

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. : DREFCC1804-0111

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-Q710EM

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 ~ Apr. 02. 2018

7. Testing Environment : Temperature (20 ~ 25) °C , Humidity (34 ~ 45) % 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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Apr. 10. 2018

DT&C Co., Ltd.

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

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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.dtnet.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-Q710EM
Add Model Name	LMQ710EM, Q710EM
RF Module Name	None
FCC ID	ZNFQ710EM
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	Bixolon	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 [dBμV]	Detector	Limit [dBμV]	Margin [dB]
479.956	L1	42.66	CAV	50.00	6.48

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]
97.293	Horizontal	36.05	QP	46.00	3.34

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	-

7. Test Results : Emission

7.1 Conducted Disturbance

ANSI C63.4	Mains terminal disturbance voltage		Result	
<u>Method:</u> 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.			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

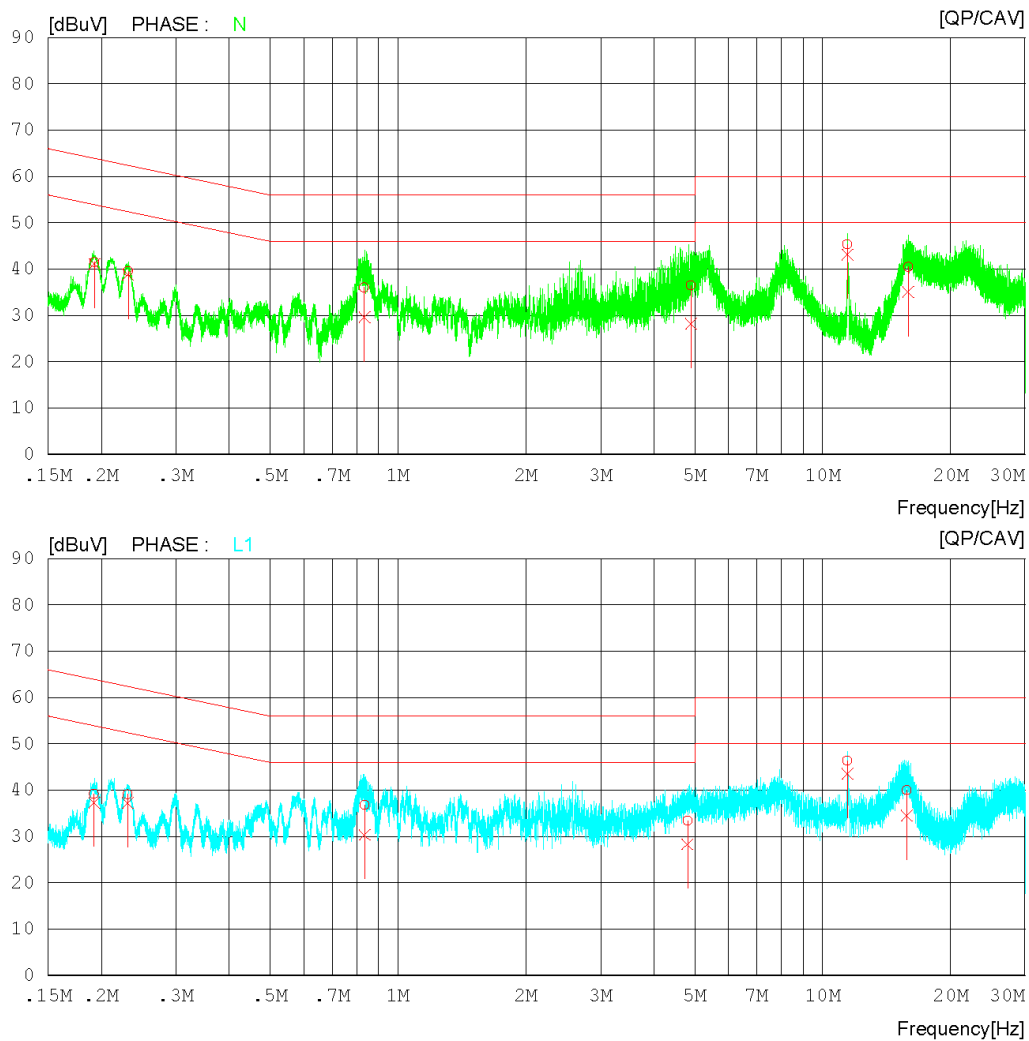
DT&C

Date 2018-03-27

Order No. DTNC1803-02003
Power Supply 120 V 60 Hz
Temp/Humi/Atm 25 'C 34 % R.H. 100.0 kPa
Test Condition PC LINK

