



RF EXPOSURE EVALUATION DOCUMENT

For WPT(wireless Power Transfer)

Applicant : SAMSUNG ELECTRONICS CO., LTD.
129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI,
GYEONGGI-DO, 16677, KOREA

Model : SM-N985F1/DS, SM-N985F1

FCC ID : A3LSMN985F1

EUT Description : GSM/WCDMA/LTE Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax,
NFC, WPT and UWB

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Prepared by:

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Suwon Test Site: UL Korea, LTD. Suwon Laboratory

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1. TEST PROCEDURE

Per FCC Guidance, WPT function was evaluated for portable exposure condition.

2. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea. Line conducted emissions are measured only at the 218 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

218 Maeyeong-ro
<input checked="" type="checkbox"/> Shield Room

UL Korea, Ltd. is accredited by IAS, Laboratory Code TL-637. The full scope of accreditation can be viewed at <https://www.iasonline.org/wp-content/uploads/2017/05/TL-637-cert-New.pdf>.

3. INFORMATION OF EQUIPMENT UNDER TEST

Information	
Operating frequency [MHz]	0.59 - 0.625
Maximum output power [mW]	50
Charging type	Inductive wireless power transfer
Operating duty factor	0.33

4. TEST EQUIPMENT

Test Equipment List				
Description	Manufacturer	Model	S/N	Cal Due
E-H Field Analyzer	Narda	EHP-200AC	170WX91008	2022-08-06



5. MEASUREMENT RESULT

5.1. H-field measurement results of EUT's 6 sides

Distance	H-field measurement [A/m]					
	Rear	Front	Edge.1	Edge.2	Edge.3	Edge.4
0cm	1.1150	0.2373	0.0553	0.0309	0.0225	0.4472

Note: 0cm distance was measured from the center of the probe head to the edge of the DUT.

5.2. H-field measurement results for 0cm to 10cm at Rear side.

Distance [cm]	H-field meas. [A/m]	H-field x (duty factor) [A/m]	FCC Limit [A/m]
0	1.1150	0.3680	1.63
1	0.5243	0.1730	
2	0.2965	0.0978	
3	0.1492	0.0492	
4	0.1208	0.0399	
5	0.0802	0.0265	
6	0.0494	0.0163	
7	0.0292	0.0096	
8	0.0211	0.0070	
9	0.0136	0.0045	
10	0.0101	0.0033	

5.3. Corrected H-field measurement

Operating duty factor is based on Averaging time of §1.1310 table 1.

- $1.0154 \text{ A/m} * 0.33 = 0.3680 \text{ A/m}$

END OF EVALUATION DOCUMENT