

TEST REPORT

FCC MPE Test for TM03LNCAHK0
Class II Permissive Change

APPLICANT
LG Electronics Inc.

REPORT NO.
HCT-RF-2107-FI008

DATE OF ISSUE
July 26, 2021

Tested by
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TEST REPORT

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TM03LNCAHK0

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Additional Model

-

Applicant

LG Electronics Inc.

2621, Nambusunhwan-ro, Gangnam-gu, Seoul, Republic of Korea

**Eut Type
Model Name**

AVN Modem Module
TM03LNCAHK0

FCC ID

BEJGEN21CA

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.

REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	July 26, 2021	Initial Release

Engineering Statement:

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.

If this report is required to confirmation of authenticity, please contact to www.hct.co.kr

RF Exposure Statement

1. Limit

According to § 1.1310, § 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 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

- WCDMA850-

Max Peak output Power at antenna input terminal	25.00	dBm
Max Peak output Power at antenna input terminal	316.23	mW
Prediction distance	20.00	cm
Prediction frequency	824 - 849	MHz
Antenna Gain including Cable (typical)	-1.310	dBi
Antenna Gain including Cable (numeric)	0.740	-
Power density at prediction frequency(S)	0.0465	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	0.5493	mW/cm ²

- WCDMA1900-

Max Peak output Power at antenna input terminal	25.00	dBm
Max Peak output Power at antenna input terminal	316.23	mW
Prediction distance	20.00	cm
Prediction frequency	1850 - 1910	MHz
Antenna Gain including Cable (typical)	-0.300	dBi
Antenna Gain including Cable (numeric)	0.933	-
Power density at prediction frequency(S)	0.0587	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm ²

- LTE Band 2-

Max Peak output Power at antenna input terminal	25.70	dBm
Max Peak output Power at antenna input terminal	371.54	mW
Prediction distance	20.00	cm
Prediction frequency	1850.0 – 1910.0	MHz
Antenna Gain including Cable (typical)	-0.300	dBi
Antenna Gain including Cable (numeric)	0.933	-
Power density at prediction frequency(S)	0.0690	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm ²

- LTE Band 4-

Max Peak output Power at antenna input terminal	25.70	dBm
Max Peak output Power at antenna input terminal	371.54	mW
Prediction distance	20.00	cm
Prediction frequency	1 710 – 1 755	MHz
Antenna Gain including Cable (typical)	-1.090	dBi
Antenna Gain including Cable (numeric)	0.778	-
Power density at prediction frequency(S)	0.0575	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm ²

- LTE Band 5-

Max Peak output Power at antenna input terminal	25.70	dBm
Max Peak output Power at antenna input terminal	371.54	mW
Prediction distance	20.00	cm
Prediction frequency	824 – 849	MHz
Antenna Gain including Cable (typical)	-1.310	dBi
Antenna Gain including Cable (numeric)	0.740	-
Power density at prediction frequency(S)	0.0547	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	0.5493	mW/cm ²

- LTE Band 17-

Max Peak output Power at antenna input terminal	25.70	dBm
Max Peak output Power at antenna input terminal	371.54	mW
Prediction distance	20.00	cm
Prediction frequency	704 – 716	MHz
Antenna Gain including Cable (typical)	-3.640	dBi
Antenna Gain including Cable (numeric)	0.433	-
Power density at prediction frequency(S)	0.0320	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	0.4773	mW/cm ²