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Also admitted in Massachusetts

March 6, 2014

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

Re: **Notice of Exempt Modification – Facility Modification
664 Rimmon Hill Road, Beacon Falls, Connecticut**

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains twelve (12) wireless telecommunications antennas at the 149-foot level of the existing 173-foot tower at 664 Rimmon Hill Road in Beacon Falls, Connecticut (the “Property”). The tower is owned by American Tower Corporation. The Council approved Cellco’s use of the existing tower in 1996. Cellco now intends to modify its facility by replacing six (6) of its existing antennas with three (3) model 742 213V01, 1900 MHz antennas and three (3) model 742 213V01, 2100 MHz antennas, at the same 149-foot level on the tower. Cellco also intends to install three (3) remote radio heads (“RRHs”) behind its 2100 MHz antennas and one (1) HYBRIFLEX™ antenna cable inside the monopole. Included in Attachment 1 are specifications for Cellco’s additional antennas, RRHs and HYBRIFLEX™ cable.

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 Christopher Bielik, First Selectman for the Town of Beacon Falls. A copy of this letter is also being sent to Joan and Wilbur Weed, 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).



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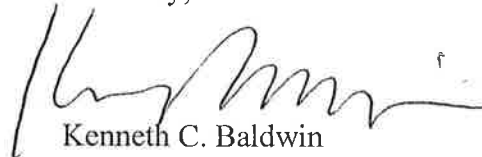
ROBINSON & COLE_{LLP}

Melanie A. Bachman
March 6, 2014
Page 2

1. The proposed modifications will not result in an increase in the height of the existing tower. The replacement antennas and RRHs will be located at the 149-foot level on the 173-foot tower.
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 modified facility 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 worst-case RF emissions calculation 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:

Christopher Bielik, Beacon Falls First Selectman
Wilbur and Joan Weed
Sandy M. Carter



ATTACHMENT 1

KATHREIN SCALA DIVISION

742 213V01 65° Panel Antenna

Kathrein's X-polarized adjustable electrical downtilt antennas offer the wireless carrier the ability to tailor polarization diversity sites for optimum performance. Using variable downtilt, only a few models need be procured to accommodate the needs of widely varying conditions. Remotely controlled downtilt is available as a retrofitable option.

- 0-6° downtilt range.
- UV resistant pulltruded fiberglass radome.
- DC Grounded metallic parts for impulse suppression.
- No moving electrical connections.
- Wideband vector dipole technology.
- Optional remote downtilt Control.
- Will accommodate future 3G / UMTS applications.

General specifications:

| | | |
|--|--|--|
| Frequency range | 1710–2200 MHz | |
| VSWR | < 1.5:1 | |
| Impedance | 50 ohms | |
| Intermodulation (2x20w) | IM3: <-150 dBc | |
| Polarization | +45° and -45° | |
| Front-to-back ratio (180°±30°) | >30 dB (co-polar) >25 dB (total power) | |
| Maximum input power | 300 watts per input (at 50°C) | |
| Electrical downtilt continuously adjustable | 0–6 degrees | |
| Connector | 2 x 7-16 DIN female | |
| Isolation | >30 dB | |
| Cross polar ratio | | |
| Main direction 0° | 25 dB (typical) | |
| Sector ±60° | >10 dB | |
| Tracking, average | 0.5 dB | |
| Squint | ±2.0° | |
| Weight | 19.8 lb (9 kg) 24.3 lb (11 kg) clamps included | |
| Dimensions | 76.9 x 6.1 x 2.8 inches (1954 x 155 x 70 mm) | |
| Wind load | at 93 mph (150kph) | |
| Front/Side/Rear | 115 lbf / 32 lbf / 115 lbf (510 N) / (140 N) / (510 N) | |
| Mounting category | M (Medium) | |
| Wind survival rating* | 120 mph (200 kph) | |
| Shipping dimensions | 88 x 6.8 x 3.6 inches (2235 x 172 x 92 mm) | |
| Shipping weight | 28.7 lb (13 kg) | |
| Mounting | Fixed mounts for 2 to 4.6 inch (50 to 115 mm) OD masts are included and tilt options are available. | |

See reverse for order information.

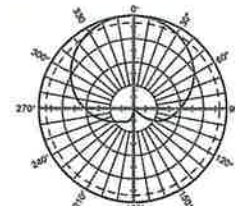
| Specifications: | 1710–1880 MHz | 1850–1990 MHz | 1920–2200 MHz |
|--|---------------------------------|---------------------------------|---------------------------------|
| Gain | 19 dBi | 19.2 dBi | 19.5 dBi |
| +45° and -45° polarization horizontal beamwidth | 67° (half-power) | 65° (half-power) | 63° (half-power) |
| +45° and -45° polarization vertical beamwidth | 4.7° (half-power) | 4.5° (half-power) | 4.3° (half-power) |
| Sidelobe suppression for first sidelobe above main beam | 0° 2° 4° 6° T 18 18 16 15 dB | 0° 2° 4° 6° T 18 18 17 16 dB | 0° 2° 4° 6° T 18 18 18 18 dB |



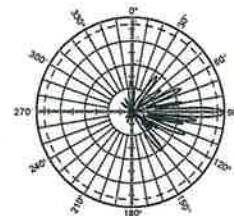
11271-B
936.3740/b



* Mechanical design is based on environmental conditions as stipulated in TIA-222-G-2 (December 2009) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



Horizontal pattern
±45°- polarization



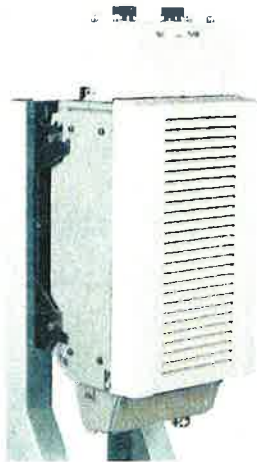
Vertical pattern
±45°- polarization
0°–6° electrical downtilt



Alcatel-Lucent RRH2x40-AWS

REMOTE RADIO HEAD

The Alcatel-Lucent RRH2x40-AWS is a high-power, small form-factor Remote Radio Head (RRH) operating in the AWS frequency band (1700/2100MHz - 3GPP Band 4). The Alcatel-Lucent RRH2x40-AWS is designed with an eco-efficient approach, providing operators with the means to achieve high quality and capacity coverage with minimum site requirements.



A distributed eNodeB expands deployment options by using two components, a Base Band Unit (BBU) containing the digital assets and a separate RRH containing the radio-frequency (RF) elements. This modular design optimizes available space and allows the main components of an eNodeB to be installed separately, within the same site or several kilometres apart.

The Alcatel-Lucent RRH2x40-AWS is linked to the BBU by an optical-fiber connection carrying downlink and uplink digital radio signals along with operations, administration and maintenance (OA&M) information. The Alcatel-Lucent RRH2x40-AWS has two transmit RF paths, 40 W RF output power per transmit path, and is designed to manage up to four-way receive diversity. The device is ideally suited to support macro coverage, with multiple-input multiple-output (MIMO) 2x2 operation in up to 20 MHz of bandwidth.

The Alcatel-Lucent RRH2x40-AWS is designed to make available all the benefits of a distributed eNodeB, with excellent RF characteristics, with low

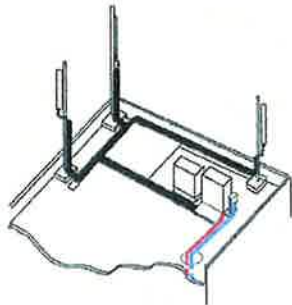
capital expenditures (CAPEX) and low operating expenditures (OPEX). The limited space available in some sites may prevent the installation of traditional single-cabinet BTS equipment or require costly cranes to be employed, leaving coverage holes. However, many of these sites can host an Alcatel-Lucent RRH2x40-AWS installation, providing more flexible site selection and improved network quality along with greatly reduced installation time and costs.

Fast, low-cost installation and deployment

The Alcatel-Lucent RRH2x40-AWS is a zero-footprint solution and operates noise-free, simplifying negotiations with site property owners and minimizing environmental impacts. Installation can easily be done by a single person because the Alcatel-Lucent RRH2x40-AWS is compact and weighs less than 20 kg (44 lb), eliminating the need for a crane to hoist the BTS cabinet to the rooftop. A site can be in operation in less than one day — a fraction of the time required for a traditional BTS.

Excellent RF performance

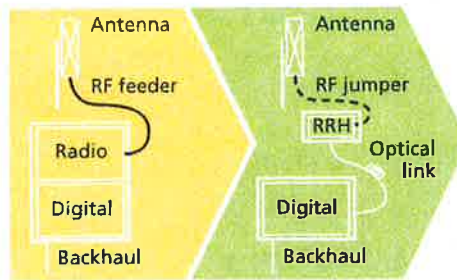
Because of its small size and weight, the Alcatel-Lucent RRH2x40-AWS can be installed close to the antenna. Operators can therefore locate the Alcatel-Lucent RRH2x40-AWS where RF engineering is deemed ideal, minimizing trade-offs between available sites and RF optimum sites. The RF feeder cost and installation costs are reduced or eliminated, and there is no need for a Tower Mounted Amplifier (TMA) because losses introduced by the RF feeder are greatly reduced. The Alcatel-Lucent RRH2x40-AWS provides more RF power while at the same time consuming less electricity.



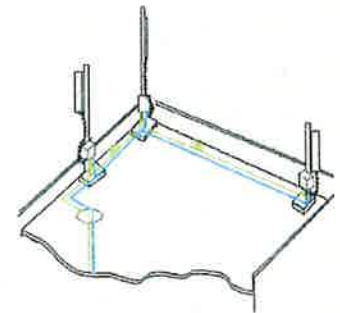
Macro

Features

- Zero-footprint deployment
- Easy installation, with a lightweight unit can be carried and set up by one person
- Optimized RF power, with flexible site selection and elimination of a TMA
- Convection-cooled (fanless)
- Noise-free
- Best-in-class power efficiency, with significantly reduced energy consumption



RRH for space-constrained cell sites



Distributed

Benefits

- Leverages existing real estate with lower site costs
- Reduces installation costs, with fewer installation materials and simplified logistics
- Decreases power costs and minimizes environmental impacts, with the potential for eco-sustainable power options
- Improves RF performance and adds flexibility to network planning

Technical specifications

Physical dimensions

- Height: 620 mm (24.4 in.)
- Width: 270 mm (10.63 in.)
- Depth: 170mm (6.7 in.)
- Weight (without mounting kit): less than 20 kg (44 lb)

Power

- Power supply: -48VDC

Operating environment

- Outdoor temperature range:
 - With solar load: -40°C to +50°C (-40°F to +122°F)
 - Without solar load: -40°C to +55°C (-40°F to +131°F)

- Passive convection cooling (no fans)
- Enclosure protection
 - IP65 (International Protection rating)

RF characteristics

- Frequency band: 1700/2100 MHz (AWS); 3GPP Band 4
- Bandwidth: up to 20 MHz
- RF output power at antenna port: 40 W nominal RF power for each Tx port
- Rx diversity: 2-way or 4-way with optional Rx Diversity module
- Noise figure: below 2.0 dB typical
- Antenna Line Device features
 - TMA and Remote electrical tilt (RET) support via AISG v2.0

Optical characteristics

Type/number of fibers

- Single-mode variant
 - One Single Mode Single Fiber per RRH2x, carrying UL and DL using CWDM
 - Single mode dual fiber (SM/DF)
- Multi-mode variant
 - Two Multi-mode fibers per RRH2x: one carrying UL, the other carrying DL

Optical fiber length

- Up to 500 m (0.31 mi), using MM fiber
- Up to 20 km (12.43 mi), using SM fiber

Digital Ports and Alarms

- Two optical ports to support daisy-chaining
- Six external alarms

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HYBRIFLEX™ RRH Hybrid Feeder Cabling Solution, 1-5/8", Single-Mode Fiber

Product Description

RFS' HYBRIFLEX Remote Radio Head (RRH) hybrid feeder cabling solution combines optical fiber and DC power for RRHs in a single lightweight aluminum corrugated cable, making it the world's most innovative solution for RRH deployments.

It was developed to reduce installation complexity and costs at Cellular sites, HYBRIFLEX allows mobile operators deploying an RRH architecture to standardize the RRH installation process and eliminate the need for and cost of cable grounding. HYBRIFLEX combines optical fiber (multi-mode or single-mode) and power in a single corrugated cable. It eliminates the need for junction boxes and can connect multiple RRHs with a single feeder. Standard RFS CELLFLEX® accessories can be used with HYBRIFLEX cable. Both pre-connectorized and on-site options are available.

Features/Benefits

- Aluminum corrugated armor with outstanding bending characteristics – minimizes installation time and enables mechanical protection and shielding
- Same accessories as 1 5/8" coaxial cable
- Outer conductor grounding – Eliminates typical grounding requirements and saves on installation costs
- Lightweight solution and compact design – Decreases tower loading
- Robust cabling – Eliminates need for expensive cable trays and ducts
- Installation of tight bundled fiber optic cable pairs directly to the RRH – Reduces CAPEX and wind load by eliminating need for interconnection
- Optical fiber and power cables housed in single corrugated cable – Saves CAPEX by standardizing RRH cable installation and reducing installation requirements
- Outdoor polyethylene jacket – Ensures long-lasting cable protection

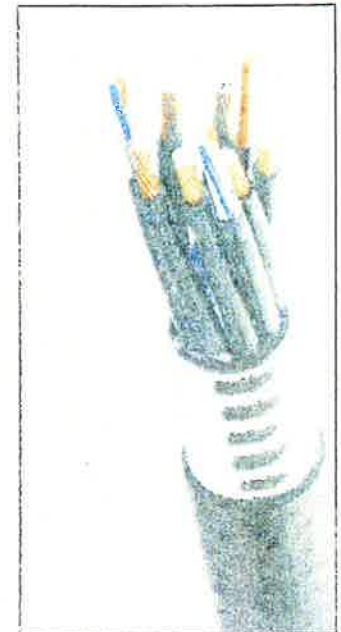


Figure 1: HYBRIFLEX Series

Technical Specifications

| | | | |
|---|--------------------------------|-------------------|---|
| Outer Conductor Armor | Corrugated Aluminum | (mm (in.)) | 46.5 (1.83) |
| Jacket | Polyethylene, PE | (mm (in.)) | 50.3 (1.98) |
| UV-Protection | Individual and External Jacket | | Yes |
| Weight, Approximate | | (kg/m (lb/ft)) | 1.9 (1.30) |
| Minimum Bending Radius, Single Bending | | (mm (in.)) | 200 (.8) |
| Minimum Bending Radius, Repeated Bending | | (mm (in.)) | 500 (20) |
| Recommended/Maximum Clamp Spacing | | (m (ft)) | 1.0 / 1.2 (3.25 / 4.0) |
| DC-Resistance Outer Conductor Armor | | (Ω/km (Ω/1000ft)) | 0.68 (0.205) |
| DC-Resistance Power Cable - 8 4mm ² (8AWG) | | (Ω/km (Ω/1000ft)) | 2.1 (0.307) |
| Version: | | | Single-mode OM3 |
| Quantity, Fiber Count | | | 16 (8 pairs) |
| Core/Clad | | (μm) | 50/125 |
| Primary Coating (Acrylate) | | (μm) | 245 |
| Buffer Diameter, Nominal | | (μm) | 900 |
| Secondary Protection, Jacket, Nominal | | (mm (in.)) | 2.0 (.08) |
| Minimum Bending Radius | | (mm (in.)) | 104 (4.1) |
| Insertion Loss @ wavelength 850nm | | dB/km | 3.0 |
| Insertion Loss @ wavelength 1310nm | | dB/km | 1.0 |
| Standards (Meets or exceeds) | | | UL94-V0 UL1666 RoHS Compliant |
| Size (Power) | | (mm (AWG)) | 8.4 (8) |
| Quantity, Wire Count (Power) | | | 16 (8 pairs) |
| Size (Alarm) | | (mm (AWG)) | 0.8 (18) |
| Quantity, Wire Count (Alarm) | | | 4 (2 pairs) |
| Type | | | UV protected |
| Strands | | | 19 |
| Primary Jacket Diameter, Nominal | | (mm (in.)) | 6.8 (0.27) |
| Standards (Meets or exceeds) | | | NFPA 130, ICEA S-95-658 UL Type X-HW-2, UL 44 UL-L5 Limited Smoke, UL VW-1 IEEE-383 (1974), IEEE1202/FT4 RoHS Compliant |
| Installation Temperature | | (°C (°F)) | -40 to +65 (-40 to 149) |
| Operation Temperature | | (°C (°F)) | -40 to +65 (-40 to 149) |

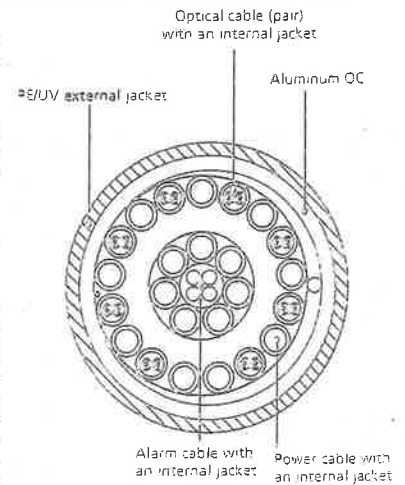


Figure 2: Construction Detail

All information contained in the present datasheet is subject to confirmation at time of ordering

ATTACHMENT 2

| Site Name: Beacon Falls | | General | | Power | | Density | | | | | | | |
|--------------------------|------------|-----------|--------|------------------|-------|--------------------|--------------|-------|--|--|--|--|--------|
| CARRIER | # OF CHAN. | WATTS ERP | HEIGHT | CALC. POWER DENS | FREQ. | MAX. PERMISS. EXP. | FRACTION MPE | Total | | | | | |
| *AT&T UMTS | 2 | 745 | 159 | 0.0212 | 880 | 0.5867 | 3.61% | | | | | | |
| *AT&T UMTS | 2 | 1052 | 159 | 0.0299 | 1900 | 1.0000 | 2.99% | | | | | | |
| *AT&T GSM | 1 | 372 | 159 | 0.0053 | 880 | 0.5867 | 0.90% | | | | | | |
| *AT&T GSM | 4 | 631 | 159 | 0.0359 | 1900 | 1.0000 | 3.59% | | | | | | |
| *AT&T LTE | 1 | 1375 | 159 | 0.0196 | 734 | 0.4893 | 4.00% | | | | | | |
| *Nextel | 9 | 100 | 137.5 | 0.0171 | 851 | 0.5673 | 3.02% | | | | | | |
| Verizon | 7 | 511 | 149 | 0.0579 | 1970 | 1.0000 | 5.79% | | | | | | |
| Verizon | 9 | 274 | 149 | 0.0399 | 869 | 0.5793 | 6.89% | | | | | | |
| Verizon | 1 | 2114 | 149 | 0.0342 | 2145 | 1.0000 | 3.42% | | | | | | |
| Verizon | 1 | 669 | 149 | 0.0108 | 698 | 0.4653 | 2.33% | | | | | | |
| * Source: Siting Council | | | | | | | | | | | | | 36.55% |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

ATTACHMENT 3



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 173 ft Monopole
ATC Site Name : Beacon Falls, CT
ATC Site Number : 302524
Engineering Number : 56495424
Proposed Carrier : Verizon Wireless
Carrier Site Name : Beacon Falls CT
Carrier Site Number : 117715
Site Location : 664 Rimmon Hill Road
Seymour, CT 06483-2722
41.407194,-73.079300
County : New Haven
Date : March 4, 2014
Max Usage : 98%
Result : Pass

Matt Wilson, E.I.



Mar 4 2014 3:19 PM



Eng. Number 56495424
March 4, 2014

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| Calculations | Attached |



Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 173 ft monopole to reflect the change in loading by Verizon.

Supporting Documents

| | |
|----------------------------|--|
| Tower Drawings | Valmont Drawing #DC3268Z, dated May 28, 1996 |
| Foundation Drawing | Girard & Company Sheet #4 of 11, dated July 16, 1996 |
| Geotechnical Report | S&ME Job #1261-07-418Z, dated November 13, 2007 |
| Modifications | Spectrasite Site #CT-0060, dated February 20, 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/TIA-222.

| | |
|---------------------------------|---|
| Basic Wind Speed: | 105 mph (3-Second Gust) |
| Basic Wind Speed w/ Ice: | 50 mph (3-Second Gust) w/ 3/4" radial ice concurrent |
| Code: | ANSI/TIA-222-G / 2003 IBC w/ 2005 CT Supplement & 2009 CT Amendment |
| Structure Class: | II |
| Exposure Category: | B |
| Topographic Category: | 1 |

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

| Mount Elev. ¹ (ft) | Qty. | Antenna | Mount Type | Lines | Carrier |
|-------------------------------|------|----------------------------|-----------------------|--|---------------|
| 157.0 | 6 | Ericsson RRUS 11 | Platform w/ Handrails | (12) 1 1/4" Coax (2) 0.78" 8 AWG 6 (1) 0.39" Cable (1) 3" Conduit | AT&T Mobility |
| | 6 | Powerwave P65-15-XLH-RR | | | |
| | 6 | Powerwave TT08-19DB111-001 | | | |
| | 6 | KMW KDXCV0012017 | | | |
| | 3 | Andrew SBNH-1D6565C | | | |
| | 1 | Raycap DC6-48-60-18-8F | | | |
| 143.0 | 2 | Andrew LNX-6514DS-T4M | Platform w/ Handrails | (12) 1 5/8" Coax | Verizon |
| | 6 | Andrew DB844H80E-XY | | | |
| | 1 | Powerwave P65-16-XL | | | |
| | 6 | RFS FD9R60004/1C-3L | | | |
| 137.5 | 3 | 72" x 12" Panel | Low Profile Platform | (12) 1 5/8" Coax | Sprint Nextel |
| | 9 | 48" x 12" Panel | | | |

Proposed Equipment

| Elevation ¹ (ft) | | Qty. | Antenna | Mount Type | Lines | Carrier |
|-----------------------------|-------|------|----------------------------|-----------------------|----------------------|---------|
| Mount | RAD | | | | | |
| 143.0 | 149.0 | 3 | Alcatel-Lucent RRH2x40-AWS | Platform w/ Handrails | (1) 1 5/8" Hybriflex | Verizon |
| | | 1 | RFS DB-B1-6C-12AB-OZ | | | |
| | | 6 | Kathrein 742 213V01 | | | |

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).

