



# 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)

April 23, 2009

Mark R. Richard  
UMTS Project Manager  
T-Mobile USA, Inc.  
35 Griffin Road South  
Bloomfield, CT 06002

RE: **EM-T-MOBILE-014-090309** - Omnipoint Communications, as subsidiary of T-Mobile USA, Inc., notice of intent to modify an existing telecommunications facility located at 405 Brushy Plain Road, Branford, Connecticut.

Dear Mr. Richard:

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.

The proposed modifications are to be implemented as specified here and in your notice dated March 5, 2009, including the placement of all necessary equipment and shelters within the tower compound. 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. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

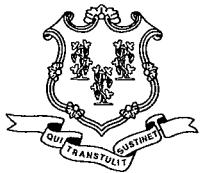
Very truly yours,

S. Derek Phelps  
Executive Director

SDP/MP/laf

c: The Honorable Anthony "Unk" DaRos, First Selectman, Town of Branford  
Diana Ross, Inland Wetland Enforcement Officer, Town of Branford  
Justine K. Gillen, Zoning Enforcement Officer, Town of Branford  
American Tower Corporation  
Carrie L. Larson, Esq., Pullman & Comley, LLC





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

March 13, 2009

The Honorable Anthony "Unk" DaRos  
First Selectman  
Town of Branford  
Town Hall  
1019 Main Street  
P. O. Box 150  
Branford, CT 06405-0150

RE: **EM-T-MOBILE-014-090309** - Omnipoint Communications, as subsidiary of T-Mobile USA, Inc., notice of intent to modify an existing telecommunications facility located at 405 Brushy Plain Road, Branford, Connecticut.

Dear Mr. DaRos:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

If you have any questions or comments regarding this proposal, please call me or inform the Council by March 27, 2009.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps  
Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Justine K. Gillen, Zoning Enforcement Officer, Town of Branford  
Diana Ross, Inland Wetland Enforcement Officer, Town of Branford

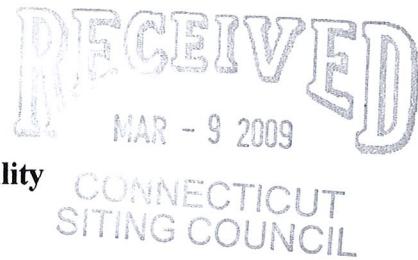
March 5, 2009

ORIGINAL

Via Federal Express

S. Derek Phelps, Executive Director  
Connecticut Siting Council  
Ten Franklin Square  
New Britain, CT 06051

**Re: Notice of Exempt Modification**  
**American Tower Corporation Telecommunications Facility**  
**405 Brushy Plain Road, Branford, Connecticut**  
**T-Mobile Site CTNH102C**



Dear Mr. Phelps:

Omnipoint Communications, a subsidiary of T-Mobile USA, Inc. ("T-Mobile"), intends to replace existing antennas, install additional antennas and replace existing ground equipment at the existing 150-foot Monopole Tower facility owned by American Tower Corporation. and located at 405 Brushy Plain Road, Branford, Connecticut ("Facility"). T-Mobile is licensed by the Federal Communications Commission (FCC) to provide PCS wireless telecommunications service in the State of Connecticut, which includes the area to be served by the proposed installation. This installation constitutes an exempt modification pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes Section 16-50g *et. seq.* (PUESA), and Section 16-50j-72(b)(2) of the Regulations of the Connecticut State Agencies adopted pursuant to PUESA. In accordance with R.C.S.A. Section 16-50j-73, a copy of this notice has been sent to, Anthony DaRos, First Selectman, Town of Branford.

The existing Facility consists of a 150-foot Monopole Tower capable of supporting multiple carriers within a fenced compound and was previously approved by the Town of Waterford. The coordinates for the Facility are approximately **Lat: 41°-19'-00" and Long: 72°-49-13"**. The tower is located in the northern portion of Branford, approximately 900 feet south of the North Branford Town Line, approximately 3000 feet south of Foxon Road (Route 80) and roughly 2 miles north of Interstate 95 (see Site Map, attached as Exhibit A). The tower currently supports Verizon antennas at the one hundred ten foot (110') level centerline AGL (above-ground level), and AT&T (New Cingular) antennas at the one hundred fifty foot level (150'). T-Mobile currently has antennas on the tower at the one hundred forty foot (140') AGL. The current T-Mobile antenna configuration is two per sector, for a total of six antennas. T-Mobile proposes to replace one T-Mobile antenna per sector, for a total of six antennas at their current elevation on the tower. T-Mobile proposes to install three RFS APXV18-2090014-C antennas on existing pipe mounts at the same elevation, one hundred forty foot (140') level centerline AGL. T-Mobile also intends to replace one of it's existing S-12000 equipment cabinets with a UMTS 3106 equipment cabinet. One existing S-12000 equipment cabinet will remain. The two cabinets will be mounted on T-Mobile's existing equipment pad contained within T-Mobile's existing lease area. T-Mobile intends to run new coaxial cable on its existing ice bridge from its current equipment pad to the existing tower. (See Design Drawings and Equipment Specifications, attached as Exhibits B and C respectively).

For the following reasons, the proposed modifications to the Brushy Plain Road Facility meet the exempt modification criteria set forth in R.C.S.A. Section 16-50j-72(b)(2):

1. The proposed modification will not increase the height of the tower as T-Mobile seeks to add to its existing antenna configuration and install additional antennas at a center line height of approximately 140 feet.
2. The installation and replacement of T-Mobile's antennas and ground equipment will not require an extension of the site boundaries.
3. The proposed modifications will not increase the noise levels at the existing Facility by six decibels or more.
4. The operation of the additional antennas will not increase the total radio frequency (RF) power density, measured at the site boundary, to a level at or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. The worst-case RF power density calculations for the proposed T-Mobile antennas would be 32.317% of the FCC standard (see general power density calculations table, attached as Exhibit D).

Also attached, Exhibit E, is a structural assessment confirming that the tower can support the existing and proposed antennas and associated equipment. Of note, because all antennas are internally mounted in the flagpole, the additional three antennas will not increase the ice and winding loading for the tower.

For the foregoing reasons, T-Mobile respectfully submits that the proposed antenna installation and equipment at the Branford Facility constitutes an exempt modification under R.C.S.A. Section 16-50j-72(b)(2).

Respectfully Submitted,



Mark R. Richard  
UMTS Project Manager  
Agent for T-Mobile

cc: Anthony DaRos, First Selectman  
Edward F. and Kristen L. Jaconette, underlying property owner

# **Exhibit A**

## **Site Map**

**T-Mobile Site CTNH102C**

**405 Brushy Plain Road  
Branford, Connecticut**

**TM-NH102C**

Lidyhites  
Pond

TOTOKET

Water  
Tank

Branford  
Supply Ponds

Shoe

Bare Plain  
Cem

Totoket

Harrison  
Sch

Batties

BM

69

Bk

Jr High Sch

BM 85

Upper Run Sch

Pipeline

ROCK

Aqueduct

TELEPHONE

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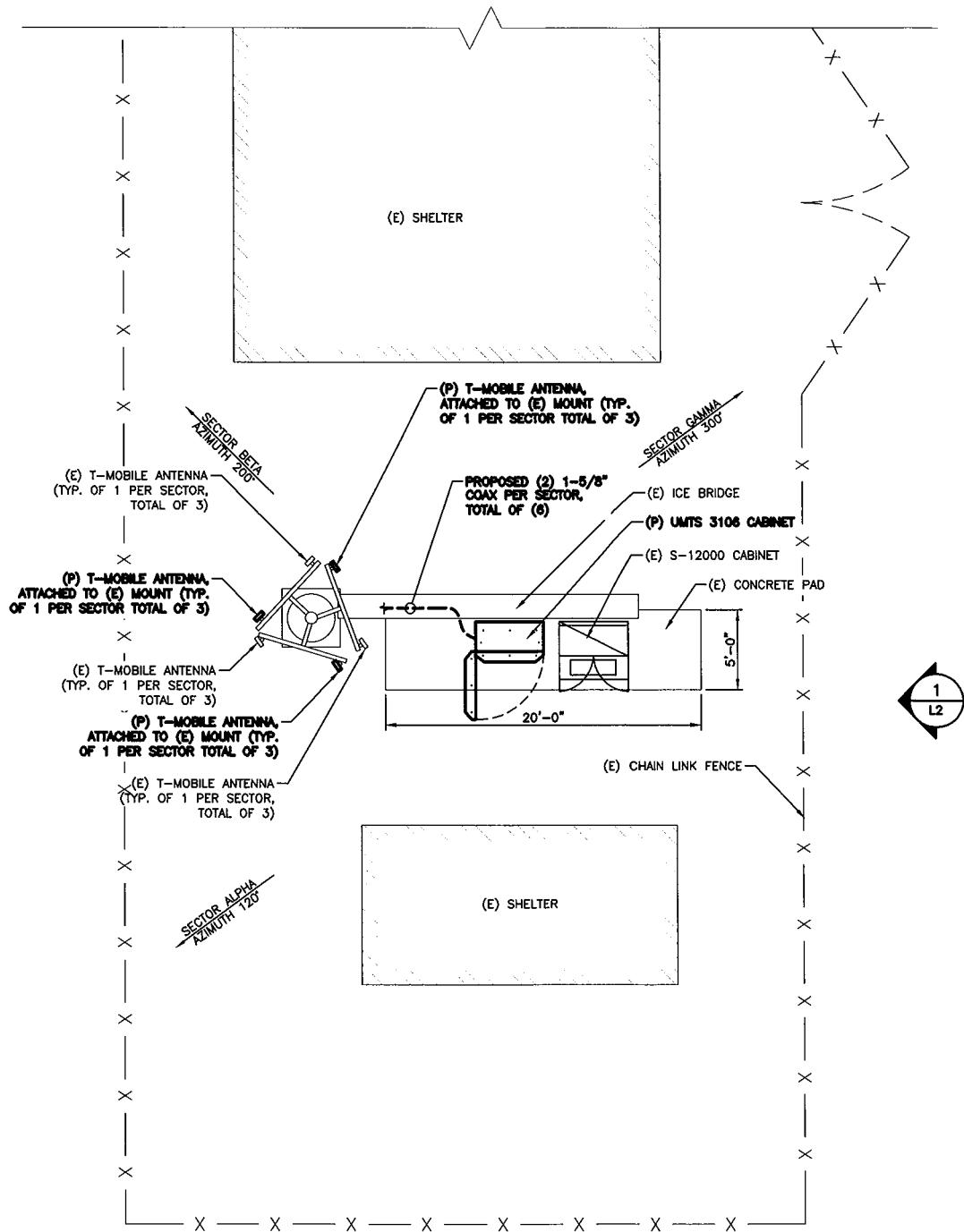
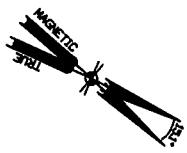
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## **Exhibit B**

### **Design Drawings**

**T-Mobile Site CTNH102C**

**405 Brushy Plain Road  
Branford, Connecticut**



## **COMPOUND LAYOUT PLAN**

SCALE: NTS

1

**T-Mobile**  
35 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002

— 50 Eastman St.  
South Easton, MA 02375  
Phone: (508) 936-6393  
Fax: (508) 936-6395

PROJECT LOCATION:  BRANFORD AMERICAN TOWER  <b>CTNH102C</b>	PROJECT MANAGER:  KB	DRAWN BY:  KO	BSDA PROJ. #:  2898.293
405 BUSHY PLAIN RD BRANFORD, CT 06405			SHEET:  <b>L1</b>
APPROVED BY:	REV 1	<b>COMPOUND LAYOUT PLAN</b>	
	01/19/09		

Q OF EXISTING ANTENNAS  
ELEV.: 153'-0" ± AGL.

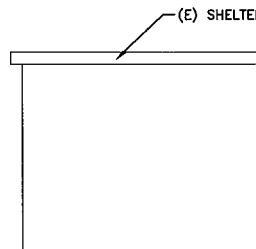
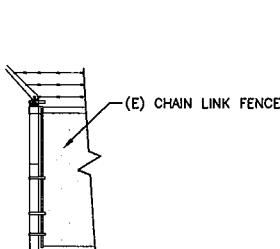
TOP OF MONPOLE  
ELEV.: 150'-0" ± AGL.

Q OF T-MOBILE ANTENNAS  
ELEV.: 140'-0" ± AGL.

(E) T-MOBILE ANTENNA (TYP.  
OF 1 PER SECTOR, TOTAL OF 3)

(P) T-MOBILE ANTENNA,  
ATTACHED TO (E) MOUNT  
(TYP. OF 1 PER SECTOR  
TOTAL OF 3)

PROPOSED (2) 1-5/8" COAX  
PER SECTOR, TOTAL OF (6)



(P) 3106 CABINET BEHIND  
(E) S-12000 CABINET

(E) S-12000

(E) CONCRETE PAD

(E) 150' MONPOLE

(E) ICE BRIDGE

GROUND LINE  
ELEV.: 0'-0" ± AGL.

## ELEVATION

SCALE: N.T.S.

1

**T-Mobile**  
35 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002

**MAXTON**

50 Eastman St.  
South Easton, MA 02375  
Phone: (508) 836-6363  
Fax: (508) 836-6363

PROJECT LOCATION:  
BRANFORD AMERICAN TOWER  
**CTNH102C**  
405 BUSHY PLAIN RD  
BRANFORD, CT 06405

APPROVED BY:

PROJECT MANAGER:  
KB  
DRAWN BY:  
KO  
BSDA PROJ #:  
2898.293  
SHEET:  
ELEVATION  
REV 1  
01/19/09

L2

## **Exhibit C**

### **Equipment Specifications**

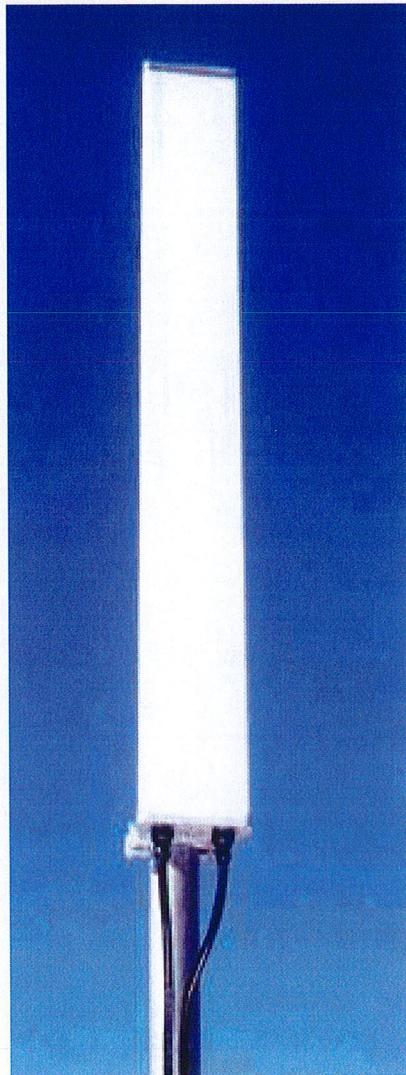
**T-Mobile Site CTNH102C**

**405 Brushy Plain Road  
Branford, Connecticut**



### Product Description

This variable tilt antenna provides exceptional suppression of all upper sidelobes at all downtilt angles. It also features a wide downtilt range with optional remote tilt.



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



## Features/Benefits

- Variable electrical downtilt - provides enhanced precision in controlling intercell interference. The tilt is infield adjustable 0-10 deg.
- High Suppression of all Upper Sidelobes (Typically <-20dB).
- Optional remote tilt - can be retrofitted.
- Two X-Polarised panels in a single radome.
- Dual polarization.
- Low profile for low visual impact.
- Broadband design.

## Technical Features

Frequency Band	3G/UMTS (Single, Broad, Dual and Triple-Band)
Horizontal Pattern	Directional
Antenna Type	Panel Dual Polarized
Electrical Down Tilt Option	Variable
Gain, dBi (dBd)	16.5 (14.4), 16.5 (14.4)
Frequency Range, MHz	1710-2170
Connector Type	(2) 7-16 DIN Female
Connector Location	Bottom
Mount Type	Downtilt
Electrical Downtilt, deg	0-10
Horizontal Beamwidth, deg	88
Mounting Hardware	APM40-2
Rated Wind Speed, km/h (mph)	160 (100)
VSWR	< 1.5:1
Vertical Beamwidth, deg	7.0, 6.4
1st Upper Sidelobe Suppression, dB	> 19 first (typically > 22)
Upper Sidelobe Suppression, dB	> 17 all other (typically > 20)
Polarization	Dual pol +/-45°
Front-To-Back Ratio, dB	> 26
Maximum Power Input, W	300
Isolation between Ports, dB	> 30
Lightning protection	Direct Ground
3rd Order IMP @ 2 x 38 dBm, dBc	> 160

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

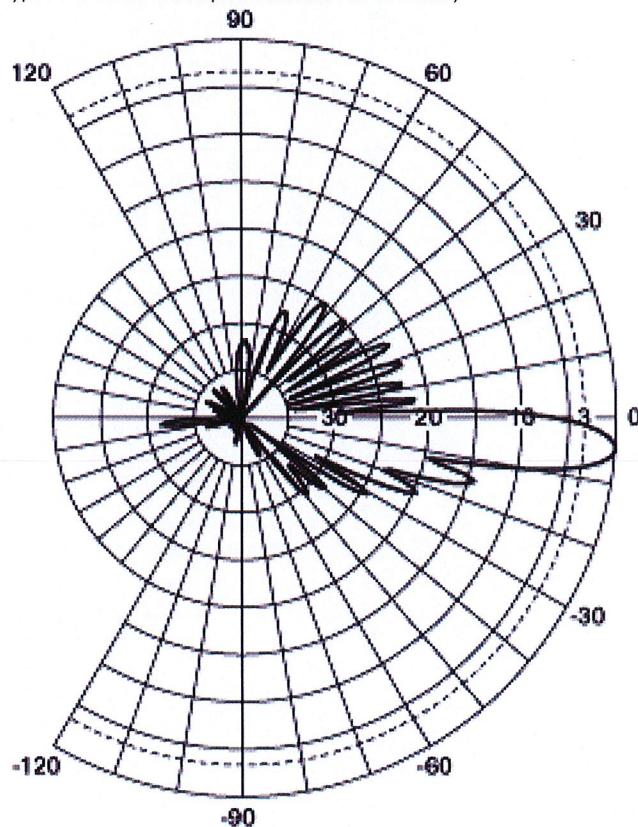
## Optimizer® Panel Dual Polarized Antenna



Overall Length, m (ft)	1.34 (4.39)
Dimensions - HxWxD, mm (in)	1349 x 169 x 80 (53.0 x 6.6 x 3.2)
Weight w/o Mtg. Hardware, kg (lb)	8.5 (18.7)
Radiating Element Material	Brass
Radome Material	Fiberglass
Reflector Material	Aluminum
Max Wind Loading Area, m <sup>2</sup> (ft <sup>2</sup> )	0.29 (3.0)
Survival Wind Speed, km/h (mph)	200 (125)
Maximum Thrust @ Rated Wind, N (lbf)	380 (85)
Shipping Weight, kg (lb)	14.1 (30.6)
Packing Dimensions, HxWxD, mm (in)	1520 x 260 x 200 (59.8 x 10.2 x 7.8)

## Vertical Pattern

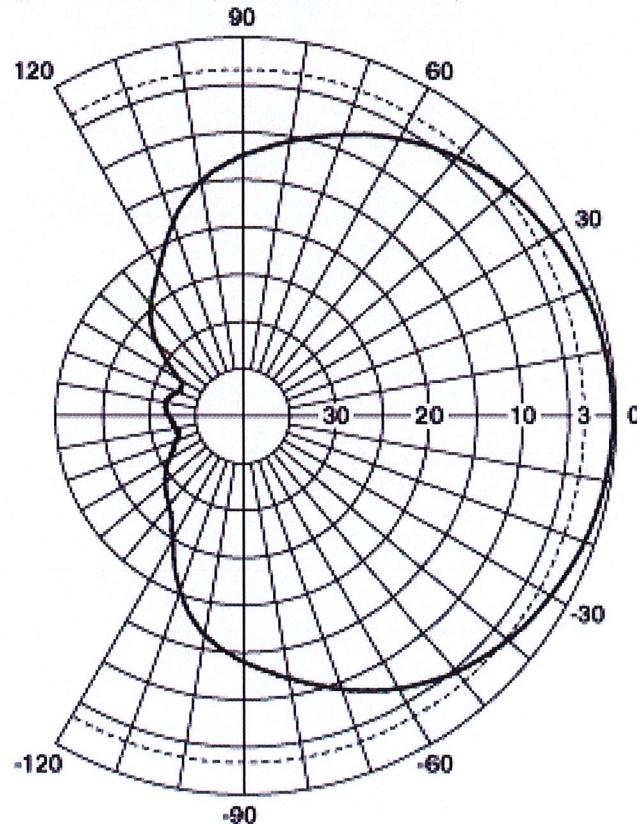
(This is a general representation of the antenna family pattern. For the latest detailed pattern contact Applications Engineering.  
You may also download the CELplot(TM) pattern reader and antenna pattern data fields from our website.)



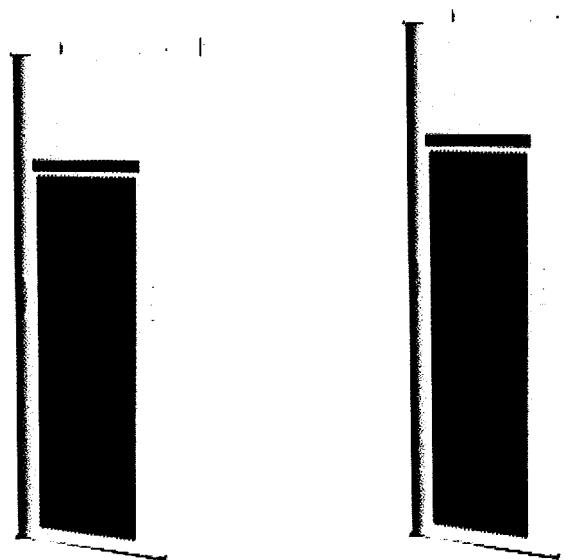
All information contained in the present datasheet is subject to confirmation at time of ordering.

**Horizontal Pattern**

(This is a general representation of the antenna family pattern. For the latest detailed pattern contact Applications Engineering.  
You may also download the CELplot(TM) pattern reader and antenna pattern data fields from our website.)



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

**The Indoor Cabinets (Two Variants Available)**

*Figure 1 RBS 3206 F and E Cabinet*

- Indoor specified
- RBS 3206F cabinet with slots for 6 radio units (single and dual band configurations)
- RBS 3206E cabinet with slots for 9 radio units (dual-band configurations only)
- The cabinets fulfil seismic requirements
- Minimal footprint
- Hot-spot heat management and fan control

The RBS 3206 cabinet footprint is the same as for the GSM RBS 2206 and WCDMA RBS 3202 cabinet. The RBS 3206 cabinet is intended for indoor sites with primarily high capacity and high coverage requirements. The RBS 3206 can be equipped with an optional integrated power supply voltages other than -48 VDC or a space for auxiliary transport network equipment.

### The Outdoor Cabinet



*Figure 2 RBS 3106 Cabinet*

- Specified for outdoor environment
- Can be configured for both 6 and 9 radio units.
- The cabinet fulfils seismic requirements
- Vandal protected
- Forced convection and heat exchanger (Eco-Cooling)

The RBS 3106 cabinet has the same footprint as the GSM RBS 2106 and the WCDMA RBS 3101.

