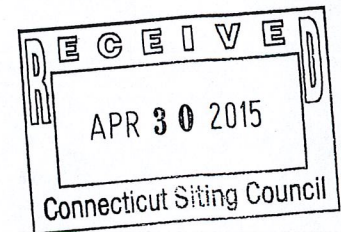


KENNETH C. BALDWIN

280 Trumbull Street  
Hartford, CT 06103-3597  
Main (860) 275-8200  
Fax (860) 275-8299  
kbaldwin@rc.com  
Direct (860) 275-8345

Also admitted in Massachusetts

April 27, 2015



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

Re: **EM-VER-034-140123 – 48 Newtown Road, Danbury, Connecticut**  
**EM-VER-064-131120 – 305 West Service Road, Hartford, Connecticut**  
**EM-VER-156-131108 – 668 Jones Hill Road, West Haven, Connecticut**  
**EM-VER-159-131017 – 100 Great Meadow Road, Wethersfield, Connecticut**  
**EM-VER-018-140725 – 37 Carmen Hill Road, Brookfield, Connecticut**  
**EM-VER-057-131127 – 1323 King Street, Greenwich, Connecticut**  
**EM-VER-132-140326 – 190 Burnham Street, South Windsor, Connecticut**  
**EM-VER-057-131004 – 36 Ritch Avenue, Greenwich, Connecticut**  
**EM-VER-011-140114 – Blue Hills Avenue, Bloomfield, Connecticut**  
**EM-VER-158-131122 – 2 Raymond Allen Lane, Westport, Connecticut**

## Completion of Construction Activity

Dear Ms. Bachman:

The purpose of this letter is to notify the Siting Council that construction activity associated with the above-referenced Cellco Partnership d/b/a Verizon Wireless telecommunications facilities has been completed.

If you have any questions or need any additional information regarding these facilities please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin".

Kenneth C. Baldwin

Copy to:  
Tim Parks

13770098-v1

Boston | Hartford | New York | Providence | Stamford | Albany | Los Angeles | New London | Sarasota | [rc.com](http://rc.com)

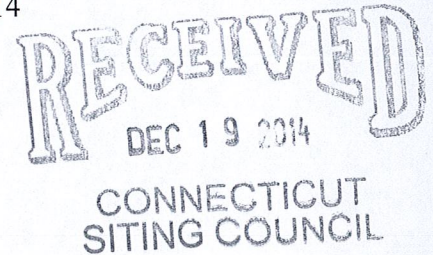
Robinson & Cole LLP

KENNETH C. BALDWIN

280 Trumbull Street  
Hartford, CT 06103-3597  
Main (860) 275-8200  
Fax (860) 275-8299  
kbaldwin@rc.com  
Direct (860) 275-8345

Also admitted in Massachusetts

December 17, 2014



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

Re: **EM-VER-002-130607 – 401 Wakelee Avenue, Ansonia, Connecticut**  
**EM-VER-043-130916 – 866 Main Street, East Hartford, Connecticut**  
**EM-VER-034-140123 – 48 Newtown Road, Danbury, Connecticut**  
**EM-VER-064-131120 – 305 West Service Road, Hartford, Connecticut**  
**EM-VER-064-130220 – 439-455 Homestead Avenue, Hartford, Connecticut**  
**EM-VER-064-131108 – 223 Brainard Road, Hartford, Connecticut**  
**EM-VER-078-131004 – 82 North Eagleville Road, Mansfield, Connecticut**  
**EM-VER-155-130806 – 570 New Park Avenue, West Hartford, Connecticut**  
**EM-VER-156-130524 – 668 Jones Hill Road, West Haven, Connecticut**  
**EM-VER-159-131017 – 100 Great Meadow Road, Wethersfield, Connecticut**

## Completion of Construction Activity

Dear Ms. Bachman:

The purpose of this letter is to notify the Siting Council that construction activity associated with the above-referenced Cellco Partnership d/b/a Verizon Wireless telecommunications facilities has been completed.

If you have any questions or need any additional information regarding these facilities please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin".

Kenneth C. Baldwin

Copy to:

Sandy M. Carter



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: [siting.council@ct.gov](mailto:siting.council@ct.gov)

[www.ct.gov/csc](http://www.ct.gov/csc)

December 9, 2013

Kenneth C. Baldwin, Esq.  
Robinson & Cole LLP  
280 Trumbull Street  
Hartford, CT 06103

RE: **EM-VER-064-131120** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 305 West Service Road, Hartford, Connecticut.

Dear Attorney Baldwin:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

- Any deviation from the proposed modification as specified in this notice and supporting materials with the Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration.

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated November 19, 2013. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Very truly yours,

Melanie A. Bachman  
Acting Executive Director

MAB/CDM/jb

c: The Honorable Pedro E. Segarra, Mayor, City of Hartford  
Albert Ilg, Acting Chief Operating Officer, City of Hartford  
Khara Dodds, Planning Division Director, City of Hartford  
American Tower





STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: [siting.council@ct.gov](mailto:siting.council@ct.gov)  
[www.ct.gov/csc](http://www.ct.gov/csc)

November 22, 2013

The Honorable Pedro E. Segarra  
Mayor  
City of Hartford  
Municipal Building  
550 Main Street  
Hartford, CT 06103

RE: **EM-VER-064-131120** -- Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 305 West Service Road, Hartford, Connecticut.

Dear Mayor Segarra:

The Connecticut Siting Council (Council) received a request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72, a copy of which has already been provided to you.

If you have any questions or comments regarding the proposal, please call me or inform the Council by December 9, 2013.

Thank you for your cooperation and consideration.

Very truly yours,

Melanie Bachman  
Acting Executive Director

MB/jb

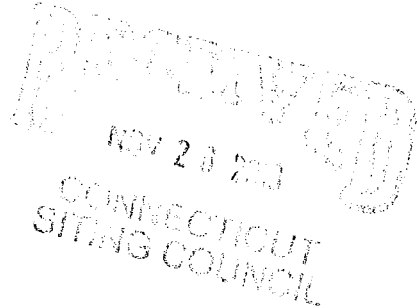
c: Albert Ilg, Acting Chief Operating Officer, City of Hartford  
Khara Dodds, Planning Division Director, City of Hartford

EM-VER-064-131120

280 Trumbull Street  
Hartford, CT 06103-3597  
Main (860) 275-8200  
Fax (860) 275-8299  
kbaldwin@rc.com  
Direct (860) 275-8345

Also admitted in Massachusetts

November 19, 2013



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

Re: **Notice of Exempt Modification – Antenna Swap  
305 West Service Road, Hartford, Connecticut**

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains twelve (12) wireless telecommunications antennas at the 115-foot level of the existing 148-foot tower at the above-referenced address. The tower is owned by American Tower Corporation. The Council approved Cellco’s shared use of this tower in 2002. Cellco now intends to replace six (6) of its antennas with three (3) model BXA-70063-6CF cellular antennas and three (3) model BXA-171063-12CF AWS antennas, at the same level on the tower. Cellco also intends to install three (3) remote radio heads (“RRHs”) behind its antennas and one (1) HYBRIFLEX™ antenna cable, inside the monopole tower. Included in Attachment 1 are specifications for the replacement 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 Pedro E. Segarra, Mayor of the City of Hartford. A copy of this letter is also being sent to 305 W. Service Road Associates LLC, the owner of the property on which the tower is located.

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



*Law Offices*

BOSTON

PROVIDENCE

HARTFORD

NEW LONDON

STAMFORD

WHITE PLAINS

NEW YORK CITY

ALBANY

SARASOTA

www.rc.com

12389694-v1

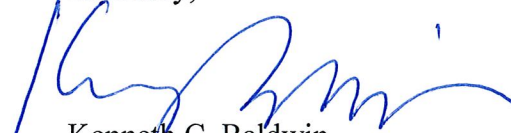
# ROBINSON & COLE<sub>LLP</sub>

Melanie A. Bachman  
November 19, 2013  
Page 2

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco's replacement antennas and RRHs will be located at the 115-foot level of the 148-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 General Power Density table for Cellco's modified facility is 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:

Pedro E. Segarra, Hartford Mayor  
305 W. Service Road Associates LLC  
Sandy M. Carter



# **ATTACHMENT 1**

## BXA-70063-6CF-EDIN-X

X-Pol | FET Panel | 63° | 14.5 dBd

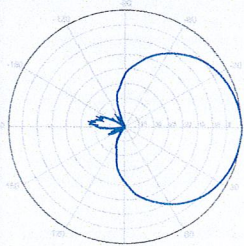
Replace 'X' with desired electrical downtilt.

Antenna is also available with NE connector(s). Replace "EDIN" with "NE" in the model number when ordering.

Electrical Characteristics	696-900 MHz		
Frequency bands	696-806 MHz	806-900 MHz	
Polarization	±45°		
Horizontal beamwidth	65°	63°	
Vertical beamwidth	13°	11°	
Gain	14.0 dBd (16.1 dBi)	14.5 dBd (16.6 dBi)	
Electrical downtilt (X)	0, 2, 3, 4, 5, 6, 8, 10		
Impedance	50Ω		
VSWR	≤1.35:1		
Upper sidelobe suppression (0°)	-18.3 dB	-18.2 dB	
Front-to-back ratio (+/-30°)	-33.4 dB	-36.3 dB	
Null fill	5% (-26.02 dB)		
Isolation between ports	< -25 dB		
Input power with EDIN connectors	500 W		
Input power with NE connectors	300 W		
Lightning protection	Direct Ground		
Connector(s)	2 Ports / EDIN or NE / Female / Center (Back)		
Mechanical Characteristics			
Dimensions Length x Width x Depth	1804 x 285 x 132 mm	71.0 x 11.2 x 5.2 in	
Depth with z-brackets	172 mm	6.8 in	
Weight without mounting brackets	7.9 kg	17 lbs	
Survival wind speed	> 201 km/hr	> 125 mph	
Wind area	Front: 0.51 m <sup>2</sup> Side: 0.24 m <sup>2</sup>	Front: 5.5 ft <sup>2</sup> Side: 2.6 ft <sup>2</sup>	
Wind load @ 161 km/hr (100 mph)	Front: 759 N Side: 391 N	Front: 169 lbf Side: 89 lbf	
Mounting Options	Part Number	Fits Pipe Diameter	Weight
3-Point Mounting & Downtilt Bracket Kit	36210008	40-115 mm 1.57-4.5 in	6.9 kg 15.2 lbs
Concealment Configurations	For concealment configurations, order BXA-70063-6CF-EDIN-X-FP		

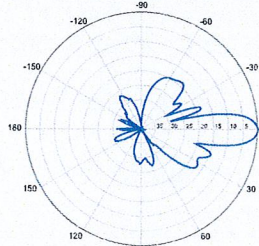


BXA-70063-6CF-EDIN-X



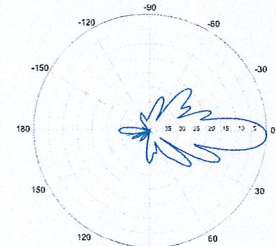
Horizontal | 750 MHz

BXA-70063-6CF-EDIN-0

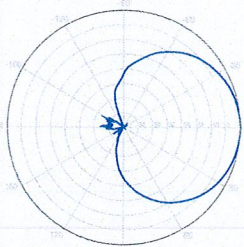


0° | Vertical | 750 MHz

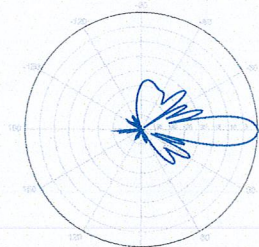
BXA-70063-6CF-EDIN-2



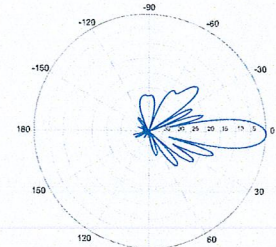
2° | Vertical | 750 MHz



Horizontal | 850 MHz



0° | Vertical | 850 MHz



2° | Vertical | 850 MHz

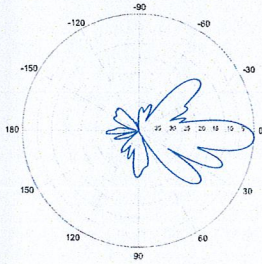
Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.



**BXA-70063-6CF-EDIN-X**

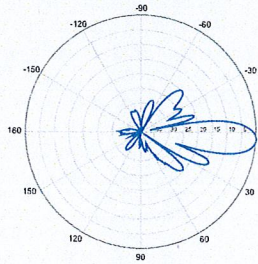
X-Pol | FET Panel | 63° | 14.5 dBd

**BXA-70063-6CF-EDIN-3**



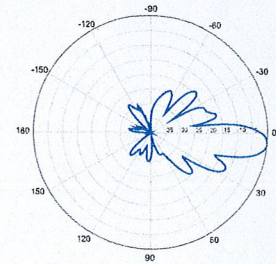
3° | Vertical | 750 MHz

**BXA-70063-6CF-EDIN-4**

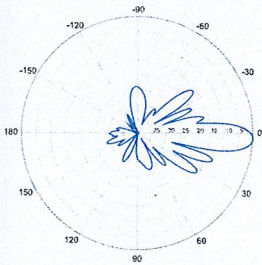


4° | Vertical | 750 MHz

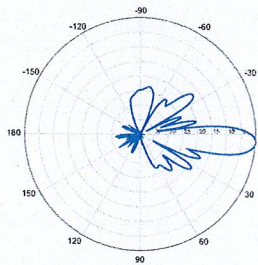
**BXA-70063-6CF-EDIN-5**



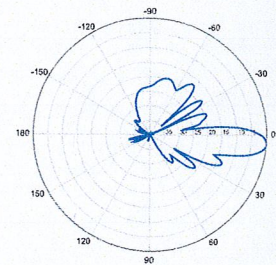
5° | Vertical | 750 MHz



3° | Vertical | 850 MHz

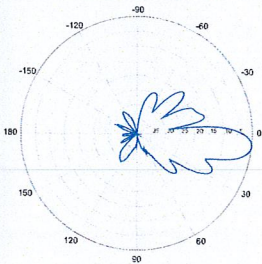


4° | Vertical | 850 MHz



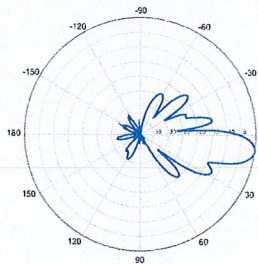
5° | Vertical | 850 MHz

**BXA-70063-6CF-EDIN-6**



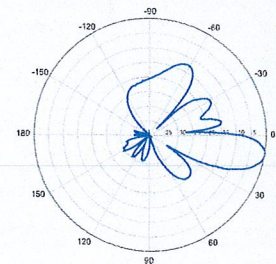
6° | Vertical | 750 MHz

**BXA-70063-6CF-EDIN-8**

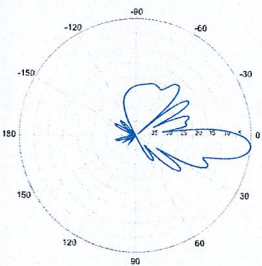


8° | Vertical | 750 MHz

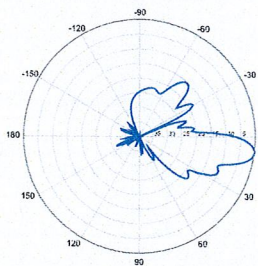
**BXA-70063-6CF-EDIN-10**



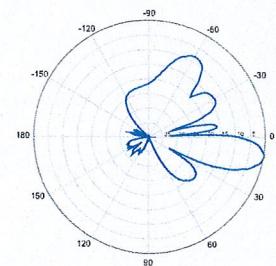
10° | Vertical | 750 MHz



6° | Vertical | 850 MHz



8° | Vertical | 850 MHz



10° | Vertical | 850 MHz

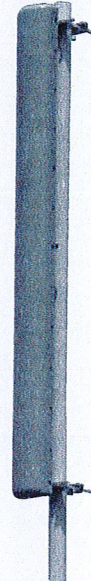
Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

## BXA-171063-12CF-EDIN-X

X-Pol | FET Panel | 63° | 19.0 dBi

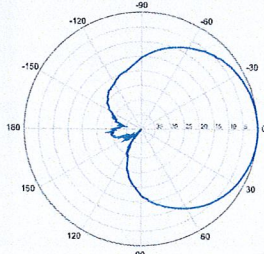
Replace "X" with desired electrical downtilt.

Antenna is also available with NE connector(s). Replace "EDIN" with "NE" in the model number when ordering.

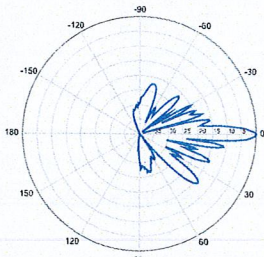


Electrical Characteristics	1710-2170 MHz		
Frequency bands	1710-1880 MHz	1850-1990 MHz	1920-2170 MHz
Polarization	±45°	±45°	±45°
Horizontal beamwidth	68°	65°	60°
Vertical beamwidth	4.5°	4.5°	4.5°
Gain	16.1 dBd / 18.2 dBi	16.5 dBd / 18.6 dBi	16.9 dBd / 19.0 dBi
Electrical downtilt (X)	0, 2, 5		
Impedance	50Ω		
VSWR	≤1.5:1		
First upper sidelobe	< -17 dB		
Front-to-back ratio	> 30 dB		
In-band isolation	> 28 dB		
IM3 (20W carrier)	< -150 dBc		
Input power	300 W		
Lightning protection	Direct Ground		
Connector(s)	2 Ports / EDIN or NE / Female / Center (Back)		
Operating temperature	-40° to +60° C / -40° to +140° F		
Mechanical Characteristics			
Dimensions Length x Width x Depth	1842 x 154 x 105 mm	72.5 x 6.1 x 4.1 in	
Depth with z-brackets	133 mm	5.2 in	
Weight without mounting brackets	5.8 kg	12.8 lbs	
Survival wind speed	> 201 km/hr		> 125 mph
Wind area	Front: 0.28 m <sup>2</sup> Side: 0.19 m <sup>2</sup>	Front: 3.1 ft <sup>2</sup> Side: 2.1 ft <sup>2</sup>	
Wind load @ 161 km/hr (100 mph)	Front: 460 N Side: 304 N	Front: 103 lbf Side: 68 lbf	
Mounting Options	Part Number	Fits Pipe Diameter	Weight
2-Point Mounting Bracket Kit	26799997	50-102 mm 2.0-4.0 in	2.3 kg 5 lbs
2-Point Mounting & Downtilt Bracket Kit	26799999	50-102 mm 2.0-4.0 in	3.6 kg 8 lbs
Concealment Configurations	For concealment configurations, order BXA-171063-12CF-EDIN-X-FP		

BXA-171063-12CF-EDIN-X

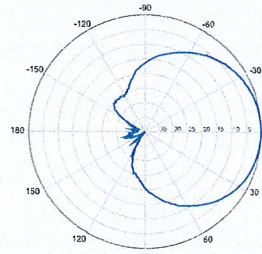


Horizontal | 1710-1880 MHz  
BXA-171063-12CF-EDIN-0

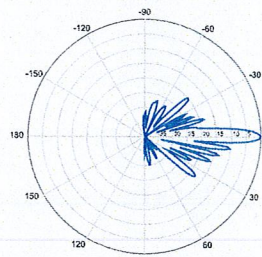


0° | Vertical | 1710-1880 MHz

BXA-171063-12CF-EDIN-X

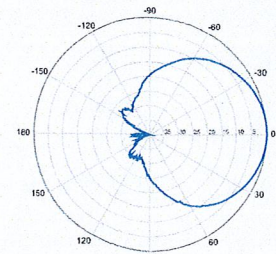


Horizontal | 1850-1990 MHz  
BXA-171063-12CF-EDIN-0

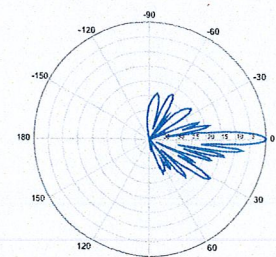


0° | Vertical | 1850-1990 MHz

BXA-171063-12CF-EDIN-X



Horizontal | 1920-2170 MHz  
BXA-171063-12CF-EDIN-0



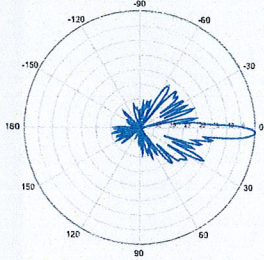
0° | Vertical | 1920-2170 MHz

Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

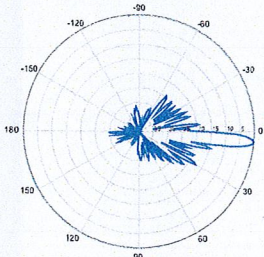
**BXA-171063-12CF-EDIN-X**

X-Pol | FET Panel | 63° | 19.0 dBi

**BXA-171063-12CF-EDIN-2**

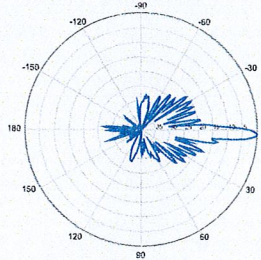


2° | Vertical | 1710-1880 MHz  
**BXA-171063-12CF-EDIN-5**

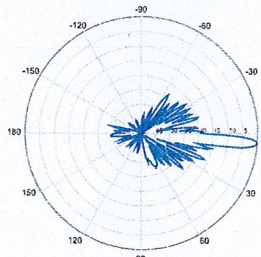


5° | Vertical | 1710-1880 MHz

**BXA-171063-12CF-EDIN-2**

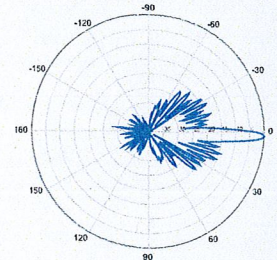


2° | Vertical | 1850-1990 MHz  
**BXA-171063-12CF-EDIN-5**

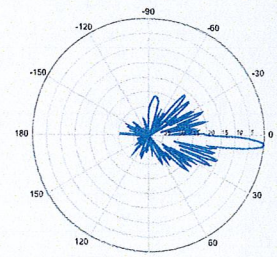


5° | Vertical | 1850-1990 MHz

**BXA-171063-12CF-EDIN-2**



2° | Vertical | 1920-2170 MHz  
**BXA-171063-12CF-EDIN-5**



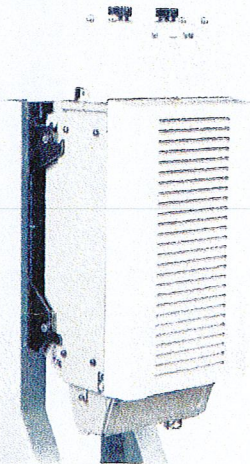
5° | Vertical | 1920-2170 MHz

Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

## 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

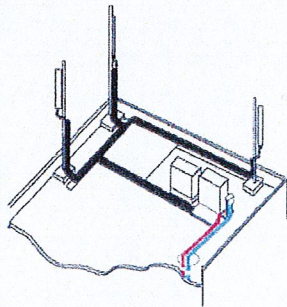
capital expenditures (CAPEX) and low operating expenditures (OPEX). The limited space available in some sites may prevent the installation of traditional single-cabinet BTS equipment or require costly cranes to be employed, leaving coverage holes. However, many of these sites can host an Alcatel-Lucent 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.



