FCC RF EXPOSURE REPORT

FCC ID: TE7KC200

Project No.	**: 1801C053**
Equipment	**: Kasa Cam Outdoor**
Model	**: KC200**
Applicant	**: TP-Link Technologies Co., Ltd.**
Address	**: Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China**
According:	**: FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091**

BTL INC.

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:

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

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

WLAN 2.4G

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)
1	N/A	N/A	PIFA Antenna	N/A	1.87
2	N/A	N/A	PIFA Antenna	N/A	2.93

WLAN 5G

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)	Note
1	N/A	N/A	PIFA Antenna	N/A	3.09	5150-5250 MHz
2	N/A	N/A	PIFA Antenna	N/A	2.73	
1	N/A	N/A	PIFA Antenna	N/A	2.90	5250-5350 MHz
2	N/A	N/A	PIFA Antenna	N/A	3.54	
1	N/A	N/A	PIFA Antenna	N/A	2.14	5470-5725 MHz
2	N/A	N/A	PIFA Antenna	N/A	3.38	
1	N/A	N/A	PIFA Antenna	N/A	3.77	5725-5850 MHz
2	N/A	N/A	PIFA Antenna	N/A	2.91	

Smart antenna system with two transmit/receive chains, but operating in a mode where only one transmit/receive chain is used.

TEST RESULTS

EUT：	Kasa Cam Outdoor	Model Name :	KC200
Temperature：	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		

2.4G WIFI-Ant 1

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
1.87	1.5382	19.86	96.8278	0.02964	1	Complies

2.4G WIFI-Ant 2

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
2.93	1.9634	19.85	96.6051	0.03775	1	Complies

5G Band UNII-1-Ant 1

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
3.09	2.0370	18.81	76.0326	0.03083	1	Complies

5G Band UNII-1-Ant 2

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
2.73	1.8750	18.88	77.2681	0.02884	1	Complies

5G Band UNII-2A-Ant 1

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
2.90	1.9498	18.73	76.6449	0.02897	1	Complies

5G Band UNII-2A-Ant 2

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
3.54	2.2594	18.86	76.9130	0.03459	1	Complies

5G Band UNII-2C-Ant 1

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
2.14	1.6368	18.86	76.9130	0.02506	1	Complies

5G Band UNII-2C-Ant 2

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
3.38	2.1777	18.87	77.0903	0.03342	1	Complies

5G Band UNII-3-Ant 1

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
3.77	2.3823	18.83	76.3836	0.03622	1	Complies

5G Band UNII-3-Ant 2

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
2.91	1.9543	18.90	77.6247	0.03020	1	Complies

For 2.4G+5G simultaneous transmission MPE:

Ant 1：

0.02964/1+0.03622/1=0.06586

Ant 2：

0.03775/1+0.03459/1=0.07234

Note: the calculated distance is 20 cm.