

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. : DREFCC2002-0055(2)
2. Client / Applicant
 - Name : LG Electronics USA, Inc.
 - Address : 1000 Sylvan Avenue Englewood Cliffs, New Jersey, United States 07632
3. Use of Report : FCC Supplier's Declaration of Conformity
4. Product Name / Test Model Name : Mobile Phone / LM-V600V
5. Test Standard : CAN/CSA CISPR 22-10
ICES-003 : 2016
ANSI C63.4:2014
FCC Part 15 Subpart B
(Other Class B digital devices & peripherals)
6. Date of Test : Jan. 14. 2020 ~ Jan. 18. 2020
7. Testing Environment : Temperature (19 ~ 22) °C , Humidity (40 ~ 45) % R.H.
8. Test Result : Refer to the attached Test Result

Affirmation	Tested by	Reviewed by
	Name : TaeHyun Choi 	Name : KyoungHwan Bae 

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.

Feb. 13. 2020

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	3
2. Test Laboratory	3
3. General Information of EUT	4
4. EUT Operations and Test Configurations	5
4.1 Principle of Configuration Selection.....	5
4.2 EUT Operation Mode.....	5
4.3 Test Configuration Mode	5
4.4 Supported Equipment.....	6
4.5 EUT In/Output Port	6
4.6 Test Voltage and Frequency.....	6
5. Test Summary	7
6. Test Environment.....	7
7. Test Results : Emission	8
7.1 Conducted Disturbance	8
7.2 Radiated Disturbance	19
8. Revision History.....	91

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.dtcn.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 23 rd , 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-V600V
Add Model Name(FCC)	LMV600V, V600V
Add Model Name(IC)	NA
IC ID	2703C-V600V
Rated Power	DC 3.87 V
Remarks	None

* Accessory

Equipment	No.	Manufacturer	Model Name	Product Number
Ear-Mic	1	CRESYN	EMB-LGE53	EAB63728251
Data Cable	1	Ningbo	LG0179	EAD65830102
T.A	1	SUNLINI	MCS-P02WR	EAY65749201
USB C/A Gender	1	KSD	N/A	EBX64329001
Dual Screen	1	LG Electronics	LM-V605N	LM-V605N

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	FORNT CAMERA+MP3	EUT is playing MP3 PLAY while recording video with the front camera.
2	REAR CAMERA	EUT is recording video with rear camera
3	IDLE	EUT is Tested on standby
4	TOF	ToF Camera in continuous shooting mode
5	TOF + Dual Screen	ToF Camera in continuous shooting mode Note : TOF mode is worst in RE BELOW 1GHz test among FRONT Camera + MP3, REAR Camera, IDLE, and TOF Test in Dual Screen mode with TOF Camera

4.3 Test Configuration Mode

No.	Mode	Description
1	FORNT CAMERA+MP3	The EUT is connected to the Travel Adaptor and is charging.Connected Earphones
2	REAR CAMERA	The EUT is connected to the Travel Adaptor and is charging.Connected Earphones
3	IDLE	The EUT is connected to the Travel Adaptor and is charging.Connected Earphones
4	TOF	The EUT is connected to the Travel Adaptor and is charging.Connected Earphones
5	TOF + Dual Screen	The EUT is connected to Dual Screen Dual Screen is connected to USB C/A Gender USB C/A Gender is connected to Travel Adapter The EUT is connected to Earphones

4.4 Supported Equipment

Used*	Product Type	Manufacturer	Model	Remarks
AE	-	-	-	-
*Abbreviations: AE - Auxiliary/Associated Equipment, or SIM - Simulator				

4.5 EUT In/Output Port

(MODE 1, 2, 3, 4)

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

(MODE 5)

Name	Type*	Cable Max. >3 m	Cable Shielded	Cable Back shell	Remarks
AUX	I/O	1.5	Non shield	Plastic	EUT
USB	I/O	-	-	Plastic	Dual Screen
PIN	I/O	-	-	Plastic	USB C/A Gender
USB	I/O	1.5	Non shield	Plastic	Adapter
*Abbreviations: AC = AC Power Port DC = DC Power Port N/E = Non-Electrical I/O = Signal Input or Output Port TP = Telecommunication Ports					

4.6 Test Voltage and Frequency

Case	Voltage (V)	Frequency (Hz)	Phases	Remarks
1	AC 120	60	Single	None

5. Test Summary

Test Items	Applied Standards	Results
Conducted Disturbance	CAN/CSA CISPR 22-10 ICES-003 : 2016 ANSI C63.4:2014	C
Radiated Disturbance	CAN/CSA CISPR 22-10 ICES-003 : 2016 ANSI C63.4:2014	C
C=Comply N/C=Not Comply N/T=Not Tested N/A=Not Applicable		

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

-Conducted Disturbance

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
0.18872	L1	48.53	Quasi - Peak	64.09	15.56

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dB μ V/m]	Detector	Limit [dB μ V/m]	Margin [dB]
43.823	V	35.72	Quasi - Peak	40.00	4.28

6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (°C)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2020-01-15	21	42	100.7
Radiated Disturbance	2020-01-14	20	45	-
	2020-01-16	19	40	
	2020-01-17	21	43	
	2020-01-17	20	45	
	2020-01-18	22	45	
	2020-01-18	22	43	

7. Test Results : Emission

7.1 Conducted Disturbance

CAN/CSA CISPR 22 ANSI C63.4	Mains terminal disturbance voltage		Result	
<u>Method:</u> The AMN placed 0,8 m from the boundary of the unit under test and bonded to a ground reference plane. This distance was between the closest points of the AMN and the EUT. All other units of the EUT and associated equipment were at least 0,8 m from the AMN. All power was connected to the system through Artificial Mains Network (AMN). Conducted voltage measurements on mains lines were made at the output of the AMN. The measuring port of the LISN for EUT was connected to spectrum analyzer. Using conducted emission test software, the emissions were scanned with peak detector mode. After scanning over the frequency range, suspected emissions were selected to perform final measurement. When performing final measurement, the receiver was used which has Quasi-Peak detector and CISPR Average detector. For (0.15 ~ 30) MHz frequency range, Quasi-Peak detector with 10 kHz RBW and 30 kHz VBW was used. By varying the configuration of the test sample and the cable routing it was attempted to maximize the emission.			Comply	
Fully configured sample scanned over the following frequency range	Frequency range on each side of line	Measurement Point		
	150 kHz to 30 MHz	Mains		
EUT mode (Refer to clauses 4)	Test configuration mode	1, 2, 3, 4, 5		
	EUT Operation mode	1, 2, 3, 4, 5		
Limits – Class A				
Frequency (MHz)	Limit dB μ V			
	Quasi-Peak	Average		
0.15 to 0.50	79	66		
0.50 to 30	73	60		
Limits – Class B				
Frequency (MHz)	Limit dB μ 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 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	ESR	ROHDE&SCHWARZ	101767	2019.12.17	2020.12.17
TWO-LINE V-NETWORK	ENV216	ROHDE&SCHWARZ	101979	2019.12.06	2020.12.06
TRANSIENT LIMITER	TL-B0930A	EMCIS	11002	2019.08.30	2020.08.30

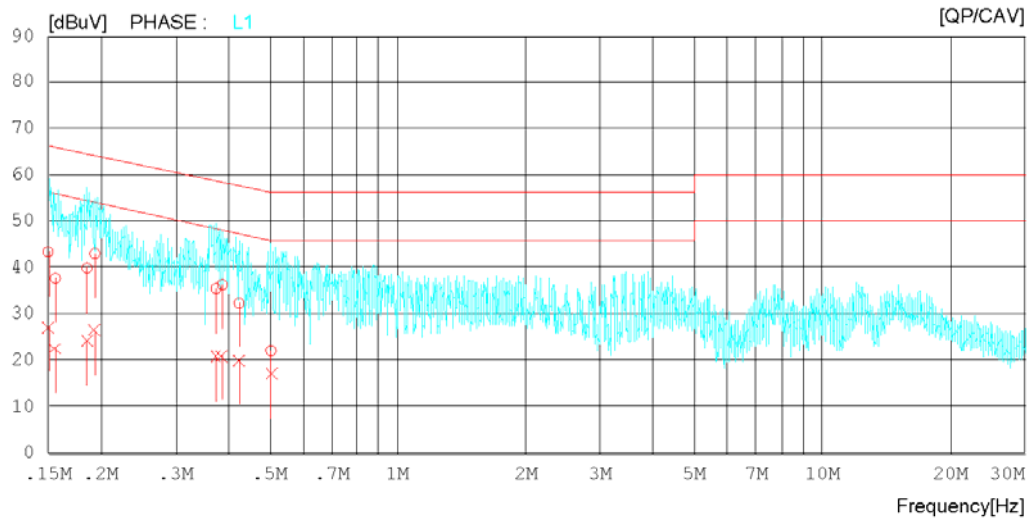
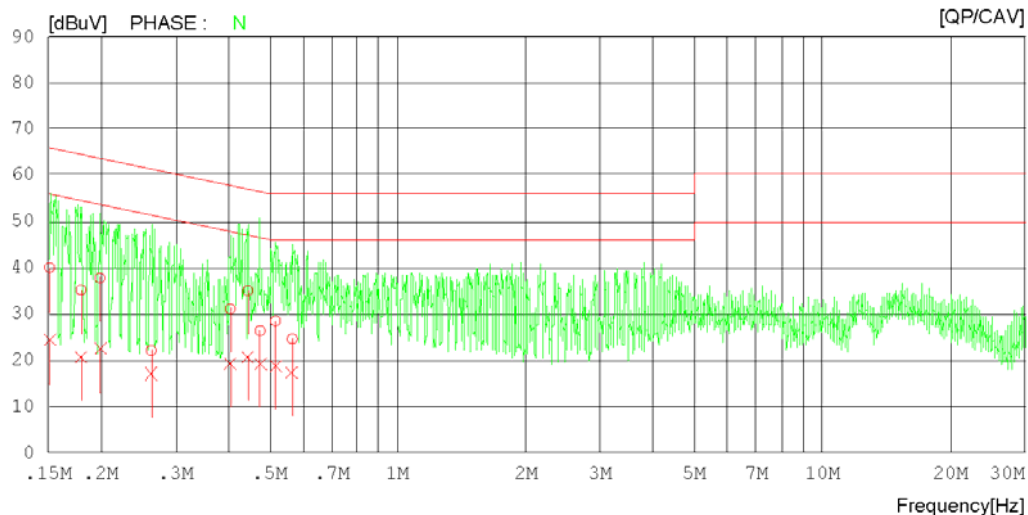
Mains terminal disturbance voltage _Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

Results of Conducted Emission

DT&C
Date 2020-01-15

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi/Atm 21 °C 42 % R.H. 100.7 kPa Front
Test Condition Camera + MP3 Mode

Memo

LIMIT : CISPR32_B QP
CISPR32_B AV


Results of Conducted Emission

DT&C
Date 2020-01-15

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi/Atm 21 °C 42 % R.H. 100.7 kPa Front
Test Condition Camera + MP3 Mode

Memo

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	0.15126	20.08	4.36	19.93	40.01	24.29	65.93	55.93	25.92	31.64	N
2	0.17943	15.02	0.61	20.14	35.16	20.75	64.51	54.51	29.35	33.76	N
3	0.19871	17.74	2.48	20.01	37.75	22.49	63.66	53.66	25.91	31.17	N
4	0.26255	2.25	-2.73	19.84	22.09	17.11	61.35	51.35	39.26	34.24	N
5	0.40268	10.92	-0.76	20.18	31.10	19.42	57.80	47.80	26.70	28.38	N
6	0.44366	14.83	0.54	20.20	35.03	20.74	56.99	46.99	21.96	26.25	N
7	0.47445	6.16	-0.81	20.23	26.39	19.42	56.44	46.44	30.05	27.02	N
8	0.51546	8.21	-1.44	20.24	28.45	18.80	56.00	46.00	27.55	27.20	N
9	0.56400	4.36	-2.77	20.24	24.60	17.47	56.00	46.00	31.40	28.53	N
10	0.15000	23.42	7.22	19.91	43.33	27.13	66.00	56.00	22.67	28.87	L1
11	0.15609	17.63	2.54	20.00	37.63	22.54	65.67	55.67	28.04	33.13	L1
12	0.18522	19.73	4.06	20.10	39.83	24.16	64.25	54.25	24.42	30.09	L1
13	0.19350	22.92	6.46	20.04	42.96	26.50	63.88	53.88	20.92	27.38	L1
14	0.37270	15.33	0.75	20.11	35.44	20.86	58.44	48.44	23.00	27.58	L1
15	0.38609	16.14	0.95	20.13	36.27	21.08	58.15	48.15	21.88	27.07	L1
16	0.42306	12.09	-0.07	20.19	32.28	20.12	57.39	47.39	25.11	27.27	L1
17	0.50299	1.84	-3.18	20.24	22.08	17.06	56.00	46.00	33.92	28.94	L1

Mains terminal disturbance voltage _Measurement data			
Test configuration mode	2	EUT Operation mode	2
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

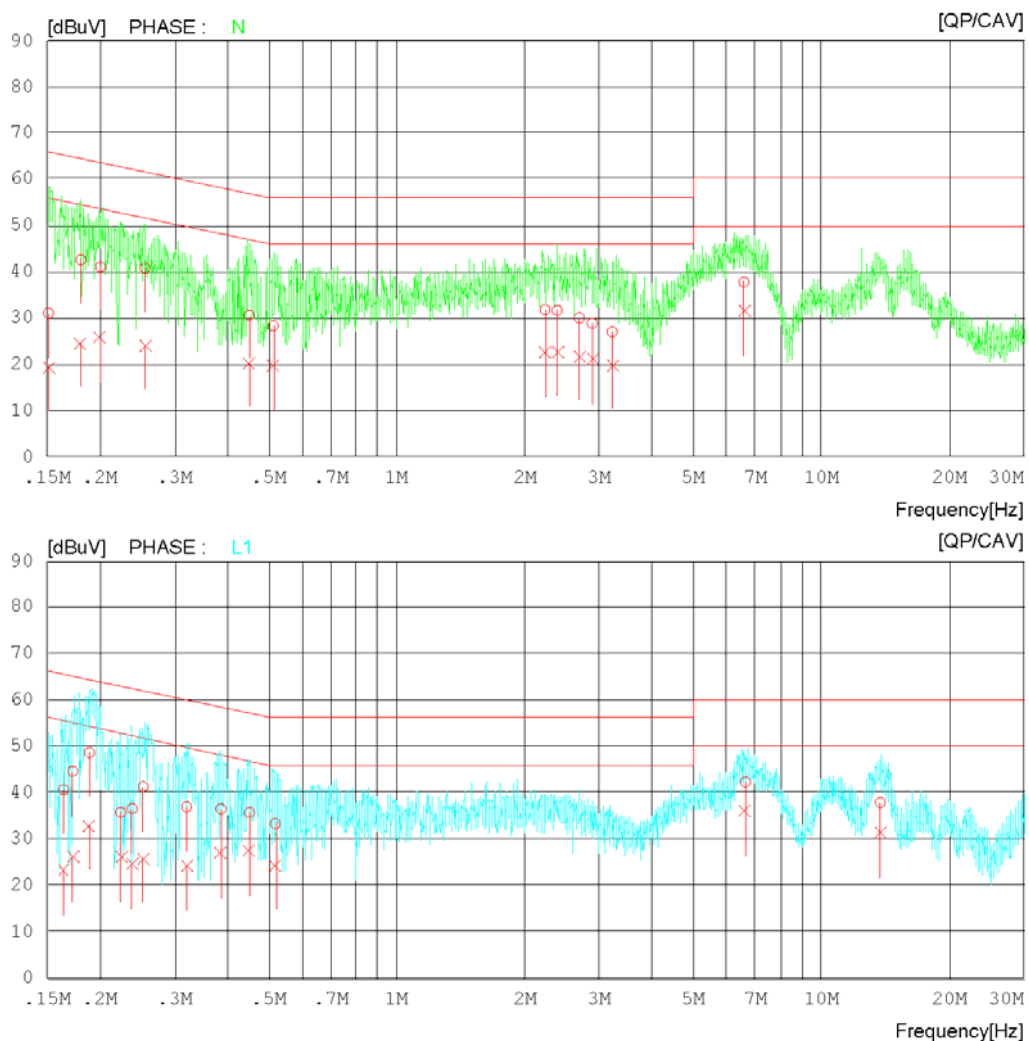
Results of Conducted Emission

DT&C
Date 2020-01-15

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi/Atm 21 °C 42 % R.H. 100.7 kPa
Test Condition Rear Camera Mode

Memo

LIMIT : CISPR32_B QP
CISPR32_B AV



Results of Conducted Emission

DT&C
Date 2020-01-15

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi/Atm 21 °C 42 % R.H. 100.7 kPa
Test Condition Rear Camera Mode

Memo

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	0.15134	11.10	-0.51	19.93	31.03	19.42	65.93	55.93	34.90	36.51	N
2	0.18006	22.42	4.40	20.13	42.55	24.53	64.48	54.48	21.93	29.95	N
3	0.20050	21.05	5.71	20.00	41.05	25.71	63.59	53.59	22.54	27.88	N
4	0.25544	20.88	4.21	19.82	40.70	24.03	61.58	51.58	20.88	27.55	N
5	0.44904	10.40	0.14	20.20	30.60	20.34	56.89	46.89	26.29	26.55	N
6	0.51125	8.07	-0.72	20.24	28.31	19.52	56.00	46.00	27.69	26.48	N
7	2.23560	11.66	2.37	20.10	31.76	22.47	56.00	46.00	24.24	23.53	N
8	2.38920	11.54	2.51	20.12	31.66	22.63	56.00	46.00	24.34	23.37	N
9	2.69200	9.90	1.60	20.11	30.01	21.71	56.00	46.00	25.99	24.29	N
10	2.88720	8.81	0.82	20.09	28.90	20.91	56.00	46.00	27.10	25.09	N
11	3.21760	6.90	-0.26	20.09	26.99	19.83	56.00	46.00	29.01	26.17	N
12	6.57320	17.39	11.06	20.36	37.75	31.42	60.00	50.00	22.25	18.58	N
13	0.16404	20.49	2.93	20.12	40.61	23.05	65.26	55.26	24.65	32.21	L1
14	0.17249	24.36	5.91	20.19	44.55	26.10	64.84	54.84	20.29	28.74	L1
15	0.18872	28.45	12.85	20.08	48.53	32.93	64.09	54.09	15.56	21.16	L1
16	0.22376	15.82	6.10	19.90	35.72	26.00	62.68	52.68	26.96	26.68	L1
17	0.23822	16.61	4.67	19.86	36.47	24.53	62.16	52.16	25.69	27.63	L1
18	0.25250	21.42	5.90	19.82	41.24	25.72	61.67	51.67	20.43	25.95	L1
19	0.31991	16.89	4.06	19.97	36.86	24.03	59.71	49.71	22.85	25.68	L1
20	0.38533	16.33	6.91	20.13	36.46	27.04	58.16	48.16	21.70	21.12	L1
21	0.44963	15.42	7.26	20.20	35.62	27.46	56.88	46.88	21.26	19.42	L1
22	0.51704	13.01	4.08	20.24	33.25	24.32	56.00	46.00	22.75	21.68	L1
23	6.62540	21.78	15.53	20.46	42.24	35.99	60.00	50.00	17.76	14.01	L1
24	13.78600	16.72	10.04	21.09	37.81	31.13	60.00	50.00	22.19	18.87	L1

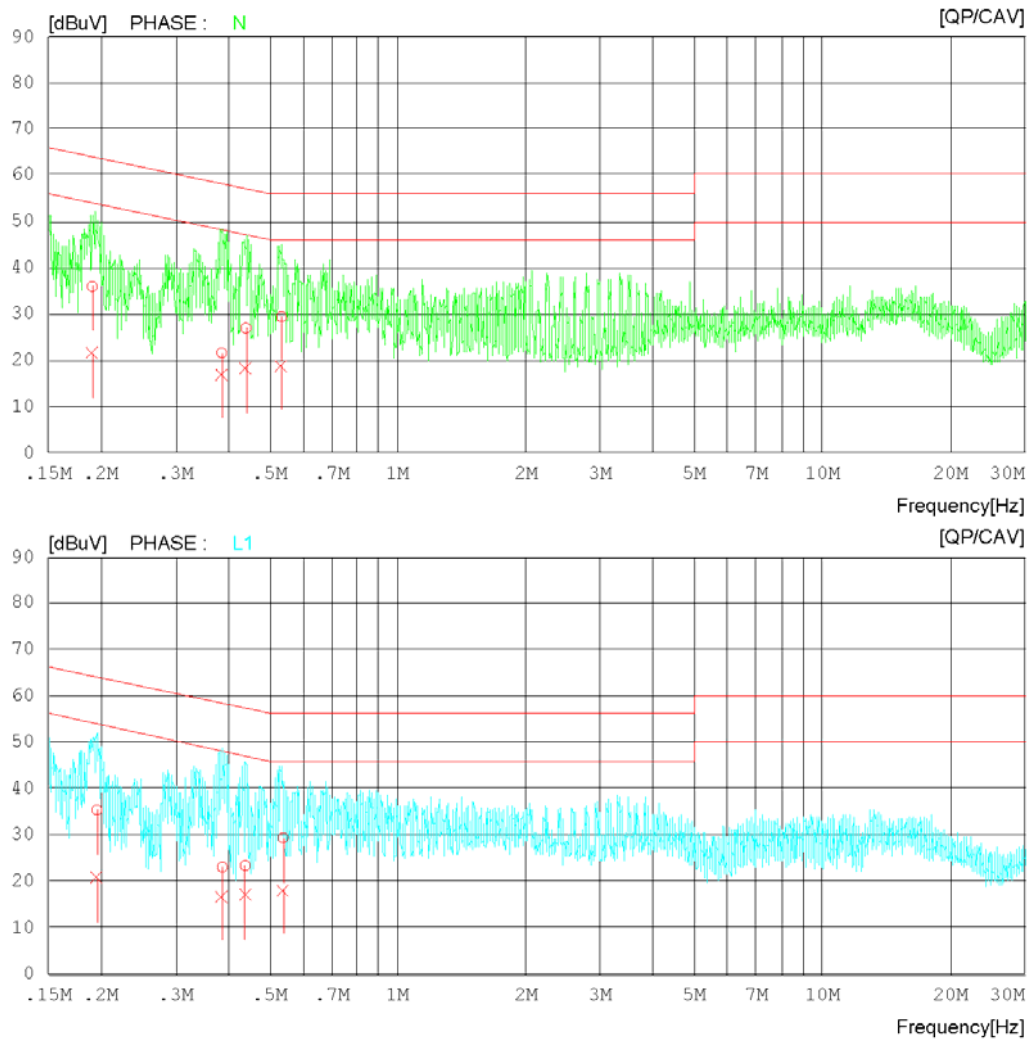
Mains terminal disturbance voltage _Measurement data			
Test configuration mode	3	EUT Operation mode	3
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

Results of Conducted Emission

DT&C
Date 2020-01-15

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi/Atm 21 °C 42 % R.H. 100.7 kPa
Test Condition IDLE Mode

Memo

LIMIT : CISPR32_B QP
CISPR32_B AV


Results of Conducted Emission

DT&C
Date 2020-01-15

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi/Atm 21 °C 42 % R.H. 100.7 kPa
Test Condition IDLE Mode