Install proposed coax inside the pole shaft.



Structure Usages

| Structural Component | Controlling Usage | Pass/Fail |
|----------------------|-------------------|-----------|
| Anchor Bolts | 78% | Pass |
| Shaft | 98% | Pass |
| Base Plate | 82% | Pass |

Foundations

| Reaction Component | Original Design Reactions | Factored Design Reactions* | Analysis Reactions | % of Design |
|--------------------|---------------------------|----------------------------|--------------------|-------------|
| Moment (Kips-Ft) | 3,020.9 | 4,078.2 | 3,685.3 | 90% |
| Shear (Kips) | 28.0 | 37.8 | 32.4 | 86% |

* The design reactions are factored by 1.35 per ANSI/TIA-222-G, Sec. 15.5.1

The structure base reactions resulting from this analysis are acceptable when compared to those shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

Deflection and Sway*

| Antenna Elevation (ft) | Deflection (ft) | Sway (Rotation) (°) |
|------------------------|-----------------|---------------------|
| 143.0 | 2.447 | 2.100 |

*Deflection and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-G



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:

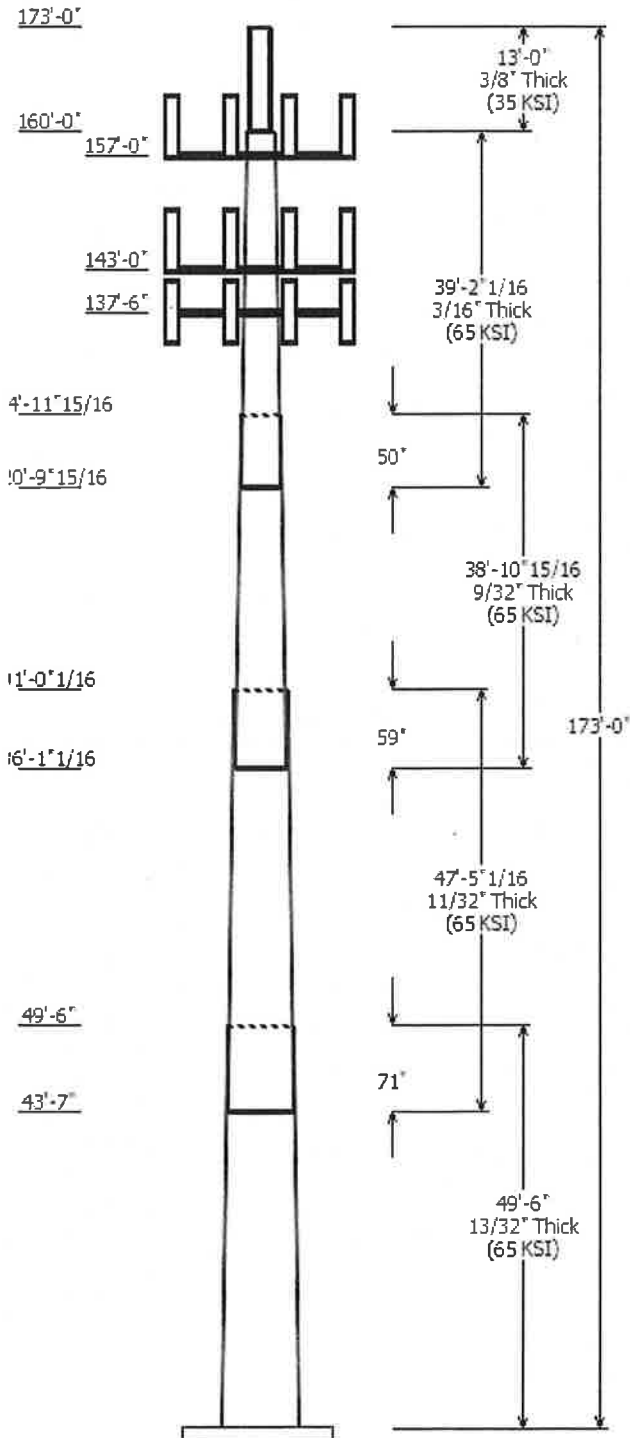
- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements 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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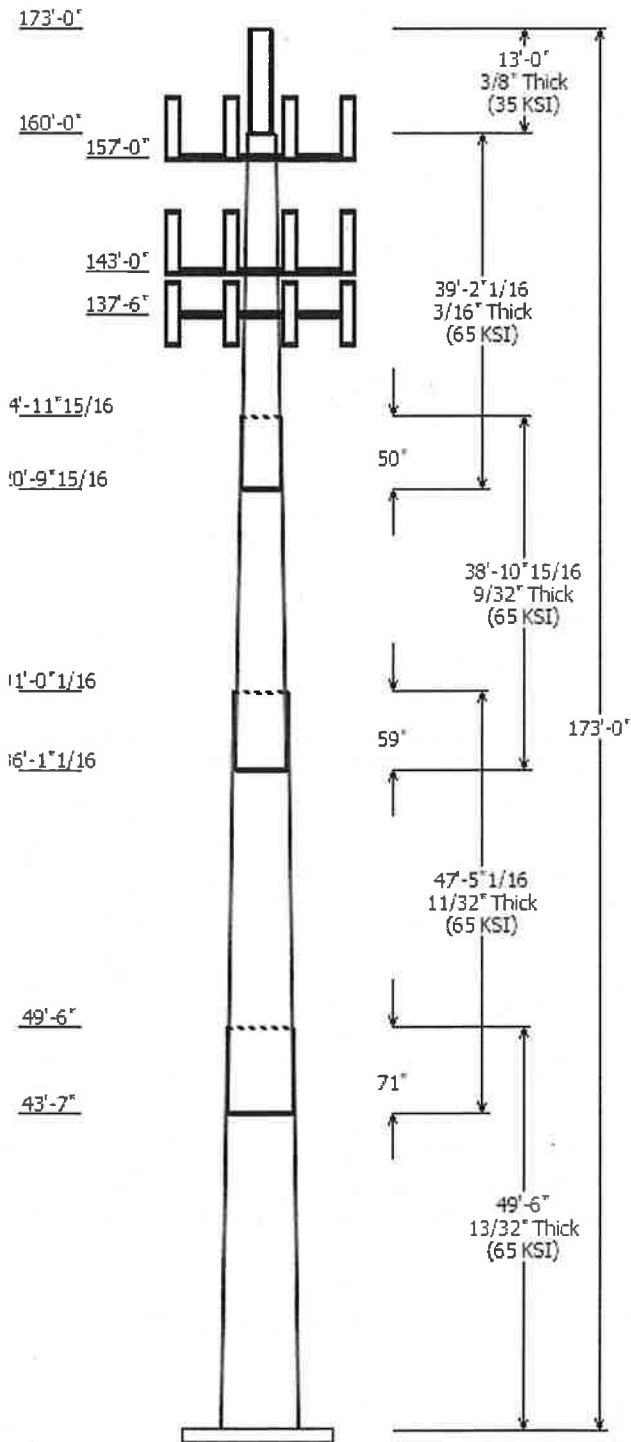
| Job Information | |
|-----------------|-------------------------|
| Pole : | 302524 |
| Code : | ANSI/TIA-222 Rev G |
| Description : | 173 ft Valmont Monopole |
| Client : | Verizon Wireless |
| Struct Class : | II |
| Location : | Beacon Falls, CT |
| Shape : | 12 Sides |
| Exposure : | B |
| Height : | 173.00 (ft) |
| Topo : | 1 |
| Base Elev (ft): | 0.00 |
| Taper: | 0.20300(in/ft) |

| Sections Properties | | | | | | | | |
|---------------------|-------------|---------------|--------------|------------------|---------------------|---------------|-------------------|--|
| Shaft Section | Length (ft) | Diameter (in) | | Thick Joint (in) | Overlap Length (in) | Taper (in/ft) | Steel Grade (ksi) | |
| | | Across Top | Flats Bottom | | | | | |
| 1 | 49.500 | 38.45 | 48.50 | 0.406 | 0.000 | 0.203000 | 65 | |
| 2 | 47.420 | 30.71 | 40.34 | 0.344 Slip Joint | 71.000 | 0.203000 | 65 | |
| 3 | 38.910 | 24.37 | 32.27 | 0.281 Slip Joint | 59.000 | 0.203000 | 65 | |
| 4 | 39.170 | 17.64 | 25.59 | 0.188 Slip Joint | 50.000 | 0.203000 | 65 | |
| 5 | 13.000 | 14.00 | 14.00 | 0.375 Butt Joint | 0.000 | 0.000000 | 35 | |

| Discrete Appurtenance | | | | |
|-----------------------|-----------------|-----|----------------------------|--|
| Attach Elev (ft) | Force Elev (ft) | Qty | Description | |
| 157.000 | 159.000 | 1 | Raycap DC6-48-60-18-8F | |
| 157.000 | 159.000 | 3 | Andrew SBNH-1D6565C | |
| 157.000 | 159.000 | 6 | KMW KDXCV0012017 | |
| 157.000 | 157.000 | 1 | Flat Platform w/ Handrails | |
| 157.000 | 159.000 | 6 | Powerwave TT08-19DB111-001 | |
| 157.000 | 159.000 | 6 | Powerwave P65-15-XLH-RR | |
| 157.000 | 159.000 | 6 | Ericsson RRUS 11 | |
| 143.000 | 149.000 | 6 | Kathrein 742 213V01 | |
| 143.000 | 149.000 | 1 | RFS DB-B1-6C-12AB-0Z | |
| 143.000 | 149.000 | 3 | Alcatel-Lucent RRH2x40-AWS | |
| 143.000 | 149.000 | 6 | RFS FD9R60004/1C-3L | |
| 143.000 | 149.000 | 1 | Powerwave P65-16-XL | |
| 143.000 | 143.000 | 1 | Flat Platform w/ Handrails | |
| 143.000 | 149.000 | 6 | Andrew DB844H80E-XY | |
| 143.000 | 149.000 | 2 | Andrew LNX-6514DS-T4M | |
| 137.500 | 137.500 | 1 | Flat Low Profile Platform | |
| 137.500 | 137.500 | 9 | 48" x 12" Panel | |
| 137.500 | 137.500 | 3 | 72" x 12" Panel | |

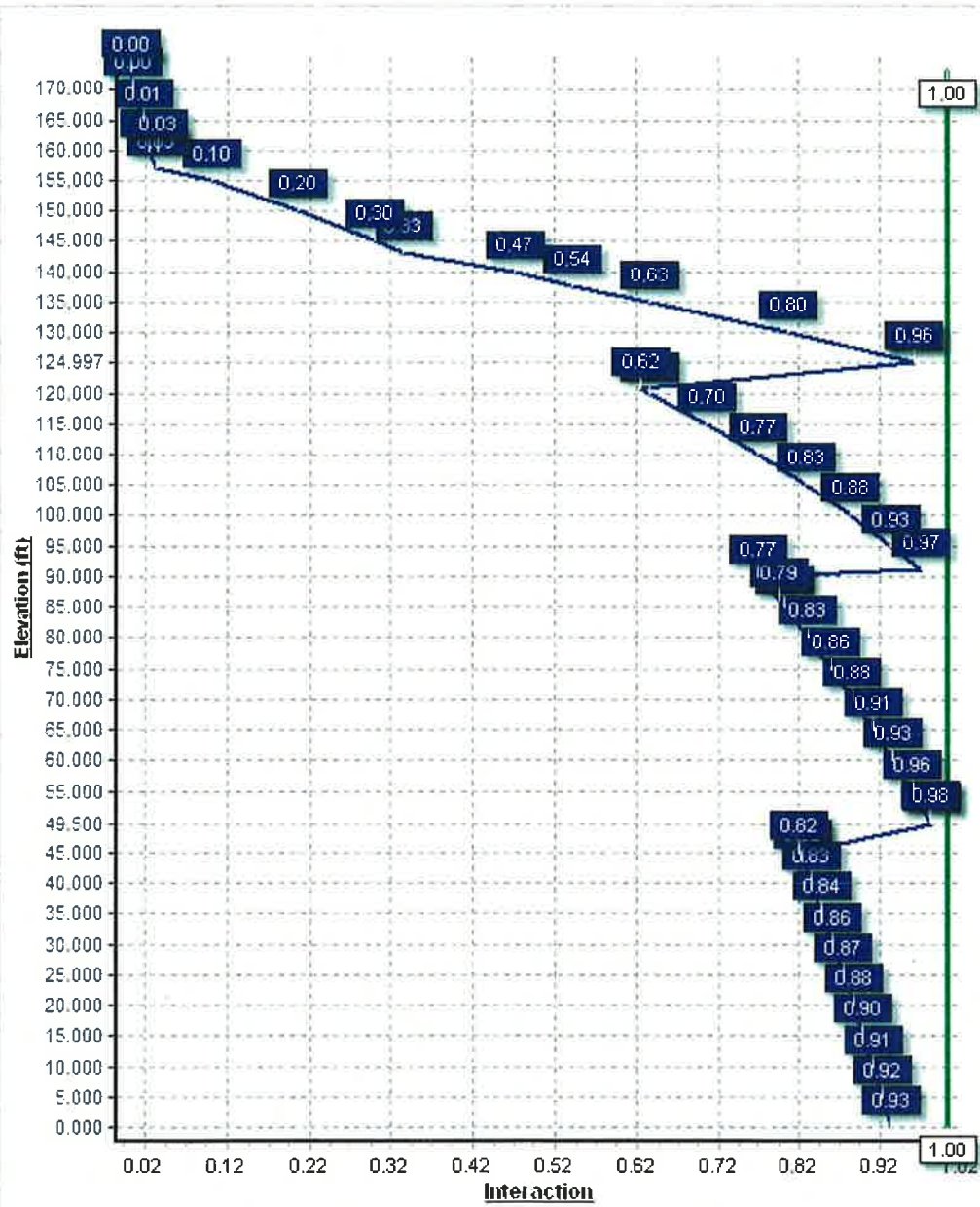
| Linear Appurtenance | | | |
|---------------------|-------|------------------|-----------------|
| Elev (ft) From | To | Description | Exposed To Wind |
| 0.000 | 137.5 | 1 5/8" Coax | No |
| 0.000 | 143.0 | 1 5/8" Coax | No |
| 0.000 | 143.0 | 1 5/8" Hybriflex | No |
| 0.000 | 157.0 | 0.39" Cable | No |
| 0.000 | 157.0 | 0.78" 8 AWG 6 | No |
| 0.000 | 157.0 | 1 1/4" Coax | No |
| 0.000 | 157.0 | 3" Conduit | No |

| Load Cases | |
|----------------------|-------------------------------------|
| 1.2D + 1.6W | 105.00 mph with No Ice |
| 0.9D + 1.6W | 105.00 mph with No Ice (Reduced DL) |
| 1.2D + 1.0Di + 1.0Wi | 50.00 mph with 0.75 in Radial Ice |
| 1.0D + 1.0W | 60.00 mph Serviceability |



| Reactions | | | |
|----------------------|-----------------|-------------|-------------|
| Load Case | Moment (kip-ft) | Shear (kip) | Axial (kip) |
| 1.2D + 1.6W | 3685.28 | 32.44 | 41.17 |
| 0.9D + 1.6W | 3624.55 | 32.42 | 30.86 |
| 1.2D + 1.0Di + 1.0Wi | 760.21 | 6.21 | 61.86 |
| 1.0D + 1.0W | 746.84 | 6.62 | 34.37 |

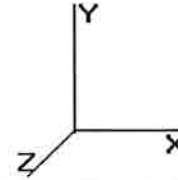
| Dish Deflections | | | |
|------------------|------------------|-----------------|----------------|
| Load Case | Attach Elev (ft) | Deflection (in) | Rotation (deg) |
| | 0.00 | 0.000 | 0.000 |



Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 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) | 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 | 49.500 | 0.4063 | 65 | | 0.00 | 9,490 | 48.50 | 0.00 | 62.91 | 18573.8 | 29.85 | 119.38 | 38.45 | 49.50 | 49.77 | 9194.7 | 23.22 | 94.65 | 0.203000 | |
| 2-12 | 47.420 | 0.3438 | 65 | Slip | 71.00 | 6,284 | 40.34 | 43.58 | 44.27 | 9039.5 | 29.30 | 117.35 | 30.71 | 91.00 | 33.62 | 3957.5 | 21.80 | 89.35 | 0.203000 | |
| 3-12 | 38.910 | 0.2813 | 65 | Slip | 59.00 | 3,363 | 32.27 | 86.09 | 28.97 | 3785.3 | 28.60 | 114.75 | 24.37 | 125.00 | 21.82 | 1616.9 | 21.08 | 86.67 | 0.203000 | |
| 4-12 | 39.170 | 0.1875 | 65 | Slip | 50.00 | 1,725 | 25.59 | 120.83 | 15.34 | 1264.2 | 34.44 | 136.51 | 17.64 | 160.00 | 10.54 | 410.0 | 23.07 | 94.11 | 0.203000 | |
| 5-R | 13.000 | 0.3750 | 35 | Butt | 0.00 | 710 | 14.00 | 160.00 | 16.05 | 372.8 | 0.00 | 37.33 | 14.00 | 173.00 | 16.05 | 372.8 | 0.00 | 37.33 | 0.000000 | |
| Shaft Weight | | | | | | 21,571 | | | | | | | | | | | | | | |

Discrete Appurtenance Properties

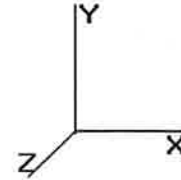
| Attach Elev (ft) | Description | Qty | No Ice | | | Ice | | | Distance From Face (ft) | Vert Ecc (ft) |
|------------------|----------------------------|-----|-------------|-----------|--------------------|-------------|-----------|--------------------|-------------------------|---------------|
| | | | Weight (lb) | EPAA (sf) | Orientation Factor | Weight (lb) | EPAA (sf) | Orientation Factor | | |
| 157.00 | Andrew SBNH-1D6565C | 3 | 60.80 | 11.450 | 0.84 | 325.81 | 13.111 | 0.84 | 0.000 | 2.000 |
| 157.00 | Ericsson RRUS 11 | 6 | 50.00 | 2.570 | 0.67 | 131.83 | 3.218 | 0.67 | 0.000 | 2.000 |
| 157.00 | Flat Platform w/ Handrails | 1 | 2000.00 | 42.400 | 1.00 | 3,430.59 | 63.511 | 1.00 | 0.000 | 0.000 |
| 157.00 | KMW KDXCV0012017 | 6 | 6.60 | 0.410 | 0.50 | 23.35 | 0.637 | 0.50 | 0.000 | 2.000 |
| 157.00 | Powerwave P65-15-XLH-RR | 6 | 41.00 | 5.430 | 0.78 | 182.39 | 6.462 | 0.78 | 0.000 | 2.000 |
| 157.00 | Powerwave TT08-19DB111- | 6 | 22.00 | 0.920 | 0.50 | 57.44 | 1.206 | 0.50 | 0.000 | 2.000 |
| 157.00 | Raycap DC6-48-60-18-8F | 1 | 20.00 | 1.110 | 1.00 | 101.04 | 2.527 | 1.00 | 0.000 | 2.000 |
| 143.00 | Alcatel-Lucent RRH2x40-AWS | 3 | 44.00 | 2.160 | 0.67 | 117.09 | 2.801 | 0.67 | 0.000 | 6.000 |
| 143.00 | Andrew DB844H80E-XY | 6 | 10.00 | 3.610 | 0.90 | 116.66 | 3.722 | 0.90 | 0.000 | 6.000 |
| 143.00 | Andrew LNX-6514DS-T4M | 2 | 38.40 | 8.170 | 0.69 | 240.68 | 9.471 | 0.69 | 0.000 | 6.000 |
| 143.00 | Flat Platform w/ Handrails | 1 | 2000.00 | 42.400 | 1.00 | 3,417.29 | 63.315 | 1.00 | 0.000 | 0.000 |
| 143.00 | Kathrein 742 213V01 | 6 | 19.80 | 5.170 | 0.67 | 133.71 | 6.448 | 0.67 | 0.000 | 6.000 |
| 143.00 | Powerwave P65-16-XL | 1 | 33.00 | 8.130 | 0.65 | 213.71 | 9.423 | 0.65 | 0.000 | 6.000 |
| 143.00 | RFS DB-B1-6C-12AB-0Z | 1 | 21.40 | 2.510 | 0.67 | 114.84 | 3.160 | 0.67 | 0.000 | 6.000 |
| 143.00 | RFS FD9R60004/1C-3L | 6 | 3.10 | 0.370 | 0.50 | 16.12 | 0.578 | 0.50 | 0.000 | 6.000 |
| 137.50 | 48" x 12" Panel | 9 | 30.00 | 5.070 | 0.66 | 161.91 | 6.043 | 0.66 | 0.000 | 0.000 |
| 137.50 | 72" x 12" Panel | 3 | 45.00 | 8.130 | 0.67 | 234.67 | 9.417 | 0.67 | 0.000 | 0.000 |
| 137.50 | Flat Low Profile Platform | 1 | 1500.00 | 26.100 | 1.00 | 2,143.60 | 45.065 | 1.00 | 0.000 | 0.000 |
| Totals | | 68 | 7285.60 | | | 17,361.33 | | | Number of Loadings : 18 | |

