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. : DREFCC1904-0118
2. Client / Applicant
   - Name : LG Electronics USA, Inc.
   - Address : 1000 Sylvan Avenue Englewood Cliffs, New Jersey, United States 07632
3. Use of Report : Grant of Certification
4. Product Name / Model Name : Mobile Phone / LM-X525BAW
5. Test Standard : ANSI C 63.4 : 2014
   FCC Part 15 Subpart B
   (Class B personal computers and peripherals)
6. Date of Test : Mar. 12. 2019
7. Testing Environment : Temperature (19 ~ 21) °C , Humidity (42 ~ 45) % R.H.
8. Test Result : Refer to the attached Test Result

Affirmation	Tested by Name : ChanGeun Lee (Signature)	Reviewed by Name : DaeHwa Eun (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. 03. 2019

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
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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
	Ghana	NCA	NCA agreement 23rd,Oct,2018	-
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, R-4496, T-1442, G-10338, G-754, G-10815	Registered
Certification	Korea	KC	KR0034	Designation
	Germany	TUV	CARAT 089112 0006 Rev.00	ISO/IEC 17025
	Russia	RMRS	17.10189.296	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 USA, Inc. 1000 Sylvan Avenue Englewood Cliffs, New Jersey, United States 07632
Manufacturer	LG Electronics USA, Inc. 1000 Sylvan Avenue Englewood Cliffs, New Jersey, United States 07632
Factory	LG Electronics USA, Inc. 1000 Sylvan Avenue Englewood Cliffs, New Jersey, United States 07632
Product Name	Mobile Phone
Model Name	LM-X525BAW
Add Model Name	LMX525BAW, X525BAW, LM-X525HA, LMX525HA, X525HA, LM-X520HM, LMX520HM, X520HM, LM-X520BMW, LMX520BMW, X520BMW
FCC ID	ZNFX525HA
Rated Power	DC 5 V
Remarks	Earphone 1. Manufacturer : CRESYN 2. P/N : EAB64468444 USB Cable 1. Manufacturer : NINGBO 2. P/N : EAD62377927

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	'READ' & 'WRITE' & 'DELETE'	The EUT is reading, writing, and erasing internal storage

4.3 Test Configuration Mode

No.	Mode	Description
1	PC LINK	EUT was connected PC by USB cable and continuously operated

4.4 Supported Equipment

Used*	Product Type	Manufacturer	Model	Remarks
AE	KEYBOARD	Microsoft	1406	20076223340
AE	MOUSE	LG	SM-9023	58Q02801
AE	LCD MONITOR	DELL	UP2414Qt	CN-OJJRX2-74261-67B-4P4U-A00
AE	PC	DELL	DCNE	N/A
AE	SSD 3.0	SAMSUNG	MU-PT250B	S2WKNAAH32059X
AE	PRINTER	Bixolon	SRP-770	N/A
AE	Headset	SAMSUNG	SHS-150V/M	N/A

*Abbreviations:
AE - Auxiliary/Associated Equipment, or
SIM - Simulator

4.5 EUT In/Output Port

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

*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	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]
0.20222	N	49.57	CAV	53.52	3.95

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]
164.827	H	39.30	QP	43.50	4.20

6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (℃)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2019-03-12	19	42	100.6
Radiated Disturbance	2019-03-12 2019-03-12 2019-03-12	21 20 21	43 44 45	-

7. Test Results : Emission

7.1 Conducted Disturbance

ANSI C63.4	Mains terminal disturbance voltage	Result
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.		**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 dBµV	
	Quasi-Peak	Average
0.15 to 0.50	79	66
0.50 to 30	73	60

Limits – Class B

Frequency (MHz)	Limit dBµV	
	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 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	2018.10.29	2019.10.29
LISN	ENV216	ROHDE & SCHWARZ	101979	2018.12.06	2019.12.06
LISN	LISN1600	TTI	197204	2018.06.07	2019.06.07
TRANSIENT LIMITER	TL-B0930A	EMCIS	11002	2018.09.05	2019.09.05
50 OHM TERMINATOR	CT-01	TME	N/A	2018.12.19	2019.12.19

