

# 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. : DREETC1902-0033(1)
2. Client / Applicant
  - Name : LG Electronics USA, Inc.
  - Address : 1000 Sylvan Avenue, Englewood Cliffs NJ 07632 United States
3. Use of Report : FCC Certification of Conformity Marking
4. Product Name / Model Name : Mobile Phone / LM-V450VM
5. Test Standard : ANSI C 63.4 : 2014  
FCC Part 15 Subpart B  
(Class B personal computers and peripherals)
6. Date of Test : Feb. 15. 2019 ~ Feb. 19. 2019
7. Testing Environment : Temperature (20 ~ 22) °C , Humidity (41 ~ 44) % R.H.
8. Test Result : Refer to the attached Test Result

Affirmation	Tested by	Reviewed by
	Name : JooHo Kim 	Name : DaeHwa Eun 

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.

**Apr. 19. 2019**

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

If this report is required to confirmation of authenticity, please contact to [report@dtnc.net](mailto:report@dtnc.net)

## CONTENTS

<b>1. General Remarks .....</b>	<b>3</b>
<b>2. Test Laboratory.....</b>	<b>3</b>
<b>3. General Information of EUT.....</b>	<b>4</b>
<b>4. EUT Operations and Test Configurations .....</b>	<b>5</b>
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
<b>5. Test Summary .....</b>	<b>7</b>
<b>6. Test Environment.....</b>	<b>7</b>
<b>7. Test Results : Emission.....</b>	<b>8</b>
7.1 Conducted Disturbance .....	8
7.2 Radiated Disturbance .....	13
<b>8. Revision History.....</b>	<b>43</b>

## 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	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-3385, R-4076, R-4180, R-4496, T-1442, G-10338, G-754, G-10815, G-20051	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 NJ 07632 United States
Manufacturer	LG Electronics USA, Inc. 1000 Sylvan Avenue, Englewood Cliffs NJ 07632 United States
Factory	LG Electronics USA, Inc. 1000 Sylvan Avenue, Englewood Cliffs NJ 07632 United States
Product Name	Mobile Phone
Model Name	LM-V450VM
Add Model Name	LMV450VM, V450VM
FCC ID	ZNFV450VM
Rated Power	DC 3.85 V
Remarks	None

Accessory	Ear-Mic	No.	Manufacturer	P/N
		1	CRESYN	EAB63728251
		2	BUJEON	EAB63728252
USB data Cable	USB data Cable	No.	Manufacturer	P/N
		1	Ningbo	EAD64746103

**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	None
AE	SSD 3.0	SAMSUNG	MU-PT250B	S2WKNAAH32059X
AE	PRINTER	Bixelon	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	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 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]
0.20239	N	50.15	Cispr - Average	53.51	3.36

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dB $\mu$ V/m]	Detector	Limit [dB $\mu$ V/m]	Margin [dB]
39970.000	H	49.79	Cispr - Average	54.00	4.21

## 6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (°C)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2019-02-19	20	44	-
Radiated Disturbance	2019-02-15	19	41	
	2019-02-18	22	41	

## 7. Test Results : Emission

### 7.1 Conducted Disturbance

ANSI C63.4	Mains terminal disturbance voltage	Result
<p><b>Method:</b> 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.</p>		<b>Comply</b>
Fully configured sample scanned over the following frequency range	Frequency range on each side of line	Measurement Point
	<b>150 kHz to 30 MHz</b>	<b>Mains</b>
EUT mode (Refer to clauses 4)	Test configuration mode	<b>1</b>
	EUT Operation mode	<b>1</b>
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 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
Ear-Mic	EAB63728251		

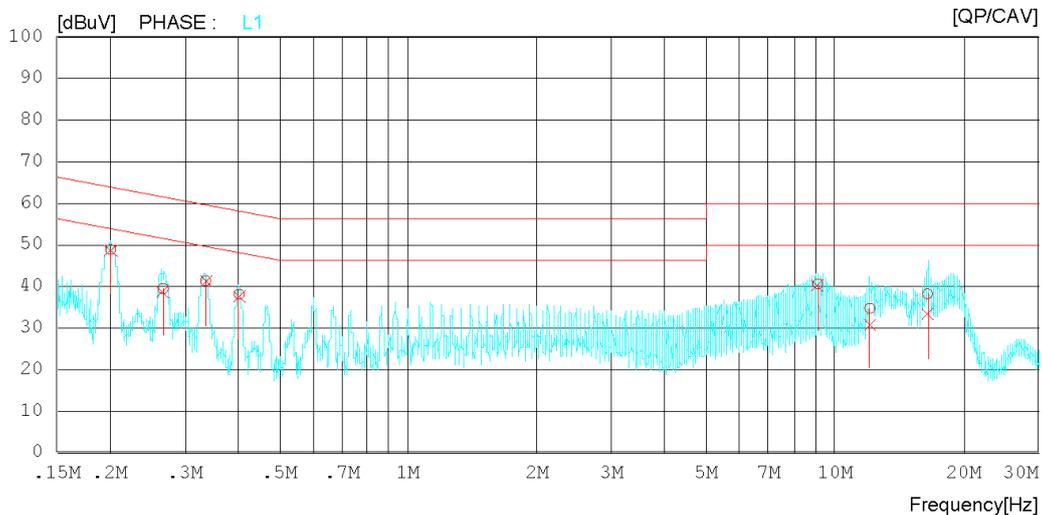
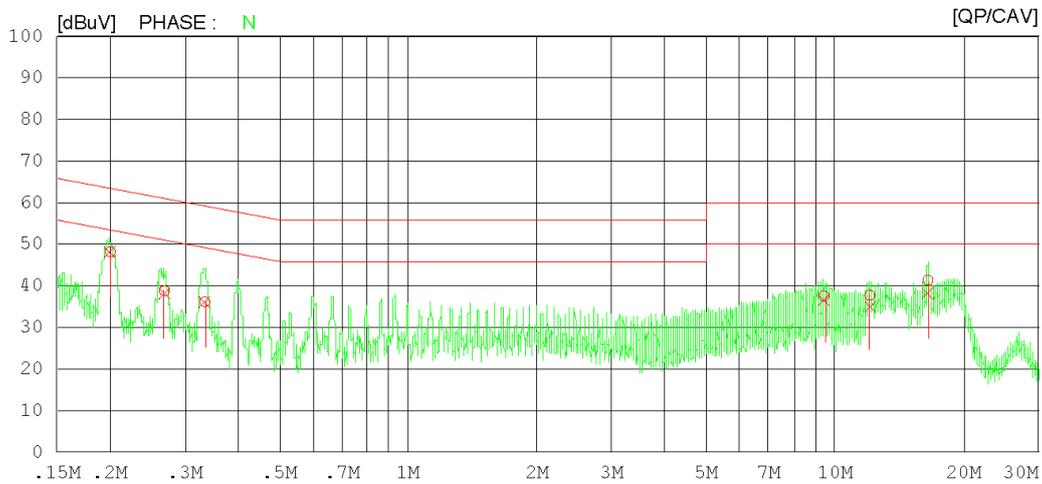
## Results of Conducted Emission

DT&C

Date 2019-02-19

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 20 'C 44 % R.H.  
 Test Condition PC LINK

LIMIT : CISPR32\_B QP  
 CISPR32\_B AV



## Results of Conducted Emission

DT&C

Date 2019-02-19

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 20 °C 44 % R.H.  
 Test Condition PC LINK

LIMIT : CISPR32\_B QP  
 CISPR32\_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	0.20050	28.16	27.95	20.03	48.19	47.98	63.59	53.59	15.40	5.61	N
2	0.26850	19.05	18.30	19.80	38.85	38.10	61.16	51.16	22.31	13.06	N
3	0.33350	16.26	15.96	19.90	36.16	35.86	59.36	49.36	23.20	13.50	N
4	9.44325	16.99	16.29	20.58	37.57	36.87	60.00	50.00	22.43	13.13	N
5	12.07523	16.91	14.43	20.82	37.73	35.25	60.00	50.00	22.27	14.75	N
6	16.53431	20.34	16.97	21.03	41.37	38.00	60.00	50.00	18.63	12.00	N
7	0.20083	28.66	28.53	20.03	48.69	48.56	63.58	53.58	14.89	5.02	L1
8	0.26650	19.52	18.82	19.79	39.31	38.61	61.23	51.23	21.92	12.62	L1
9	0.33504	21.26	21.19	19.90	41.16	41.09	59.33	49.33	18.17	8.24	L1
10	0.40150	17.91	17.53	20.03	37.94	37.56	57.82	47.82	19.88	10.26	L1
11	9.12522	19.90	19.35	20.52	40.42	39.87	60.00	50.00	19.58	10.13	L1
12	12.08005	13.71	9.83	20.82	34.53	30.65	60.00	50.00	25.47	19.35	L1
13	16.51532	17.00	12.07	21.03	38.03	33.10	60.00	50.00	21.97	16.90	L1

Mains terminal disturbance voltage _ Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Ear-Mic	EAB63728252		

## Results of Conducted Emission

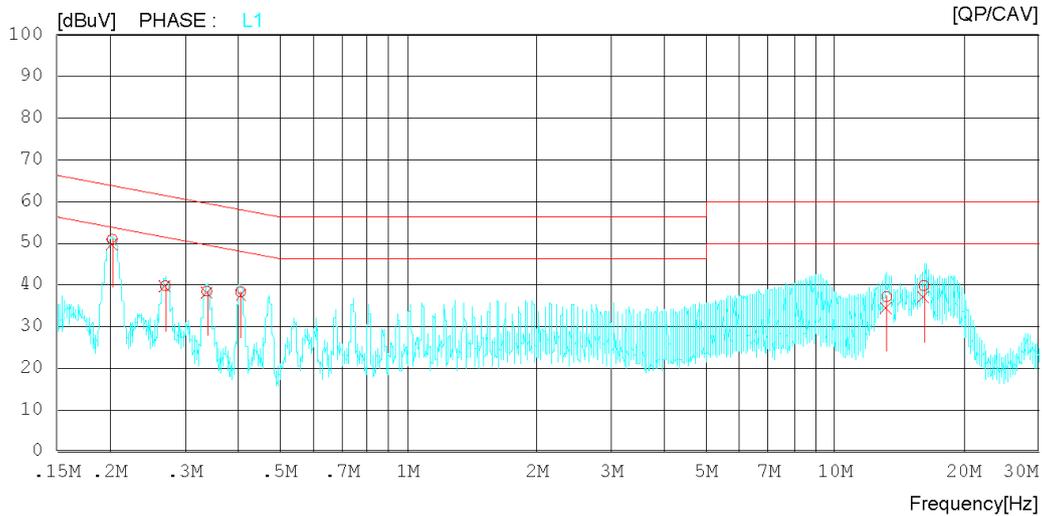
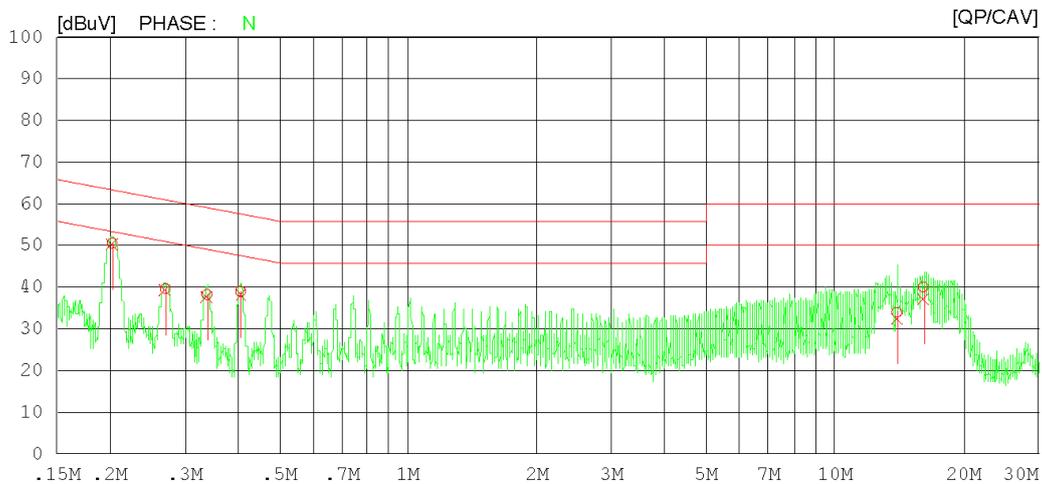
DT&C

