

Ottlite Technologies Inc.

TEST REPORT

SCOPE OF WORK

SAR Assessment– Q51, Q27

REPORT NUMBER

240808046SZN-002

ISSUE DATE

21 October 2024

[REVISED DATE]

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PAGES

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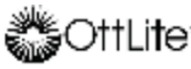
DOCUMENT CONTROL NUMBER

RF Exposure

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Test Report

Applicant	:	Ottlite Technologies Inc. 1715 N Westshore Blvd, Suite 950, Tampa, FL 33607, USA
Sample Description	:	LED table lamp with Wireless Charging
Product Model No.	:	Q51, Q27
Brand Name	:	 OttLite
Electrical Rating	:	DC 5V/2A from adapter Wireless charging output: 5W
Date Received	:	25 August 2024
Date Test Conducted	:	25 August 2024 to 30 September 2024
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 Wireless Power Transfer v04
Test Result	:	Pass
Conclusion	:	When determining of test conclusion, measurement uncertainty of tests have been considered.

Prepared and Checked By:

Approved By:

Tony Tang
Engineer

Johnny Wang
Project Engineer
Date: 21 October 2024

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Intertek Testing Services Shenzhen Ltd. Longhua Branch

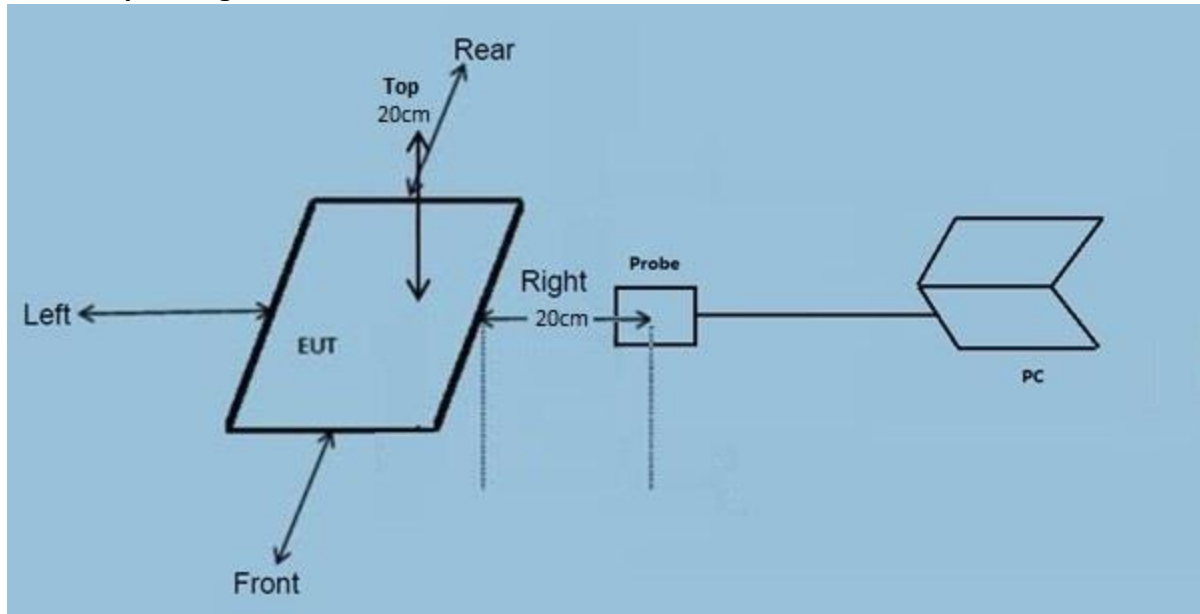
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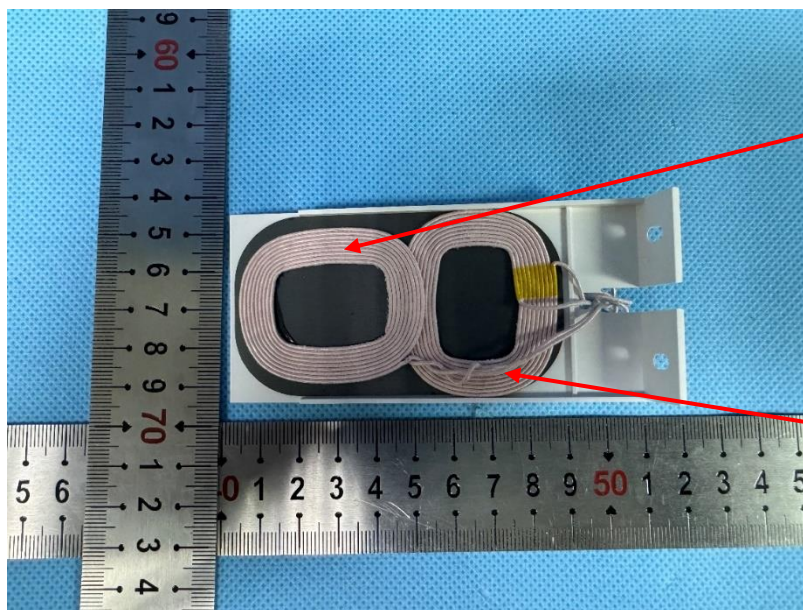
Test Report