Memo

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	0.19062	15.83	1.36	20.06	35.89	21.42	64.01	54.01	28.12	32.59	N
2	0.38512	1.48	-3.24	20.13	21.61	16.89	58.17	48.17	36.56	31.28	N
3	0.43916	6.72	-2.13	20.20	26.92	18.07	57.08	47.08	30.16	29.01	N
4	0.53228	9.13	-1.42	20.24	29.37	18.82	56.00	46.00	26.63	27.18	N
5	0.19564	15.31	0.82	20.03	35.34	20.85	63.79	53.79	28.45	32.94	L1
6	0.38589	2.90	-3.39	20.13	23.03	16.74	58.15	48.15	35.12	31.41	L1
7	0.43706	3.16	-3.25	20.20	23.36	16.95	57.12	47.12	33.76	30.17	L1
8	0.53715	9.16	-1.98	20.24	29.40	18.26	56.00	46.00	26.60	27.74	L1

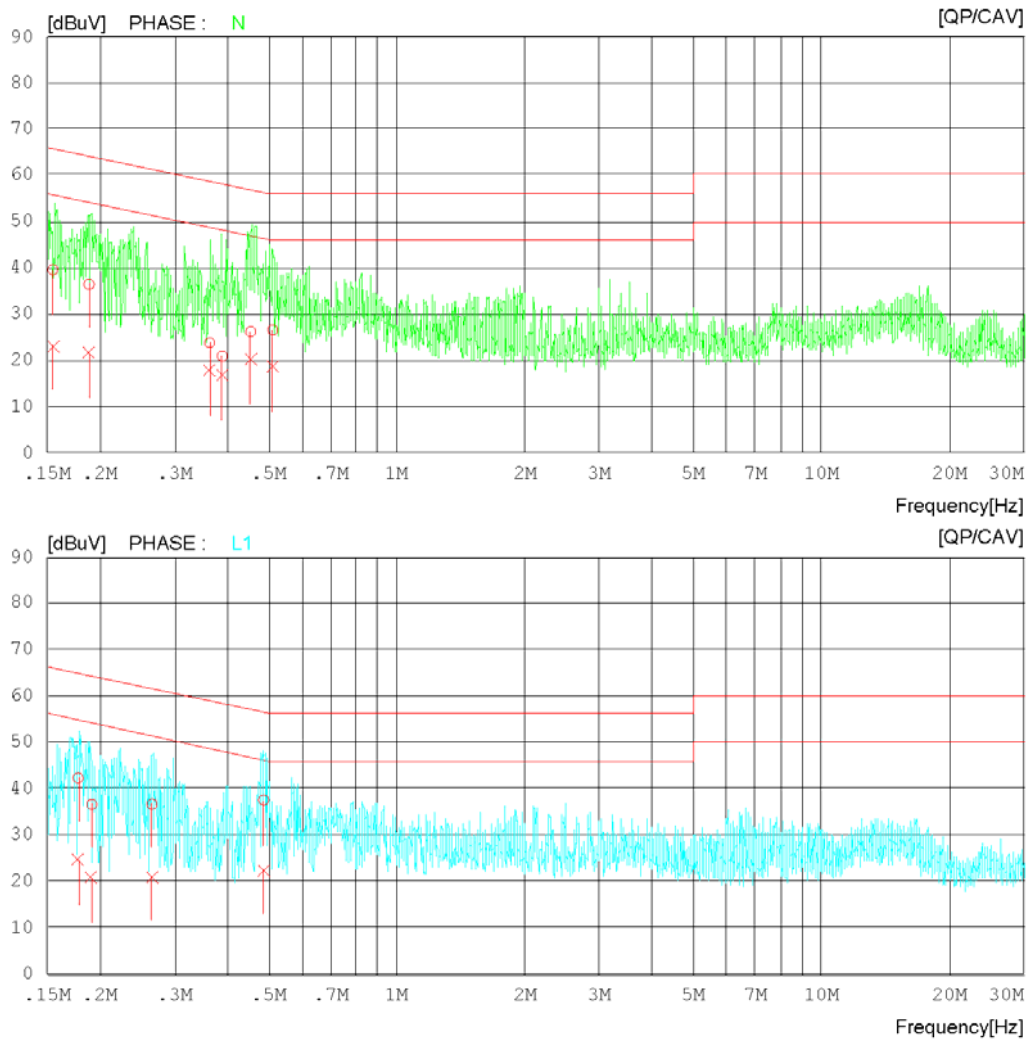
Mains terminal disturbance voltage _Measurement data			
Test configuration mode	4	EUT Operation mode	4
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

Results of Conducted Emission

DT&C
Date 2020-01-15

Order No. DTNC2001-00112
Power Supply 3 120 VAC 60 Hz
Temp/Humi/Atm 21 °C 42 % R.H. 100.7 kPa
Test Condition TOF Mode

Memo

LIMIT : CISPR32_B QP
CISPR32_B AV


Results of Conducted Emission

DT&C
Date 2020-01-15

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi/Atm 21 °C 42 % R.H. 100.7 kPa
Test Condition TOF Mode

Memo

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	0.15479	19.57	3.22	19.98	39.55	23.20	65.74	55.74	26.19	32.54	N
2	0.18866	16.27	1.51	20.08	36.35	21.59	64.10	54.10	27.75	32.51	N
3	0.36226	3.66	-2.46	20.07	23.73	17.61	58.68	48.68	34.95	31.07	N
4	0.38845	0.77	-3.42	20.15	20.92	16.73	58.10	48.10	37.18	31.37	N
5	0.45302	5.90	-0.18	20.21	26.11	20.03	56.82	46.82	30.71	26.79	N
6	0.51036	6.30	-1.50	20.24	26.54	18.74	56.00	46.00	29.46	27.26	N
7	0.17747	22.11	4.39	20.15	42.26	24.54	64.60	54.60	22.34	30.06	L1
8	0.19116	16.51	0.63	20.06	36.57	20.69	63.99	53.99	27.42	33.30	L1
9	0.26524	16.78	1.14	19.84	36.62	20.98	61.27	51.27	24.65	30.29	L1
10	0.48601	17.25	2.13	20.23	37.48	22.36	56.24	46.24	18.76	23.88	L1

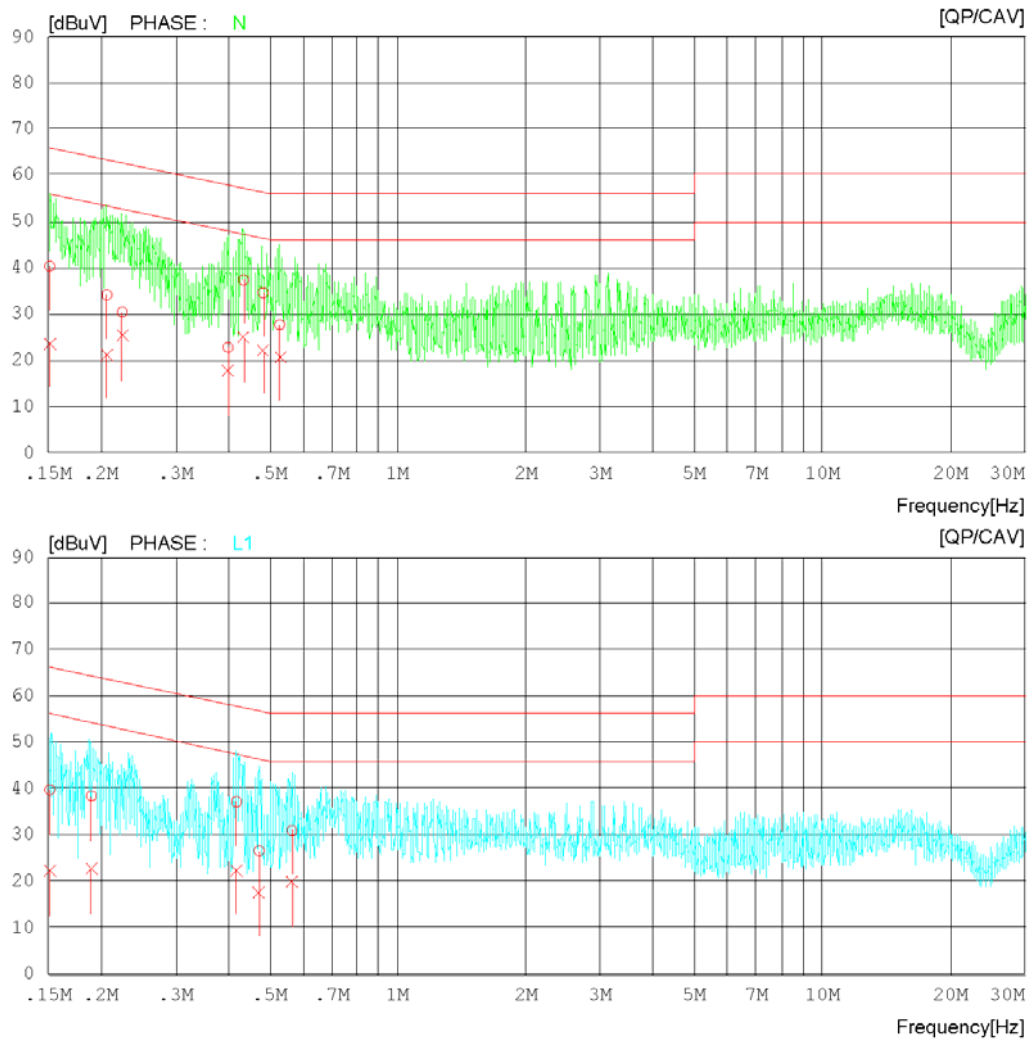
Mains terminal disturbance voltage _Measurement data			
Test configuration mode	5	EUT Operation mode	5
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

Results of Conducted Emission

DT&C
Date 2020-01-15

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi/Atm 21 °C 42 % R.H. 100.7 kPa
Test Condition TOF + Dual Screen Mode

Memo

LIMIT : CISPR32_B QP
CISPR32_B AV


Results of Conducted Emission

DT&C
Date 2020-01-15

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi/Atm 21 °C 42 % R.H. 100.7 kPa
Test Condition TOF + Dual Screen Mode

Memo

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	0.15142	20.39	3.64	19.93	40.32	23.57	65.92	55.92	25.60	32.35	N
2	0.20646	14.13	1.19	19.97	34.10	21.16	63.35	53.35	29.25	32.19	N
3	0.22434	10.49	5.43	19.90	30.39	25.33	62.66	52.66	32.27	27.33	N
4	0.39825	2.64	-2.56	20.18	22.82	17.62	57.89	47.89	35.07	30.27	N
5	0.43357	17.15	4.63	20.20	37.35	24.83	57.18	47.18	19.83	22.35	N
6	0.48162	14.30	1.83	20.23	34.53	22.06	56.31	46.31	21.78	24.25	N
7	0.52701	7.44	0.55	20.24	27.68	20.79	56.00	46.00	28.32	25.21	N
8	0.15155	19.75	2.29	19.93	39.68	22.22	65.91	55.91	26.23	33.69	L1
9	0.18974	18.30	2.51	20.07	38.37	22.58	64.05	54.05	25.68	31.47	L1
10	0.41727	16.94	2.26	20.19	37.13	22.45	57.50	47.50	20.37	25.05	L1
11	0.47169	6.34	-2.60	20.23	26.57	17.63	56.48	46.48	29.91	28.85	L1
12	0.56372	10.66	-0.49	20.24	30.90	19.75	56.00	46.00	25.10	26.25	L1

Calculation

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

7.2 Radiated Disturbance

CAN/CSA CISPR 22 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 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, 4, 5	
	EUT Operation mode		1, 2, 3, 4, 5	
Radiated Disturbance below 1 000 MHz				
Frequency range (MHz)	Quasi-peak limit dBµV/m			
	Class A		Class B	
	3 m distance	10 m distance	3 m distance	
30 to 88	49.1	39.1	40	
88 to 216	53.5	43.5	43.5	
216 to 960	56.4	46.4	46	
960 to 1 000	59.5	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(CISPR), Pub. 22 shown as below.				
Frequency range (MHz)	Quasi-peak limit dBµV/m			
	Class A (10 m distance)		Class B (10 m distance)	
30 to 230	40		30	
230 to 1 000	47		37	
Radiated Disturbance for above 1 000 MHz at a measurement distance of 3 m				
Frequency range (GHz)	Peak limit dBµV/m		Average limit dBµV/m	
	Class A	Class B	Class A	Class B
1 to 40	80	74	60	54
The test frequency range of Radiated Disturbance measurements are listed below.				
Highest frequency generated or used in the device or on which the device operates or tunes (MHz)			Upper frequency of measurement range (MHz)	
Below 108			1 000	
108 – 500			2 000	
500 – 1 000			5 000	
Above 1 000			5 th harmonic of the highest frequency or 40 GHz, whichever is lower	
Measurement uncertainty				
Expended uncertainty <i>U</i> (95 %, Confidence level, <i>k</i> = 2)			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	ESU40	ROHDE&SCHWARZ	100525	2019.12.20	2020.12.20
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
PRE AMPLIFIER	8449B	H.P	3008A00887	2019.08.26	2020.08.26
HORN ANTENNA WITH PREAMPLIFIER	EM-6969	ELECTRO-METRICS	156	2019.02.13	2021.02.13
	MLA-0618-B03-34	TSJ	1785642	2019.12.31	2020.12.31
HORN ANTENNA WITH	3116C	ETS-LINDGREN	00213177	2019.12.12	2021.12.12
PREAMPLIFIER	JS44-18004000-35-8P	L3 NARDA-MITEQ	2046884	2019.11.04	2020.11.04
(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
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

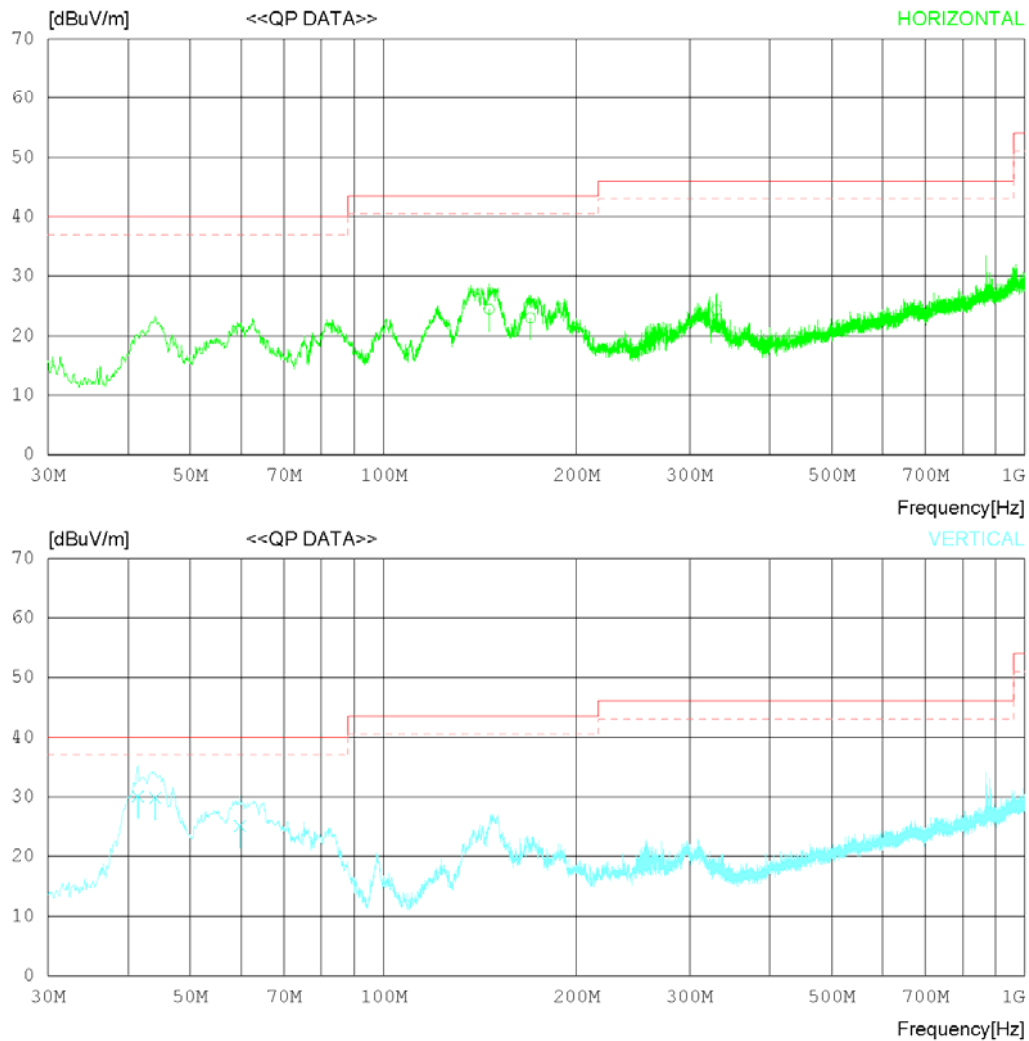
RADIATED EMISSION

Date 2020-01-16

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 19 °C 40 % R.H.
Test Condition Front Camera + MP3 Mode

Memo

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



RADIATED EMISSION

Date 2020-01-16

Order No.	DTNC2001-00112
Power Supply	120 VAC 60 Hz
Temp/Humi	19 °C 40 % R.H.
Test Condition	Front Camera + MP3 Mode

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	146.034	29.60	18.82	1.74	25.67	24.49	43.50	19.01	204	352
2	169.556	28.70	18.14	1.80	25.64	23.00	43.50	20.50	209	134
3	330.207	28.10	19.80	2.34	25.88	24.36	46.00	21.64	102	0
----- Vertical -----										
4	41.398	37.30	17.38	1.21	25.81	30.08	40.00	9.92	105	356
5	44.065	36.80	17.61	1.23	25.81	29.83	40.00	10.17	196	294
6	59.706	31.70	17.90	1.29	25.78	25.11	40.00	14.89	102	352

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
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

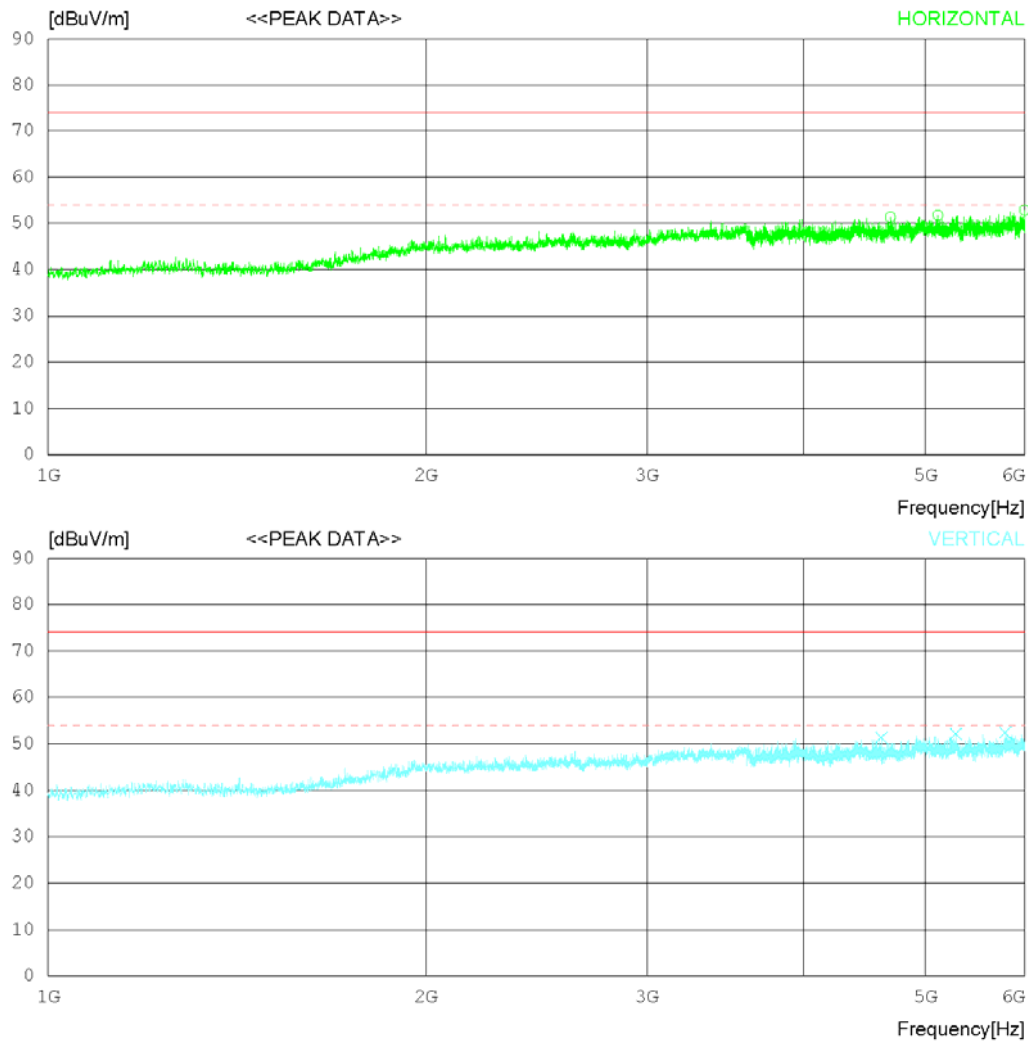
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Front Camera + MP3 Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Front Camera + MP3 Mode

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	4686.875	41.50	34.00	10.27	34.45	51.32	74.0	22.68	102	275
2	5115.625	41.80	34.13	10.70	34.88	51.75	74.0	22.25	104	358
3	5996.250	41.40	35.10	11.31	35.00	52.81	74.0	21.19	204	358
----- Vertical -----										
4	4611.250	41.60	34.00	10.07	34.35	51.32	74.0	22.68	108	0
5	5285.625	41.90	34.37	10.73	34.90	52.10	74.0	21.9	108	212
6	5788.125	41.50	34.70	11.24	34.97	52.47	74.0	21.53	101	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
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

