

# 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. : DREFCC1803-0094

2. Client / Applicant

- Name : LG Electronics MobileComm USA, Inc.
- Address : 1000 Sylvan Ave. Englewood Cliffs NJ 07632

3. Use of Report : Grant of Certification

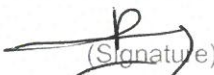

4. Product Name / Model Name : Mobile phone / LM-G710EM

5. Test Standard : ANSI C 63.4 : 2014  
FCC Part 15 Subpart B  
(Class B personal computers and peripherals)

6. Date of Test : Mar. 02. 2018 ~ Mar. 12. 2018

7. Testing Environment : Temperature (20 ~ 23) °C , Humidity (35 ~ 44) % 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.

This test report shall not be reproduced except in full, without the written approval of DT&C Co., Ltd.

**Mar. 23. 2018**

**DT&C Co., Ltd.**

If this report is required to confirmation of authenticity, please contact to [report@dtnc.net](mailto: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.dtcn.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-G710EM
Add Model Name	LMG710EM, G710EM, LM-G710EA, LMG710EA, G710EA ,LM-G710EMW, LMG710EMW, G710EMW, LM-G710EAW, LMG710EAW, G710EAW
RF Module Name	None
FCC ID	ZNFG710EM
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	DC	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	0.3	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 $\mu$ V]	Detector	Limit [dB $\mu$ V]	Margin [dB]
11.43076	L1	43.59	CAV	50.00	6.41

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dB $\mu$ V/m]	Detector	Limit [dB $\mu$ V/m]	Margin [dB]
97.293	Horizontal	36.05	QP	43.50	7.45

## 6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (°C)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2018-03-02	23	35	-
Radiated Disturbance	2018-03-12	20	44	

## 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 $\mu$ V		
	Quasi-Peak	Average	
0.15 to 0.50	79	66	
0.50 to 30	73	60	
Limits – Class B			
Frequency (MHz)	Limit dB $\mu$ 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

