

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

Note: F= Frequency in MHz

10.2. Estimation Result

EUT: Altai A3w Indoor Dual-band 3X3 802.11ac WiFi AP		
M/N: WA3311NAC-W		
Test date: 2016-01-25	Pressure: 101.2±1.0 kpa	Humidity: 54.3±3.0%
Tested by: Leo-Li	Test site: RF site	Temperature:22.9±0.6 °C

Test Mode	Frequency (MHz)	Peak Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11a	5745	24.86	306.20	10	10.00	0.6095
	5785	24.68	293.76	10	10.00	0.5847
	5825	24.55	285.10	10	10.00	0.5675
11n HT20	5745	24.42	276.69	10	10.00	0.5507
	5785	24.62	289.73	10	10.00	0.5767
	5825	24.32	270.40	10	10.00	0.5382
11n HT40	5755	24.33	271.02	10	10.00	0.5394
	5795	24.35	272.27	10	10.00	0.5419
11ac VHT20	5745	24.30	269.15	10	10.00	0.5357
	5785	24.44	277.97	10	10.00	0.5533
	5825	24.38	274.16	10	10.00	0.5457
11ac VHT40	5755	24.28	267.92	10	10.00	0.5333
	5795	24.48	280.54	10	10.00	0.5584
11ac VHT80	5775	25.41	347.54	10	10.00	0.6918

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