

TXS Industrial Design Inc. d.b.a Brandstand Products

TEST REPORT

SCOPE OF WORK

SAR Assessment– BPEVA2

REPORT NUMBER

230703019SZN-002

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DOCUMENT CONTROL NUMBER

RF Exposure

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Test Report

Applicant : TXS Industrial Design Inc. d.b.a Brandstand Products
1219 Digital Dr. Suite 100 Richardson, Texas 75081

Sample Description : CubieVia 2.0
Product Model No. : BPEVA2



Brand Name :
Electrical Rating : Input: 125V~50/60Hz, 12A MAX

Output:
Type-C1: 5.0V=3.0A,9.0V=2.22A
Type-C2: 5.0V=3.0A,9.0V=2.22A
Type 3 SPD VPR: L-N 1500V, L-G 1500V, N-G 1500V
Wireless Output: 10W
C1+C2 Output: 5.0V=4.0A, 20W Max
C1+C2+Wireless total Output: 30W

Date Received : 03 July 2023
Date Test Conducted : 03 July 2023 to 22 July 2023

Test Requested : Test for compliance with CFR 47 part 1
Test Method : Environmental evaluation and exposure limit according to FCC CFR 47 part 1, 1.1307(c) and (d), 1.1310 KDB 680106 D01 RF Exposure Wireless Charging App v03r01

Test Result : Pass
Conclusion : When determining of test conclusion, measurement uncertainty of tests have been considered.

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Date: 21 September 2023

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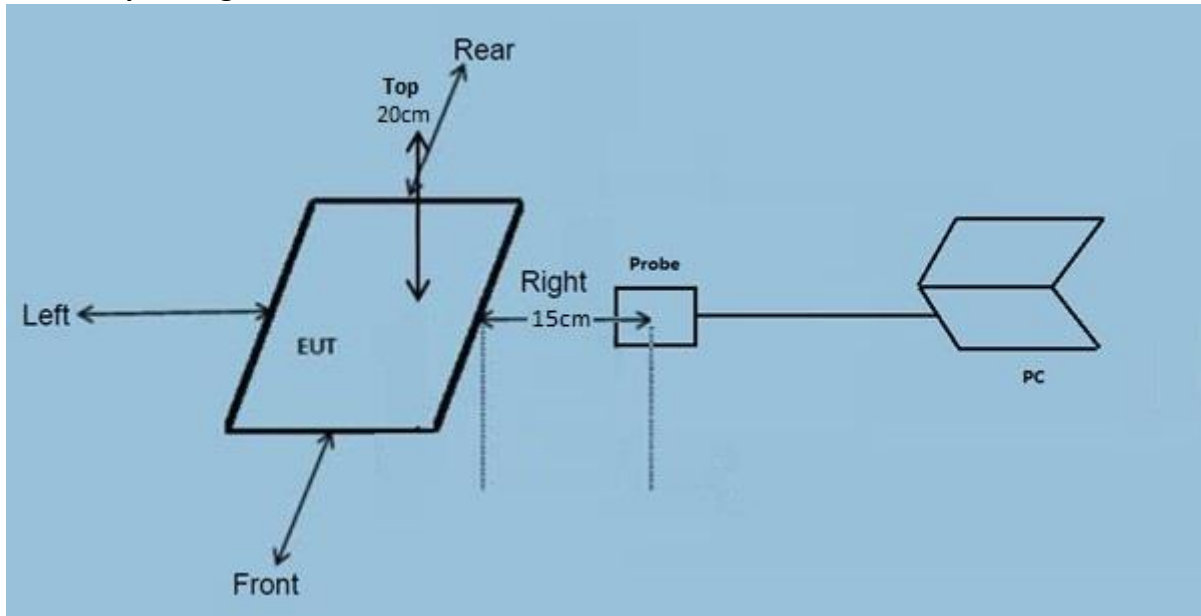
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Test Report

Test Setup Configuration



Note

- The RF exposure test is performed in the shield room.
- The test distance is between the edge of the charger and the geometric centre of probe.

Test Equipment List

Equipment No.	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
SZ186-04	Electric and Magnetic Field Analyzer	Narda	EHP-50F	510WY90119	2022-08-01	2023-08-01

This product was tested in the following configuration:

Description	Manufacturer	Detail
Mobile Phone (Provided by Intertek)	Apple Inc.	iphone Xs Max
Clip line (Provided by Intertek)	N/A	Unshielded, Length: 40cm
C to C cable (Provided by Intertek)	N/A	Unshielded, Length: 10cm
Cement resistor*2 (Provided by Intertek)	N/A	2.5Ω
Bulb (Provided by Intertek)	N/A	40W
Port A to port C conversion board (Provided by Intertek)	LX-CMTPD	N/A

Justification

Pertest mode	Description
Mode 1	Standby mode
Mode 2	Mobile phone is charging at 1% battery power
Mode 3	Mobile phone is charging at 50% battery power
Mode 4	Mobile phone is charging at 99% battery power

The EUT was powered by an adapter with 125V~50/60Hz, 12A MAX input during the test. The test system was pre-scanning tested based on the consideration of following EUT operation mode. and only the worst-case data was shown in this report.

Reference Limit:

Environmental evaluation and exposure limit according to FCC CFR 47 part 1, 1.1307(c) and (d), 1.1310

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation.

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3 – 3.0	614	1.63	(100) *	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3 – 1.34	614	1.63	(100) *	30

Note: * = Plane wave equivalent power density

Test Result:

During test, the mobile handset is being charged.

Worst Case Operating Mode: Mode 2

Test Result for wireless power transmit part:

H-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (A/m)	Probe Position Rear (A/m)	Probe Position Left (A/m)	Probe Position Right (A/m)	Probe Position Top (A/m)	Limits (A/m)
0.112-0.205	1% Battery Level	0.3048	0.3012	0.2993	0.3030	0.5242	1.63
0.112-0.205	50% Battery Level	0.3048	0.3002	0.2993	0.3031	0.5184	1.63
0.112-0.205	99% Battery Level	0.3047	0.3019	0.2991	0.3030	0.5184	1.63
0.112-0.205	Stand-by	0.2899	0.2858	0.2883	0.2844	0.4970	1.63

E-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (V/m)	Probe Position Rear (V/m)	Probe Position Left (V/m)	Probe Position Right (V/m)	Probe Position Top (V/m)	Limits (V/m)
0.112-0.205	1% Battery Level	1.7637	1.8225	1.8155	1.8651	2.0644	614
0.112-0.205	50% Battery Level	1.8947	1.8244	1.8407	1.8651	2.0073	614
0.112-0.205	99% Battery Level	1.8947	1.8244	1.8407	1.8444	2.0358	614
0.112-0.205	Stand-by	1.6890	1.7447	1.6478	1.8252	1.9833	614

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