

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. : DREFCC1804-0112(1)
2. Client / Applicant
 - Name : LG Electronics MobileComm USA, Inc.
 - Address : 1000 Sylvan Ave. Englewood Cliffs NJ 07632
3. Use of Report : Grant of Certification
4. Product Name / Model Name : Mobile phone / LM-Q710GX
5. Test Standard : ANSI C 63.4 : 2014
FCC Part 15 Subpart B
(Class B personal computers and peripherals)
6. Date of Test : Mar. 27. 2018 ~ May. 10. 2018
7. Testing Environment : Temperature (20 ~ 25) °C , Humidity (34 ~ 47) % R.H.
8. Test Result : Refer to the attached Test Result

Affirmation	Tested by	Reviewed by
	Name : JinYoung Park  (Signature)	Name : MyungJin Song  (Signature)

The test results presented in this test report are limited only to the sample supplied by applicant and the use of this test report is inhibited other than its purpose.
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May. 10. 2018

DT&C Co., Ltd.

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

CONTENTS

1. General Remarks	3
2. Test Laboratory.....	3
3. General Information of EUT.....	4
4. EUT Operations and Test Configurations	5
4.1 Principle of Configuration Selection	5
4.2 EUT Operation Mode	5
4.3 Test Configuration Mode.....	5
4.4 Supported Equipment	5
4.5 EUT In/Output Port	6
4.6 Test Voltage and Frequency	6
5. Test Summary	7
6. Test Environment.....	7
7. Test Results : Emission.....	8
7.1 Conducted Disturbance	8
7.2 Radiated Disturbance	11
8. Revision History.....	23

1. General Remarks

This report contains the result of tests performed by :

DT&C Co., Ltd.

42, Yurim-ro, 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea 17042

<http://www.dtnc.net>

Tel: +82-31-321-2664 Fax: +82-31-321-1664

2. Test Laboratory

DT&C Co., Ltd. has been accredited / filed / authorized by the agencies listed in the following table;

Certificate	Nation	Agency	Code	Remark
Accreditation	Korea	KOLAS	393	ISO/IEC 17025
	South Africa	SABS	0006	ISO/IEC 17025
Site Filing	USA	FCC	KR0034 101842 678747, 596748, 804488, 165783	Accredited 2.948 Listed
	Canada	IC	5740A-3 5740A-4	Registered
	Japan	VCCI	C-1427 R-1364, R-3385, R-4076, R-4180, T-1442, G-10338, G-754, G-10815	Registered
Certification	Korea	KC	KR0034	Designation
	Germany	TUV	CARAT 17 11 89112 005	ISO/IEC 17025

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the "General requirements for the competent of calibration and testing laboratory".

3. General Information of EUT

Applicant	LG Electronics MobileComm USA, Inc. 1000 Sylvan Ave. Englewood Cliffs NJ 07632
Manufacturer	LG Electronics MobileComm USA, Inc. 1000 Sylvan Ave. Englewood Cliffs NJ 07632
Product Name	Mobile phone
Model Name	LM-Q710GX
Add Model Name	LMQ710GX, Q710GX
RF Module Name	None
FCC ID	ZNFQ710GX
Rated Power	DC 3.85 V
Remarks	None

Related Submittal(s) / Grant(s)
Original submittal only

4. EUT Operations and Test Configurations

4.1 Principle of Configuration Selection

Emission :

The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use. For each testing mode different configurations were used, Refer to the individual tests.

4.2 EUT Operation Mode

No.	Mode	Description
1	PC LINK	The EUT is reading, writing, and erasing internal storage.

4.3 Test Configuration Mode

No.	Mode	Description
1	'READ' & 'WRITE' & 'DELETE'	EUT was connected PC by USB cable and continuously operated.

4.4 Supported Equipment

Used*	Product Type	Manufacturer	Model	Remarks
AE	KEYBOARD	LITEON Technology	KB25	None
AE	MOUSE	LG	SM-9023	None
AE	LCD MONITOR	DELL	UP2414Qt	None
AE	PC	DELL	DCNE	None
AE	SSD 3.0	SAMSUNG	MU-PT250B	None
AE	PRINTER	Bixelon	SRP-770	None
AE	Headset	COSY	COV909	None

*Abbreviations:

AE - Auxiliary/Associated Equipment, or
SIM - Simulator

4.5 EUT In/Output Port

Name	Type*	Cable Max. >3m	Cable Shielded	Cable Back shell	Remarks
USB OUT	I/O	1.7	Shield	Plastic	KEYBOARD
USB OUT	I/O	1.7	Shield	Plastic	MOUSE
POWER IN	AC	1.8	Non-Shield	Plastic	LCD MONITOR
DSUB OUT	I/O	1.8	Shield	Plastic	LCD MONITOR
POWER IN	AC	1.8	Non-Shield	Plastic	PC
DSUB IN	I/O	1.8	Shield	Plastic	PC
PARALLEL IN	I/O	2.0	Shield	Plastic	PC
SERIAL IN	I/O	1.9	Shield	Plastic	PC
USB IN	I/O	1.7	Shield	Plastic	PC
USB IN	I/O	1.7	Shield	Plastic	PC
USB IN	I/O	1.0	Shield	Plastic	PC
STEREO IN/OUT	I/O	2.0	Non-Shield	Plastic	PC
USB OUT	I/O	1.0	Shield	Plastic	SSD 3.0
POWER IN	DC	1.8	Non-Shield	Plastic	PRINTER
PARALLEL OUT	I/O	2.0	Shield	Plastic	PRINTER
SERIAL OUT	I/O	1.9	Shield	Plastic	PRINTER
STEREO IN/OUT	I/O	2.0	Non-Shield	Plastic	Headset

*Abbreviations:
 AC = AC Power Port DC = DC Power Port N/E = Non-Electrical
 I/O = Signal Input or Output Port
 TP = Telecommunication Ports

4.6 Test Voltage and Frequency

Case	Voltage (V)	Frequency (Hz)	Phases	Remarks
1	AC 120	60 Hz	Single	None

5. Test Summary

Test Items	Applied Standards	Results
Conducted Disturbance	ANSI C63.4 : 2014	C
Radiated Disturbance	ANSI C63.4 : 2014	C
C=Comply N/C=Not Comply N/T=Not Tested N/A=Not Applicable		

The data in this test report are traceable to the national or international standards.

