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. : DREFCC1912-0354

2. Client / Applicant

   • Name : Bluebird Inc.

   • Address : (Dogok-dong, SEI Tower 13,14)39, Eonjuro30-gil, Gangnam-gu, Seoul, South Korea

3. Use of Report : Grant of Certification

4. Product Name / Model Name : Smart Tablet Computer / ST102
   (FCC ID / IC ID : SS4ST102 / 22515-ST102)

5. Test Standard : CAN/CSA CISPR 22-10
   ICES-003 : 2016
   ANSI C63.4 : 2014
   FCC Part 15 Subpart B (personal computers and peripherals)

6. Date of Test : Aug. 31. 2019 ~ Sep. 07. 2019

7. Testing Environment : Temperature (22 ~ 23) °C , Humidity (52 ~ 55) % R.H.

8. Test Result : Refer to the attached Test Result

Affirmation	Tested by	Reviewed by
	Name : ChanGeun Lee (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. 27. 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	Bluebird Inc. (Dogok-dong, SEI Tower 13,14)39, Eonjuro30-gil, Gangnam-gu, Seoul, South Korea
Manufacturer	Bluebird Inc. (Dogok-dong, SEI Tower 13,14)39, Eonjuro30-gil, Gangnam-gu, Seoul, South Korea
Factory	Bluebird Inc. (SSang-young IT Twin tower-B 7~8F), 531, Dunchon-daero, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea
Product Name	Smart Tablet Computer
Model Name	ST102
Add Model Name	None
Add Model Difference	None
Software version	Windows 10 Enterprise LTSC 2019
Hardware version	2.0
Maximum Internal Frequency	1 580 MHz
FCC ID	SS4ST102
IC ID	22515-ST102
Rated Power	100-240V, 50/60Hz
Remarks	EUT Adapter - Model name : KSA29B0500200D5 - Manufacturer : Kuantech (Cambodia) Corporation Limited - Input : AC 100-240V, 50/60Hz, 0.5A - Output : DC 5V, 2A

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	Camera Front Mode	The EUT activates the front mounted camera to record images continuously.
2	Camera Rear mode	The EUT activates the Rear mounted camera to record images continuously.
3	MP4 Mode	EUT is in the state of playing MP4 files continuously.

4.3 Test Configuration Mode

No.	Mode	Description
1	Camera Front Mode	The EUT is connected to the adapter(EUT) Connect Micro SD Card to Micro SD Card Slot of EUT Connect headset to headset port of EUT Adapter(EUT) is connected to AC Main
2	Camera Rear mode	The EUT is connected to the adapter(EUT) Connect Micro SD Card to Micro SD Card Slot of EUT Connect headset to headset port of EUT Adapter(EUT) is connected to AC Main
3	MP4 Mode	The EUT is connected to the adapter(EUT) Connect Micro SD Card to Micro SD Card Slot of EUT Connect headset to headset port of EUT Adapter(EUT) is connected to AC Main

4.4 Supported Equipment

Used*	Product Type	Manufacturer	Model	Remarks
AE	Headset	SAMSUNG	SHS-150V/M	N/A
AE	Micro SD Card	N/A	N/A	N/A

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

4.5 EUT In/Output Port

Name	Type*	Cable Max. >3 m	Cable Shielded	Cable Back shell	Remarks
DC IN	DC	1.2	Non shield	Plastic	None
Stereo	I/O	1.8	Non shield	Plastic	None
Micro SD Card Slot	I/O	-	-	-	None

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

4.6 Test Voltage and Frequency

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

5. Test Summary

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

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

- Conducted Disturbance

Frequency [MHz]	Pol.	Result [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]
0349956	N	35.38	CAV	46.01	10.63

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]
39161.10	V	48.22	CAV	54.00	5.78

6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (℃)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2019-09-07	23	54	99.8
Radiated Disturbance	2019-08-31 2019-09-07	23 22	52 55	-

7. Test Results : Emission

7.1 Conducted Disturbance

CAN/CSA CISPR 22 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**	**1, 2, 3**
	EUT Operation mode	**1, 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 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	ESU	ROHDE&SCHWARZ	100538	2019.01.23	2020.01.23
TWO-LINE V-NETWORK	ENV216	ROHDE&SCHWARZ	101979	2018.12.06	2019.12.06
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)	**AC 120**	**Test Frequency (Hz)**	**60**

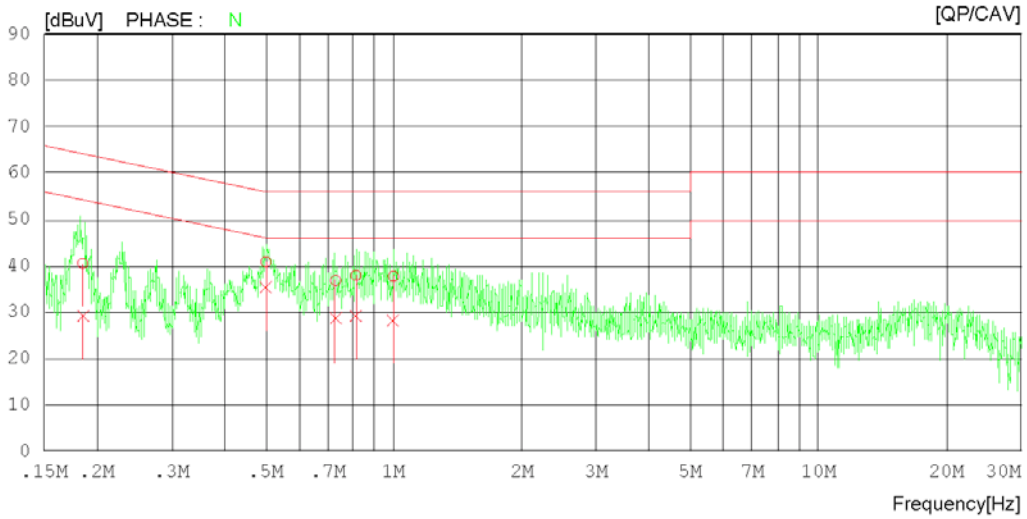
Results of Conducted Emission

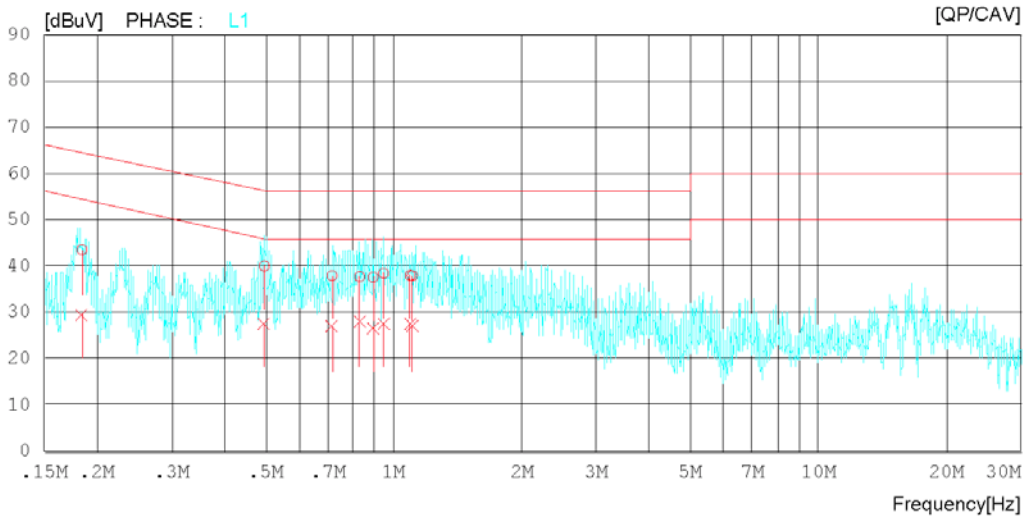
DT&C

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi/Atm	23 'C 54 %.R.H. 99.8 kPa
Test Condition	Camera Front Mode

LIMIT : CISPR32_B QP
CISPR32_B AV





Results of Conducted Emission

DT&C

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi/Atm	23 'C 54 %.R.H. 99.8 kPa
Test Condition	Camera Front Mode

LIMIT : CISPR32_B QP
CISPR32_B AV

NO	FREQ	READING		C.FACTOR	RESULT		LIMIT		MARGIN		PHASE
		QP	CAV		QP	CAV	QP	CAV	QP	CAV	
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.18494	20.53	9.17	20.03	40.56	29.20	64.26	54.26	23.70	25.06	N
2	0.49956	20.85	15.35	20.03	40.88	35.38	56.01	46.01	15.13	10.63	N
3	0.73028	16.83	8.67	20.02	36.85	28.69	56.00	46.00	19.15	17.31	N
4	0.81485	17.88	9.29	20.01	37.89	29.30	56.00	46.00	18.11	16.70	N
5	0.99837	17.82	8.35	19.92	37.74	28.27	56.00	46.00	18.26	17.73	N
6	0.18431	23.43	9.56	20.03	43.46	29.59	64.29	54.29	20.83	24.70	L1
7	0.49559	19.98	7.51	20.03	40.01	27.54	56.07	46.07	16.06	18.53	L1
8	0.71555	17.93	6.81	20.02	37.95	26.83	56.00	46.00	18.05	19.17	L1
9	0.83142	17.66	7.77	20.02	37.68	27.79	56.00	46.00	18.32	18.21	L1
10	0.89376	17.55	6.68	20.02	37.57	26.70	56.00	46.00	18.43	19.30	L1
11	0.94592	18.45	7.76	19.97	38.42	27.73	56.00	46.00	17.58	18.27	L1
12	1.09296	18.07	7.83	19.92	37.99	27.75	56.00	46.00	18.01	18.25	L1
13	1.10601	18.00	6.99	19.92	37.92	26.91	56.00	46.00	18.08	19.09	L1

Mains terminal disturbance voltage _Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

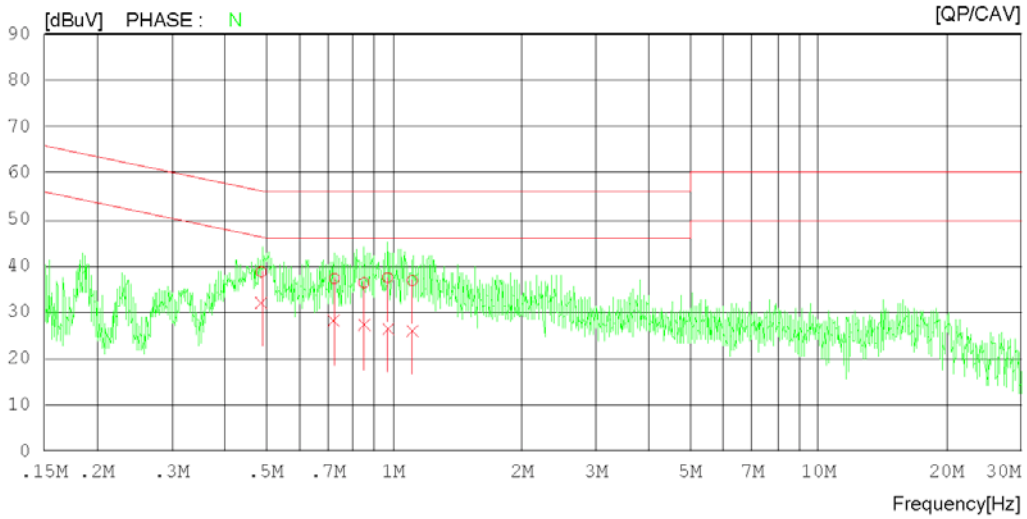
Results of Conducted Emission

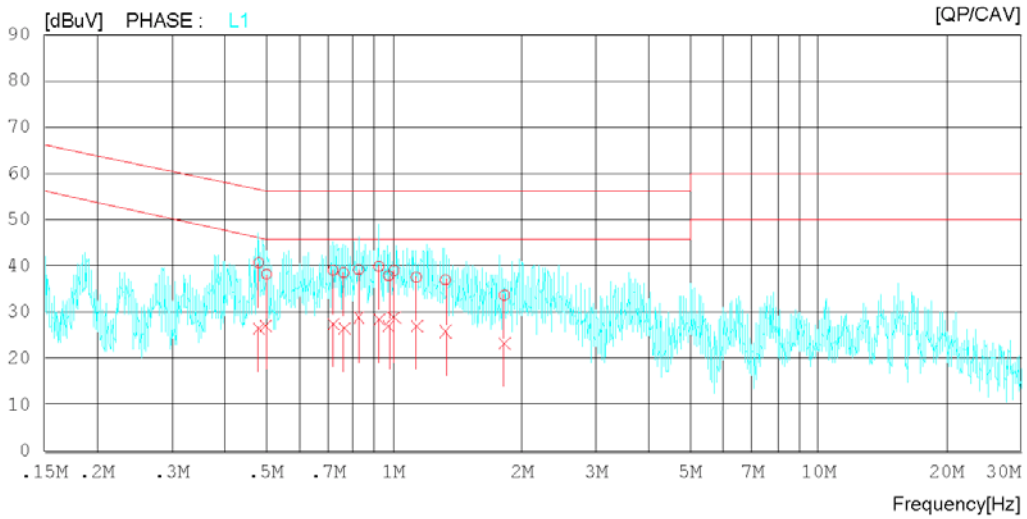
DT&C

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi/Atm	23 'C 54 %.R.H. 99.8 kPa
Test Condition	Camera Rear Mode

LIMIT : CISPR32_B QP
CISPR32_B AV





Results of Conducted Emission

DT&C

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi/Atm	23 'C 54 %.R.H. 99.8 kPa
Test Condition	Camera Rear Mode

LIMIT : CISPR32_B QP
CISPR32_B AV

NO	FREQ	READING		C.FACTOR	RESULT		LIMIT		MARGIN		PHASE
		QP	CAV		QP	CAV	QP	CAV	QP	CAV	
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.48702	18.65	12.03	20.03	38.68	32.06	56.22	46.22	17.54	14.16	N
2	0.72512	17.25	8.14	20.02	37.27	28.16	56.00	46.00	18.73	17.84	N
3	0.85005	16.37	7.10	19.97	36.34	27.07	56.00	46.00	19.66	18.93	N
4	0.96771	17.53	6.59	19.92	37.45	26.51	56.00	46.00	18.55	19.49	N
5	1.10646	16.93	6.17	19.92	36.85	26.09	56.00	46.00	19.15	19.91	N
6	0.48132	20.65	6.67	20.03	40.68	26.70	56.32	46.32	15.64	19.62	L1
7	0.50131	18.15	7.22	20.03	38.18	27.25	56.00	46.00	17.82	18.75	L1
8	0.71888	19.06	7.69	20.02	39.08	27.71	56.00	46.00	16.92	18.29	L1
9	0.76247	18.54	6.71	20.02	38.56	26.73	56.00	46.00	17.44	19.27	L1
10	0.82685	19.21	8.74	20.02	39.23	28.76	56.00	46.00	16.77	17.24	L1
11	0.92298	19.93	8.52	20.00	39.93	28.52	56.00	46.00	16.07	17.48	L1
12	0.97220	18.00	7.19	19.95	37.95	27.14	56.00	46.00	18.05	18.86	L1
13	1.00105	19.07	8.80	19.92	38.99	28.72	56.00	46.00	17.01	17.28	L1
14	1.12964	17.63	7.17	19.92	37.55	27.09	56.00	46.00	18.45	18.91	L1
15	1.32363	17.07	5.94	19.92	36.99	25.86	56.00	46.00	19.01	20.14	L1
16	1.82251	13.81	3.42	19.92	33.73	23.34	56.00	46.00	22.27	22.66	L1

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

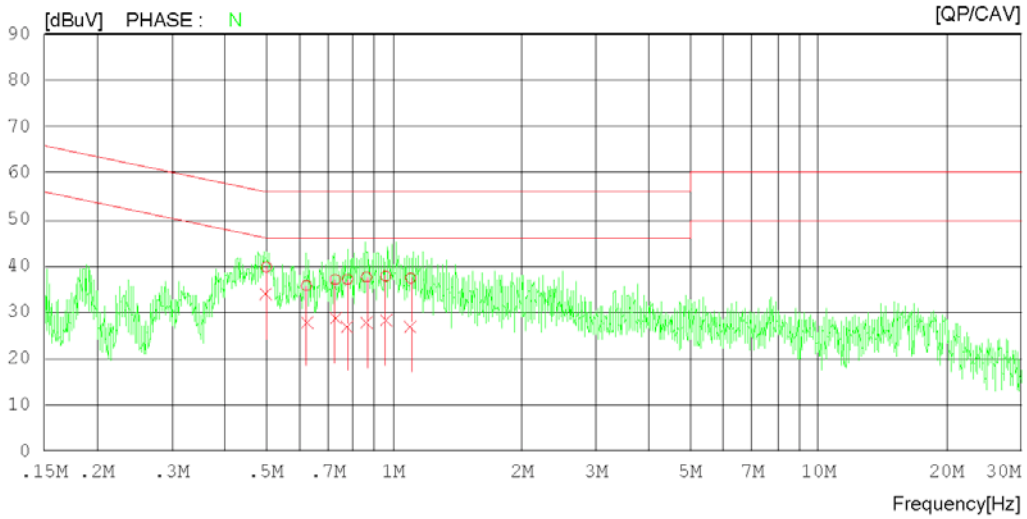
Results of Conducted Emission

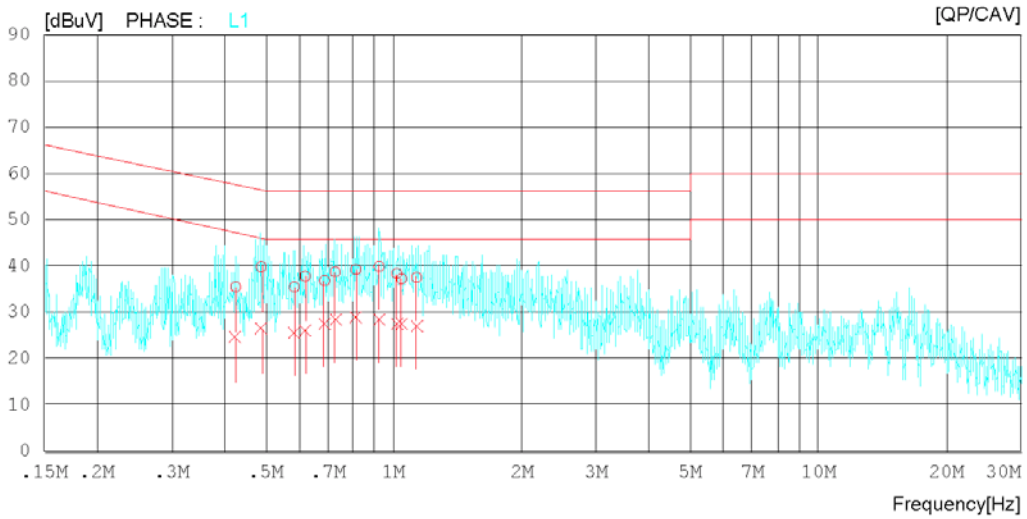
DT&C

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi/Atm	23 'C 54 %.R.H. 99.8 kPa
Test Condition	MP4 Mode

LIMIT : CISPR32_B QP
CISPR32_B AV





Results of Conducted Emission

DT&C

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi/Atm	23 'C 54 %.R.H. 99.8 kPa
Test Condition	MP4 Mode

LIMIT : CISPR32_B QP
CISPR32_B AV

NO	FREQ	READING		C.FACTOR	RESULT		LIMIT		MARGIN		PHASE
		QP	CAV		QP	CAV	QP	CAV	QP	CAV	
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.50120	19.69	13.73	20.03	39.72	33.76	56.00	46.00	16.28	12.24	N
2	0.62270	15.61	7.81	20.06	35.67	27.87	56.00	46.00	20.33	18.13	N
3	0.72835	17.01	8.56	20.02	37.03	28.58	56.00	46.00	18.97	17.42	N
4	0.77806	17.12	6.87	20.02	37.14	26.89	56.00	46.00	18.86	19.11	N
5	0.86239	17.59	7.77	19.96	37.55	27.73	56.00	46.00	18.45	18.27	N
6	0.95712	17.80	8.26	19.92	37.72	28.18	56.00	46.00	18.28	17.82	N
7	1.09601	17.43	6.70	19.92	37.35	26.62	56.00	46.00	18.65	19.38	N
8	0.42442	15.45	4.51	20.03	35.48	24.54	57.36	47.36	21.88	22.82	L1
9	0.48704	19.81	6.49	20.03	39.84	26.52	56.22	46.22	16.38	19.70	L1
10	0.58306	15.40	5.73	20.07	35.47	25.80	56.00	46.00	20.53	20.20	L1
11	0.61821	17.72	6.18	20.06	37.78	26.24	56.00	46.00	18.22	19.76	L1
12	0.68751	16.81	7.53	20.02	36.83	27.55	56.00	46.00	19.17	18.45	L1
13	0.72799	18.69	8.49	20.02	38.71	28.51	56.00	46.00	17.29	17.49	L1
14	0.81532	19.21	8.94	20.02	39.23	28.96	56.00	46.00	16.77	17.04	L1
15	0.92329	19.90	8.53	20.00	39.90	28.53	56.00	46.00	16.10	17.47	L1
16	1.01610	18.45	7.80	19.92	38.37	27.72	56.00	46.00	17.63	18.28	L1
17	1.04254	17.32	7.71	19.92	37.24	27.63	56.00	46.00	18.76	18.37	L1
18	1.13168	17.60	7.15	19.92	37.52	27.07	56.00	46.00	18.48	18.93	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

CAN/CSA CISPR 22 ANSI C63.4	Radiated disturbance 30 MHz –30 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		**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 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 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	2018.12.18	2019.12.18
TRILOG BROADBAND TEST-ANTENNA	VULB9160	SCHWARZBECK	9160-3339	2018.10.22	2020.10.22
WITH 6DB ATT	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
PREAMPLIFIER	8449B	H.P	3008A00887	2019.08.26	2020.08.26
HORN ANTENNA	3117	ETS-LINDGREN	00152093	2018.03.26	2020.03.26
HORN ANTENNA	EM-6969	ELECTRO-METRICS	156	2019.02.13	2021.02.13
PREAMPLIFIER	MLA-0618-B03-34	TSJ	1785642	2019.01.02	2020.01.02
HORN ANTENNA	3116C	ETS-LINDGREN	00213177	2017.12.05	2019.12.05
PREAMPLIFIER	JS44-18004000-35-8P	L3 NARDA-MITEQ	2046884	2018.11.09	2019.11.09
(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)	**AC 120**	**Test Frequency (Hz)**	**60**

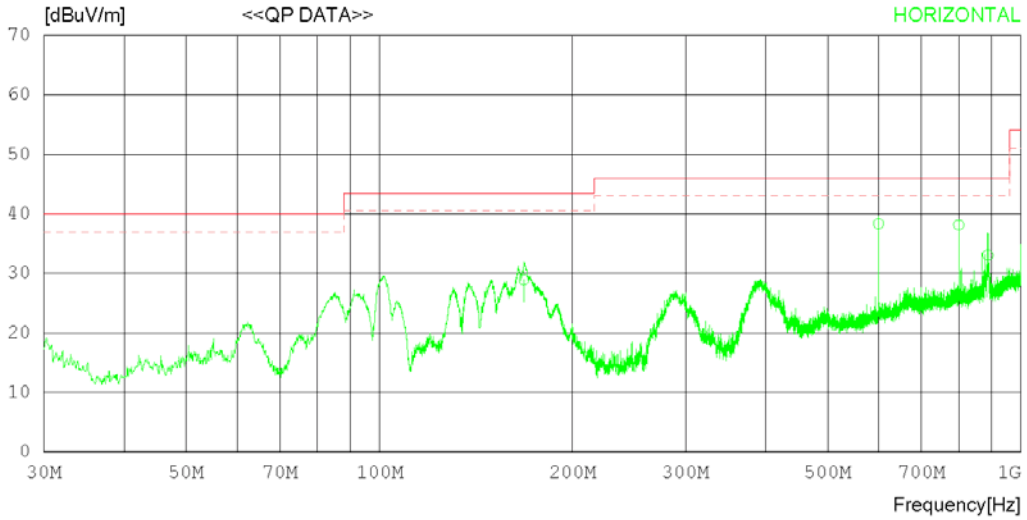
RADIATED EMISSION

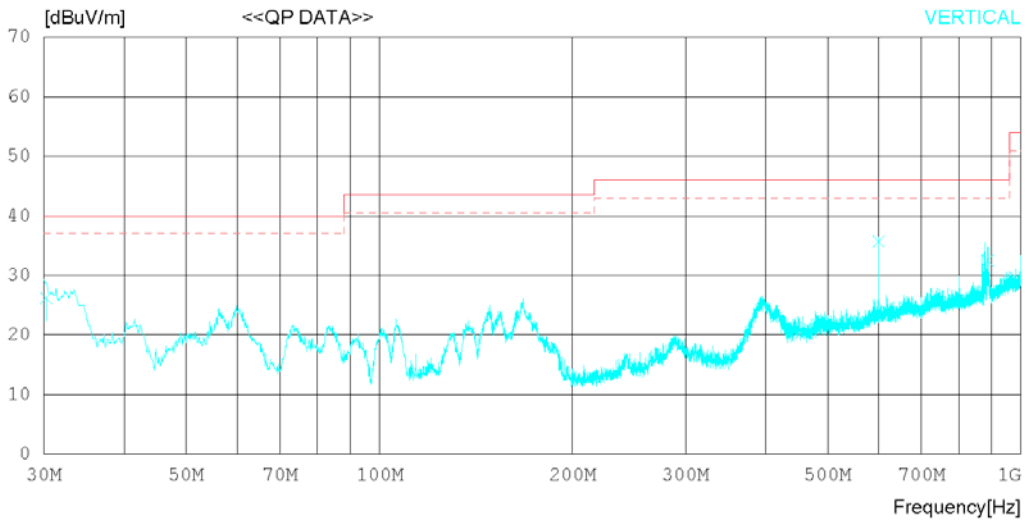
Date 2019-08-31

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 23'C 52 %.R.H.
Test Condition Front Camera Mode

Memo

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





RADIATED EMISSION

Date 2019-08-31

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 23'C 52 %.R.H.
Test Condition Front 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	167.979	34.50	18.26	1.80	25.64	28.92	43.50	14.58	195	357
2	600.002	34.80	25.90	3.10	25.49	38.31	46.00	7.69	238	0
3	799.988	32.30	28.20	3.43	25.79	38.14	46.00	7.86	201	0
4	888.156	26.10	29.26	3.50	25.82	33.04	46.00	12.96	205	0
----- Vertical ------										
5	30.243	34.70	16.23	1.09	25.82	26.20	40.00	13.80	108	294
6	600.002	32.20	25.90	3.10	25.49	35.71	46.00	10.29	101	15
7	888.156	25.60	29.26	3.50	25.82	32.54	46.00	13.46	102	354

Radiated disturbance at (1 ~ 6) GHz _Peak Measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

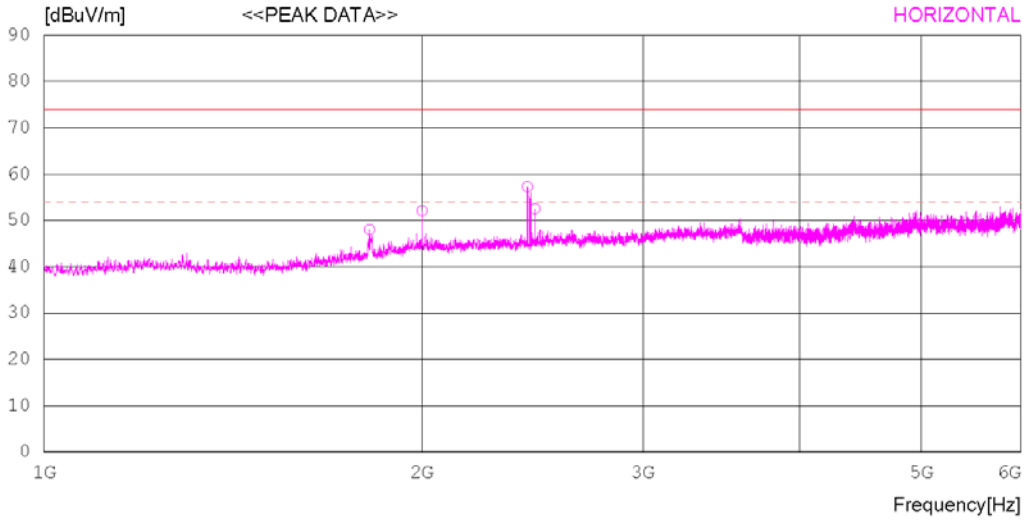
RADIATED EMISSION

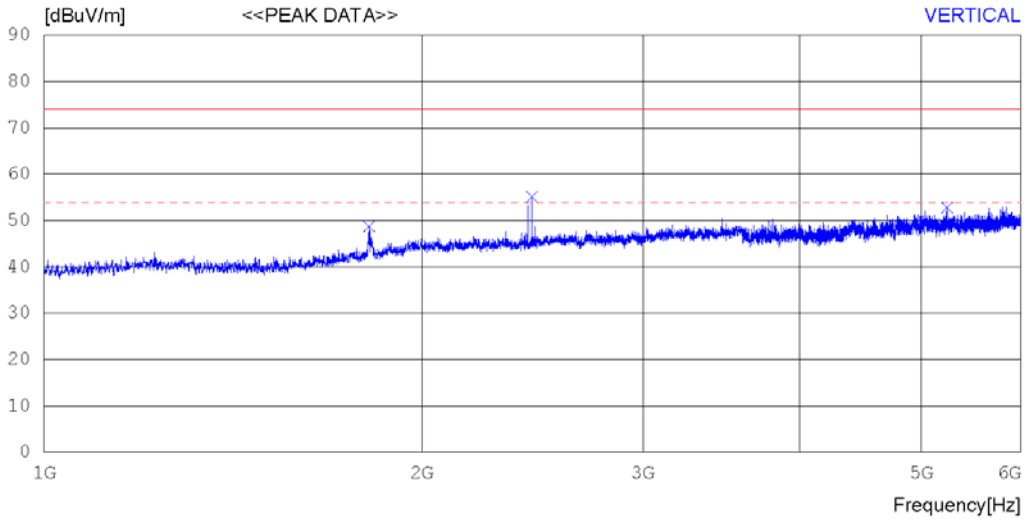
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 %.R.H.
Test Condition Camera Front Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 %.R.H.
Test Condition	Camera Front 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	1816.250	46.90	30.47	5.68	35.01	48.04	74.0	25.96	108	161
2	2000.000	49.20	31.60	6.11	34.82	52.09	74.0	21.91	112	1
3	2426.875	53.50	31.96	6.67	34.83	57.30	74.0	16.7	106	78
4	2460.000	48.50	32.14	6.70	34.83	52.51	74.0	21.49	101	1
----- Vertical ------										
5	1816.250	47.60	30.47	5.68	35.01	48.74	74.0	25.26	108	40
6	2446.875	51.20	32.08	6.69	34.83	55.14	74.0	18.86	116	358
7	5237.500	42.50	34.28	10.71	34.67	52.82	74.0	21.18	109	152

Radiated disturbance at (1 ~ 6) GHz _Average Measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

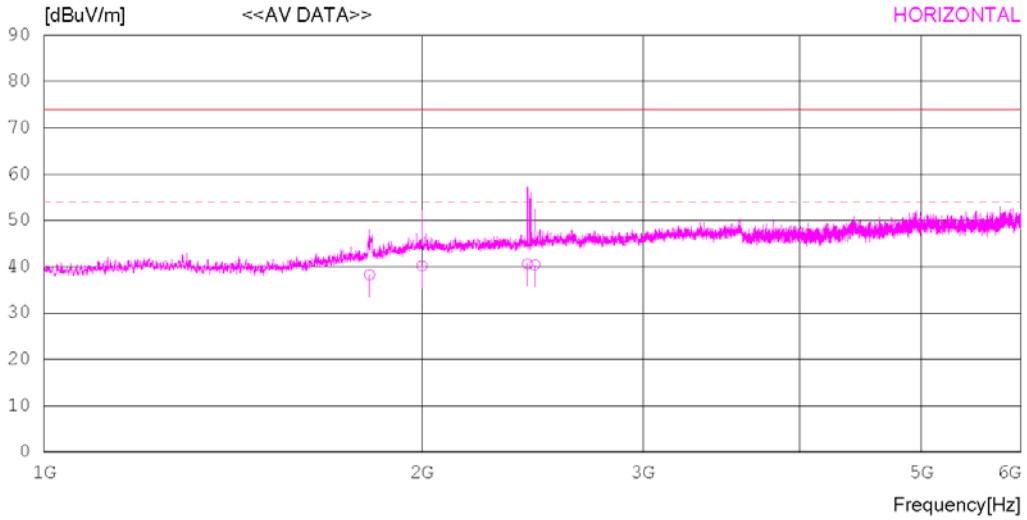
RADIATED EMISSION

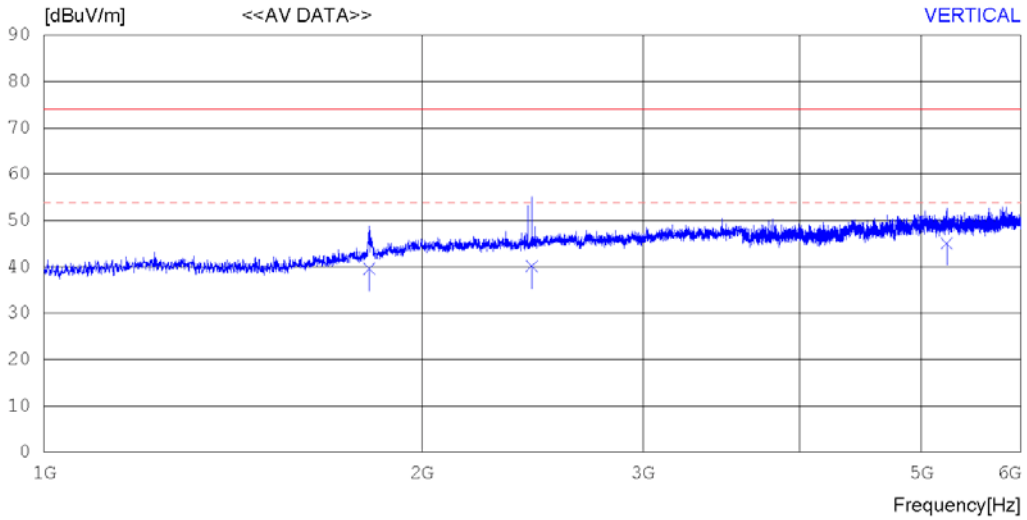
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 %.R.H.
Test Condition Camera Front Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 %.R.H.
Test Condition	Camera Front 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	1816.380	37.10	30.47	5.68	35.01	38.24	54.00	15.76	107	184
2	2000.010	37.30	31.60	6.11	34.82	40.19	54.00	13.81	111	0
3	2426.751	36.80	31.96	6.67	34.83	40.60	54.00	13.40	106	95
4	2460.380	36.40	32.14	6.70	34.83	40.41	54.00	13.59	101	0
----- Vertical ------										
5	1816.450	38.50	30.47	5.68	35.01	39.64	54.00	14.36	107	59
6	2446.915	36.20	32.08	6.69	34.83	40.14	54.00	13.86	115	351
7	5237.310	34.80	34.27	10.71	34.67	45.11	54.00	8.89	109	188

Radiated disturbance at (6 ~ 18) GHz _Peak Measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

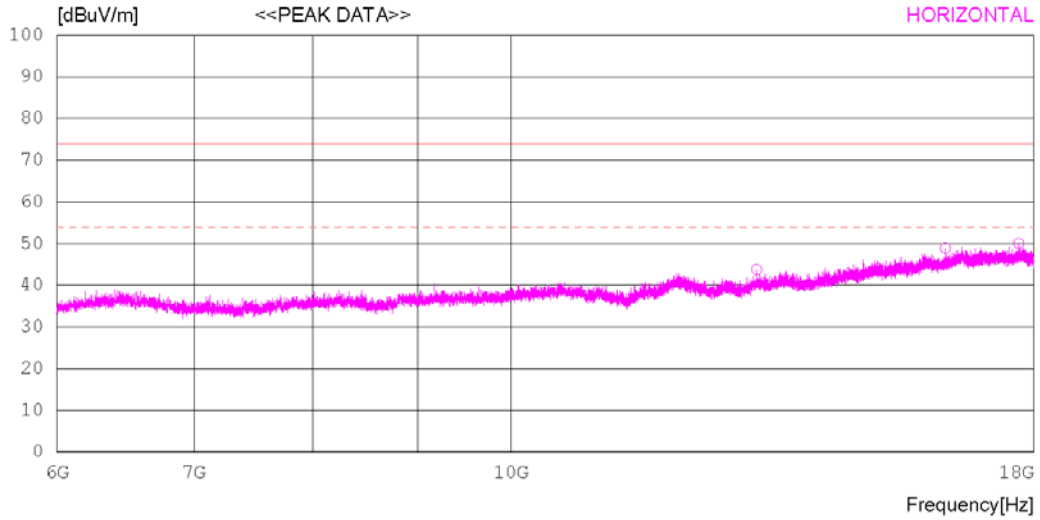
RADIATED EMISSION

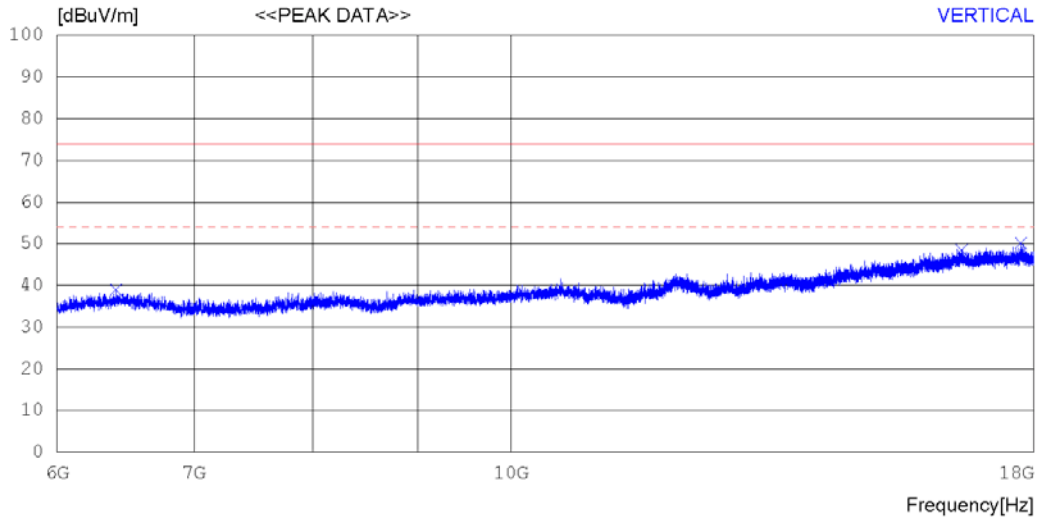
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 %.R.H.
Test Condition Camera Front Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 %.R.H.
Test Condition	Camera Front 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	13179.750	31.50	33.61	16.72	38.07	43.76	74.0	30.24	113	355
2	16294.500	30.00	36.75	18.92	36.80	48.87	74.0	25.13	111	1
3	17694.750	30.20	38.08	19.73	37.95	50.06	74.0	23.94	107	1
----- Vertical ------										
4	6412.500	34.80	31.61	11.18	38.63	38.96	74.0	35.04	105	249
5	16597.500	28.20	37.10	20.08	36.90	48.48	74.0	25.52	113	1
6	17736.750	30.30	38.12	19.72	38.01	50.13	74.0	23.87	106	1

Radiated disturbance at (6 ~18) GHz _Average Measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

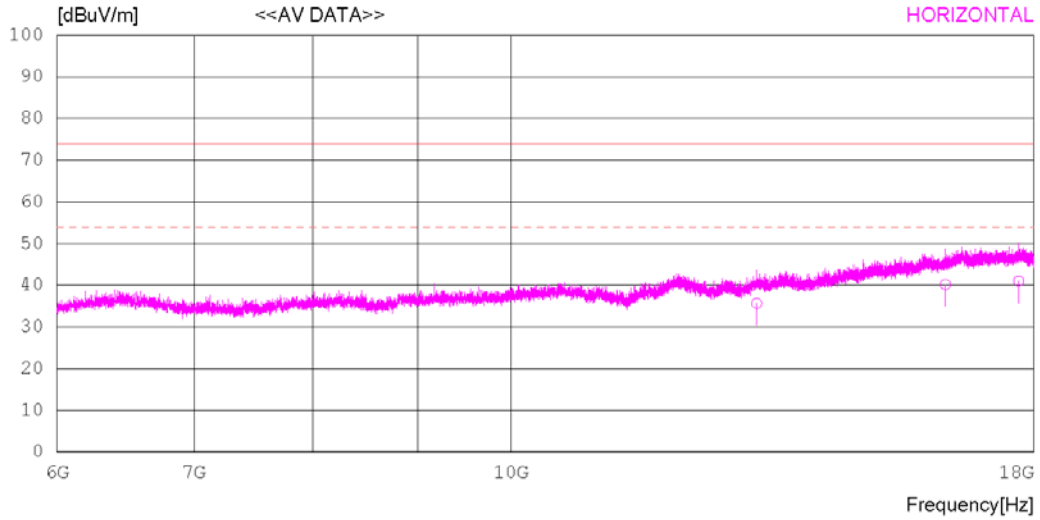
RADIATED EMISSION

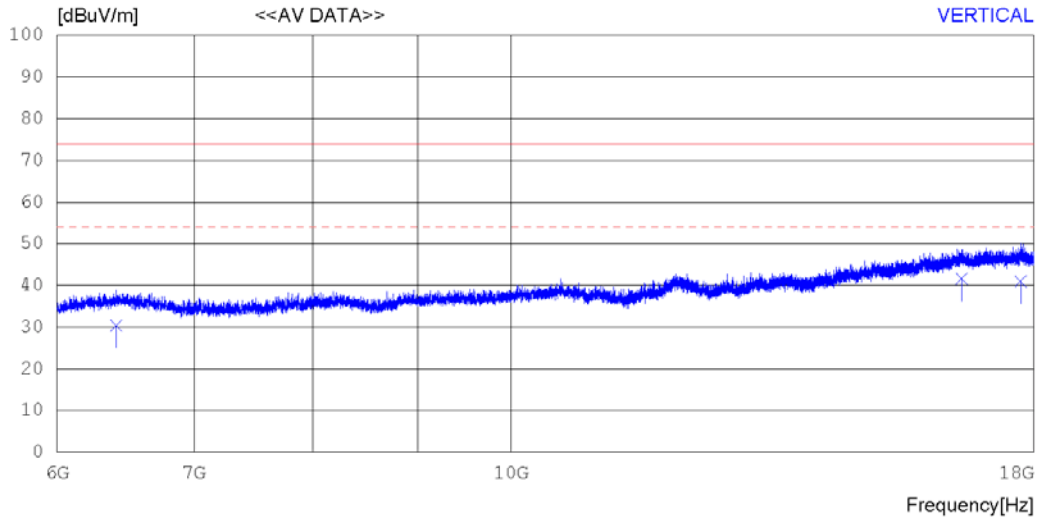
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 %.R.H.
Test Condition Camera Front Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 %.R.H.
Test Condition	Camera Front 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	13179.610	23.40	33.61	16.72	38.07	35.66	54.00	18.34	112	351
2	16294.690	21.30	36.75	18.92	36.80	40.17	54.00	13.83	109	0
3	17694.440	21.20	38.08	19.73	37.95	41.06	54.00	12.94	104	0
----- Vertical ------										
4	6412.680	26.20	31.61	11.18	38.63	30.36	54.00	23.64	103	221
5	16597.410	21.30	37.10	20.08	36.90	41.58	54.00	12.42	114	0
6	17736.340	21.20	38.12	19.72	38.01	41.03	54.00	12.97	105	0

Radiated disturbance at (18 ~ 40) GHz _Peak Measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

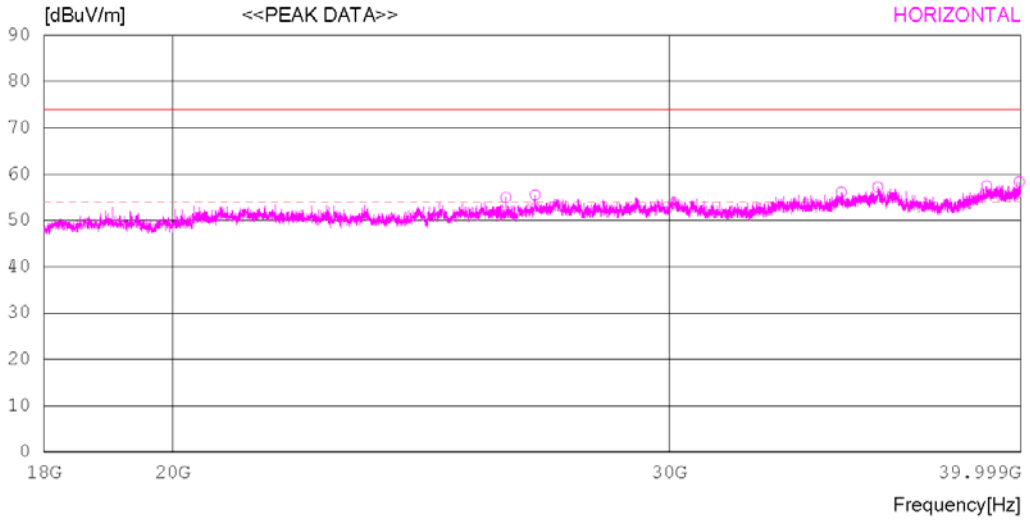
RADIATED EMISSION

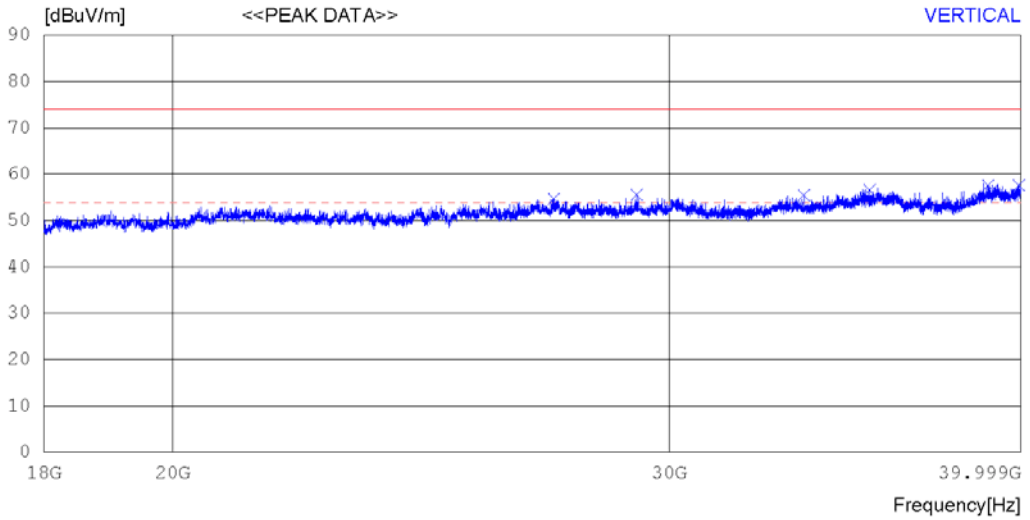
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 % R.H.
Test Condition Camera Front Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 % R.H.
Test Condition	Camera Front 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	26252.750	41.50	46.61	21.13	54.26	54.98	74.0	19.02	106	10
2	26893.500	41.70	46.82	21.12	54.14	55.50	74.0	18.5	108	136
3	34538.500	37.80	48.53	24.15	54.43	56.05	74.0	17.95	109	1
4	35586.250	39.00	48.66	24.06	54.48	57.24	74.0	16.76	112	1
5	38894.500	37.10	47.91	25.66	53.22	57.45	74.0	16.55	106	1
6	39945.000	37.80	48.67	24.39	52.54	58.32	74.0	15.68	107	1
----- Vertical ------										
7	27306.000	40.70	46.84	21.16	54.07	54.63	74.0	19.37	113	191
8	29222.750	39.90	47.56	21.85	53.74	55.57	74.0	18.43	107	355
9	33504.500	37.50	48.29	23.88	54.20	55.47	74.0	18.53	112	113
10	35349.750	38.30	48.76	24.05	54.47	56.64	74.0	17.36	110	113
11	38949.500	37.10	47.96	25.72	53.18	57.60	74.0	16.4	102	50
12	39934.000	37.10	48.66	24.41	52.54	57.63	74.0	16.37	107	358

Radiated disturbance at (18 ~40) GHz _Average Measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

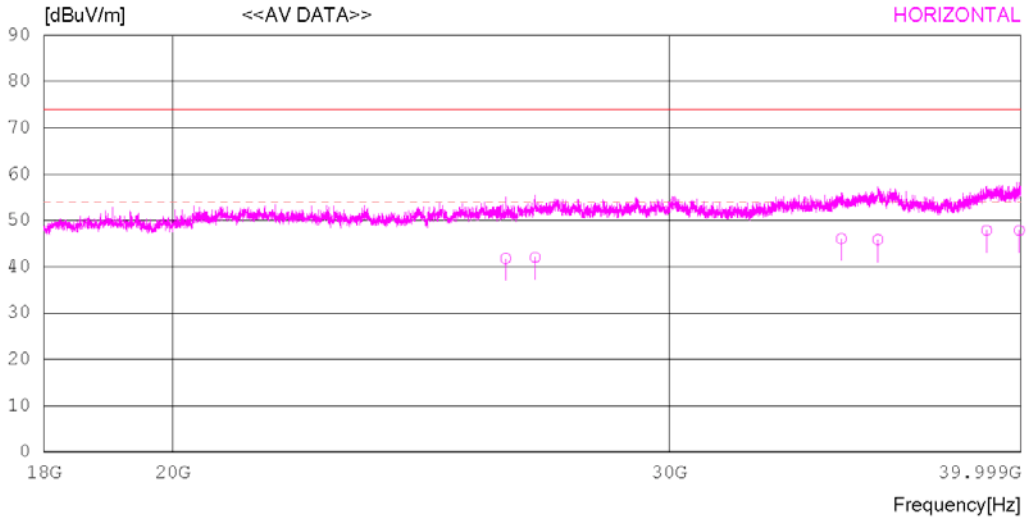
RADIATED EMISSION

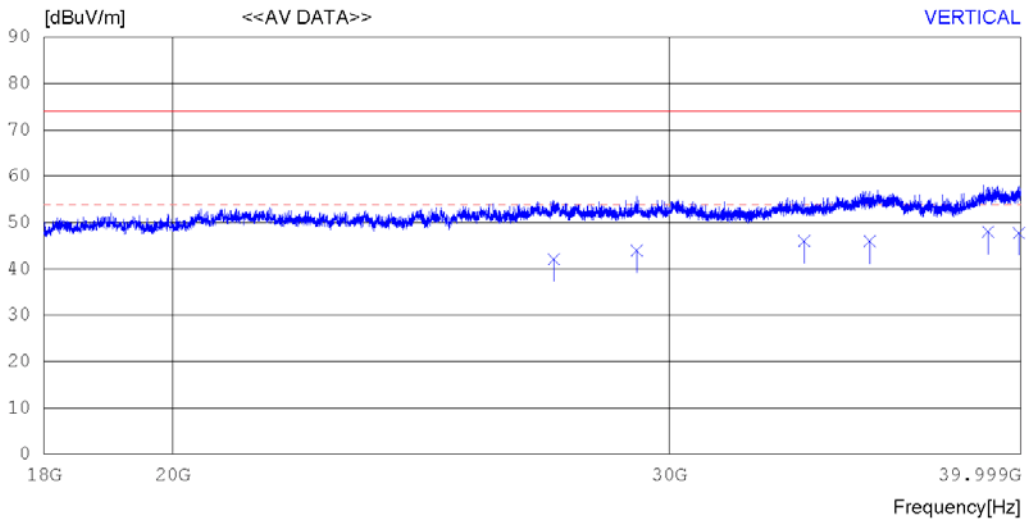
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 % R.H.
Test Condition Camera Front Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 % R.H.
Test Condition Camera Front 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	26252.61028.30	46.61	21.13	54.26	41.78	54.00	12.22	104	0	
2	26893.34028.20	46.82	21.12	54.14	42.00	54.00	12.00	108	146	
3	34538.28027.80	48.53	24.15	54.43	46.05	54.00	7.95	109	0	
4	35586.39027.60	48.66	24.06	54.48	45.84	54.00	8.16	111	0	
5	38894.41027.50	47.90	25.66	53.22	47.84	54.00	6.16	104	0	
6	39945.28027.30	48.67	24.39	52.54	47.82	54.00	6.18	105	0	
----- Vertical ------										
7	27306.12028.20	46.84	21.16	54.07	42.13	54.00	11.87	114	210	
8	29222.82028.30	47.56	21.85	53.74	43.97	54.00	10.03	106	342	
9	33504.69028.10	48.29	23.88	54.20	46.07	54.00	7.93	111	111	
10	35349.42027.60	48.76	24.05	54.47	45.94	54.00	8.06	109	110	
11	38949.38027.50	47.96	25.72	53.18	48.00	54.00	6.00	101	42	
12	39934.11027.20	48.66	24.41	52.54	47.73	54.00	6.27	105	352	

Radiated disturbance at (30 ~ 1000) MHz _Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

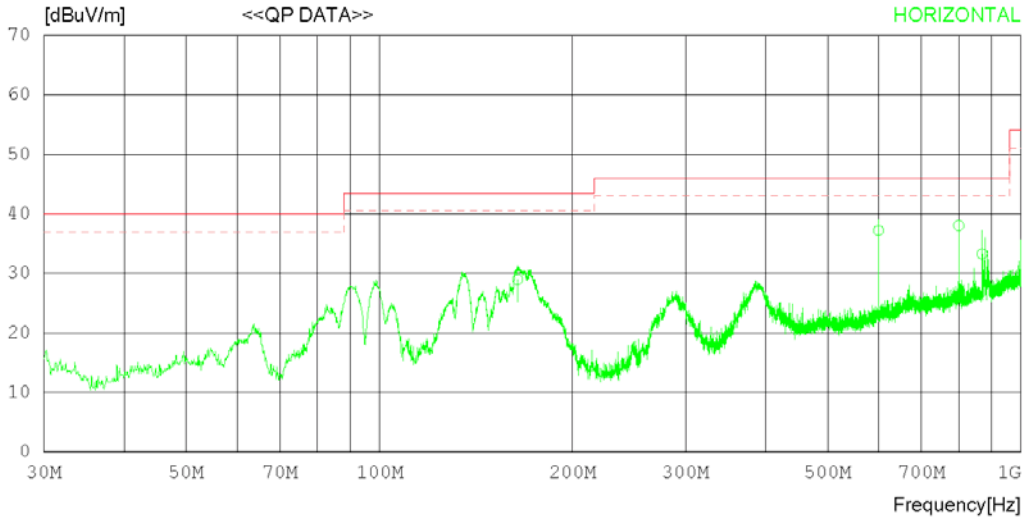
RADIATED EMISSION

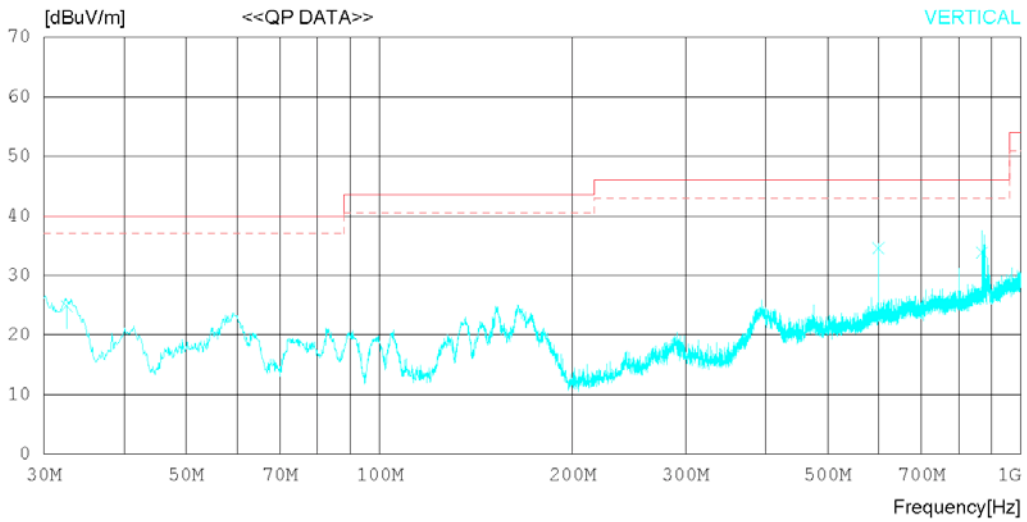
Date 2019-08-31

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 23'C 52 %.R.H.
Test Condition Rear Camera Mode

Memo

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





RADIATED EMISSION

Date 2019-08-31

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 23'C 52 %.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	164.221	34.30	18.56	1.78	25.65	28.99	43.50	14.51	198	87
2	600.002	33.70	25.90	3.10	25.49	37.21	46.00	8.79	217	0
3	800.230	32.20	28.20	3.43	25.79	38.04	46.00	7.96	205	0
4	870.086	26.30	29.20	3.55	25.78	33.27	46.00	12.73	102	104
----- Vertical ------										
5	32.546	34.10	15.45	1.12	25.82	24.85	40.00	15.15	103	188
6	600.002	31.10	25.90	3.10	25.49	34.61	46.00	11.39	102	352
7	870.086	26.90	29.20	3.55	25.78	33.87	46.00	12.13	398	118

Radiated disturbance at (1 ~ 6) GHz _Peak Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

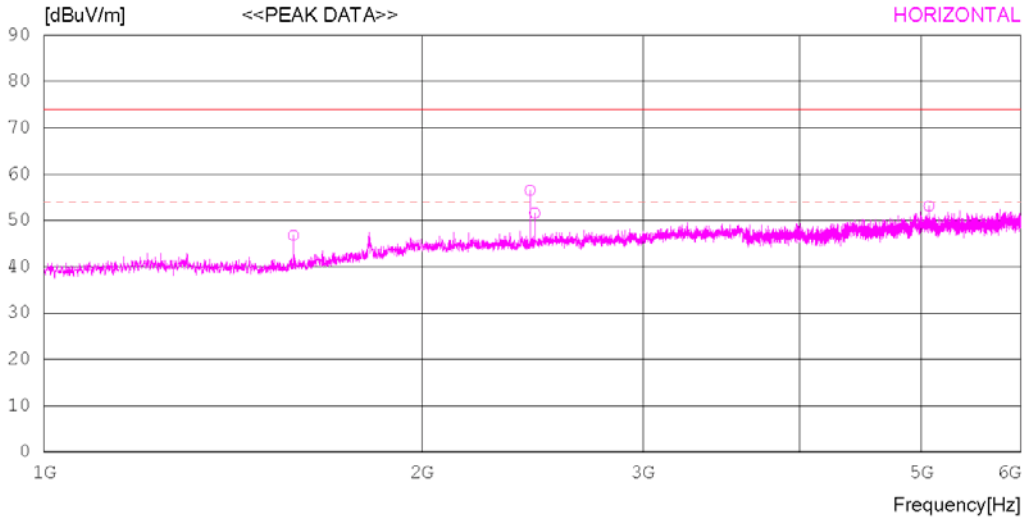
RADIATED EMISSION

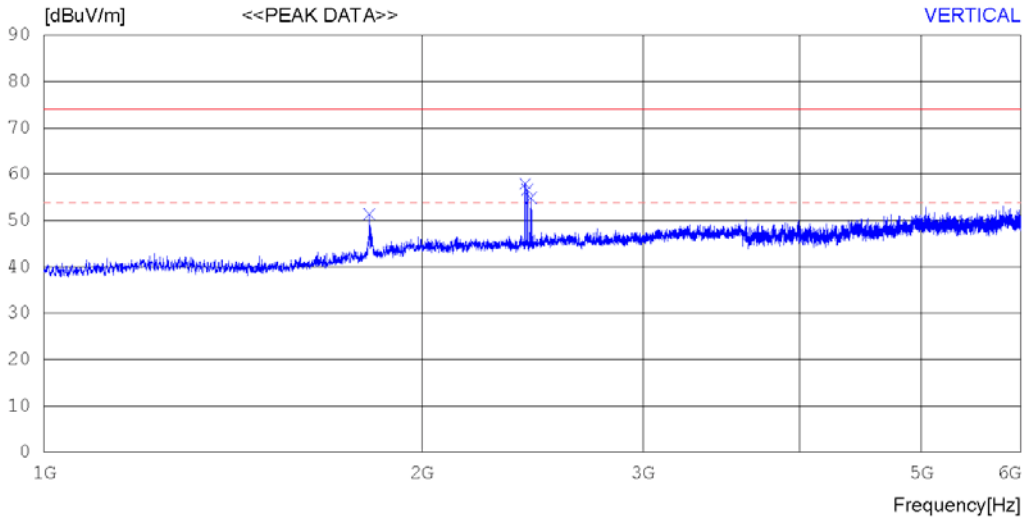
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 %.R.H.
Test Condition Camera Rear Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 %.R.H.
Test Condition	Camera Rear 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	1580.000	48.50	28.28	5.24	35.25	46.77	74.0	27.23	127	1
2	2438.750	52.60	32.03	6.69	34.83	56.49	74.0	17.51	109	1
3	2459.375	47.60	32.14	6.70	34.83	51.61	74.0	22.39	106	1
4	5067.500	42.90	34.17	10.70	34.65	53.12	74.0	20.88	105	1
----- Vertical ------										
5	1816.250	50.20	30.47	5.68	35.01	51.34	74.0	22.66	106	6
6	2416.875	54.20	31.90	6.66	34.83	57.93	74.0	16.07	103	1
7	2426.875	52.80	31.96	6.67	34.83	56.60	74.0	17.4	107	1
8	2441.875	51.00	32.05	6.69	34.83	54.91	74.0	19.09	112	1

Radiated disturbance at (1 ~ 6) GHz _Average Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

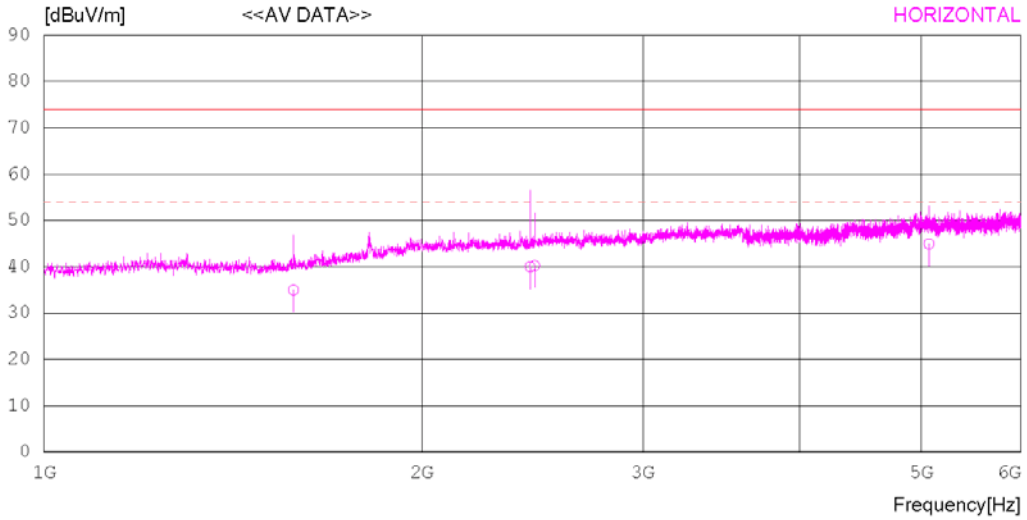
RADIATED EMISSION

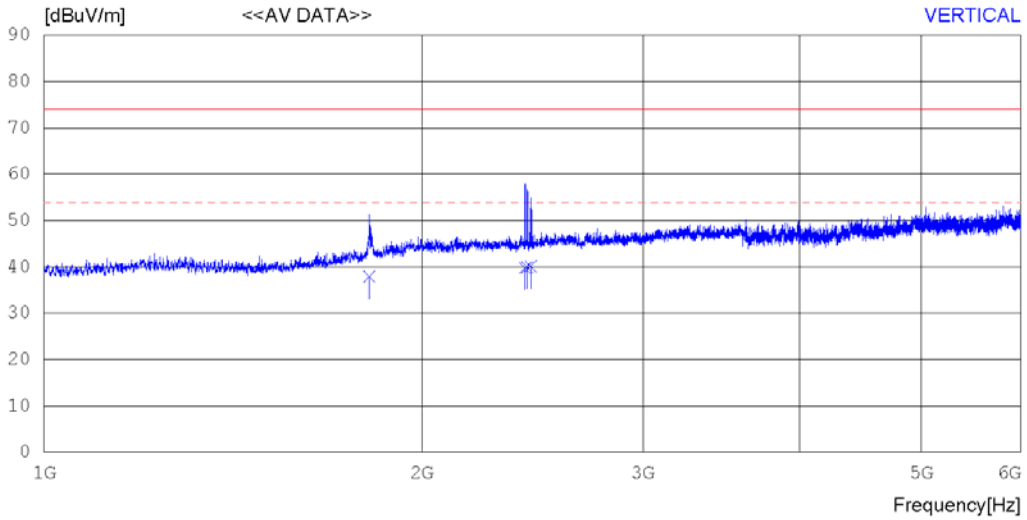
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 %.R.H.
Test Condition Camera Rear Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 %.R.H.
Test Condition	Camera Rear 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	1580.180	36.70	28.28	5.24	35.25	34.97	54.00	19.03	127	0
2	2438.620	36.10	32.03	6.69	34.83	39.99	54.00	14.01	109	7
3	2459.485	36.20	32.14	6.70	34.83	40.21	54.00	13.79	107	5
4	5067.394	34.70	34.17	10.70	34.65	44.92	54.00	9.08	105	0
----- Vertical ------										
5	1816.380	36.80	30.47	5.68	35.01	37.94	54.00	16.06	105	4
6	2416.725	36.10	31.90	6.66	34.83	39.83	54.00	14.17	104	0
7	2426.705	36.20	31.96	6.67	34.83	40.00	54.00	14.00	106	0
8	2441.865	36.20	32.05	6.69	34.83	40.11	54.00	13.89	111	3

Radiated disturbance at (6 ~ 18) GHz _Peak Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

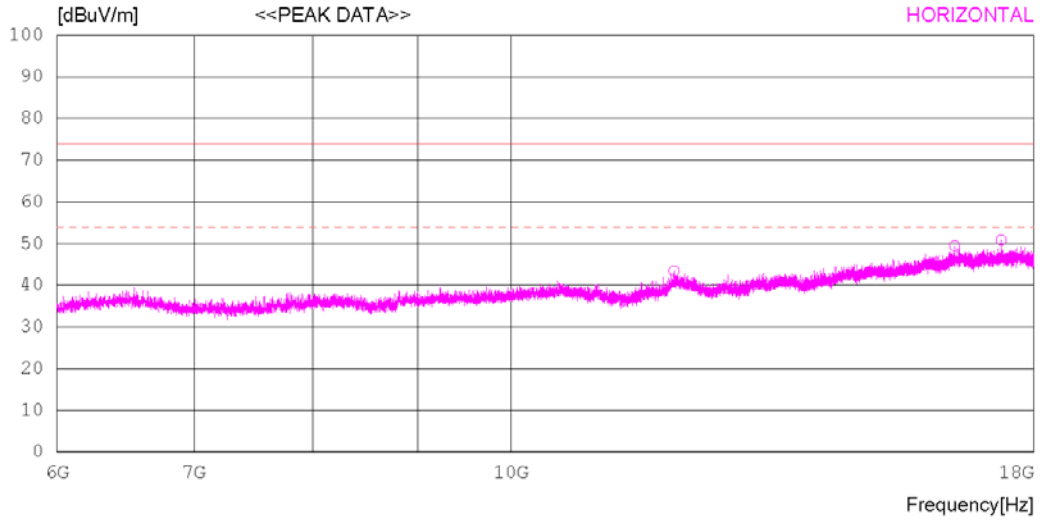
RADIATED EMISSION

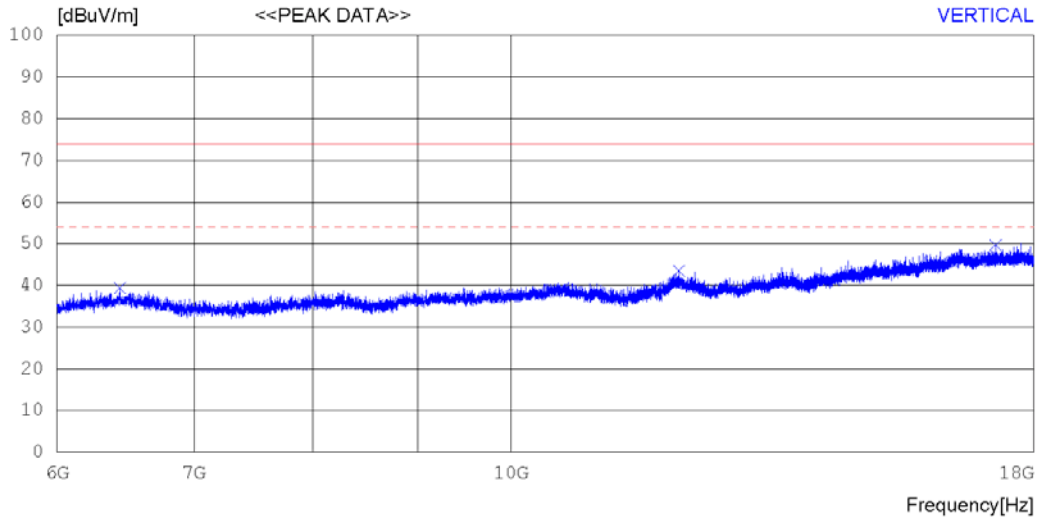
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 %.R.H.
Test Condition Camera Rear Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 %.R.H.
Test Condition	Camera Rear 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	12007.500	32.00	33.46	15.67	37.67	43.46	74.0	30.54	106	227
2	16462.500	29.90	36.94	19.43	36.81	49.46	74.0	24.54	102	1
3	17349.750	31.00	37.82	19.61	37.55	50.88	74.0	23.12	101	1
----- Vertical ------										
4	6438.750	35.20	31.60	11.19	38.60	39.39	74.0	34.61	102	261
5	12077.250	32.20	33.47	15.63	37.80	43.50	74.0	30.5	107	38
6	17244.000	30.10	37.74	19.31	37.46	49.69	74.0	24.31	107	1

Radiated disturbance at (6 ~18) GHz _Average Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