Model Name LM-Q710EM

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

DT&C

Date 2018-03-27

Order No. DTNC1803-02003
Power Supply 120 V 60 Hz
Temp/Humi/Atm 25 °C 34 % R.H. 100.0 kPa
Test Condition PC LINK

Model Name LM-Q710EM

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	0.19303	21.49	21.09	20.02	41.51	41.11	63.91	53.91	22.40	12.80	N
2	0.23129	19.60	18.94	19.91	39.51	38.85	62.40	52.40	22.89	13.55	N
3	0.83319	16.01	9.58	20.05	36.06	29.63	56.00	46.00	19.94	16.37	N
4	4.89304	16.24	8.05	20.20	36.44	28.25	56.00	46.00	19.56	17.75	N
5	11.43066	24.46	22.20	20.94	45.40	43.14	60.00	50.00	14.60	6.86	N
6	15.88562	19.30	13.92	21.17	40.47	35.09	60.00	50.00	19.53	14.91	N
7	0.19253	19.13	17.24	20.04	39.17	37.28	63.93	53.93	24.76	16.65	L1
8	0.23066	19.19	17.29	19.92	39.11	37.21	62.43	52.43	23.32	15.22	L1
9	0.83445	16.62	10.13	20.15	36.77	30.28	56.00	46.00	19.23	15.72	L1
