TEST REPORT

DT&C Co., Ltd.
42, Yurim-ro, 154Beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea, 17042
Tel : 031-321-2664, Fax : 031-321-1664

1. Report No : DRTFCC2007-0197(2)
2. Customer
   - Name : LG Electronics USA, Inc.
   - Address : 111 Sylvan Avenue, North Building Englewood Cliffs, NJ 07632
3. Use of Report : FCC Original Grant
4. Product Name / Model Name : Mobile Phone / LM-G910EMW
   FCC ID : ZNFG910EMW
5. Test Method Used : ANSI C63.10-2013
   Test Specification : FCC Part 15.225
6. Date of Test : 2020.05.08 ~ 2020.05.20, 2020.06.11 ~ 2020.07.01
7. Location of Test : ☒ Permanent Testing Lab ☐ On Site Testing
8. Testing Environment : Refer to appended test report.
9. Test Result : Refer to the attached test result.

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.

Affirmation	Tested by Name: JungWoo Kim (Signature)	Reviewed by Name: GeunKi Son (Signature)

2020. 07. 10.

DT&C Co., Ltd.

Not abided by KS Q ISO / IEC 17025 and KOLAS accreditation.

If this report is required to confirmation of authenticity, please contact to report@dtnc.net

Test Report Version

Test Report No.	Date	Description	Revised by	Reviewed by
DRTFCC2007-0197	Jul. 03, 2020	Initial issue	InHee Bae	GeunKi Son
DRTFCC2007-0197(1)	Jul. 09, 2020	Revised the section 1	JungWoo Kim	GeunKi Son
DRTFCC2007-0197(1)	Jul. 10, 2020	Revised the section 1	JungWoo Kim	GeunKi Son

CONTENTS

1. General Information

1.1 Explanations for Reference Test Data

1.1.1 Introduction

This report includes the NFC test data of FCC ID: ZNFG910HMW with reference to KDB 484596 D01v01.
The applicant takes full responsibility that the test data as reference section below represents compliance for FCC ID: ZNFG910EMW

Reference FCC ID	Exhibit type	Separated FCC ID
ZNFG910HMW	Original Grant	ZNFG910EMW

1.1.2 Explain the Differences

FCC ID: ZNFG910EMW is same the internal printed circuit board with FCC ID: ZNFG910HMW. Two products differ only the depopulation of components for the purposes of adding or removing frequency bands of operating in non US. (It does not changed the SW/HW component of NFC)

Change Bands(Frequency) Information

FCC ID	ZNFG910EMW	ZNFG910HMW
LTE	B1,2,3,4,5,7,8,12,13,17,20,28,32,38,39,40,41,66	B1,2,3,4,5,7,8,12,13,17,20,25,26,28,38,40,41,66

Component Changes Information

REF.	ZNFG910EMW	ZNFG910HMW	Changes(vs ZNFG910HMW)
U1201	EAN64893201	EAN64996301	MB L-PAMID
FL1360	EAM64393501	DNI	B32 PRx SAW added (B32 is supported)
FL1301	EAN64973501	DNI	B32 DRx module added (B32 is supported)
FL5610	EAM62491401	DNI	GPS Extractor (for B32) added
FL5602	DNI	EAM65742901	GPS SAW deleted
FL1201	EAM64390401	DNI	B39 PRx SAW added (B39 is supported)

1.1.3 Spot Check Verification Data

Equipment Class (capability)	FCC Part	Mode	TX Freq. (MHz)	Test item	Test note	Detector Mode	Reference FCC ID: ZNFG910HMW		Separated FCC ID: ZNFG910EMW		Limit (dBuV/m)	Deviation (dB)
							Frequency (MHz)	Result (dBuV/m)	Frequency (MHz)	Result (dBuV/m)		
DXX (NFC)	15.225	106 kbps	13.56	Field strength(@30m)	-	Peak	13.56	10.00	13.56	10.40	84.00	0.40

Note1: The spot check were performed based on worst-case results reported in the original FCC report.
The spot check test results are within 3dB and two products shows a good correlation. It also complies with the FCC/IC limit.

1.1.4 Refer Section

Reference FCC ID: ZNFG910HMW

Equipment Class	FCC Part	Capability	Band(MHz)	Exhibit type	Report title	Reference Sections
DXX	Part 15.225	NFC	13.56	Original Grant	DXX	All

1.2. Testing Laboratory

DT&C Co., Ltd.		
The 3 m test site and conducted measurement facility used to collect the radiated data are located at the 42, Yurim-ro, 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea 17042. The test site complies with the requirements of § 2.948 according to ANSI C63.4-2014. **- FCC MRA Accredited Test Firm No. : KR0034**		
www.dtnc.net		
Telephone	:	+ 82-31-321-2664
FAX	:	+ 82-31-321-1664

1.3. Testing Environment

Ambient Condition	
▪ Temperature	+22 ℃ ~ +23 ℃
▪ Relative Humidity	38 % ~ 42 %

1.4. Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with requirements of ANSI C 63.4-2014. All measurement uncertainty values are shown with a coverage factor of *k* = 2 to indicate a 95 % level of confidence.

