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.: DREFCC1901-0044

2. Client / Applicant

· Name : LG Electronics Inc.

· Address: Twin Tower 128 Yeoui-daero, Yeongdeungpo-gu, Seoul, Korea 07336

3. Use of Report: Grant of Certification

4. Product Name / Model Name: Mobile Phone / LM-G820V

5. Test Standard: CAN/CSA CISPR 22-10

ICES-003 : 2016 ANSI C63.4 : 2014

FCC Part 15 Subpart B (personal computers and peripherals)

6. Date of Test: Jan. 24. 2019

7. Testing Environment: Temperature (19 ~ 23) °C, Humidity (45 ~ 49) % R.H.

8. Test Result: Refer to the attached Test Result

Affirmation Name : ChanGeun Lee (Strature) Reviewed by Name : HyungJun Kim

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.

Jan. 29. 2019

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.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		Code	Remark
	Korea	KOLAS	393	ISO/IEC 17025
Accreditation	South Africa	SABS	0006	ISO/IEC 17025
	Ghana	NCA	NCA agreement 23 rd , Oct, 2018	-
	USA	FCC	KR0034 101842 678747, 596748, 804488, 165783	Accredited 2.948 Listed
Site Filing	Canada	IC	5740A-3 5740A-4	Registered
Site I lillig	Japan	VCCI	C-1427 R-1364, R-3385, R-4076, R-4180, R-4496, T-1442, G-10338, G-754, G-10815	Registered
	Korea	КС	KR0034	Designation
Certification	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 Inc.
т фр. пост.	Twin Tower 128 Yeoui-daero, Yeongdeungpo-gu, Seoul, Korea 07336
	LG Electronics Inc.
Manufacturer	222 LG-ro Jinwi-myeon, Pyeongtaek-si Gyeonggi-do, 17709, Republic
	of Korea
	LG Electronics Inc.
Factory	222 LG-ro Jinwi-myeon, Pyeongtaek-si Gyeonggi-do, 17709, Republic
	of Korea
Product Name	Mobile Phone
Model Name	LM-G820V
	LMORREY CORRY
Add Model Name	LMG820V, G820V
Rated Power	DC 3.87 V
FCC ID	ZNFG820V
IC ID	2703C-G820V
	Earphone
	1. Manufacturer : CRESYN,
	2. S/N : EAB63728251
Remarks	
	USB Cable
	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	None
AE	MOUSE	LG	SM-9023	58Q02801
AE	LCD MONITOR	DELL	UP2414Qt	CN-OJJRX2-74261-67B-4P4U- A00
AE	PC	DELL DCNE		None
AE	SSD 3.0	SAMSUNG	MU-PT250B	S2WKNAAH32059X
AE	PRINTER	Bixolon	SRP-770	None
AE	Headset	SAMSUNG	SHS-150V/M	None

^{*}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	MOOSL
					LCD MONITOR
DSUB OUT	I/O	1.8	Shield	Plastic	
POWER IN	AC	1.8	Non Shield	Plastic	
DSUB IN	I/O	1.8	Shield	Plastic	
PARALLEL IN	I/O	2.0	Shield	Plastic	
SERIAL IN	I/O	1.9	Shield	Plastic	PC
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	
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 *Abbreviations:	I/O	1.0	Non Shield	Plastic	EUI

*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	CAN/CSA CISPR 22-10 ANSI C63.4:2014	С
Radiated Disturbance	CAN/CSA CISPR 22-10 ANSI C63.4:2014	С
C=Comply N/C=Not Cor	mply N/T=Not Tested N/A=Not Applicable	
Note)		

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

- Conducted Disturbance

Frequency [MHz]	Pol.	Result [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]
0.20195	N	48.97	CAV	53.53	4.56

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]
66.011	V	34.89	QP	40.00	5.11

6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (°C)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2019-01-24	23	45	100.1
Radiated Disturbance	2019-01-24 2019-01-24	20 19	46 49	-



