



1 Cover Page

RF Exposure Evaluation Report

Application No.: SHEM2007005560CR
FCC ID: 2AH25FM020
Applicant: Shanghai Sunmi Technology Co., Ltd.
Address of Applicant: Room 605, Block 7, KIC Plaza, No.388 Song Hu Road Yang Pu District, Shanghai, China
Manufacturer: Shanghai Sunmi Technology Co., Ltd.
Address of Manufacturer: Room 605, Block 7, KIC Plaza, No.388 Song Hu Road Yang Pu District, Shanghai, China
Factory: SHENZHEN AONI ELECTRONIC CO., LTD.
Address of Factory: The 2nd, 3rd, 6th, 7th and 8th floors of Honghui Industrial Park, Liuxian 2nd Road, Xin'an Street, Shenzhen

Equipment Under Test (EUT):
EUT Name: IP Camera
Model No.: FM020
Trade mark: SUNMI
Standard(s) : FCC Rules 47 CFR §2.1091
KDB447498 D01 General RF Exposure Guidance v06
Date of Receipt: 2020-07-10
Date of Test: 2020-07-17 to 2020-08-24
Date of Issue: 2020-08-25

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

Parlam Zhan

Parlam Zhan
E&E Section Manager

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.

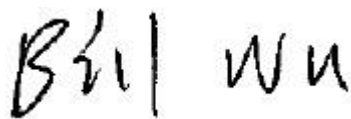
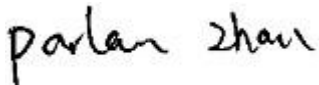


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Revision Record			
Version	Description	Date	Remark
00	Original	2020-08-25	/

Authorized for issue by:			
			
		_____ Bill Wu / Project Engineer	
			
		_____ Parlam Zhan / Reviewer	



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3 General Information

3.1 General Description of E.U.T.

Power supply:	DC 12V 1A by adapter Adapter: Model: CYSE12-120100U Input:100-240V~50/60Hz
Test voltage:	AC 120V/60Hz
Cable:	DC Cable 1.8m
Antenna Gain:	3.62dBi
Antenna Type:	FPC 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

3.2 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd. Shanghai Branch

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

Tel: +86 21 6191 5666

Fax: +86 21 6191 5678

3.3 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 17025:2017 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.

- **NVLAP (LAB CODE: 201034-0)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

- **FCC (Designation Number: CN5033)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been recognized as an accredited testing laboratory.

- **ISED (CAB Identifier: CN0020)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. EMC Laboratory has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory

- **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-13868, C-14336, T-12221, G-10830 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 SHEM200700556001

Test Mode	Test Channel	Ant	Power [dBm]	Power [mW]
11B	2412	Ant1	20.37	108.89
11B	2437	Ant1	19.47	88.51
11B	2462	Ant1	18.43	69.66
11G	2412	Ant1	14.91	30.97
11G	2437	Ant1	14.09	25.64
11G	2462	Ant1	13.17	20.75
11N20SISO	2412	Ant1	13.79	23.93
11N20SISO	2437	Ant1	12.92	19.59
11N20SISO	2462	Ant1	11.97	15.74

5.2 MPE Calculation

For FCC:

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/cm²

The max. antenna gain is 3.62 dBi

Max. Conducted Power P(mW)	Gain in Linear Scale G	Operation Distance R(cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Result
108.89	2.301	20	0.04986	1	Pass

So the device is exclusion from SAR test.

--End of the Report--