Date 2019-02-19

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 20 'C 44 % R.H.  
 Test Condition PC LINK

Memo BUJEON

LIMIT : CISPR32\_B QP  
 CISPR32\_B AV



## Results of Conducted Emission

DT&amp;C

Date 2019-02-19

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 20 'C 44 % R.H.  
 Test Condition PC LINK

Memo BUJEON

LIMIT : CISPR32\_B QP  
 CISPR32\_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	0.20239	30.52	30.13	20.02	50.54	50.15	63.51	53.51	12.97	3.36	N
2	0.26990	19.86	19.40	19.80	39.66	39.20	61.12	51.12	21.46	11.92	N
3	0.33731	18.36	17.97	19.90	38.26	37.87	59.27	49.27	21.01	11.40	N
4	0.40483	18.96	18.30	20.03	38.99	38.33	57.75	47.75	18.76	9.42	N
5	13.96796	13.03	11.28	20.99	34.02	32.27	60.00	50.00	25.98	17.73	N
6	16.12645	19.09	15.91	21.03	40.12	36.94	60.00	50.00	19.88	13.06	N
7	0.20245	30.70	29.72	20.02	50.72	49.74	63.51	53.51	12.79	3.77	L1
8	0.26994	19.84	19.58	19.80	39.64	39.38	61.12	51.12	21.48	11.74	L1
9	0.33746	18.38	18.12	19.90	38.28	38.02	59.27	49.27	20.99	11.25	L1
10	0.40500	18.11	17.49	20.03	38.14	37.52	57.75	47.75	19.61	10.23	L1
11	13.22777	16.09	13.45	20.92	37.01	34.37	60.00	50.00	22.99	15.63	L1
12	16.20009	18.64	15.66	21.03	39.67	36.69	60.00	50.00	20.33	13.31	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
<b>EUT mode</b> (Refer to clauses 4)	<b>Test configuration mode</b>		1	
	<b>EUT Operation mode</b>		1	
<b>Radiated Disturbance below 1 000 MHz</b>				
<b>Frequency range</b> (MHz)	<b>Quasi-peak limit dB<math>\mu</math>V/m</b>			
	<b>Class A (10 m distance)</b>		<b>Class B (3 m distance)</b>	
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.				
<b>Frequency range</b> (MHz)	<b>Quasi-peak limit dB<math>\mu</math>V/m</b>			
	<b>Class A (10 m distance)</b>		<b>Class B (10 m distance)</b>	
30 to 230	40		30	
230 to 1 000	47		37	
<b>Radiated Disturbance for above 1 000 MHz at a measurement distance of 3 m</b>				
<b>Frequency range</b> (GHz)	<b>Peak limit dB<math>\mu</math>V/m</b>		<b>Average limit dB<math>\mu</math>V/m</b>	
	<b>Class A</b>	<b>Class B</b>	<b>Class A</b>	<b>Class B</b>
1 to 40	80	74	60	54
<b>The test frequency range of Radiated Disturbance measurements are listed below.</b>				
<b>Highest frequency generated or used in the device or on which the device operates or tunes (MHz)</b>			<b>Upper frequency of measurement range (MHz)</b>	
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 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 WITH 6DB ATT	VULB9160	SCHWARZBECK	9160-3339	2018.10.22	2020.10.22
	8491B	HP	18403	2018.10.22	2020.10.22
LOW NOISE PRE AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2018.02.19	2019.02.19
PREAMPLIFIER	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	3116C	ETS-LINDGREN	00213177	2017.12.05	2019.12.05
	JS44-18004000-35-8P	L3 NARDA-MITEQ	2046884	2018.11.09	2019.11.09
BAND REJECT FILTER	WRCGV12-2375-2400-2 484-2505-50SS-PB	WAINWRIGHT INSTRUMENTS GMBH	1	2018.03.07	2019.03.07

(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
Ear-Mic	EAB63728251		

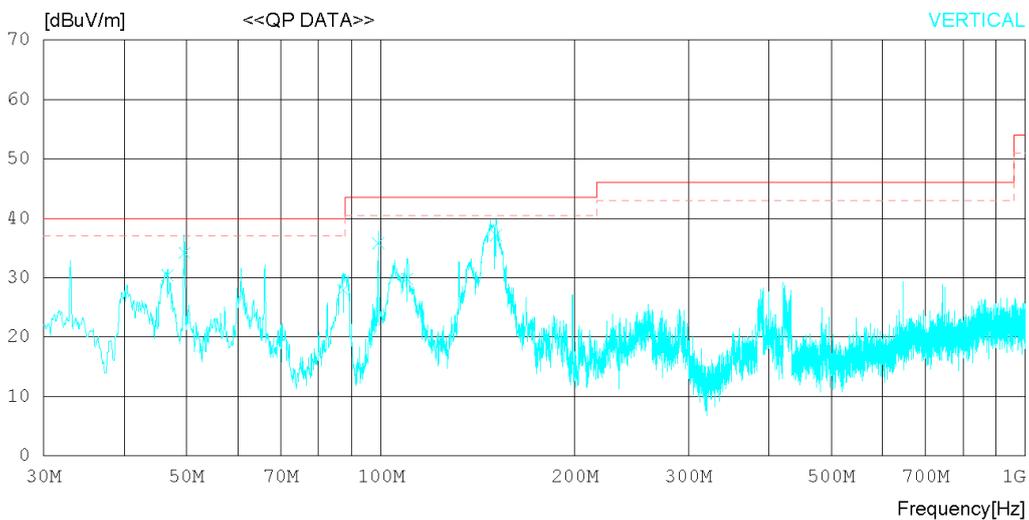
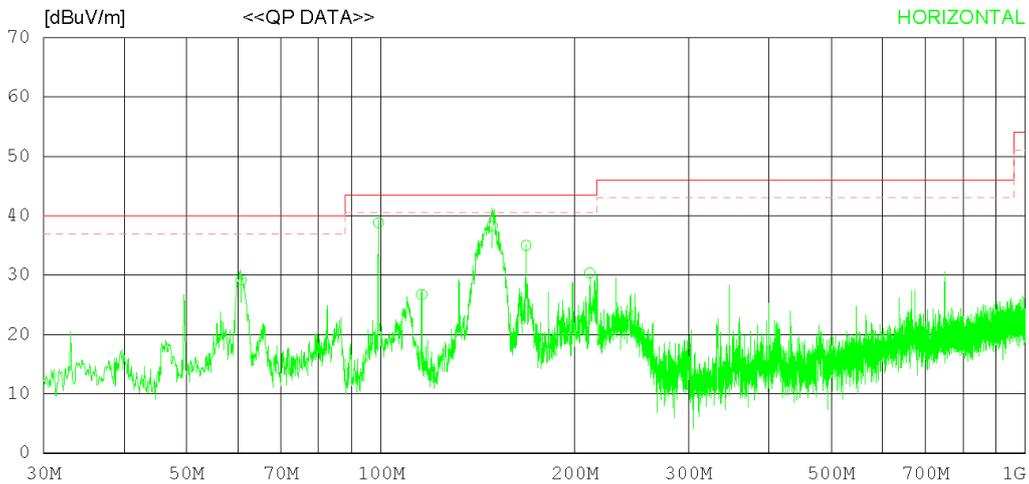
## RADIATED EMISSION

Date 2019-02-15

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 41 % R.H.  
 Test Condition PC LINK

Memo

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



## RADIATED EMISSION

Date 2019-02-15

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 41 % 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	60.668	36.10	17.90	0.60	25.52	29.08	40.00	10.92	210	157
2	99.203	48.80	15.14	0.42	25.55	38.81	43.50	4.69	100	220
3	115.735	35.00	16.69	0.60	25.56	26.73	43.50	16.77	100	352
4	148.910	44.10	18.88	0.87	25.58	38.27	43.50	5.23	300	97
5	168.015	41.60	18.26	0.69	25.56	34.99	43.50	8.51	220	183
6	211.100	38.50	16.54	0.84	25.53	30.35	43.50	13.15	100	124
----- Vertical -----										
7	46.666	37.50	17.90	0.51	25.50	30.41	40.00	9.59	200	351
8	49.589	40.90	18.26	0.54	25.51	34.19	40.00	5.81	140	246
9	87.500	39.50	13.35	0.60	25.54	27.91	40.00	12.09	200	154
10	99.218	45.80	15.14	0.42	25.55	35.81	43.50	7.69	220	228
11	109.785	38.40	16.38	0.54	25.56	29.76	43.50	13.74	100	70
12	150.889	43.00	18.90	0.87	25.58	37.19	43.50	6.31	100	54

