TEST REPORT

Dt&C Co., Ltd.
42, Yurim-ro, 154 beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea
Tel : 031-321-2664, Fax : 031-321-1664

1. Report No : DREKFCC2307-0106

2. Customer

   • Name : The Whistler Group, Inc.

   • Address : 168 Ayer Road, Littleton, MA 01460, USA

3. Use of Report : Grant of Certification

4. Product Name / Model Name : Digital Trunking Handheld Radio Scanner / WS1040
   (FCC ID : HSXSC03 / IC : 1698A-SC03)

5. Test Method Used : ANSI C63.4:2014
   FCC Part 15 Subpart B (CSR-Scanning Receiver)
   *RSS-215 Issue 2

6. Date of Test : Jan. 15. 2023 ~ Jan. 29. 2023

7. Location of Test : ☒ Permanent Testing Lab ☐ On Site Testing
   (Address : Refer to the attached)

8. Testing Environment : Temperature (21 ~ 24) °C , Humidity (40 ~ 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.
This laboratory is not accredited for the test results marked. " * "

Affirmation	Tested by	Technical Manager
	Name : JunSeo Park (Signature)	Name : DaeHwa Eun (Signature)

The above test report is the accredited test result by Korea Laboratory Accreditation Scheme, which signed the ILAC-MRA.

Jul. 25. 2023

Dt&C Co., Ltd.
Accredited by KOLAS, Republic of KOREA

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, 154 beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea
http://www.dtnc.net
Tel: +82-31-321-2664 Fax: +82-31-321-1664

2. Test Laboratory

Address of Laboratory

☐	Branch site	42, Yurim-ro 154 beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea
☐	Satellite facilities-1	46, Yurim-ro 154 beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea
☒	Satellite facilities-2	38, Yurim-ro 154 beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea
☐	Satellite facilities-3	28, Baengnyeong-ro 20 beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea

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	Designation
	Canada	IC	KR0034	Designation
	Japan	VCCI	C-11427, R-13385, R-14076, R-14180, R-14496, T-11442, G-10338, G-10754, G-10815, G-20051	Registered
Certification	Korea	KC	KR0034	Designation
	Germany	TUV	CARAT 089112 0010 Rev.00	ISO/IEC 17025
	Russia	RMRS	22.03.01.01196.296	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	The Whistler Group, Inc. 168 Ayer Road, Littleton, MA 01460, USA
Manufacturer	RDX, Inc 1106 Daeryung Techno Twon 8, 96 Gamasanro, Guemcheon-gu, Seoul, Korea
Factory	Radix Telecom Phils., Industries Inc. Sunpino BLDG, Block 6 Lot 10, Phase ll CEZ Rosario Cabite 4106 Philippines
Product Name	Digital Trunking Handheld Radio Scanner
Model Name (FCC, IC)	WS1040
Add Model Name (FCC)	PRO-651
Add Model Name (IC)	None
PMN (IC)	WS1040
Add Model Difference	The main board is identical, adding derivative models to the buyer's difference - PRO-651 _ RADIOSHACK - WS1040 _ WHISTER
Software Version	CPUUpdater_1040_B_U3.0
Hardware Version	3374_REV.0
Firmware Version	CPUUpdater_1040_B_U3.0
RF Module Name	None
Maximum Internal Frequency	20.9431 MHz
Rated Power	AC 120 V, 60 Hz
FCC ID	HSXSC03
IC	1698A-SC03
Remarks	None

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	SCAN MODE	EUT receives power from AC ADAPTOR EUTT was set to constantly scan all bands(25 MHz ~ 1300 MHz)
2	PC/IF MODE	EUT receives power from AC ADAPTOR EUT is connected to the laptop through the PC/IF port, runs the DEMO program installed on the laptop, and stores the scanned LIST file in the PC for testing

4.3 Test Configuration Mode

No.	Mode	Description
1	SCAN MODE	EUT is connected Earphone EUT is connected AC ADAPTOR
2	PC/IF MODE	EUT is connected Earphone EUT is connected AC ADAPTOR EUT is connected PC/IF Cable to laptop

4.4 Supported Equipment

Used*	Product Type	Manufacturer	Model	Remarks
AE	laptop	DELLL	Latitude 5580	9TCV9H2
AE	laptop adaptor	Lite-On Technology(Changzhou)Co. ,Ltd.	LA65NM130	CN-0G4X7T-LOC00-92M-1 5B3-A05
AE	USB scanner Programming cable	The Whistler Group Inc.	N/A	N/A

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

4.5 EUT In/Output Port

Name	Type*	Cable Max. >3 m	Cable Shielded	Cable Back shell	Remarks
AUX	I/O	1.8	Non-Shielded	Plastic	Earphone
BNC	N/E	-	-	-	ANTTENA
PC/IF	I/O	0.7	Shielded	Plastic	laptop
DC IN	DC	1.8	Non-Shielded	Plastic	-
AC IN	AC	-	-	-	Adaptor(EUT)

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

4.6 Test Voltage and Frequency

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

5. Test Summary

Test Items	Applied Standards	Results
Conducted Disturbance	ANSI C63.4 : 2014 RSS-215 Issue 2	C
Radiated Disturbance	ANSI C63.4 : 2014 RSS-215 Issue 2	C
Antenna Power Conduction	ANSI C63.4 : 2014 RSS-215 Issue 2	C
C=Comply N/C=Not Comply N/T=Not Tested N/A=Not Applicable		

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

Measurement Uncertainty	
Test Items	***U* (*k* = 2)**
Conducted Disturbance (9 kHz~ 30 MHz)	Mains : 3.6 dB Signal : 6.0 dB
Conducted Disturbance (150 kHz ~ 30 MHz)	Mains : 3.4 dB Signal : 6.0 dB
Radiated Disturbance (3m)	Below 1 GHz : 5.86 dB Above 1 GHz : 6.98 dB
Radiated Disturbance (10m)	Below 1 GHz : 4.92 dB Above 1 GHz : 6.98 dB
Antenna Power Conduction	**N/A**

- Conducted Disturbance

Frequency [MHz]	Pol.	Result [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]
0.38596	L	42.47	Cispr - Average	48.15	5.68

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dBµV/m]	Detector	Limit [dBµV/m]	Margin [dB]
35.001	V	32.68	Quasi - Peak	40.00	7.32

-Antenna Power Conduction

Frequency [MHz]	Result [dBµV/m]	Detector	Limit [dBµV]	Margin [dB]
97.89	29.94	RMS	34.00	4.06

6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (℃)	Humidity (% R.H.)	Pressure (kPa)
Conducted Disturbance	2023-06-28	21	40	100.1
Radiated Disturbance	2023-06-15 2023-06-28	23 23	45 45	-
Antenna Power Conduction	2023-06-29	24	45	99.8

7. Test Results : Emission

7.1 Conducted Disturbance

ANSI C63.4, RSS-215 Issue 2	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.2.00.0171	TSJ	N/A	N/A	N/A
EMI TEST RECEIVER	ESCI7	ROHDE&SCHWARZ	100910	2023.01.31	2024.01.31
LISN	NSLK 8128	SCHWARZBECK	5024	2022.07.13	2023.07.13
LISN	NSLK 8128 RC	SCHWARZBECK	8128 RC-387	2022.10.26	2023.10.26
PULSE LIMITER	ESH3-Z2	ROHDE&SCHWARZ	101333	2022.08.22	2023.08.22

Calculation

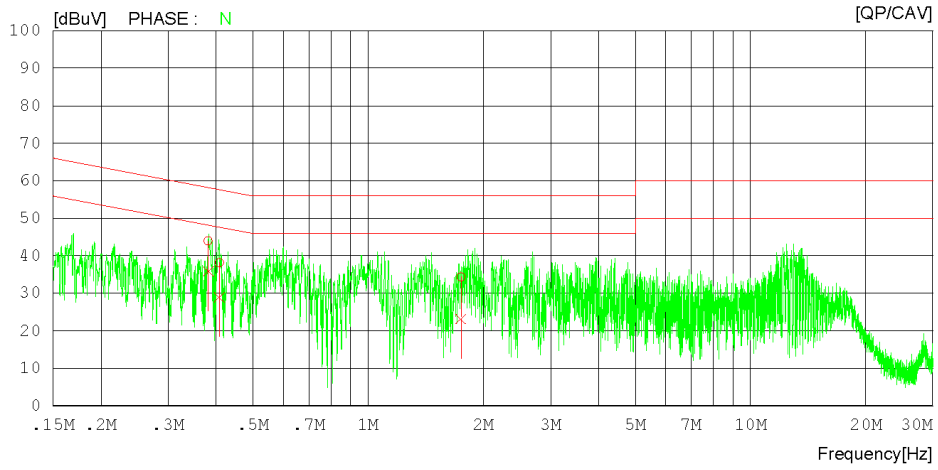
N : Neutral phase, L1 : Live phase
C.FACTOR(dB) : Pulse Limiter(dB) + Cable loss(dB) + Insertion loss of LISN(dB)
Result(dBµV) : Reading Value(dBµV) + C.FACTOR(dB)
Margin(dB) : Limit(dBµV) - Result(dBµV)