The RBS 3106 cabinet is a weatherproof outdoor cabinet for outdoor sites with primarily high capacity and high coverage requirements. The RBS 3106 houses integrated power supply with optional backup batteries, space for transmission equipment and a climate package for ensuring an indoor climate for all units inside, including the batteries.

## 2 Descriptions

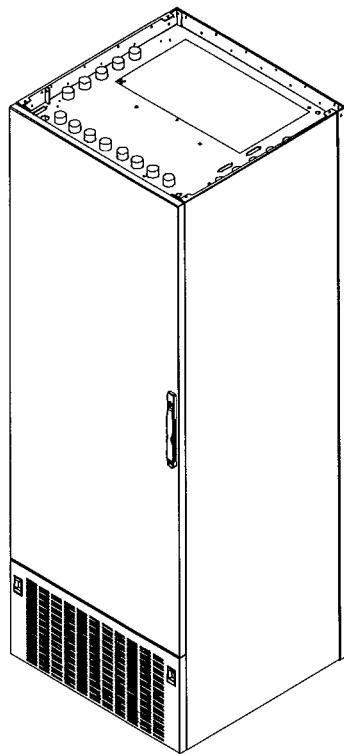
The RBS HW is modularly structured into several subsystems for easy expansion and evolution purposes. From a physical viewpoint the subsystems are located together on shelves in the cabinet. The shelves are basically identical between the cabinets.

### 3.3. GENERAL VIEW

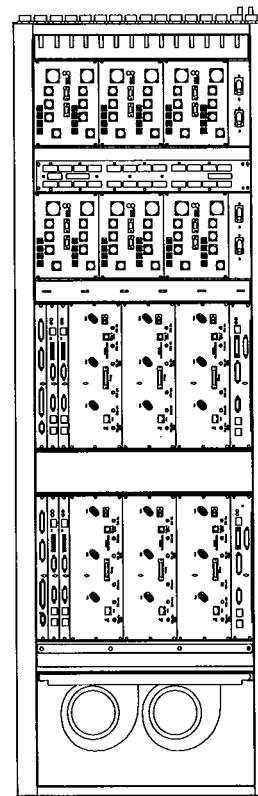
#### 3.3.1 BTS 18000 INDOOR SPECIFIC

The BTS 18000 indoor cabinet consists of the following specific elements:

- Indoor enclosure
- DC breaker panel
- BTS 18000 Integrated Cooling System (SICS)



**Figure 3.1: BTS 18000 indoor cabinet overview (door closed)**

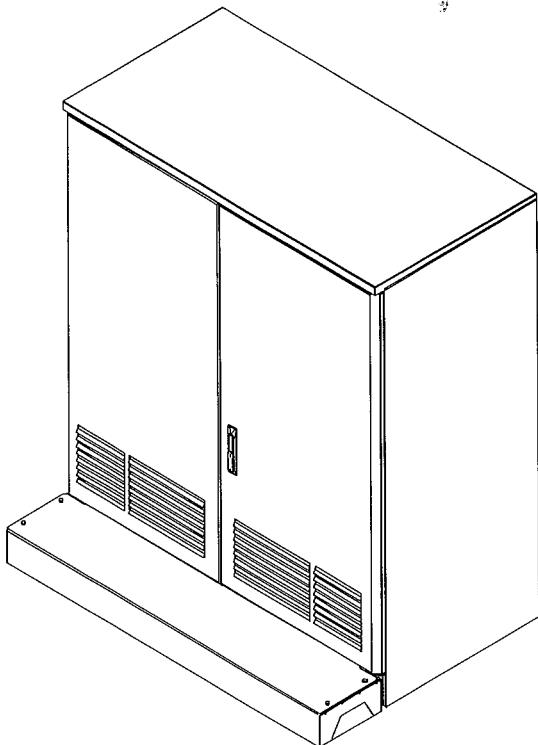


**Figure 3.2: BTS 18000 indoor cabinet fully populated overview (door open)**

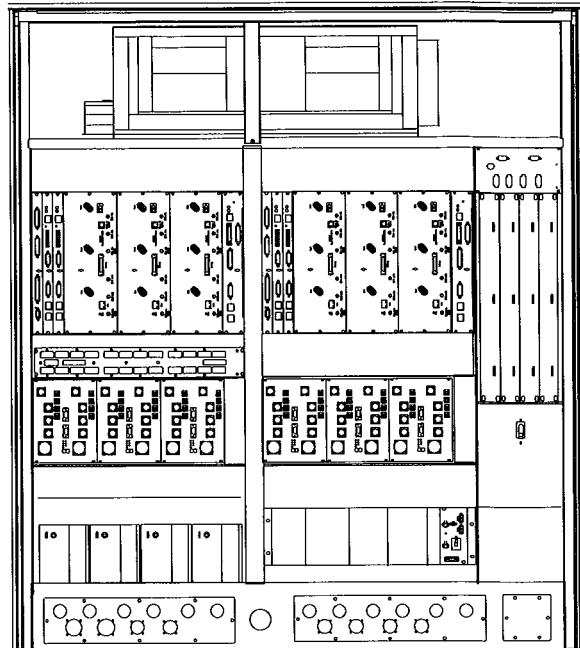
#### 3.3.2 BTS 18000 OUTDOOR SPECIFIC

The BTS 18000 outdoor cabinet consists of the following specific elements:

- Outdoor enclosure including AC Distribution Unit (ADU)
- AC/DC power supply: Universal Compact Power System (UCPS)
- Environmental Control Unit (ECU)
- Rack user and its associated User ICO



**Figure 3.3 : BTS 18000 outdoor cabinet overview (door closed)**



**Figure 3.4 : BTS 18000 outdoor cabinet fully populated overview (door open)**

### 3.3.3 BTS 18000 INDOOR/OUTDOOR SHARING ELEMENTS

The Indoor and Outdoor BTS 18000 variant share the following modules :

- Back-planes and ICO: Interface Back Plane (IBP), Digital Back-plane (DBP), Radio ICO (RICO)
- up to two Quad Interface module (IFM)
- One Interface Control Module (ICM) or two .
- Up to two spare module (SPM)
- Up to two Alarm collector and Bridge Module (ABM)
- Up to six Radio Module (RM)
- Up to six Dual diplexer module (DDM)

For the two variants, DDM are physically grouped into 2 combiner racks. The digital rack consists of the association of IFM, ICM, ABM, SPM and RM modules. There are two digital racks per cabinet. The association of one combiner rack and one digital rack will be further named "shelf"

## **Exhibit D**

### **Power Density Calculations**

**T-Mobile Site CTNH102C**

**405 Brushy Plain Road  
Branford, Connecticut**



T-Mobile USA Inc.  
35 Griffin Rd South, Bloomfield, CT 06002-1853  
Phone: (860) 692-7100  
Fax: (860) 692-7159

## Technical Memo

To: Maxton  
From: Farid Marbouh - Radio Frequency Engineer  
cc: Jason Overbey  
Subject: Power Density Report for CTNH102C  
Date: February 13, 2009

### 1. Introduction:

This report is the result of an Electromagnetic Field Intensities (EMF - Power Densities) study for the T-Mobile PCS antenna installation on a Monopole at 405 Brushy Plain Rd, Branford, CT. This study incorporates the most conservative consideration for determining the practical combined worst case power density levels that would be theoretically encountered from locations surrounding the transmitting location.

### 2. Discussion:

The following assumptions were used in the calculations:

- 1) The emissions from T-Mobile transmitters are in the (1935-1944.8), (1980.2-1984.8), (2140-2145), (2110-2120)MHz frequency Band.
- 2) The antenna array consists of three sectors, with 2 antennas per sector.
- 3) The model number for GSM antenna is APXV18-206516S.
- 3) The model number for UMTS antenna is APXV18-206516S.
- 4) GSM antenna center line height is 140 ft.
- 4) UMTS antenna center line height is 140 ft.
- 5) The maximum transmit power from any GSM sector is 2125.01 Watts Effective Radiated Power (EiRP) assuming 8 channels per sector.
- 5) The maximum transmit power from any UMTS sector is 2119.97 Watts Effective Radiated Power (EiRP) assuming 2 channels per sector.
- 6) All the antennas are simultaneously transmitting and receiving, 24 hours a day.
- 7) Power levels emitting from the antennas are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
- 8) The average ground level of the studied area does not change significantly with respect to the transmitting location

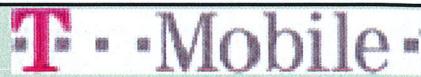
Equations given in "FCC OET Bulletin 65, Edition 97-01" were then used with the above information to perform the calculations.

### 3. Conclusion:

Based on the above worst case assumptions, the power density calculation from the T-Mobile PCS antenna installation on a Monopole at 405 Brushy Plain Rd, Branford, CT, is 0.05187 mW/cm<sup>2</sup>. This value represents 5.187% of the Maximum Permissible Exposure (MPE) standard of 1 milliwatt per square centimeter (mW/cm<sup>2</sup>) set forth in the FCC/ANSI/IEEE C95.1-1991. Furthermore, the proposed antenna location for T-Mobile will not interfere with existing public safety communications, AM or FM radio broadcasts, TV, Police Communications, HAM Radio communications or any other signals in the area.

The combined Power Density from other carriers is 27.13%. The combined Power Density for the site is 32.317% of the M.P.E. standard.

## Connecticut Market



### Worst Case Power Density

Site: CTNH102C  
 Site Address: 405 Brushy Plain Rd  
 Town: Branford  
 Tower Height: 150 ft.  
 Tower Style: Monopole

GSM Data		UMTS Data			
Base Station TX output	20 W	Base Station TX output	40 W		
Number of channels	8	Number of channels	2		
Antenna Model	APXV18-206516S	Antenna Model	APXV18-206516S		
Cable Size	1 5/8 in.	Cable Size	1 5/8 in.		
Cable Length	161 ft.	Cable Length	161 ft.		
Antenna Height	140.0 ft.	Antenna Height	140.0 ft.		
Ground Reflection	1.6	Ground Reflection	1.6		
Frequency	1945.0 MHz	Frequency	2.1 GHz		
Jumper & Connector loss	4.50 dB	Jumper & Connector loss	1.50 dB		
Antenna Gain	17.6 dBi	Antenna Gain	17.6 dBi		
Cable Loss per foot	0.0116 dB	Cable Loss per foot	0.0116 dB		
Total Cable Loss	1.8676 dB	Total Cable Loss	1.8676 dB		
Total Attenuation	6.3676 dB	Total Attenuation	3.3676 dB		
Total EIRP per Channel (In Watts)	54.24 dBm 265.63 W	Total EIRP per Channel (In Watts)	60.25 dBm 1059.99 W		
Total EIRP per Sector (In Watts)	63.27 dBm 2125.01 W	Total EIRP per Sector (In Watts)	63.26 dBm 2119.97 W		
nsg	11.2324	nsg	14.2324		
Power Density (S) =	0.025964 mW/cm^2	Power Density (S) =	0.025902 mW/cm^2		
T-Mobile Worst Case % MPE =		5.1866%			
Equation Used: $S = \frac{(1000(\text{grf})^2 (\text{Power}) \cdot 10^{(\text{nsg} \cdot 10)}}{4\pi (R)^2}$					
<small>Office of Engineering and Technology (OET) Bulletin 65, Edition 97-01, August 1997</small>					

### Co-Location Total

	% of Standard
Carrier	
Verizon	9.2400 %
Cingular	4.9500 %
Sprint	
AT&T Wireless	
Nexel	
Pocket	
Other Antenna Systems	12.9400 %
<b>Total Excluding T-Mobile</b>	<b>27.1300 %</b>
T-Mobile	5.1866
<b>Total % MPE for Site</b>	<b>32.3166%</b>

## **Exhibit E**

### **Structural Analysis**

**T-Mobile Site CTNH102C**

**405 Brushy Plain Road  
Branford, Connecticut**

PASSED



**AMERICAN TOWER™**  
CORPORATION

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## Structural Analysis Report

Structure : 150 ft. ITT Meyer monopole  
ATC Site Name : Branford CT 6, CT  
ATC Site Number : 302484  
Proposed Carrier : T-Mobile  
Carrier Site Name : Branford American Tower  
Carrier Site Number : CTNH102C  
County : New Haven  
Eng. Number : 42922421  
Date : February 10, 2009  
Usage : 72% Pole shaft, 53% Anchor bolts, 35%  
Base plate

Submitted by:  
Robert Keith  
Project Engineer

American Tower Engineering Services  
8505 Freeport Parkway  
Suite 135  
Irving, TX 75063  
Phone: 972-999-8900





**AMERICAN TOWER™**  
CORPORATION

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## **Structural Analysis Report**

**Structure** : 150 ft. ITT Meyer monopole  
**ATC Site Name** : Branford CT 6, CT  
**ATC Site Number** : 302484  
**Proposed Carrier** : T-Mobile  
**Carrier Site Name** : Branford American Tower  
**Carrier Site Number** : CTNH102C  
**County** : New Haven  
**Eng. Number** : 42922421  
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Base plate

Submitted by:  
Robert Keith  
Project Engineer

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**American Tower Engineering Services**  
8505 Freeport Parkway  
Suite 135  
Irving, TX 75063  
Phone: 972-999-8900

## Introduction

The purpose of this report is to summarize results of the structural analysis performed on the 150 ft. ITT Meyer monopole located at Branford CT 6, CT, New Haven County (ATC site# 302484). The tower was originally designed by Paul J. Ford and Company (Job# 29297-629, dated Oct 2, 1997) and manufactured by ITT Meyer (Type "B" per AT&T Spec dated April 13, 1984). The pole base has been modified per SpectraSite Modification Drawing CT-0020 M1. The pole shaft has been structurally modified per ATC Modification Job# 26487334 dated 9/15/06.

## Analysis

The existing tower was analyzed using Semaan Engineering Solutions, Inc., Software. The analysis assumes that the tower is in good, undamaged, and non-corroded condition.

Basic Wind Speed: 115.0 mph (3-Second Gust)

Radial Ice: 50.0 mph (3-Second Gust) w/ 1.25" ice

Standard/Code: ANSI/TIA-222-G / 2006 IBC / 2005 & 2008 CT Supplement

## Antenna Loads

The following antenna loads were used in the tower analysis.

### Existing Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (I/O)	Carrier
150.0	1	4' Omni	Platform w/ Rails	(1) 1 5/8 (I)	USA Mobility
	1	Yagi		(1) 1 1/2 (I)	
	2	Decibel DB408		(2) 7/8 (I)	Town of Branford
	3	Diplexer		-	AT&T Mobility
	6	ADC DD1900		-	
	6	CSS DUO1417-8686		(6) 7/8 (I)	
	1	GPS		(1) 1 1/2 (I)	
113.0	3	Decibel DB932DG90E-M	(3) T-Arm	(3) 1 1/4 (I)	Verizon
	6	Decibel DB844H90E		(6) 1 1/4 (I)	
103.0	2	Decibel DB408	(1) Standoff	(2) 7/8 (I)	Town of Branford
93.0	1	Decibel DB408	(1) Standoff	(1) 7/8 (I)	
40.0	1	Channel Master 1.2 M Dish	Dish Mount	(1) RG6 (O)	USA Mobility

### Antenna Loads (continued)

#### Proposed Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (I/O)	Carrier
140.0	3	RFS ATMAP1412D-1A20	(3) T-Arm	-	T-Mobile
	3	RFS ATMAA1412D-1A20		-	
	3	RFS APXV18-206516S-C-A20		(6) 1 5/8 (O)	
	3	RFS APXV18-206516L-C-00		(6) 1 5/8 (O)	

Note: (O) – Coax installed outside the pole shaft. (I) – Coax installed inside the pole shaft.

The existing and the proposed transmission lines were considered running inside or outside the pole shaft as indicated above. The proposed lines are considered running outside the pole. They may be stacked and installed between the existing reinforcing bars attached to the outside of the pole shaft.

#### Results

The existing 150 ft. ITT Meyer monopole with the existing and the proposed antennas is structurally acceptable per TIA/EIA-222 Rev F standards. The maximum structure usage is: 72% Pole shaft, 53% Anchor bolts, 35% Base plate.

Additional exit and/or entry ports may be required to accommodate the running of the proposed lines to the proposed antennas. These additional ports may not be installed without installation drawings providing the location, size and welding requirements of each port.

To ensure compliance with all conditions of this structural analysis, port installation drawings shall be provided by American Tower's Engineering Department under a subsequent project.

Pole Reactions	Original Design Reactions	Original Design Reactions w/ 1.35 Multiplier*	Current Analysis Reactions	% Of Design
Moment (ft-kips)	2,130.70	2,876.4	2,796.1	97.2
Shear (kips)	23.3	31.5	31.5	100.0

(\*) The original design reaction is factored by 1.35 per TIA-EIA Rev G section 15.5.1.

The structure base reactions resulting from the current analysis do not exceed the factored ones shown on the original structural drawings or calculations. Therefore, no modification to the existing foundation will be required.

Eng. Number 42922421  
February 10, 2009  
Page 3

**Conclusion**

The existing monopole and its foundation were found to be adequate to support the existing and proposed antennas with the transmission line distribution as described above while meeting the requirements of the code or standard as specified in this report.

If you have any questions or require additional information, please call (972) 999-8900.

## **Standard Conditions**

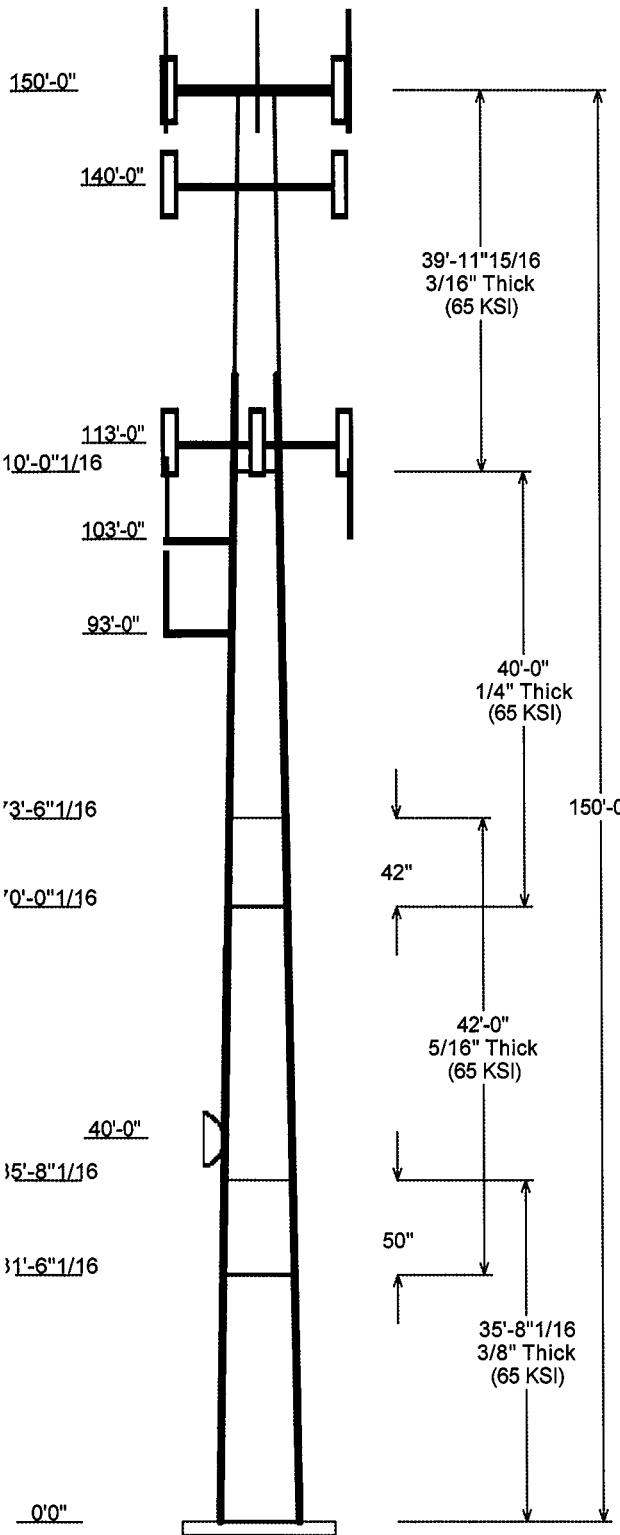
All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessarily limited, to:

- Information supplied by the client regarding the structure itself, the antenna 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 Engineering Services 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 are in an un-corroded condition and have not deteriorated; and we, therefore, assume that their capacity has not significantly changed from the "as new" condition.

All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. 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. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/EIA-222.