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
Ear-Mic	EAB63728251		

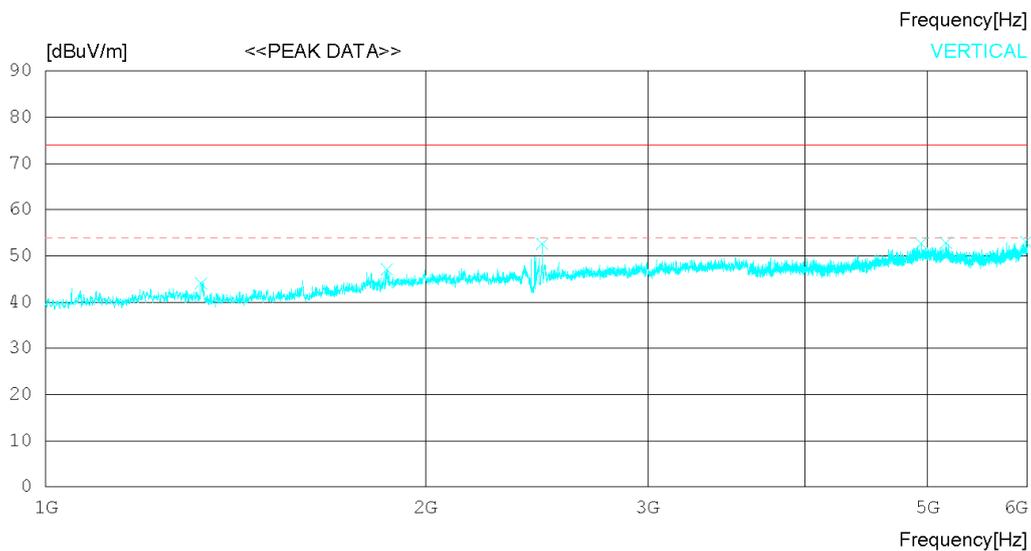
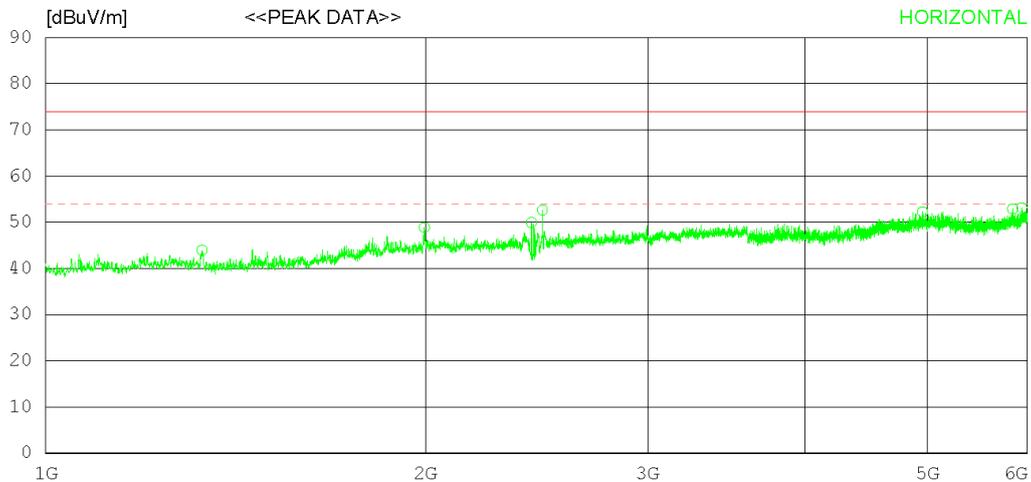
## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % 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 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % 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	1330.000	46.10	28.32	5.04	35.51	43.95	74.0	30.05	200	184
2	1995.625	46.20	31.59	5.91	34.82	48.88	74.0	25.12	300	358
3	2426.875	46.50	31.96	6.29	34.83	49.92	74.0	24.08	300	358
4	2476.250	48.90	32.21	6.34	34.83	52.62	74.0	21.38	300	139
5	4953.750	43.00	34.19	9.73	34.63	52.29	74.0	21.71	300	0
6	5839.375	42.30	34.86	10.47	34.74	52.89	74.0	21.11	300	0
7	5939.375	42.20	35.08	10.60	34.75	53.13	74.0	20.87	300	0
----- Vertical -----										
8	1328.125	46.20	28.35	5.04	35.51	44.08	74.0	29.92	200	185
9	1864.375	45.60	30.74	5.73	34.96	47.11	74.0	26.89	400	79
10	2476.250	48.90	32.21	6.34	34.83	52.62	74.0	21.38	200	78
11	4944.375	43.40	34.19	9.72	34.62	52.69	74.0	21.31	300	0
12	5172.500	43.40	34.20	9.90	34.66	52.84	74.0	21.16	100	0
13	5983.750	42.10	35.10	10.65	34.76	53.09	74.0	20.91	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
Ear-Mic	EAB63728251		

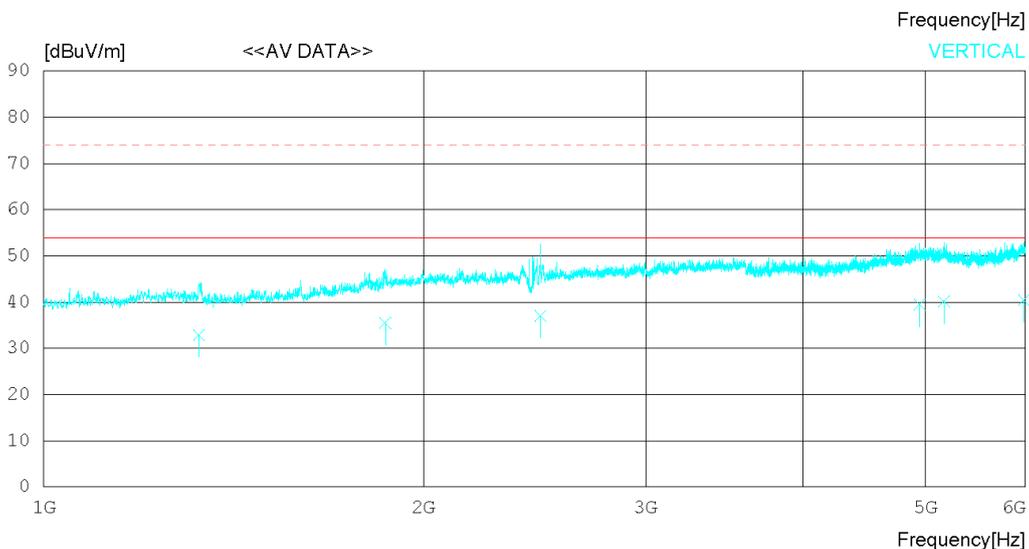
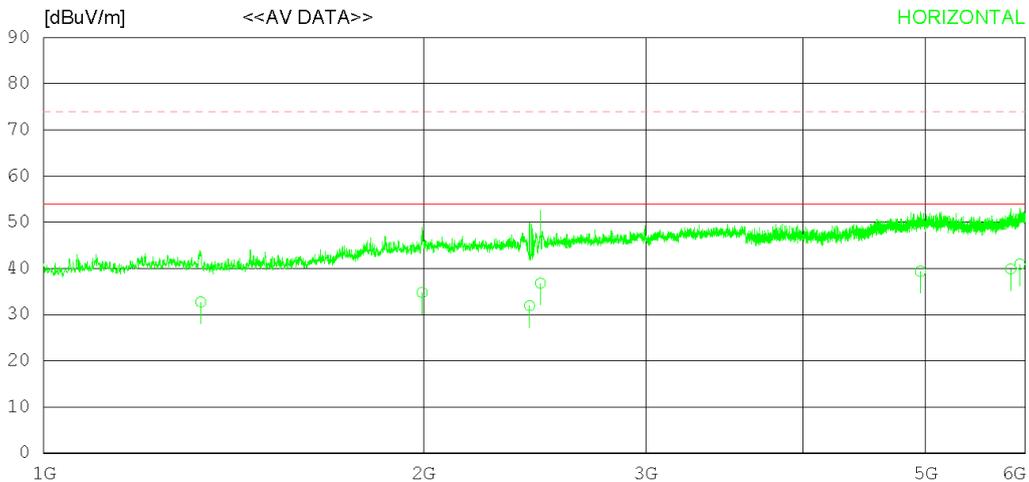
## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % 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 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % 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 CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1332.231	34.90	28.28	5.07	35.51	32.74	74.00	41.26	200	160
2	1995.174	32.10	31.59	5.90	34.82	34.77	74.00	39.23	300	315
3	2426.760	28.50	31.96	6.29	34.83	31.92	74.00	42.08	300	96
4	2476.148	33.10	32.20	6.34	34.83	36.81	74.00	37.19	300	262
5	4953.226	30.10	34.19	9.73	34.63	39.39	74.00	34.61	300	170
6	5839.283	29.30	34.86	10.47	34.74	39.89	74.00	34.11	300	149
7	5939.818	30.00	35.08	10.60	34.75	40.93	74.00	33.07	300	283
----- Vertical -----										
8	1328.418	35.00	28.35	5.04	35.51	32.88	74.00	41.12	200	264
9	1864.863	34.00	30.75	5.73	34.96	35.52	74.00	38.48	400	194
10	2475.929	33.30	32.20	6.34	34.83	37.01	74.00	36.99	200	300
11	4944.720	30.20	34.19	9.72	34.62	39.49	74.00	34.51	300	172
12	5172.240	30.70	34.20	9.90	34.66	40.14	74.00	33.86	100	56
13	5982.623	29.50	35.10	10.65	34.76	40.49	74.00	33.51	100	112

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
Ear-Mic	EAB63728251		

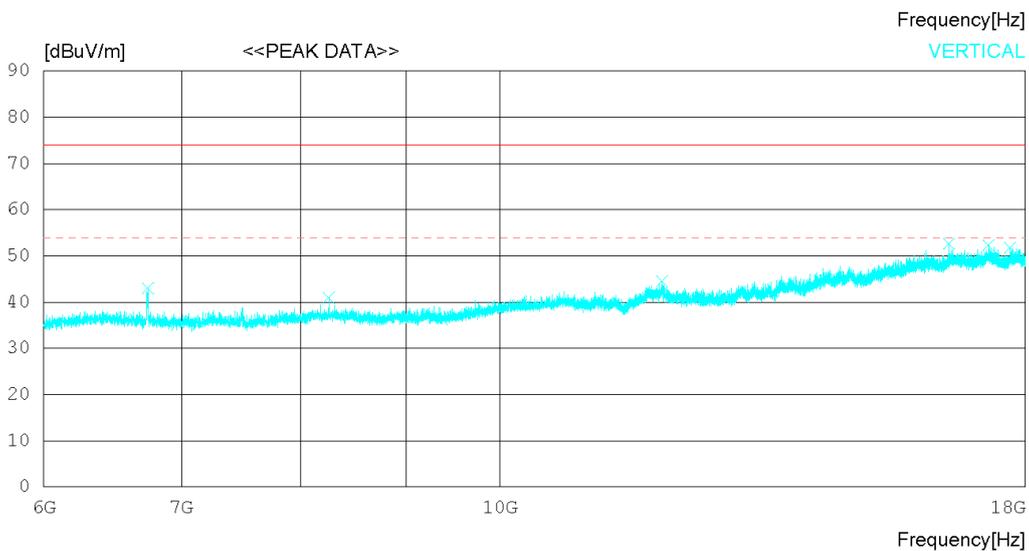
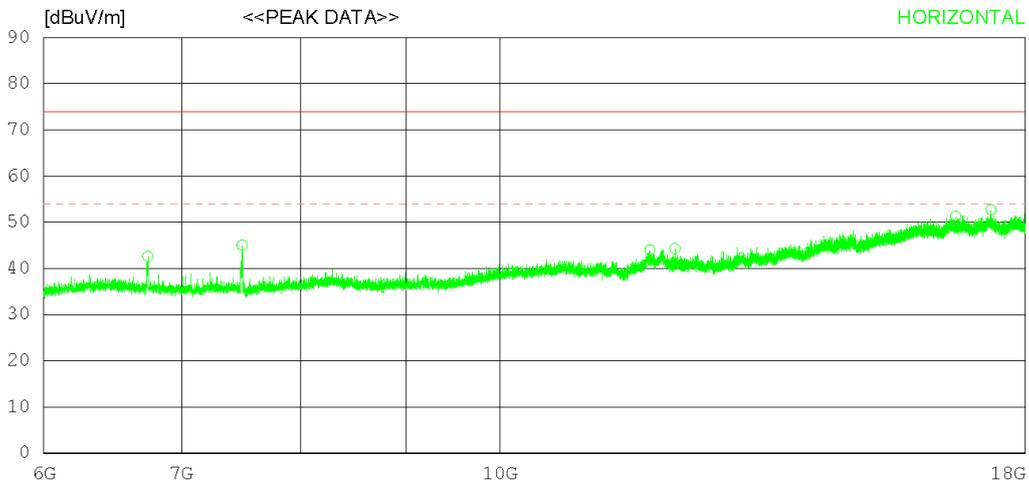
## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % 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 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % 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	6743.250	39.20	31.52	10.38	38.49	42.61	74.0	31.39	200	358
2	7492.500	40.90	31.38	11.08	38.33	45.03	74.0	28.97	100	200
3	11823.000	33.50	33.27	15.18	37.96	43.99	74.0	30.01	100	335
4	12160.500	33.40	33.47	15.37	37.95	44.29	74.0	29.71	100	358
5	16652.250	32.30	37.16	18.79	36.95	51.30	74.0	22.7	199	0
6	17322.000	33.60	37.80	18.82	37.53	52.69	74.0	21.31	100	109
----- Vertical -----										
7	6744.000	39.60	31.52	10.38	38.49	43.01	74.0	30.99	100	0
8	8258.250	35.30	31.51	11.91	37.74	40.98	74.0	33.02	100	179
9	11985.750	33.40	33.45	15.37	37.68	44.54	74.0	29.46	200	65
10	16522.500	33.80	37.01	18.67	36.83	52.65	74.0	21.35	100	358
11	17270.250	33.40	37.76	18.64	37.49	52.31	74.0	21.69	100	358
12	17691.750	32.60	38.08	19.05	37.94	51.79	74.0	22.21	199	0

