

FCC Part 15.407 TEST REPORT

For

Adtran

901 Explorer Boulevard, Huntsville Alabama , United States 35806-2807

FCC ID: HDC-17600078

Report Type: Original Report	Product Type: WiFi 6 Router
Report Producer : <u>Coco Lin</u>	
Report Number : <u>RXZ240112041RF03</u>	
Report Date : <u>2024-04-29</u>	
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Revision History

Revision	No.	Report Number	Issue Date	Description	Author/ Revised by
0.0	RXZ240112041	RXZ240112041RF03	2024-04-29	Original Report	Coco Lin

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1 General Information

1.1 Product Description for Equipment under Test (EUT)

Applicant	Adtran
	901 Explorer Boulevard, Huntsville Alabama , United States 35806-2807
Brand(Trade) Name	Adtran
Product (Equipment)	WiFi 6 Router
Main Model Name	SDG-8610YYYYYY(Y can be 0-9, a-z, A-Z, blank, “+” or “-” or “#”)
Part Number	17600078FYYYYYYY(Y can be 0-9, a-z, A-Z, blank, “+” or “-” or “#”)
Model Discrepancy	The major electrical and mechanical constructions of series models are identical to the basic model, except different Market segmentation. The model, SDG-8610 is the testing sample, and the final test data are shown on this test report.
Frequency Range	5150 MHz ~ 5250 MHz 5725 MHz ~ 5850 MHz
Maximum Conducted Average Output Power	Non Beamforming: 5150-5250 MHz: 25.87 dBm 5725-5850 MHz: 29.50 dBm Beamforming: 5150-5250 MHz: 26.48 dBm 5725-5850 MHz: 25.99 dBm
Modulation Technique	OFDM / OFDMA
Power Operation (Voltage Range)	Adapter I/P: 100-240V, 50/60Hz, 0.7A O/P: DC 12V, 1.5A
Received Date	2024/01/24
Date of Test	2024/01/25 ~ 2024/04/26

*All measurement and test data in this report was gathered from production sample serial number: RXZ240112041-1(Assigned by BACL, New Taipei Laboratory).

1.2 Objective

This report is prepared on behalf of Adtran, Inc. in accordance with Part 2, Subpart J, Part 15, Subparts A, and E of the Federal Communication Commission's rules.

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.
KDB 789033 D02 General UNII Test Procedures New Rules v02r01

1.4 Statement

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

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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	2024/03/12	21.6	51	1010	Jing Chang
Radiation Spurious Emissions	2024/1/25~2024/3/7	16.2~23.6	61~68	1010	Jim Chen
Emission Bandwidth	2024/2/5~2024/4/26	20.2~25.7	52~59	1010	Jing Chang
Maximum Output Power	2024/2/5~2024/3/14	20.2~22.5	52~59	1010	Jing Chang
Power Spectral Density	2024/2/15~2024/3/21	20.5~24.9	48~59	1010	Jing Chang

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 22183, 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.

2 System Test Configuration

2.1 Description of Test Configuration

The system supports 802.11a/n ht20/n ht40/ac vht20/ac vht40/ac vht80/ax he20/ax he40/ax he80 mode. Since the 802.11n ht20/n ht40 parameters are the same as 802.11ac vht20 and ac vht40, 802.11n ht20/n ht40 is reduced.

For 802.11n/ac/ax mode, MIMO mode supports beamforming.

For 5150 ~ 5250MHz

4 channels are provided for 802.11a, 802.11n HT20, 802.11ac VHT20, 802.11ax HE20:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
40	5200	48	5240

2 channels are provided for 802.11n HT40, 802.11ac VHT40, 802.11ax HE40:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	46	5230

1 channel is provided for 802.11ac VHT80, 802.11ax HE80:

Channel	Frequency (MHz)
42	5210

802.11a/ac20/ax20 mode Channel 36, 40, 48 were tested.

802.11ac40/ax40 mode Channel 38, 46 were tested.

802.11ac80/ax80 mode Channel 42 was tested.

For 5725 ~ 5825MHz:

5 channels are provided for 802.11a, 802.11n HT20, 802.11ac VHT20, 802.11ax HE20:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	161	5805
153	5765	165	5825
157	5785	/	/

2 channels are provided for 802.11n HT40, 802.11ac VHT40, 802.11ax HE40:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
151	5755	159	5795

1 channel is provided for 802.11ac VHT80, 802.11ax HE80:

Channel	Frequency (MHz)
155	5775

802.11a/ac20/ax20 mode Channel 149, 157, 165 were tested.

802.11ac40/ax40 mode Channel 38, 46 were tested.

802.11ac80/ax80 mode Channel 42 was tested.

2.2 EUT Exercise Software

The software was used “QATool_UIv2.78_DLLv6.83_ap_2021.11.05_Customer”.

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

Non Beamforming:

UNII Band	Mode MIMO(CDD)	Channel	Frequency (MHz)	Power setting MIMO(CDD)		
				Chain 0	Chain 1	Chain 2
UNII-1	802.11a	36	5180	19.5	19.5	19.5
		40	5200	19.5	19.5	19.5
		48	5240	19.5	19.5	19.5
UNII-3		149	5745	22	22	22
		157	5785	22	22	22
		165	5825	22	22	22
UNII-1	802.11n HT20 / ac VHT20	36	5180	19	19	19
		40	5200	19	19	19
		48	5240	18	18	18
UNII-3		149	5745	19	19	19
		157	5785	19	19	19
		165	5825	21.5	21.5	21.5
UNII-1	802.11n HT40 / ac VHT40	38	5190	16.5	16.5	16.5
		46	5230	16.5	16.5	16.5
UNII-3		151	5755	21	21	21
		159	5795	20	20	20
UNII-1	802.11ac VHT80	42	5210	14	14	14
UNII-3		155	5775	21	21	21
UNII-1	802.11ax HE20	36	5180	19	19	19
		40	5200	19	19	19
		48	5240	18.5	18.5	18.5
1UNII-3		149	5745	19	19	19
		157	5785	17.5	17.5	17.5
		165	5825	21	21	21
UNII-1	802.11ax HE40	38	5190	16	16	16
		46	5230	16	16	16
UNII-3		151	5755	20.5	20.5	20.5
		159	5795	19.5	19.5	19.5
UNII-1	802.11ax HE80	42	5210	13.5	13.5	13.5
UNII-3		155	5775	20.5	20.5	20.5

Beamforming:

UNII Band	Mode MIMO	Channel	Frequency (MHz)	Power setting MIMO		
				Chain 0	Chain 1	Chain 2
UNII-1	802.11n HT20 / ac VHT20	36	5180	40	40	40
		40	5200	40	40	40
		48	5240	39	39	39
UNII-3		149	5745	41	41	41
		157	5785	41	41	41
		165	5825	43	43	43
UNII-1	802.11n HT40 / ac VHT40	38	5190	38	38	38
		46	5230	38	38	38
UNII-3		151	5755	40	40	40
		159	5795	40	40	40
UNII-1	802.11ac VHT80	42	5210	33	33	33
UNII-3		155	5775	40	40	40
UNII-1	802.11ax HE20	36	5180	40	40	40
		40	5200	40	40	40
		48	5240	39	39	39
UNII-3		149	5745	40	40	40
		157	5785	38	38	38
		165	5825	42	42	42
UNII-1	802.11ax HE40	38	5190	37	37	37
		46	5230	37	37	37
UNII-3		151	5755	42	42	42
		159	5795	41	41	41
UNII-1	802.11ax HE80	42	5210	33	33	33
UNII-3		155	5775	42	42	42

The device support SISO and MIMO.

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

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

For n/ac/ax mode, the MIMO mode support beamforming.

The worst case data rates are as follows:

802.11a Mode: 6Mbps

802.11ac VHT20 Mode: MCS0

802.11ac VHT40 Mode: MCS0

802.11ac VHT80 Mode: MCS0

802.11ax HE20 Mode: MCS0

802.11ax HE40 Mode: MCS0

802.11ax HE80 Mode: MCS0

2.3 Test Mode

Full System (model: SDG-8610) for all test item.

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

2.4 Equipment Modifications

No modification was made to the EUT.

2.5 Support Equipment List and Details

Description	Manufacturer	Model Number	Serial Number
NB	DELL	E6410	F4NYJM1
NB	DELL	E6410	70DSQM1
Adapter	KLEC	KL-WA120150-H1	N/A

2.6 External Cable List and Details

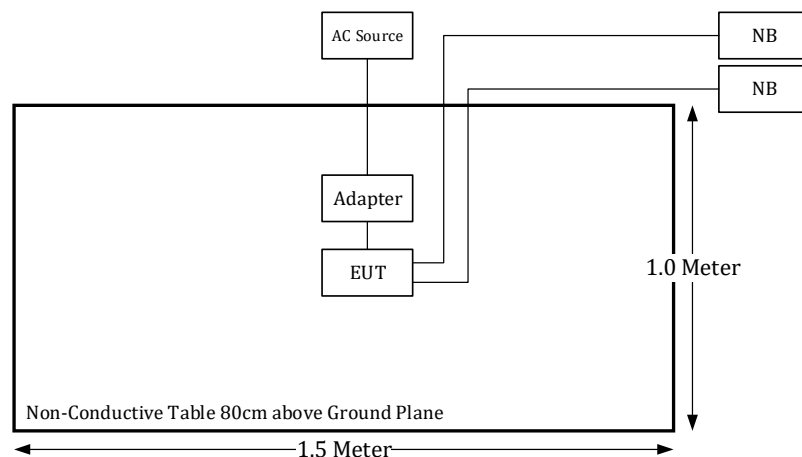
Description	Manufacturer	Cable length
RJ-45 Cable	BACL	8m
RJ-45 Cable	BACL	8m

2.7 Block Diagram of Test Setup

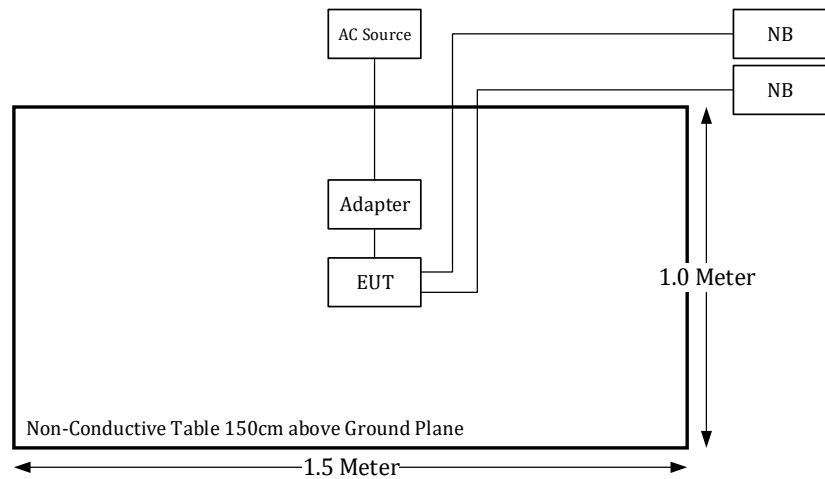
See test photographs attached in setup photos for the actual connections between EUT and support equipment.

