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Report No.: SHEM170400187802

1 Cover Page

RF MPE REPORT

Application No.: SHEM1704001878CR				
Applicant:	Zhejiang Dahua Vision Technology Co., Ltd.			
FCC ID:	SVNDH-IPC-CX6			
Equipment Under Tes	t (EUT):			
NOTE: The following sa	ample(s) was/were submitted and identified by the client as			
Product Name: CONSUMER CAMERA				
Model No.(EUT):	DH-IPC-C46P			
Add Model No.: DH-IPC-C46N, DH-IPC-C26P, DH-IPC-C26N, IPC-C46P, IPC-C46N, IPC-C26N				
Standards:	FCC Rules 47 CFR §2.1091			
	KDB447498 D01 General RF Exposure Guidance v06			
Date of Receipt:	2017-04-06			
Date of Test:	2017-04-06 to 2017-04-24			
Date of Issue:	2017-05-15			
Test Result:	Pass*			

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

Parlam Zhan E&E Section Manager SGS-CSTC (Shanghai) Co., Ltd.

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.

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Report No.: SHEM170400187802

Page: 2 of 8

2 Version

Revision Record					
Version	Chapter	Date	Modifier	Remark	
00	/	2017-05-15	1	Original	

Authorized for issue by:		
Engineer	Eddy Zong	Eddy Zong
	Print Name	
Clerk	Susie Liu	Suire Lin
	Print Name	
Reviewer	Parlam Zhan	Darlam Zhan
	Print Name	



Report No.: SHEM170400187802

Page: 3 of 8

3 Contents

	Pa	age
C	OVER PAGE	1
V	ERSION	2
\mathbf{C}	ONTENTS	3
G	ENERAL INFORMATION	4
4.1	CLIENT INFORMATION	4
4.1	GENERAL DESCRIPTION OF E.U.T.	4
4.2	TECHNICAL SPECIFICATIONS	4
4.3	TEST LOCATION	5
4.4	TEST FACILITY	5
T	EST STANDARDS AND LIMITS	6
5.1	FCC RADIOFREQUENCY RADIATION EXPOSURE LIMITS:	6
M	IEASUREMENT AND CALCULATION	7
6.1	MAXIMUM TRANSMIT POWER	7
6.2	MPE CALCULATION	8
E	UT CONSTRUCTIONAL DETAILS	8
	V G G 4.1 4.2 4.3 4.4 T 5.1 M 6.1 6.2	COVER PAGE



Report No.: SHEM170400187802

Page: 4 of 8

4 General Information

4.1 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		

4.1 General Description of E.U.T.

Product Des	Product Description:		Fixed product with 2.4G WiFi function		
Rated Input	Rated Input:				
Test Voltage	Test Voltage:		AC 120V 60Hz for Adapter		
	Manufacturer:	Mass Power Electronic Limited			
	Model No.:	ED2-050100UE			
Adaptor	Rated Input:	AC 100~240V, 50/60Hz 0.3A			
Adapter:	Rated Output:	DC 5V 1.0A			
	Cable length:	AC port:	2 wires		
	Cable length.	DC port:	300 cm		

4.2 Technical Specifications

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



Report No.: SHEM170400187802

Page: 5 of 8

4.3 Test Location

All tests were performed at:

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

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

Tel: +86 21 6191 5666 Fax: +86 21 6191 5678

4.4 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.



Report No.: SHEM170400187802

Page: 6 of 8

5 Test Standards and Limits

5.1 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



Report No.: SHEM170400187802

Page: 7 of 8

6 Measurement and Calculation

6.1 Maximum transmit power

The Power Data is based on the RF Test Report SHEM170400187802.

Test Mode	Test Channel	Power[dBm]	Power[mW]	Limit[dBm]	Verdict
11B	2412	21.54	142.56	30	PASS
11B	2437	22.57	180.72	30	PASS
11B	2462	21.86	153.46	30	PASS
11G	2412	20.98	125.31	30	PASS
11G	2437	21.37	137.09	30	PASS
11G	2462	20.65	116.14	30	PASS
11N20SISO	2412	19.37	86.50	30	PASS
11N20SISO	2437	20.48	111.69	30	PASS
11N20SISO	2462	20.6	114.82	30	PASS
11N40SISO	2422	21.7	147.91	30	PASS
11N40SISO	2437	20.76	119.12	30	PASS
11N40SISO	2452	21.33	135.83	30	PASS



Report No.: SHEM170400187802

Page: 8 of 8

6.2 MPE Calculation

The Max Conducted Peak Output Power is 22.57dBm (180.72 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

dBm

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

$$S = \frac{PG}{4R^2\pi} = \frac{180.72 \times 1.58}{4 \times 400 \times 3.14} = 0.057 \text{ mW/cm}^2$$

So the device is exclusion from SAR test.

7 EUT Constructional Details

Refer to the < DH-IPC-C46P _External Photos > & < DH-IPC-C46P _Internal Photos >.

-- End of the Report--