This is not an elevation drawing. Please submit the same document you submitted with the first submittal.

AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure	:	190 ft Self Support Tower
ATC Asset Name	:	Black Forest
ATC Asset Number	:	302460
Engineering Number	:	15320585_C3_02
Proposed Carrier	:	T-MOBILE
Carrier Site Name	:	DN04235A
Carrier Site Number	:	DN04235A
Site Location	:	4584 Hodgen Road COLORADO SPRINGS, CO 80908-3006 39.0712° N, 104.7432° W
County	:	El Paso
Date	:	May 20, 2025
Max Usage	:	48%
Analysis Result	:	Pass

COLORADO LICENSED
MICHAEL EVAN DEESE
PE.0051453
PROFESSIONAL ENGINEER

Michael Deese

Digitally signed by Michael Deese
Date: 2025.07.02 17:37:26 -04'00'

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Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 190 ft Self Support tower to reflect the change in loading by T-MOBILE.

Supporting Documents

Tower:	Pirod Drawing #200180-B, dated March 23, 1995
Foundation:	Pirod Drawing #200180-B, dated March 23, 1995
Geotechnical:	GSI Job #2208252, dated April 4, 1995
Modification:	ATC Job #13317685_C6_04, dated December 8, 2020

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

Basic Wind Speed:	107 mph (3-second gust)
Basic Wind Speed w/ Ice:	59 mph (3-second gust) w/ 0.21" radial ice concurrent
Code(s):	ANSI/TIA-222-I / 2015 IBC
Exposure Category:	C
Risk Category:	II
Topographic Factor Procedure:	Method 1
Feature:	Flat
Crest Height (H):	0 ft
Crest Length (L):	0 ft
Spectral Response:	S_{DS} = 0.15, S_{D1} = 0.07
Site Class:	Default

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please reach out to your American Tower contact. If you do not have an American Tower contact and have an Engineering question, please contact **Engineering@americantower.com** Please include the American Tower asset name, asset number, and engineering number in the subject line for any questions.

Structure Usages

Structural Component	Usage	Control	Location	Result
Leg	47.4%	User Input	Section 6	Pass
Diagonal	48.0%	Block Shear	Section 8	Pass
Horizontal	11.7%	Block Shear	Section 12	Pass
Bolt	38.0%	-	Section 6	Pass
Serviceability Usage	7.9%	Rotation	Elevation 170 ft	Pass
Foundation	45.8%	Down	Base	Pass
Foundation	38.4%	Shear	Base	Pass
Foundation	39.9%	Uplift	Base	Pass

Maximum Reactions

Foundation	Moment (k-ft)	Axial (k)	Uplift (k)	Shear (k)
Self Support Base (Global)	3,768.3	67.7	-	34.2
Self Support Base (Local)	-	240.1	193.3	23.3

Reactions shown are maximum overall and not limited by Load Case excluding Overstrength Load Cases

Foundation usages were calculated by comparing the maximum reactions from this analysis to the reactions from the original design drawings, factored by 1.35 per ANSI/TIA-222-I, Section 15.6.2

T-MOBILE Final Loading

Elev (ft)	Qty	Equipment	Lines
132.0	2	Commscope HELIAX FiberFeed 12 RRU Pendant Connect	(2) 1.46" (37.1mm) Hybrid
	3	Commscope FFVV-65C-R3-V1	
	3	Nokia AEHC	
	3	Nokia AHFIG	
	3	Nokia AirScale Dual RRH 4T4R B12/71 240W AHLOA	
129.5	3	Sector Frame	-
129.0	1	Ceragon FibeAir IP-20D-HP	(1) 0.39" (10mm) Fiber Trunk (1) 0.63" (15.9mm) Cable
	1	Commscope VHLP3-6W	

Install proposed lines alongside existing T-MOBILE lines.

Other Existing/Reserved Loading

Elev (ft)	Qty	Equipment	Lines
190.2	3	Raycap DC9-48-60-24-8C-EV (Enclosure)	(3) 0.39" (10mm) Fiber Trunk (6) 0.92" (23.4mm) Cable
187.8	3	Ericsson AIR 6419 B77D/ C-Band	-
186.0	3	Light Sector Frame	-
	3	Ericsson Radio 4490HP 44B5 44B12A C	-
	3	Ericsson Radio 4494 44B14 20B29 M01	
	3	Ericsson Radio 4890HP 48B2/B25 48B66 M01 (67.2 lbs)	
	6	Commscope NNH4-65C-R6-V3 (102.5 lbs)	
185.0	3	Ericsson AIR 6419 B77G	-
175.0	3	Light Sector Frame	-
	1	Commscope RDIDC-9181-PF-48	(1) 1.75" (44.5mm) Hybrid
	3	Fujitsu TA08025-B604	
	3	Fujitsu TA08025-B605	
	3	JMA Wireless MX08FRO665-21	
170.0	3	Light Sector Frame	-
169.9	-	-	(9) 1 5/8" Coax
165.0	3	T-Arm	-
	1	Cambium Networks PTP 58500	(8) 0.24" (6mm) Cat 5
	7	Cambium Networks PMP 450m	
163.8	-	-	(13) 0.24" (6.1mm) Cat 5e
161.7	1	Cambium Networks PMP 450m	-
158.0	2	Raycap RCMDC-6627-PF-48	(2) 1 5/8" Hybriflex
	3	Ericsson AIR 6419 B77D	
	3	Ericsson Radio 4449 - B13&B5	
	3	Ericsson Radio 4890HP 48B2 48B66 S	
	6	Commscope NHH-65B-R2B	
	1	Heavy Sector Frame	-
	3	Sector Frame	

Elev (ft)	Qty	Equipment	Lines
148.0	1	Ceragon IP-20C	-
147.5	-	-	(1) 0.24" (6mm) Cat 5
147.4	1	Radio Waves HP3-6	-
147.0	1	Radio Waves SPD3-5.2NS-RD	(2) 0.24" (6mm) Cat 5
141.0	1	Andrew HP6-59/K	(1) EW63
117.3	1	20' Omni	-
117.1	-	-	(1) 7/8" Coax
111.0	1	Andrew PL4-59-P7A/F	(1) EW63
102.0	2	Direct Mount	(2) 0.35" (8.8mm) Cat 6A
	2	Hanwha Techwin XNP-8300RW	
90.0	1	Scala 2XCA2-CP	(1) 7/8" Coax
57.3	2	Samsung RRH-C2A (w/ External Filter)	-
55.7	-	-	(2) 1 1/4" Hybriflex Cable
55.5	2	KMW ET-X-WM-18-65-8P	-
55.0	2	Light Sector Frame	-
	2	Samsung 8T8R RRH – RRH-B8	
54.9	2	KMW ET-X-TS-70-15-62-18-iR-RD	-
54.5	2	Samsung 1.9GHz RRH	-
50.0	1	Andrew Microwaves HP6-65/K	(1) EW63
21.0	-	-	(2) 1/2" Coax
	1	Standoff	-
20.7	2	GPS	-
19.3	1	L-com HG5833D w/ Radome	-
18.0	1	Ceragon IP-20C	(2) 0.24" (6mm) Cat 5
	1	Radio Waves HP2-11	

(If table breaks across pages, please see previous page for data in merged cells)

Standard Conditions

All engineering services performed by ATC Tower Services LLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

- Information supplied by the client regarding antenna, mounts, and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of ATC Tower Services LLC

It is the responsibility of the client to ensure that the information provided to ATC Tower Services LLC and used in the performance of our engineering services is correct and complete.

All assets of American Tower Corporation, its affiliates, and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and ATC Tower Services LLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

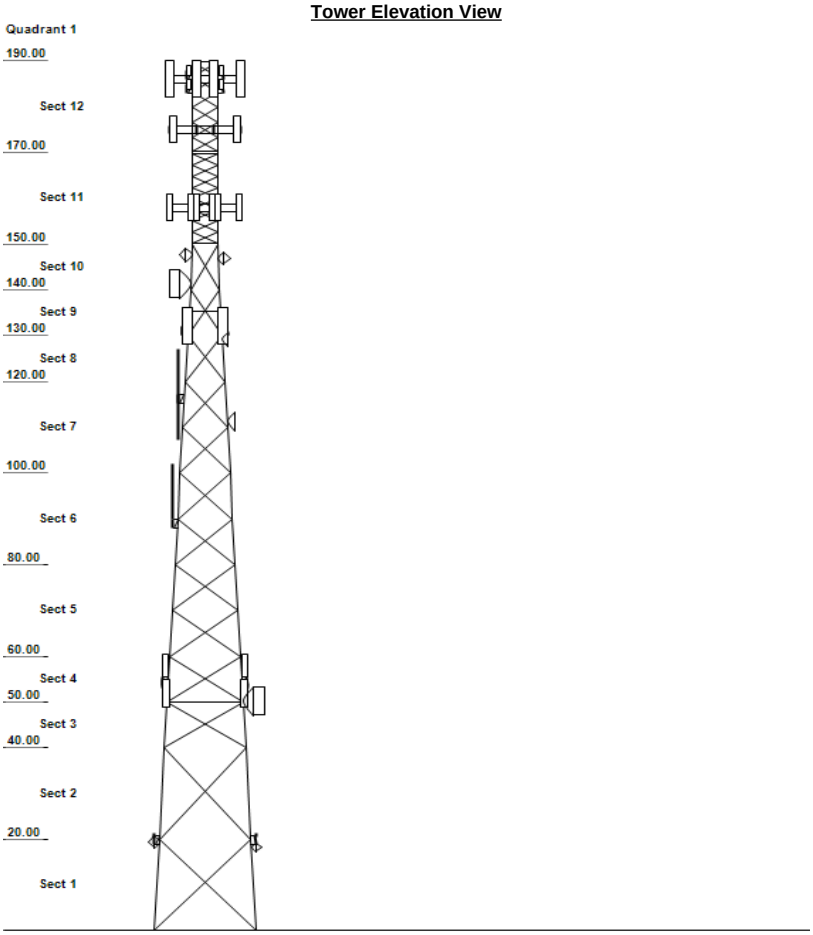
All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. ATC Tower Services LLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.

ASSET: Black Forest, 302460 CODE: ANSI/TIA-222-I
CUSTOMER: T-MOBILE PROJECT: 15320585

ANALYSIS PARAMETERS

Design Wind:	107 mph	**Ice Wind:**	59 mph w/ 0.21" ice	**Service Wind:**	60 mph
Risk Category	II	**Exposure:**	C	**S_{DS}:** 0.150	**S_{D1}:** 0.067
Topo Factor:	Method 1	**Topo Feature:**	**Flat**		
Structure Height:	190 ft	**Base Elevation:**	0 ft	**Shape:**	Triangle
Base Width:	20.00 ft	**Top Width:**	5.00 ft		

Tower Elevation View



GLOBAL BASE REACTIONS

	DL+WL	DL+WL+IL
Moment (k-ft):	3,768.34	1,507.44
Axial (k):	67.71	76.51
Shear (k):	34.17	14.20

INDIVIDUAL BASE REACTIONS

Comp (k):	240.13
Uplift (k):	193.26
Shear (k):	23.26

TOWER SECTION PROPERTIES

Section	Leg Members	Diagonal Members	Horizontal Members
1	18B 50 ksi 18"BD 2.5"	DAE 36 ksi 3.5X3.5X0.3125	
2	18B 50 ksi 18" BD 2.25"	DAE 36 ksi 3.5X3.5X0.3125	
3	12B 50 ksi 12"BD 2.25"	SAE 36 ksi 4X4X0.25	SAE 36 ksi 4X4X0.25
4	12B 50 ksi 12"BD 2.25"	SAE 36 ksi 4X4X0.25	
5	12B 50 ksi 12"BD 2"	SAE 36 ksi 3.5X3.5X0.3125	
6	12B 50 ksi 12"BD 1.75"	SAE 36 ksi 3X3X0.3125	
7	12B 50 ksi 12"BD 1.75"	SAE 36 ksi 3X3X0.1875	
8 - 9	12B 50 ksi 12"BD 1.5"	SAE 36 ksi 3X3X0.1875	
10	12B 50 ksi 12"BD 1.25"	SAE 36 ksi 3X3X0.1875	
11	SOL 50 ksi 2" SOLID	SOL 50 ksi 1" SOLID	SOL 50 ksi 1" SOLID
12	SOL 50 ksi 2" SOLID	SAE 36 ksi 1.75X1.75X0.1875	SAE 36 ksi 1.75X1.75X0.1875

SECONDARY BRACING MEMBERS

Section	Sub Diagonal 1	Sub Diagonal 2	Sub Diagonal 3
9	-	-	-

Section	Sub Horizontal 1	Sub Horizontal 2	Sub Horizontal 3
9	S3X3X0.1875	-	-

DISCRETE APPURTENANCE

Elev (ft)	Description
190.2	(3) Raycap DC9-48-60-24-8C-EV (Enclos
187.8	(3) Ericsson AIR 6419 B77D/ C-Band
186.0	(3) Generic Flat Light Sector Frame
186.0	(6) Commscope NNH4-65C-R6-V3 (102.5
186.0	(3) Ericsson Radio 4890HP 48B2/B25 48
186.0	(3) Ericsson Radio 4490HP 44B5 44B12A
186.0	(3) Ericsson Radio 4494 44B14 20B29 M0
185.0	(3) Ericsson AIR 6419 B77G
175.0	(3) Generic Flat Light Sector Frame
175.0	(3) Fujitsu TA08025-B605
175.0	(3) JMA Wireless MX08FRO665-21
175.0	(1) Commscope RDIDC-9181-PF-48
175.0	(3) Fujitsu TA08025-B604
170.0	(3) Flat Light Sector Frame
165.0	(1) Cambium Networks PTP 58500
165.0	(7) Cambium Networks PMP 450m
165.0	(3) Generic Flat T-Arm
161.7	(1) Cambium Networks PMP 450m
158.0	(3) Ericsson Radio 4890HP 48B2 48B66
158.0	(2) Raycap RCMDC-6627-PF-48
158.0	(3) Ericsson AIR 6419 B77D
158.0	(3) Ericsson Radio 4449 - B13&B5
158.0	(6) Commscope NHH-65B-R2B
158.0	(3) Generic Round Sector Frame
158.0	(1) Heavy Sector Frame
148.0	(1) Ceragon IP-20C
147.4	(1) Radio Waves HP3-6
147.0	(1) Radio Waves SPD3-5.2NS-RD
141.0	(1) Andrew HP6-59/K
132.0	(2) Commscope HELIAX FiberFeed 12 R
132.0	(3) Nokia AEHC
132.0	(3) Nokia AHFIG
132.0	(3) Commscope FFVV-65C-R3-V1
132.0	(3) Nokia AirScale Dual RRH 4T4R B12/7
129.5	(3) Round Sector Frame
129.0	(1) Commscope VHLP3-6W
129.0	(1) Ceragon FibeAir IP-20D-HP
117.3	(1) Generic 20' Omni
111.0	(1) Andrew PL4-59-P7A/F
102.0	(2) Hanwha Techwin XNP-8300RW
102.0	(2) Generic Direct Mount
90.0	(1) Scala 2XCA2-CP
57.3	(2) Samsung RRH-C2A (w/ External Filter
55.5	(2) KMW ET-X-WM-18-65-8P
55.0	(2) Samsung 8T8R RRH – RRH-B8
55.0	(2) Generic Flat Light Sector Frame

LINEAR APPURTENANCE

Elev (ft)	Description
190.2	(6) 0.92" (23.4mm) Cable
190.2	(3) 0.39" (10mm) Fiber Trunk
186.0	(1) Waveguide
175.0	(1) 1.75" (44.5mm) Hybrid
170.0	(1) Climbing Ladder
169.9	(9) 1 5/8" Coax
165.0	(8) 0.24" (6mm) Cat 5
163.8	(13) 0.24" (6.1mm) Cat 5e
158.0	(2) 1 5/8" Hybriflex
147.5	(1) 0.24" (6mm) Cat 5
147.0	(2) 0.24" (6mm) Cat 5
141.0	(1) EW63
132.0	(2) 1.46" (37.1mm) Hybrid
132.0	(1) Waveguide
129.0	(1) 0.39" (10mm) Fiber Trunk
129.0	(1) 0.63" (15.9mm) Cable
117.1	(1) 7/8" Coax
111.0	(1) EW63
102.0	(2) 0.35" (8.8mm) Cat 6A
90.0	(1) 7/8" Coax
55.7	(2) 1 1/4" Hybriflex Cable
50.0	(1) EW63
21.0	(2) 1/2" Coax
18.0	(2) 0.24" (6mm) Cat 5

DISCRETE APPURTENANCE

Elev (ft)	Description
54.9	(2) KMW ET-X-TS-70-15-62-18-iR-RD
54.5	(2) Samsung 1.9GHz RRH
50.0	(1) Andrew Microwaves HP6-65/K
21.0	(1) Standoff
20.7	(2) Generic GPS
19.3	(1) L-com HG5833D w/ Radome
18.0	(1) Radio Waves HP2-11
18.0	(1) Ceragon IP-20C

ANALYSIS PARAMETERS

Location:	El Paso County, CO	**Height:**	190 ft
Type and Shape:	Self Support, Triangle	**Base Elevation:**	0.00 ft
Manufacturer:	Pirod	**Bottom Face Width:**	20.00 ft
Kd	0.85	**Top Face Width:**	5.00 ft
Ke:	0.76	**Anchor Bolt Detail Type:**	d

ICE & WIND PARAMETERS

Exposure Category:	C	**Design Wind Speed Without Ice:**	107 mph
		Design Wind Speed with Ice:	59 mph
Risk Category:	II	**Operational Windspeed:**	60 mph
Topographic Factor Procedure:	Method 1		
Crest Height(H):	0 ft	**Design Ice Thickness:**	0.21 in
Crest Length(L):	0 ft	**HMSL:**	7679 ft
Feature:	Flat	**Distance from Apex (x):**	0
		Upwind/Downwind:	Upwind

SEISMIC PARAMETERS

Analysis Method:	Equivalent Lateral Force Method				
Site Class:	Default			**Period Based on Rayleigh Method (sec):**	1.12
T_L (sec):	4	**P:**	1.3	**C_s:**	0.030
S_{ds}:	0.150	**S_{d1}:**	0.067	**C_s, Max:**	0.030
				C_s, Min:	0.030

LOAD CASES

1.2D + 1.0W Normal	1.2D + 1.0W Normal - 107 mph Wind with No Ice
1.2D + 1.0W 60°	1.2D + 1.0W 60° - 107 mph Wind with No Ice
1.2D + 1.0W 90°	1.2D + 1.0W 90° - 107 mph Wind with No Ice
1.2D + 1.0W 120°	1.2D + 1.0W 120° - 107 mph Wind with No Ice
1.2D + 1.0W 180°	1.2D + 1.0W 180° - 107 mph Wind with No Ice
1.2D + 1.0W 210°	1.2D + 1.0W 210° - 107 mph Wind with No Ice
1.2D + 1.0W 240°	1.2D + 1.0W 240° - 107 mph Wind with No Ice
1.2D + 1.0W 300°	1.2D + 1.0W 300° - 107 mph Wind with No Ice
1.2D + 1.0W 330°	1.2D + 1.0W 330° - 107 mph Wind with No Ice
0.9D + 1.0W Normal	0.9D + 1.0W Normal - 107 mph Wind with No Ice (Reduced DL)
0.9D + 1.0W 60°	0.9D + 1.0W 60° - 107 mph Wind with No Ice (Reduced DL)
0.9D + 1.0W 90°	0.9D + 1.0W 90° - 107 mph Wind with No Ice (Reduced DL)
0.9D + 1.0W 120°	0.9D + 1.0W 120° - 107 mph Wind with No Ice (Reduced DL)
0.9D + 1.0W 180°	0.9D + 1.0W 180° - 107 mph Wind with No Ice (Reduced DL)
0.9D + 1.0W 210°	0.9D + 1.0W 210° - 107 mph Wind with No Ice (Reduced DL)
0.9D + 1.0W 240°	0.9D + 1.0W 240° - 107 mph Wind with No Ice (Reduced DL)
0.9D + 1.0W 300°	0.9D + 1.0W 300° - 107 mph Wind with No Ice (Reduced DL)
0.9D + 1.0W 330°	0.9D + 1.0W 330° - 107 mph Wind with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi Normal	1.2D + 1.0Di + 1.0Wi Normal - 59 mph Wind with 0.21" Radial Ice
1.2D + 1.0Di + 1.0Wi 60°	1.2D + 1.0Di + 1.0Wi 60° - 59 mph Wind with 0.21" Radial Ice
1.2D + 1.0Di + 1.0Wi 90°	1.2D + 1.0Di + 1.0Wi 90° - 59 mph Wind with 0.21" Radial Ice
1.2D + 1.0Di + 1.0Wi 120°	1.2D + 1.0Di + 1.0Wi 120° - 59 mph Wind with 0.21" Radial Ice
1.2D + 1.0Di + 1.0Wi 180°	1.2D + 1.0Di + 1.0Wi 180° - 59 mph Wind with 0.21" Radial Ice
1.2D + 1.0Di + 1.0Wi 210°	1.2D + 1.0Di + 1.0Wi 210° - 59 mph Wind with 0.21" Radial Ice
1.2D + 1.0Di + 1.0Wi 240°	1.2D + 1.0Di + 1.0Wi 240° - 59 mph Wind with 0.21" Radial Ice
1.2D + 1.0Di + 1.0Wi 300°	1.2D + 1.0Di + 1.0Wi 300° - 59 mph Wind with 0.21" Radial Ice

LOAD CASES	
1.2D + 1.0Di + 1.0Wi 330°	1.2D + 1.0Di + 1.0Wi 330° - 59 mph Wind with 0.21" Radial Ice
1.2D + 1.0Ev + 1.0Eh Normal	1.2D + 1.0Ev + 1.0Eh Normal - Seismic
1.2D + 1.0Ev + 1.0Eh 60°	1.2D + 1.0Ev + 1.0Eh 60° - Seismic
1.2D + 1.0Ev + 1.0Eh 90°	1.2D + 1.0Ev + 1.0Eh 90° - Seismic
1.2D + 1.0Ev + 1.0Eh 120°	1.2D + 1.0Ev + 1.0Eh 120° - Seismic
1.2D + 1.0Ev + 1.0Eh 180°	1.2D + 1.0Ev + 1.0Eh 180° - Seismic
1.2D + 1.0Ev + 1.0Eh 210°	1.2D + 1.0Ev + 1.0Eh 210° - Seismic
1.2D + 1.0Ev + 1.0Eh 240°	1.2D + 1.0Ev + 1.0Eh 240° - Seismic
1.2D + 1.0Ev + 1.0Eh 300°	1.2D + 1.0Ev + 1.0Eh 300° - Seismic
1.2D + 1.0Ev + 1.0Eh 330°	1.2D + 1.0Ev + 1.0Eh 330° - Seismic
0.9D - 1.0Ev + 1.0Eh Normal	0.9D - 1.0Ev + 1.0Eh Normal - Seismic (Reduced DL)
0.9D - 1.0Ev + 1.0Eh 60°	0.9D - 1.0Ev + 1.0Eh 60° - Seismic (Reduced DL)
0.9D - 1.0Ev + 1.0Eh 90°	0.9D - 1.0Ev + 1.0Eh 90° - Seismic (Reduced DL)
0.9D - 1.0Ev + 1.0Eh 120°	0.9D - 1.0Ev + 1.0Eh 120° - Seismic (Reduced DL)
0.9D - 1.0Ev + 1.0Eh 180°	0.9D - 1.0Ev + 1.0Eh 180° - Seismic (Reduced DL)
0.9D - 1.0Ev + 1.0Eh 210°	0.9D - 1.0Ev + 1.0Eh 210° - Seismic (Reduced DL)
0.9D - 1.0Ev + 1.0Eh 240°	0.9D - 1.0Ev + 1.0Eh 240° - Seismic (Reduced DL)
0.9D - 1.0Ev + 1.0Eh 300°	0.9D - 1.0Ev + 1.0Eh 300° - Seismic (Reduced DL)
0.9D - 1.0Ev + 1.0Eh 330°	0.9D - 1.0Ev + 1.0Eh 330° - Seismic (Reduced DL)
1.0D + 1.0W Service Normal	1.0D + 1.0W Service Normal - 60 mph Wind with No Ice
1.0D + 1.0W Service 60°	1.0D + 1.0W Service 60° - 60 mph Wind with No Ice
1.0D + 1.0W Service 90°	1.0D + 1.0W Service 90° - 60 mph Wind with No Ice
1.0D + 1.0W Service 120°	1.0D + 1.0W Service 120° - 60 mph Wind with No Ice
1.0D + 1.0W Service 180°	1.0D + 1.0W Service 180° - 60 mph Wind with No Ice
1.0D + 1.0W Service 210°	1.0D + 1.0W Service 210° - 60 mph Wind with No Ice
1.0D + 1.0W Service 240°	1.0D + 1.0W Service 240° - 60 mph Wind with No Ice
1.0D + 1.0W Service 300°	1.0D + 1.0W Service 300° - 60 mph Wind with No Ice
1.0D + 1.0W Service 330°	1.0D + 1.0W Service 330° - 60 mph Wind with No Ice
1.2D + 1.0Ev + 1.5Eh Normal	1.2D + 1.0Ev + 1.5Eh Normal - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 60°	1.2D + 1.0Ev + 1.5Eh 60° - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 90°	1.2D + 1.0Ev + 1.5Eh 90° - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 120°	1.2D + 1.0Ev + 1.5Eh 120° - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 180°	1.2D + 1.0Ev + 1.5Eh 180° - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 210°	1.2D + 1.0Ev + 1.5Eh 210° - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 240°	1.2D + 1.0Ev + 1.5Eh 240° - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 300°	1.2D + 1.0Ev + 1.5Eh 300° - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 330°	1.2D + 1.0Ev + 1.5Eh 330° - Seismic Overstrength
0.9D - 1.0Ev + 1.5Eh Normal	0.9D - 1.0Ev + 1.5Eh Normal - Seismic Overstrength (Reduced DL)
0.9D - 1.0Ev + 1.5Eh 60°	0.9D - 1.0Ev + 1.5Eh 60° - Seismic Overstrength (Reduced DL)
0.9D - 1.0Ev + 1.5Eh 90°	0.9D - 1.0Ev + 1.5Eh 90° - Seismic Overstrength (Reduced DL)
0.9D - 1.0Ev + 1.5Eh 120°	0.9D - 1.0Ev + 1.5Eh 120° - Seismic Overstrength (Reduced DL)
0.9D - 1.0Ev + 1.5Eh 180°	0.9D - 1.0Ev + 1.5Eh 180° - Seismic Overstrength (Reduced DL)
0.9D - 1.0Ev + 1.5Eh 210°	0.9D - 1.0Ev + 1.5Eh 210° - Seismic Overstrength (Reduced DL)
0.9D - 1.0Ev + 1.5Eh 240°	0.9D - 1.0Ev + 1.5Eh 240° - Seismic Overstrength (Reduced DL)
0.9D - 1.0Ev + 1.5Eh 300°	0.9D - 1.0Ev + 1.5Eh 300° - Seismic Overstrength (Reduced DL)
0.9D - 1.0Ev + 1.5Eh 330°	0.9D - 1.0Ev + 1.5Eh 330° - Seismic Overstrength (Reduced DL)

TOWER LOADING – DISCRETE APPURTENANCE

Discrete Appurtenance Properties for LC: **1.2D + 1.0W**

Elev (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc. (ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
190.2	Raycap DC9-48-60-24-8C-EV (Enc	3	19	2.7	2.2	12.4	9.7	0.80	0.67	0.0	0.00	26.97	99	67
187.8	Ericsson AIR 6419 B77D/ C-Band	3	64	3.8	2.4	16.1	7.3	0.80	0.64	0.0	0.00	26.90	133	230
186.0	Ericsson Radio 4490HP 44B5 44B	3	68	2.2	1.5	15.1	6.8	0.80	0.67	0.0	0.00	26.84	81	246
186.0	Ericsson Radio 4890HP 48B2/B25	3	67	2.2	1.5	15.1	6.9	0.80	0.67	0.0	0.00	26.84	81	242
186.0	Ericsson Radio 4494 44B14 20B2	3	57	2.2	1.5	15.1	5.6	0.80	0.67	0.0	0.00	26.84	81	206
186.0	Commscope NNH4-65C-R6-V3 (102.	6	103	17.1	8.0	19.6	7.8	0.80	0.64	0.0	0.00	26.84	1197	738
186.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	26.84	689	1440
185.0	Ericsson AIR 6419 B77G	3	66	3.8	2.4	16.1	7.9	0.80	0.65	0.0	0.00	26.82	135	238
175.0	Commscope RDIDC-9181-PF-48	1	22	1.9	1.3	14.0	8.0	0.80	0.50	0.0	0.00	26.51	17	26
175.0	Fujitsu TA08025-B605	3	75	2.0	1.3	15.0	9.1	0.80	0.50	0.0	0.00	26.51	53	270
175.0	Fujitsu TA08025-B604	3	64	2.0	1.3	15.0	7.9	0.80	0.50	0.0	0.00	26.51	53	230
175.0	JMA Wireless MX08FRO665-21	3	65	12.5	6.0	20.0	8.0	0.80	0.64	0.0	0.00	26.51	432	232
175.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	26.51	681	1440
170.0	Flat Light Sector Frame	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	26.36	677	1440
165.0	Cambium Networks PTP 58500	1	12	1.8	1.2	14.5	3.8	0.80	0.50	-1.2	18.70	26.16	16	14
165.0	Cambium Networks PMP 450m	7	31	4.3	2.1	20.3	4.4	0.80	0.50	-1.9	513.85	26.13	270	260
165.0	Generic Flat T-Arm	3	313	12.9	0.0	0.0	0.0	0.75	0.67	0.0	0.00	26.20	433	1125
161.7	Cambium Networks PMP 450m	1	31	4.3	2.1	20.3	4.4	0.80	0.50	-1.9	73.10	26.03	38	37
158.0	Ericsson Radio 4449 - B13&B5	3	70	1.6	1.3	13.2	9.3	0.80	0.50	0.0	0.00	25.97	44	252
158.0	Ericsson Radio 4890HP 48B2 48B	3	70	2.2	1.5	15.2	7.0	0.80	0.67	0.0	0.00	25.97	79	250
158.0	Raycap RCMDC-6627-PF-48	2	32	4.1	2.5	16.5	12.6	0.80	0.79	0.0	0.00	25.97	113	77
158.0	Ericsson AIR 6419 B77D	3	63	4.2	2.6	16.1	9.1	0.80	0.67	0.0	0.00	25.97	149	227
158.0	Commscope NHH-65B-R2B	6	44	8.1	6.0	11.9	7.1	0.80	0.69	0.0	0.00	25.97	591	315
158.0	Generic Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.00	25.97	479	1080
158.0	Heavy Sector Frame	1	500	29.3	0.0	0.0	0.0	0.75	0.67	0.0	0.00	25.97	325	600
148.0	Ceragon IP-20C	1	13	0.7	0.9	8.6	3.9	1.00	0.50	-0.7	5.67	25.60	8	16
147.4	Radio Waves HP3-6	1	50	10.1	3.2	38.4	20.2	1.00	1.00	0.0	0.00	25.60	221	60
147.0	Radio Waves SPD3-5.2NS-RD	1	43	6.1	3.0	36.0	0.0	1.00	1.00	0.0	0.00	25.59	133	52
141.0	Andrew HP6-59/K	1	320	41.3	6.5	77.5	53.3	1.00	1.00	0.0	0.00	25.37	891	384
132.0	Commscope HELIAX FiberFeed 12	2	20	0.9	1.4	6.7	4.7	0.80	0.50	0.0	0.00	25.03	16	48
132.0	Nokia AirScale Dual RRH 4T4R B	3	84	2.2	1.8	12.1	7.4	0.80	0.50	0.0	0.00	25.03	57	302
132.0	Nokia AHFIG	3	79	3.1	2.3	13.4	6.8	0.80	0.50	0.0	0.00	25.03	79	286
132.0	Nokia AEHC	3	104	6.8	3.2	21.5	8.1	0.80	0.62	0.0	0.00	25.03	217	373
132.0	Commscope FFVV-65C-R3-V1	3	125	21.1	8.0	25.2	9.3	0.80	0.63	0.0	0.00	25.03	679	449
129.5	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.00	24.93	460	1080
129.0	Ceragon FibeAir IP-20D-HP	1	27	1.2	1.0	11.3	4.2	0.90	1.00	0.0	0.00	24.91	23	32
129.0	Commscope VHLP3-6W	1	53	10.7	3.3	39.4	24.3	0.90	1.00	0.0	0.00	24.91	204	64
117.3	Generic 20' Omni	1	55	6.0	20.0	3.0	3.0	1.00	1.00	0.0	0.00	24.43	125	66
111.0	Andrew PL4-59-P7A/F	1	119	23.4	4.2	50.8	16.2	1.00	1.00	0.0	0.00	24.16	481	143
102.0	Hanwha Techwin XNP-8300RW	2	12	0.8	1.0	7.3	7.3	1.00	1.00	0.0	0.00	23.75	31	29
102.0	Generic Direct Mount	2	100	1.7	0.0	0.0	0.0	1.00	1.00	0.0	0.00	23.75	69	240
90.0	Scala 2XCA2-CP	1	6	1.2	12.2	0.7	0.7	1.00	1.00	4.0	94.49	23.35	24	7
57.3	Samsung RRH-C2A (w/ External F	2	57	3.1	2.0	15.7	6.7	0.90	0.50	2.3	116.11	21.28	50	138
55.5	KMW ET-X-WM-18-65-8P	2	36	6.7	5.1	12.0	4.3	0.90	0.72	0.5	77.36	21.01	155	87
55.0	Samsung 8T8R RRH – RRH-B8	2	60	2.4	1.7	13.8	6.8	0.90	0.50	0.0	0.00	20.93	38	143
55.0	Generic Flat Light Sector Fram	2	400	17.9	0.0	0.0	0.0	0.90	0.90	0.0	0.00	20.93	516	960
54.9	KMW ET-X-TS-70-15-62-18-iR-RD	2	42	8.3	6.2	11.8	5.9	0.90	0.75	-0.1	19.84	20.92	198	101
54.5	Samsung 1.9GHz RRH	2	60	2.7	2.0	13.8	9.0	0.90	0.50	-0.5	21.83	20.86	44	143
50.0	Andrew Microwaves HP6-65/K	1	320	41.3	6.5	77.5	53.3	1.00	1.00	0.9	651.52	20.61	724	384
21.0	Standoff	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.00	17.20	76	180
20.7	Generic GPS	2	10	0.9	1.0	9.0	6.0	1.00	0.50	0.0	0.00	17.15	13	24
19.3	L-com HG5833D w/ Radome	1	20	5.9	3.0	35.4	0.0	1.00	1.00	0.0	0.00	16.91	85	24
18.0	Ceragon IP-20C	1	13	0.7	0.9	8.6	3.9	1.00	0.50	1.2	6.42	16.89	5	16
18.0	Radio Waves HP2-11	1	27	4.0	2.0	24.0	0.0	1.00	1.00	0.0	0.00	16.67	56	32
	Totals	**125**	**14,285**	**985.4**									12,620	17,142

