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TEST REPORT

FCC MPE Test for AT1K01-A10

APPLICANT
SAMSUNG Electronics Co., Ltd.

REPORT NO.
HCT-RF-1907-FC012

DATE OF ISSUE
30 July 2019

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FCC ID
A3LAT1K01-A10

Applicant	**SAMSUNG Electronics Co., Ltd.** 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
Product Name	AU(AT1K01)
Model Name	AT1K01-A10

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.
This test results were applied only to the test methods required by the standard.

Tested by
Kwang Il Yoon (signature)

Technical Manager
Jong Seok Lee (signature)

HCT CO., LTD.
Soo Chan Lee
SooChan Lee / CEO

REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	30 July 2019	Initial Release

The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of the FCC Rules under normal use and maintenance.

RF Exposure Statement

1. Limit

- According to § 1.1310 RF exposure is calculated.

Table 1 – 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 Exposure				
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
300-1,500			f/300	6
1,500-100,000			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
300-1,500			f/1500	30
1,500-100,000			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 to 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. 1cc ~ 8cc Mode

EIRP[Radiated Power]	63.00	dBm
EIRP[Radiated Power]	1995262.315	mW
Prediction distance	400.00	cm
Prediction frequency	27 500 ~ 28 350	MHz
Power density at prediction frequency (S)	0.99236	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.00	mW/cm^2

Note:

1) MPE is calculated at the worst case of E.I.R.P for 1cc ~ 8cc