

9. MPE ESTIMATION

9.1. 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

Note: F= Frequency in MHz

9.2. Estimation Result

EUT: Altai A3-Ei Dual-band 3X3 802.11ac WiFi AP		
M/N: WA3311NAC-E		
Test date: 2015-12-27	Pressure: 101.2±1.0 kpa	Humidity: 53.5±3.0%
Tested by: Leo-Li	Test site: RF site	Temperature:23.2±0.6

Test Mode	Frequency (MHz)	Peak Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11a	5745	21.74	149.28	13	19.95	0.5929
	5785	21.85	153.11	13	19.95	0.6081
	5825	21.93	155.96	13	19.95	0.6194
11n HT20	5745	21.33	135.83	13	19.95	0.5394
	5785	21.63	145.55	13	19.95	0.5780
	5825	21.63	145.55	13	19.95	0.5780
11n HT40	5755	21.06	127.64	13	19.95	0.5069
	5795	21.29	134.59	13	19.95	0.5345
11ac VHT20	5745	21.45	139.64	13	19.95	0.5546
	5785	21.78	150.66	13	19.95	0.5983
	5825	21.76	149.97	13	19.95	0.5956
11ac VHT40	5755	21.25	133.35	13	19.95	0.5296
	5795	21.42	138.68	13	19.95	0.5507
11ac VHT80	5775	21.12	129.42	13	19.95	0.5140

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