

11.MPE ESTIMATION

11.1.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

11.2. Estimation Method :

Have Know Power(P),and the antenna Gain(G),then calculate the MPE with below formula:

$$MPE=(P*G)/4\pi R^2 \quad (R=20cm)$$

Note: R=Estimation distance

11.3. Estimation Result

EUT: 300 Mbps 4-Port Wireless Broadband Router		
M/N: SMCWBR14-N5		
Test date: 2013-02-31	Pressure: 101.2±1.0 kpa	Humidity: 53.0±3 %
Tested by: Leo-Li	Test site: RF site	Temperature: 24.5±0.6 °C

Cable loss: 1 dB		Attenuator loss: 20 dB				Antenna Gain: 5 dBi	
Test Mode	CH	Frequency (MHz)	Peak Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11b	CH1	2412	18.74	74.82	5	3.16	0.0471
	CH6	2437	20.80	120.23	5	3.16	0.0757
	CH11	2462	18.13	65.01	5	3.16	0.0409
11g	CH1	2412	22.93	196.34	5	3.16	0.1236
	CH6	2437	25.66	368.13	5	3.16	0.2317
	CH11	2462	20.62	115.35	5	3.16	0.0726
11n HT20	CH1	2412	21.71	148.25	5	3.16	0.0933
	CH6	2437	28.51	709.58	5	3.16	0.4466
	CH11	2462	20.26	106.17	5	3.16	0.0668
11n HT40	CH1	2422	20.79	119.95	5	3.16	0.0755
	CH4	2437	28.92	779.83	5	3.16	0.4909
	CH7	2452	20.47	111.43	5	3.16	0.0701