

MPE ESTIMATION
 FCC ID: 2AOQ6-LVAC09

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

2, Estimation Result

For antenna 1:

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 ²)
11b	13.86	13±(14)	25.12	2	1.585	0.00792
11g	13.12	13±(14)	25.12	2	1.585	0.00792
11n/HT20	12.58	13±(14)	25.12	2	1.585	0.00792
11n/HT40	13.14	13±(14)	25.12	2	1.585	0.00792

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

Note:

Note: The estimation distance is 20cm

Note: PK Output power= conducted power.

Conducted power see the test report SZAWW171228001-01, antenna gain=2dBi.

Mode	CH	PK Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11b	CH1	13.86	24.32	2	1.585	0.00767
	CH6	13.53	22.54	2	1.585	0.00711
	CH11	13.48	22.28	2	1.585	0.00703
11g	CH1	12.96	19.77	2	1.585	0.00624
	CH6	13.12	20.51	2	1.585	0.00647
	CH11	12.74	18.79	2	1.585	0.00593
11n/HT20	CH1	12.58	18.11	2	1.585	0.00571
	CH6	12.45	17.58	2	1.585	0.00555
	CH11	12.39	17.34	2	1.585	0.00547
11n/HT40	CH1	13.14	20.61	2	1.585	0.00650
	CH4	13.07	20.28	2	1.585	0.00640
	CH7	12.82	19.14	2	1.585	0.00604
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$						
Note:						
Note: The estimation distance is 20cm						
Note: PK Output power= conducted power.						
Conducted power see the test report SZAWW171228001-01, antenna gain=2dBi.						

For 5.2G WIFI:

Mode	AVG Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11a	16.32	16±(17)	50.12	2	1.585	0.01581
11n/HT20	15.93	16±(17)	50.12	2	1.585	0.01581
11n/HT40	16.92	16±(17)	50.12	2	1.585	0.01581
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$						
Note:						
Note: The estimation distance is 20cm						
Note: AVG Output power= conducted power. Conducted power see the test report SZAWW171228001-02, antenna gain=2dBi.						

Mode	CH	AVG Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11a	CH36	15.31	33.96	2	1.585	0.01071
	CH40	15.13	32.58	2	1.585	0.01028
	CH48	16.32	42.85	2	1.585	0.01352
11n/HT20	CH36	15.93	39.17	2	1.585	0.01236
	CH40	15.92	39.08	2	1.585	0.01233
	CH48	15.13	32.58	2	1.585	0.01028
11n/HT40	CH38	16.92	49.20	2	1.585	0.01552
	CH46	16.91	49.09	2	1.585	0.01549
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$						
Note:						
Note: The estimation distance is 20cm						
Note: AVG Output power= conducted power. Conducted power see the test report SZAWW171228001-02, antenna gain=2dBi.						

For 5.8G WIFI:

Mode	AVG Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11a	16.92	16±(17)	50.12	2	1.585	0.01581
11n/HT20	16.41	16±(17)	50.12	2	1.585	0.01581
11n/HT40	15.21	16±(17)	50.12	2	1.585	0.01581
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$						
Note:						
Note: The estimation distance is 20cm						
Note: AVG Output power= conducted power. Conducted power see the test report SZAWW171228001-03, antenna gain=2dBi.						

Mode	CH	AVG Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11a	CH149	16.92	49.20	2	1.585	0.01552
	CH157	15.72	37.33	2	1.585	0.01178
	CH165	15.91	38.99	2	1.585	0.01230
11n/HT20	CH149	15.82	38.19	2	1.585	0.01205
	CH157	15.62	36.48	2	1.585	0.01151
	CH165	16.41	43.75	2	1.585	0.01380
11n/HT40	CH151	15.12	32.51	2	1.585	0.01026
	CH159	15.21	33.19	2	1.585	0.01047
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$						
Note:						
Note: The estimation distance is 20cm						
Note: AVG Output power= conducted power. Conducted power see the test report SZAWW171228001-03, antenna gain=2dBi.						

For antenna 2:

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 ²)
11b	13.57	13±(14)	25.12	2	1.585	0.00792
11g	12.75	13±(14)	25.12	2	1.585	0.00792
11n/HT20	12.47	13±(14)	25.12	2	1.585	0.00792
11n/HT40	13.21	13±(14)	25.12	2	1.585	0.00792
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$						
Note:						
Note: The estimation distance is 20cm						
Note: PK Output power= conducted power. Conducted power see the test report SZAWW171228001-01, antenna gain=2dBi.						

Mode	CH	PK Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11b	CH1	13.57	22.75	2	1.585	0.00718
	CH6	13.29	21.33	2	1.585	0.00673
	CH11	13.11	20.46	2	1.585	0.00646
11g	CH1	12.75	18.84	2	1.585	0.00594
	CH6	12.78	18.97	2	1.585	0.00598
	CH11	12.62	18.28	2	1.585	0.00577
11n/HT20	CH1	12.47	17.66	2	1.585	0.00557
	CH6	12.32	17.06	2	1.585	0.00538
	CH11	12.26	16.83	2	1.585	0.00531
11n/HT40	CH1	13.21	20.94	2	1.585	0.00661
	CH4	13.08	20.32	2	1.585	0.00641
	CH7	12.89	19.45	2	1.585	0.00614
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$						
Note:						
Note: The estimation distance is 20cm						
Note: PK Output power= conducted power. Conducted power see the test report SZAWW171228001-01, antenna gain=2dBi.						

For 5.2G WIFI:

Mode	AVG Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11a	14.82	14±(15)	31.62	2	1.585	0.00998
11n/HT20	14.71	14±(15)	31.62	2	1.585	0.00998
11n/HT40	13.42	14±(15)	31.62	2	1.585	0.00998
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$						
Note:						
Note: The estimation distance is 20cm						
Note: AVG Output power= conducted power. Conducted power see the test report SZAWW171228001-02, antenna gain=2dBi.						

