

FCC MPE REPORT

FCC Certification

Applicant Name:
SAMSUNG Electronics Co., Ltd.

Address:
129, Samsung-ro, Yeongtong-gu, Suwon-si,
Gyeonggi-do, 16677, Rep. of Korea

Date of Issue:

September 8, 2017

Test Site/Location:

HCT CO., LTD., 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA

Report No.: HCT-R-1709-E004

HCT FRN: 0005866421

FCC ID : A3LSLS-BU10J

APPLICANT : SAMSUNG Electronics Co., Ltd.

Model: SLS-BU10J

EUT Type: Excellent Home LTE

The measurements shown in this report were made in accordance with the procedures specified in §2.947. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998, 21 U.S.C. 853(a)



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Manager of Telecommunication testing center

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Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-R-1709-E004	September 8, 2017	- First Approval Report

RF Exposure Statement

1. LIMITS

According to §1.1310 and §2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures

Frequency range (MHz)	Electric field Strength (V/m)	Magnetic field Strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
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

2. MAXIMUM PERMISSIBLE EXPOSURE Prediction

Prediction of MPE limit at a given distance

$$S = PG/4\pi R^2$$

S = Power density

P = power input to antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

3. RESULTS

3-1. Band 13

Max Average output Power for Multi input Multi output (MIMO)	22.000	dBm
Max Average output Power for Multi input Multi output (MIMO)	158.489	mW
Prediction distance	20.000	cm
Prediction frequency	756.000	MHz
Antenna Gain(typical)	4.520	dBi
Antenna Gain(numeric)	2.831	-
Power density at prediction frequency(S)	0.0893	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	0.5040	mW/cm ²

3-2. Band 4

Max Average output Power for Multi input Multi output (MIMO)	22.000	dBm
Max Average output Power for Multi input Multi output (MIMO)	158.489	mW
Prediction distance	20.000	cm
Prediction frequency	2155.000	MHz
Antenna Gain(typical)	7.360	dBi
Antenna Gain(numeric)	5.445	-
Power density at prediction frequency(S)	0.171684	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm ²