

Site Number: 10047

Code:

ANSI/TIA-222-G

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Site Name: PORTLAND ME, ME

Engineering Number: OAA706994\_C3\_01

7/26/2017 2:24:47 PM

Customer: T-MOBILE

### Analysis Parameters

|                     |                       |                         |      |
|---------------------|-----------------------|-------------------------|------|
| Location:           | CUMBERLAND County, ME | Height (ft):            | 275  |
| Code:               | ANSI/TIA-222-G        | Base Elevation (ft):    | 0.00 |
| Shape:              | Triangle              | Bottom Face Width (ft): | 3.50 |
| Tower Manufacturer: | Pirod                 | Top Face Width (ft):    | 3.50 |
| Tower Type:         | Guyed                 |                         |      |

### Ice & Wind Parameters

|                       |        |                               |         |
|-----------------------|--------|-------------------------------|---------|
| Structure Class:      | II     | Design Windspeed Without Ice: | 98 mph  |
| Exposure Category:    | B      | Design Windspeed With Ice:    | 40 mph  |
| Topographic Category: | 1      | Operational Windspeed:        | 60 mph  |
| Crest Height:         | 0.0 ft | Design Ice Thickness:         | 1.00 in |

### Seismic Parameters

|  |  |            |       |              |       |
|--|--|------------|-------|--------------|-------|
| Analysis Method:                       | Equivalent Modal Analysis & Equivalent Lateral Force Methods |            |       |              |       |
| Site Class:                            | D - Stiff Soil   |            |       |              |       |
| Period Based on Rayleigh Method (sec): | 0.87   |            |       |              |       |
| $T_L$ (sec):                           | 6  | p:         | 1.3   | $C_S$ :      | 0.058 |
| $S_S$ :                                | 0.245  | $S_1$ :    | 0.079 | $C_S$ , Max: | 0.058 |
| $F_a$ :                                | 1.600  | $F_V$ :    | 2.400 | $C_S$ , Min: | 0.030 |
| $S_{ds}$ :                             | 0.261  | $S_{d1}$ : | 0.126 |              |       |

### Load Cases

|                                |                                     |
|--------------------------------|-------------------------------------|
| 1.2D + 1.6W Normal             | 98 mph Normal to Face with No Ice   |
| 1.2D + 1.6W 60 deg             | 98 mph 60 degree with No Ice        |
| 1.2D + 1.6W 90 deg             | 98 mph 90 degree with No Ice        |
| 1.2D + 1.6W 120 deg            | 98 mph 120 degree with No Ice       |
| 1.2D + 1.6W 180 deg            | 98 mph 180 degree with No Ice       |
| 1.2D + 1.6W 210 deg            | 98 mph 210 degree with No Ice       |
| 1.2D + 1.6W 240 deg            | 98 mph 240 degree with No Ice       |
| 1.2D + 1.6W 300 deg            | 98 mph 300 degree with No Ice       |
| 1.2D + 1.6W 330 deg            | 98 mph 330 degree with No Ice       |
| 1.2D + 1.0Di + 1.0Wi Normal    | 40 mph Normal with 1 in Radial Ice  |
| 1.2D + 1.0Di + 1.0Wi 60 deg    | 40 mph 60 deg with 1 in Radial Ice  |
| 1.2D + 1.0Di + 1.0Wi 90 deg    | 40 mph 90 deg with 1 in Radial Ice  |
| 1.2D + 1.0Di + 1.0Wi 120 deg   | 40 mph 120 deg with 1 in Radial Ice |
| 1.2D + 1.0Di + 1.0Wi 180 deg   | 40 mph 180 deg with 1 in Radial Ice |
| 1.2D + 1.0Di + 1.0Wi 210 deg   | 40 mph 210 deg with 1 in Radial Ice |
| 1.2D + 1.0Di + 1.0Wi 240 deg   | 40 mph 240 deg with 1 in Radial Ice |
| 1.2D + 1.0Di + 1.0Wi 300 deg   | 40 mph 300 deg with 1 in Radial Ice |
| 1.2D + 1.0Di + 1.0Wi 330 deg   | 40 mph 330 deg with 1 in Radial Ice |
| (1.2 + 0.2Sds) * DL + E Normal | Seismic Normal                      |
| (1.2 + 0.2Sds) * DL + E 60 deg | Seismic 60 deg                      |
| (1.2 + 0.2Sds) * DL + E 90 deg | Seismic 90 deg                      |