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

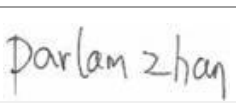
MPE REPORT

Application No.:	SHEM1803001638CR
Applicant:	Hangzhou Hikvision Digital Technology Co., Ltd
FCC ID:	2ADTD-K1T605MF
Equipment Under Test (EUT): **NOTE:** The following sample(s) was/were submitted and identified by the client as	
Product Name:	Face Recognition Terminal
Model No.(EUT):	DS-K1T605MF
Add Model No.:	DS-K1T605M, DS-K1T605MF-B, DS-K1T605M-B, DS-K1T605SF, DS-K1T605S, DS-K1T605SF-B, DS-K1T605S-B, DS-K1T605XYZ-UVW, DS-K1T605XYZF-UVW
Standards:	FCC Rules 47 CFR §2.1091 KDB447498 D01 General RF Exposure Guidance v06
Date of Receipt:	2018-03-05
Date of Test:	2018-03-02 to 2018-03-22
Date of Issue:	2018-03-28
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.

Revision Record			
Version	**Description**	**Date**	**Remark**
00	Original	2018-03-28	/

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

2 Contents

3 General Information

3.1 Client Information

Applicant:	Hangzhou Hikvision Digital Technology Co., Ltd.
Address of Applicant:	No. 555 Qianmo Road, Binjiang District, Hangzhou 310052, China
Manufacturer:	Hangzhou Hikvision Digital Technology Co., Ltd.
Address of Manufacturer:	No. 555 Qianmo Road, Binjiang District, Hangzhou 310052, China
Factory:	1. Hangzhou Hikvision Technology Co., Ltd. 2. Hangzhou Hikvision Electronics Co., Ltd.
Address of Factory:	1. No.700, Dongliu Road, Binjiang District, Hangzhou City, Zhejiang, 310052, China 2. No.299, Qiushi Road, Tonglu Economic Development Zone, Tonglu County, Hangzhou, Zhejiang, 310052, China.

3.1 General Description of E.U.T.

Power supply:	DC 12V 2A by adapter Adapter: Model:ADS-24S-12 1224GPG INPUT:100-240V~50/60Hz max 0.7A OUTPUT:12V 2A
Test voltage:	AC 120V
Cable:	DC Cable 120cm

3.2 Technical Specifications

2.4G WiFi

Antenna Gain	3.3dBi
Antenna Type	Chip Antenna
Channel Spacing	5MHz
Modulation Type	802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) 802.11n(HT20 and HT40): OFDM(64QAM, 16QAM, QPSK, BPSK)
Number of Channels	802.11b/g/n(HT20):11 802.11n(HT40):7
Operation Frequency	802.11b/g/n(HT20): 2412MHz to 2462MHz 802.11n(HT40): 2422MHz to 2452MHz

13.56MHz

Operation Frequency:	13.56MHz
Modulation Type:	ASK
Antenna Type	Loop Antenna

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.

• 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.

- **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-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 range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm2)	Averaging time (minutes)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f2)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

Note:Limit for 13.56MHz is 60.77 V/m

5 Measurement and Calculation

5.1 Maximum transmit power

The Power Data is based on the RF Test Report SHEM180300163801 & SHEM180300163802

Test Mode	Test Channel	Power[dBm]	Power[mW]
11B	2412	13.76	23.77
11B	2437	14.25	26.61
11B	2462	14.79	30.13
11G	2412	10.88	12.25
11G	2437	11.54	14.26
11G	2462	12.17	16.48
11N20SISO	2412	9.57	9.06
11N20SISO	2437	10.27	10.64
11N20SISO	2462	10.92	12.36
11N40SISO	2422	8.54	7.14
11N40SISO	2437	10.00	10.00
11N40SISO	2452	10.35	10.84

13.56MHz: 67.87dBuV/m

5.2 MPE Calculation

The Max Conducted Average Output Power is 14.79dBm (30.13mW) in the Highest channel;
The best case gain of the antenna is 3.3dBi. 3.3dB logarithmic terms convert to numeric result is nearly 2.14

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^ (Antenna gain in dBi /10)
3) R = distance to the center of radiation of antenna (in meter) = 20cm
4) MPE limit = 1mW/cm²

For WiFi: S= $\frac{PG}{4R^2\pi}$ = $\frac{30.13\times 2.14}{4\times 400\times 3.14}$ =0.0128 mW/cm²

For 13.56MHz: 67.87dBuV/m=0.00247 V/m< 60.77 V/m.

13.56MHz and WiFi modules can simultaneous transmitting, so the maximum rate of MPE is $\frac{0.00247}{60.77}+\frac{0.0128}{1}$ =0.0128<=1.0. according to the KDB447498 section 7.2 determine the device is exclusion from SAR test.

--End of the Report--