

FCC 47 CFR PART 15 SUBPART B (ICES-003) TEST REPORT

Test Report No. : OT-233-RED-009
Reception No. : 2302000447
Applicant : LG Electronics Inc.
Address : 84, Wanam-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do 51554, Republic of Korea
Manufacturer : LG Electronics Inc.
Address : 84, Wanam-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do 51554, Republic of Korea
Use of Report : FCC Supplier's Declaration of Conformity
Type of Equipment : Residential Remote Controller
Model Name : PREMTA200
Multiple Model Name : N/A
FCC ID. : BEJ-PREMTA200A
Serial number : N/A
Total page of Report : 20 pages (including this page)
Date of Incoming : February 17, 2023
Test Period : March 02, 2023 ~ March 03, 2023
Date of Issuing : March 07, 2023

SUMMARY

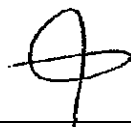
The equipment complies with the requirement of

ANSI C63.4a: 2017 / FCC Part 15 Subpart B (CLASS B Digital devices & peripherals)

ICES-003 Issue 7 / CAN/CSA-CISPR 32:17 / BETS-7 Issue3

This test report contains only the results of a single test of the sample supplied for the examination.

Reviewed by:



Sun-Teak, Oh / Manager
EMC Testing Div.
ONETECH Corp.

Approved by:



Seung-Hyun, Park / Senior Manager
EMC Testing Div.
ONETECH Corp.

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APPENDIX B – PHOTOGRAPHS OF EUT

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Revision History

Rev. No.	Issued Report No.	Issued Date	Revisions	Section Affected
0	OT-233-RED-009	March 07, 2023	Initial Issue	All

* Please contact us [(TEL : +82-31-799-9500 (Ext.0))] for verification of this test report.

1. VERIFICATION OF COMPLIANCE

1.1 Applicant

- Applicant : LG Electronics Inc.
- Address : 84, Wanam-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do 51554, Republic of Korea

1.2 Manufacturer

- Manufacturer : LG Electronics Inc.
- Address : 84, Wanam-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do 51554, Republic of Korea

1.3 Factory

- Factory : LG Electronics Inc.
- Address : 84, Wanam-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do 51554, Republic of Korea

EQUIPMENT CLASS	CLASS B Digital devices & peripherals
E.U.T. DESCRIPTION	Residential Remote Controller
MEASUREMENT PROCEDURES	ANSI C63.4a: 2017
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Supplier's Declaration of Conformity (SDoC)
STANDARDS	FCC Part 15, Section 15.101 (Class B) Canadian Standard ICES-003 Issue 7
MODIFICATIONS ON THE EQUIPMENT TO ACHIEVE COMPLIANCE	None
FINAL TEST WAS CONDUCTED ON	10 m Semi anechoic chamber & 3 m Semi anechoic chamber

ONETECH Corp. tested the above equipment in accordance with the requirements set forth in the above standard. The test results show that equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

2. TEST FACILITY

The Onetech Corp. has been designated to perform equipment testing in compliance with ISO/IEC 17025 by Radio Research Agency as accreditation body. The Onetech Corp. is accredited for measuring devices subject to Declaration of Conformity (DOC) under Parts 15 & 18 as a Conformity Assessment Body (CAB) with designation number KR0013.

These measurement tests were conducted at Onetech Corp.

The 10 m semi anechoic chamber and conducted measurement facilities are located at

- 1) 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea.
- 2) 12-5, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea.



3. PRODUCT INFORMATION

3.1 Description of EUT

The LG Electronics Inc., Model PREMTA200 (referred to as the EUT in this report) is a Residential Remote Controller. Product specification described herein was obtained from product data sheet or user's manual.

CHASSIS TYPE	Plastic
RF OPERATING FREQUENCY	Wi-Fi (2 412 to 2 472 MHz)
LIST OF EACH OSC. OR CRY. FREQ. (FREQ. $\geq$ 1 MHz)	8 MHz
POWER REQUIREMENT	DC 12 V
EXTERNAL CONNECTOR	3 Pin (GND-SIG-12 V)

3.2 Model Differences

-. The following lists consist of the added model and their differences.: None

3.3 Support Equipment

The model numbers for all the equipments that were used in the tested system is:

Description	Model	Manufacturer	Connected to
Residential Remote Controller (EUT)	PREMTA200	LG Electronics Inc.	SMPS
Smart phone	SM-N976N	Samsung	-
C-box	N/A	N/A	EUT

3.4 System Configuration

DEVICE TYPE	MODEL/PART NUMBER	MANUFACTURER
Residential Remote Controller	PREMTA200	LG Electronics Inc.
Wi-Fi Module ¹⁾	LBEE5KL1DX-623	LG Electronics

1) Installed inside of Residential Remote Controller.

3.5 Cable Description for the EUT

Cable	Shielded	Ferrite Bead	Metal Shell	Length (m)	Connected to
3 Pin (GND-SIG-12 V)	N	N	N	3.0	C-box

3.6 Equipment Modifications

-. None

4. TEST SUMMARY

4.1 Test standards and result

Test Items	Applied Standards	Results
Conducted Disturbance	ANSI C63.4a: 2017 CAN/CSA-CISPR 32:17	C
Radiated Disturbance	ANSI C63.4a: 2017 CAN/CSA-CISPR 32:17	C
C=Comply N/C=Not Comply N/T=Not Tested N/A=Not Applicable		

4.2 Test Condition

The test conditions of the noted test mode(s) in this test report are;

- . Test Voltage / Frequency: AC 220 V / 60 Hz
- . Test Mode(s)

No.	Mode	Description
1	Normal operating mode	a) This EUT can be wirelessly connected to the smartphone application through the Wi-Fi module, and the operations of the remote control are checked by the display.

5. FINAL RESULT OF MEASUREMENT

Exploratory measurement was done in normal operation mode. And the final measurement was selected for the maximized emission level.

5.1 Conducted Disturbance

5.1.1 Operating Environment

Ambient temperature : 20.2 °C
Relative humidity : 41.6 % R.H.

5.1.2 Test Setup

The EUT and other support equipment were placed on a non-conductive table, 0.8 m height above the reference ground plane. The power of EUT was fed through a 50 Ω / 50 μ H + 5 Ω LISN. The ground plane was electrically bonded to the reference ground system and all power lines were filtered from ambient.

5.1.3 Measurement uncertainty

Conducted emission, quasi-peak detection : ± 1.9 dB
Conducted emission, CISPR-average detection : ± 1.9 dB

Measurement uncertainty is calculated in accordance with CISPR 16-4-2. The measurement uncertainty is given with a confidence of 95 % with the coverage factor, $k = 2$.

5.1.4 Limit

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-peak	CISPR Average
0.15 ~ 0.5	66 to 56*	56 to 46*
0.5 ~ 5	56	46
5 ~ 30	60	50

* Decreases with the logarithm of the frequency

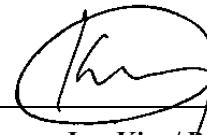
5.1.5 Test Equipment used

Model Number	Manufacturer	Description	Serial Number	Last Cal. (Interval)
■ - ESCI	Rohde & Schwarz	Test Receiver	101420	Mar. 08, 2022 (1Y)
■ - LT32C/10	Afj Instruments	LISN	32032039322	Mar. 21, 2022 (1Y)
■ - 11947A	Hewlett Packard	Transient Limiter	3107A02762	Mar. 08, 2022 (1Y)

All test equipment used is calibrated on a regular basis.

