

TEST REPORT





DT&C Co., Ltd.

42, Yurim-ro, 154Beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea, 17042
Tel : 031-321-2664, Fax : 031-321-1664

1. Report No : DREFCC2110-0168
2. Customer
 - Name : KYOCERA Corporation
 - Address : Yokohama Office 2-1-1 Kagahara, Tsuzuki-ku Yokohama-shi, Kanagawa, Japan
3. Use of Report : FCC Supplier's Declaration of Conformity
4. Product Name / Model Name : Mobile Phone / EB1083
5. Test Method Used : ANSI C63.4:2014
FCC Part 15 Subpart B
(Other Class B digital devices & peripherals)
6. Date of Test : Sep. 30. 2021
7. Location of Test : Permanent Testing Lab On Site Testing
(Address : Refer to the attached)
8. Testing Environment : Temperature 24 °C , Humidity 52 % 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 : Hun Lee 	Name : HyungJun Kim 

Oct. 15. 2021.

DT&C Co., Ltd.

KS Q ISO / IEC 17025 and KOLAS accreditation.

If this report is required to confirmation of authenticity, please contact to report@dtnc.net

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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

Address of Laboratory

<input type="checkbox"/>	BS	42, Yurim-ro 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, 17042, Korea
<input type="checkbox"/>	SF-1	46, Yurim-ro 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, 17042, Korea
<input checked="" type="checkbox"/>	SF-2	38, Yurim-ro 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, 17042, Korea
<input type="checkbox"/>	SF-3	28, Baengnyeong-ro 20beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, 17042, 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 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 0008 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	KYOCERA Corporation Yokohama Office 2-1-1 Kagahara, Tsuzuki-ku Yokohama-shi, Kanagawa, Japan
Manufacturer	KYOCERA Corporation Yokohama Office 2-1-1 Kagahara, Tsuzuki-ku Yokohama-shi, Kanagawa, Japan
Factory	KYOCERA Corporation Yokohama Office 2-1-1 Kagahara, Tsuzuki-ku Yokohama-shi, Kanagawa, Japan
Product Name	Mobile Phone
Model Name	EB1083
Add Model Name	None
Add Model Difference	None
RF Module	None
Maximum Internal Frequency	2.0 GHz (Max)
Software Version	0029.a
Hardware Version	DMT
Rated Power	DC 3.87 V (Battery)
Remarks	

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	FM	The EUT is connected to the SIGNAL GENERATOR and is receiving radio frequency (VHF II).
*		

4.3 Test Configuration Mode

No.	Mode	Description
1	Receiving(FM)	The EUT is connected to the USB C TYPE Cable. The USB C TYPE Cable is connected to the Earphone. The EUT is wirelessly connected to the SIGNAL GENERATOR.

4.4 Supported Equipment

Used*	Product Type	Manufacturer	Model	Remarks
AE	Earphone	N/A	N/A	N/A
AE	USB C to 3.5 mm	N/A	N/A	N/A

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

4.5 EUT In/Output Port

Name	Type*	Cable Max. >3m	Cable Shielded	Cable Back shell	Remarks
USB C to 3.5 mm	I/O	0.1	Shield	Plastic	N/A
Earphone	I/O	1.2	Non shield	Plastic	N/A

*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	DC 3.87	-	-	Battery

5. Test Summary

Test Items	Applied Standards	Results
Conducted Disturbance	ANSI C63.4:2014	N/A
Radiated Disturbance	ANSI C63.4:2014	C
C=Comply N/C=Not Comply N/T=Not Tested N/A=Not Applicable		
Note 1)		

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

-Conducted Disturbance

Frequency [MHz]	Phase	Result [dB μ V]	Detector	Limit [dB μ V]	Margin [dB]
-	-	-	-	-	-

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dB μ V/m]	Detector	Limit [dB μ V/m]	Margin [dB]
39991.570	V	47.58	Cispr - Average	54.0	6.42

6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (°C)	Humidity (% R.H.)	Pressure (kPa)
Radiated Disturbance	2021-09-30	24	52	-

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.			Not Applicable
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	N/A	
	EUT Operation mode	N/A	
	Power interface mode	N/A	
Limits – Class A			
Frequency (MHz)	Limit dB μ V		
	Quasi-Peak	Average	
0.15 to 0.50	79	66	
0.50 to 30	73	60	
Limits – Class B			
Frequency (MHz)	Limit dB μ V		
	Quasi-Peak	Average	
0.15 to 0.50	66 to 56	56 to 46	
0.50 to 5	56	46	
5 to 30	60	50	

Measurement Instrument					
Description	Model	Manufacturer	Identifier	Cal. Date	Cal. Due
-	-	-	-	-	-

Calculation

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

Mains terminal disturbance voltage _Test setup photo			
Test configuration mode	N/A	EUT Operation mode	N/A
N/A			
N/A			

Mains terminal disturbance voltage _ Measurement data			
Test configuration mode	N/A	EUT Operation mode	N/A
Test voltage (V)	N/A	Test Frequency (Hz)	N/A

