MPE ESTIMATION

FCC ID: X2NBL-LW08-5

1,Limit for General Population/Uncontrolled Exposures

Frequency	Power density (mW/ cm ²)	Averaging time(minutes)	
300MHz1.5GHz	F/1500	30	
1.5GHz100GHz	1.0	30	

Note: F= Frequency in MHz

2, Estimation Result

Mode	CH	PK Output	Output	Antenna	Antenna Gain	MPE
	СН	power(dBm)	power(mW)	Gain(dBi)	(linear)	(mW/cm ²)
11b	CH1	12.31	17.02159	1	1.2589	0.004263
	СН6	11.99	15.81248	1	1.2589	0.00396
	CH11	13.70	23.44229	1	1.2589	0.005871
11g	CH1	10.59	11.45513	1	1.2589	0.002869
	СН6	11.69	14.75707	1	1.2589	0.003696
	CH11	12.45	17.57924	1	1.2589	0.004403
11n/HT20	CH1	10.31	10.73989	1	1.2589	0.00269
	СН6	11.52	14.19058	1	1.2589	0.003554
	CH11	10.51	11.24605	1	1.2589	0.002817
11n/HT40	CH1	10.73	11.83042	1	1.2589	0.002963
	CH4	11.38	13.74042	1	1.2589	0.003441
	CH7	11.94	15.63148	1	1.2589	0.003915

$$Pd = \frac{Pout * G}{4\pi r^2}$$

Note:

Note: The estimation distance is 20cm

Note: PK Output power max is for antenna 1.

PK Output power= conducted power.

Conducted power see the test report STI130802125, antenna gain=1dBi.

Mode	СН	PK Output	Output	Antenna	Antenna Gain	MPE
		power(dBm)	power(mW)	Gain(dBi)	(linear)	(mW/cm ²)
11b	CH1	11.60	14.4544	1	1.2589	0.00362
	СН6	11.57	14.35489	1	1.2589	0.003595
	CH11	11.34	13.61445	1	1.2589	0.00341
11g	CH1	10.62	11.53453	1	1.2589	0.002889
	СН6	10.94	12.41652	1	1.2589	0.00311
	CH11	10.48	11.16863	1	1.2589	0.002797
11n/HT20	CH1	10.16	10.37528	1	1.2589	0.002599
	СН6	11.14	13.0017	1	1.2589	0.00326
	CH11	10.28	10.66596	1	1.2589	0.002671
11n/HT40	CH1	9.94	9.862795	1	1.2589	0.0024702
	CH4	10.18	10.42317	1	1.2589	0.002611
	CH7	10.10	10.23293	1	1.2589	0.002563

$$Pd = \frac{Pout * G}{4\pi r^2}$$

Note:

Note: The estimation distance is 20cm

Note: PK Output power max is for antenna 2.

PK Output power= conducted power.

Conducted power see the test report STI130802125, antenna gain=1dBi.

Mode C	CH	PK Output	Output	Directional	Antenna Gain	MPE
	СП	power(dBm)	power(mW)	Gain(dBi)	(linear)	(mW/cm²)
11n/HT20 (CH1	13.25	21.13489	4.01	2.5177	0.010586
	СН6	14.34	27.16439	4.01	2.5177	0.013607
	CH11	13.41	21.92805	4.01	2.5177	0.010984
11n/HT40	CH1	13.36	21.67704	4.01	2.5177	0.010858
	CH4	13.83	24.15461	4.01	2.5177	0.012099
	CH7	14.13	25.88213	4.01	2.5177	0.012964

$$Pd = \frac{Pout * G}{4\pi r^2}$$

Note:

Note: The estimation distance is 20cm

Note: PK Output power max is for antenna 1 and antenna 2 simultaneously transmit.

PK Output power= conducted power.

Conducted power see the test report STI130802125, antenna gain=1dBi.

Directional gain = antenna gain + array gain =1+10log(2)=4.01