

# **FCC RF EXPOSURE REPORT**

**FCC ID: 2AJZ4-KK-LINK**

**Project No. : 1610C051**  
**Equipment : Hub**  
**Model : KK-LINK**  
**Applicant : Hangzhou Konke Information Technology Co.,  
Ltd.**  
**Address : 28F Huafeng international mansion, No.200  
Xinye Road Jianggan District, Hangzhou,  
Zhejiang Province, China**

**According: : FCC Guidelines for Human Exposure IEEE  
C95.1**

**B T L I N C .**

No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, China.  
TEL: +86-769-8318-3000 FAX: +86-769-8319-6000

## MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi^2} = \frac{EIRP}{4\pi^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna

For Wifi 2.4G:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)
1	Magic wireless	MW2412	Chip	N/A	3

For Zigbee:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)
1	Magic wireless	MW2412	Chip	N/A	3

# TEST RESULTS

Zigbee:

EUT :	Hub	Model Name :	KK-LINK
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX MODE		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3	1.9953	5.97	3.9537	0.00157	1	Complies
3	1.9953	5.6	3.6308	0.00144	1	Complies
3	1.9953	4.57	2.8642	0.00114	1	Complies

Wifi 2.4G:

EUT :	Hub	Model Name :	KK-LINK
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX B MODE /CH01, CH06, CH11		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3	1.9953	12.69	18.5780	0.00738	1	Complies
3	1.9953	14.4	27.5423	0.01094	1	Complies
3	1.9953	14.48	28.0543	0.01114	1	Complies

EUT :	Hub	Model Name :	KK-LINK
Temperature :	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX G MODE /CH01, CH06, CH11		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3	1.9953	21.46	139.9587	0.05558	1	Complies
3	1.9953	22.73	187.4995	0.07446	1	Complies
3	1.9953	21.85	153.1087	0.06081	1	Complies

EUT :	Hub	Model Name :	KK-LINK
Temperature:	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N-20M MODE_ Total /CH01, CH06, CH11		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3	1.9953	21.84	152.7566	0.06067	1	Complies
3	1.9953	22.58	181.1340	0.07194	1	Complies
3	1.9953	21.27	133.9677	0.05320	1	Complies

EUT :	Hub	Model Name :	KK-LINK
Temperature:	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N-40M MODE_ Total /CH03, CH06, CH09		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3	1.9953	21.62	145.2112	0.05767	1	Complies
3	1.9953	23.17	207.4914	0.08240	1	Complies
3	1.9953	20.96	124.7384	0.04954	1	Complies

**For Zigbee+Wifi simultaneous transmission MPE:**

$$0.00157/1+0.08240/1=0.08397<1$$

Note: the calculated distance is 20 cm.