

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. : DREFCC1809-0267
2. Client / Applicant
 - Name : LG Electronics USA, Inc.
 - Address : 1000 Sylvan Ave. Englewood Cliffs NJ 07632 United States
3. Use of Report : Grant of Certification
4. Product Name / Model Name : Mobile Phone / KX1801
5. Test Standard : ANSI C 63.4 : 2014
FCC Part 15 Subpart B
(Class B personal computers and peripherals)
6. Date of Test : Aug. 20. 2018
7. Testing Environment : Temperature (22) °C , Humidity (44 ~ 53) % R.H.
8. Test Result : Refer to the attached Test Result

Affirmation	Tested by	Reviewed by
	Name : YongKi Kim (Signature)	Name : HyungJun Kim (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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Sep. 27. 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, R-4496, 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 USA, Inc. 1000 Sylvan Ave. Englewood Cliffs NJ 07632 United States
Manufacturer	LG Electronics USA, Inc. 1000 Sylvan Ave. Englewood Cliffs NJ 07632 United States
Factory	LG Electronics USA, Inc. 1000 Sylvan Ave. Englewood Cliffs NJ 07632 United States
Product Name	Mobile Phone
Model Name	KX1801
Add Model Name	None
FCC ID	ZNFKX1801
Rated Power	DC 3.85 V
Remarks	Earphone 1. Manufacturer : CRESYN 2. S/N : EAB63728244 USB Cable 1. Manufacturer : NINGBO 2. S/N : EAD64746101

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	DELL	KB212-B	DOC
AE	MOUSE	LG	SM-9023	DOC
AE	LCD MONITOR	DELL	UP2414Qt	DOC
AE	PC	DELL	DCNE	DOC
AE	SSD 3.0	SAMSUNG	MU-PT250B	DOC
AE	PRINTER	Bixolon	SRP-770	DOC
AE	Headset	SAMSUNG	SHS-150V/M	DOC

*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	
STEREO IN/OUT	I/O	2.0	Non Shield	Plastic	
USB	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	
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	EUT
*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]
0.71281	L1	35.37	CAV	46.00	10.63

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dB μ V/m]	Detector	Limit [dB μ V/m]	Margin [dB]
635.224	H	39.69	QP	46.00	6.31

6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (°C)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2018-08-20	22	44	-
Radiated Disturbance	2018-08-20	22	53	

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 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 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	2018.06.07	2019.06.07
TRANSIENT LIMITER	TL-B0930A	EMCIS	11002	2017.09.07	2018.09.07
50 OHM TERMINATOR	CT-01	THE	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

