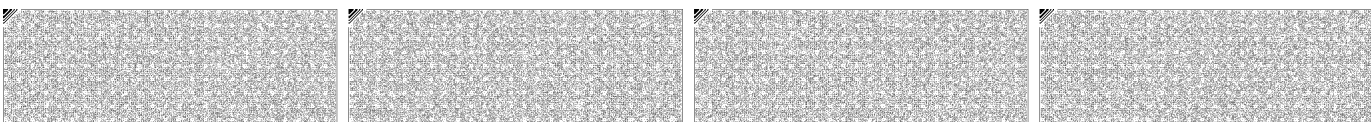




TEST REPORT

	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 : DREKFCC2308-0122 2. Customer • Name : KYOCERA Corporation • Address : Yokohama Office 2-1-1 Kagahara, Tsuzuki-ku Yokohama-shi, Kanagawa, Japan 3. Use of Report : Grant of Certification 4. Product Name / Model Name : Mobile Phone / EB1173 (FCC ID : JOYEB1173) 5. Test Method Used : ANSI C63.4:2014 FCC Part 15 Subpart B (FM Broadcast Receiver) 6. Date of Test : Aug. 21. 2023 7. Location of Test : ☒ Permanent Testing Lab ☐ On Site Testing (Address : Refer to the attached) 8. Testing Environment : Temperature 23 °C , Humidity 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. " * " <table border="1"> <tr> <td data-bbox="236 1458 352 1563">Affirmation</td> <td data-bbox="352 1458 874 1563"> Tested by Name : JunSeo Park </td> <td data-bbox="874 1458 1410 1563"> Technical Manager Name : HyungJun Kim </td> </tr> </table> The above test report is the accredited test result by Korea Laboratory Accreditation Scheme, which signed the ILAC-MRA. Aug. 31. 2023 Dt&C Co., Ltd. Accredited by KOLAS, Republic of KOREA			Affirmation	Tested by Name : JunSeo Park	Technical Manager Name : HyungJun Kim
Affirmation	Tested by Name : JunSeo Park	Technical Manager Name : HyungJun Kim			

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





Report No.: DREKFCC2308-0122
(FCC ID : JOYEB1173)



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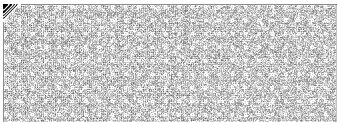
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1. General Remarks

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.dtcn.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	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	EB1173
Add Model Name	None
Add Model Difference	None
Software Version	EB1173_nightly_20230713
Hardware Version	DMT1
Maximum Internal Frequency	2.2 GHz
Rated Power	DC 3.87 V
FCC ID	JOYEB1173
RF Module Name	None
Remarks	GPS/GLONASS/Galileo/BDS

Related Submittal(s) / Grant(s)
Original submittal only



4. EUT Operations and Test Configurations

4.1 Principle of Configuration Selection

Emission :

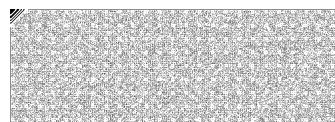
The equipment under test (EUT) was configured to measure its highest possible radiation level.
 The test modes were adapted accordingly in reference to the instructions for use.
 For each testing mode different configurations were used,
 Refer to the individual tests.

4.2 EUT Operation Mode

No.	Mode	Description
1	FM	FM receiving mode(VHF)

4.3 Test Configuration Mode

No.	Mode	Description
1	FM	EUT is connected to the AUX to the Earphone. EUT is connected to the Broadcast Test Center and is receiving radio frequency. and continuously output audio signal.



4.4 Supported Equipment

Used*	Product Type	Manufacturer	Model	Serial number	Remarks
AE	Earphone	N/A	K288984	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	1.2	Non-Shielded	Plastic	-
*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	DC 3.87	-	-	Battery



5. Test Summary

Test Items	Applied Standards	Results
Conducted Disturbance	ANSI C63.4 : 2014	N/A (Note 1)
Radiated Disturbance	ANSI C63.4 : 2014	C
Antenna Power Conduction	ANSI C63.4:2014	N/A (Note 2)
C=Comply N/C=Not Comply N/T=Not Tested N/A=Not Applicable		
Note 1) This test was not required because EUT was used power from battery.		
Note 2) This test was not required because EUT has not port about this test.		