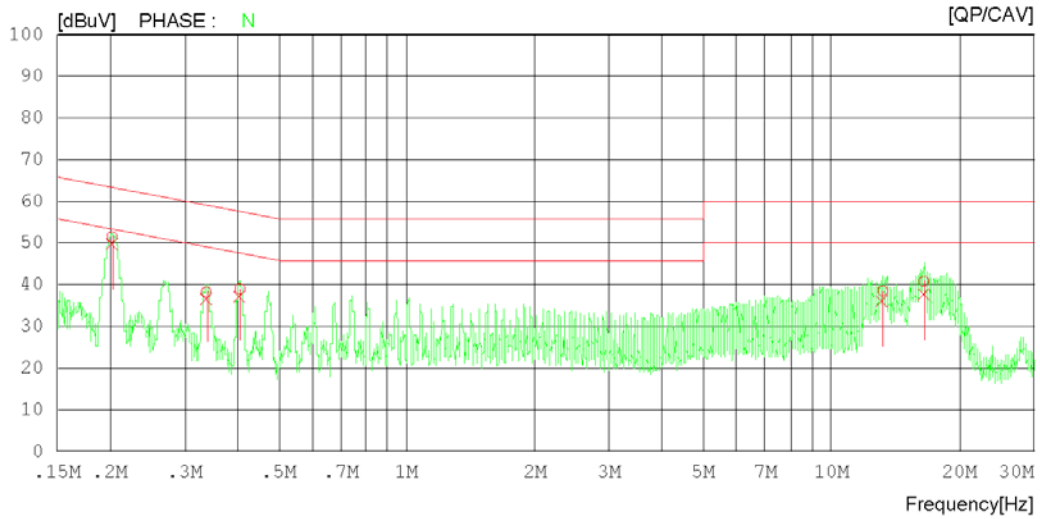
Mains terminal disturbance voltage _Measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**120**	**Test Frequency (Hz)**	**60**

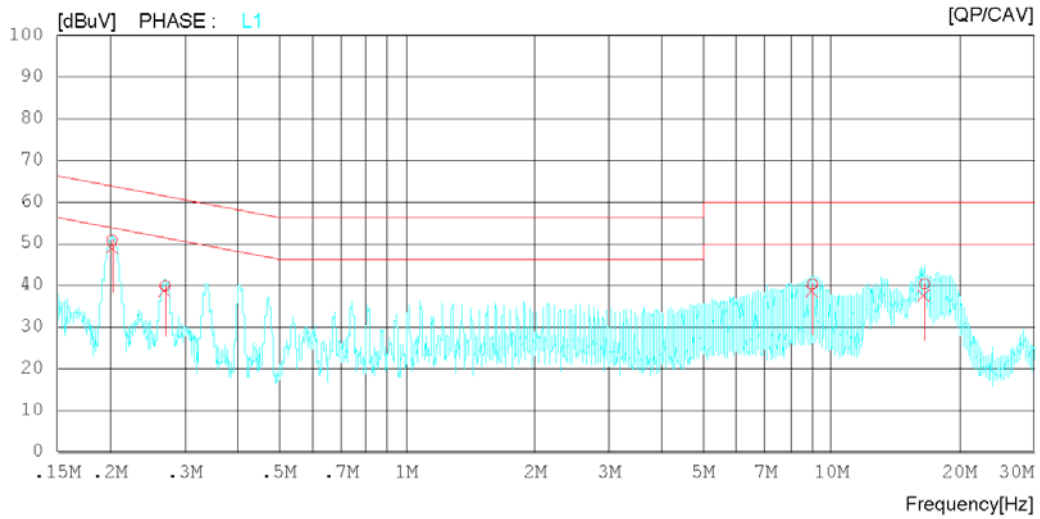
Results of Conducted Emission

DT&C
Date 2019-03-12

Order No. DTNC1902-01422
Power Supply 120 VAC 60 Hz
Temp/Humi/Atm 19 'C 42 %.R.H. 100.6 kPa
Test Condition PC Link

LIMIT : CISPR32_B QP
CISPR32_B AV





Results of Conducted Emission

DT&C
Date 2019-03-12

Order No.	DTNC1902-01422
Power Supply	120 VAC 60 Hz
Temp/Humi/Atm	19 'C 42 %.R.H. 100.6 kPa
Test Condition	PC Link

LIMIT : CISPR32_B QP
CISPR32_B 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	0.20222	31.54	29.55	20.02	51.56	49.57	63.52	53.52	11.96	3.95	N
2	0.33703	18.36	16.97	19.90	38.26	36.87	59.28	49.28	21.02	12.41	N
3	0.40447	18.96	17.33	20.03	38.99	37.36	57.76	47.76	18.77	10.40	N
4	13.21509	17.68	14.96	20.92	38.60	35.88	60.00	50.00	21.40	14.12	N
5	16.51943	19.84	16.51	21.03	40.87	37.54	60.00	50.00	19.13	12.46	N
6	0.20228	30.72	28.73	20.02	50.74	48.75	63.52	53.52	12.78	4.77	L1
7	0.26964	19.94	18.65	19.80	39.74	38.45	61.13	51.13	21.39	12.68	L1
8	9.03652	19.68	18.09	20.51	40.19	38.60	60.00	50.00	19.81	11.40	L1
9	16.58753	19.23	16.36	21.03	40.26	37.39	60.00	50.00	19.74	12.61	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 – 40 GHz	Result
Method: Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 10 or 3 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 contained in Third Edition of the International Special Committee on Radio Interference (CISPR), Pub. 22 shown.