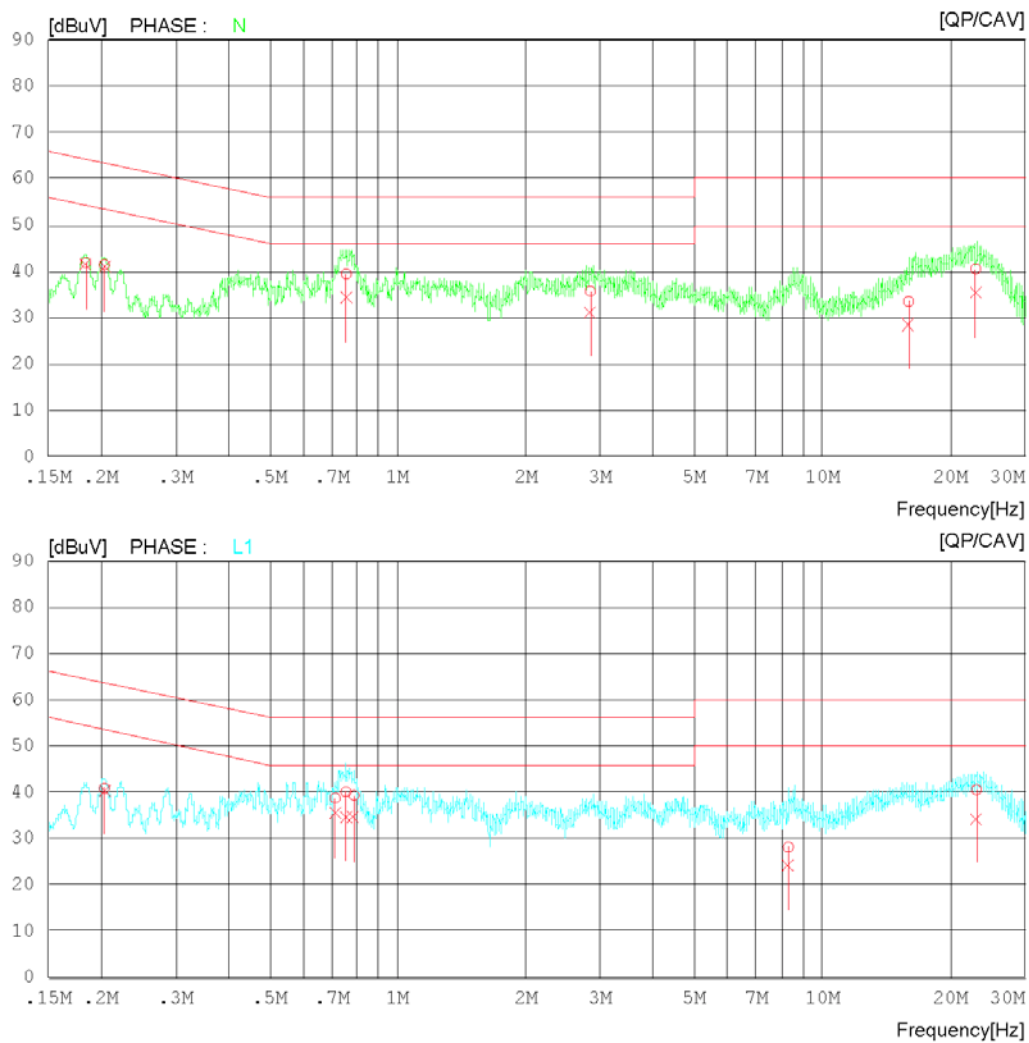
Results of Conducted Emission

DT&C

Date 2018-08-20

Order No. DTNC1808-06316
Power Supply 120 VAC 60 Hz
Temp/Humi/Atm 22 °C 44 % R.H.
Test Condition PC Link

LIMIT : CISPR22_B QP
CISPR22_B AV



Results of Conducted Emission

DT&C

Date 2018-08-20

Order No. DTNC1808-06316
Power Supply 120 VAC 60 Hz
Temp/Humi/Atm 22 °C 44 % 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	0.18415	21.85	21.45	19.99	41.84	41.44	64.30	54.30	22.46	12.86	N
2	0.20355	21.39	20.97	20.03	41.42	41.00	63.46	53.46	22.04	12.46	N
3	0.75650	19.38	14.10	20.09	39.47	34.19	56.00	46.00	16.53	11.81	N
4	2.84216	15.62	11.11	20.06	35.68	31.17	56.00	46.00	20.32	14.83	N
5	15.97232	12.30	7.30	21.17	33.47	28.47	60.00	50.00	26.53	21.53	N
6	23.01011	19.65	14.29	20.85	40.50	35.14	60.00	50.00	19.50	14.86	N
7	0.20359	20.77	20.33	20.03	40.80	40.36	63.46	53.46	22.66	13.10	L1
8	0.71281	18.46	15.13	20.24	38.70	35.37	56.00	46.00	17.30	10.63	L1
9	0.75550	19.89	14.60	20.19	40.08	34.79	56.00	46.00	15.92	11.21	L1
10	0.78850	19.16	14.37	20.16	39.32	34.53	56.00	46.00	16.68	11.47	L1
11	8.31922	7.42	3.43	20.71	28.13	24.14	60.00	50.00	31.87	25.86	L1
12	23.10960	19.71	13.45	20.84	40.55	34.29	60.00	50.00	19.45	15.71	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 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			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	100538	2018.01.29	2019.01.29
BILOG ANTENNA	VULB 9160	SCHWARZBECK	3359	2017.09.14	2019.09.14
LOW NOISE PRE AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2018.02.19	2019.02.19
HORN ANTENNA	3117	ETS-LINDGREN	00152093	2018.03.26	2020.03.26
HORN ANTENNA WITH PREAMPLIFIER	EM-6969/ MLA-0618-B03-34	ELECTRO-METRICS/ TSJ	156/ 1785642	2017.02.10	2019.02.10
PREAMPLIFIER	8449B	AGILENT TECHNOLOGIES	3008A01590	2018.02.20	2019.02.20
HORN ANTENNA WITH PREAMPLIFIER	3116C / JS44-18004000-35-8P	ETS-LINDGREN / L3 NARDA-MITEQ	00213177 / 2046884	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

