

December 11, 2014

Melanie A. Bachman
Acting Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Facility Modification
260 Beckley Road, Berlin, Connecticut**

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains fifteen (15) antennas at the 116-foot level of the existing 162-foot tower at 260 Beckley Road in Berlin (the “Property”). The tower is owned by American Tower Corporation. The Council approved Cellco’s shared use of this tower in 2002. Cellco now intends to modify its facility by replacing three (3) of its existing antennas with three (3) model LNX-6514DS-VTM, 700 MHZ antennas, at the same level on the tower. Included in Attachment 1 are specifications for Cellco’s replacement antennas.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Denise M. McNair, Town Manager for the Town of Berlin. A copy of this letter is also being sent to Elaine and John Matulis, the owners of the Property.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco’s replacement antennas will be installed on its existing antenna platform at the 116-foot level.

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Robinson+Cole

Melanie A. Bachman
December 11, 2014
Page 2

2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The operation of the replacement antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative General Power Density table for Cellco's modified facility is included in Attachment 2.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. The tower and its foundation can support Cellco's proposed modifications. (See Structural Analysis Report included in Attachment 3).

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,



Kenneth C. Baldwin

Enclosures

Copy to:

Denise M. McNair, Berlin Town Manager
Elaine and John Matulis
Sandy M. Carter

ATTACHMENT 1

Product Specifications

COMMSCOPE®

LNX-6514DS-VTM

Andrew® Antenna, 698–896 MHz, 65° horizontal beamwidth, RET compatible

POWERED BY



Electrical Specifications

Frequency Band, MHz	698–806	806–896
Gain, dBi	15.7	16.3
Beamwidth, Horizontal, degrees	65	65
Beamwidth, Horizontal Tolerance, degrees	±3	±3
Beamwidth, Vertical, degrees	12.5	11.2
Beam Tilt, degrees	0–10	0–10
USLS, typical, dB	17	18
Front-to-Back Ratio at 180°, dB	32	30
CPR at Boresight, dB	20	20
CPR at Sector, dB	10	10
Isolation, dB	30	30
VSWR Return Loss, dB	1.4 15.6	1.4 15.6
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153
Input Power per Port, maximum, watts	400	400
Polarization	±45°	±45°

Mechanical Specifications

Color Radome Material	Light gray Fiberglass, UV resistant
Connector Interface Location Quantity	7-16 DIN Female Bottom 2
Wind Loading, maximum	617.7 N @ 150 km/h 138.9 lbf @ 150 km/h
Wind Speed, maximum	241.0 km/h 149.8 mph
Antenna Dimensions, L x W x D	1847.0 mm x 301.0 mm x 181.0 mm 72.7 in x 11.9 in x 7.1 in
Net Weight	17.6 kg 38.8 lb
Model with factory installed AISG 2.0 RET LNX-6514DS-A1M	



ATTACHMENT 2

Site Name: Berlin 2 Tower Height: 162'		General		Power		Density							
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	CALC. POWER DENS	FREQ.	MAX. PERMISS. EXP.	FRACTION MPE	Total					
*AT&T UMTS	2	565	152	0.0176	880	0.5867	3.00%						
*AT&T UMTS	2	875	152	0.0272	1900	1.0000	2.72%						
*AT&T GSM	1	283	152	0.0044	880	0.5867	0.75%						
*AT&T GSM	4	525	152	0.0327	1900	1.0000	3.27%						
*AT&T LTE	1	1313	152	0.0204	734	0.4893	4.18%						
*MetroPCS CDMA	3	727	142	0.0389	2135	1.0000	3.89%						
*MetroPCS LTE	1	1200	142	0.0214	2130	1.0000	2.14%						
*Berlin FD	1	25.12	94.5	0.0010	953.55	0.6357	0.16%						
*T-Mobile GSM	8	171	162	0.0187	1945	1.0000	1.87%						
*T-Mobile UMTS	2	683	162	0.0187	2100	1.0000	1.87%						
*Sprint CDMA/LTE	5	551	127	0.0614	1900	1.0000	6.14%						
*Sprint CDMA/LTE	1	276	127	0.0062	850	0.5667	1.09%						
*Sprint CDMA/LTE	2	693	127	0.0309	2500	1.0000	3.09%						
*Nextel	12	100	90	0.0533	851	0.5673	9.39%						
Verizon PCS	11	442	116	0.1299	1970	1.0000	12.99%						
Verizon Cellular	9	406	116	0.0976	869	0.5793	16.85%						
Verizon AWS	1	1750	116	0.0468	2145	1.0000	4.68%						
Verizon 700	1	1050	116	0.0281	746	0.4973	5.64%						
								83.7%					
* Source: Siting Council													

ATTACHMENT 3



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 162 ft Monopole
ATC Site Name : Brln - Berlin, CT
ATC Site Number : 302483
Engineering Number : 60506221
Proposed Carrier : Verizon
Carrier Site Name : 119616
Carrier Site Number : Berlin 2 CT
Site Location : 260 Beckley Road
Kensington, CT 06037-2419
41.631722,-72.729900
County : Hartford
Date : November 12, 2014
Max Usage : 97%
Result : Pass

Weston Murphy



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Table of Contents

Introduction	1
Supporting Documents	1
Analysis	1
Conclusion	1
Existing and Reserved Equipment	2
Equipment to be Removed	2
Proposed Equipment	2
Structure Usages	3
Foundations	3
Deflection, Twist, and Sway	3
Standard Conditions	4
Calculations	Attached



Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 162 ft monopole to reflect the change in loading by Verizon.

Supporting Documents

Tower Drawings	ITT Meyer Type "B", dated July 21, 2001 Smith Cullum Mapping Acq. #CT-0019, dated July 21, 2001
Foundation Drawing	SpectraSite File #CT-0019, dated May 29, 2003
Geotechnical Report	Daniel G. Loucks File #871, dated December 21, 2001
Modifications	Sciencel Project #Berlin-CT0019, dated July 30, 2002

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/EIA-222.

Basic Wind Speed:	80 mph (Fastest Mile)
Basic Wind Speed w/ Ice:	69 mph (Fastest Mile)w/ 1/2" radial ice concurrent
Code:	ANSI/TIA/EIA-222-F / 2003 IBC , Sec. 1609.1.1, Exception (5) & Sec. 3108.4 w/ 2005 CT Supplement & 2009 CT Amendment

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 contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.



Existing and Reserved Equipment

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
163.0	163.0	3	Ericsson AIR 21, 1.3M, B2A B4P	Canister	(12) 1 5/8" Coax (1) 1 5/8" Fiber	T-Mobile
		3	Ericsson KRY 112 144/1			
152.0	152.0	6	Powerwave LGP21401	Platform w/ Handrails	(12) 1 1/4" Coax (2) 0.78" 8 AWG 6 (1) 0.39" Cable (1) 3" Conduit	AT&T Mobility
		1	Raycap DC6-48-60-18-8F			
		6	Ericsson RRUS 11 (Band 12)			
		3	Powerwave 7770.00			
		6	KMW AM-X-CD-16-65-00T-RET			
142.0	142.0	3	RFS APXV18-206517LS-C	Flush	(6) 1 5/8" Coax	Metro PCS
127.0	127.0	3	Alcatel-Lucent 800MHz 2X50W RRH w/ Filter	Low Profile Platform	(4) 1 1/4" Hybriflex	Sprint Nextel
		6	Alcatel-Lucent 4X40W RRH			
		3	Alcatel-Lucent TD-RRH8x20			
		3	RFS APXV/TM14-C-I20			
		1	RFS APXV9ERR18-C-A20			
		2	RFS APXVSP18-C-A20			
116.0	116.0	3	Alcatel-Lucent RRH2x40-AWS	Low Profile Platform	(18) 1 5/8" Coax (1) 1 5/8" Fiber	Verizon
		6	Antel BXA-171063-8CF-EDIN-X			
		1	RFS DB-T1-6Z-8AB-0Z			
		6	Antel LPA-80063-6CF-EDIN-X			
106.0	109.0	3	48" x 6" Panel	Flush	(6) 1 1/4" Coax	AT&T Mobility
96.0	96.0	12	Decibel 844G65VTASX	Low Profile Platform	(15) 1 5/8" Coax	Sprint Nextel

Equipment to be Removed

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
116.0	116.0	1	RFS APX75-866514-CT0	-	-	Verizon
		2	Andrew LNX-6514DS-T4M			

Proposed Equipment

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
116.0	116.0	3	Commscope LNX-6514DS-A1M	Low Profile Platform	-	Verizon

¹Mount elevation is defined as height above bottom of steel structure to the bottom of mount, RAD elevation is defined as center of antenna above ground level (AGL).



Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	61%	Pass
Shaft	97%	Pass
Base Plate	67%	Pass

Foundations

Reaction Component	Analysis Reactions
Moment (Kips-Ft)	3,625.8
Axial (Kips)	54.4
Shear (Kips)	36.5

The structure base reactions resulting from this analysis were found to be acceptable through analysis based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required.

Deflection and Sway*

Antenna Elevation (ft)	Deflection (ft)	Sway (Rotation) (°)
116.0	1.246	1.213

*Deflection and Sway was evaluated considering a design wind speed of 50 mph (Fastest Mile) per ANSI/TIA/EIA-222-F.



Standard Conditions

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

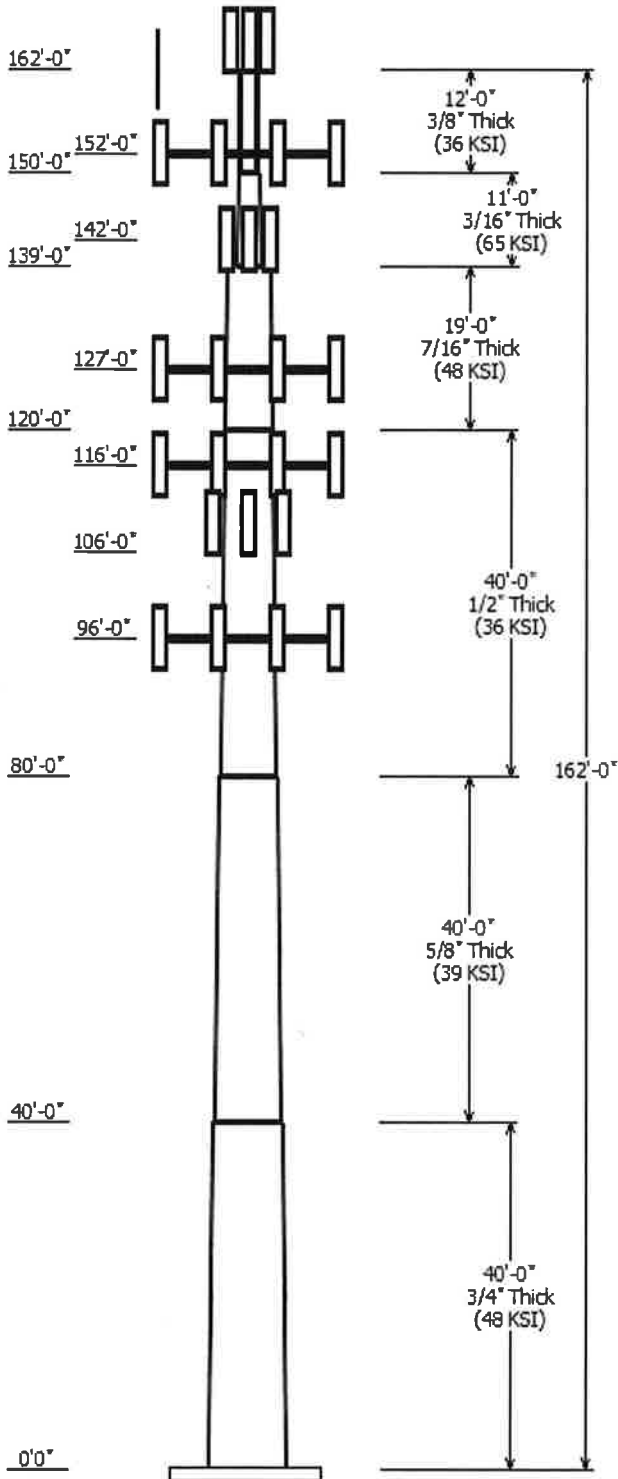
- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

It is the responsibility of the client to ensure that the information provided to ATC Tower Services, Inc. and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and that their capacity has not significantly changed from the "as new" condition.

Unless explicitly agreed by both the client and American Tower Corporation, all services will be performed in accordance with the current revision of ANSI/TIA -222. The design basic wind speed will be determined based on the minimum basic wind speed as prescribed in ANSI/TIA-222. Although every effort is taken to ensure that the loading considered is adequate to meet the requirements of all applicable regulatory entities, we can provide no assurance to meet any other local and state codes or requirements. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement.

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

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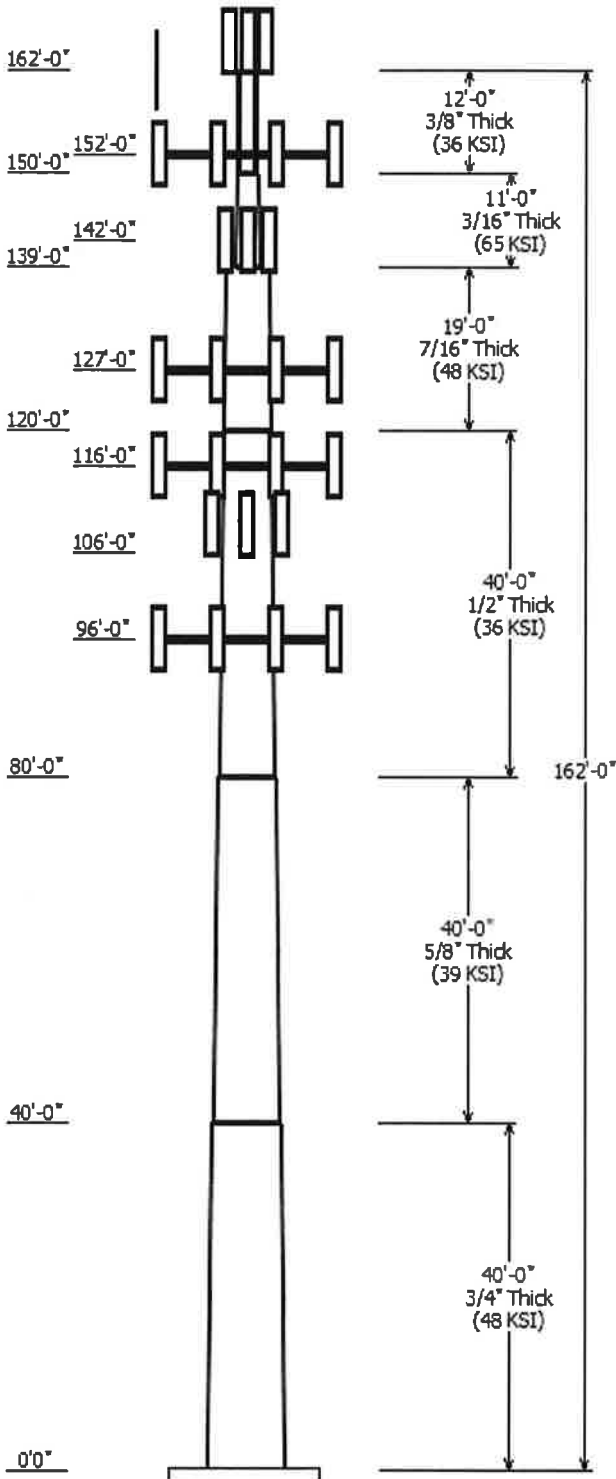


Job Information	
Pole : 302483	Code: TIA/EIA-222 Rev F
Description : 150 ft ITT Meyer Monopole	
Client : Verizon Wireless	
Location : Brln - Berlin, CT	
Shape : 12 Sides	
Height : 162.00 (ft)	
Base Elev (ft): 0.00	
Taper: 0.18970(in/ft)	

Sections Properties								
Shaft Section	Length (ft)	Diameter (in)		Thick Joint (in)	Type	Overlap Length (in)	Steel Taper (in/ft)	Steel Grade (ksi)
		Across Top	Flats Bottom					
1	40.000	43.71	51.30	0.750		0.000	0.189701	48
2	40.000	36.09	43.68	0.625	Butt Joint	0.000	0.189701	39
3	40.000	28.50	36.09	0.500	Butt Joint	0.000	0.189701	36
4	19.000	24.90	28.50	0.438	Butt Joint	0.000	0.189701	48
5	11.000	15.00	16.72	0.188	Butt Joint	0.000	0.156364	65
6	12.000	12.00	12.00	0.375	Butt Joint	0.000	0.000000	36

Discrete Appurtenance			
Attach Elev (ft)	Force Elev (ft)	Qty	Description
162.000	162.000	1	Concealment Canister
162.000	163.000	3	Ericsson AIR 21, 1.3M, B2A B4P
162.000	163.000	3	Ericsson KRY 112 144/1
152.000	152.000	6	Powerwave LGP21401
152.000	152.000	3	Powerwave 7770.00
152.000	152.000	1	Flat Platform w/ Handrails
152.000	152.000	6	KMW AM-X-CD-16-65-00T-RET
152.000	152.000	6	Ericsson RRUS 11 (Band 12)
152.000	152.000	1	Raycap DC6-48-60-18-8F
142.000	142.000	3	RFS APXV18-206517LS-C
127.000	127.000	3	RFS APXVTM14-C-I20
127.000	127.000	3	Alcatel-Lucent TD-RRH8x20
127.000	127.000	1	Flat Low Profile Platform
127.000	127.000	1	RFS APXV9ERR18-C-A20
127.000	127.000	2	RFS APXVSPP18-C-A20
127.000	127.000	6	Alcatel-Lucent 4X40W RRH
127.000	127.000	3	Alcatel-Lucent 800 MHz 2X50W
116.000	116.000	3	Commscope LNX-6514DS-A1M
116.000	116.000	3	Alcatel-Lucent RRH2x40-AWS
116.000	116.000	1	RFS DB-T1-6Z-8AB-0Z
116.000	116.000	6	Antel LPA-80063-6CF-EDIN-X
116.000	116.000	6	Antel BXA-171063-8CF-EDIN-X
116.000	116.000	1	Round Low Profile Platform
106.000	109.000	3	48" x 6" Panel
96.000	96.000	1	Flat Low Profile Platform
96.000	96.000	12	Decibel 844G65VTASX

