

# **MPE Test Report**

Report No.: ARFR-ESH-P19122504B-2

FCC ID: 2ANDLTY-R8815

**Product:** Smart Camera

Model: SC111-WK2

Received Date: Dec.25, 2019

**Test Date:** Dec.27,2019 to Jan.09, 2020

Issued Date: Jan.15, 2020

Applicant: Hangzhou Tuya Information Technology Co., Ltd

Address: Room701, Building3, More Center, No. 87 GuDun Road, Hangzhou,

Zhejiang, China

Manufacturer: Hangzhou Tuya Information Technology Co., Ltd

Address: Room701, Building3, More Center, No. 87 GuDun Road, Hangzhou,

Zhejiang, China

Issued By: BUREAU VERITAS ADT (Shanghai) Corporation

Lab Address: No. 829, Xinzhuan Road, Shanghai, P.R.China (201612)

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### **Release Control Record**

Issue No.	Description	Date Issued	
ARFR-ESH-P19122504B-2	Original release	Jan.15, 2020	



# 1 Certificate of Conformity

Product: Smart Camera

Brand: --

Test Model: SC111-WK2

Applicant: Hangzhou Tuya Information Technology Co., Ltd

Test Date: Dec.27,2019 to Jan.09, 2020

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by **BUREAU VERITAS ADT (Shanghai) Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by	:	Win	

Date: Jan.15, 2020

Will YAN

Project Engineer

(XXX) \_\_\_

Approved by: Jan.15, 2020

RF Supervisor

Daniel SUN



# 2 General Description of EUT

Product	Smart Camera
Brand	
Test Model	SC111-WK2
Model Difference	See Note 2
Power Rating	5VDC/2A with adaptor 100-240V~,50/60Hz
Modulation Type	CCK, DQPSK, DBPSK for DSSS
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Technology	DSSS, OFDM
Operating Frequency	See clause 3.2
Number of Channel	See clause 3.2
Antenna Type	FPC Antenna
Antenna Connector	
Antenna Gain	3.0dBi

Note: 1.For more details, please refer to the User's manual of the EUT.



## 3 RF Exposure

### 3.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	e Electric Field Magnetic Field Strength (V/m) Strength (A/m)		Power Density (mW/cm²)	Average Time (minutes)	
Limits For General Population / Uncontrolled Exposure					
300-1,500	-	-	F/1500	30	
1,500-100,000	-	-	1.0	30	

F = Frequency in MHz

### 3.2 MPE Calculation Formula

Power density (S) is calculated according to the formula:

 $S = PG / (4\pi R^2)$ 

Where  $S = power density in mW/cm^2$ 

P = transmit power in mW

G = numeric gain of transmit antenna (numeric gain=Log-1(dB antenna gain/10))

R = distance (cm)

### 3.3 MPE Calculation Formula

The antenna of this product, under normal use condition, is at least 20cm from the body of the user. So the device is classified as Mobile Device.

### 3.4 Calculation Result of Maximum Permissible Exposure

Frequency Band (MHz)	Max. Conducted output power(dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm²)	Limit (mW/cm²)
WLAN 2.4GHz					
2412-2462	14.09	3	20	0.0101847	1

### **Conclusion:**

The calculation result of MPE is less than the limit.

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