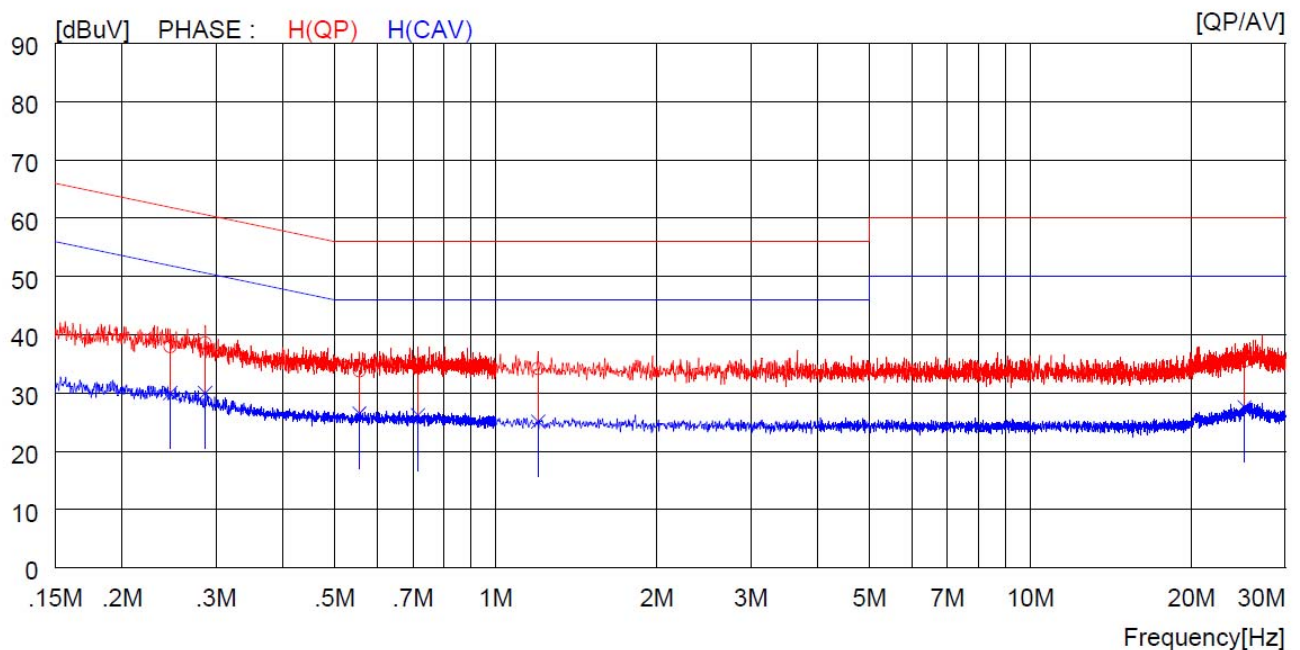
5.1.6 Test Data

-. Test Result : Pass



Tested by: Young-Jae, Kim / Project Engineer

Operating Mode 1			
Frequency range	: 0.15 MHz ~ 30 MHz	Test Date	: March 03, 2023
Resolution bandwidth	: 9 kHz	Tested Line	: HOT LINE

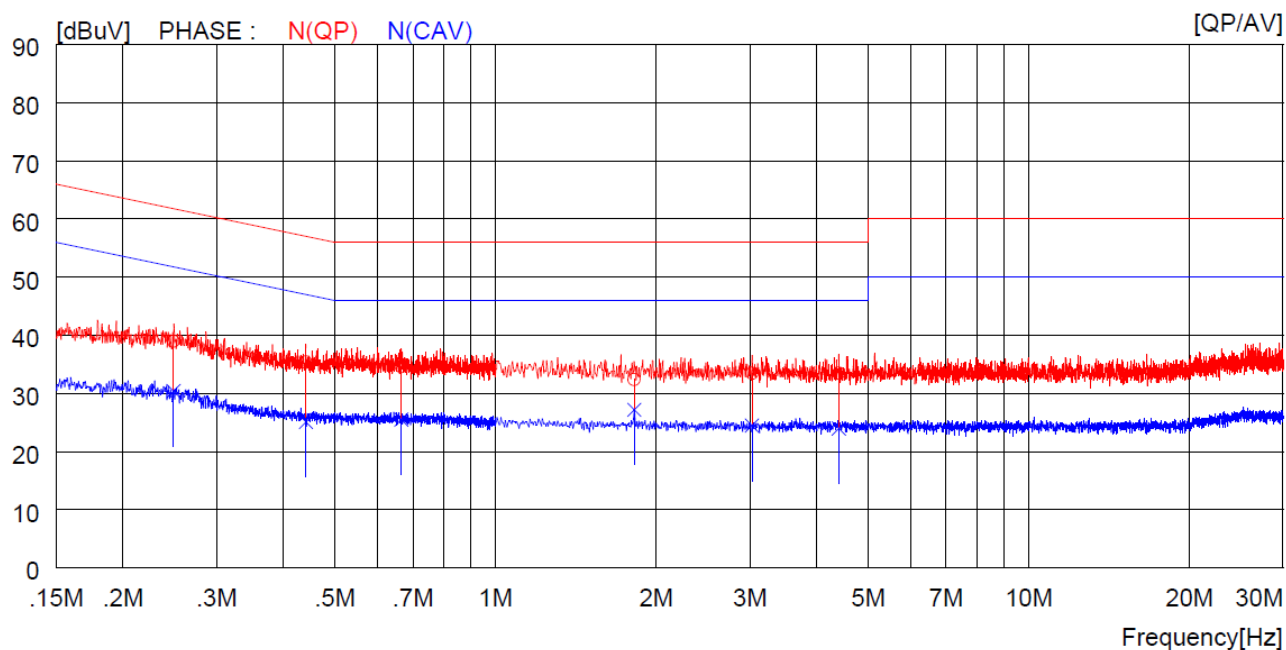


NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.24600	16.5	----	21.5	38.0	----	61.9	----	23.9	----	H (QP)
2	0.28600	17.1	----	21.5	38.6	----	60.6	----	22.0	----	H (QP)
3	0.55600	12.3	----	21.5	33.8	----	56.0	----	22.2	----	H (QP)
4	0.71600	13.3	----	21.5	34.8	----	56.0	----	21.2	----	H (QP)
5	1.20000	12.7	----	21.5	34.2	----	56.0	----	21.8	----	H (QP)
6	25.15000	13.0	----	22.5	35.5	----	60.0	----	24.5	----	H (QP)
7	0.24600	----	8.5	21.5	----	30.0	----	51.9	----	21.9	H (CAV)
8	0.28600	----	8.5	21.5	----	30.0	----	50.6	----	20.6	H (CAV)
9	0.55600	----	5.0	21.5	----	26.5	----	46.0	----	19.5	H (CAV)
10	0.71600	----	4.7	21.5	----	26.2	----	46.0	----	19.8	H (CAV)
11	1.20000	----	3.6	21.5	----	25.1	----	46.0	----	20.9	H (CAV)
12	25.15000	----	5.1	22.5	----	27.6	----	50.0	----	22.4	H (CAV)

Remark: Margin (dB) = Limit – Level (Result)

The result level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator

Operating Mode 1			
Frequency range	: 0.15 MHz ~ 30 MHz	Test Date	: March 03, 2023
Resolution bandwidth	: 9 kHz	Tested Line	: NEUTRAL LINE



