TEST REPORT

Dt&C

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. : DREFCC2011-0268

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 : Hybrid Full-Touch Handheld Computer / HF550
   (FCC ID : SS4HF550)

5. Test Standard : ANSI C 63.4 : 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 : Oct. 27. 2020 ~ Oct. 28. 2020

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

8. Testing Environment : Temperature (22) °C , Humidity (43 ~ 45) % 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)

Nov. 19. 2020

DT&C Co., Ltd.

Not abided by 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
	TOP INTERCUBE ELECTRONICS VINA CO., LTD (TEV) Lot C1, Ba thien II Industrial park, Thien Ke Ward, Binh Xuyen District, Vinh Phuc Province, Vietnam
Product Name	Hybrid Full-Touch Handheld Computer
Model Name	HF550
Add Model Name	None
Add Model Difference	None
H/W version	None
S/W version	None
Maximum Internal Frequency	1,800 MHz
Rated Power	DC 3.85 V
FCC ID	SS4HF550
Remarks	- Wireless Frequency WCDMA 5 : Tx (826.4 ~ 846.6) MHz, Rx (871.4 ~ 891.6) 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 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	Test by observing the state of charge of EUT
2	PC Link	EUT monitors the state of data transmission by connecting with a PC and proceeds with the test
3	Front Camera	EUT operates by receiving internal battery power The EUT activates the Front mounted camera to record images continuously.
4	Rear Camera	EUT operates by receiving internal battery power The EUT activates the Rear mounted camera to record images continuously.
5	MP4	EUT operates by receiving internal battery power EUT is in the state of playing MP4 files continuously.
6	WCDMA 5	The EUT was tested while operating in WCDMA 5 band Rx mode.
7	LTE 5	The EUT was tested while operating in LTE 5 band Rx mode.
8	LTE 12	The EUT was tested while operating in LTE 12 band Rx mode.
9	LTE 13	The EUT was tested while operating in LTE 13 band Rx mode.
10	LTE 71	The EUT was tested while operating in LTE 13 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 5 band) emissions are reported. * EUT is cradle charging port is unused ports.		

4.3 Test Configuration Mode

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

4.4 Supported Equipment

Used*	Product Type	Manufacturer	Model	Remarks
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	Silitek Electronics Co.,Ltd	SM-9023	6CL02291
AE	KEYBOARD	N/A	KB1210	1210_R0
AE	Headset	DONGGUANENMEY	SHS-150V/W	N/A
AE	MONITOR	DELL	P2417H	CN-0R8P39-QDC00-79C -47RB-A01
AE	Earphones	N/A	N/A	N/A
AE	Adapter(EUT)	Kuantech(Cambodia) Corporation Limited	KSA29B0500200D5	N/A

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

4.5 EUT In/Output Port

(MODE 1)

Name	Type*	Cable Max. >3 m	Cable Shielded	Cable Back shell	Remarks
Micro SD Card Slot	I/O	-	-	-	-
AUX	I/O	2.3	Non shield	Plastic	-
USB C	DC	1.3	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. >3m	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	1.3	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 1.9 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 GND = Ground
TP = Telecommunication Ports

(MODE 3,4,5,6,7,8,9,10)

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

*Abbreviations:

AC = AC Power Port DC = DC Power Port N/E = Non-Electrical
I/O = Signal Input or Output Port GND = Ground
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		

-Conducted Disturbance

Frequency [MHz]	Phase	Result [dBµV]	Detector	Limit [dBµV]	Margin [dB]
25.47612	N	36.81	Cispr - Average	50.00	13.19

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]
49.521	V	36.71	Quasi - Peak	40.00	3.29

6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (℃)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2020-10-28	22	45	100.1
Radiated Disturbance	2020-10-27	22	43	-

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	2020.10.23	2021.10.23
50 OHM TERMINATOR	CT-01	TME	N/A	2019.12.16	2020.12.16

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)

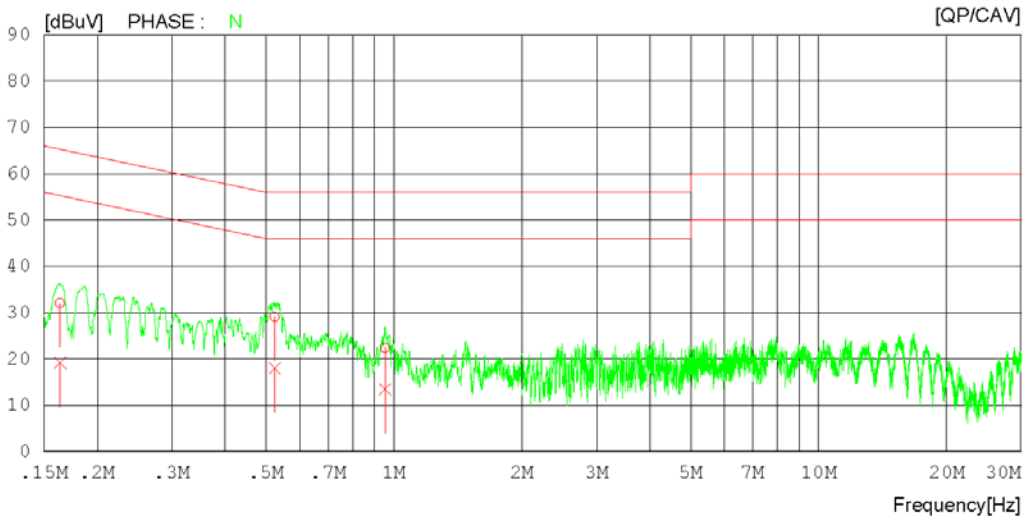
Mains terminal disturbance voltage _Measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

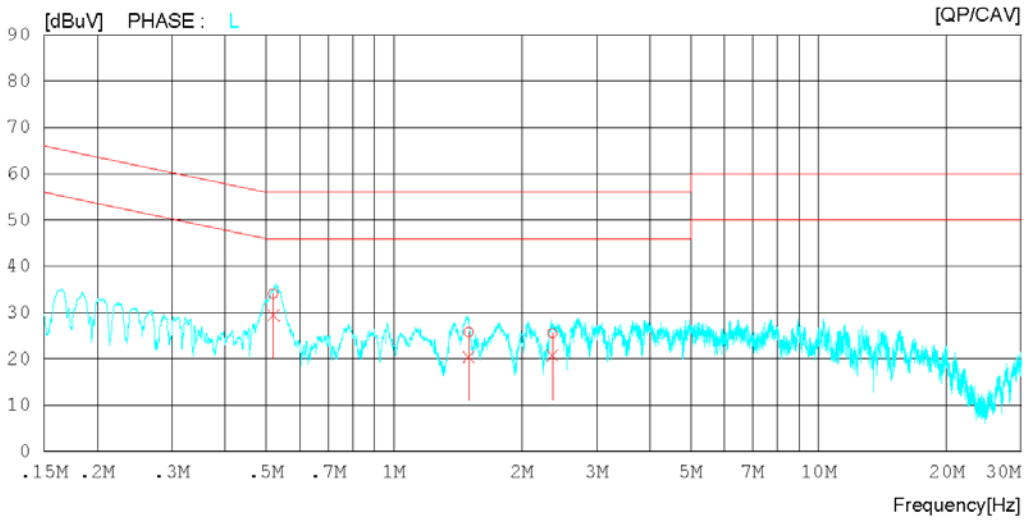
Results of Conducted Emission

DTNC Date 2020-10-28

Order No.	DTNC2010-08255
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 45 %.R.H. 100.1 kPa
Test Condition	Charging Mode

LIMIT : FCC Part15 Subpart.B Class B.QP
FCC Part15 Subpart.B Class B.AV





Results of Conducted Emission

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Test Condition	Charging Mode

LIMIT : FCC Part15 Subpart.B Class B.QP
FCC Part15 Subpart.B Class 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	0.16366	21.98	9.10	10.07	32.05	19.17	65.28	55.28	33.23	36.11	N
2	0.52411	18.96	7.93	10.12	29.08	18.05	56.00	46.00	26.92	27.95	N
3	0.95264	12.30	3.38	10.11	22.41	13.49	56.00	46.00	33.59	32.51	N
4	0.51984	23.99	19.36	10.12	34.11	29.48	56.00	46.00	21.89	16.52	L
5	1.49953	15.66	10.28	10.12	25.78	20.40	56.00	46.00	30.22	25.60	L
6	2.36074	15.34	10.52	10.16	25.50	20.68	56.00	46.00	30.50	25.32	L

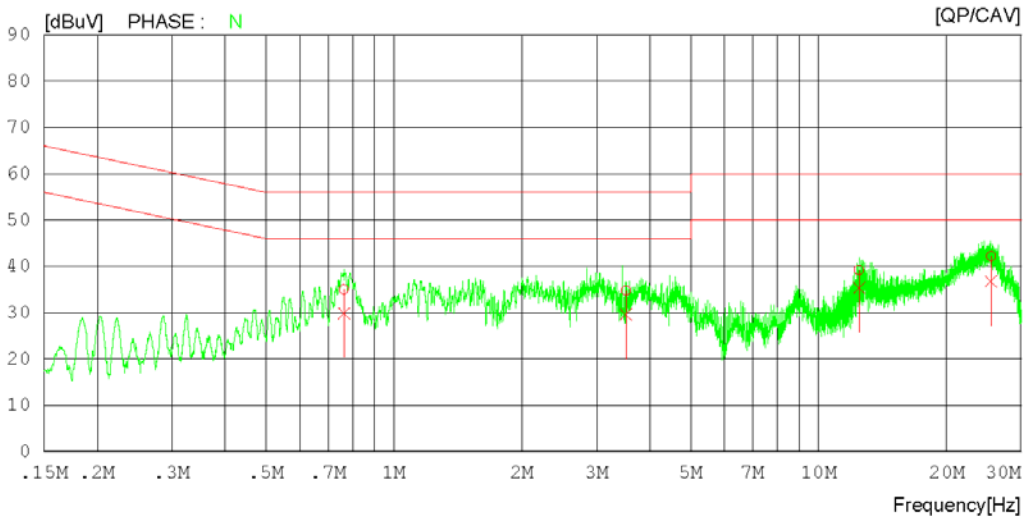
Mains terminal disturbance voltage _Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

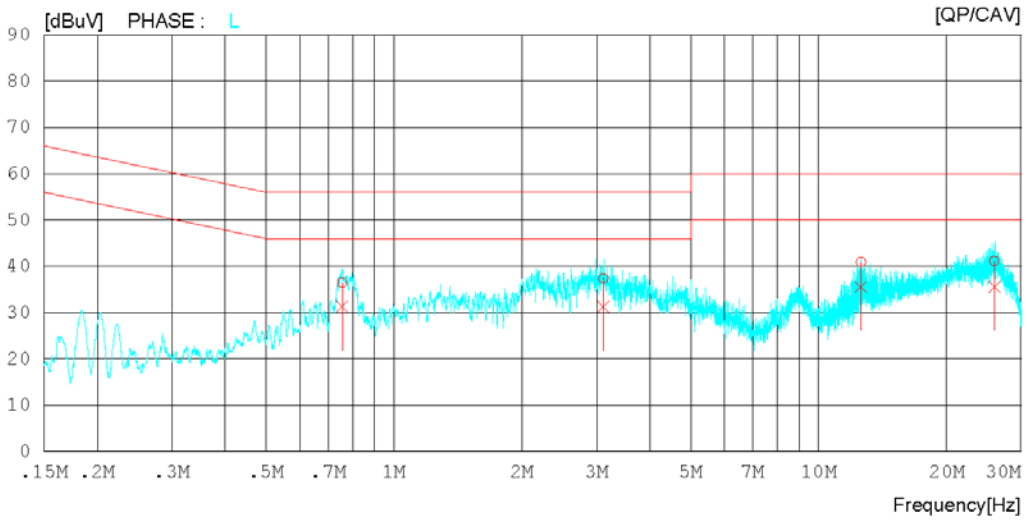
Results of Conducted Emission

DTNC Date 2020-10-28

Order No.	DTNC2010-08255
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 45 %.R.H. 100.1 kPa
Test Condition	PC Link Mode

LIMIT : FCC Part15 Subpart.B Class B.QP
FCC Part15 Subpart.B Class B.AV





Results of Conducted Emission

DTNC Date 2020-10-28

Order No.	DTNC2010-08255
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 45 %.R.H. 100.1 kPa
Test Condition	PC Link Mode

LIMIT : FCC Part15 Subpart.B Class B.QP
FCC Part15 Subpart.B Class 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	0.76265	24.93	19.70	10.11	35.04	29.81	56.00	46.00	20.96	16.19	N
2	3.51987	24.61	19.43	10.18	34.79	29.61	56.00	46.00	21.21	16.39	N
3	12.44878	28.82	24.98	10.43	39.25	35.41	60.00	50.00	20.75	14.59	N
4	25.47612	31.51	26.17	10.64	42.15	36.81	60.00	50.00	17.85	13.19	N
5	0.75470	26.32	21.19	10.11	36.43	31.30	56.00	46.00	19.57	14.70	L
6	3.11167	27.13	21.11	10.17	37.30	31.28	56.00	46.00	18.70	14.72	L
7	12.58385	30.41	25.10	10.43	40.84	35.53	60.00	50.00	19.16	14.47	L
8	25.94841	30.50	25.08	10.55	41.05	35.63	60.00	50.00	18.95	14.37	L

7.2 Radiated Disturbance

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

EUT mode (Refer to clauses 4)	**Test configuration mode**	**1, 2, 3, 4, 5, 7**
	EUT Operation mode	**1, 2, 3, 4, 5, 7**

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	2020.10.05	2022.10.05
6DB ATTENUATOR	2708A	HP	18403	2020.10.05	2022.10.05
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	3116C	ETS-LINDGREN	00213177	2019.12.12	2020.12.12
	JS44-18004000-35-8P	L3 NARDA-MITEQ	2046884	2019.11.04	2020.11.04
(NOTE : THE MEASUREMENT ANTENNAS WERE CALIBRATED IN ACCORDANCE TO THE REQUIREMENTS OF C63.5-2017.)					