-Conducted Disturbance

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
11.43063	L1	44.49	CAV	50.00	5.51

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dB μ V/m]	Detector	Limit [dB μ V/m]	Margin [dB]
74.632	Vertical	35.18	QP	40.00	4.82

6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (°C)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2018-03-27	25	34	100.0
Radiated Disturbance	2018-04-02	20	45	-
	2018-05-10	24	47	

7. Test Results : Emission

7.1 Conducted Disturbance

ANSI C63.4	Mains terminal disturbance voltage		Result
<p>Method: The AMN placed 0,8 m from the boundary of the unit under test and bonded to a ground reference plane. This distance was between the closest points of the AMN and the EUT. All other units of the EUT and associated equipment were at least 0,8 m from the AMN. All power was connected to the system through Artificial Mains Network (AMN). Conducted voltage measurements on mains lines were made at the output of the AMN. The measuring port of the LISN for EUT was connected to spectrum analyzer. Using conducted emission test software, the emissions were scanned with peak detector mode. After scanning over the frequency range, suspected emissions were selected to perform final measurement. When performing final measurement, the receiver was used which has Quasi-Peak detector and CISPR Average detector. For (0.15 ~ 30) MHz frequency range, Quasi-Peak detector with 10 kHz RBW and 30 kHz VBW was used. By varying the configuration of the test sample and the cable routing it was attempted to maximize the emission.</p>			Comply
Fully configured sample scanned over the following frequency range	Frequency range on each side of line	Measurement Point	
	150 kHz to 30 MHz	Mains	
EUT mode (Refer to clauses 4)	Test configuration mode	1	
	EUT Operation mode	1	
Limits – Class A			
Frequency (MHz)	Limit dB μ V		
	Quasi-Peak	Average	
0.15 to 0.50	79	66	
0.50 to 30	73	60	
Limits – Class B			
Frequency (MHz)	Limit dB μ V		
	Quasi-Peak	Average	
0.15 to 0.50	66 to 56	56 to 46	
0.50 to 5	56	46	
5 to 30	60	50	

Measurement uncertainty	
Expended uncertainty U (95 %, Confidence level, $k = 2$)	2.36 dB

Measurement Instrument					
Description	Model	Manufacturer	Identifier	Cal. Date	Cal. Due
MEASUREMENT SOFTWARE	EMI-C VER. 2.00.0171	TSJ	N/A	N/A	N/A
EMI TEST RECEIVER	ESR7	ROHDE & SCHWARZ	101109	2017.11.16	2018.11.16
TWO-LINE V-NETWORK	ENV216	ROHDE & SCHWARZ	101979	2017.12.18	2018.12.18
LISN	LISN1600	TTI	197204	2017.06.07	2018.06.07
TRANSIENT LIMITER	TL-B0930A	EMCIS	11002	2017.09.07	2018.09.07
50 OHM TERMINATOR	CT-01	TME	N/A	2017.12.26	2018.12.26

Mains terminal disturbance voltage _ Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60

Results of Conducted Emission

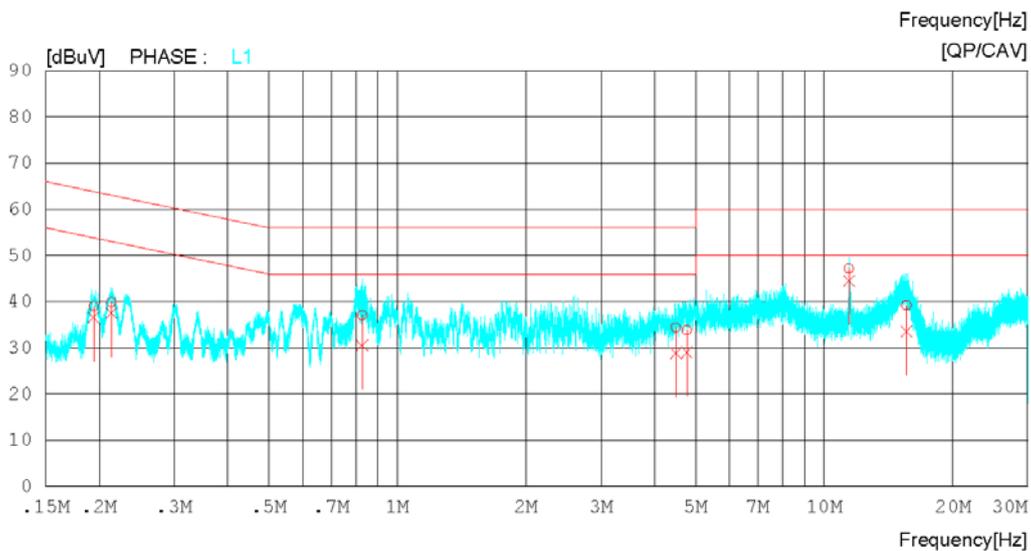
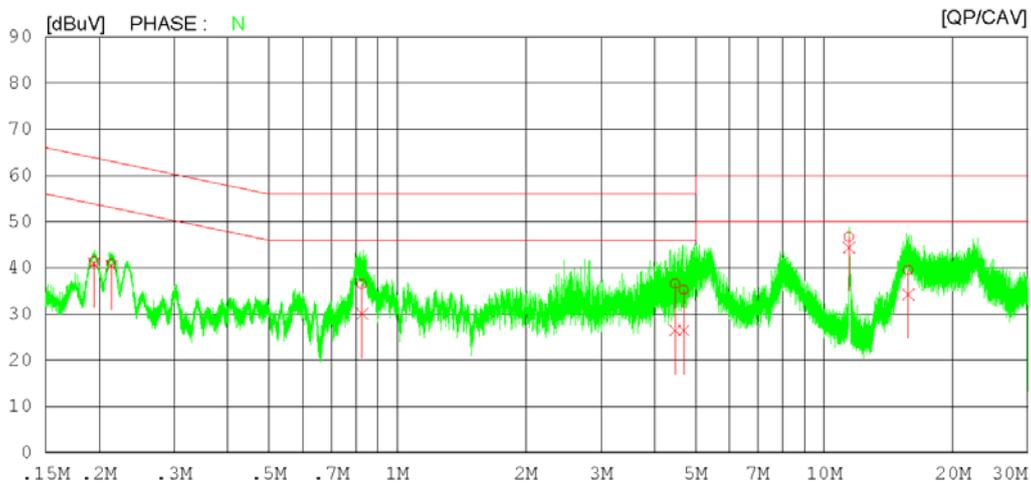
DT&C