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



## Job Information

Pole: 302484	Code: ANSI/TIA-222 Rev G
Description : 150 ft. ITT Meyer monopole	Struct Class : II
Client : T-Mobile	Exposure : B
Location : Branford CT 6, CT	Topo : 1
Shape : 12 Sides	Base Elev (ft): 0.00
Height : 150.00 (ft)	Taper: 0.156705(in/ft)

## Sections Properties

Shaft Section	Length (ft)	Diameter (in) Accross Flats Top	Diameter (in) Thick Bottom	Overlap Joint (in)	Steel Type	Length (in)	Taper (in/ft)	Steel Grade
1	35.670	31.79	37.38	0.375		0.000	0.156705	65
2	42.000	26.48	33.06	0.313	Slip Joint	50.000	0.156705	65
3	40.000	21.26	27.53	0.250	Slip Joint	42.000	0.156705	65
4	39.997	15.00	21.26	0.188	Butt Joint	0.000	0.156705	65

## Discrete Appurtenance

Attach Elev (ft)	Force Elev (ft)	Qty	Description
150.000	150.000	3	Diplexer
150.000	150.000	1	Yagi
150.000	154.500	2	Decibel DB408
150.000	150.000	6	ADC DD1900
150.000	150.000	6	CSS DUO1417-8686
150.000	150.000	1	GPS
150.000	152.000	1	4' Omni
150.000	150.000	1	Platform w/ Rails
140.000	140.000	3	RFS ATMAP1412D-1A20
140.000	140.000	3	RFS ATMAA1412D-1A20
140.000	140.000	3	RFS APXV18-206516S-C-A20
140.000	140.000	3	RFS APXV18-206516L-C-00
140.000	140.000	3	T-Arm
113.000	113.000	3	T-Arm
113.000	113.000	3	Decibel DB932DG90E-M
113.000	113.000	6	Decibel DB844H90E
103.000	103.000	1	Standoff
103.000	107.710	2	Decibel DB408
93.000	93.000	1	Standoff
93.000	97.710	1	Decibel DB408
40.000	40.000	1	Channel Master 1.2 M Dish

## Linear Appurtenance

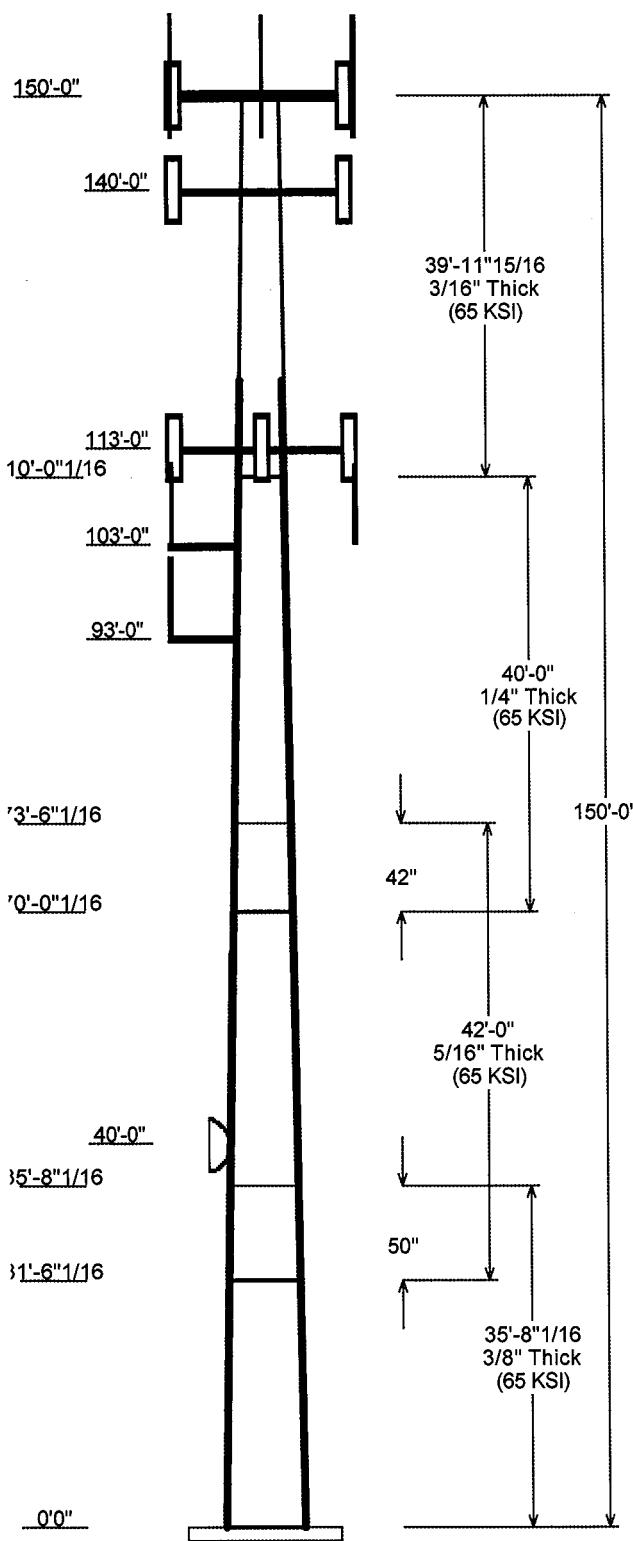
Elev (ft) From	Elev (ft) To	Description	Exposed To Wind
0.000	40.000	RG6	No
0.000	93.000	7/8" Coax	No
0.000	103.0	7/8" Coax	No
0.000	113.0	1 1/4" Coax	No
0.000	123.0	#18 Dywidag bars	Yes
0.000	123.0	#18 Dywidag bars	Yes
0.000	140.0	1 5/8" Coax	Yes
0.000	150.0	1 5/8" Coax	No
0.000	150.0	1/2" Coax	No
0.000	150.0	1/2" Coax	No
0.000	150.0	7/8" Coax	No
0.000	150.0	7/8" Coax	No

## Load Cases

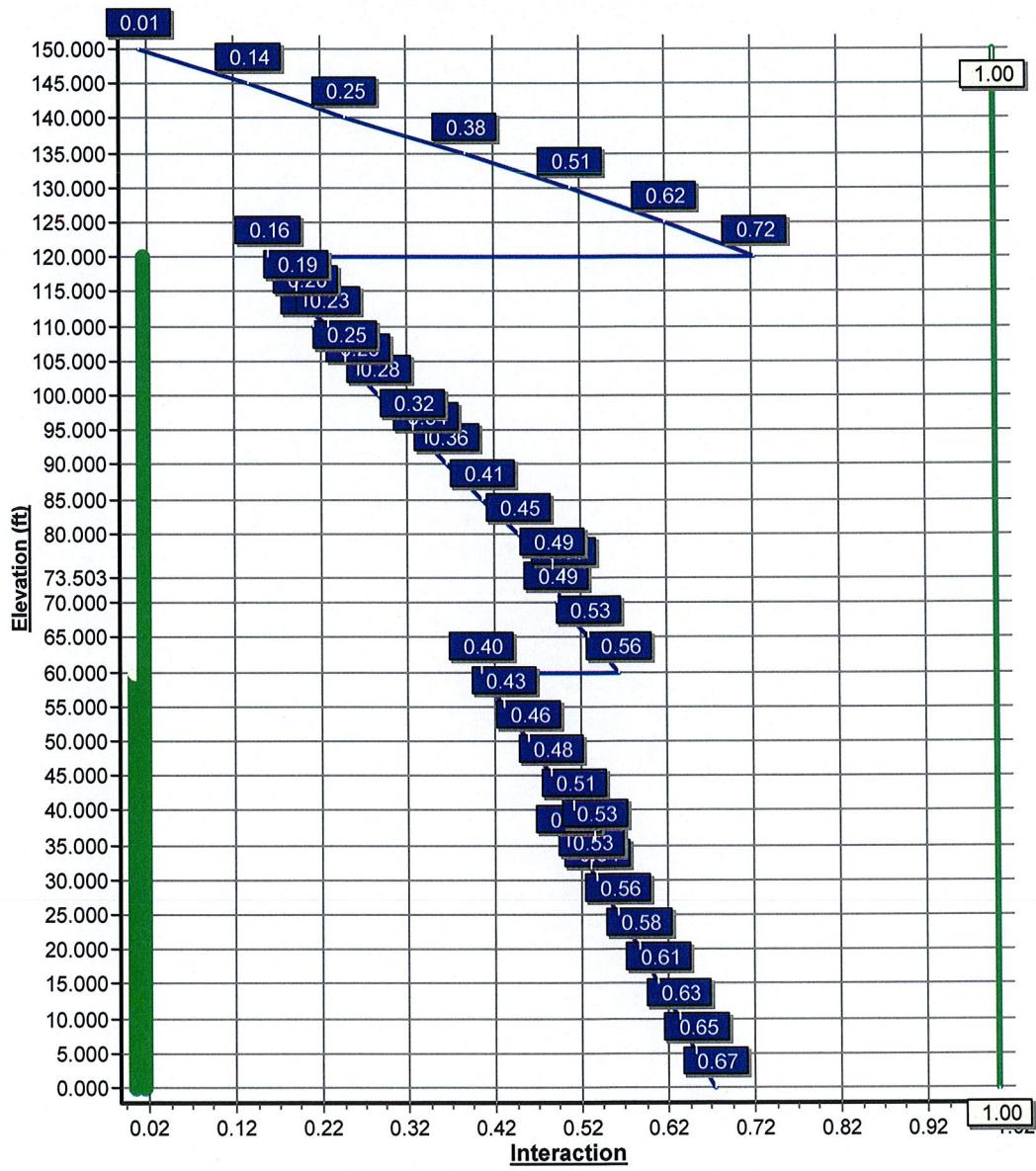
1.2D + 1.6W	115.00 mph with No Ice
0.9D + 1.6W	115.00 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.25 in Radial Ice
1.0D + 1.0W	60.00 mph Serviceability

Reactions			
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W	2796.10	31.54	35.40
0.9D + 1.6W	2758.81	30.67	28.98
1.2D + 1.0Di + 1.0Wi	607.53	6.11	71.99
1.0D + 1.0W	470.98	5.22	31.18

Dish Deflections			
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
1.0D + 1.0W	40.00	1.272	0.296



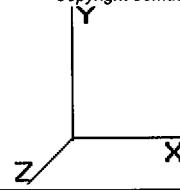
**Load Case : 1.2D + 1.6W**  
**Max Ratio 72.18% at 120.0ft**



Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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 Page: 1



Base Elev : 0.000 (ft)

### Shaft Section Properties

Sect Num	Length (ft)	Thickness (in)	Fv (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom				Top				Taper (in/ft)				
							Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)					
1	35.670	0.3750	65		0.00	5,014	37.38	0.000	44.68	7810.1	24.57	99.68	31.79	35.67	37.93	4778.6	20.57	84.77	0.15671
2	42.000	0.3130	65	Slip Joint	50.00	4,244	33.06	31.50	33.01	4521.4	26.17	105.6	26.48	73.50	26.38	2306.9	20.53	84.62	0.15671
3	40.000	0.2500	65	Slip Joint	42.00	2,646	27.53	70.00	21.97	2087.4	27.37	110.1	21.26	110.0	16.92	954.0	20.65	85.07	0.15671
4	39.997	0.1880	65	Butt Joint	0.00	1,479	21.26	110.0	12.76	723.8	28.17	113.1	15.00	150.0	8.97	251.1	19.24	79.79	0.15671
Shaft Weight						13,383													

### 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)	
150.0	Diblexer	3	10.00	0.500	0.67	21.63	1.082	0.67	0.000	0.000	
150.0	Yagi	1	45.00	4.000	1.00	306.78	21.452	1.00	0.000	0.000	
150.0	Decibel DB408	2	17.00	2.970	1.00	36.78	6.426	1.00	0.000	4.500	
150.0	ADC DD1900	6	15.00	1.340	0.50	32.45	2.899	0.50	0.000	0.000	
150.0	CSS DUO1417-8686	6	42.50	6.000	0.67	358.64	7.576	0.67	0.000	0.000	
150.0	GPS	1	1.50	0.600	1.00	3.25	1.298	1.00	0.000	0.000	
150.0	4' Omni	1	5.00	1.500	1.00	10.82	3.245	1.00	0.000	2.000	
150.0	Platform w/ Rails	1	1950.00	26.000	1.00	4218.78	56.250	1.00	0.000	0.000	
140.0	RFS ATMAP1412D-1A20	3	13.00	1.170	0.50	28.02	2.522	0.50	0.000	0.000	
140.0	RFS ATMAA1412D-1A20	3	13.00	1.170	0.50	28.02	2.522	0.50	0.000	0.000	
140.0	RFS APXV18-206516S-C-A20	3	18.70	3.500	0.67	196.63	5.269	0.67	0.000	0.000	
140.0	RFS APXV18-206516L-C-00	3	14.00	3.400	0.67	191.21	5.218	0.67	0.000	0.000	
140.0	T-Arm	3	333.00	5.000	0.67	717.77	10.777	0.67	0.000	0.000	
113.0	T-Arm	3	333.00	5.000	0.67	709.62	10.655	0.67	0.000	0.000	
113.0	Decibel DB932DG90E-M	3	9.50	3.500	0.67	183.14	5.103	0.67	0.000	0.000	
113.0	Decibel DB844H90E	6	14.00	3.970	0.67	227.22	5.341	0.67	0.000	0.000	
103.0	Standoff	1	200.00	2.500	1.00	424.11	5.301	1.00	0.000	0.000	
103.0	Decibel DB408	2	17.00	2.970	1.00	36.05	6.298	1.00	0.000	4.710	
93.00	Standoff	1	200.00	2.500	1.00	421.83	5.273	1.00	0.000	0.000	
93.00	Decibel DB408	1	28.00	2.700	1.00	59.06	5.695	1.00	0.000	4.710	
40.00	Channel Master 1.2 M Dish	1	188.00	20.910	1.00	379.65	42.226	1.00	0.000	0.000	
Totals		54	5347.10			7995.24			Number of Loadings : 21		

### Linear Appurtenance Properties

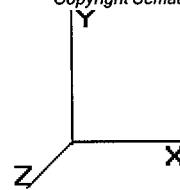
Elev From (ft)	Elev To (ft)	Description	Exposed Width (in)	Exposed To Wind
0.00	150.00	(1) 1 5/8" Coax	0.00	N
0.00	150.00	(1) 1/2" Coax	0.00	N
0.00	150.00	(0) 1/2" Coax	0.00	N
0.00	150.00	(2) 7/8" Coax	0.00	N
0.00	150.00	(6) 7/8" Coax	0.00	N
0.00	140.00	(12) 1 5/8" Coax	1.98	Y
0.00	123.00	(2) #18 Dywidag bars	2.50	Y
0.00	123.00	(2) #18 Dywidag bars	2.50	Y
0.00	113.00	(9) 1 1/4" Coax	0.00	N
0.00	103.00	(2) 7/8" Coax	0.00	N

Pole : 302484  
Location : Branford CT 6, CT  
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Base Dia : 37.38 (in)  
Top Dia : 15.00 (in)  
Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
Struct Class : II  
Exposure Category : B  
Topographic Category : 1

Base Elev : 0.000 (ft)

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0.00	93.00	(1) 7/8" Coax	0.00	N
0.00	40.00	(1) RG6	0.00	N

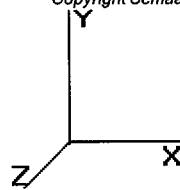
### Additional Steel

Elev (ft)	Elev (ft)	Qty	Description	— Intermediate Connections —					Connectors	Continuation?
				Fy (ksi)	Offset (in)	Description	Spacing (in)	Len (in)		
0.00	60.00	4	SOL #18 All Thread	75	2.19	6" Angle Bracket	30.0	3.31	5/8" A36 U-Bolt	
0.00	120.0	4	SOL #18 All Thread	75	5.15	6" Angle Bracket	30.0	3.31	5/8" A36 U-Bolt	

Pole : 302484  
 Location : Brantford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
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Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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Base Elev : 0.000 (ft)

**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	F'y (ksi)	S (in3)	Weight (lb)	Additional Reinforcing		
											Area (in^2)	Ix (in^4)	Weight (lb)
0.00		0.3750	37.380	44.684	7,810.1	24.57	99.68	65.0	403.6	0.0	32.00	8,940	0.0
5.00		0.3750	36.596	43.737	7,324.4	24.01	97.59	65.0	386.6	752.2	32.00	8,647	544.0
10.00		0.3750	35.813	42.791	6,859.3	23.45	95.50	65.0	370.0	736.1	32.00	8,359	544.0
15.00		0.3750	35.029	41.845	6,414.3	22.89	93.41	65.0	353.7	720.0	32.00	8,075	544.0
20.00		0.3750	34.246	40.899	5,989.0	22.33	91.32	65.0	337.8	703.9	32.00	7,797	544.0
25.00		0.3750	33.462	39.953	5,582.9	21.77	89.23	65.0	322.3	687.8	32.00	7,523	544.0
30.00		0.3750	32.679	39.007	5,195.6	21.21	87.14	65.0	307.1	671.7	32.00	7,255	544.0
31.50	Bot - Section 2	0.3750	32.443	38.722	5,082.8	21.04	86.52	65.0	302.7	198.8	32.00	7,175	163.6
35.00		0.3750	31.895	38.061	4,826.6	20.65	85.05	65.0	292.3	846.3	32.00	7,202	380.4
35.67	Top - Section 1	0.3130	32.416	32.356	4,256.3	25.61	103.57	65.0	253.7	160.5	32.00	7,166	72.9
40.00		0.3130	31.738	31.672	3,992.1	25.03	101.40	65.0	243.0	471.7	32.00	6,939	471.1
45.00		0.3130	30.954	30.882	3,700.9	24.36	98.90	65.0	231.0	532.1	32.00	6,681	544.0
50.00		0.3130	30.171	30.092	3,424.2	23.68	96.39	65.0	219.3	518.7	32.00	6,428	544.0
55.00		0.3130	29.387	29.303	3,161.6	23.01	93.89	65.0	207.8	505.3	32.00	6,180	544.0
60.00	Reinf. Top	0.3130	28.604	28.513	2,912.8	22.34	91.39	65.0	196.7	491.8	32.00	5,937	544.0
65.00		0.3130	27.820	27.723	2,677.5	21.67	88.88	65.0	185.9	478.4	16.00	3,294	272.0
70.00		0.3130	27.037	26.934	2,455.1	21.00	86.38	65.0	175.4	465.0	16.00	3,169	272.0
70.00	Bot - Section 3	0.3130	27.036	26.933	2,455.0	21.00	86.38	65.0	175.4	0.3	16.00	3,169	0.2
73.50	Top - Section 2	0.2500	26.988	21.524	1,964.0	26.78	107.95	65.0	140.6	576.4	16.00	3,161	190.4
75.00		0.2500	26.753	21.335	1,912.8	26.53	107.01	65.0	138.1	109.1	16.00	3,124	81.4
80.00		0.2500	25.970	20.704	1,748.1	25.69	103.88	65.0	130.0	357.6	16.00	3,001	272.0
85.00		0.2500	25.186	20.074	1,593.2	24.85	100.74	65.0	122.2	346.9	16.00	2,881	272.0
90.00		0.2500	24.403	19.443	1,447.7	24.01	97.61	65.0	114.6	336.2	16.00	2,763	272.0
93.00		0.2500	23.932	19.064	1,364.8	23.51	95.73	65.0	110.2	196.5	16.00	2,694	163.2
95.00		0.2500	23.619	18.812	1,311.3	23.17	94.48	65.0	107.3	128.9	16.00	2,648	108.8
100.0		0.2500	22.836	18.181	1,183.8	22.33	91.34	65.0	100.1	314.7	16.00	2,535	272.0
103.0		0.2500	22.365	17.803	1,111.4	21.83	89.46	65.0	96.0	183.7	16.00	2,469	163.2
105.0		0.2500	22.052	17.551	1,064.8	21.49	88.21	65.0	93.3	120.3	16.00	2,425	108.8
110.0		0.2500	21.268	16.920	954.1	20.65	85.07	65.0	86.7	293.2	16.00	2,317	272.0
110.0	Top - Section 3	0.2500	21.268	16.919	954.0	20.65	85.07	65.0	86.7	0.2	16.00	2,317	0.2
110.0	Bot - Section 4	0.1880	21.268	12.761	723.8	28.17	113.13	65.0	65.7		16.00	2,317	
113.0		0.1880	20.798	12.477	676.5	27.50	110.63	65.0	62.8	128.7	16.00	2,254	163.0
115.0		0.1880	20.485	12.287	646.1	27.05	108.96	65.0	60.9	84.3	16.00	2,212	108.8
120.0	Reinf. Top	0.1880	19.701	11.813	574.1	25.94	104.79	65.0	56.3	205.0	16.00	2,109	272.0
125.0		0.1880	18.918	11.338	507.7	24.82	100.63	65.0	51.8	196.9			
130.0		0.1880	18.134	10.864	446.6	23.70	96.46	65.0	47.6	188.9			
135.0		0.1880	17.351	10.390	390.6	22.59	92.29	65.0	43.5	180.8			
140.0		0.1880	16.567	9.915	339.5	21.47	88.12	65.0	39.6	172.7			
145.0		0.1880	15.784	9.441	293.1	20.35	83.96	65.0	35.9	164.7			
150.0		0.1880	15.000	8.967	251.1	19.24	79.79	65.0	32.3	156.6			

13,383.0

9,792.0

Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

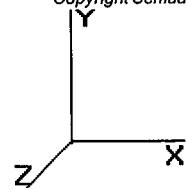
Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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Page: 4

Base Elev : 0.000 (ft)



Load Case: 1.2D + 1.6W

115.00 mph with No Ice

24 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			CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
								Thick (in)	Tributary (ft)	Aa (sf)				
0.00		1.00	0.70	22.514	24.76	310.28	1.000	0.00	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	22.514	24.76	303.78	1.247 *	0.00	5.00	15.955	19.89	788.3	0.0	1,446.6
10.00		1.00	0.70	22.514	24.76	297.27	1.259 *	0.00	5.00	15.617	19.66	778.9	0.0	1,427.3
15.00		1.00	0.70	22.514	24.76	290.77	1.271 *	0.00	5.00	15.279	19.42	769.5	0.0	1,408.0
20.00		1.00	0.70	22.514	24.76	284.27	1.284 *	0.00	5.00	14.941	19.18	760.2	0.0	1,388.7
25.00		1.00	0.70	22.514	24.76	277.76	1.297 *	0.00	5.00	14.603	18.95	750.8	0.0	1,369.4
30.00		1.00	0.70	22.533	24.78	271.37	1.200 *	0.00	5.00	14.266	17.12	678.9	0.0	1,350.0
31.50	Bot - Section 2	1.00	0.71	22.850	25.13	271.30	1.200 *	0.00	1.50	4.223	5.07	203.8	0.0	402.1
35.00		1.00	0.73	23.548	25.90	270.76	1.200 *	0.00	3.50	9.893	11.87	492.0	0.0	1,396.0
35.67	Top - Section 1	1.00	0.73	23.676	26.04	270.60	1.200 *	0.00	0.67	1.877	2.25	93.8	0.0	265.5
40.00	Appertunance(s)	1.00	0.76	24.464	26.91	274.61	1.200 *	0.00	4.33	11.983	14.38	619.1	0.0	1,037.1
45.00		1.00	0.78	25.301	27.83	272.38	1.200 *	0.00	5.00	13.522	16.23	722.5	0.0	1,182.6
50.00		1.00	0.81	26.074	28.68	269.51	1.200 *	0.00	5.00	13.184	15.82	726.0	0.0	1,166.4
55.00		1.00	0.83	26.794	29.47	266.11	1.200 *	0.00	5.00	12.846	15.41	726.9	0.0	1,150.3
60.00	Reinf. Top	1.00	0.85	27.468	30.21	262.26	1.200 *	0.00	5.00	12.508	15.01	725.6	0.0	1,134.2
65.00		1.00	0.87	28.104	30.91	258.00	1.200 *	0.00	5.00	12.170	14.60	722.3	0.0	846.1
70.00		1.00	0.89	28.705	31.57	253.41	1.200 *	0.00	5.00	11.832	14.20	717.3	0.0	830.0
70.00	Bot - Section 3	1.00	0.89	28.706	31.57	253.40	1.200 *	0.00	0.00	0.008	0.01	0.5	0.0	0.5
73.50	Top - Section 2	1.00	0.90	29.108	32.01	250.00	1.200 *	0.00	3.50	8.232	9.88	506.1	0.0	882.1
75.00		1.00	0.91	29.277	32.20	253.23	1.200 *	0.00	1.50	3.470	4.16	214.5	0.0	212.4
80.00		1.00	0.92	29.821	32.80	248.09	1.200 *	0.00	5.00	11.371	13.65	716.2	0.0	701.2
85.00		1.00	0.94	30.343	33.37	242.70	1.200 *	0.00	5.00	11.033	13.24	707.1	0.0	688.3
90.00		1.00	0.95	30.842	33.92	237.08	1.200 *	0.00	5.00	10.695	12.83	696.7	0.0	675.4
93.00	Appertunance(s)	1.00	0.96	31.132	34.24	233.60	1.200 *	0.00	3.00	6.255	7.51	411.3	0.0	399.1
95.00		1.00	0.97	31.322	34.45	231.25	1.200 *	0.00	2.00	4.102	4.92	271.4	0.0	263.5
100.0		1.00	0.98	31.785	34.96	225.22	1.200 *	0.00	5.00	10.019	12.02	672.6	0.0	649.6
103.0	Appertunance(s)	1.00	0.99	32.054	35.26	221.52	1.200 *	0.00	3.00	5.849	7.02	396.0	0.0	383.6
105.0		1.00	1.00	32.231	35.45	219.01	1.200 *	0.00	2.00	3.832	4.60	260.9	0.0	253.2
110.0		1.00	1.01	32.662	35.92	212.64	1.200 *	0.00	5.00	9.343	11.21	644.5	0.0	623.9
110.0	Top - Section 3	1.00	1.01	32.662	35.92	212.63	1.200 *	0.00	0.00	0.006	0.01	0.4	0.0	0.4
113.0	Appertunance(s)	1.00	1.02	32.914	36.20	208.74	1.200 *	0.00	3.00	5.438	6.53	378.0	0.0	317.4
115.0		1.00	1.02	33.080	36.38	206.11	1.200 *	0.00	2.00	3.562	4.27	248.8	0.0	209.9
120.0	Reinf. Top	1.00	1.04	33.484	36.83	199.43	1.200 *	0.00	5.00	8.667	10.40	613.0	0.0	518.0
125.0		1.00	1.05	33.877	37.26	192.62	1.200 *	0.00	5.00	8.330	10.00	596.0	0.0	236.3
130.0		1.00	1.06	34.259	37.68	185.68	1.010 *	0.00	5.00	7.992	8.07	486.5	0.0	226.6
135.0		1.00	1.07	34.630	38.09	178.62	1.023 *	0.00	5.00	7.654	7.83	477.4	0.0	217.0
140.0	Appertunance(s)	1.00	1.08	34.992	38.49	171.44	1.038 *	0.00	5.00	7.316	7.60	467.8	0.0	207.3
145.0		1.00	1.09	35.345	38.87	164.15	1.000	0.00	5.00	6.978	6.98	434.0	0.0	197.6
150.0	Appertunance(s)	1.00	1.11	35.689	39.25	156.76	1.000	0.00	5.00	6.640	6.64	417.0	0.0	187.9

