

Suzhou Yoshino Power Technology Co. Ltd.

TEST REPORT

SCOPE OF WORK

SAR Assessment– B4000 SST

REPORT NUMBER

230804015SZN-002

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[REVISED DATE]

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PAGES

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DOCUMENT CONTROL NUMBER

RF Exposure


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Test Report

Applicant : Suzhou Yoshino Power Technology Co. Ltd.
No.3 Shengxi Road, Kunshan Development Zone,
Kunshan City, Jiangsu 215335, P.R.China

Sample Description : Portable Power Station
Product Model No. : B4000 SST

Brand Name : 

Electrical Rating : Input: AC Input: 100-120VAC, 50/60Hz
Charging Mode: 1800W Max
Bypass Mode:12A Max
Car Input: 12VDC/10A, 120W Max
Solar Input: 12-60VDC/10A, Max, 600W Max
Wireless Charging: 2Ports, 5VDC/1A, 9VDC/1.1A,
12VDC/1.25A

Date Received : 04 August 2023
Date Test Conducted : 04 August 2023 to 05 September 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: 06 September 2023

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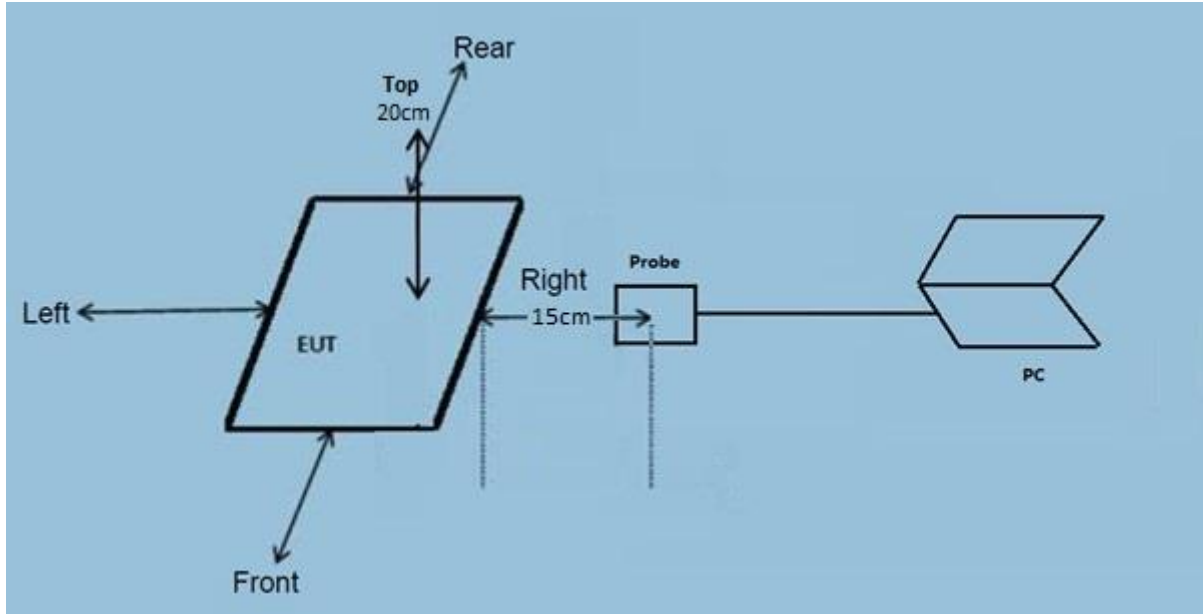
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Test Report

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	2023-07-10	2024-07-10

This product was tested in the following configuration:

Description	Manufacturer	Detail
Wireless charging load (Provided by Intertek)	/	/
Laptop (Provided by Intertek)	Lenovo	T420
Laptop (Provided by Intertek)	DELL	P137G
Cement Resistance (Provided by Intertek)	/	2ohm*2, 1.67ohm, 4ohm, 7.2ohm, 1.26ohm*2, 2.52ohm
DC5521 to DC5521 Cable (Provided by Intertek)	/	0.8meter, unshielded
USB-C to C Cable (Provided by Intertek)	/	1.0meter, unshielded
USB-C Cable (Provided by Intertek)	/	0.6meter, unshielded
USB-A Cable (Provided by Intertek)	/	0.7meter, unshielded
USB-A Cable (Provided by Intertek)	/	0.7meter, unshielded
AC Cable (Provided by Applicant)	/	1.8meter, unshielded
Cigarette Car Charging Cable (Provided by Applicant)	/	3.0meter, unshielded
Solar Charging Cable (Provided by Applicant)	/	1.5meter, unshielded
DC5521 to Cigarette Car Female Output Cable	/	0.5meter, unshielded