Radiation:

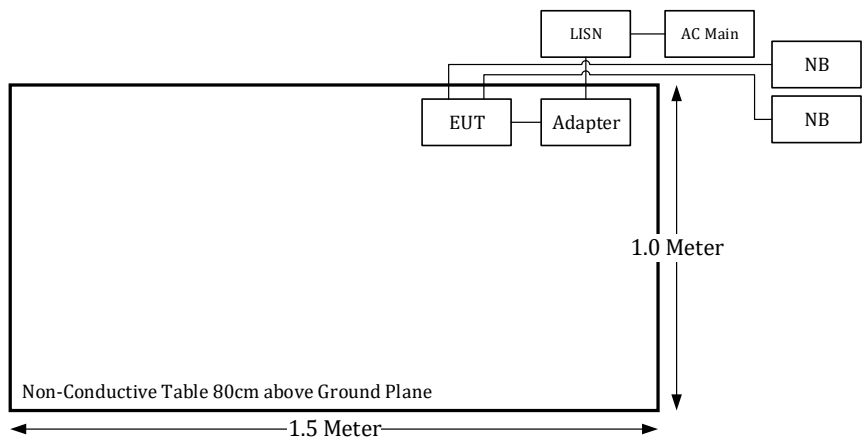
Below 1GHz



Above 1GHz:

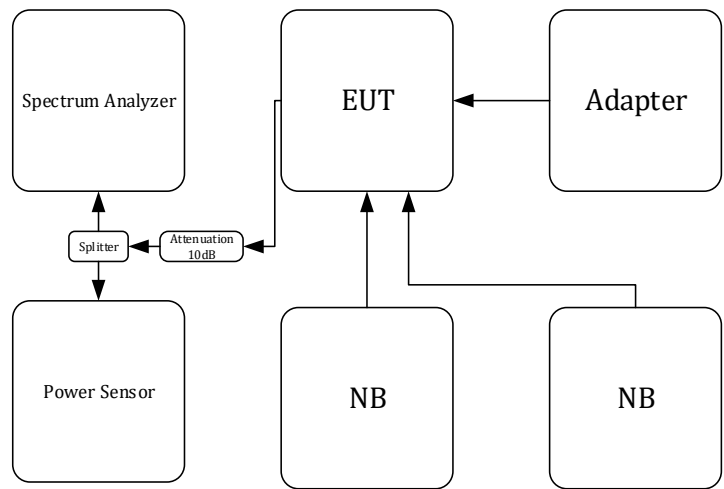


Conduction:



Conducted 1:

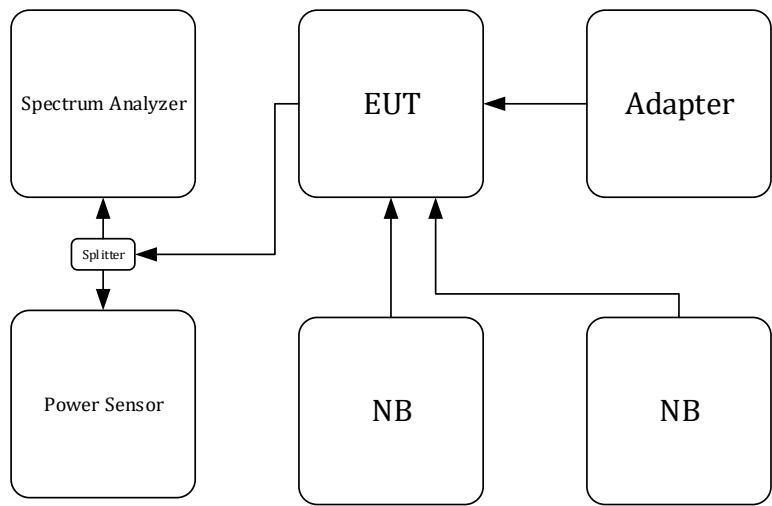
Offset: 16.5dB (Attenuation 10dB+Splitter)



Conducted 2:

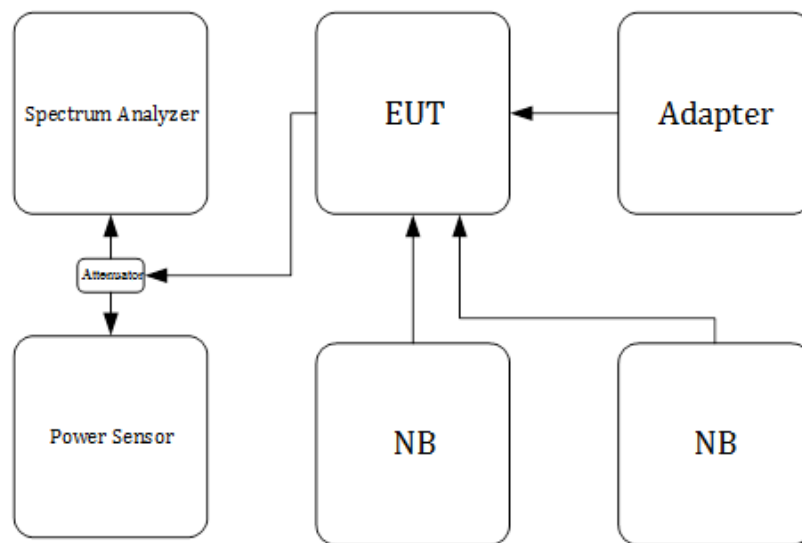
Offset: 7dB (Splitter)

Offset: 8dB (Splitter+Cable)



Conducted 3:

Offset: 11dB (Attenuator +Cable)



2.8 Duty Cycle

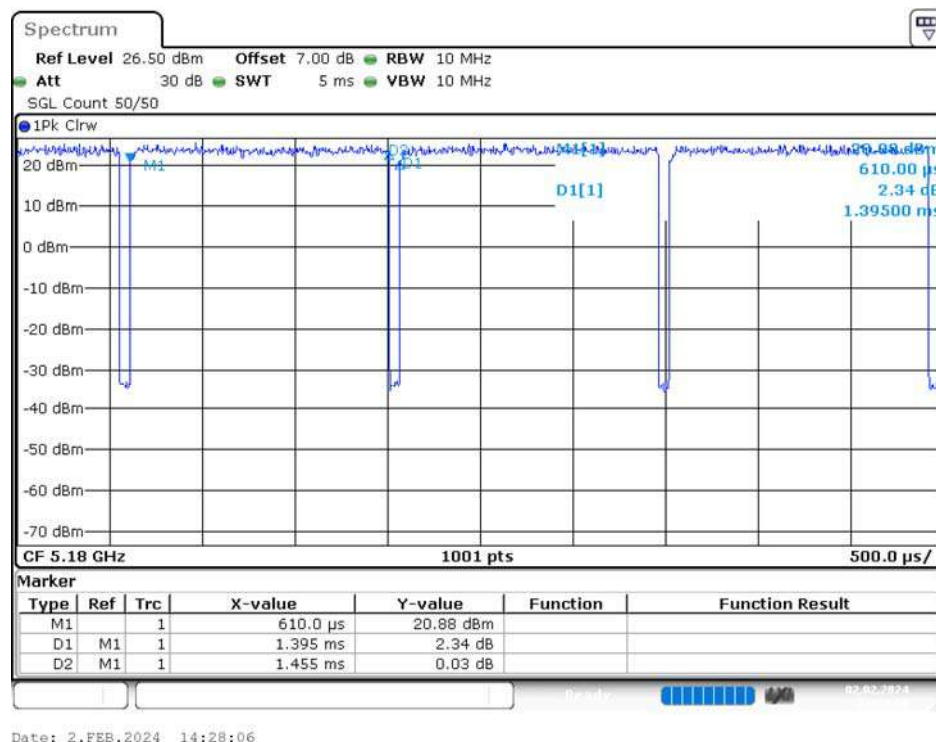
The duty cycle as below:

Radio Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T (kHz)	VBW Setting (kHz)
802.11a	1.395	1.455	96	0.18	0.72	1.0
802.11ac 20	0.666	0.731	91	0.41	1.50	2.0
802.11ac 40	0.072	0.129	56	2.52	13.89	20
802.11ac 80	0.059	0.116	51	2.92	16.95	20
802.11ax 20	0.416	0.486	86	0.66	2.40	3.0
802.11ax 40	0.256	0.326	79	1.02	3.91	5.0
802.11ax 80	0.184	0.241	76	1.19	5.43	10

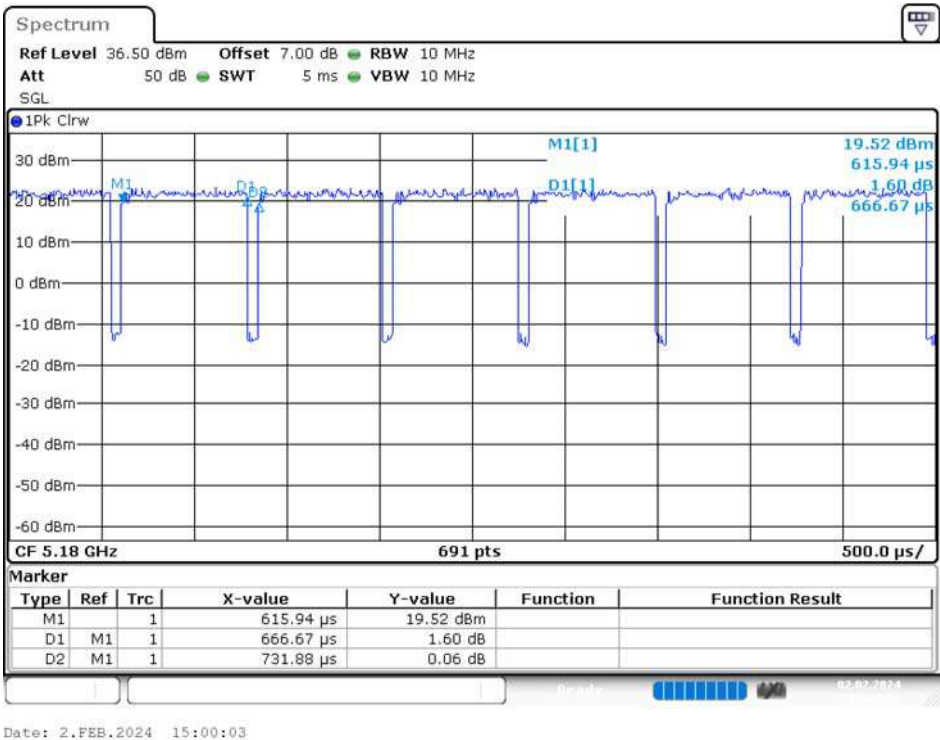
Note: Duty Cycle Correction Factor = $10 \cdot \log(1/\text{duty cycle})$

Please refer to the following plots.

