

RF Exposure for IQue M5

The IQue M5 is a pocket PC system using the Blue Tooth wireless technology specifications for wireless data transfer authorized under part 15.247 of CFR 47. MPE calculations are shown below demonstrating compliance.

MPE Calculator		MPE uses EIRP for calculation. EIRP is based on TX power added to the antenna gain in dBi. dBi = dB gain compared to an isotropic radiator. S = power density in mW/cm^2				
Tx Frequency (MHz)	2440	Output Power Average (Watts)	0.0013	dBd + 2.17 = dBi	Antenna Gain (dBi) dBi to dBd	2.17 2.17
Cable Loss (dB)	0.0	(dBm)	1.14		Antenna Gain (dBd)	0
					Antenna minus cable (dBd)	2.17
		Calculated ERP (mw)	1.300		EIRP = Po(dBm) + Gain (dB)	
		Calculated EIRP (mw)	2.143		Radiated (EIRP) dBm	3.309
Occupational Limit (300-1500 MHz)	8.13333 mW/cm^2	Power density (S) EIRP ----- = mW/cm^2			ERP = EIRP - 2.17 dB	
General Public Limit (300-1500 MHz)	1.62667 mW/cm^2	4 π r^2 r (cm) EIRP (mW)			Radiated (ERP) dBm	1.139

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	Occupational Limit	Public Limit
300-1,500	f/300	f/1500
1,500-10,000	5	1

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	Occupational Limit @ Tx Freq (mW/cm ²)	Public Limit @ Tx Freq (mW/cm ²)
300-1,500	8.133333333	1.626666667
1,500-10,000	5	1

EIRP	Distance		S
milliwatts	cm	inches	mW/cm ²
2.143	30.00	11.81	0.00019
2.143	20.00	7.87	0.00043
2.143	10.00	3.94	0.00171
2.143	5.00	1.97	0.00682
2.143	2.00	0.79	0.04263
2.143	1.00	0.39	0.17050
2.143	0.90	0.35	0.21050
2.143	0.80	0.31	0.26641
2.143	0.70	0.28	0.34797
2.143	0.60	0.24	0.47362
2.143	0.50	0.20	0.68201
2.143	0.49	0.19	0.71014
2.143	0.48	0.19	0.74003
2.143	0.47	0.19	0.77186
2.143	0.46	0.18	0.80578
2.143	0.45	0.18	0.84199
2.143	0.44	0.17	0.88070
2.143	0.43	0.17	0.92214
2.143	0.42	0.17	0.96657
2.143	0.41	0.16	1.01430
2.143	0.40	0.16	1.06565
2.143	0.30	0.12	1.89448
2.143	0.20	0.08	4.26259
2.143	0.10	0.04	17.05036

Frequency (MHz)	Occupational Limit minimum Distance (cm)	Public Limit minimum distance (cm)
300-1,500	N/A	N/A
1,500-10,000	0.20	0.40

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Garmin International, Inc.
MODEL: IQue M5
Test #: 040715
Test to: FCC Parts 2 and 80
FCCID#: IPH-00793