Parameter	Measurement uncertainty
AC conducted emission	3.6 dB (The confidence level is about 95 %, k = 2)
Radiated Disturbance (Below 1 GHz)	4.9 dB (The confidence level is about 95 %, k = 2)

1.5. Details of Applicant

Applicant : LG Electronics USA, Inc.
Address : 111 Sylvan Avenue, North Building Englewood Cliffs, NJ 07632
Contact person : Kyung-Su Han

1.6. Description of EUT

FCC Equipment Class	Low Power Communications Device Transmitter(DXX)
EUT	Mobile Phone
Model Name	LM-G910EMW
Add Model Name	LMG910EMW, G910EMW
Serial Number	Identical prototype
Power Supply	DC 3.87 V
Frequency Band	13.56 MHz
Modulation Type	ASK
Channel(s)	1
Antenna type	Loop Antenna

1.7. EUT CAPABILITIES

This EUT contains the following capabilities:
GSM/EDGE 850/1900, WCDMA/HSUPA 850/1700/1900, Multi-band LTE, 802.11b/g/n/ac WLAN(2.4 GHz) 802.11a/n/ac WLAN(5 GHz), Bluetooth(BDR, EDR, LE), NFC, WPC, Dual Display.

2. Information about test items

2.1 Test mode

Test mode1	Continuous transmitting mode
Test mode2	Continuous transmitting mode(With Dual Display[Note1])

Note 1: The dual display cover is provided to the users as an accessory.
So, the radiated test items were performed at standalone configuration and condition of equipped with dual display.
(The dual screen communicates with the main unit via USB connection.)

Note 2: This model supports data rates up to 424 kbps.

Note 3: The worst case data rate was determined according to the measured all of the fundamental emission level.
And data rate was tested at the worst case(106 kbps).

2.2 Tested frequency

Channel	TX Frequency(MHz)
Lowest	**13.56**
Middle	**-**
Highest	**-**

2.3 EMI Suppression Device(s)/Modifications

EMI suppression device(s) added and/or modifications made during testing
→ None

3. Antenna requirements

"An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section."

The antenna is attached on the device by means of unique coupling method (Spring Tension).
Therefore this E.U.T Complies with the requirement of §15.203

4. Test report

4.1 Summary of tests

FCC part section(s)	RSS section(s)	Parameter	Limit	Test condition	Status Note 1
2.1049	-	20 dB Bandwidth	-	Radiated	C
2.1049	RSS-Gen [6.7]	Occupied Bandwidth	-		NA
15.225 (a)	RSS-210 [B6(a)]	In-Band Emissions	15,848 μV/m @ 30 m 13.553 MHz – 13.567 MHz		C Note 3
15.225 (b)	RSS-210 [B6(b)]	In-Band Emissions	334 μV/m @ 30 m 13.410 MHz – 13.553 MHz 13.567 MHz – 13.710 MHz		C Note 3
15.225 (c)	RSS-210 [B6(c)]	In-Band Emissions	106 μV/m @ 30 m 13.110 MHz – 13.410 MHz 13.710 MHz – 14.010 MHz		C Note 3
15.225 (d) 15.209	RSS-210 [B6(d)] RSS-GEN [8.9]	Out-of Band Emissions	Emissions outside of the specified band (13.110-14.010 MHz) must meet the radiated limits detailed in 15.209		C Note 3
15.225 (e)	RSS-210 [B6]	Frequency Stability	±0.01 % of operating frequency	Temp & Humid Test Chamber	C
15.207	RSS-Gen [8.8]	AC Conducted Emissions	FCC Part 15.207	AC Line Conducted	C
15.203	-	Antenna Requirements	FCC Part 15.203	-	C

Note 1: **C**=Comply **NC**=Not Comply **NT**=Not Tested **NA**=Not Applicable
Note 2: For radiated emission tests below 30 MHz were performed on semi-anechoic chamber which is correlated with OATS.
Note 3: This test items were performed both normal and Dual Screen capability conditions.

4.2 Transmitter requirements

4.2.1 20dB bandwidth

- Procedure:

The 20 dB Bandwidth is measured with a spectrum analyzer connected via a receive antenna placed near the EUT while the EUT is operating in transmission mode.