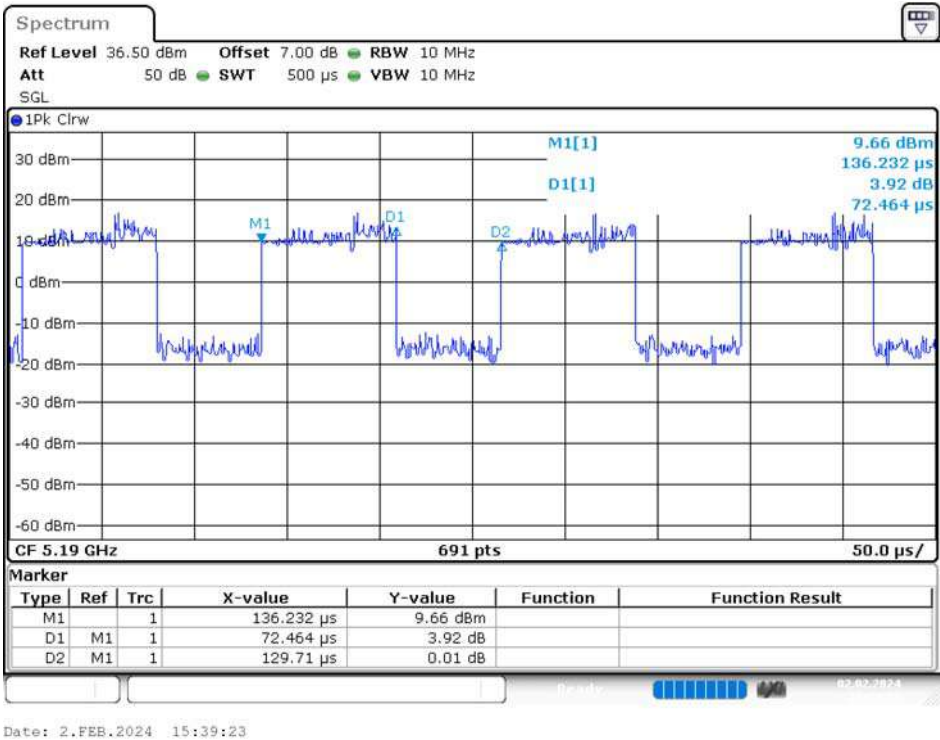
802.11a Mode



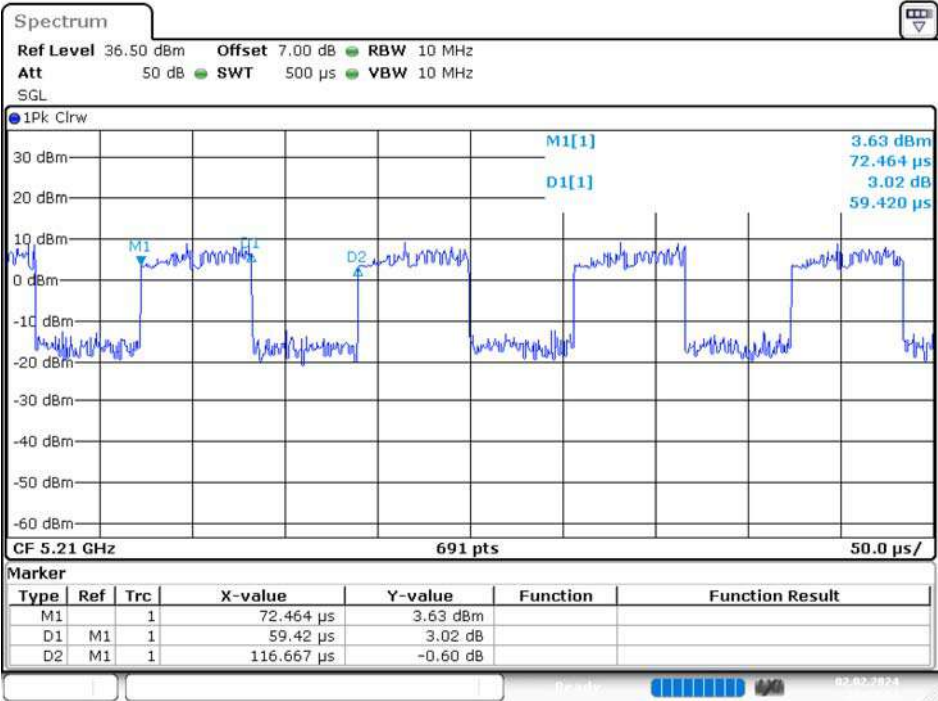
802.11ac 20 Mode



802.11ac 40 Mode

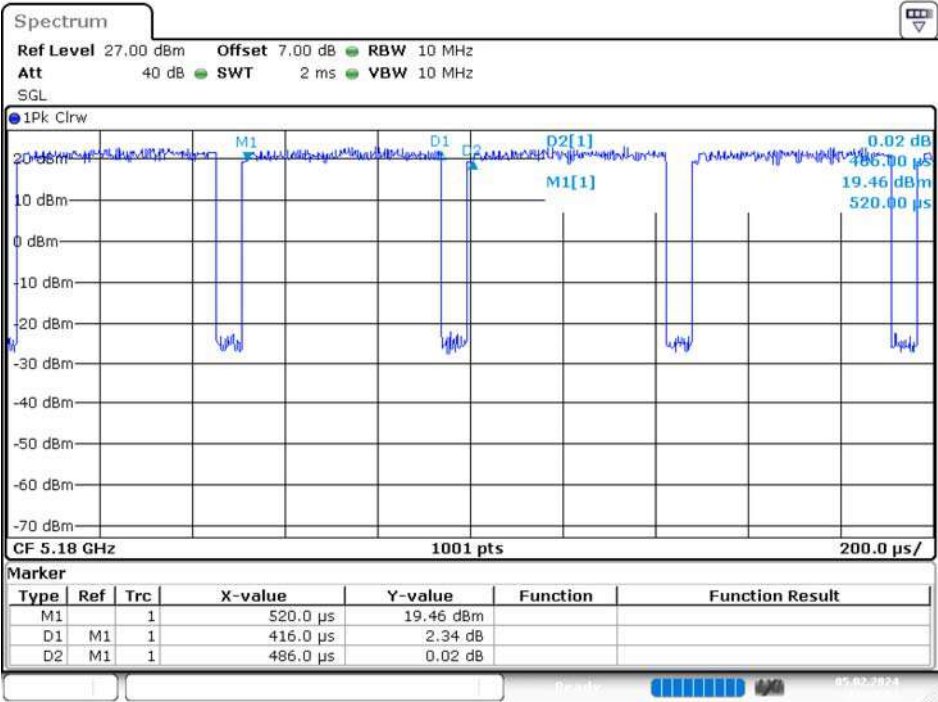


802.11ac 80 Mode



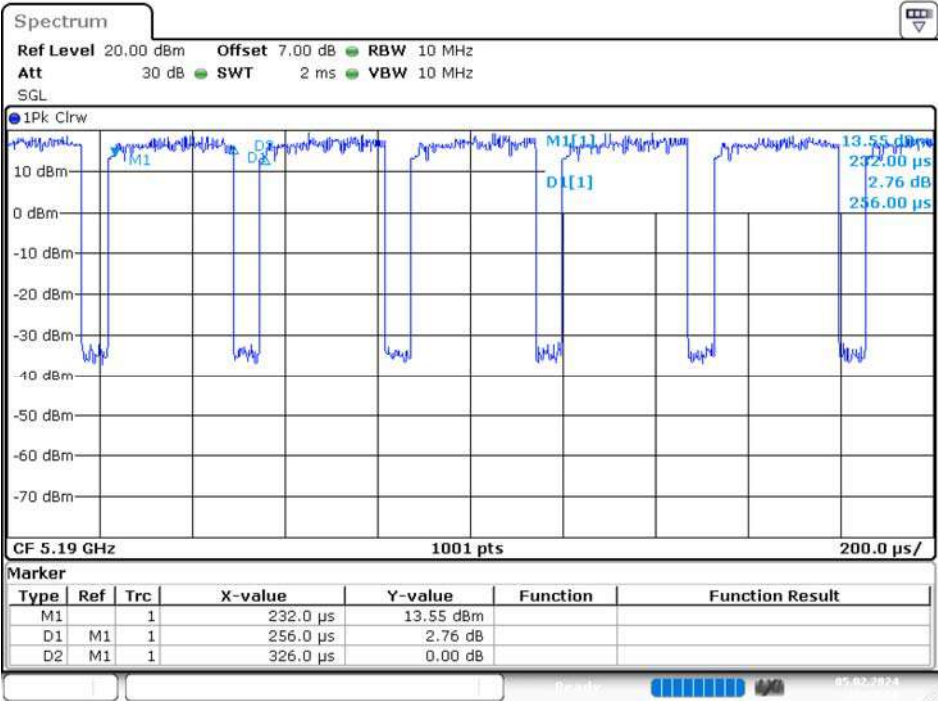
Date: 2.FEB.2024 15:12:54

802.11ax 20 Mode



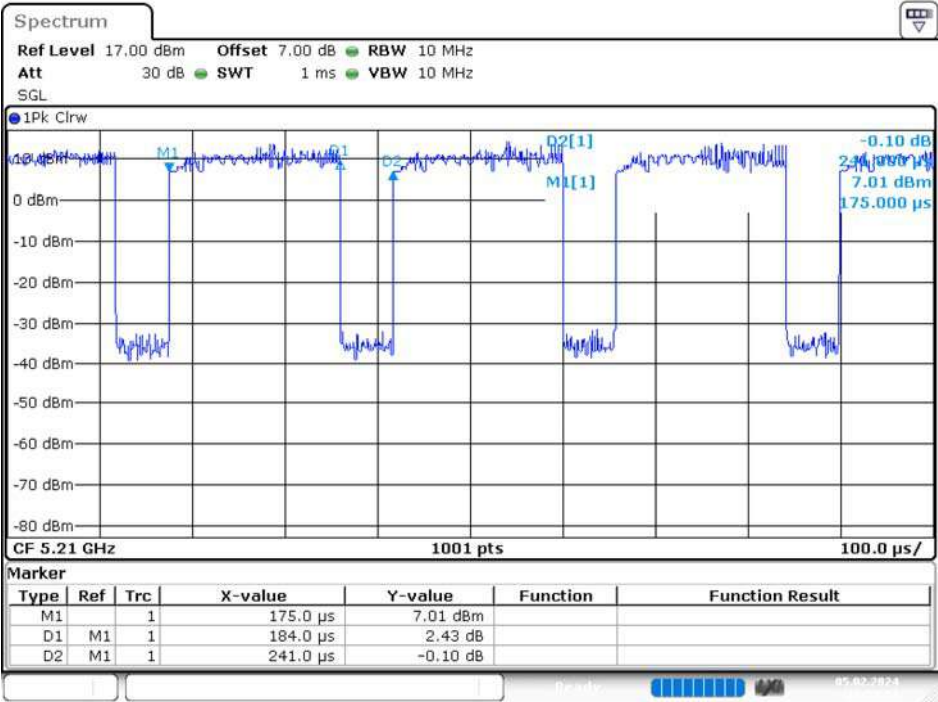
Date: 5.FEB.2024 14:32:04

802.11ax 40 Mode



Date: 5.FEB.2024 15:13:18

802.11ax 80 Mode



Date: 5.FEB.2024 15:55:57

3 Summary of Test Results

Standard(s) Section	Description of Test	Results
FCC §15.407(f), §1.1307(b)(3)	RF Exposure	Compliance
§15.203	Antenna Requirement	Compliance
§15.407(b)(9) & §15.207(a)	AC Line Conducted Emissions	Compliance
§15.205 & §15.209 & §15.407(b)	Unwanted Emission	Compliance
§15.407(a)(e)	Emission Bandwidth	Compliance
§15.407(a)	Conducted Transmitter Output Power	Compliance
§15.407(a)	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	2024/2/16	2025/2/14
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	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	EC2300049	2023/12/6	2024/12/6
Preamplifier	EM Electronics Corporation	EM18G40G	60656	2024/1/8	2025/1/6
Spectrum Analyzer	Rohde & Schwarz	FSV40	101941	2023/12/26	2024/12/25
EMI Test Receiver	Rohde & Schwarz	ESR3	102099	2023/6/16	2024/6/15
Micro flex Cable	UTIFLEX	UFB197C-1-2362-70U-70U	225757-001	2024/1/23	2025/1/21
Coaxial Cable	COMMATE	PEWC	8Dr	2023/12/23	2024/12/22
Coaxial Cable	UTIFLEX	UFB311A-Q-1440-300300	220490-006	2024/1/23	2025/1/21
Coaxial Cable	JUNFLON	J12J102248-00-B-5	AUG-07-15-044	2023/12/23	2024/12/22
Cable	EMC	EMC105-SM-SM-10000	201003	2024/1/23	2025/1/21
Coaxial Cable	ROSNOL	K1K50-UP0264-K1K50-450CM	160309-1	2024/1/23	2025/1/21
Coaxial Cable	ROSNOL	K1K50-UP0264-K1K50-50CM	15120-1	2024/1/23	2025/1/21
Band-stop filter	SinoSciTe	BSF5150-5850 MN-0899-002	001	2023/10/20	2024/10/19
High-pass filter	XINGBOKEJI	XBLBQ-GTA29	200121-3-26	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	KEYSIGHT	U2021XA	MY54080018	2024/1/30	2025/1/28
Power Splitter	Mini-Circuits	ZFRSC-183-S+	S F448201614	2023/6/6	2024/6/4
Attenuator	MCL	BW-S10W5+	605	2024/1/17	2025/1/16

***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.

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5 FCC §15.407(f), §1.1307(b)(3) – RF Exposure

5.1 Applicable Standard

According to subpart 15.407(f) 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).

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

Beam-forming:

For the 5G Wi-Fi, as it can support the beam-forming function,

So Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/10})^2 / N_{ANT}]$ dBi.