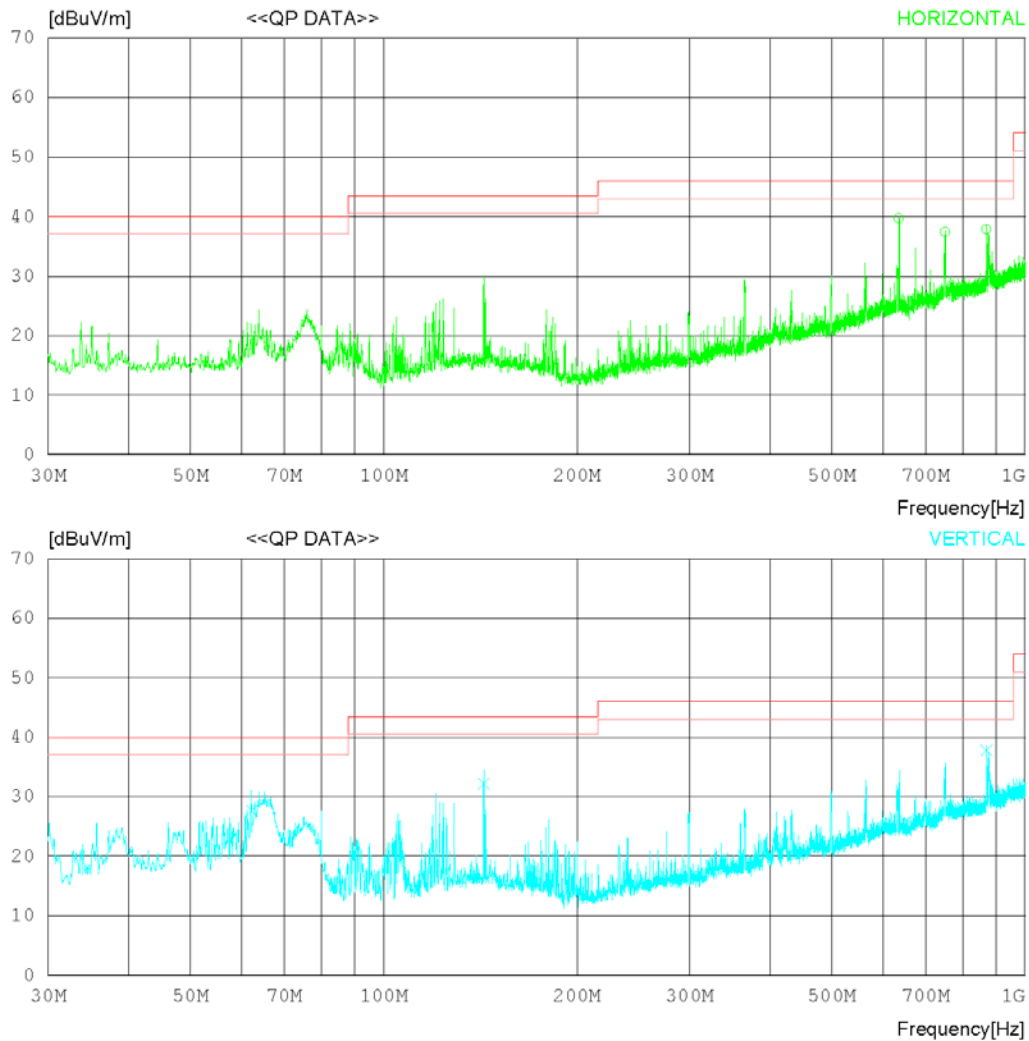
RADIATED EMISSION

Date 2018-08-20

Order No. DTNC1808-06316
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 53 %.R.H.
Test Condition PC Link