10	4.80563	13.02	7.95	20.30	33.32	28.25	56.00	46.00	22.68	17.75	L1
11	11.43095	25.32	22.51	21.01	46.33	43.52	60.00	50.00	13.67	6.48	L1
12	15.77708	18.81	13.26	21.16	39.97	34.42	60.00	50.00	20.03	15.58	L1

Calculation

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

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	

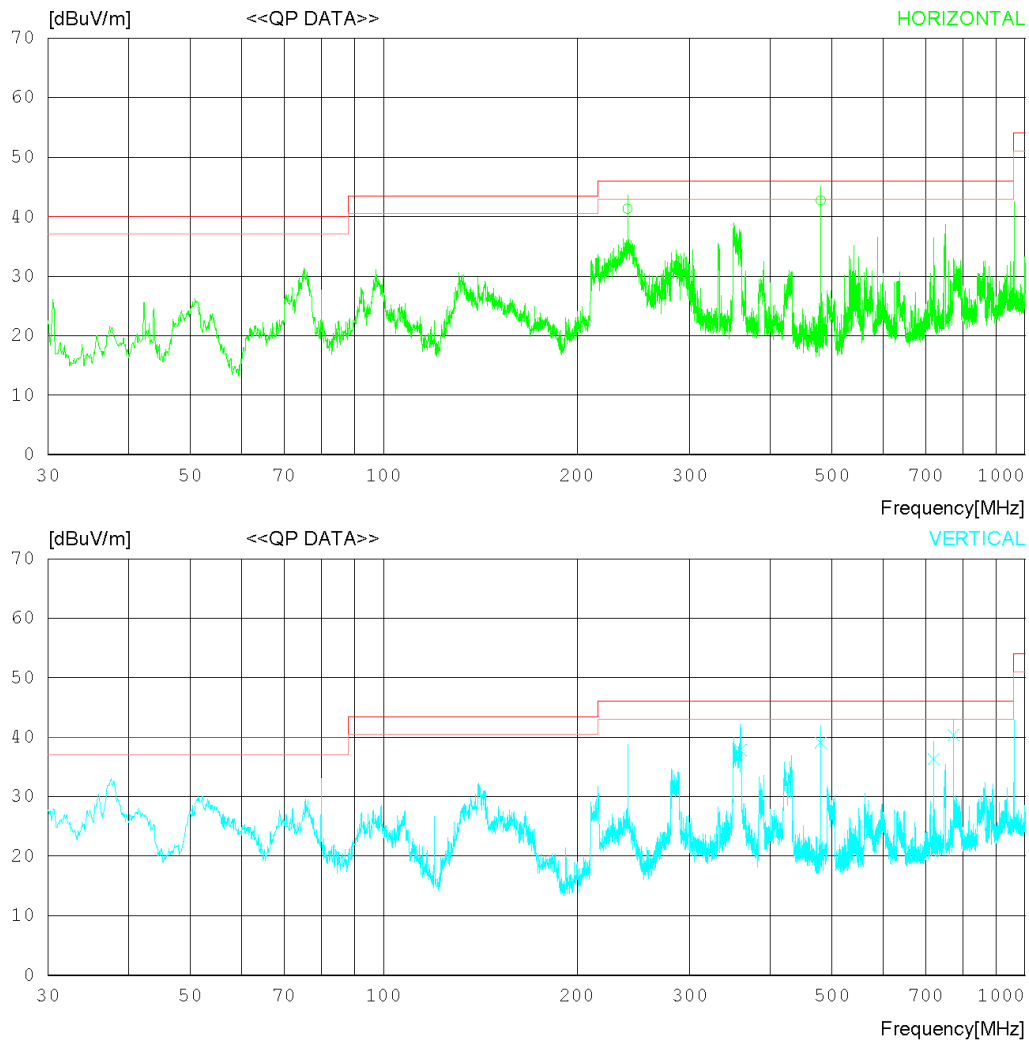
Measurement Instrument					
Description	Model	Manufacturer	Identifier	Cal. Date	Cal. Due
MEASUREMENT SOFTWARE	EMI-R VER. 2.00.0177	TSJ	N/A	N/A	N/A
EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100469	2017.07.06	2018.07.06
TRILOG BROAD BAND ANTENNA	VULB9160	SCHWARZBECK	9160-3339	2017.04.21	2019.04.21
LOW NOISE 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. DTNC1803-02003
Power Supply 120 V 60 Hz
Temp/Humi 20 'C 45 % R.H.
Test Condition PC LINK
Model Name LM-Q710EM
LIMIT : FCC Part15 Subpart.B Class B (3m)
MARGIN: 3 dB