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.
- The EUT Wireless charging coil is shown below



Wireless charging Coil 1

Wireless charging Coil 2

Test Equipment List

Equipment No.	Equipment	Manufacturer	Model No.	Cal. Date	Due Date
SZ186-06	The Magnetic Amplitude and Gradient Probe System	SPEAG	MAGPy-8D3D+E3D	2024-03-07	2025-03-07

This product was tested in the following configuration:

Description	Manufacturer	Detail
Mobile Phone	Samsung (Provided by Intertek)	S7
Adapter	NIL (Provided by applicant)	Model: TY0500200A1mn Input: 100-240Vac 50/60Hz 0.4A Output: DC 5.0V/2A

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 120V/60Hz 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 is being charged.

Worst Case Operating Mode: Mode 1

Test Result for wireless power transmit part:

H-Field Strength at 20 cm surrounding the EUT and 20cm above the top surface of the EUT Wireless charging coil 1

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	0.06	0.02	0.04	0.04	0.09	1.63
0.112-0.205	50% Battery Level	0.05	0.02	0.03	0.04	0.08	1.63
0.112-0.205	99% Battery Level	0.03	0.01	0.01	0.03	0.06	1.63
0.112-0.205	Stand-by	0.01	0.01	0.01	0.01	0.04	1.63

Wireless charging coil 2

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	0.04	0.01	0.04	0.03	0.07	1.63
0.112-0.205	50% Battery Level	0.04	0.02	0.04	0.02	0.06	1.63
0.112-0.205	99% Battery Level	0.02	0.02	0.02	0.01	0.05	1.63
0.112-0.205	Stand-by	0.01	0.01	0.01	0.01	0.02	1.63

NOTE: Two wireless charging coils cannot work at the same time

E-Field Strength at 20 cm surrounding the EUT and 20cm above the top surface of the EUT
Wireless charging coil 1

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	3.36	0.80	1.85	1.75	1.76	614
0.112-0.205	50% Battery Level	3.33	0.78	1.81	1.72	1.72	614
0.112-0.205	99% Battery Level	3.31	0.73	1.78	1.68	1.67	614
0.112-0.205	Stand-by	3.30	0.70	1.75	1.63	1.65	614

