

Hitachi America Ltd							
FCC ID: ES8-HSS-MUR-300							
2.4 GHz RFID Reader				Calculate mW/cm2 here. Enter frequency in MHz:			
RF Hazard Distance Calculation				Calculation of Limits from 1.1310 Table 1			
mW/cm2 from Table1:		1.00	(E: 61 V/m)	F(MHz)	Actual F, MHz	Controlled	Uncontrolled
Max RF Power	TX Antenna	MPE distance	S, mW/cm@ at 20 cm	Comment	0.3-3	0.5	Ave 6 min Ave 30 min
P, dBm	G, dBi	cm			3.0 - 30.0	5	180.0 36.0
					30.0-300	55	1.0 0.2
					300-1500	555	1.9 0.37
28.0	7.9	17.7	0.78	bg cardbus	1500-100000	5555	5.0 1.0
				bg module			
				BBGW			
				Enter P(mW)	Equivalent dBm	Enter dBm	Equivalent Watts
Basis of Calculations:				#NUM!	28.0	635.3	
E^2/3770 = S, mW/cm2							
E, V/m = (Pwatts*Ggain*30)^.5/d, meters							
d = ((Pwatts*G*30)/3770*S))^.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							