RADIATED EMISSION

Date 2018-04-02

Order No. DTNC1803-02003
Power Supply 120 V 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition PC LINK

Model Name LM-Q710EM

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

No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	QP [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	240.068	52.60	11.60	2.68	25.56	41.32	46.00	4.68	205	358
2	479.956	46.70	17.60	3.76	25.40	42.66	46.00	3.34	105	45
----- Vertical -----										
3	359.912	45.40	14.70	3.16	25.43	37.83	46.00	8.17	115	23
4	479.941	43.10	17.60	3.76	25.40	39.06	46.00	6.94	110	172
5	720.035	35.70	21.20	4.72	25.29	36.33	46.00	9.67	120	72
6	773.311	38.50	22.30	4.99	25.37	40.42	46.00	5.58	360	231

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

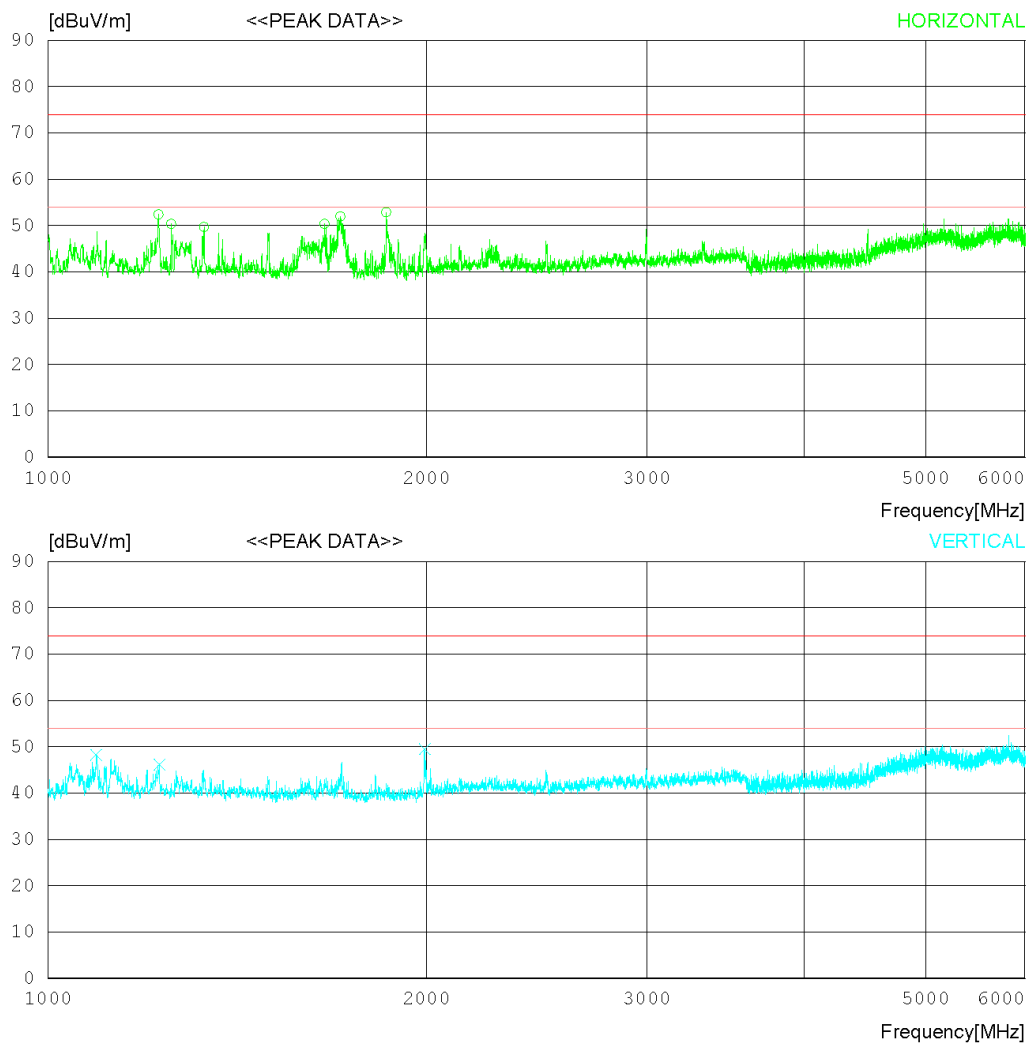
RADIATED EMISSION

Date 2018-04-02

Order No. DTNC1803-02003
Power Supply 120 V 60 Hz
Temp/Humi 20 'C 45 % R.H.
Test Condition PC LINK

Model Name LM-Q710EM

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



RADIATED EMISSION

Date 2018-04-02

Order No. DTNC1803-02003
Power Supply 120 V 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition PC LINK

Model Name LM-Q710EM

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

No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	PEAK [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	1225.000	55.00	25.68	3.89	32.19	52.38	74.0	21.62	100	0
2	1253.125	52.90	25.76	3.96	32.21	50.41	74.0	23.59	100	156
3	1331.250	51.90	25.87	4.18	32.24	49.71	74.0	24.29	100	204
4	1660.000	53.20	25.24	4.26	32.38	50.32	74.0	23.68	100	265
5	1709.375	54.80	25.21	4.32	32.40	51.93	74.0	22.07	100	204
6	1859.375	55.30	25.48	4.56	32.46	52.88	74.0	21.12	100	213
----- Vertical -----										
7	1092.500	51.40	25.40	3.54	32.14	48.20	74.0	25.8	100	358
8	1226.250	48.80	25.68	3.89	32.20	46.17	74.0	27.83	100	358
9	1993.750	51.10	26.07	4.81	32.52	49.46	74.0	24.54	100	92