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]
-	-	-	-	-	-

-Radiated Disturbance

Frequency [MHz]	Pol.	Result [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]
5018.028	H	35.56	Average	54.00	18.44

-Antenna Power Conduction

Frequency [MHz]	Result [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]
-	-	-	-	-



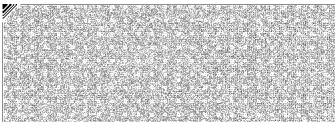


Report No.: DREKFCC2308-0122
(FCC ID : JOYEB1173)



6. Test Environment

Test Items	Test date (YYYY-MM-DD)	Temp. (°C)	Humidity (% R.H.)	Pressure (kPa)
Radiated Disturbance	2023-08-21	23	45	-



7. Test Results : Emission

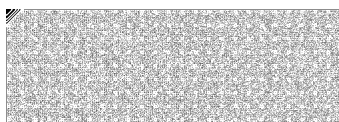
7.1 Conducted Disturbance

ANSI C63.4	Mains terminal disturbance voltage		Result		
<u>Method:</u> 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			
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
-	-	-	-	-	-

Calculation

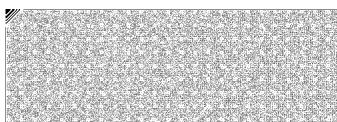
N : Neutral phase, L1 : Live phase
C.FACTOR(dB) : Pulse Limiter(dB) + Cable loss(dB) + Insertion loss of LISN(dB)
Result(dBμV) : Reading Value(dBμV) + C.FACTOR(dB)
Margin(dB) : Limit(dBμV) - Result(dBμV)

Mains terminal disturbance voltage _Measurement data			
Test configuration mode	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 –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	
	EUT Operation 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 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	





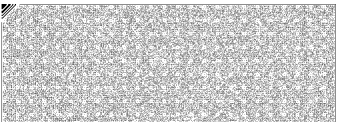
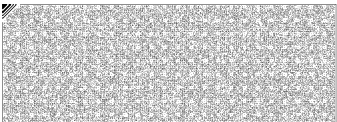
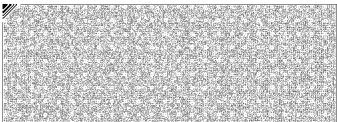
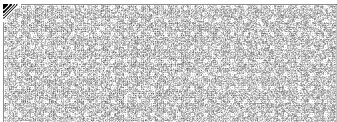
Report No.: DREKFCC2308-0122
(FCC ID : JOYEB1173)



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	ESW44	ROHDE&SCHWARZ	101645	2022.11.22	2023.11.22
TRILOG BROADBAND TEST-ANTENNA	VULB9160	SCHWARZBECK	9160-3363	2022.09.29	2024.09.29
6 dB ATTENUATOR	2708A	HP	23831	2022.09.29	2024.09.29
LOW NOISE PRE AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2023.02.07	2024.02.07
BROADCAST TEST CENTER	BTC	ROHDE&SCHWARZ	100253	2023.02.07	2024.02.07
HORN ANTENNA	3117	ETS-LINDGREN	00152093	2023.03.17	2024.03.17
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)





Report No.: DREKFCC2308-0122
(FCC ID : JOYEB1173)



Radiated disturbance at (30 ~ 1 000) MHz _ Measurement data			
Test configuration mode	1	EUT Operation mode	1
Test voltage (V)	Battery	Test Frequency (Hz)	-