Date 2018-03-27

Order No. DTNC1803-02004
 Power Supply 120 V 60 Hz
 Temp/Humi/Atm 25 °C 34 % R.H. 100.0 kPa
 Test Condition PC LINK

Model Name LM-Q710GX

LIMIT : CISPR22_B QP
 CISPR22_B AV



Results of Conducted Emission

DT&C

Date 2018-03-27

Order No. DTNC1803-02004
 Power Supply 120 V 60 Hz
 Temp/Humi/Atm 25 °C 34 % R.H. 100.0 kPa
 Test Condition PC LINK

Model Name LM-Q710GX

LIMIT : CISPR22_B QP
 CISPR22_B AV

NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	CAV [dBuV]		QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	QP [dBuV]	CAV [dBuV]	
1	0.19453	21.38	20.96	20.02	41.40	40.98	63.84	53.84	22.44	12.86	N
2	0.21387	20.97	20.39	19.98	40.95	40.37	63.05	53.05	22.10	12.68	N
3	0.82557	16.48	9.99	20.05	36.53	30.04	56.00	46.00	19.47	15.96	N
4	4.47889	16.39	6.30	20.17	36.56	26.47	56.00	46.00	19.44	19.53	N
5	4.68710	15.10	6.29	20.19	35.29	26.48	56.00	46.00	20.71	19.52	N
6	11.43063	25.75	23.48	20.94	46.69	44.42	60.00	50.00	13.31	5.58	N
7	15.75207	18.37	13.06	21.16	39.53	34.22	60.00	50.00	20.47	15.78	N
8	0.19446	18.89	16.43	20.04	38.93	36.47	63.84	53.84	24.91	17.37	L1
9	0.21375	19.81	17.48	19.99	39.80	37.47	63.06	53.06	23.26	15.59	L1
10	0.82685	16.82	10.38	20.15	36.97	30.53	56.00	46.00	19.03	15.47	L1
11	4.49510	14.14	8.55	20.27	34.41	28.82	56.00	46.00	21.59	17.18	L1
12	4.76786	13.48	8.66	20.30	33.78	28.96	56.00	46.00	22.22	17.04	L1
13	11.43063	26.10	23.48	21.01	47.11	44.49	60.00	50.00	12.89	5.51	L1
14	15.60330	17.95	12.40	21.17	39.12	33.57	60.00	50.00	20.88	16.43	L1

Calculation

N : Neutral phase, L1 : Live phase
C.FACTOR(dB) : Pulse Limiter(dB) + Cable loss(dB) + Insertion loss of LISN(dB)
Result(dBμV) : Reading Value(dBμV) + C.FACTOR(dB)
Margin(dB) : Limit(dBμV) - Result(dBμV)

7.2 Radiated Disturbance

ANSI C63.4	Radiated disturbance 30 MHz –18 GHz				Result				
Method: Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 10 meter below 1GHz and 3 meter above 1GHz. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in horizontal and vertical polarities. Final measurements were then performed by rotating the EUT 360° and adjusting the receive antenna height from 1 to 4 m. All frequencies were investigated in both horizontal and vertical antenna polarity, where applicable. For final measurement below 1 GHz frequency range, Quasi-Peak detector with (RBW = 120 kHz Bandwidth) was used. For final measurement above 1 GHz frequency range, Peak detector with (RBW = 1 MHz Bandwidth) and CISPR Average detector with (RBW = 1 MHz Bandwidth) were used.					Comply				
EUT mode (Refer to clauses 4)		Test configuration mode		1					
		EUT Operation mode		1					
Radiated Disturbance below 1 000 MHz									
Frequency range (MHz)		Quasi-peak limit dBμV/m							
		Class A (10 m distance)		Class B (3 m distance)					
30 to 88		39.1		40					
88 to 216		43.5		43.5					
216 to 960		46.4		46					
960 to 1 000		49.5		54					
According to 15.109(g), as an alternative to the radiated emission limit shown above, digital devices may be shown to comply with the standards(CISPR), Pub. 22 shown as below.									
Frequency range (MHz)		Quasi-peak limit dBμV/m							
		Class A (10 m distance)		Class B (10 m distance)					
30 to 230		40		30					
230 to 1 000		47		37					
Radiated Disturbance for above 1 000 MHz at a measurement distance of 3 m									
Frequency range (GHz)		Peak limit dBμV/m		Average limit dBμV/m					
		Class A	Class B	Class A	Class B				
1 to 40		80	74	60	54				
The test frequency range of Radiated Disturbance measurements are listed below.									
Highest frequency generated or used in the device or on which the device operates or tunes (MHz)				Upper frequency of measurement range (MHz)					
Below 108				1 000					
108 – 500				2 000					
500 – 1 000				5 000					
Above 1 000				5 th harmonic of the highest frequency or 40 GHz, whichever is lower					
Measurement uncertainty									
Expended uncertainty <i>U</i> (95 %, Confidence level, <i>k</i> = 2)			4.16 dB, (30 ~ 1 000) MHz 3.74 dB, (1 ~ 6) GHz						