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
Ear-Mic	EAB63728251		

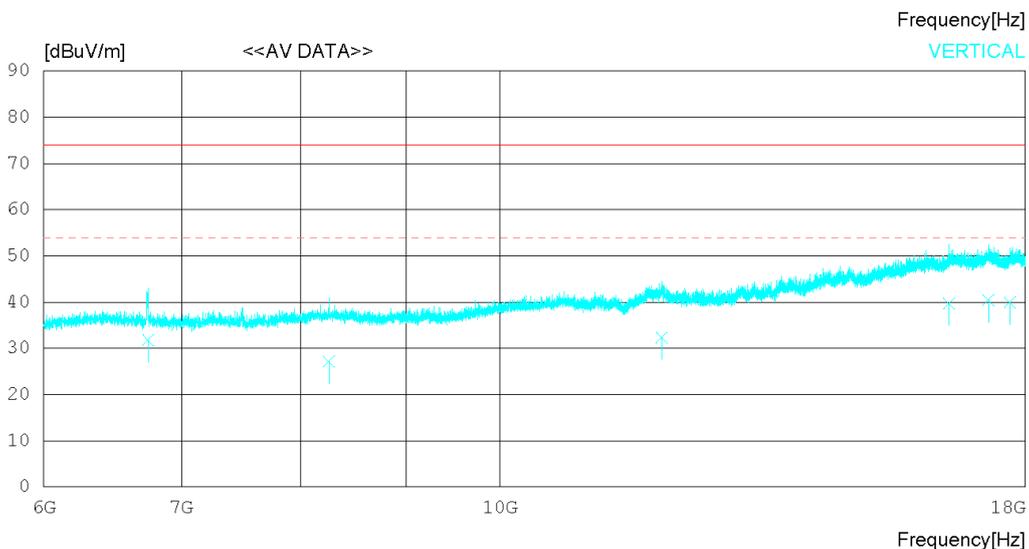
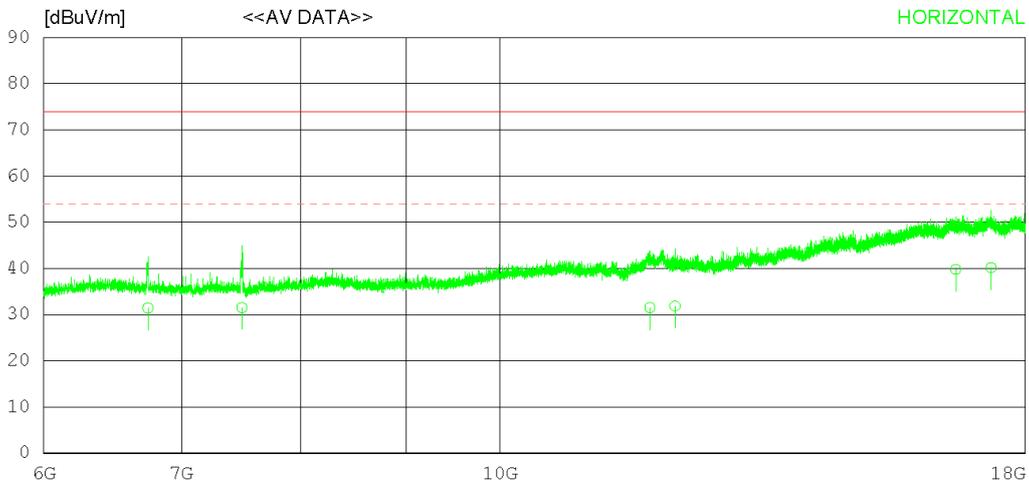
## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % 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)



## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % 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	6742.096	28.00	31.52	10.37	38.49	31.40	54.00	22.60	200	256
2	7490.672	27.40	31.38	11.08	38.33	31.53	54.00	22.47	100	311
3	11822.420	21.00	33.27	15.18	37.96	31.49	54.00	22.51	100	108
4	12160.450	21.00	33.47	15.37	37.95	31.89	54.00	22.11	100	358
5	16650.570	20.80	37.16	18.79	36.95	39.80	54.00	14.20	199	264
6	17319.570	21.10	37.80	18.81	37.53	40.18	54.00	13.82	100	65
----- Vertical -----										
7	6743.166	28.40	31.52	10.38	38.49	31.81	54.00	22.19	100	50
8	8256.987	21.50	31.51	11.91	37.74	27.18	54.00	26.82	100	349
9	11983.610	21.20	33.44	15.37	37.69	32.32	54.00	21.68	200	268
10	16523.020	20.90	37.01	18.67	36.83	39.75	54.00	14.25	100	137
11	17268.060	21.60	37.76	18.63	37.49	40.50	54.00	13.50	100	284
12	17689.400	20.80	38.08	19.04	37.94	39.98	54.00	14.02	199	93

Radiated disturbance at (18 ~ 40) GHz _Peak measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Ear-Mic	EAB63728251		

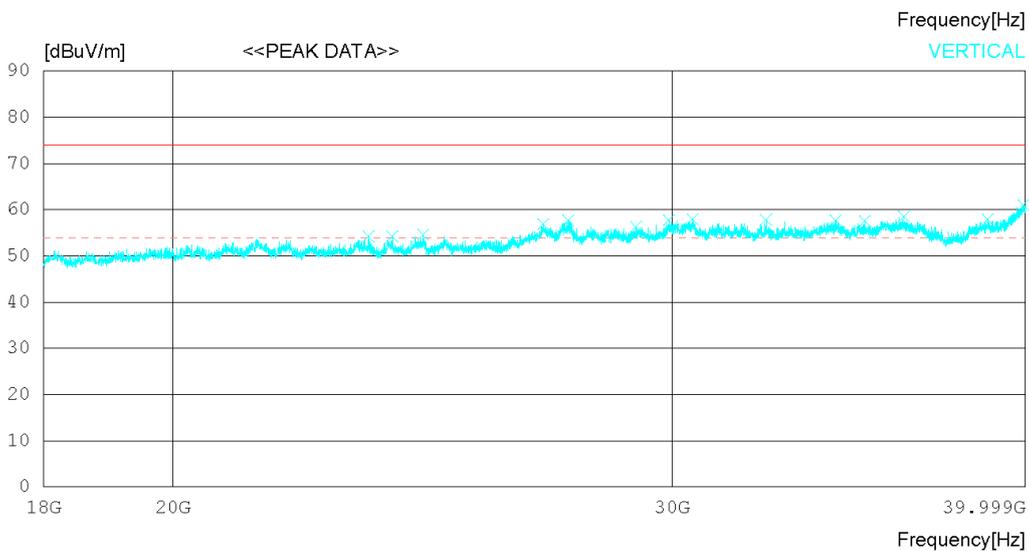
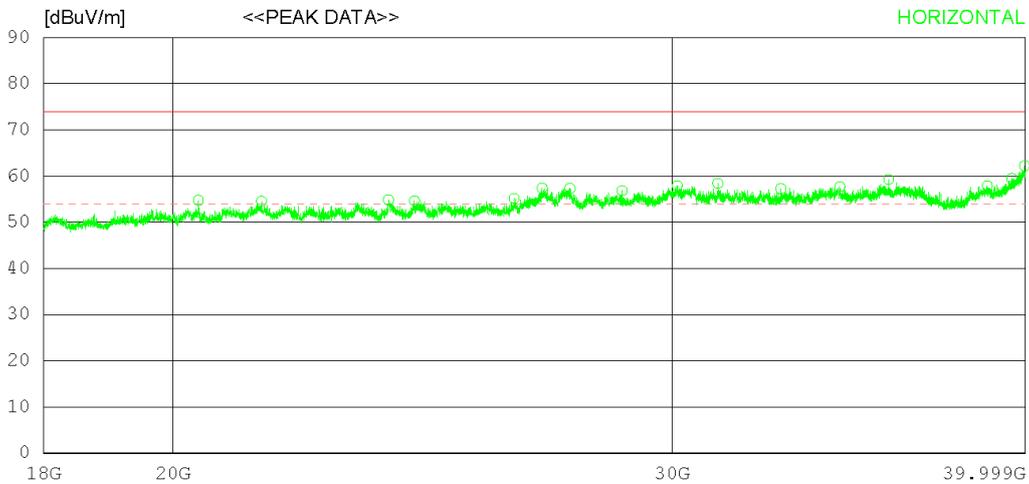
## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % 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 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % 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	20414.50045.80	45.35	18.46	54.87	54.74	74.0	19.26	300	279	
2	21487.00045.40	45.77	18.69	55.29	54.57	74.0	19.43	300	223	
3	23827.25044.30	46.09	19.77	55.32	54.84	74.0	19.16	300	359	
4	24333.25043.70	46.26	19.79	55.13	54.62	74.0	19.38	400	358	
5	26390.25042.30	46.66	20.40	54.23	55.13	74.0	18.87	300	359	
6	26998.00044.00	46.86	20.65	54.13	57.38	74.0	16.62	300	80	
7	27619.50043.30	46.82	21.22	54.02	57.32	74.0	16.68	200	107	
8	28813.00041.40	47.29	21.91	53.81	56.79	74.0	17.21	400	0	
9	30130.25041.70	48.06	21.74	53.60	57.90	74.0	16.1	300	112	
10	31145.00042.50	47.56	21.97	53.60	58.43	74.0	15.57	200	0	
11	32784.00040.60	48.33	22.26	53.91	57.28	74.0	16.72	100	358	
12	34392.75041.00	48.41	22.71	54.42	57.70	74.0	16.3	100	308	
13	35787.00042.40	48.57	22.81	54.49	59.29	74.0	14.71	100	169	
14	38776.25040.30	47.78	23.11	53.30	57.89	74.0	16.11	400	52	
15	39554.50040.50	48.40	23.36	52.79	59.47	74.0	14.53	400	265	
16	39972.50041.90	48.69	24.12	52.52	62.19	74.0	11.81	100	358	
----- Vertical -----										
17	23442.25043.80	46.15	19.73	55.36	54.32	74.0	19.68	100	0	
18	23901.50043.70	46.08	19.76	55.31	54.23	74.0	19.77	299	0	
19	24509.25043.50	46.36	19.81	55.05	54.62	74.0	19.38	400	196	
20	27025.50043.50	46.86	20.68	54.12	56.92	74.0	17.08	299	108	
21	27581.00043.70	46.82	21.23	54.02	57.73	74.0	16.27	400	29	
22	29137.50040.70	47.50	21.82	53.75	56.27	74.0	17.73	199	288	
23	29929.50041.60	48.09	21.69	53.61	57.77	74.0	16.23	199	359	
24	30515.25041.80	47.82	21.91	53.60	57.93	74.0	16.07	199	42	
25	32393.50041.40	48.05	22.18	53.76	57.87	74.0	16.13	199	359	
26	34282.75041.00	48.32	22.84	54.41	57.75	74.0	16.25	400	1	
27	35096.75041.00	48.87	22.19	54.45	57.61	74.0	16.39	100	0	
28	36235.25041.80	48.22	22.98	54.42	58.58	74.0	15.42	199	359	
29	38787.25040.30	47.79	23.10	53.29	57.90	74.0	16.1	400	159	
30	39945.00040.80	48.67	24.08	52.54	61.01	74.0	12.99	199	359	

