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WIND-TUNNEL STUDY OF  
MILLION DOLLAR PIER, ATLANTIC CITY

by

J. A. Peterka\* and J. E. Cermak\*\*



FLUID MECHANICS AND  
WIND ENGINEERING PROGRAM

COLLEGE OF ENGINEERING

COLORADO STATE UNIVERSITY  
FORT COLLINS, COLORADO

Engineering Sciences

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## LIST OF SYMBOLS

<u>Symbol</u>	<u>Definition</u>
U	Local mean velocity
D	Characteristic dimension (building height, width, etc.)
$\nu, \rho$	Kinematic viscosity and density of approach flow
$\frac{UD}{\nu}$	Reynolds number
E	Mean voltage
A, B, n	Constants
$U_{rms}$	Root-mean-square of fluctuating velocity
$E_{rms}$	Root-mean-square of fluctuating voltage
$U_\infty$	Reference mean velocity outside the boundary layer
X, Y	Horizontal coordinates
Z	Height above surface
$\delta$	Height of boundary layer
$T_u$	Turbulence intensity $\frac{U_{rms}}{U_\infty}$ or $\frac{U_{rms}}{U}$
$C_{p_{mean}}$	Mean pressure coefficient, $\frac{(p-p_\infty)_{mean}}{0.5 \rho U_\infty^2}$
$C_{p_{rms}}$	Root-mean-square pressure coefficient, $\frac{((p-p_\infty)-(p-p_\infty)_{mean})_{rms}}{0.5 \rho U_\infty^2}$
$C_{p_{max}}$	Peak maximum pressure coefficient, $\frac{(p-p_\infty)_{max}}{0.5 \rho U_\infty^2}$
$C_{p_{min}}$	Peak minimum pressure coefficient, $\frac{(p-p_\infty)_{min}}{0.5 \rho U_\infty^2}$
$( )_{min}$	Minimum value during data record
$( )_{max}$	Maximum value during data record

<u>Symbol</u>	<u>Definition</u>
p	Fluctuating pressure at a pressure tap on the structure
$p_\infty$	Static pressure in the wind tunnel above the model
$F_x, F_y$	Forces in X, Y direction
$A_R$	Reference Area
$CF_X$	Force coefficient, X direction, $\frac{F_x}{A_R 0.5\rho U_\infty^2}$
$CF_Y$	Force coefficient, Y direction, $\frac{F_y}{A_R 0.5\rho U_\infty^2}$

## 1. INTRODUCTION

### 1.1 General

A significant characteristic of modern building design is lighter cladding and more flexible frames. These features produce an increased vulnerability of glass and cladding to wind damage and result in larger deflections of the building frame. In addition, increased use of pedestrian plazas at the base of the buildings has brought about a need to consider the effects of wind and gustiness in the design of these areas.

The building geometry itself may increase or decrease wind loading on the structure. Wind forces may be modified by nearby structures which can produce beneficial shielding or adverse increases in loading. Overestimating loads results in uneconomical design; underestimating may result in cladding or window failures. Tall structures have historically produced unpleasant wind and turbulence conditions at their bases. The intensity and frequency of objectionable winds in pedestrian areas is influenced both by the structure shape and by the shape and position of adjacent structures.

Techniques have been developed for wind tunnel modeling of proposed structures which allow the prediction of wind pressures on cladding and windows, overall structural loading, and also wind velocities and gusts in pedestrian areas adjacent to the building. Information on sidewalk-level gustiness allows plaza areas to be protected by design changes before the structure is constructed. Accurate knowledge of the intensity and distribution of the pressures on the structure permits adequate but economical selection of cladding strength to meet selected maximum design winds and overall wind loads for the design of the frame for flexural control.

Modeling of the aerodynamic loading on a structure requires special consideration of flow conditions in order to guarantee similitude between model and prototype. A detailed discussion of the similarity requirements and their wind-tunnel implementation can be found in references (1), (2), and (3). In general, the requirements are that the model and prototype be geometrically similar, that the approach mean velocity at the building site have a vertical profile shape similar to the full-scale flow, that the turbulence characteristics of the flows be similar, and that the Reynolds number for the model and prototype be equal.

These criteria are satisfied by constructing a scale model of the structure and its surroundings and performing the wind tests in a wind tunnel specifically designed to model atmospheric boundary-layer flows. Reynolds number similarity requires that the quantity  $UD/v$  be similar for model and prototype. Since  $v$ , the kinematic viscosity of air, is identical for both, Reynolds numbers cannot be made precisely equal with reasonable wind velocities. To accomplish this the air velocity in the wind tunnel would have to be as large as the model scale factor times the prototype wind velocity, a velocity which would introduce unacceptable compressibility effects. However, for sufficiently high Reynolds numbers ( $>2 \times 10^4$ ) the pressure coefficient at any location on the structure will be essentially constant for a large range of Reynolds numbers. Typical values encountered are  $10^7$ - $10^8$  for the full-scale and  $10^5$ - $10^6$  for the wind-tunnel model. In this range acceptable flow similarity is achieved without precise Reynolds number equality.

### 1.2 The Wind-Tunnel Test

The wind-engineering study is performed on a building or building group modeled at scales ranging from 1:150 to 1:400. The building model

is constructed of clear plastic fastened together with screws. The structure is modeled in detail to provide accurate flow patterns in the wind passing over the building surfaces. The building under test is often located in a surrounding where nearby buildings or terrain may provide beneficial shielding or adverse wind loading. To achieve similarity in wind effects the area surrounding the test building is also modeled. A flow visualization study is first made (smoke is used to make the air currents visible) to define overall flow patterns and identify regions where local flow features might cause difficulties in building curtain-wall design or produce pedestrian discomfort.

The test model, equipped with pressure taps (200 to 600 or more), is exposed to an appropriately modeled atmospheric wind in the wind tunnel and the fluctuating pressure at each tap measured electronically. The model, and the modeled area, are rotated 10 or 15 degrees and another set of data recorded for each pressure tap. Normally, 24 or 36 sets of data (360 degrees of turning) are taken; however, when flow visualization or recorded data indicate high pressure regions of small azimuthal extent, data is obtained in smaller azimuthal steps.

Data are recorded, analyzed and processed by an on-line computerized data-acquisition system. Pressure coefficients of several types are calculated by the computer for each reading on each piezometer tap and are printed in tabular form as computer readout. Using wind data applicable to the building site, representative wind velocities are selected for combination with measured pressures on the building model. Integration of test data with wind data results in prediction of peak local wind pressures for design of glass or cladding and may include overall forces and moments on the structure (by floor if desired) for design of

the structural frame. Pressure contours are drawn on the developed building surfaces showing the intensity and distribution of peak wind loads on the building. These results may be used to divide the building into zones where lighter or heavier cladding or glass may be desirable.

Based on the visualization (smoke) tests and on a knowledge of heavy pedestrian use areas, a dozen or more locations may be chosen at the base of the building where wind velocities can be measured to determine the relative comfort or discomfort of pedestrians in plaza areas, near building entrances, near building corners, or on sidewalks. Usually a reference pedestrian position is also tested to determine whether the wind environment in the building area is better or worse than the environment a block or so away in an undisturbed area.

The following pages discuss in greater detail the procedures followed and the equipment and data collecting and processing methods used. In addition, the data presentation format is explained and the implications of the data are discussed.

## 2. EXPERIMENTAL CONFIGURATION

### 2.1 Wind Tunnel

Wind-engineering studies are performed in the Fluid Dynamics and Diffusion Laboratory at Colorado State University (Figure 1). Three large wind tunnels are available for wind loading studies depending on the detailed requirements of the study. The wind tunnel used for this investigation is shown in Figure 2. All tunnels have a flexible roof adjustable in height to maintain a zero pressure gradient along the test section. The mean velocity can be adjusted continuously in each tunnel to the maximum velocity available.

### 2.2 Model

In order to obtain an accurate assessment of local pressures using piezometer taps, models are constructed to the largest scale that does not produce significant blockage in the wind-tunnel test section. The models are constructed of 1/2 in. thick Lucite plastic and fastened together with metal screws. Significant variations in the building surface, such as mullions, are machined into the plastic surface. Piezometer taps (1/16 in. diameter) are drilled normal to the exterior vertical surfaces in rows at several or more elevations between the bottom and top of the building. Similarly, taps are placed in the roof and on any sloping, protruding, or otherwise distinctive features of the building that might need investigation.

Pressure tap locations are chosen so that the entire surface of the building can be investigated for pressure loading and at the same time permit critical examination of areas where experience has shown that maximum wind effects may be expected to occur. Locations of the pressure taps for this study are shown in Figure 3. Dimensions are

given both for full-scale building (in ft) and for model (in in.). The pressure tap numbers are shown adjacent to the taps.

The pressure tests are sometimes made in two stages. In the first stage measurements are made on the initial distribution of pressure taps. If it becomes apparent from the data that the loading on the building is being influenced by some unsuspected geometry of the building or adjacent structures, additional pressure taps are installed in the critical areas. The locations of the taps are selected so that the maximum loading can be detected and the area over which this loading is acting can be defined. Any added taps are also shown in Figure 3.

A circular area 750 to 2000 ft in radius depending on model scale and characteristics of the surrounding buildings and terrain is modeled in detail. Structures within the modeled region are made from styrofoam and cut to the individual building geometries. They are mounted on the turntable in their proper locations. Significant terrain features are included as needed. The model is mounted on a turntable (Figure 2) near the downwind end of the test section. Any buildings or terrain features which do not fit on the turntable are placed on removable pieces which are placed upwind of the turntable for appropriate wind directions. A plan view of the building and its surroundings is shown in Figure 4. The turntable is calibrated to indicate azimuthal orientation to 0.1 degree.

The region upstream from the modeled area is covered with a randomized roughness constructed using various sized cubes placed on the floor of the wind tunnel. Different roughness sizes may be used for different wind directions. Spires are installed at the test-section entrance to provide a thicker boundary layer than would otherwise be

available. The thicker boundary layer permits a somewhat larger scale model than would otherwise be possible. The spires are approximately triangularly shaped pieces of 1/2 in. thick plywood 6 in. wide at the base and 1 in. wide at the top, extending from the floor to the top of the test section. They are placed so that the broad side intercepts the flow. A barrier approximately 8 in. high is placed on the test-section floor downstream of the spires to aid in development of the boundary-layer flow.

The distribution of the roughness cubes and the spires in the roughened area was designed to provide a boundary-layer thickness of approximately 4 ft, a velocity profile power-law exponent similar to that expected to occur in the region approaching the modeled area for each wind direction (a number of wind directions may have the same approach roughness). A photograph of the completed model in the wind tunnel is shown in Figure 5. The wind-tunnel ceiling is adjusted after placement of the model to obtain a zero pressure gradient along the test section.

### 3. INSTRUMENTATION AND DATA ACQUISITION

#### 3.1 Flow Visualization

Making the air flow visible in the vicinity of the model is helpful

- (a) in understanding and interpreting mean and fluctuating pressures,
- (b) in defining zones of separated flow and reattachment and zones of vortex formation where pressure coefficients may be expected to be high
- and (c) in indicating areas where pedestrian discomfort may be a problem.

Titanium tetrachloride smoke is released from sources on and near the model to make the flow lines visible to the eye and to make it possible to obtain motion picture records of the tests. Conclusions obtained from these smoke studies are discussed in Sections 4.1 and 5.1.

#### 3.2 Pressures

Mean and fluctuating pressures are measured at each of the pressure taps on the model structure. Data are obtained for 24 or 36 wind directions, rotating the entire model assembly in a complete circle. Seventy-six pieces of 1/16 in. I.D. plastic tubing are used to connect 76 pressure ports at a time to an 80 tap pressure switch mounted inside the model. The switch was designed and fabricated in the Fluid Dynamics and Diffusion Laboratory to minimize the attenuation of pressure fluctuations across the switch. Each of the 76 measurement ports is directed in turn by the switch to one of four pressure transducers mounted close to the switch. The four pressure input taps not used for transmitting building surface pressures are connected to a common tube leading outside the wind tunnel. This arrangement provides both a means of performing in-place calibration of the transducers and, by connecting this tube to a pitot tube mounted inside the wind tunnel, a means of automatically monitoring the tunnel speed. The switch is operated by means of a shaft projecting through

the floor of the wind tunnel. A computer-controlled stepping motor steps the switch into each of the 20 required positions. The computer keeps track of switch position but a digital readout of position is provided at the wind tunnel.

The pressure transducers used are setra differential transducers (Model 237) with a 0.10 psid range. Reference pressures are obtained by connecting the reference sides of the four transducers, using plastic tubing, to the static side of a pitot-static tube mounted in the wind tunnel free stream above the model building. In this way the transducer measures the instantaneous difference between the local pressures on the surface of the building and the static pressure in the free stream above the model.

Output from the pressure transducers is fed to an on-line data acquisition system consisting of a Hewlett-Packard 21 MX computer, disk unit, card reader, printer, Digi-Data digital tape drive and a Preston Scientific analog-to-digital converter. The data are processed immediately into pressure coefficient form as described in Section 4.3 and stored for printout or further analysis.

All four transducers are recorded simultaneously for 16 seconds at a 250 sample per second rate. The results of an experiment to determine the length of record required to obtain stable mean and rms (root-mean-square) pressures and to determine the overall accuracy of the pressure data acquisition system is shown in Figure 6. A typical pressure port record was integrated for a number of different time periods to obtain the data shown. Examination of a large number of pressure taps showed that the overall accuracy for a 16 second period is, in pressure coefficient form, 0.03 for mean pressures, 0.1 for peak pressures, and 0.01 for rms pressures. Pressure coefficients are defined in Section 4.3.

### 3.3 Velocity

Mean velocity and turbulence intensity profiles are measured upstream of the model to determine that an approach boundary-layer flow appropriate to the site has been established. Tests are made at one wind velocity in the tunnel. This velocity is well above that required to produce Reynolds number similarity between the model and the prototype as discussed in Section 1.1.

In addition, mean velocity and turbulence intensity measurements are made 5 to 7 ft (prototype) above the surface at a dozen or more locations on and near the building for 16 wind directions. The measurement locations are shown on Figure 4. The surface measurements are indicative of the wind environment to which a pedestrian at the measurement location would be subjected. The locations are chosen to determine the degree of pedestrian comfort or discomfort at the building corners where relatively severe conditions frequently are found, near building entrances and on adjacent sidewalks where pedestrian traffic is heavy, and in open plaza areas. In most studies a reference pedestrian position, located about a block away, is also tested. These data are helpful in evaluating the degree of pedestrian comfort or discomfort in the proposed plaza area in terms of the undisturbed environment in the immediate vicinity.

Measurements are made with a single hot-wire anemometer mounted with its axis vertical. The instrumentation used is a Thermo Systems constant temperature anemometer (Model 1050) with a 0.001 in. diameter platinum film sensing element 0.020 in. long. Output is directed to the on-line data acquisition system for analysis.

Calibration of the hot-wire anemometer is performed by comparing output with the pitot-static tube in the wind tunnel. The calibration

data are fit to a variable exponent King's Law relationship of the form

$$E^2 = A + BU^n$$

where  $E$  is the hot-wire output voltage,  $U$  the velocity and  $A$ ,  $B$ , and  $n$  are coefficients selected to fit the data. The above relationship was used to determine the mean velocity at measurement points using the measured mean voltage. The fluctuating velocity in the form  $U_{rms}$  (root-mean-square velocity) was obtained from

$$U_{rms} = \frac{2 E E_{rms}}{B n U^{n-1}}$$

where  $E_{rms}$  is the root-mean-square voltage output from the anemometer. For interpretation all turbulence measurements for pedestrian winds were divided by the mean velocity outside the boundary-layer  $U_\infty$ . Turbulence intensity in velocity profile measurements used the local mean velocity.

#### 4. RESULTS

##### 4.1 Flow Visualization

A film is included as part of this report showing the characteristics of flow about the structure using smoke to make the flow visible. A listing of the contents of the film is shown in Table 1. Several features can be noted from the visualization. As with all large structures, wind approaching the building is deflected down to the plaza level, up over the structure and around the sides. A description of the smoke test results emphasizing flow patterns of concern relative to possible high-wind load areas and pedestrian comfort is given in Section 5.1.

##### 4.2 Velocity

Velocity and turbulence profiles are shown in Figure 7. Profiles were taken upstream from the model which are characteristic of the boundary layer approaching the model and sometimes at the building site with building removed. The boundary-layer thickness,  $\delta$ , is shown in Figure 7. The corresponding prototype value of  $\delta$  for this study is also shown in the figure. This value was established as a reasonable height for this study. The mean velocity profile approaching the modeled area has the form

$$\frac{U}{U_\infty} = \left(\frac{z}{\delta}\right)^n.$$

The exponent  $n$  for the approach flow established for this study is shown in Figure 7.

Profiles of longitudinal turbulence intensity in the flow approaching the modeled area are shown in Figure 7. The turbulence intensities are appropriate for the approach mean velocity profile selected. For the velocity profiles, turbulence intensity is defined

as the root-mean-square about the mean of the longitudinal velocity fluctuations divided by the local mean velocity  $U$ ,

$$Tu = \frac{U_{rms}}{U} .$$

Velocity data obtained at each of the pedestrian measurement locations shown in Figure 4 are listed in Table 2 as mean velocity  $U/U_\infty$ , turbulence intensity  $U_{rms}/U_\infty$ , and largest effective gust

$$U_{pk} = \frac{U + 3U_{rms}}{U_\infty}$$

These data are plotted in polar form in Figure 8. Measurements were taken 5 to 7 ft above the ground surface. A site map is superimposed on the polar plots to aid in visualization of the effects of the nearby structures on the velocity and turbulence magnitudes. An analysis of these wind data is given in Section 5.2.

To enable a quantitative assessment of the wind environment, the wind-tunnel data were combined with wind frequency and direction information obtained at the local airport. Table 3 shows wind frequency by direction and magnitude obtained from summaries published by the National Weather Service. These data, usually obtained at an elevation of about 30-40 ft, were converted to velocities at the reference velocity height for the wind-tunnel measurements and combined with the wind-tunnel data to obtain cumulative probability distributions (percent time a given velocity is exceeded) for wind velocity at each measuring location. The percentage times were summed by wind direction to obtain a percent time exceeded at each measuring position independent of wind direction (but accounting for the fact that the wind blows from different directions with varying frequency). These results are plotted in Figure 9.

Interpretation of Figure 9 is aided by a description of the effects of wind of various magnitudes on people. The earliest quantitative description of wind effects was established by Sir Francis Beaufort in 1806 for use at sea and is still in use today. Several recent investigators have added to the knowledge of wind effects on pedestrians. These investigations along with suggested criteria for acceptance have been summarized by Penwarden and Wise (4) and Melbourne (5). The Beaufort scale (from ref. 4), based on mean velocity only, is reproduced as Table 4 including qualitative descriptions of wind effects. Table 4 suggests that mean wind speeds below 12 mph are of minor concern and that mean speeds above 24 mph are definitely inconvenient. Quantitative criteria for acceptance from reference 5 are superimposed as dashed lines on Figure 9. The peak gust curves shown in Figure 9 are the percent of time during which a short gust of the stated magnitude could occur (say about one of these gusts per hour). Implications of the data plotted in Figure 9 are presented in Section 5.2

Because some pedestrian wind measuring positions are purposely chosen at sites where the smoke tests showed large velocities of small spacial extent, the general wind environment about the structure may be less severe than one might infer from a strict analysis of Table 2 and Figure 9.

#### 4.3 Pressures

For each of the pressure taps examined at each wind direction, the data record is analyzed to obtain four separate pressure coefficients. The first is the mean pressure coefficient

$$C_{p_{\text{mean}}} = \frac{(p-p_{\infty})_{\text{mean}}}{0.5 \rho U_{\infty}^2}$$

where the symbols are as defined in the List of Symbols. It represents the mean of the instantaneous pressure difference between the building pressure tap and the static pressure in the wind tunnel above the building model, nondimensionalized by the dynamic pressure

$$0.5 \rho U_{\infty}^2$$

at the reference velocity position. This relationship produces a dimensionless coefficient which indicates that the mean pressure difference between building and ambient wind at a given point on the structure is some fraction less or some fraction greater than the undisturbed wind dynamic pressure near the upper edge of the boundary layer. Using the measured coefficient, prototype mean pressure values for any wind velocity may be calculated.

The magnitude of the fluctuating pressure is obtained by the rms pressure coefficient

$$C_{p_{\text{rms}}} = \frac{((p-p_{\infty}) - (p-p_{\infty})_{\text{mean}})_{\text{rms}}}{0.5 \rho U_{\infty}^2}$$

in which the numerator is the root-mean-square of the instantaneous pressure difference about the mean.

If the pressure fluctuations followed a Gaussian probability distribution, no additional data would be required to predict the

frequency with which any given pressure level would be observed. However, the pressure fluctuations do not, in general, follow a Gaussian probability distribution so that additional information is required to show the extreme values of pressure expected. The peak maximum and peak minimum pressure coefficients are used to determine these values:

$$C_{p_{\max}} = \frac{(p-p_{\infty})_{\max}}{0.5 \rho U_{\infty}^2}$$

$$C_{p_{\min}} = \frac{(p-p_{\infty})_{\min}}{0.5 \rho U_{\infty}^2}$$

The values of  $p-p_{\infty}$  which were digitized at 250 samples per second for 16 seconds, representing about one hour of time in the full-scale, are examined individually by the computer to obtain the most positive and most negative values during the 16-second period. These are converted to  $C_{p_{\max}}$  and  $C_{p_{\min}}$  by nondimensionalizing with the free stream dynamic pressure.

The four pressure coefficients are calculated by the on-line data acquisition system computer and tabulated along with the approach wind azimuth in degrees from true north. The list of coefficients is included as Appendix A. The pressure tap code numbers used in the appendix are explained in Figure 3.

To determine the largest peak loads acting at any point on the structure for cladding design purposes, the pressure coefficients for all wind directions were searched to obtain, at each pressure tap, the largest absolute value of peak pressure coefficient. Table 6 provides these pressure coefficients and associated wind directions. Included in Section 5.3 is an analysis of the coefficients of Table 6 including the maximum values obtained and where they occurred on the building.

The pressure coefficients of Table 6 can be converted to full-scale loads by multiplication by a suitable reference pressure selected for the field site. This reference pressure is represented in the equations for pressure coefficients by the  $0.5 \rho U_\infty^2$  denominator. This value is the dynamic pressure associated with an hourly mean wind at the reference velocity measurement position at the edge of the boundary layer. In general, the method of arriving at a design reference pressure for a particular site involves selection of a design wind velocity, translation of the velocity to an hourly mean wind at the reference velocity location and conversion to a reference pressure. Selection of the design velocity can be made from statistical analysis of extreme wind data or selected from wind maps contained in the proposed wind loading code ANSI A58.1 of the American National Standards Institute (6). The calculation of reference pressure for this study is shown in Table 5. The factor used in Table 5 to reduce gust winds to hourly mean winds is given in reference (7).

The reference pressure associated with the design hourly mean velocity at the reference velocity location can be used directly with the peak-pressure coefficients to obtain peak local design wind loads for cladding design. Local, instantaneous peak loads on the full-scale building suitable for cladding design were computed by multiplying the reference pressure of Table 5 by the peak coefficients of Table 6 and are listed as peak pressures in that table. The maximum psf load given at each tap location is the absolute value of the maximum value found in the tests, irrespective of its algebraic sign. For ease in visualizing the loads on the structure, contours of equal peak pressures for cladding load shown in Table 6 have been plotted on developed elevation

views of the structure, Figure 10. For control of water infiltration from outside to inside, the largest positive (inward-acting) pressure at each tap location is tabulated in Table 6.

For glass design pressures, a glass load factor is used to account for the different duration between measured peak pressures and the one minute loading commonly used in glass design charts. The design pressure used for glass is normally less than the peak pressures used for cladding design because of the static fatigue property of glass which can withstand higher pressures for short duration loads than for long duration loads. Recent research (8) indicates that the period of application of the peak pressures reported herein is about 5-10 seconds or less. If a glass design is based on these peak-pressure values, then a glass strength associated with this duration load should be used. Because glass design charts are normally based on some alternate load duration--usually one minute--then some reduction in peak loads should be made. An estimate of a load reduction factor can be obtained from an empirical relation of glass strength as a function of load duration. Current glass selection charts showing glass strength as a function of load duration (9) and older references (10) indicate the following load reduction factors:

	ref 9	ref 10
annealed float	0.80	0.81
heat strengthened	0.94	
tempered	0.97	0.98

Loadings appropriate for glass design can be computed by multiplying the peak-pressure loads of Table 6 by these load factors.

#### 4.4 Forces and Moments

Force coefficients in the horizontal X and Y directions and moment coefficients about the X, Y, and Z axes with the origin at ground level at the base of the building with Z axis vertical may be computed for all wind directions tested by integration of mean pressures on the building. Overall forces and moments acting on the full-scale building due to wind loading which are useful in designing the structural framing of the proposed building may be obtained from use of these coefficients.

Force coefficients were computed for each floor for each wind direction using the equations shown below.

$$CF_X = \frac{F_X}{A_R 0.5 \rho U_\infty^2} \quad CF_Y = \frac{F_Y}{A_R 0.5 \rho U_\infty^2}$$

Terms and symbols used in the equations are defined in the List of Symbols and the axes are defined for the building in Figure 3. Force coefficients  $CF_X$  and  $CF_Y$  were computed for the horizontal forces acting along the X and Y axes using the mean pressure coefficient at each pressure tap.  $A_R$  represents a constant reference area for nondimensionalization of the forces and moments.

The total forces acting on the full-scale building for each floor and wind direction were computed by multiplying the above coefficients by the appropriate full-scale reference area, by the reference pressure of Table 5, and by a gust load factor selected for an appropriate wind gust duration. The gust load factor, shown in Table 5, was selected to increase the loads from an hourly mean load to that of a gust whose duration would be sufficient for its effect to be fully felt by the structure. A table of gust load factors for various gust durations is

incorporated in Table 5 so that force and moment data of Table 7 may be adjusted to a different load duration if desired.

The forces obtained at each floor were used to obtain load, shear, and moment diagrams for the building for each wind direction. The shear diagram, in kips, was obtained by algebraic sum of all forces in each coordinate direction acting above the floor of interest. The load diagram, in psf, was obtained by dividing the shear values by their contributing areas (listed in Table 7). The moment diagram, in 1000 ft-kips, was obtained by integration of the shear values so that the moment due to forces acting above the floor level of interest was calculated. The sign of the moment was established by the right-hand rule about an X', Y' axis through the floor of interest. Moments about the Z axis were calculated by considering the displacement of forces in the X and Y directions from the Z axis shown in Figure 3.

## 5. DISCUSSION

### 5.1 Flow Visualization

Flow patterns identified with smoke showed that flow passed both over and under the Pier. No flow patterns were identified whose characteristics would indicate large local pressures. Smoke flow in pedestrian areas showed that deck areas exposed to onshore winds would experience somewhat higher wind velocities than nearby beach areas--primarily because the increased elevation of the decks provided exposure to higher velocity winds. Some acceleration of flow which could be due to the Pier geometry was observed in exposed areas, but small local accelerations were difficult to detect with smoke flow.

### 5.2 Pedestrian Winds

Figure 4 shows the 54 locations selected for investigation of pedestrian wind comfort. Locations 1 and 2 were selected as reference locations on the beach and Boardwalk which should be reasonably undisturbed by presence of the Million Dollar Pier. Table 2 and Figure 8 show that the largest values of mean velocity were measured at locations 14, 22, 32, 35 and 42 with values ranging from 77 to 83 percent of  $U_\infty$ , the mean velocity at the boundary-layer height. The winds approaching the Pier over water at the elevations of these pedestrian locations were 60 to 65 percent of  $U_\infty$  so that some acceleration of wind was due to the Pier itself. For comparison, the largest mean velocities at reference locations 1 and 2 on the beach and Boardwalk were 48 and 51 percent respectively.

The largest values of fluctuating velocity,  $U_{rms}$ , were measured at locations 20, 32, 42 and 47 with values ranging from 22 to 28 percent of  $U_\infty$ . For comparison, maximum values measured at reference locations 1

and 2 were 13 and 15 percent respectively. The largest values of peak gust, represented by the mean plus three rms as discussed in Section 4.2, were measured at locations 21, 22, 32, 35 and 47 with values ranging from 122 to 152 percent of  $U_\infty$ . For comparison, the largest values measured at reference locations 1 and 2 were 87 and 90 percent of  $U_\infty$ .

Velocity data of Table 2 integrated with local wind data tabulated in Table 3 are shown in Figure 9. Based on the data of this figure, the windiest locations will be 22 and 32 at the top of the staircases at the south end of the Pier which should be unacceptably windy 25 to 40 percent of the time for mean winds. Locations 3 and 34 should be unacceptably windy 10 percent or more of the time. These data should be interpreted in light of data at reference locations 1 and 2 which, according to Figure 9, are under the unacceptable bounds but above the walking comfort criteria. The beaches at Atlantic City are obviously used in a way that indicates an environment more acceptable than would be anticipated by location 1 in Figure 9; two possibilities exist. The most likely one is that a somewhat windy environment is expected by beach users effectively raising the level of the acceptability criteria lines on Figure 9. The second possibility, less likely, is that errors exist in the meteorological data record for Atlantic City published by the National Weather Service. In either case, a reasonable guide would be to use the reference location 1 curve in Figure 9 as a generally acceptable condition and to examine windier locations using that location as a guide. On that basis, the areas of most concern are locations 3, 22, and 32. Location 3 is of concern because it is substantially windier than location 1 and is in a high traffic area. Locations 22 and 32 are of concern because of their exposed location at the top of a staircase.

Locations 22 and 32 could be protected by enclosing the staircase or shielding the upper portions with a deflection device--a solid railing about 4 ft high might work. Location 3 represents a more difficult location to protect without major changes in the Pier geometry since it experiences winds from any particular direction only a little larger in magnitude than those at reference location 1.

Results of the pedestrian wind analysis showed that the Pier would have a substantial number of locations where winds would be rather high based on acceptability criteria published in the literature. Since the beach area away from the Pier also shows rather high winds, it is reasonable to use the adjacent beach area as a standard against which locations on the Pier can be measured and presuming the existing beach to be an acceptable environment. A substantial number of locations on the Pier decks will be windier than the beach area, in part because they are at a higher elevation where wind speeds are higher and in part because the Pier itself accelerates flow in local areas. Three locations are of particular concern because they are among the highest percentage of larger wind speeds and because they are either high-traffic areas or of safety concern--these areas are locations 3, 22 and 32 discussed above.

### 5.3 Pressures

Pressures were measured at 164 pressure taps located on one-half of the model. These data were applied by symmetry to the other half of the model resulting in effectively 328 locations on the entire Pier. Table 6 shows the largest peak pressure coefficients and corresponding loads measured on the building for each pressure tap location. Data identified as Configuration A in Table 6 and Appendix A represent data obtained at each tap location for 36 wind directions. Configuration B represents

data obtained at selected taps at 2-degree azimuthal increments near azimuths where large pressure peaks were observed in Configuration A to ensure that the largest peaks were obtained. The largest peak pressure coefficient measured on the building was -1.5 measured at taps 33 and 204. This coefficient value is not large for a building of this height. The peak pressure coefficient of -1.5 represents, using the 50-yr recurrence wind reference pressure of Table 5, peak cladding pressures of -59 psf. Figure 10 shows that peak pressures over most areas of the Million Dollar Pier were in the 20 to 40 psf range for the 50-yr recurrence wind.

Table 7 tabulates shear in the X and Y direction and moments about the Z axis as discussed in Section 4.4. Moments about the X and Y axis were not reported for this structure since these moments are sensitive to the distribution of deck pressures. An insufficient number of deck pressures were obtained to provide a useful estimate of X and Y moments.

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**FIGURES**

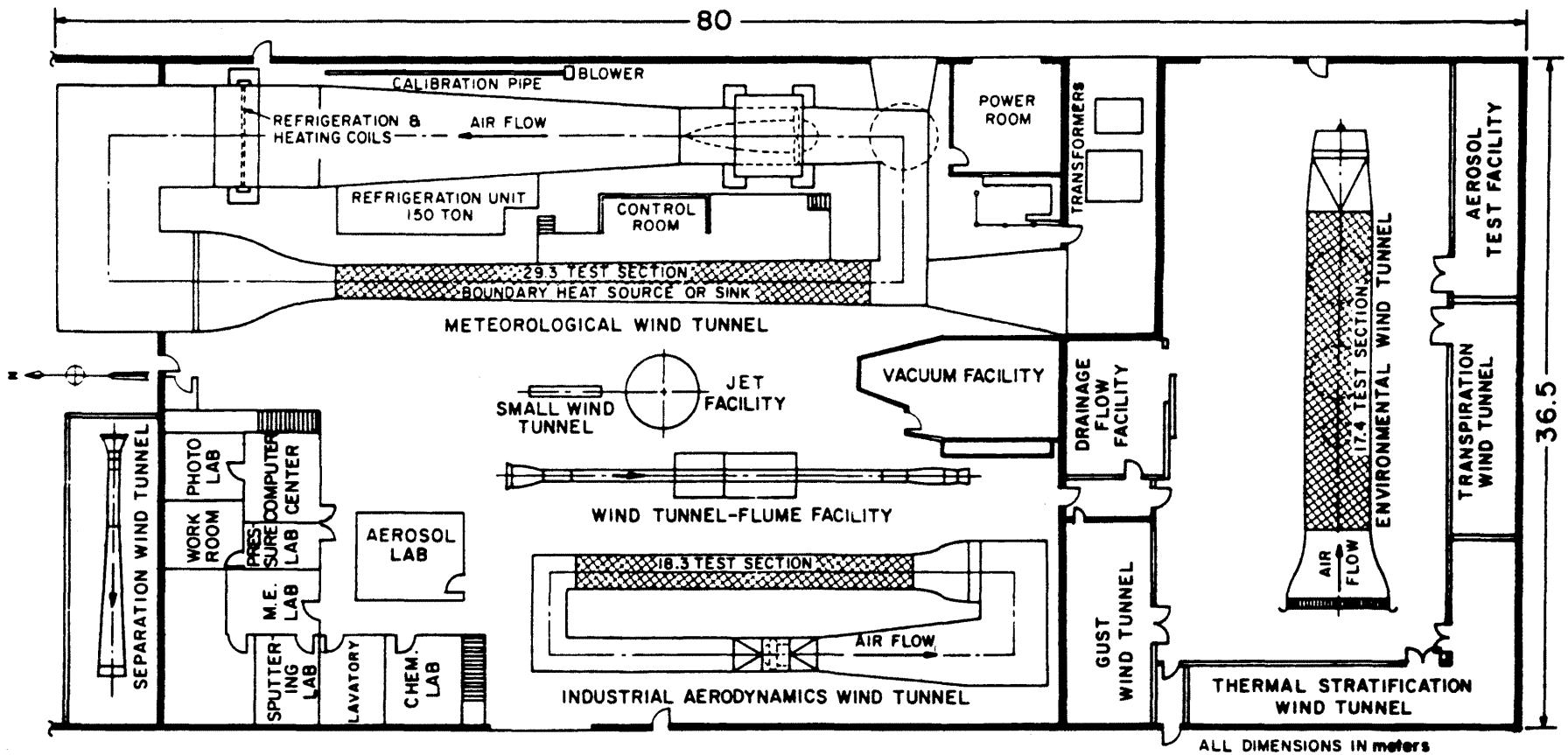
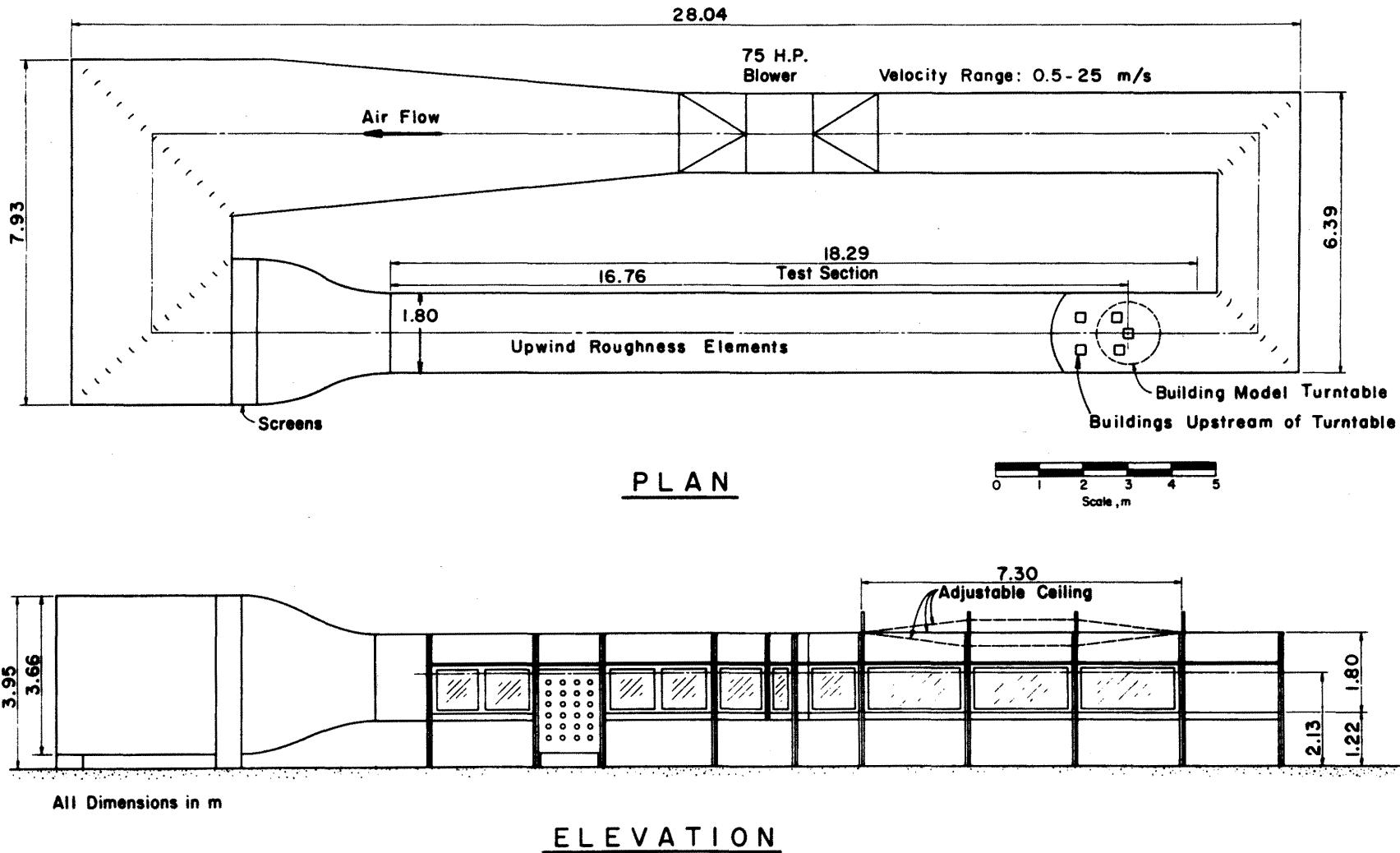


Figure 1. FLUID DYNAMICS AND DIFFUSION LABORATORY  
COLORADO STATE UNIVERSITY



## INDUSTRIAL AERODYNAMICS WIND TUNNEL

Figure 2 - Wind Tunnel Configuration

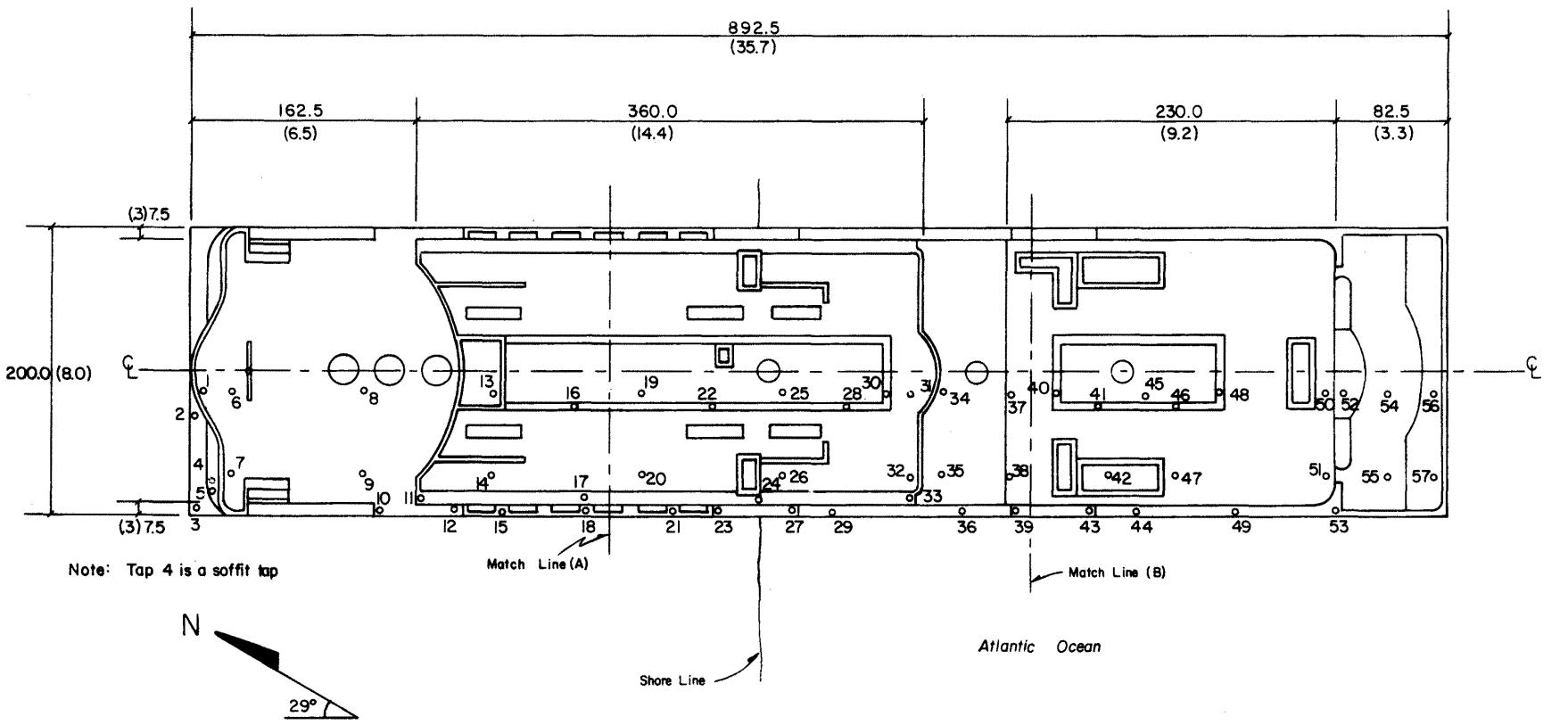


Figure 3a. Pressure Tap Locations

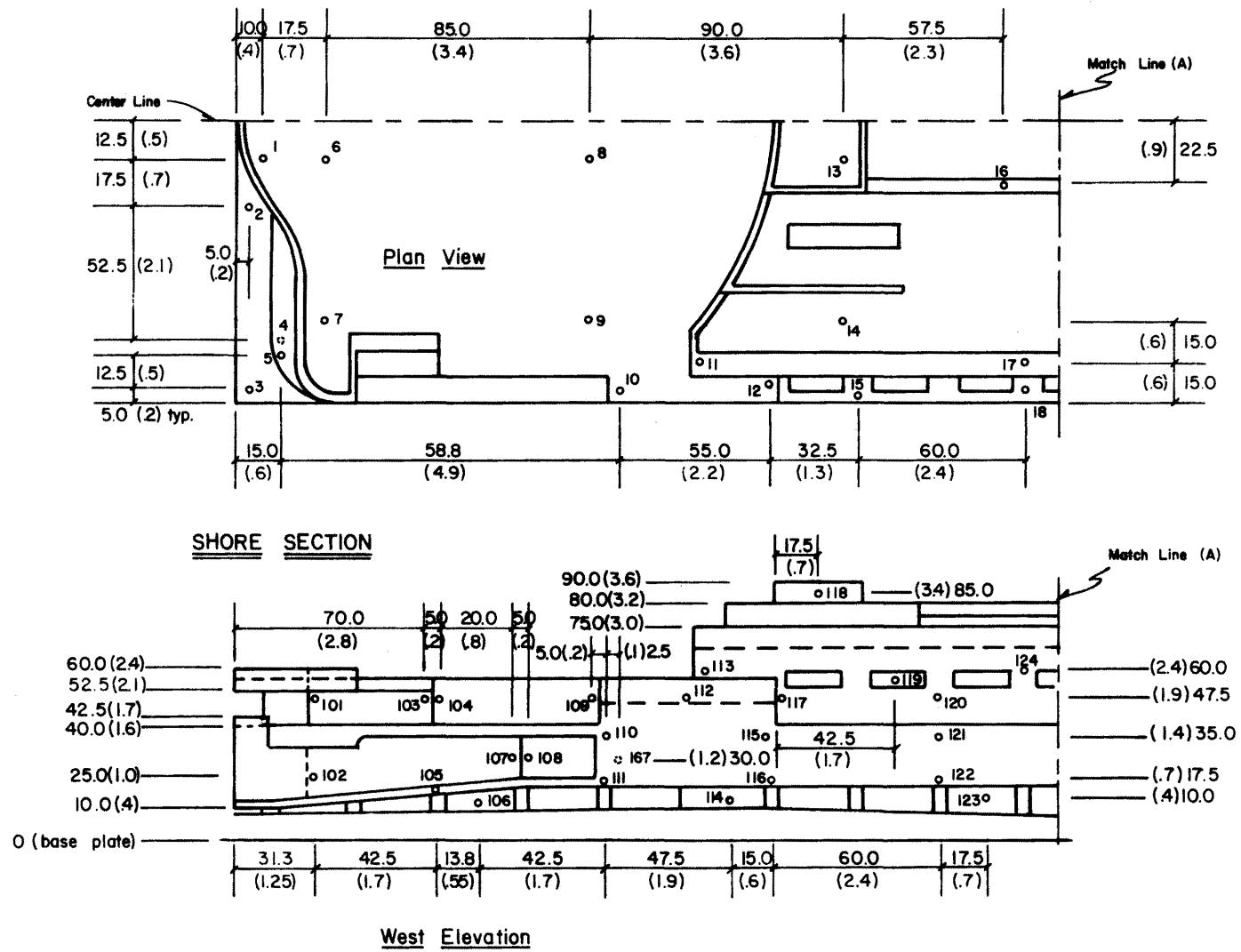


Figure 3b. Pressure Tap Locations

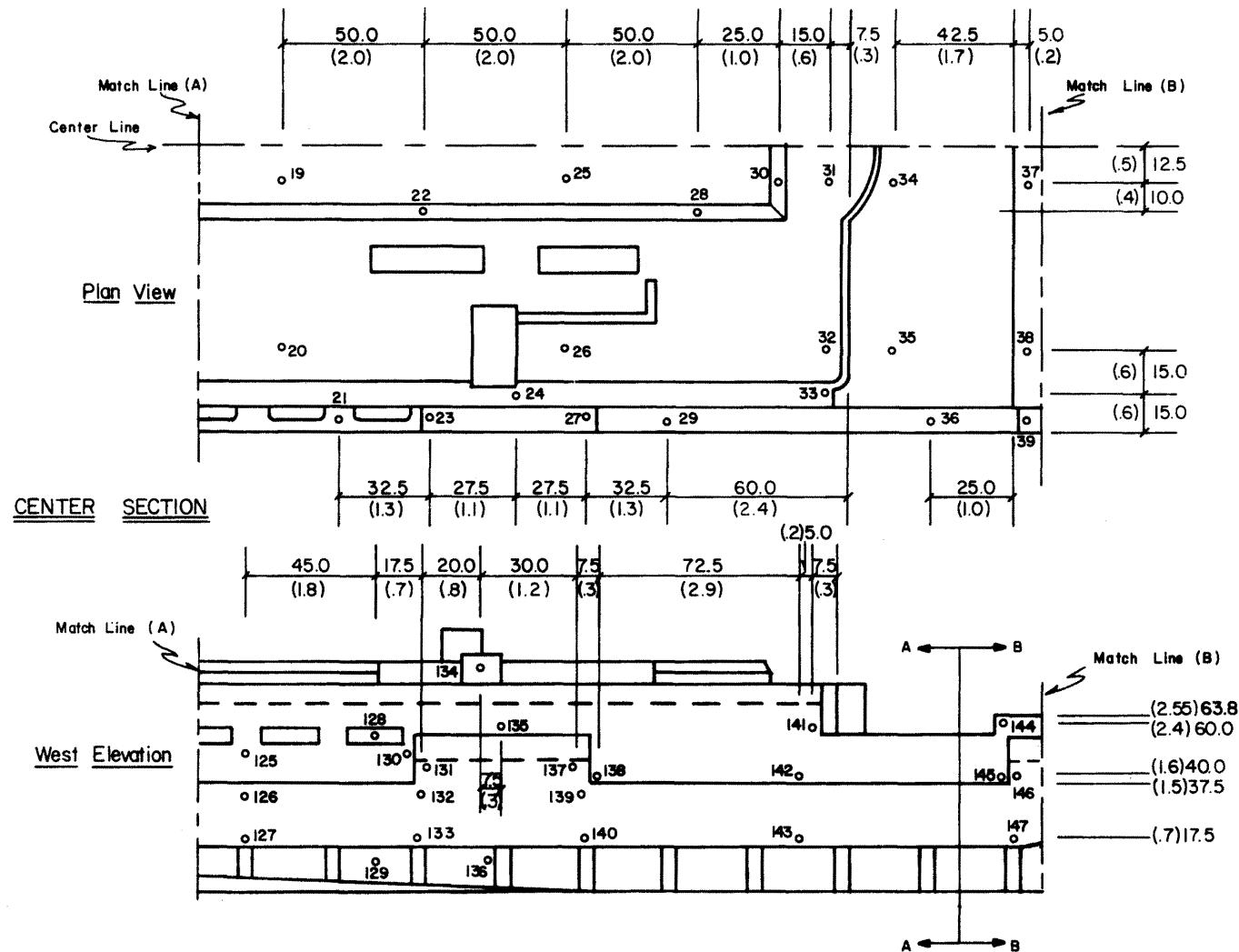


Figure 3c. Pressure Tap Locations

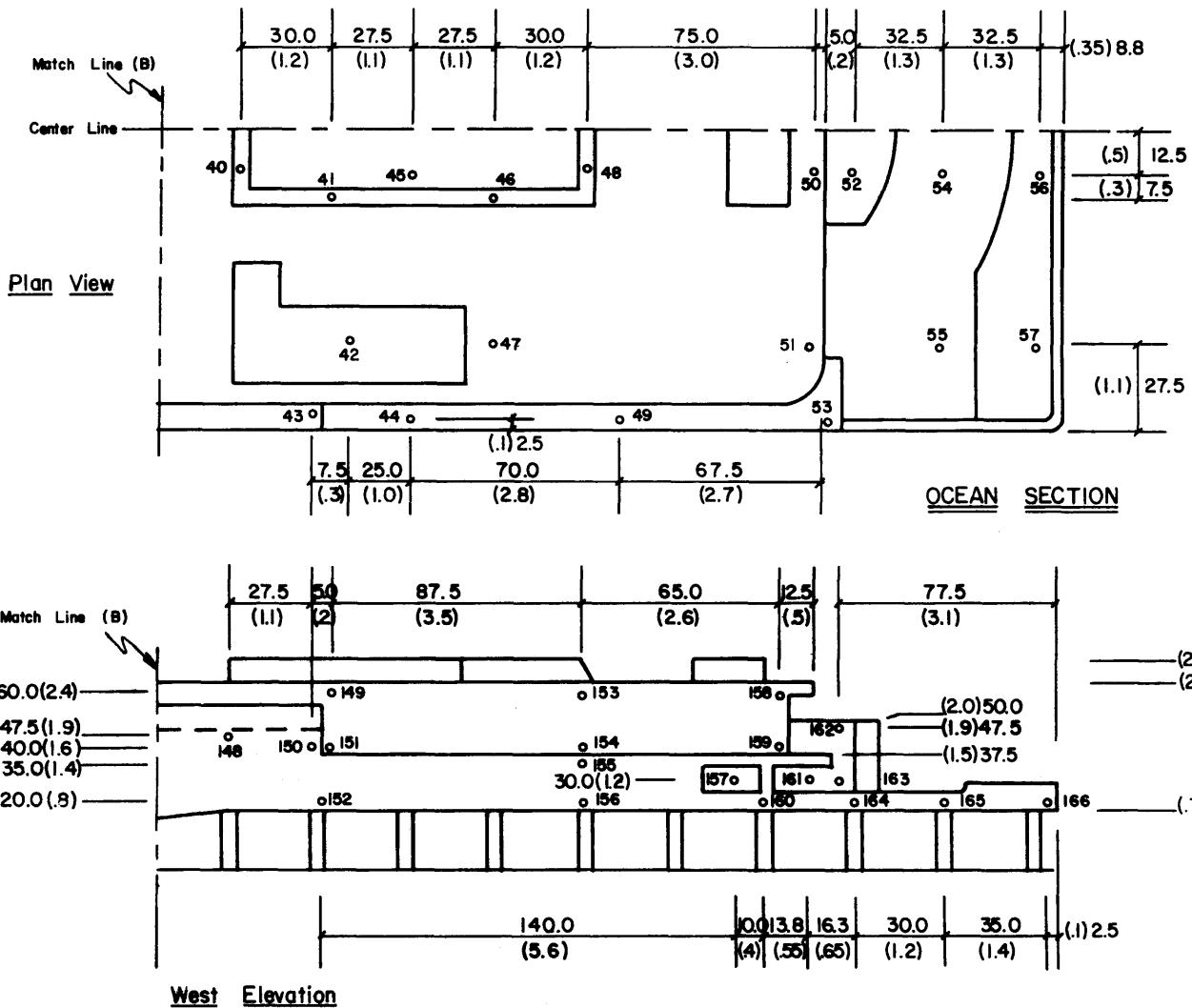


Figure 3d. Pressure Tap Locations

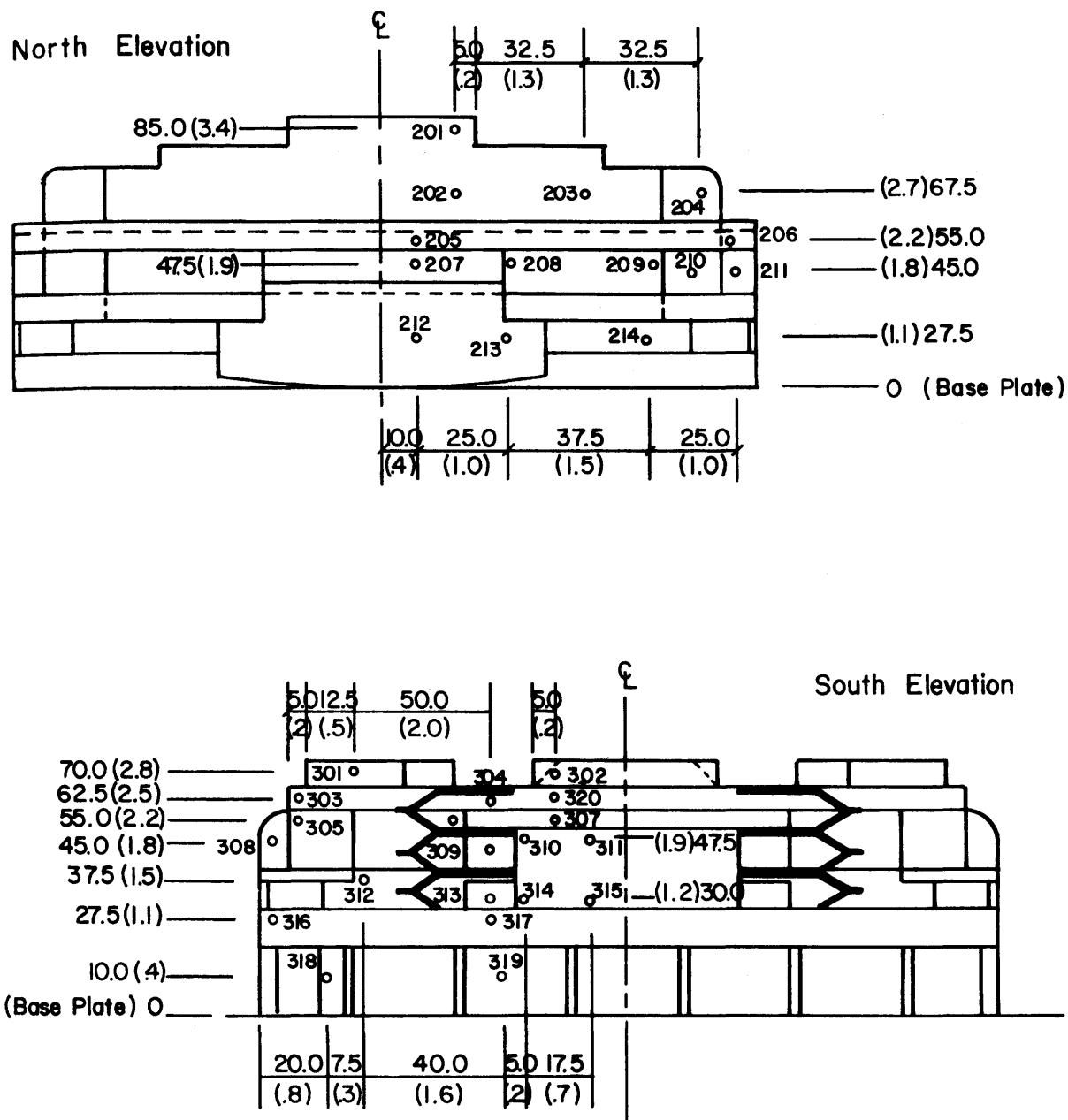
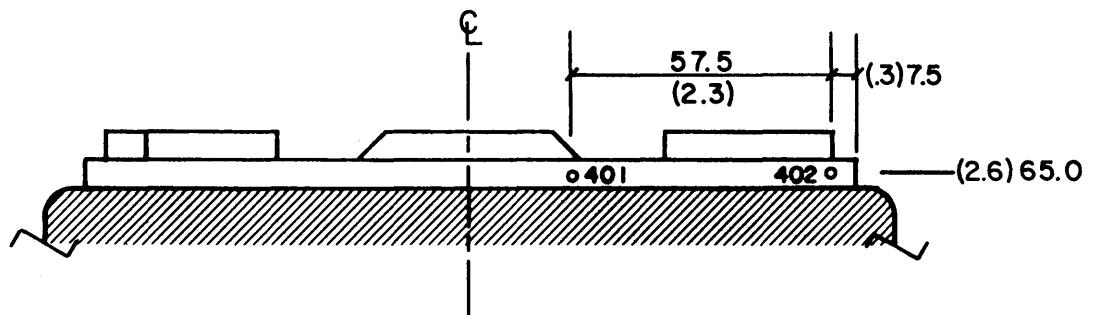
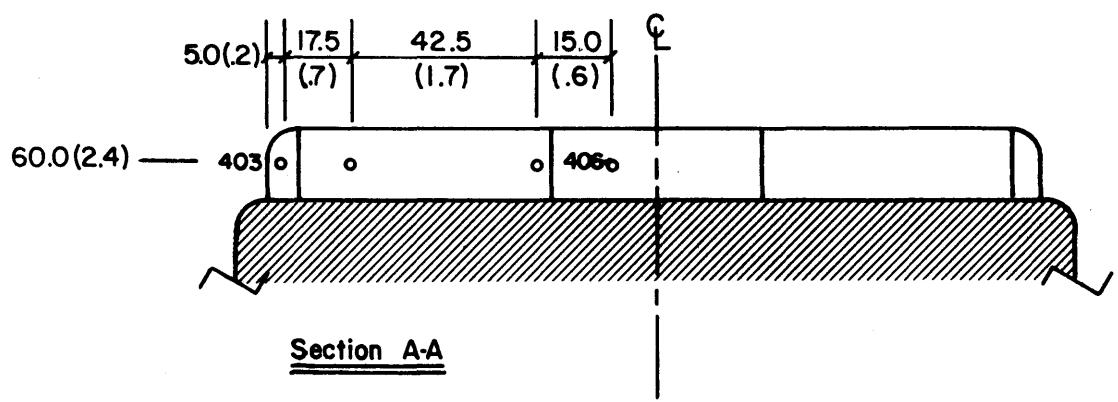


Figure 3e. Pressure Tap Locations



Section B-B



Section A-A

Figure 3f. Pressure Tap Locations

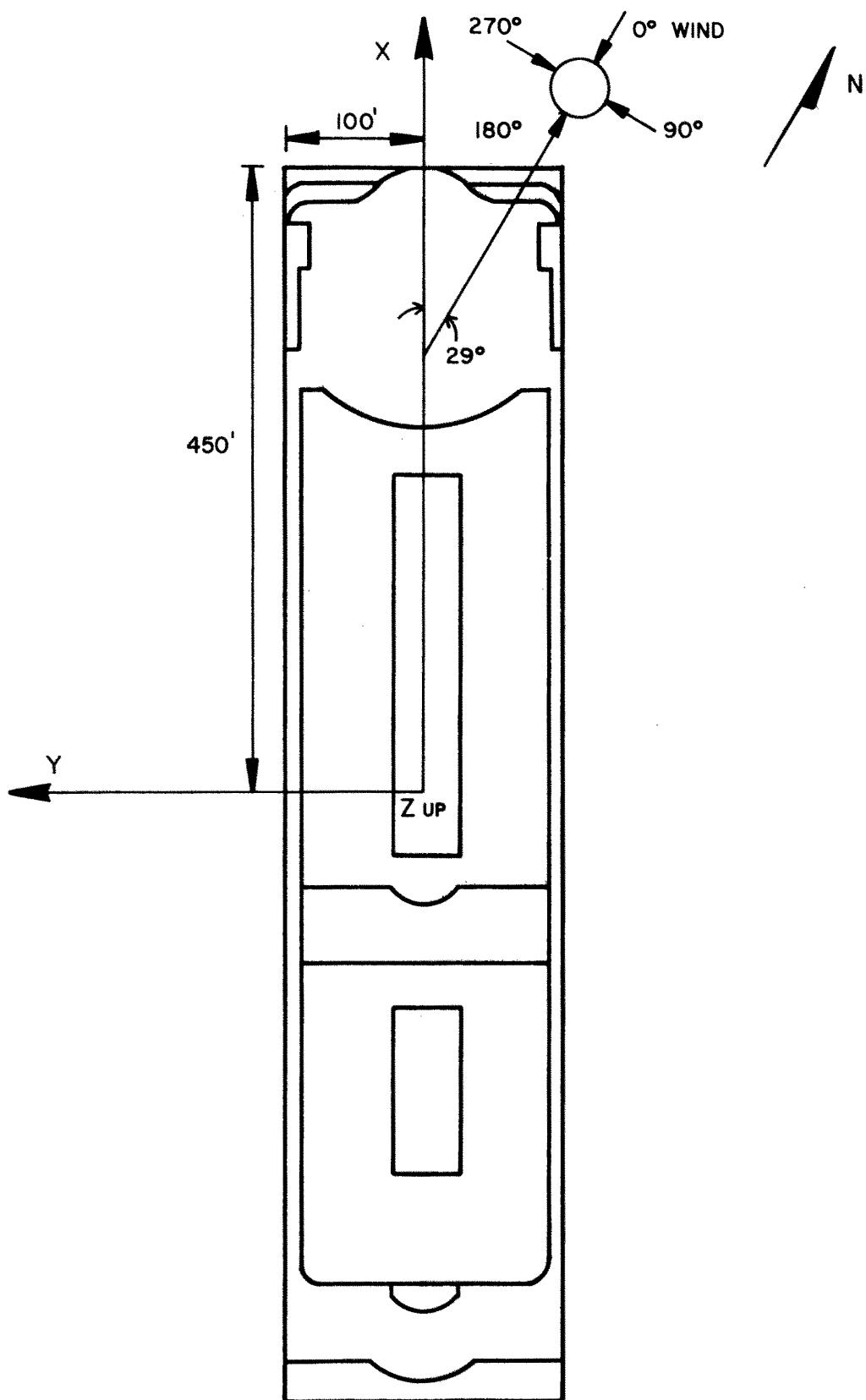


Figure 3g. Net Force Coordinate System

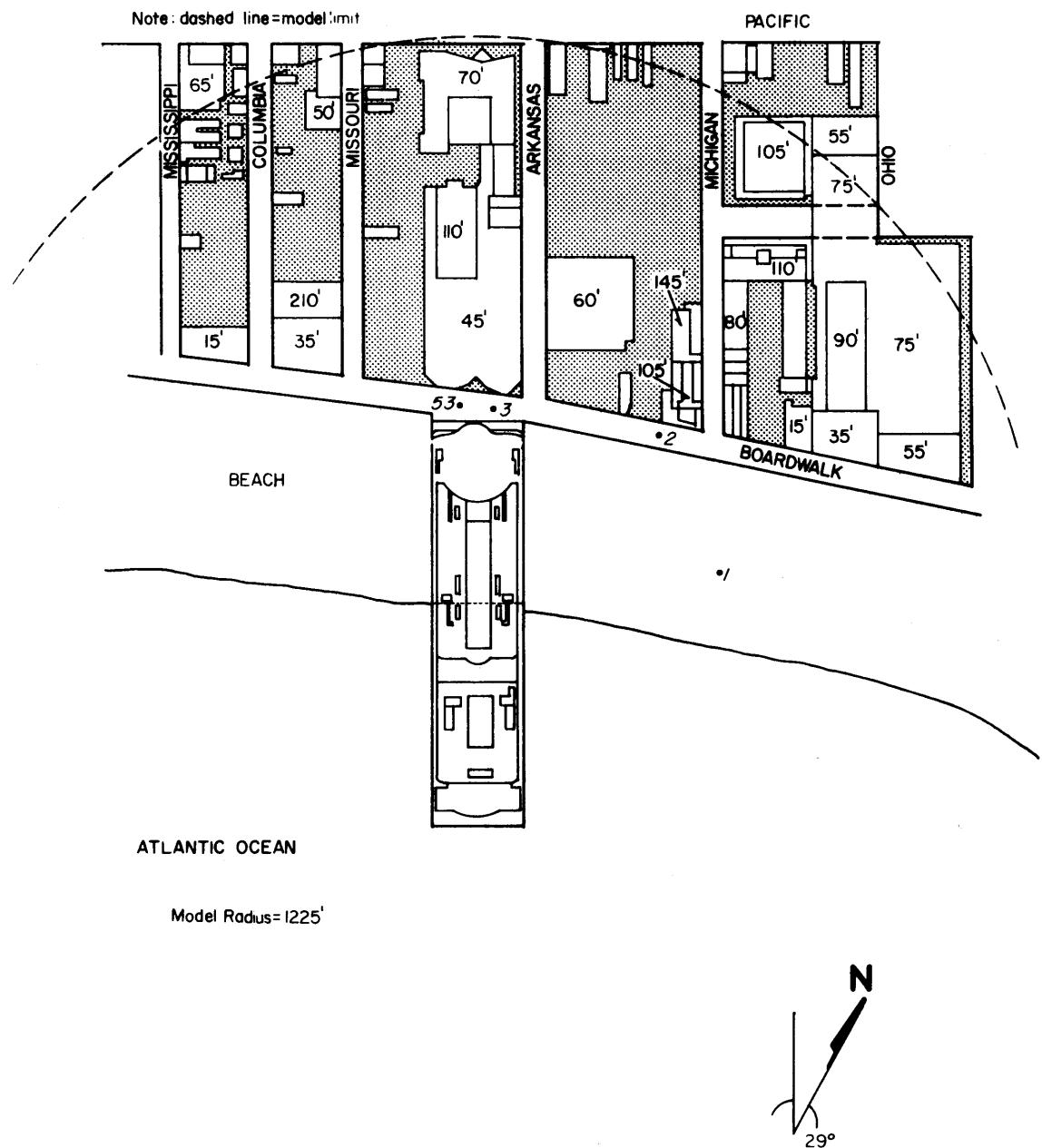


Figure 4a. Building Location and Pedestrian Wind Velocity Measuring Positions

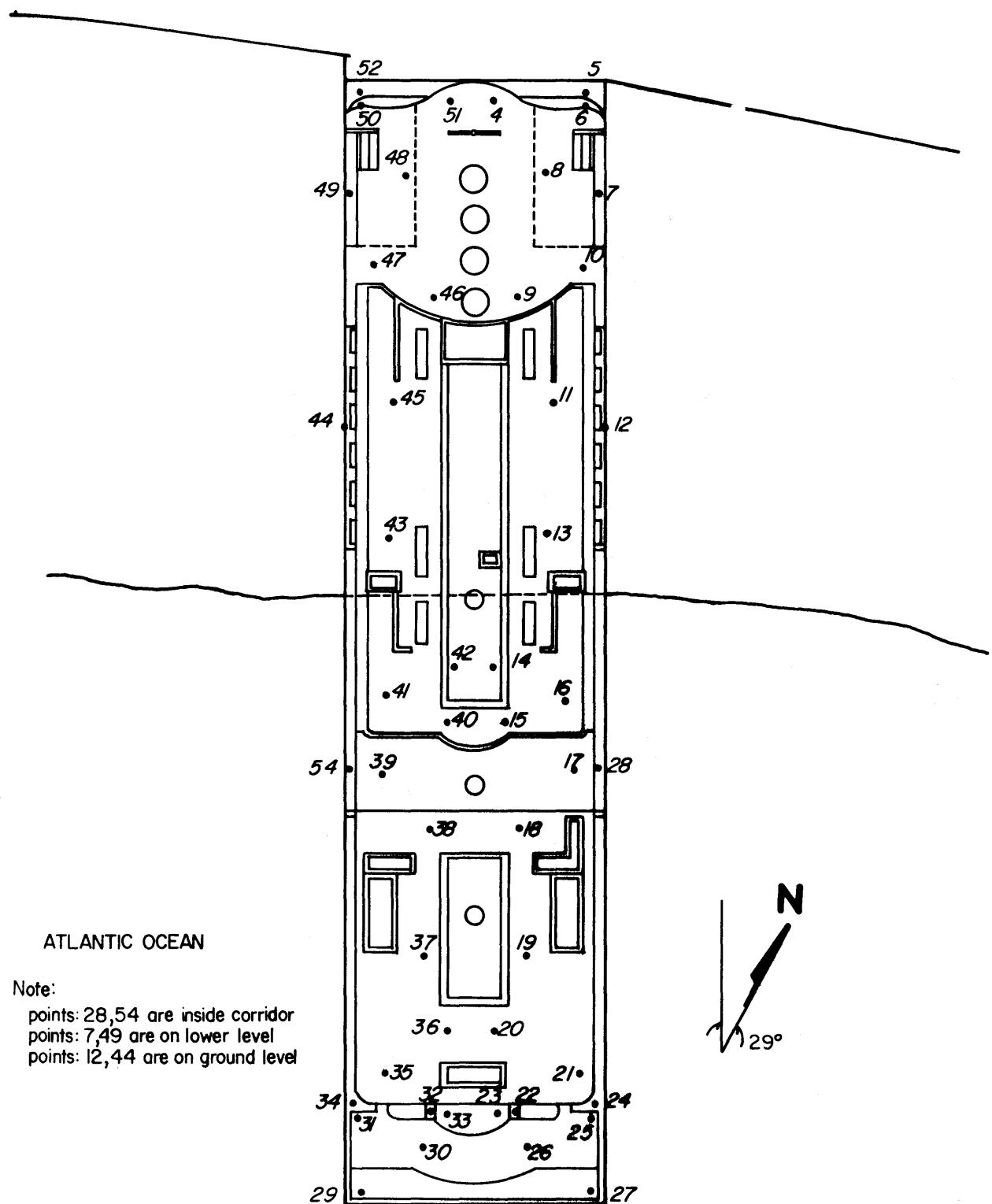
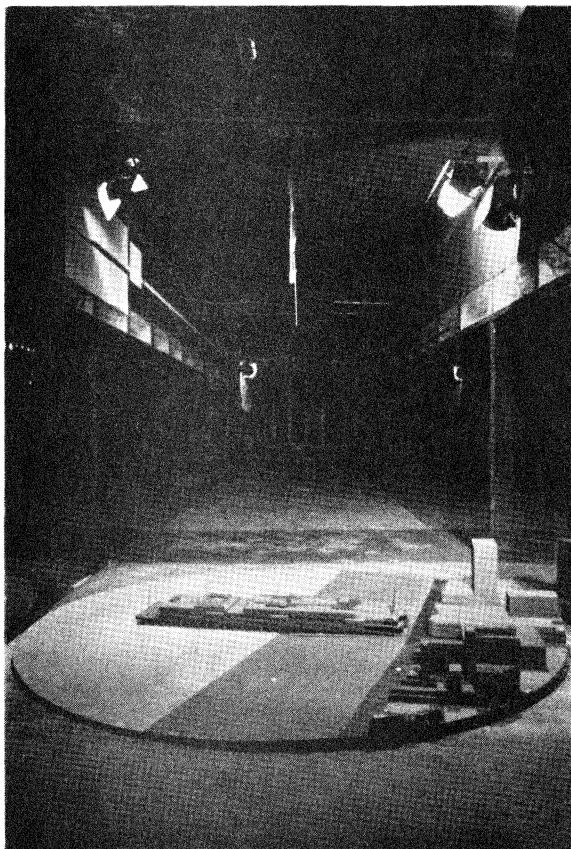


Figure 4b. Building Location and Pedestrian Wind Velocity Measuring Positions



**Figure 5. Completed Model in Wind Tunnel**

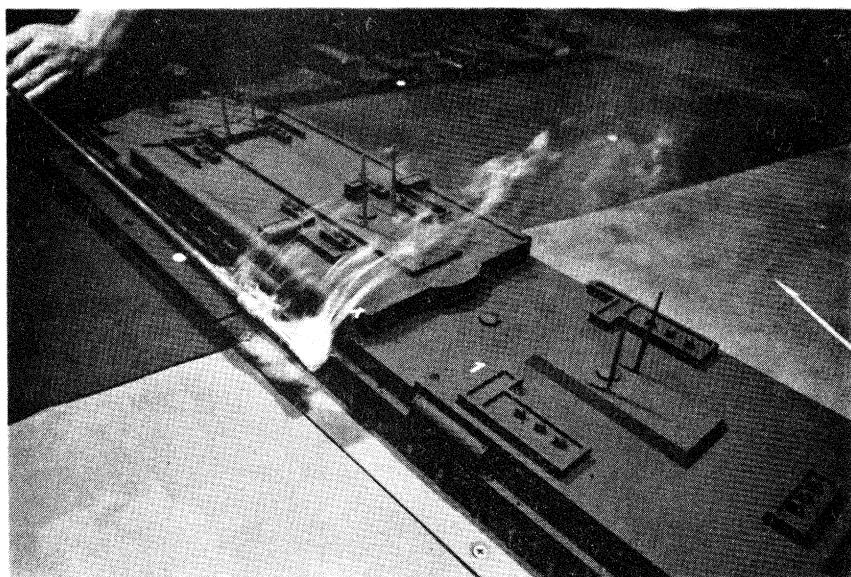
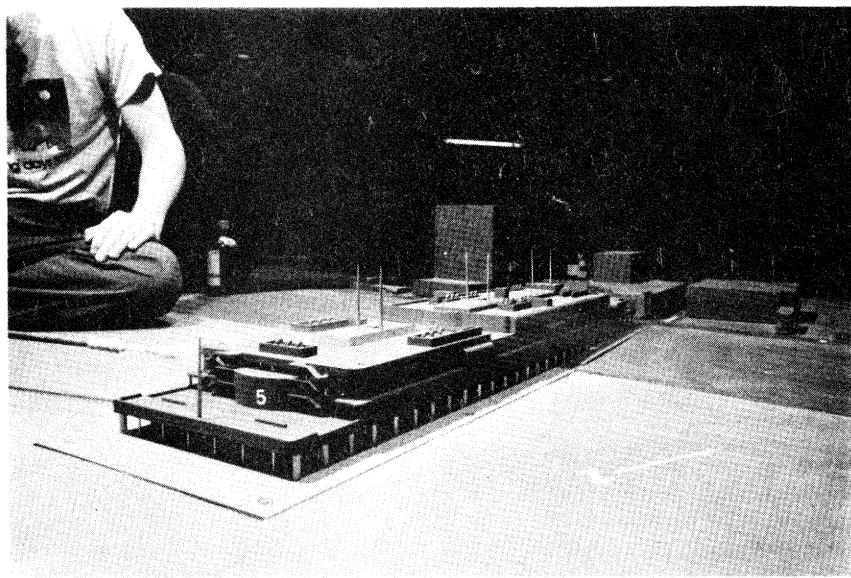


Figure 5. Completed Model in Wind Tunnel

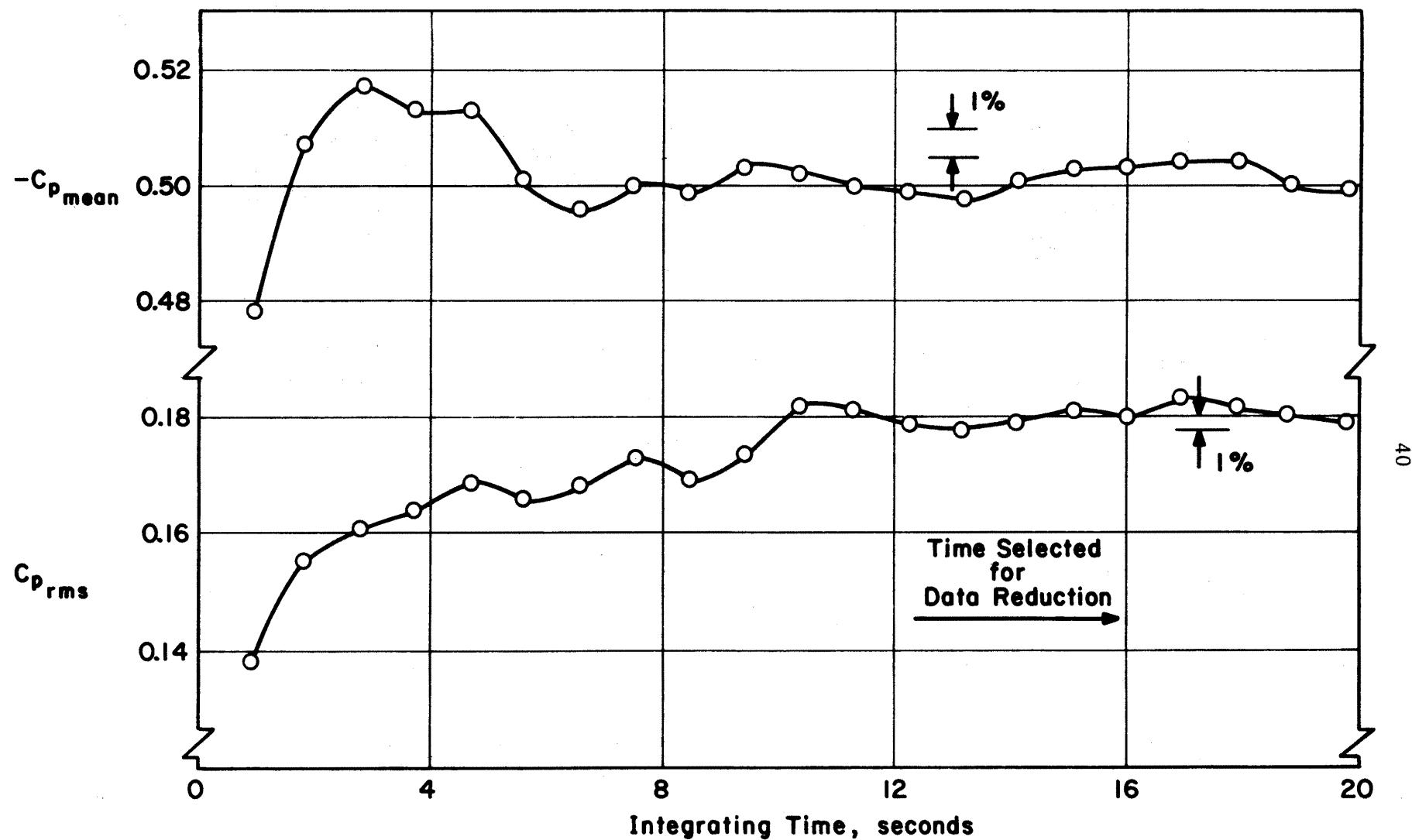


Figure 6 - Data Sampling Time Verification

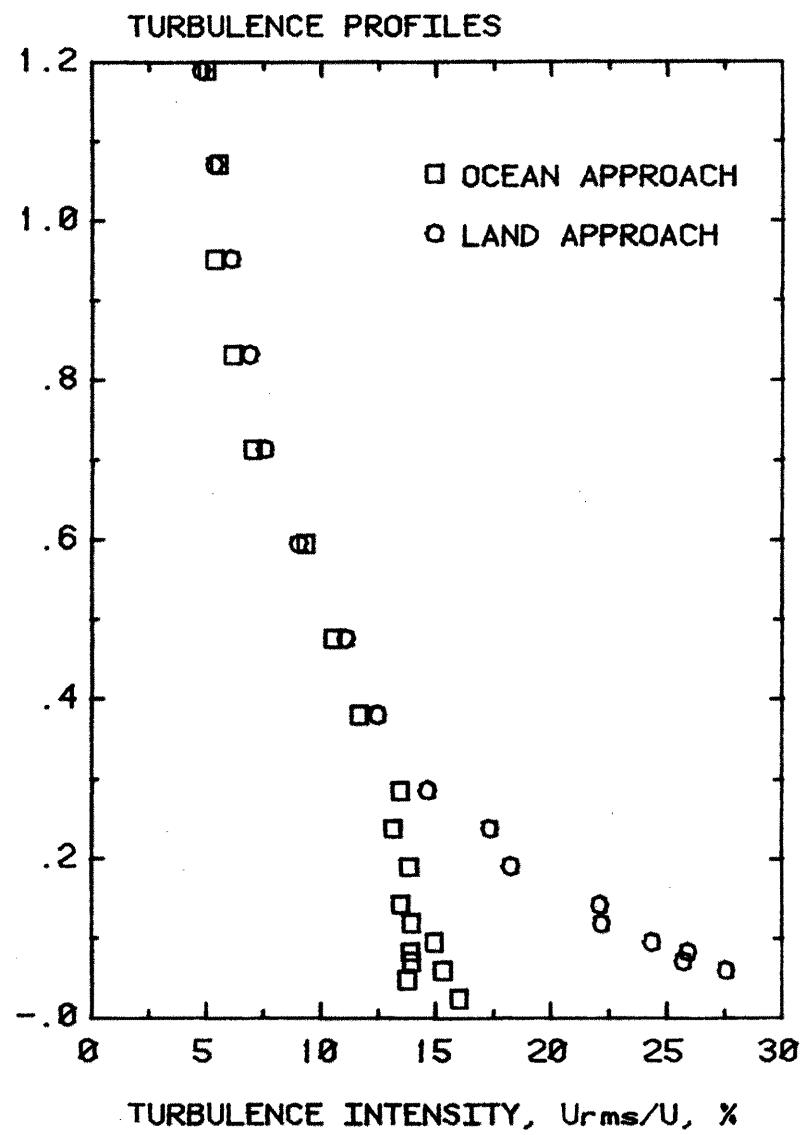
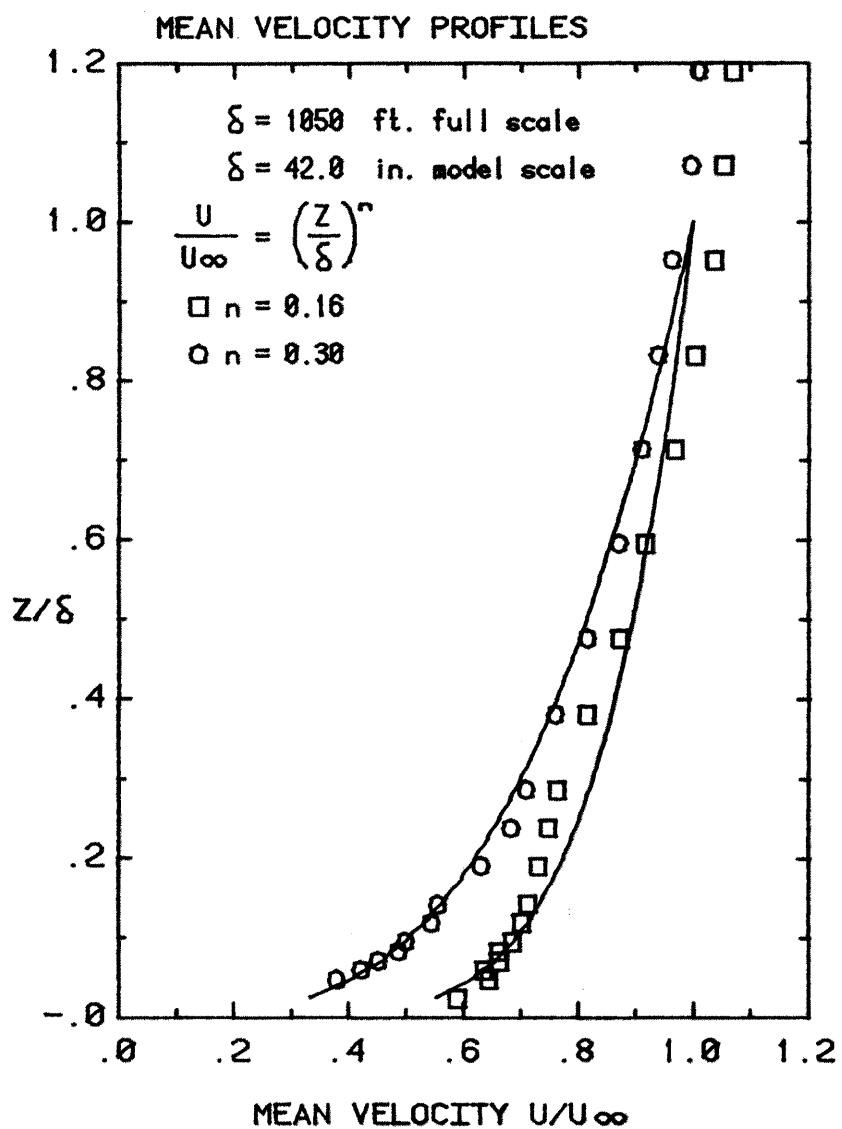
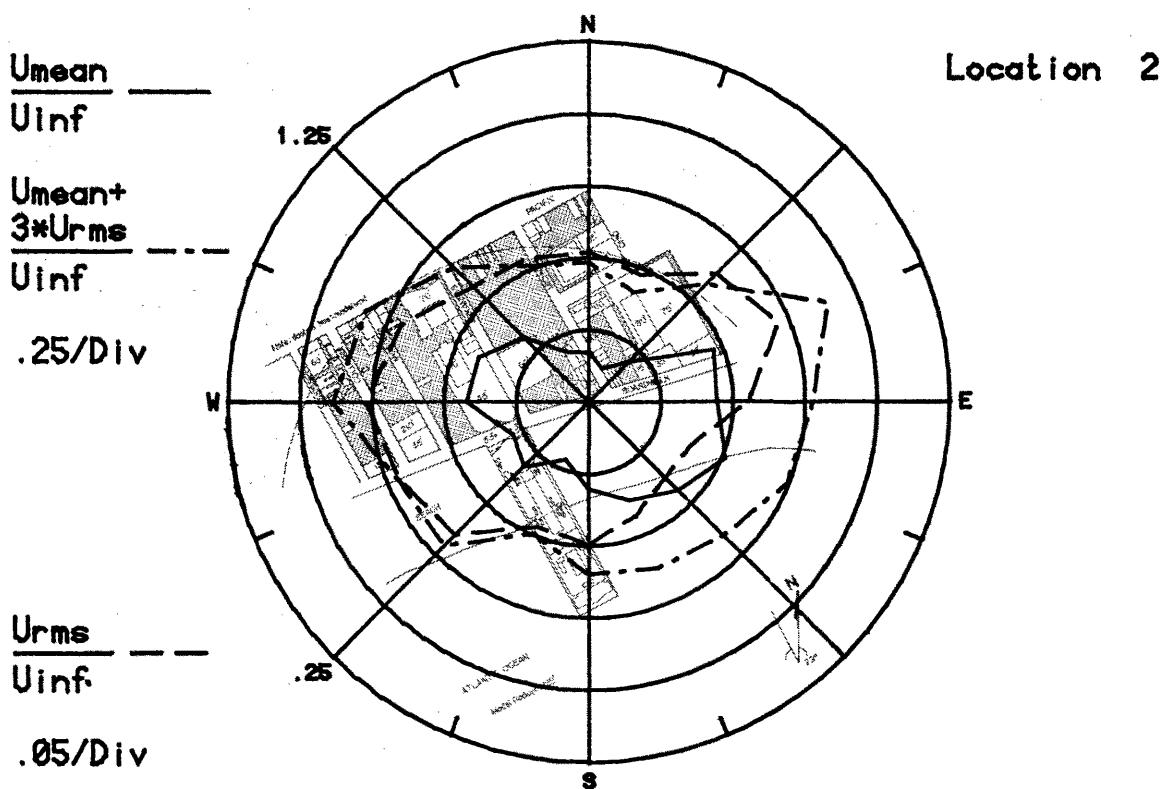
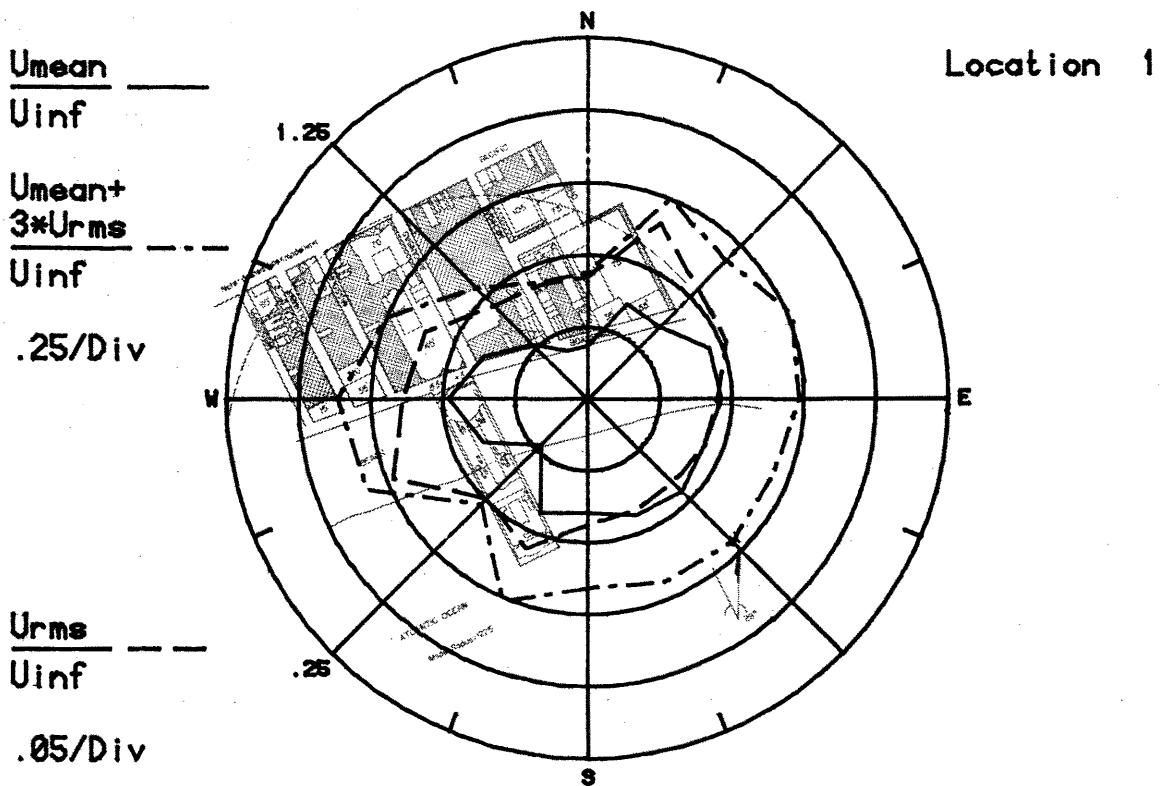


Figure 7. Mean Velocity and Turbulence Profiles Approaching the Model.



