

## RF Exposure Evaluation Declaration

**FCC ID:** SVNVCS-TS51A0

**APPLICANT:** Zhejiang Dahua Vision Technology Co., Ltd

**Application Type:** Certification

**Product:** VIDEO CONFERENCING ENDPOINT

**Model No.:** DH-VCS-TS51A0

**Trademark:**



**FCC Classification:** Digital Transmission System (DTS)

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( Marlin Chen )



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

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## Revision History

Report No.	Version	Description	Issue Date	Note
1704RSU05805	Rev. 01	Initial report	05-20-2017	Valid

## 1. PRODUCT INFORMATION

Product Name	VIDEO CONFERENCING ENDPOINT
Model No.	DH-VCS-TS51A0
Serial Model No.	DH-VCS-TS51A0, VCS-TS51A0, DHI-VCS-TS51A0, DH-VCS-TS51XX, VCS-TS51XX, DHI-VCS-TS51XX ("X" can be 0-9 or A-Z OR a-z (except A or 0) or Blank to define different client only)
Brand Name:	
Frequency Range	802.11b/g/n-HT20: 2412 ~ 2462 MHz 802.11n-HT40: 2422 ~ 2452 MHz
Type of Modulation	802.11b: DSSS 802.11g/n: OFDM
Antenna Gain	5.23dBi
<b>Components</b>	
Adapter	Manufacturer: SHENZHEN HONOR ELECTRONIC CO., LTD. M/N: ADS-65HI-12N-1 12048E Input: 100-240V ~ 50/60Hz, 1.5A max Output: 12Vdc, 4.0A

Note: Differences between all models are for different marketing requirement.

## 2. RF Exposure Evaluation

### 2.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	f/1500	6
1500-100,000	--	--	1	30

f= Frequency in MHz

Calculation Formula:  $Pd = (Pout \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

Pd = power density in mW/cm<sup>2</sup>

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

r = distance between observation point and center of the radiator in cm

Pd is the limit of MPE, 1mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

## 2.2. Test Result of RF Exposure Evaluation

Product	VIDEO CONFERENCING ENDPOINT
Test Item	RF Exposure Evaluation

Antenna Gain: Refer to Clause 1 of antenna description.

Test Mode	Frequency Band (MHz)	Maximum Output Power (dBm)	Power Density at R = 20 cm (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
802.11b/g/n	2412 ~ 2462	20.83	0.0803	1

### CONCLUSION:

Therefore, the Max Power Density at R (20 cm) = 0.0803mW/cm<sup>2</sup> < 1mW/cm<sup>2</sup>.  
So the EUT complies with the requirement.

The End