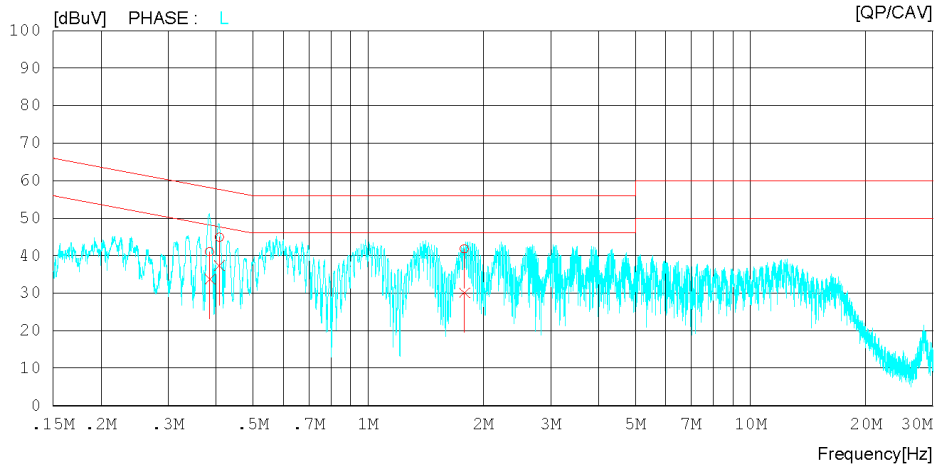
Mains terminal disturbance voltage _Measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

Date 2023-06-28

Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi/Atm 21 'C 40 % R.H. 100.1 kPa
Test Condition SCAN MODE

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





Date 2023-06-28

Order No.	DTNC2305-03434
Power Supply	120 V 60 Hz
Temp/Humi/Atm	21 'C 40 % R.H. 100.1 kPa
Test Condition	SCAN MODE

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

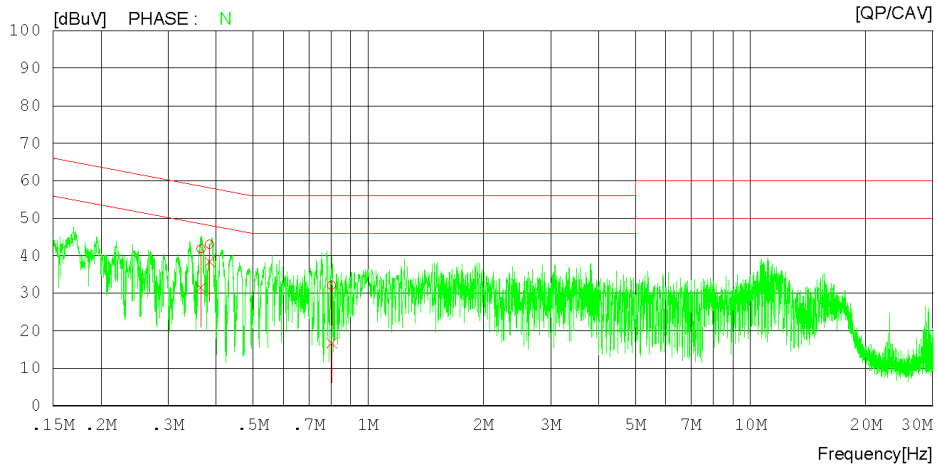
NO	FREQ	READING QP	READING CAV	C.FACTOR	RESULT QP	RESULT CAV	LIMIT QP	LIMIT CAV	MARGIN QP	MARGIN CAV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.38189	33.99	25.88	9.99	43.98	35.87	58.24	48.24	14.26	12.37	N
2	0.40850	28.18	18.92	9.99	38.17	28.91	57.68	47.68	19.51	18.77	N
3	1.74800	24.37	13.07	10.03	34.40	23.10	56.00	46.00	21.60	22.90	N
4	0.38538	31.14	23.86	9.89	41.03	33.75	58.16	48.16	17.13	14.41	L
5	0.40850	34.98	27.47	9.89	44.87	37.36	57.68	47.68	12.81	10.32	L
6	1.78640	31.74	20.09	10.04	41.78	30.13	56.00	46.00	14.22	15.87	L

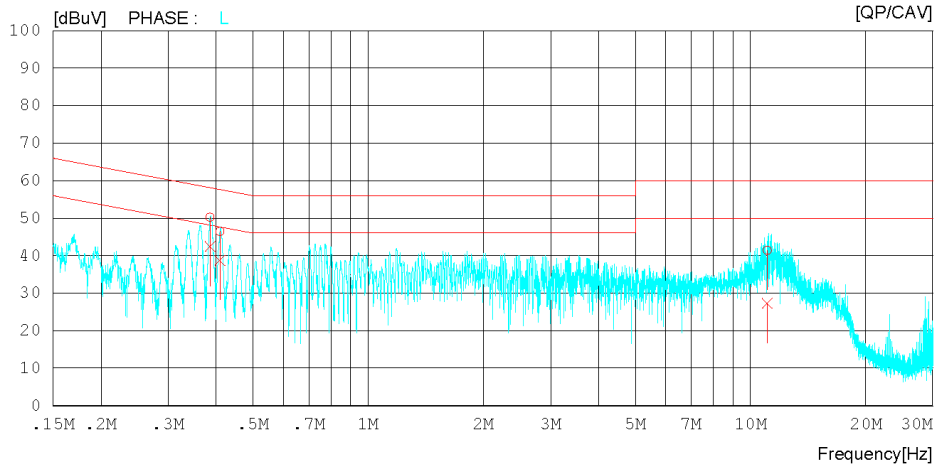
Mains terminal disturbance voltage _Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**

Date 2023-06-28

Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi/Atm 21 'C 40 % R.H. 100.1 kPa
Test Condition PC/IF MODE

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





Results of Conducted Emission

Date 2023-06-28

Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi/Atm 21 'C 40 % R.H. 100.1 kPa
Test Condition PC/IF MODE

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

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	0.36550	31.82	21.46	9.99	41.81	31.45	58.60	48.60	16.79	17.15	N
2	0.38519	33.05	28.36	9.99	43.04	38.35	58.17	48.17	15.13	9.82	N
3	0.80250	22.06	6.73	10.00	32.06	16.73	56.00	46.00	23.94	29.27	N
4	0.38596	40.31	32.58	9.89	50.20	42.47	58.15	48.15	7.95	5.68	L
5	0.40967	36.59	28.87	9.89	46.48	38.76	57.65	47.65	11.17	8.89	L
6	11.06180	31.15	16.99	10.24	41.39	27.23	60.00	50.00	18.61	22.77	L

7.2 Radiated Disturbance

ANSI C63.4, RSS-215 Issue 2	Radiated disturbance 30 MHz –18 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**	
	EUT Operation mode		**1, 2**	
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	2022.11.29	2023.11.29
TRILOG BROADBAND TEST-ANTENNA	VULB9160	SCHWARZBECK	9160-3363	2022.09.29	2024.09.29
6 DB ATTENUATOR	2708A	H.P	23831	2022.09.29	2024.09.29
LOW NOISE PRE AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2022.02.08	2023.02.08
BROAD-BAND HORN ANTENNA	BBHA 9120D	SCHWARZBECK	9120D-1014	2022.08.02	2023.08.02
PRE AMPLIFIER	8449B	H.P	3008A00887	2022.08.24	2023.08.24
HORN ANTENNA	EM-6969	ELECTRO-METRICS	156	2022.12.20	2023.12.20
PREAMPLIFIER	MLA-0618-B03-34	TSJ	1785642	2022.12.20	2023.12.20
(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 ~ 1 000) MHz _Measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**
FCC Part 15 Subpart B			

