

FCC Part 15.247
RSS-247, ISSUE 3, August 2023
RSS-GEN, ISSUE 5, February 2021 Amendment 2
TEST REPORT

For

**FCC:BROWAN COMMUNICATIONS
INCORPORATION**

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IC: Browan Communications Inc.

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FCC ID: 2AAS9-MI14
IC: 26296-MI14

Report Type: Original Report	Product Type: Wi-Fi 6 AX3000 Dual-Radio Indoor Router
Report Producer : <u>Livy Chen</u>	
Report Number : <u>RXZ231124120RF03</u>	
Report Date : <u>2024-04-02</u>	
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Revision History

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1 General Information

1.1 Product Description for Equipment under Test (EUT)

Applicant	FCC: BROWAN COMMUNICATIONS INCORPORATION No.15-1, Zhonghua Rd., Hsinchu Industrial Park, Hukou, Hsinchu Hsien, Taiwan, 303
	IC: Browan Communications Inc. No.15-1, Zhonghua Rd., Hsinchu Industrial Park, Hukou Township, Hsinchu County, 303035 Taiwan
Brand(Trade) Name	PRISM
Product (Equipment) / PMN	Wi-Fi 6 AX3000 Dual-Radio Indoor Router
Main Model Name / HVIN	MI14
Series Model Name	N/A
Frequency Range	IEEE 802.11b/g/n HT20/ax HE20 Mode: 2412 ~ 2462 MHz IEEE 802.11n HT40/ax HE40 Mode: 2422 ~ 2452 MHz
Maximum Conducted Peak Output Power	IEEE 802.11b Mode: 26.69 dBm IEEE 802.11g Mode: 25.92 dBm IEEE 802.11n HT20 Mode: 25.69 dBm IEEE 802.11n HT40 Mode: 23.17 dBm IEEE 802.11ax HE20 Mode: 27.03 dBm IEEE 802.11ax HE40 Mode: 23.71 dBm
Modulation Technique	IEEE 802.11b Mode: DSSS IEEE 802.11g Mode: OFDM IEEE 802.11n HT20 Mode: OFDM IEEE 802.11n HT40 Mode: OFDM IEEE 802.11ax HE20 Mode: OFDMA IEEE 802.11ax HE40 Mode: OFDMA
Power Operation (Voltage Range)	☐ AC 120V/60Hz ☐ Adapter I/P: ☐ By AC Power Cord ☒ PoE: DC 56V
Received Date	2023/11/24
Date of Test	2023/12/14 ~ 2024/03/07

*All measurement and test data in this report was gathered from production sample serial number: RXZ231124120-1 (Assigned by BACL, New Taipei Laboratory).

1.2 Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commissions rules and RSS-247 Issue 3, August 2023 and RSS-GEN Issue 5, February 2021 Amendment 2 of the Innovation, Science and Economic Development Canada.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices. And RSS-247 Issue 3, August 2023 and RSS-GEN Issue 5, February 2021 Amendment 2 of the Innovation, Science and Economic Development Canada.

KDB 558074 D01 15.247 Meas Guidance v05r02

1.4 Statement

Decision Rule: No, (The test results do not include MU judgment)

It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (New Taipei Laboratory).

Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

The determination of the test results does not require consideration of the uncertainty of the measurement, unless the assessment is required by customer agreement, regulation or standard document specification.

Bay Area Compliance Laboratories Corp. (New Taipei Laboratory) is not responsible for the authenticity of the information provided by the applicant that affects the test results.

1.5 Measurement Uncertainty

Parameter		Uncertainty
AC Mains		+/- 2.53 dB
RF output power, conducted		+/- 3.74 dB
Power Spectral Density, conducted		+/- 0.58 dB
Occupied Bandwidth		+/- 0.09 %
Unwanted Emissions, conducted		+/- 1.13 dB
Emissions, radiated	9 kHz~30 MHz	+/- 3.54 dB
	30 MHz~1 GHz	+/- 4.99 dB
	1 GHz~18 GHz	+/- 7.56 dB
	18 GHz~40 GHz	+/- 5.06 dB
Temperature		+/- 0.79 °C
Humidity		+/- 0.44 %

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

1.6 Environmental Conditions

Test Site	Test Date	Temperature (°C)	Relative Humidity (%)	ATM Pressure (hPa)	Test Engineer
AC Line Conducted Emissions	2023/12/25	16.3	42	1010	Jomg
Radiation Spurious Emissions	2023/12/14~2024/3/7	19.6~23.7	66~70	1010	Aaron
Conducted Spurious Emissions	2023/12/22	23.1	51	1010	Jing
Emission Bandwidth	2023/12/22	23.1	51	1010	Jing
Maximum Output Power	2023/12/22	23.1	51	1010	Jing
100 kHz Bandwidth of Frequency Band Edge	2023/12/22	23.1	51	1010	Jim
Power Spectral Density	2023/12/22	23.1	51	1010	Jing

1.7 Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (New Taipei Laboratory) to collect test data is located on

☒ 70, Lane 169, Sec. 2, Datong Road, Xizhi Dist., New Taipei City 221, Taiwan, R.O.C.

Bay Area Compliance Laboratories Corp. (New Taipei Laboratory) is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 3732) and the FCC designation No.TW3732 under the Mutual Recognition Agreement (MRA) in FCC Test.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: TW3732.

2 System Test Configuration

2.1 Description of Test Configuration

For WIFI 2.4GHz mode, there are totally 11 channels.

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	7	2442
2	2417	8	2447
3	2422	9	2452
4	2427	10	2457
5	2432	11	2462
6	2437	/	/

For 802.11 b/g/n HT20/ax HE20 Modes were tested with channel 1, 6 and 11.

For 802.11n HT40/ax HE40 Mode were tested with channel 3, 6 and 9.

2.2 EUT Exercise Software

The test software was used “QSPR v5.0-00202”

The system was configured for testing in engineering mode, which was provided by Applicant.

Engineering Mode		Power Level Setting MIMO(CDD)					
Test Frequency		Low		Middle		High	
		Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1
Mode MIMO(CDD)	802.11b Mode	19	19	19	19	19	19
	802.11g Mode	15	15	15	15	15	15
	802.11n HT20 Mode	15	15	15	15	15	15
	802.11n HT40 Mode	12	12	12	12	12	12
	802.11ax HE20 Mode	14	14	15	15	15	15
	802.11ax HE40 Mode	12	12	12	12	12	12

SISO mode and MIMO mode have the same power level setting and base on output power testing,

MIMO mode power than SISO mode large, MIMO mode was selected for full testing.

The device supports MIMO (CDD) at all modes.

The worst case data rates are as follows:

802.11b: 1Mbps

802.11g: 6Mbps

802.11n HT20: MCS0

802.11n HT40: MCS0

802.11ax HE20: MCS0

802.11ax HE40: MCS0

2.3 Equipment Modifications

No modification was made to the EUT.

2.4 Support Equipment List and Details

Description	Manufacturer	Model Number
POE	AELTA	ADH-45AR B
NB	DELL	E6410

2.5 External Cable List and Details

Description	Manufacturer	Model Number
RJ-45 Cable	BACL	1m
RJ-45 Cable	BACL	2m

2.6 Test Mode

Full System (model: MI14) for all test item.

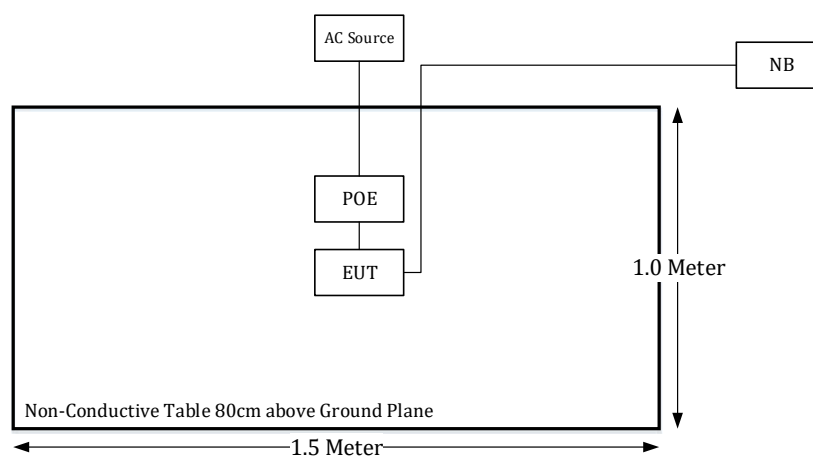
The device 802.11ax mode only supports full RU, not partial RU, test with full RU.

2.7 Block Diagram of Test Setup

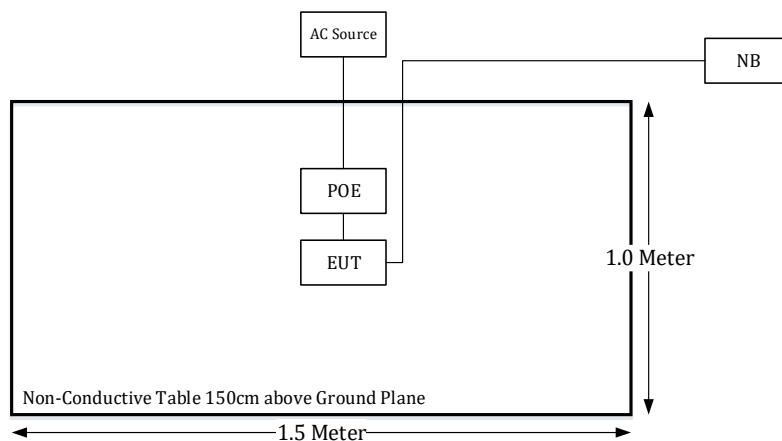
See test photographs attached in setup photos for the actual connections between EUT and support equipment.

Radiation:

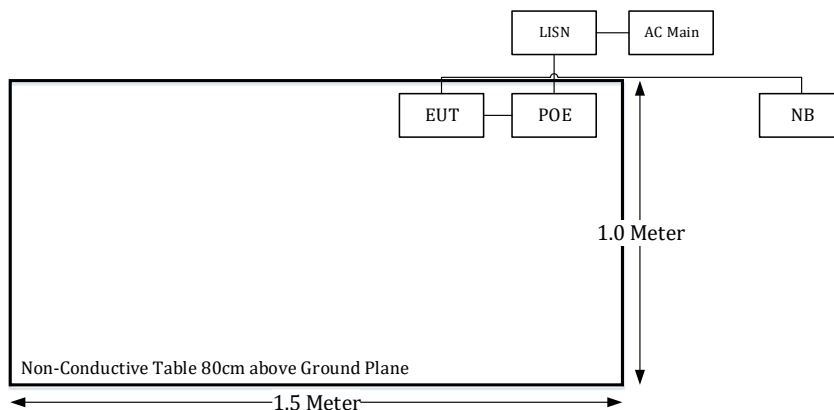
Below 1GHz



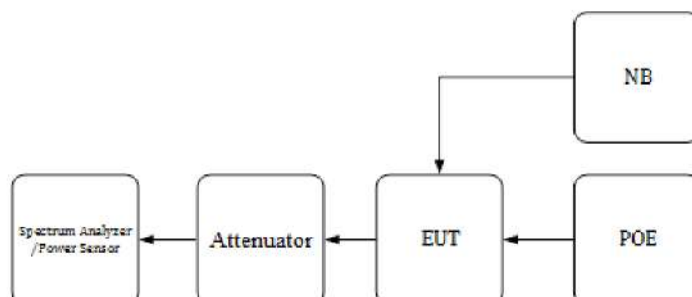
Above 1GHz:



Conduction:



Conducted:



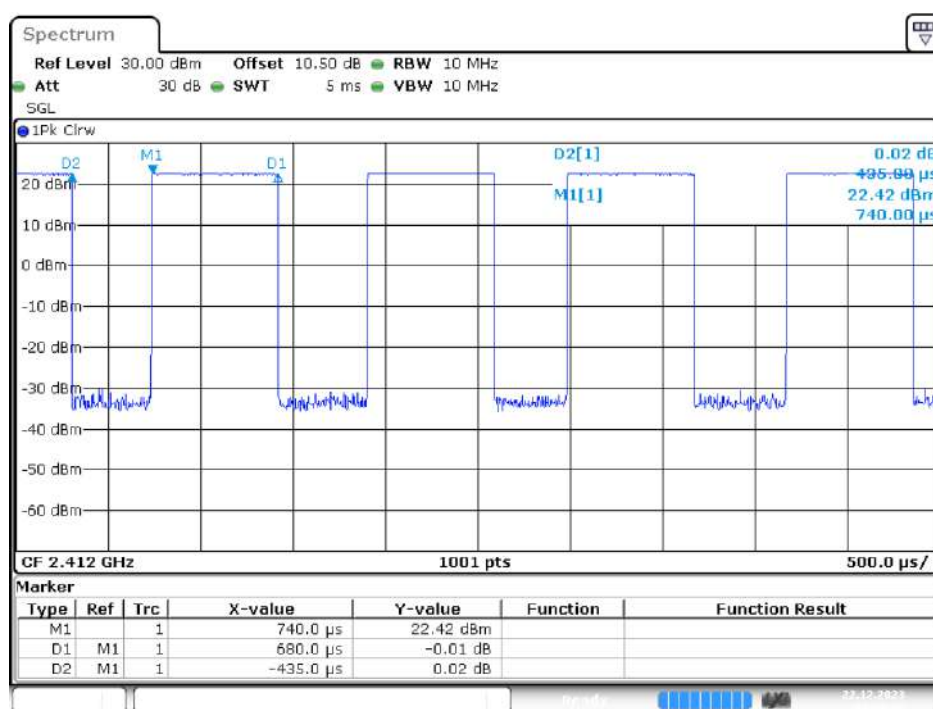
2.8 Duty Cycle

The duty cycle as below:

Radio Mode	On Time (ms)	Off Time (ms)	Duty Cycle (%)	1/T (kHz)	VBW Setting (kHz)
802.11b	0.68	0.435	61	1.47	2
802.11g	1.955	0.17	92	0.51	1
802.11n 20	5.38	0.52	91	0.19	0.2
802.11n 40	5.38	0.50	91	0.19	0.2
802.11ax 20	5.36	0.60	90	0.19	0.2
802.11ax 40	5.38	0.56	91	0.19	0.2

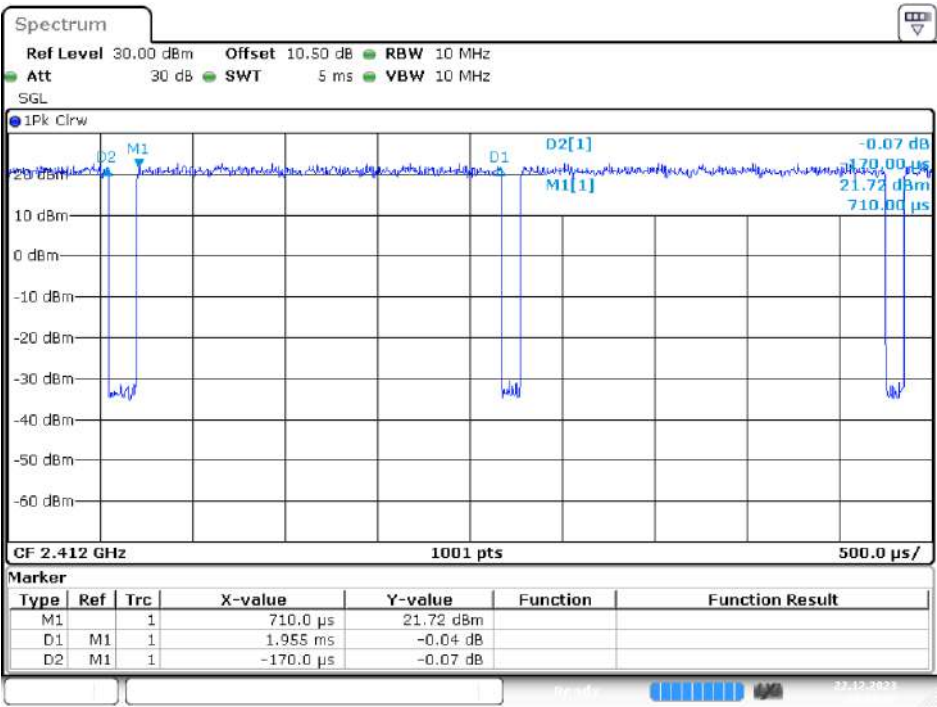
Please refer to the following plots.

B Mode



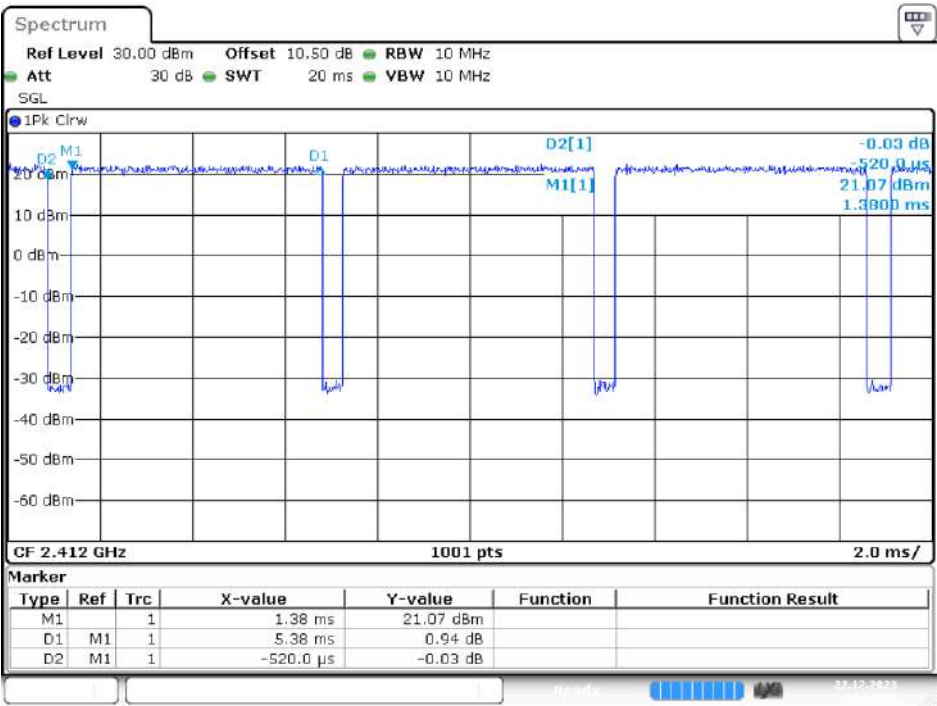
Date: 22.DEC.2023 09:50:27

G Mode



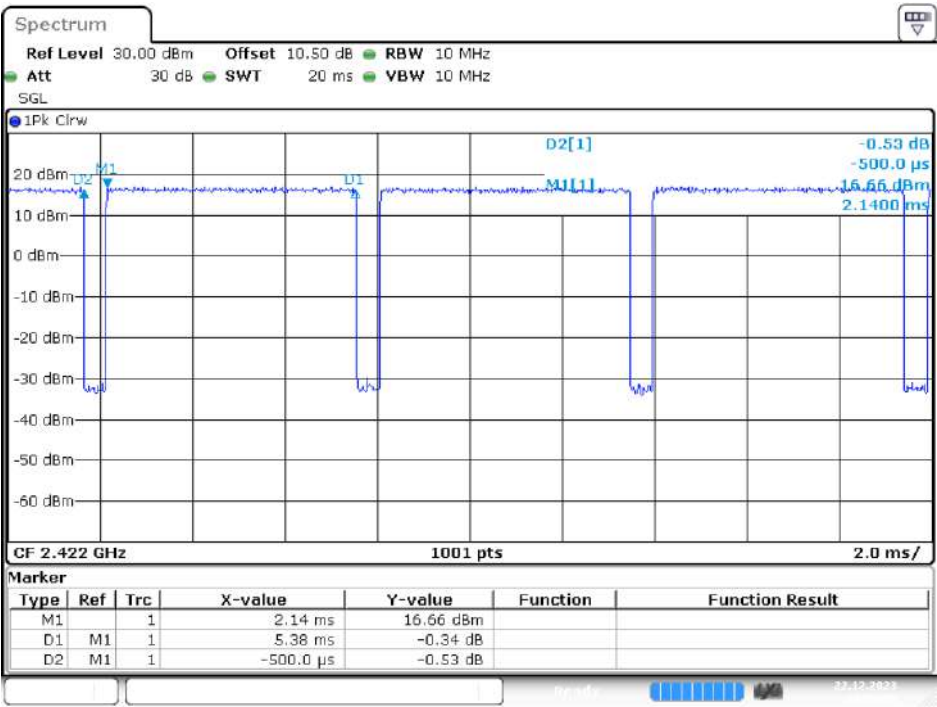
Date: 22.DEC.2023 14:19:27

N20 Mode



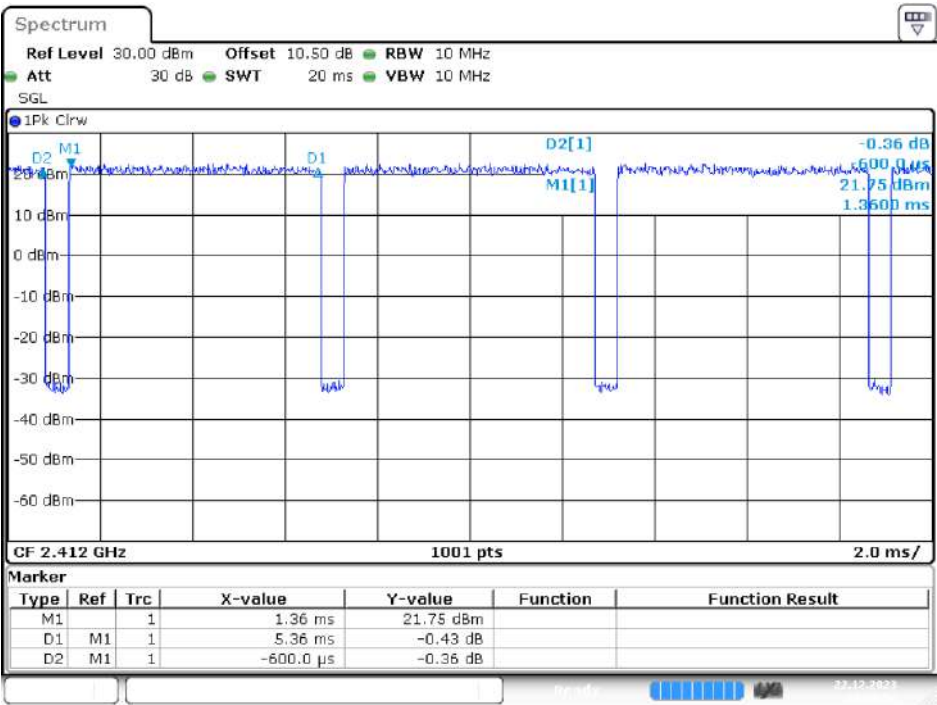
Date: 22.DEC.2023 14:23:53

N40 Mode



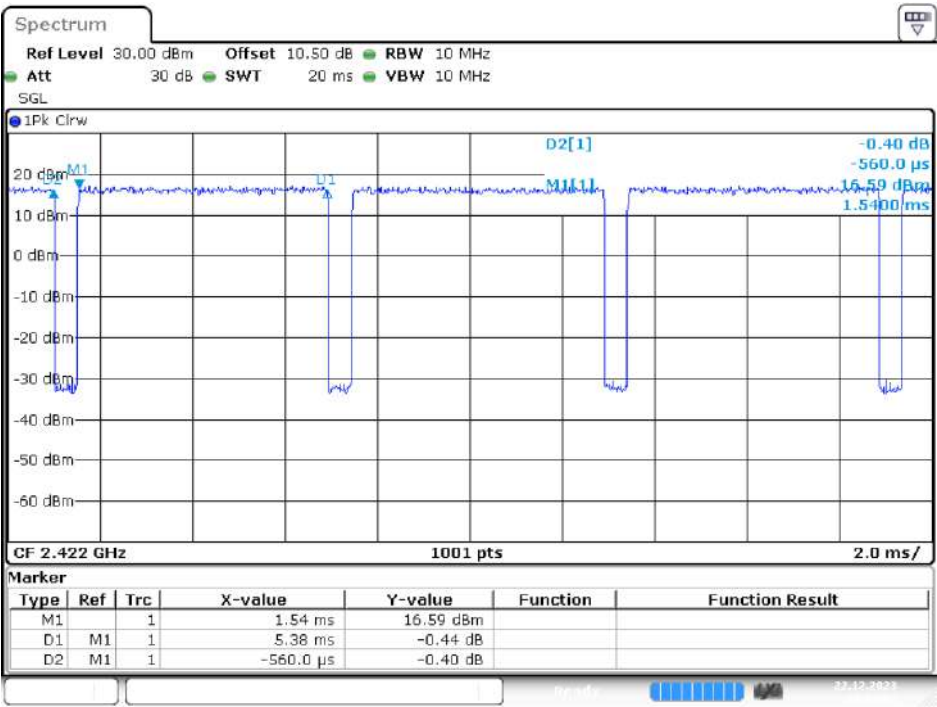
Date: 22.DEC.2023 14:25:29

AX20 Mode



Date: 22.DEC.2023 14:28:53

AX40 Mode



Date: 22.DEC.2023 14:31:02

3 Summary of Test Results

Rules	Description of Test	Results
FCC §15.247(i), §1.1307(b)(3)	RF Exposure	Compliance
RSS-102 §4	Exposure Limit	Compliance
FCC §15.203 RSS-Gen §6.8	Antenna Requirement	Compliance
FCC §15.207(a) RSS-Gen §8.8	AC Line Conducted Emissions	Compliance
FCC §15.205, §15.209, §15.247(d) RSS-247 §5.5 RSS-Gen §8.9 RSS-Gen §8.10	Spurious Emissions	Compliance
FCC §15.247(a)(2) RSS-247 §5.2(a) RSS-Gen §6.7	Emission Bandwidth	Compliance
FCC §15.247(b)(3) RSS-247 §5.4(d)	Maximum Peak Output Power	Compliance
FCC §15.247(d) RSS-247 §5.5	100 kHz Bandwidth of Frequency Band Edge	Compliance
FCC §15.247(e) RSS-247 §5.2(b)	Power Spectral Density	Compliance

4 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due Date
AC Line Conduction Room (CON-A)					
LISN	Rohde & Schwarz	ENV216	101612	2023/2/2	2024/2/1
EMI Test Receiver	Rohde & Schwarz	ESW8	100947	2023/5/22	2024/5/21
Pulse Limiter	Rohde & Schwarz	ESH3Z2	TXZEM104	2023/5/18	2024/5/17
RF Cable	EMEC	EM-CB5D	001	2023/6/6	2024/6/5
Software	AUDIX	E3	V9.150826k	N.C.R	N.C.R
Radiation Room (966-A)					
Active Loop Antenna	ETS-Lindgren	6502	35796	2023/3/23	2024/3/22
Bilog Antenna with 6 dB Attenuator	SUNOL SCIENCES & MINI-CIRCUITS	JB6/UNAT-6+	A050115/1554 2_01	2023/1/31	2024/1/30
				2024/1/19	2025/1/17
Horn Antenna	EMCO	SAS-571	1020	2023/5/18	2024/5/17
Horn Antenna	ETS-Lindgren	3116	62638	2023/8/25	2024/8/24
Preamplifier	Sonoma	310N	130602	2023/6/16	2024/6/15
Preamplifier	Channel	ERA-100M-18G-01D1748	EC2300051	2023/04/1	2024/03/31
Preamplifier	A.H. Systems	PAM-1840VH	174	2023/3/24	2024/3/23
Spectrum Analyzer	Rohde & Schwarz	FSV40	101939	2023/3/24	2024/3/23
EMI Test Receiver	Rohde & Schwarz	ESR3	102099	2023/6/16	2024/6/15
Micro flex Cable	UTIFLEX	UFB197C-1-2362-70U-70U	225757-001	2023/1/24	2024/1/23
				2024/1/23	2025/1/21
Coaxial Cable	COMMATE	PEWC	8Dr	2022/12/24	2023/12/23
				2023/12/23	2024/12/22
Coaxial Cable	UTIFLEX	UFB311A-Q-1440-300300	220490-006	2023/1/24	2024/1/23
				2024/1/23	2025/1/21
Coaxial Cable	JUNFLON	J12J102248-00-B-5	AUG-07-15-044	2022/12/24	2023/12/23
				2023/12/23	2024/12/22
Cable	EMC	EMC105-SM-SM-10000	201003	2023/1/24	2024/1/23
				2024/1/23	2025/1/21
Coaxial Cable	ROSNOL	K1K50-UP0264-K1K50-450CM	160309-1	2023/1/24	2024/1/23
				2024/1/23	2025/1/21
Coaxial Cable	ROSNOL	K1K50-UP0264-K1K50-50CM	15120-1	2023/2/2	2024/2/1
				2024/1/23	2025/1/21
Band-stop filter	Woken	STI15-9831	STI15-9831-1	2023/10/20	2024/10/19
High-pass filter	XINGBOKEJI	XBLBQ-GTA54	200108-3-2	2023/10/20	2024/10/19
Software	AUDIX	E3	18621a	N.C.R	N.C.R
Conducted Room					
Spectrum Analyzer	Rohde & Schwarz	FSV40	101204	2023/5/30	2024/5/28
Cable	UTIFLEX	UFA210A	9435	2023/10/2	2024/10/1
Power Sensor	Boonton	RTP5006	11037	2023/5/23	2024/5/21
Attenuator	MCL	BW-S10W5+	1419	2023/2/1	2024/1/31

***Statement of Traceability:** BACL Corp. attests that all of the calibrations on the equipment items listed above were traceable to the SI System of Units via the R.O.C. Center for Measurement Standards of the Electronics Testing Center, Taiwan (ETC) or to another internationally recognized National Metrology Institute (NMI), and were compliant with the current Taiwan Accreditation Foundation (TAF) requirements.