7.2 Radiated Disturbance

ANSI C63.4	Radiated disturbance 30 MHz – XX 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	
	EUT Operation mode		1	
	Power interface mode		1	
Radiated Disturbance below 1 000 MHz				
Frequency range (MHz)	Quasi-peak limit dBμV/m			
	Class A		Class B	
	3 m distance	10 m distance	3 m distance	
30 to 88	49.1	39.1	40	
88 to 216	53.5	43.5	43.5	
216 to 960	56.4	46.4	46	
960 to 1 000	59.5	49.5	54	
According to 15.109(g), as an alternative to the radiated emission limit shown above, digital devices may be shown to comply with the standards(CISPR), Pub. 22 shown as below.				
Frequency range (MHz)	Quasi-peak limit dBμV/m			
	Class A (10 m distance)		Class B (10 m distance)	
30 to 230	40		30	
230 to 1 000	47		37	
Radiated Disturbance for above 1 000 MHz at a measurement distance of 3 m				
Frequency range (GHz)	Peak limit dBμV/m		Average limit dBμV/m	
	Class A	Class B	Class A	Class B
1 to 40	80	74	60	54
The test frequency range of Radiated Disturbance measurements are listed below.				
Highest frequency generated or used in the device or on which the device operates or tunes (MHz)			Upper frequency of measurement range (MHz)	
Below 108			1 000	
108 – 500			2 000	
500 – 1 000			5 000	
Above 1 000			5 th harmonic of the highest frequency or 40 GHz, whichever is lower	

Measurement 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	2020-12-14	2021-12-14
TRILOG BROAD BAND ANTENNA	VULB9160	SCHWARZBECK	9160-3339	2020-10-05	2022-10-05
6 DB ATTENUATOR	2708A	HP	18403	2020-10-05	2022-10-05
LOW NOISE PRE AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2021-02-08	2022-02-08
HORN ANTENNA	3117	ETS-LINDGREN	00152093	2021-03-25	2022-03-25
PRE AMPLIFIER	8449B	H.P	3008A00887	2021-08-23	2022-08-23
HORN ANTENNA	EM-6969	ELECTRO-METRICS	156	2020-12-29	2021-12-29
PREAMPLIFIER	MLA-0618-B03-34	TSJ	1785642	2020-12-24	2021-12-24
HORN ANTENNA	3116C	ETS-LINDGREN	213177	2021-01-27	2022-01-27
PREAMPLIFIER	JS44-18004000-35-8P	L3 NARDA-MITEQ	2046884	2020-11-05	2021-11-05

(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)	Battery	Test Frequency (Hz)	-

RADIATED EMISSION

Date 2021-09-30

Order No.	DTNC2108-06584
Power Supply	BATTERY
Temp/Humi	24 °C 52 % R.H.
Test Condition	FM

Memo

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

Antenna Factor

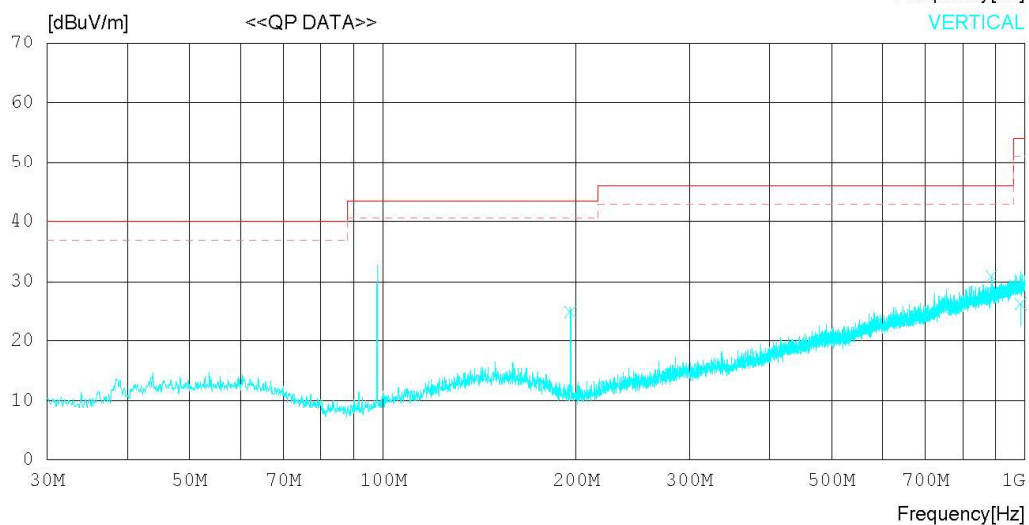
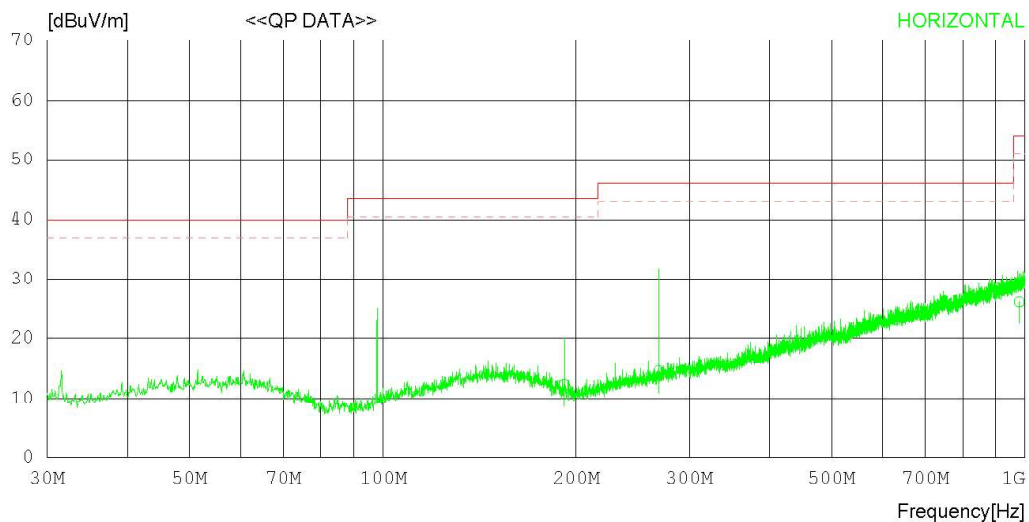
- EMC-228_VULB9160_9160-3339_with ATT_18403_2020.10.05