And spectrum analyzer setting use following test procedure of **ANCSI C63.10-2013 – Section 6.9.2.**

1. Center frequency = EUT channel center frequency
2. Span = 2 ~ 5 times the OBW
3. RBW = 1 % ~ 5 % OBW
4. VBW ≥ 3 x RBW
5. Detector = Peak
6. Trace = Max hold
7. The trace was allowed to stabilize
8. Determine the reference value = Set the spectrum analyzer marker to the highest level of the displayed trace
9. Using the marker-delta function of the instrument, determine the "−xx dB down amplitude" using [(reference value) − xx].
10. Reset the marker-delta function and move the marker to the other side of the emission until the delta marker amplitude is at the same level as the reference marker amplitude. The marker-delta frequency reading at this point is the specified emission bandwidth.

- Measurement Data: Comply

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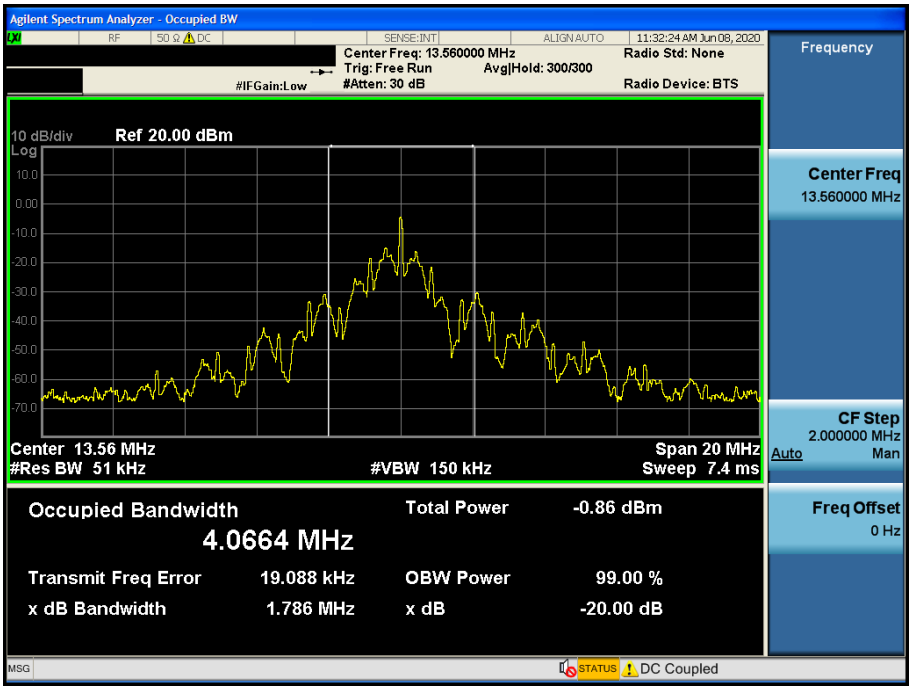


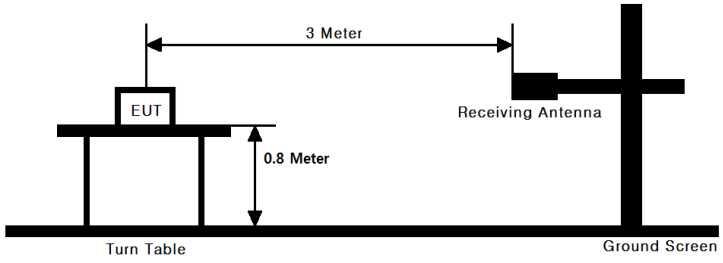
Note1: The 20dB bandwidth was measured at all data rate and the worst case data was reported (This test item was tested at 212 kbps.)

- Minimum Standard: NA

4.2.2 In-band emissions

- Test Configuration

Below 30 MHz



- Procedure: The radiated emission was tested according to the **section 6.4 of the ANSI C63.10-2013.**

The EUT was placed on a 0.8 m high non-conductive table and it was placed at 3m distance from the antenna. Measurements were performed for each of the three antenna orientations. (ie. parallel, perpendicular, and ground-parallel)
Also, measurements were performed with the EUT oriented in 3 orthogonal axis and rotated 360 degrees to determine worst-case orientation for maximum emissions.

RBW = As specified in below table, VBW ≥ 3 x RBW, Sweep = Auto, Detector = Peak
Trace mode = Max Hold until the trace stabilizes.