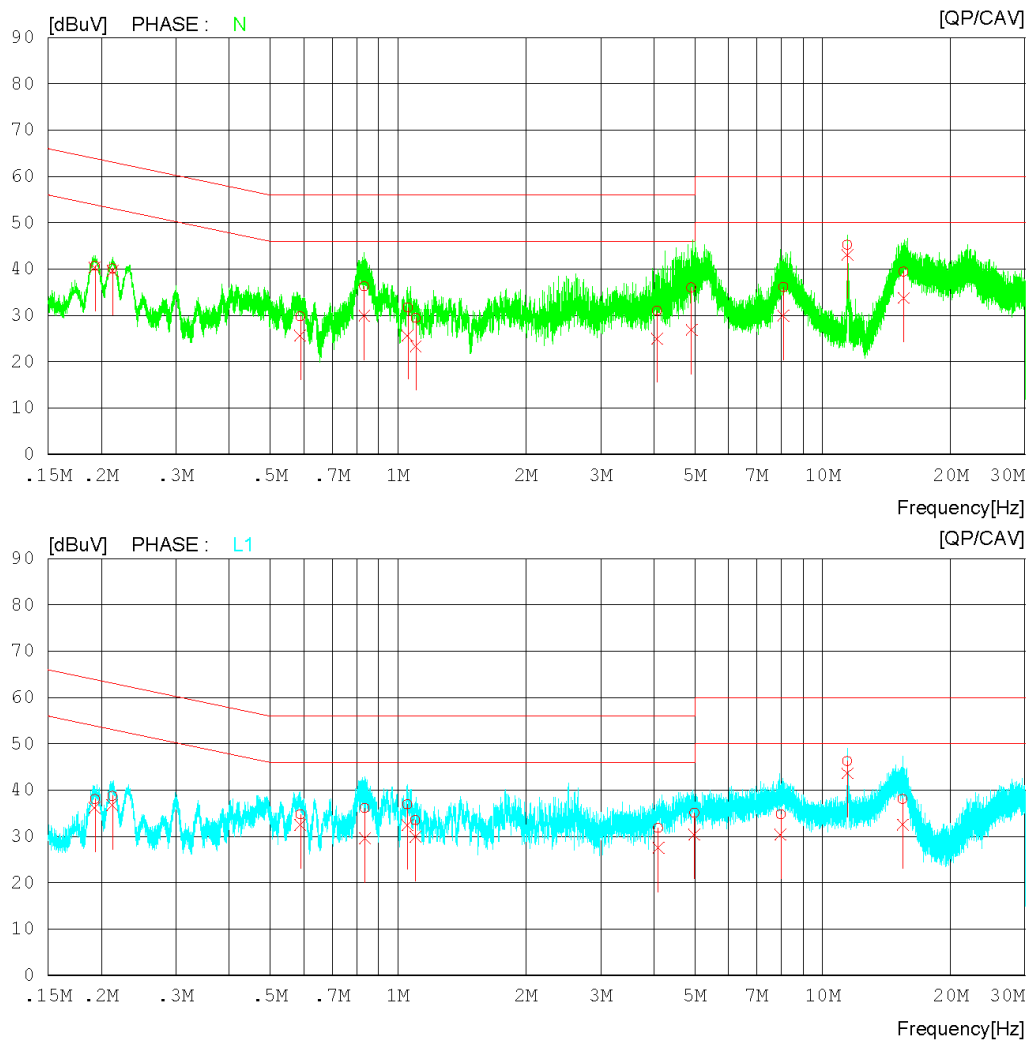
## Results of Conducted Emission

DT&amp;C

Date 2018-03-02

Order No. DTNC1803-01698  
Power Supply 120 V 60 Hz  
Temp/Humi/Atm 23 'C 35 % % R.H.  
Test Condition PC LINK

LIMIT : CISPR22\_B QP  
CISPR22\_B AV



## Results of Conducted Emission

DT&amp;C

Date 2018-03-02

Order No. DTNC1803-01698  
Power Supply 120 V 60 Hz  
Temp/Humi/Atm 23 'C 35 % % R.H.  
Test Condition PC LINK

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	0.19333	20.71	20.34	20.02	40.73	40.36	63.89	53.89	23.16	13.53	N
2	0.21253	20.13	19.62	19.99	40.12	39.61	63.11	53.11	22.99	13.50	N
3	0.58870	9.61	5.46	20.14	29.75	25.60	56.00	46.00	26.25	20.40	N
4	0.83233	16.24	9.88	20.05	36.29	29.93	56.00	46.00	19.71	16.07	N
5	1.05368	11.60	5.62	20.06	31.66	25.68	56.00	46.00	24.34	20.32	N
6	1.10096	9.33	3.27	20.06	29.39	23.33	56.00	46.00	26.61	22.67	N
7	4.08065	10.84	4.84	20.15	30.99	24.99	56.00	46.00	25.01	21.01	N
8	4.91021	15.80	6.63	20.21	36.01	26.84	56.00	46.00	19.99	19.16	N
9	8.07896	15.58	9.40	20.57	36.15	29.97	60.00	50.00	23.85	20.03	N