7. Test Results: Emission

7.1 Conducted Disturbance

CAN/CSA CISPR 22	N/CSA CISPR 22 Mains terminal disturbance voltage								
ANSI C63.4	ANSI C63.4								
other units of t power was cor voltage measur port of the LIS test software, the frequency rang performing fina CISPR Average	and the EUT. All om the AMN. All MN). Conducted . The measuring ducted emission canning over the surement. When eak detector and test sample and	Comply							
Fully configured sam		Frequency range on each si	de of line	Measure	ement Point				
er the following free	quency range	150 kHz to 30 MHz		N	lains				
EUT mo	de	Test configuration mode			1				
(Refer to clai	uses 4)	EUT Operation mode			1				
		Limits – Class A							
Frequency (MHz)		Limit	dΒμV						
requericy (Wiriz)		Quasi-Peak		Average	•				
0.15 to 0.50		79		66					
0.50 to 30		73		60					
		Limits – Class B							
Frequency (MHz)		Limit	dΒμV						
Frequency (WHZ)	•								
0.15 to 0.50	56 to 46								
0.50 to 5		56		46					
5 to 30		60		50					

Measurement uncertainty	
Expended uncertainty <i>U</i>	2.61 dB
(95 %, Confidence level, $k = 2$)	2.01 QB

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	LISN1600	TTI	197204	2018.06.07	2019.06.07						
TWO-LINE V-NETWORK	ENV216	ROHDE&SCHWARZ	101979	2018.12.06	2019.12.06						
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						



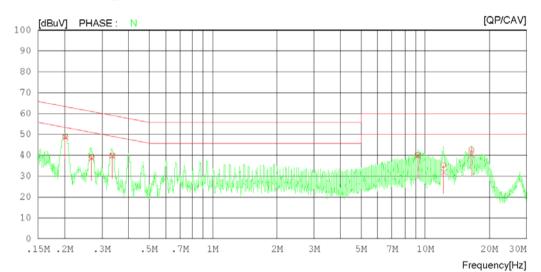
Mains terminal disturbance voltage _Measurement data										
Test configuration mode 1 EUT Operation mode 1										
Test voltage (V)	120	Test Frequency (Hz)	60							

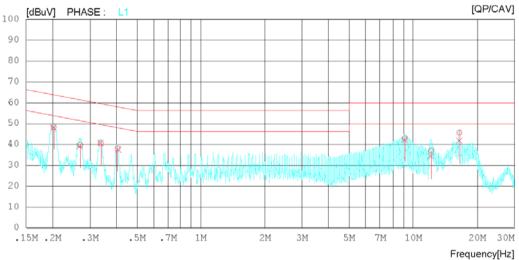
Results of Conducted Emission

DT&C Date 2019-01-24

Order No. Power Supply Temp/Humi/Atm Test Condition DTNC1901-00583,00584 120 VAC 60 Hz 23 'C 45 %.R.H. 100.1 kPa PC LINK

LIMIT : CISPR32_B QP CISPR32_B AV







Results of Conducted Emission

DT&C Date 2019-01-24

Order No. Power Supply Temp/Humi/Atm Test Condition DTNC1901-00583,00584 120 VAC 60 Hz 23 'C 45 %.R.H. 100.1 kPa PC LINK