Memo

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



RADIATED EMISSION

Date 2018-08-20

Order No. DTNC1808-06316
Power Supply 120 VAC 60 Hz
Temp/Humi 22°C 53 %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	635.224	34.10	26.40	4.43	25.24	39.69	46.00	6.31	151	33
2	749.417	29.70	28.19	4.90	25.35	37.44	46.00	8.56	100	312
3	869.358	28.90	29.30	5.18	25.57	37.81	46.00	8.19	145	348
----- Vertical -----										
4	62.331	34.60	17.37	1.25	25.52	27.70	40.00	12.30	100	247
5	143.444	36.50	19.34	1.93	25.58	32.19	43.50	11.31	100	277
6	870.207	28.90	29.30	5.19	25.57	37.82	46.00	8.18	100	341

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

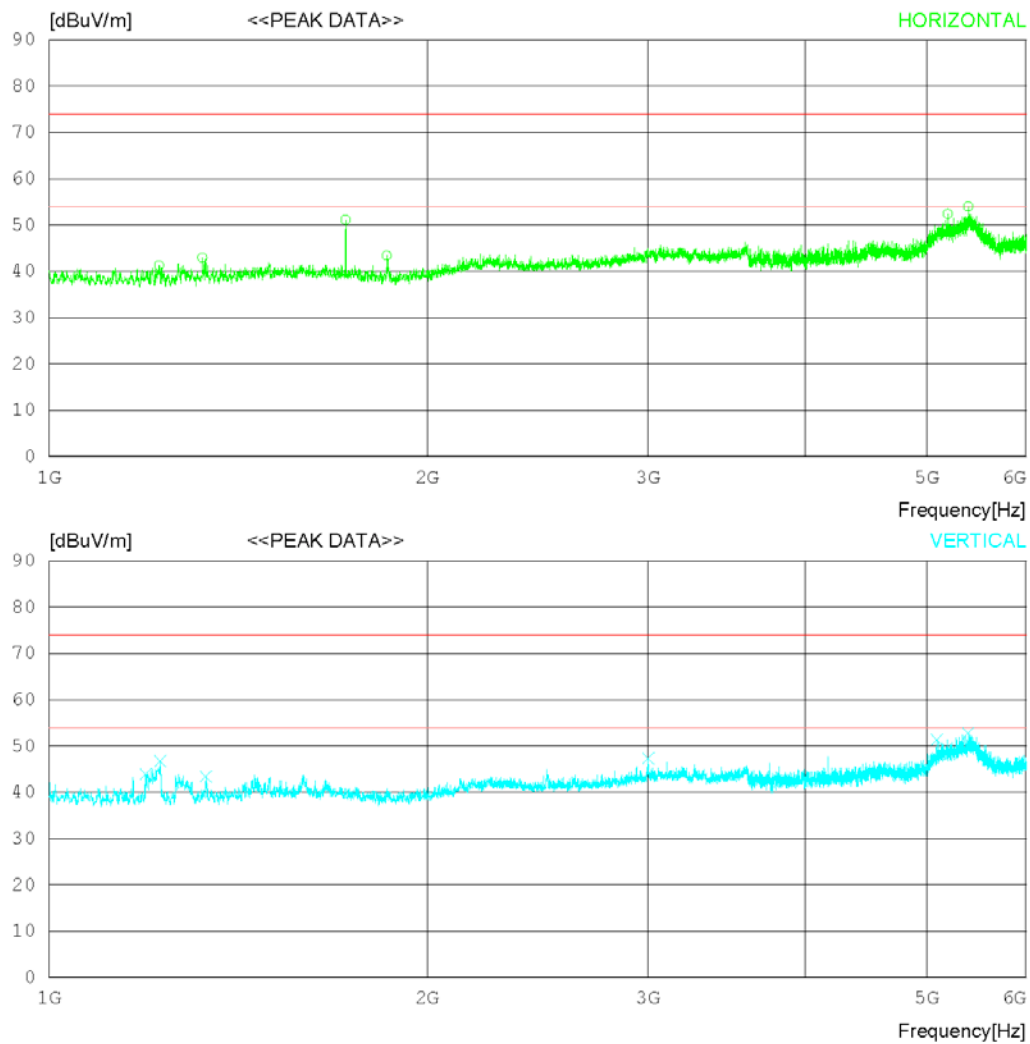
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Date 2018-08-20