10	11.43076	24.35	22.14	20.94	45.29	43.08	60.00	50.00	14.71	6.92	N
11	15.51323	18.26	12.57	21.17	39.43	33.74	60.00	50.00	20.57	16.26	N
12	0.19316	17.99	16.08	20.04	38.03	36.12	63.90	53.90	25.87	17.78	L1
13	0.21250	18.75	16.75	19.99	38.74	36.74	63.11	53.11	24.37	16.37	L1
14	0.58830	14.49	12.23	20.24	34.73	32.47	56.00	46.00	21.27	13.53	L1
15	0.83550	15.98	9.39	20.15	36.13	29.54	56.00	46.00	19.87	16.46	L1
16	1.05195	16.75	12.29	20.13	36.88	32.42	56.00	46.00	19.12	13.58	L1
17	1.09922	13.37	9.76	20.11	33.48	29.87	56.00	46.00	22.52	16.13	L1
18	4.10120	11.53	7.29	20.26	31.79	27.55	56.00	46.00	24.21	18.45	L1
19	4.98720	14.80	10.02	20.31	35.11	30.33	56.00	46.00	20.89	15.67	L1
20	7.96435	14.11	9.67	20.66	34.77	30.33	60.00	50.00	25.23	19.67	L1
21	11.43076	25.23	22.58	21.01	46.24	43.59	60.00	50.00	13.76	6.41	L1
22	15.42234	16.87	11.38	21.17	38.04	32.55	60.00	50.00	21.96	17.45	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
<b>Method:</b> 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 <sup>th</sup> 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