Cable Loss

- #24_C1_ANT to BOTTOM_3m_장의_9K-1G_2021-02-19
- #25_C2_Amp to BOTTOM_3m_장의_9K-1G_2021-02-19
- #26_C3_Amp to Receiver_3m_장의_9K-1G_2021-02-19

Pre Amp Gain

- EMC-110_AMP_MLA-100K01-B01-26_1252741_2021.02.08



RADIATED EMISSION

Date 2021-09-30

Order No. DTNC2108-06584
 Power Supply BATTERY
 Temp/Humi 24 °C 52 % R.H.
 Test Condition FM

Memo

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

Antenna Factor

1. EMC-228_VULB9160_9160-3339_with ATT_18403_2020.10.05

Cable Loss

1. #24_C1_ANT to BOTTOM_3m_창의_9K-1G_2021-02-19

2. #25_C2_Amp to BOTTOM_3m_창의_9K-1G_2021-02-19

3. #26_C3_Amp to Receiver_3m_창의_9K-1G_2021-02-19

Pre Amp Gain

1. EMC-110_AMP_MLA-100K01-B01-26_1252741_2021.02.08

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	191.683	20.40	16.60	1.94	26.66	12.28	43.50	31.22	102	54
2	268.935	20.30	18.51	2.32	26.58	14.55	46.00	31.45	107	70
3	979.720	17.70	30.31	4.87	26.78	26.10	54.00	27.90	397	312
----- VERTICAL -----										
4	195.990	33.20	16.30	1.98	26.65	24.83	43.50	18.67	102	245
5	887.964	23.50	29.36	4.55	26.49	30.92	46.00	15.08	108	312
6	984.250	17.70	30.39	4.88	26.79	26.18	54.00	27.82	209	208

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

RADIATED EMISSION

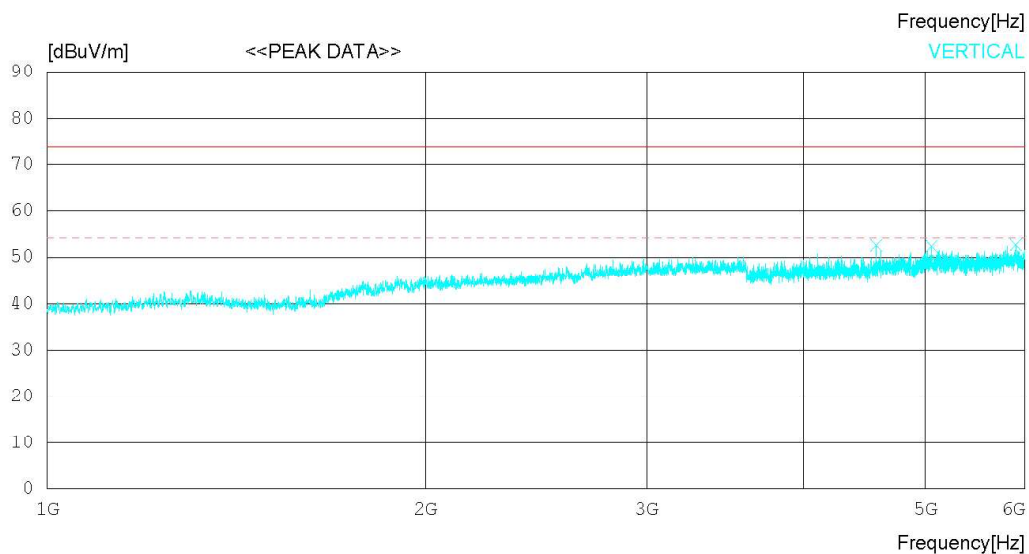
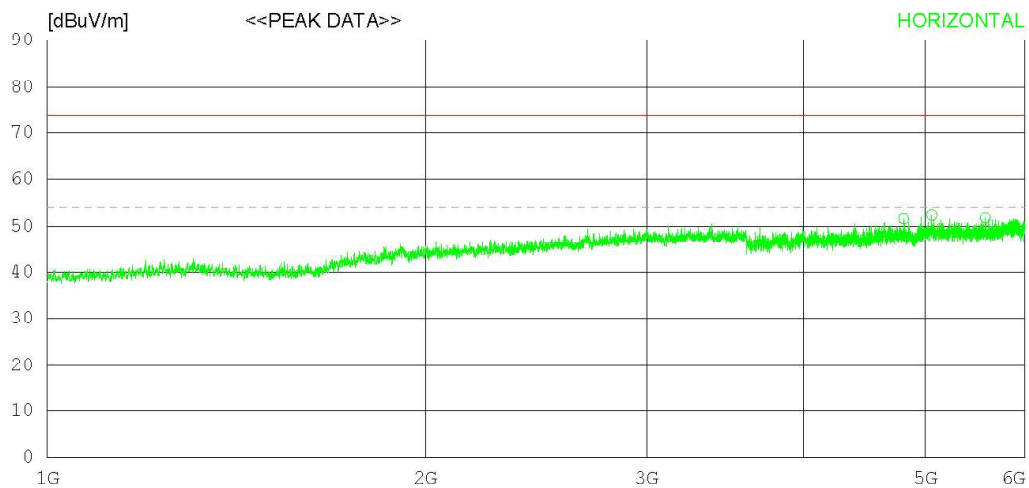
Date 2021-09-30

Order No. DTNC2108-06584
 Power Supply BATTERY
 Temp/Humi 24 'C 52 % R.H.
 Test Condition FM

Memo

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

Antenna Factor
 1. EMC-299_3117_00152093_2021.03.25
 Cable Loss
 1. #27_C1_Ant to Bottom_3m_창의_1-18G_2021.02.25
 2. #28_C2_Bottom to Amp_3m_창의_1-18G_2021.07.26
 3. #29_C3_Amp to Receiver_3m_창의_1-18G_2021.02.25
 Pre Amp Gain
 1. EMC-444_8449B_3008A00887_2021.08.23



