

Report No.: SHEM190701526402

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# 1 Cover Page

# RF MPE REPORT

Application No.: SHEM1907015264CR

FCC ID: 2ADTD-AEB1

Applicant:Hangzhou Hikvision Digital Technology Co.,Ltd.Address of Applicant:No. 555, Qianmo Road, Binjiang District,HangzhouManufacturer:Hangzhou Hikvision Digital Technology Co.,Ltd.Address of Manufacturer:No. 555, Qianmo Road, Binjiang District,Hangzhou

Factory: Hangzhou Hikvision Technology Co., Ltd.

Address of Factory: No.700, Dongliu Road, Binjiang District, Hangzhou City, Zhejiang

**Equipment Under Test (EUT):** 

EUT Name: DashCam

Model No.: AE-DC2015-B1

Add Model No.: AE-DC2015-B1 S, AE-DC2015-B1 Pro, AE-DC2015-B1+

Trade mark: HIKVISION

Standard(s): FCC Rules 47 CFR §2.1091

KDB447498 D01 General RF Exposure Guidance v06

**Date of Receipt**: 2019-07-18

**Date of Test**: 2019-07-29 to 2019-07-29

**Date of Issue**: 2019-08-05

Test Result: Pass\*

parlan 2han

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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Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@ass.com

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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



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Revision Record					
Version	Description	Date	Remark		
00	Original	2019-08-05	/		

Authorized for issue by:		
	Vincent Zhu	
	Vincent Zhu / Project Engineer	
	Parlam Zhan	
	Parlam Zhan / Reviewer	



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## 3 General Information

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

Power supply:	DC 5V by USB port	
	Car Charger:	
	Model.:TC16A-0503100D	
	Input:DC12V-24V	
	Output:DC 5V 2.1A, 1A	
Test voltage:	DC 12V	
Cable:	DC Cable 4m	

## 3.2 Technical Specifications

Antenna Gain	1.52 dBi
Antenna Type	PCB 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



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#### 3.3 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

No tests were sub-contracted.

#### 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.

#### • NVLAP (Certificate No. 201034-0)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. is accredited by the National Voluntary Laboratory Accreditation Program(NVLAP). Certificate No. 201034-0.

#### • FCC -Designation Number: CN5033

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

Designation Number: CN5033. Test Firm Registration Number: 479755.

#### Innovation, Science and Economic Development Canada

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

IC Registration No.: 8617A-1. CAB identifier: CN0020.

#### 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.



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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/cm²)	Averaging time(minutes)	
300MHz~1.5GHz	f/1500	30	
1.5GHz~100GHz	1.0	30	

For 2.4G band, the limit is 1.0 mW/cm<sup>2</sup>

# 5 Measurement and Calculation

### 5.1 Maximum transmit power

The Power Data is based on the RF Test Report SHEM190701526401

Test Mode	Test Channel	Ant	Power [dBm]	Power [mW]
11B	2412	Ant1	12.48	17.70
11B	2437	Ant1	12.52	17.86
11B	2462	Ant1	12.34	17.14
11G	2412	Ant1	11.11	12.91
11G	2437	Ant1	11.17	13.09
11G	2462	Ant1	10.97	12.50
11N20SISO	2412	Ant1	11.02	12.65
11N20SISO	2437	Ant1	11.10	12.88
11N20SISO	2462	Ant1	10.96	12.47



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### 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/cm<sup>2</sup>

For 2.4GHz WiFi mode:

The max. antenna gain i: 1.52 dBi

Max. Conducted Power P(mW)	Gain in Linear Scale G	Operatio n Distance R(cm)	Power Density (mW/cm²)	Limit (mW/cm <sup>2</sup> )	Result
17.86	1.419	20	0.00504	1	Pass

So the device is exclusion from SAR test.

-- End of the Report--