

Alvarion BST										
FCC ID: LKT-EXTR-50										
802.16e 5.4 GHz Base Station						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 Table1:	1.00					F(MHz)	Actual F, MHz		Controlled	Uncontrolled
Max RF Power	TX Antenna	MPE distance	S, mW/cm@	Comment		0.3-3	0.5		Ave 6 min	Ave 30 min
P, dBm	G, dBi	cm	at 20 cm			3.0 - 30.0	5		100.0	100.0
						30.0-300	55		180.0	36.0
						300-1500	902		1.0	0.2
19.20	8.00	6.5	0.10	Max eirp		1500-100000	5555		3.0	0.60
10.20	17.0	6.5	0.10	Max eirp					5.0	1.0
11.70	15.5	6.5	0.10	Max eirp						
						Enter P(mW)	Equivalent dBm	Enter dBm	Equivalent Watts	
Basis of Calculations:						1000	30.00	30.00	1000.0	
E^2/3770 = S, mW/cm ²										
E, V/m = (Pwatts*Ggain*30)^.5/d, meters										
d = ((Pwatts*G*30)/3770*S))^0.5				Pwatts*Ggain = 10^(PdBm-30+GdBi)/10)						
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										