REPORT No.：SZ18020117S01

RF EXPOSURE EVALUATION REPORT

APPLICANT	:	Shenzhen Chuangwei Electronic Appliance Tech Co., Ltd.
PRODUCT NAME	:	10.1 inch WIFI Digital Photo Frame
MODEL NAME	:	Skylight,D104
BRAND NAME	:	N/A
FCC ID	:	2AABK-SKYLIGHT
STANDARD(S)	:	47CFR 2.1091 KDB 447498
ISSUE DATE	:	2018-03-21

Tested by: Liang Yumei

Liang Yumei (Test engineer)

Approved by: Gan Yueming

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DIRECTORY

Change History		
Issue	**Date**	**Reason for change**
1.0	2018-03-21	First edition

1. Technical Information

Note: Provide by manufacturer.

1.1 Applicant and Manufacturer Information

Applicant:	Shenzhen Chuangwei Electronic Appliance Tech Co., Ltd.
Applicant Address:	4F & 6F, Overseas plant south, Skyworth Industrial Park, Shiyan Street, Bao'an District, Shenzhen, P.R. China
Manufacturer:	Shenzhen Chuangwei Electronic Appliance Tech Co., Ltd.
Manufacturer Address:	4F & 6F, Overseas plant south, Skyworth Industrial Park, Shiyan Street, Bao'an District, Shenzhen, P.R. China

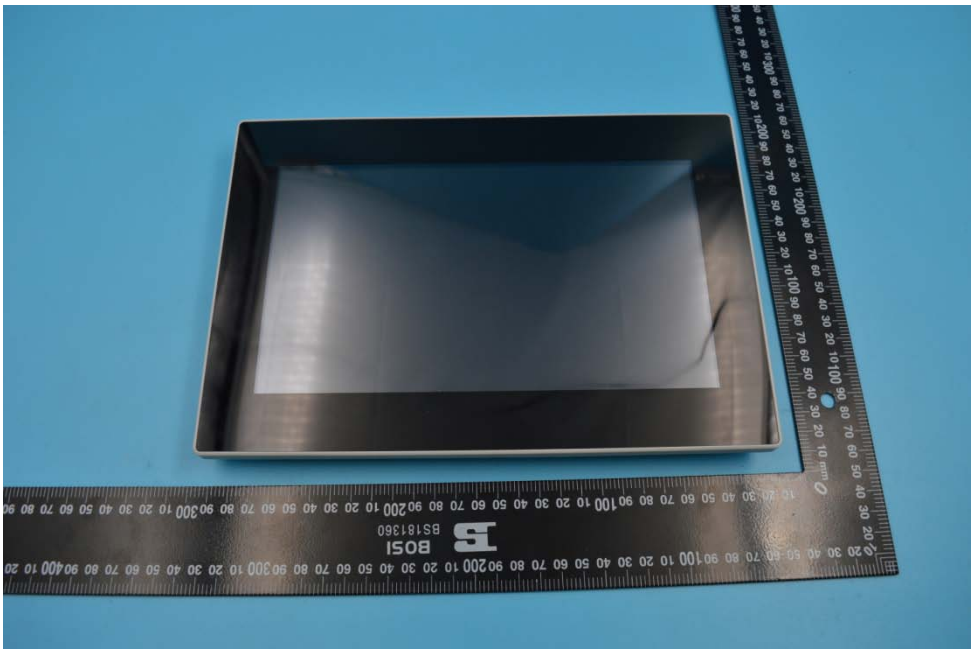
1.2 Equipment Under Test (EUT) Description

EUT Type:	10.1 inch WIFI Digital Photo Frame
Hardware Version:	D104-MB-D4-V01
Software Version:	D104.V0.10
Frequency Bands:	WLAN 2.4G: 2.412GHz - 2.462GHz; WLAN 5G Band1: 5.150GHz - 5.250GHz; WLAN 5G Band2: 5.250GHz - 5.350GHz; WLAN 5G Band3: 5.470GHz - 5.725GHz; WLAN 5G Band4: 5.725GHz - 5.850GHz;
Modulation Mode:	WLAN 2.4GHz:802.11b/g/n HT-20; WLAN 5GHz: 802.11a, 802.11n(HT20), 802.11n(HT40), 802.11ac(VHT20), 802.11ac(VHT40)
Antenna Type:	Dipole Antenna

Note 1: According to the designer, they declared that the model Skylight and D104 are accordant in both hardware and software, these two models only differ in model number, gift box design and package. The application information of two models is identical only except above mentioned point.

1.3 Photographs of the EUT

1. **EUT front view**



2. **EUT rear view**

1.3.1 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#	D104-MB-D4-V01	D104.V0.10

1.4 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 conducted Peak Output Power

1. Wifi Peak output power

Band	Channel	Frequency (MHz)	Output Power(dBm)		
			802.11a	802.11n20	802.11 ac (VHT20)
Band1	36	5180	13.12	13.61	13.59
	44	5220	12.77	13.00	13.34
	48	5240	12.41	12.86	13.18
Band2	52	5260	12.12	12.63	12.46
	60	5300	12.09	12.25	12.72
	64	5320	11.98	11.94	12.88
Band3	100	5500	11.76	11.53	12.70
	120	5600	12.87	12.29	13.55
	140	5700	14.33	13.59	14.91
Band4	149	5745	14.02	14.13	14.36
	157	5785	14.76	14.28	14.07
	165	5825	14.68	14.36	14.21

Band	Channel	Frequency (MHz)	Output Power(dBm)	
			802.11n40	802.11 ac (VHT40)
Band1	38	5190	12.48	12.74
	46	5230	11.74	11.56
Band2	54	5270	11.22	11.19
	62	5310	10.91	10.99
Band3	102	5510	10.92	10.65
	126	5630	12.28	12.06
	142	5710	13.15	13.62
Band4	151	5755	13.21	13.09
	159	5795	13.49	13.65

Band	Channel	Frequency (MHz)	Output Power(dBm)		
			802.11b	802.11g	802.11n20
Wifi2.4G	1	2412	15.5	21.39	20.99
	6	2437	15.41	21.37	21.29
	11	2462	15.27	21.78	21.2

4. RF Exposure Evaluation

Standalone transmission MPE evaluation

Bands	Frequency (MHz)	Antenna Gain (dBi)	Conducted Peak Power (dBm)	EIRP (mW)	Power density (mW/cm²)	Limit for MPE (mW/cm²)
5GHZ	5700	1.84	14.91	47.315	0.009	1.0
2.4GHz	2462	1.91	21.78	233.884	0.047	1.0

1. MPE calculation method

Power Density = EIRP/4πR²

Where: EIRP = P·G

P = Peak 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