NO	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.24900	17.5	----	21.5	39.0	----	61.8	----	22.8	----	N (QP)
2	0.44100	13.9	----	21.5	35.4	----	57.0	----	21.6	----	N (QP)
3	0.66600	13.1	----	21.5	34.6	----	56.0	----	21.4	----	N (QP)
4	1.82000	10.9	----	21.5	32.4	----	56.0	----	23.6	----	N (QP)
5	3.02800	11.9	----	21.6	33.5	----	56.0	----	22.5	----	N (QP)
6	4.40400	11.8	----	21.7	33.5	----	56.0	----	22.5	----	N (QP)
7	0.24900	----	8.9	21.5	----	30.4	----	51.8	----	21.4	N (CAV)
8	0.44100	----	3.6	21.5	----	25.1	----	47.0	----	21.9	N (CAV)
9	0.66600	----	4.0	21.5	----	25.5	----	46.0	----	20.5	N (CAV)
10	1.82000	----	5.7	21.5	----	27.2	----	46.0	----	18.8	N (CAV)
11	3.02800	----	2.9	21.6	----	24.5	----	46.0	----	21.5	N (CAV)
12	4.40400	----	2.3	21.7	----	24.0	----	46.0	----	22.0	N (CAV)

Remark: Margin (dB) = Limit – Level (Result)

The result level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

5.2 Radiated Disturbance

5.2.1 Operating Environment

Ambient temperature : (23.2 ~ 21.6) °C
Relative humidity : (41.7 ~ 49.5) % R.H.

5.2.2 Test Setup

The radiated emissions measurements were on the 10 m semi anechoic chamber. The EUT and all local support equipment's were placed on a non-conductive turntable approximately 0.8 m above the ground plane.

The frequency spectrum from 30 MHz to 40 000 MHz was scanned and emission levels maximized at each frequency recorded. The system was rotated 360°, and the antenna was varied in height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for both horizontal and vertical polarization of the receiving antenna.

5.2.3 Measurement uncertainty

Radiated emission electric field intensity, 30 MHz ~ 1 000 MHz : ± 4.5 dB

Radiated emission electric field intensity, 1 000 MHz ~ 40 000 MHz : ± 6.0 dB

Measurement uncertainty is calculated in accordance with CISPR 16-4-2. The measurement uncertainty is given with a confidence of 95 % with the coverage factor, $k = 2$.

5.2.4 Limit

-. FCC Part 15 Subpart B

Frequency of Emission (MHz)	Resolution bandwidth	Field strength @ 3 m (dBμV/m)	
30 ~ 88 88 ~ 216 216 ~ 960 Above 960	120 kHz	Quasi-peak	
		40.0	
		43.5	
		46.0	
		54.0	
> 1 000	1 MHz	Peak Limit	CISPR Average Limit
		74.0	54.0

-. ICES-003

Frequency of Emission (MHz)	Resolution bandwidth	Field strength @ 3 m (dB μ V/m)	Field strength @ 10 m (dB μ V/m)
30 ~ 88 88 ~ 216 216 ~ 230 230 ~ 960 960 ~ 1 000	120 kHz	Quasi-peak	Quasi-peak
		40.0	30.0
		43.5	33.1
		46.0	35.6
		47.0	37.0
		54.0	43.5
Frequency of Emission (MHz)	Resolution bandwidth	Field strength @ 3 m (dB μ V/m)	
> 1 000	1 MHz	Peak Limit	CISPR Average Limit
		74.0	54.0

5.2.5 Test Equipment used

	Model Number	Manufacturer	Description	Serial Number	Last Cal. (Interval)
■ -	ESW	Rohde & Schwarz	Test Receiver	101851	Mar. 08, 2022 (1Y)
■ -	ESU	Rohde & Schwarz	Test Receiver	100261	Mar. 07, 2022 (1Y)
■ -	VULB9163	Schwarzbeck	Trilog Broadband Antenna	9163-225	Sep. 14, 2022 (2Y)
■ -	HLP-2008	TDK RF Solutions	Hybrid Antenna	131316	Mar. 07, 2022 (2Y)
■ -	3115	ETS-LINDGREN	Horn Antenna	34823	Aug. 12, 2022 (1Y)
■ -	SAS-574	A.H. System	Horn Antenna	676	Oct. 19, 2022 (1Y)
■ -	8447D	Hewlett Packard	Amplifier	2944A07777	Mar. 08, 2022 (1Y)
■ -	310N	Sonoma Instrument	Amplifier	392756	Oct. 13, 2022 (1Y)
■ -	PAM-118A	Com-Power	Pre-Amplifier	18040081	Oct. 13, 2022 (1Y)
■ -	PAM-840A	Com-Power	Amplifier	461339	Oct. 13, 2022 (1Y)
■ -	CO3000	Innco Systems GmbH Controller		CO3000/1015	N/A
■ -	DT5000	Innco Systems GmbH Turn Table		N/A	N/A
■ -	MA4000-EP	Innco Systems GmbH Antenna Master		MA4000/508	N/A
■ -	MA4640-XPET	Innco Systems GmbH Antenna Master		MA4640/592	N/A

All test equipment used is calibrated on a regular basis.

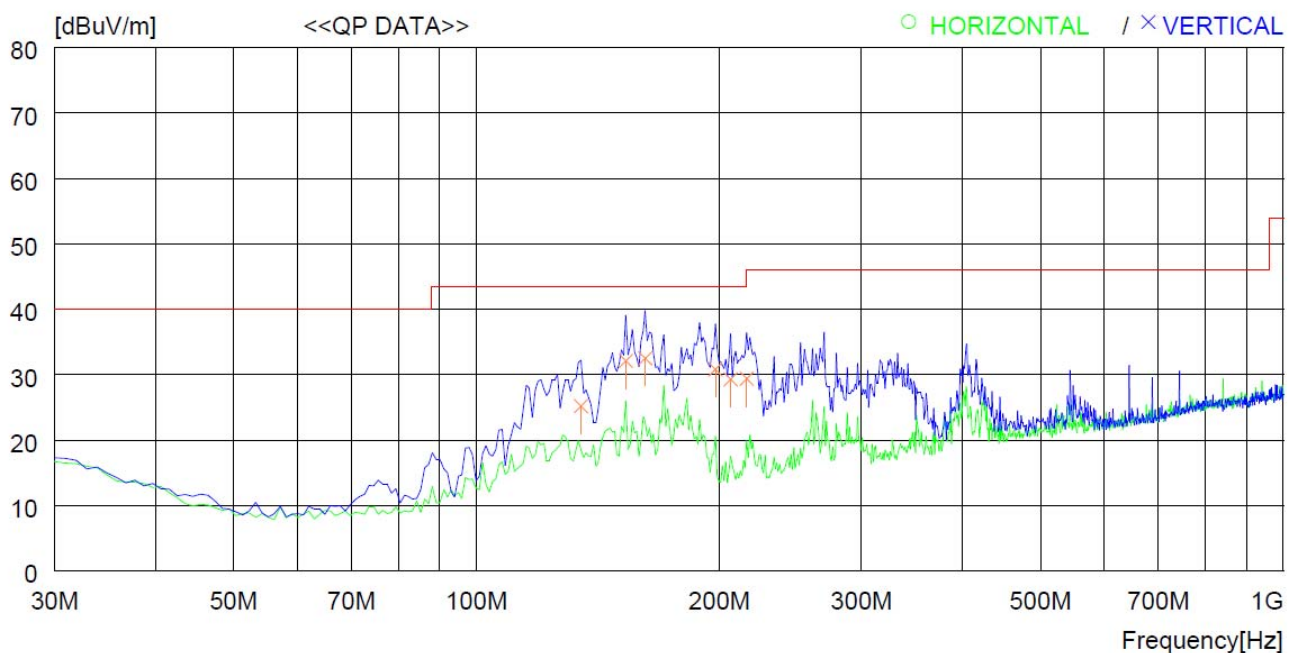
5.2.6 Test Data

- Test Result : Pass



Tested by: Young-Jae, Kim / Project Engineer

Operating Mode 1			
Frequency range	: 30 MHz ~ 1 000 MHz	Applied Standards	: FCC Part 15 Subpart B
Resolution bandwidth	: 120 kHz	Test Date	: March 02, 2023
Detector Mode	: Quasi-Peak	Measurement distance	: 3 m



