

TEST REPORT

of

FCC CFR 47 part 1, 1.1307(b), 1.1310

FCC ID: BEJGEN11NAN

Equipment Under Test : Telematics
Model Name : GEN11NAN
Variant Model Name(s) : -
Applicant : LG Electronics USA, Inc
Manufacturer : LG Electronics Inc.
Date of Receipt : 2026.05.22
Date of Test(s) : 2026.06.19 ~ 2026.06.24
Date of Issue : 2026.06.29

In the configuration tested, the EUT complied with the standards specified above. This test report does not assure KOLAS accreditation.

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We are responsible for all the information of this test report except for the data(※) provided by the customer.

Tested by:



Finn Nam

Technical
Manager:



Jinhyoung Cho

SGS Korea Co., Ltd. Gunpo Laboratory



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Report Number: F690501-RF-RTL007121

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1. General Information

1.1. Testing Laboratory

SGS Korea Co., Ltd. (Gunpo Laboratory)

- 10-2, LS-ro 182beon-gil, Gunpo-si, Gyeonggi-do, Korea, 15807
- 4, LS-ro 182beon-gil, Gunpo-si, Gyeonggi-do, Korea, 15807
- CAB Identifier: KR0150

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1.2. Details of Applicant

Applicant : LG Electronics USA, Inc.

Address : 1000 Sylvan Avenue, Englewood Cliffs, New Jersey, United States, 07632

Contact Person : Cho, Hee-jae

Phone No. : +1 201 470 2696

1.3. Details of Manufacturer

Company : LG Electronics Inc.

Address : 128, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea, 07336

1.4. Description of EUT

Kind of Product	Telematics
Model Name	GEN11NAN
Serial Number	603VIQSK55124
Power Supply	DC 12 V
Rated Power	GSM 850: 33 dB m GSM 1 900: 30 dB m WCDMA II, V: 23 dB m WCDMA IV: 22.7 dB m LTE Band 2, 5, 12, 13, 17: 23 dB m LTE Band 4: 22.7 dB m
Frequency Range	GSM 850: 824 MHz ~ 849 MHz GSM 1900: 1 850 MHz ~ 1 910 MHz WCDMA II: 1 850 MHz ~ 1 910 MHz WCDMA IV: 1 710 MHz ~ 1 755 MHz WCDMA V: 824 MHz ~ 849 MHz LTE Band 2: 1 850 MHz ~ 1 910 MHz LTE Band 4: 1 710 MHz ~ 1 755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz
Modulation Technique	QPSK, 16QAM, GMSK, 8PSK
Antenna Type	folded metal type
Antenna Gain^{**}	699 MHz ~ 716 MHz: 4.35 dB i 777 MHz ~ 787 MHz: 4.35 dB i 824 MHz ~ 849 MHz: 4.00 dB i 1 710 MHz ~ 1 755 MHz: 0.42 dB i 1 850 MHz ~ 1 910 MHz: 2.50 dB i
H/W Version	CCM Rev.E
S/W Version	v4.58
FVIN	6.65

1.5. Summary of Test Results

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 1		
Section	Test Item(s)	Result
1.1307(b)(3)	RF Exposure Evaluation	Pass

1.6. Test Report Revision

Revision	Report Number	Date of Issue	Description
0	F690501-RF-RTL007121	2026.06.29	Initial

2. RF Exposure Evaluation

2.1. Environmental evaluation and exposure limit according to FCC CFR 47 part 1, 1.1307(b), 1.1310

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time
(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

2.1.1. Friis transmission formula: $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot R^2)$

Where P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

P_d the limit of MPE, 1 mW/cm². If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

2.1.2. Test Result of RF Exposure Evaluation

Test Item : RF Exposure Evaluation Data
Test Mode : Normal Operation

2.1.3. Output Power into Antenna & RF Exposure Evaluation Distance

GSM 850

- Maximum tune up tolerance

Frequency (MHz)	Output Average Power to Antenna (dB m)	power reduction (dB)	Antenna Gain (dB i)	Duty Cycle	Power Density at 20 cm (mW/cm ²)	Limits (mW/cm ²)
824 ~ 849	34.00	1.00	4.00	0.25	0.249 270	0.549 333

