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. : DREFCC1912-0329
2. Client / Applicant
   - Name : LG Electronics USA, Inc.
   - Address : 1000 Sylvan Avenue Englewood Cliffs, New Jersey, United States 07632
3. Use of Report : Grant of Certification
4. Product Name / Model Name / FCC ID : Mobile Phone / LM-V600TM / ZNFV600TM
5. Test Standard : ANSI C 63.4 : 2014
   FCC Part 15 Subpart B
   (Class B personal computers and peripherals)
6. Date of Test : Dec. 06. 2019 ~ Dec. 10. 2019
7. Testing Environment : Temperature (21 ~ 24) °C , Humidity (40 ~ 47) % R.H.
8. Test Result : Refer to the attached Test Result

Affirmation	Tested by	Reviewed by
	Name : JunSeo Park (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.
This test report shall not be reproduced except in full, without the written approval of DT&C Co., Ltd.

Dec. 13. 2019

DT&C Co., Ltd.

'This test report is not related to KS Q ISO/IEC 17025 and KOLAS accreditation.'

If this report is required to confirmation of authenticity, please contact to report@dtnc.net

CONTENTS

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, New Jersey, United States 07632
Manufacturer	LG Electronics USA, Inc. 1000 Sylvan Avenue Englewood Cliffs, New Jersey, United States 07632
Factory	LG Electronics USA, Inc. 1000 Sylvan Avenue Englewood Cliffs, New Jersey, United States 07632
Product Name	Mobile Phone
Model Name	LM-V600TM
Add Model Name	None
FCC ID	ZNFV600TM
Rated Power	DC 3.85 V
Remarks	None

Accessory

Equipment	No.	Manufacturer	Model Name	Product Number
Ear-Mic	1	Cresyn	-	EAB63728244
	2	Bujeon	-	EAB63728245
Data cable	1	Ningbo	LG0179	EAD65830102
	2	Luxshare	L1LUC014-CS-H	EAD65830101
Wireless Charging	1	Belkin	-	boostup-bold-wireless-charging-pad

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	DISPLAY	EUT Was with H letter output connected to monitor (Earphone : cresyn / bujeon)
2	DATA COMMUNICAITON	EUT was connected NOTEBOOK by USB cable C type and continuously operated (1. cresyn+luxshare 2. cresyn+ningbo / 3. bujeon + luxshare 4. bujeon+ningbo)
3	WIRELESS CHARGING	EUT was at high speed on the wireless charger (Earphone : cresyn / bujeon)

4.3 Test Configuration Mode

No.	Mode	Description
1	DISPLAY	The EUT is connected USB C type TO HDMI by LCD MONITOR (Earphone : cresyn / bujeon)
2	DATA COMMUNICAITON	The EUT is reading, writing, internal storage (1. cresyn+luxshare 2. cresyn+ningbo / 3. bujeon + luxshare 4. bujeon+ningbo)
3	WIRELESS CHARGING	The EUT on the wireless charging pad (Earphone : cresyn / bujeon)

4.4 Supported Equipment

Used*	Product Type	Manufacturer	Model	Remarks
AE	NOTEBOOK	LG	LG15Z96	607NZUD007502
AE	NOTEBOOK ADAPTOR	Genmao Electronics	LCAP48-WK	N/A
AE	SSD	SAMSUNG	MU-PT250B	S2WKNAAH32059X
AE	KEYBOARD	Logitech	Y-U0011	N/A
AE	MOUSE	Logitech	M-U0026	N/A
AE	LCD MONITOR	DELL	P2217H	N/A
AE	Ear MIC	Lenovo	PB2	N/A
AE	wireless charger	belkin	F7U050	26S10EH4840924
AE	wireless charger adaptor	belkin	ADS-26FSG12	N/A

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

4.5 EUT In/Output Port

< MODE 1 >

Name	Type*	Cable Max. >3 m	Cable Shielded	Cable Back shell	Remarks
HDMI POEWER	I/O AC	2.0 1.8	shield Non shield	Plastic Plastic	LCD MONITOR
USB	I/O	1.5	Shield	Plastic	EUT
AUX	I/O	1.5	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

< MODE 2 >

Name	Type*	Cable Max. >3 m	Cable Shielded	Cable Back shell	Remarks
AUX	I/O	1.5	Non shield	Plastic	EUT
USB	I/O	1.5	Shield	Plastic	EUT
USB(EUT) USB(MOUSE) USB(KEYBOARD) USB(SSD) HDMI(MONITOR) AUX(EAR MIC) DC IN(ADAPTOR)	I/O I/O I/O I/O I/O I/O DC	1.3 1.8 1.8 1.0 1.8 1.8 1.8	Non shield Non shield Non shield Non shield shield Non shield Non shield	Plastic Plastic Plastic Plastic Plastic Plastic Plastic	NOTEBOOK
DC OUT POEWER	DC AC	1.8 -	Non shield Non shield	Plastic Plastic	NOTEBOOK ADAPTOR

*Abbreviations:
AC = AC Power Port DC = DC Power Port N/E = Non-Electrical
I/O = Signal Input or Output Port
TP = Telecommunication Ports

< MODE 3 >

Name	Type*	Cable Max. >3 m	Cable Shielded	Cable Back shell	Remarks
DC IN	DC	1.5	Non shield	Plastic	WIRELESS CHARGING PAD
DC OUT POEWER	DC AC	1.5 -	Non shield -	Plastic -	WIRELESS CHARGER ADAPTOR

*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
2	-	-	-	Battery

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		

-Conducted Disturbance

Frequency [MHz]	Phase	Result [dBµV]	Detector	Limit [dBµV]	Margin [dB]
0.20035	N	58.98	Quasi - Peak	63.60	4.62

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]
724.554	H	40.76	Quasi - Peak	46.00	5.24

6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (℃)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2019-12-10	24	42	-
Radiated Disturbance	2019-12-06 2019-12-07 2019-12-08 2019-12-10	23 23 21 23	40 40 44 47	-

7. Test Results : Emission

7.1 Conducted Disturbance

ANSI C63.4	Mains terminal disturbance voltage	Result
Method: The AMN placed 0,8 m from the boundary of the unit under test and bonded to a ground reference plane. This distance was between the closest points of the AMN and the EUT. All other units of the EUT and associated equipment were at least 0,8 m from the AMN. All power was connected to the system through Artificial Mains Network (AMN). Conducted voltage measurements on mains lines were made at the output of the AMN. The measuring port of the LISN for EUT was connected to spectrum analyzer. Using conducted emission test software, the emissions were scanned with peak detector mode. After scanning over the frequency range, suspected emissions were selected to perform final measurement. When performing final measurement, the receiver was used which has Quasi-Peak detector and CISPR Average detector. For (0.15 ~ 30) MHz frequency range, Quasi-Peak detector with 10 kHz RBW and 30 kHz VBW was used. By varying the configuration of the test sample and the cable routing it was attempted to maximize the emission.		Comply

Fully configured sample scanned over the following frequency range	Frequency range on each side of line	Measurement Point
	150 kHz to 30 MHz	Mains
EUT mode (Refer to clauses 4)	Test configuration mode	2, 3
	EUT Operation mode	2, 3

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)	2.44 dB
The measurement uncertainties were calculated in accordance with requirements of ANSI C 63.4-2014.	

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	2019.10.24	2020.10.24
LISN	ENV216	ROHDE & SCHWARZ	101979	2019.12.09	2020.12.09
LISN	LISN1600	TTI	197204	2019.06.04	2020.06.04
TRANSIENT LIMITER	TL-B0930A	EMCIS	11002	2019.08.30	2020.08.30
50 OHM TERMINATOR	CT-01	TME	N/A	2018.12.19	2019.12.19

Mains terminal disturbance voltage _Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**120**	**Test Frequency (Hz)**	**60**
Data cable	**Ningbo**	**Ear-Mic**	**Cresyn**

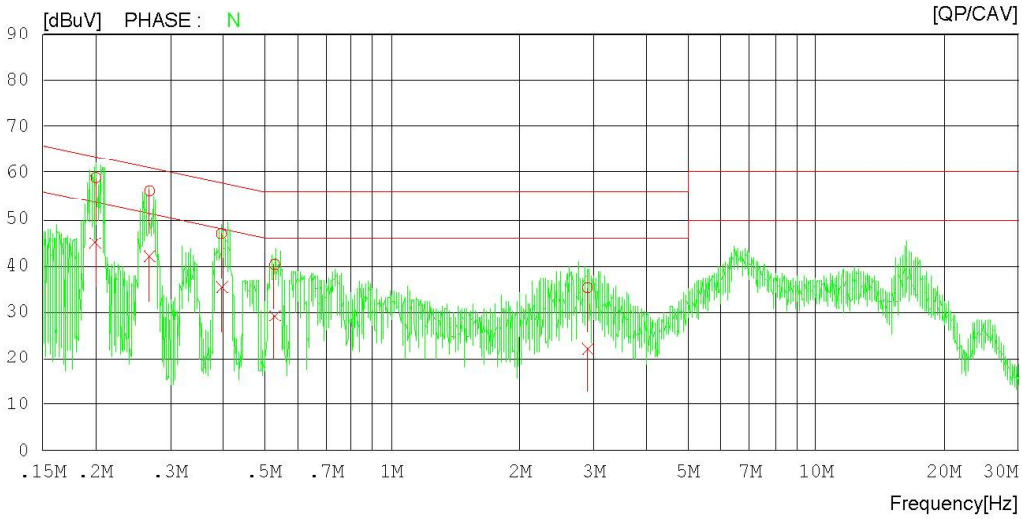
Results of Conducted Emission

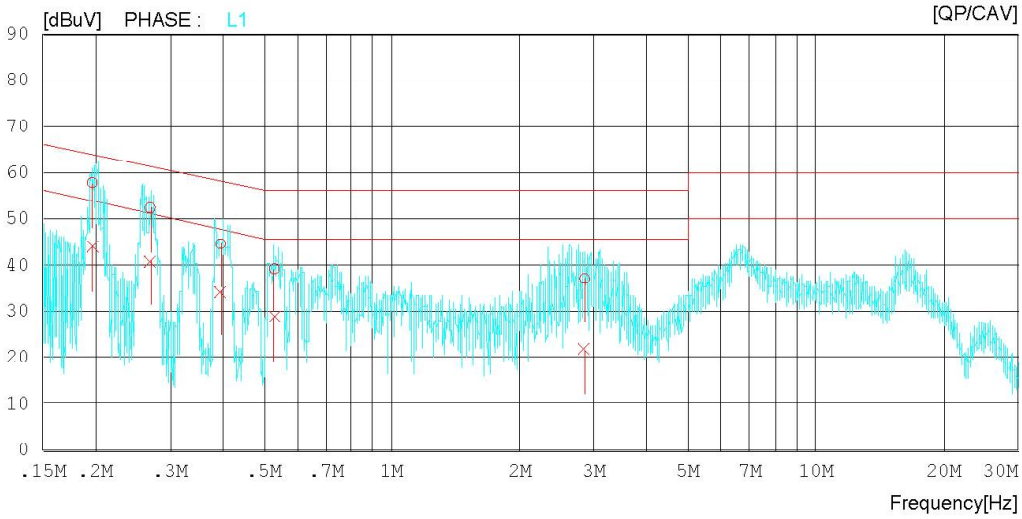
DT&C
Date 2019-12-10

Order No. DTNC1911-09483
Power Supply 120 V 60 Hz
Temp/Humi/Atm 24 'C 42 % R.H.
Test Condition DATA COMMUNICATION

Memo ningbo+cresyn

LIMIT : CISPR32_B QP
CISPR32_B AV





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Temp/Humi/Atm 24 'C 42 % R.H.
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Memo ningbo+cresyn

LIMIT : CISPR32_B QP
CISPR32_B AV

NO	FREQ	READING QP	READING CAV	C.FACTOR	RESULT QP	RESULT CAV	LIMIT QP	LIMIT CAV	MARGIN QP	MARGIN CAV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.20035	38.98	25.02	20.00	58.98	45.02	63.60	53.60	4.62	8.58	N
2	0.26831	36.38	22.04	19.85	56.23	41.89	61.17	51.17	4.94	9.28	N
3	0.39628	26.74	15.06	20.17	46.91	35.23	57.93	47.93	11.02	12.70	N
4	0.52939	20.07	9.10	20.24	40.31	29.34	56.00	46.00	15.69	16.66	N
5	2.89658	15.14	2.02	20.09	35.23	22.11	56.00	46.00	20.77	23.89	N
6	0.19650	37.77	23.92	20.02	57.79	43.94	63.76	53.76	5.97	9.82	L1
7	0.26887	32.51	21.04	19.85	52.36	40.89	61.15	51.15	8.79	10.26	L1
8	0.39450	24.58	14.12	20.17	44.75	34.29	57.97	47.97	13.22	13.68	L1
9	0.52850	19.12	8.54	20.24	39.36	28.78	56.00	46.00	16.64	17.22	L1
10	2.84970	17.06	1.56	20.09	37.15	21.65	56.00	46.00	18.85	24.35	L1

Mains terminal disturbance voltage _Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**120**	**Test Frequency (Hz)**	**60**
Data cable	**Ningbo**	**Ear-Mic**	**Bujeon**

Results of Conducted Emission

DT&C
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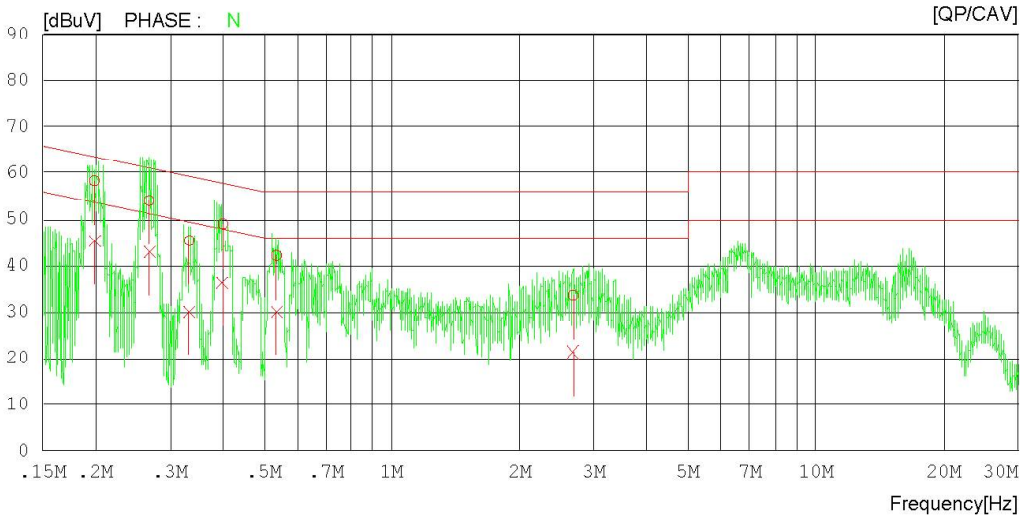
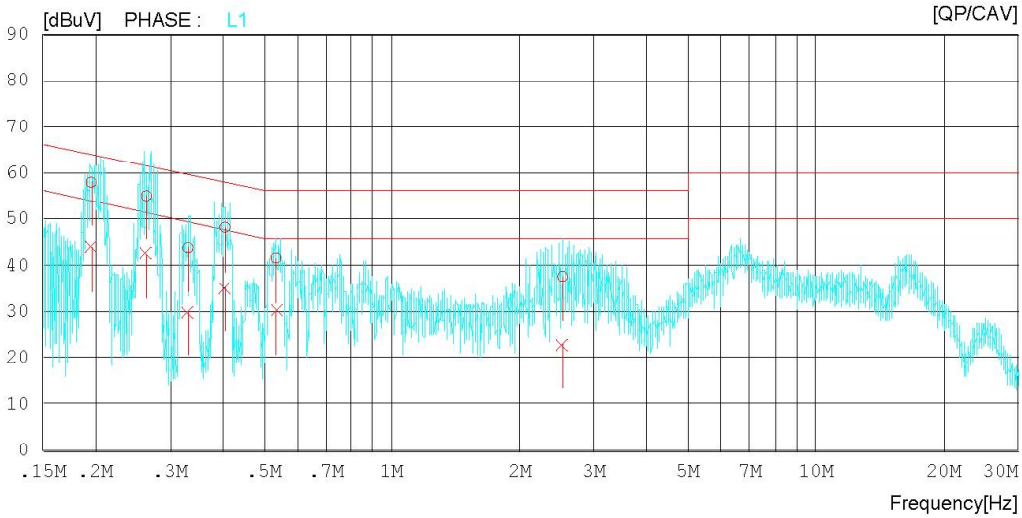
CISPR32_B AV