RADIATED EMISSION

Date 2021-09-30

Order No. DTNC2108-06584
 Power Supply BATTERY
 Temp/Humi 24 °C 52 % R.H.
 Test Condition FM

Memo

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

Antenna Factor

1. EMC-299_3117_00152093_2021.03.25

Cable Loss

1. #27_C1_Ant to Bottom_3m_창의_1-18G_2021.02.25

2. #28_C2_Bottom to Amp_3m_창의_1-18G_2021.07.26

3. #29_C3_Amp to Receiver_3m_창의_1-18G_2021.02.25

Pre Amp Gain

1. EMC-444_8449B_3008A00887_2021.08.23

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	4803.750	42.40	34.00	9.69	34.44	51.65	74.0	22.35	150	358
2	5057.500	42.70	34.00	10.25	34.51	52.44	74.0	21.56	180	194
3	5581.250	41.40	34.40	10.61	34.62	51.79	74.0	22.21	100	268
----- VERTICAL -----										
4	4568.750	43.10	33.84	9.88	34.37	52.45	74.0	21.55	400	223
5	5055.625	42.60	34.00	10.24	34.51	52.33	74.0	21.67	100	358
6	5904.375	41.20	34.80	11.29	34.68	52.61	74.0	21.39	200	358

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

RADIATED EMISSION

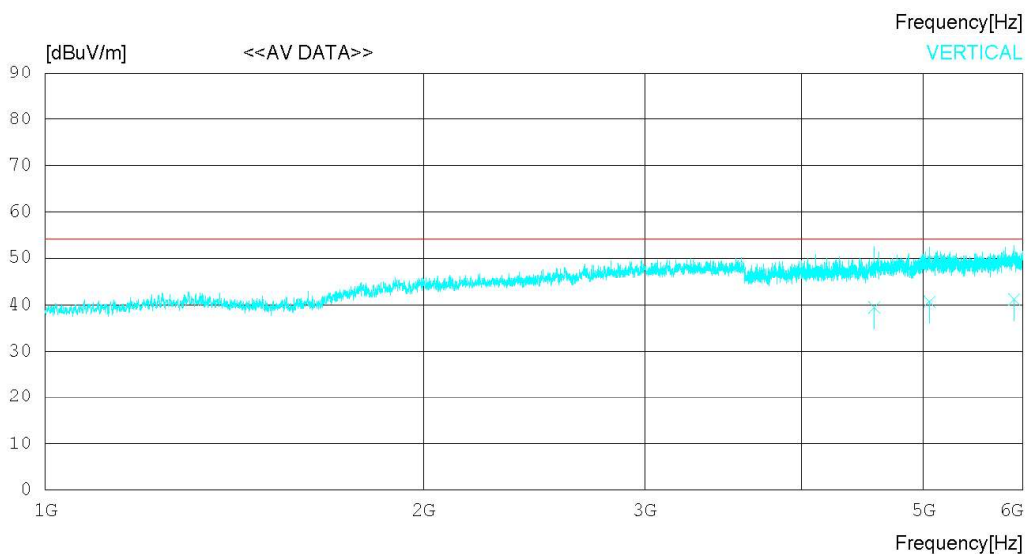
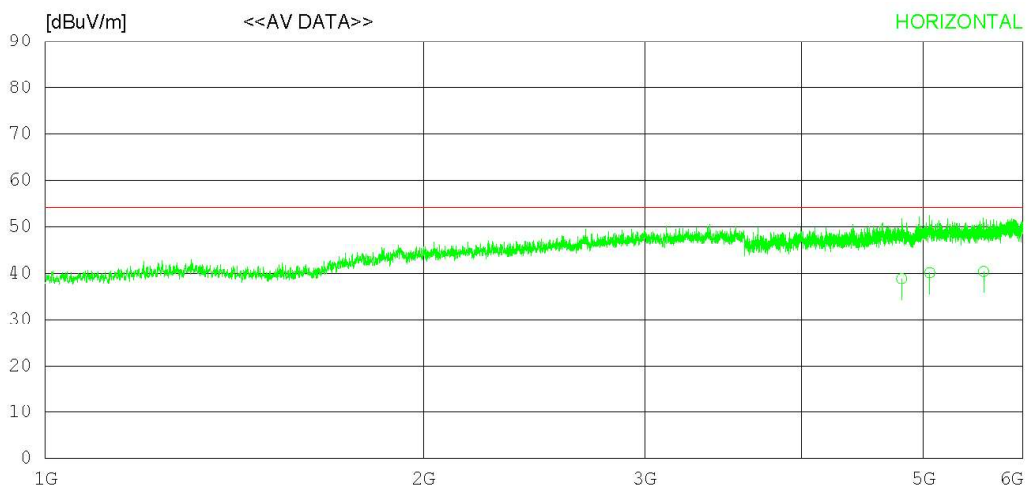
Date 2021-09-30

Order No. DTNC2108-06584
 Power Supply BATTERY
 Temp/Humi 24 'C 52 % R.H.
 Test Condition FM

Memo

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

- Antenna Factor
 1. EMC-299_3117_00152093_2021.03.25
 Cable Loss
 1. #27_C1_Ant to Bottom_3m_창의_1-18G_2021.02.25
 2. #28_C2_Bottom to Amp_3m_창의_1-18G_2021.07.26
 3. #29_C3_Amp to Receiver_3m_창의_1-18G_2021.02.25
 Pre Amp Gain
 1. EMC-444_8449B_3008A00887_2021.08.23



RADIATED EMISSION

Date 2021-09-30

Order No. DTNC2108-06584
 Power Supply BATTERY
 Temp/Humi 24 °C 52 % R.H.
 Test Condition FM