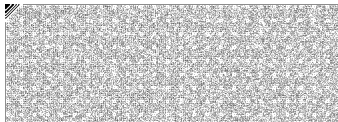
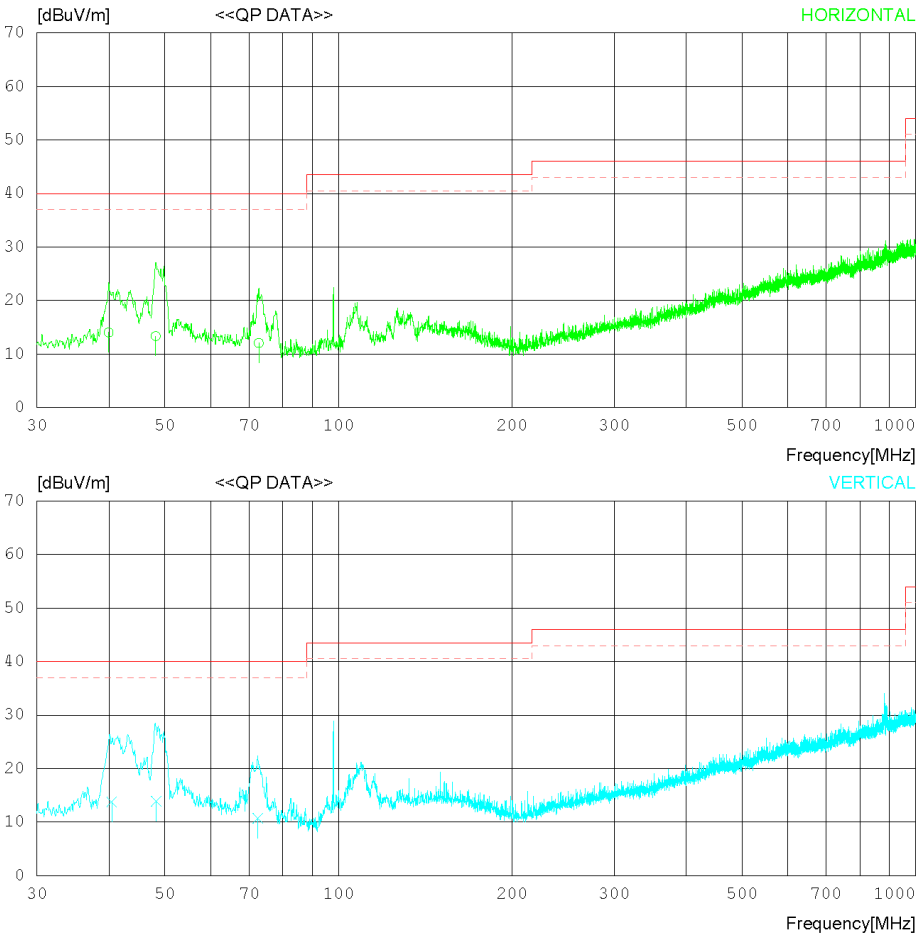
Date 2023-08-21

Order No. DTNC2308-05475
Power Supply Battery
Temp/Humi 23 'C 45 % R.H.
Test Condition

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





Report No.: DREKFCC2308-0122
(FCC ID : JOYEB1173)



Date 2023-08-21

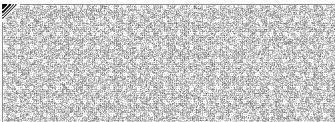
Order No. DTNC2308-05475
Power Supply Battery
Temp/Humi 23 'C 45 % R.H.
Test Condition

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	39.943	22.10	17.50	0.87	26.45	14.02	40.00	25.98	234	164
2	48.188	20.60	18.08	1.04	26.41	13.31	40.00	26.69	357	264
3	72.680	21.50	15.80	1.20	26.45	12.05	40.00	27.95	223	46
----- VERTICAL -----										
4	40.428	21.70	17.59	0.88	26.45	13.72	40.00	26.28	312	78
5	48.309	21.20	18.07	1.04	26.41	13.90	40.00	26.10	202	110
6	72.437	20.10	15.87	1.20	26.44	10.73	40.00	29.27	134	345





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(FCC ID : JOYEB1173)



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

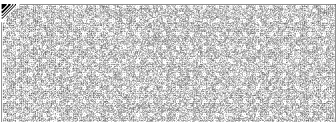
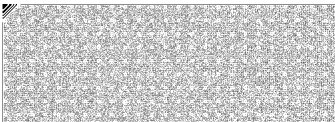
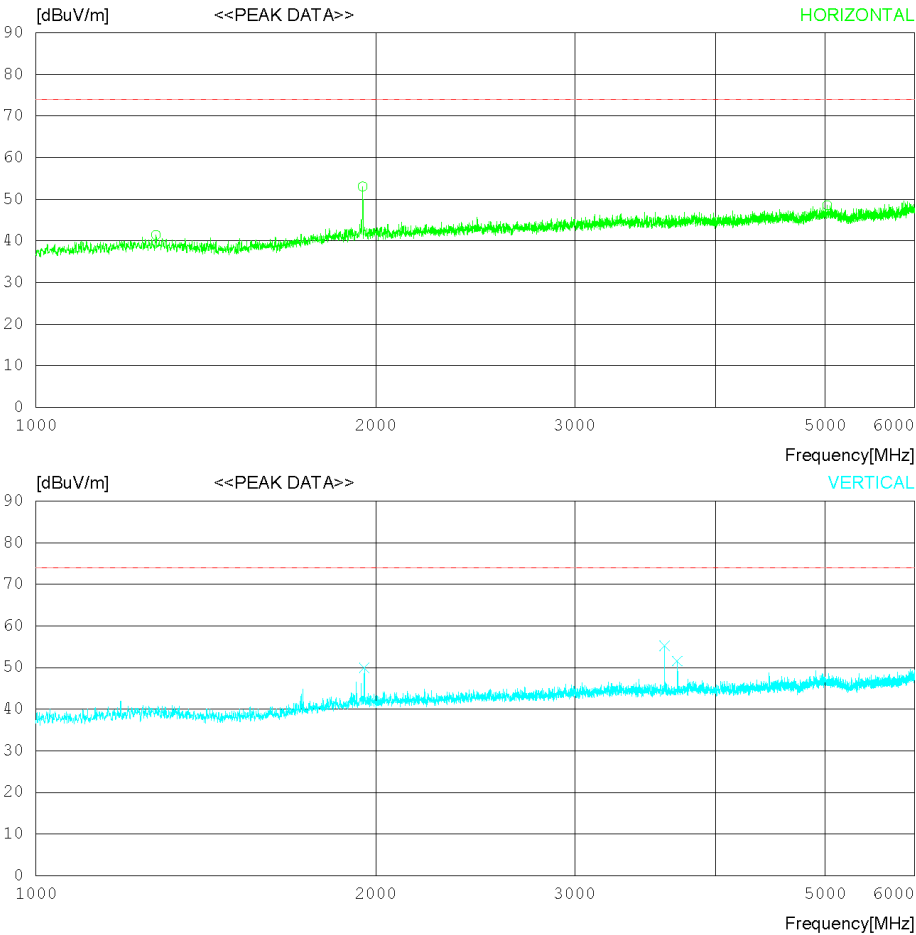
Date 2023-08-21

Order No. DTNC2308-05475
Power Supply Battery
Temp/Humi 23 'C 45 % R.H.
Test Condition

Memo

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

Antenna Factor
1. EMC-299_3117_00152093_2023.03.17
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





Report No.: DREKFCC2308-0122
(FCC ID : JOYEB1173)



Date 2023-08-21

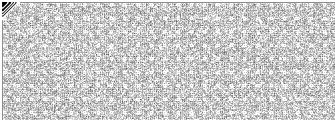
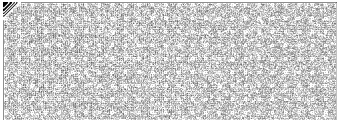
Order No. DTNC2308-05475
Power Supply Battery
Temp/Humi 23 °C 45 % R.H.
Test Condition