Results of Conducted Emission

DT&C
Date 2019-12-10

Order No. DTNC1911-09483
Power Supply 120 V 60 Hz
Temp/Humi/Atm 24 'C 42 % R.H.
Test Condition DATA COMMUNICATION

Memo ningbo+bujeon

LIMIT : CISPR32_B QP
CISPR32_B AV

NO	FREQ	READING QP	READING CAV	C.FACTOR	RESULT QP	RESULT CAV	LIMIT QP	LIMIT CAV	MARGIN QP	MARGIN CAV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.19880	38.38	25.38	20.01	58.39	45.39	63.66	53.66	5.27	8.27	N
2	0.26751	34.20	23.31	19.85	54.05	43.16	61.19	51.19	7.14	8.03	N
3	0.33279	25.37	10.19	20.01	45.38	30.20	59.38	49.38	14.00	19.18	N
4	0.39950	28.80	16.26	20.18	48.98	36.44	57.86	47.86	8.88	11.42	N
5	0.53488	21.89	9.95	20.24	42.13	30.19	56.00	46.00	13.87	15.81	N
6	2.67523	13.56	1.25	20.11	33.67	21.36	56.00	46.00	22.33	24.64	N
7	0.19550	37.88	23.85	20.03	57.91	43.88	63.80	53.80	5.89	9.92	L1
8	0.26350	35.20	22.69	19.84	55.04	42.53	61.32	51.32	6.28	8.79	L1
9	0.33054	23.82	10.09	20.00	43.82	30.09	59.44	49.44	15.62	19.35	L1
10	0.40418	28.02	15.09	20.18	48.20	35.27	57.77	47.77	9.57	12.50	L1
11	0.53346	21.45	9.95	20.24	41.69	30.19	56.00	46.00	14.31	15.81	L1
12	2.52964	17.58	2.74	20.12	37.70	22.86	56.00	46.00	18.30	23.14	L1

Mains terminal disturbance voltage _Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**120**	**Test Frequency (Hz)**	**60**
Data cable	**Luxshare**	**Ear-Mic**	**Cresyn**

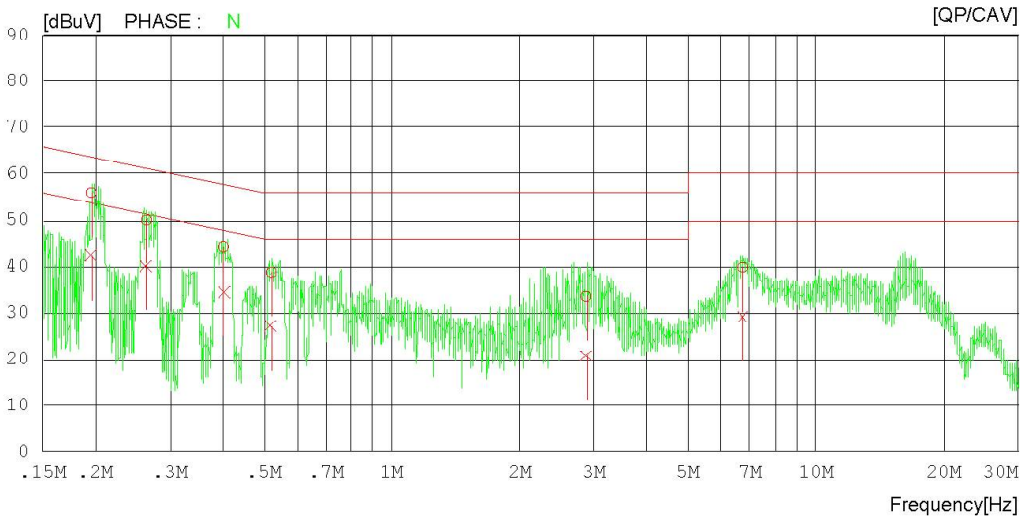
Results of Conducted Emission

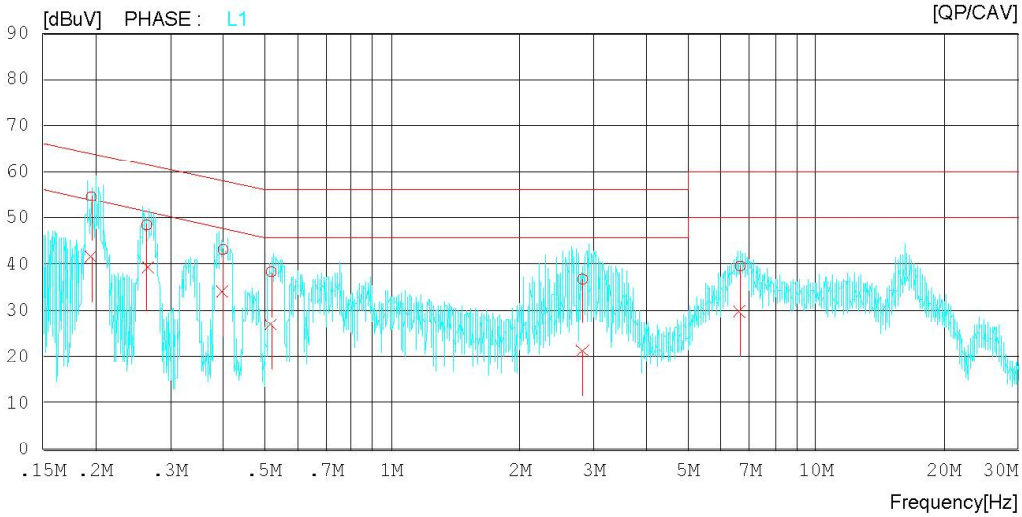
DT&C
Date 2019-12-10

Order No. DTNC1911-09483
Power Supply 120 V 60 Hz
Temp/Humi/Atm 24 'C 42 % R.H.
Test Condition DATA COMMUNICATION

Memo Luxshare+cresyn

LIMIT : CISPR32_B QP
CISPR32_B AV





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CISPR32_B AV

NO	FREQ	READING QP	READING CAV	C.FACTOR	RESULT QP	RESULT CAV	LIMIT QP	LIMIT CAV	MARGIN QP	MARGIN CAV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.19550	36.01	22.19	20.03	56.04	42.22	63.80	53.80	7.76	11.58	N
2	0.26350	30.23	20.38	19.84	50.07	40.22	61.32	51.32	11.25	11.10	N
3	0.40058	23.96	14.36	20.18	44.14	34.54	57.84	47.84	13.70	13.30	N
4	0.51950	18.44	6.88	20.24	38.68	27.12	56.00	46.00	17.32	18.88	N
5	2.87192	13.41	0.79	20.10	33.51	20.89	56.00	46.00	22.49	25.11	N
6	6.72123	19.45	9.02	20.38	39.83	29.40	60.00	50.00	20.17	20.60	N
7	0.19550	34.58	21.61	20.03	54.61	41.64	63.80	53.80	9.19	12.16	L1
8	0.26402	28.59	19.52	19.84	48.43	39.36	61.30	51.30	12.87	11.94	L1
9	0.39950	23.05	13.89	20.18	43.23	34.07	57.86	47.86	14.63	13.79	L1
10	0.51950	18.11	6.71	20.24	38.35	26.95	56.00	46.00	17.65	19.05	L1
11	2.81954	16.70	1.16	20.10	36.80	21.26	56.00	46.00	19.20	24.74	L1
12	6.62427	19.19	9.36	20.46	39.65	29.82	60.00	50.00	20.35	20.18	L1

Mains terminal disturbance voltage _Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**120**	**Test Frequency (Hz)**	**60**
Data cable	**Luxshare**	**Ear-Mic**	**Bujeon**

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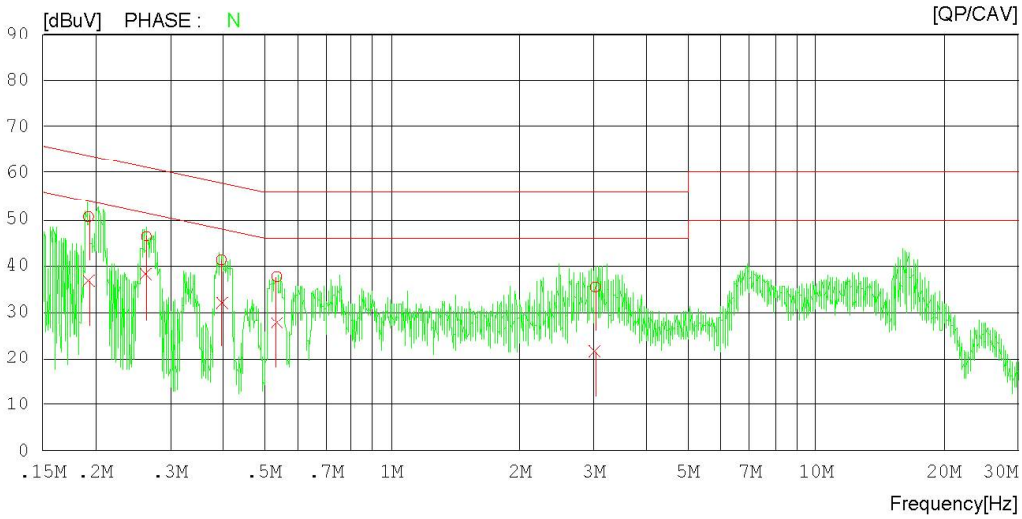

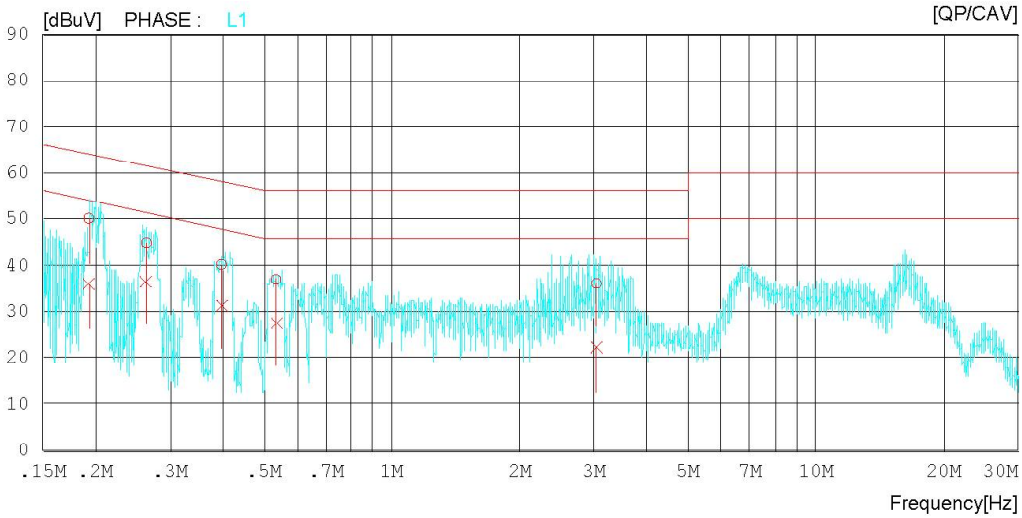

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Date 2019-12-10

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Power Supply 120 V 60 Hz
Temp/Humi/Atm 24 'C 42 % R.H.
Test Condition DATA COMMUNICATION

Memo Luxshare+bujeon

LIMIT : CISPR32_B QP
CISPR32_B AV

NO	FREQ	READING QP	READING CAV	C.FACTOR	RESULT QP	RESULT CAV	LIMIT QP	LIMIT CAV	MARGIN QP	MARGIN CAV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.19271	30.46	16.52	20.05	50.51	36.57	63.92	53.92	13.41	17.35	N
2	0.26358	26.45	18.13	19.84	46.29	37.97	61.32	51.32	15.03	13.35	N
3	0.39594	21.00	11.99	20.17	41.17	32.16	57.94	47.94	16.77	15.78	N
4	0.53549	17.36	7.51	20.24	37.60	27.75	56.00	46.00	18.40	18.25	N
5	3.01916	15.34	1.48	20.08	35.42	21.56	56.00	46.00	20.58	24.44	N
6	0.19282	30.04	15.96	20.05	50.09	36.01	63.91	53.91	13.82	17.90	L1
7	0.26350	25.02	16.68	19.84	44.86	36.52	61.32	51.32	16.46	14.80	L1
8	0.39649	20.13	11.34	20.17	40.30	31.51	57.93	47.93	17.63	16.42	L1
9	0.53350	16.77	7.32	20.24	37.01	27.56	56.00	46.00	18.99	18.44	L1
10	3.03913	16.06	2.07	20.08	36.14	22.15	56.00	46.00	19.86	23.85	L1

Mains terminal disturbance voltage _Measurement data			
Test configuration mode	**3**	**EUT Operation mode**	**3**
Test voltage (V)	**120**	**Test Frequency (Hz)**	**60**
-	**-**	**Ear-Mic**	**Cresyn**

