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. : DREFCC2101-0001(1)

2. Client / Applicant

   • Name : Bluebird Inc.

   • Address : 3F, 115, Irwon-ro, Gangnam-gu, Seoul, Republic of Korea

3. Use of Report : Grant of Certification

4. Product Name / Model Name : Enterprise Full Touch Handheld Computer / EF550
   (FCC ID : SS4EF550)

5. Test Standard : ANSI C63.4 : 2014
   FCC Part 15 Subpart B
   (Other Class B digital devices & peripherals)
   (Communications Rcvr for use w/ licensed Tx and CBs(CXX))

6. Date of Test : Sep. 26. 2020 ~ Sep. 28. 2020

7. Location of Test : ☒ Permanent Testing Lab ☐ On Site Testing

8. Testing Environment : Temperature (22) °C , Humidity (47 ~ 49) % R.H.

9. Test Result : Refer to the attached Test Result

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.

Affirmation	Tested by Name : ChanGeun Lee (Signature)	Reviewed by Name : KyoungHwan Bae (Signature)

Jan. 11. 2021

DT&C Co., Ltd.

This test report is a general report that does not use the KOLAS accreditation mark and 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-14076, R-14180, R-4496, T-11442, G-10338, G-10754, 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. 3F, 115, Irwon-ro, Gangnam-gu, Seoul, Republic of Korea
Manufacturer	Bluebird Inc. 3F, 115, Irwon-ro, Gangnam-gu, Seoul, Republic of Korea
Factory	Bluebird Inc. (SSang-young IT Twin tower-B 7~8F), 531, Dunchon-daero, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea
Product Name	Enterprise Full Touch Handheld Computer
Model Name	EF550
Add Model Name	EF550R
Add Model Difference	Add cover (plastic material)
H/W version	REV 0.3
S/W version	R1.0
Maximum Internal Frequency	38.4 MHz
Rated Power	DC 3.85 V
FCC ID	SS4EF550
Remarks	- Wireless Frequency BT : (2,402 ~ 2,480) MHz WIFI 2.4 G : (2,412 ~ 2,462) MHz WIFI 5 G : (5,180 ~ 5,825) MHz WCDMA 850 : Tx (826.4 ~ 846.6) MHz, Rx (871.4 ~ 891.6) MHz WCDMA 1700 : Tx (1,712.4 ~ 1,752.6) MHz, Rx (2,112.4 ~ 2,152.6) MHz WCDMA 1900 : Tx (1,852.4 ~ 1,907.6) MHz, Rx (1,932.4 ~ 1,987.6) MHz LTE Band 2 : Tx (1,850.7 ~ 1,909.3) MHz, Rx (1,930.7 ~ 1,989.3) MHz LTE Band 4 : Tx (1,710.7 ~ 1,754.3) MHz, Rx (2,110.7 ~ 2,154.3) MHz LTE Band 5 : Tx (824.7 ~ 848.3) MHz, Rx (869.7 ~ 893.3) MHz LTE Band 12 : Tx (699.7 ~ 715.3) MHz, Rx (729.7 ~ 745.3) MHz LTE Band 13 : Tx (779.5 ~ 784.5) MHz, Rx (748.5 ~ 753.5) MHz LTE Band 66 : Tx (1,710.7 ~ 1,779.3) MHz, Rx (2,110.7 ~ 2,179.3) MHz LTE Band 71 : Tx (665.5 ~ 695.5) MHz, Rx (619.5 ~ 649.5) MHz

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	Charging	EUT receives DC 5V from Adapter(EUT) and observes the state of charge and proceeds the test
2	PC Link	EUT monitors the state of data transmission by connecting with a PC and proceeds with the test
3	MP4	EUT is in the state of playing MP4 files continuously.
4	Front Camera	The EUT activates the mounted Front camera to record images continuously.
5	Rear Camera	The EUT activates the mounted Rear camera to record images continuously.
6	Barcode	The EUT uses an internal application and uses barcodes continuously.
7	WCDMA 5	The EUT was tested while operating in WCDMA 5 band Rx mode.
8	LTE 5	The EUT was tested while operating in LTE 5 band Rx mode.
9	LTE 12	The EUT was tested while operating in LTE 12 band Rx mode.
10	LTE 13	The EUT was tested while operating in LTE 13 band Rx mode.
11	LTE 71	The EUT was tested while operating in LTE 71 band Rx mode.
* WCDMA 5, LTE 5,12,13,71 bands that tune in the range of 30 MHz - 960 MHz are investigated. Only the worst case (LTE 71 band) emissions are reported. * EUT is tested after activating the wireless functions of Wifi, BT, WCDMA, and LTE. * EUT is cradle charging port and EUT's rear fingerprint port are unused ports.		

4.3 Test Configuration Mode

No.	Mode	Description
1	Charging	EUT connects to Headset EUT connects to Micro SD Card EUT connects to Adapter(EUT) Adapter(EUT) connects to AC Main
2	PC Link	EUT connects to Headset EUT connects to Micro SD Card EUT was connected PC by USB cable C type and continuously operated
3	MP4	EUT connects to Headset EUT connects to Micro SD Card
4	Front Camera	EUT connects to Headset EUT connects to Micro SD Card
5	Rear Camera	EUT connects to Headset EUT connects to Micro SD Card
6	Barcode	EUT connects to Headset EUT connects to Micro SD Card
7	WCDMA 5	EUT connects to Headset EUT connects to Micro SD Card
8	LTE 5	EUT connects to Headset EUT connects to Micro SD Card
9	LTE 12	EUT connects to Headset EUT connects to Micro SD Card
10	LTE 13	EUT connects to Headset EUT connects to Micro SD Card
11	LTE 71	EUT connects to Headset EUT connects to Micro SD Card

4.4 Supported Equipment

Used*	Product Type	Manufacturer	Model	Remarks
AE	Adapter(EUT)	Kuantech(Cambodia) Corporation Limited	KSA29B0500200D5	N/A
AE	PC	DELL INC	DCN3	J51ZBBX
AE	PRINTER	Bixolon	SRP-770	N/A
AE	SSD	SAMSUNG	MU-PT250B	S2WKNAAH32059X
AE	Micro SD Card	RIDATA	2GB	Y02GA53M8D3129028TW
AE	MOUSE	LOGITECH	M-U0026	810-002149
AE	KEYBOARD	MONTEREY INTERNATIONAL CORP	SKG-3000UB	TAKB601233
AE	Headset	DONGGUANENMEY	SHS-150V/W	N/A
AE	Headset	DONGGUANENMEY	SHS-150V/W	N/A
AE	MONITOR	DELL	P2417H	CN-0R8P39-QDC00-79C -47RB-A01

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

4.5 EUT In/Output Port

(MODE 1)

Name	Type*	Cable Max. >3 m	Cable Shielded	Cable Back shell	Remarks
AUX	I/O	2.3	Non shield	Plastic	-
Micro SD Card Slot	I/O	-	-	-	-
USB C	DC	1.5	Shield	Plastic	-
AC IN	AC	-	-	-	Adapter(EUT)

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

(MODE 2)

Name	Type*	Cable Max. >3 m	Cable Shielded	Cable Back shell	Remarks
AUX	I/O	2.3	Non shield	Plastic	EUT
Micro SD Card Slot	I/O	-	-	-	EUT
USB C	I/O	1.5	Shield	Plastic	EUT
USB(EUT) USB(MOUSE) USB(KEYBOARD) USB(SSD) DSUB(MONITOR) AUX(Headset) AC IN	I/O I/O I/O I/O I/O I/O AC	1.5 1.8 1.8 1.3 1.8 2.3 1.5	shield shield shield shield shield Non shield Non shield	Plastic Plastic Plastic Plastic Plastic Plastic Plastic	PC
DSUB AC	I/O AC	1.8 1.5	shield Non shield	Plastic Plastic	MONITOR

*Abbreviations:

AC = AC Power Port DC = DC Power Port N/E = Non-Electrical

I/O = Signal Input or Output Port

TP = Telecommunication Ports

(MODE 3 ~ 12)

Name	Type*	Cable Max. >3 m	Cable Shielded	Cable Back shell	Remarks
AUX	I/O	2.3	Non shield	Plastic	-
Micro SD Card Slot	I/O	-	-	-	-

*Abbreviations:

AC = AC Power Port DC = DC Power Port N/E = Non-Electrical

I/O = Signal Input or Output Port

TP = Telecommunication Ports

4.6 Test Voltage and Frequency

Case	Voltage (V)	Frequency (Hz)	Phases	Remarks
1	AC 120	60	Single	None
2	DC 3.85	-	-	Battery

5. Test Summary

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

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

- Conducted Disturbance

Frequency [MHz]	Pol.	Result [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]
0.52162	N	34.85	Cispr - Average	46.00	11.16

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]
49.521	V	36.46	Quasi - Peak	40.00	3.54

6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (℃)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2020-09-28	22	49	-
Radiated Disturbance	2020-09-26	22	47	-

7. Test Results : Emission

7.1 Conducted Disturbance

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

Fully configured sample scanned over the following frequency range	**Frequency range on each side of line**	**Measurement Point**
	150 kHz to 30 MHz	**Mains**
EUT mode (Refer to clauses 4)	**Test configuration mode**	**1, 2**
	EUT Operation mode	**1, 2**

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. 2.00.0170	TSJ	N/A	N/A	N/A
EMI TEST RECEIVER	ESU	ROHDE&SCHWARZ	100538	2020.01.20	2021.01.20
PULSE LIMITER	ESH3-Z2	ROHDE&SCHWARZ	101333	2020.08.25	2021.08.25
LISN	KNW-407	KYORITSU	8-317-8	2019.12.22	2020.12.22
LISN	NSLK 8128 RC	SCHWARZBECK	8128 RC-387	2019.11.04	2020.11.04

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)

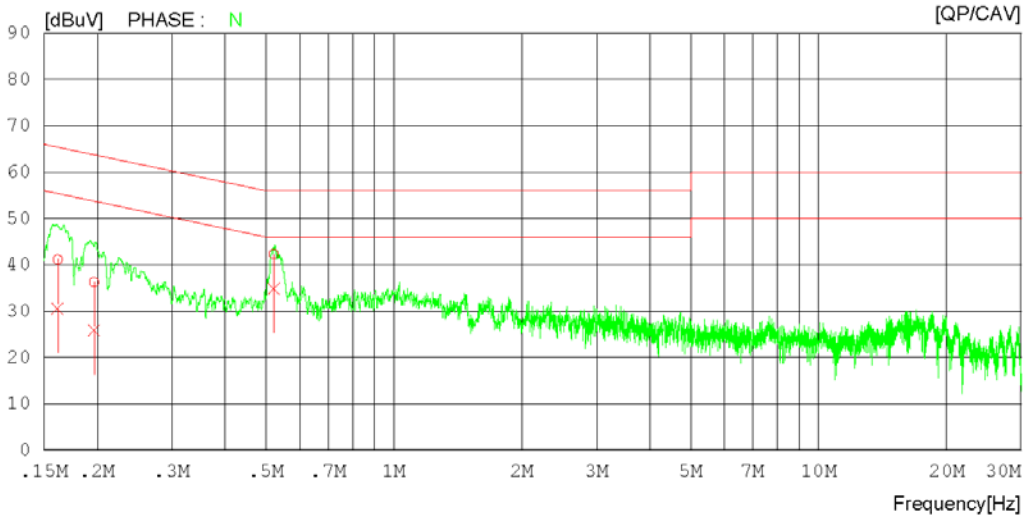
Mains terminal disturbance voltage _Measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

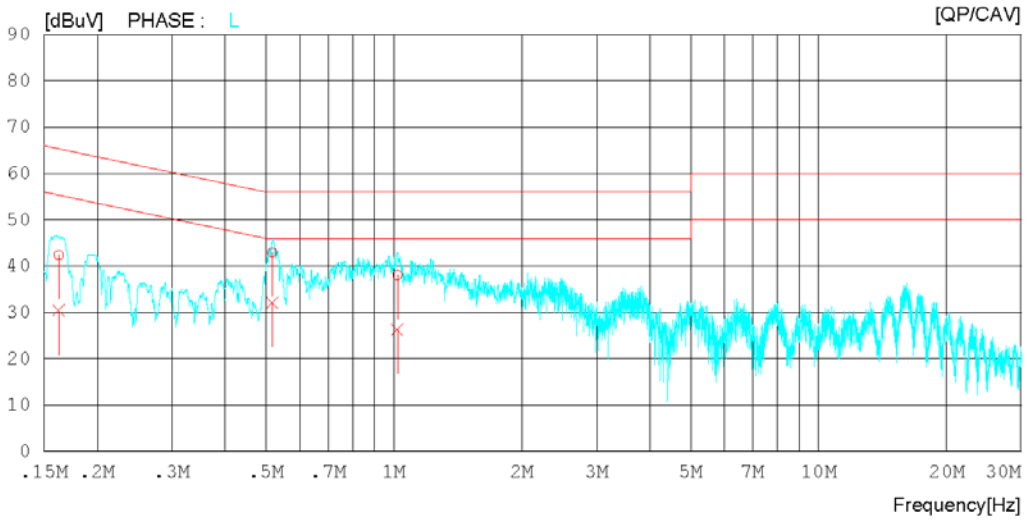
Results of Conducted Emission

DTNC Date 2020-09-28

Order No.	DTNC2008-06866, 2008-06867
Power Supply	120 VAC 60 Hz
Temp/Humi/Atm.	22 'C 49 %.R.H.
Test Condition	Charging Mode

LIMIT : CISPR32_B QP
CISPR32_B AV





Results of Conducted Emission

DTNC Date 2020-09-28

Order No.	DTNC2008-06866, 2008-06867
Power Supply	120 VAC 60 Hz
Temp/Humi/Atm.	22 'C 49 %.R.H.
Test Condition	Charging Mode

LIMIT : CISPR32_B QP
CISPR32_B AV

NO	FREQ	READING QP	READING CAV	C.FACTOR	RESULT QP	RESULT CAV	LIMIT QP	LIMIT CAV	MARGIN QP	MARGIN CAV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.16144	31.09	20.48	10.00	41.09	30.48	65.39	55.39	24.30	24.91	N
2	0.19669	26.21	15.88	10.00	36.21	25.88	63.75	53.75	27.54	27.87	N
3	0.52162	32.27	24.81	10.04	42.31	34.85	56.00	46.00	13.69	11.16	N
4	0.16233	32.40	20.31	10.00	42.40	30.31	65.34	55.34	22.94	25.03	L
5	0.51646	32.91	22.04	10.04	42.95	32.08	56.00	46.00	13.05	13.92	L
6	1.01836	28.00	16.25	10.03	38.03	26.28	56.00	46.00	17.97	19.72	L

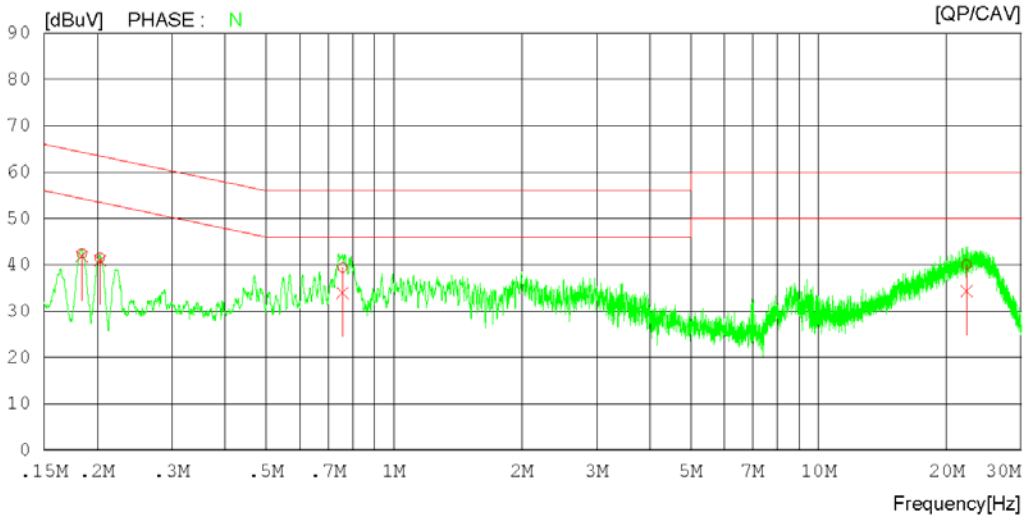
Mains terminal disturbance voltage _Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

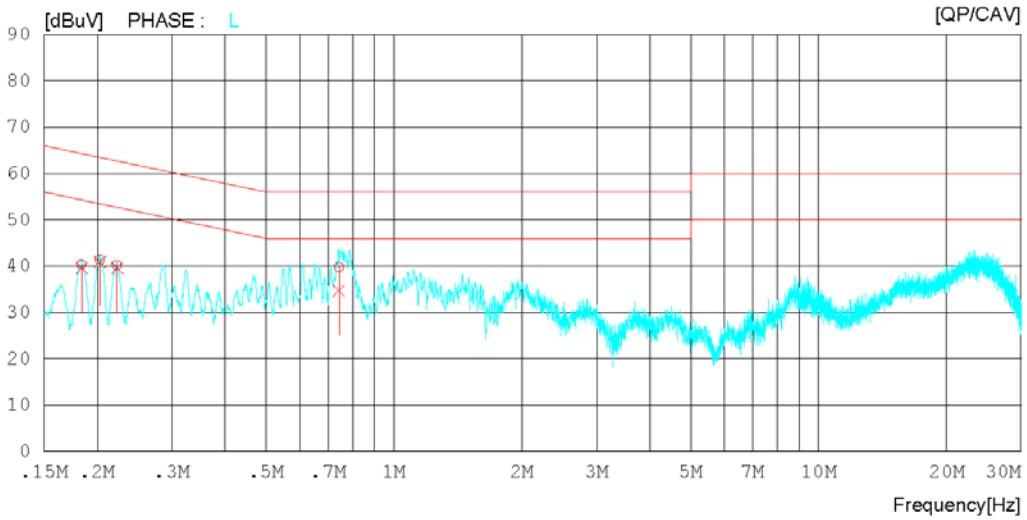
Results of Conducted Emission

DTNC Date 2020-09-28

Order No.	DTNC2008-06866, 2008-06867
Power Supply	120 VAC 60 Hz
Temp/Humi/Atm.	22 'C 49 %.R.H.
Test Condition	PC Link Mode

LIMIT : CISPR32_B QP
CISPR32_B AV





Results of Conducted Emission

DTNC Date 2020-09-28

Order No.	DTNC2008-06866, 2008-06867
Power Supply	120 VAC 60 Hz
Temp/Humi/Atm.	22 'C 49 %.R.H.
Test Condition	PC Link Mode

LIMIT : CISPR32_B QP
CISPR32_B AV

NO	FREQ	READING QP	READING CAV	C.FACTOR	RESULT QP	RESULT CAV	LIMIT QP	LIMIT CAV	MARGIN QP	MARGIN CAV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.18408	32.34	31.82	10.00	42.34	41.82	64.30	54.30	21.96	12.48	N
2	0.20327	31.47	30.92	10.00	41.47	40.92	63.48	53.48	22.01	12.56	N
3	0.75703	29.37	23.91	10.03	39.40	33.94	56.00	46.00	16.60	12.06	N
4	22.32431	29.38	23.76	10.60	39.98	34.36	60.00	50.00	20.02	15.64	N
5	0.18393	30.28	29.57	10.00	40.28	39.57	64.31	54.31	24.03	14.74	L
6	0.20297	31.37	30.85	10.00	41.37	40.85	63.49	53.49	22.12	12.64	L
7	0.22270	30.18	29.53	10.00	40.18	39.53	62.72	52.72	22.54	13.19	L
8	0.74222	29.70	24.67	10.03	39.73	34.70	56.00	46.00	16.27	11.30	L

7.2 Radiated Disturbance

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, 4, 5, 6, 11**
	EUT Operation mode	**1, 2, 3, 4, 5, 6, 11**

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	2019.12.20	2020.12.20
TRILOG BROAD BAND ANTENNA	VULB9160	SCHWARZBECK	9160-3339	2018.10.22	2020.10.22
6DB ATTENUATOR	2708A	HP	18403	2018.10.22	2020.10.22
LOW NOISE PRE AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2020.02.13	2021.02.13
HORN ANTENNA	3117	ETS-LINDGREN	00152093	2020.03.26	2021.03.26
PRE AMPLIFIER	8449B	H.P	3008A00887	2020.08.31	2021.08.31
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 PREAMPLIFIER	JS44-18004000-35-8P	L3 NARDA-MITEQ	2046884	2019.12.12	2020.12.12
	3116C	ETS-LINDGREN	00213177	2019.11.04	2020.11.04
(NOTE : THE MEASUREMENT ANTENNAS WERE CALIBRATED IN ACCORDANCE TO THE REQUIREMENTS OF C63.5-2017.)					

Calculation

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

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**

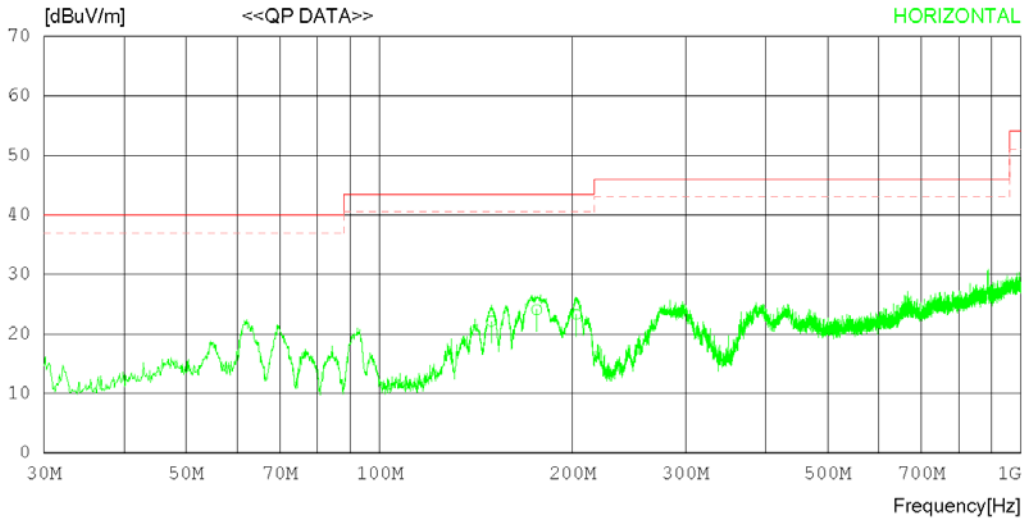
RADIATED EMISSION

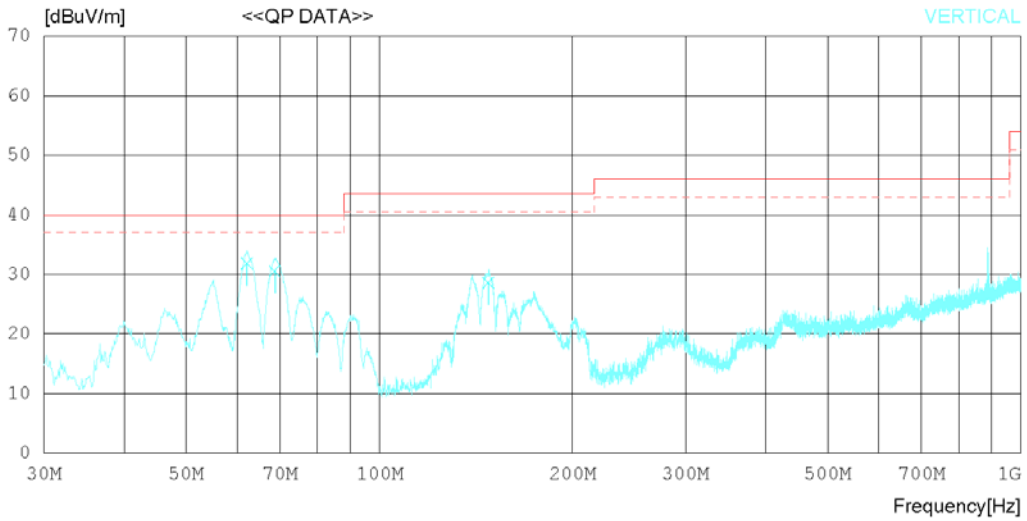
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition Charging Mode

Memo

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





RADIATED EMISSION

Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition Charging 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	149.429	28.80	18.89	1.21	26.76	22.14	43.50	21.36	315	0
2	175.860	32.10	17.46	1.21	26.70	24.07	43.50	19.43	201	0
3	202.656	32.30	16.13	1.45	26.64	23.24	43.50	20.26	209	0
----- Vertical ------										
4	62.131	39.80	17.89	0.84	26.67	31.86	40.00	8.14	100	149
5	68.679	39.70	16.73	0.87	26.70	30.60	40.00	9.40	102	196
6	147.853	35.30	18.86	1.22	26.76	28.62	43.50	14.88	105	214

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**

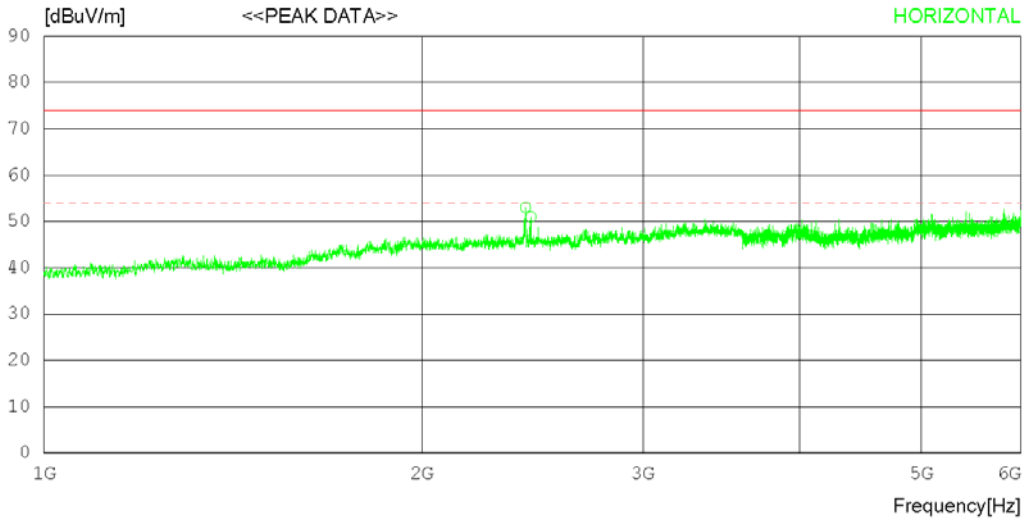
RADIATED EMISSION

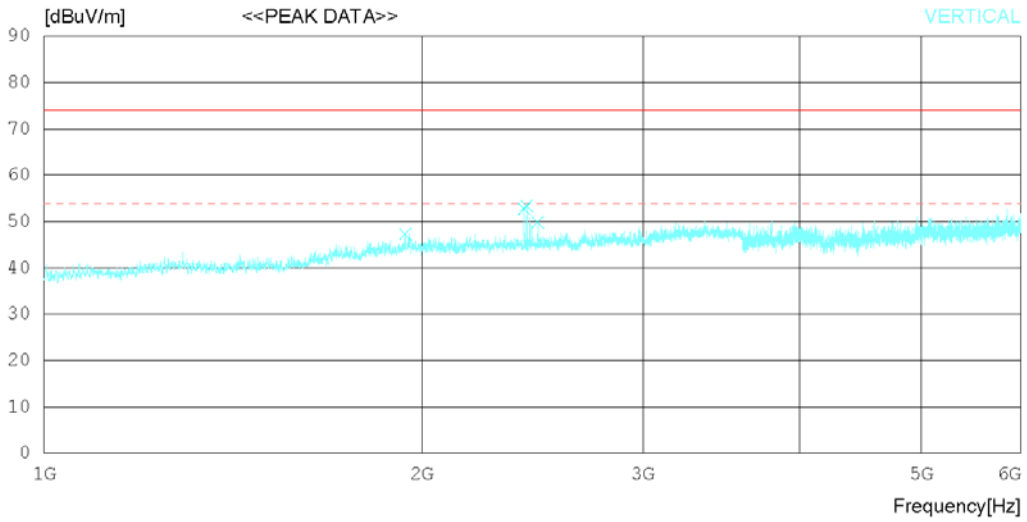
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition Charging Mode