Memo

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

Antenna Factor
1. EMC-299_3117_00152093_2023.03.17
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	1277.500	44.30	29.10	3.87	35.85	41.42	74.0	32.58	112	0
2	1946.875	52.40	31.39	4.53	35.25	53.07	74.0	20.93	202	160
3	5018.750	40.80	33.84	8.72	34.80	48.56	74.0	25.44	116	0
----- VERTICAL -----										
4	1953.125	49.30	31.40	4.53	35.24	49.99	74.0	24.01	352	358
5	3603.125	51.10	33.00	5.88	34.74	55.24	74.0	18.76	305	334
6	3698.750	47.00	33.00	6.21	34.68	51.53	74.0	22.47	245	358





Report No.: DREKFCC2308-0122
(FCC ID : JOYEB1173)



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

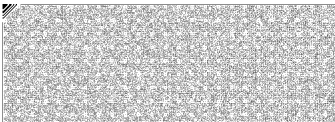
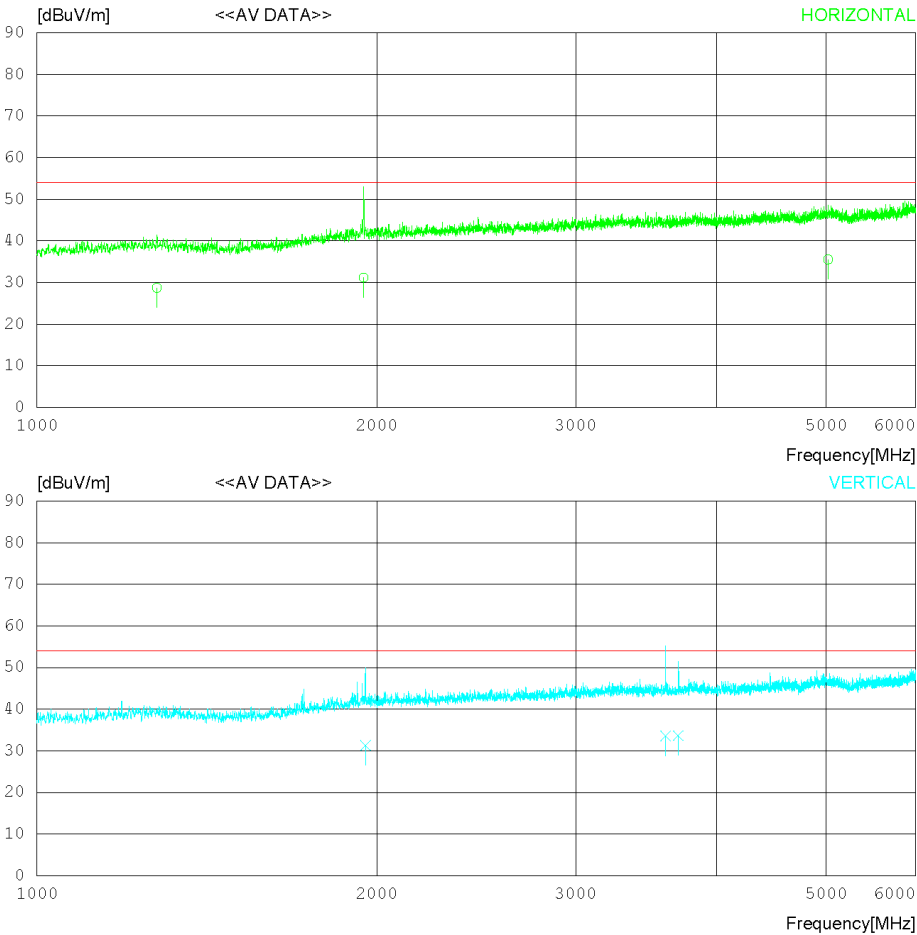
Date 2023-08-21

Order No. DTNC2308-05475
Power Supply Battery
Temp/Humi 23 'C 45 % R.H.
Test Condition

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_2023.03.17
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





Report No.: DREKFCC2308-0122
(FCC ID : JOYEB1173)