Linear Appurtenance Properties

| Elev From (ft) | Elev To (ft) | Description | Exposed Width (in) | Exposed To Wind |
|----------------|--------------|----------------------|--------------------|-----------------|
| 0.00 | 157.00 | (1) 0.39" Cable | 0.00 | N |
| 0.00 | 157.00 | (2) 0.78" 8 AWG 6 | 0.00 | N |
| 0.00 | 157.00 | (12) 1 1/4" Coax | 0.00 | N |
| 0.00 | 157.00 | (1) 3" Conduit | 0.00 | N |
| 0.00 | 143.00 | (12) 1 5/8" Coax | 0.00 | N |
| 0.00 | 143.00 | (1) 1 5/8" Hybriflex | 0.00 | N |
| 0.00 | 137.50 | (12) 1 5/8" Coax | 0.00 | N |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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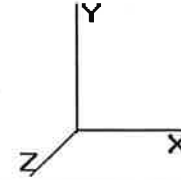
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Segment Properties (Max Len : 5 ft)

| Seg Top Elev (ft) | Description | Thick (in) | Flat Dia (in) | Area (in^2) | Ix (in^4) | W/t Ratio | D/t Ratio | Fy (ksi) | S (in3) | Weight (lb) |
|-------------------|-----------------|------------|---------------|-------------|-----------|-----------|-----------|----------|---------|-------------|
| 0.00 | | 0.4063 | 48.500 | 62.913 | 18,573.8 | 29.85 | 119.38 | 72.2 | 739.8 | 0.0 |
| 5.00 | | 0.4063 | 47.485 | 61.585 | 17,422.5 | 29.18 | 116.89 | 72.9 | 708.8 | 1,059.1 |
| 10.00 | | 0.4063 | 46.470 | 60.257 | 16,319.7 | 28.51 | 114.39 | 73.6 | 678.4 | 1,036.5 |
| 15.00 | | 0.4063 | 45.455 | 58.929 | 15,264.5 | 27.84 | 111.89 | 74.4 | 648.7 | 1,013.9 |
| 20.00 | | 0.4063 | 44.440 | 57.602 | 14,255.8 | 27.17 | 109.39 | 75.1 | 619.7 | 991.3 |
| 25.00 | | 0.4063 | 43.425 | 56.274 | 13,292.6 | 26.50 | 106.89 | 75.8 | 591.3 | 968.7 |
| 30.00 | | 0.4063 | 42.410 | 54.946 | 12,373.7 | 25.83 | 104.39 | 76.5 | 563.6 | 946.1 |
| 35.00 | | 0.4063 | 41.395 | 53.618 | 11,498.2 | 25.16 | 101.90 | 77.3 | 536.6 | 923.6 |
| 40.00 | | 0.4063 | 40.380 | 52.291 | 10,665.0 | 24.49 | 99.40 | 78.0 | 510.2 | 901.0 |
| 43.58 | Bot - Section 2 | 0.4063 | 39.653 | 51.339 | 10,093.3 | 24.01 | 97.61 | 78.5 | 491.7 | 631.8 |
| 45.00 | | 0.4063 | 39.365 | 50.963 | 9,873.0 | 23.82 | 96.90 | 78.7 | 484.5 | 459.2 |
| 49.50 | Top - Section 1 | 0.3438 | 39.139 | 42.941 | 8,249.4 | 28.36 | 113.86 | 73.8 | 407.2 | 1,436.5 |
| 50.00 | | 0.3438 | 39.038 | 42.829 | 8,184.8 | 28.29 | 113.56 | 73.9 | 405.0 | 73.0 |
| 55.00 | | 0.3438 | 38.023 | 41.706 | 7,557.4 | 27.49 | 110.61 | 74.7 | 384.0 | 719.1 |
| 60.00 | | 0.3438 | 37.007 | 40.582 | 6,963.0 | 26.70 | 107.66 | 75.6 | 363.5 | 700.0 |
| 65.00 | | 0.3438 | 35.993 | 39.459 | 6,400.6 | 25.91 | 104.71 | 76.5 | 343.5 | 680.9 |
| 70.00 | | 0.3438 | 34.978 | 38.335 | 5,869.3 | 25.12 | 101.75 | 77.3 | 324.2 | 661.8 |
| 75.00 | | 0.3438 | 33.963 | 37.212 | 5,368.2 | 24.33 | 98.80 | 78.2 | 305.4 | 642.7 |
| 80.00 | | 0.3438 | 32.948 | 36.088 | 4,896.5 | 23.54 | 95.85 | 79.0 | 287.1 | 623.6 |
| 85.00 | | 0.3438 | 31.933 | 34.965 | 4,453.3 | 22.75 | 92.89 | 79.9 | 269.4 | 604.4 |
| 86.09 | Bot - Section 3 | 0.3438 | 31.712 | 34.721 | 4,360.7 | 22.58 | 92.25 | 80.1 | 265.6 | 128.8 |
| 90.00 | | 0.3438 | 30.918 | 33.841 | 4,037.7 | 21.96 | 89.94 | 80.8 | 252.3 | 837.5 |
| 91.00 | Top - Section 2 | 0.2813 | 31.276 | 28.070 | 3,442.0 | 27.65 | 111.20 | 74.6 | 212.6 | 211.3 |
| 95.00 | | 0.2813 | 30.465 | 27.335 | 3,178.7 | 26.88 | 108.32 | 75.4 | 201.6 | 376.7 |
| 100.00 | | 0.2813 | 29.450 | 26.416 | 2,868.7 | 25.91 | 104.71 | 76.5 | 188.2 | 457.3 |
| 105.00 | | 0.2813 | 28.435 | 25.497 | 2,579.5 | 24.95 | 101.10 | 77.5 | 175.3 | 441.6 |
| 110.00 | | 0.2813 | 27.420 | 24.578 | 2,310.5 | 23.98 | 97.49 | 78.6 | 162.8 | 426.0 |
| 115.00 | | 0.2813 | 26.405 | 23.658 | 2,060.8 | 23.01 | 93.88 | 79.6 | 150.8 | 410.3 |
| 120.00 | | 0.2813 | 25.390 | 22.739 | 1,829.8 | 22.05 | 90.28 | 80.7 | 139.2 | 394.7 |
| 120.8 | Bot - Section 4 | 0.2813 | 25.222 | 22.587 | 1,793.2 | 21.89 | 89.68 | 80.8 | 137.4 | 64.0 |
| 125.0 | Top - Section 3 | 0.1875 | 24.751 | 14.830 | 1,142.1 | 33.23 | 132.00 | 68.5 | 89.1 | 528.7 |
| 125.0 | | 0.1875 | 24.750 | 14.830 | 1,142.0 | 33.23 | 132.00 | 68.5 | 89.1 | 0.2 |
| 130.00 | | 0.1875 | 23.735 | 14.217 | 1,006.2 | 31.78 | 126.59 | 70.1 | 81.9 | 247.1 |
| 135.00 | | 0.1875 | 22.720 | 13.604 | 881.6 | 30.32 | 121.17 | 71.6 | 75.0 | 236.7 |
| 137.5 | | 0.1875 | 22.213 | 13.298 | 823.4 | 29.60 | 118.47 | 72.4 | 71.6 | 114.4 |
| 140.00 | | 0.1875 | 21.705 | 12.991 | 767.7 | 28.87 | 115.76 | 73.2 | 68.3 | 111.8 |
| 143.00 | | 0.1875 | 21.096 | 12.624 | 704.4 | 28.00 | 112.51 | 74.2 | 64.5 | 130.7 |
| 145.00 | | 0.1875 | 20.690 | 12.378 | 664.1 | 27.42 | 110.35 | 74.8 | 62.0 | 85.1 |
| 150.00 | | 0.1875 | 19.675 | 11.766 | 570.3 | 25.97 | 104.93 | 76.4 | 56.0 | 205.4 |
| 155.00 | | 0.1875 | 18.660 | 11.153 | 485.8 | 24.52 | 99.52 | 78.0 | 50.3 | 195.0 |
| 157.00 | | 0.1875 | 18.254 | 10.908 | 454.4 | 23.94 | 97.35 | 78.6 | 48.1 | 75.1 |
| 160.00 | Top - Section 4 | 0.1875 | 17.645 | 10.540 | 410.0 | 23.07 | 94.11 | 79.6 | 44.9 | 109.5 |
| 160.00 | Bot - Section 5 | 0.3750 | 14.000 | 16.052 | 372.8 | 0.00 | 37.33 | 35.0 | 53.3 | |
| 165.00 | | 0.3750 | 14.000 | 16.052 | 372.8 | 0.00 | 37.33 | 35.0 | 53.3 | 273.1 |
| 170.00 | | 0.3750 | 14.000 | 16.052 | 372.8 | 0.00 | 37.33 | 35.0 | 53.3 | 273.1 |
| 173.00 | | 0.3750 | 14.000 | 16.052 | 372.8 | 0.00 | 37.33 | 35.0 | 53.3 | 163.9 |
| | | | | | | | | | | 21,571.2 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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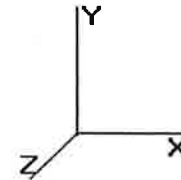
| | | |
|-------------------------------|------------------------|-------------------------------|
| Load Case: 1.2D + 1.6W | 105.00 mph with No Ice | 30 Iterations |
| Gust Response Factor : 1.10 | | Wind Importance Factor : 1.00 |
| Dead Load Factor : 1.20 | | |
| Wind Load Factor : 1.60 | | |

Shaft Segment Forces (Factored)

| Seg Top Elev (ft) | Description | Kzt | 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 | | 1.00 | 0.70 | 18.769 | 20.64 | 367.58 | 1.000 | 0.000 | 0.00 | 0.000 | 0.00 | 0.0 | 0.0 | 0.0 |
| 5.00 | | 1.00 | 0.70 | 18.769 | 20.64 | 359.89 | 1.000 | 0.000 | 5.00 | 20.702 | 20.70 | 683.9 | 0.0 | 1,270.9 |
| 10.00 | | 1.00 | 0.70 | 18.769 | 20.64 | 352.19 | 1.000 | 0.000 | 5.00 | 20.264 | 20.26 | 669.4 | 0.0 | 1,243.8 |
| 15.00 | | 1.00 | 0.70 | 18.769 | 20.64 | 344.50 | 1.000 | 0.000 | 5.00 | 19.827 | 19.83 | 654.9 | 0.0 | 1,216.7 |
| 20.00 | | 1.00 | 0.70 | 18.769 | 20.64 | 336.81 | 1.000 | 0.000 | 5.00 | 19.389 | 19.39 | 640.5 | 0.0 | 1,189.6 |
| 25.00 | | 1.00 | 0.70 | 18.769 | 20.64 | 329.11 | 1.000 | 0.000 | 5.00 | 18.951 | 18.95 | 626.0 | 0.0 | 1,162.5 |
| 30.00 | | 1.00 | 0.70 | 18.785 | 20.66 | 321.56 | 1.000 | 0.000 | 5.00 | 18.513 | 18.51 | 612.1 | 0.0 | 1,135.4 |
| 35.00 | | 1.00 | 0.73 | 19.631 | 21.59 | 320.85 | 1.000 | 0.000 | 5.00 | 18.075 | 18.08 | 624.5 | 0.0 | 1,108.3 |
| 40.00 | | 1.00 | 0.76 | 20.394 | 22.43 | 319.01 | 1.000 | 0.000 | 5.00 | 17.637 | 17.64 | 633.1 | 0.0 | 1,081.2 |
| 43.58 | Bot - Section 2 | 1.00 | 0.77 | 20.900 | 22.99 | 317.13 | 1.000 | 0.000 | 3.58 | 12.371 | 12.37 | 455.1 | 0.0 | 758.2 |
| 45.00 | | 1.00 | 0.78 | 21.092 | 23.20 | 316.27 | 1.000 | 0.000 | 1.42 | 4.913 | 4.91 | 182.4 | 0.0 | 551.1 |
| 49.50 | Top - Section 1 | 1.00 | 0.80 | 21.674 | 23.84 | 313.16 | 1.000 | 0.000 | 4.50 | 15.372 | 15.37 | 586.4 | 0.0 | 1,723.8 |
| 50.00 | | 1.00 | 0.81 | 21.737 | 23.91 | 318.39 | 1.000 | 0.000 | 0.50 | 1.686 | 1.69 | 64.5 | 0.0 | 87.6 |
| 55.00 | | 1.00 | 0.83 | 22.337 | 24.57 | 314.37 | 1.000 | 0.000 | 5.00 | 16.620 | 16.62 | 653.4 | 0.0 | 863.0 |
| 60.00 | | 1.00 | 0.85 | 22.899 | 25.18 | 309.80 | 1.000 | 0.000 | 5.00 | 16.183 | 16.18 | 652.2 | 0.0 | 840.0 |
| 65.00 | | 1.00 | 0.87 | 23.429 | 25.77 | 304.77 | 1.000 | 0.000 | 5.00 | 15.745 | 15.74 | 649.2 | 0.0 | 817.1 |
| 70.00 | | 1.00 | 0.89 | 23.930 | 26.32 | 299.33 | 1.000 | 0.000 | 5.00 | 15.307 | 15.31 | 644.7 | 0.0 | 794.1 |
| 75.00 | | 1.00 | 0.91 | 24.406 | 26.84 | 293.52 | 1.000 | 0.000 | 5.00 | 14.869 | 14.87 | 638.7 | 0.0 | 771.2 |
| 80.00 | | 1.00 | 0.92 | 24.861 | 27.34 | 287.39 | 1.000 | 0.000 | 5.00 | 14.431 | 14.43 | 631.4 | 0.0 | 748.3 |
| 85.00 | | 1.00 | 0.94 | 25.295 | 27.82 | 280.95 | 1.000 | 0.000 | 5.00 | 13.993 | 13.99 | 623.0 | 0.0 | 725.3 |
| 86.09 | Bot - Section 3 | 1.00 | 0.94 | 25.387 | 27.92 | 279.52 | 1.000 | 0.000 | 1.09 | 2.983 | 2.98 | 133.3 | 0.0 | 154.6 |
| 90.00 | | 1.00 | 0.95 | 25.711 | 28.28 | 274.25 | 1.000 | 0.000 | 3.91 | 10.762 | 10.76 | 487.0 | 0.0 | 1,005.0 |
| 91.00 | Top - Section 2 | 1.00 | 0.96 | 25.793 | 28.37 | 272.88 | 1.000 | 0.000 | 1.00 | 2.716 | 2.72 | 123.3 | 0.0 | 253.6 |
| 95.00 | | 1.00 | 0.97 | 26.112 | 28.72 | 272.34 | 1.000 | 0.000 | 4.00 | 10.644 | 10.64 | 489.2 | 0.0 | 452.1 |
| 100.00 | | 1.00 | 0.98 | 26.497 | 29.14 | 265.20 | 1.000 | 0.000 | 5.00 | 12.923 | 12.92 | 602.6 | 0.0 | 548.7 |
| 105.00 | | 1.00 | 1.00 | 26.869 | 29.55 | 257.85 | 1.000 | 0.000 | 5.00 | 12.485 | 12.48 | 590.4 | 0.0 | 529.9 |
| 110.00 | | 1.00 | 1.01 | 27.229 | 29.95 | 250.30 | 1.000 | 0.000 | 5.00 | 12.047 | 12.05 | 577.3 | 0.0 | 511.2 |
| 115.00 | | 1.00 | 1.02 | 27.577 | 30.33 | 242.57 | 1.000 | 0.000 | 5.00 | 11.609 | 11.61 | 563.4 | 0.0 | 492.4 |
| 120.00 | | 1.00 | 1.04 | 27.914 | 30.70 | 234.67 | 1.000 | 0.000 | 5.00 | 11.171 | 11.17 | 548.8 | 0.0 | 473.6 |
| 120.8 | Bot - Section 4 | 1.00 | 1.04 | 27.969 | 30.76 | 233.34 | 1.000 | 0.000 | 0.83 | 1.812 | 1.81 | 89.2 | 0.0 | 76.8 |
| 125.00 | Top - Section 3 | 1.00 | 1.05 | 28.241 | 31.06 | 226.61 | 1.000 | 0.000 | 4.17 | 9.049 | 9.05 | 449.8 | 0.0 | 634.4 |
| 125.00 | | 1.00 | 1.05 | 28.242 | 31.06 | 230.09 | 1.000 | 0.000 | 0.00 | 0.007 | 0.01 | 0.4 | 0.0 | 0.2 |
| 130.00 | | 1.00 | 1.06 | 28.560 | 31.41 | 221.90 | 1.000 | 0.000 | 5.00 | 10.457 | 10.46 | 525.6 | 0.0 | 296.5 |
| 135.00 | | 1.00 | 1.07 | 28.869 | 31.75 | 213.56 | 1.000 | 0.000 | 5.00 | 10.020 | 10.02 | 509.1 | 0.0 | 284.0 |
| 137.5 | Appertunance(s) | 1.00 | 1.08 | 29.021 | 31.92 | 209.33 | 1.000 | 0.000 | 2.50 | 4.846 | 4.85 | 247.5 | 0.0 | 137.3 |
| 140.00 | | 1.00 | 1.08 | 29.171 | 32.08 | 205.08 | 1.000 | 0.000 | 2.50 | 4.736 | 4.74 | 243.2 | 0.0 | 134.2 |
| 143.00 | Appertunance(s) | 1.00 | 1.09 | 29.348 | 32.28 | 199.93 | 1.000 | 0.000 | 3.00 | 5.539 | 5.54 | 286.1 | 0.0 | 156.9 |
| 145.00 | | 1.00 | 1.09 | 29.465 | 32.41 | 196.47 | 1.000 | 0.000 | 2.00 | 3.605 | 3.61 | 186.9 | 0.0 | 102.1 |
| 150.00 | | 1.00 | 1.11 | 29.752 | 32.72 | 187.74 | 1.000 | 0.000 | 5.00 | 8.706 | 8.71 | 455.9 | 0.0 | 246.5 |
| 155.00 | | 1.00 | 1.12 | 30.032 | 33.03 | 178.89 | 1.000 | 0.000 | 5.00 | 8.268 | 8.27 | 437.0 | 0.0 | 234.0 |
| 157.00 | Appertunance(s) | 1.00 | 1.12 | 30.142 | 33.15 | 175.32 | 1.000 | 0.000 | 2.00 | 3.185 | 3.18 | 168.9 | 0.0 | 90.1 |
| 160.00 | Top - Section 4 | 1.00 | 1.13 | 30.305 | 33.33 | 169.93 | 1.000 | 0.000 | 3.00 | 4.646 | 4.65 | 247.8 | 0.0 | 131.4 |
| 165.00 | | 1.00 | 1.14 | 30.573 | 33.63 | 130.80 | 0.600 | 0.000 | 5.00 | 5.833 | 3.50 | 188.3 | 0.0 | 327.7 |
| 170.00 | | 1.00 | 1.15 | 30.835 | 33.91 | 131.36 | 0.600 | 0.000 | 5.00 | 5.833 | 3.50 | 189.9 | 0.0 | 327.7 |
| 173.00 | | 1.00 | 1.15 | 30.989 | 34.08 | 131.69 | 0.600 | 0.000 | 3.00 | 3.500 | 2.10 | 114.5 | 0.0 | 196.6 |
| Totals: | | | | | | | | | 173.00 | | | 19,381.0 | 0.0 | 25,885.4 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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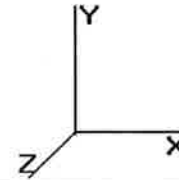
| | | |
|-------------------------------|------------------------|-------------------------------|
| Load Case: 1.2D + 1.6W | 105.00 mph with No Ice | 30 Iterations |
| Gust Response Factor : 1.10 | | Wind Importance Factor : 1.00 |
| Dead Load Factor : 1.20 | | |
| Wind Load Factor : 1.60 | | |

Discrete Appurtenance Segment Forces (Factored)

| Elev (ft) | Description | Qty | qz (psf) | qzGh (psf) | Orientation Factor | Ka | Total EPAa (sf) | Horiz Ecc (ft) | Vert Ecc (ft) | Wind FX (lb) | Mom Y (lb-ft) | Mom Z (lb-ft) | Dead Load (lb) |
|-----------|----------------------|-----|----------|------------|--------------------|------|-----------------|----------------|---------------|--------------|---------------|---------------|----------------|
| 137.5 | 72" x 12" Panel | 3 | 29.021 | 31.923 | 0.67 | 0.80 | 13.07 | 0.000 | 0.000 | 667.74 | 0.00 | 0.00 | 162.00 |
| 137.5 | 48" x 12" Panel | 9 | 29.021 | 31.923 | 0.66 | 0.80 | 24.09 | 0.000 | 0.000 | 1,230.59 | 0.00 | 0.00 | 324.00 |
| 137.5 | Flat Low Profile Pla | 1 | 29.021 | 31.923 | 1.00 | 1.00 | 26.10 | 0.000 | 0.000 | 1,333.12 | 0.00 | 0.00 | 1,800.00 |
| 143.0 | Andrew LNX-6514DS- | 2 | 29.695 | 32.664 | 0.69 | 0.75 | 8.46 | 0.000 | 6.000 | 441.93 | 0.00 | 2,651.60 | 92.16 |
| 143.0 | Andrew DB844H80E- | 6 | 29.695 | 32.664 | 0.90 | 0.75 | 14.62 | 0.000 | 6.000 | 764.11 | 0.00 | 4,584.68 | 72.00 |
| 143.0 | Flat Platform w/ Han | 1 | 29.348 | 32.283 | 1.00 | 1.00 | 42.40 | 0.000 | 0.000 | 2,190.08 | 0.00 | 0.00 | 2,400.00 |
| 143.0 | Powerwave P65-16-XL | 1 | 29.695 | 32.664 | 0.65 | 0.75 | 3.96 | 0.000 | 6.000 | 207.14 | 0.00 | 1,242.83 | 39.60 |
| 143.0 | RFS FD9R60004/1C-3L | 6 | 29.695 | 32.664 | 0.50 | 0.75 | 0.83 | 0.000 | 6.000 | 43.51 | 0.00 | 261.05 | 22.32 |
| 143.0 | Alcatel-Lucent RRH2x | 3 | 29.695 | 32.664 | 0.67 | 0.75 | 3.26 | 0.000 | 6.000 | 170.18 | 0.00 | 1,021.07 | 158.40 |
| 143.0 | RFS DB-B1-6C-12AB- | 1 | 29.695 | 32.664 | 0.67 | 0.75 | 1.26 | 0.000 | 6.000 | 65.92 | 0.00 | 395.51 | 25.68 |
| 143.0 | Kathrein 742 213V01 | 6 | 29.695 | 32.664 | 0.67 | 0.75 | 15.59 | 0.000 | 6.000 | 814.65 | 0.00 | 4,887.92 | 142.56 |
| 157.0 | Ericsson RRUS 11 | 6 | 30.251 | 33.276 | 0.67 | 0.75 | 7.75 | 0.000 | 2.000 | 412.55 | 0.00 | 825.10 | 360.00 |
| 157.0 | Powerwave P65-15- | 6 | 30.251 | 33.276 | 0.78 | 0.75 | 19.06 | 0.000 | 2.000 | 1,014.76 | 0.00 | 2,029.52 | 295.20 |
| 157.0 | Powerwave TT08- | 6 | 30.251 | 33.276 | 0.50 | 0.75 | 2.07 | 0.000 | 2.000 | 110.21 | 0.00 | 220.42 | 158.40 |
| 157.0 | Flat Platform w/ Han | 1 | 30.142 | 33.156 | 1.00 | 1.00 | 42.40 | 0.000 | 0.000 | 2,249.31 | 0.00 | 0.00 | 2,400.00 |
| 157.0 | KMW KDXCV0012017 | 6 | 30.251 | 33.276 | 0.50 | 0.75 | 0.92 | 0.000 | 2.000 | 49.12 | 0.00 | 98.23 | 47.52 |
| 157.0 | Andrew SBNH- | 3 | 30.251 | 33.276 | 0.84 | 0.75 | 21.64 | 0.000 | 2.000 | 1,152.19 | 0.00 | 2,304.37 | 218.88 |
| 157.0 | Raycap DC6-48-60-18- | 1 | 30.251 | 33.276 | 1.00 | 0.75 | 0.83 | 0.000 | 2.000 | 44.32 | 0.00 | 88.65 | 24.00 |
| | | | | | | | | | | 12,961.43 | | | 8,742.72 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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| | | |
|-------------------------------|------------------------|-------------------------------|
| Load Case: 1.2D + 1.6W | 105.00 mph with No Ice | 30 Iterations |
| Gust Response Factor : 1.10 | | Wind Importance Factor : 1.00 |
| Dead Load Factor : 1.20 | | |
| Wind Load Factor : 1.60 | | |

