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

1 Cover Page

FCC MPE REPORT

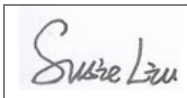
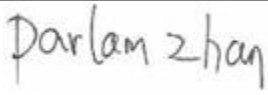
Application No.:	SHEM1603000990CR
Applicant:	Zhejiang Dahua Vision Technology Co., Ltd.
FCC ID:	SVNDH-PFM88
Equipment Under Test (EUT): **NOTE:** The following sample(s) submitted was/were identified on behalf of the client as	
Product Name:	5G Wireless Video Transmission Device CPE
Model No.(EUT):	DH-PFM881
Add Model No.:	PFM881, DHI-PFM881
Standards:	FCC Rules 47 CFR §2.1091 KDB447498 D01 General RF Exposure Guidance v06
Date of Receipt:	2016-03-16
Date of Test:	2016-04-12 to 2016-04-18
Date of Issue:	2016-05-03
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.

2 Version

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
00	/	2016-05-03	/	Original

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

3 Contents

4 General Information

4.1 Client Information

Applicant:	Zhejiang Dahua Vision Technology Co., Ltd.
Address of Applicant:	The 1st Floor, Building F, No.1199 Binan Road, Changhe Street, Binjiang District, Hangzhou, Zhejiang, P.R.China
Manufacturer:	Zhejiang Dahua Vision Technology Co., Ltd.
Address of Manufacturer:	The 1st Floor, Building F, No.1199 Binan Road, Changhe Street, Binjiang District, Hangzhou, Zhejiang, P.R.China
Factory:	Zhejiang Dahua Vision Technology Co., Ltd.
Address of Factory:	No.1199 Binan Road, Changhe Street, Binjiang District, Hangzhou, Zhejiang, P.R.China

4.2 General Description of E.U.T.

Product Description:		Portable product with WiFi function	
Rated Input:		DC 24V 0.5A PoE	
Adapter:	Model No.:	GRT-240050	
	Rated Input:	AC 100V-240V 50/60Hz	
	Rated Output:	DC 24V 500mA	
	Cable length:	AC port:	2 wires
		DC port:	90 cm
Test Voltage:	AC 120V 60Hz for adapter		

4.3 Technical Specifications

Operation Frequency:	5745-5825MHz
Modulation Technique:	OFDM(64QAM, 16QAM, QPSK, BPSK)
Data Rate:	802.11a: 6/9/12/18/24/36/48/54Mbps 802.11n: MCS0-15 up to 300Mbps
Antenna Type	Integral
Antenna Gain	15dBi
Number of Channel:	802.11 a/n(HT20): 5 Channel 149, 153, 157, 161, 165 802.11 n(HT40): 2 Channel 151, 159

4.4 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

4.5 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.

5 Test Standards and Limits

According to§1.1310 Radiofrequency radiation exposure limits:

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

6 Measurement and Calculation

6.1 Maximum transmit power

The Powe Data is based on the RF Test Report SHEM160300099002.

Test Mode	CH No.	Freq (MHz)	Reading (dBm)		Conducted Power (dBm)		
			Ant A	Ant B	Ant A	Ant B	MIMO
802.11a	149	5745	8.53	8.47	9.03	8.97	12.01
	157	5785	9.00	8.01	9.50	8.51	12.04
	165	5825	10.21	8.06	10.71	8.56	**12.78**
802.11n (HT20)	149	5745	8.38	8.60	8.88	9.10	12.00
	157	5785	8.89	7.74	9.39	8.24	11.86
	165	5825	10.16	7.91	10.66	8.41	12.69
802.11n (HT40)	151	5755	9.74	7.99	10.24	8.49	12.46
	159	5795	9.68	8.45	10.18	8.95	12.62

6.2 MPE Calculation

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^ (Antenna gain in dBi /10)

3) R = distance to the center of radiation of antenna (in meter) = 20cm

4) MPE limit = 1mW/cm²

The Max Conducted Peak Output Power is 18.97mW in highest channel;
The best case gain of the antenna is 15dBi. 15dB logarithmic terms convert to numeric result is nearly 31.62

$$S= \frac{PG}{4R^2\pi} = \frac{18.97 \times 31.62}{4 \times 400 \times 3.14} = 0.119 \text{ mW/cm}^2$$

So the device is exclusion from SAR test.

7 EUT Constructional Details

Refer to the < DH-PFM881_External Photos > & < DH-PFM881_Internal Photos>.

--End of the Report--