

Connecticut Market



Worst Case Power Density

Site: CTFF310D
Site Address: 23 Stonybrook Road
Town: Stratford
Tower Height: 100 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	125 ft.	Cable Length	115 ft.
Antenna Height	97.0 ft.	Antenna Height	87.0 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	2.3250 dB	Total Cable Loss	1.3340 dB
Total Attenuation	6.8250 dB	Total Attenuation	2.8340 dB
Total EIRP per Channel (In Watts)	54.19 dBm 262.14 W	Total EIRP per Channel (In Watts)	61.19 dBm 1314.20 W
Total EIRP per Sector (In Watts)	63.22 dBm 2097.10 W	Total EIRP per Sector (In Watts)	64.20 dBm 2628.39 W
nsg	11.1750	nsg	15.1660
Power Density (S) = 0.055559 mW/cm ²		Power Density (S) = 0.087890 mW/cm ²	
T-Mobile Worst Case % MPE = 14.3450%			

Equation Used :

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

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