\* = Cf Adjusted By Linear Load Ra Effect

Totals:

150.00

19,892.7

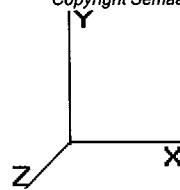
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Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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 Page: 5



Load Case: 1.2D + 1.6W

115.00 mph with No Ice

24 Iterations

Gust Response Factor : 1.10  
 Dead Load Factor : 1.20  
 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)
40.00	Channel Master 1.2 M	1	24.464	26.910	1.00	1.00	20.91	0.000	0.000	900.30	0.00	0.00	225.60
93.00	Standoff	1	31.132	34.246	1.00	1.00	2.50	0.000	0.000	136.98	0.00	0.00	240.00
93.00	Decibel DB408	1	31.575	34.732	1.00	1.00	2.70	0.000	4.710	150.04	0.00	706.71	33.60
103.0	Standoff	1	32.054	35.260	1.00	1.00	2.50	0.000	0.000	141.04	0.00	0.00	240.00
103.0	Decibel DB408	2	32.466	35.713	1.00	1.00	5.94	0.000	4.710	339.42	0.00	1,598.65	40.80
113.0	T-Arm	3	32.914	36.206	0.50	0.75	7.54	0.000	0.000	436.64	0.00	0.00	1,198.80
113.0	Decibel DB932DG90E-	3	32.914	36.206	0.54	0.80	5.63	0.000	0.000	326.02	0.00	0.00	34.20
113.0	Decibel DB844H90E	6	32.914	36.206	0.54	0.80	12.77	0.000	0.000	739.61	0.00	0.00	100.80
140.0	RFS ATMAP1412D-	3	34.992	38.491	0.40	0.80	1.40	0.000	0.000	86.46	0.00	0.00	46.80
140.0	RFS ATMAA1412D-	3	34.992	38.491	0.40	0.80	1.40	0.000	0.000	86.47	0.00	0.00	46.80
140.0	RFS APXV18-206516S-	3	34.992	38.491	0.54	0.80	5.63	0.000	0.000	346.61	0.00	0.00	67.32
140.0	RFS APXV18-206516L-	3	34.992	38.491	0.54	0.80	5.47	0.000	0.000	336.70	0.00	0.00	50.40
140.0	T-Arm	3	34.992	38.491	0.50	0.75	7.54	0.000	0.000	464.20	0.00	0.00	1,198.80
150.0	Diplexer	3	35.689	39.257	0.50	0.75	0.75	0.000	0.000	47.34	0.00	0.00	36.00
150.0	Yadi	1	35.689	39.257	0.75	0.75	3.00	0.000	0.000	188.44	0.00	0.00	54.00
150.0	Decibel DB408	2	35.991	39.590	0.75	0.75	4.45	0.000	4.500	282.20	0.00	1,269.90	40.80
150.0	ADC DD1900	6	35.689	39.257	0.38	0.75	3.01	0.000	0.000	189.38	0.00	0.00	108.00
150.0	CSS DUO1417-8686	6	35.689	39.257	0.50	0.75	18.09	0.000	0.000	1,136.27	0.00	0.00	306.00
150.0	GPS	1	35.689	39.257	0.75	0.75	0.45	0.000	0.000	28.27	0.00	0.00	1.80
150.0	4' Omni	1	35.824	39.406	0.75	0.75	1.13	0.000	2.000	70.93	0.00	141.86	6.00
150.0	Platform w/ Rails	1	35.689	39.257	1.00	1.00	26.00	0.000	0.000	1,633.11	0.00	0.00	2,340.00
										8,066.42			6,416.52

Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

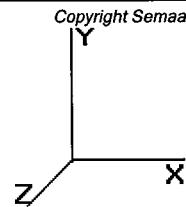
Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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Base Elev : 0.000 (ft)



Load Case: 1.2D + 1.6W

115.00 mph with No Ice

24 Iterations

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	F X (lb)	Dead Load (lb)
5.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.514	0.182	1.247	0.00	59.03
5.00	(2) #18 Dvwidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.182	1.247	0.00	0.00
5.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.182	1.247	0.00	0.00
10.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.514	0.186	1.259	0.00	59.03
10.00	(2) #18 Dvwidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.186	1.259	0.00	0.00
10.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.186	1.259	0.00	0.00
15.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.514	0.190	1.271	0.00	59.03
15.00	(2) #18 Dvwidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.190	1.271	0.00	0.00
15.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.190	1.271	0.00	0.00
20.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.514	0.195	1.284	0.00	59.03
20.00	(2) #18 Dvwidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.195	1.284	0.00	0.00
20.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.195	1.284	0.00	0.00
25.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.514	0.199	1.297	0.00	59.03
25.00	(2) #18 Dvwidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.199	1.297	0.00	0.00
25.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.199	1.297	0.00	0.00
30.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	22.533	0.204	0.000	39.26	59.03
30.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	22.533	0.204	0.000	49.57	0.00
30.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	22.533	0.204	0.000	49.57	0.00
31.50	(12) 1 5/8" Coax	Yes	1.50	1.200	1.98	0.25	0.30	22.850	0.207	0.000	11.97	17.75
31.50	(2) #18 Dvwidag bars	Yes	1.50	1.200	2.50	0.31	0.38	22.850	0.207	0.000	15.11	0.00
31.50	(2) #18 Dywidag bars	Yes	1.50	1.200	2.50	0.31	0.38	22.850	0.207	0.000	15.11	0.00
35.00	(12) 1 5/8" Coax	Yes	3.50	1.200	1.98	0.58	0.69	23.548	0.210	0.000	28.69	41.28
35.00	(2) #18 Dvwidag bars	Yes	3.50	1.200	2.50	0.73	0.87	23.548	0.210	0.000	36.23	0.00
35.00	(2) #18 Dywidag bars	Yes	3.50	1.200	2.50	0.73	0.87	23.548	0.210	0.000	36.23	0.00
35.67	(12) 1 5/8" Coax	Yes	0.67	1.200	1.98	0.11	0.13	23.676	0.212	0.000	5.53	7.91
35.67	(2) #18 Dvwidag bars	Yes	0.67	1.200	2.50	0.14	0.17	23.676	0.212	0.000	6.98	0.00
35.67	(2) #18 Dywidag bars	Yes	0.67	1.200	2.50	0.14	0.17	23.676	0.212	0.000	6.98	0.00
40.00	(12) 1 5/8" Coax	Yes	4.33	1.200	1.98	0.71	0.86	24.464	0.210	0.000	36.91	51.12
40.00	(2) #18 Dvwidag bars	Yes	4.33	1.200	2.50	0.90	1.08	24.464	0.210	0.000	46.61	0.00
40.00	(2) #18 Dywidag bars	Yes	4.33	1.200	2.50	0.90	1.08	24.464	0.210	0.000	46.61	0.00
45.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	25.301	0.215	0.000	44.08	59.03
45.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	25.301	0.215	0.000	55.66	0.00
45.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	25.301	0.215	0.000	55.66	0.00
50.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	26.074	0.221	0.000	45.43	59.03
50.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	26.074	0.221	0.000	57.36	0.00
50.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	26.074	0.221	0.000	57.36	0.00
55.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	26.794	0.226	0.000	46.69	59.03
55.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	26.794	0.226	0.000	58.95	0.00
55.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	26.794	0.226	0.000	58.95	0.00
60.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	27.468	0.233	0.000	47.86	59.03
60.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	27.468	0.233	0.000	60.43	0.00
60.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	27.468	0.233	0.000	60.43	0.00
65.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	28.104	0.239	0.000	48.97	59.03
65.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	28.104	0.239	0.000	61.83	0.00
65.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	28.104	0.239	0.000	61.83	0.00
70.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	28.705	0.246	0.000	50.02	59.03
70.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	28.705	0.246	0.000	63.15	0.00
70.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	28.705	0.246	0.000	63.15	0.00
70.00	(12) 1 5/8" Coax	Yes	0.00	1.200	1.98	0.00	0.00	28.706	0.249	0.000	0.03	0.04
70.00	(2) #18 Dvwidag bars	Yes	0.00	1.200	2.50	0.00	0.00	28.706	0.249	0.000	0.04	0.00
70.00	(2) #18 Dywidag bars	Yes	0.00	1.200	2.50	0.00	0.00	28.706	0.249	0.000	0.04	0.00

Pole : 302484  
 Location : Brantford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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 Page: 7  
 Z X

Base Elev : 0.000 (ft)

**Load Case:** 1.2D + 1.6W

115.00 mph with No Ice

24 Iterations

Gust Response Factor : 1.10  
 Dead Load Factor : 1.20  
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

73.50	(12) 1 5/8" Coax	Yes	3.50	1.200	1.98	0.58	0.69	29.108	0.252	0.000	35.50	41.32
73.50	(2) #18 Dywidag bars	Yes	3.50	1.200	2.50	0.73	0.88	29.108	0.252	0.000	44.83	0.00
73.50	(2) #18 Dvwidag bars	Yes	3.50	1.200	2.50	0.73	0.88	29.108	0.252	0.000	44.83	0.00
75.00	(12) 1 5/8" Coax	Yes	1.50	1.200	1.98	0.25	0.30	29.277	0.251	0.000	15.27	17.67
75.00	(2) #18 Dywidag bars	Yes	1.50	1.200	2.50	0.31	0.37	29.277	0.251	0.000	19.28	0.00
75.00	(2) #18 Dvwidag bars	Yes	1.50	1.200	2.50	0.31	0.37	29.277	0.251	0.000	19.28	0.00
80.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	29.821	0.256	0.000	51.96	59.03
80.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	29.821	0.256	0.000	65.61	0.00
80.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	29.821	0.256	0.000	65.61	0.00
85.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	30.343	0.264	0.000	52.87	59.03
85.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	30.343	0.264	0.000	66.75	0.00
85.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	30.343	0.264	0.000	66.75	0.00
90.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	30.842	0.272	0.000	53.74	59.03
90.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	30.842	0.272	0.000	67.85	0.00
90.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	30.842	0.272	0.000	67.85	0.00
93.00	(12) 1 5/8" Coax	Yes	3.00	1.200	1.98	0.50	0.59	31.132	0.279	0.000	32.55	35.42
93.00	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	0.63	0.75	31.132	0.279	0.000	41.09	0.00
93.00	(2) #18 Dvwidag bars	Yes	3.00	1.200	2.50	0.63	0.75	31.132	0.279	0.000	41.09	0.00
95.00	(12) 1 5/8" Coax	Yes	2.00	1.200	1.98	0.33	0.40	31.322	0.284	0.000	21.83	23.61
95.00	(2) #18 Dywidag bars	Yes	2.00	1.200	2.50	0.42	0.50	31.322	0.284	0.000	27.56	0.00
95.00	(2) #18 Dvwidag bars	Yes	2.00	1.200	2.50	0.42	0.50	31.322	0.284	0.000	27.56	0.00
100.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	31.785	0.290	0.000	55.38	59.03
100.0	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	31.785	0.290	0.000	69.93	0.00
100.0	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	31.785	0.290	0.000	69.93	0.00
103.0	(12) 1 5/8" Coax	Yes	3.00	1.200	1.98	0.50	0.59	32.054	0.298	0.000	33.51	35.42
103.0	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	0.63	0.75	32.054	0.298	0.000	42.31	0.00
103.0	(2) #18 Dvwidag bars	Yes	3.00	1.200	2.50	0.63	0.75	32.054	0.298	0.000	42.31	0.00
105.0	(12) 1 5/8" Coax	Yes	2.00	1.200	1.98	0.33	0.40	32.231	0.304	0.000	22.46	23.61
105.0	(2) #18 Dvwidag bars	Yes	2.00	1.200	2.50	0.42	0.50	32.231	0.304	0.000	28.36	0.00
105.0	(2) #18 Dywidag bars	Yes	2.00	1.200	2.50	0.42	0.50	32.231	0.304	0.000	28.36	0.00
110.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	32.662	0.311	0.000	56.91	59.03
110.0	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	32.662	0.311	0.000	71.86	0.00
110.0	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	32.662	0.311	0.000	71.86	0.00
110.0	(12) 1 5/8" Coax	Yes	0.00	1.200	1.98	0.00	0.00	32.662	0.317	0.000	0.04	0.04
110.0	(2) #18 Dywidag bars	Yes	0.00	1.200	2.50	0.00	0.00	32.662	0.317	0.000	0.05	0.00
110.0	(2) #18 Dvwidag bars	Yes	0.00	1.200	2.50	0.00	0.00	32.662	0.317	0.000	0.05	0.00
113.0	(12) 1 5/8" Coax	Yes	3.00	1.200	1.98	0.49	0.59	32.914	0.321	0.000	34.37	35.38
113.0	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	0.62	0.75	32.914	0.321	0.000	43.40	0.00
113.0	(2) #18 Dvwidag bars	Yes	3.00	1.200	2.50	0.62	0.75	32.914	0.321	0.000	43.40	0.00
115.0	(12) 1 5/8" Coax	Yes	2.00	1.200	1.98	0.33	0.40	33.080	0.327	0.000	23.06	23.61
115.0	(2) #18 Dywidag bars	Yes	2.00	1.200	2.50	0.42	0.50	33.080	0.327	0.000	29.11	0.00
115.0	(2) #18 Dvwidag bars	Yes	2.00	1.200	2.50	0.42	0.50	33.080	0.327	0.000	29.11	0.00
120.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	33.484	0.336	0.000	58.34	59.03
120.0	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	33.484	0.336	0.000	73.67	0.00
120.0	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	33.484	0.336	0.000	73.67	0.00
125.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	33.877	0.249	0.000	59.03	59.03
125.0	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	0.63	0.75	33.877	0.249	0.000	44.72	0.00
125.0	(2) #18 Dvwidag bars	Yes	3.00	1.200	2.50	0.63	0.75	33.877	0.249	0.000	44.72	0.00
130.0	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	34.259	0.103	1.010	0.00	59.03
135.0	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	34.630	0.108	1.023	0.00	59.03
140.0	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	34.992	0.113	1.038	0.00	59.03

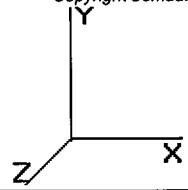
Totals: 3,508.88 1,652.92

Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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Load Case: 1.2D + 1.6W

115.00 mph with No Ice

24 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	788.29	1,567.76	0.00	0.00
10.00	778.92	1,548.44	0.00	0.00
15.00	769.54	1,529.12	0.00	0.00
20.00	760.17	1,509.81	0.00	0.00
25.00	750.79	1,490.49	0.00	0.00
30.00	817.31	1,471.18	0.00	0.00
31.50	246.00	438.56	0.00	0.00
35.00	593.18	1,480.73	0.00	0.00
35.67	113.33	281.75	0.00	0.00
40.00	1,649.54	1,367.63	0.00	0.00
45.00	877.94	1,303.22	0.00	0.00
50.00	886.16	1,287.10	0.00	0.00
55.00	891.50	1,270.97	0.00	0.00
60.00	894.33	1,254.85	0.00	0.00
65.00	894.96	966.73	0.00	0.00
70.00	893.62	950.60	0.00	0.00
70.00	0.59	0.63	0.00	0.00
73.50	631.23	966.59	0.00	0.00
75.00	268.36	248.50	0.00	0.00
80.00	899.38	821.80	0.00	0.00
85.00	893.43	808.92	0.00	0.00
90.00	886.13	796.04	0.00	0.00
93.00	813.04	745.04	0.00	706.71
95.00	348.34	310.93	0.00	0.00
100.0	867.83	768.31	0.00	0.00
103.0	994.59	735.60	0.00	1,598.65
105.0	340.04	299.04	0.00	0.00
110.0	845.16	738.59	0.00	0.00
110.0	0.56	0.49	0.00	0.00
113.0	2,001.44	1,719.98	0.00	0.00
115.0	330.11	242.20	0.00	0.00
120.0	818.63	598.71	0.00	0.00
125.0	744.43	317.02	0.00	0.00
130.0	486.53	307.34	0.00	0.00
135.0	477.38	297.66	0.00	0.00
140.0	1,788.24	1,698.09	0.00	0.00
145.0	434.05	219.26	0.00	0.00
150.0	3,992.98	3,102.17	0.00	1,411.76
<b>Totals:</b>	<b>31,468.03</b>	<b>35,461.83</b>	<b>0.00</b>	<b>3,717.13</b>

Pole : 302484  
 Location : Brantford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/in)

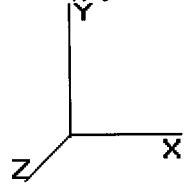
Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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Base Elev : 0.000 (ft)



Load Case: 1.2D + 1.6W

115.00 mph with No Ice

24 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Wind Load Factor : 1.60

### Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-35.40	-31.54	0.00	-2,796.10	0.00	2,796.10	2,613.99	1,306.99	3,984.35	1,967.72	0.00	0.00	0.671
5.00	-33.71	-30.88	0.00	-2,638.40	0.00	2,638.40	2,558.64	1,279.32	3,816.58	1,884.87	0.12	-0.23	0.650
10.00	-32.04	-30.22	0.00	-2,483.98	0.00	2,483.98	2,503.29	1,251.65	3,652.42	1,803.79	0.49	-0.46	0.629
15.00	-30.41	-29.56	0.00	-2,332.86	0.00	2,332.86	2,447.95	1,223.97	3,491.87	1,724.51	1.09	-0.68	0.606
20.00	-28.80	-28.89	0.00	-2,185.08	0.00	2,185.08	2,392.60	1,196.30	3,334.93	1,647.00	1.93	-0.91	0.584
25.00	-27.21	-28.21	0.00	-2,040.65	0.00	2,040.65	2,337.25	1,168.63	3,181.60	1,571.27	3.00	-1.12	0.560
30.00	-25.70	-27.43	0.00	-1,899.59	0.00	1,899.59	2,281.90	1,140.95	3,031.88	1,497.33	4.29	-1.34	0.536
31.50	-25.21	-27.22	0.00	-1,858.36	0.00	1,858.36	2,265.26	1,132.63	2,987.57	1,475.45	4.72	-1.40	0.529
35.00	-23.71	-26.62	0.00	-1,763.20	0.00	1,763.20	2,226.56	1,113.28	2,885.76	1,425.17	5.80	-1.55	0.503
35.67	-23.38	-26.54	0.00	-1,745.36	0.00	1,745.36	1,892.81	946.40	2,503.89	1,236.58	6.02	-1.58	0.533
40.00	-21.98	-24.93	0.00	-1,630.44	0.00	1,630.44	1,852.80	926.40	2,398.66	1,184.61	7.54	-1.75	0.509
45.00	-20.62	-24.08	0.00	-1,505.82	0.00	1,505.82	1,806.60	903.30	2,279.97	1,125.99	9.48	-1.96	0.483
50.00	-19.29	-23.21	0.00	-1,385.43	0.00	1,385.43	1,760.41	880.20	2,164.28	1,068.86	11.64	-2.15	0.456
55.00	-17.98	-22.33	0.00	-1,269.37	0.00	1,269.37	1,714.21	857.11	2,051.61	1,013.21	13.99	-2.34	0.430
60.00	-16.70	-21.44	0.00	-1,157.72	0.00	1,157.72	1,714.21	857.11	2,051.61	1,013.21	16.55	-2.53	0.403
60.00	-16.70	-21.44	0.00	-1,157.72	0.00	1,157.72	1,714.21	857.11	2,051.61	1,013.21	16.55	-2.53	0.562
65.00	-15.70	-20.56	0.00	-1,050.54	0.00	1,050.54	1,621.82	810.91	1,835.30	906.38	19.30	-2.71	0.526
70.00	-14.75	-19.65	0.00	-947.76	0.00	947.76	1,575.62	787.81	1,731.66	855.20	22.26	-2.94	0.490
70.00	-14.72	-19.67	0.00	-947.70	0.00	947.70	1,575.59	787.80	1,731.59	855.17	22.26	-2.95	0.490
73.50	-13.75	-19.01	0.00	-878.86	0.00	878.86	1,259.14	629.57	1,387.81	685.39	24.48	-3.11	0.499
75.00	-13.47	-18.77	0.00	-850.41	0.00	850.41	1,248.10	624.05	1,363.46	673.36	25.47	-3.17	0.487
80.00	-12.63	-17.87	0.00	-756.58	0.00	756.58	1,211.20	605.60	1,283.66	633.95	28.91	-3.40	0.446
85.00	-11.82	-16.97	0.00	-667.23	0.00	667.23	1,174.30	587.15	1,206.28	595.74	32.59	-3.61	0.405
90.00	-11.04	-16.07	0.00	-582.38	0.00	582.38	1,137.40	568.70	1,131.30	558.71	36.48	-3.81	0.364
93.00	-10.33	-15.22	0.00	-533.48	0.00	533.48	1,115.27	557.63	1,087.47	537.06	38.91	-3.93	0.340
95.00	-10.01	-14.87	0.00	-503.04	0.00	503.04	1,100.51	550.25	1,058.73	522.87	40.57	-4.00	0.324
100.00	-9.27	-13.97	0.00	-428.67	0.00	428.67	1,063.61	531.80	988.56	488.21	44.85	-4.17	0.285
103.00	-8.60	-12.94	0.00	-385.16	0.00	385.16	1,041.47	520.73	947.61	467.99	47.50	-4.26	0.260
105.00	-8.30	-12.59	0.00	-359.28	0.00	359.28	1,026.71	513.35	920.80	454.75	49.29	-4.32	0.246
110.00	-7.62	-11.70	0.00	-296.32	0.00	296.32	989.81	494.91	855.44	422.47	53.89	-4.45	0.209
110.00	-7.61	-11.71	0.00	-296.28	0.00	296.28	989.79	494.89	855.40	422.45	53.89	-4.45	0.209
110.00	-7.61	-11.71	0.00	-296.28	0.00	296.28	989.79	494.89	855.40	422.45	53.89	-4.45	0.225
113.00	-6.04	-9.58	0.00	-261.21	0.00	261.21	729.89	364.94	620.25	306.32	56.71	-4.53	0.201
115.00	-5.81	-9.24	0.00	-242.05	0.00	242.05	718.79	359.39	601.45	297.03	58.61	-4.57	0.188
120.00	-5.27	-8.39	0.00	-195.84	0.00	195.84	718.79	359.39	601.45	297.03	63.46	-4.68	0.156
120.00	-5.27	-8.39	0.00	-195.84	0.00	195.84	718.79	359.39	601.45	297.03	63.46	-4.68	0.722
125.00	-4.98	-7.64	0.00	-153.91	0.00	153.91	663.29	331.65	511.77	252.74	68.41	-4.78	0.617
130.00	-4.67	-7.16	0.00	-115.71	0.00	115.71	635.54	317.77	469.64	231.94	73.61	-5.15	0.507
135.00	-4.39	-6.67	0.00	-79.93	0.00	79.93	607.80	303.90	429.33	212.03	79.18	-5.46	0.385
140.00	-2.86	-4.74	0.00	-46.55	0.00	46.55	580.05	290.02	390.82	193.01	85.03	-5.70	0.246
145.00	-2.68	-4.29	0.00	-22.86	0.00	22.86	552.30	276.15	354.12	174.89	91.07	-5.84	0.136
150.00	0.00	-3.99	0.00	-1.41	0.00	1.41	524.55	262.28	319.23	157.66	97.21	-5.90	0.009

Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

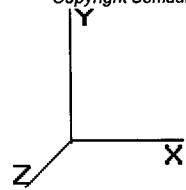
Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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Base Elev : 0.000 (ft)



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

115.00 mph with No Ice (Reduced DL)

24 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			CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
								Thick (in)	Tributary (ft)	Aa (sf)				
0.00		1.00	0.70	22.514	24.76	310.28	1.000	0.00	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	22.514	24.76	303.78	1.000 *	0.00	5.00	15.955	15.96	632.2	0.0	1,221.0
10.00		1.00	0.70	22.514	24.76	297.27	1.000 *	0.00	5.00	15.617	15.62	618.8	0.0	1,206.5
15.00		1.00	0.70	22.514	24.76	290.77	1.000 *	0.00	5.00	15.279	15.28	605.4	0.0	1,192.0
20.00		1.00	0.70	22.514	24.76	284.27	1.000 *	0.00	5.00	14.941	14.94	592.1	0.0	1,177.5
25.00		1.00	0.70	22.514	24.76	277.76	1.000 *	0.00	5.00	14.603	14.60	578.7	0.0	1,163.0
30.00		1.00	0.70	22.533	24.78	271.37	1.200 *	0.00	5.00	14.266	17.12	678.9	0.0	1,148.5
31.50	Bot - Section 2	1.00	0.71	22.850	25.13	271.30	1.200 *	0.00	1.50	4.223	5.07	203.8	0.0	342.5
35.00		1.00	0.73	23.548	25.90	270.76	1.200 *	0.00	3.50	9.893	11.87	492.0	0.0	1,142.1
35.67	Top - Section 1	1.00	0.73	23.676	26.04	270.60	1.200 *	0.00	0.67	1.877	2.25	93.8	0.0	217.4
40.00	Appertunance(s)	1.00	0.76	24.464	26.91	274.61	1.200 *	0.00	4.33	11.983	14.38	619.1	0.0	895.6
45.00		1.00	0.78	25.301	27.83	272.38	1.200 *	0.00	5.00	13.522	16.23	722.5	0.0	1,022.9
50.00		1.00	0.81	26.074	28.68	269.51	1.200 *	0.00	5.00	13.184	15.82	726.0	0.0	1,010.8
55.00		1.00	0.83	26.794	29.47	266.11	1.200 *	0.00	5.00	12.846	15.41	726.9	0.0	998.7
60.00	Reinf. Top	1.00	0.85	27.468	30.21	262.26	1.200 *	0.00	5.00	12.508	15.01	725.6	0.0	986.7
65.00		1.00	0.87	28.104	30.91	258.00	1.200 *	0.00	5.00	12.170	14.60	722.3	0.0	702.6
70.00		1.00	0.89	28.705	31.57	253.41	1.200 *	0.00	5.00	11.832	14.20	717.3	0.0	690.5
70.00	Bot - Section 3	1.00	0.89	28.706	31.57	253.40	1.200 *	0.00	0.00	0.008	0.01	0.5	0.0	0.5
73.50	Top - Section 2	1.00	0.90	29.108	32.01	250.00	1.200 *	0.00	3.50	8.232	9.88	506.1	0.0	709.2
75.00		1.00	0.91	29.277	32.20	253.23	1.200 *	0.00	1.50	3.470	4.16	214.5	0.0	179.6
80.00		1.00	0.92	29.821	32.80	248.09	1.200 *	0.00	5.00	11.371	13.65	716.2	0.0	593.9
85.00		1.00	0.94	30.343	33.37	242.70	1.200 *	0.00	5.00	11.033	13.24	707.1	0.0	584.2
90.00		1.00	0.95	30.842	33.92	237.08	1.200 *	0.00	5.00	10.695	12.83	696.7	0.0	574.5
93.00	Appertunance(s)	1.00	0.96	31.132	34.24	233.60	1.200 *	0.00	3.00	6.255	7.51	411.3	0.0	340.1
95.00		1.00	0.97	31.322	34.45	231.25	1.200 *	0.00	2.00	4.102	4.92	271.4	0.0	224.8
100.0		1.00	0.98	31.785	34.96	225.22	1.200 *	0.00	5.00	10.019	12.02	672.6	0.0	555.2
103.0	Appertunance(s)	1.00	0.99	32.054	35.26	221.52	1.200 *	0.00	3.00	5.849	7.02	396.0	0.0	328.5
105.0		1.00	1.00	32.231	35.45	219.01	1.200 *	0.00	2.00	3.832	4.60	260.9	0.0	217.1
110.0		1.00	1.01	32.662	35.92	212.64	1.200 *	0.00	5.00	9.343	11.21	644.5	0.0	535.9
110.0	Top - Section 3	1.00	1.01	32.662	35.92	212.63	1.200 *	0.00	0.00	0.006	0.01	0.4	0.0	0.4
113.0	Appertunance(s)	1.00	1.02	32.914	36.20	208.74	1.200 *	0.00	3.00	5.438	6.53	378.0	0.0	278.8
115.0		1.00	1.02	33.080	36.38	206.11	1.200 *	0.00	2.00	3.562	4.27	248.8	0.0	184.6
120.0	Reinf. Top	1.00	1.04	33.484	36.83	199.43	1.200 *	0.00	5.00	8.667	10.40	613.0	0.0	456.5
125.0		1.00	1.05	33.877	37.26	192.62	1.200 *	0.00	5.00	8.330	10.00	596.0	0.0	177.2
130.0		1.00	1.06	34.259	37.68	185.68	1.000 *	0.00	5.00	7.992	7.99	481.9	0.0	170.0
135.0		1.00	1.07	34.630	38.09	178.62	1.000 *	0.00	5.00	7.654	7.65	466.5	0.0	162.7
140.0	Appertunance(s)	1.00	1.08	34.992	38.49	171.44	1.000 *	0.00	5.00	7.316	7.32	450.5	0.0	155.5
145.0		1.00	1.09	35.345	38.87	164.15	1.000	0.00	5.00	6.978	6.98	434.0	0.0	148.2
150.0	Appertunance(s)	1.00	1.11	35.689	39.25	156.76	1.000	0.00	5.00	6.640	6.64	417.0	0.0	140.9

\* = Cf Adjusted By Linear Load Ra Effect

Totals: 150.00

19,039.4

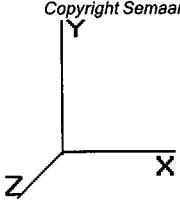
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Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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Load Case: 0.9D + 1.6W

115.00 mph with No Ice (Reduced DL)

24 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)
40.00	Channel Master 1.2 M	1	24.464	26.910	1.00	1.00	20.91	0.000	0.000	900.30	0.00	0.00	169.20
93.00	Standoff	1	31.132	34.246	1.00	1.00	2.50	0.000	0.000	136.98	0.00	0.00	180.00
93.00	Decibel DB408	1	31.575	34.732	1.00	1.00	2.70	0.000	4.710	150.04	0.00	706.71	25.20
103.0	Standoff	1	32.054	35.260	1.00	1.00	2.50	0.000	0.000	141.04	0.00	0.00	180.00
103.0	Decibel DB408	2	32.466	35.713	1.00	1.00	5.94	0.000	4.710	339.42	0.00	1,598.65	30.60
113.0	T-Arm	3	32.914	36.206	0.50	0.75	7.54	0.000	0.000	436.64	0.00	0.00	899.10
113.0	Decibel DB932DG90E-	3	32.914	36.206	0.54	0.80	5.63	0.000	0.000	326.02	0.00	0.00	25.65
113.0	Decibel DB844H90E	6	32.914	36.206	0.54	0.80	12.77	0.000	0.000	739.61	0.00	0.00	75.60
140.0	RFS ATMAP1412D-	3	34.992	38.491	0.40	0.80	1.40	0.000	0.000	86.46	0.00	0.00	35.10
140.0	RFS ATMAA1412D-	3	34.992	38.491	0.40	0.80	1.40	0.000	0.000	86.47	0.00	0.00	35.10
140.0	RFS APXV18-206516S-	3	34.992	38.491	0.54	0.80	5.63	0.000	0.000	346.61	0.00	0.00	50.49
140.0	RFS APXV18-206516L-	3	34.992	38.491	0.54	0.80	5.47	0.000	0.000	336.70	0.00	0.00	37.80
140.0	T-Arm	3	34.992	38.491	0.50	0.75	7.54	0.000	0.000	464.20	0.00	0.00	899.10
150.0	Diplexer	3	35.689	39.257	0.50	0.75	0.75	0.000	0.000	47.34	0.00	0.00	27.00
150.0	Yadi	1	35.689	39.257	0.75	0.75	3.00	0.000	0.000	188.44	0.00	0.00	40.50
150.0	Decibel DB408	2	35.991	39.590	0.75	0.75	4.45	0.000	4.500	282.20	0.00	1,269.90	30.60
150.0	ADC DD1900	6	35.689	39.257	0.38	0.75	3.01	0.000	0.000	189.38	0.00	0.00	81.00
150.0	CSS DUO1417-8686	6	35.689	39.257	0.50	0.75	18.09	0.000	0.000	1,136.27	0.00	0.00	229.50
150.0	GPS	1	35.689	39.257	0.75	0.75	0.45	0.000	0.000	28.27	0.00	0.00	1.35
150.0	4' Omni	1	35.824	39.406	0.75	0.75	1.13	0.000	2.000	70.93	0.00	141.86	4.50
150.0	Platform w/ Rails	1	35.689	39.257	1.00	1.00	26.00	0.000	0.000	1,633.11	0.00	0.00	1,755.00
										8,066.42			4,812.39

Pole : 302484  
 Location : Brantford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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 Z X

Base Elev : 0.000 (ft)

Load Case: 0.9D + 1.6W

115.00 mph with No Ice (Reduced DL)

24 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

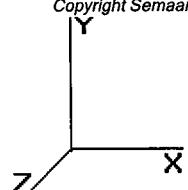
### Linear Appurtenance Segment Forces (Factored)

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)
5.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.514	0.182	1.247	0.00	44.27
5.00	(2) #18 Dwywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.182	1.247	0.00	0.00
5.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.182	1.247	0.00	0.00
10.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.514	0.186	1.259	0.00	44.27
10.00	(2) #18 Dwywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.186	1.259	0.00	0.00
10.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.186	1.259	0.00	0.00
15.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.514	0.190	1.271	0.00	44.27
15.00	(2) #18 Dwywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.190	1.271	0.00	0.00
15.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.190	1.271	0.00	0.00
20.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.514	0.195	1.284	0.00	44.27
20.00	(2) #18 Dwywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.195	1.284	0.00	0.00
20.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.195	1.284	0.00	0.00
25.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	22.514	0.199	1.297	0.00	44.27
25.00	(2) #18 Dwywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.199	1.297	0.00	0.00
25.00	(2) #18 Dwywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	22.514	0.199	1.297	0.00	0.00
30.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	22.533	0.204	0.000	39.26	44.27
30.00	(2) #18 Dwywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	22.533	0.204	0.000	49.57	0.00
30.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	22.533	0.204	0.000	49.57	0.00
31.50	(12) 1 5/8" Coax	Yes	1.50	1.200	1.98	0.25	0.30	22.850	0.207	0.000	11.97	13.31
31.50	(2) #18 Dwywidag bars	Yes	1.50	1.200	2.50	0.31	0.38	22.850	0.207	0.000	15.11	0.00
31.50	(2) #18 Dywidag bars	Yes	1.50	1.200	2.50	0.31	0.38	22.850	0.207	0.000	15.11	0.00
35.00	(12) 1 5/8" Coax	Yes	3.50	1.200	1.98	0.58	0.69	23.548	0.210	0.000	28.69	30.96
35.00	(2) #18 Dwywidag bars	Yes	3.50	1.200	2.50	0.73	0.87	23.548	0.210	0.000	36.23	0.00
35.00	(2) #18 Dywidag bars	Yes	3.50	1.200	2.50	0.73	0.87	23.548	0.210	0.000	36.23	0.00
35.67	(12) 1 5/8" Coax	Yes	0.67	1.200	1.98	0.11	0.13	23.676	0.212	0.000	5.53	5.93
35.67	(2) #18 Dwywidag bars	Yes	0.67	1.200	2.50	0.14	0.17	23.676	0.212	0.000	6.98	0.00
35.67	(2) #18 Dywidag bars	Yes	0.67	1.200	2.50	0.14	0.17	23.676	0.212	0.000	6.98	0.00
40.00	(12) 1 5/8" Coax	Yes	4.33	1.200	1.98	0.71	0.86	24.464	0.210	0.000	36.91	38.34
40.00	(2) #18 Dwywidag bars	Yes	4.33	1.200	2.50	0.90	1.08	24.464	0.210	0.000	46.61	0.00
40.00	(2) #18 Dywidag bars	Yes	4.33	1.200	2.50	0.90	1.08	24.464	0.210	0.000	46.61	0.00
45.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	25.301	0.215	0.000	44.08	44.27
45.00	(2) #18 Dwywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	25.301	0.215	0.000	55.66	0.00
45.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	25.301	0.215	0.000	55.66	0.00
50.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	26.074	0.221	0.000	45.43	44.27
50.00	(2) #18 Dwywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	26.074	0.221	0.000	57.36	0.00
50.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	26.074	0.221	0.000	57.36	0.00
55.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	26.794	0.226	0.000	46.69	44.27
55.00	(2) #18 Dwywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	26.794	0.226	0.000	58.95	0.00
55.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	26.794	0.226	0.000	58.95	0.00
60.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	27.468	0.233	0.000	47.86	44.27
60.00	(2) #18 Dwywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	27.468	0.233	0.000	60.43	0.00
60.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	27.468	0.233	0.000	60.43	0.00
65.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	28.104	0.239	0.000	48.97	44.27
65.00	(2) #18 Dwywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	28.104	0.239	0.000	61.83	0.00
65.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	28.104	0.239	0.000	61.83	0.00
70.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	28.705	0.246	0.000	50.02	44.27
70.00	(2) #18 Dwywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	28.705	0.246	0.000	63.15	0.00
70.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	28.705	0.246	0.000	63.15	0.00
70.00	(12) 1 5/8" Coax	Yes	0.00	1.200	1.98	0.00	0.00	28.706	0.249	0.000	0.03	0.03
70.00	(2) #18 Dwywidag bars	Yes	0.00	1.200	2.50	0.00	0.00	28.706	0.249	0.000	0.04	0.00
70.00	(2) #18 Dywidag bars	Yes	0.00	1.200	2.50	0.00	0.00	28.706	0.249	0.000	0.04	0.00

Pole : 302484  
 Location : Brantford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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Base Elev : 0.000 (ft)

Load Case: 0.9D + 1.6W

115.00 mph with No Ice (Reduced DL)

24 Iterations

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

Wind Importance Factor : 1.00

73.50	(12) 1 5/8" Coax	Yes	3.50	1.200	1.98	0.58	0.69	29.108	0.252	0.000	35.50	30.99
73.50	(2) #18 Dywidag bars	Yes	3.50	1.200	2.50	0.73	0.88	29.108	0.252	0.000	44.83	0.00
73.50	(2) #18 Dvwidag bars	Yes	3.50	1.200	2.50	0.73	0.88	29.108	0.252	0.000	44.83	0.00
75.00	(12) 1 5/8" Coax	Yes	1.50	1.200	1.98	0.25	0.30	29.277	0.251	0.000	15.27	13.25
75.00	(2) #18 Dywidag bars	Yes	1.50	1.200	2.50	0.31	0.37	29.277	0.251	0.000	19.28	0.00
75.00	(2) #18 Dvwidag bars	Yes	1.50	1.200	2.50	0.31	0.37	29.277	0.251	0.000	19.28	0.00
80.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	29.821	0.256	0.000	51.96	44.27
80.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	29.821	0.256	0.000	65.61	0.00
80.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	29.821	0.256	0.000	65.61	0.00
85.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	30.343	0.264	0.000	52.87	44.27
85.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	30.343	0.264	0.000	66.75	0.00
85.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	30.343	0.264	0.000	66.75	0.00
90.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	30.842	0.272	0.000	53.74	44.27
90.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	30.842	0.272	0.000	67.85	0.00
90.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	30.842	0.272	0.000	67.85	0.00
93.00	(12) 1 5/8" Coax	Yes	3.00	1.200	1.98	0.50	0.59	31.132	0.279	0.000	32.55	26.56
93.00	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	0.63	0.75	31.132	0.279	0.000	41.09	0.00
93.00	(2) #18 Dvwidag bars	Yes	3.00	1.200	2.50	0.63	0.75	31.132	0.279	0.000	41.09	0.00
95.00	(12) 1 5/8" Coax	Yes	2.00	1.200	1.98	0.33	0.40	31.322	0.284	0.000	21.83	17.71
95.00	(2) #18 Dywidag bars	Yes	2.00	1.200	2.50	0.42	0.50	31.322	0.284	0.000	27.56	0.00
95.00	(2) #18 Dvwidag bars	Yes	2.00	1.200	2.50	0.42	0.50	31.322	0.284	0.000	27.56	0.00
100.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	31.785	0.290	0.000	55.38	44.27
100.0	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	31.785	0.290	0.000	69.93	0.00
100.0	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	31.785	0.290	0.000	69.93	0.00
103.0	(12) 1 5/8" Coax	Yes	3.00	1.200	1.98	0.50	0.59	32.054	0.298	0.000	33.51	26.56
103.0	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	0.63	0.75	32.054	0.298	0.000	42.31	0.00
103.0	(2) #18 Dvwidag bars	Yes	3.00	1.200	2.50	0.63	0.75	32.054	0.298	0.000	42.31	0.00
105.0	(12) 1 5/8" Coax	Yes	2.00	1.200	1.98	0.33	0.40	32.231	0.304	0.000	22.46	17.71
105.0	(2) #18 Dvwidag bars	Yes	2.00	1.200	2.50	0.42	0.50	32.231	0.304	0.000	28.36	0.00
105.0	(2) #18 Dywidag bars	Yes	2.00	1.200	2.50	0.42	0.50	32.231	0.304	0.000	28.36	0.00
110.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	32.662	0.311	0.000	56.91	44.27
110.0	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	32.662	0.311	0.000	71.86	0.00
110.0	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	32.662	0.311	0.000	71.86	0.00
110.0	(12) 1 5/8" Coax	Yes	0.00	1.200	1.98	0.00	0.00	32.662	0.317	0.000	0.04	0.03
110.0	(2) #18 Dywidag bars	Yes	0.00	1.200	2.50	0.00	0.00	32.662	0.317	0.000	0.05	0.00
110.0	(2) #18 Dvwidag bars	Yes	0.00	1.200	2.50	0.00	0.00	32.662	0.317	0.000	0.05	0.00
113.0	(12) 1 5/8" Coax	Yes	3.00	1.200	1.98	0.49	0.59	32.914	0.321	0.000	34.37	26.54
113.0	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	0.62	0.75	32.914	0.321	0.000	43.40	0.00
113.0	(2) #18 Dvwidag bars	Yes	3.00	1.200	2.50	0.62	0.75	32.914	0.321	0.000	43.40	0.00
115.0	(12) 1 5/8" Coax	Yes	2.00	1.200	1.98	0.33	0.40	33.080	0.327	0.000	23.06	17.71
115.0	(2) #18 Dywidag bars	Yes	2.00	1.200	2.50	0.42	0.50	33.080	0.327	0.000	29.11	0.00
115.0	(2) #18 Dvwidag bars	Yes	2.00	1.200	2.50	0.42	0.50	33.080	0.327	0.000	29.11	0.00
120.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	33.484	0.336	0.000	58.34	44.27
120.0	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	33.484	0.336	0.000	73.67	0.00
120.0	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	33.484	0.336	0.000	73.67	0.00
125.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	33.877	0.249	0.000	59.03	44.27
125.0	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	0.63	0.75	33.877	0.249	0.000	44.72	0.00
125.0	(2) #18 Dvwidag bars	Yes	3.00	1.200	2.50	0.63	0.75	33.877	0.249	0.000	44.72	0.00
130.0	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	34.259	0.103	1.010	0.00	44.27
135.0	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	34.630	0.108	1.023	0.00	44.27
140.0	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	34.992	0.113	1.038	0.00	44.27

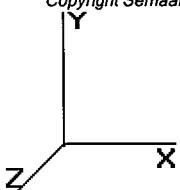
Totals: 3,508.88 1,239.69

Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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Load Case: 0.9D + 1.6W

115.00 mph with No Ice (Reduced DL)

24 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	632.24	1,311.82	0.00	0.00
10.00	618.84	1,297.33	0.00	0.00
15.00	605.45	1,282.84	0.00	0.00
20.00	592.06	1,268.36	0.00	0.00
25.00	578.66	1,253.87	0.00	0.00
30.00	817.31	1,239.38	0.00	0.00
31.50	246.00	369.81	0.00	0.00
35.00	593.18	1,205.66	0.00	0.00
35.67	113.33	229.53	0.00	0.00
40.00	1,649.54	1,143.50	0.00	0.00
45.00	877.94	1,113.41	0.00	0.00
50.00	886.16	1,101.32	0.00	0.00
55.00	891.50	1,089.23	0.00	0.00
60.00	894.33	1,077.14	0.00	0.00
65.00	894.96	793.05	0.00	0.00
70.00	893.62	780.95	0.00	0.00
70.00	0.59	0.52	0.00	0.00
73.50	631.23	772.54	0.00	0.00
75.00	268.36	206.73	0.00	0.00
80.00	899.38	684.35	0.00	0.00
85.00	893.43	674.69	0.00	0.00
90.00	886.13	665.03	0.00	0.00
93.00	813.04	599.58	0.00	706.71
95.00	348.34	260.40	0.00	0.00
100.0	867.83	644.23	0.00	0.00
103.0	994.59	592.50	0.00	1,598.65
105.0	340.04	251.48	0.00	0.00
110.0	845.16	621.94	0.00	0.00
110.0	0.56	0.41	0.00	0.00
113.0	2,001.44	1,330.74	0.00	0.00
115.0	330.11	208.85	0.00	0.00
120.0	818.63	517.03	0.00	0.00
125.0	744.43	237.77	0.00	0.00
130.0	481.85	230.51	0.00	0.00
135.0	466.48	223.24	0.00	0.00
140.0	1,770.97	1,273.57	0.00	0.00
145.0	434.05	164.44	0.00	0.00
150.0	3,992.98	2,326.63	0.00	1,411.76
Totals:	30,614.72	29,044.37	0.00	3,717.13

Pole : 302484  
 Location : Brantford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/in)