Memo

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





RADIATED EMISSION

Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition Charging 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	2418.125	48.90	32.20	7.08	35.14	53.04	74.0	20.96	295	136
2	2441.875	46.80	32.20	7.13	35.14	50.99	74.0	23.01	106	200
----- Vertical ------										
3	1939.375	44.00	31.64	6.80	35.17	47.27	74.0	26.73	216	287
4	2411.875	48.60	32.20	7.08	35.14	52.74	74.0	21.26	203	211
5	2424.375	49.30	32.20	7.10	35.14	53.46	74.0	20.54	100	211
6	2475.000	45.60	32.20	7.19	35.15	49.84	74.0	24.16	103	348

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**

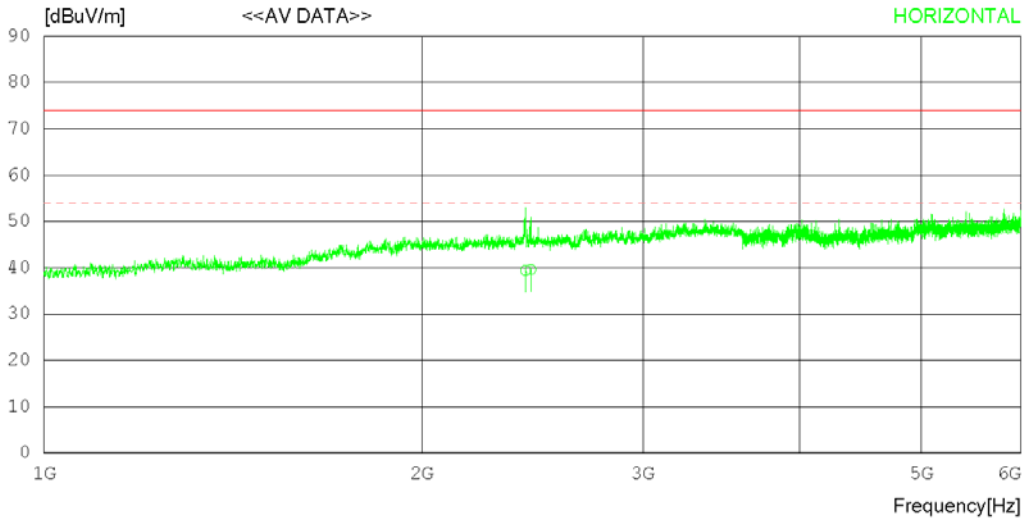
RADIATED EMISSION

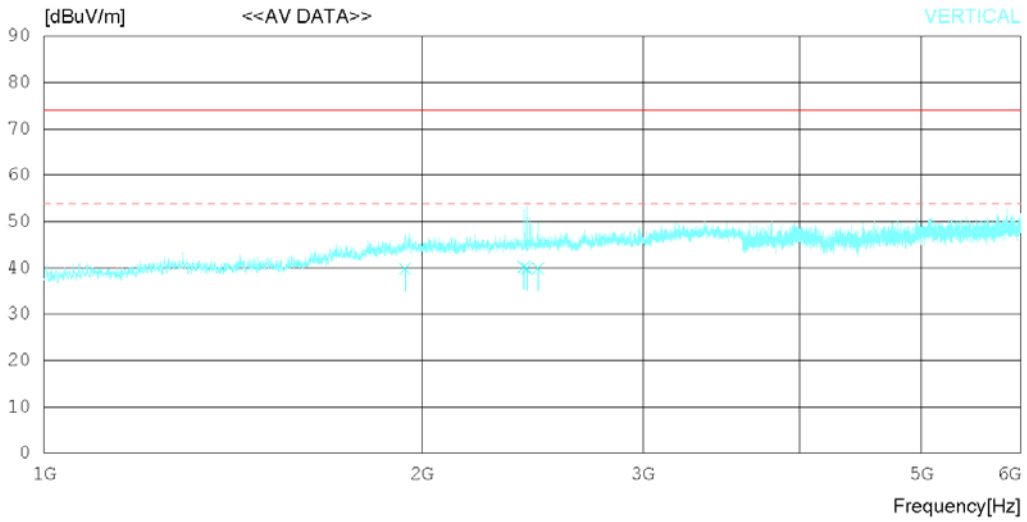
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition Charging Mode

Memo

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





RADIATED EMISSION

Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition Charging 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 CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	2418.263	35.30	32.20	7.08	35.14	39.44	54.00	14.56	293	143
2	2441.855	35.40	32.20	7.13	35.14	39.59	54.00	14.41	105	216
----- Vertical ------										
3	1939.236	36.50	31.64	6.80	35.17	39.77	54.00	14.23	214	293
4	2411.894	36.10	32.20	7.08	35.14	40.24	54.00	13.76	205	239
5	2424.322	35.70	32.20	7.10	35.14	39.86	54.00	14.14	101	218
6	2475.130	35.60	32.20	7.19	35.15	39.84	54.00	14.16	105	352

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**

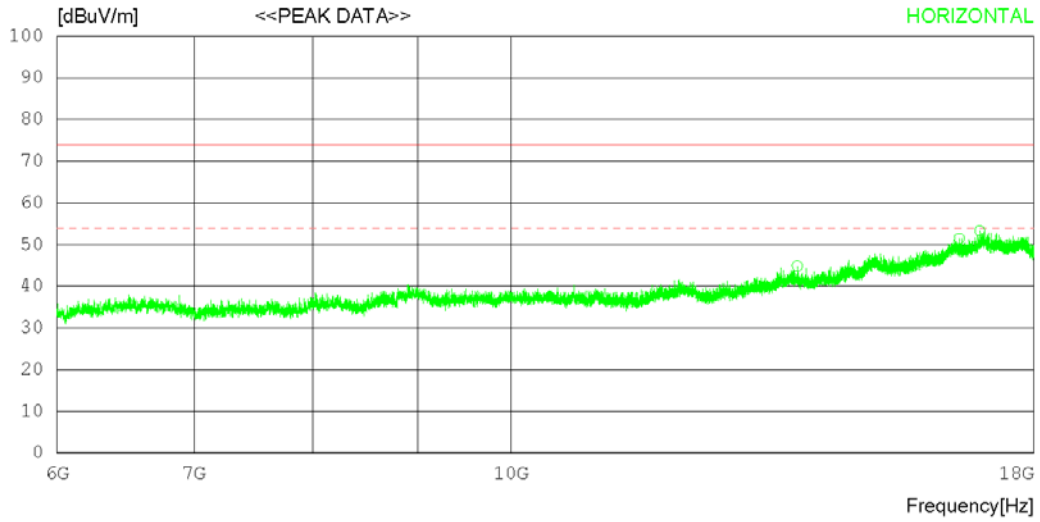
RADIATED EMISSION

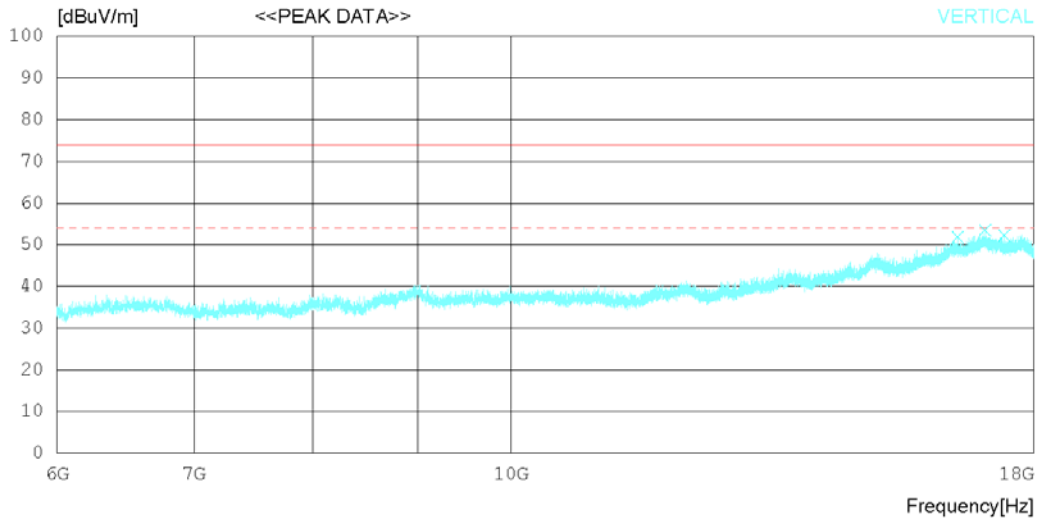
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition Charging Mode

Memo

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





RADIATED EMISSION

Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition Charging 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	13794.750	29.10	33.84	19.38	37.46	44.86	74.0	29.14	208	58
2	16551.750	28.70	37.04	21.80	36.13	51.41	74.0	22.59	202	348
3	16937.250	28.90	37.48	23.27	36.36	53.29	74.0	20.71	108	233
----- Vertical ------										
4	16522.500	29.10	37.01	21.84	36.11	51.84	74.0	22.16	108	358
5	17041.500	28.90	37.58	23.48	36.45	53.51	74.0	20.49	101	358
6	17409.000	29.20	37.86	22.03	36.89	52.20	74.0	21.8	103	252

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**

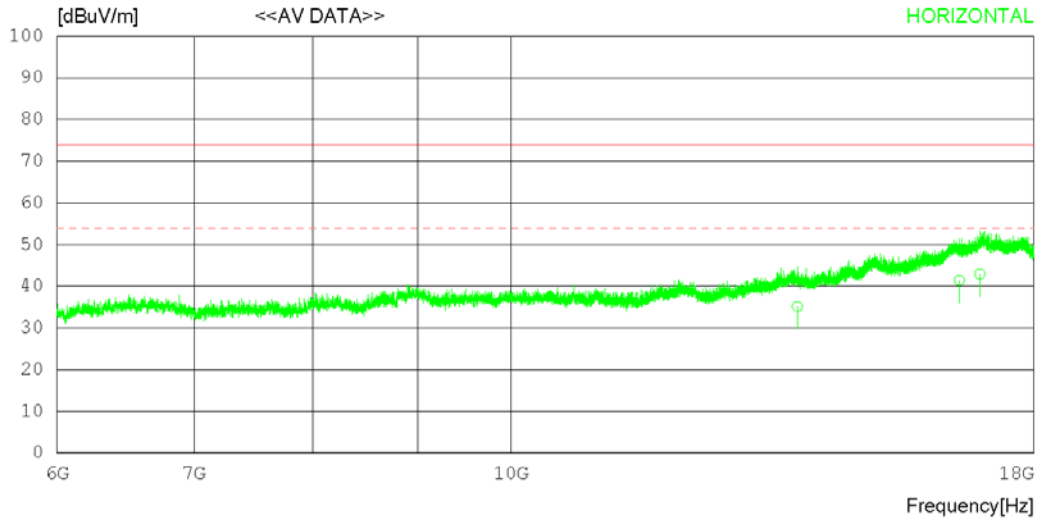
RADIATED EMISSION

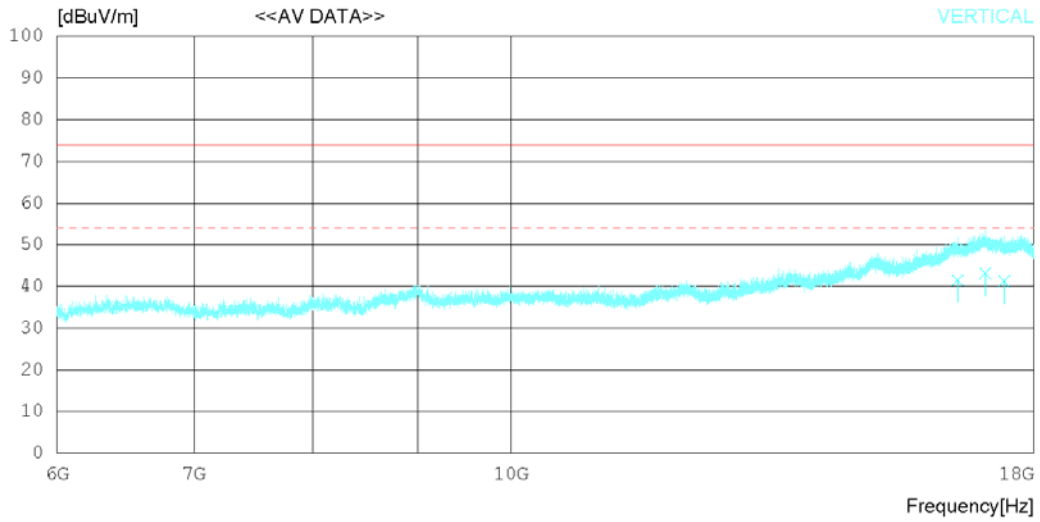
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition Charging Mode

Memo

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





RADIATED EMISSION

Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition Charging 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 CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	13794.770	19.40	33.84	19.38	37.46	35.16	54.00	18.84	206	66
2	16551.790	18.70	37.04	21.80	36.13	41.41	54.00	12.59	201	351
3	16937.150	18.50	37.48	23.27	36.36	42.89	54.00	11.11	109	244
----- Vertical ------										
4	16522.580	18.70	37.01	21.84	36.11	41.44	54.00	12.56	107	355
5	17041.500	18.50	37.58	23.48	36.45	43.11	54.00	10.89	103	352
6	17409.130	18.20	37.87	22.04	36.89	41.22	54.00	12.78	102	263

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**

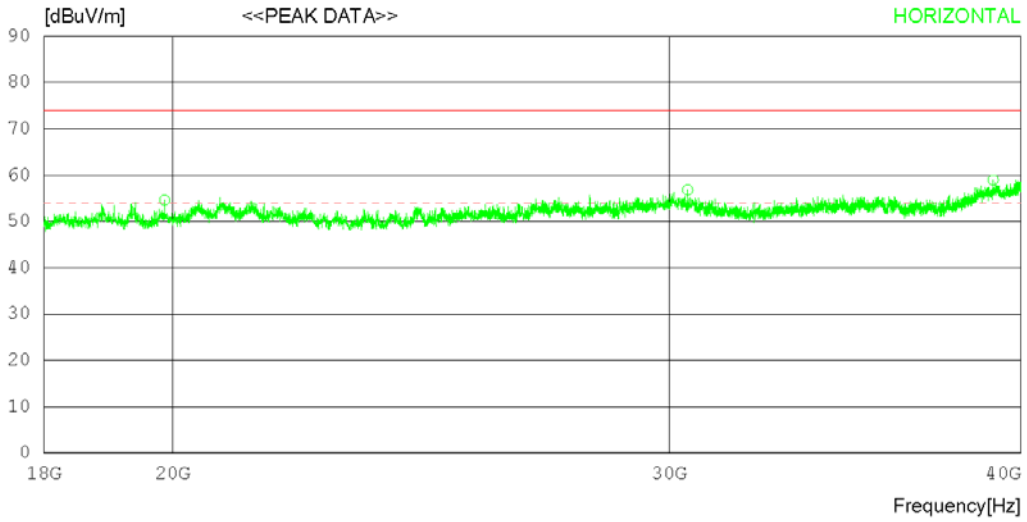
RADIATED EMISSION

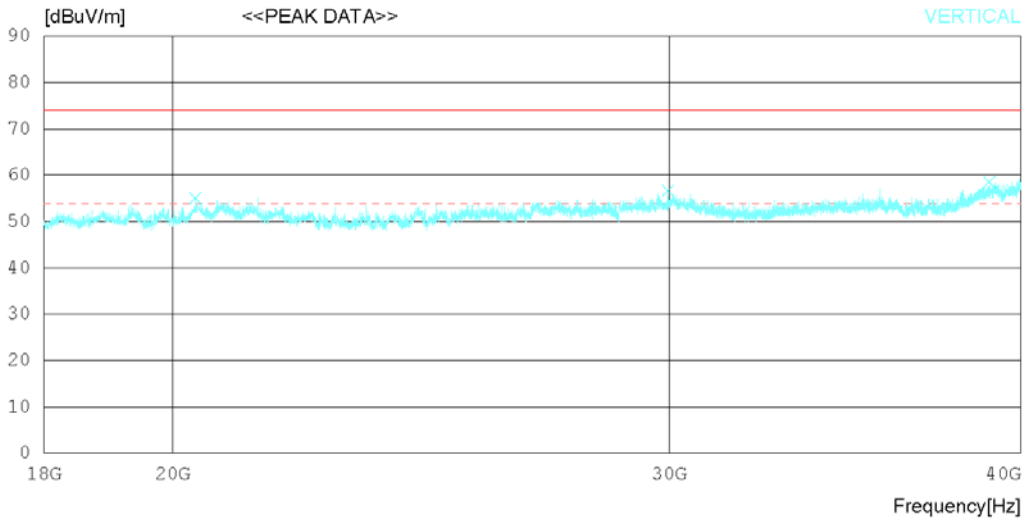
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition Charging Mode

Memo

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





RADIATED EMISSION

Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition Charging 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	19864.500	43.30	45.16	19.01	52.88	54.59	74.0	19.41	201	201
2	30463.000	39.20	47.44	22.40	52.22	56.82	74.0	17.18	305	345
3	39106.250	37.50	47.71	25.96	52.24	58.93	74.0	15.07	101	1
----- Vertical ------										
4	20370.500	43.20	45.37	19.71	53.17	55.11	74.0	18.89	202	358
5	29976.250	39.10	47.50	22.33	52.21	56.72	74.0	17.28	209	256
6	38988.000	37.20	47.59	26.06	52.25	58.60	74.0	15.4	103	251

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**

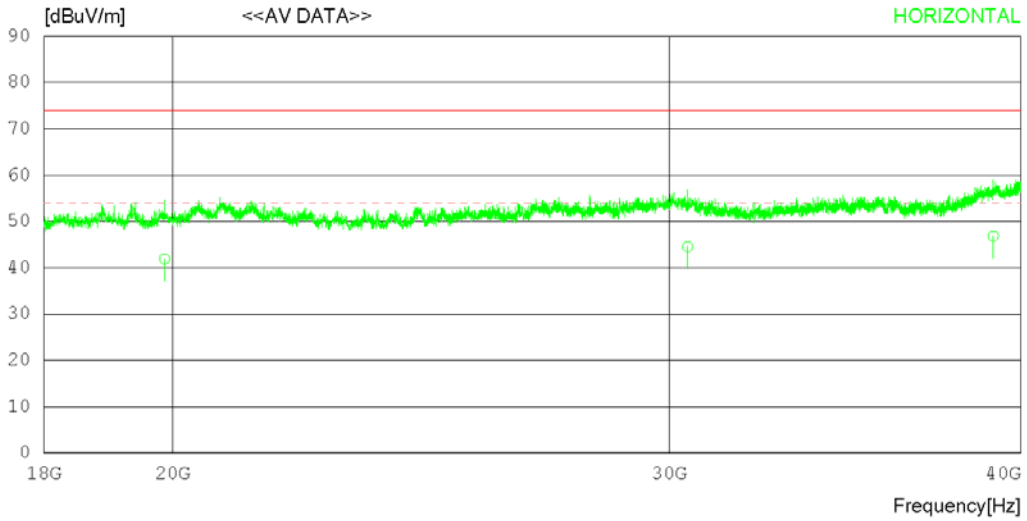
RADIATED EMISSION

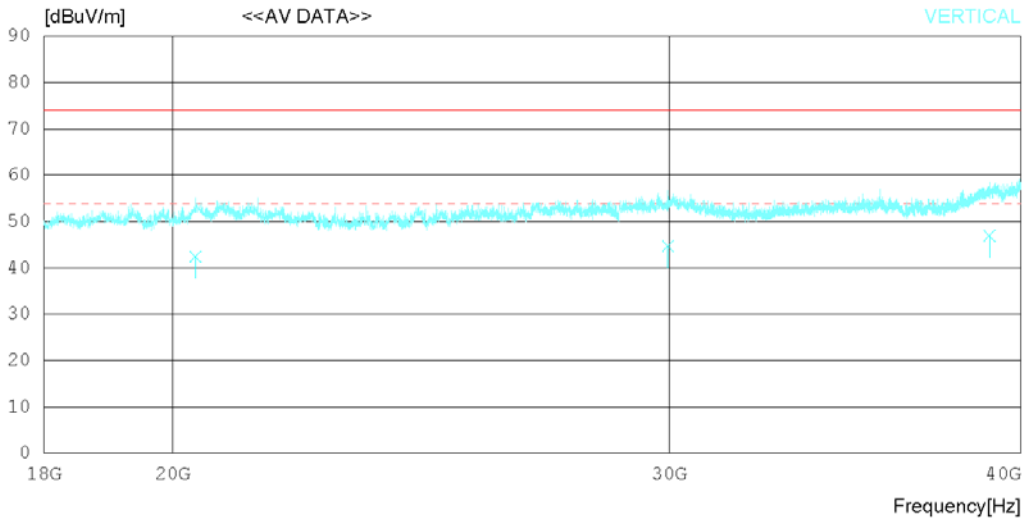
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition Charging Mode

Memo

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





RADIATED EMISSION

Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition Charging 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 CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	19864.580	30.60	45.16	19.01	52.88	41.89	54.00	12.11	203	209
2	30463.120	26.90	47.44	22.40	52.22	44.52	54.00	9.48	301	355
3	39106.270	25.40	47.71	25.96	52.24	46.83	54.00	7.17	100	0
----- Vertical ------										
4	20370.580	30.50	45.37	19.71	53.17	42.41	54.00	11.59	203	356
5	29976.210	27.10	47.50	22.33	52.21	44.72	54.00	9.28	211	251
6	38988.130	25.50	47.59	26.06	52.25	46.90	54.00	7.10	102	266

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**

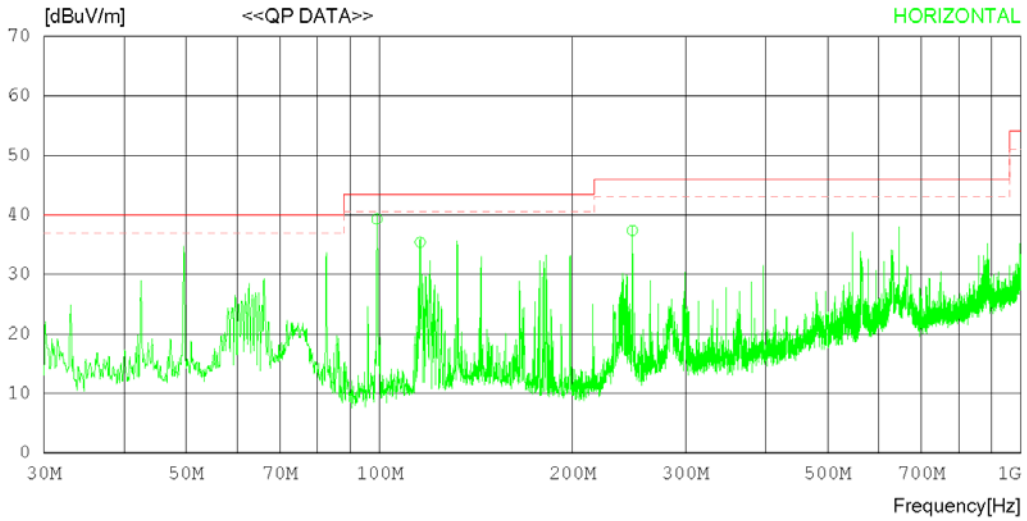
RADIATED EMISSION

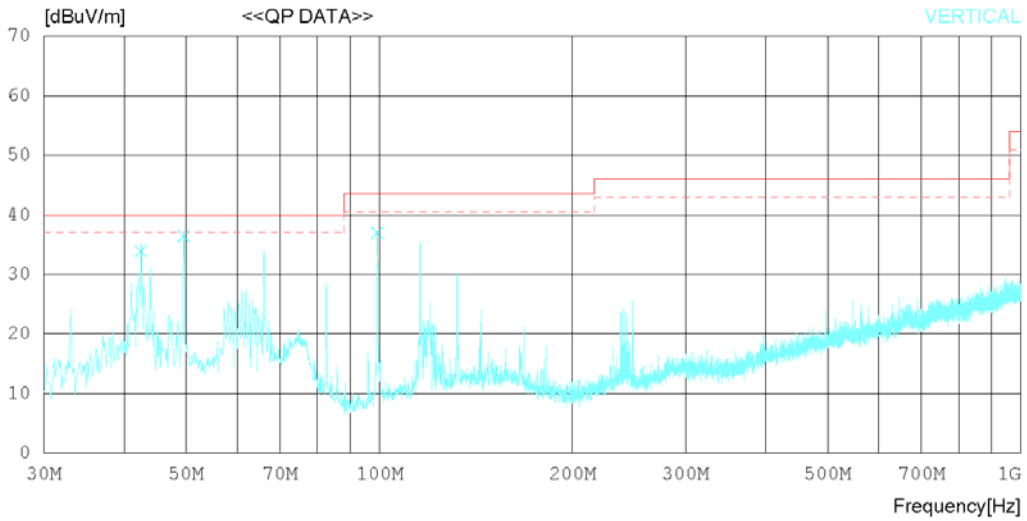
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition PC Link Mode

Memo

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





RADIATED EMISSION

Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition PC Link 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	99.111	49.70	15.12	1.29	26.84	39.27	43.50	4.23	400	352
2	115.722	44.20	16.69	1.31	26.81	35.39	43.50	8.11	203	0
3	248.002	44.10	18.02	1.83	26.59	37.36	46.00	8.64	207	0
----- Vertical ------										
4	42.489	42.30	17.55	0.68	26.58	33.95	40.00	6.05	205	0
5	49.521	44.10	18.25	0.73	26.62	36.46	40.00	3.54	101	0
6	99.111	47.40	15.12	1.29	26.84	36.97	43.50	6.53	102	188

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**

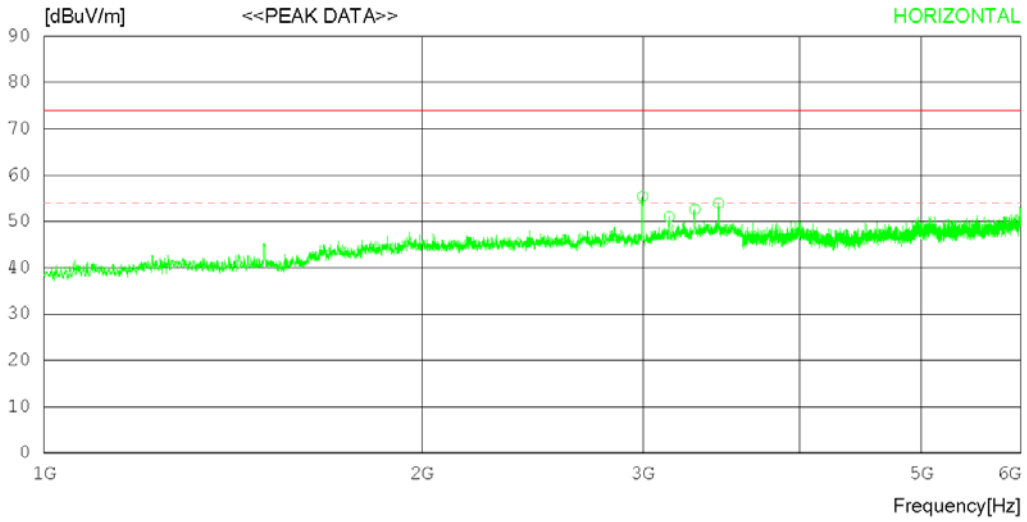
RADIATED EMISSION

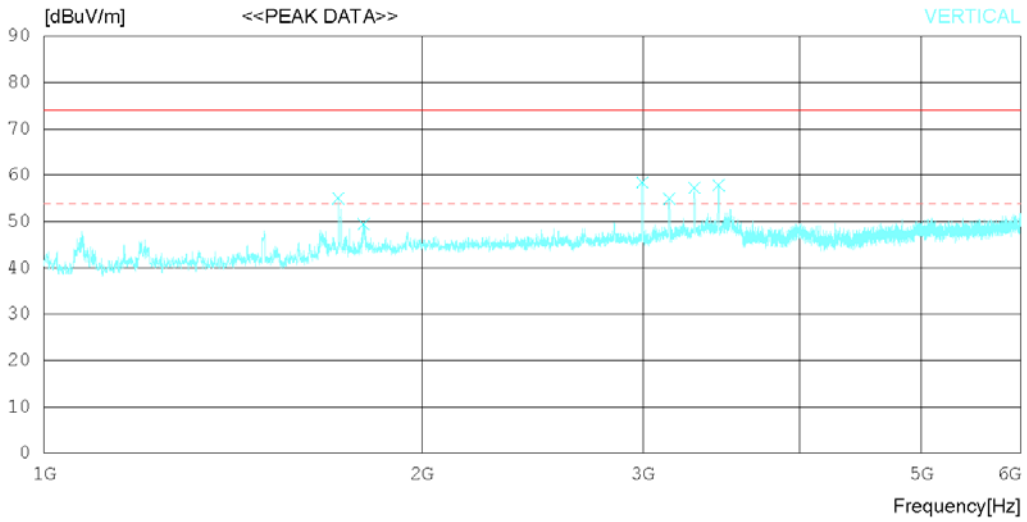
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition PC Link Mode

Memo

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





RADIATED EMISSION

Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition PC Link 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	2998.125	50.20	32.99	7.38	35.20	55.37	74.0	18.63	400	1
2	3148.125	44.80	33.10	8.25	35.13	51.02	74.0	22.98	396	251
3	3299.375	45.90	33.20	8.55	35.05	52.60	74.0	21.4	398	1
4	3445.000	47.00	33.40	8.49	34.98	53.91	74.0	20.09	201	1
----- Vertical ------										
5	1715.625	53.70	29.67	7.05	35.41	55.01	74.0	18.99	102	343
6	1798.125	47.50	30.18	7.06	35.32	49.42	74.0	24.58	301	209
7	2996.875	53.30	32.98	7.38	35.20	58.46	74.0	15.54	208	200
8	3148.750	48.70	33.10	8.25	35.13	54.92	74.0	19.08	207	343
9	3296.250	50.60	33.20	8.55	35.05	57.30	74.0	16.7	102	343
10	3446.250	50.90	33.40	8.48	34.98	57.80	74.0	16.2	104	343

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**

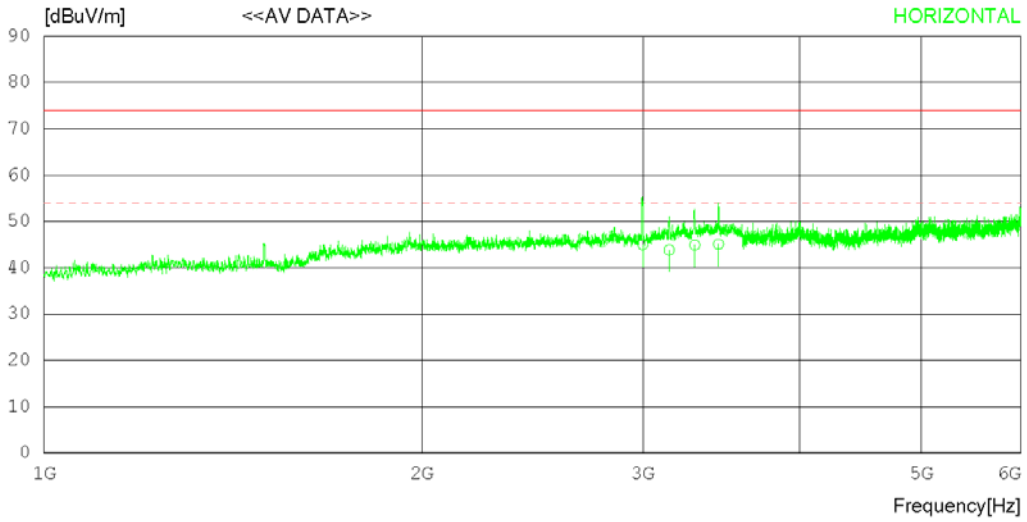
RADIATED EMISSION

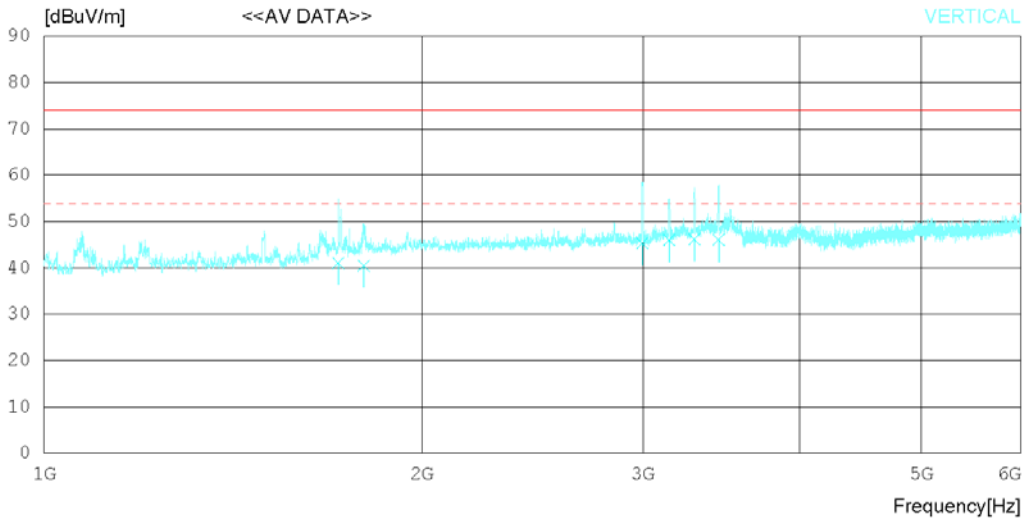
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition PC Link Mode

Memo

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





RADIATED EMISSION

Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition PC Link 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 CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	2998.285	39.80	32.99	7.38	35.20	44.97	54.00	9.03	399	0
2	3148.363	37.60	33.10	8.25	35.13	43.82	54.00	10.18	400	266
3	3299.312	38.20	33.20	8.55	35.05	44.90	54.00	9.10	398	0
4	3445.163	38.20	33.40	8.48	34.98	45.10	54.00	8.90	203	0
----- Vertical ------										
5	1715.687	39.70	29.67	7.05	35.41	41.01	54.00	12.99	100	352
6	1798.241	38.60	30.18	7.06	35.32	40.52	54.00	13.48	303	211
7	2996.889	40.20	32.98	7.38	35.20	45.36	54.00	8.64	211	203
8	3148.732	39.80	33.10	8.25	35.13	46.02	54.00	7.98	209	355
9	3296.242	39.50	33.20	8.55	35.05	46.20	54.00	7.80	101	341
10	3446.289	39.20	33.40	8.48	34.98	46.10	54.00	7.90	105	338

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**

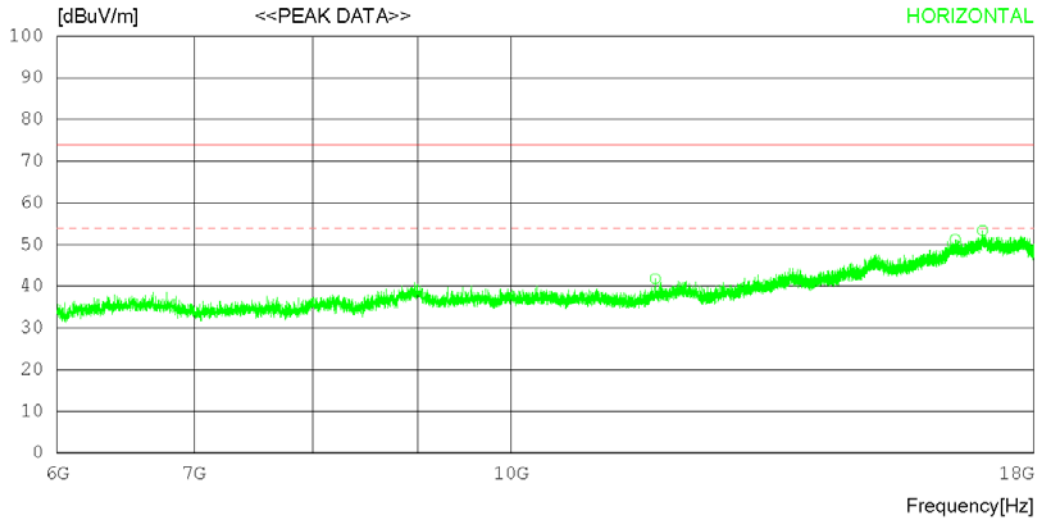
RADIATED EMISSION

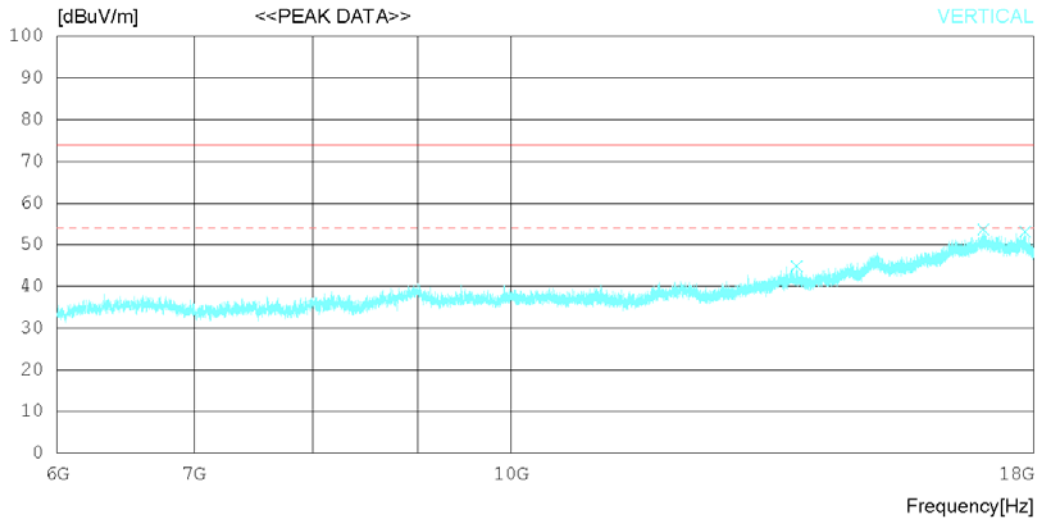
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition PC Link Mode

Memo

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





RADIATED EMISSION

Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition PC Link 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	11757.750	30.60	33.21	16.04	38.04	41.81	74.0	32.19	395	1
2	16473.000	28.50	36.95	21.89	36.12	51.22	74.0	22.78	400	205
3	16989.750	28.50	37.54	23.72	36.39	53.37	74.0	20.63	201	352
----- Vertical ------										
4	13780.500	29.20	33.83	19.30	37.46	44.87	74.0	29.13	205	358
5	17007.000	28.80	37.56	23.75	36.41	53.70	74.0	20.3	201	358
6	17825.250	29.70	38.19	22.67	37.52	53.04	74.0	20.96	109	358