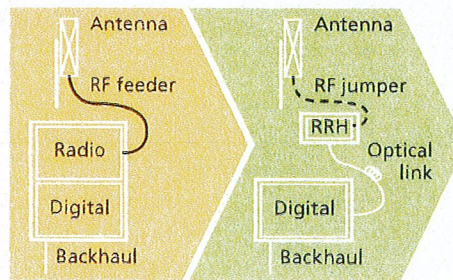
Macro

## Features

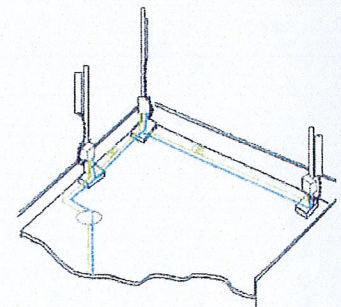
- Zero-footprint deployment
- Easy installation, with a lightweight unit can be carried and set up by one person
- Optimized RF power, with flexible site selection and elimination of a TMA
- Convection-cooled (fanless)
- Noise-free
- Best-in-class power efficiency, with significantly reduced energy consumption

## 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



RRH for space-constrained cell sites



Distributed

## Technical specifications

### Physical dimensions

- Height: 620 mm (24.4 in.)
- Width: 270 mm (10.63 in.)
- Depth: 170 mm (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

[www.alcatel-lucent.com](http://www.alcatel-lucent.com) Alcatel, Lucent, Alcatel-Lucent and the Alcatel-Lucent logo are trademarks of Alcatel-Lucent. All other trademarks are the property of their respective owners. The information presented is subject to change without notice. Alcatel-Lucent assumes no responsibility for inaccuracies contained herein. Copyright © 2010 Alcatel-Lucent. All rights reserved. CPG2809100912 (09)

**Product Data Sheet HB158-1-08U8-S&J18**



**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

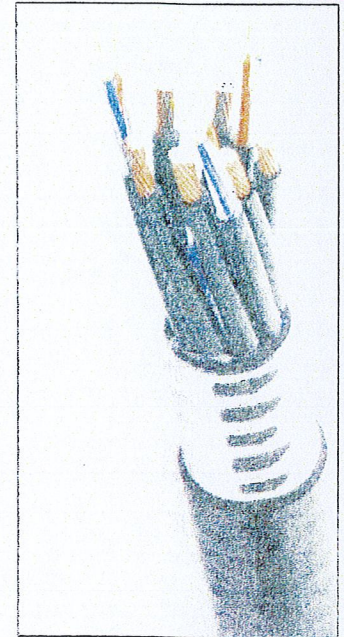


Figure 1: HYBRIFLEX Series

**Technical Specifications**

<b>Structure</b>			
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
<b>Mechanical Properties</b>			
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)
<b>Electrical Properties</b>			
DC-Resistance Outer Conductor Armor		(Ω/km (Ω/1000ft))	0.68 (0.205)
DC-Resistance Power Cable, 8.4mm <sup>2</sup> (8AWG)		(Ω/km (Ω/1000ft))	2.1 (0.307)
<b>Optical Properties</b>			
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 (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
<b>DC Power Cable Properties</b>			
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 XHHW-2, UL 44 UL-LS Limited Smoke, UL VW-1 IEEE-383 (1974), IEEE1202/FT4 RoHS Compliant
<b>Environment</b>			
Installation Temperature		(°C (°F))	-40 to +65 (-40 to 149)
Operation Temperature		(°C (°F))	-40 to +65 (-40 to 149)

\* This data is provisional and subject to change

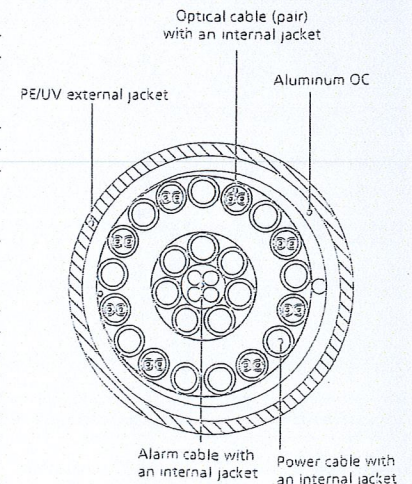


Figure 2: Construction Detail

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

# **ATTACHMENT 2**

Site Name: Hartford N Tower Height: Verizon @ 115ft		General		Power		Density							
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	CALC. POWER DENS	FREQ.	MAX. PERMISS. EXP.	FRACTION MPE	Total					
*Northcoast			125	0.0201	1900	1.0000	2.01%						
*Nextel	9	100	150	0.0144	851	0.5673	2.54%						
*Clearwire	2	153	90	0.0136	2496	1.0000	1.36%						
*Clearwire	1	211	90	0.0094	18 GHz	1.0000	0.94%						
*Sensus (Cl&P)	1	200	97	0.0076	940.1125	0.6267	1.22%						
*T-Mobile GSM	8	160	125	0.0295	1945	1.0000	2.95%						
*T-Mobile UMTS	2	670	125	0.0308	2100	1.0000	3.08%						
<b>Verizon PCS</b>	<b>11</b>	<b>443</b>	<b>115</b>	<b>0.1325</b>	<b>1970</b>	<b>1.0000</b>	<b>13.25%</b>						
<b>Verizon Cellular</b>	<b>9</b>	<b>406</b>	<b>115</b>	<b>0.0993</b>	<b>869</b>	<b>0.5793</b>	<b>17.15%</b>						
<b>Verizon AWS</b>	<b>1</b>	<b>1750</b>	<b>115</b>	<b>0.0476</b>	<b>2145</b>	<b>1.0000</b>	<b>4.76%</b>						
<b>Verizon 700</b>	<b>1</b>	<b>840</b>	<b>115</b>	<b>0.0228</b>	<b>698</b>	<b>0.4653</b>	<b>4.91%</b>						<b>54.15%</b>
* Source: Siting Council													



# **ATTACHMENT 3**



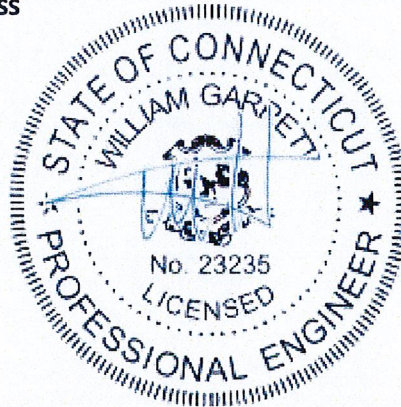
**AMERICAN TOWER®**  
CORPORATION

---

## Structural Analysis Report

**Structure** : 147.9 ft Monopole  
**ATC Site Name** : West Service Road, CT  
**ATC Site Number** : 302466  
**Engineering Number** : 53962523  
**Proposed Carrier** : Verizon  
**Carrier Site Name** : Hartford North CT  
**Carrier Site Number** : 118031  
**Site Location** : 305 W. Service Rd.  
Hartford, CT 06120-0001  
41.799539,-72.656697  
**County** : Hartford  
**Date** : November 14, 2013  
**Max Usage** : 72%  
**Result** : Pass

Weston Murphy



Nov 18 2013 12:06 PM



Eng. Number 53962523  
November 14, 2013

**Table of Contents**

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



## Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 147.9 ft monopole to reflect the change in loading by Verizon.

## Supporting Documents

<b>Tower Drawings</b>	FWT Drawing #18053, dated September 10, 1998
<b>Foundation Drawing</b>	FWT Drawing #18054, dated September 10, 1998
<b>Geotechnical Report</b>	Gibble Norden Champion Project #98134.09, dated September 8, 1998

## 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.

<b>Basic Wind Speed:</b>	95 mph (3-Second Gust)
<b>Basic Wind Speed w/ Ice:</b>	50 mph (3-Second Gust) w/ 1" radial ice concurrent
<b>Code:</b>	ANSI/TIA-222-G / 2003 IBC w/ 2005 CT Supplement & 2009 CT Amendment
<b>Structure Class:</b>	II
<b>Exposure Category:</b>	C
<b>Topographic Category:</b>	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 me via email at [weston.murphy@americantower.com](mailto:weston.murphy@americantower.com) or call 919-466-5242.



**Existing and Reserved Equipment**

Mount Elev. <sup>1</sup> (ft)	Qty.	Antenna	Mount Type	Lines	Carrier
147.9	9	48" x 12" Panels	Platform w/ Handrails	(12) 1 5/8" Coax	Sprint Nextel
	3	72" x 12" Panels			
137.0	9	48" x 4" Panels	Low Profile Platform	(9) 1 5/8" Coax	AT&T Mobility
125.0	6	Andrew ETW200VS12UB	T-Arms	(18) 1 5/8" Coax (1) 0.28" RG-6	T-Mobile
	3	RFS APX16DWV-16DWVL-S-E-ACU			
	3	RFS APX16PV-16PVL-E-00			
115.0	1	Antel BXA-171063-12BF-EDIN-X	Low Profile Platform	(18) 1 5/8" Coax	Verizon
	2	Antel BXA-171063-8BF-EDIN-X			
	3	Antel BXA-70063-6CF-EDIN-X			
100.0	1	Antel BCD-87010_25	Stand-Off	(1) 7/8" Coax	SMS
90.0	3	Argus LLPX310R	Collar	(6) 5/16" Coax (2) 3" Conduit (2) 1/2" Coax	Clearwire
	2	DragonWave A-ANT-18G-2-C			
	2	DragonWave Horizon Compact			
	3	NextNet BTS-2500			

**Proposed Equipment**

Elevation <sup>1</sup> (ft)		Qty.	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
115.0	115.0	3	Alcatel-Lucent RRH2x40-AWS	Low Profile Platform	(1) 1 5/8" Hybriflex	Verizon
		3	Antel BXA-171063-12CF-EDIN-X			
		3	Antel BXA-70063-6CF-EDIN-X			
		1	RFS DB-T1-6Z-8AB-0Z			

<sup>1</sup>Mount 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 outside the pole shaft. Stacking coax is not allowed.



**Structure Usages**

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	69%	Pass
Shaft	72%	Pass
Base Plate	59%	Pass

**Foundations**

Reaction Component	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Moment (Kips-Ft)	3,969.0	5,358.2	3,544.0	66%
Shear (Kips)	29.4	39.7	38.9	98%

\* 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)(°)
115.0	0.949	0.850

\* 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:

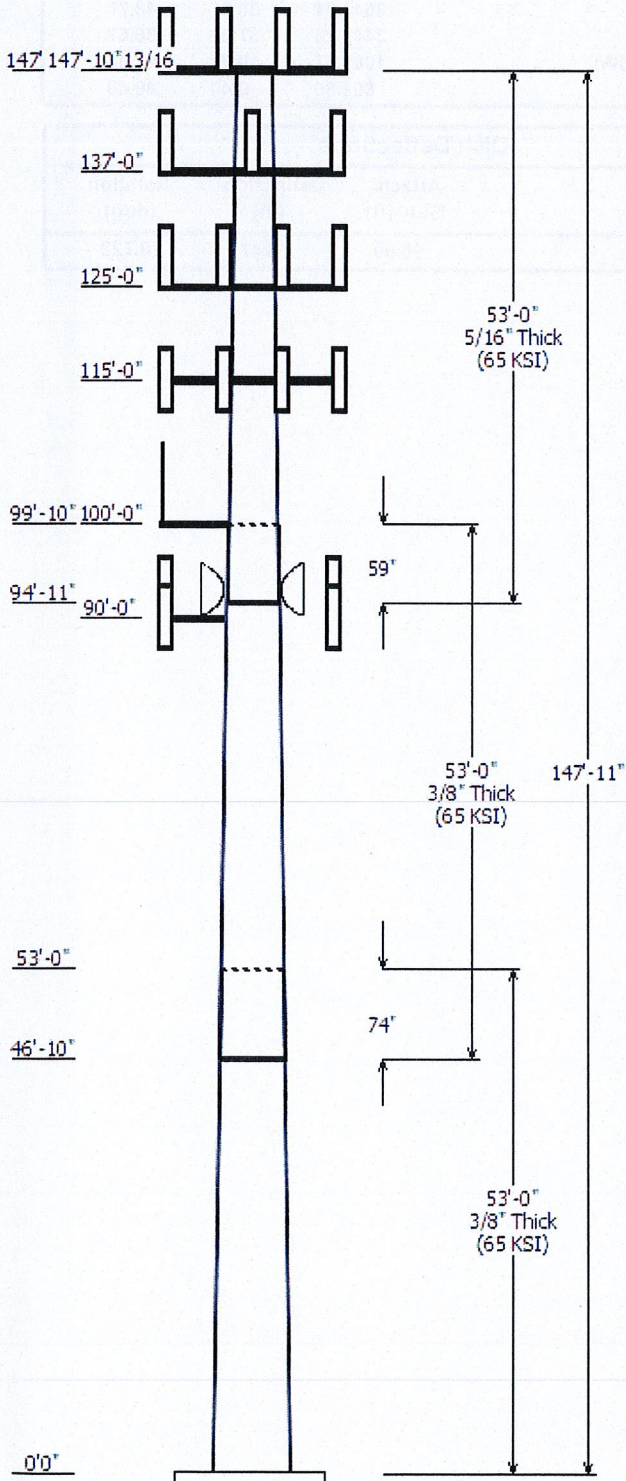
- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements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

© 2007 - 2013 by ATC IP LLC. All rights reserved.



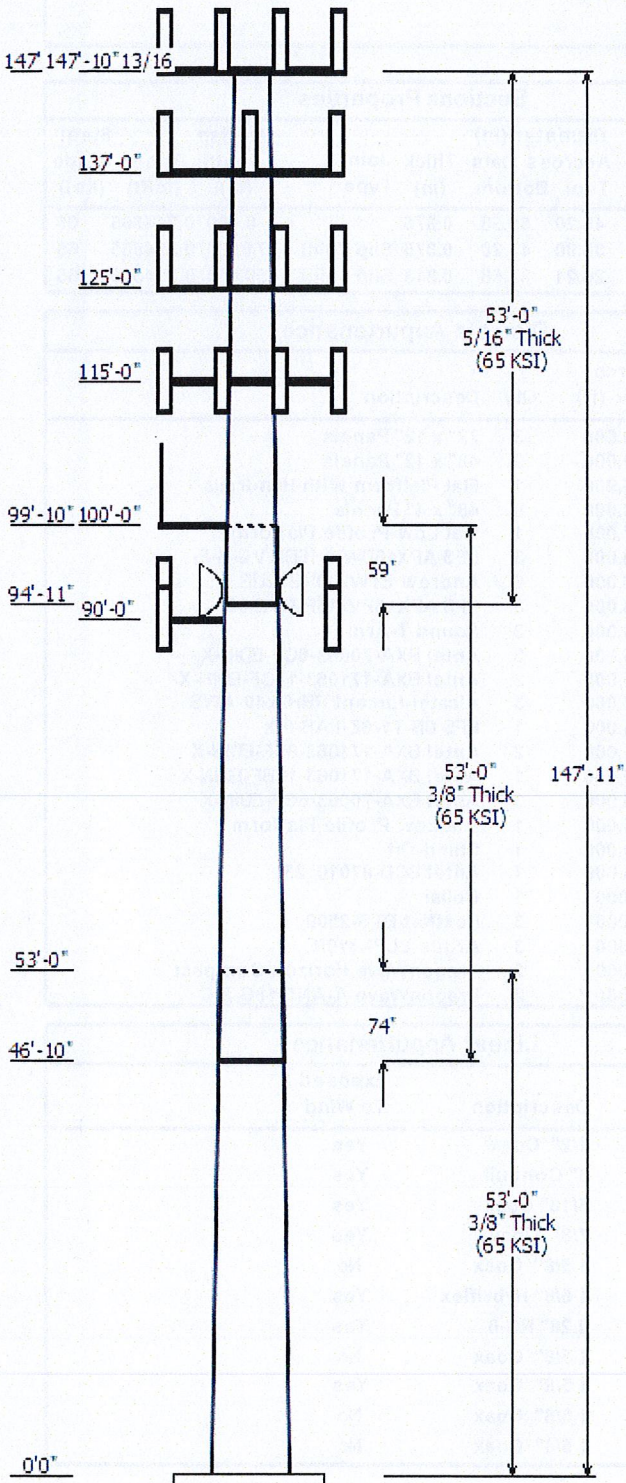
Job Information	
Pole : 302466	Code: ANSI/TIA-222 Rev G
Description : 148 ft FWT Monopole	
Client : Verizon Wireless	Struct Class : II
Location : West Service Road, CT	
Shape : 18 Sides	Exposure : C
Height : 147.92 (ft)	Topo : 1
Base Elev (ft): 0.00	
Taper: 0.21456(in/ft)	

Sections Properties								
Shaft Section	Length (ft)	Diameter (in)		Thick Joint (in)	Type	Overlap Length (in)	Steel Taper (in/ft)	Steel Grade (ksi)
		Across Top	Flats Bottom					
1	53.000	45.20	56.58	0.375		0.000	0.214565	65
2	53.000	35.90	47.28	0.375	Slip Joint	74.000	0.214565	65
3	53.000	26.21	37.58	0.313	Slip Joint	59.000	0.214565	65

Discrete Appurtenance				
Attach Elev (ft)	Force Elev (ft)	Qty	Description	
147.900	150.000	3	72" x 12" Panels	
147.900	150.000	9	48" x 12" Panels	
147.900	147.900	1	Flat Platform with Handrails	
137.000	139.000	9	48" x 4" Panels	
137.000	137.000	1	Flat Low Profile Platform	
125.000	126.000	3	RFS APX16DWV-16DWVL-S-E-	
125.000	126.000	6	Andrew ETW200VS12UB	
125.000	126.000	3	RFS APX16PV-16PVL-E-00	
125.000	125.000	3	Round T-Arm	
115.000	115.000	3	Antel BXA-70063-6CF-EDIN-X	
115.000	115.000	3	Antel BXA-171063-12CF-EDIN-X	
115.000	115.000	3	Alcatel-Lucent RRH2x40-AWS	
115.000	115.000	1	RFS DB-T1-6Z-8AB-0Z	
115.000	115.000	2	Antel BXA-171063-8BF-EDIN-X	
115.000	115.000	1	Antel BXA-171063-12BF-EDIN-X	
115.000	115.000	3	Antel BXA-70063-6CF-EDIN-X	
115.000	115.000	1	Flat Low Profile Platform	
100.000	100.000	1	Stand-Off	
100.000	105.000	1	Antel BCD-87010_25	
90.000	90.000	1	Collar	
90.000	90.000	3	NextNet BTS-2500	
90.000	92.000	3	Argus LLPX310R	
90.000	90.000	2	DragonWave Horizon Compact	
90.000	93.000	2	DragonWave A-ANT-18G-2-C	

Linear Appurtenance			
Elev (ft)		Description	Exposed To Wind
From	To		
5.000	90.000	1/2" Coax	Yes
5.000	90.000	3" Conduit	Yes
5.000	90.000	5/16" Coax	Yes
5.000	100.0	7/8" Coax	Yes
5.000	115.0	1 5/8" Coax	No
5.000	115.0	1 5/8" Hybriflex	Yes
5.000	125.0	0.28" RG-6	Yes
5.000	125.0	1 5/8" Coax	No
5.000	125.0	1 5/8" Coax	Yes
5.000	137.0	1 5/8" Coax	No
5.000	147.9	1 5/8" Coax	No

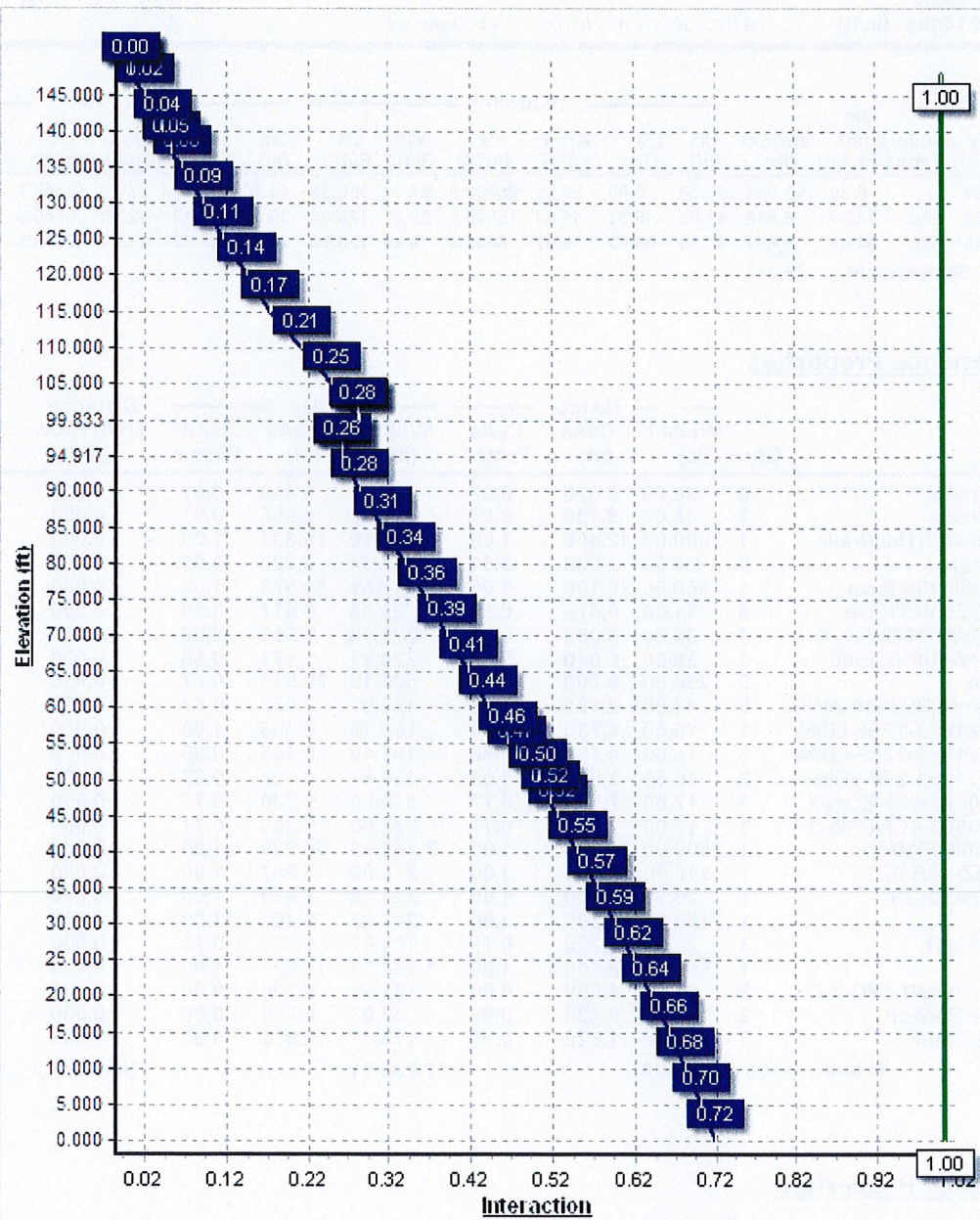




Load Cases	
1.2D + 1.6W	95.00 mph with No Ice
0.9D + 1.6W	95.00 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.00 in Radial Ice
1.0D + 1.0W	60.00 mph Serviceability

Reactions			
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.6W	3544.01	38.87	48.77
0.9D + 1.6W	3442.29	37.82	36.57
1.2D + 1.0Di + 1.0Wi	1007.67	10.37	87.06
1.0D + 1.0W	861.85	9.44	40.69

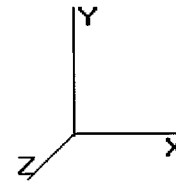
Dish Deflections			
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
1.0D + 1.0W	90.00	7.247	0.722



Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:43 AM  
 Page: 1



© 2007 - 2013 by ATC IP LLC. All rights reserved.

