

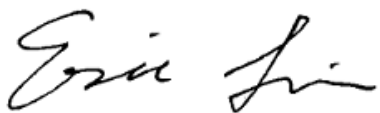
1 Cover Page

RF Exposure Evaluation Report

Application No.: KSCR2112000309AT
FCC ID: 2ADTD-M040316312
Applicant: Hangzhou Hikvision Digital Technology Co.,Ltd.
Address of Applicant: No. 555, Qianmo Road, Binjiang District, Hangzhou
Manufacturer: Hangzhou Hikvision Digital Technology Co.,Ltd.
Address of Manufacturer: No. 555, Qianmo Road, Binjiang District, Hangzhou
Factory: 1.Hangzhou Hikvision Electronics Co., Ltd.
2.Hangzhou Hikvision Technology Co., Ltd.
3.CHONGQING HIKVISION TECHNOLOGY CO.,LTD.
1.No.299, Qiushi Road, Tonglu Economic Development Zone, Tonglu County, Hangzhou, Zhejiang
Address of Factory: 2.No.700 Dongliu Road, Binjiang District, Hangzhou 310052, China
3.No. 118, Haikang Road, Area C, Jianqiao Industrial Park, Dadukou District, Chongqing, 401325, China
Equipment Under Test (EUT):
EUT Name: Multi IO Transmitter
Model No.: DS-PM1-I16O2-WA,DS-PM1-I16O2-WAUHK,DS-PM1-I16O2-WACKV, DS-PM1-I16O2-WAUVS,DS-PM1-I16O2-WAKVO,DS-PM1-I16O2-WAHUN
Trade mark: HIKVISION
Standard(s) : FCC Rules 47 CFR §2.1091
Date of Receipt: 2021-12-13
Date of Test: 2021-12-13 to 2021-12-24
Date of Issue: 2021-12-31

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



Eric Lin
Laboratory Manager



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Revision Record			
Version	Description	Date	Remark
00	Original	2021-12-31	/

Authorized for issue by:			
		<i>Damon Zhou</i>	
		Damon Zhou / Project Engineer	
		<i>Eric Lin</i>	
		Eric Lin / Reviewer	



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3 General Information

3.1 General Description of E.U.T.

Power supply:	100-240V ~ 50/60Hz
---------------	--------------------

3.2 Technical Specifications

915MHz

Operation Frequency:	912.5MHz ~ 917.4MHz
Number of Channels:	50
Channel Spacing:	100kHz
Modulation Type:	FSK
Spectrum Spread:	Frequency Hopping Spread Spectrum (FHSS)
Antenna Gain:	2.45dBi (Provided by manufacturer)
Antenna Type:	PCB Antenna



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3.3 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

3.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L4354)**

CNAS has accredited Compliance Certification Services (Kunshan) Inc. 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.

- **A2LA (Certificate No. 2541.01)**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

- **FCC (Designation Number: CN1172)**

Compliance Certification Services Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

- **ISED (CAB identifier: CN0072)**

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

Company Number: 2324E

- **VCCI (Member No.: 1938)**

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 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/cm ²)	Averaging time(minutes)
300MHz~1.5GHz	f/1500	30
1.5GHz~100GHz	1.0	30



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5 Measurement and Calculation

5.1 Maximum transmit power

The Power Data is based on the RF Test Report KSCR211200030901

Test Mode	Channel	Antenna Power[dBm]	Antenna Power[mW]
FSK	912.5	6.95	4.95
	917.4	6.60	4.57

5.2 MPE Calculation

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) For 912.5MHz ~ 917.4MHz, MPE limit: $912.5\text{MHz} / 1500 = 0.608\text{mW/cm}^2$

The max. antenna gain is		2.45	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
4.95	1.758	20	0.00173	0.608	Pass

According to the KDB447498 section 7.2 determine the device is exclusion from SAR test.

--End of the Report--



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