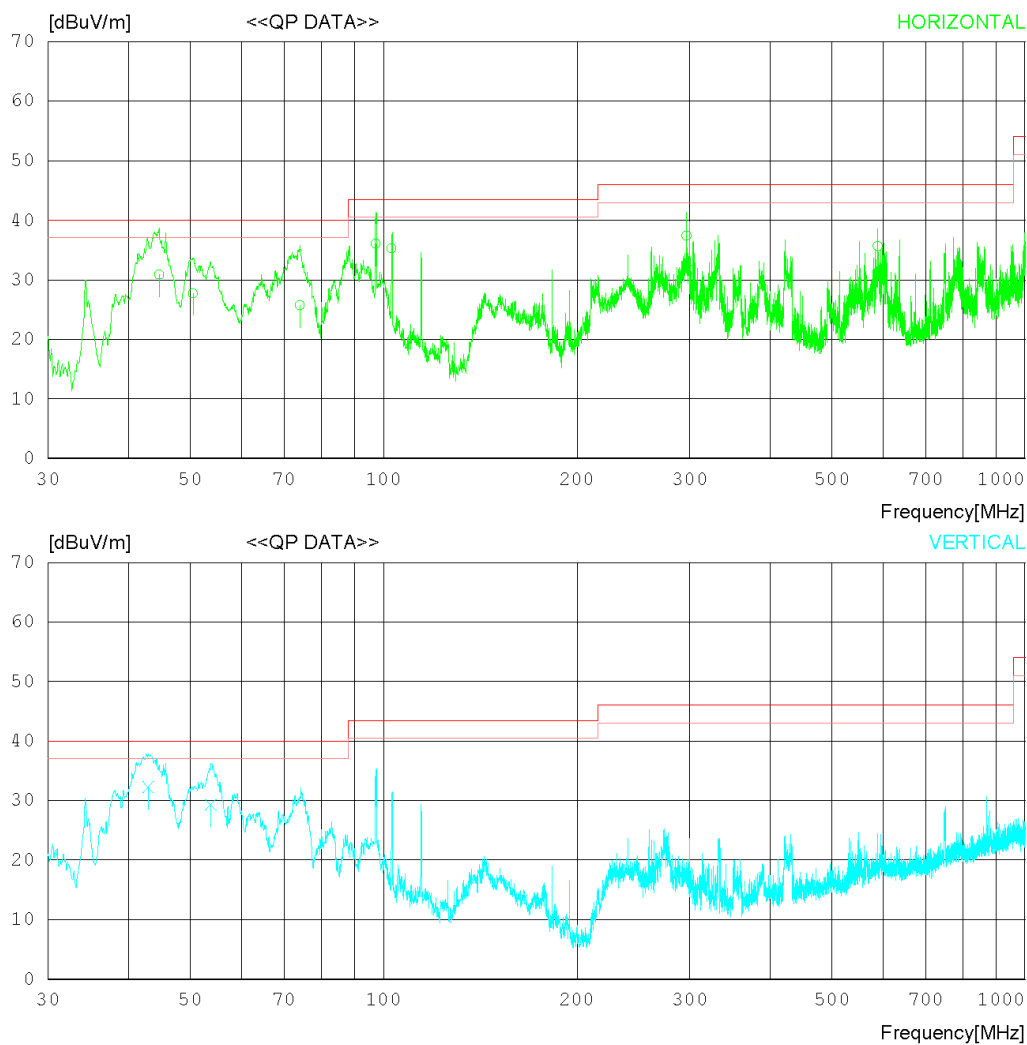
## RADIATED EMISSION

Date 2018-03-12

Order No. DTNC1803-01698  
Power Supply 120 V 60 Hz  
Temp/Humi 20 'C 44 % R.H.  
Test Condition PC LINK