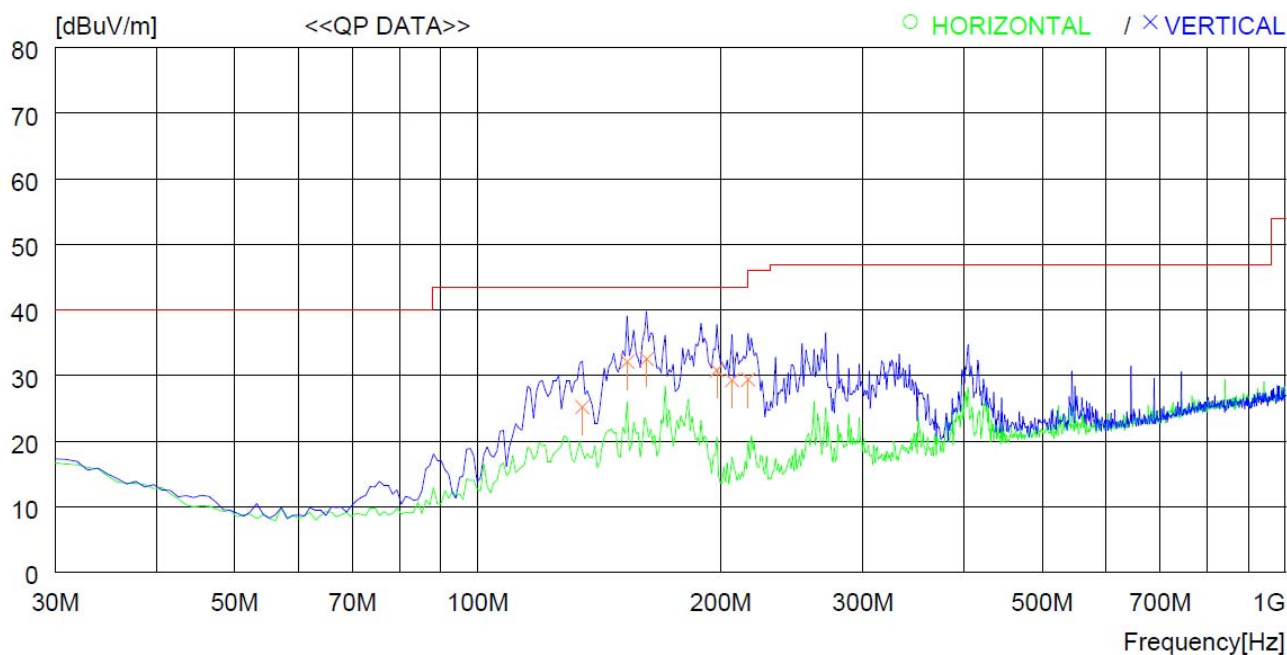
No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Vertical -----										
1	153.190	44.3	18.2	1.6	32.0	32.1	43.5	11.4	100	162
2	161.920	45.3	17.6	1.6	32.0	32.5	43.5	11.0	100	0
3	134.760	36.7	19.0	1.5	32.0	25.2	43.5	18.3	100	229
4	197.810	45.5	15.5	1.8	32.0	30.8	43.5	12.7	100	287
5	206.540	43.8	15.7	1.8	32.0	29.3	43.5	14.2	100	169
6	216.240	43.4	16.1	1.9	32.0	29.4	46.0	16.6	100	229

Remark: Margin (dB) = Limit – Result

Result = Reading Quasi-Peak + Antenna Factor + Loss – Gain

Loss and Gain in above table means Cable Loss and Pre-amplifier gain.

Operating Mode 1			
Frequency range	: 30 MHz ~ 1 000 MHz	Applied Standards	: ICES-003 Issue 7
Resolution bandwidth	: 120 kHz	Test Date	: March 02, 2023
Detector Mode	: Quasi-Peak	Measurement distance	: 3 m



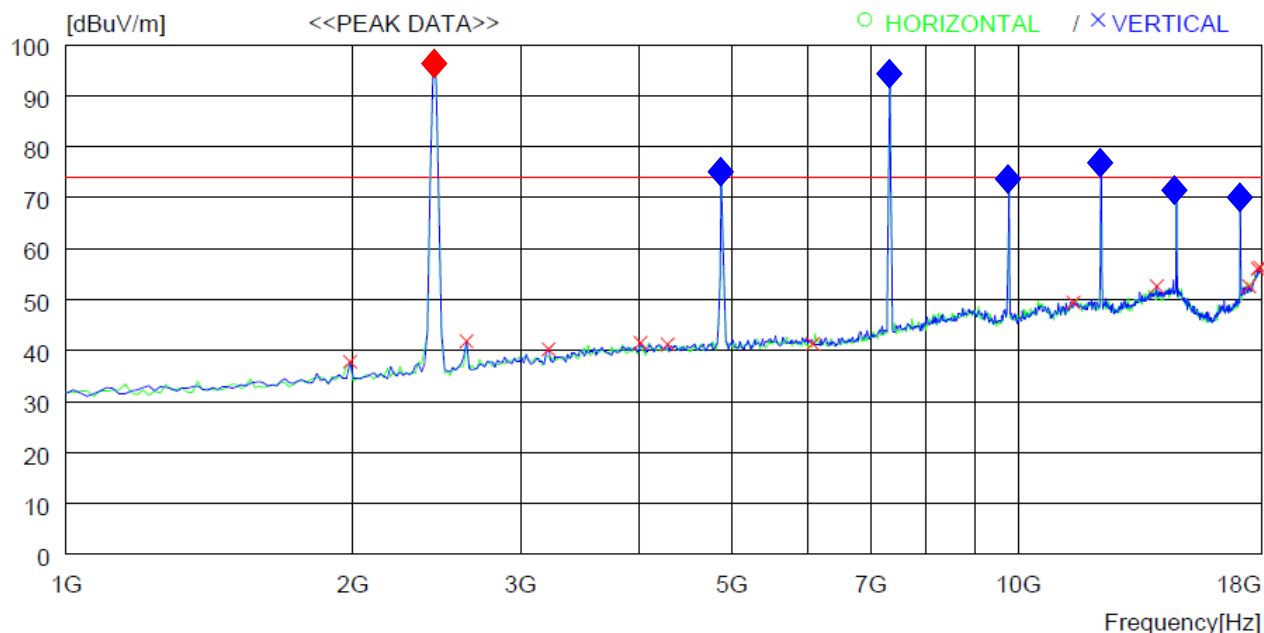
No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Vertical -----										
1	153.190	44.3	18.2	1.6	32.0	32.1	43.5	11.4	100	162
2	161.920	45.3	17.6	1.6	32.0	32.5	43.5	11.0	100	0
3	134.760	36.7	19.0	1.5	32.0	25.2	43.5	18.3	100	229
4	197.810	45.5	15.5	1.8	32.0	30.8	43.5	12.7	100	287
5	206.540	43.8	15.7	1.8	32.0	29.3	43.5	14.2	100	169
6	216.240	43.4	16.1	1.9	32.0	29.4	46.0	16.6	100	229

Remark: Margin (dB) = Limit – Result

Result = Reading Quasi-Peak + Antenna Factor + Loss – Gain

Loss and Gain in above table means Cable Loss and Pre-amplifier gain.