**Shaft Section Properties**

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Slip		Weight (lb)	Bottom				Top				Taper (in/ft)				
				Joint Type	Joint Len (in)		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
1-18	53.000	0.3750	65		0.00	10,844	56.58	0.00	66.90	26698.9	24.84	150.88	45.20	53.00	53.36	13550.7	19.49	120.55	0.214565
2-18	53.000	0.3750	65	Slip	74.00	8,848	47.28	46.83	55.83	15518.8	20.47	126.08	35.90	99.83	42.29	6746.9	15.12	95.76	0.214565
3-18	53.000	0.3125	65	Slip	59.00	5,651	37.58	94.92	36.97	6490.8	19.45	120.28	26.21	147.92	25.69	2178.3	13.03	83.89	0.214565
Shaft Weight						25,343													

**Discrete Appurtenance Properties**

Attach Elev (ft)	Description	Qty	Weight (lb)	No Ice CaAa (sf)	CaAa Factor	Weight (lb)	Ice CaAa (sf)	CaAa Factor	Distance From Face (ft)	Vert Ecc (ft)
147.90	48" x 12" Panels	9	30.00	5.070	0.67	220.42	6.409	0.67	0.000	2.100
147.90	72" x 12" Panels	3	45.00	8.130	0.67	317.28	9.898	0.67	0.000	2.100
147.90	Flat Platform with Handrails	1	2000.00	42.400	1.00	3,896.10	70.381	1.00	0.000	0.000
137.00	48" x 4" Panels	9	20.00	2.090	0.81	104.64	3.228	0.81	0.000	2.000
137.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	2,357.81	51.378	1.00	0.000	0.000
125.00	Andrew ETW200VS12UB	6	11.00	0.470	0.50	39.00	0.817	0.50	0.000	1.000
125.00	RFS APX16DWV-16DWVL-S-	3	39.60	6.080	0.66	222.96	7.519	0.66	0.000	1.000
125.00	RFS APX16PV-16PVL-E-00	3	39.60	6.040	0.66	220.91	7.471	0.66	0.000	1.000
125.00	Round T-Arm	3	250.00	9.700	0.67	524.19	20.516	0.67	0.000	0.000
115.00	Alcatel-Lucent RRH2x40-AWS	3	44.00	2.160	0.67	147.07	3.022	0.67	0.000	0.000
115.00	Antel BXA-171063-12BF-EDIN-	1	15.00	4.730	1.00	185.19	6.405	1.00	0.000	0.000
115.00	Antel BXA-171063-12CF-EDIN-	3	15.00	4.790	0.88	185.19	6.405	0.88	0.000	0.000
115.00	Antel BXA-171063-8BF-EDIN-X	2	10.50	2.940	1.00	128.87	4.096	0.87	0.000	0.000
115.00	Antel BXA-70063-6CF-EDIN-X	3	17.00	7.570	0.77	248.60	9.230	0.77	0.000	0.000
115.00	Antel BXA-70063-6CF-EDIN-X	3	17.00	7.570	0.77	248.60	9.230	0.77	0.000	0.000
115.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	2,342.93	50.939	1.00	0.000	0.000
115.00	RFS DB-T1-6Z-8AB-0Z	1	110.00	4.800	1.00	299.00	5.957	1.00	0.000	0.000
100.00	Antel BCD-87010_25	1	26.50	2.900	1.00	221.38	7.339	1.00	0.000	5.000
100.00	Stand-Off	1	150.00	6.300	1.00	243.85	9.453	1.00	0.000	0.000
90.00	Argus LLPX310R	3	28.60	4.290	0.73	174.07	5.451	0.73	0.000	2.000
90.00	Collar	1	560.00	8.500	1.00	1,154.34	17.521	1.00	0.000	0.000
90.00	DragonWave A-ANT-18G-2-C	2	27.10	4.690	0.90	151.09	6.308	0.90	0.000	3.000
90.00	DragonWave Horizon	2	10.60	0.420	0.50	53.03	0.758	0.50	0.000	0.000
90.00	NextNet BTS-2500	3	35.00	1.820	0.50	114.11	2.573	0.50	0.000	0.000
Totals		68	8066.30			21,735.01			Number of Loadings :	24

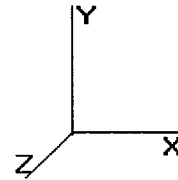
**Linear Appurtenance Properties**

Elev From (ft)	Elev To (ft)	Description	Exposed Width (in)	Exposed To Wind
5.00	147.90	(12) 1 5/8" Coax	0.00	N
5.00	137.00	(9) 1 5/8" Coax	0.00	N
5.00	125.00	(1) 0.28" RG-6	0.00	Y
5.00	125.00	(12) 1 5/8" Coax	0.00	N
5.00	125.00	(6) 1 5/8" Coax	3.96	Y
5.00	115.00	(18) 1 5/8" Coax	0.00	N
5.00	115.00	(1) 1 5/8" Hybriflex	1.98	Y
5.00	100.00	(1) 7/8" Coax	1.09	Y
5.00	90.00	(2) 1/2" Coax	0.00	Y

Pole : 302466  
Location : West Service Road, CT  
Height : 147.9 (ft)  
Base Dia : 56.58 (in)  
Top Dia : 26.21 (in)  
Shape : 18 Sides  
Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:43 AM  
Page: 2



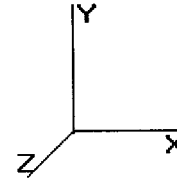
© 2007 - 2013 by ATC IP LLC. All rights reserved.

---

5.00	90.00	(2) 3" Conduit	3.50	Y
5.00	90.00	(6) 5/16" Coax	0.00	Y

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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



© 2007 - 2013 by ATC IP LLC. All rights reserved.

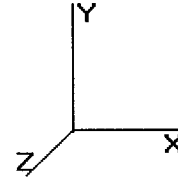
**Segment Properties** (Max Len : 5 ft)

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		0.3750	56.580	66.895	26,698.9	24.84	150.88	72.2	929.4	0.0
5.00		0.3750	55.507	65.618	25,199.0	24.34	148.02	72.8	894.2	1,127.3
10.00		0.3750	54.434	64.341	23,756.4	23.83	145.16	73.4	859.6	1,105.6
15.00		0.3750	53.361	63.065	22,369.9	23.33	142.30	74.0	825.7	1,083.8
20.00		0.3750	52.288	61.788	21,038.5	22.82	139.44	74.6	792.5	1,062.1
25.00		0.3750	51.216	60.511	19,760.9	22.32	136.57	75.2	760.0	1,040.4
30.00		0.3750	50.143	59.234	18,536.2	21.81	133.71	75.7	728.1	1,018.7
35.00		0.3750	49.070	57.957	17,363.1	21.31	130.85	76.3	696.9	996.9
40.00		0.3750	47.997	56.680	16,240.6	20.81	127.99	76.9	666.5	975.2
45.00		0.3750	46.924	55.403	15,167.5	20.30	125.13	77.5	636.6	953.5
46.83	Bot - Section 2	0.3750	46.531	54.935	14,786.2	20.12	124.08	77.7	625.9	344.2
50.00		0.3750	45.851	54.126	14,142.8	19.80	122.27	78.1	607.5	1,184.8
53.00	Top - Section 1	0.3750	45.958	54.253	14,242.2	19.85	122.55	78.1	610.4	1,106.4
55.00		0.3750	45.529	53.742	13,843.7	19.64	121.41	78.3	598.9	367.5
60.00		0.3750	44.456	52.465	12,880.2	19.14	118.55	78.9	570.7	903.5
65.00		0.3750	43.383	51.188	11,962.5	18.64	115.69	79.5	543.1	881.8
70.00		0.3750	42.310	49.912	11,089.5	18.13	112.83	80.1	516.2	860.1
75.00		0.3750	41.237	48.635	10,259.9	17.63	109.97	80.7	490.0	838.3
80.00		0.3750	40.165	47.358	9,472.9	17.12	107.11	81.3	464.5	816.6
85.00		0.3750	39.092	46.081	8,727.1	16.62	104.24	81.9	439.7	794.9
90.00		0.3750	38.019	44.804	8,021.5	16.11	101.38	82.4	415.6	773.2
94.92	Bot - Section 3	0.3750	36.964	43.548	7,365.9	15.62	98.57	82.6	392.5	739.1
95.00		0.3750	36.946	43.527	7,355.1	15.61	98.52	82.6	392.1	22.8
99.83	Top - Section 2	0.3125	36.534	35.926	5,955.1	18.85	116.91	79.2	321.1	1,305.1
100.0		0.3125	36.498	35.890	5,937.5	18.83	116.79	79.3	320.4	20.4
105.0		0.3125	35.425	34.826	5,424.9	18.23	113.36	80.0	301.6	601.6
110.0		0.3125	34.353	33.762	4,942.7	17.62	109.93	80.7	283.4	583.5
115.0		0.3125	33.280	32.698	4,490.0	17.01	106.50	81.4	265.7	565.4
120.0		0.3125	32.207	31.634	4,065.7	16.41	103.06	82.1	248.6	547.3
125.0		0.3125	31.134	30.570	3,669.1	15.80	99.63	82.6	232.1	529.2
130.0		0.3125	30.061	29.506	3,299.1	15.20	96.20	82.6	216.2	511.1
135.0		0.3125	28.988	28.442	2,954.9	14.59	92.76	82.6	200.8	493.0
137.0		0.3125	28.559	28.016	2,824.2	14.35	91.39	82.6	194.8	192.1
140.0		0.3125	27.916	27.378	2,635.5	13.99	89.33	82.6	186.0	282.7
145.0		0.3125	26.843	26.314	2,340.0	13.38	85.90	82.6	171.7	456.8
147.9		0.3125	26.221	25.697	2,179.2	13.03	83.91	82.6	163.7	256.6
147.9		0.3125	26.217	25.693	2,178.3	13.03	83.89	82.6	163.6	1.5
										25,342.5

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:43 AM  
 Page: 4



© 2007 - 2013 by ATC IP LLC. All rights reserved.

<b>Load Case:</b> 1.2D + 1.6W	95.00 mph with No Ice	23 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)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	18.656	20.52	419.33	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.85	18.656	20.52	411.38	0.650	0.000	5.00	23.712	15.41	506.1	0.0	1,352.7
10.00		1.00	0.85	18.656	20.52	403.43	0.823	* 0.000	5.00	23.258	19.14	628.4	0.0	1,326.7
15.00		1.00	0.85	18.656	20.52	395.48	0.830	* 0.000	5.00	22.804	18.93	621.6	0.0	1,300.6
20.00		1.00	0.90	19.795	21.77	399.18	0.838	* 0.000	5.00	22.350	18.72	652.4	0.0	1,274.5
25.00		1.00	0.94	20.747	22.82	400.28	1.200	* 0.000	5.00	21.896	26.28	959.5	0.0	1,248.5
30.00		1.00	0.98	21.559	23.71	399.49	1.200	* 0.000	5.00	21.442	25.73	976.3	0.0	1,222.4
35.00		1.00	1.01	22.270	24.49	397.34	1.200	* 0.000	5.00	20.988	25.19	987.2	0.0	1,196.3
40.00		1.00	1.04	22.905	25.19	394.15	1.200	* 0.000	5.00	20.534	24.64	993.4	0.0	1,170.3
45.00		1.00	1.07	23.480	25.82	390.15	1.200	* 0.000	5.00	20.080	24.10	995.8	0.0	1,144.2
46.83	Bot - Section 2	1.00	1.07	23.679	26.04	388.51	1.200	* 0.000	1.83	7.249	8.70	362.5	0.0	413.0
50.00		1.00	1.09	24.007	26.40	385.48	1.200	* 0.000	3.17	12.578	15.09	637.8	0.0	1,421.8
53.00	Top - Section 1	1.00	1.10	24.303	26.73	382.41	1.200	* 0.000	3.00	11.748	14.10	603.0	0.0	1,327.6
55.00		1.00	1.11	24.494	26.94	386.63	1.200	* 0.000	2.00	7.741	9.29	400.5	0.0	441.0
60.00		1.00	1.13	24.946	27.44	380.99	1.200	* 0.000	5.00	19.036	22.84	1,002.9	0.0	1,084.2
65.00		1.00	1.15	25.370	27.90	374.94	1.200	* 0.000	5.00	18.582	22.30	995.7	0.0	1,058.1
70.00		1.00	1.17	25.769	28.34	368.53	1.200	* 0.000	5.00	18.128	21.75	986.6	0.0	1,032.1
75.00		1.00	1.19	26.146	28.76	361.81	1.200	* 0.000	5.00	17.674	21.21	976.0	0.0	1,006.0
80.00		1.00	1.20	26.504	29.15	354.80	1.200	* 0.000	5.00	17.220	20.66	963.9	0.0	979.9
85.00		1.00	1.22	26.844	29.52	347.53	1.200	* 0.000	5.00	16.766	20.12	950.6	0.0	953.9
90.00	Appertunance(s)	1.00	1.23	27.169	29.88	340.03	1.200	* 0.000	5.00	16.313	19.58	936.0	0.0	927.8
94.92	Bot - Section 3	1.00	1.25	27.475	30.22	332.45	0.815	* 0.000	4.92	15.598	12.71	614.8	0.0	886.9
95.00		1.00	1.25	27.480	30.22	332.32	0.820	* 0.000	0.08	0.265	0.22	10.5	0.0	27.4
99.83	Top - Section 2	1.00	1.26	27.769	30.54	324.69	0.826	* 0.000	4.83	15.154	12.51	611.5	0.0	1,566.1
100.0	Appertunance(s)	1.00	1.26	27.779	30.55	330.07	0.825	* 0.000	0.17	0.515	0.42	20.8	0.0	24.4
105.0		1.00	1.27	28.066	30.87	322.02	0.772	* 0.000	5.00	15.215	11.75	580.4	0.0	721.9
110.0		1.00	1.29	28.342	31.17	313.80	0.782	* 0.000	5.00	14.761	11.54	575.8	0.0	700.2
115.0	Appertunance(s)	1.00	1.30	28.608	31.46	305.43	0.792	* 0.000	5.00	14.307	11.34	570.8	0.0	678.5
120.0		1.00	1.31	28.866	31.75	296.91	0.687	* 0.000	5.00	13.854	9.52	483.7	0.0	656.7
125.0	Appertunance(s)	1.00	1.32	29.115	32.02	288.25	0.695	* 0.000	5.00	13.400	9.31	477.3	0.0	635.0
130.0		1.00	1.33	29.356	32.29	279.47	0.650	0.000	5.00	12.946	8.41	434.8	0.0	613.3
135.0		1.00	1.34	29.591	32.55	270.57	0.650	0.000	5.00	12.492	8.12	422.9	0.0	591.6
137.0	Appertunance(s)	1.00	1.35	29.682	32.65	266.98	0.650	0.000	2.00	4.870	3.17	165.4	0.0	230.5
140.0		1.00	1.35	29.818	32.80	261.56	0.650	0.000	3.00	7.168	4.66	244.5	0.0	339.3
145.0		1.00	1.36	30.039	33.04	252.43	0.650	0.000	5.00	11.584	7.53	398.1	0.0	548.1
147.9	Appertunance(s)	1.00	1.37	30.165	33.18	247.10	0.650	0.000	2.90	6.511	4.23	224.7	0.0	307.9
147.9		1.00	1.37	30.165	33.18	247.07	0.650	0.000	0.02	0.038	0.02	1.3	0.0	1.8

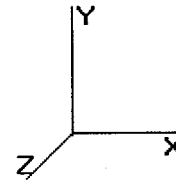
\* = Cf Adjusted By Linear Load Ra Effect

Totals: 147.92 21,973.1 0.0 30,411.0

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:43 AM  
 Page: 5



© 2007 - 2013 by ATC IP LLC. All rights reserved.

<b>Load Case:</b> 1.2D + 1.6W	95.00 mph with No Ice	23 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.20		
Wind Load Factor : 1.60		

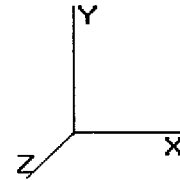
**Discrete Appurtenance Segment Forces (Factored)**

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
90.00	Argus LLPX310R	3	27.295	30.025	0.58	0.80	7.52	0.000	2.000	361.07	0.00	722.14	102.96
90.00	Collar	1	27.169	29.886	1.00	1.00	8.50	0.000	0.000	406.45	0.00	0.00	672.00
90.00	DragonWave A-ANT-	2	27.358	30.093	0.90	1.00	8.44	0.000	3.000	406.48	0.00	1,219.43	65.04
90.00	DragonWave Horizon	2	27.169	29.886	0.40	0.80	0.34	0.000	0.000	16.07	0.00	0.00	25.44
90.00	NextNet BTS-2500	3	27.169	29.886	0.40	0.80	2.18	0.000	0.000	104.43	0.00	0.00	126.00
100.0	Antel BCD-87010_25	1	28.066	30.872	1.00	1.00	2.90	0.000	5.000	143.25	0.00	716.23	31.80
100.0	Stand-Off	1	27.779	30.557	1.00	1.00	6.30	0.000	0.000	308.01	0.00	0.00	180.00
115.0	Alcatel-Lucent RRH2x	3	28.608	31.469	0.54	0.80	3.47	0.000	0.000	174.88	0.00	0.00	158.40
115.0	Antel BXA-171063-12B	1	28.608	31.469	0.80	0.80	3.78	0.000	0.000	190.53	0.00	0.00	18.00
115.0	Antel BXA-171063-12C	3	28.608	31.469	0.70	0.80	10.12	0.000	0.000	509.37	0.00	0.00	54.00
115.0	Antel BXA-171063-8BF	2	28.608	31.469	0.80	0.80	4.70	0.000	0.000	236.85	0.00	0.00	25.20
115.0	Antel BXA-70063-6CF-	3	28.608	31.469	0.62	0.80	13.99	0.000	0.000	704.37	0.00	0.00	61.20
115.0	Antel BXA-70063-6CF-	3	28.608	31.469	0.62	0.80	13.99	0.000	0.000	704.37	0.00	0.00	61.20
115.0	Flat Low Profile Pla	1	28.608	31.469	1.00	1.00	26.10	0.000	0.000	1,314.15	0.00	0.00	1,800.00
115.0	RFS DB-T1-6Z-8AB-0Z	1	28.608	31.469	0.80	0.80	3.84	0.000	0.000	193.35	0.00	0.00	132.00
125.0	Andrew	6	29.164	32.080	0.40	0.80	1.13	0.000	1.000	57.90	0.00	57.90	79.20
125.0	RFS APX16DWV-	3	29.164	32.080	0.53	0.80	9.63	0.000	1.000	494.33	0.00	494.33	142.56
125.0	RFS APX16PV-16PVL-	3	29.164	32.080	0.53	0.80	9.57	0.000	1.000	491.08	0.00	491.08	142.56
125.0	Round T-Arm	3	29.115	32.026	0.50	0.75	14.62	0.000	0.000	749.30	0.00	0.00	900.00
137.0	48" x 4" Panels	9	29.773	32.750	0.65	0.80	12.19	0.000	2.000	638.70	0.00	1,277.40	216.00
137.0	Flat Low Profile Pla	1	29.682	32.650	1.00	1.00	26.10	0.000	0.000	1,363.48	0.00	0.00	1,800.00
147.9	48" x 12" Panels	9	30.254	33.280	0.50	0.75	22.93	0.000	2.100	1,220.91	0.00	2,563.92	324.00
147.9	72" x 12" Panels	3	30.254	33.280	0.50	0.75	12.26	0.000	2.100	652.60	0.00	1,370.46	162.00
147.9	Flat Platform with H	1	30.165	33.181	1.00	1.00	42.40	0.000	0.000	2,250.99	0.00	0.00	2,400.00
										13,692.93			9,679.56

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:43 AM  
 Page: 6



© 2007 - 2013 by ATC IP LLC. All rights reserved.

<b>Load Case: 1.2D + 1.6W</b>	<b>95.00 mph with No Ice</b>	<b>23 Iterations</b>
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.20		
Wind Load Factor : 1.60		

**Linear Appurtenance Segment Forces (Factored)**

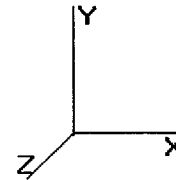
Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
10.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	18.656	0.189	1.266	0.00	0.17
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	18.656	0.189	1.266	0.00	29.52
10.00	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	18.656	0.189	1.266	0.00	7.80
10.00	(1) 7/8" Coax	Yes	5.00	0.000	1.09	0.45	0.00	18.656	0.189	1.266	0.00	1.98
10.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.656	0.189	1.266	0.00	1.80
10.00	(2) 3" Conduit	Yes	5.00	0.000	3.50	1.46	0.00	18.656	0.189	1.266	0.00	90.96
10.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.656	0.189	1.266	0.00	1.62
15.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	18.656	0.192	1.277	0.00	0.17
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	18.656	0.192	1.277	0.00	29.52
15.00	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	18.656	0.192	1.277	0.00	7.80
15.00	(1) 7/8" Coax	Yes	5.00	0.000	1.09	0.45	0.00	18.656	0.192	1.277	0.00	1.98
15.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.656	0.192	1.277	0.00	1.80
15.00	(2) 3" Conduit	Yes	5.00	0.000	3.50	1.46	0.00	18.656	0.192	1.277	0.00	90.96
15.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.656	0.192	1.277	0.00	1.62
20.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	19.795	0.196	1.289	0.00	0.17
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	19.795	0.196	1.289	0.00	29.52
20.00	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	19.795	0.196	1.289	0.00	7.80
20.00	(1) 7/8" Coax	Yes	5.00	0.000	1.09	0.45	0.00	19.795	0.196	1.289	0.00	1.98
20.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	19.795	0.196	1.289	0.00	1.80
20.00	(2) 3" Conduit	Yes	5.00	0.000	3.50	1.46	0.00	19.795	0.196	1.289	0.00	90.96
20.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	19.795	0.196	1.289	0.00	1.62
25.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	20.747	0.200	0.000	0.00	0.17
25.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	20.747	0.200	0.000	72.30	29.52
25.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	20.747	0.200	0.000	36.15	7.80
25.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	20.747	0.200	0.000	19.90	1.98
25.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	20.747	0.200	0.000	0.00	1.80
25.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	20.747	0.200	0.000	63.90	90.96
25.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	20.747	0.200	0.000	0.00	1.62
30.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	21.559	0.205	0.000	0.00	0.17
30.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	21.559	0.205	0.000	75.13	29.52
30.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	21.559	0.205	0.000	37.56	7.80
30.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	21.559	0.205	0.000	20.68	1.98
30.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	21.559	0.205	0.000	0.00	1.80
30.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	21.559	0.205	0.000	66.40	90.96
30.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	21.559	0.205	0.000	0.00	1.62
35.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	22.270	0.209	0.000	0.00	0.17
35.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	22.270	0.209	0.000	77.61	29.52
35.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	22.270	0.209	0.000	38.80	7.80
35.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	22.270	0.209	0.000	21.36	1.98
35.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	22.270	0.209	0.000	0.00	1.80
35.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	22.270	0.209	0.000	68.59	90.96
35.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	22.270	0.209	0.000	0.00	1.62
40.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	22.905	0.214	0.000	0.00	0.17
40.00	(6) 1 5/8" Coax	Yes	5.00	1.199	3.96	1.65	1.98	22.905	0.214	0.000	79.76	29.52
40.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	22.905	0.214	0.000	39.91	7.80
40.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	22.905	0.214	0.000	21.97	1.98
40.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	22.905	0.214	0.000	0.00	1.80
40.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	22.905	0.214	0.000	70.55	90.96
40.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	22.905	0.214	0.000	0.00	1.62
45.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	23.480	0.218	0.000	0.00	0.17
45.00	(6) 1 5/8" Coax	Yes	5.00	1.184	3.96	1.65	1.95	23.480	0.218	0.000	80.75	29.52



Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:43 AM  
 Page: 7



© 2007 - 2013 by ATC IP LLC. All rights reserved.

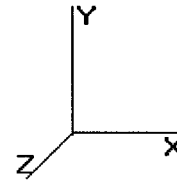
<b>Load Case:</b> 1.2D + 1.6W	95.00 mph with No Ice	23 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.20		
Wind Load Factor : 1.60		

45.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	23.480	0.218	0.000	40.91	7.80
45.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	23.480	0.218	0.000	22.52	1.98
45.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	23.480	0.218	0.000	0.00	1.80
45.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	23.480	0.218	0.000	72.32	90.96
45.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	23.480	0.218	0.000	0.00	1.62
46.83	(1) 0.28" RG-6	Yes	1.83	0.000	0.00	0.00	0.00	23.679	0.222	0.000	0.00	0.06
46.83	(6) 1 5/8" Coax	Yes	1.83	1.179	3.96	0.61	0.71	23.679	0.222	0.000	29.73	10.82
46.83	(1) 1 5/8" Hybriflex	Yes	1.83	1.200	1.98	0.30	0.36	23.679	0.222	0.000	15.13	2.86
46.83	(1) 7/8" Coax	Yes	1.83	1.200	1.09	0.17	0.20	23.679	0.222	0.000	8.33	0.73
46.83	(2) 1/2" Coax	Yes	1.83	0.000	0.00	0.00	0.00	23.679	0.222	0.000	0.00	0.66
46.83	(2) 3" Conduit	Yes	1.83	1.200	3.50	0.53	0.64	23.679	0.222	0.000	26.74	33.35
46.83	(6) 5/16" Coax	Yes	1.83	0.000	0.00	0.00	0.00	23.679	0.222	0.000	0.00	0.59
50.00	(1) 0.28" RG-6	Yes	3.17	0.000	0.00	0.00	0.00	24.007	0.225	0.000	0.00	0.11
50.00	(6) 1 5/8" Coax	Yes	3.17	1.171	3.96	1.04	1.22	24.007	0.225	0.000	51.71	18.69
50.00	(1) 1 5/8" Hybriflex	Yes	3.17	1.200	1.98	0.52	0.63	24.007	0.225	0.000	26.49	4.94
50.00	(1) 7/8" Coax	Yes	3.17	1.200	1.09	0.29	0.35	24.007	0.225	0.000	14.58	1.25
50.00	(2) 1/2" Coax	Yes	3.17	0.000	0.00	0.00	0.00	24.007	0.225	0.000	0.00	1.14
50.00	(2) 3" Conduit	Yes	3.17	1.200	3.50	0.92	1.11	24.007	0.225	0.000	46.83	57.61
50.00	(6) 5/16" Coax	Yes	3.17	0.000	0.00	0.00	0.00	24.007	0.225	0.000	0.00	1.03
53.00	(1) 0.28" RG-6	Yes	3.00	0.000	0.00	0.00	0.00	24.303	0.228	0.000	0.00	0.10
53.00	(6) 1 5/8" Coax	Yes	3.00	1.164	3.96	0.99	1.15	24.303	0.228	0.000	49.29	17.71
53.00	(1) 1 5/8" Hybriflex	Yes	3.00	1.200	1.98	0.50	0.59	24.303	0.228	0.000	25.41	4.68
53.00	(1) 7/8" Coax	Yes	3.00	1.200	1.09	0.27	0.33	24.303	0.228	0.000	13.99	1.19
53.00	(2) 1/2" Coax	Yes	3.00	0.000	0.00	0.00	0.00	24.303	0.228	0.000	0.00	1.08
53.00	(2) 3" Conduit	Yes	3.00	1.200	3.50	0.88	1.05	24.303	0.228	0.000	44.91	54.58
53.00	(6) 5/16" Coax	Yes	3.00	0.000	0.00	0.00	0.00	24.303	0.228	0.000	0.00	0.97
55.00	(1) 0.28" RG-6	Yes	2.00	0.000	0.00	0.00	0.00	24.494	0.227	0.000	0.00	0.07
55.00	(6) 1 5/8" Coax	Yes	2.00	1.160	3.96	0.66	0.77	24.494	0.227	0.000	32.99	11.81
55.00	(1) 1 5/8" Hybriflex	Yes	2.00	1.200	1.98	0.33	0.40	24.494	0.227	0.000	17.07	3.12
55.00	(1) 7/8" Coax	Yes	2.00	1.200	1.09	0.18	0.22	24.494	0.227	0.000	9.40	0.79
55.00	(2) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	24.494	0.227	0.000	0.00	0.72
55.00	(2) 3" Conduit	Yes	2.00	1.200	3.50	0.58	0.70	24.494	0.227	0.000	30.18	36.38
55.00	(6) 5/16" Coax	Yes	2.00	0.000	0.00	0.00	0.00	24.494	0.227	0.000	0.00	0.65
60.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	24.946	0.230	0.000	0.00	0.17
60.00	(6) 1 5/8" Coax	Yes	5.00	1.149	3.96	1.65	1.90	24.946	0.230	0.000	83.23	29.52
60.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	24.946	0.230	0.000	43.47	7.80
60.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	24.946	0.230	0.000	23.93	1.98
60.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	24.946	0.230	0.000	0.00	1.80
60.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	24.946	0.230	0.000	76.84	90.96
60.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	24.946	0.230	0.000	0.00	1.62
65.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	25.370	0.236	0.000	0.00	0.17
65.00	(6) 1 5/8" Coax	Yes	5.00	1.139	3.96	1.65	1.88	25.370	0.236	0.000	83.94	29.52
65.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	25.370	0.236	0.000	44.21	7.80
65.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	25.370	0.236	0.000	24.34	1.98
65.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	25.370	0.236	0.000	0.00	1.80
65.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	25.370	0.236	0.000	78.14	90.96
65.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	25.370	0.236	0.000	0.00	1.62
70.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	25.769	0.242	0.000	0.00	0.17
70.00	(6) 1 5/8" Coax	Yes	5.00	1.130	3.96	1.65	1.87	25.769	0.242	0.000	84.60	29.52
70.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	25.769	0.242	0.000	44.90	7.80
70.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	25.769	0.242	0.000	24.72	1.98
70.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	25.769	0.242	0.000	0.00	1.80
70.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	25.769	0.242	0.000	79.37	90.96
70.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	25.769	0.242	0.000	0.00	1.62
75.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	26.146	0.248	0.000	0.00	0.17
75.00	(6) 1 5/8" Coax	Yes	5.00	1.122	3.96	1.65	1.85	26.146	0.248	0.000	85.21	29.52
75.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	26.146	0.248	0.000	45.56	7.80

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:43 AM  
 Page: 8



© 2007 - 2013 by ATC IP LLC. All rights reserved.