Linear Appurtenance			
Elev From	Elev To	Description	Exposed To Wind
5.000	96.000	1 5/8" Coax	Yes
5.000	96.000	1 5/8" Coax	No
5.000	106.0	1 1/4" Coax	No
5.000	116.0	1 5/8" Coax	Yes
5.000	116.0	1 5/8" Fiber	Yes
5.000	127.0	1 1/4" Hybriflex	No
5.000	127.0	1 1/4" Hybriflex	No
5.000	142.0	1 5/8" Coax	Yes

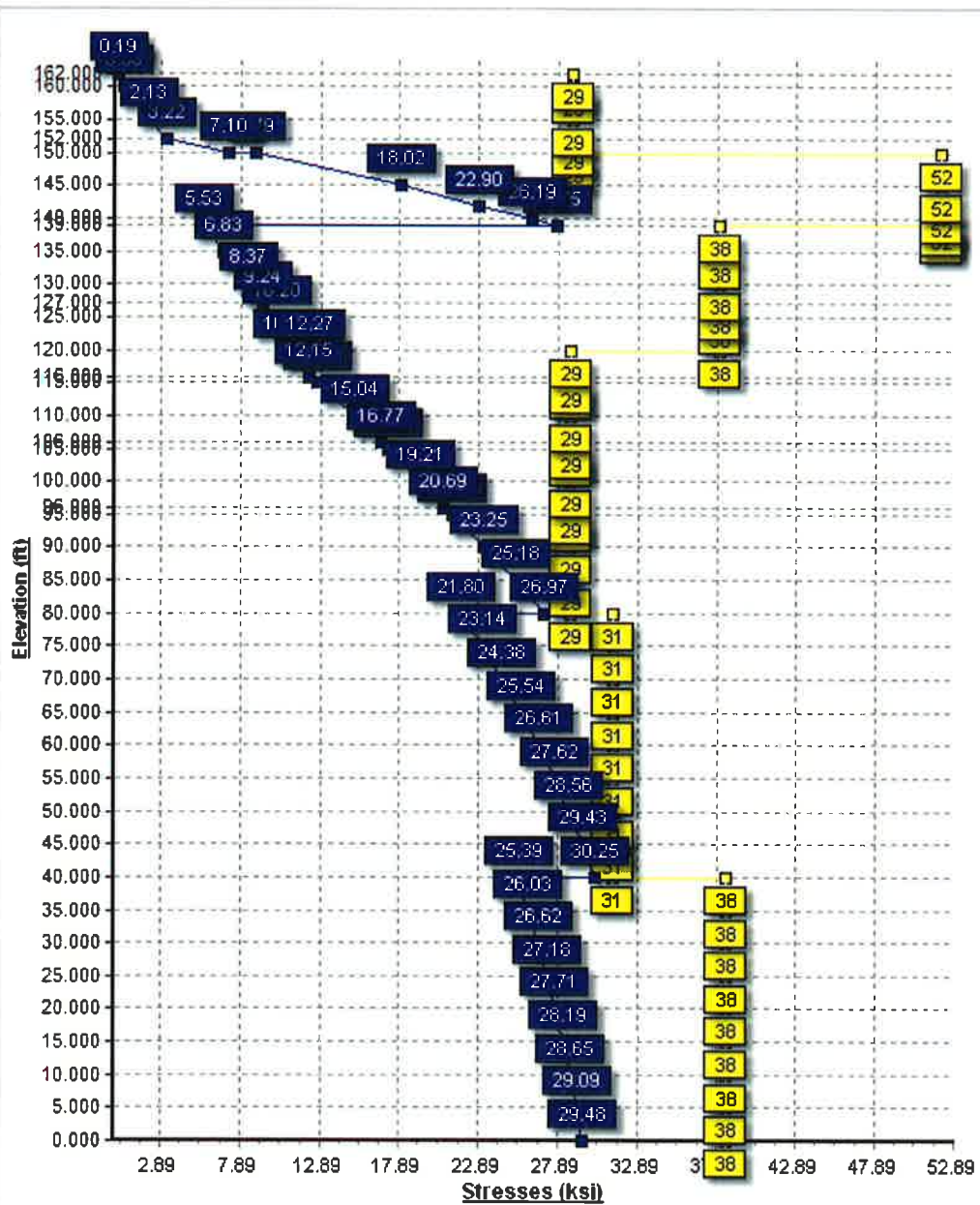


5.000	152.0	0.39" Cable	No
5.000	152.0	0.78" 8 AWG 6	No
5.000	152.0	1 1/4" Coax	No
5.000	152.0	3" Conduit	No
5.000	163.0	1 5/8" Coax	No
5.000	163.0	1 5/8" Fiber Cable	Yes

Load Cases	
No Ice	80.00 mph Wind with No Ice
Ice	69.28 mph Wind with Ice
Twist/Sway	50.00 mph Wind with No Ice

Reactions			
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
No Ice	3625.81	36.48	54.42
Ice	3126.20	30.63	63.79
Twist/Sway	1417.47	14.25	54.45

Dish Deflections			
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
	0.00	0.000	0.000

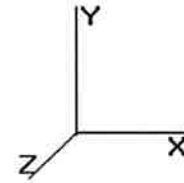


Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

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 Page: 1

Base Elev : 0.000 (ft)



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Shaft Section Properties

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Joint Len (in)	Slip (in)	Weight (lb)	Bottom						Top												
								Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Taper (in/ft)						
1-12	40.000	0.7500	48		0.00		15,369	51.30	0.00	122.08	39816.6	16.18	68.40	43.71	40.00	103.75	24442.9	13.47	58.28	0.189701						
2-12	40.000	0.6250	39	Butt	0.00		10,755	43.68	40.00	86.65	20501.8	16.58	69.89	36.09	80.00	71.38	11460.3	13.33	57.75	0.189701						
3-12	40.000	0.5000	36	Butt	0.00		6,968	36.09	80.00	57.30	9265.7	17.20	72.18	28.50	120.00	45.09	4513.2	13.13	57.01	0.189701						
4-12	19.000	0.4375	48	Butt	0.00		2,392	28.50	120.00	39.54	3975.5	15.31	65.15	24.90	139.00	34.46	2632.2	13.11	56.91	0.189701						
5-12	11.000	0.1875	65	Butt	0.00		354	16.72	139.00	9.98	348.2	21.75	89.17	15.00	150.00	8.94	250.4	19.29	80.00	0.156364						
6-12	12.000	0.3750	36	Butt	0.00		573	12.00	150.00	14.04	242.1	6.43	32.00	12.00	162.00	14.04	242.1	6.43	32.00	0.000000						
Shaft Weight							36,411																			

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	No Ice			Ice			Distance From Face (ft)	Vert Ecc (ft)
			Weight (lb)	EPAA (sf)	Orientation Factor	Weight (lb)	EPAA (sf)	Orientation Factor		
162.00	Concealment Canister	1	200.00	15.000	1.00	300.00	20.000	1.00	0.000	0.000
162.00	Ericsson AIR 21, 1.3M, B2A	3	83.00	0.000	0.71	132.60	7.200	0.71	0.000	1.000
162.00	Ericsson KRY 112 144/1	3	11.00	0.000	0.50	14.10	0.550	0.50	0.000	1.000
152.00	Ericsson RRUS 11 (Band 12)	6	55.00	2.940	0.50	74.30	3.290	0.50	0.000	0.000
152.00	Flat Platform w/ Handrails	1	2000.00	42.400	1.00	2,450.00	48.400	1.00	0.000	0.000
152.00	KMW AM-X-CD-16-65-00T-	6	48.50	8.260	0.67	95.00	9.080	0.67	0.000	0.000
152.00	Powerwave 7770.00	3	35.00	5.880	0.65	67.75	6.530	0.65	0.000	0.000
152.00	Powerwave LGP21401	6	14.10	1.290	0.50	21.26	1.530	0.50	0.000	0.000
152.00	Raycap DC6-48-60-18-8F	1	20.00	1.110	1.00	35.10	1.460	1.00	0.000	0.000
142.00	RFS APXV18-206517LS-C	3	22.00	5.020	0.68	48.13	5.700	0.68	0.000	0.000
127.00	Alcatel-Lucent 4X40W RRH	6	59.50	2.910	0.50	82.60	3.070	0.50	0.000	0.000
127.00	Alcatel-Lucent 800 MHz	3	64.00	2.400	0.50	86.10	2.720	0.50	0.000	0.000
127.00	Alcatel-Lucent TD-RRH8x20	3	66.10	4.320	0.67	77.40	2.430	0.67	0.000	0.000
127.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1,700.00	31.600	1.00	0.000	0.000
127.00	RFS APXV9ERR18-C-A20	1	62.00	8.260	0.71	113.90	9.080	0.71	0.000	0.000
127.00	RFS APXVSP18-C-A20	2	57.00	8.260	0.69	106.50	9.080	0.69	0.000	0.000
127.00	RFS APXVTM14-C-I20	3	52.90	6.900	0.66	92.40	7.580	0.66	0.000	0.000
116.00	Alcatel-Lucent RRH2x40-AWS	3	44.00	2.520	0.50	61.40	2.870	0.50	0.000	0.000
116.00	Antel BXA-171063-8CF-EDIN-X	6	10.50	2.940	0.71	29.30	3.410	0.71	0.000	0.000
116.00	Antel LPA-80063-6CF-EDIN-X	6	27.00	10.500	0.75	101.90	11.350	0.75	0.000	0.000
116.00	Commscope LNX-6514DS-	3	38.80	8.410	0.83	71.30	8.310	0.83	0.000	0.000
116.00	RFS DB-T1-6Z-8AB-0Z	1	110.00	5.600	1.00	144.50	6.080	1.00	0.000	0.000
116.00	Round Low Profile Platform	1	1500.00	21.700	1.00	1,700.00	27.200	1.00	0.000	0.000
106.00	48" x 6" Panel	3	20.00	2.870	0.67	40.00	4.000	0.67	0.000	3.000
96.00	Decibel 844G65VTZASX	12	16.00	5.310	0.71	55.00	6.500	0.71	0.000	0.000
96.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1,700.00	31.600	1.00	0.000	0.000
Totals		88	9796.00			13,516.19			Number of Loadings : 26	

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	No Ice		Ice		Exposed To Wind
			Weight (lb/ft)	CaAa (sf/ft)	Weight (lb/ft)	CaAa (sf/ft)	
5.00	163.00	(12) 1 5/8" Coax	4.92	0.00	0.00	0.00	N
5.00	163.00	(1) 1 5/8" Fiber Cable	1.61	0.00	0.00	0.00	Y
5.00	152.00	(1) 0.39" Cable	0.07	0.00	0.00	0.00	N
5.00	152.00	(2) 0.78" 8 AWG 6	1.18	0.00	0.00	0.00	N
5.00	152.00	(12) 1 1/4" Coax	12.00	0.00	0.00	0.00	N
5.00	152.00	(1) 3" Conduit	7.58	0.00	0.00	0.00	N
5.00	142.00	(6) 1 5/8" Coax	4.92	0.20	9.46	0.25	Y

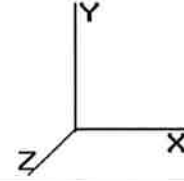
Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

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11/14/2014 3:25:18 PM

Page: 2

Base Elev : 0.000 (ft)



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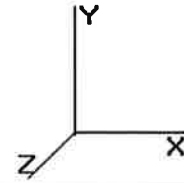
5.00	127.00	(3) 1 1/4" Hybriflex	3.00	0.16	3.77	0.21	N
5.00	127.00	(1) 1 1/4" Hybriflex	1.00	0.00	0.00	0.00	N
5.00	116.00	(18) 1 5/8" Coax	14.76	0.59	28.39	0.74	Y
5.00	116.00	(1) 1 5/8" Fiber	1.61	0.00	0.00	0.00	Y
5.00	106.00	(6) 1 1/4" Coax	0.63	0.00	0.00	0.00	N
5.00	96.00	(6) 1 5/8" Coax	4.92	0.39	9.46	0.44	Y
5.00	96.00	(9) 1 5/8" Coax	7.38	0.00	0.00	0.00	N
Total Weight			8,255.79 (lb)		5,768.11 (lb)		

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

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11/14/2014 3:25:18 PM

Page: 3

Segment Properties (Max Len : 5 ft)

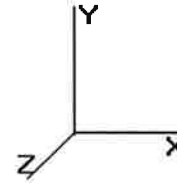
Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)
0.00		0.7500	51.300	122.078	39,816.6	16.18	68.40	48	38	0.0
5.00		0.7500	50.351	119.787	37,617.1	15.85	67.14	48	38	2,057.5
10.00		0.7500	49.403	117.497	35,500.1	15.51	65.87	48	38	2,018.6
15.00		0.7500	48.454	115.206	33,464.0	15.17	64.61	48	38	1,979.6
20.00		0.7500	47.506	112.915	31,507.4	14.83	63.34	48	38	1,940.6
25.00		0.7500	46.557	110.625	29,628.5	14.49	62.08	48	38	1,901.6
30.00		0.7500	45.609	108.334	27,825.8	14.15	60.81	48	38	1,862.7
35.00		0.7500	44.660	106.044	26,097.8	13.81	59.55	48	38	1,823.7
40.00	Top - Section 1	0.7500	43.712	103.753	24,442.9	13.47	58.28	48	38	1,784.7
40.00	Bot - Section 2	0.6250	43.680	86.648	20,501.8	16.58	69.89	39	31	
45.00		0.6250	42.731	84.739	19,176.5	16.18	68.37	39	31	1,458.0
50.00		0.6250	41.783	82.830	17,909.5	15.77	66.85	39	31	1,425.5
55.00		0.6250	40.834	80.922	16,699.7	15.36	65.34	39	31	1,393.0
60.00		0.6250	39.886	79.013	15,545.5	14.96	63.82	39	31	1,360.6
65.00		0.6250	38.937	77.104	14,445.8	14.55	62.30	39	31	1,328.1
70.00		0.6250	37.989	75.195	13,399.3	14.14	60.78	39	31	1,295.6
75.00		0.6250	37.040	73.286	12,404.5	13.74	59.26	39	31	1,263.1
80.00	Top - Section 2	0.6250	36.092	71.377	11,460.3	13.33	57.75	39	31	1,230.6
80.00	Bot - Section 3	0.5000	36.092	57.303	9,265.7	17.20	72.18	36	29	
85.00		0.5000	35.144	55.776	8,544.5	16.69	70.29	36	29	962.0
90.00		0.5000	34.195	54.249	7,861.7	16.18	68.39	36	29	936.0
95.00		0.5000	33.247	52.722	7,216.3	15.67	66.49	36	29	910.0
96.00		0.5000	33.057	52.417	7,091.6	15.57	66.11	36	29	178.9
100.00		0.5000	32.298	51.195	6,607.2	15.16	64.60	36	29	705.1
105.00		0.5000	31.350	49.668	6,033.4	14.66	62.70	36	29	858.0
106.00		0.5000	31.160	49.363	5,922.8	14.55	62.32	36	29	168.5
110.00		0.5000	30.401	48.141	5,493.9	14.15	60.80	36	29	663.6
115.00		0.5000	29.453	46.614	4,987.4	13.64	58.91	36	29	806.1
116.00		0.5000	29.263	46.308	4,890.0	13.54	58.53	36	29	158.1
120.00	Top - Section 3	0.5000	28.504	45.087	4,513.2	13.13	57.01	36	29	622.0
120.00	Bot - Section 4	0.4375	28.504	39.539	3,975.5	15.31	65.15	48	38	
125.00		0.4375	27.556	38.203	3,585.9	14.73	62.98	48	38	661.3
127.00		0.4375	27.176	37.668	3,437.5	14.50	62.12	48	38	258.2
130.00		0.4375	26.607	36.866	3,222.6	14.15	60.82	48	38	380.4
135.00		0.4375	25.659	35.530	2,884.8	13.57	58.65	48	38	615.9
139.00	Top - Section 4	0.4375	24.900	34.461	2,632.2	13.11	56.91	48	38	476.3
139.00	Bot - Section 5	0.1875	16.720	9.981	348.2	21.75	89.17	65	52	
140.00		0.1875	16.564	9.887	338.4	21.53	88.34	65	52	33.8
142.00		0.1875	16.251	9.698	319.4	21.08	86.67	65	52	66.6
145.00		0.1875	15.782	9.415	292.2	20.41	84.17	65	52	97.6
150.00	Top - Section 5	0.1875	15.000	8.943	250.4	19.29	80.00	65	52	156.2
150.00	Bot - Section 6	0.3750	12.000	14.037	242.1	6.43	32.00	36	29	
152.00		0.3750	12.000	14.037	242.1	6.43	32.00	36	29	95.5
155.00		0.3750	12.000	14.037	242.1	6.43	32.00	36	29	143.3
160.00		0.3750	12.000	14.037	242.1	6.43	32.00	36	29	238.8
162.00		0.3750	12.000	14.037	242.1	6.43	32.00	36	29	95.5
										36,411.3