5 FCC §15.247(i), §1.1307(b)(3) - RF Exposure

5.1 Applicable Standard

According to subpart 15.247(i) and subpart §1.1307(b)(3), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

For single RF sources (i.e., any single fixed RF source, mobile device, or portable device, as defined in paragraph (b)(2) of this section): A single RF source is exempt if:

(A) The available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(ii)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(ii)(A);

(B) Or the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

(C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	$1,920 R^2$
1.34-30	$3,450 R^2/f^2$
30-300	$3.83 R^2$
300-1,500	$0.0128 R^2 f$
1,500-100,000	$19.2 R^2$

5.2 RF Exposure Evaluation Result

Project info

Band	Freq (MHz)	Tunr-up Power (dBm)	Ant Gain (dBi)	Distances (mm)	Tunr-up Power (mW)	ERP (dBm)	ERP (mW)
WIFI 2.4GHz	2412	27.5	5.24	200	562.34	30.59	1145.51
WIFI 5GHz	5180	21	5.53	200	125.89	24.38	274.16

§ 1.1307(b)(3)(i)(A) and (C) method is not applicable.

§ 1.1307(b)(3)(i)(B)

Band	Freq (MHz)	Pth (mW)	X	ERP 20cm (mW)	Result Option B
WIFI 2.4GHz	2412	3060.00	1.899	3060	exempt
WIFI 5GHz	5180	3060.00	2.065	3060	exempt

The available maximum time-averaged power or effective radiated power (ERP), whichever is greater

This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive).

The WIFI 2.4GHz and WIFI 5GHz can transmit simultaneously:

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

$$= P_{WIFI\ 2.4GHz}/P_{th} + P_{WIFI\ 5GHz}/P_{th} = 1145.51/3060 + 274.16/3060 = 0.464 < 1.0$$

Result: The device compliant the SAR-Based Exemption at 20cm distances.

6 RSS-102 §4 – EXPOSURE LIMIT

6.1 Applicable Standard

According to RSS-102 §4:

For the purpose of this standard, Industry Canada has adopted the SAR and RF field strength limits established in Health Canada's RF exposure guideline, Safety Code 6.

Table 4: RF Field Strength Limits for Devices Used by the General Public (Uncontrolled Environment)				
Frequency Range (MHz)	Electric Field (V/m rms)	Magnetic Field (A/m rms)	Power Density (W/m ²)	Reference Period (minutes)
0.003-10 ²¹	83	90	-	Instantaneous*
0.1-10	-	0.73/ f	-	6**
1.1-10	87/ f ^{0.5}	-	-	6**
10-20	27.46	0.0728	2	6
20-48	58.07/ f ^{0.25}	0.1540/ f ^{0.25}	8.944/ f ^{0.5}	6
48-300	22.06	0.05852	1.291	6
300-6000	3.142 f ^{0.3417}	0.008335 f ^{0.3417}	0.02619 f ^{0.6834}	6
6000-15000	61.4	0.163	10	6
15000-150000	61.4	0.163	10	616000/ f ^{1.2}
150000-300000	0.158 f ^{0.5}	4.21 x 10 ⁻⁴ f ^{0.5}	6.67 x 10 ⁻⁵ f	616000/ f ^{1.2}
Note: f is frequency in MHz. * Based on nerve stimulation (NS). ** Based on specific absorption rate (SAR).				

Calculated Formulary:

$S = PG/4 \pi R^2$ = power density (in appropriate units, e.g. W/m²);

P = power input to the antenna (in appropriate units, e.g., W);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., m);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,j}} \leq 1$$

6.2 RF Exposure Evaluation Result

Mode	Frequency Range (MHz)	Antenna Gain		Tune-up Power		Distances (mm)	Power Density (W/m ²)	RF Exp. Limit (W/m ²)
		(dBi)	(numeric)	(dBm)	(W)			
WIFI 2.4GHz	2412-2462	5.24	3.342	27.5	0.562	200	3.7388	5.37
WIFI 5GHz	5180-5825	5.53	3.573	21	0.126	200	0.8948	9.05

The WIFI 2.4GHz and WIFI 5GHz can transmit simultaneously.

Simultaneous transmitting consideration (worst case):

The ratio= $MPE_{BT}/limit + MPE_{Wi-Fi}/limit = 3.7388/5.37 + 0.8948/9.05 = 0.795 < 1.0$

So simultaneous exposure is compliant.

Result: The device compliant the RF Exposure at 20 cm distance.

7 FCC §15.203 & RSS-GEN §6.8– Antenna Requirements

7.1 Applicable Standard

According to § 15.203,

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited.

According to RSS-Gen 6.8:

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list. For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below).

When measurements at the antenna port are used to determine the RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer.

The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested.

For licence-exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location:

This radio transmitter [enter the device's ISCED certification number] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type

7.2 Antenna Information

Manufacturer	Model	Type	Antenna Gain	Impedance
HLTRONICS(KUNSHAN)CO.LTD.	Q-2425-05FI	FPC	Antenna 0: 5.05 dBi Antenna 1: 5.24 dBi	50Ω

The antenna is permanently connected to the EUT.

Result: Compliance

8 FCC §15.207(a) & RSS-GEN §8.8– AC Line Conducted Emissions

8.1 Applicable Standard

According to §15.207

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequencies ranges.

According to RSS-GEN §8.8

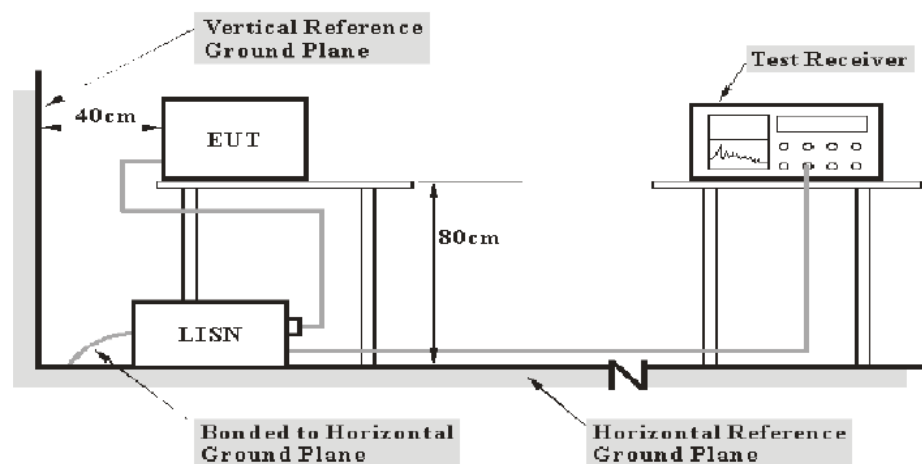
Unless stated otherwise in the applicable RSS, for radio apparatus that are designed to be connected to the public utility AC power network, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the range 150 kHz to 30 MHz shall not exceed the limits in table 4, as measured using a 50 μ H / 50 Ω line impedance stabilization network. This requirement applies for the radio frequency voltage measured between each power line and the ground terminal of each AC power-line mains cable of the EUT.

For an EUT that connects to the AC power lines indirectly, through another device, the requirement for compliance with the limits in table 4 shall apply at the terminals of the AC power-line mains cable of a representative support device, while it provides power to the EUT. The lower limit applies at the boundary between the frequency ranges. The device used to power the EUT shall be representative of typical applications.

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56 ^{Note 1}	56 to 46 ^{Note 1}
0.5-5	56	46
5-30	60	50

Note 1: Decreases with the logarithm of the frequency.

8.2 EUT Setup



Note: 1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 and RSS-GEN limits.

8.3 EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150kHz to 30MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations

Frequency Range	IF B/W
150kHz – 30MHz	9kHz

8.4 Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

8.5 Corrected Factor & Over Limit Calculation

The factor is calculated by adding LISN/ISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation. The basic equation is as follows:

$$\text{Factor} = \text{LISN VDF} + \text{Cable Loss} + \text{Transient Limiter Attenuation}$$

The “Over Limit” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an over limit of -7 dB means the emission is 7 dB below the limit. The equation for Over Limit calculation is as follows:

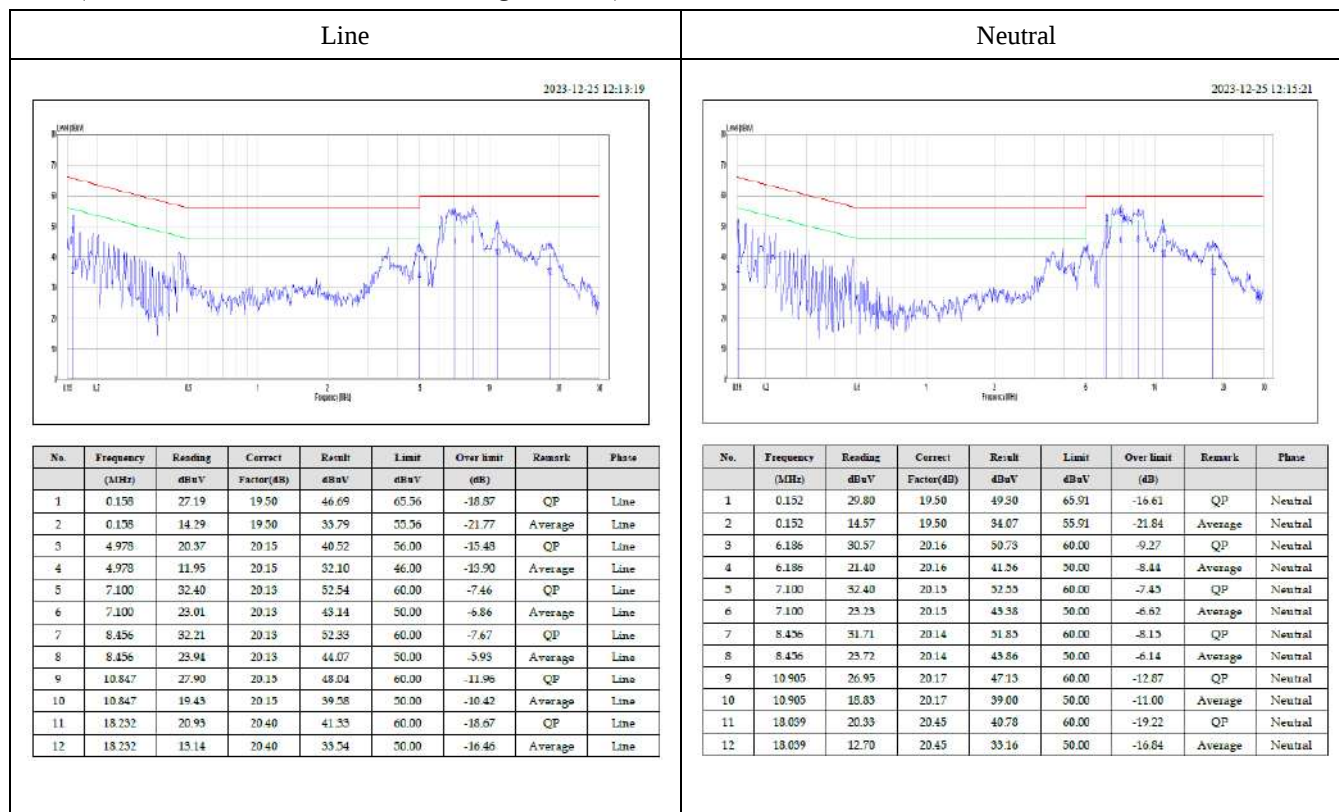
$$\text{Over Limit} = \text{Result} - \text{Limit Line}$$

8.6 Test Results

Test Mode: Transmitting

Main: AC120 V, 60 Hz

(Worst case is 802.11ax HE20 mode High channel)



Note:

Result = Reading + Factor

Over Limit = Result – Limit Line

Factor = (LISN, ISN, PLC or current probe) Factor + Cable Loss + Attenuator

9 FCC §15.209, §15.205, §15.247(d) & RSS-247 §5.5, RSS-GEN §8.9, §8.10 – Spurious Emissions

9.1 Applicable Standard

As per FCC §15.35(d): Unless otherwise specified, on any frequency or frequencies above 1000 MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function. Unless otherwise specified, measurements above 1000 MHz shall be performed using a minimum resolution bandwidth of 1MHz.

As per RSS-Gen 8.10,

Restricted frequency bands, identified in table 7, are designated primarily for safety-of-life services (distress calling and certain aeronautical activities), certain satellite downlinks, radio astronomy and some government uses. Except where otherwise indicated, the following conditions related to the restricted frequency bands apply:

(a)The transmit frequency, including fundamental components of modulation, of licence-exempt radio apparatus shall not fall within the restricted frequency bands listed in table 7 except for apparatus compliant with RSS-287, Emergency Position Indicating Radio Beacons (EPIRB), Emergency Locator Transmitters (ELT), Personal Locator Beacons (PLB), and Maritime Survivor Locator Devices (MSLD).

(b)Unwanted emissions that fall into restricted frequency bands listed in table 7 shall comply with the limits specified in table 5 and table 6.

(c)Unwanted emissions that do not fall within the restricted frequency bands listed in table 7 shall comply either with the limits specified in the applicable RSS or with those specified in table 5 and table 6.

As Per FCC §15.205(a) except as show in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 – 0.110	16.42 – 16.423	608 – 614	4. 5 – 5. 15
0.495 – 0.505	16.69475 – 16.69525	960 – 1240	5. 35 – 5. 46
2.1735 – 2.1905	16.80425 – 16.80475	1300 – 1427	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1435 – 1626.5	8.025 – 8.5
4.17725 – 4.17775	37.5 – 38.25	1645.5 – 1646.5	9.0 – 9.2
4.20725 – 4.20775	73 – 74.6	1660 – 1710	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1718.8 – 1722.2	10.6 – 12.7
6.26775 – 6.26825	108 – 121.94	2200 – 2300	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2310 – 2390	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2483.5 – 2500	15.35 – 16.2
8.362 – 8.366	156.52475 – 156.52525	2690 – 2900	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	3260 – 3267	22.01 – 23.12
8.41425 – 8.41475	162.0125 – 167.17	3.332 – 3.339	23.6 – 24.0
12.29 – 12.293	167.72 – 173.2	3 3458 – 3 358	31.2 – 31.8
12.51975 – 12.52025	240 – 285	3.600 – 4.400	36.43 – 36.5
12.57675 – 12.57725	322 – 335.4		Above 38.6
13.36 – 13.41	399.9 – 410		

As per FCC §15.209(a) and RSS-GEN §8.9: Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (micro volts/meter)	Measurement Distance (meters)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100**	3
88 - 216	150**	3
216 - 960	200**	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

According to ANSI C63.10-2013, section 5.3.3

Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field, and the emissions to be measured can be detected by the measurement equipment (see 4.3.4). Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. Measurements from 18 GHz to 40 GHz are typically made at distances significantly less than 3 m from the EUT. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade of distance (inverse of linear distance for field-strength measurements or inverse of linear distance-squared for power-density measurements).

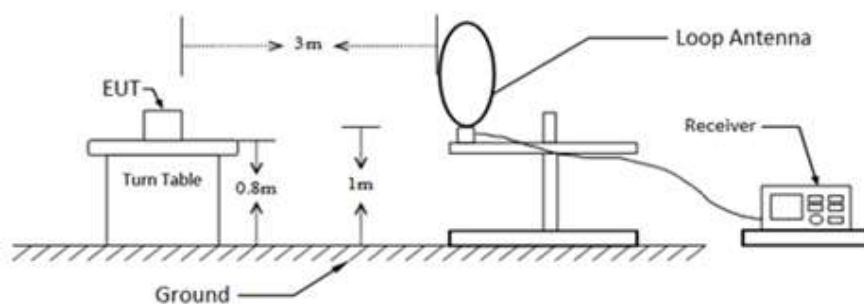
As per FCC §15.247 (d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

As per RSS-247 5.5,

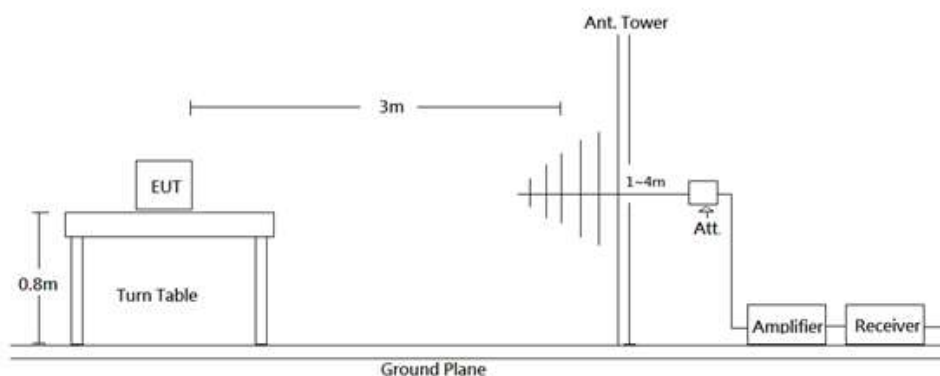
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

9.2 EUT Setup

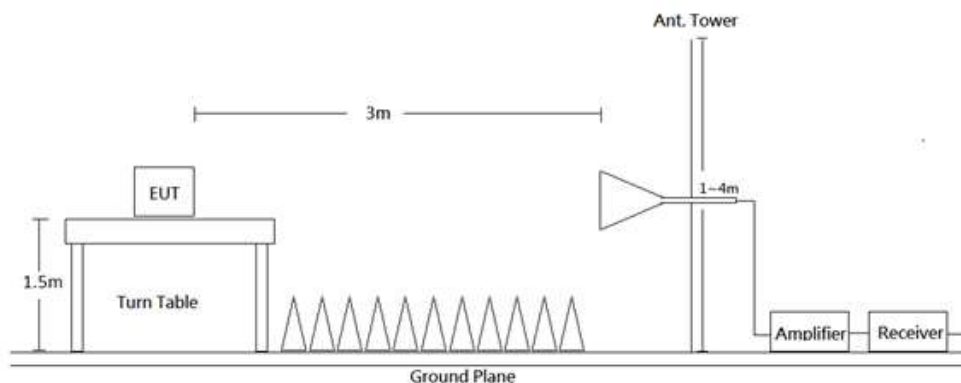
9kHz-30MHz:



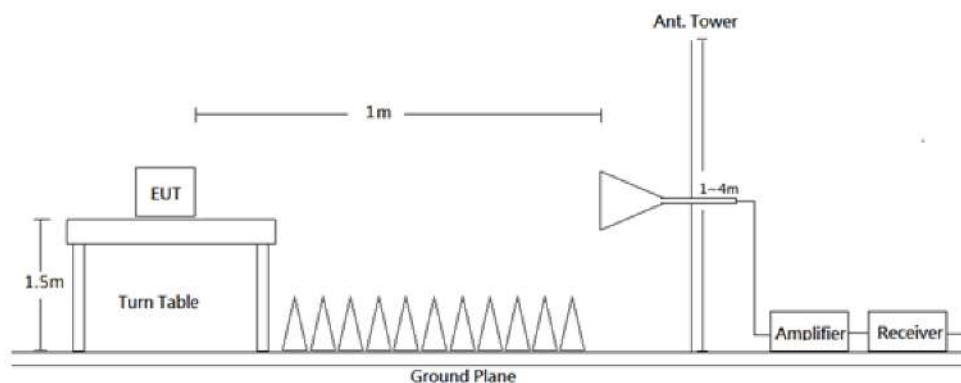
30MHz-1GHz:



1-18 GHz:



18-26.5 GHz:



Radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC Part 15.209, FCC 15.247 and RSS-Gen, RSS-247 Limits.

9.3 EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 26.5 GHz. During the radiated emission test, the EMI test receiver was set with the following configurations measurement method 6.3 in ANSI C63.10.

Frequency Range	RBW	VBW	Duty cycle	Measurement method
9 kHz - 150 kHz	300 Hz	1 kHz	/	QP/AV
150 kHz - 30 MHz	10 kHz	30 kHz	/	QP/AV
30-1000 MHz	120 kHz	300 kHz	/	QP
Above 1 GHz	1 MHz	3 MHz	/	PK
	1 MHz	10 Hz	>98%	Ave
	1 MHz	1/T	<98%	Ave

Note: T is minimum transmission duration

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

9.4 Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All data was recorded in Quasi-peak and average detector mode from 9 kHz to 30 MHz, Quasi-peak detector mode from 30 MHz to 1 GHz and PK and average detector modes for frequencies above 1 GHz.

Prescan using three directional polarities. (parallel, vertical and ground parallel)

9.5 Corrected Factor & Margin Calculation

The Correct Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

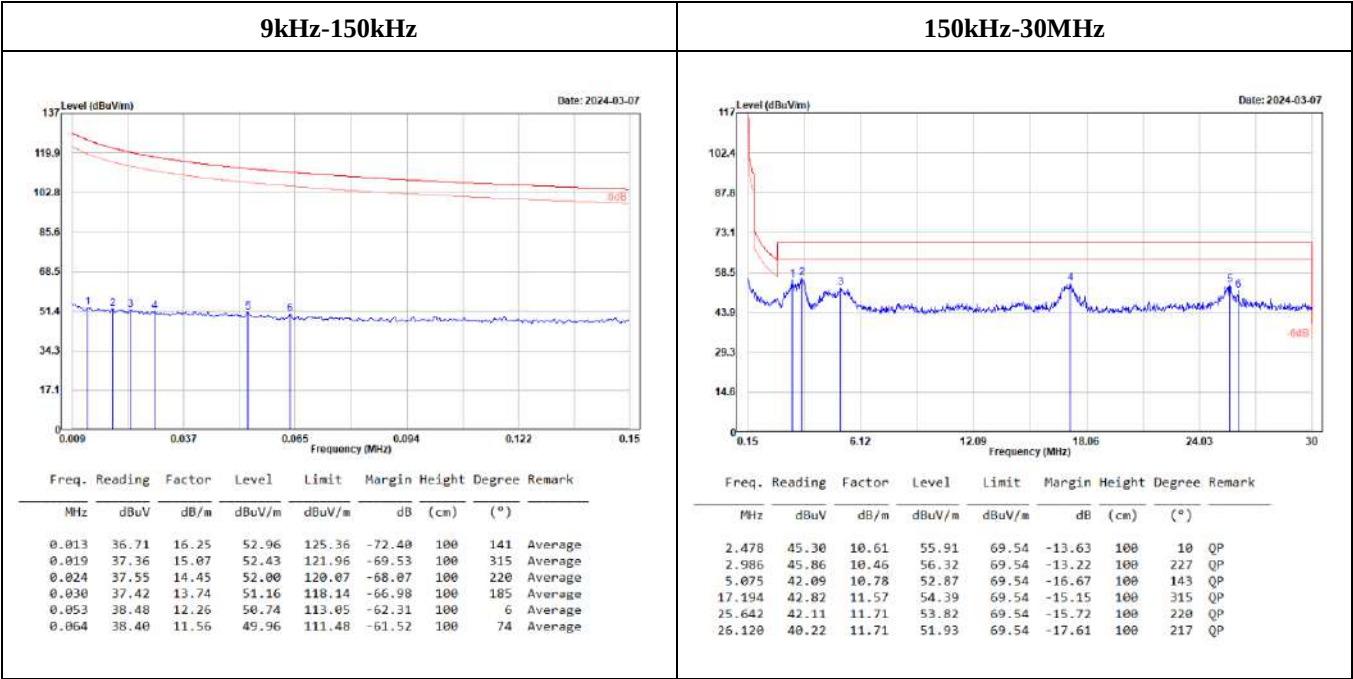
The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7 dB means the emission is 7 dB below the limit. The equation for margin calculation is as follows:

Margin = Level – Limit

9.6 Test Results

Test Mode: Transmitting
(Pre-scan with three orthogonal axis, and worse case as X axis.)

