

Alvarion BST									
FCC ID: LKT-EXTR-50									
802.16e 5.4 GHz Base Station					Calculate mW/cm2 here. Enter frequency in MHz:				
RF Hazard Distance Calculation					Calculation of Limits from 1.1310 Table 1				
								Controlled	Uncontrolled
								Ave 6 min	Ave 30 min
mW/cm2 from Table1:		1.00			F(MHz)	Actual F, MHz	Occ, mW/c2		Gen, mW/cm2
					0.3-3	0.5	100.0		100.0
Max RF Power	TX Antenna	MPE distance	S, mW/cm@	Comment	3.0 - 30.0	5	180.0		36.0
P, dBm	G, dBi	cm	at 20 cm		30.0-300	55	1.0		0.2
					300-1500	902	3.0		0.60
19.20	8.00	6.5	0.10	Max eirp	1500-100000	5555	5.0		1.0
10.20	17.0	6.5	0.10	Max eirp					
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/cm2									
E, V/m = (Pwatts*Ggain*30)^.5/d, meters									
d = ((Pwatts*G*30)/3770*S)^.5									
S@20cm = 20 log (MPE dist/20cm)									
Pwatts*Ggain = 10^(PdBi-30+GdBi)/10)									
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									