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**

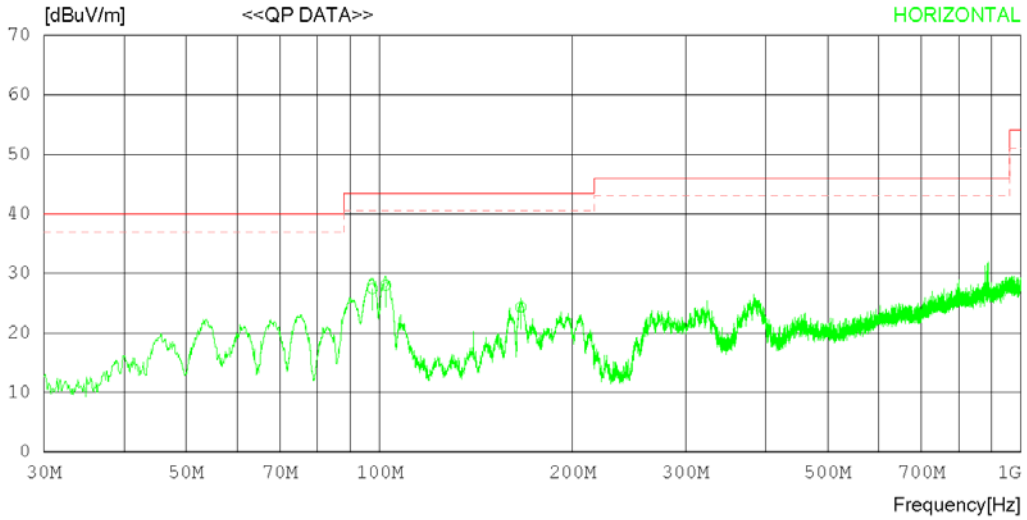
RADIATED EMISSION

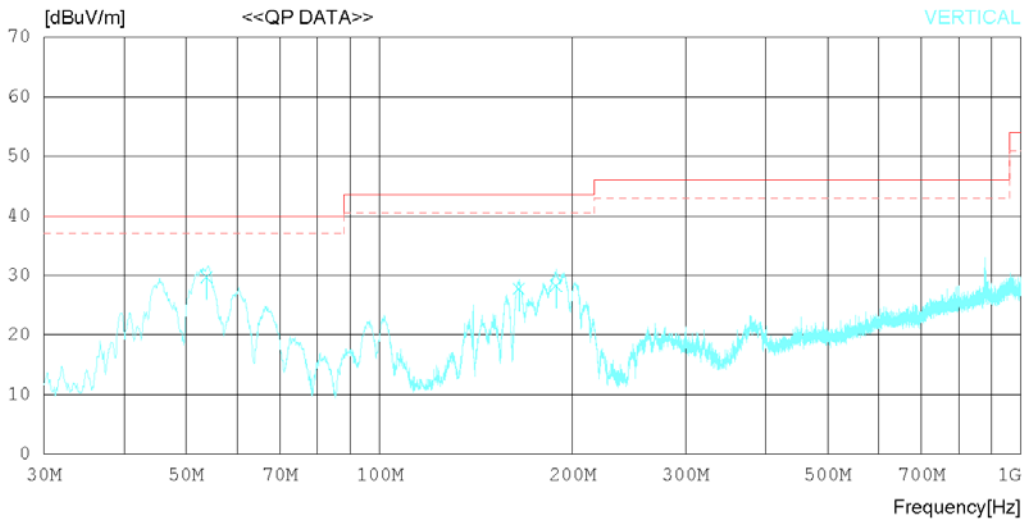
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % R.H.
Test Condition Charging Mode

Memo

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





RADIATED EMISSION

Date 2020-10-27

Order No.	DTNC2010-08255
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 43 % 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	97.535	38.40	14.61	1.26	26.83	27.44	43.50	16.06	208	273
2	102.264	37.60	15.83	1.39	26.84	27.98	43.50	15.52	303	266
3	166.040	31.10	18.60	1.34	26.72	24.32	43.50	19.18	102	352
----- Vertical ------										
4	53.765	37.80	17.80	0.78	26.64	29.74	40.00	10.26	105	0
5	164.948	34.50	18.61	1.37	26.72	27.76	43.50	15.74	101	115
6	188.591	36.60	16.74	1.58	26.67	28.25	43.50	15.25	105	144

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**

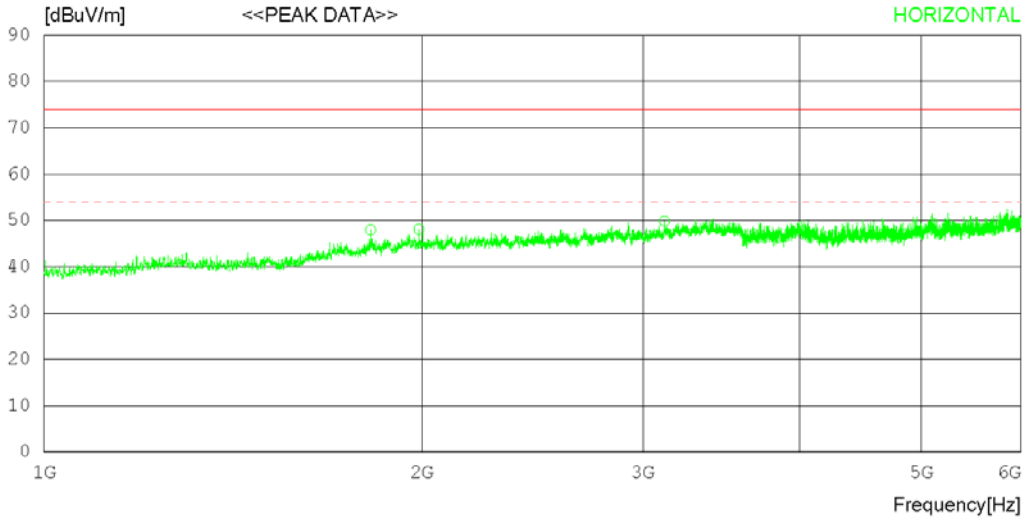
RADIATED EMISSION

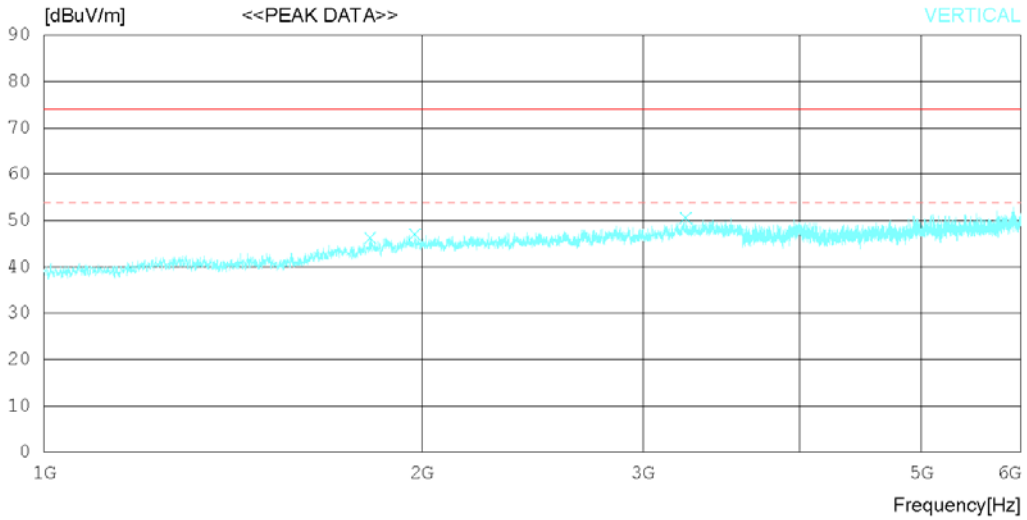
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % 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 2020-10-27

Order No.	DTNC2010-08255
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 43 % 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	1820.000	45.70	30.52	7.02	35.30	47.94	74.0	26.06	391	358
2	1989.375	44.80	31.70	6.70	35.11	48.09	74.0	25.91	302	358
3	3121.250	43.80	33.10	8.09	35.14	49.85	74.0	24.15	205	358
----- Vertical ------										
4	1819.375	44.10	30.51	7.02	35.30	46.33	74.0	27.67	106	358
5	1973.750	43.70	31.70	6.72	35.13	46.99	74.0	27.01	103	187
6	3244.375	43.90	33.20	8.54	35.08	50.56	74.0	23.44	109	358

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**

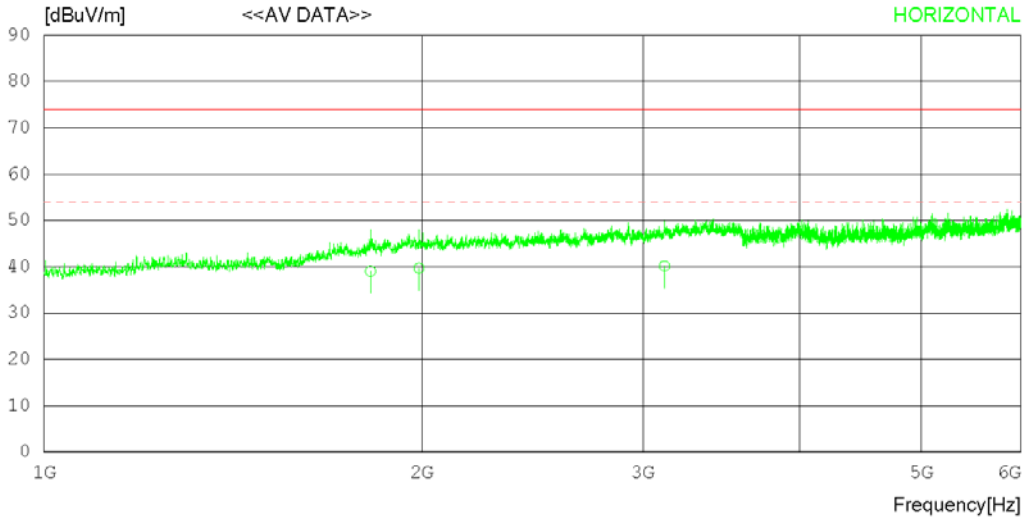
RADIATED EMISSION

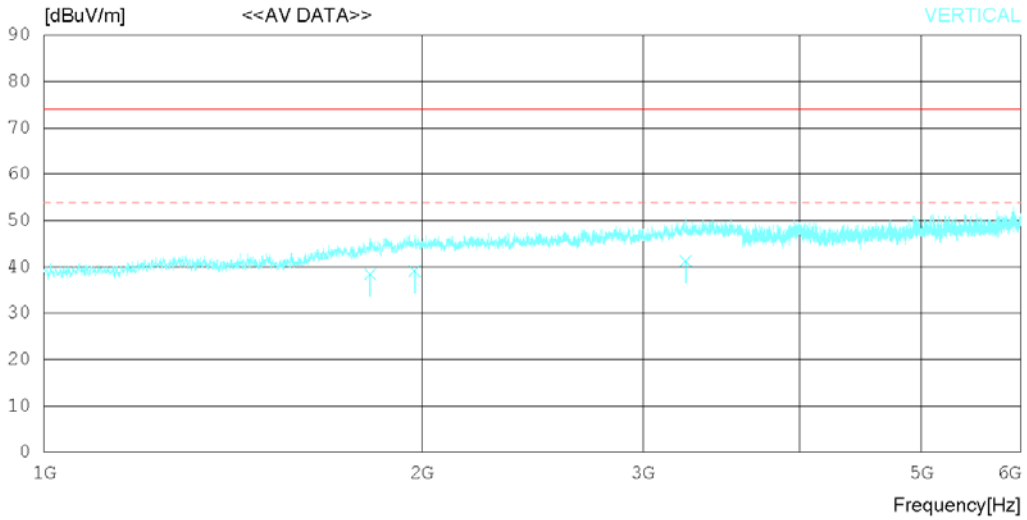
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % 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 2020-10-27

Order No.	DTNC2010-08255
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 43 % 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	1820.120	36.80	30.52	7.02	35.30	39.04	54.00	14.96	392	352
2	1989.318	36.40	31.70	6.70	35.11	39.69	54.00	14.31	303	351
3	3121.325	34.10	33.10	8.09	35.14	40.15	54.00	13.85	204	343
----- Vertical ------										
4	1819.333	36.20	30.51	7.02	35.30	38.43	54.00	15.57	105	354
5	1973.620	35.80	31.70	6.72	35.13	39.09	54.00	14.91	102	199
6	3244.497	34.60	33.20	8.54	35.08	41.26	54.00	12.74	108	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**

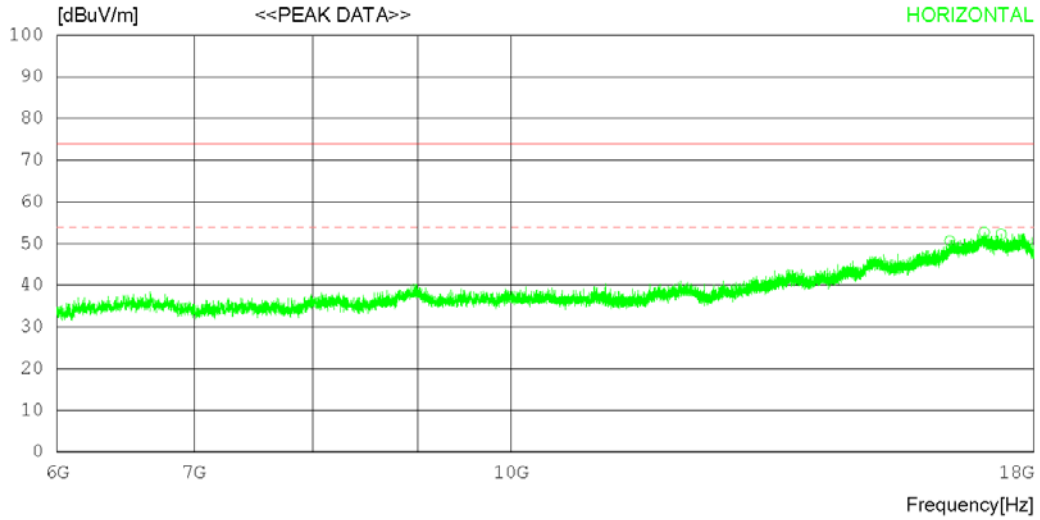
RADIATED EMISSION

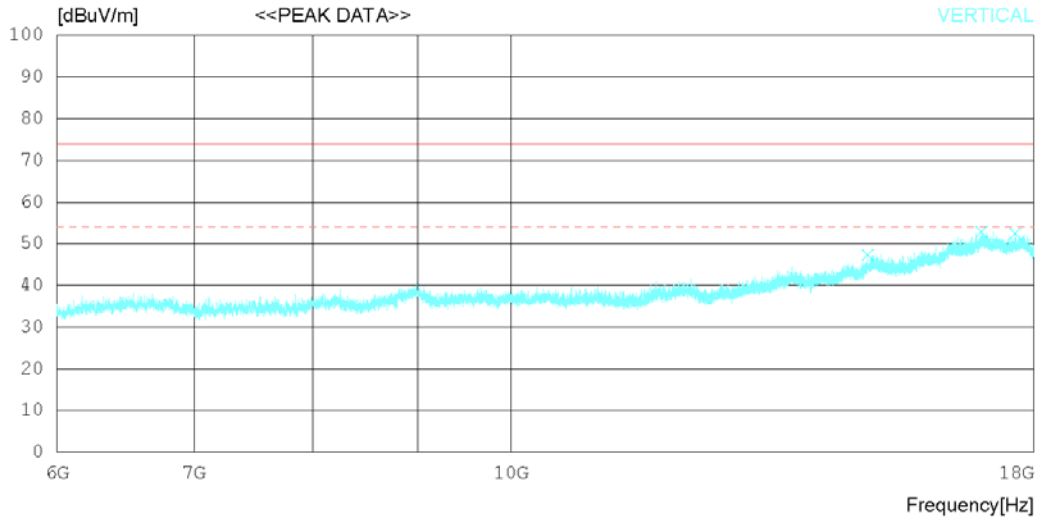
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % 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 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % 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	16374.000	28.20	36.84	21.76	36.18	50.62	74.0	23.38	211	351
2	17022.000	27.90	37.57	23.64	36.43	52.68	74.0	21.32	201	94
3	17348.250	29.20	37.82	22.06	36.82	52.26	74.0	21.74	206	66
----- Vertical ------										
4	14934.000	28.90	35.35	20.15	37.08	47.32	74.0	26.68	107	358
5	16971.000	28.10	37.52	23.57	36.38	52.81	74.0	21.19	223	358
6	17635.500	29.10	38.04	22.53	37.22	52.45	74.0	21.55	105	74

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**

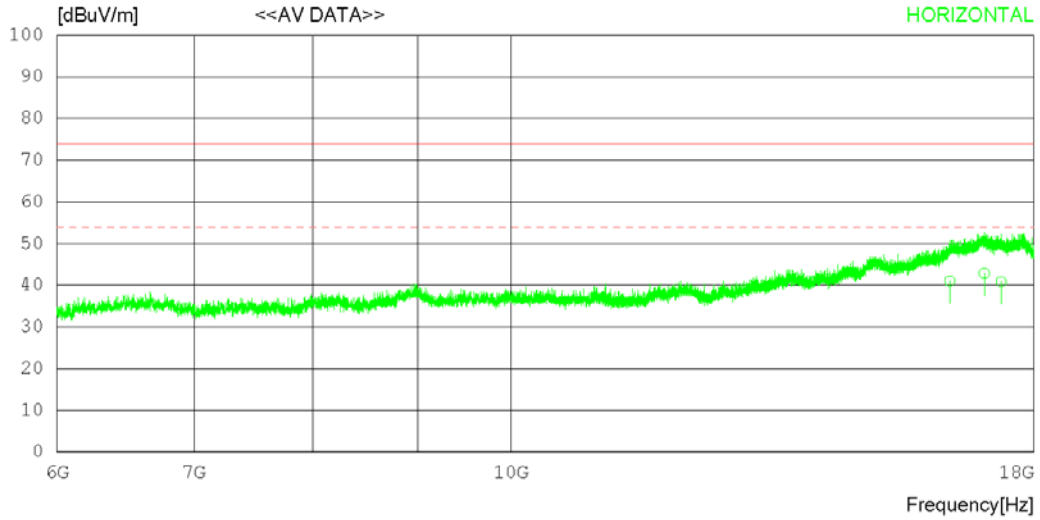
RADIATED EMISSION

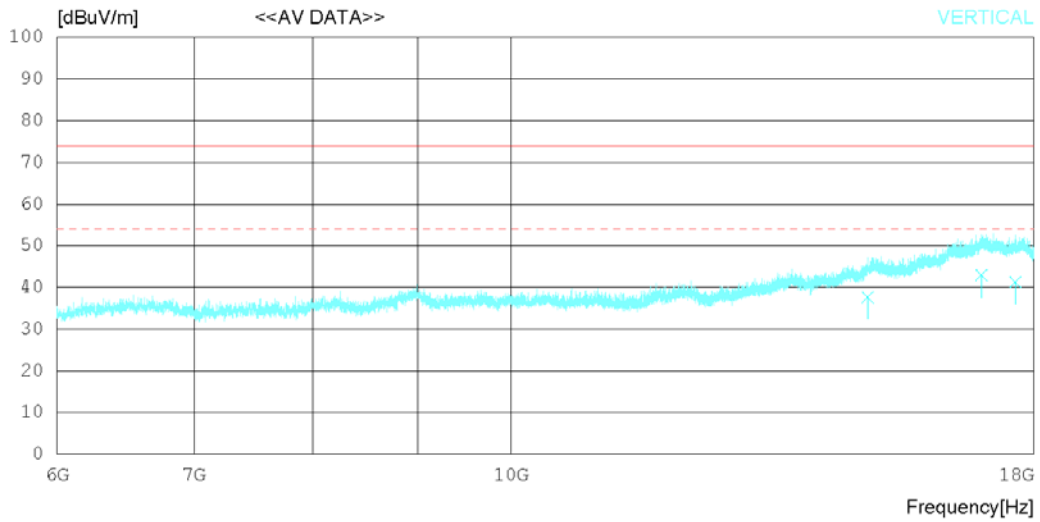
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % 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 2020-10-27

Order No.	DTNC2010-08255
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 43 % 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	16374.120	18.60	36.84	21.76	36.18	41.02	54.00	12.98	209	352
2	17022.090	18.10	37.57	23.63	36.43	42.87	54.00	11.13	203	103
3	17348.220	17.80	37.82	22.06	36.82	40.86	54.00	13.14	201	72
----- Vertical ------										
4	14934.080	19.20	35.35	20.15	37.08	37.62	54.00	16.38	105	354
5	16971.160	18.20	37.52	23.57	36.38	42.91	54.00	11.09	221	352
6	17635.580	17.90	38.04	22.53	37.22	41.25	54.00	12.75	103	88

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**

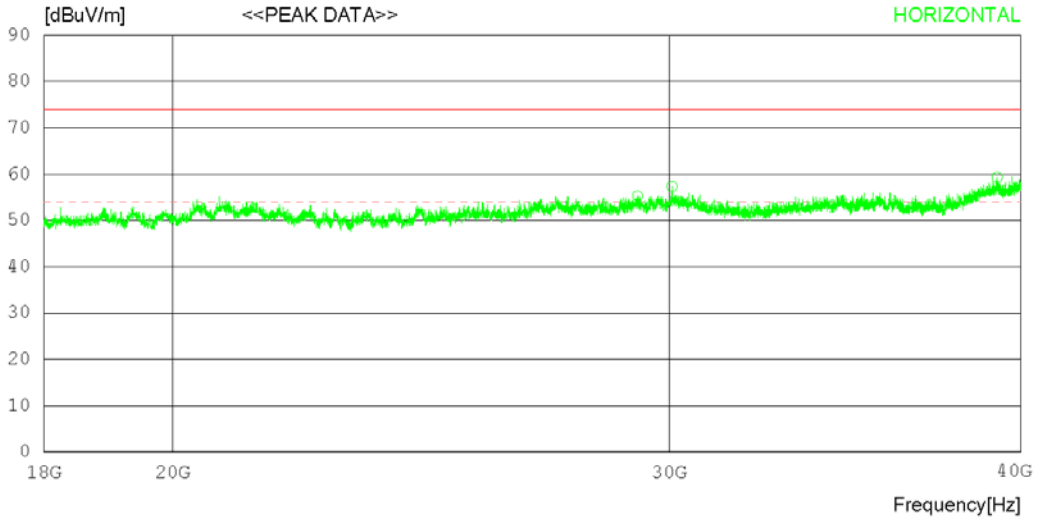
RADIATED EMISSION

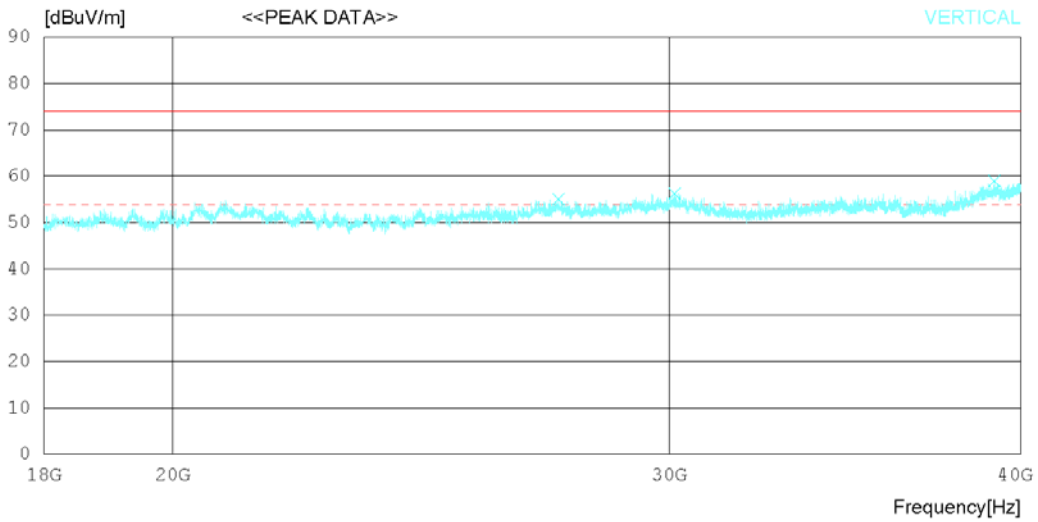
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % 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 2020-10-27

Order No.	DTNC2010-08255
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 43 % 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	29239.250	38.30	47.08	22.38	52.45	55.31	74.0	18.69	206	158
2	30075.250	39.70	47.50	22.35	52.20	57.35	74.0	16.65	308	218
3	39232.750	37.80	47.93	25.81	52.24	59.30	74.0	14.7	400	0
----- Vertical ------										
4	27407.750	40.60	46.00	21.50	53.04	55.06	74.0	18.94	106	358
5	30135.750	38.60	47.50	22.35	52.21	56.24	74.0	17.76	102	113
6	39153.000	37.50	47.81	25.90	52.24	58.97	74.0	15.03	213	117

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**

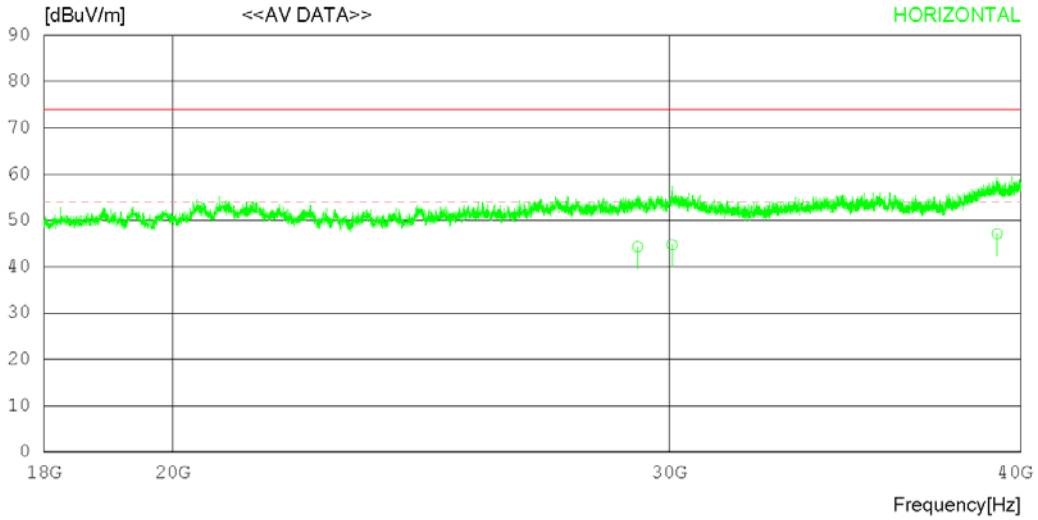
RADIATED EMISSION

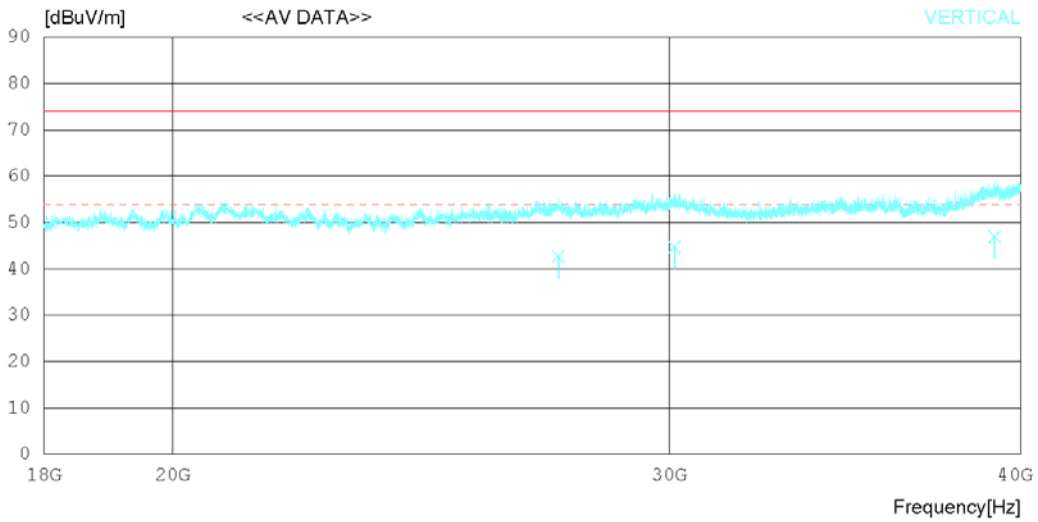
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % 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 2020-10-27

Order No.	DTNC2010-08255
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 43 % 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	29239.280	27.30	47.08	22.38	52.45	44.31	54.00	9.69	206	166
2	30075.150	27.10	47.50	22.35	52.20	44.75	54.00	9.25	307	224
3	39232.730	25.60	47.93	25.81	52.24	47.10	54.00	6.90	400	0
----- Vertical ------										
4	27407.770	28.20	46.00	21.50	53.04	42.66	54.00	11.34	105	352
5	30135.710	27.10	47.50	22.35	52.21	44.74	54.00	9.26	101	108
6	39153.090	25.50	47.81	25.90	52.24	46.97	54.00	7.03	209	121

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**

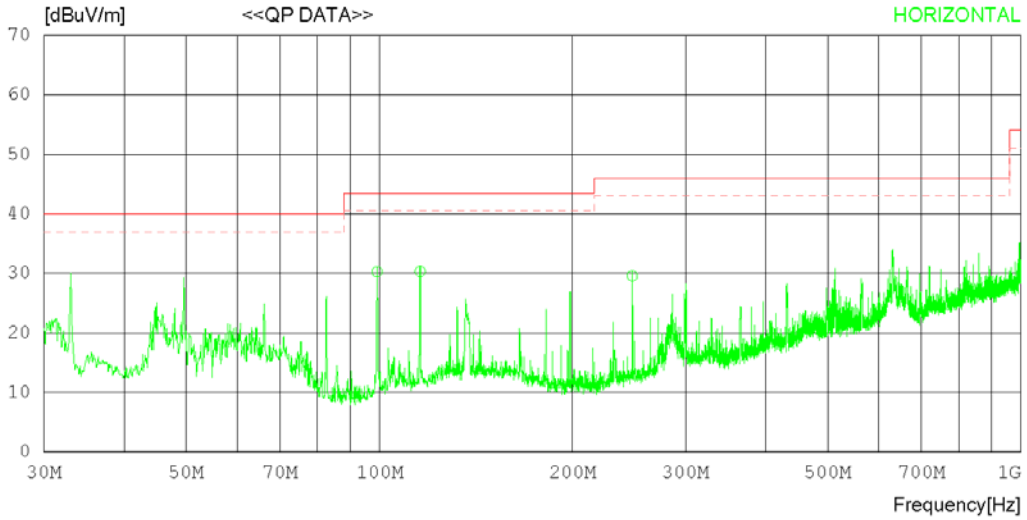
RADIATED EMISSION

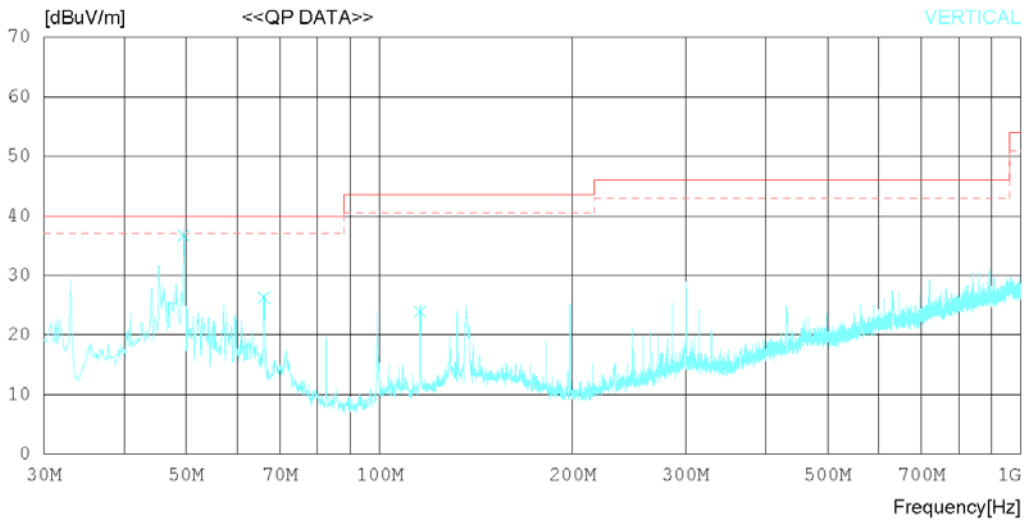
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % R.H.
Test Condition PC Link Mode

Memo

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





RADIATED EMISSION

Date 2020-10-27

Order No.	DTNC2010-08255
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 43 % 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	40.90	14.94	1.29	26.84	30.29	43.50	13.21	307	353
2	115.722	39.10	16.74	1.31	26.81	30.34	43.50	13.16	206	297
3	247.881	36.50	17.83	1.83	26.59	29.57	46.00	16.43	213	0
----- Vertical ------										
4	49.521	44.80	17.80	0.73	26.62	36.71	40.00	3.29	194	0
5	66.011	35.30	16.80	0.87	26.69	26.28	40.00	13.72	305	303
6	115.722	32.70	16.74	1.31	26.81	23.94	43.50	19.56	203	54

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**

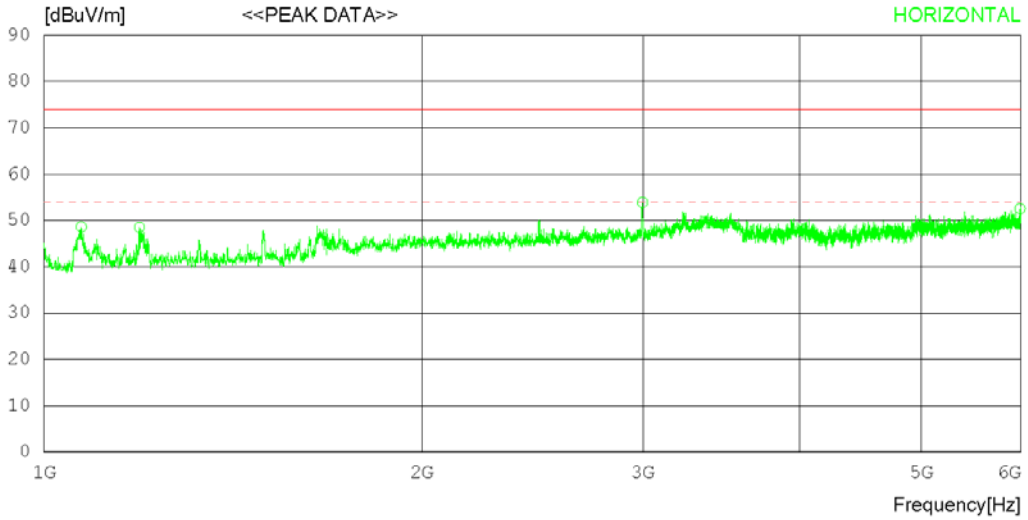
RADIATED EMISSION

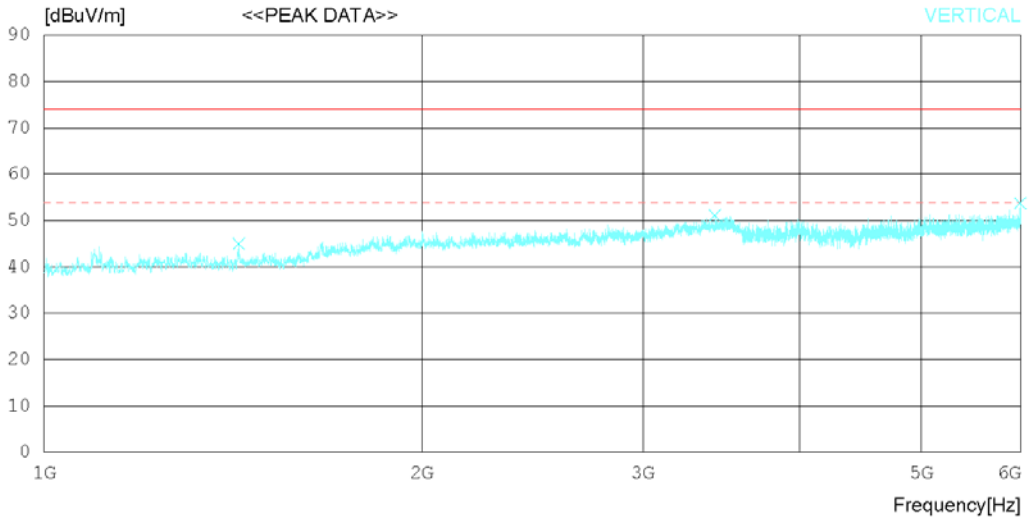
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % 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 2020-10-27

Order No.	DTNC2010-08255
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 43 % 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	1070.625	52.50	27.65	4.57	36.12	48.60	74.0	25.4	106	325
2	1191.250	51.20	28.53	4.76	35.99	48.50	74.0	25.5	314	358
3	2997.500	48.70	32.99	7.38	35.20	53.87	74.0	20.13	207	358
4	5991.875	40.80	35.08	11.82	35.20	52.50	74.0	21.5	202	358
----- Vertical ------										
5	1429.375	46.70	28.32	5.74	35.73	45.03	74.0	28.97	106	0
6	3422.500	44.20	33.40	8.52	34.99	51.13	74.0	22.87	103	186
7	5994.375	42.00	35.09	11.84	35.20	53.73	74.0	20.27	102	215

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**

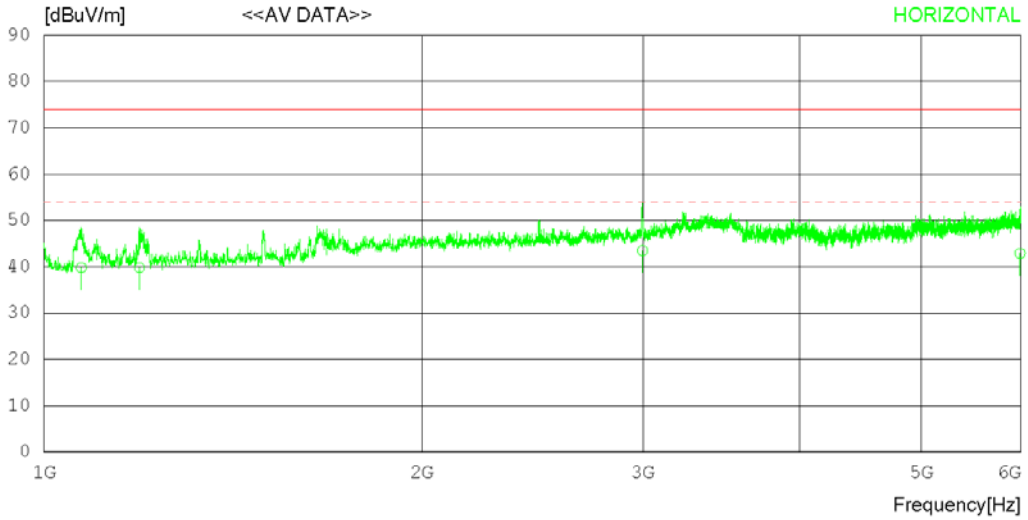
RADIATED EMISSION

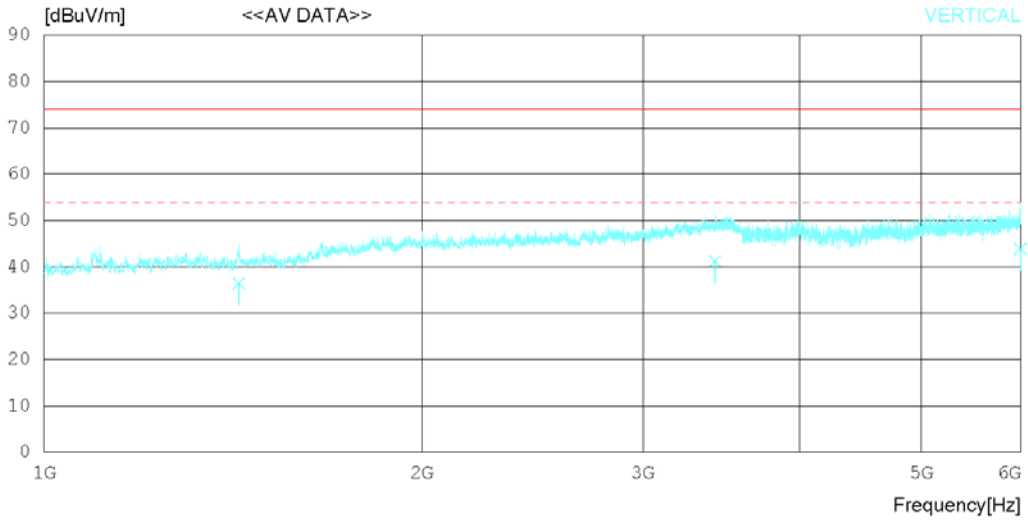
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % 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 2020-10-27

Order No.	DTNC2010-08255
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 43 % 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	1070.865	43.70	27.65	4.58	36.12	39.81	54.00	14.19	105	321
2	1191.224	42.50	28.52	4.76	35.99	39.79	54.00	14.21	315	352
3	2997.576	38.30	32.99	7.38	35.20	43.47	54.00	10.53	206	354
4	5991.813	31.20	35.08	11.82	35.20	42.90	54.00	11.10	201	355
----- Vertical ------										
5	1429.338	38.10	28.32	5.74	35.73	36.43	54.00	17.57	105	0
6	3422.584	34.30	33.40	8.52	34.99	41.23	54.00	12.77	101	193
7	5994.354	32.20	35.09	11.84	35.20	43.93	54.00	10.07	103	225

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**

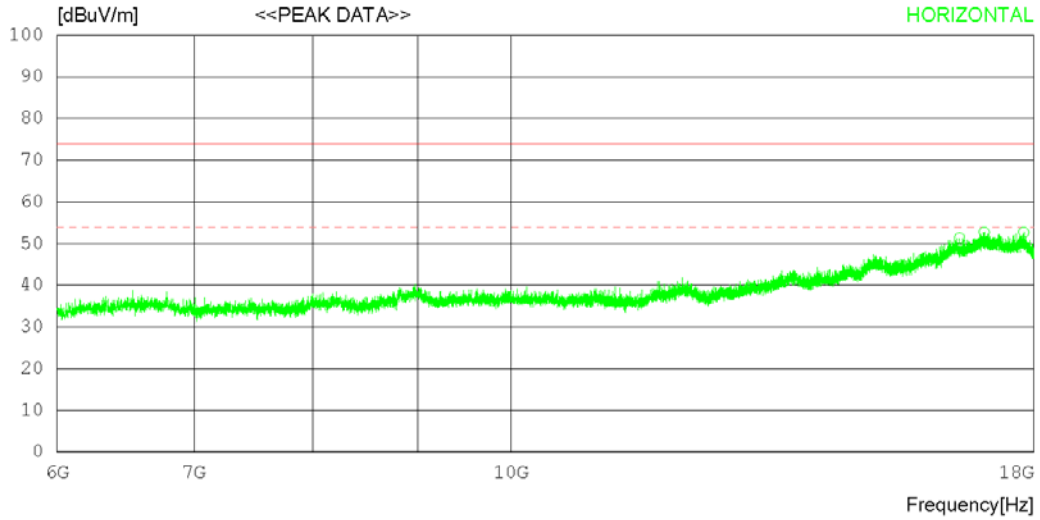
RADIATED EMISSION

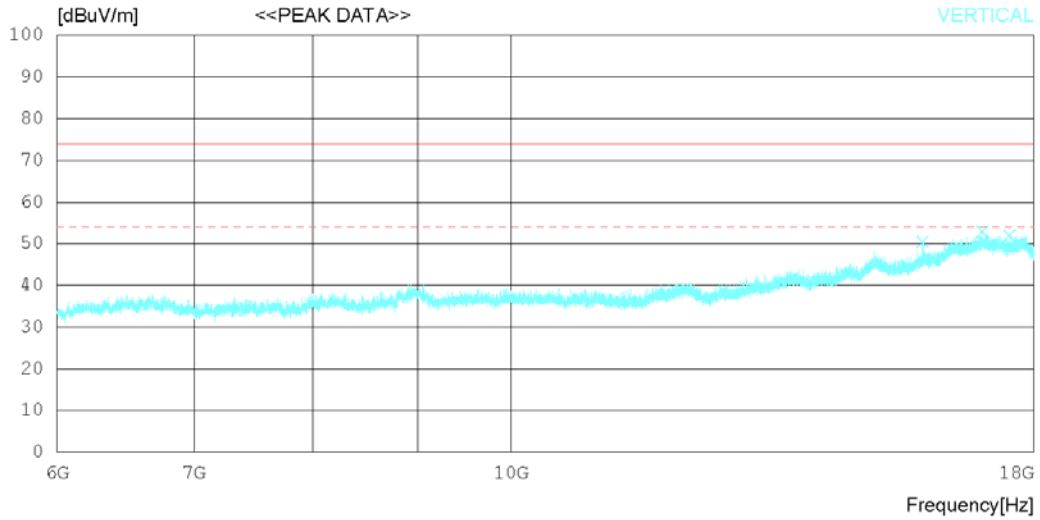
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % 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 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % 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	16555.500	28.60	37.05	21.80	36.13	51.32	74.0	22.68	109	353
2	17020.500	27.90	37.57	23.65	36.42	52.70	74.0	21.3	208	84
3	17793.750	29.20	38.16	22.80	37.47	52.69	74.0	21.31	213	358
----- Vertical ------										
4	15883.500	30.40	36.31	20.24	36.45	50.50	74.0	23.5	103	246
5	16988.250	28.10	37.54	23.71	36.39	52.96	74.0	21.04	206	358
6	17515.500	28.80	37.95	22.28	37.02	52.01	74.0	21.99	109	36

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**

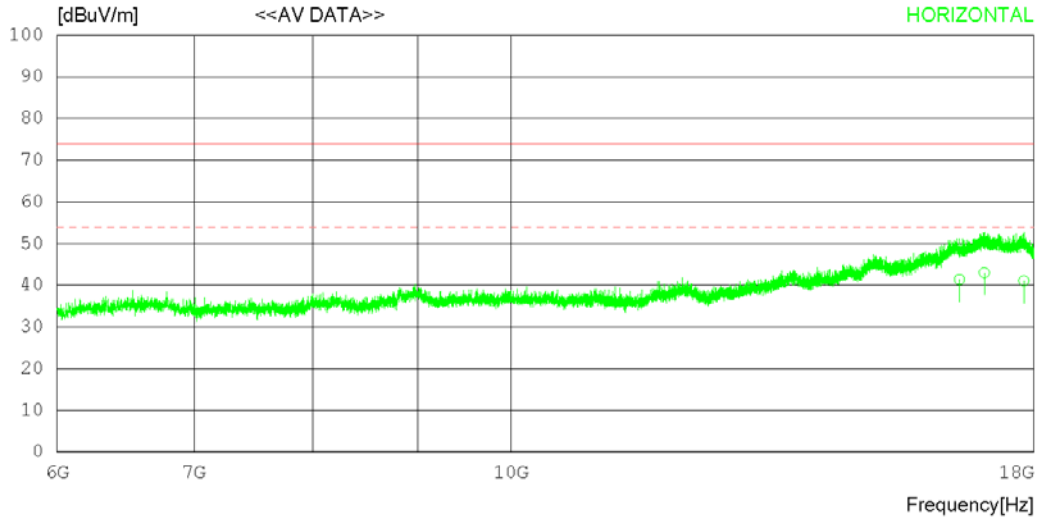
RADIATED EMISSION

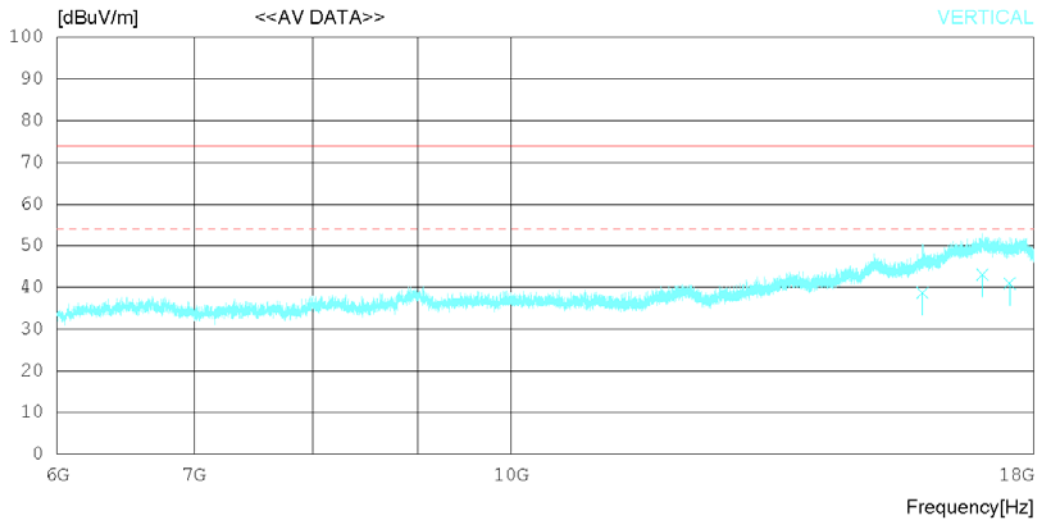
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % 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 2020-10-27