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

- Minimum Standard: Part 15.225(a), (b), (c) & RSS-210 [B6(a), (b), (c)]

Frequency Band [MHz]	Limit at 30 m measurement distance	
	[uV/m]	[dBuV/m]
13.553-13.567	15,848	84.00
13.410-13.553 13.567-13.710	334	50.47
13.110-13.410 13.710-14.010	106	40.51

- **Measurement Data: Test mode 1**

Tested Frequency : **13.56 MHz**

Measurement Distance : **3 Meters**

Test Frequency Band [MHz]	Freq. [MHz]	EUT Axis.	ANT (Note 1)	Reading Level [dBuV]	T.F [dB/m]	Field Strength @3 m [dBuV/m]	Field Strength @30 m [dBuV/m]	Limit [dBuV/m]	Margin [dB]
13.110 ~ 13.410	13.349	Z	P	16.60	18.70	35.30	-4.70	40.51	45.21
13.410 ~ 13.553	13.553	Z	P	26.50	18.70	45.20	5.20	50.47	45.27
13.553 ~ 13.567	13.560	Z	P	31.30	18.70	50.00	10.00	84.00	74.00
13.567 ~ 13.710	13.567	Z	P	27.10	18.70	45.80	5.80	50.47	44.67
13.710 ~ 14.010	13.773	Z	P	17.70	18.70	36.40	-3.60	40.51	44.11

- **Measurement Data: Test mode 2**

Tested Frequency : **13.56 MHz**

Measurement Distance : **3 Meters**

Test Frequency Band [MHz]	Freq. [MHz]	EUT Axis.	ANT (Note 1)	Reading Level [dBuV]	T.F [dB/m]	Field Strength @3 m [dBuV/m]	Field Strength @30 m [dBuV/m]	Limit [dBuV/m]	Margin [dB]
13.110 ~ 13.410	13.349	Z	P	18.20	18.70	36.90	-3.10	40.51	43.61
13.410 ~ 13.553	13.553	Z	P	28.00	18.70	46.70	6.70	50.47	43.77
13.553 ~ 13.567	13.560	Z	P	32.70	18.70	51.40	11.40	84.00	72.60
13.567 ~ 13.710	13.567	Z	P	28.40	18.70	47.10	7.10	50.47	43.37
13.710 ~ 14.010	13.773	Z	P	17.40	18.70	36.10	-3.90	40.51	44.41

Note 1. Loop antenna orientation
"P": Parallel, **"V"**: perpendicular, **"G"**: ground-parallel

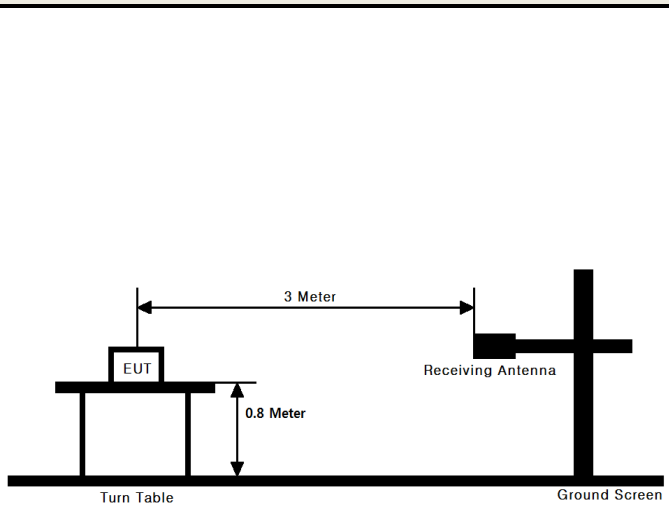
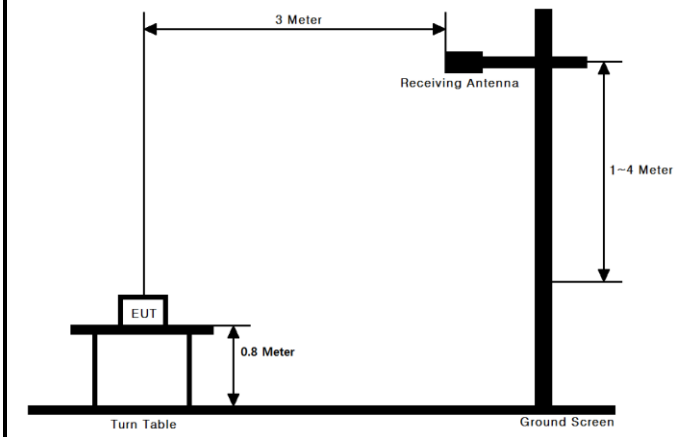
Note 2. This test item was performed at 3 m and the data were extrapolated to the specified measurement distance of 30 m using the square of an inverse linear distance extrapolation factor (40 dB/decade) as specified in §15.31(f)2.
- Extrapolation Factor = $20 \log_{10}(30/3)^2 = 40$ dB

Note 3. All data were recorded using a spectrum analyzer employing a peak detector.
If PK results were meet Quasi-peak limit, Quasi-peak measurements were omitted.

