

FCC RF EXPOSURE REPORT

For

Network Video Recorder

MODEL NUMBER: DHI-NVR2108-W-4KS2

FCC ID: SVNDHNVR21W

REPORT NUMBER: 4788560210.2-4

ISSUE DATE: September 14, 2018

Prepared for

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Prepared by

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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: ZHEJIANG DAHUA VISION TECHNOLOGY CO.,LTD.

Address: No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China

Manufacturer Information

Company Name: ZHEJIANG DAHUA VISION TECHNOLOGY CO.,LTD.

Address: No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China

EUT Description

Product Name Network Video Recorder Model Name DHI-NVR2108-W-4KS2

Sample Status Good

Sample Received date August 13, 2018

Date Tested August 15~September 10, 2018

APPLICABLE STANDARDS

STANDARD TEST RESULTS

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FCC 47CFR§2.1091

KDB-447498 D01 V06

Complies

Tested By: Checked By:

Kebo Zhang Shawn Wen

Engineer Laboratory Leader

Approved By:

Sephenbuo

Kebo. zhang.

Stephen Guo

Laboratory Manager

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 447498 D01 General RF Exposure Guidance v06.

3. FACILITIES AND ACCREDITATION

	A2LA (Certificate No.: 4102.01)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with A2LA.
	FCC (FCC Designation No.: CN1187)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	Has been recognized to perform compliance testing on equipment subject
	to the Commission's Delcaration of Conformity (DoC) and Certification
	rules
A core ditetion	IC(Company No.: 21320)
Accreditation	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
Certificate	has been registered and fully described in a report filed with ISED. The
	Company Number is 21320.
	VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with VCCI, the
	Membership No. is 3793.
	Facility Name:
	Chamber D, the VCCI registration No. is G-20019 and R-20004
	Shielding Room B, the VCCI registration No. is C-20012 and T-20011

Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3: For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30MHz had been correlated to measurements performed on an OATS.

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4. REQUIREMENT

4.1. DESCRIPTION OF EUT

Equipment	Network Video Recorder			
Model Name	DHI-NVR2108-W-4KS2			
Series model	DHI-NVR2104-W-4KS2,DHI-NVR2108-W-4KS2 NVR2104-W-4KS2,NVR2108-W-4KS2 NVR2104-W-4KS2-Lechange,NVR2108-W-4KS2-Lechange DHI-NVR21XY-W-4KSZ, DH-NVR21XY-W-4KSZ, NVR21XY-W-4KSZ, NVR21XY-W-4KSZ-Lechange			
Model difference	Different: only the name and the number of channels for audio, video input and output are different (different ways are supported by software functions, the hardware structure is the same), 04 stands for 4 channels, 08 stands for 8 channels; XY can be 04,08,16,32,64. Z can be 0~9 (only the version number of different product models of the same product is different, no hardware information is involved); the structure of the product is the same as that of the power supply. The electrical principle and key components are identical and do not affect the safety and electromagnetic compatibility of the product.			
Radio Technology	IEEE802.11b/g/n HT20			
Operation frequency	IEEE 802.11b: 2412MHz—2462MHz IEEE 802.11g: 2412MHz—2462MHz IEEE 802.11n HT20: 2412MHz—2462MHz			
Modulation	IEEE 802.11b: DSSS(CCK) IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK,BPSK)			
Power Supply	AC120V/60Hz			

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LIMIT

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure								
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time $ E ^2$, $ H ^2$ or S (minutes)				
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/150	30				
1500-100,000			1.0	30				

Note 1: f = frequency in MHz, * means Plane-wave equivalent power density

Note 2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Note 3: The limit value 1.0mW/cm² is available for this EUT.

MPE CALCULATION METHOD

 $S = PG/(4\pi R^2)$

where: S = power density (in appropriate units, e.g. mW/ cm2)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

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CALCULATED RESULTS

Radio Frequency Radiation Exposure Evaluation

Wifi 2.4G (Worst case)								
Frequency	Max. Tune up Power		Antenna Gain		Power Density	Limit	Test Result	
(MHz)	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm2)	(mW/cm2)		
2462	19	79.43	7.67	5.85	0.0924	1	Complies	

Note: the calculated distance is 20cm.

END OF REPORT