Memo

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

Antenna Factor

1. EMC-299_3117_00152093_2021.03.25
- Cable Loss**
1. #27_C1_Ant to Bottom_3m_창의_1-18G_2021.02.25
 2. #28_C2_Bottom to Amp_3m_창의_1-18G_2021.07.26
 3. #29_C3_Amp to Receiver_3m_창의_1-18G_2021.02.25
- Pre Amp Gain**
1. EMC-444_8449B_3008A00887_2021.08.23

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	4803.341	29.70	34.00	9.69	34.44	38.95	54.00	15.05	134	332
2	5057.854	30.50	34.00	10.25	34.51	40.24	54.00	13.76	201	209
3	5581.634	30.10	34.40	10.61	34.62	40.49	54.00	13.51	164	214
----- VERTICAL -----										
4	4568.711	30.20	33.84	9.88	34.37	39.55	54.00	14.45	301	217
5	5055.364	31.00	34.00	10.24	34.51	40.73	54.00	13.27	112	305
6	5904.125	29.80	34.80	11.29	34.68	41.21	54.00	12.79	108	308

Radiated disturbance at (6 ~ 18) GHz _Peak Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	Battery	Test Frequency (Hz)	-

RADIATED EMISSION

Date 2021-09-30

Order No.	DTNC2108-06584
Power Supply	BATTERY
Temp/Humi	24 'C 52 % R.H.
Test Condition	FM

Memo

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

Antenna Factor

1. EMC-233-A_EM-6969_156_2020.12.29

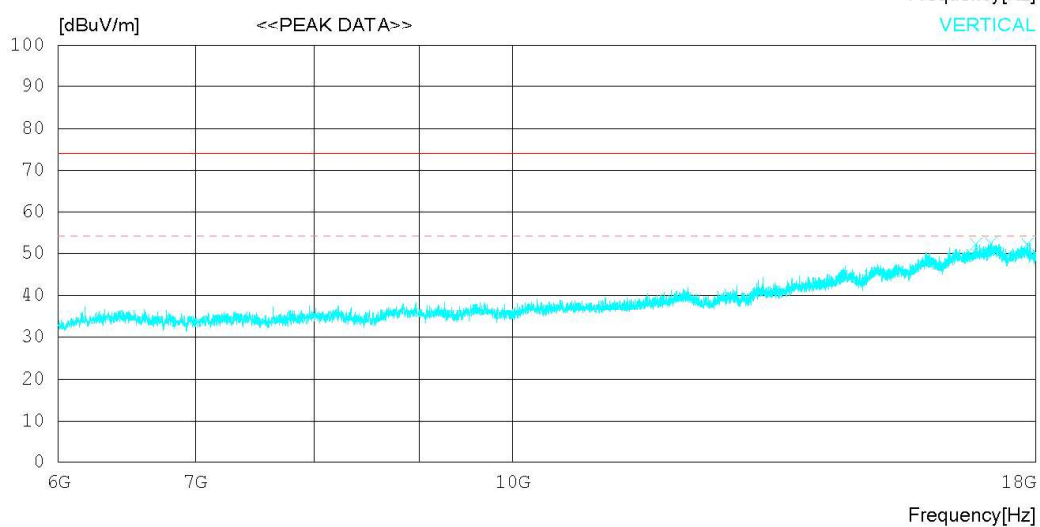
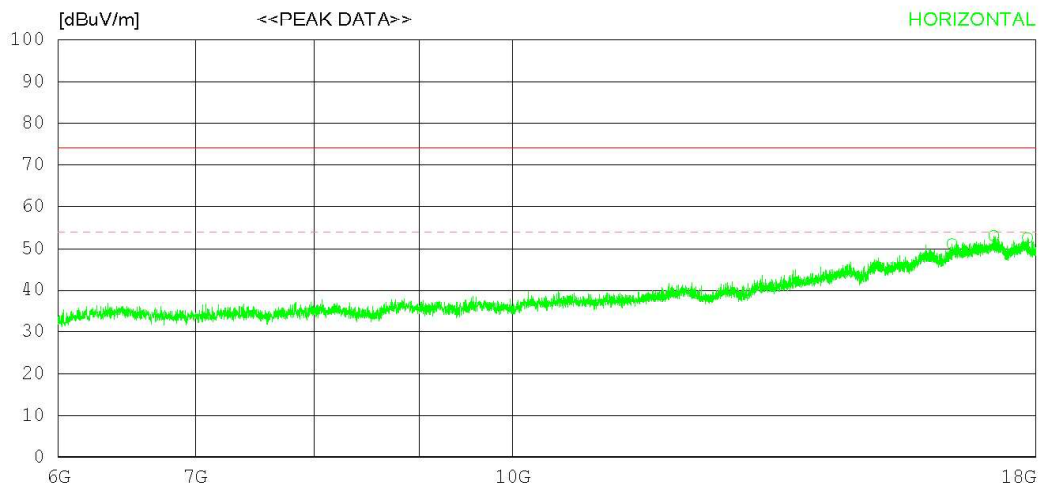
Cable Loss

1. #27_C1_Ant to Bottom_3m_창의_1-18G_2021.02.25

2. #28_C2_Bottom to Amp_3m_창의_1-18G_2021.07.26

Pre Amp Gain

1. EMC-233-M_MLA-0618-B03-34_2020.12.24



RADIATED EMISSION

Date 2021-09-30

Order No. DTNC2108-06584
 Power Supply BATTERY
 Temp/Humi 24 °C 52 % R.H.
 Test Condition FM