**Load Case: 1.2D + 1.6W**                      95.00 mph with No Ice                      23 Iterations

Gust Response Factor : 1.10                      Wind Importance Factor : 1.00

Dead Load Factor : 1.20

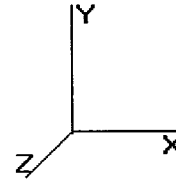
Wind Load Factor : 1.60

75.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	26.146	0.248	0.000	25.08	1.98
75.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	26.146	0.248	0.000	0.00	1.80
75.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	26.146	0.248	0.000	80.53	90.96
75.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	26.146	0.248	0.000	0.00	1.62
80.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	26.504	0.255	0.000	0.00	0.17
80.00	(6) 1 5/8" Coax	Yes	5.00	1.115	3.96	1.65	1.84	26.504	0.255	0.000	85.79	29.52
80.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	26.504	0.255	0.000	46.18	7.80
80.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	26.504	0.255	0.000	25.42	1.98
80.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	26.504	0.255	0.000	0.00	1.80
80.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	26.504	0.255	0.000	81.63	90.96
80.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	26.504	0.255	0.000	0.00	1.62
85.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	26.844	0.262	0.000	0.00	0.17
85.00	(6) 1 5/8" Coax	Yes	5.00	1.108	3.96	1.65	1.83	26.844	0.262	0.000	86.34	29.52
85.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	26.844	0.262	0.000	46.77	7.80
85.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	26.844	0.262	0.000	25.75	1.98
85.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	26.844	0.262	0.000	0.00	1.80
85.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	26.844	0.262	0.000	82.68	90.96
85.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	26.844	0.262	0.000	0.00	1.62
90.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	27.169	0.269	0.000	0.00	0.17
90.00	(6) 1 5/8" Coax	Yes	5.00	1.101	3.96	1.65	1.82	27.169	0.269	0.000	86.86	29.52
90.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	27.169	0.269	0.000	47.34	7.80
90.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	27.169	0.269	0.000	26.06	1.98
90.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	27.169	0.269	0.000	0.00	1.80
90.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	27.169	0.269	0.000	83.68	90.96
90.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	27.169	0.269	0.000	0.00	1.62
94.92	(1) 0.28" RG-6	Yes	4.92	0.000	0.00	0.00	0.00	27.475	0.185	1.254	0.00	0.17
94.92	(6) 1 5/8" Coax	Yes	4.92	0.000	3.96	1.62	0.00	27.475	0.185	1.254	0.00	29.02
94.92	(1) 1 5/8" Hybriflex	Yes	4.92	0.000	1.98	0.81	0.00	27.475	0.185	1.254	0.00	7.67
94.92	(1) 7/8" Coax	Yes	4.92	0.000	1.09	0.45	0.00	27.475	0.185	1.254	0.00	1.95
95.00	(1) 0.28" RG-6	Yes	0.08	0.000	0.00	0.00	0.00	27.480	0.187	1.262	0.00	0.00
95.00	(6) 1 5/8" Coax	Yes	0.08	0.000	3.96	0.03	0.00	27.480	0.187	1.262	0.00	0.49
95.00	(1) 1 5/8" Hybriflex	Yes	0.08	0.000	1.98	0.01	0.00	27.480	0.187	1.262	0.00	0.13
95.00	(1) 7/8" Coax	Yes	0.08	0.000	1.09	0.01	0.00	27.480	0.187	1.262	0.00	0.03
99.83	(1) 0.28" RG-6	Yes	4.83	0.000	0.00	0.00	0.00	27.769	0.190	1.270	0.00	0.17
99.83	(6) 1 5/8" Coax	Yes	4.83	0.000	3.96	1.60	0.00	27.769	0.190	1.270	0.00	28.53
99.83	(1) 1 5/8" Hybriflex	Yes	4.83	0.000	1.98	0.80	0.00	27.769	0.190	1.270	0.00	7.54
99.83	(1) 7/8" Coax	Yes	4.83	0.000	1.09	0.44	0.00	27.769	0.190	1.270	0.00	1.91
100.0	(1) 0.28" RG-6	Yes	0.17	0.000	0.00	0.00	0.00	27.779	0.190	1.269	0.00	0.01
100.0	(6) 1 5/8" Coax	Yes	0.17	0.000	3.96	0.05	0.00	27.779	0.190	1.269	0.00	0.98
100.0	(1) 1 5/8" Hybriflex	Yes	0.17	0.000	1.98	0.03	0.00	27.779	0.190	1.269	0.00	0.26
100.0	(1) 7/8" Coax	Yes	0.17	0.000	1.09	0.02	0.00	27.779	0.190	1.269	0.00	0.07
105.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	28.066	0.163	1.188	0.00	0.17
105.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	28.066	0.163	1.188	0.00	29.52
105.0	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	28.066	0.163	1.188	0.00	7.80
110.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	28.342	0.168	1.203	0.00	0.17
110.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	28.342	0.168	1.203	0.00	29.52
110.0	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	28.342	0.168	1.203	0.00	7.80
115.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	28.608	0.173	1.219	0.00	0.17
115.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	28.608	0.173	1.219	0.00	29.52
115.0	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	28.608	0.173	1.219	0.00	7.80
120.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	28.866	0.119	1.057	0.00	0.17
120.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	28.866	0.119	1.057	0.00	29.52
125.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	29.115	0.123	1.069	0.00	0.17
125.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	29.115	0.123	1.069	0.00	29.52
<b>Totals:</b>											<b>3,122.44</b>	<b>2,526.25</b>

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:43 AM  
 Page: 9



© 2007 - 2013 by ATC IP LLC. All rights reserved.

<b>Load Case:</b> 1.2D + 1.6W	95.00 mph with No Ice	23 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.20		
Wind Load Factor : 1.60		

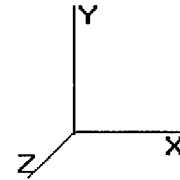
**Applied Segment Forces Summary**

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	506.08	1,352.74	0.00	0.00
10.00	628.40	1,711.41	0.00	0.00
15.00	621.62	1,685.34	0.00	0.00
20.00	652.37	1,659.27	0.00	0.00
25.00	1,151.70	1,633.20	0.00	0.00
30.00	1,176.10	1,607.13	0.00	0.00
35.00	1,193.55	1,581.06	0.00	0.00
40.00	1,205.55	1,554.99	0.00	0.00
45.00	1,212.30	1,528.93	0.00	0.00
46.83	442.45	554.07	0.00	0.00
50.00	777.38	1,665.44	0.00	0.00
53.00	736.63	1,558.49	0.00	0.00
55.00	490.11	594.88	0.00	0.00
60.00	1,230.41	1,468.94	0.00	0.00
65.00	1,226.29	1,442.87	0.00	0.00
70.00	1,220.20	1,416.80	0.00	0.00
75.00	1,212.37	1,390.73	0.00	0.00
80.00	1,202.96	1,364.66	0.00	0.00
85.00	1,192.13	1,338.59	0.00	0.00
90.00	2,474.49	2,303.96	0.00	1,941.58
94.92	614.80	1,172.42	0.00	0.00
95.00	10.51	32.23	0.00	0.00
99.83	611.47	1,846.74	0.00	0.00
100.0	472.02	245.92	0.00	716.23
105.0	580.36	1,010.28	0.00	0.00
110.0	575.77	988.56	0.00	0.00
115.0	4,598.65	3,276.83	0.00	0.00
120.0	483.70	848.76	0.00	0.00
125.0	2,269.89	2,091.35	0.00	1,043.30
130.0	434.76	716.58	0.00	0.00
135.0	422.87	694.86	0.00	0.00
137.0	2,167.54	2,287.86	0.00	1,277.40
140.0	244.52	374.71	0.00	0.00
145.0	398.08	607.13	0.00	0.00
147.9	4,349.18	3,228.18	0.00	3,934.37
147.9	1.30	1.79	0.00	0.00
<b>Totals:</b>	<b>38,788.51</b>	<b>48,837.73</b>	<b>0.00</b>	<b>8,912.89</b>

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:43 AM  
 Page: 10



© 2007 - 2013 by ATC IP LLC. All rights reserved.

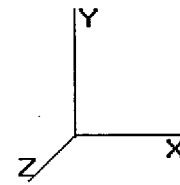
<b>Load Case: 1.2D + 1.6W</b>	<b>95.00 mph with No Ice</b>	<b>23 Iterations</b>
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.20		
Wind Load Factor : 1.60		

**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	-48.77	-38.87	0.00	-3,544.01	0.00	3,544.01	4,345.86	2,172.93	10,048.4	5,031.69	0.00	0.00	0.716
5.00	-47.30	-38.51	0.00	-3,349.67	0.00	3,349.67	4,297.95	2,148.97	9,746.71	4,880.60	0.10	-0.18	0.698
10.00	-45.47	-38.02	0.00	-3,157.11	0.00	3,157.11	4,248.67	2,124.33	9,446.21	4,730.12	0.39	-0.37	0.678
15.00	-43.67	-37.53	0.00	-2,967.00	0.00	2,967.00	4,198.03	2,099.01	9,147.11	4,580.35	0.88	-0.55	0.658
20.00	-41.90	-36.99	0.00	-2,779.38	0.00	2,779.38	4,146.02	2,073.01	8,849.60	4,431.38	1.55	-0.73	0.638
25.00	-40.17	-35.94	0.00	-2,594.44	0.00	2,594.44	4,092.65	2,046.33	8,553.86	4,283.29	2.42	-0.92	0.616
30.00	-38.47	-34.86	0.00	-2,414.74	0.00	2,414.74	4,037.92	2,018.96	8,260.07	4,136.18	3.47	-1.10	0.594
35.00	-36.81	-33.75	0.00	-2,240.46	0.00	2,240.46	3,981.82	1,990.91	7,968.42	3,990.13	4.72	-1.27	0.571
40.00	-35.19	-32.61	0.00	-2,071.73	0.00	2,071.73	3,924.36	1,962.18	7,679.09	3,845.25	6.15	-1.45	0.548
45.00	-33.63	-31.43	0.00	-1,908.68	0.00	1,908.68	3,865.54	1,932.77	7,392.25	3,701.62	7.76	-1.62	0.525
46.83	-33.04	-31.02	0.00	-1,851.07	0.00	1,851.07	3,843.63	1,921.82	7,287.74	3,649.29	8.40	-1.69	0.516
50.00	-31.34	-30.25	0.00	-1,752.84	0.00	1,752.84	3,805.35	1,902.68	7,108.10	3,559.33	9.56	-1.80	0.501
53.00	-29.76	-29.51	0.00	-1,662.09	0.00	1,662.09	3,811.38	1,905.69	7,136.13	3,573.37	10.72	-1.90	0.473
55.00	-29.13	-29.06	0.00	-1,603.08	0.00	1,603.08	3,786.98	1,893.49	7,023.14	3,516.79	11.53	-1.97	0.464
60.00	-27.63	-27.85	0.00	-1,457.80	0.00	1,457.80	3,725.01	1,862.51	6,742.74	3,376.38	13.68	-2.13	0.439
65.00	-26.16	-26.64	0.00	-1,318.56	0.00	1,318.56	3,661.69	1,830.84	6,465.44	3,237.53	16.00	-2.28	0.415
70.00	-24.73	-25.42	0.00	-1,185.37	0.00	1,185.37	3,597.00	1,798.50	6,191.43	3,100.31	18.47	-2.43	0.389
75.00	-23.34	-24.21	0.00	-1,058.26	0.00	1,058.26	3,530.95	1,765.47	5,920.87	2,964.83	21.09	-2.57	0.364
80.00	-21.98	-23.00	0.00	-937.22	0.00	937.22	3,463.53	1,731.77	5,653.95	2,831.18	23.86	-2.71	0.338
85.00	-20.65	-21.79	0.00	-822.25	0.00	822.25	3,394.75	1,697.38	5,390.86	2,699.44	26.77	-2.84	0.311
90.00	-18.43	-19.24	0.00	-711.38	0.00	711.38	3,324.61	1,662.30	5,131.78	2,569.70	29.82	-2.97	0.283
94.92	-17.28	-18.58	0.00	-616.80	0.00	616.80	3,235.43	1,617.71	4,852.78	2,430.00	32.94	-3.09	0.259
95.00	-17.23	-18.58	0.00	-615.25	0.00	615.25	3,233.85	1,616.92	4,848.02	2,427.61	32.99	-3.09	0.259
99.83	-15.40	-17.89	0.00	-525.44	0.00	525.44	2,561.72	1,280.86	3,809.83	1,907.74	36.17	-3.19	0.282
100.00	-15.16	-17.42	0.00	-521.74	0.00	521.74	2,559.96	1,279.98	3,803.41	1,904.53	36.28	-3.20	0.280
105.00	-14.15	-16.81	0.00	-434.66	0.00	434.66	2,506.38	1,253.19	3,612.46	1,808.91	39.69	-3.31	0.246
110.00	-13.17	-16.20	0.00	-350.63	0.00	350.63	2,451.43	1,225.72	3,424.36	1,714.72	43.22	-3.42	0.210
115.00	-10.16	-11.42	0.00	-269.65	0.00	269.65	2,395.12	1,197.56	3,239.30	1,622.06	46.84	-3.50	0.171
120.00	-9.33	-10.90	0.00	-212.54	0.00	212.54	2,337.45	1,168.73	3,057.46	1,531.00	50.56	-3.58	0.143
125.00	-7.38	-8.51	0.00	-157.00	0.00	157.00	2,271.20	1,135.60	2,869.91	1,437.09	54.34	-3.65	0.113
130.00	-6.69	-8.03	0.00	-114.46	0.00	114.46	2,192.15	1,096.07	2,672.63	1,338.30	58.19	-3.70	0.089
135.00	-6.02	-7.57	0.00	-74.29	0.00	74.29	2,113.09	1,056.55	2,482.37	1,243.03	62.08	-3.74	0.063
137.00	-3.88	-5.26	0.00	-57.87	0.00	57.87	2,081.47	1,040.73	2,408.24	1,205.91	63.65	-3.75	0.050
140.00	-3.52	-4.99	0.00	-42.10	0.00	42.10	2,034.04	1,017.02	2,299.14	1,151.28	66.01	-3.77	0.038
145.00	-2.94	-4.55	0.00	-17.14	0.00	17.14	1,954.98	977.49	2,122.94	1,063.05	69.96	-3.78	0.018
147.90	0.00	0.00	0.00	0.00	0.00	0.00	1,909.13	954.57	2,023.96	1,013.48	72.26	-3.79	0.000
147.92	0.00	0.00	0.00	0.00	0.00	0.00	1,908.86	954.43	2,023.38	1,013.20	72.27	-3.79	0.000

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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



11/18/2013 9:03:43 AM  
 Page: 11

© 2007 - 2013 by ATC IP LLC. All rights reserved.

<b>Load Case:</b> 0.9D + 1.6W	95.00 mph with No Ice (Reduced DL)	22 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 0.90		
Wind Load Factor : 1.60		

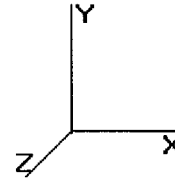
**Shaft Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	18.656	20.52	419.33	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.85	18.656	20.52	411.38	0.650	0.000	5.00	23.712	15.41	506.1	0.0	1,014.6
10.00		1.00	0.85	18.656	20.52	403.43	0.650	* 0.000	5.00	23.258	15.12	496.4	0.0	995.0
15.00		1.00	0.85	18.656	20.52	395.48	0.650	* 0.000	5.00	22.804	14.82	486.7	0.0	975.5
20.00		1.00	0.90	19.795	21.77	399.18	0.650	* 0.000	5.00	22.350	14.53	506.1	0.0	955.9
25.00		1.00	0.94	20.747	22.82	400.28	1.200	* 0.000	5.00	21.896	26.28	959.5	0.0	936.3
30.00		1.00	0.98	21.559	23.71	399.49	1.200	* 0.000	5.00	21.442	25.73	976.3	0.0	916.8
35.00		1.00	1.01	22.270	24.49	397.34	1.200	* 0.000	5.00	20.988	25.19	987.2	0.0	897.2
40.00		1.00	1.04	22.905	25.19	394.15	1.200	* 0.000	5.00	20.534	24.64	993.4	0.0	877.7
45.00		1.00	1.07	23.480	25.82	390.15	1.200	* 0.000	5.00	20.080	24.10	995.8	0.0	858.1
46.83	Bot - Section 2	1.00	1.07	23.679	26.04	388.51	1.200	* 0.000	1.83	7.249	8.70	362.5	0.0	309.8
50.00		1.00	1.09	24.007	26.40	385.48	1.200	* 0.000	3.17	12.578	15.09	637.8	0.0	1,066.3
53.00	Top - Section 1	1.00	1.10	24.303	26.73	382.41	1.200	* 0.000	3.00	11.748	14.10	603.0	0.0	995.7
55.00		1.00	1.11	24.494	26.94	386.63	1.200	* 0.000	2.00	7.741	9.29	400.5	0.0	330.7
60.00		1.00	1.13	24.946	27.44	380.99	1.200	* 0.000	5.00	19.036	22.84	1,002.9	0.0	813.2
65.00		1.00	1.15	25.370	27.90	374.94	1.200	* 0.000	5.00	18.582	22.30	995.7	0.0	793.6
70.00		1.00	1.17	25.769	28.34	368.53	1.200	* 0.000	5.00	18.128	21.75	986.6	0.0	774.0
75.00		1.00	1.19	26.146	28.76	361.81	1.200	* 0.000	5.00	17.674	21.21	976.0	0.0	754.5
80.00		1.00	1.20	26.504	29.15	354.80	1.200	* 0.000	5.00	17.220	20.66	963.9	0.0	734.9
85.00		1.00	1.22	26.844	29.52	347.53	1.200	* 0.000	5.00	16.766	20.12	950.6	0.0	715.4
90.00	Appertunance(s)	1.00	1.23	27.169	29.88	340.03	1.200	* 0.000	5.00	16.313	19.58	936.0	0.0	695.8
94.92	Bot - Section 3	1.00	1.25	27.475	30.22	332.45	0.650	* 0.000	4.92	15.598	10.14	490.3	0.0	665.2
95.00		1.00	1.25	27.480	30.22	332.32	0.650	* 0.000	0.08	0.265	0.17	8.3	0.0	20.5
99.83	Top - Section 2	1.00	1.26	27.769	30.54	324.69	0.650	* 0.000	4.83	15.154	9.85	481.4	0.0	1,174.5
100.0	Appertunance(s)	1.00	1.26	27.779	30.55	330.07	0.650	* 0.000	0.17	0.515	0.33	16.4	0.0	18.3
105.0		1.00	1.27	28.066	30.87	322.02	0.650	* 0.000	5.00	15.215	9.89	488.5	0.0	541.4
110.0		1.00	1.29	28.342	31.17	313.80	0.650	* 0.000	5.00	14.761	9.59	478.6	0.0	525.1
115.0	Appertunance(s)	1.00	1.30	28.608	31.46	305.43	0.650	* 0.000	5.00	14.307	9.30	468.3	0.0	508.8
120.0		1.00	1.31	28.866	31.75	296.91	0.650	* 0.000	5.00	13.854	9.00	457.5	0.0	492.5
125.0	Appertunance(s)	1.00	1.32	29.115	32.02	288.25	0.650	* 0.000	5.00	13.400	8.71	446.3	0.0	476.3
130.0		1.00	1.33	29.356	32.29	279.47	0.650	0.000	5.00	12.946	8.41	434.8	0.0	460.0
135.0		1.00	1.34	29.591	32.55	270.57	0.650	0.000	5.00	12.492	8.12	422.9	0.0	443.7
137.0	Appertunance(s)	1.00	1.35	29.682	32.65	266.98	0.650	0.000	2.00	4.870	3.17	165.4	0.0	172.9
140.0		1.00	1.35	29.818	32.80	261.56	0.650	0.000	3.00	7.168	4.66	244.5	0.0	254.5
145.0		1.00	1.36	30.039	33.04	252.43	0.650	0.000	5.00	11.584	7.53	398.1	0.0	411.1
147.9	Appertunance(s)	1.00	1.37	30.165	33.18	247.10	0.650	0.000	2.90	6.511	4.23	224.7	0.0	231.0
147.9		1.00	1.37	30.165	33.18	247.07	0.650	0.000	0.02	0.038	0.02	1.3	0.0	1.3
* = Cf Adjusted By Linear Load Ra Effect								Totals:	147.92			20,950.1	0.0	22,808.3

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:44 AM  
 Page: 12



© 2007 - 2013 by ATC IP LLC. All rights reserved.