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**

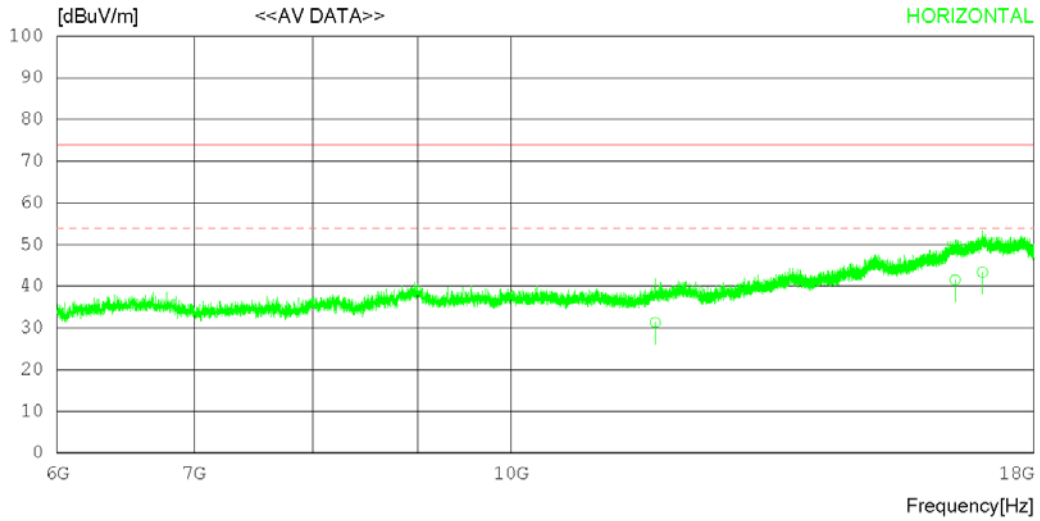
RADIATED EMISSION

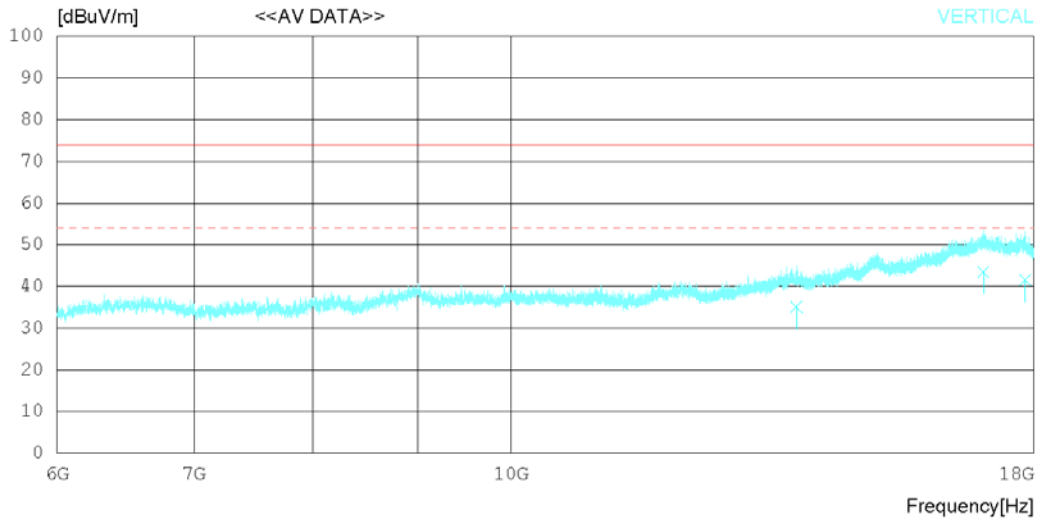
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition PC Link Mode

Memo

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





RADIATED EMISSION

Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition PC Link 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 CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	11757.770	20.10	33.21	16.04	38.04	31.31	54.00	22.69	391	0
2	16473.150	18.80	36.95	21.89	36.12	41.52	54.00	12.48	395	214
3	16989.650	18.50	37.54	23.72	36.39	43.37	54.00	10.63	203	363
----- Vertical ------										
4	13780.580	19.40	33.83	19.30	37.46	35.07	54.00	18.93	203	356
5	17007.160	18.60	37.56	23.75	36.41	43.50	54.00	10.50	202	352
6	17825.220	18.20	38.19	22.67	37.52	41.54	54.00	12.46	107	355

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**

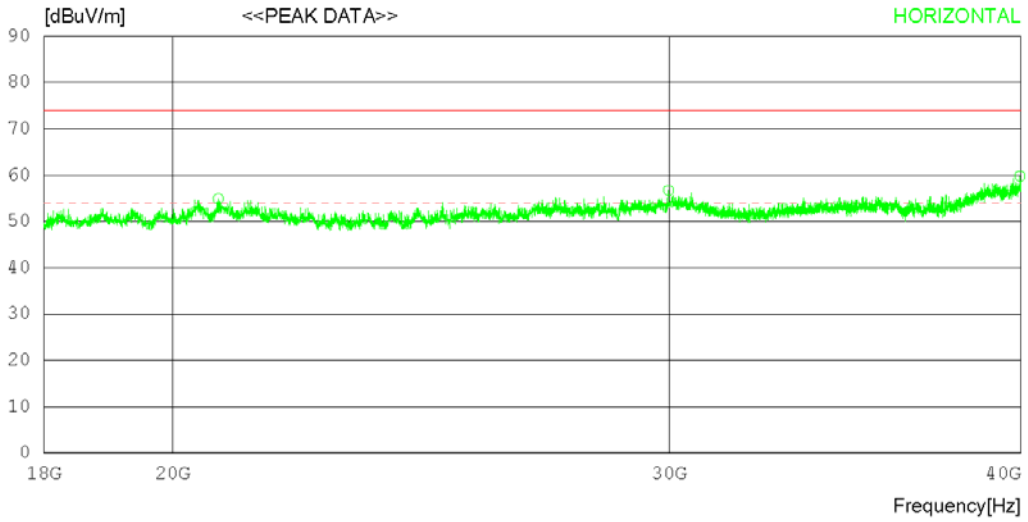
RADIATED EMISSION

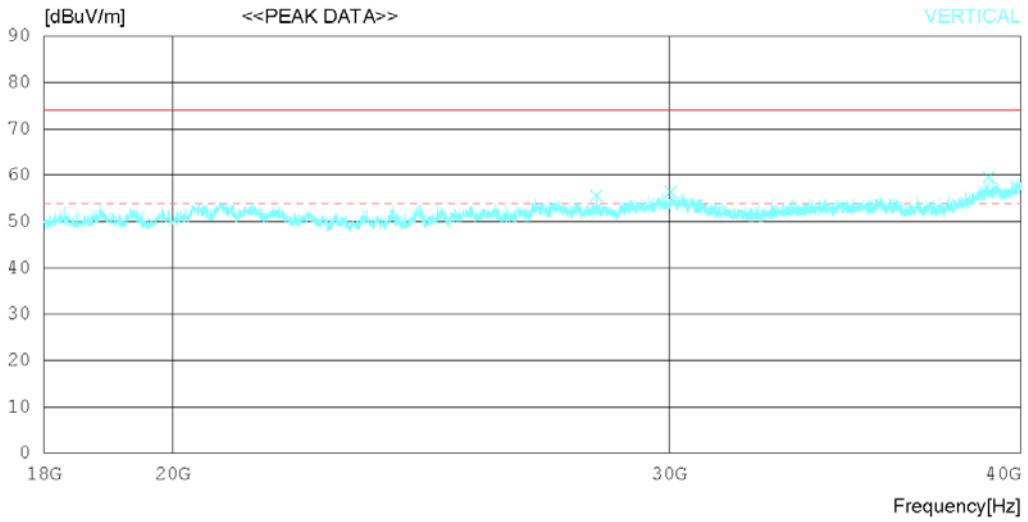
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition PC Link Mode

Memo

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





RADIATED EMISSION

Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition PC Link 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	20752.750	42.30	45.55	20.40	53.34	54.91	74.0	19.09	105	330
2	29992.750	39.10	47.50	22.33	52.20	56.73	74.0	17.27	205	165
3	39972.500	37.80	49.25	24.93	52.20	59.78	74.0	14.22	201	1
----- Vertical ------										
4	28271.250	40.20	46.40	21.74	52.76	55.58	74.0	18.42	109	358
5	30045.000	38.80	47.50	22.33	52.20	56.43	74.0	17.57	204	358
6	38963.250	38.20	47.56	26.02	52.25	59.53	74.0	14.47	199	29

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**

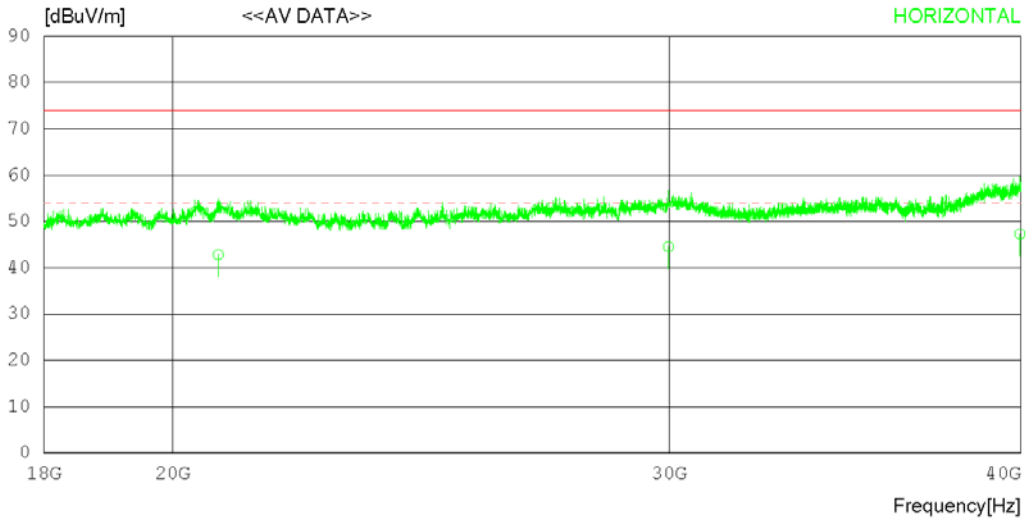
RADIATED EMISSION

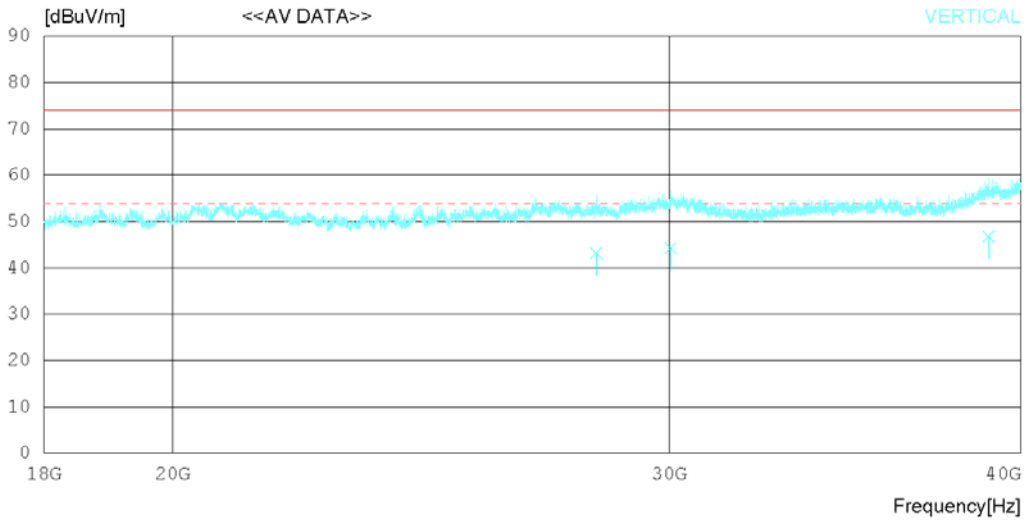
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition PC Link Mode

Memo

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





RADIATED EMISSION

Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 47 %.R.H.
Test Condition PC Link 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 CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	20752.790	30.20	45.55	20.40	53.34	42.81	54.00	11.19	106	326
2	29992.630	26.90	47.50	22.33	52.20	44.53	54.00	9.47	201	177
3	39972.540	25.30	49.25	24.93	52.20	47.28	54.00	6.72	203	0
----- Vertical ------										
4	28271.280	27.80	46.40	21.74	52.76	43.18	54.00	10.82	109	351
5	30045.130	26.70	47.50	22.33	52.20	44.33	54.00	9.67	203	352
6	38963.260	25.40	47.56	26.02	52.25	46.73	54.00	7.27	201	33

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

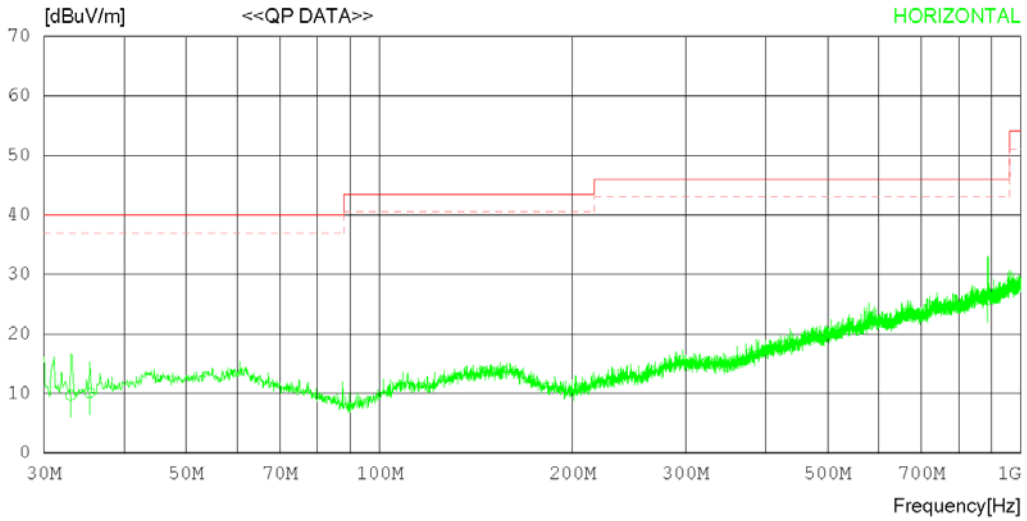
RADIATED EMISSION

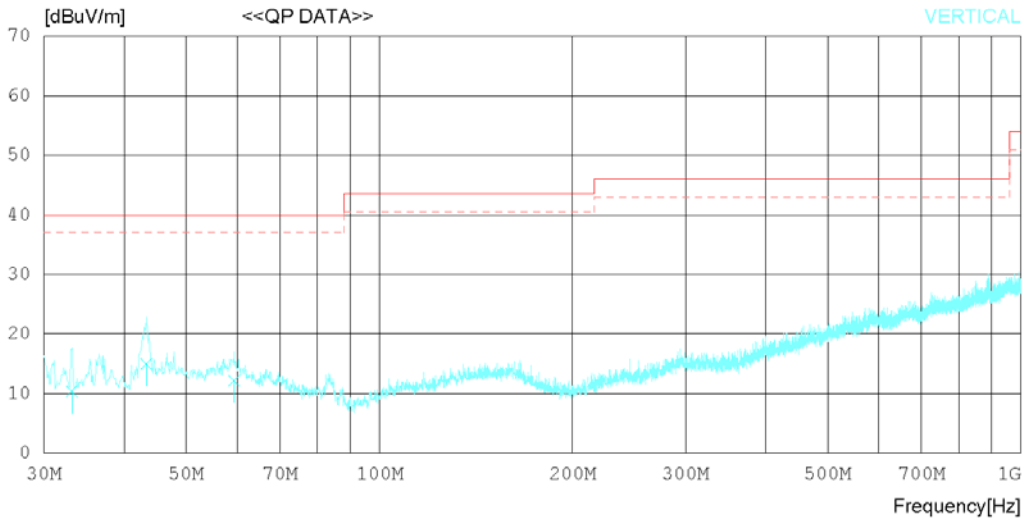
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply Battery
Temp/Humi 22 'C 47 %.R.H.
Test Condition MP4 Mode