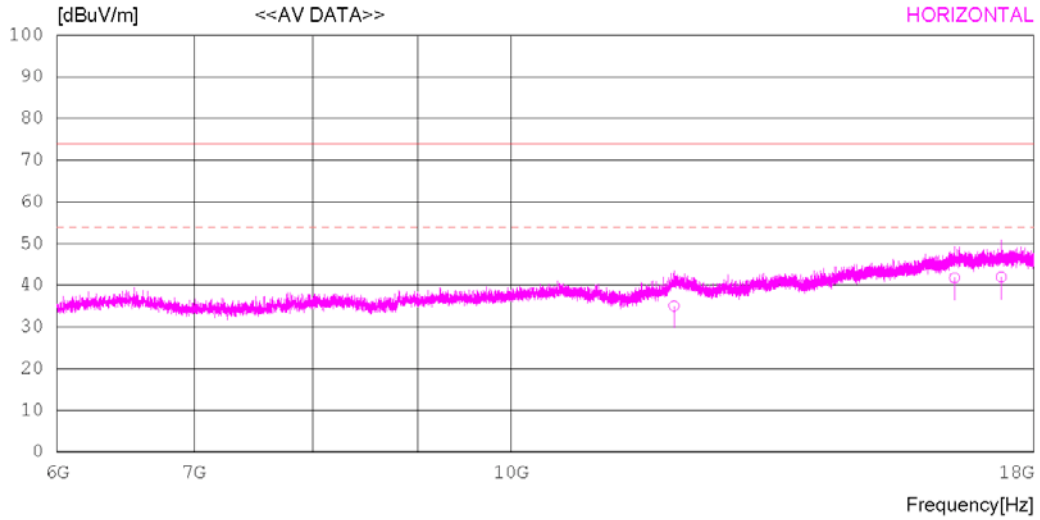
RADIATED EMISSION

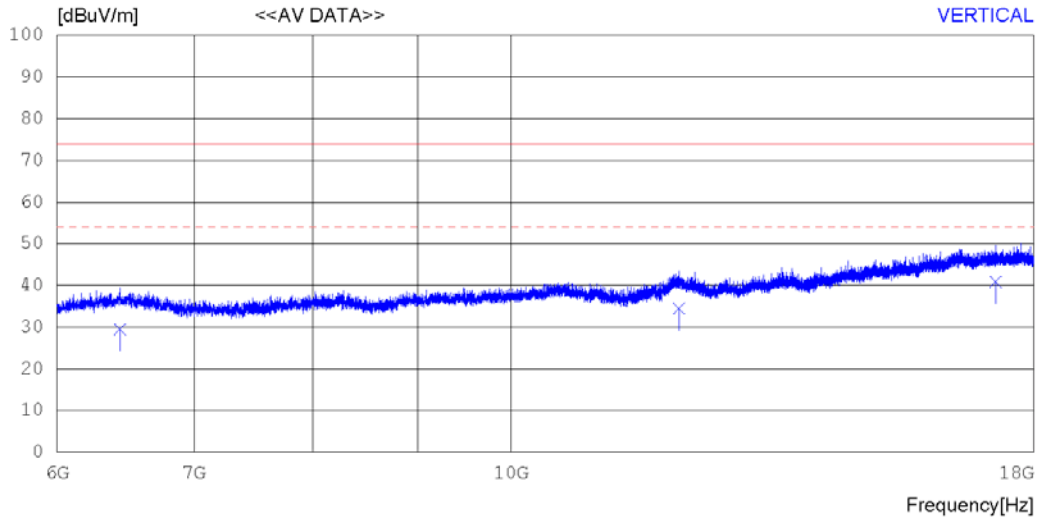
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 %.R.H.
Test Condition Camera Rear Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 %.R.H.
Test Condition	Camera Rear 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	12007.43023.60	33.46	15.67	37.67	35.06	54.00	18.94	105	211	
2	16462.39022.20	36.94	19.43	36.81	41.76	54.00	12.24	102	0	
3	17349.34022.10	37.82	19.61	37.55	41.98	54.00	12.02	101	0	
----- Vertical ------										
4	6438.370 25.30	31.60	11.19	38.60	29.49	54.00	24.51	101	253	
5	12077.42023.20	33.47	15.63	37.80	34.50	54.00	19.50	109	21	
6	17244.29021.30	37.74	19.31	37.47	40.88	54.00	13.12	105	0	

Radiated disturbance at (18 ~ 40) GHz _Peak Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

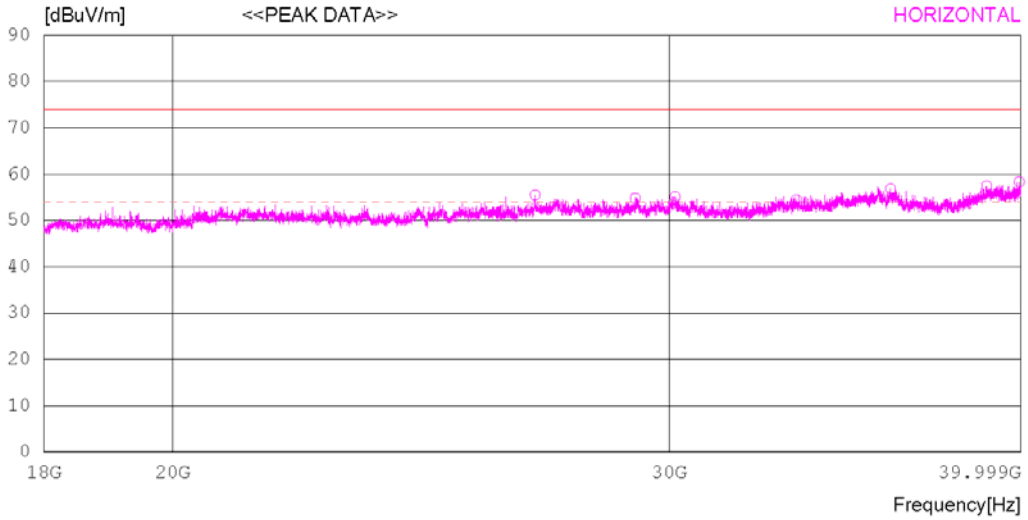
RADIATED EMISSION

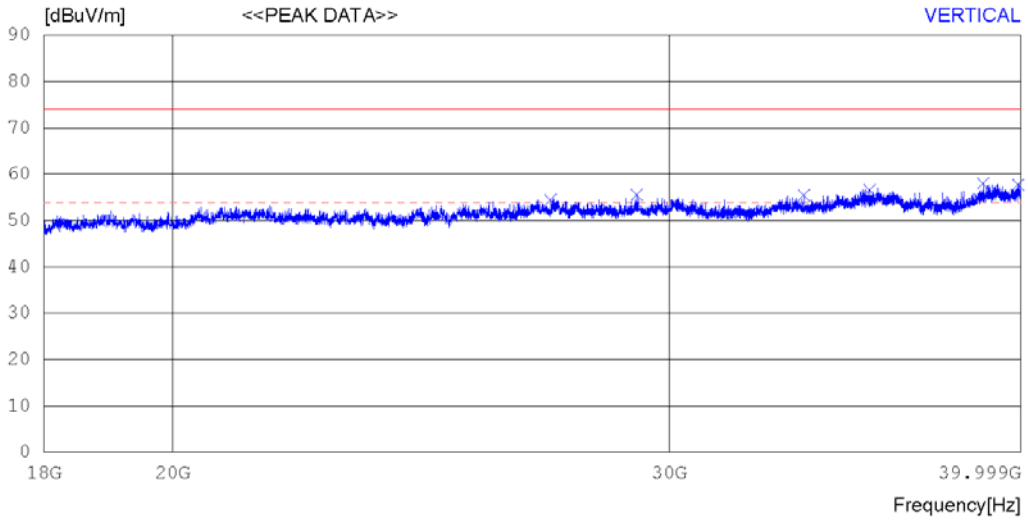
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 % R.H.
Test Condition Camera Rear Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 % R.H.
Test Condition	Camera Rear 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	26893.500	41.70	46.82	21.12	54.14	55.50	74.0	18.5	116	136
2	29184.250	39.20	47.54	21.84	53.74	54.84	74.0	19.16	109	1
3	30149.500	38.70	48.05	21.96	53.60	55.11	74.0	18.89	103	352
4	33292.750	36.50	48.37	23.71	54.12	54.46	74.0	19.54	112	355
5	35957.500	38.70	48.50	24.09	54.50	56.79	74.0	17.21	106	93
6	38894.500	37.10	47.91	25.66	53.22	57.45	74.0	16.55	105	1
7	39945.000	37.80	48.67	24.39	52.54	58.32	74.0	15.68	105	1
----- Vertical ------										
8	27231.750	40.50	46.84	21.16	54.08	54.42	74.0	19.58	102	358
9	29222.750	39.90	47.56	21.85	53.74	55.57	74.0	18.43	107	355
10	33504.500	37.50	48.29	23.88	54.20	55.47	74.0	18.53	113	113
11	35349.750	38.30	48.76	24.05	54.47	56.64	74.0	17.36	110	113
12	38787.250	38.00	47.79	25.52	53.29	58.02	74.0	15.98	103	358
13	39914.750	37.20	48.65	24.44	52.56	57.73	74.0	16.27	107	358

Radiated disturbance at (18 ~40) GHz _Average Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

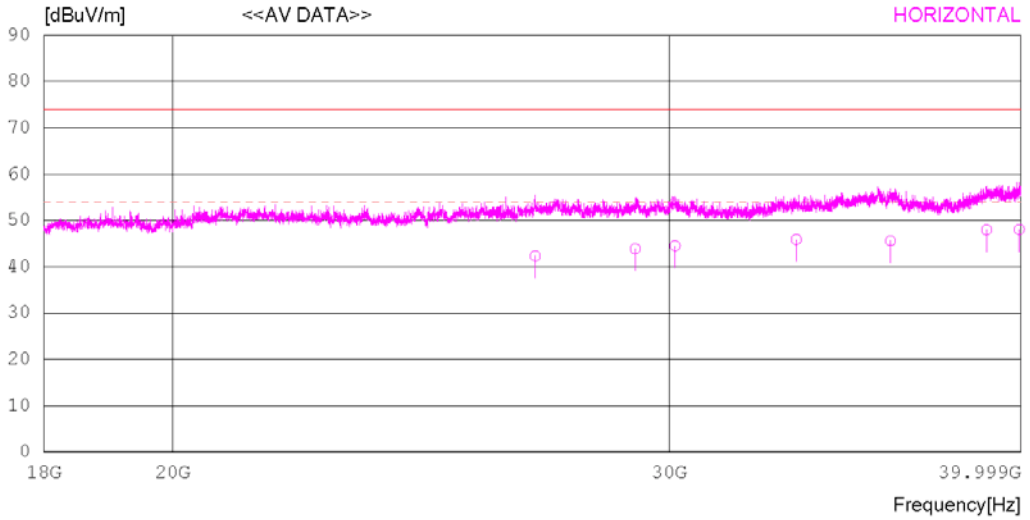
RADIATED EMISSION

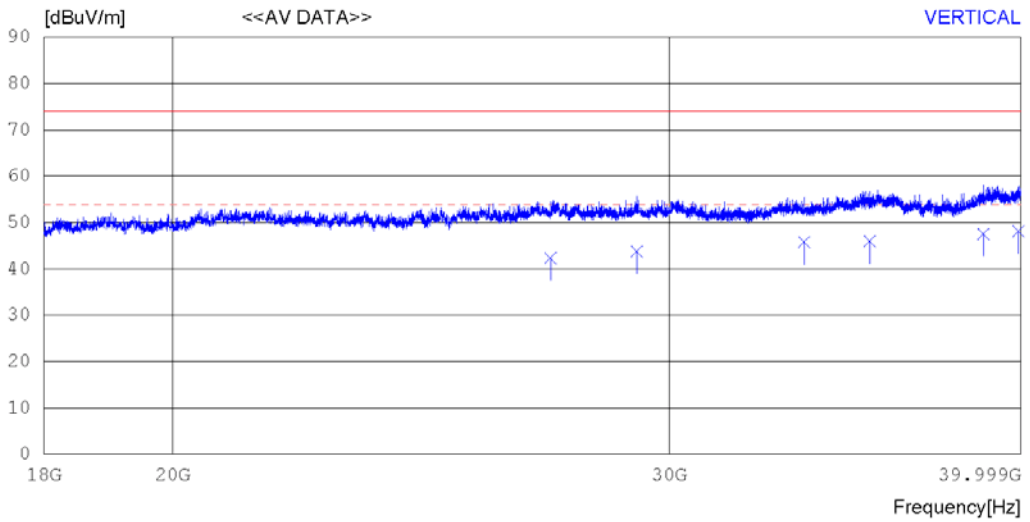
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 % R.H.
Test Condition Camera Rear Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 % R.H.
Test Condition	Camera Rear 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	26893.41028.50	46.82	21.12	54.14	42.30	54.00	11.70	115	144	
2	29184.39028.20	47.54	21.84	53.74	43.84	54.00	10.16	109	0	
3	30149.69028.10	48.05	21.96	53.60	44.51	54.00	9.49	102	0	
4	33292.22027.90	48.37	23.71	54.12	45.86	54.00	8.14	111	356	
5	35957.46027.50	48.50	24.09	54.50	45.59	54.00	8.41	104	81	
6	38894.28027.60	47.90	25.66	53.22	47.94	54.00	6.06	106	0	
7	39945.11027.50	48.67	24.39	52.54	48.02	54.00	5.98	105	0	
----- Vertical ------										
8	27231.42028.40	46.84	21.16	54.08	42.32	54.00	11.68	102	0	
9	29222.68028.10	47.56	21.85	53.74	43.77	54.00	10.23	106	356	
10	33504.51027.80	48.29	23.88	54.20	45.77	54.00	8.23	112	114	
11	35349.66027.60	48.76	24.05	54.47	45.94	54.00	8.06	109	115	
12	38787.61027.50	47.79	25.52	53.29	47.52	54.00	6.48	101	352	
13	39914.89027.60	48.65	24.44	52.56	48.13	54.00	5.87	105	356	

Radiated disturbance at (30 ~ 1000) MHz _Measurement data			
Test configuration mode	**3**	**EUT Operation mode**	**3**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

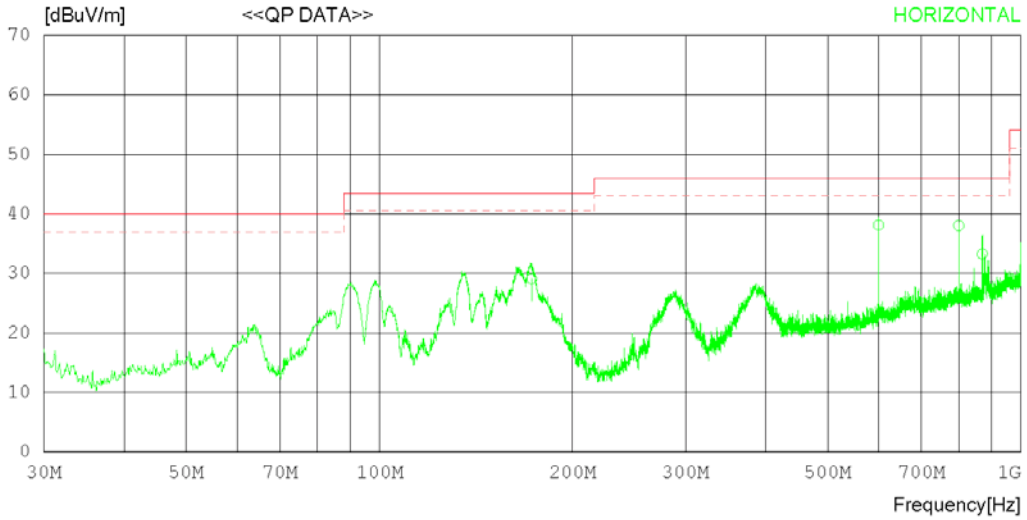
RADIATED EMISSION

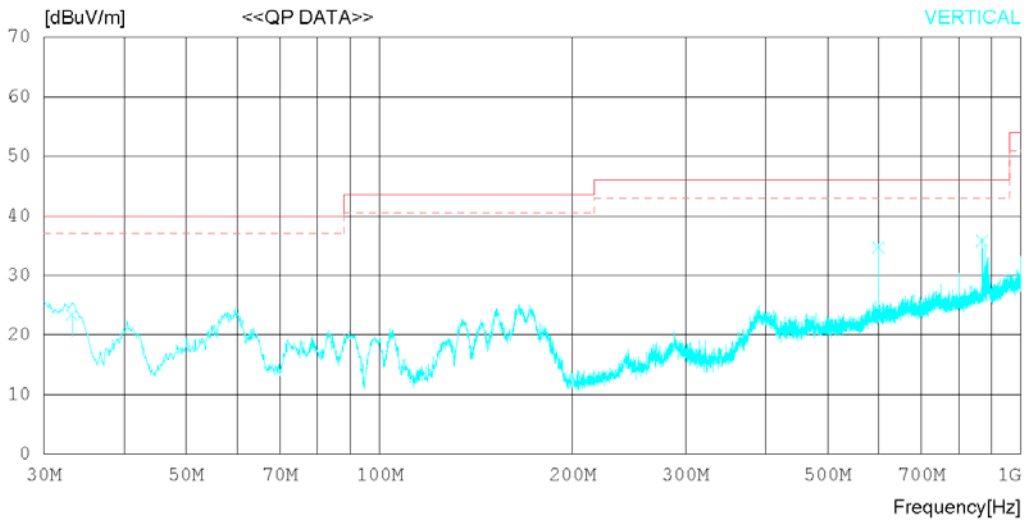
Date 2019-08-31

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 23'C 52 %.R.H.
Test Condition MP4 Mode