**Figure 8a. Mean Velocities and Turbulence Intensities at Pedestrian Locations 1 and 2**

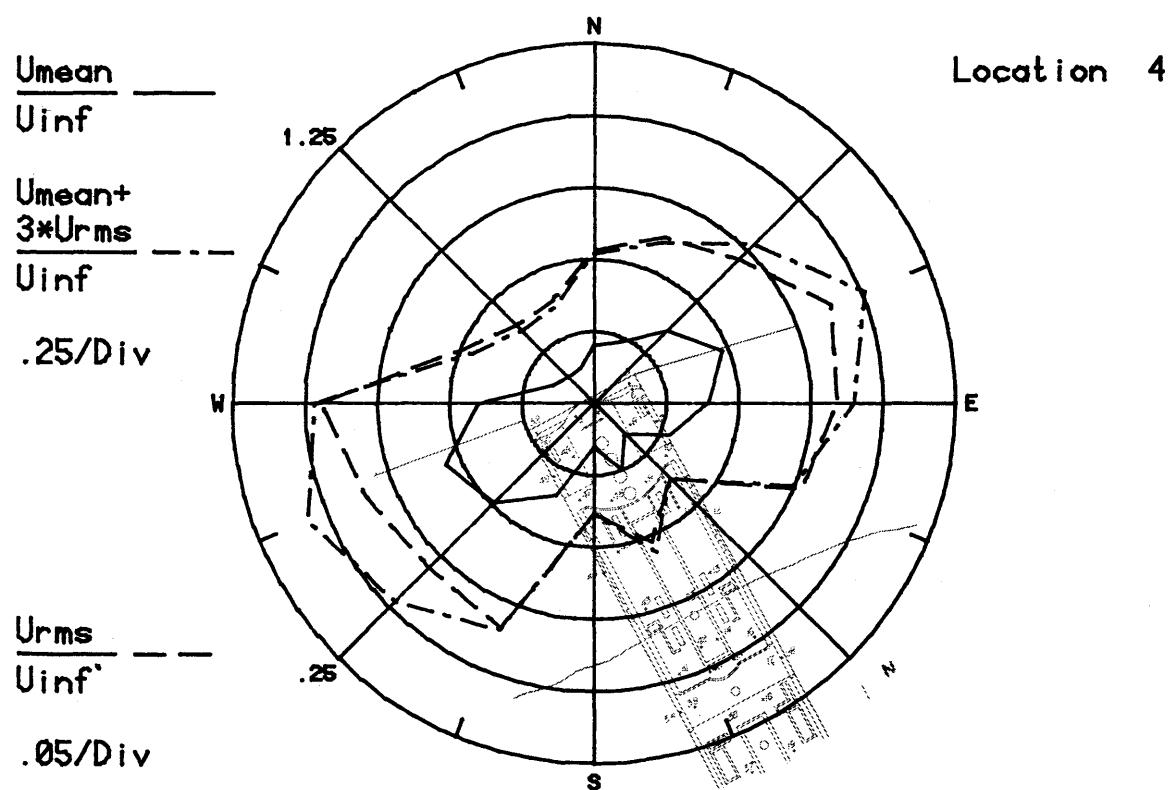
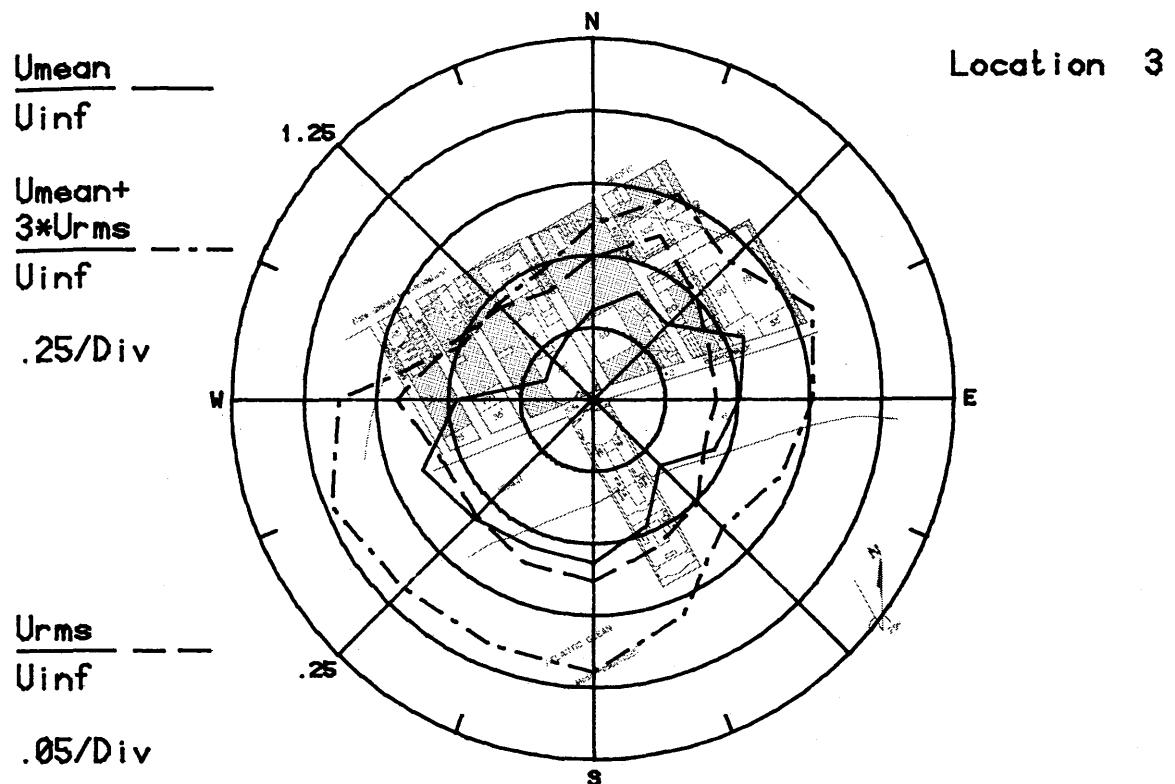


Figure 8b. Mean Velocities and Turbulence Intensities at Pedestrian Locations 3 and 4

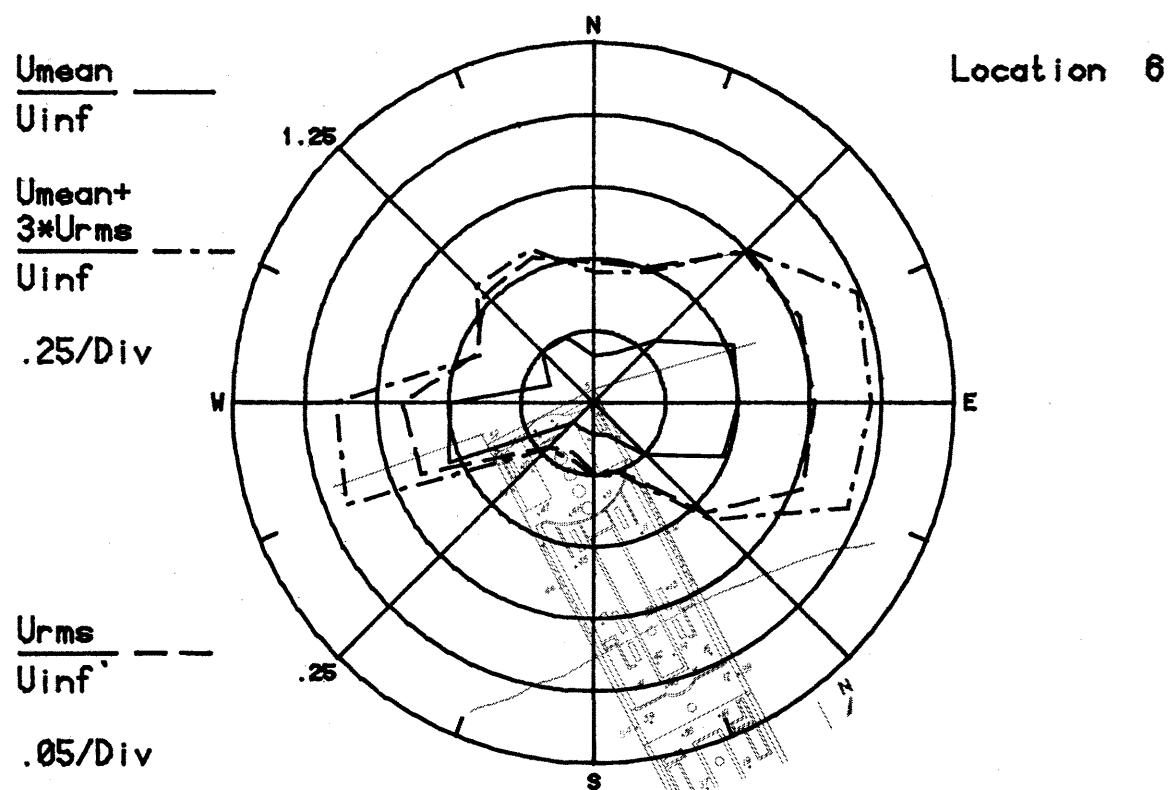
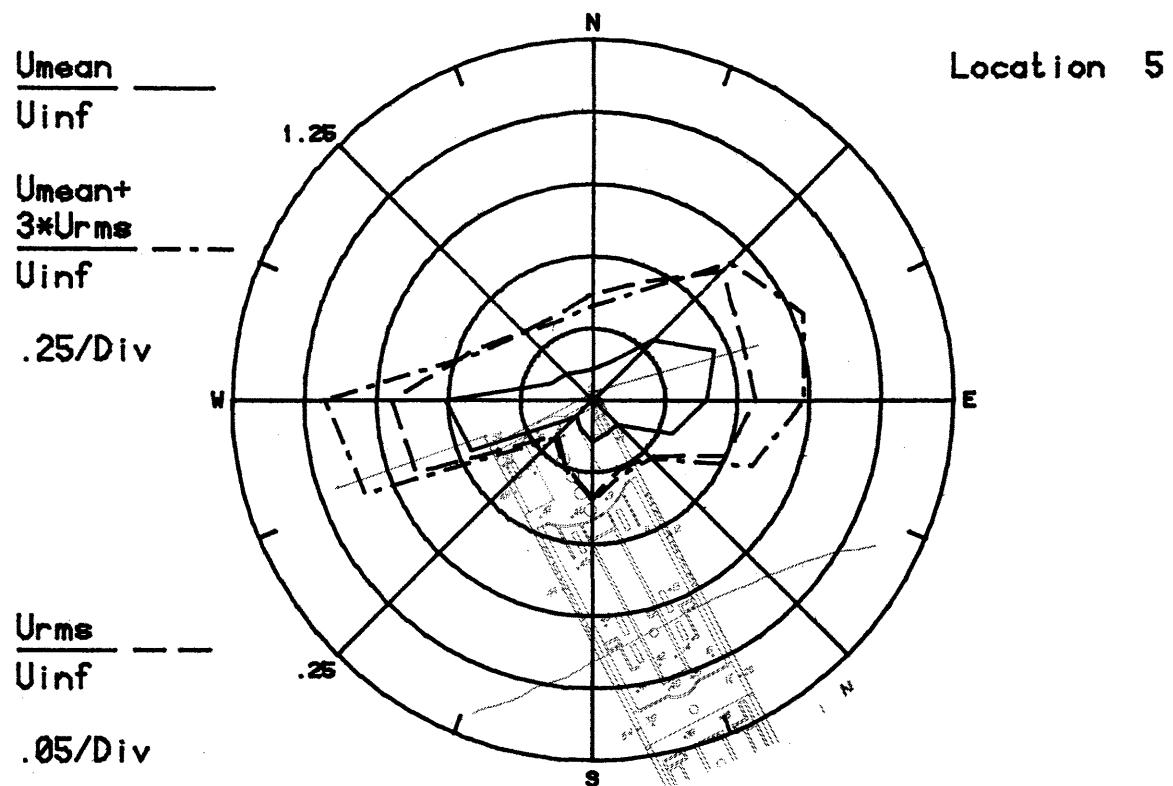


Figure 8c. Mean Velocities and Turbulence Intensities at Pedestrian Locations 5 and 6

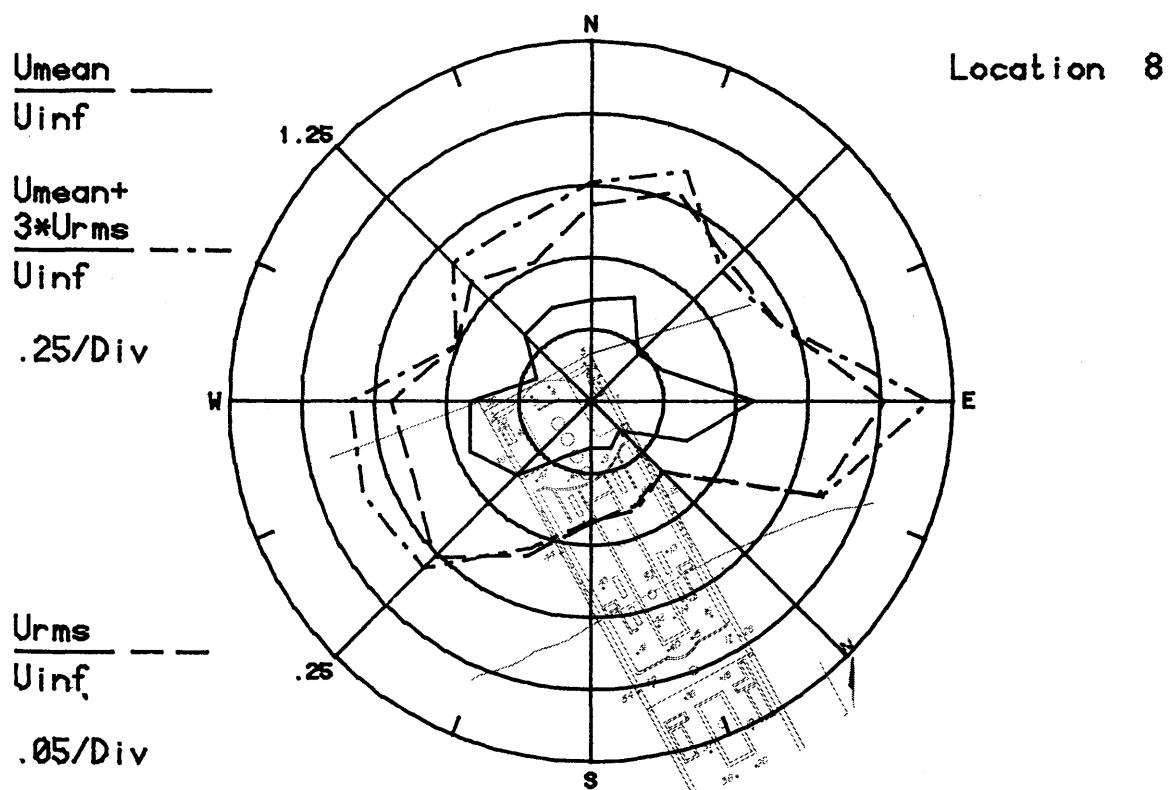
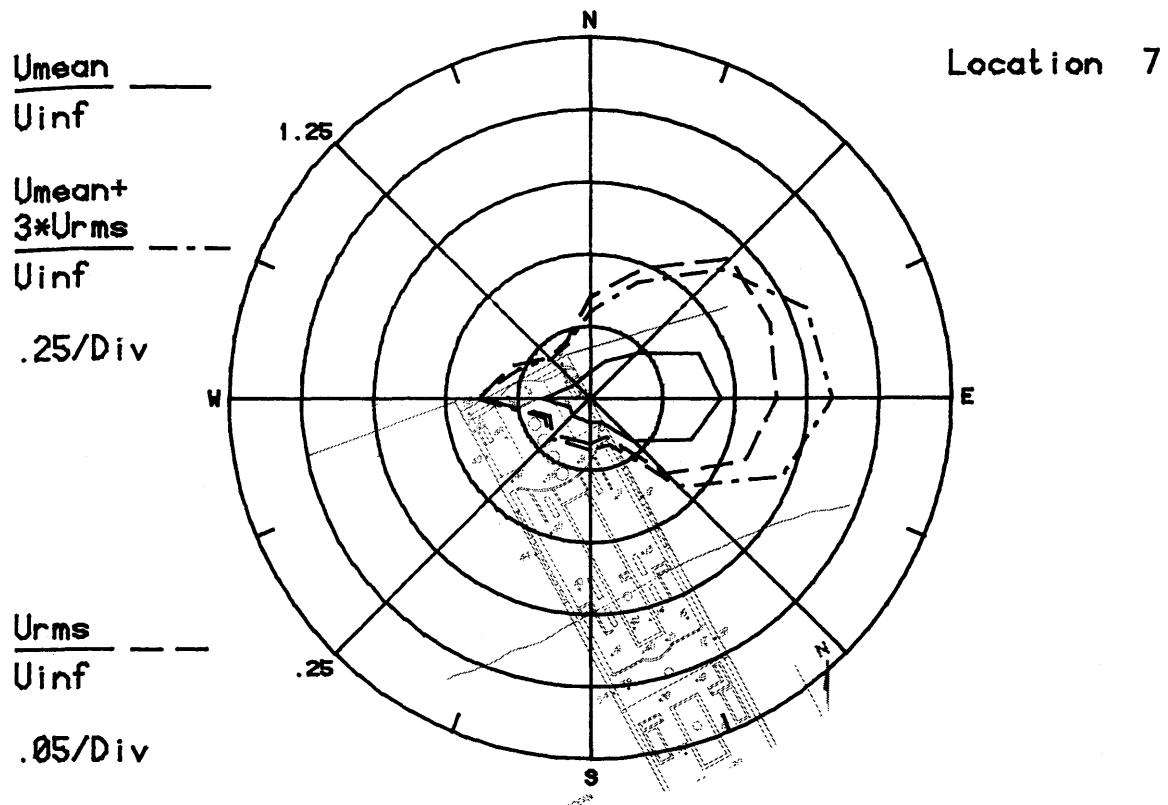


Figure 8d. Mean Velocities and Turbulence Intensities at Pedestrian Locations 7 and 8

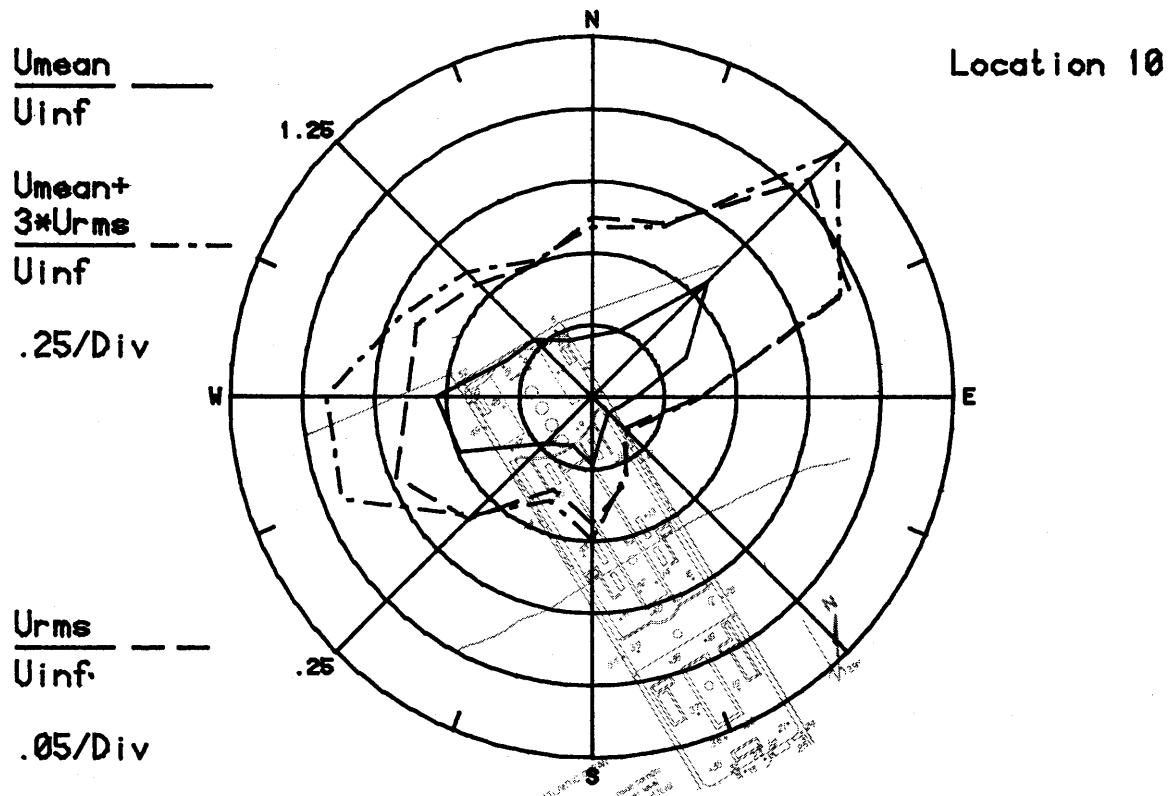
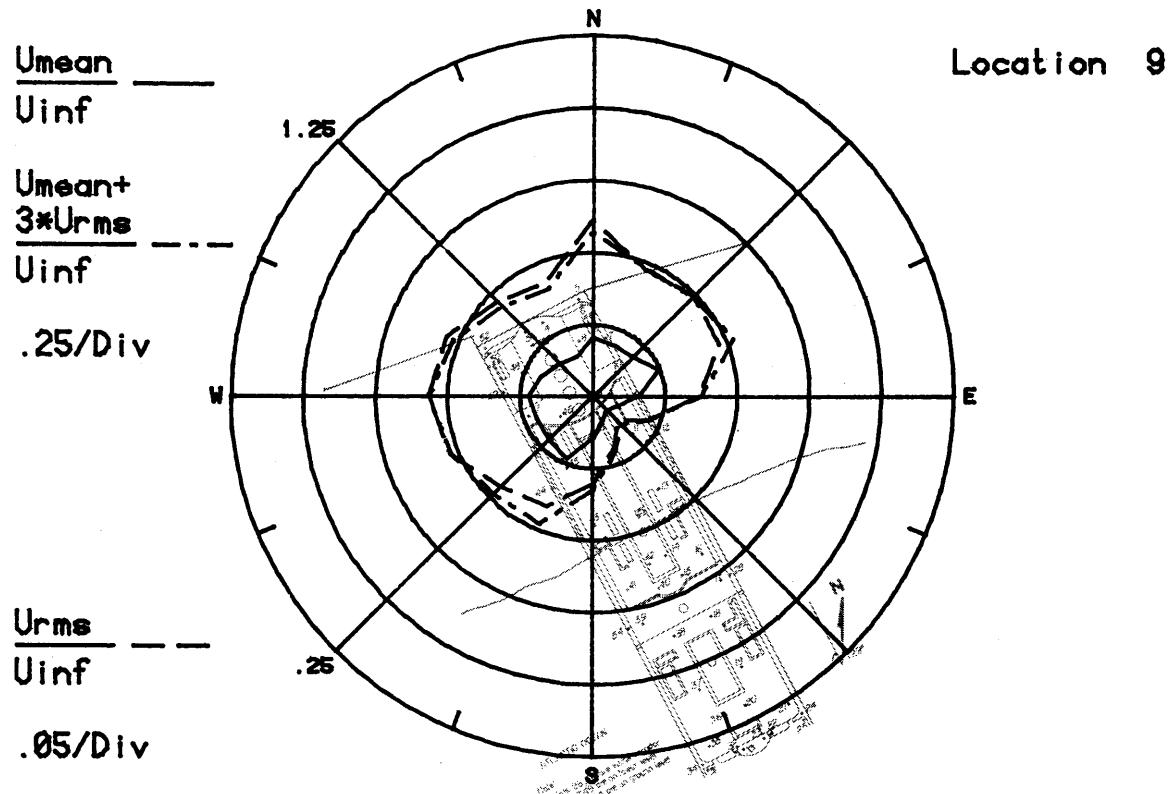
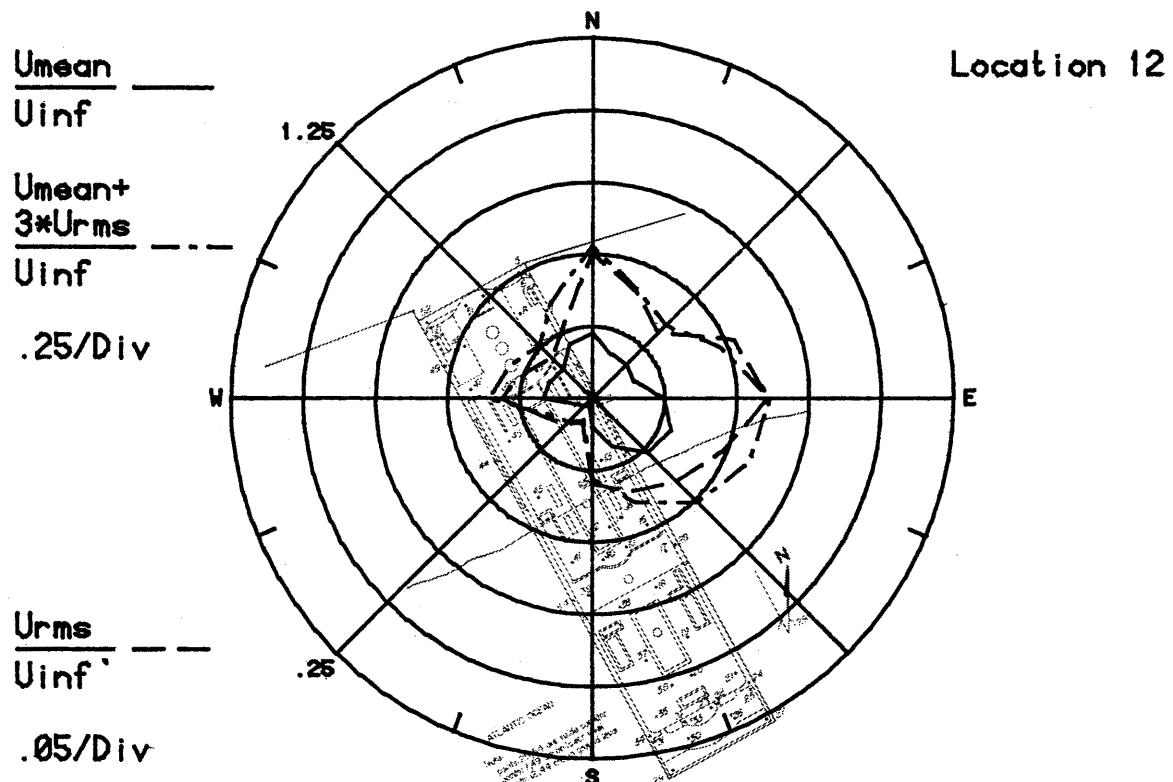
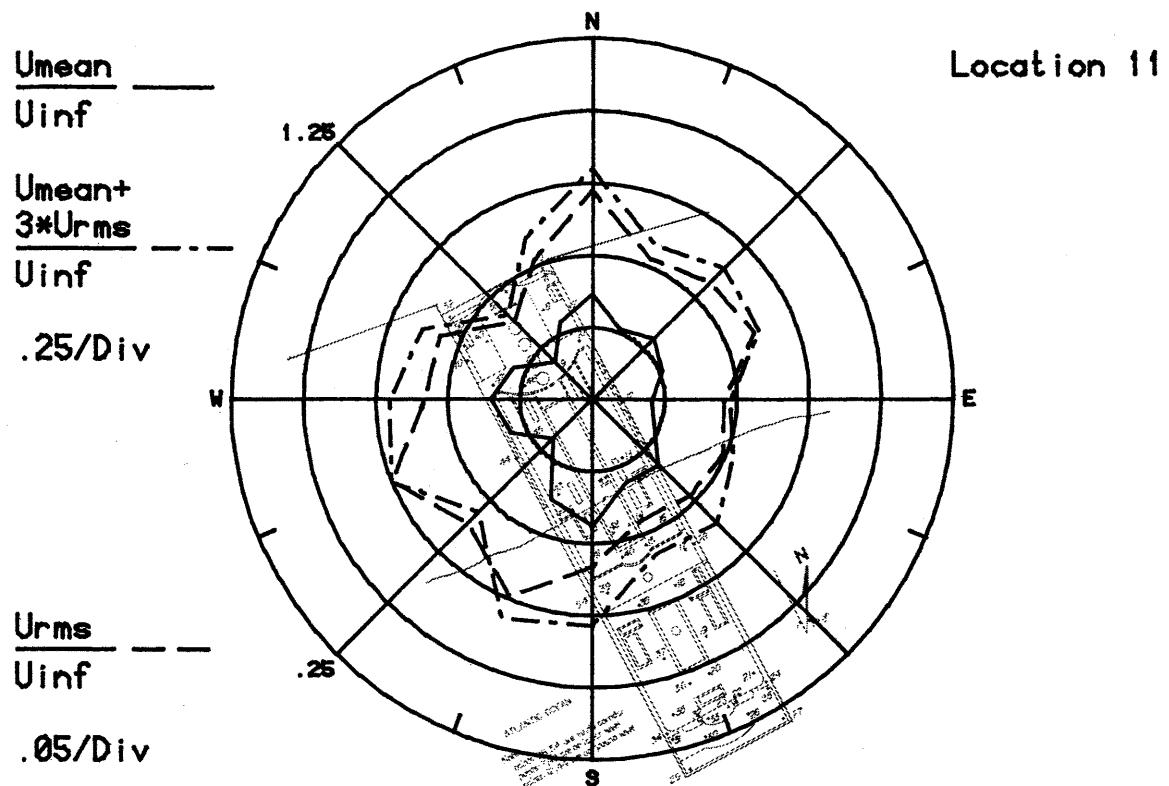


Figure 8e. Mean Velocities and Turbulence Intensities at Pedestrian Locations 9 and 10



**Figure 8f.** Mean Velocities and Turbulence Intensities at Pedestrian Locations 11 and 12

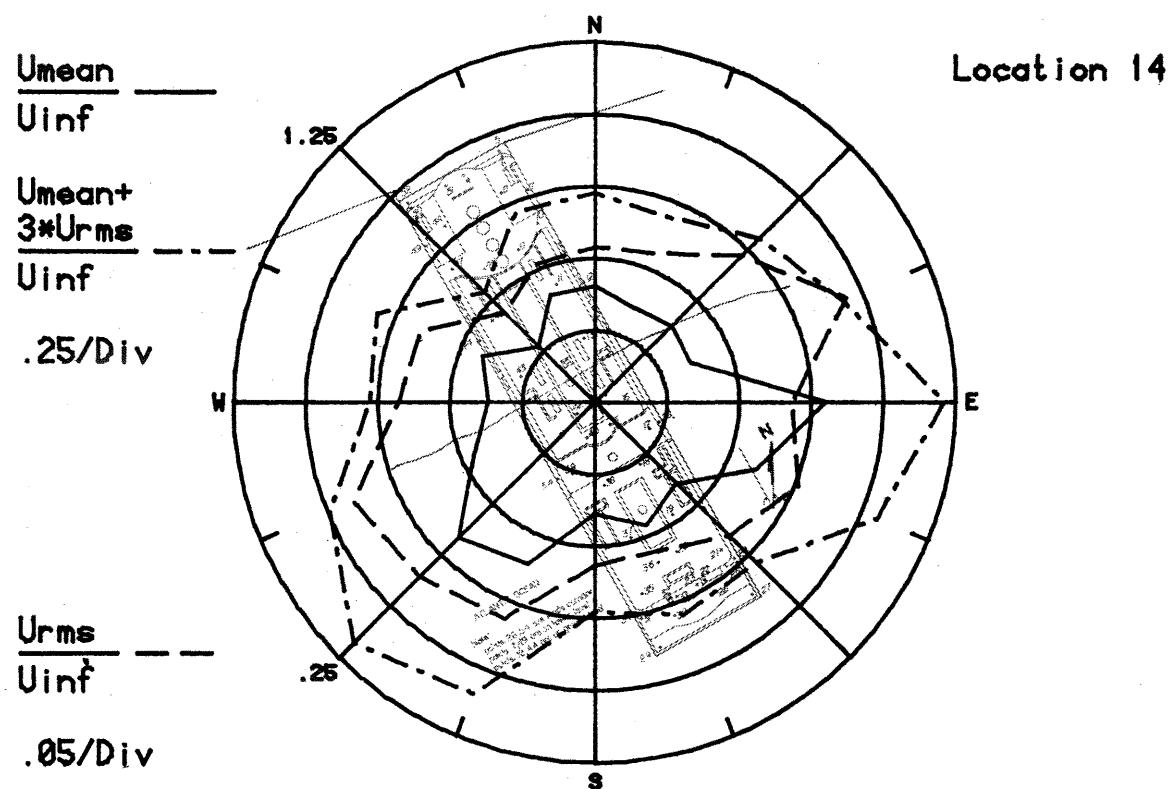
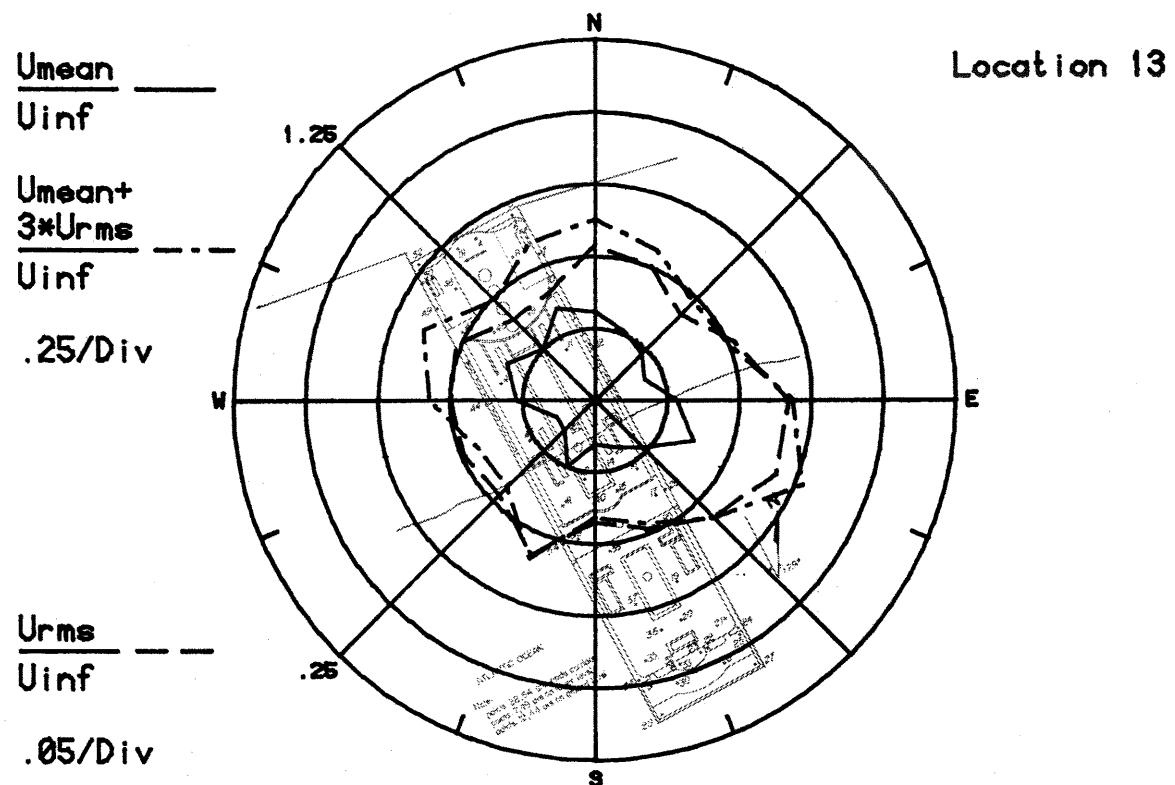


Figure 8g. Mean Velocities and Turbulence Intensities at Pedestrian Locations 13 and 14

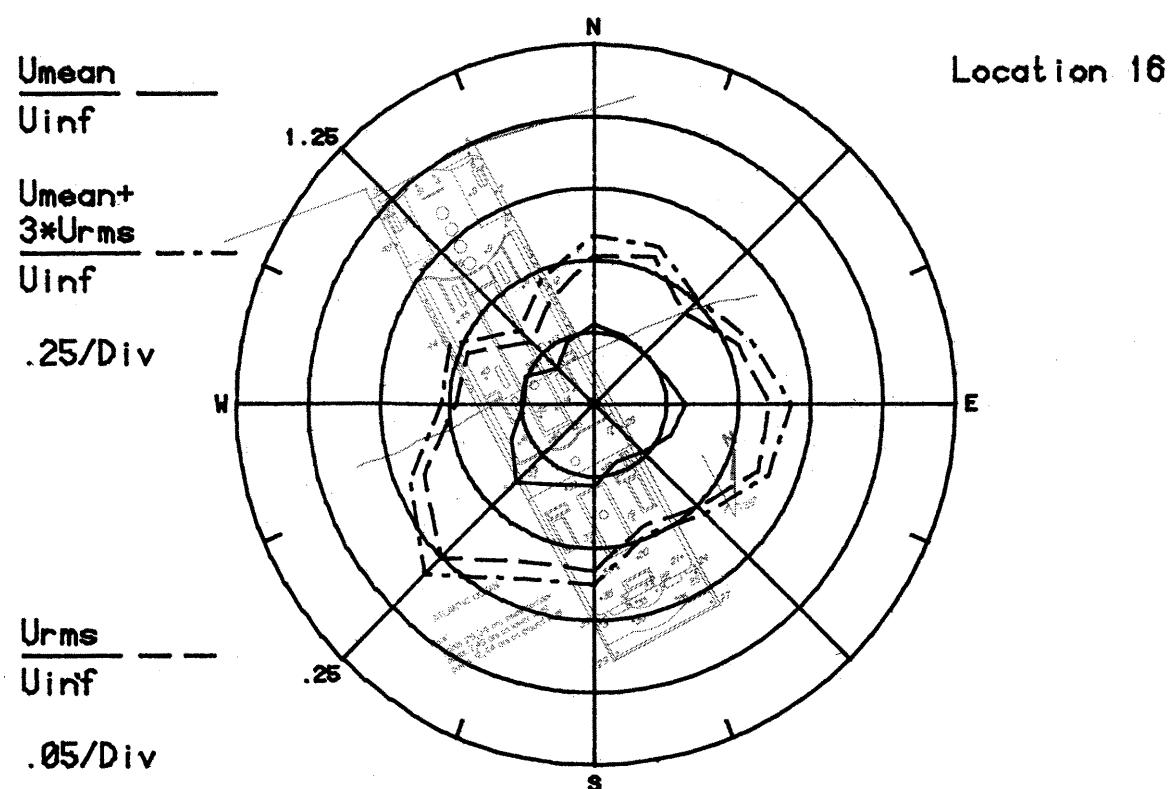
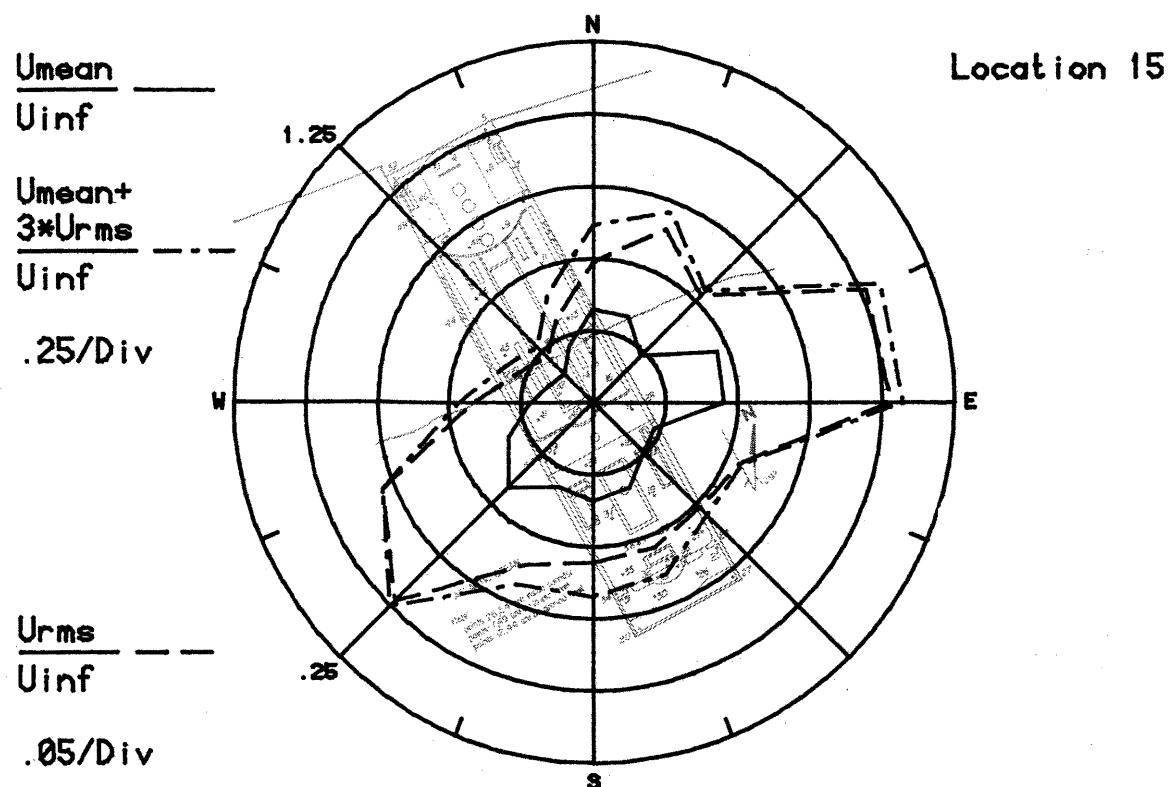
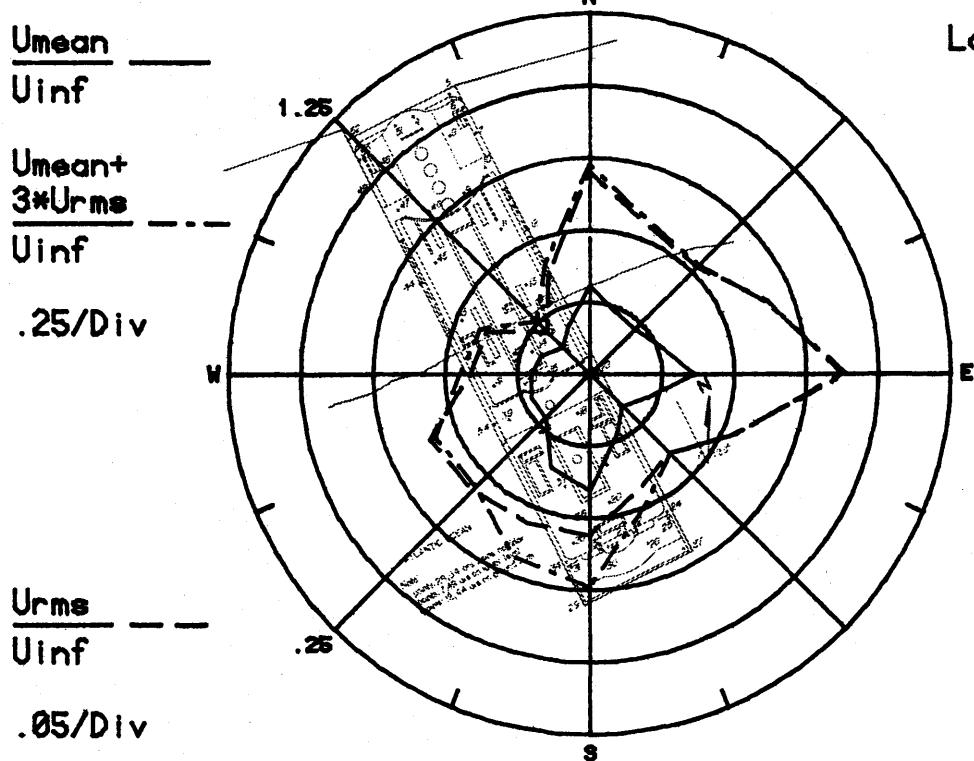


Figure 8h. Mean Velocities and Turbulence Intensities at Pedestrian Locations 15 and 16

50

Location 17



Location 18

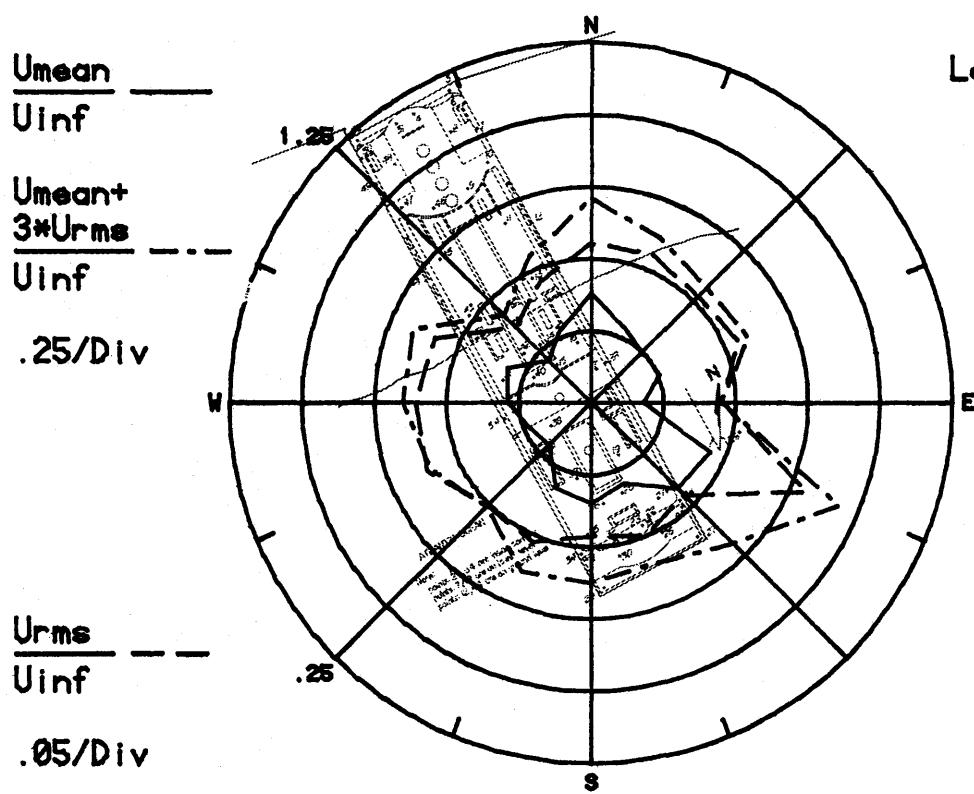


Figure 81. Mean Velocities and Turbulence Intensities at Pedestrian Locations 17 and 18

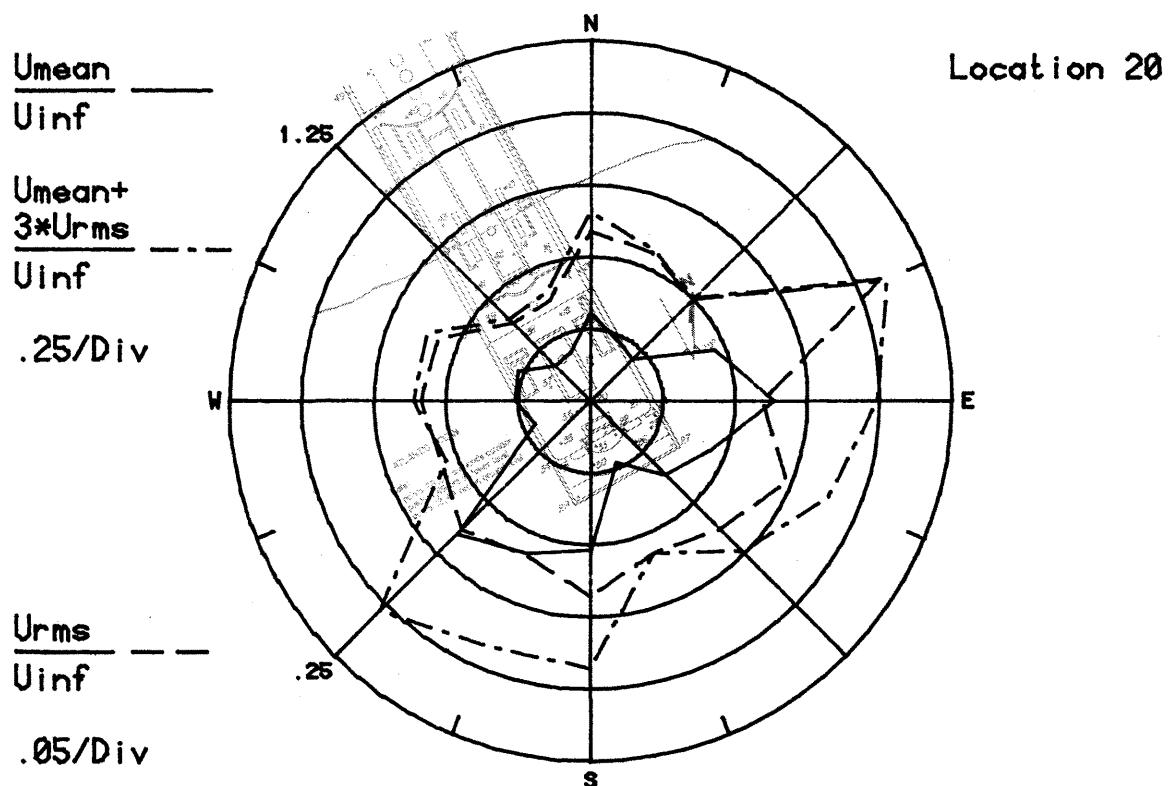
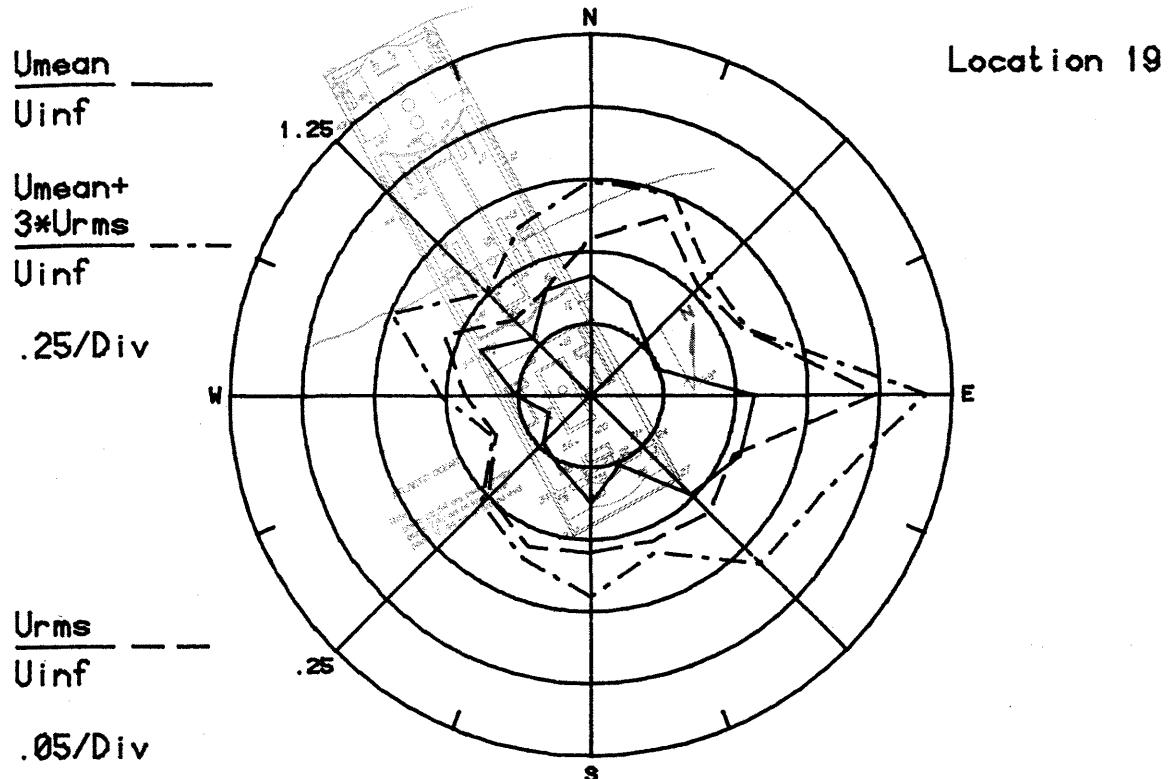


Figure 8j. Mean Velocities and Turbulence Intensities at Pedestrian Locations 19 and 20

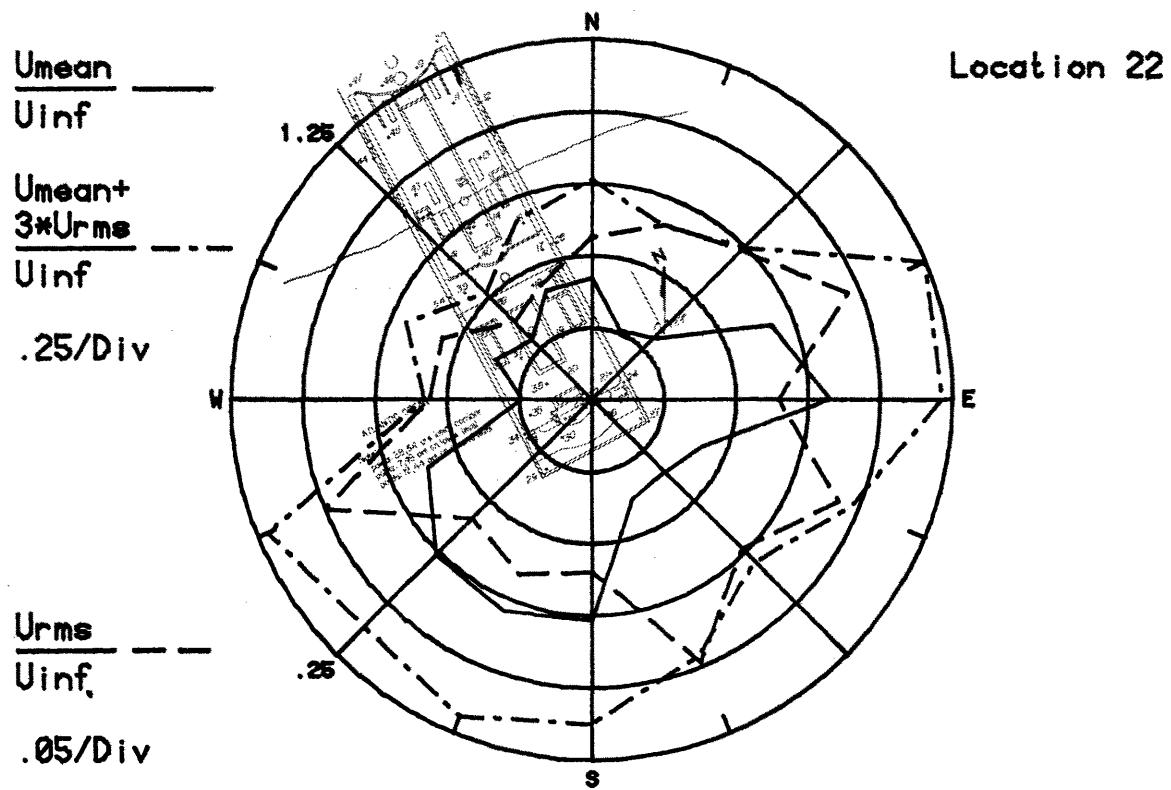
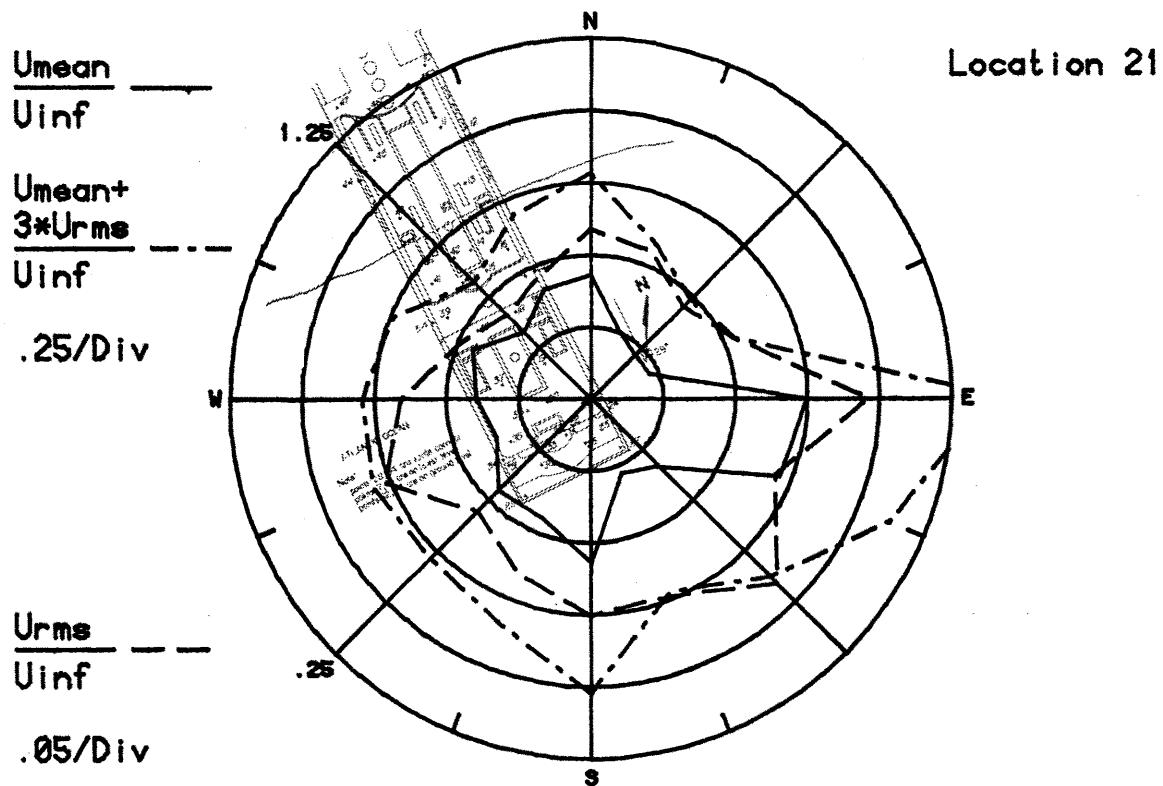


Figure 8k. Mean Velocities and Turbulence Intensities at Pedestrian Locations 21 and 22

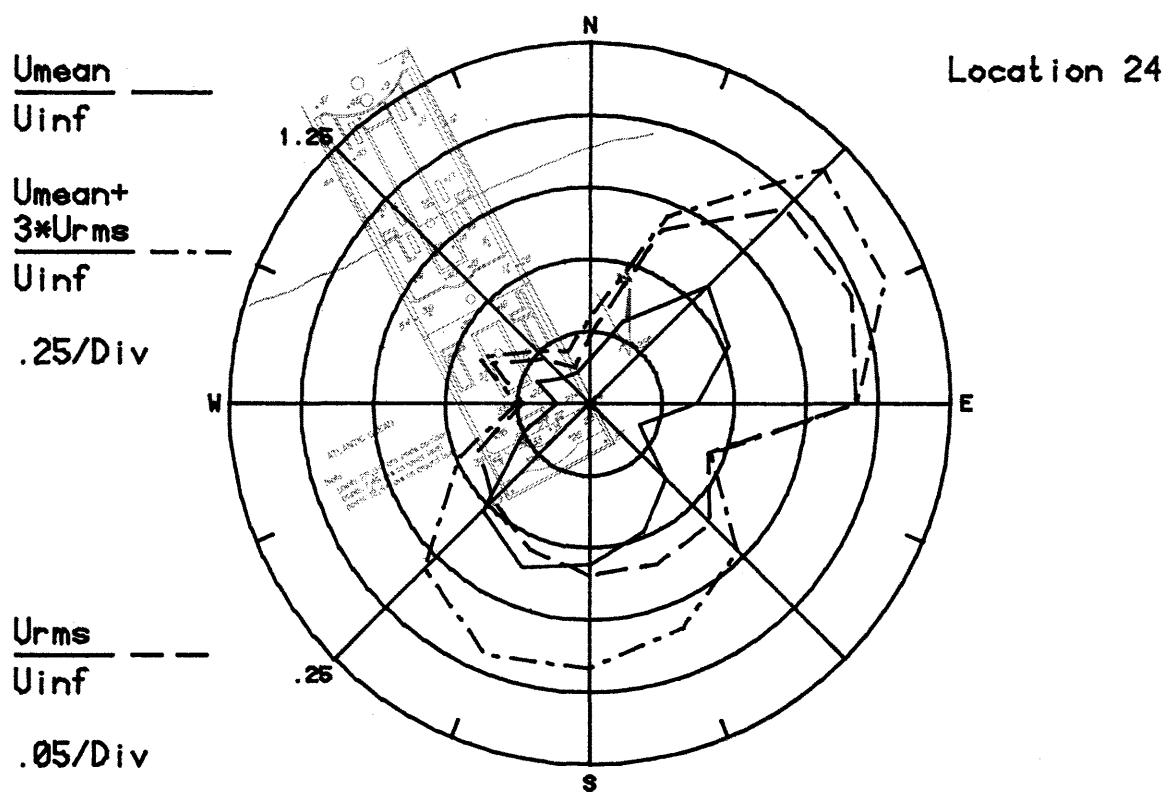
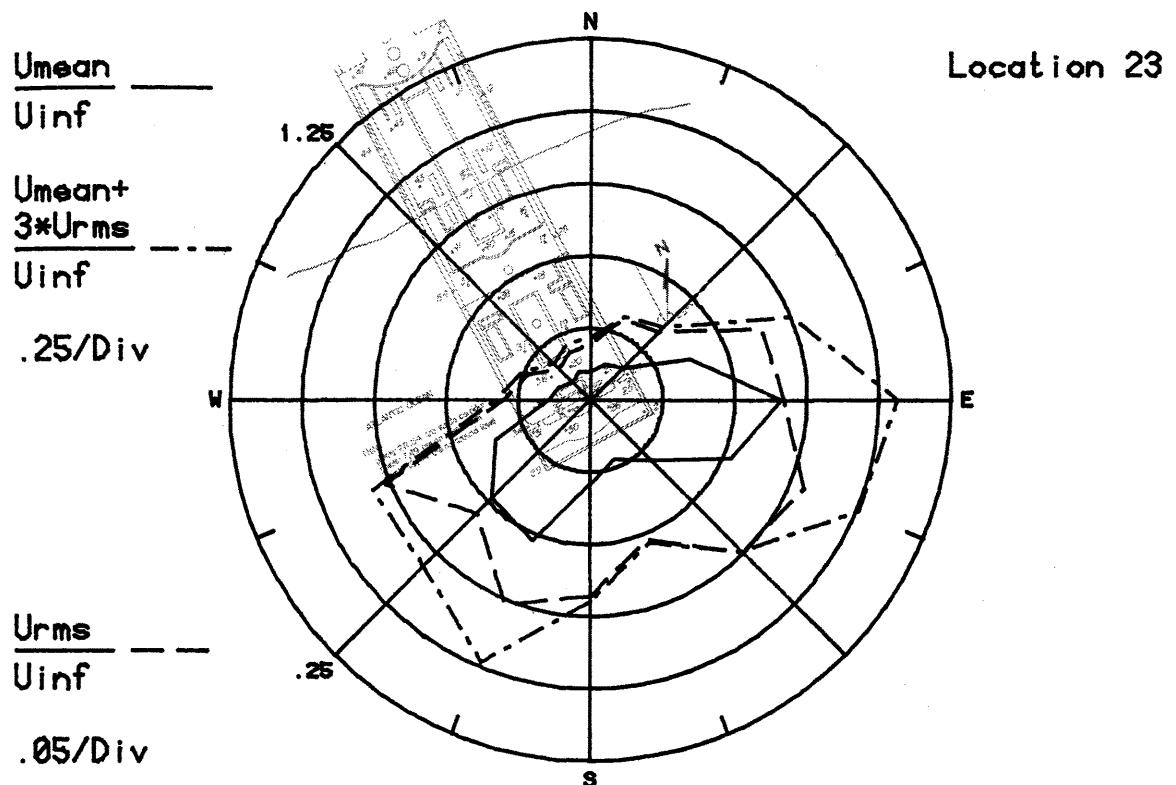
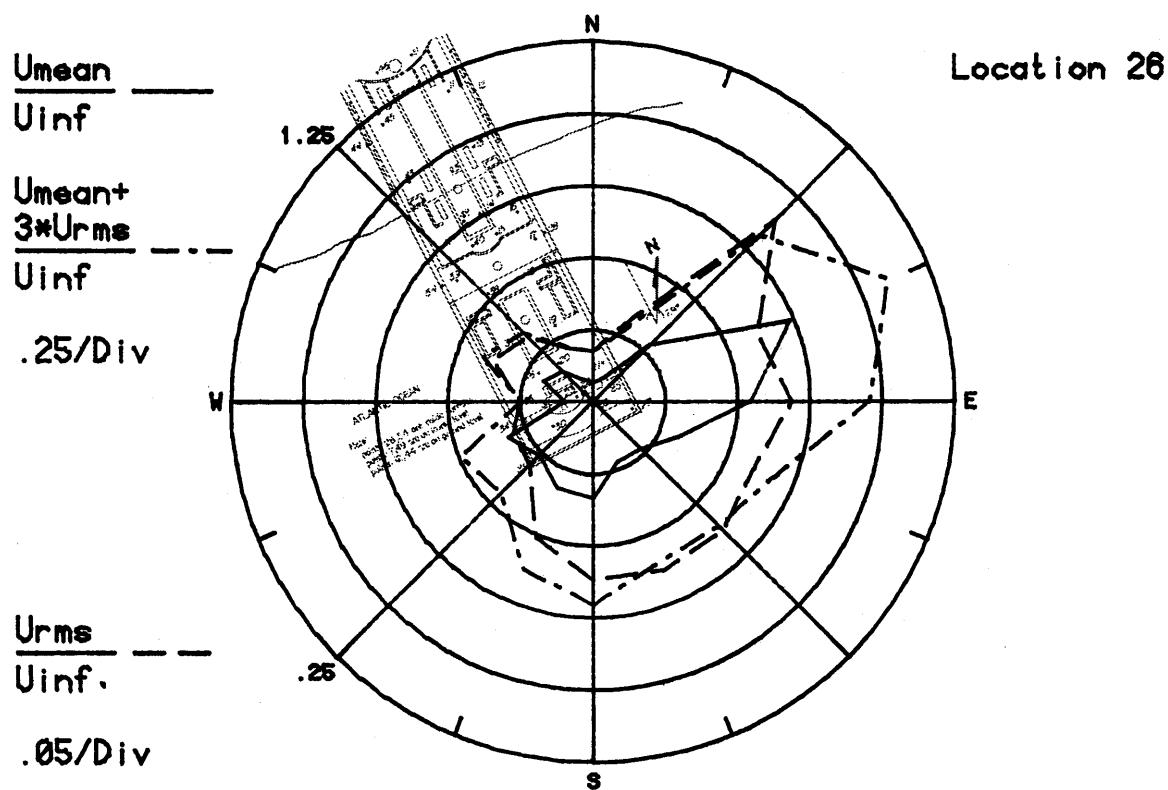
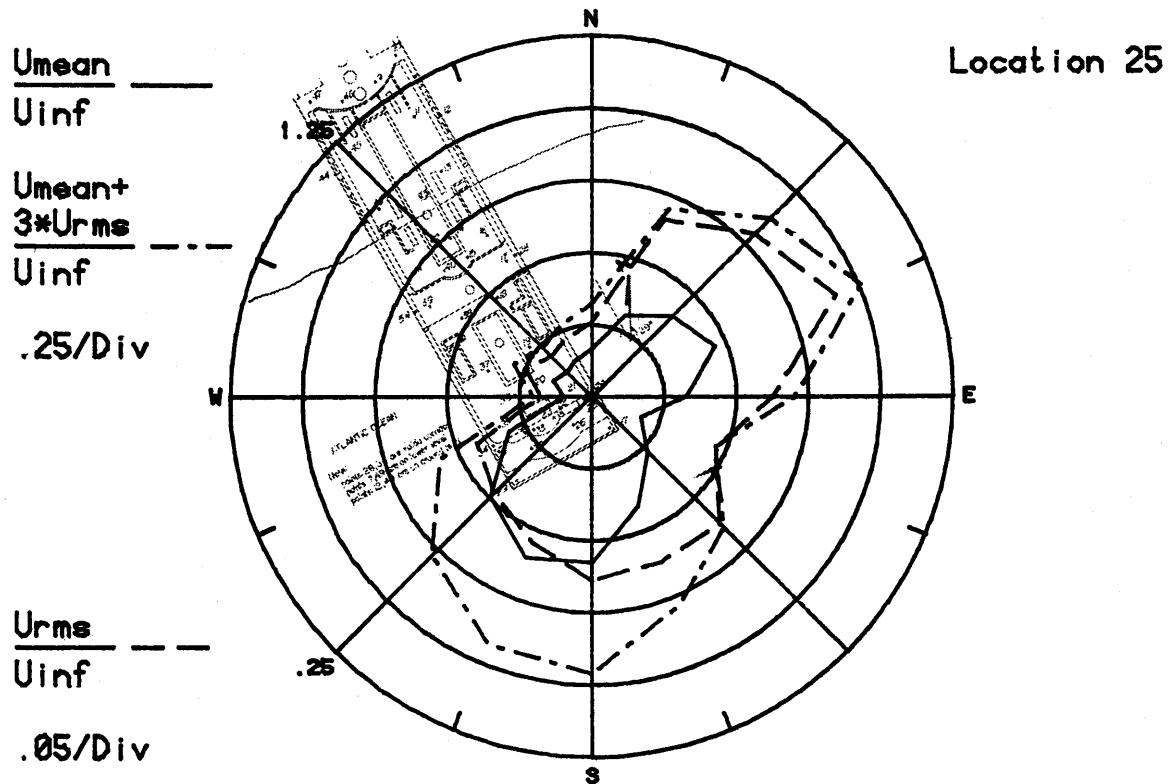


Figure 81. Mean Velocities and Turbulence Intensities at Pedestrian Locations 23 and 24