Justification

Pertest mode	Description
Mode 1	Standby mode
Mode 2	Bypass + Wireless charging load is charging at 1% battery power + USB Output + DC Output
Mode 3	Inverter + Wireless charging load is charging at 1% battery power + USB Output + DC Output
Mode 4	Bypass + Wireless charging load is charging at 50% battery power + USB Output + DC Output

The EUT was powered by AC Input: 100-120VAC, 50/60Hz or Car Input: 12VDC/10A, 120W Max; or Solar Input: 12-60VDC/10A, Max, 600W Max input during the test. The test system was pre-scanning tested based on the consideration of above 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)
0.110-0.205	1% Battery Level	0.0736	0.0673	0.0745	0.0946	0.0947	1.63
0.110-0.205	50% Battery Level	0.0668	0.0586	0.0691	0.0822	0.0834	1.63
0.110-0.205	99% Battery Level	0.0566	0.0545	0.0625	0.0774	0.0756	1.63
0.110-0.205	Stand-by	0.0386	0.0335	0.0426	0.0522	0.0534	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)
0.110-0.205	1% Battery Level	0.6242	0.6633	0.5640	0.5769	0.7419	614
0.110-0.205	50% Battery Level	0.5811	0.5564	0.5112	0.5129	0.6552	614
0.110-0.205	99% Battery Level	0.4925	0.4863	0.4566	0.4622	0.5991	614
0.110-0.205	Stand-by	0.3124	0.2899	0.2983	0.2966	0.3324	614

Configuration photo of the test:

H-Field & E-Field Strength test photos

Front



Rear



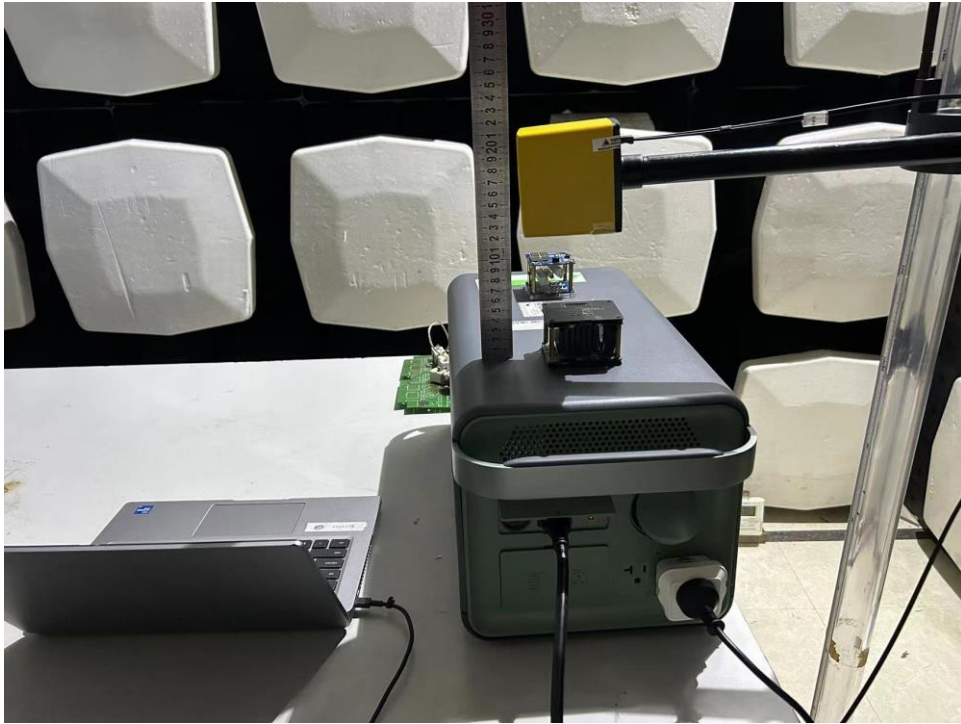
Left



Right



Top



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