



FCC/ISED Canada

TECHNICAL COMPLIANCE STATEMENT

For the

Product : Network Webcam
FCC ID : BEJAN-VC22PR
Model : AN-VC22PR
Multiple Model : HL-GE1
Applicant : LG Electronics USA
FCC Rule : CFR 47 Part 15 Subpart B Section 15.101
ISED Canada Rule : ICES-003 Issue 7 October 2020

We hereby certify that the above product has been tested by us with the listed rules and found in compliance with the regulation. The test data and results are issued on the test report no. TR-W2210-010

Signature


Choi, Young-min / Technical Manager

Date: 2022-10-18

Test Laboratory: ENG Co., Ltd.

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FCC/ISED Canada TEST REPORT

Project Number : EA2207C-038
Test Report Number : TR-W2210-010
Type of Equipment : Network Webcam
FCC ID : BEJAN-VC22PR
Model Name : AN-VC22PR
Multiple Model Name : HL-GE1
Applicant : LG Electronics USA
Address : 111 Sylvan Avenue North Building, Englewood Cliffs,
New Jersey, United States
Manufacturer 1 : Hitachi-LG Data Storage Korea, Inc.
Address : LG Gasan digital center 8F, 189, Gasan digital 1-ro,
Geumcheon-gu, Seoul, Republic of Korea
Manufacturer 2 : Hitachi Electronic Products (Malaysia) Sdn Bhd
Address : Lot 12, Jalan Kemajuan , Bangi Industrial Estate,
43650 Bandar Baru Bangi, Selangor Darul Ehsan, Malaysia.
FCC Rule : CFR 47 Part 15 Subpart B §15.101 Class B
ISED Canada Rule : ICES-003 Issue 7 October 2020
Total page of Report : 43 pages
Date of Receipt : 2022-07-29
Date of Issue : 2022-10-18
Test Result : Pass

This test report only contains the result of a single test of the sample supplied for the examination.
It is not a generally valid assessment of the features of the respective products of the mass-production.

Prepared by Chu, Woo-sik / Senior Engineer


Signature

2022-10-18

Date

Reviewed by Choi, Young-min / Technical Manager


Signature

2022-10-18

Date

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Release Control Record

Issue Report No.	Issued Date	Details/Revisions
TR-W2210-010	2022-10-18	Initial Release

1. TEST SUMMARY

1.1 Test standards and results

The sample submitted for evaluation (Hereafter refer to as the EUT) has been tested in accordance with the following regulations or standards:

Agency	APPLICABLE SECTION	TEST DESCRIPTION	RESULTS
FCC	Part 15 Subpart B Section 15.107 (a)	AC Power Line Conducted Emissions	PASS
	Part 15 Subpart B Section 15.109 (a)	Radiated Emissions	PASS
ISED Canada	ICES-003 Section 3.2.1 Table 1	AC Power Line Conducted Emissions	PASS
	ICES-003 Section 3.2.2 Table 2, Table 4	Radiated Emissions	PASS

1.2 Test Methodology

FCC: ANSI C 63.4:2014, FCC CFR 47 Part 2, and Part 15

ISED Canada: CAN/CSA-CISPR 32: 17, ANSI C63.4-2014 amended as per ANSI C63.4a-2017, ICES-Gen

1.3 Additions, deviations, exclusions from standards








No additions, deviations or exclusions have been made from standard.

1.4 Purpose of the test

To determine whether the equipment under test fulfills the FCC and ISED Canada Rules, Regulation and standards stated in section 1.1 and 1.2.

1.5 Test Facility

The measurement facilities are located at 135-60 Gyeongchung-daero, Gonjam-eup, Gwangju-si, Gyeonggi-do 12813, Korea. Our test facilities are accredited as a Conformity Assessment Body (CAB) by the FCC and ISED Canada, designated by the RRA (National Radio Research Agency), and accredited by KOLAS (Korea Laboratory Accreditation Scheme) in Korea and approved by TUV Rheinland, TUV SÜD and Korean Register of Shipping according to the requirement of ISO/IEC 17025.

Laboratory Qualification	Registration No.	Mark
FCC	KR0160	
ISED Canada	12721A	
RRA	KR0160	
TUV Rheinland	UA 50314109-0002	
TUV SÜD	CARAT 094465 0004 Rev.00	
Korean Agency for Technology and Standards	KT733	
KOREAN REGISTER OF SHIPPING	PCT40841-TL001	

Remark. This report is not related to KOLAS accreditation and relevant regulation.

2. EUT (Equipment Under Test) Description

The LG Electronics USA Model AN-VC22PR (referred to as the EUT in this report) is a Network Webcam. This test report covers only unintentional radiator part and intentional radiator part acc. to Part 15 subpart C shall be issued other test report number. The product specification described herein was obtained from product data sheet or user's manual.

Processor	Qualcomm QRB3165
RAM	6 GB
SSD	64 GB
Camera	12 MP Wide RGB Camera 12 MP NV Camera
Input/Output Ports	DC Input, LAN, RS-232C, MPI, USB C-type, HDMI Input/Output
Rated Voltage	12 V, 2.5 A
Product installation height	2 m (78.7 inches) or less
Weight	350 g (0.7 lbs)
RF Specification	Bluetooth: (2 402 ~ 2480) MHz WiFi (IEEE 802.11 a/b/g/n/ac): (2 412 ~ 2 472) MHz (5 180 ~ 5 320) MHz, (5 500 ~ 5 700) MHz, (5 745 ~ 5 825) MHz

2.1 Additional Model

Model Name	Model Difference
AN-VC22PR	Basic Model
HL-GE1	Identical to the basic model except for the model designation

Note: The manufacturer has declared to all the additional model names into basic model name without any further evaluation by ENG Co., Ltd.

3. TEST CONDITION

3.1 Equipment Used During Test

The following peripheral devices and/or interface cables were connected during the measurement:

Description	Model No.	Serial No.	Manufacturer.
Network Webcam (EUT)	AN-VC22PR	N/A	Hitachi-LG Data Storage Korea, Inc., Hitachi Electronic Products (Malaysia) Sdn Bhd
Adapter for EUT	BM030S12F	N/A	BridgePower Corp.
IR Remote Control for EUT	N/A	N/A	N/A
Notebook PC	81Y3	N/A	LCFC (Hefei) Electronics
Adapter for Notebook PC	ADL45WCE	N/A	CHICONY POWER TECHNOLOGY(SUZHOU) CO.,LTD
MI BOX	MDZ-22-AB	N/A	Xiaomi Inc.
Adapter for MI BOX	EVVC*10052-2100	N/A	AIRLINE MECHANICAL Co., Ltd.
IR Remote Control for MI BOX	XMRM-006	N/A	Beijing Xiaomi Electronics Co., Ltd
TV	ZEN U430 UHD TV Max HDR	N/A	SHENZHEN KTC Commercial Display Technology Co., Ltd.
USB Mouse	TG-M305U	N/A	HANDE C&T Co., Limited
USB to C Gender	N/A	N/A	N/A

3.2 Cable Description

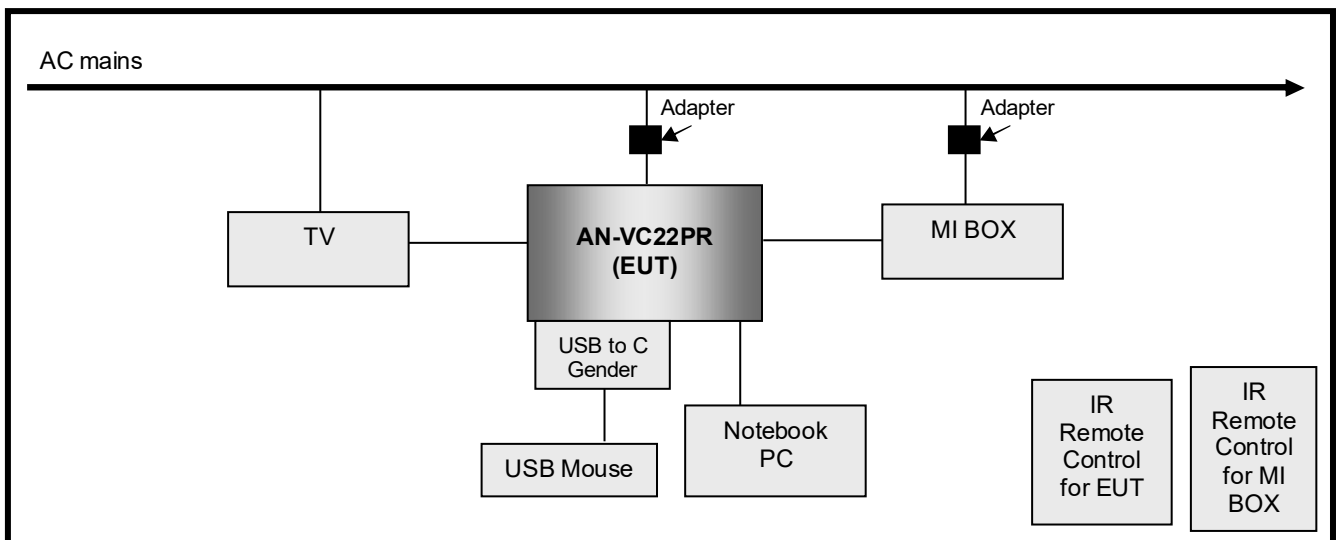
Description	Ports Name	Shielded (Y/N)	Ferrite Core (Y/N)	Length (m)	Connected to
EUT	DC IN	N	Y	1.5	Adapter for EUT
	HDMI IN	Y	N	1.0	MI BOX
	HDMI OUT	Y	N	2.0	TV
	USB C-type	-	-	-	USB to C Gender
	LAN	N	N	3.0	Notebook PC
USB to C Gender	USB	N	N	1.5	USB Mouse
Adapter for EUT	AC IN	N	N	2.0	AC Mains
IR Remote Control for EUT	-	-	-	-	-
IR Remote Control for MI BOX	-	-	-	-	-

* Acc. to manufacturer's declaration, RS-232C, MPI port is for debugging purpose, so the ports were not connected to peripheral device.

3.3 Mode of operation during the test

Test Mode	Description
Mode of Operation	The EUT has 2 internal cameras and a HDMI input/output, so following 3 modes were operated during the test. 1) RGB Camera, 2) IR Camera, 3) Mi Box (Settop box)
# 1	Captured images by the RGB camera on the EUT were continuously displayed on the TV through HDMI output port on the EUT and ping-test between the EUT and a notebook PC was performed.
# 2	Captured images by the IR camera on the EUT were continuously displayed on the TV through the HDMI output port on the EUT and ping-test between the EUT and a notebook PC was performed.
# 3	The video output on the settop box (Mi Box) was connected to HDMI input port on the EUT and output images were continuously displayed on the TV through the HDMI output port on the EUT and ping-test between the EUT and a notebook PC was performed.

3.4 Test Setup Drawing



4. EUT Modifications

- No EMC Relevant Modifications were performed by this test laboratory.

5. EMISSION TESTS

5.1 AC Power Line Conducted Emission

5.1.1 Test setup

The EUT and all supporting equipments were placed on a non-metallic table approximately 0.8 m above the ground plane.

Power was fed to the EUT through a 50 Ω/50 μH + 5 Ω Line Impedance Stabilization Network (LISN) and all supporting equipments were connected to another LISN. The ground plane was electrically bonded to the reference ground system and all power lines were filtered from ambient noise. Preliminary Power line Conducted Emission test was performed by using the procedure in ANSI C63.4: 2014 7.3.3 to determine the worse operating conditions.

5.1.2 Sample Calculated Example

Used Software for measurement is EMC 32 supplied by Rohde&Schwarz.