Operating Mode 1			
Frequency range	: 1 GHz ~ 18 GHz	Test Date	: March 02, 2023
Resolution bandwidth	: 1 MHz	Measurement distance	: 3 m
Detector Mode	: Peak		



No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Vertical -----										
1	1986.000	50.0	27.2	3.1	42.5	37.8	74.0	36.2	100	100
2	2632.000	52.4	28.7	3.6	42.9	41.8	74.0	32.2	100	77
3	3210.000	48.9	30.5	4.0	43.2	40.2	74.0	33.8	100	233
4	4009.000	47.9	32.6	4.6	43.6	41.5	74.0	32.5	100	7
5	4281.000	47.3	32.5	4.8	43.4	41.2	74.0	32.8	100	7
6	6083.000	43.8	34.2	5.6	42.3	41.3	74.0	32.7	100	7
7	11421.000	44.8	38.9	8.1	42.4	49.4	74.0	24.6	100	7
8	13971.000	44.7	41.4	8.7	42.2	52.6	74.0	21.4	100	77
9	17456.000	42.4	43.7	10.0	43.5	52.6	74.0	21.4	100	7
10	17830.000	42.7	46.6	10.1	43.4	56.0	74.0	18	100	300
11	17932.000	41.9	47.5	10.2	43.3	56.3	74.0	17.7	100	7

Remark: Margin (dB) = Limit – Result

Result = Reading Peak + Antenna Factor + Loss – Gain

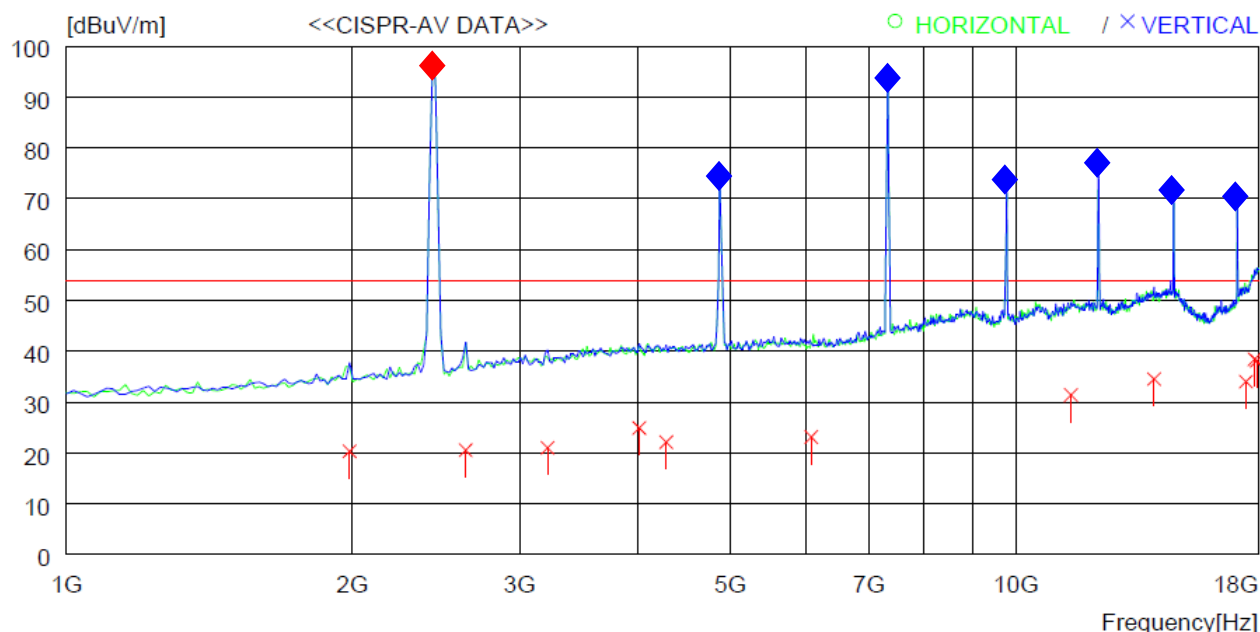
Loss and Gain in above table means Cable Loss and Pre-amplifier gain.

* Radiated emissions (Tx/Rx frequencies) from the transceiver shall be ignored.

WLAN: 2 412 ~ 2 472 MHz

* Exclusion band Carrier Frequency: ◆ , Exclusion band Harmonic Frequency: ◆

Operating Mode 1			
Frequency range	: 1 GHz ~ 18 GHz	Test Date	: March 02, 2023
Resolution bandwidth	: 1 MHz	Measurement distance	: 3 m
Detector Mode	: CISPR-Average		



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	CAV	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Vertical -----										
1	1986.228	32.5	27.2	3.1	42.5	20.3	54.0	33.7	100	100
2	2632.315	31.1	28.7	3.6	42.9	20.5	54.0	33.5	100	77
3	3210.248	29.7	30.5	4.0	43.2	21.0	54.0	33.0	100	233
4	4009.192	31.3	32.6	4.6	43.6	24.9	54.0	29.1	100	7
5	4281.330	28.2	32.5	4.8	43.4	22.1	54.0	31.9	100	7
6	6083.478	25.5	34.2	5.7	42.3	23.1	54.0	30.9	100	7
7	11421.320	26.8	38.9	8.1	42.4	31.4	54.0	22.6	100	7
8	13971.050	26.6	41.4	8.7	42.2	34.5	54.0	19.5	100	77
9	17456.850	23.8	43.7	10.0	43.5	34.0	54.0	20.0	100	7
10	17830.120	25.1	46.6	10.1	43.4	38.4	54.0	15.6	100	300
11	17932.230	23.7	47.5	10.2	43.3	38.1	54.0	15.9	100	7