Memo

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

Antenna Factor

1. EMC-233-A_EM-6969_156_2020.12.29

Cable Loss

1. #27_C1_Ant to Bottom_3m_창의_1-18G_2021.02.25

2. #28_C2_Bottom to Amp_3m_창의_1-18G_2021.07.26

Pre Amp Gain

1. EMC-233-M_MLA-0618-B03-34_2020.12.24

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	16381.500	28.00	36.03	24.28	37.19	51.12	74.0	22.88	100	1
2	17164.500	28.70	36.50	25.39	37.52	53.07	74.0	20.93	200	179
3	17829.000	29.00	36.76	25.06	38.28	52.54	74.0	21.46	210	54
----- VERTICAL -----										
4	16831.500	28.30	36.40	24.79	37.32	52.17	74.0	21.83	300	358
5	17113.500	27.90	36.50	25.37	37.48	52.29	74.0	21.71	100	358
6	17827.500	28.70	36.76	25.05	38.27	52.24	74.0	21.76	150	311

Radiated disturbance at (6 ~ 18) GHz _Average Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	Battery	Test Frequency (Hz)	-

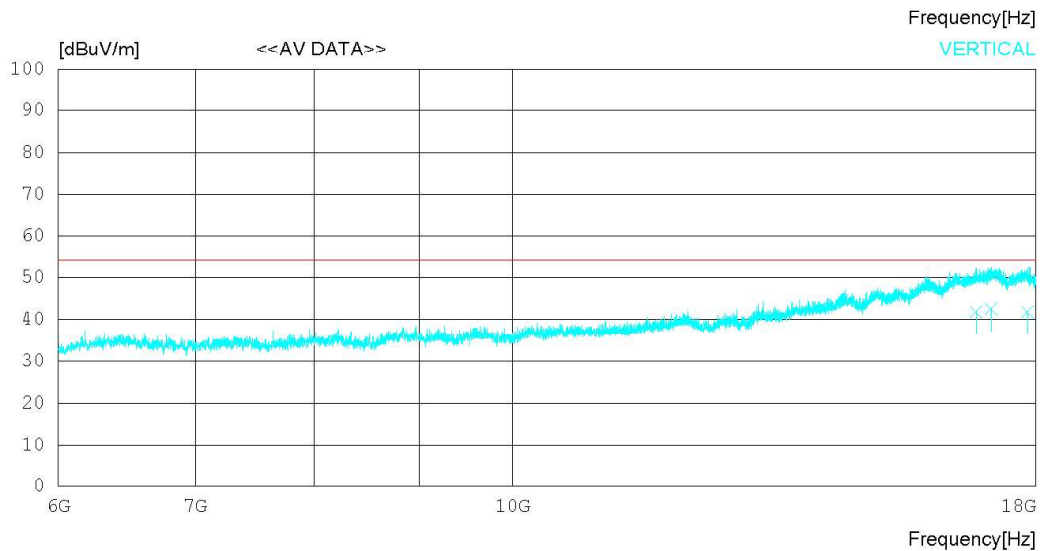
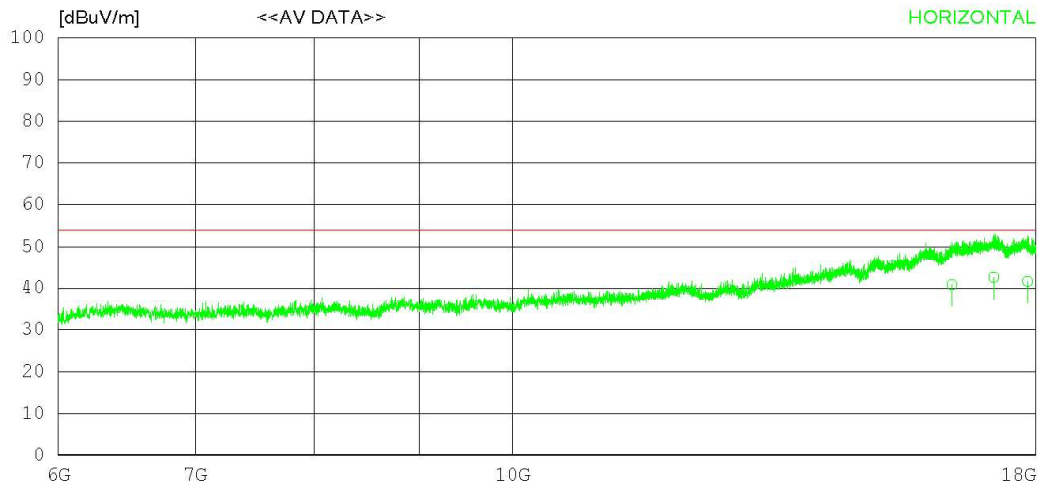
RADIATED EMISSION

Date 2021-09-30

Order No.	DTNC2108-06584
Power Supply	BATTERY
Temp/Humi	24 'C 52 % R.H.
Test Condition	FM

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_2020.12.29
Cable Loss
 1. #27_C1_Ant to Bottom_3m_창의_1-18G_2021.02.25
 2. #28_C2_Bottom to Amp_3m_창의_1-18G_2021.07.26
Pre Amp Gain
 1. EMC-233-M_MLA-0618-B03-34_2020.12.24


RADIATED EMISSION

Date 2021-09-30

Order No. DTNC2108-06584
 Power Supply BATTERY
 Temp/Humi 24 °C 52 % R.H.
 Test Condition FM

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_2020.12.29
- Cable Loss
- 1. #27_C1_Ant to Bottom_3m_창의_1-18G_2021.02.25
- 2. #28_C2_Bottom to Amp_3m_창의_1-18G_2021.07.26
- Pre Amp Gain
- 1. EMC-233-M_MLA-0618-B03-34_2020.12.24