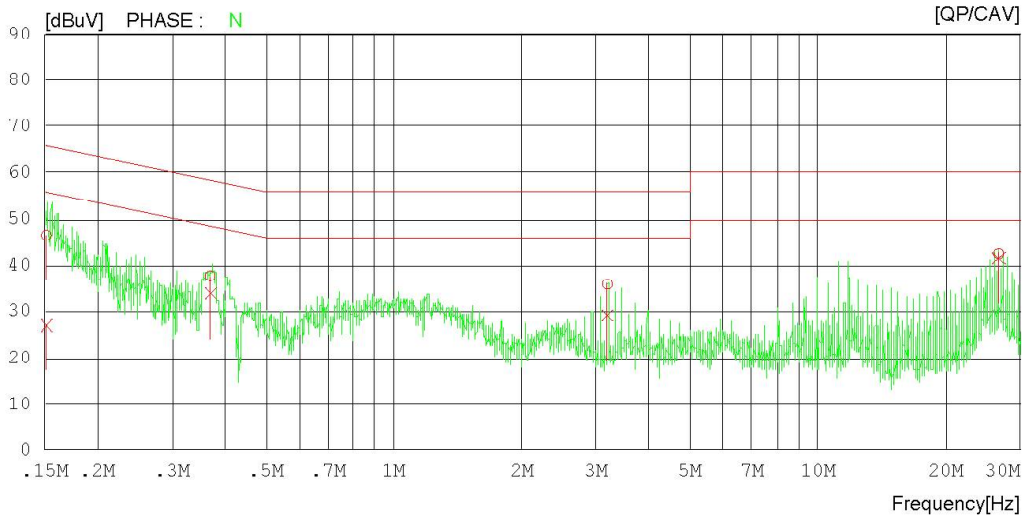
Results of Conducted Emission

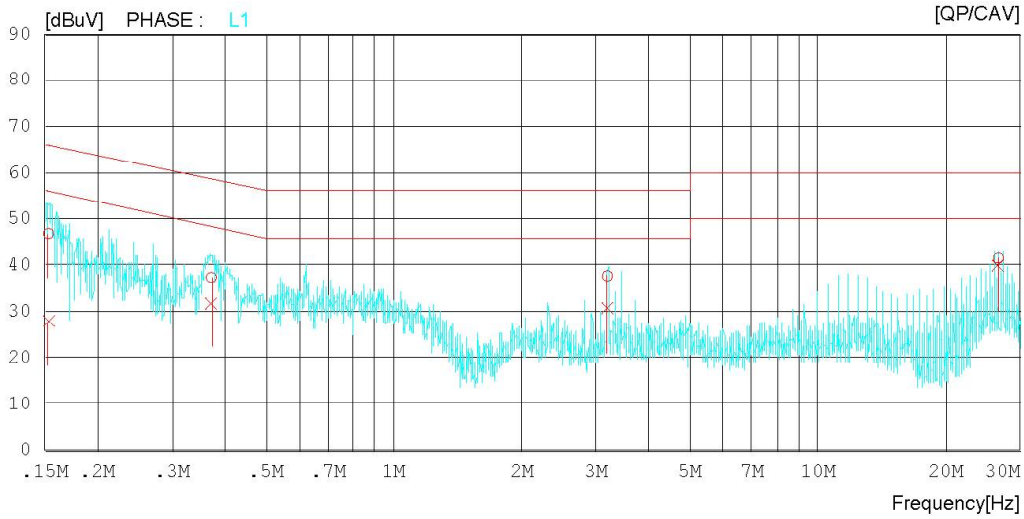
DT&C
Date 2019-12-10

Order No. DTNC1911-09483
Power Supply 120 V 60 Hz
Temp/Humi/Atm 24 'C 42 % R.H.
Test Condition wireless

Memo cresyn

LIMIT : CISPR32_B QP
CISPR32_B AV





Results of Conducted Emission

DT&C
Date 2019-12-10

Order No. DTNC1911-09483
Power Supply 120 V 60 Hz
Temp/Humi/Atm 24 'C 42 % R.H.
Test Condition wireless

Memo cresyn

LIMIT : CISPR32_B QP
CISPR32_B AV

NO	FREQ	READING QP	READING CAV	C.FACTOR	RESULT QP	RESULT CAV	LIMIT QP	LIMIT CAV	MARGIN QP	MARGIN CAV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.15150	26.64	7.12	19.93	46.57	27.05	65.92	55.92	19.35	28.87	N
2	0.36880	17.56	13.72	20.09	37.65	33.81	58.53	48.53	20.88	14.72	N
3	3.19345	15.73	9.00	20.09	35.82	29.09	56.00	46.00	20.18	16.91	N
4	26.71139	21.87	20.87	20.56	42.43	41.43	60.00	50.00	17.57	8.57	N
5	0.15331	26.89	7.85	19.96	46.85	27.81	65.82	55.82	18.97	28.01	L1
6	0.37100	17.18	11.90	20.10	37.28	32.00	58.48	48.48	21.20	16.48	L1
7	3.19258	17.56	10.62	20.09	37.65	30.71	56.00	46.00	18.35	15.29	L1
8	26.70358	20.88	19.28	20.56	41.44	39.84	60.00	50.00	18.56	10.16	L1

Mains terminal disturbance voltage _Measurement data			
Test configuration mode	**3**	**EUT Operation mode**	**3**
Test voltage (V)	**120**	**Test Frequency (Hz)**	**60**
-	**-**	**Ear-Mic**	**Bujeon**

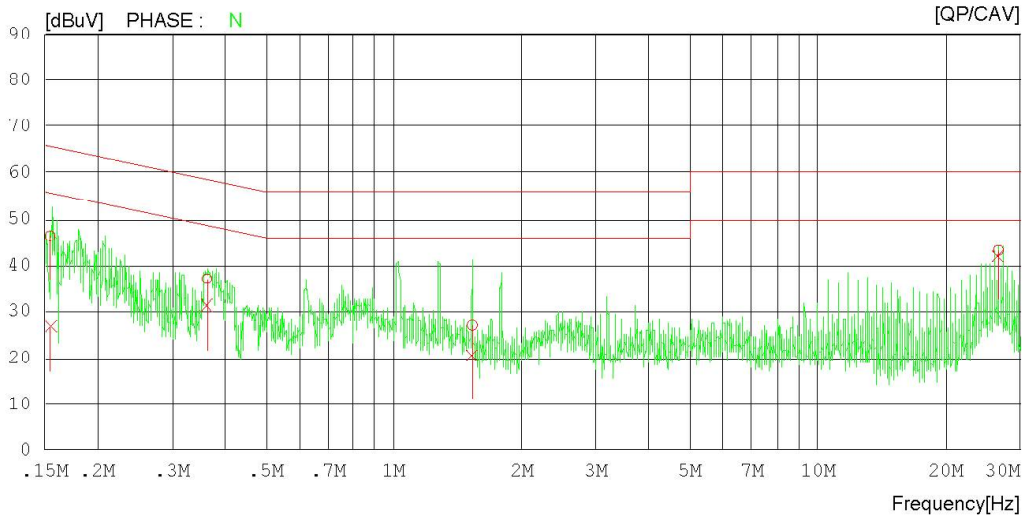
Results of Conducted Emission

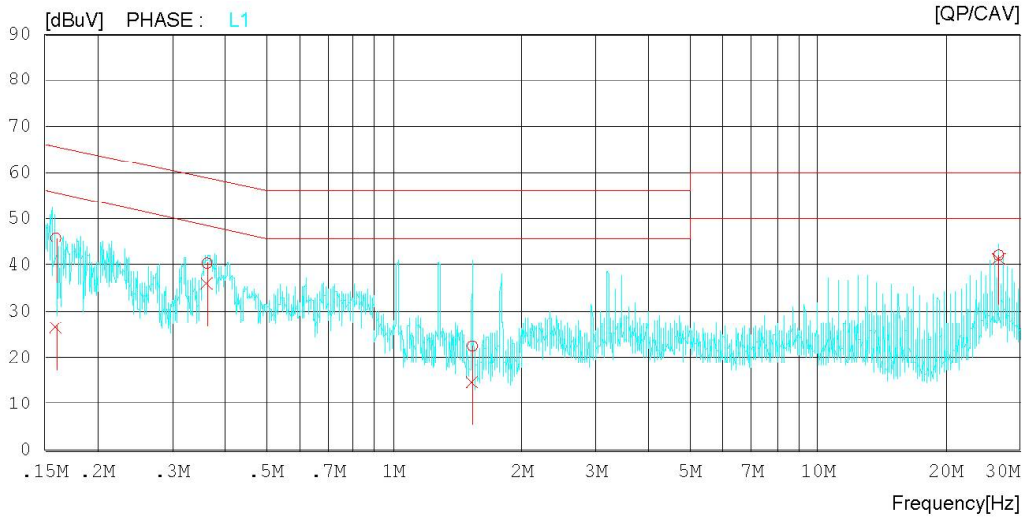
DT&C
Date 2019-12-10

Order No. DTNC1911-09483
Power Supply 120 V 60 Hz
Temp/Humi/Atm 24 'C 42 % R.H.
Test Condition wireless

Memo bujeon

LIMIT : CISPR32_B QP
CISPR32_B AV





Results of Conducted Emission

DT&C
Date 2019-12-10

Order No.	DTNC1911-09483
Power Supply	120 V 60 Hz
Temp/Humi/Atm	24 'C 42 % R.H.
Test Condition	wireless
Memo	bujeon

LIMIT : CISPR32_B QP
CISPR32_B AV

NO	FREQ	READING QP	READING CAV	C.FACTOR	RESULT QP	RESULT CAV	LIMIT QP	LIMIT CAV	MARGIN QP	MARGIN CAV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.15450	26.37	6.78	19.98	46.35	26.76	65.75	55.75	19.40	28.99	N
2	0.36250	17.00	11.25	20.07	37.07	31.32	58.67	48.67	21.60	17.35	N
3	1.53220	7.04	0.71	20.06	27.10	20.77	56.00	46.00	28.90	25.23	N
4	26.70445	22.70	21.55	20.56	43.26	42.11	60.00	50.00	16.74	7.89	N
5	0.15950	25.82	6.67	20.05	45.87	26.72	65.49	55.49	19.62	28.77	L1
6	0.36233	20.27	16.09	20.07	40.34	36.16	58.67	48.67	18.33	12.51	L1
7	1.53220	2.50	-5.10	20.06	22.56	14.96	56.00	46.00	33.44	31.04	L1
8	26.70618	21.52	20.60	20.56	42.08	41.16	60.00	50.00	17.92	8.84	L1

Calculation

N : Neutral phase, L1 : Live phase
C.FACTOR(dB) : Pulse Limiter(dB) + Cable loss(dB) + Insertion loss of LISN(dB)
Result(dBµV) : Reading Value(dBµV) + C.FACTOR(dB)
Margin(dB) : Limit(dBµV) - Result(dBµV)

7.2 Radiated Disturbance

ANSI C63.4	Radiated disturbance 30 MHz – 40 GHz	Result
Method: Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 10 or 3 meter below 1GHz and 3 meter above 1GHz. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in horizontal and vertical polarities. Final measurements were then performed by rotating the EUT 360° and adjusting the receive antenna height from 1 to 4 m. All frequencies were investigated in both horizontal and vertical antenna polarity, where applicable. For final measurement below 1 GHz frequency range, Quasi-Peak detector with (RBW = 120 kHz Bandwidth) was used. For final measurement above 1 GHz frequency range, Peak detector with (RBW = 1 MHz Bandwidth) and CISPR Average detector with (RBW = 1 MHz Bandwidth) were used.		Comply

EUT mode (Refer to clauses 4)	Test configuration mode	1, 2, 3
	EUT Operation mode	1, 2, 3

Radiated Disturbance below 1 000 MHz

Frequency range (MHz)	Quasi-peak limit dBµV/m	
	Class A (10 m distance)	Class B (3 m distance)
30 to 88	39.1	40
88 to 216	43.5	43.5
216 to 960	46.4	46
960 to 1 000	49.5	54

According to 15.109(g), as an alternative to the radiated emission limit shown above, digital devices may be shown to comply with the standards contained in Third Edition of the International Special Committee on Radio Interference (CISPR), Pub. 22 shown.

Frequency range (MHz)	Quasi-peak limit dBµV/m	
	Class A (10 m distance)	Class B (10 m distance)
30 to 230	40	30
230 to 1 000	47	37

Radiated Disturbance for above 1 000 MHz at a measurement distance of 3 m

Frequency range (GHz)	Peak limit dBµV/m		Average limit dBµV/m	
	Class A	Class B	Class A	Class B
1 to 40	80	74	60	54

The test frequency range of Radiated Disturbance measurements are listed below.

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 108	1 000
108 – 500	2 000
500 – 1 000	5 000
Above 1 000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

Measurement uncertainty	
Expended uncertainty *U* (95 %, Confidence level, *k* = 2)	2.89 dB, (30 ~ 1 000) MHz 4.22 dB, (1 GHz above)
The measurement uncertainties were calculated in accordance with requirements of ANSI C 63.4-2014.	

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	2019.06.12	2020.06.12
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	2019.02.18	2020.02.18
HORN ANTENNA	3117	ETS-LINDGREN	00152093	2018.03.26	2020.03.26
BAND REJECT FILTER	WRCGV12-2375-2400-2484-2505-50SS-PB	WAINWRIGHT INSTRUMENTS GMBH	1	2019.02.27	2020.02.27
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	SAS-574	A.H.SYSTEMS INC.	155	2019.07.03	2021.07.03
PREAMPLIFIER	MLA-1840-J02-45	TSJ	16966-10728	2019.06.27	2020.06.27
(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)	**Battery**	**Test Frequency (Hz)**	**-**
-	**-**	**Ear-Mic**	**Cresyn**

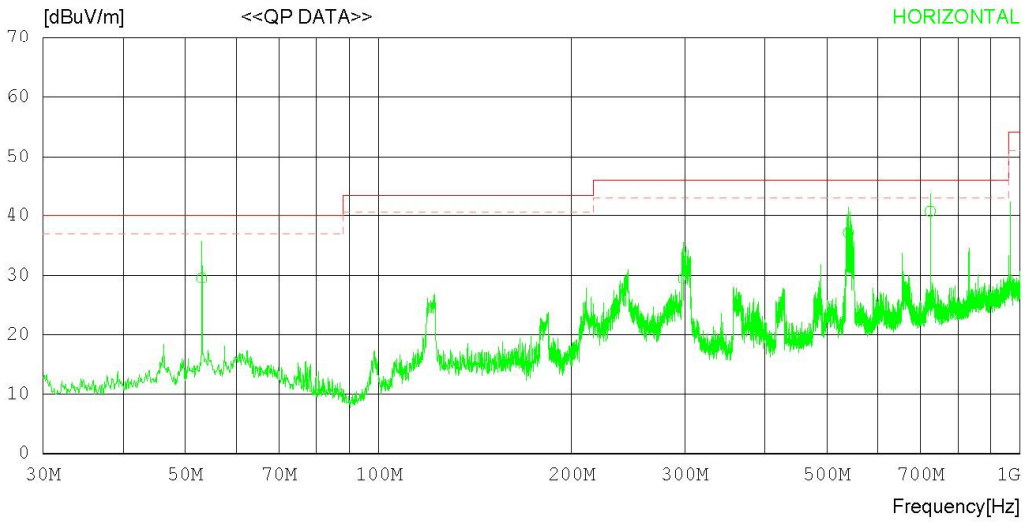
RADIATED EMISSION

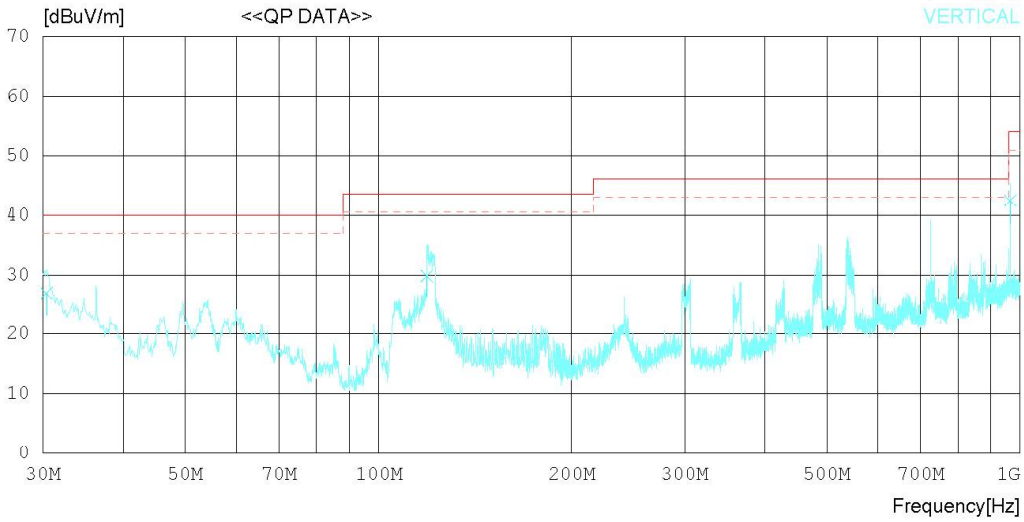
Date 2019-12-06

Order No. DTNC1911-09483
Power Supply Battery
Temp/Humi 23 'C 40 % R.H.
Test Condition DISPLAY

