MPE ESTIMATION

Test report
On Behalf of
Shenzhen Reo-link Digital Technology Co., Ltd
For
WiFi IP Camera
Model No.: RLC-511W, RLC-811W

FCC ID: 2AL7V511W

Prepared for :	**Shenzhen Reo-link Digital Technology Co., Ltd** **11th Floor, Building C,Unisplendour Information Harbour, North High-Tech Zone, Nanshan District, Shenzhen, China,518057**
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Date of Test:	**Jan. 16, 2019 ~ Jan. 24, 2019**
Date of Report:	**Jan. 24, 2019**
Report Number:	**HK1901160221-2E**

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:

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	15.89	15±1(16)	39.81	5	3.1623	0.02506
11g	14.68	14±1(15)	31.62	5	3.1623	0.01990
11n/HT20	12.99	12±1(13)	19.95	5	3.1623	0.01256
11n/HT40	12.69	12±1(13)	19.95	5	3.1623	0.01256

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

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK1901160221-E, antenna port 1 gain=5dBi, antenna port 2 gain=5dBi,MIMO gain=8.01dBi

Mode	CH	PK Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm²)
11b	CH1	15.89	38.82	5	3.1623	0.02443
	CH6	15.69	37.07	5	3.1623	0.02333
	CH11	15.33	34.12	5	3.1623	0.02148
11g	CH1	14.68	29.38	5	3.1623	0.01849
	CH6	14.33	27.10	5	3.1623	0.01706
	CH11	14.61	28.91	5	3.1623	0.01820
11n/HT20	CH1	12.92	19.59	5	3.1623	0.01233
	CH6	12.97	19.82	5	3.1623	0.01247
	CH11	12.99	19.91	5	3.1623	0.01253
11n/HT40	CH3	12.69	18.58	5	3.1623	0.01169
	CH6	12.02	15.92	5	3.1623	0.01002
	CH9	12.65	18.41	5	3.1623	0.01159

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

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK1901160221-E, antenna port 1 gain=5dBi, antenna port 2 gain=5dBi,MIMO gain=8.01dBi

For antenna 2:

Mode	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm²)
11b	15.74	15±1(16)	39.81	5	3.1623	0.02506
11g	14.40	14±1(15)	31.62	5	3.1623	0.01990
11n/HT20	13.21	13±1(14)	25.12	5	3.1623	0.01581
11n/HT40	13.16	13±1(14)	25.12	5	3.1623	0.01581

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

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK1901160221-E, antenna port 1 gain=5dBi, antenna port 2 gain=5dBi,MIMO gain=8.01dBi

Mode	CH	PK Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm²)
11b	CH1	15.74	37.50	5	3.1623	0.02360
	CH6	15.30	33.88	5	3.1623	0.02133
	CH11	15.62	36.48	5	3.1623	0.02296
11g	CH1	13.98	25.00	5	3.1623	0.01574
	CH6	14.40	27.54	5	3.1623	0.01734
	CH11	13.81	24.04	5	3.1623	0.01513
11n/HT20	CH1	13.21	20.94	5	3.1623	0.01318
	CH6	13.07	20.28	5	3.1623	0.01276
	CH11	13.08	20.32	5	3.1623	0.01279
11n/HT40	CH3	13.00	19.95	5	3.1623	0.01256
	CH6	12.94	19.68	5	3.1623	0.01239
	CH9	13.16	20.70	5	3.1623	0.01303

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

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK1901160221-E, antenna port 1 gain=5dBi, antenna port 2 gain=5dBi,MIMO gain=8.01dBi

For MIMO:

Mode	Max PK Output power(dBm)	Tune Up Power(dBm)	Max Tune Up power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm²)
11b	--	--	--	--	--	--
11g	--	--	--	--	--	--
11n/HT20	16.08	15.5±1(16.5)	44.67	8.01	6.4565	0.05740
11n/HT40	15.92	15±1(16)	39.81	8.01	6.4565	0.05116

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

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK1901160221-E, antenna port 1 gain=5dBi, antenna port 2 gain=5dBi, MIMO gain=8.01dBi

Mode	CH	PK Output power(dBm)	Output power(mW)	Antenna Gain(dBi)	Antenna Gain (linear)	MPE (mW/cm²)
11b	CH1	--	--	--	--	--
	CH6	--	--	--	--	--
	CH11	--	--	--	--	--
11g	CH1	--	--	--	--	--
	CH6	--	--	--	--	--
	CH11	--	--	--	--	--
11n/HT20	CH1	16.08	40.55	8.01	6.4565	0.05211
	CH6	16.03	40.09	8.01	6.4565	0.05152
	CH11	16.05	40.27	8.01	6.4565	0.05175
11n/HT40	CH3	15.86	38.55	8.01	6.4565	0.04954
	CH6	15.51	35.56	8.01	6.4565	0.04570
	CH9	15.92	39.08	8.01	6.4565	0.05023

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

Note: The estimation distance is 20cm

Note:

PK Output power= conducted power.

Conducted power see the test report HK1901160221-E, antenna port 1 gain=5dBi, antenna port 2 gain=5dBi,MIMO gain=8.01dBi

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