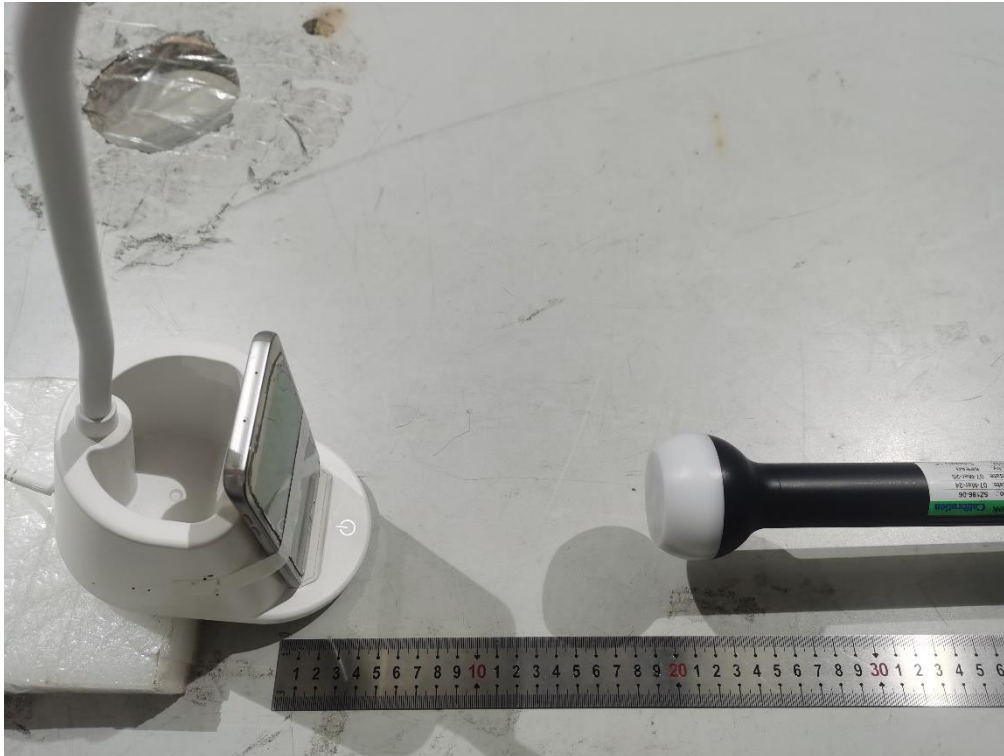
Wireless charging coil 2

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	3.23	0.76	1.83	1.76	1.73	614
0.112-0.205	50% Battery Level	3.15	0.73	1.84	1.74	1.71	614
0.112-0.205	99% Battery Level	3.10	0.75	1.83	1.69	1.65	614
0.112-0.205	Stand-by	3.03	0.68	1.65	1.60	1.63	614

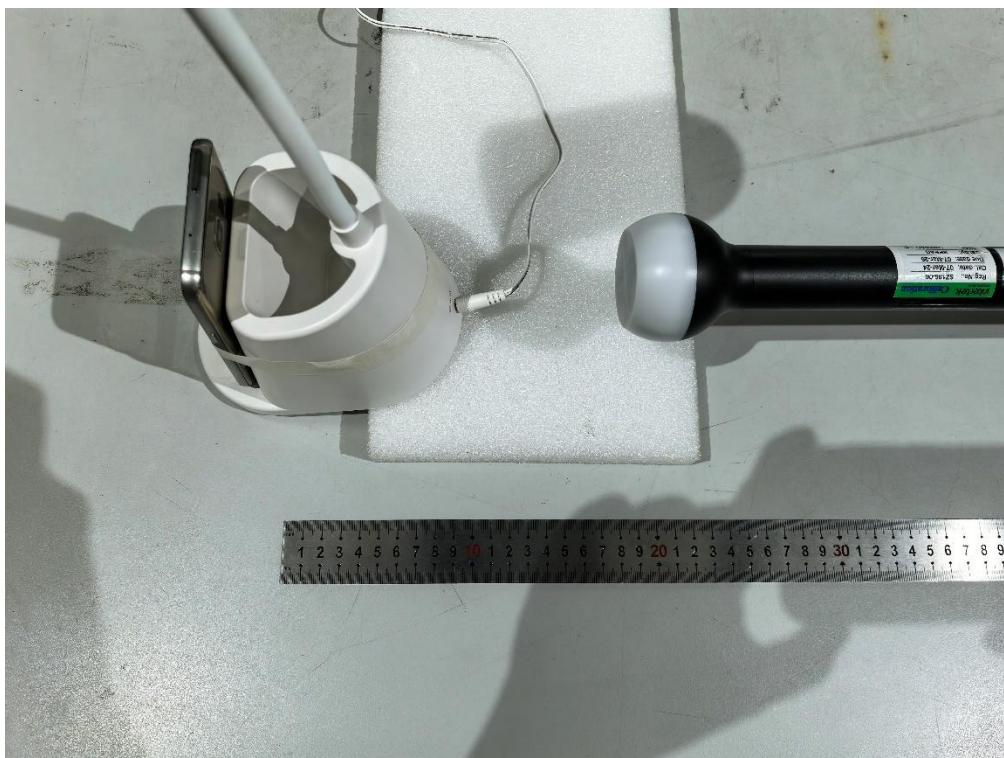
NOTE: Two wireless charging coils cannot work at the same time