Date 2023-08-21

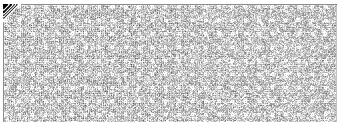
Order No. DTNC2308-05475
Power Supply Battery
Temp/Humi 23 'C 45 % R.H.
Test Condition

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_2023.03.17
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	1277.100	31.60	29.10	3.87	35.85	28.72	54.00	25.28	231	45
2	1946.280	30.50	31.39	4.53	35.25	31.17	54.00	22.83	324	223
3	5018.028	27.80	33.84	8.72	34.80	35.56	54.00	18.44	176	305
----- VERTICAL -----										
4	1953.487	30.60	31.40	4.53	35.24	31.29	54.00	22.71	342	124
5	3603.181	29.40	33.00	5.88	34.74	33.54	54.00	20.46	213	334
6	3698.325	29.10	33.00	6.21	34.68	33.63	54.00	20.37	211	77





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

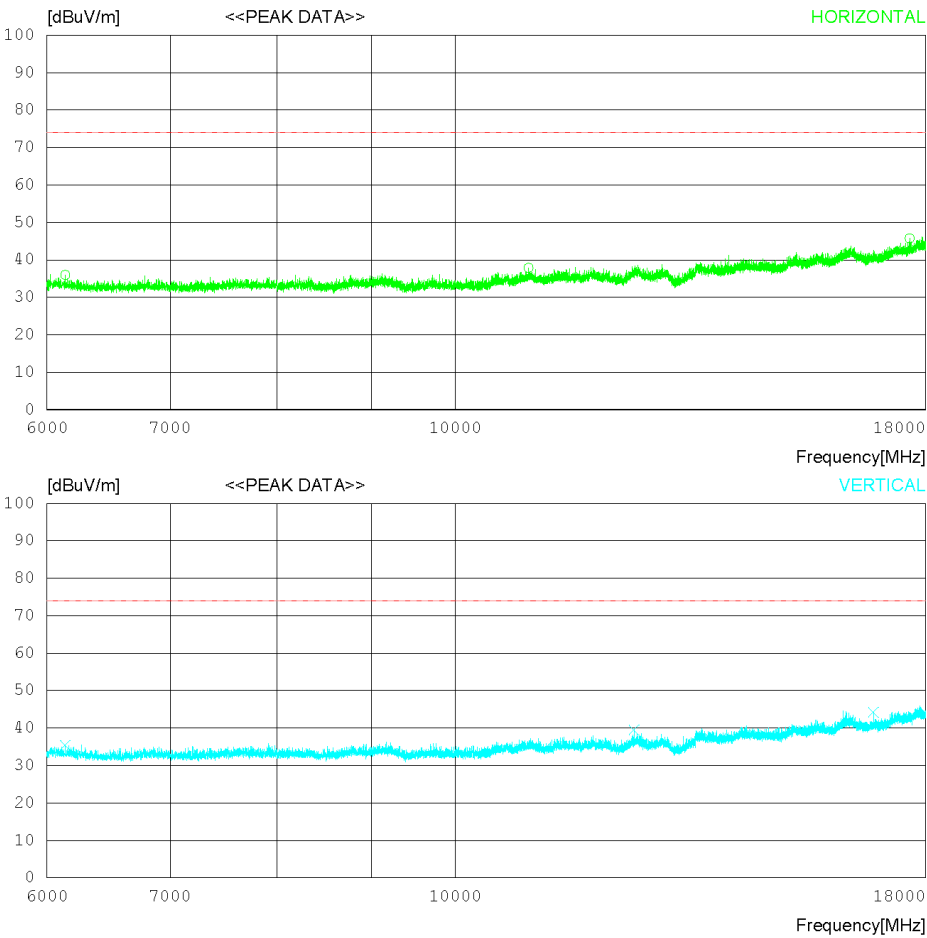
Date 2023-08-21

Order No. DTNC2308-05475
Power Supply Battery
Temp/Humi 23 °C 45 % R.H.
Test Condition

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





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(FCC ID : JOYEB1173)



