

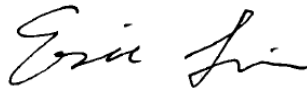
## 1 Cover Page

# RF Exposure Evaluation Report

**Application No.:** KSCR2204000478AT  
**FCC ID:** SVNPF5QI-E60  
**Applicant:** ZHEJIANG DAHUA VISION TECHNOLOGY CO.,LTD.  
**Address of Applicant:** No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China  
**Manufacturer:** ZHEJIANG DAHUA VISION TECHNOLOGY CO.,LTD.  
**Address of Manufacturer:** No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China  
**Equipment Under Test (EUT):**  
**EUT Name:** Visual Radar  
**Model No.:** DH-PFR5QI-E60-PV; PFR5QI-E60-PV; PFR5QI-E60; DH-PFR5QI-E60  
**Standard(s) :** FCC Rules 47 CFR §2.1091  
KDB 447498 D04 interim General RF Exposure Guidance v01  
**Date of Receipt:** 2022-03-03  
**Date of Test:** 2022-05-19 to 2022-06-06  
**Date of Issue:** 2022-06-11

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



Eric Lin  
EMC Laboratory Manager



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Revision Record			
Version	Description	Date	Remark
00	Original	2022-06-11	/

Authorized for issue by:			
		<i>Damon Zhou</i>	
		<hr/>	
		Damon Zhou / Project Engineer	
		<i>Eric Lin</i>	
		<hr/>	
		Eric Lin / Reviewer	



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### 3 General Information

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

Power supply:	DC 12V, 2A; POE+(802.3at)
Test voltage:	AC120V/60Hz
Operation Frequency	61GHz-61.5GHz
Modulation Type	FMCW
Antenna Type	Integrated Patch Antenna
Antenna Gain:	13dBi Max
Antenna Model No:	CTSGR-400
Antenna Manufacturer:	Shenzhen Cheng-Tech Co., LTD



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### 3.2 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.

Note:

1.SGS is not responsible for wrong test results due to incorrect information (e.g. max. clock frequency, highest internal frequency, antenna gain, cable loss, etc ) is provided by the applicant. (if applicable).

2.SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (if applicable).

### 3.3 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

## 5 Measurement and Calculation

### 5.1 Maximum transmit power

The Power Data is based on the RF Test Report KSCR220400047801

Test Mode	Test Channel	E.I.R.P. [dBm]	E.I.R.P. [mW]
mmWave	61.275GHz	19.02	79.80



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## 5.2 MPE Calculation

The E.I.R.P. is: 79.80mW;

According to the formula  $S = \frac{PG}{4R^2\pi}$ , we can calculate S which is MPE.

Note:

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

$$S = \frac{PG}{4R^2\pi} = 79.80 / (4 \times 400 \times 3.14) = 0.0159 \text{mW/cm}^2 < 1 \text{mW/cm}^2$$

So the device is exclusion from SAR test.

**--End of the Report--**



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