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

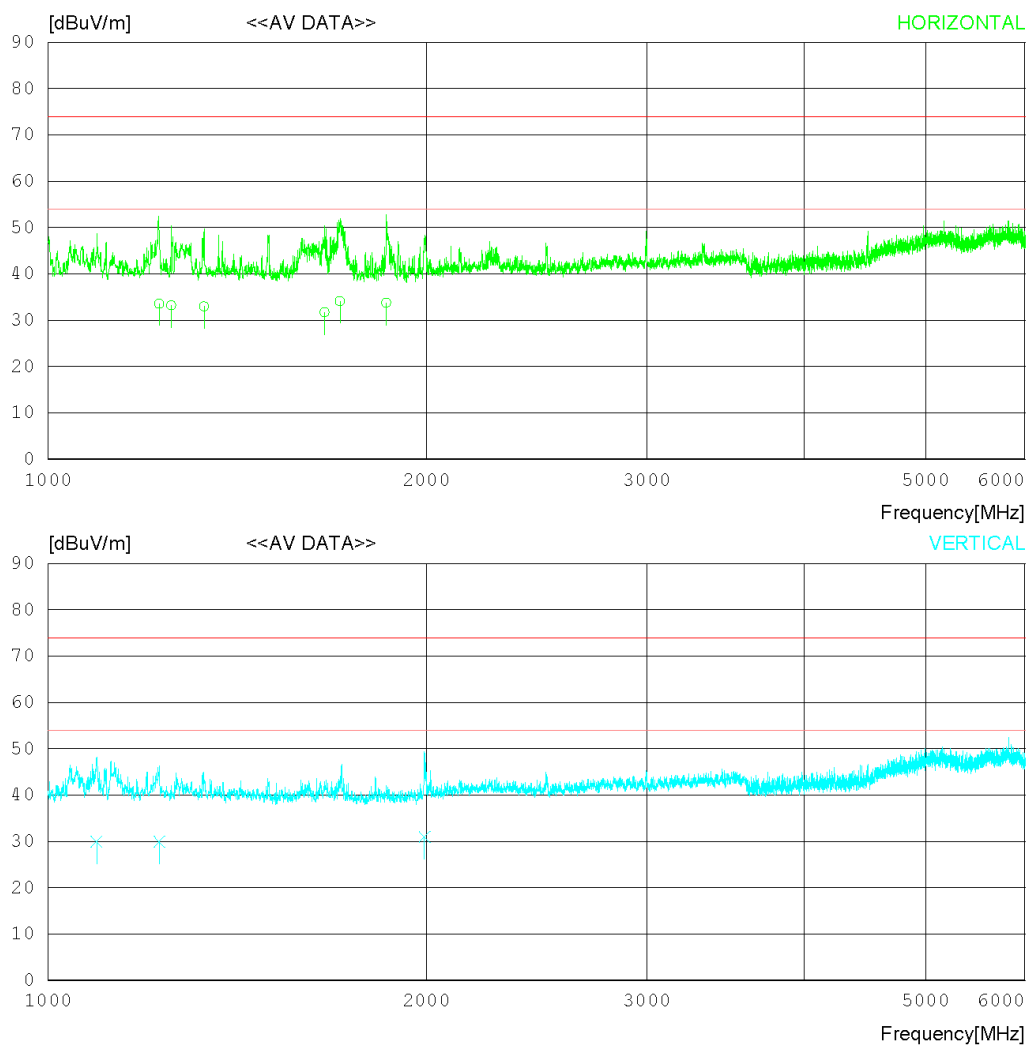
RADIATED EMISSION

Date 2018-04-02

Order No. DTNC1803-02003
Power Supply 120 V 60 Hz
Temp/Humi 20 'C 45 % R.H.
Test Condition PC LINK

Model Name LM-Q710EM

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



RADIATED EMISSION

Date 2018-04-02

Order No. DTNC1803-02003
Power Supply 120 V 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition PC LINK

Model Name LM-Q710EM

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	1225.682	36.20	25.68	3.89	32.19	33.58	54.00	20.42	100	23
2	1253.250	35.70	25.76	3.96	32.21	33.21	54.00	20.79	100	168
3	1331.386	35.10	25.87	4.18	32.24	32.91	54.00	21.09	100	119
4	1660.779	34.60	25.24	4.26	32.38	31.72	54.00	22.28	100	278
5	1708.253	37.00	25.21	4.32	32.40	34.13	54.00	19.87	100	175
6	1859.368	36.20	25.48	4.56	32.46	33.78	54.00	20.22	100	235
----- Vertical -----										
7	1092.698	33.10	25.40	3.54	32.14	29.90	54.00	24.10	100	138
8	1226.154	32.50	25.68	3.89	32.19	29.88	54.00	24.12	100	13
9	1993.298	32.60	26.07	4.81	32.52	30.96	54.00	23.04	100	32