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	16381.450	17.70	36.03	24.28	37.19	40.82	54.00	13.18	105	57
2	17164.520	18.20	36.50	25.39	37.52	42.57	54.00	11.43	301	197
3	17829.530	18.10	36.76	25.06	38.28	41.64	54.00	12.36	234	66
----- VERTICAL -----										
4	16831.330	17.90	36.40	24.79	37.32	41.77	54.00	12.23	211	332
5	17113.370	18.10	36.50	25.37	37.48	42.49	54.00	11.51	109	302
6	17827.170	18.20	36.75	25.05	38.27	41.73	54.00	12.27	187	297

Radiated disturbance at (18 ~ 40) GHz _Peak Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	Battery	Test Frequency (Hz)	-

RADIATED EMISSION

Date 2021-09-30

Order No.	DTNC2108-06584
Power Supply	BATTERY
Temp/Humi	24 'C 52 % R.H.
Test Condition	FM

Memo

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

Antenna Factor

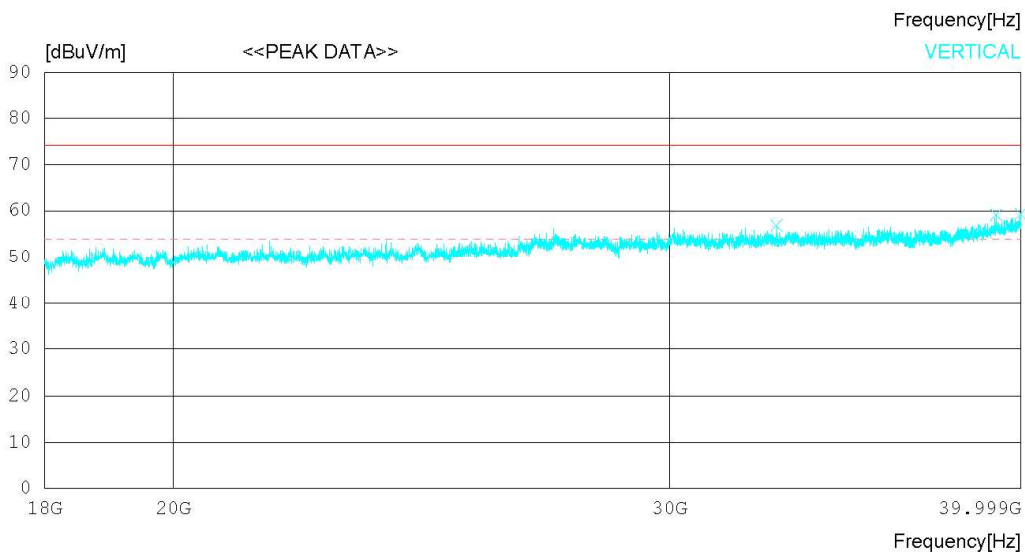
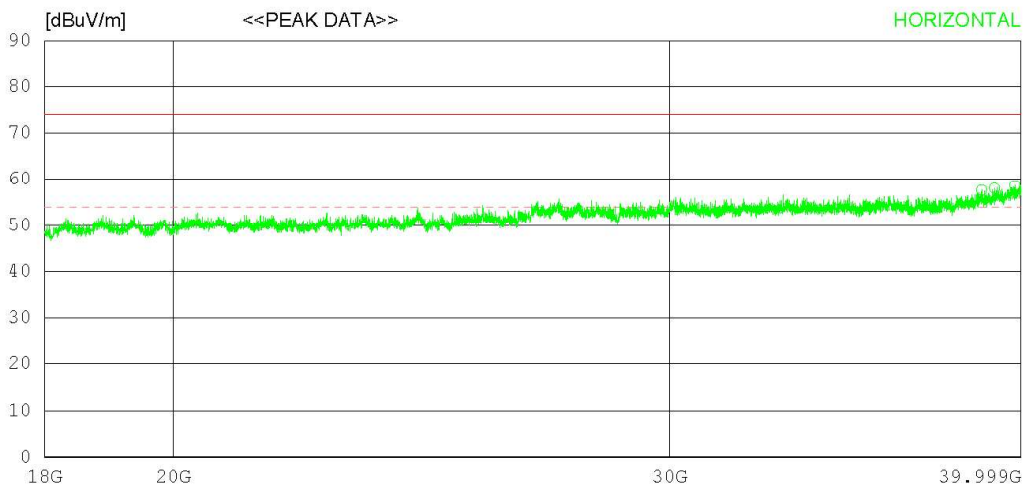
- EMC-442-A_3116C_00213177_2021.01.27

Cable Loss

- #32_C1_Ant to Amp_3m_창의_18-40G_2021-05-21
- #33_C2_Amp to Receiver_3m_창의_18-40G_2021.05.21

Pre Amp Gain

- JS44-18004000-35-8P_2046884_2020.11.05



RADIATED EMISSION

Date 2021-09-30

Order No. DTNC2108-06584
 Power Supply BATTERY
 Temp/Humi 24 °C 52 % R.H.
 Test Condition FM

Memo

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

Antenna Factor

- 1. EMC-442-A_3116C_00213177_2021.01.27
- Cable Loss
- 1. #32_C1_Ant to Amp_3m_창의_18-40G_2021-05-21
- 2. #33_C2_Amp to Receiver_3m_창의_18-40G_2021.05.21
- Pre Amp Gain
- 1. JS44-18004000-35-8P_2046884_2020.11.05

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	38732.250	37.30	47.00	25.97	52.72	57.55	74.0	16.45	200	320
2	39136.500	37.00	47.15	26.48	52.62	58.01	74.0	15.99	100	63
3	39793.750	36.70	47.64	26.72	52.45	58.61	74.0	15.39	280	231
----- VERTICAL -----										
4	32751.000	37.30	47.80	24.65	52.89	56.86	74.0	17.14	100	319
5	39191.500	38.00	47.18	26.55	52.60	59.13	74.0	14.87	175	1
6	39991.750	37.30	47.79	26.59	52.40	59.28	74.0	14.72	134	1