At 5.31 MHz

QP Limit = 60.0 dBμV

Correction Factor (C. Factor) of LISN, Pulse Limiter and cable loss at 5.31 MHz = 9.7 dB

Q.P Reading from the Test receiver = 40.8 dBμV

(Calculated value for system losses by software EMC32 manufactured by Rohde & Schwarz)

Therefore Q.P Margin = 60 - 40.8 = 19.2


so the EUT has 19.2 dB margin at 5.31 MHz

5.1.3 Measurement uncertainty

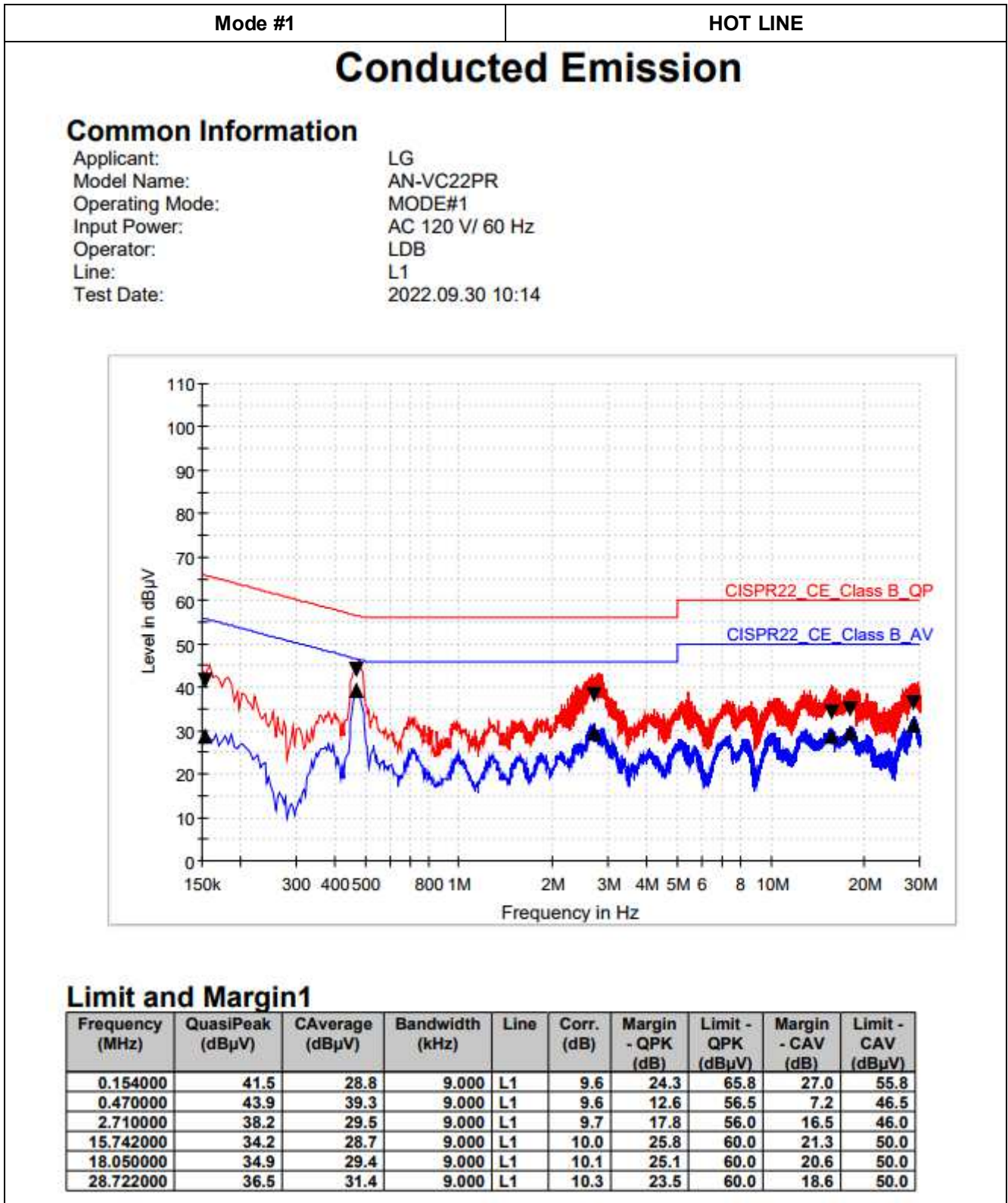
Frequency range	Uncertainty
150 kHz ~ 30 MHz	2.21 dB

The measurement uncertainties are given with 95 % confidence.

5.1.4 Test Result

Date of Test	2022-09-30		
Temperature	(20.85 ± 0.45) °C	Relative humidity	(50.75 ± 0.35) % R.H.
Operating Input Voltage	120 Vac	Input Frequency	60 Hz
Frequency range	RBW	VBW	Detector Mode
0.15 MHz ~ 30 MHz	9 kHz	30 kHz	Peak , Q.P and/or Average
Test Mode	Mode #1, #2, and #3		
Test Result	Pass	Tested By	Lim, Da-bin 

5.1.5 Test Data



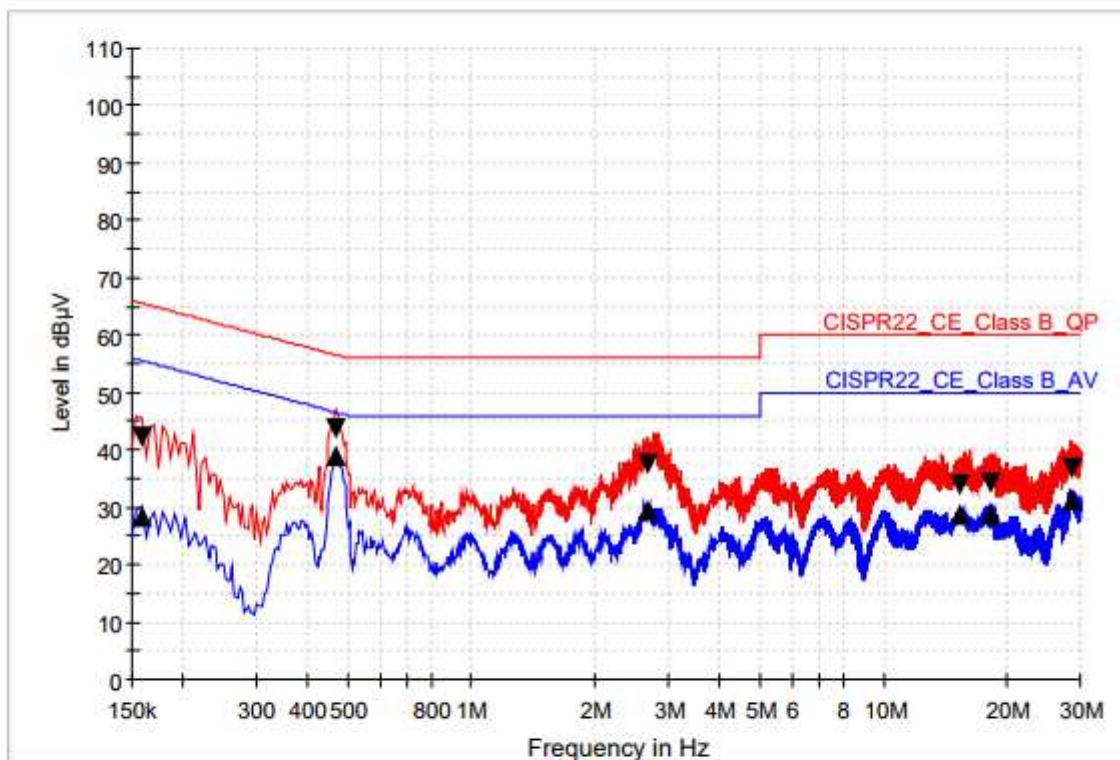
Mode #1

NEUTRAL LINE

Conducted Emission

Common Information

Applicant: LG
 Model Name: AN-VC22PR
 Operating Mode: MODE#1
 Input Power: AC 120 V/ 60 Hz
 Operator: LDB
 Line: N
 Test Date: 2022.09.30 10:09



Limit and Margin1

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV)	Margin - CAV (dB)	Limit - CAV (dBµV)
0.158000	42.4	28.3	9.000	N	9.6	23.2	65.6	27.3	55.6
0.470000	43.7	38.9	9.000	N	9.6	12.8	56.5	7.6	46.5
2.674000	37.5	29.4	9.000	N	9.7	18.5	56.0	16.6	46.0
15.314000	34.0	28.7	9.000	N	10.0	26.0	60.0	21.3	50.0
18.226000	34.4	28.8	9.000	N	10.1	25.6	60.0	21.2	50.0
28.770000	36.6	31.3	9.000	N	10.3	23.4	60.0	18.7	50.0

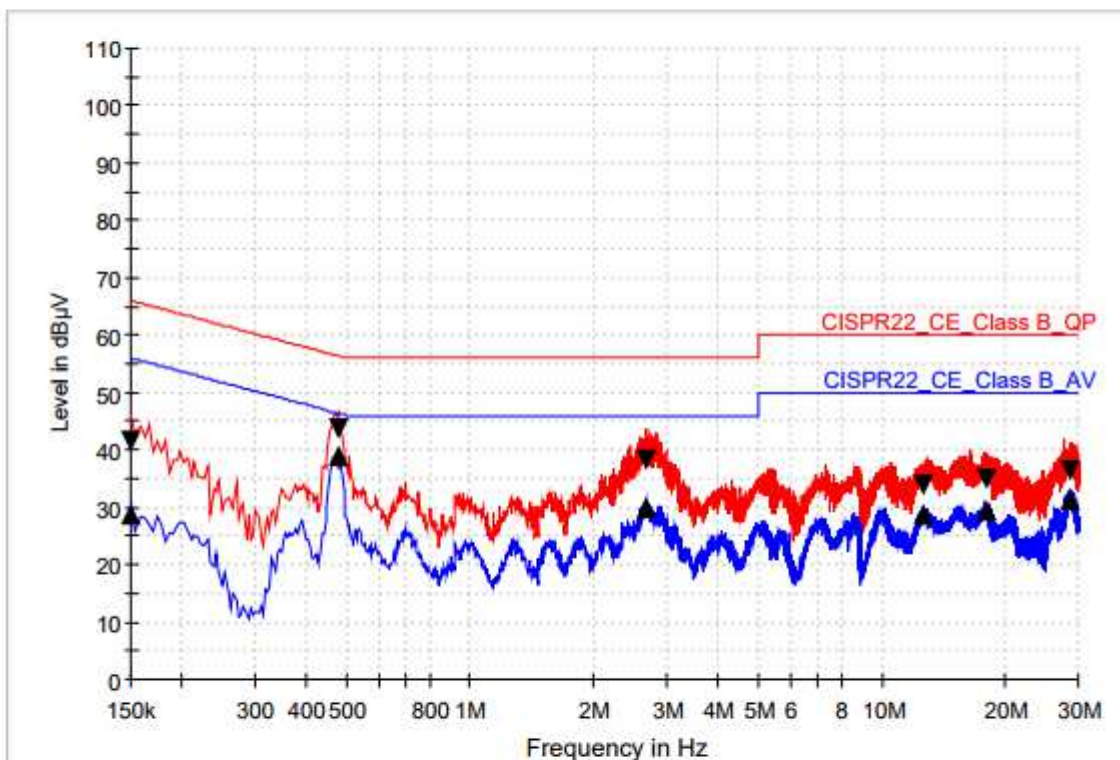
Mode #2

HOT LINE

Conducted Emission

Common Information

Applicant: LG
 Model Name: AN-VC22PR
 Operating Mode: MODE#2
 Input Power: AC 120 V/ 60 Hz
 Operator: LDB
 Line: L1
 Test Date: 2022.09.30 10:23



Limit and Margin1

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV)	Margin - CAV (dB)	Limit - CAV (dBµV)
0.150000	41.5	28.6	9.000	L1	9.6	24.5	66.0	27.4	56.0
0.478000	43.7	38.9	9.000	L1	9.6	12.7	56.4	7.5	46.4
2.678000	38.2	29.9	9.000	L1	9.7	17.8	56.0	16.1	46.0
12.662000	33.8	28.6	9.000	L1	10.0	26.2	60.0	21.4	50.0
17.998000	34.8	29.4	9.000	L1	10.1	25.2	60.0	20.6	50.0
28.622000	36.5	31.3	9.000	L1	10.3	23.5	60.0	18.7	50.0

