

FCC TEST REPORT

FCC ID:2BMGC-SLK-24-SW-153

Report No..... : ZHT-241010019E-1
Product..... : Wireless charger for smartphone
Trademark..... : Shelllang
Model(s)..... : SLK-24-SW-153
SLK-153-02, SLK-153-03, SLK-153-04, SLK-153-05, SLK-153-06,
SLK-153-07
Model difference..... : SLK-24-SW-153 is the test model, while other models are derivative models.
These models are the same on the circuit, with only different model names
and appearance colors. Therefore, the test data of SLK-24-SW-153 can
represent the remaining models.
Applicant..... : SHELLLANG KOREA
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Manufacturer..... : SHELLLANG KOREA
Address..... : Room B101, 110, Yulgok-ro, Jongno-gu, Seoul, Korea
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Date of Receipt..... : Oct. 10, 2024
Date of Test(s)..... : Oct. 10, 2024 to Nov. 29, 2024
Date of Issue..... : Dec. 9, 2024
Test Standard(s)..... : FCC CFR 47 PART 1 , 1.1310
Test procedure..... : KDB 680106 D01 Wireless Power Transfer v04

In the configuration tested, the EUT complied with the standards specified above.

Tested by:

Kimi Lu

Kimi Lu/ Engineer

Reviewed by:

Baret Wu

Baret Wu/ Director

Approved by:

Levi Lee

Levi Lee/ Manager

Note: The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report shall not be reproduced except in full, without prior written approval of ZHT. This document may be altered or revised by ZHT, personnel only, and shall be noted in the revision of the document.

RF Exposure Evaluation

Product Name:	Wireless charger for smartphone
Product Model No.:	SLK-24-SW-153
Test Auxiliary:	Wireless charging load
Transmitting mode:	Keep the EUT in continuously wireless charging mode

Test Modes

Mode 1	AC adapter + wireless charging(5W)
Mode 2	AC adapter + wireless charging(7.5W)
Mode 3	AC adapter + wireless charging(10W)
Mode 4	AC adapter + wireless charging(15W)
<p>Note: 1.All full load, half load, and no-load tests have been conducted in each mode, only the worst-case was recorded in the report. Mode 4 full load is the worst mode.</p> <p>2.The EUT not supports portable use.</p>	

Auxiliary equipment

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	Wireless charging load	N/A	EESON	N/A	AE
E-2	AC adapter	N/A	CHG-WALL-PD-45W	N/A	AE

1 Measuring Standard

KDB 680106 D01 Wireless Power Transfer v04

2 Requirements

According to the item 5 of KDB 680106 D01 v04:

Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation.

Requirements of section 3 of KDB 680106 D01	Yes/ No	Description
Mobile Device and Portable Device Configurations	Yes	Mobile Device
Equipment Authorization Procedures for Devices Operating at Frequencies Below 4 MHz	Yes	The device operate in the frequency range 110.1-205kHz.
RF Exposure compliance may be ensured only for a minimum conditions at smaller distances can still be considered unlikely.separation distance that is greater than 20 cm, while use	Yes	The aggregate H-field and E-field strengths anywhere at or beyond 20 cm surrounding the device, and 20 cm away from the top surface.

3 Limits

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)

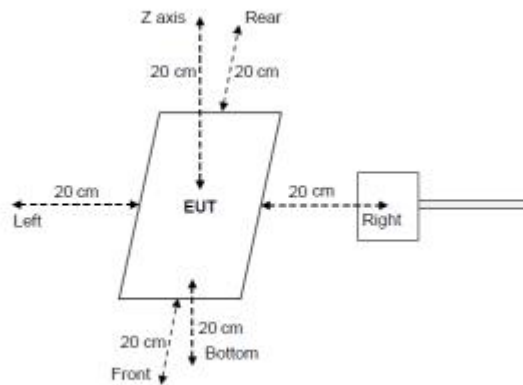
Limits for Maximum Permissible Exposure (MPE)

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

F=frequency in MHz
 * =Plane-wave equivalent power density
 RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

4 Test Setup

For mobile exposure conditions:



5 Test Procedure

- 1) The RF exposure test was performed in anechoic chamber.
- 2) The measurement probe was placed at test distance (20 cm from all sides and 20 cm from the top) which is between the edge of the charger and the geometric center of probe.
- 3) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.
- 4) The EUT was measured according to the dictates of KDB 680106 D01 v04.

Remark: The EUT' s test position A, B, C, D and E is valid for the E and H field measurements.

6 Test Instruments list

Test Equipment	Manufacturer	Model No.	SN.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
Near-field Electric and Electric Field Sensor System	SPEAG	MAGPy- 8H3D+ED3 V2	3101	Mar. 12, 2024	Mar. 11, 2026
Test software: MAGPY.exe V2.6					

7 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	H-field	$\pm 0.7\text{dB}$
2	E-field	$\pm 1.06\text{dB}$

Decision Rule

- ☒ Uncertainty is not included
☐ Uncertainty is included

8 Test Result

The above test modes all include full load, empty load, and half load. The worst-case state reflected in this report is the fully loaded state.

E-Filed Strength at 20 cm from the edges surrounding the EUT (V/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	50%Limits (V/m)	Limits (V/m)	test result
0.1101-0.205	0.28	0.47	0.66	0.63	307	614	PASS

E-Filed Strength at 20 cm from the top of the EUT (V/m)

Frequency Range (MHz)	Test Position E	50%Limits (V/m)	Limits (V/m)	test result
0.1101-0.205	0.67	307	614	PASS

H-Filed Strength at 20 cm from the edges surrounding the EUT (A/m)

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	50%Limits (A/m)	Limits (A/m)	test result
0.1101-0.205	0.32	0.27	0.58	0.69	0.815	1.63	PASS

H-Filed Strength at 20 cm from the top of the EUT (A/m)

Frequency Range (MHz)	Test Position E	50%Limits (A/m)	Limits (A/m)	test result
0.1101-0.205	0.189	0.815	1.63	PASS

9 Test Set-up Photo