Note 4. Sample Calculation.
Margin = Limit – Field Strength @ 30 m / Field Strength @ 30 m = Field Strength @ 3 m – 40 dB
Field Strength @ 3 m = Reading + T.F / T.F = AF + CL
Where, T.F = Total Factor, AF = Antenna Factor, CL = Cable Loss

4.2.3 Out-of-band emissions

- Test configuration

Below 30 MHz	30 MHz ~ 1 GHz
	

- Procedure: The radiated emission was tested according to the **section 6.4, 6.5 of the ANSI C63.10-2013.**

The EUT was tested from 9 kHz up to the 1 GHz excluding the band 13.110 MHz - 14.010 MHz.
The EUT was placed on a 0.8 m high non-conductive table and it was placed at 3m distance from the antenna.
For measurements below 30MHz were performed for each of the three antenna orientations.
(ie. parallel, perpendicular, and ground-parallel) For measurements above 30 MHz were performed for each of the both horizontal and vertical polarizations.
Also, measurements were performed with the EUT oriented in 3 orthogonal axis and rotated 360 degrees to determine worst-case orientation for maximum emissions.

RBW = As specified in below table, VBW ≥ 3 x RBW, Sweep = Auto, Detector = Peak
Trace mode = Max Hold until the trace stabilizes.

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

- Minimum Standard: Part 15.209, 225(d) & RSS-210[B6(d)], RSS-GEN[8.9]

▪ FCC Part 15.209(a):

Frequency [MHz]	Field Strength [uV/m]	Measurement Distance [Meters]
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30	30	30
30 ~ 88	100 **	3
88 ~ 216	150 **	3
216 ~ 960	200 **	3
Above 960	200	3

** Except as provided in 15.209(g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54 MHz - 72 MHz, 76 MHz - 88 MHz, 174 MHz - 216 MHz or 470 MHz - 806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g. 15.231 and 15.241.

▪ FCC Part 15.209(b):

In the emission table above, the tighter limit applies at the band edges.

- Measurement Data: Test mode 1

Tested Frequency : **13.56 MHz**

Measurement Distance : **3 Meters**

Frequency [MHz]	EUT Axis.	ANT (Note 1)	Reading [dBuV]	T.F [dB/m]	Distance factor [dB]	Field Strength [dBuV/m]	Limit [dBuV/m]	Margin [dB]
0.805	Z	P	30.6	18.2	40	8.8	29.5	20.7
3.075	Z	P	22.2	18.4	40	0.6	29.5	28.9
27.120	Z	P	24.4	9.3	40	-6.3	29.5	35.8
39.700	Z	V	33.3	-9.3	0	24	40	16.0
75.590	Z	H	34.6	-11.7	0	22.9	40	17.1
119.240	Z	V	29.8	-9.2	0	20.6	43.5	22.9
953.427	Z	H	25.7	7.1	0	32.8	46	13.2

- Measurement Data: Test mode 2

Tested Frequency : **13.56 MHz**

Measurement Distance : **3 Meters**

Frequency [MHz]	EUT Axis.	ANT (Note 1)	Reading [dBuV]	T.F [dB/m]	Distance factor [dB]	Field Strength [dBuV/m]	Limit [dBuV/m]	Margin [dB]
0.344	Z	P	30.1	18.2	80	-31.7	16.9	48.6
0.795	Z	P	28.6	18.2	40	6.8	29.6	22.8
16.100	Z	P	16.2	18.8	40	-5	29.5	34.5
27.120	Z	P	13.4	19.6	40	-7	29.5	36.5
42.610	Z	H	37.5	-8.8	0	28.7	40	11.3
74.620	Z	H	31.3	-11.5	0	19.8	40	20.2
119.240	Z	V	30.1	-9.2	0	20.9	43.5	22.6
952.457	Z	V	26	7	0	33	46	13.0

Note 1. Loop antenna orientation (30 MHz Below)
"P"= Parallel, **"V"**= perpendicular, **"G"**= ground-parallel
Bilog antenna polarization (30 MHz above)
"H"= Horizontal, **"V"**= Vertical

Note 2. All data were recorded using a spectrum analyzer employing a peak detector.
If PK results were meet Quasi-peak limit, Quasi-peak measurements were omitted.

Note 3. No other spurious and harmonic emissions were reported greater than listed emissions above table.

Note 4. Sample calculation
Margin = Limit – Field Strength
Field Strength = Reading + T.F – Distance factor
T.F = AF + CL – AG
Distance factor = 20log(Measurement distance / The measured distance)^2
Where, T.F = Total Factor, AF = Antenna Factor, CL = Cable Loss, AG = Amplifier Gain

4.2.4 Frequency Stability

- Procedure:

Part 15.225 requires that devices operating in the 13.553 MHz – 13.567 MHz shall maintain the carrier frequency within 0.01 % of the operating frequency over the temperature variation of -20 degrees to +50 degrees C at normal supply voltage.