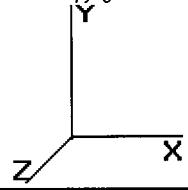
Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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Base Elev : 0.000 (ft)



Load Case: 0.9D + 1.6W

115.00 mph with No Ice (Reduced DL)

24 Iterations

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

Wind Importance Factor : 1.00

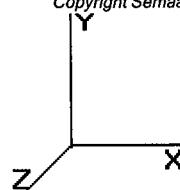
### Calculated Forces

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	-28.98	-30.67	0.00	-2,758.81	0.00	2,758.81	2,613.99	1,306.99	3,984.35	1,967.72	0.00	0.00	0.661
5.00	-27.55	-30.15	0.00	-2,605.45	0.00	2,605.45	2,558.64	1,279.32	3,816.58	1,884.87	0.12	-0.23	0.641
10.00	-26.14	-29.62	0.00	-2,454.71	0.00	2,454.71	2,503.29	1,251.65	3,652.42	1,803.79	0.48	-0.45	0.620
15.00	-24.75	-29.10	0.00	-2,306.60	0.00	2,306.60	2,447.95	1,223.97	3,491.87	1,724.51	1.08	-0.68	0.598
20.00	-23.39	-28.58	0.00	-2,161.10	0.00	2,161.10	2,392.60	1,196.30	3,334.93	1,647.00	1.91	-0.89	0.576
25.00	-22.04	-28.06	0.00	-2,018.20	0.00	2,018.20	2,337.25	1,168.63	3,181.60	1,571.27	2.96	-1.11	0.553
30.00	-20.75	-27.27	0.00	-1,877.89	0.00	1,877.89	2,281.90	1,140.95	3,031.88	1,497.33	4.24	-1.32	0.529
31.50	-20.34	-27.05	0.00	-1,836.90	0.00	1,836.90	2,265.26	1,132.63	2,987.57	1,475.45	4.66	-1.39	0.522
35.00	-19.11	-26.46	0.00	-1,742.31	0.00	1,742.31	2,226.56	1,113.28	2,885.76	1,425.17	5.73	-1.53	0.496
35.67	-18.84	-26.37	0.00	-1,724.58	0.00	1,724.58	1,892.81	946.40	2,503.89	1,236.58	5.95	-1.56	0.525
40.00	-17.66	-24.75	0.00	-1,610.41	0.00	1,610.41	1,852.80	926.40	2,398.66	1,184.61	7.45	-1.73	0.502
45.00	-16.49	-23.89	0.00	-1,486.68	0.00	1,486.68	1,806.60	903.30	2,279.97	1,125.99	9.37	-1.93	0.476
50.00	-15.34	-23.02	0.00	-1,367.23	0.00	1,367.23	1,760.41	880.20	2,164.28	1,068.86	11.50	-2.13	0.449
55.00	-14.22	-22.13	0.00	-1,252.15	0.00	1,252.15	1,714.21	857.11	2,051.61	1,013.21	13.83	-2.32	0.423
60.00	-13.11	-21.23	0.00	-1,141.50	0.00	1,141.50	1,714.21	857.11	2,051.61	1,013.21	16.35	-2.50	0.396
60.00	-13.11	-21.23	0.00	-1,141.50	0.00	1,141.50	1,714.21	857.11	2,051.61	1,013.21	16.35	-2.50	0.553
65.00	-12.29	-20.35	0.00	-1,035.35	0.00	1,035.35	1,621.82	810.91	1,835.30	906.38	19.07	-2.67	0.518
70.00	-11.51	-19.44	0.00	-933.62	0.00	933.62	1,575.62	787.81	1,731.66	855.20	21.99	-2.91	0.482
70.00	-11.49	-19.45	0.00	-933.55	0.00	933.55	1,575.59	787.80	1,731.59	855.17	21.99	-2.91	0.482
73.50	-10.71	-18.80	0.00	-865.46	0.00	865.46	1,259.14	629.57	1,387.81	685.39	24.19	-3.07	0.490
75.00	-10.47	-18.55	0.00	-837.32	0.00	837.32	1,248.10	624.05	1,363.46	673.36	25.16	-3.13	0.478
80.00	-9.77	-17.65	0.00	-744.56	0.00	744.56	1,211.20	605.60	1,283.66	633.95	28.56	-3.36	0.438
85.00	-9.09	-16.75	0.00	-656.30	0.00	656.30	1,174.30	587.15	1,206.28	595.74	32.19	-3.57	0.397
90.00	-8.45	-15.85	0.00	-572.54	0.00	572.54	1,137.40	568.70	1,131.30	558.71	36.03	-3.76	0.357
93.00	-7.88	-15.01	0.00	-524.29	0.00	524.29	1,115.27	557.63	1,087.47	537.06	38.43	-3.87	0.333
95.00	-7.61	-14.66	0.00	-494.27	0.00	494.27	1,100.51	550.25	1,058.73	522.87	40.07	-3.95	0.317
100.00	-7.00	-13.76	0.00	-420.97	0.00	420.97	1,063.61	531.80	988.56	488.21	44.29	-4.11	0.279
103.00	-6.46	-12.74	0.00	-378.08	0.00	378.08	1,041.47	520.73	947.61	467.99	46.90	-4.20	0.255
105.00	-6.22	-12.39	0.00	-352.60	0.00	352.60	1,026.71	513.35	920.80	454.75	48.67	-4.26	0.240
110.00	-5.65	-11.51	0.00	-290.65	0.00	290.65	989.81	494.91	855.44	422.47	53.20	-4.39	0.204
110.00	-5.64	-11.51	0.00	-290.61	0.00	290.61	989.79	494.89	855.40	422.45	53.20	-4.39	0.204
110.00	-5.64	-11.51	0.00	-290.61	0.00	290.61	989.79	494.89	855.40	422.45	53.20	-4.39	0.220
113.00	-4.46	-9.42	0.00	-256.12	0.00	256.12	729.89	364.94	620.25	306.32	55.98	-4.46	0.196
115.00	-4.26	-9.08	0.00	-237.28	0.00	237.28	718.79	359.39	601.45	297.03	57.86	-4.51	0.184
120.00	-3.80	-8.23	0.00	-191.90	0.00	191.90	718.79	359.39	601.45	297.03	62.64	-4.62	0.152
120.00	-3.80	-8.23	0.00	-191.90	0.00	191.90	718.79	359.39	601.45	297.03	62.64	-4.62	0.705
125.00	-3.59	-7.48	0.00	-150.76	0.00	150.76	663.29	331.65	511.77	252.74	67.52	-4.71	0.602
130.00	-3.36	-7.00	0.00	-113.36	0.00	113.36	635.54	317.77	469.64	231.94	72.65	-5.08	0.495
135.00	-3.15	-6.53	0.00	-78.36	0.00	78.36	607.80	303.90	429.33	212.03	78.13	-5.38	0.375
140.00	-2.04	-4.65	0.00	-45.71	0.00	45.71	580.05	290.02	390.82	193.01	83.89	-5.61	0.241
145.00	-1.91	-4.21	0.00	-22.45	0.00	22.45	552.30	276.15	354.12	174.89	89.84	-5.75	0.132
150.00	0.00	-3.99	0.00	-1.41	0.00	1.41	524.55	262.28	319.23	157.66	95.89	-5.81	0.009

Pole : 302484  
 Location : Brantford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/in)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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Base Elev : 0.000 (ft)

Load Case: 1.2D + 1.0Di + 1.0Wi			50.00 mph with 1.25 in Radial Ice	23 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	0.70	4.256	4.682	0.000	1.200	0.00	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	4.256	4.682	0.000	1.200 *	2.07	5.00	17.680	21.22	99.3	517.9	1,964.5
10.00		1.00	0.70	4.256	4.682	0.000	1.200 *	2.21	5.00	17.466	20.96	98.1	545.9	1,973.2
15.00		1.00	0.70	4.256	4.682	0.000	1.200 *	2.31	5.00	17.205	20.65	96.7	558.0	1,966.0
20.00		1.00	0.70	4.256	4.682	0.000	1.200 *	2.37	5.00	16.923	20.31	95.1	563.2	1,951.9
25.00		1.00	0.70	4.256	4.682	0.000	1.200 *	2.43	5.00	16.630	19.96	93.4	564.4	1,933.8
30.00		1.00	0.70	4.260	4.686	0.000	1.200 *	2.47	5.00	16.329	19.59	91.8	562.9	1,913.0
31.50	Bot - Section 2	1.00	0.71	4.320	4.751	0.000	1.200 *	2.48	1.50	4.847	5.82	27.6	169.0	571.1
35.00		1.00	0.73	4.451	4.897	0.000	1.200 *	2.51	3.50	11.359	13.63	66.7	398.4	1,794.4
35.67	Top - Section 1	1.00	0.73	4.476	4.923	0.000	1.200 *	2.52	0.67	2.158	2.59	12.7	76.3	341.8
40.00	Appertunance(s)	1.00	0.76	4.625	5.087	0.000	1.200 *	2.54	4.33	13.822	16.59	84.4	489.3	1,526.4
45.00		1.00	0.78	4.783	5.261	0.000	1.200 *	2.57	5.00	15.671	18.80	98.9	559.1	1,741.6
50.00		1.00	0.81	4.929	5.422	0.000	1.200 *	2.60	5.00	15.355	18.43	99.9	552.2	1,718.6
55.00		1.00	0.83	5.065	5.572	0.000	1.200 *	2.63	5.00	15.038	18.05	100.5	544.5	1,694.8
60.00	Reinf. Top	1.00	0.85	5.193	5.712	0.000	1.200 *	2.65	5.00	14.719	17.66	100.9	536.2	1,670.4
65.00		1.00	0.87	5.313	5.844	0.000	1.200 *	2.67	5.00	14.399	17.28	101.0	527.3	1,373.3
70.00		1.00	0.89	5.426	5.969	0.000	1.200 *	2.69	5.00	14.078	16.89	100.8	517.8	1,347.8
70.00	Bot - Section 3	1.00	0.89	5.426	5.969	0.000	1.200 *	2.69	0.00	0.009	0.01	0.1	0.3	0.9
73.50	Top - Section 2	1.00	0.90	5.503	6.053	0.000	1.200 *	2.70	3.50	9.812	11.77	71.3	363.8	1,245.9
75.00		1.00	0.91	5.534	6.088	0.000	1.200 *	2.71	1.50	4.147	4.98	30.3	154.7	367.1
80.00		1.00	0.92	5.637	6.201	0.000	1.200 *	2.73	5.00	13.648	16.38	101.6	506.5	1,207.7
85.00		1.00	0.94	5.736	6.309	0.000	1.200 *	2.74	5.00	13.323	15.99	100.9	495.9	1,184.2
90.00		1.00	0.95	5.830	6.413	0.000	1.200 *	2.76	5.00	12.999	15.60	100.0	485.0	1,160.4
93.00	Appertunance(s)	1.00	0.96	5.885	6.474	0.000	1.200 *	2.77	3.00	7.641	9.17	59.4	287.0	686.0
95.00		1.00	0.97	5.921	6.513	0.000	1.200 *	2.77	2.00	5.029	6.03	39.3	189.5	453.0
100.0		1.00	0.98	6.008	6.609	0.000	1.200 *	2.79	5.00	12.347	14.82	97.9	462.3	1,111.9
103.0	Appertunance(s)	1.00	0.99	6.059	6.665	0.000	1.200 *	2.80	3.00	7.250	8.70	58.0	273.2	656.8
105.0		1.00	1.00	6.093	6.702	0.000	1.200 *	2.80	2.00	4.768	5.72	38.3	180.2	433.4
110.0		1.00	1.01	6.174	6.792	0.000	1.200 *	2.82	5.00	11.693	14.03	95.3	438.5	1,062.4
110.0	Top - Section 3	1.00	1.01	6.174	6.792	0.000	1.200 *	2.82	0.00	0.008	0.01	0.1	0.3	0.7
113.0	Appertunance(s)	1.00	1.02	6.222	6.844	0.000	1.200 *	2.82	3.00	6.850	8.22	56.3	258.5	575.9
115.0		1.00	1.02	6.253	6.879	0.000	1.200 *	2.83	2.00	4.506	5.41	37.2	170.5	380.4
120.0	Reinf. Top	1.00	1.04	6.330	6.963	0.000	1.200 *	2.84	5.00	11.038	13.25	92.2	413.9	931.9
125.0		1.00	1.05	6.404	7.044	0.000	1.200 *	2.85	5.00	10.710	12.85	90.5	401.3	637.6
130.0		1.00	1.06	6.476	7.124	0.000	1.200 *	2.86	5.00	10.381	12.46	88.7	388.5	615.2
135.0		1.00	1.07	6.546	7.201	0.000	1.200 *	2.87	5.00	10.052	12.06	86.9	375.6	592.5
140.0	Appertunance(s)	1.00	1.08	6.615	7.276	0.000	1.200 *	2.88	5.00	9.723	11.67	84.9	362.5	569.7
145.0		1.00	1.09	6.681	7.350	0.000	1.200	2.89	5.00	9.393	11.27	82.8	349.2	546.8
150.0	Appertunance(s)	1.00	1.11	6.746	7.421	0.000	1.200	2.90	5.00	9.063	10.88	80.7	335.8	523.7

\* = Cf Adjusted By Linear Load Ra Effect

Totals: 150.00

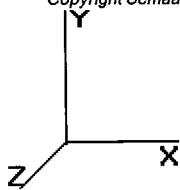
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Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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Load Case: 1.2D + 1.0Di + 1.0Wi		50.00 mph with 1.25 in Radial Ice	23 Iterations		
Gust Response Factor :	1.10	Ice Dead Load Factor :	1.00 <th>Wind Importance Factor :</th> <td>1.00</td>	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)
40.00	Channel Master 1.2 M	1	4.625	5.087	1.00	1.00	42.23	0.000	0.000	214.80	0.00	0.00	328.25
93.00	Standoff	1	5.885	6.474	1.00	1.00	5.27	0.000	0.000	34.14	0.00	0.00	361.83
93.00	Decibel DB408	1	5.969	6.566	1.00	1.00	5.69	0.000	4.710	37.39	0.00	176.11	42.66
103.0	Standoff	1	6.059	6.665	1.00	1.00	5.30	0.000	0.000	35.34	0.00	0.00	364.11
103.0	Decibel DB408	2	6.137	6.751	1.00	1.00	12.60	0.000	4.710	85.04	0.00	400.52	30.90
113.0	T-Arm	3	6.222	6.844	0.50	0.75	15.99	0.000	0.000	109.44	0.00	0.00	2,028.65
113.0	Decibel DB932DG90E-	3	6.222	6.844	0.54	0.80	8.21	0.000	0.000	56.16	0.00	0.00	555.13
113.0	Decibel DB844H90E	6	6.222	6.844	0.54	0.80	17.18	0.000	0.000	117.56	0.00	0.00	1,380.13
140.0	RFS ATMAP1412D-	3	6.615	7.276	0.40	0.80	3.03	0.000	0.000	22.02	0.00	0.00	69.06
140.0	RFS ATMAA1412D-	3	6.615	7.276	0.40	0.80	3.03	0.000	0.000	22.02	0.00	0.00	69.06
140.0	RFS APXV18-206516S-	3	6.615	7.276	0.54	0.80	8.47	0.000	0.000	61.65	0.00	0.00	601.11
140.0	RFS APXV18-206516L-	3	6.615	7.276	0.54	0.80	8.39	0.000	0.000	61.05	0.00	0.00	582.02
140.0	T-Arm	3	6.615	7.276	0.50	0.75	16.25	0.000	0.000	118.22	0.00	0.00	2,053.12
150.0	Diplexer	3	6.746	7.421	0.50	0.75	1.63	0.000	0.000	12.10	0.00	0.00	55.90
150.0	Yagi	1	6.746	7.421	0.75	0.75	16.09	0.000	0.000	119.40	0.00	0.00	270.78
150.0	Decibel DB408	2	6.804	7.484	0.75	0.75	9.64	0.000	4.500	72.13	0.00	324.60	32.36
150.0	ADC DD1900	6	6.746	7.421	0.38	0.75	6.52	0.000	0.000	48.41	0.00	0.00	152.71
150.0	CSS DUO1417-8686	6	6.746	7.421	0.50	0.75	22.84	0.000	0.000	169.50	0.00	0.00	2,202.81
150.0	GPS	1	6.746	7.421	0.75	0.75	0.97	0.000	0.000	7.22	0.00	0.00	1.55
150.0	4' Omni	1	6.772	7.449	0.75	0.75	2.43	0.000	2.000	18.13	0.00	36.26	4.82
150.0	Platform w/ Rails	1	6.746	7.421	1.00	1.00	56.25	0.000	0.000	417.44	0.00	0.00	3,758.78
												1,839.15	14,945.75

Pole : 302484  
 Location : Brantford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

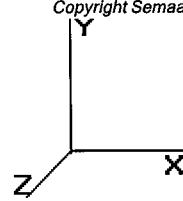
Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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Load Case: 1.2D + 1.0Di + 1.0Wi

50.00 mph with 1.25 in Radial Ice

23 Iterations

Gust Response Factor : 1.10

Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00

Dead Load Factor : 1.20

Wind Load Factor : 1.00

Ice Importance 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	F X (lb)	Dead Load (lb)
5.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.55	0.00	4.256	0.182	1.247	0.00	296.12
5.00	(2) #18 Dwywidag bars	Yes	5.00	0.000	2.50	2.77	0.00	4.256	0.182	1.247	0.00	71.64
5.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	2.77	0.00	4.256	0.182	1.247	0.00	71.64
10.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.67	0.00	4.256	0.186	1.259	0.00	313.74
10.00	(2) #18 Dwywidag bars	Yes	5.00	0.000	2.50	2.89	0.00	4.256	0.186	1.259	0.00	78.43
10.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	2.89	0.00	4.256	0.186	1.259	0.00	78.43
15.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.75	0.00	4.256	0.190	1.271	0.00	324.76
15.00	(2) #18 Dwywidag bars	Yes	5.00	0.000	2.50	2.97	0.00	4.256	0.190	1.271	0.00	82.75
15.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	2.97	0.00	4.256	0.190	1.271	0.00	82.75
20.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.81	0.00	4.256	0.195	1.284	0.00	332.92
20.00	(2) #18 Dwywidag bars	Yes	5.00	0.000	2.50	3.02	0.00	4.256	0.195	1.284	0.00	85.99
20.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	3.02	0.00	4.256	0.195	1.284	0.00	85.99
25.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	2.85	0.00	4.256	0.199	1.297	0.00	339.46
25.00	(2) #18 Dwywidag bars	Yes	5.00	0.000	2.50	3.07	0.00	4.256	0.199	1.297	0.00	88.61
25.00	(2) #18 Dwywidag bars	Yes	5.00	0.000	2.50	3.07	0.00	4.256	0.199	1.297	0.00	88.61
30.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	2.89	3.47	4.260	0.204	0.000	16.24	344.93
30.00	(2) #18 Dwywidag bars	Yes	5.00	1.200	2.50	3.11	3.73	4.260	0.204	0.000	17.46	90.82
30.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	3.11	3.73	4.260	0.204	0.000	17.46	90.82
31.50	(12) 1 5/8" Coax	Yes	1.50	1.200	1.98	0.87	1.05	4.320	0.207	0.000	4.97	104.16
31.50	(2) #18 Dwywidag bars	Yes	1.50	1.200	2.50	0.94	1.12	4.320	0.207	0.000	5.34	27.49
31.50	(2) #18 Dywidag bars	Yes	1.50	1.200	2.50	0.94	1.12	4.320	0.207	0.000	5.34	27.49
35.00	(12) 1 5/8" Coax	Yes	3.50	1.200	1.98	2.04	2.45	4.451	0.210	0.000	12.00	244.53
35.00	(2) #18 Dwywidag bars	Yes	3.50	1.200	2.50	2.19	2.63	4.451	0.210	0.000	12.89	64.86
35.00	(2) #18 Dywidag bars	Yes	3.50	1.200	2.50	2.19	2.63	4.451	0.210	0.000	12.89	64.86
35.67	(12) 1 5/8" Coax	Yes	0.67	1.200	1.98	0.39	0.47	4.476	0.212	0.000	2.32	46.93
35.67	(2) #18 Dwywidag bars	Yes	0.67	1.200	2.50	0.42	0.51	4.476	0.212	0.000	2.49	12.46
35.67	(2) #18 Dywidag bars	Yes	0.67	1.200	2.50	0.42	0.51	4.476	0.212	0.000	2.49	12.46
40.00	(12) 1 5/8" Coax	Yes	4.33	1.200	1.98	2.55	3.06	4.625	0.210	0.000	15.59	306.41
40.00	(2) #18 Dwywidag bars	Yes	4.33	1.200	2.50	2.74	3.29	4.625	0.210	0.000	16.73	81.79
40.00	(2) #18 Dywidag bars	Yes	4.33	1.200	2.50	2.74	3.29	4.625	0.210	0.000	16.73	81.79
45.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	2.97	3.57	4.783	0.215	0.000	18.78	357.56
45.00	(2) #18 Dwywidag bars	Yes	5.00	1.200	2.50	3.19	3.83	4.783	0.215	0.000	20.14	95.98
45.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	3.19	3.83	4.783	0.215	0.000	20.14	95.98
50.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	3.00	3.60	4.929	0.221	0.000	19.50	360.95
50.00	(2) #18 Dwywidag bars	Yes	5.00	1.200	2.50	3.21	3.86	4.929	0.221	0.000	20.91	97.38
50.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	3.21	3.86	4.929	0.221	0.000	20.91	97.38
55.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	3.02	3.62	5.065	0.226	0.000	20.17	364.06
55.00	(2) #18 Dwywidag bars	Yes	5.00	1.200	2.50	3.23	3.88	5.065	0.226	0.000	21.62	98.66
55.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	3.23	3.88	5.065	0.226	0.000	21.62	98.66
60.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	3.04	3.64	5.193	0.233	0.000	20.81	366.92
60.00	(2) #18 Dwywidag bars	Yes	5.00	1.200	2.50	3.25	3.90	5.193	0.233	0.000	22.30	99.85
60.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	3.25	3.90	5.193	0.233	0.000	22.30	99.85
65.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	3.05	3.67	5.313	0.239	0.000	21.42	369.59
65.00	(2) #18 Dwywidag bars	Yes	5.00	1.200	2.50	3.27	3.93	5.313	0.239	0.000	22.94	100.96
65.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	3.27	3.93	5.313	0.239	0.000	22.94	100.96
70.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	3.07	3.69	5.426	0.246	0.000	22.00	372.08
70.00	(2) #18 Dwywidag bars	Yes	5.00	1.200	2.50	3.29	3.95	5.426	0.246	0.000	23.55	102.00
70.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	3.29	3.95	5.426	0.246	0.000	23.55	102.00
70.00	(12) 1 5/8" Coax	Yes	0.00	1.200	1.98	0.00	0.00	5.426	0.249	0.000	0.01	0.25
70.00	(2) #18 Dwywidag bars	Yes	0.00	1.200	2.50	0.00	0.00	5.426	0.249	0.000	0.02	0.07
70.00	(2) #18 Dywidag bars	Yes	0.00	1.200	2.50	0.00	0.00	5.426	0.249	0.000	0.02	0.07

Pole : 302484  
 Location : Brantford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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Base Elev : 0.000 (ft)