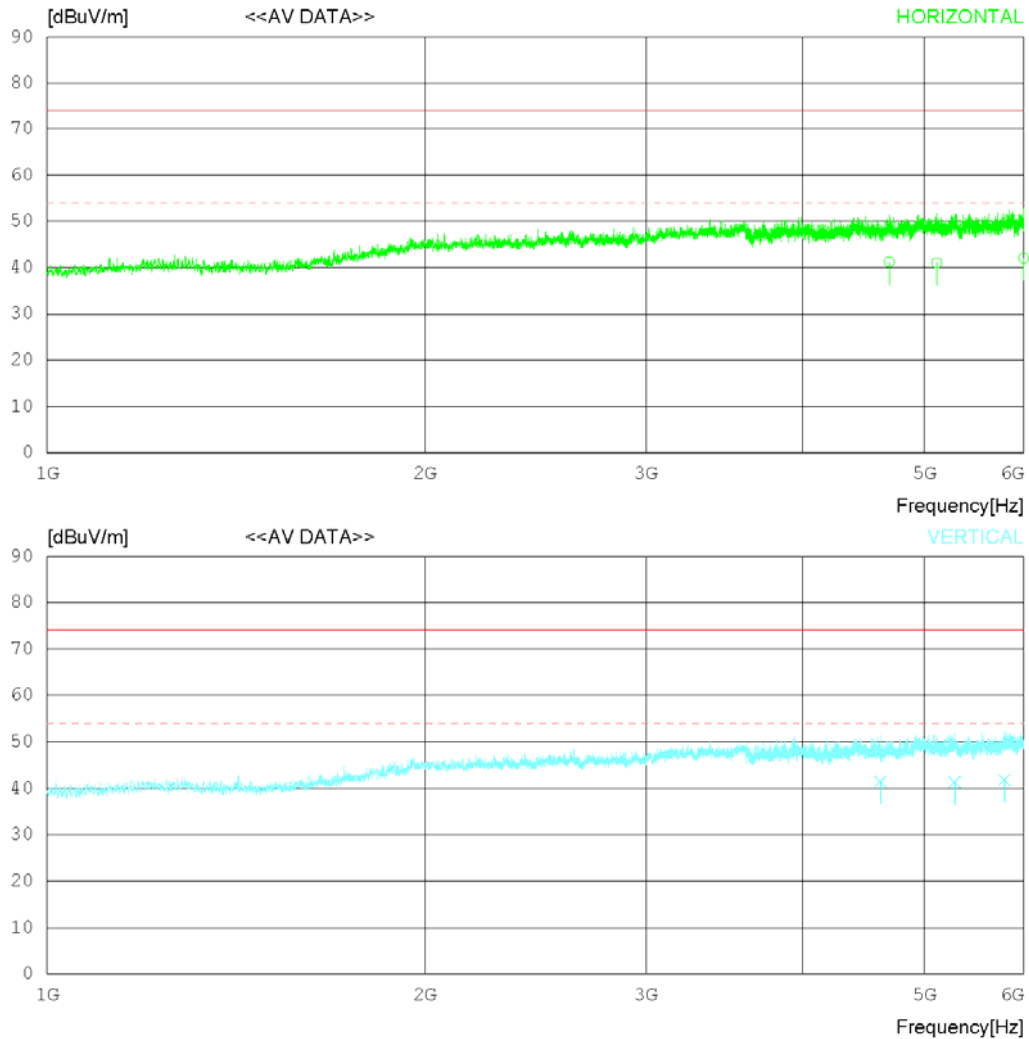
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Front Camera + MP3 Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Front Camera + MP3 Mode

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	4686.715	31.40	34.00	10.27	34.45	41.22	54.00	12.78	102	288
2	5115.515	31.10	34.13	10.70	34.88	41.05	54.00	12.95	104	351
3	5996.380	30.60	35.10	11.31	35.00	42.01	54.00	11.99	205	352
----- Vertical -----										
4	4611.380	31.70	34.00	10.07	34.35	41.42	54.00	12.58	108	0
5	5285.527	31.10	34.37	10.73	34.90	41.30	54.00	12.70	105	227
6	5788.285	30.80	34.70	11.24	34.97	41.77	54.00	12.23	104	0

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
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

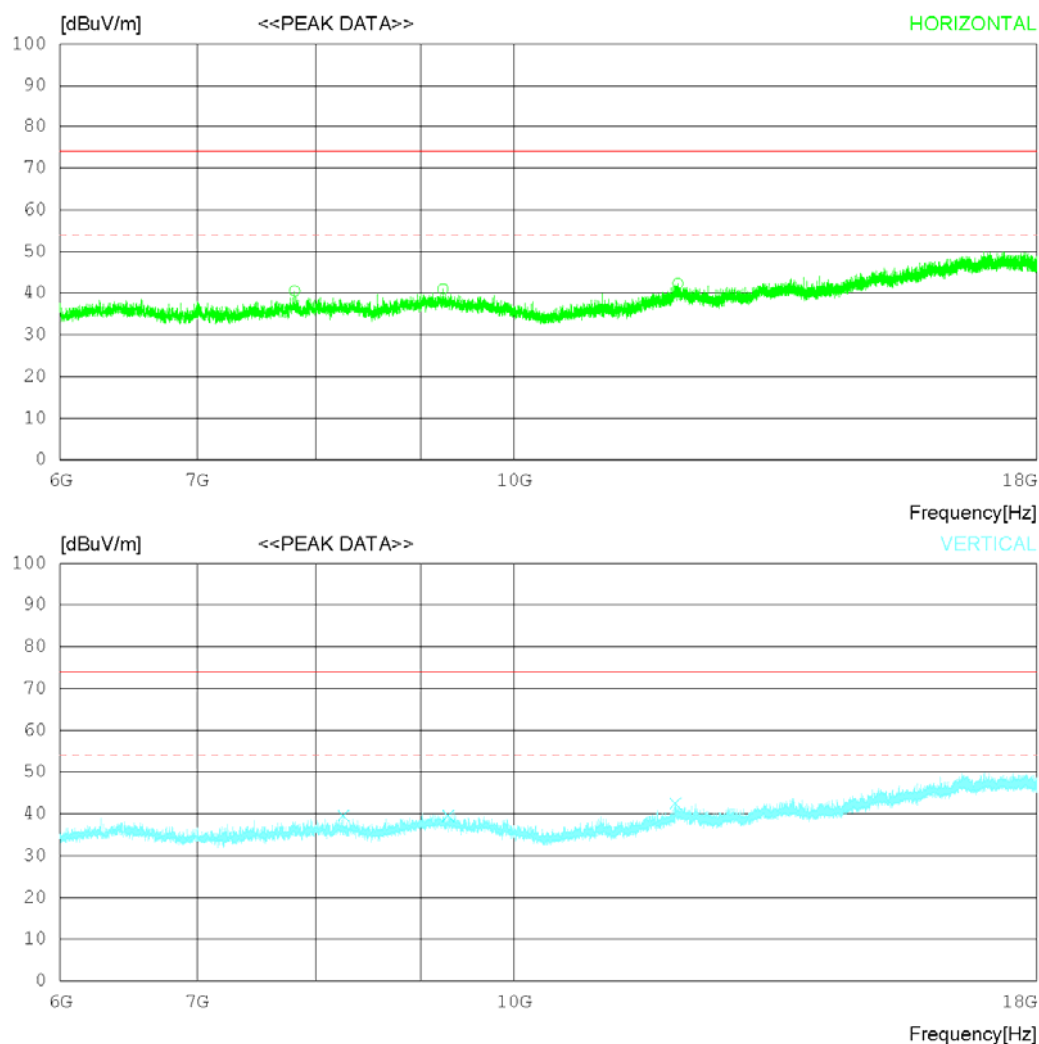
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Front Camera + MP3 Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Front Camera + MP3 Mode

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	7811.250	34.40	31.33	12.59	37.78	40.54	74.0	33.46	108	0
2	9230.250	32.70	32.20	13.81	37.68	41.03	74.0	32.97	112	0
3	12019.500	30.90	33.46	15.66	37.73	42.29	74.0	31.71	105	123
----- Vertical -----										
4	8253.750	32.60	31.50	12.79	37.35	39.54	74.0	34.46	112	0
5	9285.000	31.10	32.23	13.93	37.73	39.53	74.0	34.47	107	9
6	11986.500	31.10	33.45	15.66	37.72	42.49	74.0	31.51	106	268

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
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

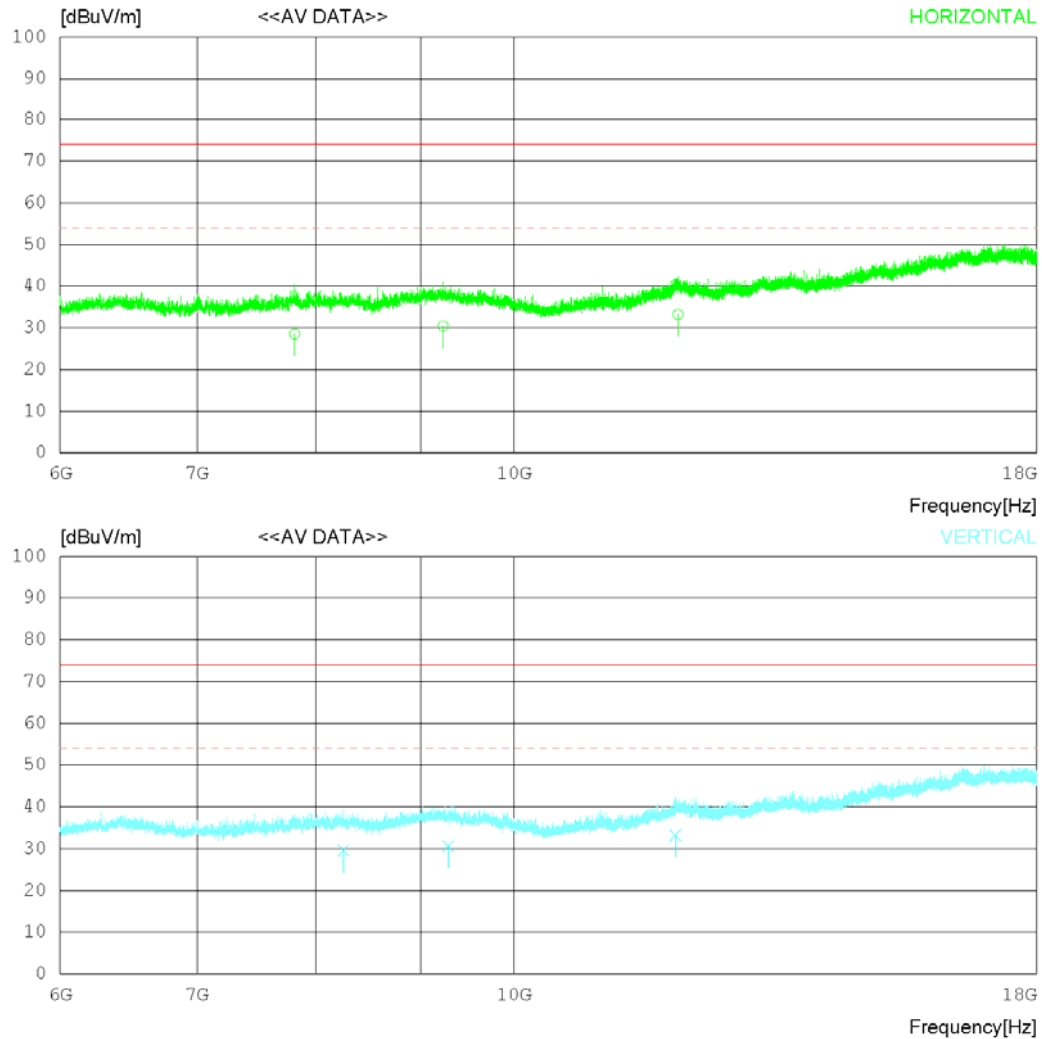
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Front Camera + MP3 Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Front Camera + MP3 Mode

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	7811.185	22.40	31.33	12.59	37.78	28.54	54.00	25.46	105	0
2	9230.125	22.10	32.20	13.81	37.68	30.43	54.00	23.57	109	0
3	12019.370	21.80	33.46	15.66	37.73	33.19	54.00	20.81	108	135
----- Vertical -----										
4	8253.510	22.70	31.50	12.79	37.35	29.64	54.00	24.36	109	0
5	9285.110	22.20	32.23	13.93	37.73	30.63	54.00	23.37	104	0
6	11986.450	21.80	33.45	15.66	37.72	33.19	54.00	20.81	105	277

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
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

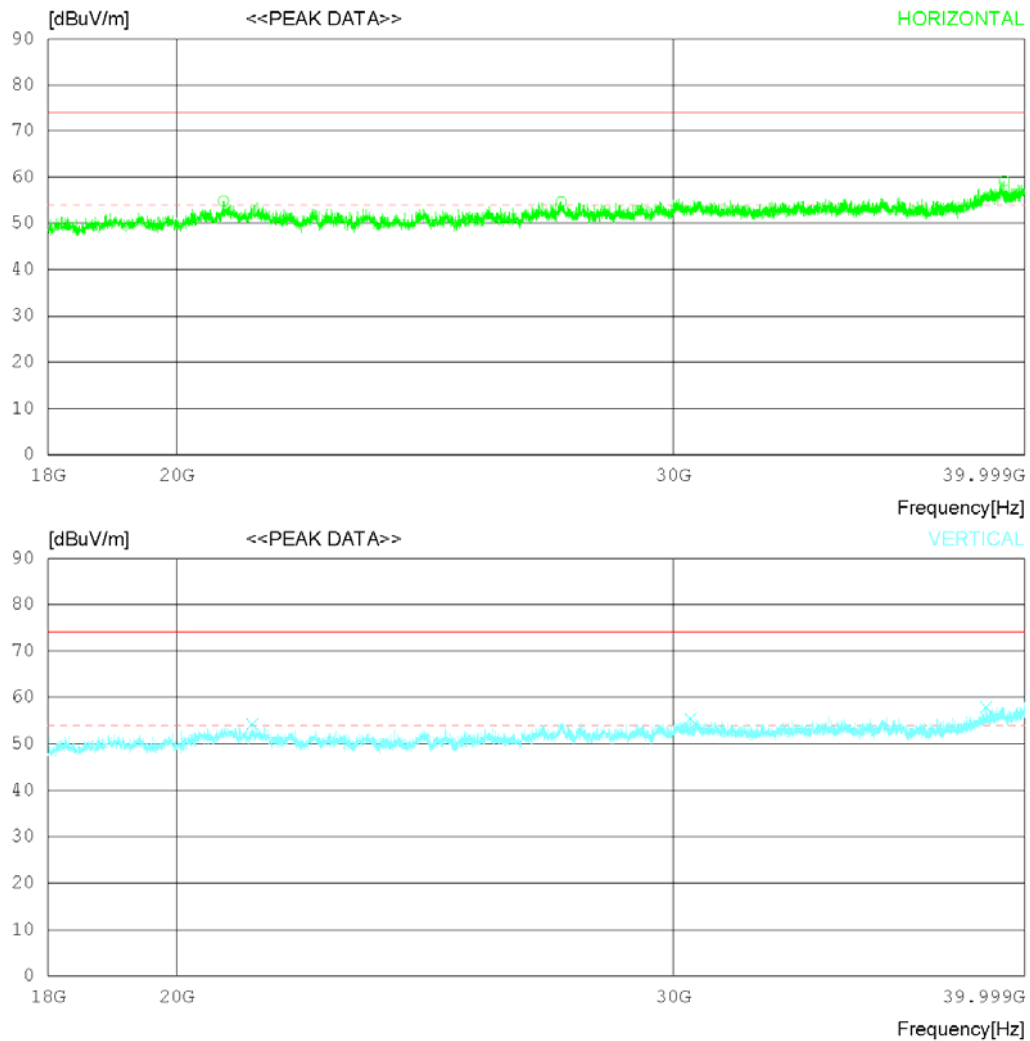
RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 45 % R.H.
Test Condition Front Camera + MP3 Mode

Memo

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



RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 45 % R.H.
Test Condition Front Camera + MP3 Mode

Memo

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

No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	PEAK	FACTOR							
		[dBuV]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	20777.50042.50	45.58	20.09	53.35	54.82	74.0	19.18	112	127	
2	27380.25040.50	45.98	21.18	53.05	54.61	74.0	19.39	116	22	
3	39326.25038.00	48.03	25.30	52.23	59.10	74.0	14.9	102	54	
----- Vertical -----										
4	21275.25041.90	45.52	20.35	53.57	54.20	74.0	19.8	106	67	
5	30441.00038.00	47.46	22.14	52.22	55.38	74.0	18.62	106	136	
6	38757.00037.40	47.26	25.49	52.26	57.89	74.0	16.11	103	344	

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
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

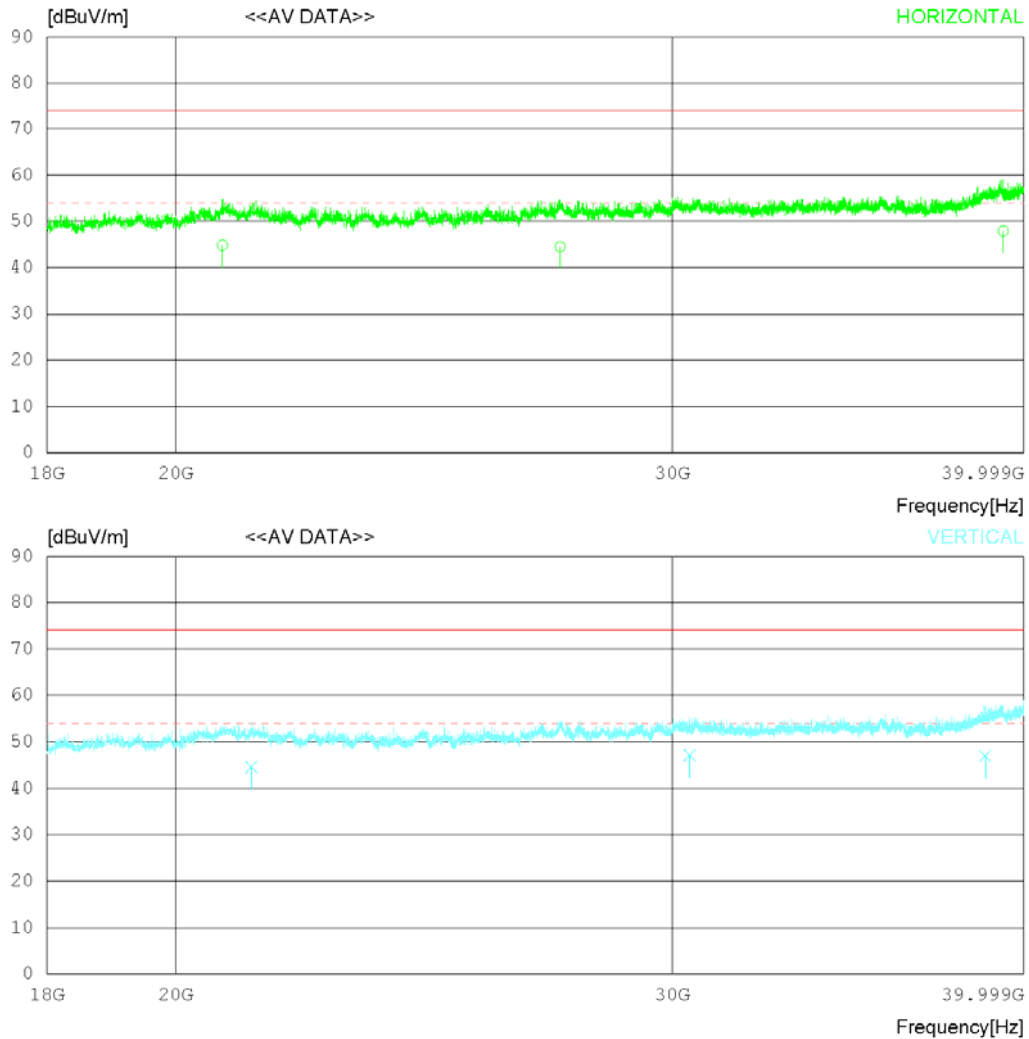
RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 45 % R.H.
Test Condition Front Camera + MP3 Mode

Memo

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



RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 45 % R.H.
Test Condition Front Camera + MP3 Mode

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	20777.69032.50		45.58	20.09	53.35	44.82	54.00	9.18	109	135
2	27380.21030.40		45.98	21.18	53.05	44.51	54.00	9.49	114	35
3	39326.17026.80		48.03	25.30	52.23	47.90	54.00	6.10	105	41
----- Vertical -----										
4	21275.18032.30		45.52	20.35	53.57	44.60	54.00	9.40	109	88
5	30441.07029.70		47.46	22.14	52.22	47.08	54.00	6.92	107	155
6	38757.11026.40		47.26	25.49	52.26	46.89	54.00	7.11	101	341

Radiated disturbance at (30 ~ 1000) MHz _Measurement data			
Test configuration mode	2	EUT Operation mode	2
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

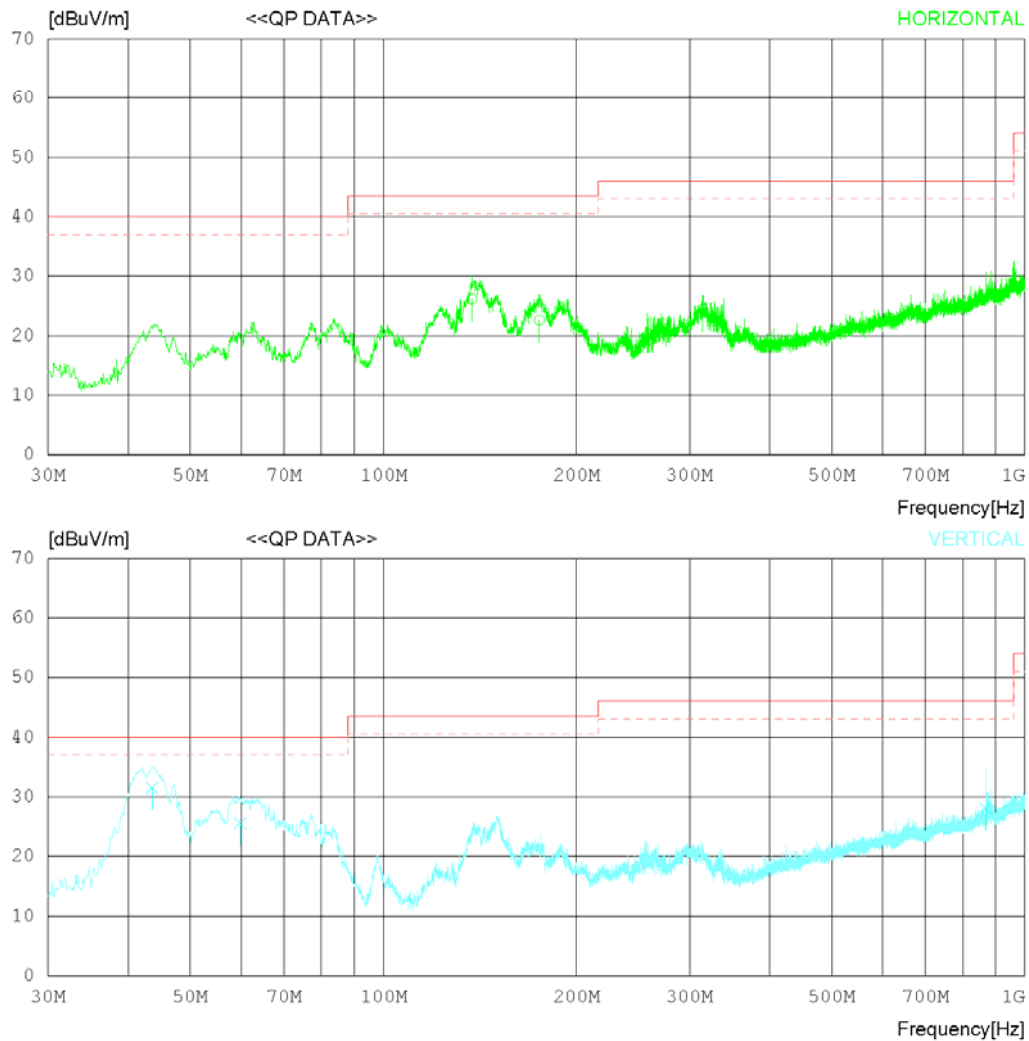
RADIATED EMISSION

Date 2020-01-16

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 19 °C 40 % R.H.
Test Condition Rear Camera Mode

Memo

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



RADIATED EMISSION

Date 2020-01-16

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 19 °C 40 % R.H.
Test Condition Rear Camera Mode

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	137.425	31.70	18.52	1.67	25.68	26.21	43.50	17.29	204	352
2	175.012	28.90	17.55	1.82	25.63	22.64	43.50	20.86	211	146
3	314.445	28.50	19.54	2.30	25.86	24.48	46.00	21.52	108	102
----- Vertical -----										
4	43.580	38.50	17.60	1.23	25.81	31.52	40.00	8.48	104	288
5	59.828	32.20	17.90	1.29	25.78	25.61	40.00	14.39	109	352
6	870.086	21.10	29.20	3.55	25.78	28.07	46.00	17.93	101	64