**Figure 8m.** Mean Velocities and Turbulence Intensities at Pedestrian Locations 25 and 26

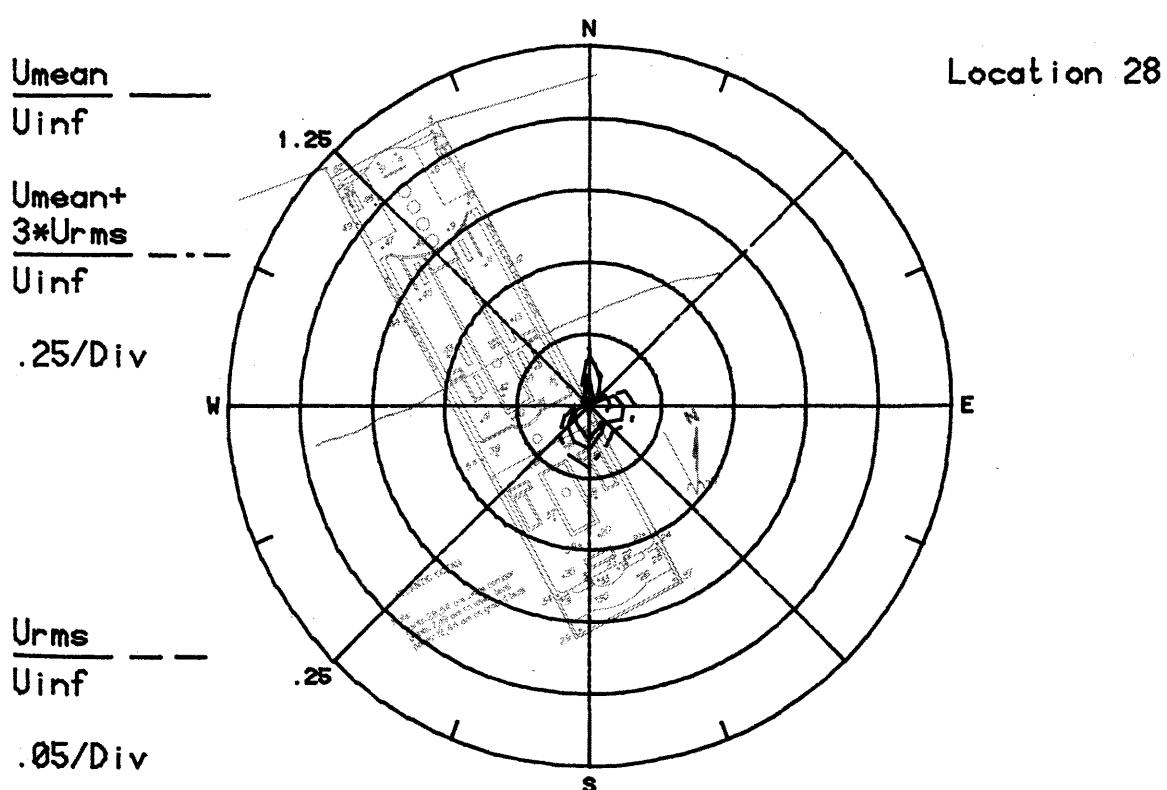
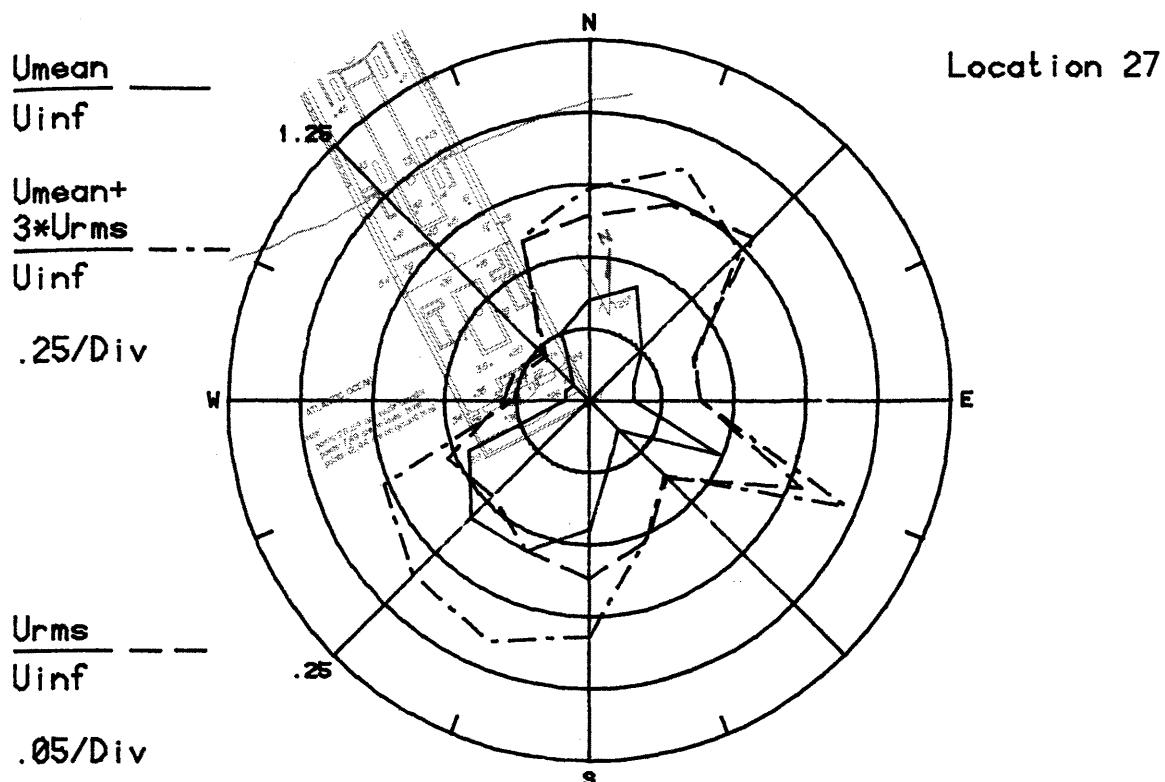
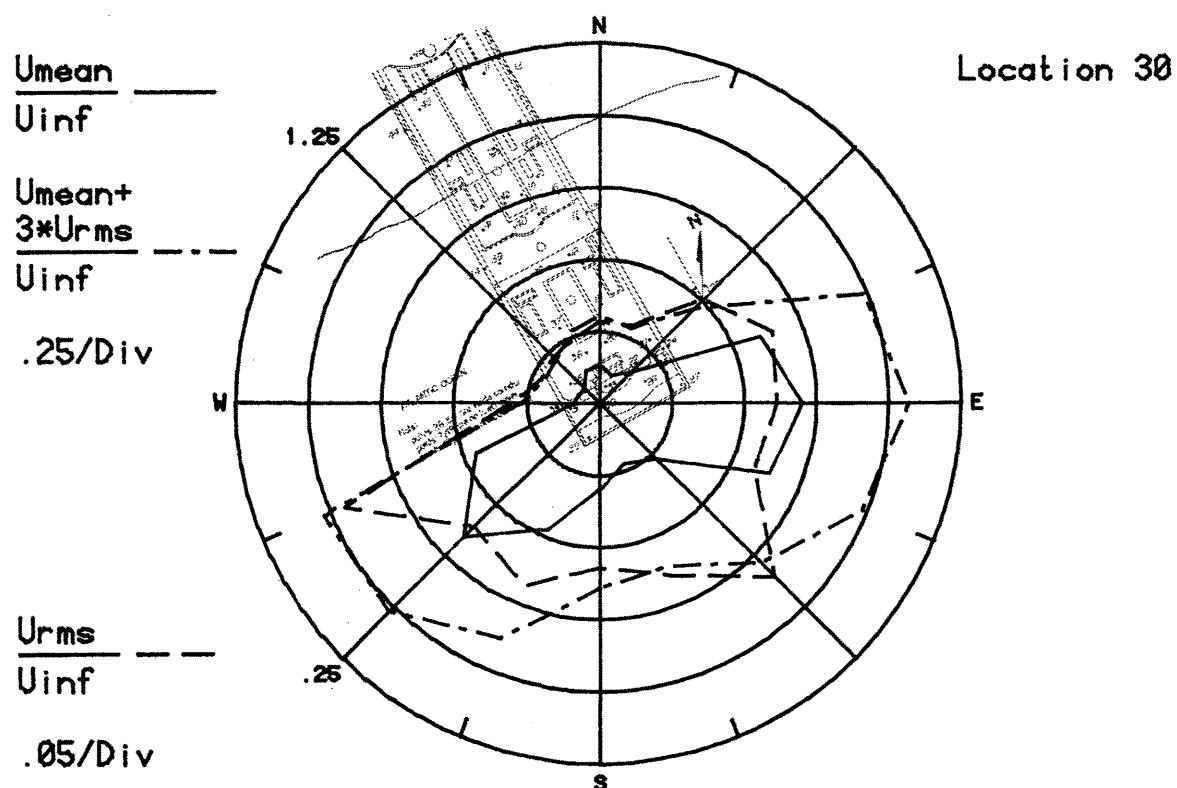
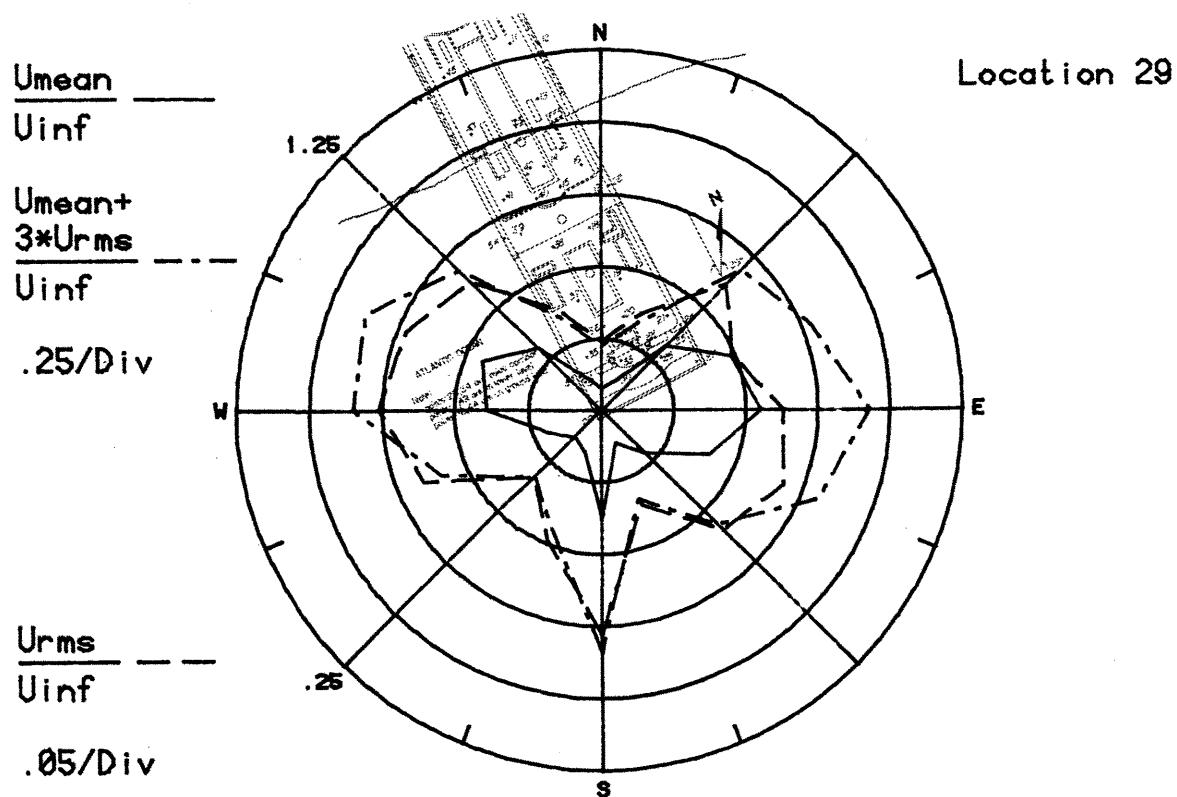


Figure 8n. Mean Velocities and Turbulence Intensities at Pedestrian Locations 27 and 28



**Figure 8o.** Mean Velocities and Turbulence Intensities at Pedestrian Locations 29 and 30

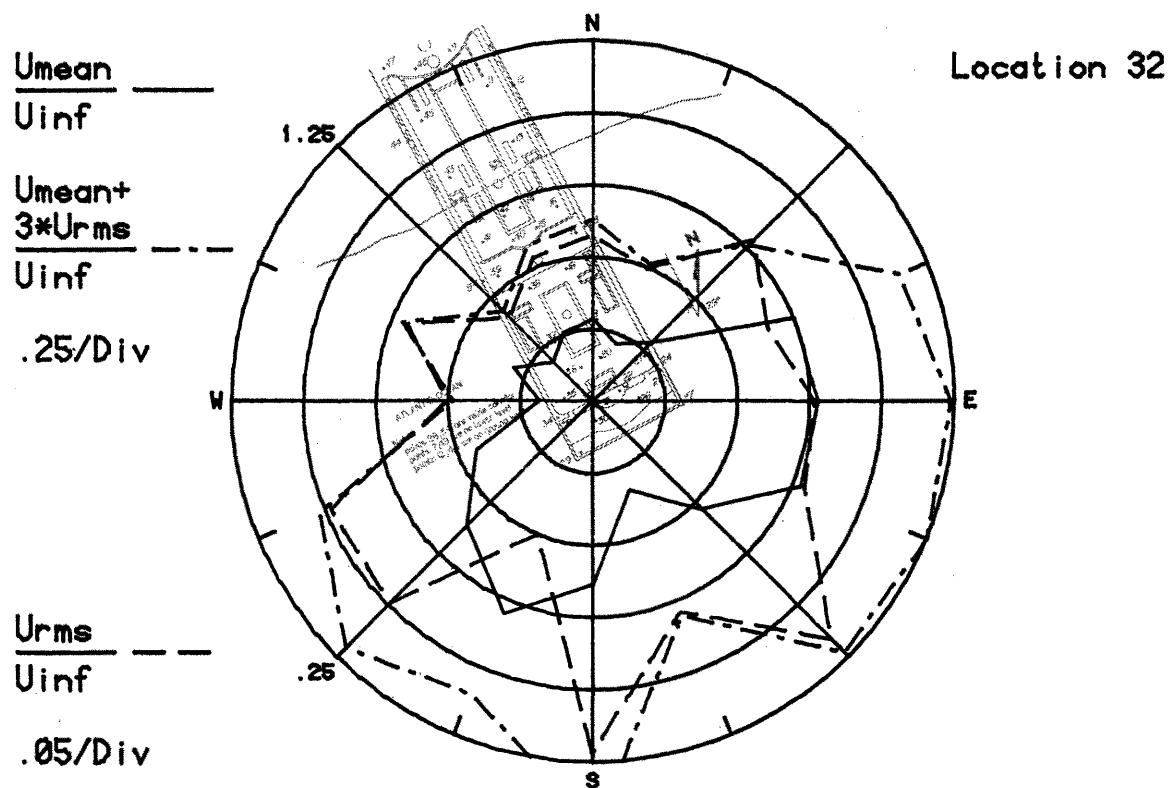
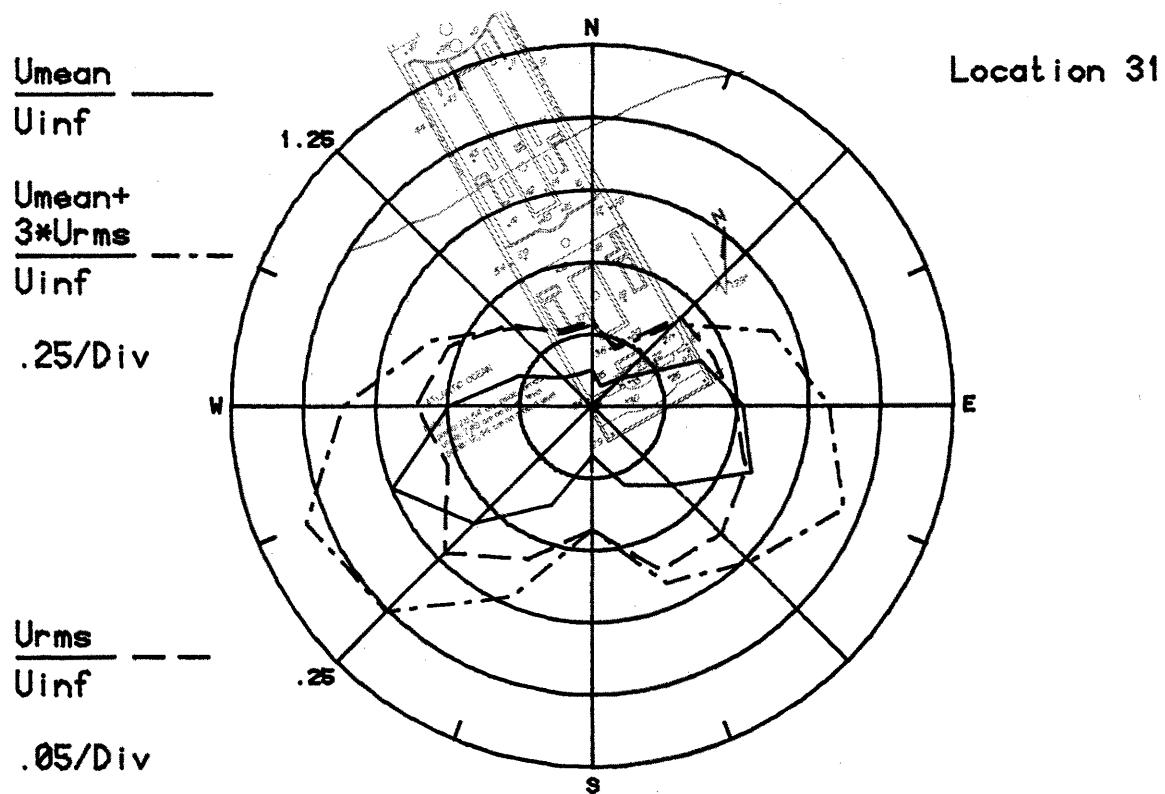


Figure 8p. Mean Velocities and Turbulence Intensities at Pedestrian Locations 31 and 32

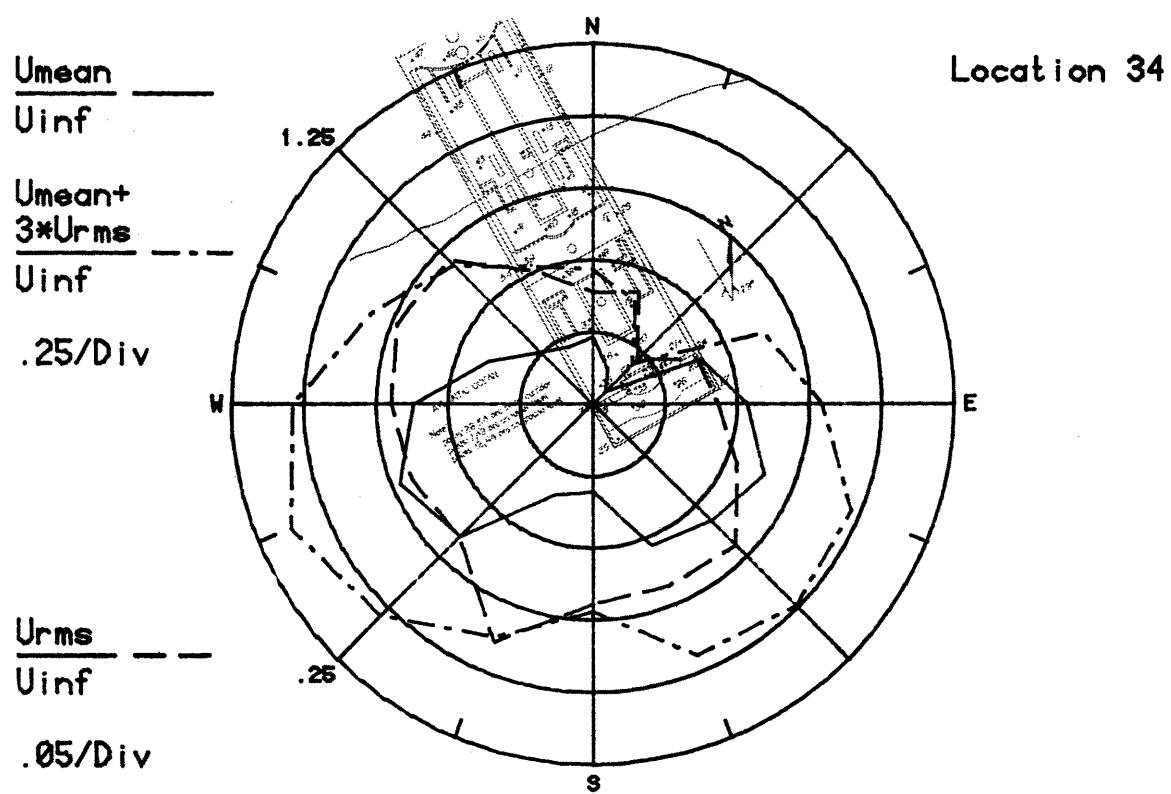
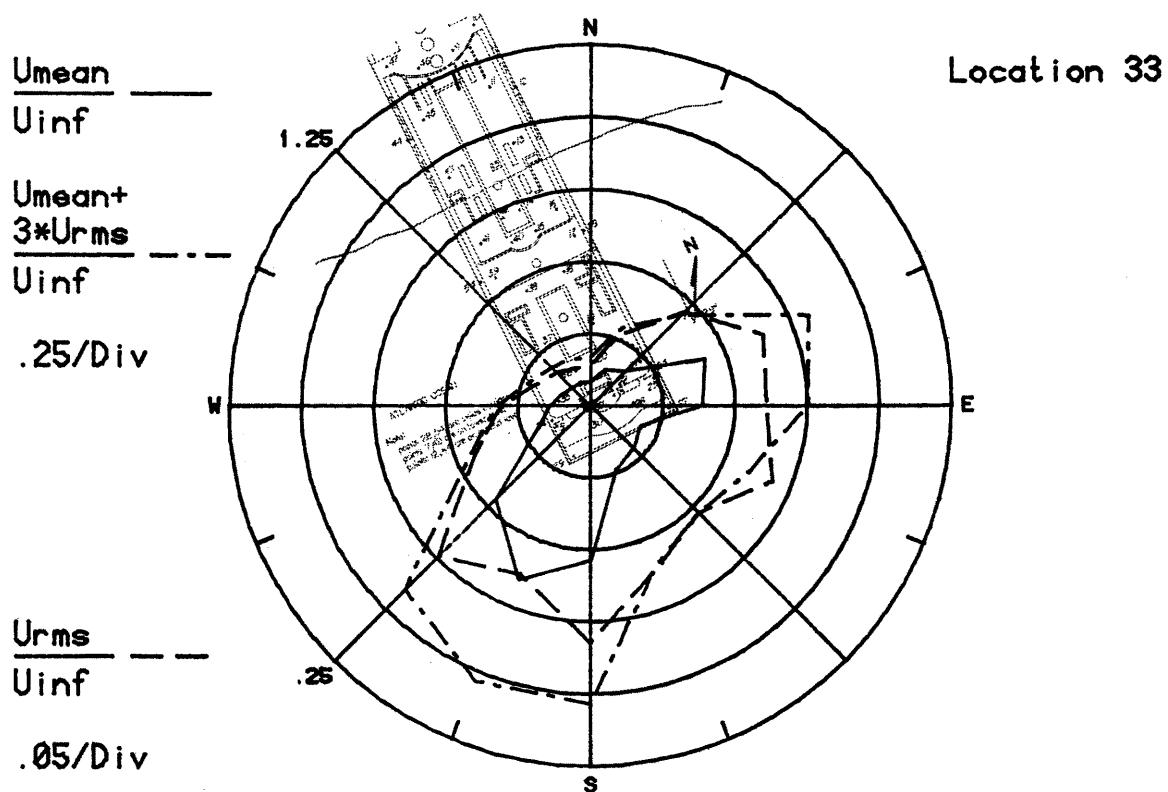


Figure 8q. Mean Velocities and Turbulence Intensities at Pedestrian Locations 33 and 34

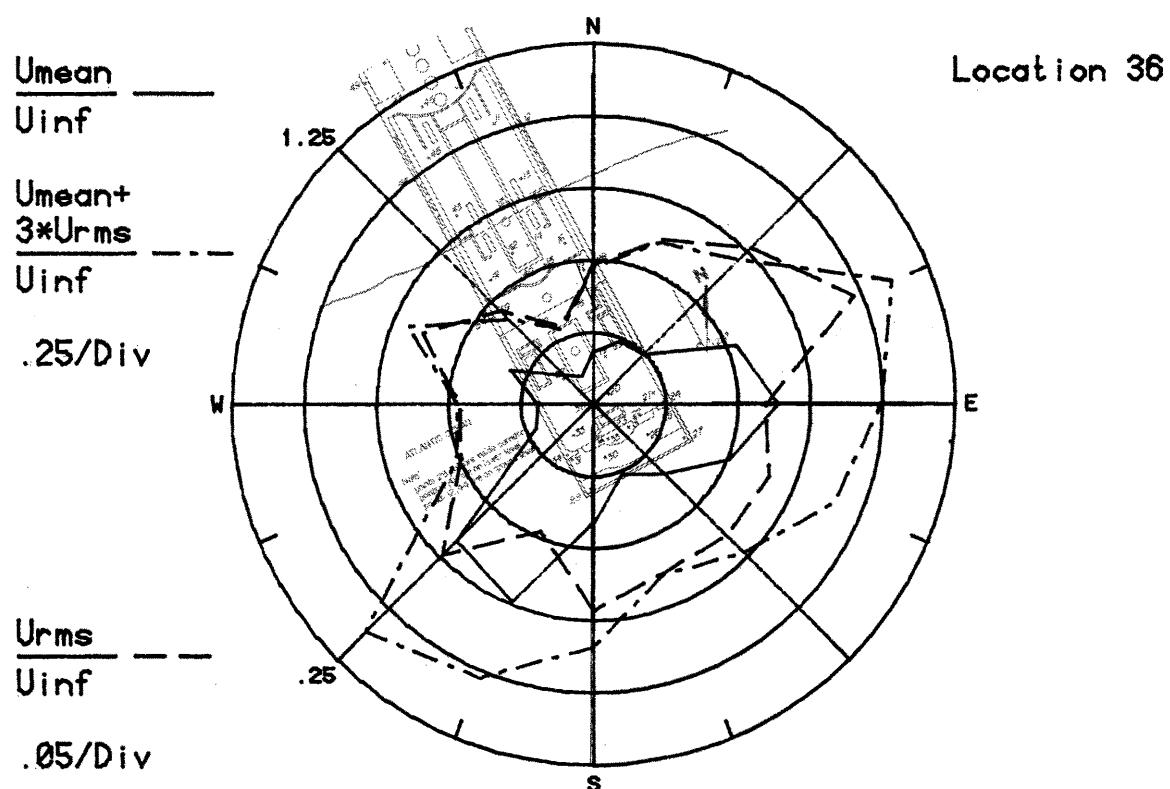
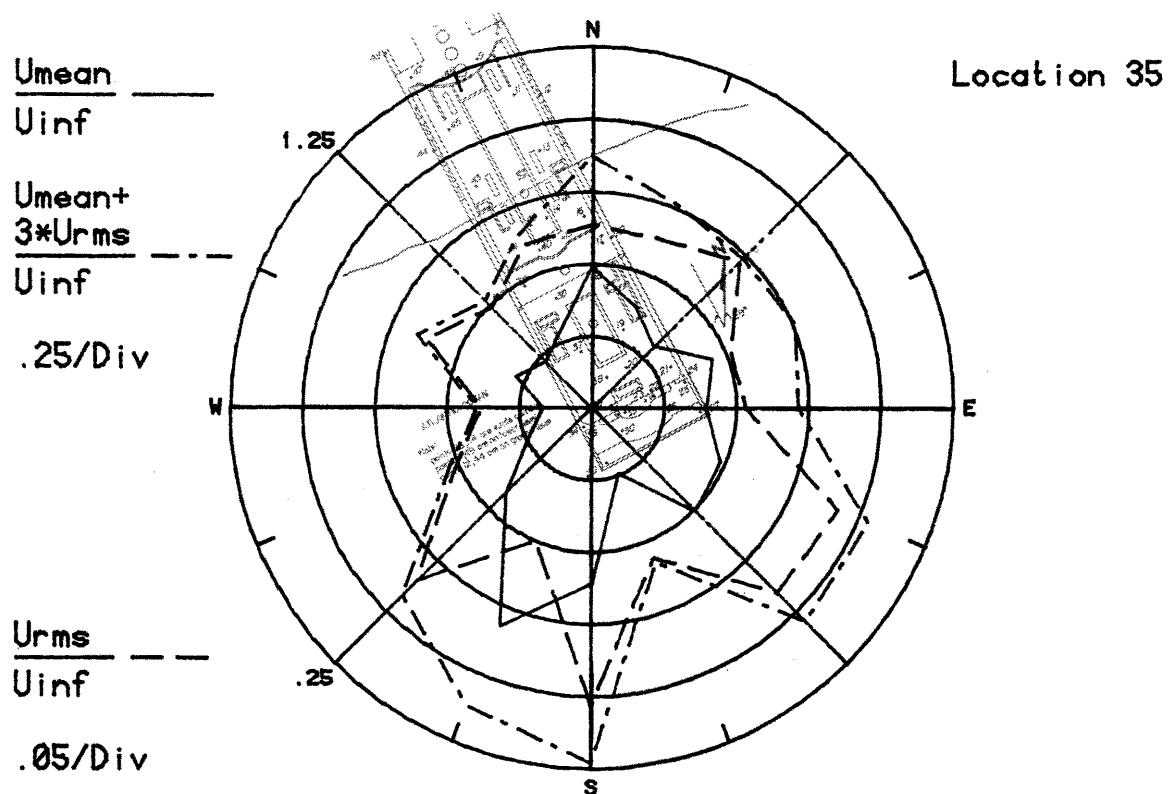


Figure 8r. Mean Velocities and Turbulence Intensities at Pedestrian Locations 35 and 36

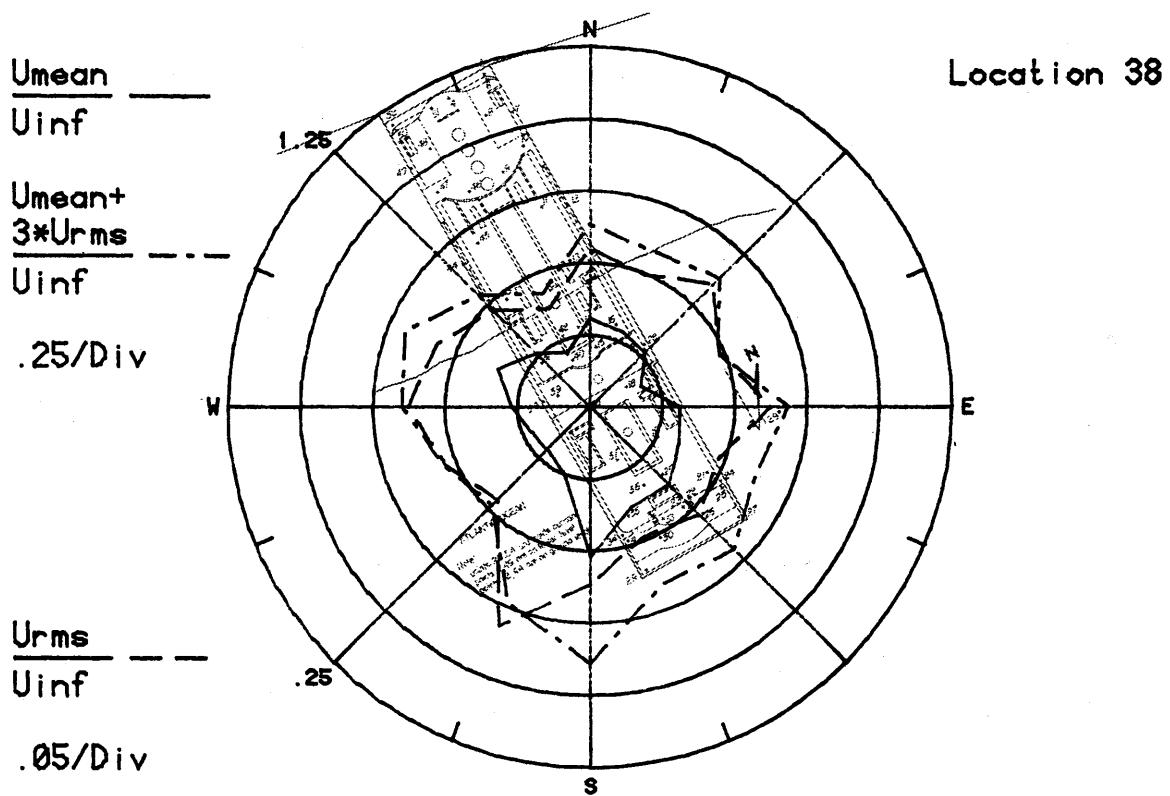
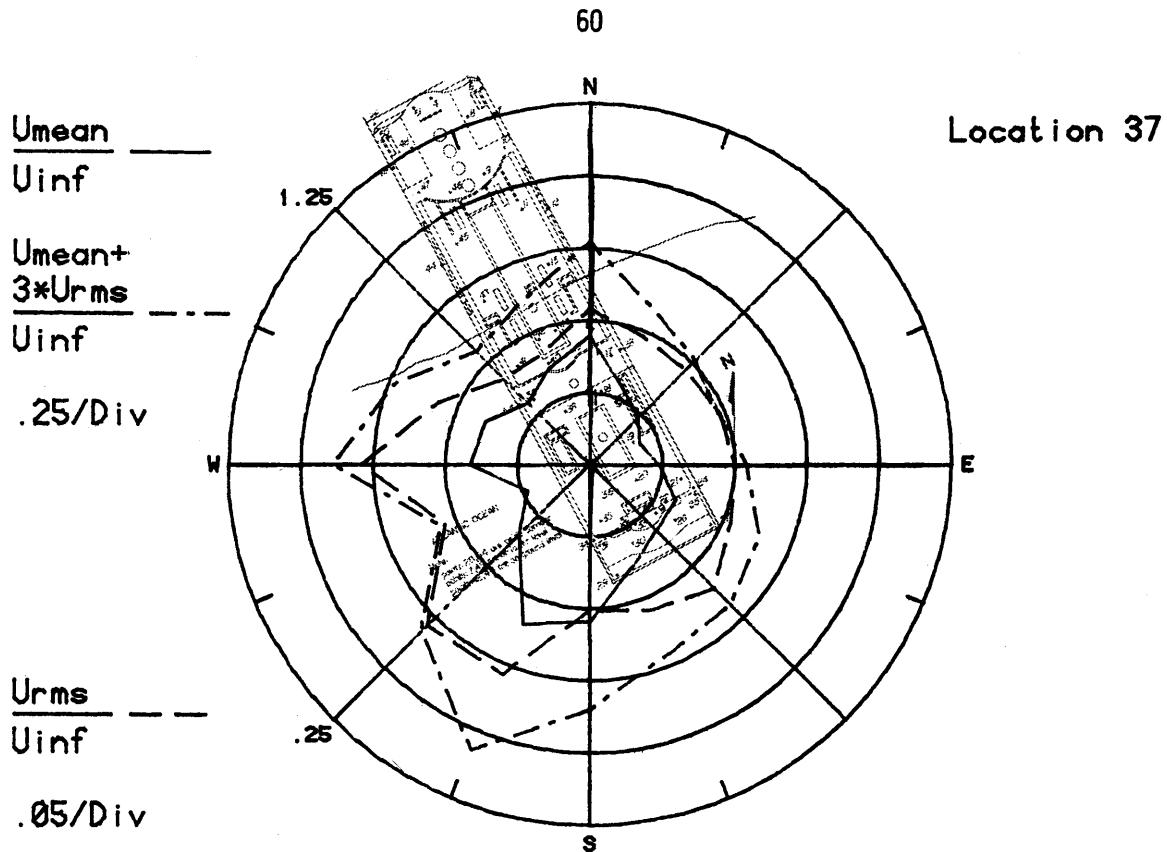


Figure 8s. Mean Velocities and Turbulence Intensities at Pedestrian Locations 37 and 38

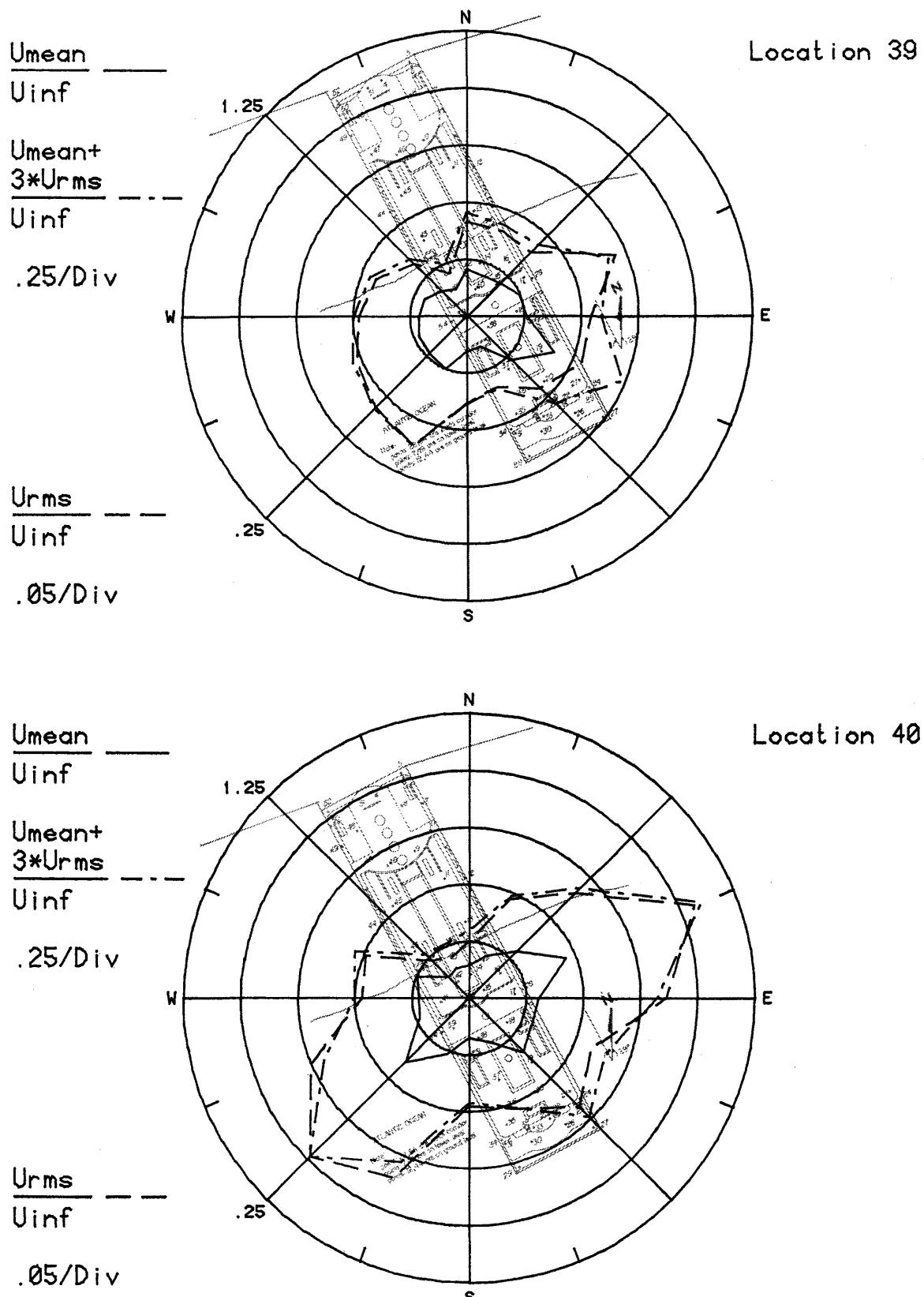


Figure 8t. Mean Velocities and Turbulence Intensities at Pedestrian Locations 39 and 40

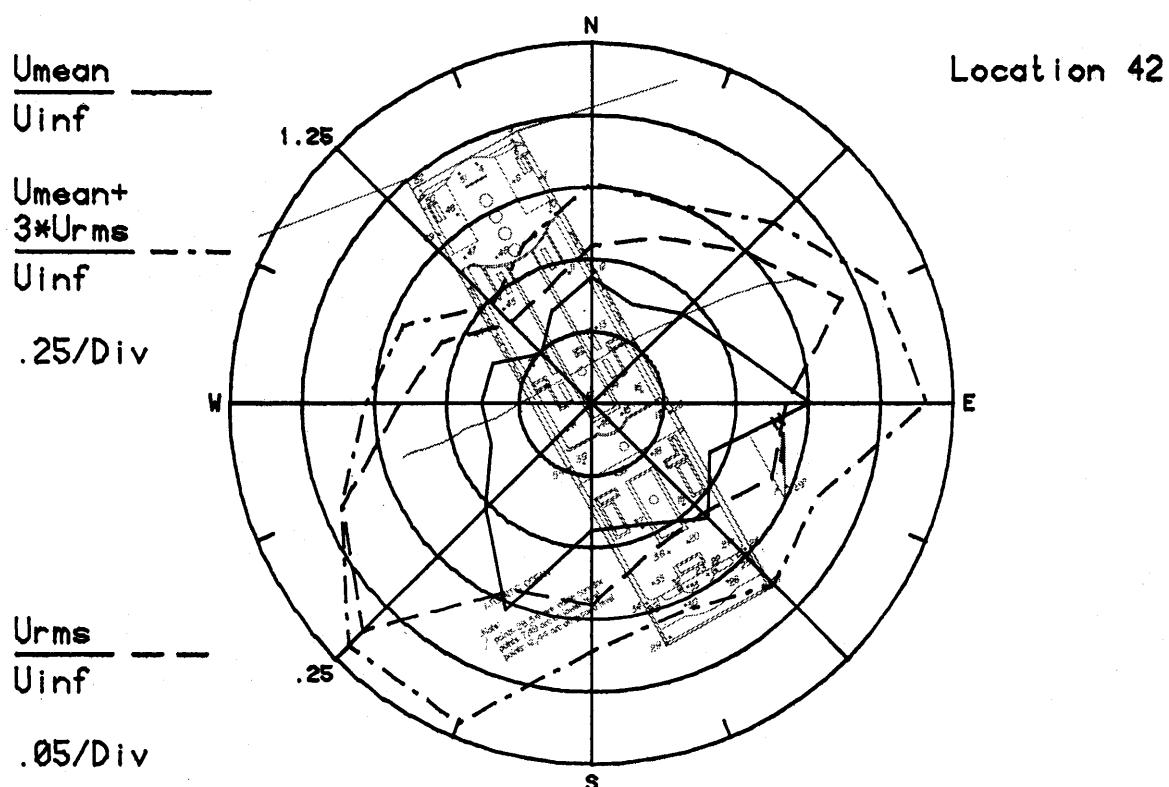
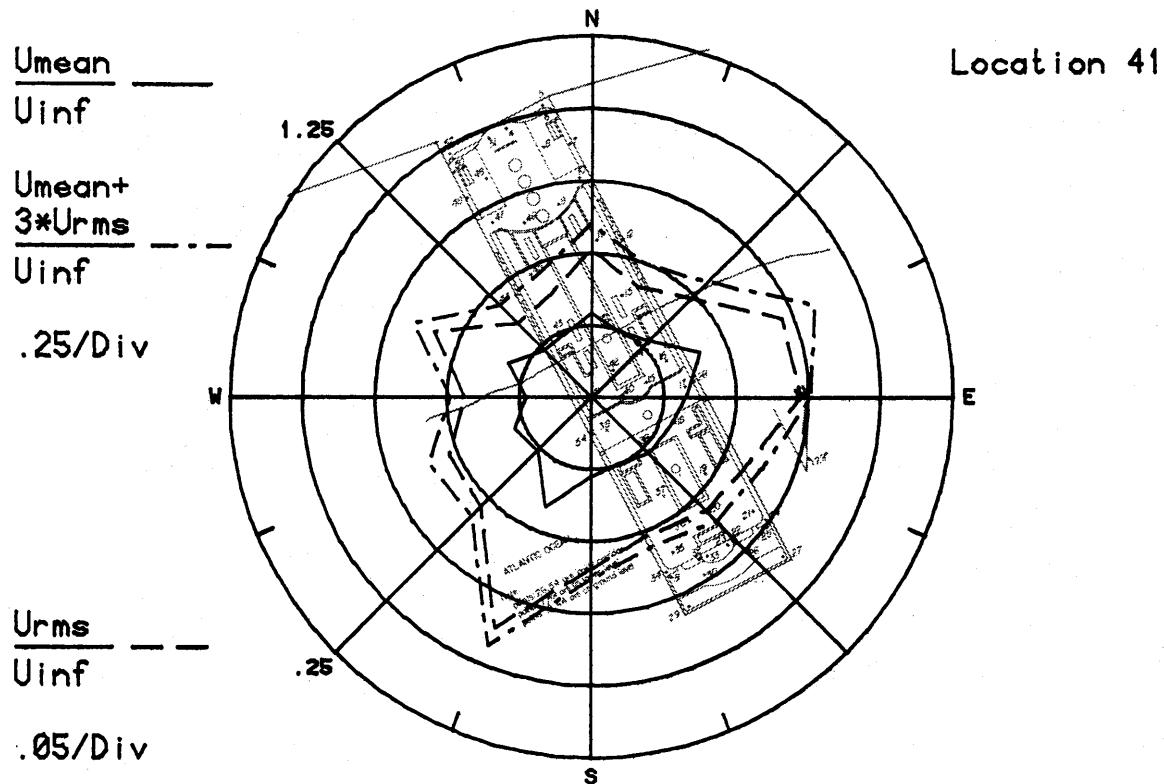


Figure 8u. Mean Velocities and Turbulence Intensities at Pedestrian Locations 41 and 42

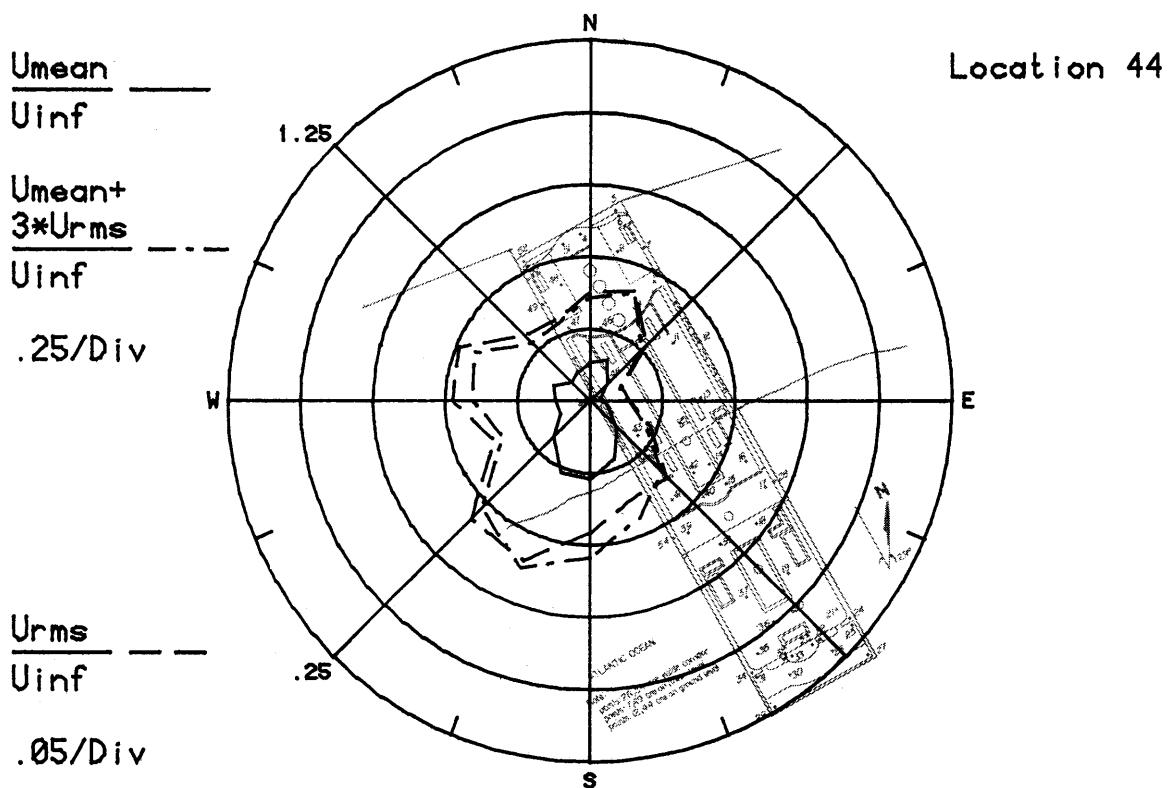
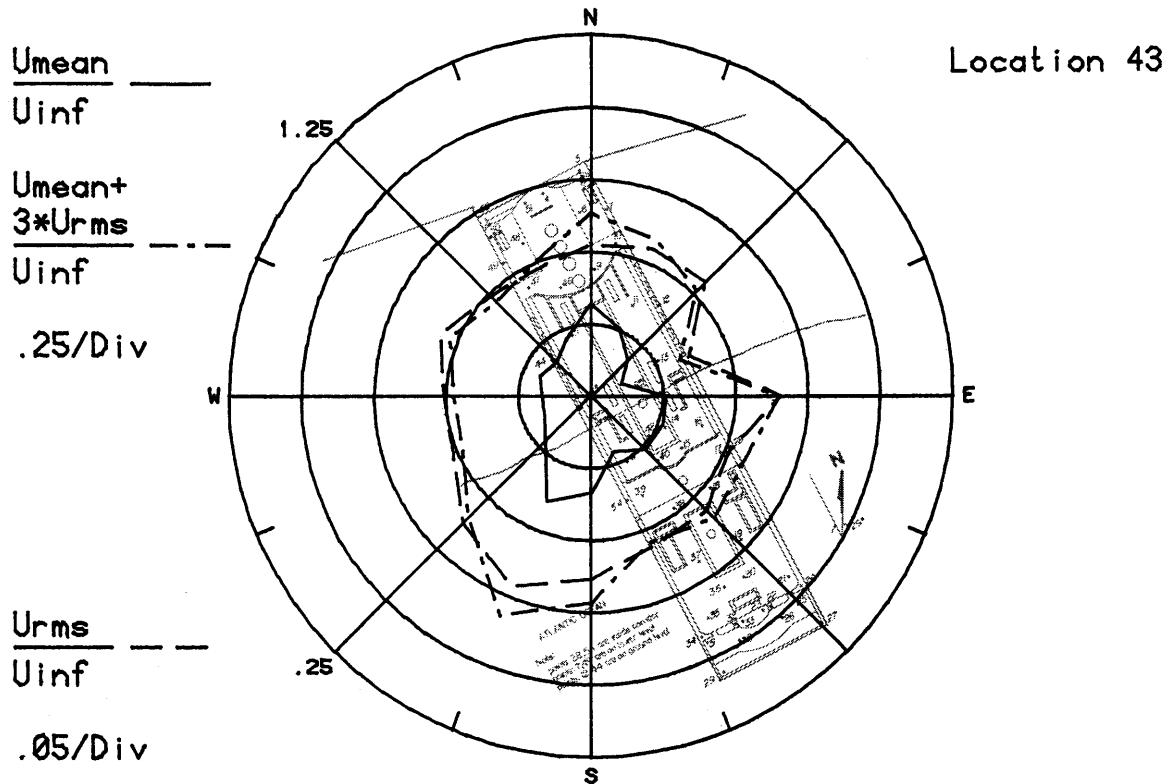


Figure 8v. Mean Velocities and Turbulence Intensities at Pedestrian Locations 43 and 44

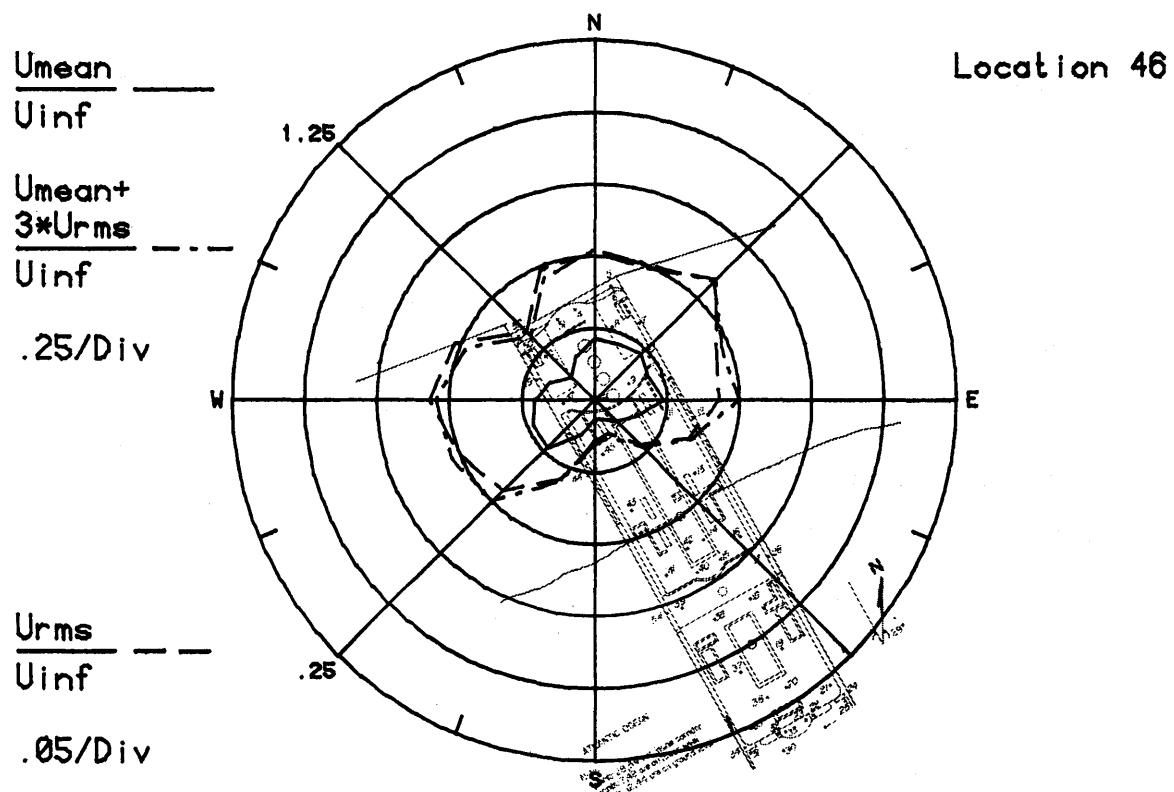
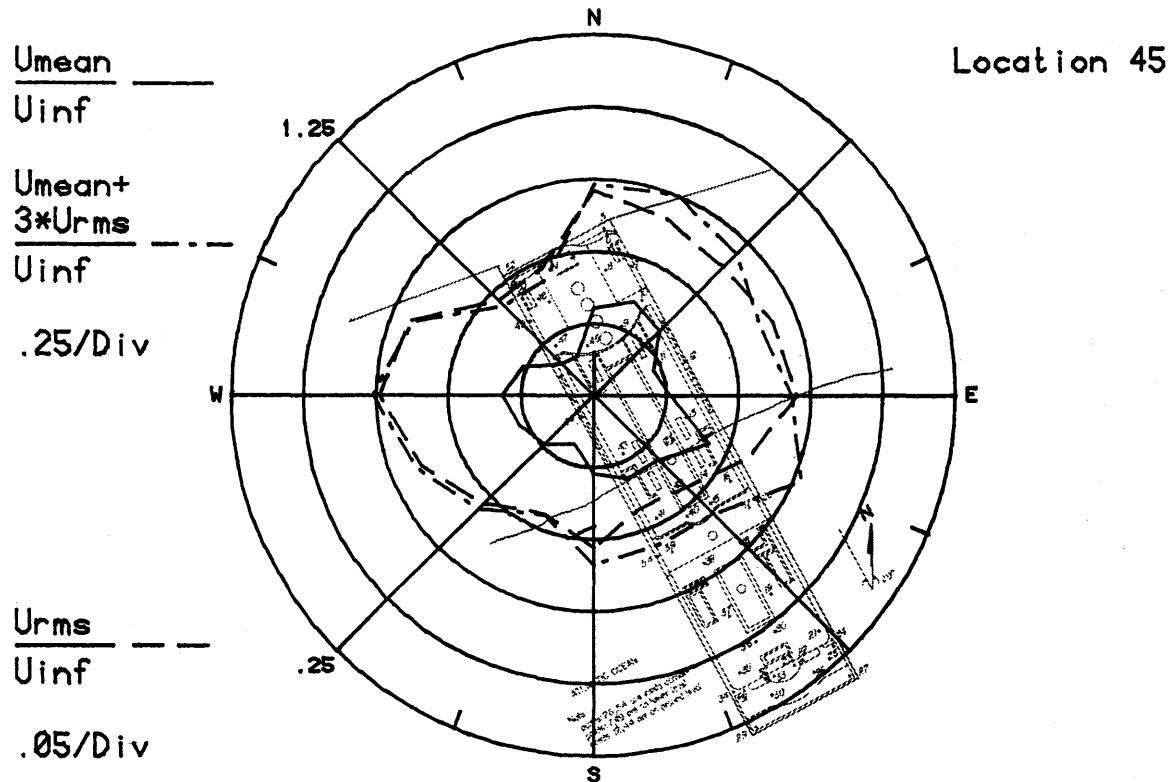
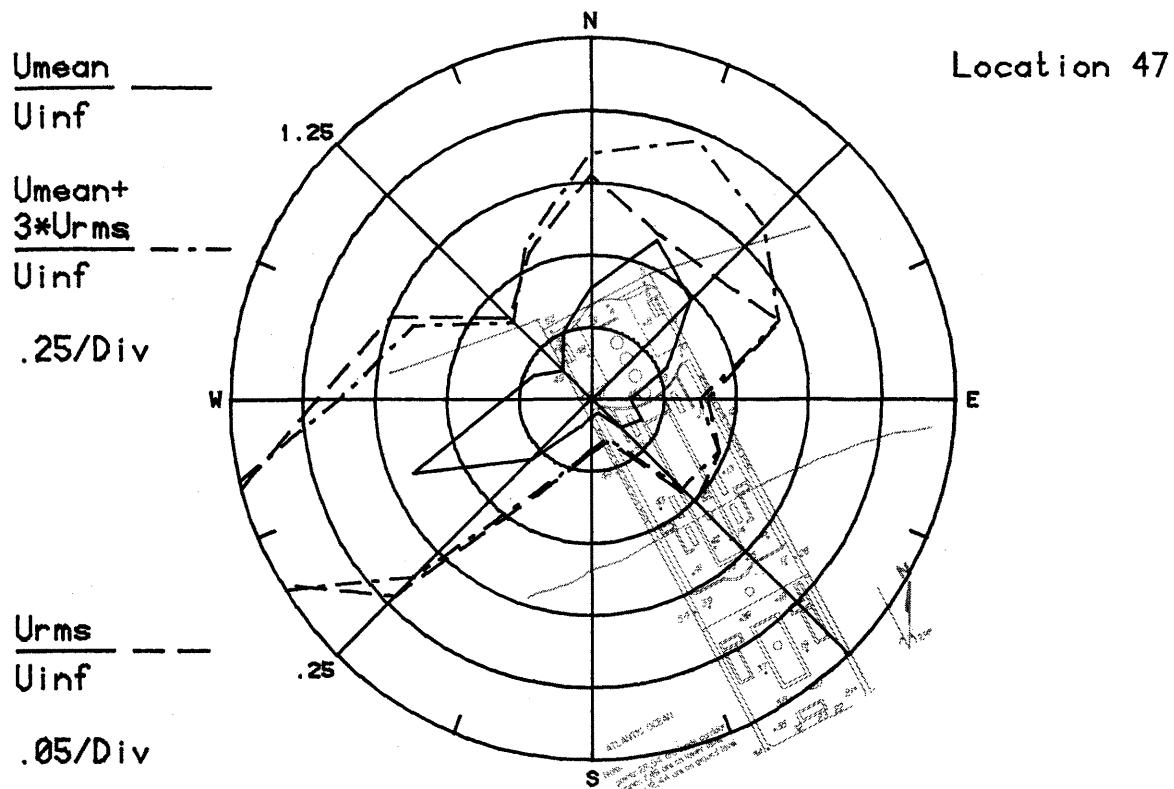


Figure 8w. Mean Velocities and Turbulence Intensities at Pedestrian Locations 45 and 46

65



Location 48

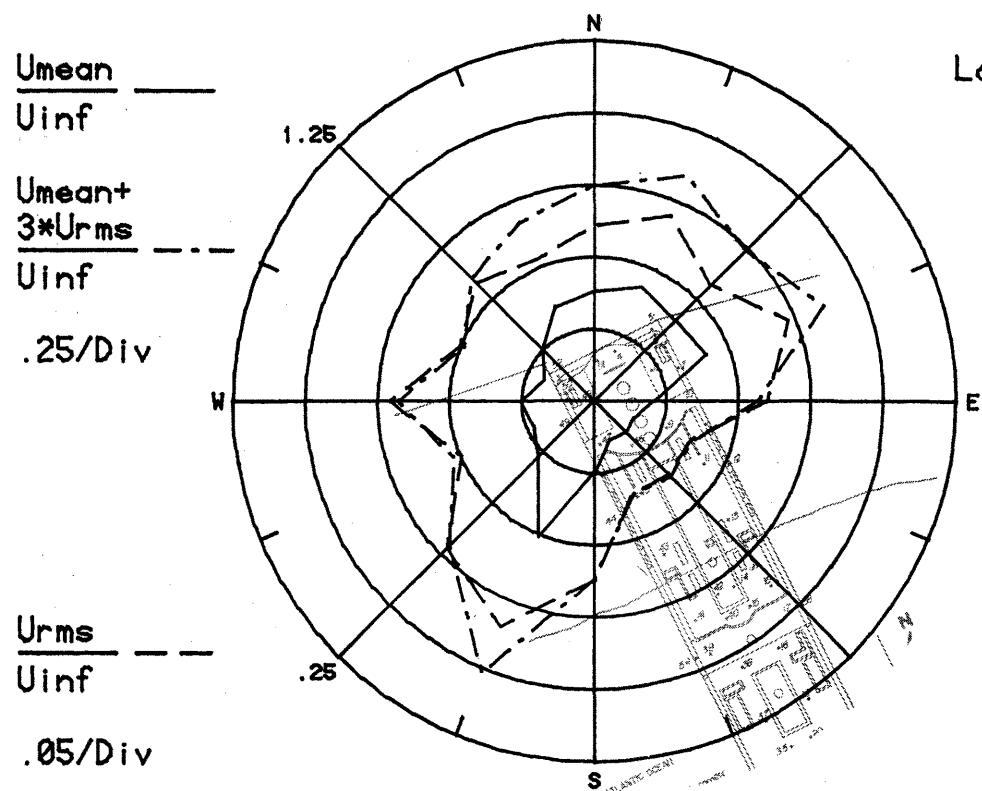
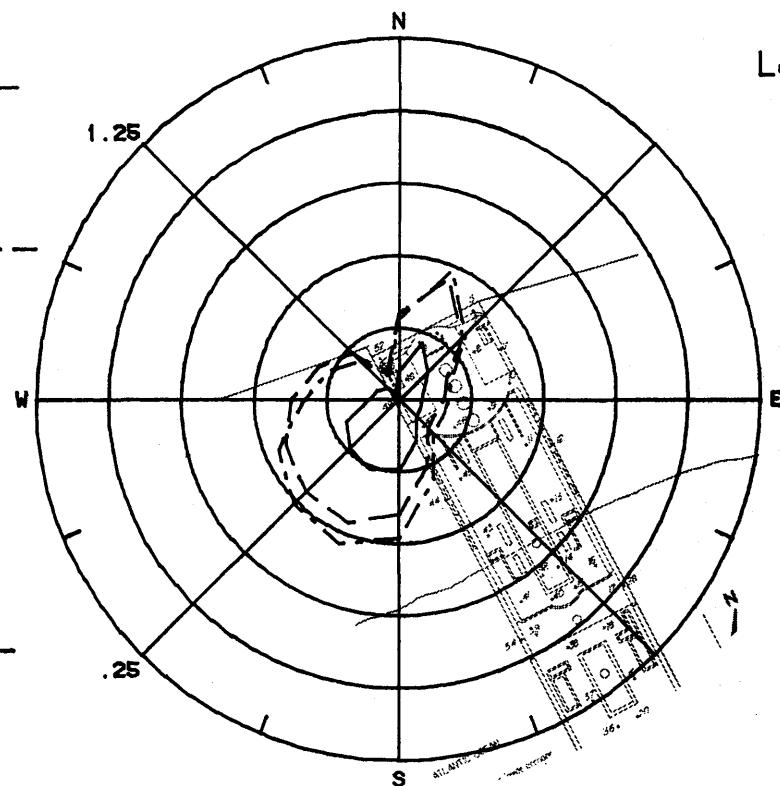
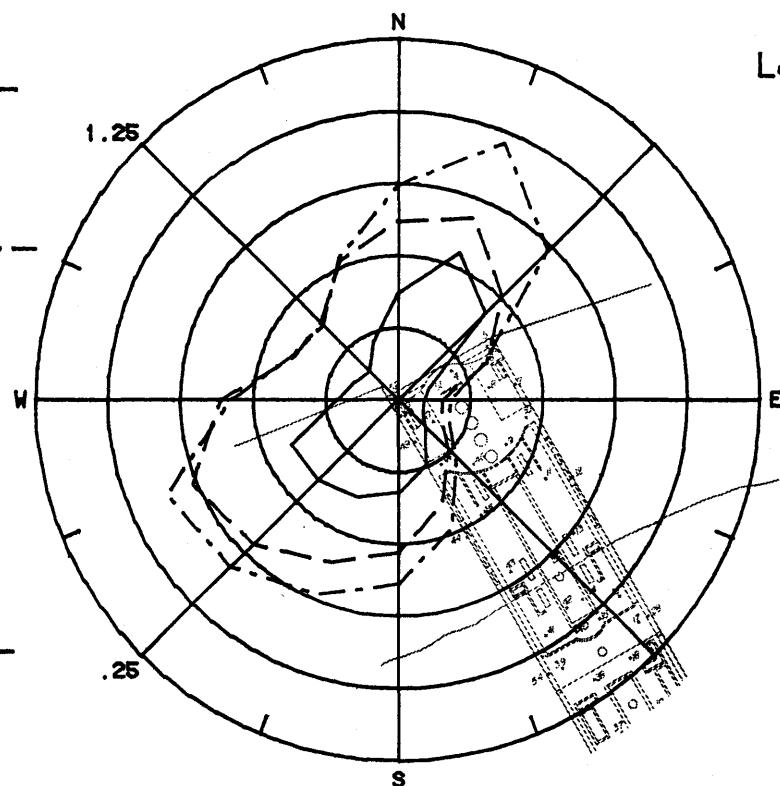


Figure 8x. Mean Velocities and Turbulence Intensities at Pedestrian Locations 47 and 48

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 $\frac{U_{mean}}{U_{inf}}$  $U_{inf}$  $\frac{U_{mean} + 3 \cdot U_{rms}}{U_{inf}}$  $U_{inf}$  $.25/\text{Div}$  $\frac{U_{rms}}{U_{inf}}$  $U_{inf}$  $.05/\text{Div}$ 

Location 49

 $\frac{U_{mean}}{U_{inf}}$  $U_{inf}$  $\frac{U_{mean} + 3 \cdot U_{rms}}{U_{inf}}$  $U_{inf}$  $.25/\text{Div}$  $\frac{U_{rms}}{U_{inf}}$  $U_{inf}$  $.05/\text{Div}$ 

Location 50

Figure 8y. Mean Velocities and Turbulence Intensities at Pedestrian Locations 49 and 50

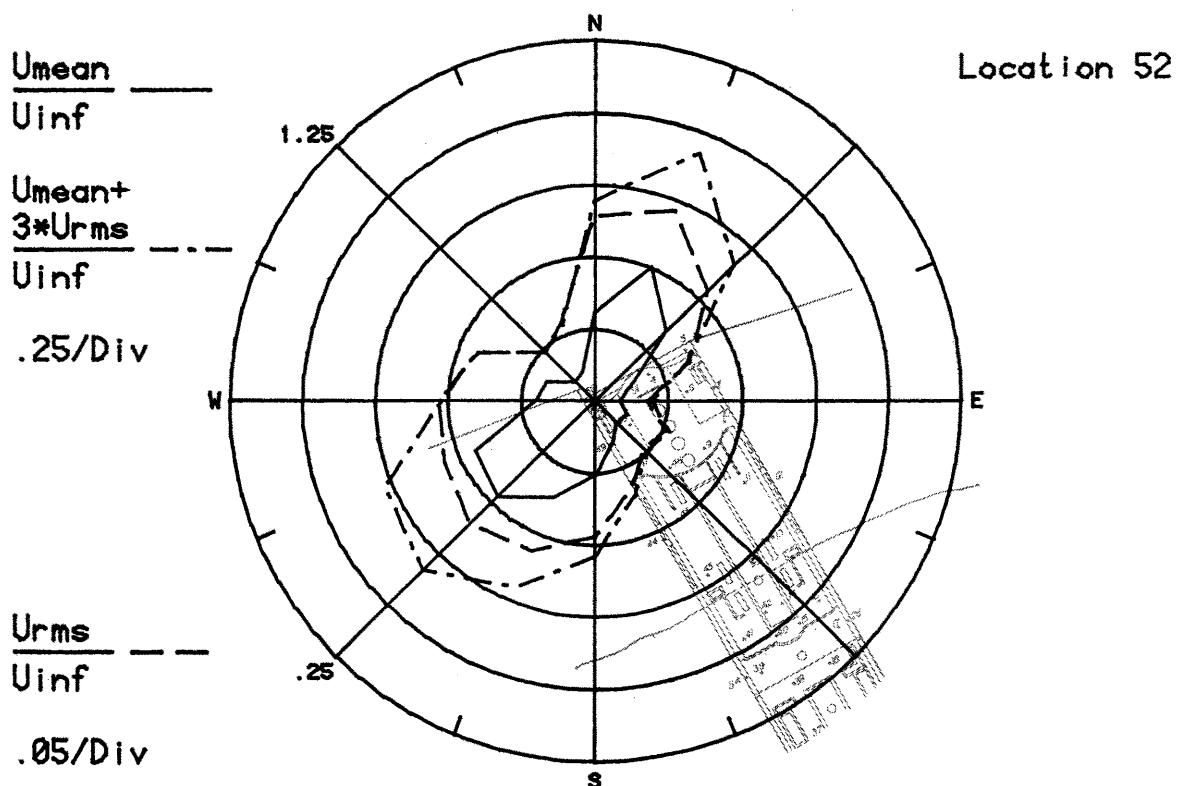
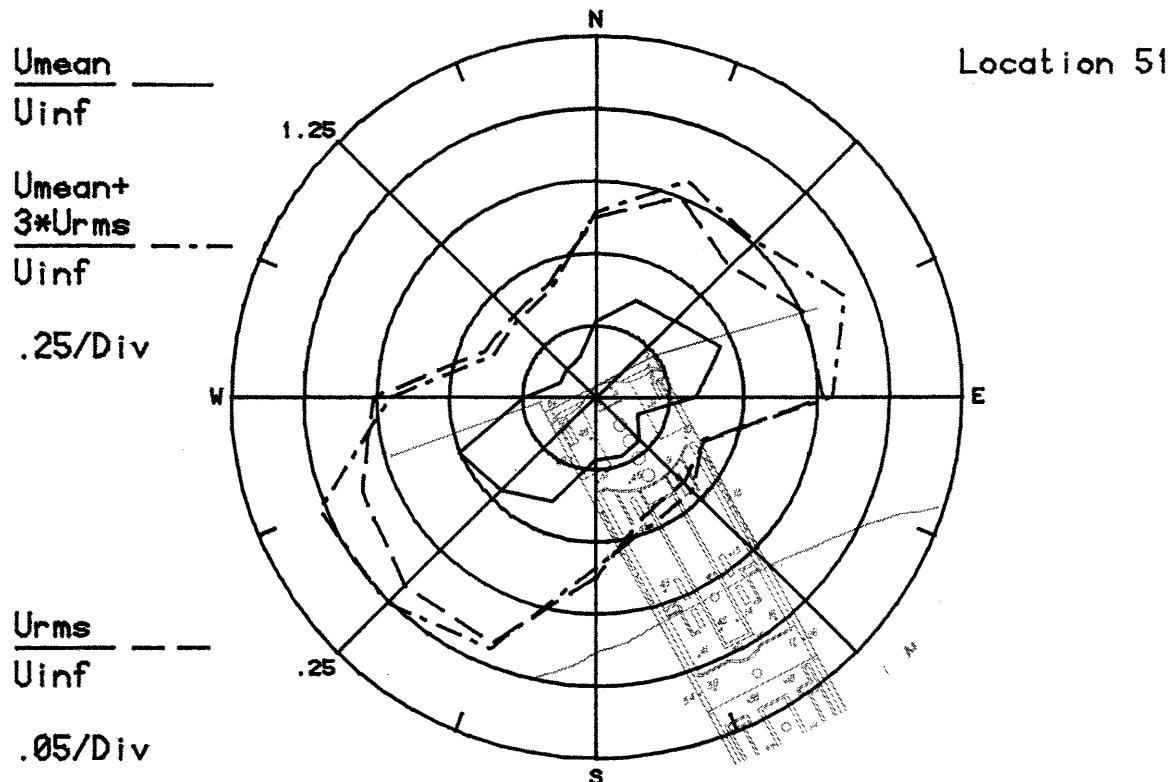
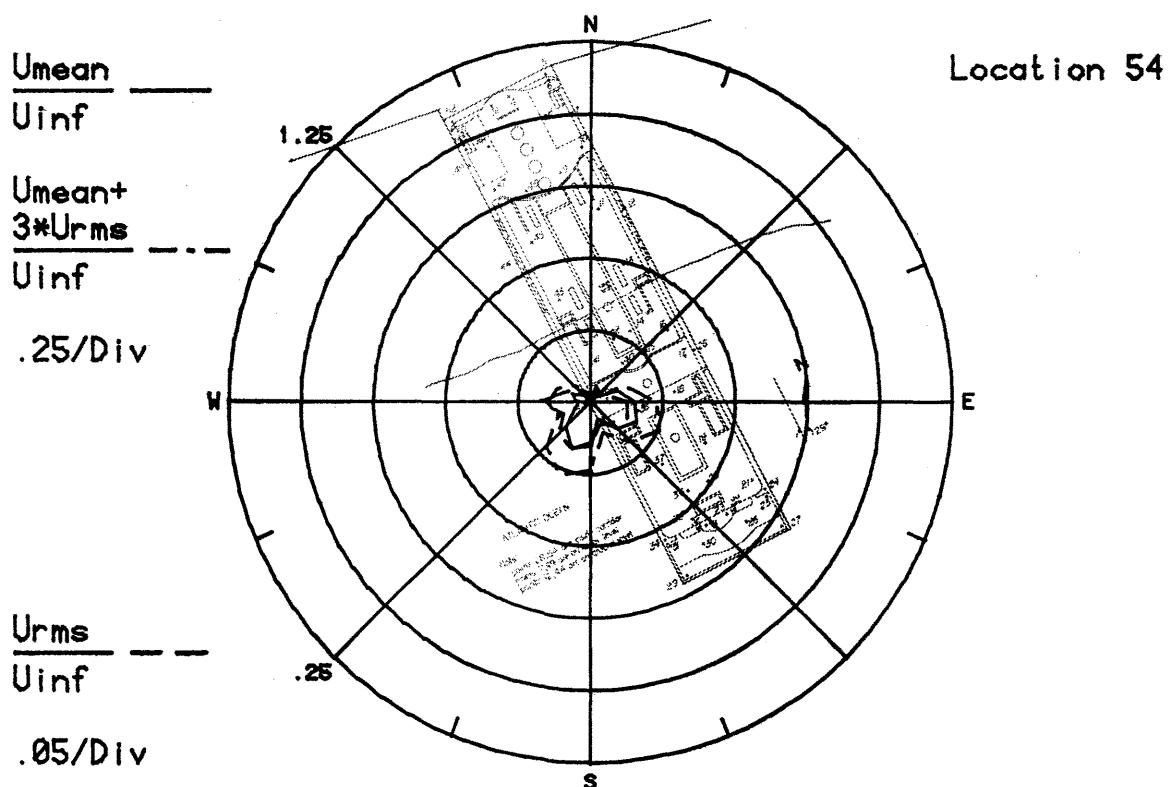
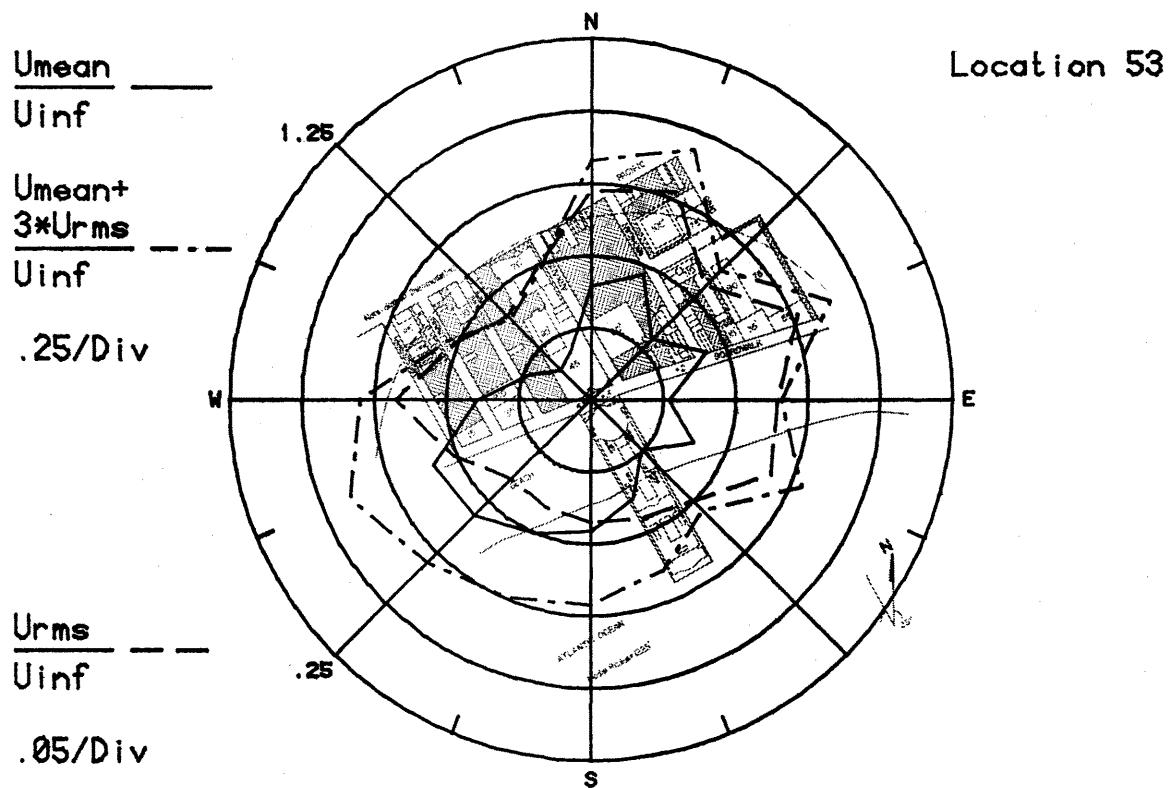


Figure 8z. Mean Velocities and Turbulence Intensities at Pedestrian Locations 51 and 52



**Figure 8#.** Mean Velocities and Turbulence Intensities at Pedestrian Locations 53 and 54

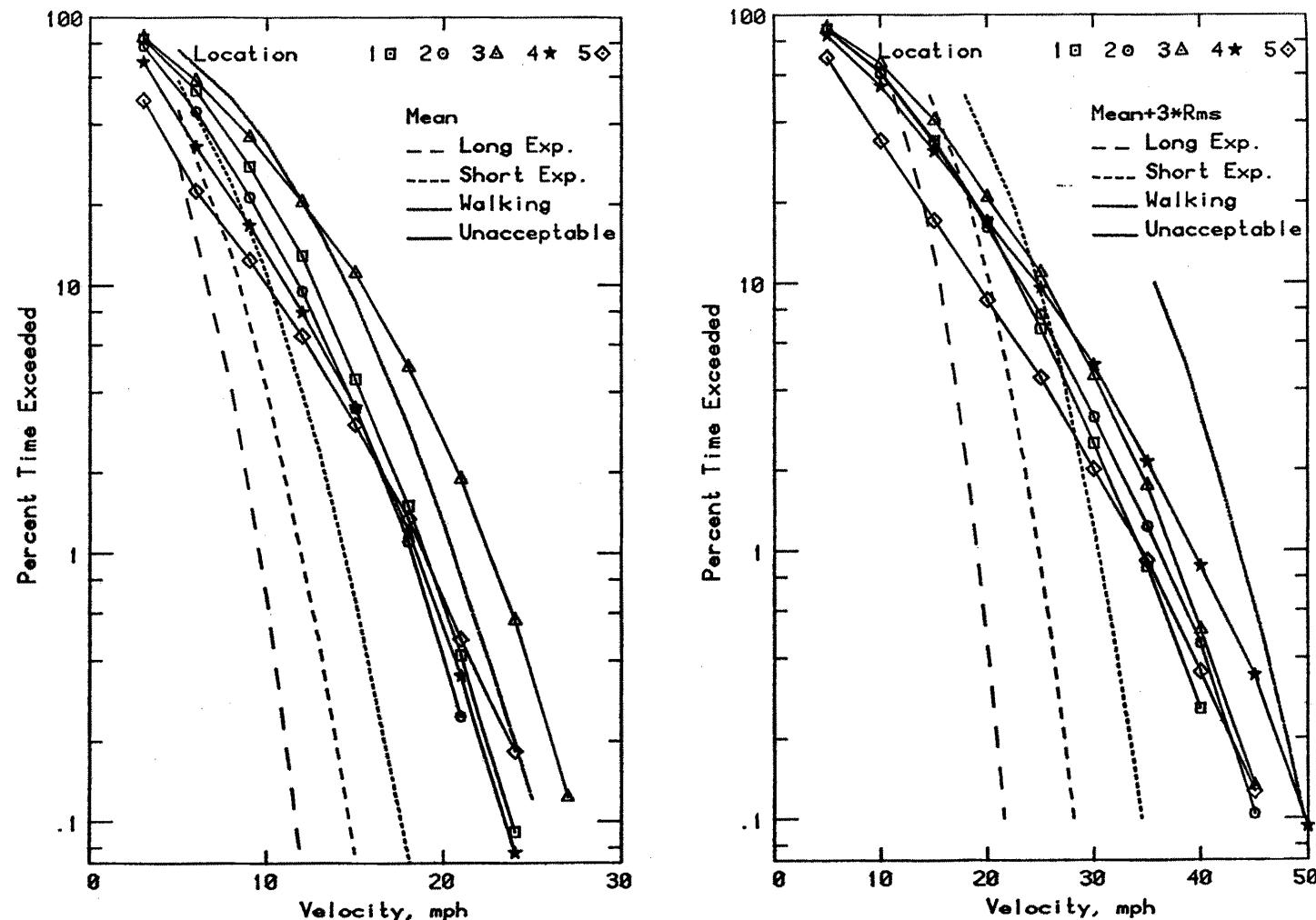


Figure 9a. Wind Velocity Probabilities  
for Pedestrian Locations

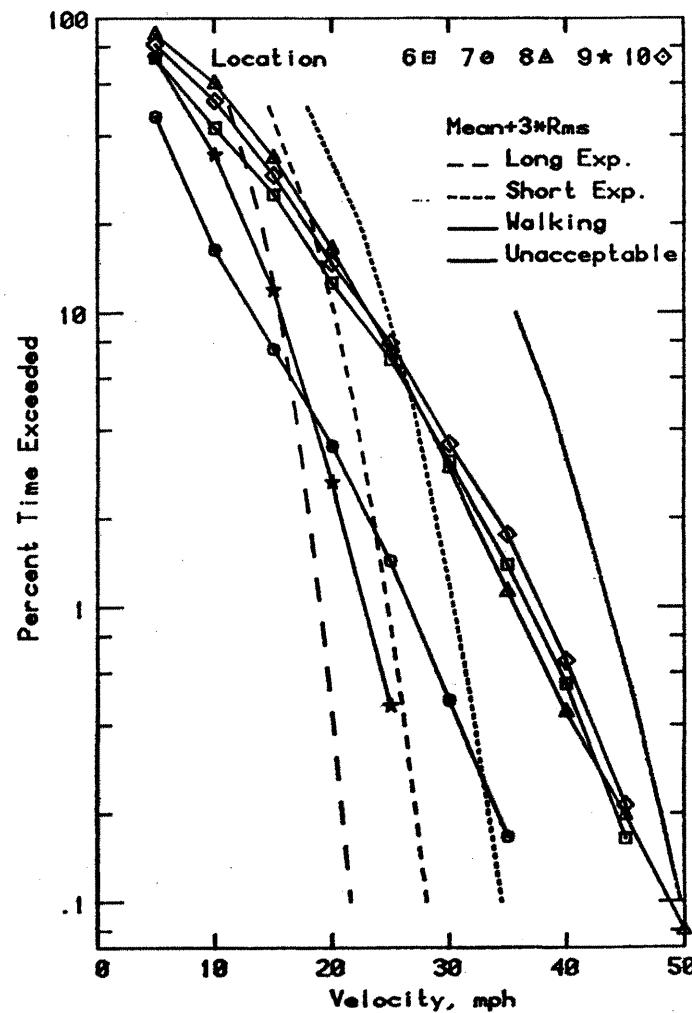
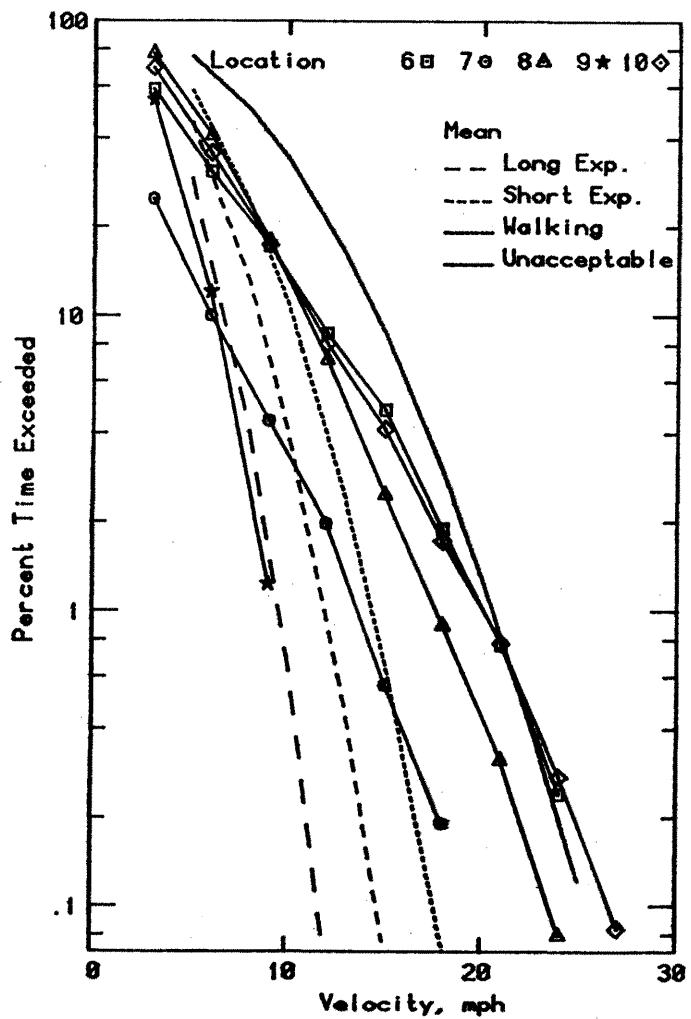