Directional gain = Band 1: 9.05 dBi , Band 4: 9.49 dBi

Band	Freq (MHz)	Tune-up Average Power (dBm)	Ant Gain (dBi)	Distances (mm)	Tune-up Average Power (mW)	ERP (dBm)	ERP (mW)
WIFI 2.4GHz	2412	22.9	5.41	200	194.98	26.16	413.05
WIFI 5GHz Band 1	5180	26.5	9.05	200	446.68	33.4	2187.76
WIFI 5GHz Band 4	5745	26	9.49	200	398.11	33.34	2157.74

§ 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)	Ratio	Result Option B
WIFI 2.4GHz	2412	3060.00	1.899	3060	0.13	exempt
WIFI 5GHz Band 1	5180	3060.00	2.065	3060	0.71	exempt
WIFI 5GHz Band 4	5745	3060.00	2.087	3060	0.71	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).

Non Beam-forming:

Band	Freq (MHz)	Tune-up Average Power (dBm)	Ant Gain (dBi)	Distances (mm)	Tune-up Average Power (mW)	ERP (dBm)	ERP (mW)
WIFI 2.4GHz	2412	26.1	2.4	200	407.38	26.35	431.52
WIFI 5GHz Band 1	5180	25.9	4.8	200	389.05	28.55	716.14
WIFI 5GHz Band 4	5745	29.6	5.8	200	912.01	33.25	2113.49

§ 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)	Ratio	Result Option B
WIFI 2.4GHz	2412	3060.00	1.899	3060	0.14	exempt
WIFI 5GHz Band 1	5180	3060.00	2.065	3060	0.23	exempt
WIFI 5GHz Band 4	5745	3060.00	2.087	3060	0.69	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 cannot transmit simultaneously

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

6 FCC §15.203 – Antenna Requirements

6.1 Applicable Standard

For intentional device, 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.

6.2 Antenna Information

Manufacturer	Antenna Type	Antenna Gain (dBi)	Input impedance
LYNwave Technology.	PCB Antenna	Antenna 0: 5150~5250 MHz: 3.3 5725~5850 MHz: 3.3	50Ω
		Antenna 1: 5150~5250 MHz: 4.8 5725~5850 MHz: 4.7	
		Antenna 2: 5150~5250 MHz: 4.6 5725~5850 MHz: 5.8	

The antenna is permanently connected to the EUT.

Result: Compliance

7 FCC §15.407(b)(9), §15.207(a) – AC Line Conducted Emissions

7.1 Applicable Standard

As per FCC §15.407(b) (9)

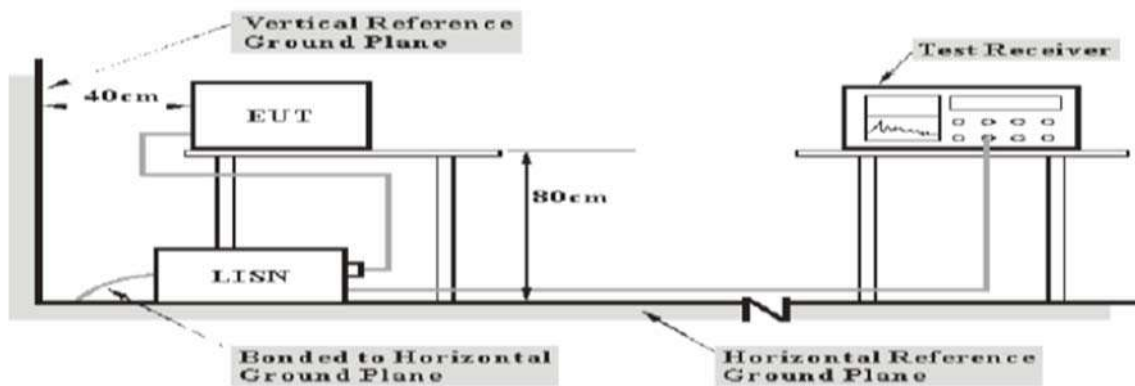
Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207

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.

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.

7.2 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 limits.

7.3 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

7.4 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.

7.5 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:

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

7.6 Test Results

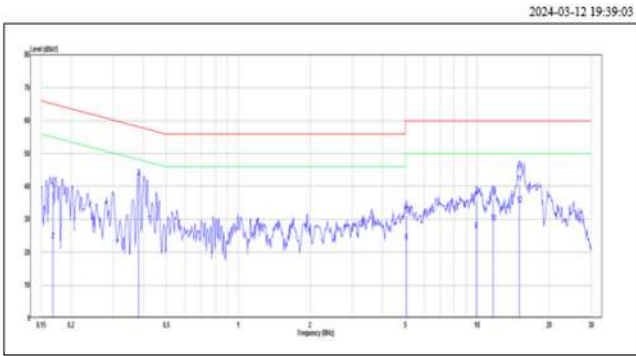
Test Mode: Transmitting

Main: AC120 V, 60 Hz

Non Beamforming Mode:

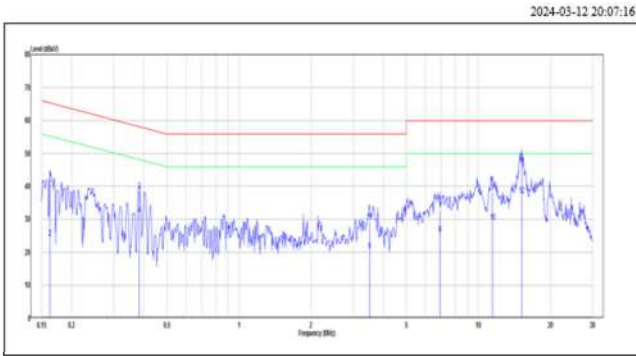
(Worst case is 802.11ax20 mode 5240 MHz)

Band 1 Line



No.	Frequency (MHz)	Reading dBuV	Correct Factor(dB)	Result dBuV	Limit dBuV	Over limit (dB)	Remark	Phase
1	0.168	19.28	19.44	38.72	65.08	-26.36	QP	Line
2	0.168	4.02	19.44	23.46	55.08	-31.62	Average	Line
3	0.383	23.28	19.52	42.80	58.21	-15.41	QP	Line
4	0.383	22.84	19.52	42.36	48.21	-5.85	Average	Line
5	5.058	11.15	20.11	31.26	60.00	-28.74	QP	Line
6	5.058	2.96	20.11	23.07	50.00	-26.93	Average	Line
7	9.913	15.79	20.08	35.87	60.00	-24.13	QP	Line
8	9.913	6.54	20.08	26.62	50.00	-23.38	Average	Line
9	11.683	16.25	20.13	36.38	60.00	-23.62	QP	Line
10	11.683	8.87	20.13	29.00	50.00	-21.00	Average	Line
11	14.986	20.61	20.23	40.84	60.00	-19.16	QP	Line
12	14.986	14.11	20.23	34.34	50.00	-15.66	Average	Line

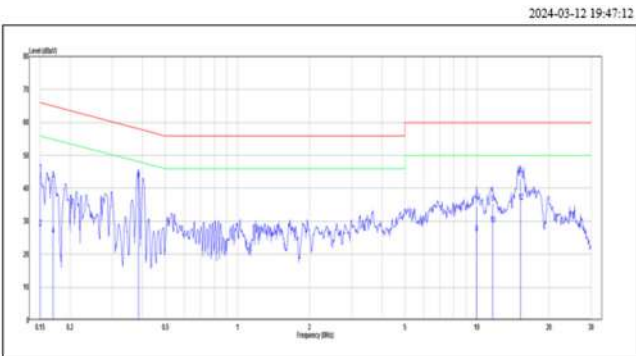
Band 1 Neutral



No.	Frequency (MHz)	Reading dBuV	Correct Factor(dB)	Result dBuV	Limit dBuV	Over limit (dB)	Remark	Phase
1	0.162	22.92	19.45	42.37	65.34	-22.97	QP	Neutral
2	0.162	4.83	19.45	24.28	55.34	-31.06	Average	Neutral
3	0.383	19.15	19.53	38.68	58.21	-19.53	QP	Neutral
4	0.383	11.82	19.53	31.35	48.21	-16.87	Average	Neutral
5	3.509	9.14	20.07	29.21	56.00	-26.79	QP	Neutral
6	3.509	0.36	20.07	20.43	46.00	-25.57	Average	Neutral
7	6.914	12.41	20.11	32.52	60.00	-27.48	QP	Neutral
8	6.914	5.32	20.11	25.43	50.00	-24.57	Average	Neutral
9	11.438	18.09	20.15	38.24	60.00	-21.76	QP	Neutral
10	11.438	9.10	20.15	29.25	50.00	-20.75	Average	Neutral
11	15.146	25.99	20.28	46.27	60.00	-13.73	QP	Neutral
12	15.146	16.93	20.28	37.21	50.00	-12.79	Average	Neutral

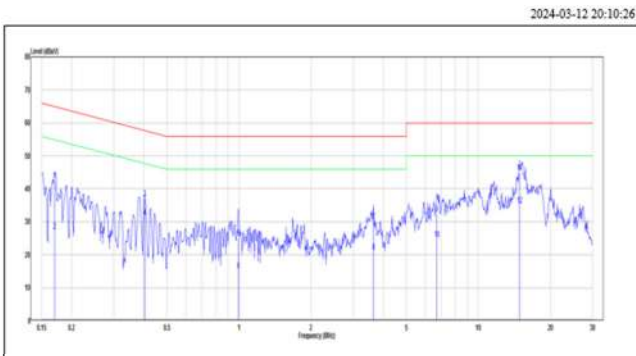
(Worst case is 802.11ac20 mode 5785 MHz)

Band 4 Line



No.	Frequency (MHz)	Reading dBuV	Correct Factor(dB)	Result dBuV	Limit dBuV	Over limit (dB)	Remark	Phase
1	0.150	25.45	19.44	44.89	66.00	-21.11	QP	Line
2	0.150	8.42	19.44	27.86	56.00	-28.14	Average	Line
3	0.169	23.15	19.44	42.59	64.99	-22.40	QP	Line
4	0.169	6.29	19.44	25.73	54.99	-29.26	Average	Line
5	0.385	23.53	19.52	43.05	58.17	-15.12	QP	Line
6	0.385	22.76	19.52	42.28	48.17	-5.89	Average	Line
7	9.966	14.50	20.08	34.58	60.00	-25.42	QP	Line
8	9.966	6.29	20.08	26.37	50.00	-23.63	Average	Line
9	11.621	15.32	20.13	35.45	60.00	-24.55	QP	Line
10	11.621	8.74	20.13	28.86	50.00	-21.14	Average	Line
11	15.226	22.74	20.24	42.97	60.00	-17.03	QP	Line
12	15.226	15.61	20.24	35.85	50.00	-14.15	Average	Line

Band 4 Neutral

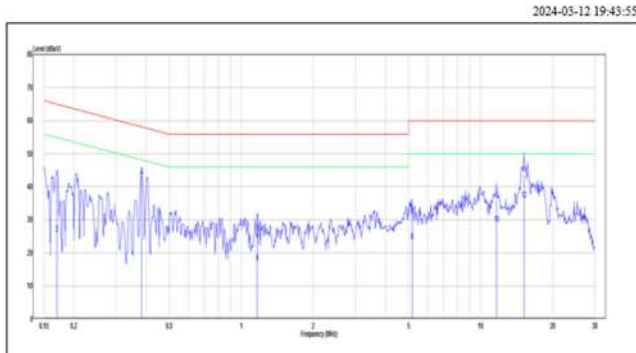


No.	Frequency (MHz)	Reading dBuV	Correct Factor(dB)	Result dBuV	Limit dBuV	Over limit (dB)	Remark	Phase
1	0.169	23.25	19.45	42.70	64.99	-22.29	QP	Neutral
2	0.169	7.66	19.45	27.11	54.99	-27.88	Average	Neutral
3	0.404	17.51	19.54	37.05	57.77	-20.72	QP	Neutral
4	0.404	11.86	19.54	31.40	47.77	-16.37	Average	Neutral
5	0.994	5.21	19.83	25.04	56.00	-30.96	QP	Neutral
6	0.994	-4.64	19.83	15.19	46.00	-30.81	Average	Neutral
7	3.642	10.07	20.07	30.14	56.00	-25.86	QP	Neutral
8	3.642	0.85	20.07	20.92	46.00	-25.08	Average	Neutral
9	6.698	12.24	20.11	32.35	60.00	-27.65	QP	Neutral
10	6.698	4.60	20.11	24.70	50.00	-25.30	Average	Neutral
11	14.828	24.77	20.27	45.04	60.00	-14.96	QP	Neutral
12	14.828	14.84	20.27	35.11	50.00	-14.89	Average	Neutral