Discrete Appurtenance Properties for LC: **0.9D + 1.0W**

Elev (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc. (ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
190.2	Raycap DC9-48-60-24-8C-EV (Enc	3	19	2.7	2.2	12.4	9.7	0.80	0.67	0.0	0.00	26.97	99	50
187.8	Ericsson AIR 6419 B77D/ C-Band	3	64	3.8	2.4	16.1	7.3	0.80	0.64	0.0	0.00	26.90	133	173
186.0	Ericsson Radio 4490HP 44B5 44B	3	68	2.2	1.5	15.1	6.8	0.80	0.67	0.0	0.00	26.84	81	184
186.0	Ericsson Radio 4890HP 48B2/B25	3	67	2.2	1.5	15.1	6.9	0.80	0.67	0.0	0.00	26.84	81	181
186.0	Ericsson Radio 4494 44B14 20B2	3	57	2.2	1.5	15.1	5.6	0.80	0.67	0.0	0.00	26.84	81	155
186.0	Commscope NNH4-65C-R6-V3 (102.	6	103	17.1	8.0	19.6	7.8	0.80	0.64	0.0	0.00	26.84	1197	554
186.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	26.84	689	1080
185.0	Ericsson AIR 6419 B77G	3	66	3.8	2.4	16.1	7.9	0.80	0.65	0.0	0.00	26.82	135	178
175.0	Commscope RDIDC-9181-PF-48	1	22	1.9	1.3	14.0	8.0	0.80	0.50	0.0	0.00	26.51	17	20
175.0	Fujitsu TA08025-B605	3	75	2.0	1.3	15.0	9.1	0.80	0.50	0.0	0.00	26.51	53	202
175.0	Fujitsu TA08025-B604	3	64	2.0	1.3	15.0	7.9	0.80	0.50	0.0	0.00	26.51	53	173
175.0	JMA Wireless MX08FRO665-21	3	65	12.5	6.0	20.0	8.0	0.80	0.64	0.0	0.00	26.51	432	174
175.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	26.51	681	1080
170.0	Flat Light Sector Frame	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	26.36	677	1080
165.0	Cambium Networks PTP 58500	1	12	1.8	1.2	14.5	3.8	0.80	0.50	-1.2	18.70	26.16	16	11
165.0	Cambium Networks PMP 450m	7	31	4.3	2.1	20.3	4.4	0.80	0.50	-1.9	513.85	26.13	270	195

Elev (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc. (ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
165.0	Generic Flat T-Arm	3	313	12.9	0.0	0.0	0.0	0.75	0.67	0.0	0.00	26.20	433	844
161.7	Cambium Networks PMP 450m	1	31	4.3	2.1	20.3	4.4	0.80	0.50	-1.9	73.10	26.03	38	28
158.0	Ericsson Radio 4449 - B13&B5	3	70	1.6	1.3	13.2	9.3	0.80	0.50	0.0	0.00	25.97	44	189
158.0	Ericsson Radio 4890HP 48B2 48B	3	70	2.2	1.5	15.2	7.0	0.80	0.67	0.0	0.00	25.97	79	188
158.0	Raycap RCMDC-6627-PF-48	2	32	4.1	2.5	16.5	12.6	0.80	0.79	0.0	0.00	25.97	113	58
158.0	Ericsson AIR 6419 B77D	3	63	4.2	2.6	16.1	9.1	0.80	0.67	0.0	0.00	25.97	149	170
158.0	Commscope NHH-65B-R2B	6	44	8.1	6.0	11.9	7.1	0.80	0.69	0.0	0.00	25.97	591	236
158.0	Generic Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.00	25.97	479	810
158.0	Heavy Sector Frame	1	500	29.3	0.0	0.0	0.0	0.75	0.67	0.0	0.00	25.97	325	450
148.0	Ceragon IP-20C	1	13	0.7	0.9	8.6	3.9	1.00	0.50	-0.7	5.67	25.60	8	12
147.4	Radio Waves HP3-6	1	50	10.1	3.2	38.4	20.2	1.00	1.00	0.0	0.00	25.60	221	45
147.0	Radio Waves SPD3-5.2NS-RD	1	43	6.1	3.0	36.0	0.0	1.00	1.00	0.0	0.00	25.59	133	39
141.0	Andrew HP6-59/K	1	320	41.3	6.5	77.5	53.3	1.00	1.00	0.0	0.00	25.37	891	288
132.0	Commscope HELIAX FiberFeed 12	2	20	0.9	1.4	6.7	4.7	0.80	0.50	0.0	0.00	25.03	16	36
132.0	Nokia AirScale Dual RRH 4T4R B	3	84	2.2	1.8	12.1	7.4	0.80	0.50	0.0	0.00	25.03	57	226
132.0	Nokia AHFIG	3	79	3.1	2.3	13.4	6.8	0.80	0.50	0.0	0.00	25.03	79	214
132.0	Nokia AEHC	3	104	6.8	3.2	21.5	8.1	0.80	0.62	0.0	0.00	25.03	217	280
132.0	Commscope FFVV-65C-R3-V1	3	125	21.1	8.0	25.2	9.3	0.80	0.63	0.0	0.00	25.03	679	336
129.5	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.00	24.93	460	810
129.0	Ceragon FibeAir IP-20D-HP	1	27	1.2	1.0	11.3	4.2	0.90	1.00	0.0	0.00	24.91	23	24
129.0	Commscope VHLP3-6W	1	53	10.7	3.3	39.4	24.3	0.90	1.00	0.0	0.00	24.91	204	48
117.3	Generic 20' Omni	1	55	6.0	20.0	3.0	3.0	1.00	1.00	0.0	0.00	24.43	125	50
111.0	Andrew PL4-59-P7A/F	1	119	23.4	4.2	50.8	16.2	1.00	1.00	0.0	0.00	24.16	481	107
102.0	Hanwha Techwin XNP-8300RW	2	12	0.8	1.0	7.3	7.3	1.00	1.00	0.0	0.00	23.75	31	21
102.0	Generic Direct Mount	2	100	1.7	0.0	0.0	0.0	1.00	1.00	0.0	0.00	23.75	69	180
90.0	Scala 2XCA2-CP	1	6	1.2	12.2	0.7	0.7	1.00	1.00	4.0	94.49	23.35	24	5
57.3	Samsung RRH-C2A (w/ External F	2	57	3.1	2.0	15.7	6.7	0.90	0.50	2.3	116.11	21.28	50	103
55.5	KMW ET-X-WM-18-65-8P	2	36	6.7	5.1	12.0	4.3	0.90	0.72	0.5	77.36	21.01	155	66
55.0	Samsung 8T8R RRH – RRH-B8	2	60	2.4	1.7	13.8	6.8	0.90	0.50	0.0	0.00	20.93	38	107
55.0	Generic Flat Light Sector Fram	2	400	17.9	0.0	0.0	0.0	0.90	0.90	0.0	0.00	20.93	516	720
54.9	KMW ET-X-TS-70-15-62-18-iR-RD	2	42	8.3	6.2	11.8	5.9	0.90	0.75	-0.1	19.84	20.92	198	75
54.5	Samsung 1.9GHz RRH	2	60	2.7	2.0	13.8	9.0	0.90	0.50	-0.5	21.83	20.86	44	107
50.0	Andrew Microwaves HP6-65/K	1	320	41.3	6.5	77.5	53.3	1.00	1.00	0.9	651.52	20.61	724	288
21.0	Standoff	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.00	17.20	76	135
20.7	Generic GPS	2	10	0.9	1.0	9.0	6.0	1.00	0.50	0.0	0.00	17.15	13	18
19.3	L-com HG5833D w/ Radome	1	20	5.9	3.0	35.4	0.0	1.00	1.00	0.0	0.00	16.91	85	18
18.0	Ceragon IP-20C	1	13	0.7	0.9	8.6	3.9	1.00	0.50	1.2	6.42	16.89	5	12
18.0	Radio Waves HP2-11	1	27	4.0	2.0	24.0	0.0	1.00	1.00	0.0	0.00	16.67	56	24
	Totals	**125**	**14,285**	**985.4**									12,620	12,857

Discrete Appurtenance Properties for LC: **1.2D + 1.0Di + 1.0Wi**

Elev (ft)	Description	Qty	Ice Wt (lb)	Ice EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc. (ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
190.2	Raycap DC9-48-60-24-8C-EV (Enc	3	30	2.8	2.2	12.4	9.7	0.80	0.67	0.0	0.00	8.20	32	103
187.8	Ericsson AIR 6419 B77D/ C-Band	3	77	4.0	2.4	16.1	7.3	0.80	0.64	0.0	0.00	8.18	43	271
186.0	Ericsson Radio 4490HP 44B5 44B	3	77	2.3	1.5	15.1	6.8	0.80	0.67	0.0	0.00	8.16	25	271
186.0	Ericsson Radio 4890HP 48B2/B25	3	76	2.3	1.5	15.1	6.9	0.80	0.67	0.0	0.00	8.16	26	267
186.0	Ericsson Radio 4494 44B14 20B2	3	65	2.3	1.5	15.1	5.6	0.80	0.67	0.0	0.00	8.16	26	230
186.0	Commscope NNH4-65C-R6-V3 (102.	6	149	17.6	8.0	19.6	7.8	0.80	0.64	0.0	0.00	8.16	375	1019
186.0	Generic Flat Light Sector Fram	3	443	20.1	0.0	0.0	0.0	0.75	0.75	0.0	0.00	8.16	235	1569
185.0	Ericsson AIR 6419 B77G	3	80	4.0	2.4	16.1	7.9	0.80	0.65	0.0	0.00	8.15	43	280
175.0	Commscope RDIDC-9181-PF-48	1	30	2.0	1.3	14.0	8.0	0.80	0.50	0.0	0.00	8.06	5	34
175.0	Fujitsu TA08025-B605	3	84	2.1	1.3	15.0	9.1	0.80	0.50	0.0	0.00	8.06	17	297
175.0	Fujitsu TA08025-B604	3	72	2.1	1.3	15.0	7.9	0.80	0.50	0.0	0.00	8.06	17	255
175.0	JMA Wireless MX08FRO665-21	3	101	12.9	6.0	20.0	8.0	0.80	0.64	0.0	0.00	8.06	136	342
175.0	Generic Flat Light Sector Fram	3	443	20.1	0.0	0.0	0.0	0.75	0.75	0.0	0.00	8.06	232	1569
170.0	Flat Light Sector Frame	3	442	20.0	0.0	0.0	0.0	0.75	0.75	0.0	0.00	8.01	230	1567
165.0	Cambium Networks PTP 58500	1	17	1.9	1.2	14.5	3.8	0.80	0.50	-1.2	6.08	7.95	5	20
165.0	Cambium Networks PMP 450m	7	43	4.5	2.1	20.3	4.4	0.80	0.50	-1.9	163.15	7.95	86	347
165.0	Generic Flat T-Arm	3	349	14.1	0.0	0.0	0.0	0.75	0.67	0.0	0.00	7.96	143	1236
161.7	Cambium Networks PMP 450m	1	43	4.5	2.1	20.3	4.4	0.80	0.50	-1.9	23.21	7.91	12	50
158.0	Ericsson Radio 4449 - B13&B5	3	78	1.8	1.3	13.2	9.3	0.80	0.50	0.0	0.00	7.89	14	276
158.0	Ericsson Radio 4890HP 48B2 48B	3	78	2.4	1.5	15.2	7.0	0.80	0.67	0.0	0.00	7.89	25	276
158.0	Raycap RCMDC-6627-PF-48	2	50	4.2	2.5	16.5	12.6	0.80	0.79	0.0	0.00	7.89	36	113
158.0	Ericsson AIR 6419 B77D	3	79	4.4	2.6	16.1	9.1	0.80	0.67	0.0	0.00	7.89	47	274
158.0	Commscope NHH-65B-R2B	6	68	8.5	6.0	11.9	7.1	0.80	0.69	0.0	0.00	7.89	188	462
158.0	Generic Round Sector Frame	3	352	16.7	0.0	0.0	0.0	0.75	0.67	0.0	0.00	7.89	169	1236
158.0	Heavy Sector Frame	1	578	31.8	0.0	0.0	0.0	0.75	0.67	0.0	0.00	7.89	107	678
148.0	Ceragon IP-20C	1	16	0.8	0.9	8.6	3.9	1.00	0.50	-0.7	1.91	7.78	3	19
147.4	Radio Waves HP3-6	1	79	10.4	3.2	38.4	20.2	1.00	1.00	0.0	0.00	7.78	69	89
147.0	Radio Waves SPD3-5.2NS-RD	1	68	6.3	3.0	36.0	0.0	1.00	1.00	0.0	0.00	7.78	41	77
141.0	Andrew HP6-59/K	1	434	41.8	6.5	77.5	53.3	1.00	1.00	0.0	0.00	7.71	274	498
132.0	Commscope HELIAX FiberFeed 12	2	24	1.0	1.4	6.7	4.7	0.80	0.50	0.0	0.00	7.61	5	56
132.0	Nokia AirScale Dual RRH 4T4R B	3	93	2.4	1.8	12.1	7.4	0.80	0.50	0.0	0.00	7.61	18	328
132.0	Nokia AHFIG	3	90	3.2	2.3	13.4	6.8	0.80	0.50	0.0	0.00	7.61	25	318
132.0	Nokia AEHC	3	125	7.1	3.2	21.5	8.1	0.80	0.62	0.0	0.00	7.61	68	437
132.0	Commscope FFVV-65C-R3-V1	3	182	21.6	8.0	25.2	9.3	0.80	0.63	0.0	0.00	7.61	212	619
129.5	Round Sector Frame	3	351	16.7	0.0	0.0	0.0	0.75	0.67	0.0	0.00	7.58	162	1232

Elev (ft)	Description	Qty	Ice Wt (lb)	Ice EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc. (ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
129.0	Ceragon FibeAir IP-20D-HP	1	31	1.3	1.0	11.3	4.2	0.90	1.00	0.0	0.00	7.57	7	36
129.0	Commscope VHLP3-6W	1	83	10.9	3.3	39.4	24.3	0.90	1.00	0.0	0.00	7.57	63	94
117.3	Generic 20' Omni	1	75	7.0	20.0	3.0	3.0	1.00	1.00	0.0	0.00	7.43	44	86
111.0	Andrew PL4-59-P7A/F	1	151	23.9	4.2	50.8	16.2	1.00	1.00	0.0	0.00	7.35	149	175
102.0	Hanwha Techwin XNP-8300RW	2	16	0.8	1.0	7.3	7.3	1.00	1.00	0.0	0.00	7.22	10	37
102.0	Generic Direct Mount	2	106	1.9	0.0	0.0	0.0	1.00	1.00	0.0	0.00	7.22	23	252
90.0	Scala 2XCA2-CP	1	11	2.1	12.2	0.7	0.7	1.00	1.00	4.0	49.75	7.10	12	12
57.3	Samsung RRH-C2A (w/ External F	2	68	3.2	2.0	15.7	6.7	0.90	0.50	2.3	36.99	6.47	16	158
55.5	KMW ET-X-WM-18-65-8P	2	52	7.0	5.1	12.0	4.3	0.90	0.72	0.5	24.57	6.39	49	120
55.0	Samsung 8T8R RRH – RRH-B8	2	67	2.5	1.7	13.8	6.8	0.90	0.50	0.0	0.00	6.37	12	159
55.0	Generic Flat Light Sector Fram	2	437	19.8	0.0	0.0	0.0	0.90	0.90	0.0	0.00	6.37	173	1035
54.9	KMW ET-X-TS-70-15-62-18-iR-RD	2	63	8.6	6.2	11.8	5.9	0.90	0.75	-0.1	6.29	6.36	63	142
54.5	Samsung 1.9GHz RRH	2	70	2.9	2.0	13.8	9.0	0.90	0.50	-0.5	6.98	6.34	14	163
50.0	Andrew Microwaves HP6-65/K	1	422	41.8	6.5	77.5	53.3	1.00	1.00	0.9	200.32	6.27	223	486
21.0	Standoff	1	158	5.5	0.0	0.0	0.0	1.00	1.00	0.0	0.00	5.23	24	188
20.7	Generic GPS	2	13	1.0	1.0	9.0	6.0	1.00	0.50	0.0	0.00	5.21	4	30
19.3	L-com HG5833D w/ Radome	1	39	6.0	3.0	35.4	0.0	1.00	1.00	0.0	0.00	5.14	26	43
18.0	Ceragon IP-20C	1	15	0.8	0.9	8.6	3.9	1.00	0.50	1.2	2.11	5.13	2	18
18.0	Radio Waves HP2-11	1	36	4.1	2.0	24.0	0.0	1.00	1.00	0.0	0.00	5.07	18	41
	Totals	**125**	**17,130**	**1052.9**									4089	19,987

Discrete Appurtenance Properties for LC: **1.0D + 1.0W Service**

Elev (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc. (ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
190.2	Raycap DC9-48-60-24-8C-EV (Enc	3	19	2.7	2.2	12.4	9.7	0.80	0.67	0.0	0.00	8.48	31	56
187.8	Ericsson AIR 6419 B77D/ C-Band	3	64	3.8	2.4	16.1	7.3	0.80	0.64	0.0	0.00	8.46	42	192
186.0	Ericsson Radio 4490HP 44B5 44B	3	68	2.2	1.5	15.1	6.8	0.80	0.67	0.0	0.00	8.44	25	205
186.0	Ericsson Radio 4890HP 48B2/B25	3	67	2.2	1.5	15.1	6.9	0.80	0.67	0.0	0.00	8.44	25	202
186.0	Ericsson Radio 4494 44B14 20B2	3	57	2.2	1.5	15.1	5.6	0.80	0.67	0.0	0.00	8.44	25	172
186.0	Commscope NNH4-65C-R6-V3 (102.	6	103	17.1	8.0	19.6	7.8	0.80	0.64	0.0	0.00	8.44	376	615
186.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	8.44	217	1200
185.0	Ericsson AIR 6419 B77G	3	66	3.8	2.4	16.1	7.9	0.80	0.65	0.0	0.00	8.43	42	198
175.0	Commscope RDIDC-9181-PF-48	1	22	1.9	1.3	14.0	8.0	0.80	0.50	0.0	0.00	8.34	5	22
175.0	Fujitsu TA08025-B605	3	75	2.0	1.3	15.0	9.1	0.80	0.50	0.0	0.00	8.34	17	225
175.0	Fujitsu TA08025-B604	3	64	2.0	1.3	15.0	7.9	0.80	0.50	0.0	0.00	8.34	17	192
175.0	JMA Wireless MX08FRO665-21	3	65	12.5	6.0	20.0	8.0	0.80	0.64	0.0	0.00	8.34	136	194
175.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	8.34	214	1200
170.0	Flat Light Sector Frame	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.00	8.29	213	1200
165.0	Cambium Networks PTP 58500	1	12	1.8	1.2	14.5	3.8	0.80	0.50	-1.2	5.88	8.22	5	12
165.0	Cambium Networks PMP 450m	7	31	4.3	2.1	20.3	4.4	0.80	0.50	-1.9	161.57	8.22	85	217
165.0	Generic Flat T-Arm	3	313	12.9	0.0	0.0	0.0	0.75	0.67	0.0	0.00	8.24	136	938
161.7	Cambium Networks PMP 450m	1	31	4.3	2.1	20.3	4.4	0.80	0.50	-1.9	22.99	8.18	12	31
158.0	Ericsson Radio 4449 - B13&B5	3	70	1.6	1.3	13.2	9.3	0.80	0.50	0.0	0.00	8.16	14	210
158.0	Ericsson Radio 4890HP 48B2 48B	3	70	2.2	1.5	15.2	7.0	0.80	0.67	0.0	0.00	8.16	25	208
158.0	Raycap RCMDC-6627-PF-48	2	32	4.1	2.5	16.5	12.6	0.80	0.79	0.0	0.00	8.16	36	64
158.0	Ericsson AIR 6419 B77D	3	63	4.2	2.6	16.1	9.1	0.80	0.67	0.0	0.00	8.16	47	189
158.0	Commscope NHH-65B-R2B	6	44	8.1	6.0	11.9	7.1	0.80	0.69	0.0	0.00	8.16	186	262
158.0	Generic Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.00	8.16	151	900
158.0	Heavy Sector Frame	1	500	29.3	0.0	0.0	0.0	0.75	0.67	0.0	0.00	8.16	102	500
148.0	Ceragon IP-20C	1	13	0.7	0.9	8.6	3.9	1.00	0.50	-0.7	1.78	8.05	3	13
147.4	Radio Waves HP3-6	1	50	10.1	3.2	38.4	20.2	1.00	1.00	0.0	0.00	8.05	69	50
147.0	Radio Waves SPD3-5.2NS-RD	1	43	6.1	3.0	36.0	0.0	1.00	1.00	0.0	0.00	8.05	42	43
141.0	Andrew HP6-59/K	1	320	41.3	6.5	77.5	53.3	1.00	1.00	0.0	0.00	7.98	280	320
132.0	Commscope HELIAX FiberFeed 12	2	20	0.9	1.4	6.7	4.7	0.80	0.50	0.0	0.00	7.87	5	40
132.0	Nokia AirScale Dual RRH 4T4R B	3	84	2.2	1.8	12.1	7.4	0.80	0.50	0.0	0.00	7.87	18	251
132.0	Nokia AHFIG	3	79	3.1	2.3	13.4	6.8	0.80	0.50	0.0	0.00	7.87	25	238
132.0	Nokia AEHC	3	104	6.8	3.2	21.5	8.1	0.80	0.62	0.0	0.00	7.87	68	311
132.0	Commscope FFVV-65C-R3-V1	3	125	21.1	8.0	25.2	9.3	0.80	0.63	0.0	0.00	7.87	214	374
129.5	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.00	7.84	145	900
129.0	Ceragon FibeAir IP-20D-HP	1	27	1.2	1.0	11.3	4.2	0.90	1.00	0.0	0.00	7.83	7	26
129.0	Commscope VHLP3-6W	1	53	10.7	3.3	39.4	24.3	0.90	1.00	0.0	0.00	7.83	64	53
117.3	Generic 20' Omni	1	55	6.0	20.0	3.0	3.0	1.00	1.00	0.0	0.00	7.68	39	55
111.0	Andrew PL4-59-P7A/F	1	119	23.4	4.2	50.8	16.2	1.00	1.00	0.0	0.00	7.60	151	119
102.0	Hanwha Techwin XNP-8300RW	2	12	0.8	1.0	7.3	7.3	1.00	1.00	0.0	0.00	7.47	10	24
102.0	Generic Direct Mount	2	100	1.7	0.0	0.0	0.0	1.00	1.00	0.0	0.00	7.47	22	200
90.0	Scala 2XCA2-CP	1	6	1.2	12.2	0.7	0.7	1.00	1.00	4.0	29.71	7.34	7	6
57.3	Samsung RRH-C2A (w/ External F	2	57	3.1	2.0	15.7	6.7	0.90	0.50	2.3	36.51	6.69	16	115
55.5	KMW ET-X-WM-18-65-8P	2	36	6.7	5.1	12.0	4.3	0.90	0.72	0.5	24.32	6.61	49	73
55.0	Samsung 8T8R RRH – RRH-B8	2	60	2.4	1.7	13.8	6.8	0.90	0.50	0.0	0.00	6.58	12	119
55.0	Generic Flat Light Sector Fram	2	400	17.9	0.0	0.0	0.0	0.90	0.90	0.0	0.00	6.58	162	800
54.9	KMW ET-X-TS-70-15-62-18-iR-RD	2	42	8.3	6.2	11.8	5.9	0.90	0.75	-0.1	6.24	6.58	62	84
54.5	Samsung 1.9GHz RRH	2	60	2.7	2.0	13.8	9.0	0.90	0.50	-0.5	6.87	6.56	14	119
50.0	Andrew Microwaves HP6-65/K	1	320	41.3	6.5	77.5	53.3	1.00	1.00	0.9	204.86	6.48	228	320
21.0	Standoff	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.00	5.41	24	150
20.7	Generic GPS	2	10	0.9	1.0	9.0	6.0	1.00	0.50	0.0	0.00	5.39	4	20
19.3	L-com HG5833D w/ Radome	1	20	5.9	3.0	35.4	0.0	1.00	1.00	0.0	0.00	5.32	27	20
18.0	Ceragon IP-20C	1	13	0.7	0.9	8.6	3.9	1.00	0.50	1.2	2.02	5.31	2	13
18.0	Radio Waves HP2-11	1	27	4.0	2.0	24.0	0.0	1.00	1.00	0.0	0.00	5.24	18	27

Elev (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc. (ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
	Totals	**125**	**14,285**	**985.4**									3,968	14,285

TOWER LOADING – LINEAR APPURTENANCE

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	% In Wind	Spread On Faces	Bundling	Cluster Dia (in)	Out of Zone	Spacing (in)	Orient. Factor	K_a Override
8.0	55.7	1 1/4" Hybriflex Cable	2	1.54	1.00	100	3	Individual	0.00	N	1.00	1.00	0.00
8.0	21.0	1/2" Coax	2	0.63	0.15	100	3	Individual	0.00	N	1.00	1.00	0.00
0.0	190.2	0.92" (23.4mm) Cable	6	0.92	0.89	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	190.2	0.39" (10mm) Fiber Trunk	3	0.39	0.06	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	186.0	Waveguide	1	2.00	6.00	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	175.0	1.75" (44.5mm) Hybrid	1	1.75	2.72	100	1	Individual	0.00	N	1.00	1.00	0.00
0.0	170.0	Climbing Ladder	1	2.00	6.90	100	1	Individual	0.00	N	1.00	1.00	0.00
0.0	169.9	1 5/8" Coax	9	1.98	0.82	100	3	Individual	0.00	N	1.00	1.00	0.00
0.0	165.0	0.24" (6mm) Cat 5	8	0.24	0.04	100	1	Individual	0.00	N	1.00	1.00	0.00
0.0	163.8	0.24" (6.1mm) Cat 5e	13	0.24	0.03	100	1	Individual	0.00	N	1.00	1.00	0.00
0.0	158.0	1 5/8" Hybriflex	2	1.98	1.30	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	147.5	0.24" (6mm) Cat 5	1	0.24	0.04	100	1	Individual	0.00	N	1.00	1.00	0.00
0.0	147.0	0.24" (6mm) Cat 5	2	0.24	0.04	100	1	Individual	0.00	N	1.00	1.00	0.00
0.0	141.0	EW63	1	2.01	0.51	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	132.0	1.46" (37.1mm) Hybrid	2	1.46	1.70	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	132.0	Waveguide	1	2.00	6.00	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	129.0	0.63" (15.9mm) Cable	1	0.63	0.31	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	129.0	0.39" (10mm) Fiber Trunk	1	0.39	0.06	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	117.1	7/8" Coax	1	1.09	0.33	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	111.0	EW63	1	2.01	0.51	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	102.0	0.35" (8.8mm) Cat 6A	2	0.35	0.05	100	1	Individual	0.00	N	1.00	1.00	0.00
0.0	90.0	7/8" Coax	1	1.09	0.33	100	1	Individual	0.00	N	1.00	1.00	0.00
0.0	50.0	EW63	1	2.01	0.51	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	18.0	0.24" (6mm) Cat 5	2	0.24	0.04	100	1	Individual	0.00	N	1.00	1.00	0.00

SECTION FORCES

1.2D + 1.0W Normal — Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice — Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	1.00	1.00	0.0	15.37	41.14	0.00	1657	0	933	266	1199
11	160	26.03	0.000	14.673	0.00	0.142	2.80	1.00	1.00	0.0	8.46	23.69	0.00	2444	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	1.00	1.00	0.0	9.56	24.02	0.00	1518	0	521	555	1076
9	135	25.15	7.366	8.614	0.00	0.231	2.50	1.00	1.00	0.0	11.72	29.25	0.00	1863	0	625	589	1214
8	125	24.75	6.027	8.614	0.00	0.185	2.65	1.00	1.00	0.0	10.23	27.08	0.00	1886	0	570	654	1224
7	110	24.12	12.992	18.831	0.00	0.168	2.71	1.00	1.00	0.0	21.74	58.85	0.00	4292	0	1206	1329	2535
6	90	23.15	14.383	18.831	0.00	0.145	2.79	1.00	1.00	0.0	23.08	64.41	0.00	4892	0	1267	1329	2596
5	70	21.99	18.488	22.037	0.00	0.150	2.77	1.00	1.00	0.0	27.92	77.42	0.00	6063	0	1447	1275	2722
4	55	20.93	11.351	11.820	0.00	0.154	2.76	1.00	1.00	0.0	16.32	45.02	0.00	3356	0	801	625	1427
3	45	20.09	16.700	11.820	0.00	0.177	2.67	1.00	1.00	0.0	21.89	58.54	0.00	3768	0	1000	634	1634
2	30	18.50	14.945	24.708	0.00	0.112	2.91	1.00	1.00	0.0	25.25	73.57	0.00	9019	0	1157	1169	2326
1	10	16.04	15.714	26.210	0.00	0.107	2.94	1.00	1.00	0.0	26.15	76.80	0.00	9808	0	1047	1012	2059
													Totals	**50,567**	**0**			**21,545**

1.2D + 1.0W 60° — Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice — Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	0.80	1.00	0.0	13.06	34.95	0.00	1657	0	792	266	1059
11	160	26.03	0.000	14.673	0.00	0.142	2.80	0.80	1.00	0.0	8.46	23.69	0.00	2444	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	0.80	1.00	0.0	8.46	21.25	0.00	1518	0	461	555	1016
9	135	25.15	7.366	8.614	0.00	0.231	2.50	0.80	1.00	0.0	10.24	25.58	0.00	1863	0	547	589	1135
8	125	24.75	6.027	8.614	0.00	0.185	2.65	0.80	1.00	0.0	9.02	23.89	0.00	1886	0	503	654	1157
7	110	24.12	12.992	18.831	0.00	0.168	2.71	0.80	1.00	0.0	19.15	51.81	0.00	4292	0	1062	1329	2391
6	90	23.15	14.383	18.831	0.00	0.145	2.79	0.80	1.00	0.0	20.20	56.38	0.00	4892	0	1109	1329	2438
5	70	21.99	18.488	22.037	0.00	0.150	2.77	0.80	1.00	0.0	24.22	67.16	0.00	6063	0	1255	1275	2530
4	55	20.93	11.351	11.820	0.00	0.154	2.76	0.80	1.00	0.0	14.05	38.76	0.00	3356	0	690	625	1315
3	45	20.09	16.700	11.820	0.00	0.177	2.67	0.80	1.00	0.0	18.55	49.61	0.00	3768	0	847	634	1482
2	30	18.50	14.945	24.708	0.00	0.112	2.91	0.80	1.00	0.0	22.26	64.86	0.00	9019	0	1020	1169	2189
1	10	16.04	15.714	26.210	0.00	0.107	2.94	0.80	1.00	0.0	23.00	67.57	0.00	9808	0	921	1012	1933
													Totals	**50,567**	**0**			**20,179**