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
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

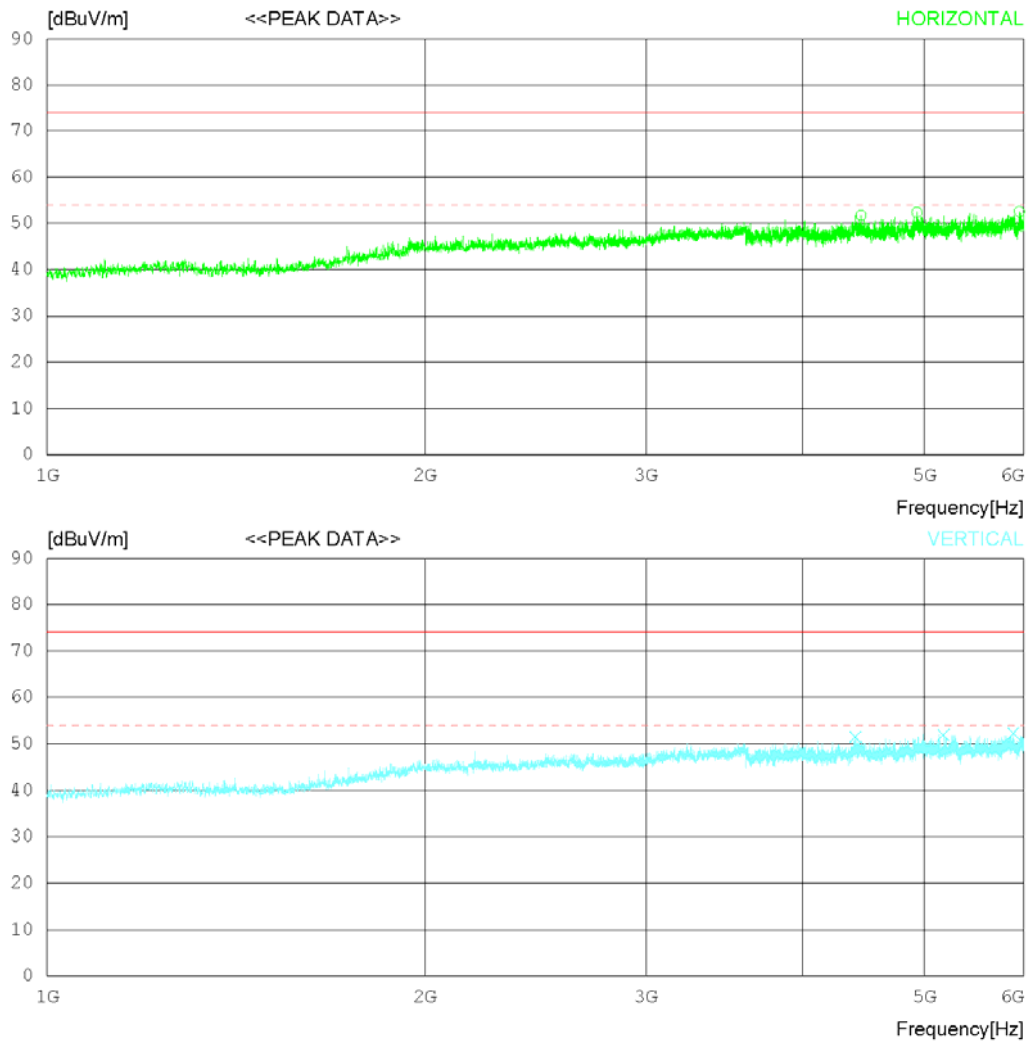
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Rear Camera Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Rear Camera Mode

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	4450.000	42.10	33.90	9.88	34.13	51.75	74.0	22.25	109	285
2	4930.000	42.30	34.16	10.67	34.77	52.36	74.0	21.64	101	358
3	5950.000	41.10	35.10	11.30	34.99	52.51	74.0	21.49	108	358
----- Vertical -----										
4	4402.500	41.90	33.81	9.82	34.07	51.46	74.0	22.54	109	0
5	5177.500	41.80	34.20	10.69	34.88	51.81	74.0	22.19	106	0
6	5887.500	41.00	34.98	11.28	34.98	52.28	74.0	21.72	103	5

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
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

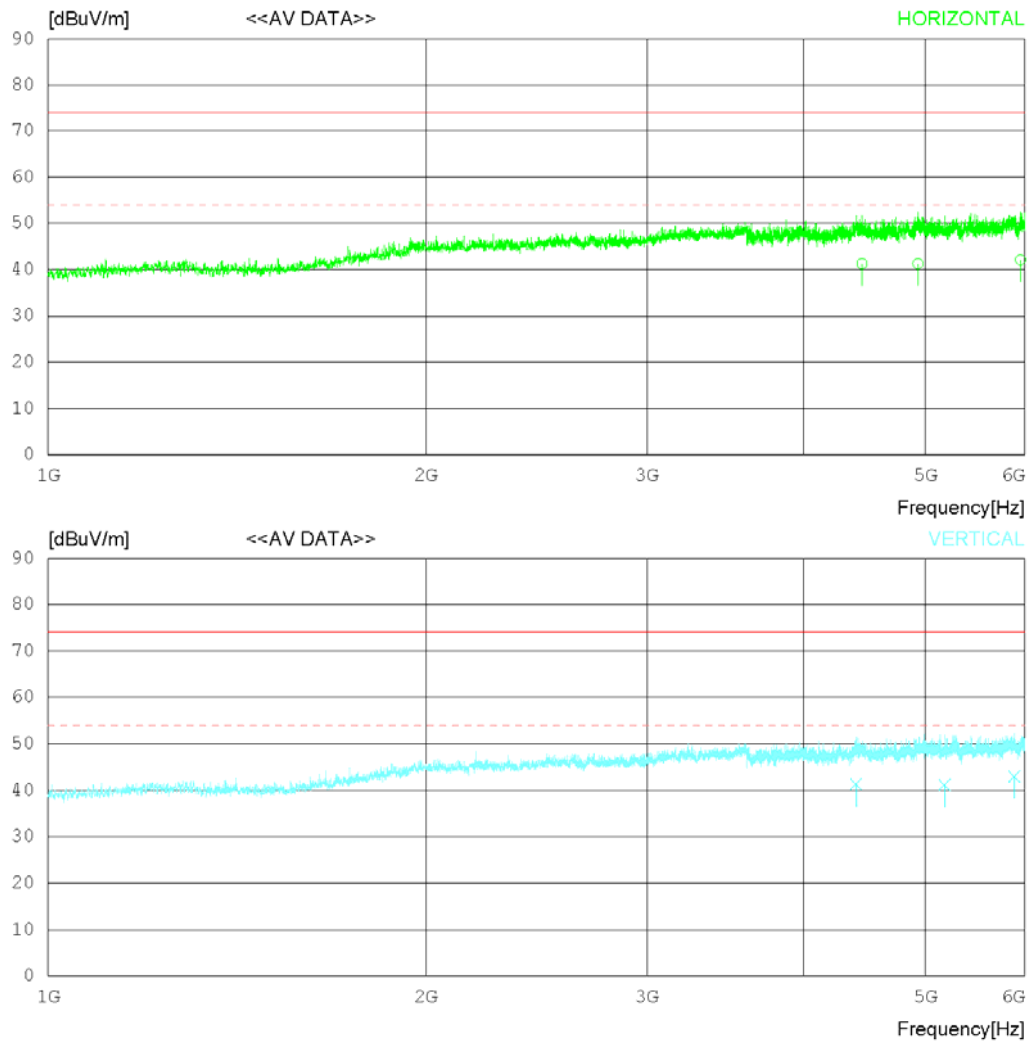
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Rear Camera Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Rear Camera Mode

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	4450.110	31.60	33.90	9.88	34.13	41.25	54.00	12.75	108	294
2	4930.080	31.20	34.16	10.67	34.77	41.26	54.00	12.74	105	356
3	5950.270	30.70	35.10	11.30	34.99	42.11	54.00	11.89	104	352
----- Vertical -----										
4	4402.452	31.70	33.80	9.82	34.07	41.25	54.00	12.75	107	0
5	5177.395	31.10	34.20	10.69	34.88	41.11	54.00	12.89	104	0
6	5887.410	31.70	34.97	11.28	34.98	42.97	54.00	11.03	105	0

Radiated disturbance at (6 ~ 18) GHz _Peak measurement data			
Test configuration mode	2	EUT Operation mode	2
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

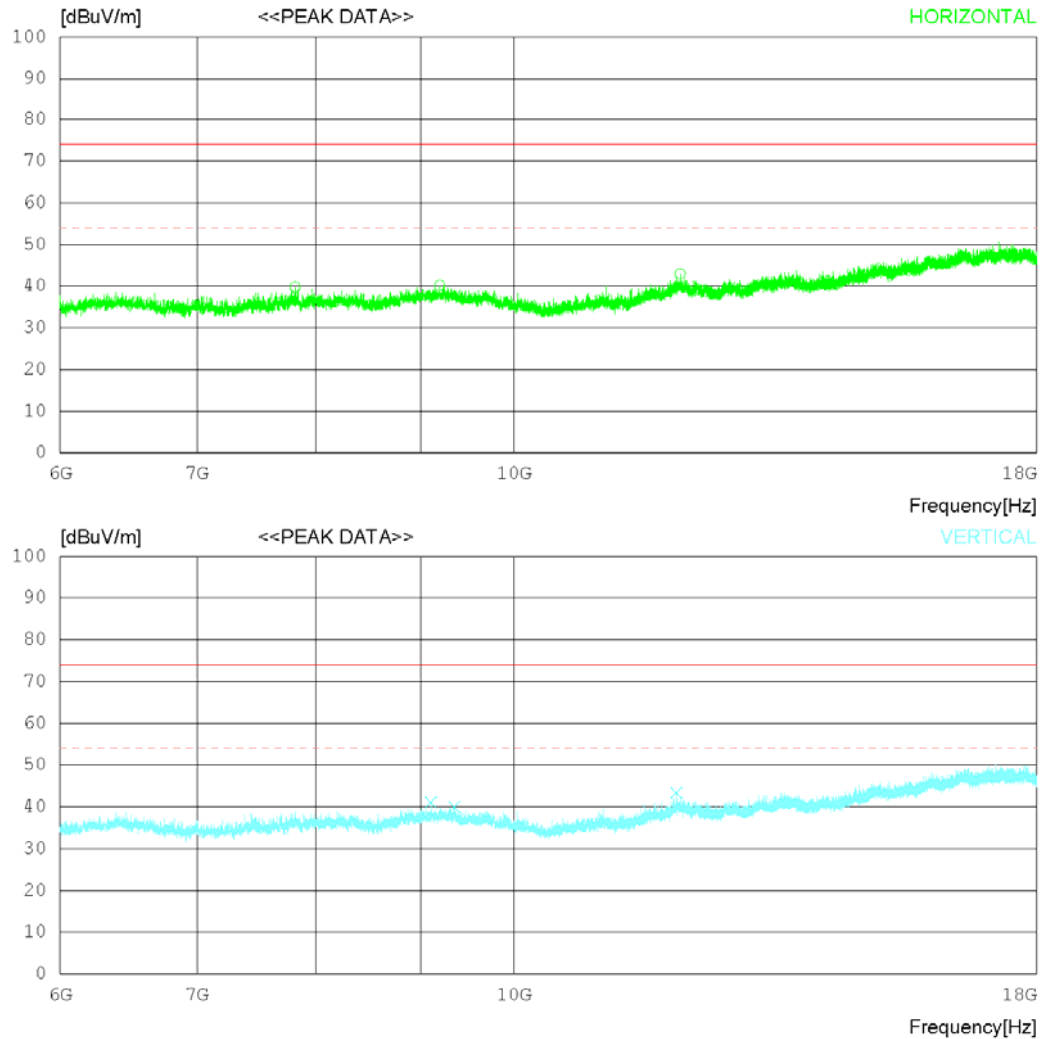
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Rear Camera Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Rear Camera Mode

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	7815.750	33.60	31.33	12.59	37.78	39.74	74.0	34.26	108	32
2	9195.000	31.90	32.19	13.74	37.66	40.17	74.0	33.83	112	358
3	12051.000	31.60	33.46	15.64	37.77	42.93	74.0	31.07	106	358
----- Vertical -----										
4	9107.250	32.90	32.15	13.59	37.59	41.05	74.0	32.95	104	112
5	9353.250	31.40	32.26	14.09	37.78	39.97	74.0	34.03	107	0
6	11999.250	31.90	33.46	15.68	37.70	43.34	74.0	30.66	103	55

Radiated disturbance at (6 ~ 18) GHz _Average measurement data			
Test configuration mode	2	EUT Operation mode	2
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

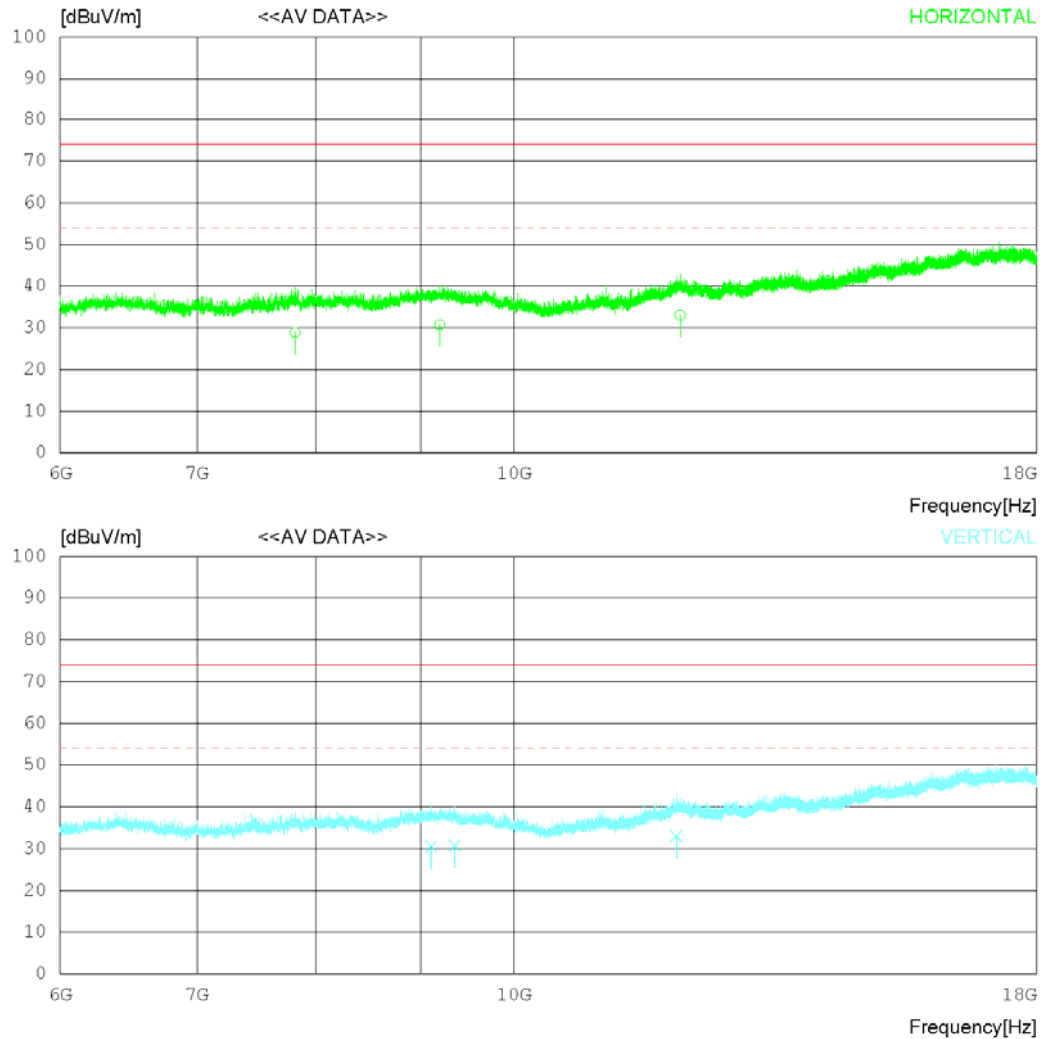
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Rear Camera Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition Rear Camera Mode

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	7815.680	22.70	31.33	12.59	37.78	28.84	54.00	25.16	109	44
2	9195.240	22.50	32.19	13.74	37.66	30.77	54.00	23.23	108	356
3	12051.120	21.70	33.46	15.64	37.77	33.03	54.00	20.97	104	352
----- Vertical -----										
4	9107.140	22.40	32.15	13.59	37.59	30.55	54.00	23.45	103	102
5	9353.520	22.20	32.26	14.09	37.78	30.77	54.00	23.23	104	0
6	11999.310	21.50	33.46	15.68	37.70	32.94	54.00	21.06	105	41

Radiated disturbance at (18 ~ 40) GHz _Peak measurement data			
Test configuration mode	2	EUT Operation mode	2
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

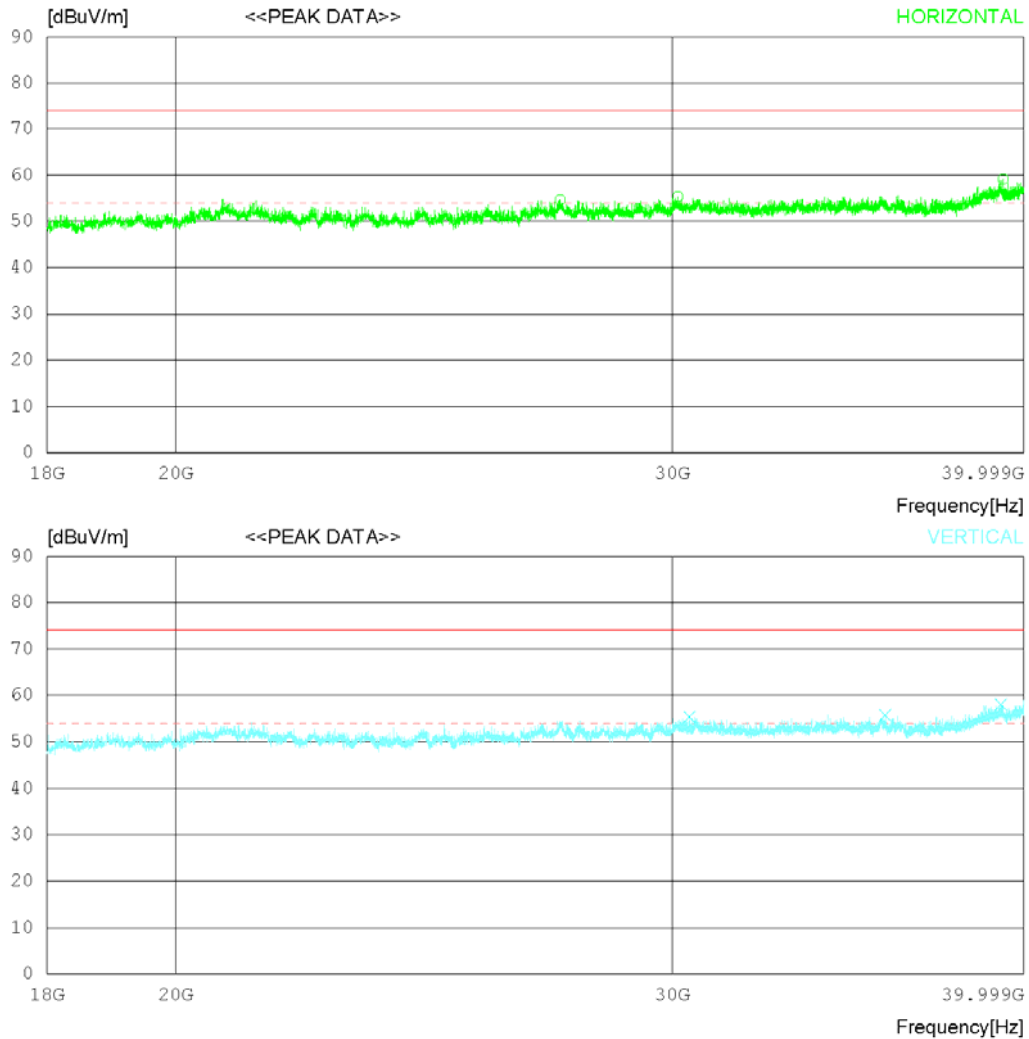
RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 45 % R.H.
Test Condition Rear Camera Mode

Memo

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



RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 45 % R.H.
Test Condition Rear Camera Mode

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	27380.250	40.50	45.98	21.18	53.05	54.61	74.0	19.39	108	22
2	30141.250	38.10	47.50	21.96	52.21	55.35	74.0	18.65	106	182
3	39326.250	38.00	48.03	25.30	52.23	59.10	74.0	14.9	111	54
----- Vertical -----										
4	30441.000	38.00	47.46	22.14	52.22	55.75	74.0	18.25	109	163
5	39254.750	38.60	46.90	24.08	53.83	55.38	74.0	18.62	105	358
6	35721.000	36.90	47.95	25.41	52.24	58.02	74.0	15.98	102	136

Radiated disturbance at (18 ~ 40) GHz _Average measurement data			
Test configuration mode	2	EUT Operation mode	2
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

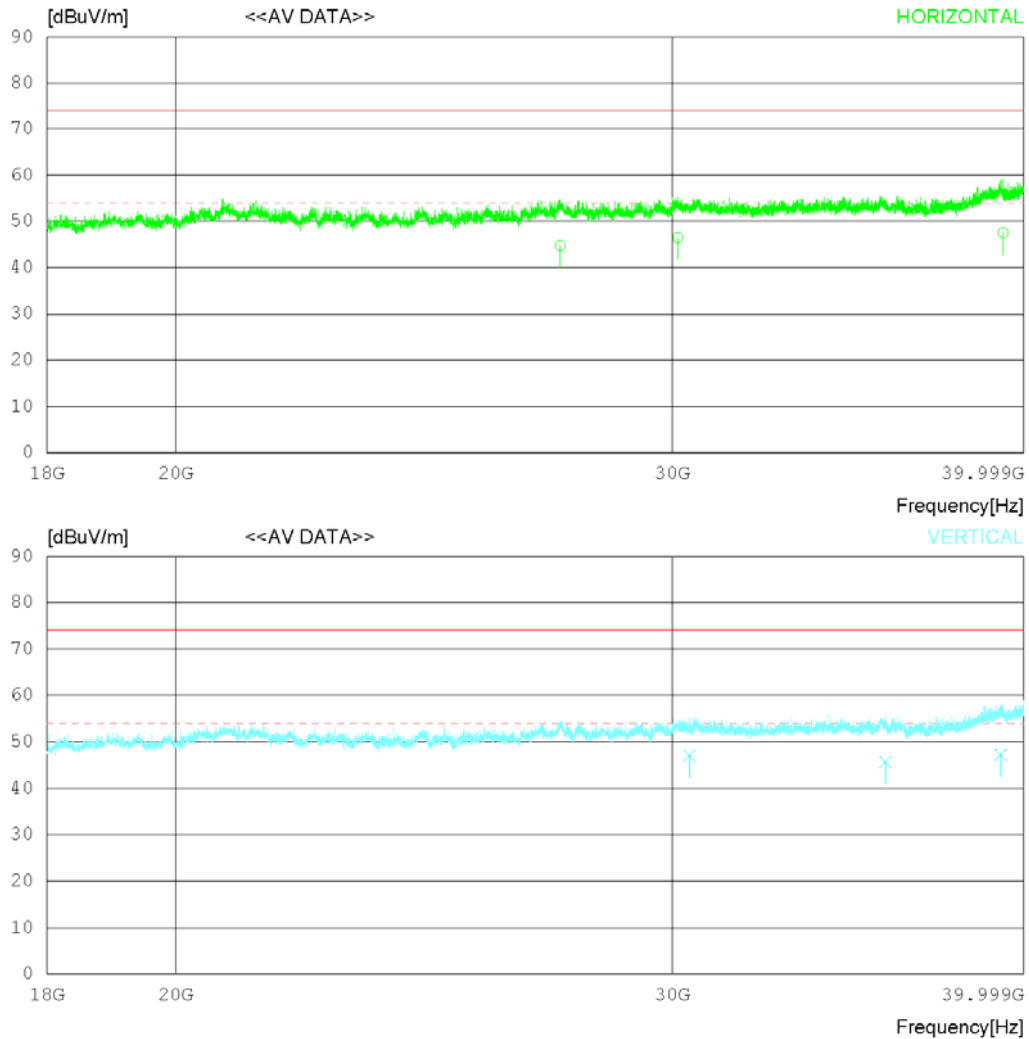
RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 45 % R.H.
Test Condition Rear Camera Mode

