

MPE Test Report

Report No.: ARFR-ESH-P20030602B-2

FCC ID: 2ANDLTY-R8813

Product: Smart Camera

Model: SC012-WK2

Received Date: Mar.06, 2020

Test Date: Mar.09 to Mar.31, 2020

Issued Date: Apr.01, 2020

Applicant: Hangzhou Tuya Information Technology Co., Ltd

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Zhejiang, China

Manufacturer: Hangzhou Tuya Information Technology Co., Ltd

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

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Issued By: BUREAU VERITAS ADT (Shanghai) Corporation

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Test Lab Cert 2343.01



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Release Control Record

| Issue No. | Description | Date Issued |
|-----------------------|------------------|--------------|
| ARFR-ESH-P20030602B-2 | Original release | Apr.02, 2020 |



1 Certificate of Conformity

Product: Smart Camera

Brand: --

Test Model: SC012-WK2

Applicant: Hangzhou Tuya Information Technology Co., Ltd

Test Date: Mar.09 to Mar.19, 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:

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Data

Apr.02, 2020

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Approved by:

Date:

Apr.02, 2020



2 General Description of EUT

| Product | Smart Camera | | |
|---|-----------------------------------|--|--|
| Brand | | | |
| Test Model | SC012-WK2 | | |
| Power Rating 5VDC/2A with adaptor 100-240V~,50/60Hz | | | |
| Modulation Type | CCK, DQPSK, DBPSK for DSSS | | |
| | 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 | Ceramic 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) | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density (mW/cm ²) | Average Time (minutes) | | | |
|---|----------------------------------|----------------------------------|--|---------------------------|--|--|--|
| Limits For General Population / Uncontrolled Exposure | | | | | | | |
| 300-1,500 | 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 | 14.74 | 3 | 20 | 0.0118291 | 1 | | | |

Conclusion:

The calculation result of MPE is less than the limit.

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