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

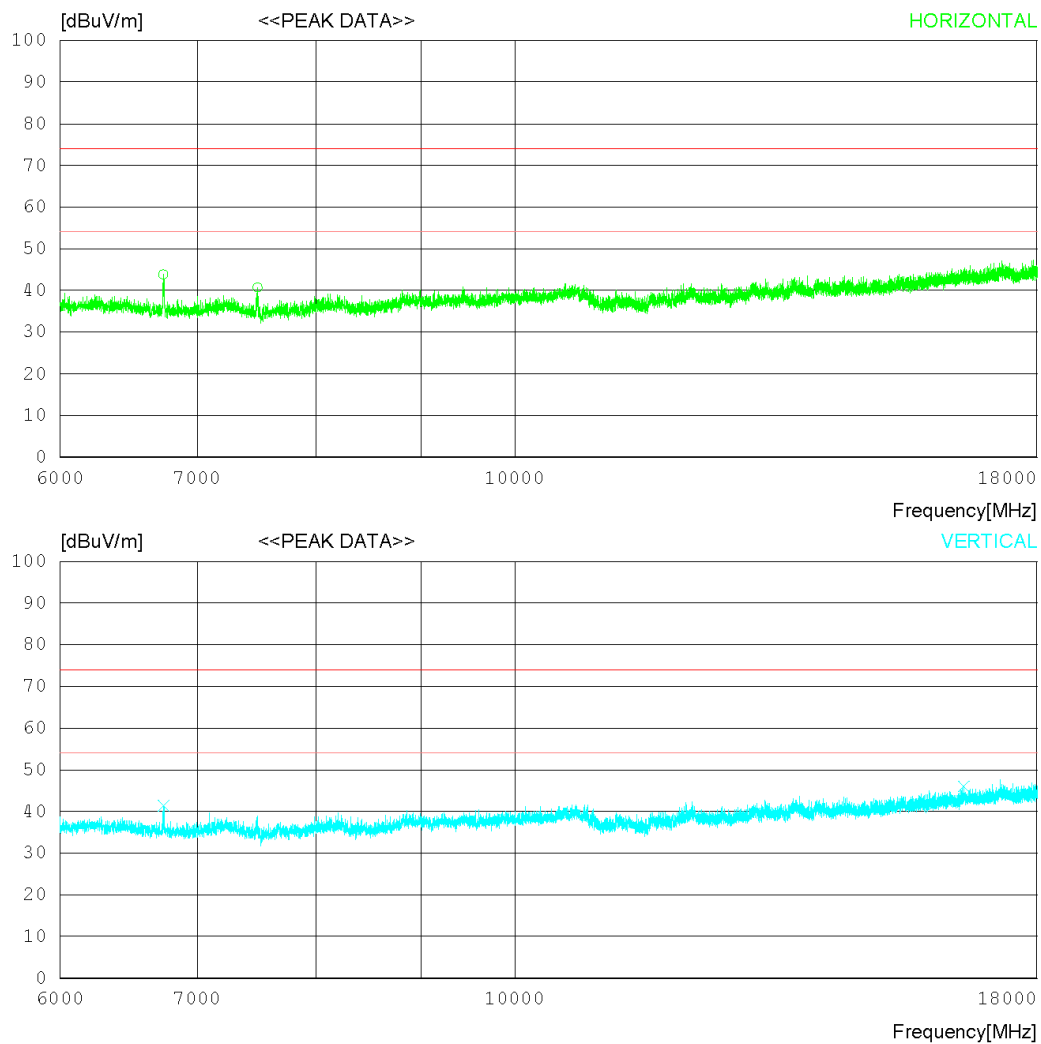
RADIATED EMISSION

Date 2018-04-02

Order No. DTNC1803-02003
Power Supply 120 V 60 Hz
Temp/Humi 20 'C 45 % R.H.
Test Condition PC LINK

Model Name LM-Q710EM

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. DTNC1803-02003
Power Supply 120 V 60 Hz
Temp/Humi 20 'C 45 % R.H.
Test Condition PC LINK

Model Name LM-Q710EM

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	6740.250	42.30	31.40	8.89	38.77	43.82	74.0	30.18	100	358
2	7493.250	38.40	31.37	9.66	38.80	40.63	74.0	33.37	100	174
----- Vertical -----										
3	6739.500	39.90	31.40	8.89	38.77	41.42	74.0	32.58	100	295
4	16575.000	32.10	36.97	13.29	36.30	46.06	74.0	27.94	100	242

