

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 Result

UNII Band 1

EUT:AC1750 Wireless Dual Band PCI Express Adapter		
M/N: Archer T8E		
Test date: 2014-10-21	Pressure: 101.1±1.0 kpa	Humidity: 49.3±3.0%
Tested by: Kevin_Hu	Test site: RF site	Temperature:22.5±0.6 °C

Test Mode	CH	Frequency (MHz)	Maximum Conducted Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11a	CH36	5180	22.04	159.96	2	1.58	0.0505
	CH40	5200	23.24	210.86	2	1.58	0.0665
	CH48	5240	17.06	50.82	2	1.58	0.0160
11n HT20	CH36	5180	23.41	219.28	2	1.58	0.0692
	CH40	5200	22.87	193.64	2	1.58	0.0611
	CH48	5240	17.83	60.67	2	1.58	0.0191
11n HT40	CH38	5190	17.78	59.98	2	1.58	0.0189
	CH46	5230	18.66	73.45	2	1.58	0.0232
11ac VHT20	CH36	5180	23.68	233.35	2	1.58	0.0736
	CH40	5200	23.43	220.29	2	1.58	0.0695
	CH48	5240	18.00	63.10	2	1.58	0.0199
11ac VHT40	CH38	5190	18.16	65.46	2	1.58	0.0207
	CH46	5230	18.98	79.07	2	1.58	0.0249
11ac VHT80	CH42	5210	19.03	79.98	2	1.58	0.0252

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

UNII Band 4

EUT:AC1750 Wireless Dual Band PCI Express Adapter		
M/N: Archer T8E		
Test date: 2014-10-21	Pressure: 101.4±1.0 kpa	Humidity: 50.1±3.0%
Tested by: Kobe_Huang	Test site: RF site	Temperature:22.3±0.6 °C

Test Mode	CH	Frequency (MHz)	Maximum Conducted Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11a	CH149	5745	23.19	208.45	2	1.58	0.0658
	CH157	5785	23.13	205.59	2	1.58	0.0649
	CH165	5825	22.99	199.07	2	1.58	0.0628
11n HT20	CH149	5745	22.91	195.43	2	1.58	0.0617
	CH157	5785	22.40	173.78	2	1.58	0.0548
	CH165	5825	22.76	188.80	2	1.58	0.0596
11n HT40	CH151	5755	23.13	205.59	2	1.58	0.0649
	CH159	5795	23.22	209.89	2	1.58	0.0662
11ac VHT20	CH149	5745	22.96	197.70	2	1.58	0.0624
	CH157	5785	22.66	184.50	2	1.58	0.0582
	CH165	5825	22.92	195.88	2	1.58	0.0618
11ac VHT40	CH151	5755	23.33	215.28	2	1.58	0.0679
	CH159	5795	23.14	206.06	2	1.58	0.0650
11ac VHT80	CH155	5775	22.78	189.67	2	1.58	0.0598

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