

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(MHz)	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

2.4GHz

EUT:AC750 Wireless Dual Band Router		
M/N:C20i		
Test date: 2014-06-07	Pressure: 101.2±1.0 kpa	Humidity: 48.4±3.0%
Tested by: Kevin_Hu	Test site: RF site	Temperature:20.7±0.6 °C

Cable loss: 1 dB		Attenuator loss: 20 dB				Antenna Gain: 2dBi	
Test Mode	CH	Frequency (MHz)	Peak Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11b	CH1	2412	25.98	396.28	2	1.58	0.1250
	CH6	2437	25.83	382.82	2	1.58	0.1208
	CH11	2462	25.76	376.70	2	1.58	0.1188
11g	CH1	2412	26.79	477.53	2	1.58	0.1506
	CH6	2437	29.14	820.35	2	1.58	0.2588
	CH11	2462	25.00	316.23	2	1.58	0.0998
11n HT20	CH1	2412	26.98	498.88	2	1.58	0.1574
	CH6	2437	28.57	719.45	2	1.58	0.2270
	CH11	2462	25.17	328.85	2	1.58	0.1037
11n HT40	CH1	2422	24.44	277.97	2	1.58	0.0877
	CH4	2437	28.61	726.11	2	1.58	0.2291
	CH7	2452	23.34	215.77	2	1.58	0.0681

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

UNII Band 4:

EUT:AC750 Wireless Dual Band Router		
M/N:C20i		
Test date: 2014-06-07	Pressure: 101.6±1.0 kpa	Humidity: 48.4±3.0%
Tested by: Kevin_Hu	Test site: RF site	Temperature:22.7±0.6 °C

Cable loss: 1 dB		Attenuator loss: 20 dB				Antenna Gain: 3.5dBi	
Test Mode	CH	Frequency (MHz)	Peak Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11a	CH149	5745	26.21	417.83	3.5	2.24	0.1862
	CH157	5785	26.15	412.10	3.5	2.24	0.1836
	CH165	5825	26.11	408.32	3.5	2.24	0.1819
11n HT20	CH149	5745	26.14	411.15	3.5	2.24	0.1832
	CH157	5785	26.63	460.26	3.5	2.24	0.2051
	CH165	5825	26.31	427.56	3.5	2.24	0.1905
11n HT40	CH151	5755	26.61	458.14	3.5	2.24	0.2042
	CH159	5795	26.45	441.57	3.5	2.24	0.1968
11ac VHT20	CH149	5745	26.14	411.15	3.5	2.24	0.1832
	CH157	5785	26.04	401.79	3.5	2.24	0.1790
	CH165	5825	26.72	469.89	3.5	2.24	0.2094
11ac VHT40	CH151	5755	26.47	443.61	3.5	2.24	0.1977
	CH159	5795	26.75	473.15	3.5	2.24	0.2108
11ac VHT80	CH155	5775	26.25	421.70	3.5	2.24	0.1879

$$MPE = \frac{PG}{4\pi R^2}$$