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	5th harmonic of the highest frequency or 40 GHz, whichever is lower

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	2018.06.28	2019.06.28
TRILOG BROADBAND TEST-ANTENNA	VULB9160	SCHWARZBECK	9160-3339	2018.10.22	2020.10.22
6DB ATTENUATOR	8491B	HP	18403	2018.10.22	2020.10.22
LOW NOISE PRE AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2019.02.18	2020.02.18
PRE AMPLIFIER	8449B	H.P	3008A00887	2018.08.31	2019.08.31
HORN ANTENNA	3117	ETS-LINDGREN	00152093	2018.03.26	2020.03.26
HORN ANTENNA WITH PREAMPLIFIER	EM-6969	ELECTRO-METRICS	156	2019.02.13	2021.02.13
	MLA-0618-B03-34	TSJ	1785642	2019.01.02	2020.01.02
HORN ANTENNA WITH PREAMPLIFIER	JS44-18004000-35-8P	L3 NARDA-MITEQ	2046884	2018.11.09	2019.11.09
	3116C	ETS-LINDGREN	00213177	2017.12.05	2019.12.05
(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**

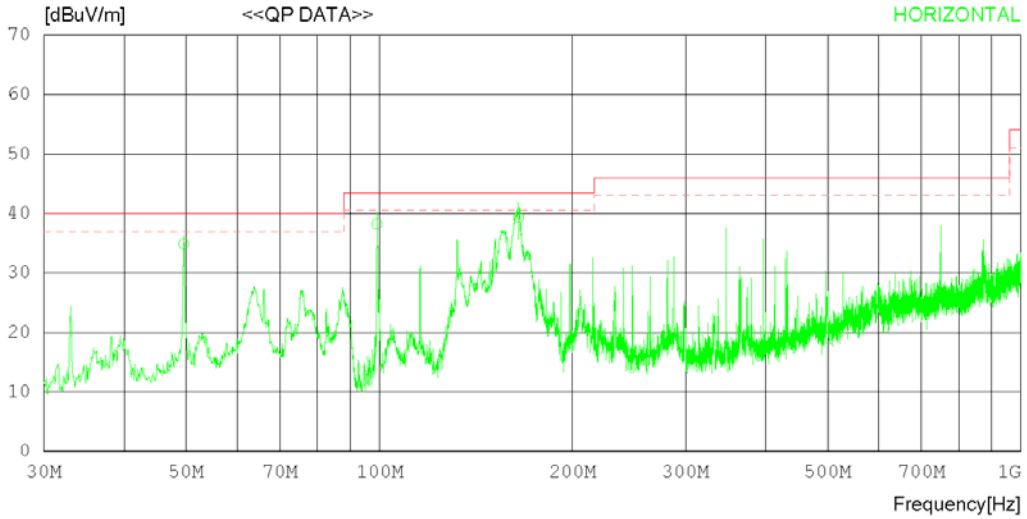
RADIATED EMISSION

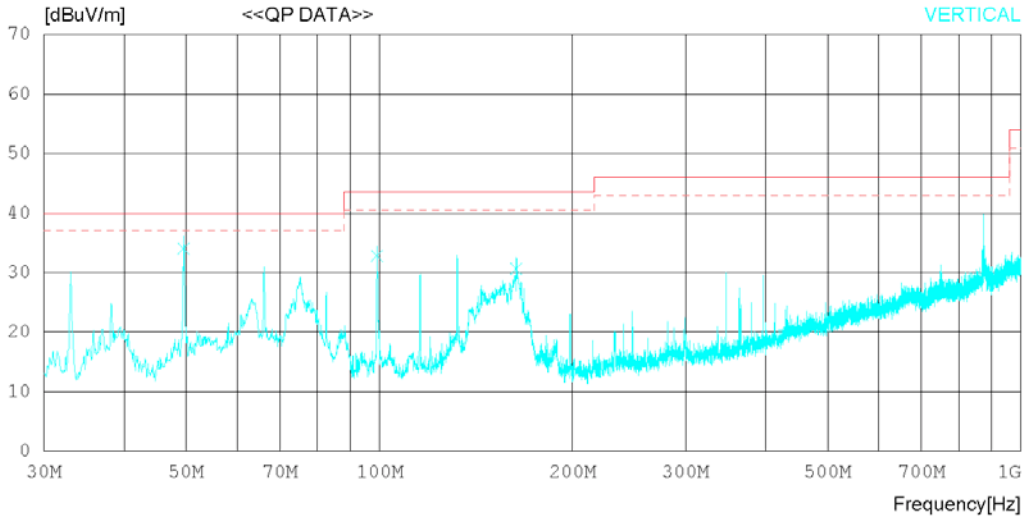
Date 2019-03-12

Order No. DTNC1902-01422
Power Supply 120 VAC 60 Hz
Temp/Humi 21 'C 43 % R.H.
Test Condition PC Link

Memo

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





RADIATED EMISSION

Date 2019-03-12

Order No. DTNC1902-01422
Power Supply 120 VAC 60 Hz
Temp/Humi 21 'C 43 % 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	49.521	40.30	18.25	2.10	25.80	34.85	40.00	5.15	387	309
2	99.111	46.20	15.12	2.60	25.70	38.22	43.50	5.28	334	353
3	164.827	43.40	18.51	3.04	25.65	39.30	43.50	4.20	265	349
----- Vertical ------										
4	49.521	39.50	18.25	2.10	25.80	34.05	40.00	5.95	130	350
5	99.111	40.80	15.12	2.60	25.70	32.82	43.50	10.68	171	238
6	163.493	34.60	18.62	3.04	25.65	30.61	43.50	12.89	103	47