Remark: Margin (dB) = Limit – Result

Result = Reading CISPR-Average + Antenna Factor + Loss – Gain

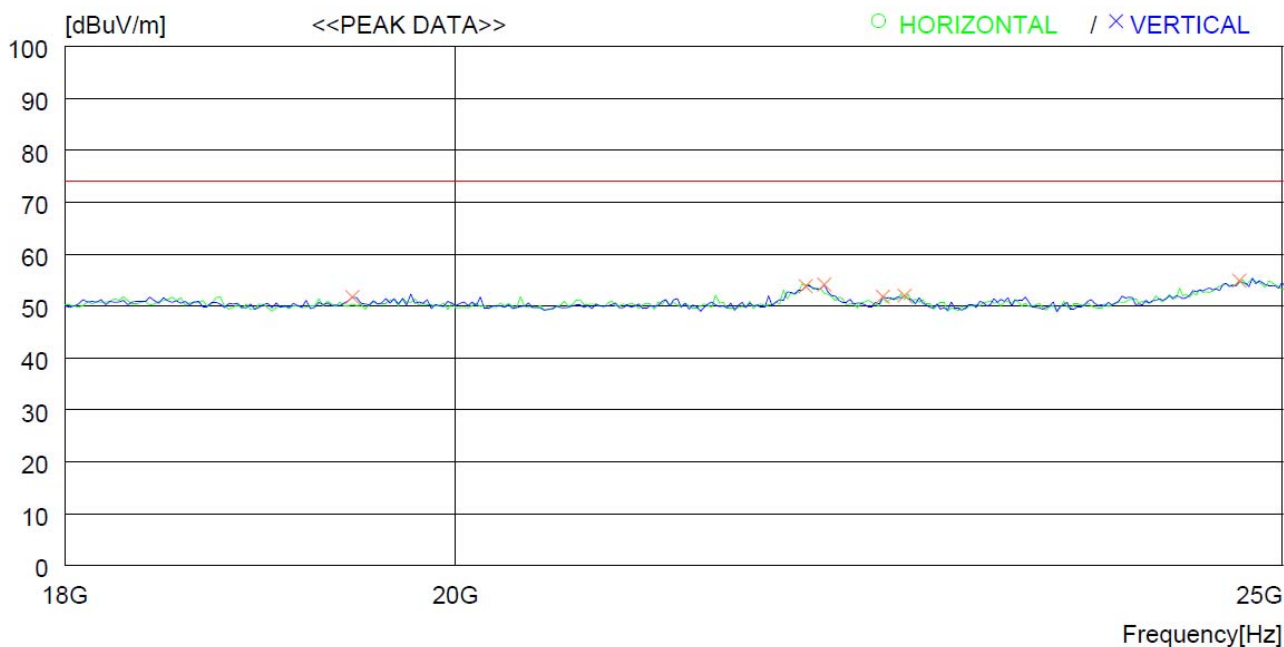
Loss and Gain in above table means Cable Loss and Pre-amplifier gain.

* Radiated emissions (Tx/Rx frequencies) from the transceiver shall be ignored.

WLAN: 2 412 ~ 2 472 MHz

* Exclusion band Carrier Frequency: ◆ , Exclusion band Harmonic Frequency: ◆

Frequency range	: 18 GHz ~ 25 GHz	Test Date	: March 02, 2023
Resolution bandwidth	: 1 MHz	Measurement distance	: 3 m
Detector Mode	: Peak		



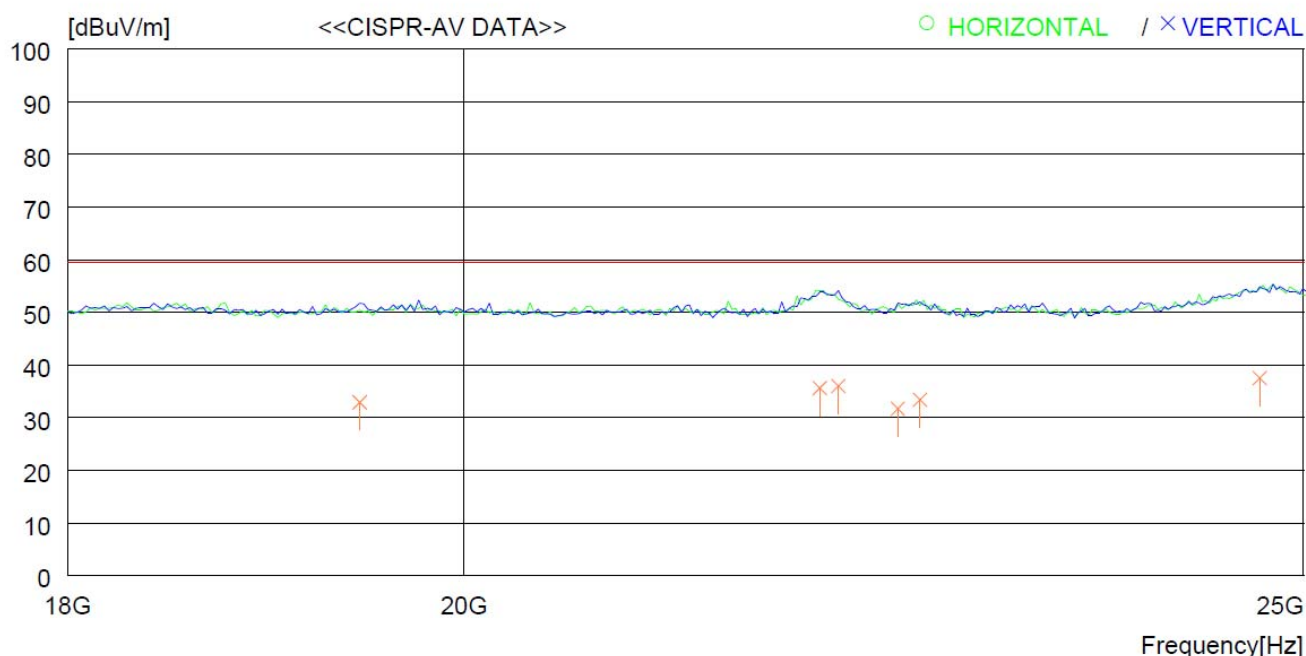
No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Vertical -----										
1	19452.000	44.5	38.0	10.2	41.0	51.7	74.0	22.3	100	0
2	21982.000	47.0	38.6	11.1	42.9	53.8	74.0	20.2	100	124
3	22092.000	47.3	38.6	11.1	42.9	54.1	74.0	19.9	100	0
4	22444.000	45.2	38.7	10.9	43.0	51.8	74.0	22.2	100	309
5	22576.000	45.2	38.8	11.0	43.0	52.0	74.0	22	100	22
6	24710.000	47.5	39.1	11.4	43.1	54.9	74.0	19.1	100	0

Remark: Margin (dB) = Limit – Result

Result = Reading Peak + Antenna Factor + Loss – Gain

Loss and Gain in above table means Cable Loss and Pre-amplifier gain.

Frequency range	: 18 GHz ~ 25 GHz	Test Date	: March 02, 2023
Resolution bandwidth	: 1 MHz	Measurement distance	: 3 m
Detector Mode	: CISPR Average		



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	CAV	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Vertical -----										
1	19452.210	25.7	38.0	10.2	41.0	32.9	59.5	26.6	100	0
2	21982.370	28.8	38.6	11.1	42.9	35.6	59.5	23.9	100	124
3	22092.450	29.2	38.6	11.1	42.9	36.0	59.5	23.5	100	0
4	22444.120	25.1	38.7	10.9	43.0	31.7	59.5	27.8	100	309
5	22576.340	26.6	38.8	11.0	43.0	33.4	59.5	26.1	100	22
6	24710.950	30.1	39.1	11.4	43.1	37.5	59.5	22.0	100	0

Remark: Margin (dB) = Limit – Result

Result = Reading CISPR-Average + Antenna Factor + Loss – Gain

Loss and Gain in above table means Cable Loss and Pre-amplifier gain.