Z X

<u>Load Case:</u> 1.2D + 1.0Di + 1.0Wi		50.00 mph with 1.25 in Radial Ice										23 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													
73.50	(12) 1 5/8" Coax	Yes	3.50	1.200	1.98	2.16	2.59	5.503	0.252	0.000	15.67	261.61	
73.50	(2) #18 Dywidag bars	Yes	3.50	1.200	2.50	2.31	2.77	5.503	0.252	0.000	16.77	71.88	
73.50	(2) #18 Dvwidaq bars	Yes	3.50	1.200	2.50	2.31	2.77	5.503	0.252	0.000	16.77	71.88	
75.00	(12) 1 5/8" Coax	Yes	1.50	1.200	1.98	0.92	1.11	5.534	0.251	0.000	6.75	112.08	
75.00	(2) #18 Dywidag bars	Yes	1.50	1.200	2.50	0.99	1.19	5.534	0.251	0.000	7.22	30.82	
75.00	(2) #18 Dvwidaq bars	Yes	1.50	1.200	2.50	0.99	1.19	5.534	0.251	0.000	7.22	30.82	
80.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	3.10	3.72	5.637	0.256	0.000	23.08	376.63	
80.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	3.32	3.98	5.637	0.256	0.000	24.69	103.90	
80.00	(2) #18 Dvwidaq bars	Yes	5.00	1.200	2.50	3.32	3.98	5.637	0.256	0.000	24.69	103.90	
85.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	3.12	3.74	5.736	0.264	0.000	23.59	378.72	
85.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	3.33	4.00	5.736	0.264	0.000	25.23	104.78	
85.00	(2) #18 Dvwidaq bars	Yes	5.00	1.200	2.50	3.33	4.00	5.736	0.264	0.000	25.23	104.78	
90.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	3.13	3.75	5.830	0.272	0.000	24.07	380.71	
90.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	3.34	4.01	5.830	0.272	0.000	25.74	105.62	
90.00	(2) #18 Dvwidaq bars	Yes	5.00	1.200	2.50	3.34	4.01	5.830	0.272	0.000	25.74	105.62	
93.00	(12) 1 5/8" Coax	Yes	3.00	1.200	1.98	1.88	2.26	5.885	0.279	0.000	14.62	229.11	
93.00	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	2.01	2.41	5.885	0.279	0.000	15.63	63.66	
93.00	(2) #18 Dvwidaq bars	Yes	3.00	1.200	2.50	2.01	2.41	5.885	0.279	0.000	15.63	63.66	
95.00	(12) 1 5/8" Coax	Yes	2.00	1.200	1.98	1.26	1.51	5.921	0.284	0.000	9.82	153.04	
95.00	(2) #18 Dywidag bars	Yes	2.00	1.200	2.50	1.34	1.61	5.921	0.284	0.000	10.50	42.57	
95.00	(2) #18 Dvwidaq bars	Yes	2.00	1.200	2.50	1.34	1.61	5.921	0.284	0.000	10.50	42.57	
100.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	3.15	3.78	6.008	0.290	0.000	25.00	384.40	
100.0	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	3.37	4.04	6.008	0.290	0.000	26.72	107.18	
100.0	(2) #18 Dvwidaq bars	Yes	5.00	1.200	2.50	3.37	4.04	6.008	0.290	0.000	26.72	107.18	
103.0	(12) 1 5/8" Coax	Yes	3.00	1.200	1.98	1.90	2.27	6.059	0.298	0.000	15.16	231.27	
103.0	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	2.03	2.43	6.059	0.298	0.000	16.20	64.58	
103.0	(2) #18 Dvwidaq bars	Yes	3.00	1.200	2.50	2.03	2.43	6.059	0.298	0.000	16.20	64.58	
105.0	(12) 1 5/8" Coax	Yes	2.00	1.200	1.98	1.27	1.52	6.093	0.304	0.000	10.18	154.45	
105.0	(2) #18 Dywidag bars	Yes	2.00	1.200	2.50	1.35	1.62	6.093	0.304	0.000	10.88	43.17	
105.0	(2) #18 Dvwidaq bars	Yes	2.00	1.200	2.50	1.35	1.62	6.093	0.304	0.000	10.88	43.17	
110.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	3.17	3.81	6.174	0.311	0.000	25.88	387.79	
110.0	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	3.39	4.07	6.174	0.311	0.000	27.64	108.62	
110.0	(2) #18 Dvwidaq bars	Yes	5.00	1.200	2.50	3.39	4.07	6.174	0.311	0.000	27.64	108.62	
110.0	(12) 1 5/8" Coax	Yes	0.00	1.200	1.98	0.00	0.00	6.174	0.317	0.000	0.02	0.26	
110.0	(2) #18 Dywidag bars	Yes	0.00	1.200	2.50	0.00	0.00	6.174	0.317	0.000	0.02	0.07	
110.0	(2) #18 Dvwidaq bars	Yes	0.00	1.200	2.50	0.00	0.00	6.174	0.317	0.000	0.02	0.07	
113.0	(12) 1 5/8" Coax	Yes	3.00	1.200	1.98	1.91	2.29	6.222	0.321	0.000	15.66	232.99	
113.0	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	2.04	2.44	6.222	0.321	0.000	16.73	65.35	
113.0	(2) #18 Dvwidaq bars	Yes	3.00	1.200	2.50	2.04	2.44	6.222	0.321	0.000	16.73	65.35	
115.0	(12) 1 5/8" Coax	Yes	2.00	1.200	1.98	1.27	1.53	6.253	0.327	0.000	10.52	155.75	
115.0	(2) #18 Dywidag bars	Yes	2.00	1.200	2.50	1.36	1.63	6.253	0.327	0.000	11.23	43.72	
115.0	(2) #18 Dvwidaq bars	Yes	2.00	1.200	2.50	1.36	1.63	6.253	0.327	0.000	11.23	43.72	
120.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	3.20	3.83	6.330	0.336	0.000	26.70	390.92	
120.0	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	3.41	4.09	6.330	0.336	0.000	28.51	109.95	
120.0	(2) #18 Dvwidaq bars	Yes	5.00	1.200	2.50	3.41	4.09	6.330	0.336	0.000	28.51	109.95	
125.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	3.21	3.85	6.404	0.249	0.000	27.09	392.40	
125.0	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	2.05	2.46	6.404	0.249	0.000	17.36	66.35	
125.0	(2) #18 Dvwidaq bars	Yes	3.00	1.200	2.50	2.05	2.46	6.404	0.249	0.000	17.36	66.35	
130.0	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	3.21	0.00	6.476	0.103	1.010	0.00	393.83	
135.0	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	3.22	0.00	6.546	0.108	1.023	0.00	395.21	
140.0	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	3.23	0.00	6.615	0.113	1.038	0.00	396.55	

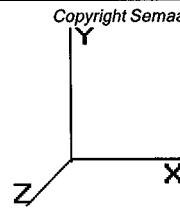
Totals: 1,382.49 15,077.07

Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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Load Case: 1.2D + 1.0Di + 1.0Wi

50.00 mph with 1.25 in Radial Ice

23 Iterations

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

Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00  
 Ice Importance Factor : 1.00

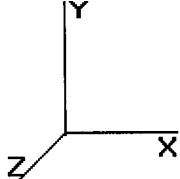
### Applied Segment Forces Summary

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	99.33	2,466.02	0.00	0.00
10.00	98.12	2,505.85	0.00	0.00
15.00	96.66	2,518.39	0.00	0.00
20.00	95.07	2,518.93	0.00	0.00
25.00	93.42	2,512.57	0.00	0.00
30.00	142.97	2,501.65	0.00	0.00
31.50	43.28	748.94	0.00	0.00
35.00	104.53	2,212.11	0.00	0.00
35.67	20.04	421.95	0.00	0.00
40.00	348.23	2,378.42	0.00	0.00
45.00	157.99	2,352.76	0.00	0.00
50.00	161.22	2,335.95	0.00	0.00
55.00	163.96	2,317.84	0.00	0.00
60.00	166.30	2,298.62	0.00	0.00
65.00	168.27	2,006.46	0.00	0.00
70.00	169.93	1,985.48	0.00	0.00
70.00	0.11	1.32	0.00	0.00
73.50	120.48	1,694.46	0.00	0.00
75.00	51.49	559.23	0.00	0.00
80.00	174.01	1,853.72	0.00	0.00
85.00	174.91	1,834.10	0.00	0.00
90.00	175.60	1,813.96	0.00	0.00
93.00	176.75	1,483.93	0.00	176.11
95.00	70.11	715.00	0.00	0.00
100.0	176.37	1,770.33	0.00	0.00
103.0	225.93	1,447.97	0.00	400.52
105.0	70.27	696.43	0.00	0.00
110.0	176.46	1,723.13	0.00	0.00
110.0	0.12	1.14	0.00	0.00
113.0	388.53	4,936.85	0.00	0.00
115.0	70.17	632.31	0.00	0.00
120.0	175.94	1,564.42	0.00	0.00
125.0	152.34	1,184.41	0.00	0.00
130.0	88.74	1,030.67	0.00	0.00
135.0	86.86	1,009.41	0.00	0.00
140.0	369.85	4,362.33	0.00	0.00
145.0	82.84	568.45	0.00	0.00
150.0	945.05	7,025.07	0.00	360.86
Totals:	6,082.28	71,990.55	0.00	937.49

Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
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Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
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Base Elev : 0.000 (ft)

Load Case: 1.2D + 1.0Di + 1.0Wi      50.00 mph with 1.25 in Radial Ice				23 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

### 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	-71.99	-6.11	0.00	-607.53	0.00	607.53	2,613.99	1,306.99	3,984.35	1,967.72	0.00	0.00	0.160
5.00	-69.52	-6.07	0.00	-576.97	0.00	576.97	2,558.64	1,279.32	3,816.58	1,884.87	0.03	-0.05	0.156
10.00	-67.01	-6.03	0.00	-546.60	0.00	546.60	2,503.29	1,251.65	3,652.42	1,803.79	0.11	-0.10	0.152
15.00	-64.48	-5.98	0.00	-516.44	0.00	516.44	2,447.95	1,223.97	3,491.87	1,724.51	0.24	-0.15	0.148
20.00	-61.96	-5.93	0.00	-486.52	0.00	486.52	2,392.60	1,196.30	3,334.93	1,647.00	0.42	-0.20	0.143
25.00	-59.44	-5.88	0.00	-456.85	0.00	456.85	2,337.25	1,168.63	3,181.60	1,571.27	0.66	-0.25	0.138
30.00	-56.94	-5.76	0.00	-427.44	0.00	427.44	2,281.90	1,140.95	3,031.88	1,497.33	0.94	-0.30	0.133
31.50	-56.19	-5.73	0.00	-418.79	0.00	418.79	2,265.26	1,132.63	2,987.57	1,475.45	1.04	-0.31	0.131
35.00	-53.97	-5.64	0.00	-398.74	0.00	398.74	2,226.56	1,113.28	2,885.76	1,425.17	1.28	-0.34	0.125
35.67	-53.55	-5.63	0.00	-394.96	0.00	394.96	1,892.81	946.40	2,503.89	1,236.58	1.33	-0.35	0.133
40.00	-51.17	-5.31	0.00	-370.57	0.00	370.57	1,852.80	926.40	2,398.66	1,184.61	1.66	-0.39	0.128
45.00	-48.81	-5.17	0.00	-344.03	0.00	344.03	1,806.60	903.30	2,279.97	1,125.99	2.10	-0.44	0.122
50.00	-46.47	-5.03	0.00	-318.16	0.00	318.16	1,760.41	880.20	2,164.28	1,068.86	2.58	-0.48	0.116
55.00	-44.15	-4.88	0.00	-293.02	0.00	293.02	1,714.21	857.11	2,051.61	1,013.21	3.11	-0.53	0.110
60.00	-41.85	-4.72	0.00	-268.62	0.00	268.62	1,714.21	857.11	2,051.61	1,013.21	3.68	-0.57	0.104
60.00	-41.85	-4.72	0.00	-268.62	0.00	268.62	1,714.21	857.11	2,051.61	1,013.21	3.68	-0.57	0.145
65.00	-39.85	-4.57	0.00	-245.02	0.00	245.02	1,621.82	810.91	1,835.30	906.38	4.30	-0.61	0.137
70.00	-37.86	-4.39	0.00	-222.19	0.00	222.19	1,575.62	787.81	1,731.66	855.20	4.97	-0.67	0.129
70.00	-37.86	-4.40	0.00	-222.18	0.00	222.18	1,575.59	787.80	1,731.59	855.17	4.97	-0.67	0.129
73.50	-36.16	-4.28	0.00	-206.76	0.00	206.76	1,259.14	629.57	1,387.81	685.39	5.47	-0.70	0.132
75.00	-35.60	-4.24	0.00	-200.35	0.00	200.35	1,248.10	624.05	1,363.46	673.36	5.69	-0.72	0.129
80.00	-33.75	-4.08	0.00	-179.13	0.00	179.13	1,211.20	605.60	1,283.66	633.95	6.47	-0.77	0.120
85.00	-31.91	-3.90	0.00	-158.75	0.00	158.75	1,174.30	587.15	1,206.28	595.74	7.31	-0.82	0.110
90.00	-30.10	-3.72	0.00	-139.23	0.00	139.23	1,137.40	568.70	1,131.30	558.71	8.20	-0.87	0.100
93.00	-28.62	-3.53	0.00	-127.89	0.00	127.89	1,115.27	557.63	1,087.47	537.06	8.75	-0.90	0.094
95.00	-27.90	-3.47	0.00	-120.83	0.00	120.83	1,100.51	550.25	1,058.73	522.87	9.13	-0.91	0.090
100.00	-26.13	-3.27	0.00	-103.50	0.00	103.50	1,063.61	531.80	988.56	488.21	10.11	-0.96	0.081
103.00	-24.69	-3.03	0.00	-93.28	0.00	93.28	1,041.47	520.73	947.61	467.99	10.72	-0.98	0.074
105.00	-23.99	-2.96	0.00	-87.22	0.00	87.22	1,026.71	513.35	920.80	454.75	11.13	-0.99	0.071
110.00	-22.27	-2.76	0.00	-72.42	0.00	72.42	989.81	494.91	855.44	422.47	12.19	-1.02	0.062
110.00	-22.27	-2.76	0.00	-72.41	0.00	72.41	989.79	494.89	855.40	422.45	12.19	-1.02	0.062
110.00	-22.27	-2.76	0.00	-72.41	0.00	72.41	989.79	494.89	855.40	422.45	12.19	-1.02	0.067
113.00	-17.34	-2.29	0.00	-64.14	0.00	64.14	729.89	364.94	620.25	306.32	12.84	-1.04	0.059
115.00	-16.71	-2.21	0.00	-59.56	0.00	59.56	718.79	359.39	601.45	297.03	13.28	-1.05	0.055
120.00	-15.14	-2.01	0.00	-48.49	0.00	48.49	718.79	359.39	601.45	297.03	14.40	-1.08	0.047
120.00	-15.14	-2.01	0.00	-48.49	0.00	48.49	718.79	359.39	601.45	297.03	14.40	-1.08	0.199
125.00	-13.96	-1.85	0.00	-38.42	0.00	38.42	663.29	331.65	511.77	252.74	15.55	-1.10	0.173
130.00	-12.93	-1.76	0.00	-29.15	0.00	29.15	635.54	317.77	469.64	231.94	16.76	-1.20	0.146
135.00	-11.92	-1.67	0.00	-20.32	0.00	20.32	607.80	303.90	429.33	212.03	18.06	-1.28	0.115
140.00	-7.57	-1.21	0.00	-11.97	0.00	11.97	580.05	290.02	390.82	193.01	19.43	-1.34	0.075
145.00	-7.00	-1.11	0.00	-5.93	0.00	5.93	552.30	276.15	354.12	174.89	20.85	-1.37	0.047
150.00	0.00	-0.94	0.00	-0.36	0.00	0.36	524.55	262.28	319.23	157.66	22.30	-1.39	0.002

Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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Load Case: 1.0D + 1.0W

60.00 mph Serviceability

23 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	az (psf)	azGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	6.129	6.742	161.88	1.000	0.00	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	6.129	6.742	158.49	1.000 *	0.00	5.00	15.955	15.96	107.6	0.0	1,296.2
10.00		1.00	0.70	6.129	6.742	155.10	1.000 *	0.00	5.00	15.617	15.62	105.3	0.0	1,280.1
15.00		1.00	0.70	6.129	6.742	151.70	1.000 *	0.00	5.00	15.279	15.28	103.0	0.0	1,264.0
20.00		1.00	0.70	6.129	6.742	148.31	1.000 *	0.00	5.00	14.941	14.94	100.7	0.0	1,247.9
25.00		1.00	0.70	6.129	6.742	144.92	1.000 *	0.00	5.00	14.603	14.60	98.4	0.0	1,231.8
30.00		1.00	0.70	6.134	6.747	141.58	1.200 *	0.00	5.00	14.266	17.12	115.5	0.0	1,215.7
31.50	Bot - Section 2	1.00	0.71	6.220	6.842	141.55	1.200 *	0.00	1.50	4.223	5.07	34.7	0.0	362.4
35.00		1.00	0.73	6.410	7.051	141.27	1.200 *	0.00	3.50	9.893	11.87	83.7	0.0	1,226.8
35.67	Top - Section 1	1.00	0.73	6.445	7.089	141.18	1.200 *	0.00	0.67	1.877	2.25	16.0	0.0	233.4
40.00	Appertunance(s)	1.00	0.76	6.659	7.325	143.27	1.200 *	0.00	4.33	11.983	14.38	105.3	0.0	942.8
45.00		1.00	0.78	6.887	7.576	142.11	1.200 *	0.00	5.00	13.522	16.23	122.9	0.0	1,076.1
50.00		1.00	0.81	7.098	7.807	140.61	1.200 *	0.00	5.00	13.184	15.82	123.5	0.0	1,062.7
55.00		1.00	0.83	7.294	8.023	138.84	1.200 *	0.00	5.00	12.846	15.41	123.7	0.0	1,049.3
60.00	Reinf. Top	1.00	0.85	7.477	8.225	136.83	1.200 *	0.00	5.00	12.508	15.01	123.4	0.0	1,035.8
65.00		1.00	0.87	7.650	8.415	134.61	1.200 *	0.00	5.00	12.170	14.60	122.9	0.0	750.4
70.00		1.00	0.89	7.814	8.595	132.21	1.200 *	0.00	5.00	11.832	14.20	122.0	0.0	737.0
70.00	Bot - Section 3	1.00	0.89	7.814	8.595	132.21	1.200 *	0.00	0.00	0.008	0.01	0.1	0.0	0.5
73.50	Top - Section 2	1.00	0.90	7.924	8.716	130.43	1.200 *	0.00	3.50	8.232	9.88	86.1	0.0	766.8
75.00		1.00	0.91	7.969	8.766	132.12	1.200 *	0.00	1.50	3.470	4.16	36.5	0.0	190.6
80.00		1.00	0.92	8.118	8.930	129.44	1.200 *	0.00	5.00	11.371	13.65	121.8	0.0	629.6
85.00		1.00	0.94	8.260	9.086	126.62	1.200 *	0.00	5.00	11.033	13.24	120.3	0.0	618.9
90.00		1.00	0.95	8.396	9.235	123.69	1.200 *	0.00	5.00	10.695	12.83	118.5	0.0	608.2
93.00	Appertunance(s)	1.00	0.96	8.475	9.322	121.88	1.200 *	0.00	3.00	6.255	7.51	70.0	0.0	359.7
95.00		1.00	0.97	8.526	9.379	120.65	1.200 *	0.00	2.00	4.102	4.92	46.2	0.0	237.7
100.0		1.00	0.98	8.652	9.517	117.50	1.200 *	0.00	5.00	10.019	12.02	114.4	0.0	586.7
103.0	Appertunance(s)	1.00	0.99	8.726	9.598	115.57	1.200 *	0.00	3.00	5.849	7.02	67.4	0.0	346.9
105.0		1.00	1.00	8.774	9.651	114.26	1.200 *	0.00	2.00	3.832	4.60	44.4	0.0	229.1
110.0		1.00	1.01	8.891	9.780	110.94	1.200 *	0.00	5.00	9.343	11.21	109.7	0.0	565.2
110.0	Top - Section 3	1.00	1.01	8.891	9.780	110.94	1.200 *	0.00	0.00	0.006	0.01	0.1	0.0	0.4
113.0	Appertunance(s)	1.00	1.02	8.960	9.856	108.91	1.200 *	0.00	3.00	5.438	6.53	64.3	0.0	291.7
115.0		1.00	1.02	9.005	9.905	107.53	1.200 *	0.00	2.00	3.562	4.27	42.3	0.0	193.1
120.0	Reinf. Top	1.00	1.04	9.115	10.02	104.05	1.200 *	0.00	5.00	8.667	10.40	104.3	0.0	477.0
125.0		1.00	1.05	9.222	10.14	100.50	1.200 *	0.00	5.00	8.330	10.00	101.4	0.0	196.9
130.0		1.00	1.06	9.326	10.25	96.880	1.000 *	0.00	5.00	7.992	7.99	82.0	0.0	188.9
135.0		1.00	1.07	9.427	10.36	93.195	1.000 *	0.00	5.00	7.654	7.65	79.4	0.0	180.8
140.0	Appertunance(s)	1.00	1.08	9.525	10.47	89.450	1.000 *	0.00	5.00	7.316	7.32	76.7	0.0	172.7
145.0		1.00	1.09	9.621	10.58	85.648	1.000	0.00	5.00	6.978	6.98	73.8	0.0	164.7
150.0	Appertunance(s)	1.00	1.11	9.715	10.68	81.792	1.000	0.00	5.00	6.640	6.64	71.0	0.0	156.6

\* = Cf Adjusted By Linear Load Ra Effect

Totals: 150.00

3,239.2

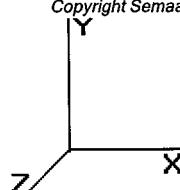
0.0 23,175.0

Pole : 302484  
 Location : Brantford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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Load Case: 1.0D + 1.0W

60.00 mph Serviceability

23 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 1.00

Wind Load Factor : 1.00

### Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	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)
40.00	Channel Master 1.2 M	1	6.659	7.325	1.00	1.00	20.91	0.000	0.000	153.17	0.00	0.00	188.00
93.00	Standoff	1	8.475	9.322	1.00	1.00	2.50	0.000	0.000	23.31	0.00	0.00	200.00
93.00	Decibel DB408	1	8.595	9.455	1.00	1.00	2.70	0.000	4.710	25.53	0.00	120.23	28.00
103.0	Standoff	1	8.726	9.598	1.00	1.00	2.50	0.000	0.000	24.00	0.00	0.00	200.00
103.0	Decibel DB408	2	8.838	9.722	1.00	1.00	5.94	0.000	4.710	57.75	0.00	271.98	34.00
113.0	T-Arm	3	8.960	9.856	0.50	0.75	7.54	0.000	0.000	74.29	0.00	0.00	999.00
113.0	Decibel DB932DG90E-	3	8.960	9.856	0.54	0.80	5.63	0.000	0.000	55.47	0.00	0.00	28.50
113.0	Decibel DB844H90E	6	8.960	9.856	0.54	0.80	12.77	0.000	0.000	125.83	0.00	0.00	84.00
140.0	RFS ATMAP1412D-	3	9.525	10.478	0.40	0.80	1.40	0.000	0.000	14.71	0.00	0.00	39.00
140.0	RFS ATMAA1412D-	3	9.525	10.478	0.40	0.80	1.40	0.000	0.000	14.71	0.00	0.00	39.00
140.0	RFS APXV18-206516S-	3	9.525	10.478	0.54	0.80	5.63	0.000	0.000	58.97	0.00	0.00	56.10
140.0	RFS APXV18-206516L-	3	9.525	10.478	0.54	0.80	5.47	0.000	0.000	57.28	0.00	0.00	42.00
140.0	T-Arm	3	9.525	10.478	0.50	0.75	7.54	0.000	0.000	78.98	0.00	0.00	999.00
150.0	Diplexer	3	9.715	10.686	0.50	0.75	0.75	0.000	0.000	8.05	0.00	0.00	30.00
150.0	Yagi	1	9.715	10.686	0.75	0.75	3.00	0.000	0.000	32.06	0.00	0.00	45.00
150.0	Decibel DB408	2	9.797	10.777	0.75	0.75	4.45	0.000	4.500	48.01	0.00	216.05	34.00
150.0	ADC DD1900	6	9.715	10.686	0.38	0.75	3.01	0.000	0.000	32.22	0.00	0.00	90.00
150.0	CSS DUO1417-8686	6	9.715	10.686	0.50	0.75	18.09	0.000	0.000	193.32	0.00	0.00	255.00
150.0	GPS	1	9.715	10.686	0.75	0.75	0.45	0.000	0.000	4.81	0.00	0.00	1.50
150.0	4' Omni	1	9.752	10.727	0.75	0.75	1.13	0.000	2.000	12.07	0.00	24.14	5.00
150.0	Platform w/ Rails	1	9.715	10.686	1.00	1.00	26.00	0.000	0.000	277.84	0.00	0.00	1,950.00
												1,372.36	5,347.10

Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

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Base Elev : 0.000 (ft)



Load Case: 1.0D + 1.0W

60.00 mph Serviceability

23 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)

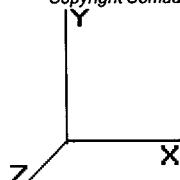
Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	Fx (lb)	Dead Load (lb)
5.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.129	0.182	1.247	0.00	49.19
5.00	(2) #18 Dvwidag bars	Yes	5.00	0.000	2.50	1.04	0.00	6.129	0.182	1.247	0.00	0.00
5.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	6.129	0.182	1.247	0.00	0.00
10.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.129	0.186	1.259	0.00	49.19
10.00	(2) #18 Dvwidag bars	Yes	5.00	0.000	2.50	1.04	0.00	6.129	0.186	1.259	0.00	0.00
10.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	6.129	0.186	1.259	0.00	0.00
15.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.129	0.190	1.271	0.00	49.19
15.00	(2) #18 Dvwidag bars	Yes	5.00	0.000	2.50	1.04	0.00	6.129	0.190	1.271	0.00	0.00
15.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	6.129	0.190	1.271	0.00	0.00
20.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.129	0.195	1.284	0.00	49.19
20.00	(2) #18 Dvwidag bars	Yes	5.00	0.000	2.50	1.04	0.00	6.129	0.195	1.284	0.00	0.00
20.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	6.129	0.195	1.284	0.00	0.00
25.00	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	6.129	0.199	1.297	0.00	49.19
25.00	(2) #18 Dvwidag bars	Yes	5.00	0.000	2.50	1.04	0.00	6.129	0.199	1.297	0.00	0.00
25.00	(2) #18 Dywidag bars	Yes	5.00	0.000	2.50	1.04	0.00	6.129	0.199	1.297	0.00	0.00
30.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	6.134	0.204	0.000	6.68	49.19
30.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	6.134	0.204	0.000	8.43	0.00
30.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	6.134	0.204	0.000	8.43	0.00
31.50	(12) 1 5/8" Coax	Yes	1.50	1.200	1.98	0.25	0.30	6.220	0.207	0.000	2.04	14.79
31.50	(2) #18 Dvwidag bars	Yes	1.50	1.200	2.50	0.31	0.38	6.220	0.207	0.000	2.57	0.00
31.50	(2) #18 Dywidag bars	Yes	1.50	1.200	2.50	0.31	0.38	6.220	0.207	0.000	2.57	0.00
35.00	(12) 1 5/8" Coax	Yes	3.50	1.200	1.98	0.58	0.69	6.410	0.210	0.000	4.88	34.40
35.00	(2) #18 Dvwidag bars	Yes	3.50	1.200	2.50	0.73	0.87	6.410	0.210	0.000	6.16	0.00
35.00	(2) #18 Dywidag bars	Yes	3.50	1.200	2.50	0.73	0.87	6.410	0.210	0.000	6.16	0.00
35.67	(12) 1 5/8" Coax	Yes	0.67	1.200	1.98	0.11	0.13	6.445	0.212	0.000	0.94	6.59
35.67	(2) #18 Dvwidag bars	Yes	0.67	1.200	2.50	0.14	0.17	6.445	0.212	0.000	1.19	0.00
35.67	(2) #18 Dywidag bars	Yes	0.67	1.200	2.50	0.14	0.17	6.445	0.212	0.000	1.19	0.00
40.00	(12) 1 5/8" Coax	Yes	4.33	1.200	1.98	0.71	0.86	6.659	0.210	0.000	6.28	42.60
40.00	(2) #18 Dvwidag bars	Yes	4.33	1.200	2.50	0.90	1.08	6.659	0.210	0.000	7.93	0.00
40.00	(2) #18 Dywidag bars	Yes	4.33	1.200	2.50	0.90	1.08	6.659	0.210	0.000	7.93	0.00
45.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	6.887	0.215	0.000	7.50	49.19
45.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	6.887	0.215	0.000	9.47	0.00
45.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	6.887	0.215	0.000	9.47	0.00
50.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	7.098	0.221	0.000	7.73	49.19
50.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	7.098	0.221	0.000	9.76	0.00
50.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	7.098	0.221	0.000	9.76	0.00
55.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	7.294	0.226	0.000	7.94	49.19
55.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	7.294	0.226	0.000	10.03	0.00
55.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	7.294	0.226	0.000	10.03	0.00
60.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	7.477	0.233	0.000	8.14	49.19
60.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	7.477	0.233	0.000	10.28	0.00
60.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	7.477	0.233	0.000	10.28	0.00
65.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	7.650	0.239	0.000	8.33	49.19
65.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	7.650	0.239	0.000	10.52	0.00
65.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	7.650	0.239	0.000	10.52	0.00
70.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	7.814	0.246	0.000	8.51	49.19
70.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	7.814	0.246	0.000	10.74	0.00
70.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	7.814	0.246	0.000	10.74	0.00
70.00	(12) 1 5/8" Coax	Yes	0.00	1.200	1.98	0.00	0.00	7.814	0.249	0.000	0.01	0.03
70.00	(2) #18 Dvwidag bars	Yes	0.00	1.200	2.50	0.00	0.00	7.814	0.249	0.000	0.01	0.00
70.00	(2) #18 Dywidag bars	Yes	0.00	1.200	2.50	0.00	0.00	7.814	0.249	0.000	0.01	0.00

Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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**Load Case: 1.0D + 1.0W**

60.00 mph Serviceability

23 Iterations

Gust Response Factor : 1.10

Dead Load Factor : 1.00

Wind Load Factor : 1.00

Wind Importance Factor : 1.00

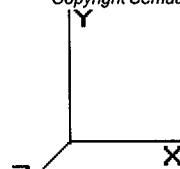
73.50	(12) 1 5/8" Coax	Yes	3.50	1.200	1.98	0.58	0.69	7.924	0.252	0.000	6.04	34.44
73.50	(2) #18 Dvwidag bars	Yes	3.50	1.200	2.50	0.73	0.88	7.924	0.252	0.000	7.63	0.00
73.50	(2) #18 Dvwidag bars	Yes	3.50	1.200	2.50	0.73	0.88	7.924	0.252	0.000	7.63	0.00
75.00	(12) 1 5/8" Coax	Yes	1.50	1.200	1.98	0.25	0.30	7.969	0.251	0.000	2.60	14.73
75.00	(2) #18 Dywidag bars	Yes	1.50	1.200	2.50	0.31	0.37	7.969	0.251	0.000	3.28	0.00
75.00	(2) #18 Dvwidag bars	Yes	1.50	1.200	2.50	0.31	0.37	7.969	0.251	0.000	3.28	0.00
80.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	8.118	0.256	0.000	8.84	49.19
80.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	8.118	0.256	0.000	11.16	0.00
80.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	8.118	0.256	0.000	11.16	0.00
85.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	8.260	0.264	0.000	8.99	49.19
85.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	8.260	0.264	0.000	11.36	0.00
85.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	8.260	0.264	0.000	11.36	0.00
90.00	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	8.396	0.272	0.000	9.14	49.19
90.00	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	8.396	0.272	0.000	11.54	0.00
90.00	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	8.396	0.272	0.000	11.54	0.00
93.00	(12) 1 5/8" Coax	Yes	3.00	1.200	1.98	0.50	0.59	8.475	0.279	0.000	5.54	29.52
93.00	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	0.63	0.75	8.475	0.279	0.000	6.99	0.00
93.00	(2) #18 Dvwidag bars	Yes	3.00	1.200	2.50	0.63	0.75	8.475	0.279	0.000	6.99	0.00
95.00	(12) 1 5/8" Coax	Yes	2.00	1.200	1.98	0.33	0.40	8.526	0.284	0.000	3.71	19.68
95.00	(2) #18 Dywidag bars	Yes	2.00	1.200	2.50	0.42	0.50	8.526	0.284	0.000	4.69	0.00
95.00	(2) #18 Dvwidag bars	Yes	2.00	1.200	2.50	0.42	0.50	8.526	0.284	0.000	4.69	0.00
100.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	8.652	0.290	0.000	9.42	49.19
100.0	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	8.652	0.290	0.000	11.90	0.00
100.0	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	8.652	0.290	0.000	11.90	0.00
103.0	(12) 1 5/8" Coax	Yes	3.00	1.200	1.98	0.50	0.59	8.726	0.298	0.000	5.70	29.52
103.0	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	0.63	0.75	8.726	0.298	0.000	7.20	0.00
103.0	(2) #18 Dvwidag bars	Yes	3.00	1.200	2.50	0.63	0.75	8.726	0.298	0.000	7.20	0.00
105.0	(12) 1 5/8" Coax	Yes	2.00	1.200	1.98	0.33	0.40	8.774	0.304	0.000	3.82	19.68
105.0	(2) #18 Dvwidag bars	Yes	2.00	1.200	2.50	0.42	0.50	8.774	0.304	0.000	4.83	0.00
105.0	(2) #18 Dywidag bars	Yes	2.00	1.200	2.50	0.42	0.50	8.774	0.304	0.000	4.83	0.00
110.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	8.891	0.311	0.000	9.68	49.19
110.0	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	8.891	0.311	0.000	12.23	0.00
110.0	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	8.891	0.311	0.000	12.23	0.00
110.0	(12) 1 5/8" Coax	Yes	0.00	1.200	1.98	0.00	0.00	8.891	0.317	0.000	0.01	0.03
110.0	(2) #18 Dywidag bars	Yes	0.00	1.200	2.50	0.00	0.00	8.891	0.317	0.000	0.01	0.00
110.0	(2) #18 Dvwidag bars	Yes	0.00	1.200	2.50	0.00	0.00	8.891	0.317	0.000	0.01	0.00
113.0	(12) 1 5/8" Coax	Yes	3.00	1.200	1.98	0.49	0.59	8.960	0.321	0.000	5.85	29.48
113.0	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	0.62	0.75	8.960	0.321	0.000	7.38	0.00
113.0	(2) #18 Dvwidag bars	Yes	3.00	1.200	2.50	0.62	0.75	8.960	0.321	0.000	7.38	0.00
115.0	(12) 1 5/8" Coax	Yes	2.00	1.200	1.98	0.33	0.40	9.005	0.327	0.000	3.92	19.68
115.0	(2) #18 Dywidag bars	Yes	2.00	1.200	2.50	0.42	0.50	9.005	0.327	0.000	4.95	0.00
115.0	(2) #18 Dvwidag bars	Yes	2.00	1.200	2.50	0.42	0.50	9.005	0.327	0.000	4.95	0.00
120.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	9.115	0.336	0.000	9.93	49.19
120.0	(2) #18 Dvwidag bars	Yes	5.00	1.200	2.50	1.04	1.25	9.115	0.336	0.000	12.53	0.00
120.0	(2) #18 Dywidag bars	Yes	5.00	1.200	2.50	1.04	1.25	9.115	0.336	0.000	12.53	0.00
125.0	(12) 1 5/8" Coax	Yes	5.00	1.200	1.98	0.82	0.99	9.222	0.249	0.000	10.04	49.19
125.0	(2) #18 Dywidag bars	Yes	3.00	1.200	2.50	0.63	0.75	9.222	0.249	0.000	7.61	0.00
125.0	(2) #18 Dvwidag bars	Yes	3.00	1.200	2.50	0.63	0.75	9.222	0.249	0.000	7.61	0.00
130.0	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	9.326	0.103	1.010	0.00	49.19
135.0	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	9.427	0.108	1.023	0.00	49.19
140.0	(12) 1 5/8" Coax	Yes	5.00	0.000	1.98	0.82	0.00	9.525	0.113	1.038	0.00	49.19

Totals: 596.97 1,377.43

Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

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

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Load Case: 1.0D + 1.0W

60.00 mph Serviceability

23 Iterations

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

Wind Importance 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	107.56	1,397.13	0.00	0.00
10.00	105.29	1,381.03	0.00	0.00
15.00	103.01	1,364.94	0.00	0.00
20.00	100.73	1,348.84	0.00	0.00
25.00	98.45	1,332.74	0.00	0.00
30.00	139.05	1,316.65	0.00	0.00
31.50	41.85	392.72	0.00	0.00
35.00	100.92	1,297.35	0.00	0.00
35.67	19.28	246.94	0.00	0.00
40.00	280.64	1,218.21	0.00	0.00
45.00	149.37	1,176.68	0.00	0.00
50.00	150.76	1,163.25	0.00	0.00
55.00	151.67	1,149.81	0.00	0.00
60.00	152.15	1,136.38	0.00	0.00
65.00	152.26	850.94	0.00	0.00
70.00	152.03	837.50	0.00	0.00
70.00	0.10	0.55	0.00	0.00
73.50	107.39	837.22	0.00	0.00
75.00	45.66	220.65	0.00	0.00
80.00	153.01	730.17	0.00	0.00
85.00	152.00	719.43	0.00	0.00
90.00	150.76	708.70	0.00	0.00
93.00	138.32	648.07	0.00	120.23
95.00	59.26	277.24	0.00	0.00
100.0	147.65	685.59	0.00	0.00
103.0	169.21	640.20	0.00	271.98
105.0	57.85	267.34	0.00	0.00
110.0	143.79	660.83	0.00	0.00
110.0	0.09	0.44	0.00	0.00
113.0	340.51	1,460.48	0.00	0.00
115.0	56.16	219.96	0.00	0.00
120.0	139.28	544.26	0.00	0.00
125.0	126.65	264.19	0.00	0.00
130.0	81.98	256.12	0.00	0.00
135.0	79.36	248.05	0.00	0.00
140.0	301.30	1,415.08	0.00	0.00
145.0	73.85	182.71	0.00	0.00
150.0	679.33	2,585.14	0.00	240.19
Totals:	5,208.55	31,183.53	0.00	632.40

Pole : 302484  
 Location : Brantford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/in)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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 X  
 Z

Load Case: 1.0D + 1.0W

60.00 mph Serviceability

23 Iterations

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

Wind Importance Factor : 1.00

### Calculated Forces

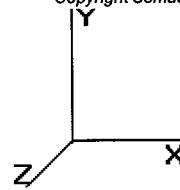
Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-31.18	-5.22	0.00	-470.98	0.00	470.98	2,613.99	1,306.99	3,984.35	1,967.72	0.00	0.00	0.119
5.00	-29.78	-5.13	0.00	-444.88	0.00	444.88	2,558.64	1,279.32	3,816.58	1,884.87	0.02	-0.04	0.115
10.00	-28.40	-5.04	0.00	-419.23	0.00	419.23	2,503.29	1,251.65	3,652.42	1,803.79	0.08	-0.08	0.111
15.00	-27.03	-4.96	0.00	-394.01	0.00	394.01	2,447.95	1,223.97	3,491.87	1,724.51	0.18	-0.12	0.107
20.00	-25.68	-4.87	0.00	-369.24	0.00	369.24	2,392.60	1,196.30	3,334.93	1,647.00	0.33	-0.15	0.103
25.00	-24.34	-4.78	0.00	-344.90	0.00	344.90	2,337.25	1,168.63	3,181.60	1,571.27	0.51	-0.19	0.099
30.00	-23.02	-4.65	0.00	-320.99	0.00	320.99	2,281.90	1,140.95	3,031.88	1,497.33	0.72	-0.23	0.095
31.50	-22.63	-4.61	0.00	-314.00	0.00	314.00	2,265.26	1,132.63	2,987.57	1,475.45	0.80	-0.24	0.094
35.00	-21.33	-4.51	0.00	-297.88	0.00	297.88	2,226.56	1,113.28	2,885.76	1,425.17	0.98	-0.26	0.089
35.67	-21.08	-4.50	0.00	-294.86	0.00	294.86	1,892.81	946.40	2,503.89	1,236.58	1.02	-0.27	0.094
40.00	-19.86	-4.22	0.00	-275.39	0.00	275.39	1,852.80	926.40	2,398.66	1,184.61	1.27	-0.30	0.090
45.00	-18.69	-4.08	0.00	-254.29	0.00	254.29	1,806.60	903.30	2,279.97	1,125.99	1.60	-0.33	0.086
50.00	-17.52	-3.93	0.00	-233.92	0.00	233.92	1,760.41	880.20	2,164.28	1,068.86	1.96	-0.36	0.081
55.00	-16.37	-3.78	0.00	-214.28	0.00	214.28	1,714.21	857.11	2,051.61	1,013.21	2.36	-0.40	0.076
60.00	-15.23	-3.63	0.00	-195.39	0.00	195.39	1,714.21	857.11	2,051.61	1,013.21	2.79	-0.43	0.071
60.00	-15.23	-3.63	0.00	-195.39	0.00	195.39	1,714.21	857.11	2,051.61	1,013.21	2.79	-0.43	0.100
65.00	-14.38	-3.48	0.00	-177.27	0.00	177.27	1,621.82	810.91	1,835.30	906.38	3.26	-0.46	0.093
70.00	-13.54	-3.32	0.00	-159.89	0.00	159.89	1,575.62	787.81	1,731.66	855.20	3.76	-0.50	0.087
70.00	-13.54	-3.32	0.00	-159.88	0.00	159.88	1,575.59	787.80	1,731.59	855.17	3.76	-0.50	0.087
73.50	-12.71	-3.21	0.00	-148.25	0.00	148.25	1,259.14	629.57	1,387.81	685.39	4.13	-0.52	0.089
75.00	-12.48	-3.17	0.00	-143.44	0.00	143.44	1,248.10	624.05	1,363.46	673.36	4.30	-0.54	0.087
80.00	-11.75	-3.02	0.00	-127.59	0.00	127.59	1,211.20	605.60	1,283.66	633.95	4.88	-0.57	0.080
85.00	-11.03	-2.87	0.00	-112.49	0.00	112.49	1,174.30	587.15	1,206.28	595.74	5.50	-0.61	0.072
90.00	-10.33	-2.71	0.00	-98.16	0.00	98.16	1,137.40	568.70	1,131.30	558.71	6.16	-0.64	0.065
93.00	-9.68	-2.57	0.00	-89.91	0.00	89.91	1,115.27	557.63	1,087.47	537.06	6.57	-0.66	0.061
95.00	-9.40	-2.51	0.00	-84.77	0.00	84.77	1,100.51	550.25	1,058.73	522.87	6.85	-0.67	0.058
100.00	-8.72	-2.36	0.00	-72.22	0.00	72.22	1,063.61	531.80	988.56	488.21	7.57	-0.70	0.051
103.00	-8.08	-2.18	0.00	-64.87	0.00	64.87	1,041.47	520.73	947.61	467.99	8.02	-0.72	0.047
105.00	-7.81	-2.12	0.00	-60.51	0.00	60.51	1,026.71	513.35	920.80	454.75	8.33	-0.73	0.045
110.00	-7.15	-1.97	0.00	-49.89	0.00	49.89	989.81	494.91	855.44	422.47	9.10	-0.75	0.038
110.00	-7.15	-1.97	0.00	-49.89	0.00	49.89	989.79	494.89	855.40	422.45	9.10	-0.75	0.038
110.00	-7.15	-1.97	0.00	-49.89	0.00	49.89	989.79	494.89	855.40	422.45	9.10	-0.75	0.041
113.00	-5.69	-1.61	0.00	-43.98	0.00	43.98	729.89	364.94	620.25	306.32	9.58	-0.76	0.037
115.00	-5.47	-1.56	0.00	-40.75	0.00	40.75	718.79	359.39	601.45	297.03	9.90	-0.77	0.034
120.00	-4.93	-1.41	0.00	-32.97	0.00	32.97	718.79	359.39	601.45	297.03	10.72	-0.79	0.029
120.00	-4.93	-1.41	0.00	-32.97	0.00	32.97	718.79	359.39	601.45	297.03	10.72	-0.79	0.127
125.00	-4.67	-1.28	0.00	-25.91	0.00	25.91	663.29	331.65	511.77	252.74	11.55	-0.81	0.110
130.00	-4.41	-1.20	0.00	-19.49	0.00	19.49	635.54	317.77	469.64	231.94	12.43	-0.87	0.091
135.00	-4.17	-1.12	0.00	-13.48	0.00	13.48	607.80	303.90	429.33	212.03	13.37	-0.92	0.070
140.00	-2.75	-0.80	0.00	-7.86	0.00	7.86	580.05	290.02	390.82	193.01	14.36	-0.96	0.045
145.00	-2.57	-0.72	0.00	-3.86	0.00	3.86	552.30	276.15	354.12	174.89	15.38	-0.99	0.027
150.00	0.00	-0.68	0.00	-0.24	0.00	0.24	524.55	262.28	319.23	157.66	16.42	-1.00	0.002

Pole : 302484  
 Location : Branford CT 6, CT  
 Height : 150.0 (ft)  
 Shape : 12 Sides  
 Base Dia : 37.38 (in)  
 Top Dia : 15.00 (in)  
 Taper : 0.156705 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1

Base Elev : 0.000 (ft)

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## 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	31.54	0.00	35.40	0.00	0.00	2796.10	0.00	0.67
0.9D + 1.6W	30.67	0.00	28.98	0.00	0.00	2758.81	0.00	0.66
1.2D + 1.0Di + 1.0Wi	6.11	0.00	71.99	0.00	0.00	607.53	125.00	0.17
1.0D + 1.0W	5.22	0.00	31.18	0.00	0.00	470.98	0.00	0.12

## Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors				Upper Termination Connectors				Lower Termination Connectors				Max Member			
			VQ/I (lb/in)	Applied Shear (kips)	phiVn (kips)	Shear		MQ/I (kips)	phiVn (kips)	Num Req'd	Num Actual	MQ/I (kips)	phiVn (kips)	Num Req'd	Num Actual	Pu (kip)	phiPn (kip)	Ratio
						Applied	phiVn											
0.00	60.0	(4) SOL-#18 All Thre	175.8	5.3	16.8	111.2	12.0	10	18	0.0	12.0	0	0	178.9	249.8	0.72		
0.00	120.	(4) SOL-#18 All Thre	294.3	8.8	16.8	56.8	12.0	5	10	0.0	12.0	0	0	202.6	249.8	0.81		