Memo

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



RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 45 % R.H.
Test Condition Rear Camera Mode

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	27380.36030.60		45.98	21.18	53.05	44.71	54.00	9.29	104	0
2	30141.21029.20		47.50	21.96	52.21	46.45	54.00	7.55	105	196
3	39326.29026.40		48.03	25.30	52.23	47.50	54.00	6.50	109	66
----- Vertical -----										
4	30441.12029.60		47.46	22.14	52.22	46.98	54.00	7.02	108	345
5	35721.08028.50		46.90	24.08	53.83	45.65	54.00	8.35	104	377
6	39254.61026.07		47.95	25.41	52.24	47.19	54.00	6.81	101	351

Radiated disturbance at (30 ~ 1000) MHz _Measurement data			
Test configuration mode	3	EUT Operation mode	3
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

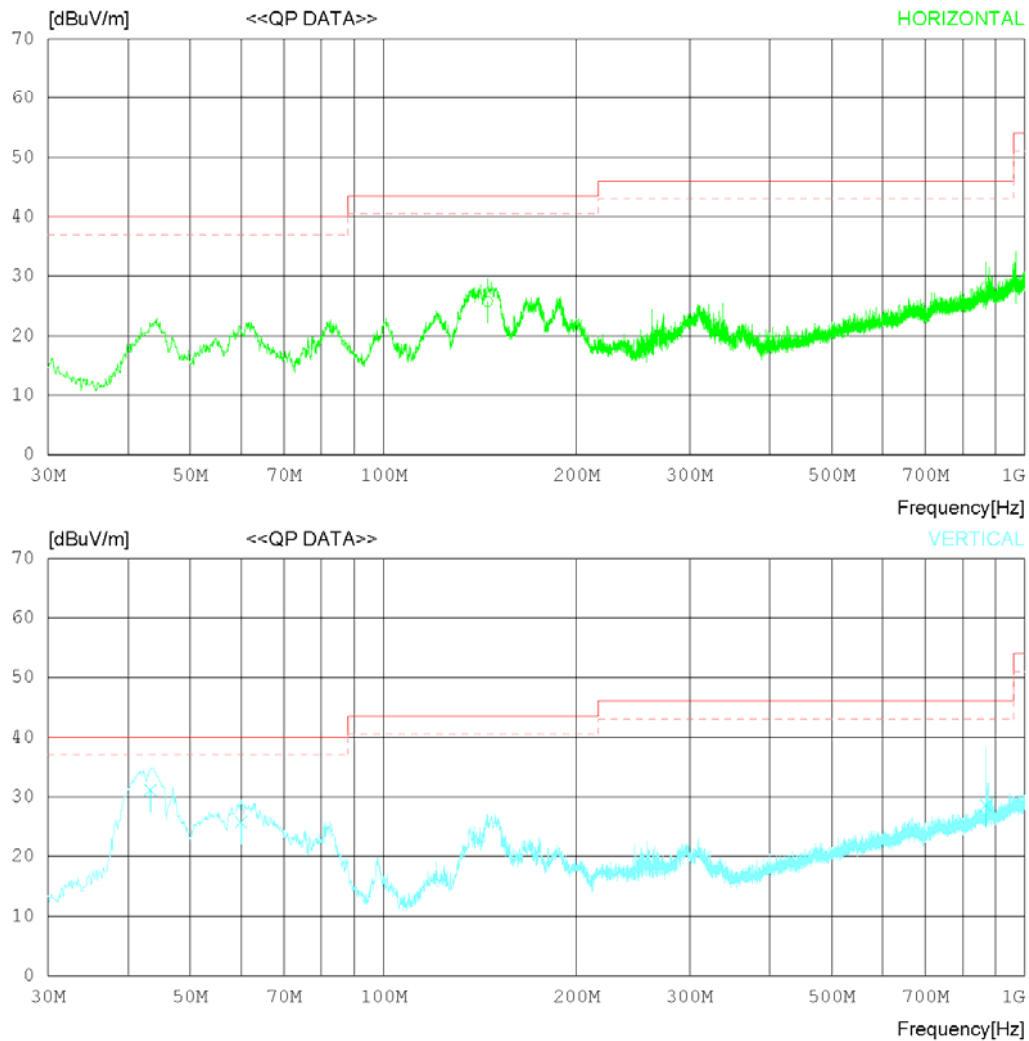
RADIATED EMISSION

Date 2020-01-16

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 19 °C 40 % R.H.
Test Condition IDLE Mode

Memo

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



RADIATED EMISSION

Date 2020-01-16

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 19 °C 40 % R.H.
Test Condition IDLE Mode

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	145.306	30.90	18.81	1.74	25.67	25.78	43.50	17.72	206	353
2	869.965	21.20	29.20	3.55	25.78	28.17	46.00	17.83	201	0
3	969.533	20.70	30.50	3.80	25.90	29.10	54.00	24.90	208	0
----- Vertical -----										
4	43.338	38.10	17.60	1.23	25.81	31.12	40.00	8.88	103	352
5	59.949	32.30	17.90	1.29	25.78	25.71	40.00	14.29	104	25
6	869.722	21.60	29.20	3.55	25.78	28.57	46.00	17.43	105	152

Radiated disturbance at (1 ~ 6) GHz _Peak measurement data			
Test configuration mode	3	EUT Operation mode	3
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

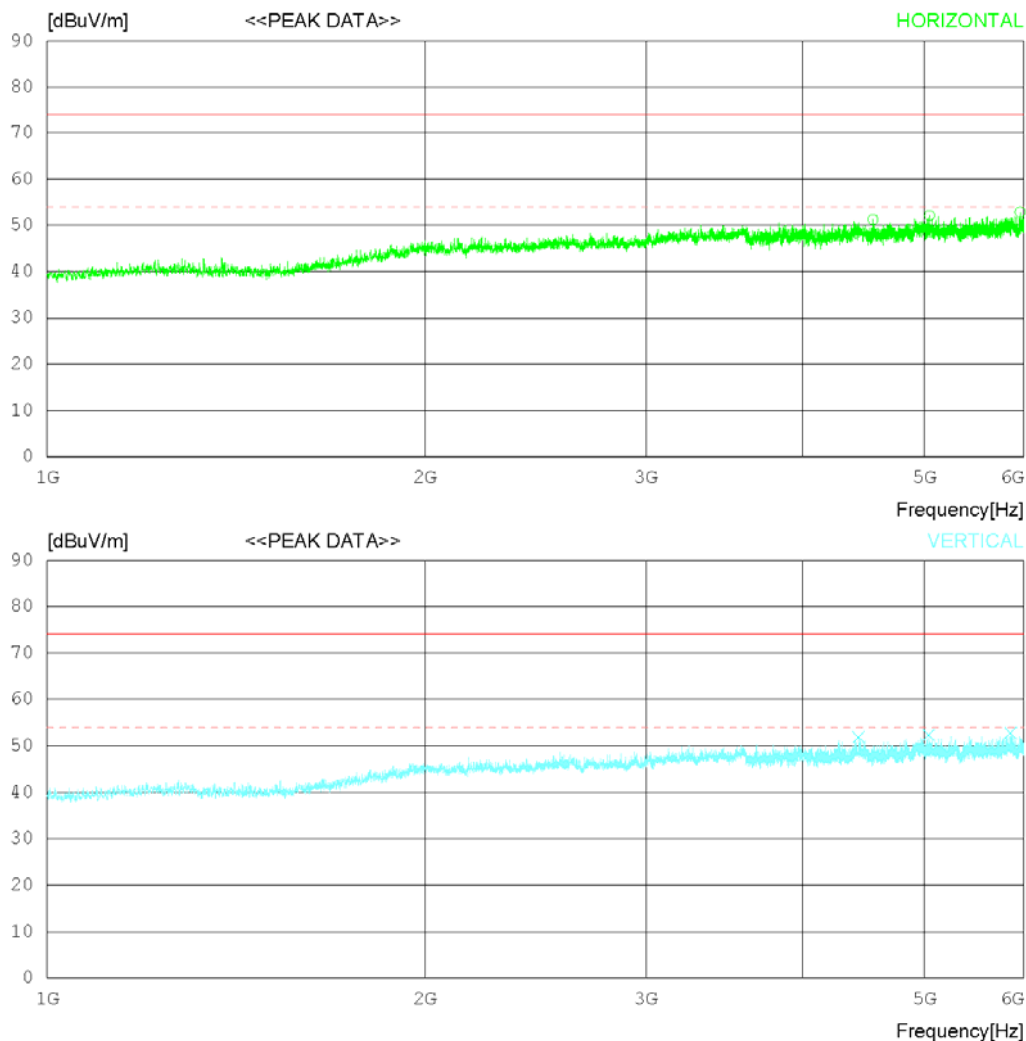
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition IDLE Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition IDLE Mode

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	4550.000	41.60	33.90	9.99	34.27	51.22	74.0	22.78	109	169
2	5046.250	42.10	34.19	10.72	34.87	52.14	74.0	21.86	103	22
3	5958.750	41.40	35.10	11.30	34.99	52.81	74.0	21.19	106	354
----- Vertical -----										
4	4432.500	42.20	33.87	9.86	34.11	51.82	74.0	22.18	206	0
5	5040.000	42.30	34.18	10.71	34.87	52.32	74.0	21.68	201	0
6	5858.125	41.50	34.92	11.27	34.98	52.71	74.0	21.29	105	0

Radiated disturbance at (1 ~ 6) GHz _Average measurement data			
Test configuration mode	3	EUT Operation mode	3
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

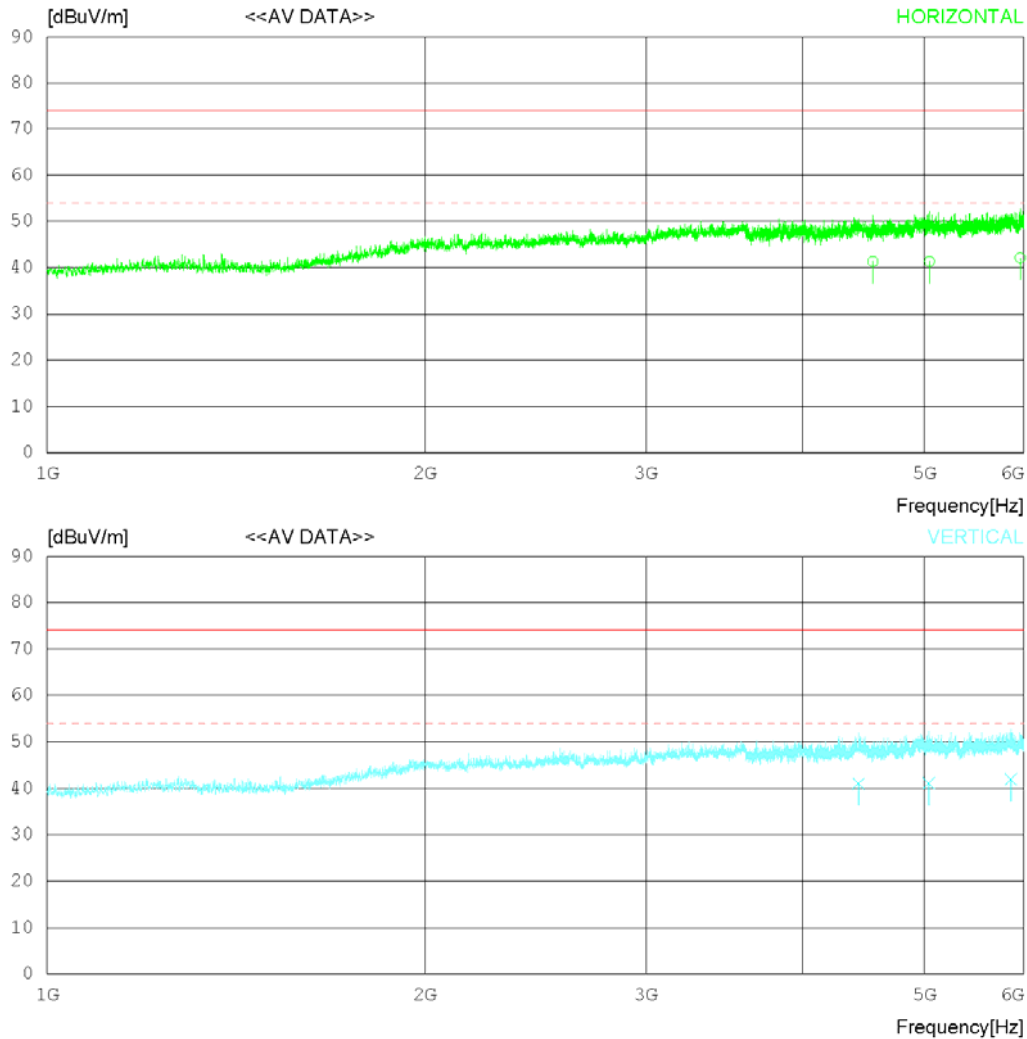
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition IDLE Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition IDLE Mode

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	4550.040	31.70	33.90	9.99	34.27	41.32	54.00	12.68	109	177
2	5046.280	31.30	34.19	10.72	34.87	41.34	54.00	12.66	104	35
3	5958.650	30.70	35.10	11.30	34.99	42.11	54.00	11.89	105	349
----- Vertical -----										
4	4432.258	31.40	33.86	9.86	34.11	41.01	54.00	12.99	205	0
5	5040.040	31.10	34.18	10.71	34.87	41.12	54.00	12.88	202	0
6	5858.385	30.70	34.92	11.27	34.98	41.91	54.00	12.09	104	0

Radiated disturbance at (6 ~ 18) GHz _Peak measurement data			
Test configuration mode	3	EUT Operation mode	3
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

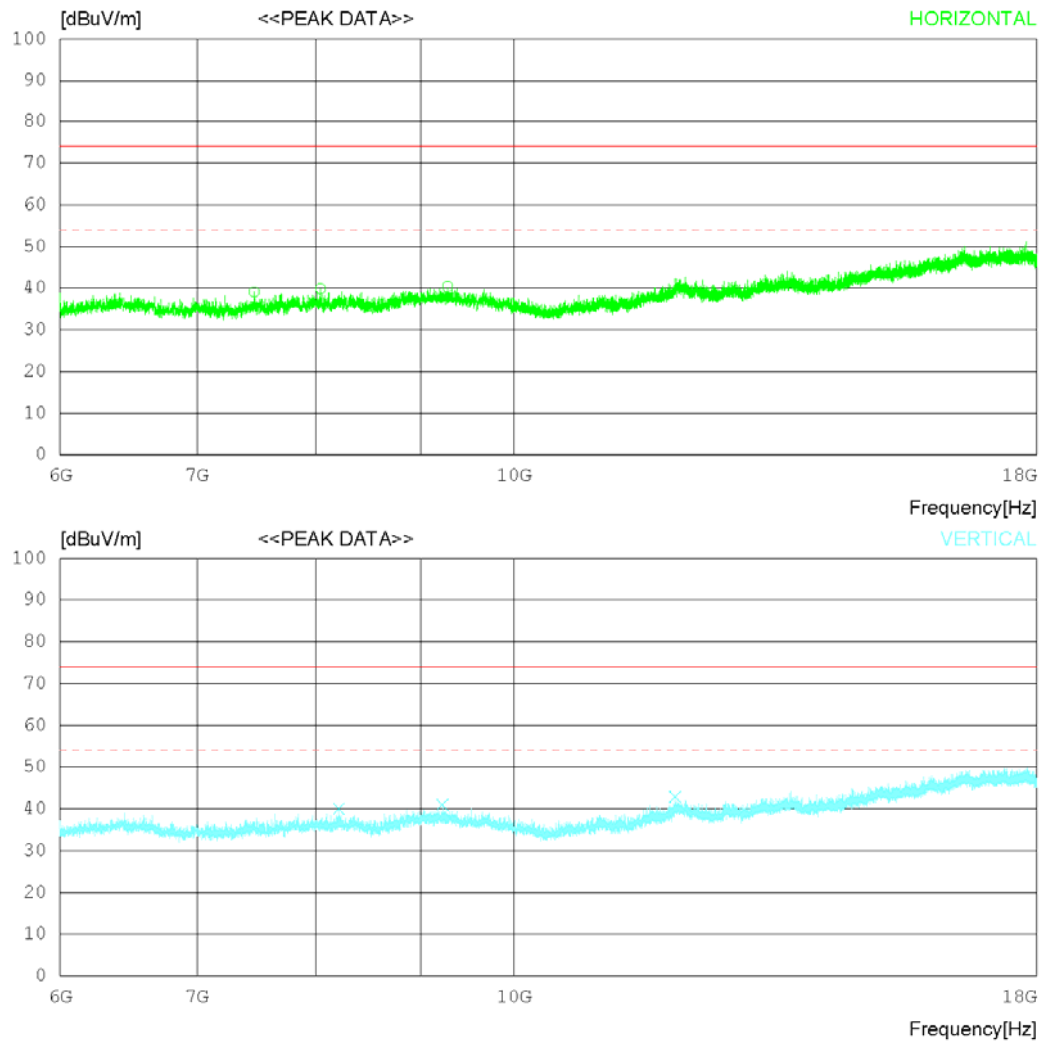
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition IDLE Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition IDLE Mode

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	7464.000	33.90	31.38	11.84	38.04	39.08	74.0	34.92	106	8
2	8042.250	33.60	31.33	12.35	37.47	39.81	74.0	34.19	107	60
3	9278.250	31.90	32.23	13.92	37.72	40.33	74.0	33.67	109	336
----- Vertical -----										
4	8210.250	33.10	31.47	12.75	37.37	39.95	74.0	34.05	103	170
5	9225.000	32.60	32.20	13.80	37.68	40.92	74.0	33.08	106	0
6	11984.250	31.50	33.44	15.64	37.72	42.86	74.0	31.14	107	0

Radiated disturbance at (6 ~ 18) GHz _Average measurement data			
Test configuration mode	3	EUT Operation mode	3
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

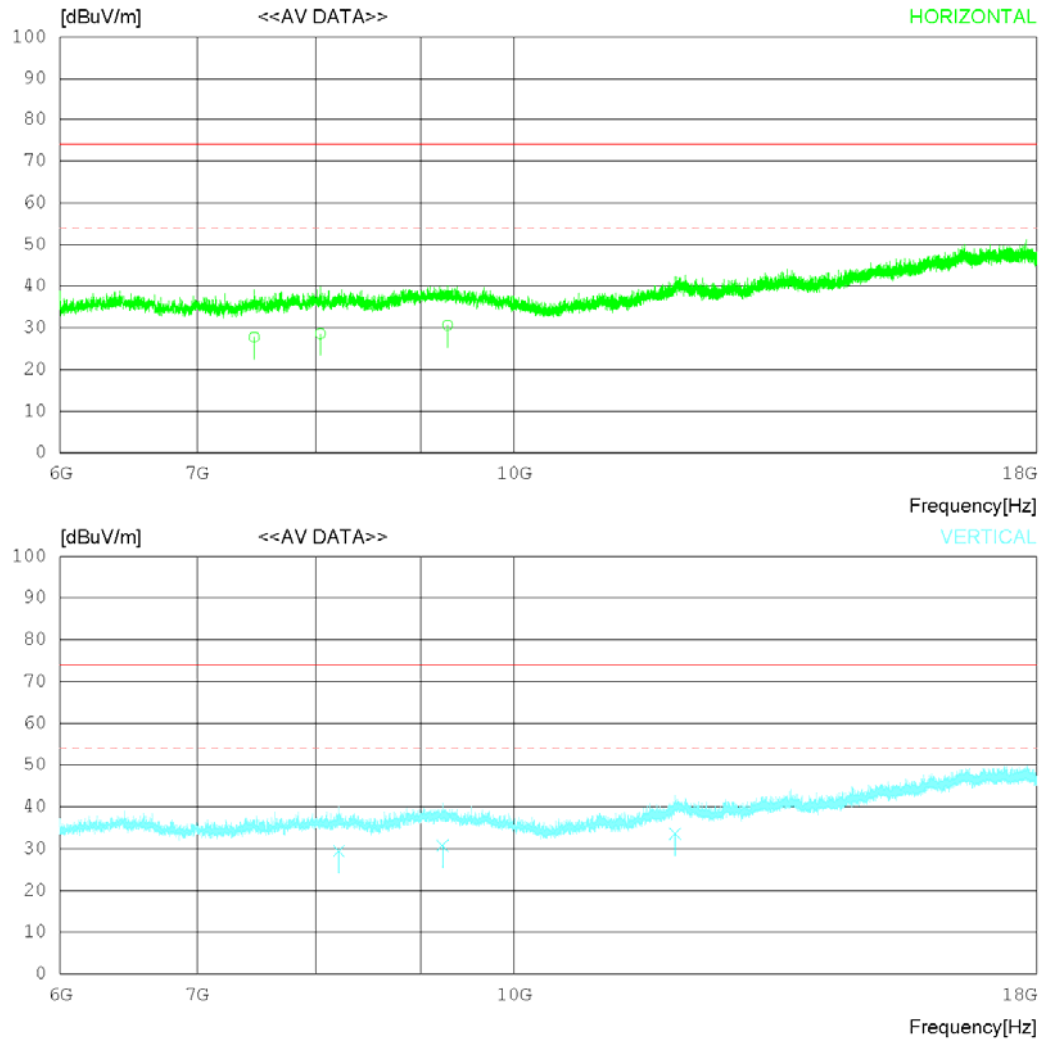
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition IDLE Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition IDLE Mode

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	7464.080	22.60	31.38	11.84	38.04	27.78	54.00	26.22	104	0
2	8042.317	22.40	31.33	12.35	37.47	28.61	54.00	25.39	105	68
3	9278.301	22.20	32.23	13.92	37.72	30.63	54.00	23.37	108	246
----- Vertical -----										
4	8210.140	22.50	31.47	12.75	37.37	29.35	54.00	24.65	102	186
5	9225.080	22.40	32.20	13.80	37.68	30.72	54.00	23.28	104	0
6	11984.360	22.20	33.44	15.64	37.72	33.56	54.00	20.44	105	0