Order No.	DTNC2010-08255
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 43 % 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	16555.580	18.70	37.05	21.80	36.13	41.42	54.00	12.58	108	352
2	17020.520	18.20	37.57	23.65	36.42	43.00	54.00	11.00	206	91
3	17793.680	17.60	38.16	22.80	37.47	41.09	54.00	12.91	211	349
----- Vertical ------										
4	15883.580	18.60	36.31	20.24	36.45	38.70	54.00	15.30	101	244
5	16988.140	18.20	37.54	23.71	36.39	43.06	54.00	10.94	203	352
6	17515.580	17.80	37.95	22.28	37.02	41.01	54.00	12.99	108	41

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**

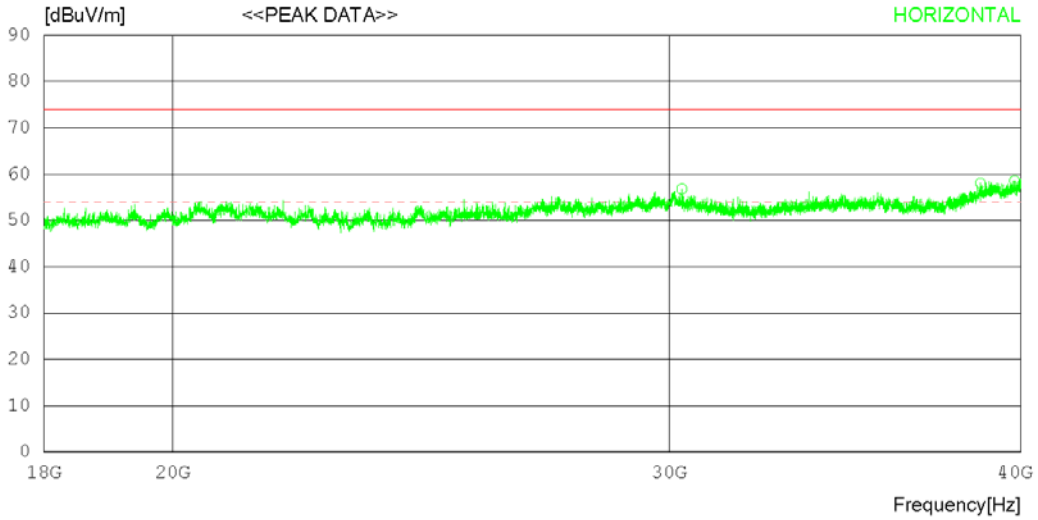
RADIATED EMISSION

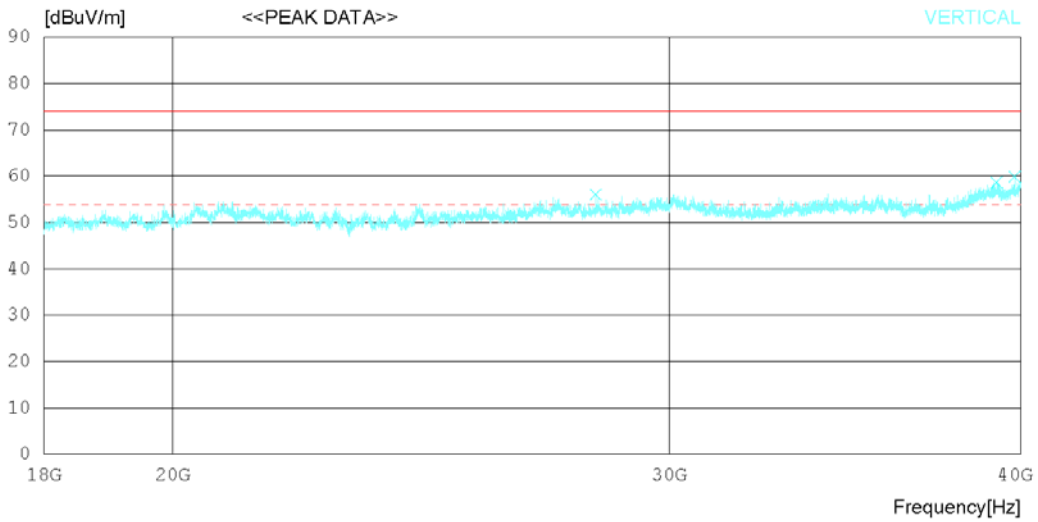
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % 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 2020-10-27

Order No.	DTNC2010-08255
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 43 % 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	30314.500	39.10	47.50	22.38	52.22	56.76	74.0	17.24	206	47
2	38699.250	37.50	47.20	25.62	52.27	58.05	74.0	15.95	303	52
3	39796.500	36.70	48.89	25.14	52.21	58.52	74.0	15.48	103	1
----- Vertical ------										
4	28252.000	40.70	46.40	21.73	52.77	56.06	74.0	17.94	107	358
5	39221.750	37.20	47.92	25.81	52.24	58.69	74.0	15.31	217	21
6	39802.000	38.10	48.90	25.14	52.21	59.93	74.0	14.07	108	195

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**

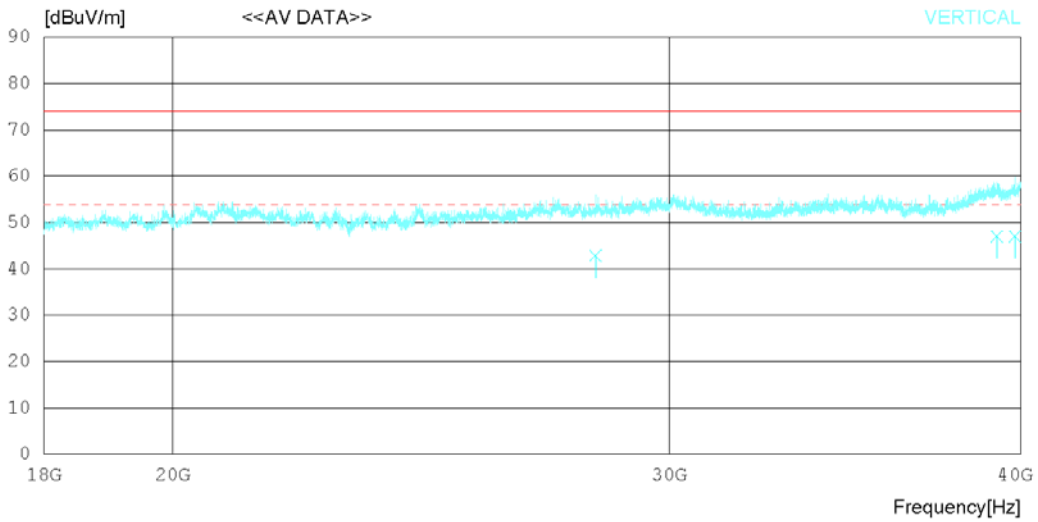
RADIATED EMISSION

Date 2020-10-27

Order No. DTNC2010-08255
Power Supply 120 VAC 60 Hz
Temp/Humi 22 'C 43 % 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 2020-10-27

Order No.	DTNC2010-08255
Power Supply	120 VAC 60 Hz
Temp/Humi	22 'C 43 % 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	30314.580	26.80	47.50	22.38	52.22	44.46	54.00	9.54	203	41
2	38699.210	25.30	47.20	25.62	52.27	45.85	54.00	8.15	305	66
3	39796.470	25.20	48.89	25.14	52.21	47.02	54.00	6.98	102	0
----- Vertical ------										
4	28252.070	27.50	46.40	21.73	52.77	42.86	54.00	11.14	105	352
5	39221.680	25.50	47.92	25.81	52.24	46.99	54.00	7.01	214	33
6	39802.130	25.20	48.90	25.13	52.21	47.02	54.00	6.98	105	203

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

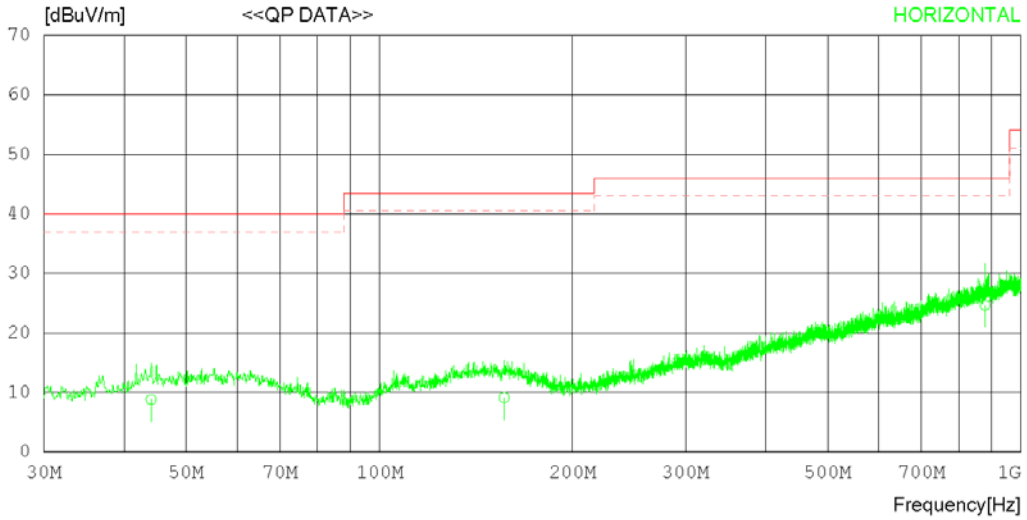
RADIATED EMISSION

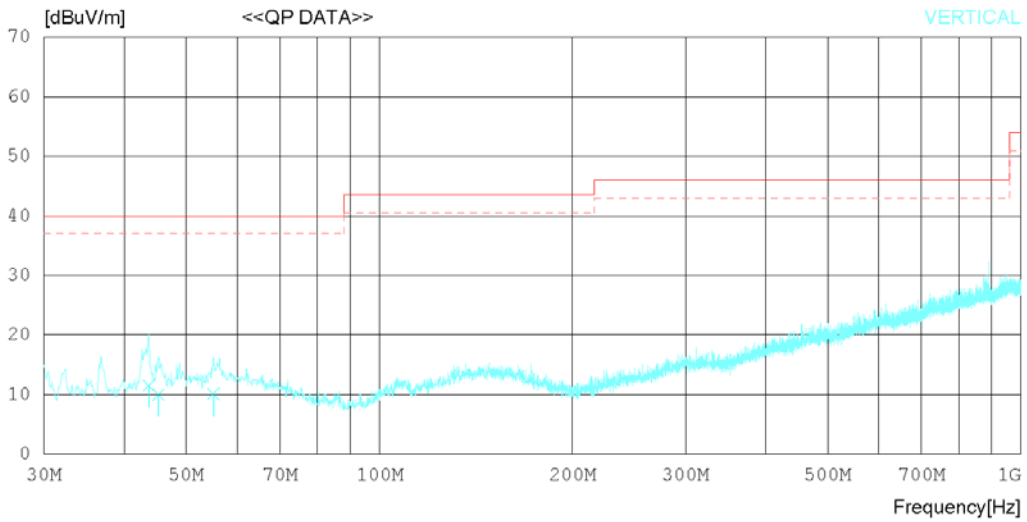
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply Battery
Temp/Humi 22 'C 43 % R.H.
Test Condition Front Camera Mode

Memo

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





RADIATED EMISSION

Date 2020-10-27

Order No.	DTNC2010-08255
Power Supply	Battery
Temp/Humi	22 'C 43 % 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	44.065	17.60	17.11	0.69	26.59	8.81	40.00	31.19	101	354
2	156.461	15.60	18.90	1.35	26.74	9.11	43.50	34.39	105	352
3	879.303	18.20	29.29	3.61	26.44	24.66	46.00	21.34	309	0
----- Vertical ------										
4	43.701	20.40	17.04	0.70	26.59	11.55	40.00	28.45	102	0
5	45.278	18.60	17.33	0.71	26.60	10.04	40.00	29.96	206	354
6	55.099	18.20	17.79	0.78	26.64	10.13	40.00	29.87	302	105