Measurement Instrument					
Description	Model	Manufacturer	Identifier	Cal. Date	Cal. Due
MEASUREMENT SOFTWARE	EMI-R VER. 2.00.0177	TSJ	N/A	N/A	N/A
EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100469	2017.07.06	2018.07.06
TRILOG BROAD BAND ANTENNA	VULB9160	SCHWARZBECK	9160-3339	2017.04.21	2019.04.21
LOW NOISE PRE AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2018.02.19	2019.02.19
PRE AMPLIFIER	8449B	H.P	3008A00887	2017.09.06	2018.09.06
BROAD-BAND HORN ANTENNA	BBHA 9120D	SCHWARZBECK	9120D-1014	2016.08.05	2018.08.05
HORN ANTENNA	EM-6969	ELECTRO-METRICS	156	2018.01.02	2019.01.02
PREAMPLIFIER	MLA-0618-B03-34	TSJ	1785642	2017.03.02	2019.03.02
LOW NOISE PRE AMPLIFIER	MLA-1840-J02-40	TSJ	13184	2017.10.10	2018.10.10
HORN ANTENNA	SAS-574	A.H.SYSTEMS INC.	155	2017.07.31	2019.07.31

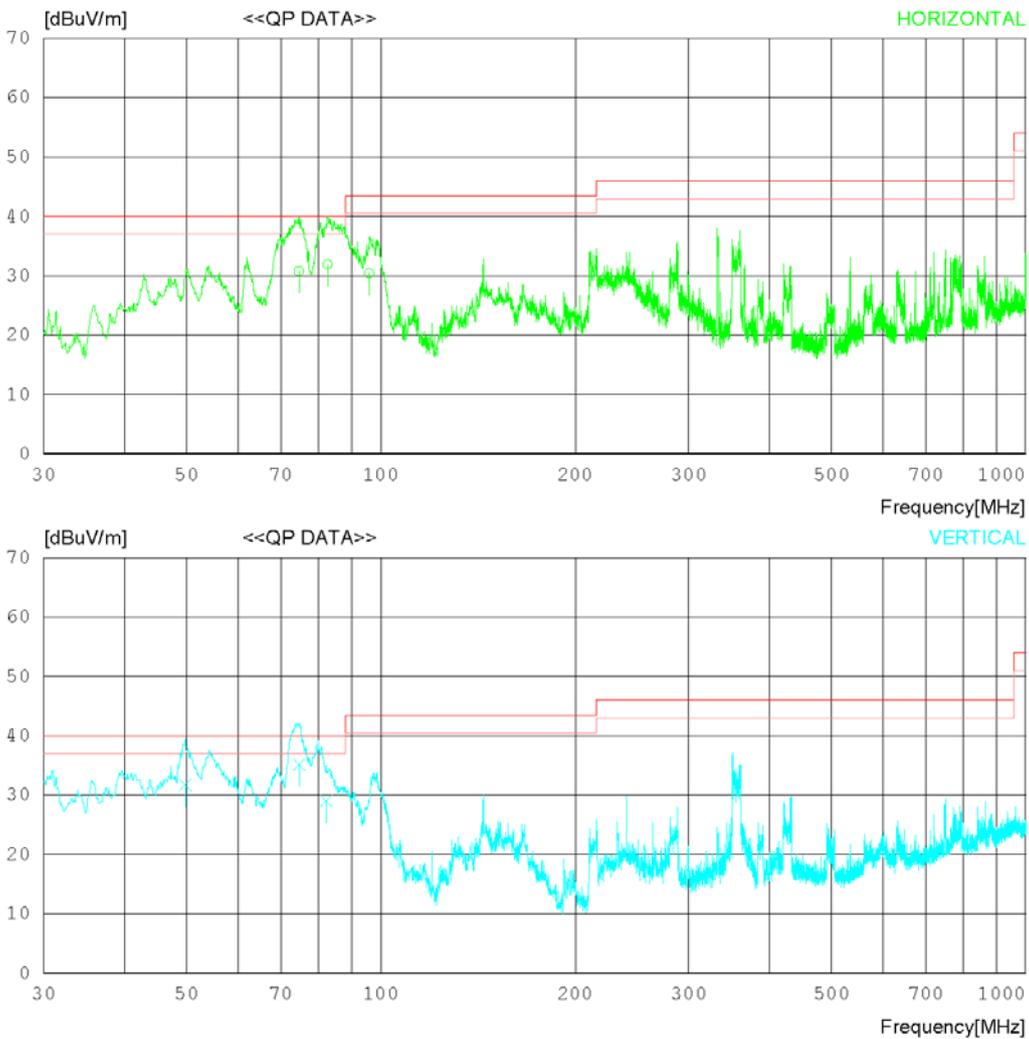
(NOTE : THE MEASUREMENT ANTENNAS WERE CALIBRATED IN ACCORDANCE TO THE REQUIREMENTS OF C63.5-2017.)