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**

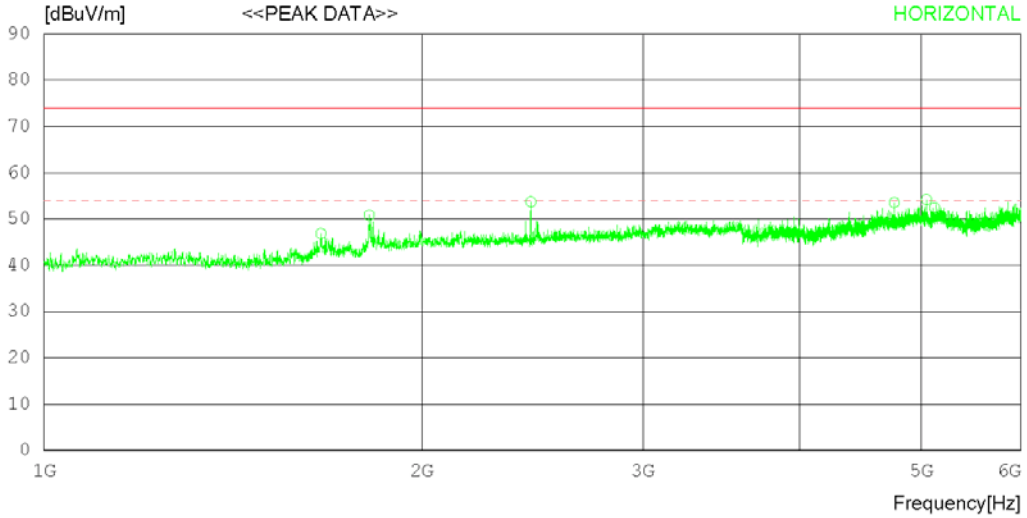
RADIATED EMISSION

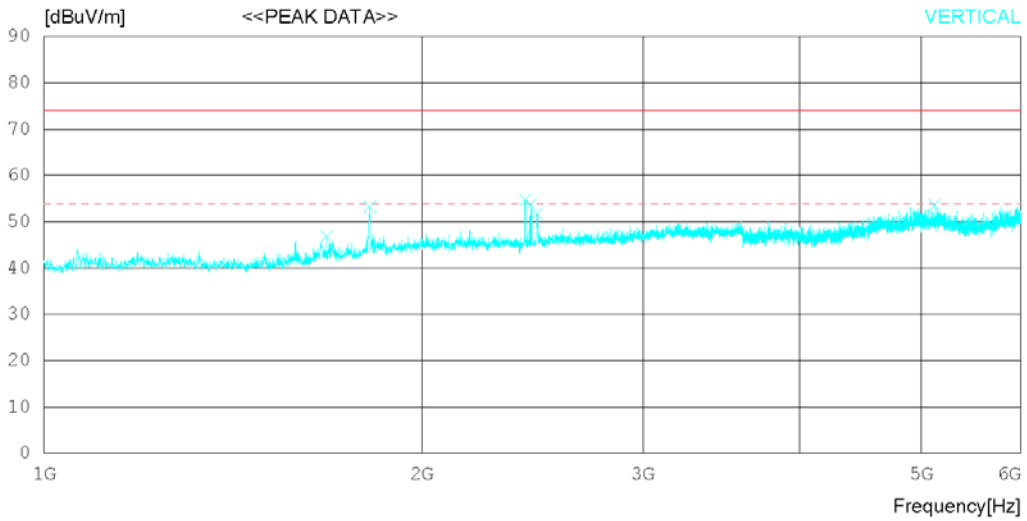
Date 2019-03-12

Order No. DTNC1902-01422
Power Supply 120 VAC 60 Hz
Temp/Humi 20 'C 44 %.R.H.
Test Condition PC Link

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)
FCC Part15 Subpart.B Class B (3m) - GHz(Average)





RADIATED EMISSION

Date 2019-03-12

Order No. DTNC1902-01422
Power Supply 120 VAC 60 Hz
Temp/Humi 20 'C 44 %.R.H.
Test Condition PC Link

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)
FCC Part15 Subpart.B Class B (3m) - GHz(Average)

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	1661.875	47.20	28.92	5.92	35.17	46.87	74.0	27.13	233	358
2	1815.625	49.20	30.46	6.18	35.01	50.83	74.0	23.17	199	300
3	2441.875	49.40	32.05	7.05	34.83	53.67	74.0	20.33	231	343
4	4756.250	43.40	34.00	10.70	34.57	53.53	74.0	20.47	109	358
5	5045.625	43.60	34.19	11.05	34.65	54.19	74.0	19.81	132	198
6	5121.250	41.90	34.14	11.04	34.65	52.43	74.0	21.57	353	358
----- Vertical ------										
7	1678.750	47.10	28.96	5.95	35.15	46.86	74.0	27.14	114	117
8	1817.500	51.60	30.47	6.18	35.01	53.24	74.0	20.76	134	1
9	2416.875	50.60	31.90	7.03	34.83	54.70	74.0	19.3	109	1
10	2441.875	49.50	32.05	7.05	34.83	53.77	74.0	20.23	181	310
11	2470.000	47.30	32.18	7.08	34.83	51.73	74.0	22.27	123	1
12	5121.250	43.10	34.14	11.04	34.65	53.63	74.0	20.37	255	193