LIMIT : CISPR32_B QP CISPR32_B AV

NO	FREQ	READING QP CAV [dBuV][dBuV]	C.FACTOR	RESULT QP CAV [dBuV] [dBuV]	LIMI' QP ([dBuV][CAV	MARGIN QP CAV [dBuV][dBuV]	PHASE
1		29.16 28.95		49.1848.97			14.35 4.56	N
2		19.49 18.75	19.80	39.29 38.55		1.16	21.87 12.61	N
3	0.33550	19.93 19.75	19.90	39.83 39.65	59.31 4	9.31	19.48 9.66	N
4	9.23611	19.64 19.05	20.54	40.18 39.59	60.00 5	0.00	19.82 10.41	N
5	12.20530	14.53 11.25	20.83	35.36 32.08	60.00 5	0.00	24.64 17.92	И
6	16.50353	21.82 19.53	21.03	42.85 40.56	60.00 5	0.00	17.15 9.44	N
7	0.20252	28.15 27.96	20.02	48.17 47.98	63.51 5	3.51	15.34 5.53	L1
8	0.27015	19.79 19.20	19.80	39.59 39.00	61.11 5	1.11	21.52 12.11	L1
9	0.33773	20.53 20.45	19.91	40.44 40.36	59.26 4	9.26	18.82 8.90	L1
10	0.40542	18.02 17.40	20.03	38.05 37.43	57.74 4	7.74	19.69 10.31	L1
11	9.12633	22.26 21.74	20.52	42.78 42.26	60.00 5	0.00	17.22 7.74	L1
12	12.17187	16.03 13.31	20.83	36.86 34.14	60.00 5	0.00	23.14 15.86	L-1
13	16.50366	24.43 20.61	21.03	45.4641.64	60.00 5	0.00	14.54 8.36	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 Method: Preliminary (peak) measurer or 3 meter below 1GHz and 3	Radiated disturbance 30 MHz –XX GHz**							
the receive antenna located a measurements were then per height from 1 to 4 m. All frequ where applicable. For final me	meter above 1GHz. That various heights in hor formed by rotating the lancies were investigate easurement below 1 GH was used. For final me	ne EUT was rota izontal and vertion EUT 360° and a red in both horizon Iz frequency rand asurement abov	ated 360° about its azimuth with cal polarities. Final djusting the receive antenna ental and vertical antenna polaritinge, Quasi-Peak detector with the 1 GHz frequency range, Peak					
EUT mode	Test configura	tion mode	1					
(Refer to clauses 4)	EUT Operation	on mode	1					
	Radiated Disturbar	nce below 1 000) MHz					
Frequency range		Quasi-pe	ak limit dBμV/m					
(MHz)	Class A (10 m	distance)	Class B (3 m dista	ance)				
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					
ccording to 15 109(g), as an alterna	tive to the radiated emis	ssion limit showr	above digital devices may be	shown to				
According to 15.109(g), as an alterna comply with the standards contained CISPR), Pub. 22 shown.		nternational Spe	cial Committee on Radio Interfe					
comply with the standards contained CISPR), Pub. 22 shown. Frequency range	in Third Edition of the Ir	nternational Spe	cial Committee on Radio Interfe ak limit dΒμV/m	rence				
omply with the standards contained CISPR), Pub. 22 shown. Frequency range (MHz)	in Third Edition of the Ir Class A (10 m	nternational Spe	cial Committee on Radio Interfe ak limit dΒμV/m Class B (10 m dist	rence				
omply with the standards contained CISPR), Pub. 22 shown. Frequency range (MHz) 30 to 230	in Third Edition of the Ir Class A (10 m	nternational Spe	cial Committee on Radio Interfe ak limit dBμV/m Class B (10 m dist	rence				
comply with the standards contained CISPR), Pub. 22 shown. Frequency range (MHz) 30 to 230 230 to 1 000	Class A (10 m 40	Quasi-pe	cial Committee on Radio Interfe ak limit dΒμV/m Class B (10 m dist	rence				
comply with the standards contained CISPR), Pub. 22 shown. Frequency range (MHz) 30 to 230 230 to 1 000 Radiated Disturb	in Third Edition of the Ir Class A (10 m 40 47	Quasi-pe distance)	cial Committee on Radio Interferance ak limit dBμV/m Class B (10 m dist 30 37	ance)				
omply with the standards contained CISPR), Pub. 22 shown. Frequency range (MHz) 30 to 230 230 to 1 000	Class A (10 m 40 47 ance for above 1 000	Quasi-pe distance)	cial Committee on Radio Interferance ak limit dBµV/m Class B (10 m dist 30 37 surement distance of 3 m Average limit dBµ	ance)				
omply with the standards contained CISPR), Pub. 22 shown. Frequency range (MHz) 30 to 230 230 to 1 000 Radiated Disturb Frequency range	Class A (10 m 40 47 ance for above 1 000 Peak limit of	Quasi-pe distance) MHz at a meas	cial Committee on Radio Interferance ak limit dBµV/m Class B (10 m dist 30 37 surement distance of 3 m Average limit dBµ	ance)				
omply with the standards contained CISPR), Pub. 22 shown. Frequency range (MHz) 30 to 230 230 to 1 000 Radiated Disturb Frequency range (GHz) 1 to 40	Class A (10 m 40 47 ance for above 1 000 Peak limit of Class A 80	Quasi-pe distance) MHz at a meas IBµV/m Class B 74	cial Committee on Radio Interferance ak limit dBµV/m Class B (10 m distriction of 30 are surement distance of 3 m Average limit dBµ Class A	ance) IV/m Class B				
omply with the standards contained CISPR), Pub. 22 shown. Frequency range (MHz) 30 to 230 230 to 1 000 Radiated Disturb Frequency range (GHz) 1 to 40	Class A (10 m 40 47 ance for above 1 000 Peak limit of Class A 80 range of Radiated Disid or used in the device	Quasi-pe distance) MHz at a meas IBµV/m Class B 74 sturbance meas	cial Committee on Radio Interferance ak limit dBµV/m Class B (10 m dist 30 37 surement distance of 3 m Average limit dBµ Class A 60	ance) IV/m Class B 54				
omply with the standards contained CISPR), Pub. 22 shown. Frequency range (MHz) 30 to 230 230 to 1 000 Radiated Disturb Frequency range (GHz) 1 to 40 The test frequency generate or on which the device ope	Class A (10 m 40 47 ance for above 1 000 Peak limit of Class A 80 range of Radiated Districted or used in the device rates or tunes (MHz) 08	Quasi-pe distance) MHz at a meas IBµV/m Class B 74 sturbance meas	cial Committee on Radio Interferance ak limit dBµV/m Class B (10 m distriction of 30 m and 37 m are surement distance of 3 m are surement distance of 3 m are surement distance of 3 m are surements are listed below. Surements are listed below. Surements are listed below.	ance) IV/m Class B 54				
omply with the standards contained CISPR), Pub. 22 shown. Frequency range (MHz) 30 to 230 230 to 1 000 Radiated Disturb Frequency range (GHz) 1 to 40 The test frequency Highest frequency generate or on which the device ope	Class A (10 m 40 47 ance for above 1 000 Peak limit of Class A 80 range of Radiated Districted or used in the device rates or tunes (MHz) 08 00	Quasi-pe distance) MHz at a meas IBµV/m Class B 74 sturbance meas	cial Committee on Radio Interfer ak limit dBµV/m Class B (10 m distriction of 30 m distriction of 3 m distr	ance) IV/m Class B 54				