Radiated disturbance at (30 ~ 1000) MHz _ Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60

RADIATED EMISSION

Date 2018-04-02

Order No. DTNC1803-02004
 Power Supply 120 V 60 Hz
 Temp/Humi 20 °C 45 % R.H.
 Test Condition PC LINK
 Model Name LM-Q710GX
 LIMIT : FCC Part15 Subpart.B Class B (3m)
 MARGIN: 3 dB



RADIATED EMISSION

Date 2018-04-02

Order No. DTNC1803-02004
 Power Supply 120 V 60 Hz
 Temp/Humi 20 °C 45 % R.H.
 Test Condition PC LINK

Model Name LM-Q710GX

LIMIT : FCC Part15 Subpart.B Class B (3m)
 MARGIN: 3 dB

No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	74.612	45.70	9.19	1.43	25.53	30.79	40.00	9.21	155	223
2	82.573	48.50	7.49	1.47	25.54	31.92	40.00	8.08	220	127
3	95.927	46.20	8.37	1.40	25.55	30.42	43.50	13.08	150	23
----- Vertical -----										
4	49.768	44.30	11.88	1.10	25.51	31.77	40.00	8.23	330	123
5	74.632	50.10	9.18	1.43	25.53	35.18	40.00	4.82	380	25
6	82.268	45.60	7.53	1.49	25.54	29.08	40.00	10.92	110	175

Radiated disturbance at (1 ~ 6) GHz _ Peak measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60

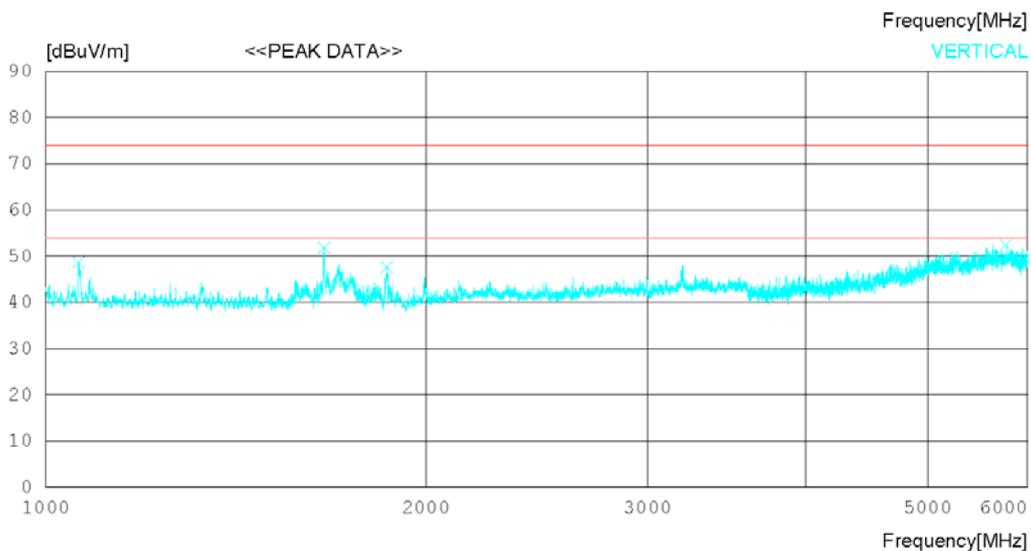
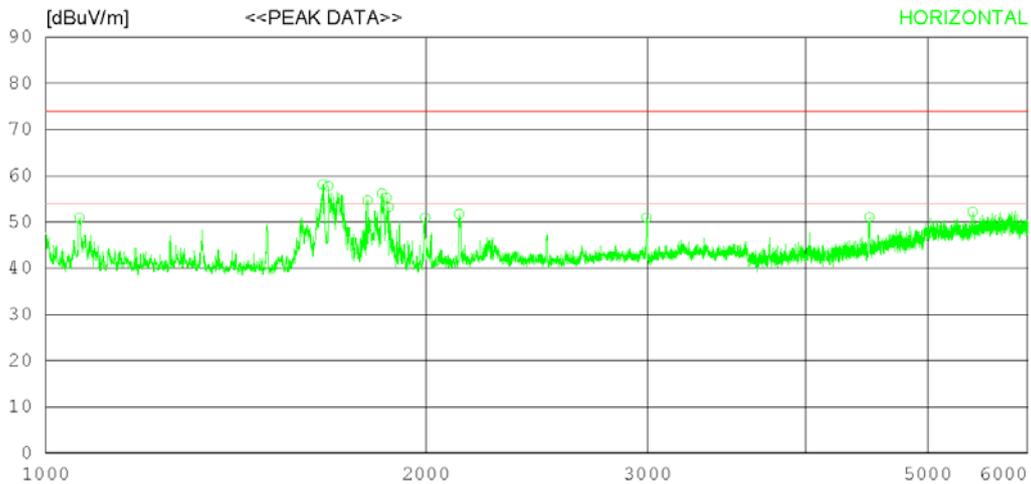
RADIATED EMISSION

Date 2018-05-10

Order No. DTNC1803-02004
 Power Supply 120 V 60 Hz
 Temp/Humi 24 °C 47 % R.H.
 Test Condition PC LINK

Model Name LM-Q710GX

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)
 FCC Part15 Subpart.B Class B (3m) - 18G(Avg)



RADIATED EMISSION

Date 2018-05-10

Order No. DTNC1803-02004
 Power Supply 120 V 60 Hz
 Temp/Humi 24 °C 47 % R.H.
 Test Condition PC LINK