Radiated disturbance at (18 ~ 40) GHz _Average Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	Battery	Test Frequency (Hz)	-

RADIATED EMISSION

Date 2021-09-30

Order No.	DTNC2108-06584
Power Supply	BATTERY
Temp/Humi	24 'C 52 % R.H.
Test Condition	FM

Memo

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

Antenna Factor

1. EMC-442-A_3116C_00213177_2021.01.27

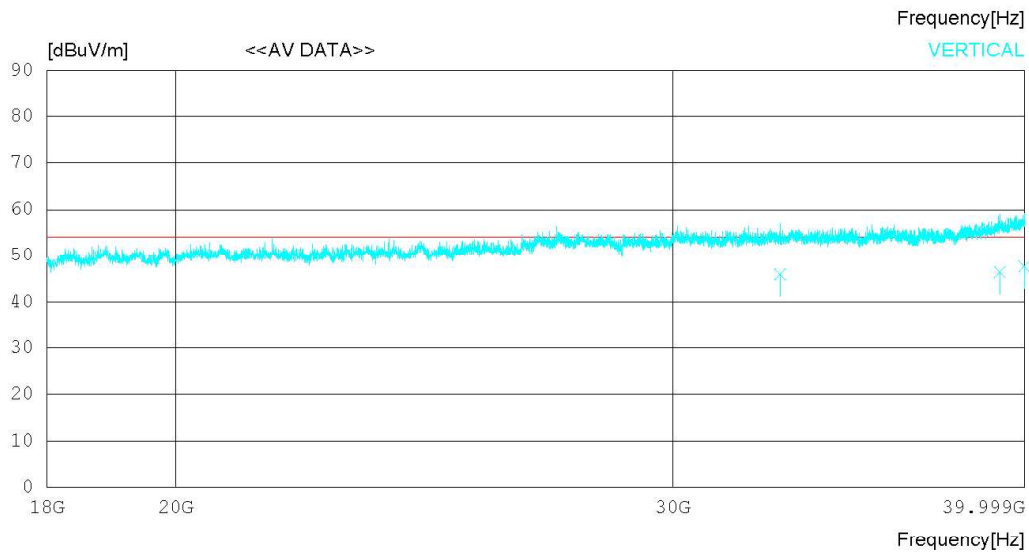
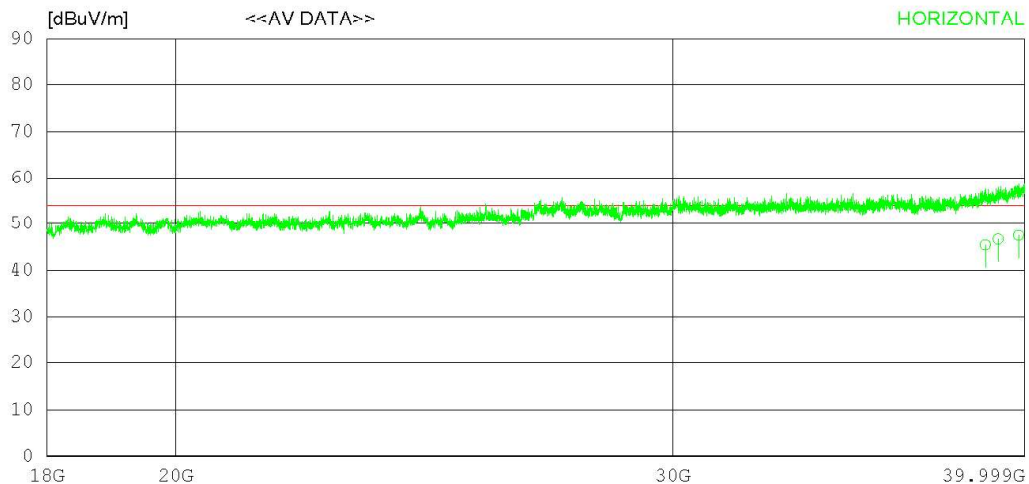
Cable Loss

1. #32_C1_Ant to Amp_3m_참의_18-40G_2021-05-21

2. #33_C2_Amp to Receiver_3m_참의_18-40G_2021.05.21

Pre Amp Gain

1. JS44-18004000-35-8P_2046884_2020.11.05



RADIATED EMISSION

Date 2021-09-30

Order No. DTNC2108-06584
 Power Supply BATTERY
 Temp/Humi 24 °C 52 % R.H.
 Test Condition FM

Memo

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

Antenna Factor

1. EMC-442-A_3116C_00213177_2021.01.27

Cable Loss

1. #32_C1_Ant to Amp_3m_창의_18-40G_2021-05-21

2. #33_C2_Amp to Receiver_3m_창의_18-40G_2021.05.21

Pre Amp Gain

1. JS44-18004000-35-8P_2046884_2020.11.05

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	38732.540	25.20	47.00	25.97	52.72	45.45	54.00	8.55	225	345
2	39136.860	25.70	47.15	26.48	52.62	46.71	54.00	7.29	129	102
3	39793.640	25.60	47.63	26.72	52.45	47.50	54.00	6.50	312	268
----- VERTICAL -----										
4	32751.580	26.30	47.80	24.65	52.89	45.86	54.00	8.14	105	307
5	39191.520	25.20	47.18	26.55	52.60	46.33	54.00	7.67	135	55
6	39991.570	25.60	47.79	26.59	52.40	47.58	54.00	6.42	108	52

9. Revision History

Date	Description	Revised By	Reviewed By
Oct. 15. 2021	Initial report	Hun Lee	HyungJun Kim

-End of test report-