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

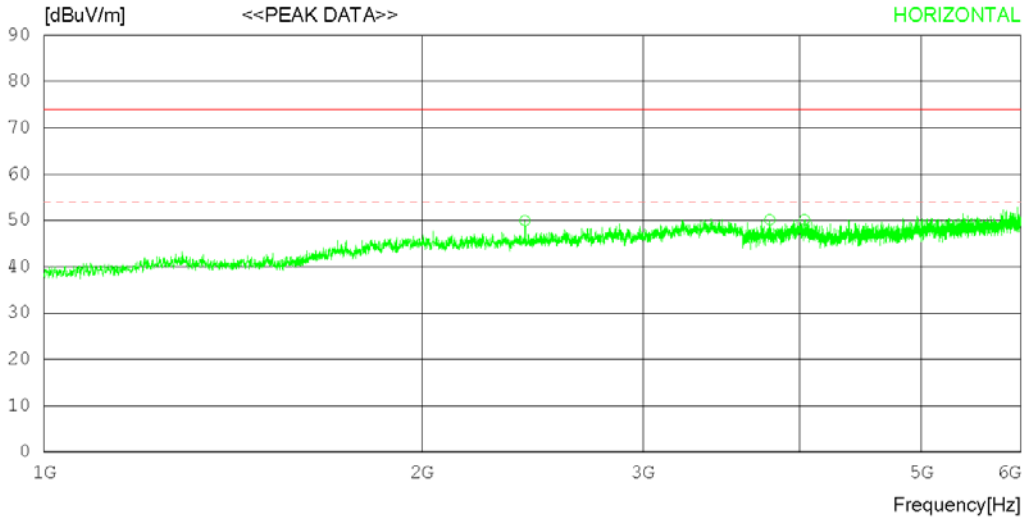
RADIATED EMISSION

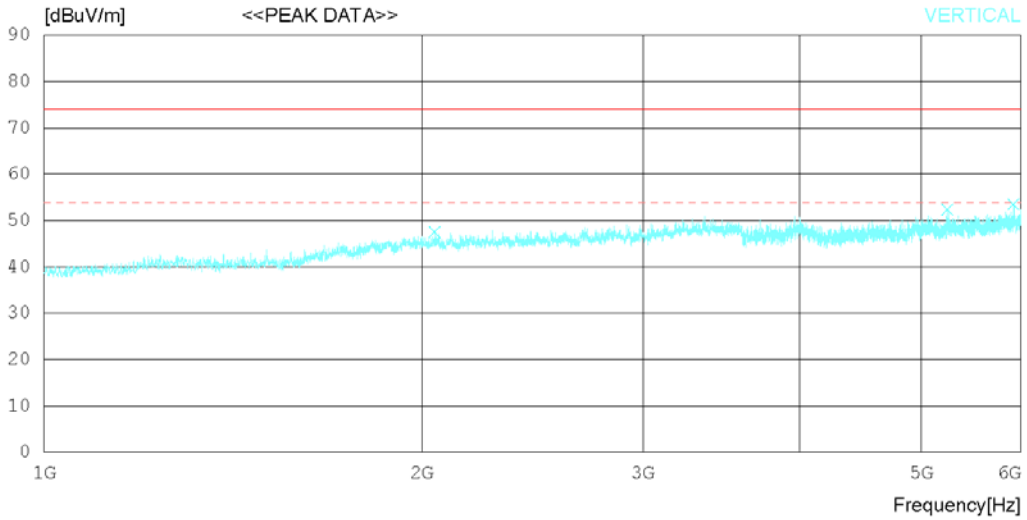
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply Battery
Temp/Humi 22 'C 43 % R.H.
Test Condition Front Camera Mode

Memo

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





RADIATED EMISSION

Date 2020-10-27

Order No. DTNC2010-08255
Power Supply Battery
Temp/Humi 22 'C 43 % R.H.
Test Condition Front Camera Mode

Memo

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

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	2416.250	45.80	32.20	7.08	35.14	49.94	74.0	24.06	108	0
2	3786.250	42.50	33.40	9.03	34.81	50.12	74.0	23.88	106	53
3	4035.000	41.70	33.50	9.62	34.71	50.11	74.0	23.89	102	0
----- Vertical ------										
4	2047.500	44.10	31.80	6.72	35.10	47.52	74.0	26.48	106	249
5	5243.125	42.80	34.37	10.34	35.12	52.39	74.0	21.61	102	349
6	5921.875	42.20	34.94	11.55	35.19	53.50	74.0	20.5	106	358

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

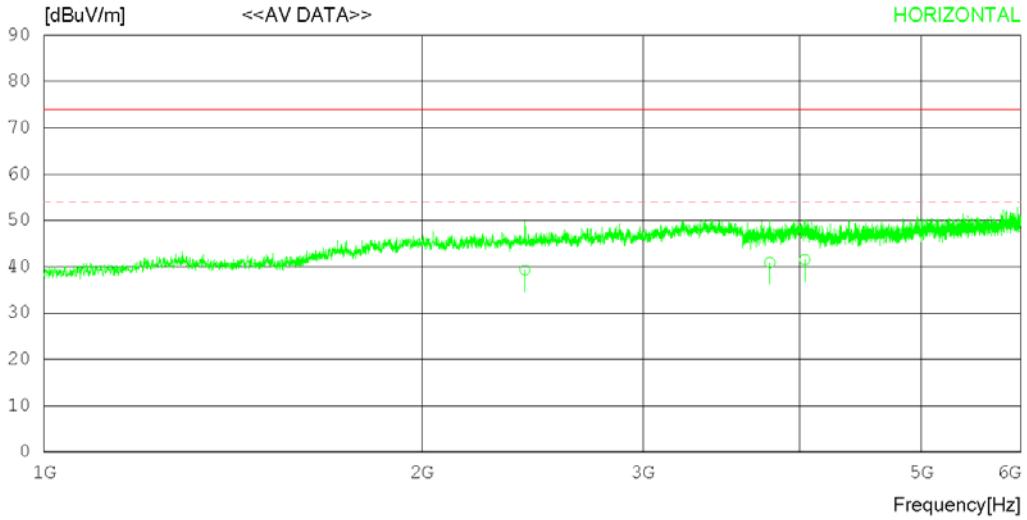
RADIATED EMISSION

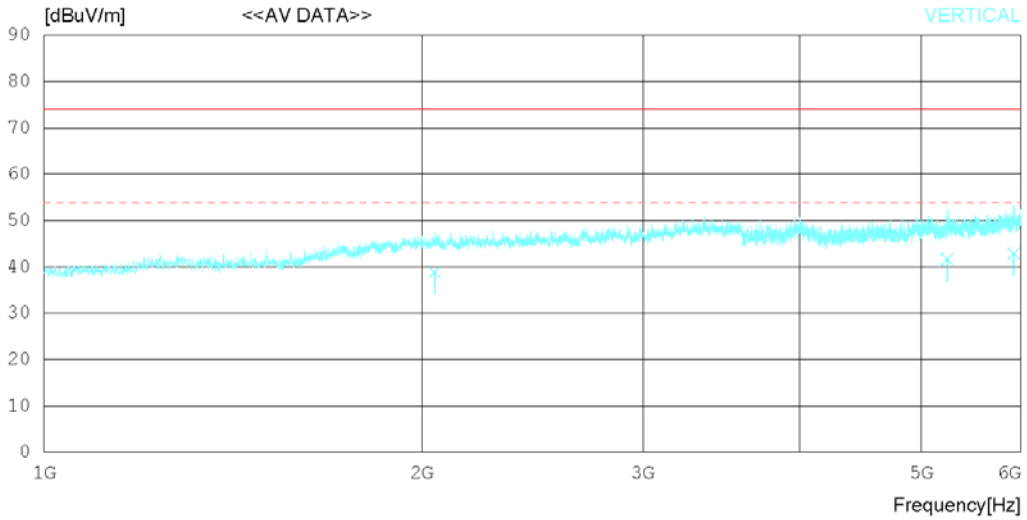
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply Battery
Temp/Humi 22 'C 43 % R.H.
Test Condition Front Camera Mode

Memo

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





RADIATED EMISSION

Date 2020-10-27

Order No.	DTNC2010-08255
Power Supply	Battery
Temp/Humi	22 'C 43 % R.H.
Test Condition	Front Camera Mode

Memo

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

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	2416.196	35.20	32.20	7.08	35.14	39.34	54.00	14.66	109	0
2	3786.229	33.30	33.40	9.03	34.81	40.92	54.00	13.08	105	66
3	4035.163	33.10	33.50	9.62	34.71	41.51	54.00	12.49	101	0
----- Vertical ------										
4	2047.541	35.50	31.80	6.72	35.10	38.92	54.00	15.08	105	355
5	5243.274	32.10	34.37	10.34	35.12	41.69	54.00	12.31	101	341
6	5921.821	31.60	34.94	11.55	35.19	42.90	54.00	11.10	106	352

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

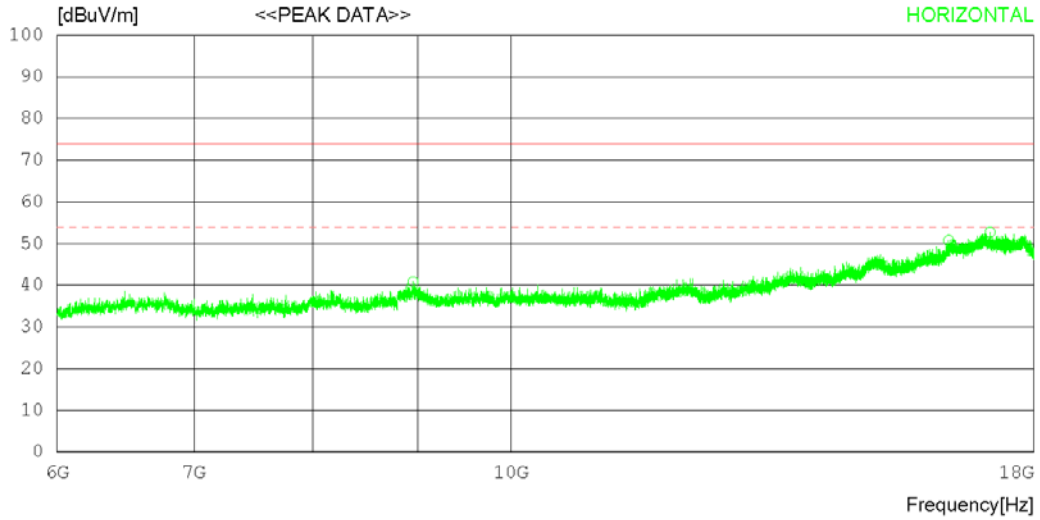
RADIATED EMISSION

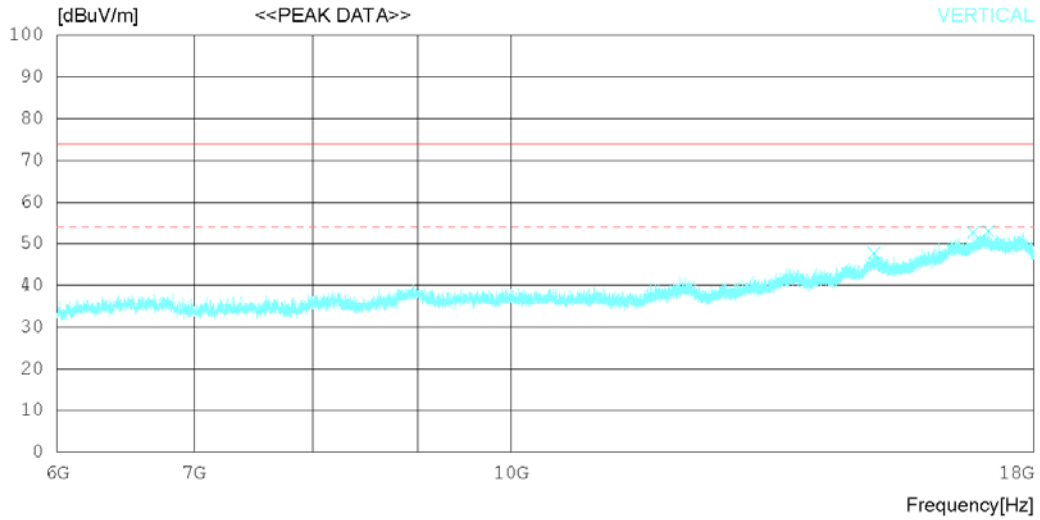
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply Battery
Temp/Humi 22 'C 43 % R.H.
Test Condition Front Camera Mode

Memo

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





RADIATED EMISSION

Date 2020-10-27

Order No. DTNC2010-08255
Power Supply Battery
Temp/Humi 22 'C 43 % R.H.
Test Condition Front Camera Mode

Memo

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

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	8955.750	30.90	32.06	15.38	37.47	40.87	74.0	33.13	106	0
2	16356.750	28.50	36.82	21.61	36.19	50.74	74.0	23.26	207	150
3	17133.750	28.90	37.65	22.75	36.56	52.74	74.0	21.26	314	358
----- Vertical ------										
4	15033.750	28.60	35.48	20.63	36.97	47.74	74.0	26.26	202	34
5	16810.500	29.50	37.34	22.20	36.29	52.75	74.0	21.25	107	358
6	17100.750	28.90	37.63	23.01	36.52	53.02	74.0	20.98	203	194

