

MPE Test Report

Report No.: ARFR-19SE2161VTSHPB-3

FCC ID: 2ANDLTY-R8809

Product: Smart Camera

Model: SC101-WA2,SC101-WB2

Received Date: Sept.23, 2019

Test Date: Sept.24 to Oct.16, 2019

Issued Date: Nov.04, 2019

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Manufacturer: Hangzhou Tuya Information Technology Co., Ltd

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Issued By: BUREAU VERITAS ADT (Shanghai) Corporation

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Table of Contents

Re	Release Control Record3				
1		Certificate of Conformity	. 4		
(Gen	eral Description of EUT	. 5		
2		RF Exposure	. 6		
:	2.1	Limits For Maximum Permissible Exposure (MPE)	. 6		
:	2.2	MPE Calculation Formula	. 6		
:	2.3	MPE Calculation Formula	. 6		
;	2.4	Calculation Result of Maximum Permissible Exposure	. 6		



Release Control Record

Issue No.	Description	Date Issued	
ARFR-19SE2161VTSHPB-3	Original release	Nov.04, 2019	



Certificate of Conformity

Product: Smart Camera

Brand:

Model: SC101-WA2,SC101-WB2

Applicant: Hangzhou Tuya Information Technology Co., Ltd

Test Date: Sept.05 to Sept.24, 2019

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:

Date:

Nov.04, 2019

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Project Engineer

Approved by:

Date:

Nov.04, 2019

RF Supervisor

Daniel SUN



General Description of EUT

Product	Smart Camera		
Brand			
Test Model	SC101-WA2,SC101-WB2		
Model Difference			
Power Rating	5VDC/1A with adaptor 100-240V~,50/60Hz		
Modulation Type	CCK, DQPSK, DBPSK for DSSS		
Wieddidion 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	Ceramic Antenna		
Antenna Connector			
Antenna Gain	3.0dBi		

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



2 RF Exposure

2.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field 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

2.2 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)

2.3 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.

2.4 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	13.51	3.0	20	0.0089115	1	

Conclusion:

The calculation result of MPE is less than the limit.

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