



RF Exposure Report

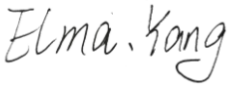
For

Applicant Name: SHENZHEN TOUMEI TECHNOLOGY CO., LTD
Address: 502 Building A, Jinke Industrial Park, Luhua Community Guanhu St.,
Longhua District, Shenzhen, China
EUT Name: Smart Projector
Brand Name: TOUMEI
Model Number: C900
Series Model Number: Refer to section 2

Issued By

Company Name: BTF Testing Lab (Shenzhen) Co., Ltd.
Address: F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park,
Tantou Community, Songgang Street, Bao'an District, Shenzhen,
China

Report Number: BTF230712R00304
Test Standards: 47 CFR Part 2 Subpart J Section 2.1091
FCC ID: 2BCE6-AKSERIES
Test Conclusion: Pass
Test Date: 2023-07-07 to 2023-07-25
Date of Issue: 2023-07-28

Prepared By: 
Elma. Yang / Project Engineer
Date: 2023-07-28

Approved By: 
Ryan CJ / EMC Manager
Date: 2023-07-28

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Revision History		
Version	Issue Date	Revisions Content
R_V0	2023-07-28	Original
Note:	Once the revision has been made, then previous versions reports are invalid.	

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1. Introduction

1.1 Identification of Testing Laboratory

Company Name:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
Phone Number:	+86-0755-23146130
Fax Number:	+86-0755-23146130

1.2 Identification of the Responsible Testing Location

Test Location:	BTF Testing Lab (Shenzhen) Co., Ltd.
Address:	F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
Description:	All measurement facilities used to collect the measurement data are located at F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China
FCC Registration Number:	518915
Designation Number:	CN1330

1.3 Laboratory Condition

Ambient Temperature:	20°C to 25°C
Ambient Relative Humidity:	45% to 55%
Ambient Pressure:	100 kPa to 102 kPa

1.4 Announcement

- (1) The test report reference to the report template version v0.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) This document may not be altered or revised in any way unless done so by BTF and all revisions are duly noted in the revisions section.
- (5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- (6) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2. Product Information

2.1 Application Information

Company Name:	SHENZHEN TOUMEI TECHNOLOGY CO., LTD
Address:	502 Building A, Jinke Industrial Park, Luhua Community Guanhu St., Longhua District, Shenzhen, China

2.2 Manufacturer Information

Company Name:	SHENZHEN TOUMEI TECHNOLOGY CO., LTD
Address:	502 Building A, Jinke Industrial Park, Luhua Community Guanhu St., Longhua District, Shenzhen, China

2.3 General Description of Equipment under Test (EUT)

EUT Name	Smart Projector
Under Test Model Name	C900
Series Model Name	C1000, C2000, C3000, K1, K2, K5, K9, M1, M2, M3, M5, M6, M7, M8, M9, V5, V6, V7, V8, V9, V7Pro, V8Battery, Q1, Q2, Q3, Q5, X1, X2, X3, X5, X6, X7, X8, S1, S2, S3, S5, S6, S8, S9, A3, A5, A6, A7, A8, A9
Description of Model name differentiation	Since according to the declaration from the applicant, the electrical circuit design, layout, components used, internal wiring and functions were identical for the above models, with only different on color.
Hardware Version	MTK9269
Software and Firmware Version	C.4TY20230517en2
Sample No.:	BTFSN230712E003-1/1

2.4 Technical Information

Power Supply:	DC 7.4V by battery and recharged by an adapter
Power Adaptor:	Adapter Model: TEKA-TE120200US Adapter Input: 100-240V, 50/60Hz, 0.7A Max Adapter Output: 12V 2A Adapter Model: TEKA-TE120300US Adapter Input: 100-240V, 50/60Hz, 1.2A Max Adapter Output: 12V 3A
For Bluetooth:	
Operation Frequency:	2402MHz to 2480MHz
Number of Channels:	79
Modulation Type:	GFSK, $\pi/4$ DQPSK, 8DPSK
Channel spacing:	1MHz

Antenna Type:	PIFA Antenna
Antenna Gain:	2.75 dBi
For 2.4G Wi-Fi:	
Operation Frequency:	802.11b/g/n(HT20)/ax(HE20): 2412MHz to 2472MHz 802.11n(HT40)/ax(HE40): 2422MHz to 2462MHz
Number of Channels:	802.11b/g/n(HT20) /ax(HE20): 11 Channels 802.11n(HT40)/ax(HE40): 9 Channels
Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ax: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)
Antenna Type:	ANT1: PIFA Antenna ANT2: PIFA Antenna
Antenna Gain#:	ANT1: 2.75dBi, ANT2: 2.75dBi
For 5G Wi-Fi:	
Operation Frequency:	802.11a/n(HT20)/ac(VHT20)/ax(HE20) : U-NII Band 1: 5180MHz to 5240MHz; U-NII Band 3: 5745MHz to 5825MHz; 802.11n(HT40)/ac(VHT40)/ax(HE40) : U-NII Band 1: 5190MHz to 5230MHz; U-NII Band 3: 5755MHz to 5795MHz; 802.11ac(VHT80)/ax(HE80) : U-NII Band 1: 5210MHz; U-NII Band 3: 5775MHz;
Number of Channels:	802.11a/n(HT20)/ac(VHT20)/ax(HE20): U-NII Band 1: 4; U-NII Band 3: 5; 802.11 n(HT40)/ac(VHT40)/ax(HE40): U-NII Band 1: 2; U-NII Band 3: 2; 802.11 ac(VHT80)/ax(HE80): U-NII Band 1: 1; U-NII Band 3: 1;
Modulation Type:	802.11a: OFDM(BPSK, QPSK, 16QAM, 64QAM); 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM); 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM); 802.11ax: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM);
Antenna Type:	ANT1: PIFA Antenna ANT2: PIFA Antenna
Antenna Gain#:	For U-NII Band 1: ANT1: 4.01dBi, ANT2: 4.01dBi; For U-NII Band 3: ANT1: 3.28dBi, ANT2: 3.28dBi;

Test Requirement

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

Note: f = frequency in MHz

EVALUATION METHOD

Transmission formula: $Pd = (Pout * G) / (4 * \pi * r^2)$

Where

Pd = power density in mW/cm², **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

2.5 Assessment Result

☒ Passed ☐ Not Applicable

Frequency (MHz)	Type	Conducted Power (dBm)	Maximum Tune-up (dBm)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Result
2441	BT-EDR	1.39	2	0.0008	1.0000	Pass
2437	2.4G-Wi-Fi	18.46	19	0.0384	1.0000	Pass
5230	U-NII Band 1	15.46	16	0.0280	1.0000	Pass
5825	U-NII Band 3	15.41	16	0.0227	1.0000	Pass

Note: The exposure evaluation safety distance is 20cm.

For Maximum Simultaneous Transmission:

This device also support simultaneous transmission for Bluetooth+ Wi-Fi1+ Wi-Fi2.

Operation mode	Total MPE ratio	MPE ratio Limit	Result
Bluetooth+ Wi-Fi1+ Wi-Fi2	0.0851	1.0000	PASS



Test Report Number: BTF230628R01302



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--END OF REPORT--