1.2D + 1.0W 90° — Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice — Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	0.85	1.00	0.0	13.64	36.50	0.00	1657	0	827	266	1094
11	160	26.03	0.000	14.673	0.00	0.142	2.80	0.85	1.00	0.0	8.46	23.69	0.00	2444	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	0.85	1.00	0.0	8.74	21.94	0.00	1518	0	476	555	1031
9	135	25.15	7.366	8.614	0.00	0.231	2.50	0.85	1.00	0.0	10.61	26.50	0.00	1863	0	566	589	1155
8	125	24.75	6.027	8.614	0.00	0.185	2.65	0.85	1.00	0.0	9.32	24.69	0.00	1886	0	519	654	1174
7	110	24.12	12.992	18.831	0.00	0.168	2.71	0.85	1.00	0.0	19.80	53.57	0.00	4292	0	1098	1329	2427
6	90	23.15	14.383	18.831	0.00	0.145	2.79	0.85	1.00	0.0	20.92	58.39	0.00	4892	0	1149	1329	2478
5	70	21.99	18.488	22.037	0.00	0.150	2.77	0.85	1.00	0.0	25.14	69.72	0.00	6063	0	1303	1275	2578
4	55	20.93	11.351	11.820	0.00	0.154	2.76	0.85	1.00	0.0	14.62	40.32	0.00	3356	0	718	625	1343
3	45	20.09	16.700	11.820	0.00	0.177	2.67	0.85	1.00	0.0	19.39	51.84	0.00	3768	0	885	634	1520
2	30	18.50	14.945	24.708	0.00	0.112	2.91	0.85	1.00	0.0	23.00	67.04	0.00	9019	0	1054	1169	2223
1	10	16.04	15.714	26.210	0.00	0.107	2.94	0.85	1.00	0.0	23.79	69.88	0.00	9808	0	953	1012	1964
													Totals	**50,567**	**0**			**20,520**

1.2D + 1.0W 120° — Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice — Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	1.00	1.00	0.0	15.37	41.14	0.00	1657	0	933	266	1199
11	160	26.03	0.000	14.673	0.00	0.142	2.80	1.00	1.00	0.0	8.46	23.69	0.00	2444	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	1.00	1.00	0.0	9.56	24.02	0.00	1518	0	521	555	1076
9	135	25.15	7.366	8.614	0.00	0.231	2.50	1.00	1.00	0.0	11.72	29.25	0.00	1863	0	625	589	1214
8	125	24.75	6.027	8.614	0.00	0.185	2.65	1.00	1.00	0.0	10.23	27.08	0.00	1886	0	570	654	1224
7	110	24.12	12.992	18.831	0.00	0.168	2.71	1.00	1.00	0.0	21.74	58.85	0.00	4292	0	1206	1329	2535
6	90	23.15	14.383	18.831	0.00	0.145	2.79	1.00	1.00	0.0	23.08	64.41	0.00	4892	0	1267	1329	2596
5	70	21.99	18.488	22.037	0.00	0.150	2.77	1.00	1.00	0.0	27.92	77.42	0.00	6063	0	1447	1275	2722
4	55	20.93	11.351	11.820	0.00	0.154	2.76	1.00	1.00	0.0	16.32	45.02	0.00	3356	0	801	625	1427
3	45	20.09	16.700	11.820	0.00	0.177	2.67	1.00	1.00	0.0	21.89	58.54	0.00	3768	0	1000	634	1634
2	30	18.50	14.945	24.708	0.00	0.112	2.91	1.00	1.00	0.0	25.25	73.57	0.00	9019	0	1157	1169	2326
1	10	16.04	15.714	26.210	0.00	0.107	2.94	1.00	1.00	0.0	26.15	76.80	0.00	9808	0	1047	1012	2059
													Totals	**50,567**	**0**			**21,545**

1.2D + 1.0W 180° — Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice — Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	0.80	1.00	0.0	13.06	34.95	0.00	1657	0	792	266	1059

SECTION FORCES

1.2D + 1.0W 180° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
11	160	26.03	0.000	14.673	0.00	0.142	2.80	0.80	1.00	0.0	8.46	23.69	0.00	2444	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	0.80	1.00	0.0	8.46	21.25	0.00	1518	0	461	555	1016
9	135	25.15	7.366	8.614	0.00	0.231	2.50	0.80	1.00	0.0	10.24	25.58	0.00	1863	0	547	589	1135
8	125	24.75	6.027	8.614	0.00	0.185	2.65	0.80	1.00	0.0	9.02	23.89	0.00	1886	0	503	654	1157
7	110	24.12	12.992	18.831	0.00	0.168	2.71	0.80	1.00	0.0	19.15	51.81	0.00	4292	0	1062	1329	2391
6	90	23.15	14.383	18.831	0.00	0.145	2.79	0.80	1.00	0.0	20.20	56.38	0.00	4892	0	1109	1329	2438
5	70	21.99	18.488	22.037	0.00	0.150	2.77	0.80	1.00	0.0	24.22	67.16	0.00	6063	0	1255	1275	2530
4	55	20.93	11.351	11.820	0.00	0.154	2.76	0.80	1.00	0.0	14.05	38.76	0.00	3356	0	690	625	1315
3	45	20.09	16.700	11.820	0.00	0.177	2.67	0.80	1.00	0.0	18.55	49.61	0.00	3768	0	847	634	1482
2	30	18.50	14.945	24.708	0.00	0.112	2.91	0.80	1.00	0.0	22.26	64.86	0.00	9019	0	1020	1169	2189
1	10	16.04	15.714	26.210	0.00	0.107	2.94	0.80	1.00	0.0	23.00	67.57	0.00	9808	0	921	1012	1933
													Totals	**50,567**	**0**			**20,179**

1.2D + 1.0W 210° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	0.85	1.00	0.0	13.64	36.50	0.00	1657	0	827	266	1094
11	160	26.03	0.000	14.673	0.00	0.142	2.80	0.85	1.00	0.0	8.46	23.69	0.00	2444	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	0.85	1.00	0.0	8.74	21.94	0.00	1518	0	476	555	1031
9	135	25.15	7.366	8.614	0.00	0.231	2.50	0.85	1.00	0.0	10.61	26.50	0.00	1863	0	566	589	1155
8	125	24.75	6.027	8.614	0.00	0.185	2.65	0.85	1.00	0.0	9.32	24.69	0.00	1886	0	519	654	1174
7	110	24.12	12.992	18.831	0.00	0.168	2.71	0.85	1.00	0.0	19.80	53.57	0.00	4292	0	1098	1329	2427
6	90	23.15	14.383	18.831	0.00	0.145	2.79	0.85	1.00	0.0	20.92	58.39	0.00	4892	0	1149	1329	2478
5	70	21.99	18.488	22.037	0.00	0.150	2.77	0.85	1.00	0.0	25.14	69.72	0.00	6063	0	1303	1275	2578
4	55	20.93	11.351	11.820	0.00	0.154	2.76	0.85	1.00	0.0	14.62	40.32	0.00	3356	0	718	625	1343
3	45	20.09	16.700	11.820	0.00	0.177	2.67	0.85	1.00	0.0	19.39	51.84	0.00	3768	0	885	634	1520
2	30	18.50	14.945	24.708	0.00	0.112	2.91	0.85	1.00	0.0	23.00	67.04	0.00	9019	0	1054	1169	2223
1	10	16.04	15.714	26.210	0.00	0.107	2.94	0.85	1.00	0.0	23.79	69.88	0.00	9808	0	953	1012	1964
													Totals	**50,567**	**0**			**20,520**

1.2D + 1.0W 240° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	1.00	1.00	0.0	15.37	41.14	0.00	1657	0	933	266	1199
11	160	26.03	0.000	14.673	0.00	0.142	2.80	1.00	1.00	0.0	8.46	23.69	0.00	2444	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	1.00	1.00	0.0	9.56	24.02	0.00	1518	0	521	555	1076
9	135	25.15	7.366	8.614	0.00	0.231	2.50	1.00	1.00	0.0	11.72	29.25	0.00	1863	0	625	589	1214
8	125	24.75	6.027	8.614	0.00	0.185	2.65	1.00	1.00	0.0	10.23	27.08	0.00	1886	0	570	654	1224
7	110	24.12	12.992	18.831	0.00	0.168	2.71	1.00	1.00	0.0	21.74	58.85	0.00	4292	0	1206	1329	2535
6	90	23.15	14.383	18.831	0.00	0.145	2.79	1.00	1.00	0.0	23.08	64.41	0.00	4892	0	1267	1329	2596
5	70	21.99	18.488	22.037	0.00	0.150	2.77	1.00	1.00	0.0	27.92	77.42	0.00	6063	0	1447	1275	2722
4	55	20.93	11.351	11.820	0.00	0.154	2.76	1.00	1.00	0.0	16.32	45.02	0.00	3356	0	801	625	1427
3	45	20.09	16.700	11.820	0.00	0.177	2.67	1.00	1.00	0.0	21.89	58.54	0.00	3768	0	1000	634	1634
2	30	18.50	14.945	24.708	0.00	0.112	2.91	1.00	1.00	0.0	25.25	73.57	0.00	9019	0	1157	1169	2326
1	10	16.04	15.714	26.210	0.00	0.107	2.94	1.00	1.00	0.0	26.15	76.80	0.00	9808	0	1047	1012	2059
													Totals	**50,567**	**0**			**21,545**

1.2D + 1.0W 300° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	0.80	1.00	0.0	13.06	34.95	0.00	1657	0	792	266	1059
11	160	26.03	0.000	14.673	0.00	0.142	2.80	0.80	1.00	0.0	8.46	23.69	0.00	2444	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	0.80	1.00	0.0	8.46	21.25	0.00	1518	0	461	555	1016
9	135	25.15	7.366	8.614	0.00	0.231	2.50	0.80	1.00	0.0	10.24	25.58	0.00	1863	0	547	589	1135
8	125	24.75	6.027	8.614	0.00	0.185	2.65	0.80	1.00	0.0	9.02	23.89	0.00	1886	0	503	654	1157
7	110	24.12	12.992	18.831	0.00	0.168	2.71	0.80	1.00	0.0	19.15	51.81	0.00	4292	0	1062	1329	2391
6	90	23.15	14.383	18.831	0.00	0.145	2.79	0.80	1.00	0.0	20.20	56.38	0.00	4892	0	1109	1329	2438
5	70	21.99	18.488	22.037	0.00	0.150	2.77	0.80	1.00	0.0	24.22	67.16	0.00	6063	0	1255	1275	2530
4	55	20.93	11.351	11.820	0.00	0.154	2.76	0.80	1.00	0.0	14.05	38.76	0.00	3356	0	690	625	1315
3	45	20.09	16.700	11.820	0.00	0.177	2.67	0.80	1.00	0.0	18.55	49.61	0.00	3768	0	847	634	1482
2	30	18.50	14.945	24.708	0.00	0.112	2.91	0.80	1.00	0.0	22.26	64.86	0.00	9019	0	1020	1169	2189
1	10	16.04	15.714	26.210	0.00	0.107	2.94	0.80	1.00	0.0	23.00	67.57	0.00	9808	0	921	1012	1933
													Totals	**50,567**	**0**			**20,179**

1.2D + 1.0W 330° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	0.85	1.00	0.0	13.64	36.50	0.00	1657	0	827	266	1094
11	160	26.03	0.000	14.673	0.00	0.142	2.80	0.85	1.00	0.0	8.46	23.69	0.00	2444	0	524	1009	1534

SECTION FORCES

1.2D + 1.0W 330° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
10	145	25.51	5.503	7.813	0.00	0.226	2.51	0.85	1.00	0.0	8.74	21.94	0.00	1518	0	476	555	1031
9	135	25.15	7.366	8.614	0.00	0.231	2.50	0.85	1.00	0.0	10.61	26.50	0.00	1863	0	566	589	1155
8	125	24.75	6.027	8.614	0.00	0.185	2.65	0.85	1.00	0.0	9.32	24.69	0.00	1886	0	519	654	1174
7	110	24.12	12.992	18.831	0.00	0.168	2.71	0.85	1.00	0.0	19.80	53.57	0.00	4292	0	1098	1329	2427
6	90	23.15	14.383	18.831	0.00	0.145	2.79	0.85	1.00	0.0	20.92	58.39	0.00	4892	0	1149	1329	2478
5	70	21.99	18.488	22.037	0.00	0.150	2.77	0.85	1.00	0.0	25.14	69.72	0.00	6063	0	1303	1275	2578
4	55	20.93	11.351	11.820	0.00	0.154	2.76	0.85	1.00	0.0	14.62	40.32	0.00	3356	0	718	625	1343
3	45	20.09	16.700	11.820	0.00	0.177	2.67	0.85	1.00	0.0	19.39	51.84	0.00	3768	0	885	634	1520
2	30	18.50	14.945	24.708	0.00	0.112	2.91	0.85	1.00	0.0	23.00	67.04	0.00	9019	0	1054	1169	2223
1	10	16.04	15.714	26.210	0.00	0.107	2.94	0.85	1.00	0.0	23.79	69.88	0.00	9808	0	953	1012	1964
													Totals	**50,567**	**0**			**20,520**

0.9D + 1.0W Normal Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice (Reduced DL) Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	1.00	1.00	0.0	15.37	41.14	0.00	1243	0	933	266	1199
11	160	26.03	0.000	14.673	0.00	0.142	2.80	1.00	1.00	0.0	8.46	23.69	0.00	1833	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	1.00	1.00	0.0	9.56	24.02	0.00	1138	0	521	555	1076
9	135	25.15	7.366	8.614	0.00	0.231	2.50	1.00	1.00	0.0	11.72	29.25	0.00	1397	0	625	589	1214
8	125	24.75	6.027	8.614	0.00	0.185	2.65	1.00	1.00	0.0	10.23	27.08	0.00	1415	0	570	654	1224
7	110	24.12	12.992	18.831	0.00	0.168	2.71	1.00	1.00	0.0	21.74	58.85	0.00	3219	0	1206	1329	2535
6	90	23.15	14.383	18.831	0.00	0.145	2.79	1.00	1.00	0.0	23.08	64.41	0.00	3669	0	1267	1329	2596
5	70	21.99	18.488	22.037	0.00	0.150	2.77	1.00	1.00	0.0	27.92	77.42	0.00	4547	0	1447	1275	2722
4	55	20.93	11.351	11.820	0.00	0.154	2.76	1.00	1.00	0.0	16.32	45.02	0.00	2517	0	801	625	1427
3	45	20.09	16.700	11.820	0.00	0.177	2.67	1.00	1.00	0.0	21.89	58.54	0.00	2826	0	1000	634	1634
2	30	18.50	14.945	24.708	0.00	0.112	2.91	1.00	1.00	0.0	25.25	73.57	0.00	6765	0	1157	1169	2326
1	10	16.04	15.714	26.210	0.00	0.107	2.94	1.00	1.00	0.0	26.15	76.80	0.00	7356	0	1047	1012	2059
													Totals	**37,925**	**0**			**21,545**

0.9D + 1.0W 60° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice (Reduced DL) Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	0.80	1.00	0.0	13.06	34.95	0.00	1243	0	792	266	1059
11	160	26.03	0.000	14.673	0.00	0.142	2.80	0.80	1.00	0.0	8.46	23.69	0.00	1833	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	0.80	1.00	0.0	8.46	21.25	0.00	1138	0	461	555	1016
9	135	25.15	7.366	8.614	0.00	0.231	2.50	0.80	1.00	0.0	10.24	25.58	0.00	1397	0	547	589	1135
8	125	24.75	6.027	8.614	0.00	0.185	2.65	0.80	1.00	0.0	9.02	23.89	0.00	1415	0	503	654	1157
7	110	24.12	12.992	18.831	0.00	0.168	2.71	0.80	1.00	0.0	19.15	51.81	0.00	3219	0	1062	1329	2391
6	90	23.15	14.383	18.831	0.00	0.145	2.79	0.80	1.00	0.0	20.20	56.38	0.00	3669	0	1109	1329	2438
5	70	21.99	18.488	22.037	0.00	0.150	2.77	0.80	1.00	0.0	24.22	67.16	0.00	4547	0	1255	1275	2530
4	55	20.93	11.351	11.820	0.00	0.154	2.76	0.80	1.00	0.0	14.05	38.76	0.00	2517	0	690	625	1315
3	45	20.09	16.700	11.820	0.00	0.177	2.67	0.80	1.00	0.0	18.55	49.61	0.00	2826	0	847	634	1482
2	30	18.50	14.945	24.708	0.00	0.112	2.91	0.80	1.00	0.0	22.26	64.86	0.00	6765	0	1020	1169	2189
1	10	16.04	15.714	26.210	0.00	0.107	2.94	0.80	1.00	0.0	23.00	67.57	0.00	7356	0	921	1012	1933
													Totals	**37,925**	**0**			**20,179**

0.9D + 1.0W 90° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice (Reduced DL) Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	0.85	1.00	0.0	13.64	36.50	0.00	1243	0	827	266	1094
11	160	26.03	0.000	14.673	0.00	0.142	2.80	0.85	1.00	0.0	8.46	23.69	0.00	1833	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	0.85	1.00	0.0	8.74	21.94	0.00	1138	0	476	555	1031
9	135	25.15	7.366	8.614	0.00	0.231	2.50	0.85	1.00	0.0	10.61	26.50	0.00	1397	0	566	589	1155
8	125	24.75	6.027	8.614	0.00	0.185	2.65	0.85	1.00	0.0	9.32	24.69	0.00	1415	0	519	654	1174
7	110	24.12	12.992	18.831	0.00	0.168	2.71	0.85	1.00	0.0	19.80	53.57	0.00	3219	0	1098	1329	2427
6	90	23.15	14.383	18.831	0.00	0.145	2.79	0.85	1.00	0.0	20.92	58.39	0.00	3669	0	1149	1329	2478
5	70	21.99	18.488	22.037	0.00	0.150	2.77	0.85	1.00	0.0	25.14	69.72	0.00	4547	0	1303	1275	2578
4	55	20.93	11.351	11.820	0.00	0.154	2.76	0.85	1.00	0.0	14.62	40.32	0.00	2517	0	718	625	1343
3	45	20.09	16.700	11.820	0.00	0.177	2.67	0.85	1.00	0.0	19.39	51.84	0.00	2826	0	885	634	1520
2	30	18.50	14.945	24.708	0.00	0.112	2.91	0.85	1.00	0.0	23.00	67.04	0.00	6765	0	1054	1169	2223
1	10	16.04	15.714	26.210	0.00	0.107	2.94	0.85	1.00	0.0	23.79	69.88	0.00	7356	0	953	1012	1964
													Totals	**37,925**	**0**			**20,520**

0.9D + 1.0W 120° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice (Reduced DL) Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	1.00	1.00	0.0	15.37	41.14	0.00	1243	0	933	266	1199
11	160	26.03	0.000	14.673	0.00	0.142	2.80	1.00	1.00	0.0	8.46	23.69	0.00	1833	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	1.00	1.00	0.0	9.56	24.02	0.00	1138	0	521	555	1076

SECTION FORCES

0.9D + 1.0W 120° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice (Reduced DL) Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
9	135	25.15	7.366	8.614	0.00	0.231	2.50	1.00	1.00	0.0	11.72	29.25	0.00	1397	0	625	589	1214
8	125	24.75	6.027	8.614	0.00	0.185	2.65	1.00	1.00	0.0	10.23	27.08	0.00	1415	0	570	654	1224
7	110	24.12	12.992	18.831	0.00	0.168	2.71	1.00	1.00	0.0	21.74	58.85	0.00	3219	0	1206	1329	2535
6	90	23.15	14.383	18.831	0.00	0.145	2.79	1.00	1.00	0.0	23.08	64.41	0.00	3669	0	1267	1329	2596
5	70	21.99	18.488	22.037	0.00	0.150	2.77	1.00	1.00	0.0	27.92	77.42	0.00	4547	0	1447	1275	2722
4	55	20.93	11.351	11.820	0.00	0.154	2.76	1.00	1.00	0.0	16.32	45.02	0.00	2517	0	801	625	1427
3	45	20.09	16.700	11.820	0.00	0.177	2.67	1.00	1.00	0.0	21.89	58.54	0.00	2826	0	1000	634	1634
2	30	18.50	14.945	24.708	0.00	0.112	2.91	1.00	1.00	0.0	25.25	73.57	0.00	6765	0	1157	1169	2326
1	10	16.04	15.714	26.210	0.00	0.107	2.94	1.00	1.00	0.0	26.15	76.80	0.00	7356	0	1047	1012	2059
													Totals	**37,925**	**0**			**21,545**

0.9D + 1.0W 180° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice (Reduced DL) Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	0.80	1.00	0.0	13.06	34.95	0.00	1243	0	792	266	1059
11	160	26.03	0.000	14.673	0.00	0.142	2.80	0.80	1.00	0.0	8.46	23.69	0.00	1833	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	0.80	1.00	0.0	8.46	21.25	0.00	1138	0	461	555	1016
9	135	25.15	7.366	8.614	0.00	0.231	2.50	0.80	1.00	0.0	10.24	25.58	0.00	1397	0	547	589	1135
8	125	24.75	6.027	8.614	0.00	0.185	2.65	0.80	1.00	0.0	9.02	23.89	0.00	1415	0	503	654	1157
7	110	24.12	12.992	18.831	0.00	0.168	2.71	0.80	1.00	0.0	19.15	51.81	0.00	3219	0	1062	1329	2391
6	90	23.15	14.383	18.831	0.00	0.145	2.79	0.80	1.00	0.0	20.20	56.38	0.00	3669	0	1109	1329	2438
5	70	21.99	18.488	22.037	0.00	0.150	2.77	0.80	1.00	0.0	24.22	67.16	0.00	4547	0	1255	1275	2530
4	55	20.93	11.351	11.820	0.00	0.154	2.76	0.80	1.00	0.0	14.05	38.76	0.00	2517	0	690	625	1315
3	45	20.09	16.700	11.820	0.00	0.177	2.67	0.80	1.00	0.0	18.55	49.61	0.00	2826	0	847	634	1482
2	30	18.50	14.945	24.708	0.00	0.112	2.91	0.80	1.00	0.0	22.26	64.86	0.00	6765	0	1020	1169	2189
1	10	16.04	15.714	26.210	0.00	0.107	2.94	0.80	1.00	0.0	23.00	67.57	0.00	7356	0	921	1012	1933
													Totals	**37,925**	**0**			**20,179**

0.9D + 1.0W 210° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice (Reduced DL) Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	0.85	1.00	0.0	13.64	36.50	0.00	1243	0	827	266	1094
11	160	26.03	0.000	14.673	0.00	0.142	2.80	0.85	1.00	0.0	8.46	23.69	0.00	1833	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	0.85	1.00	0.0	8.74	21.94	0.00	1138	0	476	555	1031
9	135	25.15	7.366	8.614	0.00	0.231	2.50	0.85	1.00	0.0	10.61	26.50	0.00	1397	0	566	589	1155
8	125	24.75	6.027	8.614	0.00	0.185	2.65	0.85	1.00	0.0	9.32	24.69	0.00	1415	0	519	654	1174
7	110	24.12	12.992	18.831	0.00	0.168	2.71	0.85	1.00	0.0	19.80	53.57	0.00	3219	0	1098	1329	2427
6	90	23.15	14.383	18.831	0.00	0.145	2.79	0.85	1.00	0.0	20.92	58.39	0.00	3669	0	1149	1329	2478
5	70	21.99	18.488	22.037	0.00	0.150	2.77	0.85	1.00	0.0	25.14	69.72	0.00	4547	0	1303	1275	2578
4	55	20.93	11.351	11.820	0.00	0.154	2.76	0.85	1.00	0.0	14.62	40.32	0.00	2517	0	718	625	1343
3	45	20.09	16.700	11.820	0.00	0.177	2.67	0.85	1.00	0.0	19.39	51.84	0.00	2826	0	885	634	1520
2	30	18.50	14.945	24.708	0.00	0.112	2.91	0.85	1.00	0.0	23.00	67.04	0.00	6765	0	1054	1169	2223
1	10	16.04	15.714	26.210	0.00	0.107	2.94	0.85	1.00	0.0	23.79	69.88	0.00	7356	0	953	1012	1964
													Totals	**37,925**	**0**			**20,520**

0.9D + 1.0W 240° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice (Reduced DL) Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	1.00	1.00	0.0	15.37	41.14	0.00	1243	0	933	266	1199
11	160	26.03	0.000	14.673	0.00	0.142	2.80	1.00	1.00	0.0	8.46	23.69	0.00	1833	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	1.00	1.00	0.0	9.56	24.02	0.00	1138	0	521	555	1076
9	135	25.15	7.366	8.614	0.00	0.231	2.50	1.00	1.00	0.0	11.72	29.25	0.00	1397	0	625	589	1214
8	125	24.75	6.027	8.614	0.00	0.185	2.65	1.00	1.00	0.0	10.23	27.08	0.00	1415	0	570	654	1224
7	110	24.12	12.992	18.831	0.00	0.168	2.71	1.00	1.00	0.0	21.74	58.85	0.00	3219	0	1206	1329	2535
6	90	23.15	14.383	18.831	0.00	0.145	2.79	1.00	1.00	0.0	23.08	64.41	0.00	3669	0	1267	1329	2596
5	70	21.99	18.488	22.037	0.00	0.150	2.77	1.00	1.00	0.0	27.92	77.42	0.00	4547	0	1447	1275	2722
4	55	20.93	11.351	11.820	0.00	0.154	2.76	1.00	1.00	0.0	16.32	45.02	0.00	2517	0	801	625	1427
3	45	20.09	16.700	11.820	0.00	0.177	2.67	1.00	1.00	0.0	21.89	58.54	0.00	2826	0	1000	634	1634
2	30	18.50	14.945	24.708	0.00	0.112	2.91	1.00	1.00	0.0	25.25	73.57	0.00	6765	0	1157	1169	2326
1	10	16.04	15.714	26.210	0.00	0.107	2.94	1.00	1.00	0.0	26.15	76.80	0.00	7356	0	1047	1012	2059
													Totals	**37,925**	**0**			**21,545**

0.9D + 1.0W 300° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice (Reduced DL) Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	0.80	1.00	0.0	13.06	34.95	0.00	1243	0	792	266	1059
11	160	26.03	0.000	14.673	0.00	0.142	2.80	0.80	1.00	0.0	8.46	23.69	0.00	1833	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	0.80	1.00	0.0	8.46	21.25	0.00	1138	0	461	555	1016
9	135	25.15	7.366	8.614	0.00	0.231	2.50	0.80	1.00	0.0	10.24	25.58	0.00	1397	0	547	589	1135

SECTION FORCES

0.9D + 1.0W 300° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice (Reduced DL) Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
8	125	24.75	6.027	8.614	0.00	0.185	2.65	0.80	1.00	0.0	9.02	23.89	0.00	1415	0	503	654	1157
7	110	24.12	12.992	18.831	0.00	0.168	2.71	0.80	1.00	0.0	19.15	51.81	0.00	3219	0	1062	1329	2391
6	90	23.15	14.383	18.831	0.00	0.145	2.79	0.80	1.00	0.0	20.20	56.38	0.00	3669	0	1109	1329	2438
5	70	21.99	18.488	22.037	0.00	0.150	2.77	0.80	1.00	0.0	24.22	67.16	0.00	4547	0	1255	1275	2530
4	55	20.93	11.351	11.820	0.00	0.154	2.76	0.80	1.00	0.0	14.05	38.76	0.00	2517	0	690	625	1315
3	45	20.09	16.700	11.820	0.00	0.177	2.67	0.80	1.00	0.0	18.55	49.61	0.00	2826	0	847	634	1482
2	30	18.50	14.945	24.708	0.00	0.112	2.91	0.80	1.00	0.0	22.26	64.86	0.00	6765	0	1020	1169	2189
1	10	16.04	15.714	26.210	0.00	0.107	2.94	0.80	1.00	0.0	23.00	67.57	0.00	7356	0	921	1012	1933
													Totals	**37,925**	**0**			**20,179**

0.9D + 1.0W 330° Gust Response Factor (Gh): 0.85
107 mph Wind with No Ice (Reduced DL) Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	26.67	11.567	6.667	0.00	0.176	2.68	0.85	1.00	0.0	13.64	36.50	0.00	1243	0	827	266	1094
11	160	26.03	0.000	14.673	0.00	0.142	2.80	0.85	1.00	0.0	8.46	23.69	0.00	1833	0	524	1009	1534
10	145	25.51	5.503	7.813	0.00	0.226	2.51	0.85	1.00	0.0	8.74	21.94	0.00	1138	0	476	555	1031
9	135	25.15	7.366	8.614	0.00	0.231	2.50	0.85	1.00	0.0	10.61	26.50	0.00	1397	0	566	589	1155
8	125	24.75	6.027	8.614	0.00	0.185	2.65	0.85	1.00	0.0	9.32	24.69	0.00	1415	0	519	654	1174
7	110	24.12	12.992	18.831	0.00	0.168	2.71	0.85	1.00	0.0	19.80	53.57	0.00	3219	0	1098	1329	2427
6	90	23.15	14.383	18.831	0.00	0.145	2.79	0.85	1.00	0.0	20.92	58.39	0.00	3669	0	1149	1329	2478
5	70	21.99	18.488	22.037	0.00	0.150	2.77	0.85	1.00	0.0	25.14	69.72	0.00	4547	0	1303	1275	2578
4	55	20.93	11.351	11.820	0.00	0.154	2.76	0.85	1.00	0.0	14.62	40.32	0.00	2517	0	718	625	1343
3	45	20.09	16.700	11.820	0.00	0.177	2.67	0.85	1.00	0.0	19.39	51.84	0.00	2826	0	885	634	1520
2	30	18.50	14.945	24.708	0.00	0.112	2.91	0.85	1.00	0.0	23.00	67.04	0.00	6765	0	1054	1169	2223
1	10	16.04	15.714	26.210	0.00	0.107	2.94	0.85	1.00	0.0	23.79	69.88	0.00	7356	0	953	1012	1964
													Totals	**37,925**	**0**			**20,520**

1.2D + 1.0Di + 1.0Wi Normal Gust Response Factor (Gh): 0.85
59 mph Wind with 0.21" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.11	11.567	11.712	5.05	0.224	2.52	1.00	1.00	0.2	18.35	46.23	5.05	1944	287	319	153	472
11	160	7.91	0.000	20.373	5.70	0.196	2.61	1.00	1.00	0.2	11.83	30.89	5.70	2862	418	208	591	799
10	145	7.76	5.503	9.553	1.74	0.254	2.43	1.00	1.00	0.2	11.10	26.93	1.74	1795	277	178	316	493
9	135	7.65	7.366	10.383	1.77	0.255	2.42	1.00	1.00	0.2	13.45	32.60	1.77	2179	316	212	331	543
8	125	7.53	6.027	10.415	1.80	0.206	2.58	1.00	1.00	0.2	12.02	30.96	1.80	2198	312	198	381	579
7	110	7.33	12.992	22.539	3.71	0.187	2.64	1.00	1.00	0.2	25.89	68.37	3.71	4945	652	426	787	1213
6	90	7.04	14.383	22.684	3.85	0.161	2.73	1.00	1.00	0.2	27.28	74.52	3.85	5566	673	446	807	1253
5	70	6.69	18.488	26.025	3.99	0.164	2.72	1.00	1.00	0.2	33.30	90.62	3.99	6791	729	515	765	1280
4	55	6.37	11.351	13.855	2.04	0.167	2.71	1.00	1.00	0.2	19.24	52.17	2.04	3747	391	282	371	653
3	45	6.11	16.700	14.416	2.60	0.193	2.62	1.00	1.00	0.2	24.96	65.40	2.60	4230	462	340	361	700
2	30	5.62	14.945	27.917	3.21	0.121	2.88	1.00	1.00	0.2	30.72	88.47	3.21	9773	754	423	709	1132
1	10	4.88	15.714	29.169	2.96	0.114	2.91	1.00	1.00	0.2	32.19	93.62	2.96	10496	688	388	605	993
													Totals	**56,527**	**5,961**			**10,110**