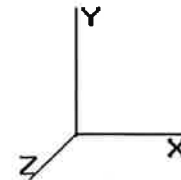
Applied Segment Forces Summary

| 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 | 683.87 | 1,495.13 | 0.00 | 0.00 |
| 10.00 | 669.40 | 1,468.02 | 0.00 | 0.00 |
| 15.00 | 654.94 | 1,440.92 | 0.00 | 0.00 |
| 20.00 | 640.48 | 1,413.81 | 0.00 | 0.00 |
| 25.00 | 626.01 | 1,386.70 | 0.00 | 0.00 |
| 30.00 | 612.07 | 1,359.59 | 0.00 | 0.00 |
| 35.00 | 624.50 | 1,332.48 | 0.00 | 0.00 |
| 40.00 | 633.07 | 1,305.38 | 0.00 | 0.00 |
| 43.58 | 455.05 | 918.84 | 0.00 | 0.00 |
| 45.00 | 182.37 | 614.60 | 0.00 | 0.00 |
| 49.50 | 586.40 | 1,925.60 | 0.00 | 0.00 |
| 50.00 | 64.51 | 109.98 | 0.00 | 0.00 |
| 55.00 | 653.39 | 1,087.18 | 0.00 | 0.00 |
| 60.00 | 652.20 | 1,064.24 | 0.00 | 0.00 |
| 65.00 | 649.23 | 1,041.30 | 0.00 | 0.00 |
| 70.00 | 644.68 | 1,018.37 | 0.00 | 0.00 |
| 75.00 | 638.71 | 995.43 | 0.00 | 0.00 |
| 80.00 | 631.44 | 972.49 | 0.00 | 0.00 |
| 85.00 | 622.98 | 949.55 | 0.00 | 0.00 |
| 86.09 | 133.30 | 203.34 | 0.00 | 0.00 |
| 90.00 | 487.01 | 1,180.52 | 0.00 | 0.00 |
| 91.00 | 123.30 | 298.56 | 0.00 | 0.00 |
| 95.00 | 489.18 | 631.32 | 0.00 | 0.00 |
| 100.0 | 602.65 | 772.93 | 0.00 | 0.00 |
| 105.0 | 590.40 | 754.16 | 0.00 | 0.00 |
| 110.0 | 577.32 | 735.39 | 0.00 | 0.00 |
| 115.0 | 563.45 | 716.63 | 0.00 | 0.00 |
| 120.0 | 548.83 | 697.86 | 0.00 | 0.00 |
| 120.8 | 89.19 | 114.01 | 0.00 | 0.00 |
| 125.0 | 449.79 | 821.28 | 0.00 | 0.00 |
| 125.0 | 0.36 | 0.36 | 0.00 | 0.00 |
| 130.0 | 525.64 | 520.74 | 0.00 | 0.00 |
| 135.0 | 509.10 | 508.22 | 0.00 | 0.00 |
| 137.5 | 3,478.94 | 2,535.42 | 0.00 | 0.00 |
| 140.0 | 243.16 | 216.77 | 0.00 | 0.00 |
| 143.0 | 4,983.62 | 3,208.72 | 0.00 | 15,044.67 |
| 145.0 | 186.95 | 141.43 | 0.00 | 0.00 |
| 150.0 | 455.87 | 344.81 | 0.00 | 0.00 |
| 155.0 | 437.02 | 332.30 | 0.00 | 0.00 |
| 157.0 | 5,201.40 | 3,633.42 | 0.00 | 5,566.29 |
| 160.0 | 247.78 | 131.36 | 0.00 | 0.00 |
| 165.0 | 188.33 | 327.73 | 0.00 | 0.00 |
| 170.0 | 189.94 | 327.72 | 0.00 | 0.00 |
| 173.0 | 114.54 | 196.63 | 0.00 | 0.00 |
| Totals: | 32,342.39 | 41,251.24 | 0.00 | 20,610.96 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides, Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)

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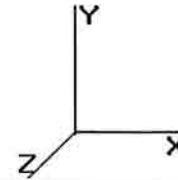
| | | |
|-------------------------------|------------------------|-------------------------------|
| Load Case: 1.2D + 1.6W | 105.00 mph with No Ice | 30 Iterations |
| Gust Response Factor : 1.10 | | Wind Importance Factor : 1.00 |
| Dead Load Factor : 1.20 | | |
| Wind Load Factor : 1.60 | | |

Calculated Forces

| Seg Elev (ft) | Pu FY (-) (kips) | Vu FX (-) (kips) | Tu MY (ft-kips) | Mu MZ (ft-kips) | Mu MX (ft-kips) | Resultant Moment (ft-kips) | phi Pn (kips) | phi Vn (kips) | phi Tn (ft-kips) | phi Mn (ft-kips) | Total Deflect (in) | Rotation (deg) | Ratio |
|---------------|------------------|------------------|-----------------|-----------------|-----------------|----------------------------|---------------|---------------|------------------|------------------|--------------------|----------------|-------|
| 0.00 | -41.17 | -32.44 | 0.00 | -3,685.28 | 0.00 | 3,685.28 | 4,086.01 | 2,043.01 | 8,107.89 | 4,004.18 | 0.00 | 0.00 | 0.931 |
| 5.00 | -39.52 | -31.95 | 0.00 | -3,523.07 | 0.00 | 3,523.07 | 4,040.25 | 2,020.12 | 7,846.47 | 3,875.07 | 0.15 | -0.28 | 0.919 |
| 10.00 | -37.90 | -31.46 | 0.00 | -3,363.33 | 0.00 | 3,363.33 | 3,992.74 | 1,996.37 | 7,585.59 | 3,746.24 | 0.59 | -0.56 | 0.908 |
| 15.00 | -36.32 | -30.97 | 0.00 | -3,206.05 | 0.00 | 3,206.05 | 3,943.49 | 1,971.74 | 7,325.49 | 3,617.78 | 1.32 | -0.84 | 0.896 |
| 20.00 | -34.76 | -30.48 | 0.00 | -3,051.22 | 0.00 | 3,051.22 | 3,892.49 | 1,946.24 | 7,066.38 | 3,489.82 | 2.36 | -1.14 | 0.883 |
| 25.00 | -33.23 | -30.00 | 0.00 | -2,898.82 | 0.00 | 2,898.82 | 3,839.74 | 1,919.87 | 6,808.48 | 3,362.45 | 3.71 | -1.43 | 0.871 |
| 30.00 | -31.73 | -29.52 | 0.00 | -2,748.83 | 0.00 | 2,748.83 | 3,785.25 | 1,892.63 | 6,552.02 | 3,235.80 | 5.37 | -1.73 | 0.858 |
| 35.00 | -30.26 | -29.01 | 0.00 | -2,601.24 | 0.00 | 2,601.24 | 3,729.02 | 1,864.51 | 6,297.22 | 3,109.96 | 7.35 | -2.04 | 0.845 |
| 40.00 | -28.85 | -28.47 | 0.00 | -2,456.17 | 0.00 | 2,456.17 | 3,671.04 | 1,835.52 | 6,044.29 | 2,985.05 | 9.66 | -2.35 | 0.831 |
| 43.58 | -27.87 | -28.05 | 0.00 | -2,354.16 | 0.00 | 2,354.16 | 3,628.42 | 1,814.21 | 5,864.30 | 2,896.16 | 11.51 | -2.58 | 0.821 |
| 45.00 | -27.17 | -27.93 | 0.00 | -2,314.42 | 0.00 | 2,314.42 | 3,611.32 | 1,805.66 | 5,793.46 | 2,861.17 | 12.29 | -2.68 | 0.817 |
| 49.50 | -25.20 | -27.32 | 0.00 | -2,188.72 | 0.00 | 2,188.72 | 2,851.35 | 1,425.67 | 4,562.16 | 2,253.08 | 14.96 | -2.97 | 0.981 |
| 50.00 | -25.00 | -27.34 | 0.00 | -2,175.06 | 0.00 | 2,175.06 | 2,847.21 | 1,423.61 | 4,543.52 | 2,243.87 | 15.27 | -3.00 | 0.978 |
| 55.00 | -23.78 | -26.78 | 0.00 | -2,038.35 | 0.00 | 2,038.35 | 2,804.92 | 1,402.46 | 4,357.58 | 2,152.04 | 18.61 | -3.37 | 0.956 |
| 60.00 | -22.58 | -26.21 | 0.00 | -1,904.43 | 0.00 | 1,904.43 | 2,760.87 | 1,380.44 | 4,172.57 | 2,060.67 | 22.33 | -3.74 | 0.933 |
| 65.00 | -21.42 | -25.64 | 0.00 | -1,773.37 | 0.00 | 1,773.37 | 2,715.09 | 1,357.54 | 3,988.71 | 1,969.88 | 26.45 | -4.12 | 0.908 |
| 70.00 | -20.29 | -25.05 | 0.00 | -1,645.18 | 0.00 | 1,645.18 | 2,667.55 | 1,333.78 | 3,806.24 | 1,879.76 | 30.96 | -4.50 | 0.883 |
| 75.00 | -19.18 | -24.46 | 0.00 | -1,519.92 | 0.00 | 1,519.92 | 2,618.28 | 1,309.14 | 3,625.36 | 1,790.43 | 35.87 | -4.88 | 0.857 |
| 80.00 | -18.11 | -23.87 | 0.00 | -1,397.60 | 0.00 | 1,397.60 | 2,567.25 | 1,283.63 | 3,446.31 | 1,702.00 | 41.18 | -5.27 | 0.829 |
| 85.00 | -17.13 | -23.23 | 0.00 | -1,278.23 | 0.00 | 1,278.23 | 2,514.49 | 1,257.24 | 3,269.29 | 1,614.58 | 46.89 | -5.65 | 0.799 |
| 86.09 | -16.86 | -23.14 | 0.00 | -1,252.99 | 0.00 | 1,252.99 | 2,502.79 | 1,251.39 | 3,231.11 | 1,595.72 | 48.19 | -5.74 | 0.792 |
| 90.00 | -15.66 | -22.59 | 0.00 | -1,162.44 | 0.00 | 1,162.44 | 2,459.97 | 1,229.99 | 3,094.54 | 1,528.28 | 53.02 | -6.05 | 0.767 |
| 91.00 | -15.30 | -22.49 | 0.00 | -1,139.78 | 0.00 | 1,139.78 | 1,883.46 | 941.73 | 2,407.12 | 1,188.79 | 54.30 | -6.13 | 0.967 |
| 95.00 | -14.58 | -22.03 | 0.00 | -1,049.91 | 0.00 | 1,049.91 | 1,854.90 | 927.45 | 2,308.01 | 1,139.84 | 59.55 | -6.45 | 0.930 |
| 100.00 | -13.71 | -21.45 | 0.00 | -939.77 | 0.00 | 939.77 | 1,817.60 | 908.80 | 2,184.84 | 1,079.01 | 66.53 | -6.89 | 0.879 |
| 105.00 | -12.88 | -20.87 | 0.00 | -832.55 | 0.00 | 832.55 | 1,778.55 | 889.28 | 2,062.81 | 1,018.74 | 73.97 | -7.33 | 0.825 |
| 110.00 | -12.08 | -20.29 | 0.00 | -728.22 | 0.00 | 728.22 | 1,737.76 | 868.88 | 1,942.11 | 959.14 | 81.86 | -7.76 | 0.767 |
| 115.00 | -11.30 | -19.71 | 0.00 | -626.80 | 0.00 | 626.80 | 1,695.22 | 847.61 | 1,822.99 | 900.31 | 90.18 | -8.18 | 0.703 |
| 120.00 | -10.62 | -19.11 | 0.00 | -528.25 | 0.00 | 528.25 | 1,650.94 | 825.47 | 1,705.66 | 842.36 | 98.94 | -8.58 | 0.634 |
| 120.83 | -10.45 | -19.04 | 0.00 | -512.39 | 0.00 | 512.39 | 1,643.42 | 821.71 | 1,686.37 | 832.84 | 100.43 | -8.64 | 0.622 |
| 125.00 | -9.66 | -18.49 | 0.00 | -433.07 | 0.00 | 433.07 | 913.95 | 456.98 | 927.00 | 457.81 | 108.08 | -8.96 | 0.958 |
| 125.00 | -9.58 | -18.53 | 0.00 | -433.01 | 0.00 | 433.01 | 913.94 | 456.97 | 926.96 | 457.79 | 108.09 | -8.96 | 0.958 |
| 130.00 | -9.01 | -18.00 | 0.00 | -340.33 | 0.00 | 340.33 | 896.41 | 448.21 | 871.33 | 430.32 | 117.70 | -9.44 | 0.803 |
| 135.00 | -8.51 | -17.46 | 0.00 | -250.31 | 0.00 | 250.31 | 877.14 | 438.57 | 815.56 | 402.77 | 127.77 | -9.86 | 0.633 |
| 137.50 | -6.57 | -13.62 | 0.00 | -206.66 | 0.00 | 206.66 | 866.86 | 433.43 | 787.69 | 389.01 | 132.96 | -10.04 | 0.540 |
| 140.00 | -6.36 | -13.36 | 0.00 | -172.63 | 0.00 | 172.63 | 856.13 | 428.06 | 759.86 | 375.27 | 138.23 | -10.21 | 0.468 |
| 143.00 | -4.08 | -7.89 | 0.00 | -117.51 | 0.00 | 117.51 | 842.68 | 421.34 | 726.58 | 358.83 | 144.67 | -10.37 | 0.333 |
| 145.00 | -3.95 | -7.69 | 0.00 | -101.73 | 0.00 | 101.73 | 833.37 | 416.68 | 704.47 | 347.91 | 149.01 | -10.46 | 0.297 |
| 150.00 | -3.68 | -7.19 | 0.00 | -63.29 | 0.00 | 63.29 | 808.86 | 404.43 | 649.60 | 320.81 | 160.01 | -10.64 | 0.202 |
| 155.00 | -3.43 | -6.70 | 0.00 | -27.35 | 0.00 | 27.35 | 782.61 | 391.31 | 595.47 | 294.08 | 171.15 | -10.75 | 0.098 |
| 157.00 | -0.83 | -0.91 | 0.00 | -8.39 | 0.00 | 8.39 | 771.63 | 385.81 | 574.08 | 283.51 | 175.64 | -10.78 | 0.031 |
| 160.00 | -0.74 | -0.64 | 0.00 | -5.65 | 0.00 | 5.65 | 754.62 | 377.31 | 542.31 | 267.82 | 182.37 | -10.79 | 0.022 |
| 160.00 | -0.74 | -0.64 | 0.00 | -5.65 | 0.00 | 5.65 | 505.62 | 252.81 | 279.19 | 182.79 | 182.37 | -10.79 | 0.032 |
| 165.00 | -0.46 | -0.40 | 0.00 | -2.43 | 0.00 | 2.43 | 505.62 | 252.81 | 279.19 | 182.79 | 193.61 | -10.80 | 0.014 |
| 170.00 | -0.17 | -0.15 | 0.00 | -0.45 | 0.00 | 0.45 | 505.62 | 252.81 | 279.19 | 182.79 | 204.87 | -10.81 | 0.003 |
| 173.00 | 0.00 | -0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 505.62 | 252.81 | 279.19 | 182.79 | 211.62 | -10.81 | 0.000 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides, Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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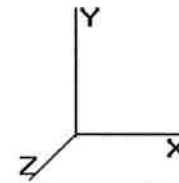
| | | |
|-------------------------------|-------------------------------------|-------------------------------|
| Load Case: 0.9D + 1.6W | 105.00 mph with No Ice (Reduced DL) | 30 Iterations |
| Gust Response Factor : 1.10 | | Wind Importance Factor : 1.00 |
| Dead Load Factor : 0.90 | | |
| Wind Load Factor : 1.60 | | |

Shaft Segment Forces (Factored)

| Seg Top Elev (ft) | Description | Kzt | 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 | | 1.00 | 0.70 | 18.769 | 20.64 | 367.58 | 1.000 | 0.000 | 0.00 | 0.000 | 0.00 | 0.0 | 0.0 | 0.0 |
| 5.00 | | 1.00 | 0.70 | 18.769 | 20.64 | 359.89 | 1.000 | 0.000 | 5.00 | 20.702 | 20.70 | 683.9 | 0.0 | 953.2 |
| 10.00 | | 1.00 | 0.70 | 18.769 | 20.64 | 352.19 | 1.000 | 0.000 | 5.00 | 20.264 | 20.26 | 669.4 | 0.0 | 932.9 |
| 15.00 | | 1.00 | 0.70 | 18.769 | 20.64 | 344.50 | 1.000 | 0.000 | 5.00 | 19.827 | 19.83 | 654.9 | 0.0 | 912.5 |
| 20.00 | | 1.00 | 0.70 | 18.769 | 20.64 | 336.81 | 1.000 | 0.000 | 5.00 | 19.389 | 19.39 | 640.5 | 0.0 | 892.2 |
| 25.00 | | 1.00 | 0.70 | 18.769 | 20.64 | 329.11 | 1.000 | 0.000 | 5.00 | 18.951 | 18.95 | 626.0 | 0.0 | 871.9 |
| 30.00 | | 1.00 | 0.70 | 18.785 | 20.66 | 321.56 | 1.000 | 0.000 | 5.00 | 18.513 | 18.51 | 612.1 | 0.0 | 851.5 |
| 35.00 | | 1.00 | 0.73 | 19.631 | 21.59 | 320.85 | 1.000 | 0.000 | 5.00 | 18.075 | 18.08 | 624.5 | 0.0 | 831.2 |
| 40.00 | | 1.00 | 0.76 | 20.394 | 22.43 | 319.01 | 1.000 | 0.000 | 5.00 | 17.637 | 17.64 | 633.1 | 0.0 | 810.9 |
| 43.58 | Bot - Section 2 | 1.00 | 0.77 | 20.900 | 22.99 | 317.13 | 1.000 | 0.000 | 3.58 | 12.371 | 12.37 | 455.1 | 0.0 | 568.6 |
| 45.00 | | 1.00 | 0.78 | 21.092 | 23.20 | 316.27 | 1.000 | 0.000 | 1.42 | 4.913 | 4.91 | 182.4 | 0.0 | 413.3 |
| 49.50 | Top - Section 1 | 1.00 | 0.80 | 21.674 | 23.84 | 313.16 | 1.000 | 0.000 | 4.50 | 15.372 | 15.37 | 586.4 | 0.0 | 1,292.9 |
| 50.00 | | 1.00 | 0.81 | 21.737 | 23.91 | 318.39 | 1.000 | 0.000 | 0.50 | 1.686 | 1.69 | 64.5 | 0.0 | 65.7 |
| 55.00 | | 1.00 | 0.83 | 22.337 | 24.57 | 314.37 | 1.000 | 0.000 | 5.00 | 16.620 | 16.62 | 653.4 | 0.0 | 647.2 |
| 60.00 | | 1.00 | 0.85 | 22.899 | 25.18 | 309.80 | 1.000 | 0.000 | 5.00 | 16.183 | 16.18 | 652.2 | 0.0 | 630.0 |
| 65.00 | | 1.00 | 0.87 | 23.429 | 25.77 | 304.77 | 1.000 | 0.000 | 5.00 | 15.745 | 15.74 | 649.2 | 0.0 | 612.8 |
| 70.00 | | 1.00 | 0.89 | 23.930 | 26.32 | 299.33 | 1.000 | 0.000 | 5.00 | 15.307 | 15.31 | 644.7 | 0.0 | 595.6 |
| 75.00 | | 1.00 | 0.91 | 24.406 | 26.84 | 293.52 | 1.000 | 0.000 | 5.00 | 14.869 | 14.87 | 638.7 | 0.0 | 578.4 |
| 80.00 | | 1.00 | 0.92 | 24.861 | 27.34 | 287.39 | 1.000 | 0.000 | 5.00 | 14.431 | 14.43 | 631.4 | 0.0 | 561.2 |
| 85.00 | | 1.00 | 0.94 | 25.295 | 27.82 | 280.95 | 1.000 | 0.000 | 5.00 | 13.993 | 13.99 | 623.0 | 0.0 | 544.0 |
| 86.09 | Bot - Section 3 | 1.00 | 0.94 | 25.387 | 27.92 | 279.52 | 1.000 | 0.000 | 1.09 | 2.983 | 2.98 | 133.3 | 0.0 | 116.0 |
| 90.00 | | 1.00 | 0.95 | 25.711 | 28.28 | 274.25 | 1.000 | 0.000 | 3.91 | 10.762 | 10.76 | 487.0 | 0.0 | 753.8 |
| 91.00 | Top - Section 2 | 1.00 | 0.96 | 25.793 | 28.37 | 272.88 | 1.000 | 0.000 | 1.00 | 2.716 | 2.72 | 123.3 | 0.0 | 190.2 |
| 95.00 | | 1.00 | 0.97 | 26.112 | 28.72 | 272.34 | 1.000 | 0.000 | 4.00 | 10.644 | 10.64 | 489.2 | 0.0 | 339.1 |
| 100.00 | | 1.00 | 0.98 | 26.497 | 29.14 | 265.20 | 1.000 | 0.000 | 5.00 | 12.923 | 12.92 | 602.6 | 0.0 | 411.5 |
| 105.00 | | 1.00 | 1.00 | 26.869 | 29.55 | 257.85 | 1.000 | 0.000 | 5.00 | 12.485 | 12.48 | 590.4 | 0.0 | 397.5 |
| 110.00 | | 1.00 | 1.01 | 27.229 | 29.95 | 250.30 | 1.000 | 0.000 | 5.00 | 12.047 | 12.05 | 577.3 | 0.0 | 383.4 |
| 115.00 | | 1.00 | 1.02 | 27.577 | 30.33 | 242.57 | 1.000 | 0.000 | 5.00 | 11.609 | 11.61 | 563.4 | 0.0 | 369.3 |
| 120.00 | | 1.00 | 1.04 | 27.914 | 30.70 | 234.67 | 1.000 | 0.000 | 5.00 | 11.171 | 11.17 | 548.8 | 0.0 | 355.2 |
| 120.8 | Bot - Section 4 | 1.00 | 1.04 | 27.969 | 30.76 | 233.34 | 1.000 | 0.000 | 0.83 | 1.812 | 1.81 | 89.2 | 0.0 | 57.6 |
| 125.00 | Top - Section 3 | 1.00 | 1.05 | 28.241 | 31.06 | 226.61 | 1.000 | 0.000 | 4.17 | 9.049 | 9.05 | 449.8 | 0.0 | 475.8 |
| 125.00 | | 1.00 | 1.05 | 28.242 | 31.06 | 230.09 | 1.000 | 0.000 | 0.00 | 0.007 | 0.01 | 0.4 | 0.0 | 0.2 |
| 130.00 | | 1.00 | 1.06 | 28.560 | 31.41 | 221.90 | 1.000 | 0.000 | 5.00 | 10.457 | 10.46 | 525.6 | 0.0 | 222.4 |
| 135.00 | | 1.00 | 1.07 | 28.869 | 31.75 | 213.56 | 1.000 | 0.000 | 5.00 | 10.020 | 10.02 | 509.1 | 0.0 | 213.0 |
| 137.5 | Appertunance(s) | 1.00 | 1.08 | 29.021 | 31.92 | 209.33 | 1.000 | 0.000 | 2.50 | 4.846 | 4.85 | 247.5 | 0.0 | 103.0 |
| 140.00 | | 1.00 | 1.08 | 29.171 | 32.08 | 205.08 | 1.000 | 0.000 | 2.50 | 4.736 | 4.74 | 243.2 | 0.0 | 100.6 |
| 143.00 | Appertunance(s) | 1.00 | 1.09 | 29.348 | 32.28 | 199.93 | 1.000 | 0.000 | 3.00 | 5.539 | 5.54 | 286.1 | 0.0 | 117.7 |
| 145.00 | | 1.00 | 1.09 | 29.465 | 32.41 | 196.47 | 1.000 | 0.000 | 2.00 | 3.605 | 3.61 | 186.9 | 0.0 | 76.6 |
| 150.00 | | 1.00 | 1.11 | 29.752 | 32.72 | 187.74 | 1.000 | 0.000 | 5.00 | 8.706 | 8.71 | 455.9 | 0.0 | 184.9 |
| 155.00 | | 1.00 | 1.12 | 30.032 | 33.03 | 178.89 | 1.000 | 0.000 | 5.00 | 8.268 | 8.27 | 437.0 | 0.0 | 175.5 |
| 157.00 | Appertunance(s) | 1.00 | 1.12 | 30.142 | 33.15 | 175.32 | 1.000 | 0.000 | 2.00 | 3.185 | 3.18 | 168.9 | 0.0 | 67.6 |
| 160.00 | Top - Section 4 | 1.00 | 1.13 | 30.305 | 33.33 | 169.93 | 1.000 | 0.000 | 3.00 | 4.646 | 4.65 | 247.8 | 0.0 | 98.5 |
| 165.00 | | 1.00 | 1.14 | 30.573 | 33.63 | 130.80 | 0.600 | 0.000 | 5.00 | 5.833 | 3.50 | 188.3 | 0.0 | 245.8 |
| 170.00 | | 1.00 | 1.15 | 30.835 | 33.91 | 131.36 | 0.600 | 0.000 | 5.00 | 5.833 | 3.50 | 189.9 | 0.0 | 245.8 |
| 173.00 | | 1.00 | 1.15 | 30.989 | 34.08 | 131.69 | 0.600 | 0.000 | 3.00 | 3.500 | 2.10 | 114.5 | 0.0 | 147.5 |
| Totals: | | | | | | | | | 173.00 | | | 19,381.0 | 0.0 | 19,414.1 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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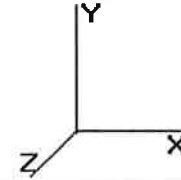
| | | |
|-------------------------------|-------------------------------------|-------------------------------|
| Load Case: 0.9D + 1.6W | 105.00 mph with No Ice (Reduced DL) | 30 Iterations |
| Gust Response Factor : 1.10 | | Wind Importance Factor : 1.00 |
| Dead Load Factor : 0.90 | | |
| Wind Load Factor : 1.60 | | |