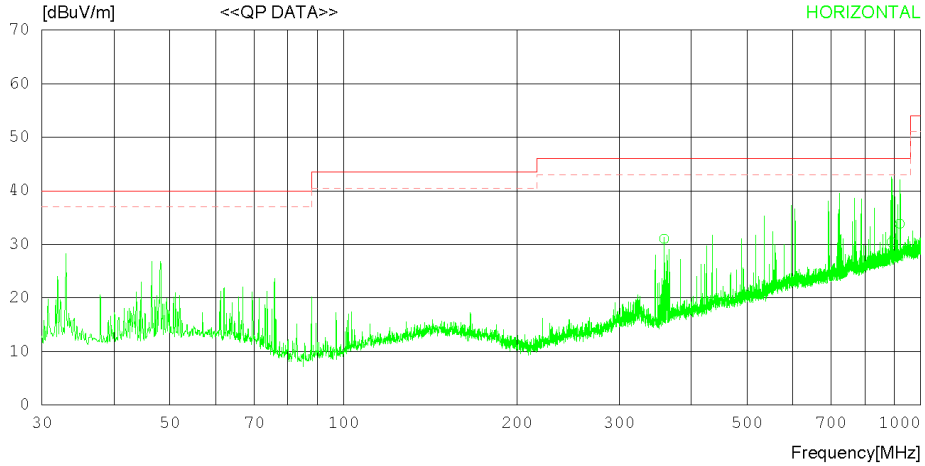
Date 2023-06-15

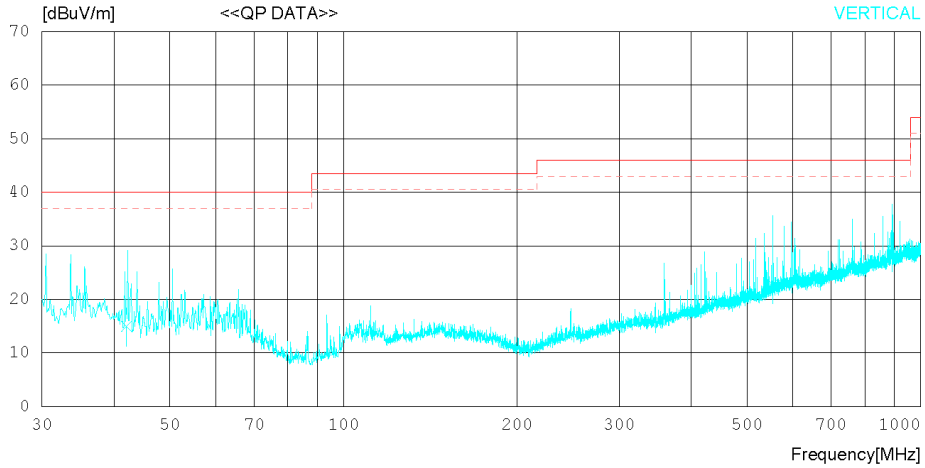
Order No. DTNC2305-03434
Power Supply 120 V 60 HZ
Temp/Humi 23 'C 45 % R.H.
Test Condition SCAN MODE

Memo

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

Antenna Factor
1. ANT_EMC-309_VULB9160_3363_with ATT_2022-09-29
Cable Loss
1. C1_ANT TO BOTTOM_UNDER_2023_05_16
2. C2_AMP TO BOTTOM_UNDER_2023_02_17
3. C3_AMP TO RECEIVER_UNDER_2022.12.12
Pre Amp Gain
1. EMC-110_AMP_MLA-100K01-B01-26_1252741_2023.02.07





Date 2023-06-15

Order No. DTNC2305-03434
Power Supply 120 V 60 HZ
Temp/Humi 23 'C 45 % R.H.
Test Condition SCAN MODE

Memo

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

Antenna Factor
1. ANT_EMC-309_VULB9160_3363_with ATT_2022-09-29
Cable Loss
1. C1_ANT TO BOTTOM_UNDER_2023_05_16
2. C2_AMP TO BOTTOM_UNDER_2023_02_17
3. C3_AMP TO RECEIVER_UNDER_2022.12.12
Pre Amp Gain
1. EMC-110_AMP_MLA-100K01-B01-26_1252741_2023.02.07

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	359.368	34.40	20.36	2.62	26.38	31.00	46.00	15.00	236	116
2	889.909	23.10	29.30	4.07	26.10	30.37	46.00	15.63	234	38
3	919.042	26.00	29.78	4.15	26.10	33.83	46.00	12.17	131	45
----- VERTICAL ------										
4	42.009	22.80	17.70	0.90	26.44	14.96	40.00	25.04	311	185
5	554.160	20.70	24.58	3.37	25.81	22.84	46.00	23.16	220	228
6	892.204	21.60	29.34	4.07	26.10	28.91	46.00	17.09	375	116

Radiated disturbance at (30 ~ 1 000) MHz _Measurement data			
Test configuration mode	**1**	**EUT Operation mode**	**1**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**
ICES-003 Issue 7			

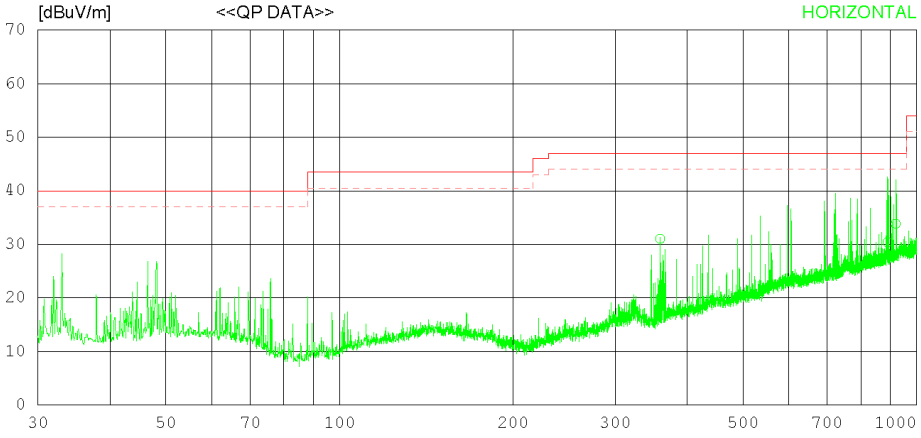
Date 2023-06-15

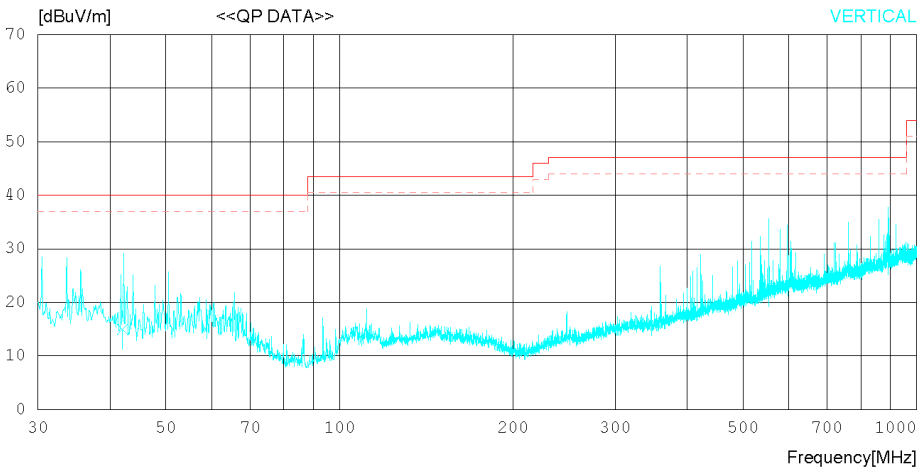
Order No. DTNC2305-03434
Power Supply 120 V 60 HZ
Temp/Humi 23 'C 45 % R.H.
Test Condition SCAN MODE

Memo

LIMIT : ICES-003 Issue 7_Class B
MARGIN: 3 dB

Antenna Factor
1. ANT_EMC-309_VULB9160_3363_with ATT_2022-09-29
Cable Loss
1. C1_ANT TO BOTTOM_UNDER_2023_05_16
2. C2_AMP TO BOTTOM_UNDER_2023_02_17
3. C3_AMP TO RECEIVER_UNDER_2022.12.12
Pre Amp Gain
1. EMC-110_AMP_MLA-100K01-B01-26_1252741_2023.02.07





Date 2023-06-15

Order No. DTNC2305-03434
Power Supply 120 V 60 HZ
Temp/Humi 23 'C 45 % R.H.
Test Condition SCAN MODE

Memo

LIMIT : ICES-003 Issue 7_Class B
MARGIN: 3 dB

Antenna Factor
1. ANT_EMC-309_VULB9160_3363_with ATT_2022-09-29
Cable Loss
1. C1_ANT TO BOTTOM_UNDER_2023_05_16
2. C2_AMP TO BOTTOM_UNDER_2023_02_17
3. C3_AMP TO RECEIVER_UNDER_2022.12.12
Pre Amp Gain
1. EMC-110_AMP_MLA-100K01-B01-26_1252741_2023.02.07

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	359.368	34.40	20.36	2.62	26.38	31.00	47.00	16.00	236	116
2	889.909	23.10	29.30	4.07	26.10	30.37	47.00	16.63	234	38
3	919.042	26.00	29.78	4.15	26.10	33.83	47.00	13.17	131	45
----- VERTICAL ------										
4	42.009	22.80	17.70	0.90	26.44	14.96	40.00	25.04	311	185
5	554.160	20.70	24.58	3.37	25.81	22.84	47.00	24.16	220	228
6	892.204	21.60	29.34	4.07	26.10	28.91	47.00	18.09	375	116

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**

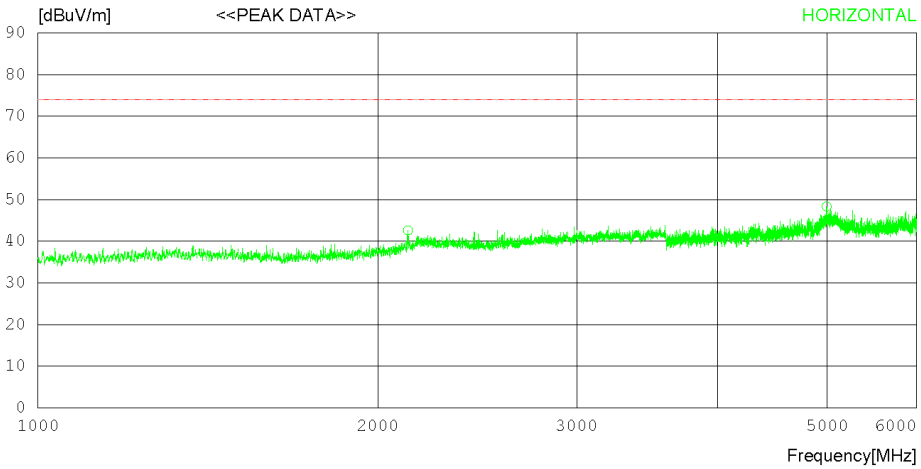
Date 2023-06-28

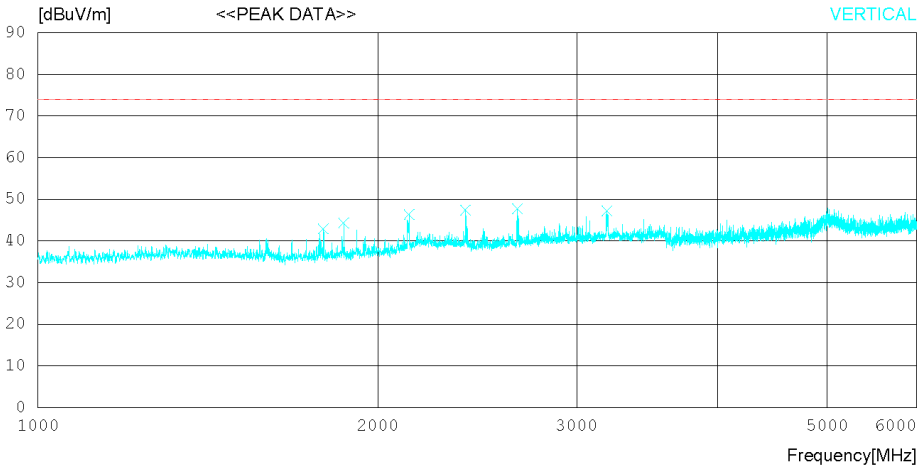
Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition SCAN MODE

Memo

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

Antenna Factor
1. ANT_9120D_1014_22.08.02
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
3. #29_C3_Amp to Receiver_3m_1-18G_2022-09-15
Pre Amp Gain
1. AMP_8449B_3008A00887_2022.08.24





Date 2023-06-28

Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition SCAN MODE

Memo

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

Antenna Factor
1. ANT_9120D_1014_22.08.02
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
3. #29_C3_Amp to Receiver_3m_1-18G_2022-09-15
Pre Amp Gain
1. AMP_8449B_3008A00887_2022.08.24

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	2126.875	45.60	27.45	4.74	35.19	42.60	74.0	31.4	100	358
2	4993.125	42.60	31.77	8.78	34.80	48.35	74.0	25.65	100	358
----- VERTICAL ------										
3	1790.000	48.50	25.38	4.38	35.39	42.87	74.0	31.13	100	0
4	1865.625	49.60	25.59	4.45	35.32	44.32	74.0	29.68	100	352
5	2131.250	49.20	27.55	4.75	35.19	46.31	74.0	27.69	100	10
6	2391.875	49.90	27.65	5.05	35.16	47.44	74.0	26.56	100	132
7	2658.750	49.80	27.82	5.25	35.13	47.74	74.0	26.26	100	0
8	3190.625	47.40	28.98	5.84	34.99	47.23	74.0	26.77	100	34

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**

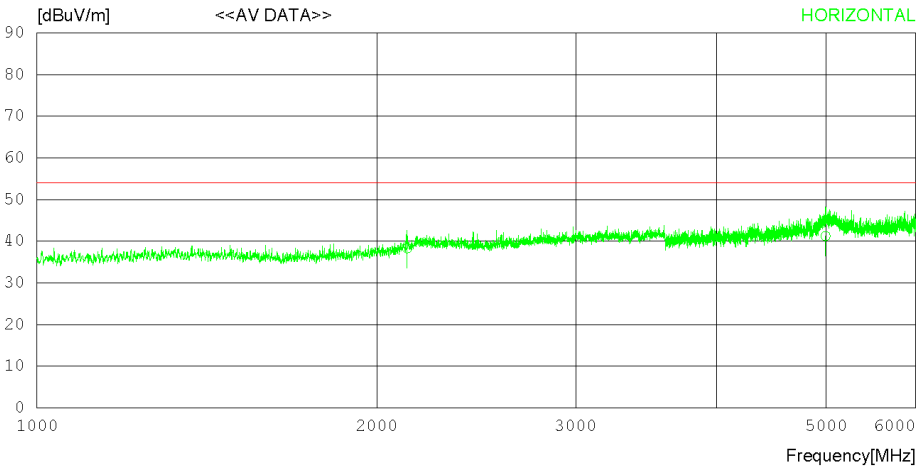
Date 2023-06-28

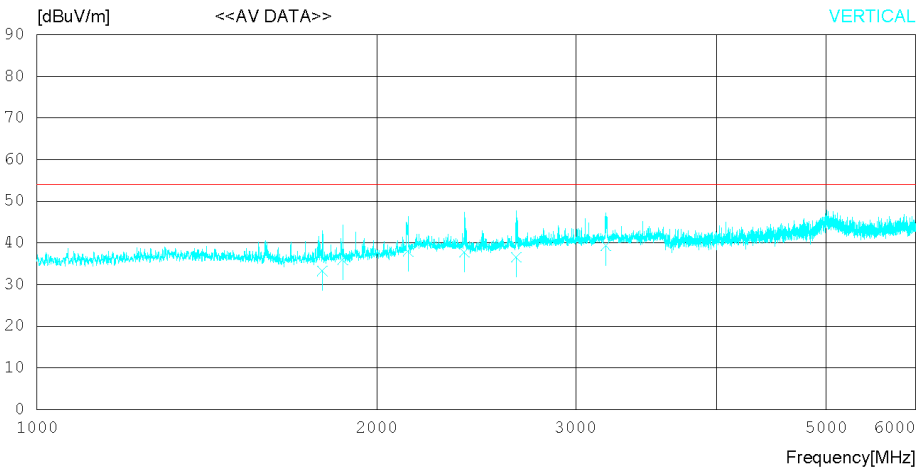
Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition SCAN MODE

Memo

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

Antenna Factor
1. ANT_9120D_1014_22.08.02
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
3. #29_C3_Amp to Receiver_3m_1-18G_2022-09-15
Pre Amp Gain
1. AMP_8449B_3008A00887_2022.08.24





Date 2023-06-28

Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition SCAN MODE

Memo

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

Antenna Factor
1. ANT_9120D_1014_22.08.02
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
3. #29_C3_Amp to Receiver_3m_1-18G_2022-09-15
Pre Amp Gain
1. AMP_8449B_3008A00887_2022.08.24

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	2126.731	41.30	27.44	4.74	35.19	38.29	54.00	15.71	100	358
2	4993.431	35.50	31.77	8.78	34.80	41.25	54.00	12.75	100	358
----- VERTICAL ------										
3	1789.653	38.90	25.38	4.38	35.39	33.27	54.00	20.73	100	0
4	1865.334	41.20	25.59	4.45	35.32	35.92	54.00	18.08	100	352
5	2130.998	40.90	27.54	4.75	35.19	38.00	54.00	16.00	100	10
6	2391.432	40.20	27.65	5.05	35.16	37.74	54.00	16.26	100	132
7	2658.667	38.60	27.82	5.25	35.13	36.54	54.00	17.46	100	0
8	3189.623	39.50	28.98	5.84	34.99	39.33	54.00	14.67	100	34

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**

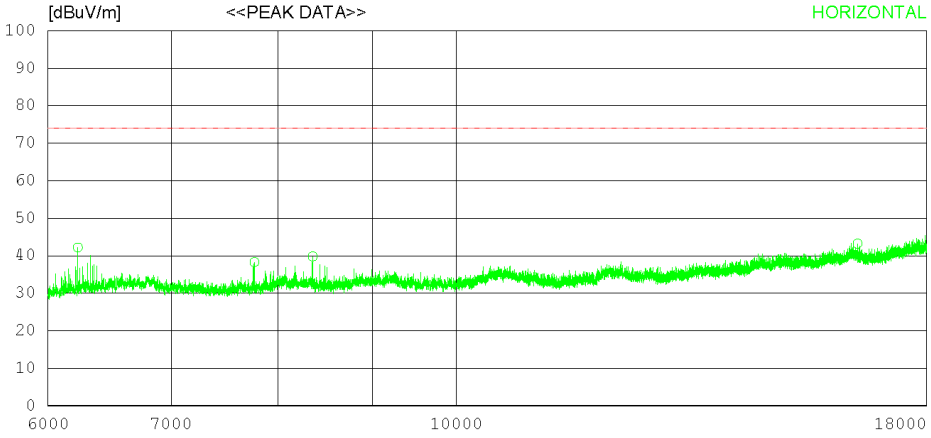
Date 2023-06-28

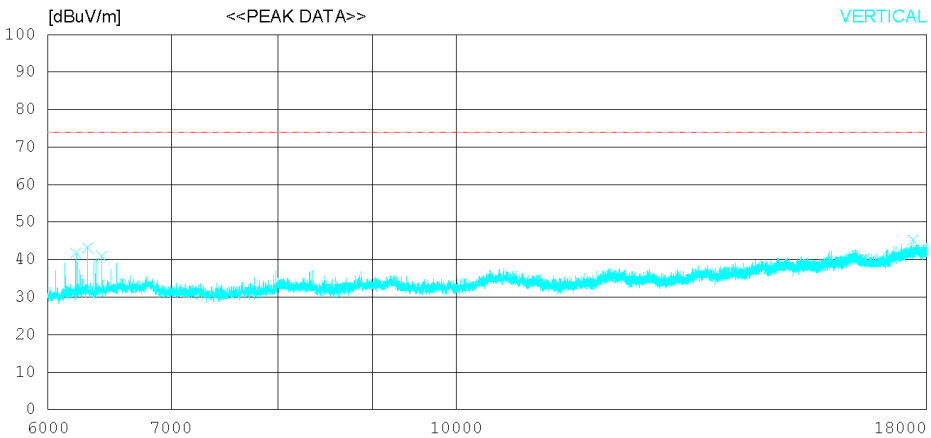
Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition SCAN MODE

