



RF EXPOSURE EVALUATION DOCUMENT

**FOR
WPT (Wireless Power Transfer)**

MODEL NUMBER: SM-N970F/DS, SM-N970F, SM-N970X

FCC ID: A3LSMN970F

ISSUE DATE: 6/27/2019

Prepared for
**SAMSUNG ELECTRONICS CO., LTD.
129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI,
GYEONGGI-DO, 16677, KOREA**

Prepared by
UL Korea, Ltd.

26th floor, 152, Teheran-ro, Gangnam-gu Seoul, 06236, Korea

**Suwon Test Site: UL Korea, Ltd. Suwon Laboratory
218 Maeyeong-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16675, Korea**

TEL: (031) 337-9902

FAX: (031) 213-5433

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

Suwon
Shield Room

UL Korea, Ltd. is accredited by IAS, Laboratory Code TL-637.

The full scope of accreditation can be viewed at <http://www.iasonline.org/PDF/TL/TL-637.pdf>.

3. Information of EQUIPMENT UNDER TEST

Information	
Operating frequency (MHz)	0.594
Maximum output power (mW)	50
Charging type	Inductive wireless power transfer
Operating duty factor	0.23

4. Test Equipment

Test Equipment List					
Description	Manufacturer	Model	Serial Numver	Cal Date	Cal Due
Electric and Magnetic Field Probe	Narda	EHP-200A	170WX80301	12-14-2018	12-14-2019

5. Measurement results

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	0.9509	0.3112	0.1228	0.5173	0.0407	0.0363

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	0.9509	0.2187	1.63
1	0.4601	0.1058	
2	0.2594	0.0597	
3	0.1590	0.0366	
4	0.1009	0.0232	
5	0.0726	0.0167	
6	0.0463	0.0106	
7	0.0324	0.0075	
8	0.0242	0.0056	
9	0.0163	0.0037	
10	0.0138	0.0032	

5.3. Corrected H-field measurement

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

- $0.9509 \text{ A/m} * 0.23 = 0.2187 \text{ A/m}$

End.