Memo cresyn

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





RADIATED EMISSION

Date 2019-12-06

Order No.	DTNC1911-09483
Power Supply	Battery
Temp/Humi	23 'C 40 % R.H.
Test Condition	DISPLAY
Memo	cresyn

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	53.038	35.60	18.50	1.29	25.79	29.60	40.00	10.40	208	120
2	298.441	33.60	19.50	2.25	25.84	29.51	46.00	16.49	175	176
3	539.728	34.60	25.09	2.88	25.49	37.08	46.00	8.92	146	147
4	724.554	35.50	27.58	3.35	25.77	40.66	46.00	5.34	342	277
----- Vertical ------										
5	30.364	35.50	16.10	1.09	25.82	26.87	40.00	13.13	227	173
6	118.996	37.10	16.85	1.66	25.69	29.92	43.50	13.58	120	251
7	966.137	34.10	30.46	3.79	25.92	42.43	54.00	11.57	223	127

Radiated disturbance at (1 ~ 6) GHz _Peak measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**Battery**	**Test Frequency (Hz)**	**-**
-	**-**	**Ear-Mic**	**Cresyn**

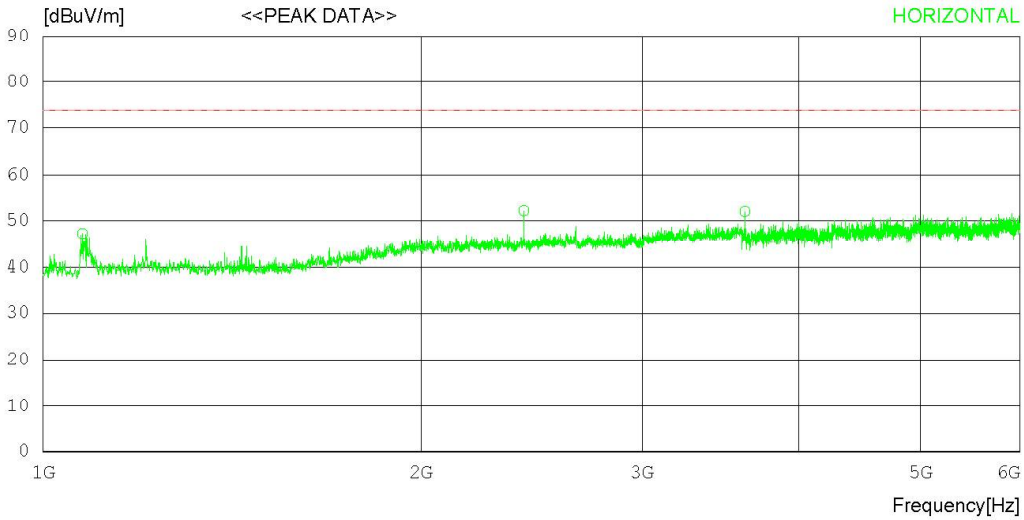
RADIATED EMISSION

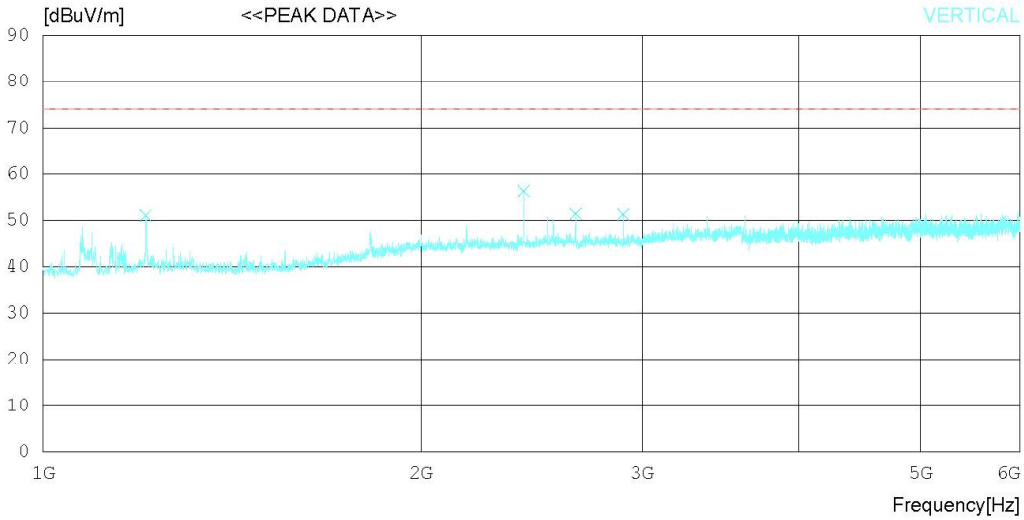
Date 2019-12-07

Order No. DTNC1911-09483
Power Supply Battery
Temp/Humi 23 'C 40 % R.H.
Test Condition DISPLAY

Memo cresyn

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





RADIATED EMISSION

Date 2019-12-07

Order No.	DTNC1911-09483
Power Supply	Battery
Temp/Humi	23 'C 40 % R.H.
Test Condition	DISPLAY
Memo	cresyn

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

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	1075.000	50.80	27.70	4.41	35.64	47.27	74.0	26.73	124	292
2	2415.000	48.20	31.89	6.66	34.58	52.17	74.0	21.83	215	288
3	3622.500	44.40	33.28	8.38	34.06	52.00	74.0	22	100	240
----- Vertical ------										
4	1207.500	53.00	28.79	4.76	35.46	51.09	74.0	22.91	124	29
5	2415.000	52.50	31.89	6.66	34.58	56.47	74.0	17.53	243	238
6	2656.250	46.50	32.69	6.94	34.73	51.40	74.0	22.6	128	260
7	2898.125	46.60	32.20	7.29	34.87	51.22	74.0	22.78	223	0

Radiated disturbance at (1 ~ 6) GHz _Average measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**Battery**	**Test Frequency (Hz)**	**-**
-	**-**	**Ear-Mic**	**Cresyn**

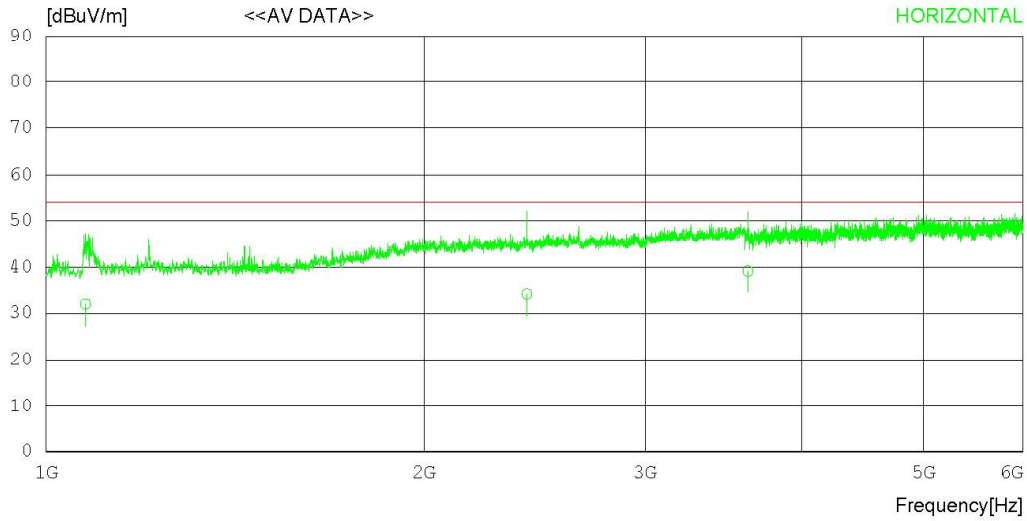
RADIATED EMISSION

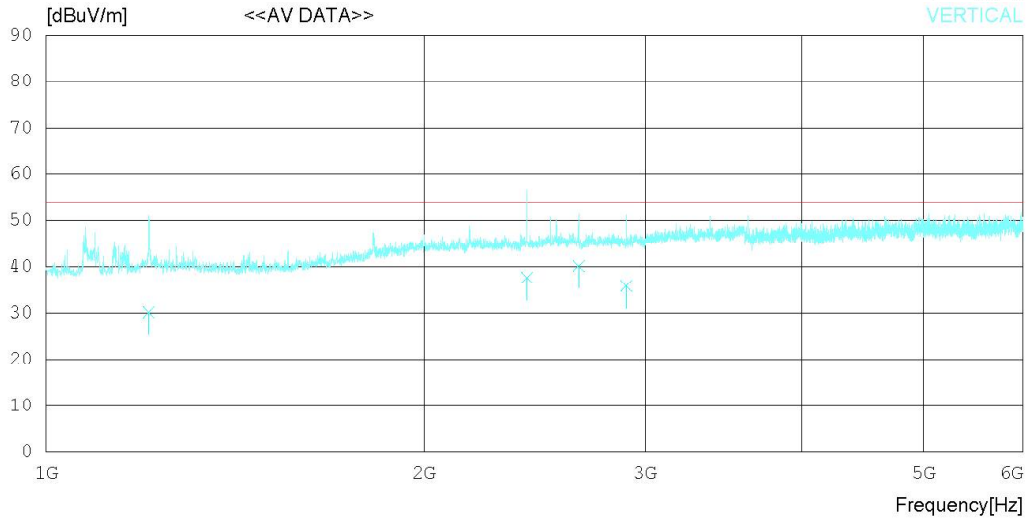
Date 2019-12-07

Order No. DTNC1911-09483
Power Supply Battery
Temp/Humi 23 'C 40 % R.H.
Test Condition DISPLAY

Memo cresyn

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





RADIATED EMISSION

Date 2019-12-07

Order No.	DTNC1911-09483
Power Supply	Battery
Temp/Humi	23 'C 40 % R.H.
Test Condition	DISPLAY
Memo	cresyn

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)
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	1075.042	35.50	27.70	4.41	35.64	31.97	54.00	22.03	120	124
2	2415.030	30.10	31.89	6.66	34.58	34.07	54.00	19.93	224	134
3	3622.504	31.60	33.27	8.38	34.06	39.19	54.00	14.81	308	77
----- Vertical ------										
4	1207.544	32.20	28.78	4.76	35.46	30.28	54.00	23.72	334	120
5	2415.023	33.60	31.89	6.66	34.58	37.57	54.00	16.43	124	227
6	2656.211	35.20	32.69	6.93	34.73	40.09	54.00	13.91	302	277
7	2898.144	31.20	32.20	7.29	34.87	35.82	54.00	18.18	134	124

Radiated disturbance at (6 ~ 18) GHz _Peak measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**Battery**	**Test Frequency (Hz)**	**-**
-	**-**	**Ear-Mic**	**Cresyn**

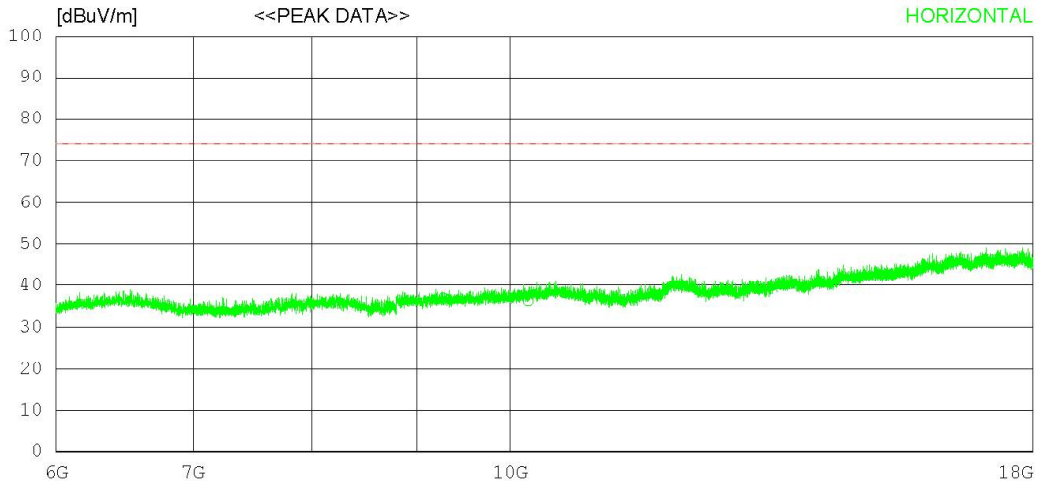
RADIATED EMISSION

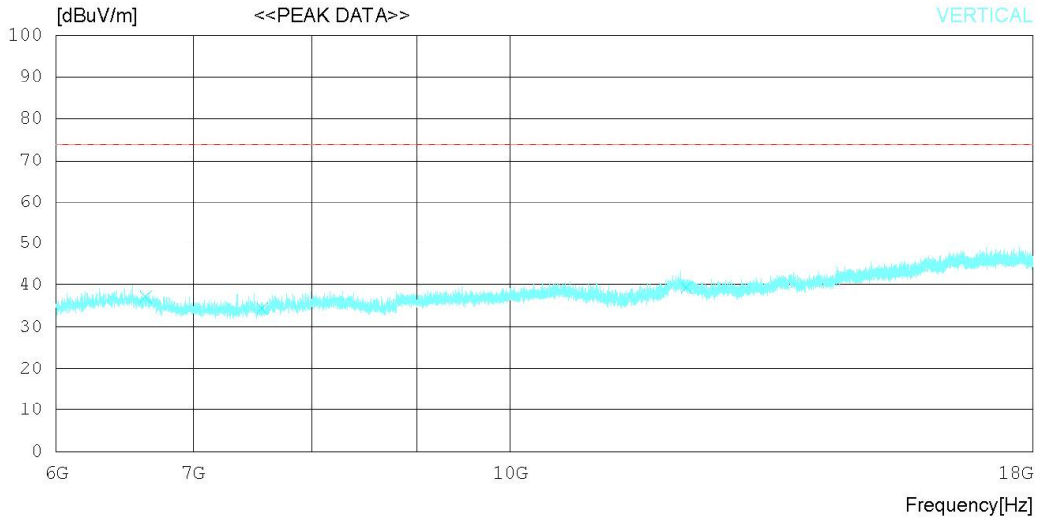
Date 2019-12-08

Order No. DTNC1911-09483
Power Supply Battery
Temp/Humi 21 'C 44 % R.H.
Test Condition DISPLAY

Memo cresyn

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





RADIATED EMISSION

Date 2019-12-08

Order No.	DTNC1911-09483
Power Supply	Battery
Temp/Humi	21 'C 44 % R.H.
Test Condition	DISPLAY
Memo	cresyn

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

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	9276.000	29.90	32.22	13.91	39.10	36.93	74.0	37.07	124	0
2	10203.000	27.30	32.52	14.46	38.00	36.28	74.0	37.72	214	276
3	10632.000	29.10	32.46	14.75	38.12	38.19	74.0	35.81	272	0
----- Vertical ------										
4	6635.250	32.80	31.55	11.22	38.45	37.12	74.0	36.88	234	145
5	7566.000	29.40	31.37	11.94	38.25	34.46	74.0	39.54	288	9
6	12191.250	28.30	33.48	15.55	38.00	39.33	74.0	34.67	124	75

Radiated disturbance at (6 ~ 18) GHz _Average measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**Battery**	**Test Frequency (Hz)**	**-**
-	**-**	**Ear-Mic**	**Cresyn**