Beamforming Mode:

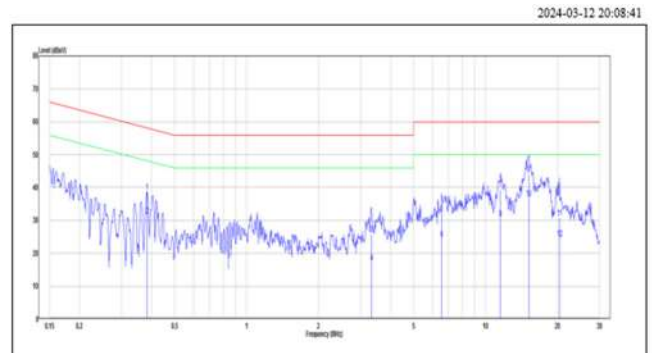
(Worst case is 802.11ax20 mode 5240 MHz)

Band 1 Line



No.	Frequency (MHz)	Reading dBuV	Correct Factor(dB)	Result dBuV	Limit dBuV	Over limit (dB)	Remark	Phase
1	0.169	23.19	19.44	42.63	64.99	-22.36	QP	Line
2	0.169	6.33	19.44	25.77	54.99	-29.22	Average	Line
3	0.383	23.80	19.52	43.32	58.21	-14.89	QP	Line
4	0.383	23.35	19.52	42.87	48.21	-5.34	Average	Line
5	1.166	6.35	19.85	26.21	56.00	-29.79	QP	Line
6	1.166	-2.81	19.85	17.04	46.00	-28.96	Average	Line
7	5.166	10.95	20.11	31.06	60.00	-28.94	QP	Line
8	5.166	3.42	20.11	23.53	50.00	-26.47	Average	Line
9	11.621	15.80	20.13	35.93	60.00	-24.07	QP	Line
10	11.621	8.57	20.13	28.70	50.00	-21.30	Average	Line
11	15.146	23.45	20.24	43.69	60.00	-16.31	QP	Line
12	15.146	15.75	20.24	35.98	50.00	-14.02	Average	Line

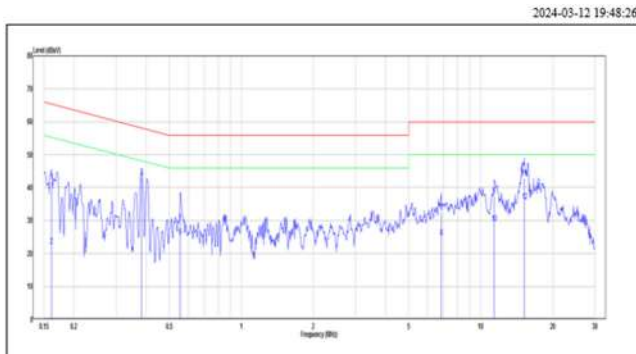
Band 1 Neutral



No.	Frequency (MHz)	Reading dBuV	Correct Factor(dB)	Result dBuV	Limit dBuV	Over limit (dB)	Remark	Phase
1	0.383	19.11	19.53	38.64	58.21	-19.57	QP	Neutral
2	0.383	11.80	19.53	31.32	48.21	-16.89	Average	Neutral
3	3.328	5.61	20.07	25.68	56.00	-30.32	QP	Neutral
4	3.328	-2.84	20.07	17.23	46.00	-28.77	Average	Neutral
5	6.557	12.06	20.11	32.17	60.00	-27.83	QP	Neutral
6	6.557	4.18	20.11	24.29	50.00	-25.71	Average	Neutral
7	11.559	19.24	20.15	39.40	60.00	-20.60	QP	Neutral
8	11.559	10.39	20.15	30.54	50.00	-19.46	Average	Neutral
9	15.146	23.67	20.28	43.95	60.00	-16.05	QP	Neutral
10	15.146	16.46	20.28	36.74	50.00	-13.26	Average	Neutral
11	20.377	10.34	20.50	30.85	60.00	-29.15	QP	Neutral
12	20.377	3.99	20.50	24.49	50.00	-25.51	Average	Neutral

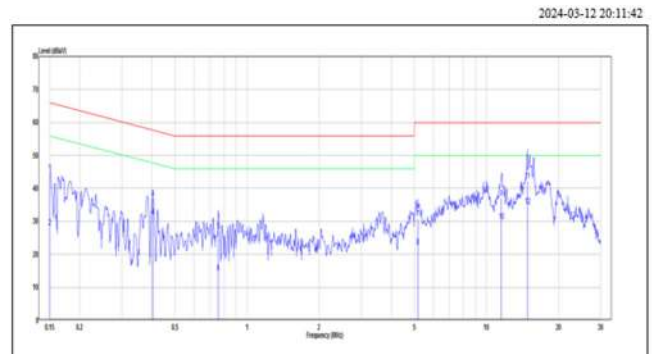
(Worst case is 802.11ac40 mode 5755 MHz)

Band 4 Line



No.	Frequency (MHz)	Reading dBuV	Correct Factor(dB)	Result dBuV	Limit dBuV	Over limit (dB)	Remark	Phase
1	0.161	22.54	19.44	41.98	65.43	-23.45	QP	Line
2	0.161	2.86	19.44	22.30	55.43	-33.13	Average	Line
3	0.383	23.79	19.52	43.31	58.21	-14.90	QP	Line
4	0.383	23.33	19.52	42.85	48.21	-5.36	Average	Line
5	0.555	10.03	19.60	29.63	56.00	-26.37	QP	Line
6	0.555	5.44	19.60	25.04	46.00	-20.96	Average	Line
7	6.841	12.47	20.10	32.56	60.00	-27.44	QP	Line
8	6.841	4.85	20.10	24.95	50.00	-25.05	Average	Line
9	11.377	17.53	20.12	37.65	60.00	-22.35	QP	Line
10	11.377	9.08	20.12	29.20	50.00	-20.80	Average	Line
11	15.226	22.76	20.24	43.00	60.00	-17.00	QP	Line
12	15.226	15.53	20.24	35.77	50.00	-14.23	Average	Line

Band 4 Neutral



No.	Frequency (MHz)	Reading dBuV	Correct Factor(dB)	Result dBuV	Limit dBuV	Over limit (dB)	Remark	Phase
1	0.150	25.51	19.45	44.96	66.00	-21.04	QP	Neutral
2	0.150	8.66	19.45	28.11	56.00	-27.89	Average	Neutral
3	0.404	17.45	19.54	36.98	57.77	-20.79	QP	Neutral
4	0.404	11.79	19.54	31.33	47.77	-16.44	Average	Neutral
5	0.739	7.44	19.71	27.15	56.00	-28.85	QP	Neutral
6	0.739	-5.30	19.71	14.41	46.00	-31.59	Average	Neutral
7	5.166	10.60	20.11	30.71	60.00	-29.29	QP	Neutral
8	5.166	2.21	20.11	22.33	50.00	-27.67	Average	Neutral
9	11.559	16.81	20.15	36.97	60.00	-23.03	QP	Neutral
10	11.559	9.81	20.15	29.96	50.00	-20.04	Average	Neutral
11	14.828	22.13	20.27	42.40	60.00	-17.60	QP	Neutral
12	14.828	14.44	20.27	34.71	50.00	-15.29	Average	Neutral

Note:

Result = Reading + Factor

Over Limit = Result - Limit Line

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

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

8 FCC §15.209, §15.205, §15.407(b) – Spurious Emissions

8.1 Applicable Standard

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): 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

Note 1: 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 470-806MHz. 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).

Convert the test distance limit of 3 meters to a limit of 1 meter:

Conversion factor = $20 \log (1\text{m}/3\text{m}) = 9.5 \text{ dB}$, Limit = 63.50 dBuV/m @ 1m

As per FCC Part 15.407 (b)

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

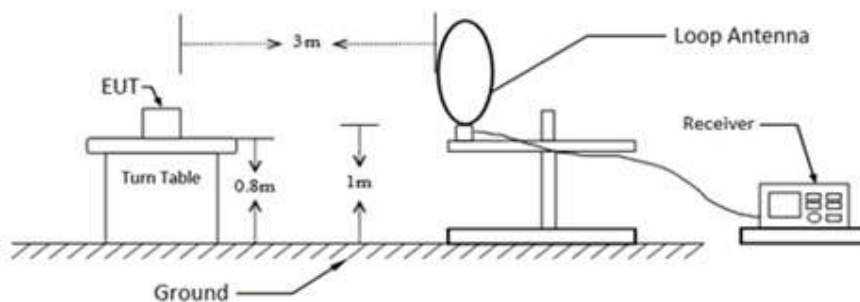
Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in § 15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.

The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

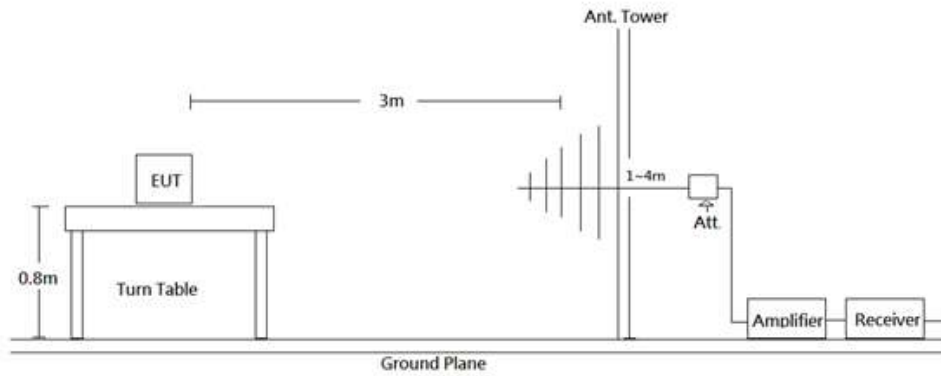
Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

8.2 EUT Setup

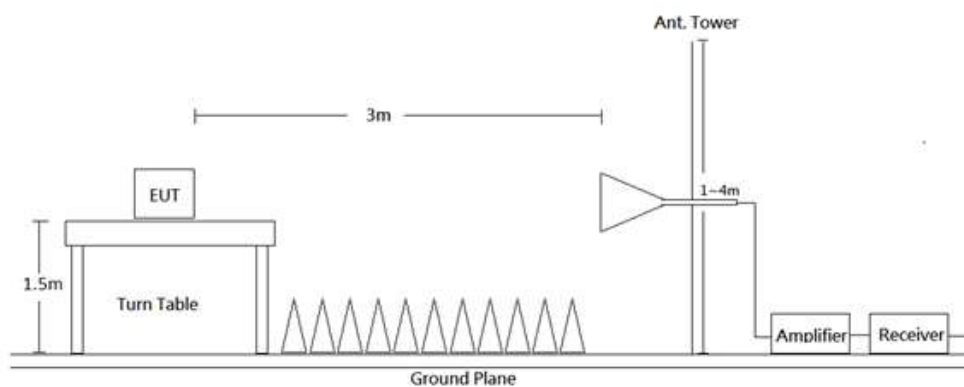
9kHz-30MHz:



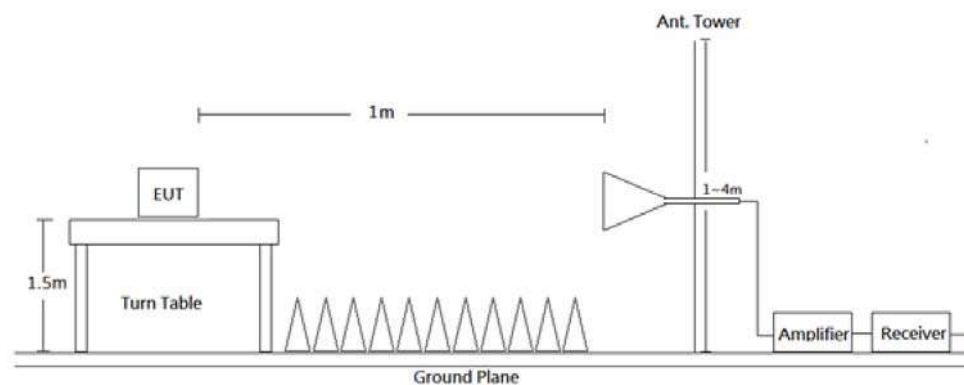
30MHz-1GHz:



1-18 GHz:



18-40 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 15.407 Limits.