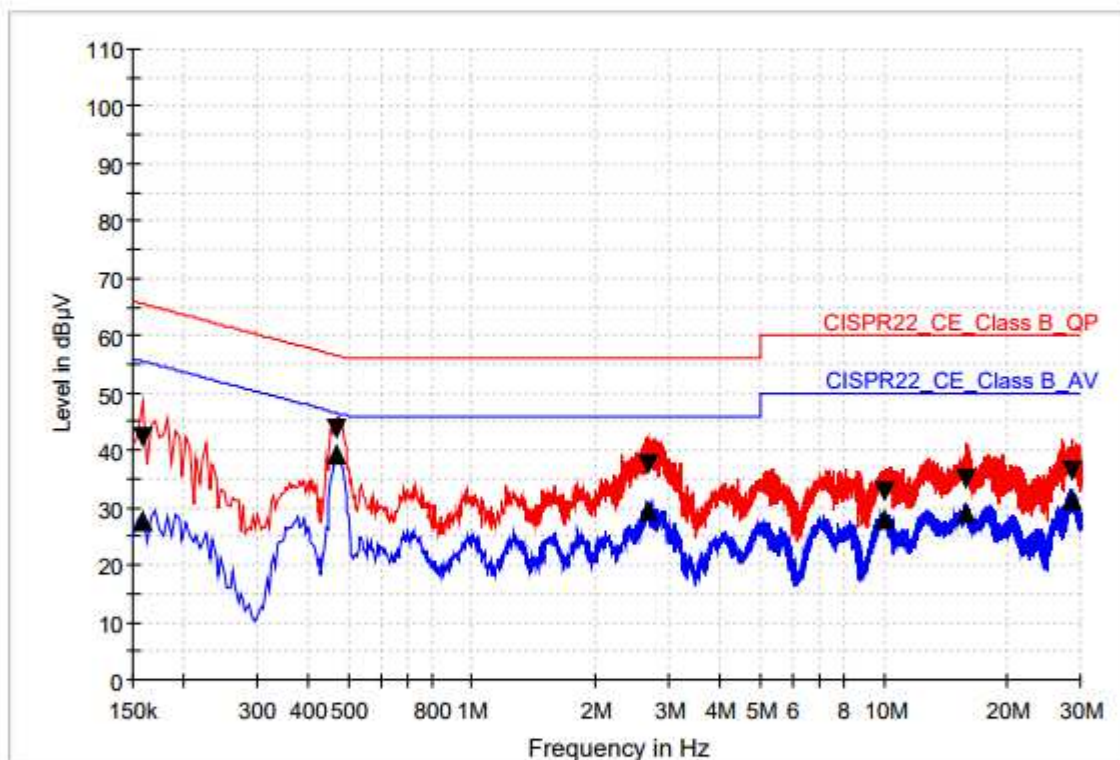
Mode #2

NEUTRAL LINE

Conducted Emission

Common Information

Applicant: LG
 Model Name: AN-VC22PR
 Operating Mode: MODE#2
 Input Power: AC 120 V/ 60 Hz
 Operator: LDB
 Line: N
 Test Date: 2022.09.30 10:28



Limit and Margin1

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV)	Margin - CAV (dB)	Limit - CAV (dBµV)
0.158000	42.1	27.6	9.000	N	9.6	23.4	65.6	28.0	55.6
0.470000	43.8	39.2	9.000	N	9.6	12.7	56.5	7.3	46.5
2.686000	37.5	29.4	9.000	N	9.7	18.5	56.0	16.6	46.0
10.078000	32.9	28.0	9.000	N	9.9	27.1	60.0	22.0	50.0
15.826000	34.9	29.2	9.000	N	10.0	25.1	60.0	20.8	50.0
28.742000	36.5	31.2	9.000	N	10.3	23.5	60.0	18.8	50.0

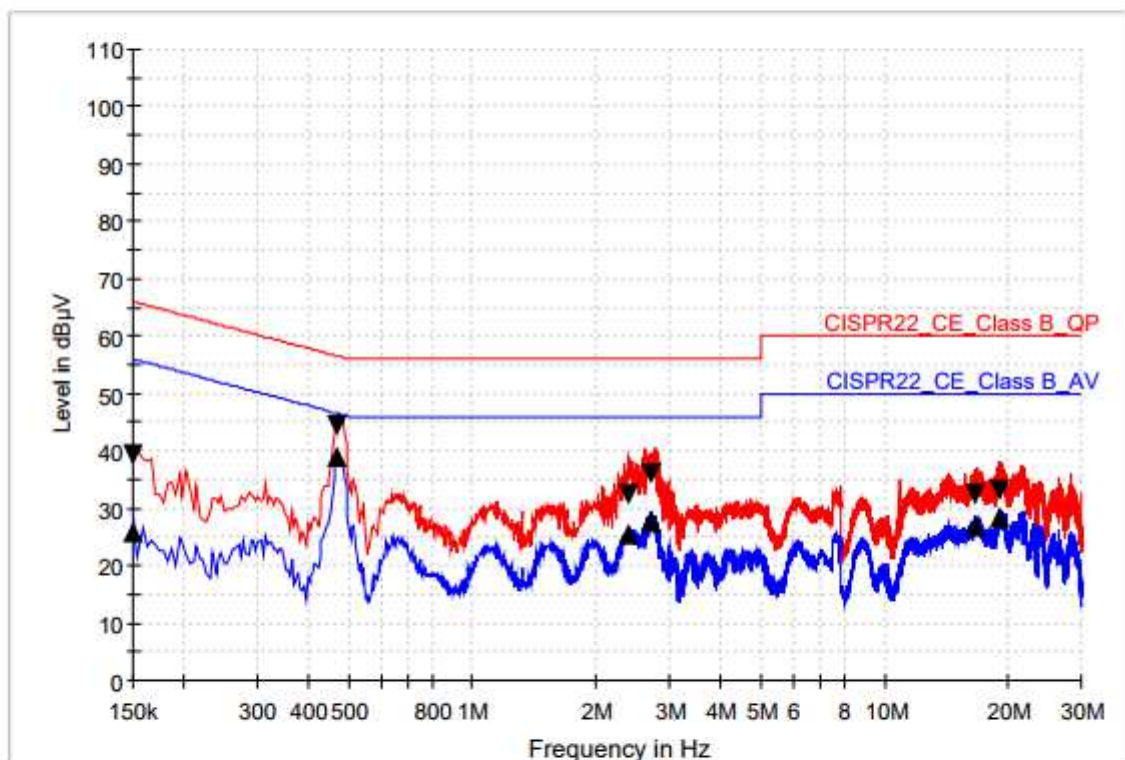
Mode #3

HOT LINE

Conducted Emission

Common Information

Applicant: LG
 Model Name: AN-VC22PR
 Operating Mode: MODE#3
 Input Power: AC 120 V/ 60 Hz
 Operator: LDB
 Line: L1
 Test Date: 2022.09.30 10:38



Limit and Margin1

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV)	Margin - CAV (dB)	Limit - CAV (dBµV)
0.150000	39.2	25.8	9.000	L1	9.6	26.8	66.0	30.2	56.0
0.470000	44.6	38.8	9.000	L1	9.6	12.0	56.5	7.7	46.5
2.402000	32.5	25.5	9.000	L1	9.7	23.5	56.0	20.5	46.0
2.706000	36.1	27.8	9.000	L1	9.7	19.9	56.0	18.2	46.0
16.582000	32.2	27.0	9.000	L1	10.1	27.8	60.0	23.0	50.0
19.014000	33.3	28.3	9.000	L1	10.1	26.7	60.0	21.7	50.0

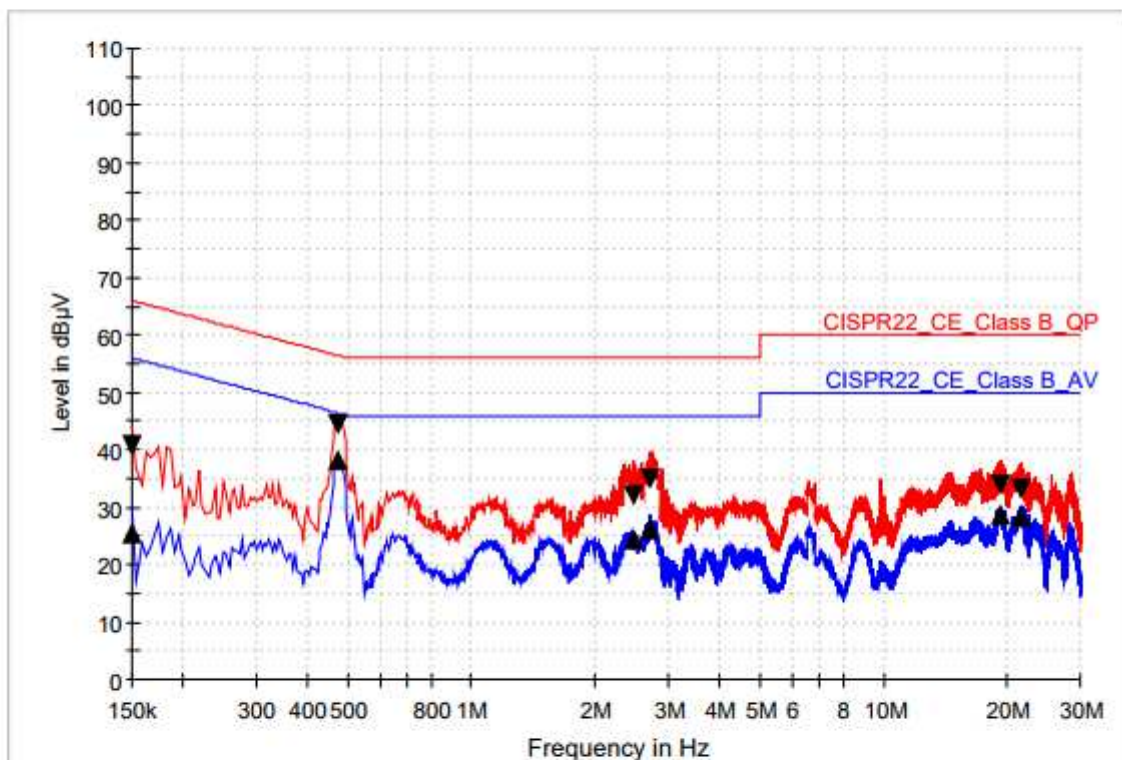
Mode #3

NEUTRAL LINE

Conducted Emission

Common Information

Applicant: LG
 Model Name: AN-VC22PR
 Operating Mode: MODE#3
 Input Power: AC 120 V/ 60 Hz
 Operator: LDB
 Line: N
 Test Date: 2022.09.30 10:33



Limit and Margin1

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV)	Margin - CAV (dB)	Limit - CAV (dBµV)
0.150000	40.7	25.6	9.000	N	9.6	25.3	66.0	30.4	56.0
0.474000	44.6	38.3	9.000	N	9.6	11.8	56.4	8.1	46.4
2.478000	31.9	24.4	9.000	N	9.7	24.1	56.0	21.6	46.0
2.702000	34.8	26.3	9.000	N	9.7	21.2	56.0	19.7	46.0
19.198000	33.8	28.7	9.000	N	10.1	26.2	60.0	21.3	50.0
21.442000	33.0	28.3	9.000	N	10.2	27.0	60.0	21.7	50.0

5.2 Radiated Emission

5.2.1 Test setup

The radiated emissions measurements were in the 3/10 m, Semi Anechoic Chamber. The EUT and all local supporting equipments were placed on a non-conductive table approximately 0.8 m above the ground plane. The frequency spectrum from 30 MHz to the maximum frequency as specified in CFR 47 Part 15 section 15.33 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. Preliminary radiated emission test was conducted using the procedure in ANSI C63.4: 2014 8.3.1.1 below 1 000 MHz, 8.3.1.2 above 1 GHz to determine the worse operating conditions Measurement distance between the EUT and an antenna was as below table.

Frequency range (MHz)	Measurement Distance	
	Class B Device	Class A Device
Below 1 000 MHz	3 m	10 m
Above 1 000 MHz	3 m	3 m

The test set-up photos are included in appendix II.

5.2.2 Measurement frequency range

Highest frequency generated or used in the device or on which the device operates or tunes	Upper Frequency of Measurement range (MHz)
Below 1.705 MHz	30
(1.705 ~ 108) MHz	1 000
(108 ~ 500) MHz	2 000
(500 ~ 1 000) MHz	5 000
Above 1 000 MHz	5th harmonic of the highest freq. or 40 GHz, whichever is lower

The measurement uncertainties are given with 95 % confidence.

5.2.3 Sample Calculated Example

Used Software for measurement is manufactured by TSJ.

At 80 MHz

Limit = 39.1 dB μ V/m

Result = Receiver reading value + Antenna Factor + Cable Loss - Pre-amplifier gain = 30 dB μ V/m

Margin = Limit - Result = 39.1 - 30 = 9.1

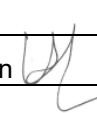
so the EUT has 9.1 dB margin at 80 MHz

5.2.4 Measurement uncertainty

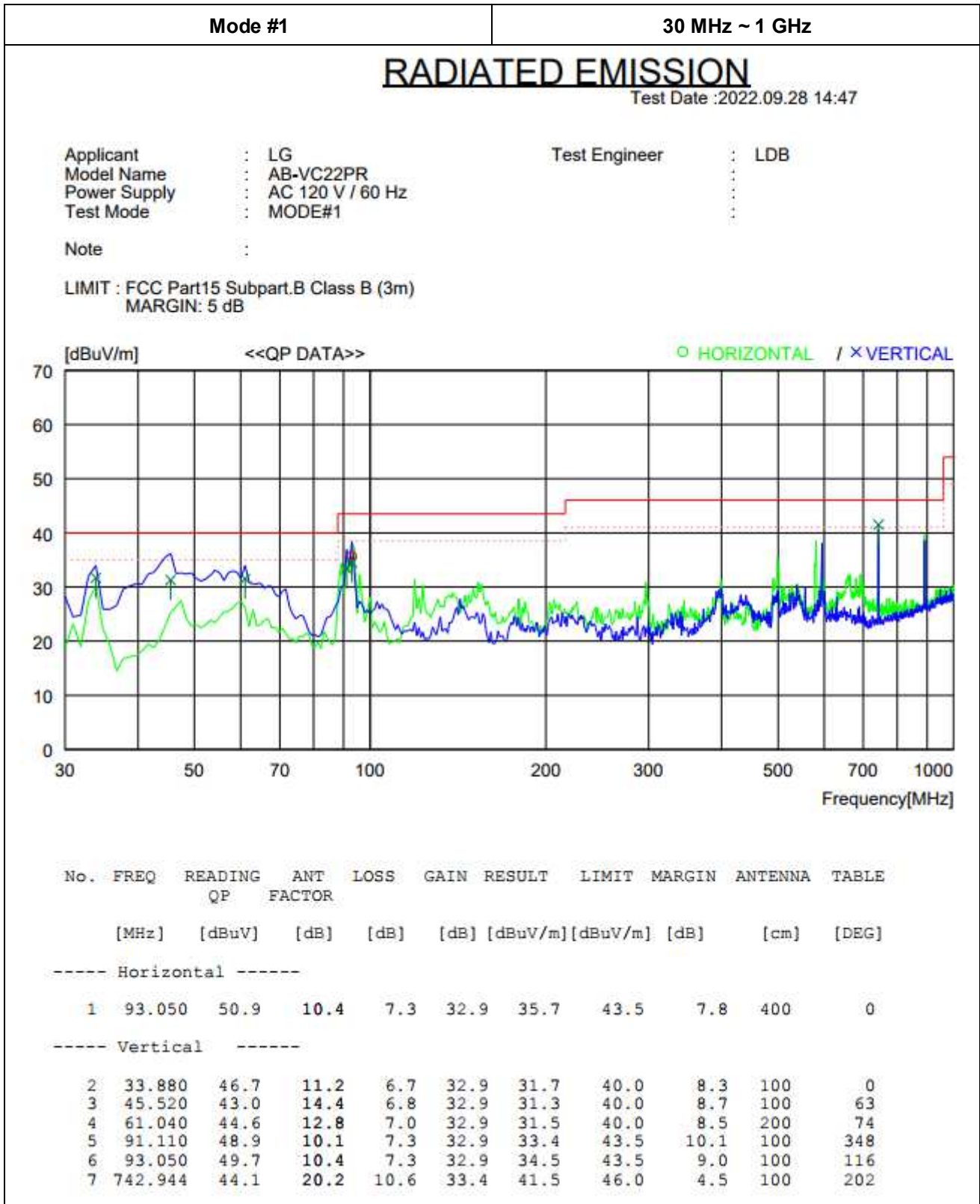
Frequency range	Uncertainty
Below 1 000 MHz	4.64 dB
Above 1 000 MHz	4.91 dB

The measurement uncertainties are given with 95 % confidence.

5.2.5 Test result

Date of Test	2022-09-28		
Temperature	(23.25 \pm 0.25) °C	Relative humidity	(51.65 \pm 0.25) % R.H.
Operating Input Voltage	120 Vac	Input Frequency	60 Hz
Frequency range	RBW	VBW	Detector Mode
Below 1 000 MHz	120 kHz	300 kHz	Peak or Q.P.
			Measurement distance
			3 m
Date of Test	2022-09-28		
Temperature	(23.95 \pm 0.35) °C	Relative humidity	(53.1 \pm 0.9) % R.H.
Frequency range	RBW	VBW	Detector Mode
Above 1 000 MHz	1 MHz	1 MHz or 10 Hz	Peak or Average
			Measurement distance
			3 m
Test Mode	Mode #1, #2, and #3		
Test Result	Pass	Tested By	Lim, Da-bin 

5.2.6 Test Data



Mode #2

30 MHz ~ 1 GHz

RADIATED EMISSION

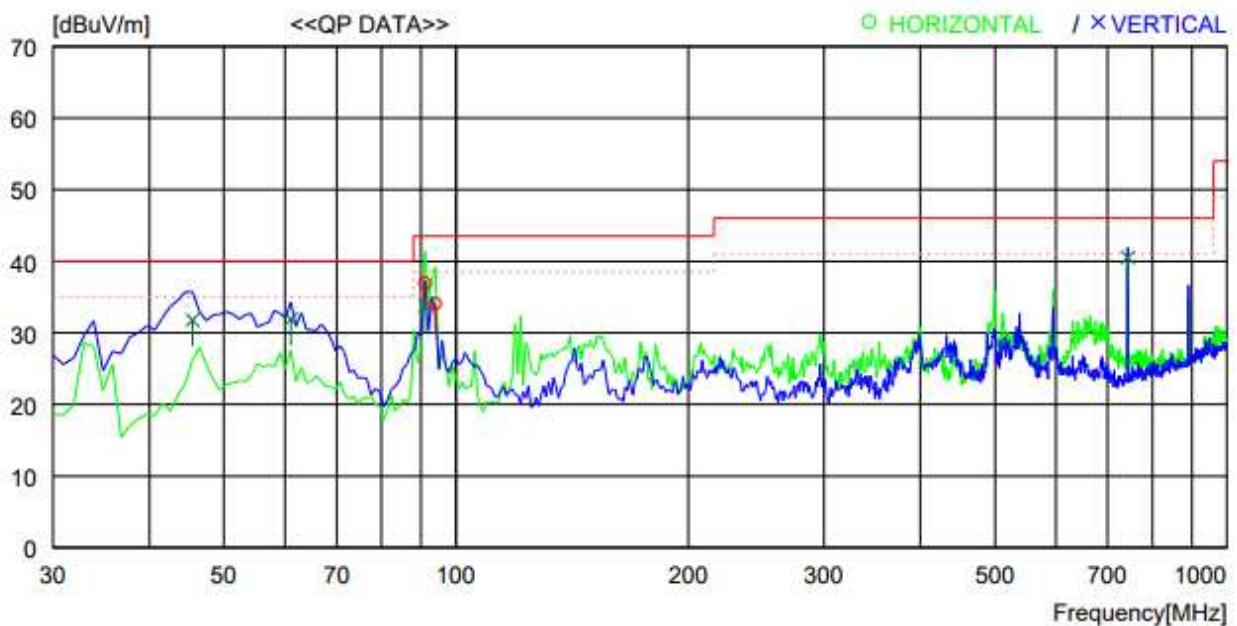
Test Date :2022.09.28 14:57

Applicant : LG
 Model Name : AB-VC22PR
 Power Supply : AC 120 V / 60 Hz
 Test Mode : MODE#2

Test Engineer : LDB

Note :

LIMIT : FCC Part15 Subpart.B Class B (3m)
 MARGIN: 5 dB



No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	91.110	52.4	10.1	7.3	32.9	36.9	43.5	6.6	200	359
2	94.020	49.1	10.6	7.3	32.9	34.1	43.5	9.4	200	330
----- Vertical -----										
3	45.520	43.5	14.4	6.8	32.9	31.8	40.0	8.2	100	359
4	61.040	45.0	12.8	7.0	32.9	31.9	40.0	8.1	100	34
5	91.110	49.3	10.1	7.3	32.9	33.8	43.5	9.7	100	3
6	742.944	43.1	20.2	10.6	33.4	40.5	46.0	5.5	100	336

Mode #3

30 MHz ~ 1 GHz

RADIATED EMISSION

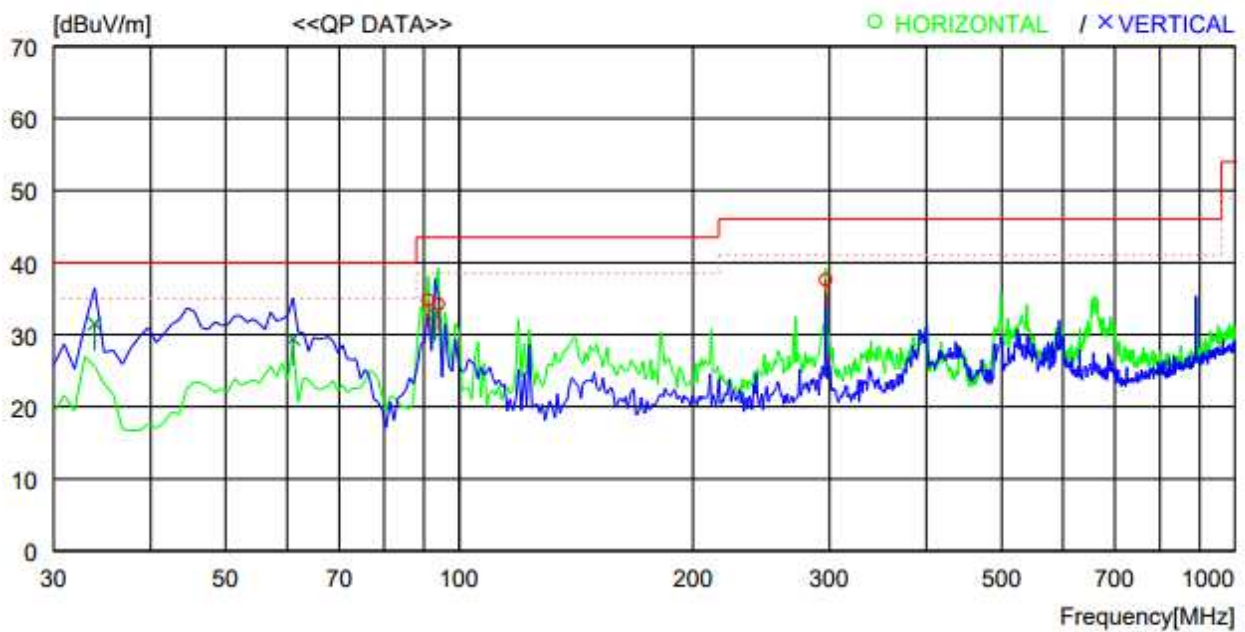
Test Date :2022.09.28 15:13

Applicant : LG
 Model Name : AB-VC22PR
 Power Supply : AC 120 V / 60 Hz
 Test Mode : MODE#3

Test Engineer : LDB

Note :

LIMIT : FCC Part15 Subpart.B Class B (3m)
 MARGIN: 5 dB



No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	91.110	50.3	10.1	7.3	32.9	34.8	43.5	8.7	300	359
2	94.020	49.2	10.6	7.3	32.9	34.2	43.5	9.3	300	329
3	296.750	47.9	13.2	8.6	32.1	37.6	46.0	8.4	100	242
----- Vertical -----										
4	33.880	46.5	11.2	6.7	32.9	31.5	40.0	8.5	100	39
5	61.040	42.5	12.8	7.0	32.9	29.4	40.0	10.6	100	240
6	93.050	48.0	10.4	7.3	32.9	32.8	43.5	10.7	100	0

Mode #1

1 GHz ~ 18 GHz

RADIATED EMISSION

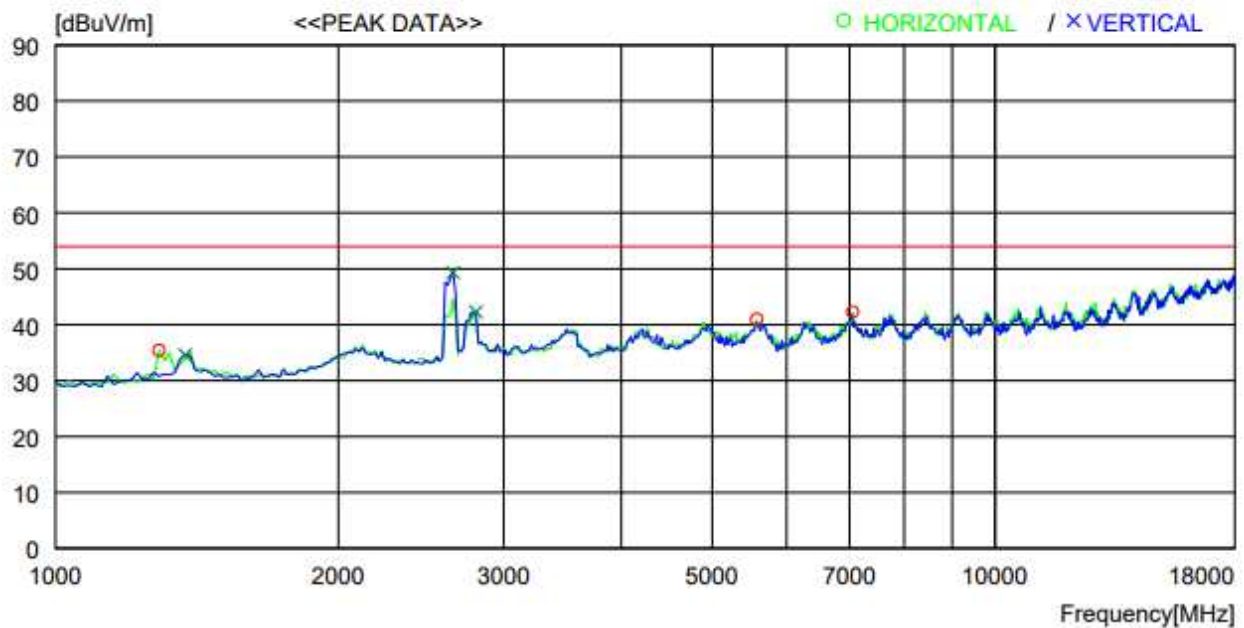
Test Date : 2022.09.28 15:55

Applicant : LG
 Model Name : AN-VC22PR
 Power Supply : AC 120 V / 60 Hz
 Test Mode : MODE#1

Test Engineer : LDB

Note :

LIMIT : 1-18G AV



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]
----- Horizontal -----										
1	1289.000	47.0	25.1	2.7	39.4	35.4	54.0	18.6	100	126
2	5573.000	40.4	34.5	5.9	39.8	41.0	54.0	13	100	345
3	7052.000	39.6	35.7	6.6	39.6	42.3	54.0	11.7	100	359
----- Vertical -----										
4	1374.000	45.9	25.4	2.8	39.5	34.6	54.0	19.4	100	33
5	2649.000	55.2	29.7	4.0	39.6	49.3	54.0	4.7	200	62
6	2802.000	47.6	30.2	4.2	39.7	42.3	54.0	11.7	200	65

NOTE: Average mode was not measured, because peak values were under the average limit.

