

RF Exposure Evaluation Report

Product : 10 inch WIFI Digital Photo Frame
Trade mark : N/A
Model/Type reference : Skylight 2, D104S
Serial Number : N/A
Report Number : EED32K00312404
FCC ID : 2AABK-SKYLIGHT2
Date of Issue : Dec. 19, 2018
47 CFR Part 1.1307
Test Standards : 47 CFR Part 1.1310
KDB447498D01v06
Test result : PASS

Prepared for:

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2 Version

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4 General Information

4.1 Client Information

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

4.2 General Description of EUT

Product Name:	10 inch WIFI Digital Photo Frame
Model No.(EUT):	Skylight 2, D104S
Test Model No.:	Skylight 2
Trade Mark:	N/A
EUT Supports Radios application:	2.4GHz: Wi-Fi:802.11b/g/n(HT20)(HT40): 2412MHz ~2472 MHz 5GHz: Wi-Fi: U-NII-1: 5.15-5.25GHz; U-NII-2A: 5.25-5.35GHz U-NII-2C: 5.470-5.725GHz; U-NII-3: 5.725-5.850GHz 802.11a, 802.11n(20MHz/40MHz)

4.3 Product Specification subjective to this standard

Frequency Range:	2.4GHz: Wi-Fi:802.11b/g/n(HT20)(HT40): 2412MHz ~2472 MHz 5GHz: Wi-Fi: U-NII-1: 5.15-5.25GHz; U-NII-2A: 5.25-5.35GHz U-NII-2C: 5.470-5.725GHz; U-NII-3: 5.725-5.850GHz 802.11a, 802.11n(20MHz/40MHz)	
Test Power Grade:	N/A	
Test Software of EUT:	Ampak RFTestTool, VER:5.3(manufacturer declare)	
Antenna Type:	Integral antenna	
Antenna Gain:	4 dBi@2.4G 2dBi@5G	
Power Supply:	Adapter	Model:TPA-46050150UU Input:100~240V~ 50/60Hz, 0.3A Output:5V --- 1500mA
Conducted Peak Output Power:	20.48dBm	
	The Conducted Peak Output Power data refer to the report EED32K00312401	
Firmware version:	D104.V2.05(manufacturer declare)	
Hardware version:	V01(manufacturer declare)	
Sample Received Date:	Nov. 19, 2018	
Sample tested Date:	Nov. 22, 2018 to Dec. 12, 2018	
The tested sample(s) and the sample information are provided by the client. Model No.: Skylight 2, D104S Only the model Skylight 2 was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models. Only the models are different.		

4.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 RF Exposure Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Limits

According to FCC Part1.1310: 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 part1.1307(b)

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)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*(900/f ²)	6
30–300	61.4	0.163	1.0	6
300–1500			f/300	6
1500–100,000			5	6
(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

A rough estimation of the expected exposure in power flux density on a given point can be made with the following equation:

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

Where:

S = power density

P = power input to the antenna

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

R= distance to the centre of radiation of the antenna

EIRP = P*G

The antenna of the product, under normal use condition is at least 20 cm away from the body of the user.

Warning statement to the user for keeping at least 20cm separation distance and the prohibition of operating to a person has been printed on the user's manual. Therefore, the S of the device is calculated with R=20cm, and if it is below the limit S, then we can conclude the device complies with the rules.

5.1.2 Test Procedure

Software provided by client enabled the EUT to transmit data at lowest, middle and highest channel individually.

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5.1.3 EUT RF Exposure Evaluation

Antenna Gain: 4dBi

Output Power Into Antenna & RF Exposure Evaluation Distance:

Channel	Frequency (MHz)	Max Conducted Peak Output Power(dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R (cm)	S (mW/cm ²)	Limit (mW/cm ²)	Result
Highest	2442	20.48	4	24.48	280.54	20	0.056	1.0	Pass

Note: Refer to report No. EED32K00312401 for EUT test Max Conducted Peak Output Power value.

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32K00312401 for EUT external and internal photos.

*** End of Report ***

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