9kHz-30MHz:
(Worst case is 802.11ax HE20 mode, high channel)
(Prescan using three directional polarities, worst case parallel.)

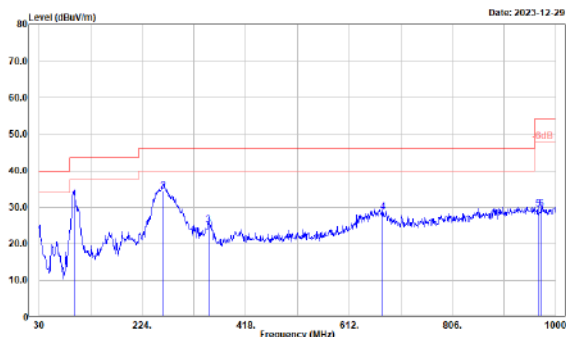


30MHz-1GHz:

(Worst case is 802.11ax HE20 mode)

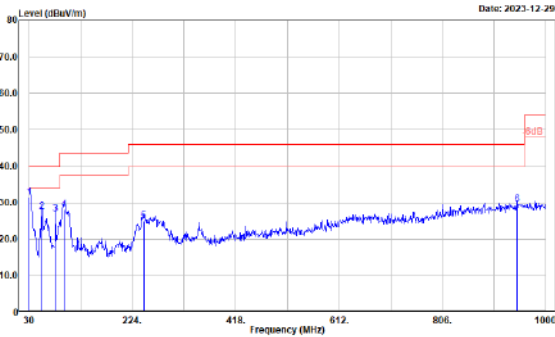
Low channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
94.990	46.80	-14.62	32.18	43.50	-11.32	100	253	QP
262.880	44.55	-10.06	34.49	46.00	-11.51	100	3	QP
348.180	33.55	-8.39	25.16	46.00	-20.84	100	14	QP
675.050	30.73	-2.19	28.54	46.00	-17.46	100	360	QP
967.020	26.85	2.63	29.48	54.00	-24.52	100	320	QP
972.840	27.05	2.54	29.59	54.00	-24.41	100	245	QP

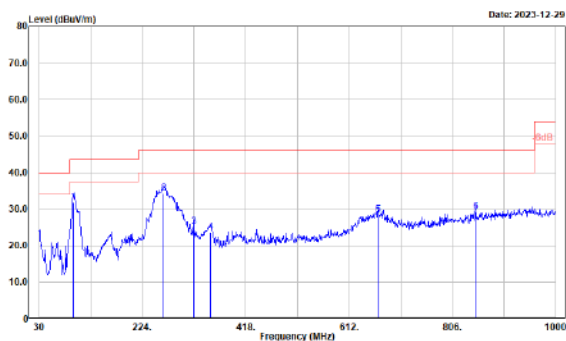
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
30.000	34.36	-3.01	31.35	40.00	-8.65	100	4	QP
54.250	43.76	-16.25	27.51	40.00	-12.49	100	266	QP
79.470	42.84	-15.93	26.91	40.00	-13.09	100	28	QP
95.960	42.41	-14.25	28.16	43.50	-15.34	100	147	QP
245.340	36.08	-11.20	24.88	46.00	-21.12	100	234	QP
946.650	26.87	2.69	29.56	46.00	-16.44	100	147	QP

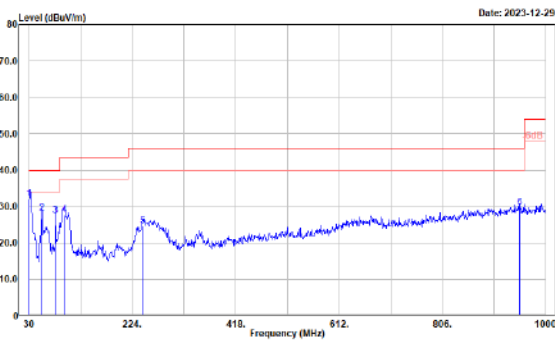
Middle channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
94.020	46.58	-14.72	31.86	43.50	-11.64	100	240	QP
263.770	44.16	-9.92	34.24	46.00	-11.76	100	0	QP
320.030	34.09	-8.95	25.14	46.00	-20.86	100	330	QP
352.040	32.00	-8.31	23.69	46.00	-22.31	100	207	QP
666.320	30.81	-2.31	28.50	46.00	-17.50	100	9	QP
849.650	28.08	1.17	29.25	46.00	-16.75	100	158	QP

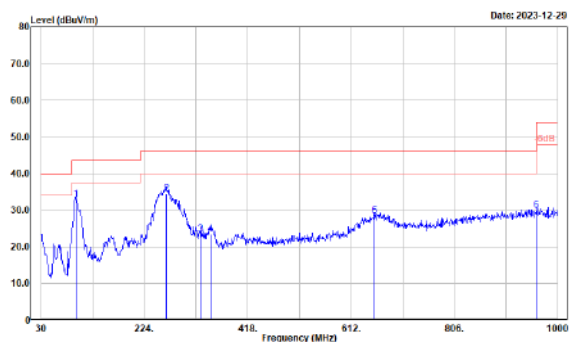
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
30.000	35.12	-3.01	32.11	40.00	-7.89	100	270	QP
54.250	44.44	-16.25	28.19	40.00	-11.81	100	338	QP
79.470	43.55	-15.93	27.62	40.00	-12.38	100	7	QP
94.990	42.44	-14.62	27.82	43.50	-15.68	100	26	QP
243.400	35.92	-11.22	24.70	46.00	-21.30	100	331	QP
950.530	26.92	2.78	29.70	46.00	-16.30	100	328	QP

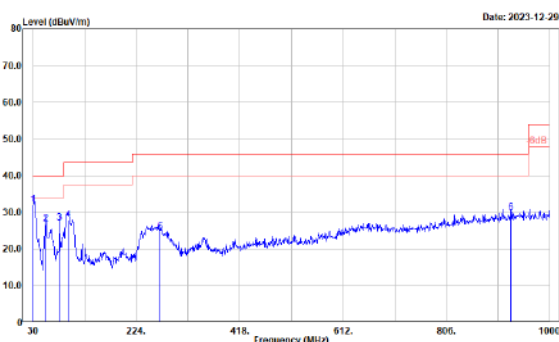
High channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
95.960	47.17	-14.25	32.92	43.50	-10.58	100	255	QP
264.740	44.24	-9.79	34.45	46.00	-11.55	100	0	QP
329.730	32.06	-8.55	23.51	46.00	-22.49	100	329	QP
348.160	31.88	-8.39	23.49	46.00	-22.51	100	26	QP
655.650	30.81	-2.49	28.32	46.00	-17.68	100	0	QP
960.230	27.11	2.80	29.91	54.00	-24.09	100	0	QP

Vertical



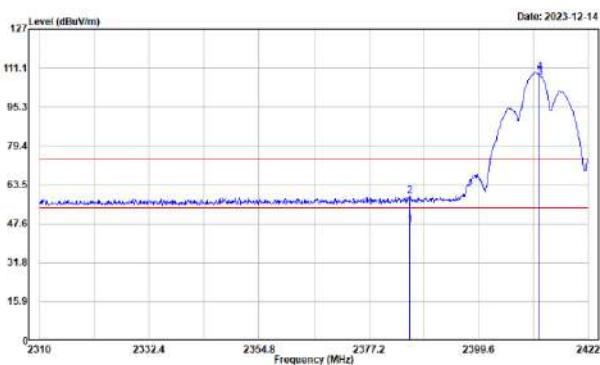
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
30.000	35.05	-3.01	32.04	40.00	-7.96	100	138	QP
54.250	43.23	-16.25	26.98	40.00	-13.02	100	297	QP
79.470	43.05	-15.93	27.12	40.00	-12.88	100	23	QP
94.990	42.57	-14.62	27.95	43.50	-15.55	100	165	QP
268.620	34.24	-9.66	24.58	46.00	-21.42	100	360	QP
927.250	27.48	2.35	29.83	46.00	-16.17	100	62	QP

Band-Edge:

802.11b mode

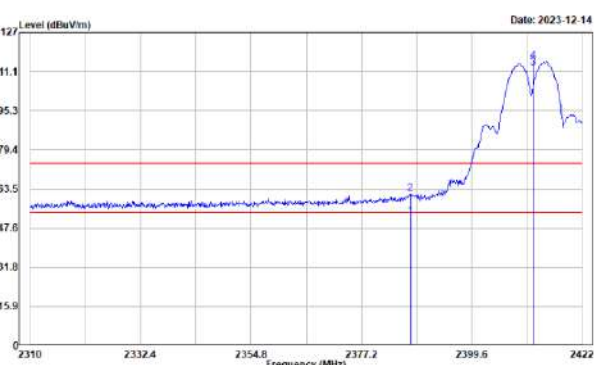
Low channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2385.488	58.09	-11.04	47.05	54.00	-6.95	128	150	Average
2385.488	69.78	-11.04	58.74	74.00	-15.26	128	150	Peak
2412.000	117.97	-10.94	107.03			128	150	Average
2412.000	120.28	-10.94	109.34			128	150	Peak

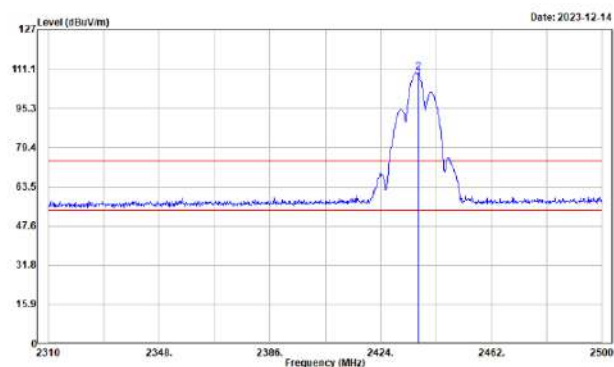
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2387.168	63.29	-11.03	52.26	54.00	-1.74	126	168	Average
2387.168	72.49	-11.03	61.46	74.00	-12.54	126	168	Peak
2412.000	123.33	-10.94	112.39			126	168	Average
2412.000	126.17	-10.94	115.23			126	168	Peak

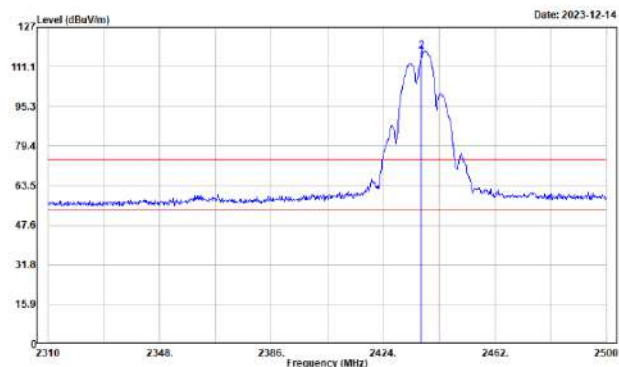
Middle channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	118.19	-10.92	107.27			127	148	Average
2437.000	120.67	-10.92	109.75			127	148	Peak

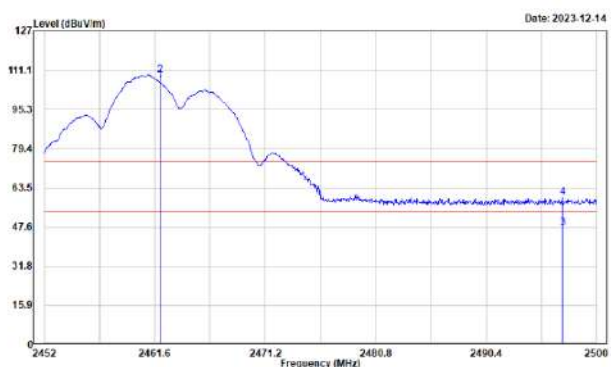
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	126.09	-10.92	115.17			114	160	Average
2437.000	128.40	-10.92	117.48			114	160	Peak

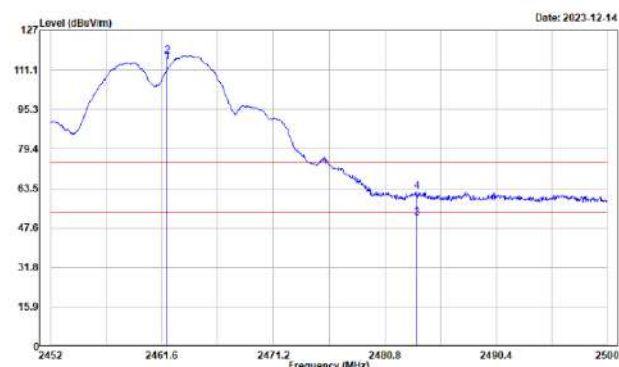
High channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2462.000	117.65	-10.76	106.89			145	147	Average
2462.000	119.75	-10.76	108.99			145	147	Peak
2497.024	57.30	-10.31	46.99	54.00	-7.01	145	147	Average
2497.024	69.85	-10.31	59.54	74.00	-14.46	145	147	Peak

Vertical

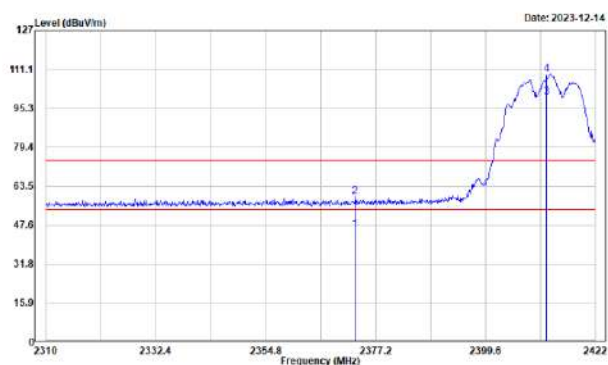


Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2462.000	125.15	-10.76	114.39			136	170	Average
2462.000	127.51	-10.76	116.75			136	170	Peak
2483.584	62.05	-10.48	51.57	54.00	-2.43	136	170	Average
2483.584	72.67	-10.48	62.19	74.00	-11.81	136	170	Peak

802.11g mode

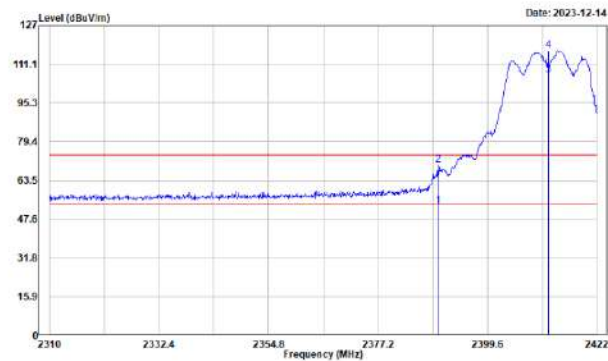
Low channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2373.056	57.01	-11.12	45.89	54.00	-8.11	131	151	Average
2373.056	70.19	-11.12	59.07	74.00	-14.93	131	151	Peak
2412.000	110.60	-10.94	99.66			131	151	Average
2412.000	120.05	-10.94	109.11			131	151	Peak

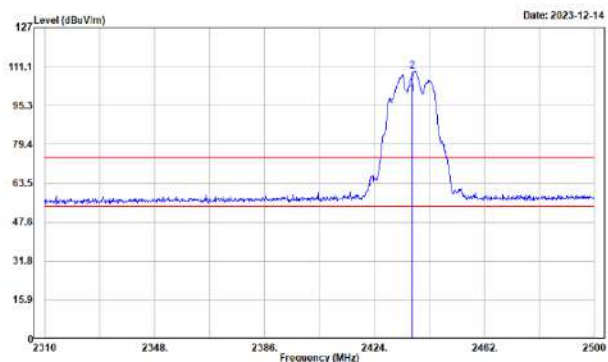
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2389.408	64.07	-11.03	53.04	54.00	-0.96	126	175	Average
2389.408	80.98	-11.03	69.95	74.00	-4.05	126	175	Peak
2412.000	117.55	-10.94	106.61			126	175	Average
2412.000	127.52	-10.94	116.58			126	175	Peak

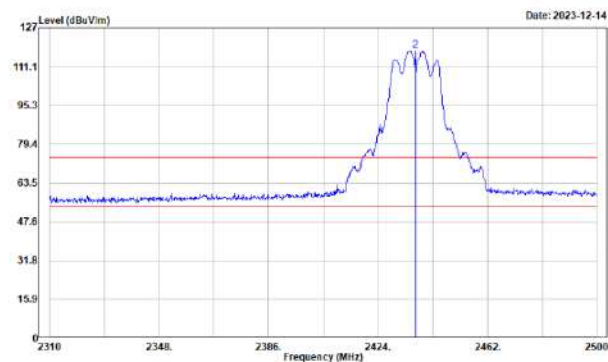
Middle channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	110.77	-10.92	99.85			127	148	Average
2437.000	120.17	-10.92	109.25			127	148	Peak

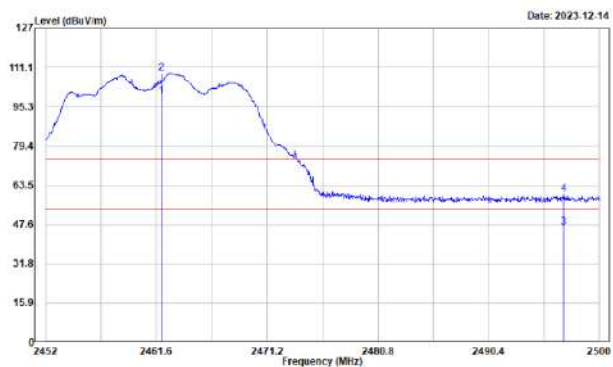
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	118.79	-10.92	107.87			128	173	Average
2437.000	128.61	-10.92	117.69			128	173	Peak

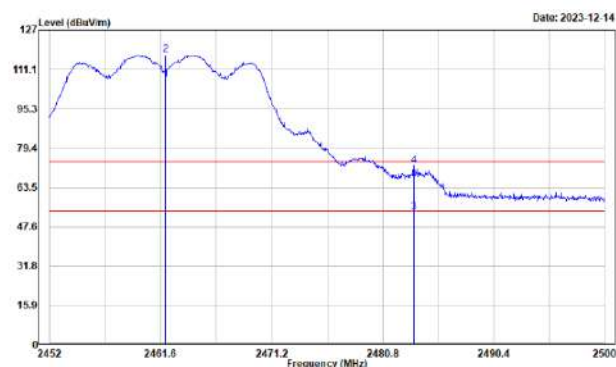
High channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2452.000	110.07	-10.76	99.31			147	148	Average
2462.000	117.97	-10.76	107.21			147	148	Peak
2496.928	56.63	-10.31	46.32	54.00	-7.68	147	148	Average
2496.928	70.06	-10.31	59.75	74.00	-14.25	147	148	Peak

Vertical

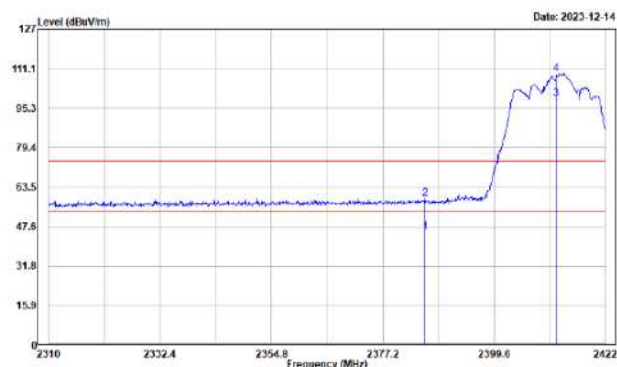


Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2462.000	117.97	-10.76	107.21			137	175	Average
2462.000	127.62	-10.76	116.86			137	175	Peak
2483.501	63.91	-10.48	53.43	54.00	-0.57	137	175	Average
2483.501	82.93	-10.48	72.45	74.00	-1.55	137	175	Peak

802.11n HT20 mode

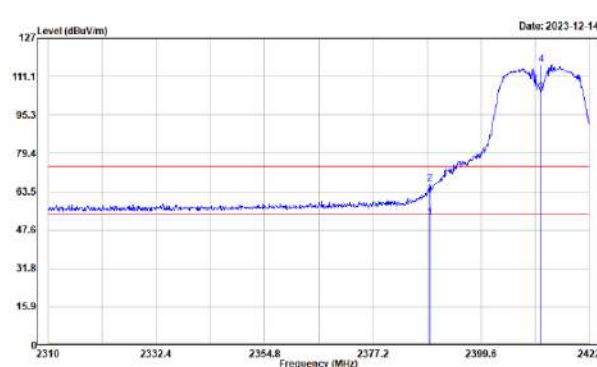
Low channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2385.712	56.56	-11.04	45.52	54.00	-8.48	131	153	Average
2385.712	69.87	-11.04	58.83	74.00	-15.17	131	153	Peak
2412.000	109.99	-10.94	99.05			131	153	Average
2412.000	126.88	-10.94	109.08			131	153	Peak

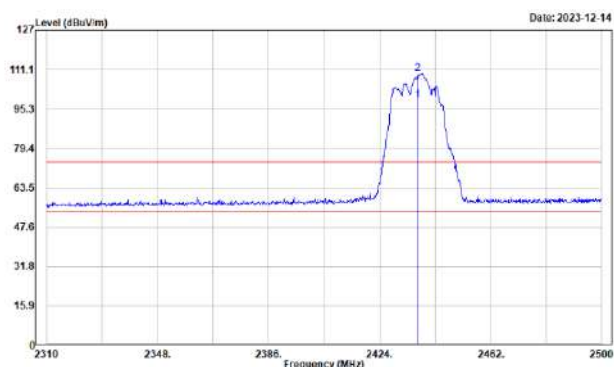
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2388.960	63.80	-11.03	52.77	54.00	-1.23	130	177	Average
2388.960	77.84	-11.03	66.81	74.00	-7.19	130	177	Peak
2412.000	115.09	-10.94	104.15			130	177	Average
2412.000	126.88	-10.94	115.94			130	177	Peak

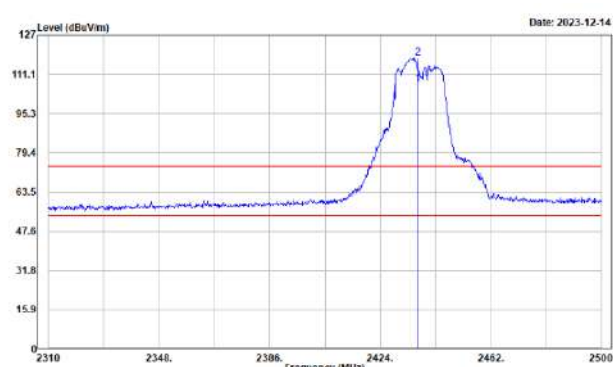
Middle channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	109.80	-10.92	98.88			127	150	Average
2437.000	120.41	-10.92	109.49			127	150	Peak

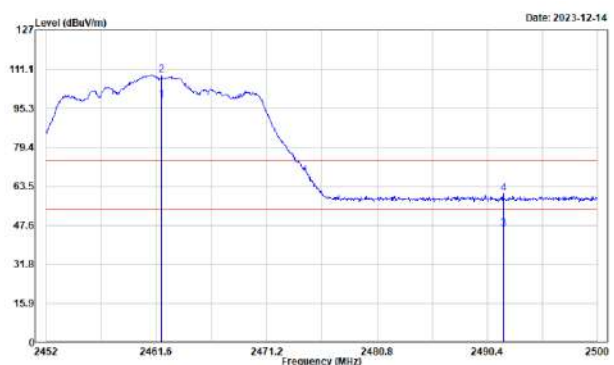
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	118.04	-10.92	107.12			126	162	Average
2437.000	128.72	-10.92	117.80			126	162	Peak

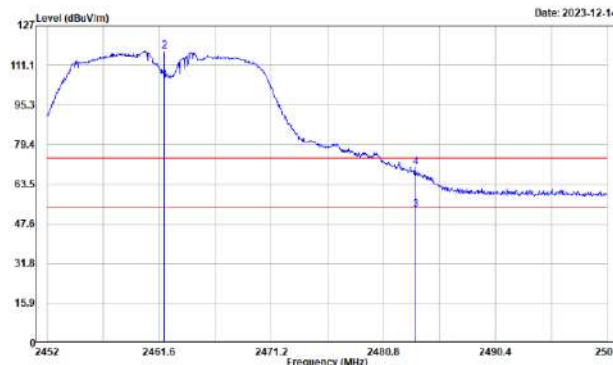
High channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2462.000	109.23	-10.76	98.47			122	159	Average
2462.000	119.58	-10.76	108.82			122	159	Peak
2491.792	56.43	-10.38	46.05	54.00	-7.95	122	159	Average
2491.792	70.83	-10.38	60.45	74.00	-13.55	122	159	Peak

Vertical

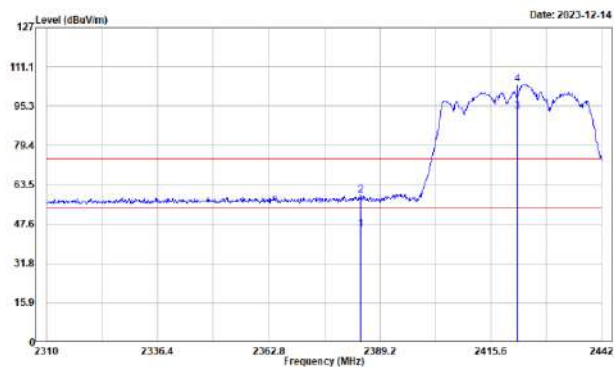


Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2462.000	115.82	-10.76	105.06			127	173	Average
2462.000	127.28	-10.76	116.52			127	173	Peak
2483.536	63.95	-10.48	53.47	54.00	-0.53	127	173	Average
2483.536	80.86	-10.48	70.38	74.00	-3.62	127	173	Peak