Mode #2

1 GHz ~ 18 GHz

RADIATED EMISSION

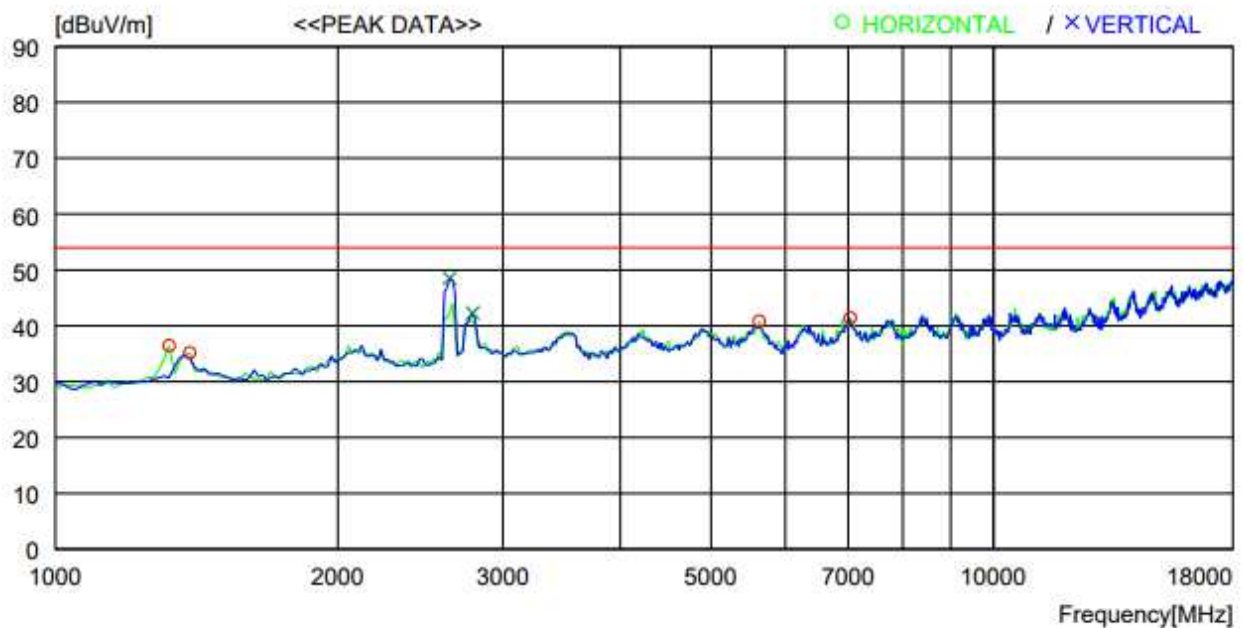
Test Date :2022.09.28 16:00

Applicant : LG
 Model Name : AN-VC22PR
 Power Supply : AC 120 V / 60 Hz
 Test Mode : MODE#2

Test Engineer : LDB

Note :

LIMIT : 1-18G AV



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]
----- Horizontal -----										
1	1323.000	47.9	25.2	2.7	39.4	36.4	54.0	17.6	100	122
2	1391.000	46.4	25.5	2.8	39.5	35.2	54.0	18.8	200	129
3	5624.000	40.1	34.6	5.9	39.8	40.8	54.0	13.2	100	359
4	7035.000	38.8	35.7	6.6	39.7	41.4	54.0	12.6	100	20
----- Vertical -----										
5	2632.000	54.4	29.7	4.0	39.6	48.5	54.0	5.5	200	65
6	2785.000	47.7	30.2	4.1	39.7	42.3	54.0	11.7	200	61

NOTE: Average mode was not measured, because peak values were under the average limit.

Mode #3

1 GHz ~ 18 GHz

RADIATED EMISSION

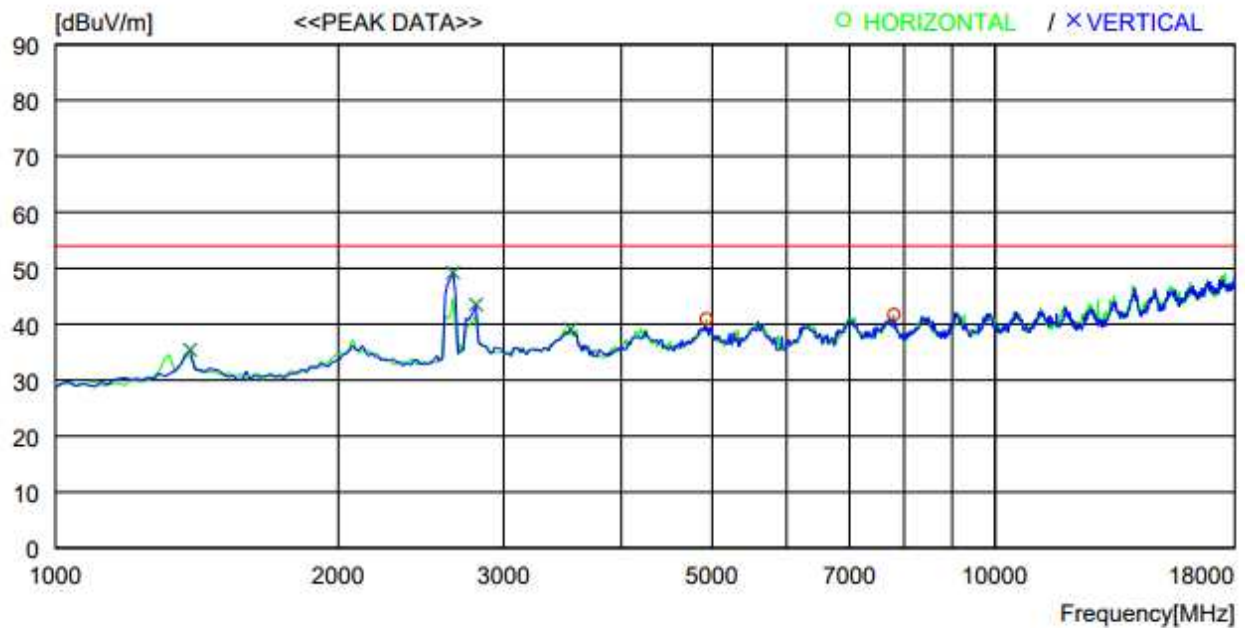
Test Date :2022.09.28 16:07

Applicant : LG
 Model Name : AN-VC22PR
 Power Supply : AC 120 V / 60 Hz
 Test Mode : MODE#3

Test Engineer : LDB
 :
 :
 :

Note :

LIMIT : 1-18G AV



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]
----- Horizontal -----										
1	4927.000	41.0	34.4	5.5	40.0	40.9	54.0	13.1	100	359
2	7800.000	38.3	36.2	7.0	39.8	41.7	54.0	12.3	200	207
----- Vertical -----										
3	1391.000	46.6	25.5	2.8	39.5	35.4	54.0	18.6	100	359
4	2649.000	55.1	29.7	4.0	39.6	49.2	54.0	4.8	200	0
5	2802.000	48.8	30.2	4.2	39.7	43.5	54.0	10.5	200	61
6	3533.000	42.1	32.1	4.7	39.8	39.1	54.0	14.9	200	269

NOTE: Average mode was not measured, because peak values were under the average limit.

Mode #1

18 GHz ~ 26.5 GHz

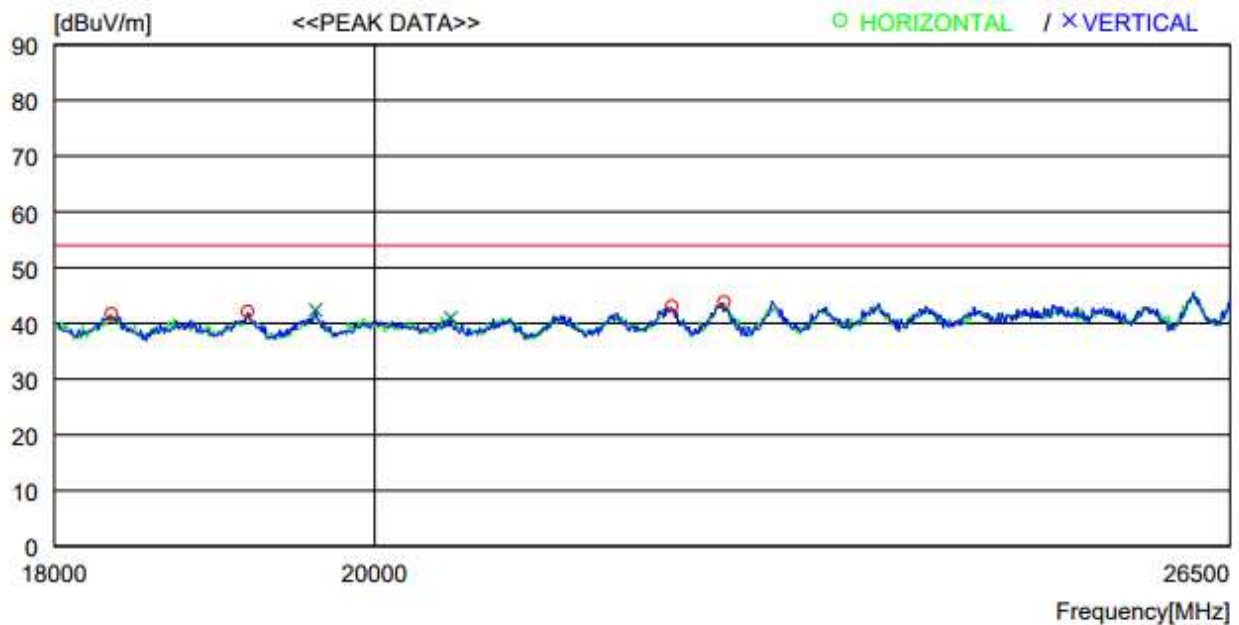
RADIATED EMISSION

Test Date :2022.09.28 17:21

Applicant : LG
 Model Name : AN-VC22PR
 Power Supply : AC 120 V / 60 Hz
 Test Mode : MODE#1

Test Engineer : LDB

Note :
 LIMIT : 18-26G AV



NOTE: Average mode was not measured, because Peak values were under the Average limit.