Radiated disturbance at (18 ~ 40) GHz _Peak measurement data			
Test configuration mode	3	EUT Operation mode	3
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

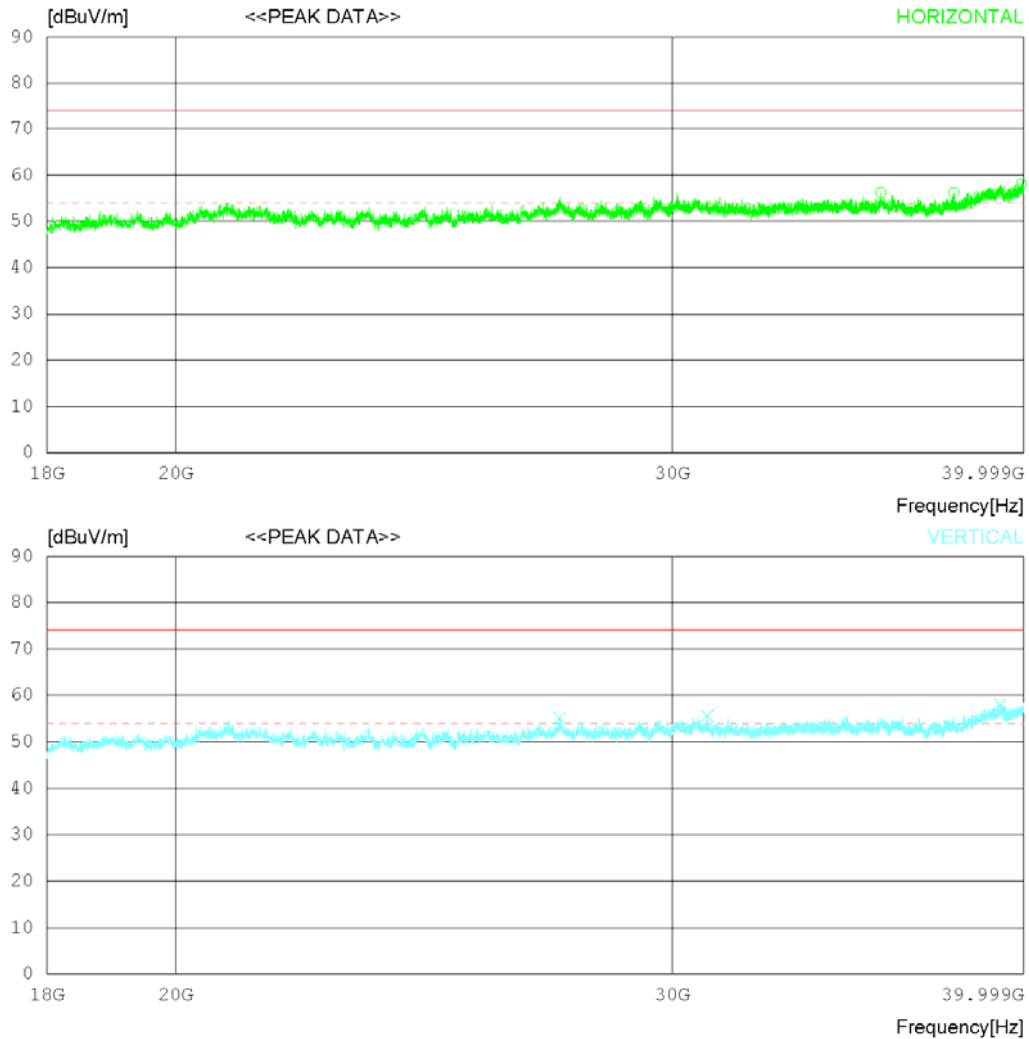
RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 43 % R.H.
Test Condition IDLE Mode

Memo

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



RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 43 % R.H.
Test Condition IDLE Mode

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	35580.75039.00	47.00	24.06	53.80	56.26	74.0	17.74	107	34	
2	37767.00038.10	46.10	24.49	52.49	56.20	74.0	17.8	109	243	
3	39914.75036.70	49.13	24.44	52.20	58.07	74.0	15.93	100	0	
----- Vertical -----										
4	27369.25041.10	45.97	21.17	53.05	55.19	74.0	18.81	103	349	
5	30881.00038.20	47.32	22.40	52.24	55.68	74.0	18.32	106	32	
6	39224.50036.90	47.92	25.45	52.24	58.03	74.0	15.97	103	358	

Radiated disturbance at (18 ~ 40) GHz _Average measurement data			
Test configuration mode	3	EUT Operation mode	3
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

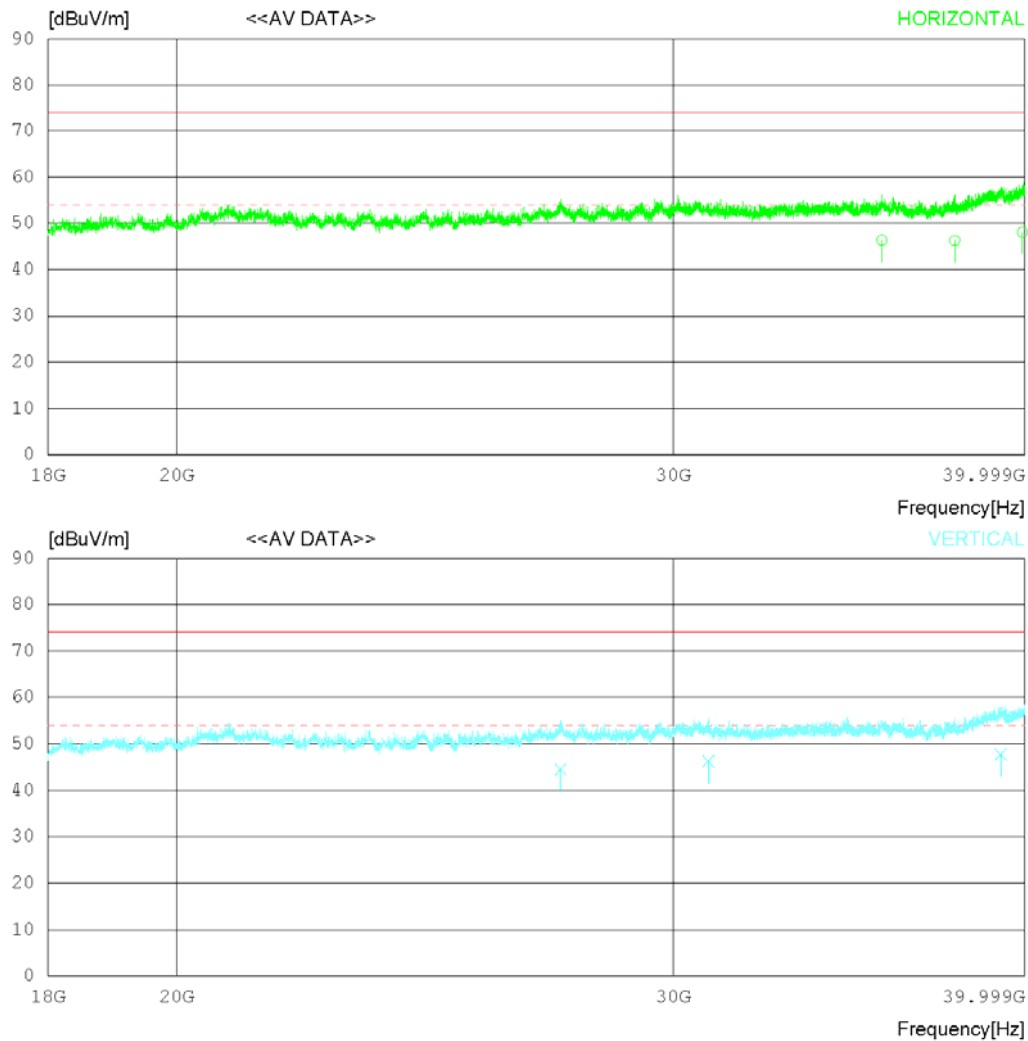
RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 43 % R.H.
Test Condition IDLE Mode

Memo

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



RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 43 % R.H.
Test Condition IDLE Mode

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	35580.62029.10		47.00	24.06	53.80	46.36	54.00	7.64	108	36
2	37767.27028.20		46.10	24.49	52.49	46.30	54.00	7.70	107	237
3	39914.88026.70		49.13	24.44	52.20	48.07	54.00	5.93	101	0
----- Vertical -----										
4	27369.21030.40		45.97	21.17	53.06	44.48	54.00	9.52	102	356
5	30881.17028.80		47.32	22.40	52.24	46.28	54.00	7.72	101	22
6	39224.68026.60		47.92	25.45	52.24	47.73	54.00	6.27	102	347

Radiated disturbance at (30 ~ 1000) MHz _Measurement data			
Test configuration mode	4	EUT Operation mode	4
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

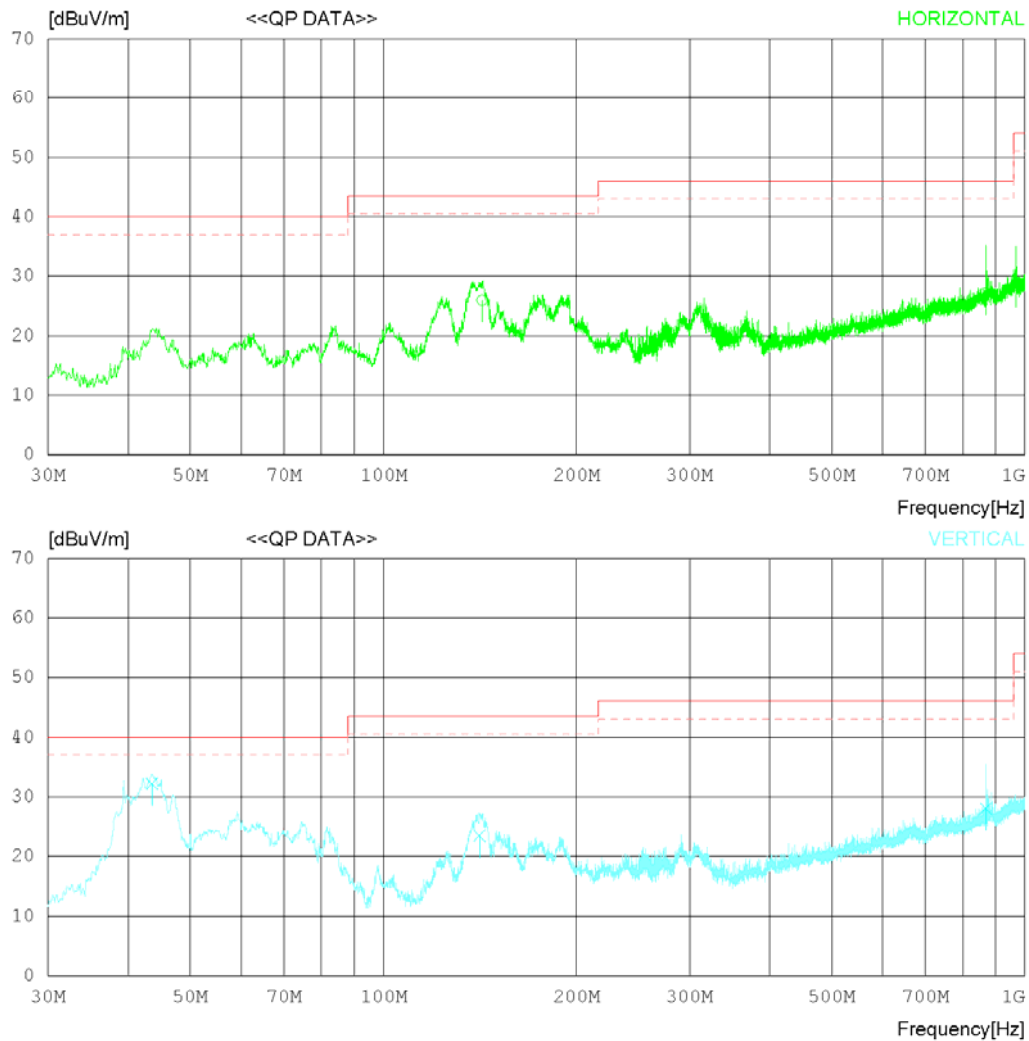
RADIATED EMISSION

Date 2020-01-16

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 19 °C 40 % R.H.
Test Condition TOF Mode

Memo

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



RADIATED EMISSION

Date 2020-01-16

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 19 °C 40 % R.H.
Test Condition TOF Mode

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	142.396	31.20	18.75	1.70	25.67	25.98	43.50	17.52	205	355
2	869.843	20.30	29.20	3.55	25.78	27.27	46.00	18.73	109	353
3	969.533	20.10	30.50	3.80	25.90	28.50	54.00	25.50	101	282
----- Vertical -----										
4	43.580	39.20	17.60	1.23	25.81	32.22	40.00	7.78	109	352
5	141.184	28.80	18.72	1.69	25.68	23.53	43.50	19.97	104	356
6	870.086	21.10	29.20	3.55	25.78	28.07	46.00	17.93	105	111

Radiated disturbance at (1 ~ 6) GHz _Peak measurement data			
Test configuration mode	4	EUT Operation mode	4
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

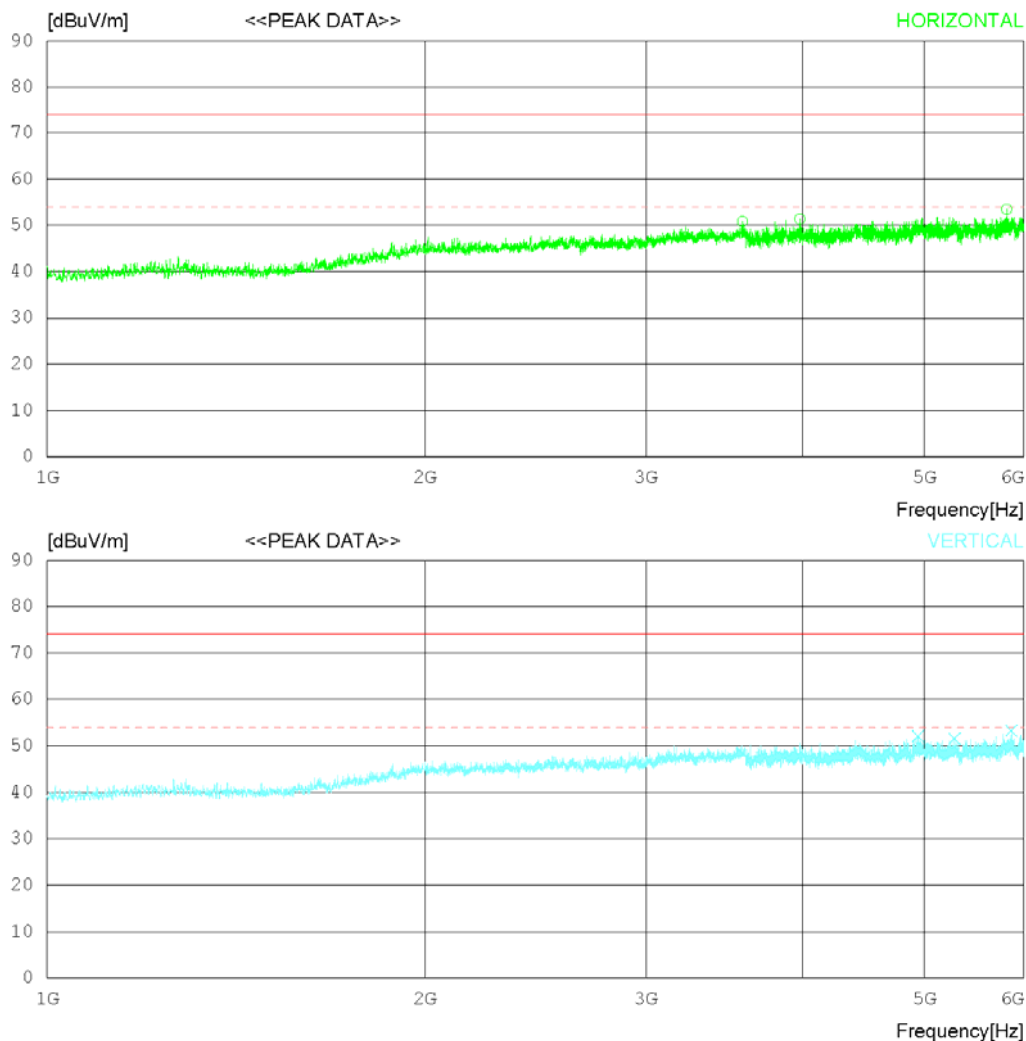
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition TOF Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition TOF Mode

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	3580.000	43.40	33.26	8.28	34.12	50.82	74.0	23.18	105	352
2	3978.125	42.70	33.30	8.91	33.57	51.34	74.0	22.66	107	53
3	5813.750	42.40	34.76	11.27	34.97	53.46	74.0	20.54	106	358
----- Vertical -----										
4	4942.500	42.00	34.19	10.68	34.78	52.09	74.0	21.91	101	0
5	5283.750	41.40	34.37	10.73	34.90	51.60	74.0	22.4	104	11
6	5863.750	42.00	34.93	11.27	34.98	53.22	74.0	20.78	108	100

Radiated disturbance at (1 ~ 6) GHz _Average measurement data			
Test configuration mode	4	EUT Operation mode	4
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

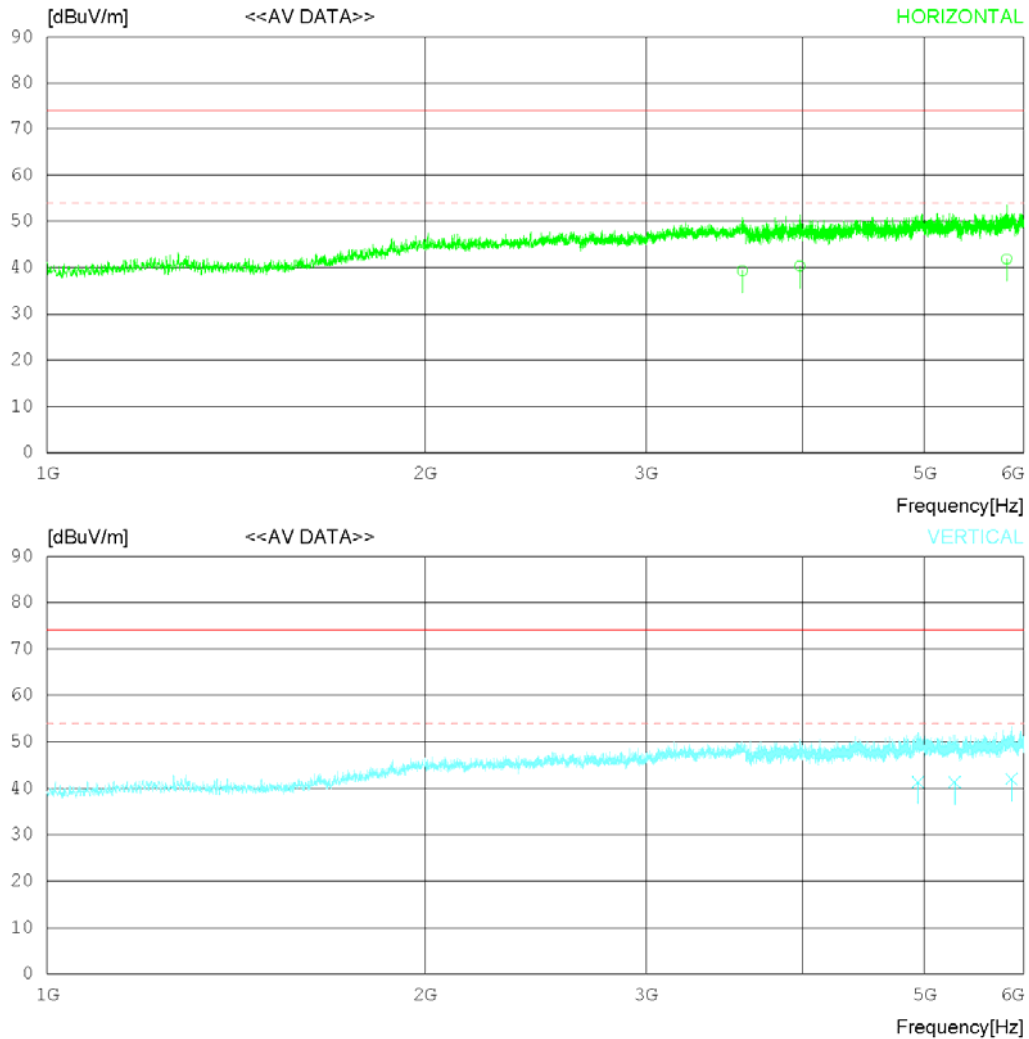
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition TOF Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition TOF Mode

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	3580.050	31.90	33.26	8.28	34.12	39.32	54.00	14.68	102	345
2	3978.285	31.70	33.30	8.91	33.57	40.34	54.00	13.66	104	66
3	5813.640	30.80	34.75	11.27	34.97	41.85	54.00	12.15	105	352
----- Vertical -----										
4	4942.352	31.30	34.18	10.68	34.78	41.38	54.00	12.62	101	0
5	5283.685	31.10	34.37	10.73	34.90	41.30	54.00	12.70	104	0
6	5863.620	30.80	34.93	11.27	34.98	42.02	54.00	11.98	105	95

Radiated disturbance at (6 ~ 18) GHz _Peak measurement data			
Test configuration mode	4	EUT Operation mode	4
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

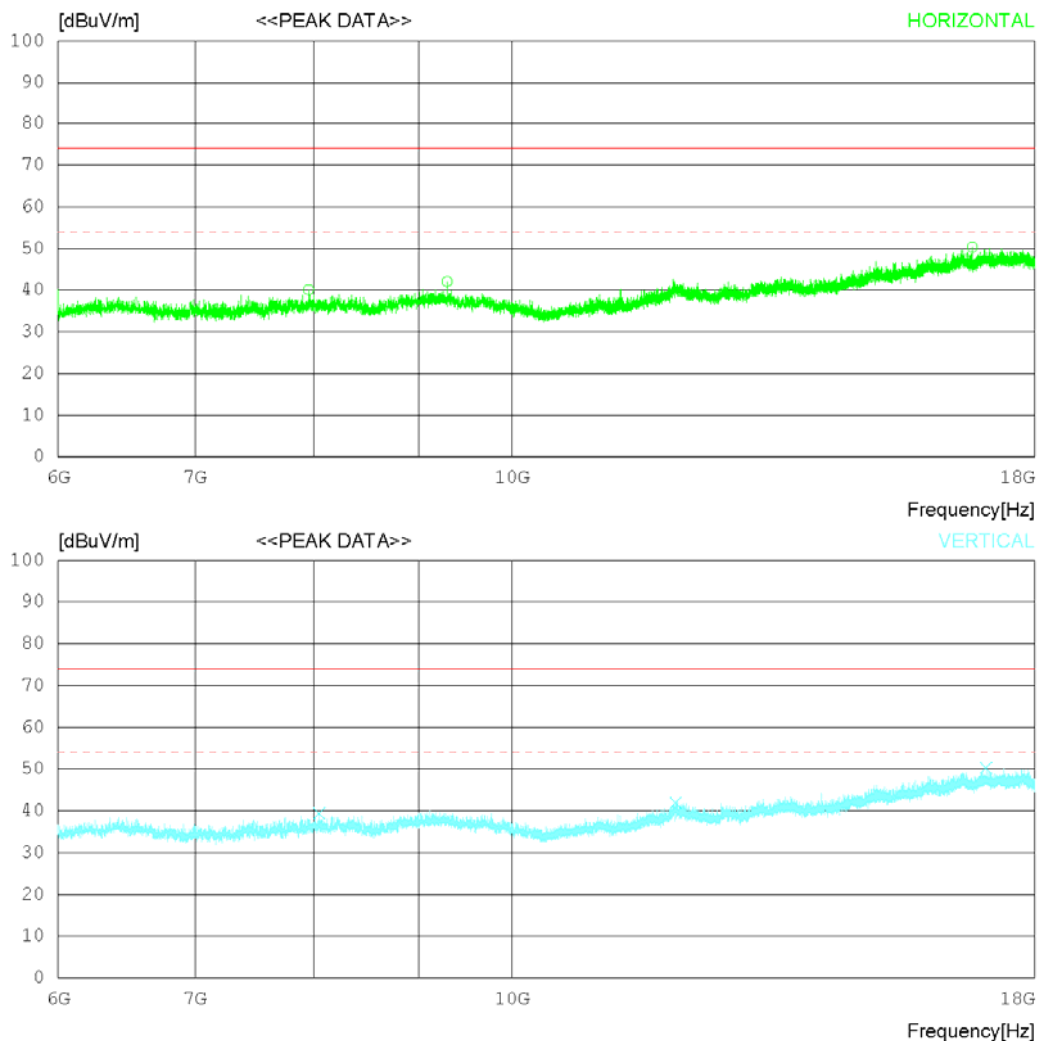
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition TOF Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition TOF Mode