Date 2023-08-21

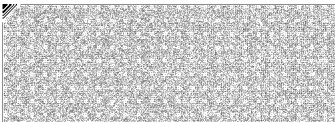
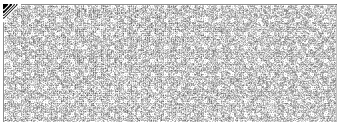
Order No. DTNC2308-05475
Power Supply Battery
Temp/Humi 23 °C 45 % R.H.
Test Condition

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	6139.500	36.70	31.40	7.65	39.78	35.97	74.0	38.03	201	17
2	10955.250	33.60	32.30	10.58	38.62	37.86	74.0	36.14	113	186
3	17642.250	31.30	37.10	15.26	37.91	45.75	74.0	28.25	346	276
----- VERTICAL -----										
4	6138.000	36.10	31.40	7.65	39.78	35.37	74.0	38.63	213	0
5	12498.000	34.00	33.50	10.64	38.71	39.43	74.0	34.57	342	0
6	16860.000	31.90	36.60	12.85	37.17	44.18	74.0	29.82	176	0





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

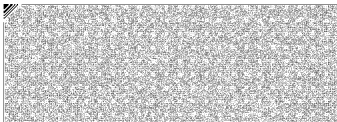
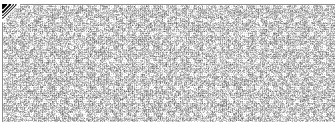
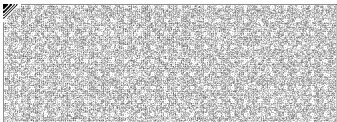
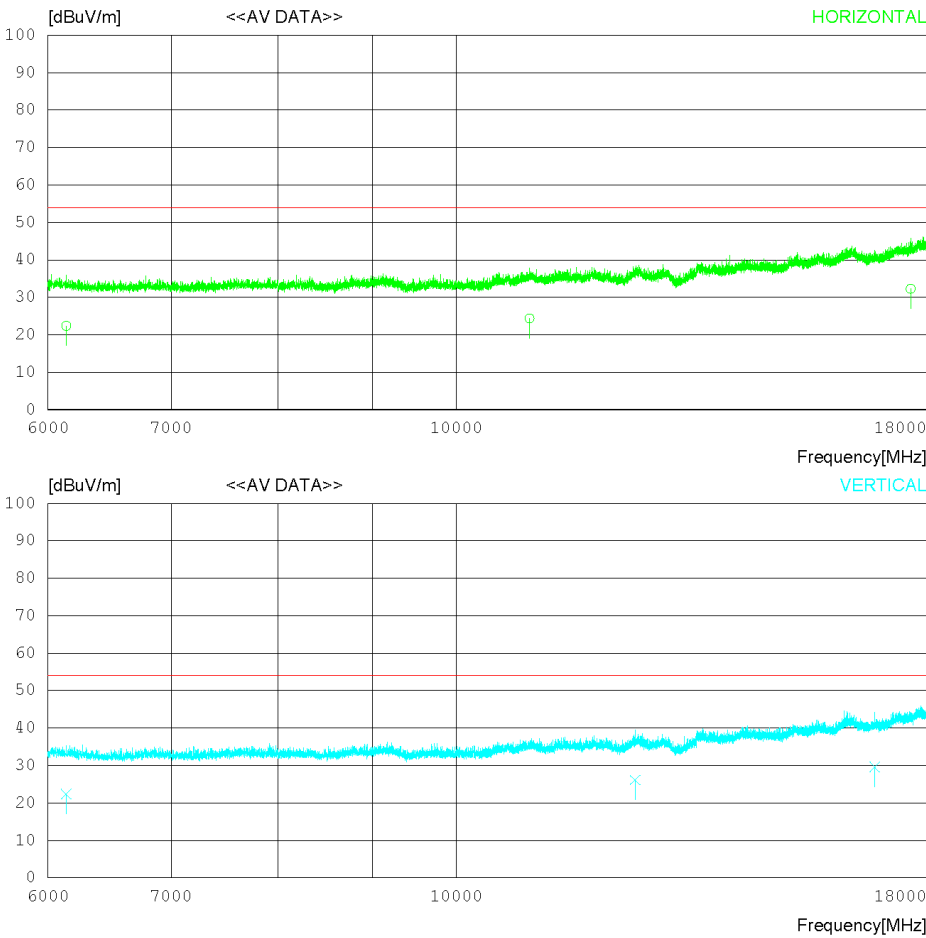
Date 2023-08-21

