

Radiated power calculation

Peak Output Power

Operating Mode (Modulation)	Channel \ Frequency (No. \ MHz)	Maximum Average Power Measured (dBm)	Antenna Gain (dBi)	Maximum Average EIRP (dBm)	Maximum Average EIRP (mW)
11Mbps 802.11b DSSS 20dBm nominal	1 \ 2412	9.90	-1	8.9	7.76
54Mbps 802.11g OFDM 14.5dBm nominal	1 \ 2412	-1.66	-1	-2.66	0.54
1Mbps Bluetooth GFSK 9.5dBm nominal	1 \ 2402	6.51	-1	5.51	3.56

Distance to 10W/m²

$$Pr = Pt / 4 * \pi * r^2$$

	EIRP (mW)	Pr (W)	r(cm)
	Pt		
11Mbps 802.11b DSSS 20dBm nominal	7.76	10	0.8
54Mbps 802.11g OFDM 14.5dBm nominal	0.54	10	0.2
1Mbps Bluetooth GFSK 9.5dBm nominal	3.56	10	0.5

Therefore distance for 10w/m² is 1cm from the internal antenna