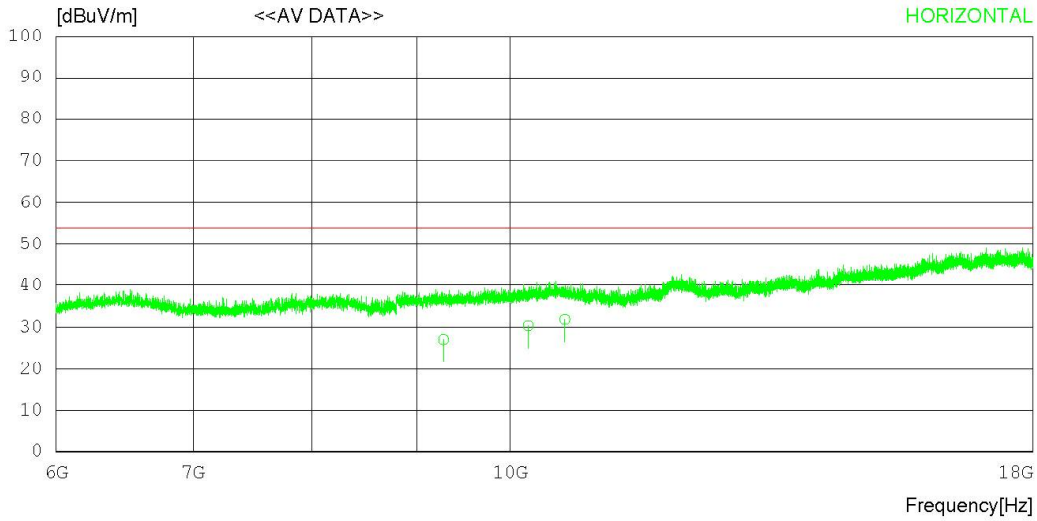
RADIATED EMISSION

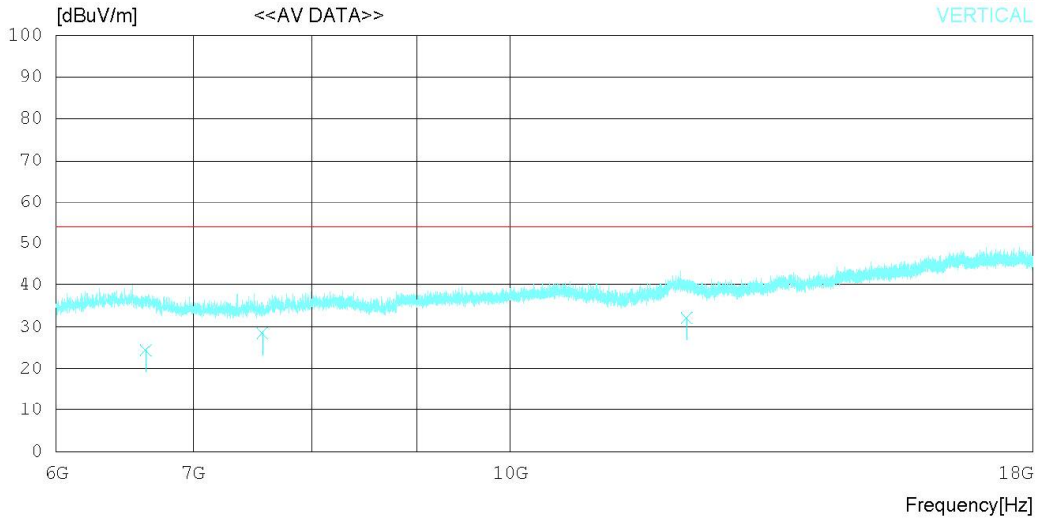
Date 2019-12-08

Order No. DTNC1911-09483
Power Supply Battery
Temp/Humi 21 'C 44 % R.H.
Test Condition DISPLAY

Memo cresyn

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





RADIATED EMISSION

Date 2019-12-08

Order No.	DTNC1911-09483
Power Supply	Battery
Temp/Humi	21 'C 44 % R.H.
Test Condition	DISPLAY
Memo	cresyn

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)
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	9276.042	20.10	32.22	13.91	39.10	27.13	54.00	26.87	120	78
2	10203.180	21.40	32.52	14.46	38.00	30.38	54.00	23.62	342	262
3	10632.030	22.80	32.46	14.75	38.12	31.89	54.00	22.11	144	188
----- Vertical ------										
4	6635.214	20.10	31.55	11.22	38.45	24.42	54.00	29.58	134	226
5	7566.032	23.50	31.37	11.94	38.25	28.56	54.00	25.44	120	128
6	12191.240	21.20	33.48	15.55	38.00	32.23	54.00	21.77	227	208

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

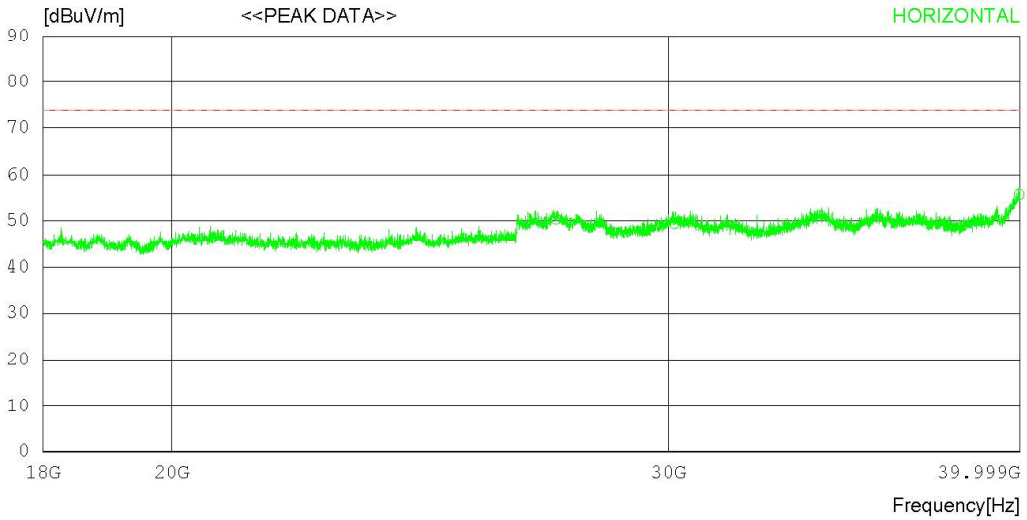
RADIATED EMISSION

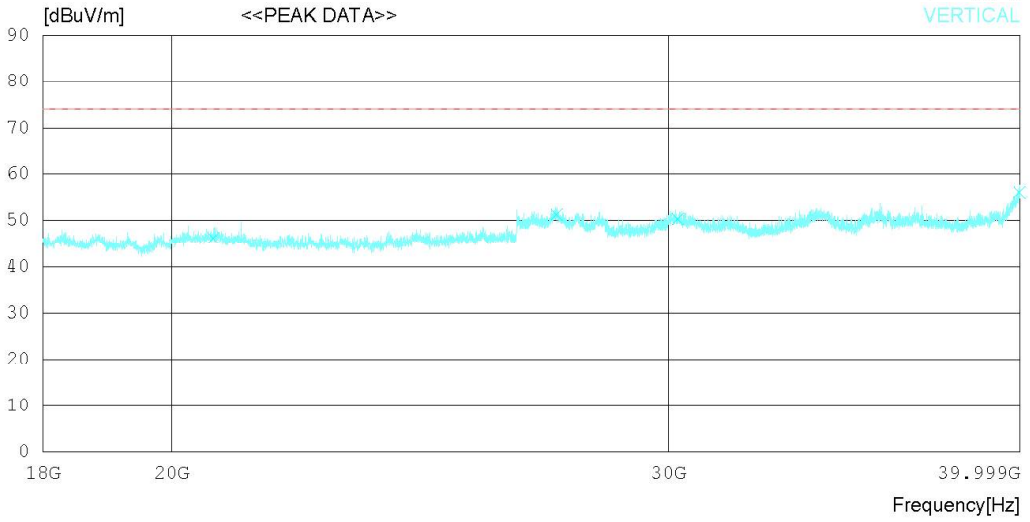
Date 2019-12-10

Order No. DTNC1911-09483
Power Supply Battery
Temp/Humi 23 'C 47 % R.H.
Test Condition DISPLAY

Memo cresyn

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





RADIATED EMISSION

Date 2019-12-10

Order No.	DTNC1911-09483
Power Supply	Battery
Temp/Humi	23 'C 47 % R.H.
Test Condition	DISPLAY
Memo	cresyn

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

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	20686.750	31.60	39.45	19.61	44.26	46.40	74.0	27.6	124	123
2	27369.250	36.00	38.79	21.08	45.40	50.47	74.0	23.53	302	358
3	30155.000	33.80	40.29	21.88	46.50	49.47	74.0	24.53	177	193
4	39967.000	35.20	43.46	23.94	46.78	55.82	74.0	18.18	123	358
----- Vertical ------										
5	20686.750	31.40	39.45	19.61	44.26	46.20	74.0	27.8	125	207
6	27388.500	36.70	38.80	21.09	45.41	51.18	74.0	22.82	243	262
7	30240.250	34.60	40.26	21.95	46.50	50.31	74.0	23.69	214	0
8	39978.000	35.40	43.50	23.93	46.72	56.11	74.0	17.89	181	0

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

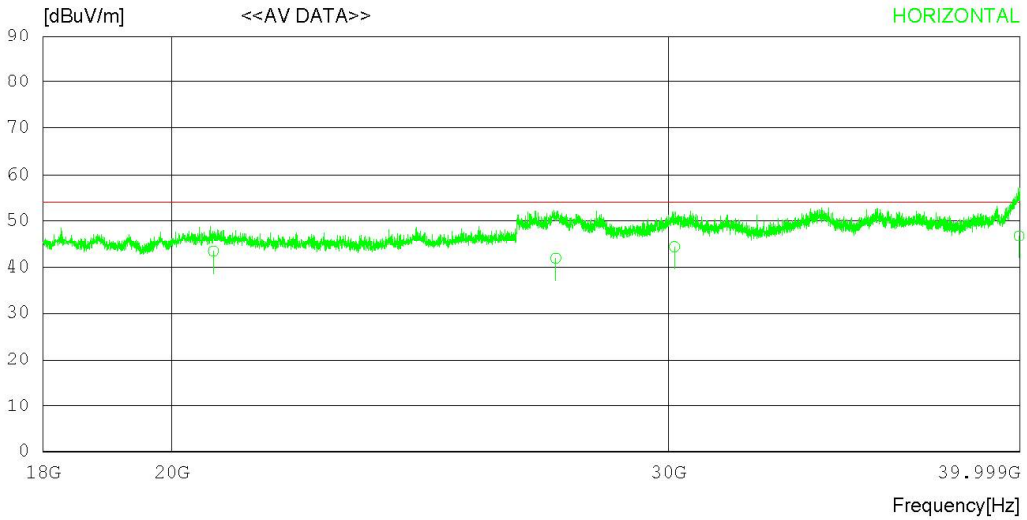
RADIATED EMISSION

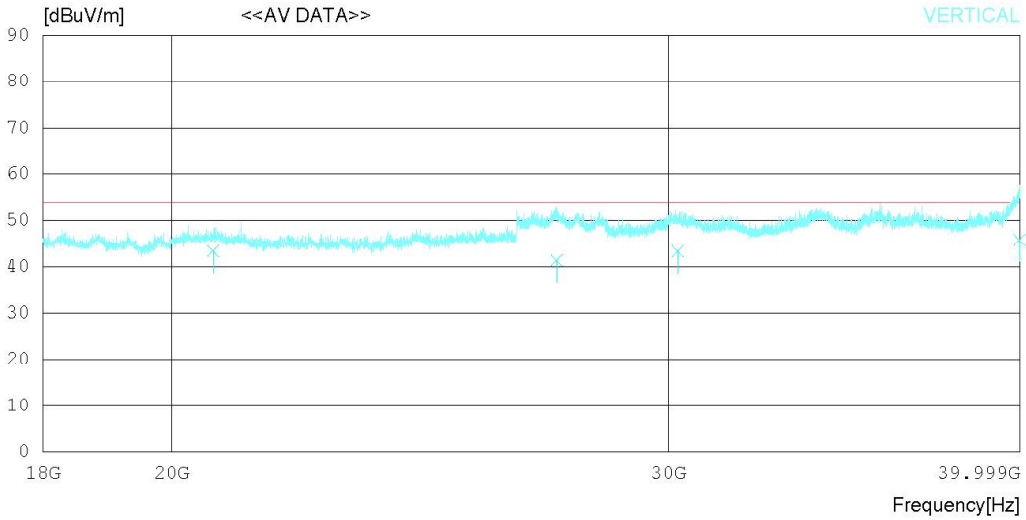
Date 2019-12-10

Order No. DTNC1911-09483
Power Supply Battery
Temp/Humi 23 'C 47 % R.H.
Test Condition DISPLAY

Memo cresyn

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





RADIATED EMISSION

Date 2019-12-10

Order No.	DTNC1911-09483
Power Supply	Battery
Temp/Humi	23 'C 47 % R.H.
Test Condition	DISPLAY
Memo	cresyn

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)
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	20686.12028.60	39.45	19.61	44.26	43.40	54.00	10.60	120	120	
2	27369.21027.42	38.79	21.08	45.40	41.89	54.00	12.11	134	234	
3	30155.03028.65	40.29	21.88	46.50	44.32	54.00	9.68	234	188	
4	39967.02026.20	43.46	23.94	46.78	46.82	54.00	7.18	277	123	
----- Vertical ------										
5	20686.71028.60	39.45	19.61	44.26	43.40	54.00	10.60	120	132	
6	27388.54026.80	38.80	21.09	45.41	41.28	54.00	12.72	231	255	
7	30240.30027.60	40.26	21.95	46.50	43.31	54.00	10.69	277	134	
8	39978.08025.10	43.50	23.93	46.72	45.81	54.00	8.19	134	280	

Radiated disturbance at (30 ~ 1000) MHz _Measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**Battery**	**Test Frequency (Hz)**	**-**
-	**-**	**Ear-Mic**	**Bujeon**