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev: 0.000 (ft)

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11/14/2014 3:25:19 PM

Page: 4

Load Case: No Ice	80.00 mph Wind with No Ice	23 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Shaft Segment Forces

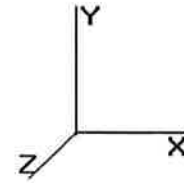
Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C	Cf	Ice Thick (in)	Tributary (ft)	Ap (sf)	EPAs (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		0.00	1.00 16.384	27.68 341.99	1.030		0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		0.00	1.00 16.384	27.68 335.67	1.030		0.000	5.00	21.177	21.81	604.0	0.0	2,057.5
10.00		0.00	1.00 16.384	27.68 329.35	1.030		0.000	5.00	20.782	21.41	592.7	0.0	2,018.6
15.00		0.00	1.00 16.384	27.68 323.02	1.030		0.000	5.00	20.387	21.00	581.4	0.0	1,979.6
20.00		0.00	1.00 16.384	27.68 316.70	1.030		0.000	5.00	19.992	20.59	570.2	0.0	1,940.6
25.00		0.00	1.00 16.384	27.68 310.38	1.030		0.000	5.00	19.597	20.18	558.9	0.0	1,901.6
30.00		0.00	1.00 16.384	27.68 304.05	1.030		0.000	5.00	19.201	19.78	547.6	0.0	1,862.7
35.00		0.00	1.01 16.662	28.15 300.24	1.030		0.000	5.00	18.806	19.37	545.4	0.0	1,823.7
40.00	Top - Section 1	0.00	1.05 17.310	29.25 299.53	1.030		0.000	5.00	18.411	18.96	554.7	0.0	1,784.7
45.00		0.00	1.09 17.902	30.25 297.78	1.030		0.000	5.00	18.002	18.54	561.0	0.0	1,458.0
50.00		0.00	1.12 18.449	31.17 295.58	1.030		0.000	5.00	17.607	18.14	565.4	0.0	1,425.5
55.00		0.00	1.15 18.959	32.04 292.83	1.030		0.000	5.00	17.212	17.73	568.0	0.0	1,393.0
60.00		0.00	1.18 19.436	32.84 289.61	1.030		0.000	5.00	16.817	17.32	568.9	0.0	1,360.6
65.00		0.00	1.21 19.885	33.60 285.97	1.030		0.000	5.00	16.422	16.91	568.4	0.0	1,328.1
70.00		0.00	1.24 20.311	34.32 281.98	1.030		0.000	5.00	16.026	16.51	566.6	0.0	1,295.6
75.00		0.00	1.26 20.715	35.00 277.66	1.030		0.000	5.00	15.631	16.10	563.6	0.0	1,263.1
80.00	Top - Section 2	0.00	1.28 21.101	35.66 273.06	1.030		0.000	5.00	15.236	15.69	559.6	0.0	1,230.6
85.00		0.00	1.31 21.469	36.28 268.19	1.030		0.000	5.00	14.841	15.29	554.6	0.0	962.0
90.00		0.00	1.33 21.823	36.88 263.10	1.030		0.000	5.00	14.446	14.88	548.7	0.0	936.0
95.00		0.00	1.35 22.163	37.45 257.78	1.030		0.000	5.00	14.050	14.47	542.0	0.0	910.0
96.00	Appertunance(s)	0.00	1.35 22.229	37.56 256.69	1.030		0.000	1.00	2.763	2.85	106.9	0.0	178.9
100.00		0.00	1.37 22.490	38.00 252.27	1.030		0.000	4.00	10.893	11.22	426.4	0.0	705.1
105.00		0.00	1.39 22.806	38.54 246.57	1.030		0.000	5.00	13.260	13.66	526.4	0.0	858.0
106.00	Appertunance(s)	0.00	1.39 22.867	38.64 245.41	1.030		0.000	1.00	2.605	2.68	103.7	0.0	168.5
110.00		0.00	1.41 23.111	39.05 240.71	1.030		0.000	4.00	10.260	10.57	412.8	0.0	663.6
115.00		0.00	1.42 23.406	39.55 234.68	1.030		0.000	5.00	12.470	12.84	508.0	0.0	806.1
116.00	Appertunance(s)	0.00	1.43 23.464	39.65 233.46	1.030		0.000	1.00	2.446	2.52	99.9	0.0	158.1
120.00	Top - Section 3	0.00	1.44 23.692	40.04 228.51	1.030		0.000	4.00	9.628	9.92	397.1	0.0	622.0
125.00		0.00	1.46 23.970	40.51 222.20	1.030		0.000	5.00	11.679	12.03	487.3	0.0	661.3
127.00	Appertunance(s)	0.00	1.47 24.079	40.69 219.63	1.030		0.000	2.00	4.561	4.70	191.2	0.0	258.2
130.00		0.00	1.48 24.241	40.96 215.75	1.030		0.000	3.00	6.723	6.92	283.7	0.0	380.4
135.00		0.00	1.49 24.503	41.41 209.19	1.030		0.000	5.00	10.889	11.22	464.4	0.0	615.9
139.00	Top - Section 4	0.00	1.50 24.709	41.75 203.85	1.030		0.000	4.00	8.426	8.68	362.4	0.0	476.3
140.00		0.00	1.51 24.759	41.84 135.74	1.030		0.000	1.00	1.387	1.43	59.8	0.0	33.8
142.00	Appertunance(s)	0.00	1.51 24.860	42.01 133.45	1.030		0.000	2.00	2.735	2.82	118.3	0.0	66.6
145.00		0.00	1.52 25.009	42.26 129.98	1.030		0.000	3.00	4.004	4.12	174.3	0.0	97.6
150.00	Top - Section 5	0.00	1.54 25.252	42.67 124.14	1.030		0.000	5.00	6.413	6.61	281.9	0.0	156.2
152.00	Appertunance(s)	0.00	1.54 25.348	42.83 99.506	1.030		0.000	2.00	2.000	2.06	88.2	0.0	95.5
155.00		0.00	1.55 25.490	43.07 99.785	1.030		0.000	3.00	3.000	3.09	133.1	0.0	143.3
160.00		0.00	1.57 25.722	43.47 100.23	1.030		0.000	5.00	5.000	5.15	223.9	0.0	238.8
162.00	Appertunance(s)	0.00	1.57 25.814	43.62 100.41	1.030		0.000	2.00	2.000	2.06	89.9	0.0	95.5
Totals:								162.00			16,261.7	0.0	36,411.3

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
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Code: TIA/EIA-222 Rev F

11/14/2014 3:25:19 PM
 Page: 5

Base Elev: 0.000 (ft)



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Load Case: No Ice 80.00 mph Wind with No Ice 23 Iterations

Gust Response Factor : 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Discrete Appurtenance Segment Forces

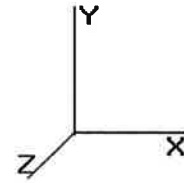
Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientation Factor	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
96.00	Decibel	12	22.229	37.567	0.71	45.24	0.000	0.000	1,699.58	0.00	0.00	192.00
96.00	Flat Low Profile Pla	1	22.229	37.567	1.00	26.10	0.000	0.000	980.50	0.00	0.00	1,500.00
106.0	48" x 6" Panel	3	23.051	38.955	0.67	5.77	0.000	3.000	224.72	0.00	674.17	60.00
116.0	Round Low Profile PI	1	23.464	39.654	1.00	21.70	0.000	0.000	860.50	0.00	0.00	1,500.00
116.0	Antel BXA-171063-8CF	6	23.464	39.654	0.71	12.52	0.000	0.000	496.65	0.00	0.00	63.00
116.0	Antel LPA-80063-6CF	6	23.464	39.654	0.75	47.25	0.000	0.000	1,873.67	0.00	0.00	162.00
116.0	RFS DB-T1-6Z-8AB-0Z	1	23.464	39.654	1.00	5.60	0.000	0.000	222.06	0.00	0.00	110.00
116.0	Alcatel-Lucent RRH2x	3	23.464	39.654	0.50	3.78	0.000	0.000	149.89	0.00	0.00	132.00
116.0	Commscope LNX-	3	23.464	39.654	0.83	20.94	0.000	0.000	830.40	0.00	0.00	116.40
127.0	Alcatel-Lucent 800 M	3	24.079	40.694	0.50	3.60	0.000	0.000	146.50	0.00	0.00	192.00
127.0	Alcatel-Lucent 4X40W	6	24.079	40.694	0.50	8.73	0.000	0.000	355.26	0.00	0.00	357.00
127.0	RFS APXVSP18-C-	2	24.079	40.694	0.69	11.40	0.000	0.000	463.86	0.00	0.00	114.00
127.0	RFS APXV9ERR18-C-	1	24.079	40.694	0.71	5.86	0.000	0.000	238.66	0.00	0.00	62.00
127.0	Flat Low Profile Pla	1	24.079	40.694	1.00	26.10	0.000	0.000	1,062.12	0.00	0.00	1,500.00
127.0	Alcatel-Lucent TD-RR	3	24.079	40.694	0.67	8.68	0.000	0.000	353.36	0.00	0.00	198.30
127.0	RFS APXVTM14-C-I20	3	24.079	40.694	0.66	13.66	0.000	0.000	555.96	0.00	0.00	158.70
142.0	RFS APXV18-	3	24.860	42.013	0.68	10.24	0.000	0.000	430.25	0.00	0.00	66.00
152.0	Raycap DC6-48-60-18-	1	25.348	42.838	1.00	1.11	0.000	0.000	47.55	0.00	0.00	20.00
152.0	Ericsson RRUS 11 (Ba	6	25.348	42.838	0.50	8.82	0.000	0.000	377.83	0.00	0.00	330.00
152.0	KMW AM-X-CD-16-65-	6	25.348	42.838	0.67	33.21	0.000	0.000	1,422.45	0.00	0.00	291.00
152.0	Flat Platform w/ Han	1	25.348	42.838	1.00	42.40	0.000	0.000	1,816.33	0.00	0.00	2,000.00
152.0	Powerwave 7770.00	3	25.348	42.838	0.65	11.47	0.000	0.000	491.18	0.00	0.00	105.00
152.0	Powerwave LGP21401	6	25.348	42.838	0.50	3.87	0.000	0.000	165.78	0.00	0.00	84.60
162.0	Ericsson KRY 112 144	3	25.859	43.702	0.50	0.00	0.000	1.000	0.00	0.00	0.00	33.00
162.0	Ericsson AIR 21, 1.3	3	25.859	43.702	0.71	0.00	0.000	1.000	0.00	0.00	0.00	249.00
162.0	Concealment Canister	1	25.814	43.625	1.00	15.00	0.000	0.000	654.38	0.00	0.00	200.00
									15,919.43			9,796.00

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

11/14/2014 3:25:19 PM
 Page: 6

Base Elev : 0.000 (ft)



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Load Case: No Ice	80.00 mph Wind with No Ice	23 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Linear Appurtenance Segment Forces

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Weight (lb/ft)	CaAa (sf/ft)	qz (psf)	FX (lb)	Dead Load (lb)
10.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	16.384	0.00	8.05
10.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
10.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	16.384	81.68	73.80
10.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	16.384	0.00	8.05
10.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	16.384	53.99	24.60
15.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	16.384	0.00	8.05
15.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
15.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	16.384	81.68	73.80
15.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	16.384	0.00	8.05
15.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	16.384	53.99	24.60
20.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	16.384	0.00	8.05
20.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
20.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	16.384	81.68	73.80
20.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	16.384	0.00	8.05
20.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	16.384	53.99	24.60
25.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	16.384	0.00	8.05
25.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
25.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	16.384	81.68	73.80
25.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	16.384	0.00	8.05
25.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	16.384	53.99	24.60
30.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	16.384	0.00	8.05
30.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.384	27.69	24.60
30.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	16.384	81.68	73.80
30.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	16.384	0.00	8.05
30.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	16.384	53.99	24.60
35.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	16.662	0.00	8.05
35.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	16.662	28.16	24.60
35.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	16.662	83.07	73.80
35.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	16.662	0.00	8.05
35.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	16.662	54.91	24.60
40.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	17.310	0.00	8.05
40.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	17.310	29.25	24.60
40.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	17.310	86.30	73.80
40.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	17.310	0.00	8.05
40.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	17.310	57.04	24.60
45.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	17.902	0.00	8.05
45.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	17.902	30.25	24.60
45.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	17.902	89.25	73.80
45.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	17.902	0.00	8.05
45.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	17.902	59.00	24.60
50.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	18.449	0.00	8.05
50.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	18.449	31.18	24.60
50.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	18.449	91.98	73.80
50.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	18.449	0.00	8.05
50.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	18.449	60.80	24.60
55.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	18.959	0.00	8.05
55.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	18.959	32.04	24.60
55.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	18.959	94.52	73.80
55.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	18.959	0.00	8.05
55.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	18.959	62.48	24.60
60.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	19.436	0.00	8.05

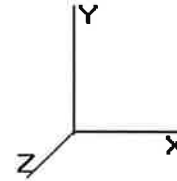
Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

11/14/2014 3:25:19 PM

Page: 7



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Load Case: No Ice	80.00 mph Wind with No Ice	23 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

60.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	19.436	32.85	24.60
60.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	19.436	96.90	73.80
60.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	19.436	0.00	8.05
60.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	19.436	64.05	24.60
65.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	19.885	0.00	8.05
65.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	19.885	33.61	24.60
65.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	19.885	99.14	73.80
65.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	19.885	0.00	8.05
65.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	19.885	65.53	24.60
70.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	20.311	0.00	8.05
70.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	20.311	34.33	24.60
70.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	20.311	101.26	73.80
70.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	20.311	0.00	8.05
70.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	20.311	66.93	24.60
75.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	20.715	0.00	8.05
75.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	20.715	35.01	24.60
75.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	20.715	103.28	73.80
75.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	20.715	0.00	8.05
75.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	20.715	68.27	24.60
80.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	21.101	0.00	8.05
80.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	21.101	35.66	24.60
80.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	21.101	105.20	73.80
80.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	21.101	0.00	8.05
80.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	21.101	69.54	24.60
85.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	21.469	0.00	8.05
85.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	21.469	36.28	24.60
85.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	21.469	107.04	73.80
85.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	21.469	0.00	8.05
85.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	21.469	70.75	24.60
90.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	21.823	0.00	8.05
90.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	21.823	36.88	24.60
90.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	21.823	108.80	73.80
90.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	21.823	0.00	8.05
90.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	21.823	71.92	24.60
95.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	22.163	0.00	8.05
95.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	22.163	37.45	24.60
95.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	22.163	110.49	73.80
95.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	22.163	0.00	8.05
95.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	22.163	73.04	24.60
96.00	(1) 1 5/8" Fiber Cable	Yes	1.00	1.61	0.00	22.229	0.00	1.61
96.00	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	22.229	7.51	4.92
96.00	(18) 1 5/8" Coax	Yes	1.00	14.76	0.59	22.229	22.16	14.76
96.00	(1) 1 5/8" Fiber	Yes	1.00	1.61	0.00	22.229	0.00	1.61
96.00	(6) 1 5/8" Coax	Yes	1.00	4.92	0.39	22.229	14.65	4.92
100.0	(1) 1 5/8" Fiber Cable	Yes	4.00	1.61	0.00	22.490	0.00	6.44
100.0	(6) 1 5/8" Coax	Yes	4.00	4.92	0.20	22.490	30.41	19.68
100.0	(18) 1 5/8" Coax	Yes	4.00	14.76	0.59	22.490	89.70	59.04
100.0	(1) 1 5/8" Fiber	Yes	4.00	1.61	0.00	22.490	0.00	6.44
105.0	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	22.806	0.00	8.05
105.0	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	22.806	38.54	24.60
105.0	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	22.806	113.70	73.80
105.0	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	22.806	0.00	8.05
106.0	(1) 1 5/8" Fiber Cable	Yes	1.00	1.61	0.00	22.867	0.00	1.61
106.0	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	22.867	7.73	4.92
106.0	(18) 1 5/8" Coax	Yes	1.00	14.76	0.59	22.867	22.80	14.76
106.0	(1) 1 5/8" Fiber	Yes	1.00	1.61	0.00	22.867	0.00	1.61
110.0	(1) 1 5/8" Fiber Cable	Yes	4.00	1.61	0.00	23.111	0.00	6.44

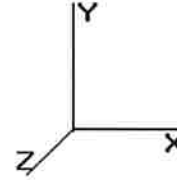
Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

11/14/2014 3:25:19 PM

Page: 8

Base Elev: 0.000 (ft)



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Load Case: No Ice	80.00 mph Wind with No Ice	23 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

