

1 Cover Page

RF Exposure Evaluation Report

Application No.: KSCR2111000227AT
2ADTD-D2676093

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: Wireless External Magnet Detector

Model No.: DS-PDMCX-E-WA

Add Model No.: DS-PDMCX-E-WAUHK,DS-PDMCX-E-WACKV,DS-PDMCX-E-WAUVS,DS-PDMCX-E-WAKVO,DS-PDMCX-E-WAHUN

Standard(s) : FCC Rules 47 CFR §2.1091

Date of Receipt: 2021-11-08

Date of Test: 2021-11-26 to 2021-11-30

Date of Issue: 2021-11-30

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	2021-11-30	/

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:	DC 3V,40mA Max By CR123A*1 battery
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3.2 Technical Specifications

Operation Frequency:	912.5MHz ~ 917.4MHz
Number of Channels:	50
Channel Spacing:	100kHz
Spectrum Spread:	Frequency Hopping Spread Spectrum (FHSS)
Modulation Type:	FSK
Antenna Gain:	-1.1 dBi (Provided by manufacturer)
Antenna Type:	Monopole 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 KSCR211100022701

Test Mode	Channel	Antenna Power[dBm]	Antenna Power[mW]
FSK	912.5	10.13	10.30
	917.4	9.95	9.89

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) MPE limit = 0.608mW/cm²

The max. antenna gain is		-1.1	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
10.3	0.776	20	0.00159	0.608	Pass

For 912.5MHz ~ 917.4MHz, the limit: 912.5MHz / 1500 = 0.608mW/cm².

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

--End of the Report--



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