1.2D + 1.0Di + 1.0Wi 60° Gust Response Factor (Gh): 0.85
59 mph Wind with 0.21" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.11	11.567	11.712	5.05	0.224	2.52	0.80	1.00	0.2	16.03	40.40	5.05	1944	287	278	153	431
11	160	7.91	0.000	20.373	5.70	0.196	2.61	0.80	1.00	0.2	11.83	30.89	5.70	2862	418	208	591	799
10	145	7.76	5.503	9.553	1.74	0.254	2.43	0.80	1.00	0.2	10.00	24.26	1.74	1795	277	160	316	476
9	135	7.65	7.366	10.383	1.77	0.255	2.42	0.80	1.00	0.2	11.98	29.03	1.77	2179	316	189	331	520
8	125	7.53	6.027	10.415	1.80	0.206	2.58	0.80	1.00	0.2	10.82	27.85	1.80	2198	312	178	381	559
7	110	7.33	12.992	22.539	3.71	0.187	2.64	0.80	1.00	0.2	23.29	61.51	3.71	4945	652	383	787	1170
6	90	7.04	14.383	22.684	3.85	0.161	2.73	0.80	1.00	0.2	24.41	66.66	3.85	5566	673	399	807	1206
5	70	6.69	18.488	26.025	3.99	0.164	2.72	0.80	1.00	0.2	29.60	80.55	3.99	6791	729	458	765	1223
4	55	6.37	11.351	13.855	2.04	0.167	2.71	0.80	1.00	0.2	16.97	46.01	2.04	3747	391	249	371	619
3	45	6.11	16.700	14.416	2.60	0.193	2.62	0.80	1.00	0.2	21.62	56.65	2.60	4230	462	294	361	655
2	30	5.62	14.945	27.917	3.21	0.121	2.88	0.80	1.00	0.2	27.74	79.87	3.21	9773	754	382	709	1091
1	10	4.88	15.714	29.169	2.96	0.114	2.91	0.80	1.00	0.2	29.05	84.48	2.96	10496	688	350	605	955
													Totals	**56,527**	**5,961**			**9,704**

1.2D + 1.0Di + 1.0Wi 90° Gust Response Factor (Gh): 0.85
59 mph Wind with 0.21" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.11	11.567	11.712	5.05	0.224	2.52	0.85	1.00	0.2	16.61	41.86	5.05	1944	287	288	153	442
11	160	7.91	0.000	20.373	5.70	0.196	2.61	0.85	1.00	0.2	11.83	30.89	5.70	2862	418	208	591	799
10	145	7.76	5.503	9.553	1.74	0.254	2.43	0.85	1.00	0.2	10.28	24.93	1.74	1795	277	164	316	480
9	135	7.65	7.366	10.383	1.77	0.255	2.42	0.85	1.00	0.2	12.35	29.92	1.77	2179	316	194	331	525
8	125	7.53	6.027	10.415	1.80	0.206	2.58	0.85	1.00	0.2	11.12	28.63	1.80	2198	312	183	381	564

SECTION FORCES

1.2D + 1.0Di + 1.0Wi 90° Gust Response Factor (Gh): 0.85
59 mph Wind with 0.21" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
7	110	7.33	12.992	22.539	3.71	0.187	2.64	0.85	1.00	0.2	23.94	63.22	3.71	4945	652	394	787	1181
6	90	7.04	14.383	22.684	3.85	0.161	2.73	0.85	1.00	0.2	25.13	68.63	3.85	5566	673	411	807	1218
5	70	6.69	18.488	26.025	3.99	0.164	2.72	0.85	1.00	0.2	30.52	83.07	3.99	6791	729	472	765	1237
4	55	6.37	11.351	13.855	2.04	0.167	2.71	0.85	1.00	0.2	17.54	47.55	2.04	3747	391	257	371	628
3	45	6.11	16.700	14.416	2.60	0.193	2.62	0.85	1.00	0.2	22.46	58.84	2.60	4230	462	306	361	666
2	30	5.62	14.945	27.917	3.21	0.121	2.88	0.85	1.00	0.2	28.48	82.02	3.21	9773	754	392	709	1101
1	10	4.88	15.714	29.169	2.96	0.114	2.91	0.85	1.00	0.2	29.83	86.77	2.96	10496	688	360	605	964
													Totals	**56,527**	**5,961**			**9,806**

1.2D + 1.0Di + 1.0Wi 120° Gust Response Factor (Gh): 0.85
59 mph Wind with 0.21" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.11	11.567	11.712	5.05	0.224	2.52	1.00	1.00	0.2	18.35	46.23	5.05	1944	287	319	153	472
11	160	7.91	0.000	20.373	5.70	0.196	2.61	1.00	1.00	0.2	11.83	30.89	5.70	2862	418	208	591	799
10	145	7.76	5.503	9.553	1.74	0.254	2.43	1.00	1.00	0.2	11.10	26.93	1.74	1795	277	178	316	493
9	135	7.65	7.366	10.383	1.77	0.255	2.42	1.00	1.00	0.2	13.45	32.60	1.77	2179	316	212	331	543
8	125	7.53	6.027	10.415	1.80	0.206	2.58	1.00	1.00	0.2	12.02	30.96	1.80	2198	312	198	381	579
7	110	7.33	12.992	22.539	3.71	0.187	2.64	1.00	1.00	0.2	25.89	68.37	3.71	4945	652	426	787	1213
6	90	7.04	14.383	22.684	3.85	0.161	2.73	1.00	1.00	0.2	27.28	74.52	3.85	5566	673	446	807	1253
5	70	6.69	18.488	26.025	3.99	0.164	2.72	1.00	1.00	0.2	33.30	90.62	3.99	6791	729	515	765	1280
4	55	6.37	11.351	13.855	2.04	0.167	2.71	1.00	1.00	0.2	19.24	52.17	2.04	3747	391	282	371	653
3	45	6.11	16.700	14.416	2.60	0.193	2.62	1.00	1.00	0.2	24.96	65.40	2.60	4230	462	340	361	700
2	30	5.62	14.945	27.917	3.21	0.121	2.88	1.00	1.00	0.2	30.72	88.47	3.21	9773	754	423	709	1132
1	10	4.88	15.714	29.169	2.96	0.114	2.91	1.00	1.00	0.2	32.19	93.62	2.96	10496	688	388	605	993
													Totals	**56,527**	**5,961**			**10,110**

1.2D + 1.0Di + 1.0Wi 180° Gust Response Factor (Gh): 0.85
59 mph Wind with 0.21" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.11	11.567	11.712	5.05	0.224	2.52	0.80	1.00	0.2	16.03	40.40	5.05	1944	287	278	153	431
11	160	7.91	0.000	20.373	5.70	0.196	2.61	0.80	1.00	0.2	11.83	30.89	5.70	2862	418	208	591	799
10	145	7.76	5.503	9.553	1.74	0.254	2.43	0.80	1.00	0.2	10.00	24.26	1.74	1795	277	160	316	476
9	135	7.65	7.366	10.383	1.77	0.255	2.42	0.80	1.00	0.2	11.98	29.03	1.77	2179	316	189	331	520
8	125	7.53	6.027	10.415	1.80	0.206	2.58	0.80	1.00	0.2	10.82	27.85	1.80	2198	312	178	381	559
7	110	7.33	12.992	22.539	3.71	0.187	2.64	0.80	1.00	0.2	23.29	61.51	3.71	4945	652	383	787	1170
6	90	7.04	14.383	22.684	3.85	0.161	2.73	0.80	1.00	0.2	24.41	66.66	3.85	5566	673	399	807	1206
5	70	6.69	18.488	26.025	3.99	0.164	2.72	0.80	1.00	0.2	29.60	80.55	3.99	6791	729	458	765	1223
4	55	6.37	11.351	13.855	2.04	0.167	2.71	0.80	1.00	0.2	16.97	46.01	2.04	3747	391	249	371	619
3	45	6.11	16.700	14.416	2.60	0.193	2.62	0.80	1.00	0.2	21.62	56.65	2.60	4230	462	294	361	655
2	30	5.62	14.945	27.917	3.21	0.121	2.88	0.80	1.00	0.2	27.74	79.87	3.21	9773	754	382	709	1091
1	10	4.88	15.714	29.169	2.96	0.114	2.91	0.80	1.00	0.2	29.05	84.48	2.96	10496	688	350	605	955
													Totals	**56,527**	**5,961**			**9,704**

1.2D + 1.0Di + 1.0Wi 210° Gust Response Factor (Gh): 0.85
59 mph Wind with 0.21" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.11	11.567	11.712	5.05	0.224	2.52	0.85	1.00	0.2	16.61	41.86	5.05	1944	287	288	153	442
11	160	7.91	0.000	20.373	5.70	0.196	2.61	0.85	1.00	0.2	11.83	30.89	5.70	2862	418	208	591	799
10	145	7.76	5.503	9.553	1.74	0.254	2.43	0.85	1.00	0.2	10.28	24.93	1.74	1795	277	164	316	480
9	135	7.65	7.366	10.383	1.77	0.255	2.42	0.85	1.00	0.2	12.35	29.92	1.77	2179	316	194	331	525
8	125	7.53	6.027	10.415	1.80	0.206	2.58	0.85	1.00	0.2	11.12	28.63	1.80	2198	312	183	381	564
7	110	7.33	12.992	22.539	3.71	0.187	2.64	0.85	1.00	0.2	23.94	63.22	3.71	4945	652	394	787	1181
6	90	7.04	14.383	22.684	3.85	0.161	2.73	0.85	1.00	0.2	25.13	68.63	3.85	5566	673	411	807	1218
5	70	6.69	18.488	26.025	3.99	0.164	2.72	0.85	1.00	0.2	30.52	83.07	3.99	6791	729	472	765	1237
4	55	6.37	11.351	13.855	2.04	0.167	2.71	0.85	1.00	0.2	17.54	47.55	2.04	3747	391	257	371	628
3	45	6.11	16.700	14.416	2.60	0.193	2.62	0.85	1.00	0.2	22.46	58.84	2.60	4230	462	306	361	666
2	30	5.62	14.945	27.917	3.21	0.121	2.88	0.85	1.00	0.2	28.48	82.02	3.21	9773	754	392	709	1101
1	10	4.88	15.714	29.169	2.96	0.114	2.91	0.85	1.00	0.2	29.83	86.77	2.96	10496	688	360	605	964
													Totals	**56,527**	**5,961**			**9,806**

1.2D + 1.0Di + 1.0Wi 240° Gust Response Factor (Gh): 0.85
59 mph Wind with 0.21" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.11	11.567	11.712	5.05	0.224	2.52	1.00	1.00	0.2	18.35	46.23	5.05	1944	287	319	153	472
11	160	7.91	0.000	20.373	5.70	0.196	2.61	1.00	1.00	0.2	11.83	30.89	5.70	2862	418	208	591	799
10	145	7.76	5.503	9.553	1.74	0.254	2.43	1.00	1.00	0.2	11.10	26.93	1.74	1795	277	178	316	493
9	135	7.65	7.366	10.383	1.77	0.255	2.42	1.00	1.00	0.2	13.45	32.60	1.77	2179	316	212	331	543
8	125	7.53	6.027	10.415	1.80	0.206	2.58	1.00	1.00	0.2	12.02	30.96	1.80	2198	312	198	381	579
7	110	7.33	12.992	22.539	3.71	0.187	2.64	1.00	1.00	0.2	25.89	68.37	3.71	4945	652	426	787	1213

SECTION FORCES

1.2D + 1.0Di + 1.0Wi 240° Gust Response Factor (Gh): 0.85
59 mph Wind with 0.21" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
6	90	7.04	14.383	22.684	3.85	0.161	2.73	1.00	1.00	0.2	27.28	74.52	3.85	5566	673	446	807	1253
5	70	6.69	18.488	26.025	3.99	0.164	2.72	1.00	1.00	0.2	33.30	90.62	3.99	6791	729	515	765	1280
4	55	6.37	11.351	13.855	2.04	0.167	2.71	1.00	1.00	0.2	19.24	52.17	2.04	3747	391	282	371	653
3	45	6.11	16.700	14.416	2.60	0.193	2.62	1.00	1.00	0.2	24.96	65.40	2.60	4230	462	340	361	700
2	30	5.62	14.945	27.917	3.21	0.121	2.88	1.00	1.00	0.2	30.72	88.47	3.21	9773	754	423	709	1132
1	10	4.88	15.714	29.169	2.96	0.114	2.91	1.00	1.00	0.2	32.19	93.62	2.96	10496	688	388	605	993
													Totals	**56,527**	**5,961**			**10,110**

1.2D + 1.0Di + 1.0Wi 300° Gust Response Factor (Gh): 0.85
59 mph Wind with 0.21" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.11	11.567	11.712	5.05	0.224	2.52	0.80	1.00	0.2	16.03	40.40	5.05	1944	287	278	153	431
11	160	7.91	0.000	20.373	5.70	0.196	2.61	0.80	1.00	0.2	11.83	30.89	5.70	2862	418	208	591	799
10	145	7.76	5.503	9.553	1.74	0.254	2.43	0.80	1.00	0.2	10.00	24.26	1.74	1795	277	160	316	476
9	135	7.65	7.366	10.383	1.77	0.255	2.42	0.80	1.00	0.2	11.98	29.03	1.77	2179	316	189	331	520
8	125	7.53	6.027	10.415	1.80	0.206	2.58	0.80	1.00	0.2	10.82	27.85	1.80	2198	312	178	381	559
7	110	7.33	12.992	22.539	3.71	0.187	2.64	0.80	1.00	0.2	23.29	61.51	3.71	4945	652	383	787	1170
6	90	7.04	14.383	22.684	3.85	0.161	2.73	0.80	1.00	0.2	24.41	66.66	3.85	5566	673	399	807	1206
5	70	6.69	18.488	26.025	3.99	0.164	2.72	0.80	1.00	0.2	29.60	80.55	3.99	6791	729	458	765	1223
4	55	6.37	11.351	13.855	2.04	0.167	2.71	0.80	1.00	0.2	16.97	46.01	2.04	3747	391	249	371	619
3	45	6.11	16.700	14.416	2.60	0.193	2.62	0.80	1.00	0.2	21.62	56.65	2.60	4230	462	294	361	655
2	30	5.62	14.945	27.917	3.21	0.121	2.88	0.80	1.00	0.2	27.74	79.87	3.21	9773	754	382	709	1091
1	10	4.88	15.714	29.169	2.96	0.114	2.91	0.80	1.00	0.2	29.05	84.48	2.96	10496	688	350	605	955
													Totals	**56,527**	**5,961**			**9,704**

1.2D + 1.0Di + 1.0Wi 330° Gust Response Factor (Gh): 0.85
59 mph Wind with 0.21" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.11	11.567	11.712	5.05	0.224	2.52	0.85	1.00	0.2	16.61	41.86	5.05	1944	287	288	153	442
11	160	7.91	0.000	20.373	5.70	0.196	2.61	0.85	1.00	0.2	11.83	30.89	5.70	2862	418	208	591	799
10	145	7.76	5.503	9.553	1.74	0.254	2.43	0.85	1.00	0.2	10.28	24.93	1.74	1795	277	164	316	480
9	135	7.65	7.366	10.383	1.77	0.255	2.42	0.85	1.00	0.2	12.35	29.92	1.77	2179	316	194	331	525
8	125	7.53	6.027	10.415	1.80	0.206	2.58	0.85	1.00	0.2	11.12	28.63	1.80	2198	312	183	381	564
7	110	7.33	12.992	22.539	3.71	0.187	2.64	0.85	1.00	0.2	23.94	63.22	3.71	4945	652	394	787	1181
6	90	7.04	14.383	22.684	3.85	0.161	2.73	0.85	1.00	0.2	25.13	68.63	3.85	5566	673	411	807	1218
5	70	6.69	18.488	26.025	3.99	0.164	2.72	0.85	1.00	0.2	30.52	83.07	3.99	6791	729	472	765	1237
4	55	6.37	11.351	13.855	2.04	0.167	2.71	0.85	1.00	0.2	17.54	47.55	2.04	3747	391	257	371	628
3	45	6.11	16.700	14.416	2.60	0.193	2.62	0.85	1.00	0.2	22.46	58.84	2.60	4230	462	306	361	666
2	30	5.62	14.945	27.917	3.21	0.121	2.88	0.85	1.00	0.2	28.48	82.02	3.21	9773	754	392	709	1101
1	10	4.88	15.714	29.169	2.96	0.114	2.91	0.85	1.00	0.2	29.83	86.77	2.96	10496	688	360	605	964
													Totals	**56,527**	**5,961**			**9,806**

1.0D + 1.0W Service Normal Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.38	11.567	6.667	0.00	0.176	2.68	1.00	1.00	0.0	15.37	41.14	0.00	1381	0	293	84	377
11	160	8.19	0.000	14.673	0.00	0.142	2.80	1.00	1.00	0.0	8.46	23.69	0.00	2037	0	165	317	482
10	145	8.02	5.503	7.813	0.00	0.226	2.51	1.00	1.00	0.0	10.03	25.19	0.00	1265	0	172	174	346
9	135	7.91	7.366	8.614	0.00	0.231	2.50	1.00	1.00	0.0	12.37	30.88	0.00	1552	0	208	185	393
8	125	7.78	6.027	8.614	0.00	0.185	2.65	1.00	1.00	0.0	10.95	29.01	0.00	1572	0	192	206	398
7	110	7.58	12.992	18.831	0.00	0.168	2.71	1.00	1.00	0.0	23.72	64.19	0.00	3577	0	414	418	832
6	90	7.28	14.383	18.831	0.00	0.145	2.79	1.00	1.00	0.0	25.06	69.94	0.00	4077	0	433	418	850
5	70	6.91	18.488	22.037	0.00	0.150	2.77	1.00	1.00	0.0	30.71	85.17	0.00	5052	0	501	401	901
4	55	6.58	11.351	11.820	0.00	0.154	2.76	1.00	1.00	0.0	17.82	49.15	0.00	2797	0	275	197	472
3	45	6.32	16.700	11.820	0.00	0.177	2.67	1.00	1.00	0.0	23.29	62.28	0.00	3140	0	334	200	534
2	30	5.82	14.945	24.708	0.00	0.112	2.91	1.00	1.00	0.0	28.63	83.44	0.00	7516	0	413	368	780
1	10	5.04	15.714	26.210	0.00	0.107	2.94	1.00	1.00	0.0	29.84	87.66	0.00	8173	0	376	318	694
													Totals	**42,139**	**0**			**7,059**

1.0D + 1.0W Service 60° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.38	11.567	6.667	0.00	0.176	2.68	0.80	1.00	0.0	13.06	34.95	0.00	1381	0	249	84	333
11	160	8.19	0.000	14.673	0.00	0.142	2.80	0.80	1.00	0.0	8.46	23.69	0.00	2037	0	165	317	482
10	145	8.02	5.503	7.813	0.00	0.226	2.51	0.80	1.00	0.0	8.93	22.43	0.00	1265	0	153	174	327
9	135	7.91	7.366	8.614	0.00	0.231	2.50	0.80	1.00	0.0	10.89	27.20	0.00	1552	0	183	185	368
8	125	7.78	6.027	8.614	0.00	0.185	2.65	0.80	1.00	0.0	9.75	25.82	0.00	1572	0	171	206	377
7	110	7.58	12.992	18.831	0.00	0.168	2.71	0.80	1.00	0.0	21.12	57.16	0.00	3577	0	368	418	786
6	90	7.28	14.383	18.831	0.00	0.145	2.79	0.80	1.00	0.0	22.18	61.91	0.00	4077	0	383	418	801

SECTION FORCES

1.0D + 1.0W Service 60° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
5	70	6.91	18.488	22.037	0.00	0.150	2.77	0.80	1.00	0.0	27.01	74.91	0.00	5052	0	440	401	841
4	55	6.58	11.351	11.820	0.00	0.154	2.76	0.80	1.00	0.0	15.55	42.88	0.00	2797	0	240	197	437
3	45	6.32	16.700	11.820	0.00	0.177	2.67	0.80	1.00	0.0	19.95	53.35	0.00	3140	0	287	200	486
2	30	5.82	14.945	24.708	0.00	0.112	2.91	0.80	1.00	0.0	25.64	74.73	0.00	7516	0	369	368	737
1	10	5.04	15.714	26.210	0.00	0.107	2.94	0.80	1.00	0.0	26.70	78.43	0.00	8173	0	336	318	654
													Totals	**42,139**	**0**			**6,629**

1.0D + 1.0W Service 90° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.38	11.567	6.667	0.00	0.176	2.68	0.85	1.00	0.0	13.64	36.50	0.00	1381	0	260	84	344
11	160	8.19	0.000	14.673	0.00	0.142	2.80	0.85	1.00	0.0	8.46	23.69	0.00	2037	0	165	317	482
10	145	8.02	5.503	7.813	0.00	0.226	2.51	0.85	1.00	0.0	9.21	23.12	0.00	1265	0	158	174	332
9	135	7.91	7.366	8.614	0.00	0.231	2.50	0.85	1.00	0.0	11.26	28.12	0.00	1552	0	189	185	374
8	125	7.78	6.027	8.614	0.00	0.185	2.65	0.85	1.00	0.0	10.05	26.61	0.00	1572	0	176	206	382
7	110	7.58	12.992	18.831	0.00	0.168	2.71	0.85	1.00	0.0	21.77	58.92	0.00	3577	0	380	418	798
6	90	7.28	14.383	18.831	0.00	0.145	2.79	0.85	1.00	0.0	22.90	63.92	0.00	4077	0	395	418	813
5	70	6.91	18.488	22.037	0.00	0.150	2.77	0.85	1.00	0.0	27.94	77.47	0.00	5052	0	455	401	856
4	55	6.58	11.351	11.820	0.00	0.154	2.76	0.85	1.00	0.0	16.11	44.45	0.00	2797	0	249	197	445
3	45	6.32	16.700	11.820	0.00	0.177	2.67	0.85	1.00	0.0	20.79	55.58	0.00	3140	0	299	200	498
2	30	5.82	14.945	24.708	0.00	0.112	2.91	0.85	1.00	0.0	26.39	76.90	0.00	7516	0	380	368	748
1	10	5.04	15.714	26.210	0.00	0.107	2.94	0.85	1.00	0.0	27.49	80.74	0.00	8173	0	346	318	664
													Totals	**42,139**	**0**			**6,737**

1.0D + 1.0W Service 120° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.38	11.567	6.667	0.00	0.176	2.68	1.00	1.00	0.0	15.37	41.14	0.00	1381	0	293	84	377
11	160	8.19	0.000	14.673	0.00	0.142	2.80	1.00	1.00	0.0	8.46	23.69	0.00	2037	0	165	317	482
10	145	8.02	5.503	7.813	0.00	0.226	2.51	1.00	1.00	0.0	10.03	25.19	0.00	1265	0	172	174	346
9	135	7.91	7.366	8.614	0.00	0.231	2.50	1.00	1.00	0.0	12.37	30.88	0.00	1552	0	208	185	393
8	125	7.78	6.027	8.614	0.00	0.185	2.65	1.00	1.00	0.0	10.95	29.01	0.00	1572	0	192	206	398
7	110	7.58	12.992	18.831	0.00	0.168	2.71	1.00	1.00	0.0	23.72	64.19	0.00	3577	0	414	418	832
6	90	7.28	14.383	18.831	0.00	0.145	2.79	1.00	1.00	0.0	25.06	69.94	0.00	4077	0	433	418	850
5	70	6.91	18.488	22.037	0.00	0.150	2.77	1.00	1.00	0.0	30.71	85.17	0.00	5052	0	501	401	901
4	55	6.58	11.351	11.820	0.00	0.154	2.76	1.00	1.00	0.0	17.82	49.15	0.00	2797	0	275	197	472
3	45	6.32	16.700	11.820	0.00	0.177	2.67	1.00	1.00	0.0	23.29	62.28	0.00	3140	0	334	200	534
2	30	5.82	14.945	24.708	0.00	0.112	2.91	1.00	1.00	0.0	28.63	83.44	0.00	7516	0	413	368	780
1	10	5.04	15.714	26.210	0.00	0.107	2.94	1.00	1.00	0.0	29.84	87.66	0.00	8173	0	376	318	694
													Totals	**42,139**	**0**			**7,059**

1.0D + 1.0W Service 180° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.38	11.567	6.667	0.00	0.176	2.68	0.80	1.00	0.0	13.06	34.95	0.00	1381	0	249	84	333
11	160	8.19	0.000	14.673	0.00	0.142	2.80	0.80	1.00	0.0	8.46	23.69	0.00	2037	0	165	317	482
10	145	8.02	5.503	7.813	0.00	0.226	2.51	0.80	1.00	0.0	8.93	22.43	0.00	1265	0	153	174	327
9	135	7.91	7.366	8.614	0.00	0.231	2.50	0.80	1.00	0.0	10.89	27.20	0.00	1552	0	183	185	368
8	125	7.78	6.027	8.614	0.00	0.185	2.65	0.80	1.00	0.0	9.75	25.82	0.00	1572	0	171	206	377
7	110	7.58	12.992	18.831	0.00	0.168	2.71	0.80	1.00	0.0	21.12	57.16	0.00	3577	0	368	418	786
6	90	7.28	14.383	18.831	0.00	0.145	2.79	0.80	1.00	0.0	22.18	61.91	0.00	4077	0	383	418	801
5	70	6.91	18.488	22.037	0.00	0.150	2.77	0.80	1.00	0.0	27.01	74.91	0.00	5052	0	440	401	841
4	55	6.58	11.351	11.820	0.00	0.154	2.76	0.80	1.00	0.0	15.55	42.88	0.00	2797	0	240	197	437
3	45	6.32	16.700	11.820	0.00	0.177	2.67	0.80	1.00	0.0	19.95	53.35	0.00	3140	0	287	200	486
2	30	5.82	14.945	24.708	0.00	0.112	2.91	0.80	1.00	0.0	25.64	74.73	0.00	7516	0	369	368	737
1	10	5.04	15.714	26.210	0.00	0.107	2.94	0.80	1.00	0.0	26.70	78.43	0.00	8173	0	336	318	654
													Totals	**42,139**	**0**			**6,629**

1.0D + 1.0W Service 210° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.38	11.567	6.667	0.00	0.176	2.68	0.85	1.00	0.0	13.64	36.50	0.00	1381	0	260	84	344
11	160	8.19	0.000	14.673	0.00	0.142	2.80	0.85	1.00	0.0	8.46	23.69	0.00	2037	0	165	317	482
10	145	8.02	5.503	7.813	0.00	0.226	2.51	0.85	1.00	0.0	9.21	23.12	0.00	1265	0	158	174	332
9	135	7.91	7.366	8.614	0.00	0.231	2.50	0.85	1.00	0.0	11.26	28.12	0.00	1552	0	189	185	374
8	125	7.78	6.027	8.614	0.00	0.185	2.65	0.85	1.00	0.0	10.05	26.61	0.00	1572	0	176	206	382
7	110	7.58	12.992	18.831	0.00	0.168	2.71	0.85	1.00	0.0	21.77	58.92	0.00	3577	0	380	418	798
6	90	7.28	14.383	18.831	0.00	0.145	2.79	0.85	1.00	0.0	22.90	63.92	0.00	4077	0	395	418	813
5	70	6.91	18.488	22.037	0.00	0.150	2.77	0.85	1.00	0.0	27.94	77.47	0.00	5052	0	455	401	856

SECTION FORCES

1.0D + 1.0W Service 210° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
4	55	6.58	11.351	11.820	0.00	0.154	2.76	0.85	1.00	0.0	16.11	44.45	0.00	2797	0	249	197	445
3	45	6.32	16.700	11.820	0.00	0.177	2.67	0.85	1.00	0.0	20.79	55.58	0.00	3140	0	299	200	498
2	30	5.82	14.945	24.708	0.00	0.112	2.91	0.85	1.00	0.0	26.39	76.90	0.00	7516	0	380	368	748
1	10	5.04	15.714	26.210	0.00	0.107	2.94	0.85	1.00	0.0	27.49	80.74	0.00	8173	0	346	318	664
													Totals	**42,139**	**0**			**6,737**

1.0D + 1.0W Service 240° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.38	11.567	6.667	0.00	0.176	2.68	1.00	1.00	0.0	15.37	41.14	0.00	1381	0	293	84	377
11	160	8.19	0.000	14.673	0.00	0.142	2.80	1.00	1.00	0.0	8.46	23.69	0.00	2037	0	165	317	482
10	145	8.02	5.503	7.813	0.00	0.226	2.51	1.00	1.00	0.0	10.03	25.19	0.00	1265	0	172	174	346
9	135	7.91	7.366	8.614	0.00	0.231	2.50	1.00	1.00	0.0	12.37	30.88	0.00	1552	0	208	185	393
8	125	7.78	6.027	8.614	0.00	0.185	2.65	1.00	1.00	0.0	10.95	29.01	0.00	1572	0	192	206	398
7	110	7.58	12.992	18.831	0.00	0.168	2.71	1.00	1.00	0.0	23.72	64.19	0.00	3577	0	414	418	832
6	90	7.28	14.383	18.831	0.00	0.145	2.79	1.00	1.00	0.0	25.06	69.94	0.00	4077	0	433	418	850
5	70	6.91	18.488	22.037	0.00	0.150	2.77	1.00	1.00	0.0	30.71	85.17	0.00	5052	0	501	401	901
4	55	6.58	11.351	11.820	0.00	0.154	2.76	1.00	1.00	0.0	17.82	49.15	0.00	2797	0	275	197	472
3	45	6.32	16.700	11.820	0.00	0.177	2.67	1.00	1.00	0.0	23.29	62.28	0.00	3140	0	334	200	534
2	30	5.82	14.945	24.708	0.00	0.112	2.91	1.00	1.00	0.0	28.63	83.44	0.00	7516	0	413	368	780
1	10	5.04	15.714	26.210	0.00	0.107	2.94	1.00	1.00	0.0	29.84	87.66	0.00	8173	0	376	318	694
													Totals	**42,139**	**0**			**7,059**

1.0D + 1.0W Service 300° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.38	11.567	6.667	0.00	0.176	2.68	0.80	1.00	0.0	13.06	34.95	0.00	1381	0	249	84	333
11	160	8.19	0.000	14.673	0.00	0.142	2.80	0.80	1.00	0.0	8.46	23.69	0.00	2037	0	165	317	482
10	145	8.02	5.503	7.813	0.00	0.226	2.51	0.80	1.00	0.0	8.93	22.43	0.00	1265	0	153	174	327
9	135	7.91	7.366	8.614	0.00	0.231	2.50	0.80	1.00	0.0	10.89	27.20	0.00	1552	0	183	185	368
8	125	7.78	6.027	8.614	0.00	0.185	2.65	0.80	1.00	0.0	9.75	25.82	0.00	1572	0	171	206	377
7	110	7.58	12.992	18.831	0.00	0.168	2.71	0.80	1.00	0.0	21.12	57.16	0.00	3577	0	368	418	786
6	90	7.28	14.383	18.831	0.00	0.145	2.79	0.80	1.00	0.0	22.18	61.91	0.00	4077	0	383	418	801
5	70	6.91	18.488	22.037	0.00	0.150	2.77	0.80	1.00	0.0	27.01	74.91	0.00	5052	0	440	401	841
4	55	6.58	11.351	11.820	0.00	0.154	2.76	0.80	1.00	0.0	15.55	42.88	0.00	2797	0	240	197	437
3	45	6.32	16.700	11.820	0.00	0.177	2.67	0.80	1.00	0.0	19.95	53.35	0.00	3140	0	287	200	486
2	30	5.82	14.945	24.708	0.00	0.112	2.91	0.80	1.00	0.0	25.64	74.73	0.00	7516	0	369	368	737
1	10	5.04	15.714	26.210	0.00	0.107	2.94	0.80	1.00	0.0	26.70	78.43	0.00	8173	0	336	318	654
													Totals	**42,139**	**0**			**6,629**

1.0D + 1.0W Service 330° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
12	180	8.38	11.567	6.667	0.00	0.176	2.68	0.85	1.00	0.0	13.64	36.50	0.00	1381	0	260	84	344
11	160	8.19	0.000	14.673	0.00	0.142	2.80	0.85	1.00	0.0	8.46	23.69	0.00	2037	0	165	317	482
10	145	8.02	5.503	7.813	0.00	0.226	2.51	0.85	1.00	0.0	9.21	23.12	0.00	1265	0	158	174	332
9	135	7.91	7.366	8.614	0.00	0.231	2.50	0.85	1.00	0.0	11.26	28.12	0.00	1552	0	189	185	374
8	125	7.78	6.027	8.614	0.00	0.185	2.65	0.85	1.00	0.0	10.05	26.61	0.00	1572	0	176	206	382
7	110	7.58	12.992	18.831	0.00	0.168	2.71	0.85	1.00	0.0	21.77	58.92	0.00	3577	0	380	418	798
6	90	7.28	14.383	18.831	0.00	0.145	2.79	0.85	1.00	0.0	22.90	63.92	0.00	4077	0	395	418	813
5	70	6.91	18.488	22.037	0.00	0.150	2.77	0.85	1.00	0.0	27.94	77.47	0.00	5052	0	455	401	856
4	55	6.58	11.351	11.820	0.00	0.154	2.76	0.85	1.00	0.0	16.11	44.45	0.00	2797	0	249	197	445
3	45	6.32	16.700	11.820	0.00	0.177	2.67	0.85	1.00	0.0	20.79	55.58	0.00	3140	0	299	200	498
2	30	5.82	14.945	24.708	0.00	0.112	2.91	0.85	1.00	0.0	26.39	76.90	0.00	7516	0	380	368	748
1	10	5.04	15.714	26.210	0.00	0.107	2.94	0.85	1.00	0.0	27.49	80.74	0.00	8173	0	346	318	664
													Totals	**42,139**	**0**			**6,737**