Expended uncertainty U

(95 %, Confidence level, k = 2)

3 m _ 4.22 dB, (30 ~ 1 000) MHz

10 m $_$ 2.89 dB, (30 \sim 1 000) MHz

4.16 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	2018.06.28	2019.06.28						
TRILOG BROAD BAND ANTENNA	VULB9160	SCHWARZBECK	9160-3339	2018.10.22	2020.10.22						
6DB ATTENUATOR	8491B	HP	23831	2018.09.17	2020.09.17						
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						
PRE AMPLIFIER	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	2018.11.09	2019.11.09						
(NOTE : THE MEASUREM	MENT ANTENNAS WERE	CALIBRATED IN ACCO	RDANCE TO THE F	REQUIREMENTS C	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					

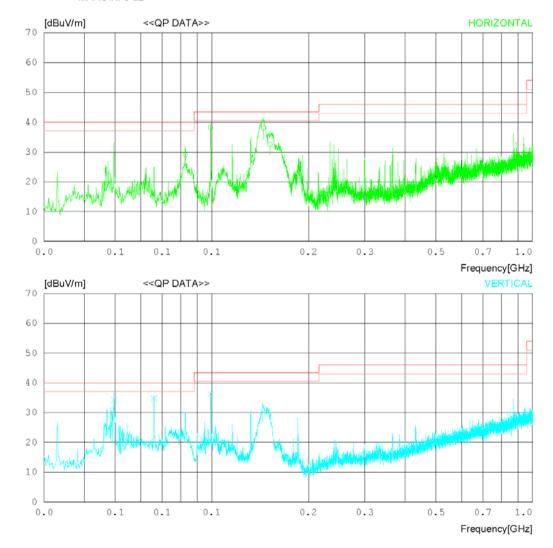
RADIATED EMISSION

Date 2019-01-24

Order No. Power Supply Temp/Humi Test Condition DTNC1901-00583,00584 120 VAC 60 Hz 20 'C 46 %.R.H. PC LINK