802.11n HT40 mode

Low channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2384.712	56.46	-11.05	45.41	54.00	-8.59	152	148	Average
2384.712	70.37	-11.05	59.32	74.00	-14.68	152	148	Peak
2422.000	104.00	-10.94	93.06			152	148	Average
2422.000	114.89	-10.94	103.95			152	148	Peak

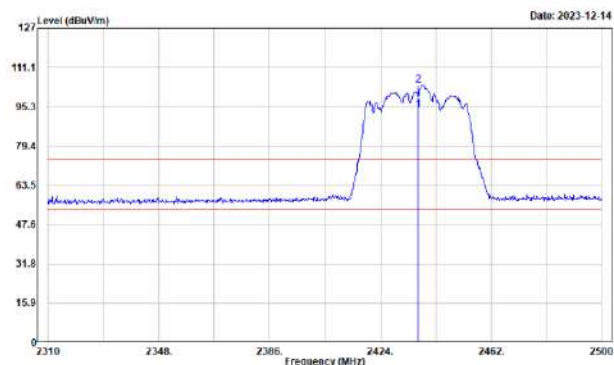
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2389.728	63.72	-11.02	52.70	54.00	-1.30	116	162	Average
2389.728	77.74	-11.02	66.72	74.00	-7.28	116	162	Peak
2422.000	112.35	-10.94	101.41			116	162	Average
2422.000	122.69	-10.94	111.75			116	162	Peak

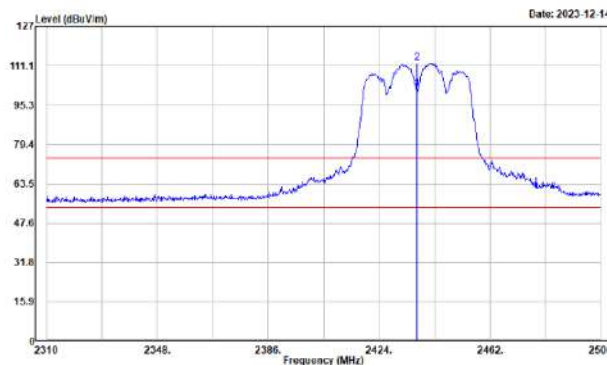
Middle channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	104.80	-10.92	93.88			124	147	Average
2437.000	114.85	-10.92	103.93			124	147	Peak

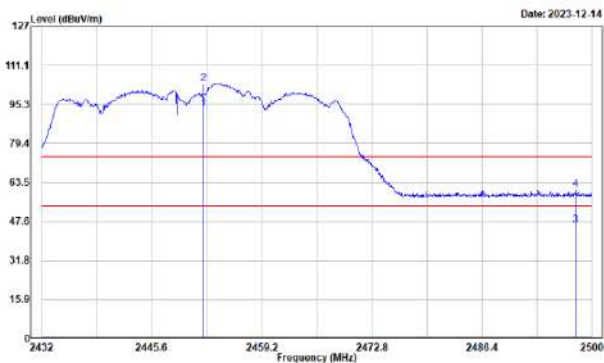
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	112.78	-10.92	101.86			113	176	Average
2437.000	122.96	-10.92	112.04			113	176	Peak

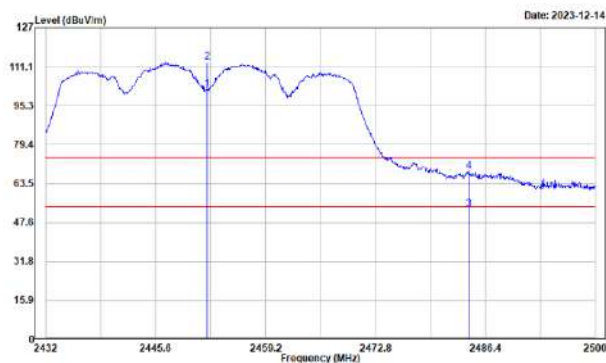
High channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2452.000	104.50	-10.89	93.61			144	147	Average
2452.000	114.56	-10.89	103.67			144	147	Peak
2497.960	56.29	-10.29	46.00	54.00	-8.00	144	147	Average
2497.960	70.95	-10.29	60.66	74.00	-13.34	144	147	Peak

Vertical

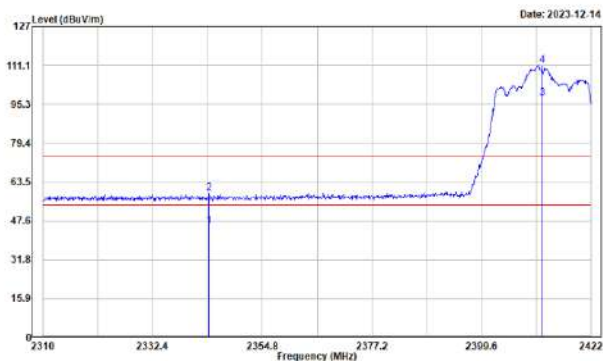


Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2452.000	112.60	-10.89	101.71			113	174	Average
2452.000	123.65	-10.89	112.76			113	174	Peak
2484.292	63.40	-10.47	52.93	54.00	-1.07	113	174	Average
2484.292	78.85	-10.47	68.38	74.00	-5.62	113	174	Peak

802.11ax HE20 mode

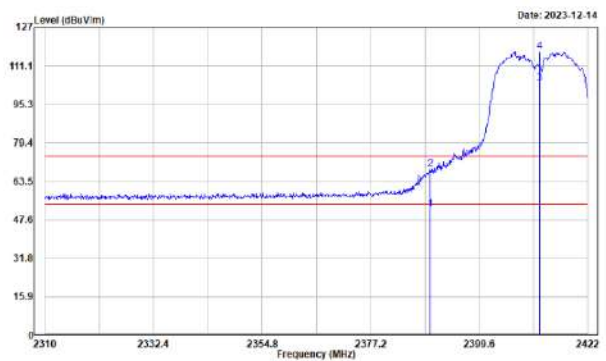
Low channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2343.936	56.68	-11.31	45.37	54.00	-8.63	146	161	Average
2343.936	70.27	-11.31	58.96	74.00	-15.04	146	161	Peak
2412.000	108.57	-10.94	97.63			146	161	Average
2412.000	122.04	-10.94	111.10			146	161	Peak

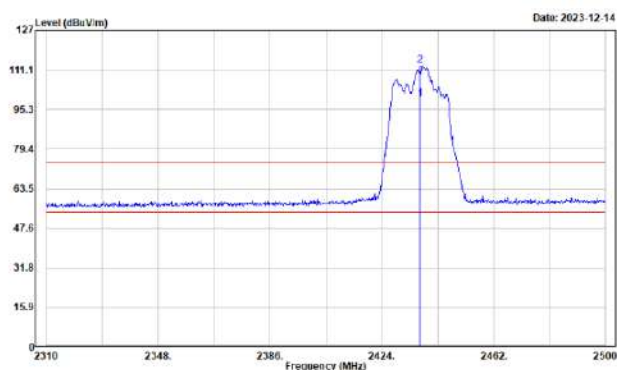
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2389.408	63.09	-11.03	52.06	54.00	-1.94	131	175	Average
2389.408	79.63	-11.03	68.60	74.00	-5.40	131	175	Peak
2412.000	114.78	-10.94	103.84			131	175	Average
2412.000	127.93	-10.94	116.99			131	175	Peak

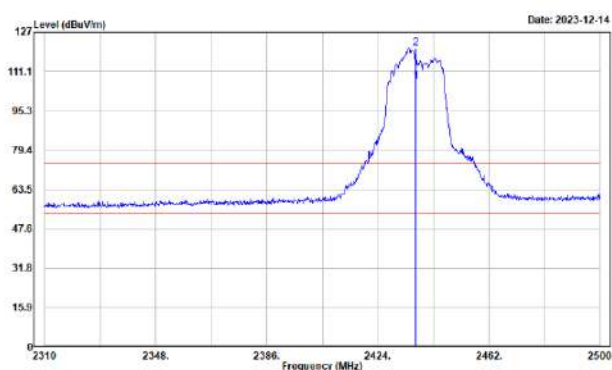
Middle channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	110.37	-10.92	99.45			126	151	Average
2437.000	123.64	-10.92	112.72			126	151	Peak

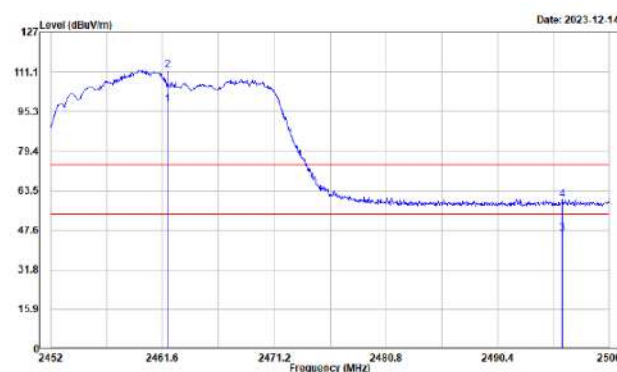
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	117.86	-10.92	106.94			129	158	Average
2437.000	131.23	-10.92	120.31			129	158	Peak

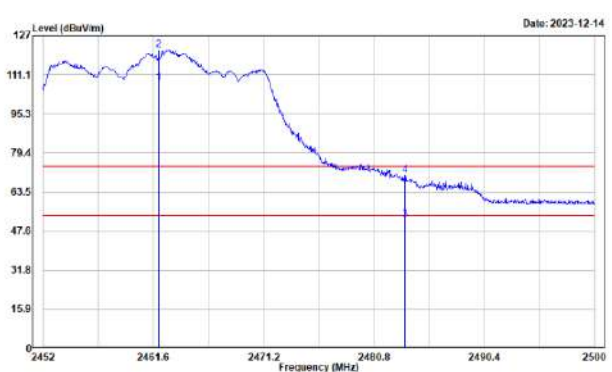
High channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2462.000	108.96	-10.76	98.20			147	148	Average
2462.000	122.66	-10.76	111.90			147	148	Peak
2495.968	56.40	-10.33	46.07	54.00	-7.93	147	148	Average
2495.968	70.37	-10.33	60.04	74.00	-13.96	147	148	Peak

Vertical

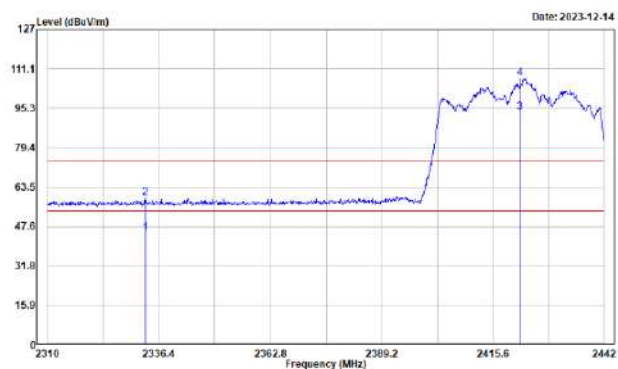


Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2462.000	118.56	-10.76	107.80			141	169	Average
2462.000	131.80	-10.76	121.04			141	169	Peak
2483.517	62.87	-10.48	52.39	54.00	-1.61	141	169	Average
2483.517	80.66	-10.48	70.18	74.00	-3.82	141	169	Peak

802.11ax HE40 mode

Low channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2333.100	56.40	-11.39	45.01	54.00	-8.99	134	151	Average
2333.100	70.44	-11.39	59.05	74.00	-14.95	134	151	Peak
2422.000	104.66	-10.94	93.72			134	151	Average
2422.000	118.49	-10.94	107.55			134	151	Peak

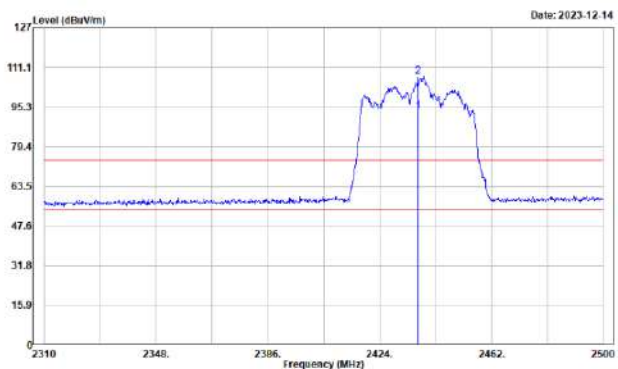
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2388.936	63.21	-11.03	52.18	54.00	-1.82	119	162	Average
2388.936	77.77	-11.03	66.74	74.00	-7.26	119	162	Peak
2422.000	112.00	-10.94	101.06			119	162	Average
2422.000	125.24	-10.94	114.30			119	162	Peak

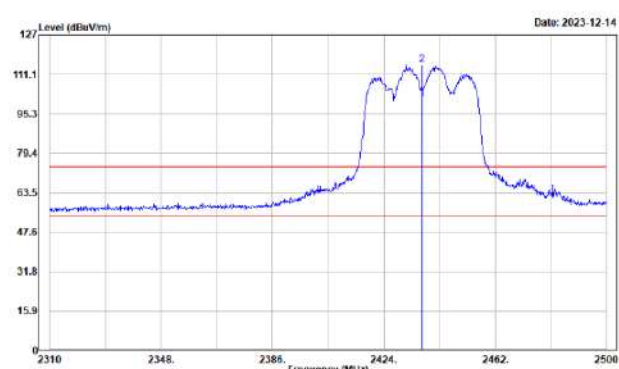
Middle channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	104.63	-10.92	93.71			124	150	Average
2437.000	118.31	-10.92	107.39			124	150	Peak

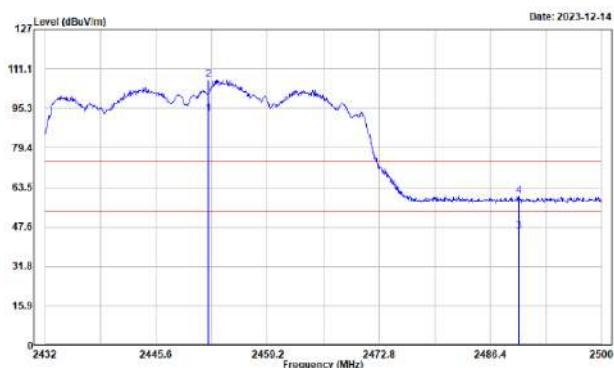
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	112.05	-10.92	101.13			111	174	Average
2437.000	125.81	-10.92	114.89			111	174	Peak

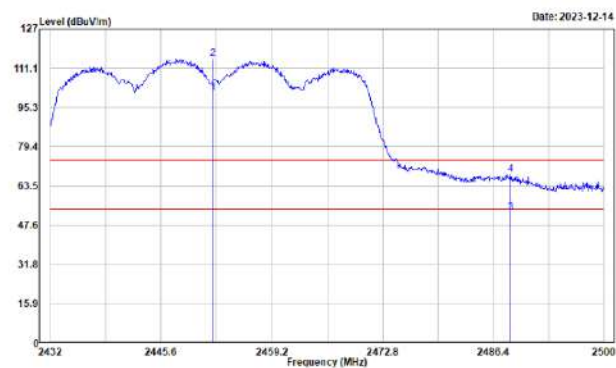
High channel

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2452.000	103.95	-10.89	93.06			143	147	Average
2452.000	117.68	-10.89	106.79			143	147	Peak
2489.868	56.32	-10.40	45.92	54.00	-8.08	143	147	Average
2489.868	70.29	-10.40	59.89	74.00	-14.11	143	147	Peak

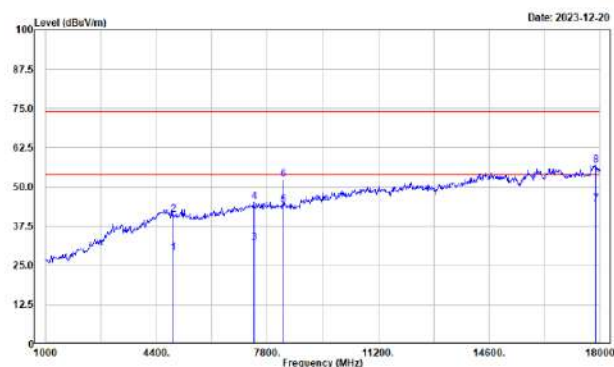
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2452.000	112.12	-10.89	101.23			137	175	Average
2452.000	125.76	-10.89	114.87			137	175	Peak
2488.508	62.99	-10.42	52.57	54.00	-1.43	137	175	Average
2488.508	78.50	-10.42	68.08	74.00	-5.92	137	175	Peak

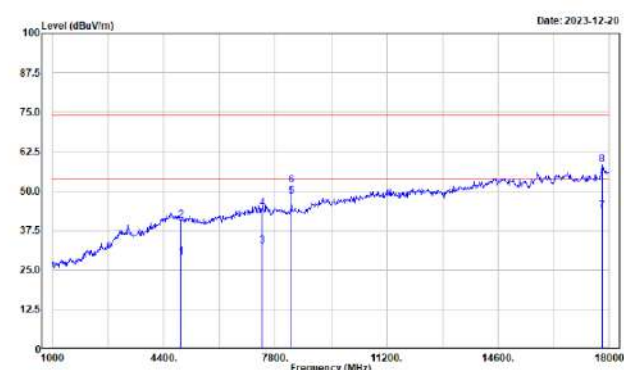
1GHz-18GHz:

Horizontal



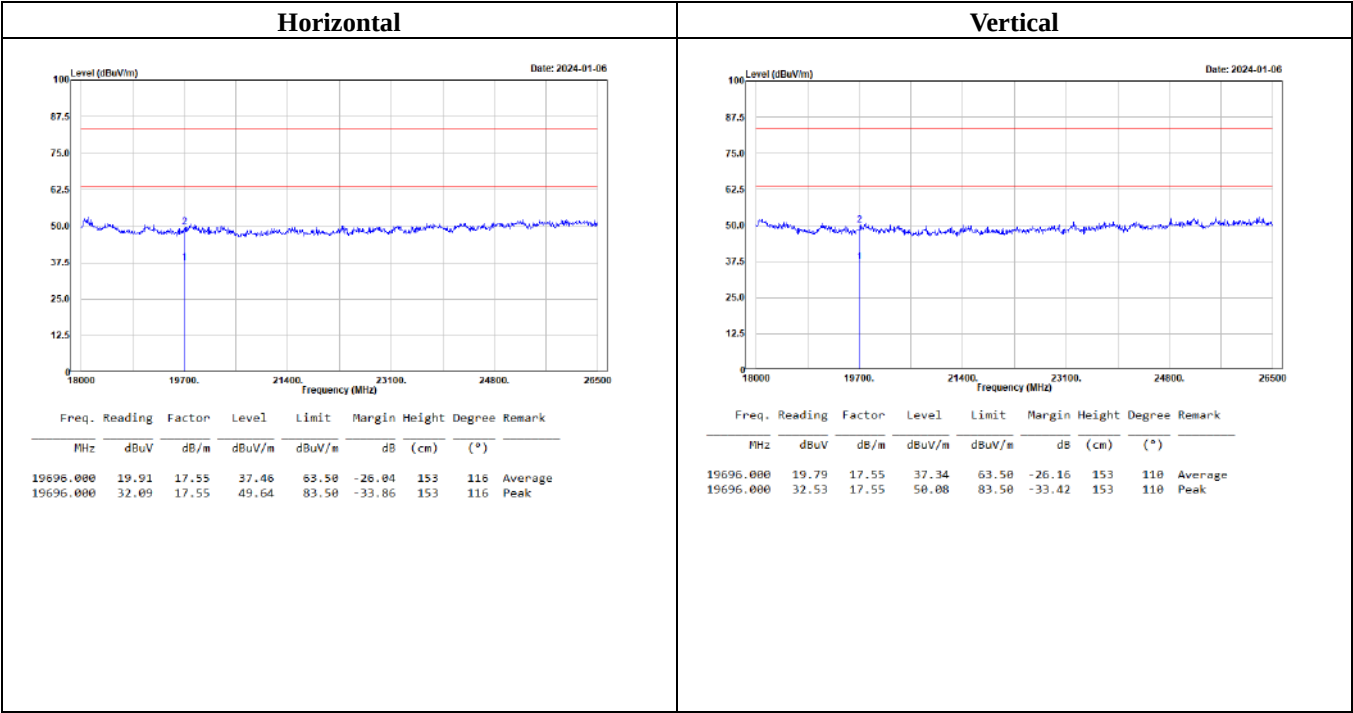
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4924.000	32.84	-3.84	29.00	54.00	-25.00	154	76	Average
4924.000	44.92	-3.84	41.08	74.00	-32.92	154	76	Peak
7386.000	31.87	0.45	32.32	54.00	-21.68	152	301	Average
7386.000	44.75	0.45	45.20	74.00	-28.80	152	301	Peak
8288.000	43.21	0.97	44.18	54.00	-9.82	126	173	Average
8288.000	51.34	0.97	52.31	74.00	-21.69	126	173	Peak
17881.000	31.20	13.19	44.39	54.00	-9.61	150	232	Average
17881.000	43.78	13.19	56.97	74.00	-17.03	150	232	Peak

Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4924.000	32.77	-3.84	28.93	54.00	-25.07	150	46	Average
4924.000	44.41	-3.84	40.57	74.00	-33.43	150	46	Peak
7386.000	31.99	0.45	32.44	54.00	-21.56	156	89	Average
7386.000	43.89	0.45	44.34	74.00	-29.66	156	89	Peak
8288.000	47.27	0.97	48.24	54.00	-5.76	171	193	Average
8288.000	50.88	0.97	51.85	74.00	-22.15	171	193	Peak
17779.000	30.90	12.79	43.69	54.00	-10.31	150	0	Average
17779.000	45.35	12.79	58.14	74.00	-15.86	150	0	Peak

18GHz-26.5GHz:



Level = Reading + Factor.

Margin = Level – Limit.

Factor = Antenna Factor + Cable Loss – Amplifier Gain.

For 18-26.5GHz Convert the test distance limit of 3 meters to a limit of 1 meter:

Conversion factor = 20 log (1m/3m) = 9.5 dB , Limit = 54+9.5 = 63.50 dBuV/m @ 1m

Above 1GHz

802.11b Mode:

Low channel																	
Horizontal									Vertical								
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2385.488	58.09	-11.04	47.05	54.00	-6.95	128	150	Average	2387.168	63.29	-11.03	52.26	54.00	-1.74	126	168	Average
2385.488	69.78	-11.04	58.74	74.00	-15.26	128	150	Peak	2387.168	72.49	-11.03	61.46	74.00	-12.54	126	168	Peak
2412.000	117.97	-10.94	107.03			128	150	Average	2412.000	123.33	-10.94	112.39			126	168	Average
2412.000	120.28	-10.94	109.34			128	150	Peak	2412.000	126.17	-10.94	115.23			126	168	Peak
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4824.000	37.58	-3.75	33.83	54.00	-20.17	227	47	Average	4824.000	35.04	-3.75	31.29	54.00	-22.71	151	245	Average
4824.000	46.73	-3.75	42.98	74.00	-31.02	227	47	Peak	4824.000	44.99	-3.75	41.24	74.00	-32.76	151	245	Peak
7236.000	33.35	0.29	33.64	54.00	-20.36	125	246	Average	7236.000	37.80	0.29	38.09	54.00	-15.91	178	32	Average
7236.000	43.42	0.29	43.71	74.00	-30.29	125	246	Peak	7236.000	47.64	0.29	47.93	74.00	-26.07	178	32	Peak
8288.000	43.43	0.97	44.40	54.00	-9.60	122	191	Average	8288.000	47.49	0.97	48.46	54.00	-5.54	178	199	Average
8288.000	48.75	0.97	49.72	74.00	-24.28	122	191	Peak	8288.000	51.02	0.97	51.99	74.00	-22.01	178	199	Peak
Middle channel																	
Horizontal									Vertical								
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	118.19	-10.92	107.27			127	148	Average	2437.000	126.09	-10.92	115.17			114	160	Average
2437.000	120.67	-10.92	109.75			127	148	Peak	2437.000	128.40	-10.92	117.48			114	160	Peak
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4874.000	34.61	-3.86	30.75	54.00	-23.25	156	182	Average	4874.000	33.43	-3.86	29.57	54.00	-24.43	152	297	Average
4874.000	46.08	-3.86	42.22	74.00	-31.78	156	182	Peak	4874.000	44.98	-3.86	41.12	74.00	-32.88	152	297	Peak
7311.000	33.34	0.18	33.52	54.00	-20.48	152	277	Average	7311.000	32.97	0.18	33.15	54.00	-20.85	174	360	Average
7311.000	45.41	0.18	45.59	74.00	-28.41	152	277	Peak	7311.000	44.42	0.18	44.60	74.00	-29.40	174	360	Peak
8288.000	43.40	0.97	44.37	54.00	-9.63	125	204	Average	8288.000	47.21	0.97	48.18	54.00	-5.82	181	213	Average
8288.000	48.31	0.97	49.28	74.00	-24.72	125	204	Peak	8288.000	50.84	0.97	51.81	74.00	-22.19	181	213	Peak
High channel																	
Horizontal									Vertical								
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2462.000	117.65	-10.76	106.89			145	147	Average	2462.000	125.15	-10.76	114.39			136	170	Average
2462.000	119.75	-10.76	108.99			145	147	Peak	2462.000	127.51	-10.76	116.75			136	170	Peak
2497.024	57.30	-10.31	46.99	54.00	-7.01	145	147	Average	2483.584	62.05	-10.48	51.57	54.00	-2.43	136	170	Average
2497.024	69.85	-10.31	59.54	74.00	-14.46	145	147	Peak	2483.584	72.67	-10.48	62.19	74.00	-11.81	136	170	Peak
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4924.000	34.86	-3.84	31.02	54.00	-22.98	156	281	Average	4924.000	35.54	-3.84	31.70	54.00	-22.30	154	353	Average
4924.000	44.81	-3.84	40.97	74.00	-33.03	156	281	Peak	4924.000	46.78	-3.84	42.94	74.00	-31.06	154	353	Peak
7386.000	33.63	0.45	34.08	54.00	-19.92	152	104	Average	7386.000	33.69	0.45	34.14	54.00	-19.86	151	299	Average
7386.000	43.95	0.45	44.40	74.00	-29.60	152	104	Peak	7386.000	44.47	0.45	44.92	74.00	-29.08	151	299	Peak
8288.000	43.51	0.97	44.48	54.00	-9.52	128	203	Average	8288.000	47.40	0.97	48.37	54.00	-5.63	169	207	Average
8288.000	48.88	0.97	49.85	74.00	-24.15	128	203	Peak	8288.000	50.97	0.97	51.94	74.00	-22.06	169	207	Peak