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**

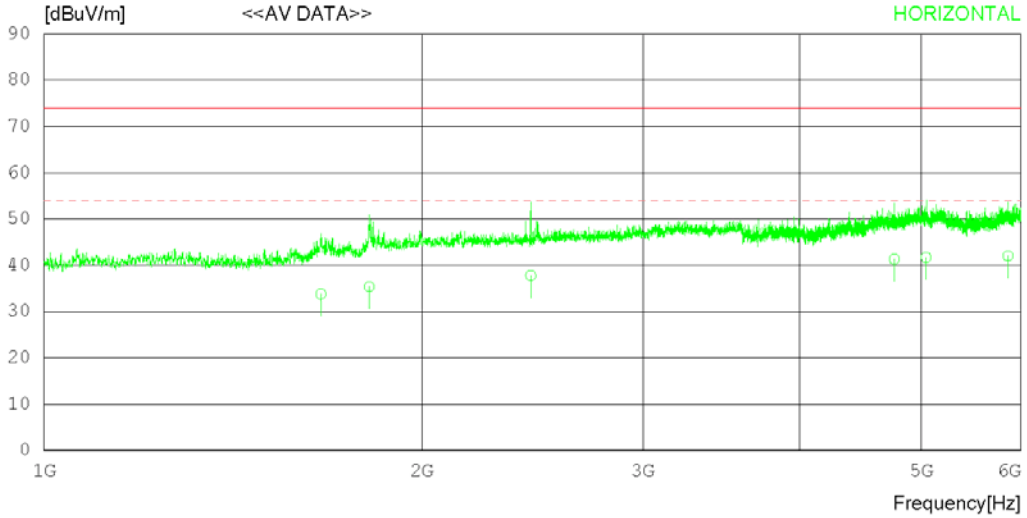
RADIATED EMISSION

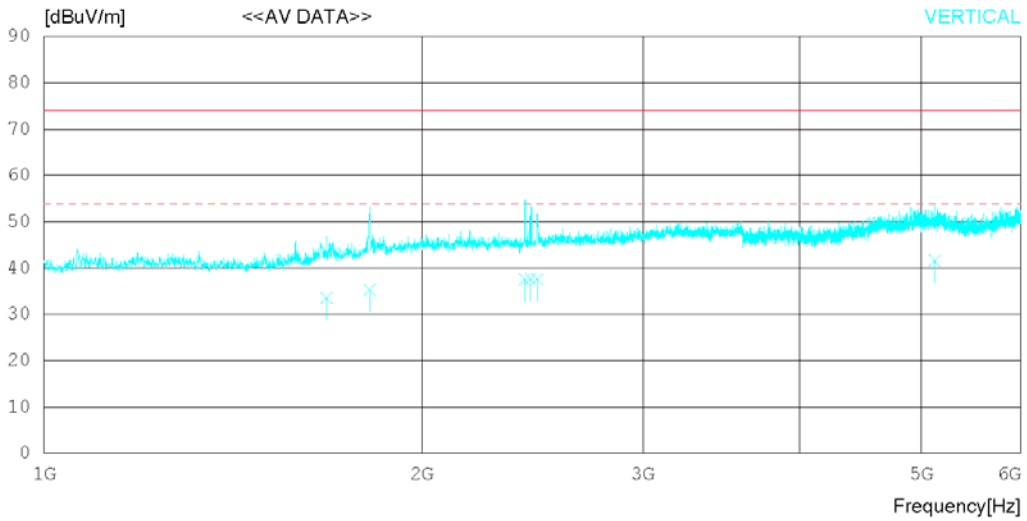
Date 2019-03-12

Order No. DTNC1902-01422
Power Supply 120 VAC 60 Hz
Temp/Humi 20 'C 44 %.R.H.
Test Condition PC Link

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)
FCC Part15 Subpart.B Class B (3m) - GHz(Peak)





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Order No. DTNC1902-01422
Power Supply 120 VAC 60 Hz
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LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)
FCC Part15 Subpart.B Class B (3m) - GHz(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	1661.345	34.10	28.92	5.92	35.17	33.77	54.00	20.23	234	341
2	1815.545	33.70	30.46	6.18	35.01	35.33	54.00	18.67	198	313
3	2441.475	33.50	32.05	7.05	34.83	37.77	54.00	16.23	232	341
4	4756.340	31.20	34.00	10.70	34.57	41.33	54.00	12.67	109	352
5	5042.225	31.10	34.18	11.06	34.65	41.69	54.00	12.31	134	204
6	5859.195	30.30	34.92	11.52	34.74	42.00	54.00	12.00	253	356
----- Vertical ------										
7	1678.210	33.80	28.96	5.95	35.15	33.56	54.00	20.44	114	123
8	1817.340	33.70	30.47	6.18	35.01	35.34	54.00	18.66	135	5
9	2416.155	33.40	31.90	7.03	34.83	37.50	54.00	16.50	109	6
10	2441.345	33.40	32.05	7.05	34.83	37.67	54.00	16.33	181	321
11	2470.290	33.20	32.18	7.08	34.83	37.63	54.00	16.37	123	4
12	5121.350	31.10	34.14	11.04	34.65	41.63	54.00	12.37	255	187