Memo

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

Antenna Factor
1. EMC-233-A_EM-6969_156_2022.12.20
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
Pre Amp Gain
1. EMC-233-M_MLA-0618-B03-34_2022.12.20





Date 2023-06-28

Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition SCAN MODE

Memo

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

Antenna Factor
1. EMC-233-A_EM-6969_156_2022.12.20
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
Pre Amp Gain
1. EMC-233-M_MLA-0618-B03-34_2022.12.20

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	6228.750	43.00	31.20	7.72	39.71	42.21	74.0	31.79	220	358
2	7766.250	37.20	31.10	8.43	38.43	38.30	74.0	35.7	352	232
3	8354.250	38.00	31.49	8.64	38.31	39.82	74.0	34.18	113	358
4	16506.750	30.90	36.51	13.02	37.23	43.20	74.0	30.8	305	0
----- VERTICAL ------										
5	6213.000	42.60	31.20	7.71	39.72	41.79	74.0	32.21	131	359
6	6305.250	43.90	31.10	7.76	39.65	43.11	74.0	30.89	134	147
7	6418.500	41.60	31.10	7.81	39.56	40.95	74.0	33.05	256	359
8	17688.750	30.70	37.10	15.39	37.98	45.21	74.0	28.79	145	0

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**

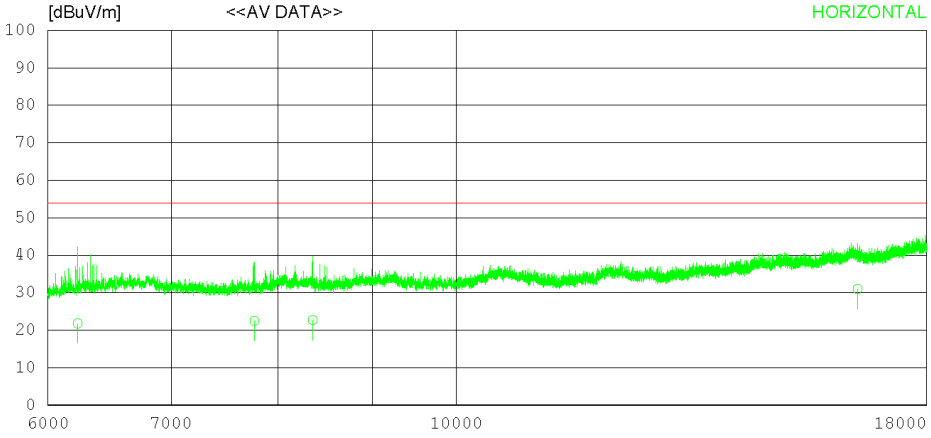
Date 2023-06-28

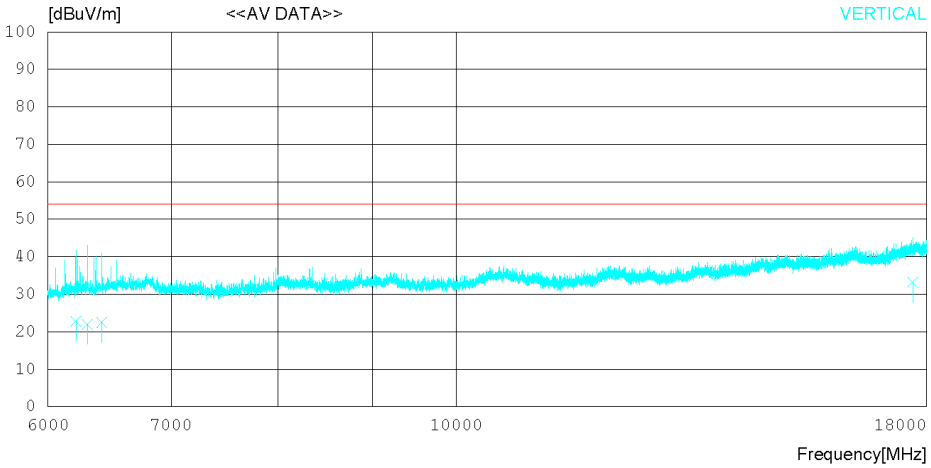
Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition SCAN MODE

Memo

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

Antenna Factor
1. EMC-233-A_EM-6969_156_2022.12.20
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
Pre Amp Gain
1. EMC-233-M_MLA-0618-B03-34_2022.12.20





Date 2023-06-28

Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition SCAN MODE

Memo

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

Antenna Factor
1. EMC-233-A_EM-6969_156_2022.12.20
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
Pre Amp Gain
1. EMC-233-M_MLA-0618-B03-34_2022.12.20

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	6228.132	22.60	31.20	7.72	39.71	21.81	54.00	32.19	220	202
2	7766.241	21.40	31.10	8.43	38.43	22.50	54.00	31.50	308	113
3	8353.372	20.90	31.49	8.64	38.31	22.72	54.00	31.28	114	206
4	16506.120	18.70	36.51	13.03	37.23	31.01	54.00	22.99	120	157
----- VERTICAL ------										
5	6213.345	23.60	31.20	7.71	39.72	22.79	54.00	31.21	322	116
6	6304.216	22.70	31.10	7.76	39.65	21.91	54.00	32.09	134	171
7	6417.631	23.10	31.10	7.81	39.56	22.45	54.00	31.55	226	350
8	17687.690	18.70	37.10	15.38	37.98	33.20	54.00	20.80	305	14

Radiated disturbance at (30 ~ 1 000) MHz _Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**
FCC Part 15 Subpart B			

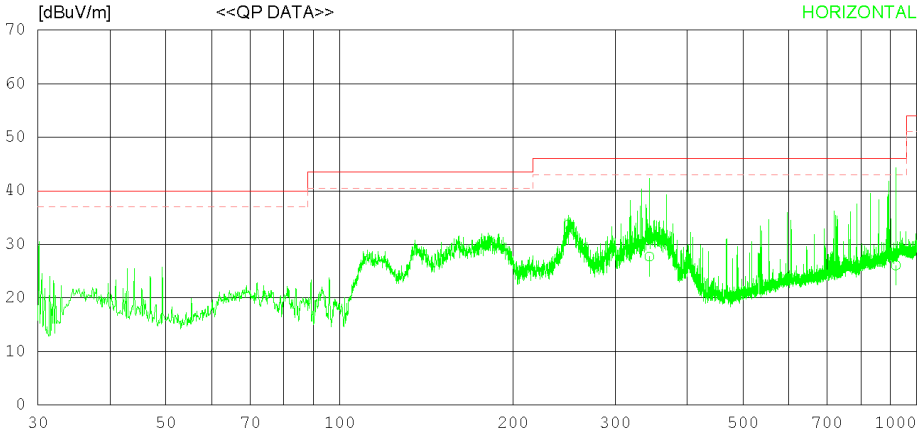
Date 2023-06-15

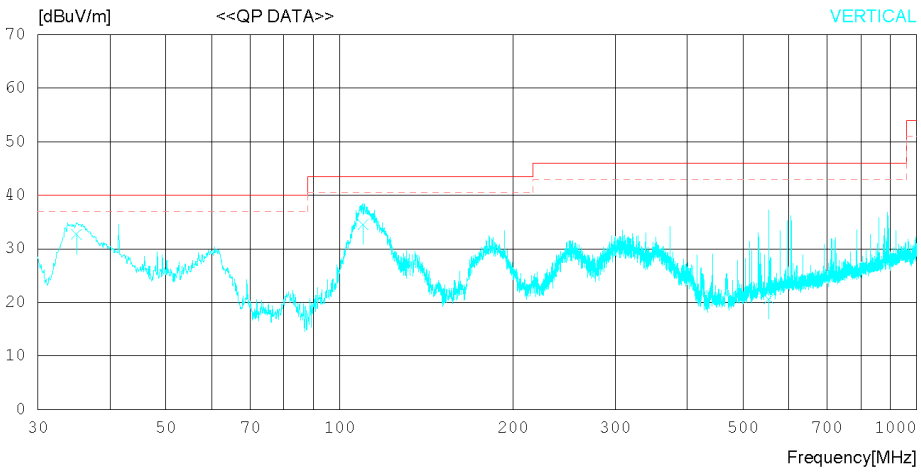
Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition PC/IF MODE