Figure 9b. Wind Velocity Probabilities  
for Pedestrian Locations

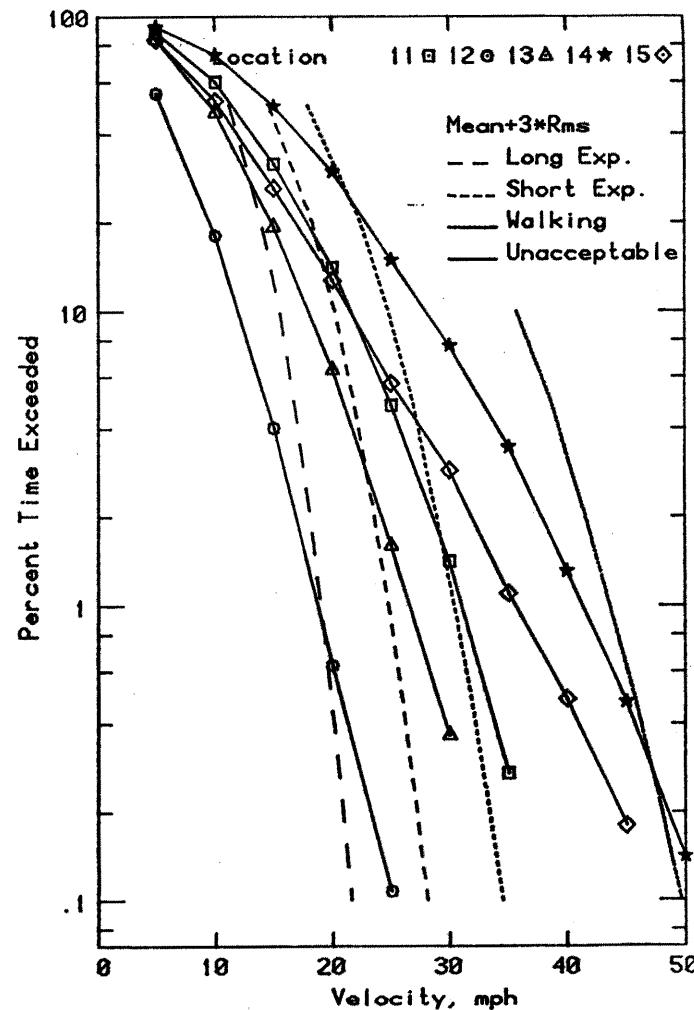
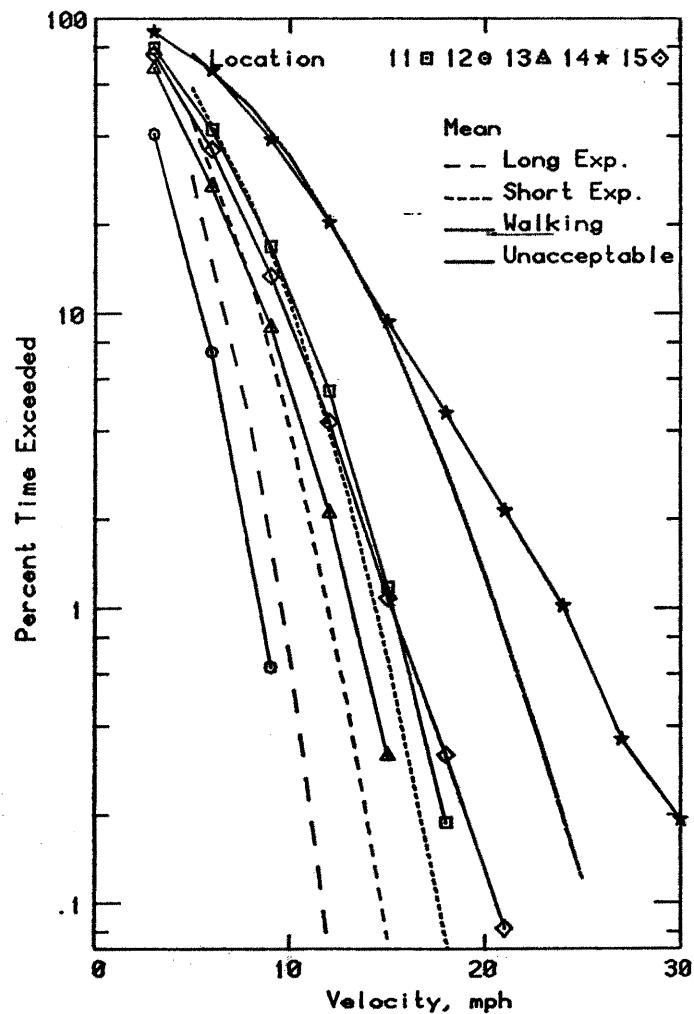


Figure 9c. Wind Velocity Probabilities  
for Pedestrian Locations

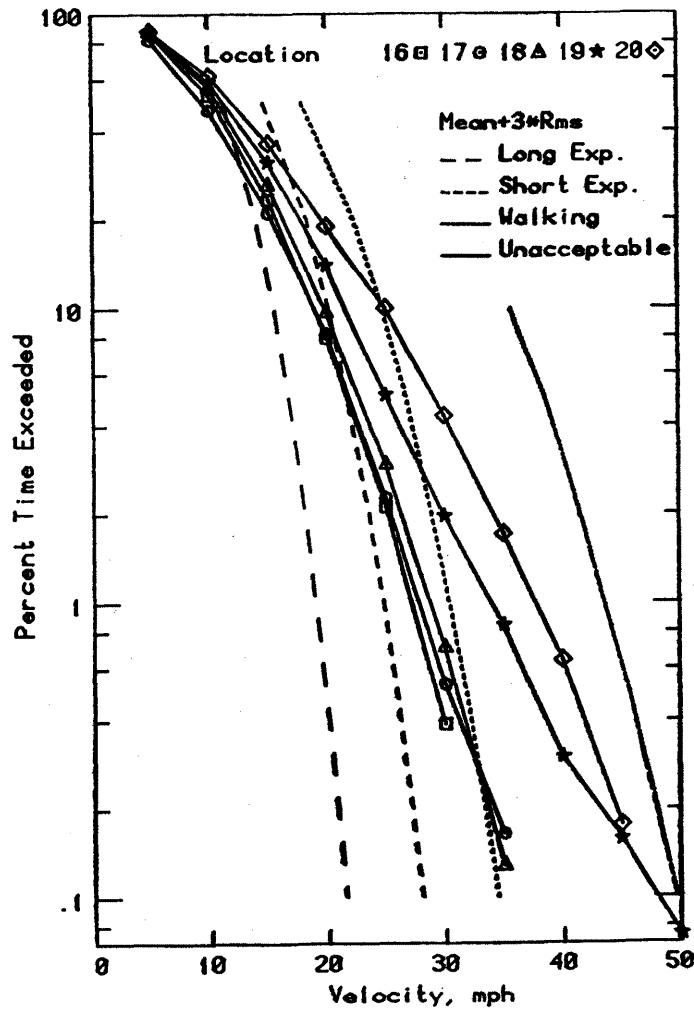
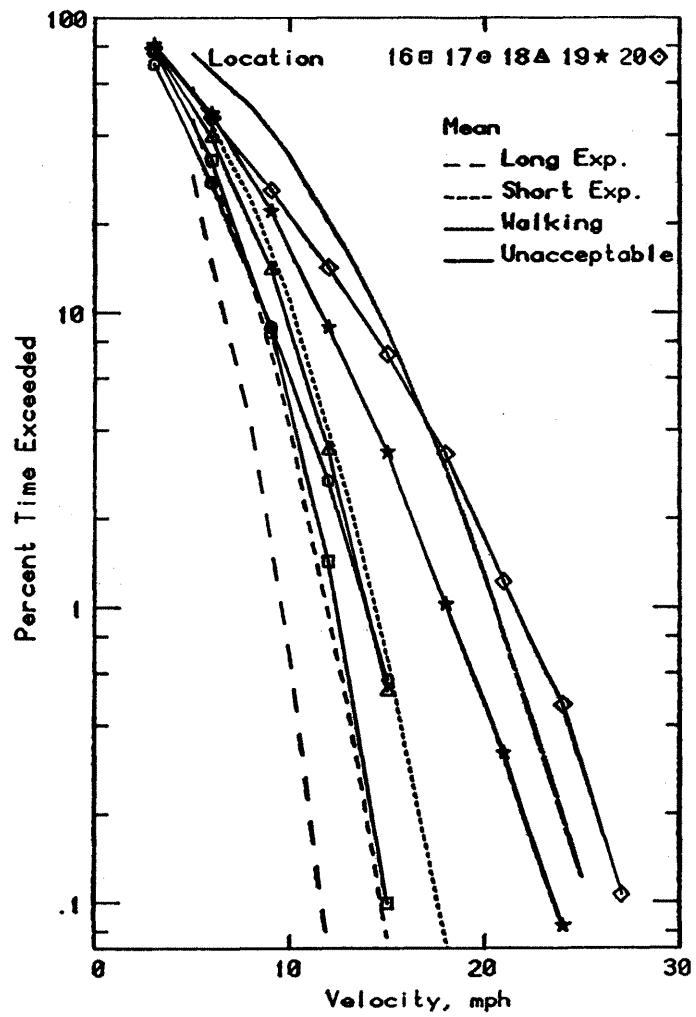


Figure 9d. Wind Velocity Probabilities  
for Pedestrian Locations

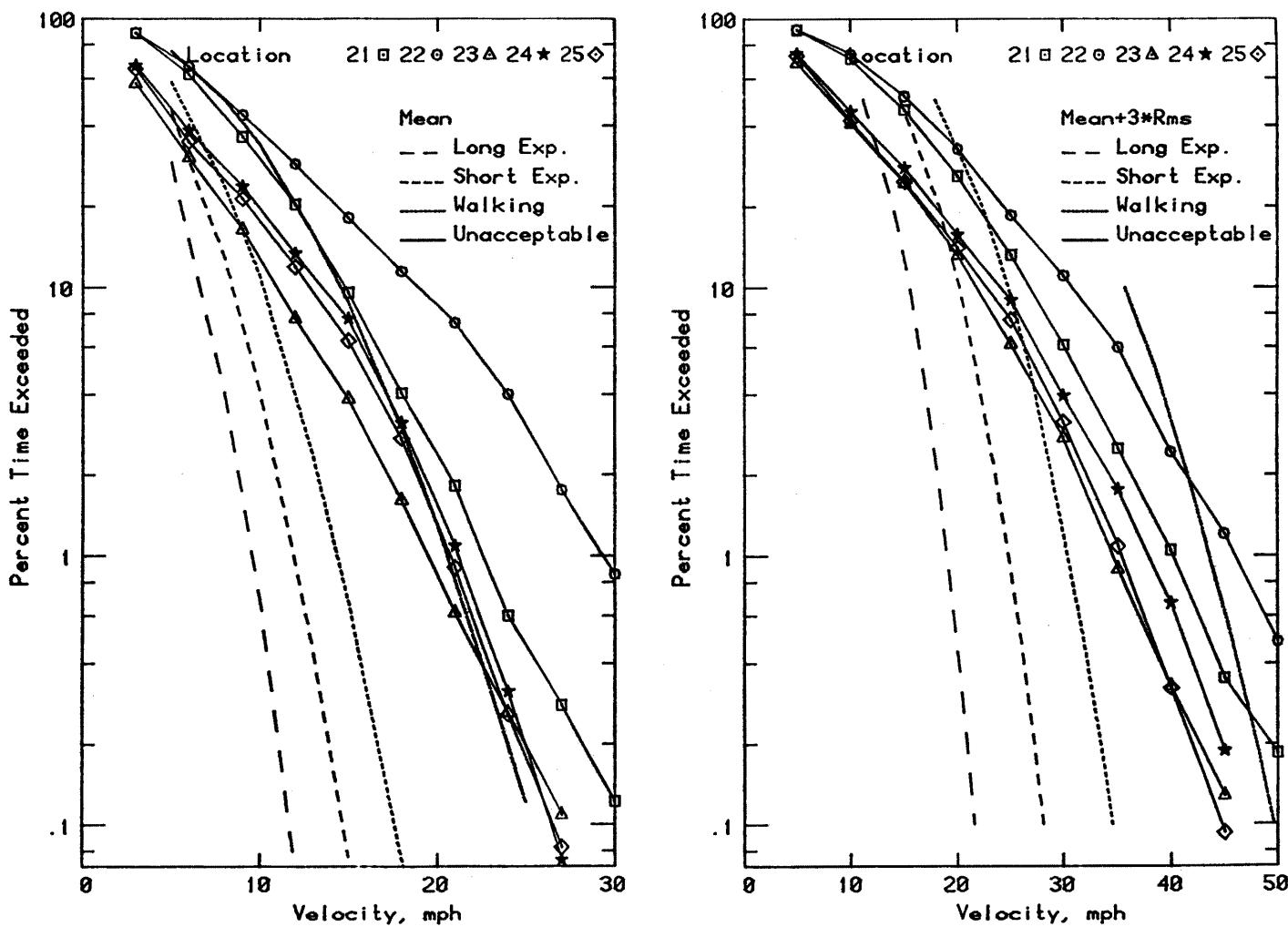


Figure 9e. Wind Velocity Probabilities  
for Pedestrian Locations

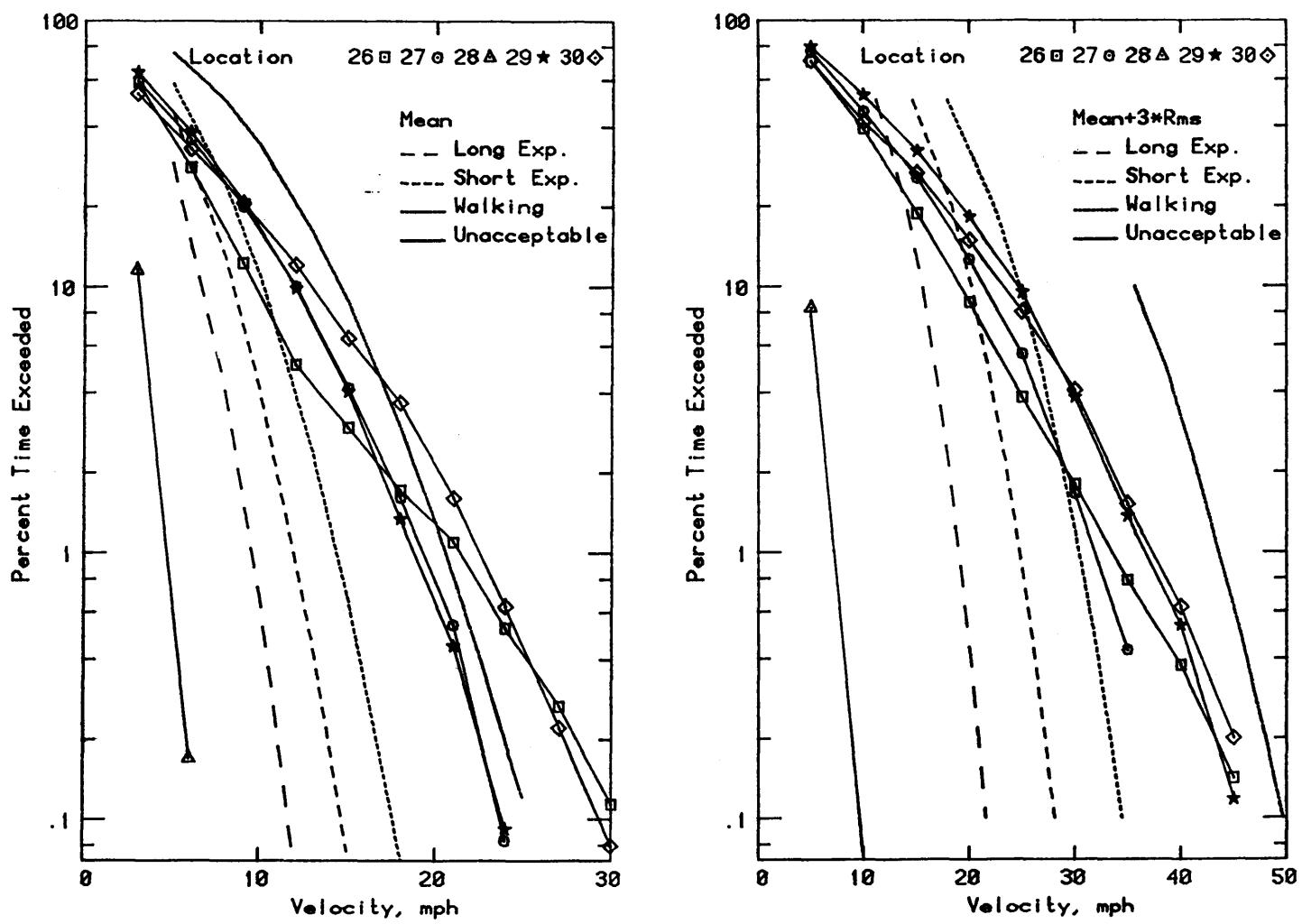


Figure 9f. Wind Velocity Probabilities  
for Pedestrian Locations

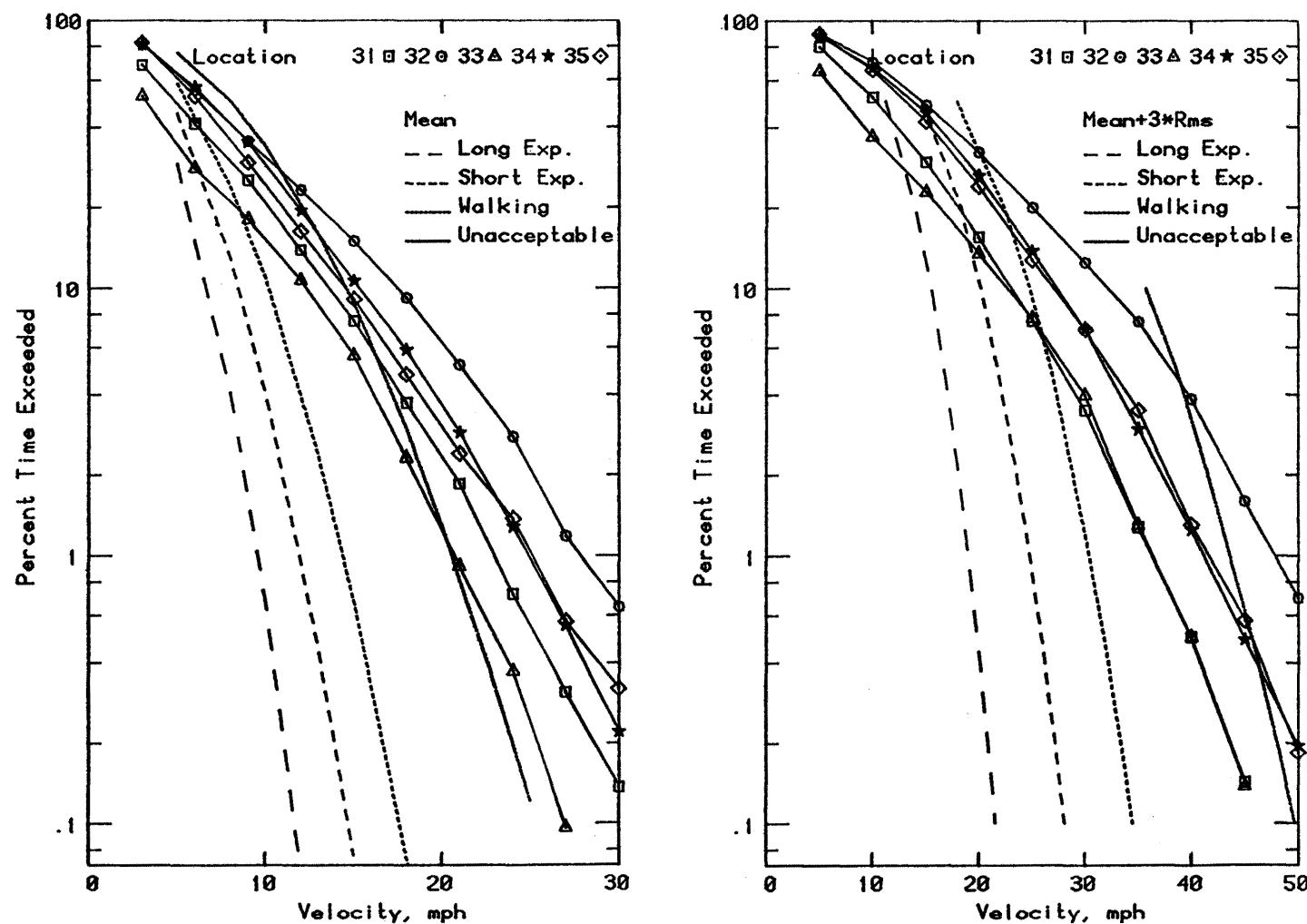


Figure 9g. Wind Velocity Probabilities for Pedestrian Locations

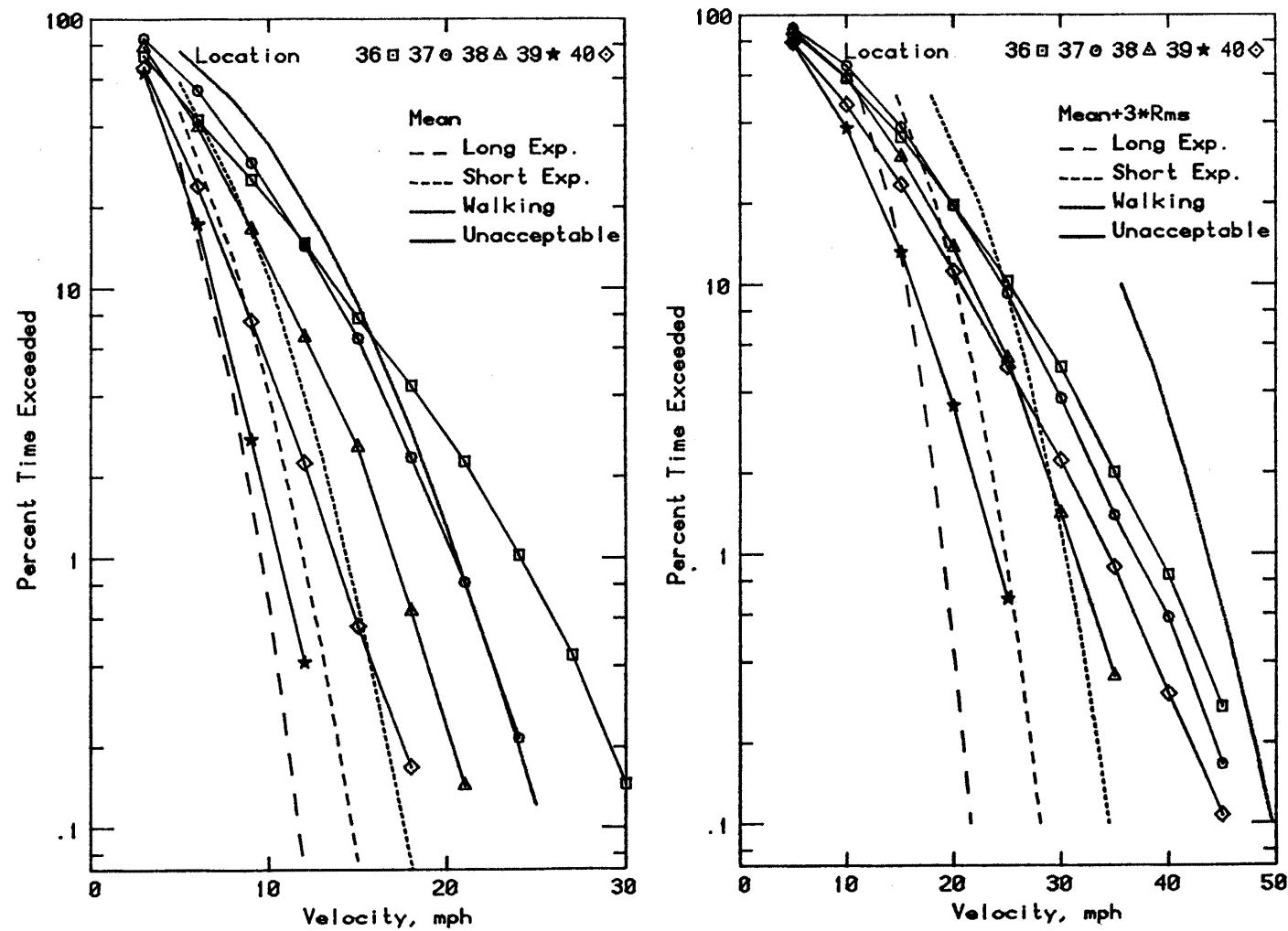


Figure 9h. Wind Velocity Probabilities  
for Pedestrian Locations

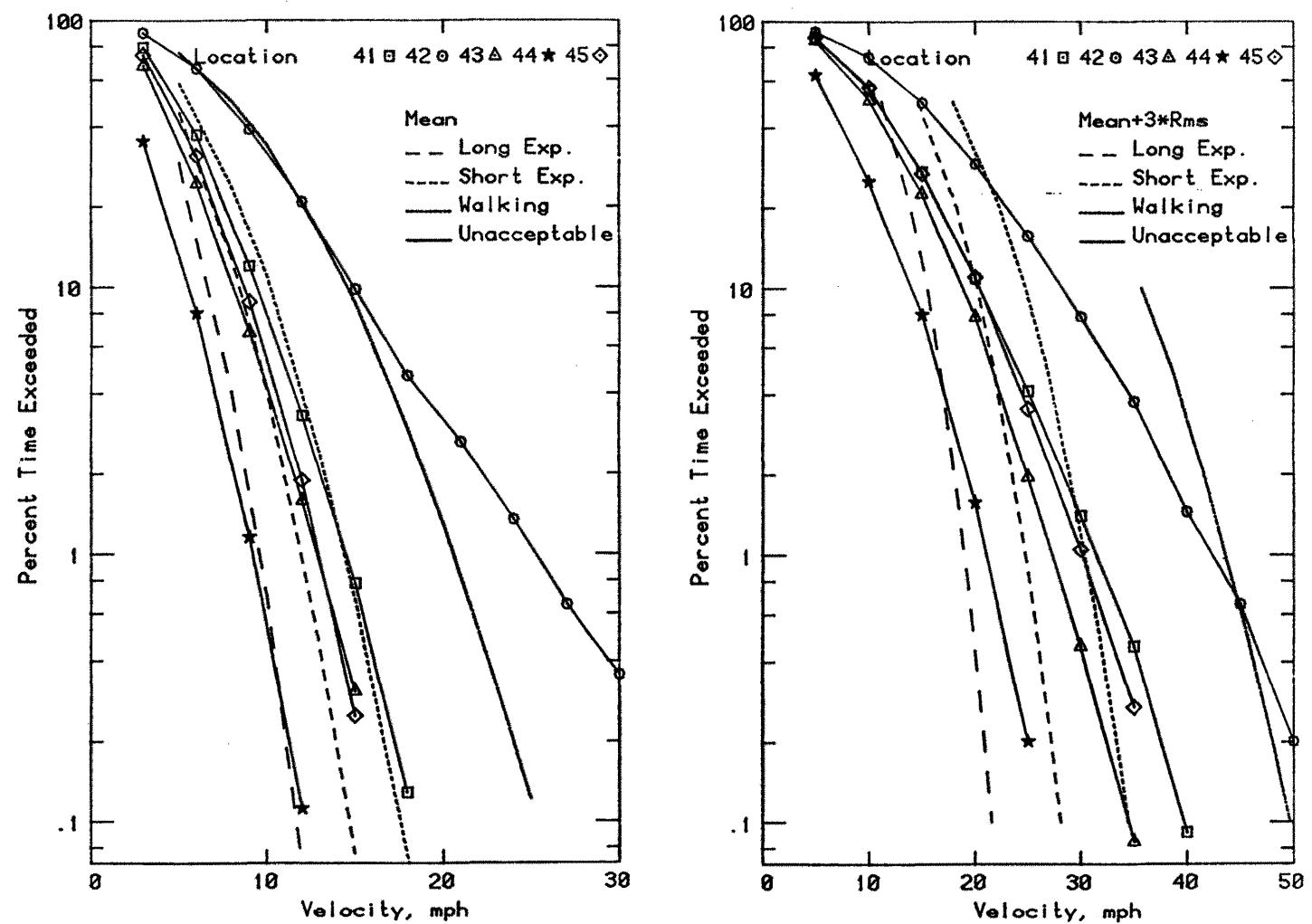


Figure 9i. Wind Velocity Probabilities  
for Pedestrian Locations

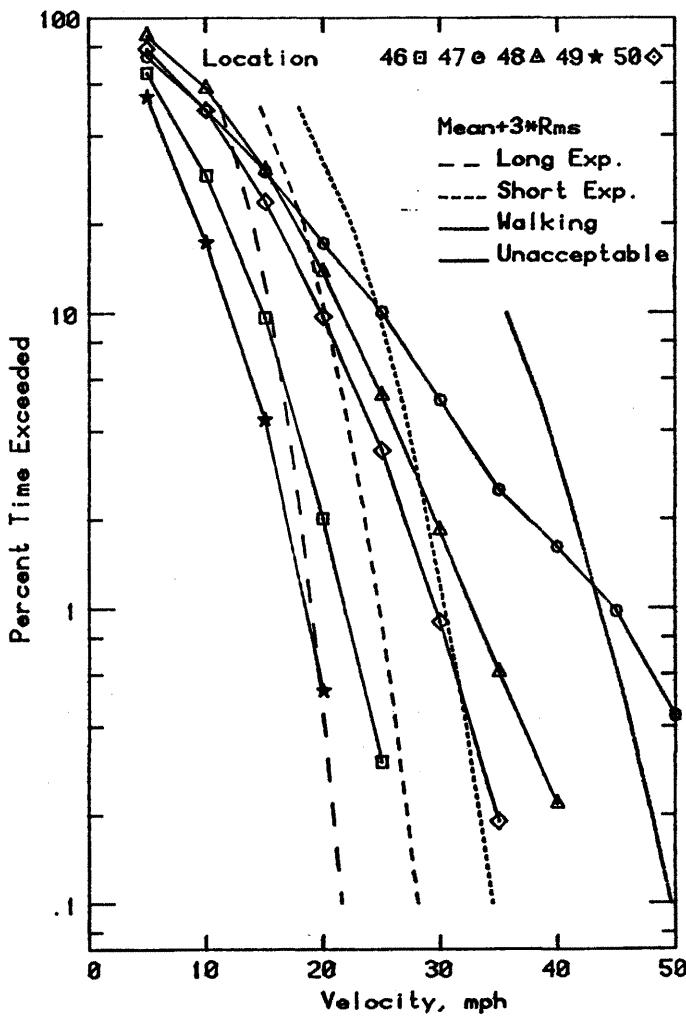
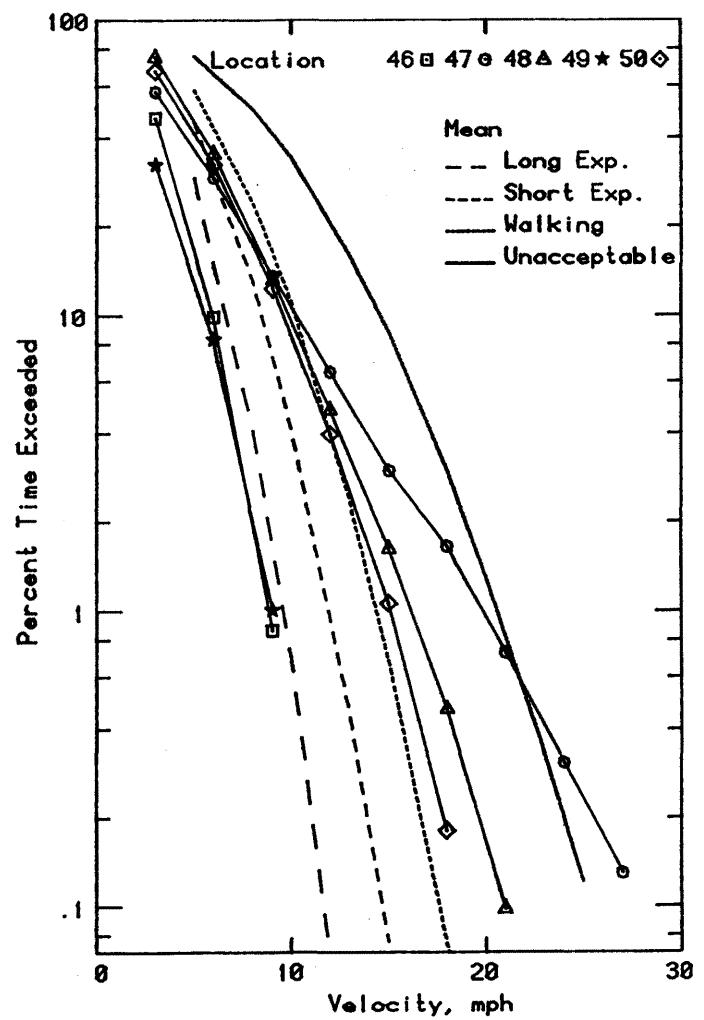


Figure 9j. Wind Velocity Probabilities  
for Pedestrian Locations

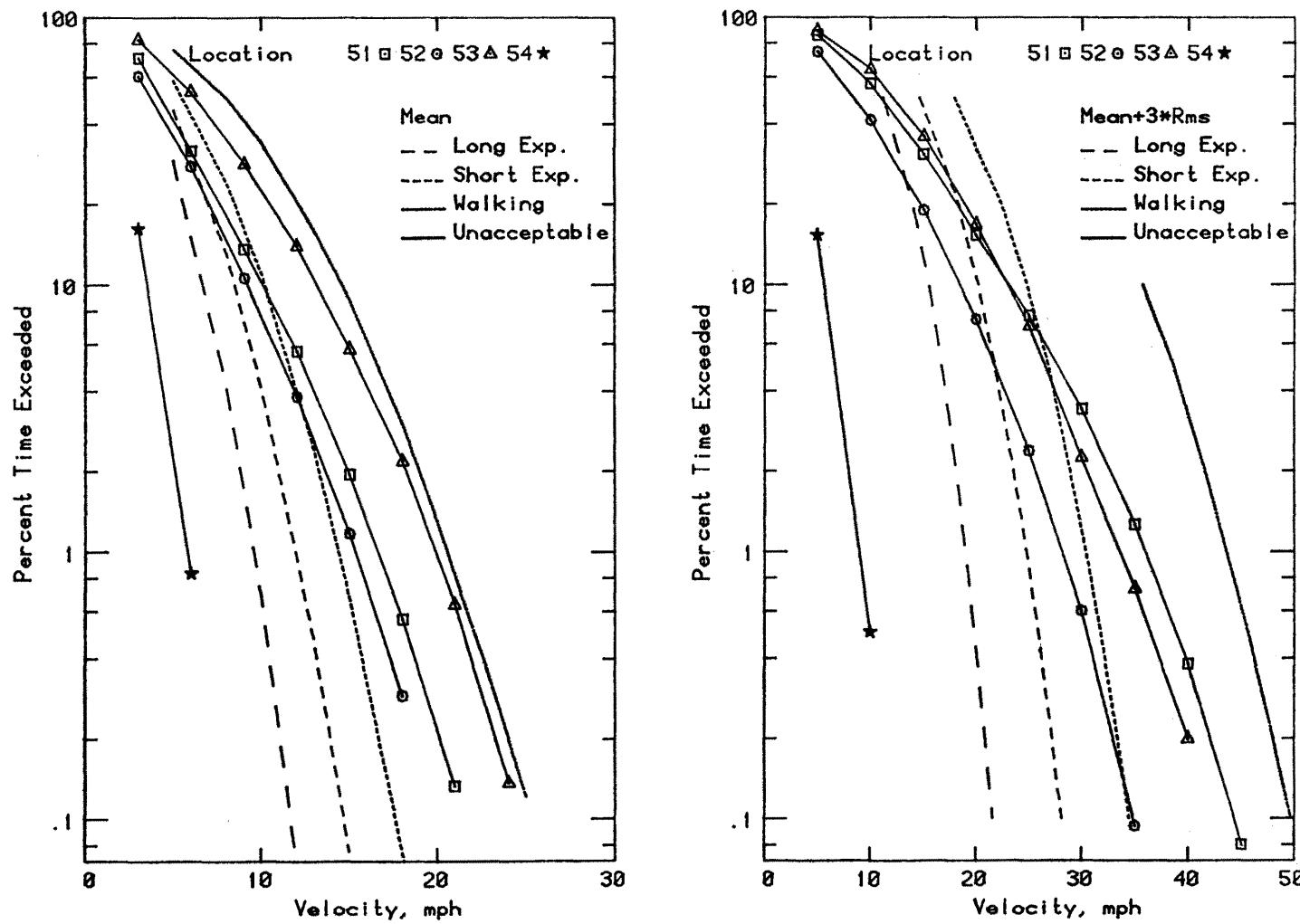
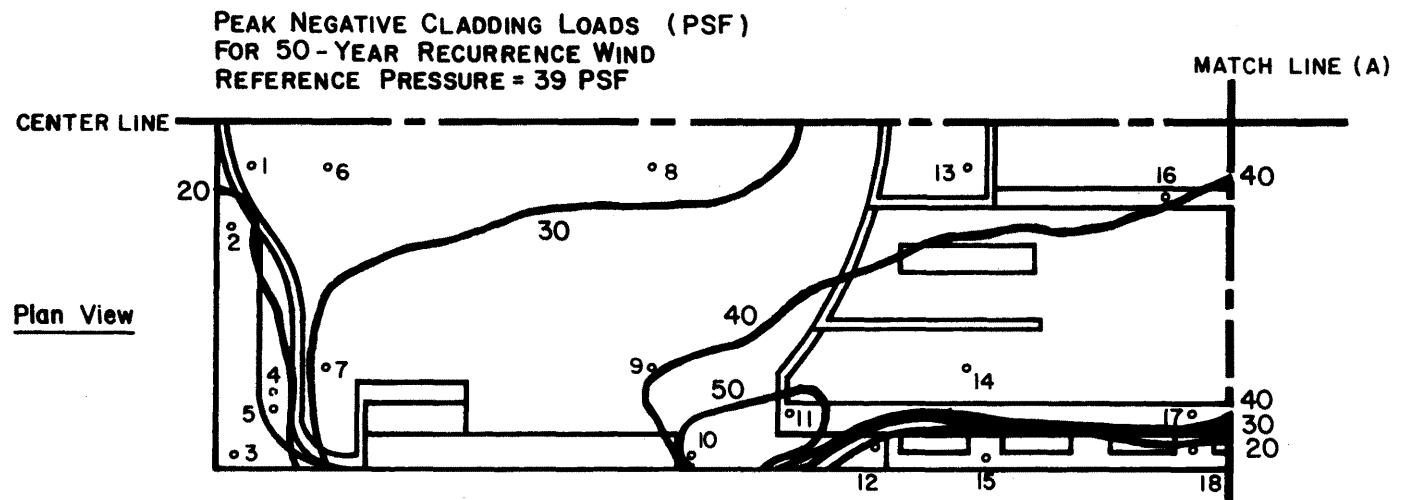
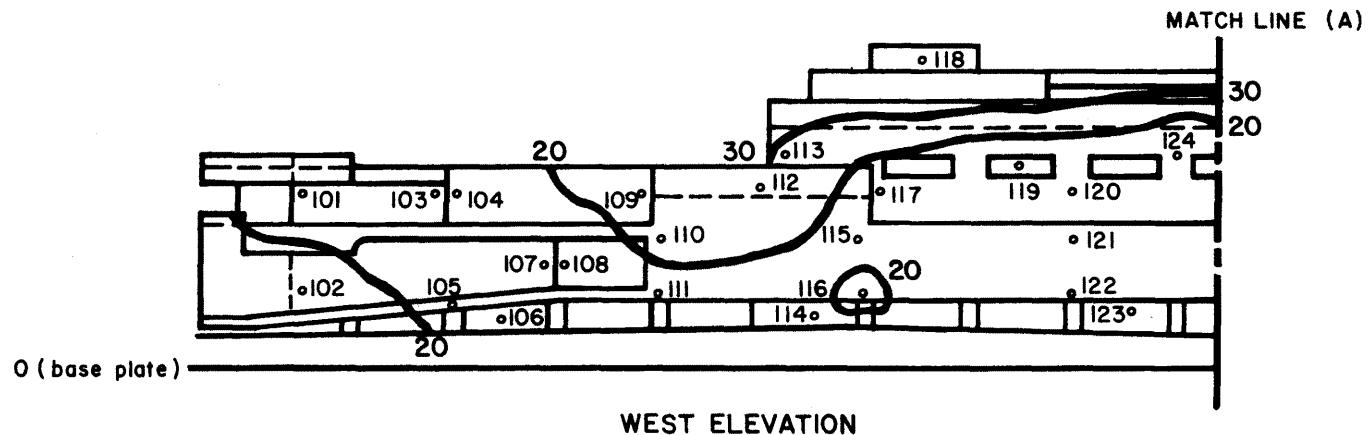


Figure 9k. Wind Velocity Probabilities  
for Pedestrian Locations



SHORE SECTION

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WEST ELEVATION

Figure 10a. Peak Pressure Contours on the Building  
for Cladding Loads

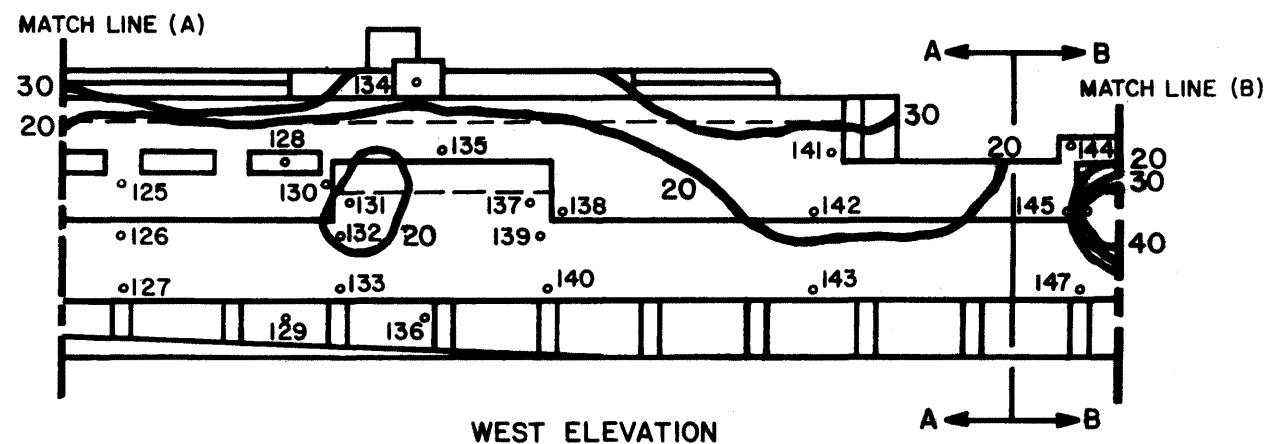
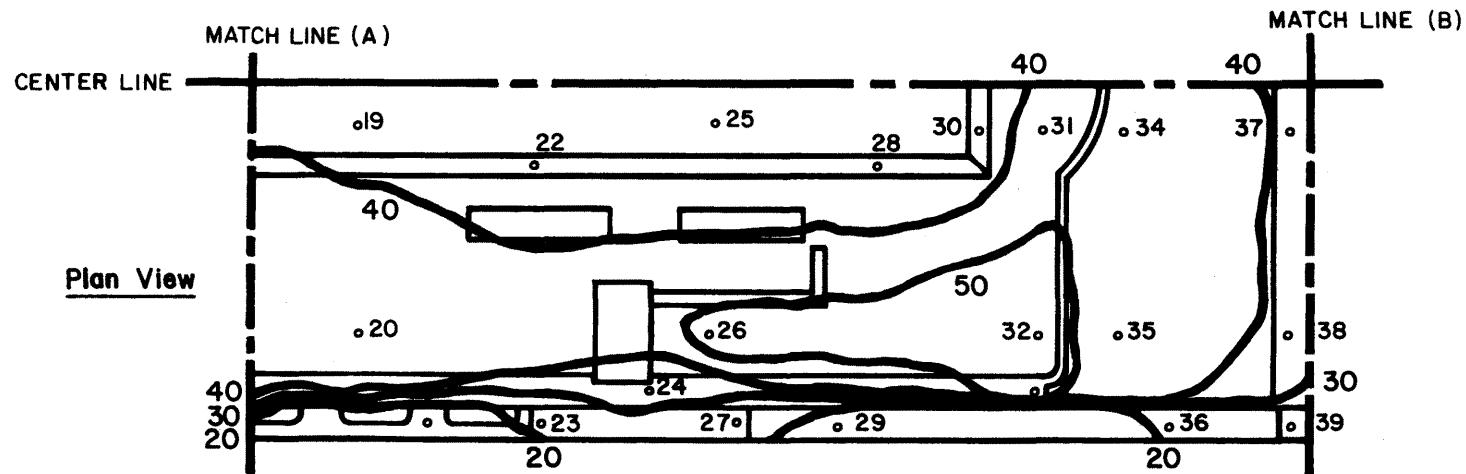
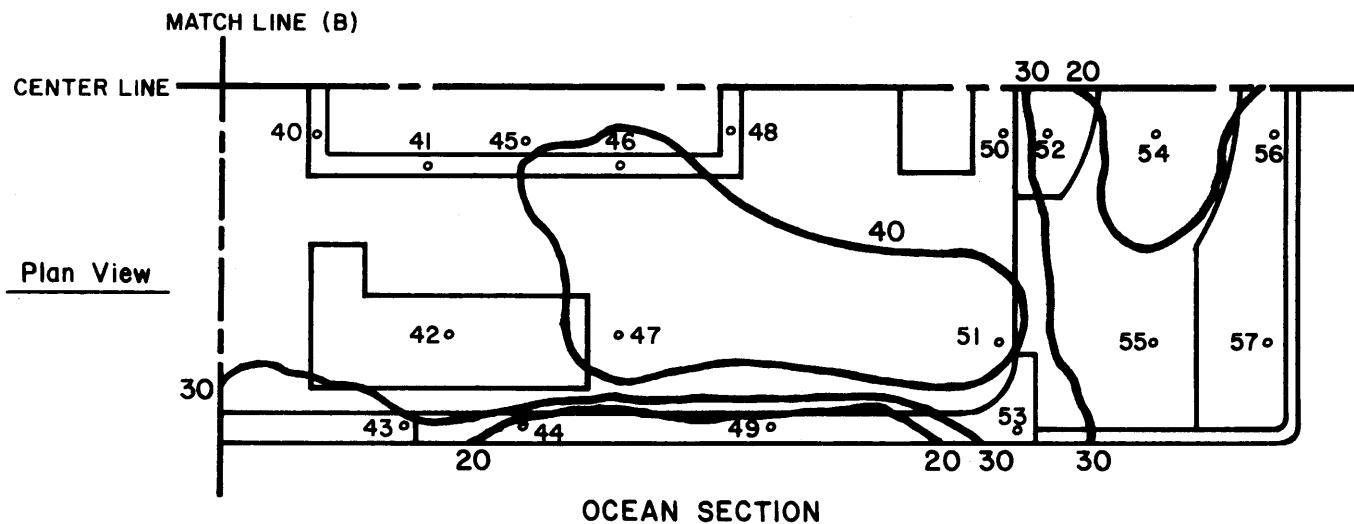


Figure 10b. Peak Pressure Contours on the Building  
for Cladding Loads



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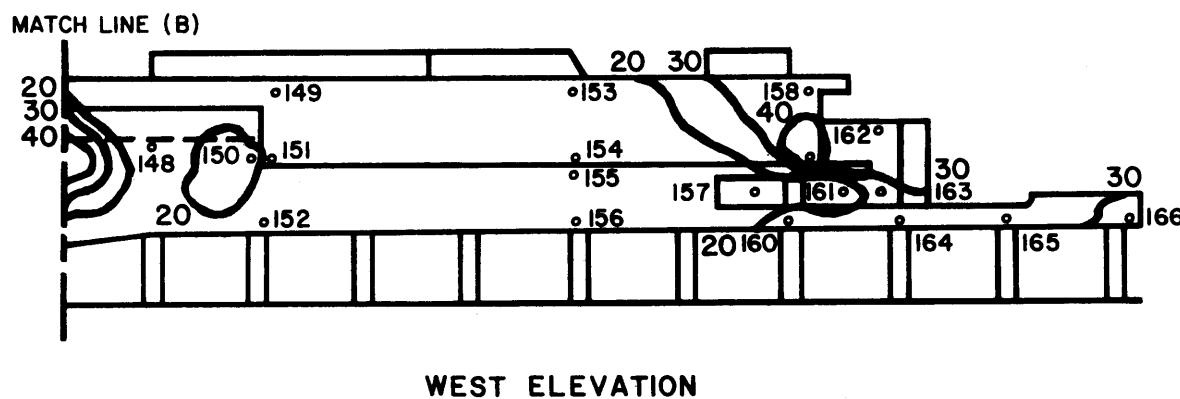
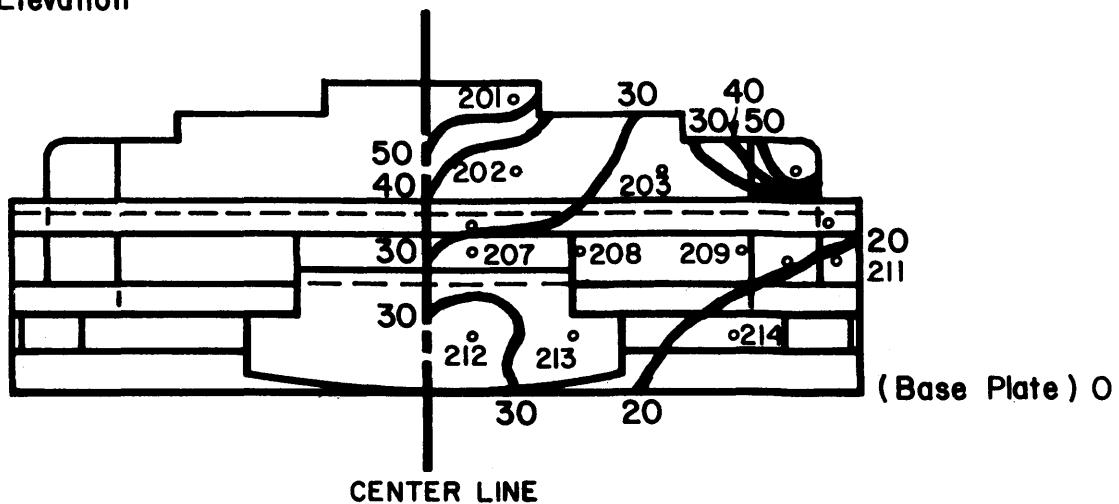


Figure 10c. Peak Pressure Contours on the Building  
for Cladding Loads

North Elevation



South Elevation

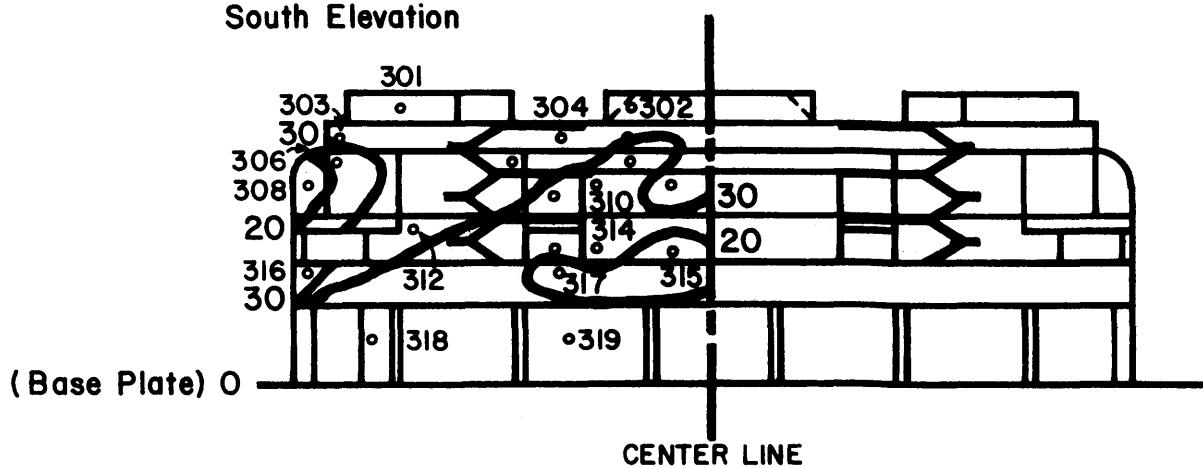


Figure 10d. Peak Pressure Contours on the Building  
for Cladding Loads

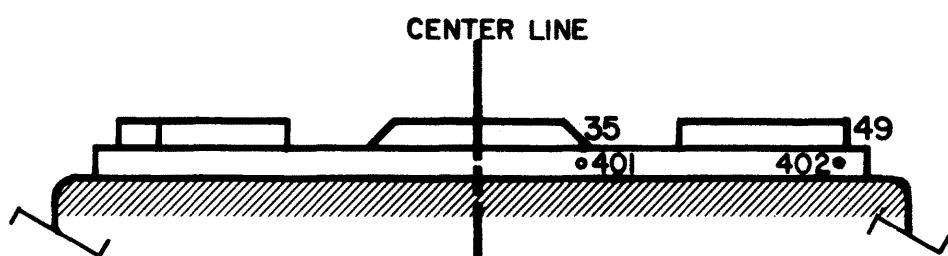
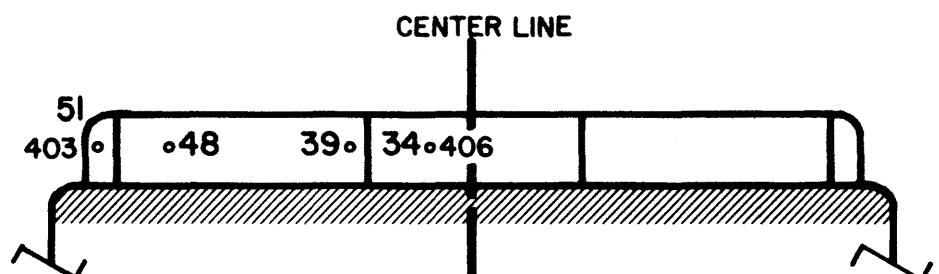


Figure 10e. Peak-Pressure Contours on the Building  
for Cladding Loads

**TABLES**

TABLE 1  
MOTION PICTURE SCENE GUIDE

1. Introduction
2. Purposes for model testing
3. Procedures for conducting tests
4. Specific flow visualization scenes for Million Dollar Pier

Peak Pressure Areas

<u>RUN</u>	<u>TAP</u>	<u>AZIMUTH</u>
1	33	230°
2	33,204	240°
3	204	250°

High Pedestrian Wind Velocities

<u>RUN</u>	<u>PEDESTRIAN LOCATION</u>	<u>AZIMUTH</u>
4	14,22	90°
5	32,35	202.5°

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES  
MILLION DOLLAR PIER, ATLANTIC CITY

LOCATION 1

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	18.4	8.5	43.8	0.00	17.1	10.4	48.3
22.50	35.5	13.2	75.0	22.50	12.5	9.5	41.1
45.00	35.3	10.8	67.7	45.00	19.0	12.3	57.3
67.50	45.5	10.4	76.7	67.50	46.9	14.2	89.6
90.00	46.4	9.0	73.4	90.00	44.5	11.1	77.7
112.50	43.2	8.7	69.4	112.50	51.3	7.7	74.4
135.00	45.7	8.3	70.6	135.00	43.3	7.5	65.7
157.50	43.7	8.5	69.1	157.50	36.7	8.6	62.5
180.00	39.5	8.8	65.9	180.00	30.1	9.9	59.9
202.50	42.7	11.3	76.4	202.50	21.4	9.3	49.4
225.00	22.6	9.0	52.0	225.00	31.5	13.1	70.7
247.50	39.1	14.6	82.7	247.50	28.6	14.1	71.1
270.00	48.3	12.7	86.5	270.00	42.4	15.4	88.6
292.50	38.5	12.1	74.9	292.50	41.1	14.0	83.0
315.00	26.8	9.1	54.2	315.00	31.9	11.3	65.7
337.50	18.1	8.6	43.9	337.50	18.7	10.6	51.0

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LOCATION 3

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	30.9	9.8	60.4	0.00	20.1	10.6	51.9
22.50	39.9	12.2	76.6	22.50	22.9	12.5	60.2
45.00	36.5	10.2	67.0	45.00	35.5	14.1	77.7
67.50	56.3	8.7	82.4	67.50	48.0	17.2	101.2
90.00	50.6	8.5	76.1	90.00	39.3	16.9	89.6
112.50	45.1	8.0	70.1	112.50	28.1	15.5	74.7
135.00	33.4	10.0	63.0	135.00	14.9	7.4	37.0
157.50	47.6	11.2	81.2	157.50	24.7	10.4	55.9
180.00	56.6	12.3	94.6	180.00	15.3	7.7	38.5
202.50	58.0	12.3	92.1	202.50	34.6	16.0	85.1
225.00	58.0	11.4	92.6	225.00	48.8	17.1	107.6
247.50	63.9	11.3	97.8	247.50	55.6	17.1	96.7
270.00	47.0	13.6	87.9	270.00	40.0	16.0	45.5
292.50	17.7	10.4	49.1	292.50	16.0	7.6	35.5
315.00	29.6	9.0	48.7	315.00	12.9	7.7	35.9
337.50	23.5	8.1	47.8	337.50	12.9	7.7	35.9

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES  
MILLION DOLLAR PIER, ATLANTIC CITY

LOCATION 5

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	10.9	7.3	32.8	0.00	16.3	9.7	45.3
22.50	14.0	8.9	40.6	22.50	18.7	10.1	49.1
45.00	29.3	12.7	67.4	45.00	30.5	14.7	74.7
67.50	45.3	11.2	79.0	67.50	52.5	15.5	99.0
90.00	39.5	11.3	73.3	90.00	50.5	15.3	96.3
112.50	29.6	10.0	59.5	112.50	48.4	15.7	95.4
135.00	12.0	5.6	28.7	135.00	25.0	10.8	57.4
157.50	12.3	5.1	27.7	157.50	11.7	5.2	27.3
180.00	14.3	6.8	34.7	180.00	10.7	4.8	25.1
202.50	10.8	4.9	25.4	202.50	9.8	3.7	21.0
225.00	8.1	3.4	18.4	225.00	9.6	4.3	22.5
247.50	45.5	13.2	85.1	247.50	54.1	12.9	92.8
270.00	51.2	13.9	92.9	270.00	49.3	13.2	88.9
292.50	15.8	9.0	42.8	292.50	16.3	8.7	42.5
315.00	12.9	6.8	33.2	315.00	25.1	10.6	57.0
337.50	10.6	6.4	29.9	337.50	24.6	10.9	57.4

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LOCATION 7

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	9.1	7.0	30.1	0.00	35.1	13.6	75.8
22.50	14.0	9.8	43.3	22.50	39.0	15.7	86.1
45.00	22.3	13.7	63.3	45.00	23.2	13.5	63.7
67.50	40.5	13.5	81.0	67.50	27.6	14.0	69.7
90.00	45.2	12.9	83.8	90.00	56.1	20.3	117.1
112.50	37.3	11.5	71.7	112.50	35.5	17.0	86.6
135.00	21.0	7.4	43.0	135.00	14.2	6.9	34.8
157.50	8.0	2.9	17.5	157.50	17.3	7.9	41.0
180.00	8.4	3.1	17.9	180.00	16.2	8.5	41.7
202.50	7.0	3.1	17.1	202.50	20.4	11.6	55.2
225.00	8.6	3.6	19.5	225.00	36.0	15.3	81.9
247.50	7.9	3.0	17.0	247.50	45.3	13.3	85.2
270.00	16.6	7.7	39.7	270.00	41.0	13.8	83.3
292.50	9.0	5.9	26.6	292.50	20.3	10.0	50.5
315.00	7.1	4.0	19.2	315.00	32.7	11.6	67.7
337.50	7.5	4.2	20.2	337.50	35.3	10.4	66.5

LOCATION 8

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES  
MILLION DOLLAR PIER, ATLANTIC CITY

LOCATION 9

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0 00	20.4	12.2	56.9	0 00	21.3	12.5	58.7
33.50	19.3	9.5	47.9	22.50	13.0	63.9	63.9
67.50	19.2	9.8	48.7	45.00	12.2	120.0	120.0
101.50	24.6	9.5	53.0	67.50	19.3	93.0	93.0
135.00	15.4	7.3	37.4	90.00	7.6	21.4	21.4
168.50	8.8	4.2	21.4	112.50	9.5	17.1	17.1
202.00	6.8	2.4	14.0	135.00	7.0	29.9	29.9
235.50	8.8	3.9	20.4	157.50	6.4	49.5	49.5
269.00	14.4	6.1	32.7	180.00	10.8	33.8	33.8
302.50	23.1	8.9	47.8	202.50	18.0	50.4	50.4
336.00	21.3	8.9	48.1	225.00	22.4	93.3	93.3
370.50	20.9	10.6	52.6	247.50	49.4	91.0	91.0
404.00	22.3	11.9	56.3	270.00	33.7	12.7	12.7
437.50	19.1	10.9	51.8	292.50	32.6	13.1	13.1
471.00	16.2	9.3	44.6	315.00	27.9	11.0	11.0
504.50	14.7	8.5	40.3	337.50	21.4	51.2	51.2

LOCATION 11

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0 00	36.4	14.4	79.7	0 00	22.5	10.0	52.6
33.50	25.9	10.5	57.4	22.50	16.7	40.0	40.0
67.50	25.9	11.5	64.0	45.00	6.4	47.0	47.0
101.50	26.2	12.1	62.0	67.50	10.6	61.1	61.1
135.00	26.5	9.1	47.9	90.00	24.7	72.2	72.2
168.50	26.5	9.5	52.7	112.50	9.2	60.0	60.0
202.00	20.9	9.0	60.9	135.00	8.2	6.0	6.0
235.50	23.0	11.6	58.0	157.50	11.1	11.1	11.1
269.00	23.5	14.0	78.6	180.00	10.6	10.6	10.6
302.50	18.9	12.2	82.0	202.50	4.0	4.0	4.0
336.00	20.2	15.0	75.2	225.00	5.1	4.4	4.4
370.50	25.4	11.5	76.0	247.50	5.1	4.9	4.9
404.00	29.1	11.4	63.4	270.00	29.2	29.2	29.2
437.50	18.4	11.6	41.1	292.50	15.5	15.5	15.5
471.00	29.1	10.5	60.6	315.00	21.4	21.4	21.4

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES  
MILLION DOLLAR PIER, ATLANTIC CITY

LOCATION 13

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	30.6	10.7	62.7	0.00	40.3	10.7	72.3
22.50	26.2	10.1	56.4	22.50	35.7	11.2	69.3
45.00	23.1	8.4	48.3	45.00	32.4	14.3	60.4
67.50	18.7	10.5	50.1	67.50	36.0	18.9	92.6
90.00	28.3	13.4	62.6	90.00	80.1	23.7	121.2
112.50	37.0	13.5	72.6	112.50	50.0	15.3	105.3
135.00	23.2	11.6	57.9	135.00	39.6	11.1	78.8
157.50	17.5	9.7	46.4	157.50	46.1	11.2	79.7
180.00	15.3	8.5	40.8	180.00	38.8	11.3	72.8
202.50	24.6	11.6	59.4	202.50	50.0	16.6	109.3
225.00	14.8	9.4	42.8	225.00	66.5	17.1	117.3
247.50	14.3	9.8	43.8	247.50	45.1	18.1	99.3
270.00	27.3	10.0	57.2	270.00	36.8	13.6	77.5
292.50	33.1	10.3	64.0	292.50	42.2	13.0	81.2
315.00	25.2	7.9	49.0	315.00	27.5	8.8	53.8
337.50	34.5	8.2	59.0	337.50	40.2	10.4	71.4

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LOCATION 15

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	32.3	9.8	61.6	0.00	27.5	10.3	58.4
22.50	32.4	13.0	71.3	22.50	25.9	11.0	59.0
45.00	23.4	10.5	54.7	45.00	24.5	10.9	51.1
67.50	46.4	20.4	107.5	67.50	26.3	12.0	68.6
90.00	45.3	20.6	107.1	90.00	31.7	12.2	68.2
112.50	22.8	11.0	55.7	112.50	28.3	12.1	64.9
135.00	24.1	10.9	55.3	135.00	23.7	10.1	54.1
157.50	32.0	10.9	64.9	157.50	21.3	9.1	48.6
180.00	34.0	11.1	67.3	180.00	28.6	11.0	62.4
202.50	31.5	12.2	68.0	202.50	30.0	11.1	63.4
225.00	41.6	19.5	100.3	225.00	38.2	15.1	63.3
247.50	31.7	15.9	79.4	247.50	30.9	15.4	63.0
270.00	21.6	8.5	46.5	270.00	24.2	9.5	59.9
292.50	16.3	5.5	32.0	292.50	25.5	7.7	51.1
315.00	14.0	4.4	27.3	315.00	17.9	7.0	47.0
337.50	21.4	6.5	40.9	337.50	23.7	7.0	47.0

LOCATION 16

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES  
MILLION DOLLAR PIER, ATLANTIC CITY

LOCATION 17

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	30.5	14.0	72.5	0.00	37.7	11.6	70.6
22.50	23.3	11.0	56.2	22.50	28.8	11.1	62.1
45.00	21.9	10.4	53.3	45.00	25.6	10.4	56.3
67.50	25.8	13.3	65.5	67.50	25.7	11.0	58.8
90.00	36.4	17.5	88.8	90.00	17.9	9.0	45.0
112.50	21.4	10.9	54.2	112.50	44.6	16.2	93.1
135.00	15.0	7.8	39.2	135.00	41.8	9.1	69.1
157.50	23.5	8.7	49.7	157.50	30.2	9.3	60.1
180.00	40.3	11.2	73.9	180.00	34.6	9.4	62.4
202.50	35.1	11.2	68.7	202.50	32.1	10.4	63.4
225.00	21.4	11.4	55.7	225.00	20.5	10.2	50.9
247.50	21.9	11.9	57.7	247.50	23.0	12.3	59.9
270.00	19.9	8.3	44.8	270.00	28.8	12.1	65.1
292.50	17.8	7.7	40.8	292.50	31.4	11.7	66.5
315.00	13.2	4.1	25.5	315.00	20.6	7.4	42.8
337.50	18.4	7.4	40.6	337.50	27.6	9.2	53.0

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LOCATION 18

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	41.5	10.9	74.2	0.00	30.1	11.7	65.3
22.50	35.0	13.4	75.2	22.50	23.1	11.1	56.5
45.00	26.6	10.6	58.4	45.00	20.6	10.0	50.5
67.50	34.2	11.6	59.0	67.50	46.3	21.6	110.9
90.00	56.5	19.8	115.9	90.00	63.5	11.9	99.2
112.50	55.5	10.7	87.6	112.50	44.5	14.7	88.5
135.00	48.4	11.5	82.9	135.00	36.0	12.6	73.8
157.50	36.1	11.0	59.0	157.50	22.9	11.4	57.2
180.00	37.1	10.9	69.8	180.00	51.9	13.6	92.7
202.50	27.3	11.3	61.2	202.50	57.2	11.6	92.0
225.00	36.2	10.0	53.1	225.00	65.2	12.1	103.1
247.50	45.4	7.1	36.8	247.50	20.5	7.7	53.9
270.00	45.6	8.7	51.9	270.00	26.1	11.4	61.2
292.50	41.6	11.0	74.5	292.50	26.9	7.6	61.0
315.00	38.2	7.4	50.6	315.00	17.4	7.5	40.3
337.50	39.7	8.0	63.8	337.50	17.9	7.5	40.4

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES  
MILLION DOLLAR PIER, ATLANTIC CITY

LOCATION 21

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	42.9	11.8	78.2
22.50	25.4	11.0	58.5
45.00	21.6	9.0	48.7
67.50	21.9	10.8	54.3
90.00	74.6	19.2	132.3
112.50	70.7	13.8	112.1
135.00	33.0	18.2	87.7
157.50	20.0	14.8	72.6
180.00	56.9	15.1	102.1
202.50	44.6	13.1	84.0
225.00	45.2	11.1	78.4
247.50	35.2	15.4	81.3
270.00	39.8	13.1	79.2
292.50	44.2	9.9	73.9
315.00	32.6	8.2	57.1
337.50	41.3	9.2	69.0

LOCATION 22

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	42.3	11.3	76.0
22.50	26.0	13.1	65.4
45.00	30.3	14.6	74.1
67.50	67.2	19.2	124.9
90.00	82.8	12.9	121.5
112.50	41.7	18.5	97.3
135.00	53.5	14.7	79.6
157.50	37.1	19.7	96.2
180.00	76.5	11.9	112.5
202.50	79.4	13.0	118.9
225.00	76.4	11.7	111.4
247.50	61.3	20.0	101.2
270.00	24.2	11.2	97.9
292.50	36.0	11.1	97.1
315.00	29.3	7.6	67.3
337.50	41.0	8.8	67.3

LOCATION 23

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	9.9	3.8	21.4
22.50	13.2	6.0	31.2
45.00	15.6	6.6	35.7
67.50	136.9	12.8	75.4
90.00	66.2	13.4	106.5
112.50	52.7	16.0	100.8
135.00	39.4	14.9	74.2
157.50	22.0	10.5	53.4
180.00	43.0	13.6	69.9
202.50	52.3	15.3	98.3
225.00	48.0	11.1	81.6
247.50	35.4	15.4	81.5
270.00	14.8	6.6	32.8
292.50	11.7	4.7	25.7
315.00	8.7	3.1	18.0
337.50	10.5	3.6	21.2

LOCATION 24

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	15.3	4.6	29.1
22.50	31.0	13.0	70.1
45.00	57.3	19.1	114.6
67.50	52.0	19.6	110.9
90.00	37.0	18.0	92.5
112.50	112.5	18.8	45.3
135.00	36.9	11.0	72.4
157.50	48.3	12.0	64.4
180.00	53.9	11.1	61.6
202.50	61.3	10.9	60.0
225.00	52.5	9.5	51.0
247.50	24.1	8.8	44.6
270.00	11.5	4.7	23.4
292.50	19.8	4.4	24.7
315.00	12.7	4.2	21.2
337.50	11.6	4.2	21.2

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES  
MILLION DOLLAR PIER, ATLANTIC CITY

LOCATION 25

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	16.6	5.1	32.0
22.50	30.4	12.2	70.1
45.00	39.4	16.0	87.3
67.50	46.0	18.3	100.9
90.00	32.6	12.5	70.1
112.50	18.2	6.3	46.0
135.00	27.2	12.5	64.7
157.50	41.4	12.4	78.8
180.00	57.6	12.8	96.0
202.50	60.3	10.9	92.9
225.00	49.4	9.5	77.9
247.50	30.9	6.6	56.7
270.00	9.6	3.5	26.2
292.50	14.3	3.0	29.4
315.00	12.1	4.0	24.0
337.50	13.9	4.4	27.1

LOCATION 26

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	6.0	6.0	17.0
22.50	35.8	12.0	67.8
45.00	12.3	7.7	113.7
67.50	12.7	7.7	95.7
90.00	12.0	7.4	87.7
112.50	12.7	7.2	81.7
135.00	12.7	7.2	80.4
157.50	12.3	7.2	70.4
180.00	12.3	7.4	62.2
202.50	12.2	7.2	64.4
225.00	10.6	6.3	49.4
247.50	5.5	2.9	24.6
270.00	9.6	5.0	41.0
292.50	10.5	5.5	34.0
315.00	8.2	3.9	20.0
337.50	8.2	3.9	20.0

LOCATION 27

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	34.9	12.8	73.4
22.50	42.9	14.7	85.9
45.00	25.5	16.0	73.5
67.50	18.5	7.7	39.7
90.00	15.3	7.7	38.5
112.50	48.6	15.9	96.2
135.00	14.2	7.5	36.8
157.50	20.2	10.5	51.7
180.00	45.0	12.4	82.0
202.50	56.5	11.3	90.5
225.00	57.7	10.4	85.9
247.50	45.1	10.6	76.0
270.00	8.3	3.9	26.2
292.50	8.6	5.5	25.1
315.00	7.5	4.6	21.3
337.50	25.2	12.0	61.2

LOCATION 28

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	6.5	6.5	3.5
22.50	33.2	12.0	20.1
45.00	9.5	4.4	14.4
67.50	9.4	4.4	14.4
90.00	11.9	4.4	14.2
112.50	12.0	6.0	15.0
135.00	13.5	6.0	16.6
157.50	14.4	6.0	16.6
180.00	14.7	3.3	11.7
202.50	13.3	5.5	14.4
225.00	10.0	5.5	11.4
247.50	6.0	3.0	9.0
270.00	27.0	6.0	34.0
292.50	29.2	5.0	34.0
315.00	31.5	6.0	34.0
337.50	33.7	5.0	34.0

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES  
MILLION DOLLAR PIER, ATLANTIC CITY

LOCATION 29

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	7.9	4.6	22.3	0.00	13.2	5.6	19.0
22.50	10.7	7.2	32.4	22.50	15.7	10.1	21.9
45.00	31.6	12.2	68.3	45.00	16.0	12.0	21.0
67.50	48.6	9.8	78.1	67.50	16.0	12.0	21.0
90.00	55.2	12.6	93.0	90.00	16.0	12.0	21.0
112.50	40.3	13.6	81.1	112.50	27.0	13.5	21.0
135.00	21.0	11.9	56.6	135.00	27.0	13.5	21.0
157.50	12.1	7.1	33.4	157.50	27.0	13.5	21.0
180.00	17.2	15.6	84.1	180.00	29.0	15.0	21.0
202.50	15.5	9.8	44.9	202.50	47.0	23.0	44.4
225.00	12.8	6.6	32.6	225.00	65.0	33.0	71.1
247.50	19.7	13.1	59.1	247.50	45.0	23.0	44.4
270.00	39.0	15.3	84.6	270.00	29.0	13.5	21.0
292.50	43.9	14.4	87.1	292.50	27.0	13.5	21.0
315.00	30.6	12.5	68.2	315.00	27.0	13.5	21.0
337.50	11.9	7.5	34.4	337.50	12.4	4.0	16.6

LOCATION 31

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	12.7	5.6	29.6	0.00	26.3	11.5	62.8
22.50	7.9	4.5	21.5	22.50	21.5	9.9	51.2
45.00	13.8	8.6	39.7	45.00	22.5	11.1	51.2
67.50	40.4	9.0	67.4	67.50	22.5	11.1	51.2
90.00	52.4	9.9	82.2	90.00	77.5	35.5	114.9
112.50	59.6	11.5	94.2	112.50	53.3	21.1	123.0
135.00	38.9	12.6	76.7	135.00	53.3	21.1	123.0
157.50	29.4	12.3	66.5	157.50	63.3	21.6	123.0
180.00	17.2	8.6	42.9	180.00	79.0	34.4	136.0
202.50	37.2	11.5	71.7	202.50	61.1	24.0	100.0
225.00	57.6	14.4	100.9	225.00	43.3	14.4	100.0
247.50	74.6	10.8	107.1	247.50	10.0	19.0	49.0
270.00	49.5	12.2	86.0	270.00	29.2	13.5	21.0
292.50	27.3	10.7	59.4	292.50	31.5	19.0	59.0
315.00	14.2	8.0	38.1	315.00	26.0	13.5	21.0
337.50	12.2	5.4	28.6	337.50	26.0	13.5	21.0

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES  
MILLION DOLLAR PIER, ATLANTIC CITY

LOCATION 33

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	8.2	2.8	16.8	0.00	23.3	7.7	46.5
22.50	13.4	5.2	29.1	22.50	13.3	9.4	38.4
45.00	17.0	9.1	44.4	45.00	6.2	4.4	19.4
67.50	42.9	12.9	81.6	67.50	40.3	7.8	99.9
90.00	38.6	12.2	75.3	90.00	53.4	8.7	100.0
112.50	18.6	13.6	59.5	112.50	64.4	10.8	96.2
135.00	21.0	10.6	52.7	135.00	57.4	13.9	94.2
157.50	23.4	12.2	60.0	157.50	53.1	13.7	92.5
180.00	53.8	16.5	103.3	180.00	30.4	13.9	102.5
202.50	65.2	12.7	103.3	202.50	33.9	17.9	104.0
225.00	46.1	14.8	90.5	225.00	64.8	13.1	113.1
247.50	19.1	8.6	44.8	247.50	72.4	13.6	103.7
270.00	13.8	8.1	32.1	270.00	61.9	13.9	92.5
292.50	10.2	13.9	22.0	292.50	38.7	14.6	67.8
315.00	8.8	2.3	18.7	315.00	25.6	14.1	51.3
337.50	8.8	2.8	17.2	337.50	21.5	9.9	51.3

LOCATION 35

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	48.7	12.7	86.8	0.00	18.2	9.7	47.5
22.50	38.5	12.6	73.5	22.50	23.5	12.3	56.0
45.00	14.4	7.5	29.5	45.00	24.6	15.3	50.0
67.50	44.8	10.4	75.9	67.50	53.3	19.5	111.0
90.00	39.6	10.6	71.5	90.00	63.8	11.9	109.0
112.50	48.1	18.5	103.5	112.50	50.4	13.1	133.0
135.00	50.4	18.1	104.9	135.00	34.0	13.0	104.0
157.50	24.3	11.2	57.9	157.50	26.0	12.6	54.4
180.00	61.0	20.6	122.8	180.00	41.1	14.3	142.2
202.50	52.8	16.0	111.2	202.50	73.7	9.6	111.0
225.00	41.4	17.0	92.3	225.00	67.6	14.8	99.0
247.50	22.7	10.0	52.7	247.50	21.5	9.2	51.7
270.00	18.7	7.6	39.5	270.00	19.2	9.2	51.7
292.50	20.4	12.4	55.6	292.50	31.3	12.0	64.0
315.00	22.0	9.8	53.2	315.00	14.2	9.1	51.7
337.50	29.9	12.2	65.5	337.50	10.5	5.0	51.7

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES  
MILLION DOLLAR PIER, ATLANTIC CITY

LOCATION 37

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	44.6	10.8	77.0	0.00	30.3	11.0	63.2
22.50	29.3	9.6	58.0	22.50	28.3	9.9	58.1
45.00	23.4	9.3	51.4	45.00	26.9	12.0	63.0
67.50	18.7	9.6	47.6	67.50	18.7	9.7	47.7
90.00	24.0	10.0	54.1	90.00	31.1	12.5	68.5
112.50	32.0	10.5	63.5	112.50	33.2	10.6	61.7
135.00	32.2	12.1	68.6	135.00	38.0	10.6	69.8
157.50	38.4	10.9	71.1	157.50	37.3	9.7	66.4
180.00	54.7	10.2	85.2	180.00	51.6	12.3	88.0
202.50	59.9	15.7	107.0	202.50	24.2	16.5	73.6
225.00	34.6	15.8	62.0	225.00	20.9	9.0	48.0
247.50	23.2	10.6	55.3	247.50	21.9	10.7	54.0
270.00	41.4	15.8	88.6	270.00	27.1	12.6	64.8
292.50	39.1	11.3	73.0	292.50	34.7	11.4	68.9
315.00	30.3	8.4	55.5	315.00	26.3	9.4	54.7
337.50	36.2	8.4	61.3	337.50	20.5	7.4	42.6

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LOCATION 38

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	44.6	10.8	77.0	0.00	30.3	11.0	63.2
22.50	29.3	9.6	58.0	22.50	28.3	9.9	58.1
45.00	23.4	9.3	51.4	45.00	26.9	12.0	63.0
67.50	18.7	9.6	47.6	67.50	18.7	9.7	47.7
90.00	24.0	10.0	54.1	90.00	31.1	12.5	68.5
112.50	32.0	10.5	63.5	112.50	33.2	10.6	61.7
135.00	32.2	12.1	68.6	135.00	38.0	10.6	69.8
157.50	38.4	10.9	71.1	157.50	37.3	9.7	66.4
180.00	54.7	10.2	85.2	180.00	51.6	12.3	88.0
202.50	59.9	15.7	107.0	202.50	24.2	16.5	73.6
225.00	34.6	15.8	62.0	225.00	20.9	9.0	48.0
247.50	23.2	10.6	55.3	247.50	21.9	10.7	54.0
270.00	41.4	15.8	88.6	270.00	27.1	12.6	64.8
292.50	39.1	11.3	73.0	292.50	34.7	11.4	68.9
315.00	30.3	8.4	55.5	315.00	26.3	9.4	54.7
337.50	36.2	8.4	61.3	337.50	20.5	7.4	42.6

LOCATION 39

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	20.6	6.3	45.4	0.00	14.6	5.6	29.3
22.50	18.9	8.1	43.1	22.50	20.4	9.4	48.6
45.00	20.2	7.9	44.0	45.00	29.0	15.0	68.1
67.50	24.8	4.1	67.1	67.50	45.8	21.4	119.9
90.00	26.1	10.6	58.6	90.00	30.5	17.2	82.2
112.50	41.2	10.8	73.7	112.50	29.7	11.5	64.2
135.00	27.3	9.0	54.4	135.00	33.2	13.5	73.0
157.50	14.6	6.7	34.8	157.50	26.3	10.5	52.9
180.00	15.5	7.6	38.4	180.00	17.6	9.3	46.1
202.50	24.7	12.3	61.5	202.50	26.2	17.0	77.8
225.00	23.5	11.3	57.5	225.00	39.5	19.7	98.4
247.50	22.8	10.4	54.1	247.50	23.3	15.0	60.2
270.00	21.4	9.3	49.6	270.00	22.2	9.4	53.9
292.50	20.0	8.6	45.8	292.50	24.7	9.7	56.9
315.00	15.9	6.5	35.5	315.00	13.1	4.6	26.4
337.50	12.8	4.0	24.9	337.50	14.3	3.9	26.4

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LOCATION 40

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	20.6	6.3	45.4	0.00	14.6	5.6	29.3
22.50	18.9	8.1	43.1	22.50	20.4	9.4	48.6
45.00	20.2	7.9	44.0	45.00	29.0	15.0	68.1
67.50	24.8	4.1	67.1	67.50	45.8	21.4	119.9
90.00	26.1	10.6	58.6	90.00	30.5	17.2	82.2
112.50	41.2	10.8	73.7	112.50	29.7	11.5	64.2
135.00	27.3	9.0	54.4	135.00	33.2	13.5	73.0
157.50	14.6	6.7	34.8	157.50	26.3	10.5	52.9
180.00	15.5	7.6	38.4	180.00	17.6	9.3	46.1
202.50	24.7	12.3	61.5	202.50	26.2	17.0	77.8
225.00	23.5	11.3	57.5	225.00	39.5	19.7	98.4
247.50	22.8	10.4	54.1	247.50	23.3	15.0	60.2
270.00	21.4	9.3	49.6	270.00	22.2	9.4	53.9
292.50	20.0	8.6	45.8	292.50	24.7	9.7	56.9
315.00	15.9	6.5	35.5	315.00	13.1	4.6	26.4
337.50	12.8	4.0	24.9	337.50	14.3	3.9	26.4

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES  
MILLION DOLLAR PIER, ATLANTIC CITY

LOCATION 41

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	29.2	10.3	59.9
22.50	24.8	8.8	49.7
45.00	27.5	9.6	56.4
67.50	40.7	14.3	82.5
90.00	26.5	14.5	75.9
112.50	28.5	11.8	63.9
135.00	24.5	11.4	55.9
157.50	27.5	11.9	63.2
180.00	27.5	11.3	63.2
202.50	41.0	17.0	58.6
225.00	26.3	10.0	60.6
247.50	28.7	10.6	60.7
270.00	22.5	8.7	48.7
292.50	31.1	11.8	66.7
315.00	23.2	7.2	44.9
337.50	23.8	7.6	46.7

LOCATION 42

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	43.6	4.7	74.4
22.50	37.1	4.4	68.6
45.00	51.8	5.5	107.9
67.50	55.5	5.2	115.0
90.00	56.4	5.5	115.0
112.50	44.2	4.4	84.0
135.00	56.4	5.5	115.0
157.50	45.5	5.5	115.0
180.00	44.6	5.5	115.0
202.50	27.6	4.6	113.0
225.00	51.6	5.6	118.0
247.50	27.6	4.6	113.0
270.00	58.1	5.6	118.0
292.50	56.6	5.6	118.0
315.00	22.2	2.9	77.7
337.50	8.4	1.4	60.1

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LOCATION 43

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	31.9	10.5	63.2
22.50	25.5	11.0	58.7
45.00	18.0	11.2	51.5
67.50	11.2	7.3	33.1
90.00	26.8	13.1	65.0
112.50	26.8	10.2	57.4
135.00	26.8	11.3	60.0
157.50	26.8	12.7	54.6
180.00	26.8	12.7	71.6
202.50	29.4	14.3	62.2
225.00	29.4	12.5	59.7
247.50	29.4	10.3	48.0
270.00	29.4	10.2	47.4
292.50	29.4	11.2	52.6
315.00	29.4	9.5	46.1
337.50	29.4	9.5	50.3

LOCATION 44

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	13.3	3.6	35.7
22.50	15.6	3.6	40.3
45.00	18.6	3.6	45.2
67.50	13.1	4.4	31.2
90.00	13.1	4.4	31.2
112.50	11.2	4.4	29.0
135.00	13.1	4.4	35.0
157.50	13.1	4.4	34.0
180.00	13.1	4.4	34.0
202.50	22.5	4.4	55.2
225.00	24.7	5.0	44.4
247.50	24.7	5.0	44.4
270.00	27.6	5.0	55.6
292.50	29.2	5.0	55.6
315.00	31.5	5.0	55.6
337.50	31.5	5.0	55.6

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TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES  
MILLION DOLLAR PIER, ATLANTIC CITY

LOCATION 45

WIND AZIMUTH	UMEAR/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAR+3*URMS/UINF (PERCENT)
0.00	30.5	14.2	73.1
22.50	35.4	13.2	75.0
45.00	31.8	12.6	69.6
67.50	22.2	13.3	62.3
90.00	26.4	14.0	68.5
112.50	43.0	11.5	77.5
135.00	31.4	9.0	58.4
157.50	21.1	8.5	56.5
180.00	27.2	10.6	58.0
202.50	18.1	8.9	44.0
225.00	23.9	10.7	55.9
247.50	27.5	12.8	66.0
270.00	31.8	14.7	76.0
292.50	26.2	13.6	67.1
315.00	16.0	9.3	43.8
337.50	14.9	9.5	43.5

LOCATION 46

WIND AZIMUTH	UMEAR/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAR+3*URMS/UINF (PERCENT)
0.00	21.4	10.2	51.4
22.50	21.0	9.8	50.8
45.00	22.6	11.1	50.0
67.50	20.2	9.1	47.6
90.00	23.9	8.6	49.5
112.50	14.8	6.9	35.0
135.00	9.9	4.4	22.0
157.50	6.8	2.5	14.2
180.00	6.7	2.0	15.2
202.50	12.8	3.9	30.5
225.00	23.0	7.2	49.6
247.50	23.2	10.0	54.6
270.00	20.7	11.3	47.4
292.50	16.4	10.4	31.4
315.00	11.3	6.7	25.0
337.50	16.4	9.8	45.0

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LOCATION 47

WIND AZIMUTH	UMEAR/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAR+3*URMS/UINF (PERCENT)
0.00	38.5	15.5	85.0
22.50	39.3	12.3	96.3
45.00	46.4	12.0	64.4
67.50	27.8	14.1	70.2
90.00	13.3	8.0	37.4
112.50	18.9	9.6	47.6
135.00	12.9	10.1	44.2
157.50	13.3	13.7	14.9
180.00	6.3	3.7	17.4
202.50	10.4	6.1	28.7
225.00	29.3	19.3	67.3
247.50	67.0	28.4	152.3
270.00	30.3	19.0	87.2
292.50	21.7	15.0	66.6
315.00	13.9	8.0	37.7
337.50	23.2	11.1	58.5

LOCATION 48

WIND AZIMUTH	UMEAR/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAR+3*URMS/UINF (PERCENT)
0.00	38.1	12.1	74.5
22.50	42.7	13.2	84.4
45.00	39.6	11.4	73.7
67.50	42.1	14.6	83.8
90.00	26.6	12.0	56.6
112.50	14.9	7.2	36.5
135.00	13.0	7.2	37.6
157.50	14.0	8.9	35.2
180.00	24.5	12.0	62.0
202.50	90.0	16.9	101.0
225.00	22.6	14.4	53.9
247.50	22.0	14.9	53.9
270.00	25.0	14.1	46.0
292.50	18.4	10.0	30.0
315.00	11.4	11.5	22.0
337.50	34.4	10.0	45.0

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES  
MILLION DOLLAR PIER, ATLANTIC CITY

LOCATION 49

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	10.1	5.9	27.6	0.00	37.1	12.3	74.1
22.50	21.2	9.6	48.3	22.50	55.3	13.6	96.2
45.00	14.0	6.2	32.5	45.00	42.6	10.2	73.1
67.50	9.2	3.5	19.8	67.50	11.8	6.6	31.7
90.00	7.9	3.1	17.2	90.00	8.9	3.1	18.0
112.50	7.9	2.7	15.9	112.50	9.3	3.3	19.2
135.00	8.4	2.6	16.8	135.00	13.5	4.9	28.1
157.50	15.4	5.1	30.6	157.50	24.6	7.9	48.2
180.00	24.2	8.0	48.2	180.00	32.2	10.6	64.0
202.50	26.2	9.2	53.8	202.50	36.5	12.1	72.9
225.00	24.0	9.1	51.1	225.00	39.2	14.2	81.7
247.50	19.8	8.5	45.2	247.50	40.1	15.3	57.6
270.00	10.4	7.5	32.8	270.00	21.1	12.2	39.5
292.50	8.1	6.0	26.2	292.50	16.3	7.8	36.7
315.00	5.8	4.5	19.4	315.00	13.9	7.6	33.4
337.50	2.7	2.1	8.9	337.50	22.0	10.5	

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LOCATION 50

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	26.6	12.5	63.9	0.00	30.8	12.9	69.4
22.50	36.1	15.0	81.0	22.50	50.2	14.3	93.0
45.00	37.5	12.8	76.0	45.00	34.3	10.8	66.8
67.50	45.7	15.3	91.4	67.50	12.6	6.9	33.4
90.00	33.7	15.4	60.0	90.00	8.7	3.6	19.4
112.50	15.3	8.0	39.2	112.50	11.9	3.2	27.4
135.00	21.1	8.4	46.2	135.00	10.4	4.7	24.6
157.50	22.0	8.8	48.3	157.50	15.6	6.6	35.4
180.00	21.5	12.5	59.0	180.00	25.7	9.5	54.1
202.50	38.8	18.4	94.1	202.50	36.3	11.2	70.0
225.00	45.6	18.5	101.0	225.00	46.9	12.1	83.0
247.50	50.5	17.3	102.2	247.50	44.5	11.1	77.7
270.00	24.5	15.2	76.2	270.00	20.2	10.6	52.0
292.50	13.1	8.2	37.8	292.50	17.6	8.6	43.6
315.00	13.8	8.0	37.8	315.00	9.6	4.8	23.9
337.50	14.7	8.5	40.2	337.50	10.8	5.9	28.4

LOCATION 51

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)	WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	26.6	12.5	63.9	0.00	30.8	12.9	69.4
22.50	36.1	15.0	81.0	22.50	50.2	14.3	93.0
45.00	37.5	12.8	76.0	45.00	34.3	10.8	66.8
67.50	45.7	15.3	91.4	67.50	12.6	6.9	33.4
90.00	33.7	15.4	60.0	90.00	8.7	3.6	19.4
112.50	15.3	8.0	39.2	112.50	11.9	3.2	27.4
135.00	21.1	8.4	46.2	135.00	10.4	4.7	24.6
157.50	22.0	8.8	48.3	157.50	15.6	6.6	35.4
180.00	21.5	12.5	59.0	180.00	25.7	9.5	54.1
202.50	38.8	18.4	94.1	202.50	36.3	11.2	70.0
225.00	45.6	18.5	101.0	225.00	46.9	12.1	83.0
247.50	50.5	17.3	102.2	247.50	44.5	11.1	77.7
270.00	24.5	15.2	76.2	270.00	20.2	10.6	52.0
292.50	13.1	8.2	37.8	292.50	17.6	8.6	43.6
315.00	13.8	8.0	37.8	315.00	9.6	4.8	23.9
337.50	14.7	8.5	40.2	337.50	10.8	5.9	28.4

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES  
MILLION DOLLAR PIER, ATLANTIC CITY

LOCATION 53

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	39.3	14.4	82.7
22.50	47.0	15.5	93.5
45.00	29.7	11.1	63.1
67.50	43.1	13.5	89.3
90.00	26.9	12.9	65.6
112.50	38.5	13.5	78.8
135.00	24.7	9.9	54.5
157.50	37.5	9.0	64.3
180.00	45.6	8.5	71.2
202.50	50.2	8.1	74.4
225.00	58.7	7.7	79.9
247.50	59.1	10.2	89.8
270.00	39.3	13.5	79.9
292.50	23.0	10.2	53.5
315.00	14.8	8.2	39.3
337.50	17.9	9.8	47.3

LOCATION 54

WIND AZIMUTH	UMEAN/UINF (PERCENT)	URMS/UINF (PERCENT)	UMEAN+3*URMS/UINF (PERCENT)
0.00	5	2	1.2
22.50	31	5	5.7
45.00	25	4	4.4
67.50	10.1	3	1.7
90.00	15.3	3	2.9
112.50	17.3	3	3.7
135.00	12.9	2	2.5
157.50	6.4	1.7	1.4
180.00	15.1	2	2.5
202.50	12.0	2	2.7
225.00	12.1	2	2.8
247.50	5.8	1.4	1.5
270.00	4.2	1.0	1.0
292.50	2.6	0.7	0.7
315.00	1.9	0.4	0.4
337.50	1.6	0.7	0.6

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES  
MILLION DOLLAR PIER, ATLANTIC CITY

\* \* GREATEST VALUES \* \*

UMEAN/UINF (PERCENT)					URMS/UINF (PERCENT)					UMEAN+3*RMS/UINF (PERCENT)				
LOC	AZ	MEAN	RMS	M+3RMS	LOC	AZ	MEAN	RMS	M+3RMS	LOC	AZ	MEAN	RMS	M+3RMS
22	90.0	82.8	12.9	121.5	47	247.5	67.0	28.4	152.3	47	247.5	67.0	28.4	152.3
35	202.5	81.8	10.0	111.7	32	180.0	63.6	24.4	136.8	32	180.0	63.6	24.4	136.8
14	90.0	80.1	13.7	121.2	32	135.0	53.0	23.3	123.0	21	90.0	74.6	19.2	132.3
32	202.5	79.9	10.0	110.0	42	225.0	51.6	22.3	118.6	32	112.5	77.5	15.0	125.0
22	202.5	79.4	13.2	118.9	20	67.5	46.3	21.6	110.9	22	67.5	67.2	19.2	124.9
32	90.0	77.8	15.4	123.9	40	67.5	45.8	21.4	110.0	32	90.0	77.8	15.4	123.9
42	202.5	77.6	14.1	119.8	10	45.0	56.2	21.2	120.0	32	135.0	53.0	23.3	123.0
32	112.5	77.5	15.8	125.0	35	180.0	61.0	20.6	122.8	35	180.0	61.0	20.6	122.8
22	180.0	76.5	11.9	112.3	15	90.0	45.3	20.6	107.1	22	90.0	82.8	12.9	121.5
22	225.0	76.4	11.7	111.4	15	67.5	46.4	20.4	107.5	14	90.0	80.1	13.7	121.2

TOT

TABLE 3

## PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED

ATLANTIC CITY, NEW JERSEY NAT. RV FRC. EXP. CTR

SEASON : ANNUAL NO. OF OBS. = 29216 HT. OF MEAS. = 20. FT.