Order No. DTNC2308-05475
Power Supply Battery
Temp/Humi 23 'C 45 % R.H.
Test Condition

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





Report No.: DREKFCC2308-0122
(FCC ID : JOYEB1173)



Date 2023-08-21

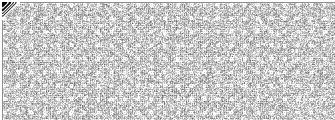
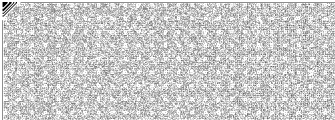
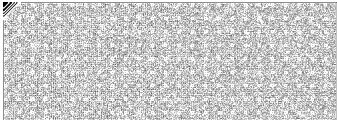
Order No. DTNC2308-05475
Power Supply Battery
Temp/Humi 23 'C 45 % R.H.
Test Condition

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	6139.560	23.10	31.40	7.65	39.78	22.37	54.00	31.63	162	202
2	10955.300	20.10	32.30	10.58	38.62	24.36	54.00	29.64	145	263
3	17642.160	17.80	37.10	15.26	37.91	32.25	54.00	21.75	226	149
----- VERTICAL -----										
4	6138.350	23.10	31.40	7.65	39.78	22.37	54.00	31.63	312	131
5	12498.010	20.70	33.50	10.64	38.71	26.13	54.00	27.87	220	131
6	16868.130	17.30	36.60	12.86	37.17	29.59	54.00	24.41	176	133





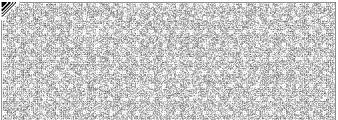
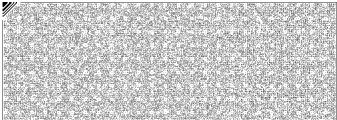
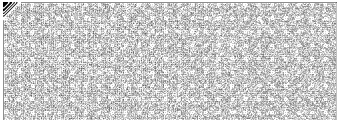
Report No.: DREKFCC2308-0122
(FCC ID : JOYEB1173)



7.3 Antenna Power Conduction

ANSI C63.4	Antenna power conduction		Result
<u>Method:</u> 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			Not Applicable
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	N/A	
	EUT Operation mode	N/A	

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



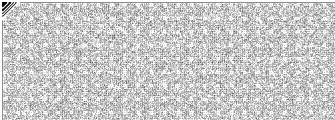
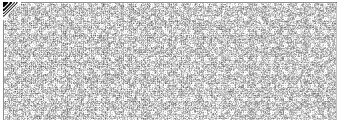


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Antenna Power Conduction _Measurement data graph			
Test configuration mode	N/A	EUT Operation mode	N/A
Test voltage (V)	N/A	Test Frequency (Hz)	N/A
N/A			

Conducted differential voltage disturbance _Measurement data list					
Test configuration mode		N/A	EUT Operation mode		N/A
Source (MHz)	Frequency (MHz)	Limit (dBμV)	Result (dBμV)	Margin (dB)	
Fundamental (≤ 1 000)	-	50	-	-	
Harmonics (30 ~ 300)	-		-	-	
Harmonics (300 ~ 1 000)	-		-	-	
Other (30 ~ 1 000)	-		-	-	





Report No.: DREKFCC2308-0122
(FCC ID : JOYEB1173)



8. Revision History

Date	Report No.	Description	Revised By	Reviewed By
Aug. 31. 2023	DREKFCC2308-0122	Initial report	JunSeo Park	HyungJun Kim

-End of test report-