Memo

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





RADIATED EMISSION

Date 2019-08-31

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 23'C 52 %.R.H.
Test Condition MP4 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	172.829	35.10	17.79	1.81	25.64	29.06	43.50	14.44	215	272
2	600.002	34.60	25.90	3.10	25.49	38.11	46.00	7.89	203	0
3	799.988	32.20	28.20	3.43	25.79	38.04	46.00	7.96	195	0
4	870.450	26.30	29.20	3.55	25.78	33.27	46.00	12.73	398	0
----- Vertical ------										
5	33.153	32.60	15.53	1.13	25.82	23.44	40.00	16.56	102	357
6	600.002	31.20	25.90	3.10	25.49	34.71	46.00	11.29	109	352
7	870.086	28.90	29.20	3.55	25.78	35.87	46.00	10.13	305	72

Radiated disturbance at (1 ~ 6) GHz _Peak Measurement data			
Test configuration mode	**3**	**EUT Operation mode**	**3**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

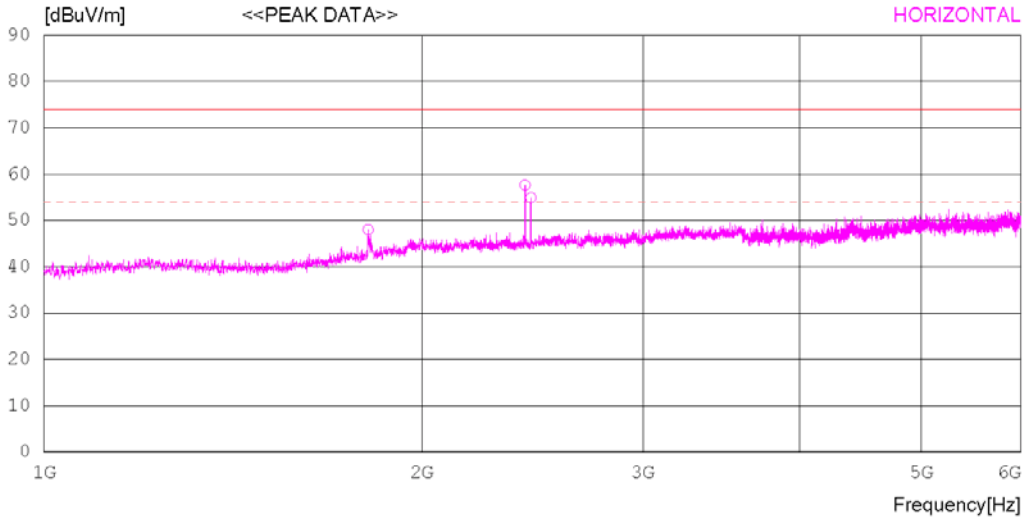
RADIATED EMISSION

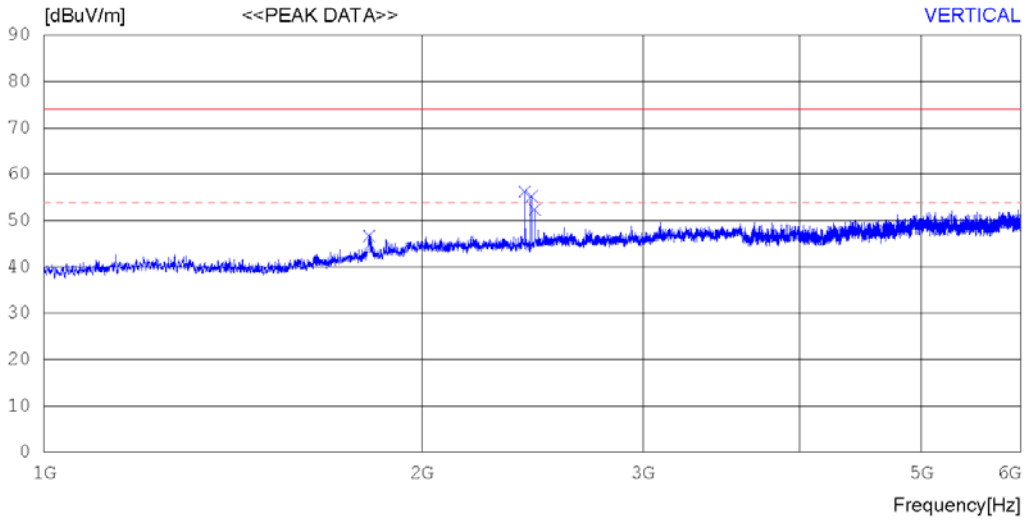
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 %.R.H.
Test Condition MP4 Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 %.R.H.
Test Condition	MP4 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	1811.875	46.90	30.45	5.67	35.01	48.01	74.0	25.99	109	1
2	2416.875	53.90	31.90	6.66	34.83	57.63	74.0	16.37	108	1
3	2441.875	51.00	32.05	6.69	34.83	54.91	74.0	19.09	104	1
----- Vertical ------										
4	1815.625	45.50	30.46	5.68	35.01	46.63	74.0	27.37	113	1
5	2416.250	52.50	31.90	6.66	34.83	56.23	74.0	17.77	107	64
6	2446.875	51.30	32.08	6.69	34.83	55.24	74.0	18.76	101	45
7	2460.000	48.40	32.14	6.70	34.83	52.41	74.0	21.59	105	1

Radiated disturbance at (1 ~ 6) GHz _Average Measurement data			
Test configuration mode	**3**	**EUT Operation mode**	**3**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

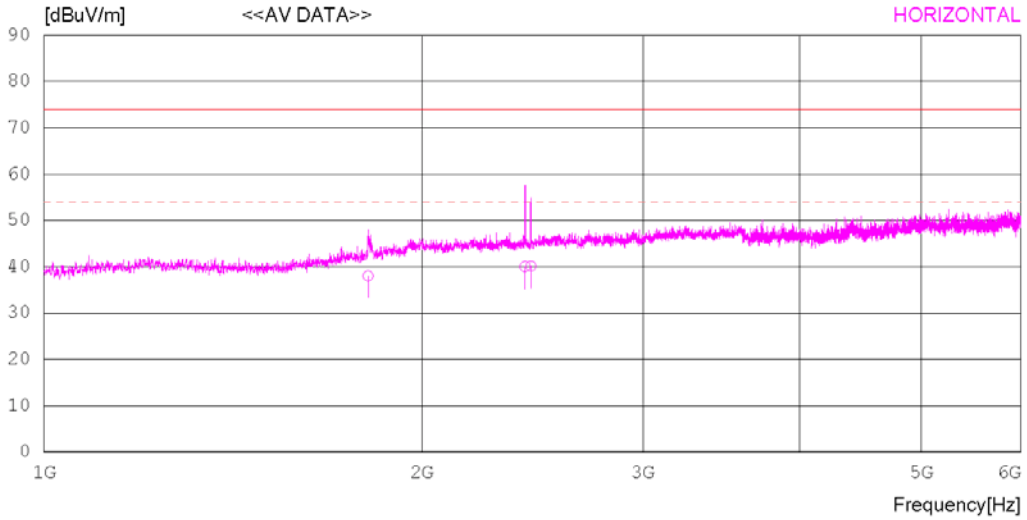
RADIATED EMISSION

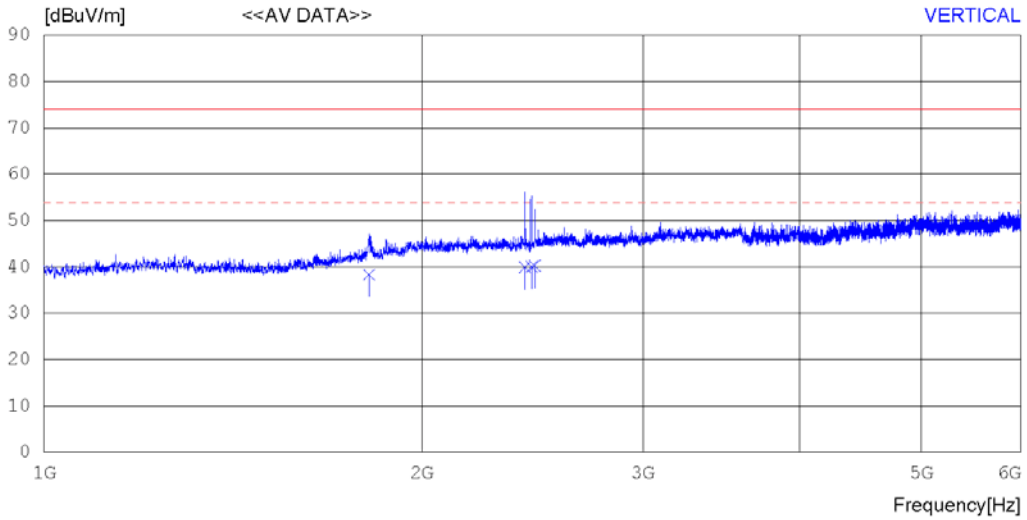
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 %.R.H.
Test Condition MP4 Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 %.R.H.
Test Condition	MP4 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	1811.715	36.90	30.45	5.67	35.01	38.01	54.00	15.99	109	0
2	2416.667	36.30	31.90	6.66	34.83	40.03	54.00	13.97	106	4
3	2441.905	36.20	32.05	6.69	34.83	40.11	54.00	13.89	104	3
----- Vertical ------										
4	1815.415	37.20	30.46	5.68	35.01	38.33	54.00	15.67	113	0
5	2416.371	36.20	31.90	6.66	34.83	39.93	54.00	14.07	106	87
6	2446.948	36.10	32.08	6.69	34.83	40.04	54.00	13.96	101	57
7	2460.040	36.30	32.14	6.70	34.83	40.31	54.00	13.69	105	0

Radiated disturbance at (6 ~ 18) GHz _Peak Measurement data			
Test configuration mode	**3**	**EUT Operation mode**	**3**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

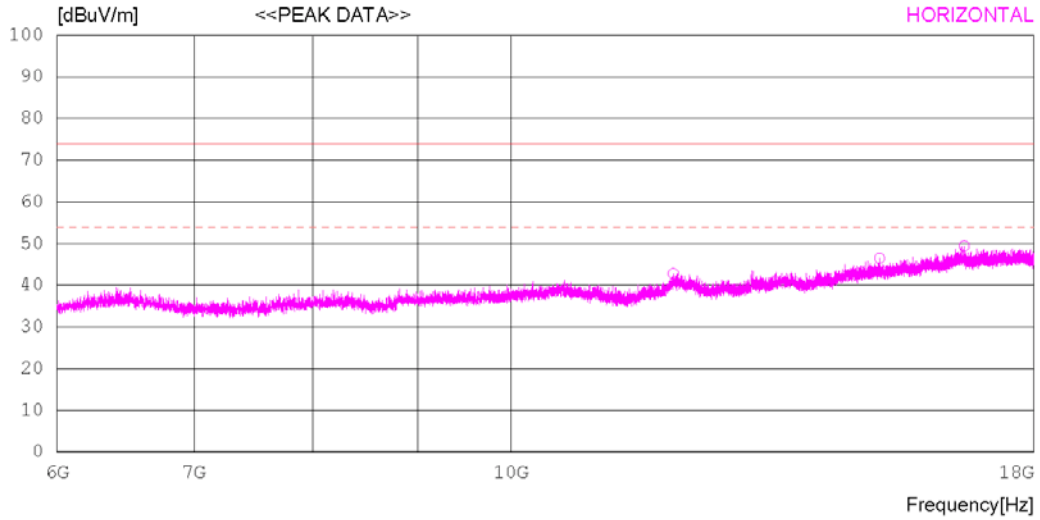
RADIATED EMISSION

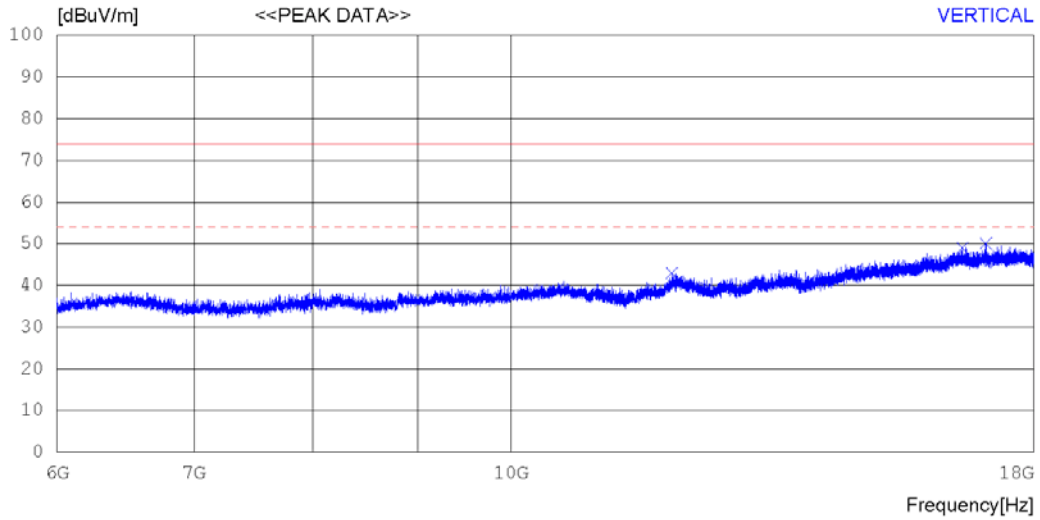
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 %.R.H.
Test Condition MP4 Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 %.R.H.
Test Condition	MP4 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	11998.500	31.30	33.46	15.68	37.66	42.78	74.0	31.22	109	141
2	15133.500	29.80	35.58	18.19	37.12	46.45	74.0	27.55	106	1
3	16643.250	29.40	37.15	19.81	36.94	49.42	74.0	24.58	105	1
----- Vertical ------										
4	11982.000	31.50	33.44	15.64	37.69	42.89	74.0	31.11	104	358
5	16612.500	28.80	37.11	20.02	36.91	49.02	74.0	24.98	102	1
6	17052.750	29.80	37.59	19.94	37.30	50.03	74.0	23.97	107	1