Radiated disturbance at (18 ~ 40) GHz _Average measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Ear-Mic	EAB63728251		

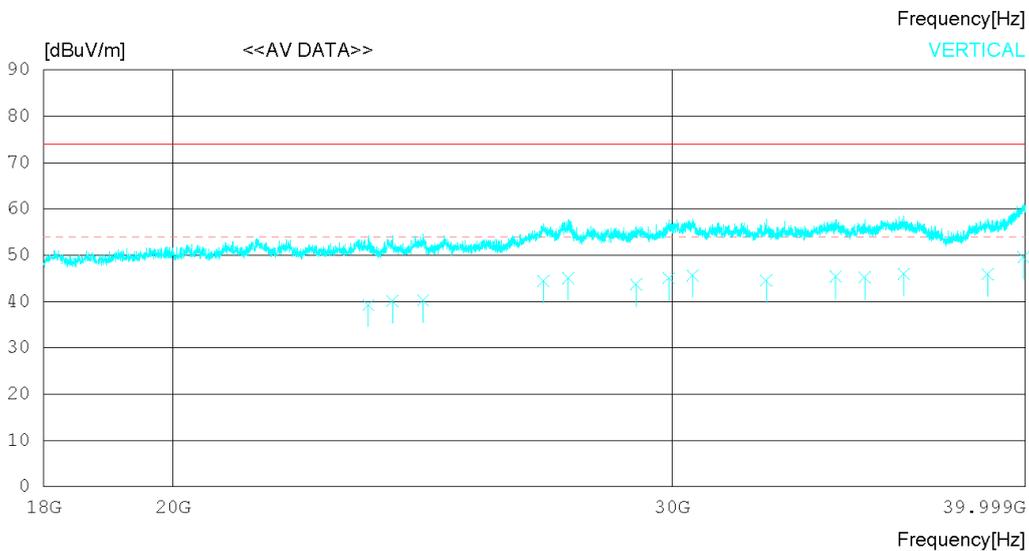
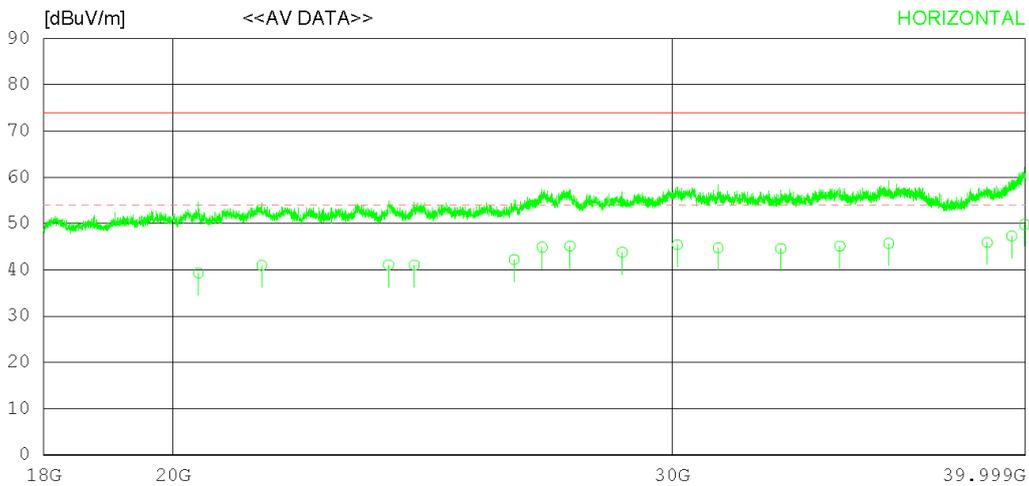
## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % 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)



## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % 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	20414.53030.40	45.35	18.46	54.87	39.34	54.00	14.66	300	267	
2	21489.01031.80	45.77	18.69	55.30	40.96	54.00	13.04	300	150	
3	23826.42030.50	46.09	19.77	55.32	41.04	54.00	12.96	300	87	
4	24332.47030.10	46.26	19.79	55.13	41.02	54.00	12.98	400	340	
5	26391.84029.40	46.66	20.40	54.23	42.23	54.00	11.77	300	312	
6	26999.00031.50	46.86	20.65	54.13	44.88	54.00	9.12	300	154	
7	27619.44031.10	46.82	21.22	54.02	45.12	54.00	8.88	200	154	
8	28815.15028.40	47.29	21.91	53.81	43.79	54.00	10.21	400	67	
9	30130.71029.20	48.06	21.74	53.60	45.40	54.00	8.60	300	131	
10	31147.05028.80	47.56	21.97	53.60	44.73	54.00	9.27	200	128	
11	32784.22027.90	48.33	22.26	53.91	44.58	54.00	9.42	100	143	
12	34393.23028.40	48.41	22.71	54.42	45.10	54.00	8.90	100	253	
13	35786.57028.80	48.57	22.81	54.49	45.69	54.00	8.31	100	356	
14	38777.97028.30	47.78	23.11	53.29	45.90	54.00	8.10	400	90	
15	39554.50028.30	48.40	23.36	52.79	47.27	54.00	6.73	400	265	
16	39970.00029.50	48.69	24.12	52.52	49.79	54.00	4.21	100	12	
----- Vertical -----										
17	23441.43028.80	46.15	19.73	55.36	39.32	54.00	14.68	100	114	
18	23902.76029.60	46.08	19.76	55.31	40.13	54.00	13.87	299	30	
19	24509.73029.20	46.36	19.81	55.05	40.32	54.00	13.68	400	211	
20	27023.81031.00	46.86	20.68	54.12	44.42	54.00	9.58	299	156	
21	27580.66031.10	46.82	21.23	54.02	45.13	54.00	8.87	400	54	
22	29137.29028.10	47.50	21.82	53.75	43.67	54.00	10.33	199	242	
23	29928.74028.90	48.09	21.69	53.61	45.07	54.00	8.93	199	328	
24	30514.83029.50	47.82	21.91	53.60	45.63	54.00	8.37	199	52	
25	32393.46028.00	48.05	22.18	53.76	44.47	54.00	9.53	199	355	
26	34281.09028.60	48.32	22.85	54.41	45.36	54.00	8.64	400	110	
27	35094.55028.60	48.87	22.19	54.45	45.21	54.00	8.79	100	215	
28	36233.68029.20	48.22	22.98	54.42	45.98	54.00	8.02	199	175	
29	38788.04028.30	47.79	23.10	53.29	45.90	54.00	8.10	400	259	
30	39944.82029.40	48.67	24.07	52.54	49.60	54.00	4.40	199	108	

Radiated disturbance at (30 ~ 1000) MHz _ Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Ear-Mic	EAB63728252		

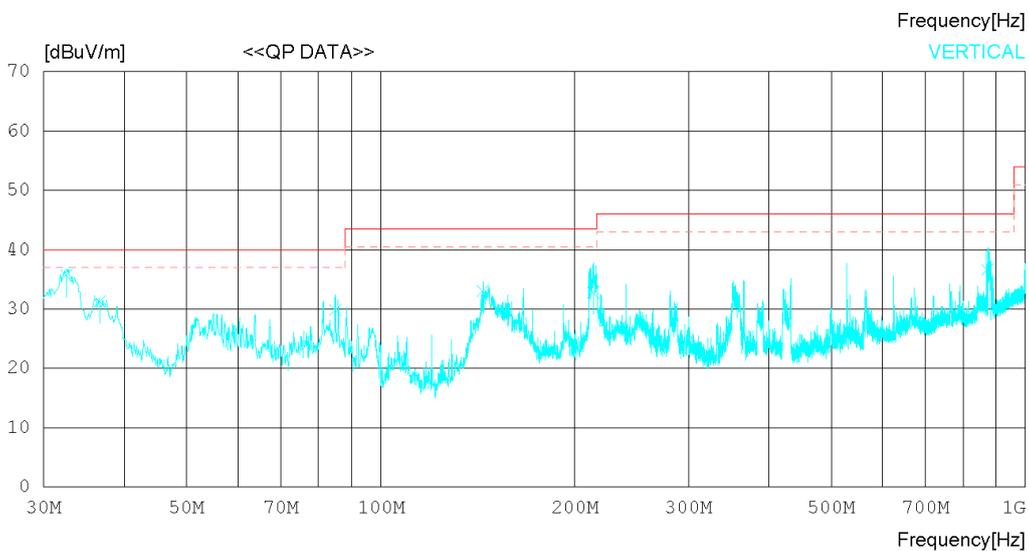
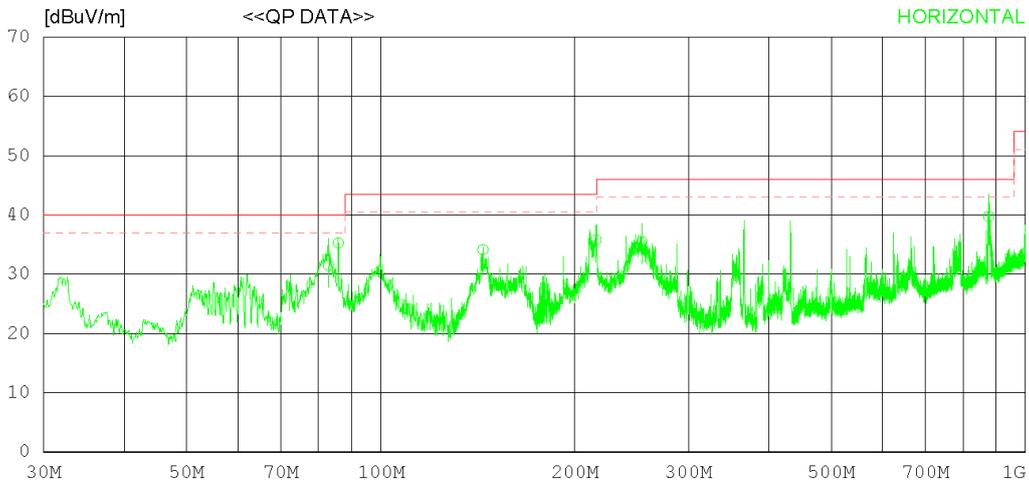
## RADIATED EMISSION