Note:

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

802.11g Mode:

Low channel																	
Horizontal								Vertical									
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2373.056	57.01	-11.12	45.89	54.00	-8.11	131	151	Average	2389.408	64.07	-11.03	53.04	54.00	-0.96	126	175	Average
2373.056	70.19	-11.12	59.07	74.00	-14.93	131	151	Peak	2389.408	80.98	-11.03	69.95	74.00	-4.05	126	175	Peak
2412.000	110.60	-10.94	99.66			131	151	Average	2412.000	117.55	-10.94	106.61			126	175	Average
2412.000	120.05	-10.94	109.11			131	151	Peak	2412.000	127.52	-10.94	116.58			126	175	Peak
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4824.000	33.35	-3.75	29.60	54.00	-24.40	155	1	Average	4824.000	33.11	-3.75	29.36	54.00	-24.64	158	156	Average
4824.000	45.35	-3.75	41.60	74.00	-32.40	155	1	Peak	4824.000	45.76	-3.75	42.01	74.00	-31.99	158	156	Peak
7236.000	32.04	0.29	32.33	54.00	-21.67	152	261	Average	7236.000	32.22	0.29	32.51	54.00	-21.49	155	212	Average
7236.000	43.27	0.29	43.56	74.00	-30.44	152	261	Peak	7236.000	43.96	0.29	44.25	74.00	-29.75	155	212	Peak
8288.000	43.40	0.97	44.37	54.00	-9.63	126	254	Average	8288.000	47.26	0.97	48.23	54.00	-5.77	172	192	Average
8288.000	48.87	0.97	49.84	74.00	-24.16	126	254	Peak	8288.000	51.07	0.97	52.04	74.00	-21.96	172	192	Peak

Middle channel																	
Horizontal								Vertical									
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	110.77	-10.92	99.85			127	148	Average	2437.000	118.79	-10.92	107.87			128	173	Average
2437.000	120.17	-10.92	109.25			127	148	Peak	2437.000	128.61	-10.92	117.69			128	173	Peak
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4874.000	32.98	-3.86	29.12	54.00	-24.88	154	360	Average	4874.000	33.10	-3.86	29.24	54.00	-24.76	152	53	Average
4874.000	44.79	-3.86	40.93	74.00	-33.07	154	360	Peak	4874.000	44.32	-3.86	40.46	74.00	-33.54	152	53	Peak
7311.000	31.92	0.18	32.10	54.00	-21.90	158	220	Average	7311.000	32.02	0.18	32.20	54.00	-21.80	155	224	Average
7311.000	43.53	0.18	43.71	74.00	-30.29	158	220	Peak	7311.000	43.34	0.18	43.52	74.00	-30.48	155	224	Peak
8288.000	43.40	0.97	44.37	54.00	-9.63	126	212	Average	8288.000	47.34	0.97	48.31	54.00	-5.69	178	205	Average
8288.000	48.77	0.97	49.74	74.00	-24.26	126	212	Peak	8288.000	51.20	0.97	52.17	74.00	-21.83	178	205	Peak

High channel																	
Horizontal								Vertical									
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2462.000	110.07	-10.76	99.31			147	148	Average	2462.000	117.97	-10.76	107.21			137	175	Average
2462.000	119.60	-10.76	108.84			147	148	Peak	2462.000	127.62	-10.76	116.86			137	175	Peak
2496.928	56.63	-10.31	46.32	54.00	-7.68	147	148	Average	2483.501	63.91	-10.48	53.43	54.00	-0.57	137	175	Average
2496.928	70.06	-10.31	59.75	74.00	-14.25	147	148	Peak	2483.501	82.93	-10.48	72.45	74.00	-1.55	137	175	Peak
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4924.000	34.83	-3.84	30.99	54.00	-23.01	158	94	Average	4924.000	33.23	-3.84	29.39	54.00	-24.61	152	264	Average
4924.000	47.35	-3.84	43.51	74.00	-30.49	158	94	Peak	4924.000	45.23	-3.84	41.39	74.00	-32.61	152	264	Peak
7386.000	33.68	0.45	34.13	54.00	-19.87	153	241	Average	7386.000	32.10	0.45	32.55	54.00	-21.45	156	122	Average
7386.000	45.10	0.45	45.55	74.00	-28.45	153	241	Peak	7386.000	44.09	0.45	44.54	74.00	-29.46	156	122	Peak
8288.000	43.33	0.97	44.30	54.00	-9.70	121	199	Average	8288.000	47.31	0.97	48.28	54.00	-5.72	177	206	Average
8288.000	48.74	0.97	49.71	74.00	-24.29	121	199	Peak	8288.000	51.58	0.97	52.55	74.00	-21.45	177	206	Peak

Note:

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

802.11n HT20 Mode:

Low channel																			
Horizontal									Vertical										
Freq.		Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.		Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2385.712		56.56	-11.04	45.52	54.00	-8.48	131	153	Average	2388.960		63.80	-11.03	52.77	54.00	-1.23	130	177	Average
2385.712		69.87	-11.04	58.83	74.00	-15.17	131	153	Peak	2388.960		77.84	-11.03	66.81	74.00	-7.19	130	177	Peak
2412.000		109.99	-10.94	99.05			131	153	Average	2412.000		115.09	-10.94	104.15			130	177	Average
2412.000		120.02	-10.94	109.08			131	153	Peak	2412.000		126.88	-10.94	115.94			130	177	Peak
Freq.		Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.		Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4824.000		34.51	-3.75	30.76	54.00	-23.24	151	59	Average	4824.000		32.83	-3.75	29.08	54.00	-24.92	157	332	Average
4824.000		45.34	-3.75	41.59	74.00	-32.41	151	59	Peak	4824.000		45.63	-3.75	41.88	74.00	-32.12	157	332	Peak
7236.000		32.57	0.29	32.86	54.00	-21.14	153	274	Average	7236.000		31.91	0.29	32.20	54.00	-21.80	151	25	Average
7236.000		42.91	0.29	43.20	74.00	-30.80	153	274	Peak	7236.000		43.89	0.29	44.18	74.00	-29.82	151	25	Peak
8288.000		43.09	0.97	44.06	54.00	-9.94	123	216	Average	8288.000		47.35	0.97	48.32	54.00	-5.68	185	187	Average
8288.000		48.87	0.97	49.84	74.00	-24.16	123	216	Peak	8288.000		51.21	0.97	52.18	74.00	-21.82	185	187	Peak

Middle channel																			
Horizontal									Vertical										
Freq.		Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.		Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000		109.80	-10.92	98.88			127	150	Average	2437.000		118.04	-10.92	107.12			126	162	Average
2437.000		120.41	-10.92	109.49			127	150	Peak	2437.000		128.72	-10.92	117.80			126	162	Peak
Freq.		Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.		Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4874.000		32.60	-3.86	28.74	54.00	-25.26	152	81	Average	4874.000		32.91	-3.86	29.05	54.00	-24.95	152	281	Average
4874.000		45.52	-3.86	41.66	74.00	-32.34	152	81	Peak	4874.000		43.69	-3.86	39.83	74.00	-34.17	152	281	Peak
7311.000		31.53	0.18	31.71	54.00	-22.29	155	20	Average	7311.000		31.62	0.18	31.80	54.00	-22.20	159	240	Average
7311.000		43.96	0.18	44.14	74.00	-29.86	155	20	Peak	7311.000		43.54	0.18	43.72	74.00	-30.28	159	240	Peak
8288.000		43.16	0.97	44.13	54.00	-9.87	122	208	Average	8288.000		47.31	0.97	48.28	54.00	-5.72	177	212	Average
8288.000		48.50	0.97	49.47	74.00	-24.53	122	208	Peak	8288.000		51.01	0.97	51.98	74.00	-22.02	177	212	Peak

High channel																			
Horizontal									Vertical										
Freq.		Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.		Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2462.000		109.23	-10.76	98.47			122	159	Average	2462.000		115.82	-10.76	105.06			127	173	Average
2462.000		119.58	-10.76	108.82			122	159	Peak	2462.000		127.28	-10.76	116.52			127	173	Peak
2491.792		56.43	-10.38	46.05	54.00	-7.95	122	159	Average	2483.536		63.95	-10.48	53.47	54.00	-0.53	127	173	Average
2491.792		70.83	-10.38	60.45	74.00	-13.55	122	159	Peak	2483.536		80.86	-10.48	70.38	74.00	-3.62	127	173	Peak
Freq.		Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.		Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4924.000		32.84	-3.84	29.00	54.00	-25.00	154	76	Average	4924.000		32.77	-3.84	28.93	54.00	-25.07	150	46	Average
4924.000		44.92	-3.84	41.08	74.00	-32.92	154	76	Peak	4924.000		44.41	-3.84	40.57	74.00	-33.43	150	46	Peak
7386.000		31.87	0.45	32.32	54.00	-21.68	152	301	Average	7386.000		31.99	0.45	32.44	54.00	-21.56	156	89	Average
7386.000		44.75	0.45	45.20	74.00	-28.80	152	301	Peak	7386.000		43.89	0.45	44.34	74.00	-29.66	156	89	Peak
8288.000		43.21	0.97	44.18	54.00	-9.82	126	173	Average	8288.000		47.27	0.97	48.24	54.00	-5.76	171	193	Average
8288.000		51.34	0.97	52.31	74.00	-21.69	126	173	Peak	8288.000		50.88	0.97	51.85	74.00	-22.15	171	193	Peak
17881.000		31.20	13.19	44.39	54.00	-9.61	150	232	Average	17779.000		30.90	12.79	43.69	54.00	-10.31	150	0	Average
17881.000		43.78	13.19	56.97	74.00	-17.03	150	232	Peak	17779.000		45.35	12.79	58.14	74.00	-15.86	150	0	Peak

Note:

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

802.11n HT40 Mode:

Low channel																	
Horizontal								Vertical									
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2384.712	56.46	-11.05	45.41	54.00	-8.59	152	148	Average	2389.728	63.72	-11.02	52.70	54.00	-1.30	116	162	Average
2384.712	70.37	-11.05	59.32	74.00	-14.68	152	148	Peak	2389.728	77.74	-11.02	66.72	74.00	-7.28	116	162	Peak
2422.000	104.00	-10.94	93.06			152	148	Average	2422.000	112.35	-10.94	101.41			116	162	Average
2422.000	114.89	-10.94	103.95			152	148	Peak	2422.000	122.69	-10.94	111.75			116	162	Peak
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4844.000	34.39	-3.79	30.60	54.00	-23.40	158	188	Average	4844.000	32.93	-3.79	29.14	54.00	-24.86	155	214	Average
4844.000	45.52	-3.79	41.73	74.00	-32.27	158	188	Peak	4844.000	45.16	-3.79	41.37	74.00	-32.63	155	214	Peak
7266.000	31.46	0.26	31.72	54.00	-22.28	147	304	Average	7266.000	31.57	0.26	31.83	54.00	-22.17	152	330	Average
7266.000	43.81	0.26	44.07	74.00	-29.93	147	304	Peak	7266.000	43.29	0.26	43.55	74.00	-30.45	152	330	Peak
8288.000	42.94	0.97	43.91	54.00	-10.09	125	211	Average	8288.000	47.81	0.97	48.78	54.00	-5.22	176	206	Average
8288.000	48.62	0.97	49.59	74.00	-24.41	125	211	Peak	8288.000	51.73	0.97	52.70	74.00	-21.30	176	206	Peak

Middle channel																	
Horizontal								Vertical									
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	104.80	-10.92	93.88			124	147	Average	2437.000	112.78	-10.92	101.86			113	176	Average
2437.000	114.85	-10.92	103.93			124	147	Peak	2437.000	122.96	-10.92	112.04			113	176	Peak
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4874.000	32.91	-3.86	29.05	54.00	-24.95	153	144	Average	4874.000	32.93	-3.86	29.07	54.00	-24.93	151	16	Average
4874.000	44.58	-3.86	40.72	74.00	-33.28	153	144	Peak	4874.000	45.76	-3.86	41.90	74.00	-32.10	151	16	Peak
7311.000	31.52	0.18	31.70	54.00	-22.30	158	319	Average	7311.000	31.75	0.18	31.93	54.00	-22.07	154	320	Average
7311.000	44.44	0.18	44.62	74.00	-29.38	158	319	Peak	7311.000	43.90	0.18	44.08	74.00	-29.92	154	320	Peak
8288.000	43.60	0.97	44.57	54.00	-9.43	124	206	Average	8288.000	47.67	0.97	48.64	54.00	-5.36	175	206	Average
8288.000	48.92	0.97	49.89	74.00	-24.11	124	206	Peak	8288.000	51.51	0.97	52.48	74.00	-21.52	175	206	Peak

High channel																	
Horizontal								Vertical									
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2452.000	104.50	-10.89	93.61			144	147	Average	2452.000	112.60	-10.89	101.71			113	174	Average
2452.000	114.56	-10.89	103.67			144	147	Peak	2452.000	123.65	-10.89	112.76			113	174	Peak
2497.960	56.29	-10.29	46.00	54.00	-8.00	144	147	Average	2484.292	63.40	-10.47	52.93	54.00	-1.07	113	174	Average
2497.960	70.95	-10.29	60.66	74.00	-13.34	144	147	Peak	2484.292	78.85	-10.47	68.38	74.00	-5.62	113	174	Peak
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4904.000	32.81	-3.92	28.89	54.00	-25.11	155	62	Average	4904.000	32.86	-3.92	28.94	54.00	-25.06	158	204	Average
4904.000	46.17	-3.92	42.25	74.00	-31.75	155	62	Peak	4904.000	45.30	-3.92	41.38	74.00	-32.62	158	204	Peak
7356.000	31.51	0.37	31.88	54.00	-22.12	152	1	Average	7356.000	31.56	0.37	31.93	54.00	-22.07	153	161	Average
7356.000	43.83	0.37	44.20	74.00	-29.80	152	1	Peak	7356.000	42.94	0.37	43.31	74.00	-30.69	153	161	Peak
8288.000	43.55	0.97	44.52	54.00	-9.48	127	198	Average	8288.000	47.40	0.97	48.37	54.00	-5.63	174	200	Average
8288.000	48.81	0.97	49.78	74.00	-24.22	127	198	Peak	8288.000	51.16	0.97	52.13	74.00	-21.87	174	200	Peak

Note:

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

802.11ax HE20 Mode:

Low channel																	
Horizontal								Vertical									
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2343.936	56.68	-11.31	45.37	54.00	-8.63	146	161	Average	2389.408	63.09	-11.03	52.06	54.00	-1.94	131	175	Average
2343.936	70.27	-11.31	58.96	74.00	-15.04	146	161	Peak	2389.408	79.63	-11.03	68.60	74.00	-5.40	131	175	Peak
2412.000	108.57	-10.94	97.63			146	161	Average	2412.000	114.78	-10.94	103.84			131	175	Average
2412.000	122.04	-10.94	111.10			146	161	Peak	2412.000	127.93	-10.94	116.99			131	175	Peak
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4824.000	33.10	-3.75	29.35	54.00	-24.65	153	113	Average	4824.000	32.89	-3.75	29.14	54.00	-24.86	157	266	Average
4824.000	45.72	-3.75	41.97	74.00	-32.03	153	113	Peak	4824.000	45.26	-3.75	41.51	74.00	-32.49	157	266	Peak
7236.000	31.88	0.29	32.17	54.00	-21.83	158	136	Average	7236.000	31.95	0.29	32.24	54.00	-21.76	152	24	Average
7236.000	43.35	0.29	43.64	74.00	-30.36	158	136	Peak	7236.000	44.24	0.29	44.53	74.00	-29.47	152	24	Peak
8288.000	43.60	0.97	44.57	54.00	-9.43	121	205	Average	8288.000	47.61	0.97	48.58	54.00	-5.42	179	193	Average
8288.000	49.24	0.97	50.21	74.00	-23.79	121	205	Peak	8288.000	51.37	0.97	52.34	74.00	-21.66	179	193	Peak

Middle channel																	
Horizontal								Vertical									
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	110.37	-10.92	99.45			126	151	Average	2437.000	117.86	-10.92	106.94			129	158	Average
2437.000	123.64	-10.92	112.72			126	151	Peak	2437.000	131.23	-10.92	120.31			129	158	Peak
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4874.000	34.06	-3.86	30.20	54.00	-23.80	155	181	Average	4874.000	32.91	-3.86	29.05	54.00	-24.95	159	173	Average
4874.000	44.29	-3.86	40.43	74.00	-33.57	155	181	Peak	4874.000	45.46	-3.86	41.60	74.00	-32.40	159	173	Peak
7311.000	31.56	0.18	31.74	54.00	-22.26	152	55	Average	7311.000	31.67	0.18	31.85	54.00	-22.15	151	309	Average
7311.000	45.12	0.18	45.30	74.00	-28.70	152	55	Peak	7311.000	43.40	0.18	43.58	74.00	-30.42	151	309	Peak
8288.000	43.34	0.97	44.31	54.00	-9.69	129	142	Average	8288.000	47.16	0.97	48.13	54.00	-5.87	174	181	Average
8288.000	48.95	0.97	49.92	74.00	-24.08	129	142	Peak	8288.000	51.18	0.97	52.15	74.00	-21.85	174	181	Peak

High channel																	
Horizontal								Vertical									
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2462.000	108.96	-10.76	98.20			147	148	Average	2462.000	118.56	-10.76	107.80			141	169	Average
2462.000	122.66	-10.76	111.90			147	148	Peak	2462.000	131.80	-10.76	121.04			141	169	Peak
2495.968	56.40	-10.33	46.07	54.00	-7.93	147	148	Average	2483.517	62.87	-10.48	52.39	54.00	-1.61	141	169	Average
2495.968	70.37	-10.33	60.04	74.00	-13.96	147	148	Peak	2483.517	80.66	-10.48	70.18	74.00	-3.82	141	169	Peak
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4924.000	34.44	-3.84	30.60	54.00	-23.40	151	148	Average	4924.000	32.86	-3.84	29.02	54.00	-24.98	149	169	Average
4924.000	44.48	-3.84	40.64	74.00	-33.36	151	148	Peak	4924.000	44.92	-3.84	41.08	74.00	-32.92	149	169	Peak
7386.000	31.79	0.45	32.24	54.00	-21.76	154	191	Average	7386.000	31.95	0.45	32.40	54.00	-21.60	156	350	Average
7386.000	43.18	0.45	43.63	74.00	-30.37	154	191	Peak	7386.000	43.49	0.45	43.94	74.00	-30.06	156	350	Peak
8288.000	43.16	0.97	44.13	54.00	-9.87	126	206	Average	8288.000	47.30	0.97	48.27	54.00	-5.73	174	207	Average
8288.000	48.78	0.97	49.75	74.00	-24.25	126	206	Peak	8288.000	51.23	0.97	52.20	74.00	-21.80	174	207	Peak

Note:

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

802.11ax HE40 Mode:

Low channel																	
Horizontal								Vertical									
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2333.100	56.40	-11.39	45.01	54.00	-8.99	134	151	Average	2388.936	63.21	-11.03	52.18	54.00	-1.82	119	162	Average
2333.100	70.44	-11.39	59.05	74.00	-14.95	134	151	Peak	2388.936	77.77	-11.03	66.74	74.00	-7.26	119	162	Peak
2422.000	104.66	-10.94	93.72			134	151	Average	2422.000	112.00	-10.94	101.06			119	162	Average
2422.000	118.49	-10.94	107.55			134	151	Peak	2422.000	125.24	-10.94	114.30			119	162	Peak
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4844.000	32.94	-3.79	29.15	54.00	-24.85	159	90	Average	4844.000	32.91	-3.79	29.12	54.00	-24.88	150	43	Average
4844.000	45.39	-3.79	41.60	74.00	-32.40	159	90	Peak	4844.000	44.90	-3.79	41.11	74.00	-32.89	150	43	Peak
7266.000	31.60	0.26	31.86	54.00	-22.14	154	327	Average	7266.000	31.62	0.26	31.88	54.00	-22.12	152	167	Average
7266.000	43.17	0.26	43.43	74.00	-30.57	154	327	Peak	7266.000	43.54	0.26	43.80	74.00	-30.20	152	167	Peak
8288.000	43.27	0.97	44.24	54.00	-9.76	121	198	Average	8288.000	47.84	0.97	48.81	54.00	-5.19	179	201	Average
8288.000	48.62	0.97	49.59	74.00	-24.41	121	198	Peak	8288.000	51.38	0.97	52.35	74.00	-21.65	179	201	Peak

Middle channel																	
Horizontal								Vertical									
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2437.000	104.63	-10.92	93.71			124	150	Average	2437.000	112.05	-10.92	101.13			111	174	Average
2437.000	118.31	-10.92	107.39			124	150	Peak	2437.000	125.81	-10.92	114.89			111	174	Peak
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4874.000	32.76	-3.86	28.90	54.00	-25.10	154	43	Average	4874.000	32.89	-3.86	29.03	54.00	-24.97	151	66	Average
4874.000	45.72	-3.86	41.86	74.00	-32.14	154	43	Peak	4874.000	44.51	-3.86	40.65	74.00	-33.35	151	66	Peak
7311.000	31.57	0.18	31.75	54.00	-22.25	151	31	Average	7311.000	31.64	0.18	31.82	54.00	-22.18	152	196	Average
7311.000	43.12	0.18	43.30	74.00	-30.70	151	31	Peak	7311.000	43.98	0.18	44.16	74.00	-29.84	152	196	Peak
8288.000	43.63	0.97	44.60	54.00	-9.40	126	174	Average	8288.000	47.62	0.97	48.59	54.00	-5.41	174	208	Average
8288.000	48.88	0.97	49.85	74.00	-24.15	126	174	Peak	8288.000	51.19	0.97	52.16	74.00	-21.84	174	208	Peak

High channel																	
Horizontal								Vertical									
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2452.000	103.95	-10.89	93.06			143	147	Average	2452.000	112.12	-10.89	101.23			137	175	Average
2452.000	117.68	-10.89	106.79			143	147	Peak	2452.000	125.76	-10.89	114.87			137	175	Peak
2489.868	56.32	-10.40	45.92	54.00	-8.08	143	147	Average	2488.508	62.99	-10.42	52.57	54.00	-1.43	137	175	Average
2489.868	70.29	-10.40	59.89	74.00	-14.11	143	147	Peak	2488.508	78.50	-10.42	68.08	74.00	-5.92	137	175	Peak
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
4904.000	32.89	-3.92	28.97	54.00	-25.03	156	331	Average	4904.000	32.74	-3.92	28.82	54.00	-25.18	152	68	Average
4904.000	44.46	-3.92	40.54	74.00	-33.46	156	331	Peak	4904.000	44.26	-3.92	40.34	74.00	-33.66	152	68	Peak
7356.000	31.59	0.37	31.96	54.00	-22.04	151	74	Average	7356.000	31.62	0.37	31.99	54.00	-22.01	156	357	Average
7356.000	43.21	0.37	43.58	74.00	-30.42	151	74	Peak	7356.000	43.52	0.37	43.89	74.00	-30.11	156	357	Peak
8288.000	43.03	0.97	44.00	54.00	-10.00	122	202	Average	8288.000	47.58	0.97	48.55	54.00	-5.45	175	216	Average
8288.000	48.84	0.97	49.81	74.00	-24.19	122	202	Peak	8288.000	51.04	0.97	52.01	74.00	-21.99	175	216	Peak

Note:

Level = Reading + Factor.

