

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				
								Controlled Ave 6 min	Uncontrolled Ave 30 min
mW/cm2 from Table1:		1.00	(E: 61 V/m)		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	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))^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									