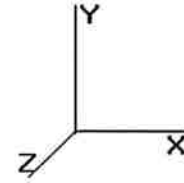
110.0	(6) 1 5/8" Coax	Yes	4.00	4.92	0.20	23.111	31.25	19.68
110.0	(18) 1 5/8" Coax	Yes	4.00	14.76	0.59	23.111	92.17	59.04
110.0	(1) 1 5/8" Fiber	Yes	4.00	1.61	0.00	23.111	0.00	6.44
115.0	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	23.406	0.00	8.05
115.0	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	23.406	39.56	24.60
115.0	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	23.406	116.69	73.80
115.0	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	23.406	0.00	8.05
116.0	(1) 1 5/8" Fiber Cable	Yes	1.00	1.61	0.00	23.464	0.00	1.61
116.0	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	23.464	7.93	4.92
116.0	(18) 1 5/8" Coax	Yes	1.00	14.76	0.59	23.464	23.40	14.76
116.0	(1) 1 5/8" Fiber	Yes	1.00	1.61	0.00	23.464	0.00	1.61
120.0	(1) 1 5/8" Fiber Cable	Yes	4.00	1.61	0.00	23.692	0.00	6.44
120.0	(6) 1 5/8" Coax	Yes	4.00	4.92	0.20	23.692	32.03	19.68
125.0	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	23.970	0.00	8.05
125.0	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	23.970	40.51	24.60
127.0	(1) 1 5/8" Fiber Cable	Yes	2.00	1.61	0.00	24.079	0.00	3.22
127.0	(6) 1 5/8" Coax	Yes	2.00	4.92	0.20	24.079	16.28	9.84
130.0	(1) 1 5/8" Fiber Cable	Yes	3.00	1.61	0.00	24.241	0.00	4.83
130.0	(6) 1 5/8" Coax	Yes	3.00	4.92	0.20	24.241	24.58	14.76
135.0	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	24.503	0.00	8.05
135.0	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	24.503	41.41	24.60
139.0	(1) 1 5/8" Fiber Cable	Yes	4.00	1.61	0.00	24.709	0.00	6.44
139.0	(6) 1 5/8" Coax	Yes	4.00	4.92	0.20	24.709	33.41	19.68
140.0	(1) 1 5/8" Fiber Cable	Yes	1.00	1.61	0.00	24.759	0.00	1.61
140.0	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	24.759	8.37	4.92
142.0	(1) 1 5/8" Fiber Cable	Yes	2.00	1.61	0.00	24.860	0.00	3.22
142.0	(6) 1 5/8" Coax	Yes	2.00	4.92	0.20	24.860	16.81	9.84
145.0	(1) 1 5/8" Fiber Cable	Yes	3.00	1.61	0.00	25.009	0.00	4.83
150.0	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	25.252	0.00	8.05
152.0	(1) 1 5/8" Fiber Cable	Yes	2.00	1.61	0.00	25.348	0.00	3.22
155.0	(1) 1 5/8" Fiber Cable	Yes	3.00	1.61	0.00	25.490	0.00	4.83
160.0	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	25.722	0.00	8.05
162.0	(1) 1 5/8" Fiber Cable	Yes	2.00	1.61	0.00	25.814	0.00	3.22
Totals:							4,242.83	3,191.60

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

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11/14/2014 3:25:19 PM

Page: 9

Load Case: No Ice 80.00 mph Wind with No Ice 23 Iterations

Gust Response Factor : 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	603.97	2,057.54	0.00	0.00
10.00	756.06	2,346.46	0.00	0.00
15.00	744.79	2,307.49	0.00	0.00
20.00	733.52	2,268.52	0.00	0.00
25.00	722.25	2,229.54	0.00	0.00
30.00	710.98	2,190.57	0.00	0.00
35.00	711.57	2,151.60	0.00	0.00
40.00	727.33	2,112.63	0.00	0.00
45.00	739.50	1,785.88	0.00	0.00
50.00	749.41	1,753.41	0.00	0.00
55.00	757.05	1,720.93	0.00	0.00
60.00	762.74	1,688.45	0.00	0.00
65.00	766.70	1,655.98	0.00	0.00
70.00	769.14	1,623.50	0.00	0.00
75.00	770.20	1,591.02	0.00	0.00
80.00	770.01	1,558.54	0.00	0.00
85.00	768.70	1,289.86	0.00	0.00
90.00	766.35	1,263.88	0.00	0.00
95.00	763.03	1,237.90	0.00	0.00
96.00	2,831.32	1,936.46	0.00	0.00
100.0	546.53	918.26	0.00	0.00
105.0	678.63	1,124.44	0.00	0.00
106.0	358.93	281.77	0.00	674.17
110.0	536.18	874.17	0.00	0.00
115.0	664.30	1,069.32	0.00	0.00
116.0	4,564.42	2,294.15	0.00	0.00
120.0	429.10	767.11	0.00	0.00
125.0	527.82	842.74	0.00	0.00
127.0	3,383.17	2,912.73	0.00	0.00
130.0	308.26	477.28	0.00	0.00
135.0	505.85	777.27	0.00	0.00
139.0	395.83	605.45	0.00	0.00
140.0	68.14	66.08	0.00	0.00
142.0	565.39	197.20	0.00	0.00
145.0	174.31	179.64	0.00	0.00
150.0	281.89	292.97	0.00	0.00
152.0	4,409.36	2,980.85	0.00	0.00
155.0	133.11	162.89	0.00	0.00
160.0	223.87	271.48	0.00	0.00
162.0	744.24	590.59	0.00	0.00
Totals:	36,423.92	54,456.56	0.00	674.17

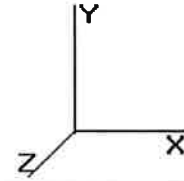
Pole : 302483
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11/14/2014 3:25:19 PM

Page : 10

Base Elev : 0.000 (ft)



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Load Case: No Ice 80.00 mph Wind with No Ice 23 Iterations

Gust Response Factor : 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-36.484	-54.415	0.000	0.000	0.000	-3,625.808	0.000	0.000	0.000	0.000
5.00	-35.993	-52.279	0.000	0.000	0.000	-3,443.390	-0.068	0.000	0.068	-0.126
10.00	-35.340	-49.857	0.000	0.000	0.000	-3,263.425	-0.268	0.000	0.268	-0.253
15.00	-34.688	-47.477	0.000	0.000	0.000	-3,086.727	-0.602	0.000	0.602	-0.380
20.00	-34.038	-45.138	0.000	0.000	0.000	-2,913.288	-1.069	0.000	1.069	-0.508
25.00	-33.389	-42.842	0.000	0.000	0.000	-2,743.102	-1.669	0.000	1.669	-0.636
30.00	-32.742	-40.587	0.000	0.000	0.000	-2,576.160	-2.404	0.000	2.404	-0.763
35.00	-32.084	-38.375	0.000	0.000	0.000	-2,412.455	-3.272	0.000	3.272	-0.891
40.00	-31.402	-36.205	0.000	0.000	0.000	-2,252.035	-4.273	0.000	4.273	-1.018
45.00	-30.712	-34.359	0.000	0.000	0.000	-2,095.027	-5.407	0.000	5.407	-1.144
50.00	-30.010	-32.544	0.000	0.000	0.000	-1,941.469	-6.686	0.000	6.686	-1.294
55.00	-29.291	-30.767	0.000	0.000	0.000	-1,791.420	-8.121	0.000	8.121	-1.442
60.00	-28.558	-29.027	0.000	0.000	0.000	-1,644.964	-9.711	0.000	9.711	-1.589
65.00	-27.812	-27.325	0.000	0.000	0.000	-1,502.177	-11.452	0.000	11.452	-1.733
70.00	-27.054	-25.661	0.000	0.000	0.000	-1,363.120	-13.343	0.000	13.343	-1.874
75.00	-26.287	-24.035	0.000	0.000	0.000	-1,227.851	-15.379	0.000	15.379	-2.011
80.00	-25.513	-22.447	0.000	0.000	0.000	-1,096.416	-17.558	0.000	17.558	-2.145
85.00	-24.747	-21.127	0.000	0.000	0.000	-968.854	-19.873	0.000	19.873	-2.273
90.00	-23.980	-19.834	0.000	0.000	0.000	-845.123	-22.335	0.000	22.335	-2.424
95.00	-23.191	-18.597	0.000	0.000	0.000	-725.226	-24.950	0.000	24.950	-2.566
96.00	-20.295	-16.766	0.000	0.000	0.000	-702.035	-25.491	0.000	25.491	-2.594
100.00	-19.738	-15.834	0.000	0.000	0.000	-620.857	-27.710	0.000	27.710	-2.700
105.00	-19.025	-14.720	0.000	0.000	0.000	-522.166	-30.604	0.000	30.604	-2.823
106.00	-18.667	-14.438	0.000	0.000	0.000	-502.467	-31.198	0.000	31.198	-2.847
110.00	-18.110	-13.562	0.000	0.000	0.000	-427.799	-33.622	0.000	33.622	-2.937
115.00	-17.403	-12.511	0.000	0.000	0.000	-337.250	-36.751	0.000	36.751	-3.036
116.00	-12.732	-10.453	0.000	0.000	0.000	-319.847	-37.389	0.000	37.389	-3.054
120.00	-12.274	-9.695	0.000	0.000	0.000	-268.921	-39.977	0.000	39.977	-3.123
125.00	-11.709	-8.872	0.000	0.000	0.000	-207.552	-43.288	0.000	43.288	-3.198
127.00	-8.171	-6.148	0.000	0.000	0.000	-184.135	-44.634	0.000	44.634	-3.229
130.00	-7.842	-5.682	0.000	0.000	0.000	-159.621	-46.676	0.000	46.676	-3.272
135.00	-7.297	-4.928	0.000	0.000	0.000	-120.412	-50.135	0.000	50.135	-3.334
139.00	-6.868	-4.344	0.000	0.000	0.000	-91.226	-52.945	0.000	52.945	-3.375
140.00	-6.802	-4.274	0.000	0.000	0.000	-84.358	-53.653	0.000	53.653	-3.385
142.00	-6.236	-4.095	0.000	0.000	0.000	-70.756	-55.099	0.000	55.099	-3.515
145.00	-6.063	-3.907	0.000	0.000	0.000	-52.048	-57.362	0.000	57.362	-3.679
150.00	-5.769	-3.624	0.000	0.000	0.000	-21.733	-61.321	0.000	61.321	-3.859
152.00	-1.168	-0.947	0.000	0.000	0.000	-10.195	-62.946	0.000	62.946	-3.895
155.00	-1.025	-0.793	0.000	0.000	0.000	-6.690	-65.402	0.000	65.402	-3.925
160.00	-0.783	-0.538	0.000	0.000	0.000	-1.566	-69.524	0.000	69.524	-3.949
162.00	-0.744	0.000	0.000	0.000	0.000	0.000	-71.178	0.000	71.178	-3.951

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

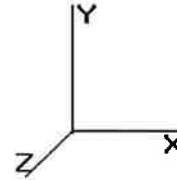
Code: TIA/EIA-222 Rev F

11/14/2014 3:25:19 PM

Page: 11

Base Elev: 0.000 (ft)

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Load Case: No Ice	80.00 mph Wind with No Ice	23 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Calculated Stresses

Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Stress Ratio	
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)			
0.00	0.45	0.61	0.00	0.00	0.00	29.02	29.48	38.5	0.0	0.766
5.00	0.44	0.61	0.00	0.00	0.00	28.63	29.09	38.5	0.0	0.756
10.00	0.42	0.61	0.00	0.00	0.00	28.21	28.65	38.5	0.0	0.745
15.00	0.41	0.61	0.00	0.00	0.00	27.76	28.19	38.5	0.0	0.733
20.00	0.40	0.61	0.00	0.00	0.00	27.29	27.71	38.5	0.0	0.720
25.00	0.39	0.61	0.00	0.00	0.00	26.77	27.18	38.5	0.0	0.706
30.00	0.37	0.61	0.00	0.00	0.00	26.23	26.62	38.5	0.0	0.692
35.00	0.36	0.61	0.00	0.00	0.00	25.64	26.03	38.5	0.0	0.676
40.00	0.35	0.61	0.00	0.00	0.00	25.02	25.39	38.5	0.0	0.660
40.00	0.42	0.74	0.00	0.00	0.00	29.80	30.25	31.4	0.0	0.965
45.00	0.41	0.74	0.00	0.00	0.00	29.00	29.43	31.4	0.0	0.939
50.00	0.39	0.74	0.00	0.00	0.00	28.14	28.56	31.4	0.0	0.911
55.00	0.38	0.74	0.00	0.00	0.00	27.21	27.62	31.4	0.0	0.881
60.00	0.37	0.73	0.00	0.00	0.00	26.22	26.61	31.4	0.0	0.849
65.00	0.35	0.73	0.00	0.00	0.00	25.15	25.54	31.4	0.0	0.814
70.00	0.34	0.73	0.00	0.00	0.00	24.01	24.38	31.4	0.0	0.777
75.00	0.33	0.73	0.00	0.00	0.00	22.77	23.14	31.4	0.0	0.738
80.00	0.31	0.73	0.00	0.00	0.00	21.45	21.80	31.4	0.0	0.695
80.00	0.39	0.90	0.00	0.00	0.00	26.53	26.97	28.7	0.0	0.939
85.00	0.38	0.90	0.00	0.00	0.00	24.75	25.18	28.7	0.0	0.877
90.00	0.37	0.90	0.00	0.00	0.00	22.83	23.25	28.7	0.0	0.810
95.00	0.35	0.89	0.00	0.00	0.00	20.75	21.16	28.7	0.0	0.737
96.00	0.32	0.79	0.00	0.00	0.00	20.33	20.69	28.7	0.0	0.721
100.00	0.31	0.78	0.00	0.00	0.00	18.85	19.21	28.7	0.0	0.669
105.00	0.30	0.78	0.00	0.00	0.00	16.85	17.20	28.7	0.0	0.599
106.00	0.29	0.77	0.00	0.00	0.00	16.42	16.77	28.7	0.0	0.584
110.00	0.28	0.76	0.00	0.00	0.00	14.70	15.04	28.7	0.0	0.524
115.00	0.27	0.76	0.00	0.00	0.00	12.37	12.71	28.7	0.0	0.442
116.00	0.23	0.56	0.00	0.00	0.00	11.89	12.15	28.7	0.0	0.423
120.00	0.22	0.55	0.00	0.00	0.00	10.55	10.81	28.7	0.0	0.376
120.00	0.25	0.63	0.00	0.00	0.00	11.98	12.27	38.1	0.0	0.322
125.00	0.23	0.62	0.00	0.00	0.00	9.91	10.20	38.1	0.0	0.268
127.00	0.16	0.44	0.00	0.00	0.00	9.04	9.24	38.1	0.0	0.243
130.00	0.15	0.43	0.00	0.00	0.00	8.19	8.37	38.1	0.0	0.220
135.00	0.14	0.42	0.00	0.00	0.00	6.65	6.83	38.1	0.0	0.179
139.00	0.13	0.40	0.00	0.00	0.00	5.36	5.53	38.1	0.0	0.145
139.00	0.44	1.40	0.00	0.00	0.00	27.21	27.75	52.0	0.0	0.534
140.00	0.43	1.40	0.00	0.00	0.00	25.65	26.19	52.0	0.0	0.504
142.00	0.42	1.31	0.00	0.00	0.00	22.36	22.90	52.0	0.0	0.440
145.00	0.41	1.31	0.00	0.00	0.00	17.46	18.02	52.0	0.0	0.347
150.00	0.41	1.31	0.00	0.00	0.00	8.09	8.79	52.0	0.0	0.169
150.00	0.26	0.84	0.00	0.00	0.00	6.69	7.10	28.8	0.0	0.246
152.00	0.07	0.17	0.00	0.00	0.00	3.14	3.22	28.8	0.0	0.112
155.00	0.06	0.15	0.00	0.00	0.00	2.06	2.13	28.8	0.0	0.074
160.00	0.04	0.11	0.00	0.00	0.00	0.48	0.56	28.8	0.0	0.019
162.00	0.00	0.11	0.00	0.00	0.00	0.00	0.19	28.8	0.0	0.006

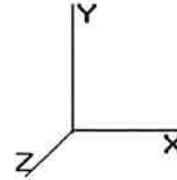
Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

11/14/2014 3:25:20 PM

Page: 12

Base Elev : 0.000 (ft)



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Load Case: Ice	69.28 mph Wind with Ice	23 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Shaft Segment Forces