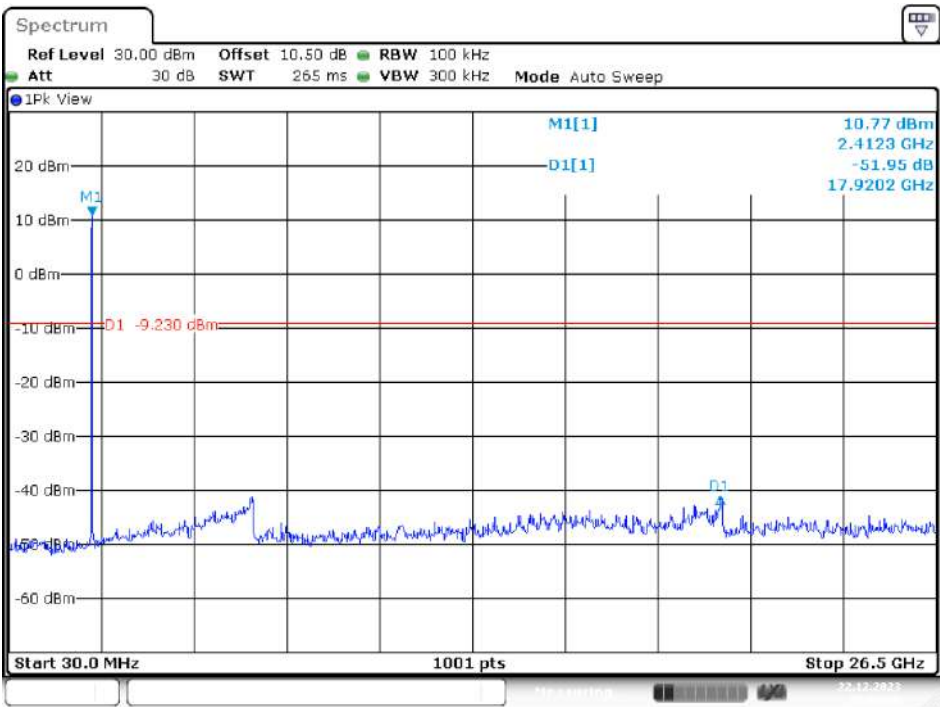
Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

Conducted Spurious Emissions:

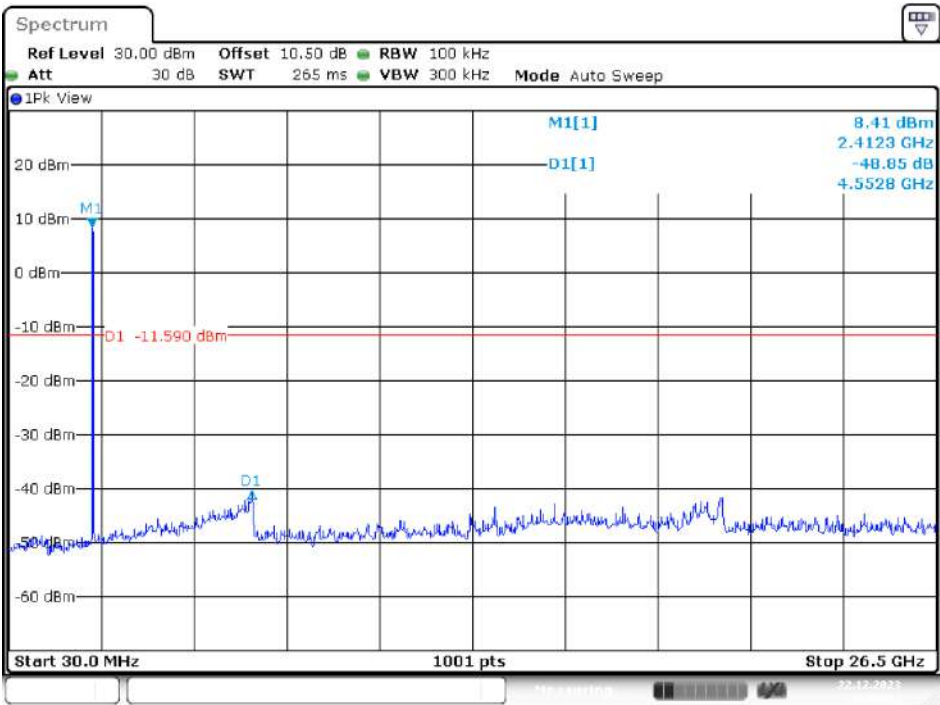
Channel	Frequency (MHz)	Delta Peak to Band Emission (dBc)		Limit (dBc)	Result
		Chain 0	Chain 1		
B Mode					
Low	2412	51.95	50.81	≥ 20	PASS
Middle	2437	48.85	50.82	≥ 20	PASS
High	2462	50.15	52.32	≥ 20	PASS
G Mode					
Low	2412	43.95	46.78	≥ 20	PASS
Middle	2437	45.30	44.62	≥ 20	PASS
High	2462	45.84	46.65	≥ 20	PASS
N20 Mode					
Low	2412	43.74	44.63	≥ 20	PASS
Middle	2437	44.01	46.62	≥ 20	PASS
High	2462	46.19	45.54	≥ 20	PASS
N40 Mode					
Low	2422	39.78	38.67	≥ 20	PASS
Middle	2437	39.27	39.86	≥ 20	PASS
High	2452	41.43	40.20	≥ 20	PASS
AX20 Mode					
Low	2412	43.42	43.55	≥ 20	PASS
Middle	2437	45.06	42.26	≥ 20	PASS
High	2462	42.33	46.91	≥ 20	PASS
AX40 Mode					
Low	2422	37.56	38.54	≥ 20	PASS
Middle	2437	39.26	39.43	≥ 20	PASS
High	2452	37.84	40.26	≥ 20	PASS

B Mode (Chain 0)
Low Channel



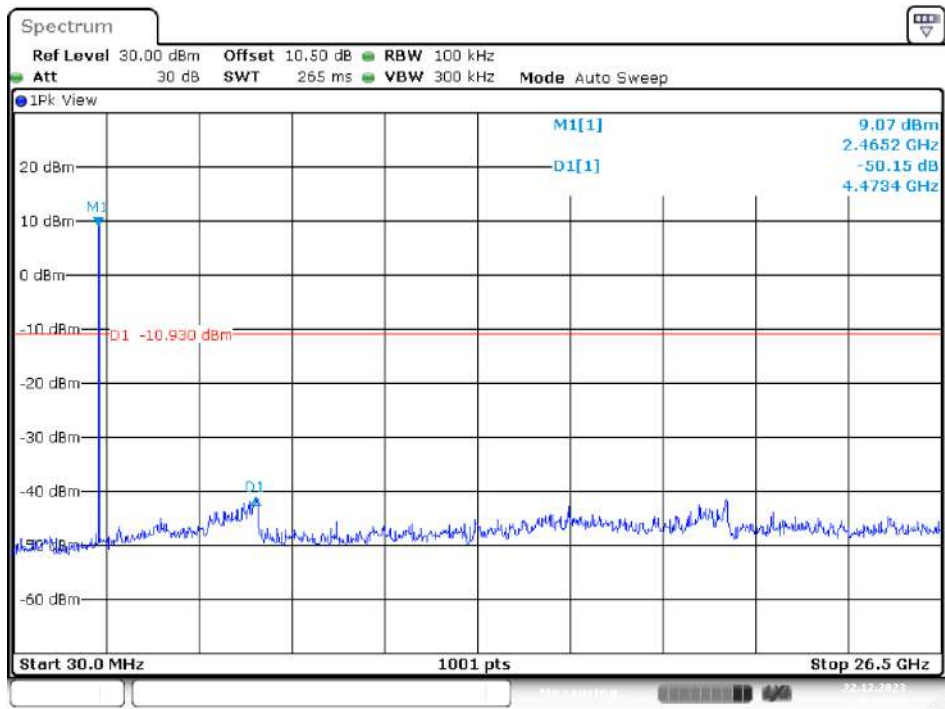
Date: 22.DEC.2023 09:55:17

Middle Channel



Date: 22.DEC.2023 10:02:27

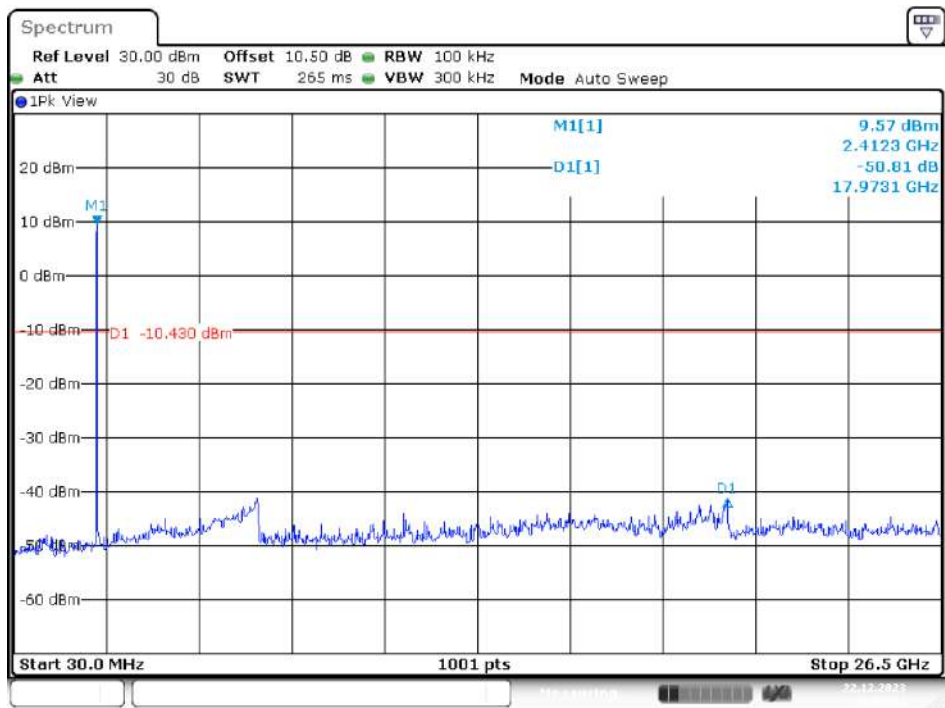
High Channel



Date: 22.DEC.2023 10:15:10

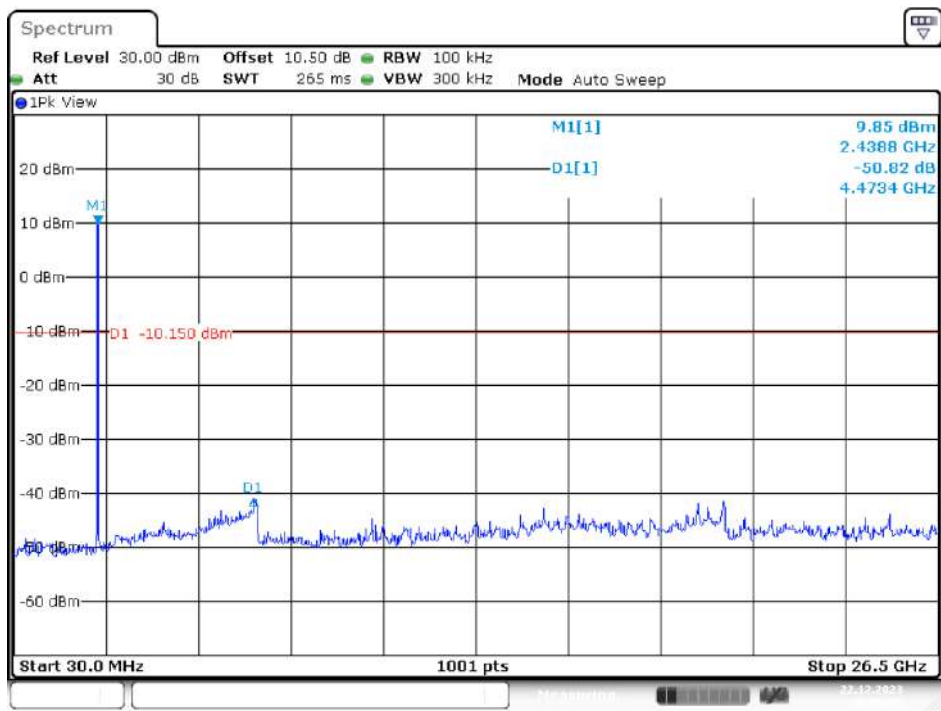
B Mode (Chain 1)

Low Channel



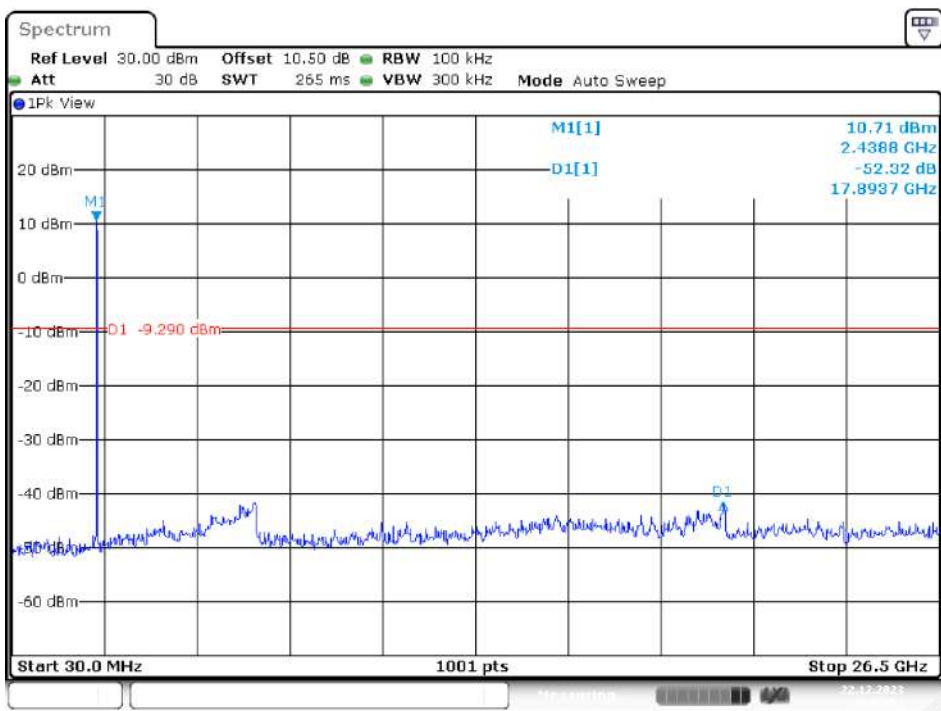
Date: 22.DEC.2023 10:53:23

Middle Channel



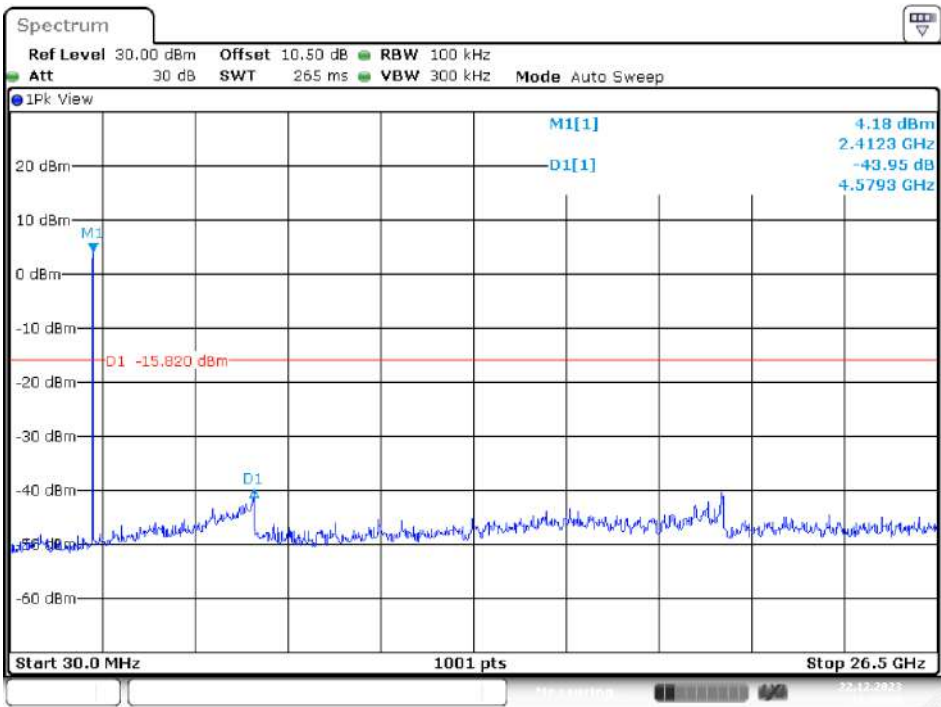
Date: 22.DEC.2023 10:55:35

High Channel



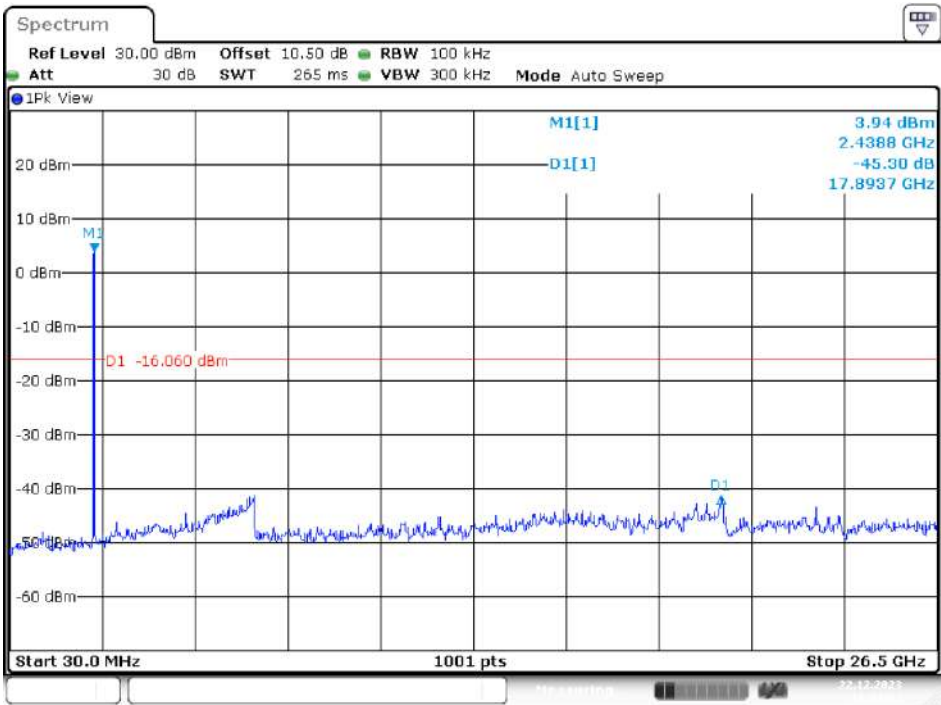
Date: 22.DEC.2023 10:57:58

G Mode (Chain 0)
Low Channel



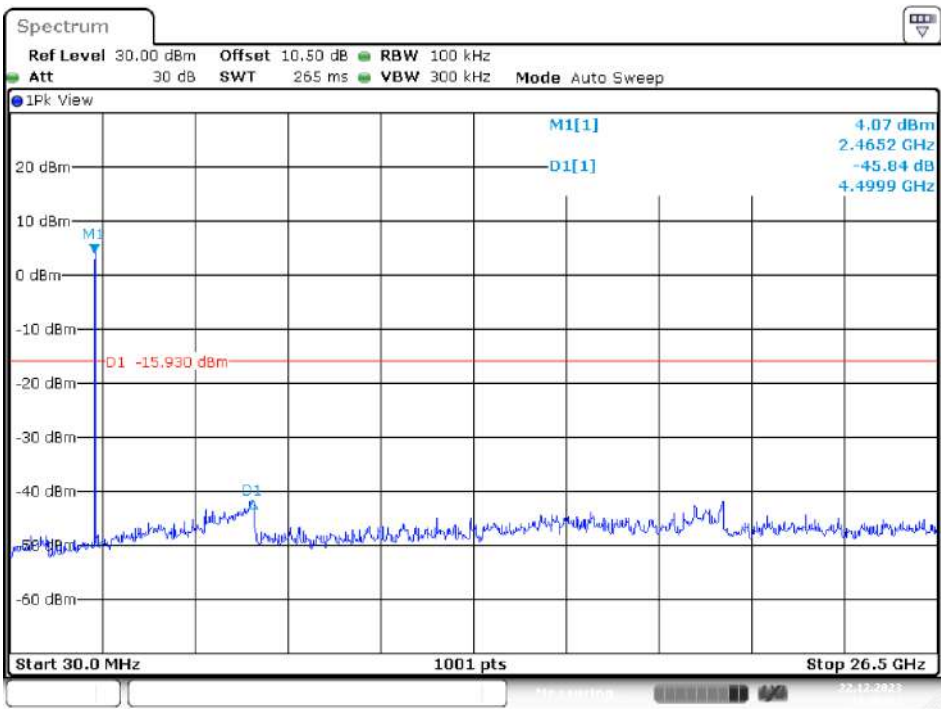
Date: 22.DEC.2023 11:40:39

Middle Channel



Date: 22.DEC.2023 11:43:13

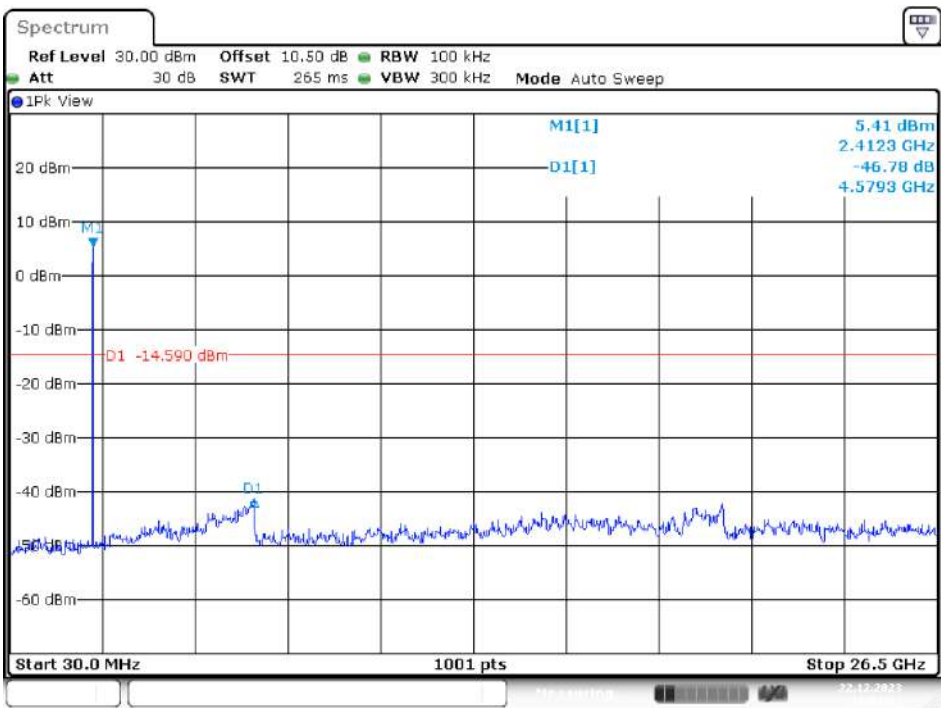
High Channel



Date: 22.DEC.2023 11:45:32

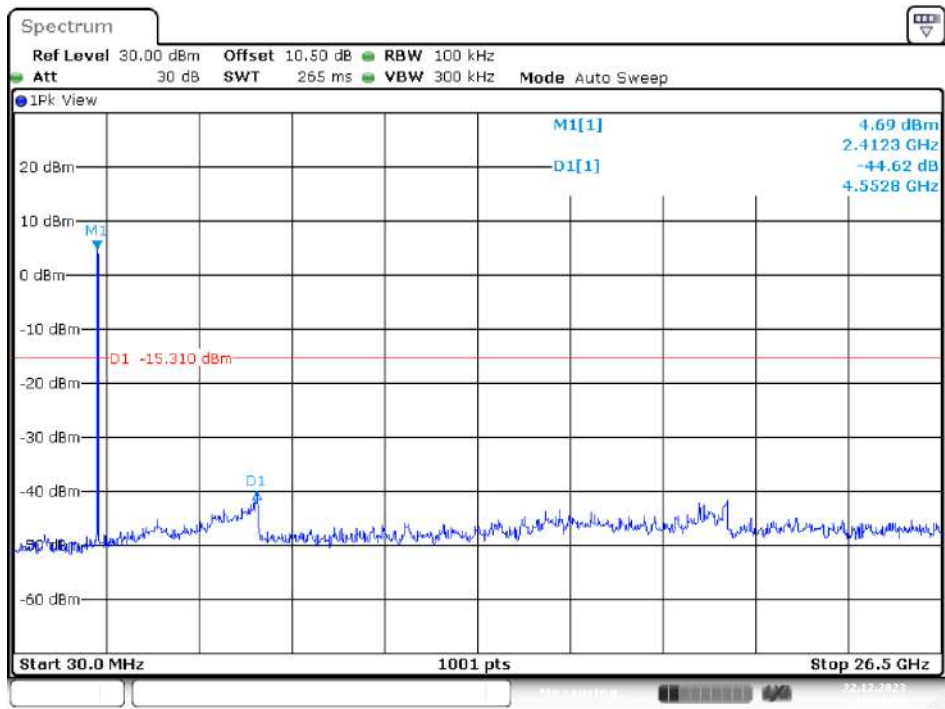
G Mode (Chain 1)