EQUIVALENT LATERAL FORCE METHOD

Long-Period Transition Period (T_L – Seconds):	4
Importance Factor (I_e):	1.00
Response Modification Coefficient (R):	3.00
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.15
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.07
Seismic Response Coefficient (C_s):	0.03
Upper Limit C_S:	0.03
Lower Limit C_S:	0.03
Period based on Rayleigh Method (sec):	1.12
Redundancy Factor (p):	1.30
Seismic Force Distribution Exponent (k):	1.31
Total Unfactored Dead Load:	56.42 k
Seismic Base Shear (E):	2.20 k

SEISMIC FORCES

0.9D - 1.0Ev + 1.0Eh

Section/Appurtenance	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	Cvx	Horizontal Force (lb)	Vertical Force (lb)
12	180.00	1,381	1,258,661	0.057	125	1,201
11	160.00	2,037	1,590,601	0.072	158	1,772
10	145.00	1,265	868,235	0.039	86	1,101
9	135.00	1,552	970,111	0.044	96	1,351
8	125.00	1,572	887,853	0.040	88	1,367
7	110.00	3,577	1,708,509	0.077	170	3,112
6	90.00	4,077	1,496,462	0.068	149	3,547
5	70.00	5,052	1,333,425	0.060	133	4,395
4	55.00	2,797	537,891	0.024	53	2,433
3	45.00	3,140	464,140	0.021	46	2,732
2	30.00	7,516	652,468	0.030	65	6,539
1	10.00	8,173	167,800	0.008	17	7,111
Raycap DC9-48-60-24-8C-EV (Enclosure)	190.00	56	54,314	0.002	5	48
Ericsson AIR 6419 B77D/ C-Band	187.80	192	185,048	0.008	18	167
Ericsson Radio 4490HP 44B5 44B12A C	186.00	205	195,000	0.009	19	178
Ericsson Radio 4890HP 48B2/B25 48B66 M01 (67.2 lbs)	186.00	202	191,860	0.009	19	175
Ericsson Radio 4494 44B14 20B29 M01	186.00	172	163,595	0.007	16	150
Commscope NNH4-65C-R6-V3 (102.5 lbs)	186.00	615	585,287	0.026	58	535
Generic Flat Light Sector Frame	186.00	1,200	1,142,023	0.052	114	1,044
Ericsson AIR 6419 B77G	185.00	198	187,389	0.008	19	173
Commscope RDIDC-9181-PF-48	175.00	22	19,239	0.001	2	19
Fujitsu TA08025-B605	175.00	225	197,665	0.009	20	196
Fujitsu TA08025-B604	175.00	192	168,411	0.008	17	167
JMA Wireless MX08FRO665-21	175.00	194	169,992	0.008	17	168
Generic Flat Light Sector Frame	175.00	1,200	1,054,215	0.048	105	1,044
Flat Light Sector Frame	170.00	1,200	1,014,863	0.046	101	1,044
Cambium Networks PTP 58500	165.00	12	9,596	0.000	1	10
Cambium Networks PMP 450m	165.00	217	176,470	0.008	18	189
Generic Flat T-Arm	165.00	938	762,399	0.034	76	816
Cambium Networks PMP 450m	161.70	31	24,550	0.001	2	27
Ericsson Radio 4449 - B13&B5	158.00	210	161,333	0.007	16	183
Ericsson Radio 4890HP 48B2 48B66 S	158.00	208	160,180	0.007	16	181
Raycap RCMDC-6627-PF-48	158.00	64	49,168	0.002	5	56
Ericsson AIR 6419 B77D	158.00	189	145,430	0.007	14	165
Commscope NHH-65B-R2B	158.00	262	201,435	0.009	20	228
Generic Round Sector Frame	158.00	900	691,425	0.031	69	783
Heavy Sector Frame	158.00	500	384,125	0.017	38	435
Ceragon IP-20C	148.00	13	9,166	0.000	1	11
Radio Waves HP3-6	147.40	50	35,066	0.002	3	44
Radio Waves SPD3-5.2NS-RD	147.00	43	30,050	0.001	3	37
Andrew HP6-59/K	141.00	320	211,724	0.010	21	278
Commscope HELIAX FiberFeed 12 RRU Pendant Connect	132.00	40	24,271	0.001	2	35
Nokia AirScale Dual RRH 4T4R B12/71 240W AHLOA	132.00	251	152,543	0.007	15	219
Nokia AHFIG	132.00	238	144,534	0.006	14	207
Nokia AEHC	132.00	311	188,585	0.008	19	270
Commscope FFVV-65C-R3-V1	132.00	374	226,812	0.010	23	325
Round Sector Frame	129.50	900	532,563	0.024	53	783
Ceragon FibeAir IP-20D-HP	129.00	26	15,602	0.001	2	23
Commscope VHLP3-6W	129.00	53	31,203	0.001	3	46

Generic 20' Omni	117.30	55	28,582	0.001	3	48
Andrew PL4-59-P7A/F	111.00	119	57,519	0.003	6	104
Hanwha Techwin XNP-8300RW	102.00	24	10,296	0.000	1	21
Generic Direct Mount	102.00	200	86,517	0.004	9	174
Scala 2XCA2-CP	90.00	6	2,092	0.000	0	5
Samsung RRH-C2A (w/ External Filter)	57.30	115	23,258	0.001	2	100
KMW ET-X-WM-18-65-8P	55.50	73	14,169	0.001	1	63
Samsung 8T8R RRH – RRH-B8	55.00	119	22,887	0.001	2	104
Generic Flat Light Sector Frame	55.00	800	153,862	0.007	15	696
KMW ET-X-TS-70-15-62-18-iR-RD	54.90	84	16,079	0.001	2	73
Samsung 1.9GHz RRH	54.50	119	22,614	0.001	2	104
Andrew Microwaves HP6-65/K	50.00	320	54,308	0.002	5	278
Standoff	21.00	150	8,154	0.000	1	130
Generic GPS	20.70	20	1,067	0.000	0	17
L-com HG5833D w/ Radome	19.30	20	973	0.000	0	17
Ceragon IP-20C	18.00	13	577	0.000	0	11
Radio Waves HP2-11	18.00	27	1,199	0.000	0	23
Totals		**56,424**	**22,137,442**	**1.000**	**2,201**	**49,089**

0.9D - 1.0Ev + 1.5Eh

Section/Appurtenance	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	Cvx	Horizontal Force (lb)	Vertical Force (lb)
12	180.00	1,381	1,258,661	0.057	188	1,201
11	160.00	2,037	1,590,601	0.072	237	1,772
10	145.00	1,265	868,235	0.039	129	1,101
9	135.00	1,552	970,111	0.044	145	1,351
8	125.00	1,572	887,853	0.040	132	1,367
7	110.00	3,577	1,708,509	0.077	255	3,112
6	90.00	4,077	1,496,462	0.068	223	3,547
5	70.00	5,052	1,333,425	0.060	199	4,395
4	55.00	2,797	537,891	0.024	80	2,433
3	45.00	3,140	464,140	0.021	69	2,732
2	30.00	7,516	652,468	0.030	97	6,539
1	10.00	8,173	167,800	0.008	25	7,111
Raycap DC9-48-60-24-8C-EV (Enclosure)	190.00	56	54,314	0.002	8	48
Ericsson AIR 6419 B77D/ C-Band	187.80	192	185,048	0.008	28	167
Ericsson Radio 4490HP 44B5 44B12A C	186.00	205	195,000	0.009	29	178
Ericsson Radio 4890HP 48B2/B25 48B66 M01 (67.2 lbs)	186.00	202	191,860	0.009	29	175
Ericsson Radio 4494 44B14 20B29 M01	186.00	172	163,595	0.007	24	150
Commscope NNH4-65C-R6-V3 (102.5 lbs)	186.00	615	585,287	0.026	87	535
Generic Flat Light Sector Frame	186.00	1,200	1,142,023	0.052	170	1,044
Ericsson AIR 6419 B77G	185.00	198	187,389	0.008	28	173
Commscope RDIDC-9181-PF-48	175.00	22	19,239	0.001	3	19
Fujitsu TA08025-B605	175.00	225	197,665	0.009	29	196
Fujitsu TA08025-B604	175.00	192	168,411	0.008	25	167
JMA Wireless MX08FRO665-21	175.00	194	169,992	0.008	25	168
Generic Flat Light Sector Frame	175.00	1,200	1,054,215	0.048	157	1,044
Flat Light Sector Frame	170.00	1,200	1,014,863	0.046	151	1,044
Cambium Networks PTP 58500	165.00	12	9,596	0.000	1	10
Cambium Networks PMP 450m	165.00	217	176,470	0.008	26	189
Generic Flat T-Arm	165.00	938	762,399	0.034	114	816
Cambium Networks PMP 450m	161.70	31	24,550	0.001	4	27
Ericsson Radio 4449 - B13&B5	158.00	210	161,333	0.007	24	183
Ericsson Radio 4890HP 48B2 48B66 S	158.00	208	160,180	0.007	24	181
Raycap RCMDC-6627-PF-48	158.00	64	49,168	0.002	7	56
Ericsson AIR 6419 B77D	158.00	189	145,430	0.007	22	165
Commscope NHH-65B-R2B	158.00	262	201,435	0.009	30	228
Generic Round Sector Frame	158.00	900	691,425	0.031	103	783
Heavy Sector Frame	158.00	500	384,125	0.017	57	435
Ceragon IP-20C	148.00	13	9,166	0.000	1	11
Radio Waves HP3-6	147.40	50	35,066	0.002	5	44
Radio Waves SPD3-5.2NS-RD	147.00	43	30,050	0.001	4	37
Andrew HP6-59/K	141.00	320	211,724	0.010	32	278
Commscope HELIAX FiberFeed 12 RRU Pendant Connect	132.00	40	24,271	0.001	4	35
Nokia AirScale Dual RRH 4T4R B12/71 240W AHLOA	132.00	251	152,543	0.007	23	219
Nokia AHFIG	132.00	238	144,534	0.006	22	207
Nokia AEHC	132.00	311	188,585	0.008	28	270
Commscope FFVV-65C-R3-V1	132.00	374	226,812	0.010	34	325
Round Sector Frame	129.50	900	532,563	0.024	79	783
Ceragon FibeAir IP-20D-HP	129.00	26	15,602	0.001	2	23
Commscope VHLP3-6W	129.00	53	31,203	0.001	5	46
Generic 20' Omni	117.30	55	28,582	0.001	4	48
Andrew PL4-59-P7A/F	111.00	119	57,519	0.003	9	104
Hanwha Techwin XNP-8300RW	102.00	24	10,296	0.000	2	21
Generic Direct Mount	102.00	200	86,517	0.004	13	174
Scala 2XCA2-CP	90.00	6	2,092	0.000	0	5
Samsung RRH-C2A (w/ External Filter)	57.30	115	23,258	0.001	3	100
KMW ET-X-WM-18-65-8P	55.50	73	14,169	0.001	2	63
Samsung 8T8R RRH – RRH-B8	55.00	119	22,887	0.001	3	104
Generic Flat Light Sector Frame	55.00	800	153,862	0.007	23	696
KMW ET-X-TS-70-15-62-18-iR-RD	54.90	84	16,079	0.001	2	73
Samsung 1.9GHz RRH	54.50	119	22,614	0.001	3	104

Andrew Microwaves HP6-65/K	50.00	320	54,308	0.002	8	278
Standoff	21.00	150	8,154	0.000	1	130
Generic GPS	20.70	20	1,067	0.000	0	17
L-com HG5833D w/ Radome	19.30	20	973	0.000	0	17
Ceragon IP-20C	18.00	13	577	0.000	0	11
Radio Waves HP2-11	18.00	27	1,199	0.000	0	23
Totals		**56,424**	**22,137,442**	**1.000**	**3,301**	**49,089**

1.2D + 1.0Ev + 1.0Eh

Section/Appurtenance	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	Cvx	Horizontal Force (lb)	Vertical Force (lb)
12	180.00	1,381	1,258,661	0.057	125	1,698
11	160.00	2,037	1,590,601	0.072	158	2,505
10	145.00	1,265	868,235	0.039	86	1,556
9	135.00	1,552	970,111	0.044	96	1,909
8	125.00	1,572	887,853	0.040	88	1,933
7	110.00	3,577	1,708,509	0.077	170	4,400
6	90.00	4,077	1,496,462	0.068	149	5,015
5	70.00	5,052	1,333,425	0.060	133	6,214
4	55.00	2,797	537,891	0.024	53	3,440
3	45.00	3,140	464,140	0.021	46	3,863
2	30.00	7,516	652,468	0.030	65	9,245
1	10.00	8,173	167,800	0.008	17	10,053
Raycap DC9-48-60-24-8C-EV (Enclosure)	190.00	56	54,314	0.002	5	68
Ericsson AIR 6419 B77D/ C-Band	187.80	192	185,048	0.008	18	236
Ericsson Radio 4490HP 44B5 44B12A C	186.00	205	195,000	0.009	19	252
Ericsson Radio 4890HP 48B2/B25 48B66 M01 (67.2 lbs)	186.00	202	191,860	0.009	19	248
Ericsson Radio 4494 44B14 20B29 M01	186.00	172	163,595	0.007	16	211
Commscope NNH4-65C-R6-V3 (102.5 lbs)	186.00	615	585,287	0.026	58	756
Generic Flat Light Sector Frame	186.00	1,200	1,142,023	0.052	114	1,476
Ericsson AIR 6419 B77G	185.00	198	187,389	0.008	19	244
Commscope RDIDC-9181-PF-48	175.00	22	19,239	0.001	2	27
Fujitsu TA08025-B605	175.00	225	197,665	0.009	20	277
Fujitsu TA08025-B604	175.00	192	168,411	0.008	17	236
JMA Wireless MX08FRO665-21	175.00	194	169,992	0.008	17	238
Generic Flat Light Sector Frame	175.00	1,200	1,054,215	0.048	105	1,476
Flat Light Sector Frame	170.00	1,200	1,014,863	0.046	101	1,476
Cambium Networks PTP 58500	165.00	12	9,596	0.000	1	15
Cambium Networks PMP 450m	165.00	217	176,470	0.008	18	267
Generic Flat T-Arm	165.00	938	762,399	0.034	76	1,153
Cambium Networks PMP 450m	161.70	31	24,550	0.001	2	38
Ericsson Radio 4449 - B13&B5	158.00	210	161,333	0.007	16	258
Ericsson Radio 4890HP 48B2 48B66 S	158.00	208	160,180	0.007	16	256
Raycap RCMDC-6627-PF-48	158.00	64	49,168	0.002	5	79
Ericsson AIR 6419 B77D	158.00	189	145,430	0.007	14	233
Commscope NHH-65B-R2B	158.00	262	201,435	0.009	20	323
Generic Round Sector Frame	158.00	900	691,425	0.031	69	1,107
Heavy Sector Frame	158.00	500	384,125	0.017	38	615
Ceragon IP-20C	148.00	13	9,166	0.000	1	16
Radio Waves HP3-6	147.40	50	35,066	0.002	3	62
Radio Waves SPD3-5.2NS-RD	147.00	43	30,050	0.001	3	53
Andrew HP6-59/K	141.00	320	211,724	0.010	21	394
Commscope HELIAX FiberFeed 12 RRU Pendant Connect	132.00	40	24,271	0.001	2	49
Nokia AirScale Dual RRH 4T4R B12/71 240W AHLOA	132.00	251	152,543	0.007	15	309
Nokia AHFIG	132.00	238	144,534	0.006	14	293
Nokia AEHC	132.00	311	188,585	0.008	19	382
Commscope FFVV-65C-R3-V1	132.00	374	226,812	0.010	23	460
Round Sector Frame	129.50	900	532,563	0.024	53	1,107
Ceragon FibeAir IP-20D-HP	129.00	26	15,602	0.001	2	33
Commscope VHLP3-6W	129.00	53	31,203	0.001	3	65
Generic 20' Omni	117.30	55	28,582	0.001	3	68
Andrew PL4-59-P7A/F	111.00	119	57,519	0.003	6	146
Hanwha Techwin XNP-8300RW	102.00	24	10,296	0.000	1	29
Generic Direct Mount	102.00	200	86,517	0.004	9	246
Scala 2XCA2-CP	90.00	6	2,092	0.000	0	7
Samsung RRH-C2A (w/ External Filter)	57.30	115	23,258	0.001	2	141
KMW ET-X-WM-18-65-8P	55.50	73	14,169	0.001	1	90
Samsung 8T8R RRH – RRH-B8	55.00	119	22,887	0.001	2	146
Generic Flat Light Sector Frame	55.00	800	153,862	0.007	15	984
KMW ET-X-TS-70-15-62-18-iR-RD	54.90	84	16,079	0.001	2	103
Samsung 1.9GHz RRH	54.50	119	22,614	0.001	2	146
Andrew Microwaves HP6-65/K	50.00	320	54,308	0.002	5	394
Standoff	21.00	150	8,154	0.000	1	184
Generic GPS	20.70	20	1,067	0.000	0	25
L-com HG5833D w/ Radome	19.30	20	973	0.000	0	25
Ceragon IP-20C	18.00	13	577	0.000	0	16
Radio Waves HP2-11	18.00	27	1,199	0.000	0	33
Totals		**56,424**	**22,137,442**	**1.000**	**2,201**	**69,401**

1.2D + 1.0Ev + 1.5Eh

Section/Appurtenance	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	Cvx	Horizontal Force (lb)	Vertical Force (lb)
12	180.00	1,381	1,258,661	0.057	188	1,698
11	160.00	2,037	1,590,601	0.072	237	2,505
10	145.00	1,265	868,235	0.039	129	1,556
9	135.00	1,552	970,111	0.044	145	1,909
8	125.00	1,572	887,853	0.040	132	1,933
7	110.00	3,577	1,708,509	0.077	255	4,400
6	90.00	4,077	1,496,462	0.068	223	5,015
5	70.00	5,052	1,333,425	0.060	199	6,214
4	55.00	2,797	537,891	0.024	80	3,440
3	45.00	3,140	464,140	0.021	69	3,863
2	30.00	7,516	652,468	0.030	97	9,245
1	10.00	8,173	167,800	0.008	25	10,053
Raycap DC9-48-60-24-8C-EV (Enclosure)	190.00	56	54,314	0.002	8	68
Ericsson AIR 6419 B77D/ C-Band	187.80	192	185,048	0.008	28	236
Ericsson Radio 4490HP 44B5 44B12A C	186.00	205	195,000	0.009	29	252
Ericsson Radio 4890HP 48B2/B25 48B66 M01 (67.2 lbs)	186.00	202	191,860	0.009	29	248
Ericsson Radio 4494 44B14 20B29 M01	186.00	172	163,595	0.007	24	211
Commscope NNH4-65C-R6-V3 (102.5 lbs)	186.00	615	585,287	0.026	87	756
Generic Flat Light Sector Frame	186.00	1,200	1,142,023	0.052	170	1,476
Ericsson AIR 6419 B77G	185.00	198	187,389	0.008	28	244
Commscope RDIDC-9181-PF-48	175.00	22	19,239	0.001	3	27
Fujitsu TA08025-B605	175.00	225	197,665	0.009	29	277
Fujitsu TA08025-B604	175.00	192	168,411	0.008	25	236
JMA Wireless MX08FRO665-21	175.00	194	169,992	0.008	25	238
Generic Flat Light Sector Frame	175.00	1,200	1,054,215	0.048	157	1,476
Flat Light Sector Frame	170.00	1,200	1,014,863	0.046	151	1,476
Cambium Networks PTP 58500	165.00	12	9,596	0.000	1	15
Cambium Networks PMP 450m	165.00	217	176,470	0.008	26	267
Generic Flat T-Arm	165.00	938	762,399	0.034	114	1,153
Cambium Networks PMP 450m	161.70	31	24,550	0.001	4	38
Ericsson Radio 4449 - B13&B5	158.00	210	161,333	0.007	24	258
Ericsson Radio 4890HP 48B2 48B66 S	158.00	208	160,180	0.007	24	256
Raycap RCMDC-6627-PF-48	158.00	64	49,168	0.002	7	79
Ericsson AIR 6419 B77D	158.00	189	145,430	0.007	22	233
Commscope NHH-65B-R2B	158.00	262	201,435	0.009	30	323
Generic Round Sector Frame	158.00	900	691,425	0.031	103	1,107
Heavy Sector Frame	158.00	500	384,125	0.017	57	615
Ceragon IP-20C	148.00	13	9,166	0.000	1	16
Radio Waves HP3-6	147.40	50	35,066	0.002	5	62
Radio Waves SPD3-5.2NS-RD	147.00	43	30,050	0.001	4	53
Andrew HP6-59/K	141.00	320	211,724	0.010	32	394
Commscope HELIAX FiberFeed 12 RRU Pendant Connect	132.00	40	24,271	0.001	4	49
Nokia AirScale Dual RRH 4T4R B12/71 240W AHLOA	132.00	251	152,543	0.007	23	309
Nokia AHFIG	132.00	238	144,534	0.006	22	293
Nokia AEHC	132.00	311	188,585	0.008	28	382
Commscope FFVV-65C-R3-V1	132.00	374	226,812	0.010	34	460
Round Sector Frame	129.50	900	532,563	0.024	79	1,107
Ceragon FibeAir IP-20D-HP	129.00	26	15,602	0.001	2	33
Commscope VHLP3-6W	129.00	53	31,203	0.001	5	65
Generic 20' Omni	117.30	55	28,582	0.001	4	68
Andrew PL4-59-P7A/F	111.00	119	57,519	0.003	9	146
Hanwha Techwin XNP-8300RW	102.00	24	10,296	0.000	2	29
Generic Direct Mount	102.00	200	86,517	0.004	13	246
Scala 2XCA2-CP	90.00	6	2,092	0.000	0	7
Samsung RRH-C2A (w/ External Filter)	57.30	115	23,258	0.001	3	141
KMW ET-X-WM-18-65-8P	55.50	73	14,169	0.001	2	90
Samsung 8T8R RRH – RRH-B8	55.00	119	22,887	0.001	3	146
Generic Flat Light Sector Frame	55.00	800	153,862	0.007	23	984
KMW ET-X-TS-70-15-62-18-iR-RD	54.90	84	16,079	0.001	2	103
Samsung 1.9GHz RRH	54.50	119	22,614	0.001	3	146
Andrew Microwaves HP6-65/K	50.00	320	54,308	0.002	8	394
Standoff	21.00	150	8,154	0.000	1	184
Generic GPS	20.70	20	1,067	0.000	0	25
L-com HG5833D w/ Radome	19.30	20	973	0.000	0	25
Ceragon IP-20C	18.00	13	577	0.000	0	16
Radio Waves HP2-11	18.00	27	1,199	0.000	0	33
Totals		**56,424**	**22,137,442**	**1.000**	**3,301**	**69,401**

FORCE/STRESS SUMMARY

Section 1 – 0.0' to 20.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L 18B - 18"BD 2.5"	-227.83	1.2D + 1.0W N	20.033	100	100	100	0.00	0.00	613.30	0.00	0.00	0	0	37	User Input
D DAE - 3.5X3.5X0.3125	-7.74	1.2D + 1.0W 330°	27.592	50	50	25	158.42	36.00	47.67	141.37	139.20	4	2	16	Member Y

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c Pn$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
L 18B - 18"BD 2.5"	184.83	0.9D + 1.0W 60°	50.0	65	662.70	0.00	0.00		0	0	28	User Input
D DAE - 3.5X3.5X0.3125	7.29	0.9D + 1.0W 330°	36.0	58	114.71	141.37	112.01	71.05	4	2	10	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	195.29	0.9D + 1.0W 60°	843.15	5	6	2" F1554 GD 55
Bot Compression	239.42	1.2D + 1.0W N	824.41	26	6	2" F1554 GD 55

FORCE/STRESS SUMMARY

Section 2 – 20.0' to 40.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Φc Pn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	# Bolt	# Hole	Use %	Controls
L 18B - 18" BD 2.25"	-206.04	1.2D + 1.0W N	20.033	100	100	100	0.00	0.00	512.40	0.00	0.00	0	0	40	User Input
D DAE - 3.5X3.5X0.3125	-7.86	1.2D + 1.0W 330°	26.255	50	50	25	150.75	36.00	52.65	141.37	139.20	4	2	15	Member Y

Member Tension	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	Blk Shear Φt Pn (kip)	# Bolt	# Hole	Use %	Controls
L 18B - 18" BD 2.25"	167.31	0.9D + 1.0W 60°	50.0	65	536.80	0.00	0.00		0	0	31	User Input
D DAE - 3.5X3.5X0.3125	7.25	0.9D + 1.0W 330°	36.0	58	114.71	141.37	112.01	71.05	4	2	10	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	ΦRnt (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	175.99	0.9D + 1.0W 60°	523.32	34	6	1.25" A325

Section 3 – 40.0' to 50.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Φc Pn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 2.25"	-189.54	1.2D + 1.0W N	10.017	100	100	100	0.00	0.00	512.40	0.00	0.00	0	0	37	User Input
H SAE - 4X4X0.25	-0.98	0.9D + 1.0W N	15	100	100	100	226.42	35.71	10.83	110.45	69.60	2	1	9	Member Z
D SAE - 4X4X0.25	-5.12	0.9D + 1.0W 330°	18.448	50	50	50	139.23	35.71	28.64	55.22	34.80	1	1	18	Member Z

Member Tension	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	Blk Shear Φt Pn (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 2.25"	155.89	0.9D + 1.0W 60°	50.0	65	536.80	0.00	0.00		0	0	29	User Input
H SAE - 4X4X0.25	1.08	1.2D + 1.0W 180°	36.0	58	52.59	110.45	56.12	31.62	2	1	3	Blk Shear
D SAE - 4X4X0.25	5.15	1.2D + 1.0W 330°	36.0	58	52.59	55.22	21.32	16.43	1	1	31	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	ΦRnt (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	157.71	0.9D + 1.0W 60°	523.32	30	6	1.25" A325

Section 4 – 50.0' to 60.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Φc Pn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 2.25"	-176.26	1.2D + 1.0W N	10.017	100	100	100	0.00	0.00	512.40	0.00	0.00	0	0	34	User Input
D SAE - 4X4X0.25	-5.48	1.2D + 1.0W 120°	17.616	50	50	50	132.95	35.71	31.41	55.22	34.80	1	1	17	Member Z

Member Tension	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	Blk Shear Φt Pn (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 2.25"	146.77	0.9D + 1.0W 60°	50.0	65	536.80	0.00	0.00		0	0	27	User Input
D SAE - 4X4X0.25	5.07	0.9D + 1.0W 330°	36.0	58	52.59	55.22	21.32	16.43	1	1	31	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	ΦRnt (kip)	Use %	Num Bolts	Bolt Type

FORCE/STRESS SUMMARY

Section 5 – 60.0' to 80.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Φc Pn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 2"	-165.60	1.2D + 1.0W 120°	10.017	100	100	100	0.00	0.00	399.90	0.00	0.00	0	0	41	User Input
D SAE - 3.5X3.5X0.3125	-4.74	0.9D + 1.0W 330°	16.803	50	50	50	146.11	36.00	28.02	55.22	43.50	1	1	17	Member Z

Member Tension	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	Blk Shear Φt Pn (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 2"	138.38	0.9D + 1.0W 60°	50.0	65	424.10	0.00	0.00		0	0	33	User Input
D SAE - 3.5X3.5X0.3125	4.65	1.2D + 1.0W 330°	36.0	58	54.80	55.22	26.64	20.54	1	1	23	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	ΦRnt (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	141.95	0.9D + 1.0W 60°	523.32	27	6	1.25" A325

Section 6 – 80.0' to 100.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Φc Pn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 1.75"	-142.57	1.2D + 1.0W 120°	10.017	100	100	100	0.00	0.00	300.70	0.00	0.00	0	0	47	User Input
D SAE - 3X3X0.3125	-4.80	1.2D + 1.0W 330°	15.243	50	50	50	155.27	36.00	21.13	35.34	34.80	1	1	23	Member Z

Member Tension	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	Blk Shear Φt Pn (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 1.75"	119.91	0.9D + 1.0W 60°	50.0	65	324.70	0.00	0.00		0	0	37	User Input
D SAE - 3X3X0.3125	4.77	1.2D + 1.0W 330°	36.0	58	47.24	35.34	21.21	16.94	1	1	28	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	ΦRnt (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	124.21	0.9D + 1.0W 60°	327.10	38	6	1 A325

FORCE/STRESS SUMMARY

Section 7 – 100.0' to 120.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 1.75"	-117.62	1.2D + 1.0W 120°	10.017	100	100	100	0.00	0.00	300.70	0.00	0.00	0	0	39	User Input
D SAE - 3X3X0.1875	-4.86	1.2D + 1.0W 330°	13.796	50	50	50	138.89	36.00	16.17	35.34	20.88	1	1	30	Member Z

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c Pn$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 1.75"	98.77	0.9D + 1.0W 300°	50.0	65	324.70	0.00	0.00		0	0	30	User Input
D SAE - 3X3X0.1875	4.81	1.2D + 1.0W 210°	36.0	58	29.06	35.34	12.72	10.16	1	1	47	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	103.88	0.9D + 1.0W 60°	327.10	32	6	1 A325

Section 8 – 120.0' to 130.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 1.5"	-89.72	1.2D + 1.0W N	10.017	100	100	100	0.00	0.00	214.90	0.00	0.00	0	0	42	User Input
D SAE - 3X3X0.1875	-5.28	1.2D + 1.0W 210°	12.503	50	50	50	125.87	36.00	19.69	35.34	20.88	1	1	27	Member Z

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c Pn$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 1.5"	74.52	0.9D + 1.0W 60°	50.0	65	238.60	0.00	0.00		0	0	31	User Input
D SAE - 3X3X0.1875	4.87	0.9D + 1.0W 330°	36.0	58	29.06	35.34	12.72	10.16	1	1	48	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	80.99	0.9D + 1.0W 60°	327.10	25	6	1 A325

Section 9 – 130.0' to 140.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 1.5"	-76.58	1.2D + 1.0W 120°	10.017	50	50	50	0.00	0.00	214.90	0.00	0.00	0	0	36	User Input
D SAE - 3X3X0.1875	-4.49	0.9D + 1.0W 210°	11.93	50	50	50	120.10	36.00	21.44	35.34	20.88	1	1	22	Bolt Bear

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c Pn$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 1.5"	63.34	0.9D + 1.0W 60°	50.0	65	238.60	0.00	0.00		0	0	27	User Input
D SAE - 3X3X0.1875	4.73	1.2D + 1.0W 330°	36.0	58	29.06	35.34	12.72	10.16	1	1	47	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type

FORCE/STRESS SUMMARY

Section 10 – 140.0' to 150.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Φc Pn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 1.25"	-58.63	1.2D + 1.0W 120°	10.017	100	100	100	0.00	0.00	142.50	0.00	0.00	0	0	41	User Input
D SAE - 3X3X0.1875	-5.55	1.2D + 1.0W N	11.416	50	50	50	116.20	36.00	22.58	35.34	20.88	1	1	27	Bolt Bear

Member Tension	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	Blk Shear Φt Pn (kip)	# Bolt	# Hole	Use %	Controls
L 12B - 12"BD 1.25"	48.85	0.9D + 1.0W 60°	50.0	65	165.70	0.00	0.00		0	0	29	User Input
D SAE - 3X3X0.1875	4.68	0.9D + 1.0W 180°	36.0	58	29.06	35.34	12.72	10.16	1	1	46	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	ΦRnt (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	56.17	0.9D + 1.0W 60°	327.10	17	6	1 A325

Section 11 – 150.0' to 170.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Φc Pn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 2" SOLID	-51.97	1.2D + 1.0W 120°	2.448	100	100	100	58.75	50.00	109.84	0.00	0.00	0	0	47	Member X
H SOL - 1" SOLID	-0.77	0.9D + 1.0W 120°	5	100	100	100	156.00	50.00	7.29	0.00	0.00	0	0	11	Member X
D SOL - 1" SOLID	-3.66	1.2D + 1.0W 330°	5.567	50	50	50	120.25	50.00	12.27	0.00	0.00	0	0	30	Member X

Member Tension	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	Blk Shear Φt Pn (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 2" SOLID	44.78	0.9D + 1.0W 60°	50.0	65	141.37	0.00	0.00		0	0	32	Member
H SOL - 1" SOLID	0.88	1.2D + 1.0W 60°	50.0	65	35.34	0.00	0.00	0.00	0	0	2	Member
D SOL - 1" SOLID	3.58	1.2D + 1.0W 330°	50.0	65	35.34	0.00	0.00	0.00	0	0	10	Member

Max Splice Forces	Pu (kip)	Load Case	ΦRnt (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	44.34	0.9D + 1.0W 60°	327.10	14	6	1 A325

Section 12 – 170.0' to 190.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Φc Pn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 2" SOLID	-14.13	1.2D + 1.0W 120°	3.264	100	100	100	78.34	50.00	90.26	0.00	0.00	0	0	16	Member X
H SAE - 1.75X1.75X0.1875	-0.65	0.9D + 1.0W 240°	5	100	100	100	174.93	36.00	5.81	8.84	10.44	1	1	11	Member Z
D SAE - 1.75X1.75X0.1875	-2.07	1.2D + 1.0W 90°	5.971	50	50	50	108.34	36.00	14.11	8.84	10.44	1	1	23	Bolt Shear