Memo

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



## RADIATED EMISSION

Date 2018-03-12

Order No. DTNC1803-01698  
Power Supply 120 V 60 Hz  
Temp/Humi 20 °C 44 % R.H.  
Test Condition PC LINK

### Memo

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	44.686	43.95	11.34	1.02	25.50	30.81	40.00	9.19	395	358
2	50.492	40.20	11.91	1.11	25.51	27.71	40.00	12.29	385	358
3	74.016	40.50	9.32	1.43	25.53	25.72	40.00	14.28	305	280
4	97.293	51.60	8.61	1.39	25.55	36.05	43.50	7.45	120	274
5	102.957	49.80	9.63	1.44	25.55	35.32	43.50	8.18	325	85
6	296.512	46.70	13.33	2.83	25.49	37.37	46.00	8.63	110	325
7	299.786	41.00	13.40	2.84	25.48	31.76	46.00	14.24	205	199
8	589.335	36.80	19.78	4.29	25.26	35.61	46.00	10.39	115	23
----- Vertical -----										
9	42.962	45.80	10.99	0.99	25.50	32.28	40.00	7.72	380	358
10	53.753	41.70	11.98	1.14	25.51	29.31	40.00	10.69	205	358

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

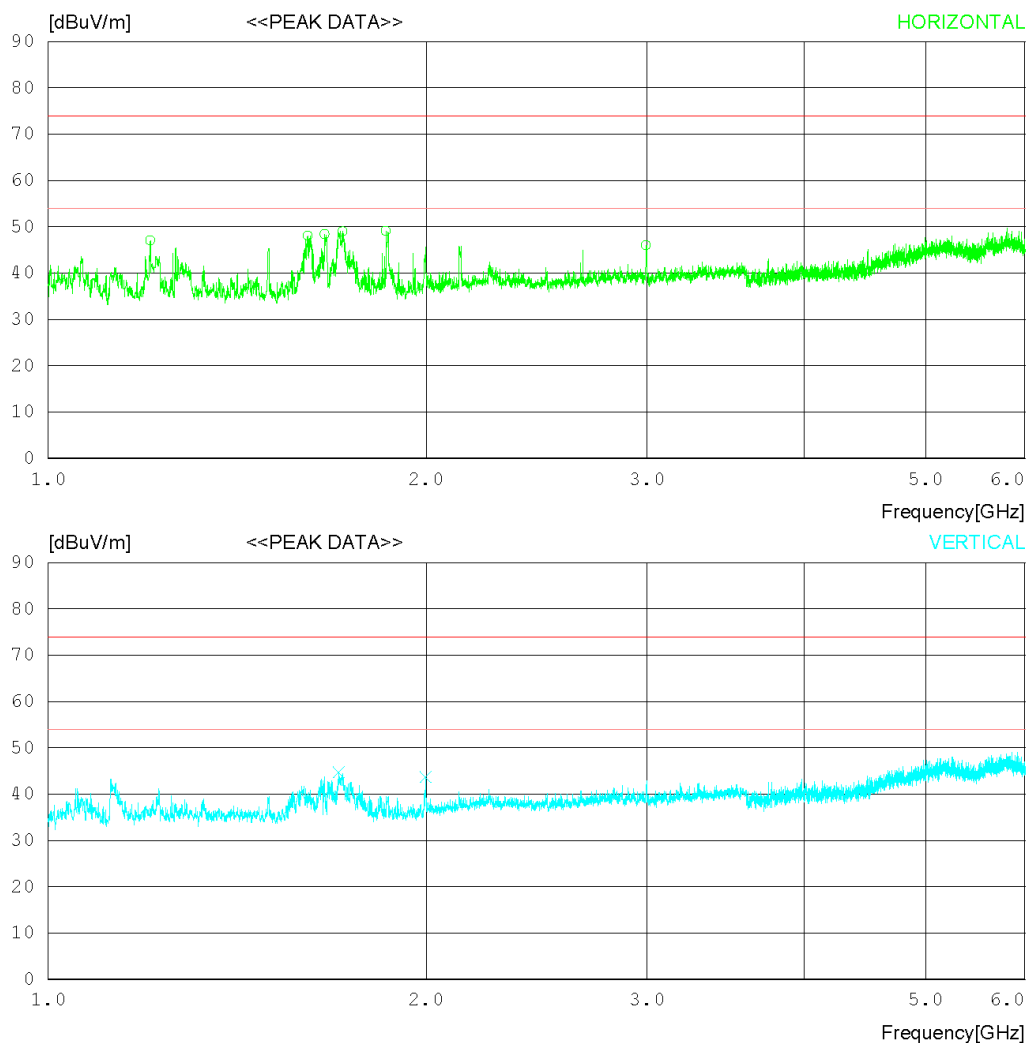
## RADIATED EMISSION

Date 2018-03-12

Order No. DTNC1803-01698  
Power Supply 120 V 60 Hz  
Temp/Humi 20 °C 44 % R.H.  
Test Condition PC LINK

Memo

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



## RADIATED EMISSION

Date 2018-03-12

Order No. DTNC1803-01698  
Power Supply 120 V 60 Hz  
Temp/Humi 20 °C 44 % R.H.  
Test Condition PC LINK

### Memo

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	1205.625	56.00	25.62	3.83	38.35	47.10	74.0	26.9	100	358
2	1609.375	56.30	25.29	4.18	37.75	48.02	74.0	25.98	100	358
3	1661.250	56.60	25.24	4.26	37.70	48.40	74.0	25.6	100	111
4	1715.000	57.10	25.22	4.33	37.64	49.01	74.0	24.99	100	203
5	1858.125	56.50	25.47	4.56	37.49	49.04	74.0	24.96	100	216
6	2993.125	49.60	28.21	5.31	37.13	45.99	74.0	28.01	100	166
----- Vertical -----										
7	1703.125	52.80	25.20	4.32	37.65	44.67	74.0	29.33	100	0
8	1997.500	50.10	26.09	4.82	37.34	43.67	74.0	30.33	100	0