Memo

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

Antenna Factor
1. ANT_EMC-309_VULB9160_3363_with ATT_2022-09-29
Cable Loss
1. C1_ANT TO BOTTOM_UNDER_2023_05_16
2. C2_AMP TO BOTTOM_UNDER_2023_02_17
3. C3_AMP TO RECEIVER_UNDER_2022.12.12
Pre Amp Gain
1. EMC-110_AMP_MLA-100K01-B01-26_1252741_2023.02.07





Date 2023-06-15

Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition PC/IF MODE

Memo

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

Antenna Factor
1. ANT_EMC-309_VULB9160_3363_with ATT_2022-09-29
Cable Loss
1. C1_ANT TO BOTTOM_UNDER_2023_05_16
2. C2_AMP TO BOTTOM_UNDER_2023_02_17
3. C3_AMP TO RECEIVER_UNDER_2022.12.12
Pre Amp Gain
1. EMC-110_AMP_MLA-100K01-B01-26_1252741_2023.02.07

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	249.000	40.30	17.66	2.14	26.40	33.70	46.00	12.30	321	78
2	343.999	31.50	20.02	2.57	26.40	27.69	46.00	18.31	202	115
3	919.999	18.20	29.80	4.15	26.10	26.05	46.00	19.95	113	305
----- VERTICAL ------										
4	35.001	41.10	17.20	0.85	26.47	32.68	40.00	7.32	131	78
5	109.818	43.20	16.38	1.46	26.50	34.54	43.50	8.96	220	113
6	554.185	18.50	24.58	3.37	25.81	20.64	46.00	25.36	100	358

Radiated disturbance at (30 ~ 1 000) MHz _Measurement data			
Test configuration mode	**2**	**EUT Operation mode**	**2**
Test voltage (V)	**AC 120**	**Test Frequency (Hz)**	**60**
ICES-003 Issue 7			

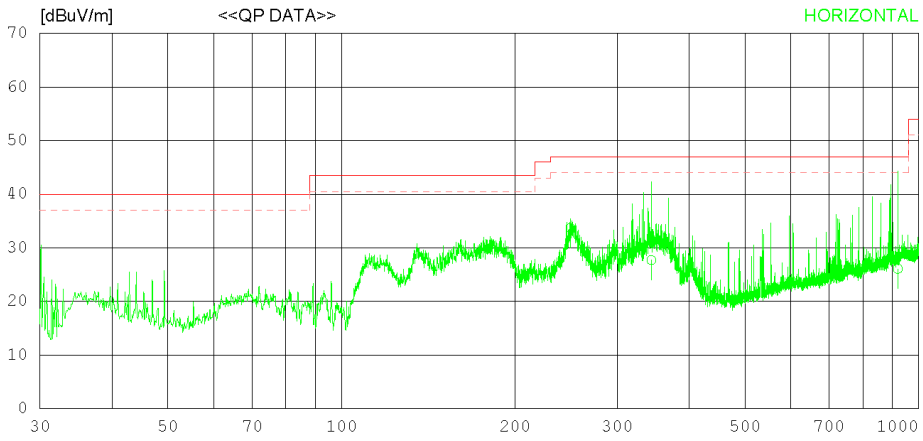
Date 2023-06-15

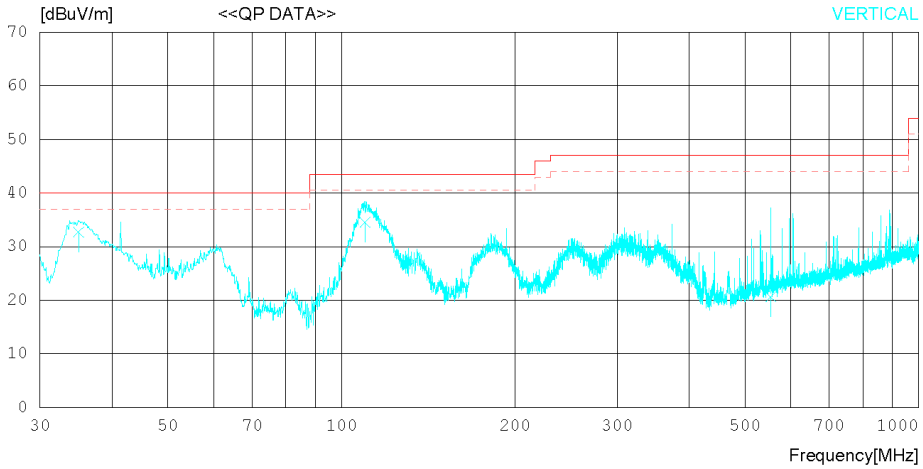
Order No. DTNC2305-03438
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition PC/IF MODE

Memo

LIMIT : ICES-003 Issue 7_Class B
MARGIN: 3 dB

Antenna Factor
1. ANT_EMC-309_VULB9160_3363_with ATT_2022-09-29
Cable Loss
1. C1_ANT TO BOTTOM_UNDER_2023_05_16
2. C2_AMP TO BOTTOM_UNDER_2023_02_17
3. C3_AMP TO RECEIVER_UNDER_2022.12.12
Pre Amp Gain
1. EMC-110_AMP_MLA-100K01-B01-26_1252741_2023.02.07





Date 2023-06-15

Order No. DTNC2305-03438
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition PC/IF MODE

Memo

LIMIT : ICES-003 Issue 7_Class B
MARGIN: 3 dB

Antenna Factor
1. ANT_EMC-309_VULB9160_3363_with ATT_2022-09-29
Cable Loss
1. C1_ANT TO BOTTOM_UNDER_2023_05_16
2. C2_AMP TO BOTTOM_UNDER_2023_02_17
3. C3_AMP TO RECEIVER_UNDER_2022.12.12
Pre Amp Gain
1. EMC-110_AMP_MLA-100K01-B01-26_1252741_2023.02.07

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	249.000	40.30	17.66	2.14	26.40	33.70	47.00	13.30	321	78
2	343.999	31.50	20.02	2.57	26.40	27.69	47.00	19.31	202	115
3	919.999	18.20	29.80	4.15	26.10	26.05	47.00	20.95	113	305
----- VERTICAL ------										
4	35.001	41.10	17.20	0.85	26.47	32.68	40.00	7.32	131	78
5	109.818	43.20	16.38	1.46	26.50	34.54	43.50	8.96	220	113
6	554.185	18.50	24.58	3.37	25.81	20.64	47.00	26.36	100	358

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**

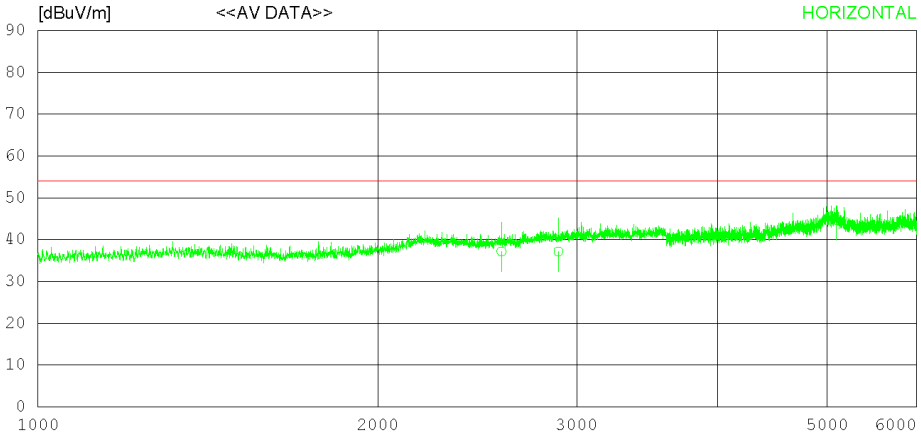
Date 2023-06-28

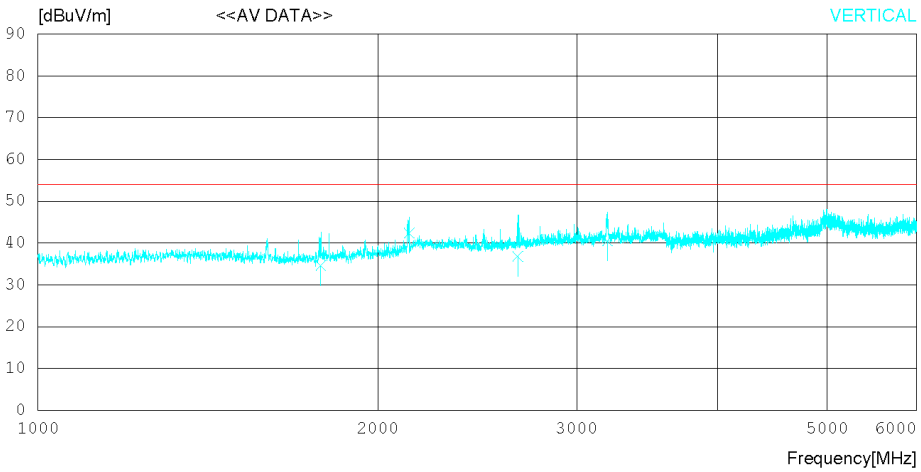
Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition PC/IF MODE

Memo

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

Antenna Factor
1. ANT_9120D_1014_22.08.02
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
3. #29_C3_Amp to Receiver_3m_1-18G_2022-09-15
Pre Amp Gain
1. AMP_8449B_3008A00887_2022.08.24





Date 2023-06-28

Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition PC/IF MODE

Memo

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

Antenna Factor
1. ANT_9120D_1014_22.08.02
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
3. #29_C3_Amp to Receiver_3m_1-18G_2022-09-15
Pre Amp Gain
1. AMP_8449B_3008A00887_2022.08.24

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	2572.432	39.50	27.64	5.18	35.14	37.18	54.00	16.82	112	322
2	2889.387	38.30	28.48	5.50	35.11	37.17	54.00	16.83	134	114
3	5094.338	39.20	32.09	8.23	34.81	44.71	54.00	9.29	134	12
----- VERTICAL ------										
4	1780.350	40.20	25.36	4.38	35.40	34.54	54.00	19.46	131	13
5	2132.937	45.20	27.59	4.75	35.19	42.35	54.00	11.65	350	305
6	2659.963	38.90	27.82	5.25	35.13	36.84	54.00	17.16	220	173
7	3194.983	40.60	28.99	5.85	34.98	40.46	54.00	13.54	331	235

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

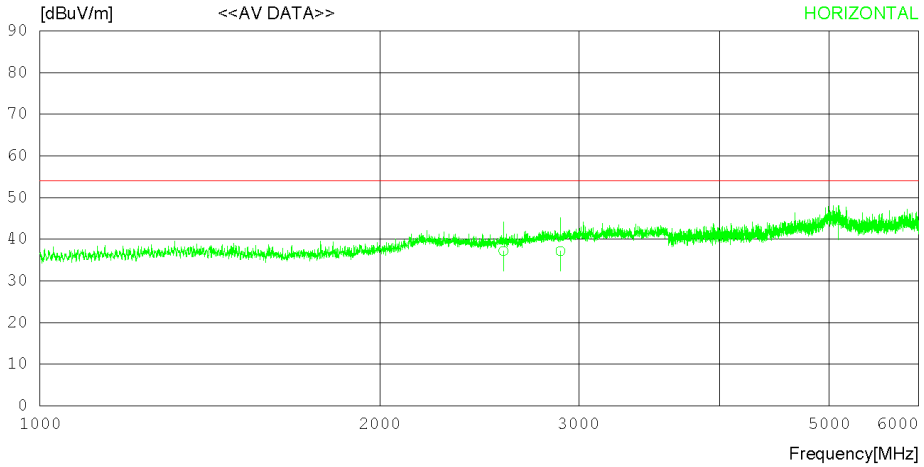
Date 2023-06-28

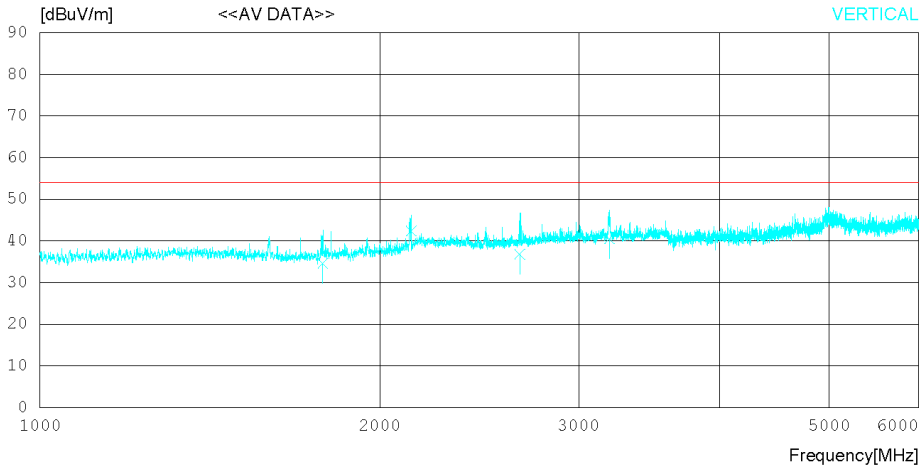
Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition PC/IF MODE

Memo

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

Antenna Factor
1. ANT_9120D_1014_22.08.02
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
3. #29_C3_Amp to Receiver_3m_1-18G_2022-09-15
Pre Amp Gain
1. AMP_8449B_3008A00887_2022.08.24





Date 2023-06-28

Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition PC/IF MODE

Memo

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

Antenna Factor
1. ANT_9120D_1014_22.08.02
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
3. #29_C3_Amp to Receiver_3m_1-18G_2022-09-15
Pre Amp Gain
1. AMP_8449B_3008A00887_2022.08.24

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	2572.432	39.50	27.64	5.18	35.14	37.18	54.00	16.82	112	322
2	2889.387	38.30	28.48	5.50	35.11	37.17	54.00	16.83	134	114
3	5094.338	39.20	32.09	8.23	34.81	44.71	54.00	9.29	134	12
----- VERTICAL ------										
4	1780.350	40.20	25.36	4.38	35.40	34.54	54.00	19.46	131	13
5	2132.937	45.20	27.59	4.75	35.19	42.35	54.00	11.65	350	305
6	2659.963	38.90	27.82	5.25	35.13	36.84	54.00	17.16	220	173
7	3194.983	40.60	28.99	5.85	34.98	40.46	54.00	13.54	331	235

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**

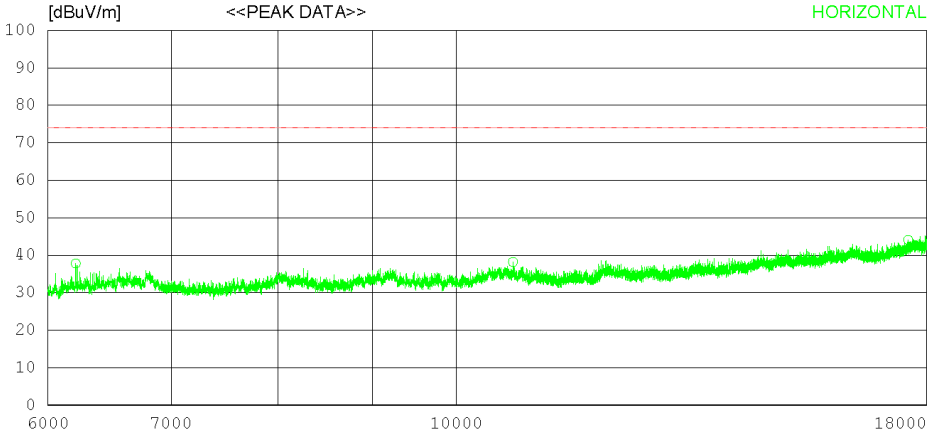
Date 2023-06-28

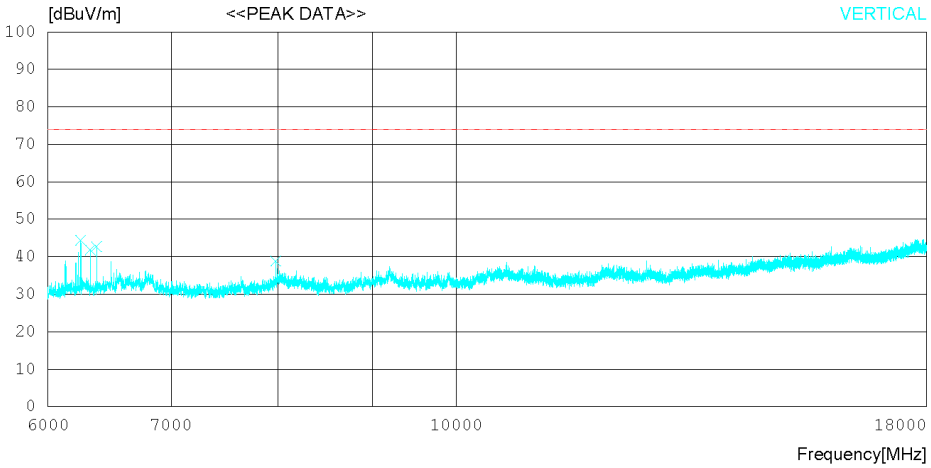
Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition PC/IF MODE

Memo

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

Antenna Factor
1. EMC-233-A_EM-6969_156_2022.12.20
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
Pre Amp Gain
1. EMC-233-M_MLA-0618-B03-34_2022.12.20





Date 2023-06-28

Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition PC/IF MODE

Memo

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

Antenna Factor
1. EMC-233-A_EM-6969_156_2022.12.20
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
Pre Amp Gain
1. EMC-233-M_MLA-0618-B03-34_2022.12.20

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	6212.250	38.60	31.20	7.71	39.72	37.79	74.0	36.21	133	190
2	10729.500	34.40	32.30	10.07	38.59	38.18	74.0	35.82	114	358
3	17589.750	29.70	37.10	15.07	37.82	44.05	74.0	29.95	134	0
----- VERTICAL ------										
4	6251.250	45.20	31.20	7.74	39.69	44.45	74.0	29.55	320	144
5	6326.250	42.60	31.10	7.76	39.64	41.82	74.0	32.18	221	176
6	6376.500	43.40	31.10	7.79	39.60	42.69	74.0	31.31	134	358
7	7976.250	37.50	31.25	8.46	38.36	38.85	74.0	35.15	350	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**