Mode	CH	AVG Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11a	CH36	14.82	30.34	2	1.585	0.00957
	CH40	13.61	22.96	2	1.585	0.00724
	CH48	12.41	17.42	2	1.585	0.00550
11n/HT20	CH36	13.83	24.15	2	1.585	0.00762
	CH40	14.21	26.36	2	1.585	0.00832
	CH48	14.71	29.58	2	1.585	0.00933
11n/HT40	CH38	13.42	21.98	2	1.585	0.00693
	CH46	12.51	17.82	2	1.585	0.00562
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$						
Note:						
Note: The estimation distance is 20cm						
Note: AVG Output power= conducted power. Conducted power see the test report SZAWW171228001-02, antenna gain=2dBi.						

For 5.8G WIFI:

Mode	AVG Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11a	13.13	14±(15)	31.62	2	1.585	0.00998
11n/HT20	13.31	14±(15)	31.62	2	1.585	0.00998
11n/HT40	14.71	14±(15)	31.62	2	1.585	0.00998

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

Note:

Note: The estimation distance is 20cm

Note: AVG Output power= conducted power.

Conducted power see the test report SZAWW171228001-03, antenna gain=2dBi.

Mode	CH	AVG Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11a	CH149	13.13	20.56	2	1.585	0.00649
	CH157	12.61	18.24	2	1.585	0.00575
	CH165	12.33	17.10	2	1.585	0.00539
11n/HT20	CH149	12.93	19.63	2	1.585	0.00619
	CH157	12.63	18.32	2	1.585	0.00578
	CH165	13.31	21.43	2	1.585	0.00676
11n/HT40	CH151	14.71	29.58	2	1.585	0.00933
	CH159	13.11	20.46	2	1.585	0.00646

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

Note:

Note: The estimation distance is 20cm

Note: AVG Output power= conducted power.

Conducted power see the test report SZAWW171228001-03, antenna gain=2dBi.

For MIMO:

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 ²)
11n/HT20	15.53	16±1(17)	50.12	2	1.585	0.01581
11n/HT40	16.18	16±1(17)	50.12	2	1.585	0.01581
$Pd = \frac{P_{out} * G}{4\pi r^2} :$						
Note:						
Note: The estimation distance is 20cm						
Note: PK Output power= conducted power. Conducted power see the test report SZAWW171228001-01, antenna gain=2dBi.						

Mode	CH	PK Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11n/HT20	CH1	15.53	35.73	2	1.585	0.01127
	CH6	15.39	34.59	2	1.585	0.01091
	CH11	15.33	34.12	2	1.585	0.01076
11n/HT40	CH1	16.18	41.50	2	1.585	0.01309
	CH4	16.08	40.55	2	1.585	0.01279
	CH7	15.86	38.55	2	1.585	0.01216
$Pd = \frac{P_{out} * G}{4\pi r^2} :$						
Note:						
Note: The estimation distance is 20cm						
Note: PK Output power= conducted power. Conducted power see the test report SZAWW171228001-01, antenna gain=2dBi.						

For 5.2G WIFI:

Mode	AVG Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11a	18.08	18±1(19)	79.43	2	1.585	0.02506
11n/HT20	18.16	18±1(19)	79.43	2	1.585	0.02506
11n/HT40	18.52	18±1(19)	79.43	2	1.585	0.02506
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$						
Note:						
Note: The estimation distance is 20cm						
Note: AVG Output power= conducted power. Conducted power see the test report SZAWW171228001-02, antenna gain=2dBi.						

Mode	CH	AVG Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11a	CH36	18.08	64.27	2	1.585	0.02028
	CH40	17.45	55.59	2	1.585	0.01754
	CH48	17.80	60.26	2	1.585	0.01901
11n/HT20	CH36	18.02	63.39	2	1.585	0.02000
	CH40	18.16	65.46	2	1.585	0.02065
	CH48	17.94	62.23	2	1.585	0.01963
11n/HT40	CH38	18.52	71.12	2	1.585	0.02244
	CH46	18.26	66.99	2	1.585	0.02113
$Pd = \frac{P_{out} * G}{4\pi r^2} ;$						
Note:						
Note: The estimation distance is 20cm						
Note: AVG Output power= conducted power. Conducted power see the test report SZAWW171228001-02, antenna gain=2dBi.						

For 5.8G WIFI:

Mode	AVG Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11a	18.44	18 ± 1(19)	79.43	2	1.585	0.02506
11n/HT20	18.14	18 ± 1(19)	79.43	2	1.585	0.02506
11n/HT40	17.93	18 ± 1(19)	79.43	2	1.585	0.02506

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

Note:

Note: The estimation distance is 20cm

Note: AVG Output power= conducted power.
Conducted power see the test report SZAWW171228001-03, antenna gain=2dBi.

Mode	CH	AVG Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm ²)
11a	CH149	18.44	69.82	2	1.585	0.02203
	CH157	17.45	55.59	2	1.585	0.01754
	CH165	17.49	56.10	2	1.585	0.01770
11n/HT20	CH149	17.62	57.81	2	1.585	0.01824
	CH157	17.39	54.83	2	1.585	0.01730
	CH165	18.14	65.16	2	1.585	0.02056
11n/HT40	CH151	17.93	62.09	2	1.585	0.01959
	CH159	17.30	53.70	2	1.585	0.01694

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

Note:

Note: The estimation distance is 20cm

Note: AVG Output power= conducted power.
Conducted power see the test report SZAWW171228001-03, antenna gain=2dBi.

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