



**SGS-CSTC Standards Technical Services
(Shanghai) Co., Ltd.**

588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China
 Telephone: +86 (0) 21 6191 5666
 Fax: +86 (0) 21 6191 5678
 ee.shanghai@sgs.com

Report No.: SHEM170300167702
 Page: 1 of 8

1 Cover Page

RF MPE REPORT

Application No.:	SHEM1703001024CR
Applicant:	Zhejiang Dahua Vision Technology Co., Ltd.
FCC ID:	SVNIPC-HFW1XXXS
Equipment Under Test (EUT):	
NOTE: The following sample(s) was/were submitted and identified by the client as	
Product Name:	IP CAMERA
Model No.(EUT):	DH-IPC-HFW1435SP-W
Add Model No.:	IPC-HFW1235SP-W, IPC-HFW1235SN-W, DH-IPC-HFW1235SP-W, DH-IPC-HFW1235SN-W, IPC-HFW1435SP-W, IPC-HFW1435SN-W, DH-IPC-HFW1435SN-W
Standards:	FCC Rules 47 CFR §2.1091 KDB447498 D01 General RF Exposure Guidance v06
Date of Receipt:	2017-03-29
Date of Test:	2017-05-19 to 2017-07-04
Date of Issue:	2017-07-05
Test Result:	Pass*


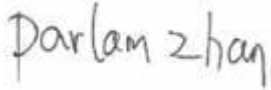
* In the configuration tested, the EUT detailed in this report complied with the standards specified above.



The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction. documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only

Revision Record				
Version	Chapter	Date	Modifier	Remark
00	/	2017-07-05	/	Original

Authorized for issue by:			
Tested By			2017-07-05
	_____		_____
	Vincent Zhu /Project Engineer		Date
Checked By			2017-07-05
	_____		_____
	Parlam Zhan /Reviewer		Date

2 Contents

	Page
1 COVER PAGE.....	1
2 CONTENTS	3
3 GENERAL INFORMATION	4
3.1 CLIENT INFORMATION.....	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
4 TEST STANDARDS AND LIMITS.....	6
4.1 FCC RADIOFREQUENCY RADIATION EXPOSURE LIMITS:	6
5 MEASUREMENT AND CALCULATION	7
5.1 MAXIMUM TRANSMIT POWER	7
5.2 MPE CALCULATION.....	8
6 EUT CONSTRUCTIONAL DETAILS.....	8

3 General Information

3.1 Client Information

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
Factory:	Zhejiang Dahua Vision Technology Co., Ltd.
Address of Factory:	No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China

3.1 General Description of E.U.T.

Product Description:	Fixed product with 2.4G WiFi function		
Rated Input:	DC 12V 1A		
Test Voltage:	AC 120V 60Hz for Adapter		
Adapter:	Manufacturer:	SHENZHEN HONOR ELECTRONIC CO.,LTD.	
	Model No.:	ADS-12AM-12 12012EPCU	
	Rated Input:	AC 100~240V, 50/60Hz	
	Rated Output:	DC 12V 1.0A	
	Cable length:	AC port:	2 wires
DC port:		300 cm	

3.2 Technical Specifications

Operation Frequency:	802.11 b/g/n(HT20): 2412MHz-2462MHz 802.11 n(HT40): 2422MHz-2452MHz
Modulation Technique:	02.11 b DSSS(CCK, DQPSK, DBPSK) 802.11 g/n(HT20)/n(HT40) OFDM(64QAM, 16QAM, QPSK, BPSK)
Data Rate:	802.11b: 1/2/5.5/11Mbps, 802.11g: 6/9/12/18/24/36/48/54Mbps 802.11n: MCS0-7
Number of Channel:	802.11 b/g/n(HT20): 11 802.11 n(HT40) 7
Antenna Type:	Monopole Antenna
Antenna Gain:	2 dBi

3.3 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China

Tel: +86 21 6191 5666

Fax: +86 21 6191 5678

3.4 Test Facility

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

- **CNAS (No. CNAS L0599)**

CNAS has accredited SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. to ISO/IEC 17025:2005 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.

- **FCC – Registration No.: 402683**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered and fully described in a report filed with the Federal Communications Commission (FCC). The acceptance letter from the FCC is maintained in our files. Registration No.: 402683.

- **Industry Canada (IC) – IC Assigned Code: 8617A**

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 8617A-1.

- **VCCI (Member No.: 3061)**

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-3868, C-4336, T-2221, G-830 respectively.

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 ²)	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 SHEM170300167701.

Test Mode	Test Channel	Power[dBm]	Power[mW]	Limit[dBm]	Verdict
11B	2412	14.13	25.88	30	PASS
11B	2437	15.49	35.40	30	PASS
11B	2462	15.02	31.77	30	PASS
11G	2412	19.63	91.83	30	PASS
11G	2437	20.93	123.88	30	PASS
11G	2462	20.5	112.20	30	PASS
11N20SISO	2412	19.15	82.22	30	PASS
11N20SISO	2437	20.37	108.89	30	PASS
11N20SISO	2462	19.84	96.38	30	PASS
11N40SISO	2422	21.01	126.18	30	PASS
11N40SISO	2437	21.43	139.00	30	PASS
11N40SISO	2452	21.3	134.90	30	PASS

5.2 MPE Calculation

The Max Conducted Peak Output Power is 21.43dBm (139.00 mW);

The best case gain of the antenna is 2dBi. 2dB logarithmic terms convert to numeric result is nearly 1.58.

For FCC:

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

Note:

- 1) P (Watts) = Power Input to antenna = $10^{\frac{dBm}{10}} / 1000$
- 2) G (Antenna gain in numeric) = $10^{\text{(Antenna gain in dBi / 10)}}$
- 3) R = distance to the center of radiation of antenna (in meter) = 20cm
- 4) MPE limit = 1mW/cm²

$$S = \frac{PG}{4R^2\pi} = \frac{139 \times 1.58}{4 \times 400 \times 3.14} = 0.044 \text{ mW/cm}^2$$

So the device is exclusion from SAR test.

6 EUT Constructional Details

Refer to the < External Photos > & < Internal Photos >.

--End of the Report--