Member Tension	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	Blk Shear Φt Pn (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 2" SOLID	11.75	0.9D + 1.0W 60°	50.0	65	141.37	0.00	0.00		0	0	8	Member
H SAE - 1.75X1.75X0.1875	0.67	1.2D + 1.0W 60°	36.0	58	16.82	8.84	6.20	5.71	1	1	12	Blk Shear
D SAE - 1.75X1.75X0.1875	2.04	1.2D + 1.0W 90°	36.0	58	16.82	8.84	6.20	5.71	1	1	36	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	ΦRnt (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	11.34	0.9D + 1.0W 60°	120.41	9	4	0.75" A325

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	20.00	0.0046	-0.0007	0.0193	0.0193
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	50.00	0.0205	-0.0025	0.0496	0.0496
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	60.00	0.03	-0.0028	0.0579	0.058
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	90.00	0.0705	0.0027	0.0991	0.0991
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	100.00	0.0893	0.0031	0.1172	0.1172
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	110.00	0.1114	-0.0066	0.1351	0.1351
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	120.00	0.1364	-0.0073	0.1496	0.1496
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	130.00	0.1646	-0.0082	0.1728	0.1729
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	140.00	0.1967	-0.0090	0.1914	0.1914
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	150.00	0.2322	-0.0104	0.2259	0.2261
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	157.55	0.263	-0.0092	0.2426	0.2428
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	162.45	0.284	-0.0084	0.2530	0.2532
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	164.90	0.2949	-0.0081	0.2538	0.2538
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	170.00	0.318	-0.0079	0.3046	0.3047
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	173.47	0.334	-0.0078	0.2538	0.2539
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	186.53	0.3941	-0.0075	0.2658	0.2659
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	190.00	0.4101	-0.0075	0.2650	0.2651
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	20.00	0.0032	0.0007	0.0174	0.0174
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	50.00	0.0203	0.0024	0.0489	0.0489
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	60.00	0.0295	0.0027	0.0569	0.0569
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	90.00	0.0693	0.0046	0.0983	0.0984
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	100.00	0.0884	0.0054	0.1165	0.1166
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	110.00	0.1104	0.0061	0.1338	0.1338
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	120.00	0.1351	0.0067	0.1487	0.1488
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	130.00	0.1632	0.0075	0.1712	0.1712
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	140.00	0.1947	0.0082	0.1900	0.1901
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	150.00	0.2306	0.0094	0.2197	0.2199
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	157.55	0.2612	0.0100	0.2413	0.2415
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	162.45	0.2822	0.0103	0.2502	0.2504
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	164.90	0.293	0.0104	0.2600	0.26
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	170.00	0.3159	0.0103	0.3070	0.307
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	173.47	0.3319	0.0102	0.2516	0.2518
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	186.53	0.3918	0.0100	0.2638	0.264
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	190.00	0.4076	0.0099	0.2651	0.2651
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	20.00	0.0052	0.0007	0.0210	0.021
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	50.00	0.021	0.0025	0.0504	0.0505
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	60.00	0.0309	0.0027	0.0599	0.0599
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	90.00	0.0711	0.0047	0.1009	0.101
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	100.00	0.0904	0.0055	0.1198	0.12
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	110.00	0.1138	0.0062	0.1377	0.1377
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	120.00	0.1393	0.0068	0.1523	0.1524
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	130.00	0.1679	0.0076	0.1764	0.1764
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	140.00	0.2007	0.0083	0.1951	0.1951
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	150.00	0.2363	0.0095	0.2289	0.2291
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	157.55	0.2676	-0.0099	0.2466	0.2467
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	162.45	0.289	-0.0103	0.2558	0.256
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	164.90	0.3001	-0.0104	0.2657	0.2657
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	170.00	0.3236	-0.0102	0.3143	0.3143
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	173.47	0.3399	-0.0101	0.2572	0.2574
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	186.53	0.4011	-0.0099	0.2696	0.2698
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	190.00	0.4173	-0.0099	0.2705	0.2705
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	20.00	0.0046	-0.0007	0.0192	0.0192
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	50.00	0.0205	-0.0025	0.0495	0.0496
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	60.00	0.03	-0.0028	0.0578	0.0579
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	90.00	0.0699	0.0026	0.0990	0.099
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	100.00	0.0888	-0.0058	0.1175	0.1176
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	110.00	0.1112	-0.0066	0.1349	0.1349
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	120.00	0.1361	-0.0073	0.1494	0.1494
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	130.00	0.1642	-0.0082	0.1724	0.1724

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	140.00	0.1963	-0.0091	0.1913	0.1914
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	150.00	0.2317	-0.0105	0.2255	0.2257
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	157.55	0.2624	-0.0111	0.2422	0.2424
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	162.45	0.2834	-0.0115	0.2526	0.2529
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	164.90	0.2942	-0.0116	0.2532	0.2533
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	170.00	0.3173	-0.0115	0.3040	0.3041
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	173.47	0.3332	-0.0114	0.2533	0.2535
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	186.53	0.3934	-0.0112	0.2653	0.2655
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	190.00	0.4092	-0.0112	0.2645	0.2645
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	20.00	0.0032	0.0006	0.0174	0.0174
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	50.00	0.0203	0.0021	0.0490	0.049
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	60.00	0.0295	0.0023	0.0569	0.0569
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	90.00	0.0697	0.0000	0.0984	0.0984
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	100.00	0.0884	-0.0049	0.1163	0.1164
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	110.00	0.1103	0.0056	0.1336	0.1336
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	120.00	0.1349	0.0062	0.1484	0.1484
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	130.00	0.163	0.0070	0.1709	0.1709
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	140.00	0.1945	0.0077	0.1897	0.1899
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	150.00	0.2302	0.0089	0.2190	0.2191
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	157.55	0.2608	0.0086	0.2407	0.2409
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	162.45	0.2817	0.0085	0.2509	0.251
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	164.90	0.2924	0.0084	0.2487	0.2487
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	170.00	0.3153	0.0083	0.3056	0.3056
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	173.47	0.3312	0.0082	0.2511	0.2512
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	186.53	0.391	0.0080	0.2631	0.2632
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	190.00	0.4067	0.0080	0.2644	0.2644
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	20.00	0.0052	-0.0007	0.0210	0.021
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	50.00	0.021	-0.0025	0.0505	0.0506
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	60.00	0.0309	-0.0027	0.0600	0.06
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	90.00	0.0712	-0.0047	0.1011	0.1012
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	100.00	0.0914	-0.0055	0.1201	0.1202
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	110.00	0.1139	-0.0062	0.1380	0.138
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	120.00	0.1395	-0.0068	0.1525	0.1527
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	130.00	0.1681	-0.0076	0.1767	0.1767
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	140.00	0.201	-0.0083	0.1954	0.1954
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	150.00	0.2367	-0.0095	0.2293	0.2295
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	157.55	0.2681	0.0099	0.2470	0.2472
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	162.45	0.2895	0.0103	0.2561	0.2563
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	164.90	0.3006	0.0104	0.2660	0.2661
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	170.00	0.3241	0.0102	0.3147	0.3147
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	173.47	0.3404	0.0102	0.2576	0.2578
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	186.53	0.4018	0.0099	0.2701	0.2702
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	190.00	0.4179	0.0099	0.2709	0.2709
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	20.00	0.0046	-0.0008	0.0192	0.0192
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	50.00	0.0205	-0.0028	0.0495	0.0496
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	60.00	0.03	-0.0031	0.0579	0.0579
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	90.00	0.0695	-0.0053	0.0990	0.0992
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	100.00	0.0892	-0.0063	0.1180	0.1182
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	110.00	0.1113	-0.0070	0.1351	0.1352
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	120.00	0.1364	-0.0078	0.1499	0.1501
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	130.00	0.1645	-0.0086	0.1729	0.1729
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	140.00	0.1966	-0.0095	0.1919	0.1919
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	150.00	0.2323	-0.0109	0.2263	0.2266
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	157.55	0.2632	-0.0107	0.2432	0.2434
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	162.45	0.2843	-0.0105	0.2522	0.2525
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	164.90	0.2952	-0.0104	0.2648	0.2649
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	170.00	0.3183	-0.0103	0.3059	0.3059
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	173.47	0.3344	-0.0102	0.2542	0.2544
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	186.53	0.3948	-0.0101	0.2664	0.2666

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	190.00	0.4107	-0.0100	0.2656	0.2656
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	20.00	0.0032	-0.0007	0.0175	0.0175
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	50.00	0.0204	-0.0024	0.0489	0.049
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	60.00	0.0296	-0.0027	0.0570	0.057
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	90.00	0.0694	-0.0046	0.0984	0.0985
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	100.00	0.0882	-0.0054	0.1167	0.1168
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	110.00	0.1105	-0.0061	0.1341	0.1341
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	120.00	0.1353	-0.0067	0.1489	0.1491
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	130.00	0.1634	-0.0075	0.1714	0.1714
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	140.00	0.195	-0.0082	0.1903	0.1904
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	150.00	0.2309	-0.0094	0.2200	0.2202
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	157.55	0.2616	-0.0100	0.2417	0.2419
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	162.45	0.2826	-0.0103	0.2507	0.2508
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	164.90	0.2934	-0.0105	0.2605	0.2605
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	170.00	0.3164	-0.0104	0.3074	0.3074
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	173.47	0.3324	-0.0102	0.2520	0.2522
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	186.53	0.3924	-0.0100	0.2642	0.2644
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	190.00	0.4082	-0.0100	0.2655	0.2655
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	20.00	0.0052	0.0006	0.0211	0.0211
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	50.00	0.021	0.0022	0.0507	0.0507
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	60.00	0.0309	0.0024	0.0601	0.0601
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	90.00	0.0723	0.0000	0.1012	0.1012
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	100.00	0.0915	0.0051	0.1201	0.1202
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	110.00	0.114	0.0058	0.1380	0.138
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	120.00	0.1396	0.0064	0.1524	0.1525
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	130.00	0.1683	-0.0072	0.1769	0.1769
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	140.00	0.2012	0.0079	0.1952	0.1952
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	150.00	0.2368	0.0091	0.2291	0.2292
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	157.55	0.2681	-0.0089	0.2469	0.247
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	162.45	0.2896	0.0087	0.2573	0.2574
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	164.90	0.3006	0.0086	0.2552	0.2552
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	170.00	0.3241	0.0084	0.3138	0.3138
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	173.47	0.3404	0.0084	0.2575	0.2577
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	186.53	0.4017	0.0082	0.2698	0.27
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	190.00	0.4179	-0.0082	0.2706	0.2706
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	20.00	0.0017	-0.0002	0.0056	0.0056
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	50.00	0.0052	-0.0007	0.0130	0.013
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	60.00	0.0078	-0.0007	0.0159	0.0159
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	90.00	0.0189	0.0007	0.0277	0.0277
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	100.00	0.0242	0.0008	0.0334	0.0334
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	110.00	0.0305	-0.0018	0.0389	0.039
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	120.00	0.0378	-0.0021	0.0436	0.0436
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	130.00	0.0461	-0.0023	0.0518	0.0519
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	140.00	0.0559	-0.0026	0.0582	0.0582
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	150.00	0.0665	-0.0031	0.0704	0.0704
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	157.55	0.076	-0.0023	0.0755	0.0755
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	162.45	0.0826	-0.0019	0.0786	0.0786
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	164.90	0.086	-0.0017	0.0805	0.0806
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	170.00	0.0932	-0.0014	0.0963	0.0963
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	173.47	0.0982	-0.0012	0.0795	0.0795
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	186.53	0.117	-0.0008	0.0824	0.0824
0.9D - 1.0Ev + 1.0Eh 330° Seismic (Reduced DL)	190.00	0.122	-0.0008	0.0848	0.0848
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	20.00	0.0013	0.0001	0.0046	0.0046
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	50.00	0.0052	0.0006	0.0129	0.0129
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	60.00	0.0076	0.0006	0.0152	0.0153
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	90.00	0.0187	0.0012	0.0277	0.0277
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	100.00	0.024	0.0014	0.0334	0.0334
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	110.00	0.0303	0.0016	0.0388	0.0388
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	120.00	0.0376	0.0018	0.0436	0.0436

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	130.00	0.0458	0.0020	0.0511	0.0511
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	140.00	0.0554	0.0023	0.0580	0.0581
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	150.00	0.0665	0.0027	0.0699	0.0699
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	157.55	0.076	0.0020	0.0755	0.0755
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	162.45	0.0826	0.0017	0.0784	0.0785
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	164.90	0.086	0.0015	0.0806	0.0806
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	170.00	0.0932	0.0012	0.0975	0.0975
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	173.47	0.0982	0.0010	0.0792	0.0792
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	186.53	0.117	0.0007	0.0824	0.0824
0.9D - 1.0Ev + 1.0Eh 300° Seismic (Reduced DL)	190.00	0.122	0.0007	0.0848	0.0848
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	20.00	0.0018	0.0001	0.0060	0.006
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	50.00	0.0052	0.0006	0.0130	0.013
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	60.00	0.0079	0.0006	0.0161	0.0161
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	90.00	0.0185	0.0012	0.0277	0.0278
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	100.00	0.0238	0.0014	0.0335	0.0335
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	110.00	0.0306	0.0016	0.0390	0.039
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	120.00	0.0379	0.0018	0.0436	0.0436
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	130.00	0.0462	0.0020	0.0522	0.0522
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	140.00	0.0561	0.0023	0.0583	0.0583
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	150.00	0.0665	0.0027	0.0709	0.0709
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	157.55	0.076	0.0020	0.0755	0.0755
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	162.45	0.0826	0.0017	0.0785	0.0785
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	164.90	0.0859	0.0015	0.0807	0.0807
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	170.00	0.0932	0.0012	0.0975	0.0975
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	173.47	0.0982	0.0010	0.0791	0.0792
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	186.53	0.117	0.0007	0.0824	0.0824
0.9D - 1.0Ev + 1.0Eh 240° Seismic (Reduced DL)	190.00	0.122	0.0007	0.0847	0.0847
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	20.00	0.0017	-0.0002	0.0056	0.0056
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	50.00	0.0052	-0.0007	0.0130	0.013
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	60.00	0.0078	-0.0007	0.0159	0.0159
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	90.00	0.0186	0.0007	0.0278	0.0278
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	100.00	0.0239	-0.0016	0.0334	0.0334
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	110.00	0.0305	-0.0018	0.0389	0.039
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	120.00	0.0378	-0.0021	0.0436	0.0436
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	130.00	0.0461	-0.0023	0.0518	0.0519
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	140.00	0.0559	-0.0026	0.0582	0.0582
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	150.00	0.0665	-0.0031	0.0704	0.0704
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	157.55	0.076	-0.0024	0.0755	0.0755
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	162.45	0.0826	-0.0019	0.0786	0.0786
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	164.90	0.086	-0.0017	0.0805	0.0806
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	170.00	0.0932	-0.0014	0.0963	0.0963
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	173.47	0.0982	-0.0012	0.0795	0.0795
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	186.53	0.117	-0.0008	0.0824	0.0824
0.9D - 1.0Ev + 1.0Eh 210° Seismic (Reduced DL)	190.00	0.122	-0.0008	0.0848	0.0848
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	20.00	0.0013	0.0001	0.0046	0.0046
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	50.00	0.0052	0.0006	0.0129	0.0129
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	60.00	0.0076	0.0006	0.0152	0.0153
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	90.00	0.0186	0.0000	0.0278	0.0278
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	100.00	0.024	-0.0014	0.0334	0.0334
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	110.00	0.0303	0.0016	0.0388	0.0388
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	120.00	0.0376	0.0018	0.0436	0.0436
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	130.00	0.0458	0.0020	0.0511	0.0511
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	140.00	0.0554	0.0023	0.0580	0.0581
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	150.00	0.0665	0.0027	0.0699	0.0699
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	157.55	0.076	0.0020	0.0755	0.0755
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	162.45	0.0826	0.0017	0.0784	0.0785
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	164.90	0.086	0.0015	0.0806	0.0806
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	170.00	0.0932	0.0012	0.0975	0.0975
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	173.47	0.0982	0.0010	0.0792	0.0792

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	186.53	0.117	0.0007	0.0824	0.0824
0.9D - 1.0Ev + 1.0Eh 180° Seismic (Reduced DL)	190.00	0.122	0.0007	0.0848	0.0848
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	20.00	0.0018	0.0001	0.0060	0.006
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	50.00	0.0052	0.0006	0.0130	0.013
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	60.00	0.0079	0.0006	0.0161	0.0161
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	90.00	0.0185	-0.0012	0.0277	0.0278
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	100.00	0.0243	-0.0014	0.0335	0.0335
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	110.00	0.0306	0.0016	0.0390	0.039
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	120.00	0.0379	0.0018	0.0436	0.0436
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	130.00	0.0462	0.0020	0.0522	0.0522
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	140.00	0.0561	0.0023	0.0583	0.0583
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	150.00	0.0665	0.0027	0.0709	0.0709
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	157.55	0.076	0.0020	0.0755	0.0755
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	162.45	0.0826	0.0017	0.0785	0.0785
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	164.90	0.0859	0.0015	0.0807	0.0807
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	170.00	0.0932	0.0012	0.0975	0.0975
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	173.47	0.0982	0.0010	0.0791	0.0792
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	186.53	0.117	0.0007	0.0824	0.0824
0.9D - 1.0Ev + 1.0Eh 120° Seismic (Reduced DL)	190.00	0.122	0.0007	0.0847	0.0847
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	20.00	0.0017	-0.0002	0.0056	0.0056
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	50.00	0.0052	-0.0007	0.0130	0.013
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	60.00	0.0078	-0.0007	0.0159	0.0159
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	90.00	0.0185	-0.0013	0.0277	0.0277
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	100.00	0.0242	-0.0016	0.0334	0.0334
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	110.00	0.0305	-0.0018	0.0389	0.039
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	120.00	0.0378	-0.0021	0.0436	0.0436
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	130.00	0.0461	-0.0023	0.0518	0.0519
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	140.00	0.0559	-0.0026	0.0582	0.0582
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	150.00	0.0665	-0.0031	0.0704	0.0704
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	157.55	0.076	-0.0023	0.0755	0.0755
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	162.45	0.0826	-0.0019	0.0786	0.0786
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	164.90	0.086	-0.0017	0.0805	0.0806
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	170.00	0.0932	-0.0014	0.0963	0.0963
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	173.47	0.0982	-0.0012	0.0795	0.0795
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	186.53	0.117	-0.0008	0.0824	0.0824
0.9D - 1.0Ev + 1.0Eh 90° Seismic (Reduced DL)	190.00	0.122	-0.0008	0.0848	0.0848
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	20.00	0.0013	0.0001	0.0046	0.0046
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	50.00	0.0052	0.0006	0.0129	0.0129
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	60.00	0.0076	0.0006	0.0152	0.0153
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	90.00	0.0187	-0.0012	0.0277	0.0277
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	100.00	0.024	0.0014	0.0331	0.0332
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	110.00	0.0303	0.0016	0.0388	0.0388
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	120.00	0.0376	0.0018	0.0436	0.0436
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	130.00	0.0458	0.0020	0.0511	0.0511
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	140.00	0.0554	0.0023	0.0580	0.0581
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	150.00	0.0665	0.0027	0.0699	0.0699
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	157.55	0.076	0.0020	0.0755	0.0755
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	162.45	0.0826	0.0017	0.0784	0.0785
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	164.90	0.086	0.0015	0.0806	0.0806
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	170.00	0.0932	0.0012	0.0975	0.0975
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	173.47	0.0982	0.0010	0.0792	0.0792
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	186.53	0.117	0.0007	0.0824	0.0824
0.9D - 1.0Ev + 1.0Eh 60° Seismic (Reduced DL)	190.00	0.122	0.0007	0.0848	0.0848
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	20.00	0.0018	0.0001	0.0060	0.006
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	50.00	0.0052	0.0006	0.0130	0.013
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	60.00	0.0079	0.0006	0.0161	0.0161
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	90.00	0.019	0.0000	0.0277	0.0277
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	100.00	0.0243	0.0014	0.0335	0.0335
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	110.00	0.0306	0.0016	0.0390	0.039

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	120.00	0.0379	0.0018	0.0436	0.0436
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	130.00	0.0462	0.0020	0.0522	0.0522
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	140.00	0.0561	0.0023	0.0583	0.0583
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	150.00	0.0665	0.0027	0.0709	0.0709
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	157.55	0.076	0.0020	0.0755	0.0755
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	162.45	0.0826	0.0017	0.0785	0.0785
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	164.90	0.0859	0.0015	0.0807	0.0807
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	170.00	0.0932	0.0012	0.0975	0.0975
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	173.47	0.0982	0.0010	0.0791	0.0792
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	186.53	0.117	0.0007	0.0824	0.0824
0.9D - 1.0Ev + 1.0Eh Normal Seismic (Reduced DL)	190.00	0.122	0.0007	0.0847	0.0847
1.2D + 1.0Ev + 1.0Eh 330° Seismic	20.00	0.002	-0.0002	0.0061	0.0061
1.2D + 1.0Ev + 1.0Eh 330° Seismic	50.00	0.0052	-0.0007	0.0130	0.0131
1.2D + 1.0Ev + 1.0Eh 330° Seismic	60.00	0.0079	-0.0007	0.0161	0.0161
1.2D + 1.0Ev + 1.0Eh 330° Seismic	90.00	0.0191	0.0007	0.0278	0.0278
1.2D + 1.0Ev + 1.0Eh 330° Seismic	100.00	0.0244	0.0008	0.0336	0.0336
1.2D + 1.0Ev + 1.0Eh 330° Seismic	110.00	0.0307	-0.0018	0.0391	0.0392
1.2D + 1.0Ev + 1.0Eh 330° Seismic	120.00	0.038	-0.0021	0.0438	0.0438
1.2D + 1.0Ev + 1.0Eh 330° Seismic	130.00	0.0463	-0.0023	0.0523	0.0523
1.2D + 1.0Ev + 1.0Eh 330° Seismic	140.00	0.0562	-0.0027	0.0586	0.0586
1.2D + 1.0Ev + 1.0Eh 330° Seismic	150.00	0.0667	-0.0031	0.0722	0.0722
1.2D + 1.0Ev + 1.0Eh 330° Seismic	157.55	0.0763	-0.0024	0.0759	0.0759
1.2D + 1.0Ev + 1.0Eh 330° Seismic	162.45	0.0829	-0.0019	0.0789	0.0789
1.2D + 1.0Ev + 1.0Eh 330° Seismic	164.90	0.0863	-0.0017	0.0809	0.0809
1.2D + 1.0Ev + 1.0Eh 330° Seismic	170.00	0.0935	-0.0014	0.0967	0.0967
1.2D + 1.0Ev + 1.0Eh 330° Seismic	173.47	0.0986	-0.0012	0.0798	0.0798
1.2D + 1.0Ev + 1.0Eh 330° Seismic	186.53	0.1175	-0.0008	0.0828	0.0828
1.2D + 1.0Ev + 1.0Eh 330° Seismic	190.00	0.1225	-0.0008	0.0853	0.0853
1.2D + 1.0Ev + 1.0Eh 300° Seismic	20.00	0.0016	0.0001	0.0050	0.005
1.2D + 1.0Ev + 1.0Eh 300° Seismic	50.00	0.0052	0.0006	0.0129	0.0129
1.2D + 1.0Ev + 1.0Eh 300° Seismic	60.00	0.0077	0.0006	0.0154	0.0154
1.2D + 1.0Ev + 1.0Eh 300° Seismic	90.00	0.0188	0.0012	0.0278	0.0278
1.2D + 1.0Ev + 1.0Eh 300° Seismic	100.00	0.0241	0.0014	0.0336	0.0336
1.2D + 1.0Ev + 1.0Eh 300° Seismic	110.00	0.0305	0.0016	0.0389	0.039
1.2D + 1.0Ev + 1.0Eh 300° Seismic	120.00	0.0377	0.0018	0.0438	0.0438
1.2D + 1.0Ev + 1.0Eh 300° Seismic	130.00	0.046	0.0020	0.0514	0.0514
1.2D + 1.0Ev + 1.0Eh 300° Seismic	140.00	0.0557	0.0023	0.0583	0.0584
1.2D + 1.0Ev + 1.0Eh 300° Seismic	150.00	0.0667	0.0027	0.0719	0.0719
1.2D + 1.0Ev + 1.0Eh 300° Seismic	157.55	0.0763	0.0020	0.0758	0.0759
1.2D + 1.0Ev + 1.0Eh 300° Seismic	162.45	0.0829	0.0017	0.0788	0.0788
1.2D + 1.0Ev + 1.0Eh 300° Seismic	164.90	0.0863	0.0015	0.0809	0.0809
1.2D + 1.0Ev + 1.0Eh 300° Seismic	170.00	0.0935	0.0012	0.0979	0.0979
1.2D + 1.0Ev + 1.0Eh 300° Seismic	173.47	0.0986	0.0011	0.0795	0.0795
1.2D + 1.0Ev + 1.0Eh 300° Seismic	186.53	0.1175	0.0007	0.0828	0.0828
1.2D + 1.0Ev + 1.0Eh 300° Seismic	190.00	0.1225	0.0007	0.0853	0.0853
1.2D + 1.0Ev + 1.0Eh 240° Seismic	20.00	0.0021	0.0001	0.0065	0.0065
1.2D + 1.0Ev + 1.0Eh 240° Seismic	50.00	0.0052	0.0006	0.0130	0.013
1.2D + 1.0Ev + 1.0Eh 240° Seismic	60.00	0.008	0.0006	0.0164	0.0164
1.2D + 1.0Ev + 1.0Eh 240° Seismic	90.00	0.0185	0.0012	0.0278	0.0279
1.2D + 1.0Ev + 1.0Eh 240° Seismic	100.00	0.0239	0.0014	0.0336	0.0337
1.2D + 1.0Ev + 1.0Eh 240° Seismic	110.00	0.0308	0.0016	0.0392	0.0392
1.2D + 1.0Ev + 1.0Eh 240° Seismic	120.00	0.0382	0.0018	0.0437	0.0437
1.2D + 1.0Ev + 1.0Eh 240° Seismic	130.00	0.0465	0.0020	0.0527	0.0527
1.2D + 1.0Ev + 1.0Eh 240° Seismic	140.00	0.0565	0.0023	0.0587	0.0587
1.2D + 1.0Ev + 1.0Eh 240° Seismic	150.00	0.0667	0.0027	0.0721	0.0721
1.2D + 1.0Ev + 1.0Eh 240° Seismic	157.55	0.0763	0.0020	0.0759	0.0759
1.2D + 1.0Ev + 1.0Eh 240° Seismic	162.45	0.0829	0.0017	0.0788	0.0789
1.2D + 1.0Ev + 1.0Eh 240° Seismic	164.90	0.0863	0.0015	0.0811	0.0811
1.2D + 1.0Ev + 1.0Eh 240° Seismic	170.00	0.0935	0.0012	0.0979	0.0979

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0Ev + 1.0Eh 240° Seismic	173.47	0.0986	0.0011	0.0795	0.0795
1.2D + 1.0Ev + 1.0Eh 240° Seismic	186.53	0.1175	0.0007	0.0828	0.0828
1.2D + 1.0Ev + 1.0Eh 240° Seismic	190.00	0.1225	0.0007	0.0851	0.0851
1.2D + 1.0Ev + 1.0Eh 210° Seismic	20.00	0.002	-0.0002	0.0061	0.0061
1.2D + 1.0Ev + 1.0Eh 210° Seismic	50.00	0.0052	-0.0007	0.0130	0.0131
1.2D + 1.0Ev + 1.0Eh 210° Seismic	60.00	0.0079	-0.0007	0.0161	0.0161
1.2D + 1.0Ev + 1.0Eh 210° Seismic	90.00	0.0185	0.0007	0.0279	0.0279
1.2D + 1.0Ev + 1.0Eh 210° Seismic	100.00	0.0239	-0.0016	0.0336	0.0336
1.2D + 1.0Ev + 1.0Eh 210° Seismic	110.00	0.0307	-0.0018	0.0391	0.0392
1.2D + 1.0Ev + 1.0Eh 210° Seismic	120.00	0.038	-0.0021	0.0438	0.0438
1.2D + 1.0Ev + 1.0Eh 210° Seismic	130.00	0.0463	-0.0023	0.0523	0.0523
1.2D + 1.0Ev + 1.0Eh 210° Seismic	140.00	0.0562	-0.0027	0.0586	0.0586
1.2D + 1.0Ev + 1.0Eh 210° Seismic	150.00	0.0667	-0.0031	0.0722	0.0722
1.2D + 1.0Ev + 1.0Eh 210° Seismic	157.55	0.0763	-0.0024	0.0759	0.0759
1.2D + 1.0Ev + 1.0Eh 210° Seismic	162.45	0.0829	-0.0019	0.0789	0.0789
1.2D + 1.0Ev + 1.0Eh 210° Seismic	164.90	0.0863	-0.0017	0.0809	0.0809
1.2D + 1.0Ev + 1.0Eh 210° Seismic	170.00	0.0935	-0.0014	0.0967	0.0967
1.2D + 1.0Ev + 1.0Eh 210° Seismic	173.47	0.0986	-0.0012	0.0798	0.0798
1.2D + 1.0Ev + 1.0Eh 210° Seismic	186.53	0.1175	-0.0008	0.0828	0.0828
1.2D + 1.0Ev + 1.0Eh 210° Seismic	190.00	0.1225	-0.0008	0.0853	0.0853
1.2D + 1.0Ev + 1.0Eh 180° Seismic	20.00	0.0016	0.0001	0.0050	0.005
1.2D + 1.0Ev + 1.0Eh 180° Seismic	50.00	0.0052	0.0006	0.0129	0.0129
1.2D + 1.0Ev + 1.0Eh 180° Seismic	60.00	0.0077	0.0006	0.0154	0.0154
1.2D + 1.0Ev + 1.0Eh 180° Seismic	90.00	0.0186	0.0000	0.0279	0.0279
1.2D + 1.0Ev + 1.0Eh 180° Seismic	100.00	0.0241	-0.0014	0.0336	0.0336
1.2D + 1.0Ev + 1.0Eh 180° Seismic	110.00	0.0305	0.0016	0.0389	0.039
1.2D + 1.0Ev + 1.0Eh 180° Seismic	120.00	0.0377	0.0018	0.0438	0.0438
1.2D + 1.0Ev + 1.0Eh 180° Seismic	130.00	0.046	0.0020	0.0514	0.0514
1.2D + 1.0Ev + 1.0Eh 180° Seismic	140.00	0.0557	0.0023	0.0584	0.0584
1.2D + 1.0Ev + 1.0Eh 180° Seismic	150.00	0.0667	0.0027	0.0719	0.0719
1.2D + 1.0Ev + 1.0Eh 180° Seismic	157.55	0.0763	0.0020	0.0758	0.0759
1.2D + 1.0Ev + 1.0Eh 180° Seismic	162.45	0.0829	0.0017	0.0788	0.0788
1.2D + 1.0Ev + 1.0Eh 180° Seismic	164.90	0.0863	0.0015	0.0809	0.0809
1.2D + 1.0Ev + 1.0Eh 180° Seismic	170.00	0.0935	0.0012	0.0979	0.0979
1.2D + 1.0Ev + 1.0Eh 180° Seismic	173.47	0.0986	0.0011	0.0795	0.0795
1.2D + 1.0Ev + 1.0Eh 180° Seismic	186.53	0.1175	0.0007	0.0828	0.0828
1.2D + 1.0Ev + 1.0Eh 180° Seismic	190.00	0.1225	0.0007	0.0853	0.0853
1.2D + 1.0Ev + 1.0Eh 120° Seismic	20.00	0.0021	0.0001	0.0065	0.0065
1.2D + 1.0Ev + 1.0Eh 120° Seismic	50.00	0.0052	0.0006	0.0130	0.013
1.2D + 1.0Ev + 1.0Eh 120° Seismic	60.00	0.008	0.0006	0.0164	0.0164
1.2D + 1.0Ev + 1.0Eh 120° Seismic	90.00	0.0185	-0.0012	0.0278	0.0279
1.2D + 1.0Ev + 1.0Eh 120° Seismic	100.00	0.0245	-0.0014	0.0336	0.0337
1.2D + 1.0Ev + 1.0Eh 120° Seismic	110.00	0.0308	0.0016	0.0392	0.0392
1.2D + 1.0Ev + 1.0Eh 120° Seismic	120.00	0.0382	0.0018	0.0437	0.0437
1.2D + 1.0Ev + 1.0Eh 120° Seismic	130.00	0.0465	0.0020	0.0527	0.0527
1.2D + 1.0Ev + 1.0Eh 120° Seismic	140.00	0.0565	0.0023	0.0587	0.0587
1.2D + 1.0Ev + 1.0Eh 120° Seismic	150.00	0.0667	0.0027	0.0721	0.0721
1.2D + 1.0Ev + 1.0Eh 120° Seismic	157.55	0.0763	0.0020	0.0759	0.0759
1.2D + 1.0Ev + 1.0Eh 120° Seismic	162.45	0.0829	0.0017	0.0788	0.0789
1.2D + 1.0Ev + 1.0Eh 120° Seismic	164.90	0.0863	0.0015	0.0811	0.0811
1.2D + 1.0Ev + 1.0Eh 120° Seismic	170.00	0.0935	0.0012	0.0979	0.0979
1.2D + 1.0Ev + 1.0Eh 120° Seismic	173.47	0.0986	0.0011	0.0795	0.0795
1.2D + 1.0Ev + 1.0Eh 120° Seismic	186.53	0.1175	0.0007	0.0828	0.0828
1.2D + 1.0Ev + 1.0Eh 120° Seismic	190.00	0.1225	0.0007	0.0851	0.0851
1.2D + 1.0Ev + 1.0Eh 90° Seismic	20.00	0.002	-0.0002	0.0061	0.0061
1.2D + 1.0Ev + 1.0Eh 90° Seismic	50.00	0.0052	-0.0007	0.0130	0.0131
1.2D + 1.0Ev + 1.0Eh 90° Seismic	60.00	0.0079	-0.0007	0.0161	0.0161
1.2D + 1.0Ev + 1.0Eh 90° Seismic	90.00	0.0186	-0.0013	0.0278	0.0278
1.2D + 1.0Ev + 1.0Eh 90° Seismic	100.00	0.0244	-0.0016	0.0335	0.0335