VELOCITY LEVELS IN MPH.

DIRECTION	0 - 3	4 - 7	8 - 12	13 - 18	19 - 24	25 - 31	32 - 38	39 +	TOTAL
N	.30	2.40	3.30	1.50	.20	0.00	0.00	0.00	7.70
NNE	.20	1.00	1.10	.60	.10	0.00	0.00	0.00	7.90
NNNE	.10	1.00	1.10	.60	.10	0.00	0.00	0.00	7.90
ENE	.20	1.00	1.20	1.30	.20	0.10	0.00	0.00	7.90
ESE	.20	1.20	1.90	1.20	.10	0.00	0.00	0.00	7.90
SE	.20	1.80	1.40	.50	.10	0.00	0.00	0.00	7.90
SSE	.10	.80	1.20	.50	.10	0.00	0.00	0.00	7.90
SW	.30	2.80	4.10	3.60	.60	0.10	0.00	0.00	14.60
WSW	.20	1.60	2.70	1.90	.40	0.10	0.00	0.00	7.90
WSWSW	.20	1.70	2.30	1.30	.30	0.10	0.00	0.00	7.90
WSWSWSW	.20	2.20	3.00	1.60	.30	0.10	0.10	0.00	7.90
WSWSWSWSW	.20	1.80	3.40	2.40	.80	.30	0.10	0.00	7.90
WSWSWSWSWSW	.20	1.70	3.60	3.00	1.20	.40	0.10	0.00	7.90
WSWSWSWSWSWSW	.20	2.20	3.60	2.40	.80	.30	0.10	0.00	7.90
WSWSWSWSWSWSWSW	.20	1.50	1.80	1.40	.30	0.00	0.00	0.00	7.90
WSWSWSWSWSWSWSWSW	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
TOT	7.50	24.10	35.50	25.20	6.00	1.50	.30	0.00	

TABLE 4  
SUMMARY OF WIND EFFECTS ON PEOPLE

	<u>Beaufort number</u>	<u>Speed (mph)</u>	<u>Effects</u>
Calm, light air	0, 1	0- 3	Calm, no noticeable wind
Light breeze	2	4- 7	Wind felt on face
Gentle breeze	3	8-12	Wind extends light flag Hair is disturbed Clothing flaps
Moderate breeze	4	13-18	Raises dust, dry soil and loose paper Hair disarranged
Fresh breeze	5	19-24	Force of wind felt on body Drifting snow becomes airborne Limit of agreeable wind on land
Strong breeze	6	25-31	Umbrellas used with difficulty Hair blown straight Difficult to walk steadily Wind noise on ears unpleasant Windborne snow above head height (blizzard)
Near gale	7	32-38	Inconvenience felt when walking
Gale	8	39-46	Generally impedes progress Great difficulty with balance in gusts
Strong gale	9	47-54	People blown over by gusts

Note: Table from Reference 4, p. 40.

TABLE 5

## CALCULATION OF REFERENCE PRESSURE

## 1. Basic wind speed from ANSI A58.1 (Ref. 6):

50-yr fastest mile at 30 ft = 90 mph

$$\text{Mean hourly wind speed} = \frac{90}{1.28} = 70.3 \text{ mph}$$

$$\text{Mean hourly gradient wind speed} = 70.3 \left(\frac{1000}{30}\right)^{.16} = 123.2 \text{ mph}$$

$$\begin{aligned} \text{Mean hourly wind at reference location} &= U_{\infty} = \text{gradient wind} \\ &= 123.2 \text{ mph} \end{aligned}$$

$$\text{Reference Pressure} = 0.5 \rho U_{\infty}^2 = (.00256) (123.2)^2 = 38.8 \text{ psf}$$

Use 39 psf

## 2. Loads for 100-yr recurrence wind:

100-yr fastest mile at 30 ft = 105 mph

$$\text{Multiply 50-yr loads by } \left(\frac{105}{90}\right)^2 = 1.36$$

## 3. Gust load factors to convert hourly mean integrated loads to various gust durations (see Sect. 4.4):

<u>Gust Duration, sec</u>	<u>Gust Load Factor</u>
10 - 15	$(1.4)^2 = 1.96$
30	$(1.32)^2 = 1.74$
45	$(1.26)^2 = 1.59$

The 30 second gust load factor was used in Table 7.

TABLE 6A. PEAK LOADS FOR CONFIGURATION A :  
LARGEST VALUES OF CLADDING LOAD

MILLION DOLLAR PIER, ATLANTIC CITY  
REFERENCE PRESSURE = 39.0 PSF

TAP	AZI- MUTH	PRESS COEFF	NEGATIVE PEAK	POSITIVE PEAK	TAP	AZI- MUTH	PRESS COEFF	NEGATIVE PEAK	POSITIVE PEAK	TAP	AZI- MUTH	PRESS COEFF	NEGATIVE PEAK	POSITIVE PEAK	
			---	PSF				---	PSF				---	PSF	
1	240	- .59	-23.2	11.8	49	100	.72	-17.1	28.1	140	110	.51	-14.0	20.0	
2	240	- .47	-18.3	13.4	50	160	-.67	-34.0	1.8	141	110	.71	-27.5	23.5	
3	80	- .44	-17.0	13.0	51	130	-1.13	-43.9	1.5	142	110	.68	-22.4	26.6	
4	50	- .58	-22.6	12.2	52	160	-.73	-28.4	21.8	143	100	.57	-15.2	22.3	
5	230	- .42	-16.6	16.4	53	240	-.83	-32.2	19.2	144	70	.48	-18.8	18.2	
6	90	- .56	-22.0	7.2	54	260	-.47	-18.2	17.6	145	70	.65	-16.0	25.8	
7	240	- .93	-36.3	13.9	55	240	-.60	-23.5	10.2	146	290	-.1	-43.7	30.8	
8	220	- .72	-28.3	12.0	56	260	-.57	-22.2	12.2	147	80	.65	-14.1	25.5	
9	240	-1.02	-39.6	15.1	57	180	-.53	-20.9	8.2	148	70	.84	-17.9	32.9	
10	240	-1.41	-53.0	11.0	101	200	.63	-17.4	24.5	149	60	.51	-27.4	30.4	
11	240	-1.36	-53.0	10.5	102	240	.54	-21.2	17.1	150	180	.78	-13.9	29.2	
12	20	.61	-18.6	23.8	103	230	.64	-19.1	25.1	151	60	.75	-13.4	29.9	
13	20	.89	-34.6	7.7	104	270	.73	-16.0	28.5	152	80	.54	-15.7	20.0	
14	240	-1.19	-46.5	10.8	105	200	.55	-16.1	21.4	153	100	.74	-19.0	28.8	
15	30	.77	-17.9	30.2	106	300	.47	-14.8	18.4	154	100	.81	-14.2	31.5	
16	220	-1.04	-40.4	10.3	107	60	.63	-13.6	24.4	155	100	.57	-14.9	22.3	
17	230	-1.22	-47.4	7.6	108	200	.62	-14.5	24.4	157	80	.76	-15.3	29.5	
18	20	.67	-11.6	26.0	109	210	.73	-20.7	28.7	158	170	.82	-32.0	25.2	
19	240	-.86	-33.5	6.8	110	200	.71	-21.7	27.7	159	170	-.1	-43.9	30.1	
20	240	-1.23	-46.0	9.9	111	200	.48	-15.6	16.7	160	130	.68	-22.8	26.5	
21	80	.63	-13.0	24.5	112	100	.75	-29.2	28.9	161	70	.63	-14.9	24.5	
22	240	-.96	-35.2	10.8	113	200	.88	-21.0	34.5	162	240	.90	-35.0	33.1	
23	260	.58	-21.4	22.5	114	200	.62	-15.9	24.1	163	240	.78	-29.5	30.4	
24	230	-.87	-33.7	10.3	115	250	.74	-19.4	29.0	164	110	.67	-22.8	26.2	
25	230	-.83	-32.5	11.1	116	200	.52	-19.6	20.5	165	110	.71	-21.2	27.5	
26	240	-.1	-34.1	10.0	117	200	.69	-17.2	26.8	166	100	.89	-32.4	34.9	
27	160	.63	-23.3	24.4	118	210	.92	-31.5	35.9	167	20	.54	-15.8	21.2	
28	230	-.86	-33.7	8.3	119	200	.83	-16.7	32.5	201	240	-.1	-50.6	24.8	
29	110	.71	-15.5	27.8	120	200	.81	-16.8	31.5	202	230	.81	-31.5	23.1	
30	240	-.90	-35.2	12.2	121	200	.69	-12.1	26.9	203	240	.75	-29.2	21.0	
31	200	-1.09	-42.6	7.1	122	60	.50	-14.4	19.4	204	250	-.1	-56.6	25.0	
32	230	-1.38	-53.6	11.4	123	60	.52	-10.5	20.3	205	60	.93	-36.5	24.0	
33	230	-1.51	-59.0	6.0	124	350	.72	-17.4	28.1	206	200	.70	-27.4	21.8	
34	240	-1.08	-42.3	17.3	125	700	.77	-11.4	29.9	207	280	.72	-28.0	11.3	
35	230	-1.15	-45.0	13.0	126	60	.66	-10.8	25.6	208	60	.65	-25.3	19.5	
36	120	.66	-23.0	23.2	127	60	.76	-17.1	29.6	209	240	.75	-29.4	25.6	
37	240	-.82	-31.9	9.0	128	250	.47	-11.2	16.4	210	240	.66	-19.5	25.2	
38	230	-1.06	-39.1	7.1	129	60	.66	-15.6	25.7	211	240	.75	-18.8	29.2	
39	290	-.73	-28.6	15.7	130	60	.74	-11.3	16.2	212	250	.83	-32.2	19.8	
40	90	.91	-35.5	20.4	131	280	.72	-25.4	28.2	213	230	.62	-24.2	26.7	
41	220	-.97	-37.7	19.6	132	280	.78	-21.1	30.5	214	30	.69	-14.9	24.7	
42	260	-.89	-34.6	8.0	133	130	.51	-11.5	19.8	301	250	.98	-38.3	24.7	
43	200	-.76	-29.5	20.6	134	100	.77	-25.1	30.0	302	250	.93	-36.4	22.8	
44	70	-.70	-14.0	27.2	135	100	.71	-12.9	27.6	303	240	.88	-34.2	26.8	
45	240	-.83	-32.5	6.1	136	700	.42	-11.3	16.2	304	60	.91	-32.7	35.4	
46	240	-.44	-44.9	11.4	137	180	.66	-17.7	25.6	305	240	.85	-27.5	33.3	
47	270	-.1	-1.15	-44.9	12.5	138	180	.74	-16.1	29.0	306	250	.95	-36.9	31.1
48	240	-.82	-31.0	23.4	139	180	.73	-15.2	28.4						

TABLE 6A. PEAK LOADS FOR CONFIGURATION A :  
LARGEST VALUES OF CLADDING LOAD

MILLION DOLLAR PIER, ATLANTIC CITY  
REFERENCE PRESSURE = 39.0 PSF

TAP	AZI-	PRESS	NEGATIVE	POSITIVE	TAP	AZI-	PRESS	NEGATIVE	POSITIVE	TAP	AZI-	PRESS	NEGATIVE	POSITIVE
MUTH	COEFF	PEAK	PEAK	PSF	MUTH	COEFF	PEAK	PEAK	PSF	MUTH	COEFF	PEAK	PEAK	PSF
307	250	.69	-20.7	27.0	314	240	.70	-26.5	27.3	401	250	-.89	-34.9	13.2
308	60	1.04	-13.8	40.4	315	260	.70	-18.6	27.4	402	230	-1.25	-48.9	20.0
309	240	.69	-24.5	26.8	316	240	.80	-30.2	31.2	403	230	-1.32	-51.4	36.5
310	250	.75	-28.6	29.1	317	240	.69	-11.3	27.1	404	250	-1.22	-47.7	21.3
311	30	.79	-30.6	30.6	318	240	-.64	-24.9	16.2	405	250	-.99	-38.7	23.5
312	240	-.83	-32.5	28.4	319	260	-.53	-20.7	10.2	406	230	-.87	-34.0	19.1
313	240	.68	-26.3	26.7	320	30	-.86	-33.6	31.0					

TABLE 6A. PEAK LOADS FOR CONFIGURATION A :  
LARGEST VALUES OF CLADDING LOAD

MILLION DOLLAR PIER, ATLANTIC CITY  
REFERENCE PRESSURE = 39.0 PSF

\* \* 15 GREATEST PRESSURE COEFFICIENT MAGNITUDES \* \*

TAP	AZI-MUTH	PRESS COEFF	NEGATIVE PEAK	POSITIVE PEAK
			---- PSF ----	
33	230	-1.51	-59.9	6.0
204	250	-1.50	-58.6	25.0
10	240	-1.41	-55.9	11.0
26	240	-1.39	-54.1	10.0
32	230	-1.38	-53.8	11.4
11	240	-1.36	-53.0	10.5
403	230	-1.32	-51.4	36.5
201	240	-1.30	-50.6	24.8
402	230	-1.25	-48.9	20.0
20	240	-1.23	-48.0	9.9
404	250	-1.22	-47.7	21.3
17	230	-1.22	-47.4	7.6
14	240	-1.19	-46.5	10.8
35	230	-1.15	-45.0	13.0
47	270	-1.15	-44.9	12.5

TABLE 6A. PEAK LOADS FOR CONFIGURATION B :  
LARGEST VALUES OF CLADDING LOAD

MILLION DOLLAR PIER, ATLANTIC CITY  
REFERENCE PRESSURE = 39.0 PSF

TAP	AZI-MUTH	PRESS COEFF	NEGATIVE PEAK	POSITIVE PEAK	TAP	AZI-MUTH	PRESS COEFF	NEGATIVE PEAK	POSITIVE PEAK	TAP	AZI-MUTH	PRESS COEFF	NEGATIVE PEAK	POSITIVE PEAK
			--- PSF ---					--- PSF ---					--- PSF ---	
10	240	-1.52	-59.1	1.4	32	230	-1.53	-59.5	.7	204	252	-1.47	-57.2	10.4
11	254	-1.40	-54.4	-3.9	33	226	-1.49	-58.1	-5.5	403	230	-1.46	-56.9	21.2
26	226	-1.54	-60.0	4.5										

TABLE 6A. PEAK LOADS FOR CONFIGURATION B :  
LARGEST VALUES OF CLADDING LOAD

MILLION DOLLAR PIER, ATLANTIC CITY  
REFERENCE PRESSURE = 39.0 PSF

\* \* 7 GREATEST PRESSURE COEFFICIENT MAGNITUDES \* \*

TAP	AZI- MUTH	PRESS COEFF	NEGATIVE PEAK	POSITIVE PEAK
			----- PSF -----	
26	226	-1.54	-60.0	4.5
32	230	-1.53	-59.5	.7
10	240	-1.52	-59.1	1.4
33	226	-1.49	-58.1	-5.5
204	252	-1.47	-57.2	10.4
403	230	-1.46	-56.9	21.2
11	254	-1.40	-54.4	-3.9

TABLE 6B. COMPARISON OF CONFIGURATIONS A AND B                    MILLION DOLLAR PIER, ATLANTIC CITY

TAPS WHERE NEGATIVE PEAK LOAD FOR CONFIG. B EXCEEDED THAT FOR CONFIG. A BY 5 PSF  
REF. PRESSURE = 39.0 PSF

TAP	AZIMUTH	A CONFIG PSF LOAD	AZIMUTH	B CONFIG PSF LOAD
26	240	-54.1	226	-60.0
32	230	-53.8	230	-59.5
403	230	-51.4	230	-56.9



TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 0° CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (X)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-6.7 9.9	741 1325	-9.0 7.5	23 -70	-35.4 345.8	41.2
.10	8.85	.8 28.7	1514 4085	.5 7.0	43 5	-28.8 335.9	39.7
.20	17.70	-1.3 45.3	1770 7080	-1.7 6.4	21 -3	-29.6 307.2	34.1
.30	26.55	-2.6 47.5	1770 7080	-1.5 6.7	21 -5	-28.2 261.9	29.8
.40	35.40	-2.7 51.9	1770 7013	-1.5 7.4	23 -5	-25.6 214.4	25.3
.50	44.25	-4.6 54.4	1770 7010	-2.6 7.8	27 -10	-23.0 162.5	20.0
.60	53.10	-6.8 42.6	1670 5842	-4.1 7.3	21 -15	-18.3 108.2	13.4
.70	61.95	-12.3 32.7	1390 4422	-8.8 7.4	20 -34	-11.6 65.5	9.2
.80	70.80	.4 25.1	668 3075	.6 8.1	37 3	.7 32.8	5.8
.90	79.65	.3 7.8	234 506	1.3 15.3	47 8	.3 7.8	1.6
1.00	88.50					0.0 0.0	0.0

TABLE 7 SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 10<sup>o</sup> CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-9.8 19.9	741 1325	-13.3 15.0	29 -65	-48.5 520.2	85.4
.10	8.85	-1.8 55.2	1514 4085	-1.2 13.5	51 -7	-38.6 500.3	82.1
.20	17.70	-3.6 68.5	1770 7080	-2.1 9.7	33 -8	-36.9 445.2	69.6
.30	26.55	-4.6 69.8	1770 7080	-2.6 9.9	33 -10	-33.2 376.6	59.4
.40	35.40	-4.8 74.0	1770 7013	-2.7 10.6	35 -10	-28.6 306.8	49.0
.50	44.25	-6.4 77.5	1770 7010	-3.6 11.1	38 -14	-23.8 232.8	37.4
.60	53.10	-7.4 59.1	1670 5842	-4.4 10.1	31 -18	-17.4 155.3	24.2
.70	61.95	-11.2 46.9	1390 4422	-8.1 10.6	28 -30	-10.0 96.2	15.7
.80	70.80	.9 37.2	668 3075	1.4 12.1	40 5	1.2 49.2	9.4
.90	79.65	.2 12.0	234 506	1.0 23.7	49 4	.2 12.0	2.6
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 20 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-9.8 18.4	741 1325	-13.3 13.9	32 -77	-66.9 584.2	87.4
.10	8.85	-2.8 65.0	1514 4085	-1.8 15.9	55 -10	-57.1 565.8	84.1
.20	17.70	-6.0 84.6	1770 7080	-3.4 12.0	28 -9	-54.3 509.8	68.0
.30	26.55	-6.8 83.9	1770 7080	-3.8 11.9	27 -10	-48.3 416.2	57.5
.40	35.40	-6.0 88.7	1770 7013	-3.4 12.6	29 -9	-41.5 332.3	47.3
.50	44.25	-7.8 91.7	1770 7010	-4.4 13.1	34 -13	-35.5 243.6	35.5
.60	53.10	-10.1 64.7	1670 5842	-6.0 11.1	24 -17	-27.6 151.9	21.3
.70	61.95	-16.1 43.4	1390 4422	-11.6 9.8	24 -41	-17.6 87.2	14.1
.80	70.80	-1.2 32.7	668 3075	-1.7 10.6	42 -7	-1.4 43.6	8.7
.90	79.65	- .3 11.1	234 506	-1.2 21.9	50 -6	- .3 11.1	2.5
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 30° CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (X)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-10.5 26.0	741 1325	-14.2 19.6	31 -56	-41.7 702.5	81.5
.10	8.85	-2.3 74.7	1514 4085	-1.5 18.3	49 -7	-31.2 676.5	77.3
.20	17.70	-6.0 105.2	1770 7080	-3.4 14.9	16 -5	-28.9 601.8	61.0
.30	26.55	-7.1 106.7	1770 7080	-4.0 15.1	19 -6	-22.9 496.6	52.5
.40	35.40	-6.0 108.2	1770 7013	-3.4 15.4	20 -5	-15.8 389.9	43.2
.50	44.25	-8.9 103.0	1770 7010	-5.0 15.0	24 -9	-9.8 281.7	33.2
.60	53.10	-9.3 78.7	1670 5842	-5.5 13.5	18 -10	-1.0 176.7	22.0
.70	61.95	-4.4 50.4	1390 4422	-3.1 11.4	28 -11	8.3 98.0	15.5
.80	70.80	9.5 34.9	668 3075	14.2 11.4	37 45	12.6 47.6	9.0
.90	79.65	3.2 12.7	234 506	13.6 25.1	46 51	3.2 12.7	2.8
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 40° CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (X)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-10.4 23.3	741 1325	-14.0 17.5	30 -61	-23.9 732.6	75.4
.10	8.85	-2.5 73.8	1514 4085	-1.7 18.1	46 -7	-13.5 709.3	71.6
.20	17.70	-5.8 114.5	1770 7080	-3.3 16.2	13 -3	-11.0 635.6	56.4
.30	26.55	-6.6 112.0	1770 7080	-3.7 15.8	12 -3	-5.2 521.1	50.0
.40	35.40	-4.5 116.6	1770 7013	-2.5 16.6	17 -3	1.3 409.1	43.7
.50	44.25	-6.4 115.2	1770 7010	-3.6 16.4	23 -6	5.8 292.5	34.7
.60	53.10	-6.4 84.0	1670 5842	-3.8 14.4	18 -6	12.2 177.3	22.6
.70	61.95	.7 47.7	1390 4422	.5 10.8	33 2	18.6 93.3	15.7
.80	70.80	13.6 33.9	668 3075	20.3 11.0	35 62	17.9 45.6	8.7
.90	79.65	4.3 11.8	234 506	18.5 23.2	42 70	4.3 11.8	2.5
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 50 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCEHTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-5.5 26.4	741 1325	-7.5 19.9	33 -31	13.7 787.9	61.5
.10	8.85	4.0 78.0	1514 4085	2.7 19.1	43 10	19.2 761.5	57.4
.20	17.70	-1.0 126.8	1770 7080	-6 17.9	8 -6	15.2 683.5	42.2
.30	26.55	-3.6 124.9	1770 7080	-2.0 17.6	8 -1	16.2 556.7	37.7
.40	35.40	-1.6 128.5	1770 7013	-9 18.3	12 -1	19.8 431.8	33.2
.50	44.25	-3.5 124.7	1770 7010	-2.0 17.8	17 -2	21.4 303.3	26.4
.60	53.10	-4.8 91.7	1670 5842	-2.6 15.7	10 -2	24.9 178.6	17.0
.70	61.95	4.6 47.0	1390 4422	3.3 16.6	28 12	29.7 96.9	12.7
.80	70.80	18.7 30.5	668 3075	27.9 9.9	25 70	25.1 39.8	6.7
.90	79.65	6.5 9.4	234 506	27.7 18.5	31 97	6.5 9.4	1.9
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 60° CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)		AREA (SQ FT)		PRESSURE (PSF)		ECCEN (X)		SHEAR (KIPS)		MOMENT (1000-FT-KIPS) Z
		X	Y	X	Y	X	Y	X	Y	X	Y	
.00	0.00	-7.4	32.7	741	1325	-10.0	24.7	30	-31	62.0	1118.6	43.6
.10	8.85	7.0	98.3	1514	4085	4.6	24.1	39	13	69.4	1085.9	38.9
.20	17.70	.8	179.7	1770	7080	.4	25.4	2	0	62.4	987.6	21.5
.30	26.55	-7	183.3	1770	7080	-4	25.9	-6	0	61.6	897.9	19.7
.40	35.40	3.9	194.4	1770	7013	2.2	27.7	2	0	62.3	624.6	19.7
.50	44.25	1.4	181.7	1770	7010	.8	25.9	5	0	58.4	430.2	18.0
.60	53.10	-1	137.2	1670	5842	-1	23.5	1	-0	57.0	248.5	13.7
.70	61.95	14.0	64.4	1390	4422	10.1	14.6	21	21	57.1	111.4	13.2
.80	70.80	31.6	36.4	668	3075	47.3	11.8	17	66	43.1	47.0	6.8
.90	79.65	11.5	19.6	234	506	49.3	20.9	19	91	11.5	10.6	1.9
1.00	88.50									0.0	0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS ; MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 70 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-13.3 37.2	741 1325	-17.9 26.0	29 -47	62.7 1147.6	29.4
.10	8.85	-7 101.8	1514 4083	-5 24.9	39 -1	76.0 1110.5	23.9
.20	17.70	-2.9 184.7	1770 7080	-1.6 26.1	-1 0	76.7 1008.7	6.1
.30	26.55	1.0 188.4	1770 7080	.6 26.6	-3 -0	79.6 823.9	6.7
.40	35.40	9.3 196.5	1770 7013	5.2 28.0	-1 -0	78.6 635.3	8.9
.50	44.25	4.2 181.3	1770 7010	2.4 25.9	0 0	69.3 439.0	10.2
.60	53.10	3.4 140.1	1670 3842	2.0 24.0	-3 -0	65.1 257.5	9.9
.70	61.95	15.6 68.9	1390 4422	11.2 15.6	16 16	61.8 117.4	11.8
.80	70.80	33.7 37.9	668 3075	50.5 12.3	15 60	46.2 48.5	6.5
.90	79.65	12.5 10.6	234 506	53.7 20.9	17 90	12.5 10.6	1.9
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 80 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-17.1 35.6	741 1325	-23.1 26.9	27 -59	72.9 1138.6	14.4
.10	8.85	-2.9 98.1	1514 4085	-1.9 24.0	38 -5	90.0 1103.0	9.1
.20	17.70	-1.6 182.1	1770 7080	-.9 25.7	-3 0	92.9 1004.9	-7.8
.30	26.55	4.8 184.4	1770 7080	2.7 26.0	-6 -1	94.5 822.8	-5.0
.40	35.40	14.6 190.2	1770 7013	8.2 27.1	-5 -2	89.7 638.4	-.2
.50	44.25	6.6 175.6	1770 7010	3.8 25.1	-4 -1	75.1 448.2	4.4
.60	53.10	6.7 141.2	1670 5842	4.0 24.2	-6 -1	68.5 272.6	7.7
.70	61.95	17.4 75.1	1390 4422	12.5 17.0	13 13	61.7 131.4	11.6
.80	70.80	32.4 43.8	668 3075	48.5 14.3	16 52	44.3 56.3	7.1
.90	79.65	11.9 12.5	234 506	51.1 24.7	22 93	11.9 12.5	2.3
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 90° CONFIGURATION A REFERENCE PRESSURE 39.0 PSF GUST FACTOR 1.32  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION

FLOOR	HEIGHT	FORCE (KIPS)		AREA (SQ FT)		PRESSURE (PSF)		ECCEN (%)		SHEAR (KIPS)		MOMENT (1000-FT-KIPS)
		X	Y	X	Y	X	Y	X	Y	X	Y	Z
.00	0.00	-16.6	29.7	741	1325	-22.4	22.4	23	-58	90.5	1010.4	-15.9
.10	8.85	-1.5	72.0	1514	4085	-1.0	17.6	28	-3	107.0	980.7	-20.0
.20	17.70	2.2	164.0	1770	7080	1.3	23.2	-9	-1	108.5	908.7	-29.0
.30	26.55	9.9	166.1	1770	7080	5.6	23.5	-11	-3	106.3	744.6	-22.2
.40	35.40	18.9	170.9	1770	7013	10.7	24.4	-11	-5	96.4	578.5	-13.8
.50	44.25	10.1	158.1	1770	7010	5.7	22.6	-10	-3	77.5	407.6	-5.3
.60	53.10	10.7	130.4	1670	5842	6.4	22.3	-10	-4	67.4	249.5	1.5
.70	61.95	17.9	70.9	1390	4422	12.9	16.0	7	9	56.7	119.1	7.2
.80	70.80	28.4	39.1	668	3075	42.5	12.7	12	38	38.8	48.2	4.6
.90	79.65	10.4	9.0	234	506	44.6	17.8	16	83	10.4	9.0	1.5
1.00	88.50									0.0	0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 100 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)		AREA (SQ FT)		PRESSURE (PSF)		ECCEN (%)		SHEAR (KIPS)		MOMENT (1000-FT-KIPS)
		X	Y	X	Y	X	Y	X	Y	X	Y	Z
.00	0.00	-13.1	27.3	741	1325	-17.7	20.6	25	-54	124.7	933.1	-18.8
.10	8.85	2.7	63.7	1514	4085	1.8	15.6	27	5	137.8	905.8	-22.6
.20	17.70	8.4	147.4	1770	7080	4.7	20.8	-10	-2	135.1	842.1	-30.4
.30	26.55	15.9	149.7	1770	7080	9.0	21.1	-12	-6	126.7	694.7	-24.0
.40	35.40	22.9	154.4	1770	7013	12.9	22.0	-13	-8	110.8	545.0	-15.7
.50	44.25	17.9	144.3	1770	7010	10.1	20.6	-11	-6	87.9	390.6	-6.8
.60	53.10	17.3	121.9	1670	5842	10.4	20.9	-10	-6	70.0	246.3	.5
.70	61.95	19.7	73.1	1390	4422	14.1	16.5	4	5	52.7	124.4	6.1
.80	70.80	24.2	42.0	668	3075	36.2	13.7	12	31	33.0	51.3	4.5
.90	79.65	8.8	9.3	234	506	37.8	18.3	19	83	8.8	9.3	1.5
1.00	88.50									0.0	0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 110 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION

GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-9.7 24.3	741 1325	-13.1 18.3	29 -53	155.6 825.0	-12.9
.10	8.85	7.2 58.8	1514 4085	4.8 14.4	31 17	163.3 800.7	-16.6
.20	17.70	16.3 127.3	1770 7080	9.2 18.0	-8 -5	158.0 741.9	-24.9
.30	26.55	22.7 128.2	1770 7080	12.8 18.1	-11 -9	141.7 614.6	-20.0
.40	35.40	26.8 131.3	1770 7013	15.1 18.7	-12 -11	119.0 486.5	-13.4
.50	44.25	23.5 124.2	1770 7010	13.3 17.7	-10 -9	92.2 355.2	-6.3
.60	53.10	21.3 107.3	1670 5842	12.8 18.4	-10 -9	68.7 231.0	-4.4
.70	61.95	20.6 71.5	1390 4422	14.8 16.2	1 2	47.4 123.7	4.5
.80	70.80	19.8 43.1	668 3075	29.7 14.0	11 22	26.8 52.2	4.0
.90	79.65	7.0 9.0	234 506	30.0 17.9	24 82	7.0 9.0	1.5
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 120 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION

GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X	X Y	X Y	X Y	X Y	Z
.00	0.00	-8.8	14.8	741 1325	-11.9 11.2	25 -66	168.2 559.5
.10	8.85	9.0	34.0	1514 4085	5.9 8.3	20 24	177.0 544.7
.20	17.70	21.5	88.1	1770 7080	12.1 12.4	-14 -16	168.0 510.8
.30	26.55	27.3	84.9	1770 7080	15.4 12.0	-15 -22	146.5 422.7
.40	35.40	30.6	83.9	1770 7013	17.3 12.0	-14 -23	119.2 337.8
.50	44.25	27.3	80.5	1770 7010	15.4 11.5	-12 -19	88.6 253.9
.60	53.10	23.9	75.2	1670 5842	14.3 12.9	-9 -13	61.3 173.4
.70	61.95	15.5	56.1	1390 4422	11.1 12.7	-1 -1	37.5 98.2
.80	70.80	16.5	36.6	668 3075	24.7 11.9	8 16	22.0 42.1
.90	79.65	5.5	5.5	234 506	23.6 10.9	16 74	5.5 5.5
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 130° CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION

GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-14.1 9.3	741 1325	-19.0 7.0	10 -67	150.3 342.7	-13.1
.10	8.85	5.5 19.9	1514 4085	3.6 4.9	16 20	164.4 333.4	-14.4
.20	17.70	22.4 54.9	1770 7080	12.7 7.8	-16 -29	158.9 313.5	-16.0
.30	26.55	27.0 50.3	1770 7080	15.2 7.1	-14 -34	136.5 258.6	-11.4
.40	35.40	29.3 47.9	1770 7013	16.6 6.8	-11 -31	109.5 208.3	-7.2
.50	44.25	27.0 46.7	1770 7010	15.2 6.7	-11 -28	80.2 160.4	-3.9
.60	53.10	24.4 46.6	1670 5842	14.6 8.0	-8 -18	53.3 113.6	-.9
.70	61.95	11.0 38.0	1390 4422	7.9 8.6	-3 -4	28.8 67.0	1.1
.80	70.80	13.4 25.1	668 3075	20.1 8.2	8 19	17.8 29.0	1.7
.90	79.65	4.4 3.9	234 506	19.0 7.6	15 77	4.4 3.9	.6
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 140° CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION

GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-15.1 3.5	741 1325	-20.3 2.6	1 -29	147.8 165.1	-5.0
.10	8.85	5.5 7.4	1514 4085	3.6 1.8	8 26	162.9 161.6	-5.4
.20	17.70	24.3 25.4	1770 7080	13.8 3.6	-14 -59	157.5 154.2	-5.8
.30	26.55	28.0 22.2	1770 7080	15.8 3.1	-9 -54	133.1 128.8	-2.8
.40	35.40	29.5 21.1	1770 7013	16.7 3.0	-5 -34	105.1 106.7	-.4
.50	44.25	28.9 22.0	1770 7010	16.3 3.1	-4 -22	75.6 85.6	1.2
.60	53.10	25.3 22.9	1670 5842	15.2 3.9	-1 -7	46.7 63.6	2.2
.70	61.95	7.4 20.8	1390 4422	5.3 4.7	2 4	21.3 40.7	2.5
.80	70.80	10.4 15.7	668 3075	15.6 5.1	14 42	14.0 19.8	2.2
.90	79.65	3.6 4.1	234 506	15.3 8.2	26 99	3.6 4.1	.8
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS  
 WIND DIRECTION 150° CONFIGURATION A MILLION DOLLAR PIER, ATLANTIC CITY  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION  
 REFERENCE PRESSURE 39.0 PSF GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-15.3 - .0	741 1325	-20.7 - .0	0 0	146.1 .0	-.2
.10	8.85	4.5 .0	1514 4085	3.0 .0	0 0	161.4 .0	-.2
.20	17.70	24.3 .0	1770 7080	13.7 .0	-0 -0	156.9 .0	-.2
.30	26.55	28.2 .0	1770 7080	16.0 .0	0 0	132.6 .0	-.2
.40	35.40	29.7 .0	1770 7013	16.8 .0	-0 -0	104.3 .0	-.2
.50	44.25	29.3 .0	1770 7010	16.6 .0	0 0	74.6 .0	-.2
.60	53.10	25.6 .0	1670 5842	15.3 .0	0 0	45.3 .0	-.2
.70	61.95	7.2 .0	1390 4422	5.2 .0	-0 -26	19.7 .0	-.2
.80	70.80	9.3 - .0	668 3075	13.9 - .0	-0 0	12.5 -.0	.0
.90	79.65	3.2 .0	234 506	13.7 .0	0 0	3.2 .0	.0
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 160 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCECTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (X)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X	X Y	X	X Y	X	Z
.00	0.00	-15.1	-3.5	741 1325	-20.3 -2.6	1 29	148.1 -165.1
.10	8.85	5.5	-7.4	1514 4085	3.6 -1.8	8 -26	163.2 -161.6
.20	17.70	24.3	-25.4	1770 7080	13.8 -3.6	-14 59	157.8 -154.2
.30	26.55	28.0	-22.2	1770 7080	15.8 -3.1	-9 54	133.4 -128.8
.40	35.40	29.5	-21.1	1770 7013	16.7 -3.0	-5 34	105.4 -106.7
.50	44.25	28.9	-22.0	1770 7010	16.3 -3.1	-4 22	75.9 -85.6
.60	53.10	25.3	-22.9	1670 5842	15.2 -3.9	-1 7	47.0 -63.6
.70	61.95	7.7	-20.8	1390 4422	5.5 -4.7	5 -9	21.6 -40.7
.80	70.80	10.4	-15.7	668 3075	15.6 -5.1	14 -42	14.0 -19.8
.90	79.65	3.6	-4.1	234 506	15.3 -8.2	26 -99	3.6 -4.1
1.00	88.50					0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS ; MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 170 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION

GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-14.1 -9.3	741 1325	-19.0 -7.0	10 67	149.7 -342.7	12.8
.10	8.65	5.5 -19.9	1514 4085	3.6 -4.9	16 -20	163.8 -333.4	14.2
.20	17.70	22.4 -54.9	1770 7080	12.7 -7.8	-16 29	158.3 -313.5	15.7
.30	26.55	27.0 -50.3	1770 7080	15.2 -7.1	-14 34	135.9 -258.6	11.1
.40	35.40	29.3 -47.9	1770 7013	16.6 -6.8	-11 31	108.9 -208.3	7.0
.50	44.25	27.0 -46.7	1770 7010	15.2 -6.7	-11 28	79.6 -160.4	3.7
.60	53.10	24.4 -46.6	1670 5842	14.6 -8.0	-8 18	52.6 -113.6	.6
.70	61.95	16.4 -38.0	1390 4422	7.5 -8.6	-2 2	28.2 -67.0	-1.4
.80	70.80	13.4 -25.1	668 3075	20.1 -8.2	8 -19	17.8 -29.0	-1.7
.90	79.65	4.4 -3.9	234 506	19.0 -7.6	15 -77	4.4 -3.9	-.6
1.00	88.50					0.0 0.0	0.0

TABLE 7 SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 180 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-8.8 -14.8	741 1325	-11.9 -11.2	25 66	165.6 -559.5	18.8
.10	8.85	9.0 -34.0	1514 4085	5.9 -8.3	20 -24	174.4 -544.7	21.0
.20	17.70	21.5 -88.1	1770 7080	12.1 -12.4	-14 16	165.5 -510.8	24.3
.30	26.55	27.3 -84.9	1770 7080	15.4 -12.0	-15 22	144.0 -422.7	18.4
.40	35.40	30.6 -83.9	1770 7013	17.3 -12.0	-14 23	116.7 -337.8	12.0
.50	44.25	27.3 -80.5	1770 7010	15.4 -11.5	-12 19	86.1 -253.9	6.0
.60	53.10	23.9 -75.2	1670 5842	14.3 -12.9	-9 13	58.8 -173.4	1.1
.70	61.95	13.0 -56.1	1390 4422	9.3 -12.7	-6 6	34.9 -98.2	-2.3
.80	70.80	16.5 -36.6	668 3075	24.7 -11.9	8 -16	22.0 -42.1	-2.4
.90	79.65	5.5 -5.5	234 506	23.6 -10.9	16 -74	5.5 -5.5	-0.8
1.00	88.50					0.0 0.0	0.0

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TABLE 7 SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 190 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCECTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (X)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-9.7 -24.3	741 1325	-13.1 -18.3	29 53	151.9 -825.0	12.8
.10	8.85	7.2 -58.8	1514 4085	4.8 -14.4	31 -17	161.6 -800.7	16.6
.20	17.70	16.3 -127.3	1770 7080	9.2 -18.0	-8 5	154.4 -741.9	24.9
.30	26.55	22.7 -128.2	1770 7080	12.8 -18.1	-11 9	138.0 -614.6	20.0
.40	35.40	26.8 -131.3	1770 7013	15.1 -18.7	-12 11	115.3 -486.5	13.3
.50	44.25	23.5 -124.2	1770 7010	13.3 -17.7	-10 9	88.5 -355.2	6.2
.60	53.10	21.3 -107.3	1670 5842	12.8 -18.4	-10 9	65.0 -231.0	.3
.70	61.95	16.9 -71.5	1390 4422	12.2 -16.2	2 -2	43.7 -123.7	-4.6
.80	70.80	19.8 -43.1	668 3075	29.7 -14.0	11 -22	26.8 -52.2	-4.0
.90	79.65	7.0 -9.0	234 506	30.0 -17.9	24 -82	7.0 -9.0	-1.5
1.00	88.50					0.0 0.0	0.0

[3]

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 200 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCECTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION

GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-13.1 -27.3	741 1325	-17.7 -20.6	25 54	120.0 -933.1	18.8
.10	8.85	2.7 -63.7	1514 4085	1.8 -15.6	27 -5	133.1 -905.8	22.6
.20	17.70	8.4 -147.4	1770 7080	4.7 -20.8	-10 2	130.4 -842.1	30.5
.30	26.55	15.9 -149.7	1770 7080	9.0 -21.1	-12 6	122.0 -694.7	24.1
.40	35.40	22.9 -154.4	1770 7013	12.9 -22.0	-13 8	106.1 -545.0	15.8
.50	44.25	17.9 -144.3	1770 7010	10.1 -20.6	-11 6	83.3 -390.6	6.8
.60	53.10	17.3 -121.9	1670 5842	10.4 -20.9	-10 6	65.3 -246.3	-4.4
.70	61.95	15.0 -73.1	1390 4422	10.8 -16.5	4 -4	48.0 -124.4	-6.0
.80	70.80	24.2 -42.0	668 3075	36.2 -13.7	12 -31	33.0 -51.3	-4.5
.90	79.65	8.8 -9.3	234 506	37.8 -18.3	19 -83	8.8 -9.3	-1.5
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 210 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION

GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-16.6 -29.7	741 1325	-22.4 -22.4	23 58	85.4 -1010.4	16.0
.10	8.85	-1.5 -72.0	1514 4085	-1.0 -17.6	28 3	101.9 -980.7	20.1
.20	17.70	2.2 -164.0	1770 7080	1.3 -23.2	-9 1	103.4 -908.7	29.2
.30	26.55	9.9 -166.1	1770 7080	5.6 -23.5	-11 3	101.2 -744.6	22.4
.40	35.40	18.9 -170.9	1770 7013	10.7 -24.4	-11 5	91.3 -578.5	13.9
.50	44.25	10.1 -158.1	1770 7010	5.7 -22.6	-10 3	72.4 -407.6	5.5
.60	53.10	10.7 -139.4	1670 5842	6.4 -22.3	-10 4	62.3 -249.5	-1.4
.70	61.95	12.8 -70.9	1390 4422	9.2 -16.0	7 -6	51.6 -119.1	-7.0
.80	70.80	28.4 -39.1	668 3075	42.5 -12.7	12 -38	38.8 -48.2	-4.6
.90	79.65	10.4 -9.0	234 506	44.6 -17.8	16 -83	10.4 -9.0	-1.5
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 220 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 454 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-17.1 -35.6	741 1325	-23.1 -26.9	27 59	68.4 -1138.6	-14.3
.10	8.85	-2.9 -98.1	1514 4085	-1.9 -24.0	38 5	85.5 -1103.0	-9.0
.20	17.70	-1.6 -182.1	1770 7080	- .9 -25.7	-3 -0	88.3 -1004.9	7.9
.30	26.55	4.8 -184.4	1770 7080	2.7 -26.0	-6 1	90.9 -822.8	5.1
.40	35.40	14.6 -190.2	1770 7013	8.2 -27.1	-5 2	85.1 -638.4	.3
.50	44.25	6.6 -175.6	1770 7010	3.8 -25.1	-4 1	70.6 -448.2	-4.3
.60	53.10	6.7 -141.2	1670 5842	4.0 -24.2	-6 1	63.9 -272.6	-7.7
.70	61.95	12.9 -75.1	1390 4422	9.3 -17.0	13 -10	57.2 -131.4	-11.5
.80	70.80	32.4 -43.8	668 3075	48.5 -14.3	16 -52	44.3 -56.3	-7.1
.90	79.65	11.9 -12.5	234 506	51.1 -24.7	22 -93	11.9 -12.5	-2.3
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 230 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-13.3 -37.2	741 1325	-17.9 -28.0	29 47	60.1 -1147.6	-29.4
.10	8.85	-7 -101.8	1514 4085	-5 -24.9	39 1	73.3 -1110.5	-23.9
.20	17.70	-2.9 -184.7	1770 7080	-1.6 -26.1	-1 -0	74.1 -1008.7	-6.0
.30	26.55	1.0 -188.4	1770 7080	.6 -26.6	-3 0	77.0 -823.9	-6.7
.40	35.40	9.3 -196.5	1770 7013	5.2 -28.0	-1 0	76.0 -635.5	-8.9
.50	44.25	4.2 -181.5	1770 7010	2.4 -25.9	0 -0	66.7 -439.0	-10.2
.60	53.10	3.4 -140.1	1670 5842	2.0 -24.0	-3 0	62.5 -257.5	-9.9
.70	61.95	12.9 -68.9	1390 4422	9.3 -15.6	16 -14	59.1 -117.4	-11.7
.80	70.80	33.7 -37.9	668 3075	50.5 -12.3	15 -60	46.2 -48.5	-6.5
.90	79.65	12.5 -10.6	234 506	53.7 -20.9	17 -90	12.5 -10.6	-1.9
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 240° CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)		AREA (SQ FT)		PRESSURE (PSF)		ECCEN (%)		SHEAR (KIPS)		MOMENT (1000-FT-KIPS)
		X	Y	X	Y	X	Y	X	Y	X	Y	Z
.00	0.00	-7.4	-32.7	741	1325	-10.0	-24.7	30	31	61.2	-1118.6	-43.6
.10	8.85	7.0	-98.3	1514	4085	4.6	-24.1	39	-13	68.6	-1085.9	-38.9
.20	17.70	.8	-179.7	1770	7080	.4	-25.4	2	-0	61.6	-987.6	-21.5
.30	26.55	-7	-183.3	1770	7080	-4	-25.9	-9	-0	60.8	-807.9	-19.7
.40	35.40	3.9	-194.4	1770	7013	2.2	-27.7	2	-0	61.5	-624.6	-19.7
.50	44.25	1.4	-181.7	1770	7010	.8	-25.9	5	-0	57.6	-430.2	-18.0
.60	53.10	-1.1	-137.2	1670	5842	-1	-23.5	1	0	56.2	-248.5	-13.7
.70	61.95	13.3	-64.4	1390	4422	9.5	-14.6	21	-20	56.4	-111.4	-13.2
.80	70.80	31.6	-36.4	668	3075	47.3	-11.8	17	-66	43.1	-47.0	-6.8
.90	79.65	11.5	-10.6	234	506	49.3	-20.9	19	-91	11.5	-10.6	-1.9
1.00	88.50									0.0	0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 250 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION

GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-5.5 -26.4	741 1323	-7.5 -19.9	33 -31	13.2 -787.9	-61.4
.10	8.85	4.0 -78.0	1514 4085	2.7 -19.1	43 -10	18.7 -761.5	-57.4
.20	17.70	-1.0 -126.8	1770 7080	-6 -17.9	8 0	14.7 -683.5	-42.2
.30	26.55	-3.6 -124.9	1770 7080	-2.0 -17.6	8 1	15.7 -556.7	-37.7
.40	35.40	-1.6 -128.5	1770 7013	-9 -18.3	12 1	19.3 -431.8	-33.2
.50	44.25	-3.5 -124.7	1770 7010	-2.0 -17.8	17 2	20.9 -303.3	-26.4
.60	53.10	-4.8 -91.7	1670 5842	-2.8 -15.7	10 2	24.4 -178.6	-17.0
.70	61.95	4.1 -47.0	1390 4422	2.9 -10.6	28 -11	29.2 -86.9	-12.7
.80	70.80	18.7 -30.5	668 3075	27.9 -9.9	25 -70	23.1 -39.8	-6.7
.90	79.65	6.5 -9.4	234 506	27.7 -10.5	31 -97	6.5 -9.4	-1.9
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 260 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION

GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)		AREA (SQ FT)		PRESSURE (PSF)		ECCEN (%)		SHEAR (KIPS)		MOMENT (1000-FT-KIPS)
		X	Y	X	Y	X	Y	X	Y	X	Y	Z
.00	0.00	-10.4	-23.3	741	1325	-14.0	-17.5	30	61	-24.3	-732.6	-75.4
.10	8.85	-2.5	-73.8	1514	4085	-1.7	-18.1	46	7	-13.9	-709.3	-71.6
.20	17.70	-5.8	-114.5	1770	7080	-3.3	-16.2	13	3	-11.3	-635.6	-56.4
.30	26.55	-6.6	-112.0	1770	7080	-3.7	-15.8	12	3	-5.6	-521.1	-49.9
.40	35.40	-4.5	-116.6	1770	7013	-2.5	-16.6	17	3	1.0	-409.1	-43.7
.50	44.25	-6.4	-115.2	1770	7010	-3.6	-16.4	23	6	5.4	-292.5	-34.7
.60	53.10	-6.4	-84.0	1670	5842	-3.8	-14.4	18	6	11.9	-177.3	-22.5
.70	61.95	.4	-47.7	1390	4422	.3	-10.8	33	-1	18.2	-93.3	-15.7
.80	70.80	13.6	-33.9	668	3075	20.3	-11.0	35	-62	17.9	-45.6	-8.7
.90	79.65	4.3	-11.8	234	506	18.5	-23.2	42	-70	4.3	-11.8	-2.5
1.00	88.50									0.0	0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 270 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (X)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-10.5 -26.0	741 1325	-14.2 -19.6	31 56	-42.3 -702.5	-81.5
.10	8.85	-2.3 -74.7	1514 4083	-1.5 -18.3	49 7	-31.9 -676.5	-77.3
.20	17.70	-6.0 -105.2	1770 7080	-3.4 -14.9	18 5	-29.6 -601.8	-60.9
.30	26.55	-7.1 -106.7	1770 7080	-4.0 -15.1	19 6	-23.6 -496.6	-52.4
.40	35.40	-6.0 -108.2	1770 7013	-3.4 -15.4	20 5	-16.5 -389.9	-43.1
.50	44.25	-8.9 -105.0	1770 7010	-5.0 -15.0	24 9	-10.5 -281.7	-33.2
.60	53.10	-9.3 -78.7	1670 5842	-5.5 -13.5	18 10	-1.7 -176.7	-21.9
.70	61.95	-3.0 -50.4	1390 4422	-3.6 -11.4	28 13	7.6 -98.0	-15.4
.80	70.80	9.5 -34.9	668 3075	14.2 -11.4	37 -45	12.6 -47.6	-9.0
.90	79.65	3.2 -12.7	234 506	13.6 -25.1	46 -51	3.2 -12.7	-2.8
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 280 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-9.8 -18.4	741 1325	-13.3 -13.9	32 77	-67.7 -584.2	-87.4
.10	8.85	-2.8 -65.0	1514 4085	-1.8 -15.9	55 10	-57.8 -565.8	-84.0
.20	17.70	-6.0 -84.6	1770 7080	-3.4 -12.0	28 9	-55.1 -500.8	-68.0
.30	26.55	-6.8 -83.9	1770 7080	-3.8 -11.9	27 10	-49.0 -416.2	-57.4
.40	35.40	-6.0 -88.7	1770 7013	-3.4 -12.6	29 9	-42.3 -332.2	-47.2
.50	44.25	-7.8 -91.7	1770 7010	-4.4 -13.1	34 13	-36.2 -243.6	-35.4
.60	53.10	-10.1 -64.7	1670 5842	-6.0 -11.1	24 17	-28.4 -151.9	-21.2
.70	61.95	-16.9 -43.4	1390 4422	-12.1 -9.8	24 42	-18.3 -87.2	-14.0
.80	70.80	-1.2 -32.7	668 3075	-1.7 -10.6	42 7	-1.4 -43.8	-8.7
.90	79.65	-1.3 -11.1	234 506	-1.2 -21.9	50 6	-1.3 -11.1	-2.5
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 290 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCECTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)		PRESSURE (PSF)		ECCEEN (%)		SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
			X	Y	X	Y	X	Y		
.00	0.00	-9.8 -19.9	741	1325	-13.3 -15.0	29 65	-49.2 -520.2	-85.3		
.10	8.85	-1.8 -55.2	1514	4085	-1.2 -13.5	51 7	-39.3 -500.3	-82.1		
.20	17.70	-3.6 -68.5	1770	7080	-2.1 -9.7	33 8	-37.6 -445.2	-69.5		
.30	26.55	-4.6 -69.8	1770	7080	-2.6 -9.9	33 10	-33.9 -376.6	-59.4		
.40	35.40	-4.8 -74.0	1770	7013	-2.7 -10.6	35 10	-29.3 -306.8	-49.0		
.50	44.25	-6.4 -77.5	1770	7010	-3.6 -11.1	38 14	-24.5 -232.8	-37.4		
.60	53.10	-7.4 -59.1	1670	5842	-4.4 -10.1	31 18	-18.1 -155.3	-24.1		
.70	61.95	-11.9 -46.9	1390	4422	-8.6 -10.6	28 32	-10.7 -96.2	-15.7		
.80	70.80	.9 -37.2	668	3075	1.4 -12.1	40 -5	1.2 -49.2	-9.4		
.90	79.65	.2 -12.0	234	506	1.0 -23.7	49 -4	.2 -12.0	-2.6		
1.00	88.50						0.0 0.0	0.0		

[b]

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 300 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)		AREA (SQ FT)		PRESSURE (PSF)		ECCEN (%)		SHEAR (KIPS)		MOMENT (1000-FT-KIPS)	
		X	Y	X	Y	X	Y	X	Y	X	Y	Z	
.00	0.00	-6.7	-9.9	741	1325	-9.0	-7.5	23	70	-36.0	-345.8	-41.2	
.10	8.65	.8	-28.7	1514	4085	.5	-7.0	43	-5	-29.4	-335.9	-39.7	
.20	17.70	-1.3	-45.3	1770	7080	-1.7	-6.4	21	3	-30.1	-307.2	-34.1	
.30	26.55	-2.6	-47.5	1770	7080	-1.5	-6.7	21	5	-28.8	-261.9	-29.7	
.40	35.40	-2.7	-51.9	1770	7013	-1.5	-7.4	23	5	-26.2	-214.4	-25.3	
.50	44.25	-4.6	-54.4	1770	7010	-2.6	-7.8	27	10	-23.5	-162.5	-20.0	
.60	53.10	-6.8	-42.6	1670	5842	-4.1	-7.3	21	15	-18.9	-108.2	-13.4	
.70	61.95	-12.9	-32.7	1390	4422	-9.3	-7.4	20	36	-12.2	-65.5	-9.2	
.80	70.80	.4	-25.1	668	3075	.6	-8.1	37	-3	.7	-32.8	-5.8	
.90	79.65	.3	-7.8	234	506	1.3	-15.3	47	-8	.3	-7.8	-1.6	
1.00	88.50									0.0	0.0	0.0	

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 310 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION

GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-5.1 -3.9	741 1325	-6.9 -3.0	12 69	-20.0 -186.1	-19.0
.10	8.85	3.0 -12.3	1514 4085	2.0 -3.0	36 -39	-14.9 -182.2	-18.5
.20	17.70	1.7 -23.8	1770 7080	1.0 -3.4	14 -5	-17.9 -169.9	-16.4
.30	26.55	.1 -24.4	1770 7080	.1 -3.4	13 -0	-19.6 -146.1	-14.9
.40	35.40	-.6 -27.8	1770 7013	-.3 -4.0	18 2	-19.7 -121.7	-13.4
.50	44.25	-2.0 -30.5	1770 7010	-1.1 -4.3	26 8	-19.2 -93.9	-11.1
.60	53.10	-4.6 -24.5	1670 5842	-2.7 -4.2	20 16	-17.2 -63.4	-7.6
.70	61.95	-11.3 -19.4	1390 4422	-8.1 -4.4	16 42	-12.6 -38.9	-5.4
.80	70.80	-.9 -15.1	668 3075	-1.4 -4.9	37 10	-1.3 -19.5	-3.5
.90	79.65	-.4 -4.5	234 506	-1.7 -8.8	46 18	-.4 -4.5	-.9
1.00	88.50					0.0 0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 320 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION

GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)		AREA (SQ FT)		PRESSURE (PSF)		ECCEN (%)		SHEAR (KIPS)		MOMENT (1000-FT-KIPS) Z
		X	Y	X	Y	X	Y	X	Y	X	Y	
.00	0.00	-4.0	-.6	741	1325	-5.4	-.4	-0	-4	-17.3	-73.9	-5.8
.10	8.85	3.8	-1.6	1514	4085	2.5	-.4	-8	84	-13.3	-73.3	-5.8
.20	17.70	2.7	-9.0	1770	7080	1.5	-1.3	1	-1	-17.0	-71.7	-6.1
.30	26.55	.6	-9.1	1770	7080	.4	-1.3	-0	0	-19.7	-62.8	-6.1
.40	35.40	-.6	-11.2	1770	7013	-.3	-1.6	13	3	-20.4	-53.7	-6.1
.50	44.25	-1.9	-13.4	1770	7010	-1.1	-1.9	26	16	-19.8	-42.5	-5.5
.60	53.10	-4.4	-11.2	1670	5842	-2.6	-1.9	19	33	-17.9	-29.1	-3.9
.70	61.95	-11.1	-8.8	1390	4422	-8.0	-2.0	10	57	-13.6	-17.9	-2.8
.80	70.80	-1.8	-7.0	668	3075	-2.7	-2.3	39	46	-2.5	-9.1	-1.8
.90	79.65	-.7	-2.1	234	506	-3.0	-4.1	41	64	-.7	-2.1	-.4
1.00	88.50									0.0	0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 330 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION

GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)		AREA (SQ FT)		PRESSURE (PSF)		ECCEN (%)		SHEAR (KIPS)		MOMENT (1000-FT-KIPS)	
		X	Y	X	Y	X	Y	X	Y	X	Y	Z	
.00	0.00	-3.1	-.0	741	1325	-4.2	-.0	-0	-0	-23.3	-.0	-.0	
.10	8.25	3.2	-.0	1514	4085	2.1	-.0	0	-0	-20.2	-.0	-.0	
.20	17.70	2.0	-.0	1770	7080	1.1	-.0	-0	0	-23.3	-.0	-.0	
.30	26.55	-.4	-.0	1770	7080	-.2	-.0	-0	-0	-25.3	-.0	-.0	
.40	35.40	-1.8	-.0	1770	7013	-1.0	-.0	0	-0	-24.9	-.0	-.0	
.50	44.25	-2.7	-.0	1770	7010	-1.5	-.0	0	-0	-23.1	-.0	-.0	
.60	53.10	-5.0	-.0	1670	5842	-3.0	-.0	0	0	-20.4	-.0	-.0	
.70	61.95	-11.1	-.0	1390	4422	-8.0	-.0	0	1	-15.4	-.0	-.0	
.80	70.80	-2.9	-.0	668	3075	-4.4	-.0	-0	-0	-4.3	-.0	-.0	
.90	79.65	-1.3	-.0	234	506	-5.7	-.0	0	-0	-1.3	-.0	-.0	
1.00	88.50									0.0	0.0	0.0	

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 340 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION

GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)		AREA (SQ FT)		PRESSURE (PSF)		ECCEN (%)		SHEAR (KIPS)		MOMENT (1000-FT-KIPS) Z
		X	Y	X	Y	X	Y	X	Y	X	Y	
.00	0.00	-4.0	.6	741	1325	-5.4	.4	-0	4	-17.0	73.9	5.8
.10	8.85	3.8	1.6	1514	4085	2.5	.4	-8	-84	-13.0	73.3	5.8
.20	17.70	2.7	9.0	1770	7080	1.5	1.3	1	1	-16.8	71.7	6.1
.30	26.55	.6	9.1	1770	7080	.4	1.3	-0	-0	-19.5	62.8	6.1
.40	35.40	-1.6	11.2	1770	7013	-3	1.6	13	-3	-20.1	53.7	6.1
.50	44.25	-1.9	13.4	1770	7010	-1.1	1.9	26	-16	-19.6	42.5	5.5
.60	53.10	-4.4	11.2	1670	5842	-2.6	1.9	19	-33	-17.7	29.1	3.9
.70	61.95	-10.8	8.8	1390	4422	-7.8	2.0	10	-57	-13.3	17.9	2.8
.80	70.80	-1.8	7.0	668	3075	-2.7	2.3	39	-46	-2.5	9.1	1.8
.90	79.65	-1.7	2.1	234	506	-3.0	4.1	41	-64	-1.7	2.1	.4
1.00	88.50									0.0	0.0	0.0

TABLE 7. SHEAR AND MOMENT DIAGRAMS : MILLION DOLLAR PIER, ATLANTIC CITY  
 WIND DIRECTION 350 CONFIGURATION A REFERENCE PRESSURE 39.0 PSF  
 ECCENTRICITIES BASED ON 450 FT IN THE X DIRECTION AND 100 FT IN THE Y DIRECTION

GUST FACTOR 1.32

FLOOR	HEIGHT	FORCE (KIPS)	AREA (SQ FT)	PRESSURE (PSF)	ECCEN (%)	SHEAR (KIPS)	MOMENT (1000-FT-KIPS)
		X Y	X Y	X Y	X Y	X Y	Z
.00	0.00	-5.1 3.9	741 1325	-6.9 3.0	12 -69	-19.5 186.1	19.0
.10	8.85	3.0 12.3	1514 4085	2.0 3.0	36 39	-14.4 182.2	18.5
.20	17.70	1.7 23.8	1770 7080	1.0 3.4	14 5	-17.4 169.9	16.4
.30	26.55	.1 24.4	1770 7080	.1 3.4	13 0	-19.2 146.1	14.9
.40	35.40	-.6 27.8	1770 7013	-.3 4.0	18 -2	-19.3 121.7	13.4
.50	44.25	-2.0 30.5	1770 7010	-1.1 4.3	26 -8	-18.7 93.9	11.1
.60	53.10	-4.6 24.5	1670 5842	-2.7 4.2	20 -16	-16.7 63.4	7.6
.70	61.95	-10.8 19.4	1390 4422	-7.8 4.4	16 -41	-12.2 38.9	5.4
.80	70.80	-.9 15.1	668 3075	-1.4 4.9	37 -10	-1.3 19.5	3.5
.90	79.65	-.4 4.5	234 506	-1.7 8.8	46 -18	-.4 4.5	.9
1.00	88.50					0.0 0.0	0.0

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TABLE 7. MILLION DOLLAR PIER, ATLANTIC CITY  
 PROJECT 7710 CONFIGURATION A  
 SCALE = 300 REF. PRESSURE = 30.0  
 GUST FACTOR = 1.72 STANDARD FLOOR HEIGHT = 8.85  
 NUMBER OF SIDES = 12 NO. OF FLOORS = 10

SIDE	ANGLE	Z-AXIS
1	90.0	18.000
2	90.0	10.000
3	90.0	2.000
4	90.0	-6.000
5	0.0	0.000
6	180.0	4.000
7	270.0	-10.000
8	270.0	-2.000
9	270.0	6.000
10	270.0	14.000
11	0.0	4.000
12	180.0	0.000
FLOOR #	LABEL	HEIGHT-FT
1	.00	8.85
2	.10	8.85
3	.20	8.85
4	.30	8.85
5	.40	8.85
6	.50	8.85
7	.60	8.85
8	.70	8.85
9	.80	8.85
10	.90	8.85

**APPENDIX A**

**PRESSURE DATA**

**Note:** Pressure coefficients are defined in Section 4.3.

**Pressure tap designation is explained in Figure 3.**

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
0	1	- .057	.045	.127	-.247	0	51	- .102	.022	-.002	-.189	0	144	- .090	.027	.007	-.222
0	2	- .107	.035	.046	-.233	0	52	- .118	.028	-.028	-.270	0	145	- .058	.021	.014	-.143
0	3	- .123	.023	-.013	-.214	0	53	- .103	.026	-.034	-.303	0	146	- .109	.026	-.030	-.252
0	4	- .127	.031	-.042	-.277	0	54	- .121	.024	-.034	-.246	0	147	- .068	.025	-.002	-.155
0	5	- .095	.028	.084	-.263	0	55	- .107	.030	-.062	-.341	0	148	- .085	.020	-.010	-.216
0	6	- .065	.031	.067	-.201	0	56	- .079	.034	-.080	-.311	0	149	- .075	.022	-.034	-.193
0	7	- .075	.045	.151	-.285	0	57	- .062	.038	-.118	-.274	0	150	- .102	.020	-.010	-.192
0	8	- .090	.045	.182	-.153	0	101	- .152	.028	-.029	-.285	0	151	- .083	.022	-.018	-.182
0	9	- .039	.037	.172	-.191	0	102	- .141	.028	-.053	-.341	0	152	- .080	.019	-.016	-.165
0	10	- .197	.043	-.075	-.365	0	103	- .111	.031	-.030	-.281	0	153	- .064	.021	-.001	-.175
0	11	- .245	.071	.046	-.643	0	104	- .143	.033	-.016	-.285	0	154	- .093	.023	-.016	-.229
0	12	- .182	.050	-.006	-.493	0	105	- .134	.020	-.056	-.224	0	155	- .076	.022	-.009	-.180
0	13	- .182	.071	.026	-.619	0	106	- .129	.021	-.060	-.230	0	156	- .082	.021	-.003	-.176
0	14	- .199	.045	-.052	-.397	0	107	- .107	.021	-.026	-.225	0	157	- .069	.021	-.003	-.148
0	15	- .166	.038	-.066	-.346	0	108	- .121	.027	-.034	-.247	0	158	- .125	.027	-.025	-.302
0	16	- .111	.035	.040	-.270	0	109	- .139	.032	-.008	-.267	0	159	- .095	.023	-.012	-.243
0	17	- .166	.076	-.033	-.565	0	110	- .193	.044	-.076	-.380	0	160	- .088	.023	-.022	-.265
0	18	- .134	.023	-.043	-.221	0	111	- .128	.027	-.049	-.241	0	161	- .093	.019	-.030	-.181
0	19	- .084	.028	-.008	-.228	0	112	- .212	.056	-.081	-.527	0	162	- .127	.025	-.057	-.216
0	20	- .035	.031	.092	-.155	0	113	- .232	.049	-.123	-.473	0	163	- .097	.025	-.018	-.191
0	21	- .163	.025	-.012	-.263	0	114	- .142	.026	-.062	-.251	0	164	- .091	.026	-.010	-.205
0	22	- .094	.023	-.008	-.212	0	115	- .166	.041	-.053	-.403	0	165	- .078	.025	-.010	-.217
0	23	- .124	.027	-.022	-.258	0	116	- .143	.046	-.012	-.473	0	166	- .089	.028	-.010	-.216
0	24	- .130	.034	-.042	-.322	0	117	- .192	.038	-.091	-.363	0	167	- .158	.026	-.072	-.255
0	25	- .047	.046	-.228	-.196	0	118	- .242	.061	-.085	-.607	0	201	- .015	.080	-.452	-.216
0	26	- .129	.029	-.020	-.283	0	119	- .127	.032	-.035	-.288	0	202	- .067	.083	.511	-.167
0	27	- .104	.023	-.028	-.237	0	120	- .132	.035	-.031	-.280	0	203	- .064	.071	.539	-.110
0	28	- .076	.023	.012	-.193	0	121	- .118	.025	-.050	-.226	0	204	- .128	.081	.419	-.438
0	29	- .081	.023	-.004	-.191	0	122	- .116	.031	-.006	-.268	0	205	- .105	.047	.258	-.308
0	30	- .090	.022	-.013	-.208	0	123	- .086	.026	-.033	-.200	0	206	- .107	.034	.077	-.306
0	31	- .064	.033	.096	-.196	0	124	- .109	.028	-.022	-.238	0	207	- .129	.039	-.006	-.339
0	32	- .013	.041	.223	-.162	0	125	- .101	.023	-.028	-.223	0	208	- .094	.042	.322	-.282
0	33	- .084	.038	.028	-.296	0	126	- .123	.025	-.016	-.236	0	209	- .087	.031	.056	-.227
0	34	- .110	.024	-.022	-.194	0	127	- .086	.024	-.002	-.216	0	210	- .104	.036	.047	-.274
0	35	- .089	.025	.003	-.295	0	128	- .100	.027	-.020	-.242	0	211	- .111	.037	.128	-.312
0	36	- .067	.023	.028	-.193	0	129	- .077	.018	-.015	-.150	0	212	- .137	.038	.002	-.352
0	37	- .031	.044	.207	-.187	0	130	- .114	.028	-.014	-.252	0	213	- .136	.030	-.030	-.279
0	38	- .064	.036	.181	-.235	0	131	- .108	.026	-.032	-.234	0	214	- .112	.023	.036	-.220
0	39	- .116	.027	-.061	-.289	0	132	- .099	.023	-.020	-.222	0	301	- .097	.024	.017	-.223
0	40	- .020	.066	.458	-.155	0	133	- .082	.019	-.001	-.179	0	302	- .172	.036	.062	-.409
0	41	- .084	.024	-.008	-.187	0	134	- .175	.040	-.073	-.397	0	303	- .123	.031	.034	-.331
0	42	- .096	.024	-.018	-.210	0	135	- .101	.025	-.004	-.227	0	304	- .114	.025	.022	-.220
0	43	- .106	.021	-.026	-.214	0	136	- .080	.020	-.007	-.165	0	305	- .112	.022	.048	-.203
0	44	- .073	.022	.010	-.175	0	137	- .087	.019	-.012	-.199	0	306	- .137	.025	.064	-.243
0	45	- .044	.030	.156	-.169	0	138	- .109	.022	-.034	-.245	0	307	- .112	.022	.041	-.214
0	46	- .092	.019	-.022	-.201	0	139	- .086	.021	-.014	-.216	0	308	- .088	.023	.002	-.240
0	47	- .110	.032	.006	-.285	0	140	- .084	.023	-.011	-.173	0	309	- .108	.019	.037	-.190
0	48	- .073	.025	.010	-.196	0	141	- .061	.019	-.001	-.155	0	310	- .133	.026	.034	-.250
0	49	- .072	.021	.010	-.247	0	142	- .092	.022	-.021	-.200	0	311	- .111	.026	.006	-.277
0	50	- .165	.029	-.075	-.306	0	143	- .074	.021	-.011	-.173	0	312	- .119	.026	-.029	-.242

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
0	313	- .093	.021	- .221	10	37	- .060	.044	.125	- .221	10	130	- .133	.028	- .028	- .267	
0	314	- .111	.026	- .016	- .234	10	38	- .076	.036	.097	- .233	10	131	- .126	.027	- .036	- .235
0	315	- .097	.026	- .002	- .257	10	39	- .131	.030	.047	- .309	10	132	- .124	.027	- .040	- .239
0	316	- .071	.028	- .000	- .214	10	40	- .023	.061	.332	- .198	10	133	- .104	.025	- .028	- .234
0	317	- .061	.021	- .020	- .244	10	41	- .098	.024	.005	- .201	10	134	- .182	.042	- .078	- .390
0	318	- .113	.020	- .051	- .183	10	42	- .112	.024	.029	- .248	10	135	- .102	.026	- .028	- .235
0	319	- .075	.018	- .015	- .136	10	43	- .115	.024	.028	- .242	10	136	- .123	.024	- .029	- .218
0	320	- .114	.025	- .028	- .216	10	44	- .083	.024	.012	- .196	10	137	- .100	.020	- .039	- .232
0	401	- .059	.046	- .191	- .283	10	45	- .069	.032	.053	- .207	10	138	- .122	.024	- .012	- .249
0	402	- .052	.026	- .092	- .148	10	46	- .112	.023	.034	- .212	10	139	- .102	.026	- .027	- .208
0	403	- .102	.025	- .024	- .258	10	47	- .121	.032	.006	- .344	10	140	- .104	.020	- .010	- .169
0	404	- .067	.023	- .012	- .158	10	48	- .099	.036	.017	- .361	10	141	- .075	.023	- .037	- .207
0	405	- .074	.026	- .020	- .186	10	49	- .082	.023	.006	- .198	10	142	- .107	.021	- .018	- .179
0	406	- .077	.022	- .011	- .177	10	50	- .171	.034	.047	- .384	10	143	- .093	.028	- .009	- .250
1	- .024	.046	.203	- .222	10	51	- .101	.024	.004	- .201	10	144	- .104	.021	- .012	- .160	
1	- .098	.056	.138	- .293	10	52	- .126	.036	.017	- .321	10	145	- .072	.027	- .030	- .283	
1	- .118	.028	.008	- .232	10	53	- .110	.028	.005	- .239	10	146	- .121	.020	- .000	- .167	
1	- .188	.047	.085	- .468	10	54	- .134	.027	.043	- .247	10	147	- .086	.025	- .009	- .273	
1	- .098	.036	.067	- .228	10	55	- .112	.033	.008	- .282	10	148	- .086	.020	- .017	- .205	
1	- .054	.029	.067	- .173	10	56	- .089	.035	.058	- .239	10	149	- .111	.022	- .039	- .210	
1	- .051	.055	.186	- .293	10	57	- .065	.040	.107	- .216	10	150	- .095	.023	- .030	- .242	
1	- .004	.047	.228	- .146	10	101	- .202	.034	.100	- .375	10	151	- .095	.019	- .027	- .190	
1	- .058	.036	.089	- .185	10	102	- .181	.037	.074	- .389	10	152	- .095	.021	- .003	- .182	
1	- .244	.048	- .123	- .483	10	103	- .153	.039	.035	- .359	10	153	- .076	.023	- .023	- .214	
1	- .274	.073	- .086	- .631	10	104	- .187	.034	.091	- .367	10	154	- .101	.022	- .023	- .179	
1	- .220	.053	.026	- .457	10	105	- .175	.027	.098	- .325	10	155	- .088	.022	- .009	- .257	
1	- .165	.089	.031	- .629	10	106	- .163	.027	.083	- .275	10	156	- .094	.024	- .048	- .167	
1	- .242	.053	- .031	- .503	10	107	- .136	.027	.049	- .262	10	157	- .074	.023	- .030	- .415	
1	- .213	.043	- .109	- .401	10	108	- .157	.032	.077	- .293	10	158	- .123	.027	- .030	- .204	
1	- .120	.035	.044	- .287	10	109	- .171	.031	.059	- .316	10	159	- .098	.024	- .005	- .204	
1	- .242	.094	.017	- .746	10	110	- .241	.050	.102	- .453	10	160	- .095	.023	- .022	- .206	
1	- .168	.027	- .091	- .281	10	111	- .168	.033	.096	- .330	10	161	- .094	.019	- .024	- .173	
1	- .099	.028	.033	- .241	10	112	- .260	.065	.104	- .748	10	162	- .122	.024	- .034	- .221	
1	- .034	.034	.121	- .167	10	113	- .278	.056	.153	- .513	10	163	- .096	.024	- .004	- .201	
1	- .125	.028	- .021	- .275	10	114	- .176	.034	.051	- .316	10	164	- .094	.028	- .007	- .239	
1	- .165	.023	- .015	- .217	10	115	- .211	.044	.035	- .377	10	165	- .079	.025	- .005	- .214	
1	- .141	.027	- .058	- .255	10	116	- .189	.057	.017	- .454	10	166	- .095	.030	- .011	- .314	
1	- .137	.034	- .037	- .420	10	117	- .231	.040	.125	- .405	10	167	- .204	.037	- .100	- .360	
1	- .057	.053	.291	- .252	10	118	- .273	.067	.122	- .693	10	201	- .023	.087	- .452	- .283	
1	- .147	.036	- .026	- .320	10	119	- .156	.036	.031	- .330	10	202	- .076	.084	- .530	- .127	
1	- .122	.025	- .038	- .259	10	120	- .168	.040	.042	- .326	10	203	- .067	.070	- .441	- .102	
1	- .092	.026	.031	- .225	10	121	- .153	.030	.062	- .285	10	204	- .186	.072	- .202	- .490	
1	- .094	.021	- .017	- .178	10	122	- .135	.038	.025	- .342	10	205	- .080	.046	- .115	- .321	
1	- .109	.025	- .025	- .235	10	123	- .107	.030	.056	- .226	10	206	- .161	.043	- .080	- .358	
1	- .085	.035	.058	- .232	10	124	- .137	.031	.022	- .311	10	207	- .097	.039	- .019	- .269	
1	- .028	.042	.148	- .205	10	125	- .129	.026	.057	- .281	10	208	- .076	.047	- .202	- .244	
1	- .107	.039	.008	- .302	10	126	- .153	.029	.071	- .285	10	209	- .077	.038	- .090	- .217	
1	- .127	.025	- .045	- .233	10	127	- .113	.028	.034	- .226	10	210	- .135	.051	- .022	- .373	
1	- .109	.029	.003	- .296	10	128	- .120	.028	.020	- .266	10	211	- .139	.038	- .099	- .298	
1	- .063	.025	.010	- .205	10	129	- .099	.020	.006	- .187	10	212	- .129	.043	.059	- .353	