Model Name LM-Q710GX

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)
 FCC Part15 Subpart.B Class B (3m) - 18G(Avg)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1063.750	54.10	25.40	3.59	32.13	50.96	74.0	23.04	100	358
2	1657.500	60.80	25.24	4.43	32.38	58.09	74.0	15.91	100	358
3	1675.000	60.40	25.23	4.48	32.38	57.73	74.0	16.27	100	194
4	1798.750	57.10	25.30	4.73	32.44	54.69	74.0	19.31	100	219
5	1846.250	58.40	25.44	4.82	32.46	56.20	74.0	17.8	100	358
6	1863.125	57.40	25.49	4.85	32.46	55.28	74.0	18.72	100	358
7	1869.375	55.30	25.51	4.86	32.47	53.20	74.0	20.8	100	219
8	1998.125	52.30	26.09	5.11	32.52	50.98	74.0	23.02	100	358
9	2126.250	51.90	27.34	5.06	32.53	51.77	74.0	22.23	100	219
10	2991.875	49.60	28.21	5.69	32.58	50.92	74.0	23.08	100	209
11	4495.625	45.10	30.49	7.92	32.45	51.06	74.0	22.94	100	214
12	5426.875	41.90	31.53	11.29	32.52	52.20	74.0	21.8	100	358
----- Vertical -----										
13	1061.875	51.80	25.40	3.58	32.13	48.65	74.0	25.35	100	184
14	1662.500	54.50	25.24	4.45	32.38	51.81	74.0	22.19	100	257
15	1863.125	49.60	25.49	4.85	32.46	47.48	74.0	26.52	100	1
16	5765.625	40.80	31.73	12.61	32.76	52.38	74.0	21.62	100	290

Radiated disturbance at (1 ~ 6) GHz _Average measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60

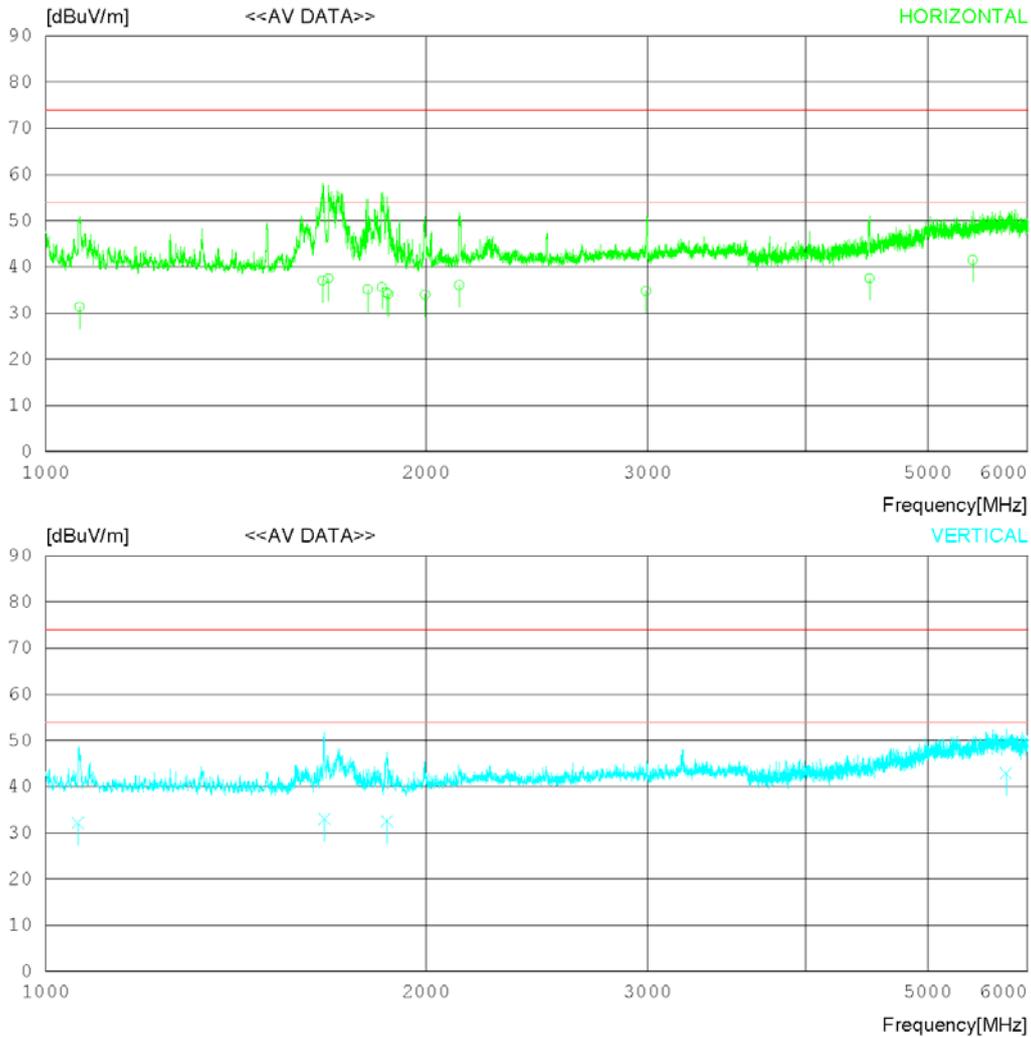
RADIATED EMISSION

Date 2018-05-10

Order No. DTNC1803-02004
 Power Supply 120 V 60 Hz
 Temp/Humi 24 °C 47 % R.H.
 Test Condition PC LINK

Model Name LM-Q710GX

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)
 FCC Part15 Subpart.B Class B (3m) - 18G(Peak)



RADIATED EMISSION

Date 2018-05-10

Order No. DTNC1803-02004
 Power Supply 120 V 60 Hz
 Temp/Humi 24 °C 47 % R.H.
 Test Condition PC LINK