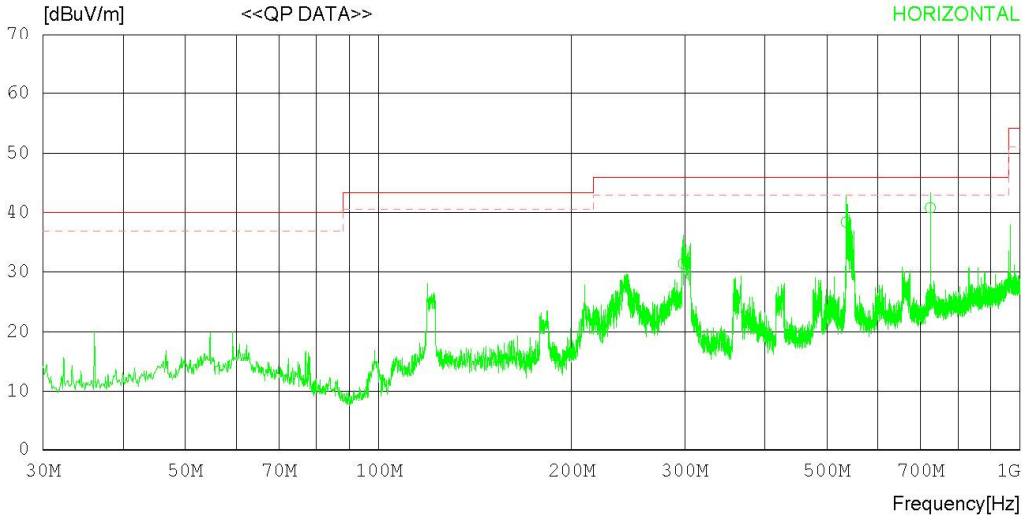
RADIATED EMISSION

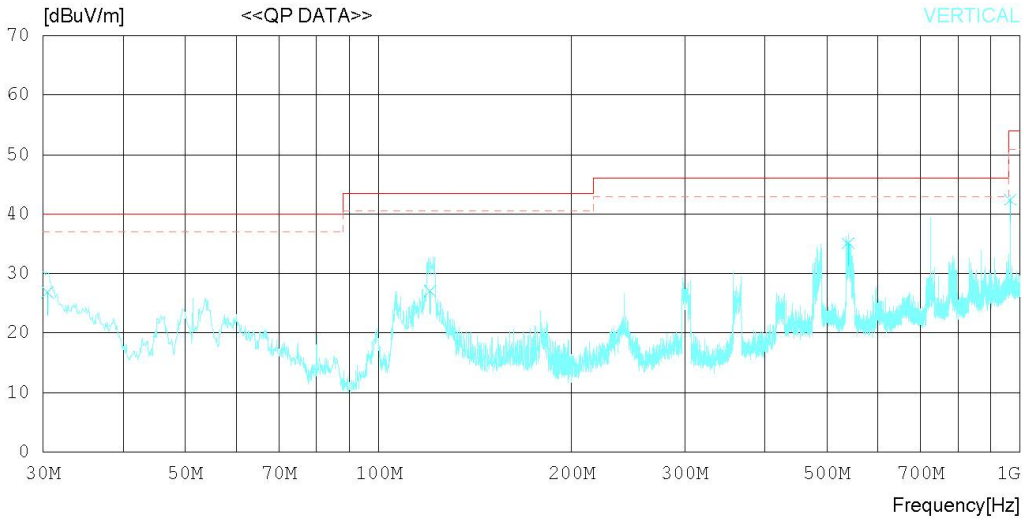
Date 2019-12-06

Order No. DTNC1911-09483
Power Supply Battery
Temp/Humi 23 'C 40 % R.H.
Test Condition DISPLAY

Memo bujeon

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





RADIATED EMISSION

Date 2019-12-06

Order No.	DTNC1911-09483
Power Supply	Battery
Temp/Humi	23 'C 40 % R.H.
Test Condition	DISPLAY
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	298.441	35.50	19.50	2.25	25.84	31.41	46.00	14.59	178	176
2	535.726	36.10	24.97	2.87	25.50	38.44	46.00	7.56	226	161
3	724.554	35.60	27.58	3.35	25.77	40.76	46.00	5.24	134	152
----- Vertical ------										
4	30.485	35.60	15.97	1.09	25.82	26.84	40.00	13.16	246	120
5	120.330	34.20	16.94	1.66	25.69	27.11	43.50	16.39	134	227
6	539.606	32.60	25.09	2.88	25.49	35.08	46.00	10.92	244	314
7	966.137	34.10	30.46	3.79	25.92	42.43	54.00	11.57	208	116

Radiated disturbance at (1 ~ 6) GHz _Peak measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**Battery**	**Test Frequency (Hz)**	**-**
-	**-**	**Ear-Mic**	**Bujeon**

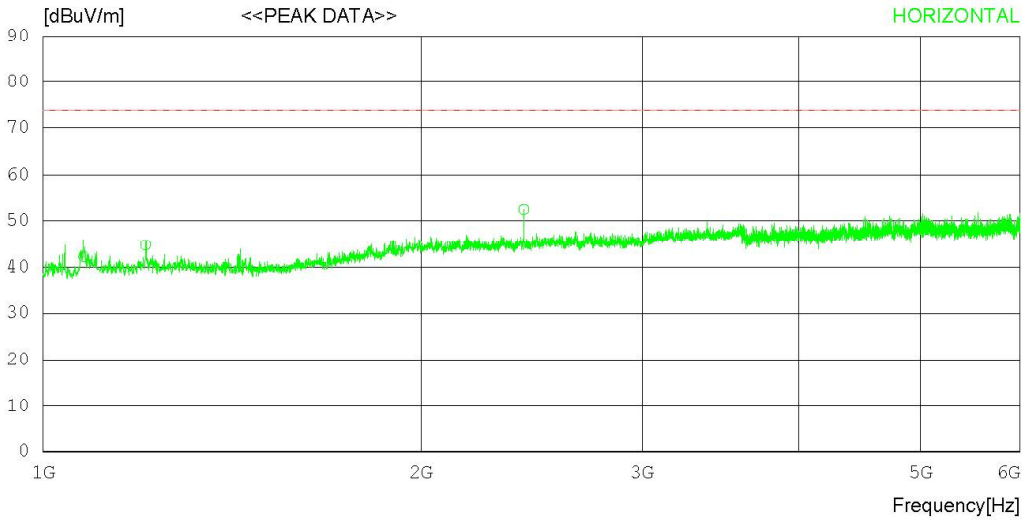
RADIATED EMISSION

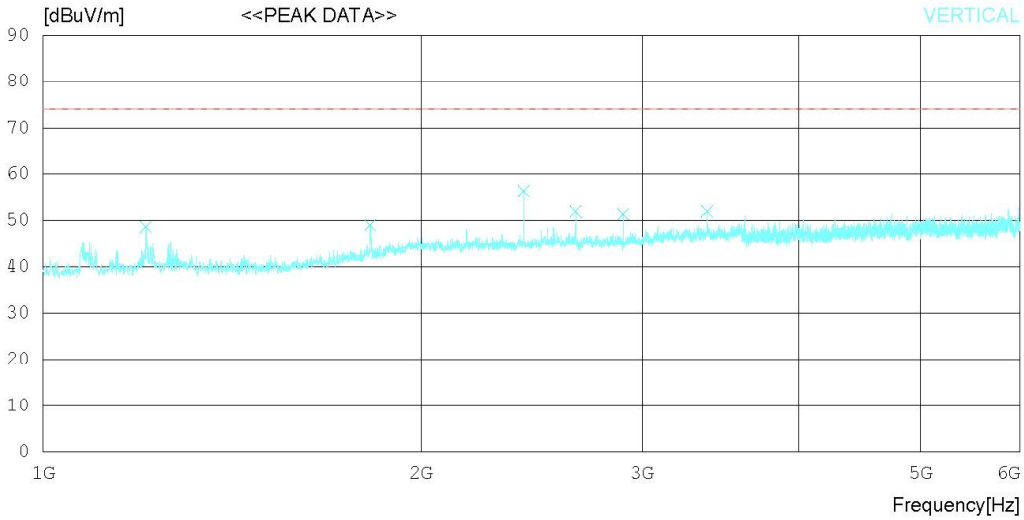
Date 2019-12-07

Order No. DTNC1911-09483
Power Supply Battery
Temp/Humi 23 'C 40 % R.H.
Test Condition DISPLAY

Memo buejon

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





RADIATED EMISSION

Date 2019-12-07

Order No.	DTNC1911-09483
Power Supply	Battery
Temp/Humi	23 'C 40 % R.H.
Test Condition	DISPLAY
Memo	buejon

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

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	1077.500	45.70	27.73	4.41	35.64	42.20	74.0	31.8	124	315
2	1206.875	46.70	28.79	4.76	35.46	44.79	74.0	29.21	241	358
3	2415.000	48.50	31.89	6.66	34.58	52.47	74.0	21.53	314	289
----- Vertical ------										
4	1207.500	50.60	28.79	4.76	35.46	48.69	74.0	25.31	235	243
5	1821.875	47.40	30.49	5.69	34.59	48.99	74.0	25.01	111	0
6	2415.000	52.50	31.89	6.66	34.58	56.47	74.0	17.53	134	0
7	2656.250	47.00	32.69	6.94	34.73	51.90	74.0	22.1	205	238
8	2898.125	46.70	32.20	7.29	34.87	51.32	74.0	22.68	131	0
9	3381.250	45.50	32.80	8.04	34.40	51.94	74.0	22.06	172	238

Radiated disturbance at (1 ~ 6) GHz _Average measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**Battery**	**Test Frequency (Hz)**	**-**
-	**-**	**Ear-Mic**	**Bujeon**

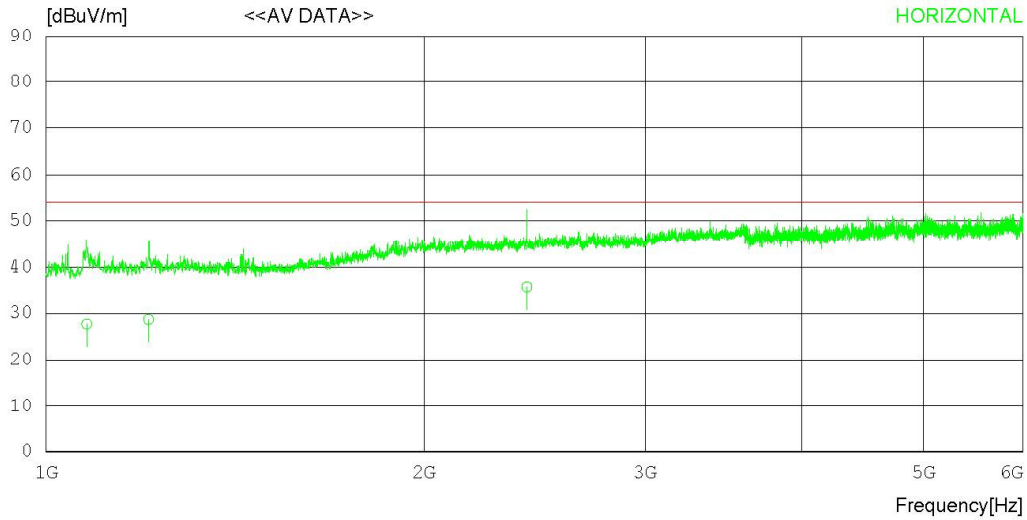
RADIATED EMISSION

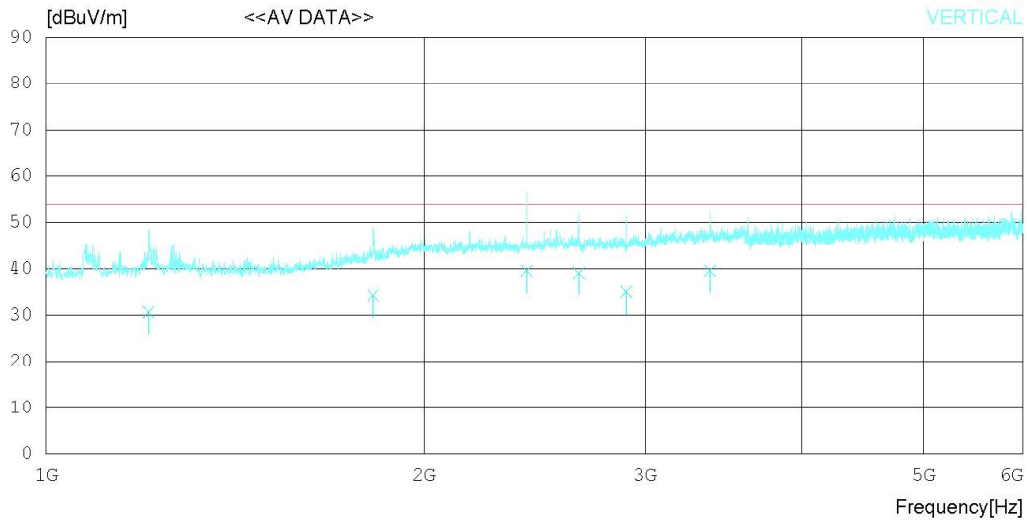
Date 2019-12-07

Order No. DTNC1911-09483
Power Supply Battery
Temp/Humi 23 'C 40 % R.H.
Test Condition DISPLAY

Memo buejon

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





RADIATED EMISSION

Date 2019-12-07

Order No.	DTNC1911-09483
Power Supply	Battery
Temp/Humi	23 'C 40 % R.H.
Test Condition	DISPLAY
Memo	buejon

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)
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	1077.544	31.20	27.73	4.41	35.64	27.70	54.00	26.30	272	115
2	1206.811	30.60	28.79	4.76	35.46	28.69	54.00	25.31	301	234
3	2415.060	31.60	31.89	6.66	34.58	35.57	54.00	18.43	224	144
----- Vertical ------										
4	1207.120	32.60	28.79	4.76	35.46	30.69	54.00	23.31	100	243
5	1821.844	32.60	30.49	5.69	34.59	34.19	54.00	19.81	124	78
6	2415.012	35.50	31.89	6.66	34.58	39.47	54.00	14.53	230	112
7	2656.250	34.12	32.69	6.94	34.73	39.02	54.00	14.98	311	342
8	2898.124	30.26	32.20	7.29	34.87	34.88	54.00	19.12	114	242
9	3381.212	33.10	32.80	8.03	34.40	39.53	54.00	14.47	125	120

Radiated disturbance at (6 ~ 18) GHz _Peak measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**Battery**	**Test Frequency (Hz)**	**-**
-	**-**	**Ear-Mic**	**Bujeon**

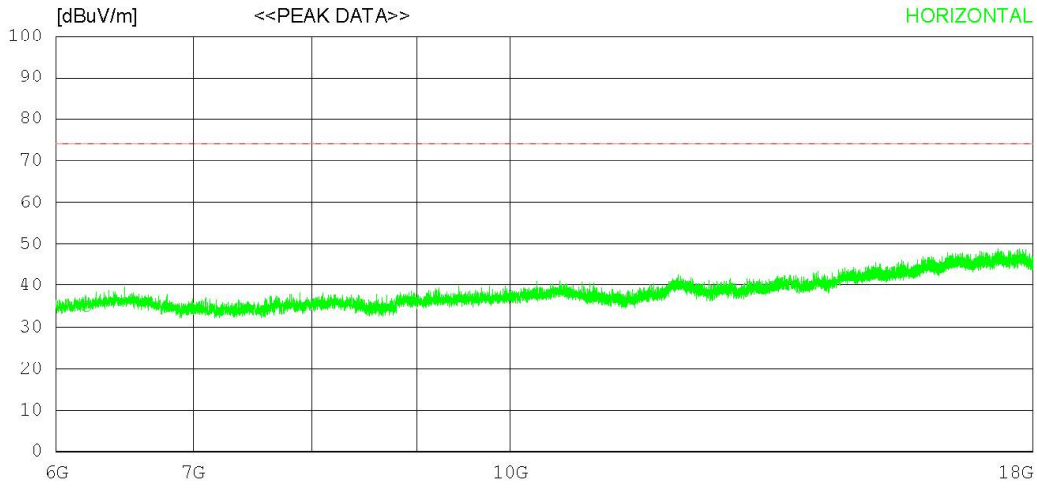
RADIATED EMISSION

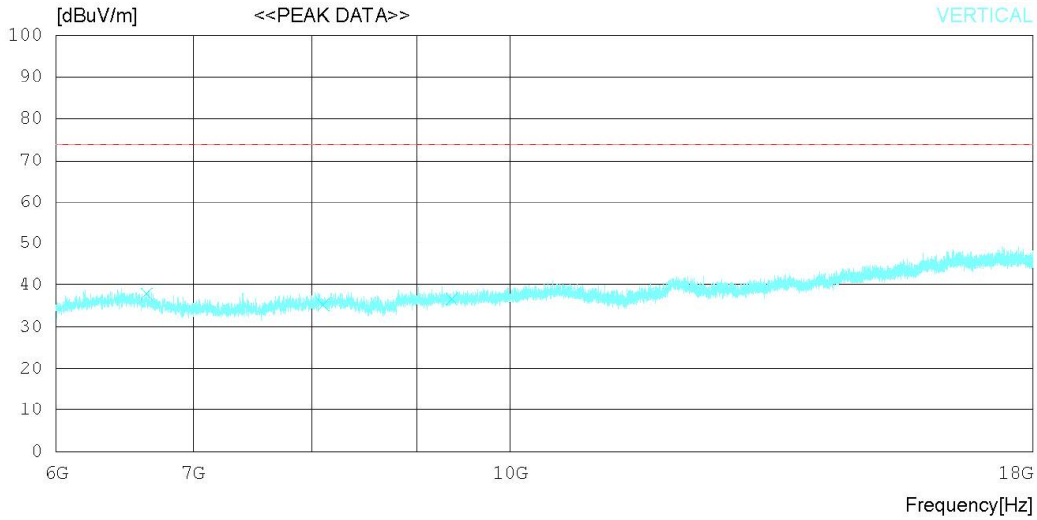
Date 2019-12-08

Order No. DTNC1911-09483
Power Supply Battery
Temp/Humi 21 'C 44 % R.H.
Test Condition DISPLAY