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

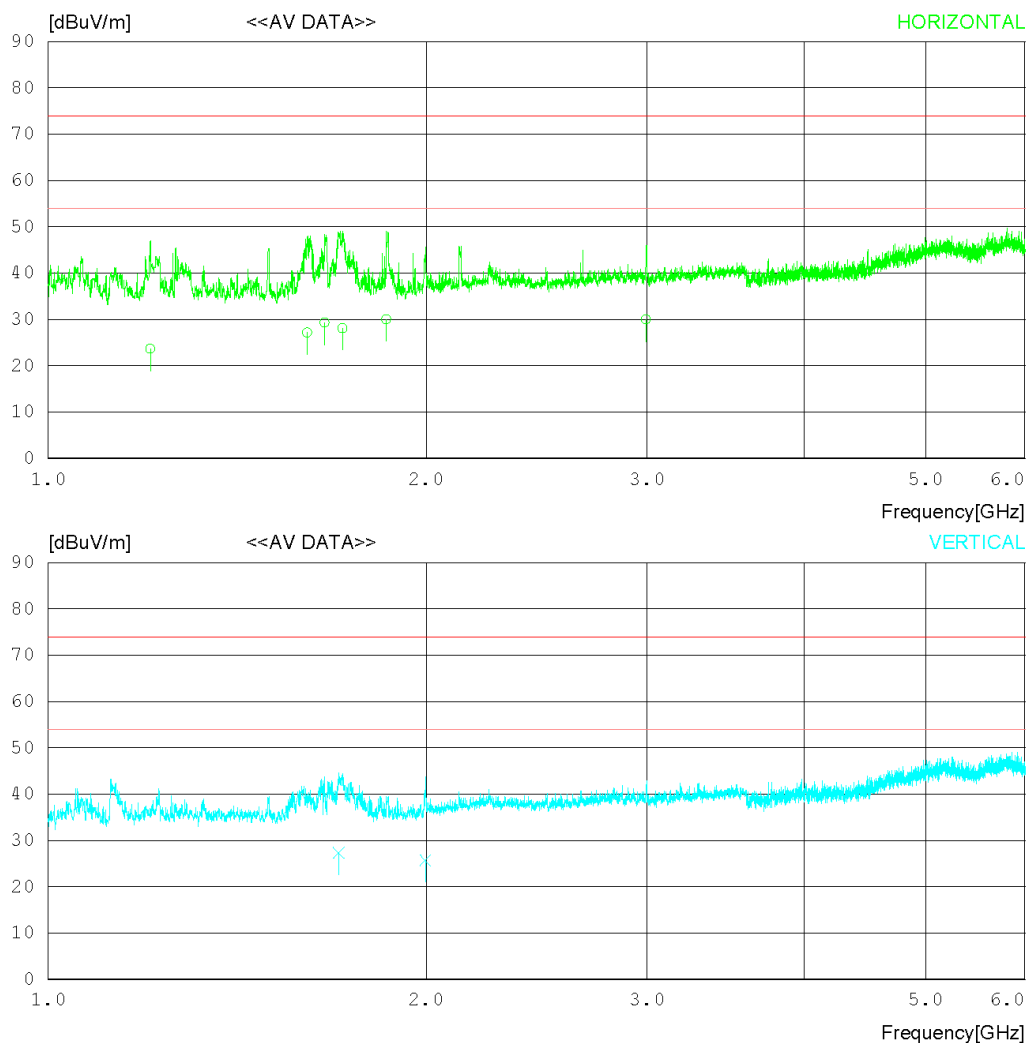
## RADIATED EMISSION

Date 2018-03-12

Order No. DTNC1803-01698  
Power Supply 120 V 60 Hz  
Temp/Humi 20 °C 44 % R.H.  
Test Condition PC LINK

Memo

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



## RADIATED EMISSION

Date 2018-03-12

Order No. DTNC1803-01698  
Power Supply 120 V 60 Hz  
Temp/Humi 20 °C 44 % R.H.  
Test Condition PC LINK

### Memo

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	1205.686	32.50	25.62	3.83	38.35	23.60	54.00	30.40	105	35
2	1608.250	35.40	25.29	4.18	37.76	27.11	54.00	26.89	120	12
3	1661.124	37.50	25.24	4.26	37.70	29.30	54.00	24.70	135	152
4	1715.068	36.20	25.22	4.33	37.64	28.11	54.00	25.89	115	176
5	1859.052	37.50	25.48	4.56	37.49	30.05	54.00	23.95	110	253
6	2993.175	33.60	28.21	5.31	37.13	29.99	54.00	24.01	105	235
----- Vertical -----										
7	1703.352	35.40	25.20	4.32	37.65	27.27	54.00	26.73	120	112
8	1997.113	32.10	26.09	4.82	37.34	25.67	54.00	28.33	105	23