Discrete Appurtenance Segment Forces (Factored)

| Elev (ft) | Description | Qty | qz (psf) | qzGh (psf) | Orientation Factor | Ka | Total EPAa (sf) | Horiz Ecc (ft) | Vert Ecc (ft) | Wind FX (lb) | Mom Y (lb-ft) | Mom Z (lb-ft) | Dead Load (lb) |
|-----------|----------------------|-----|----------|------------|--------------------|------|-----------------|----------------|---------------|--------------|---------------|---------------|----------------|
| 137.5 | 72" x 12" Panel | 3 | 29.021 | 31.923 | 0.67 | 0.80 | 13.07 | 0.000 | 0.000 | 667.74 | 0.00 | 0.00 | 121.50 |
| 137.5 | 48" x 12" Panel | 9 | 29.021 | 31.923 | 0.66 | 0.80 | 24.09 | 0.000 | 0.000 | 1,230.59 | 0.00 | 0.00 | 243.00 |
| 137.5 | Flat Low Profile Pla | 1 | 29.021 | 31.923 | 1.00 | 1.00 | 26.10 | 0.000 | 0.000 | 1,333.12 | 0.00 | 0.00 | 1,350.00 |
| 143.0 | Andrew LNX-6514DS- | 2 | 29.695 | 32.664 | 0.69 | 0.75 | 8.46 | 0.000 | 6.000 | 441.93 | 0.00 | 2,651.60 | 69.12 |
| 143.0 | Andrew DB844H80E- | 6 | 29.695 | 32.664 | 0.90 | 0.75 | 14.62 | 0.000 | 6.000 | 764.11 | 0.00 | 4,584.68 | 54.00 |
| 143.0 | Flat Platform w/ Han | 1 | 29.348 | 32.283 | 1.00 | 1.00 | 42.40 | 0.000 | 0.000 | 2,190.08 | 0.00 | 0.00 | 1,800.00 |
| 143.0 | Powerwave P65-16-XL | 1 | 29.695 | 32.664 | 0.65 | 0.75 | 3.96 | 0.000 | 6.000 | 207.14 | 0.00 | 1,242.83 | 29.70 |
| 143.0 | RFS FD9R60004/1C-3L | 6 | 29.695 | 32.664 | 0.50 | 0.75 | 0.83 | 0.000 | 6.000 | 43.51 | 0.00 | 261.05 | 16.74 |
| 143.0 | Alcatel-Lucent RRH2x | 3 | 29.695 | 32.664 | 0.67 | 0.75 | 3.26 | 0.000 | 6.000 | 170.18 | 0.00 | 1,021.07 | 118.80 |
| 143.0 | RFS DB-B1-6C-12AB- | 1 | 29.695 | 32.664 | 0.67 | 0.75 | 1.26 | 0.000 | 6.000 | 65.92 | 0.00 | 395.51 | 19.26 |
| 143.0 | Kathrein 742 213V01 | 6 | 29.695 | 32.664 | 0.67 | 0.75 | 15.59 | 0.000 | 6.000 | 814.65 | 0.00 | 4,887.92 | 106.92 |
| 157.0 | Ericsson RRUS 11 | 6 | 30.251 | 33.276 | 0.67 | 0.75 | 7.75 | 0.000 | 2.000 | 412.55 | 0.00 | 825.10 | 270.00 |
| 157.0 | Powerwave P65-15- | 6 | 30.251 | 33.276 | 0.78 | 0.75 | 19.06 | 0.000 | 2.000 | 1,014.76 | 0.00 | 2,029.52 | 221.40 |
| 157.0 | Powerwave TT08- | 6 | 30.251 | 33.276 | 0.50 | 0.75 | 2.07 | 0.000 | 2.000 | 110.21 | 0.00 | 220.42 | 118.80 |
| 157.0 | Flat Platform w/ Han | 1 | 30.142 | 33.156 | 1.00 | 1.00 | 42.40 | 0.000 | 0.000 | 2,249.31 | 0.00 | 0.00 | 1,800.00 |
| 157.0 | KMW KDXCV0012017 | 6 | 30.251 | 33.276 | 0.50 | 0.75 | 0.92 | 0.000 | 2.000 | 49.12 | 0.00 | 98.23 | 35.64 |
| 157.0 | Andrew SBNH- | 3 | 30.251 | 33.276 | 0.84 | 0.75 | 21.64 | 0.000 | 2.000 | 1,152.19 | 0.00 | 2,304.37 | 164.16 |
| 157.0 | Raycap DC6-48-60-18- | 1 | 30.251 | 33.276 | 1.00 | 0.75 | 0.83 | 0.000 | 2.000 | 44.32 | 0.00 | 88.65 | 18.00 |
| | | | | | | | | | | 12,961.43 | | | 6,557.04 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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| | | |
|-------------------------------|-------------------------------------|-------------------------------|
| Load Case: 0.9D + 1.6W | 105.00 mph with No Ice (Reduced DL) | 30 Iterations |
| Gust Response Factor : 1.10 | | Wind Importance Factor : 1.00 |
| Dead Load Factor : 0.90 | | |
| Wind Load Factor : 1.60 | | |

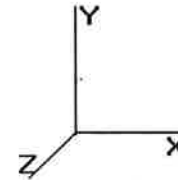
Applied Segment Forces Summary

| 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 | 683.87 | 1,121.35 | 0.00 | 0.00 |
| 10.00 | 669.40 | 1,101.02 | 0.00 | 0.00 |
| 15.00 | 654.94 | 1,080.69 | 0.00 | 0.00 |
| 20.00 | 640.48 | 1,060.36 | 0.00 | 0.00 |
| 25.00 | 626.01 | 1,040.02 | 0.00 | 0.00 |
| 30.00 | 612.07 | 1,019.69 | 0.00 | 0.00 |
| 35.00 | 624.50 | 999.36 | 0.00 | 0.00 |
| 40.00 | 633.07 | 979.03 | 0.00 | 0.00 |
| 43.58 | 455.05 | 689.13 | 0.00 | 0.00 |
| 45.00 | 182.37 | 460.95 | 0.00 | 0.00 |
| 49.50 | 586.40 | 1,444.20 | 0.00 | 0.00 |
| 50.00 | 64.51 | 82.48 | 0.00 | 0.00 |
| 55.00 | 653.39 | 815.38 | 0.00 | 0.00 |
| 60.00 | 652.20 | 798.18 | 0.00 | 0.00 |
| 65.00 | 649.23 | 780.98 | 0.00 | 0.00 |
| 70.00 | 644.68 | 763.77 | 0.00 | 0.00 |
| 75.00 | 638.71 | 746.57 | 0.00 | 0.00 |
| 80.00 | 631.44 | 729.37 | 0.00 | 0.00 |
| 85.00 | 622.98 | 712.17 | 0.00 | 0.00 |
| 86.09 | 133.30 | 152.50 | 0.00 | 0.00 |
| 90.00 | 487.01 | 885.39 | 0.00 | 0.00 |
| 91.00 | 123.30 | 223.92 | 0.00 | 0.00 |
| 95.00 | 489.18 | 473.49 | 0.00 | 0.00 |
| 100.0 | 602.65 | 579.70 | 0.00 | 0.00 |
| 105.0 | 590.40 | 565.62 | 0.00 | 0.00 |
| 110.0 | 577.32 | 551.55 | 0.00 | 0.00 |
| 115.0 | 563.45 | 537.47 | 0.00 | 0.00 |
| 120.0 | 548.83 | 523.40 | 0.00 | 0.00 |
| 120.8 | 89.19 | 85.51 | 0.00 | 0.00 |
| 125.0 | 449.79 | 615.96 | 0.00 | 0.00 |
| 125.0 | 0.36 | 0.27 | 0.00 | 0.00 |
| 130.0 | 525.64 | 390.55 | 0.00 | 0.00 |
| 135.0 | 509.10 | 381.17 | 0.00 | 0.00 |
| 137.5 | 3,478.94 | 1,901.57 | 0.00 | 0.00 |
| 140.0 | 243.16 | 162.58 | 0.00 | 0.00 |
| 143.0 | 4,983.62 | 2,406.54 | 0.00 | 15,044.67 |
| 145.0 | 186.95 | 106.07 | 0.00 | 0.00 |
| 150.0 | 455.87 | 258.61 | 0.00 | 0.00 |
| 155.0 | 437.02 | 249.22 | 0.00 | 0.00 |
| 157.0 | 5,201.40 | 2,725.06 | 0.00 | 5,566.29 |
| 160.0 | 247.78 | 98.52 | 0.00 | 0.00 |
| 165.0 | 188.33 | 245.79 | 0.00 | 0.00 |
| 170.0 | 189.94 | 245.79 | 0.00 | 0.00 |
| 173.0 | 114.54 | 147.47 | 0.00 | 0.00 |
| Totals: | 32,342.39 | 30,938.43 | 0.00 | 20,610.96 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides, Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)

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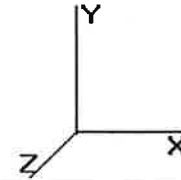
| | | |
|-------------------------------|-------------------------------------|-------------------------------|
| Load Case: 0.9D + 1.6W | 105.00 mph with No Ice (Reduced DL) | 30 Iterations |
| Gust Response Factor : 1.10 | | Wind Importance Factor : 1.00 |
| Dead Load Factor : 0.90 | | |
| Wind Load Factor : 1.60 | | |

Calculated Forces

| Seg Elev (ft) | Pu FY (-) (kips) | Vu FX (-) (kips) | Tu MY (ft-kips) | Mu MZ (ft-kips) | Mu MX (ft-kips) | Resultant Moment (ft-kips) | phi Pn (kips) | phi Vn (kips) | phi Tn (ft-kips) | phi Mn (ft-kips) | Total Deflect (in) | Rotation (deg) | Ratio |
|---------------|------------------|------------------|-----------------|-----------------|-----------------|----------------------------|---------------|---------------|------------------|------------------|--------------------|----------------|-------|
| 0.00 | -30.86 | -32.42 | 0.00 | -3,624.55 | 0.00 | 3,624.55 | 4,086.01 | 2,043.01 | 8,107.89 | 4,004.18 | 0.00 | 0.00 | 0.913 |
| 5.00 | -29.59 | -31.87 | 0.00 | -3,462.47 | 0.00 | 3,462.47 | 4,040.25 | 2,020.12 | 7,846.47 | 3,875.07 | 0.15 | -0.27 | 0.901 |
| 10.00 | -28.34 | -31.33 | 0.00 | -3,303.11 | 0.00 | 3,303.11 | 3,992.74 | 1,996.37 | 7,585.59 | 3,746.24 | 0.58 | -0.55 | 0.889 |
| 15.00 | -27.12 | -30.80 | 0.00 | -3,146.45 | 0.00 | 3,146.45 | 3,943.49 | 1,971.74 | 7,325.49 | 3,617.78 | 1.30 | -0.83 | 0.877 |
| 20.00 | -25.91 | -30.27 | 0.00 | -2,992.46 | 0.00 | 2,992.46 | 3,892.49 | 1,946.24 | 7,066.38 | 3,489.82 | 2.32 | -1.11 | 0.864 |
| 25.00 | -24.74 | -29.75 | 0.00 | -2,841.10 | 0.00 | 2,841.10 | 3,839.74 | 1,919.87 | 6,808.48 | 3,362.45 | 3.65 | -1.41 | 0.852 |
| 30.00 | -23.58 | -29.23 | 0.00 | -2,692.35 | 0.00 | 2,692.35 | 3,785.25 | 1,892.63 | 6,552.02 | 3,235.80 | 5.28 | -1.70 | 0.839 |
| 35.00 | -22.45 | -28.70 | 0.00 | -2,546.19 | 0.00 | 2,546.19 | 3,729.02 | 1,864.51 | 6,297.22 | 3,109.96 | 7.22 | -2.00 | 0.825 |
| 40.00 | -21.37 | -28.13 | 0.00 | -2,402.70 | 0.00 | 2,402.70 | 3,671.04 | 1,835.52 | 6,044.29 | 2,985.05 | 9.48 | -2.31 | 0.811 |
| 43.58 | -20.62 | -27.70 | 0.00 | -2,301.92 | 0.00 | 2,301.92 | 3,628.42 | 1,814.21 | 5,864.30 | 2,896.16 | 11.30 | -2.53 | 0.801 |
| 45.00 | -20.08 | -27.56 | 0.00 | -2,262.68 | 0.00 | 2,262.68 | 3,611.32 | 1,805.66 | 5,793.46 | 2,861.17 | 12.06 | -2.63 | 0.797 |
| 49.50 | -18.59 | -26.96 | 0.00 | -2,138.65 | 0.00 | 2,138.65 | 2,851.35 | 1,425.67 | 4,562.16 | 2,253.08 | 14.68 | -2.91 | 0.956 |
| 50.00 | -18.42 | -26.95 | 0.00 | -2,125.17 | 0.00 | 2,125.17 | 2,847.21 | 1,423.61 | 4,543.52 | 2,243.87 | 14.98 | -2.94 | 0.954 |
| 55.00 | -17.47 | -26.37 | 0.00 | -1,990.40 | 0.00 | 1,990.40 | 2,804.92 | 1,402.46 | 4,357.58 | 2,152.04 | 18.25 | -3.30 | 0.931 |
| 60.00 | -16.55 | -25.77 | 0.00 | -1,858.57 | 0.00 | 1,858.57 | 2,760.87 | 1,380.44 | 4,172.57 | 2,060.67 | 21.90 | -3.66 | 0.908 |
| 65.00 | -15.66 | -25.17 | 0.00 | -1,729.70 | 0.00 | 1,729.70 | 2,715.09 | 1,357.54 | 3,988.71 | 1,969.88 | 25.93 | -4.03 | 0.884 |
| 70.00 | -14.78 | -24.57 | 0.00 | -1,603.83 | 0.00 | 1,603.83 | 2,667.55 | 1,333.78 | 3,806.24 | 1,879.76 | 30.35 | -4.40 | 0.859 |
| 75.00 | -13.93 | -23.97 | 0.00 | -1,480.97 | 0.00 | 1,480.97 | 2,618.28 | 1,309.14 | 3,625.36 | 1,790.43 | 35.15 | -4.77 | 0.833 |
| 80.00 | -13.11 | -23.36 | 0.00 | -1,361.13 | 0.00 | 1,361.13 | 2,567.25 | 1,283.63 | 3,446.31 | 1,702.00 | 40.35 | -5.15 | 0.805 |
| 85.00 | -12.36 | -22.73 | 0.00 | -1,244.33 | 0.00 | 1,244.33 | 2,514.49 | 1,257.24 | 3,269.29 | 1,614.58 | 45.94 | -5.53 | 0.776 |
| 86.09 | -12.15 | -22.62 | 0.00 | -1,219.63 | 0.00 | 1,219.63 | 2,502.79 | 1,251.39 | 3,231.11 | 1,595.72 | 47.20 | -5.61 | 0.769 |
| 90.00 | -11.24 | -22.08 | 0.00 | -1,131.12 | 0.00 | 1,131.12 | 2,459.97 | 1,229.99 | 3,094.54 | 1,528.28 | 51.92 | -5.91 | 0.745 |
| 91.00 | -10.96 | -21.97 | 0.00 | -1,108.96 | 0.00 | 1,108.96 | 1,883.46 | 941.73 | 2,407.12 | 1,188.79 | 53.17 | -5.99 | 0.939 |
| 95.00 | -10.40 | -21.50 | 0.00 | -1,021.14 | 0.00 | 1,021.14 | 1,854.90 | 927.45 | 2,308.01 | 1,139.84 | 58.31 | -6.30 | 0.902 |
| 100.00 | -9.74 | -20.91 | 0.00 | -913.62 | 0.00 | 913.62 | 1,817.60 | 908.80 | 2,184.84 | 1,079.01 | 65.13 | -6.73 | 0.853 |
| 105.00 | -9.10 | -20.33 | 0.00 | -809.05 | 0.00 | 809.05 | 1,778.55 | 889.28 | 2,062.81 | 1,018.74 | 72.39 | -7.16 | 0.800 |
| 110.00 | -8.48 | -19.75 | 0.00 | -707.41 | 0.00 | 707.41 | 1,737.76 | 868.88 | 1,942.11 | 959.14 | 80.10 | -7.58 | 0.743 |
| 115.00 | -7.90 | -19.17 | 0.00 | -608.69 | 0.00 | 608.69 | 1,695.22 | 847.61 | 1,822.99 | 900.31 | 88.23 | -7.98 | 0.681 |
| 120.00 | -7.38 | -18.58 | 0.00 | -512.84 | 0.00 | 512.84 | 1,650.94 | 825.47 | 1,705.66 | 842.36 | 96.77 | -8.37 | 0.614 |
| 120.83 | -7.25 | -18.50 | 0.00 | -497.42 | 0.00 | 497.42 | 1,643.42 | 821.71 | 1,686.37 | 832.84 | 98.23 | -8.44 | 0.602 |
| 125.00 | -6.66 | -17.98 | 0.00 | -420.33 | 0.00 | 420.33 | 913.95 | 456.98 | 927.00 | 457.81 | 105.70 | -8.74 | 0.927 |
| 125.00 | -6.59 | -18.01 | 0.00 | -420.26 | 0.00 | 420.26 | 913.94 | 456.97 | 926.96 | 457.79 | 105.71 | -8.74 | 0.927 |
| 130.00 | -6.15 | -17.48 | 0.00 | -330.21 | 0.00 | 330.21 | 896.41 | 448.21 | 871.33 | 430.32 | 115.08 | -9.21 | 0.776 |
| 135.00 | -5.77 | -16.94 | 0.00 | -242.81 | 0.00 | 242.81 | 877.14 | 438.57 | 815.56 | 402.77 | 124.90 | -9.61 | 0.611 |
| 137.50 | -4.45 | -13.21 | 0.00 | -200.45 | 0.00 | 200.45 | 866.86 | 433.43 | 787.69 | 389.01 | 129.96 | -9.79 | 0.521 |
| 140.00 | -4.29 | -12.95 | 0.00 | -167.44 | 0.00 | 167.44 | 856.13 | 428.06 | 759.86 | 375.27 | 135.11 | -9.95 | 0.452 |
| 143.00 | -2.77 | -7.63 | 0.00 | -113.54 | 0.00 | 113.54 | 842.68 | 421.34 | 726.58 | 358.83 | 141.38 | -10.11 | 0.320 |
| 145.00 | -2.69 | -7.43 | 0.00 | -98.28 | 0.00 | 98.28 | 833.37 | 416.68 | 704.47 | 347.91 | 145.62 | -10.20 | 0.286 |
| 150.00 | -2.50 | -6.95 | 0.00 | -61.11 | 0.00 | 61.11 | 808.86 | 404.43 | 649.60 | 320.81 | 156.34 | -10.37 | 0.194 |
| 155.00 | -2.32 | -6.47 | 0.00 | -26.38 | 0.00 | 26.38 | 782.61 | 391.31 | 595.47 | 294.08 | 167.20 | -10.48 | 0.093 |
| 157.00 | -0.59 | -0.86 | 0.00 | -7.87 | 0.00 | 7.87 | 771.63 | 385.81 | 574.08 | 283.51 | 171.58 | -10.50 | 0.029 |
| 160.00 | -0.54 | -0.60 | 0.00 | -5.28 | 0.00 | 5.28 | 754.62 | 377.31 | 542.31 | 267.82 | 178.14 | -10.51 | 0.020 |
| 160.00 | -0.54 | -0.60 | 0.00 | -5.28 | 0.00 | 5.28 | 505.62 | 252.81 | 279.19 | 182.79 | 178.14 | -10.51 | 0.030 |
| 165.00 | -0.33 | -0.37 | 0.00 | -2.27 | 0.00 | 2.27 | 505.62 | 252.81 | 279.19 | 182.79 | 189.10 | -10.53 | 0.013 |
| 170.00 | -0.12 | -0.14 | 0.00 | -0.42 | 0.00 | 0.42 | 505.62 | 252.81 | 279.19 | 182.79 | 200.07 | -10.53 | 0.003 |
| 173.00 | 0.00 | -0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 505.62 | 252.81 | 279.19 | 182.79 | 206.65 | -10.53 | 0.000 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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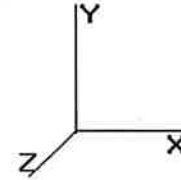
| | | |
|--|-----------------------------------|-------------------------------|
| Load Case: 1.2D + 1.0Di + 1.0Wi | 50.00 mph with 0.75 in Radial Ice | 29 Iterations |
| Gust Response Factor : 1.10 | Ice Dead Load Factor : 1.00 | Wind Importance Factor : 1.00 |
| Dead Load Factor : 1.20 | | Ice Importance Factor : 1.00 |
| Wind Load Factor : 1.00 | | |