Memo bujeon

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





RADIATED EMISSION

Date 2019-12-08

Order No.	DTNC1911-09483
Power Supply	Battery
Temp/Humi	21 'C 44 % R.H.
Test Condition	DISPLAY
Memo	bujeon

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

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	6207.000	31.50	31.66	10.78	38.96	34.98	74.0	39.02	124	306
2	7365.000	29.80	31.40	11.72	38.48	34.44	74.0	39.56	240	256
3	8564.250	27.60	31.75	12.93	37.77	34.51	74.0	39.49	124	290
----- Vertical ------										
4	6642.000	33.50	31.55	11.22	38.45	37.82	74.0	36.18	241	355
5	8102.250	29.30	31.38	12.49	37.82	35.35	74.0	38.65	221	197
6	9363.750	29.40	32.26	14.12	39.15	36.63	74.0	37.37	342	211

Radiated disturbance at (6 ~ 18) GHz _Average measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**Battery**	**Test Frequency (Hz)**	**-**
-	**-**	**Ear-Mic**	**Bujeon**

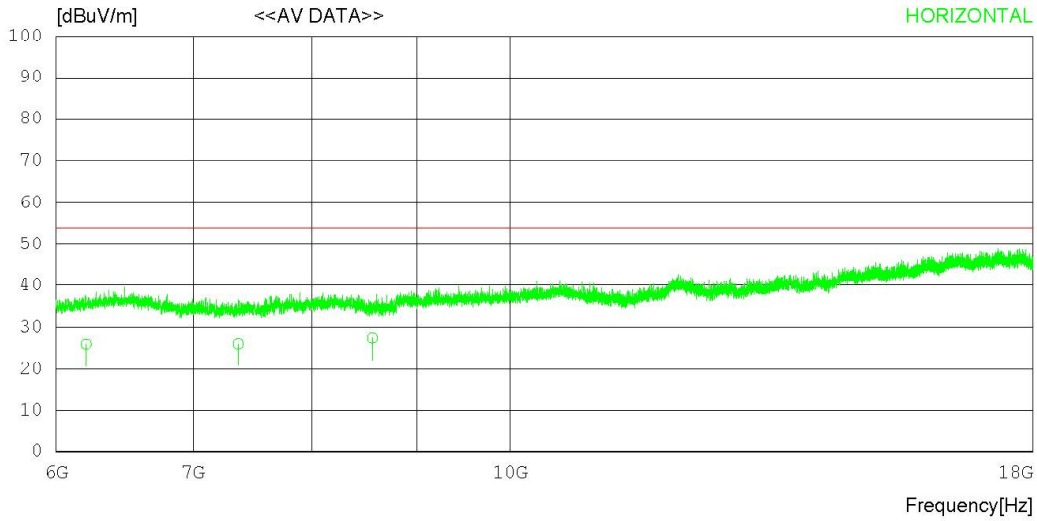
RADIATED EMISSION

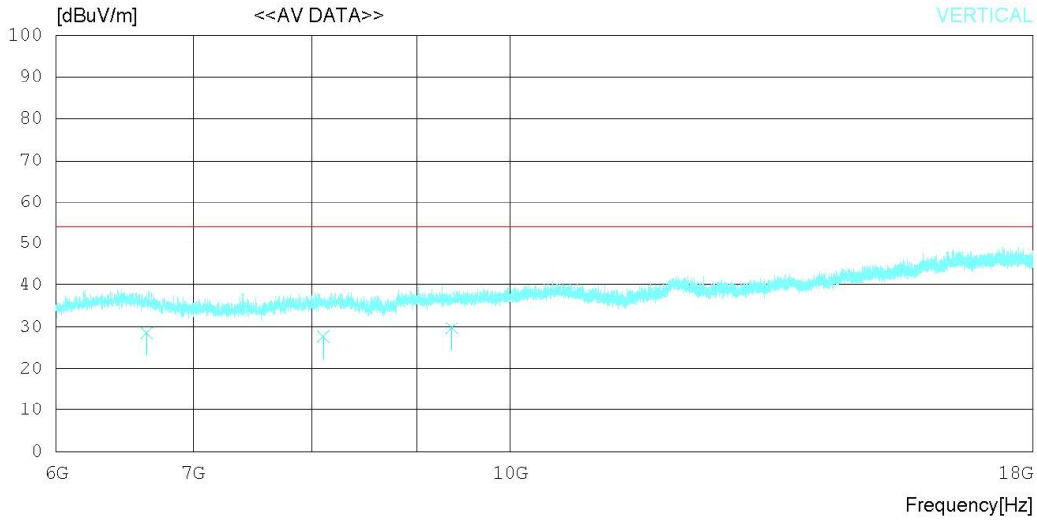
Date 2019-12-08

Order No. DTNC1911-09483
Power Supply Battery
Temp/Humi 21 'C 44 % R.H.
Test Condition DISPLAY

Memo bujeon

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





RADIATED EMISSION

Date 2019-12-08

Order No.	DTNC1911-09483
Power Supply	Battery
Temp/Humi	21 'C 44 % R.H.
Test Condition	DISPLAY
Memo	bujeon

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)
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	6207.042	22.60	31.66	10.78	38.96	26.08	54.00	27.92	127	27
2	7365.077	21.50	31.40	11.72	38.48	26.14	54.00	27.86	308	156
3	8564.216	20.60	31.75	12.93	37.77	27.51	54.00	26.49	142	322
----- Vertical ------										
4	6642.024	24.20	31.55	11.22	38.45	28.52	54.00	25.48	120	120
5	8102.250	21.60	31.38	12.49	37.82	27.65	54.00	26.35	234	134
6	9363.750	22.60	32.26	14.12	39.15	29.83	54.00	24.17	374	177

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

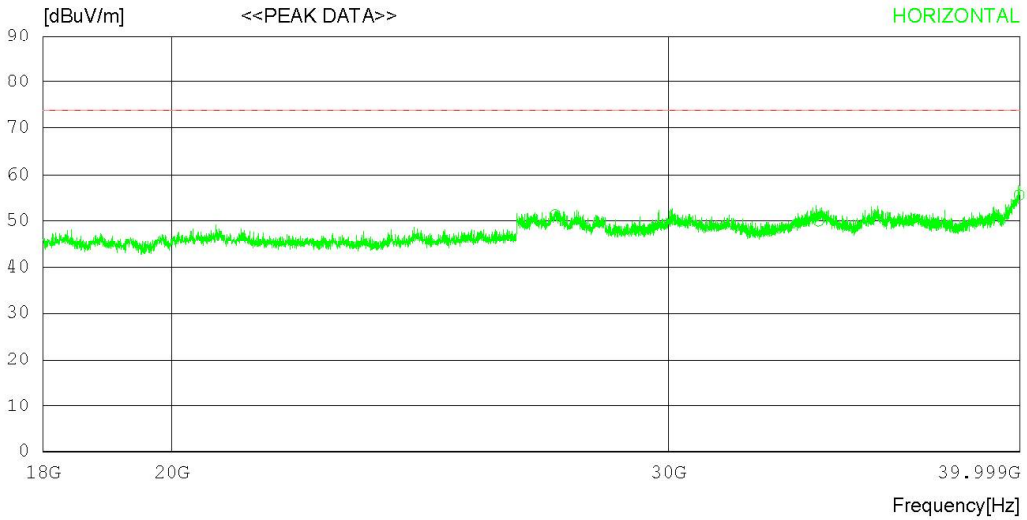
RADIATED EMISSION

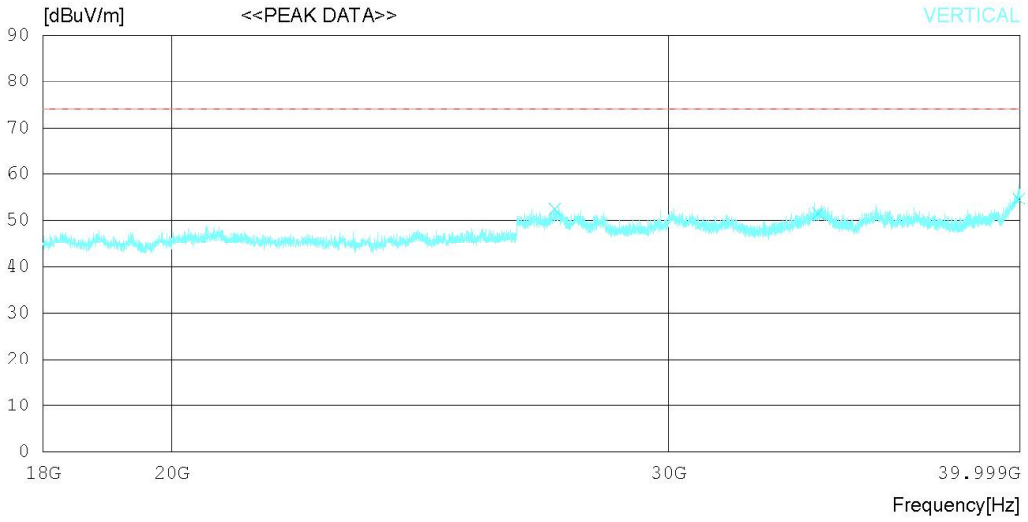
Date 2019-12-10

Order No. DTNC1911-09483
Power Supply Battery
Temp/Humi 23 'C 47 % R.H.
Test Condition DISPLAY

Memo bujeon

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





RADIATED EMISSION

Date 2019-12-10

Order No.	DTNC1911-09483
Power Supply	Battery
Temp/Humi	23 'C 47 % R.H.
Test Condition	DISPLAY
Memo	bujeon

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

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	27350.000	36.80	38.78	21.09	45.38	51.29	74.0	22.71	125	358
2	33925.250	31.20	41.42	24.11	46.74	49.99	74.0	24.01	201	358
3	39967.000	35.10	43.46	23.94	46.78	55.72	74.0	18.28	243	358
----- Vertical ------										
4	27350.000	37.90	38.78	21.09	45.38	52.39	74.0	21.61	246	0
5	33925.250	32.70	41.42	24.11	46.74	51.49	74.0	22.51	226	0
6	39967.000	34.10	43.46	23.94	46.78	54.72	74.0	19.28	273	0

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

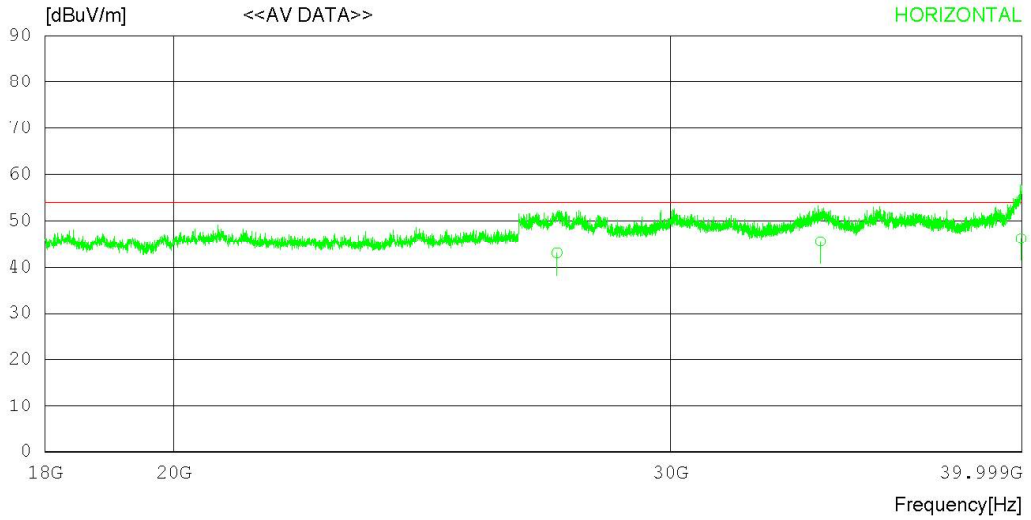
RADIATED EMISSION

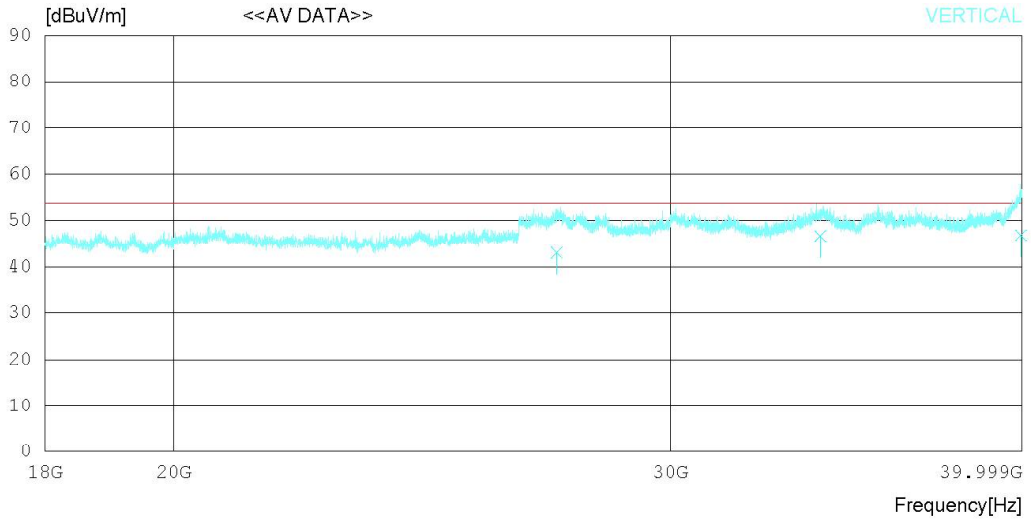
Date 2019-12-10

Order No. DTNC1911-09483
Power Supply Battery
Temp/Humi 23 'C 47 % R.H.
Test Condition DISPLAY

Memo bujeon

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





RADIATED EMISSION

Date 2019-12-10

Order No. DTNC1911-09483
Power Supply Battery
Temp/Humi 23 'C 47 % R.H.
Test Condition DISPLAY

Memo bujeon

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)
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	27350.01028.60	38.78	21.09	45.38	43.09	54.00	10.91	120	272	
2	33925.25026.77	41.42	24.11	46.74	45.56	54.00	8.44	237	131	
3	39967.03025.60	43.46	23.94	46.78	46.22	54.00	7.78	134	311	
----- Vertical ------										
4	27350.34028.60	38.78	21.09	45.38	43.09	54.00	10.91	120	247	
5	33925.21027.90	41.42	24.11	46.74	46.69	54.00	7.31	134	144	
6	39967.32026.22	43.46	23.94	46.78	46.84	54.00	7.16	308	127	