- Measurement Data: Comply

Operating Frequency : **13,560,000 Hz**

VOLTAGE (%)	POWER (V_{DC})	TEMP (℃)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.870	+20(ref)	13,559,910	-90	+0.000 660
100 %		-20	13,560,083	+83	+0.000 616
100 %		-10	13,560,060	+60	+0.000 441
100 %		0	13,559,884	-116	+0.000 852
100 %		+10	13,559,936	-64	+0.000 471
100 %		+20	13,560,136	+136	+0.000 999
100 %		+30	13,560,098	+98	+0.000 725
100 %		+40	13,560,113	+113	+0.000 831
100 %		+50	13,559,910	-90	+0.000 660
115 %	4.451	+20	13,560,187	+187	+0.001 380
BATT.ENDPOINT	3.100	+20	13,560,167	+167	+0.001 231

- Minimum Standard: Part 15. 225(e) & RSS-210 [B6]

The frequency tolerance of the carrier signal shall be maintained within ±0.01 % of the operating frequency.

4.2.5 AC Line Conducted Emissions

- Test Requirements and limit

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN).

Frequency Range (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 ~ 0.5	66 to 56 *	56 to 46 *
0.5 ~ 5	56	46
5 ~ 30	60	50

* Decreases with the logarithm of the frequency

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

- Test Configuration

See test photographs for the actual connections between EUT and support equipment.

- Test Procedure

1. The EUT is placed on a wooden table 80 cm above the reference ground plane.
2. The EUT is connected via LISN to a test power supply.
3. The measurement results are obtained as described below:
4. Detectors – Quasi Peak and Average Detector.

- Measurement Data: Comply (refer to the next page)