**Load Case: 0.9D + 1.6W**

95.00 mph with No Ice (Reduced DL)

22 Iterations

Gust Response Factor : 1.10  
 Dead Load Factor : 0.90  
 Wind Load Factor : 1.60

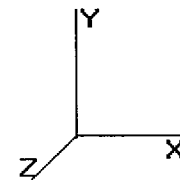
Wind Importance Factor : 1.00

**Discrete Appurtenance Segment Forces (Factored)**

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
90.00	Argus LLPX310R	3	27.295	30.025	0.58	0.80	7.52	0.000	2.000	361.07	0.00	722.14	77.22
90.00	Collar	1	27.169	29.886	1.00	1.00	8.50	0.000	0.000	406.45	0.00	0.00	504.00
90.00	DragonWave A-ANT-	2	27.358	30.093	0.90	1.00	8.44	0.000	3.000	406.48	0.00	1,219.43	48.78
90.00	DragonWave Horizon	2	27.169	29.886	0.40	0.80	0.34	0.000	0.000	16.07	0.00	0.00	19.08
90.00	NextNet BTS-2500	3	27.169	29.886	0.40	0.80	2.18	0.000	0.000	104.43	0.00	0.00	94.50
100.0	Antel BCD-87010_25	1	28.066	30.872	1.00	1.00	2.90	0.000	5.000	143.25	0.00	716.23	23.85
100.0	Stand-Off	1	27.779	30.557	1.00	1.00	6.30	0.000	0.000	308.01	0.00	0.00	135.00
115.0	Alcatel-Lucent RRH2x	3	28.608	31.469	0.54	0.80	3.47	0.000	0.000	174.88	0.00	0.00	118.80
115.0	Antel BXA-171063-12B	1	28.608	31.469	0.80	0.80	3.78	0.000	0.000	190.53	0.00	0.00	13.50
115.0	Antel BXA-171063-12C	3	28.608	31.469	0.70	0.80	10.12	0.000	0.000	509.37	0.00	0.00	40.50
115.0	Antel BXA-171063-8BF	2	28.608	31.469	0.80	0.80	4.70	0.000	0.000	236.85	0.00	0.00	18.90
115.0	Antel BXA-70063-6CF-	3	28.608	31.469	0.62	0.80	13.99	0.000	0.000	704.37	0.00	0.00	45.90
115.0	Antel BXA-70063-6CF-	3	28.608	31.469	0.62	0.80	13.99	0.000	0.000	704.37	0.00	0.00	45.90
115.0	Flat Low Profile Pla	1	28.608	31.469	1.00	1.00	26.10	0.000	0.000	1,314.15	0.00	0.00	1,350.00
115.0	RFS DB-T1-6Z-8AB-0Z	1	28.608	31.469	0.80	0.80	3.84	0.000	0.000	193.35	0.00	0.00	99.00
125.0	Andrew	6	29.164	32.080	0.40	0.80	1.13	0.000	1.000	57.90	0.00	57.90	59.40
125.0	RFS APX16DWV-	3	29.164	32.080	0.53	0.80	9.63	0.000	1.000	494.33	0.00	494.33	106.92
125.0	RFS APX16PV-16PVL-	3	29.164	32.080	0.53	0.80	9.57	0.000	1.000	491.08	0.00	491.08	106.92
125.0	Round T-Arm	3	29.115	32.026	0.50	0.75	14.62	0.000	0.000	749.30	0.00	0.00	675.00
137.0	48" x 4" Panels	9	29.773	32.750	0.65	0.80	12.19	0.000	2.000	638.70	0.00	1,277.40	162.00
137.0	Flat Low Profile Pla	1	29.682	32.650	1.00	1.00	26.10	0.000	0.000	1,363.48	0.00	0.00	1,350.00
147.9	48" x 12" Panels	9	30.254	33.280	0.50	0.75	22.93	0.000	2.100	1,220.91	0.00	2,563.92	243.00
147.9	72" x 12" Panels	3	30.254	33.280	0.50	0.75	12.26	0.000	2.100	652.60	0.00	1,370.46	121.50
147.9	Flat Platform with H	1	30.165	33.181	1.00	1.00	42.40	0.000	0.000	2,250.99	0.00	0.00	1,800.00
										13,692.93			7,259.67

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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



11/18/2013 9:03:44 AM  
 Page: 13

© 2007 - 2013 by ATC IP LLC. All rights reserved.

<b>Load Case:</b> 0.9D + 1.6W	95.00 mph with No Ice (Reduced DL)	22 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 0.90		
Wind Load Factor : 1.60		

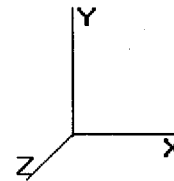
**Linear Appurtenance Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
10.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	18.656	0.189	1.266	0.00	0.13
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	18.656	0.189	1.266	0.00	22.14
10.00	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	18.656	0.189	1.266	0.00	5.85
10.00	(1) 7/8" Coax	Yes	5.00	0.000	1.09	0.45	0.00	18.656	0.189	1.266	0.00	1.49
10.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.656	0.189	1.266	0.00	1.35
10.00	(2) 3" Conduit	Yes	5.00	0.000	3.50	1.46	0.00	18.656	0.189	1.266	0.00	68.22
10.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.656	0.189	1.266	0.00	1.22
15.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	18.656	0.192	1.277	0.00	0.13
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	18.656	0.192	1.277	0.00	22.14
15.00	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	18.656	0.192	1.277	0.00	5.85
15.00	(1) 7/8" Coax	Yes	5.00	0.000	1.09	0.45	0.00	18.656	0.192	1.277	0.00	1.49
15.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.656	0.192	1.277	0.00	1.35
15.00	(2) 3" Conduit	Yes	5.00	0.000	3.50	1.46	0.00	18.656	0.192	1.277	0.00	68.22
15.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.656	0.192	1.277	0.00	1.22
20.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	19.795	0.196	1.289	0.00	0.13
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	19.795	0.196	1.289	0.00	22.14
20.00	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	19.795	0.196	1.289	0.00	5.85
20.00	(1) 7/8" Coax	Yes	5.00	0.000	1.09	0.45	0.00	19.795	0.196	1.289	0.00	1.49
20.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	19.795	0.196	1.289	0.00	1.35
20.00	(2) 3" Conduit	Yes	5.00	0.000	3.50	1.46	0.00	19.795	0.196	1.289	0.00	68.22
20.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	19.795	0.196	1.289	0.00	1.22
25.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	20.747	0.200	0.000	0.00	0.13
25.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	20.747	0.200	0.000	72.30	22.14
25.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	20.747	0.200	0.000	36.15	5.85
25.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	20.747	0.200	0.000	19.90	1.49
25.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	20.747	0.200	0.000	0.00	1.35
25.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	20.747	0.200	0.000	63.90	68.22
25.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	20.747	0.200	0.000	0.00	1.22
30.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	21.559	0.205	0.000	0.00	0.13
30.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	21.559	0.205	0.000	75.13	22.14
30.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	21.559	0.205	0.000	37.56	5.85
30.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	21.559	0.205	0.000	20.68	1.49
30.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	21.559	0.205	0.000	0.00	1.35
30.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	21.559	0.205	0.000	66.40	68.22
30.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	21.559	0.205	0.000	0.00	1.22
35.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	22.270	0.209	0.000	0.00	0.13
35.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	22.270	0.209	0.000	77.61	22.14
35.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	22.270	0.209	0.000	38.80	5.85
35.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	22.270	0.209	0.000	21.36	1.49
35.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	22.270	0.209	0.000	0.00	1.35
35.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	22.270	0.209	0.000	68.59	68.22
35.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	22.270	0.209	0.000	0.00	1.22
40.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	22.905	0.214	0.000	0.00	0.13
40.00	(6) 1 5/8" Coax	Yes	5.00	1.199	3.96	1.65	1.98	22.905	0.214	0.000	79.76	22.14
40.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	22.905	0.214	0.000	39.91	5.85
40.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	22.905	0.214	0.000	21.97	1.49
40.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	22.905	0.214	0.000	0.00	1.35
40.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	22.905	0.214	0.000	70.55	68.22
40.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	22.905	0.214	0.000	0.00	1.22
45.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	23.480	0.218	0.000	0.00	0.13
45.00	(6) 1 5/8" Coax	Yes	5.00	1.184	3.96	1.65	1.95	23.480	0.218	0.000	80.75	22.14

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:44 AM  
 Page: 14



© 2007 - 2013 by ATC IP LLC. All rights reserved.

**Load Case: 0.9D + 1.6W**      95.00 mph with No Ice (Reduced DL)      22 Iterations

Gust Response Factor : 1.10      Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

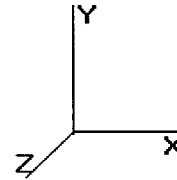
45.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	23.480	0.218	0.000	40.91	5.85
45.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	23.480	0.218	0.000	22.52	1.49
45.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	23.480	0.218	0.000	0.00	1.35
45.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	23.480	0.218	0.000	72.32	68.22
45.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	23.480	0.218	0.000	0.00	1.22
46.83	(1) 0.28" RG-6	Yes	1.83	0.000	0.00	0.00	0.00	23.679	0.222	0.000	0.00	0.05
46.83	(6) 1 5/8" Coax	Yes	1.83	1.179	3.96	0.61	0.71	23.679	0.222	0.000	29.73	8.12
46.83	(1) 1 5/8" Hybriflex	Yes	1.83	1.200	1.98	0.30	0.36	23.679	0.222	0.000	15.13	2.15
46.83	(1) 7/8" Coax	Yes	1.83	1.200	1.09	0.17	0.20	23.679	0.222	0.000	8.33	0.54
46.83	(2) 1/2" Coax	Yes	1.83	0.000	0.00	0.00	0.00	23.679	0.222	0.000	0.00	0.50
46.83	(2) 3" Conduit	Yes	1.83	1.200	3.50	0.53	0.64	23.679	0.222	0.000	26.74	25.01
46.83	(6) 5/16" Coax	Yes	1.83	0.000	0.00	0.00	0.00	23.679	0.222	0.000	0.00	0.45
50.00	(1) 0.28" RG-6	Yes	3.17	0.000	0.00	0.00	0.00	24.007	0.225	0.000	0.00	0.08
50.00	(6) 1 5/8" Coax	Yes	3.17	1.171	3.96	1.04	1.22	24.007	0.225	0.000	51.71	14.02
50.00	(1) 1 5/8" Hybriflex	Yes	3.17	1.200	1.98	0.52	0.63	24.007	0.225	0.000	26.49	3.70
50.00	(1) 7/8" Coax	Yes	3.17	1.200	1.09	0.29	0.35	24.007	0.225	0.000	14.58	0.94
50.00	(2) 1/2" Coax	Yes	3.17	0.000	0.00	0.00	0.00	24.007	0.225	0.000	0.00	0.85
50.00	(2) 3" Conduit	Yes	3.17	1.200	3.50	0.92	1.11	24.007	0.225	0.000	46.83	43.21
50.00	(6) 5/16" Coax	Yes	3.17	0.000	0.00	0.00	0.00	24.007	0.225	0.000	0.00	0.77
53.00	(1) 0.28" RG-6	Yes	3.00	0.000	0.00	0.00	0.00	24.303	0.228	0.000	0.00	0.08
53.00	(6) 1 5/8" Coax	Yes	3.00	1.164	3.96	0.99	1.15	24.303	0.228	0.000	49.29	13.28
53.00	(1) 1 5/8" Hybriflex	Yes	3.00	1.200	1.98	0.50	0.59	24.303	0.228	0.000	25.41	3.51
53.00	(1) 7/8" Coax	Yes	3.00	1.200	1.09	0.27	0.33	24.303	0.228	0.000	13.99	0.89
53.00	(2) 1/2" Coax	Yes	3.00	0.000	0.00	0.00	0.00	24.303	0.228	0.000	0.00	0.81
53.00	(2) 3" Conduit	Yes	3.00	1.200	3.50	0.88	1.05	24.303	0.228	0.000	44.91	40.93
53.00	(6) 5/16" Coax	Yes	3.00	0.000	0.00	0.00	0.00	24.303	0.228	0.000	0.00	0.73
55.00	(1) 0.28" RG-6	Yes	2.00	0.000	0.00	0.00	0.00	24.494	0.227	0.000	0.00	0.05
55.00	(6) 1 5/8" Coax	Yes	2.00	1.160	3.96	0.66	0.77	24.494	0.227	0.000	32.99	8.85
55.00	(1) 1 5/8" Hybriflex	Yes	2.00	1.200	1.98	0.33	0.40	24.494	0.227	0.000	17.07	2.34
55.00	(1) 7/8" Coax	Yes	2.00	1.200	1.09	0.18	0.22	24.494	0.227	0.000	9.40	0.59
55.00	(2) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	24.494	0.227	0.000	0.00	0.54
55.00	(2) 3" Conduit	Yes	2.00	1.200	3.50	0.58	0.70	24.494	0.227	0.000	30.18	27.29
55.00	(6) 5/16" Coax	Yes	2.00	0.000	0.00	0.00	0.00	24.494	0.227	0.000	0.00	0.49
60.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	24.946	0.230	0.000	0.00	0.13
60.00	(6) 1 5/8" Coax	Yes	5.00	1.149	3.96	1.65	1.90	24.946	0.230	0.000	83.23	22.14
60.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	24.946	0.230	0.000	43.47	5.85
60.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	24.946	0.230	0.000	23.93	1.49
60.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	24.946	0.230	0.000	0.00	1.35
60.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	24.946	0.230	0.000	76.84	68.22
60.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	24.946	0.230	0.000	0.00	1.22
65.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	25.370	0.236	0.000	0.00	0.13
65.00	(6) 1 5/8" Coax	Yes	5.00	1.139	3.96	1.65	1.88	25.370	0.236	0.000	83.94	22.14
65.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	25.370	0.236	0.000	44.21	5.85
65.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	25.370	0.236	0.000	24.34	1.49
65.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	25.370	0.236	0.000	0.00	1.35
65.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	25.370	0.236	0.000	78.14	68.22
65.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	25.370	0.236	0.000	0.00	1.22
70.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	25.769	0.242	0.000	0.00	0.13
70.00	(6) 1 5/8" Coax	Yes	5.00	1.130	3.96	1.65	1.87	25.769	0.242	0.000	84.60	22.14
70.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	25.769	0.242	0.000	44.90	5.85
70.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	25.769	0.242	0.000	24.72	1.49
70.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	25.769	0.242	0.000	0.00	1.35
70.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	25.769	0.242	0.000	79.37	68.22
70.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	25.769	0.242	0.000	0.00	1.22
75.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	26.146	0.248	0.000	0.00	0.13
75.00	(6) 1 5/8" Coax	Yes	5.00	1.122	3.96	1.65	1.85	26.146	0.248	0.000	85.21	22.14
75.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	26.146	0.248	0.000	45.56	5.85



Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:44 AM  
 Page: 15



© 2007 - 2013 by ATC IP LLC. All rights reserved.

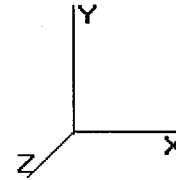
<b>Load Case:</b> 0.9D + 1.6W	95.00 mph with No Ice (Reduced DL)	22 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 0.90		
Wind Load Factor : 1.60		

75.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	26.146	0.248	0.000	25.08	1.49
75.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	26.146	0.248	0.000	0.00	1.35
75.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	26.146	0.248	0.000	80.53	68.22
75.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	26.146	0.248	0.000	0.00	1.22
80.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	26.504	0.255	0.000	0.00	0.13
80.00	(6) 1 5/8" Coax	Yes	5.00	1.115	3.96	1.65	1.84	26.504	0.255	0.000	85.79	22.14
80.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	26.504	0.255	0.000	46.18	5.85
80.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	26.504	0.255	0.000	25.42	1.49
80.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	26.504	0.255	0.000	0.00	1.35
80.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	26.504	0.255	0.000	81.63	68.22
80.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	26.504	0.255	0.000	0.00	1.22
85.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	26.844	0.262	0.000	0.00	0.13
85.00	(6) 1 5/8" Coax	Yes	5.00	1.108	3.96	1.65	1.83	26.844	0.262	0.000	86.34	22.14
85.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	26.844	0.262	0.000	46.77	5.85
85.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	26.844	0.262	0.000	25.75	1.49
85.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	26.844	0.262	0.000	0.00	1.35
85.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	26.844	0.262	0.000	82.68	68.22
85.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	26.844	0.262	0.000	0.00	1.22
90.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	27.169	0.269	0.000	0.00	0.13
90.00	(6) 1 5/8" Coax	Yes	5.00	1.101	3.96	1.65	1.82	27.169	0.269	0.000	86.86	22.14
90.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	27.169	0.269	0.000	47.34	5.85
90.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	27.169	0.269	0.000	26.06	1.49
90.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	27.169	0.269	0.000	0.00	1.35
90.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	27.169	0.269	0.000	83.68	68.22
90.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	27.169	0.269	0.000	0.00	1.22
94.92	(1) 0.28" RG-6	Yes	4.92	0.000	0.00	0.00	0.00	27.475	0.185	1.254	0.00	0.13
94.92	(6) 1 5/8" Coax	Yes	4.92	0.000	3.96	1.62	0.00	27.475	0.185	1.254	0.00	21.77
94.92	(1) 1 5/8" Hybriflex	Yes	4.92	0.000	1.98	0.81	0.00	27.475	0.185	1.254	0.00	5.75
94.92	(1) 7/8" Coax	Yes	4.92	0.000	1.09	0.45	0.00	27.475	0.185	1.254	0.00	1.46
95.00	(1) 0.28" RG-6	Yes	0.08	0.000	0.00	0.00	0.00	27.480	0.187	1.262	0.00	0.00
95.00	(6) 1 5/8" Coax	Yes	0.08	0.000	3.96	0.03	0.00	27.480	0.187	1.262	0.00	0.37
95.00	(1) 1 5/8" Hybriflex	Yes	0.08	0.000	1.98	0.01	0.00	27.480	0.187	1.262	0.00	0.10
95.00	(1) 7/8" Coax	Yes	0.08	0.000	1.09	0.01	0.00	27.480	0.187	1.262	0.00	0.02
99.83	(1) 0.28" RG-6	Yes	4.83	0.000	0.00	0.00	0.00	27.769	0.190	1.270	0.00	0.13
99.83	(6) 1 5/8" Coax	Yes	4.83	0.000	3.96	1.60	0.00	27.769	0.190	1.270	0.00	21.40
99.83	(1) 1 5/8" Hybriflex	Yes	4.83	0.000	1.98	0.80	0.00	27.769	0.190	1.270	0.00	5.66
99.83	(1) 7/8" Coax	Yes	4.83	0.000	1.09	0.44	0.00	27.769	0.190	1.270	0.00	1.44
100.0	(1) 0.28" RG-6	Yes	0.17	0.000	0.00	0.00	0.00	27.779	0.190	1.269	0.00	0.00
100.0	(6) 1 5/8" Coax	Yes	0.17	0.000	3.96	0.05	0.00	27.779	0.190	1.269	0.00	0.74
100.0	(1) 1 5/8" Hybriflex	Yes	0.17	0.000	1.98	0.03	0.00	27.779	0.190	1.269	0.00	0.19
100.0	(1) 7/8" Coax	Yes	0.17	0.000	1.09	0.02	0.00	27.779	0.190	1.269	0.00	0.05
105.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	28.066	0.163	1.188	0.00	0.13
105.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	28.066	0.163	1.188	0.00	22.14
105.0	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	28.066	0.163	1.188	0.00	5.85
110.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	28.342	0.168	1.203	0.00	0.13
110.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	28.342	0.168	1.203	0.00	22.14
110.0	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	28.342	0.168	1.203	0.00	5.85
115.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	28.608	0.173	1.219	0.00	0.13
115.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	28.608	0.173	1.219	0.00	22.14
115.0	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	28.608	0.173	1.219	0.00	5.85
120.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	28.866	0.119	1.057	0.00	0.13
120.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	28.866	0.119	1.057	0.00	22.14
125.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	29.115	0.123	1.069	0.00	0.13
125.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	29.115	0.123	1.069	0.00	22.14
<b>Totals:</b>											<b>3,122.44</b>	<b>1,894.69</b>

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:44 AM  
 Page: 16



© 2007 - 2013 by ATC IP LLC. All rights reserved.

**Load Case:** 0.9D + 1.6W      95.00 mph with No Ice (Reduced DL)      22 Iterations  
**Gust Response Factor :** 1.10      **Wind Importance Factor :** 1.00  
**Dead Load Factor :** 0.90  
**Wind Load Factor :** 1.60

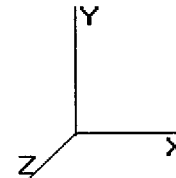
**Applied Segment Forces Summary**

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	506.08	1,014.56	0.00	0.00
10.00	496.39	1,283.56	0.00	0.00
15.00	486.70	1,264.01	0.00	0.00
20.00	506.13	1,244.45	0.00	0.00
25.00	1,151.70	1,224.90	0.00	0.00
30.00	1,176.10	1,205.35	0.00	0.00
35.00	1,193.55	1,185.80	0.00	0.00
40.00	1,205.55	1,166.25	0.00	0.00
45.00	1,212.30	1,146.69	0.00	0.00
46.83	442.45	415.56	0.00	0.00
50.00	777.38	1,249.08	0.00	0.00
53.00	736.63	1,168.87	0.00	0.00
55.00	490.11	446.16	0.00	0.00
60.00	1,230.41	1,101.71	0.00	0.00
65.00	1,226.29	1,082.15	0.00	0.00
70.00	1,220.20	1,062.60	0.00	0.00
75.00	1,212.37	1,043.05	0.00	0.00
80.00	1,202.96	1,023.50	0.00	0.00
85.00	1,192.13	1,003.94	0.00	0.00
90.00	2,474.49	1,727.97	0.00	1,941.58
94.92	490.27	879.31	0.00	0.00
95.00	8.33	24.17	0.00	0.00
99.83	481.41	1,385.06	0.00	0.00
100.0	467.62	184.44	0.00	716.23
105.0	488.52	757.71	0.00	0.00
110.0	478.61	741.42	0.00	0.00
115.0	4,496.12	2,457.62	0.00	0.00
120.0	457.48	636.57	0.00	0.00
125.0	2,238.91	1,568.51	0.00	1,043.30
130.0	434.76	537.44	0.00	0.00
135.0	422.87	521.14	0.00	0.00
137.0	2,167.54	1,715.90	0.00	1,277.40
140.0	244.52	281.03	0.00	0.00
145.0	398.08	455.35	0.00	0.00
147.9	4,349.18	2,421.14	0.00	3,934.37
147.9	1.30	1.34	0.00	0.00
<b>Totals:</b>	<b>37,765.45</b>	<b>36,628.29</b>	<b>0.00</b>	<b>8,912.89</b>

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:44 AM  
 Page: 17



© 2007 - 2013 by ATC I PLLC. All rights reserved.

<b>Load Case:</b> 0.9D + 1.6W	95.00 mph with No Ice (Reduced DL)	22 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 0.90		
Wind Load Factor : 1.60		

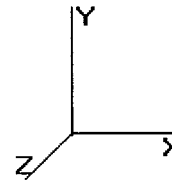
**Calculated Forces**

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	-36.57	-37.82	0.00	-3,442.29	0.00	3,442.29	4,345.86	2,172.93	10,048.4	5,031.69	0.00	0.00	0.693
5.00	-35.44	-37.43	0.00	-3,253.18	0.00	3,253.18	4,297.95	2,148.97	9,746.71	4,880.60	0.10	-0.18	0.675
10.00	-34.04	-37.03	0.00	-3,066.05	0.00	3,066.05	4,248.67	2,124.33	9,446.21	4,730.12	0.38	-0.36	0.657
15.00	-32.67	-36.63	0.00	-2,880.91	0.00	2,880.91	4,198.03	2,099.01	9,147.11	4,580.35	0.85	-0.53	0.637
20.00	-31.32	-36.21	0.00	-2,697.74	0.00	2,697.74	4,146.02	2,073.01	8,849.60	4,431.38	1.51	-0.71	0.617
25.00	-30.00	-35.13	0.00	-2,516.68	0.00	2,516.68	4,092.65	2,046.33	8,553.86	4,283.29	2.35	-0.89	0.595
30.00	-28.71	-34.03	0.00	-2,341.01	0.00	2,341.01	4,037.92	2,018.96	8,260.07	4,136.18	3.37	-1.06	0.573
35.00	-27.45	-32.89	0.00	-2,170.89	0.00	2,170.89	3,981.82	1,990.91	7,968.42	3,990.13	4.58	-1.24	0.551
40.00	-26.22	-31.74	0.00	-2,006.43	0.00	2,006.43	3,924.36	1,962.18	7,679.09	3,845.25	5.97	-1.41	0.529
45.00	-25.04	-30.55	0.00	-1,847.75	0.00	1,847.75	3,865.54	1,932.77	7,392.25	3,701.62	7.53	-1.58	0.506
46.83	-24.60	-30.13	0.00	-1,791.75	0.00	1,791.75	3,843.63	1,921.82	7,287.74	3,649.29	8.15	-1.64	0.498
50.00	-23.32	-29.36	0.00	-1,696.35	0.00	1,696.35	3,805.35	1,902.68	7,108.10	3,559.33	9.28	-1.75	0.483
53.00	-22.13	-28.61	0.00	-1,608.28	0.00	1,608.28	3,811.38	1,905.69	7,136.13	3,573.37	10.41	-1.84	0.456
55.00	-21.65	-28.15	0.00	-1,551.05	0.00	1,551.05	3,786.98	1,893.49	7,023.14	3,516.79	11.19	-1.91	0.447
60.00	-20.52	-26.94	0.00	-1,410.30	0.00	1,410.30	3,725.01	1,862.51	6,742.74	3,376.38	13.28	-2.06	0.423
65.00	-19.42	-25.72	0.00	-1,275.61	0.00	1,275.61	3,661.69	1,830.84	6,465.44	3,237.53	15.52	-2.21	0.400
70.00	-18.34	-24.51	0.00	-1,147.00	0.00	1,147.00	3,597.00	1,798.50	6,191.43	3,100.31	17.91	-2.36	0.375
75.00	-17.30	-23.29	0.00	-1,024.47	0.00	1,024.47	3,530.95	1,765.47	5,920.87	2,964.83	20.45	-2.49	0.351
80.00	-16.28	-22.08	0.00	-908.02	0.00	908.02	3,463.53	1,731.77	5,653.95	2,831.18	23.14	-2.63	0.326
85.00	-15.29	-20.88	0.00	-797.61	0.00	797.61	3,394.75	1,697.38	5,390.86	2,699.44	25.96	-2.76	0.300
90.00	-13.65	-18.35	0.00	-691.29	0.00	691.29	3,324.61	1,662.30	5,131.78	2,569.70	28.92	-2.88	0.273
94.92	-12.78	-17.83	0.00	-601.08	0.00	601.08	3,235.43	1,617.71	4,852.78	2,430.00	31.94	-2.99	0.251
95.00	-12.73	-17.83	0.00	-599.60	0.00	599.60	3,233.85	1,616.92	4,848.02	2,427.61	31.99	-2.99	0.251
99.83	-11.36	-17.28	0.00	-513.43	0.00	513.43	2,561.72	1,280.86	3,809.83	1,907.74	35.08	-3.10	0.274
100.00	-11.18	-16.82	0.00	-509.83	0.00	509.83	2,559.96	1,279.98	3,803.41	1,904.53	35.18	-3.10	0.272
105.00	-10.43	-16.31	0.00	-425.74	0.00	425.74	2,506.38	1,253.19	3,612.46	1,808.91	38.49	-3.21	0.240
110.00	-9.69	-15.81	0.00	-344.19	0.00	344.19	2,451.43	1,225.72	3,424.36	1,714.72	41.91	-3.31	0.205
115.00	-7.48	-11.18	0.00	-265.17	0.00	265.17	2,395.12	1,197.56	3,239.30	1,622.06	45.43	-3.40	0.167
120.00	-6.86	-10.70	0.00	-209.25	0.00	209.25	2,337.45	1,168.73	3,057.46	1,531.00	49.03	-3.48	0.140
125.00	-5.42	-8.37	0.00	-154.72	0.00	154.72	2,271.20	1,135.60	2,869.91	1,437.09	52.71	-3.54	0.110
130.00	-4.91	-7.91	0.00	-112.87	0.00	112.87	2,192.15	1,096.07	2,672.63	1,338.30	56.44	-3.59	0.087
135.00	-4.41	-7.46	0.00	-73.33	0.00	73.33	2,113.09	1,056.55	2,482.37	1,243.03	60.22	-3.63	0.061
137.00	-2.83	-5.18	0.00	-57.14	0.00	57.14	2,081.47	1,040.73	2,408.24	1,205.91	61.75	-3.65	0.049
140.00	-2.57	-4.92	0.00	-41.59	0.00	41.59	2,034.04	1,017.02	2,299.14	1,151.28	64.04	-3.66	0.037
145.00	-2.14	-4.50	0.00	-16.97	0.00	16.97	1,954.98	977.49	2,122.94	1,063.05	67.88	-3.68	0.017
147.90	0.00	0.00	0.00	0.00	0.00	0.00	1,909.13	954.57	2,023.96	1,013.48	70.12	-3.68	0.000
147.92	0.00	0.00	0.00	0.00	0.00	0.00	1,908.86	954.43	2,023.38	1,013.20	70.13	-3.68	0.000

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:44 AM  
 Page: 18



© 2007 - 2013 by ATC IP LLC. All rights reserved.