Memo

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





RADIATED EMISSION

Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply Battery
Temp/Humi 22 'C 47 %.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	33.031	20.10	15.51	0.64	26.54	9.71	40.00	30.29	202	0
2	35.335	20.20	15.87	0.65	26.55	10.17	40.00	29.83	196	197
3	888.035	19.30	29.26	3.61	26.49	25.68	46.00	20.32	305	0
----- Vertical ------										
4	33.153	20.70	15.53	0.64	26.54	10.33	40.00	29.67	101	0
5	43.338	23.30	17.60	0.69	26.59	15.00	40.00	25.00	105	0
6	59.343	20.10	17.90	0.83	26.66	12.17	40.00	27.83	303	0

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

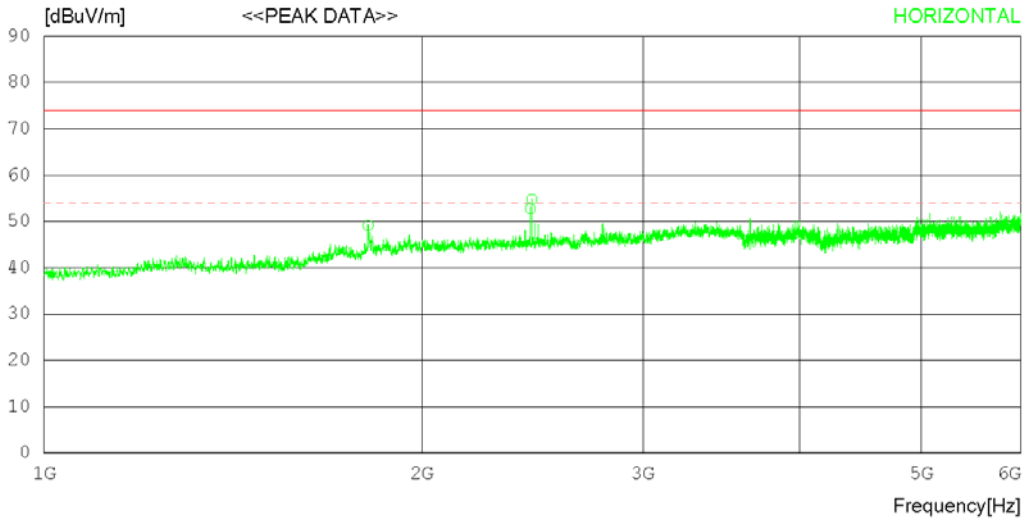
RADIATED EMISSION

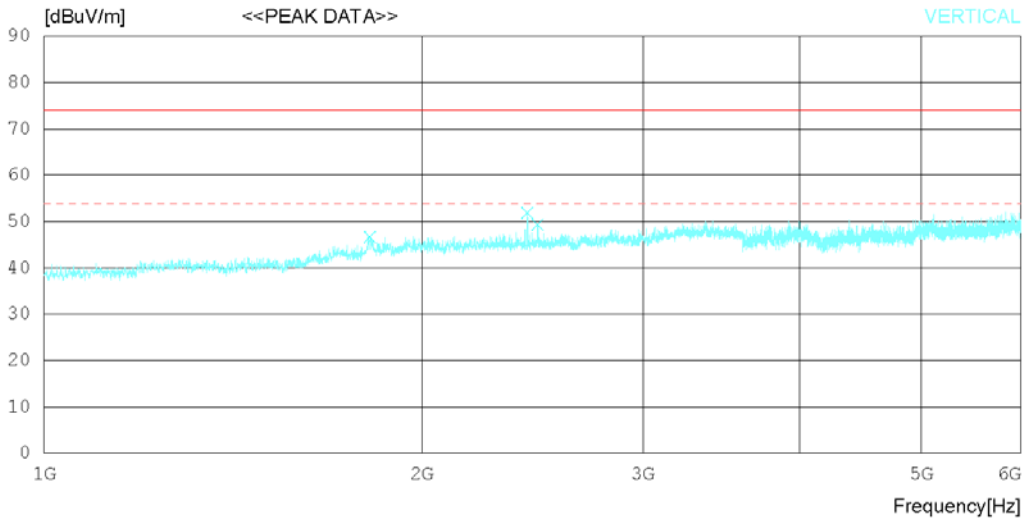
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply Battery
Temp/Humi 22 'C 47 %.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 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply Battery
Temp/Humi 22 'C 47 %.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	47.00	30.39	7.04	35.31	49.12	74.0	24.88	102	332
2	2439.375	48.60	32.20	7.12	35.14	52.78	74.0	21.22	198	358
3	2446.875	50.60	32.20	7.14	35.14	54.80	74.0	19.2	201	358
----- Vertical ------										
4	1818.750	44.40	30.50	7.03	35.30	46.63	74.0	27.37	102	54
5	2426.875	47.70	32.20	7.11	35.14	51.87	74.0	22.13	100	54
6	2473.125	45.10	32.20	7.18	35.15	49.33	74.0	24.67	101	305

Radiated disturbance at (1 ~ 6) GHz _ Average Measurement data			
Test configuration mode	**3**	**EUT Operation mode**	**3**
Test voltage (V)	**Battery**	**Test Frequency (Hz)**	**-**

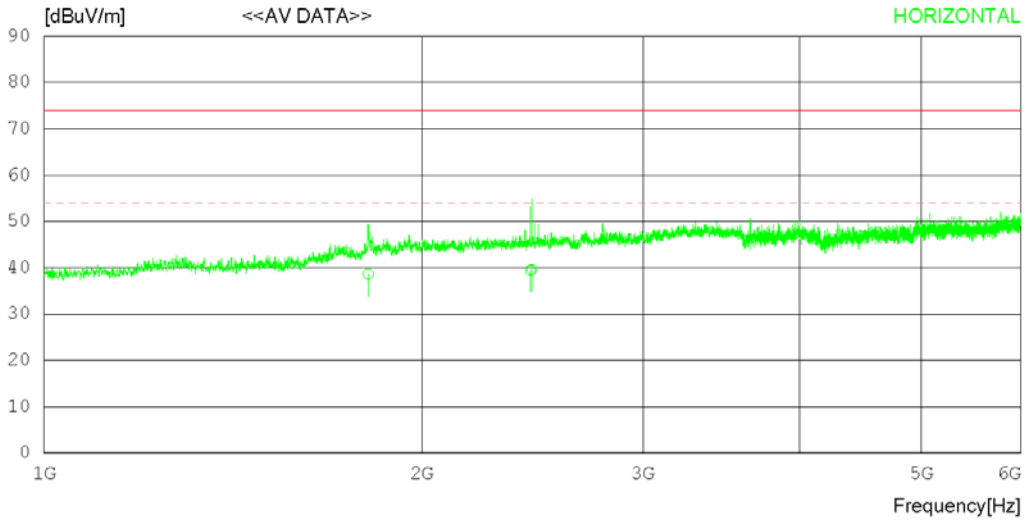
RADIATED EMISSION

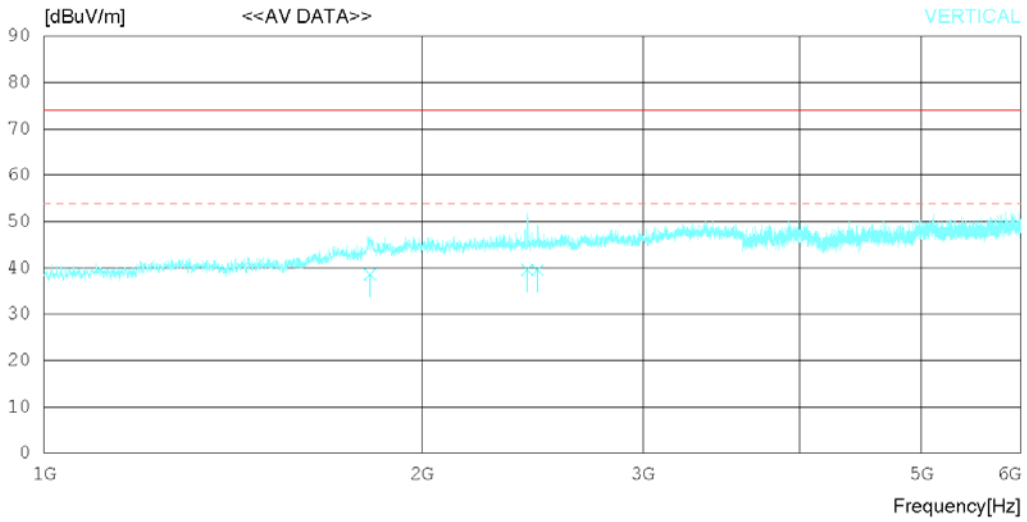
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply Battery
Temp/Humi 22 'C 47 %.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 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply Battery
Temp/Humi 22 'C 47 %.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 CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	1811.886	36.50	30.39	7.04	35.31	38.62	54.00	15.38	100	341
2	2439.337	35.30	32.20	7.12	35.14	39.48	54.00	14.52	200	355
3	2446.965	35.40	32.20	7.14	35.14	39.60	54.00	14.40	203	352
----- Vertical ------										
4	1818.767	36.40	30.50	7.02	35.30	38.62	54.00	15.38	100	48
5	2426.832	35.40	32.20	7.11	35.14	39.57	54.00	14.43	100	66
6	2473.240	35.30	32.20	7.18	35.15	39.53	54.00	14.47	105	314

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

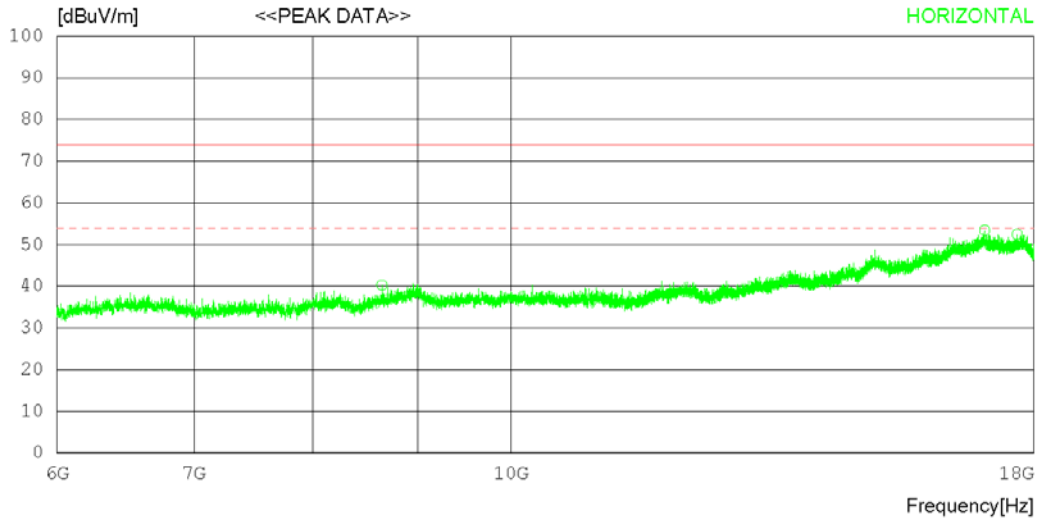
RADIATED EMISSION

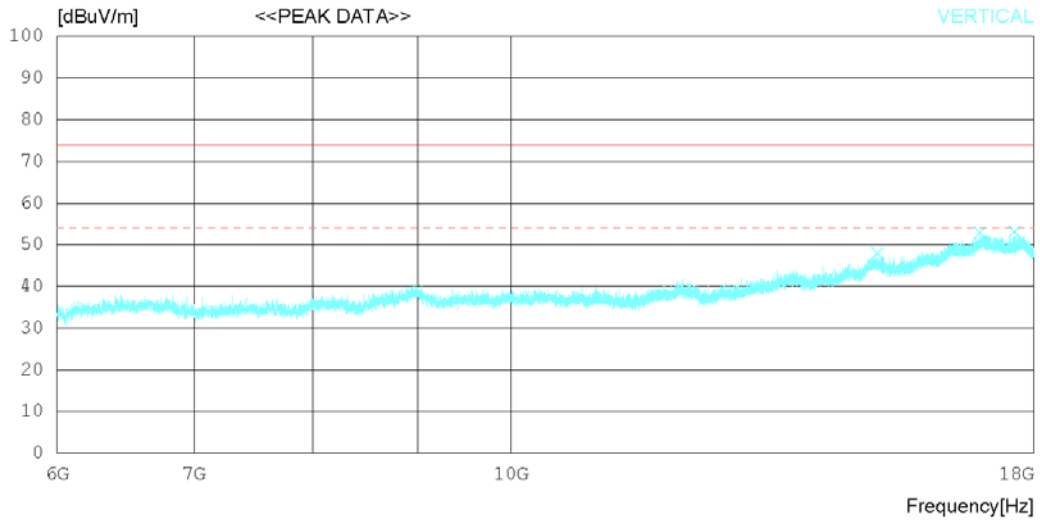
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply Battery
Temp/Humi 22 'C 47 %.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 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply Battery
Temp/Humi 22 'C 47 %.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	8646.750	30.80	31.82	14.96	37.29	40.29	74.0	33.71	211	33
2	17029.500	28.70	37.57	23.58	36.44	53.41	74.0	20.59	331	87
3	17663.250	29.10	38.06	22.58	37.26	52.48	74.0	21.52	106	335
----- Vertical ------										
4	15096.750	28.90	35.54	20.47	36.92	47.99	74.0	26.01	102	258
5	16941.000	28.50	37.48	23.31	36.36	52.93	74.0	21.07	100	277
6	17620.500	29.80	38.03	22.51	37.19	53.15	74.0	20.85	100	358

