

## Connecticut Market



### Worst Case Power Density

**Site:** CTNH801B  
**Site Address:** 123 Pine Orchard Road  
**Town:** Branford  
**Tower Height:** 125 ft.  
**Facility 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	APX16DWV-16DWV	Antenna Model	APX16DWV-16DWV
Cable Size	7/8 in.	Cable Size	7/8 in.
Cable Length	150 ft.	Cable Length	150 ft.
Antenna Height	122.0 ft.	Antenna Height	122.0 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	18.0 dBi	Antenna Gain	18.0 dBi
Cable Loss per foot	0.0186 dB	Cable Loss per foot	0.0116 dB
Total Cable Loss	2.7900 dB	Total Cable Loss	1.7400 dB
Total Attenuation	7.2900 dB	Total Attenuation	3.2400 dB
Total EIRP per Channel (In Watts)	53.72 dBm 235.52 W	Total EIRP per Channel (In Watts)	60.78 dBm 1196.91 W
Total EIRP per Sector (In Watts)	62.75 dBm 1884.17 W	Total EIRP per Sector (In Watts)	63.79 dBm 2393.81 W
nsg	10.7100	nsg	14.7600
Power Density (S) = 0.030720 mW/cm <sup>2</sup>		Power Density (S) = 0.039030 mW/cm <sup>2</sup>	
<b>T-Mobile Worst Case % MPE = 6.9750%</b>			

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	0.0000 %
Cingular	0.0000 %
Sprint	0.0000 %
AT&T Wireless	0.0000 %
Nextel	0.0000 %
MetroPCS	
Other Antenna Systems	0.0000 %
<b>Total Excluding T-Mobile</b>	<b>0.0000 %</b>
T-Mobile	6.9750
<b>Total % MPE for Site</b>	<b>6.9750%</b>