

## **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

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)

This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification. The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any government agencies.



#### **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

WIII YAN

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.

--- END ---