Shaft Segment Forces (Factored)

| Seg Top Elev (ft) | Description | Kzt | 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 | | 1.00 | 0.70 | 4.256 | 4.682 | 0.000 | 1.200 | 0.000 | 0.00 | 0.000 | 0.00 | 0.0 | 0.0 | 0.0 |
| 5.00 | | 1.00 | 0.70 | 4.256 | 4.682 | 0.000 | 1.200 | 1.242 | 5.00 | 21.737 | 26.08 | 122.1 | 392.0 | 1,662.9 |
| 10.00 | | 1.00 | 0.70 | 4.256 | 4.682 | 0.000 | 1.200 | 1.331 | 5.00 | 21.374 | 25.65 | 120.1 | 412.1 | 1,655.9 |
| 15.00 | | 1.00 | 0.70 | 4.256 | 4.682 | 0.000 | 1.200 | 1.386 | 5.00 | 20.982 | 25.18 | 117.9 | 420.5 | 1,637.2 |
| 20.00 | | 1.00 | 0.70 | 4.256 | 4.682 | 0.000 | 1.200 | 1.427 | 5.00 | 20.578 | 24.69 | 115.6 | 423.7 | 1,613.3 |
| 25.00 | | 1.00 | 0.70 | 4.256 | 4.682 | 0.000 | 1.200 | 1.459 | 5.00 | 20.167 | 24.20 | 113.3 | 424.0 | 1,586.5 |
| 30.00 | | 1.00 | 0.70 | 4.260 | 4.686 | 0.000 | 1.200 | 1.486 | 5.00 | 19.751 | 23.70 | 111.1 | 422.3 | 1,557.6 |
| 35.00 | | 1.00 | 0.73 | 4.451 | 4.897 | 0.000 | 1.200 | 1.509 | 5.00 | 19.333 | 23.20 | 113.6 | 419.1 | 1,527.4 |
| 40.00 | | 1.00 | 0.76 | 4.625 | 5.087 | 0.000 | 1.200 | 1.529 | 5.00 | 18.912 | 22.69 | 115.4 | 414.9 | 1,496.0 |
| 43.58 | Bot - Section 2 | 1.00 | 0.77 | 4.739 | 5.213 | 0.000 | 1.200 | 1.542 | 3.58 | 13.292 | 15.95 | 83.2 | 294.8 | 1,052.9 |
| 45.00 | | 1.00 | 0.78 | 4.783 | 5.261 | 0.000 | 1.200 | 1.547 | 1.42 | 5.278 | 6.33 | 33.3 | 118.1 | 669.1 |
| 49.50 | Top - Section 1 | 1.00 | 0.80 | 4.915 | 5.406 | 0.000 | 1.200 | 1.562 | 4.50 | 16.544 | 19.85 | 107.3 | 370.4 | 2,094.2 |
| 50.00 | | 1.00 | 0.81 | 4.929 | 5.422 | 0.000 | 1.200 | 1.564 | 0.50 | 1.816 | 2.18 | 11.8 | 41.1 | 128.7 |
| 55.00 | | 1.00 | 0.83 | 5.065 | 5.572 | 0.000 | 1.200 | 1.579 | 5.00 | 17.936 | 21.52 | 119.9 | 404.7 | 1,267.6 |
| 60.00 | | 1.00 | 0.85 | 5.193 | 5.712 | 0.000 | 1.200 | 1.592 | 5.00 | 17.510 | 21.01 | 120.0 | 397.9 | 1,237.9 |
| 65.00 | | 1.00 | 0.87 | 5.313 | 5.844 | 0.000 | 1.200 | 1.605 | 5.00 | 17.082 | 20.50 | 119.8 | 390.6 | 1,207.7 |
| 70.00 | | 1.00 | 0.89 | 5.426 | 5.969 | 0.000 | 1.200 | 1.617 | 5.00 | 16.655 | 19.99 | 119.3 | 383.0 | 1,177.2 |
| 75.00 | | 1.00 | 0.91 | 5.534 | 6.088 | 0.000 | 1.200 | 1.628 | 5.00 | 16.226 | 19.47 | 118.5 | 375.1 | 1,146.3 |
| 80.00 | | 1.00 | 0.92 | 5.637 | 6.201 | 0.000 | 1.200 | 1.639 | 5.00 | 15.797 | 18.96 | 117.6 | 366.8 | 1,115.1 |
| 85.00 | | 1.00 | 0.94 | 5.736 | 6.309 | 0.000 | 1.200 | 1.649 | 5.00 | 15.368 | 18.44 | 116.4 | 358.3 | 1,083.6 |
| 86.09 | Bot - Section 3 | 1.00 | 0.94 | 5.757 | 6.332 | 0.000 | 1.200 | 1.651 | 1.09 | 3.282 | 3.94 | 24.9 | 77.5 | 232.1 |
| 90.00 | | 1.00 | 0.95 | 5.830 | 6.413 | 0.000 | 1.200 | 1.658 | 3.91 | 11.844 | 14.21 | 91.1 | 278.3 | 1,283.3 |
| 91.00 | Top - Section 2 | 1.00 | 0.96 | 5.849 | 6.434 | 0.000 | 1.200 | 1.660 | 1.00 | 2.994 | 3.59 | 23.1 | 71.0 | 324.6 |
| 95.00 | | 1.00 | 0.97 | 5.921 | 6.513 | 0.000 | 1.200 | 1.667 | 4.00 | 11.755 | 14.11 | 91.9 | 277.1 | 729.2 |
| 100.00 | | 1.00 | 0.98 | 6.008 | 6.609 | 0.000 | 1.200 | 1.676 | 5.00 | 14.319 | 17.18 | 113.6 | 337.5 | 886.2 |
| 105.00 | | 1.00 | 1.00 | 6.093 | 6.702 | 0.000 | 1.200 | 1.684 | 5.00 | 13.888 | 16.67 | 111.7 | 328.2 | 858.1 |
| 110.00 | | 1.00 | 1.01 | 6.174 | 6.792 | 0.000 | 1.200 | 1.692 | 5.00 | 13.457 | 16.15 | 109.7 | 318.6 | 829.8 |
| 115.00 | | 1.00 | 1.02 | 6.253 | 6.879 | 0.000 | 1.200 | 1.699 | 5.00 | 13.025 | 15.63 | 107.5 | 309.0 | 801.4 |
| 120.00 | | 1.00 | 1.04 | 6.330 | 6.963 | 0.000 | 1.200 | 1.707 | 5.00 | 12.594 | 15.11 | 105.2 | 299.1 | 772.8 |
| 120.8 | Bot - Section 4 | 1.00 | 1.04 | 6.342 | 6.976 | 0.000 | 1.200 | 1.708 | 0.83 | 2.048 | 2.46 | 17.1 | 49.4 | 126.2 |
| 125.00 | Top - Section 3 | 1.00 | 1.05 | 6.404 | 7.044 | 0.000 | 1.200 | 1.714 | 4.17 | 10.239 | 12.29 | 86.6 | 244.4 | 878.9 |
| 125.00 | | 1.00 | 1.05 | 6.404 | 7.044 | 0.000 | 1.200 | 1.714 | 0.00 | 0.008 | 0.01 | 0.1 | 0.2 | 0.4 |
| 130.00 | | 1.00 | 1.06 | 6.476 | 7.124 | 0.000 | 1.200 | 1.720 | 5.00 | 11.891 | 14.27 | 101.7 | 283.2 | 579.7 |
| 135.00 | | 1.00 | 1.07 | 6.546 | 7.201 | 0.000 | 1.200 | 1.727 | 5.00 | 11.459 | 13.75 | 99.0 | 273.0 | 557.0 |
| 137.5 | Appertunance(s) | 1.00 | 1.08 | 6.581 | 7.239 | 0.000 | 1.200 | 1.730 | 2.50 | 5.566 | 6.68 | 48.4 | 133.9 | 271.2 |
| 140.00 | | 1.00 | 1.08 | 6.615 | 7.276 | 0.000 | 1.200 | 1.733 | 2.50 | 5.458 | 6.55 | 47.7 | 131.3 | 265.5 |
| 143.00 | Appertunance(s) | 1.00 | 1.09 | 6.655 | 7.320 | 0.000 | 1.200 | 1.737 | 3.00 | 6.407 | 7.69 | 56.3 | 153.8 | 310.7 |
| 145.00 | | 1.00 | 1.09 | 6.681 | 7.350 | 0.000 | 1.200 | 1.739 | 2.00 | 4.185 | 5.02 | 36.9 | 100.9 | 203.0 |
| 150.00 | | 1.00 | 1.11 | 6.746 | 7.421 | 0.000 | 1.200 | 1.745 | 5.00 | 10.160 | 12.19 | 90.5 | 241.6 | 488.1 |
| 155.00 | | 1.00 | 1.12 | 6.810 | 7.491 | 0.000 | 1.200 | 1.751 | 5.00 | 9.727 | 11.67 | 87.4 | 231.0 | 464.9 |
| 157.00 | Appertunance(s) | 1.00 | 1.12 | 6.835 | 7.518 | 0.000 | 1.200 | 1.753 | 2.00 | 3.769 | 4.52 | 34.0 | 90.7 | 180.8 |
| 160.00 | Top - Section 4 | 1.00 | 1.13 | 6.872 | 7.559 | 0.000 | 1.200 | 1.757 | 3.00 | 5.524 | 6.63 | 50.1 | 132.1 | 263.5 |
| 165.00 | | 1.00 | 1.14 | 6.933 | 7.626 | 0.000 | 1.200 | 1.762 | 5.00 | 7.302 | 8.76 | 66.8 | 169.6 | 497.3 |
| 170.00 | | 1.00 | 1.15 | 6.992 | 7.691 | 0.000 | 1.200 | 1.767 | 5.00 | 7.306 | 8.77 | 67.4 | 170.1 | 497.8 |
| 173.00 | | 1.00 | 1.15 | 7.027 | 7.730 | 0.000 | 1.200 | 1.770 | 3.00 | 4.385 | 5.26 | 40.7 | 102.3 | 298.9 |
| Totals: | | | | | | | | | 173.00 | | | 3,705.5 | 11,633.0 | 37,518.5 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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Load Case: 1.2D + 1.0Di + 1.0Wi 50.00 mph with 0.75 in Radial Ice 29 Iterations

Gust Response Factor : 1.10 Ice Dead Load Factor : 1.00 Wind Importance Factor : 1.00

Dead Load Factor : 1.20 Ice Importance Factor : 1.00

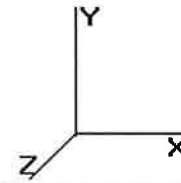
Wind Load Factor : 1.00

Discrete Appurtenance Segment Forces (Factored)

| Elev (ft) | Description | Qty | qz (psf) | qzGh (psf) | Orientation Factor | Ka | Total EPAa (sf) | Horiz Ecc (ft) | Vert Ecc (ft) | Wind FX (lb) | Mom Y (lb-ft) | Mom Z (lb-ft) | Dead Load (lb) |
|-----------|----------------------|-----|----------|------------|--------------------|------|-----------------|----------------|---------------|--------------|---------------|---------------|----------------|
| 137.5 | 72" x 12" Panel | 3 | 6.581 | 7.239 | 0.67 | 0.80 | 15.14 | 0.000 | 0.000 | 109.62 | 0.00 | 0.00 | 731.00 |
| 137.5 | 48" x 12" Panel | 9 | 6.581 | 7.239 | 0.66 | 0.80 | 28.72 | 0.000 | 0.000 | 207.87 | 0.00 | 0.00 | 1,511.19 |
| 137.5 | Flat Low Profile Pla | 1 | 6.581 | 7.239 | 1.00 | 1.00 | 45.07 | 0.000 | 0.000 | 326.22 | 0.00 | 0.00 | 2,243.60 |
| 143.0 | Andrew LNX-6514DS- | 2 | 6.734 | 7.407 | 0.69 | 0.75 | 9.80 | 0.000 | 6.000 | 72.61 | 0.00 | 435.64 | 496.73 |
| 143.0 | Andrew DB844H80E- | 6 | 6.734 | 7.407 | 0.90 | 0.75 | 15.07 | 0.000 | 6.000 | 111.64 | 0.00 | 669.85 | 711.96 |
| 143.0 | Flat Platform w/ Han | 1 | 6.655 | 7.320 | 1.00 | 1.00 | 63.31 | 0.000 | 0.000 | 463.49 | 0.00 | 0.00 | 3,367.29 |
| 143.0 | Powerwave P65-16-XL | 1 | 6.734 | 7.407 | 0.65 | 0.75 | 4.59 | 0.000 | 6.000 | 34.02 | 0.00 | 204.14 | 220.31 |
| 143.0 | RFS FD9R60004/1C-3L | 6 | 6.734 | 7.407 | 0.50 | 0.75 | 1.30 | 0.000 | 6.000 | 9.63 | 0.00 | 57.76 | 100.47 |
| 143.0 | Alcatel-Lucent RRH2x | 3 | 6.734 | 7.407 | 0.67 | 0.75 | 4.22 | 0.000 | 6.000 | 31.27 | 0.00 | 187.64 | 377.67 |
| 143.0 | RFS DB-B1-6C-12AB- | 1 | 6.734 | 7.407 | 0.67 | 0.75 | 1.59 | 0.000 | 6.000 | 11.76 | 0.00 | 70.57 | 119.12 |
| 143.0 | Kathrein 742 213V01 | 6 | 6.734 | 7.407 | 0.67 | 0.75 | 19.44 | 0.000 | 6.000 | 143.99 | 0.00 | 863.91 | 826.03 |
| 157.0 | Ericsson RRUS 11 | 6 | 6.860 | 7.546 | 0.67 | 0.75 | 9.70 | 0.000 | 2.000 | 73.20 | 0.00 | 146.41 | 851.00 |
| 157.0 | Powerwave P65-15- | 6 | 6.860 | 7.546 | 0.78 | 0.75 | 22.68 | 0.000 | 2.000 | 171.14 | 0.00 | 342.29 | 1,143.52 |
| 157.0 | Powerwave TT08- | 6 | 6.860 | 7.546 | 0.50 | 0.75 | 2.71 | 0.000 | 2.000 | 20.47 | 0.00 | 40.95 | 371.04 |
| 157.0 | Flat Platform w/ Han | 1 | 6.835 | 7.518 | 1.00 | 1.00 | 63.51 | 0.000 | 0.000 | 477.50 | 0.00 | 0.00 | 3,380.59 |
| 157.0 | KMW KDXCV0012017 | 6 | 6.860 | 7.546 | 0.50 | 0.75 | 1.43 | 0.000 | 2.000 | 10.82 | 0.00 | 21.63 | 148.01 |
| 157.0 | Andrew SBNH- | 3 | 6.860 | 7.546 | 0.84 | 0.75 | 24.78 | 0.000 | 2.000 | 186.98 | 0.00 | 373.96 | 1,013.90 |
| 157.0 | Raycap DC6-48-60-18- | 1 | 6.860 | 7.546 | 1.00 | 0.75 | 1.90 | 0.000 | 2.000 | 14.30 | 0.00 | 28.60 | 105.04 |
| | | | | | | | | | | 2,476.54 | | | 17,718.45 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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| | | |
|--|-----------------------------------|-------------------------------|
| Load Case: 1.2D + 1.0Di + 1.0Wi | 50.00 mph with 0.75 in Radial Ice | 29 Iterations |
| Gust Response Factor : 1.10 | Ice Dead Load Factor : 1.00 | Wind Importance Factor : 1.00 |
| Dead Load Factor : 1.20 | | Ice Importance Factor : 1.00 |
| Wind Load Factor : 1.00 | | |

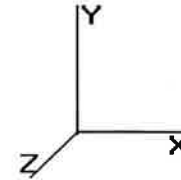
Applied Segment Forces Summary

| 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 | 122.12 | 1,887.09 | 0.00 | 0.00 |
| 10.00 | 120.08 | 1,880.10 | 0.00 | 0.00 |
| 15.00 | 117.87 | 1,861.40 | 0.00 | 0.00 |
| 20.00 | 115.60 | 1,837.54 | 0.00 | 0.00 |
| 25.00 | 113.30 | 1,810.69 | 0.00 | 0.00 |
| 30.00 | 111.05 | 1,781.85 | 0.00 | 0.00 |
| 35.00 | 113.60 | 1,751.60 | 0.00 | 0.00 |
| 40.00 | 115.44 | 1,720.25 | 0.00 | 0.00 |
| 43.58 | 83.15 | 1,213.62 | 0.00 | 0.00 |
| 45.00 | 33.32 | 732.66 | 0.00 | 0.00 |
| 49.50 | 107.33 | 2,296.02 | 0.00 | 0.00 |
| 50.00 | 11.82 | 151.08 | 0.00 | 0.00 |
| 55.00 | 119.92 | 1,491.85 | 0.00 | 0.00 |
| 60.00 | 120.01 | 1,462.11 | 0.00 | 0.00 |
| 65.00 | 119.79 | 1,431.94 | 0.00 | 0.00 |
| 70.00 | 119.29 | 1,401.39 | 0.00 | 0.00 |
| 75.00 | 118.54 | 1,370.50 | 0.00 | 0.00 |
| 80.00 | 117.55 | 1,339.32 | 0.00 | 0.00 |
| 85.00 | 116.35 | 1,307.86 | 0.00 | 0.00 |
| 86.09 | 24.94 | 280.80 | 0.00 | 0.00 |
| 90.00 | 91.15 | 1,458.83 | 0.00 | 0.00 |
| 91.00 | 23.11 | 369.56 | 0.00 | 0.00 |
| 95.00 | 91.87 | 908.41 | 0.00 | 0.00 |
| 100.0 | 113.57 | 1,110.43 | 0.00 | 0.00 |
| 105.0 | 111.70 | 1,082.32 | 0.00 | 0.00 |
| 110.0 | 109.67 | 1,054.03 | 0.00 | 0.00 |
| 115.0 | 107.51 | 1,025.58 | 0.00 | 0.00 |
| 120.0 | 105.22 | 996.98 | 0.00 | 0.00 |
| 120.8 | 17.15 | 163.39 | 0.00 | 0.00 |
| 125.0 | 86.55 | 1,065.71 | 0.00 | 0.00 |
| 125.0 | 0.07 | 0.56 | 0.00 | 0.00 |
| 130.0 | 101.65 | 803.95 | 0.00 | 0.00 |
| 135.0 | 99.02 | 781.22 | 0.00 | 0.00 |
| 137.5 | 692.06 | 4,869.13 | 0.00 | 0.00 |
| 140.0 | 47.66 | 348.10 | 0.00 | 0.00 |
| 143.0 | 934.70 | 6,629.40 | 0.00 | 2,489.52 |
| 145.0 | 36.91 | 242.31 | 0.00 | 0.00 |
| 150.0 | 90.48 | 586.45 | 0.00 | 0.00 |
| 155.0 | 87.44 | 563.28 | 0.00 | 0.00 |
| 157.0 | 988.43 | 7,233.19 | 0.00 | 953.84 |
| 160.0 | 50.11 | 263.49 | 0.00 | 0.00 |
| 165.0 | 66.82 | 497.29 | 0.00 | 0.00 |
| 170.0 | 67.43 | 497.84 | 0.00 | 0.00 |
| 173.0 | 40.68 | 298.90 | 0.00 | 0.00 |
| Totals: | 6,182.03 | 61,860.01 | 0.00 | 3,443.36 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)