Test mode 1

Measurement Data

Results of Conducted Emission

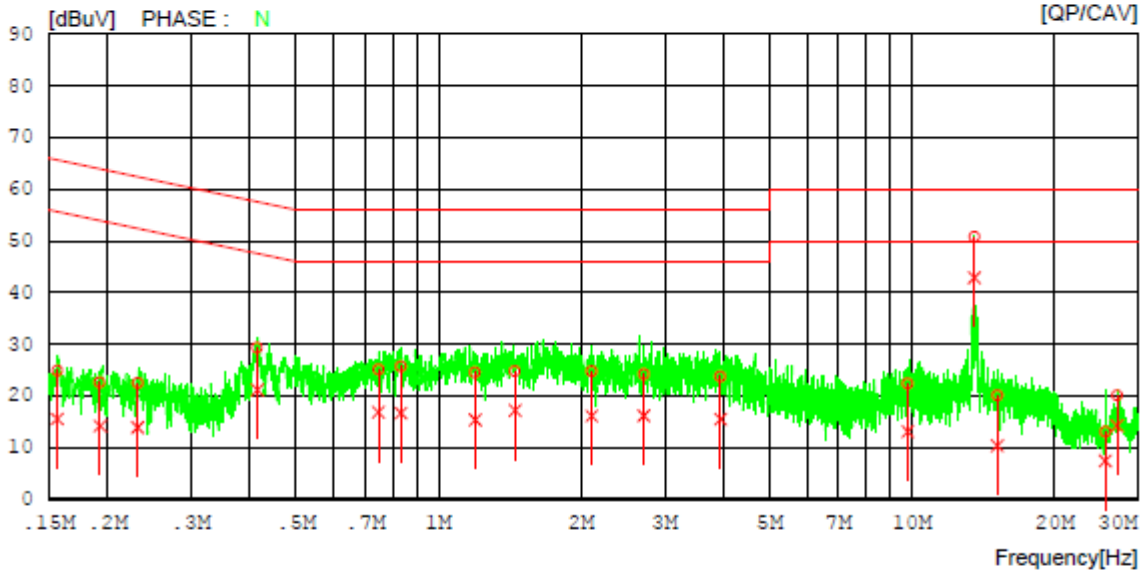
DTNC

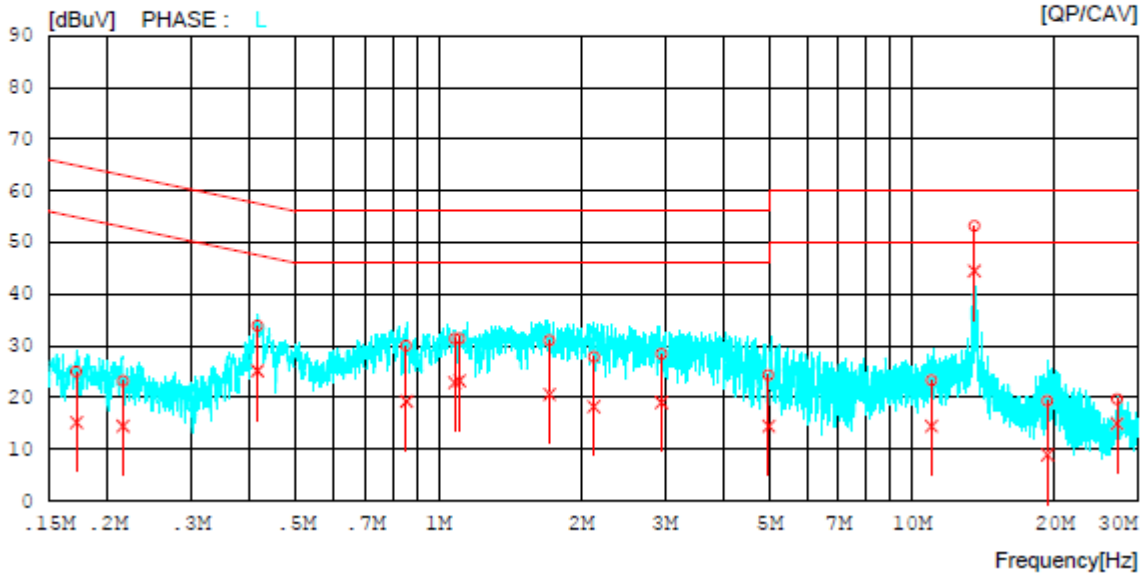
Date 2020-05-08

Order No.	DTNC2004-03119	Referrence No.	
Model No.	LM-G910HMW	Power Supply	120 V, 60 Hz
Serial No.		Temp/Humi.	23 'C / 42 %
Test Condition	NFC	Operator	InHee Bae

Memo

LIMIT : FCC P15.207 QP
FCC P15.207 AV





Measurement Data

Results of Conducted Emission

DTNC Date 2020-05-08

Order No.	DTNC2004-03119	Referrence No.	
Model No.	LM-G910HMW	Power Supply	120 V, 60 Hz
Serial No.		Temp/Humi.	23 'C / 42 %
Test Condition	NFC	Operator	InHee Bae

Memo

LIMIT : FCC P15.207 QP
FCC P15.207 AV

NO	FREQ	READING QP	READING CAV	C.FACTOR	RESULT QP	RESULT CAV	LIMIT QP	LIMIT CAV	MARGIN QP	MARGIN CAV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.15652	14.88	5.56	10.00	24.88	15.56	65.65	55.65	40.77	40.09	N
2	0.19240	12.64	4.19	10.02	22.66	14.21	63.93	53.93	41.27	39.72	N
3	0.23129	12.45	3.87	10.02	22.47	13.89	62.40	52.40	39.93	38.51	N
4	0.41368	19.27	11.10	10.06	29.33	21.16	57.57	47.57	28.24	26.41	N
5	0.74647	15.08	6.83	10.05	25.13	16.88	56.00	46.00	30.87	29.12	N
6	0.83233	15.63	6.63	10.06	25.69	16.69	56.00	46.00	30.31	29.31	N
7	1.19453	14.52	5.38	10.07	24.59	15.45	56.00	46.00	31.41	30.55	N
8	1.44918	14.76	7.09	10.07	24.83	17.16	56.00	46.00	31.17	28.84	N
9	2.10673	14.64	6.03	10.11	24.75	16.14	56.00	46.00	31.25	29.86	N
10	2.71201	14.12	6.02	10.14	24.26	16.16	56.00	46.00	31.74	29.84	N
11	3.93997	13.53	5.32	10.19	23.72	15.51	56.00	46.00	32.28	30.49	N
12	9.79171	12.04	2.79	10.35	22.39	13.14	60.00	50.00	37.61	36.86	N
13	13.55936	40.33	32.46	10.42	50.75	42.88	60.00	50.00	9.25	7.12	N
14	15.15192	9.65	-0.03	10.44	20.09	10.41	60.00	50.00	39.91	39.59	N
15	25.60367	2.53	-3.12	10.59	13.12	7.47	60.00	50.00	46.88	42.53	N
16	27.11755	9.44	3.64	10.63	20.07	14.27	60.00	50.00	39.93	35.73	N
17	0.17169	14.92	5.08	10.01	24.93	15.09	64.88	54.88	39.95	39.79	L
18	0.21532	13.14	4.44	10.02	23.16	14.46	63.00	53.00	39.84	38.54	L
19	0.41453	23.72	15.05	10.04	33.76	25.09	57.56	47.56	23.80	22.47	L
20	0.85467	19.91	9.20	10.05	29.96	19.25	56.00	46.00	26.04	26.75	L
21	1.08246	21.28	12.77	10.06	31.34	22.83	56.00	46.00	24.66	23.17	L
22	1.10790	21.26	13.09	10.06	31.32	23.15	56.00	46.00	24.68	22.85	L
23	1.71477	20.86	10.47	10.10	30.96	20.57	56.00	46.00	25.04	25.43	L
24	2.12937	17.69	8.04	10.12	27.81	18.16	56.00	46.00	28.19	27.84	L
25	2.95476	18.27	8.85	10.15	28.42	19.00	56.00	46.00	27.58	27.00	L
26	4.98168	14.00	4.18	10.22	24.22	14.40	56.00	46.00	31.78	31.60	L
27	10.99338	12.86	4.10	10.35	23.21	14.45	60.00	50.00	36.79	35.55	L
28	13.55936	42.70	34.06	10.41	53.11	44.47	60.00	50.00	6.89	5.53	L
29	19.32882	8.82	-1.58	10.49	19.31	8.91	60.00	50.00	40.69	41.09	L
30	27.12076	9.05	4.32	10.58	19.63	14.90	60.00	50.00	40.37	35.10	L