Mode #2

18 GHz ~ 26.5 GHz

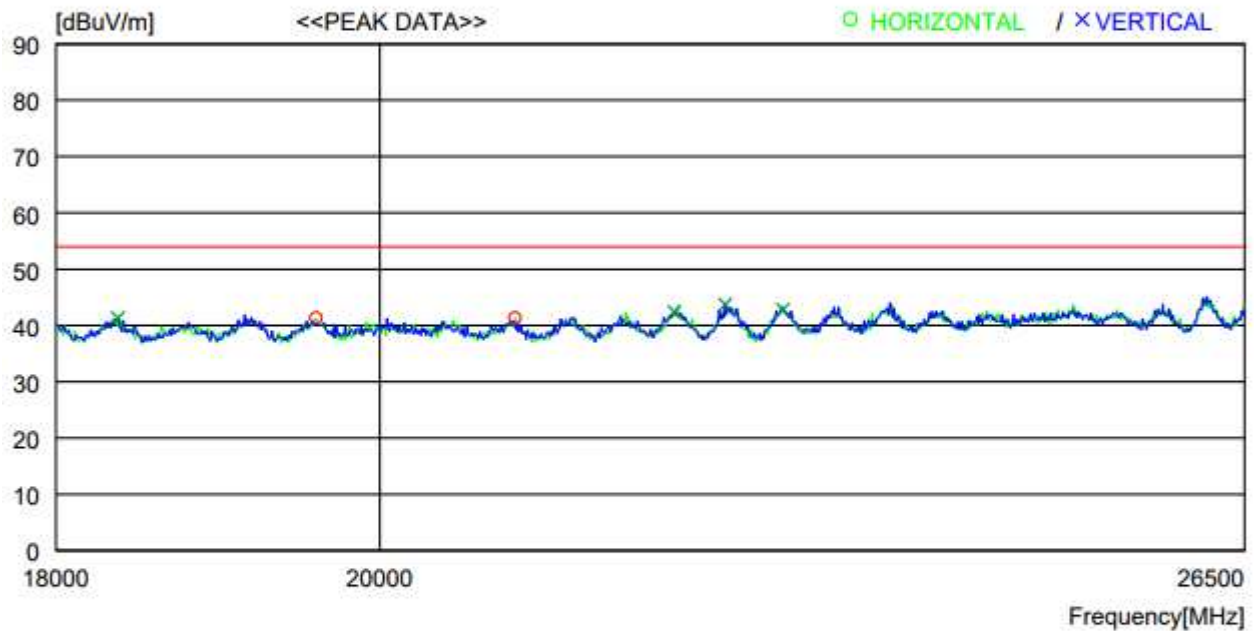
RADIATED EMISSION

Test Date :2022.09.28 17:24

Applicant : LG
 Model Name : AN-VC22PR
 Power Supply : AC 120 V / 60 Hz
 Test Mode : MODE#2

Test Engineer : LDB

Note :
 LIMIT : 18-26G AV



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]
----- Horizontal -----										
1	19589.500	49.0	37.5	11.3	56.5	41.3	54.0	12.7	100	0
2	20898.500	48.2	37.8	11.7	56.4	41.3	54.0	12.7	100	0
----- Vertical -----										
3	18365.500	50.2	37.6	11.0	57.5	41.3	54.0	12.7	100	359
4	22012.000	48.9	38.0	11.9	56.4	42.4	54.0	11.6	100	96
5	22377.500	49.2	38.2	12.0	55.7	43.7	54.0	10.3	100	340
6	22802.500	46.7	38.5	12.2	54.6	42.8	54.0	11.2	100	205

NOTE: Average mode was not measured, because Peak values were under the Average limit.

Mode #3

18 GHz ~ 26.5 GHz

RADIATED EMISSION

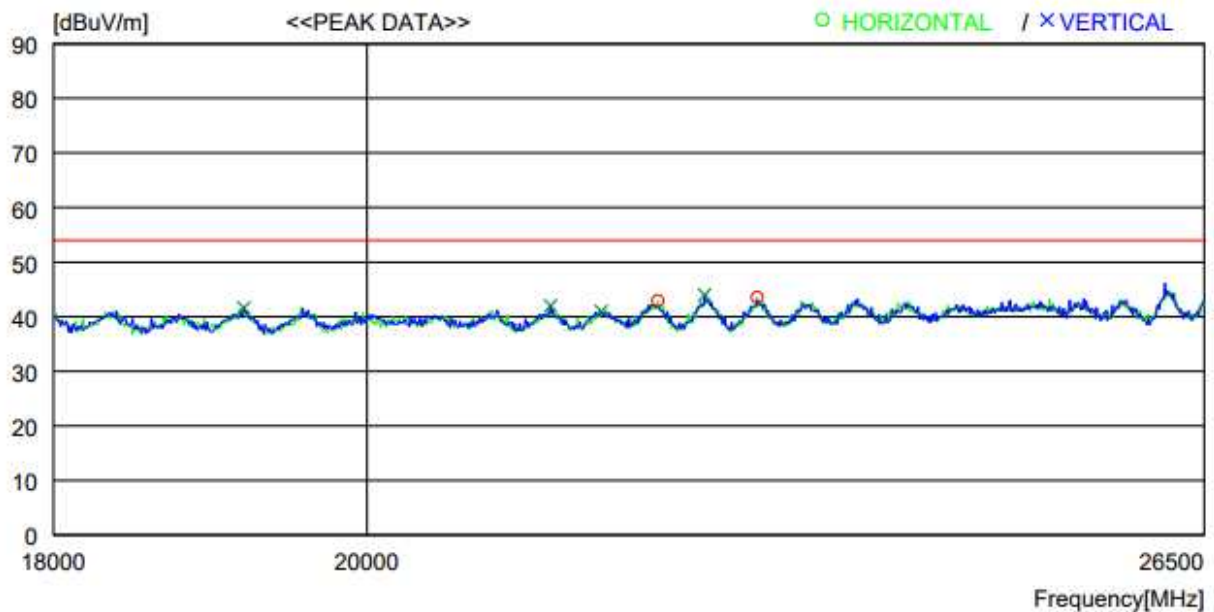
Test Date : 2022.09.28 17:29

Applicant : LG
 Model Name : AN-VC22PR
 Power Supply : AC 120 V / 60 Hz
 Test Mode : MODE#3

Test Engineer : LDB

Note :

LIMIT : 18-26G AV

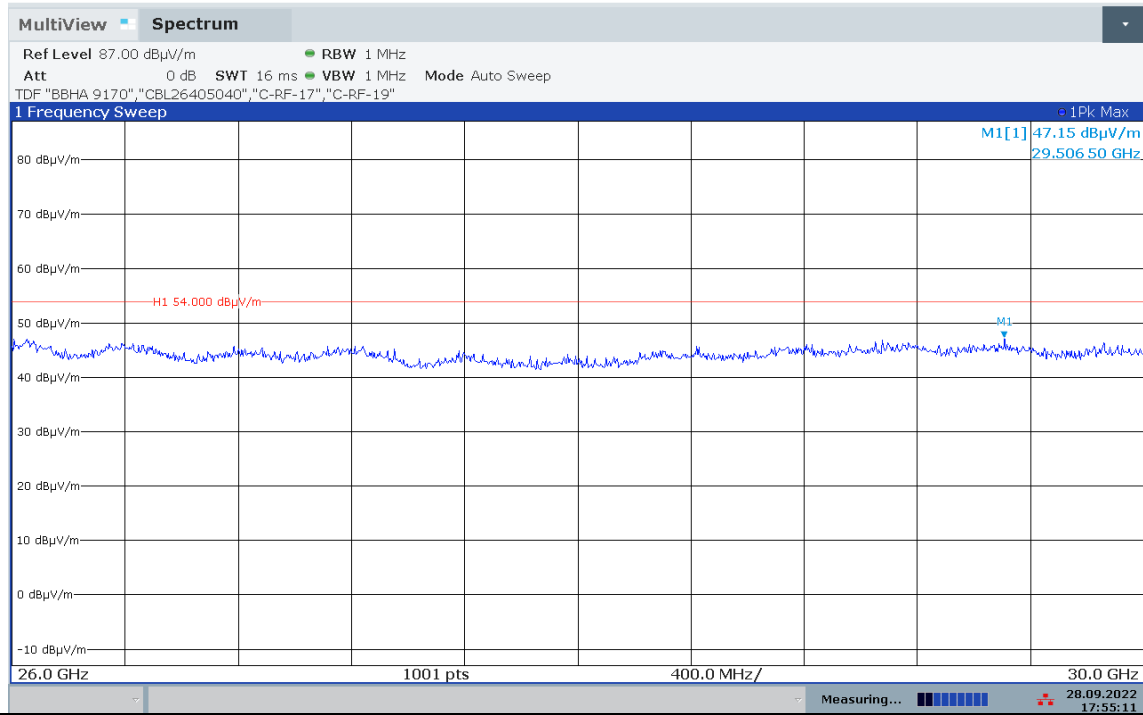


No.	FREQ [MHz]	READING [dBuV]	ANT PEAK FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	22054.500	49.4	38.0	11.9	56.4	42.9	54.0	11.1	100	50
2	22802.500	47.4	38.5	12.2	54.6	43.5	54.0	10.5	100	252
----- Vertical -----										
3	19190.000	49.7	37.6	11.2	56.9	41.6	54.0	12.4	100	359
4	21272.500	49.0	37.9	11.7	56.6	42.0	54.0	12	100	138
5	21638.000	48.0	37.9	11.8	56.7	41.0	54.0	13	100	359
6	22403.000	49.4	38.2	12.0	55.6	44.0	54.0	10	100	359

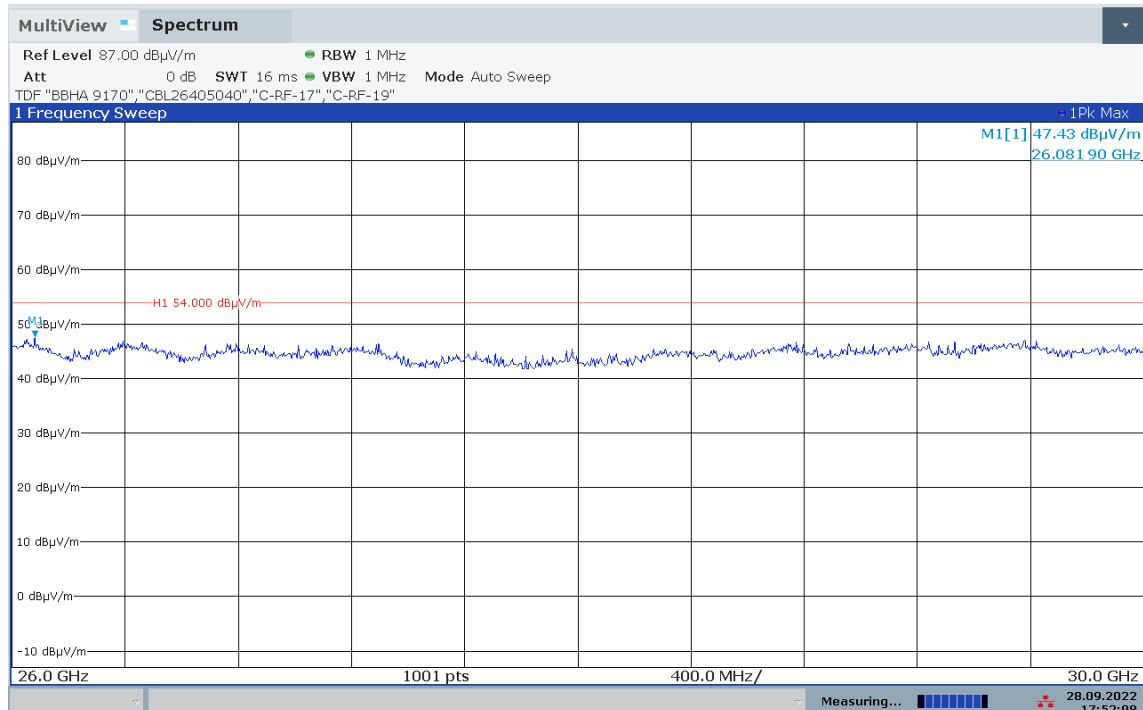
NOTE: Average mode was not measured, because Peak values were under the Average limit.