Memo

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





RADIATED EMISSION

Date 2019-01-24

Order No. Power Supply Temp/Humi Test Condition

DTNC1901-00583,00584 120 VAC 60 Hz 20 'C 46 %.R.H. PC LINK

Memo

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

No	. FREQ	READING OP	ANT FACTOR	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m] [dB]	[cm]	[DEG]
	Horizon	tal								
1 2 3 4	82.622 99.111 145.064 151.854	39.20 47.20 42.80 37.20	13.94 15.12 18.80 18.90	1.47 1.39 1.95 2.02	25.54 25.55 25.58 25.58	29.07 38.16 37.97 32.54	40.00 43.50 43.50 43.50	10.93 5.34 5.53 10.96	240 300 240 100	320 350 354 280
	Vertica:	1								
5 6 7 8	49.521 66.011 99.111 143.973	40.50 41.90 45.20 35.20	18.25 17.20 15.12 18.78	1.10 1.31 1.39 1.94	25.51 25.52 25.55 25.58	34.34 34.89 36.16 30.34	40.00 40.00 43.50 43.50	5.66 5.11 7.34 13.16	100 100 100 220	140 0 64 70



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

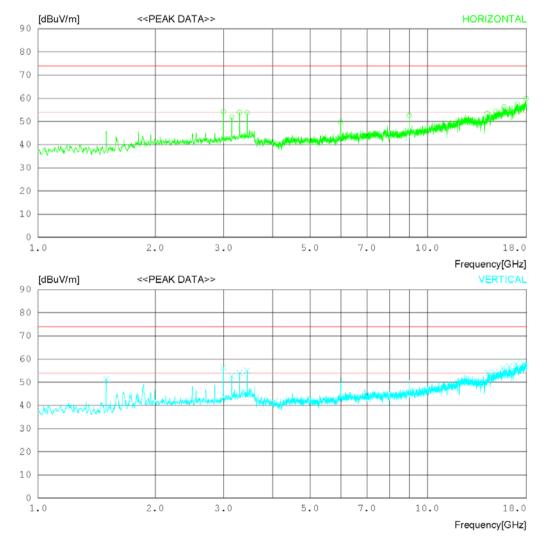
RADIATED EMISSION

Date 2019-01-24

Order No. DTNC1901-00583,00584
Power Supply 120 VAC 60 Hz
Temp/Humi 19 'C 49 %.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 40 GHz and not found emissions above 18 GHz.



RADIATED EMISSION

Date 2019-01-24

Order No. DTNC1901-00583,00584
Power Supply 120 VAC 60 Hz
Temp/Humi 19 'C 49 %.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 PEAK	ANT FACTOR	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]		[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m	.] [dB]	[cm]	[DEG]
	Horizont	al	==							
2 3 4 5 6 7 8 9	3148.37 3295.00 3445.87 5991.62 8990.00 14260.0 15014.3 15745.3	0 53.90 3 5 51.10 3 0 52.90 3 5 52.70 3 5 45.70 3 0 46.60 3 8 042.30 3 8 043.50 4 5 042.00 4 5 043.40 4	3.00 2.91 2.80 5.10 6.39 9.11 9.70 0.24 1.75	2.64 2.77 2.91 3.78 4.95 6.76 6.98 7.23 7.99	34.77 34.69 34.62 34.76 35.33 33.90 34.61 34.71	54.20 51.97 53.89 53.79 49.82 52.61 53.57 54.37 56.26 57.58 59.87	74.0 74.0 74.0 74.0 74.0 74.0 74.0 74.0	19.8 22.03 20.11 20.21 24.18 21.39 20.43 19.63 17.74 16.42 14.13	100 400 100 170 310 400 100 330 100 100 280	358 178 185 358 1 358 219 289 358 145 83
	Vertical	L								
13 14 15 16 17 18 19	2993.25 3146.25 3297.12 3443.75 14296.1 14891.1 15628.5 16249.0 16946.0	0 56.70 2 0 56.00 3 0 51.80 3 5 53.10 3 0 53.90 3 3 042.10 3 0 043.60 4 0 042.70 4 0 042.20 4	2.49 2.99 2.91 2.80 9.16 9.63 0.03 1.15	2.65 2.64 2.77 2.91 6.88 7.05 7.18 7.66 7.98	34.69 34.62 33.93 34.51 34.70 34.61 34.21	51.26 56.30 52.66 54.09 54.99 54.21 56.11 56.90 57.95 58.23	74.0 74.0 74.0 74.0 74.0 74.0 74.0	22.74 17.7 21.34 19.91 19.01 19.79 19.73 17.89 17.1 16.05 15.77	400 350 100 220 100 300 100 190 100 170 230	0 0 0 0 0 0 0 0 306 358 257