**Load Case:** 1.2D + 1.0Di + 1.0Wi      50.00 mph with 1.00 in Radial Ice      22 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

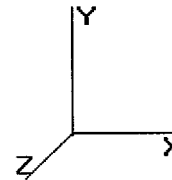
**Shaft Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	5.168	5.685	0.000	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.85	5.168	5.685	0.000	1.200	1.656	5.00	25.092	30.11	171.2	593.0	1,945.7
10.00		1.00	0.85	5.168	5.685	0.000	1.200	* 1.775	5.00	24.737	29.68	168.7	624.9	1,951.6
15.00		1.00	0.85	5.168	5.685	0.000	1.200	* 1.848	5.00	24.344	29.21	166.1	639.2	1,939.8
20.00		1.00	0.90	5.483	6.032	0.000	1.200	* 1.902	5.00	23.935	28.72	173.2	645.7	1,920.2
25.00		1.00	0.94	5.747	6.322	0.000	1.200	* 1.945	5.00	23.517	28.22	178.4	647.7	1,896.1
30.00		1.00	0.98	5.972	6.569	0.000	1.200	* 1.981	5.00	23.093	27.71	182.0	646.7	1,869.1
35.00		1.00	1.01	6.169	6.786	0.000	1.200	* 2.012	5.00	22.665	27.20	184.6	643.6	1,839.9
40.00		1.00	1.04	6.345	6.979	0.000	1.200	* 2.039	5.00	22.233	26.68	186.2	638.9	1,809.2
45.00		1.00	1.07	6.504	7.155	0.000	1.200	* 2.063	5.00	21.800	26.16	187.2	632.9	1,777.1
46.83	Bot - Section 2	1.00	1.07	6.559	7.215	0.000	1.200	* 2.071	1.83	7.882	9.46	68.2	231.2	644.2
50.00		1.00	1.09	6.650	7.315	0.000	1.200	* 2.085	3.17	13.679	16.41	120.1	402.6	1,824.4
53.00	Top - Section 1	1.00	1.10	6.732	7.405	0.000	1.200	* 2.097	3.00	12.797	15.36	113.7	378.7	1,706.3
55.00		1.00	1.11	6.785	7.463	0.000	1.200	* 2.105	2.00	8.443	10.13	75.6	251.1	692.1
60.00		1.00	1.13	6.910	7.601	0.000	1.200	* 2.123	5.00	20.805	24.97	189.8	619.3	1,703.5
65.00		1.00	1.15	7.028	7.731	0.000	1.200	* 2.140	5.00	20.366	24.44	188.9	610.1	1,668.3
70.00		1.00	1.17	7.138	7.852	0.000	1.200	* 2.156	5.00	19.925	23.91	187.7	600.4	1,632.5
75.00		1.00	1.19	7.243	7.967	0.000	1.200	* 2.171	5.00	19.484	23.38	186.3	590.2	1,596.1
80.00		1.00	1.20	7.342	8.076	0.000	1.200	* 2.185	5.00	19.041	22.85	184.5	579.5	1,559.4
85.00		1.00	1.22	7.436	8.180	0.000	1.200	* 2.198	5.00	18.598	22.32	182.6	568.4	1,522.2
90.00	Appertunance(s)	1.00	1.23	7.526	8.279	0.000	1.200	* 2.211	5.00	18.155	21.79	180.4	557.0	1,484.7
94.92	Bot - Section 3	1.00	1.25	7.611	8.372	0.000	1.200	* 2.223	4.92	17.420	20.90	175.0	536.3	1,423.2
95.00		1.00	1.25	7.612	8.374	0.000	1.200	* 2.223	0.08	0.296	0.36	3.0	9.2	36.6
99.83	Top - Section 2	1.00	1.26	7.692	8.461	0.000	1.200	* 2.234	4.83	16.954	20.34	172.1	524.2	2,090.3
100.0	Appertunance(s)	1.00	1.26	7.695	8.464	0.000	1.200	* 2.234	0.17	0.577	0.69	5.9	18.1	42.5
105.0		1.00	1.27	7.774	8.552	0.000	1.200	* 2.245	5.00	17.086	20.50	175.3	529.6	1,251.5
110.0		1.00	1.29	7.851	8.636	0.000	1.200	* 2.256	5.00	16.641	19.97	172.5	517.0	1,217.2
115.0	Appertunance(s)	1.00	1.30	7.925	8.717	0.000	1.200	* 2.266	5.00	16.196	19.43	169.4	504.3	1,182.7
120.0		1.00	1.31	7.996	8.796	0.000	1.200	* 2.276	5.00	15.750	18.90	166.2	491.2	1,148.0
125.0	Appertunance(s)	1.00	1.32	8.065	8.872	0.000	1.200	* 2.285	5.00	15.304	18.36	162.9	478.0	1,113.0
130.0		1.00	1.33	8.132	8.945	0.000	1.200	2.294	5.00	14.857	17.83	159.5	464.6	1,077.9
135.0		1.00	1.34	8.197	9.016	0.000	1.200	2.303	5.00	14.411	17.29	155.9	451.0	1,042.6
137.0	Appertunance(s)	1.00	1.35	8.222	9.044	0.000	1.200	2.306	2.00	5.638	6.77	61.2	178.2	408.7
140.0		1.00	1.35	8.260	9.086	0.000	1.200	2.311	3.00	8.324	9.99	90.8	262.3	601.6
145.0		1.00	1.36	8.321	9.153	0.000	1.200	2.319	5.00	13.517	16.22	148.5	423.3	971.4
147.9	Appertunance(s)	1.00	1.37	8.356	9.191	0.000	1.200	2.324	2.90	7.634	9.16	84.2	240.8	548.7
147.9		1.00	1.37	8.356	9.192	0.000	1.200	2.324	0.02	0.044	0.05	0.5	1.4	3.2
* = Cf Adjusted By Linear Load Ra Effect								Totals:	147.92			5,178.3	16,730.5	47,141.6

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:44 AM  
 Page: 19



© 2007 - 2013 by ATC IP LLC. All rights reserved.

<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.00 in Radial Ice	22 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		

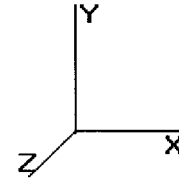
**Discrete Appurtenance Segment Forces (Factored)**

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
90.00	Argus LLPX310R	3	7.561	8.317	0.58	0.80	9.55	0.000	2.000	79.43	0.00	158.87	539.37
90.00	Collar	1	7.526	8.279	1.00	1.00	17.52	0.000	0.000	145.05	0.00	0.00	1,776.34
90.00	DragonWave A-ANT-	2	7.578	8.336	0.90	1.00	11.35	0.000	3.000	94.65	0.00	283.94	256.93
90.00	DragonWave Horizon	2	7.526	8.279	0.40	0.80	0.61	0.000	0.000	5.02	0.00	0.00	110.29
90.00	NextNet BTS-2500	3	7.526	8.279	0.40	0.80	3.09	0.000	0.000	25.56	0.00	0.00	363.32
100.0	Antel BCD-87010_25	1	7.774	8.552	1.00	1.00	7.34	0.000	5.000	62.77	0.00	313.83	226.68
100.0	Stand-Off	1	7.695	8.464	1.00	1.00	9.45	0.000	0.000	80.02	0.00	0.00	193.85
115.0	Alcatel-Lucent RRH2x	3	7.925	8.717	0.54	0.80	4.86	0.000	0.000	42.36	0.00	0.00	467.61
115.0	Antel BXA-171063-12B	1	7.925	8.717	0.80	0.80	5.12	0.000	0.000	44.67	0.00	0.00	188.19
115.0	Antel BXA-171063-12C	3	7.925	8.717	0.70	0.80	13.53	0.000	0.000	117.92	0.00	0.00	564.56
115.0	Antel BXA-171063-8BF	2	7.925	8.717	0.70	0.80	5.70	0.000	0.000	49.71	0.00	0.00	261.94
115.0	Antel BXA-70063-6CF-	3	7.925	8.717	0.62	0.80	17.06	0.000	0.000	148.69	0.00	0.00	755.99
115.0	Antel BXA-70063-6CF-	3	7.925	8.717	0.62	0.80	17.06	0.000	0.000	148.69	0.00	0.00	755.99
115.0	Flat Low Profile Pla	1	7.925	8.717	1.00	1.00	50.94	0.000	0.000	444.05	0.00	0.00	2,442.93
115.0	RFS DB-T1-6Z-8AB-0Z	1	7.925	8.717	0.80	0.80	4.77	0.000	0.000	41.54	0.00	0.00	321.00
125.0	Andrew	6	8.079	8.886	0.40	0.80	1.96	0.000	1.000	17.42	0.00	17.42	247.21
125.0	RFS APX16DWV-	3	8.079	8.886	0.53	0.80	11.91	0.000	1.000	105.84	0.00	105.84	692.65
125.0	RFS APX16PV-16PVL-	3	8.079	8.886	0.53	0.80	11.83	0.000	1.000	105.16	0.00	105.16	686.49
125.0	Round T-Arm	3	8.065	8.872	0.50	0.75	30.93	0.000	0.000	274.37	0.00	0.00	1,530.57
137.0	48" x 4" Panels	9	8.247	9.072	0.65	0.80	18.83	0.000	2.000	170.81	0.00	341.63	977.77
137.0	Flat Low Profile Pla	1	8.222	9.044	1.00	1.00	51.38	0.000	0.000	464.68	0.00	0.00	2,457.81
147.9	48" x 12" Panels	9	8.381	9.219	0.50	0.75	28.98	0.000	2.100	267.20	0.00	561.12	2,037.76
147.9	72" x 12" Panels	3	8.381	9.219	0.50	0.75	14.92	0.000	2.100	137.55	0.00	288.85	978.84
147.9	Flat Platform with H	1	8.356	9.191	1.00	1.00	70.38	0.000	0.000	646.90	0.00	0.00	3,846.10
										3,720.07			22,680.19

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:44 AM  
 Page: 20



© 2007 - 2013 by ATC IP LLC. All rights reserved.

**Load Case:** 1.2D + 1.0Di + 1.0Wi      50.00 mph with 1.00 in Radial Ice      22 Iterations

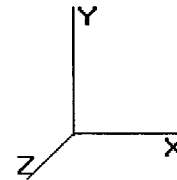
Gust Response Factor : 1.10      Ice Dead Load Factor : 1.00      Wind Importance Factor : 1.00  
 Dead Load Factor : 1.20      Ice Importance Factor : 1.00  
 Wind Load Factor : 1.00

**Linear Appurtenance Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
10.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	5.168	0.189	1.266	0.00	21.35
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	3.13	0.00	5.168	0.189	1.266	0.00	140.58
10.00	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	2.30	0.00	5.168	0.189	1.266	0.00	42.35
10.00	(1) 7/8" Coax	Yes	5.00	0.000	1.09	1.93	0.00	5.168	0.189	1.266	0.00	29.24
10.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.168	0.189	1.266	0.00	30.07
10.00	(2) 3" Conduit	Yes	5.00	0.000	3.50	2.94	0.00	5.168	0.189	1.266	0.00	168.74
10.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.168	0.189	1.266	0.00	34.15
15.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	5.168	0.192	1.277	0.00	23.05
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	3.19	0.00	5.168	0.192	1.277	0.00	145.60
15.00	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	2.37	0.00	5.168	0.192	1.277	0.00	44.54
15.00	(1) 7/8" Coax	Yes	5.00	0.000	1.09	1.99	0.00	5.168	0.192	1.277	0.00	31.18
15.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.168	0.192	1.277	0.00	32.06
15.00	(2) 3" Conduit	Yes	5.00	0.000	3.50	3.00	0.00	5.168	0.192	1.277	0.00	172.37
15.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.168	0.192	1.277	0.00	36.32
20.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	5.483	0.196	1.289	0.00	24.35
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	3.24	0.00	5.483	0.196	1.289	0.00	149.32
20.00	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	2.41	0.00	5.483	0.196	1.289	0.00	46.19
20.00	(1) 7/8" Coax	Yes	5.00	0.000	1.09	2.04	0.00	5.483	0.196	1.289	0.00	32.65
20.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.483	0.196	1.289	0.00	33.56
20.00	(2) 3" Conduit	Yes	5.00	0.000	3.50	3.04	0.00	5.483	0.196	1.289	0.00	175.07
20.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.483	0.196	1.289	0.00	37.95
25.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	5.747	0.200	0.000	0.00	25.40
25.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.27	3.93	5.747	0.200	0.000	24.82	152.32
25.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	2.45	2.94	5.747	0.200	0.000	18.56	47.53
25.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	2.08	2.49	5.747	0.200	0.000	15.74	33.84
25.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.747	0.200	0.000	0.00	34.78
25.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	3.08	3.70	5.747	0.200	0.000	23.36	177.25
25.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.747	0.200	0.000	0.00	39.28
30.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	5.972	0.205	0.000	0.00	26.30
30.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.30	3.96	5.972	0.205	0.000	26.02	154.83
30.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	2.48	2.97	5.972	0.205	0.000	19.52	48.66
30.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	2.11	2.53	5.972	0.205	0.000	16.59	34.85
30.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.972	0.205	0.000	0.00	35.81
30.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	3.11	3.73	5.972	0.205	0.000	24.51	179.08
30.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	5.972	0.205	0.000	0.00	40.40
35.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	6.169	0.209	0.000	0.00	27.08
35.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.33	3.99	6.169	0.209	0.000	27.09	157.00
35.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	2.50	3.00	6.169	0.209	0.000	20.37	49.65
35.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	2.13	2.56	6.169	0.209	0.000	17.35	35.73
35.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.169	0.209	0.000	0.00	36.71
35.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	3.13	3.76	6.169	0.209	0.000	25.53	180.67
35.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.169	0.209	0.000	0.00	41.37
40.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	6.345	0.214	0.000	0.00	27.78
40.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.35	4.02	6.345	0.214	0.000	28.05	158.92
40.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	2.52	3.03	6.345	0.214	0.000	21.14	50.53
40.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	2.15	2.58	6.345	0.214	0.000	18.03	36.51
40.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.345	0.214	0.000	0.00	37.51
40.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	3.16	3.79	6.345	0.214	0.000	26.44	182.08
40.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.345	0.214	0.000	0.00	42.24
45.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	6.504	0.218	0.000	0.00	28.41
45.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.37	4.04	6.504	0.218	0.000	28.93	160.64

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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



11/18/2013 9:03:44 AM  
 Page: 21

© 2007 - 2013 by ATC IP LLC. All rights reserved.

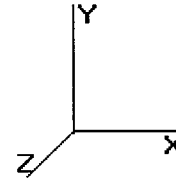
<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.00 in Radial Ice	22 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

45.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	2.54	3.05	6.504	0.218	0.000	21.84	51.32
45.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	2.17	2.61	6.504	0.218	0.000	18.66	37.22
45.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.504	0.218	0.000	0.00	38.24
45.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	3.18	3.81	6.504	0.218	0.000	27.28	183.34
45.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.504	0.218	0.000	0.00	43.02
46.83	(1) 0.28" RG-6	Yes	1.83	0.000	0.00	0.00	0.00	6.559	0.222	0.000	0.00	10.50
46.83	(6) 1 5/8" Coax	Yes	1.83	1.200	3.96	1.24	1.49	6.559	0.222	0.000	10.72	59.12
46.83	(1) 1 5/8" Hybriflex	Yes	1.83	1.200	1.98	0.94	1.12	6.559	0.222	0.000	8.10	18.92
46.83	(1) 7/8" Coax	Yes	1.83	1.200	1.09	0.80	0.96	6.559	0.222	0.000	6.92	13.74
46.83	(2) 1/2" Coax	Yes	1.83	0.000	0.00	0.00	0.00	6.559	0.222	0.000	0.00	14.11
46.83	(2) 3" Conduit	Yes	1.83	1.200	3.50	1.17	1.40	6.559	0.222	0.000	10.11	67.38
46.83	(6) 5/16" Coax	Yes	1.83	0.000	0.00	0.00	0.00	6.559	0.222	0.000	0.00	15.87
50.00	(1) 0.28" RG-6	Yes	3.17	0.000	0.00	0.00	0.00	6.650	0.225	0.000	0.00	18.36
50.00	(6) 1 5/8" Coax	Yes	3.17	1.200	3.96	2.15	2.57	6.650	0.225	0.000	18.83	102.73
50.00	(1) 1 5/8" Hybriflex	Yes	3.17	1.200	1.98	1.62	1.95	6.650	0.225	0.000	14.25	32.96
50.00	(1) 7/8" Coax	Yes	3.17	1.200	1.09	1.39	1.67	6.650	0.225	0.000	12.18	23.98
50.00	(2) 1/2" Coax	Yes	3.17	0.000	0.00	0.00	0.00	6.650	0.225	0.000	0.00	24.63
50.00	(2) 3" Conduit	Yes	3.17	1.200	3.50	2.02	2.43	6.650	0.225	0.000	17.77	116.84
50.00	(6) 5/16" Coax	Yes	3.17	0.000	0.00	0.00	0.00	6.650	0.225	0.000	0.00	27.70
53.00	(1) 0.28" RG-6	Yes	3.00	0.000	0.00	0.00	0.00	6.732	0.228	0.000	0.00	17.59
53.00	(6) 1 5/8" Coax	Yes	3.00	1.200	3.96	2.04	2.45	6.732	0.228	0.000	18.12	97.85
53.00	(1) 1 5/8" Hybriflex	Yes	3.00	1.200	1.98	1.54	1.85	6.732	0.228	0.000	13.72	31.47
53.00	(1) 7/8" Coax	Yes	3.00	1.200	1.09	1.32	1.59	6.732	0.228	0.000	11.74	22.94
53.00	(2) 1/2" Coax	Yes	3.00	0.000	0.00	0.00	0.00	6.732	0.228	0.000	0.00	23.56
53.00	(2) 3" Conduit	Yes	3.00	1.200	3.50	1.92	2.31	6.732	0.228	0.000	17.09	111.08
53.00	(6) 5/16" Coax	Yes	3.00	0.000	0.00	0.00	0.00	6.732	0.228	0.000	0.00	26.48
55.00	(1) 0.28" RG-6	Yes	2.00	0.000	0.00	0.00	0.00	6.785	0.227	0.000	0.00	11.81
55.00	(6) 1 5/8" Coax	Yes	2.00	1.200	3.96	1.36	1.63	6.785	0.227	0.000	12.19	65.45
55.00	(1) 1 5/8" Hybriflex	Yes	2.00	1.200	1.98	1.03	1.24	6.785	0.227	0.000	9.24	21.08
55.00	(1) 7/8" Coax	Yes	2.00	1.200	1.09	0.88	1.06	6.785	0.227	0.000	7.91	15.38
55.00	(2) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	6.785	0.227	0.000	0.00	15.80
55.00	(2) 3" Conduit	Yes	2.00	1.200	3.50	1.28	1.54	6.785	0.227	0.000	11.51	74.22
55.00	(6) 5/16" Coax	Yes	2.00	0.000	0.00	0.00	0.00	6.785	0.227	0.000	0.00	17.76
60.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	6.910	0.230	0.000	0.00	30.01
60.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.42	4.10	6.910	0.230	0.000	31.19	164.96
60.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	2.59	3.11	6.910	0.230	0.000	23.66	53.32
60.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	2.22	2.67	6.910	0.230	0.000	20.28	39.01
60.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.910	0.230	0.000	0.00	40.07
60.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	3.23	3.87	6.910	0.230	0.000	29.44	186.52
60.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	6.910	0.230	0.000	0.00	45.01
65.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	7.028	0.236	0.000	0.00	30.48
65.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.43	4.12	7.028	0.236	0.000	31.85	166.20
65.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	2.61	3.13	7.028	0.236	0.000	24.20	53.90
65.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	2.24	2.69	7.028	0.236	0.000	20.76	39.53
65.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.028	0.236	0.000	0.00	40.60
65.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	3.24	3.89	7.028	0.236	0.000	30.07	187.43
65.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.028	0.236	0.000	0.00	45.58
70.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	7.138	0.242	0.000	0.00	30.91
70.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.45	4.14	7.138	0.242	0.000	32.48	167.35
70.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	2.62	3.15	7.138	0.242	0.000	24.70	54.44
70.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	2.25	2.70	7.138	0.242	0.000	21.21	40.02
70.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.138	0.242	0.000	0.00	41.10
70.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	3.26	3.91	7.138	0.242	0.000	30.67	188.28
70.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.138	0.242	0.000	0.00	46.11
75.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	7.243	0.248	0.000	0.00	31.32
75.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.46	4.15	7.243	0.248	0.000	33.07	168.43
75.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	2.63	3.16	7.243	0.248	0.000	25.18	54.95

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:45 AM  
 Page: 22



© 2007 - 2013 by ATC IP LLC. All rights reserved.

