

TXS Industrial Design, Inc. dba Brandstand Products

TEST REPORT

SCOPE OF WORK

EMC TESTING—BPETOP2

REPORT NUMBER

250521050GZU-003

ISSUE DATE

09-March-2026

[REVISED DATE]

[-----]

PAGES

8

DOCUMENT CONTROL NUMBER

© 2017 INTERTEK



TEST REPORT

Applicant Name & : TXS Industrial Design, Inc. dba Brandstand Products
Address : 1219 Digital Dr. Suite 100, Richardson, Texas, 75081, United States
Manufacturing Site : Shenzhen Huntkey Electronics Co., Ltd
Huntkey Industrial Park, Xue-Xiang Village, Banxue Road,
Bantian, SHENZHEN Guangdong 518129 China
Intertek Report No: 250521050GZU-003
FCC ID: 2AFT4-BPETOP2

Test standards

47 CFR PART 1, Subpart I, Section 1.1310
KDB 680106 D01 RF Exposure Wireless Charging App v03r01

Sample Description

Product : Cubietrio+
Model No. : BPETOP2
Electrical Rating : 125VAC, 12A, 60Hz, 1500W
SINGLE USB-C1/C2 OUTPUT(20W MAX): 5V= 3A or 9V= 2.22A or
12V= 1.67A
DOUBLE PORT USB-C1+USB-C2 OUTPUT(15W MAX): 5V= 3A
VPR: L-N 1200V, L-G 1200V, N-G 1200V, In 3KA
WIRELESS OUTPUT: UP TO 15W
AC OUTPUT: 125VAC, 12A, 60Hz, 1500W
Serial No. : Not Labeled
Date Received : 21 May 2025
Date Test : 10 September 2025
Conducted

Prepared and Checked By

Approved By:



Elena Lei
Project Engineer



Dean Liu
Sr. Project Engineer

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

TEST REPORT

CONTENT

TEST REPORT	1
CONTENT	3
1.0 TEST RESULT SUMMARY	4
2.0 GENERAL DESCRIPTION	5
2.1 PRODUCT DESCRIPTION	5
2.2 TEST FACILITY	5
2.3 EUT EXERCISING SOFTWARE	5
2.4 SPECIAL ACCESSORIES	5
2.5 EQUIPMENT MODIFICATION	5
2.6 SUPPORT EQUIPMENT LIST AND DESCRIPTION	5
3.0 EMF TEST	7
3.1 STANDARD REQUIREMENT	7
3.2 TEST DATA	8
4.0 TEST EQUIPMENT LIST	8

TEST REPORT

1.0 TEST RESULT SUMMARY

Classification of EUT: Class B

Test Item	Standard	Result
EMF	47 CFR PART 1, Subpart I, Section 1.1310	PASS

Remark:

When determining the test results, measurement uncertainty of tests has been considered.

TEST REPORT

2.0 General Description

2.1 Product Description

Operating Frequency	127KHz,359KHz
Type of Modulation:	ASK
Antenna Type	Inductive loop coil antenna
Power Supply:	120VAC, 60Hz
Power cord:	wires unscreened cable

2.2 Test Facility

Room102/104, No 203, KeZhu Road, Science City, GETDD Guangzhou, China

A2LA Certificate Number 0078.10

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch is accredited by A2LA and Listed in FCC website. FCC accredited test labs may perform both Certification testing under Parts 15 and 18 and Declaration of Conformity testing.

2.3 EUT Exercising Software

N/A

2.4 Special Accessories

N/A

2.5 Equipment Modification

Any modifications installed previous to testing by TXS Industrial Design, Inc. dba Brandstand Products will be incorporated in each production model sold / leased in the United States.

No modifications were installed by Intertek Testing Services Shenzhen Ltd. Guangzhou Branch.

2.6 Support Equipment List and Description

This product was tested with corresponding support equipment as below:
Support Equipment:

TEST REPORT

Support equipment

Description	Model No.	Rating	Supplied by
Wireless charging load	F18/19	15W	Intertek
Cement resistance*2	-	0.5 Ω ,1 Ω , 5 Ω ,2 Ω ,5 Ω ,	Intertek
incandescent light bulb*2	--	100-240~, 50/60Hz,	Intertek

Cable

Description	Model No.	Connector type	Cable length/type	Supplied by
Power supply	--	AC	1.6 m(unshielded)	applicant
EUT to Adapter light bulb*2	--	AC	1 m(unshielded)	applicant
EUT to Adapter Cement resistance *2	--	DC	0.8 m(unshielded)	applicant

Remark: Wireless charging load was one of typical client devices, it's selected such that the EUT was fully exercised at maximum power from its transmitter. It will not be sold together.

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above evaluated respectively

Pretest mode	Description	
Standby Mode	kept transmitting continuously	
Charging Mode	CH: Low	Wireless charging load is charging at 1% battery power, 50% and 99% battery power respectively, keep transmitting continuously
	CH: Middle	
	CH: High	

TEST REPORT

3.0 EMF TEST

3.1 Standard Requirement

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.1m normally can be maintained between the user and the device.

(a) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S)(mW/cm ²)	Averaging Times E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	F/300	6
1500-100000	--	--	5	6

(b) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S)(mW/cm ²)	Averaging Times E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	F/1500	30
1500-100000	--	--	1.0	30

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

TEST REPORT

3.2 Test Data

Input Voltage: 120V/60Hz

Ambient Condition: 22.7°C, 53.2%RH

Test distance: 20 cm away from the coil.

The report only retains the worst data at 359KHz.

H-Filed Strength:

Test Position	Probe Measure Result (A/m)			50% Limit (A/m)	Limit (A/m)
	WPT client in 1% battery power	WPT client in 50% battery power	WPT client in 99% battery power		
Side 1	0.066	0.062	0.061	0.815	1.63
Side 2	0.064	0.069	0.066	0.815	1.63
Side 3	0.086	0.081	0.080	0.815	1.63
Side 4	0.076	0.079	0.073	0.815	1.63
Top	0.071	0.070	0.066	0.815	1.63

MPE ratio:

$$0.086 \text{ (A/m)} / 0.815 \text{ (A/m)} = 0.1055$$

The EUT is composite device with Bluetooth and WPT function, Bluetooth function MPE ratio is 0.00044, the test data please refer to FCC ID: 2AFT4-BPETOP2, 250521050GZU MPE report.

Sum of the MPE ratio for all simultaneously transmitting antennas:

$$0.00044 + 0.1055 = 0.10594 < 1$$

4.0 Test Equipment List

Equip. No.	Equipment	Model	Manufacturer	Cal. date	Due date
EM007-03	Exposure Level Tester	ELT-400	NARDA	05/03/2025	04/03/2026

*****End of the test report*****