Date 2019-02-15

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 41 % R.H.  
 Test Condition PC LINK

Memo BUJEON

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



## RADIATED EMISSION

Date 2019-02-15

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 19 °C 41 % R.H.  
 Test Condition PC LINK

Memo BUJEON

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	83.027	40.80	13.89	2.47	25.73	31.43	40.00	8.57	210	271
2	85.922	45.00	13.51	2.49	25.73	35.27	40.00	4.73	200	340
3	143.978	38.10	18.78	2.88	25.67	34.09	43.50	9.41	200	238
4	215.793	41.30	16.73	3.37	25.64	35.76	43.50	7.74	124	63
5	254.089	39.60	18.04	3.58	25.75	35.47	46.00	10.53	109	199
6	877.472	30.10	29.13	6.31	25.80	39.74	46.00	6.26	100	72
----- Vertical -----										
7	32.526	44.20	15.45	1.88	25.82	35.71	40.00	4.29	100	38
8	36.661	39.10	16.07	1.93	25.81	31.29	40.00	8.71	100	256
9	85.038	39.50	13.60	2.49	25.73	29.86	40.00	10.14	120	194
10	144.008	37.10	18.78	2.88	25.67	33.09	43.50	10.41	132	305
11	213.480	38.50	16.64	3.35	25.64	32.85	43.50	10.65	100	175
12	873.320	27.00	29.17	6.28	25.79	36.66	46.00	9.34	200	40

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
Ear-Mic	EAB63728252		

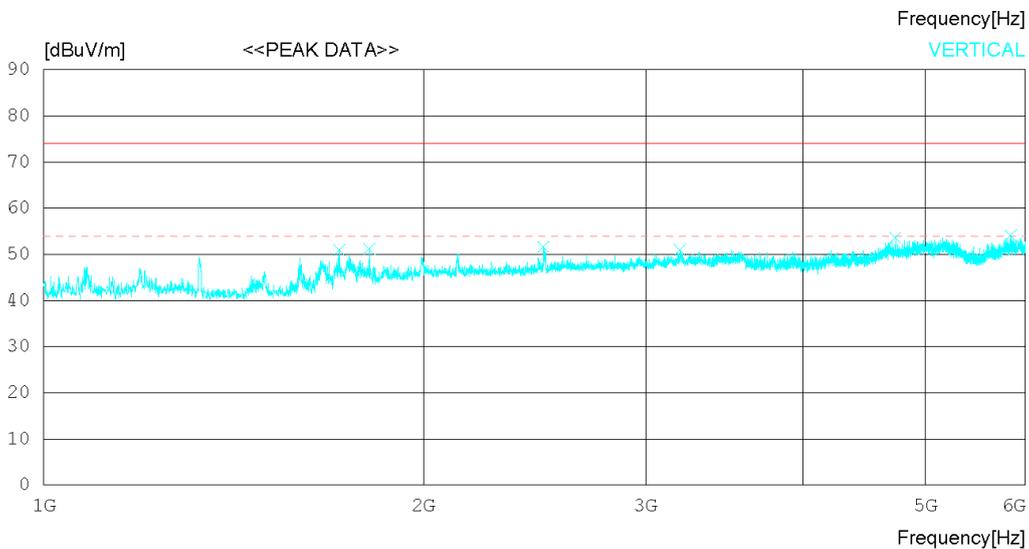
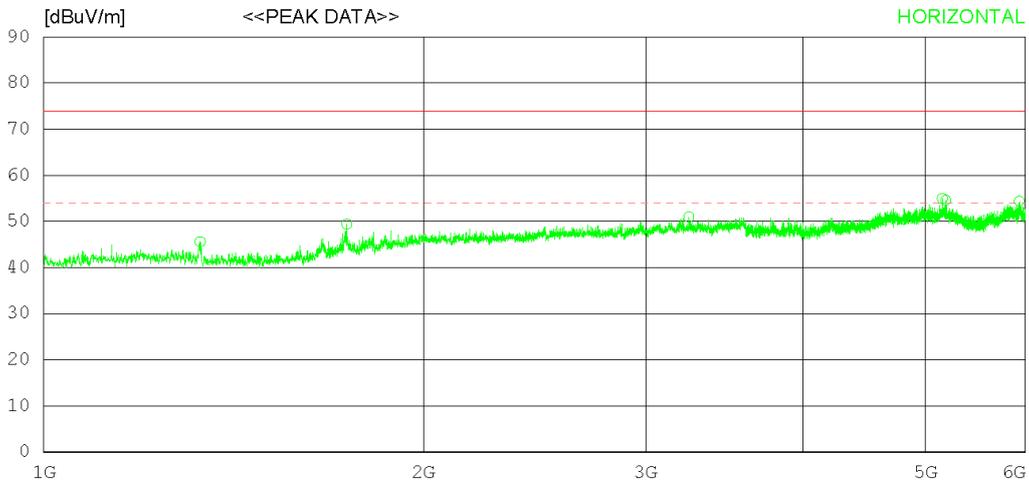
## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % R.H.  
 Test Condition PC LINK

Memo BUJEON

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



## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % R.H.  
 Test Condition PC LINK

Memo BUJEON

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	1330.625	47.20	28.31	5.61	35.51	45.61	74.0	28.39	100	173
2	1738.750	49.00	29.47	6.04	35.09	49.42	74.0	24.58	100	168
3	3246.250	44.50	33.02	8.20	34.72	51.00	74.0	23	400	262
4	5155.625	44.40	34.20	11.04	34.66	54.98	74.0	19.02	100	182
5	5186.250	44.00	34.20	11.03	34.66	54.57	74.0	19.43	300	348
6	5933.125	42.50	35.07	11.53	34.75	54.35	74.0	19.65	200	0
----- Vertical -----										
7	1715.625	50.90	29.19	6.00	35.11	50.98	74.0	23.02	100	204
8	1811.875	49.60	30.45	6.17	35.01	51.21	74.0	22.79	299	65
9	2488.750	47.10	32.26	7.09	34.83	51.62	74.0	22.38	100	0
10	3193.750	44.40	33.18	8.16	34.74	51.00	74.0	23	100	200
11	4733.125	43.50	34.00	10.67	34.56	53.61	74.0	20.39	299	0
12	5839.375	42.40	34.86	11.53	34.74	54.05	74.0	19.95	400	359

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
Ear-Mic	EAB63728252		

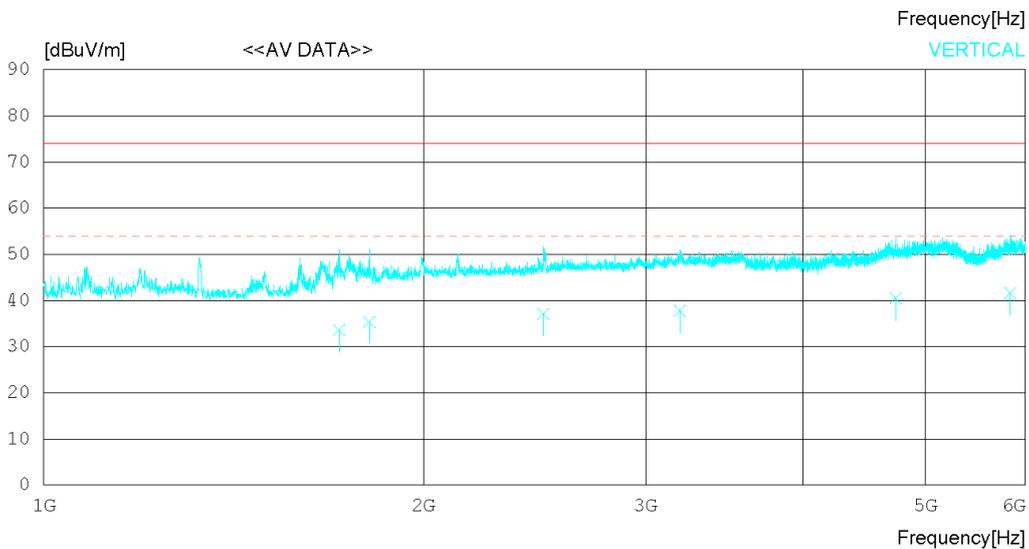
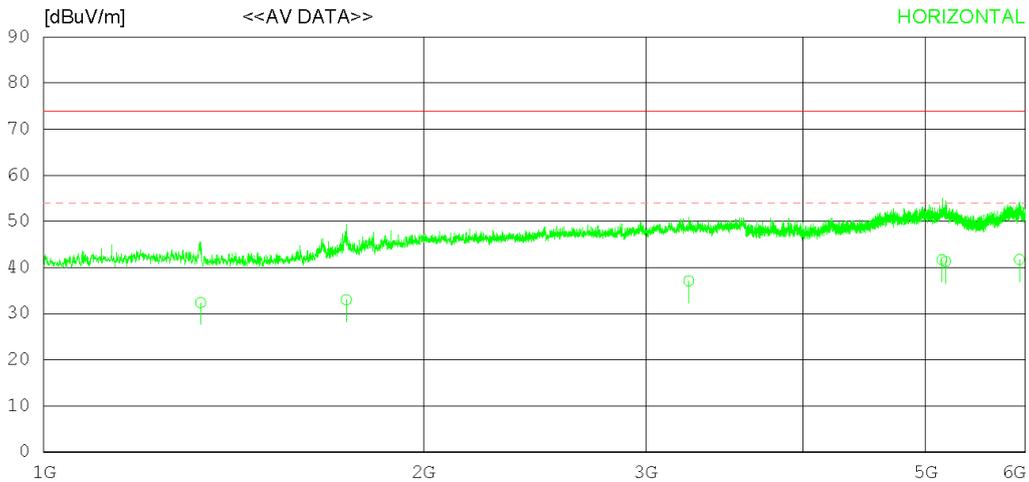
## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % R.H.  
 Test Condition PC LINK

Memo BUJEON

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



## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % R.H.  
 Test Condition PC LINK

Memo BUJEON

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	1331.646	34.00	28.29	5.61	35.51	32.39	54.00	21.61	100	356
2	1736.990	32.60	29.44	6.04	35.09	32.99	54.00	21.01	100	164
3	3245.292	30.60	33.02	8.21	34.72	37.11	54.00	16.89	400	119
4	5152.636	31.10	34.20	11.04	34.66	41.68	54.00	12.32	100	9
5	5185.570	30.70	34.20	11.03	34.66	41.27	54.00	12.73	300	239
6	5932.184	29.90	35.06	11.53	34.75	41.74	54.00	12.26	200	75
----- Vertical -----										
7	1714.793	33.60	29.18	6.00	35.11	33.67	54.00	20.33	100	135
8	1811.708	33.80	30.45	6.17	35.01	35.41	54.00	18.59	299	351
9	2488.677	32.60	32.25	7.09	34.83	37.11	54.00	16.89	100	253
10	3192.683	31.20	33.17	8.15	34.74	37.78	54.00	16.22	100	200
11	4733.484	30.40	34.00	10.67	34.56	40.51	54.00	13.49	299	2
12	5837.283	30.00	34.85	11.52	34.74	41.63	54.00	12.37	400	347