Radiated disturbance at (6 ~ 18) GHz _ Average Measurement data			
Test configuration mode	**3**	**EUT Operation mode**	**3**
Test voltage (V)	**Battery**	**Test Frequency (Hz)**	**-**

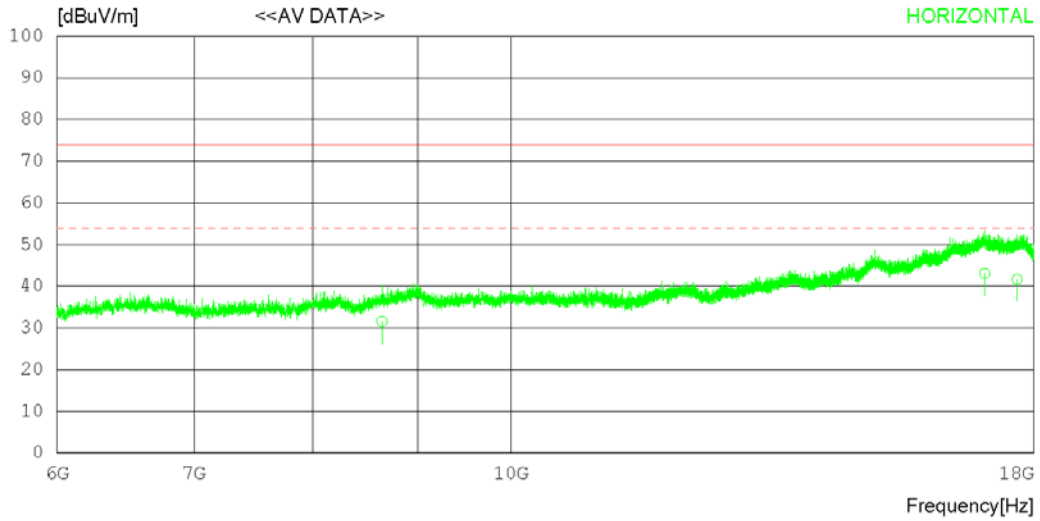
RADIATED EMISSION

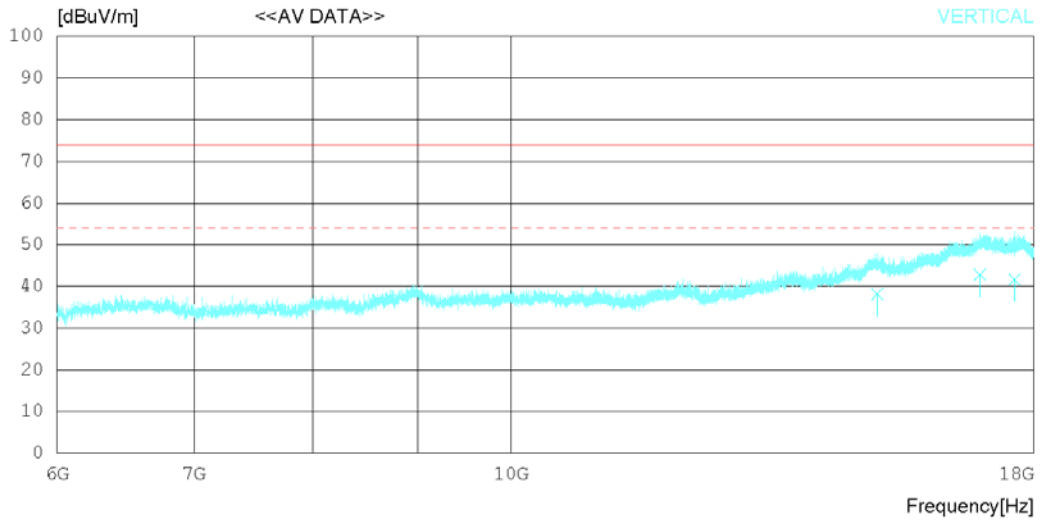
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply Battery
Temp/Humi 22 'C 47 %.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 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply Battery
Temp/Humi 22 'C 47 %.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 CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	8646.773	22.10	31.82	14.96	37.29	31.59	54.00	22.41	209	31
2	17029.540	18.40	37.57	23.58	36.44	43.11	54.00	10.89	312	99
3	17663.190	18.30	38.06	22.58	37.26	41.68	54.00	12.32	101	342
----- Vertical ------										
4	15096.770	19.10	35.54	20.47	36.92	38.19	54.00	15.81	100	266
5	16941.140	18.40	37.48	23.31	36.36	42.83	54.00	11.17	105	271
6	17620.540	18.30	38.03	22.51	37.19	41.65	54.00	12.35	101	352

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

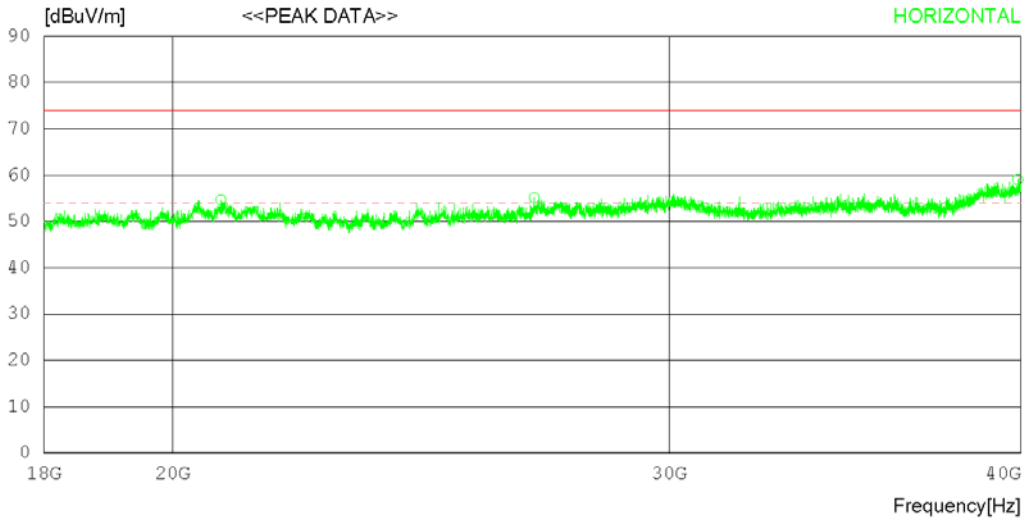
RADIATED EMISSION

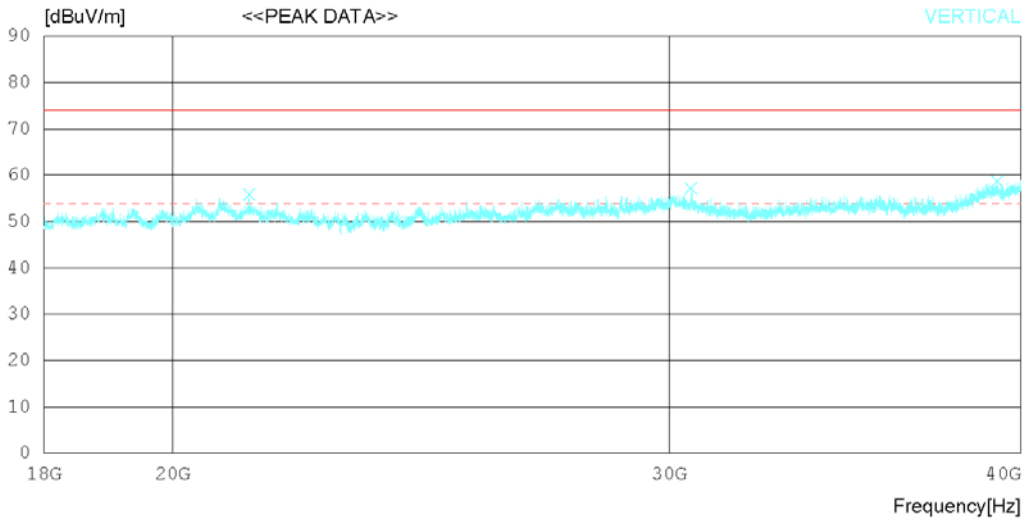
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply Battery
Temp/Humi 22 'C 47 %.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 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply Battery
Temp/Humi 22 'C 47 %.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	20802.250	41.90	45.60	20.49	53.36	54.63	74.0	19.37	200	157
2	26874.250	40.90	45.90	21.51	53.22	55.09	74.0	18.91	205	1
3	39901.000	37.10	49.10	25.02	52.20	59.02	74.0	14.98	100	303
----- Vertical ------										
4	21286.250	43.20	45.51	20.69	53.58	55.82	74.0	18.18	103	327
5	30553.750	39.60	47.40	22.41	52.23	57.18	74.0	16.82	101	358
6	39230.000	37.20	47.93	25.81	52.24	58.70	74.0	15.3	206	358

Radiated disturbance at (18 ~ 40) GHz _ Average Measurement data			
Test configuration mode	**3**	**EUT Operation mode**	**3**
Test voltage (V)	**Battery**	**Test Frequency (Hz)**	**-**

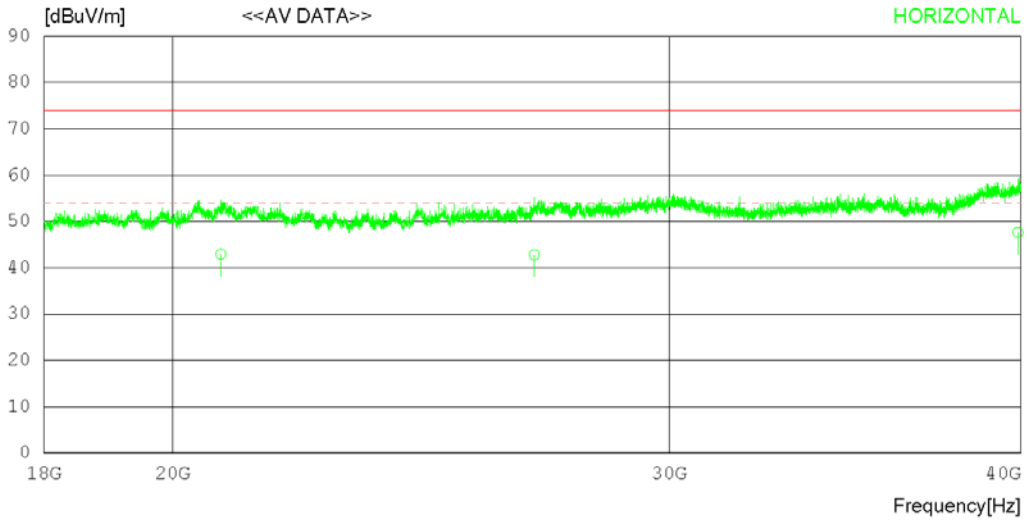
RADIATED EMISSION

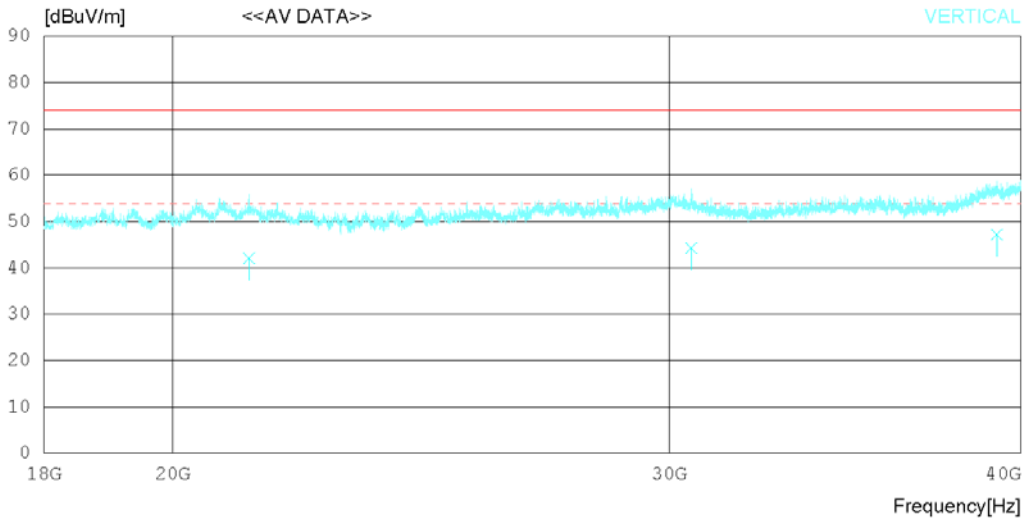
Date 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply Battery
Temp/Humi 22 'C 47 %.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 2020-09-26

Order No. DTNC2008-06866, 2008-06867
Power Supply Battery
Temp/Humi 22 'C 47 %.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 CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	20802.270	30.20	45.60	20.49	53.36	42.93	54.00	11.07	203	166
2	26874.290	28.60	45.90	21.51	53.22	42.79	54.00	11.21	211	0
3	39901.160	25.70	49.10	25.02	52.20	47.62	54.00	6.38	102	315
----- Vertical ------										
4	21286.280	29.50	45.51	20.69	53.58	42.12	54.00	11.88	101	302
5	30553.770	26.70	47.40	22.41	52.23	44.28	54.00	9.72	105	355
6	39230.140	25.70	47.93	25.81	52.24	47.20	54.00	6.80	203	352