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR FIER, ATLANTIC CITY

WD	TAP	CPRMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPRMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPRMEAN	CPRMS	CPMAX	CPMIN
10	213	- .160	.038	- .039	- .355	20	23	- .116	.024	- .028	- .256	20	15	- .205	.056	- .046	- .503
10	214	- .136	.029	- .031	- .270	20	24	- .127	.033	- .026	- .397	20	17	- .246	.037	- .139	- .440
10	301	- .101	.025	- .029	- .292	20	25	- .094	.045	- .084	- .341	20	18	- .321	.065	- .143	- .722
10	302	- .176	.042	- .048	- .368	20	26	- .148	.031	- .015	- .247	20	19	- .164	.037	- .042	- .429
10	303	- .116	.030	- .018	- .292	20	27	- .103	.025	- .015	- .290	20	20	- .183	.028	- .049	- .310
10	304	- .117	.030	- .007	- .259	20	28	- .108	.030	- .017	- .171	20	21	- .142	.041	- .060	- .327
10	305	- .112	.026	- .005	- .225	20	29	- .100	.020	- .017	- .348	20	22	- .114	.029	- .045	- .233
10	306	- .135	.027	- .034	- .239	20	30	- .131	.029	- .001	- .181	20	23	- .139	.033	- .029	- .284
10	307	- .124	.029	- .034	- .262	20	31	- .077	.044	- .181	- .247	20	24	- .127	.025	- .017	- .252
10	308	- .100	.024	- .002	- .241	20	32	- .060	.036	- .010	- .200	20	25	- .149	.027	- .016	- .271
10	309	- .103	.021	- .030	- .189	20	33	- .114	.035	- .003	- .359	20	26	- .115	.027	- .016	- .231
10	310	- .132	.031	- .030	- .305	20	34	- .149	.029	- .054	- .295	20	27	- .114	.025	- .034	- .222
10	311	- .119	.039	- .025	- .678	20	35	- .120	.031	- .010	- .267	20	28	- .101	.018	- .033	- .178
10	312	- .113	.025	- .049	- .253	20	36	- .098	.024	- .026	- .234	20	29	- .123	.025	- .019	- .246
10	313	- .091	.019	- .030	- .180	20	37	- .091	.040	- .072	- .321	20	30	- .121	.024	- .036	- .247
10	314	- .114	.024	- .046	- .235	20	38	- .100	.035	- .067	- .243	20	31	- .116	.024	- .018	- .273
10	315	- .105	.027	- .004	- .265	20	39	- .156	.031	- .037	- .319	20	32	- .116	.024	- .012	- .187
10	316	- .079	.027	- .004	- .234	20	40	- .058	.054	- .267	- .300	20	33	- .106	.022	- .048	- .490
10	317	- .070	.021	- .002	- .286	20	41	- .115	.029	- .001	- .263	20	34	- .166	.044	- .025	- .229
10	318	- .137	.022	- .068	- .214	20	42	- .135	.026	- .052	- .245	20	35	- .110	.024	- .038	- .179
10	319	- .096	.022	- .028	- .177	20	43	- .136	.027	- .053	- .303	20	36	- .105	.021	- .046	- .178
10	320	- .125	.037	- .063	- .409	20	44	- .104	.025	- .015	- .254	20	37	- .099	.018	- .046	- .212
10	401	- .053	.045	- .130	- .272	20	45	- .091	.041	- .060	- .312	20	38	- .121	.022	- .053	- .212
10	402	- .055	.029	- .117	- .237	20	46	- .142	.028	- .048	- .355	20	39	- .100	.021	- .034	- .188
10	403	- .120	.027	- .036	- .260	20	47	- .146	.036	- .001	- .301	20	40	- .107	.022	- .008	- .190
10	404	- .080	.024	- .008	- .193	20	48	- .138	.057	- .033	- .523	20	41	- .090	.020	- .030	- .172
10	405	- .092	.027	- .026	- .212	20	49	- .103	.022	- .039	- .220	20	42	- .115	.022	- .036	- .206
10	406	- .092	.023	- .000	- .200	20	50	- .197	.048	- .013	- .550	20	43	- .102	.020	- .036	- .291
20	1	- .028	.045	- .209	- .218	20	51	- .113	.030	- .037	- .274	20	44	- .129	.030	- .025	- .203
20	2	- .132	.056	- .138	- .341	20	52	- .148	.051	- .078	- .487	20	45	- .094	.023	- .025	- .321
20	3	- .088	.032	- .057	- .217	20	53	- .119	.031	- .039	- .297	20	46	- .148	.023	- .055	- .206
20	4	- .244	.064	- .092	- .573	20	54	- .161	.033	- .031	- .332	20	47	- .107	.023	- .018	- .289
20	5	- .090	.046	- .131	- .366	20	55	- .139	.037	- .051	- .296	20	48	- .121	.029	- .028	- .243
20	6	- .058	.030	- .063	- .183	20	56	- .168	.041	- .112	- .408	20	49	- .106	.024	- .041	- .232
20	7	- .034	.060	- .186	- .265	20	57	- .079	.028	- .138	- .274	20	50	- .128	.025	- .014	- .294
20	8	- .002	.049	- .227	- .157	20	58	- .252	.044	- .132	- .447	20	51	- .114	.024	- .043	- .235
20	9	- .071	.035	- .084	- .227	20	59	- .237	.050	- .114	- .492	20	52	- .117	.024	- .032	- .235
20	10	- .266	.052	- .146	- .472	20	60	- .199	.053	- .053	- .465	20	53	- .095	.026	- .048	- .235
20	11	- .254	.072	- .080	- .629	20	61	- .221	.042	- .104	- .400	20	54	- .177	.023	- .032	- .263
20	12	- .231	.053	- .042	- .483	20	62	- .223	.043	- .119	- .413	20	55	- .101	.024	- .034	- .202
20	13	- .159	.091	- .057	- .888	20	63	- .206	.038	- .109	- .372	20	56	- .106	.023	- .068	- .187
20	14	- .264	.056	- .036	- .502	20	64	- .168	.040	- .087	- .323	20	57	- .085	.026	- .020	- .253
20	15	- .209	.042	- .091	- .409	20	65	- .196	.046	- .077	- .373	20	58	- .109	.025	- .020	- .211
20	16	- .127	.035	- .037	- .315	20	66	- .206	.042	- .082	- .401	20	59	- .106	.026	- .019	- .255
20	17	- .223	.074	- .022	- .583	20	67	- .302	.061	- .150	- .557	20	60	- .099	.026	- .019	- .196
20	18	- .174	.026	- .106	- .298	20	68	- .210	.050	- .092	- .799	20	61	- .131	.028	- .027	- .267
20	19	- .104	.031	- .003	- .436	20	69	- .264	.058	- .117	- .552	20	62	- .107	.028	- .019	- .238
20	20	- .056	.037	- .137	- .205	20	70	- .290	.052	- .185	- .529	20	63	- .103	.027	- .020	- .251
20	21	- .123	.026	- .028	- .225	20	71	- .237	.035	- .145	- .406	20	64	- .103	.027	- .021	- .223
20	22	- .124	.027	- .013	- .263	20	72	- .216	.042	- .107	- .417	20	65	- .090	.023	- .021	- .223

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	MD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	MD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
166	-	.110	.026	.112	.239	30	9	.096	.036	.083	.257	30	102	.306	.054	.172	.522
167	-	.239	.042	.125	.445	30	10	.253	.042	.155	.454	30	103	.220	.051	.042	.379
201	-	.017	.083	.445	.567	30	11	.311	.062	.147	.664	30	104	.201	.035	.110	.332
202	-	.086	.053	.445	.449	30	12	.210	.061	.149	.550	30	105	.226	.033	.132	.365
204	-	.209	.068	.113	.626	30	13	.226	.047	.051	.514	30	106	.168	.034	.174	.379
206	-	.095	.054	.111	.466	30	14	.144	.033	.142	.559	30	107	.192	.033	.096	.337
207	-	.230	.053	.900	.957	30	15	.151	.035	.072	.317	30	108	.209	.033	.113	.358
208	-	.098	.046	.955	.227	30	16	.207	.026	.089	.406	30	109	.311	.041	.208	.488
209	-	.080	.055	.227	.210	30	17	.179	.028	.102	.295	30	110	.197	.036	.095	.381
210	-	.077	.050	.220	.434	30	18	.217	.038	.089	.406	30	111	.220	.040	.094	.444
211	-	.189	.062	.020	.434	30	19	.068	.041	.042	.235	30	112	.249	.036	.160	.421
212	-	.167	.040	.070	.347	30	20	.124	.031	.040	.212	30	113	.260	.032	.162	.391
213	-	.141	.058	.070	.434	30	21	.144	.028	.028	.229	30	114	.280	.033	.097	.405
214	-	.192	.053	.061	.434	30	22	.200	.043	.074	.366	30	115	.231	.031	.153	.360
201	-	.123	.029	.028	.295	30	23	.116	.024	.023	.321	30	116	.231	.033	.070	.358
203	-	.200	.064	.023	.333	30	24	.122	.043	.024	.291	30	117	.231	.033	.165	.356
204	-	.125	.036	.002	.346	30	25	.161	.024	.091	.283	30	118	.165	.030	.141	.306
205	-	.136	.039	.027	.346	30	26	.189	.030	.042	.194	30	119	.159	.030	.056	.290
206	-	.125	.031	.028	.346	30	27	.131	.021	.021	.205	30	120	.141	.030	.059	.266
207	-	.145	.032	.028	.346	30	28	.108	.039	.046	.405	30	121	.142	.030	.021	.260
208	-	.150	.043	.027	.346	30	29	.167	.057	.069	.423	30	122	.119	.030	.022	.255
209	-	.119	.024	.036	.244	30	30	.072	.040	.129	.223	30	123	.137	.029	.041	.232
310	-	.114	.024	.006	.265	30	31	.141	.043	.024	.580	30	124	.116	.029	.066	.274
311	-	.150	.041	.009	.514	30	32	.183	.038	.011	.471	30	125	.140	.029	.030	.226
312	-	.148	.051	.000	.514	30	33	.203	.041	.026	.479	30	126	.143	.029	.036	.206
313	-	.120	.028	.011	.265	30	34	.122	.036	.026	.521	30	127	.112	.024	.041	.168
314	-	.104	.021	.003	.346	30	35	.128	.048	.026	.325	30	128	.095	.024	.025	.229
315	-	.132	.031	.005	.346	30	36	.132	.036	.012	.469	30	129	.115	.024	.043	.206
316	-	.093	.033	.007	.346	30	37	.255	.038	.140	.413	30	130	.114	.021	.047	.219
317	-	.091	.026	.011	.273	30	38	.091	.059	.170	.430	30	131	.110	.019	.035	.161
318	-	.141	.020	.077	.273	30	39	.133	.053	.003	.342	30	132	.094	.019	.030	.326
319	-	.102	.025	.024	.206	30	40	.154	.027	.008	.384	30	133	.139	.013	.025	.228
320	-	.158	.055	.024	.079	30	41	.225	.022	.054	.240	30	134	.105	.017	.027	.212
401	-	.067	.053	.016	.126	30	42	.118	.044	.090	.274	30	135	.097	.017	.052	.217
402	-	.067	.031	.014	.295	30	43	.104	.044	.090	.246	30	136	.125	.021	.023	.255
403	-	.137	.028	.014	.295	30	44	.171	.050	.018	.415	30	137	.108	.021	.021	.201
404	-	.096	.027	.014	.295	30	45	.205	.042	.018	.287	30	138	.108	.021	.021	.222
405	-	.115	.031	.009	.273	30	46	.162	.062	.029	.505	30	139	.129	.021	.059	.242
406	-	.115	.029	.022	.273	30	47	.118	.055	.023	.421	30	140	.098	.021	.021	.260
407	-	.045	.055	.203	.217	30	48	.210	.052	.023	.421	30	141	.098	.021	.059	.242
408	-	.144	.059	.023	.295	30	49	.118	.055	.023	.421	30	142	.111	.021	.043	.348
409	-	.162	.037	.023	.295	30	50	.161	.056	.023	.421	30	143	.156	.024	.065	.430
410	-	.270	.068	.058	.058	30	51	.174	.022	.055	.505	30	144	.156	.024	.082	.430
411	-	.104	.047	.079	.079	30	52	.193	.038	.038	.572	30	145	.129	.026	.069	.293
412	-	.082	.035	.059	.059	30	53	.121	.038	.038	.572	30	146	.129	.026	.069	.242
413	-	.121	.078	.269	.269	30	54	.087	.044	.153	.423	30	147	.149	.021	.057	.242
414	-	.063	.041	.113	.251	30	55	.271	.044	.153	.423	30	148	.149	.021	.057	.242
415	-	.063	.041	.113	.251	30	56	.101	.044	.153	.423	30	149	.149	.021	.057	.242

## APPENDIX A -- PRESSURE DATA

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

MD	TRP	CPMEAN	CPRMS	CPMAX	CPMIN	MD	TRP	CPMEAN	CPRMS	CPMAX	CPMIN	MD	TRP	CPMEAN	CPRMS	CPMAX	CPMIN
300	152	-143	.025	-.063	-.235	300	401	-.086	.058	.224	-.359	40	45	-141	.055	.037	-.415
300	153	-106	.019	-.032	-.203	300	402	-.081	.034	.236	-.236	40	46	-173	.038	.049	-.349
300	154	-129	.022	-.039	-.235	300	403	-.118	.033	.001	-.435	40	47	-138	.045	.025	-.346
300	155	-114	.021	-.027	-.197	300	404	-.117	.037	.006	-.353	40	48	-197	.070	.052	-.701
300	156	-116	.022	-.047	-.197	300	405	-.150	.038	.005	-.311	40	49	-120	.020	.043	-.233
300	157	-094	.019	-.028	-.174	300	406	-.074	.033	.082	-.446	40	50	-183	.053	.005	-.518
300	158	-129	.020	-.036	-.215	400	233	-.138	.029	.021	-.275	40	51	-167	.056	.045	-.487
300	159	-113	.024	-.030	-.235	400	444	-.105	.043	.021	-.419	40	52	-132	.032	.019	-.410
300	160	-114	.025	-.030	-.235	400	445	-.218	.046	.021	-.242	40	53	-162	.036	.045	-.421
300	161	-100	.019	-.035	-.170	400	5	-.131	.046	.017	-.327	40	54	-119	.036	.133	-.393
300	162	-137	.028	-.014	-.255	400	6	-.068	.029	.025	-.220	40	55	-126	.037	.007	-.312
300	163	-117	.026	-.005	-.222	400	8	-.112	.052	.095	-.407	40	56	-92	.032	.084	-.267
300	164	-111	.026	-.038	-.235	400	9	-.097	.041	.126	-.287	40	57	-204	.031	.124	-.356
300	165	-101	.022	-.035	-.199	400	9	-.126	.032	.037	-.274	40	101	-201	.033	.107	-.391
300	166	-119	.025	-.043	-.353	400	10	-.222	.037	.142	-.457	40	102	-197	.032	.111	-.380
300	167	-189	.028	-.103	-.353	400	11	-.232	.056	.029	-.600	40	103	-187	.027	.112	-.322
300	201	-.054	.065	.341	-.305	400	12	-.201	.036	.082	-.378	40	104	-187	.027	.105	-.305
300	202	-.011	.075	.433	-.371	400	13	-.129	.034	.004	-.338	40	105	-187	.026	.093	-.281
300	203	-.012	.068	.423	-.170	400	14	-.189	.045	.003	-.441	40	106	-167	.026	.122	-.305
300	204	-.164	.059	.079	-.436	400	15	-.183	.030	.076	-.314	40	107	-181	.026	.117	-.308
300	205	-102	.053	.183	-.447	400	16	-.179	.037	.041	-.326	40	108	-187	.026	.130	-.380
300	206	-248	.051	-.91	-.496	400	17	-.196	.057	.041	-.513	40	109	-223	.035	.104	-.324
300	207	-117	.046	.043	-.326	400	18	-.141	.022	.074	-.239	40	110	-208	.038	.119	-.421
300	208	-.090	.052	.174	-.326	400	19	-.171	.042	.007	-.402	40	111	-208	.038	.106	-.489
300	209	-.094	.052	.189	-.273	400	20	-.079	.044	.106	-.267	40	112	-218	.037	.094	-.337
300	210	-205	.050	-.031	-.304	400	21	-.121	.022	.048	-.213	40	113	-174	.028	.097	-.401
300	211	-170	.035	-.020	-.310	400	22	-.152	.036	.036	-.457	40	114	-186	.041	.126	-.458
300	212	-160	.062	-.029	-.403	400	23	-.133	.024	.051	-.238	40	115	-197	.022	.052	-.310
300	213	-204	.055	-.077	-.438	400	24	-.135	.033	.044	-.342	40	116	-193	.043	.057	-.271
300	214	-168	.039	-.056	-.362	400	25	-.149	.046	.035	-.365	40	117	-213	.032	.065	-.250
300	301	-152	.036	-.012	-.397	400	26	-.163	.039	.036	-.374	40	118	-156	.029	.031	-.285
300	302	-210	.066	-.003	-.347	400	27	-.129	.022	.053	-.218	40	119	-150	.022	.043	-.237
300	303	-125	.036	-.003	-.351	400	28	-.162	.032	.068	-.317	40	120	-134	.023	.053	-.254
300	304	-143	.041	-.007	-.297	400	29	-.124	.020	.063	-.204	40	121	-138	.023	.053	-.216
300	305	-120	.030	-.037	-.272	400	30	-.121	.038	.045	-.374	40	122	-129	.025	.056	-.194
300	306	-147	.032	-.023	-.290	400	31	-.131	.057	.118	-.386	40	124	-129	.025	.043	-.254
300	307	-159	.041	-.000	-.404	400	32	-.090	.041	.111	-.263	40	125	-113	.022	.043	-.188
300	308	-135	.023	-.049	-.275	400	33	-.165	.047	.050	-.399	40	126	-120	.022	.056	-.216
300	309	-119	.024	-.026	-.234	400	34	-.106	.042	.000	-.401	40	127	-120	.022	.043	-.223
300	310	-165	.046	-.003	-.633	400	35	-.149	.047	.037	-.377	40	128	-119	.023	.055	-.164
300	311	-167	.051	-.011	-.284	400	36	-.142	.031	.041	-.326	40	129	-105	.023	.054	-.207
300	312	-167	.029	-.002	-.212	400	37	-.153	.032	.054	-.419	40	130	-122	.021	.036	-.203
300	313	-115	.023	-.012	-.212	400	38	-.123	.036	.050	-.322	40	131	-122	.020	.057	-.218
300	314	-153	.034	-.003	-.292	400	39	-.170	.025	.038	-.292	40	132	-120	.020	.054	-.170
300	315	-154	.038	-.021	-.380	400	40	-.123	.049	.032	-.410	40	133	-105	.023	.056	-.352
300	316	-102	.024	-.033	-.216	400	41	-.146	.033	.007	-.293	40	134	-146	.023	.007	-.235
300	317	-103	.021	-.034	-.196	400	42	-.136	.021	.067	-.267	40	135	-116	.020	.038	-.210
300	318	-108	.031	-.009	-.226	400	43	-.146	.023	.055	-.206	40	136	-109	.018	.041	-.195
300	319	-104	.031	-.099	-.061	400	44	-.126	.021	.021	-.055	40	137	-109	.018	.041	-.195

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
40	138	-136	.023	-.043	-.254	40	307	-.159	.029	-.013	-.369	50	31	174	.060	.024	-.453
40	139	-123	.021	-.049	-.226	40	308	-.129	.020	-.057	-.207	50	32	167	.046	.165	-.324
40	140	-134	.022	-.071	-.245	40	309	-.125	.023	-.034	-.221	50	33	186	.052	.010	-.563
40	141	-112	.021	-.036	-.201	40	310	-.167	.042	-.031	-.378	50	34	213	.047	.032	-.402
40	142	-133	.021	-.060	-.203	40	311	-.131	.031	-.022	-.307	50	35	156	.044	.062	-.320
40	143	-126	.020	-.054	-.203	40	312	-.119	.024	-.030	-.223	50	36	199	.027	.026	-.558
40	144	-160	.027	-.084	-.302	40	313	-.153	.034	-.020	-.347	50	37	148	.041	.016	-.498
40	145	-125	.021	-.043	-.219	40	314	-.155	.038	-.018	-.231	50	38	172	.025	.102	-.406
40	146	-172	.029	-.087	-.347	40	315	-.130	.024	-.052	-.231	50	39	170	.078	.114	-.436
40	147	-146	.027	-.056	-.252	40	316	-.109	.025	-.042	-.185	50	40	172	.047	.026	-.422
40	148	-145	.023	-.075	-.265	40	317	-.174	.027	-.084	-.309	50	41	144	.039	.075	-.269
40	149	-120	.019	-.063	-.208	40	318	-.133	.043	-.012	-.323	50	42	158	.024	.067	-.232
40	150	-140	.021	-.076	-.227	40	319	-.176	.061	-.006	-.622	50	43	137	.021	.062	-.570
40	151	-128	.019	-.065	-.217	40	320	-.117	.068	-.267	-.431	50	44	192	.067	.002	-.459
40	152	-135	.019	-.079	-.201	40	401	-.088	.039	-.114	-.225	50	45	191	.043	.057	-.459
40	153	-106	.018	-.036	-.197	40	402	-.192	.042	-.023	-.455	50	46	153	.053	.094	-.469
40	154	-126	.021	-.029	-.221	40	403	-.145	.048	-.026	-.441	50	47	199	.072	.062	-.323
40	155	-116	.019	-.038	-.201	40	404	-.173	.048	-.067	-.395	50	48	138	.023	.064	-.433
40	156	-121	.022	-.044	-.245	40	405	-.180	.044	-.009	-.524	50	49	171	.038	.014	-.357
40	157	-106	.017	-.052	-.188	40	406	-.094	.032	-.079	-.246	50	50	151	.057	.092	-.409
40	158	-133	.030	-.038	-.381	50	2	-.171	.031	-.032	-.322	50	51	151	.029	.064	-.298
40	159	-122	.025	-.049	-.250	50	3	-.128	.031	-.005	-.338	50	52	162	.032	.050	-.322
40	160	-123	.025	-.042	-.252	50	4	-.145	.047	-.143	-.579	50	53	122	.032	.047	-.276
40	161	-112	.021	-.045	-.230	50	5	-.173	.049	-.035	-.402	50	54	202	.026	.026	-.322
40	162	-150	.030	-.020	-.330	50	6	-.111	.029	-.019	-.301	50	55	122	.024	.015	-.246
40	163	-131	.026	-.011	-.248	50	7	-.152	.040	-.017	-.363	50	56	202	.024	.122	-.361
40	164	-123	.024	-.040	-.289	50	8	-.133	.040	-.036	-.322	50	57	101	.024	.122	-.370
40	165	-114	.020	-.045	-.206	50	9	-.144	.031	-.019	-.341	50	58	228	.034	.122	-.375
40	166	-132	.024	-.056	-.265	50	10	-.220	.032	-.121	-.356	50	59	103	.030	.123	-.329
40	167	-236	.026	-.149	-.342	50	11	-.231	.054	-.089	-.608	50	60	104	.025	.125	-.301
40	201	-.097	.073	-.259	-.476	50	12	-.193	.032	-.097	-.349	50	61	105	.025	.025	-.300
40	202	-.058	.068	-.274	-.324	50	13	-.154	.035	-.037	-.391	50	62	106	.195	.025	-.300
40	203	-.028	.053	-.357	-.210	50	14	-.206	.045	-.002	-.497	50	63	107	.185	.025	-.300
40	204	-.200	.044	-.026	-.445	50	15	-.188	.030	-.098	-.315	50	64	108	.191	.027	-.300
40	205	-.144	.059	-.058	-.453	50	16	-.206	.042	-.094	-.400	50	65	201	.028	.141	-.340
40	206	-.209	.035	-.129	-.437	50	17	-.195	.021	-.084	-.645	50	66	110	.031	.122	-.310
40	207	-.132	.041	-.032	-.337	50	18	-.145	.048	-.024	-.246	50	67	111	.032	.122	-.359
40	208	-.123	.051	-.095	-.325	50	19	-.203	.040	-.036	-.585	50	68	112	.032	.121	-.304
40	209	-.119	.048	-.064	-.299	50	20	-.099	.022	-.057	-.218	50	69	113	.026	.116	-.317
40	210	-.194	.032	-.102	-.430	50	21	-.130	.038	-.043	-.392	50	70	114	.030	.069	-.314
40	211	-.165	.025	-.096	-.289	50	22	-.183	.038	-.026	-.265	50	71	115	.024	.118	-.292
40	212	-.166	.035	-.004	-.301	50	23	-.152	.027	-.038	-.347	50	72	116	.024	.118	-.294
40	213	-.176	.030	-.076	-.222	50	24	-.150	.036	-.026	-.373	50	73	117	.024	.118	-.294
40	214	-.165	.025	-.086	-.271	50	25	-.176	.042	-.013	-.443	50	74	118	.029	.062	-.290
40	301	-.151	.037	-.058	-.364	50	26	-.184	.026	-.057	-.322	50	75	119	.028	.077	-.260
40	302	-.194	.061	-.016	-.783	50	27	-.155	.026	-.076	-.237	50	76	120	.026	.020	-.231
40	303	-.129	.034	-.006	-.302	50	28	-.131	.021	-.045	-.424	50	77	121	.026	.077	-.222
40	304	-.153	.043	-.031	-.455	50	29	-.142	.021	-.076	-.237	50	78	122	.026	.061	-.231
40	305	-.119	.025	-.030	-.239	50	30	-.129	.043	-.045	-.424	50	79	123	.020	.066	-.222
40	306	-.150	.032	-.034	-.303	50						50					

## APPENDIX A -- PRESSURE DATA

## CONFIGURATION A: HILLTON DOLLAR FIER, ATLANTIC CITY

		CPMEAN	CPRMS	CPMAX	CPMIN	MD		CPMEAN	CPRMS	CPMAX	CPMIN	MD		CPMEAN	CPRMS	CPMAX	CPMIN
500	124	.137	.024	.058	.263	50	207	.213	.046	.028	.445	50	179	.274	.053	.000	.000
500	125	.132	.018	.077	.214	50	208	.180	.047	.011	.348	50	19	.184	.026	.079	.279
500	126	.136	.021	.074	.216	50	209	.164	.036	.015	.348	50	20	.184	.026	.097	.295
500	127	.132	.020	.064	.207	50	210	.213	.026	.119	.321	50	21	.264	.050	.078	.364
500	128	.134	.022	.056	.217	50	211	.192	.046	.105	.321	50	22	.265	.036	.078	.364
500	129	.138	.015	.083	.201	50	212	.204	.033	.112	.327	50	23	.215	.036	.063	.325
500	130	.128	.022	.050	.212	50	213	.183	.026	.106	.327	50	24	.225	.044	.014	.570
500	131	.145	.022	.076	.237	50	214	.162	.045	.022	.437	50	25	.227	.065	.063	.467
500	132	.144	.020	.081	.222	50	203	.186	.054	.029	.672	50	26	.207	.044	.113	.462
500	133	.144	.016	.087	.212	50	204	.163	.032	.015	.338	50	27	.203	.050	.148	.612
500	134	.164	.034	.057	.320	50	205	.189	.071	.077	.557	50	28	.204	.024	.122	.300
500	135	.140	.023	.061	.232	50	206	.147	.024	.023	.295	50	29	.204	.056	.097	.583
500	136	.139	.019	.073	.207	50	207	.154	.042	.012	.342	50	30	.204	.079	.016	.662
500	137	.149	.018	.081	.231	50	208	.152	.023	.012	.342	50	31	.204	.063	.113	.459
500	138	.158	.024	.069	.314	50	209	.143	.023	.058	.246	50	32	.203	.073	.071	.750
500	139	.150	.021	.076	.241	50	210	.150	.025	.062	.266	50	33	.203	.073	.058	.701
500	140	.154	.021	.096	.232	50	211	.172	.034	.030	.331	50	34	.203	.061	.097	.579
500	141	.146	.022	.069	.248	50	212	.192	.044	.051	.321	50	35	.203	.030	.109	.396
500	142	.150	.021	.084	.235	50	213	.137	.031	.025	.321	50	36	.203	.021	.042	.773
500	143	.148	.019	.087	.220	50	214	.140	.025	.056	.231	50	37	.203	.030	.060	.615
500	144	.163	.028	.065	.332	50	215	.160	.031	.053	.301	50	38	.203	.034	.117	.383
500	145	.154	.029	.069	.256	50	216	.176	.036	.038	.308	50	39	.203	.034	.034	.636
500	146	.162	.026	.057	.278	50	217	.157	.023	.090	.253	50	40	.203	.074	.053	.622
500	147	.156	.026	.047	.266	50	218	.122	.019	.063	.229	50	41	.202	.062	.047	.455
500	148	.155	.024	.063	.257	50	219	.119	.021	.053	.220	50	42	.202	.038	.115	.433
500	149	.148	.022	.054	.256	50	220	.116	.041	.025	.272	50	43	.202	.031	.107	.725
500	150	.149	.022	.067	.243	50	221	.174	.055	.013	.517	50	44	.202	.031	.002	.599
500	151	.142	.022	.051	.249	50	401	.155	.070	.178	.450	50	45	.202	.063	.067	.503
500	152	.145	.018	.088	.232	50	402	.122	.034	.142	.254	50	46	.202	.067	.049	.700
500	153	.138	.023	.062	.264	50	403	.154	.041	.002	.456	50	47	.202	.082	.021	.325
500	154	.144	.024	.069	.253	50	404	.162	.050	.005	.542	50	48	.202	.082	.025	.437
500	155	.139	.022	.066	.249	50	405	.194	.053	.046	.466	50	49	.202	.035	.013	.375
500	156	.142	.027	.044	.305	50	406	.215	.048	.047	.448	50	50	.176	.030	.017	.599
500	157	.153	.021	.087	.248	50	407	.167	.046	.043	.391	50	51	.176	.037	.037	.380
500	158	.162	.027	.080	.314	50	408	.244	.035	.010	.373	50	52	.188	.025	.154	.325
500	159	.157	.027	.072	.310	50	409	.196	.039	.014	.362	50	53	.204	.022	.124	.289
500	160	.156	.025	.077	.265	50	410	.290	.051	.137	.519	50	54	.204	.019	.092	.242
500	161	.156	.024	.054	.279	50	411	.255	.041	.078	.423	50	55	.193	.023	.088	.290
500	162	.163	.030	.059	.293	50	412	.181	.035	.085	.330	50	56	.153	.021	.092	.259
500	163	.149	.028	.040	.262	50	413	.222	.040	.032	.399	50	57	.153	.021	.147	.403
500	164	.169	.023	.088	.261	50	414	.241	.058	.009	.535	50	58	.188	.025	.153	.412
500	165	.163	.018	.100	.239	50	415	.203	.042	.002	.446	50	59	.203	.031	.153	.369
500	166	.159	.026	.082	.278	50	416	.230	.030	.143	.366	50	60	.203	.027	.123	.321
500	167	.193	.025	.127	.290	50	417	.250	.053	.087	.509	50	61	.203	.024	.143	.311
500	201	.149	.085	.122	.774	50	418	.217	.034	.072	.361	50	62	.203	.027	.143	.348
500	202	.118	.068	.334	.453	50	419	.251	.047	.124	.522	50	63	.106	.024	.234	.337
500	203	.050	.205	.248	60	420	.238	.049	.003	.432	50	64	.107	.026	.135	.122	
500	204	.203	.036	.080	.419	50	421	.029	.029	.104	.318	50	65	.109	.026	.218	.336
500	205	.236	.083	.045	.838	50	422	.296	.057	.086	.595	50	66	.109	.026	.135	.337
500	206	.234	.038	.130	.398	50	423	.8	.241	.058	.606	50	67	.107	.027	.147	.376

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
600	110	-237	.030	-.120	-.360	600	160	-.249	.026	-.163	-.369	70	4	-211	.030	-.078	-.331
600	111	-219	.028	-.123	-.333	600	161	-.255	.024	-.166	-.353	70	5	-218	.026	-.098	-.320
600	112	-219	.032	-.106	-.364	600	162	-.203	.030	-.192	-.414	70	6	-216	.030	-.113	-.351
600	113	-205	.024	-.122	-.359	600	163	-.250	.026	-.114	-.343	70	7	-293	.031	-.080	-.381
600	114	-208	.028	-.107	-.334	600	164	-.248	.020	-.186	-.334	70	8	-192	.031	-.004	-.459
600	115	-207	.026	-.124	-.319	600	165	-.233	.034	-.230	-.472	70	9	-198	.053	-.013	-.444
600	116	-200	.024	-.111	-.301	600	166	-.217	.022	-.133	-.302	70	10	-192	.033	-.095	-.357
600	117	-189	.024	-.111	-.291	600	167	-.275	.026	-.117	-.019	70	11	-204	.052	-.004	-.448
600	118	-290	.045	-.128	-.093	600	201	-.249	.083	-.151	-.600	70	12	-194	.035	-.049	-.353
600	119	-194	.028	-.082	-.203	600	203	-.167	.069	-.139	-.400	70	13	-290	.051	-.008	-.495
600	120	-197	.026	-.115	-.236	600	204	-.292	.041	-.119	-.935	70	14	-224	.023	-.078	-.340
600	121	-201	.021	-.150	-.236	600	205	-.369	.082	-.035	-.474	70	15	-193	.062	-.005	-.568
600	122	-258	.027	-.108	-.262	600	206	-.254	.047	-.261	.590	70	16	-302	.058	-.023	-.395
600	123	-194	.022	-.088	-.287	600	208	-.343	.050	-.150	-.649	70	17	-222	.023	-.084	-.272
600	124	-188	.029	-.115	-.280	600	209	-.222	.034	-.083	-.376	70	18	-315	.071	-.039	-.620
600	125	-189	.022	-.115	-.287	600	210	-.225	.029	-.141	-.385	70	19	-203	.060	-.025	-.551
600	126	-247	.026	-.077	-.277	600	211	-.249	.025	-.166	-.373	70	20	-206	.025	-.309	-.504
600	127	-175	.023	-.077	-.393	600	212	-.391	.061	-.215	.699	70	21	-271	.050	-.118	-.413
600	128	-191	.030	-.078	-.401	600	213	-.255	.038	-.088	-.449	70	22	-241	.031	-.147	-.432
600	129	-204	.019	-.148	-.380	600	214	-.243	.025	-.154	-.359	70	23	-230	.040	-.103	-.618
600	130	-246	.028	-.148	-.380	600	301	-.211	.060	-.044	.532	70	24	-300	.064	-.088	-.384
600	131	-203	.031	-.112	-.380	600	302	-.290	.041	-.114	-.545	70	25	-235	.038	-.423	-.333
600	132	-199	.025	-.099	-.284	600	303	-.247	.032	-.143	-.394	70	26	-228	.027	-.138	-.649
600	133	-215	.018	-.150	-.278	600	304	-.265	.080	-.049	-.838	70	27	-321	.049	-.185	-.316
600	134	-281	.044	-.114	-.303	600	305	-.244	.022	-.175	-.336	70	28	-323	.023	-.065	-.621
600	135	-200	.028	-.081	-.267	600	306	-.267	.032	-.150	-.437	70	29	-308	.059	-.078	-.781
600	136	-195	.023	-.086	-.267	600	307	-.188	.044	-.048	-.358	70	30	-361	.077	-.032	-.572
600	137	-219	.020	-.133	-.398	600	308	-.211	.033	-.084	-.354	70	31	-316	.067	-.083	-.674
600	138	-279	.027	-.170	-.398	600	309	-.230	.028	-.148	-.327	70	32	-300	.071	-.084	-.566
600	139	-207	.023	-.114	-.298	600	310	-.317	.037	-.210	-.474	70	33	-315	.061	-.073	-.540
600	140	-212	.021	-.132	-.322	600	311	-.301	.052	-.160	-.506	70	34	-296	.054	-.117	-.390
600	141	-224	.025	-.182	-.364	600	312	-.140	.053	-.099	-.293	70	35	-237	.032	-.007	-.667
600	142	-278	.025	-.182	-.364	600	313	-.215	.026	-.135	-.300	70	36	-377	.080	-.015	-.534
600	143	-210	.022	-.182	-.364	600	314	-.284	.032	-.171	-.394	70	37	-237	.057	-.177	-.510
600	144	-227	.036	-.149	-.413	600	315	-.277	.044	-.130	-.451	70	38	-393	.038	-.024	-.462
600	145	-229	.030	-.182	-.309	600	316	-.229	.023	-.160	-.331	70	39	-315	.073	-.022	-.676
600	146	-215	.028	-.119	-.332	600	317	-.160	.019	-.094	-.238	70	40	-316	.073	-.051	-.436
600	147	-215	.034	-.112	-.411	600	318	-.156	.021	-.087	-.237	70	41	-204	.058	-.133	-.360
600	148	-220	.032	-.126	-.402	600	319	-.123	.030	-.040	-.304	70	42	-223	.039	-.029	-.455
600	149	-229	.030	-.126	-.402	600	320	-.208	.048	-.054	-.510	70	43	-228	.083	-.047	-.715
600	150	-277	.030	-.114	-.356	600	321	-.196	.042	-.010	-.392	70	44	-302	.058	-.127	-.662
600	151	-210	.025	-.141	-.319	600	322	-.160	.019	-.044	-.238	70	45	-316	.081	-.081	-.488
600	152	-214	.025	-.182	-.363	600	323	-.156	.021	-.087	-.237	70	46	-208	.058	-.095	-.344
600	153	-274	.030	-.182	-.400	600	324	-.202	.003	-.007	-.626	70	47	-207	.035	-.035	-.352
600	154	-203	.027	-.099	-.380	600	325	-.005	.068	-.060	-.664	70	48	-178	.076	-.114	-.303
600	155	-207	.030	-.179	-.419	600	326	-.170	.026	-.023	-.314	70	49	-244	.026	-.063	-.418
600	156	-250	.021	-.203	-.419	600	327	-.132	.022	-.290	-.290	70	50	-198	.050	-.063	-.418
600	157	-230	.026	-.187	-.313	70	3	-.202	.003	-.007	-.626	70	51	-224	.050	-.063	-.418

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	
53	-281	.030	-.201	-.441	.70	146	-294	.033	-.200	-.445	.70	315	-316	.040	-.208	-.476	-.476	
54	-199	.022	-.125	-.290	.70	147	-224	.030	-.112	-.356	.70	316	-250	.027	-.171	-.368	-.368	
55	-218	.019	-.140	-.298	.70	148	-236	.037	-.130	-.458	.70	317	-113	.018	-.024	-.200	-.200	
56	-167	.031	-.087	-.253	.70	149	-243	.031	-.150	-.429	.70	318	-104	.023	-.019	-.222	-.222	
57	-173	.026	-.100	-.286	.70	150	-297	.032	-.195	-.331	.70	319	-208	.043	-.041	-.427	-.427	
101	-196	.022	-.121	-.279	.70	151	-218	.029	-.114	-.331	.70	401	-314	.082	-.041	-.689	-.689	
102	-281	.025	-.190	-.377	.70	152	-226	.025	-.163	-.331	.70	402	-206	.045	-.037	-.491	-.491	
103	-206	.023	-.131	-.297	.70	153	-225	.026	-.207	-.415	.70	403	-233	.048	-.036	-.621	-.621	
104	-205	.024	-.120	-.314	.70	154	-289	.028	-.149	-.325	.70	404	-242	.060	-.028	-.628	-.628	
105	-188	.022	-.116	-.279	.70	155	-223	.025	-.149	-.325	.70	405	-302	.070	-.010	-.581	-.581	
106	-250	.021	-.156	-.347	.70	156	-237	.027	-.152	-.376	.70	406	-34	.062	-.115	-.596	-.596	
107	-198	.021	-.124	-.290	.70	157	-279	.022	-.212	-.388	.80	1	-164	.043	-.102	-.303	-.303	
108	-194	.023	-.106	-.286	.70	158	-253	.031	-.264	-.497	.80	2	-182	.022	-.101	-.268	-.268	
109	-195	.032	-.072	-.391	.70	159	-285	.027	-.215	-.421	.80	3	-285	.030	-.192	-.436	-.436	
110	-257	.030	-.135	-.370	.70	160	-289	.029	-.208	-.397	.80	4	-192	.025	-.116	-.398	-.398	
111	-191	.022	-.105	-.271	.70	161	-276	.024	-.203	-.381	.80	5	-194	.026	-.103	-.368	-.368	
112	-192	.035	-.033	-.356	.70	162	-281	.031	-.186	-.424	.80	6	-184	.033	-.054	-.374	-.374	
113	-182	.036	-.077	-.371	.70	163	-200	.028	-.116	-.314	.80	7	-271	.039	-.094	-.345	-.345	
114	-247	.024	-.112	-.342	.70	164	-292	.033	-.191	-.439	.80	8	-301	.065	-.026	-.436	-.436	
115	-188	.029	-.056	-.306	.70	165	-275	.027	-.192	-.419	.80	9	-190	.063	-.202	-.509	-.509	
116	-188	.025	-.090	-.291	.70	166	-278	.039	-.285	-.621	.80	10	-181	.041	-.038	-.425	-.425	
117	-172	.026	-.070	-.227	.70	167	-197	.022	-.119	-.293	.80	11	-291	.068	-.035	-.395	-.395	
118	-353	.050	-.186	-.579	.70	201	-357	.139	.024	-.1	.056	.80	12	-179	.038	-.031	-.367	-.367
119	-182	.032	-.070	-.313	.70	202	-322	.081	-.009	-.641	.80	13	-297	.064	-.089	-.591	-.591	
120	-183	.027	-.097	-.293	.70	203	-229	.072	-.070	-.514	.80	14	-214	.050	-.080	-.462	-.462	
121	-184	.021	-.106	-.291	.70	204	-262	.052	-.065	-.545	.80	15	-265	.030	-.152	-.408	-.408	
122	-236	.024	-.141	-.335	.70	205	-303	.049	-.145	-.617	.80	16	-295	.059	-.019	-.560	-.560	
123	-178	.021	-.092	-.261	.70	206	-177	.027	-.097	-.314	.80	17	-228	.053	-.061	-.528	-.528	
124	-186	.030	-.028	-.317	.70	207	-281	.028	-.174	-.426	.80	18	-184	.021	-.098	-.263	-.263	
125	-201	.022	-.093	-.293	.70	208	-303	.030	-.200	-.422	.80	19	-398	.063	-.119	-.660	-.660	
126	-256	.025	-.113	-.365	.70	209	-214	.031	-.107	-.369	.80	20	-195	.057	-.028	-.473	-.473	
127	-188	.023	-.064	-.272	.70	210	-217	.025	-.130	-.315	.80	21	-207	.024	-.126	-.333	-.333	
128	-213	.027	-.115	-.356	.70	211	-222	.032	-.139	-.390	.80	22	-263	.046	-.112	-.539	-.539	
129	-216	.018	-.159	-.267	.70	212	-310	.037	-.182	-.507	.80	23	-302	.029	-.209	-.438	-.438	
130	-264	.026	-.182	-.369	.70	213	-235	.031	-.090	-.384	.80	24	-227	.038	-.120	-.564	-.564	
131	-220	.027	-.125	-.360	.70	214	-202	.022	-.134	-.278	.80	25	-229	.060	-.070	-.530	-.530	
132	-219	.024	-.145	-.313	.70	215	-136	.063	-.110	-.456	.80	26	-238	.034	-.133	-.409	-.409	
133	-221	.019	-.166	-.296	.70	216	-283	.031	-.184	-.420	.80	27	-239	.028	-.214	-.448	-.448	
134	-283	.037	-.154	-.502	.70	217	-306	.036	-.206	-.474	.80	28	-318	.041	-.193	-.576	-.576	
135	-210	.026	-.123	-.325	.70	218	-232	.063	-.038	-.691	.80	29	-231	.024	-.154	-.340	-.340	
136	-208	.021	-.108	-.291	.70	219	-263	.034	-.136	-.410	.80	30	-330	.057	-.119	-.594	-.594	
137	-222	.029	-.157	-.298	.70	220	-206	.042	-.037	-.360	.80	31	-425	.073	-.164	-.760	-.760	
138	-278	.025	-.205	-.374	.70	221	-214	.033	-.056	-.350	.80	32	-246	.065	-.054	-.555	-.555	
139	-212	.022	-.136	-.290	.70	222	-223	.024	-.152	-.315	.80	33	-285	.060	-.089	-.598	-.598	
140	-222	.021	-.162	-.315	.70	223	-321	.038	-.223	-.504	.80	34	-288	.051	-.062	-.457	-.457	
141	-245	.024	-.132	-.377	.70	224	-312	.044	-.191	-.525	.80	35	-238	.052	-.070	-.717	-.717	
142	-299	.027	-.175	-.426	.70	225	-667	.069	-.240	-.284	.80	36	-248	.062	-.153	-.414	-.414	
143	-229	.024	-.134	-.326	.70	226	-211	.024	-.135	-.304	.80	37	-345	.050	-.047	-.649	-.649	
144	-242	.040	-.117	-.482	.70	227	-214	.029	-.186	-.397	.80	38	-239	.062	-.096	-.467	-.467	
145	-247	.030	-.161	-.430	.70	228	-314	.029	-.186	-.397	.80	39	-	-	-	-	-	

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	
39	-	.333	.038	.207	.535	80	132	.213	.023	.135	.312	80	301	-	.097	.045	.189	.304
40	-	.402	.091	.038	.823	80	133	.215	.019	.148	.293	80	302	-	.288	.038	.134	.439
41	-	.291	.065	.068	.616	80	134	.278	.032	.152	.448	80	303	-	.365	.040	.256	.521
42	-	.178	.040	.001	.358	80	135	.213	.024	.132	.329	80	304	-	.182	.052	.044	.539
43	-	.337	.032	.222	.491	80	136	.205	.020	.148	.283	80	305	-	.297	.024	.227	.381
44	-	.237	.025	.141	.337	80	137	.221	.020	.157	.311	80	306	-	.251	.034	.102	.379
45	-	.298	.073	.117	.688	80	138	.278	.027	.200	.413	80	308	-	.222	.029	.096	.322
46	-	.286	.048	.133	.525	80	139	.213	.023	.139	.320	80	309	-	.207	.024	.130	.317
47	-	.192	.044	.017	.379	80	140	.228	.024	.119	.320	80	310	-	.306	.038	.152	.450
48	-	.141	.049	.080	.461	80	141	.263	.030	.157	.472	80	311	-	.286	.044	.165	.505
49	-	.298	.030	.189	.402	80	142	.304	.030	.180	.409	80	312	-	.012	.075	.296	.233
50	-	.228	.030	.142	.358	80	143	.236	.025	.126	.342	80	313	-	.168	.025	.062	.269
51	-	.225	.030	.148	.371	80	144	.249	.040	.119	.471	80	314	-	.258	.031	.122	.379
52	-	.222	.033	.087	.407	80	145	.252	.029	.168	.425	80	315	-	.299	.045	.190	.465
53	-	.317	.031	.236	.428	80	146	.297	.032	.189	.452	80	316	-	.264	.032	.167	.371
54	-	.178	.022	.087	.227	80	147	.236	.029	.130	.362	80	317	-	.056	.021	.063	.127
55	-	.240	.021	.132	.316	80	148	.237	.030	.135	.360	80	318	-	.156	.019	.096	.218
56	-	.166	.039	.043	.351	80	149	.244	.024	.163	.337	80	319	-	.080	.024	.012	.164
57	-	.188	.031	.096	.340	80	150	.300	.029	.207	.439	80	320	-	.205	.038	.012	.387
101	-	.181	.023	.085	.305	80	151	.227	.026	.130	.318	80	401	-	.304	.066	.071	.640
102	-	.278	.026	.179	.401	80	152	.241	.021	.176	.344	80	402	-	.203	.043	.079	.397
103	-	.186	.026	.106	.337	80	153	.241	.020	.190	.350	80	403	-	.235	.047	.003	.457
104	-	.165	.028	.096	.236	80	154	.331	.029	.228	.443	80	404	-	.234	.054	.000	.493
105	-	.169	.021	.096	.351	80	155	.251	.024	.172	.357	80	405	-	.271	.071	.079	.675
106	-	.239	.025	.167	.351	80	156	.252	.027	.159	.377	80	406	-	.266	.056	.074	.495
107	-	.175	.021	.104	.240	80	157	.290	.024	.212	.392	80	1	-	.129	.052	.134	.314
108	-	.175	.026	.089	.323	80	158	.403	.036	.287	.590	90	2	-	.161	.021	.083	.263
109	-	.176	.032	.066	.323	80	159	.329	.031	.238	.476	90	3	-	.167	.027	.052	.260
110	-	.265	.035	.142	.438	80	160	.323	.032	.235	.469	90	4	-	.158	.024	.074	.241
111	-	.174	.024	.085	.267	80	161	.283	.024	.210	.381	90	5	-	.170	.032	.020	.352
112	-	.179	.035	.047	.326	80	162	.261	.031	.168	.400	90	6	-	.176	.048	.033	.364
113	-	.179	.038	.024	.504	80	163	.180	.028	.070	.287	90	7	-	.164	.046	.037	.451
114	-	.257	.023	.149	.344	80	164	.341	.036	.231	.506	90	8	-	.272	.059	.024	.610
115	-	.171	.026	.066	.278	80	165	.311	.032	.229	.434	90	9	-	.178	.059	.053	.432
116	-	.171	.023	.091	.256	80	166	.423	.051	.301	.652	90	10	-	.178	.047	.003	.395
117	-	.168	.027	.075	.295	80	167	.187	.025	.070	.286	90	11	-	.200	.058	.014	.501
118	-	.382	.037	.184	.643	80	201	.376	.136	.069	.207	90	12	-	.154	.033	.024	.370
119	-	.181	.031	.066	.327	80	202	.331	.072	.059	.696	90	13	-	.273	.064	.067	.579
120	-	.187	.026	.100	.292	80	203	.272	.066	.092	.529	90	14	-	.205	.043	.038	.400
121	-	.185	.021	.108	.267	80	204	.266	.067	.017	.593	90	15	-	.174	.025	.068	.279
122	-	.239	.024	.132	.338	80	205	.231	.037	.104	.428	90	16	-	.270	.049	.106	.498
123	-	.184	.020	.117	.267	80	206	.143	.029	.035	.312	90	17	-	.224	.035	.070	.570
124	-	.194	.028	.078	.419	80	207	.221	.026	.150	.331	90	18	-	.184	.019	.115	.265
125	-	.205	.020	.137	.287	80	208	.263	.030	.152	.388	90	19	-	.279	.051	.088	.580
126	-	.258	.023	.182	.356	80	209	.204	.037	.097	.397	90	20	-	.172	.049	.022	.406
127	-	.195	.021	.117	.273	80	210	.192	.029	.080	.318	90	21	-	.190	.022	.094	.273
128	-	.211	.025	.128	.355	80	211	.195	.033	.049	.350	90	22	-	.246	.038	.124	.438
129	-	.211	.017	.163	.287	80	212	.262	.031	.168	.413	90	23	-	.209	.025	.097	.313
130	-	.262	.023	.187	.345	80	213	.201	.029	.196	.329	90	24	-	.217	.030	.113	.370
131	-	.212	.023	.139	.311	80	214	.180	.023	.076	.272	90						

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
90	25	- .264	.046	- .099	- .493	90	118	- .276	.049	- .115	- .467	90	201	- .326	.110	- .011	- .985
90	26	- .240	.034	- .083	- .409	90	119	- .172	.028	- .074	- .310	90	202	- .293	.061	- .047	- .578
90	27	- .227	.026	- .145	- .338	90	120	- .179	.022	- .099	- .272	90	203	- .279	.056	- .024	- .497
90	28	- .295	.041	- .184	- .488	90	121	- .177	.018	- .116	- .252	90	204	- .255	.067	- .044	- .724
90	29	- .236	.023	- .151	- .368	90	122	- .219	.021	- .134	- .293	90	205	- .173	.031	- .074	- .324
90	30	- .289	.049	- .126	- .502	90	123	- .171	.018	- .109	- .241	90	206	- .174	.020	- .086	- .248
90	31	- .310	.057	- .066	- .617	90	124	- .183	.025	- .103	- .285	90	207	- .172	.020	- .082	- .324
90	32	- .259	.060	- .015	- .516	90	125	- .189	.018	- .159	- .317	90	208	- .219	.027	- .044	- .471
90	33	- .281	.053	- .092	- .669	90	126	- .236	.021	- .112	- .267	90	209	- .178	.041	- .027	- .331
90	34	- .250	.042	- .035	- .470	90	127	- .182	.020	- .112	- .267	90	210	- .163	.033	- .029	- .316
90	35	- .224	.046	- .065	- .368	90	128	- .197	.023	- .108	- .311	90	211	- .160	.029	- .029	- .316
90	36	- .237	.033	- .138	- .379	90	129	- .195	.017	- .138	- .270	90	212	- .221	.027	- .130	- .331
90	37	- .294	.051	- .090	- .522	90	130	- .244	.021	- .161	- .345	90	213	- .171	.026	- .085	- .278
90	38	- .205	.040	- .047	- .382	90	131	- .201	.023	- .118	- .309	90	214	- .147	.023	- .069	- .238
90	39	- .238	.036	- .161	- .413	90	132	- .195	.022	- .121	- .298	90	301	- .091	.033	- .094	- .208
90	40	- .382	.097	- .065	- .909	90	133	- .194	.018	- .134	- .270	90	302	- .276	.044	- .119	- .437
90	41	- .218	.063	- .063	- .568	90	134	- .259	.026	- .166	- .381	90	303	- .368	.044	- .254	- .587
90	42	- .167	.029	- .013	- .372	90	125	- .209	.023	- .127	- .298	90	304	- .105	.053	- .226	- .368
90	43	- .243	.022	- .176	- .349	90	136	- .191	.020	- .138	- .277	90	305	- .292	.029	- .197	- .423
90	44	- .237	.021	- .180	- .319	90	137	- .220	.019	- .158	- .300	90	306	- .213	.048	- .010	- .446
90	45	- .297	.049	- .065	- .477	90	138	- .264	.026	- .155	- .367	90	307	- .147	.033	- .015	- .271
90	46	- .280	.039	- .161	- .443	90	139	- .211	.023	- .129	- .306	90	308	- .229	.026	- .064	- .337
90	47	- .108	.035	- .089	- .258	90	140	- .226	.022	- .153	- .296	90	309	- .155	.031	- .033	- .272
90	48	- .125	.039	- .033	- .292	90	141	- .302	.044	- .186	- .572	90	310	- .243	.045	- .064	- .437
90	49	- .294	.030	- .214	- .416	90	142	- .304	.031	- .211	- .439	90	311	- .216	.047	- .063	- .427
90	50	- .233	.030	- .129	- .402	90	143	- .238	.027	- .155	- .381	90	312	- .045	.078	- .430	- .201
90	51	- .237	.034	- .158	- .535	90	144	- .232	.031	- .112	- .368	90	313	- .134	.033	- .005	- .243
90	52	- .175	.034	- .033	- .285	90	145	- .235	.023	- .143	- .340	90	314	- .200	.037	- .053	- .326
90	53	- .309	.032	- .219	- .452	90	146	- .273	.026	- .173	- .367	90	315	- .244	.049	- .107	- .475
90	54	- .142	.025	- .001	- .238	90	147	- .221	.024	- .136	- .315	90	316	- .243	.037	- .142	- .393
90	55	- .146	.024	- .052	- .233	90	148	- .232	.025	- .147	- .322	90	317	- .019	.029	- .140	- .670
90	56	- .151	.037	- .042	- .280	90	149	- .243	.020	- .191	- .318	90	318	- .141	.016	- .076	- .212
90	57	- .180	.031	- .076	- .321	90	150	- .295	.023	- .216	- .394	90	319	- .051	.022	- .028	- .115
90	101	- .163	.027	- .065	- .281	90	151	- .231	.023	- .142	- .324	90	320	- .148	.044	- .113	- .301
90	102	- .166	.023	- .083	- .254	90	152	- .242	.019	- .181	- .324	90	401	- .272	.053	- .110	- .463
90	103	- .153	.028	- .033	- .271	90	153	- .258	.022	- .186	- .371	90	402	- .183	.037	- .081	- .382
90	104	- .151	.031	- .058	- .303	90	154	- .332	.031	- .229	- .455	90	403	- .204	.066	- .187	- .407
90	105	- .144	.023	- .056	- .231	90	155	- .251	.027	- .149	- .346	90	404	- .198	.061	- .189	- .426
90	106	- .148	.022	- .070	- .233	90	156	- .246	.028	- .160	- .350	90	405	- .232	.057	- .116	- .577
90	107	- .142	.022	- .068	- .221	90	157	- .273	.025	- .208	- .359	90	406	- .99	.041	- .043	- .426
90	108	- .144	.026	- .013	- .200	90	158	- .400	.038	- .274	- .541	100	1	- .112	.052	- .124	- .344
90	109	- .153	.030	- .023	- .309	90	159	- .331	.031	- .232	- .446	100	2	- .134	.022	- .052	- .215
90	110	- .155	.029	- .009	- .354	90	160	- .328	.034	- .227	- .431	100	3	- .133	.027	- .020	- .234
90	111	- .143	.022	- .038	- .235	90	161	- .264	.026	- .182	- .359	100	4	- .122	.024	- .033	- .216
90	112	- .161	.033	- .038	- .307	90	162	- .198	.037	- .012	- .335	100	5	- .136	.033	- .005	- .306
90	113	- .170	.033	- .051	- .375	90	163	- .123	.036	- .070	- .252	100	6	- .166	.056	- .061	- .306
90	114	- .158	.021	- .079	- .254	90	164	- .350	.040	- .238	- .533	100	7	- .144	.045	- .063	- .406
90	115	- .155	.024	- .052	- .262	90	165	- .329	.038	- .237	- .482	100	8	- .243	.048	- .027	- .306
90	116	- .154	.022	- .063	- .242	90	166	- .443	.062	- .288	- .758	100	9	- .164	.052	- .117	- .406
90	117	- .163	.026	- .070	- .272	90	167	- .158	.023	- .053	- .235	100	10	- .178	.043	- .024	- .216

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
100	11	- .227	.060	- .029	- .536	100	104	- .124	.026	- .020	- .241	100	154	- .329	.037	- .222	- .486
100	12	- .167	.029	- .054	- .301	100	105	- .124	.020	- .027	- .194	100	155	- .245	.031	- .139	- .365
100	13	- .263	.064	- .066	- .624	100	106	- .136	.021	- .041	- .202	100	156	- .234	.030	- .129	- .354
100	14	- .188	.040	- .029	- .341	100	107	- .117	.026	- .022	- .190	100	157	- .267	.024	- .190	- .355
100	15	- .183	.023	- .108	- .262	100	108	- .124	.025	- .015	- .225	100	158	- .396	.043	- .283	- .588
100	16	- .246	.039	- .130	- .453	100	109	- .156	.030	- .029	- .268	100	159	- .330	.035	- .232	- .451
100	17	- .233	.052	- .088	- .485	100	110	- .154	.027	- .048	- .248	100	160	- .324	.032	- .242	- .455
100	18	- .180	.018	- .114	- .249	100	111	- .131	.020	- .054	- .197	100	161	- .256	.025	- .183	- .344
100	19	- .245	.039	- .122	- .423	100	112	- .164	.030	- .047	- .275	100	162	- .131	.049	- .074	- .274
100	20	- .155	.036	- .008	- .301	100	113	- .183	.033	- .079	- .323	100	163	- .067	.045	- .155	- .208
100	21	- .184	.022	- .120	- .294	100	114	- .159	.020	- .092	- .227	100	164	- .372	.047	- .249	- .554
100	22	- .223	.034	- .130	- .371	100	115	- .155	.023	- .052	- .232	100	165	- .331	.041	- .221	- .488
100	23	- .211	.023	- .140	- .306	100	116	- .149	.022	- .077	- .228	100	166	- .464	.071	- .286	- .832
100	24	- .234	.033	- .144	- .391	100	117	- .167	.024	- .072	- .268	100	167	- .138	.019	- .072	- .200
100	25	- .243	.030	- .143	- .353	100	118	- .258	.040	- .117	- .442	100	201	- .280	.083	- .060	- .867
100	26	- .224	.033	- .102	- .357	100	119	- .172	.024	- .086	- .269	100	202	- .256	.046	- .111	- .457
100	27	- .241	.027	- .140	- .350	100	120	- .183	.022	- .089	- .264	100	203	- .252	.047	- .086	- .490
100	28	- .258	.034	- .169	- .402	100	121	- .174	.018	- .104	- .239	100	204	- .271	.077	- .051	- .629
100	29	- .241	.028	- .159	- .378	100	122	- .213	.022	- .131	- .292	100	205	- .146	.033	- .094	- .394
100	30	- .266	.046	- .063	- .474	100	123	- .169	.018	- .099	- .228	100	206	- .157	.037	- .039	- .447
100	31	- .288	.033	- .057	- .529	100	124	- .183	.024	- .098	- .269	100	207	- .145	.021	- .064	- .254
100	32	- .288	.075	- .031	- .906	100	125	- .178	.018	- .126	- .241	100	208	- .168	.028	- .076	- .299
100	33	- .306	.070	- .102	- .718	100	126	- .227	.021	- .165	- .299	100	209	- .162	.052	- .004	- .422
100	34	- .200	.047	- .077	- .465	100	127	- .178	.021	- .108	- .245	100	210	- .134	.030	- .010	- .240
100	35	- .158	.059	- .058	- .460	100	128	- .191	.021	- .113	- .271	100	211	- .151	.027	- .029	- .227
100	36	- .233	.035	- .123	- .389	100	129	- .180	.015	- .135	- .227	100	212	- .192	.028	- .049	- .338
100	37	- .217	.051	- .025	- .415	100	130	- .237	.019	- .170	- .302	100	213	- .143	.026	- .018	- .228
100	38	- .167	.027	- .068	- .304	100	131	- .194	.020	- .130	- .268	100	214	- .123	.021	- .036	- .190
100	39	- .232	.024	- .151	- .331	100	132	- .189	.026	- .093	- .267	100	301	- .622	.050	- .194	- .183
100	40	- .338	.097	- .046	- .718	100	133	- .184	.017	- .115	- .252	100	302	- .256	.053	- .010	- .484
100	41	- .142	.036	- .013	- .362	100	134	- .268	.028	- .167	- .399	100	303	- .374	.050	- .208	- .364
100	42	- .171	.027	- .070	- .281	100	135	- .205	.022	- .137	- .330	100	304	- .144	.076	- .336	- .253
100	43	- .243	.024	- .165	- .336	100	136	- .188	.019	- .113	- .262	100	305	- .259	.033	- .159	- .393
100	44	- .233	.024	- .158	- .329	100	137	- .222	.020	- .150	- .307	100	306	- .128	.064	- .211	- .343
100	45	- .169	.027	- .059	- .321	100	138	- .252	.029	- .069	- .363	100	307	- .077	.043	- .084	- .219
100	46	- .260	.034	- .160	- .415	100	139	- .213	.026	- .119	- .316	100	308	- .218	.028	- .113	- .310
100	47	- .086	.040	- .097	- .216	100	140	- .223	.023	- .130	- .313	100	309	- .788	.041	- .125	- .210
100	48	- .080	.041	- .093	- .227	100	141	- .343	.066	- .203	- .627	100	310	- .155	.052	- .063	- .379
100	49	- .296	.037	- .186	- .437	100	142	- .215	.037	- .192	- .509	100	311	- .125	.056	- .091	- .380
100	50	- .245	.036	- .123	- .389	100	143	- .234	.032	- .130	- .389	100	312	- .996	.089	- .450	- .199
100	51	- .275	.059	- .148	- .717	100	144	- .216	.027	- .126	- .370	100	313	- .633	.040	- .112	- .227
100	52	- .115	.039	- .022	- .273	100	145	- .220	.021	- .164	- .300	100	314	- .127	.045	- .065	- .286
100	53	- .285	.031	- .182	- .421	100	146	- .259	.023	- .165	- .347	100	315	- .171	.056	- .005	- .389
100	54	- .085	.036	- .042	- .180	100	147	- .213	.022	- .141	- .299	100	316	- .205	.046	- .041	- .381
100	55	- .132	.029	- .016	- .248	100	148	- .218	.022	- .142	- .310	100	317	- .027	.043	- .214	- .099
100	56	- .108	.038	- .029	- .276	100	149	- .227	.019	- .155	- .302	100	318	- .136	.016	- .074	- .200
100	57	- .169	.037	- .020	- .346	100	150	- .282	.024	- .183	- .384	100	319	- .027	.024	- .074	- .101
100	101	- .136	.027	- .038	- .270	100	151	- .217	.023	- .115	- .296	100	320	- .091	.058	- .205	- .369
100	102	- .139	.023	- .052	- .202	100	152	- .243	.021	- .186	- .326	100	401	- .240	.047	- .025	- .507
100	103	- .127	.027	- .006	- .262	100	153	- .252	.025	- .183	- .349	100	402	- .230	.029	- .146	- .435

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
100	403	-154	.090	.217	-.500	110	47	-047	.045	.174	-.185	110	140	-213	.029	125	209
100	404	-102	.089	.227	-.357	110	48	-051	.043	.190	-.258	110	141	-367	.072	184	706
100	405	-168	.073	.253	-.449	110	49	-274	.036	-.152	-.410	110	142	-329	.049	140	574
100	406	-224	.051	.070	-.435	110	50	-263	.050	-.111	-.534	110	143	-199	.040	107	3376
110	1	-103	.049	.128	-.211	110	51	-368	.106	-.150	-.802	110	144	-176	.029	120	301
110	2	-168	.023	-.032	-.191	110	52	-044	.046	.202	-.178	110	145	-181	.021	120	279
110	3	-103	.028	-.008	-.225	110	53	-249	.034	-.145	-.383	110	146	-224	.025	138	350
110	4	-090	.024	-.004	-.185	110	54	-036	.047	.172	-.212	110	147	-189	.024	113	303
110	5	-107	.029	-.037	-.219	110	55	-121	.034	.090	-.274	110	148	-188	.025	120	295
110	6	-150	.051	.055	-.419	110	56	-074	.041	.118	-.300	110	149	-194	.021	120	301
110	7	-126	.038	.066	-.311	110	57	-150	.039	-.062	-.243	110	150	-250	.038	140	405
110	8	-209	.041	-.018	-.377	110	58	-114	.025	.017	-.237	110	151	-187	.027	147	316
110	9	-162	.049	.051	-.424	110	59	-109	.024	.036	-.189	110	152	-224	.026	140	341
110	10	-185	.046	-.020	-.443	110	60	-104	.026	.029	-.176	110	153	-231	.028	144	343
110	11	-263	.063	-.030	-.541	110	61	-105	.025	-.023	-.200	110	154	-297	.042	170	482
110	12	-157	.026	-.046	-.281	110	62	-107	.021	-.029	-.186	110	155	-217	.035	105	352
110	13	-269	.077	-.057	-.669	110	63	-118	.021	-.035	-.187	110	156	-214	.033	105	343
110	14	-160	.036	-.013	-.284	110	64	-107	.068	.021	-.15	110	157	-257	.027	177	345
110	15	-169	.024	-.084	-.264	110	65	-104	.028	.007	-.200	110	158	-376	.046	266	669
110	16	-176	.029	-.087	-.311	110	66	-109	.032	-.041	-.247	110	159	-311	.036	218	443
110	17	-234	.057	-.076	-.567	110	67	-148	.027	-.032	-.246	110	160	-318	.036	220	451
110	18	-163	.019	-.106	-.270	110	68	-114	.022	-.032	-.211	110	161	-246	.027	171	343
110	19	-206	.035	-.056	-.393	110	69	-112	.036	-.059	-.288	110	162	-031	.058	218	218
110	20	-128	.027	-.008	-.246	110	70	-190	.035	-.078	-.342	110	163	-013	.054	263	158
110	21	-165	.023	-.078	-.281	110	71	-114	.150	.020	-.086	110	164	-359	.056	213	586
110	22	-211	.036	-.113	-.450	110	72	-115	.140	.023	-.064	110	165	-306	.047	206	544
110	23	-263	.025	-.119	-.342	110	73	-116	.137	.023	-.064	110	166	-446	.080	261	822
110	24	-240	.041	-.125	-.423	110	74	-117	.158	.023	-.060	110	167	-122	.019	058	188
110	25	-210	.028	-.116	-.413	110	75	-118	.234	.037	-.098	110	201	-225	.056	031	586
110	26	-190	.032	-.050	-.303	110	76	-119	.152	.024	-.076	110	202	-215	.036	063	412
110	27	-246	.033	-.135	-.419	110	77	-120	.159	.020	-.072	110	203	-214	.036	080	396
110	28	-218	.030	-.115	-.391	110	78	-121	.150	.017	-.084	110	204	-319	.092	056	697
110	29	-238	.034	-.115	-.396	110	79	-122	.190	.022	-.101	110	205	-126	.038	000	314
110	30	-219	.051	-.024	-.405	110	80	-123	.143	.018	-.078	110	206	-134	.032	016	301
110	31	-277	.076	-.016	-.674	110	81	-124	.158	.024	-.083	110	207	-123	.025	038	235
110	32	-295	.082	-.041	-.745	110	82	-125	.149	.018	-.084	110	208	-147	.027	035	241
110	33	-328	.090	-.086	-.745	110	83	-126	.199	.021	-.126	110	209	-117	.036	040	312
110	34	-105	.071	.204	-.450	110	84	-127	.153	.020	-.087	110	210	-116	.029	027	211
110	35	-672	.057	-.113	-.314	110	85	-128	.166	.025	-.079	110	211	-143	.028	040	241
110	36	-222	.047	-.071	-.489	110	86	-129	.148	.019	-.084	110	212	-158	.032	042	277
110	37	-122	.047	-.026	-.325	110	87	-130	.214	.022	-.140	110	213	-165	.027	002	198
110	38	-130	.025	-.020	-.228	110	88	-131	.173	.024	-.073	110	214	-091	.022	015	167
110	39	-198	.025	-.126	-.295	110	89	-132	.168	.024	-.083	110	301	-010	.063	320	140
110	40	-266	.075	-.046	-.701	110	90	-133	.158	.021	-.091	110	302	-197	.076	227	586
110	41	-110	.026	-.024	-.256	110	91	-134	.268	.037	-.149	110	303	-350	.052	178	544
110	42	-156	.030	-.055	-.284	110	92	-135	.180	.026	-.109	110	304	-090	108	636	1230
110	43	-226	.025	-.154	-.354	110	93	-136	.165	.021	-.101	110	305	-205	.032	089	222
110	44	-217	.029	-.127	-.349	110	94	-137	.198	.024	-.115	110	306	-024	.085	499	158
110	45	-148	.019	-.078	-.246	110	95	-138	.207	.036	-.054	110	307	-001	.050	227	290
110	46	-218	.031	-.134	-.377	110	96	-139	.188	.033	-.089	110	308	-186	.043	043	290

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
110	309	.009	.048	.234	-.140	120	332	-.290	.075	-.034	-.684	120	126	-.106	.021	.071	-.031
110	310	-.059	.058	.211	-.300	120	334	-.062	.066	.261	-.318	120	127	-.114	.021	.045	-.030
110	311	-.023	.065	.267	-.213	120	335	-.046	.042	.114	-.245	120	128	-.100	.020	.030	-.020
110	312	.123	.092	.567	-.120	120	337	-.051	.034	.047	-.020	120	129	-.180	.021	.030	-.020
110	313	.012	.047	.205	-.120	120	338	-.053	.027	.025	-.020	120	131	-.140	.020	.030	-.020
110	314	-.046	.053	.179	-.204	120	339	-.168	.047	.034	-.093	120	132	-.130	.020	.030	-.020
110	315	-.057	.063	.172	-.307	120	340	-.166	.025	.077	-.020	120	133	-.125	.024	.042	-.030
110	316	.122	.053	.093	-.332	120	341	-.195	.048	.041	-.004	120	134	-.267	.044	.062	-.076
110	317	.109	.058	.460	-.018	120	342	-.123	.022	.022	-.011	120	135	-.184	.020	.051	-.059
110	318	-.111	.018	-.042	-.176	120	343	-.204	.029	.113	-.339	120	136	-.166	.020	.044	-.031
110	319	-.000	.026	.115	-.088	120	344	-.189	.035	.092	-.334	120	137	-.156	.029	.036	-.030
110	320	.052	.074	-.020	-.370	120	345	-.115	.019	.043	-.179	120	138	-.151	.033	.046	-.030
120	401	-.173	.042	-.020	-.370	120	346	-.165	.020	.086	-.301	120	139	-.184	.033	.057	-.030
120	402	-.191	.023	-.118	-.306	120	347	-.029	.060	.213	-.256	120	140	-.351	.054	.093	-.030
120	403	.169	.100	.317	-.526	120	348	-.017	.086	.471	-.269	120	141	-.287	.054	.093	-.030
120	404	-.005	.084	.351	-.326	120	349	-.226	.039	.110	-.380	120	142	-.144	.036	.028	-.020
120	405	-.047	.106	.381	-.346	120	350	-.295	.070	.128	-.627	120	143	-.131	.031	.028	-.020
120	406	.121	.082	.240	-.376	120	351	-.469	.129	.143	-.109	120	144	-.135	.020	.074	-.074
120	407	-.085	.036	.084	-.248	120	352	-.469	.068	.329	-.413	120	145	-.156	.026	.028	-.061
120	408	-.085	.024	.006	-.198	120	353	-.207	.039	.041	-.396	120	146	-.148	.031	.028	-.020
120	409	-.074	.026	.038	-.205	120	354	-.040	.060	.132	-.285	120	147	-.148	.025	.028	-.064
120	410	-.057	.023	.036	-.157	120	355	-.104	.043	.095	-.292	120	148	-.155	.034	.034	-.018
120	411	.076	.027	.042	-.237	120	356	-.031	.048	.157	-.234	120	149	-.185	.032	.034	-.018
120	412	.123	.036	.118	-.322	120	357	-.110	.044	.081	-.479	120	150	-.142	.034	.034	-.018
120	413	.101	.039	.159	-.219	120	358	-.098	.022	.020	-.182	120	151	-.189	.032	.032	-.018
120	414	.181	.035	-.004	-.346	120	359	-.087	.021	.009	-.164	120	152	-.208	.047	.050	-.018
120	415	.138	.047	-.155	-.364	120	360	-.076	.023	.006	-.166	120	153	-.246	.047	.110	-.053
120	416	.171	.041	-.027	-.386	120	361	-.069	.023	.005	-.163	120	154	-.184	.033	.092	-.053
120	417	.271	.054	-.096	-.490	120	362	-.047	.021	.010	-.161	120	155	-.193	.028	.157	-.157
120	418	.138	.023	-.059	-.241	120	363	-.055	.019	.010	-.160	120	156	-.232	.050	.167	-.167
120	419	.257	.064	-.050	-.366	120	364	-.066	.021	.006	-.125	120	157	-.323	.037	.204	-.204
120	420	.124	.029	-.001	-.273	120	365	-.055	.019	.010	-.125	120	158	-.273	.041	.194	-.194
120	421	.141	.021	-.070	-.221	120	366	-.067	.030	.033	-.188	120	159	-.209	.027	.150	-.180
120	422	.115	.024	-.036	-.260	120	367	-.109	.136	.027	-.245	120	160	-.021	.027	.316	-.147
120	423	.173	.054	-.066	-.467	120	368	-.110	.131	.024	-.233	120	161	-.067	.027	.316	-.147
120	424	.138	.018	-.079	-.222	120	369	-.088	.022	.010	-.173	120	162	-.087	.027	.316	-.147
120	425	.149	.031	-.025	-.282	120	370	-.134	.026	.050	-.258	120	163	-.060	.026	.480	-.147
120	426	.106	.023	-.006	-.208	120	371	-.186	.027	.058	-.313	120	164	-.326	.054	.182	-.146
120	427	.135	.025	-.046	-.230	120	372	-.126	.020	.054	-.197	120	165	-.276	.048	.194	-.146
120	428	.189	.031	-.074	-.334	120	373	-.114	.021	.041	-.185	120	166	-.402	.079	.205	-.205
120	429	.187	.025	-.108	-.301	120	374	-.104	.023	.020	-.207	120	167	-.100	.019	.194	-.194
120	430	.242	.051	-.094	-.513	120	375	-.195	.030	.108	-.311	120	201	-.180	.033	.051	-.051
120	431	.155	.030	-.055	-.221	120	376	-.118	.020	.043	-.204	120	202	-.181	.026	.103	-.103
120	432	.135	.036	.022	-.336	120	377	-.119	.018	.067	-.217	120	203	-.190	.030	.104	-.104
120	433	.241	.035	-.136	-.400	120	378	-.125	.019	.067	-.217	120	204	-.194	.031	.071	-.071
120	434	.160	.033	-.055	-.334	120	379	-.114	.016	.062	-.183	120	205	-.195	.034	.031	-.016
120	435	.196	.036	-.080	-.370	120	380	-.153	.022	.033	-.221	120	206	-.114	.030	.020	-.011
120	436	.134	.072	.151	-.386	120	381	-.168	.017	.040	-.167	120	207	-.093	.023	.185	-.185
120	437	.263	.091	-.017	-.650	120	382	-.121	.021	.054	-.250	120	208	-.114	.023	.006	-.006
120	438	.272	.069	-.083	-.620	120	383	-.109	.017	.051	-.174	120	209	-.114	.023	.185	-.185

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER - ATLANTIC CITY

WD	TAP	CPRMEAN	CPRMS	CPRMAX	CPRMIN	WD	TAP	CPRMEAN	CPRMS	CPRMAX	CPRMIN	WD	TAP	CPRMEAN	CPRMS	CPRMAX	CPRMIN
120	209	- .091	.027	.065	- .202	130	19	- .110	.028	- .004	- .231	130	112	- .110	.026	.013	.268
120	210	- .087	.026	.012	- .195	130	20	- .076	.025	.045	- .175	130	113	- .166	.023	- .030	.268
120	211	- .116	.026	- .020	- .212	130	21	- .100	.027	.014	- .197	130	114	- .106	.020	- .004	.174
120	212	- .122	.032	.004	- .244	130	22	- .150	.022	.081	- .307	130	115	- .077	.021	- .012	.285
120	213	- .075	.027	.047	- .169	130	23	- .150	.024	.056	- .243	130	116	- .159	.021	- .032	.151
120	214	- .063	.020	.018	- .149	130	24	- .150	.055	.008	- .532	130	117	- .100	.026	- .025	.192
120	201	- .049	.070	.352	- .159	130	25	- .101	.024	.020	- .217	130	118	- .089	.024	- .010	.210
120	202	- .151	.103	.314	- .473	130	26	- .088	.033	.076	- .204	130	119	- .089	.024	- .004	.193
120	203	- .056	.103	.182	- .661	130	27	- .191	.032	.099	- .356	130	120	- .092	.023	- .013	.163
120	204	- .222	.133	.736	- .273	130	28	- .101	.023	.015	- .207	130	121	- .079	.019	- .039	.215
120	205	- .157	.037	.059	- .324	130	29	- .051	.027	.016	- .245	130	122	- .118	.023	- .013	.160
120	206	- .089	.097	.591	- .353	130	30	- .184	.052	.192	- .307	130	123	- .084	.019	- .007	.232
120	207	- .081	.062	.336	- .105	130	31	- .213	.095	.166	- .597	130	124	- .093	.026	- .005	.156
120	208	- .149	.034	.034	- .268	130	32	- .031	.035	.031	- .509	130	125	- .081	.019	- .051	.208
120	209	- .095	.061	.392	- .119	130	33	- .204	.056	.020	- .475	130	126	- .128	.022	- .005	.195
120	310	- .025	.068	.308	- .324	130	34	- .055	.052	.279	- .215	130	127	- .099	.021	- .011	.193
120	311	- .075	.084	.441	- .283	130	35	- .027	.048	.222	- .217	130	128	- .098	.027	- .001	.147
120	312	- .116	.101	.474	- .224	130	36	- .126	.035	.006	- .296	130	129	- .078	.022	- .000	.226
120	313	- .072	.048	.297	- .082	130	37	- .019	.026	.088	- .105	130	130	- .137	.023	- .020	.191
120	314	- .028	.059	.269	- .149	130	38	- .090	.026	.008	- .197	130	131	- .103	.024	- .004	.221
120	315	- .026	.064	.294	- .202	130	39	- .131	.026	.023	- .302	130	132	- .098	.025	- .008	.180
120	316	- .026	.061	.310	- .230	130	40	- .129	.029	.045	- .268	130	133	- .096	.025	- .005	.643
120	317	- .180	.074	.508	- .066	130	41	- .067	.021	.003	- .188	130	134	- .266	.025	- .020	.217
120	318	- .093	.018	.030	- .162	130	42	- .090	.033	.043	- .220	130	135	- .115	.025	- .034	.186
120	319	- .011	.024	.105	- .066	130	43	- .186	.032	.084	- .328	130	136	- .106	.023	- .021	.213
120	320	- .006	.096	.520	- .354	130	44	- .130	.039	.024	- .314	130	137	- .119	.021	- .044	.231
120	401	- .088	.034	.041	- .251	130	45	- .081	.020	.010	- .201	130	138	- .111	.021	- .024	.359
120	402	- .136	.020	.072	- .221	130	46	- .153	.027	.060	- .277	130	139	- .122	.029	- .045	.265
120	403	- .185	.087	.323	- .461	130	47	- .069	.060	.253	- .283	130	140	- .133	.029	- .045	.511
120	404	- .024	.067	.359	- .218	130	48	- .046	.099	.474	- .251	130	141	- .264	.049	- .147	.319
120	405	- .059	.091	.397	- .237	130	49	- .169	.032	.077	- .314	130	142	- .188	.034	- .057	.235
120	406	- .004	.073	.264	- .275	130	50	- .312	.065	.081	- .644	130	143	- .101	.032	- .036	.274
130	1	- .061	.029	.053	- .162	130	51	- .475	.135	.148	- .126	130	144	- .092	.035	- .022	.195
130	2	- .072	.024	.036	- .182	130	52	- .095	.083	.455	- .444	130	145	- .094	.022	- .018	.229
130	3	- .065	.027	.041	- .191	130	53	- .154	.056	.037	- .394	130	146	- .125	.023	- .039	.206
130	4	- .041	.024	.047	- .173	130	54	- .065	.070	.389	- .286	130	147	- .106	.023	- .005	.241
130	5	- .051	.024	.035	- .160	130	55	- .061	.067	.258	- .323	130	148	- .115	.031	- .027	.235
130	6	- .103	.030	.013	- .194	130	56	- .062	.071	.302	- .523	130	149	- .121	.028	- .027	.332
130	7	- .066	.036	.017	- .188	130	57	- .097	.054	.090	- .424	130	150	- .157	.033	- .030	.233
130	8	- .155	.033	- .017	- .314	130	58	- .080	.023	.018	- .171	130	151	- .094	.039	- .089	.371
130	9	- .111	.041	.056	- .305	130	59	- .073	.024	.001	- .167	130	152	- .123	.038	- .032	.221
130	10	- .150	.036	.032	- .354	130	60	- .052	.023	.041	- .133	130	153	- .150	.038	- .046	.368
130	11	- .232	.041	.132	- .427	130	61	- .044	.024	.028	- .158	130	154	- .176	.039	- .022	.353
130	12	- .118	.024	.020	- .214	130	62	- .062	.023	.039	- .145	130	155	- .156	.031	- .027	.317
130	13	- .240	.053	.071	- .318	130	63	- .075	.021	.001	- .148	130	156	- .186	.032	- .084	.494
130	14	- .105	.026	.001	- .199	130	64	- .048	.029	.060	- .124	130	157	- .191	.054	- .120	.384
130	15	- .117	.025	.030	- .214	130	65	- .122	.026	.030	- .172	130	158	- .200	.039	- .032	.585
130	16	- .071	.022	.003	- .191	130	66	- .116	.023	.035	- .200	130	159	- .230	.051	- .101	.338
130	17	- .102	.032	- .009	- .284	130	67	- .067	.021	.010	- .161	130	160	- .275	.053	- .101	.585
130	18	- .114	.021	- .044	- .201	130	68	- .111	-	-	-	130	161	- .191	.03	- .101	.338