Order No. DTNC1808-06316
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 53 % 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 2018-08-20

Order No. DTNC1808-06316
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 53 %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	1223.125	45.70	23.96	3.78	32.19	41.25	74.0	32.75	100	215
2	1324.375	46.70	24.57	3.91	32.24	42.94	74.0	31.06	100	358
3	1722.500	54.10	25.13	4.37	32.40	51.20	74.0	22.8	210	235
4	1858.125	46.60	24.84	4.48	32.46	43.46	74.0	30.54	100	154
5	5194.375	42.70	34.47	7.57	32.36	52.38	74.0	21.62	100	179
6	5396.875	42.40	36.46	7.60	32.50	53.96	74.0	20.04	400	1
----- Vertical -----										
7	1193.750	48.50	23.77	3.75	32.18	43.84	74.0	30.16	200	1
8	1226.250	51.20	23.98	3.78	32.20	46.76	74.0	27.24	100	1
9	1333.125	47.10	24.60	3.91	32.24	43.37	74.0	30.63	100	65
10	3000.000	45.00	29.00	5.84	32.58	47.26	74.0	26.74	100	1
11	5092.500	42.60	33.76	7.34	32.29	51.41	74.0	22.59	100	313
12	5395.625	41.20	36.44	7.60	32.50	52.74	74.0	21.26	100	1

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

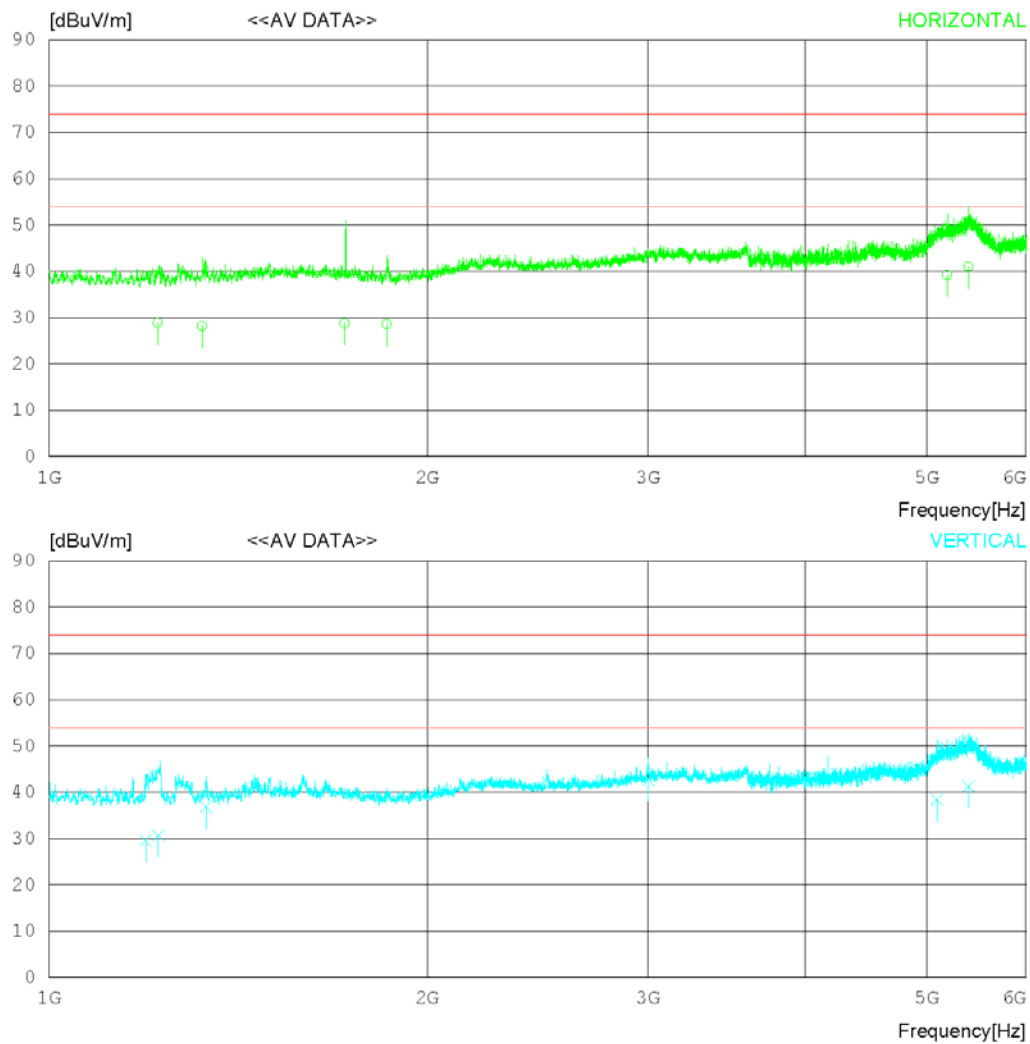
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Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 53 % R.H.
Test Condition

