

**1 Cover Page**

# RF MPE REPORT

**Application No.:** SHCR2111000759CR  
**FCC ID:** 2APV2-CSC8W1H3  
**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-C8W  
**Add Model No.:** CS-C8W (3MP,4mm),CS-C8W (3MP,6mm),CS-C8W (5MP,4mm),CS-C8W (5MP,6mm)  
**Trade mark:** EZVIZ  
**Standard(s) :** FCC Rules 47 CFR §2.1091  
 KDB447498 D01 General RF Exposure Guidance v06  
**Date of Receipt:** 2021-11-15  
**Date of Test:** 2021-11-15 to 2021-12-08  
**Date of Issue:** 2021-12-08

<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*

Parlam Zhan  
Laboratory Manager



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Revision Record			
Version	Description	Date	Remark
00	Original	2021-12-08	/

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



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### 3 General Information

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

Power supply:	12V=1A,6W Max
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#### 3.2 Technical Specifications

##### 2.4G WiFi

Antenna Gain:	Ant 1:2.4dBi; (Provided by manufacturer) Ant 2:2.4dBi; (Provided by manufacturer) Directional gain:5.41dBi
Antenna Type:	Antenna 1: PIFA Antenna Antenna 2: PIFA 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 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 SHCR211100075901

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	17.80	17.22	NA	60.26	52.72	N/A
11B	2437	17.97	17.28	NA	<b>62.66</b>	53.46	N/A
11B	2462	17.70	16.86	NA	58.88	48.53	N/A
11G	2412	17.50	17.32	NA	56.23	53.95	N/A
11G	2437	17.61	17.43	NA	57.68	<b>55.34</b>	N/A
11G	2462	17.36	17.00	NA	54.45	50.12	N/A
11N20MIMO	2412	15.29	14.34	17.85	33.81	27.16	60.95
11N20MIMO	2437	15.45	14.40	17.97	35.08	27.54	<b>62.66</b>
11N20MIMO	2462	15.18	14.05	17.66	32.96	25.41	58.34



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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 2.4 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
62.66	1.738	20	0.02166	1	Pass

For 2.4G WiFi –Antenna2:

The max. antenna gain is 2.4 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
55.34	1.738	20	0.01913	1	Pass

In MIMO mode:

The max. antenna gain is 5.41 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
62.66	3.475	20	0.04332	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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