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	7953.000	34.00	31.31	12.33	37.57	40.07	74.0	33.93	107	0
2	9293.250	33.60	32.23	13.95	37.73	42.05	74.0	31.95	105	5
3	16777.500	30.30	37.30	18.94	36.27	50.27	74.0	23.73	112	358
----- Vertical -----										
4	8048.250	33.20	31.34	12.36	37.47	39.43	74.0	34.57	106	0
5	12018.000	30.50	33.46	15.66	37.73	41.89	74.0	32.11	101	339
6	17040.000	29.10	37.58	20.01	36.45	50.24	74.0	23.76	100	358

Radiated disturbance at (6 ~ 18) GHz _Average measurement data			
Test configuration mode	4	EUT Operation mode	4
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

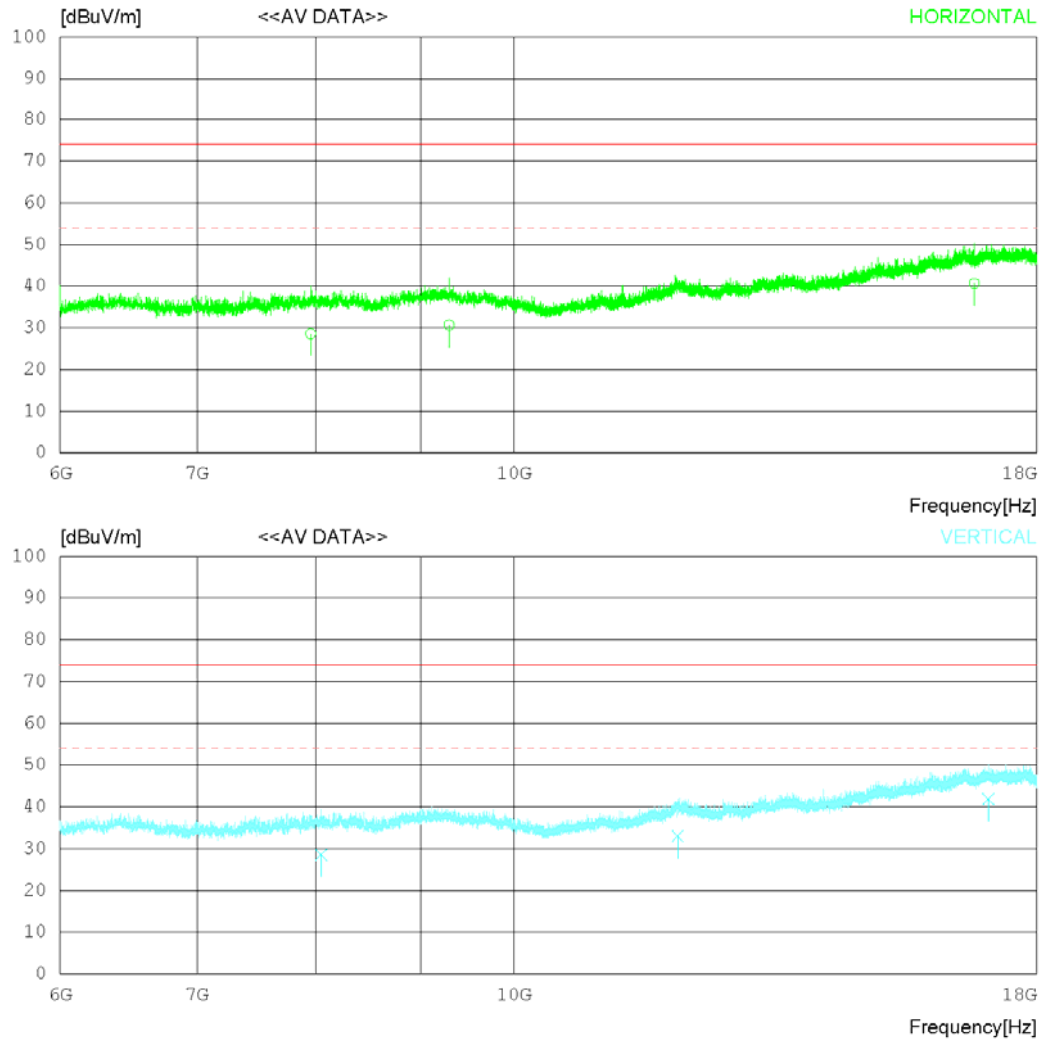
RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition TOF Mode

Memo

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



RADIATED EMISSION

Date 2020-01-14

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition TOF Mode

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	7953.210	22.50	31.31	12.33	37.57	28.57	54.00	25.43	102	0
2	9293.380	22.20	32.23	13.95	37.73	30.65	54.00	23.35	107	0
3	16777.450	20.70	37.30	18.94	36.27	40.67	54.00	13.33	108	352
----- Vertical -----										
4	8048.380	22.30	31.34	12.36	37.47	28.53	54.00	25.47	109	0
5	12018.110	21.60	33.46	15.66	37.73	32.99	54.00	21.01	104	342
6	17040.210	20.70	37.58	20.01	36.45	41.84	54.00	12.16	105	351

Radiated disturbance at (18 ~ 40) GHz _Peak measurement data			
Test configuration mode	4	EUT Operation mode	4
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

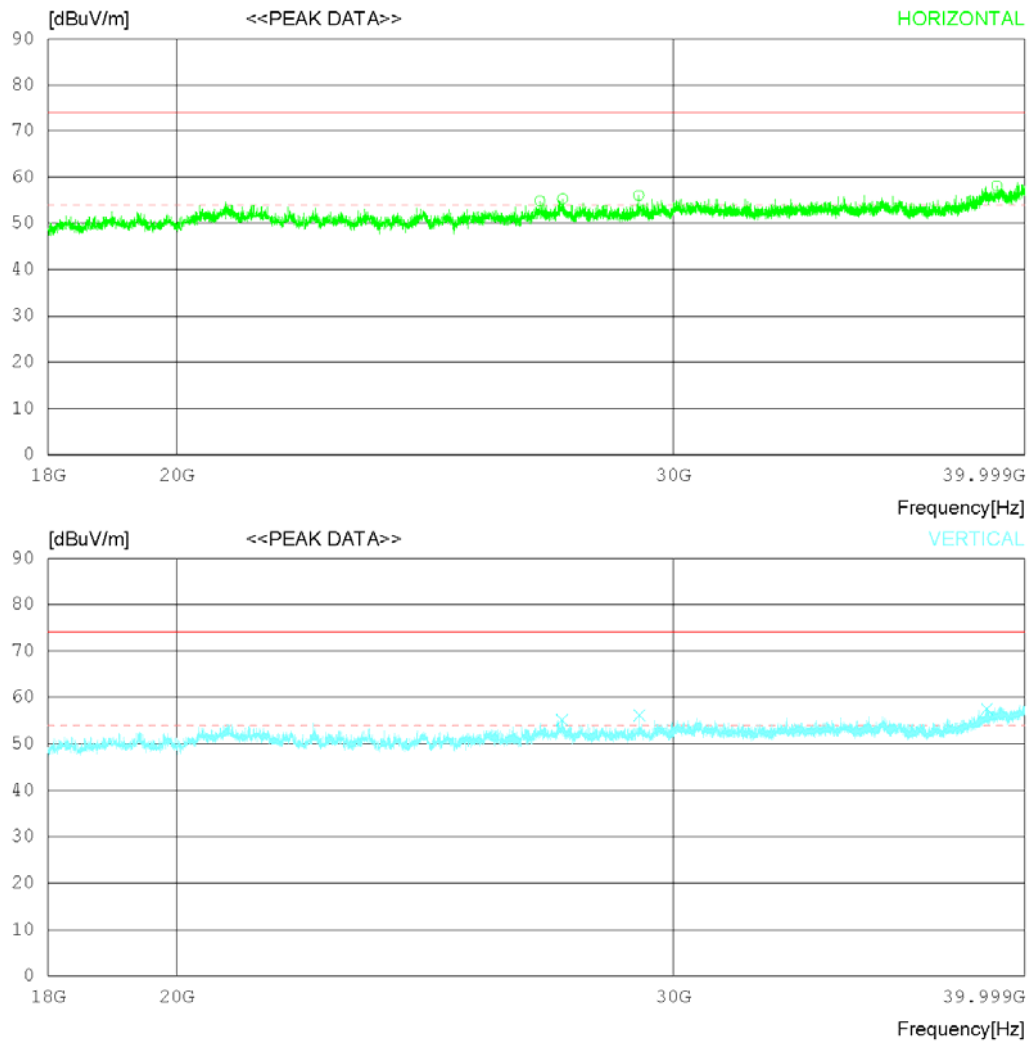
RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 43 % R.H.
Test Condition TOF Mode

Memo

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



RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 43 % R.H.
Test Condition TOF Mode

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	26910.000	41.00	45.90	21.12	53.20	54.82	74.0	19.18	126	0
2	27407.750	41.10	46.00	21.18	53.04	55.24	74.0	18.76	105	244
3	29170.500	39.70	46.97	21.84	52.47	56.04	74.0	17.96	102	0
4	39089.750	37.00	47.69	25.65	52.25	58.09	74.0	15.91	104	7
----- Vertical -----										
5	27405.000	41.00	46.00	21.18	53.04	55.14	74.0	18.86	108	358
6	29189.750	39.80	46.99	21.84	52.46	56.17	74.0	17.83	112	13
7	38779.000	37.00	47.28	25.52	52.26	57.54	74.0	16.46	106	358

Radiated disturbance at (18 ~ 40) GHz _Average measurement data			
Test configuration mode	4	EUT Operation mode	4
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

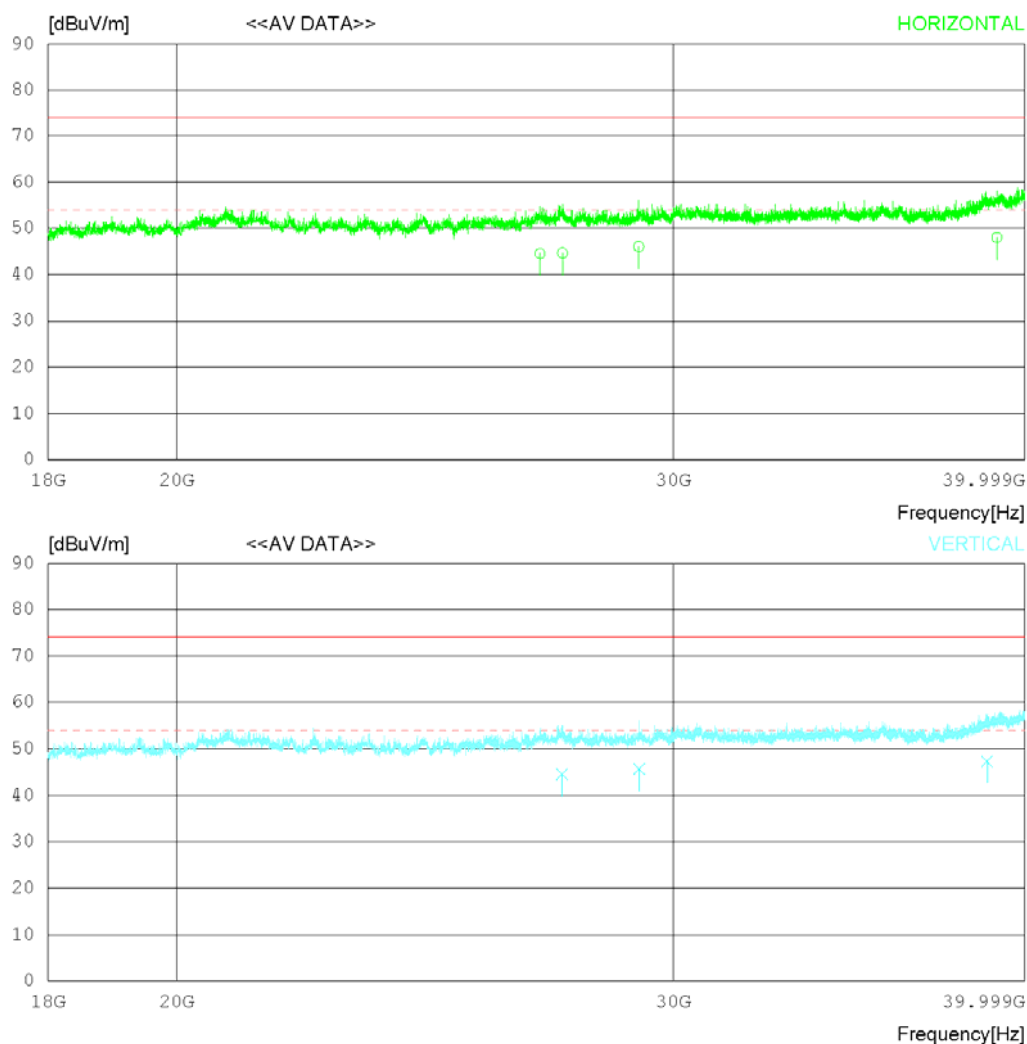
RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 43 % R.H.
Test Condition TOF Mode

Memo

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



RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 43 % R.H.
Test Condition TOF Mode

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	26910.28030.70		45.90	21.12	53.20	44.52	54.00	9.48	118	0
2	27407.66030.50		46.00	21.18	53.04	44.64	54.00	9.36	103	241
3	29170.43029.70		46.97	21.84	52.47	46.04	54.00	7.96	104	0
4	39089.86026.90		47.69	25.65	52.25	47.99	54.00	6.01	105	0
----- Vertical -----										
5	27405.07030.40		46.00	21.18	53.04	44.54	54.00	9.46	106	651
6	29189.88029.30		46.99	21.84	52.46	45.67	54.00	8.33	109	0
7	38779.13026.80		47.28	25.52	52.26	47.34	54.00	6.66	104	353

Radiated disturbance at (30 ~ 1000) MHz _Measurement data			
Test configuration mode	5	EUT Operation mode	5
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

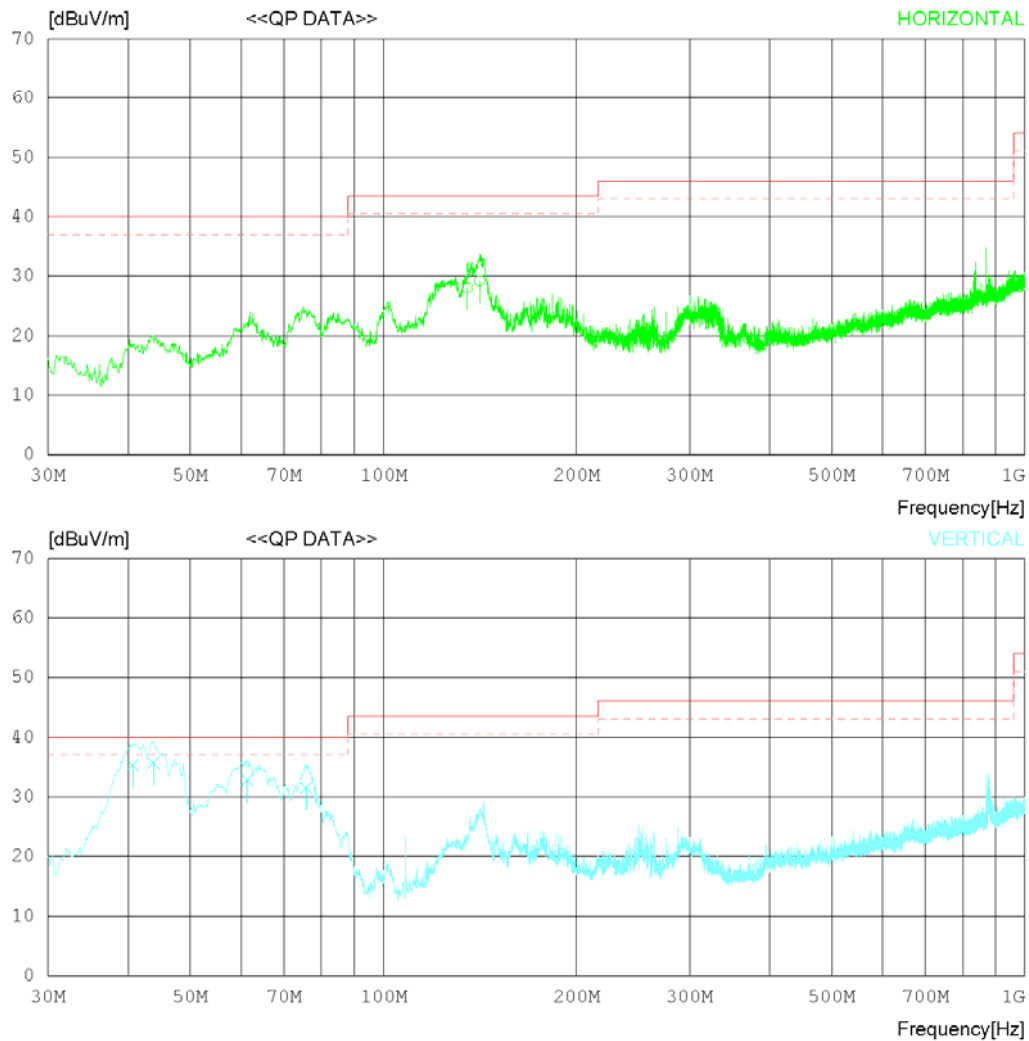
RADIATED EMISSION

Date 2020-01-16

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 19 °C 40 % R.H.
Test Condition TOF + Dual Screen Mode

Memo

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



RADIATED EMISSION

Date 2020-01-16

Order No.	DTNC2001-00112
Power Supply	120 VAC 60 Hz
Temp/Humi	19 °C 40 % R.H.
Test Condition	TOF + Dual Screen Mode

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	135.000	33.70	18.35	1.68	25.68	28.05	43.50	15.45	201	0
2	141.184	34.50	18.72	1.69	25.68	29.23	43.50	14.27	202	352
----- Vertical -----										
3	40.670	42.80	17.14	1.20	25.81	35.33	40.00	4.67	101	308
4	43.823	42.70	17.60	1.23	25.81	35.72	40.00	4.28	109	0
5	61.283	39.40	17.90	1.29	25.78	32.81	40.00	7.19	104	313
6	75.711	40.20	15.66	1.43	25.75	31.54	40.00	8.46	102	157

Radiated disturbance at (1 ~ 6) GHz _Peak measurement data			
Test configuration mode	5	EUT Operation mode	5
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

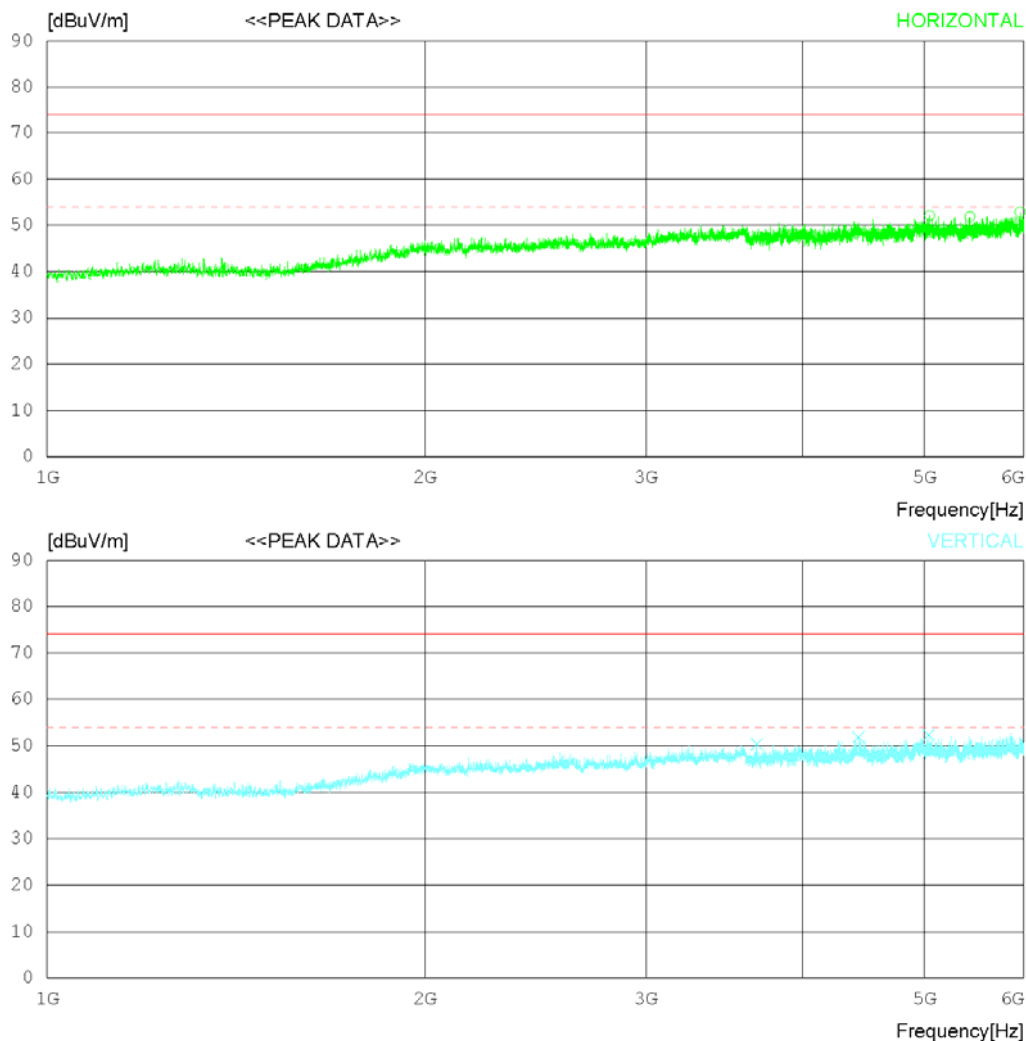
RADIATED EMISSION

Date 2020-01-17

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition TOF + Dual Screen Mode