Memo

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



RADIATED EMISSION

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Test Condition

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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	1219.945	33.30	23.94	3.78	32.19	28.83	54.00	25.17	100	209
2	1322.866	31.90	24.57	3.90	32.24	28.13	54.00	25.87	100	244
3	1719.888	31.70	25.14	4.37	32.40	28.81	54.00	25.19	210	233
4	1858.170	31.80	24.84	4.48	32.46	28.66	54.00	25.34	100	92
5	5190.558	29.60	34.44	7.56	32.36	39.24	54.00	14.76	100	154
6	5395.078	29.50	36.44	7.60	32.50	41.04	54.00	12.96	400	144
----- Vertical -----										
7	1194.001	34.20	23.77	3.75	32.18	29.54	54.00	24.46	200	270
8	1221.353	35.20	23.95	3.78	32.19	30.74	54.00	23.26	100	221
9	1333.333	40.60	24.60	3.91	32.24	36.87	54.00	17.13	100	171
10	2999.988	40.50	29.00	5.84	32.58	42.76	54.00	11.24	100	180
11	5093.397	29.60	33.77	7.34	32.29	38.42	54.00	15.58	100	320
12	5399.290	29.70	36.49	7.60	32.51	41.28	54.00	12.72	100	21

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

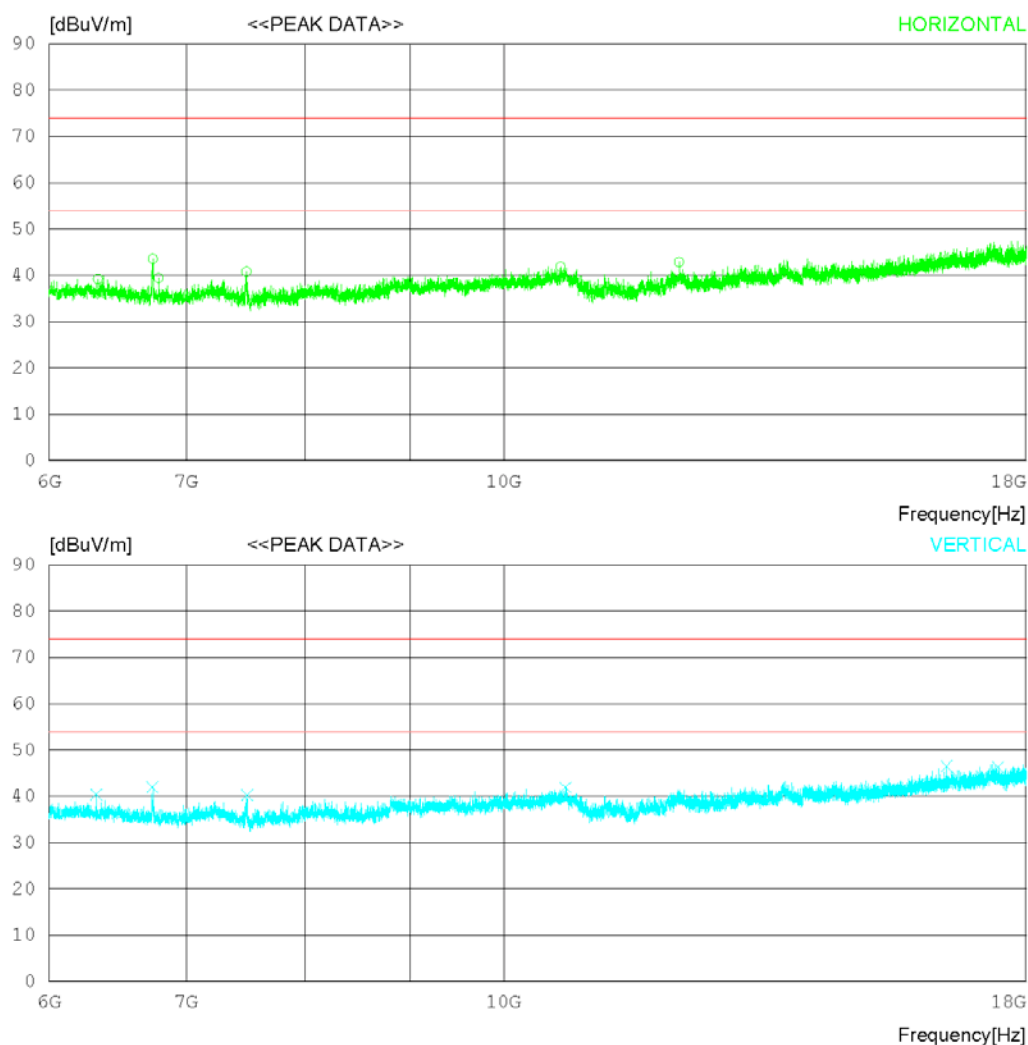
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Temp/Humi 22 'C 53 % R.H.
Test Condition

Model Name

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

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Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 53 % R.H.
Test Condition

Model Name

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	6340.500	39.20	31.42	7.54	38.91	39.25	74.0	34.75	100	72
2	6743.250	43.02	31.40	7.88	38.77	43.53	74.0	30.47	130	171
3	6786.000	38.84	31.39	7.92	38.75	39.40	74.0	34.6	100	358
4	7491.750	39.89	31.37	8.36	38.79	40.83	74.0	33.17	330	358
5	10665.750	35.68	32.52	11.40	37.72	41.88	74.0	32.12	100	358
6	12183.000	36.44	33.33	11.45	38.43	42.79	74.0	31.21	195	129
----- Vertical -----										
7	6326.250	40.35	31.42	7.52	38.90	40.39	74.0	33.61	100	122
8	6741.750	41.42	31.40	7.88	38.77	41.93	74.0	32.07	155	358
9	7493.250	39.29	31.37	8.37	38.80	40.23	74.0	33.77	100	286
10	10725.750	35.64	32.54	11.46	37.74	41.90	74.0	32.1	100	358
11	16459.500	31.88	36.85	14.09	36.36	46.46	74.0	27.54	100	121
12	17441.250	30.85	37.95	14.25	36.77	46.28	74.0	27.72	190	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

