

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

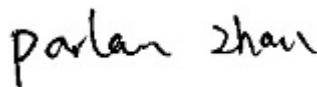
**Application No.:** SHCR2111000759CR  
**FCC ID:** 2APV2-CSH31J5  
**Applicant:** Hangzhou Ezviz Software Co., Ltd.  
**Address of Applicant:** Room 302,Unit B,Building 2,399 Danfeng Road,Binjiang District,Hangzhou,Zhejiang  
**Manufacturer:** Hangzhou Ezviz Software Co., Ltd.  
**Address of Manufacturer:** 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 (5MP);  
**Add Model No:** CS-H3  
**Trade mark:** EZVIZ  
**Standard(s) :** FCC Rules 47 CFR §2.1091  
KDB447498 D01 General RF Exposure Guidance v06  
**Date of Receipt:** 2022-02-25  
**Date of Test:** 2022-03-10 to 2022-03-18  
**Date of Issue:** 2022-03-19

<b>Test Result:</b>	<b>Pass*</b>
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\* In the configuration tested, the EUT complied with the standards specified above.



Parlam Zhan  
Laboratory Manager



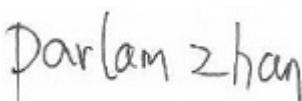
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<b>Revision Record</b>				
<b>Version</b>	<b>Chapter</b>	<b>Date</b>	<b>Modifier</b>	<b>Remark</b>
01		2022-03-19		Original

<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 RF 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:	DC 12V
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#### 3.2 Technical Specifications

2.4G WiFi

Antenna Gain:	Ant 1:2.24dBi; (Provided by manufacturer) Ant 2:2.3dBi; (Provided by manufacturer) Directional gain:5.28dBi
Antenna Type:	Antenna 1: Dipole Antenna Antenna 2: Dipole Antenna
Channel Spacing:	5MHz
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
Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz

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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.

Company Number: 2324E

• **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-20134, R-11600, C-11707, T-11499, 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

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## 5 Measurement and Calculation

### 5.1 Maximum transmit power

The Power Data is based on the RF Test Report SHCR220200044201

Test Mode	Channel	Antenna 1 Power[dBm]	Antenna 2 Power[dBm]	MIMO Power[dBm]	Antenna 1 Power[mW]	Antenna 2 Power[mW]	MIMO Power[mW]
11B	2412	14.32	13.27	NA	<b>27.04</b>	21.23	N/A
11B	2437	13.86	12.81	NA	24.32	19.10	N/A
11B	2462	13.39	12.32	NA	21.83	17.06	N/A
11G	2412	13.70	13.29	NA	23.44	<b>21.33</b>	N/A
11G	2437	13.02	12.67	NA	20.04	18.49	N/A
11G	2462	12.52	12.19	NA	17.86	16.56	N/A
11N20MIMO	2412	10.93	11.27	14.11	12.39	13.40	<b>25.76</b>
11N20MIMO	2437	10.52	10.76	13.65	11.27	11.91	23.17
11N20MIMO	2462	10.04	10.47	13.27	10.09	11.14	21.23

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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:

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

For 2.4G WiFi –Antenna1:

The max. antenna gain is 2.24 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
27.04	1.675	20	0.00901	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
21.33	1.698	20	0.00721	1	Pass

In MIMO mode:

The max. antenna gain is 5.28 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
25.76	3.373	20	0.01729	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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