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Ap (sf)	EPAs (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		0.00	1.00 12.287	20.76 296.17	1.030		0.500	0.00	0.000	0.00	0.0	0.0	0.0
5.00		0.00	1.00 12.287	20.76 290.69	1.030		0.500	5.00	21.594	22.24	461.9	159.2	2,216.7
10.00		0.00	1.00 12.287	20.76 285.21	1.030		0.500	5.00	21.199	21.83	453.4	156.2	2,174.8
15.00		0.00	1.00 12.287	20.76 279.74	1.030		0.500	5.00	20.804	21.43	445.0	153.3	2,132.8
20.00		0.00	1.00 12.287	20.76 274.26	1.030		0.500	5.00	20.408	21.02	436.5	150.3	2,090.9
25.00		0.00	1.00 12.287	20.76 268.79	1.030		0.500	5.00	20.013	20.61	428.1	147.3	2,049.0
30.00		0.00	1.00 12.287	20.76 263.31	1.030		0.500	5.00	19.618	20.21	419.6	144.3	2,007.0
35.00		0.00	1.01 12.496	21.11 260.01	1.030		0.500	5.00	19.223	19.80	418.1	141.4	1,965.1
40.00	Top - Section 1	0.00	1.05 12.982	21.93 259.39	1.030		0.500	5.00	18.828	19.39	425.4	138.4	1,923.1
45.00		0.00	1.09 13.426	22.69 257.88	1.030		0.500	5.00	18.419	18.97	430.5	135.3	1,593.3
50.00		0.00	1.12 13.836	23.38 255.98	1.030		0.500	5.00	18.024	18.56	434.1	132.4	1,557.9
55.00		0.00	1.15 14.218	24.02 253.59	1.030		0.500	5.00	17.629	18.16	436.3	129.4	1,522.4
60.00		0.00	1.18 14.576	24.63 250.80	1.030		0.500	5.00	17.233	17.75	437.3	126.4	1,487.0
65.00		0.00	1.21 14.913	25.20 247.65	1.030		0.500	5.00	16.838	17.34	437.1	123.5	1,451.5
70.00		0.00	1.24 15.232	25.74 244.19	1.030		0.500	5.00	16.443	16.94	436.0	120.5	1,416.1
75.00		0.00	1.26 15.536	26.25 240.45	1.030		0.500	5.00	16.048	16.53	434.0	117.5	1,380.6
80.00	Top - Section 2	0.00	1.28 15.825	26.74 236.47	1.030		0.500	5.00	15.653	16.12	431.2	114.6	1,345.2
85.00		0.00	1.31 16.101	27.21 232.26	1.030		0.500	5.00	15.257	15.72	427.6	111.6	1,073.5
90.00		0.00	1.33 16.366	27.65 227.84	1.030		0.500	5.00	14.862	15.31	423.4	108.6	1,044.6
95.00		0.00	1.35 16.621	28.09 223.24	1.030		0.500	5.00	14.467	14.90	418.6	105.6	1,015.6
96.00	Appertunance(s)	0.00	1.35 16.671	28.17 222.30	1.030		0.500	1.00	2.846	2.93	82.6	21.0	199.9
100.00		0.00	1.37 16.866	28.50 218.46	1.030		0.500	4.00	11.226	11.56	329.6	82.1	787.3
105.00		0.00	1.39 17.103	28.90 213.53	1.030		0.500	5.00	13.677	14.09	407.2	99.7	957.7
106.00	Appertunance(s)	0.00	1.39 17.150	28.98 212.53	1.030		0.500	1.00	2.688	2.77	80.2	19.8	188.3
110.00		0.00	1.41 17.332	29.29 208.45	1.030		0.500	4.00	10.594	10.91	319.6	77.4	741.0
115.00		0.00	1.42 17.554	29.66 203.23	1.030		0.500	5.00	12.886	13.27	393.7	93.8	899.8
116.00	Appertunance(s)	0.00	1.43 17.597	29.73 202.18	1.030		0.500	1.00	2.530	2.61	77.5	18.6	176.7
120.00	Top - Section 3	0.00	1.44 17.768	30.02 197.89	1.030		0.500	4.00	9.961	10.26	308.1	72.6	694.6
125.00		0.00	1.46 17.977	30.38 192.42	1.030		0.500	5.00	12.096	12.46	378.5	87.8	749.2
127.00	Appertunance(s)	0.00	1.47 18.058	30.51 190.20	1.030		0.500	2.00	4.728	4.87	148.6	34.7	292.8
130.00		0.00	1.48 18.179	30.72 186.84	1.030		0.500	3.00	6.973	7.18	220.7	50.9	431.4
135.00		0.00	1.49 18.376	31.05 181.16	1.030		0.500	5.00	11.305	11.64	361.6	81.9	697.8
139.00	Top - Section 4	0.00	1.50 18.530	31.31 176.53	1.030		0.500	4.00	8.760	9.02	282.6	63.6	539.9
140.00		0.00	1.51 18.568	31.38 175.55	1.030		0.500	1.00	1.470	1.51	47.5	10.7	44.5
142.00	Appertunance(s)	0.00	1.51 18.644	31.50 175.56	1.030		0.500	2.00	2.901	2.99	94.2	21.0	87.6
145.00		0.00	1.52 18.755	31.69 172.56	1.030		0.500	3.00	4.254	4.38	138.9	30.6	128.1
150.00	Top - Section 5	0.00	1.54 18.938	32.00 107.51	1.030		0.500	5.00	6.830	7.03	225.1	48.5	204.7
152.00	Appertunance(s)	0.00	1.54 19.010	32.12 86.173	1.030		0.500	2.00	2.167	2.23	71.7	15.7	111.2
155.00		0.00	1.55 19.116	32.30 86.414	1.030		0.500	3.00	3.250	3.35	108.1	23.5	166.8
160.00		0.00	1.57 19.290	32.60 86.806	1.030		0.500	5.00	5.417	5.58	181.9	39.1	278.0
162.00	Appertunance(s)	0.00	1.57 19.359	32.71 86.961	1.030		0.500	2.00	2.167	2.23	73.0	15.7	111.2
Totals:								162.00			12,564.8	3,524.5	39,935.8

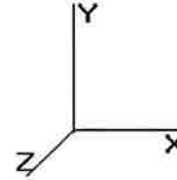
Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
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11/14/2014 3:25:20 PM
 Page: 13

Base Elev: 0.000 (ft)

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Load Case: Ice	69.28 mph Wind with Ice	23 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Discrete Appurtenance Segment Forces

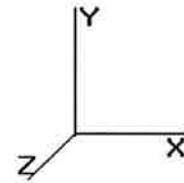
Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientation Factor	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
96.00	Decibel	12	16.671	28.174	0.71	55.38	0.000	0.000	1,560.26	0.00	0.00	660.00
96.00	Flat Low Profile Pla	1	16.671	28.174	1.00	31.60	0.000	0.000	890.29	0.00	0.00	1,700.00
106.0	48" x 6" Panel	3	17.287	29.215	0.67	8.04	0.000	3.000	234.89	0.00	704.66	120.00
116.0	Round Low Profile PI	1	17.597	29.739	1.00	27.20	0.000	0.000	808.90	0.00	0.00	1,700.00
116.0	Antel BXA-171063-8CF	6	17.597	29.739	0.71	14.53	0.000	0.000	432.01	0.00	0.00	175.80
116.0	Antel LPA-80063-6CF	6	17.597	29.739	0.75	51.08	0.000	0.000	1,518.92	0.00	0.00	611.40
116.0	RFS DB-T1-6Z-8AB-0Z	1	17.597	29.739	1.00	6.08	0.000	0.000	180.81	0.00	0.00	144.50
116.0	Alcatel-Lucent RRH2x	3	17.597	29.739	0.50	4.30	0.000	0.000	128.03	0.00	0.00	184.20
116.0	Commscope LNX-	3	17.597	29.739	0.83	20.69	0.000	0.000	615.36	0.00	0.00	213.90
127.0	Alcatel-Lucent 800 M	3	18.058	30.519	0.50	4.08	0.000	0.000	124.52	0.00	0.00	258.30
127.0	Alcatel-Lucent 4X40W	6	18.058	30.519	0.50	9.21	0.000	0.000	281.08	0.00	0.00	495.60
127.0	RFS APXVSP18-C-	2	18.058	30.519	0.69	12.53	0.000	0.000	382.41	0.00	0.00	213.00
127.0	RFS APXV9ERR18-C-	1	18.058	30.519	0.71	6.45	0.000	0.000	196.75	0.00	0.00	113.90
127.0	Flat Low Profile Pla	1	18.058	30.519	1.00	31.60	0.000	0.000	964.40	0.00	0.00	1,700.00
127.0	Alcatel-Lucent TD-RR	3	18.058	30.519	0.67	4.88	0.000	0.000	149.06	0.00	0.00	232.20
127.0	RFS APXVTM14-C-I20	3	18.058	30.519	0.66	15.01	0.000	0.000	458.04	0.00	0.00	277.20
142.0	RFS APXV18-	3	18.644	31.508	0.68	11.63	0.000	0.000	366.38	0.00	0.00	144.39
152.0	Raycap DC6-48-60-18-	1	19.010	32.127	1.00	1.46	0.000	0.000	46.90	0.00	0.00	35.10
152.0	Ericsson RRUS 11 (Ba	6	19.010	32.127	0.50	9.87	0.000	0.000	317.09	0.00	0.00	445.80
152.0	KMW AM-X-CD-16-65-	6	19.010	32.127	0.67	36.50	0.000	0.000	1,172.67	0.00	0.00	570.00
152.0	Flat Platform w/ Han	1	19.010	32.127	1.00	48.40	0.000	0.000	1,554.93	0.00	0.00	2,450.00
152.0	Powerwave 7770.00	3	19.010	32.127	0.65	12.73	0.000	0.000	409.08	0.00	0.00	203.24
152.0	Powerwave LGP21401	6	19.010	32.127	0.50	4.59	0.000	0.000	147.46	0.00	0.00	127.56
162.0	Ericsson KRY 112 144	3	19.393	32.774	0.50	0.83	0.000	1.000	27.04	0.00	27.04	42.30
162.0	Ericsson AIR 21, 1,3	3	19.393	32.774	0.71	15.34	0.000	1.000	502.63	0.00	502.63	397.80
162.0	Concealment Canister	1	19.359	32.717	1.00	20.00	0.000	0.000	654.34	0.00	0.00	300.00
									14,124.23			13,516.19

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

Code : TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

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11/14/2014 3:25:20 PM

Page: 14

Load Case: Ice	69.28 mph Wind with Ice	23 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Linear Appurtenance Segment Forces

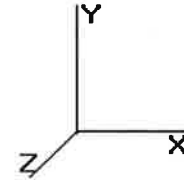
Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Weight (lb/ft)	CaAa (sf/ft)	qz (psf)	FX (lb)	Dead Load (lb)
10.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
10.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
10.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	12.287	76.83	141.95
10.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	12.287	0.00	0.00
10.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	12.287	45.68	47.30
15.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
15.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
15.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	12.287	76.83	141.95
15.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	12.287	0.00	0.00
15.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	12.287	45.68	47.30
20.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
20.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
20.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	12.287	76.83	141.95
20.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	12.287	0.00	0.00
20.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	12.287	45.68	47.30
25.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
25.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
25.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	12.287	76.83	141.95
25.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	12.287	0.00	0.00
25.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	12.287	45.68	47.30
30.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	12.287	0.00	0.00
30.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.287	25.96	47.30
30.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	12.287	76.83	141.95
30.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	12.287	0.00	0.00
30.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	12.287	45.68	47.30
35.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	12.496	0.00	0.00
35.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.496	26.40	47.30
35.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	12.496	78.13	141.95
35.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	12.496	0.00	0.00
35.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	12.496	46.46	47.30
40.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	12.982	0.00	0.00
40.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	12.982	27.42	47.30
40.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	12.982	81.17	141.95
40.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	12.982	0.00	0.00
40.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	12.982	48.27	47.30
45.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	13.426	0.00	0.00
45.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	13.426	28.36	47.30
45.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	13.426	83.95	141.95
45.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	13.426	0.00	0.00
45.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	13.426	49.92	47.30
50.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	13.836	0.00	0.00
50.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	13.836	29.23	47.30
50.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	13.836	86.52	141.95
50.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	13.836	0.00	0.00
50.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	13.836	51.44	47.30
55.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	14.218	0.00	0.00
55.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	14.218	30.04	47.30
55.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	14.218	88.91	141.95
55.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	14.218	0.00	0.00
55.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	14.218	52.86	47.30
60.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	14.576	0.00	0.00

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

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11/14/2014 3:25:20 PM

Page: 15

Load Case: Ice

69.28 mph Wind with Ice

23 Iterations

Gust Response Factor : 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

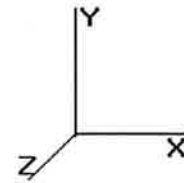
60.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	14.576	30.79	47.30
60.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	14.576	91.14	141.95
60.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	14.576	0.00	0.00
60.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	14.576	54.19	47.30
65.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	14.913	0.00	0.00
65.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	14.913	31.50	47.30
65.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	14.913	93.25	141.95
65.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	14.913	0.00	0.00
65.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	14.913	55.45	47.30
70.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	15.232	0.00	0.00
70.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	15.232	32.18	47.30
70.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	15.232	95.25	141.95
70.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	15.232	0.00	0.00
70.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	15.232	56.63	47.30
75.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	15.536	0.00	0.00
75.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	15.536	32.82	47.30
75.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	15.536	97.14	141.95
75.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	15.536	0.00	0.00
75.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	15.536	57.76	47.30
80.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	15.825	0.00	0.00
80.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	15.825	33.43	47.30
80.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	15.825	98.95	141.95
80.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	15.825	0.00	0.00
80.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	15.825	58.84	47.30
85.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	16.101	0.00	0.00
85.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	16.101	34.01	47.30
85.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	16.101	100.68	141.95
85.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	16.101	0.00	0.00
85.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	16.101	59.86	47.30
90.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	16.366	0.00	0.00
90.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	16.366	34.57	47.30
90.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	16.366	102.34	141.95
90.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	16.366	0.00	0.00
90.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	16.366	60.85	47.30
95.00	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	16.621	0.00	0.00
95.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	16.621	35.11	47.30
95.00	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	16.621	103.93	141.95
95.00	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	16.621	0.00	0.00
95.00	(6) 1 5/8" Coax	Yes	5.00	9.46	0.44	16.621	61.80	47.30
96.00	(1) 1 5/8" Fiber Cable	Yes	1.00	0.00	0.00	16.671	0.00	0.00
96.00	(6) 1 5/8" Coax	Yes	1.00	9.46	0.25	16.671	7.04	9.46
96.00	(18) 1 5/8" Coax	Yes	1.00	28.39	0.74	16.671	20.85	28.39
96.00	(1) 1 5/8" Fiber	Yes	1.00	0.00	0.00	16.671	0.00	0.00
96.00	(6) 1 5/8" Coax	Yes	1.00	9.46	0.44	16.671	12.40	9.46
100.0	(1) 1 5/8" Fiber Cable	Yes	4.00	0.00	0.00	16.866	0.00	0.00
100.0	(6) 1 5/8" Coax	Yes	4.00	9.46	0.25	16.866	28.50	37.84
100.0	(18) 1 5/8" Coax	Yes	4.00	28.39	0.74	16.866	84.37	113.56
100.0	(1) 1 5/8" Fiber	Yes	4.00	0.00	0.00	16.866	0.00	0.00
105.0	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	17.103	0.00	0.00
105.0	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	17.103	36.13	47.30
105.0	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	17.103	106.95	141.95
105.0	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	17.103	0.00	0.00
106.0	(1) 1 5/8" Fiber Cable	Yes	1.00	0.00	0.00	17.150	0.00	0.00
106.0	(6) 1 5/8" Coax	Yes	1.00	9.46	0.25	17.150	7.25	9.46
106.0	(18) 1 5/8" Coax	Yes	1.00	28.39	0.74	17.150	21.45	28.39
106.0	(1) 1 5/8" Fiber	Yes	1.00	0.00	0.00	17.150	0.00	0.00
110.0	(1) 1 5/8" Fiber Cable	Yes	4.00	0.00	0.00	17.332	0.00	0.00

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
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Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

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11/14/2014 3:25:20 PM

Page: 16

Load Case: Ice 69.28 mph Wind with Ice 23 Iterations

Gust Response Factor : 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

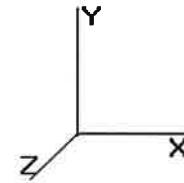
110.0	(6) 1 5/8" Coax	Yes	4.00	9.46	0.25	17.332	29.29	37.84
110.0	(18) 1 5/8" Coax	Yes	4.00	28.39	0.74	17.332	86.70	113.56
110.0	(1) 1 5/8" Fiber	Yes	4.00	0.00	0.00	17.332	0.00	0.00
115.0	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	17.554	0.00	0.00
115.0	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	17.554	37.08	47.30
115.0	(18) 1 5/8" Coax	Yes	5.00	28.39	0.74	17.554	109.76	141.95
115.0	(1) 1 5/8" Fiber	Yes	5.00	0.00	0.00	17.554	0.00	0.00
116.0	(1) 1 5/8" Fiber Cable	Yes	1.00	0.00	0.00	17.597	0.00	0.00
116.0	(6) 1 5/8" Coax	Yes	1.00	9.46	0.25	17.597	7.43	9.46
116.0	(18) 1 5/8" Coax	Yes	1.00	28.39	0.74	17.597	22.01	28.39
116.0	(1) 1 5/8" Fiber	Yes	1.00	0.00	0.00	17.597	0.00	0.00
120.0	(1) 1 5/8" Fiber Cable	Yes	4.00	0.00	0.00	17.768	0.00	0.00
120.0	(6) 1 5/8" Coax	Yes	4.00	9.46	0.25	17.768	30.03	37.84
125.0	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	17.977	0.00	0.00
125.0	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	17.977	37.98	47.30
127.0	(1) 1 5/8" Fiber Cable	Yes	2.00	0.00	0.00	18.058	0.00	0.00
127.0	(6) 1 5/8" Coax	Yes	2.00	9.46	0.25	18.058	15.26	18.92
130.0	(1) 1 5/8" Fiber Cable	Yes	3.00	0.00	0.00	18.179	0.00	0.00
130.0	(6) 1 5/8" Coax	Yes	3.00	9.46	0.25	18.179	23.04	28.38
135.0	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	18.376	0.00	0.00
135.0	(6) 1 5/8" Coax	Yes	5.00	9.46	0.25	18.376	38.82	47.30
139.0	(1) 1 5/8" Fiber Cable	Yes	4.00	0.00	0.00	18.530	0.00	0.00
139.0	(6) 1 5/8" Coax	Yes	4.00	9.46	0.25	18.530	31.32	37.84
140.0	(1) 1 5/8" Fiber Cable	Yes	1.00	0.00	0.00	18.568	0.00	0.00
140.0	(6) 1 5/8" Coax	Yes	1.00	9.46	0.25	18.568	7.85	9.46
142.0	(1) 1 5/8" Fiber Cable	Yes	2.00	0.00	0.00	18.644	0.00	0.00
142.0	(6) 1 5/8" Coax	Yes	2.00	9.46	0.25	18.644	15.75	18.92
145.0	(1) 1 5/8" Fiber Cable	Yes	3.00	0.00	0.00	18.755	0.00	0.00
150.0	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	18.938	0.00	0.00
152.0	(1) 1 5/8" Fiber Cable	Yes	2.00	0.00	0.00	19.010	0.00	0.00
155.0	(1) 1 5/8" Fiber Cable	Yes	3.00	0.00	0.00	19.116	0.00	0.00
160.0	(1) 1 5/8" Fiber Cable	Yes	5.00	0.00	0.00	19.290	0.00	0.00
162.0	(1) 1 5/8" Fiber Cable	Yes	2.00	0.00	0.00	19.359	0.00	0.00
Totals:							3,881.19	5,308.17