8.3 EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 40 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	200 Hz/300 Hz	1 kHz	/	QP/AV
150 kHz - 30 MHz	9 kHz/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.

8.4 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.

According to C63.10, emission shall be computed as: $E [dB\mu V/m] = EIRP[dBm] + 95.2$, for $d = 3$ meters.

All emissions under the average limit and under the noise floor have not recorded in the report

8.5 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:

$$\text{Correct Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

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:

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

8.6 Test Results

Test Mode: Transmitting

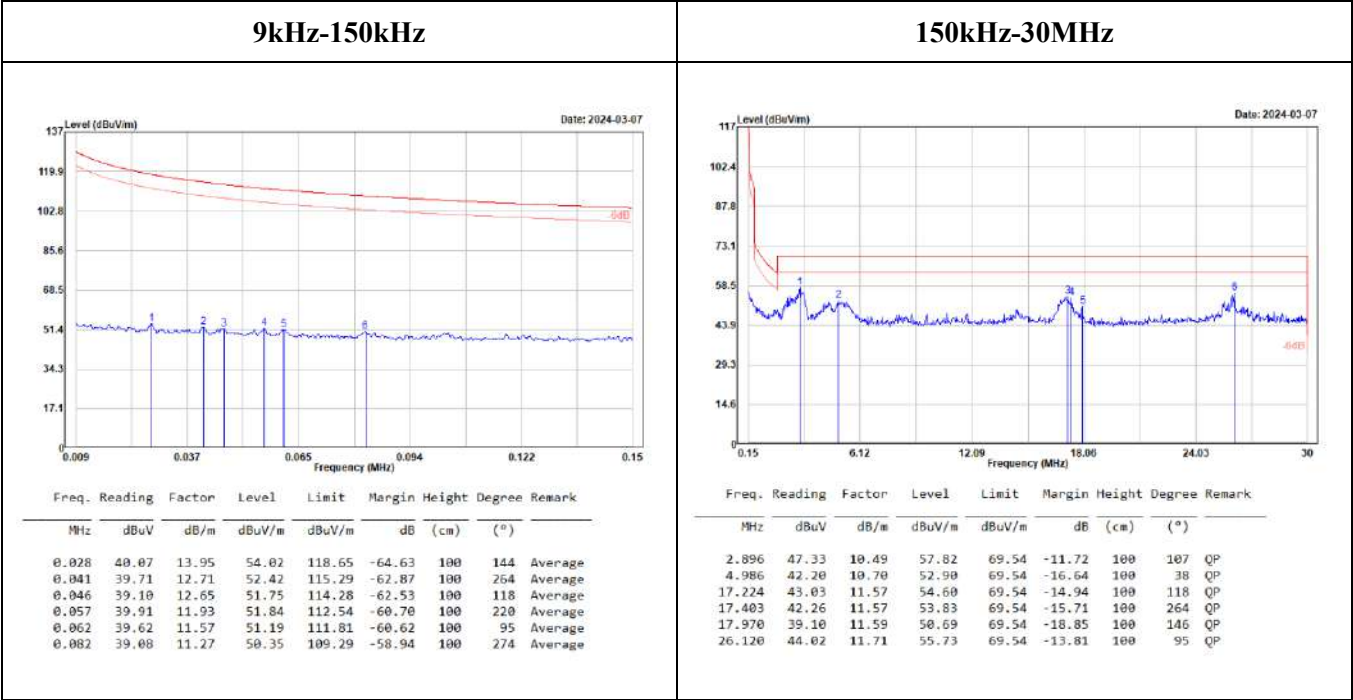
(Pre-scan with three orthogonal axis, and worse case as Z axis.)

9kHz-30MHz:

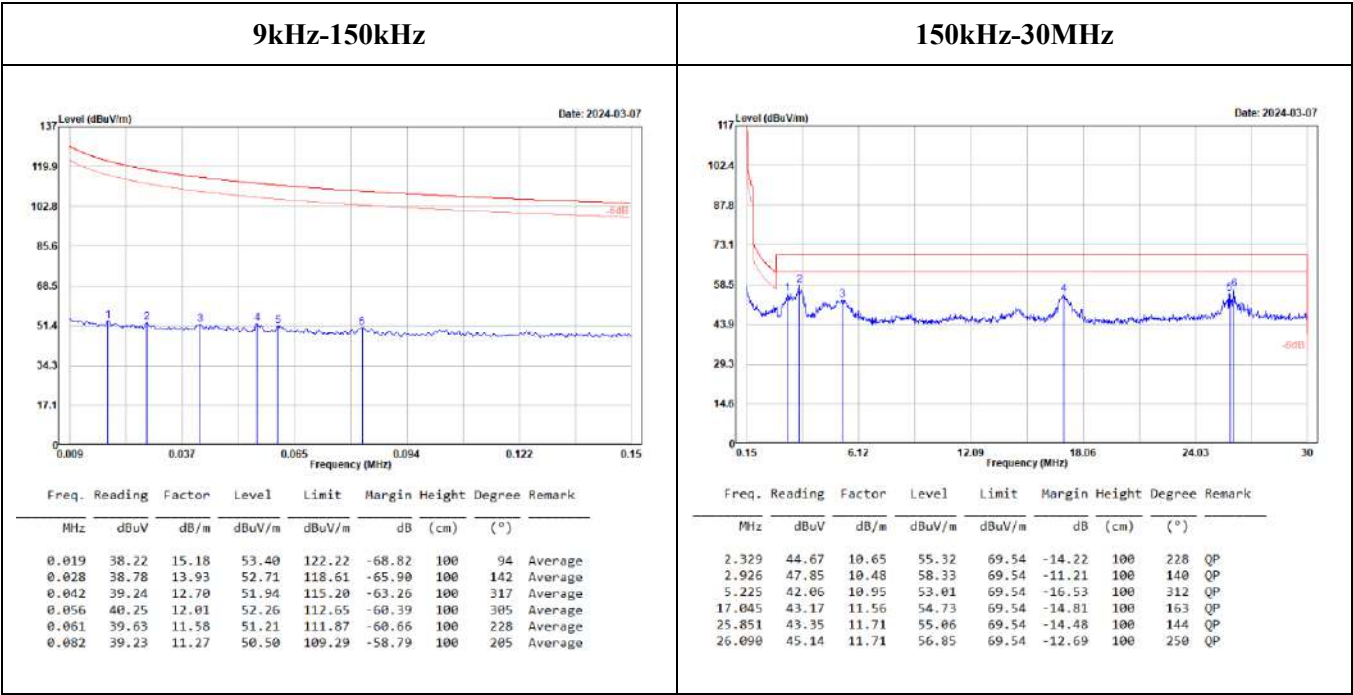
(Worst case is 802.11ax20 mode 5240 MHz)

(Pre-scan using three directional polarities, worst case as parallel.)

Non Beamforming Mode:



Beamforming Mode:

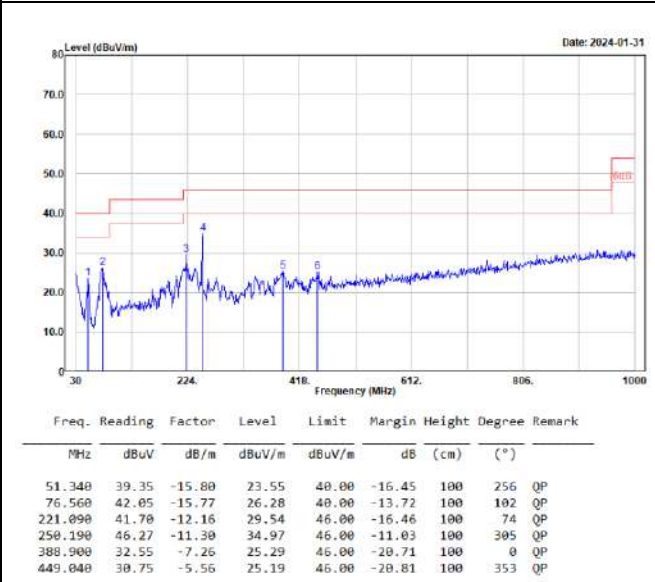


30MHz-1GHz:

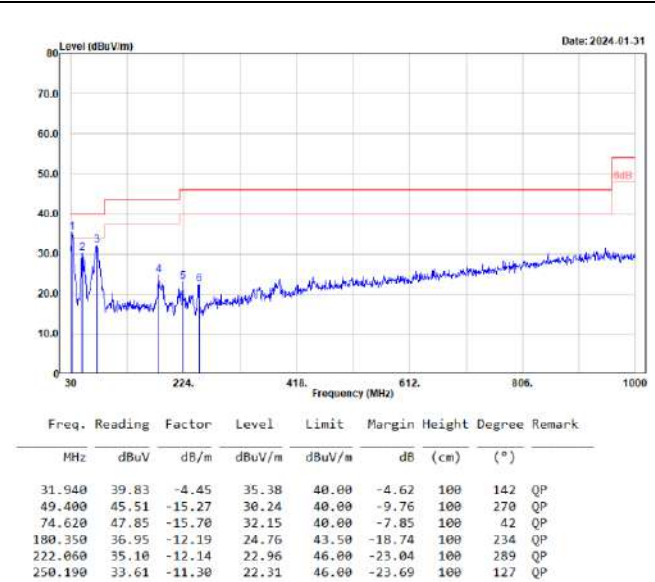
Non Beamforming Mode:

(Worst case is 802.11ac 20 Mode, 5200 MHz)

Horizontal

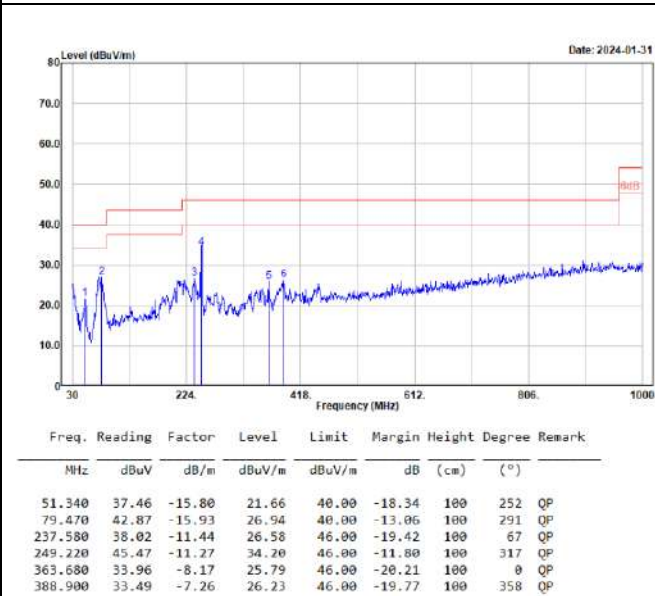


Vertical

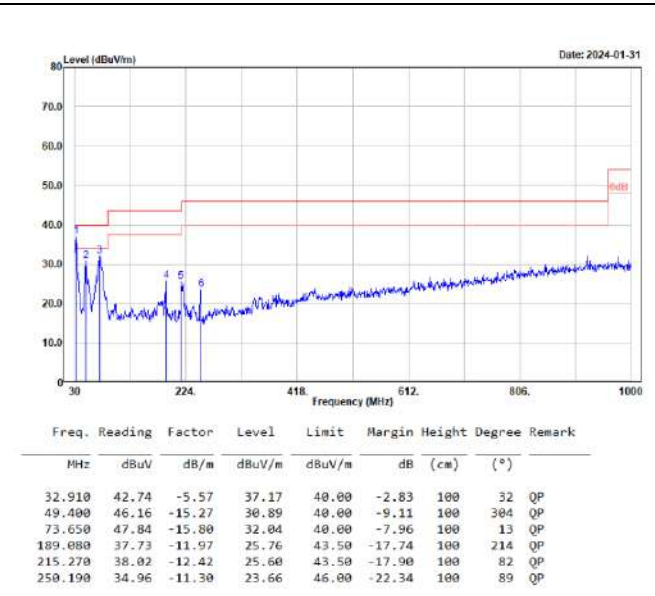


(Worst case is 802.11ac 20 Mode, 5785 MHz)