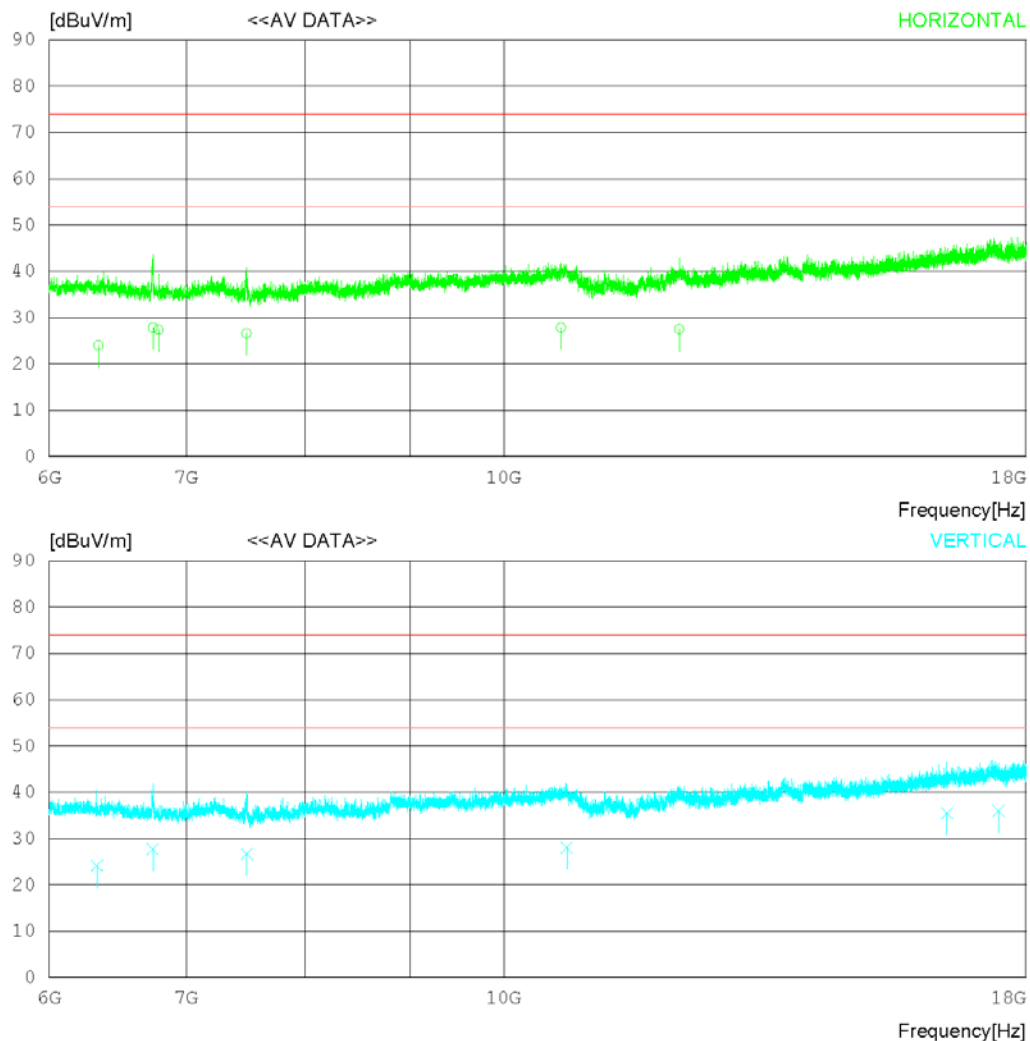
RADIATED EMISSION

Date 2018-08-20

Order No. DTNC1808-06316
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 53 % R.H.
Test Condition

Model Name

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 2018-08-20

Order No. DTNC1808-06316
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 53 % R.H.
Test Condition

Model Name

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

No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	CAV [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	6344.510	23.90	31.42	7.54	38.91	23.95	54.00	30.05	100	112
2	6741.850	27.30	31.40	7.88	38.77	27.81	54.00	26.19	130	211
3	6787.540	26.80	31.39	7.92	38.75	27.36	54.00	26.64	100	349
4	7492.220	25.70	31.37	8.36	38.79	26.64	54.00	27.36	330	330
5	10667.990	21.70	32.52	11.40	37.72	27.90	54.00	26.10	100	339
6	12180.940	21.10	33.33	11.45	38.43	27.45	54.00	26.55	195	139
----- Vertical -----										
7	6331.220	24.10	31.42	7.54	38.91	24.15	54.00	29.85	100	221
8	6741.950	27.20	31.40	7.88	38.77	27.71	54.00	26.29	155	271
9	7492.661	25.80	31.37	8.36	38.80	26.73	54.00	27.27	100	184
10	10737.750	21.80	32.55	11.47	37.75	28.07	54.00	25.93	100	334
11	16461.800	20.90	36.85	14.10	36.36	35.49	54.00	18.51	100	138
12	17450.810	20.60	37.96	14.25	36.79	36.02	54.00	17.98	190	80

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
Sep. 27. 2018	Initial report	YongKi Kim	HyungJun Kim

-End of test report-