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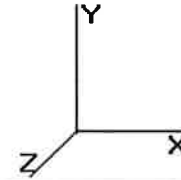
| | | |
|--|-----------------------------------|-------------------------------|
| Load Case: 1.2D + 1.0Di + 1.0Wi | 50.00 mph with 0.75 in Radial Ice | 29 Iterations |
| Gust Response Factor : 1.10 | Ice Dead Load Factor : 1.00 | Wind Importance Factor : 1.00 |
| Dead Load Factor : 1.20 | | Ice Importance Factor : 1.00 |
| Wind Load Factor : 1.00 | | |

Calculated Forces

| Seg Elev (ft) | Pu FY (-) (kips) | Vu FX (-) (kips) | Tu MY (ft-kips) | Mu MZ (ft-kips) | Mu MX (ft-kips) | Resultant Moment (ft-kips) | phi Pn (kips) | phi Vn (kips) | phi Tn (ft-kips) | phi Mn (ft-kips) | Total Deflect (in) | Rotation (deg) | Ratio |
|---------------|------------------|------------------|-----------------|-----------------|-----------------|----------------------------|---------------|---------------|------------------|------------------|--------------------|----------------|-------|
| 0.00 | -61.86 | -6.21 | 0.00 | -760.21 | 0.00 | 760.21 | 4,086.01 | 2,043.01 | 8,107.89 | 4,004.18 | 0.00 | 0.00 | 0.205 |
| 5.00 | -59.96 | -6.15 | 0.00 | -729.15 | 0.00 | 729.15 | 4,040.25 | 2,020.12 | 7,846.47 | 3,875.07 | 0.03 | -0.06 | 0.203 |
| 10.00 | -58.08 | -6.09 | 0.00 | -698.40 | 0.00 | 698.40 | 3,992.74 | 1,996.37 | 7,585.59 | 3,746.24 | 0.12 | -0.12 | 0.201 |
| 15.00 | -56.21 | -6.02 | 0.00 | -667.96 | 0.00 | 667.96 | 3,943.49 | 1,971.74 | 7,325.49 | 3,617.78 | 0.27 | -0.17 | 0.199 |
| 20.00 | -54.37 | -5.96 | 0.00 | -637.85 | 0.00 | 637.85 | 3,892.49 | 1,946.24 | 7,066.38 | 3,489.82 | 0.49 | -0.24 | 0.197 |
| 25.00 | -52.55 | -5.90 | 0.00 | -608.05 | 0.00 | 608.05 | 3,839.74 | 1,919.87 | 6,808.48 | 3,362.45 | 0.77 | -0.30 | 0.195 |
| 30.00 | -50.76 | -5.83 | 0.00 | -578.58 | 0.00 | 578.58 | 3,785.25 | 1,892.63 | 6,552.02 | 3,235.80 | 1.12 | -0.36 | 0.192 |
| 35.00 | -49.01 | -5.76 | 0.00 | -549.42 | 0.00 | 549.42 | 3,729.02 | 1,864.51 | 6,297.22 | 3,109.96 | 1.53 | -0.43 | 0.190 |
| 40.00 | -47.28 | -5.68 | 0.00 | -520.61 | 0.00 | 520.61 | 3,671.04 | 1,835.52 | 6,044.29 | 2,985.05 | 2.01 | -0.49 | 0.187 |
| 43.58 | -46.06 | -5.61 | 0.00 | -500.26 | 0.00 | 500.26 | 3,628.42 | 1,814.21 | 5,864.30 | 2,896.16 | 2.40 | -0.54 | 0.185 |
| 45.00 | -45.33 | -5.61 | 0.00 | -492.31 | 0.00 | 492.31 | 3,611.32 | 1,805.66 | 5,793.46 | 2,861.17 | 2.56 | -0.56 | 0.185 |
| 49.50 | -43.03 | -5.50 | 0.00 | -467.09 | 0.00 | 467.09 | 2,851.35 | 1,425.67 | 4,562.16 | 2,253.08 | 3.12 | -0.62 | 0.222 |
| 50.00 | -42.87 | -5.52 | 0.00 | -464.34 | 0.00 | 464.34 | 2,847.21 | 1,423.61 | 4,543.52 | 2,243.87 | 3.19 | -0.63 | 0.222 |
| 55.00 | -41.38 | -5.44 | 0.00 | -436.75 | 0.00 | 436.75 | 2,804.92 | 1,402.46 | 4,357.58 | 2,152.04 | 3.89 | -0.71 | 0.218 |
| 60.00 | -39.91 | -5.36 | 0.00 | -409.55 | 0.00 | 409.55 | 2,760.87 | 1,380.44 | 4,172.57 | 2,060.67 | 4.67 | -0.79 | 0.213 |
| 65.00 | -38.47 | -5.27 | 0.00 | -382.78 | 0.00 | 382.78 | 2,715.09 | 1,357.54 | 3,988.71 | 1,969.88 | 5.54 | -0.87 | 0.209 |
| 70.00 | -37.06 | -5.18 | 0.00 | -356.43 | 0.00 | 356.43 | 2,667.55 | 1,333.78 | 3,806.24 | 1,879.76 | 6.50 | -0.95 | 0.204 |
| 75.00 | -35.69 | -5.09 | 0.00 | -330.52 | 0.00 | 330.52 | 2,618.28 | 1,309.14 | 3,625.36 | 1,790.43 | 7.54 | -1.03 | 0.198 |
| 80.00 | -34.34 | -5.00 | 0.00 | -305.07 | 0.00 | 305.07 | 2,567.25 | 1,283.63 | 3,446.31 | 1,702.00 | 8.67 | -1.12 | 0.193 |
| 85.00 | -33.04 | -4.89 | 0.00 | -280.07 | 0.00 | 280.07 | 2,514.49 | 1,257.24 | 3,269.29 | 1,614.58 | 9.88 | -1.20 | 0.187 |
| 86.09 | -32.75 | -4.88 | 0.00 | -274.76 | 0.00 | 274.76 | 2,502.79 | 1,251.39 | 3,231.11 | 1,595.72 | 10.16 | -1.22 | 0.185 |
| 90.00 | -31.29 | -4.78 | 0.00 | -255.66 | 0.00 | 255.66 | 2,459.97 | 1,229.99 | 3,094.54 | 1,528.28 | 11.19 | -1.29 | 0.180 |
| 91.00 | -30.92 | -4.77 | 0.00 | -250.87 | 0.00 | 250.87 | 1,883.46 | 941.73 | 2,407.12 | 1,188.79 | 11.46 | -1.31 | 0.227 |
| 95.00 | -30.01 | -4.70 | 0.00 | -231.79 | 0.00 | 231.79 | 1,854.90 | 927.45 | 2,308.01 | 1,139.84 | 12.59 | -1.38 | 0.220 |
| 100.00 | -28.89 | -4.61 | 0.00 | -208.27 | 0.00 | 208.27 | 1,817.60 | 908.80 | 2,184.84 | 1,079.01 | 14.09 | -1.48 | 0.209 |
| 105.00 | -27.80 | -4.52 | 0.00 | -185.21 | 0.00 | 185.21 | 1,778.55 | 889.28 | 2,062.81 | 1,018.74 | 15.68 | -1.57 | 0.197 |
| 110.00 | -26.75 | -4.42 | 0.00 | -162.62 | 0.00 | 162.62 | 1,737.76 | 868.88 | 1,942.11 | 959.14 | 17.38 | -1.67 | 0.185 |
| 115.00 | -25.72 | -4.33 | 0.00 | -140.50 | 0.00 | 140.50 | 1,695.22 | 847.61 | 1,822.99 | 900.31 | 19.18 | -1.76 | 0.171 |
| 120.00 | -24.72 | -4.21 | 0.00 | -118.87 | 0.00 | 118.87 | 1,650.94 | 825.47 | 1,705.66 | 842.36 | 21.08 | -1.85 | 0.156 |
| 120.83 | -24.55 | -4.21 | 0.00 | -115.37 | 0.00 | 115.37 | 1,643.42 | 821.71 | 1,686.37 | 832.84 | 21.40 | -1.87 | 0.153 |
| 125.00 | -23.49 | -4.10 | 0.00 | -97.84 | 0.00 | 97.84 | 913.95 | 456.98 | 927.00 | 457.81 | 23.06 | -1.94 | 0.239 |
| 125.00 | -23.49 | -4.12 | 0.00 | -97.83 | 0.00 | 97.83 | 913.94 | 456.97 | 926.96 | 457.79 | 23.07 | -1.94 | 0.239 |
| 130.00 | -22.68 | -4.03 | 0.00 | -77.21 | 0.00 | 77.21 | 896.41 | 448.21 | 871.33 | 430.32 | 25.16 | -2.05 | 0.205 |
| 135.00 | -21.90 | -3.93 | 0.00 | -57.04 | 0.00 | 57.04 | 877.14 | 438.57 | 815.56 | 402.77 | 27.35 | -2.14 | 0.167 |
| 137.50 | -17.05 | -3.07 | 0.00 | -47.21 | 0.00 | 47.21 | 866.86 | 433.43 | 787.69 | 389.01 | 28.49 | -2.18 | 0.141 |
| 140.00 | -16.71 | -3.02 | 0.00 | -39.54 | 0.00 | 39.54 | 856.13 | 428.06 | 759.86 | 375.27 | 29.64 | -2.22 | 0.125 |
| 143.00 | -10.12 | -1.83 | 0.00 | -27.99 | 0.00 | 27.99 | 842.68 | 421.34 | 726.58 | 358.83 | 31.05 | -2.26 | 0.090 |
| 145.00 | -9.88 | -1.79 | 0.00 | -24.33 | 0.00 | 24.33 | 833.37 | 416.68 | 704.47 | 347.91 | 32.00 | -2.28 | 0.082 |
| 150.00 | -9.29 | -1.68 | 0.00 | -15.38 | 0.00 | 15.38 | 808.86 | 404.43 | 649.60 | 320.81 | 34.41 | -2.32 | 0.059 |
| 155.00 | -8.73 | -1.57 | 0.00 | -6.97 | 0.00 | 6.97 | 782.61 | 391.31 | 595.47 | 294.08 | 36.86 | -2.35 | 0.035 |
| 157.00 | -1.55 | -0.29 | 0.00 | -2.87 | 0.00 | 2.87 | 771.63 | 385.81 | 574.08 | 283.51 | 37.85 | -2.36 | 0.012 |
| 160.00 | -1.29 | -0.23 | 0.00 | -2.00 | 0.00 | 2.00 | 754.62 | 377.31 | 542.31 | 267.82 | 39.33 | -2.36 | 0.009 |
| 160.00 | -1.29 | -0.23 | 0.00 | -2.00 | 0.00 | 2.00 | 505.62 | 252.81 | 279.19 | 182.79 | 39.33 | -2.36 | 0.014 |
| 165.00 | -0.79 | -0.14 | 0.00 | -0.86 | 0.00 | 0.86 | 505.62 | 252.81 | 279.19 | 182.79 | 41.81 | -2.37 | 0.006 |
| 170.00 | -0.30 | -0.05 | 0.00 | -0.16 | 0.00 | 0.16 | 505.62 | 252.81 | 279.19 | 182.79 | 44.29 | -2.37 | 0.001 |
| 173.00 | 0.00 | -0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 505.62 | 252.81 | 279.19 | 182.79 | 45.78 | -2.37 | 0.000 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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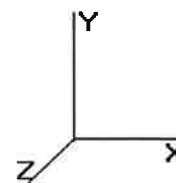
| | | |
|-------------------------------|--------------------------|-------------------------------|
| Load Case: 1.0D + 1.0W | 60.00 mph Serviceability | 28 Iterations |
| Gust Response Factor : 1.10 | | Wind Importance Factor : 1.00 |
| Dead Load Factor : 1.00 | | |
| Wind Load Factor : 1.00 | | |

Shaft Segment Forces (Factored)

| Seg Top Elev (ft) | Description | Kzt | 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 | | 1.00 | 0.70 | 6.129 | 6.742 | 210.04 | 1.000 | 0.000 | 0.00 | 0.000 | 0.00 | 0.0 | 0.0 | 0.0 |
| 5.00 | | 1.00 | 0.70 | 6.129 | 6.742 | 205.65 | 1.000 | 0.000 | 5.00 | 20.702 | 20.70 | 139.6 | 0.0 | 1,059.1 |
| 10.00 | | 1.00 | 0.70 | 6.129 | 6.742 | 201.25 | 1.000 | 0.000 | 5.00 | 20.264 | 20.26 | 136.6 | 0.0 | 1,036.5 |
| 15.00 | | 1.00 | 0.70 | 6.129 | 6.742 | 196.86 | 1.000 | 0.000 | 5.00 | 19.827 | 19.83 | 133.7 | 0.0 | 1,013.9 |
| 20.00 | | 1.00 | 0.70 | 6.129 | 6.742 | 192.46 | 1.000 | 0.000 | 5.00 | 19.389 | 19.39 | 130.7 | 0.0 | 991.3 |
| 25.00 | | 1.00 | 0.70 | 6.129 | 6.742 | 188.06 | 1.000 | 0.000 | 5.00 | 18.951 | 18.95 | 127.8 | 0.0 | 968.7 |
| 30.00 | | 1.00 | 0.70 | 6.134 | 6.747 | 183.75 | 1.000 | 0.000 | 5.00 | 18.513 | 18.51 | 124.9 | 0.0 | 946.1 |
| 35.00 | | 1.00 | 0.73 | 6.410 | 7.051 | 183.34 | 1.000 | 0.000 | 5.00 | 18.075 | 18.08 | 127.4 | 0.0 | 923.6 |
| 40.00 | | 1.00 | 0.76 | 6.659 | 7.325 | 182.29 | 1.000 | 0.000 | 5.00 | 17.637 | 17.64 | 129.2 | 0.0 | 901.0 |
| 43.58 | Bot - Section 2 | 1.00 | 0.77 | 6.825 | 7.507 | 181.21 | 1.000 | 0.000 | 3.58 | 12.371 | 12.37 | 92.9 | 0.0 | 631.8 |
| 45.00 | | 1.00 | 0.78 | 6.887 | 7.576 | 180.72 | 1.000 | 0.000 | 1.42 | 4.913 | 4.91 | 37.2 | 0.0 | 459.2 |
| 49.50 | Top - Section 1 | 1.00 | 0.80 | 7.077 | 7.785 | 178.95 | 1.000 | 0.000 | 4.50 | 15.372 | 15.37 | 119.7 | 0.0 | 1,436.5 |
| 50.00 | | 1.00 | 0.81 | 7.098 | 7.807 | 181.94 | 1.000 | 0.000 | 0.50 | 1.686 | 1.69 | 13.2 | 0.0 | 73.0 |
| 55.00 | | 1.00 | 0.83 | 7.294 | 8.023 | 179.64 | 1.000 | 0.000 | 5.00 | 16.620 | 16.62 | 133.3 | 0.0 | 719.1 |
| 60.00 | | 1.00 | 0.85 | 7.477 | 8.225 | 177.03 | 1.000 | 0.000 | 5.00 | 16.183 | 16.18 | 133.1 | 0.0 | 700.0 |
| 65.00 | | 1.00 | 0.87 | 7.650 | 8.415 | 174.15 | 1.000 | 0.000 | 5.00 | 15.745 | 15.74 | 132.5 | 0.0 | 680.9 |
| 70.00 | | 1.00 | 0.89 | 7.814 | 8.595 | 171.04 | 1.000 | 0.000 | 5.00 | 15.307 | 15.31 | 131.6 | 0.0 | 661.8 |
| 75.00 | | 1.00 | 0.91 | 7.969 | 8.766 | 167.72 | 1.000 | 0.000 | 5.00 | 14.869 | 14.87 | 130.3 | 0.0 | 642.7 |
| 80.00 | | 1.00 | 0.92 | 8.118 | 8.930 | 164.22 | 1.000 | 0.000 | 5.00 | 14.431 | 14.43 | 128.9 | 0.0 | 623.6 |
| 85.00 | | 1.00 | 0.94 | 8.260 | 9.086 | 160.54 | 1.000 | 0.000 | 5.00 | 13.993 | 13.99 | 127.1 | 0.0 | 604.4 |
| 86.09 | Bot - Section 3 | 1.00 | 0.94 | 8.290 | 9.119 | 159.72 | 1.000 | 0.000 | 1.09 | 2.983 | 2.98 | 27.2 | 0.0 | 128.8 |
| 90.00 | | 1.00 | 0.95 | 8.396 | 9.235 | 156.72 | 1.000 | 0.000 | 3.91 | 10.762 | 10.76 | 99.4 | 0.0 | 837.5 |
| 91.00 | Top - Section 2 | 1.00 | 0.96 | 8.422 | 9.264 | 155.93 | 1.000 | 0.000 | 1.00 | 2.716 | 2.72 | 25.2 | 0.0 | 211.3 |
| 95.00 | | 1.00 | 0.97 | 8.526 | 9.379 | 155.62 | 1.000 | 0.000 | 4.00 | 10.644 | 10.64 | 99.8 | 0.0 | 376.7 |
| 100.0 | | 1.00 | 0.98 | 8.652 | 9.517 | 151.54 | 1.000 | 0.000 | 5.00 | 12.923 | 12.92 | 123.0 | 0.0 | 457.3 |
| 105.0 | | 1.00 | 1.00 | 8.774 | 9.651 | 147.34 | 1.000 | 0.000 | 5.00 | 12.485 | 12.48 | 120.5 | 0.0 | 441.6 |
| 110.0 | | 1.00 | 1.01 | 8.891 | 9.780 | 143.03 | 1.000 | 0.000 | 5.00 | 12.047 | 12.05 | 117.8 | 0.0 | 426.0 |
| 115.0 | | 1.00 | 1.02 | 9.005 | 9.905 | 138.61 | 1.000 | 0.000 | 5.00 | 11.609 | 11.61 | 115.0 | 0.0 | 410.3 |
| 120.0 | | 1.00 | 1.04 | 9.115 | 10.02 | 134.10 | 1.000 | 0.000 | 5.00 | 11.171 | 11.17 | 112.0 | 0.0 | 394.7 |
| 120.8 | Bot - Section 4 | 1.00 | 1.04 | 9.133 | 10.04 | 133.34 | 1.000 | 0.000 | 0.83 | 1.812 | 1.81 | 18.2 | 0.0 | 64.0 |
| 125.0 | Top - Section 3 | 1.00 | 1.05 | 9.222 | 10.14 | 129.49 | 1.000 | 0.000 | 4.17 | 9.049 | 9.05 | 91.8 | 0.0 | 528.7 |
| 125.0 | | 1.00 | 1.05 | 9.222 | 10.14 | 131.48 | 1.000 | 0.000 | 0.00 | 0.007 | 0.01 | 0.1 | 0.0 | 0.2 |
| 130.0 | | 1.00 | 1.06 | 9.326 | 10.25 | 126.80 | 1.000 | 0.000 | 5.00 | 10.457 | 10.46 | 107.3 | 0.0 | 247.1 |
| 135.0 | | 1.00 | 1.07 | 9.427 | 10.36 | 122.03 | 1.000 | 0.000 | 5.00 | 10.020 | 10.02 | 103.9 | 0.0 | 236.7 |
| 137.5 | Appertunance(s) | 1.00 | 1.08 | 9.476 | 10.42 | 119.62 | 1.000 | 0.000 | 2.50 | 4.846 | 4.85 | 50.5 | 0.0 | 114.4 |
| 140.0 | | 1.00 | 1.08 | 9.525 | 10.47 | 117.19 | 1.000 | 0.000 | 2.50 | 4.736 | 4.74 | 49.6 | 0.0 | 111.8 |
| 143.0 | Appertunance(s) | 1.00 | 1.09 | 9.583 | 10.54 | 114.24 | 1.000 | 0.000 | 3.00 | 5.539 | 5.54 | 58.4 | 0.0 | 130.7 |
| 145.0 | | 1.00 | 1.09 | 9.621 | 10.58 | 112.27 | 1.000 | 0.000 | 2.00 | 3.605 | 3.61 | 38.2 | 0.0 | 85.1 |
| 150.0 | | 1.00 | 1.11 | 9.715 | 10.68 | 107.28 | 1.000 | 0.000 | 5.00 | 8.706 | 8.71 | 93.0 | 0.0 | 205.4 |
| 155.0 | | 1.00 | 1.12 | 9.806 | 10.78 | 102.22 | 1.000 | 0.000 | 5.00 | 8.268 | 8.27 | 89.2 | 0.0 | 195.0 |
| 157.0 | Appertunance(s) | 1.00 | 1.12 | 9.842 | 10.82 | 100.18 | 1.000 | 0.000 | 2.00 | 3.185 | 3.18 | 34.5 | 0.0 | 75.1 |
| 160.0 | Top - Section 4 | 1.00 | 1.13 | 9.896 | 10.88 | 97.104 | 1.000 | 0.000 | 3.00 | 4.646 | 4.65 | 50.6 | 0.0 | 109.5 |
| 165.0 | | 1.00 | 1.14 | 9.983 | 10.98 | 74.747 | 0.600 | 0.000 | 5.00 | 5.833 | 3.50 | 38.4 | 0.0 | 273.1 |
| 170.0 | | 1.00 | 1.15 | 10.069 | 11.07 | 75.067 | 0.600 | 0.000 | 5.00 | 5.833 | 3.50 | 38.8 | 0.0 | 273.1 |
| 173.0 | | 1.00 | 1.15 | 10.119 | 11.13 | 75.255 | 0.600 | 0.000 | 3.00 | 3.500 | 2.10 | 23.4 | 0.0 | 163.9 |
| Totals: | | | | | | | | | 173.00 | | | 3,955.3 | 0.0 | 21,571.2 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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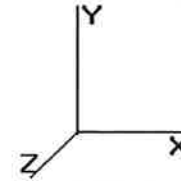
| | | |
|-------------------------------|--------------------------|-------------------------------|
| Load Case: 1.0D + 1.0W | 60.00 mph Serviceability | 28 Iterations |
| Gust Response Factor : 1.10 | | Wind Importance Factor : 1.00 |
| Dead Load Factor : 1.00 | | |
| Wind Load Factor : 1.00 | | |