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
130	162	.103	.099	.607	-.184	140	5	-.065	.021	.014	-.142	140	55	-.056	.073	.271	-.326
130	163	.072	.085	.499	-.184	140	6	-.063	.027	.065	-.167	140	56	-.003	.064	.304	-.351
130	164	-.259	.060	-.109	-.557	140	7	-.068	.029	.062	-.189	140	57	-.066	.055	.124	-.435
130	165	-.213	.053	-.084	-.454	140	8	-.108	.031	.023	-.238	140	101	-.094	.020	-.007	-.153
130	166	-.330	.078	-.154	-.686	140	9	-.148	.025	.051	-.315	140	102	-.089	.021	.036	-.138
130	167	-.082	.019	-.025	-.161	140	10	-.182	.033	.099	-.343	140	103	-.057	.026	.040	-.160
130	201	-.149	.022	-.086	-.206	140	11	-.120	.027	.038	-.244	140	104	-.057	.023	.027	-.157
130	202	-.154	.021	-.085	-.241	140	12	-.213	.051	.068	-.433	140	105	-.089	.019	-.014	-.163
130	203	-.165	.023	-.081	-.251	140	13	-.095	.020	.003	-.155	140	107	-.052	.018	.022	-.119
130	204	-.300	.075	-.102	-.617	140	14	-.090	.026	.022	-.281	140	108	-.042	.027	-.023	-.121
130	205	-.067	.029	.107	-.177	140	15	-.038	.021	.057	-.119	140	109	-.139	.022	-.063	-.247
130	206	-.079	.028	.118	-.262	140	16	-.065	.027	.023	-.210	140	110	-.122	.021	-.016	-.229
130	207	-.064	.020	.039	-.145	140	17	-.088	.024	.011	-.183	140	111	-.063	.019	-.017	-.133
130	208	-.075	.024	.035	-.155	140	18	-.066	.024	.005	-.189	140	112	-.089	.026	-.003	-.215
130	209	-.057	.025	.049	-.151	140	19	-.047	.025	.061	-.165	140	113	-.143	.021	-.077	-.240
130	210	-.060	.023	-.027	-.148	140	20	-.120	.029	.056	-.213	140	114	-.091	.021	-.004	-.156
130	211	-.088	.022	-.009	-.187	140	21	-.071	.018	.067	-.212	140	115	-.077	.023	-.013	-.196
130	212	-.086	.032	.121	-.251	140	22	-.126	.024	.044	-.258	140	116	-.058	.026	-.019	-.139
130	213	-.046	.026	.053	-.155	140	23	-.128	.020	.036	-.543	140	117	-.070	.031	-.065	-.186
130	214	-.038	.020	.038	-.120	140	24	-.205	.062	.017	-.190	140	118	-.118	.027	-.014	-.224
130	301	.013	.075	.506	-.209	140	25	-.068	.023	.077	-.355	140	119	-.064	.024	-.027	-.179
130	302	-.103	.131	.418	-.461	140	26	-.071	.031	.035	-.355	140	120	-.064	.023	-.027	-.166
130	303	-.293	.065	-.120	-.572	140	27	-.173	.033	-.006	-.145	140	121	-.047	.019	-.030	-.146
130	304	-.275	.142	.876	-.157	140	28	-.070	.022	.017	-.203	140	122	-.089	.024	-.012	-.179
130	305	-.090	.068	.228	-.303	140	29	-.091	.029	.017	-.209	140	123	-.060	.019	-.011	-.122
130	306	-.122	.128	.783	-.325	140	30	-.054	.052	.313	-.459	140	124	-.067	.026	-.027	-.188
130	307	-.155	.084	.556	-.671	140	31	-.113	.073	.098	-.459	140	125	-.047	.019	-.030	-.120
130	308	-.089	.050	.148	-.234	140	32	-.168	.050	-.006	-.415	140	126	-.098	.022	-.003	-.210
130	309	.078	.449	.449	-.136	140	33	-.157	.054	.003	-.417	140	127	-.075	.021	-.029	-.149
130	310	-.070	.092	.418	-.276	140	34	-.043	.043	.268	-.075	140	128	-.073	.027	-.034	-.236
130	311	-.132	.112	.610	-.277	140	35	-.020	.054	.254	-.239	140	129	-.046	.019	-.024	-.116
130	312	-.071	.126	.595	-.385	140	36	-.067	.041	.066	-.270	140	130	-.167	.022	-.026	-.304
130	313	-.086	.070	.410	-.086	140	37	-.061	.027	.131	-.089	140	131	-.080	.024	-.016	-.257
130	314	-.051	.084	.456	-.208	140	38	-.069	.027	.058	-.190	140	132	-.074	.025	-.021	-.192
130	315	-.060	.086	.506	-.182	140	39	-.096	.026	.015	-.232	140	133	-.058	.021	-.024	-.140
130	316	-.075	.071	.549	-.146	140	40	-.083	.025	.001	-.196	140	134	-.210	.056	-.057	-.464
130	317	-.252	.079	.685	-.044	140	41	-.059	.023	.028	-.162	140	135	-.087	.027	-.025	-.208
130	318	-.076	.019	.011	-.144	140	42	-.079	.033	.088	-.207	140	136	-.074	.018	-.004	-.142
130	319	-.004	.022	.090	-.068	140	43	-.145	.030	.037	-.352	140	137	-.086	.020	-.026	-.183
130	320	-.095	.121	.638	-.384	140	44	-.076	.028	.024	-.242	140	138	-.078	.023	-.136	-.228
130	401	-.033	.028	.092	-.144	140	45	-.058	.023	.026	-.240	140	139	-.083	.026	-.011	-.215
130	402	-.086	.019	-.002	-.166	140	46	-.121	.033	.029	-.266	140	140	-.089	.022	-.003	-.192
130	403	-.070	.161	.426	-.357	140	47	-.061	.068	.228	-.286	140	141	-.198	.049	-.066	-.419
130	404	-.034	.068	.400	-.153	140	48	-.040	.077	.577	-.279	140	142	-.130	.040	-.010	-.298
130	405	-.109	.078	.496	-.120	140	49	-.132	.028	.025	-.242	140	143	-.056	.024	-.020	-.197
130	406	.054	.049	.273	-.109	140	50	-.324	.068	.098	-.703	140	144	-.050	.033	-.089	-.339
140	407	-.027	.029	.161	-.141	140	51	-.466	.121	.120	-.962	140	145	-.050	.020	-.028	-.157
140	408	-.079	.020	.025	-.141	140	52	-.116	.093	.450	-.443	140	146	-.086	.024	-.010	-.201
140	409	-.080	.023	.012	-.163	140	53	-.076	.057	.136	-.295	140	147	-.076	.020	-.000	-.171
140	410	-.047	.019	.024	-.108	140	54	-.056	.086	.358	-.382	140	147	-.076	.020	-.000	-.171

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
140	148	- .068	.025	.034	- .206	140	317	- .290	.092	.678	.047	150	41	- .043	.024	.054	- .186
140	149	- .064	.025	.024	- .207	140	318	- .052	.018	.022	.126	150	42	- .047	.038	.161	- .183
140	150	- .120	.027	- .010	- .264	140	319	- .003	.022	.078	.067	150	43	- .137	.037	.013	- .380
140	151	- .051	.031	- .100	- .177	140	401	- .007	.025	.142	.288	150	44	- .043	.026	.078	- .146
140	152	- .089	.018	- .021	- .175	140	402	- .048	.021	.047	.144	150	45	- .046	.025	.065	- .163
140	153	- .094	.038	.041	- .286	140	403	- .003	.094	.432	.352	150	46	- .084	.029	.032	- .242
140	154	- .134	.031	- .015	- .286	140	404	- .053	.074	.546	.168	150	47	- .0023	.058	.321	- .380
140	155	- .115	.035	- .015	- .275	140	405	.096	.074	.543	.094	150	48	- .063	.069	.423	- .295
140	156	- .155	.032	- .032	- .333	140	406	.055	.048	.289	.062	150	49	- .093	.031	.040	- .212
140	157	- .147	.033	.021	- .271	140	407	- .017	.030	.139	.110	150	50	- .349	.074	.145	- .705
140	158	- .234	.054	- .093	- .520	150	408	- .026	.028	.056	.183	150	51	- .424	.105	.137	- .369
140	159	- .189	.042	- .062	- .461	150	409	- .080	.023	.015	.169	150	52	- .127	.091	.434	- .555
140	160	- .247	.054	- .076	- .451	150	410	- .044	.047	.021	.022	150	53	- .018	.066	.252	- .244
140	161	- .163	.035	- .040	- .343	150	411	- .065	.019	.014	.140	150	54	- .050	.088	.352	- .371
140	162	- .175	.109	.655	- .102	150	412	- .057	.025	.056	.166	150	55	- .046	.073	.276	- .380
140	163	- .110	.097	.675	- .166	150	413	- .066	.071	.031	.053	150	56	- .012	.067	.285	- .467
140	164	- .197	.055	- .039	- .467	150	414	- .066	.027	.011	.248	150	57	- .035	.055	.137	- .369
140	165	- .157	.066	- .024	- .404	150	415	- .111	.029	.017	.274	150	58	- .099	.023	.004	- .209
140	166	- .265	.076	- .050	- .655	150	416	- .106	.026	.059	.235	150	59	- .091	.020	.013	- .160
140	167	- .086	.017	- .026	- .145	150	417	- .111	.029	.076	.366	150	60	- .052	.021	.042	- .143
140	201	- .119	.020	- .051	- .222	150	418	- .159	.029	.027	.292	150	61	- .087	.023	.013	- .199
140	202	- .122	.019	- .058	- .188	150	419	- .113	.032	.027	.292	150	62	- .093	.020	.007	- .160
140	203	- .121	.020	- .053	- .207	150	420	- .208	.052	.053	.454	150	63	- .050	.020	.038	- .118
140	204	- .175	.033	- .071	- .329	150	421	- .083	.026	.001	.156	150	64	- .054	.024	.074	- .147
140	205	- .051	.024	- .045	- .184	150	422	- .077	.026	.101	.184	150	65	- .137	.019	.073	- .223
140	206	- .105	.025	- .014	- .246	150	423	- .025	.022	.080	.122	150	66	- .052	.020	.040	- .205
140	207	- .041	.019	- .043	- .101	150	424	- .046	.023	.056	.210	150	67	- .060	.016	.001	- .118
140	208	- .076	.023	- .033	- .145	150	425	- .073	.021	.027	.154	150	68	- .070	.023	.010	- .186
140	209	- .063	.024	- .031	- .135	150	426	- .082	.022	.015	.165	150	69	- .129	.021	.044	- .216
140	210	- .059	.021	- .012	- .146	150	427	- .038	.024	.059	.141	150	70	- .089	.020	.014	- .167
140	211	- .081	.019	- .013	- .173	150	428	- .052	.027	.083	.214	150	71	- .086	.033	.015	- .253
140	212	- .078	.027	- .028	- .190	150	429	- .115	.019	.054	.188	150	72	- .050	.020	.021	- .117
140	213	- .055	.020	- .016	- .133	150	430	- .114	.022	.043	.270	150	73	- .044	.036	.147	- .154
140	214	- .048	.020	- .021	- .111	150	431	- .180	.066	.017	.548	150	74	- .044	.027	.015	- .184
140	301	- .041	.091	.414	- .159	150	432	- .051	.024	.038	.140	150	75	- .092	.024	.048	- .167
140	302	- .094	.144	.540	- .495	150	433	- .050	.035	.113	.166	150	76	- .046	.024	.048	- .167
140	303	- .226	.067	.098	- .648	150	434	- .166	.044	.016	.428	150	77	- .051	.023	.049	- .148
140	304	- .320	.141	.883	- .131	150	435	- .053	.025	.052	.192	150	78	- .030	.019	.043	- .114
140	305	- .008	.077	.270	- .214	150	436	- .049	.024	.033	.163	150	79	- .077	.023	.055	- .199
140	306	- .205	.126	.709	- .246	150	437	- .041	.055	.254	.199	150	80	- .052	.018	.020	- .110
140	307	- .207	.090	.593	- .027	150	438	- .141	.072	.108	.478	150	81	- .054	.026	.047	- .226
140	308	- .045	.042	.183	- .181	150	439	- .158	.056	.010	.434	150	82	- .028	.019	.051	- .110
140	309	- .224	.090	.538	- .061	150	440	- .148	.061	.035	.577	150	83	- .091	.022	.065	- .203
140	310	- .157	.111	.558	- .170	150	441	- .035	.047	.357	.092	150	84	- .071	.024	.071	- .185
140	311	- .216	.132	.661	- .191	150	442	- .030	.051	.333	.217	150	85	- .052	.031	.090	- .185
140	312	- .099	.125	.646	- .418	150	443	- .023	.030	.132	.162	150	86	- .029	.018	.069	- .095
140	313	- .141	.078	.510	- .050	150	444	- .027	.062	.114	.096	150	87	- .085	.022	.012	- .188
140	314	- .105	.093	.516	- .158	150	445	- .052	.026	.058	.195	150	88	- .058	.024	.038	- .159
140	315	- .122	.094	.504	- .146	150	446	- .080	.023	.001	.191	150	89	- .053	.019	.058	- .101
140	316	- .169	.089	.538	- .054	150	447	- .064	.024	.034	.174	150	90	- .037	.019	.058	- .101

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

	TAP	CPMEAN	CPRMS	CPMAX	CPMIN		TAP	CPMEAN	CPRMS	CPMAX	CPMIN		TAP	CPMEAN	CPRMS	CPMAX	CPMIN
150	134	-.160	.059	-.008	-.468	150	303	-.162	.082	.205	-.626	160	27	-.207	.061	-.047	-.599
150	135	-.053	.026	.064	-.192	150	304	.315	.135	.863	-.137	160	28	-.053	.030	.061	-.184
150	136	-.061	.021	.029	-.137	150	305	.082	.090	.467	-.201	160	29	-.002	.030	.111	-.119
150	137	-.061	.026	.030	-.188	150	306	.234	.127	.728	-.148	160	30	-.022	.065	.269	-.201
150	138	-.028	.041	.217	-.177	150	307	.220	.092	.693	-.121	160	31	-.194	.074	.096	-.475
150	139	-.068	.034	.069	-.254	150	308	-.005	.049	.285	-.174	160	32	-.181	.063	.038	-.505
150	140	-.059	.026	.075	-.143	150	309	.259	.088	.611	-.034	160	33	-.204	.091	.065	-.657
150	141	-.136	.051	.094	-.465	150	310	.194	.119	.625	-.194	160	34	-.063	.060	.400	-.087
150	142	-.072	.033	.039	-.261	150	311	.254	.136	.759	-.134	160	35	-.046	.049	.213	-.324
150	143	-.029	.025	.071	-.128	150	312	.114	.136	.671	-.383	160	36	-.004	.027	.144	-.103
150	144	-.026	.024	.084	-.200	150	313	.170	.087	.516	-.033	160	37	-.009	.026	.120	-.107
150	145	-.019	.016	.049	-.086	150	314	.135	.105	.568	-.134	160	38	-.057	.029	.065	-.177
150	146	-.055	.021	.037	-.137	150	315	.154	.103	.585	-.134	160	39	-.081	.021	.005	-.157
150	147	-.049	.022	.049	-.128	150	316	.227	.099	.657	-.020	160	40	-.076	.023	.013	-.179
150	148	-.043	.025	.068	-.174	150	317	.305	.092	.695	-.068	160	41	-.035	.024	.083	-.119
150	149	-.029	.023	.086	-.183	150	318	-.033	.023	.106	-.092	160	42	-.022	.050	.172	-.244
150	150	-.093	.036	.026	-.355	150	319	.026	.027	.145	-.052	160	43	-.200	.060	-.023	-.494
150	151	-.017	.036	.207	-.161	150	320	.189	.150	.704	-.304	160	44	-.002	.031	.121	-.126
150	152	-.054	.022	.029	-.156	150	401	-.003	.027	.151	-.106	160	45	-.055	.027	.030	-.201
150	153	-.044	.032	.127	-.248	150	402	-.023	.021	.054	-.124	160	46	-.069	.027	.075	-.149
150	154	-.090	.031	.072	-.257	150	403	-.027	.103	.528	-.233	160	47	-.018	.065	.273	-.214
150	155	-.069	.030	.049	-.234	150	404	.056	.075	.467	-.117	160	48	-.048	.191	.599	-.216
150	156	-.107	.041	.042	-.294	150	405	.101	.081	.579	-.111	160	49	-.044	.034	.065	-.183
150	157	-.103	.040	.086	-.291	150	406	.068	.056	.377	-.117	160	50	-.371	.082	-.068	-.871
150	158	-.238	.077	-.059	-.744	160	1	-.032	.028	.136	-.123	160	51	-.410	.107	.133	-.978
150	159	-.196	.076	.006	-.761	160	2	-.070	.032	.125	-.201	160	52	-.117	.094	.560	-.729
150	160	-.169	.057	.023	-.386	160	3	-.110	.025	.009	-.210	160	53	-.028	.072	.317	-.283
150	161	-.121	.043	.088	-.321	160	4	-.069	.023	.010	-.172	160	54	-.037	.090	.452	-.400
150	162	-.200	.107	.799	-.085	160	5	-.086	.023	.010	-.174	160	55	-.023	.067	.402	-.245
150	163	-.127	.101	.558	-.143	160	6	-.084	.028	.091	-.194	160	56	-.013	.068	.258	-.396
150	164	-.128	.061	.096	-.440	160	7	-.105	.043	.034	-.329	160	57	-.016	.053	.172	-.304
150	165	-.062	.061	.120	-.317	160	8	-.119	.026	-.020	-.216	160	101	-.108	.027	.003	-.229
150	166	-.190	.079	.070	-.515	160	9	-.123	.031	-.013	-.290	160	102	-.113	.025	-.047	-.229
150	167	-.070	.018	-.018	-.123	160	10	-.158	.023	-.082	-.272	160	103	-.080	.023	-.006	-.177
150	201	-.100	.019	-.037	-.172	160	11	-.158	.026	-.071	-.260	160	104	-.062	.020	-.010	-.139
150	202	-.102	.018	-.034	-.170	160	12	-.156	.047	-.022	-.380	160	105	-.098	.021	-.008	-.170
150	203	-.089	.016	-.033	-.155	160	13	-.227	.057	-.050	-.469	160	106	-.093	.019	-.014	-.150
150	204	-.139	.024	-.068	-.254	160	14	-.101	.027	-.003	-.248	160	107	-.056	.019	-.017	-.112
150	205	-.052	.026	-.049	-.148	160	15	-.059	.027	-.053	-.147	160	108	-.065	.018	-.007	-.123
150	206	-.126	.032	-.035	-.308	160	16	-.026	.025	-.121	-.137	160	109	-.163	.022	-.103	-.256
150	207	-.039	.019	-.017	-.099	160	17	-.064	.028	-.040	-.249	160	110	-.124	.019	-.047	-.205
150	208	-.073	.021	-.016	-.150	160	18	-.059	.021	-.015	-.144	160	111	-.053	.016	-.020	-.117
150	209	-.060	.020	-.005	-.123	160	19	-.097	.021	-.003	-.181	160	112	-.066	.022	-.023	-.167
150	210	-.060	.022	-.023	-.150	160	20	-.064	.034	-.073	-.237	160	113	-.127	.020	-.063	-.208
150	211	-.073	.018	-.000	-.162	160	21	-.036	.027	-.078	-.141	160	114	-.083	.020	-.011	-.152
150	212	-.049	.036	.132	-.161	160	22	-.122	.020	-.030	-.215	160	115	-.098	.041	-.029	-.288
150	213	-.045	.023	.095	-.139	160	23	-.100	.023	-.004	-.176	160	116	-.039	.019	-.040	-.116
150	214	-.048	.019	.025	-.111	160	24	-.149	.065	-.059	-.426	160	117	-.002	.044	-.184	-.127
150	201	-.138	.092	.540	-.106	160	25	-.050	.026	-.065	-.148	160	118	-.087	.033	-.044	-.233
150	302	-.085	.163	.564	-.664	160	26	-.059	.040	-.191	-.277	160	119	-.030	.023	.061	-.135

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
1600	120	- .034	.024	.070	-.132	1600	203	-.081	.016	-.022	-.151	1700	13	-.25522	.03801	.00694	.547
1600	121	-.017	.019	.077	-.114	1600	204	-.129	.023	-.043	-.231	1700	14	-.15852	.04018	.00696	.326
1600	122	-.059	.027	.127	-.160	1600	205	-.053	.026	-.038	-.277	1700	15	-.05522	.04352	.00697	.349
1600	123	-.030	.024	.071	-.112	1600	206	-.170	.040	-.054	-.362	1700	16	-.15852	.04452	.00698	.320
1600	124	-.033	.030	.103	-.158	1600	207	-.035	.018	-.026	-.114	1700	17	-.15852	.04552	.00699	.247
1600	125	-.003	.022	.092	-.080	1600	208	-.059	.022	-.011	-.132	1700	18	-.15852	.04652	.00700	.428
1600	126	-.068	.021	.012	-.171	1600	209	-.082	.024	-.020	-.228	1700	19	-.15852	.04752	.00701	.400
1600	127	-.042	.030	.119	-.208	1600	210	-.092	.021	-.018	-.190	1700	20	-.15852	.04852	.00702	.449
1600	128	-.009	.033	.131	-.058	1600	211	-.056	.032	-.020	-.202	1700	21	-.15852	.04952	.00703	.555
1600	129	.031	.031	.144	-.182	1600	212	-.051	.021	-.044	-.134	1700	22	-.15852	.05052	.00704	.237
1600	130	-.058	.021	.041	-.182	1600	213	-.051	.020	-.014	-.128	1700	23	-.15852	.05152	.00705	.418
1600	131	-.027	.025	.104	-.142	1600	214	-.181	.093	-.634	-.052	1700	24	-.15852	.05252	.00706	.216
1600	132	-.011	.030	.110	-.117	1600	215	-.110	.173	-.584	-.612	1700	25	-.15852	.05352	.00707	.556
1600	133	.025	.033	.135	-.069	1600	216	-.068	.100	-.269	-.528	1700	26	-.15852	.05452	.00708	.238
1600	134	-.017	.046	.083	-.361	1600	217	.286	.141	-.797	-.202	1700	27	-.15852	.05552	.00709	.141
1600	135	-.017	.029	.126	-.141	1600	218	.173	.108	-.587	-.172	1700	28	-.15852	.05652	.00710	.176
1600	136	-.002	.036	.136	-.091	1600	219	.232	.122	-.798	-.171	1700	29	-.15852	.05752	.00711	.050
1600	137	-.065	.041	.045	-.261	1600	220	.203	.100	-.607	-.088	1700	30	-.15852	.05852	.00712	.643
1600	138	-.048	.057	.337	-.094	1600	221	.081	.079	-.451	-.084	1700	31	-.15852	.05952	.00713	.740
1600	139	-.046	.043	.095	-.260	1600	222	.269	.090	-.606	-.043	1700	32	-.15852	.06052	.00714	.137
1600	140	-.002	.034	.129	-.123	1600	223	.168	.142	-.734	-.259	1700	33	-.15852	.06152	.00715	.828
1600	141	-.048	.072	.195	-.319	1600	224	.110	.146	-.731	-.262	1700	34	-.15852	.06252	.00716	.082
1600	142	-.022	.033	.131	-.108	1600	225	.232	.129	-.643	-.382	1700	35	-.15852	.06352	.00717	.074
1600	143	-.001	.028	.112	-.108	1600	226	.129	.130	-.643	-.009	1700	36	-.15852	.06452	.00718	.015
1600	144	-.018	.024	.090	-.121	1600	227	.178	.087	-.574	-.202	1700	37	-.15852	.06552	.00719	.236
1600	145	-.016	.016	.049	-.073	1600	228	.136	.112	-.687	-.185	1700	38	-.15852	.06652	.00720	.267
1600	146	-.037	.020	.072	-.114	1600	229	.143	.104	-.702	-.101	1700	39	-.15852	.06752	.00721	.157
1600	147	-.017	.029	.101	-.130	1600	230	.275	.107	-.744	-.072	1700	40	-.15852	.06852	.00722	.072
1600	148	-.024	.025	.090	-.166	1600	231	.282	.091	-.664	-.072	1700	41	-.15852	.06952	.00723	.204
1600	149	-.014	.022	.109	-.087	1600	232	.011	.031	-.142	-.068	1700	42	-.15852	.07052	.00724	.653
1600	150	-.121	.068	.098	-.577	1600	233	.026	.027	-.143	-.042	1700	43	-.15852	.07152	.00725	.210
1600	151	-.047	.053	.337	-.079	1600	234	.160	.148	-.773	-.342	1700	44	-.15852	.07252	.00726	.164
1600	152	-.015	.024	.066	-.099	1600	235	.001	.017	-.027	-.091	1700	45	-.15852	.07352	.00727	.444
1600	153	-.002	.026	.097	-.177	1600	236	.402	-.017	-.022	-.075	1700	46	-.15852	.07452	.00728	.235
1600	154	-.037	.035	.096	-.180	1600	237	.070	.128	-.636	-.304	1700	47	-.15852	.07552	.00729	.144
1600	155	-.019	.032	.011	-.166	1600	238	.404	.035	-.662	-.137	1700	48	-.15852	.07652	.00730	.859
1600	156	-.031	.039	.125	-.208	1600	239	.405	.128	-.685	-.603	1700	49	-.15852	.07752	.00731	.467
1600	157	-.025	.055	.150	-.196	1600	240	.1	-.054	-.029	-.440	1700	50	-.15852	.07852	.00732	.761
1600	158	-.269	.101	.014	-.780	1700	2	-.105	-.022	-.088	-.197	1700	51	-.15852	.07952	.00733	.833
1600	159	-.241	.124	.099	-.001	1700	3	-.113	-.022	-.035	-.195	1700	52	-.15852	.08052	.00734	.262
1600	160	-.086	.064	.094	-.428	1700	4	-.064	-.022	-.004	-.225	1700	53	-.15852	.08152	.00735	.050
1600	161	-.089	.070	.204	-.373	1700	5	-.106	-.027	-.020	-.234	1700	54	-.15852	.08252	.00736	.314
1600	162	-.215	.121	.849	-.167	1700	6	-.159	-.052	-.051	-.279	1700	55	-.15852	.08352	.00737	.078
1600	163	-.136	.113	.698	-.163	1700	7	-.121	-.027	-.022	-.258	1700	56	-.15852	.08452	.00738	.040
1600	164	-.046	.072	.179	-.515	1700	8	-.143	-.041	-.017	-.432	1700	57	-.15852	.08552	.00739	.017
1600	165	-.014	.046	.140	-.254	1700	9	-.143	-.032	-.090	-.415	1700	58	-.15852	.08652	.00740	.037
1600	166	-.072	.092	.348	-.449	1700	10	-.185	-.029	-.029	-.425	1700	59	-.15852	.08752	.00741	.188
1600	167	-.059	.016	.005	-.110	1700	11	-.185	-.036	-.036	-.305	1700	60	-.15852	.08852	.00742	.011
1600	201	-.106	.019	-.044	-.178	1700	12	-.115	-.042	-.036	-.105	1700	61	-.15852	.08952	.00743	.023
1600	202	-.107	.018	-.047	-.182	1700	13	-.115	-.042	-.036	-.105	1700	62	-.15852	.09052	.00744	.011

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

MD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	MD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	MD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
170	106	- .082	.022	.003	- .153	170	156	.027	.035	.182	- .090	170	405	.091	.090	.569	- .222
170	107	- .077	.019	-.010	- .140	170	157	.048	.050	.245	- .110	170	406	- 1.16	.084	.489	- .262
170	108	- .072	.018	-.014	- .149	170	158	- .239	.115	.190	- .820	180	1	- 1.05	.042	.098	- .267
170	109	- .193	.030	-.104	- .323	170	159	- .215	.139	.233	- 1.125	180	2	- 1.32	.023	.023	- .220
170	110	- .116	.031	-.010	- .233	170	160	-.000	.053	.199	- .260	180	3	- 1.44	.020	.028	- .261
170	111	- .030	.020	-.068	- .110	170	161	-.023	.098	.338	- .379	180	4	- 1.44	.046	.056	- .260
170	112	- .065	.039	-.099	- .186	170	162	.281	.122	.779	- .115	180	5	- 1.50	.063	.032	- .357
170	113	- .135	.032	-.015	- .286	170	163	.217	.122	.255	- .256	180	6	- 1.70	.046	.090	- .330
170	114	- .041	.033	-.073	- .151	170	164	.049	.060	.217	- .119	180	7	- 1.84	.060	.062	- .307
170	115	- .023	.052	-.198	- .261	170	165	.077	.034	.486	- .247	180	9	- 1.84	.014	.419	- .419
170	116	- .015	.036	-.157	- .108	170	166	.076	.103	.002	- .131	180	10	- 2.13	.040	.123	- .496
170	117	- .065	.053	-.245	- .133	170	167	-.069	.015	.059	- .288	180	11	- 2.32	.038	.106	- .359
170	118	- .142	.050	-.068	- .324	170	168	.201	.133	.021	- .068	180	12	- 1.14	.052	.058	- .590
170	119	- .032	.034	-.152	- .170	170	169	.203	.110	.018	- .054	180	13	- 2.40	.080	.100	- .306
170	120	- .023	.030	-.126	- .139	170	170	.204	-.147	.026	- .060	180	14	- 2.33	.048	.316	- .164
170	121	- .016	.021	-.086	- .093	170	171	.205	-.073	.028	- .026	180	15	- 0.27	.053	.059	- .436
170	122	- .011	.046	-.173	- .140	170	172	.206	.226	.051	- .081	180	16	- 1.34	.066	.066	- .456
170	123	- .021	.030	-.201	- .070	170	173	.207	.055	.019	- .015	180	17	- 2.10	.044	.076	- .157
170	124	- .002	.035	-.167	- .131	170	174	.208	.083	.022	- .016	180	18	- 0.44	.033	.045	- .363
170	125	- .023	.023	-.135	- .067	170	175	.209	.078	.027	- .007	180	19	- 1.79	.046	.073	- .585
170	126	- .004	.029	-.073	- .114	170	176	.210	-.114	.028	- .019	180	20	- 2.58	.037	.134	- .147
170	127	- .025	.035	-.290	- .107	170	177	.211	-.125	.024	- .046	180	21	- 0.24	.043	.081	- .373
170	128	- .066	.025	-.219	- .011	170	178	.212	-.078	.029	- .147	180	22	- 2.06	.038	.102	- .188
170	129	- .036	.026	-.134	- .107	170	179	.213	-.075	.022	- .011	180	23	- 0.67	.080	.220	- .487
170	130	- .003	.029	-.240	- .096	170	180	.214	-.078	.019	- .012	180	24	- 1.38	.033	.047	- .249
170	131	- .019	.030	-.259	- .081	170	181	.301	-.133	.091	- .577	180	25	- 1.90	.078	.008	- .590
170	132	- .057	.027	-.191	- .030	170	182	.302	-.138	.156	- .531	180	26	- 2.84	.075	.146	- .549
170	133	- .103	.075	-.249	- .370	170	183	.303	-.034	.100	- .473	180	27	- 1.84	.045	.097	- .487
170	134	- .012	.035	-.177	- .085	170	184	.304	.244	.120	- .699	180	28	- 1.25	.044	.257	- .029
170	135	- .047	.032	-.206	- .051	170	185	.305	.250	.100	- .658	180	29	- 0.91	.058	.037	- .388
170	136	- .073	.069	-.127	- .371	170	186	.306	.234	.105	- .773	180	30	- 1.90	.064	.025	- .552
170	137	- .121	.067	-.555	- .062	170	187	.307	.139	.096	- .554	180	31	- 3.95	.079	.162	- .842
170	138	- .026	.062	-.177	- .292	170	188	.308	.182	.110	- .779	180	32	- 3.93	.086	.040	- .173
170	139	- .051	.031	-.221	- .051	170	189	.309	.306	.090	- .654	180	33	- 0.48	.076	.270	- .564
170	140	- .063	.059	-.299	- .248	170	190	.310	.204	.151	- .747	180	34	- 1.49	.070	.256	- .078
170	141	- .030	.034	-.188	- .099	170	191	.311	.215	.139	- .785	180	35	- 1.49	.042	.085	- .431
170	142	- .043	.029	-.179	- .067	170	192	.312	.212	.132	- .729	180	36	- 1.59	.038	.067	- .244
170	143	- .026	.023	-.113	- .124	170	193	.313	.223	.089	- .641	180	37	- 0.70	.044	.029	- .431
170	144	- .033	.015	-.032	-.091	170	194	.314	.160	.114	- .701	180	38	- 1.75	.029	.085	- .323
170	145	- .021	.020	-.069	-.097	170	195	.315	.116	.102	- .598	180	39	- 0.91	.034	.080	- .515
170	146	- .021	.027	-.129	-.096	170	196	.316	.294	.106	- .799	180	40	- 1.62	.049	.125	- .523
170	147	- .011	.034	-.175	-.094	170	197	.317	.269	.088	- .644	180	41	- 1.96	.186	.515	- .029
170	148	- .011	.023	-.131	-.093	170	198	.318	.072	.038	- .286	180	42	- 2.48	.064	.032	- .569
170	149	- .112	.100	.182	-.670	170	199	.319	.050	.032	- .167	180	43	- 1.07	.052	.357	- .029
170	150	- .121	.071	.438	-.085	170	200	.320	-.017	.132	- .151	180	44	- 1.25	.031	.260	- .184
170	151	- .020	.028	-.137	-.062	170	201	.401	-.048	.028	- .114	180	45	- 1.68	.043	.229	- .501
170	152	- .022	.025	-.116	-.071	170	202	.402	-.044	.062	- .368	180	46	- 0.50	.067	.394	- .148
170	153	- .018	.039	-.169	-.140	170	203	.403	.254	.143	- .849	180	47	- 1.68	.096	.168	- .501
170	154	- .034	.040	-.223	-.094	170	204	.404	.044	.062	- .368	180	48	- 0.50	.067	.394	- .148

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
180	49	.070	.046	.278	-.083	180	142	.081	.047	.310	-.027	180	311	.193	.109	.731	-.172
180	50	-.345	.060	-.174	-.623	180	143	.090	.037	.256	-.002	180	312	.219	.096	.728	-.104
180	51	-.437	.092	-.154	-.881	180	144	-.027	.036	.158	-.143	180	313	.240	.078	.684	-.041
180	52	-.029	.074	.329	-.341	180	145	-.057	.022	.061	-.140	180	314	.203	.107	.696	-.212
180	53	.137	.062	.404	-.036	180	146	.074	.037	.231	-.071	180	315	.123	.093	.590	-.152
180	54	.024	.070	.284	-.229	180	147	.050	.043	.256	-.037	180	316	.249	.103	.707	-.006
180	55	-.103	.073	.439	-.113	180	148	.050	.043	.291	-.071	180	317	.202	.074	.506	-.013
180	56	-.020	.051	.236	-.313	180	149	-.014	.028	.105	-.112	180	318	.129	.044	.361	-.010
180	57	.128	.074	.211	-.335	180	150	-.037	.116	.326	-.703	180	319	.097	.034	.218	-.003
180	101	-.082	.035	.044	-.246	180	151	.071	.497	.031	-.031	180	320	.039	.132	.357	-.334
180	102	.151	.027	-.043	-.273	180	152	.064	.036	.208	-.052	180	401	-.061	.039	.070	-.228
180	103	-.147	.036	-.006	-.297	180	153	.035	.032	.199	-.055	180	402	-.118	.033	.002	-.273
180	104	-.062	.030	.086	-.161	180	154	.080	.050	.343	-.078	180	403	.287	.128	.936	-.130
180	105	.114	.028	.023	-.232	180	155	.098	.053	.382	-.099	180	404	.043	.086	.405	-.252
180	106	-.081	.024	-.003	-.171	180	156	.073	.041	.258	-.054	180	405	-.019	.069	.374	-.224
180	107	.098	.023	-.004	-.197	180	157	.108	.060	.308	-.086	180	406	-.016	.091	.329	-.380
180	108	-.081	.022	-.035	-.159	180	158	-.105	.136	.302	-.679	190	1	-.111	.047	.123	-.301
180	109	-.223	.034	-.119	-.497	180	159	-.047	.171	.517	-.629	190	2	-.116	.021	.039	-.189
180	110	.108	.033	.039	-.254	180	160	.070	.066	.372	-.183	190	3	-.109	.029	-.009	-.224
180	111	-.024	.021	.059	-.113	180	161	.113	.122	.483	-.300	190	4	-.102	.023	-.006	-.202
180	112	-.042	.051	.162	-.216	180	162	.286	.113	.791	-.111	190	5	-.176	.029	-.071	-.312
180	113	.136	.046	.157	-.316	180	163	.243	.106	.720	-.029	190	6	-.150	.069	.119	-.468
180	114	-.016	.035	.119	-.128	180	164	.113	.060	.381	-.239	190	7	-.247	.062	.065	-.468
180	115	.024	.061	.245	-.299	180	165	.121	.040	.293	-.006	190	8	-.229	.042	.080	-.426
180	116	.049	.037	.190	-.078	180	166	.200	.101	.668	-.135	190	9	-.235	.075	.007	.645
180	117	.038	.068	.469	-.124	180	167	-.066	.023	.024	-.144	190	10	-.205	.045	.057	-.402
180	118	-.215	.060	.163	-.484	180	201	.167	.027	.082	-.318	190	11	-.254	.060	.103	-.559
180	119	-.011	.051	.343	-.171	180	202	-.170	.024	.082	-.294	190	12	-.093	.067	.176	-.424
180	120	-.009	.041	.175	-.115	180	203	.158	.020	.092	-.247	190	13	-.257	.064	.097	-.501
180	121	-.000	.030	.129	-.079	180	204	-.178	.033	.067	-.358	190	14	-.270	.055	.112	-.562
180	122	-.045	.058	.264	-.111	180	205	-.103	.036	.031	-.320	190	15	-.061	.064	.295	-.176
180	123	.068	.036	.254	-.053	180	206	-.285	.055	.108	-.498	190	16	-.247	.078	.063	-.546
180	124	-.033	.050	.311	-.191	180	207	-.097	.023	.024	-.184	190	17	-.310	.054	.265	-.597
180	125	.054	.032	.225	-.055	180	208	.117	.026	.032	-.209	190	18	-.050	.043	.082	-.495
180	126	-.020	.033	.207	-.062	180	209	-.121	.029	.015	-.230	190	19	-.193	.053	.043	-.622
180	127	.049	.036	.199	-.057	180	210	.152	.033	.001	-.285	190	20	-.369	.055	.324	-.082
180	128	.060	.050	.274	-.091	180	211	.166	.032	.051	-.306	190	21	-.239	.049	.007	.530
180	129	-.103	.032	.231	-.019	180	212	-.101	.033	.126	-.255	190	22	-.033	.050	.231	-.114
180	130	-.001	.041	.179	-.117	180	213	.113	.027	.015	-.234	190	23	-.159	.078	.167	-.479
180	131	.031	.043	.270	-.079	180	214	-.100	.022	.006	-.172	190	24	-.039	.039	.002	-.335
180	132	.063	.045	.350	-.054	180	301	-.016	.091	.487	-.291	190	25	-.380	.073	.116	-.788
180	133	.094	.036	.262	-.011	180	302	-.093	.171	.545	-.639	190	26	-.380	.078	.192	-.447
180	134	-.011	.113	.376	-.365	180	303	.148	.113	.614	-.417	190	27	-.080	.064	.091	-.433
180	135	.048	.048	.334	-.119	180	304	.205	.109	.907	-.174	190	28	-.149	.054	.353	-.027
180	136	.078	.045	.252	-.082	180	305	.321	.108	.743	-.055	190	29	-.142	.056	.023	-.438
180	137	.023	.083	.225	-.453	180	306	.229	.099	.745	-.019	190	30	-.198	.062	.059	-.830
180	138	.153	.072	.622	-.043	180	307	.032	.080	.464	-.234	190	31	-.278	.063	.225	-.862
180	139	.030	.074	.292	-.389	180	308	.241	.121	.800	-.073	190	32	-.499	.095	.104	-.992
180	140	.102	.041	.291	-.069	180	309	.288	.086	.684	-.050	190	33	-.481	.104	.160	-.363
180	141	.139	.060	.406	-.147	180	310	.203	.137	.692	-.280	190	34	-.114	.065	.160	-.363

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
190	35	- .182	.078	.094	-.584	190	128	.095	.058	.350	-.096	190	211	-.156	.039	.014	-.304
190	36	-.099	.053	.317	-.055	190	129	.168	.036	.297	-.073	190	212	-.101	.026	-.006	-.240
190	37	-.153	.049	.032	-.365	190	130	.059	.046	.252	-.060	190	213	-.157	.028	-.077	-.301
190	38	-.215	.045	-.075	-.400	190	131	.068	.051	.303	-.068	190	214	-.110	.029	.032	-.242
190	39	-.021	.039	.217	-.180	190	132	.099	.056	.403	-.048	190	301	-.093	.148	.539	-.473
190	40	-.241	.043	-.096	-.574	190	133	.099	.046	.352	-.036	190	302	-.218	.109	.688	-.218
190	41	-.164	.083	.116	-.430	190	134	.099	.100	.499	-.311	190	303	-.131	.082	.517	-.153
190	42	-.309	.082	.096	-.438	190	135	.065	.059	.358	-.114	190	305	-.356	.100	.853	-.168
190	43	-.154	.075	.160	-.015	190	136	.144	.061	.416	-.055	190	306	-.175	.068	.550	-.003
190	44	-.153	.065	.480	-.015	190	137	.097	.089	.374	-.427	190	307	-.054	.059	.218	-.250
190	45	-.116	.042	.039	-.285	190	138	.217	.075	.510	-.069	190	308	-.267	.117	.886	-.012
190	46	-.017	.054	.210	-.222	190	139	.112	.085	.448	-.266	190	309	-.252	.082	.686	-.047
190	47	-.252	.073	.121	-.623	190	140	.155	.046	.348	-.055	190	310	-.105	.126	.559	-.251
190	48	-.051	.058	.312	-.180	190	141	.228	.072	.561	-.050	190	311	-.076	.095	.446	-.172
190	49	-.144	.063	.440	-.023	190	142	.161	.061	.439	-.008	190	312	-.195	.080	.510	-.135
190	50	-.281	.055	-.423	-.614	190	143	.137	.044	.317	-.006	190	313	-.230	.068	.532	-.058
190	51	-.498	.098	-.123	-.894	190	144	-.037	.052	.202	-.199	190	314	-.152	.078	.610	-.069
190	52	-.086	.050	.157	-.313	190	145	-.025	.041	.166	-.166	190	315	-.035	.096	.448	-.289
190	53	-.163	.067	.467	-.091	190	146	.089	.054	.370	-.073	190	316	-.194	.097	.636	-.084
190	54	-.047	.066	.265	-.116	190	147	.119	.047	.367	-.029	190	317	-.152	.066	.448	-.011
190	55	-.100	.062	.466	-.110	190	148	.097	.058	.435	-.067	190	318	-.157	.049	.403	-.035
190	56	-.052	.039	.167	-.262	190	149	.029	.040	.209	-.111	190	319	-.104	.039	.261	-.014
190	57	-.132	.078	.119	-.433	190	150	.089	.121	.610	-.576	190	320	-.081	.113	.582	-.373
190	58	-.046	.033	.105	-.176	190	151	.224	.081	.692	-.015	190	401	-.151	.047	.001	-.335
190	59	-.125	.026	-.039	-.246	190	152	.102	.040	.305	-.003	190	402	-.209	.045	.072	-.387
190	60	-.171	.043	.056	-.318	190	153	.091	.044	.291	-.041	190	403	-.250	.146	.760	-.378
190	61	-.034	.038	.237	-.160	190	154	.159	.058	.403	-.009	190	404	-.042	.100	.381	-.389
190	62	-.069	.032	.105	-.173	190	155	.160	.062	.423	-.008	190	405	-.040	.074	.240	-.300
190	63	-.019	.025	.130	-.105	190	156	.123	.052	.348	-.019	190	406	-.127	.079	.180	-.568
190	64	-.111	.028	.063	-.224	190	157	.217	.062	.460	-.003	190	407	-.139	.046	.051	-.314
190	65	-.076	.031	.105	-.171	190	158	.112	.112	.525	-.440	200	1	-.189	.021	.104	-.260
190	66	-.204	.039	-.007	-.356	190	159	.190	.146	.738	-.566	200	2	-.188	.033	.077	-.327
190	67	-.039	.038	.285	-.171	190	160	.147	.063	.571	-.162	200	3	-.116	.024	.031	-.212
190	68	-.012	.025	.130	-.094	190	161	.274	.085	.583	-.287	200	4	-.195	.028	.110	-.304
190	69	-.001	.053	.226	-.217	190	162	.262	.096	.812	-.017	200	5	-.223	.051	.023	-.552
190	70	-.078	.053	.117	-.288	190	163	.189	.083	.605	-.045	200	6	-.376	.052	.172	-.650
190	71	-.068	.037	.203	-.041	190	164	.176	.068	.599	-.041	200	7	-.270	.050	.112	-.604
190	72	-.076	.063	.335	-.244	190	165	.199	.055	.534	-.078	200	8	-.294	.092	.030	-.818
190	73	-.083	.038	.219	-.073	190	166	.167	-.054	.895	-.054	200	9	-.326	.062	.164	-.624
190	74	-.131	.078	.498	-.055	190	167	-.054	.035	.070	-.149	200	10	-.430	.082	.213	-.822
190	75	-.224	.074	.194	-.482	190	168	.201	-.217	.040	-.073	200	11	-.471	.072	.225	-.445
190	76	-.022	.082	.413	-.195	190	169	.202	-.219	.035	-.092	200	12	-.365	.060	.061	-.525
190	77	-.044	.061	.357	-.126	190	170	.031	-.072	.304	-.012	200	13	-.282	.074	.248	-.611
190	78	-.098	.052	.341	-.047	190	171	.195	.038	.084	-.382	200	14	-.433	.063	.396	-.179
190	79	-.128	.061	.365	-.071	190	172	.204	-.133	.034	-.033	200	15	-.354	.078	.692	-.811
190	80	-.113	.046	.307	-.038	190	173	.205	-.362	.055	-.193	200	16	-.335	.067	.222	-.811
190	81	-.066	.063	.341	-.112	190	174	.207	-.088	.024	-.012	200	17	-.386	.062	.327	-.090
190	82	-.126	.045	.390	-.012	190	175	.209	-.121	.026	-.015	200	18	-.050	.062	.191	-.677
190	83	-.090	.043	.290	-.020	190	176	.210	-.158	.029	-.052	200	19	-.315	.064	.258	-.773
190	84	.092	.044	.298	-.043	190	177	.210	-.175	.039	-.019	200	20	-.431	.064		

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER ATLANTIC CITY

MD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	MD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	MD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
200	21	.093	.064	.425	.075	200	114	.032	.042	.287	.096	200	164	.230	.080	.455	.045
200	22	-.359	.065	-.683	-.746	200	115	.070	.062	.433	.299	200	165	.244	.076	.663	-.163
200	23	.006	.067	.389	-.230	200	116	-.091	.043	.285	-.034	200	166	.276	.094	.075	-.397
200	24	-.235	.093	.232	-.704	200	117	-.138	.084	.526	-.095	200	167	-.030	.047	.102	-.110
200	25	-.166	.066	.056	-.497	200	118	-.349	.094	.217	.698	200	201	-.278	.047	.470	-.487
200	26	.575	.087	-.226	-.1057	200	119	.096	.097	.537	.216	200	202	-.226	.040	.120	-.445
200	27	-.097	.100	.287	-.485	200	120	.126	.084	.445	.065	200	203	-.243	.047	.124	-.330
200	28	-.164	.069	.103	-.431	200	121	.166	.061	.412	-.006	200	204	-.155	.034	.049	-.044
200	29	-.182	.069	.501	-.002	200	122	.160	.051	.388	.040	200	205	-.310	.025	.242	-.230
200	30	-.321	.065	-.095	-.607	200	123	.146	.046	.342	-.004	200	206	-.140	.020	.050	-.050
200	31	-.397	.067	-.179	-.092	200	124	.091	.080	.459	.145	200	207	-.140	.020	.057	-.246
200	32	.613	.130	.006	-.259	200	125	.158	.057	.499	.012	200	208	-.171	.010	.430	-.340
200	33	.585	.132	-.286	-.123	200	126	.139	.058	.551	-.002	200	209	-.171	.010	.430	-.340
200	34	-.253	.053	-.061	-.532	200	127	.144	.054	.579	-.038	200	210	-.160	.010	.430	-.340
200	35	-.336	.091	.030	-.825	200	128	.133	.074	.470	.170	200	211	-.160	.010	.050	-.100
200	36	.126	.057	.396	-.073	200	129	.205	.043	.408	.094	200	212	-.180	.020	.100	-.110
200	37	-.255	.052	-.057	-.497	200	130	.107	.062	.410	.073	200	213	-.103	.042	.092	-.092
200	38	.366	.051	-.135	-.650	200	131	.116	.067	.430	.073	200	214	-.103	.044	.090	-.090
200	39	-.053	.052	.173	-.229	200	132	.143	.061	.489	.012	200	301	-.227	.020	.180	-.490
200	40	-.306	.053	-.128	-.542	200	133	.191	.045	.365	-.036	200	302	-.227	.020	.110	-.360
200	41	-.289	.098	.150	-.827	200	134	.138	.103	.517	.371	200	303	-.227	.020	.110	-.140
200	42	-.477	.066	.246	-.746	200	135	.085	.069	.393	.122	200	304	-.244	.040	.760	-.760
200	43	.176	.098	.146	-.757	200	136	.170	.056	.410	-.003	200	305	-.059	.044	.444	-.301
200	44	-.202	.072	.537	-.017	200	137	.151	.085	.459	.404	200	306	-.054	.044	.945	-.010
200	45	-.126	.053	.033	-.454	200	138	.246	.086	.626	.067	200	307	-.110	.020	.510	-.079
200	46	-.071	.082	.166	-.568	200	139	.169	.085	.505	.166	200	308	-.090	.070	.950	-.022
200	47	-.428	.077	-.086	-.914	200	140	.170	.052	.401	.045	200	309	-.020	.050	.350	-.350
200	48	-.067	.056	.218	-.198	200	141	.078	.078	.576	.036	200	310	-.030	.030	.401	-.260
200	49	-.296	.082	.521	-.029	200	142	.181	.071	.513	.018	200	311	-.160	.060	.401	-.044
200	50	-.308	.061	-.668	-.722	200	143	.150	.050	.377	.027	200	312	-.160	.060	.401	-.044
200	51	-.512	.101	-.087	-.971	200	144	.059	.064	.298	.253	200	313	-.184	.084	.360	-.360
200	52	-.133	.047	.128	-.309	200	145	.015	.061	.234	.033	200	314	-.070	.070	.440	-.440
200	53	-.111	.080	.418	-.195	200	146	.138	.068	.430	-.033	200	315	-.070	.070	.300	-.300
200	54	-.064	.051	.214	-.193	200	147	.150	.054	.384	.017	200	316	-.070	.046	.300	-.300
200	55	-.027	.067	.304	-.226	200	148	.143	.070	.468	.046	200	317	-.140	.060	.300	-.240
200	56	-.089	.039	.668	-.288	200	149	.052	.054	.399	.095	200	318	-.081	.064	.030	-.190
200	57	-.091	.078	.191	-.394	200	150	.189	.115	.609	.329	200	319	-.017	.047	.047	-.047
200	101	-.092	.039	.061	-.222	200	151	.261	.088	.674	.017	200	320	-.247	.084	.151	-.151
200	102	-.216	.030	-.109	-.317	200	152	.149	.050	.332	.010	200	401	-.121	.020	.669	-.669
200	103	-.163	.063	.098	-.369	200	153	.113	.058	.343	.037	200	402	-.121	.020	.669	-.669
200	104	-.034	.053	.308	-.201	200	154	.220	.077	.551	.047	200	403	-.121	.020	.669	-.669
200	105	-.107	.042	.176	-.269	200	155	.228	.083	.609	.017	200	404	-.121	.020	.669	-.669
200	106	-.063	.032	.178	-.150	200	156	.163	.057	.440	.016	200	405	-.121	.020	.669	-.669
200	107	-.100	.038	.209	-.205	200	157	.265	.066	.612	.110	200	406	-.121	.020	.669	-.669
200	108	-.067	.040	.088	-.190	200	158	.206	.098	.645	.208	200	210	-.180	.020	.220	-.020
200	109	-.276	.050	.049	-.437	200	159	.280	.115	.737	.528	200	210	-.027	.020	.830	-.011
200	110	-.079	.053	.170	-.228	200	160	.202	.077	.551	.047	200	210	-.120	.020	.669	-.669
200	111	-.002	.033	.123	-.094	200	161	.281	.078	.601	.083	200	210	-.120	.020	.669	-.669
200	112	-.025	.058	.310	-.146	200	162	.235	.087	.690	-.020	200	210	-.120	.020	.669	-.669
200	113	-.108	.052	.181	-.322	200	163	.149	.077	.549	.075	200	210	-.120	.020	.669	-.669

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
210	7	-445	.071	-.254	-.751	210	57	-.072	.056	.113	-.409	210	150	.254	.111	.659	-.323
210	8	-322	.063	-.031	-.614	210	101	-.129	.046	.078	-.308	210	151	.288	.097	.749	-.041
210	9	-345	.099	-.022	-.801	210	102	-.249	.034	-.122	-.389	210	152	.188	.061	.506	-.045
210	10	-413	.088	-.204	-.835	210	103	-.152	.072	.113	-.458	210	153	.128	.065	.399	-.057
210	11	-518	.106	-.278	-.1.049	210	104	-.001	.070	.443	-.218	210	154	.260	.082	.624	-.016
210	12	-533	.094	-.384	-.458	210	105	-.047	.054	.144	-.274	210	155	.276	.086	.652	-.071
210	13	-334	.078	-.055	-.676	210	106	-.047	.041	.135	-.171	210	156	.204	.070	.527	-.005
210	14	-570	.097	-.340	-.1.044	210	107	-.080	.051	.254	-.231	210	157	.310	.087	.727	-.101
210	15	-117	.074	-.497	-.1.227	210	108	-.051	.050	.120	-.202	210	158	.227	.102	.633	-.138
210	16	-417	.098	-.129	-.827	210	109	-.280	.072	.025	-.531	210	159	.233	.117	.772	-.055
210	17	-472	.082	-.283	-.1.102	210	110	-.054	.071	.289	-.242	210	160	.244	.088	.680	-.006
210	18	-132	.077	-.528	-.110	210	111	-.019	.042	.178	-.094	210	161	.252	.089	.629	-.015
210	19	-433	.086	-.178	-.795	210	112	-.062	.074	.355	-.225	210	162	.182	.093	.573	-.140
210	20	-507	.076	-.275	-.1.043	210	113	-.089	.053	.066	-.231	210	163	.052	.083	.494	-.224
210	21	-143	.074	-.505	-.041	210	114	-.092	.049	.267	-.078	210	164	.247	.084	.570	-.009
222	23	-437	.088	-.662	-.850	210	115	-.092	.098	.512	-.389	210	165	.258	.072	.624	-.063
210	24	-334	.093	.101	-.718	210	116	-.100	.043	.288	-.011	210	166	.209	.103	.695	-.172
210	25	-264	.089	.012	-.637	210	117	-.151	.080	.499	-.081	210	167	-.006	.050	.162	-.144
210	26	-676	.094	-.405	-.1.377	210	118	-.401	.111	.262	-.807	210	201	.331	.087	.020	-.895
210	27	-047	.106	-.353	-.455	210	119	-.127	.082	.470	-.187	210	202	.331	.059	.117	-.603
210	28	-171	.064	.059	-.507	210	120	-.193	.082	.395	-.063	210	203	.293	.048	.153	-.486
210	29	-223	.080	.546	-.017	210	121	-.206	.061	.474	-.006	210	204	.301	.052	.145	-.542
210	30	-371	.069	-.156	-.806	210	122	-.182	.052	.436	-.011	210	205	.188	.035	.068	-.339
210	31	-451	.076	-.171	-.770	210	123	-.177	.051	.381	-.015	210	206	.399	.062	.194	-.638
210	32	-745	.146	-.205	-.1.343	210	124	-.121	.087	.497	-.124	210	207	.147	.024	.048	-.234
210	33	-746	.144	-.336	-.1.248	210	125	-.180	.068	.642	-.028	210	208	.182	.028	.058	-.288
210	34	-333	.051	-.125	-.507	210	126	-.177	.070	.581	-.000	210	209	.300	.053	.175	-.525
210	35	-460	.096	-.117	-.1.000	210	127	-.169	.056	.436	-.017	210	210	.159	.061	.071	-.372
210	36	-152	.068	.440	-.045	210	128	-.159	.095	.595	-.140	210	211	.163	.069	.101	-.363
210	37	-335	.054	-.138	-.658	210	129	-.225	.052	.412	-.101	210	212	.156	.027	.078	-.261
210	38	-448	.056	-.284	-.714	210	130	-.156	.078	.577	-.035	210	213	.233	.035	.145	-.372
210	39	-041	.058	.174	-.308	210	131	-.160	.083	.490	-.117	210	214	.682	.052	.153	-.232
210	40	-356	.057	-.166	-.591	210	132	-.193	.080	.586	-.012	210	301	.342	.080	.100	-.723
210	41	-382	.097	-.116	-.723	210	133	-.223	.058	.497	-.054	210	302	.261	.123	.358	-.674
210	42	-528	.063	-.323	-.654	210	134	-.147	.134	.659	-.390	210	303	.088	.127	.606	-.490
210	43	-108	.106	.294	-.526	210	135	-.118	.084	.603	-.105	210	304	-.007	.065	.263	-.324
210	44	-234	.081	.570	-.017	210	136	-.157	.055	.375	-.014	210	305	-.049	.175	.600	-.555
210	45	-238	.097	.001	-.656	210	137	-.208	.091	.602	-.158	210	306	.632	.060	.286	-.373
210	46	-264	.141	-.083	-.006	210	138	-.275	.091	.668	-.082	210	307	-.204	.040	.010	-.360
210	47	-523	.084	-.234	-.1.030	210	139	-.226	.094	.767	-.152	210	308	.289	.111	.793	-.051
210	48	-020	.060	.259	-.247	210	140	-.200	.058	.465	-.057	210	309	.138	.071	.474	-.102
210	49	-240	.084	.579	-.054	210	141	-.224	.090	.575	-.024	210	310	-.036	.071	.239	-.344
210	50	-292	.042	-.154	-.487	210	142	-.232	.086	.597	-.007	210	311	-.138	.059	.108	-.408
210	51	-408	.122	-.051	-.935	210	143	-.185	.059	.485	-.045	210	312	-.044	.111	.300	-.321
210	52	-185	.037	-.029	-.326	210	144	-.071	.059	.286	-.287	210	313	.074	.070	.361	-.140
210	53	-031	.088	.268	-.379	210	145	-.035	.088	.356	-.245	210	314	.029	.059	.275	-.172
210	54	-140	.032	.666	-.266	210	146	-.196	.076	.541	-.003	210	315	-.162	.052	.089	-.360
210	55	-140	.057	.98	-.396	210	147	-.178	.082	.522	-.038	210	316	-.083	.087	.231	-.387
210	56	-125	.039	.050	-.333	210	148	-.074	.066	.381	-.095	210	317	-.010	.037	.155	-.096

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
210	319	.039	.049	.193	-.227	220	43	.009	.107	.349	-.347	220	136	.126	.060	.371	-.065
210	320	-.226	.044	-.011	-.368	220	44	.255	.089	.696	.019	220	137	.233	.093	.636	-.121
210	401	-.334	.063	-.119	-.669	220	45	-.356	.098	.048	-.756	220	138	.279	.097	.700	-.007
210	402	-.478	.142	-.248	-.130	220	46	-.400	.119	.144	-.861	220	139	.254	.096	.696	-.087
210	403	-.042	.241	.628	-.946	220	47	-.484	.081	-.244	-.867	220	140	.206	.065	.481	-.032
210	404	-.325	.099	.072	-.267	220	48	-.012	.075	.285	-.321	220	141	.201	.254	.091	.602
210	405	-.214	.098	.137	-.674	220	49	.256	.089	.679	.016	220	142	.194	.063	.480	-.029
210	406	-.297	.059	-.043	-.588	220	50	-.241	.035	-.116	-.456	220	144	-.063	.073	.348	-.303
220	1	-.214	.052	-.048	-.431	220	51	-.378	.132	-.123	-.964	220	145	.091	.097	.454	-.026
220	2	-.208	.025	-.132	-.303	220	52	-.220	.035	-.110	-.358	220	146	.234	.080	.575	-.026
220	3	-.132	.037	-.023	-.299	220	53	-.163	.087	-.136	-.497	220	147	.187	.058	.441	-.029
220	4	-.137	.035	-.028	-.293	220	54	-.139	.027	-.043	-.267	220	148	.221	.096	.660	-.051
220	5	-.248	.037	-.132	-.388	220	55	-.143	.051	.057	-.358	220	149	.112	.081	.512	-.121
220	6	-.233	.037	-.082	-.399	220	56	-.141	.040	-.020	-.302	220	150	.302	.108	.750	-.199
220	7	-.417	.081	-.201	-.753	220	57	-.109	.050	.089	-.347	220	151	.289	.108	.737	-.045
220	8	-.361	.075	-.017	-.725	220	101	-.090	.056	.160	-.262	220	152	.205	.062	.440	-.057
220	9	-.381	.089	-.107	-.804	220	102	-.219	.044	-.059	-.406	220	153	.135	.073	.418	-.076
220	10	-.431	.107	-.153	-.996	220	103	-.110	.088	.239	-.401	220	154	.281	.069	.642	-.074
220	11	-.484	.104	-.224	-.992	220	104	-.038	.086	.359	-.202	220	155	.302	.096	.723	-.071
220	12	-.021	.104	.497	-.413	220	105	-.017	.061	.228	-.214	220	156	.208	.072	.545	-.011
220	13	-.348	.077	-.045	-.652	220	106	-.034	.043	.192	-.084	220	157	.324	.091	.722	-.077
220	14	-.552	.089	-.321	-.973	220	107	-.054	.062	.235	-.229	220	158	.168	.110	.593	-.243
220	15	-.172	.076	.529	-.052	220	108	-.009	.065	.263	-.223	220	159	.141	.107	.640	-.217
220	16	-.448	.105	-.070	-.137	220	109	-.185	.090	.242	-.472	220	160	.239	.085	.589	-.018
220	17	-.517	.091	-.302	-.122	220	110	-.047	.080	.436	-.210	220	161	.158	.090	.591	-.101
220	18	-.198	.074	.395	-.077	220	111	-.049	.051	.258	-.093	220	162	.078	.121	.535	-.471
220	19	-.388	.088	-.046	-.730	220	112	-.084	.087	.484	-.204	220	163	.079	.087	.304	-.399
220	20	-.547	.090	-.332	-.1030	220	113	-.032	.075	.476	-.296	220	164	.265	.097	.641	-.050
220	21	-.179	.076	.606	-.025	220	114	-.123	.053	.365	-.073	220	165	.278	.084	.677	-.035
220	22	-.424	.086	.094	-.750	220	115	-.106	.113	.591	-.390	220	166	.075	.106	.488	-.317
220	23	-.117	.083	.475	-.173	220	116	-.126	.050	.334	-.007	220	167	.022	.066	.292	-.167
220	24	-.385	.085	-.025	-.773	220	117	-.217	.089	.663	-.061	220	201	.378	.102	.045	-.004
220	25	-.331	.097	-.034	-.729	220	118	-.353	.123	.308	-.005	220	202	.078	.073	.168	-.716
220	26	-.671	.098	-.401	-.126	220	119	-.158	.097	.602	-.144	220	203	.356	.059	.200	-.621
220	27	-.086	.113	.625	-.347	220	120	-.204	.084	.568	-.014	220	204	.357	.063	.178	-.582
220	28	-.198	.091	.113	-.656	220	121	-.204	.068	.456	-.014	220	205	.244	.038	.124	-.416
220	29	-.231	.080	.559	-.036	220	122	-.181	.052	.410	-.036	220	206	.363	.074	.136	-.616
220	30	-.327	.074	-.086	-.688	220	123	-.179	.053	.436	-.038	220	207	.195	.032	.067	-.337
220	31	-.377	.080	-.098	-.744	220	124	-.181	.100	.722	-.136	220	208	.223	.038	.033	-.382
220	32	-.736	.136	-.123	-.209	220	125	-.242	.085	.767	-.023	220	209	.389	.057	.207	-.626
220	33	-.823	.144	-.406	-.1358	220	126	-.237	.082	.790	-.021	220	210	.132	.069	.144	-.379
220	34	-.328	.068	-.096	-.631	220	127	-.200	.065	.656	-.057	220	211	.136	.087	.201	-.414
220	35	-.481	.100	-.176	-.899	220	128	-.193	.108	.630	-.129	220	212	.213	.033	.123	-.328
220	36	-.171	.074	.506	-.013	220	129	-.234	.055	.451	-.093	220	213	.307	.045	.182	-.480
220	37	-.374	.069	-.064	-.731	220	130	-.208	.095	.604	-.006	220	214	.051	.068	.247	-.246
220	38	-.434	.070	.285	-.839	220	131	-.206	.099	.633	-.217	220	301	.433	.073	.213	-.916
220	39	-.028	.067	.319	-.210	220	132	-.215	.080	.568	-.020	220	302	.351	.103	.038	.722
220	40	-.393	.072	-.144	-.876	220	133	-.222	.052	.418	-.066	220	303	-.112	.153	.492	-.825
220	41	-.439	.087	-.089	-.967	220	134	-.159	.141	.636	-.445	220	304	-.117	.099	.217	-.457
220	42	-.478	.066	-.296	-.784	220	135	-.151	.087	.617	-.133	220	304	-.117	.099	.217	-.457

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	
220	305	- .250	.104	.228	-.655	230	29	.262	.091	.714	.034	230	122	.200	.058	.465	.016	
220	306	- .080	.098	.188	-.552	230	31	.372	.087	.103	-.868	230	123	.201	.058	.508	.054	
220	307	- .230	.035	-.089	-.360	230	31	.418	.103	.046	-.862	230	124	.190	.103	.616	-.093	
220	308	- .286	.115	.926	-.046	230	33	.743	.141	.302	-.138	230	125	.253	.091	.606	.019	
220	309	- .004	.089	.298	-.357	230	33	.827	.137	.461	-.1	514	230	126	.247	.090	.634	-.111
220	310	- .056	.064	.287	-.13	230	33	.516	.102	.208	-.1	153	230	127	.206	.110	.760	-.122
220	311	- .217	.049	-.013	-.395	230	33	.432	.082	.077	-.045	230	128	.219	.053	.473	.058	
220	312	- .211	.096	.252	-.649	230	33	.517	.083	.312	-.1	001	230	130	.236	.096	.659	-.000
220	313	- .063	.070	.258	-.203	230	33	.425	.079	.077	-.743	230	131	.218	.101	.723	-.098	
220	314	- .055	.055	-.203	-.228	230	33	.517	.083	.325	-.389	230	132	.221	.092	.637	-.055	
220	315	- .215	.045	-.064	-.382	230	39	.021	.080	.066	-.787	230	133	.202	.057	.432	.039	
220	316	- .205	.071	.017	-.513	230	40	.425	.085	.200	-.850	230	134	.140	.153	.771	.468	
220	317	- .071	.027	.63	-.173	230	41	.488	.084	.351	-.765	230	135	.161	.094	.610	-.070	
220	318	- .118	.139	.301	-.520	230	42	.517	.063	.403	-.302	230	136	.088	.063	.338	-.087	
220	319	- .017	.048	.150	-.308	230	43	.052	.100	.634	-.037	230	137	.264	.093	.604	.185	
220	320	- .239	.043	-.086	-.457	230	44	.268	.084	.045	-.761	230	138	.293	.096	.744	-.027	
401	402	- .405	.077	-.095	-.755	230	45	.437	.084	.058	-.880	230	139	.286	.096	.513	.034	
402	403	- .538	.150	-.293	-.201	230	46	.509	.096	.286	-.108	230	140	.190	.066	.559	.018	
403	404	- .226	.289	.618	-.128	230	47	.532	.079	.237	-.642	230	141	.172	.093	.639	.043	
404	405	- .420	.104	-.052	-.1	005	230	48	.171	.123	.720	-.032	230	142	.262	.089	.669	.017
405	406	- .313	.111	.170	-.931	230	49	.265	.103	.128	-.526	230	143	.192	.061	.374	.307	
406	1	- .355	.076	.035	-.765	230	50	.254	.036	.109	-.924	230	144	.031	.089	.443	.224	
230	2	- .261	.065	-.086	-.577	230	51	.366	.113	.041	-.452	230	145	.163	.113	.634	.080	
230	3	- .262	.027	-.174	-.365	230	52	.238	.046	.018	-.804	230	146	.277	.096	.791	.033	
230	4	- .119	.037	-.023	-.295	230	53	.306	.083	.025	-.315	230	147	.196	.068	.653	.122	
230	5	- .116	.042	-.042	-.245	230	54	.195	.025	.117	-.471	230	148	.217	.094	.653	.076	
230	6	- .229	.043	-.095	-.425	230	55	.203	.053	.046	-.392	230	149	.114	.078	.502	.043	
230	7	- .269	.044	-.122	-.480	230	56	.155	.032	.075	-.391	230	150	.304	.101	.704	.043	
230	8	- .500	.093	-.265	-.849	230	57	.176	.049	.005	-.391	230	151	.269	.112	.690	.043	
230	9	- .374	.086	-.066	-.725	230	58	.072	.069	.319	-.323	230	152	.208	.066	.443	.013	
230	10	- .458	.090	.175	-.852	230	59	.251	.062	.016	-.490	230	153	.127	.077	.486	.283	
230	11	- .560	.131	-.255	-.137	230	60	.062	.095	.364	-.491	230	154	.280	.091	.717	.063	
230	12	- .590	.116	.304	-.1	018	230	61	.098	.097	.575	-.186	230	155	.203	.098	.808	.079
230	13	- .027	.121	.419	-.452	230	62	.021	.066	.278	-.181	230	156	.203	.075	.573	.096	
230	14	- .368	.074	-.066	-.608	230	63	.063	.048	.270	-.071	230	157	.319	.087	.695	.105	
230	15	- .637	.101	.370	-.111	230	64	.062	.073	.364	-.192	230	158	.098	.103	.563	.125	
230	16	- .200	.086	.51	-.018	230	65	.053	.076	.336	-.164	230	159	.082	.093	.441	.046	
230	17	- .476	.124	.106	-.957	230	66	.091	.095	.292	-.468	230	160	.224	.084	.669	.014	
230	18	- .557	.096	-.273	-.216	230	67	.106	.099	.641	-.140	230	161	.042	.076	.570	.181	
230	19	- .189	.080	.616	-.018	230	68	.091	.058	.320	-.057	230	162	.124	.167	.440	.723	
230	20	- .401	.097	-.076	-.808	230	69	.143	.111	.567	-.300	230	163	.228	.092	.165	.582	
230	21	- .574	.094	-.296	-.028	230	70	.031	.112	.464	-.326	230	164	.261	.093	.641	.020	
230	22	- .215	.085	.586	-.000	230	71	.174	.068	.590	-.016	230	165	.275	.085	.706	.046	
230	23	- .467	.084	-.117	-.845	230	72	.191	.114	.633	-.401	230	166	.079	.112	.313	.578	
230	24	- .137	.090	.577	-.172	230	73	.171	.060	.427	-.023	230	167	.073	.068	.436	.120	
230	25	- .430	.082	.162	-.865	230	74	.230	.099	.584	-.027	230	168	.062	.061	.136	.807	
230	26	- .715	.101	.452	-.1	222	75	.354	.146	.323	-.794	230	169	.412	.080	.641	.718	
230	27	- .130	.110	.545	-.279	230	76	.194	.118	.669	-.123	230	170	.408	.063	.224	.986	
230	28	- .311	.126	.076	-.863	230	77	.120	.097	.808	-.012	230	171	.402	.076	.194	-.066	

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
230	205	- .283	.040	- .133	- .455	240	15	.206	.096	.631	- .060	240	108	.116	.093	.528	- .155
230	206	- .270	.087	- .082	- .676	240	16	- .473	.128	.077	- 1.001	240	109	- .036	.138	.450	- .419
230	207	- .243	.041	- .119	- .380	240	17	- .610	.101	.354	- 1.210	240	110	.160	.110	.700	- .159
230	208	- .242	.062	- .058	- .406	240	18	.209	.081	.658	- .019	240	111	.126	.063	.381	- .076
230	209	- .415	.066	- .209	- .667	240	19	- .606	.093	.352	- 1.232	240	112	.016	.111	.447	- .345
230	210	- .099	.079	- .271	- .393	240	20	- .225	.089	.559	- .018	240	113	.162	.067	.430	- .009
230	211	- .102	.107	- .366	- .430	240	21	- .474	.097	.058	- .901	240	114	.183	.110	.605	- .410
230	212	- .294	.047	- .162	- .558	240	22	- .119	.100	.486	- .258	240	115	.169	.058	.429	- .021
230	213	- .362	.052	- .181	- .621	240	23	- .442	.084	.175	- .856	240	116	.227	.098	.642	- .025
230	214	- .005	.066	- .265	- .236	240	24	- .388	.093	.046	- .781	240	117	- .351	.148	.357	- .799
230	201	- .477	.072	- .298	- .936	240	25	- .733	.112	.443	- 1.388	240	118	.191	.124	.672	- .179
230	302	- .376	.106	- .024	- .792	240	26	- .148	.100	.520	- 1.193	240	119	.225	.095	.653	- .000
230	303	- .298	.146	- .285	- .608	240	27	- .404	.120	.111	- .846	240	120	.211	.083	.579	- .015
230	304	- .255	.102	- .052	- .629	240	28	- .259	.097	.621	- .021	240	121	.192	.055	.420	- .036
230	305	- .337	.072	- .128	- .611	240	29	- .392	.089	.095	- .901	240	122	.194	.057	.453	- .073
230	306	- .260	.147	- .054	- .846	240	30	- .433	.112	.069	- .923	240	123	.194	.104	.680	- .080
230	307	- .246	.034	- .105	- .423	240	31	- .302	.135	.302	- 1.206	240	124	.253	.092	.613	- .001
230	308	- .288	.116	1.037	- .080	240	32	- .707	.148	.326	- 1.400	240	125	.249	.090	.664	- .021
230	309	- .191	.104	- .119	- .571	240	33	- .740	.148	.326	- 1.400	240	126	.199	.059	.476	- .010
230	310	- .098	.107	- .248	- .616	240	34	- .475	.097	.016	- 1.085	240	127	.200	.108	.708	- .158
230	311	- .255	.048	- .040	- .448	240	35	- .557	.111	.131	- 1.040	240	128	.200	.053	.453	- .076
230	312	- .328	.080	- .062	- .640	240	36	- .205	.081	.596	- .025	240	129	.249	.094	.648	- .002
230	313	- .187	.068	.035	- .480	240	37	- .446	.089	.137	- .817	240	130	.219	.105	.667	- .308
230	314	- .135	.067	.125	- .468	240	38	- .599	.100	.345	- .989	240	131	.250	.104	.776	- .197
230	315	- .233	.041	- .017	- .393	240	39	- .068	.092	.276	- .458	240	132	.206	.060	.465	- .051
230	316	- .330	.073	- .156	- .699	240	40	- .416	.100	.057	- .856	240	133	.169	.160	.767	- .468
230	317	- .130	.020	- .062	- .230	240	41	- .513	.091	.671	- .950	240	134	.196	.106	.706	- .093
230	318	- .227	.099	.211	- .534	240	42	- .558	.071	.368	- .864	240	135	.142	.063	.313	- .124
230	319	- .082	.062	.095	- .398	240	43	- .071	.094	.527	- .368	240	136	.244	.107	.657	- .125
230	320	- .263	.060	- .094	- .668	240	44	- .255	.090	.698	- .040	240	137	.244	.107	.693	- .026
230	401	- .467	.084	- .185	- .854	240	45	- .451	.091	.036	- .833	240	138	.260	.113	.699	- .036
230	402	- .530	.111	- .278	- .255	240	46	- .542	.104	.079	- 1.135	240	139	.262	.109	.491	- .010
230	403	- .429	.270	- .366	- 1.319	240	47	- .550	.085	.343	- .997	240	140	.159	.063	.565	- .193
230	404	- .483	.106	- .208	- .962	240	48	- .360	.115	.028	- .816	240	141	.121	.092	.637	- .025
230	405	- .427	.115	.074	- .985	240	49	- .247	.088	.596	- .018	240	142	.246	.092	.404	- .024
230	406	- .439	.090	- .088	- .973	240	50	- .248	.046	.074	- .487	240	143	.171	.063	.573	- .288
240	1	- .299	.073	- .142	- .594	240	51	- .481	.107	.204	- .974	240	144	.021	.095	.404	- .288
240	2	- .313	.036	- .183	- .468	240	52	- .235	.066	.049	- .500	240	145	.200	.112	.609	- .161
240	3	- .111	.042	- .062	- .313	240	53	- .384	.085	.068	- .827	240	146	.284	.101	.682	- .262
240	4	- .101	.048	- .072	- .242	240	54	- .234	.030	.157	- 1.410	240	147	.186	.067	.437	- .013
240	5	- .215	.047	- .002	- .397	240	55	- .233	.048	.099	- 1.603	240	148	.224	.100	.710	- .115
240	6	- .267	.042	- .141	- .496	240	56	- .170	.023	.096	- .311	240	149	.108	.079	.460	- .116
240	7	- .535	.093	- .278	- .930	240	57	- .221	.045	.680	- .450	240	150	.300	.101	.738	- .078
240	8	- .345	.087	- .039	- .694	240	101	- .037	.083	.399	- .278	240	151	.239	.112	.727	- .075
240	9	- .524	.110	- .258	- 1.016	240	102	- .269	.084	.101	- .543	240	152	.196	.066	.473	- .029
240	10	- .641	.135	- .290	- 1.411	240	103	- .002	.100	.531	- .399	240	153	.120	.079	.456	- .077
240	11	- .670	.131	- .304	- 1.358	240	104	- .139	.105	.562	- .196	240	154	.272	.096	.738	- .061
240	12	- .075	.117	- .497	- .422	240	105	- .047	.068	.332	- 1.67	240	155	.292	.099	.750	- .059
240	13	- .365	.067	- .144	- .687	240	106	- .083	.050	.295	- .051	240	156	.175	.069	.509	- .014
240	14	- .693	.108	- .271	- 1.193	240	107	- .049	.078	.377	- 1.72	240	157	.275	.097	.757	- .031

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
240	158	.007	.094	.350	-.385	250	1	.243	.066	-.072	-.518	250	51	.366	.098	-.033	-.848
240	159	.004	.083	.324	-.356	250	2	.178	.031	-.066	-.288	250	52	.219	.073	-.065	-.630
240	160	.208	.085	.616	-.058	250	3	.009	.038	.147	-.153	250	53	.287	.074	-.020	-.594
240	161	-.062	.063	.188	-.267	250	4	.017	.053	.195	-.205	250	54	.167	.049	-.011	-.409
240	162	-.351	.137	.173	-.098	250	5	.101	.041	.060	-.262	250	55	.176	.046	-.046	-.376
240	163	-.375	.088	-.144	-.257	250	6	.146	.033	-.044	-.400	250	56	.139	.026	-.044	-.322
240	164	.210	.091	.671	-.039	250	7	.316	.076	-.064	-.636	250	57	.172	.048	-.016	-.464
240	165	.238	.083	.597	-.028	250	8	.187	.055	.017	.506	250	101	.082	.102	.629	-.176
240	166	-.246	.109	.119	-.694	250	9	.380	.096	-.135	-.687	250	102	.091	.092	.218	-.419
240	167	-.104	.063	.354	-.070	250	10	.428	.099	-.122	-.957	250	103	.065	.113	.613	-.365
240	201	-.454	.155	.024	-1.297	250	11	.518	.130	-.195	-1.100	250	104	.128	.104	.568	-.269
240	202	-.414	.088	-.101	-.798	250	12	.049	.112	.511	-.336	250	105	.090	.058	.365	-.096
240	203	-.434	.074	-.246	-.749	250	13	.235	.054	-.070	-.551	250	106	.095	.053	.325	-.050
240	204	-.456	.107	-.239	-1.425	250	14	.487	.100	-.140	-.997	250	107	.093	.081	.468	-.121
240	205	-.314	.054	-.087	-.548	250	15	.155	.089	.547	-.079	250	108	.129	.084	.624	-.103
240	206	-.164	.086	.134	-.468	250	16	.282	.114	.260	-.796	250	109	.052	.108	.490	-.277
240	207	-.276	.046	-.111	-.468	250	17	.451	.099	-.222	-.939	250	110	.127	.093	.582	-.110
240	208	-.230	.083	.155	-.473	250	18	.171	.082	.578	-.015	250	111	.100	.060	.439	-.039
240	209	-.397	.071	-.140	-.755	250	19	.274	.089	.118	-.707	250	112	.108	.098	.689	-.316
240	210	-.051	.090	.363	-.350	250	20	.434	.101	.186	-.966	250	113	.064	.102	.497	-.228
240	211	-.027	.124	.405	-.481	250	21	.158	.089	.629	-.045	250	114	.145	.065	.618	-.001
240	212	-.416	.065	-.237	-.638	250	22	.291	.074	.081	-.735	250	115	.151	.098	.744	-.497
240	213	-.402	.062	-.196	-.621	250	23	.079	.101	.502	-.267	250	116	.120	.058	.394	-.021
240	214	-.057	.080	-.447	-.199	250	24	.321	.079	.090	-.669	250	117	.163	.079	.618	-.013
240	301	-.325	.082	-.308	-.929	250	25	.243	.067	-.009	-.580	250	118	.097	.150	.526	-.698
240	302	-.284	.101	.032	-.795	250	26	.305	.096	-.051	-1.001	250	119	.121	.104	.674	-.162
240	303	-.452	.131	.123	-.877	250	27	.098	.089	.535	-.249	250	120	.156	.090	.699	-.066
240	304	-.391	.083	-.124	-.727	250	28	.253	.106	.189	-.642	250	121	.138	.072	.655	-.045
240	305	-.392	.058	-.223	-.705	250	29	.174	.090	.602	-.061	250	122	.093	.061	.405	-.066
240	306	-.460	.119	-.080	-.891	250	30	.265	.070	.044	-.594	250	123	.136	.061	.497	-.005
240	307	-.273	.047	-.093	-.490	250	31	.266	.087	.037	-.658	250	124	.124	.095	.572	-.104
240	308	-.225	.110	.644	-.064	250	32	.464	.120	.078	-1.108	250	125	.151	.074	.469	-.029
240	309	-.349	.085	-.036	-.628	250	33	.472	.127	.202	-1.344	250	126	.115	.082	.462	-.176
240	310	-.214	.132	.151	-.712	250	34	.273	.072	.016	-.579	250	127	.125	.057	.430	-.025
240	311	-.249	.053	-.073	-.481	250	35	.421	.111	-.135	-1.040	250	128	.134	.108	.651	-.438
240	312	-.433	.070	-.240	-.832	250	36	.120	.074	.500	-.098	250	129	.123	.053	.363	-.026
240	313	-.338	.076	-.136	-.673	250	37	.283	.080	.027	-.666	250	130	.141	.103	.638	-.153
240	314	-.263	.095	.016	-.679	250	38	.434	.096	.147	-.847	250	131	.146	.109	.634	-.287
240	315	-.237	.052	-.047	-.469	250	39	.028	.096	.386	-.414	250	132	.169	.097	.660	-.138
240	316	-.418	.076	-.243	-.774	250	40	.241	.096	.085	-.696	250	133	.126	.059	.503	-.026
240	317	-.171	.021	-.104	-.289	250	41	.343	.116	.226	-.811	250	134	.071	.144	.687	-.519
240	318	-.270	.072	.033	-.639	250	42	.451	.082	-.259	-.782	250	135	.122	.100	.653	-.163
240	319	-.141	.079	.022	-.474	250	43	.066	.093	.455	-.320	250	136	.023	.057	.231	-.166
240	320	-.321	.087	-.089	-.786	250	44	.181	.095	.613	-.089	250	137	.162	.085	.545	-.084
240	401	-.489	.102	-.041	-.083	250	45	.275	.081	.009	-.632	250	138	.140	.000	.642	-.136
240	402	-.516	.083	-.304	-.1079	250	46	.330	.089	.188	-.711	250	139	.183	.094	.628	-.103
240	403	-.339	.216	.251	-.1290	250	47	.389	.092	-.093	-.917	250	140	.106	.065	.388	-.086
240	404	-.496	.107	-.185	-.218	250	48	.258	.091	.103	-.723	250	141	.046	.078	.370	-.233
240	405	-.479	.113	-.039	-.969	250	49	.161	.084	.656	-.103	250	142	.123	.090	.497	-.129
240	406	-.482	.097	-.090	-.863	250	50	.202	.060	.010	-.482	250	143	.111	.062	.385	-.071