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
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Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

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11/14/2014 3:25:20 PM

Page: 17

Load Case: Ice 69.28 mph Wind with Ice 23 Iterations

Gust Response Factor : 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	461.86	2,216.73	0.00	0.00
10.00	601.88	2,600.14	0.00	0.00
15.00	593.43	2,558.19	0.00	0.00
20.00	584.98	2,516.25	0.00	0.00
25.00	576.52	2,474.31	0.00	0.00
30.00	568.07	2,432.37	0.00	0.00
35.00	569.11	2,390.43	0.00	0.00
40.00	582.31	2,348.48	0.00	0.00
45.00	592.69	2,018.67	0.00	0.00
50.00	601.29	1,983.23	0.00	0.00
55.00	608.10	1,947.78	0.00	0.00
60.00	613.38	1,912.33	0.00	0.00
65.00	617.31	1,876.89	0.00	0.00
70.00	620.04	1,841.44	0.00	0.00
75.00	621.70	1,805.99	0.00	0.00
80.00	622.38	1,770.55	0.00	0.00
85.00	622.18	1,498.90	0.00	0.00
90.00	621.17	1,469.95	0.00	0.00
95.00	619.41	1,441.00	0.00	0.00
96.00	2,573.43	2,644.96	0.00	0.00
100.0	442.46	1,060.20	0.00	0.00
105.0	550.25	1,298.89	0.00	0.00
106.0	343.82	376.54	0.00	704.66
110.0	435.60	1,011.36	0.00	0.00
115.0	540.59	1,237.84	0.00	0.00
116.0	3,790.95	3,274.13	0.00	0.00
120.0	338.12	851.47	0.00	0.00
125.0	416.48	945.22	0.00	0.00
127.0	2,720.13	3,661.45	0.00	0.00
130.0	243.70	536.98	0.00	0.00
135.0	400.45	873.82	0.00	0.00
139.0	313.87	680.78	0.00	0.00
140.0	55.36	79.70	0.00	0.00
142.0	476.28	302.43	0.00	0.00
145.0	138.89	205.39	0.00	0.00
150.0	225.14	333.44	0.00	0.00
152.0	3,719.84	3,994.38	0.00	0.00
155.0	108.15	181.54	0.00	0.00
160.0	181.89	302.56	0.00	0.00
162.0	1,257.02	861.12	0.00	529.67
Totals:	30,570.23	63,817.83	0.00	1,234.33

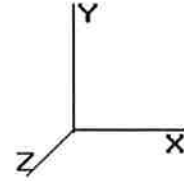
Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

Code : TIA/EIA-222 Rev F

11/14/2014 3:25:20 PM

Page : 18

Base Elev : 0.000 (ft)



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Load Case: Ice

69.28 mph Wind with Ice

23 Iterations

Gust Response Factor : 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-30.631	-63.788	0.000	0.000	0.000	-3,126.205	0.000	0.000	0.000	0.000
5.00	-30.285	-61.514	0.000	0.000	0.000	-2,973.051	-0.059	0.000	0.059	-0.109
10.00	-29.788	-58.859	0.000	0.000	0.000	-2,821.631	-0.232	0.000	0.232	-0.219
15.00	-29.291	-56.247	0.000	0.000	0.000	-2,672.693	-0.520	0.000	0.520	-0.329
20.00	-28.793	-53.679	0.000	0.000	0.000	-2,526.242	-0.923	0.000	0.923	-0.439
25.00	-28.294	-51.155	0.000	0.000	0.000	-2,382.281	-1.443	0.000	1.443	-0.550
30.00	-27.794	-48.675	0.000	0.000	0.000	-2,240.815	-2.078	0.000	2.078	-0.661
35.00	-27.285	-46.239	0.000	0.000	0.000	-2,101.845	-2.830	0.000	2.830	-0.772
40.00	-26.753	-43.848	0.000	0.000	0.000	-1,965.422	-3.698	0.000	3.698	-0.883
45.00	-26.216	-41.784	0.000	0.000	0.000	-1,831.657	-4.682	0.000	4.682	-0.993
50.00	-25.669	-39.754	0.000	0.000	0.000	-1,700.579	-5.793	0.000	5.793	-1.124
55.00	-25.106	-37.763	0.000	0.000	0.000	-1,572.236	-7.040	0.000	7.040	-1.254
60.00	-24.528	-35.810	0.000	0.000	0.000	-1,446.710	-8.423	0.000	8.423	-1.383
65.00	-23.938	-33.897	0.000	0.000	0.000	-1,324.070	-9.940	0.000	9.940	-1.510
70.00	-23.337	-32.024	0.000	0.000	0.000	-1,204.381	-11.588	0.000	11.588	-1.634
75.00	-22.725	-30.189	0.000	0.000	0.000	-1,087.699	-13.365	0.000	13.365	-1.756
80.00	-22.105	-28.395	0.000	0.000	0.000	-974.075	-15.267	0.000	15.267	-1.874
85.00	-21.491	-26.671	0.000	0.000	0.000	-863.554	-17.291	0.000	17.291	-1.988
90.00	-20.875	-25.376	0.000	0.000	0.000	-756.102	-19.446	0.000	19.446	-2.123
95.00	-20.233	-23.934	0.000	0.000	0.000	-651.726	-21.739	0.000	21.739	-2.250
96.00	-17.580	-21.374	0.000	0.000	0.000	-631.494	-22.213	0.000	22.213	-2.275
100.0	-17.132	-20.301	0.000	0.000	0.000	-561.176	-24.161	0.000	24.161	-2.371
105.0	-16.549	-19.008	0.000	0.000	0.000	-475.519	-26.704	0.000	26.704	-2.483
106.0	-16.206	-18.632	0.000	0.000	0.000	-458.267	-27.227	0.000	27.227	-2.505
110.0	-15.753	-17.617	0.000	0.000	0.000	-393.444	-29.361	0.000	29.361	-2.587
115.0	-15.171	-16.391	0.000	0.000	0.000	-314.682	-32.119	0.000	32.119	-2.678
116.0	-11.240	-13.290	0.000	0.000	0.000	-299.512	-32.682	0.000	32.682	-2.696
120.0	-10.877	-12.443	0.000	0.000	0.000	-254.551	-34.968	0.000	34.968	-2.760
125.0	-10.425	-11.510	0.000	0.000	0.000	-200.168	-37.898	0.000	37.898	-2.832
127.0	-7.531	-7.983	0.000	0.000	0.000	-179.318	-39.090	0.000	39.090	-2.862
130.0	-7.268	-7.453	0.000	0.000	0.000	-156.725	-40.902	0.000	40.902	-2.904
135.0	-6.829	-6.594	0.000	0.000	0.000	-120.388	-43.976	0.000	43.976	-2.965
139.0	-6.483	-5.928	0.000	0.000	0.000	-93.073	-46.477	0.000	46.477	-3.007
140.0	-6.431	-5.843	0.000	0.000	0.000	-86.590	-47.108	0.000	47.108	-3.017
142.0	-5.954	-5.550	0.000	0.000	0.000	-73.729	-48.401	0.000	48.401	-3.152
145.0	-5.822	-5.333	0.000	0.000	0.000	-55.867	-50.439	0.000	50.439	-3.325
150.0	-5.588	-5.003	0.000	0.000	0.000	-26.757	-54.038	0.000	54.038	-3.526
152.0	-1.628	-1.245	0.000	0.000	0.000	-15.582	-55.526	0.000	55.526	-3.574
155.0	-1.510	-1.070	0.000	0.000	0.000	-10.697	-57.786	0.000	57.786	-3.620
160.0	-1.309	-0.779	0.000	0.000	0.000	-3.148	-61.600	0.000	61.600	-3.661
162.0	-1.257	0.000	0.000	0.000	0.000	-0.530	-63.134	0.000	63.134	-3.665

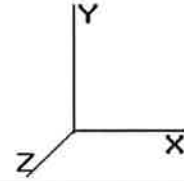
Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
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11/14/2014 3:25:20 PM

Page: 19

Base Elev : 0.000 (ft)



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Load Case: Ice	69.28 mph Wind with Ice	23 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Calculated Stresses

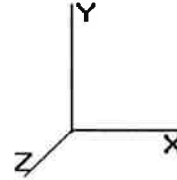
Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Stress Ratio	
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)			
0.00	0.52	0.51	0.00	0.00	0.00	25.02	25.56	38.5	0.0	0.664
5.00	0.51	0.51	0.00	0.00	0.00	24.72	25.25	38.5	0.0	0.656
10.00	0.50	0.52	0.00	0.00	0.00	24.39	24.91	38.5	0.0	0.647
15.00	0.49	0.52	0.00	0.00	0.00	24.04	24.54	38.5	0.0	0.638
20.00	0.48	0.52	0.00	0.00	0.00	23.66	24.15	38.5	0.0	0.628
25.00	0.46	0.52	0.00	0.00	0.00	23.25	23.73	38.5	0.0	0.617
30.00	0.45	0.52	0.00	0.00	0.00	22.81	23.28	38.5	0.0	0.605
35.00	0.44	0.52	0.00	0.00	0.00	22.34	22.80	38.5	0.0	0.592
40.00	0.42	0.52	0.00	0.00	0.00	21.83	22.27	38.5	0.0	0.579
40.00	0.51	0.63	0.00	0.00	0.00	26.01	26.54	31.4	0.0	0.846
45.00	0.49	0.63	0.00	0.00	0.00	25.35	25.87	31.4	0.0	0.825
50.00	0.48	0.63	0.00	0.00	0.00	24.64	25.15	31.4	0.0	0.802
55.00	0.47	0.63	0.00	0.00	0.00	23.88	24.37	31.4	0.0	0.777
60.00	0.45	0.63	0.00	0.00	0.00	23.06	23.54	31.4	0.0	0.751
65.00	0.44	0.63	0.00	0.00	0.00	22.17	22.63	31.4	0.0	0.722
70.00	0.43	0.63	0.00	0.00	0.00	21.21	21.66	31.4	0.0	0.691
75.00	0.41	0.63	0.00	0.00	0.00	20.17	20.62	31.4	0.0	0.657
80.00	0.40	0.63	0.00	0.00	0.00	19.06	19.48	31.4	0.0	0.621
80.00	0.50	0.78	0.00	0.00	0.00	23.57	24.10	28.7	0.0	0.839
85.00	0.48	0.78	0.00	0.00	0.00	22.06	22.59	28.7	0.0	0.786
90.00	0.47	0.78	0.00	0.00	0.00	20.43	20.94	28.7	0.0	0.729
95.00	0.45	0.78	0.00	0.00	0.00	18.65	19.15	28.7	0.0	0.667
96.00	0.41	0.68	0.00	0.00	0.00	18.29	18.73	28.7	0.0	0.652
100.00	0.40	0.68	0.00	0.00	0.00	17.04	17.48	28.7	0.0	0.609
105.00	0.38	0.68	0.00	0.00	0.00	15.35	15.77	28.7	0.0	0.549
106.00	0.38	0.67	0.00	0.00	0.00	14.98	15.40	28.7	0.0	0.536
110.00	0.37	0.66	0.00	0.00	0.00	13.52	13.94	28.7	0.0	0.485
115.00	0.35	0.66	0.00	0.00	0.00	11.54	11.95	28.7	0.0	0.416
116.00	0.29	0.49	0.00	0.00	0.00	11.13	11.45	28.7	0.0	0.399
120.00	0.28	0.49	0.00	0.00	0.00	9.99	10.30	28.7	0.0	0.359
120.00	0.31	0.56	0.00	0.00	0.00	11.34	11.69	38.1	0.0	0.307
125.00	0.30	0.55	0.00	0.00	0.00	9.55	9.90	38.1	0.0	0.260
127.00	0.21	0.41	0.00	0.00	0.00	8.81	9.05	38.1	0.0	0.238
130.00	0.20	0.40	0.00	0.00	0.00	8.04	8.27	38.1	0.0	0.217
135.00	0.19	0.39	0.00	0.00	0.00	6.65	6.87	38.1	0.0	0.180
139.00	0.17	0.38	0.00	0.00	0.00	5.47	5.68	38.1	0.0	0.149
139.00	0.59	1.32	0.00	0.00	0.00	27.76	28.45	52.0	0.0	0.547
140.00	0.59	1.32	0.00	0.00	0.00	26.32	27.01	52.0	0.0	0.519
142.00	0.57	1.25	0.00	0.00	0.00	23.30	23.97	52.0	0.0	0.461
145.00	0.57	1.26	0.00	0.00	0.00	18.74	19.43	52.0	0.0	0.374
150.00	0.56	1.27	0.00	0.00	0.00	9.95	10.74	52.0	0.0	0.207
150.00	0.36	0.81	0.00	0.00	0.00	8.24	8.71	28.8	0.0	0.302
152.00	0.09	0.24	0.00	0.00	0.00	4.80	4.90	28.8	0.0	0.170
155.00	0.08	0.22	0.00	0.00	0.00	3.29	3.39	28.8	0.0	0.118
160.00	0.06	0.19	0.00	0.00	0.00	0.97	1.08	28.8	0.0	0.037
162.00	0.00	0.18	0.00	0.00	0.00	0.16	0.35	28.8	0.0	0.012

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
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 Taper : 0.189701 (in/ft)

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11/14/2014 3:25:20 PM

Page: 20

Load Case: Twist/Sway	50.00 mph Wind with No Ice	23 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Shaft Segment Forces

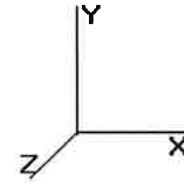
Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Ap (sf)	EPAs (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)	
0.00		0.00	1.00	6.400	10.81	213.75	1.030	0.000	0.00	0.000	0.00	0.0	0.0	
5.00		0.00	1.00	6.400	10.81	209.79	1.030	0.000	5.00	21.177	21.81	235.9	0.0	2,057.5
10.00		0.00	1.00	6.400	10.81	205.84	1.030	0.000	5.00	20.782	21.41	231.5	0.0	2,018.6
15.00		0.00	1.00	6.400	10.81	201.89	1.030	0.000	5.00	20.387	21.00	227.1	0.0	1,979.6
20.00		0.00	1.00	6.400	10.81	197.94	1.030	0.000	5.00	19.992	20.59	222.7	0.0	1,940.6
25.00		0.00	1.00	6.400	10.81	193.98	1.030	0.000	5.00	19.597	20.18	218.3	0.0	1,901.6
30.00		0.00	1.00	6.400	10.81	190.03	1.030	0.000	5.00	19.201	19.78	213.9	0.0	1,862.7
35.00		0.00	1.01	6.509	10.99	187.65	1.030	0.000	5.00	18.806	19.37	213.1	0.0	1,823.7
40.00	Top - Section 1	0.00	1.05	6.762	11.42	187.20	1.030	0.000	5.00	18.411	18.96	216.7	0.0	1,784.7
45.00		0.00	1.09	6.993	11.81	186.11	1.030	0.000	5.00	18.002	18.54	219.1	0.0	1,458.0
50.00		0.00	1.12	7.207	12.17	184.74	1.030	0.000	5.00	17.607	18.14	220.9	0.0	1,425.5
55.00		0.00	1.15	7.406	12.51	183.02	1.030	0.000	5.00	17.212	17.73	221.9	0.0	1,393.0
60.00		0.00	1.18	7.592	12.83	181.00	1.030	0.000	5.00	16.817	17.32	222.2	0.0	1,360.6
65.00		0.00	1.21	7.768	13.12	178.73	1.030	0.000	5.00	16.422	16.91	222.0	0.0	1,328.1
70.00		0.00	1.24	7.934	13.40	176.23	1.030	0.000	5.00	16.026	16.51	221.3	0.0	1,295.6
75.00		0.00	1.26	8.092	13.67	173.54	1.030	0.000	5.00	15.631	16.10	220.2	0.0	1,263.1
80.00	Top - Section 2	0.00	1.28	8.242	13.93	170.66	1.030	0.000	5.00	15.236	15.69	218.6	0.0	1,230.6
85.00		0.00	1.31	8.387	14.17	167.62	1.030	0.000	5.00	14.841	15.29	216.7	0.0	962.0
90.00		0.00	1.33	8.525	14.40	164.43	1.030	0.000	5.00	14.446	14.88	214.4	0.0	936.0
95.00		0.00	1.35	8.657	14.63	161.11	1.030	0.000	5.00	14.050	14.47	211.7	0.0	910.0
96.00	Appertunance(s)	0.00	1.35	8.683	14.67	160.43	1.030	0.000	1.00	2.763	2.85	41.8	0.0	178.9
100.00		0.00	1.37	8.785	14.84	157.67	1.030	0.000	4.00	10.893	11.22	166.6	0.0	705.1
105.00		0.00	1.39	8.908	15.05	154.11	1.030	0.000	5.00	13.260	13.66	205.6	0.0	858.0
106.00	Appertunance(s)	0.00	1.39	8.933	15.09	153.38	1.030	0.000	1.00	2.605	2.68	40.5	0.0	168.5
110.00		0.00	1.41	9.028	15.25	150.44	1.030	0.000	4.00	10.260	10.57	161.2	0.0	663.6
115.00		0.00	1.42	9.143	15.45	146.67	1.030	0.000	5.00	12.470	12.84	198.5	0.0	806.1
116.00	Appertunance(s)	0.00	1.43	9.166	15.49	145.91	1.030	0.000	1.00	2.446	2.52	39.0	0.0	158.1
120.00	Top - Section 3	0.00	1.44	9.255	15.64	142.82	1.030	0.000	4.00	9.628	9.92	155.1	0.0	622.0
125.00		0.00	1.46	9.363	15.82	138.87	1.030	0.000	5.00	11.679	12.03	190.4	0.0	661.3
127.00	Appertunance(s)	0.00	1.47	9.406	15.89	137.27	1.030	0.000	2.00	4.561	4.70	74.7	0.0	258.2
130.00		0.00	1.48	9.469	16.00	134.84	1.030	0.000	3.00	6.723	6.92	110.8	0.0	380.4
135.00		0.00	1.49	9.572	16.17	130.74	1.030	0.000	5.00	10.889	11.22	181.4	0.0	615.9
139.00	Top - Section 4	0.00	1.50	9.652	16.31	127.40	1.030	0.000	4.00	8.426	8.68	141.6	0.0	476.3
140.00		0.00	1.51	9.672	16.34	84.840	1.030	0.000	1.00	1.387	1.43	23.3	0.0	33.8
142.00	Appertunance(s)	0.00	1.51	9.711	16.41	83.407	1.030	0.000	2.00	2.735	2.82	46.2	0.0	66.6
145.00		0.00	1.52	9.769	16.51	81.242	1.030	0.000	3.00	4.004	4.12	68.1	0.0	97.6
150.00	Top - Section 5	0.00	1.54	9.864	16.67	77.592	1.030	0.000	5.00	6.413	6.61	110.1	0.0	156.2
152.00	Appertunance(s)	0.00	1.54	9.902	16.73	62.192	1.049	0.000	2.00	2.000	2.10	35.1	0.0	95.5
155.00		0.00	1.55	9.957	16.82	62.365	1.047	0.000	3.00	3.000	3.14	52.9	0.0	143.3
160.00		0.00	1.57	10.048	16.98	62.649	1.044	0.000	5.00	5.000	5.22	88.7	0.0	238.8
162.00	Appertunance(s)	0.00	1.57	10.083	17.04	62.760	1.043	0.000	2.00	2.000	2.09	35.5	0.0	95.5
Totals:								162.00			6,355.3	0.0	36,411.3	