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
Ear-Mic	EAB63728252		

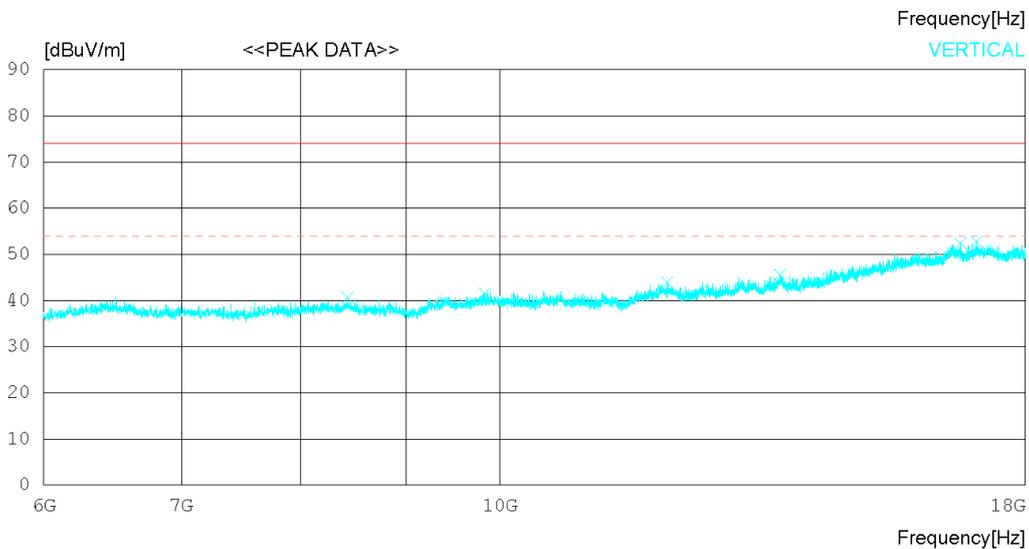
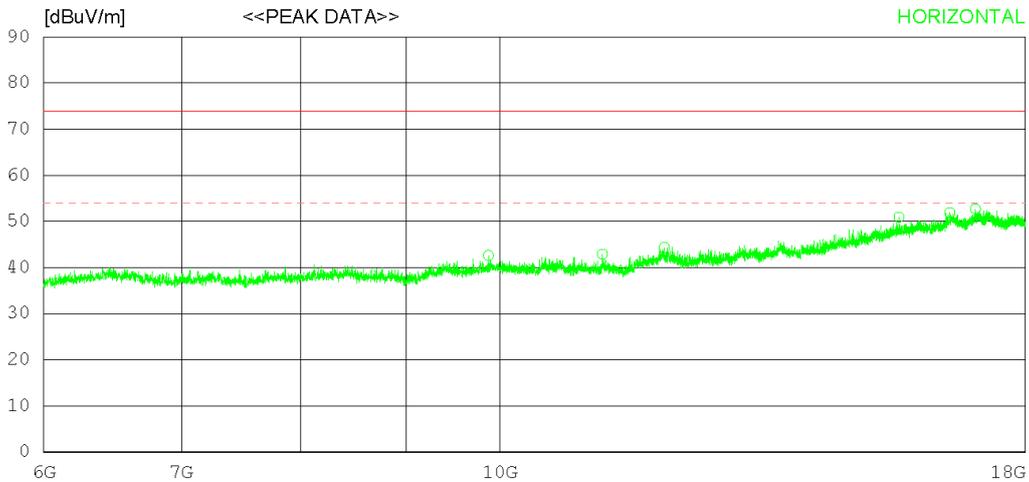
## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % R.H.  
 Test Condition PC LINK

Memo BUJEON

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



## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % R.H.  
 Test Condition PC LINK

Memo BUJEON

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	9868.500	34.20	32.49	14.19	38.26	42.62	74.0	31.38	400	196
2	11211.000	33.70	32.63	14.85	38.27	42.91	74.0	31.09	400	0
3	12015.000	32.90	33.46	15.67	37.69	44.34	74.0	29.66	100	99
4	15625.500	32.80	36.06	18.89	36.83	50.92	74.0	23.08	400	292
5	16540.500	31.90	37.03	19.81	36.85	51.89	74.0	22.11	300	90
6	17019.000	32.30	37.56	20.12	37.28	52.70	74.0	21.3	300	358
----- Vertical -----										
7	8431.500	33.70	31.65	12.94	37.64	40.65	74.0	33.35	400	152
8	9832.500	33.30	32.47	14.14	38.35	41.56	74.0	32.44	199	358
9	12055.500	32.60	33.46	15.64	37.76	43.94	74.0	30.06	400	75
10	13680.000	32.30	33.79	17.25	37.74	45.60	74.0	28.4	400	186
11	16744.500	33.00	37.26	19.15	37.03	52.38	74.0	21.62	400	358
12	17047.500	32.50	37.59	19.97	37.30	52.76	74.0	21.24	100	267

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
Ear-Mic	EAB63728252		

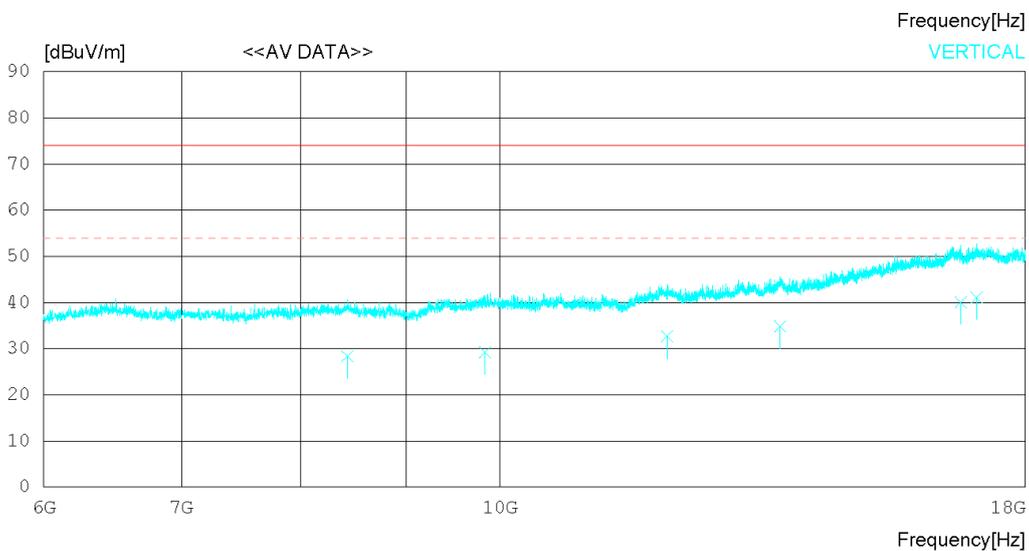
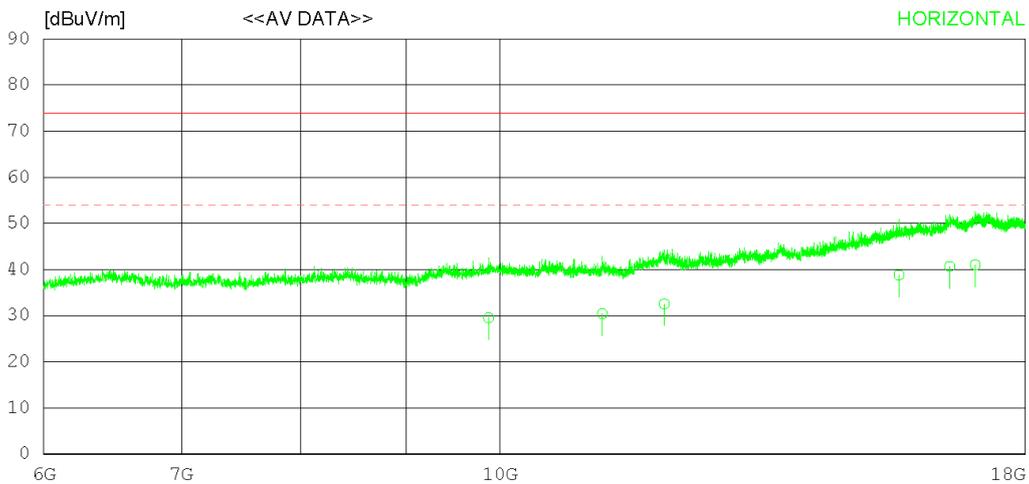
## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % R.H.  
 Test Condition PC LINK

Memo BUJEON

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



## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % R.H.  
 Test Condition PC LINK

Memo BUJEON

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	9869.465	21.10	32.49	14.19	38.25	29.53	54.00	24.47	400	77
2	11212.110	21.20	32.63	14.85	38.27	30.41	54.00	23.59	400	39
3	12014.490	21.10	33.46	15.67	37.69	32.54	54.00	21.46	100	259
4	15623.770	20.70	36.06	18.89	36.83	38.82	54.00	15.18	400	100
5	16538.220	20.70	37.03	19.79	36.84	40.68	54.00	13.32	300	188
6	17017.490	20.60	37.56	20.12	37.27	41.01	54.00	12.99	300	65
----- Vertical -----										
7	8429.466	21.40	31.64	12.94	37.64	28.34	54.00	25.66	400	118
8	9831.898	21.00	32.47	14.14	38.35	29.26	54.00	24.74	199	273
9	12055.670	21.30	33.47	15.64	37.76	32.65	54.00	21.35	400	84
10	13681.020	21.50	33.80	17.25	37.74	34.81	54.00	19.19	400	298
11	16743.900	20.70	37.26	19.16	37.03	40.09	54.00	13.91	400	3
12	17044.800	20.80	37.58	19.98	37.30	41.06	54.00	12.94	100	142

Radiated disturbance at (18 ~ 40) GHz _Peak measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Ear-Mic	EAB63728252		