Model Name LM-Q710GX

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)
 FCC Part15 Subpart.B Class B (3m) - 18G(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1063.735	34.50	25.40	3.59	32.13	31.36	54.00	22.64	105	23
2	1657.511	39.80	25.24	4.43	32.38	37.09	54.00	16.91	100	12
3	1675.628	40.20	25.22	4.47	32.38	37.51	54.00	16.49	100	186
4	1798.775	37.50	25.30	4.73	32.44	35.09	54.00	18.91	120	235
5	1846.239	37.80	25.44	4.82	32.46	35.60	54.00	18.40	115	13
6	1863.206	36.50	25.49	4.85	32.46	34.38	54.00	19.62	100	326
7	1868.053	36.20	25.50	4.86	32.46	34.10	54.00	19.90	105	235
8	1998.232	35.30	26.09	5.11	32.52	33.98	54.00	20.02	110	13
9	2126.111	36.10	27.34	5.06	32.53	35.97	54.00	18.03	110	225
10	2990.085	33.50	28.21	5.69	32.58	34.82	54.00	19.18	100	132
11	4495.532	31.60	30.49	7.91	32.45	37.55	54.00	16.45	100	236
12	5426.928	31.20	31.53	11.30	32.52	41.51	54.00	12.49	105	12
----- Vertical -----										
13	1662.322	35.70	25.24	4.45	32.38	33.01	54.00	20.99	100	215
14	1060.258	35.20	25.40	3.58	32.13	32.05	54.00	21.95	105	175
15	1863.697	34.60	25.49	4.85	32.46	32.48	54.00	21.52	110	23
16	5765.650	31.30	31.73	12.61	32.76	42.88	54.00	11.12	100	235

Radiated disturbance at (6 ~ 18) GHz _Peak measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60

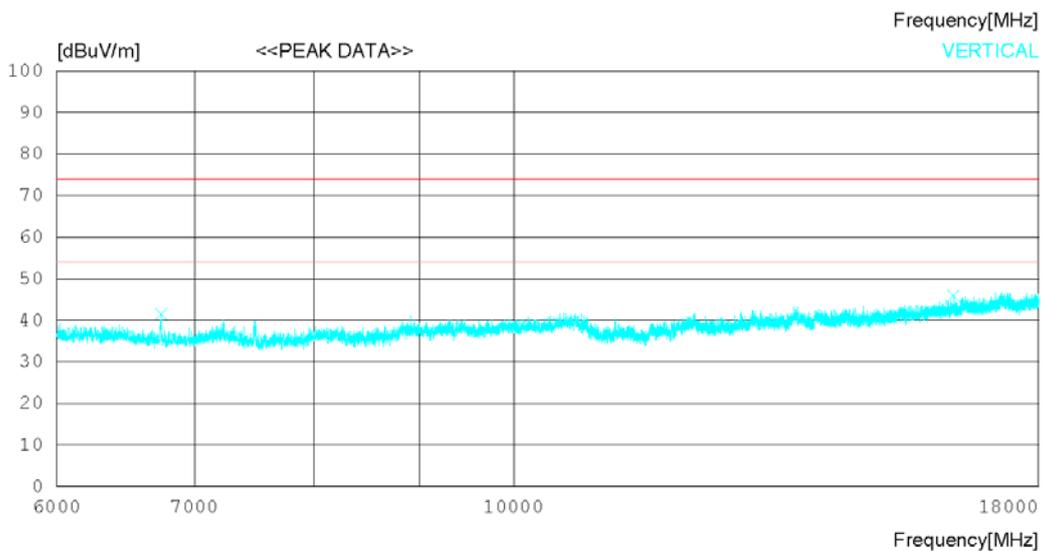
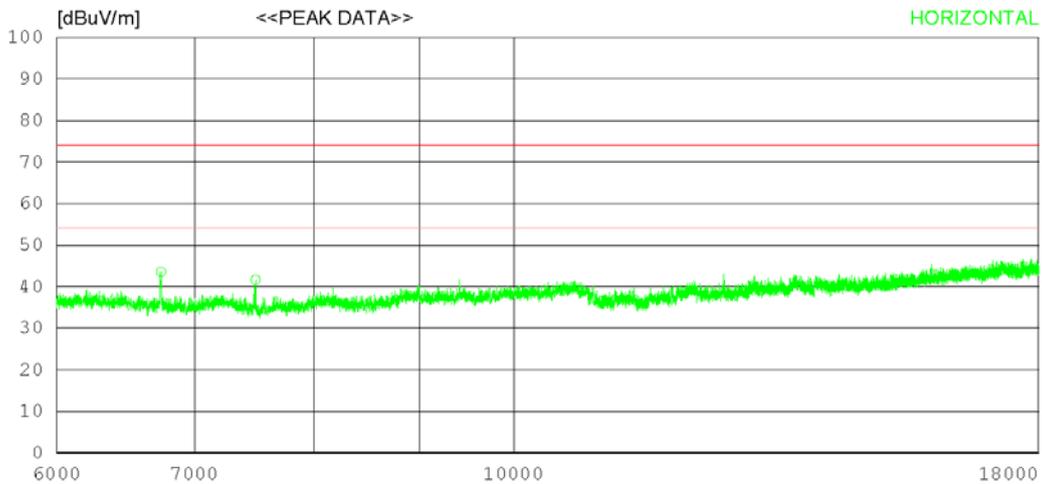
RADIATED EMISSION

Date 2018-04-02

Order No. DTNC1803-02004
 Power Supply 120 V 60 Hz
 Temp/Humi 20 °C 45 % R.H.
 Test Condition PC LINK

Model Name LM-Q710GX

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)
 FCC Part15 Subpart.B Class B (3m) - 18G(Avg)



* The measurement is performed above 18 GHz up to 30 GHz and not found emissions above 18 GHz.