GSM 1 900

- Maximum tune up tolerance

Frequency (MHz)	Output Average Power to Antenna (dB m)	power reduction (dB)	Antenna Gain (dB i)	Duty Cycle	Power Density at 20 cm (mW/cm ²)	Limits (mW/cm ²)
1 850 ~ 1 910	31.00	3.50	2.50	0.25	0.049 736	1

WCDMA - Band II

- Maximum tune up tolerance

Frequency (MHz)	Output Average Power to Antenna (dB m)	Antenna Gain (dB i)	Power Density at 20 cm (mW/cm ²)	Limits (mW/cm ²)
1 850 ~ 1 910	24.00	2.50	0.088 865	1

WCDMA - Band IV

- Maximum tune up tolerance

Frequency (MHz)	Output Average Power to Antenna (dB m)	Antenna Gain (dB i)	Power Density at 20 cm (mW/cm ²)	Limits (mW/cm ²)
1 710 ~ 1 755	23.70	0.42	0.051 372	1

WCDMA - Band V

- Maximum tune up tolerance

Frequency (MHz)	Output Average Power to Antenna (dB m)	Antenna Gain (dB i)	Power Density at 20 cm (mW/cm ²)	Limits (mW/cm ²)
824 ~ 849	24.00	4.00	0.125 525	0.549 333

LTE Band 2

- Maximum tune up tolerance

Frequency (MHz)	Output Average Power to Antenna (dB m)	Antenna Gain (dB i)	Power Density at 20 cm (mW/cm ²)	Limits (mW/cm ²)
1 850 ~ 1 910	24.00	2.50	0.088 865	1

LTE Band 4

- Maximum tune up tolerance

Frequency (MHz)	Output Average Power to Antenna (dB m)	Antenna Gain (dB i)	Power Density at 20 cm (mW/cm ²)	Limits (mW/cm ²)
1 710 ~ 1 755	23.70	0.42	0.051 372	1

LTE Band 5

- Maximum tune up tolerance

Frequency (MHz)	Output Average Power to Antenna (dB m)	Antenna Gain (dB i)	Power Density at 20 cm (mW/cm ²)	Limits (mW/cm ²)
824 ~ 849	24.00	4.00	0.125 525	0.549 333

LTE Band 12

- Maximum tune up tolerance

Frequency (MHz)	Output Average Power to Antenna (dB m)	Antenna Gain (dB i)	Power Density at 20 cm (mW/cm ²)	Limits (mW/cm ²)
699 ~ 716	24.00	4.35	0.136 060	0.466 000

LTE Band 13

- Maximum tune up tolerance

Frequency (MHz)	Output Average Power to Antenna (dB m)	Antenna Gain (dB i)	Power Density at 20 cm (mW/cm ²)	Limits (mW/cm ²)
777 ~ 787	24.00	4.35	0.136 060	0.518 000

LTE Band 17

- Maximum tune up tolerance

Frequency (MHz)	Output Average Power to Antenna (dB m)	Antenna Gain (dB i)	Power Density at 20 cm (mW/cm ²)	Limits (mW/cm ²)
704 ~ 716	24.00	4.35	0.136 060	0.469 333

Note;

- The power density Pd (5th column) at a distance of 20 cm calculated from the friis transmission formula is far below the limit of 1 mW/cm².
- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.
- This equipment should be installed and operated with minimum 20 cm between the radiator and your body.
- The antenna gain of this transmitter is less than 6 dB i and must not be collocated or operating in conjunction with any other antenna or transmitter unless authorized to do so by the FCC.
- According to KDB 447498 D01 RF Exposure Guidance 4.1.
- Power Density at 20 cm was calculated with power reduction.

- End of the Test Report -