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

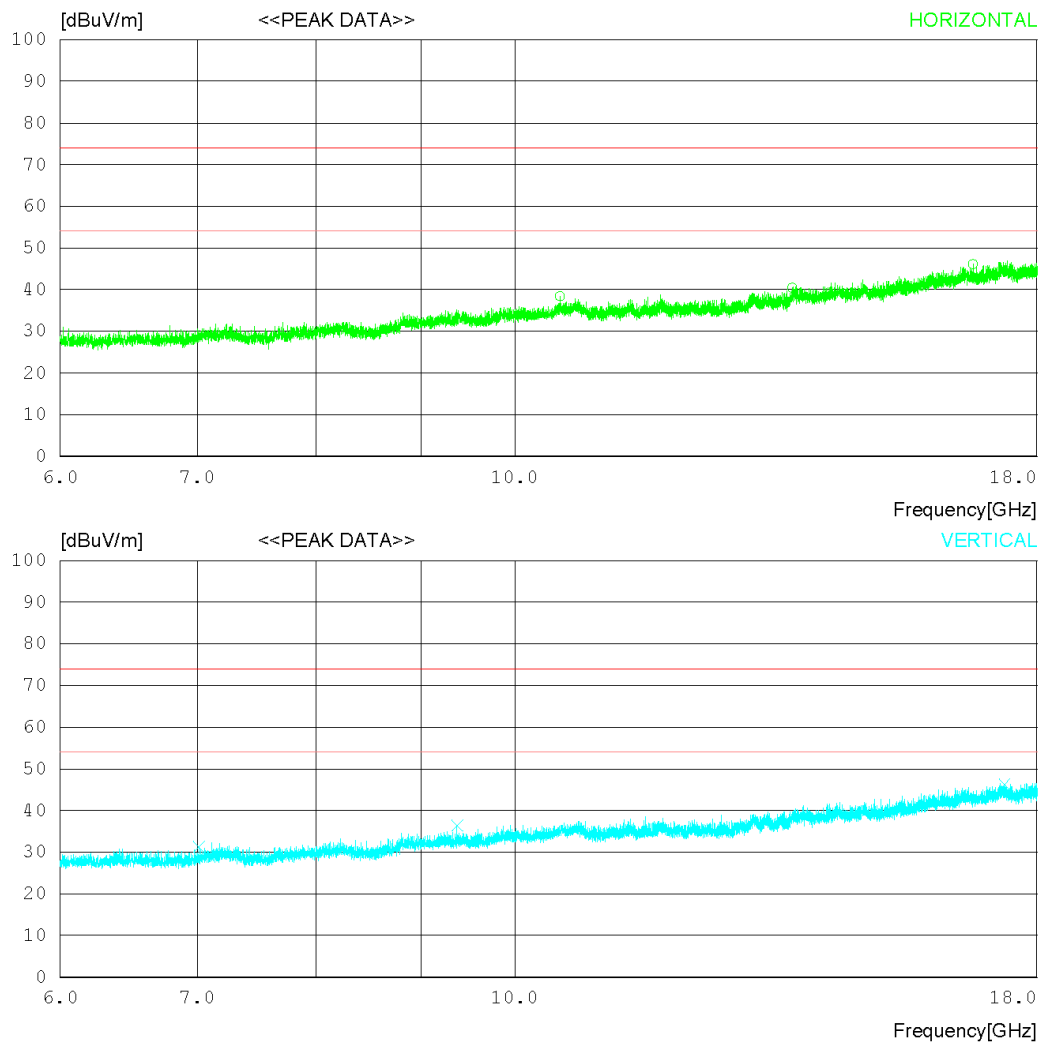
## RADIATED EMISSION

Date 2018-03-12

Order No. DTNC1803-01698  
Power Supply 120 V 60 Hz  
Temp/Humi 20 °C 44 % R.H.  
Test Condition PC LINK

Memo

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 2018-03-12

Order No. DTNC1803-01698  
Power Supply 120 V 60 Hz  
Temp/Humi 20 °C 44 % R.H.  
Test Condition PC LINK

Memo

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	10525.500	30.90	32.47	12.68	37.68	38.37	74.0	35.63	100	1
2	13665.750	31.00	33.86	13.24	37.72	40.38	74.0	33.62	100	279
3	16748.250	32.30	37.16	12.92	36.22	46.16	74.0	27.84	100	173
----- Vertical -----										
4	7012.500	29.50	31.38	9.32	38.84	31.36	74.0	42.64	100	190
5	9373.500	31.60	32.00	10.69	37.86	36.43	74.0	37.57	100	19
6	17350.500	31.30	37.84	13.76	36.63	46.27	74.0	27.73	100	182