**Load Case:** 1.2D + 1.0Di + 1.0Wi      50.00 mph with 1.00 in Radial Ice      22 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

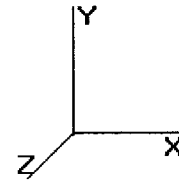
75.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	2.26	2.72	7.243	0.248	0.000	21.64	40.47
75.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.243	0.248	0.000	0.00	41.56
75.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	3.27	3.92	7.243	0.248	0.000	31.24	189.08
75.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.243	0.248	0.000	0.00	46.62
80.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	7.342	0.255	0.000	0.00	31.71
80.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.47	4.17	7.342	0.255	0.000	33.64	169.46
80.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	2.65	3.18	7.342	0.255	0.000	25.64	55.43
80.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	2.28	2.73	7.342	0.255	0.000	22.05	40.91
80.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.342	0.255	0.000	0.00	42.01
80.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	3.28	3.94	7.342	0.255	0.000	31.78	189.84
80.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.342	0.255	0.000	0.00	47.09
85.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	7.436	0.262	0.000	0.00	32.08
85.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.48	4.18	7.436	0.262	0.000	34.18	170.43
85.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	2.66	3.19	7.436	0.262	0.000	26.08	55.89
85.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	2.29	2.74	7.436	0.262	0.000	22.44	41.32
85.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.436	0.262	0.000	0.00	42.43
85.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	3.29	3.95	7.436	0.262	0.000	32.30	190.56
85.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.436	0.262	0.000	0.00	47.55
90.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	7.526	0.269	0.000	0.00	32.43
90.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.49	4.19	7.526	0.269	0.000	34.70	171.35
90.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	2.67	3.20	7.526	0.269	0.000	26.50	56.33
90.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	2.30	2.76	7.526	0.269	0.000	22.82	41.71
90.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.526	0.269	0.000	0.00	42.83
90.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	3.30	3.96	7.526	0.269	0.000	32.79	191.24
90.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.526	0.269	0.000	0.00	47.98
94.92	(1) 0.28" RG-6	Yes	4.92	0.000	0.00	0.00	0.00	7.611	0.185	1.254	0.00	32.22
94.92	(6) 1 5/8" Coax	Yes	4.92	0.000	3.96	3.44	0.00	7.611	0.185	1.254	0.00	169.34
94.92	(1) 1 5/8" Hybriflex	Yes	4.92	0.000	1.98	2.63	0.00	7.611	0.185	1.254	0.00	55.79
94.92	(1) 7/8" Coax	Yes	4.92	0.000	1.09	2.27	0.00	7.611	0.185	1.254	0.00	41.38
95.00	(1) 0.28" RG-6	Yes	0.08	0.000	0.00	0.00	0.00	7.612	0.187	1.262	0.00	0.55
95.00	(6) 1 5/8" Coax	Yes	0.08	0.000	3.96	0.06	0.00	7.612	0.187	1.262	0.00	2.87
95.00	(1) 1 5/8" Hybriflex	Yes	0.08	0.000	1.98	0.04	0.00	7.612	0.187	1.262	0.00	0.95
95.00	(1) 7/8" Coax	Yes	0.08	0.000	1.09	0.04	0.00	7.612	0.187	1.262	0.00	0.70
99.83	(1) 0.28" RG-6	Yes	4.83	0.000	0.00	0.00	0.00	7.692	0.190	1.270	0.00	31.98
99.83	(6) 1 5/8" Coax	Yes	4.83	0.000	3.96	3.39	0.00	7.692	0.190	1.270	0.00	167.27
99.83	(1) 1 5/8" Hybriflex	Yes	4.83	0.000	1.98	2.60	0.00	7.692	0.190	1.270	0.00	55.22
99.83	(1) 7/8" Coax	Yes	4.83	0.000	1.09	2.24	0.00	7.692	0.190	1.270	0.00	41.02
100.0	(1) 0.28" RG-6	Yes	0.17	0.000	0.00	0.00	0.00	7.695	0.190	1.269	0.00	1.10
100.0	(6) 1 5/8" Coax	Yes	0.17	0.000	3.96	0.12	0.00	7.695	0.190	1.269	0.00	5.77
100.0	(1) 1 5/8" Hybriflex	Yes	0.17	0.000	1.98	0.09	0.00	7.695	0.190	1.269	0.00	1.90
100.0	(1) 7/8" Coax	Yes	0.17	0.000	1.09	0.08	0.00	7.695	0.190	1.269	0.00	1.41
105.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	7.774	0.163	1.188	0.00	33.41
105.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	3.52	0.00	7.774	0.163	1.188	0.00	173.87
105.0	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	2.70	0.00	7.774	0.163	1.188	0.00	57.52
110.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	7.851	0.168	1.203	0.00	33.71
110.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	3.53	0.00	7.851	0.168	1.203	0.00	174.64
110.0	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	2.70	0.00	7.851	0.168	1.203	0.00	57.89
115.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	7.925	0.173	1.219	0.00	33.99
115.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	3.54	0.00	7.925	0.173	1.219	0.00	175.38
115.0	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	2.71	0.00	7.925	0.173	1.219	0.00	58.25
120.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	7.996	0.119	1.057	0.00	34.27
120.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	3.55	0.00	7.996	0.119	1.057	0.00	176.10
125.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	8.065	0.123	1.069	0.00	34.54
125.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	3.55	0.00	8.065	0.123	1.069	0.00	176.79
<b>Totals:</b>											<b>1,426.81</b>	<b>11,019.96</b>



Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:45 AM  
 Page: 23



© 2007 - 2013 by ATC IP LLC. All rights reserved.

**Load Case:** 1.2D + 1.0Di + 1.0Wi      50.00 mph with 1.00 in Radial Ice      22 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

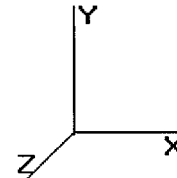
**Applied Segment Forces Summary**

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	171.17	1,945.71	0.00	0.00
10.00	168.75	2,668.95	0.00	0.00
15.00	166.07	2,675.78	0.00	0.00
20.00	173.25	2,670.18	0.00	0.00
25.00	260.88	2,657.42	0.00	0.00
30.00	268.69	2,639.92	0.00	0.00
35.00	274.90	2,619.05	0.00	0.00
40.00	279.88	2,595.62	0.00	0.00
45.00	283.87	2,570.18	0.00	0.00
46.83	104.09	935.80	0.00	0.00
50.00	183.10	2,330.47	0.00	0.00
53.00	174.39	2,187.80	0.00	0.00
55.00	116.47	1,013.99	0.00	0.00
60.00	294.36	2,513.33	0.00	0.00
65.00	295.81	2,482.86	0.00	0.00
70.00	296.81	2,451.55	0.00	0.00
75.00	297.41	2,419.47	0.00	0.00
80.00	297.64	2,386.73	0.00	0.00
85.00	297.56	2,353.38	0.00	0.00
90.00	646.88	5,365.74	0.00	442.81
94.92	175.00	1,968.65	0.00	0.00
95.00	2.97	45.87	0.00	0.00
99.83	172.15	2,628.31	0.00	0.00
100.0	148.64	481.58	0.00	313.83
105.0	175.34	1,767.19	0.00	0.00
110.0	172.46	1,734.35	0.00	0.00
115.0	1,207.05	7,459.42	0.00	0.00
120.0	166.24	1,520.68	0.00	0.00
125.0	665.72	4,643.62	0.00	228.42
130.0	159.48	1,181.19	0.00	0.00
135.0	155.92	1,145.86	0.00	0.00
137.0	696.69	3,885.65	0.00	341.63
140.0	90.75	637.05	0.00	0.00
145.0	148.46	1,030.43	0.00	0.00
147.9	1,135.84	7,445.66	0.00	849.97
147.9	0.49	3.20	0.00	0.00
<b>Totals:</b>	<b>10,325.19</b>	<b>87,062.61</b>	<b>0.00</b>	<b>2,176.66</b>

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:45 AM  
 Page: 24



© 2007 - 2013 by ATC IP LLC. All rights reserved.

**Load Case:** 1.2D + 1.0Di + 1.0Wi      50.00 mph with 1.00 in Radial Ice      22 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

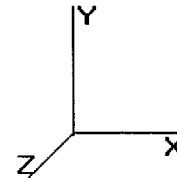
Wind Load Factor : 1.00

**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	-87.06	-10.37	0.00	-1,007.67	0.00	1,007.67	4,345.86	2,172.93	10,048.4	5,031.69	0.00	0.00	0.220
5.00	-85.10	-10.27	0.00	-955.84	0.00	955.84	4,297.95	2,148.97	9,746.71	4,880.60	0.03	-0.05	0.216
10.00	-82.42	-10.17	0.00	-904.49	0.00	904.49	4,248.67	2,124.33	9,446.21	4,730.12	0.11	-0.10	0.211
15.00	-79.74	-10.08	0.00	-853.62	0.00	853.62	4,198.03	2,099.01	9,147.11	4,580.35	0.25	-0.16	0.205
20.00	-77.06	-9.96	0.00	-803.24	0.00	803.24	4,146.02	2,073.01	8,849.60	4,431.38	0.44	-0.21	0.200
25.00	-74.40	-9.76	0.00	-753.42	0.00	753.42	4,092.65	2,046.33	8,553.86	4,283.29	0.69	-0.26	0.194
30.00	-71.75	-9.54	0.00	-704.62	0.00	704.62	4,037.92	2,018.96	8,260.07	4,136.18	1.00	-0.32	0.188
35.00	-69.12	-9.32	0.00	-656.89	0.00	656.89	3,981.82	1,990.91	7,968.42	3,990.13	1.35	-0.37	0.182
40.00	-66.52	-9.08	0.00	-610.31	0.00	610.31	3,924.36	1,962.18	7,679.09	3,845.25	1.77	-0.42	0.176
45.00	-63.95	-8.81	0.00	-564.92	0.00	564.92	3,865.54	1,932.77	7,392.25	3,701.62	2.23	-0.47	0.169
46.83	-63.01	-8.73	0.00	-548.76	0.00	548.76	3,843.63	1,921.82	7,287.74	3,649.29	2.42	-0.49	0.167
50.00	-60.68	-8.56	0.00	-521.11	0.00	521.11	3,805.35	1,902.68	7,108.10	3,559.33	2.75	-0.52	0.162
53.00	-58.49	-8.39	0.00	-495.43	0.00	495.43	3,811.38	1,905.69	7,136.13	3,573.37	3.09	-0.55	0.154
55.00	-57.47	-8.30	0.00	-478.65	0.00	478.65	3,786.98	1,893.49	7,023.14	3,516.79	3.33	-0.57	0.151
60.00	-54.95	-8.02	0.00	-437.15	0.00	437.15	3,725.01	1,862.51	6,742.74	3,376.38	3.96	-0.62	0.144
65.00	-52.47	-7.74	0.00	-397.03	0.00	397.03	3,661.69	1,830.84	6,465.44	3,237.53	4.63	-0.67	0.137
70.00	-50.01	-7.45	0.00	-358.33	0.00	358.33	3,597.00	1,798.50	6,191.43	3,100.31	5.35	-0.71	0.129
75.00	-47.59	-7.16	0.00	-321.06	0.00	321.06	3,530.95	1,765.47	5,920.87	2,964.83	6.12	-0.76	0.122
80.00	-45.20	-6.86	0.00	-285.25	0.00	285.25	3,463.53	1,731.77	5,653.95	2,831.18	6.94	-0.80	0.114
85.00	-42.85	-6.56	0.00	-250.94	0.00	250.94	3,394.75	1,697.38	5,390.86	2,699.44	7.79	-0.84	0.106
90.00	-37.49	-5.86	0.00	-217.68	0.00	217.68	3,324.61	1,662.30	5,131.78	2,569.70	8.69	-0.88	0.096
94.92	-35.52	-5.66	0.00	-188.88	0.00	188.88	3,235.43	1,617.71	4,852.78	2,430.00	9.61	-0.91	0.089
95.00	-35.48	-5.67	0.00	-188.41	0.00	188.41	3,233.85	1,616.92	4,848.02	2,427.61	9.63	-0.91	0.089
99.83	-32.85	-5.47	0.00	-161.00	0.00	161.00	2,561.72	1,280.86	3,809.83	1,907.74	10.57	-0.94	0.097
100.00	-32.37	-5.32	0.00	-159.77	0.00	159.77	2,559.96	1,279.98	3,803.41	1,904.53	10.60	-0.95	0.097
105.00	-30.60	-5.13	0.00	-133.18	0.00	133.18	2,506.38	1,253.19	3,612.46	1,808.91	11.61	-0.98	0.086
110.00	-28.87	-4.94	0.00	-107.52	0.00	107.52	2,451.43	1,225.72	3,424.36	1,714.72	12.66	-1.01	0.074
115.00	-21.43	-3.61	0.00	-82.79	0.00	82.79	2,395.12	1,197.56	3,239.30	1,622.06	13.73	-1.04	0.060
120.00	-19.91	-3.43	0.00	-64.73	0.00	64.73	2,337.45	1,168.73	3,057.46	1,531.00	14.83	-1.06	0.051
125.00	-15.28	-2.68	0.00	-47.36	0.00	47.36	2,271.20	1,135.60	2,869.91	1,437.09	15.96	-1.08	0.040
130.00	-14.10	-2.50	0.00	-33.97	0.00	33.97	2,192.15	1,096.07	2,672.63	1,338.30	17.10	-1.10	0.032
135.00	-12.96	-2.32	0.00	-21.47	0.00	21.47	2,113.09	1,056.55	2,482.37	1,243.03	18.26	-1.11	0.023
137.00	-9.09	-1.55	0.00	-16.48	0.00	16.48	2,081.47	1,040.73	2,408.24	1,205.91	18.73	-1.11	0.018
140.00	-8.45	-1.45	0.00	-11.82	0.00	11.82	2,034.04	1,017.02	2,299.14	1,151.28	19.43	-1.12	0.014
145.00	-7.43	-1.28	0.00	-4.57	0.00	4.57	1,954.98	977.49	2,122.94	1,063.05	20.60	-1.12	0.008
147.90	0.00	0.00	0.00	0.00	0.00	0.00	1,909.13	954.57	2,023.96	1,013.48	21.28	-1.12	0.000
147.92	0.00	0.00	0.00	0.00	0.00	0.00	1,908.86	954.43	2,023.38	1,013.20	21.29	-1.12	0.000

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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



11/18/2013 9:03:45 AM  
 Page: 25

© 2007 - 2013 by ATC IP LLC. All rights reserved.

<b>Load Case:</b> 1.0D + 1.0W	60.00 mph Serviceability	21 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)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	7.442	8.186	264.84	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.85	7.442	8.186	259.82	0.650	0.000	5.00	23.712	15.41	126.2	0.0	1,127.3
10.00		1.00	0.85	7.442	8.186	254.80	0.650	* 0.000	5.00	23.258	15.12	123.8	0.0	1,105.6
15.00		1.00	0.85	7.442	8.186	249.77	0.650	* 0.000	5.00	22.804	14.82	121.3	0.0	1,083.8
20.00		1.00	0.90	7.896	8.686	252.11	0.650	* 0.000	5.00	22.350	14.53	126.2	0.0	1,062.1
25.00		1.00	0.94	8.276	9.104	252.81	1.200	* 0.000	5.00	21.896	26.28	239.2	0.0	1,040.4
30.00		1.00	0.98	8.600	9.460	252.31	1.200	* 0.000	5.00	21.442	25.73	243.4	0.0	1,018.7
35.00		1.00	1.01	8.883	9.772	250.95	1.200	* 0.000	5.00	20.988	25.19	246.1	0.0	996.9
40.00		1.00	1.04	9.137	10.05	248.94	1.200	* 0.000	5.00	20.534	24.64	247.7	0.0	975.2
45.00		1.00	1.07	9.366	10.30	246.41	1.200	* 0.000	5.00	20.080	24.10	248.3	0.0	953.5
46.83	Bot - Section 2	1.00	1.07	9.445	10.39	245.37	1.200	* 0.000	1.83	7.249	8.70	90.4	0.0	344.2
50.00		1.00	1.09	9.576	10.53	243.46	1.200	* 0.000	3.17	12.578	15.09	159.0	0.0	1,184.8
53.00	Top - Section 1	1.00	1.10	9.694	10.66	241.52	1.200	* 0.000	3.00	11.748	14.10	150.3	0.0	1,106.4
55.00		1.00	1.11	9.770	10.74	244.18	1.200	* 0.000	2.00	7.741	9.29	99.8	0.0	367.5
60.00		1.00	1.13	9.951	10.94	240.62	1.200	* 0.000	5.00	19.036	22.84	250.0	0.0	903.5
65.00		1.00	1.15	10.120	11.13	236.80	1.200	* 0.000	5.00	18.582	22.30	248.2	0.0	881.8
70.00		1.00	1.17	10.279	11.30	232.76	1.200	* 0.000	5.00	18.128	21.75	246.0	0.0	860.1
75.00		1.00	1.19	10.430	11.47	228.51	1.200	* 0.000	5.00	17.674	21.21	243.3	0.0	838.3
80.00		1.00	1.20	10.572	11.62	224.08	1.200	* 0.000	5.00	17.220	20.66	240.3	0.0	816.6
85.00		1.00	1.22	10.708	11.77	219.49	1.200	* 0.000	5.00	16.766	20.12	237.0	0.0	794.9
90.00	Appertunance(s)	1.00	1.23	10.838	11.92	214.76	1.200	* 0.000	5.00	16.313	19.58	233.4	0.0	773.2
94.92	Bot - Section 3	1.00	1.25	10.960	12.05	209.97	0.650	* 0.000	4.92	15.598	10.14	122.2	0.0	739.1
95.00		1.00	1.25	10.962	12.05	209.89	0.650	* 0.000	0.08	0.265	0.17	2.1	0.0	22.8
99.83	Top - Section 2	1.00	1.26	11.077	12.18	205.06	0.650	* 0.000	4.83	15.154	9.85	120.0	0.0	1,305.1
100.0	Appertunance(s)	1.00	1.26	11.081	12.18	208.46	0.650	* 0.000	0.17	0.515	0.33	4.1	0.0	20.4
105.0		1.00	1.27	11.195	12.31	203.38	0.650	* 0.000	5.00	15.215	9.89	121.8	0.0	601.6
110.0		1.00	1.29	11.305	12.43	198.19	0.650	* 0.000	5.00	14.761	9.59	119.3	0.0	583.5
115.0	Appertunance(s)	1.00	1.30	11.412	12.55	192.90	0.650	* 0.000	5.00	14.307	9.30	116.7	0.0	565.4
120.0		1.00	1.31	11.514	12.66	187.52	0.650	* 0.000	5.00	13.854	9.00	114.1	0.0	547.3
125.0	Appertunance(s)	1.00	1.32	11.614	12.77	182.05	0.650	* 0.000	5.00	13.400	8.71	111.3	0.0	529.2
130.0		1.00	1.33	11.710	12.88	176.51	0.650	0.000	5.00	12.946	8.41	108.4	0.0	511.1
135.0		1.00	1.34	11.803	12.98	170.88	0.650	0.000	5.00	12.492	8.12	105.4	0.0	493.0
137.0	Appertunance(s)	1.00	1.35	11.840	13.02	168.62	0.650	0.000	2.00	4.870	3.17	41.2	0.0	192.1
140.0		1.00	1.35	11.894	13.08	165.19	0.650	0.000	3.00	7.168	4.66	61.0	0.0	282.7
145.0		1.00	1.36	11.982	13.18	159.43	0.650	0.000	5.00	11.584	7.53	99.2	0.0	456.8
147.9	Appertunance(s)	1.00	1.37	12.032	13.23	156.06	0.650	0.000	2.90	6.511	4.23	56.0	0.0	256.6
147.9		1.00	1.37	12.033	13.23	156.04	0.650	0.000	0.02	0.038	0.02	0.3	0.0	1.5

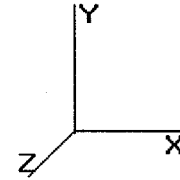
\* = Cf Adjusted By Linear Load Ra Effect

Totals: 147.92 5,223.0 0.0 25,342.5

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:45 AM  
 Page: 26



© 2007 - 2013 by ATC IP LLC. All rights reserved.

<b>Load Case: 1.0D + 1.0W</b>	<b>60.00 mph Serviceability</b>	<b>21 Iterations</b>
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

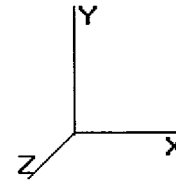
**Discrete Appurtenance Segment Forces (Factored)**

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
90.00	Argus LLPX310R	3	10.888	11.977	0.58	0.80	7.52	0.000	2.000	90.02	0.00	180.04	85.80
90.00	Collar	1	10.838	11.921	1.00	1.00	8.50	0.000	0.000	101.33	0.00	0.00	560.00
90.00	DragonWave A-ANT-	2	10.913	12.004	0.90	1.00	8.44	0.000	3.000	101.34	0.00	304.01	54.20
90.00	DragonWave Horizon	2	10.838	11.921	0.40	0.80	0.34	0.000	0.000	4.01	0.00	0.00	21.20
90.00	NextNet BTS-2500	3	10.838	11.921	0.40	0.80	2.18	0.000	0.000	26.04	0.00	0.00	105.00
100.0	Antel BCD-87010_25	1	11.195	12.315	1.00	1.00	2.90	0.000	5.000	35.71	0.00	178.56	26.50
100.0	Stand-Off	1	11.081	12.189	1.00	1.00	6.30	0.000	0.000	76.79	0.00	0.00	150.00
115.0	Alcatel-Lucent RRH2x	3	11.412	12.553	0.54	0.80	3.47	0.000	0.000	43.60	0.00	0.00	132.00
115.0	Antel BXA-171063-12B	1	11.412	12.553	0.80	0.80	3.78	0.000	0.000	47.50	0.00	0.00	15.00
115.0	Antel BXA-171063-12C	3	11.412	12.553	0.70	0.80	10.12	0.000	0.000	126.99	0.00	0.00	45.00
115.0	Antel BXA-171063-8BF	2	11.412	12.553	0.80	0.80	4.70	0.000	0.000	59.05	0.00	0.00	21.00
115.0	Antel BXA-70063-6CF-	3	11.412	12.553	0.62	0.80	13.99	0.000	0.000	175.61	0.00	0.00	51.00
115.0	Antel BXA-70063-6CF-	3	11.412	12.553	0.62	0.80	13.99	0.000	0.000	175.61	0.00	0.00	51.00
115.0	Flat Low Profile Pla	1	11.412	12.553	1.00	1.00	26.10	0.000	0.000	327.63	0.00	0.00	1,500.00
115.0	RFS DB-T1-6Z-8AB-0Z	1	11.412	12.553	0.80	0.80	3.84	0.000	0.000	48.20	0.00	0.00	110.00
125.0	Andrew	6	11.633	12.797	0.40	0.80	1.13	0.000	1.000	14.43	0.00	14.43	66.00
125.0	RFS APX16DWV-	3	11.633	12.797	0.53	0.80	9.63	0.000	1.000	123.24	0.00	123.24	118.80
125.0	RFS APX16PV-16PVL-	3	11.633	12.797	0.53	0.80	9.57	0.000	1.000	122.43	0.00	122.43	118.80
125.0	Round T-Arm	3	11.614	12.775	0.50	0.75	14.62	0.000	0.000	186.80	0.00	0.00	750.00
137.0	48" x 4" Panels	9	11.876	13.064	0.65	0.80	12.19	0.000	2.000	159.23	0.00	318.47	180.00
137.0	Flat Low Profile Pla	1	11.840	13.024	1.00	1.00	26.10	0.000	0.000	339.93	0.00	0.00	1,500.00
147.9	48" x 12" Panels	9	12.068	13.275	0.50	0.75	22.93	0.000	2.100	304.38	0.00	639.20	270.00
147.9	72" x 12" Panels	3	12.068	13.275	0.50	0.75	12.26	0.000	2.100	162.70	0.00	341.67	135.00
147.9	Flat Platform with H	1	12.032	13.236	1.00	1.00	42.40	0.000	0.000	561.19	0.00	0.00	2,000.00
										<b>3,413.75</b>			<b>8,066.30</b>

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:45 AM  
 Page: 27



© 2007 - 2013 by ATC IP LLC. All rights reserved.