Radiated disturbance at (6 ~18) GHz _Average Measurement data			
Test configuration mode	**3**	**EUT Operation mode**	**3**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

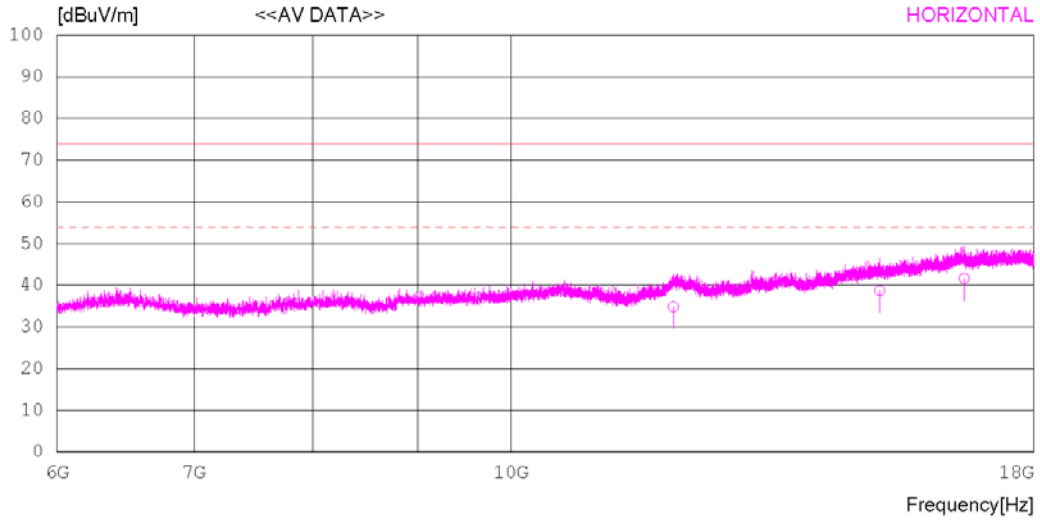
RADIATED EMISSION

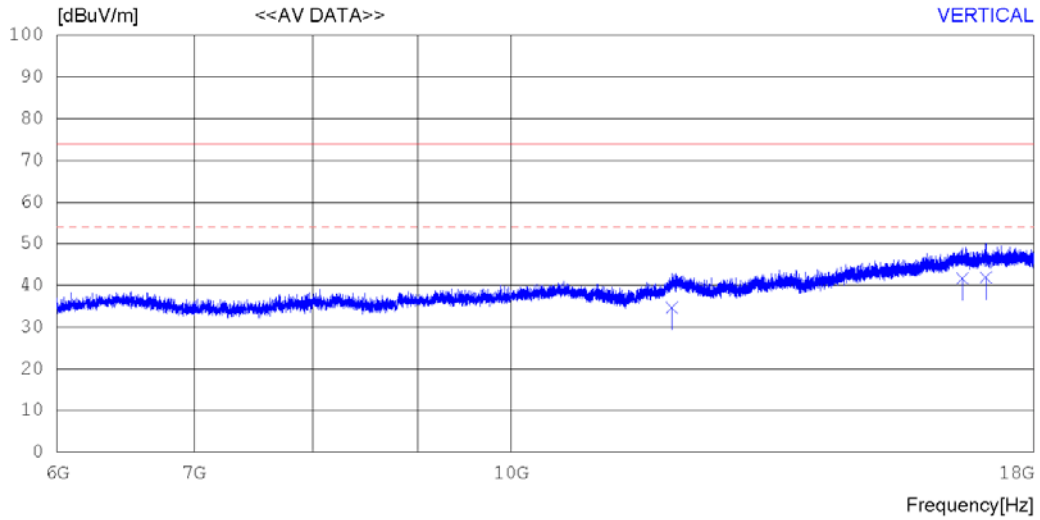
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 %.R.H.
Test Condition MP4 Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 %.R.H.
Test Condition	MP4 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	11998.48023.40	33.46	15.68	37.66	34.88	54.00	19.12	109	117	
2	15133.27022.10	35.58	18.19	37.12	38.75	54.00	15.25	104	0	
3	16643.39021.60	37.15	19.81	36.94	41.62	54.00	12.38	105	0	
----- Vertical ------										
4	11982.28023.30	33.44	15.64	37.69	34.69	54.00	19.31	105	348	
5	16612.42021.50	37.11	20.02	36.91	41.72	54.00	12.28	101	0	
6	17052.82021.60	37.59	19.94	37.30	41.83	54.00	12.17	106	0	

Radiated disturbance at (18 ~ 40) GHz _Peak Measurement data			
Test configuration mode	**3**	**EUT Operation mode**	**3**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

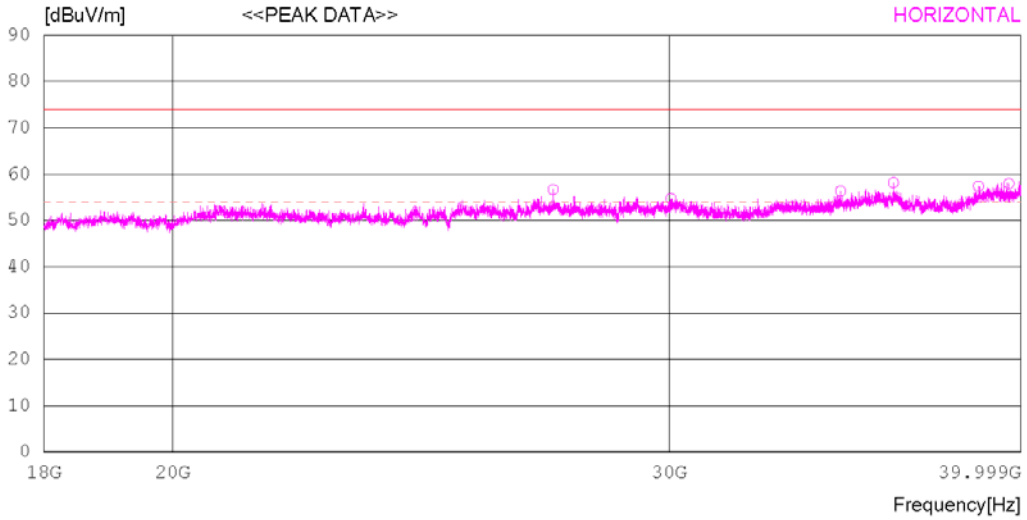
RADIATED EMISSION

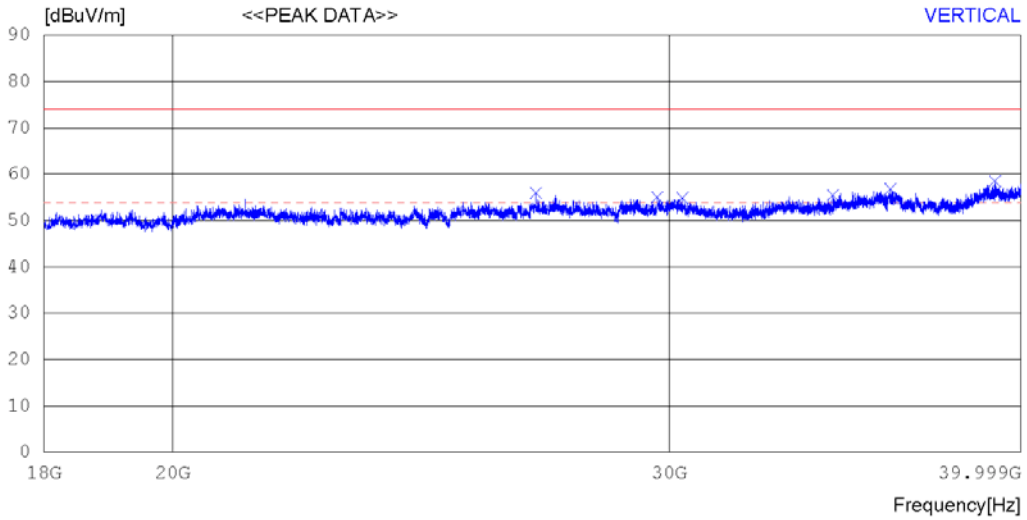
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 % R.H.
Test Condition MP4 Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No.	DTNC1908-06608, DTNC1910-08130
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 55 % R.H.
Test Condition	MP4 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	27289.500	42.70	46.84	21.17	54.07	56.64	74.0	17.36	103	1
2	30047.750	38.30	48.11	21.90	53.60	54.71	74.0	19.29	106	1
3	34516.500	38.10	48.51	24.16	54.43	56.34	74.0	17.66	112	194
4	36040.000	40.10	48.44	24.10	54.49	58.15	74.0	15.85	110	218
5	38633.250	37.80	47.62	25.34	53.39	57.37	74.0	16.63	106	213
6	39612.250	37.40	48.44	24.88	52.75	57.97	74.0	16.03	107	54
----- Vertical ------										
7	26912.750	42.10	46.83	21.12	54.14	55.91	74.0	18.09	102	353
8	29720.500	38.90	47.93	21.86	53.65	55.04	74.0	18.96	111	358
9	30336.500	38.50	47.93	22.08	53.60	54.91	74.0	19.09	112	358
10	34307.500	37.30	48.34	24.20	54.42	55.42	74.0	18.58	107	358
11	35952.000	38.70	48.50	24.09	54.50	56.79	74.0	17.21	104	6
12	39161.250	37.90	48.13	25.54	53.05	58.52	74.0	15.48	107	48

Radiated disturbance at (18 ~40) GHz _Average Measurement data			
Test configuration mode	**3**	**EUT Operation mode**	**3**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

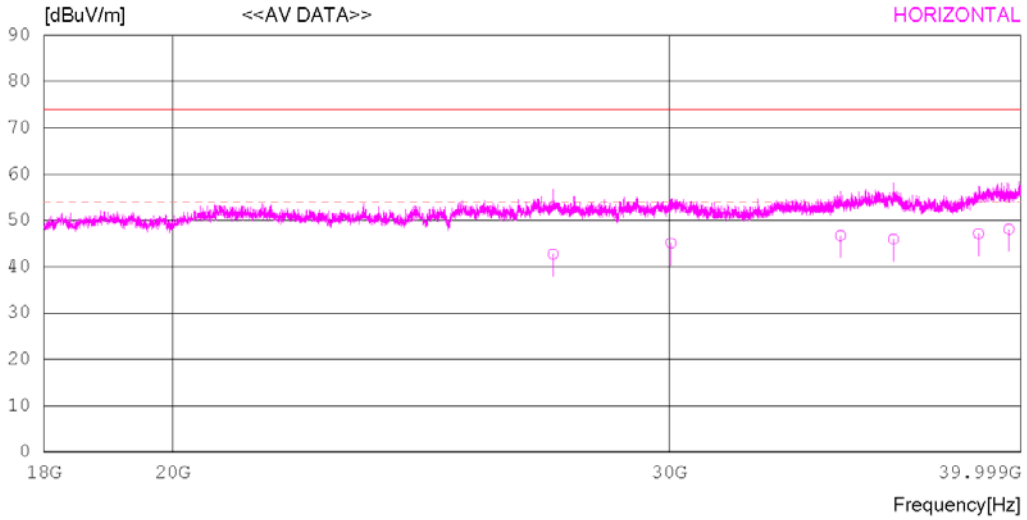
RADIATED EMISSION

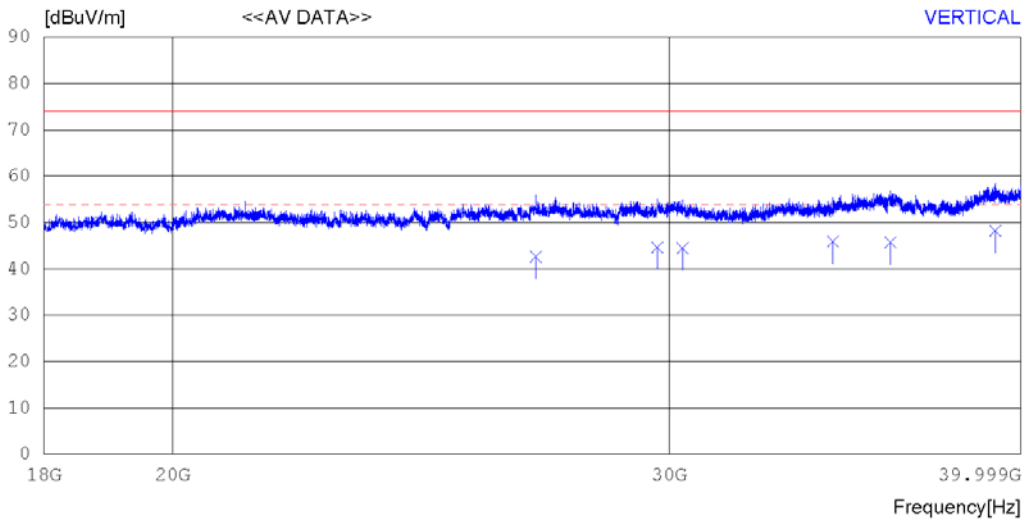
Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 % R.H.
Test Condition MP4 Mode

Memo

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





RADIATED EMISSION

Date 2019-09-07

Order No. DTNC1908-06608, DTNC1910-08130
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 55 % R.H.
Test Condition MP4 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	27289.41028.80	46.84	21.17	54.07	42.74	54.00	11.26	102	0	
2	30047.66028.70	48.11	21.90	53.60	45.11	54.00	8.89	106	0	
3	34516.69028.50	48.51	24.16	54.43	46.74	54.00	7.26	112	201	
4	36040.05027.90	48.44	24.10	54.49	45.95	54.00	8.05	109	229	
5	38633.16027.60	47.62	25.34	53.39	47.17	54.00	6.83	104	227	
6	39612.38027.50	48.44	24.88	52.75	48.07	54.00	5.93	105	65	
----- Vertical ------										
7	26912.41028.80	46.83	21.12	54.14	42.61	54.00	11.39	102	359	
8	29720.62028.50	47.93	21.86	53.65	44.64	54.00	9.36	109	5	
9	30336.68028.10	47.93	22.08	53.60	44.51	54.00	9.49	111	0	
10	34307.42027.80	48.34	24.20	54.42	45.92	54.00	8.08	106	0	
11	35952.69027.70	48.50	24.09	54.50	45.79	54.00	8.21	101	0	
12	39161.10027.60	48.13	25.54	53.05	48.22	54.00	5.78	105	58	

Calculation

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

8. Revision History

Date	Description	Revised By	Reviewed By
Oct. 27. 2019	Initial report	ChanGeun Lee	HyungJun Kim

-End of test report-