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

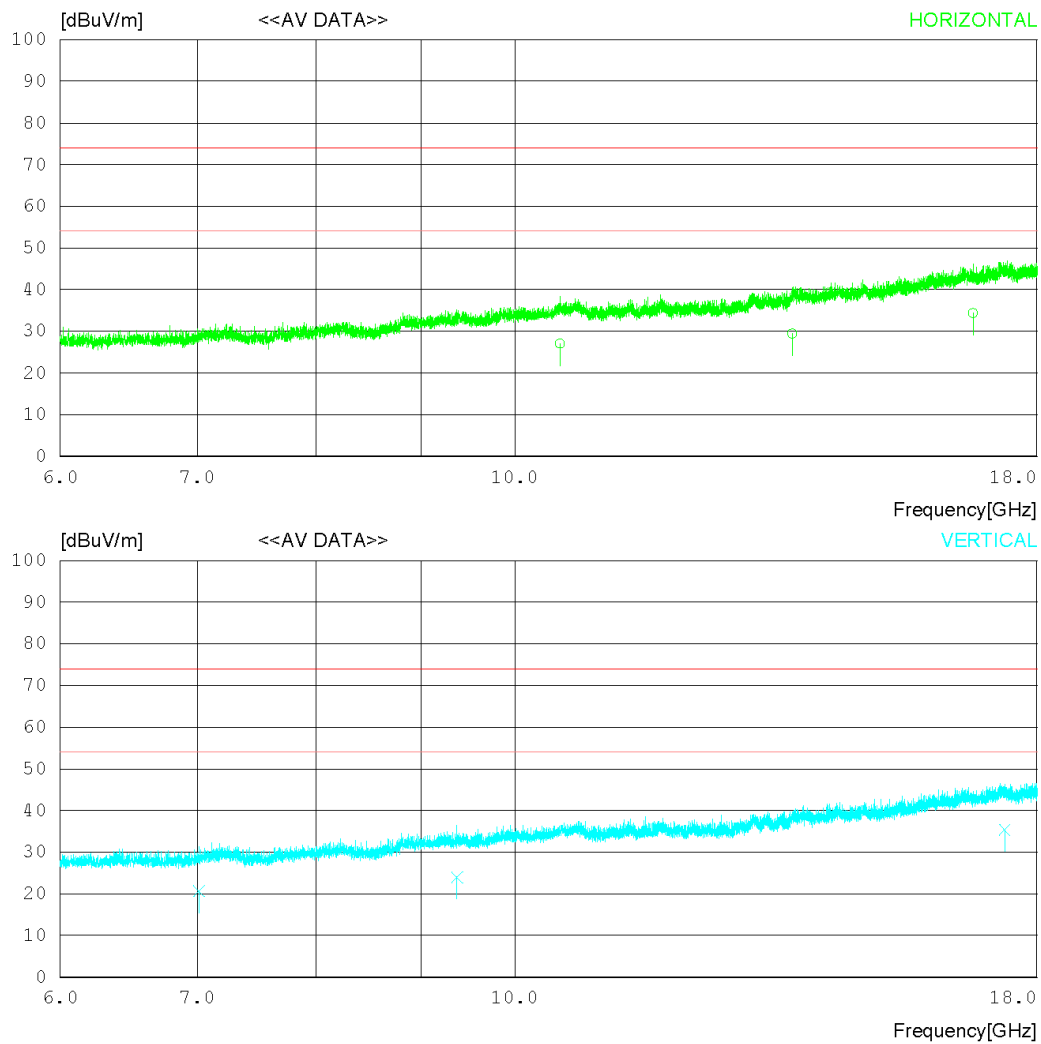
## RADIATED EMISSION

Date 2018-03-12

Order No. DTNC1803-01698  
Power Supply 120 V 60 Hz  
Temp/Humi 20 °C 44 % R.H.  
Test Condition PC LINK

Memo

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 2018-03-12

Order No. DTNC1803-01698  
Power Supply 120 V 60 Hz  
Temp/Humi 20 °C 44 % R.H.  
Test Condition PC LINK

Memo

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	10525.620	19.50	32.47	12.68	37.68	26.97	54.00	27.03	105	23
2	13666.030	20.10	33.86	13.24	37.72	29.48	54.00	24.52	110	175
3	16748.630	20.50	37.16	12.92	36.22	34.36	54.00	19.64	130	223
----- Vertical -----										
4	7012.565	18.90	31.38	9.32	38.84	20.76	54.00	33.24	105	175
5	9373.227	19.20	32.00	10.69	37.86	24.03	54.00	29.97	115	12
6	17351.250	20.40	37.84	13.77	36.63	35.38	54.00	18.62	120	123

### 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)

## 8. Revision History

Date	Description	Revised By	Reviewed By
Mar.23.2018	Initial report	JinYoung Park	MyungJin Song

-End of test report-