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

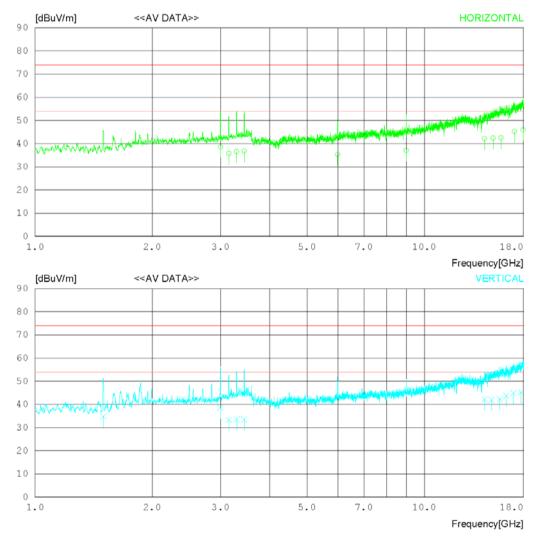
RADIATED EMISSION

Date 2019-01-24

Order No. DTNC1901-00583,00584
Power Supply 120 VAC 60 Hz
Temp/Humi 19 'C 49 %.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 40 GHz and not found emissions above 18 GHz.

RADIATED EMISSION

Date 2019-01-24

Order No. DTNC1901-00583,00584
Power Supply 120 VAC 60 Hz
Temp/Humi 19 'C 49 %.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.		ADING ANT AV FACTO	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE		
[]		BuV] [dB]	r [dB]	[dB]	[dBuV/m]	[dBuV/m	ı] [dB]	[cm]	[DEG]		
Horizontal											
2 314 3 329 4 344 5 899 6 142 7 150 8 157 9 170 10 179	3.480 38. 7.775 34. 5.310 35. 5.915 35. 0.340 31. 61.14030. 14.80030. 44.93029. 52.83029. 52.83029.	.80 33.00 .60 32.91 .70 32.80 .20 36.39 .20 39.11 .30 39.70 .80 40.24 .60 41.75	2.65 2.64 2.77 2.91 4.95 6.76 6.98 7.99 8.94 3.78	34.84 34.77 34.69 34.62 35.33 33.90 34.61 34.71 34.16 33.86 34.76	37.21 42.17 42.37 42.56 45.18 45.87	54.00 54.00 54.00 54.00 54.00 54.00 54.00 54.00 54.00 54.00 54.00	15.30 18.33 17.41 17.21 16.79 11.83 11.63 11.44 8.82 8.13 18.68	100 400 100 190 320 400 100 310 100 310	351 178 190 358 358 230 290 355 160 83 10		
Vertical											
13 314 14 329 15 344 16 142 17 148 18 156 19 162 20 169 21 177	3.940 38. 7.330 32. 6.945 32. 3.150 32. 97.3800. 91.8109. 28.5509. 49.4909. 46.1409. 7.190 40.	.50 32.99 .60 32.91 .50 32.80 .10 39.16 .80 39.64 .80 40.03 .60 41.15 .40 41.78	2.65 2.64 2.77 2.91 6.88 7.05 7.18 7.66 7.98 8.60	34.84 34.77 34.69 34.62 33.94 34.51 34.70 34.61 34.21 33.93 35.34	33.36 33.59 33.59 42.20	54.00 54.00 54.00 54.00 54.00 54.00 54.00 54.00 54.00 54.00	15.50 20.64 20.41 20.41 11.80 12.02 11.69 10.20 9.05 8.79 19.24	400 380 100 190 100 290 100 188 100 180 210	290 180 120 80 65 220 280 350 355 270 30		

Calculation

Result(dBuV/m): Reading Value(dBuV) + Cable loss(dB) - Pre amplifier gain(dB) + Ant. Factor(dB)

Margin : Limit(dBuV/m) - Result(dBuV/m)

8. Revision History

Date	Description	Revised By	Reviewed By
Jan. 29. 2019	Initial report	ChanGeun Lee	HyungJun Kim

⁻End of test report-