REPORT No.：SZ18040216S01

FCC RF EXPOSURE EVALUATION REPORT

APPLICANT	:	Shenzhen CYLAN Technology Co.,Ltd
PRODUCT NAME	:	Clever Dog Smart Camera
MODEL NAME	:	DOG-1W-V5
BRAND NAME	:	Clever Dog
FCC ID	:	2ADHE-DOG-1W-V5
STANDARD(S)	:	47CFR 2.1091 KDB 447498
ISSUE DATE	:	2018-09-17

Tested by: Gan Yueming

Gan Yueming(Test engineer)

Approved by: Peng Huarui

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MORLAB

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DIRECTORY

Change History		
Issue	**Date**	**Reason for change**
1.0	2018-09-17	First edition

1. Technical Information

Note: Provide by manufacturer.

1.1 Applicant and Manufacturer Information

Applicant:	Shenzhen CYLAN Technology Co.,Ltd
Applicant Address:	Room 1506-1507, 15/F Office Building 4th of Chongwen Garden, Taoyuan St., Nanshan Dist Shenzhen China
Manufacturer:	Shenzhen CYLAN Technology Co.,Ltd
Manufacturer Address:	Room 1506-1507, 15/F Office Building 4th of Chongwen Garden, Taoyuan St., Nanshan Dist Shenzhen China

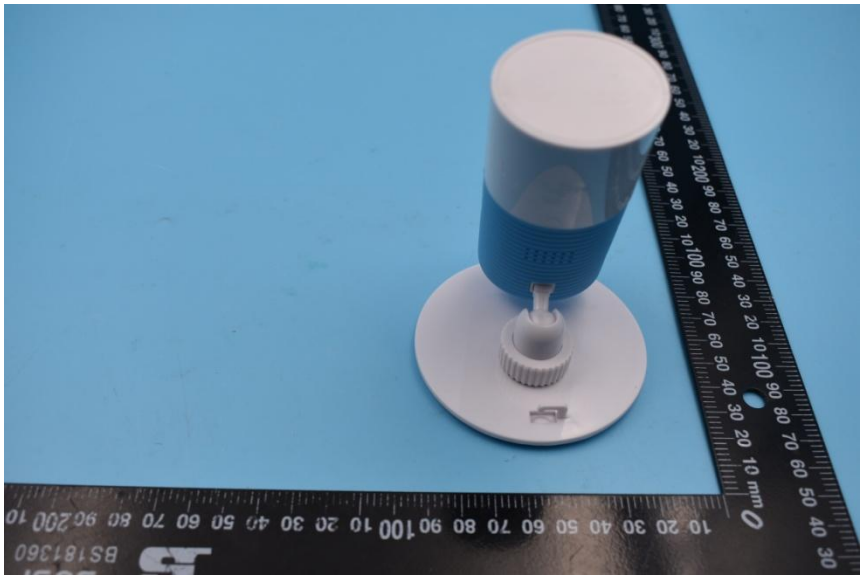
1.2 Equipment Under Test (EUT) Description

EUT Type:	Clever Dog Smart Camera
Hardware Version:	IPC-BT-510WX1-SL-S-V1_02
Software Version:	1.0.0.188
Frequency Bands:	WLAN 2.4GHz: 2412 MHz ~ 2462 MHz
Modulation Mode:	802.11b: DSSS 802.11g/n-HT20：OFDM
Antenna Gain:	2dBi

1.3 Photographs of the EUT

1. **EUT front view**

2. **EUT rear view**



1.4 Identification of all used EUT

The EUT identity consists of numerical and letter characters, the letter character indicates the test sample, and the following two numerical characters indicate the software version of the test sample.

EUT Identity	Hardware Version	Software Version
1#	IPC-BT-510WX1-SL-S-V1_02	1.0.0.188

1.5 Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	47 CFR§2.1091	Radio frequency Radiation Exposure Evaluation: mobile devices
2	KDB 447498 D01v06	General RF Exposure Guidance

2. Device Category and RF Exposure Limit

Per user manual, Based on 47CFR 2.1091, this device belongs to mobile device category with General Population/Uncontrolled exposure.

Mobile Devices:

47CFR 2.1091(b)

For purposes of this section, a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons. In this context, the term “fixed location” means that the device is physically secured at one location and is not able to be easily moved to another location. Transmitting devices designed to be used by consumers or workers that can be easily re-located, such as wireless devices associated with a personal computer, are considered to be mobile devices if they meet the 20 centimeter separation requirement.

GENERAL POPULATION / UNCONTROLLED EXPOSURE

The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity. Warning labels placed on low-power consumer devices such as cellular telephones are not considered sufficient to allow the device to be considered under the occupational/controlled category, and the general population/uncontrolled exposure limits apply to these devices.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*($180/f^2$)	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	f/1500	30
1500-100,000	-	-	1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

3. Measurement of RF Output Power

<2.4G Band>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit(dBm)
WLAN 2.4GHz	802.11b 1Mbps	CH 1	2412	**12.41**	**13.0**
		CH 6	2437	11.58	12.00
		CH 11	2462	11.74	12.00
	802.11g 6Mbps	CH 1	2412	1.74	2.00
		CH 6	2437	1.39	2.00
		CH 11	2462	1.46	2.00
	802.11n-HT20 MCS0	CH 1	2412	0.98	1.50
		CH 6	2437	0.53	1.00
		CH 11	2462	0.61	1.00
	802.11n-HT40 MCS0	CH 3	2422	-2.11	-1.00
		CH 6	2437	-2.37	-1.00
		CH 9	2452	-2.59	-1.00

Note: According to KDB 447498 section 7.1, the source-based time-averaged maximum radiated power, the maximum antenna gain, must be applied to calculate the field strength and power density required to establish the minimum test separation distance.

4. RF Exposure Evaluation

Standalone transmission MPE evaluation

Bands	Frequency (MHz)	Maximum Tune-up Limit (dBm)	Antenna Gain (dBi)	Results (mW)	Power density (mW/cm²)	Limit for MPE (mW/cm²)
2.4G	2412	13.0	2.0	31.623	0.006	1.0

1. MPE calculation method

Power Density = $P \cdot G / 4\pi R^2$

Where:

P = Output power

G = Antenna gain

R = Separation distance (20cm)

Annex A General Information

1. Identification of the Responsible Testing Laboratory

Company Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Department:	Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Responsible Test Lab Manager:	Mr. Su Feng
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

END OF REPORT