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
250	144	.025	.087	.370	-.324	250	313	.308	.048	-.176	-.490	260	37	-.234	.073	-.012	-.649
250	145	.138	.095	.607	-.210	250	314	-.329	.069	-.075	-.591	260	38	-.386	.090	-.117	-.854
250	146	.148	.108	.598	-.434	250	315	-.202	.052	-.020	-.426	260	39	-.073	.118	.404	-.542
250	147	.124	.066	.511	-.106	250	316	.307	.070	-.147	-.653	260	40	-.183	.091	-.128	-.533
250	148	.146	.106	.844	-.177	250	317	-.131	.022	-.061	-.218	260	41	-.230	.132	-.219	-.887
250	149	.060	.077	.448	-.139	250	318	-.194	.064	-.107	-.509	260	42	-.442	.082	-.368	-.542
250	150	.159	.097	.778	-.148	250	319	.146	.073	-.008	-.490	260	43	-.046	.082	-.593	-.062
250	151	.142	.102	.648	-.115	250	320	.275	.082	-.048	-.752	260	44	-.147	.074	-.004	-.566
250	152	.130	.061	.535	-.052	250	401	.326	.108	-.116	-.894	260	45	-.213	.078	.074	-.621
250	153	.050	.066	.416	-.187	250	402	.387	.084	-.163	-.917	260	46	-.273	.084	-.117	-.810
250	154	.120	.087	.483	-.125	250	403	.447	.167	-.250	-.129	260	47	-.360	.073	.049	-.569
250	155	.178	.085	.530	-.080	250	404	.409	.110	-.014	-.224	260	48	-.258	.078	.021	-.550
250	156	.123	.069	.483	-.107	250	405	.326	.099	-.020	-.993	260	49	-.128	.055	.410	-.757
250	157	.119	.086	.374	-.111	250	406	.288	.076	-.000	-.677	260	50	-.212	.086	.046	-.508
250	158	-.113	.093	.349	-.451	260	1	.169	.063	-.073	-.457	260	51	-.308	.063	-.128	-.665
250	159	-.061	.077	.279	-.385	260	1	.146	.047	-.076	-.330	260	52	-.234	.078	-.029	-.466
250	160	.104	.069	.454	-.116	260	1	.090	.038	-.165	-.157	260	53	-.189	.050	-.053	-.466
250	161	.108	.044	.152	-.270	260	1	.007	.046	-.237	-.164	260	54	-.181	.050	-.073	-.417
250	162	.361	.074	-.066	-.648	260	1	.088	.054	-.147	-.343	260	55	-.154	.044	-.020	-.569
250	163	.293	.056	-.133	-.520	260	1	.099	.040	-.032	-.388	260	56	-.140	.050	-.035	-.360
250	164	.125	.085	.506	-.095	260	1	.285	.103	-.001	-.875	260	57	-.140	.050	-.509	-.110
250	165	.145	.074	.464	-.052	260	1	.133	.064	-.214	-.356	260	58	-.140	.050	-.390	-.462
250	166	.336	.093	.023	-.766	260	1	.337	.116	-.020	-.828	260	59	-.105	.093	-.590	-.193
250	167	.114	.074	.398	-.088	260	1	.368	.108	-.077	-.058	260	60	-.096	.105	.731	-.191
250	201	.263	.114	.057	-.031	260	1	.517	.159	-.108	-.316	260	61	-.157	.065	.440	-.068
250	202	.225	.073	.088	-.549	260	1	.129	.111	-.586	-.288	260	62	-.155	.065	.437	-.061
250	203	.321	.069	-.125	-.694	260	1	.223	.060	-.050	-.508	260	63	-.116	.086	.613	-.123
250	204	.490	.165	-.132	-.501	260	1	.473	.107	-.064	-.914	260	64	-.116	.090	.548	-.047
250	205	.232	.058	-.042	-.311	260	1	.187	.098	-.580	-.077	260	65	-.171	.100	.556	-.215
250	206	.026	.092	.393	-.509	260	1	.228	.104	-.149	-.703	260	66	-.136	.100	.710	-.128
250	207	.239	.058	.061	-.540	260	1	.412	.091	-.150	-.922	260	67	-.186	.111	.436	-.028
250	208	.148	.104	.330	-.406	260	1	.176	.071	-.538	-.026	260	68	-.139	.069	.711	-.177
250	209	.278	.073	-.012	-.743	260	1	.250	.073	-.053	-.618	260	69	-.123	.140	.649	-.161
250	210	.020	.097	.408	-.304	260	1	.375	.088	-.094	-.809	260	70	-.133	.117	.587	-.057
250	211	.040	.115	.565	-.325	260	21	.153	.088	-.606	-.045	260	71	-.149	.081	.615	-.261
250	212	.493	.083	-.188	-.826	260	21	.249	.070	-.078	-.594	260	72	-.169	.071	.501	-.012
250	213	.234	.072	.016	-.309	260	23	.032	.110	-.478	-.549	260	73	-.166	.086	.686	-.013
250	214	.099	.089	.517	-.120	260	24	.299	.075	-.013	-.612	260	74	-.213	.086	.697	-.475
250	301	.409	.079	-.221	-.983	260	25	.211	.069	-.038	-.519	260	75	-.213	.052	.175	-.146
250	302	.306	.089	.040	-.934	260	26	.464	.107	-.135	-.001	260	76	-.119	.171	.109	-.643
250	303	.371	.089	-.028	-.802	260	27	.095	.095	-.551	-.359	260	77	-.120	.161	.087	-.104
250	304	.316	.069	-.070	-.658	260	28	.204	.100	-.203	-.669	260	78	-.121	.073	.612	-.075
250	305	.317	.050	-.189	-.556	260	29	.141	.079	-.489	-.081	260	79	-.122	.063	.499	-.018
250	306	.424	.090	-.218	-.946	260	30	.246	.067	-.050	-.585	260	80	-.138	.060	.520	-.018
250	307	.246	.048	-.086	-.532	260	31	.224	.076	-.102	-.582	260	81	-.124	.091	.500	-.124
250	308	.124	.097	.656	-.107	260	32	.382	.107	-.046	-.993	260	82	-.125	.141	.071	-.112
250	309	.319	.057	-.157	-.538	260	33	.391	.103	-.146	-.940	260	83	-.126	.079	.517	-.018
250	310	.319	.100	.082	-.732	260	34	.221	.058	-.002	-.459	260	84	-.127	.057	.370	-.018
250	311	.212	.066	.041	-.532	260	35	.399	.109	-.010	-.907	260	85	-.128	.099	.616	-.122
250	312	.329	.061	-.143	-.656	260	36	.092	.074	.491	-.191	260	86	-.099	.049	.299	-.022

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
260	130	.145	.099	.603	-.112	260	213	.209	.089	.274	-.500	270	23	.082	.097	.499	-.262
260	131	.097	.121	.624	-.511	260	214	.168	.099	.686	-.085	270	24	-.244	.079	.021	-.738
260	132	.121	.110	.686	-.517	260	301	-.379	.071	-.183	-.931	270	25	-.172	.065	.121	-.549
260	133	.102	.058	.408	-.038	260	302	-.295	.076	-.051	-.764	270	26	-.394	.110	-.032	-.914
260	134	.067	.135	.631	-.427	260	303	-.316	.069	-.100	-.629	270	27	-.100	.083	.510	-.282
260	135	-.110	.092	.610	-.159	260	304	-.278	.047	-.101	-.499	270	28	-.146	.087	.214	-.489
260	136	-.007	.047	.259	-.153	260	305	-.269	.047	-.135	-.801	270	29	-.129	.078	.474	-.086
260	137	.119	.083	.567	-.224	260	306	-.346	.080	-.107	-.468	270	30	-.210	.061	.063	-.522
260	138	.079	.094	.354	-.232	260	307	-.243	.049	-.107	-.468	270	31	-.170	.065	.059	-.486
260	139	.137	.090	.629	-.277	260	308	-.082	.086	.506	-.189	270	32	-.312	.098	-.017	-.966
260	140	.064	.064	.351	-.133	260	309	-.275	.046	-.147	-.501	270	33	-.341	.100	-.103	-.929
260	141	.003	.075	.356	-.217	260	310	-.310	.067	-.079	-.632	270	34	-.188	.056	.063	-.471
260	142	.087	.088	.529	-.177	260	311	-.224	.059	-.052	-.588	270	35	-.333	.095	-.065	-.774
260	143	.079	.061	.368	-.134	260	312	-.259	.056	-.083	-.506	270	36	-.089	.071	.391	-.112
260	144	-.024	.085	.364	-.306	260	313	-.264	.049	-.115	-.531	270	37	-.184	.061	-.015	-.469
260	145	.150	.094	.646	-.135	260	314	-.302	.063	-.121	-.655	270	38	-.312	.080	.039	-.755
260	146	.109	.128	.673	-.699	260	315	-.217	.053	-.026	-.477	270	39	-.102	.108	.260	-.661
260	147	.089	.063	.392	-.089	260	316	-.267	.059	-.138	-.626	270	40	-.129	.081	.223	-.433
260	148	.107	.092	.331	-.124	260	317	-.140	.023	-.068	-.246	270	41	-.124	.114	.476	-.714
260	149	.040	.074	.428	-.147	260	318	-.171	.056	-.005	-.457	270	42	-.417	.089	-.120	-.764
260	150	.110	.090	.636	-.123	260	319	-.152	.062	-.039	-.532	270	43	-.028	.070	.380	-.369
260	151	.086	.091	.540	-.211	260	320	-.257	.074	-.003	-.809	270	44	-.098	.072	.499	-.136
260	152	.106	.057	.364	-.049	260	401	-.264	.103	-.118	-.795	270	45	-.153	.060	.076	-.660
260	153	.040	.064	.333	-.174	260	402	-.355	.082	-.619	-.937	270	46	-.184	.091	.129	-.585
260	154	.099	.083	.550	-.119	260	403	-.434	.133	-.102	-.107	270	47	-.334	.080	-.072	-.152
260	155	.152	.083	.583	-.084	260	404	-.388	.168	-.097	-.193	270	48	-.223	.064	.001	-.579
260	156	.095	.066	.391	-.128	260	405	-.284	.081	-.059	-.803	270	49	-.091	.073	.456	-.081
260	157	.072	.066	.433	-.099	260	406	-.255	.067	-.059	-.545	270	50	-.181	.051	.005	-.436
260	158	-.139	.077	.267	-.416	270	1	-.119	.071	.201	-.518	270	51	-.236	.075	-.020	-.663
260	159	-.077	.062	.181	-.343	270	2	-.022	.057	.323	-.169	270	52	-.207	.058	.016	-.514
260	160	.078	.071	.492	-.166	270	3	-.014	.051	.249	-.143	270	53	-.186	.058	.010	-.458
260	161	-.117	.040	.126	-.315	270	4	-.011	.061	.288	-.280	270	54	-.150	.039	-.030	-.352
260	162	.320	.066	-.140	-.625	270	5	-.023	.064	.378	-.296	270	55	-.138	.051	.034	-.366
260	163	-.261	.056	-.102	-.513	270	6	-.070	.055	.149	-.376	270	56	-.150	.050	.025	-.518
260	164	.078	.073	.416	-.146	270	7	-.124	.088	.149	-.734	270	57	-.105	.051	.094	-.381
260	165	.099	.065	.444	-.081	270	8	-.083	.060	.191	-.379	270	101	-.070	.085	.543	-.332
260	166	-.348	.066	-.086	-.680	270	9	-.134	.083	.130	-.481	270	102	-.029	.091	.439	-.311
260	167	.119	.076	.472	-.079	270	10	-.168	.084	.213	-.669	270	103	-.027	.086	.611	-.258
260	201	-.178	.117	.254	-.906	270	11	-.258	.130	.149	-.873	270	104	-.016	.103	.511	-.410
260	202	-.154	.076	.200	-.513	270	12	-.017	.161	.508	-.419	270	105	-.071	.058	.367	-.158
260	203	-.273	.068	-.008	-.544	270	13	-.159	.054	.023	-.536	270	106	-.055	.056	.320	-.090
260	204	-.493	.207	.116	-.1404	270	14	-.294	.136	.164	-.786	270	107	-.070	.078	.513	-.100
260	205	-.199	.070	.295	-.516	270	15	-.115	.104	.274	-.172	270	108	-.054	.075	.536	-.168
260	206	-.037	.083	.324	-.532	270	16	-.157	.106	.263	-.648	270	109	-.038	.096	.735	-.290
260	207	-.211	.060	.010	-.485	270	17	-.326	.103	-.004	-.953	270	110	-.047	.089	.466	-.486
260	208	-.125	.094	.283	-.439	270	18	-.150	.087	.556	-.070	270	111	-.047	.060	.400	-.116
260	209	-.231	.078	.070	-.629	270	19	-.191	.074	.094	-.603	270	112	-.042	.094	.742	-.203
260	210	.072	.094	.465	-.245	270	20	-.315	.107	.052	-.920	270	113	-.052	.093	.885	-.220
260	211	.136	.114	.567	-.308	270	21	-.145	.105	.589	-.114	270	114	-.079	.074	.501	-.079
260	212	-.379	.102	-.037	-.734	270	22	-.185	.082	.153	-.579	270	115	-.070	.104	.652	-.347

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION B: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
270	116	.069	.072	.525	-.097	270	166	.342	.057	-.200	-.605	280	9	-.091	.103	.388	-.628
270	117	.131	.090	.671	-.107	270	167	.034	.066	.400	-.148	280	10	-.116	.110	.237	-.701
270	118	-.012	.131	.754	-.059	270	201	-.151	.110	.266	-.829	280	11	-.181	.120	.209	-.808
270	119	.084	.115	.834	-.280	270	202	-.113	.082	.214	-.478	280	12	-.089	.087	.611	-.124
270	120	.196	.104	.669	-.106	270	203	-.206	.082	.076	-.571	280	13	-.129	.061	.167	-.415
270	121	.177	.088	.593	-.111	270	204	-.377	.185	.323	-.1403	280	14	-.101	.087	.243	-.510
270	122	.126	.078	.486	-.140	270	205	-.088	.074	.357	-.417	280	15	-.079	.079	.492	-.104
270	123	.162	.075	.435	-.140	270	206	-.067	.094	.517	-.292	280	16	-.079	.060	.175	-.383
270	124	.172	.115	.699	-.140	270	207	-.097	.053	.176	-.320	280	17	-.186	.075	.034	-.579
270	125	.179	.082	.536	-.042	270	208	-.069	.093	.321	-.403	280	18	-.107	.058	.443	-.036
270	126	.138	.095	.583	-.175	270	209	-.112	.095	.316	-.506	280	19	-.123	.042	.030	-.370
270	127	.142	.068	.444	-.055	270	210	-.010	.075	.340	-.280	280	20	-.162	.078	.125	-.565
270	128	.136	.096	.631	-.104	270	211	.042	.103	.475	-.254	280	21	-.058	.066	.446	-.136
270	129	.109	.050	.327	-.025	270	212	-.191	.078	.128	-.524	280	22	-.055	.056	.276	-.240
270	130	.170	.107	.660	-.089	270	213	-.090	.102	.407	-.440	280	23	-.056	.102	.515	-.546
270	131	.101	.108	.687	-.444	270	214	-.077	.073	.532	-.097	280	24	-.152	.060	.123	-.378
270	132	.114	.108	.782	-.424	270	301	-.374	.072	-.172	-.703	280	25	-.130	.041	.086	-.317
270	133	.101	.056	.368	-.054	270	302	-.273	.074	-.042	-.759	280	26	-.153	.070	.144	-.505
270	124	.083	.125	.737	-.356	270	303	-.248	.067	-.042	-.561	280	27	-.000	.064	.410	-.305
270	135	.114	.089	.580	-.157	270	304	-.210	.053	-.070	-.464	280	28	-.163	.052	.168	-.151
270	136	-.013	.039	.156	-.144	270	305	-.206	.038	-.101	-.384	280	29	-.137	.065	.390	-.322
270	137	.110	.067	.411	-.101	270	306	-.254	.056	-.126	-.568	280	30	-.121	.035	.014	-.309
270	138	.058	.076	.456	-.165	270	307	-.200	.044	-.075	-.417	280	31	-.110	.044	.079	-.230
270	139	.121	.075	.453	-.123	270	308	-.041	.079	-.433	-.180	280	32	-.170	.077	.230	-.528
270	140	.044	.069	.356	-.119	270	309	-.215	.038	-.076	-.375	280	33	-.196	.070	.046	-.782
270	141	-.017	.063	.315	-.234	270	310	-.256	.054	-.025	-.535	280	34	-.096	.035	.049	-.261
270	142	.063	.077	.435	-.121	270	311	-.205	.051	-.025	-.510	280	35	-.209	.077	.059	-.647
270	143	.049	.056	.271	-.116	270	312	-.197	.046	-.070	-.431	280	36	-.022	.063	.515	-.203
270	144	-.027	.075	.334	-.226	270	313	-.206	.042	-.092	-.391	280	37	-.108	.048	.106	-.483
270	145	.145	.080	.491	-.086	270	314	-.244	.053	-.110	-.524	280	38	-.169	.071	.077	-.525
270	146	.047	.136	.450	-.935	270	315	-.198	.051	-.004	-.463	280	39	-.168	.071	.077	-.703
270	147	.046	.056	.339	-.135	270	316	-.252	.048	-.127	-.522	280	40	-.057	.069	.502	-.385
270	148	.074	.076	.476	-.149	270	317	-.146	.025	-.063	-.274	280	41	-.094	.086	.502	-.709
270	149	.023	.063	.331	-.161	270	318	-.160	.060	-.165	-.482	280	42	-.259	.089	.025	-.707
270	150	.057	.079	.430	-.179	270	319	-.140	.061	-.063	-.505	280	43	-.002	.076	.343	-.341
270	151	.036	.080	.394	-.228	270	320	-.268	.060	-.043	-.576	280	44	-.055	.084	.422	-.179
270	152	.067	.053	.336	-.092	270	401	-.190	.094	.173	-.608	280	45	-.129	.042	.061	-.451
270	153	.021	.060	.318	-.161	270	402	-.294	.093	.064	-.857	280	46	-.075	.076	.291	-.389
270	154	.061	.079	.449	-.112	270	403	-.377	.117	.005	-.012	280	47	-.247	.079	.028	-.694
270	155	.110	.080	.494	-.167	270	404	-.334	.100	-.079	-.090	280	48	-.168	.042	.451	-.460
270	156	.069	.067	.379	-.126	270	405	-.246	.074	-.044	-.696	280	49	-.045	.077	.012	-.337
270	157	-.026	.063	.429	-.170	270	406	-.228	.068	-.026	-.563	280	50	-.134	.042	.042	-.462
270	158	-.145	.061	.095	-.359	280	1	-.090	.060	-.303	-.498	280	51	-.171	.055	-.006	-.462
270	159	-.075	.052	.218	-.255	280	2	-.029	.053	-.243	-.192	280	52	-.149	.052	-.030	-.402
270	160	.046	.068	.354	-.151	280	3	-.029	.051	-.334	-.160	280	53	-.101	.032	-.001	-.313
270	161	-.103	.037	.078	-.284	280	4	-.025	.058	.314	-.197	280	54	-.132	.055	.050	-.461
270	162	-.251	.057	.080	-.453	280	5	-.017	.043	.419	-.236	280	55	-.128	.044	.051	-.471
270	163	-.202	.052	.080	-.453	280	6	-.107	.087	.287	-.278	280	56	-.083	.050	.106	-.290
270	164	-.041	.068	.390	-.149	280	7	-.019	.060	.307	-.269	280	57	-.118	.085	.553	-.207
270	165	.057	.063	.372	-.127	280	8	-.019	.060	-.207	-.269	280	58	-.118	.085	-.553	-.207

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
2800	102	-.006	.92	.419	-.325	2800	152	.031	.058	.295	-.124	2800	401	-.093	.062	.199	-.368
2800	103	.123	.105	.645	-.183	2800	153	.007	.057	.353	-.184	2800	402	-.156	.103	.408	-.701
2800	104	.140	.113	.679	-.218	2800	154	.027	.073	.355	-.267	2800	403	-.248	.079	.003	.811
2800	105	.156	.070	.549	-.066	2800	155	.063	.074	.400	-.262	2800	404	-.220	.070	.001	.689
2800	106	.125	.072	.472	-.066	2800	156	.015	.059	.337	-.219	2800	405	-.151	.039	.015	.464
2800	107	.134	.092	.627	-.097	2800	158	.145	.054	.095	-.146	2900	1	-.069	.059	.242	-.337
2800	108	.144	.101	.607	-.080	2800	159	.087	.046	.150	-.296	2900	3	-.006	.040	.342	-.120
2800	109	.188	.098	.623	-.112	2800	160	.008	.053	.319	-.177	2900	4	-.010	.054	.188	-.302
2800	110	.136	.112	.651	-.318	2800	161	.111	.029	.021	-.231	2900	5	-.024	.058	.262	-.187
2800	111	.124	.078	.479	-.056	2800	162	.203	.042	.087	-.422	2900	6	-.012	.075	.356	-.306
2800	112	.121	.094	.572	-.167	2800	163	.163	.039	.052	-.383	2900	7	-.082	.075	.512	-.177
2800	113	.196	.121	.768	-.354	2800	164	.006	.060	.290	-.179	2900	8	-.039	.051	.224	-.268
2800	114	.124	.071	.452	-.046	2800	165	.003	.056	.264	-.168	2900	9	-.080	.090	.211	-.633
2800	115	.113	.084	.522	-.124	2800	166	.297	.059	.139	-.550	2900	10	-.070	.098	.188	-.101
2800	116	.098	.070	.435	-.089	2800	167	.103	.085	.543	-.123	2900	11	-.151	.132	.254	-.848
2800	117	.123	.067	.466	-.068	2800	201	.006	.092	.635	-.524	2900	12	-.080	.100	.591	-.317
2800	118	.080	.140	.921	-.571	2800	202	.035	.085	.509	-.217	2900	13	-.096	.058	.198	-.381
2800	119	.062	.080	.443	-.244	2800	203	.022	.071	.373	-.302	2900	14	-.083	.100	.277	-.561
2800	120	.064	.071	.425	-.140	2800	204	.053	.181	.640	-.204	2900	15	-.116	.092	.312	-.124
2800	121	.048	.058	.311	-.242	2800	205	.109	.097	.615	-.779	2900	16	-.062	.069	.233	-.431
2800	122	.024	.060	.312	-.142	2800	206	.035	.084	.559	-.394	2900	17	-.170	.093	.195	-.797
2800	123	.052	.054	.309	-.088	2800	207	.125	.078	.233	-.717	2900	18	-.154	.071	.438	-.046
2800	124	.045	.081	.483	-.199	2800	208	.033	.090	.499	-.347	2900	19	-.094	.052	.133	-.534
2800	125	.042	.060	.360	-.082	2800	209	.073	.109	.490	-.490	2900	20	-.143	.096	.180	-.635
2800	126	.004	.066	.337	-.206	2800	210	.073	.094	.655	-.166	2900	21	-.092	.078	.524	-.185
2800	127	.032	.054	.329	-.114	2800	211	.118	.100	.746	-.115	2900	22	-.018	.056	.253	-.315
2800	128	.023	.070	.425	-.228	2800	212	.195	.086	.251	-.659	2900	23	-.010	.082	.389	-.393
2800	129	.012	.040	.226	-.093	2800	213	.067	.090	.488	-.475	2900	24	-.125	.057	.106	-.465
2800	130	.054	.094	.604	-.185	2800	214	.121	.089	.538	-.446	2900	25	-.104	.043	.045	-.406
2800	131	.040	.097	.396	-.651	2800	215	.297	.070	.104	-.708	2900	26	-.129	.074	.120	-.561
2800	132	.021	.089	.616	-.540	2800	216	.002	.260	.071	-.634	2900	27	-.028	.061	.367	-.138
2800	133	.006	.044	.507	-.119	2800	217	.189	.056	.061	-.466	2900	28	-.073	.049	.146	-.393
2800	134	.036	.100	.483	-.436	2800	218	.171	.046	.031	-.438	2900	29	-.060	.063	.414	-.138
2800	135	.011	.069	.552	-.249	2800	219	.039	.035	.035	-.336	2900	30	-.091	.035	.009	-.317
2800	136	.042	.039	.148	-.206	2800	220	.206	.046	.055	-.438	2900	31	-.069	.043	.166	-.314
2800	137	.013	.065	.579	-.317	2800	221	.169	.043	.043	-.354	2900	32	-.170	.075	.080	-.695
2800	138	.025	.079	.549	-.317	2800	222	.019	.080	.061	-.199	2900	33	-.170	.035	.069	-.241
2800	139	.021	.073	.702	-.264	2800	223	.009	.174	.036	-.347	2900	34	-.073	.067	.045	-.510
2800	140	.017	.050	.175	-.215	2800	224	.212	.049	.060	-.481	2900	35	-.181	.059	.343	-.165
2800	141	.048	.058	.215	-.211	2800	225	.169	.050	.002	-.464	2900	36	-.058	.045	.071	-.447
2800	142	.008	.669	.351	-.201	2800	226	.170	.039	.055	-.357	2900	37	-.058	.022	.221	-.734
2800	143	.002	.055	.342	-.170	2800	227	.033	.041	.077	-.298	2900	38	-.099	.056	.071	-.302
2800	144	.015	.085	.467	-.394	2800	228	.015	.063	.061	-.347	2900	39	-.141	.107	.293	-.253
2800	145	.095	.089	.581	-.284	2800	229	.015	.163	.041	-.32	2900	40	-.002	.074	.392	-.530
2800	146	.005	.146	.476	-.778	2800	230	.224	.049	.120	-.418	2900	41	-.054	.064	.293	-.188
2800	147	.015	.067	.344	-.215	2800	231	.127	.027	.043	-.274	2900	42	-.152	.052	.261	-.187
2800	148	.050	.094	.483	-.350	2800	232	.124	.039	.038	-.329	2900	43	-.022	.058	.323	-.187
2800	149	.019	.076	.344	-.166	2800	233	.113	.038	.036	-.315	2900	44	-.016	.058	.191	-.639
2800	150	.028	.088	.460	-.208	2800	234	.170	.051	.021	-.552	2900	44	-.016	.058	.080	-.695
2800	151	.022	.078	.427	-.208	2800	235	.170	.051	-.021	-.552	2900	44	-.016	.058	.323	-.187

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
290	45	- .099	.029	.005	-.231	290	138	- .028	.058	.245	-.185	290	307	- 1.39	.025	-.043	-.246
290	46	- .004	.052	.258	-.192	290	139	- .027	.059	.326	-.126	290	308	- 0.4	.046	-.190	-.246
290	47	- .182	.060	.036	-.552	290	140	- .014	.042	.237	-.162	290	309	- 1.36	.021	-.073	-.273
290	48	- .135	.033	.007	-.313	290	141	- .016	.042	.204	-.189	290	310	- 1.73	.028	-.089	-.344
290	49	- .010	.047	.275	-.174	290	142	- .018	.057	.343	-.207	290	311	- 1.41	.034	-.034	-.282
290	50	- .128	.039	.069	-.322	290	143	- .016	.041	.309	-.168	290	312	- 1.35	.029	-.035	-.263
290	51	- .140	.038	-.002	-.364	290	144	- .015	.067	.323	-.409	290	313	- 1.37	.023	-.058	-.312
290	52	- .147	.036	-.015	-.357	290	145	- .095	.076	.559	-.111	290	314	- 1.69	.029	-.058	-.344
290	53	- .123	.034	.023	-.280	290	146	- .134	.148	.389	-.120	290	315	- 1.35	.030	-.023	-.305
290	54	- .076	.025	.018	-.205	290	147	- .035	.042	.170	-.202	290	316	- 1.78	.035	-.075	-.405
290	55	- .122	.044	.089	-.435	290	148	- .062	.053	.334	-.204	290	317	- 1.04	.022	-.033	-.228
290	56	- .107	.033	.025	-.272	290	149	- .026	.047	.258	-.184	290	318	- 1.06	.027	-.007	-.310
290	57	- .079	.048	.144	-.284	290	150	- .047	.049	.248	-.228	290	319	- 0.95	.035	-.028	-.324
290	101	- .665	.070	.421	-.364	290	151	- .045	.049	.226	-.231	290	320	- 1.48	.032	-.041	-.305
290	102	- .014	.071	.331	-.285	290	152	- .021	.039	.292	-.144	290	401	- 0.51	.062	-.333	-.294
290	103	- .016	.068	.433	-.190	290	153	- .034	.046	.213	-.276	290	402	- 0.65	.118	-.514	-.590
290	104	- .032	.083	.496	-.331	290	154	- .036	.055	.266	-.194	290	403	- 2.20	.062	-.006	-.546
290	105	- .083	.053	.381	-.171	290	155	- .067	.059	.313	-.278	290	404	- 1.99	.058	-.001	-.455
290	106	- .062	.058	.397	-.089	290	156	- .027	.047	.303	-.193	290	405	- 1.33	.046	-.072	-.384
290	107	- .048	.065	.381	-.147	290	157	- .051	.038	.193	-.175	290	406	- 1.16	.041	-.031	-.349
290	108	- .065	.071	.418	-.158	290	158	- .150	.044	.095	-.305	300	1	- 0.83	.035	-.113	-.236
290	109	- .095	.086	.487	-.154	290	159	- .096	.037	.156	-.229	300	2	- 0.54	.022	-.073	-.142
290	110	- .083	.101	.664	-.204	290	160	- .049	.044	.252	-.177	300	3	- 0.90	.044	-.124	-.390
290	111	- .069	.073	.433	-.118	290	161	- .113	.025	.628	-.211	300	4	- 0.64	.039	-.191	-.233
290	112	- .091	.099	.580	-.313	290	162	- .168	.027	.075	-.339	300	5	- 0.69	.047	-.186	-.358
290	113	- .120	.101	.684	-.143	290	163	- .130	.025	.034	-.242	300	6	- 0.49	.029	-.079	-.186
290	114	- .118	.079	.543	-.050	290	164	- .053	.048	.339	-.217	300	7	- 1.03	.048	-.133	-.344
290	115	- .119	.100	.672	-.172	290	165	- .047	.044	.231	-.224	300	8	- 0.49	.032	-.263	-.168
290	116	- .107	.083	.483	-.178	290	166	- .221	.041	.121	-.490	300	9	- 0.54	.047	-.159	-.465
290	117	- .154	.077	.521	-.052	290	167	- .019	.067	.376	-.166	300	10	- 0.55	.054	-.281	-.453
290	118	- .048	.136	.803	-.576	290	201	- .042	.089	.438	-.569	300	11	- 1.27	.073	-.270	-.624
290	119	- .099	.098	.549	-.156	290	202	- .008	.077	.593	-.272	300	12	- 0.99	.064	-.371	-.332
290	120	- .131	.092	.613	-.135	290	203	- .062	.075	.414	-.432	300	13	- 0.85	.040	-.100	-.378
290	121	- .113	.077	.505	-.204	290	204	- .183	.262	.471	-.031	300	14	- 0.53	.066	-.268	-.486
290	122	- .084	.076	.416	-.151	290	205	- .096	.074	.423	-.446	300	15	- 0.11	.062	-.336	-.219
290	123	- .110	.069	.402	-.085	290	206	- .067	.085	.421	-.349	300	16	- 0.62	.051	-.204	-.307
290	124	- .096	.091	.611	-.162	290	207	- .101	.057	.289	-.345	300	17	- 1.01	.074	-.193	-.618
290	125	- .094	.070	.458	-.151	290	208	- .048	.088	.359	-.349	300	18	- 0.44	.053	-.373	-.698
290	126	- .054	.083	.489	-.226	290	209	- .061	.110	.405	-.685	300	19	- 1.98	.049	-.174	-.322
290	127	- .074	.066	.474	-.119	290	210	- .011	.071	.469	-.221	300	20	- 0.79	.078	-.254	-.452
290	128	- .071	.076	.431	-.228	290	211	- .063	.086	.470	-.334	300	21	- 0.31	.066	-.484	-.171
290	129	- .048	.045	.282	-.050	290	212	- .148	.057	.230	-.426	300	22	- 0.34	.046	-.213	-.229
290	130	- .104	.101	.612	-.132	290	213	- .068	.076	.369	-.372	300	23	- 0.23	.065	-.404	-.319
290	131	- .000	.097	.349	-.629	290	214	- .058	.071	.476	-.146	300	24	- 0.86	.056	-.132	-.413
290	132	- .005	.092	.381	-.429	290	201	- .230	.054	.026	-.559	300	25	- 0.74	.040	-.075	-.309
290	133	- .036	.044	.289	-.082	290	202	- .250	.059	.107	-.583	300	26	- 0.83	.074	-.257	-.516
290	134	- .014	.101	.528	-.449	290	203	- .148	.037	.027	-.363	300	27	- 0.06	.062	-.313	-.176
290	135	- .045	.069	.441	-.148	290	204	- .135	.028	.018	-.266	300	28	- 0.49	.052	-.262	-.271
290	136	- .027	.034	.161	-.139	290	205	- .135	.024	.048	-.244	300	29	- 0.51	.073	-.422	-.169
290	137	- .020	.051	.282	-.117	290	206	- .168	.027	.073	-.294	300	30	- 0.85	.037	-.009	-.317

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
300	31	- .079	.048	.136	- .294	300	124	.022	.072	.560	- .193	300	207	- .094	.032	.160	- .341
300	322	- .092	.090	.292	- .553	300	125	.036	.063	.397	- .164	300	208	- .071	.058	.374	- .263
300	333	- .120	.066	.155	- .482	300	126	.000	.072	.406	- .245	300	209	- .058	.081	.384	- .468
300	344	- .068	.030	.053	- .212	300	127	.031	.062	.391	- .115	300	210	- .014	.059	.326	- .310
300	355	- .160	.060	.083	- .440	300	128	.037	.076	.229	- .073	300	211	- .001	.056	.363	- .164
300	366	- .044	.050	.197	- .298	300	129	.040	.092	.584	- .160	300	212	- .022	.077	.105	- .212
300	377	- .090	.062	.147	- .367	300	130	.021	.071	.393	- .242	300	213	- .003	.013	.340	- .184
300	388	- .102	.079	.245	- .579	300	131	.019	.082	.411	- .431	300	214	- .172	.048	.037	- .408
300	399	- .005	.077	.522	- .258	300	132	.030	.049	.271	- .104	300	215	- .122	.055	.126	- .591
300	400	- .041	.057	.239	- .380	300	133	.001	.105	.563	- .407	300	216	- .027	.032	.027	- .281
300	411	- .143	.080	.047	- .536	300	134	.034	.074	.431	- .173	300	217	- .127	.026	.039	- .262
300	422	- .036	.048	.204	- .176	300	135	.014	.039	.209	- .138	300	218	- .125	.029	.048	- .286
300	433	- .026	.059	.362	- .152	300	136	- .025	.058	.332	- .171	300	219	- .155	.028	.136	- .158
300	444	- .078	.032	.051	- .247	300	137	.013	.061	.232	- .247	300	220	- .122	.031	.231	- .158
300	455	- .012	.052	.206	- .234	300	138	.030	.065	.328	- .232	300	221	- .199	.047	.048	- .227
300	466	- .184	.068	.020	- .549	300	139	.003	.051	.275	- .124	300	222	- .161	.031	.055	- .306
300	477	- .119	.037	-.008	- .289	300	140	.033	.040	.160	- .184	300	223	- .133	.040	.024	- .427
300	488	- .003	.044	.255	- .123	300	141	.033	.059	.278	- .167	300	224	- .118	.029	.009	- .253
300	499	- .145	.037	.018	- .293	300	142	.001	.048	.251	- .216	300	225	- .120	.023	.039	- .211
300	500	- .118	.041	.024	- .399	300	143	.013	.075	.380	- .438	300	226	- .152	.029	.044	- .276
300	511	- .133	.034	-.012	- .305	300	144	.096	.080	.506	- .117	300	227	- .126	.016	.016	- .241
300	522	- .108	.034	-.011	- .276	300	145	.053	.114	.331	- .062	300	228	- .159	.043	.053	- .399
300	533	- .095	.025	-.008	- .210	300	146	.011	.046	.206	- .212	300	229	- .090	.025	.011	- .225
300	544	- .145	.046	.004	- .388	300	147	.023	.063	.293	- .295	300	230	- .082	.031	.023	- .255
300	555	- .098	.033	.071	- .233	300	148	.002	.051	.236	- .200	300	231	- .066	.030	.023	- .247
300	566	- .066	.045	.139	- .262	300	149	.019	.054	.201	- .199	300	232	- .129	.032	.032	- .287
300	577	- .003	.065	.368	- .284	300	150	.018	.049	.193	- .200	300	233	- .128	.061	.320	- .606
300	101	- .069	.060	.267	- .256	300	151	.007	.042	.224	- .153	300	234	- .174	.063	.028	- .549
300	102	- .005	.059	.385	- .206	300	152	.018	.041	.218	- .158	300	235	- .140	.060	.028	- .573
300	103	- .034	.053	.319	- .249	300	153	.024	.053	.223	- .206	300	236	- .087	.040	.083	- .259
300	104	- .007	.036	.202	- .122	300	154	.004	.057	.276	- .256	300	237	- .087	.040	.044	- .300
300	105	- .035	.038	.133	- .153	300	155	.025	.043	.295	- .153	300	238	- .097	.042	.116	- .324
300	106	- .004	.051	.279	- .181	300	156	.060	.028	.086	- .147	300	239	- .061	.021	.082	- .143
300	107	- .005	.043	.182	- .156	300	157	.041	.035	.007	- .288	300	240	- .174	.063	.028	- .424
300	108	- .023	.050	.384	- .140	300	158	.087	.031	.056	- .229	300	241	- .097	.042	.116	- .324
300	109	- .042	.048	.427	- .194	300	159	.056	.036	.113	- .207	300	242	- .061	.021	.082	- .143
300	110	- .004	.038	.225	- .095	300	160	.024	.024	.015	- .234	300	243	- .085	.037	.156	- .279
300	111	- .008	.056	.425	- .271	300	161	.155	.028	.067	- .249	300	244	- .086	.043	.198	- .304
300	112	- .007	.062	.480	- .273	300	162	.119	.026	.029	- .216	300	245	- .056	.032	.124	- .246
300	113	- .018	.050	.297	- .151	300	163	.062	.035	.102	- .249	300	246	- .118	.043	.177	- .419
300	114	- .002	.057	.342	- .282	300	164	.060	.032	.093	- .287	300	247	- .053	.033	.097	- .317
300	115	- .013	.050	.328	- .125	300	165	.195	.043	.086	- .404	300	248	- .042	.043	.156	- .409
300	116	- .026	.045	.309	- .098	300	166	.021	.047	.263	- .193	300	249	- .086	.052	.052	- .585
300	117	- .068	.076	.388	- .417	300	167	.039	.063	.384	- .481	300	250	- .035	.043	.145	- .177
300	118	- .009	.068	.434	- .282	300	168	.034	.052	.238	- .211	300	251	- .092	.043	.102	- .364
300	119	- .032	.070	.420	- .195	300	169	.061	.117	.586	- .059	300	252	- .055	.042	.102	- .380
300	120	- .023	.057	.314	- .184	300	170	.043	.184	.295	- .310	300	253	- .052	.042	.102	- .346
300	121	- .002	.062	.337	- .183	300	171	.003	.071	.443	- .280	300	254	- .052	.037	.146	- .329
300	122	- .023	.034	.058	- .115	300	172	- .003	- .071	-	-	300	255	- .052	.037	.146	- .329

## APPENDIX A -- PRESSURE DATA

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
3100	17	.074	.049	.089	-.409	3100	110	.078	.046	.131	-.218	3100	160	-.045	.034	.125	-.208
3100	18	.006	.035	.238	-.094	3100	111	-.029	.023	.219	-.141	3100	161	-.078	.021	-.001	-.214
3100	19	.095	.040	.071	-.438	3100	112	-.038	.038	.305	-.253	3100	162	-.121	.027	-.025	-.254
3100	20	-.060	.051	.237	-.148	3100	113	-.029	.048	.373	-.259	3100	163	-.089	.025	.011	-.204
3100	21	-.004	.052	.329	-.148	3100	114	-.060	.030	.235	-.156	3100	164	-.047	.033	.135	-.219
3100	22	-.031	.032	.232	-.278	3100	115	-.029	.034	.225	-.184	3100	165	-.043	.030	.117	-.245
3100	23	-.060	.055	.274	-.278	3100	116	-.021	.036	.29	-.117	3100	166	-.032	.034	-.036	-.364
3100	24	-.066	.043	.187	-.288	3100	117	.015	.051	.254	-.136	3100	167	-.018	.041	.171	-.277
3100	25	-.064	.031	.116	-.264	3100	118	.123	.051	.246	-.398	3100	201	-.004	.051	.441	-.190
3100	26	-.048	.048	.153	-.360	3100	119	-.028	.041	.380	-.214	3100	202	-.018	.041	.209	-.315
3100	27	-.055	.048	.225	-.228	3100	120	-.014	.041	.271	-.208	3100	203	-.018	.065	.343	-.586
3100	28	-.049	.038	.160	-.250	3100	121	-.040	.040	.249	-.179	3100	204	-.051	.047	.084	-.327
3100	29	-.007	.048	.225	-.163	3100	122	-.011	.040	.289	-.171	3100	205	-.111	.064	.380	-.263
3100	30	.052	.026	.034	-.169	3100	123	-.011	.037	.258	-.102	3100	206	-.029	.033	.040	-.234
3100	31	-.084	.034	.059	-.248	3100	124	-.020	.041	.299	-.177	3100	207	-.092	.048	.309	-.225
3100	32	-.056	.056	.214	-.368	3100	125	-.012	.033	.242	-.133	3100	209	-.079	.062	.397	-.562
3100	33	-.085	.053	.100	-.478	3100	126	-.045	.038	.296	-.299	3100	210	-.039	.058	.302	-.254
3100	34	-.048	.024	.064	-.206	3100	127	-.014	.035	.263	-.131	3100	211	-.012	.048	.262	-.223
3100	35	-.130	.049	.057	-.387	3100	128	-.013	.048	.306	-.201	3100	212	-.121	.028	.018	-.258
3100	36	-.006	.051	.262	-.141	3100	129	-.010	.030	.157	-.085	3100	213	-.091	.033	.123	-.221
3100	37	-.033	.042	.232	-.183	3100	130	-.017	.059	.540	-.191	3100	214	-.017	.049	.271	-.173
3100	38	-.047	.047	.179	-.297	3100	131	-.027	.047	.274	-.241	3100	215	-.110	.039	.425	-.425
3100	39	-.099	.060	.214	-.472	3100	132	-.022	.047	.227	-.254	3100	216	-.056	.045	.420	-.292
3100	40	-.006	.067	.393	-.202	3100	133	-.010	.034	.168	-.096	3100	217	-.088	.030	.007	-.216
3100	41	-.034	.052	.272	-.230	3100	134	-.045	.071	.374	-.424	3100	218	-.026	.013	.013	-.188
3100	42	-.078	.057	.102	-.411	3100	135	-.010	.052	.442	-.215	3100	219	-.086	.024	.021	-.231
3100	43	-.060	.043	.124	-.241	3100	136	-.028	.028	.157	-.114	3100	220	-.120	.026	.020	-.206
3100	44	-.003	.052	.237	-.186	3100	137	-.019	.037	.271	-.194	3100	221	-.097	.042	.186	-.229
3100	45	-.062	.029	.064	-.208	3100	138	-.051	.041	.309	-.240	3100	222	-.030	.021	.030	-.201
3100	46	-.014	.042	.234	-.187	3100	139	-.015	.041	.378	-.164	3100	223	-.091	.028	.043	-.258
3100	47	-.140	.052	.052	-.442	3100	140	-.021	.036	.210	-.153	3100	224	-.028	.017	.017	-.303
3100	48	-.089	.034	.011	-.297	3100	141	-.038	.032	.124	-.170	3100	225	-.100	.025	.000	-.221
3100	49	-.017	.040	.171	-.141	3100	142	-.033	.048	.213	-.184	3100	226	-.086	.019	.019	-.179
3100	50	-.109	.030	-.024	-.246	3100	143	-.017	.036	.152	-.144	3100	227	-.085	.019	.041	-.225
3100	51	-.087	.030	-.013	-.287	3100	144	-.011	.067	.365	-.387	3100	228	-.089	.025	.000	-.206
3100	52	-.102	.028	-.014	-.270	3100	145	-.037	.064	.460	-.166	3100	229	-.091	.021	.043	-.211
3100	53	-.084	.027	-.051	-.246	3100	146	-.067	.080	.318	-.987	3100	230	-.110	.034	.013	-.379
3100	54	-.069	.023	-.001	-.200	3100	147	-.024	.038	.283	-.175	3100	231	-.061	.021	.000	-.206
3100	55	-.129	.035	-.010	-.334	3100	148	-.011	.047	.234	-.219	3100	232	-.067	.022	.010	-.155
3100	56	-.072	.031	-.079	-.202	3100	149	-.018	.038	.168	-.175	3100	233	-.049	.021	.030	-.155
3100	57	-.057	.037	.122	-.226	3100	150	-.042	.039	.157	-.195	3100	234	-.026	.010	.337	-.302
3100	101	-.043	.054	.266	-.368	3100	151	-.030	.035	.161	-.177	3100	235	-.026	.050	.337	-.302
3100	102	-.118	.049	.258	-.233	3100	152	-.020	.035	.162	-.127	3100	236	-.026	.050	.398	-.371
3100	103	-.042	.051	.366	-.207	3100	153	-.022	.035	.160	-.183	3100	237	-.011	.051	.008	-.487
3100	104	-.053	.046	.196	-.275	3100	154	-.038	.044	.175	-.184	3100	238	-.099	.046	.034	-.380
3100	105	-.019	.039	.197	-.191	3100	155	-.018	.048	.219	-.246	3100	239	-.068	.032	.053	-.236
3100	106	-.069	.035	.149	-.183	3100	156	-.027	.038	.179	-.168	3100	240	-.050	.026	.040	-.217
3100	107	-.022	.052	.301	-.202	3100	157	-.011	.025	.098	-.212	320	1	-.080	.048	.144	-.305
3100	108	-.026	.041	.145	-.177	3100	158	-.006	.030	.006	-.281	320	2	-.061	.021	.052	-.151
3100	109	-.005	.044	.254	-.145	3100	159	-.067	.027	.055	-.199						

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
320	3	- .140	.035	- .010	- .332	320	53	- .081	.024	.006	- .199	320	145	- .081	.051	.203	- .489
320	4	- .091	.029	.047	- .215	320	54	- .065	.018	- .006	- .155	320	147	- .032	.026	.088	- .144
320	5	- .086	.036	.142	- .245	320	55	- .130	.030	- .024	- .261	320	149	- .033	.033	.174	- .150
320	6	- .046	.035	.105	- .180	320	56	- .063	.026	.088	- .183	320	149	- .033	.027	.100	- .151
320	7	- .120	.044	.140	- .494	320	57	- .054	.029	.133	- .188	320	150	- .063	.026	.091	- .197
320	8	- .019	.043	.226	- .231	320	58	- .059	.042	.486	- .229	320	151	- .048	.027	.103	- .185
320	9	- .037	.037	.144	- .230	320	59	- .131	.038	.180	- .290	320	152	- .030	.027	.111	- .150
320	10	- .035	.034	.134	- .247	320	60	- .056	.044	.305	- .204	320	153	- .035	.028	.144	- .174
320	11	- .165	.062	.027	- .517	320	61	- .060	.043	.137	- .298	320	154	- .057	.033	.146	- .192
320	12	- .057	.036	.152	- .211	320	62	- .038	.034	.110	- .160	320	155	- .033	.034	.133	- .273
320	13	- .122	.063	.171	- .341	320	63	- .091	.031	.069	- .184	320	157	- .056	.018	.044	- .156
320	14	- .056	.036	.090	- .240	320	64	- .041	.045	.212	- .158	320	158	- .066	.022	.021	- .265
320	15	- .083	.033	.076	- .271	320	65	- .034	.042	.216	- .169	320	159	- .068	.021	.038	- .171
320	16	- .055	.043	.102	- .320	320	66	- .012	.043	.194	- .283	320	160	- .049	.026	.089	- .196
320	17	- .061	.034	.115	- .287	320	67	- .100	.038	.074	- .283	320	161	- .074	.018	.015	- .165
320	18	- .017	.023	.096	- .111	320	68	- .041	.031	.123	- .181	320	162	- .108	.021	.037	- .229
320	19	- .090	.034	.069	- .240	320	69	- .059	.040	.108	- .302	320	163	- .077	.020	.009	- .169
320	20	- .047	.033	.125	- .179	320	70	- .075	.047	.230	- .322	320	164	- .053	.026	.096	- .238
320	21	- .027	.030	.124	- .228	320	71	- .080	.029	.039	- .161	320	165	- .050	.023	.075	- .254
320	22	- .030	.026	.079	- .133	320	72	- .046	.031	.104	- .177	320	166	- .116	.031	.032	- .334
320	23	- .100	.034	.170	- .285	320	73	- .038	.028	.085	- .133	320	167	- .047	.042	.202	- .200
320	24	- .069	.031	.116	- .247	320	74	- .043	.022	.058	- .166	320	201	- .005	.071	.385	- .282
320	25	- .058	.028	.060	- .201	320	75	- .183	.061	.100	- .517	320	202	- .004	.060	.338	- .169
320	26	- .037	.030	.076	- .213	320	76	- .045	.028	.077	- .167	320	203	- .004	.047	.312	- .187
320	27	- .084	.030	.083	- .224	320	77	- .034	.031	.158	- .167	320	204	- .062	.064	.313	- .265
320	28	- .047	.029	.091	- .163	320	78	- .033	.024	.095	- .129	320	205	- .102	.044	.110	- .327
320	29	- .029	.031	.187	- .149	320	79	- .058	.030	.114	- .169	320	206	- .053	.046	.190	- .224
320	30	- .042	.022	.043	- .186	320	80	- .023	.027	.160	- .111	320	207	- .096	.031	.032	- .234
320	31	- .087	.032	.058	- .226	320	81	- .024	.035	.189	- .332	320	208	- .101	.038	.308	- .222
320	32	- .040	.044	.244	- .275	320	82	- .026	.026	.129	- .158	320	209	- .078	.045	.362	- .345
320	33	- .061	.035	.083	- .323	320	83	- .055	.029	.112	- .188	320	210	- .058	.047	.247	- .283
320	34	- .041	.019	.032	- .108	320	84	- .025	.030	.216	- .111	320	211	- .027	.046	.317	- .245
320	35	- .119	.032	- .001	- .430	320	85	- .033	.030	.134	- .145	320	212	- .123	.031	.002	- .347
320	36	- .024	.032	.132	- .151	320	86	- .029	.018	.064	- .080	320	213	- .093	.025	.038	- .230
320	37	- .036	.035	.157	- .199	320	87	- .040	.038	.162	- .153	320	214	- .039	.047	.281	- .178
320	38	- .033	.036	.176	- .278	320	88	- .048	.028	.081	- .216	320	215	- .089	.029	.001	- .265
320	39	- .118	.043	.072	- .516	320	89	- .038	.029	.216	- .229	320	216	- .058	.047	.247	- .283
320	40	- .009	.056	.256	- .172	320	90	- .028	.021	.176	- .124	320	217	- .027	.046	.317	- .245
320	41	- .047	.032	.108	- .330	320	91	- .025	.030	.134	- .145	320	218	- .123	.031	.002	- .347
320	42	- .056	.036	.047	- .376	320	92	- .035	.018	.064	- .080	320	219	- .093	.025	.038	- .230
320	43	- .088	.029	.100	- .250	320	93	- .040	.038	.162	- .153	320	220	- .039	.047	.281	- .178
320	44	- .027	.035	.234	- .167	320	94	- .039	.023	.095	- .138	320	221	- .089	.029	.001	- .265
320	45	- .056	.025	.047	- .167	320	95	- .070	.026	.048	- .160	320	222	- .057	.032	.057	- .359
320	46	- .032	.025	.112	- .135	320	96	- .033	.027	.115	- .131	320	223	- .084	.026	.002	- .219
320	47	- .124	.034	- .010	- .311	320	97	- .035	.024	.114	- .127	320	224	- .082	.021	.013	- .156
320	48	- .071	.025	.015	- .193	320	98	- .041	.022	.076	- .130	320	225	- .080	.021	.010	- .154
320	49	- .033	.031	.169	- .208	320	99	- .142	.057	.031	- .171	320	226	- .083	.022	.009	- .198
320	50	- .094	.022	- .033	- .211	320	100	- .143	.029	.024	- .151	320	227	- .082	.022	.008	- .212
320	51	- .076	.022	- .002	- .197	320	101	- .044	.044	.205	- .339	320	228	- .079	.017	.024	- .154
320	52	- .090	.022	- .019	- .220	320	102	- .145	.004	.044	- .154	320	229	- .106	.022	.035	- .206

## APPENDIX A -- PRESSURE DATA

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
320	315	- .075	.021	- .009	- 180	330	39	- .078	.032	.059	- 311	330	132	- .048	.024	.042	- 173
320	316	- .081	.025	- .018	- 248	330	40	- .006	.055	.379	- 185	330	133	- .037	.018	.043	- 110
320	317	- .044	.017	- .007	- 125	330	41	- .047	.020	.114	- 205	330	134	- .122	.046	.050	- 282
320	318	- .063	.017	- .001	- 137	330	42	- .063	.025	.068	- 183	330	135	- .049	.018	.056	- 210
320	319	- .042	.016	- .017	- 117	330	43	- .058	.022	.043	- 185	330	136	- .039	.021	.060	- 128
320	320	- .085	.021	- .015	- 162	330	44	- .042	.026	.113	- 173	330	137	- .050	.018	.012	- 150
401	402	- .034	.037	- .150	- 270	330	45	- .049	.024	.041	- 160	330	138	- .043	.021	.042	- 185
402	403	- .003	.036	- .384	- 405	330	46	- .056	.021	.027	- 158	330	139	- .043	.021	.060	- 160
403	404	- .104	.033	- .020	- 370	330	47	- .076	.025	.036	- 207	330	140	- .042	.020	.026	- 162
404	405	- .076	.030	- .014	- 243	330	48	- .065	.023	.053	- 162	330	141	- .068	.024	.024	- 128
405	406	- .058	.024	- .029	- 151	330	49	- .048	.022	.074	- 134	330	142	- .035	.022	.094	- 357
1	2	- .042	.019	- .031	- 147	330	50	- .117	.021	- .048	- 216	330	143	- .046	.035	.149	- 146
2	3	- .068	.043	- .134	- 302	330	51	- .086	.021	- .018	- 171	330	144	- .014	.032	.145	- 171
3	4	- .078	.020	- .059	- 180	330	52	- .095	.021	- .028	- 205	330	145	- .091	.022	.060	- 140
4	5	- .086	.030	- .019	- 208	330	53	- .093	.022	- .025	- 236	330	146	- .038	.022	.027	- 147
5	6	- .081	.027	- .048	- 222	330	54	- .089	.018	- .026	- 167	330	147	- .047	.022	.095	- 200
6	7	- .077	.030	- .105	- 260	330	55	- .089	.025	- .006	- 256	330	148	- .055	.022	.093	- 196
7	8	- .049	.029	- .077	- 169	330	56	- .061	.027	.061	- 173	330	149	- .077	.024	.092	- 204
8	9	- .058	.042	- .271	- 223	330	57	- .050	.026	.077	- 154	330	150	- .061	.024	.082	- 145
9	10	- .005	.037	- .225	- 182	330	58	- .078	.036	.146	- 281	330	151	- .042	.019	.059	- 222
10	11	- .019	.036	- .150	- 191	330	59	- .082	.028	.087	- 189	330	152	- .049	.021	.042	- 222
11	12	- .064	.035	- .150	- 250	330	60	- .053	.038	.160	- 178	330	153	- .073	.024	.047	- 200
12	13	- .158	.069	- .990	- 535	330	61	- .064	.037	.074	- 233	330	154	- .046	.023	.069	- 225
13	14	- .078	.034	- .115	- 274	330	62	- .056	.027	.079	- 196	330	155	- .046	.023	.067	- 200
14	15	- .148	.066	- .083	- 530	330	63	- .050	.024	.083	- 130	330	156	- .068	.016	.019	- 157
15	16	- .104	.041	- .081	- 308	330	64	- .037	.037	.167	- 135	330	157	- .119	.022	.053	- 262
16	17	- .052	.030	- .061	- 203	330	65	- .046	.035	.210	- 205	330	158	- .084	.020	.018	- 198
17	18	- .059	.044	- .155	- 336	330	66	- .042	.043	.217	- 408	330	159	- .080	.022	.073	- 206
18	19	- .051	.033	- .068	- 258	330	67	- .072	.035	.087	- 260	330	160	- .091	.017	.030	- 200
19	20	- .048	.020	- .039	- 187	330	68	- .049	.025	.088	- 182	330	161	- .122	.022	.046	- 216
20	21	- .036	.034	- .107	- 209	330	69	- .086	.043	.112	- 304	330	162	- .089	.021	.005	- 224
21	22	- .034	.032	- .182	- 261	330	70	- .131	.036	.054	- 281	330	163	- .066	.022	.025	- 216
22	23	- .036	.027	- .088	- 180	330	71	- .051	.023	.070	- 183	330	164	- .062	.024	.032	- 205
23	24	- .047	.024	- .056	- 160	330	72	- .062	.027	.059	- 216	330	165	- .095	.024	.016	- 205
24	25	- .067	.030	- .052	- 256	330	73	- .050	.024	.063	- 147	330	166	- .065	.036	.096	- 215
25	26	- .074	.032	- .039	- 296	330	74	- .080	.022	.063	- 191	330	167	- .042	.083	.561	- 216
26	27	- .052	.027	- .059	- 169	330	75	- .064	.027	.132	- 568	330	201	- .049	.064	.431	- 140
27	28	- .056	.029	- .126	- 203	330	76	- .055	.027	.037	- 261	330	202	- .027	.051	.315	- 140
28	29	- .053	.024	- .067	- 172	330	77	- .045	.023	.093	- 189	330	203	- .071	.063	.268	- 206
29	30	- .043	.026	- .068	- 162	330	78	- .041	.023	.043	- 157	330	204	- .089	.042	.127	- 205
30	31	- .041	.025	- .063	- 158	330	79	- .068	.026	.063	- 184	330	205	- .060	.036	.096	- 215
31	32	- .058	.021	- .016	- 214	330	80	- .040	.022	.058	- 110	330	206	- .042	.083	.561	- 216
32	33	- .036	.031	- .107	- 203	330	81	- .046	.029	.084	- 284	330	207	- .034	.064	.431	- 140
33	34	- .016	.039	- .142	- 189	330	82	- .031	.022	.061	- 166	330	208	- .067	.036	.364	- 206
34	35	- .050	.031	- .092	- 244	330	83	- .065	.024	.038	- 198	330	209	- .057	.034	.147	- 207
35	36	- .060	.020	- .001	- 167	330	84	- .036	.021	.076	- 124	330	210	- .040	.025	.022	- 226
36	37	- .073	.028	- .014	- 254	330	85	- .044	.028	.107	- 220	330	211	- .115	.024	.007	- 189
37	38	- .033	.027	- .135	- 167	330	86	- .036	.017	.052	- 102	330	212	- .084	.021	.000	- 182
38	39	- .035	.035	- .148	- 174	330	87	- .051	.034	.195	- 203	330	213	- .044	.035	.032	- 187
39	40	- .029	.029	- .153	- 160	330	88	- .057	.024	.049	- 202	330	214	- .044	.035	.032	- 182

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A: MILLION DOLLAR PIER ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
330	301	-.079	.022	-.008	-.217	340	25	-.048	.031	.177	-.255	340	118	-.181	.065	.030	-.621
330	302	-.142	.028	-.073	-.319	340	26	-.073	.030	.075	-.209	340	119	-.074	.030	.019	-.335
330	303	-.099	.024	-.025	-.216	340	27	-.067	.026	.023	-.203	340	120	-.069	.026	.022	-.186
330	304	-.094	.021	-.022	-.175	340	28	-.051	.024	.048	-.164	340	121	-.063	.020	.010	-.150
330	305	-.098	.019	-.041	-.239	340	29	-.050	.024	.046	-.168	340	122	-.086	.023	.013	-.175
330	306	-.125	.023	-.046	-.184	340	30	-.064	.019	.093	-.162	340	123	-.057	.019	.015	-.119
330	307	-.093	.019	-.014	-.162	340	31	-.047	.027	.095	-.176	340	124	-.065	.031	.078	-.333
330	308	-.063	.022	-.011	-.166	340	32	-.016	.035	.170	-.134	340	125	-.053	.022	.032	-.172
330	309	-.099	.017	-.039	-.205	340	33	-.049	.029	.059	-.262	340	126	-.081	.024	.013	-.186
330	310	-.123	.022	-.046	-.187	340	34	-.067	.018	.011	-.139	340	127	-.051	.022	.038	-.133
330	311	-.087	.022	-.000	-.187	340	35	-.074	.025	.008	-.260	340	128	-.057	.029	.044	-.317
330	312	-.102	.023	-.027	-.204	340	36	-.040	.024	.067	-.170	340	129	-.044	.016	.014	-.119
330	313	-.090	.019	-.032	-.175	340	37	-.038	.033	.162	-.139	340	130	-.067	.029	.036	-.259
330	314	-.112	.024	-.025	-.228	340	38	-.049	.029	.116	-.166	340	131	-.065	.024	.022	-.254
330	315	-.076	.022	-.000	-.162	340	39	-.086	.031	.082	-.343	340	132	-.058	.023	.058	-.202
330	316	-.068	.022	-.027	-.187	340	40	-.004	.051	.369	-.170	340	133	-.046	.018	.034	-.137
330	317	-.042	.016	-.043	-.106	340	41	-.055	.026	.073	-.186	340	134	-.142	.049	.021	-.568
330	318	-.063	.017	-.006	-.131	340	42	-.072	.023	.001	-.275	340	135	-.061	.029	.065	-.274
330	319	-.040	.015	-.008	-.098	340	43	-.069	.022	.039	-.215	340	136	-.047	.017	.016	-.122
320	320	-.092	.021	-.024	-.203	340	44	-.050	.024	.069	-.195	340	137	-.057	.019	.003	-.143
401	401	-.038	.037	-.147	-.233	340	45	-.045	.023	.064	-.137	340	138	-.086	.023	.009	-.205
402	402	-.000	.044	-.419	-.184	340	46	-.066	.019	.021	-.155	340	139	-.054	.022	.022	-.150
403	403	-.098	.032	-.020	-.327	340	47	-.084	.028	.014	-.244	340	140	-.052	.021	.031	-.166
404	404	-.069	.029	-.017	-.268	340	48	-.062	.020	.003	-.157	340	141	-.053	.020	.017	-.170
405	405	-.054	.021	-.020	-.153	340	49	-.056	.022	.046	-.195	340	142	-.076	.024	.027	-.202
406	406	-.042	.018	-.020	-.122	340	50	-.127	.021	.058	-.218	340	143	-.046	.020	.040	-.144
1	1	-.065	.042	.173	-.208	340	51	-.090	.019	.031	-.166	340	144	-.055	.033	.071	-.368
2	2	-.084	.020	.041	-.164	340	52	-.098	.020	.028	-.184	340	145	-.028	.027	.134	-.159
3	3	-.091	.026	-.026	-.206	340	53	-.099	.023	.034	-.244	340	146	-.094	.027	.006	-.254
4	4	-.085	.024	-.024	-.267	340	54	-.099	.019	.040	-.173	340	147	-.045	.021	.038	-.139
5	5	-.074	.038	.182	-.186	340	55	-.094	.026	.015	-.280	340	148	-.057	.025	.038	-.213
6	6	-.053	.030	-.080	-.171	340	56	-.065	.028	.048	-.182	340	149	-.059	.021	.012	-.159
7	7	-.061	.052	.199	-.361	340	57	-.050	.029	.075	-.181	340	150	-.084	.023	.002	-.180
8	8	-.003	.038	.184	-.130	340	58	-.038	.086	.342	340	151	-.066	.023	.022	-.171	
9	9	-.014	.039	.177	-.188	340	59	101	-.104	.038	340	152	-.051	.019	.051	-.175	
10	10	-.089	.036	.055	-.241	340	60	102	-.093	.022	107	340	153	-.054	.021	.034	-.279
11	11	-.204	.082	-.006	-.682	340	61	103	-.060	.036	.98	340	154	-.081	.025	.022	-.447
12	12	-.103	.036	.035	-.267	340	62	104	-.089	.036	.033	340	155	-.055	.023	.047	-.339
13	13	-.155	.057	.033	-.429	340	63	105	-.080	.023	.007	340	156	-.055	.023	.042	-.140
14	14	-.126	.039	.055	-.333	340	64	106	-.072	.021	.019	340	157	-.076	.017	.017	-.150
15	15	-.087	.030	.014	-.244	340	65	107	-.062	.027	.073	340	158	-.124	.025	.053	-.332
16	16	-.076	.040	.098	-.295	340	66	108	-.060	.025	.064	340	159	-.092	.022	.018	-.195
17	17	-.061	.034	.115	-.228	340	67	109	-.065	.036	.080	340	160	-.068	.023	.022	-.175
18	18	-.070	.021	.007	-.184	340	68	110	-.062	.020	.001	340	161	-.094	.018	.039	-.183
19	19	-.049	.029	.100	-.185	340	69	111	-.131	.052	.015	340	162	-.127	.022	.059	-.234
20	20	-.041	.031	.096	-.200	340	70	112	-.176	.042	.038	340	163	-.093	.021	.014	-.198
21	21	-.050	.025	.108	-.201	340	71	113	-.075	.023	.014	340	164	-.074	.027	.011	-.195
22	22	-.058	.022	.075	-.178	340	72	114	-.088	.029	.010	340	165	-.067	.024	.019	-.168
23	23	-.080	.030	.032	-.280	340	73	115	-.070	.025	.015	340	166	-.089	.024	.014	-.218
24	24	-.087	.032	.012	-.227	340	74	116	-.107	.025	.033	340	167	-.069	.026	.051	-.201

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

MD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	MD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	MD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
340	201	.036	.086	.450	-.184	350	11	.205	.068	.003	-.567	350	104	-.120	.033	-.010	-.325
340	202	.062	.075	.550	-.129	350	12	-.136	.041	.012	-.390	350	105	-.112	.020	-.028	-.176
340	203	.043	.058	.370	-.128	350	13	-.195	.068	.006	-.525	350	106	-.101	.020	-.010	-.214
340	204	-.070	.084	.426	-.400	350	14	-.170	.047	.044	-.517	350	107	-.091	.021	-.006	-.273
340	205	-.091	.046	.204	-.312	350	15	-.129	.035	-.026	-.309	350	108	-.105	.034	-.053	-.208
340	206	-.068	.033	.141	-.229	350	16	-.106	.043	.084	-.401	350	110	-.140	.037	-.039	-.316
340	207	-.087	.028	.063	-.217	350	17	-.091	.047	-.026	-.216	350	111	-.091	.022	-.010	-.385
340	208	-.091	.036	.208	-.216	350	18	-.101	.023	-.028	-.199	350	112	-.162	.045	-.008	-.377
340	209	-.060	.045	.262	-.193	350	19	-.062	.028	.118	-.201	350	113	-.185	.036	-.076	-.192
340	210	-.061	.036	.177	-.213	350	20	-.045	.033	.129	-.312	350	114	-.103	.023	-.012	-.258
340	211	-.054	.041	.130	-.241	350	21	-.072	.025	.028	-.312	350	115	-.120	.032	-.006	-.230
340	212	-.123	.027	.018	-.236	350	22	-.073	.021	.016	-.269	350	116	-.098	.028	-.004	-.244
340	213	-.088	.023	-.009	-.283	350	23	-.097	.029	.028	-.287	350	117	-.140	.026	-.063	-.527
340	214	-.069	.026	-.069	-.164	350	24	-.106	.032	.006	-.239	350	118	-.194	.055	-.035	-.215
340	301	-.079	.021	-.017	-.194	350	25	-.042	.037	.146	-.262	350	119	-.095	.027	-.001	-.238
340	302	-.150	.028	-.059	-.304	350	26	-.100	.030	.028	-.219	350	120	-.101	.029	-.009	-.208
340	303	-.109	.025	-.043	-.276	350	27	-.081	.024	.019	-.190	350	121	-.090	.022	-.015	-.430
340	304	-.104	.021	-.035	-.200	350	28	-.061	.024	.037	-.188	350	122	-.101	.022	-.026	-.250
340	305	-.105	.019	-.039	-.172	350	29	-.064	.021	.019	-.198	350	123	-.070	.022	-.072	-.178
340	306	-.134	.023	-.062	-.223	350	30	-.079	.019	.003	-.210	350	124	-.086	.028	-.024	-.445
340	307	-.099	.019	-.038	-.173	350	31	-.058	.028	.082	-.159	350	125	-.075	.021	-.008	-.199
340	308	-.065	.023	-.018	-.242	350	32	-.023	.033	.176	-.228	350	126	-.101	.022	-.030	-.250
340	309	-.099	.018	-.048	-.188	350	33	-.058	.032	.066	-.169	350	127	-.067	.021	-.015	-.167
340	310	-.123	.022	-.035	-.227	350	34	-.086	.019	-.015	-.217	350	128	-.075	.025	-.044	-.271
340	311	-.090	.022	-.009	-.177	350	35	-.075	.023	.003	-.186	350	129	-.057	.016	-.019	-.119
340	312	-.105	.022	-.031	-.208	350	36	-.052	.023	.030	-.186	350	130	-.088	.025	-.082	-.223
340	313	-.086	.017	-.023	-.152	350	37	-.039	.035	.108	-.170	350	131	-.081	.023	-.000	-.216
340	314	-.106	.021	-.030	-.191	350	38	-.059	.029	.118	-.178	350	132	-.075	.022	-.002	-.185
340	315	-.077	.020	-.009	-.168	350	39	-.089	.026	.044	-.253	350	133	-.061	.017	-.003	-.139
340	316	-.063	.023	-.011	-.375	350	40	-.061	.054	.334	-.192	350	134	-.152	.041	-.032	-.453
340	317	-.042	.016	-.016	-.123	350	41	-.067	.025	.037	-.183	350	135	-.080	.027	-.038	-.268
340	318	-.075	.016	-.011	-.140	350	42	-.083	.022	.007	-.189	350	136	-.061	.019	-.011	-.145
340	319	-.044	.014	-.001	-.090	350	43	-.078	.021	.008	-.201	350	137	-.070	.020	-.068	-.162
340	320	-.099	.022	-.030	-.206	350	44	-.059	.022	.030	-.246	350	138	-.096	.024	-.022	-.205
340	401	-.043	.036	.190	-.205	350	45	-.043	.027	.086	-.139	350	139	-.068	.022	-.029	-.156
340	402	-.012	.034	-.229	-.132	350	46	-.081	.019	.001	-.223	350	140	-.065	.020	-.007	-.134
340	403	-.093	.027	-.008	-.242	350	47	-.092	.028	-.003	-.284	350	141	-.055	.020	-.010	-.179
340	404	-.061	.024	.003	-.173	350	48	-.065	.022	.021	-.186	350	142	-.084	.023	-.003	-.223
340	405	-.058	.021	.013	-.159	350	49	-.062	.021	.050	-.194	350	143	-.058	.019	-.006	-.126
340	406	-.048	.018	.016	-.134	350	50	-.150	.027	-.074	-.268	350	144	-.071	.027	-.036	-.245
350	1	-.067	.038	.115	-.203	350	51	-.097	.021	-.020	-.173	350	145	-.046	.021	-.050	-.124
350	2	-.100	.022	-.048	-.187	350	52	-.108	.025	-.024	-.226	350	146	-.096	.022	-.009	-.259
350	3	-.103	.021	-.010	-.190	350	53	-.099	.025	-.016	-.216	350	147	-.057	.019	-.024	-.129
350	4	-.097	.020	-.008	-.168	350	54	-.112	.022	-.012	-.233	350	148	-.066	.024	-.027	-.187
350	5	-.081	.034	.086	-.212	350	55	-.098	.028	.134	-.224	350	149	-.063	.021	-.012	-.215
350	6	-.062	.028	.118	-.160	350	56	-.071	.033	.030	-.219	350	150	-.089	.023	-.003	-.203
350	7	-.071	.047	.214	-.271	350	57	-.052	.033	-.022	-.366	350	151	-.071	.023	-.013	-.203
350	8	-.001	.041	.224	-.127	350	58	-.128	.030	-.022	-.194	350	152	-.065	.019	-.004	-.154
350	9	-.030	.037	.201	-.214	350	59	-.110	.021	-.037	-.233	350	153	-.058	.022	-.057	-.320
350	10	-.143	.042	.087	-.300	350	60	-.084	.030	.055	-.233	350	154				

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION A) MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
350	154	-.088	.024	.032	-.441	350	205	-.103	.044	.216	-.324	350	309	-.104	.019	-.046	-.186
350	155	-.065	.022	.040	-.275	350	206	-.089	.029	.054	-.199	350	310	-.129	.025	-.053	-.257
350	156	-.069	.021	.007	-.205	350	207	-.110	.037	.065	-.309	350	311	-.102	.027	-.014	-.230
350	157	-.070	.018	-.003	-.157	350	208	-.097	.036	.132	-.219	350	312	-.115	.026	-.031	-.251
350	158	-.121	.026	-.032	-.253	350	209	-.074	.036	.137	-.196	350	313	-.090	.020	-.017	-.199
350	159	-.092	.022	-.030	-.214	350	210	-.082	.031	.105	-.202	350	314	-.108	.024	-.023	-.200
350	160	-.078	.023	-.009	-.283	350	211	-.085	.037	.157	-.217	350	315	-.090	.024	-.000	-.196
350	161	-.089	.019	-.035	-.248	350	212	-.137	.035	-.009	-.389	350	316	-.063	.025	.011	-.253
350	162	-.124	.024	-.053	-.244	350	213	-.107	.026	-.021	-.266	350	317	-.051	.019	-.003	-.131
350	163	-.093	.024	-.016	-.205	350	214	-.098	.021	-.016	-.178	350	318	-.091	.017	-.031	-.153
350	164	-.082	.027	-.016	-.223	350	301	-.082	.021	-.019	-.188	350	319	-.057	.016	-.006	-.113
350	165	-.071	.024	-.005	-.170	350	302	-.163	.031	-.084	-.378	350	320	-.107	.023	-.035	-.203
350	166	-.085	.026	-.005	-.228	350	303	-.119	.028	-.043	-.293	350	401	-.053	.037	-.189	-.269
350	167	-.126	.025	-.027	-.240	350	304	-.108	.023	-.042	-.218	350	402	-.037	.026	-.162	-.195
350	201	.040	.091	.506	-.216	350	305	-.102	.020	-.044	-.215	350	403	-.094	.025	-.011	-.254
350	202	.068	.079	.469	-.105	350	306	-.135	.023	-.064	-.239	350	404	-.059	.022	-.037	-.197
350	203	-.052	.065	.348	-.119	350	307	-.103	.020	-.043	-.192	350	405	-.064	.021	-.022	-.173
350	204	-.104	.068	.250	-.369	350	308	-.074	.023	-.004	-.223	350	406	-.057	.017	.011	-.148

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION B: MILLION DOLLAR PIER, ATLANTIC CITY

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN	WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
2222	10	- .472	.126	- .164	-1.031	236	11	- .596	.116	- .322	-1.250	250	26	- .330	.115	- .184	-1.315
2222	11	- .473	.096	- .228	-1.013	236	26	- .709	.120	- .354	-1.496	250	32	- .459	.120	- .110	-1.081
2222	26	- .679	.113	- .378	-1.225	236	32	- .716	.135	- .254	-1.479	250	33	- .478	.119	- .224	-1.035
2222	32	- .778	.131	- .257	-1.273	236	33	- .754	.144	- .352	-1.352	250	204	- .434	.141	- .052	-1.324
2222	33	- .841	.137	- .466	-1.383	236	204	- .427	.079	- .245	-1.036	250	403	- .438	.167	- .159	-1.343
2222	204	- .354	.056	- .183	-1.608	236	403	- .497	.237	- .333	-1.239	252	10	- .445	.136	- .075	-1.255
2224	403	- .286	.286	- .454	-1.240	238	10	- .586	.140	- .169	-1.169	252	11	- .555	.139	- .232	-1.333
2224	10	- .501	.132	- .174	-1.143	238	11	- .613	.109	- .312	-1.125	252	26	- .499	.121	- .131	-1.160
2224	11	- .483	.096	- .238	-1.950	238	26	- .707	.120	- .398	-1.212	252	32	- .420	.114	- .026	-1.003
2224	26	- .682	.169	- .363	-1.265	238	32	- .688	.134	- .232	-1.227	252	33	- .440	.121	- .171	-1.070
2224	32	- .761	.138	- .245	-1.336	238	33	- .745	.142	- .350	-1.350	252	204	- .456	.154	- .014	-1.467
2224	33	- .826	.133	- .493	-1.313	238	204	- .440	.079	- .258	-1.054	252	403	- .428	.151	- .300	-1.066
2224	204	- .368	.058	- .203	-1.836	238	403	- .535	.227	- .237	-1.285	254	10	- .425	.130	- .112	-1.252
2224	403	- .322	.271	- .424	-1.290	240	10	- .610	.150	- .192	-1.515	254	11	- .586	.156	- .225	-1.396
2226	10	- .516	.148	- .166	-1.140	240	11	- .625	.118	- .294	-1.153	254	26	- .488	.113	- .156	- .961
2226	11	- .510	.102	- .262	-1.942	240	26	- .707	.113	- .293	-1.422	254	32	- .416	.114	- .090	-1.044
2226	26	- .691	.109	- .408	-1.538	240	32	- .698	.141	- .263	-1.330	254	33	- .422	.108	- .182	-1.115
2226	32	- .751	.135	- .190	-1.289	240	33	- .723	.137	- .364	-1.359	254	204	- .463	.154	- .101	-1.328
2226	33	- .836	.138	- .429	-1.490	240	204	- .468	.102	- .246	-1.199	254	403	- .428	.139	- .141	-1.291
2226	204	- .372	.063	- .204	-1.792	240	403	- .539	.221	- .330	-1.300	256	10	- .424	.131	- .121	-1.191
2226	403	- .369	.262	- .384	-1.102	242	10	- .619	.141	- .229	-1.136	256	11	- .575	.145	- .202	-1.336
2228	10	- .526	.135	- .175	-1.106	242	11	- .645	.120	- .331	-1.325	256	26	- .490	.117	- .140	-1.165
2228	11	- .526	.101	- .291	-1.996	242	26	- .713	.114	- .394	-1.199	256	32	- .419	.116	- .093	- .916
2228	26	- .689	.107	- .323	-1.165	242	32	- .673	.132	- .171	-1.263	256	33	- .421	.107	- .178	- .957
2228	32	- .742	.142	- .186	-1.250	242	33	- .715	.138	- .360	-1.344	256	204	- .462	.162	- .028	-1.221
2228	33	- .812	.135	- .447	-1.357	242	204	- .490	.114	- .297	-1.322	256	403	- .446	.144	- .081	-1.163
2228	204	- .386	.058	- .233	-1.806	242	403	- .563	.210	- .206	-1.324	258	10	- .414	.130	- .036	-1.196
2228	403	- .387	.262	- .545	-1.254	244	10	- .669	.137	- .218	-1.261	258	11	- .543	.126	- .226	-1.173
2330	10	- .537	.140	- .148	-1.346	244	11	- .647	.117	- .278	-1.223	258	26	- .481	.115	- .167	- .987
2330	11	- .548	.111	- .276	-1.074	244	26	- .700	.109	- .376	-1.154	258	32	- .398	.112	- .012	-1.018
2330	26	- .692	.105	- .438	-1.321	244	32	- .661	.133	- .180	-1.226	258	33	- .410	.109	- .163	-1.045
2330	32	- .752	.145	- .211	-1.326	244	33	- .677	.128	- .318	-1.152	258	204	- .459	.180	- .026	-1.283
2330	33	- .799	.133	- .421	-1.382	244	204	- .492	.103	- .249	-1.115	258	403	- .427	.140	- .168	-1.122
2330	204	- .395	.062	- .227	-1.868	244	403	- .573	.208	- .167	-1.271	260	10	- .434	.135	- .013	-1.133
2330	403	- .440	.269	- .380	-1.458	246	10	- .644	.131	- .140	-1.235	260	11	- .489	.143	- .101	-1.145
2330	10	- .572	.148	- .269	-1.244	246	11	- .535	.124	- .246	-1.122	260	26	- .493	.112	- .064	-1.176
2332	11	- .576	.108	- .297	-1.056	246	26	- .542	.121	- .208	-1.050	260	32	- .388	.108	- .013	- .981
2332	26	- .716	.118	- .388	-1.319	246	32	- .484	.120	- .018	-1.996	260	33	- .412	.104	- .196	-1.020
2332	32	- .745	.149	- .180	-1.274	246	33	- .505	.125	- .206	-1.117	260	204	- .391	.168	- .107	-1.178
2332	33	- .809	.149	- .361	-1.389	246	204	- .418	.119	- .142	-1.133	260	403	- .433	.132	- .066	-1.003
2332	204	- .419	.077	- .227	-1.145	246	403	- .441	.178	- .155	-1.119	262	10	- .404	.132	- .071	-1.135
2332	403	- .485	.251	- .310	-1.436	248	10	- .428	.117	- .080	-1.247	262	11	- .467	.134	- .166	-1.051
2334	10	- .593	.150	- .217	-1.391	248	11	- .524	.120	- .224	-1.074	262	26	- .459	.121	- .082	-1.014
2334	11	- .559	.107	- .311	-1.020	248	26	- .519	.122	- .117	-1.095	262	32	- .383	.110	- .084	- .921
2334	26	- .694	.111	- .405	-1.168	248	32	- .470	.127	- .100	-1.019	262	33	- .389	.103	- .165	-1.004
2334	32	- .740	.142	- .299	-1.261	248	33	- .477	.123	- .211	-1.098	262	204	- .359	.170	- .266	-1.118
2334	33	- .765	.132	- .417	-1.319	248	204	- .394	.117	- .129	-1.078	262	403	- .436	.137	- .024	-1.135
2334	204	- .426	.076	- .226	-1.065	248	403	- .446	.164	- .165	-1.272	264	10	- .376	.125	- .037	-1.188
2334	403	- .475	.246	- .379	-1.362	250	10	- .453	.126	- .113	-1.187	264	11	- .456	.122	- .118	-1.123
2336	10	- .602	.145	- .188	-1.249	250	11	- .544	.124	- .233	-1.095	264	26	- .464	.111	- .117	- .968

## APPENDIX A -- PRESSURE DATA:

## CONFIGURATION B; MILLION DOLLAR PIER, ATLANTIC CITY

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WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
264	32	-.367	.111	-.126	-1.094
264	33	-.382	.099	-.142	-1.092

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
264	204	-.343	.167	172	-1.007

WD	TAP	CPMEAN	CPRMS	CPMAX	CPMIN
264	403	-.416	.131	.102	-1.049