Memo

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



RADIATED EMISSION

Date 2020-01-17

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition TOF + Dual Screen Mode

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	5046.250	42.10	34.19	10.72	34.87	52.14	74.0	21.86	109	22
2	5433.125	41.30	34.67	10.80	34.92	51.85	74.0	22.15	104	261
3	5958.750	41.40	35.10	11.30	34.99	52.81	74.0	21.19	111	354
----- Vertical -----										
4	3677.500	42.80	33.00	8.54	33.99	50.35	74.0	23.65	117	255
5	4432.500	42.20	33.87	9.86	34.11	51.82	74.0	22.18	106	0
6	5040.000	42.30	34.18	10.71	34.87	52.32	74.0	21.68	109	0

Radiated disturbance at (1 ~ 6) GHz _Average measurement data			
Test configuration mode	5	EUT Operation mode	5
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

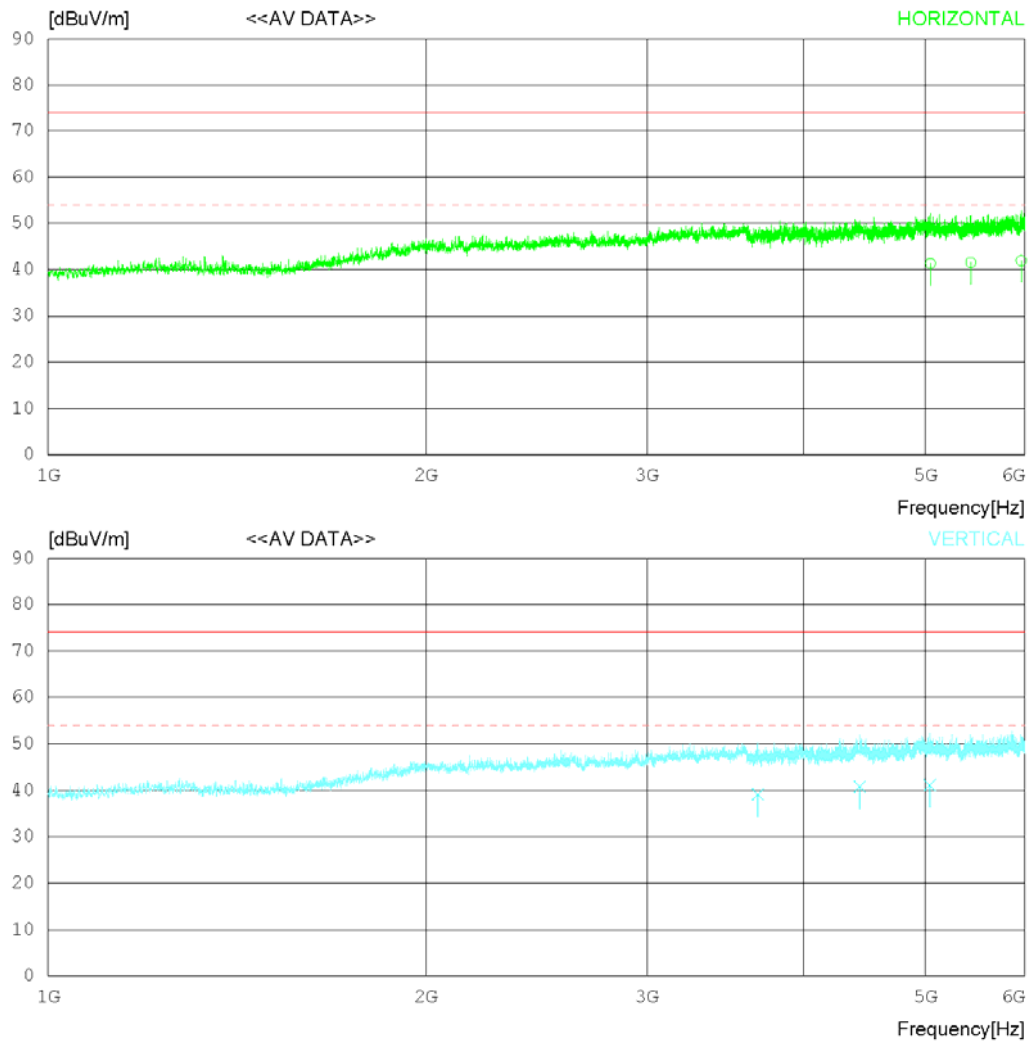
RADIATED EMISSION

Date 2020-01-17

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 % R.H.
Test Condition TOF + Dual Screen Mode

Memo

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



RADIATED EMISSION

Date 2020-01-17

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 20 °C 45 %R.H.
Test Condition TOF + Dual Screen Mode

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	5046.380	31.30	34.19	10.72	34.87	41.34	54.00	12.66	109	0
2	5433.235	31.00	34.67	10.80	34.92	41.55	54.00	12.45	104	279
3	5958.670	30.50	35.10	11.30	34.99	41.91	54.00	12.09	108	354
----- Vertical -----										
4	3677.420	31.50	33.00	8.54	33.99	39.05	54.00	14.95	115	263
5	4432.690	31.20	33.87	9.86	34.11	40.82	54.00	13.18	104	0
6	5040.040	31.10	34.18	10.71	34.87	41.12	54.00	12.88	108	0

Radiated disturbance at (6 ~ 18) GHz _Peak measurement data			
Test configuration mode	5	EUT Operation mode	5
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

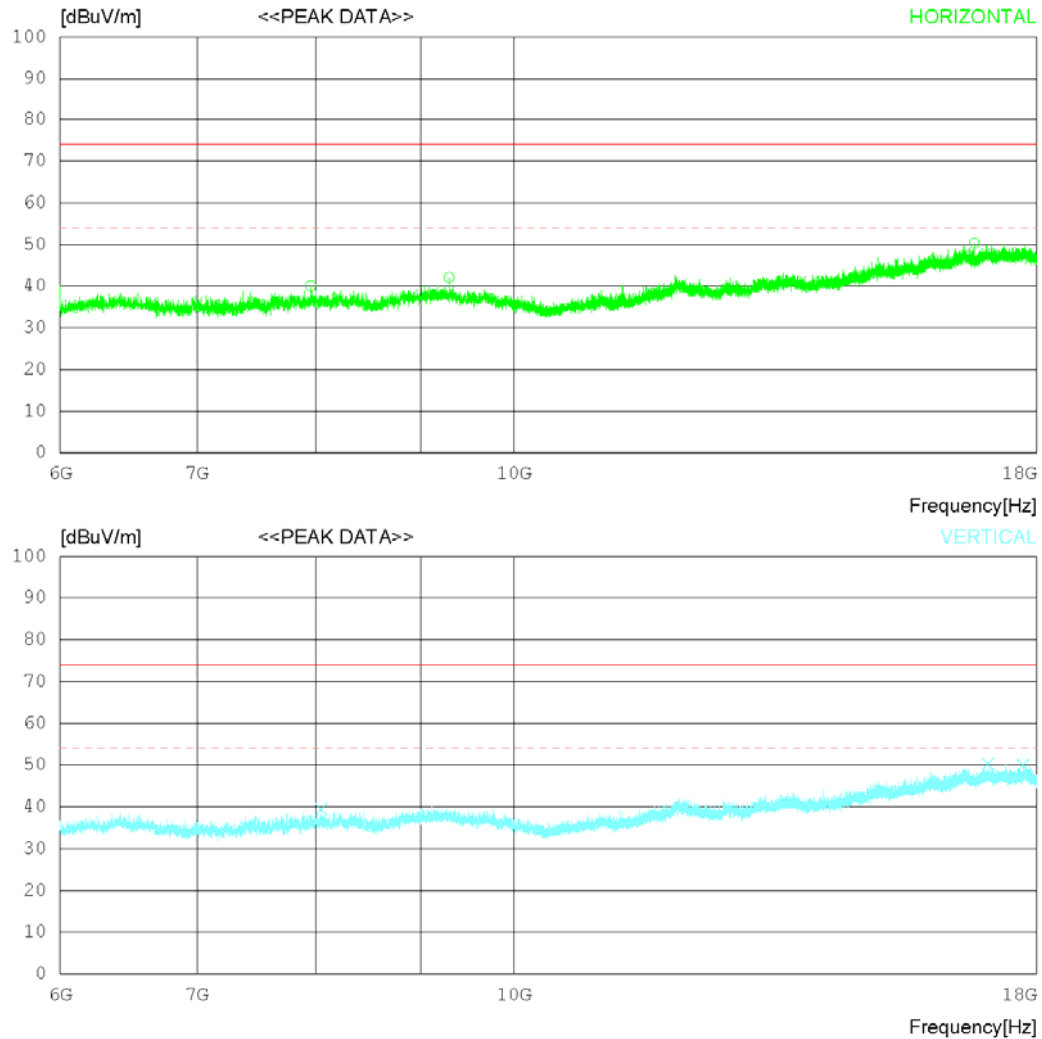
RADIATED EMISSION

Date 2020-01-17

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 21 °C 43 % R.H.
Test Condition TOF + Dual Screen Mode

Memo

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



RADIATED EMISSION

Date 2020-01-17

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 21 °C 43 %R.H.
Test Condition TOF + Dual Screen Mode

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	7953.000	34.00	31.31	12.33	37.57	40.07	74.0	33.93	107	0
2	9293.250	33.60	32.23	13.95	37.73	42.05	74.0	31.95	112	5
3	16777.500	30.30	37.30	18.94	36.27	50.27	74.0	23.73	106	358
----- Vertical -----										
4	8048.250	33.20	31.34	12.36	37.47	39.43	74.0	34.57	112	0
5	17040.000	29.10	37.58	20.01	36.45	50.24	74.0	23.76	107	358
6	17727.750	29.50	38.11	19.73	37.36	49.98	74.0	24.02	105	49

Radiated disturbance at (6 ~ 18) GHz _Average measurement data			
Test configuration mode	5	EUT Operation mode	5
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

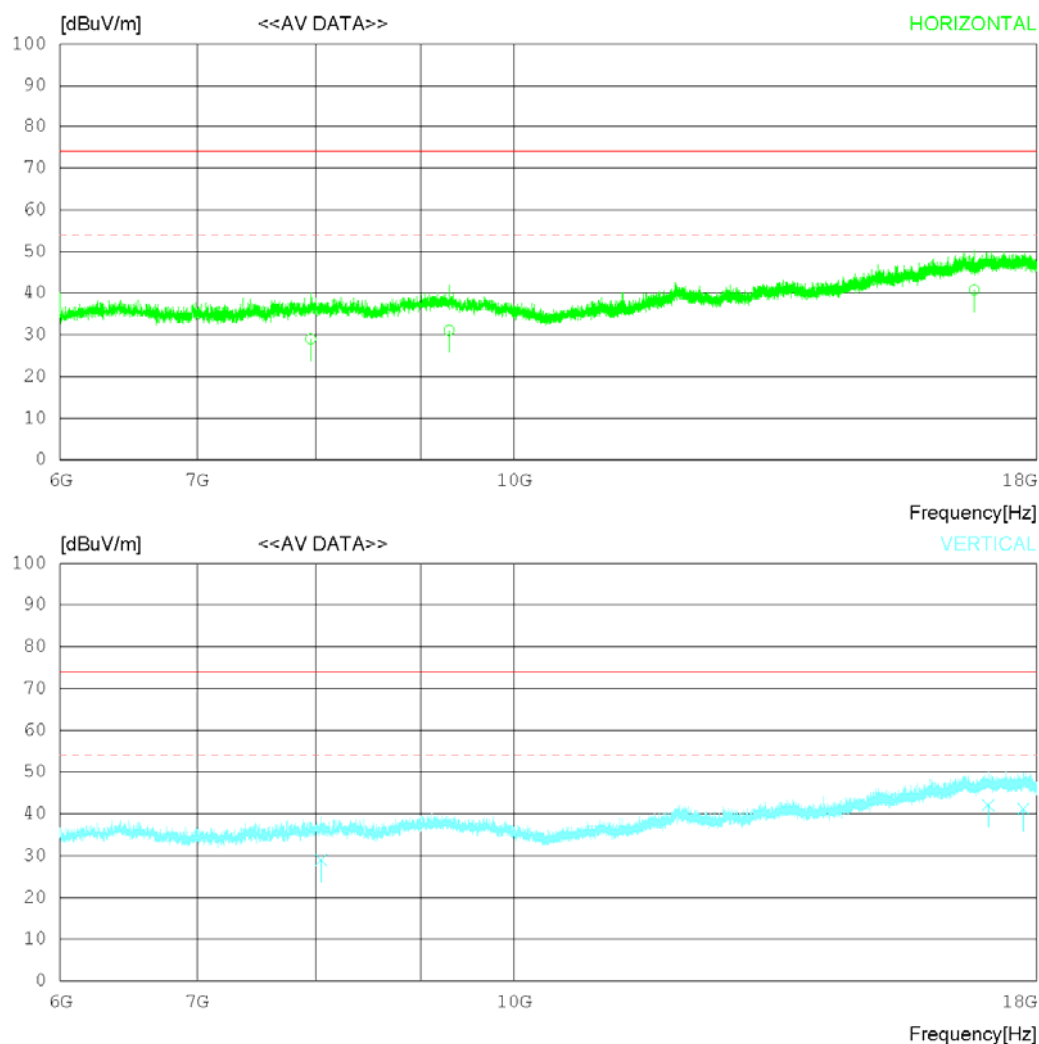
RADIATED EMISSION

Date 2020-01-17

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 21 °C 43 % R.H.
Test Condition TOF + Dual Screen Mode

Memo

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



RADIATED EMISSION

Date 2020-01-17

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 21 °C 43 %R.H.
Test Condition TOF + Dual Screen Mode

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	7953.140	22.90	31.31	12.33	37.57	28.97	54.00	25.03	105	0
2	9293.390	22.60	32.23	13.95	37.73	31.05	54.00	22.95	109	0
3	16777.260	20.80	37.30	18.94	36.27	40.77	54.00	13.23	107	351
----- Vertical -----										
4	8048.380	22.70	31.34	12.36	37.47	28.93	54.00	25.07	109	0
5	17040.110	20.90	37.58	20.01	36.45	42.04	54.00	11.96	104	352
6	17727.860	20.70	38.11	19.73	37.36	41.18	54.00	12.82	108	54

Radiated disturbance at (18 ~ 40) GHz _Peak measurement data			
Test configuration mode	5	EUT Operation mode	5
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

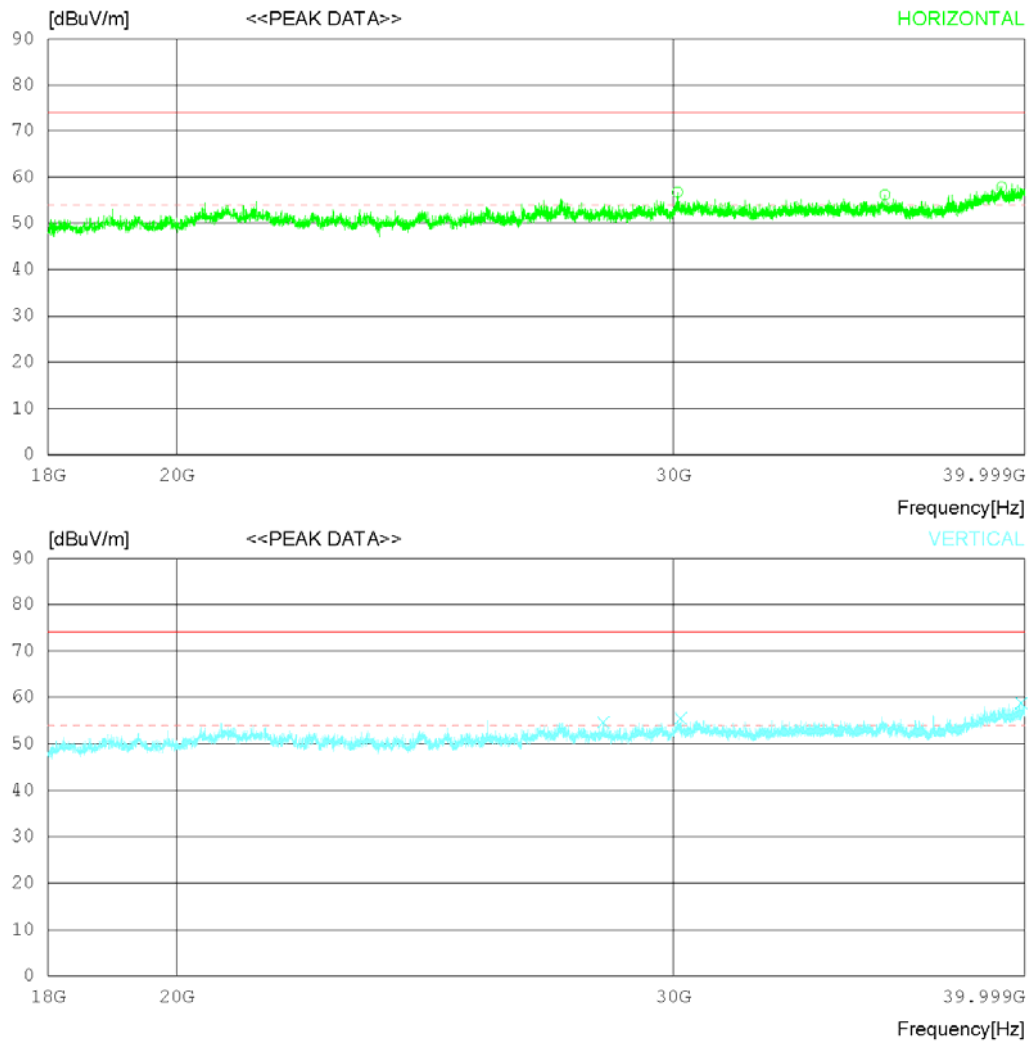
RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 43 % R.H.
Test Condition TOF + Dual Screen Mode

Memo

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



RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 43 % R.H.
Test Condition TOF + Dual Screen Mode

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	30113.750	39.50	47.50	21.94	52.21	56.73	74.0	17.27	112	315
2	35671.500	39.00	46.93	24.08	53.82	56.19	74.0	17.81	108	140
3	39243.750	36.70	47.94	25.43	52.24	57.83	74.0	16.17	100	41
----- Vertical -----										
4	28340.000	39.50	46.44	21.47	52.74	54.67	74.0	19.33	113	98
5	30190.750	38.20	47.50	21.99	52.21	55.48	74.0	18.52	107	329
6	39892.750	37.40	49.09	24.47	52.21	58.75	74.0	15.25	102	234

Radiated disturbance at (18 ~ 40) GHz _Average measurement data			
Test configuration mode	5	EUT Operation mode	5
Test voltage (V)	120	Test Frequency (Hz)	60
Travel Adaptor	Sunlin	Ear-Mic	Cresyn

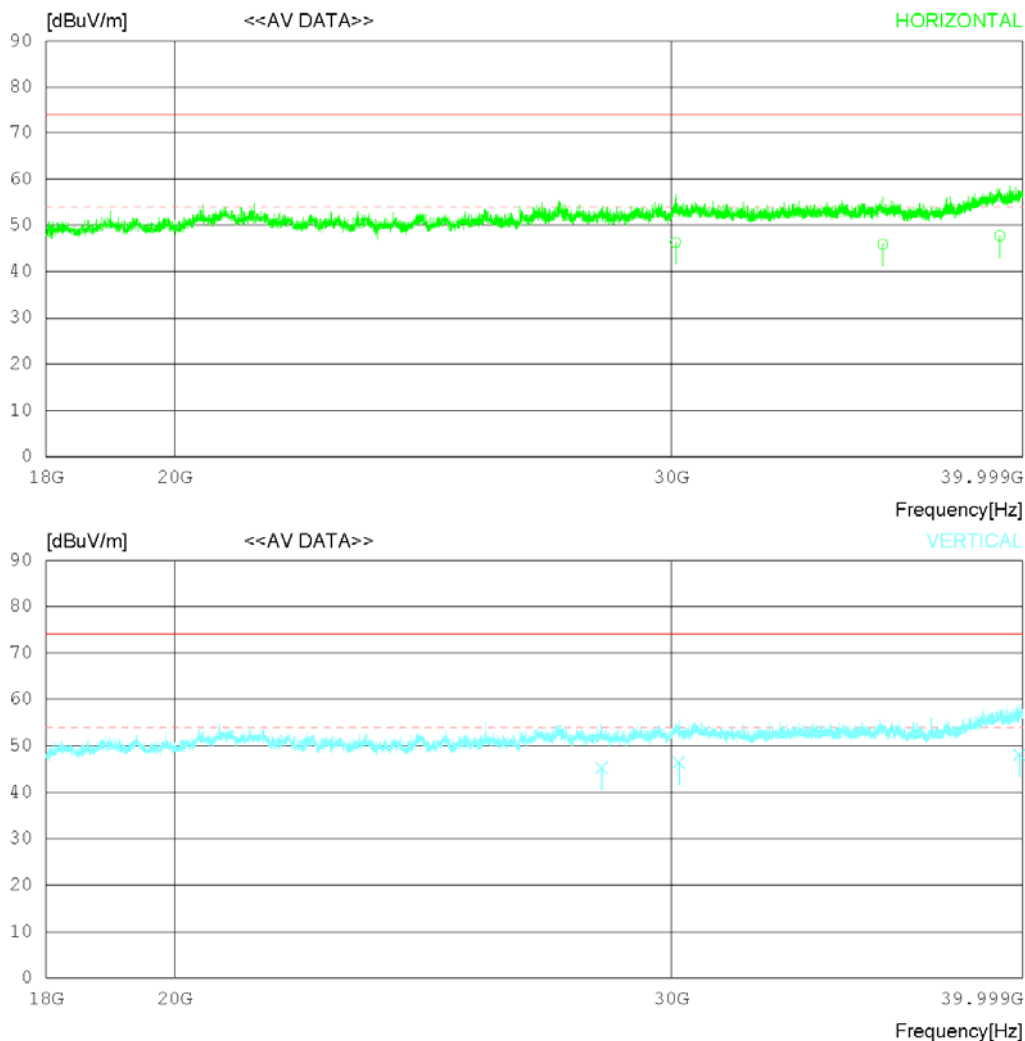
RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 43 % R.H.
Test Condition TOF + Dual Screen Mode

Memo

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



RADIATED EMISSION

Date 2020-01-18

Order No. DTNC2001-00112
Power Supply 120 VAC 60 Hz
Temp/Humi 22 °C 43 % R.H.
Test Condition TOF + Dual Screen Mode

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	30113.63029.10		47.50	21.94	52.21	46.33	54.00	7.67	109	328
2	35671.43028.70		46.93	24.08	53.82	45.89	54.00	8.11	107	152
3	39243.72026.60		47.94	25.43	52.24	47.73	54.00	6.27	101	55
----- Vertical -----										
4	28340.12030.10		46.44	21.47	52.74	45.27	54.00	8.73	109	96
5	30190.65029.10		47.50	21.99	52.21	46.38	54.00	7.62	105	335
6	39892.52026.70		49.09	24.47	52.21	48.05	54.00	5.95	104	341

Calculation

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

8. Revision History

Date	Description	Revised By	Reviewed By
Feb. 04. 2020	Initial report	ChanGeun Lee	KyoungHwan Bae
Feb. 10. 2020	- Added measurement uncertainty. (Refer to page 8 and 19.)	ChanGeun Lee	KyoungHwan Bae
Feb. 13. 2020	Updated Add model name	TaeHyun Choi	KyoungHwan Bae

-End of test report-