HCT CO.,LTD.

74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA
TEL: +82-31-645-6300 FAX: +82-31-645-6401

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:
August 07, 2017
Test Site/Location:
HCT CO., LTD., 74,Seoicheon-ro 578beon-gil,Majang-myeo,Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA
Report No.: HCT-R-1707-E012-1
HCT FRN: 0005866421

FCC ID	**: A3LRFV01U-D2A**
APPLICANT	**: SAMSUNG Electronics Co., Ltd.**

Model: RFV01U-D2A

EUT Type: RRU(RFV01U)

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)

Report prepared by : Kyung Soo Kang
Engineer of Telecommunication testing center

Approved by : Jong Seok Lee
Manager of Telecommunication testing center

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-R-1707-E012	July 28, 2017	- First Approval Report
HCT-R-1707-E012-1	August 07, 2017	- Change the results.

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)	54.040	dBm
Max Average output Power for Multi input Multi output (MIMO)	253512.863	mW
Prediction distance	1000.000	cm
Prediction frequency	756.000	MHz
Antenna Gain(typical)	10.865	dBi
Antenna Gain(numeric)	12.204	-
Power density at prediction frequency(S)	0.2462	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.5040	mW/cm^2

3-2. Band 5

Max Average output Power for Multi input Multi output (MIMO)	54.040	dBm
Max Average output Power for Multi input Multi output (MIMO)	253512.863	mW
Prediction distance	1000.000	cm
Prediction frequency	894.000	MHz
Antenna Gain(typical)	10.865	dBi
Antenna Gain(numeric)	12.204	-
Power density at prediction frequency(S)	0.2462	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.5960	mW/cm^2

Simultaneous transmission operations

1. Simultaneous MPE 10 m is 0.2462 + 0.2462 = 0.4924 < 0.5040

*The Worst case Band13, 5 : 54.040 dBm is Higest Power.