Configuration photo of the test:

Front



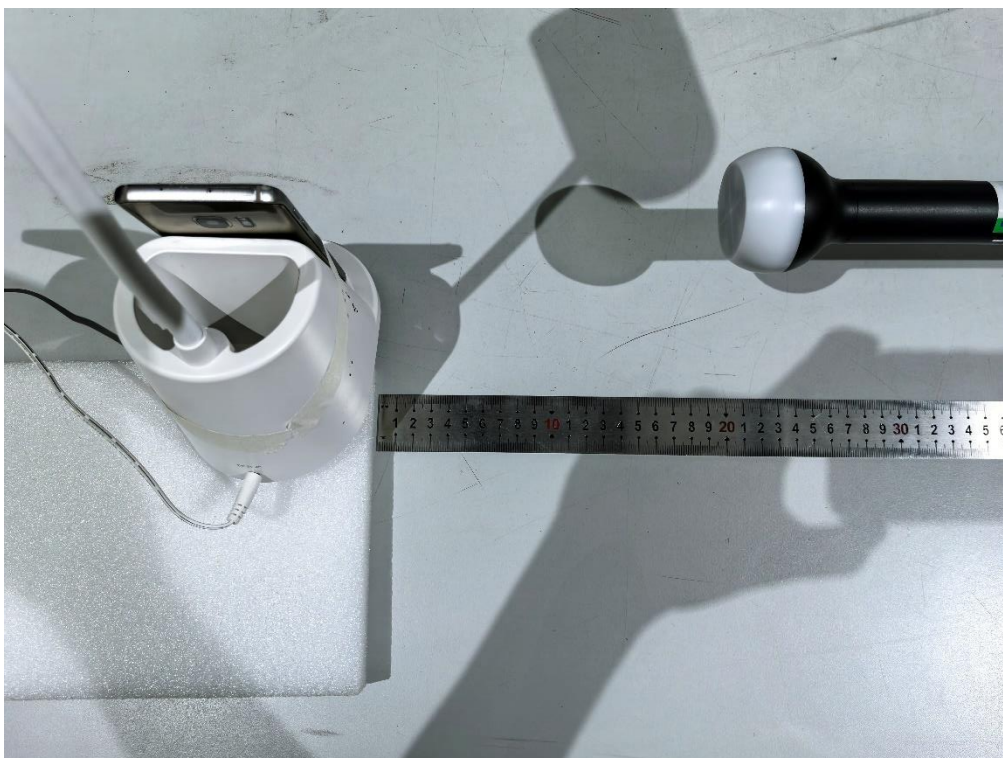
Rear



Left



Right



Top



***** End of Report*****