APPENDIX

TEST EQUIPMENT FOR TESTS

Date of Test(original test): 2020.05.08 ~ 2020.05.20

Type	Manufacturer	Model	Cal.Date (yy/mm/dd)	Next.Cal.Date (yy/mm/dd)	S/N
Spectrum Analyzer	Agilent Technologies	N9020A	19/12/16	20/12/16	MY50410357
Spectrum Analyzer	Agilent Technologies	N9020A	19/06/26	20/06/26	US47360812
DC Power Supply	Agilent Technologies	66332A	19/06/25	20/06/25	MY43000211
Multimeter	FLUKE	17B	19/12/16	20/12/16	26030065WS
Signal Generator	Rohde Schwarz	SMBV100A	19/12/16	20/12/16	255571
Thermohygrometer	BODYCOM	BJ5478	19/12/18	20/12/18	120612-1
Thermohygrometer	BODYCOM	BJ5478	19/12/18	20/12/18	120612-2
Loop Antenna	Schwarzbeck	FMZB1513	20/02/19	22/02/19	1513-128
BILOG ANTENNA	Schwarzbeck	VULB 9160	19/04/23	21/04/23	9160-3362
PreAmplifier	H.P	8447D	19/12/16	20/12/16	2944A07774
Temp & Humi Test Chamber	SJ Science	SJ-TH-S50	19/06/25	20/06/25	SJ-TH-S50-130930
EMI Receiver	ROHDE&SCHWARZ	ESW44	19/07/30	20/07/30	101645
Cable	Radiall	TESTPRO3	20/01/16	21/01/16	M-01
Cable	Junkosha	MWX315	20/01/16	21/01/16	M-05
Cable	Junkosha	MWX221	20/01/16	21/01/16	M-06
Thermohygrometer	TESTO	608-H1	20/01/21	21/01/21	34862883
EMI Test Receiver	Rohde Schwarz	ESCI7	20/01/28	21/01/28	100910
PULSE LIMITER	Rohde Schwarz	ESH3-Z2	19/09/17	20/09/17	101333
LISN	SCHWARZBECK	NNLK 8121	19/05/23	20/05/23	6183
Cable	DT&C	Cable	20/01/16	21/01/16	RF-82

Note1: The measurement antennas were calibrated in accordance to the requirements of ANSI C63.5-2017
Note2: The cable is not a regular calibration item, so it has been calibrated by DT & C itself.

Date of Test(Spot check verification): 2020.06.11 ~ 2020.07.01

Type	Manufacturer	Model	Cal.Date (yy/mm/dd)	Next.Cal.Date (yy/mm/dd)	S/N
Spectrum Analyzer	Agilent Technologies	N9020A	19/12/16	20/12/16	MY50410357
Multimeter	FLUKE	17B	19/12/16	20/12/16	26030065WS
Signal Generator	Rohde Schwarz	SMBV100A	19/12/16	20/12/16	255571
Thermohygrometer	BODYCOM	BJ5478	19/12/18	20/12/18	120612-1
Loop Antenna	Schwarzbeck	FMZB1513	20/02/19	22/02/19	1513-128
EMI Receiver	ROHDE&SCHWARZ	ESW44	19/07/30	20/07/30	101645
Cable	Radiall	TESTPRO3	20/01/16	21/01/16	M-01
Cable	Junkosha	MWX315	20/01/16	21/01/16	M-05
Cable	Junkosha	MWX221	20/01/16	21/01/16	M-06

Note1: The measurement antennas were calibrated in accordance to the requirements of ANSI C63.5-2017
Note2: The cable is not a regular calibration item, so it has been calibrated by DT & C itself.