Mode #1

26.5 GHz ~ 30 GHz (Vertical)

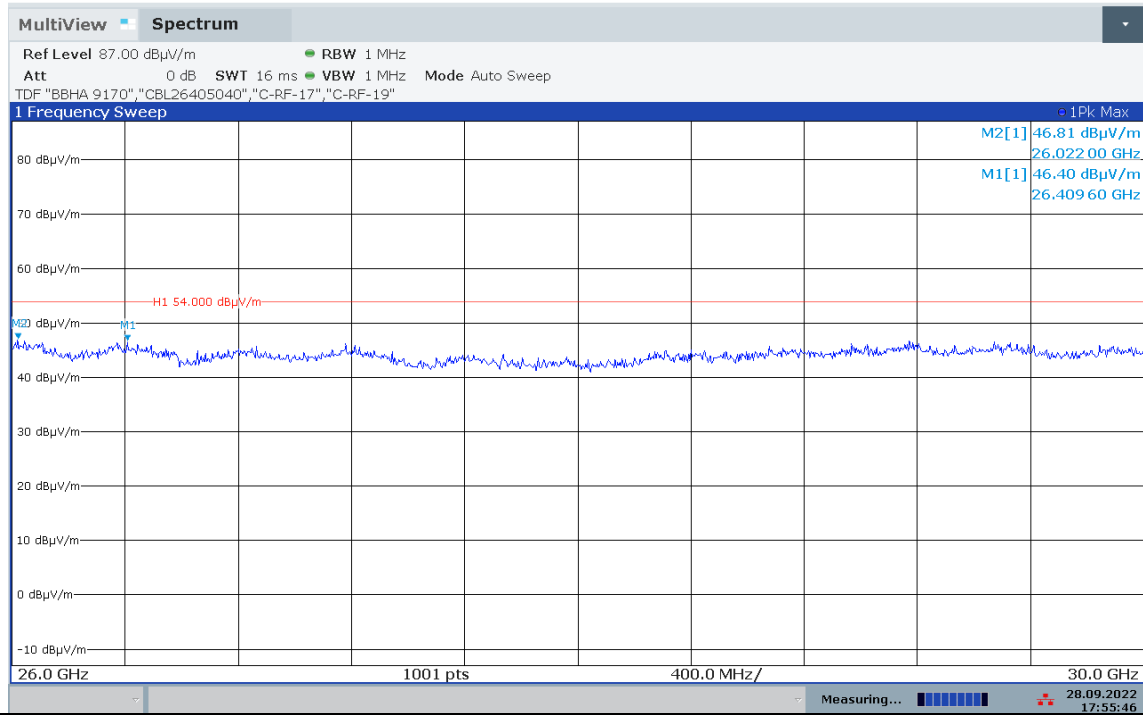


26.5 GHz ~ 30 GHz (Horizontal)

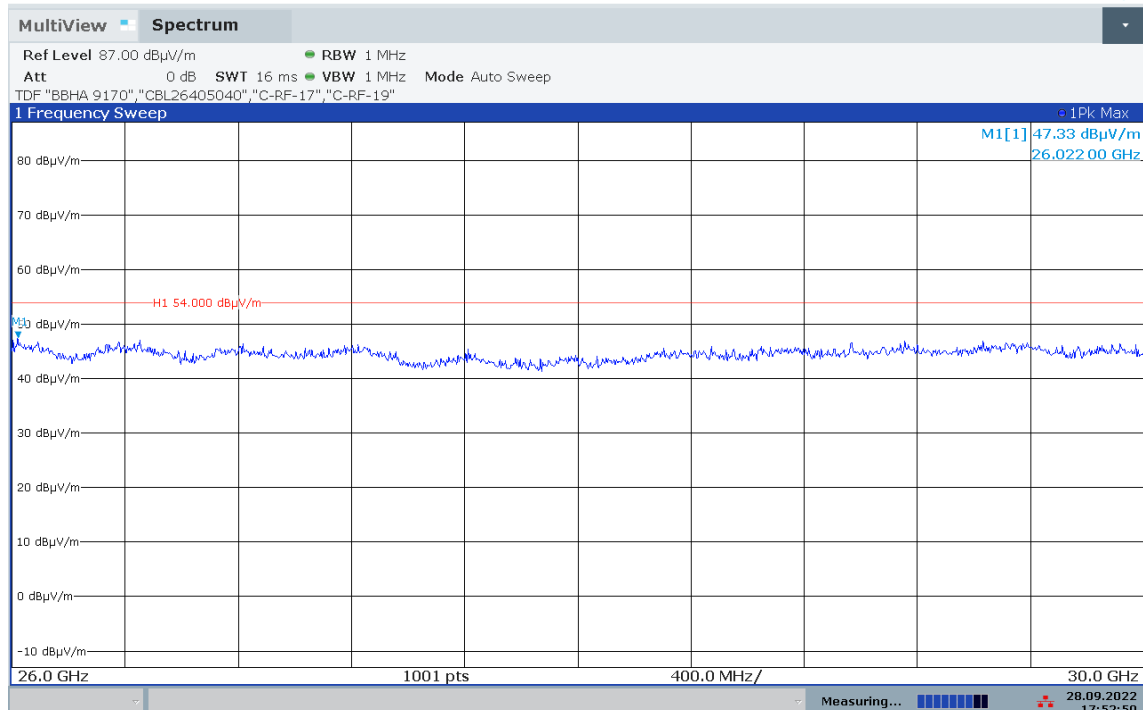


Mode #2

26.5 GHz ~ 30 GHz (Vertical)

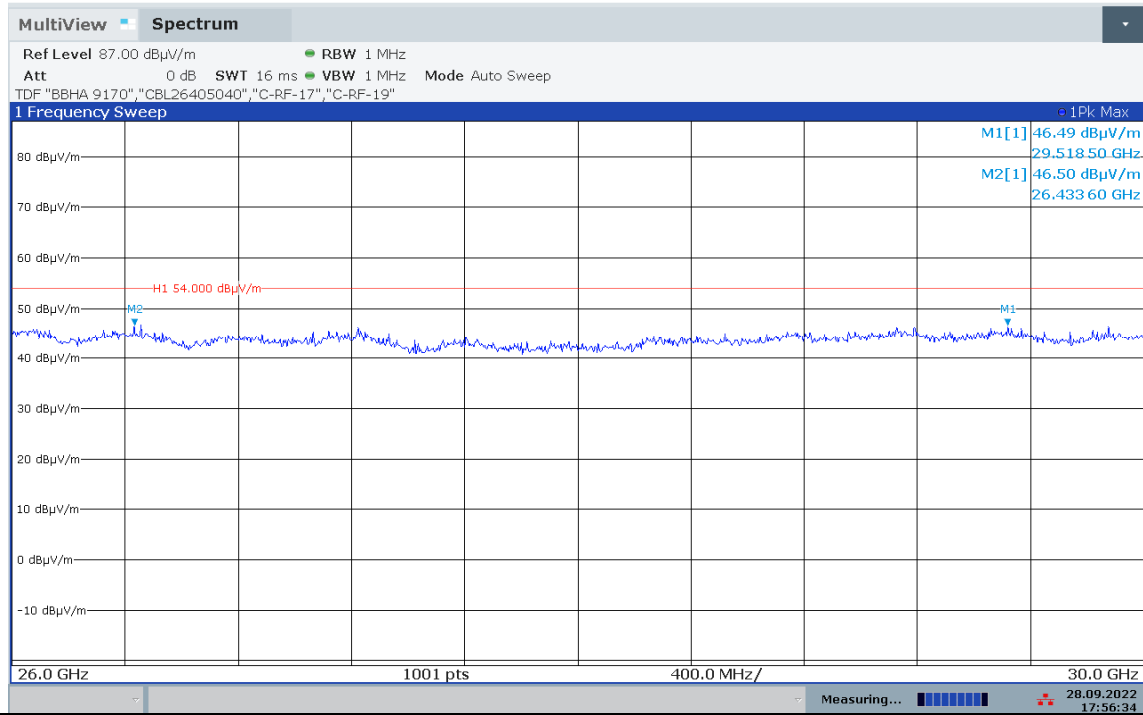


26.5 GHz ~ 30 GHz (Horizontal)

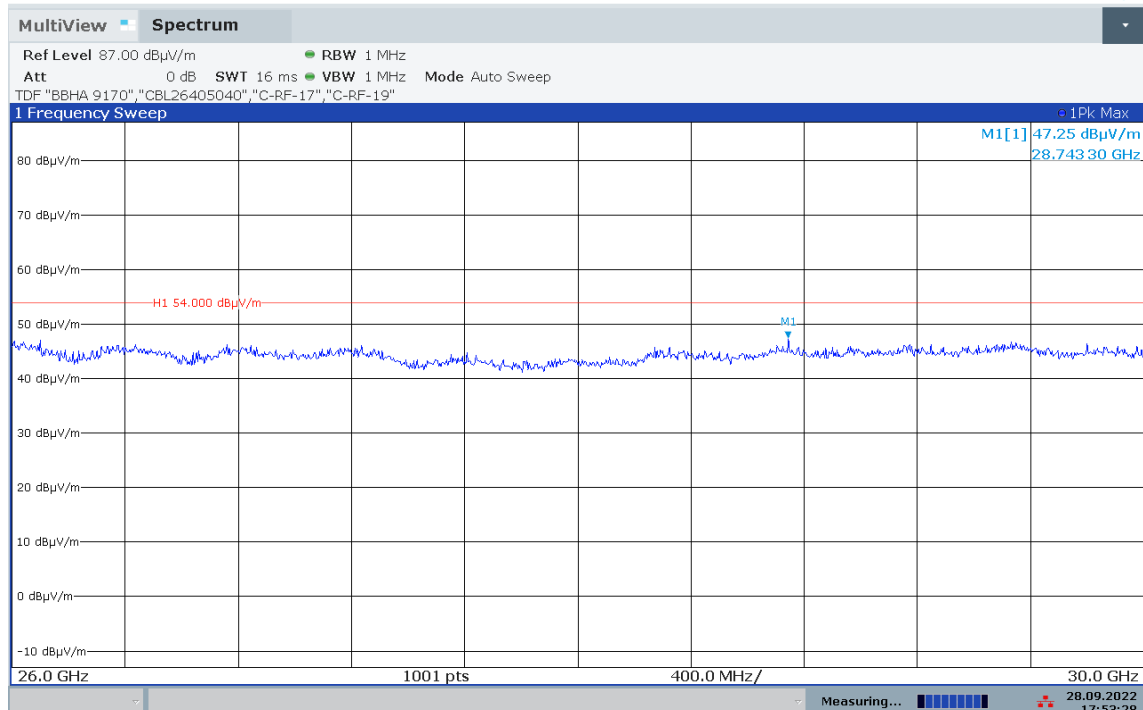


Mode #3

26.5 GHz ~ 30 GHz (Vertical)



26.5 GHz ~ 30 GHz (Horizontal)

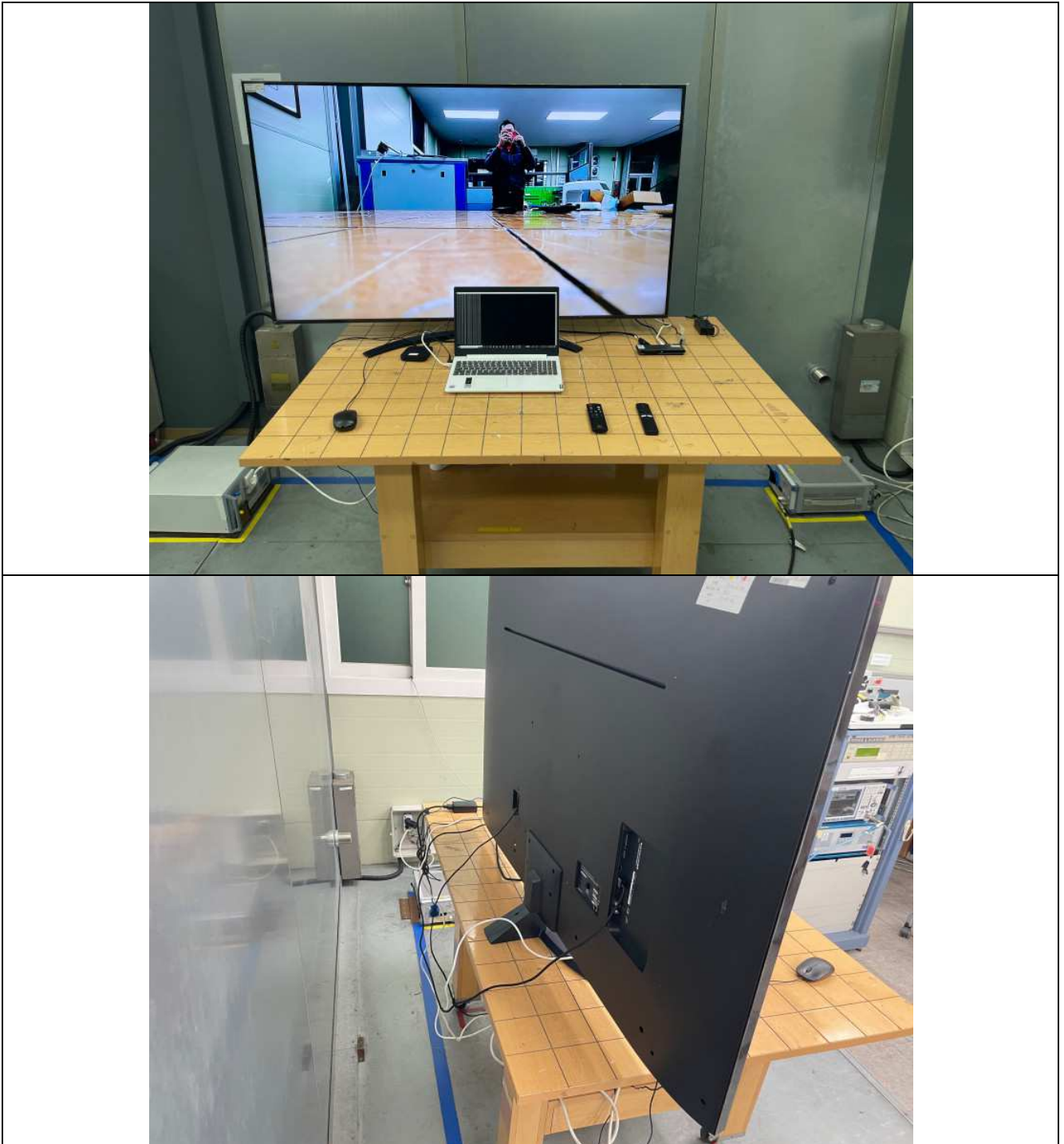


Appendix I - Test Instrumentation

Name of Equipment	Model Number	Manufacturer	Serial Number	Last Cal. (Interval)	USE
For EMISSION					
Test Receiver	ESR7	Rohde & Schwarz	101543	2022-07-15 (1Y)	■
EMI Test Receiver	ESW	Rohde & Schwarz	101197	2022-01-13 (1Y)	□
LISN	ENV4200	Rohde & Schwarz	100203	2022-01-14 (1Y)	□
LISN	ENV216	Rohde & Schwarz	100110	2022-01-13 (1Y)	■
LISN	LS16C	AFJ	16011403310	2022-07-15 (1Y)	■
LISN	NNLK8121	SchwarzBeck	8121-163	2022-07-15 (1Y)	□
Voltage Probe	TK9420	Schwarzbeck	9420-165	2022-01-14 (1Y)	□
Loop Antenna	HFH2-Z2	Rohde & Schwarz	100341	2021-05-14 (2Y)	□
8-Wire ISN CAT 3	CAT3 8158	Schwarzbeck	CAT3 8158 #70	2022-01-14 (1Y)	□
8-Wire ISN CAT 5	CAT5 8158	Schwarzbeck	CAT5 8158 #126	2022-01-14 (1Y)	□
8-Wire ISN CAT 6	NTFM 8158	Schwarzbeck	NTFM 8158 #95	2022-01-14 (1Y)	□
Test Receiver	ESU	Rohde & Schwarz	100303	2022-01-13 (1Y)	■
TRILog Broadband Antenna	VULB9163	Schwarzbeck	9163-799	2021-09-28 (2Y)	■
DOPPEL STEG HORN Antenna	HF 907	Rohde & Schwarz	102426	2021-10-21 (1Y)	■
Preamp (1-18) GHz	SCU 18D	Rohde & Schwarz	19006450	2022-04-15 (1Y)	■