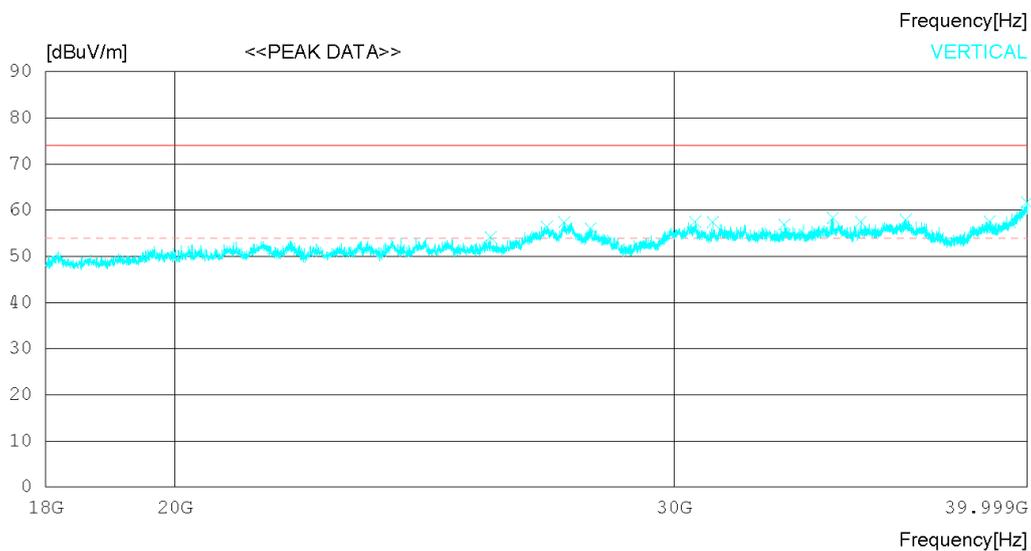
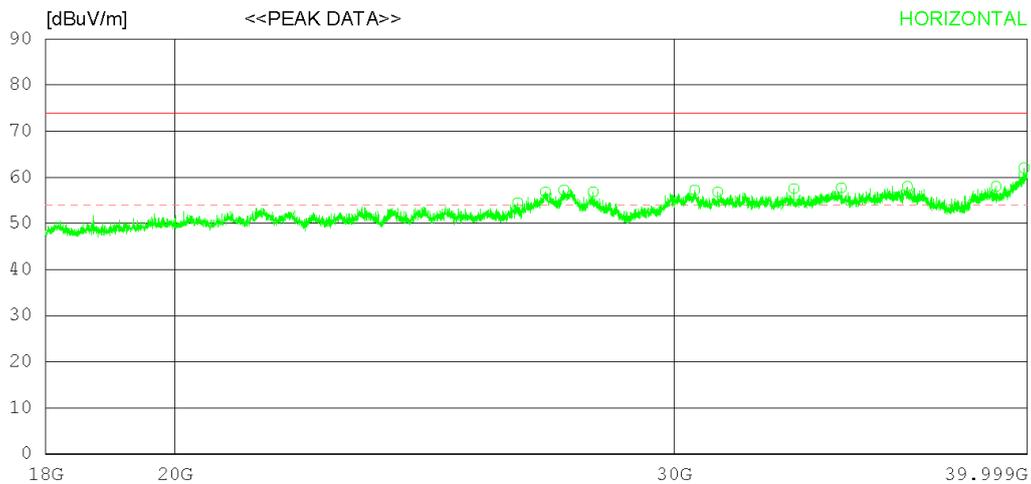
## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % R.H.  
 Test Condition PC LINK

Memo BUJEON

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



## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % R.H.  
 Test Condition PC LINK

Memo BUJEON

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	26426.00041.60	46.67	20.46	54.23	54.50	74.0	19.5	299	0	
2	27028.25043.40	46.86	20.68	54.12	56.82	74.0	17.18	299	0	
3	27435.25043.30	46.83	21.17	54.05	57.25	74.0	16.75	100	0	
4	28100.75042.60	46.85	21.33	53.93	56.85	74.0	17.15	299	0	
5	30518.00041.10	47.82	21.91	53.60	57.23	74.0	16.77	100	0	
6	31092.75040.90	47.54	21.96	53.60	56.80	74.0	17.2	199	108	
7	33078.25040.70	48.46	22.42	54.03	57.55	74.0	16.45	400	258	
8	34376.25041.00	48.40	22.73	54.42	57.71	74.0	16.29	299	0	
9	36273.75041.20	48.18	22.99	54.40	57.97	74.0	16.03	199	80	
10	38988.00040.20	48.01	22.98	53.16	58.03	74.0	15.97	299	0	
11	39890.00042.00	48.63	23.97	52.57	62.03	74.0	11.97	100	227	
----- Vertical -----										
12	25848.50042.40	46.55	19.57	54.38	54.14	74.0	19.86	200	80	
13	27058.50043.00	46.86	20.72	54.11	56.47	74.0	17.53	100	259	
14	27451.75043.50	46.83	21.18	54.05	57.46	74.0	16.54	300	358	
15	28040.25041.90	46.81	21.24	53.94	56.01	74.0	17.99	100	358	
16	30529.00041.40	47.81	21.92	53.60	57.53	74.0	16.47	400	0	
17	30969.00041.50	47.54	21.94	53.60	57.38	74.0	16.62	300	70	
18	32830.75040.20	48.37	22.28	53.93	56.92	74.0	17.08	300	27	
19	34150.75041.50	48.21	23.00	54.41	58.30	74.0	15.7	300	358	
20	34934.50040.90	48.86	22.15	54.45	57.46	74.0	16.54	400	15	
21	36232.50041.20	48.22	22.98	54.42	57.98	74.0	16.02	200	0	
22	38790.00040.00	47.79	23.10	53.29	57.60	74.0	16.4	400	292	
23	39986.25041.40	48.70	24.14	52.51	61.73	74.0	12.27	200	0	

Radiated disturbance at (18 ~ 40) GHz _Average measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Ear-Mic	EAB63728252		

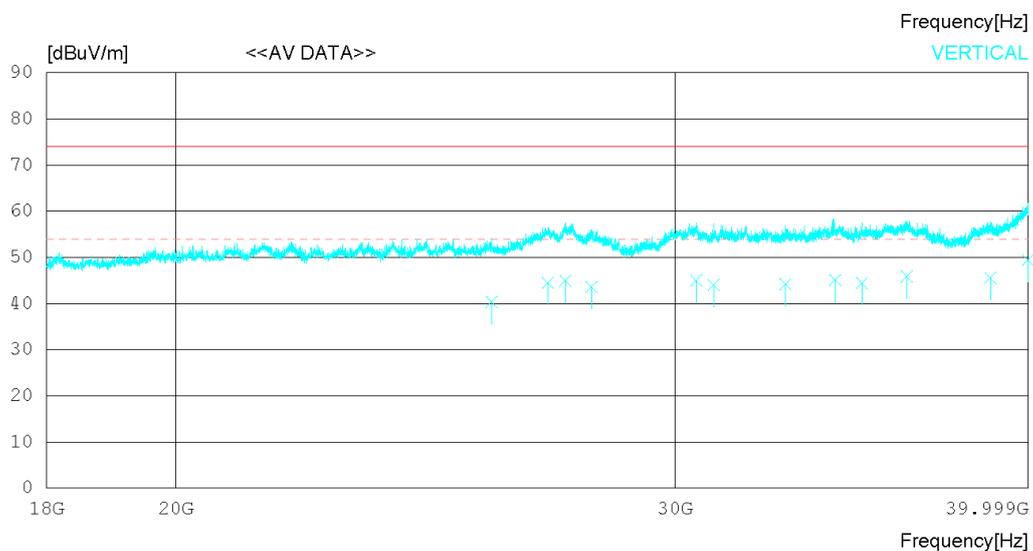
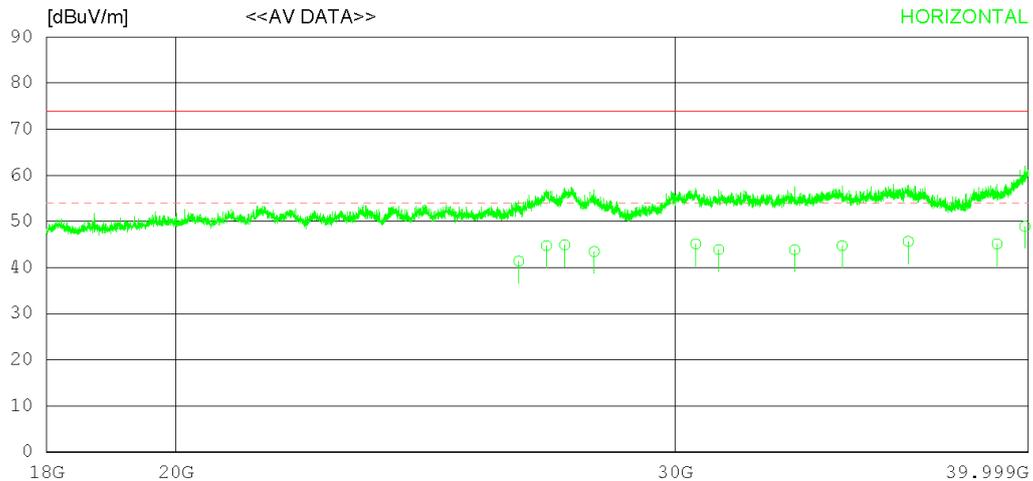
## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 'C 41 % R.H.  
 Test Condition PC LINK

Memo BUJEON

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



## RADIATED EMISSION

Date 2019-02-18

Order No. DTNC1902-01269  
 Power Supply 120 V 60 Hz  
 Temp/Humi 22 °C 41 % R.H.  
 Test Condition PC LINK

Memo BUJEON

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	26427.28028.50	46.67	20.47	54.23	41.41	54.00	12.59	299	158	
2	27030.25031.30	46.86	20.68	54.12	44.72	54.00	9.28	299	5	
3	27433.28031.00	46.83	21.16	54.05	44.94	54.00	9.06	100	186	
4	28101.05029.20	46.85	21.33	53.93	43.45	54.00	10.55	299	18	
5	30518.41029.00	47.82	21.91	53.60	45.13	54.00	8.87	100	90	
6	31093.10028.00	47.54	21.96	53.60	43.90	54.00	10.10	199	275	
7	33076.09027.00	48.46	22.41	54.03	43.84	54.00	10.16	400	331	
8	34375.36028.00	48.40	22.73	54.42	44.71	54.00	9.29	299	289	
9	36274.21028.90	48.18	22.99	54.40	45.67	54.00	8.33	199	41	
10	38989.36027.30	48.01	22.98	53.16	45.13	54.00	8.87	299	138	
11	39888.74028.90	48.63	23.97	52.57	48.93	54.00	5.07	100	156	
----- Vertical -----										
12	25849.30028.60	46.55	19.57	54.38	40.34	54.00	13.66	200	176	
13	27058.32031.00	46.86	20.72	54.11	44.47	54.00	9.53	100	211	
14	27450.91031.00	46.83	21.18	54.05	44.96	54.00	9.04	300	352	
15	28040.51029.50	46.81	21.24	53.94	43.61	54.00	10.39	100	314	
16	30528.63028.90	47.81	21.92	53.60	45.03	54.00	8.97	400	63	
17	30962.23028.10	47.54	21.94	53.60	43.98	54.00	10.02	300	150	
18	32828.16027.50	48.37	22.28	53.93	44.22	54.00	9.78	300	110	
19	34184.05028.30	48.24	22.96	54.41	45.09	54.00	8.91	300	309	
20	34932.91027.90	48.85	22.15	54.45	44.45	54.00	9.55	400	147	
21	36233.82029.10	48.22	22.98	54.42	45.88	54.00	8.12	200	152	
22	38791.94028.00	47.79	23.10	53.29	45.60	54.00	8.40	400	300	
23	39986.16029.10	48.70	24.14	52.51	49.43	54.00	4.57	200	20	

### 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
Feb. 22. 2019	Initial report	JooHo Kim	DaeHwa Eun
Apr. 19. 2019	Accessory Delete (Travel Adaptor)	JooHo Kim	DaeHwa Eun

-End of test report-