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

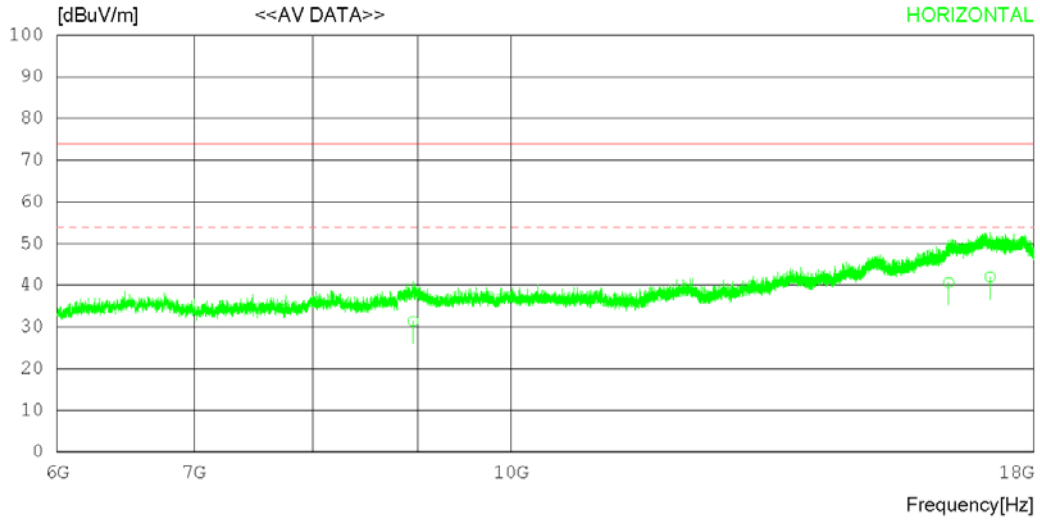
RADIATED EMISSION

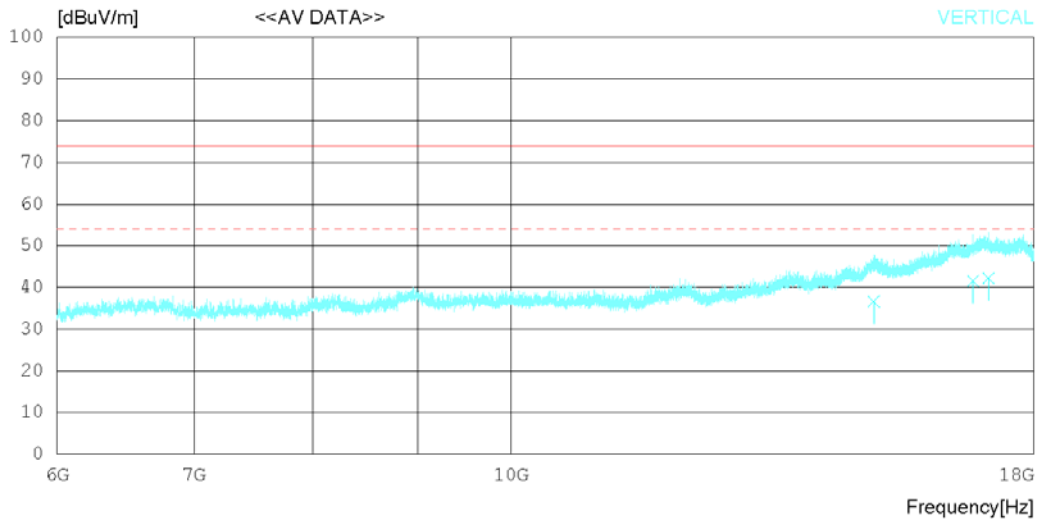
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply Battery
Temp/Humi 22 'C 43 % R.H.
Test Condition Front Camera Mode

Memo

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





RADIATED EMISSION

Date 2020-10-27

Order No. DTNC2010-08255
Power Supply Battery
Temp/Humi 22 'C 43 % R.H.
Test Condition Front Camera Mode

Memo

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

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	8955.721	21.40	32.06	15.38	37.47	31.37	54.00	22.63	105	0
2	16356.680	18.40	36.82	21.61	36.19	40.64	54.00	13.36	206	166
3	17133.590	18.10	37.65	22.75	36.56	41.94	54.00	12.06	315	353
----- Vertical ------										
4	15033.770	17.50	35.48	20.63	36.97	36.64	54.00	17.36	203	41
5	16810.550	18.30	37.34	22.20	36.29	41.55	54.00	12.45	105	351
6	17100.790	18.10	37.63	23.01	36.52	42.22	54.00	11.78	201	203

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

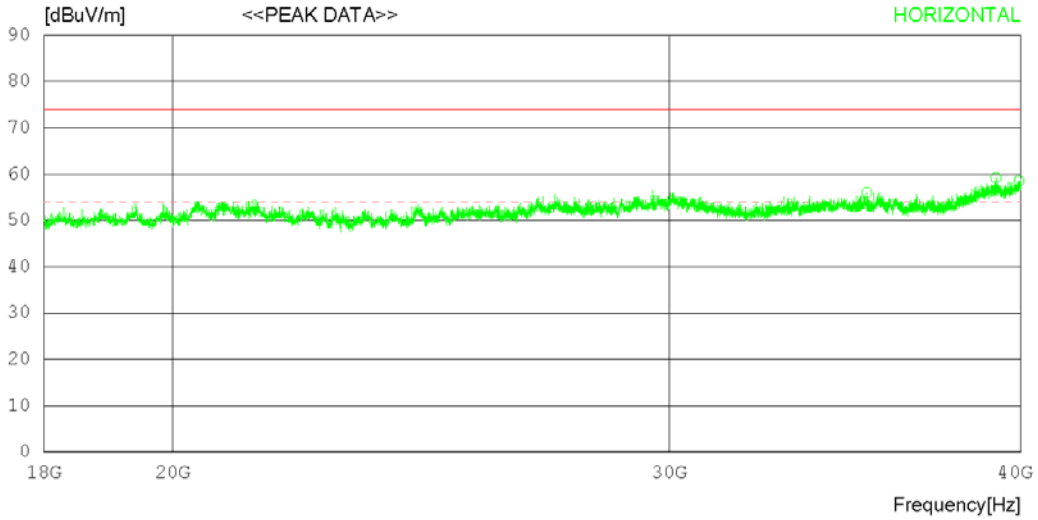
RADIATED EMISSION

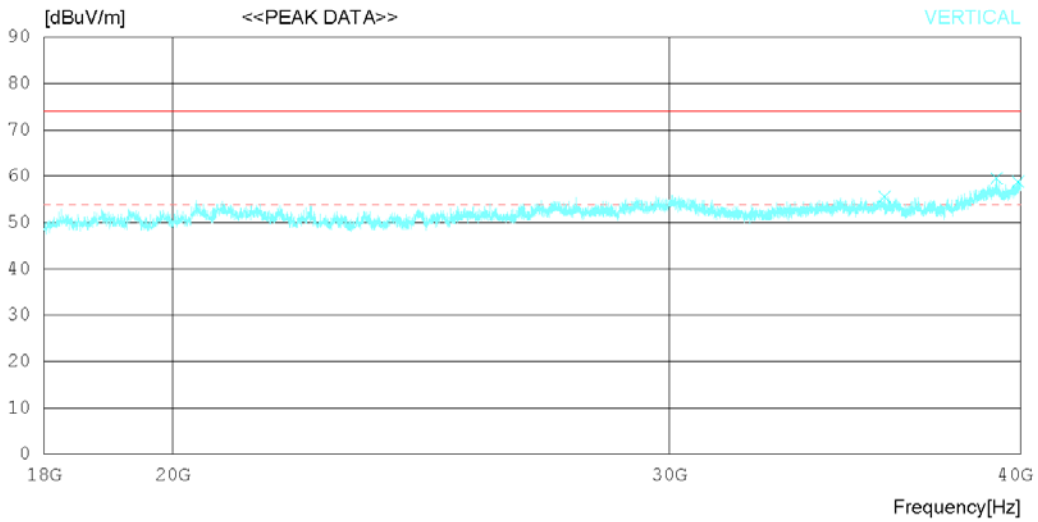
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply Battery
Temp/Humi 22 'C 43 % R.H.
Test Condition Front Camera Mode

Memo

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





RADIATED EMISSION

Date 2020-10-27

Order No. DTNC2010-08255
Power Supply Battery
Temp/Humi 22 'C 43 % R.H.
Test Condition Front Camera Mode

Memo

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

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	35259.000	38.10	47.04	24.56	53.71	55.99	74.0	18.01	209	137
2	39188.750	37.70	47.88	25.86	52.24	59.20	74.0	14.8	400	157
3	39934.000	36.60	49.17	24.98	52.20	58.55	74.0	15.45	398	0
----- Vertical ------										
4	35792.500	38.10	46.90	24.42	53.85	55.57	74.0	18.43	107	358
5	39210.750	38.00	47.91	25.83	52.24	59.50	74.0	14.5	102	358
6	39912.000	36.90	49.12	25.00	52.20	58.82	74.0	15.18	105	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)**	**-**

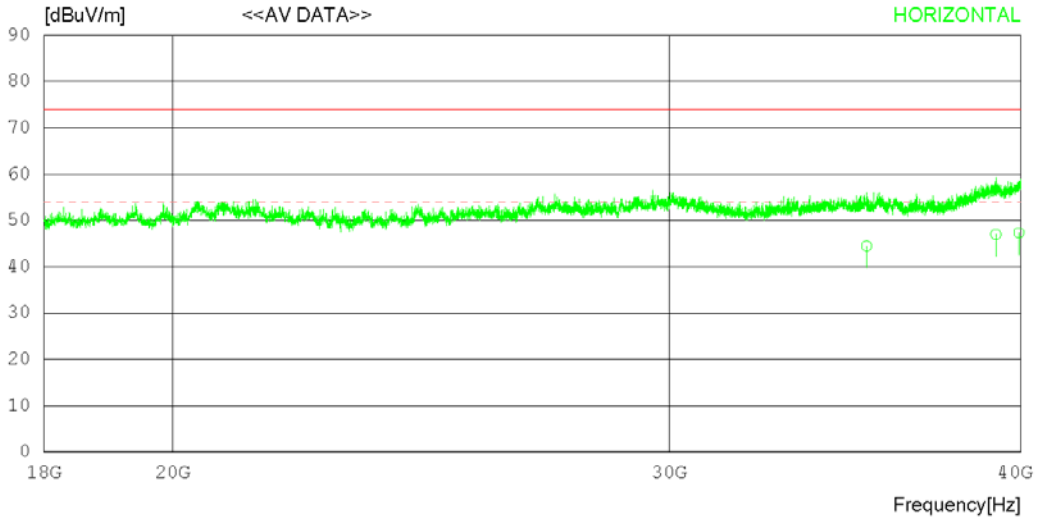
RADIATED EMISSION

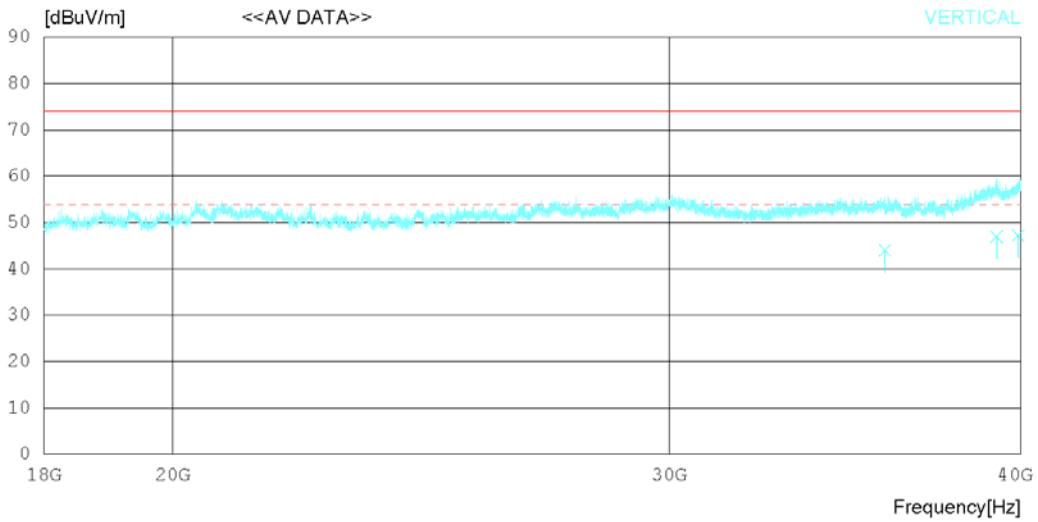
Date 2020-10-27

Order No. DTNC2010-08255
Power Supply Battery
Temp/Humi 22 'C 43 % R.H.
Test Condition Front Camera Mode

Memo

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





RADIATED EMISSION

Date 2020-10-27

Order No.	DTNC2010-08255
Power Supply	Battery
Temp/Humi	22 'C 43 % R.H.
Test Condition	Front Camera Mode

Memo

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

No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	35259.030	26.60	47.04	24.56	53.71	44.49	54.00	9.51	206	125
2	39188.710	25.50	47.88	25.86	52.24	47.00	54.00	7.00	400	166
3	39934.120	25.40	49.17	24.98	52.20	47.35	54.00	6.65	397	0
----- Vertical ------										
4	35792.580	26.60	46.90	24.42	53.85	44.07	54.00	9.93	105	355
5	39210.790	25.40	47.91	25.83	52.24	46.90	54.00	7.10	101	344
6	39912.120	25.30	49.12	25.00	52.20	47.22	54.00	6.78	103	352