6. SAMPLE CALCULATIONS

$$\text{dB}\mu\text{V} = 20 \text{ Log}_{10}(\mu\text{V})$$

$$\text{Margin} = \text{Limit} - \text{Result}$$

-. Example 1: 1.82000 MHz

Class B Limit	= 46.0 dB μ V (CISPR Average)
Reading	= 5.7 dB μ V
Correction Factor	= Cable Loss + Pulse Limiter
	= 21.5 dB
Total	= 27.2 dB μ V
Margin	= 46.0 dB μ V – 27.2 dB μ V
	= 18.8 dB

-. Example 2: 161.920 MHz

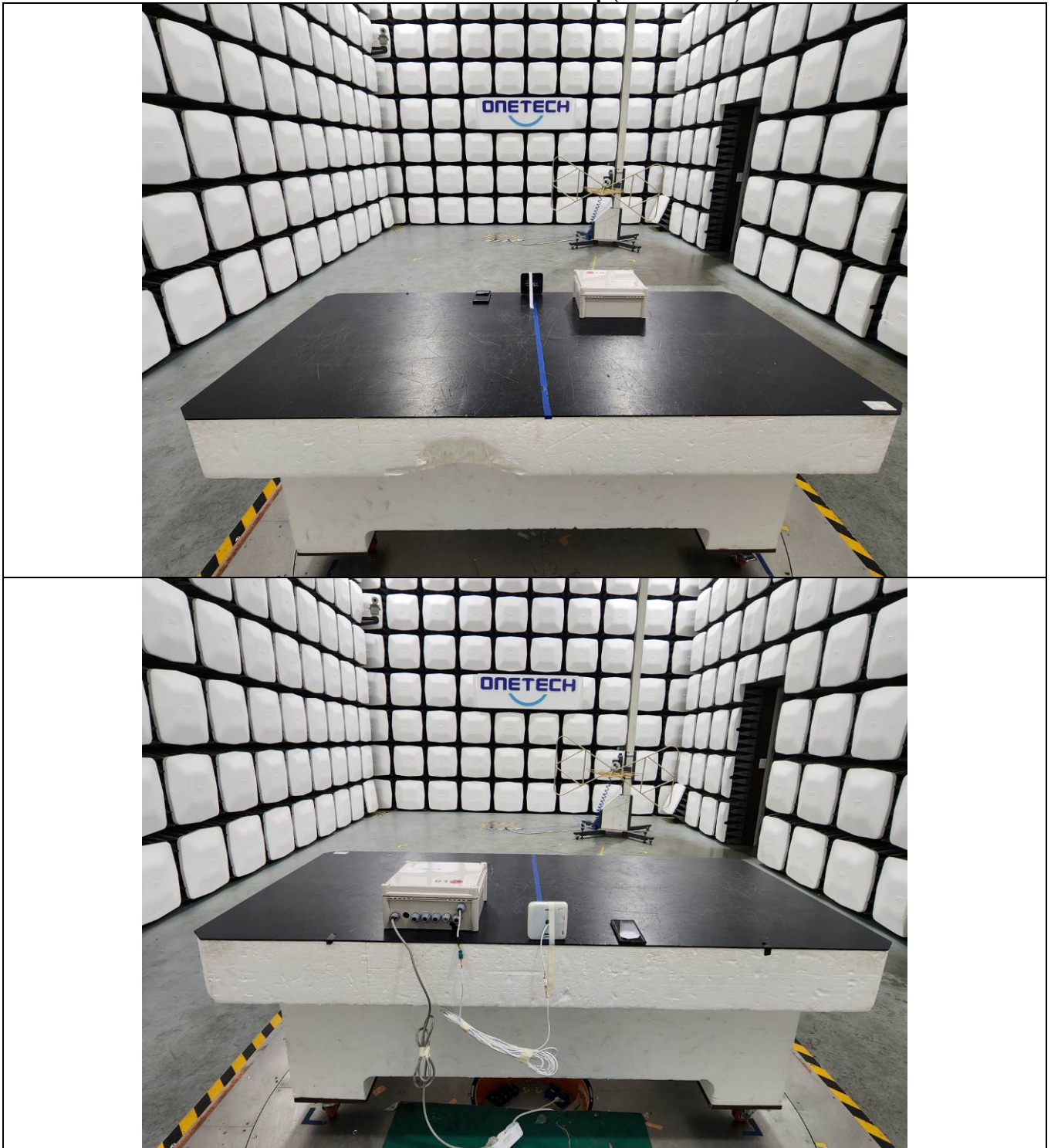
Class B Limit	= 43.5 dB μ V/m (Quasi-Peak)
Reading	= 45.3 dB μ V
Correction Factor	= Antenna Factor (17.6 dB/m) + Cable Loss (1.6 dB) - Amp. Gain (32.0 dB)
	= -12.8 dB
Total	= 32.5 dB μ V/m
Margin	= 43.5 dB μ V/m – 32.5 dB μ V/m
	= 11.0 dB

APPENDIX A
[TEST SET UP PHOTOGRAPHS]

