

FCC TEST REPORT

Report No.....: AB25100060FW02

FCC ID.....: **2BD4M-D238A**

Applicant.....: Shenzhen Showtop Technology Co., Ltd

Address.....: 320, Xinghai Mingcheng phase VII., Qianhai Road, Nanshan District, Shenzhen, China.518000

Manufacturer.....: Shenzhen Showtop Technology Co., Ltd

Address.....: 320, Xinghai Mingcheng phase VII., Qianhai Road, Nanshan District, Shenzhen, China.518000

Product Name.....: Desktop Digital Signage

Trade Mark.....: SHOWTOP

Test Model.....: D23.8A-N02

Additional Model(s).....: D23.8A-N01, D23.8A-N03, D23.8A-N04, D23.8A-N05, D23.8A-N06, D23.8A-N07, D23.8A-N08, D23.8A-N09

Standard.....: FCC Part 2 (Section 2.1091)
KDB 447498 D01
IEEE C95.1

Date of Receipt.....: 2025.10.23

Date of Issue.....: 2025.10.30

Test Result.....: Pass

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Approved by:
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Testing Laboratory Name.....: Aibo Standard Technology (Shenzhen) Co., Ltd.

Address.....: 101, Building B, Tuori New Energy Industrial Park, High-tech Park, Tianliao Community, Yutang Street, Guangming District, Shenzhen City, Guangdong Province, China

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FCC TEST REPORT

EUT.....	: Desktop Digital Signage
Test Model.....	: D23.8A-N02
Applicant.....	: Shenzhen Showtop Technology Co., Ltd
Address.....	: 320, Xinghai Mingcheng phase VII., Qianhai Road, Nanshan District, Shenzhen, China. 518000
Manufacturer.....	: Shenzhen Showtop Technology Co., Ltd
Address.....	: 320, Xinghai Mingcheng phase VII., Qianhai Road, Nanshan District, Shenzhen, China. 518000

Test Result	Positive
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The test report merely corresponds to the test sample.

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REPORT VERSION

Version No.	Issue Date	Description
01	2025.10.30	Initial Issue

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1. GENERAL INFORMATION

1.1. GENERAL DESCRIPTION OF EUT

Product Name:	Desktop Digital Signage
Trade Mark:	SHOWTOP
Test Model:	D23.8A-N02
Additional Model(s):	D23.8A-N01, D23.8A-N03, D23.8A-N04, D23.8A-N05, D23.8A-N06, D23.8A-N07, D23.8A-N08, D23.8A-N09
Model Difference:	Different models resulting from sales strategies or different casing colors do not affect the product's safety and electromagnetic compatibility.
Hardware Version:	V20
Software Version:	1.3.1.12
Power Supply:	DC 12V Powered by AC/DC adapter
Battery	/
EUT Supports Function: (Provided by the customer)	2.4G WIFI
Test Sample(s) Number:	AB25100060FW01-01 (Engineer Sample)
Radio Specification Subject to this Report	
2.4G WIFI	
Radio Specification:	IEEE 802.11b/g/n
Frequency Range:	2412MHz~2462MHz for IEEE 802.11b/g/n(HT20) 2422MHz~2452MHz for IEEE 802.11n(HT40)
Modulation Type:	IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g: OFDM (64-QAM, 16-QAM, QPSK, BPSK) IEEE 802.11n-HT20: OFDM (64-QAM, 16-QAM, QPSK, BPSK) IEEE 802.11n-HT40: OFDM (64-QAM, 16-QAM, QPSK, BPSK)
Channel Spacing:	5MHz
Channel Number(s):	11 Channels for IEEE 802.11b/g/n(HT20) 7 Channels for IEEE 802.11n(HT40)
Antenna Type:	Foldable external antenna
Antenna Gain:	2.43dBi

1.2. DESCRIPTION OF TEST FACILITY

Test Lab: Aibo Standard Technology (Shenzhen) Co., Ltd.

Address: 101, Building B, Tuori New Energy Industrial Park, High-tech Park, Tianliao Community, Yutang Street, Guangming District, Shenzhen City, Guangdong Province, China

Tel.: +(86) 0755 85250797

E-mail: aibo@aibonorm.com

Website: www.Aibonorm.com

The test facility is recognized, certified, or accredited by the following organizations:

A2LA-Lab Certificate No.: 7514.01

Aibo Standard Technology (Shenzhen) Co., Ltd. has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC Accredited Lab.

Designation Number: CN1411

Test Firm Registration Number: 567066

ISED Wireless Device Testing Laboratories

Company Number: 33924

CAB identifier: CN0185

2. RF EXPOSURE EVALUATION

2.1 Limit

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 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

f = frequency in MHz

Friis transmission formula: $P_d = (P_{out} * G) / (4 * \pi * r^2)$

Where

P_d = power density in mW/cm², P_{out} = 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

P_d is the limit of MPE, 1 mW/cm². 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.

Test Procedure

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

2.2 Evaluation Result

2.4G WIFI

Mode	Output power to antenna (dBm)	Output power to antenna (mW)	Power Density at R=20cm (mW/cm ²)	Limit (mW/cm ²)	Result
n20	6.89	4.887	0.001701061	1.0	PASS

So a SAR test is not required

*****THE END*****