Low Channel



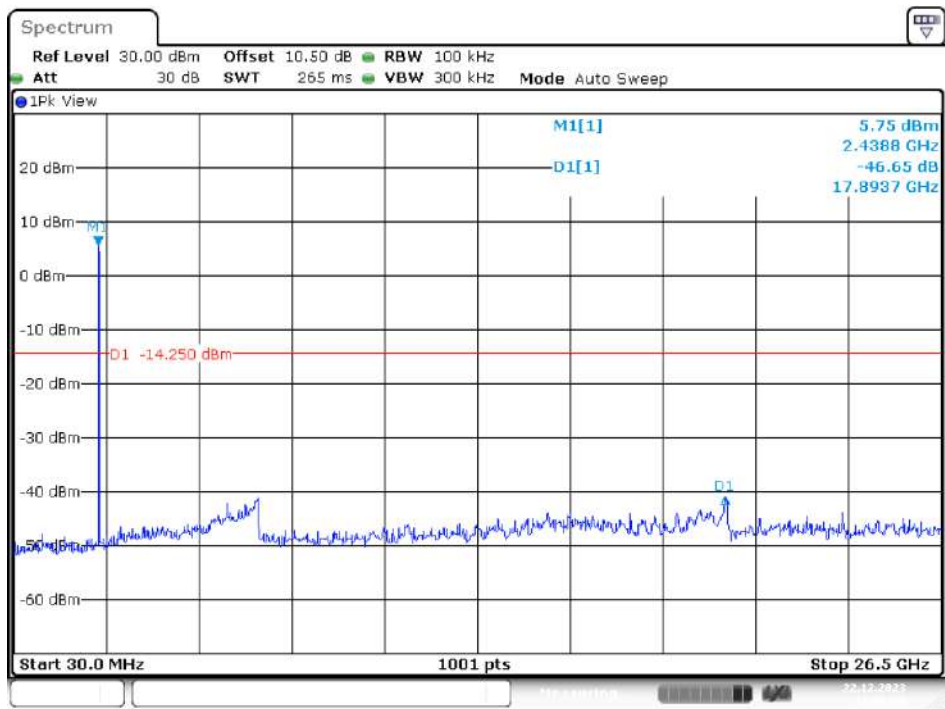
Date: 22.DEC.2023 11:01:37

Middle Channel



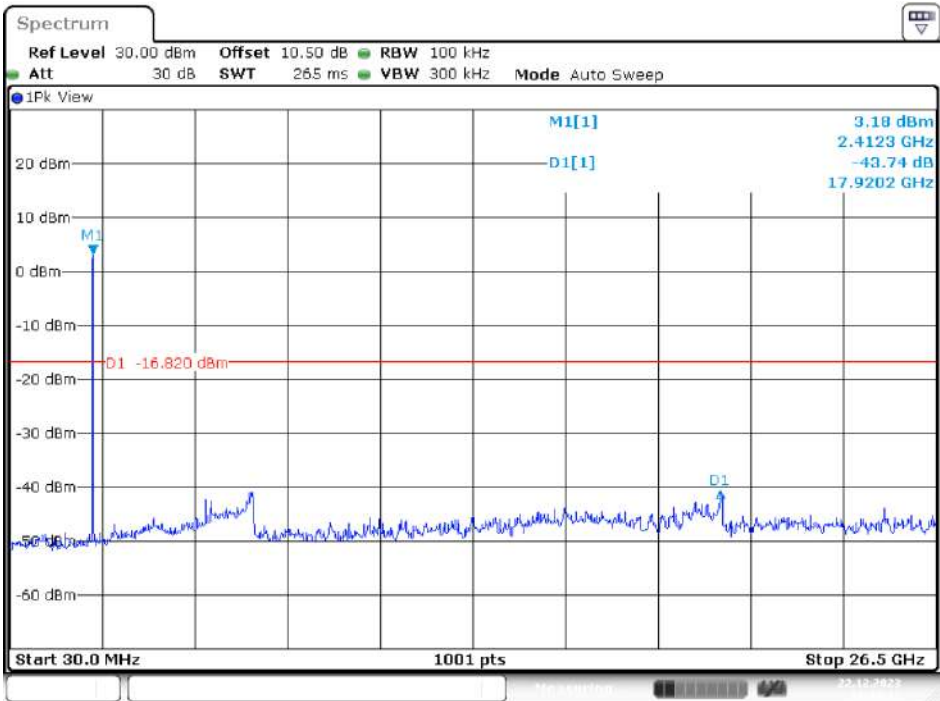
Date: 22.DEC.2023 11:03:58

High Channel



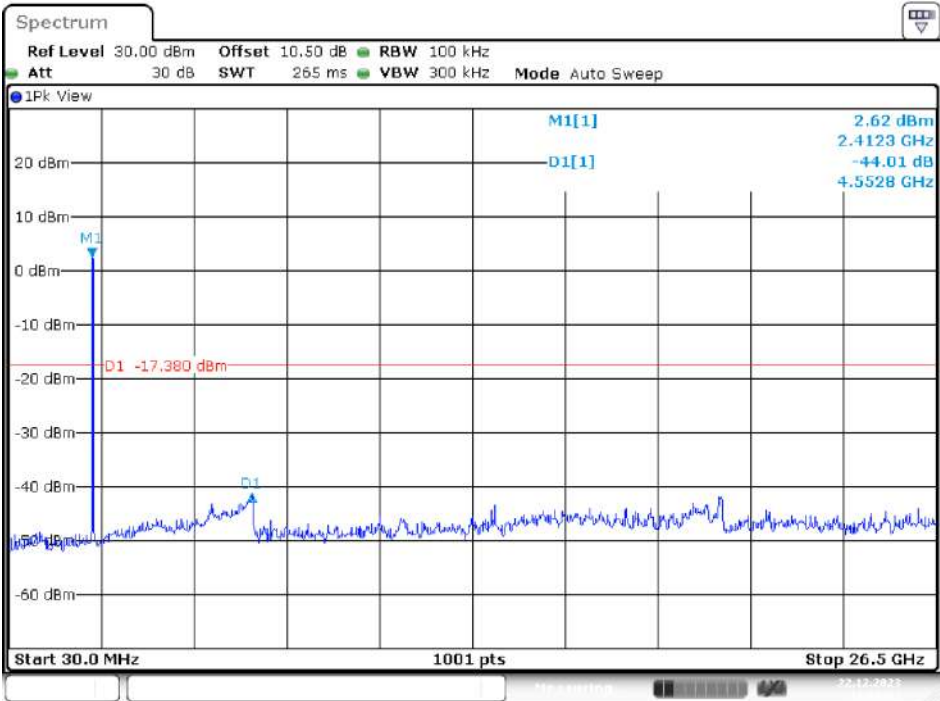
Date: 22.DEC.2023 11:06:20

N20 Mode (Chain 0)
Low Channel



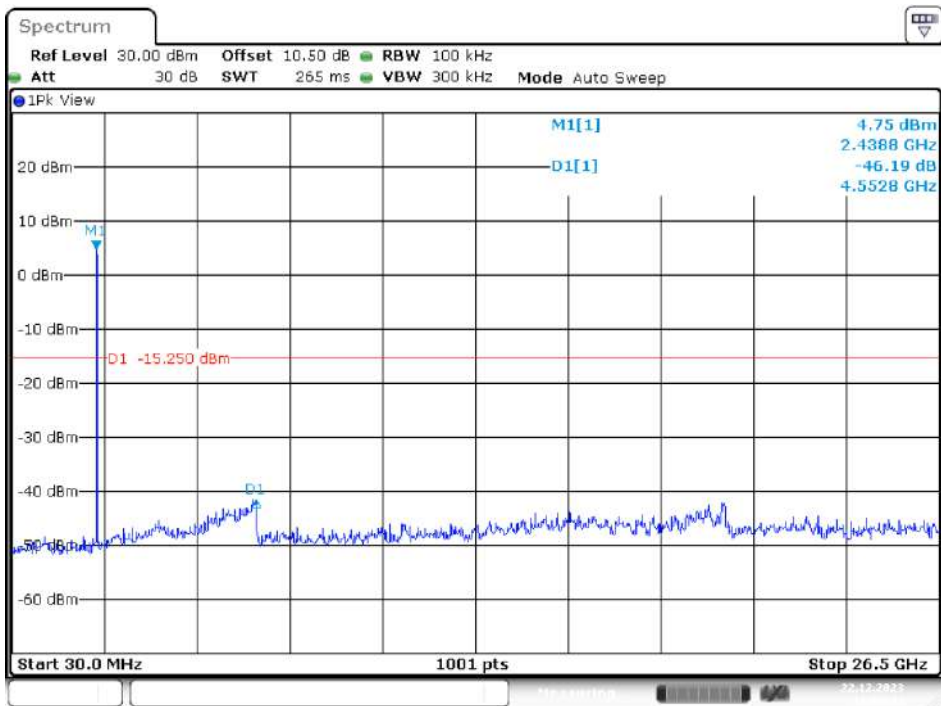
Date: 22.DEC.2023 11:48:12

Middle Channel



Date: 22.DEC.2023 11:50:17

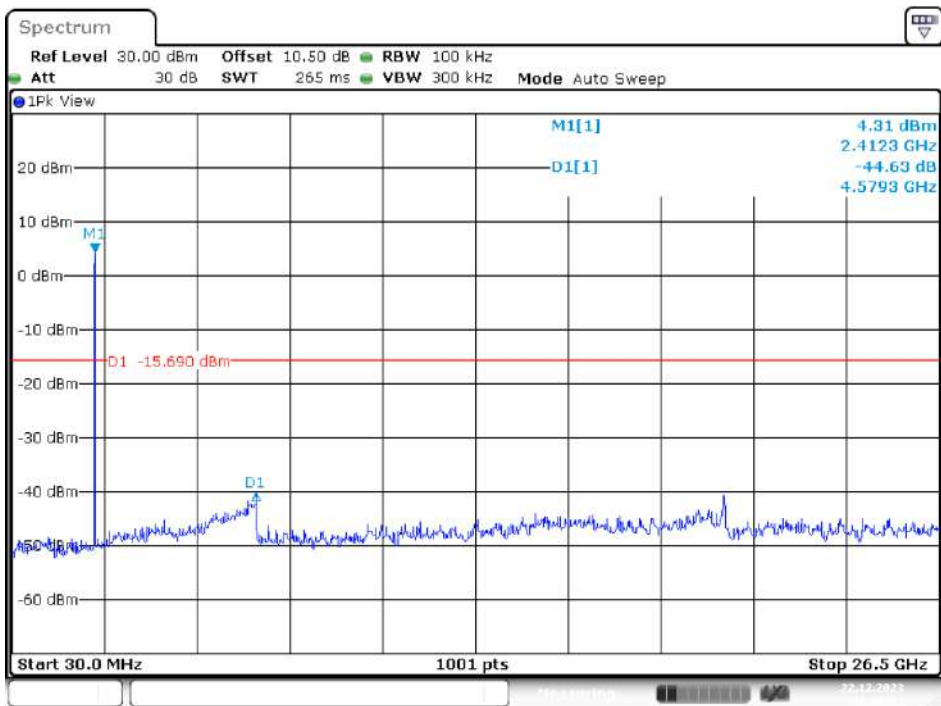
High Channel



Date: 22.DEC.2023 11:54:43

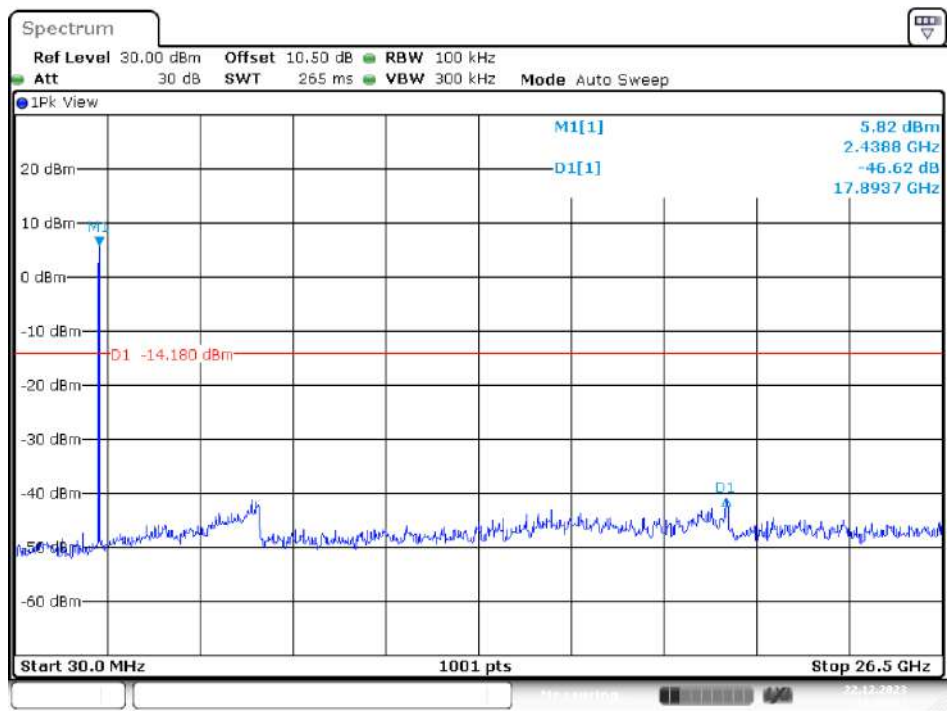
N20 Mode (Chain 1)

Low Channel



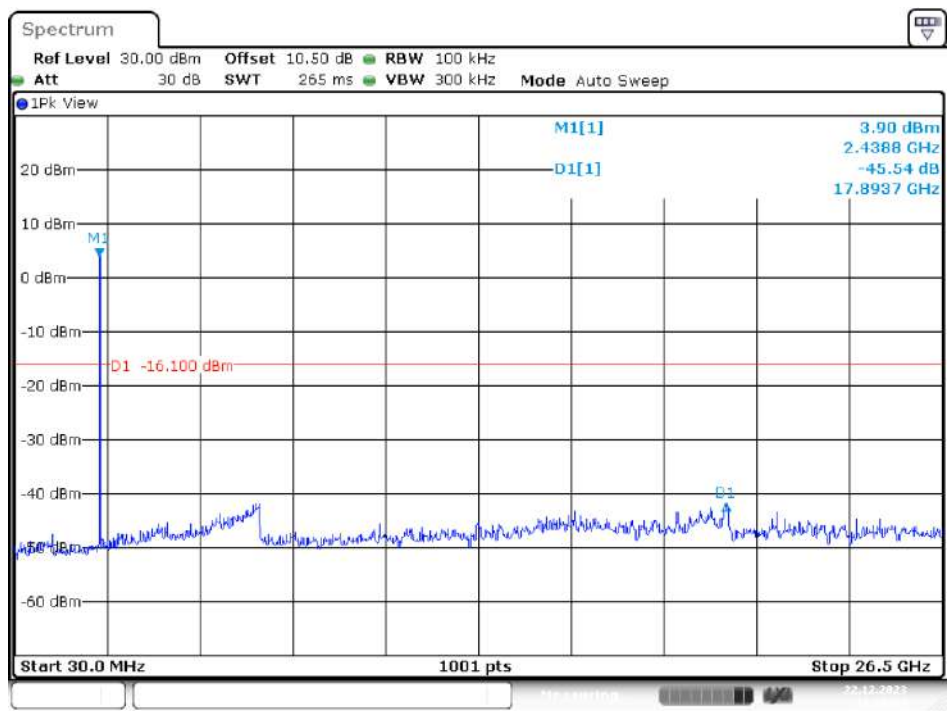
Date: 22.DEC.2023 11:10:28

Middle Channel



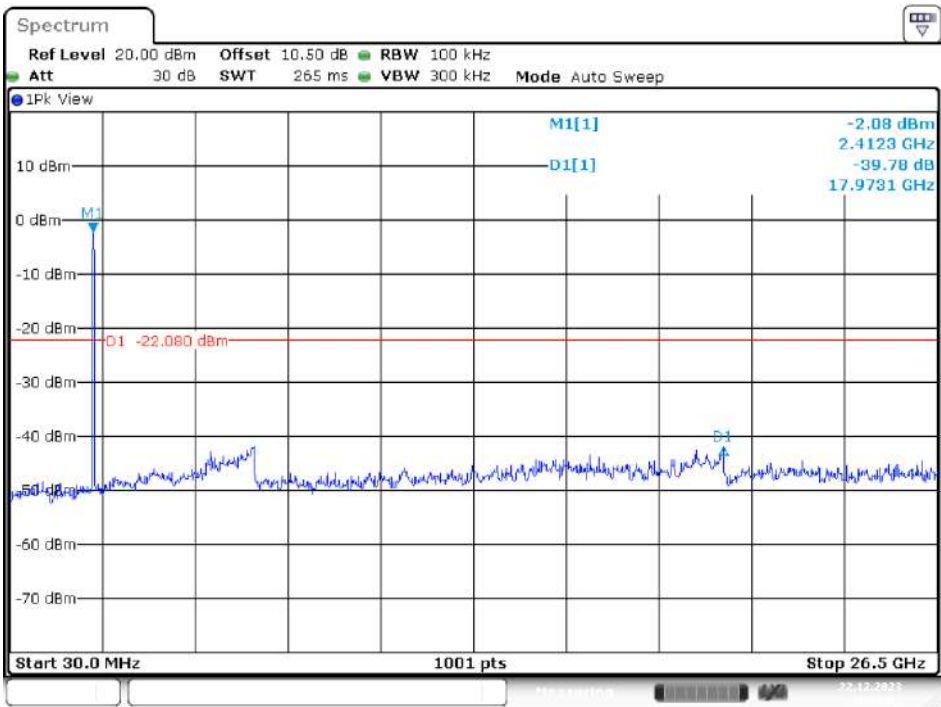
Date: 22.DEC.2023 11:13:27

High Channel



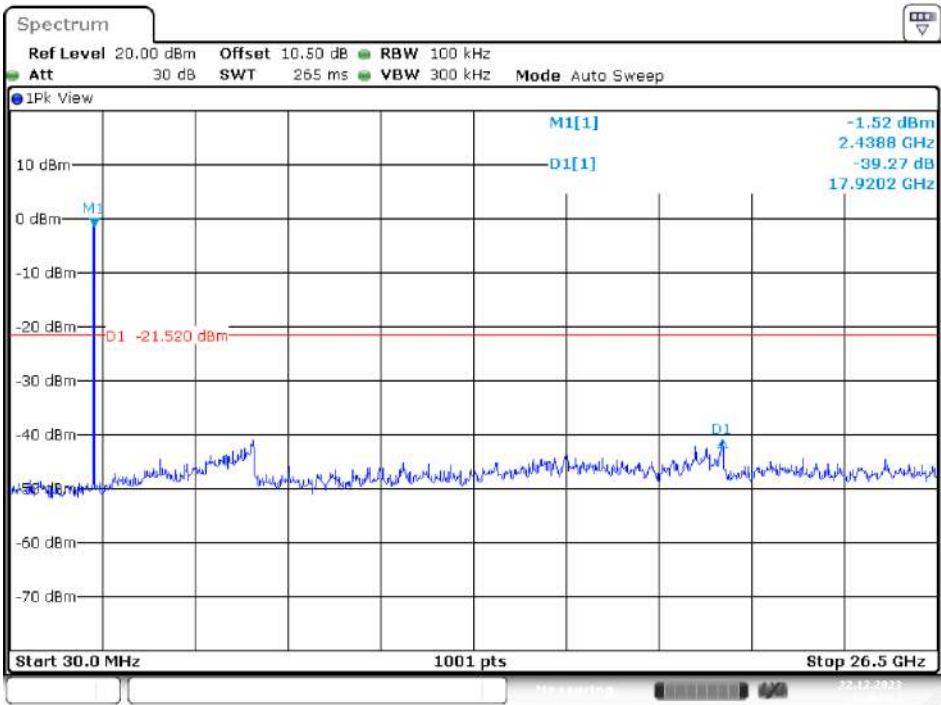
Date: 22.DEC.2023 11:16:15

N40 Mode (Chain 0)
Low Channel



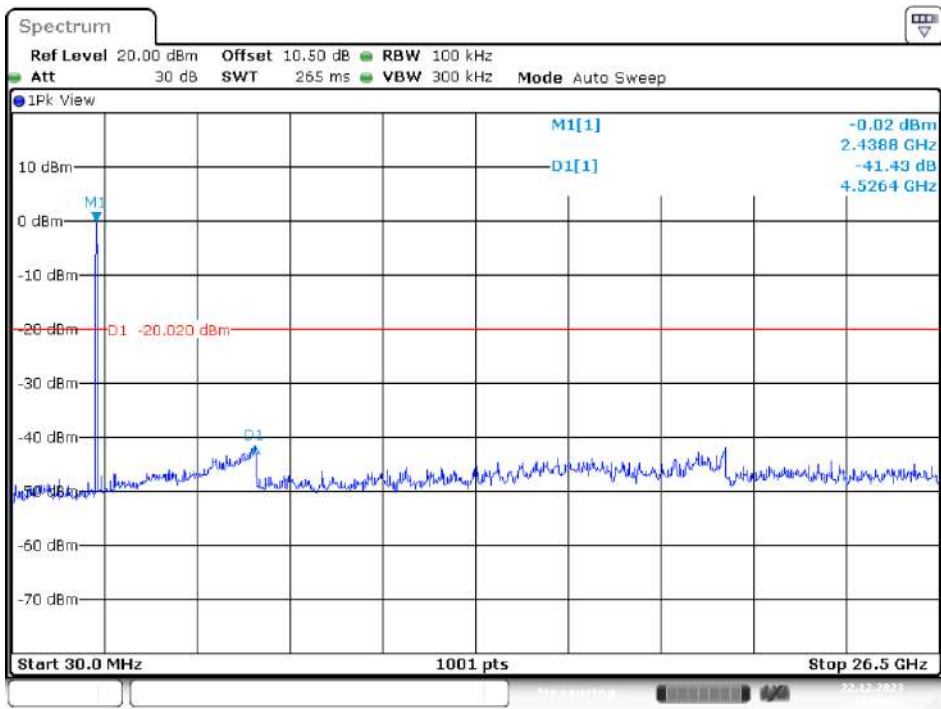
Date: 22.DEC.2023 11:59:17

Middle Channel



Date: 22.DEC.2023 12:03:31

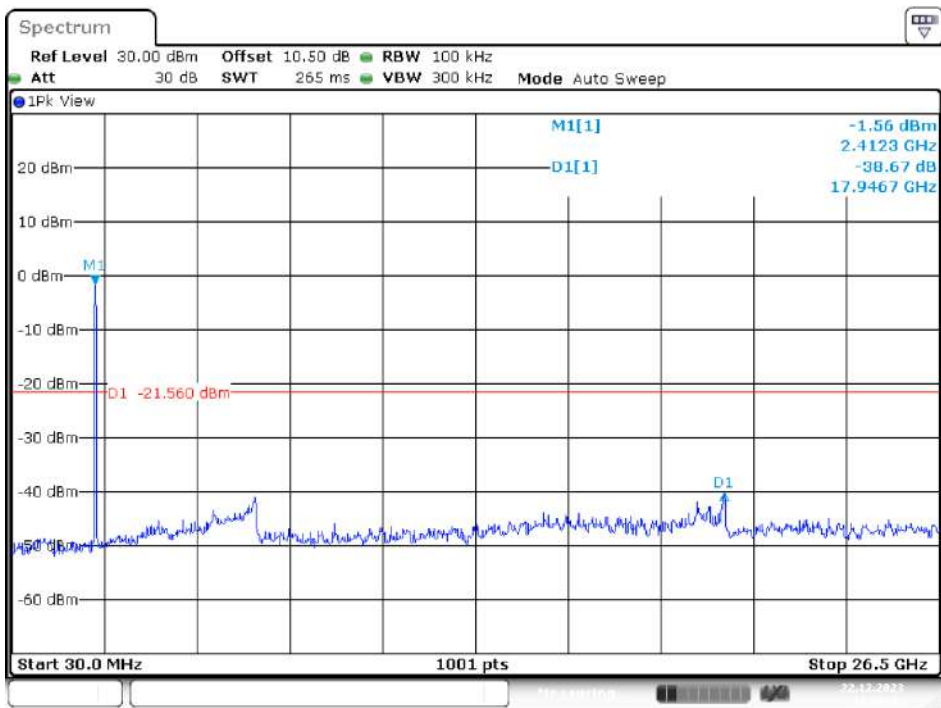
High Channel



Date: 22.DEC.2023 12:05:57

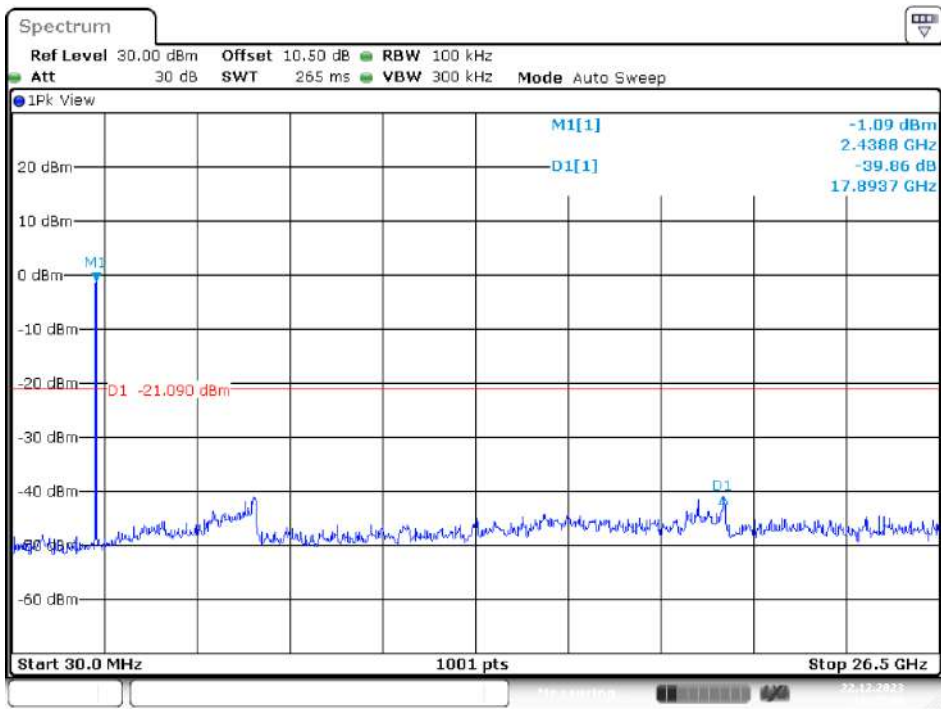
N40 Mode (Chain 1)