RADIATED EMISSION

Date 2018-04-02

Order No. DTNC1803-02004
 Power Supply 120 V 60 Hz
 Temp/Humi 20 'C 45 % R.H.
 Test Condition PC LINK

Model Name LM-Q710GX

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)
 FCC Part15 Subpart.B Class B (3m) - 18G(Avg)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	6743.250	42.00	31.40	8.90	38.77	43.53	74.0	30.47	100	224
2	7495.500	39.40	31.37	9.66	38.80	41.63	74.0	32.37	100	234
----- Vertical -----										
3	6744.750	40.00	31.40	8.91	38.77	41.54	74.0	32.46	100	295
4	16361.250	32.40	36.74	13.29	36.41	46.02	74.0	27.98	100	1

Radiated disturbance at (6 ~ 18) GHz _ Average measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60

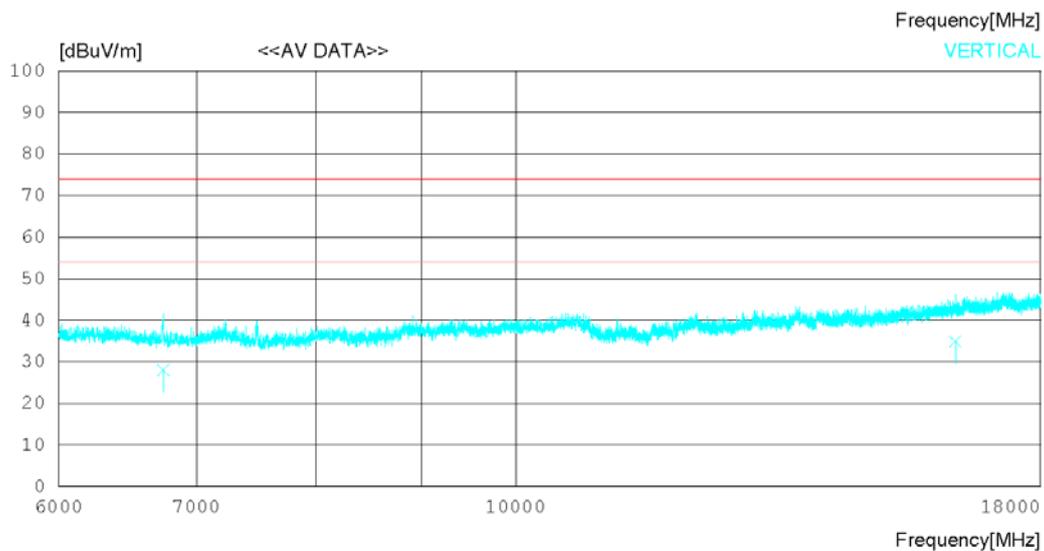
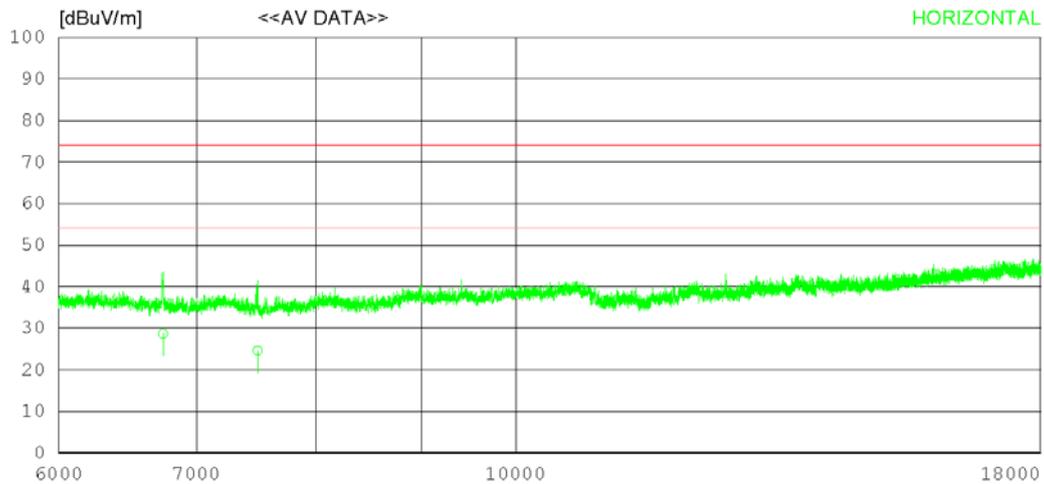
RADIATED EMISSION

Date 2018-04-02

Order No. DTNC1803-02004
 Power Supply 120 V 60 Hz
 Temp/Humi 20 °C 45 % R.H.
 Test Condition PC LINK

Model Name LM-Q710GX

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)
 FCC Part15 Subpart.B Class B (3m) - 18G(Peak)



* The measurement is performed above 18 GHz up to 30 GHz and not found emissions above 18 GHz.

RADIATED EMISSION

Date 2018-04-02

Order No. DTNC1803-02004
 Power Supply 120 V 60 Hz
 Temp/Humi 20 °C 45 % R.H.
 Test Condition PC LINK

Model Name LM-Q710GX

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)
 FCC Part15 Subpart.B Class B (3m) - 18G(Peak)

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	6743.628	27.10	31.40	8.90	38.77	28.63	54.00	25.37	105	235
2	7495.502	22.40	31.37	9.66	38.80	24.63	54.00	29.37	120	235
----- Vertical -----										
3	6744.318	26.50	31.40	8.91	38.77	28.04	54.00	25.96	110	11
4	16361.220	21.30	36.74	13.29	36.41	34.92	54.00	19.08	105	12

Calculation

N : Neutral phase, L1 : Live phase
C.FACTOR(dB) : Pulse Limiter(dB) + Cable loss(dB) + Insertion loss of LISN(dB)
Result(dBμV) : Reading Value(dBμV) + C.FACTOR(dB)
Margin(dB) : Limit(dBμV) - Result(dBμV)

8. Revision History

Date	Description	Revised By	Reviewed By
Apr. 10. 2018	Initial report	JinYoung Park	MyungJin Song
May. 10. 2018	Radiated Disturbance Retest (1 GHz ~ 6 GHz)	JinYoung Park	MyungJin Song

-End of test report-