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**

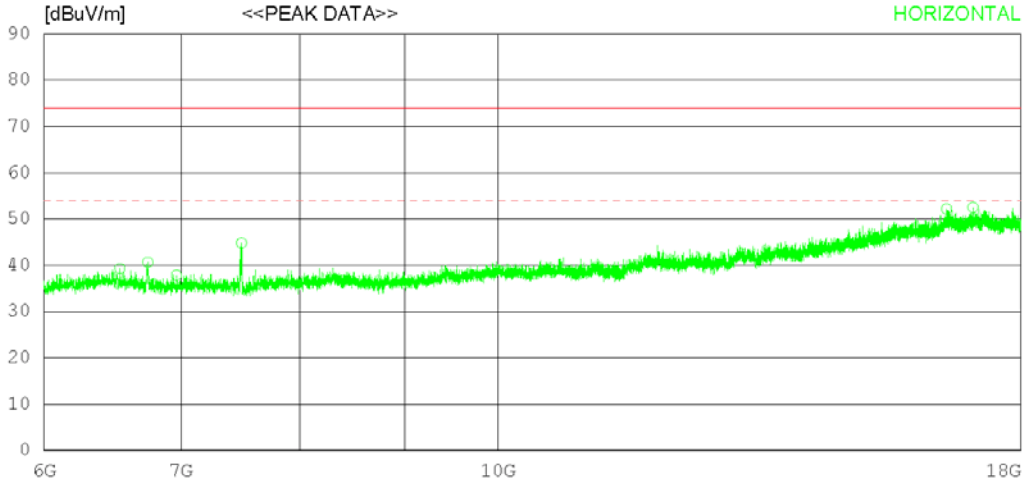
RADIATED EMISSION

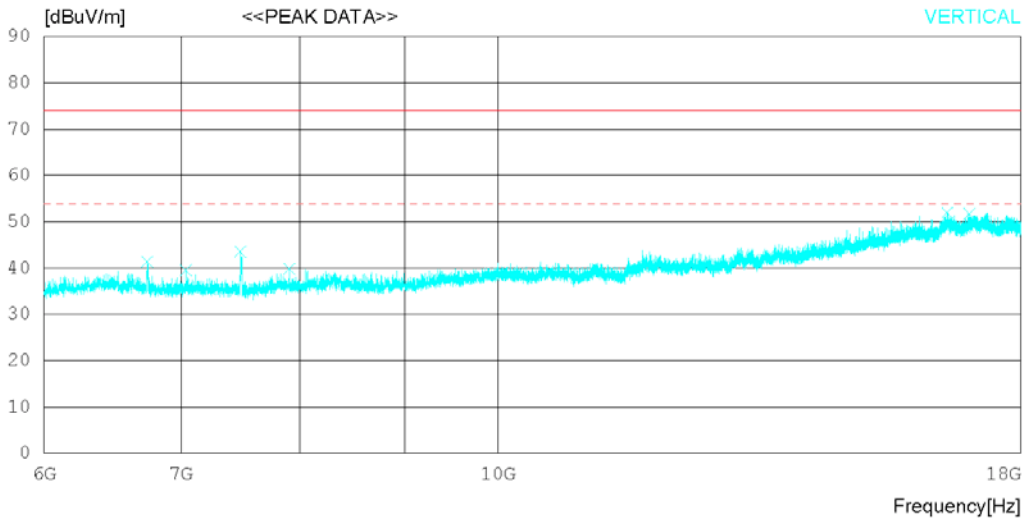
Date 2019-03-12

Order No. DTNC1902-01422
Power Supply 120 VAC 60 Hz
Temp/Humi 21 'C 45 %.R.H.
Test Condition PC Link

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)
FCC Part15 Subpart.B Class B (3m) - GHz(Average)





* The measurement is performed above 18 GHz up to 40 GHz and not found emissions above 18 GHz.

RADIATED EMISSION

Date 2019-03-12

Order No. DTNC1902-01422
Power Supply 120 VAC 60 Hz
Temp/Humi 21 'C 45 %.R.H.
Test Condition PC Link

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Peak)
FCC Part15 Subpart.B Class B (3m) - GHz(Average)

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	6534.000	35.00	31.58	11.21	38.50	39.29	74.0	34.71	108	358
2	6742.500	36.40	31.52	11.23	38.49	40.66	74.0	33.34	313	358
3	6963.750	33.40	31.46	11.67	38.68	37.85	74.0	36.15	107	169
4	7492.500	39.90	31.38	11.87	38.33	44.82	74.0	29.18	199	358
5	16555.500	32.10	37.05	19.88	36.86	52.17	74.0	21.83	163	85
6	17055.750	32.30	37.59	19.93	37.31	52.51	74.0	21.49	227	1
----- Vertical ------										
7	6739.500	37.10	31.52	11.23	38.49	41.36	74.0	32.64	116	100
8	7039.500	35.10	31.44	11.72	38.71	39.55	74.0	34.45	103	240
9	7480.500	38.70	31.38	11.86	38.34	43.60	74.0	30.4	207	211
10	7905.000	34.10	31.31	12.42	37.99	39.84	74.0	34.16	183	307
11	16573.500	31.80	37.07	19.97	36.88	51.96	74.0	22.04	147	359
12	16987.500	31.30	37.54	20.12	37.25	51.71	74.0	22.29	108	32