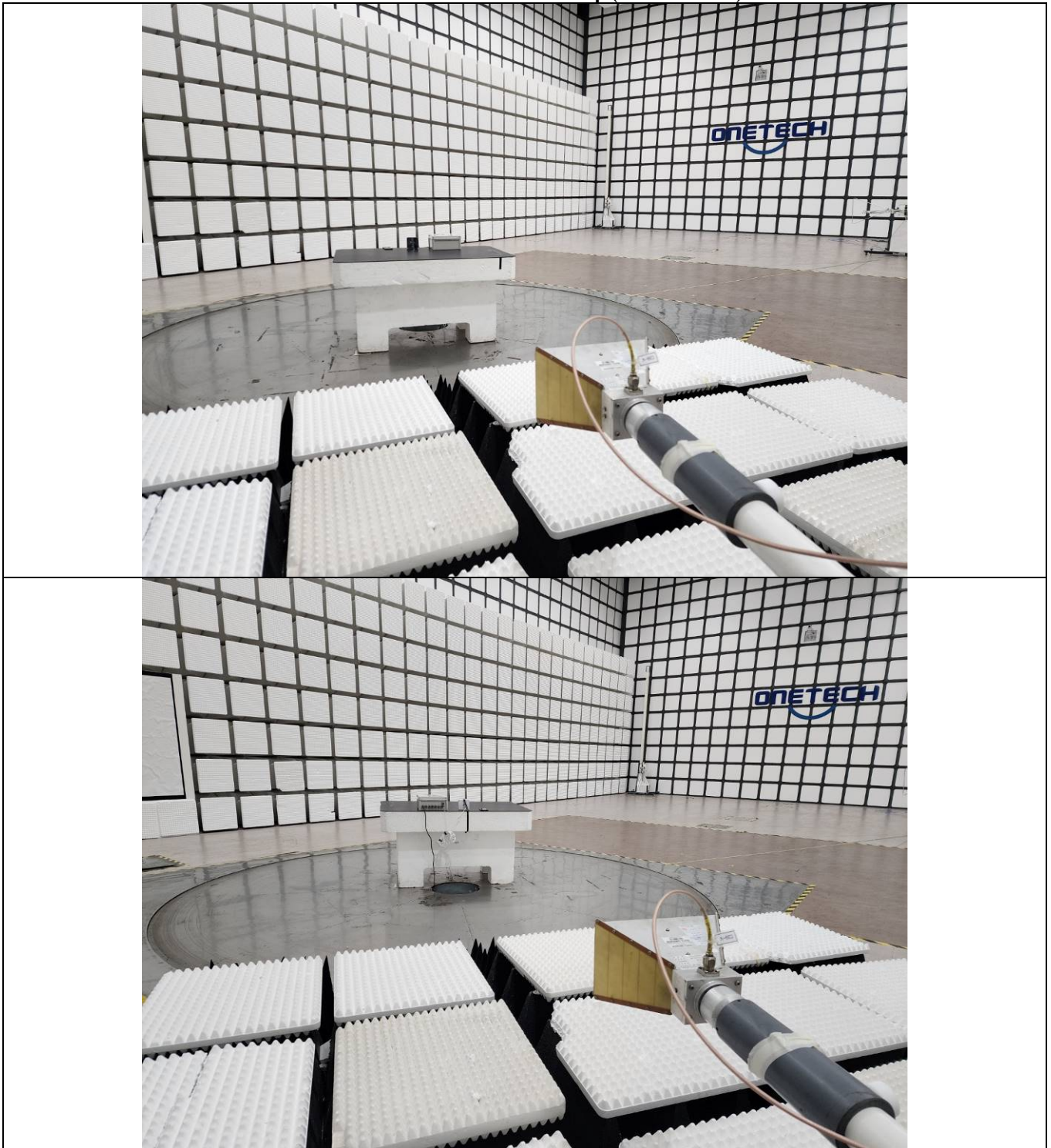
Conducted Disturbance Test Set Up



Radiated Disturbance Test Set Up (Below 1 GHz)



Radiated Disturbance Test Set Up (Above 1 GHz)



APPENDIX B

[PHOTOGRAPHS OF EUT]



Enclosure (Front)



Enclosure (Rear)



Inside

APPENDIX C
[DECLARATION OF CONFORMITY]

SUPPLIER'S DECLARATION OF CONFORMITY

Per FCC § 2.1077 Compliance information.

Trade Name : LG

Model Number : PREMTA200

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful Interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party: LG Electronics USA, Inc.

Address: 111 Sylvan Avenue, North Building
Englewood Cliffs, New Jersey
07632

E-mail: lg.environmental@lge.com

We hereby declare that the equipment bearing the trade and model number specified above was tested conforming to the applicable FCC rules under the most accurate measurement standards possible, and that the necessary steps have been taken and are in force to assure that production units equipment will continue to comply with the Commission's requirements.



LG Electronics USA, Inc.

A handwritten signature in black ink, appearing to read 'V. J. Kim'.

V. J. Kim

March 07, 2023

G. Kim

APPENDIX D
[LABELLING REQUIREMENTS]
[INFORMATION TO THE USER IN USER'S MANUAL]

LABELLING REQUIREMENTS

FCC Part 15 SUBPART B § 15.19 Labeling requirements

(a) In addition to the requirements in part 2 of this chapter, a device subject to certification, or Supplier's Declaration of Conformity shall be labeled as follows:

(1) Receivers associated with the operation of a licensed radio service, e.g., FM broadcast under part 73 of this chapter, land mobile operation under part 90 of this chapter, etc., shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

(2) A stand-alone cable input selector switch, shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules for use with cable television service.

(3) All other devices shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

(4) Where a device is constructed in two or more sections connected by wires and marketed together, the statement specified under paragraph (a) of this section is required to be affixed only to the main control unit.

(5) When the device is so small or for such use that it is impracticable to label it with the statement specified under paragraph (a) of this section in a font that is four-point or larger, and the device does not have a display that can show electronic labeling, then the information required by this paragraph shall be placed in the user manual and must also either be placed on the device packaging or on a removable label attached to the device.

For FCC Certification

If the device is subject to Certification: (1) Section 2.925 contains information on identification of the equipment; (2) include a label bearing an FCC Identifier (FCC ID) (Section 2.926) and (3) include the appropriate compliance statement in Section 15.19(a). If the labelling area is considered too small and therefore it is impractical (smaller than the palm of the hand) to display the compliance statement, then the statement may be placed in the user manual or product packaging. However, the device must still be labelled with the FCC ID. If the device is unquestionably too small for the FCC ID to be readable (smaller than 4-6 points), the FCC ID may be placed in the user manual. However, it must be determined that the device itself is too small – the label area allocated to the FCC ID may not be reduced because of over crowded identification of other product and regulatory information. Justification for placing the FCC ID in the manual must be submitted with the initial application for certification for review and approval.

For FCC Supplier's Declaration of Conformity (SDOC)

(a) If a product must be tested and authorized under Supplier's Declaration of Conformity, a compliance information statement shall be supplied with the product at the time of marketing or importation, containing the following information:

- (1) Identification of the product, e.g., name and model number;
- (2) A compliance statement as applicable, e.g., for devices subject to part 15 of this chapter as specified in §15.19(a)(3) of this chapter, that the product complies with the rules; and
- (3) The identification, by name, address and telephone number or Internet contact information, of the responsible party, as defined in §2.909. The responsible party for Supplier's Declaration of Conformity must be located within the United States.

(b) If a product is assembled from modular components (e.g., enclosures, power supplies and CPU boards) that, by themselves, are authorized under a Supplier's Declaration of Conformity and/or a grant of certification, and the assembled product is also subject to authorization under Supplier's Declaration of Conformity but, in accordance with the applicable regulations, does not require additional testing, the product shall be supplied, at the time of marketing or importation, with a compliance information statement containing the following information:

- (1) Identification of the assembled product, e.g., name and model number.
- (2) Identification of the modular components used in the assembly. A modular component authorized under Supplier's Declaration of Conformity shall be identified as specified in paragraph (a)(1) of this section. A modular component authorized under a grant of certification shall be identified by name and model number (if applicable) along with the FCC Identifier number.
- (3) A statement that the product complies with part 15 of this chapter.
- (4) The identification, by name, address and telephone number or Internet contact information, of the responsible party who assembled the product from modular components, as defined in §2.909. The responsible party for Supplier's Declaration of Conformity must be located within the United States.
- (5) Copies of the compliance information statements for each modular component used in the system that is authorized under Supplier's Declaration of Conformity.

(c) The compliance information statement shall be included in the user's manual or as a separate sheet. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form. The information may be provided electronically as permitted in §2.935.

For ICES-003

The manufacturer, importer or supplier shall meet the labelling requirements set out in this section and in Notice 2014-DRS1003 for electronic labelling for every unit:

- i. prior to marketing in Canada, for ITE manufactured in Canada and
- ii. prior to importation into Canada, for imported ITE.

Each unit of an ITE model shall bear a label (see below) that represents the manufacturer's or the importer's SDoC with Innovation, Science and Economic Development Canada's ICES-003. This label shall be permanently affixed to the ITE or displayed electronically and its text must be clearly legible. If the dimensions of the device are too small or if it is not practical to place the label on the ITE and electronic labelling has not been implemented, the label shall be, upon agreement with Innovation, Science and Economic Development Canada, placed in a prominent location in the user manual supplied with the ITE. The user manual may be in an electronic format and must be readily available.

Innovation, Science and Economic Development Canada ICES-003 Compliance Label:

CAN ICES-3 (*)/NMB-3(*)

* Insert either "A" or "B" but not both to identify the applicable Class of ITE.

PROPOSED LABEL

The label included following statement will be attached on product or the compliance statement can be observed in a prominent location in the instruction manual.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

INFORMATION TO THE USER IN USER'S MANUAL

For FCC: The instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

For a **Class A** digital device or peripheral

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

For a **Class B** digital device or peripheral

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

- . Reorient or relocate the receiving antenna.
- . Increase the separation between the equipment and receiver.
- . Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- . Consult the dealer or an experienced radio/TV technician for help.

WARNING

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.