New England Market

Worst Case Power Density

Site:	**CTNH331B**
Site Address:	**940 Meriden Road**
Town:	**Waterbury**
Tower Height:	**150 ft.**
Tower Style:	**Monopole**
Base Station TX output	25 W
Number of channels	8
Antenna Model	APXV18-209014-C
Cable Size	1 5/8
Cable Length	130 ft.
Antenna Height	97.0 ft.
Ground Reflection	1.6
Frequency	1945.0 MHz
Jumper & Connector loss	4.50 dB
Antenna Gain	17.8 dBi
Cable Loss per foot	0.0116 dB
Total Cable Loss	1.5080 dB
Total Attenuation	6.0080 dB
Total EIRP per Channel	55.77 dBm
(In Watts)	377.69 W
Total EIRP per Sector	64.80 dBm
(In Watts)	3021.55 W
nsg	11.7920
Power Density (S) =	**0.080051 mW/cm^2**
T-Mobile Worst Case % MPE =	**8.0051%**

Equation Used :

$$S = \frac{(1000)(grf)^2(Power)*10^{(nsg/10)}}{4\pi(R)^2}$$

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Co-Location Total

Carrier	**% of Standard**
Verizon	
Cingular	
Sprint PCS	
AT&T Wireless	
Nextel	7.4521 %
Total Excluding T-Mobile	**7.4521 %**
T-Mobile	8.0051
Total % MPE for Site	**15.4572%**

Relative Gain Power Density

Antenna Relative Gain Factor	-27.0 dBi
Total Attenuation	6.0080 dB
Total EIRP per Channel	28.77 dBm
(In Watts)	0.75 W
Total EIRP per Sector	37.80 dBm
(In Watts)	6.03 W
nsg	-15.2080
Power Density (S) =	**0.000160 mW/cm^2**
T-Mobile Relative Gain % MPE =	**0.0160%**