<b>Load Case:</b> 1.0D + 1.0W	60.00 mph Serviceability	21 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

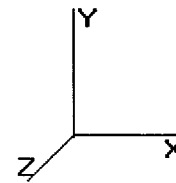
**Linear Appurtenance Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Exposed Ca	Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
10.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	7.442	0.189	1.266	0.00	0.14
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	7.442	0.189	1.266	0.00	24.60
10.00	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	7.442	0.189	1.266	0.00	6.50
10.00	(1) 7/8" Coax	Yes	5.00	0.000	1.09	0.45	0.00	7.442	0.189	1.266	0.00	1.65
10.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.442	0.189	1.266	0.00	1.50
10.00	(2) 3" Conduit	Yes	5.00	0.000	3.50	1.46	0.00	7.442	0.189	1.266	0.00	75.80
10.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.442	0.189	1.266	0.00	1.35
15.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	7.442	0.192	1.277	0.00	0.14
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	7.442	0.192	1.277	0.00	24.60
15.00	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	7.442	0.192	1.277	0.00	6.50
15.00	(1) 7/8" Coax	Yes	5.00	0.000	1.09	0.45	0.00	7.442	0.192	1.277	0.00	1.65
15.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.442	0.192	1.277	0.00	1.50
15.00	(2) 3" Conduit	Yes	5.00	0.000	3.50	1.46	0.00	7.442	0.192	1.277	0.00	75.80
15.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.442	0.192	1.277	0.00	1.35
20.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	7.896	0.196	1.289	0.00	0.14
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	7.896	0.196	1.289	0.00	24.60
20.00	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	7.896	0.196	1.289	0.00	6.50
20.00	(1) 7/8" Coax	Yes	5.00	0.000	1.09	0.45	0.00	7.896	0.196	1.289	0.00	1.65
20.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.896	0.196	1.289	0.00	1.50
20.00	(2) 3" Conduit	Yes	5.00	0.000	3.50	1.46	0.00	7.896	0.196	1.289	0.00	75.80
20.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	7.896	0.196	1.289	0.00	1.35
25.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	8.276	0.200	0.000	0.00	0.14
25.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	8.276	0.200	0.000	18.03	24.60
25.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	8.276	0.200	0.000	9.01	6.50
25.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	8.276	0.200	0.000	4.96	1.65
25.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	8.276	0.200	0.000	0.00	1.50
25.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	8.276	0.200	0.000	15.93	75.80
25.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	8.276	0.200	0.000	0.00	1.35
30.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	8.600	0.205	0.000	0.00	0.14
30.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	8.600	0.205	0.000	18.73	24.60
30.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	8.600	0.205	0.000	9.37	6.50
30.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	8.600	0.205	0.000	5.16	1.65
30.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	8.600	0.205	0.000	0.00	1.50
30.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	8.600	0.205	0.000	16.55	75.80
30.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	8.600	0.205	0.000	0.00	1.35
35.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	8.883	0.209	0.000	0.00	0.14
35.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	8.883	0.209	0.000	19.35	24.60
35.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	8.883	0.209	0.000	9.67	6.50
35.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	8.883	0.209	0.000	5.33	1.65
35.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	8.883	0.209	0.000	0.00	1.50
35.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	8.883	0.209	0.000	17.10	75.80
35.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	8.883	0.209	0.000	0.00	1.35
40.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	9.137	0.214	0.000	0.00	0.14
40.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	9.137	0.214	0.000	19.90	24.60
40.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	9.137	0.214	0.000	9.95	6.50
40.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	9.137	0.214	0.000	5.48	1.65
40.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	9.137	0.214	0.000	0.00	1.50
40.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	9.137	0.214	0.000	17.59	75.80
40.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	9.137	0.214	0.000	0.00	1.35
45.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	9.366	0.218	0.000	0.00	0.14
45.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	9.366	0.218	0.000	20.40	24.60

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:45 AM  
 Page: 28



© 2007 - 2013 by ATC IP LLC. All rights reserved.

**Load Case: 1.0D + 1.0W**                      60.00 mph Serviceability                      21 Iterations

Gust Response Factor : 1.10                      Wind Importance Factor : 1.00

Dead Load Factor : 1.00

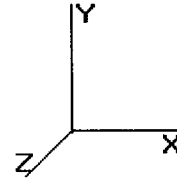
Wind Load Factor : 1.00

45.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	9.366	0.218	0.000	10.20	6.50
45.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	9.366	0.218	0.000	5.62	1.65
45.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	9.366	0.218	0.000	0.00	1.50
45.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	9.366	0.218	0.000	18.03	75.80
45.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	9.366	0.218	0.000	0.00	1.35
46.83	(1) 0.28" RG-6	Yes	1.83	0.000	0.00	0.00	0.00	9.445	0.222	0.000	0.00	0.05
46.83	(6) 1 5/8" Coax	Yes	1.83	1.200	3.96	0.61	0.73	9.445	0.222	0.000	7.54	9.02
46.83	(1) 1 5/8" Hybriflex	Yes	1.83	1.200	1.98	0.30	0.36	9.445	0.222	0.000	3.77	2.38
46.83	(1) 7/8" Coax	Yes	1.83	1.200	1.09	0.17	0.20	9.445	0.222	0.000	2.08	0.61
46.83	(2) 1/2" Coax	Yes	1.83	0.000	0.00	0.00	0.00	9.445	0.222	0.000	0.00	0.55
46.83	(2) 3" Conduit	Yes	1.83	1.200	3.50	0.53	0.64	9.445	0.222	0.000	6.67	27.79
46.83	(6) 5/16" Coax	Yes	1.83	0.000	0.00	0.00	0.00	9.445	0.222	0.000	0.00	0.50
50.00	(1) 0.28" RG-6	Yes	3.17	0.000	0.00	0.00	0.00	9.576	0.225	0.000	0.00	0.09
50.00	(6) 1 5/8" Coax	Yes	3.17	1.200	3.96	1.04	1.25	9.576	0.225	0.000	13.21	15.58
50.00	(1) 1 5/8" Hybriflex	Yes	3.17	1.200	1.98	0.52	0.63	9.576	0.225	0.000	6.60	4.12
50.00	(1) 7/8" Coax	Yes	3.17	1.200	1.09	0.29	0.35	9.576	0.225	0.000	3.64	1.04
50.00	(2) 1/2" Coax	Yes	3.17	0.000	0.00	0.00	0.00	9.576	0.225	0.000	0.00	0.95
50.00	(2) 3" Conduit	Yes	3.17	1.200	3.50	0.92	1.11	9.576	0.225	0.000	11.68	48.01
50.00	(6) 5/16" Coax	Yes	3.17	0.000	0.00	0.00	0.00	9.576	0.225	0.000	0.00	0.85
53.00	(1) 0.28" RG-6	Yes	3.00	0.000	0.00	0.00	0.00	9.694	0.228	0.000	0.00	0.09
53.00	(6) 1 5/8" Coax	Yes	3.00	1.200	3.96	0.99	1.19	9.694	0.228	0.000	12.67	14.76
53.00	(1) 1 5/8" Hybriflex	Yes	3.00	1.200	1.98	0.50	0.59	9.694	0.228	0.000	6.33	3.90
53.00	(1) 7/8" Coax	Yes	3.00	1.200	1.09	0.27	0.33	9.694	0.228	0.000	3.49	0.99
53.00	(2) 1/2" Coax	Yes	3.00	0.000	0.00	0.00	0.00	9.694	0.228	0.000	0.00	0.90
53.00	(2) 3" Conduit	Yes	3.00	1.200	3.50	0.88	1.05	9.694	0.228	0.000	11.20	45.48
53.00	(6) 5/16" Coax	Yes	3.00	0.000	0.00	0.00	0.00	9.694	0.228	0.000	0.00	0.81
55.00	(1) 0.28" RG-6	Yes	2.00	0.000	0.00	0.00	0.00	9.770	0.227	0.000	0.00	0.06
55.00	(6) 1 5/8" Coax	Yes	2.00	1.200	3.96	0.66	0.79	9.770	0.227	0.000	8.51	9.84
55.00	(1) 1 5/8" Hybriflex	Yes	2.00	1.200	1.98	0.33	0.40	9.770	0.227	0.000	4.26	2.60
55.00	(1) 7/8" Coax	Yes	2.00	1.200	1.09	0.18	0.22	9.770	0.227	0.000	2.34	0.66
55.00	(2) 1/2" Coax	Yes	2.00	0.000	0.00	0.00	0.00	9.770	0.227	0.000	0.00	0.60
55.00	(2) 3" Conduit	Yes	2.00	1.200	3.50	0.58	0.70	9.770	0.227	0.000	7.52	30.32
55.00	(6) 5/16" Coax	Yes	2.00	0.000	0.00	0.00	0.00	9.770	0.227	0.000	0.00	0.54
60.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	9.951	0.230	0.000	0.00	0.14
60.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	9.951	0.230	0.000	21.67	24.60
60.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	9.951	0.230	0.000	10.84	6.50
60.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	9.951	0.230	0.000	5.97	1.65
60.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	9.951	0.230	0.000	0.00	1.50
60.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	9.951	0.230	0.000	19.16	75.80
60.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	9.951	0.230	0.000	0.00	1.35
65.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	10.120	0.236	0.000	0.00	0.14
65.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	10.120	0.236	0.000	22.04	24.60
65.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	10.120	0.236	0.000	11.02	6.50
65.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	10.120	0.236	0.000	6.07	1.65
65.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	10.120	0.236	0.000	0.00	1.50
65.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	10.120	0.236	0.000	19.48	75.80
65.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	10.120	0.236	0.000	0.00	1.35
70.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	10.279	0.242	0.000	0.00	0.14
70.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	10.279	0.242	0.000	22.39	24.60
70.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	10.279	0.242	0.000	11.19	6.50
70.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	10.279	0.242	0.000	6.16	1.65
70.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	10.279	0.242	0.000	0.00	1.50
70.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	10.279	0.242	0.000	19.79	75.80
70.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	10.279	0.242	0.000	0.00	1.35
75.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	10.430	0.248	0.000	0.00	0.14
75.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	10.430	0.248	0.000	22.72	24.60
75.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	10.430	0.248	0.000	11.36	6.50

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:45 AM  
 Page: 29



© 2007 - 2013 by ATC IP LLC. All rights reserved.

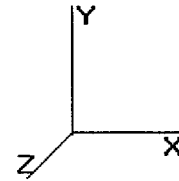
<b>Load Case:</b> 1.0D + 1.0W	<b>60.00 mph Serviceability</b>	<b>21 Iterations</b>
<b>Gust Response Factor:</b> 1.10		<b>Wind Importance Factor:</b> 1.00
<b>Dead Load Factor:</b> 1.00		
<b>Wind Load Factor:</b> 1.00		

75.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	10.430	0.248	0.000	6.25	1.65
75.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	10.430	0.248	0.000	0.00	1.50
75.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	10.430	0.248	0.000	20.08	75.80
75.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	10.430	0.248	0.000	0.00	1.35
80.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	10.572	0.255	0.000	0.00	0.14
80.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	10.572	0.255	0.000	23.03	24.60
80.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	10.572	0.255	0.000	11.51	6.50
80.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	10.572	0.255	0.000	6.34	1.65
80.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	10.572	0.255	0.000	0.00	1.50
80.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	10.572	0.255	0.000	20.35	75.80
80.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	10.572	0.255	0.000	0.00	1.35
85.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	10.708	0.262	0.000	0.00	0.14
85.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	10.708	0.262	0.000	23.32	24.60
85.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	10.708	0.262	0.000	11.66	6.50
85.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	10.708	0.262	0.000	6.42	1.65
85.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	10.708	0.262	0.000	0.00	1.50
85.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	10.708	0.262	0.000	20.61	75.80
85.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	10.708	0.262	0.000	0.00	1.35
90.00	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	10.838	0.269	0.000	0.00	0.14
90.00	(6) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	10.838	0.269	0.000	23.60	24.60
90.00	(1) 1 5/8" Hybriflex	Yes	5.00	1.200	1.98	0.82	0.99	10.838	0.269	0.000	11.80	6.50
90.00	(1) 7/8" Coax	Yes	5.00	1.200	1.09	0.45	0.55	10.838	0.269	0.000	6.50	1.65
90.00	(2) 1/2" Coax	Yes	5.00	0.000	0.00	0.00	0.00	10.838	0.269	0.000	0.00	1.50
90.00	(2) 3" Conduit	Yes	5.00	1.200	3.50	1.46	1.75	10.838	0.269	0.000	20.86	75.80
90.00	(6) 5/16" Coax	Yes	5.00	0.000	0.00	0.00	0.00	10.838	0.269	0.000	0.00	1.35
94.92	(1) 0.28" RG-6	Yes	4.92	0.000	0.00	0.00	0.00	10.960	0.185	1.254	0.00	0.14
94.92	(6) 1 5/8" Coax	Yes	4.92	0.000	3.96	1.62	0.00	10.960	0.185	1.254	0.00	24.19
94.92	(1) 1 5/8" Hybriflex	Yes	4.92	0.000	1.98	0.81	0.00	10.960	0.185	1.254	0.00	6.39
94.92	(1) 7/8" Coax	Yes	4.92	0.000	1.09	0.45	0.00	10.960	0.185	1.254	0.00	1.62
95.00	(1) 0.28" RG-6	Yes	0.08	0.000	0.00	0.00	0.00	10.962	0.187	1.262	0.00	0.00
95.00	(6) 1 5/8" Coax	Yes	0.08	0.000	3.96	0.03	0.00	10.962	0.187	1.262	0.00	0.41
95.00	(1) 1 5/8" Hybriflex	Yes	0.08	0.000	1.98	0.01	0.00	10.962	0.187	1.262	0.00	0.11
95.00	(1) 7/8" Coax	Yes	0.08	0.000	1.09	0.01	0.00	10.962	0.187	1.262	0.00	0.03
99.83	(1) 0.28" RG-6	Yes	4.83	0.000	0.00	0.00	0.00	11.077	0.190	1.270	0.00	0.14
99.83	(6) 1 5/8" Coax	Yes	4.83	0.000	3.96	1.60	0.00	11.077	0.190	1.270	0.00	23.78
99.83	(1) 1 5/8" Hybriflex	Yes	4.83	0.000	1.98	0.80	0.00	11.077	0.190	1.270	0.00	6.28
99.83	(1) 7/8" Coax	Yes	4.83	0.000	1.09	0.44	0.00	11.077	0.190	1.270	0.00	1.60
100.0	(1) 0.28" RG-6	Yes	0.17	0.000	0.00	0.00	0.00	11.081	0.190	1.269	0.00	0.00
100.0	(6) 1 5/8" Coax	Yes	0.17	0.000	3.96	0.05	0.00	11.081	0.190	1.269	0.00	0.82
100.0	(1) 1 5/8" Hybriflex	Yes	0.17	0.000	1.98	0.03	0.00	11.081	0.190	1.269	0.00	0.22
100.0	(1) 7/8" Coax	Yes	0.17	0.000	1.09	0.02	0.00	11.081	0.190	1.269	0.00	0.05
105.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	11.195	0.163	1.188	0.00	0.14
105.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	11.195	0.163	1.188	0.00	24.60
105.0	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	11.195	0.163	1.188	0.00	6.50
110.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	11.305	0.168	1.203	0.00	0.14
110.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	11.305	0.168	1.203	0.00	24.60
110.0	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	11.305	0.168	1.203	0.00	6.50
115.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	11.412	0.173	1.219	0.00	0.14
115.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	11.412	0.173	1.219	0.00	24.60
115.0	(1) 1 5/8" Hybriflex	Yes	5.00	0.000	1.98	0.82	0.00	11.412	0.173	1.219	0.00	6.50
120.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	11.514	0.119	1.057	0.00	0.14
120.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	11.514	0.119	1.057	0.00	24.60
125.0	(1) 0.28" RG-6	Yes	5.00	0.000	0.00	0.00	0.00	11.614	0.123	1.069	0.00	0.14
125.0	(6) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	11.614	0.123	1.069	0.00	24.60
<b>Totals:</b>											<b>790.03</b>	<b>2,105.21</b>

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:45 AM  
 Page: 30



© 2007 - 2013 by ATC IP LLC. All rights reserved.

<b>Load Case:</b> 1.0D + 1.0W	60.00 mph Serviceability	21 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

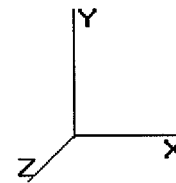
**Applied Segment Forces Summary**

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	126.17	1,127.29	0.00	0.00
10.00	123.75	1,426.18	0.00	0.00
15.00	121.34	1,404.45	0.00	0.00
20.00	126.18	1,382.73	0.00	0.00
25.00	287.13	1,361.00	0.00	0.00
30.00	293.21	1,339.28	0.00	0.00
35.00	297.56	1,317.55	0.00	0.00
40.00	300.57	1,295.83	0.00	0.00
45.00	302.50	1,274.10	0.00	0.00
46.83	110.44	461.73	0.00	0.00
50.00	194.12	1,387.86	0.00	0.00
53.00	184.03	1,298.74	0.00	0.00
55.00	122.47	495.73	0.00	0.00
60.00	307.67	1,224.12	0.00	0.00
65.00	306.84	1,202.39	0.00	0.00
70.00	305.50	1,180.67	0.00	0.00
75.00	303.72	1,158.94	0.00	0.00
80.00	301.54	1,137.22	0.00	0.00
85.00	299.00	1,115.49	0.00	0.00
90.00	618.86	1,919.97	0.00	484.05
94.92	122.23	977.02	0.00	0.00
95.00	2.08	26.86	0.00	0.00
99.83	120.02	1,538.95	0.00	0.00
100.0	116.58	204.93	0.00	178.56
105.0	121.79	841.90	0.00	0.00
110.0	119.32	823.80	0.00	0.00
115.0	1,120.92	2,730.69	0.00	0.00
120.0	114.05	707.30	0.00	0.00
125.0	558.18	1,742.79	0.00	260.10
130.0	108.39	597.15	0.00	0.00
135.0	105.42	579.05	0.00	0.00
137.0	540.38	1,906.55	0.00	318.47
140.0	60.96	312.26	0.00	0.00
145.0	99.24	505.95	0.00	0.00
147.9	1,084.28	2,690.15	0.00	980.87
147.9	0.32	1.49	0.00	0.00
<b>Totals:</b>	<b>9,426.80</b>	<b>40,698.11</b>	<b>0.00</b>	<b>2,222.05</b>



Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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



11/18/2013 9:03:45 AM  
 Page: 31

© 2007 - 2013 by ATC IP LLC. All rights reserved.

<b>Load Case:</b> 1.0D + 1.0W	60.00 mph Serviceability	21 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

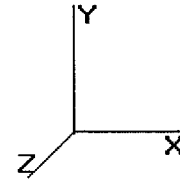
**Calculated Forces**

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	-40.69	-9.44	0.00	-861.85	0.00	861.85	4,345.86	2,172.93	10,048.4	5,031.69	0.00	0.00	0.181
5.00	-39.56	-9.35	0.00	-814.64	0.00	814.64	4,297.95	2,148.97	9,746.71	4,880.60	0.02	-0.04	0.176
10.00	-38.13	-9.25	0.00	-767.91	0.00	767.91	4,248.67	2,124.33	9,446.21	4,730.12	0.10	-0.09	0.171
15.00	-36.72	-9.15	0.00	-721.66	0.00	721.66	4,198.03	2,099.01	9,147.11	4,580.35	0.21	-0.13	0.166
20.00	-35.33	-9.05	0.00	-675.89	0.00	675.89	4,146.02	2,073.01	8,849.60	4,431.38	0.38	-0.18	0.161
25.00	-33.96	-8.79	0.00	-630.63	0.00	630.63	4,092.65	2,046.33	8,553.86	4,283.29	0.59	-0.22	0.156
30.00	-32.61	-8.51	0.00	-586.70	0.00	586.70	4,037.92	2,018.96	8,260.07	4,136.18	0.84	-0.27	0.150
35.00	-31.29	-8.23	0.00	-544.14	0.00	544.14	3,981.82	1,990.91	7,968.42	3,990.13	1.15	-0.31	0.144
40.00	-29.99	-7.95	0.00	-502.98	0.00	502.98	3,924.36	1,962.18	7,679.09	3,845.25	1.50	-0.35	0.138
45.00	-28.72	-7.65	0.00	-463.25	0.00	463.25	3,865.54	1,932.77	7,392.25	3,701.62	1.89	-0.39	0.133
46.83	-28.25	-7.55	0.00	-449.23	0.00	449.23	3,843.63	1,921.82	7,287.74	3,649.29	2.04	-0.41	0.130
50.00	-26.86	-7.35	0.00	-425.33	0.00	425.33	3,805.35	1,902.68	7,108.10	3,559.33	2.32	-0.44	0.127
53.00	-25.56	-7.17	0.00	-403.27	0.00	403.27	3,811.38	1,905.69	7,136.13	3,573.37	2.61	-0.46	0.120
55.00	-25.07	-7.05	0.00	-388.93	0.00	388.93	3,786.98	1,893.49	7,023.14	3,516.79	2.80	-0.48	0.117
60.00	-23.84	-6.75	0.00	-353.66	0.00	353.66	3,725.01	1,862.51	6,742.74	3,376.38	3.33	-0.52	0.111
65.00	-22.64	-6.45	0.00	-319.90	0.00	319.90	3,661.69	1,830.84	6,465.44	3,237.53	3.89	-0.55	0.105
70.00	-21.45	-6.14	0.00	-287.66	0.00	287.66	3,597.00	1,798.50	6,191.43	3,100.31	4.49	-0.59	0.099
75.00	-20.30	-5.84	0.00	-256.94	0.00	256.94	3,530.95	1,765.47	5,920.87	2,964.83	5.13	-0.63	0.092
80.00	-19.16	-5.54	0.00	-227.74	0.00	227.74	3,463.53	1,731.77	5,653.95	2,831.18	5.80	-0.66	0.086
85.00	-18.04	-5.24	0.00	-200.05	0.00	200.05	3,394.75	1,697.38	5,390.86	2,699.44	6.51	-0.69	0.079
90.00	-16.13	-4.60	0.00	-173.39	0.00	173.39	3,324.61	1,662.30	5,131.78	2,569.70	7.25	-0.72	0.072
94.92	-15.15	-4.47	0.00	-150.77	0.00	150.77	3,235.43	1,617.71	4,852.78	2,430.00	8.01	-0.75	0.067
95.00	-15.12	-4.47	0.00	-150.40	0.00	150.40	3,233.85	1,616.92	4,848.02	2,427.61	8.02	-0.75	0.067
99.83	-13.59	-4.33	0.00	-128.79	0.00	128.79	2,561.72	1,280.86	3,809.83	1,907.74	8.79	-0.78	0.073
100.00	-13.38	-4.22	0.00	-127.89	0.00	127.89	2,559.96	1,279.98	3,803.41	1,904.53	8.82	-0.78	0.072
105.00	-12.54	-4.09	0.00	-106.80	0.00	106.80	2,506.38	1,253.19	3,612.46	1,808.91	9.65	-0.81	0.064
110.00	-11.72	-3.96	0.00	-86.35	0.00	86.35	2,451.43	1,225.72	3,424.36	1,714.72	10.51	-0.83	0.055
115.00	-9.00	-2.81	0.00	-66.53	0.00	66.53	2,395.12	1,197.56	3,239.30	1,622.06	11.39	-0.85	0.045
120.00	-8.30	-2.68	0.00	-52.50	0.00	52.50	2,337.45	1,168.73	3,057.46	1,531.00	12.29	-0.87	0.038
125.00	-6.56	-2.10	0.00	-38.81	0.00	38.81	2,271.20	1,135.60	2,869.91	1,437.09	13.21	-0.89	0.030
130.00	-5.96	-1.98	0.00	-28.31	0.00	28.31	2,192.15	1,096.07	2,672.63	1,338.30	14.15	-0.90	0.024
135.00	-5.39	-1.87	0.00	-18.39	0.00	18.39	2,113.09	1,056.55	2,482.37	1,243.03	15.10	-0.91	0.017
137.00	-3.49	-1.30	0.00	-14.33	0.00	14.33	2,081.47	1,040.73	2,408.24	1,205.91	15.48	-0.91	0.014
140.00	-3.18	-1.23	0.00	-10.42	0.00	10.42	2,034.04	1,017.02	2,299.14	1,151.28	16.06	-0.92	0.011
145.00	-2.67	-1.13	0.00	-4.25	0.00	4.25	1,954.98	977.49	2,122.94	1,063.05	17.02	-0.92	0.005
147.90	0.00	0.00	0.00	0.00	0.00	0.00	1,909.13	954.57	2,023.96	1,013.48	17.58	-0.92	0.000
147.92	0.00	0.00	0.00	0.00	0.00	0.00	1,908.86	954.43	2,023.38	1,013.20	17.58	-0.92	0.000

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:46 AM  
 Page: 32



© 2007 - 2013 by ATC IP LLC. All rights reserved.

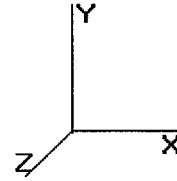
### Analysis Summary

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	38.87	0.00	48.77	0.00	0.00	3544.01	0.00	0.72
0.9D + 1.6W	37.82	0.00	36.57	0.00	0.00	3442.29	0.00	0.69
1.2D + 1.0Di + 1.0Wi	10.37	0.00	87.06	0.00	0.00	1007.67	0.00	0.22
1.0D + 1.0W	9.44	0.00	40.69	0.00	0.00	861.85	0.00	0.18

Pole : 302466  
 Location : West Service Road, CT  
 Height : 147.9 (ft)  
 Base Dia : 56.58 (in)  
 Top Dia : 26.21 (in)  
 Shape : 18 Sides  
 Taper : 0.214565 (in/ft)

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

11/18/2013 9:03:46 AM  
 Page: 33



© 2007 - 2013 by ATC IP LLC. All rights reserved.

## Base Summary

### Reactions

Original Design			Analysis			Moment Design %
Moment (kip-ft)	Axial (kip)	Shear (kip)	Moment (kip-ft)	Axial (kip)	Shear (kip)	
3,969.00	39.50	29.40	3,544.01	87.06	38.87	89.29

### 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	2.500	69.000	Round	0	0.00	11.224	559.22	946.99	0.59

### 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
63.00	16	2.25" 18J	2.25	75.00	100.00	Radial	0.00	0.0	174.20	260.00	0.69	163.32	260.00	0.65