Discrete Appurtenance Segment Forces (Factored)

| Elev (ft) | Description | Qty | qz (psf) | qzGh (psf) | Orientation Factor | Ka | Total EPAa (sf) | Horiz Ecc (ft) | Vert Ecc (ft) | Wind FX (lb) | Mom Y (lb-ft) | Mom Z (lb-ft) | Dead Load (lb) |
|-----------|----------------------|-----|----------|------------|--------------------|------|-----------------|----------------|---------------|--------------|---------------|---------------|----------------|
| 137.5 | 72" x 12" Panel | 3 | 9.476 | 10.424 | 0.67 | 0.80 | 13.07 | 0.000 | 0.000 | 136.27 | 0.00 | 0.00 | 135.00 |
| 137.5 | 48" x 12" Panel | 9 | 9.476 | 10.424 | 0.66 | 0.80 | 24.09 | 0.000 | 0.000 | 251.14 | 0.00 | 0.00 | 270.00 |
| 137.5 | Flat Low Profile Pla | 1 | 9.476 | 10.424 | 1.00 | 1.00 | 26.10 | 0.000 | 0.000 | 272.07 | 0.00 | 0.00 | 1,500.00 |
| 143.0 | Andrew LNX-6514DS- | 2 | 9.696 | 10.666 | 0.69 | 0.75 | 8.46 | 0.000 | 6.000 | 90.19 | 0.00 | 541.14 | 76.80 |
| 143.0 | Andrew DB844H80E- | 6 | 9.696 | 10.666 | 0.90 | 0.75 | 14.62 | 0.000 | 6.000 | 155.94 | 0.00 | 935.65 | 60.00 |
| 143.0 | Flat Platform w/ Han | 1 | 9.583 | 10.541 | 1.00 | 1.00 | 42.40 | 0.000 | 0.000 | 446.96 | 0.00 | 0.00 | 2,000.00 |
| 143.0 | Powerwave P65-16-XL | 1 | 9.696 | 10.666 | 0.65 | 0.75 | 3.96 | 0.000 | 6.000 | 42.27 | 0.00 | 253.64 | 33.00 |
| 143.0 | RFS FD9R60004/1C-3L | 6 | 9.696 | 10.666 | 0.50 | 0.75 | 0.83 | 0.000 | 6.000 | 8.88 | 0.00 | 53.28 | 18.60 |
| 143.0 | Alcatel-Lucent RRH2x | 3 | 9.696 | 10.666 | 0.67 | 0.75 | 3.26 | 0.000 | 6.000 | 34.73 | 0.00 | 208.38 | 132.00 |
| 143.0 | RFS DB-B1-6C-12AB- | 1 | 9.696 | 10.666 | 0.67 | 0.75 | 1.26 | 0.000 | 6.000 | 13.45 | 0.00 | 80.72 | 21.40 |
| 143.0 | Kathrein 742 213V01 | 6 | 9.696 | 10.666 | 0.67 | 0.75 | 15.59 | 0.000 | 6.000 | 166.26 | 0.00 | 997.54 | 118.80 |
| 157.0 | Ericsson RRUS 11 | 6 | 9.878 | 10.866 | 0.67 | 0.75 | 7.75 | 0.000 | 2.000 | 84.19 | 0.00 | 168.39 | 300.00 |
| 157.0 | Powerwave P65-15- | 6 | 9.878 | 10.866 | 0.78 | 0.75 | 19.06 | 0.000 | 2.000 | 207.09 | 0.00 | 414.19 | 246.00 |
| 157.0 | Powerwave TT08- | 6 | 9.878 | 10.866 | 0.50 | 0.75 | 2.07 | 0.000 | 2.000 | 22.49 | 0.00 | 44.98 | 132.00 |
| 157.0 | Flat Platform w/ Han | 1 | 9.842 | 10.827 | 1.00 | 1.00 | 42.40 | 0.000 | 0.000 | 459.04 | 0.00 | 0.00 | 2,000.00 |
| 157.0 | KMW KDXCV0012017 | 6 | 9.878 | 10.866 | 0.50 | 0.75 | 0.92 | 0.000 | 2.000 | 10.02 | 0.00 | 20.05 | 39.60 |
| 157.0 | Andrew SBNH- | 3 | 9.878 | 10.866 | 0.84 | 0.75 | 21.64 | 0.000 | 2.000 | 235.14 | 0.00 | 470.28 | 182.40 |
| 157.0 | Raycap DC6-48-60-18- | 1 | 9.878 | 10.866 | 1.00 | 0.75 | 0.83 | 0.000 | 2.000 | 9.05 | 0.00 | 18.09 | 20.00 |
| | | | | | | | | | | 2,645.19 | | | 7,285.60 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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| | | |
|-------------------------------|--------------------------|-------------------------------|
| Load Case: 1.0D + 1.0W | 60.00 mph Serviceability | 28 Iterations |
| Gust Response Factor : 1.10 | | Wind Importance Factor : 1.00 |
| Dead Load Factor : 1.00 | | |
| Wind Load Factor : 1.00 | | |

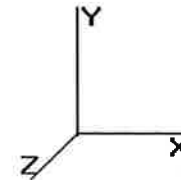
Applied Segment Forces Summary

| 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 | 139.56 | 1,245.94 | 0.00 | 0.00 |
| 10.00 | 136.61 | 1,223.35 | 0.00 | 0.00 |
| 15.00 | 133.66 | 1,200.76 | 0.00 | 0.00 |
| 20.00 | 130.71 | 1,178.17 | 0.00 | 0.00 |
| 25.00 | 127.76 | 1,155.58 | 0.00 | 0.00 |
| 30.00 | 124.91 | 1,132.99 | 0.00 | 0.00 |
| 35.00 | 127.45 | 1,110.40 | 0.00 | 0.00 |
| 40.00 | 129.20 | 1,087.81 | 0.00 | 0.00 |
| 43.58 | 92.87 | 765.70 | 0.00 | 0.00 |
| 45.00 | 37.22 | 512.16 | 0.00 | 0.00 |
| 49.50 | 119.67 | 1,604.67 | 0.00 | 0.00 |
| 50.00 | 13.16 | 91.65 | 0.00 | 0.00 |
| 55.00 | 133.35 | 905.98 | 0.00 | 0.00 |
| 60.00 | 133.10 | 886.87 | 0.00 | 0.00 |
| 65.00 | 132.50 | 867.75 | 0.00 | 0.00 |
| 70.00 | 131.57 | 848.64 | 0.00 | 0.00 |
| 75.00 | 130.35 | 829.52 | 0.00 | 0.00 |
| 80.00 | 128.86 | 810.41 | 0.00 | 0.00 |
| 85.00 | 127.14 | 791.29 | 0.00 | 0.00 |
| 86.09 | 27.20 | 169.45 | 0.00 | 0.00 |
| 90.00 | 99.39 | 983.76 | 0.00 | 0.00 |
| 91.00 | 25.16 | 248.80 | 0.00 | 0.00 |
| 95.00 | 99.83 | 526.10 | 0.00 | 0.00 |
| 100.0 | 122.99 | 644.11 | 0.00 | 0.00 |
| 105.0 | 120.49 | 628.47 | 0.00 | 0.00 |
| 110.0 | 117.82 | 612.83 | 0.00 | 0.00 |
| 115.0 | 114.99 | 597.19 | 0.00 | 0.00 |
| 120.0 | 112.01 | 581.55 | 0.00 | 0.00 |
| 120.8 | 18.20 | 95.01 | 0.00 | 0.00 |
| 125.0 | 91.79 | 684.40 | 0.00 | 0.00 |
| 125.0 | 0.07 | 0.30 | 0.00 | 0.00 |
| 130.0 | 107.27 | 433.95 | 0.00 | 0.00 |
| 135.0 | 103.90 | 423.52 | 0.00 | 0.00 |
| 137.5 | 709.99 | 2,112.85 | 0.00 | 0.00 |
| 140.0 | 49.62 | 180.64 | 0.00 | 0.00 |
| 143.0 | 1,017.07 | 2,673.93 | 0.00 | 3,070.34 |
| 145.0 | 38.15 | 117.86 | 0.00 | 0.00 |
| 150.0 | 93.04 | 287.34 | 0.00 | 0.00 |
| 155.0 | 89.19 | 276.92 | 0.00 | 0.00 |
| 157.0 | 1,061.51 | 3,027.85 | 0.00 | 1,135.98 |
| 160.0 | 50.57 | 109.47 | 0.00 | 0.00 |
| 165.0 | 38.44 | 273.11 | 0.00 | 0.00 |
| 170.0 | 38.76 | 273.10 | 0.00 | 0.00 |
| 173.0 | 23.37 | 163.86 | 0.00 | 0.00 |
| Totals: | 6,600.49 | 34,376.04 | 0.00 | 4,206.32 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)

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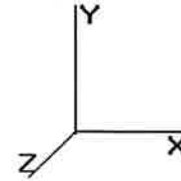
| | | |
|-------------------------------|--------------------------|-------------------------------|
| Load Case: 1.0D + 1.0W | 60.00 mph Serviceability | 28 Iterations |
| Gust Response Factor : 1.10 | | Wind Importance Factor : 1.00 |
| Dead Load Factor : 1.00 | | |
| Wind Load Factor : 1.00 | | |

Calculated Forces

| Seg Elev (ft) | Pu FY (-) (kips) | Vu FX (-) (kips) | Tu MY (ft-kips) | Mu MZ (ft-kips) | Mu MX (ft-kips) | Resultant Moment (ft-kips) | phi Pn (kips) | phi Vn (kips) | phi Tn (ft-kips) | phi Mn (ft-kips) | Total Deflect (in) | Rotation (deg) | Ratio |
|---------------|------------------|------------------|-----------------|-----------------|-----------------|----------------------------|---------------|---------------|------------------|------------------|--------------------|----------------|-------|
| 0.00 | -34.37 | -6.62 | 0.00 | -746.84 | 0.00 | 746.84 | 4,086.01 | 2,043.01 | 8,107.89 | 4,004.18 | 0.00 | 0.00 | 0.195 |
| 5.00 | -33.12 | -6.51 | 0.00 | -713.76 | 0.00 | 713.76 | 4,040.25 | 2,020.12 | 7,846.47 | 3,875.07 | 0.03 | -0.06 | 0.192 |
| 10.00 | -31.89 | -6.40 | 0.00 | -681.21 | 0.00 | 681.21 | 3,992.74 | 1,996.37 | 7,585.59 | 3,746.24 | 0.12 | -0.11 | 0.190 |
| 15.00 | -30.68 | -6.30 | 0.00 | -649.20 | 0.00 | 649.20 | 3,943.49 | 1,971.74 | 7,325.49 | 3,617.78 | 0.27 | -0.17 | 0.187 |
| 20.00 | -29.50 | -6.19 | 0.00 | -617.71 | 0.00 | 617.71 | 3,892.49 | 1,946.24 | 7,066.38 | 3,489.82 | 0.48 | -0.23 | 0.185 |
| 25.00 | -28.34 | -6.09 | 0.00 | -586.75 | 0.00 | 586.75 | 3,839.74 | 1,919.87 | 6,808.48 | 3,362.45 | 0.75 | -0.29 | 0.182 |
| 30.00 | -27.20 | -5.99 | 0.00 | -556.29 | 0.00 | 556.29 | 3,785.25 | 1,892.63 | 6,552.02 | 3,235.80 | 1.09 | -0.35 | 0.179 |
| 35.00 | -26.08 | -5.88 | 0.00 | -526.35 | 0.00 | 526.35 | 3,729.02 | 1,864.51 | 6,297.22 | 3,109.96 | 1.49 | -0.41 | 0.176 |
| 40.00 | -24.99 | -5.77 | 0.00 | -496.94 | 0.00 | 496.94 | 3,671.04 | 1,835.52 | 6,044.29 | 2,985.05 | 1.96 | -0.48 | 0.173 |
| 43.58 | -24.22 | -5.68 | 0.00 | -476.27 | 0.00 | 476.27 | 3,628.42 | 1,814.21 | 5,864.30 | 2,896.16 | 2.33 | -0.52 | 0.171 |
| 45.00 | -23.71 | -5.66 | 0.00 | -468.22 | 0.00 | 468.22 | 3,611.32 | 1,805.66 | 5,793.46 | 2,861.17 | 2.49 | -0.54 | 0.170 |
| 49.50 | -22.10 | -5.53 | 0.00 | -442.77 | 0.00 | 442.77 | 2,851.35 | 1,425.67 | 4,562.16 | 2,253.08 | 3.03 | -0.60 | 0.204 |
| 50.00 | -22.01 | -5.54 | 0.00 | -440.00 | 0.00 | 440.00 | 2,847.21 | 1,423.61 | 4,543.52 | 2,243.87 | 3.09 | -0.61 | 0.204 |
| 55.00 | -21.09 | -5.42 | 0.00 | -412.33 | 0.00 | 412.33 | 2,804.92 | 1,402.46 | 4,357.58 | 2,152.04 | 3.77 | -0.68 | 0.199 |
| 60.00 | -20.20 | -5.30 | 0.00 | -385.23 | 0.00 | 385.23 | 2,760.87 | 1,380.44 | 4,172.57 | 2,060.67 | 4.52 | -0.76 | 0.194 |
| 65.00 | -19.33 | -5.18 | 0.00 | -358.72 | 0.00 | 358.72 | 2,715.09 | 1,357.54 | 3,988.71 | 1,969.88 | 5.36 | -0.83 | 0.189 |
| 70.00 | -18.48 | -5.06 | 0.00 | -332.81 | 0.00 | 332.81 | 2,667.55 | 1,333.78 | 3,806.24 | 1,879.76 | 6.27 | -0.91 | 0.184 |
| 75.00 | -17.64 | -4.94 | 0.00 | -307.50 | 0.00 | 307.50 | 2,618.28 | 1,309.14 | 3,625.36 | 1,790.43 | 7.27 | -0.99 | 0.178 |
| 80.00 | -16.83 | -4.82 | 0.00 | -282.78 | 0.00 | 282.78 | 2,567.25 | 1,283.63 | 3,446.31 | 1,702.00 | 8.34 | -1.07 | 0.173 |
| 85.00 | -16.04 | -4.69 | 0.00 | -258.67 | 0.00 | 258.67 | 2,514.49 | 1,257.24 | 3,269.29 | 1,614.58 | 9.50 | -1.14 | 0.167 |
| 86.09 | -15.86 | -4.67 | 0.00 | -253.57 | 0.00 | 253.57 | 2,502.79 | 1,251.39 | 3,231.11 | 1,595.72 | 9.76 | -1.16 | 0.165 |
| 90.00 | -14.88 | -4.56 | 0.00 | -235.27 | 0.00 | 235.27 | 2,459.97 | 1,229.99 | 3,094.54 | 1,528.28 | 10.74 | -1.22 | 0.160 |
| 91.00 | -14.63 | -4.54 | 0.00 | -230.69 | 0.00 | 230.69 | 1,883.46 | 941.73 | 2,407.12 | 1,188.79 | 11.00 | -1.24 | 0.202 |
| 95.00 | -14.10 | -4.45 | 0.00 | -212.53 | 0.00 | 212.53 | 1,854.90 | 927.45 | 2,308.01 | 1,139.84 | 12.07 | -1.30 | 0.194 |
| 100.00 | -13.45 | -4.34 | 0.00 | -190.27 | 0.00 | 190.27 | 1,817.60 | 908.80 | 2,184.84 | 1,079.01 | 13.48 | -1.39 | 0.184 |
| 105.00 | -12.82 | -4.22 | 0.00 | -168.59 | 0.00 | 168.59 | 1,778.55 | 889.28 | 2,062.81 | 1,018.74 | 14.99 | -1.48 | 0.173 |
| 110.00 | -12.20 | -4.10 | 0.00 | -147.50 | 0.00 | 147.50 | 1,737.76 | 868.88 | 1,942.11 | 959.14 | 16.59 | -1.57 | 0.161 |
| 115.00 | -11.60 | -3.99 | 0.00 | -126.99 | 0.00 | 126.99 | 1,695.22 | 847.61 | 1,822.99 | 900.31 | 18.28 | -1.66 | 0.148 |
| 120.00 | -11.02 | -3.87 | 0.00 | -107.05 | 0.00 | 107.05 | 1,650.94 | 825.47 | 1,705.66 | 842.36 | 20.06 | -1.74 | 0.134 |
| 120.83 | -10.92 | -3.85 | 0.00 | -103.84 | 0.00 | 103.84 | 1,643.42 | 821.71 | 1,686.37 | 832.84 | 20.36 | -1.75 | 0.131 |
| 125.00 | -10.24 | -3.75 | 0.00 | -87.78 | 0.00 | 87.78 | 913.95 | 456.98 | 927.00 | 457.81 | 21.92 | -1.81 | 0.203 |
| 125.00 | -10.24 | -3.76 | 0.00 | -87.77 | 0.00 | 87.77 | 913.94 | 456.97 | 926.96 | 457.79 | 21.92 | -1.81 | 0.203 |
| 130.00 | -9.80 | -3.65 | 0.00 | -68.99 | 0.00 | 68.99 | 896.41 | 448.21 | 871.33 | 430.32 | 23.87 | -1.91 | 0.171 |
| 135.00 | -9.38 | -3.54 | 0.00 | -50.75 | 0.00 | 50.75 | 877.14 | 438.57 | 815.56 | 402.77 | 25.92 | -2.00 | 0.137 |
| 137.50 | -7.29 | -2.76 | 0.00 | -41.89 | 0.00 | 41.89 | 866.86 | 433.43 | 787.69 | 389.01 | 26.98 | -2.03 | 0.116 |
| 140.00 | -7.11 | -2.71 | 0.00 | -34.99 | 0.00 | 34.99 | 856.13 | 428.06 | 759.86 | 375.27 | 28.05 | -2.07 | 0.102 |
| 143.00 | -4.47 | -1.60 | 0.00 | -23.79 | 0.00 | 23.79 | 842.68 | 421.34 | 726.58 | 358.83 | 29.36 | -2.10 | 0.072 |
| 145.00 | -4.36 | -1.56 | 0.00 | -20.59 | 0.00 | 20.59 | 833.37 | 416.68 | 704.47 | 347.91 | 30.24 | -2.12 | 0.064 |
| 150.00 | -4.07 | -1.46 | 0.00 | -12.80 | 0.00 | 12.80 | 808.86 | 404.43 | 649.60 | 320.81 | 32.48 | -2.15 | 0.045 |
| 155.00 | -3.80 | -1.36 | 0.00 | -5.52 | 0.00 | 5.52 | 782.61 | 391.31 | 595.47 | 294.08 | 34.75 | -2.18 | 0.024 |
| 157.00 | -0.81 | -0.18 | 0.00 | -1.67 | 0.00 | 1.67 | 771.63 | 385.81 | 574.08 | 283.51 | 35.66 | -2.18 | 0.007 |
| 160.00 | -0.71 | -0.13 | 0.00 | -1.12 | 0.00 | 1.12 | 754.62 | 377.31 | 542.31 | 267.82 | 37.03 | -2.18 | 0.005 |
| 160.00 | -0.71 | -0.13 | 0.00 | -1.12 | 0.00 | 1.12 | 505.62 | 252.81 | 279.19 | 182.79 | 37.03 | -2.18 | 0.008 |
| 165.00 | -0.43 | -0.08 | 0.00 | -0.48 | 0.00 | 0.48 | 505.62 | 252.81 | 279.19 | 182.79 | 39.32 | -2.19 | 0.003 |
| 170.00 | -0.16 | -0.03 | 0.00 | -0.09 | 0.00 | 0.09 | 505.62 | 252.81 | 279.19 | 182.79 | 41.61 | -2.19 | 0.001 |
| 173.00 | 0.00 | -0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 505.62 | 252.81 | 279.19 | 182.79 | 42.99 | -2.19 | 0.000 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides, Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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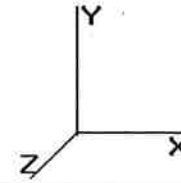
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Analysis Summary

| Load Case | Reactions | | | | | | Max Usage | |
|----------------------|-----------------------|-----------------------|-----------------------|---------------------------|---------------------------|---------------------------|--------------|----------------------|
| | Shear FX (kips) | Shear FZ (kips) | Axial FY (kips) | Moment MX (ft-kips) | Moment MY (ft-kips) | Moment MZ (ft-kips) | Elev (ft) | Interaction Ratio |
| 1.2D + 1.6W | 32.44 | 0.00 | 41.17 | 0.00 | 0.00 | 3685.28 | 49.50 | 0.98 |
| 0.9D + 1.6W | 32.42 | 0.00 | 30.86 | 0.00 | 0.00 | 3624.55 | 49.50 | 0.96 |
| 1.2D + 1.0Di + 1.0Wi | 6.21 | 0.00 | 61.86 | 0.00 | 0.00 | 760.21 | 125.00 | 0.24 |
| 1.0D + 1.0W | 6.62 | 0.00 | 34.37 | 0.00 | 0.00 | 746.84 | 49.50 | 0.20 |

Pole : 302524
 Location : Beacon Falls, CT
 Height : 173.0 (ft)
 Base Dia : 48.50 (in)
 Top Dia : 14.00 (in)
 Shape : 12 Sides. Sect 5: Round
 Taper : 0.203000 (in/ft)

Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure Category : B
 Topographic Category : 1
 Base Elev : 0.000 (ft)



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Base Summary

Reactions

| Original Design | | | Analysis | | | Moment Design % |
|-----------------|-------------|-------------|-----------------|-------------|-------------|-----------------|
| Moment (kip-ft) | Axial (kip) | Shear (kip) | Moment (kip-ft) | Axial (kip) | Shear (kip) | |
| 3,020.91 | 28.65 | 28.02 | 3,685.28 | 61.86 | 32.44 | 90.36 |

Base Plate

| Yield (ksi) | Thick (in) | Width (in) | Style | Poly Sides | Clip Len (in) | Effective Len (in) | Mu (kip-in) | Phi Mn (kip-in) | Ratio |
|-------------|------------|------------|---------|------------|---------------|--------------------|-------------|-----------------|-------|
| 60.0 | 2.750 | 62.710 | Polygon | 12 | 0.00 | 9.747 | 816.16 | 995.07 | 0.82 |

Anchor Bolts

| Bolt Circle | Num Bolts | Bolt Type | Bolt Dia (in) | Yield (ksi) | Ultimate (ksi) | Arrange | Cluster Dist (in) | Start Angle (deg) | Compression | | | Tension | | |
|-------------|-----------|-----------|---------------|-------------|----------------|---------|-------------------|-------------------|-------------|-------------|-------|-------------|-------------|-------|
| | | | | | | | | | Force (kip) | Allow (kip) | Ratio | Force (kip) | Allow (kip) | Ratio |
| 56.71 | 16 | 2.25" 18J | 2.25 | 75.00 | 100.00 | Radial | 0.00 | 0.0 | 198.82 | 260.00 | 0.78 | 191.09 | 260.00 | 0.75 |