

MPE ESTIMATION  
 FCC ID: 2AQJT-EZC-CS2

**1, Limit for General Population/ Uncontrolled Exposures**

Frequency	Power density (mW/ cm <sup>2</sup> )	Averaging time(minutes)
300MHz----1.5GHz	F/1500	30
1.5GHz---100GHz	1.0	30

Note: F= Frequency in MHz

**2 Estimation Result**

**For 2.4G WIFI:**

Mode	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm <sup>2</sup> )
11b	12.89	12±1(13)	19.95	1	1.2589	0.00500
11g	12.32	12±1(13)	19.95	1	1.2589	0.00500
11n/HT20	11.54	11±1(12)	15.85	1	1.2589	0.00397
11n/HT40	10.85	10±1(11)	12.59	1	1.2589	0.00315

$$Pd = \frac{P_{out} * G}{4\pi r^2} ;$$

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report HK1908071937-1E, antenna gain=1dBi.

Mode	CH	PK Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm <sup>2</sup> )
11b	CH1	12.89	19.45	1	1.2589	0.00487
	CH6	12.80	19.05	1	1.2589	0.00477
	CH11	12.41	17.42	1	1.2589	0.00436
11g	CH1	12.32	17.06	1	1.2589	0.00428
	CH6	11.60	14.45	1	1.2589	0.00362
	CH11	11.75	14.96	1	1.2589	0.00375
11n/HT20	CH1	11.54	14.26	1	1.2589	0.00357
	CH6	11.43	13.90	1	1.2589	0.00348
	CH11	10.86	12.19	1	1.2589	0.00305
11n/HT40	CH1	10.85	12.16	1	1.2589	0.00305
	CH4	10.34	10.81	1	1.2589	0.00271
	CH7	10.22	10.52	1	1.2589	0.00264

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

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report HK1908071937-1E, antenna gain=1dBi.

**For 5.2G WIFI:**

Mode	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm <sup>2</sup> )
11a	11.29	11±1(12)	15.85	1	1.2589	0.00397
11n/HT20	10.99	10±1(11)	12.59	1	1.2589	0.00315
11n/HT40	9.85	9±1(10)	10.00	1	1.2589	0.00250
11ac/HT20	9.74	9±1(10)	10.00	1	1.2589	0.00250
11ac/HT40	8.77	8±1(9)	7.94	1	1.2589	0.00199
11ac/HT80	8.65	8±1(9)	7.94	1	1.2589	0.00199

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

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report HK1908071937-2E, antenna gain=1dBi.

Mode	CH	PK Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm <sup>2</sup> )
11a	CH36	11.29	13.46	1	1.2589	0.00337
	CH40	10.77	11.94	1	1.2589	0.00299
	CH48	10.44	11.07	1	1.2589	0.00277
11n/HT20	CH36	10.71	11.78	1	1.2589	0.00295
	CH40	10.99	12.56	1	1.2589	0.00315
	CH48	10.28	10.67	1	1.2589	0.00267
11n/HT40	CH38	9.85	9.66	1	1.2589	0.00242
	CH46	9.66	9.25	1	1.2589	0.00232
11ac/HT20	CH36	9.74	9.42	1	1.2589	0.00236
	CH40	8.25	6.68	1	1.2589	0.00167
	CH48	8.53	7.13	1	1.2589	0.00179
11ac/HT40	CH38	8.77	7.53	1	1.2589	0.00189
	CH46	8.69	7.40	1	1.2589	0.00185
11ac/HT80	CH42	8.65	7.33	1	1.2589	0.00184

$$Pd = \frac{P_{out} * G}{4\pi r^2};$$

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report HK1908071937-2E, antenna gain=1dBi.

**For 5.8G WIFI:**

Mode	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm <sup>2</sup> )
11a	11.56	11±1(12)	15.85	1	1.2589	0.00397
11n/HT20	10.58	10±1(11)	12.59	1	1.2589	0.00315
11n/HT40	9.84	9±1(10)	10.00	1	1.2589	0.00251
11ac/HT20	9.38	9±1(10)	10.00	1	1.2589	0.00251
11ac/HT40	9.45	9±1(10)	10.00	1	1.2589	0.00251
11ac/HT80	9.14	9±1(10)	10.00	1	1.2589	0.00251

$$Pd = \frac{P_{out} * G}{4\pi r^2} ;$$

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK1908071937-2E, The MIMO mode power is max, so only calculate max power mode and antenna port 1 gain=1dBi, antenna port 2 gain=1dBi.

Mode	CH	PK Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm <sup>2</sup> )
11a	CH149	11.46	14.00	1	1.2589	0.00351
	CH157	11.06	12.76	1	1.2589	0.00320
	CH165	11.56	14.32	1	1.2589	0.00359
11n/HT20	CH149	10.58	11.43	1	1.2589	0.00286
	CH157	10.03	10.07	1	1.2589	0.00252
	CH165	10.52	11.27	1	1.2589	0.00282
11n/HT40	CH151	9.84	9.64	1	1.2589	0.00242
	CH159	9.64	9.20	1	1.2589	0.00231
11ac/HT20	CH149	9.38	8.67	1	1.2589	0.00217
	CH157	9.26	8.43	1	1.2589	0.00211
	CH165	8.54	7.14	1	1.2589	0.00179
11ac/HT40	CH151	9.45	8.81	1	1.2589	0.00221
	CH159	8.49	7.06	1	1.2589	0.00177
11ac/HT80	CH155	9.14	8.20	1	1.2589	0.00206

$$Pd = \frac{P_{out} * G}{4\pi r^2};$$

Note:

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK1908071937-2E, The MIMO mode power is max, so only calculate max power mode and antenna port 1 gain=1dBi, antenna port 2 gain=1dBi.

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