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

11/14/2014 3:25:20 PM
 Page: 21

Base Elev : 0.000 (ft)



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Load Case: Twist/Sway 50.00 mph Wind with No Ice 23 Iterations

Gust Response Factor : 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Discrete Appurtenance Segment Forces

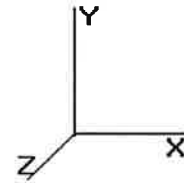
Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientation Factor	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
96.00	Decibel	12	8.683	14.675	0.71	45.24	0.000	0.000	663.90	0.00	0.00	192.00
96.00	Flat Low Profile Pla	1	8.683	14.675	1.00	26.10	0.000	0.000	383.01	0.00	0.00	1,500.00
106.0	48" x 6" Panel	3	9.004	15.217	0.67	5.77	0.000	3.000	87.78	0.00	263.35	60.00
116.0	Round Low Profile Pl	1	9.166	15.490	1.00	21.70	0.000	0.000	336.13	0.00	0.00	1,500.00
116.0	Antel BXA-171063-8CF	6	9.166	15.490	0.71	12.52	0.000	0.000	194.00	0.00	0.00	63.00
116.0	Antel LPA-80063-6CF	6	9.166	15.490	0.75	47.25	0.000	0.000	731.90	0.00	0.00	162.00
116.0	RFS DB-T1-6Z-8AB-0Z	1	9.166	15.490	1.00	5.60	0.000	0.000	86.74	0.00	0.00	110.00
116.0	Alcatel-Lucent RRH2x	3	9.166	15.490	0.50	3.78	0.000	0.000	58.55	0.00	0.00	132.00
116.0	Commscope LNX-	3	9.166	15.490	0.83	20.94	0.000	0.000	324.37	0.00	0.00	116.40
127.0	Alcatel-Lucent 800 M	3	9.406	15.896	0.50	3.60	0.000	0.000	57.23	0.00	0.00	192.00
127.0	Alcatel-Lucent 4X40W	6	9.406	15.896	0.50	8.73	0.000	0.000	138.77	0.00	0.00	357.00
127.0	RFS APXVSP18-C-	2	9.406	15.896	0.69	11.40	0.000	0.000	181.20	0.00	0.00	114.00
127.0	RFS APXV9ERR18-C-	1	9.406	15.896	0.71	5.86	0.000	0.000	93.22	0.00	0.00	62.00
127.0	Flat Low Profile Pla	1	9.406	15.896	1.00	26.10	0.000	0.000	414.89	0.00	0.00	1,500.00
127.0	Alcatel-Lucent TD-RR	3	9.406	15.896	0.67	8.68	0.000	0.000	138.03	0.00	0.00	198.30
127.0	RFS APXVTM14-C-I20	3	9.406	15.896	0.66	13.66	0.000	0.000	217.17	0.00	0.00	158.70
142.0	RFS APXV18-	3	9.711	16.411	0.68	10.24	0.000	0.000	168.07	0.00	0.00	66.00
152.0	Raycap DC6-48-60-18-	1	9.902	16.734	1.00	1.11	0.000	0.000	18.57	0.00	0.00	20.00
152.0	Ericsson RRUS 11 (Ba	6	9.902	16.734	0.50	8.82	0.000	0.000	147.59	0.00	0.00	330.00
152.0	KMW AM-X-CD-16-65-	6	9.902	16.734	0.67	33.21	0.000	0.000	555.64	0.00	0.00	291.00
152.0	Flat Platform w/ Han	1	9.902	16.734	1.00	42.40	0.000	0.000	709.50	0.00	0.00	2,000.00
152.0	Powerwave 7770.00	3	9.902	16.734	0.65	11.47	0.000	0.000	191.87	0.00	0.00	105.00
152.0	Powerwave LGP21401	6	9.902	16.734	0.50	3.87	0.000	0.000	64.76	0.00	0.00	84.60
162.0	Ericsson KRY 112 144	3	10.101	17.071	0.50	0.00	0.000	1.000	0.00	0.00	0.00	33.00
162.0	Ericsson AIR 21, 1.3	3	10.101	17.071	0.71	0.00	0.000	1.000	0.00	0.00	0.00	249.00
162.0	Concealment Canister	1	10.083	17.041	1.00	15.00	0.000	0.000	255.62	0.00	0.00	200.00
									6,218.53			9,796.00

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

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11/14/2014 3:25:20 PM

Page: 22

Load Case: Twist/Sway	50.00 mph Wind with No Ice	23 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Linear Appurtenance Segment Forces

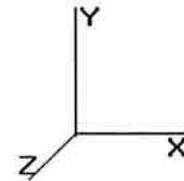
Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Weight (lb/ft)	CaAa (sf/ft)	qz (psf)	FX (lb)	Dead Load (lb)
10.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	6.400	0.00	8.05
10.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
10.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	6.400	31.91	73.80
10.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	6.400	0.00	8.05
10.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	6.400	21.09	24.60
15.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	6.400	0.00	8.05
15.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
15.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	6.400	31.91	73.80
15.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	6.400	0.00	8.05
15.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	6.400	21.09	24.60
20.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	6.400	0.00	8.05
20.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
20.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	6.400	31.91	73.80
20.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	6.400	0.00	8.05
20.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	6.400	21.09	24.60
25.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	6.400	0.00	8.05
25.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
25.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	6.400	31.91	73.80
25.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	6.400	0.00	8.05
25.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	6.400	21.09	24.60
30.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	6.400	0.00	8.05
30.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.400	10.82	24.60
30.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	6.400	31.91	73.80
30.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	6.400	0.00	8.05
30.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	6.400	21.09	24.60
35.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	6.509	0.00	8.05
35.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.509	11.00	24.60
35.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	6.509	32.45	73.80
35.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	6.509	0.00	8.05
35.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	6.509	21.45	24.60
40.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	6.762	0.00	8.05
40.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.762	11.43	24.60
40.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	6.762	33.71	73.80
40.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	6.762	0.00	8.05
40.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	6.762	22.28	24.60
45.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	6.993	0.00	8.05
45.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	6.993	11.82	24.60
45.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	6.993	34.86	73.80
45.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	6.993	0.00	8.05
45.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	6.993	23.05	24.60
50.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	7.207	0.00	8.05
50.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	7.207	12.18	24.60
50.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	7.207	35.93	73.80
50.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	7.207	0.00	8.05
50.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	7.207	23.75	24.60
55.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	7.406	0.00	8.05
55.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	7.406	12.52	24.60
55.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	7.406	36.92	73.80
55.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	7.406	0.00	8.05
55.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	7.406	24.41	24.60
60.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	7.592	0.00	8.05

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

11/14/2014 3:25:20 PM
 Page: 23



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Load Case: Twist/Sway	50.00 mph Wind with No Ice	23 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

60.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	7.592	12.83	24.60
60.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	7.592	37.85	73.80
60.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	7.592	0.00	8.05
60.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	7.592	25.02	24.60
65.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	7.768	0.00	8.05
65.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	7.768	13.13	24.60
65.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	7.768	38.73	73.80
65.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	7.768	0.00	8.05
65.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	7.768	25.60	24.60
70.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	7.934	0.00	8.05
70.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	7.934	13.41	24.60
70.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	7.934	39.55	73.80
70.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	7.934	0.00	8.05
70.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	7.934	26.15	24.60
75.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	8.092	0.00	8.05
75.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.092	13.68	24.60
75.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	8.092	40.34	73.80
75.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	8.092	0.00	8.05
75.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	8.092	26.67	24.60
80.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	8.242	0.00	8.05
80.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.242	13.93	24.60
80.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	8.242	41.09	73.80
80.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	8.242	0.00	8.05
80.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	8.242	27.16	24.60
85.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	8.387	0.00	8.05
85.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.387	14.17	24.60
85.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	8.387	41.81	73.80
85.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	8.387	0.00	8.05
85.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	8.387	27.64	24.60
90.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	8.525	0.00	8.05
90.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.525	14.41	24.60
90.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	8.525	42.50	73.80
90.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	8.525	0.00	8.05
90.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	8.525	28.09	24.60
95.00	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	8.657	0.00	8.05
95.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.657	14.63	24.60
95.00	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	8.657	43.16	73.80
95.00	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	8.657	0.00	8.05
95.00	(6) 1 5/8" Coax	Yes	5.00	4.92	0.39	8.657	28.53	24.60
96.00	(1) 1 5/8" Fiber Cable	Yes	1.00	1.61	0.00	8.683	0.00	1.61
96.00	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	8.683	2.93	4.92
96.00	(18) 1 5/8" Coax	Yes	1.00	14.76	0.59	8.683	8.66	14.76
96.00	(1) 1 5/8" Fiber	Yes	1.00	1.61	0.00	8.683	0.00	1.61
96.00	(6) 1 5/8" Coax	Yes	1.00	4.92	0.39	8.683	5.72	4.92
100.0	(1) 1 5/8" Fiber Cable	Yes	4.00	1.61	0.00	8.785	0.00	6.44
100.0	(6) 1 5/8" Coax	Yes	4.00	4.92	0.20	8.785	11.88	19.68
100.0	(18) 1 5/8" Coax	Yes	4.00	14.76	0.59	8.785	35.04	59.04
100.0	(1) 1 5/8" Fiber	Yes	4.00	1.61	0.00	8.785	0.00	6.44
105.0	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	8.908	0.00	8.05
105.0	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	8.908	15.06	24.60
105.0	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	8.908	44.41	73.80
105.0	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	8.908	0.00	8.05
106.0	(1) 1 5/8" Fiber Cable	Yes	1.00	1.61	0.00	8.933	0.00	1.61
106.0	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	8.933	3.02	4.92
106.0	(18) 1 5/8" Coax	Yes	1.00	14.76	0.59	8.933	8.91	14.76
106.0	(1) 1 5/8" Fiber	Yes	1.00	1.61	0.00	8.933	0.00	1.61
110.0	(1) 1 5/8" Fiber Cable	Yes	4.00	1.61	0.00	9.028	0.00	6.44

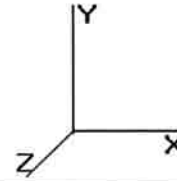
Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
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 Shape : 12 Sides
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Code: TIA/EIA-222 Rev F

11/14/2014 3:25:21 PM

Page: 24

Base Elev : 0.000 (ft)



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Load Case: Twist/Sway	50.00 mph Wind with No Ice	23 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

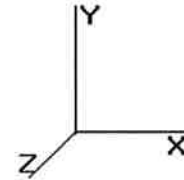
110.0	(6) 1 5/8" Coax	Yes	4.00	4.92	0.20	9.028	12.21	19.68
110.0	(18) 1 5/8" Coax	Yes	4.00	14.76	0.59	9.028	36.01	59.04
110.0	(1) 1 5/8" Fiber	Yes	4.00	1.61	0.00	9.028	0.00	6.44
115.0	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	9.143	0.00	8.05
115.0	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	9.143	15.45	24.60
115.0	(18) 1 5/8" Coax	Yes	5.00	14.76	0.59	9.143	45.58	73.80
115.0	(1) 1 5/8" Fiber	Yes	5.00	1.61	0.00	9.143	0.00	8.05
116.0	(1) 1 5/8" Fiber Cable	Yes	1.00	1.61	0.00	9.166	0.00	1.61
116.0	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	9.166	3.10	4.92
116.0	(18) 1 5/8" Coax	Yes	1.00	14.76	0.59	9.166	9.14	14.76
116.0	(1) 1 5/8" Fiber	Yes	1.00	1.61	0.00	9.166	0.00	1.61
120.0	(1) 1 5/8" Fiber Cable	Yes	4.00	1.61	0.00	9.255	0.00	6.44
120.0	(6) 1 5/8" Coax	Yes	4.00	4.92	0.20	9.255	12.51	19.68
125.0	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	9.363	0.00	8.05
125.0	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	9.363	15.82	24.60
127.0	(1) 1 5/8" Fiber Cable	Yes	2.00	1.61	0.00	9.406	0.00	3.22
127.0	(6) 1 5/8" Coax	Yes	2.00	4.92	0.20	9.406	6.36	9.84
130.0	(1) 1 5/8" Fiber Cable	Yes	3.00	1.61	0.00	9.469	0.00	4.83
130.0	(6) 1 5/8" Coax	Yes	3.00	4.92	0.20	9.469	9.60	14.76
135.0	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	9.572	0.00	8.05
135.0	(6) 1 5/8" Coax	Yes	5.00	4.92	0.20	9.572	16.18	24.60
139.0	(1) 1 5/8" Fiber Cable	Yes	4.00	1.61	0.00	9.652	0.00	6.44
139.0	(6) 1 5/8" Coax	Yes	4.00	4.92	0.20	9.652	13.05	19.68
140.0	(1) 1 5/8" Fiber Cable	Yes	1.00	1.61	0.00	9.672	0.00	1.61
140.0	(6) 1 5/8" Coax	Yes	1.00	4.92	0.20	9.672	3.27	4.92
142.0	(1) 1 5/8" Fiber Cable	Yes	2.00	1.61	0.00	9.711	0.00	3.22
142.0	(6) 1 5/8" Coax	Yes	2.00	4.92	0.20	9.711	6.56	9.84
145.0	(1) 1 5/8" Fiber Cable	Yes	3.00	1.61	0.00	9.769	0.00	4.83
150.0	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	9.864	0.00	8.05
152.0	(1) 1 5/8" Fiber Cable	Yes	2.00	1.61	0.00	9.902	0.00	3.22
155.0	(1) 1 5/8" Fiber Cable	Yes	3.00	1.61	0.00	9.957	0.00	4.83
160.0	(1) 1 5/8" Fiber Cable	Yes	5.00	1.61	0.00	10.048	0.00	8.05
162.0	(1) 1 5/8" Fiber Cable	Yes	2.00	1.61	0.00	10.083	0.00	3.22
Totals:							1,657.36	3,191.60

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
 Taper : 0.189701 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

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11/14/2014 3:25:21 PM

Page: 25

Load Case: Twist/Sway 50.00 mph Wind with No Ice 23 Iterations

Gust Response Factor : 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	235.93	2,057.54	0.00	0.00
10.00	295.34	2,346.46	0.00	0.00
15.00	290.93	2,307.49	0.00	0.00
20.00	286.53	2,268.52	0.00	0.00
25.00	282.13	2,229.54	0.00	0.00
30.00	277.73	2,190.57	0.00	0.00
35.00	277.96	2,151.60	0.00	0.00
40.00	284.12	2,112.63	0.00	0.00
45.00	288.87	1,785.88	0.00	0.00
50.00	292.74	1,753.41	0.00	0.00
55.00	295.72	1,720.93	0.00	0.00
60.00	297.94	1,688.45	0.00	0.00
65.00	299.49	1,655.98	0.00	0.00
70.00	300.44	1,623.50	0.00	0.00
75.00	300.86	1,591.02	0.00	0.00
80.00	300.79	1,558.54	0.00	0.00
85.00	300.27	1,289.86	0.00	0.00
90.00	299.35	1,263.88	0.00	0.00
95.00	298.06	1,237.90	0.00	0.00
96.00	1,105.98	1,936.46	0.00	0.00
100.0	213.49	918.26	0.00	0.00
105.0	265.09	1,124.44	0.00	0.00
106.0	140.21	281.77	0.00	263.35
110.0	209.44	874.17	0.00	0.00
115.0	259.49	1,069.32	0.00	0.00
116.0	1,782.97	2,294.15	0.00	0.00
120.0	167.62	767.11	0.00	0.00
125.0	206.18	842.74	0.00	0.00
127.0	1,321.55	2,912.73	0.00	0.00
130.0	120.41	477.28	0.00	0.00
135.0	197.60	777.27	0.00	0.00
139.0	154.62	605.45	0.00	0.00
140.0	26.62	66.08	0.00	0.00
142.0	220.85	197.20	0.00	0.00
145.0	68.09	179.64	0.00	0.00
150.0	110.11	292.97	0.00	0.00
152.0	1,723.04	2,980.85	0.00	0.00
155.0	52.85	162.89	0.00	0.00
160.0	88.65	271.48	0.00	0.00
162.0	291.16	590.59	0.00	0.00
Totals:	14,231.22	54,456.56	0.00	263.35