Preamp 9 kHz-1 GHz	310N	Sonoma Instrument	344015	2022-01-13 (1Y)	■
Attenuators	6 dB	Rohde & Schwarz	272.4110.50	2022-01-13 (1Y)	■
Antenna Master	MA4000-EP	INNCO SYSTEM	4600814	N/A	■
Antenna Master	MA4000-XP-ET	INNCO SYSTEM	N/A	N/A	■
Turn Table	DT3000-3t	INNCO SYSTEM	1310814	N/A	■
CO3000 Controller	CO3000-4PORT	INNCO SYSTEM	CO3000/806/34130 814/L	N/A	■
CO3000 Controller	CO3000-4PORT	INNCO SYSTEM	CO3000/807/34130 814/L	N/A	■
Notch Filter	G318	MICRO-TRONICS	BRM50702	2021-11-01 (1Y)	□
Notch Filter	G319	MICRO-TRONICS	BRC50703	2021-11-01 (1Y)	□
Horn Antenna	BBHA 9170	Schwarzbeck	783	2021-10-22 (1Y)	■
PRE AMPLIFIER	CBL18265035	CERNEX	28706	2022-03-07 (1Y)	■
PRE AMPLIFIER	CBL26405040	CERNEX	28707	2022-03-07 (1Y)	■
Signal&Spectrum Analyzer	FSW 43	Rohde & Schwarz	100578	2022-04-19 (1Y)	■

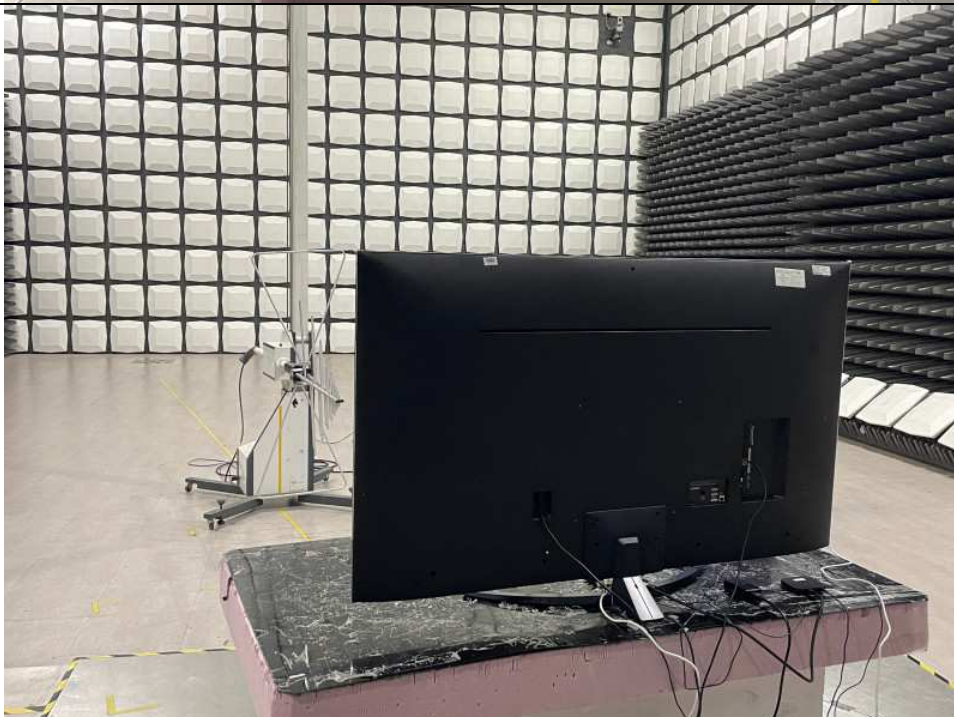
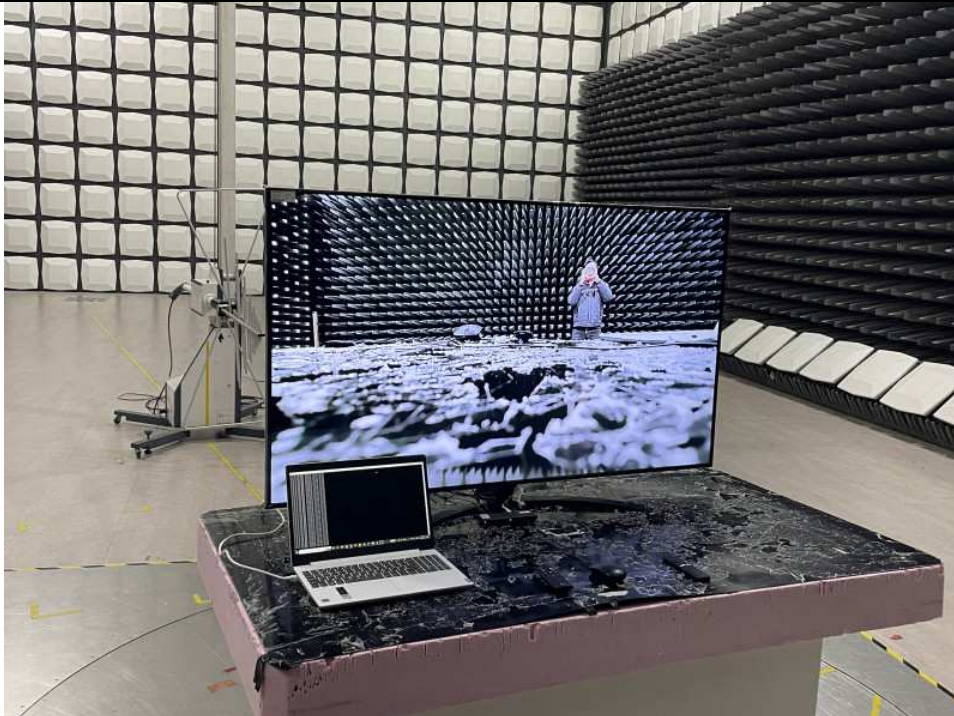
The above measuring equipment have been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

Appendix II - Test Setup Photos: AC Power Line Conducted Emission Test



Appendix III - Test Setup Photos: Radiated Emission Test

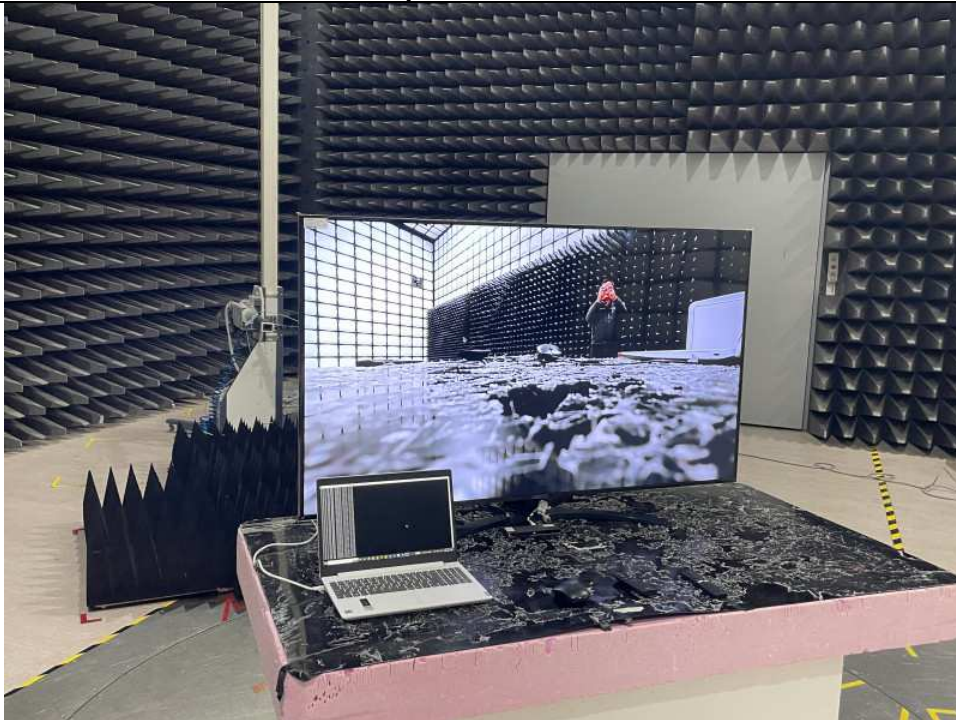
Test Setup for 30 MHz ~ 1 GHz



Test Setup for 1 GHz ~ 18 GHz

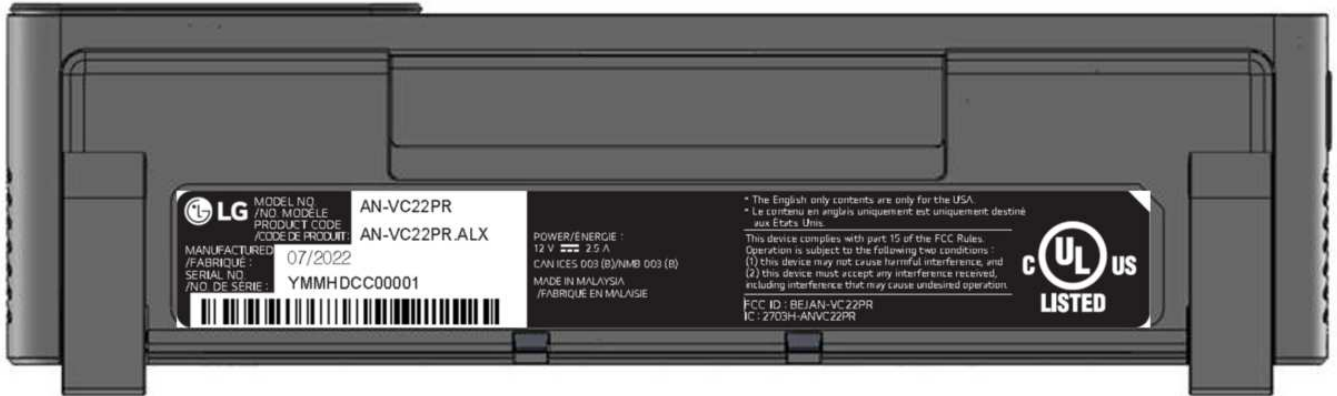


Test Setup for 18 GHz ~ 30 GHz



APPENDIX IV - IDENTIFICATION LABEL

Following label shall be affixed on the bottom side of the product.



APPENDIX V - PHOTOGRAPHS REPORT (EXTERNAL PHOTO)











APPENDIX VI - PHOTOGRAPHS REPORT (INTERNAL PHOTO)

