

**1 Cover Page*****RF Exposure Evaluation Report***

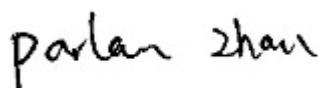
**Application No.:** SHCR2204000754AT  
**FCC ID:** 2APV2-CSH31H3  
**Applicant:** Hangzhou Ezviz Software Co., Ltd.  
**Address of Applicant:** Room 302,Unit B,Building 2,399 Danfeng Road,Binjiang District,Hangzhou,Zhejiang  
**Manufacturer:** Hangzhou Ezviz Software Co., Ltd.  
**Address of Manufacturer:** Room 302,Unit B,Building 2,399 Danfeng Road,Binjiang District,Hangzhou,Zhejiang

**Equipment Under Test (EUT):**

**EUT Name:** Smart Home Camera  
**Model No.:** CS-H3 (3MP)  
**Add Model No.:** CS-H3, CS-H3-R100-1H3WKFL  
**Trade Mark:** EZVIZ  
**Standard(s) :** FCC Rules 47 CFR §2.1091  
KDB447498 D01 General RF Exposure Guidance v06  
**Date of Receipt:** 2022-04-20  
**Date of Test:** 2022-04-28 to 2022-04-30  
**Date of Issue:** 2022-05-09

**Test Result:****Pass\***

\* In the configuration tested, the EUT complied with the standards specified above.



Parlam Zhan  
EMC Laboratory Manager



SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
Testing Center EMC Laboratory Manager

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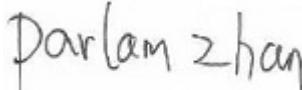
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<b>Revision Record</b>				
<b>Version</b>	<b>Chapter</b>	<b>Date</b>	<b>Modifier</b>	<b>Remark</b>
01		2022-05-09		Original

<b>Authorized for issue by:</b>			
			
	<b>Micheal Niu /Project Engineer</b>		
			
	<b>Parlam Zhan /Reviewer</b>		

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## 2 Contents

	Page
<b>1 COVER PAGE</b> .....	1
<b>2 CONTENTS</b> .....	3
<b>3 GENERAL INFORMATION</b> .....	4
3.1 GENERAL DESCRIPTION OF E.U.T .....	4
3.2 TECHNICAL SPECIFICATIONS .....	4
3.3 TEST LOCATION .....	5
3.4 TEST FACILITY.....	5
<b>4 TEST STANDARDS AND LIMITS</b> .....	6
4.1 FCC RADIOFREQUENCY RADIATION EXPOSURE LIMITS:.....	6
<b>5 MEASUREMENT AND CALCULATION</b> .....	7
5.1 MAXIMUM TRANSMIT POWER .....	7
5.2 MPE CALCULATION .....	8



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### 3 General Information

#### 3.1 General Description of E.U.T.

Power supply:	12V 1A,9W Max
---------------	---------------

#### 3.2 Technical Specifications

##### 2.4GHz

Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz
Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK); 802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Number of Channels:	802.11b/g/n(HT20):11
Channel Spacing:	5MHz
Antenna Type:	Dipole Antenna
Antenna Gain:	Ant 1:2.3dBi (Provided by the manufacturer) Ant 2:2.3dBi (Provided by the manufacturer) Directional gain:5.31dBi



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### 3.3 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

### 3.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L4354)**

CNAS has accredited Compliance Certification Services (Kunshan) Inc. to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **A2LA (Certificate No. 2541.01)**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

- **FCC (Designation Number: CN1172)**

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory.

Designation Number: CN1172.

- **ISED (CAB identifier: CN0072)**

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

CAB Identifier: CN0072.

- **VCCI (Member No.: 1938)**

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-1600, C-1707, T-1499, G-10216 respectively.

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## 4 Test Standards and Limits

### 4.1 FCC Radiofrequency radiation exposure limits:

According to §1.1310, the limit for general population/uncontrolled exposures

Frequency	Power density(mW/cm <sup>2</sup> )	Averaging time(minutes)
300MHz~1.5GHz	f/1500	30
1.5GHz~100GHz	1.0	30

1) Note: PSD limit for 2.4G= 1mW/cm<sup>2</sup>

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## 5 Measurement and Calculation

### 5.1 Maximum transmit power

The Power Data is based on the RF Test Report SHCR220400075401

2.4G

Test Mode	Frequency (MHz)	Antenna 1 Power[dBm]	Antenna 2 Power[dBm]	MIMO Power[dBm]	Antenna 1 Power[mW]	Antenna 2 Power[mW]	MIMO Power[mW]
11B	2412	14.13	14.48	NA	25.88	<b>28.05</b>	N/A
11B	2437	13.37	14.14	NA	21.73	25.94	N/A
11B	2462	12.71	13.62	NA	18.66	23.01	N/A
11G	2412	14.17	14.35	NA	<b>26.12</b>	27.23	N/A
11G	2437	13.40	13.95	NA	21.88	24.83	N/A
11G	2462	12.79	13.43	NA	19.01	22.03	N/A
11N20MIMO	2412	14.15	14.37	17.27	26.00	27.35	<b>53.33</b>
11N20MIMO	2437	13.42	13.96	16.71	21.98	24.89	46.88
11N20MIMO	2462	12.63	13.25	15.96	18.32	21.13	39.45

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## 5.2 MPE Calculation

According to the formula  $S=P/4\pi R^2$ , we can calculate S which is MPE.

Note:

- 2) P (mW)
- 3) R = distance to the center of radiation of antenna (in meter) = 20cm
- 4) MPE limit = 1mW/cm<sup>2</sup>

For 2.4G WiFi –Antenna1:

The max. antenna gain is 2.3 dBi

Max. Conducted Power P(mW)	Gain in Linear Scale G	Operation Distance R(cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Result
26.12	1.698	20	0.00882	1	Pass

For 2.4G WiFi –Antenna2:

The max. antenna gain is 2.3 dBi

Max. Conducted Power P(mW)	Gain in Linear Scale G	Operation Distance R(cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Result
28.05	1.698	20	0.00948	1	Pass

In MIMO mode:

Two antennas can transmit simultaneously and they are correlated.

The max. antenna gain is 5.31 dBi

Max. Conducted Power P(mW)	Gain in Linear Scale G	Operation Distance R(cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Result
53.33	3.396	20	0.03603	1	Pass

according to the KDB447498 section 7.2 determine the device is exclusion from SAR test.

--End of the Report--



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