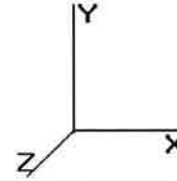
Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
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11/14/2014 3:25:21 PM

Page: 26

Base Elev : 0.000 (ft)



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Load Case: Twist/Sway	50.00 mph Wind with No Ice	23 Iterations
Gust Response Factor : 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-14.255	-54.450	0.000	0.000	0.000	-1,417.471	0.000	0.000	0.000	0.000
5.00	-14.063	-52.381	0.000	0.000	0.000	-1,346.198	-0.027	0.000	0.027	-0.049
10.00	-13.808	-50.023	0.000	0.000	0.000	-1,275.884	-0.105	0.000	0.105	-0.099
15.00	-13.554	-47.704	0.000	0.000	0.000	-1,206.844	-0.235	0.000	0.235	-0.149
20.00	-13.300	-45.425	0.000	0.000	0.000	-1,139.076	-0.418	0.000	0.418	-0.199
25.00	-13.047	-43.185	0.000	0.000	0.000	-1,072.578	-0.653	0.000	0.653	-0.248
30.00	-12.794	-40.985	0.000	0.000	0.000	-1,007.346	-0.940	0.000	0.940	-0.298
35.00	-12.538	-38.824	0.000	0.000	0.000	-943.376	-1.279	0.000	1.279	-0.348
40.00	-12.272	-36.702	0.000	0.000	0.000	-880.688	-1.671	0.000	1.671	-0.398
45.00	-12.003	-34.907	0.000	0.000	0.000	-819.331	-2.114	0.000	2.114	-0.447
50.00	-11.729	-33.145	0.000	0.000	0.000	-759.318	-2.614	0.000	2.614	-0.506
55.00	-11.449	-31.415	0.000	0.000	0.000	-700.674	-3.176	0.000	3.176	-0.564
60.00	-11.163	-29.719	0.000	0.000	0.000	-643.431	-3.797	0.000	3.797	-0.621
65.00	-10.872	-28.056	0.000	0.000	0.000	-587.618	-4.478	0.000	4.478	-0.678
70.00	-10.577	-26.426	0.000	0.000	0.000	-533.259	-5.218	0.000	5.218	-0.733
75.00	-10.278	-24.830	0.000	0.000	0.000	-480.377	-6.014	0.000	6.014	-0.787
80.00	-9.976	-23.267	0.000	0.000	0.000	-428.989	-6.866	0.000	6.866	-0.839
85.00	-9.677	-21.972	0.000	0.000	0.000	-379.112	-7.772	0.000	7.772	-0.889
90.00	-9.378	-20.704	0.000	0.000	0.000	-330.728	-8.735	0.000	8.735	-0.948
95.00	-9.070	-19.466	0.000	0.000	0.000	-283.839	-9.758	0.000	9.758	-1.004
96.00	-7.938	-17.546	0.000	0.000	0.000	-274.769	-9.970	0.000	9.970	-1.015
100.0	-7.721	-16.625	0.000	0.000	0.000	-243.016	-10.838	0.000	10.838	-1.056
105.0	-7.443	-15.502	0.000	0.000	0.000	-204.410	-11.970	0.000	11.970	-1.104
106.0	-7.303	-15.221	0.000	0.000	0.000	-196.705	-12.202	0.000	12.202	-1.114
110.0	-7.086	-14.346	0.000	0.000	0.000	-167.493	-13.151	0.000	13.151	-1.149
115.0	-6.810	-13.280	0.000	0.000	0.000	-132.065	-14.376	0.000	14.376	-1.187
116.0	-4.983	-11.022	0.000	0.000	0.000	-125.255	-14.625	0.000	14.625	-1.195
120.0	-4.804	-10.256	0.000	0.000	0.000	-105.325	-15.638	0.000	15.638	-1.222
125.0	-4.583	-9.416	0.000	0.000	0.000	-81.305	-16.934	0.000	16.934	-1.251
127.0	-3.200	-6.532	0.000	0.000	0.000	-72.139	-17.460	0.000	17.460	-1.263
130.0	-3.071	-6.057	0.000	0.000	0.000	-62.540	-18.260	0.000	18.260	-1.280
135.0	-2.858	-5.283	0.000	0.000	0.000	-47.187	-19.614	0.000	19.614	-1.304
139.0	-2.690	-4.681	0.000	0.000	0.000	-35.757	-20.713	0.000	20.713	-1.321
140.0	-2.664	-4.614	0.000	0.000	0.000	-33.067	-20.990	0.000	20.990	-1.324
142.0	-2.443	-4.420	0.000	0.000	0.000	-27.738	-21.557	0.000	21.557	-1.375
145.0	-2.376	-4.239	0.000	0.000	0.000	-20.409	-22.442	0.000	22.442	-1.440
150.0	-2.261	-3.947	0.000	0.000	0.000	-8.529	-23.993	0.000	23.993	-1.510
152.0	-0.460	-1.013	0.000	0.000	0.000	-4.007	-24.629	0.000	24.629	-1.524
155.0	-0.403	-0.852	0.000	0.000	0.000	-2.628	-25.591	0.000	25.591	-1.536
160.0	-0.307	-0.583	0.000	0.000	0.000	-0.614	-27.205	0.000	27.205	-1.546
162.0	-0.291	0.000	0.000	0.000	0.000	0.000	-27.853	0.000	27.853	-1.546

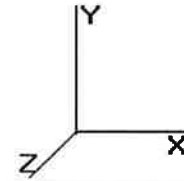
Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
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11/14/2014 3:25:21 PM

Page: 27

Base Elev : 0.000 (ft)



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Load Case: Twist/Sway 50.00 mph Wind with No Ice 23 Iterations

Gust Response Factor : 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses							Combined (ksi)	Allowable Stress (Fb) (ksi)		Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)					
0.00	0.45	0.24	0.00	0.00	0.00	11.34	11.80	38.5	0.0	0.307	
5.00	0.44	0.24	0.00	0.00	0.00	11.19	11.64	38.5	0.0	0.302	
10.00	0.43	0.24	0.00	0.00	0.00	11.03	11.46	38.5	0.0	0.298	
15.00	0.41	0.24	0.00	0.00	0.00	10.85	11.28	38.5	0.0	0.293	
20.00	0.40	0.24	0.00	0.00	0.00	10.67	11.08	38.5	0.0	0.288	
25.00	0.39	0.24	0.00	0.00	0.00	10.47	10.87	38.5	0.0	0.282	
30.00	0.38	0.24	0.00	0.00	0.00	10.26	10.64	38.5	0.0	0.277	
35.00	0.37	0.24	0.00	0.00	0.00	10.03	10.40	38.5	0.0	0.270	
40.00	0.35	0.24	0.00	0.00	0.00	9.78	10.15	38.5	0.0	0.264	
40.00	0.42	0.29	0.00	0.00	0.00	11.66	12.09	31.4	0.0	0.386	
45.00	0.41	0.29	0.00	0.00	0.00	11.34	11.76	31.4	0.0	0.375	
50.00	0.40	0.29	0.00	0.00	0.00	11.00	11.41	31.4	0.0	0.364	
55.00	0.39	0.29	0.00	0.00	0.00	10.64	11.04	31.4	0.0	0.352	
60.00	0.38	0.29	0.00	0.00	0.00	10.25	10.64	31.4	0.0	0.339	
65.00	0.36	0.29	0.00	0.00	0.00	9.84	10.21	31.4	0.0	0.326	
70.00	0.35	0.29	0.00	0.00	0.00	9.39	9.76	31.4	0.0	0.311	
75.00	0.34	0.28	0.00	0.00	0.00	8.91	9.26	31.4	0.0	0.295	
80.00	0.33	0.28	0.00	0.00	0.00	8.39	8.73	31.4	0.0	0.278	
80.00	0.41	0.35	0.00	0.00	0.00	10.38	10.80	28.7	0.0	0.376	
85.00	0.39	0.35	0.00	0.00	0.00	9.69	10.10	28.7	0.0	0.352	
90.00	0.38	0.35	0.00	0.00	0.00	8.94	9.34	28.7	0.0	0.325	
95.00	0.37	0.35	0.00	0.00	0.00	8.12	8.51	28.7	0.0	0.296	
96.00	0.33	0.31	0.00	0.00	0.00	7.96	8.31	28.7	0.0	0.289	
100.00	0.32	0.31	0.00	0.00	0.00	7.38	7.72	28.7	0.0	0.269	
105.00	0.31	0.30	0.00	0.00	0.00	6.60	6.93	28.7	0.0	0.241	
106.00	0.31	0.30	0.00	0.00	0.00	6.43	6.76	28.7	0.0	0.235	
110.00	0.30	0.30	0.00	0.00	0.00	5.76	6.08	28.7	0.0	0.212	
115.00	0.28	0.30	0.00	0.00	0.00	4.84	5.15	28.7	0.0	0.179	
116.00	0.24	0.22	0.00	0.00	0.00	4.66	4.91	28.7	0.0	0.171	
120.00	0.23	0.22	0.00	0.00	0.00	4.13	4.38	28.7	0.0	0.152	
120.00	0.26	0.25	0.00	0.00	0.00	4.69	4.97	38.1	0.0	0.130	
125.00	0.25	0.24	0.00	0.00	0.00	3.88	4.15	38.1	0.0	0.109	
127.00	0.17	0.17	0.00	0.00	0.00	3.54	3.73	38.1	0.0	0.098	
130.00	0.16	0.17	0.00	0.00	0.00	3.21	3.38	38.1	0.0	0.089	
135.00	0.15	0.16	0.00	0.00	0.00	2.61	2.77	38.1	0.0	0.073	
139.00	0.14	0.16	0.00	0.00	0.00	2.10	2.25	38.1	0.0	0.059	
139.00	0.47	0.55	0.00	0.00	0.00	10.66	11.17	52.0	0.0	0.215	
140.00	0.47	0.55	0.00	0.00	0.00	10.05	10.56	52.0	0.0	0.203	
142.00	0.46	0.51	0.00	0.00	0.00	8.77	9.26	52.0	0.0	0.178	
145.00	0.45	0.51	0.00	0.00	0.00	6.85	7.35	52.0	0.0	0.141	
150.00	0.44	0.51	0.00	0.00	0.00	3.17	3.72	52.0	0.0	0.072	
150.00	0.28	0.33	0.00	0.00	0.00	2.63	2.96	28.8	0.0	0.103	
152.00	0.07	0.07	0.00	0.00	0.00	1.23	1.31	28.8	0.0	0.046	
155.00	0.06	0.06	0.00	0.00	0.00	0.81	0.88	28.8	0.0	0.030	
160.00	0.04	0.04	0.00	0.00	0.00	0.19	0.24	28.8	0.0	0.008	
162.00	0.00	0.04	0.00	0.00	0.00	0.00	0.07	28.8	0.0	0.003	

Pole : 302483
 Location : Brln - Berlin, CT
 Height : 162.0 (ft)
 Base Dia : 51.30 (in)
 Top Dia : 12.00 (in)
 Shape : 12 Sides
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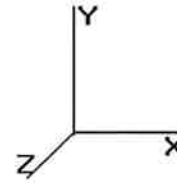
Code: TIA/EIA-222 Rev F

11/14/2014 3:25:21 PM

Page: 28

Base Elev: 0.000 (ft)

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Analysis Summary

Load Case	Reactions						Max Stresses			
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Combined Stress (ksi)	Allowable Stress (ksi)	Elev (ft)	Stress Ratio
No Ice	36.5	0.00	54.42	0.00	0.00	3625.81	30.25	31.4	40.00	0.965
Ice	30.6	0.00	63.79	0.00	0.00	3126.20	26.54	31.4	40.00	0.846
Twist/Sway	14.3	0.00	54.45	0.00	0.00	1417.47	12.09	31.4	40.00	0.386

Base/Flange Plate	Plate Type	Baseplate
	Pole Diameter	37.38 in
	Pole Thickness	in
	Plate Length	62 in
	Plate Thickness	2 in
	Plate Fy	60 ksi
	Weld Length	0.25 in
	Allowable	664.01 k-in
	Applied	447.21 k-in

Stiffeners	#	0

Bolts	#	8
	Bolt Circle (R)adial / (S)quare	44 in S
	Bolt Gap	6 in
	Diameter	2.25 in
	Hole Diameter	2.375 in
	Type	#18J
	Fy	75 ksi
	Fu	100 ksi
	Allowable	194.86 k
	Applied	119.42 k

Reinforcement	#	0

Extra Bolts	#	12
	Bolt Circle (R)adial / (S)quare	55.5 in S
	Bolt Gap	6 in
	Offset Angle	30°
	Diameter	1.75 in
	Type	R71
	Fu	390 ksi
	Allowable	412.75 k
	Applied	106.29 k

Code Rev. **F**
A.S.I. **1.33**

Date **11/12/2014**
Engineer **WDM**
Site # **302483**
Carrier **Verizon**

Moment * **2356.8 k-ft**
Axial * **35.6 k**

* Factored by 0.65, see attached calcs

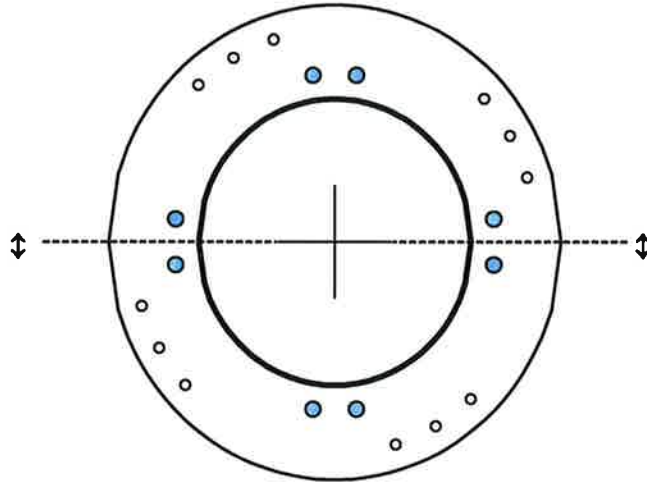


Plate Stress Ratio:
0.67 (Pass)

Bolt Stress Ratio:
0.61 (Pass)

Extra Bolt Stress Ratio:
0.26 (Pass)

11/12/2014

WDM

#302483

Foundation Check

M=3625.8 K-ft

V=36.48 K

P=54.40 K

Sliding Factor of Safety

V=36.48 K

Total Weight = Wt. of Concrete = Wt. of Soil + P = 86.7 + 47.8 + 54.4 = 188.9 K

Ultimate friction resistance = $0.41 \times (\text{wt.}) = 0.41 \times 188.9 = 77.449 \text{ K}$

Ultimate passive sliding resistance = $11' \times 2.58' \times 1.33 = 37.7 \text{ K}$

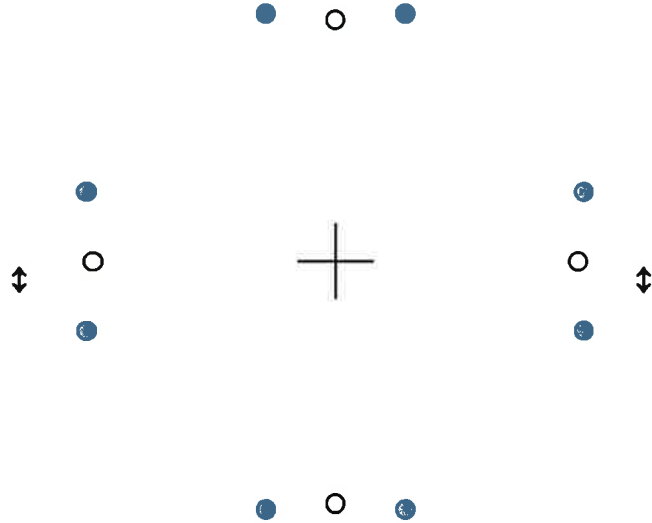
Factor of Safety = $113.93/37.7 = 3.02$; OK

(12) R71 Williams 150ks rock anchor check (next page)

Code Rev. **F**
 A.S.I. 1.33
 Moment **3625.8 k-ft**
 Axial **54.4 k**

Date **11/12/2014**
 Engineer **WDM**
 Site # **302483**
 Carrier **Verizon**

Bolts	#	8
	Bolt Circle (R)adial / (S)quare	44.25 in S
	Bolt Gap	12 in
	Diameter	1.75 in
	Hole Diameter	3.625 in
	Type	R71 William
	Fu	390 ksi
	Allowable	446.16 k
	Applied	328.99 k
	#	0
Reinforcement	#	0
	#	4
	Bolt Circle (R)adial / (S)quare	41.63 in R
	Offset Angle	90°
	Diameter	1.75 in
	Type	R71 William
	Fu	390 ksi
Allowable	412.75 k	
Applied	316.94 k	
Extra Bolts	#	0



Bolt Stress Ratio:
0.74 (Pass)

Extra Bolt Stress Ratio:
0.77 (Pass)