

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

5180-5240MHz Band:

EUT: Wireless Speaker						
M/N: LF-S50G						
Test date: 2016-06-21			Pressure: 102.1±1.0 kpa		Humidity: 51.1±3.0%	
Tested by: Alice-Yang			Test site: RF site		Temperature:22.8±0.6 °C	
Test Mode	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11a	5180	12.86	19.32	6.02	4.00	0.0154
	5200	12.79	19.01	6.02	4.00	0.0151
	5240	12.78	18.97	6.02	4.00	0.0151
11n HT20	5180	12.55	17.99	6.02	4.00	0.0143
	5200	12.57	18.07	6.02	4.00	0.0144
	5240	12.47	17.66	6.02	4.00	0.0141
11n HT40	5190	12.49	17.74	6.02	4.00	0.0141
	5230	12.56	18.03	6.02	4.00	0.0144

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

5250-5350MHz Band:

EUT: Wireless Speaker						
M/N: LF-S50G						
Test date: 2016-06-21			Pressure: 102.1±1.0 kpa		Humidity: 51.1±3.0%	
Tested by: Alice-Yang			Test site: RF site		Temperature:22.8±0.6 °C	
Test Mode	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11a	5260	12.48	17.70	6.09	4.06	0.0143
	5300	12.22	16.67	6.09	4.06	0.0135
	5320	12.36	17.22	6.09	4.06	0.0139
11n HT20	5260	12.14	16.37	6.09	4.06	0.0132
	5300	12.05	16.03	6.09	4.06	0.0130
	5320	12.17	16.48	6.09	4.06	0.0133
11n HT40	5270	12.01	15.89	6.09	4.06	0.0129
	5310	12.1	16.22	6.09	4.06	0.0131

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

5470-5725MHz Band:

EUT: Wireless Speaker						
M/N: LF-S50G						
Test date: 2016-06-21			Pressure: 102.1±1.0 kpa		Humidity: 51.1±3.0%	
Tested by: Alice-Yang			Test site: RF site		Temperature:22.8±0.6 °C	
Test Mode	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11a	5500	13.01	20.00	5.41	3.48	0.0138
	5600	13.17	20.75	5.41	3.48	0.0144
	5700	12.6	18.20	5.41	3.48	0.0126
11n HT20	5500	12.69	18.58	5.41	3.48	0.0129
	5600	12.8	19.05	5.41	3.48	0.0132
	5700	12.54	17.95	5.41	3.48	0.0124
11n HT40	5510	12.75	18.84	5.41	3.48	0.0130
	5590	12.82	19.14	5.41	3.48	0.0132
	5670	12.5	17.78	5.41	3.48	0.0123

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

5745-5825MHz Band:

EUT: Wireless Speaker						
M/N: LF-S50G						
Test date: 2016-06-21			Pressure: 102.1±1.0 kpa		Humidity: 51.1±3.0%	
Tested by: Alice-Yang			Test site: RF site		Temperature:22.8±0.6 °C	
Test Mode	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11a	5745	12.19	16.56	6.39	4.36	0.0144
	5785	11.91	15.52	6.39	4.36	0.0135
	5825	11.79	15.10	6.39	4.36	0.0131
11n HT20	5745	12.08	16.14	6.39	4.36	0.0140
	5785	11.75	14.96	6.39	4.36	0.0130
	5825	11.48	14.06	6.39	4.36	0.0122
11n HT40	5755	11.6	14.45	6.39	4.36	0.0125
	5795	11.88	15.42	6.39	4.36	0.0134

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