

10. MPE ESTIMATION

10.1.Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/cm ²)	Averaging time(minutes)
300MHz----1.5GHz	F/1500	30
1.5GHz---100GHz	1.0	30

Frequency	Power density (mW/cm ²)	Averaging time(minutes)
2412	1	30
2437	1	30
2462	1	30

Note: F= Frequency in MHz

10.2.Estimation Result

EUT: CaptionCall Wireless Router 2		
M/N: CR2		
Test date: 2017-01-03	Pressure: 102.3±1.0 kpa	Humidity: 51.5±3.0%
Tested by: Lynn	Test site: RF site	Temperature:22.1±0.6 °C

Test Mode	Frequency (MHz)	Peak Output Power (dBm)		Peak Output Power (mW)		Antenna Gain (dBi)		Antenna Gain (Linear)		MPE		
		Ant a	Ant b	Ant a	Ant b	Ant a	Ant b	Ant a	Ant b	Ant a	Ant b	Total
11b	2412	15.46	16.73	35.16	47.10	2	5	1.58	3.16	0.0111	0.0296	N/A
	2437	15.14	16.88	32.66	48.75	2	5	1.58	3.16	0.0103	0.0307	N/A
	2462	15.04	16.74	31.92	47.21	2	5	1.58	3.16	0.0101	0.0297	N/A
11g	2412	16.77	16.52	47.53	44.87	2	5	1.58	3.16	0.0150	0.0282	N/A
	2437	16.67	16.76	46.45	47.42	2	5	1.58	3.16	0.0147	0.0299	N/A
	2462	16.65	16.60	46.24	45.71	2	5	1.58	3.16	0.0146	0.0288	N/A
11n HT20	2412	16.54	16.34	45.08	43.05	2	5	1.58	3.16	0.0142	0.0271	0.0413
	2437	16.52	16.57	44.87	45.39	2	5	1.58	3.16	0.0142	0.0286	0.0428
	2462	16.44	16.41	44.06	43.75	2	5	1.58	3.16	0.0139	0.0275	0.0414
11n HT40	2422	16.85	16.66	48.42	46.34	2	5	1.58	3.16	0.0153	0.0292	0.0445
	2437	16.78	16.69	47.64	46.67	2	5	1.58	3.16	0.0150	0.0294	0.0444
	2452	16.69	16.60	46.67	45.71	2	5	1.58	3.16	0.0147	0.0288	0.0435

$$MPE = \frac{PG}{4\pi R^2} \quad (R=20 \text{ cm})$$

11. ANTENNA REQUIREMENT

11.1. Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

11.2. Antenna Connected Construction

The antennas used for this product are Dipole antenna and PCBA antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 5dBi.