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

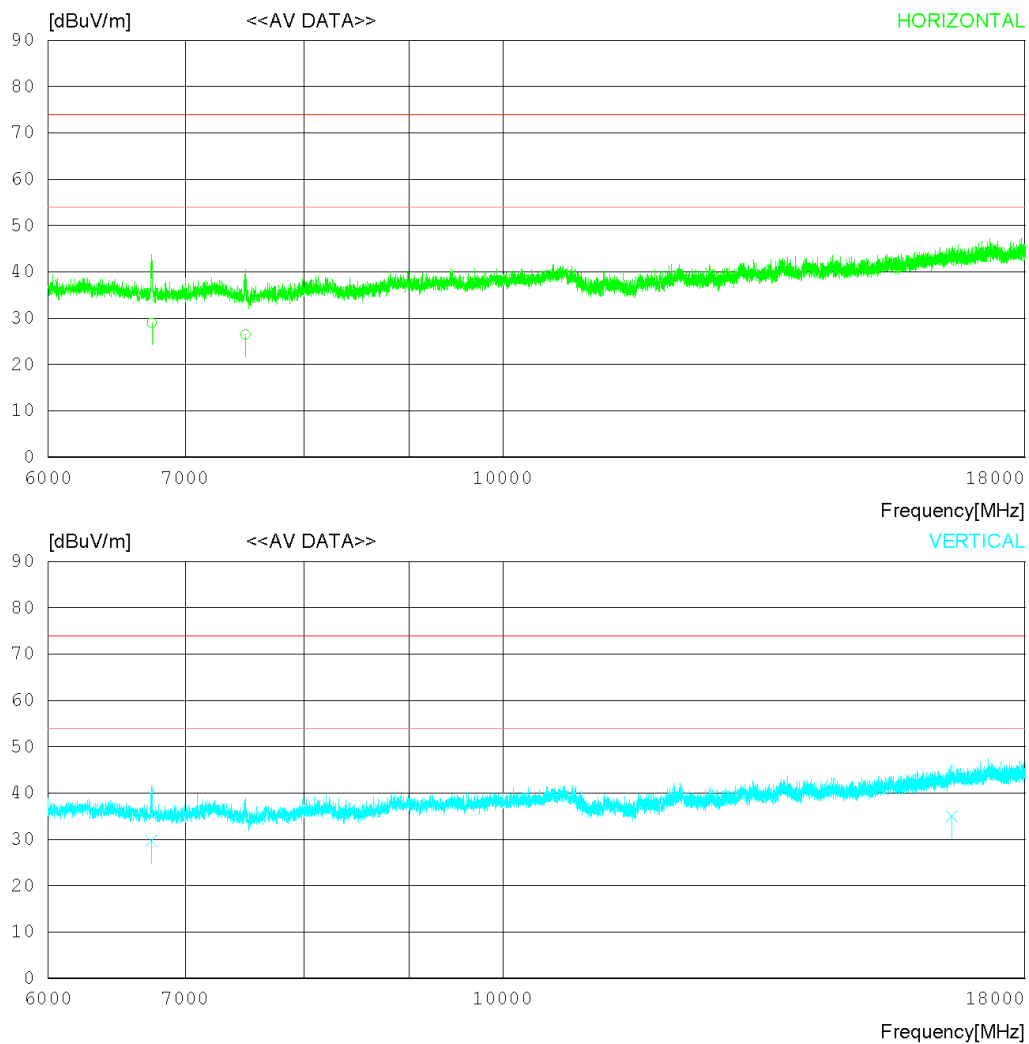
RADIATED EMISSION

Date 2018-04-02

Order No. DTNC1803-02003
Power Supply 120 V 60 Hz
Temp/Humi 20 'C 45 % R.H.
Test Condition PC LINK

Model Name LM-Q710EM

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. DTNC1803-02003
Power Supply 120 V 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition PC LINK

Model Name LM-Q710EM

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	6742.318	27.50	31.40	8.90	38.77	29.03	54.00	24.97	105	23
2	7493.256	24.30	31.37	9.66	38.80	26.53	54.00	27.47	115	116
----- Vertical -----										
3	6739.563	28.10	31.40	8.89	38.77	29.62	54.00	24.38	115	135
4	16575.020	21.00	36.97	13.29	36.30	34.96	54.00	19.04	105	235

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

-End of test report-