

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

EUT: Altai A8-Ein (ac) Super WiFi Base Station		
M/N:WA8011NAC		
Test date: 2015-10-25	Pressure: 101.4±1.0 kpa	Humidity: 52.3±3.0%
Tested by: Leo-Li	Test site: RF site	Temperature:23.2±0.6 °C

Test Mode	CH	Frequency (MHz)	Peak Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11b	CH1	2412	16.60	45.71	19	79.43	0.7227
	CH6	2437	16.52	44.87	19	79.43	0.7095
	CH11	2462	16.46	44.26	19	79.43	0.6998
11g	CH1	2412	16.58	45.50	19	79.43	0.7194
	CH6	2437	16.56	45.29	19	79.43	0.7161
	CH11	2462	16.53	44.98	19	79.43	0.7111
11n HT20	CH1	2412	16.59	45.60	19	79.43	0.7210
	CH6	2437	16.55	45.19	19	79.43	0.7144
	CH11	2462	16.46	44.26	19	79.43	0.6998
11n HT40	CH3	2422	16.57	45.39	19	79.43	0.7177
	CH6	2437	16.66	46.34	19	79.43	0.7327
	CH9	2452	16.79	47.75	19	79.43	0.7550

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

When incorporate the module or module-like transmitter in host device that operate in the mixed mobile and portable host platform exposure conditions, the test exclusion condition” [Σ of (the highest measured or estimated SAR for each standalone antenna configuration, adjusted for maximum tune-up tolerance) / 1.6 W/kg] + [Σ of MPE ratios] is ≤ 1.0” should be satisfied.

So the result will be 1.4W/kg / 1.6W/kg+0.1137/1≤ 1.0.