Low Channel



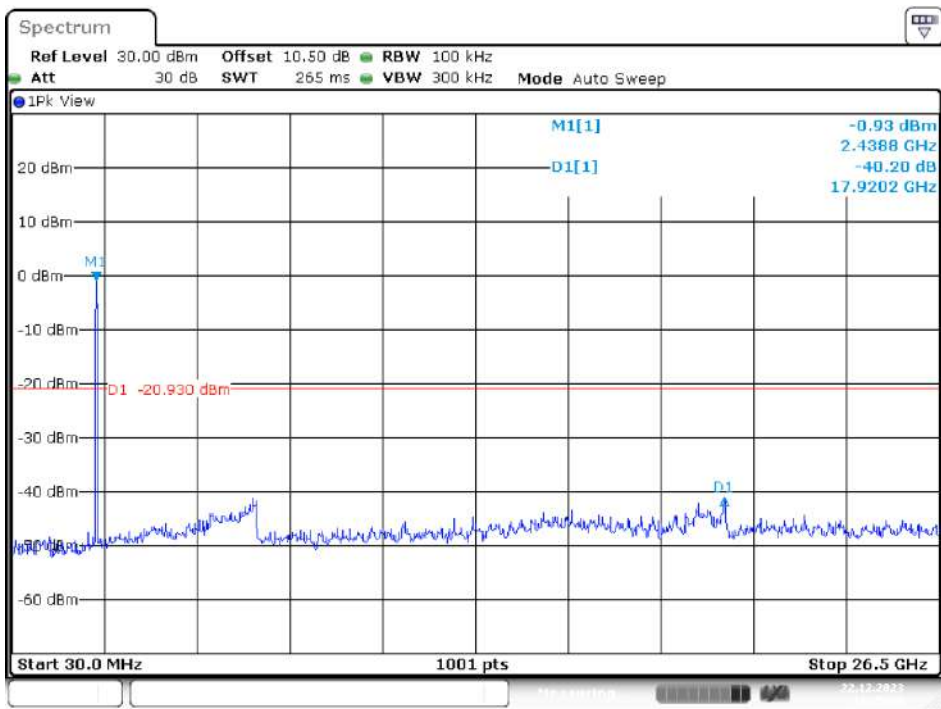
Date: 22.DEC.2023 11:19:42

Middle Channel



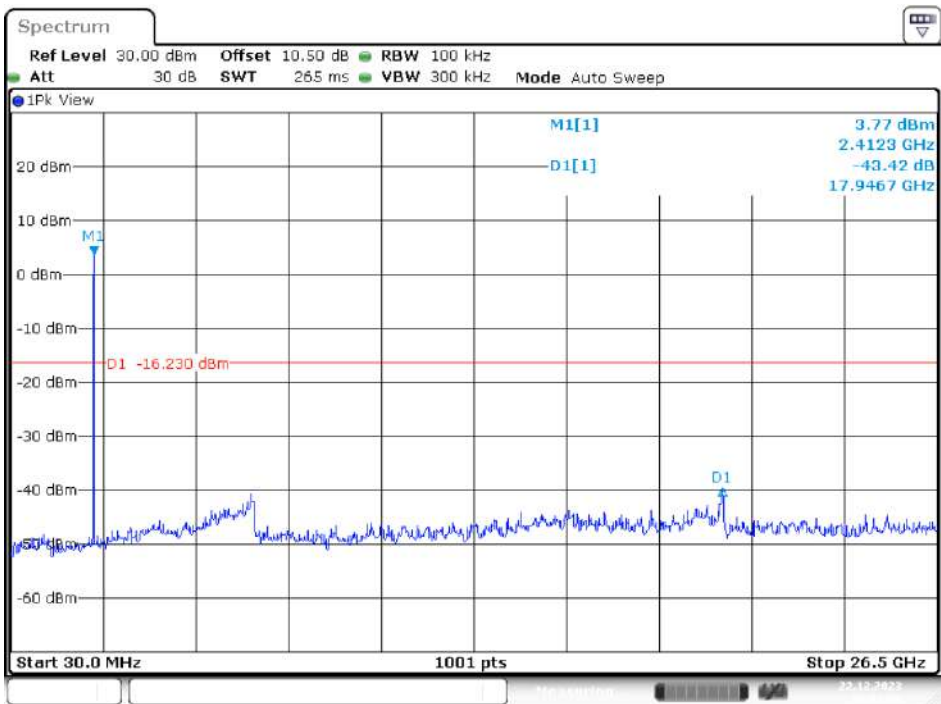
Date: 22 DEC 2023 11:22:00

High Channel



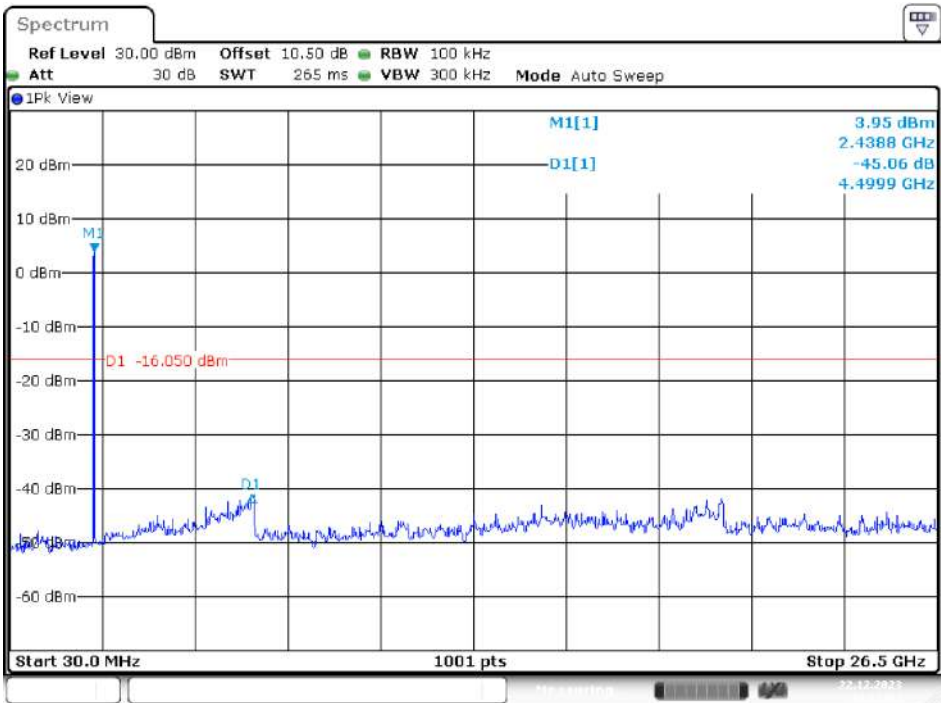
Date: 22 DEC 2023 11:25:20

AX20 Mode (Chain 0)
Low Channel



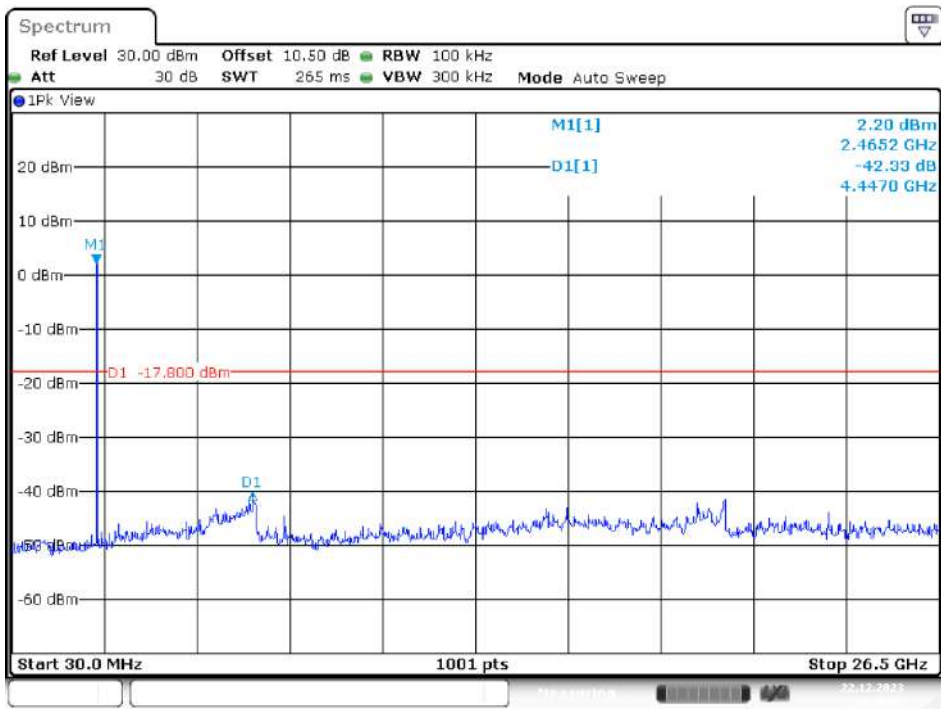
Date: 22.DEC.2023 12:12:27

Middle Channel



Date: 22.DEC.2023 12:17:32

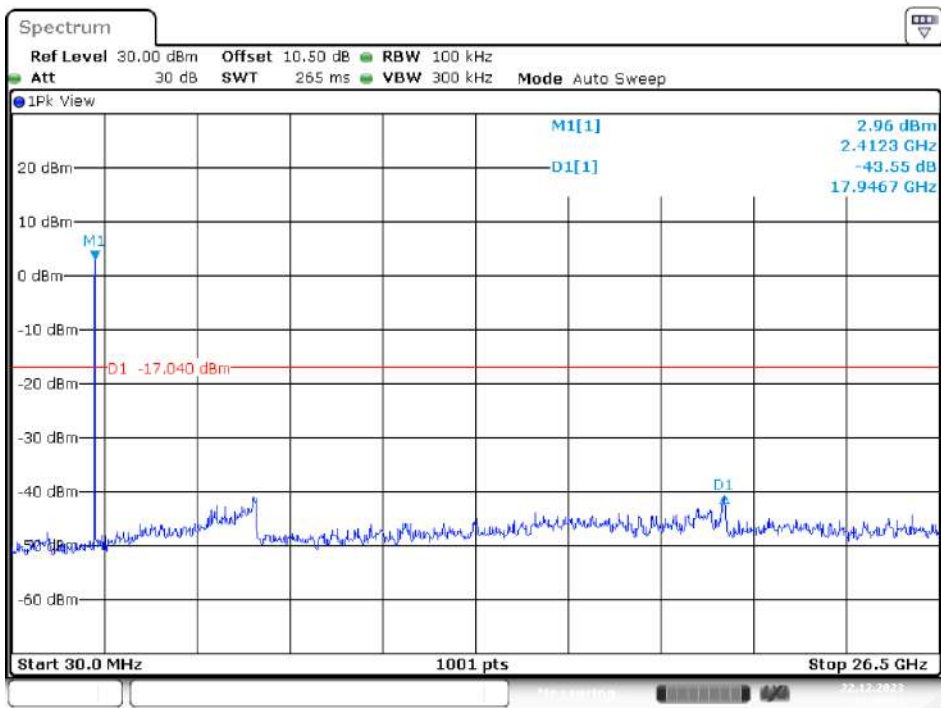
High Channel



Date: 22.DEC.2023 12:20:16

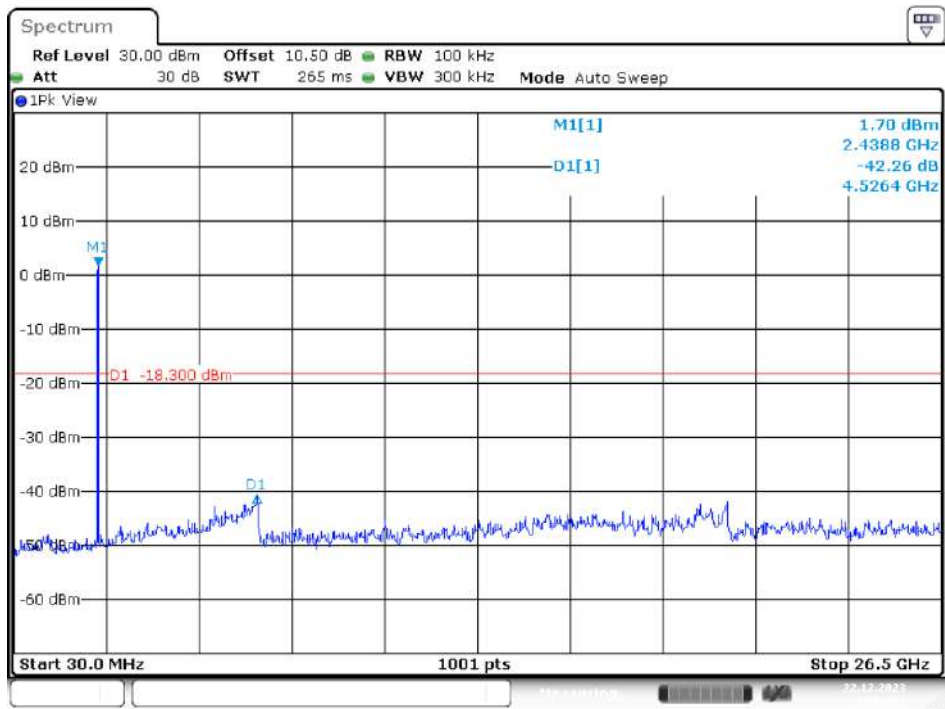
AX20 Mode (Chain 1)

Low Channel



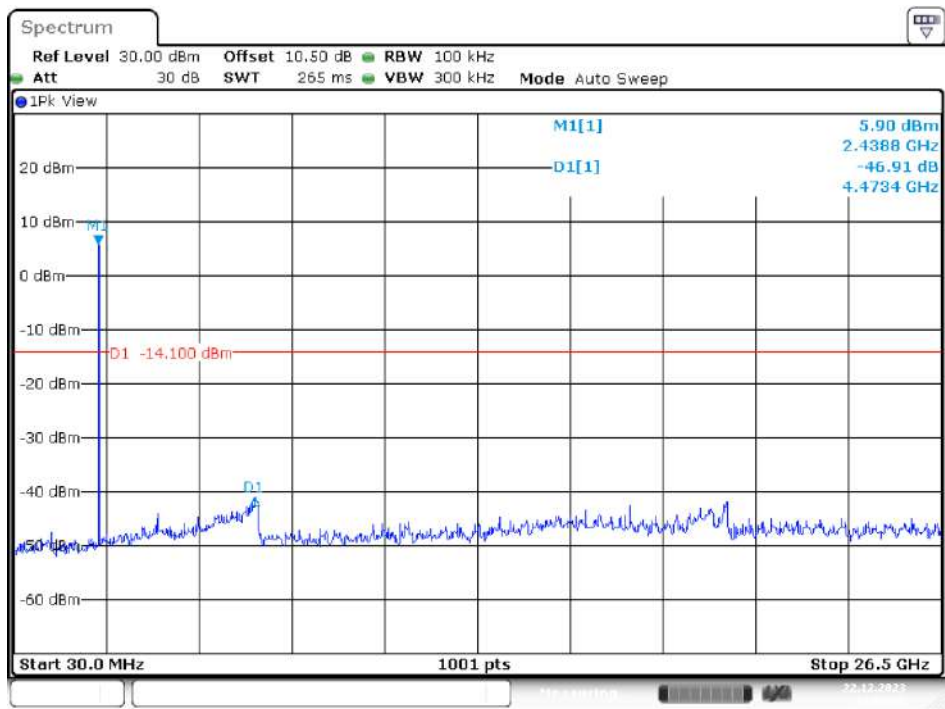
Date: 22.DEC.2023 12:48:22

Middle Channel



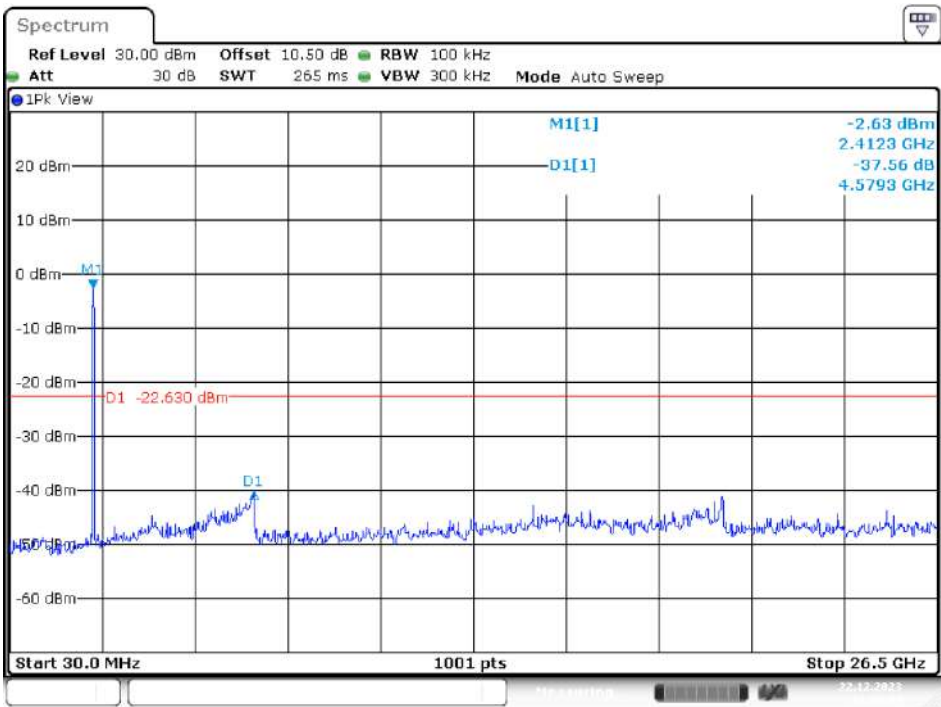
Date: 22.DEC.2023 12:51:17

High Channel



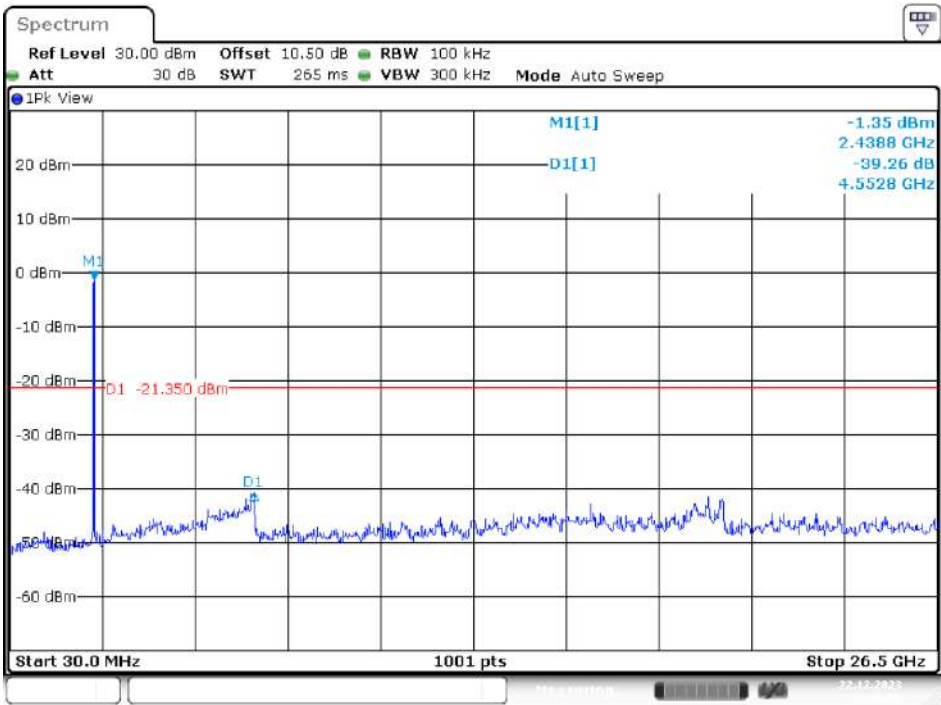
Date: 22.DEC.2023 12:53:36

AX40 Mode (Chain 0)
Low Channel



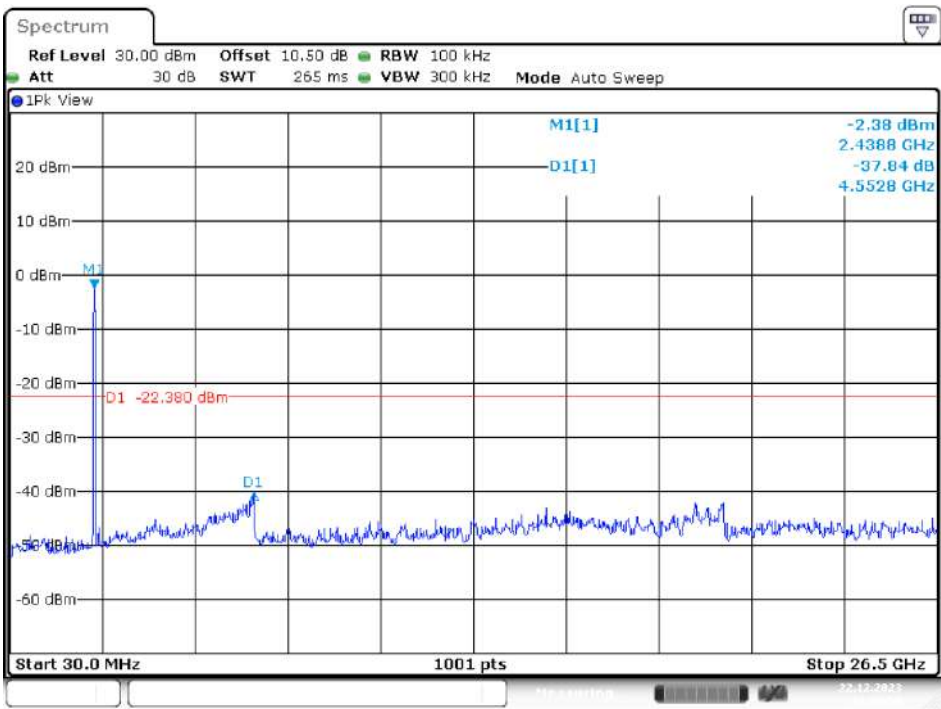
Date: 22.DEC.2023 12:35:05

Middle Channel



Date: 22.DEC.2023 12:36:57

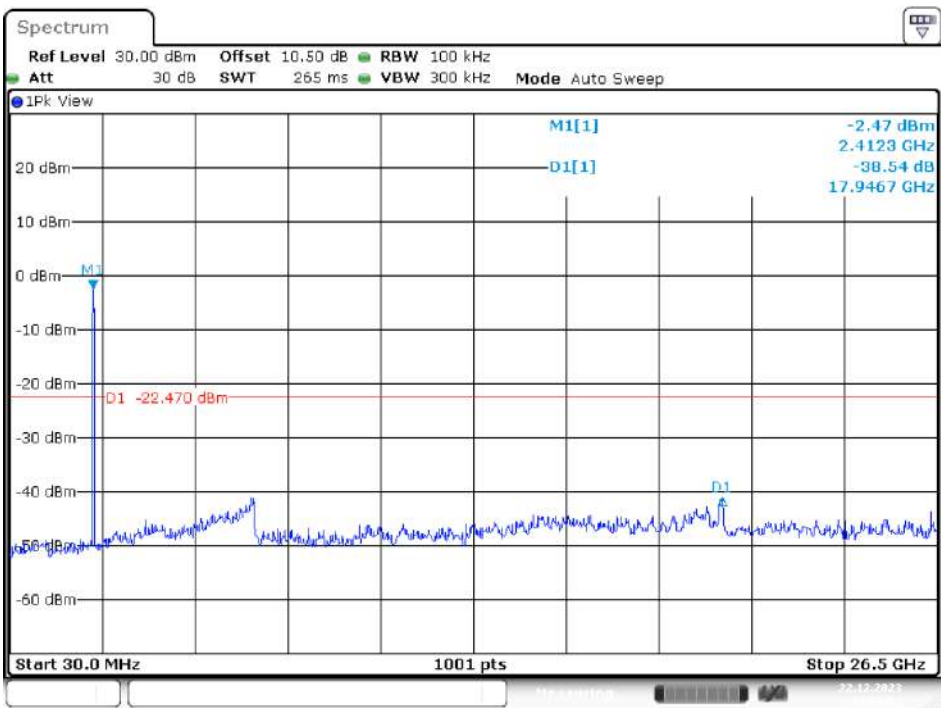
High Channel



Date: 22.DEC.2023 12:39:50

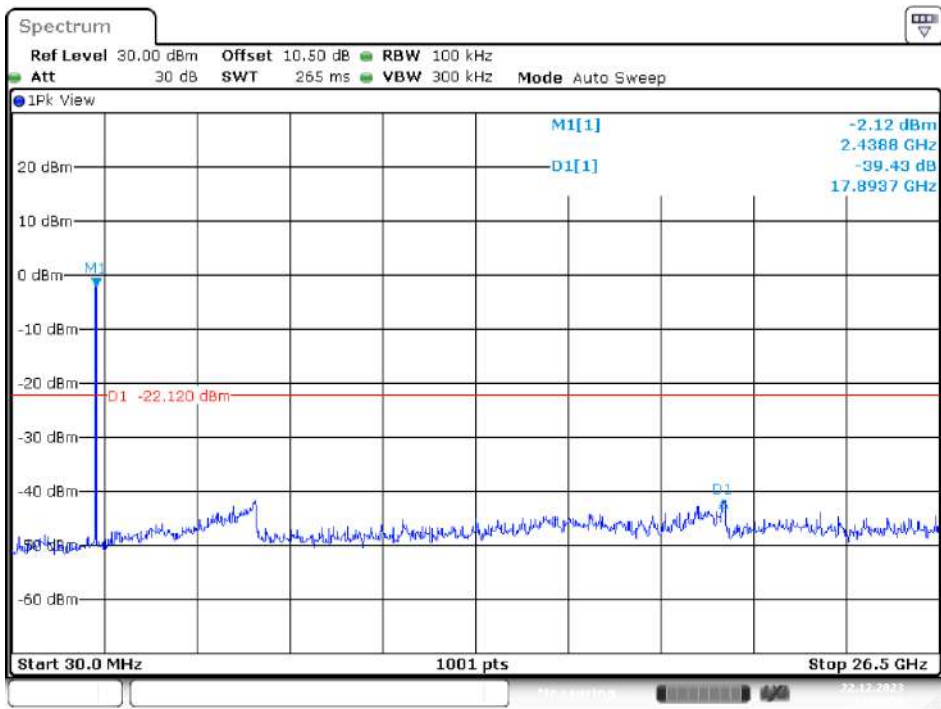
AX40 Mode (Chain 1)

Low Channel



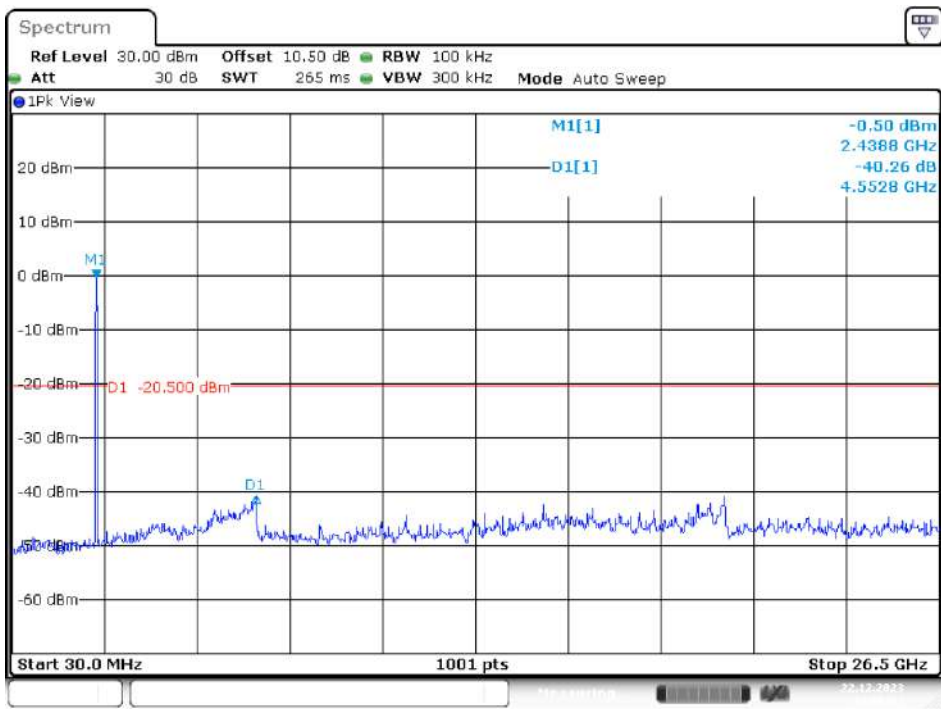
Date: 22.DEC.2023 12:58:57

Middle Channel



Date: 22.DEC.2023 13:00:59

High Channel



Date: 22.DEC.2023 14:06:18