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0Ev + 1.0Eh 90° Seismic	110.00	0.0307	-0.0018	0.0391	0.0392
1.2D + 1.0Ev + 1.0Eh 90° Seismic	120.00	0.038	-0.0021	0.0438	0.0438
1.2D + 1.0Ev + 1.0Eh 90° Seismic	130.00	0.0463	-0.0023	0.0523	0.0523
1.2D + 1.0Ev + 1.0Eh 90° Seismic	140.00	0.0562	-0.0027	0.0586	0.0586
1.2D + 1.0Ev + 1.0Eh 90° Seismic	150.00	0.0667	-0.0031	0.0722	0.0722
1.2D + 1.0Ev + 1.0Eh 90° Seismic	157.55	0.0763	-0.0024	0.0759	0.0759
1.2D + 1.0Ev + 1.0Eh 90° Seismic	162.45	0.0829	-0.0019	0.0789	0.0789
1.2D + 1.0Ev + 1.0Eh 90° Seismic	164.90	0.0863	-0.0017	0.0809	0.0809
1.2D + 1.0Ev + 1.0Eh 90° Seismic	170.00	0.0935	-0.0014	0.0967	0.0967
1.2D + 1.0Ev + 1.0Eh 90° Seismic	173.47	0.0986	-0.0012	0.0798	0.0798
1.2D + 1.0Ev + 1.0Eh 90° Seismic	186.53	0.1175	-0.0008	0.0828	0.0828
1.2D + 1.0Ev + 1.0Eh 90° Seismic	190.00	0.1225	-0.0008	0.0853	0.0853
1.2D + 1.0Ev + 1.0Eh 60° Seismic	20.00	0.0016	0.0001	0.0050	0.005
1.2D + 1.0Ev + 1.0Eh 60° Seismic	50.00	0.0052	0.0006	0.0129	0.0129
1.2D + 1.0Ev + 1.0Eh 60° Seismic	60.00	0.0077	0.0006	0.0154	0.0154
1.2D + 1.0Ev + 1.0Eh 60° Seismic	90.00	0.0188	-0.0012	0.0278	0.0278
1.2D + 1.0Ev + 1.0Eh 60° Seismic	100.00	0.0241	0.0014	0.0332	0.0332
1.2D + 1.0Ev + 1.0Eh 60° Seismic	110.00	0.0305	0.0016	0.0389	0.039
1.2D + 1.0Ev + 1.0Eh 60° Seismic	120.00	0.0377	0.0018	0.0438	0.0438
1.2D + 1.0Ev + 1.0Eh 60° Seismic	130.00	0.046	0.0020	0.0514	0.0514
1.2D + 1.0Ev + 1.0Eh 60° Seismic	140.00	0.0557	0.0023	0.0583	0.0584
1.2D + 1.0Ev + 1.0Eh 60° Seismic	150.00	0.0667	0.0027	0.0719	0.0719
1.2D + 1.0Ev + 1.0Eh 60° Seismic	157.55	0.0763	0.0020	0.0758	0.0759
1.2D + 1.0Ev + 1.0Eh 60° Seismic	162.45	0.0829	0.0017	0.0788	0.0788
1.2D + 1.0Ev + 1.0Eh 60° Seismic	164.90	0.0863	0.0015	0.0809	0.0809
1.2D + 1.0Ev + 1.0Eh 60° Seismic	170.00	0.0935	0.0012	0.0979	0.0979
1.2D + 1.0Ev + 1.0Eh 60° Seismic	173.47	0.0986	0.0011	0.0795	0.0795
1.2D + 1.0Ev + 1.0Eh 60° Seismic	186.53	0.1175	0.0007	0.0828	0.0828
1.2D + 1.0Ev + 1.0Eh 60° Seismic	190.00	0.1225	0.0007	0.0853	0.0853
1.2D + 1.0Ev + 1.0Eh Normal Seismic	20.00	0.0021	0.0001	0.0065	0.0065
1.2D + 1.0Ev + 1.0Eh Normal Seismic	50.00	0.0052	0.0006	0.0130	0.013
1.2D + 1.0Ev + 1.0Eh Normal Seismic	60.00	0.008	0.0006	0.0164	0.0164
1.2D + 1.0Ev + 1.0Eh Normal Seismic	90.00	0.0192	0.0000	0.0278	0.0278
1.2D + 1.0Ev + 1.0Eh Normal Seismic	100.00	0.0245	0.0014	0.0336	0.0337
1.2D + 1.0Ev + 1.0Eh Normal Seismic	110.00	0.0308	0.0016	0.0392	0.0392
1.2D + 1.0Ev + 1.0Eh Normal Seismic	120.00	0.0382	0.0018	0.0437	0.0437
1.2D + 1.0Ev + 1.0Eh Normal Seismic	130.00	0.0465	0.0020	0.0527	0.0527
1.2D + 1.0Ev + 1.0Eh Normal Seismic	140.00	0.0565	0.0023	0.0587	0.0587
1.2D + 1.0Ev + 1.0Eh Normal Seismic	150.00	0.0667	0.0027	0.0721	0.0721
1.2D + 1.0Ev + 1.0Eh Normal Seismic	157.55	0.0763	0.0020	0.0759	0.0759
1.2D + 1.0Ev + 1.0Eh Normal Seismic	162.45	0.0829	0.0017	0.0788	0.0789
1.2D + 1.0Ev + 1.0Eh Normal Seismic	164.90	0.0862	0.0015	0.0811	0.0811
1.2D + 1.0Ev + 1.0Eh Normal Seismic	170.00	0.0935	0.0012	0.0979	0.0979
1.2D + 1.0Ev + 1.0Eh Normal Seismic	173.47	0.0986	0.0011	0.0795	0.0795
1.2D + 1.0Ev + 1.0Eh Normal Seismic	186.53	0.1175	0.0007	0.0828	0.0828
1.2D + 1.0Ev + 1.0Eh Normal Seismic	190.00	0.1225	0.0007	0.0851	0.0851
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	20.00	0.0064	-0.0009	0.0260	0.026
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	50.00	0.0272	-0.0032	0.0639	0.0639
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	60.00	0.0386	-0.0035	0.0735	0.0735
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	90.00	0.087	0.0034	0.1225	0.1226
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	100.00	0.1117	0.0039	0.1443	0.1443
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	110.00	0.1387	-0.0082	0.1656	0.1657
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	120.00	0.169	-0.0090	0.1826	0.1826
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	130.00	0.2033	-0.0100	0.2099	0.21
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	140.00	0.2416	-0.0111	0.2315	0.2315
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	150.00	0.2853	-0.0126	0.2710	0.2713
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	157.55	0.322	-0.0113	0.2894	0.2896
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	162.45	0.3472	-0.0105	0.3008	0.301
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	164.90	0.36	-0.0102	0.3020	0.3021

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	170.00	0.3875	-0.0100	0.3579	0.358
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	173.47	0.4064	-0.0099	0.3014	0.3016
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	186.53	0.4777	-0.0098	0.3145	0.3147
1.2D + 1.0Di + 1.0Wi 330° 59 mph Wind with 0.21" Radial Ice	190.00	0.4966	-0.0098	0.3141	0.3142
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	20.00	0.007	0.0009	0.0276	0.0276
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	50.00	0.0273	0.0031	0.0635	0.0635
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	60.00	0.0387	0.0034	0.0706	0.0707
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	90.00	0.0862	0.0058	0.1217	0.1218
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	100.00	0.1113	0.0067	0.1435	0.1437
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	110.00	0.1382	0.0076	0.1642	0.1643
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	120.00	0.1684	0.0083	0.1817	0.1819
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	130.00	0.2025	0.0092	0.2079	0.2079
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	140.00	0.2405	0.0101	0.2300	0.2302
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	150.00	0.2837	0.0115	0.2635	0.2638
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	157.55	0.3203	0.0123	0.2881	0.2883
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	162.45	0.3454	0.0128	0.2979	0.2982
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	164.90	0.3582	0.0131	0.3084	0.3084
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	170.00	0.3855	0.0130	0.3607	0.3607
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	173.47	0.4043	0.0129	0.2992	0.2995
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	186.53	0.4753	0.0127	0.3125	0.3127
1.2D + 1.0Di + 1.0Wi 300° 59 mph Wind with 0.21" Radial Ice	190.00	0.4942	0.0127	0.3143	0.3143
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	20.00	0.0046	0.0009	0.0221	0.0221
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	50.00	0.0271	0.0031	0.0643	0.0643
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	60.00	0.0383	0.0034	0.0756	0.0756
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	90.00	0.0889	0.0059	0.1240	0.1241
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	100.00	0.1125	0.0068	0.1467	0.1469
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	110.00	0.1399	0.0077	0.1680	0.168
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	120.00	0.1708	0.0084	0.1849	0.1851
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	130.00	0.2055	0.0093	0.2132	0.2132
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	140.00	0.2452	0.0101	0.2347	0.2347
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	150.00	0.2887	0.0115	0.2740	0.2742
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	157.55	0.3259	-0.0121	0.2927	0.2929
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	162.45	0.3513	-0.0127	0.3029	0.3031
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	164.90	0.3643	-0.0129	0.3134	0.3134
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	170.00	0.3921	-0.0127	0.3673	0.3673
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	173.47	0.4113	-0.0127	0.3041	0.3044
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	186.53	0.4835	-0.0126	0.3177	0.3179
1.2D + 1.0Di + 1.0Wi 240° 59 mph Wind with 0.21" Radial Ice	190.00	0.5025	-0.0125	0.3187	0.3187
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	20.00	0.0064	-0.0009	0.0260	0.026
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	50.00	0.0272	-0.0032	0.0638	0.0638
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	60.00	0.0385	-0.0035	0.0733	0.0733
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	90.00	0.0883	0.0033	0.1223	0.1223
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	100.00	0.1114	-0.0073	0.1445	0.1447
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	110.00	0.1384	-0.0082	0.1653	0.1653
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	120.00	0.1686	-0.0091	0.1822	0.1822
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	130.00	0.2029	-0.0101	0.2092	0.2092
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	140.00	0.241	-0.0112	0.2311	0.2312
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	150.00	0.2845	-0.0127	0.2703	0.2706
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	157.55	0.3212	-0.0136	0.2886	0.2889
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	162.45	0.3462	-0.0142	0.3001	0.3004
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	164.90	0.3591	-0.0144	0.3012	0.3012
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	170.00	0.3864	-0.0143	0.3570	0.357
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	173.47	0.4053	-0.0143	0.3006	0.301
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	186.53	0.4764	-0.0142	0.3137	0.314
1.2D + 1.0Di + 1.0Wi 210° 59 mph Wind with 0.21" Radial Ice	190.00	0.4953	-0.0141	0.3133	0.3133
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	20.00	0.007	0.0008	0.0276	0.0276
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	50.00	0.0273	0.0027	0.0636	0.0636
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	60.00	0.0387	0.0030	0.0705	0.0706
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	90.00	0.0883	0.0000	0.1218	0.1218

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	100.00	0.1112	-0.0062	0.1432	0.1434
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	110.00	0.1381	0.0070	0.1639	0.164
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	120.00	0.1682	0.0077	0.1814	0.1814
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	130.00	0.2022	0.0086	0.2074	0.2074
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	140.00	0.2402	0.0095	0.2296	0.2298
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	150.00	0.2833	0.0108	0.2626	0.2629
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	157.55	0.3198	0.0107	0.2873	0.2875
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	162.45	0.3447	0.0106	0.2985	0.2987
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	164.90	0.3575	0.0105	0.2969	0.2969
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	170.00	0.3847	0.0105	0.3591	0.3591
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	173.47	0.4035	0.0104	0.2985	0.2987
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	186.53	0.4743	0.0102	0.3116	0.3118
1.2D + 1.0Di + 1.0Wi 180° 59 mph Wind with 0.21" Radial Ice	190.00	0.4931	0.0102	0.3134	0.3134
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	20.00	0.0046	-0.0009	0.0221	0.0221
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	50.00	0.0271	-0.0031	0.0644	0.0644
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	60.00	0.0384	-0.0034	0.0757	0.0757
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	90.00	0.089	-0.0059	0.1242	0.1244
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	100.00	0.1127	-0.0069	0.1470	0.1472
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	110.00	0.1402	-0.0077	0.1683	0.1683
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	120.00	0.171	-0.0084	0.1852	0.1854
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	130.00	0.2058	-0.0093	0.2135	0.2135
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	140.00	0.2456	-0.0101	0.2351	0.2351
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	150.00	0.2892	-0.0115	0.2745	0.2748
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	157.55	0.3265	0.0122	0.2933	0.2935
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	162.45	0.3519	0.0127	0.3034	0.3036
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	164.90	0.3651	0.0129	0.3140	0.314
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	170.00	0.3928	0.0128	0.3679	0.3679
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	173.47	0.4121	0.0128	0.3047	0.305
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	186.53	0.4844	0.0126	0.3183	0.3185
1.2D + 1.0Di + 1.0Wi 120° 59 mph Wind with 0.21" Radial Ice	190.00	0.5035	0.0126	0.3193	0.3194
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	20.00	0.0064	-0.0010	0.0260	0.026
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	50.00	0.0272	-0.0036	0.0637	0.0637
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	60.00	0.0385	-0.0039	0.0734	0.0734
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	90.00	0.0869	-0.0067	0.1224	0.1225
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	100.00	0.1103	-0.0078	0.1451	0.1454
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	110.00	0.1387	-0.0088	0.1656	0.1657
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	120.00	0.169	-0.0096	0.1828	0.1831
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	130.00	0.2033	-0.0106	0.2099	0.21
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	140.00	0.2416	-0.0116	0.2319	0.232
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	150.00	0.2853	-0.0132	0.2714	0.2718
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	157.55	0.3221	-0.0131	0.2899	0.2902
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	162.45	0.3473	-0.0130	0.3001	0.3003
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	164.90	0.3602	-0.0130	0.3133	0.3133
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	170.00	0.3877	-0.0129	0.3592	0.3593
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	173.47	0.4066	-0.0128	0.3019	0.3021
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	186.53	0.4781	-0.0127	0.3151	0.3154
1.2D + 1.0Di + 1.0Wi 90° 59 mph Wind with 0.21" Radial Ice	190.00	0.497	-0.0127	0.3147	0.3148
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	20.00	0.007	-0.0009	0.0276	0.0276
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	50.00	0.0273	-0.0031	0.0636	0.0636
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	60.00	0.0387	-0.0034	0.0706	0.0707
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	90.00	0.0863	-0.0058	0.1219	0.122
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	100.00	0.1096	-0.0068	0.1438	0.144
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	110.00	0.1384	-0.0076	0.1645	0.1646
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	120.00	0.1686	-0.0083	0.1820	0.1822
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	130.00	0.2028	-0.0092	0.2083	0.2083
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	140.00	0.241	-0.0101	0.2304	0.2306
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	150.00	0.2842	-0.0115	0.2640	0.2642
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	157.55	0.3209	-0.0124	0.2887	0.2889
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	162.45	0.346	-0.0129	0.2986	0.2988

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	164.90	0.3588	-0.0131	0.3091	0.3091
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	170.00	0.3862	-0.0131	0.3613	0.3613
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	173.47	0.405	-0.0129	0.2998	0.3001
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	186.53	0.4762	-0.0128	0.3131	0.3133
1.2D + 1.0Di + 1.0Wi 60° 59 mph Wind with 0.21" Radial Ice	190.00	0.4951	-0.0128	0.3149	0.3149
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	20.00	0.0046	0.0008	0.0221	0.0221
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	50.00	0.0271	0.0028	0.0645	0.0646
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	60.00	0.0384	0.0030	0.0758	0.0758
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	90.00	0.0887	0.0000	0.1245	0.1245
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	100.00	0.1127	0.0063	0.1471	0.1473
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	110.00	0.1402	-0.0072	0.1684	0.1684
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	120.00	0.1712	0.0079	0.1852	0.1854
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	130.00	0.2061	0.0088	0.2139	0.2139
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	140.00	0.2459	0.0097	0.2351	0.2351
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	150.00	0.2894	0.0111	0.2745	0.2747
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	157.55	0.3267	0.0109	0.2934	0.2936
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	162.45	0.3522	0.0108	0.3048	0.305
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	164.90	0.3653	0.0107	0.3032	0.3032
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	170.00	0.3931	0.0106	0.3671	0.3671
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	173.47	0.4123	0.0106	0.3049	0.305
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	186.53	0.4846	-0.0105	0.3182	0.3184
1.2D + 1.0Di + 1.0Wi Normal 59 mph Wind with 0.21" Radial Ice	190.00	0.5037	0.0104	0.3193	0.3193
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	20.00	0.0122	-0.0022	0.0570	0.057
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	50.00	0.0641	-0.0079	0.1551	0.1553
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	60.00	0.0934	-0.0086	0.1801	0.1802
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	90.00	0.2201	0.0086	0.3112	0.3113
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	100.00	0.2793	0.0101	0.3674	0.3675
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	110.00	0.3488	-0.0204	0.4241	0.4242
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	120.00	0.4273	-0.0226	0.4708	0.4709
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	130.00	0.5161	-0.0253	0.5429	0.5431
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	140.00	0.6165	-0.0280	0.6021	0.6023
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	150.00	0.7298	-0.0322	0.7125	0.7132
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	157.55	0.827	0.0268	0.7659	0.7662
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	162.45	0.8936	0.0324	0.7989	0.7991
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	164.90	0.9277	0.0347	0.8012	0.802
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	170.00	1.0007	0.0353	0.9627	0.9633
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	173.47	1.0512	0.0349	0.8012	0.8014
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	186.53	1.2413	0.0349	0.8394	0.8395
0.9D + 1.0W 330° 107 mph Wind with No Ice (Reduced DL)	190.00	1.2917	0.0350	0.8364	0.837
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	20.00	0.0121	0.0021	0.0578	0.0578
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	50.00	0.0636	0.0077	0.1532	0.1534
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	60.00	0.0929	0.0085	0.1799	0.1799
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	90.00	0.217	0.0146	0.3089	0.3092
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	100.00	0.2779	0.0172	0.3668	0.3672
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	110.00	0.3469	0.0194	0.4219	0.4219
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	120.00	0.425	0.0214	0.4684	0.4689
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	130.00	0.5133	0.0239	0.5411	0.5411
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	140.00	0.6135	0.0263	0.5993	0.5993
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	150.00	0.7254	0.0302	0.6993	0.7
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	157.55	0.8222	0.0391	0.7627	0.7637
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	162.45	0.8884	0.0447	0.7907	0.792
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	164.90	0.9225	0.0470	0.8219	0.8221
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	170.00	0.9951	0.0476	0.9706	0.9708
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	173.47	1.0455	0.0472	0.7952	0.7966
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	186.53	1.2349	0.0472	0.8339	0.8352
0.9D + 1.0W 300° 107 mph Wind with No Ice (Reduced DL)	190.00	1.2849	0.0473	0.8373	0.8374
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	20.00	0.0142	0.0022	0.0623	0.0623
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	50.00	0.0656	0.0078	0.1578	0.158
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	60.00	0.096	0.0085	0.1863	0.1863

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	90.00	0.2231	0.0146	0.3170	0.3174
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	100.00	0.2838	0.0171	0.3765	0.3769
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	110.00	0.3565	0.0192	0.4329	0.4329
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	120.00	0.4366	0.0212	0.4796	0.48
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	130.00	0.5269	0.0235	0.5547	0.5547
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	140.00	0.6298	-0.0261	0.6138	0.6138
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	150.00	0.7436	-0.0303	0.7170	0.7176
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	157.55	0.8425	-0.0390	0.7789	0.7797
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	162.45	0.9101	-0.0448	0.8080	0.8093
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	164.90	0.945	-0.0469	0.8397	0.8399
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	170.00	1.0192	-0.0468	0.9943	0.9944
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	173.47	1.0707	-0.0473	0.8127	0.8141
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	186.53	1.2643	-0.0472	0.8521	0.8534
0.9D + 1.0W 240° 107 mph Wind with No Ice (Reduced DL)	190.00	1.3153	-0.0470	0.8555	0.8557
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	20.00	0.0122	-0.0022	0.0570	0.057
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	50.00	0.064	-0.0080	0.1552	0.1554
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	60.00	0.0933	-0.0087	0.1800	0.18
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	90.00	0.2198	0.0082	0.3111	0.3112
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	100.00	0.279	-0.0185	0.3697	0.3702
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	110.00	0.3485	-0.0211	0.4242	0.4243
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	120.00	0.427	-0.0234	0.4705	0.4707
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	130.00	0.5157	-0.0263	0.5424	0.5426
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	140.00	0.6161	-0.0292	0.6026	0.6027
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	150.00	0.7293	-0.0338	0.7123	0.7131
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	157.55	0.8264	-0.0425	0.7656	0.7668
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	162.45	0.8929	-0.0481	0.7987	0.8001
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	164.90	0.927	-0.0503	0.8006	0.8006
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	170.00	0.9999	-0.0506	0.9621	0.9621
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	173.47	1.0504	-0.0506	0.8008	0.8024
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	186.53	1.2404	-0.0506	0.8389	0.8404
0.9D + 1.0W 210° 107 mph Wind with No Ice (Reduced DL)	190.00	1.2908	-0.0506	0.8359	0.8359
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	20.00	0.0121	0.0018	0.0578	0.0578
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	50.00	0.0636	0.0066	0.1536	0.1538
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	60.00	0.0929	0.0072	0.1800	0.18
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	90.00	0.219	0.0000	0.3094	0.3094
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	100.00	0.2778	-0.0154	0.3665	0.3668
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	110.00	0.3468	0.0176	0.4214	0.4214
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	120.00	0.4248	0.0196	0.4678	0.4678
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	130.00	0.5132	0.0220	0.5408	0.5408
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	140.00	0.6132	0.0244	0.5982	0.5987
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	150.00	0.725	0.0280	0.6976	0.6982
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	157.55	0.8215	0.0282	0.7613	0.7618
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	162.45	0.8877	0.0281	0.7936	0.7941
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	164.90	0.9216	0.0281	0.7865	0.7865
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	170.00	0.9941	0.0284	0.9667	0.9667
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	173.47	1.0443	0.0280	0.7940	0.7945
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	186.53	1.2331	0.0280	0.8322	0.8327
0.9D + 1.0W 180° 107 mph Wind with No Ice (Reduced DL)	190.00	1.2833	0.0281	0.8356	0.8356
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	20.00	0.0142	-0.0022	0.0623	0.0623
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	50.00	0.0656	-0.0078	0.1579	0.1581
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	60.00	0.0961	-0.0085	0.1864	0.1864
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	90.00	0.2232	-0.0146	0.3172	0.3176
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	100.00	0.286	-0.0171	0.3767	0.3771
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	110.00	0.3567	-0.0192	0.4330	0.433
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	120.00	0.4368	-0.0212	0.4798	0.4803
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	130.00	0.5271	0.0236	0.5549	0.5549
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	140.00	0.6301	0.0262	0.6141	0.6141
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	150.00	0.744	0.0304	0.7175	0.7181
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	157.55	0.843	0.0391	0.7794	0.78

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	162.45	0.9106	0.0449	0.8081	0.8094
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	164.90	0.9456	0.0470	0.8400	0.8402
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	170.00	1.0198	0.0469	0.9947	0.9948
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	173.47	1.0714	0.0473	0.8131	0.8145
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	186.53	1.265	0.0473	0.8525	0.8538
0.9D + 1.0W 120° 107 mph Wind with No Ice (Reduced DL)	190.00	1.316	0.0471	0.8558	0.8561
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	20.00	0.0122	-0.0024	0.0569	0.0569
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	50.00	0.064	-0.0089	0.1549	0.1552
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	60.00	0.0932	-0.0098	0.1798	0.1799
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	90.00	0.2177	-0.0168	0.3108	0.3112
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	100.00	0.2791	-0.0197	0.3706	0.3711
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	110.00	0.3485	-0.0222	0.4241	0.4242
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	120.00	0.427	-0.0245	0.4714	0.472
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	130.00	0.5157	-0.0272	0.5430	0.5432
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	140.00	0.6163	-0.0299	0.6031	0.6033
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	150.00	0.73	-0.0344	0.7139	0.7147
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	157.55	0.8275	-0.0344	0.7673	0.7681
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	162.45	0.894	-0.0344	0.7961	0.7969
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	164.90	0.9284	-0.0344	0.8361	0.8363
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	170.00	1.0015	-0.0343	0.9665	0.9667
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	173.47	1.0523	-0.0343	0.8022	0.803
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	186.53	1.2429	-0.0343	0.8410	0.8417
0.9D + 1.0W 90° 107 mph Wind with No Ice (Reduced DL)	190.00	1.2929	-0.0343	0.8379	0.8381
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	20.00	0.0121	-0.0021	0.0578	0.0578
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	50.00	0.0637	-0.0077	0.1532	0.1534
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	60.00	0.0929	-0.0085	0.1800	0.18
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	90.00	0.217	-0.0146	0.3090	0.3093
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	100.00	0.2761	-0.0172	0.3670	0.3674
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	110.00	0.3471	-0.0194	0.4222	0.4222
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	120.00	0.4252	-0.0214	0.4686	0.4691
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	130.00	0.5135	-0.0239	0.5414	0.5414
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	140.00	0.6138	-0.0263	0.5996	0.5996
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	150.00	0.7257	-0.0303	0.6995	0.7001
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	157.55	0.8225	-0.0392	0.7629	0.7639
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	162.45	0.8888	-0.0448	0.7914	0.7924
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	164.90	0.9228	-0.0471	0.8224	0.8225
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	170.00	0.9955	-0.0477	0.9709	0.9711
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	173.47	1.0458	-0.0473	0.7955	0.7969
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	186.53	1.2353	-0.0472	0.8343	0.8356
0.9D + 1.0W 60° 107 mph Wind with No Ice (Reduced DL)	190.00	1.2855	-0.0474	0.8376	0.8378
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	20.00	0.0142	0.0019	0.0624	0.0624
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	50.00	0.0656	0.0069	0.1584	0.1585
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	60.00	0.0961	0.0074	0.1865	0.1865
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	90.00	0.2258	0.0000	0.3176	0.3176
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	100.00	0.286	0.0159	0.3765	0.3768
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	110.00	0.3567	0.0181	0.4328	0.4328
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	120.00	0.4368	-0.0201	0.4794	0.4794
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	130.00	0.5272	0.0225	0.5550	0.555
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	140.00	0.6301	0.0250	0.6129	0.6129
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	150.00	0.7437	-0.0290	0.7162	0.7168
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	157.55	0.8426	-0.0288	0.7785	0.779
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	162.45	0.9102	-0.0288	0.8114	0.8119
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	164.90	0.945	-0.0287	0.8050	0.805
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	170.00	1.0191	-0.0284	0.9911	0.9911
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	173.47	1.0706	-0.0288	0.8124	0.8129
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	186.53	1.2639	-0.0288	0.8512	0.8517
0.9D + 1.0W Normal 107 mph Wind with No Ice (Reduced DL)	190.00	1.3149	-0.0286	0.8546	0.8546
1.2D + 1.0W 330° 107 mph Wind with No Ice	20.00	0.0125	-0.0022	0.0575	0.0575
1.2D + 1.0W 330° 107 mph Wind with No Ice	50.00	0.0642	-0.0079	0.1554	0.1556

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0W 330° 107 mph Wind with No Ice	60.00	0.0936	-0.0086	0.1807	0.1807
1.2D + 1.0W 330° 107 mph Wind with No Ice	90.00	0.2207	0.0086	0.3120	0.3121
1.2D + 1.0W 330° 107 mph Wind with No Ice	100.00	0.28	0.0101	0.3685	0.3687
1.2D + 1.0W 330° 107 mph Wind with No Ice	110.00	0.3497	-0.0205	0.4254	0.4256
1.2D + 1.0W 330° 107 mph Wind with No Ice	120.00	0.4284	-0.0227	0.4722	0.4724
1.2D + 1.0W 330° 107 mph Wind with No Ice	130.00	0.5176	-0.0254	0.5449	0.5451
1.2D + 1.0W 330° 107 mph Wind with No Ice	140.00	0.6184	-0.0281	0.6040	0.6042
1.2D + 1.0W 330° 107 mph Wind with No Ice	150.00	0.7319	-0.0323	0.7152	0.7159
1.2D + 1.0W 330° 107 mph Wind with No Ice	157.55	0.8295	0.0268	0.7689	0.7693
1.2D + 1.0W 330° 107 mph Wind with No Ice	162.45	0.8963	0.0325	0.8021	0.8023
1.2D + 1.0W 330° 107 mph Wind with No Ice	164.90	0.9306	0.0348	0.8045	0.8053
1.2D + 1.0W 330° 107 mph Wind with No Ice	170.00	1.0039	0.0354	0.9669	0.9676
1.2D + 1.0W 330° 107 mph Wind with No Ice	173.47	1.0546	0.0350	0.8044	0.8045
1.2D + 1.0W 330° 107 mph Wind with No Ice	186.53	1.2454	0.0350	0.8428	0.8429
1.2D + 1.0W 330° 107 mph Wind with No Ice	190.00	1.296	0.0351	0.8398	0.8405
1.2D + 1.0W 300° 107 mph Wind with No Ice	20.00	0.0119	0.0021	0.0574	0.0574
1.2D + 1.0W 300° 107 mph Wind with No Ice	50.00	0.0637	0.0077	0.1535	0.1537
1.2D + 1.0W 300° 107 mph Wind with No Ice	60.00	0.093	0.0085	0.1801	0.1801
1.2D + 1.0W 300° 107 mph Wind with No Ice	90.00	0.2175	0.0146	0.3097	0.31
1.2D + 1.0W 300° 107 mph Wind with No Ice	100.00	0.2784	0.0172	0.3678	0.3682
1.2D + 1.0W 300° 107 mph Wind with No Ice	110.00	0.3477	0.0194	0.4230	0.423
1.2D + 1.0W 300° 107 mph Wind with No Ice	120.00	0.426	0.0214	0.4698	0.4703
1.2D + 1.0W 300° 107 mph Wind with No Ice	130.00	0.5146	0.0240	0.5427	0.5427
1.2D + 1.0W 300° 107 mph Wind with No Ice	140.00	0.6151	0.0263	0.6012	0.6012
1.2D + 1.0W 300° 107 mph Wind with No Ice	150.00	0.7275	0.0303	0.7012	0.7019
1.2D + 1.0W 300° 107 mph Wind with No Ice	157.55	0.8246	0.0393	0.7656	0.7666
1.2D + 1.0W 300° 107 mph Wind with No Ice	162.45	0.8911	0.0449	0.7938	0.7951
1.2D + 1.0W 300° 107 mph Wind with No Ice	164.90	0.9253	0.0472	0.8251	0.8253
1.2D + 1.0W 300° 107 mph Wind with No Ice	170.00	0.9982	0.0478	0.9748	0.975
1.2D + 1.0W 300° 107 mph Wind with No Ice	173.47	1.0489	0.0474	0.7983	0.7996
1.2D + 1.0W 300° 107 mph Wind with No Ice	186.53	1.239	0.0473	0.8372	0.8386
1.2D + 1.0W 300° 107 mph Wind with No Ice	190.00	1.2892	0.0475	0.8407	0.8409
1.2D + 1.0W 240° 107 mph Wind with No Ice	20.00	0.0145	0.0022	0.0629	0.0629
1.2D + 1.0W 240° 107 mph Wind with No Ice	50.00	0.0657	0.0078	0.1581	0.1583
1.2D + 1.0W 240° 107 mph Wind with No Ice	60.00	0.0963	0.0086	0.1869	0.1869
1.2D + 1.0W 240° 107 mph Wind with No Ice	90.00	0.2235	0.0147	0.3178	0.3182
1.2D + 1.0W 240° 107 mph Wind with No Ice	100.00	0.2844	0.0172	0.3775	0.3779
1.2D + 1.0W 240° 107 mph Wind with No Ice	110.00	0.3574	0.0193	0.4342	0.4342
1.2D + 1.0W 240° 107 mph Wind with No Ice	120.00	0.4378	0.0212	0.4810	0.4814
1.2D + 1.0W 240° 107 mph Wind with No Ice	130.00	0.5282	-0.0236	0.5566	0.5566
1.2D + 1.0W 240° 107 mph Wind with No Ice	140.00	0.6316	-0.0262	0.6160	0.616
1.2D + 1.0W 240° 107 mph Wind with No Ice	150.00	0.7456	-0.0304	0.7203	0.7209
1.2D + 1.0W 240° 107 mph Wind with No Ice	157.55	0.8448	-0.0391	0.7818	0.7826
1.2D + 1.0W 240° 107 mph Wind with No Ice	162.45	0.9127	-0.0449	0.8111	0.8124
1.2D + 1.0W 240° 107 mph Wind with No Ice	164.90	0.9478	-0.0471	0.8429	0.8431
1.2D + 1.0W 240° 107 mph Wind with No Ice	170.00	1.0223	-0.0470	0.9985	0.9987
1.2D + 1.0W 240° 107 mph Wind with No Ice	173.47	1.074	-0.0474	0.8158	0.8172
1.2D + 1.0W 240° 107 mph Wind with No Ice	186.53	1.2683	-0.0474	0.8555	0.8567
1.2D + 1.0W 240° 107 mph Wind with No Ice	190.00	1.3195	-0.0472	0.8587	0.8589
1.2D + 1.0W 210° 107 mph Wind with No Ice	20.00	0.0125	-0.0022	0.0575	0.0575
1.2D + 1.0W 210° 107 mph Wind with No Ice	50.00	0.0641	-0.0080	0.1555	0.1557
1.2D + 1.0W 210° 107 mph Wind with No Ice	60.00	0.0935	-0.0088	0.1805	0.1806
1.2D + 1.0W 210° 107 mph Wind with No Ice	90.00	0.2202	0.0082	0.3119	0.312
1.2D + 1.0W 210° 107 mph Wind with No Ice	100.00	0.2796	-0.0186	0.3707	0.3712
1.2D + 1.0W 210° 107 mph Wind with No Ice	110.00	0.3494	-0.0211	0.4254	0.4256
1.2D + 1.0W 210° 107 mph Wind with No Ice	120.00	0.4281	-0.0234	0.4719	0.4721
1.2D + 1.0W 210° 107 mph Wind with No Ice	130.00	0.5169	-0.0264	0.5443	0.5444
1.2D + 1.0W 210° 107 mph Wind with No Ice	140.00	0.6179	-0.0293	0.6047	0.6049
1.2D + 1.0W 210° 107 mph Wind with No Ice	150.00	0.7313	-0.0339	0.7149	0.7157