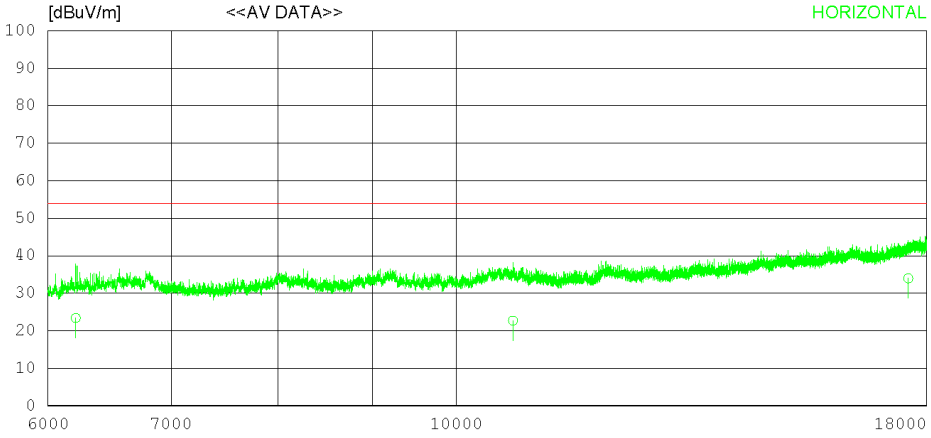
Date 2023-06-28

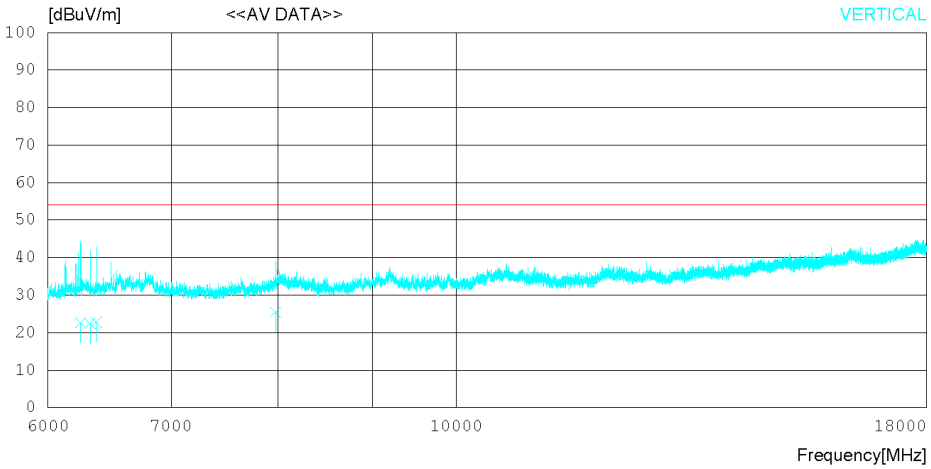
Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition PC/IF MODE

Memo

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

Antenna Factor
1. EMC-233-A_EM-6969_156_2022.12.20
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
Pre Amp Gain
1. EMC-233-M_MLA-0618-B03-34_2022.12.20





Date 2023-06-28

Order No. DTNC2305-03434
Power Supply 120 V 60 Hz
Temp/Humi 23 'C 45 % R.H.
Test Condition PC/IF MODE

Memo

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

Antenna Factor
1. EMC-233-A_EM-6969_156_2022.12.20
Cable Loss
1. #27_C1_Ant to Bottom_3m_1-18G_2022-09-15
2. #28_C2_Bottom to Amp(Filter,Receiver)_3m_1-18G_2022-09-15
Pre Amp Gain
1. EMC-233-M_MLA-0618-B03-34_2022.12.20

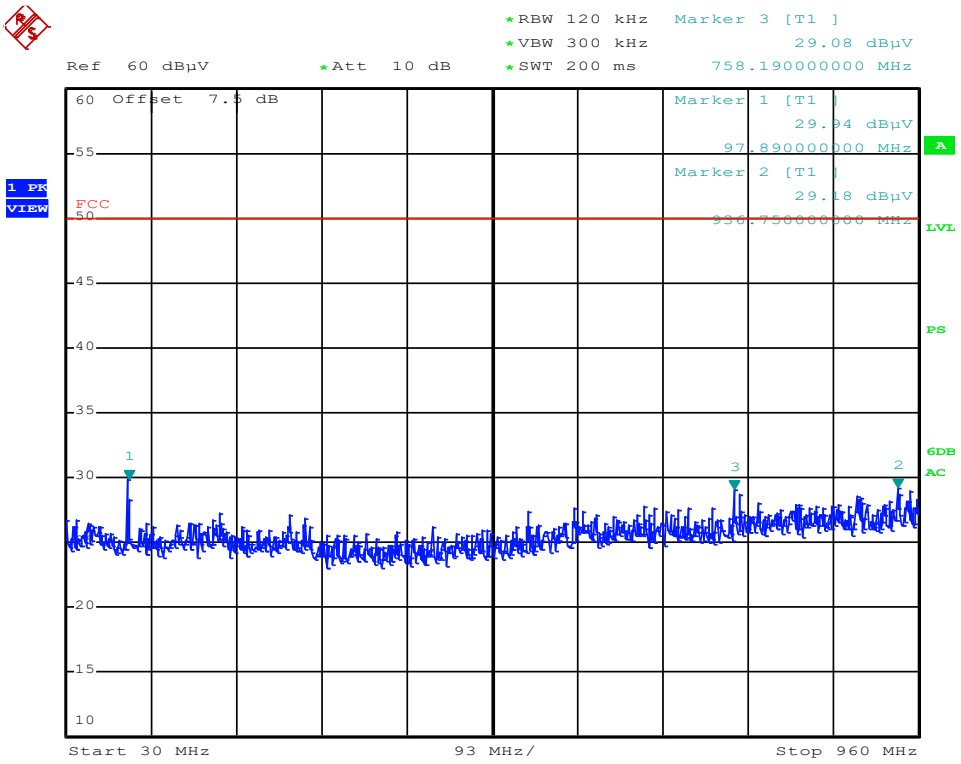
No.	FREQ [MHz]	READING CAV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- HORIZONTAL ------										
1	6212.113	24.20	31.20	7.71	39.72	23.39	54.00	30.61	311	190
2	10729.530	18.90	32.30	10.07	38.59	22.68	54.00	31.32	220	305
3	17589.180	19.60	37.10	15.07	37.82	33.95	54.00	20.05	131	131
----- VERTICAL ------										
4	6251.132	23.40	31.20	7.74	39.69	22.65	54.00	31.35	131	122
5	6325.939	23.20	31.10	7.76	39.64	22.42	54.00	31.58	220	305
6	6376.463	23.50	31.10	7.79	39.60	22.79	54.00	31.21	131	113
7	7975.930	24.10	31.25	8.46	38.36	25.45	54.00	28.55	231	133

7.3 Antenna Power Conduction

ANSI C63.4	Antenna power conduction		Result
Method: Power on the receive antenna terminals was to be determined by measurement of the voltage present at these terminals. Antenna conducted power measurements was performed with the EUT antenna terminals connected directly to measuring instrument using a impedance-Matching network to connect the measurement Instrument to the antenna terminals of the EUT. The losses in decibels in impedance-matching network and cables was added to the measured values in dBμV. The measurements were repeated with the receiver tuned to a frequency until all of frequencies had been successively measured. Power in the receive antenna terminals in the ratio of V^2 /R, where V is the loss-corrected voltage measured at the antenna terminals, and R is the impedance of the measuring instrument			**Comply**
Fully configured sample scanned over the following frequency range	**Frequency range on each side of line**	**Limit**	
	30 MHz to 1 000 MHz	**2 nW (50 dBμV)**	
	54 MHz to 300 MHz 300 MHz to 450 MHz 450 MHz to 804 MHz	**-26 dBmV (34 dBμV) -20 dBmV (40 dBμV) -15 dBmV (45 dBμV)**	
Measurement Point	**Tuner port**		
EUT mode (Refer to clauses 4)	**Test configuration mode**	**1**	
	EUT Operation mode	**1**	

Measurement Instrument					
Description	**Model**	**Manufacturer**	**Identifier**	**Cal. Date**	**Cal. Due**
POWER SPLITTER	ZFRSC-123-S+	MINI-CIRCUITS	SF314201229	2022.07.14	2023.07.14
BROADCAST TEST CENTER	BTC	ROHDE&SCHWARZ	100253	2023.02.07	2024.02.07
EMI TEST RECEIVER	ESU40	ROHDE&SCHWARZ	100525	2022.11.29	2023.11.29

Antenna Power Conduction _Measurement data graph			
Test configuration mode	1	EUT Operation mode	2
Test voltage (V)	AC 120	Test Frequency (Hz)	60



8. Revision History

Date	Description	Revised By	Reviewed By
Jul. 25. 2023	Initial report	JunSeo Park	DaeHwa Eun

-End of test report-