Radiated disturbance at (30 ~ 1000) MHz _Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**120**	**Test Frequency (Hz)**	**60**
Data cable	**Ningbo**	**Ear-Mic**	**Cresyn**

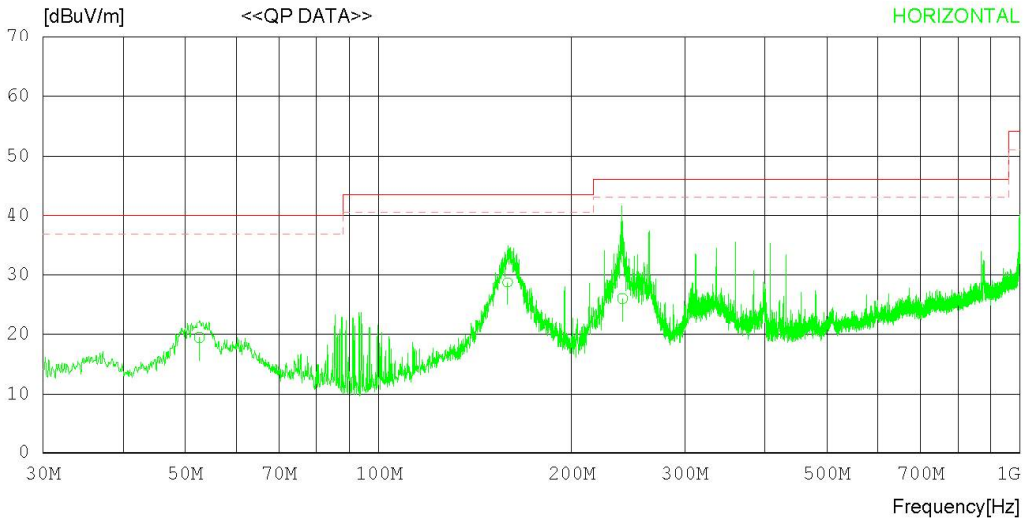
RADIATED EMISSION

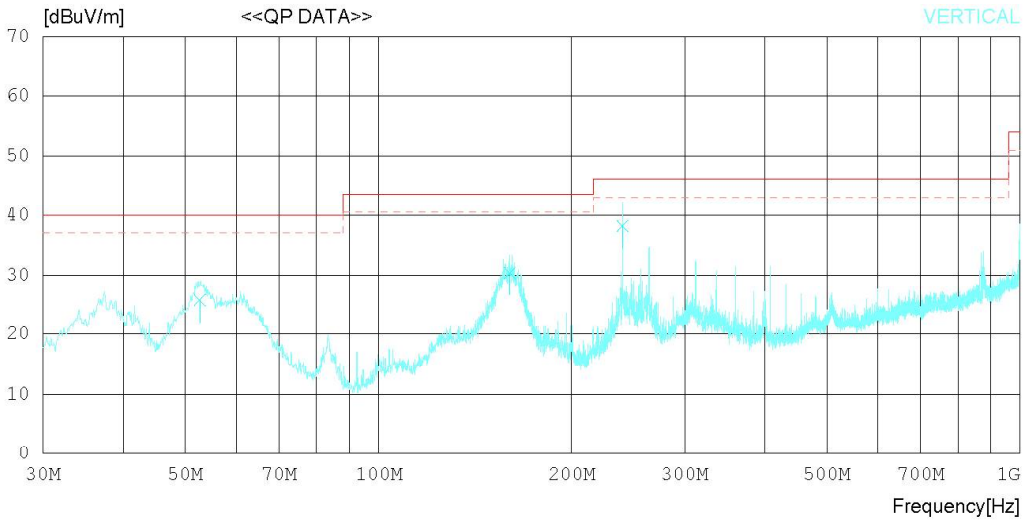
Date 2019-12-06

Order No. DTNC1911-09483
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 40 % R.H.
Test Condition DATA COMMUNICATION

Memo ningbo+cresyn

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





RADIATED EMISSION

Date 2019-12-06

Order No.	DTNC1911-09483
Power Supply	120 V 60 Hz
Temp/Humi	23 'C 40 % R.H.
Test Condition	DATA COMMUNICATION
Memo	ningbo+cresyn

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	52.553	25.50	18.46	1.29	25.79	19.46	40.00	20.54	343	227
2	158.933	33.70	18.90	1.78	25.66	28.72	43.50	14.78	112	170
3	239.986	31.50	18.10	2.07	25.71	25.96	46.00	20.04	266	120
----- Vertical ------										
4	52.641	31.80	18.46	1.29	25.79	25.76	40.00	14.24	113	233
5	160.295	35.40	18.88	1.78	25.66	30.40	43.50	13.10	227	308
6	240.001	43.70	18.10	2.07	25.71	38.16	46.00	7.84	116	120

Radiated disturbance at (1 ~ 6) GHz _Peak measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**120**	**Test Frequency (Hz)**	**60**
Data cable	**Ningbo**	**Ear-Mic**	**Cresyn**

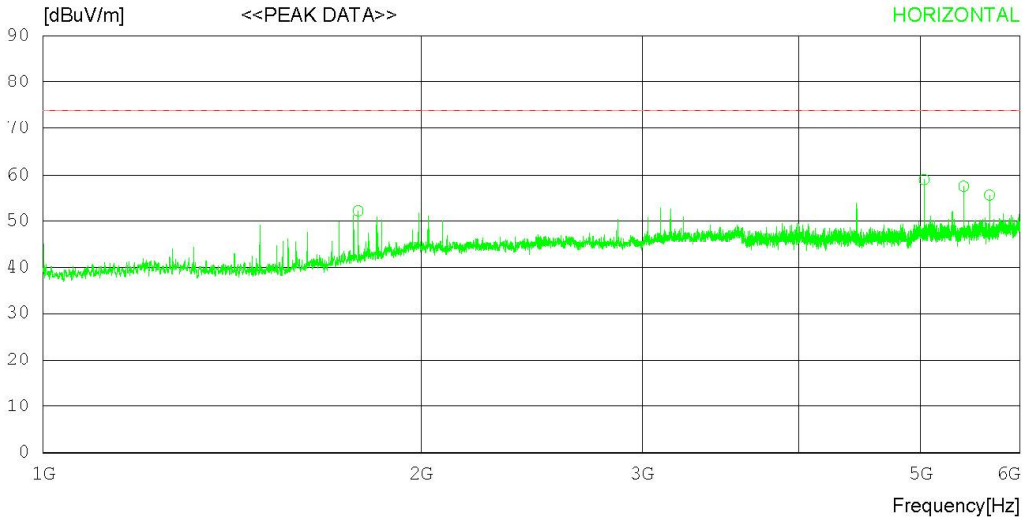
RADIATED EMISSION

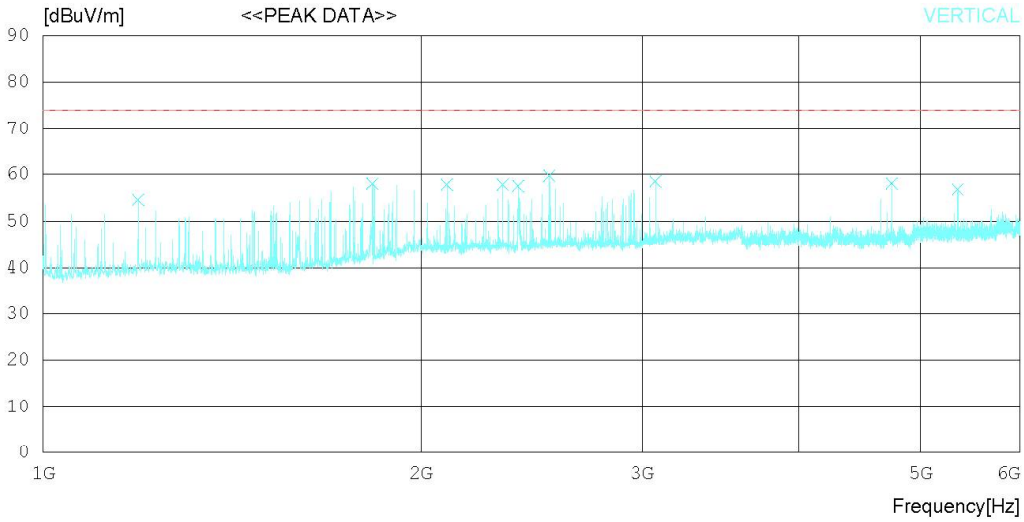
Date 2019-12-07

Order No. DTNC1911-09483
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 40 % R.H.
Test Condition DATA COMMUNICATION

Memo ningbo+cresyn

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





RADIATED EMISSION

Date 2019-12-07

Order No.	DTNC1911-09483
Power Supply	120 V 60 Hz
Temp/Humi	23 'C 40 % R.H.
Test Condition	DATA COMMUNICATION
Memo	ningbo+cresyn

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

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	1782.500	51.10	30.12	5.61	34.65	52.18	74.0	21.82	243	350
2	5031.250	49.00	34.16	10.72	34.86	59.02	74.0	14.98	112	351
3	5409.375	47.10	34.62	10.80	34.92	57.60	74.0	16.4	256	356
4	5673.125	45.10	34.60	11.00	34.95	55.75	74.0	18.25	114	352
----- Vertical ------										
5	1190.625	56.70	28.67	4.73	35.48	54.62	74.0	19.38	113	179
6	1829.375	56.40	30.52	5.71	34.58	58.05	74.0	15.95	128	210
7	2097.500	54.30	31.70	6.27	34.40	57.87	74.0	16.13	201	0
8	2323.125	54.20	31.65	6.56	34.53	57.88	74.0	16.12	243	0
9	2389.375	53.70	31.78	6.64	34.57	57.55	74.0	16.45	124	0
10	2531.250	55.10	32.43	6.79	34.65	59.67	74.0	14.33	221	184
11	3074.375	53.00	32.80	7.59	34.83	58.56	74.0	15.44	262	341
12	4741.875	48.20	34.00	10.41	34.52	58.09	74.0	15.91	132	242
13	5351.875	46.40	34.50	10.77	34.91	56.76	74.0	17.24	155	0

Radiated disturbance at (1 ~ 6) GHz _Average measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**120**	**Test Frequency (Hz)**	**60**
Data cable	**Ningbo**	**Ear-Mic**	**Cresyn**

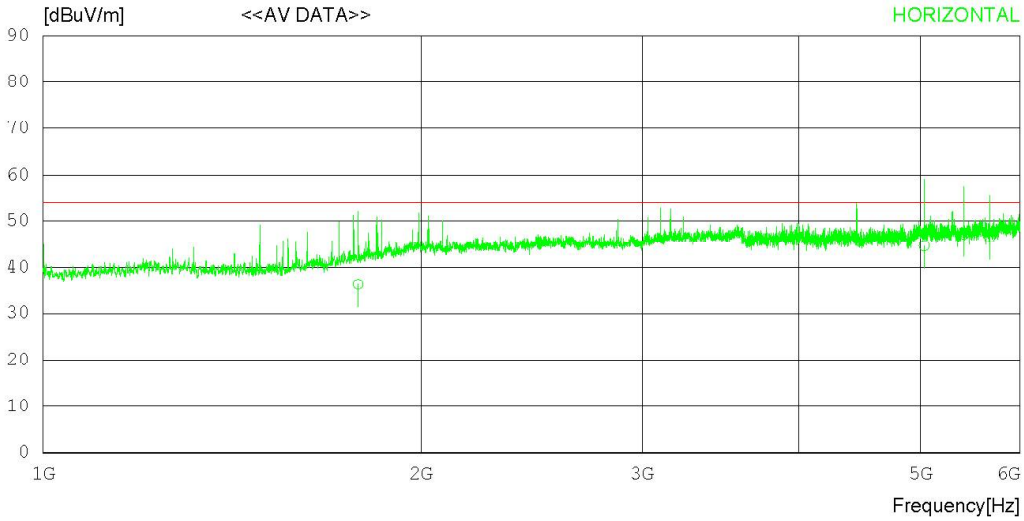
RADIATED EMISSION

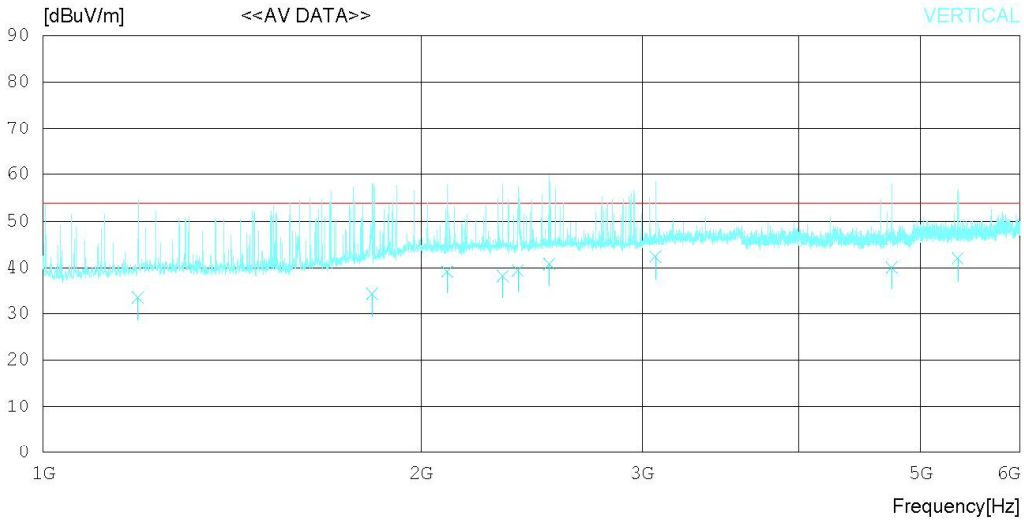
Date 2019-12-07

Order No. DTNC1911-09483
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 40 % R.H.
Test Condition DATA COMMUNICATION

Memo ningbo+cresyn

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





RADIATED EMISSION

Date 2019-12-07

Order No.	DTNC1911-09483
Power Supply	120 V 60 Hz
Temp/Humi	23 'C 40 % R.H.
Test Condition	DATA COMMUNICATION
Memo	ningbo+cresyn

LIMIT : FCC Part15 Subpart.B Class B (3m) - GHz(Average)
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	1782.423	35.20	30.12	5.61	34.65	36.28	54.00	17.72	120	78
2	5031.211	34.60	34.16	10.72	34.86	44.62	54.00	9.38	273	184
3	5409.364	36.70	34.62	10.80	34.92	47.20	54.00	6.80	320	321
4	5673.117	35.80	34.60	11.00	34.95	46.45	54.00	7.55	114	314
----- Vertical ------										
5	1190.124	35.50	28.66	4.73	35.48	33.41	54.00	20.59	100	179
6	1829.311	32.60	30.52	5.71	34.58	34.25	54.00	19.75	186	147
7	2097.424	35.60	31.70	6.27	34.40	39.17	54.00	14.83	166	134
8	2323.774	34.60	31.65	6.56	34.53	38.28	54.00	15.72	162	244
9	2389.186	35.60	31.78	6.64	34.57	39.45	54.00	14.55	246	124
10	2531.215	36.20	32.42	6.79	34.65	40.76	54.00	13.24	172	48
11	3074.311	36.80	32.80	7.59	34.83	42.36	54.00	11.64	241	305
12	4741.851	30.20	34.00	10.41	34.52	40.09	54.00	13.91	312	114
13	5351.622	31.60	34.50	10.77	34.91	41.96	54.00	12.04	242	120