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0W 210° 107 mph Wind with No Ice	157.55	0.8287	-0.0426	0.7684	0.7696
1.2D + 1.0W 210° 107 mph Wind with No Ice	162.45	0.8955	-0.0483	0.8017	0.8032
1.2D + 1.0W 210° 107 mph Wind with No Ice	164.90	0.9297	-0.0505	0.8037	0.8037
1.2D + 1.0W 210° 107 mph Wind with No Ice	170.00	1.0029	-0.0508	0.9662	0.9662
1.2D + 1.0W 210° 107 mph Wind with No Ice	173.47	1.0536	-0.0508	0.8038	0.8054
1.2D + 1.0W 210° 107 mph Wind with No Ice	186.53	1.2443	-0.0507	0.8422	0.8437
1.2D + 1.0W 210° 107 mph Wind with No Ice	190.00	1.2949	-0.0507	0.8392	0.8392
1.2D + 1.0W 180° 107 mph Wind with No Ice	20.00	0.0119	0.0018	0.0575	0.0575
1.2D + 1.0W 180° 107 mph Wind with No Ice	50.00	0.0638	0.0067	0.1539	0.1541
1.2D + 1.0W 180° 107 mph Wind with No Ice	60.00	0.093	0.0072	0.1801	0.1801
1.2D + 1.0W 180° 107 mph Wind with No Ice	90.00	0.2194	0.0000	0.3102	0.3102
1.2D + 1.0W 180° 107 mph Wind with No Ice	100.00	0.2784	-0.0155	0.3674	0.3677
1.2D + 1.0W 180° 107 mph Wind with No Ice	110.00	0.3476	0.0177	0.4225	0.4225
1.2D + 1.0W 180° 107 mph Wind with No Ice	120.00	0.4257	0.0196	0.4691	0.4691
1.2D + 1.0W 180° 107 mph Wind with No Ice	130.00	0.5144	0.0221	0.5423	0.5423
1.2D + 1.0W 180° 107 mph Wind with No Ice	140.00	0.6146	0.0245	0.6003	0.6008
1.2D + 1.0W 180° 107 mph Wind with No Ice	150.00	0.727	0.0281	0.6995	0.7
1.2D + 1.0W 180° 107 mph Wind with No Ice	157.55	0.8238	0.0283	0.7642	0.7647
1.2D + 1.0W 180° 107 mph Wind with No Ice	162.45	0.8903	0.0282	0.7966	0.7971
1.2D + 1.0W 180° 107 mph Wind with No Ice	164.90	0.9243	0.0282	0.7897	0.7897
1.2D + 1.0W 180° 107 mph Wind with No Ice	170.00	0.9971	0.0285	0.9708	0.9708
1.2D + 1.0W 180° 107 mph Wind with No Ice	173.47	1.0475	0.0281	0.7970	0.7975
1.2D + 1.0W 180° 107 mph Wind with No Ice	186.53	1.2371	0.0281	0.8354	0.8359
1.2D + 1.0W 180° 107 mph Wind with No Ice	190.00	1.2875	0.0282	0.8389	0.8389
1.2D + 1.0W 120° 107 mph Wind with No Ice	20.00	0.0145	-0.0022	0.0629	0.0629
1.2D + 1.0W 120° 107 mph Wind with No Ice	50.00	0.0657	-0.0078	0.1583	0.1585
1.2D + 1.0W 120° 107 mph Wind with No Ice	60.00	0.0963	-0.0086	0.1870	0.187
1.2D + 1.0W 120° 107 mph Wind with No Ice	90.00	0.2237	-0.0147	0.3181	0.3184
1.2D + 1.0W 120° 107 mph Wind with No Ice	100.00	0.2867	-0.0172	0.3779	0.3783
1.2D + 1.0W 120° 107 mph Wind with No Ice	110.00	0.3576	-0.0193	0.4344	0.4344
1.2D + 1.0W 120° 107 mph Wind with No Ice	120.00	0.438	-0.0212	0.4813	0.4818
1.2D + 1.0W 120° 107 mph Wind with No Ice	130.00	0.5286	0.0236	0.5570	0.557
1.2D + 1.0W 120° 107 mph Wind with No Ice	140.00	0.632	0.0263	0.6164	0.6164
1.2D + 1.0W 120° 107 mph Wind with No Ice	150.00	0.7462	0.0305	0.7209	0.7215
1.2D + 1.0W 120° 107 mph Wind with No Ice	157.55	0.8455	0.0392	0.7824	0.783
1.2D + 1.0W 120° 107 mph Wind with No Ice	162.45	0.9134	0.0450	0.8113	0.8126
1.2D + 1.0W 120° 107 mph Wind with No Ice	164.90	0.9485	0.0472	0.8433	0.8435
1.2D + 1.0W 120° 107 mph Wind with No Ice	170.00	1.023	0.0471	0.9990	0.9992
1.2D + 1.0W 120° 107 mph Wind with No Ice	173.47	1.0748	0.0475	0.8163	0.8177
1.2D + 1.0W 120° 107 mph Wind with No Ice	186.53	1.2692	0.0475	0.8559	0.8572
1.2D + 1.0W 120° 107 mph Wind with No Ice	190.00	1.3204	0.0473	0.8592	0.8594
1.2D + 1.0W 90° 107 mph Wind with No Ice	20.00	0.0125	-0.0024	0.0574	0.0574
1.2D + 1.0W 90° 107 mph Wind with No Ice	50.00	0.0641	-0.0089	0.1553	0.1555
1.2D + 1.0W 90° 107 mph Wind with No Ice	60.00	0.0934	-0.0098	0.1804	0.1805
1.2D + 1.0W 90° 107 mph Wind with No Ice	90.00	0.2182	-0.0168	0.3116	0.3121
1.2D + 1.0W 90° 107 mph Wind with No Ice	100.00	0.2798	-0.0197	0.3716	0.3721
1.2D + 1.0W 90° 107 mph Wind with No Ice	110.00	0.3494	-0.0222	0.4254	0.4256
1.2D + 1.0W 90° 107 mph Wind with No Ice	120.00	0.4282	-0.0245	0.4729	0.4735
1.2D + 1.0W 90° 107 mph Wind with No Ice	130.00	0.5172	-0.0273	0.5450	0.5452
1.2D + 1.0W 90° 107 mph Wind with No Ice	140.00	0.6182	-0.0300	0.6054	0.6056
1.2D + 1.0W 90° 107 mph Wind with No Ice	150.00	0.7322	-0.0345	0.7166	0.7174
1.2D + 1.0W 90° 107 mph Wind with No Ice	157.55	0.83	-0.0345	0.7704	0.7712
1.2D + 1.0W 90° 107 mph Wind with No Ice	162.45	0.8968	-0.0345	0.7994	0.8001
1.2D + 1.0W 90° 107 mph Wind with No Ice	164.90	0.9314	-0.0345	0.8394	0.8396
1.2D + 1.0W 90° 107 mph Wind with No Ice	170.00	1.0047	-0.0345	0.9708	0.971
1.2D + 1.0W 90° 107 mph Wind with No Ice	173.47	1.0557	-0.0345	0.8054	0.8062
1.2D + 1.0W 90° 107 mph Wind with No Ice	186.53	1.2471	-0.0344	0.8444	0.8451
1.2D + 1.0W 90° 107 mph Wind with No Ice	190.00	1.2973	-0.0344	0.8414	0.8416
1.2D + 1.0W 60° 107 mph Wind with No Ice	20.00	0.0119	-0.0021	0.0575	0.0575

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0W 60° 107 mph Wind with No Ice	50.00	0.0638	-0.0077	0.1535	0.1537
1.2D + 1.0W 60° 107 mph Wind with No Ice	60.00	0.0931	-0.0085	0.1802	0.1802
1.2D + 1.0W 60° 107 mph Wind with No Ice	90.00	0.2175	-0.0147	0.3098	0.3102
1.2D + 1.0W 60° 107 mph Wind with No Ice	100.00	0.2768	-0.0172	0.3680	0.3684
1.2D + 1.0W 60° 107 mph Wind with No Ice	110.00	0.3479	-0.0194	0.4234	0.4234
1.2D + 1.0W 60° 107 mph Wind with No Ice	120.00	0.4262	-0.0215	0.4701	0.4706
1.2D + 1.0W 60° 107 mph Wind with No Ice	130.00	0.5149	-0.0240	0.5431	0.5431
1.2D + 1.0W 60° 107 mph Wind with No Ice	140.00	0.6154	-0.0264	0.6015	0.6015
1.2D + 1.0W 60° 107 mph Wind with No Ice	150.00	0.7279	-0.0304	0.7015	0.7021
1.2D + 1.0W 60° 107 mph Wind with No Ice	157.55	0.825	-0.0393	0.7660	0.767
1.2D + 1.0W 60° 107 mph Wind with No Ice	162.45	0.8916	-0.0450	0.7946	0.7957
1.2D + 1.0W 60° 107 mph Wind with No Ice	164.90	0.9258	-0.0473	0.8257	0.8259
1.2D + 1.0W 60° 107 mph Wind with No Ice	170.00	0.9988	-0.0478	0.9752	0.9754
1.2D + 1.0W 60° 107 mph Wind with No Ice	173.47	1.0493	-0.0475	0.7988	0.8001
1.2D + 1.0W 60° 107 mph Wind with No Ice	186.53	1.2395	-0.0474	0.8377	0.839
1.2D + 1.0W 60° 107 mph Wind with No Ice	190.00	1.2899	-0.0476	0.8412	0.8413
1.2D + 1.0W Normal 107 mph Wind with No Ice	20.00	0.0145	0.0019	0.0629	0.0629
1.2D + 1.0W Normal 107 mph Wind with No Ice	50.00	0.0658	0.0069	0.1587	0.1589
1.2D + 1.0W Normal 107 mph Wind with No Ice	60.00	0.0963	0.0074	0.1871	0.1871
1.2D + 1.0W Normal 107 mph Wind with No Ice	90.00	0.2263	0.0000	0.3185	0.3185
1.2D + 1.0W Normal 107 mph Wind with No Ice	100.00	0.2868	0.0160	0.3777	0.378
1.2D + 1.0W Normal 107 mph Wind with No Ice	110.00	0.3577	-0.0182	0.4342	0.4342
1.2D + 1.0W Normal 107 mph Wind with No Ice	120.00	0.4381	-0.0202	0.4809	0.4809
1.2D + 1.0W Normal 107 mph Wind with No Ice	130.00	0.5287	-0.0226	0.5570	0.557
1.2D + 1.0W Normal 107 mph Wind with No Ice	140.00	0.632	-0.0251	0.6153	0.6153
1.2D + 1.0W Normal 107 mph Wind with No Ice	150.00	0.7459	-0.0291	0.7196	0.7202
1.2D + 1.0W Normal 107 mph Wind with No Ice	157.55	0.8452	-0.0289	0.7816	0.7821
1.2D + 1.0W Normal 107 mph Wind with No Ice	162.45	0.913	-0.0289	0.8147	0.8152
1.2D + 1.0W Normal 107 mph Wind with No Ice	164.90	0.948	-0.0288	0.8084	0.8084
1.2D + 1.0W Normal 107 mph Wind with No Ice	170.00	1.0224	-0.0285	0.9956	0.9956
1.2D + 1.0W Normal 107 mph Wind with No Ice	173.47	1.0741	-0.0289	0.8156	0.8161
1.2D + 1.0W Normal 107 mph Wind with No Ice	186.53	1.2682	-0.0289	0.8547	0.8552
1.2D + 1.0W Normal 107 mph Wind with No Ice	190.00	1.3194	-0.0287	0.8580	0.858

DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	FX* (kip)	FY* (kip)	FZ* (kip)
	11.55	0.00	0	1	0.01	240.13	-23.26
1.2D + 1.0W Normal	11.55	0.00	120	1a	7.72	-86.17	-5.46
	11.55	0.00	240	1b	-7.74	-86.25	-5.44
	11.55	0.00	0	1	-0.84	127.89	-11.94
1.2D + 1.0W 60°	11.55	0.00	120	1a	-10.73	127.83	5.28
	11.55	0.00	240	1b	-16.83	-188.00	-9.75
	11.55	0.00	0	1	-0.99	22.63	-1.46
1.2D + 1.0W 90°	11.55	0.00	120	1a	-17.37	206.38	9.51
	11.55	0.00	240	1b	-14.79	-161.31	-8.05
	11.55	0.00	0	1	-0.90	-86.14	9.42
1.2D + 1.0W 120°	11.55	0.00	120	1a	-20.12	240.07	11.66
	11.55	0.00	240	1b	-8.57	-86.23	-4.00
	11.55	0.00	0	1	-0.01	-187.92	19.45
1.2D + 1.0W 180°	11.55	0.00	120	1a	-9.92	127.85	6.69
	11.55	0.00	240	1b	9.94	127.77	6.66
	11.55	0.00	0	1	0.47	-161.22	16.83
1.2D + 1.0W 210°	11.55	0.00	120	1a	-0.80	22.61	1.55
	11.55	0.00	240	1b	16.89	206.32	10.33
	11.55	0.00	0	1	0.89	-86.14	9.42
1.2D + 1.0W 240°	11.55	0.00	120	1a	8.57	-86.15	-3.99
	11.55	0.00	240	1b	20.13	240.00	11.65
	11.55	0.00	0	1	0.86	127.89	-11.94
1.2D + 1.0W 300°	11.55	0.00	120	1a	16.82	-187.93	-9.75
	11.55	0.00	240	1b	10.72	127.75	5.29
	11.55	0.00	0	1	0.52	206.45	-19.80
1.2D + 1.0W 330°	11.55	0.00	120	1a	14.33	-161.24	-8.84
	11.55	0.00	240	1b	1.72	22.50	-0.07
	11.55	0.00	0	1	0.01	234.10	-22.88
0.9D + 1.0W Normal	11.55	0.00	120	1a	8.05	-91.63	-5.65
	11.55	0.00	240	1b	-8.06	-91.69	-5.63
	11.55	0.00	0	1	-0.85	122.05	-11.56
0.9D + 1.0W 60°	11.55	0.00	120	1a	-10.40	121.99	5.09
	11.55	0.00	240	1b	-17.15	-193.26	-9.93
	11.55	0.00	0	1	-0.99	16.98	-1.08
0.9D + 1.0W 90°	11.55	0.00	120	1a	-17.04	200.42	9.31
	11.55	0.00	240	1b	-15.11	-166.61	-8.23
	11.55	0.00	0	1	-0.90	-91.60	9.79
0.9D + 1.0W 120°	11.55	0.00	120	1a	-19.79	234.05	11.47
	11.55	0.00	240	1b	-8.89	-91.66	-4.18
	11.55	0.00	0	1	-0.01	-193.20	19.82
0.9D + 1.0W 180°	11.55	0.00	120	1a	-9.59	122.02	6.50
	11.55	0.00	240	1b	9.60	121.96	6.48
	11.55	0.00	0	1	0.47	-166.55	17.20
0.9D + 1.0W 210°	11.55	0.00	120	1a	-0.47	16.96	1.36
	11.55	0.00	240	1b	16.56	200.37	10.14
	11.55	0.00	0	1	0.89	-91.60	9.79
0.9D + 1.0W 240°	11.55	0.00	120	1a	8.90	-91.61	-4.17
	11.55	0.00	240	1b	19.80	233.99	11.46
	11.55	0.00	0	1	0.86	122.05	-11.56
0.9D + 1.0W 300°	11.55	0.00	120	1a	17.15	-193.20	-9.94
	11.55	0.00	240	1b	10.40	121.94	5.10
	11.55	0.00	0	1	0.52	200.47	-19.42
0.9D + 1.0W 330°	11.55	0.00	120	1a	14.65	-166.57	-9.02
	11.55	0.00	240	1b	1.40	16.87	-0.26
	11.55	0.00	0	1	0.00	112.54	-8.14
1.2D + 1.0Di + 1.0Wi Normal	11.55	0.00	120	1a	4.39	-17.97	-3.03
	11.55	0.00	240	1b	-4.40	-18.06	-3.03
	11.55	0.00	0	1	-0.42	68.02	-3.53
1.2D + 1.0Di + 1.0Wi 60°	11.55	0.00	120	1a	-3.25	67.96	1.41

*(-) Uplift and (+) Down

DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	FX* (kip)	FY* (kip)	FZ* (kip)
	11.55	0.00	240	1b	-8.27	-59.47	-4.78
	11.55	0.00	0	1	-0.49	25.57	0.84
1.2D + 1.0Di + 1.0Wi 90°	11.55	0.00	120	1a	-5.98	99.48	3.19
	11.55	0.00	240	1b	-7.42	-48.54	-4.02
	11.55	0.00	0	1	-0.44	-17.92	5.32
1.2D + 1.0Di + 1.0Wi 120°	11.55	0.00	120	1a	-7.04	112.48	4.08
	11.55	0.00	240	1b	-4.82	-18.05	-2.30
	11.55	0.00	0	1	0.00	-59.34	9.55
1.2D + 1.0Di + 1.0Wi 180°	11.55	0.00	120	1a	-2.84	67.97	2.13
	11.55	0.00	240	1b	2.85	67.88	2.12
	11.55	0.00	0	1	0.24	-48.41	8.44
1.2D + 1.0Di + 1.0Wi 210°	11.55	0.00	120	1a	0.96	25.52	0.00
	11.55	0.00	240	1b	5.74	99.40	3.60
	11.55	0.00	0	1	0.44	-17.92	5.32
1.2D + 1.0Di + 1.0Wi 240°	11.55	0.00	120	1a	4.82	-17.96	-2.29
	11.55	0.00	240	1b	7.04	112.39	4.07
	11.55	0.00	0	1	0.43	68.02	-3.53
1.2D + 1.0Di + 1.0Wi 300°	11.55	0.00	120	1a	8.27	-59.38	-4.79
	11.55	0.00	240	1b	3.25	67.87	1.41
	11.55	0.00	0	1	0.25	99.54	-6.77
1.2D + 1.0Di + 1.0Wi 330°	11.55	0.00	120	1a	7.18	-48.46	-4.43
	11.55	0.00	240	1b	-0.49	25.43	-0.83
	11.55	0.00	0	1	0.00	38.64	-3.00
1.2D + 1.0Ev + 1.0Eh Normal	11.55	0.00	120	1a	-0.69	12.85	0.42
	11.55	0.00	240	1b	0.69	12.85	0.42
	11.55	0.00	0	1	0.02	30.04	-2.27
1.2D + 1.0Ev + 1.0Eh 60°	11.55	0.00	120	1a	-1.96	30.04	1.15
	11.55	0.00	240	1b	0.07	4.25	0.04
	11.55	0.00	0	1	0.02	21.45	-1.54
1.2D + 1.0Ev + 1.0Eh 90°	11.55	0.00	120	1a	-2.42	36.34	1.41
	11.55	0.00	240	1b	0.25	6.56	0.13
	11.55	0.00	0	1	0.02	12.85	-0.81
1.2D + 1.0Ev + 1.0Eh 120°	11.55	0.00	120	1a	-2.60	38.64	1.50
	11.55	0.00	240	1b	0.71	12.85	0.39
	11.55	0.00	0	1	0.00	4.25	-0.08
1.2D + 1.0Ev + 1.0Eh 180°	11.55	0.00	120	1a	-1.97	30.04	1.12
	11.55	0.00	240	1b	1.97	30.04	1.12
	11.55	0.00	0	1	-0.01	6.55	-0.28
1.2D + 1.0Ev + 1.0Eh 210°	11.55	0.00	120	1a	-1.34	21.45	0.75
	11.55	0.00	240	1b	2.43	36.34	1.39
	11.55	0.00	0	1	-0.02	12.85	-0.81
1.2D + 1.0Ev + 1.0Eh 240°	11.55	0.00	120	1a	-0.71	12.85	0.39
	11.55	0.00	240	1b	2.60	38.64	1.50
	11.55	0.00	0	1	-0.02	30.04	-2.27
1.2D + 1.0Ev + 1.0Eh 300°	11.55	0.00	120	1a	-0.07	4.25	0.04
	11.55	0.00	240	1b	1.96	30.04	1.15
	11.55	0.00	0	1	-0.01	36.34	-2.80
1.2D + 1.0Ev + 1.0Eh 330°	11.55	0.00	120	1a	-0.24	6.56	0.15
	11.55	0.00	240	1b	1.32	21.45	0.79
	11.55	0.00	0	1	0.00	32.33	-2.55
0.9D - 1.0Ev + 1.0Eh Normal	11.55	0.00	120	1a	-0.30	6.59	0.20
	11.55	0.00	240	1b	0.30	6.59	0.20
	11.55	0.00	0	1	0.02	23.75	-1.82
0.9D - 1.0Ev + 1.0Eh 60°	11.55	0.00	120	1a	-1.57	23.75	0.92
	11.55	0.00	240	1b	-0.32	-1.99	-0.18
	11.55	0.00	0	1	0.02	15.17	-1.09
0.9D - 1.0Ev + 1.0Eh 90°	11.55	0.00	120	1a	-2.03	30.03	1.18
	11.55	0.00	240	1b	-0.14	0.31	-0.09
0.9D - 1.0Ev + 1.0Eh 120°	11.55	0.00	0	1	0.02	6.59	-0.36

*(-) Uplift and (+) Down

DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	FX* (kip)	FY* (kip)	FZ* (kip)
	11.55	0.00	120	1a	-2.21	32.33	1.27
	11.55	0.00	240	1b	0.32	6.59	0.17
	11.55	0.00	0	1	0.00	-1.99	0.37
0.9D - 1.0Ev + 1.0Eh 180°	11.55	0.00	120	1a	-1.58	23.75	0.89
	11.55	0.00	240	1b	1.58	23.75	0.89
	11.55	0.00	0	1	-0.01	0.31	0.17
0.9D - 1.0Ev + 1.0Eh 210°	11.55	0.00	120	1a	-0.95	15.17	0.53
	11.55	0.00	240	1b	2.04	30.03	1.17
	11.55	0.00	0	1	-0.02	6.59	-0.36
0.9D - 1.0Ev + 1.0Eh 240°	11.55	0.00	120	1a	-0.32	6.59	0.17
	11.55	0.00	240	1b	2.21	32.33	1.27
	11.55	0.00	0	1	-0.02	23.75	-1.82
0.9D - 1.0Ev + 1.0Eh 300°	11.55	0.00	120	1a	0.32	-1.99	-0.18
	11.55	0.00	240	1b	1.57	23.75	0.92
	11.55	0.00	0	1	-0.01	30.03	-2.35
0.9D - 1.0Ev + 1.0Eh 330°	11.55	0.00	120	1a	0.15	0.31	-0.08
	11.55	0.00	240	1b	0.93	15.17	0.56
	11.55	0.00	0	1	0.00	88.31	-8.27
1.0D + 1.0W Service Normal	11.55	0.00	120	1a	1.80	-15.91	-1.38
	11.55	0.00	240	1b	-1.80	-15.98	-1.38
	11.55	0.00	0	1	-0.28	52.48	-4.63
1.0D + 1.0W Service 60°	11.55	0.00	120	1a	-4.14	52.44	2.08
	11.55	0.00	240	1b	-4.75	-48.50	-2.75
	11.55	0.00	0	1	-0.34	18.85	-1.26
1.0D + 1.0W Service 90°	11.55	0.00	120	1a	-6.27	77.54	3.45
	11.55	0.00	240	1b	-4.10	-39.96	-2.19
	11.55	0.00	0	1	-0.31	-15.88	2.25
1.0D + 1.0W Service 120°	11.55	0.00	120	1a	-7.15	88.27	4.14
	11.55	0.00	240	1b	-2.09	-15.97	-0.88
	11.55	0.00	0	1	0.00	-48.41	5.49
1.0D + 1.0W Service 180°	11.55	0.00	120	1a	-3.87	52.45	2.56
	11.55	0.00	240	1b	3.87	52.39	2.55
	11.55	0.00	0	1	0.16	-39.88	4.64
1.0D + 1.0W Service 210°	11.55	0.00	120	1a	-0.93	18.82	0.91
	11.55	0.00	240	1b	6.11	77.48	3.72
	11.55	0.00	0	1	0.31	-15.88	2.25
1.0D + 1.0W Service 240°	11.55	0.00	120	1a	2.09	-15.90	-0.87
	11.55	0.00	240	1b	7.15	88.21	4.14
	11.55	0.00	0	1	0.29	52.48	-4.63
1.0D + 1.0W Service 300°	11.55	0.00	120	1a	4.75	-48.44	-2.75
	11.55	0.00	240	1b	4.14	52.38	2.09
	11.55	0.00	0	1	0.17	77.58	-7.16
1.0D + 1.0W Service 330°	11.55	0.00	120	1a	3.94	-39.90	-2.47
	11.55	0.00	240	1b	1.24	18.75	0.35
	11.55	0.00	0	1	0.00	47.46	-3.74
1.2D + 1.0Ev + 1.5Eh Normal	11.55	0.00	120	1a	-0.37	8.44	0.24
	11.55	0.00	240	1b	0.37	8.44	0.24
	11.55	0.00	0	1	0.03	34.45	-2.64
1.2D + 1.0Ev + 1.5Eh 60°	11.55	0.00	120	1a	-2.27	34.45	1.34
	11.55	0.00	240	1b	-0.57	-4.57	-0.33
	11.55	0.00	0	1	0.03	21.45	-1.54
1.2D + 1.0Ev + 1.5Eh 90°	11.55	0.00	120	1a	-2.98	43.97	1.74
	11.55	0.00	240	1b	-0.31	-1.08	-0.20
	11.55	0.00	0	1	0.03	8.44	-0.44
1.2D + 1.0Ev + 1.5Eh 120°	11.55	0.00	120	1a	-3.24	47.46	1.87
	11.55	0.00	240	1b	0.39	8.44	0.20
	11.55	0.00	0	1	0.00	-4.57	0.66
1.2D + 1.0Ev + 1.5Eh 180°	11.55	0.00	120	1a	-2.30	34.45	1.30
	11.55	0.00	240	1b	2.30	34.45	1.30

*(-) Uplift and (+) Down

DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	FX* (kip)	FY* (kip)	FZ* (kip)
					(-) Uplift and (+) Down		
	11.55	0.00	0	1	-0.02	-1.08	0.37
1.2D + 1.0Ev + 1.5Eh 210°	11.55	0.00	120	1a	-1.35	21.45	0.74
	11.55	0.00	240	1b	2.99	43.97	1.71
	11.55	0.00	0	1	-0.03	8.44	-0.44
1.2D + 1.0Ev + 1.5Eh 240°	11.55	0.00	120	1a	-0.39	8.44	0.20
	11.55	0.00	240	1b	3.24	47.46	1.87
	11.55	0.00	0	1	-0.03	34.45	-2.64
1.2D + 1.0Ev + 1.5Eh 300°	11.55	0.00	120	1a	0.57	-4.57	-0.33
	11.55	0.00	240	1b	2.27	34.45	1.34
	11.55	0.00	0	1	-0.02	43.97	-3.45
1.2D + 1.0Ev + 1.5Eh 330°	11.55	0.00	120	1a	0.33	-1.08	-0.17
	11.55	0.00	240	1b	1.32	21.45	0.80
	11.55	0.00	0	1	0.00	41.13	-3.29
0.9D - 1.0Ev + 1.5Eh Normal	11.55	0.00	120	1a	0.02	2.19	0.02
	11.55	0.00	240	1b	-0.02	2.19	0.02
	11.55	0.00	0	1	0.03	28.15	-2.19
0.9D - 1.0Ev + 1.5Eh 60°	11.55	0.00	120	1a	-1.88	28.15	1.12
	11.55	0.00	240	1b	-0.96	-10.79	-0.56
	11.55	0.00	0	1	0.03	15.17	-1.09
0.9D - 1.0Ev + 1.5Eh 90°	11.55	0.00	120	1a	-2.59	37.65	1.51
	11.55	0.00	240	1b	-0.70	-7.31	-0.42
	11.55	0.00	0	1	0.03	2.19	0.01
0.9D - 1.0Ev + 1.5Eh 120°	11.55	0.00	120	1a	-2.85	41.13	1.65
	11.55	0.00	240	1b	0.00	2.19	-0.03
	11.55	0.00	0	1	0.00	-10.79	1.11
0.9D - 1.0Ev + 1.5Eh 180°	11.55	0.00	120	1a	-1.91	28.15	1.07
	11.55	0.00	240	1b	1.91	28.15	1.07
	11.55	0.00	0	1	-0.02	-7.31	0.82
0.9D - 1.0Ev + 1.5Eh 210°	11.55	0.00	120	1a	-0.96	15.17	0.52
	11.55	0.00	240	1b	2.60	37.65	1.49
	11.55	0.00	0	1	-0.03	2.19	0.01
0.9D - 1.0Ev + 1.5Eh 240°	11.55	0.00	120	1a	0.00	2.19	-0.03
	11.55	0.00	240	1b	2.85	41.13	1.65
	11.55	0.00	0	1	-0.03	28.15	-2.19
0.9D - 1.0Ev + 1.5Eh 300°	11.55	0.00	120	1a	0.96	-10.79	-0.56
	11.55	0.00	240	1b	1.88	28.15	1.12
	11.55	0.00	0	1	-0.01	37.65	-3.00
0.9D - 1.0Ev + 1.5Eh 330°	11.55	0.00	120	1a	0.72	-7.31	-0.40
	11.55	0.00	240	1b	0.93	15.17	0.57

MAXIMUM REACTIONS SUMMARY

	Individual	Individual w/ Overstrength	Global (DL+WL+IL)		Global (DL+WL)	
Max Uplift:	193.26	193.26	Moment Ice:	1507.44 (kip-ft)	Moment:	3768.34 (kip-ft)
Max Down:	240.13	240.13	Total Down Ice:	76.51 (kip)	Total Down:	67.71 (kip)
Max Shear:	23.26	23.26	Total Shear Ice:	14.2 (kip)	Total Shear:	34.17 (kip)

1.2D + 1.0W Normal