

RF Exposure (MPE) Calculations

Silver Spring Networks									
FCC ID: OWS-NIC514									
IC: 5975A- NIC514									
Utility Meter WLAN Transceiver			2.4 GHz			Calculate mW/cm ² here. Enter frequency in MHz:			
RF Hazard Distance Calculation									
Calculation of Limits from 1.1310 Table 1									
mW/cm ² from Table 1:		1.00	(E: 61 V/m)			F(MHz)	Actual F, MHz	Controlled Ave 6 min Occ, mW/c ²	Uncontrolled Ave 30 min Gen, mW/cm ²
Max RF Power P, dBm	TX Antenna G, dBi	MPE distance cm	S, mW/cm [@] at 20 cm	Comment	0.3-3 3.0 - 30.0 30.0-300 300-1500	0.5 5 55 902	100.0 180.0 1.0 3.0	100.0 36.0 0.2 0.60	
21.7	1.0	3.8	0.04		1500-100000	5555	5.0	1.0	
Enter P(mW)						Equivalent dBm	Enter dBm	Equivalent Watts	
Basis of Calculations:					64	18.1	18.1	64.6	
E ² /3770 = S, mW/cm ²									
E, V/m = (Pwatts*Ggain*30) ^{0.5} /d, meters									
d = ((Pwatts*G*30)/3770*S) ^{0.5}									
S@20cm = 20 log (MPE dist/20cm)									
NOTE: For mobile or fixed location transmitters, minimum separation distance is for FCC compliance is 20 cm, even if calculations indicate MPE distance is less									