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**

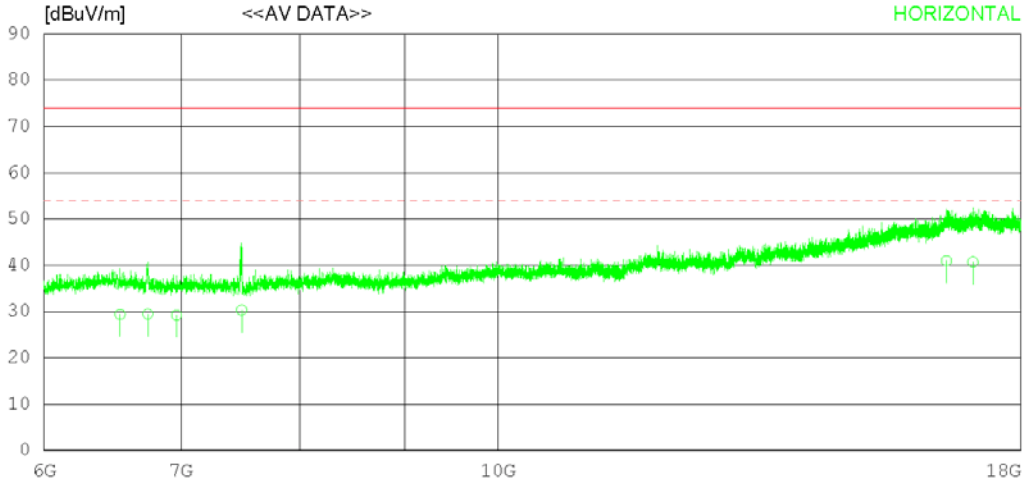
RADIATED EMISSION

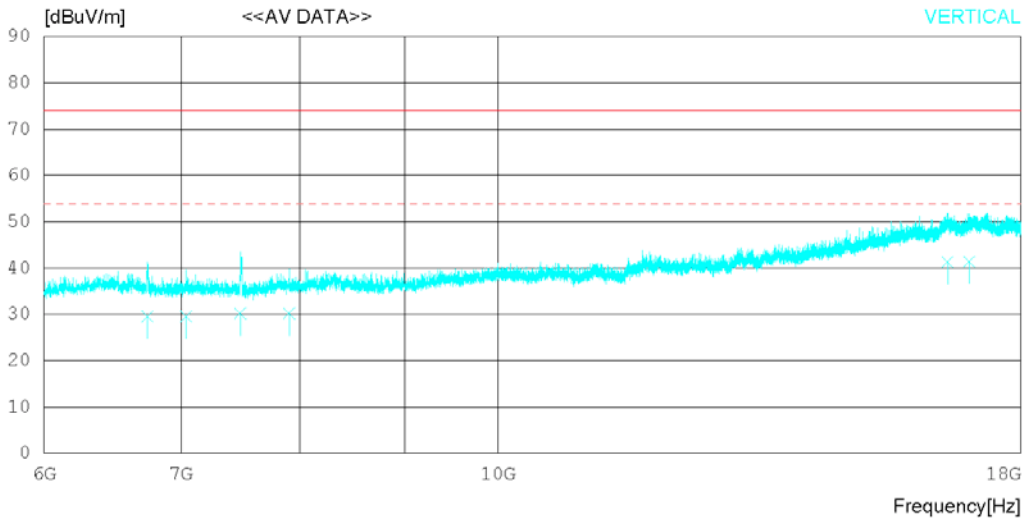
Date 2019-03-12

Order No. DTNC1902-01422
Power Supply 120 VAC 60 Hz
Temp/Humi 21 'C 45 %.R.H.
Test Condition PC Link

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)
FCC Part15 Subpart.B Class B (3m) - GHz(Peak)





* The measurement is performed above 18 GHz up to 40 GHz and not found emissions above 18 GHz.

RADIATED EMISSION

Date 2019-03-12

Order No. DTNC1902-01422
Power Supply 120 VAC 60 Hz
Temp/Humi 21 'C 45 %.R.H.
Test Condition PC Link

Memo

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)
FCC Part15 Subpart.B Class B (3m) - GHz(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	6534.710	25.10	31.58	11.21	38.50	29.39	54.00	24.61	107	357
2	6742.340	25.20	31.52	11.23	38.49	29.46	54.00	24.54	313	359
3	6963.150	24.80	31.46	11.67	38.67	29.26	54.00	24.74	108	175
4	7492.760	25.40	31.38	11.87	38.33	30.32	54.00	23.68	199	352
5	16555.640	20.90	37.05	19.88	36.86	40.97	54.00	13.03	163	96
6	17055.240	20.50	37.59	19.93	37.31	40.71	54.00	13.29	227	5
----- Vertical ------										
7	6739.780	25.30	31.52	11.23	38.49	29.56	54.00	24.44	167	120
8	7039.940	25.10	31.44	11.72	38.71	29.55	54.00	24.45	104	244
9	7480.690	25.30	31.38	11.86	38.34	30.20	54.00	23.80	208	212
10	7905.330	24.50	31.31	12.42	37.99	30.24	54.00	23.76	183	310
11	16573.710	21.10	37.07	19.97	36.88	41.26	54.00	12.74	147	355
12	16987.950	21.00	37.54	20.12	37.25	41.41	54.00	12.59	107	40

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. 00. 2019	Initial report	ChanGeun Lee	DaeHwa Eun

-End of test report-