Horizontal



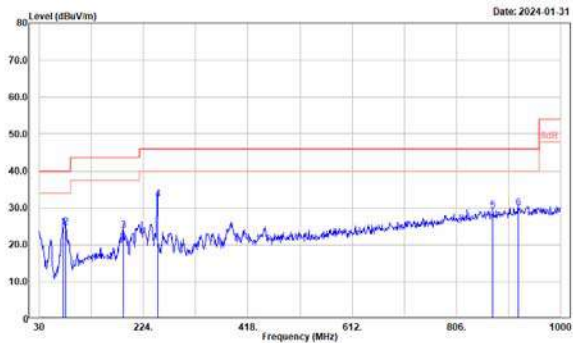
Vertical



Beamforming Mode:

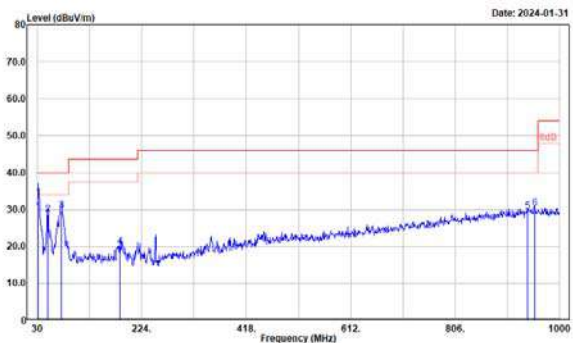
(Worst case is 802.11ax 20 Mode, 5200 MHz)

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
74.620	40.46	-15.70	24.76	40.00	-15.24	100	92	QP
79.470	40.54	-15.93	24.61	40.00	-15.39	100	313	QP
187.140	35.91	-12.07	23.84	43.50	-19.66	100	282	QP
250.190	43.70	-11.30	32.40	46.00	-13.60	100	290	QP
873.900	27.86	1.35	29.21	46.00	-16.79	100	52	QP
920.460	27.80	2.11	29.91	46.00	-16.09	100	151	QP

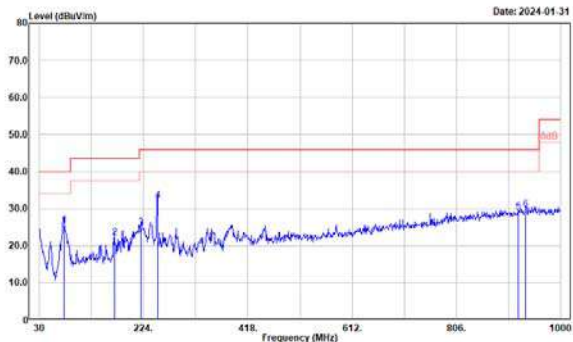
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
31.940	37.60	-4.45	33.15	40.00	-6.85	100	90	QP
49.400	43.90	-15.27	28.63	40.00	-11.37	100	274	QP
74.620	45.48	-15.70	29.78	40.00	-10.22	100	9	QP
183.260	32.05	-12.16	19.89	43.50	-23.61	100	93	QP
939.860	26.91	2.55	29.46	46.00	-16.54	100	189	QP
953.440	27.52	2.79	30.31	46.00	-15.69	100	155	QP

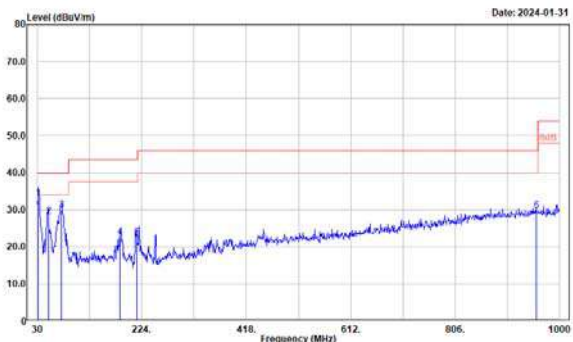
(Worst case is 802.11ac 40 Mode, 5755 MHz)

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
75.590	41.12	-15.68	25.44	40.00	-14.56	100	80	QP
169.680	33.56	-11.47	22.09	43.50	-21.41	100	277	QP
219.150	36.94	-12.22	24.72	46.00	-21.28	100	150	QP
250.190	43.32	-11.30	32.02	46.00	-13.98	100	281	QP
921.430	26.91	2.16	29.07	46.00	-16.93	100	127	QP
935.010	27.36	2.43	29.79	46.00	-16.21	100	201	QP

Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
31.940	37.36	-4.45	32.91	40.00	-7.09	100	79	QP
50.370	43.84	-15.58	28.26	40.00	-11.74	100	253	QP
74.620	45.56	-15.70	29.86	40.00	-10.14	100	45	QP
183.260	34.81	-12.16	22.65	43.50	-20.85	100	359	QP
214.300	34.87	-12.47	22.40	43.50	-21.10	100	79	QP
956.350	27.01	2.80	29.81	46.00	-16.19	100	257	QP

Level = Reading + Factor.

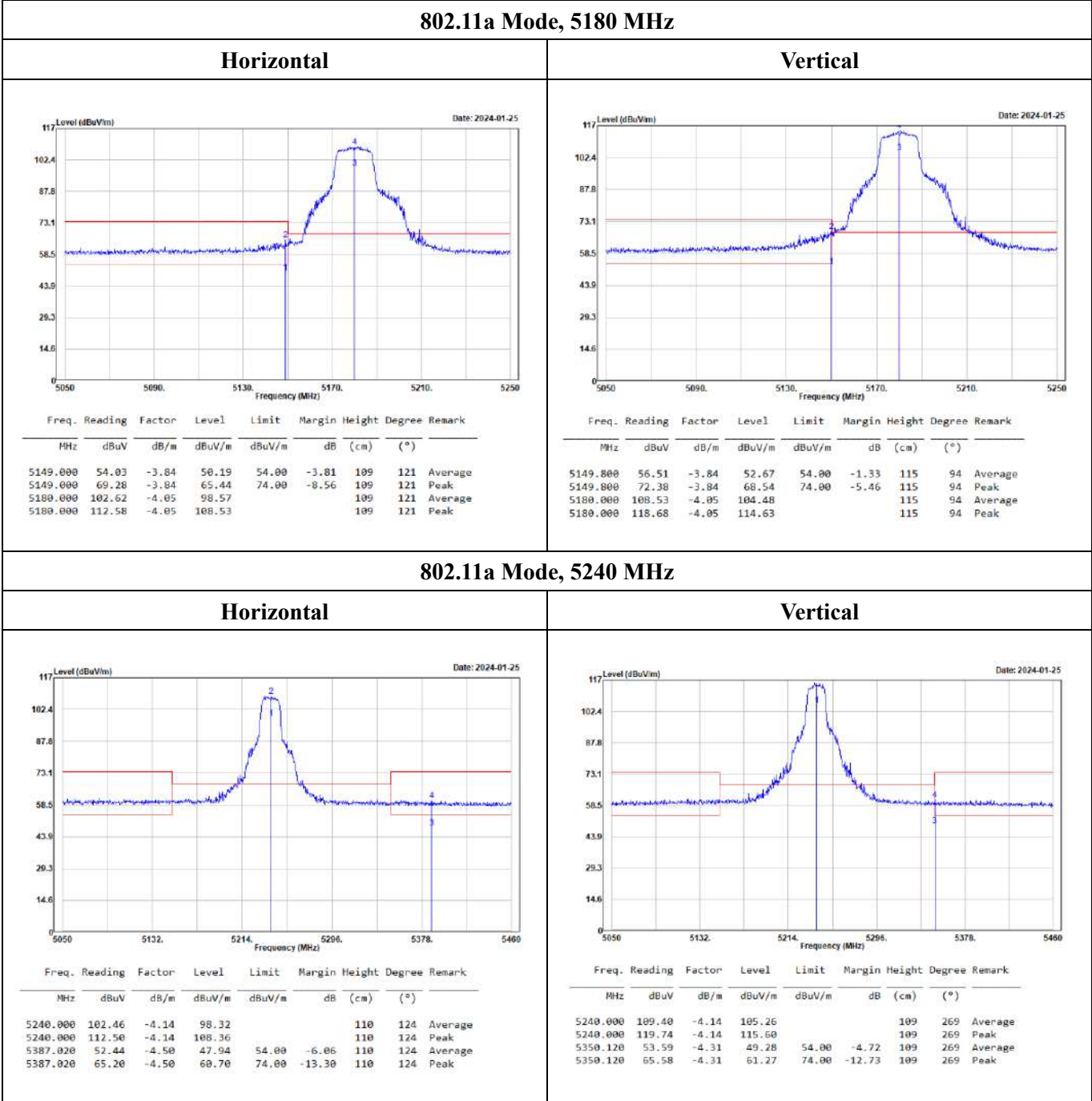
Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

Band-Edge

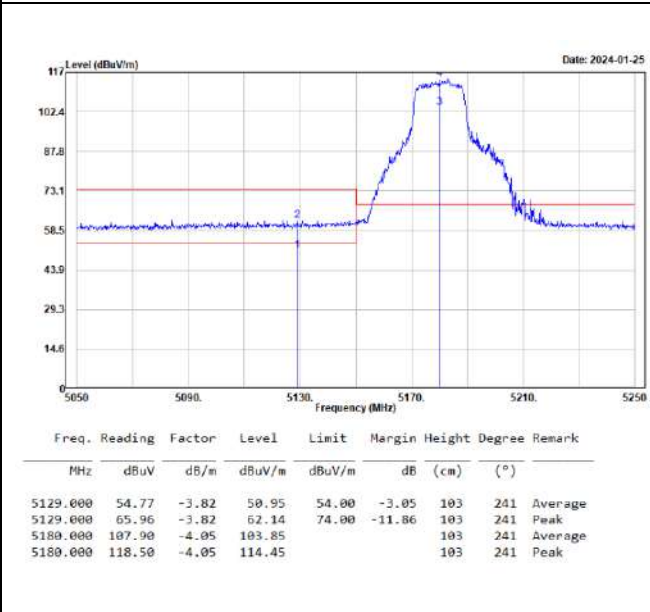
5150-5250 MHz

Non Beamforming Mode:

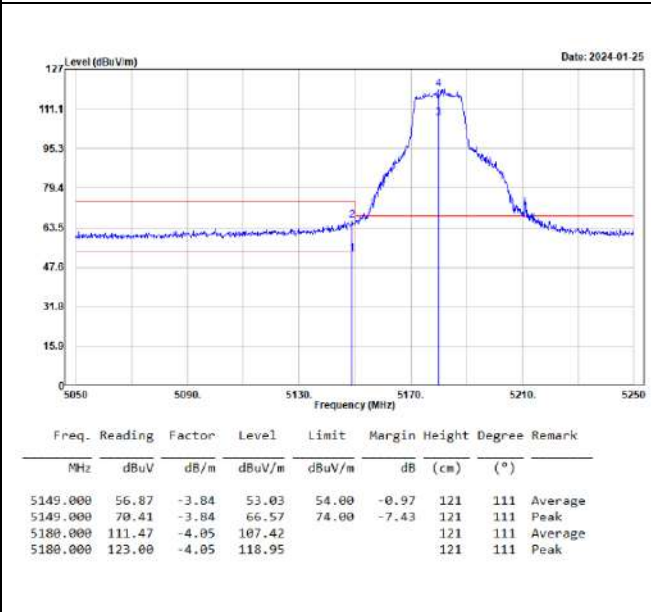


802.11ac VHT20 Mode, 5180 MHz

Horizontal

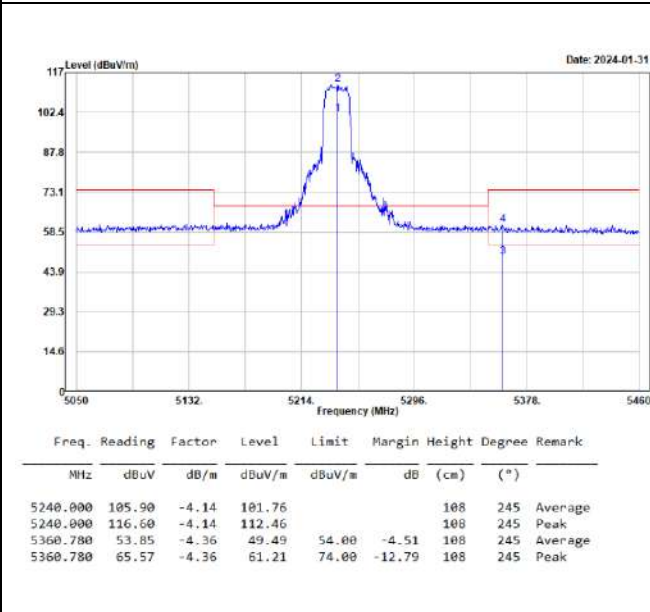


Vertical

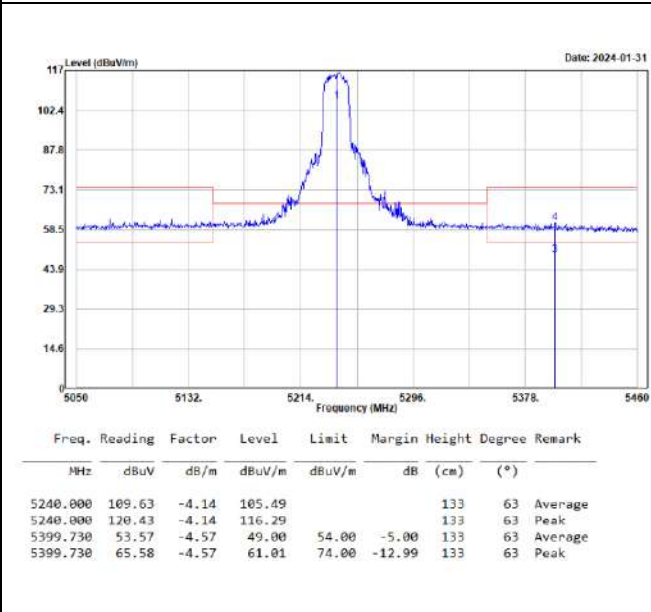


802.11ac VHT20 Mode, 5240 MHz

Horizontal

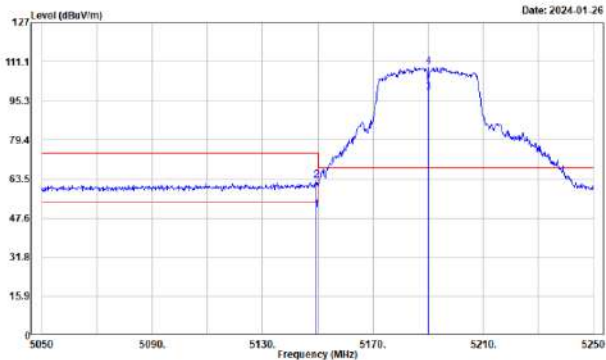


Vertical



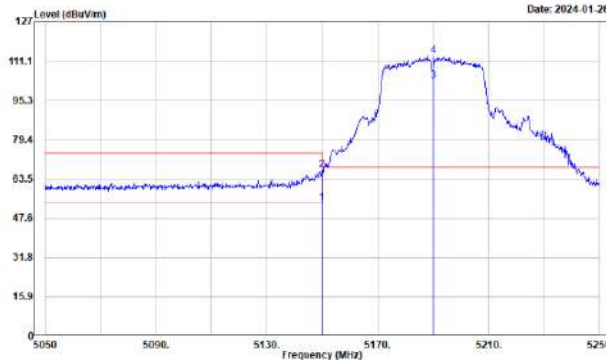
802.11ac VHT40 Mode, 5190 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5149.600	54.63	-3.84	50.79	54.00	-3.21	102	269	Average
5149.600	66.85	-3.84	63.01	74.00	-10.99	102	269	Peak
5190.000	102.76	-4.11	98.65			102	269	Average
5190.000	113.24	-4.11	109.13			102	269	Peak

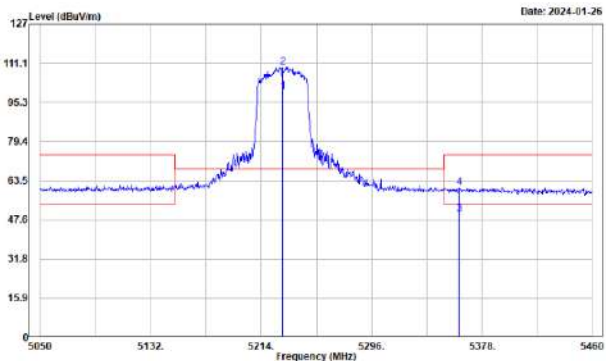
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5149.920	57.54	-3.84	53.70	54.00	-0.30	104	119	Average
5149.920	71.07	-3.84	67.23	74.00	-6.77	104	119	Peak
5190.000	107.16	-4.11	103.05			104	119	Average
5190.000	117.19	-4.11	113.08			104	119	Peak

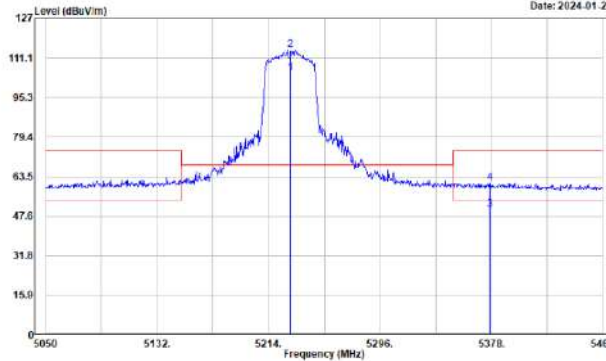
802.11ac VHT40 Mode, 5230 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5230.000	103.57	-4.15	99.42			120	243	Average
5230.000	113.64	-4.15	109.49			120	243	Peak
5361.190	54.22	-4.37	49.85	54.00	-4.15	120	243	Average
5361.190	65.07	-4.37	60.70	74.00	-13.30	120	243	Peak

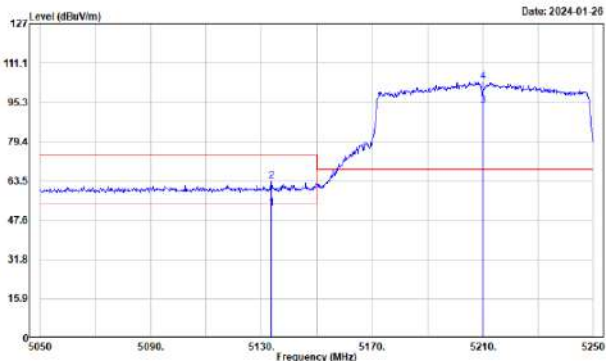
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5230.000	108.98	-4.15	104.83			121	118	Average
5230.000	118.56	-4.15	114.41			121	118	Peak
5376.770	54.58	-4.45	50.13	54.00	-3.87	121	118	Average
5376.770	65.53	-4.45	61.08	74.00	-12.92	121	118	Peak

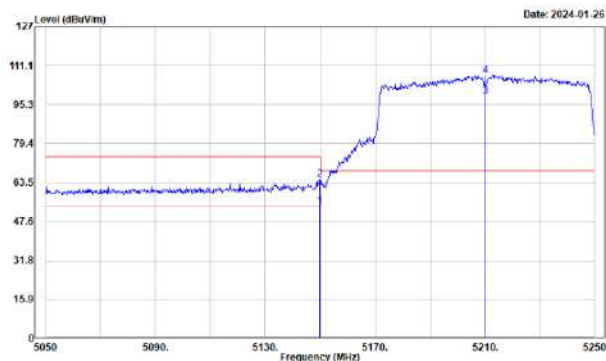
802.11ac VHT80 Mode, 5210 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5133.600	55.99	-3.83	52.16	54.00	-1.84	100	242	Average
5133.600	67.15	-3.83	63.32	74.00	-10.68	100	242	Peak
5210.000	97.98	-4.17	93.81			100	242	Average
5210.000	107.89	-4.17	103.72			100	242	Peak

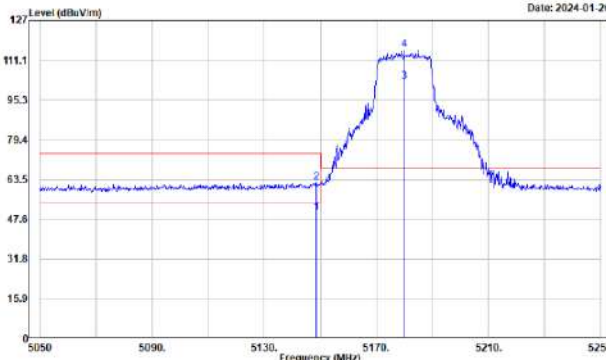
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5149.000	57.69	-3.84	53.85	54.00	-0.15	102	119	Average
5149.000	68.58	-3.84	64.74	74.00	-9.26	102	119	Peak
5210.000	102.59	-4.17	98.42			102	119	Average
5210.000	111.23	-4.17	107.06			102	119	Peak

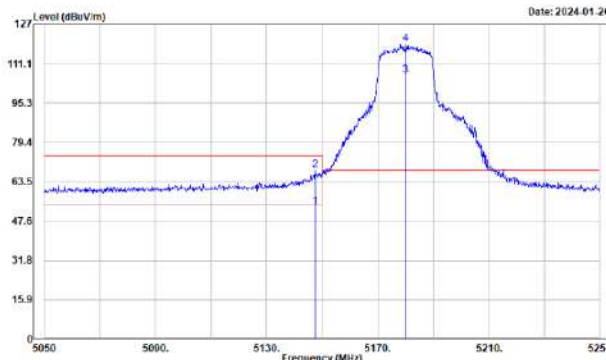
802.11ax HE20 Mode, 5180 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5148.600	54.16	-3.84	50.32	54.00	-3.68	102	242	Average
5148.600	66.09	-3.84	62.25	74.00	-11.75	102	242	Peak
5180.000	106.68	-4.05	102.63			102	242	Average
5180.000	119.31	-4.05	115.26			102	242	Peak

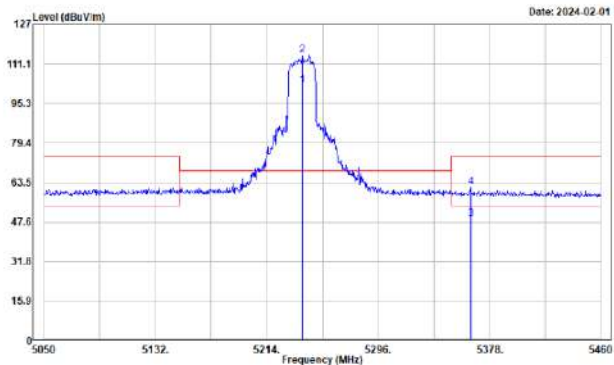
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5147.400	57.32	-3.83	53.49	54.00	-0.51	101	108	Average
5147.400	72.12	-3.83	68.29	74.00	-5.71	101	108	Peak
5180.000	110.56	-4.05	106.51			101	108	Average
5180.000	123.07	-4.05	119.02			101	108	Peak

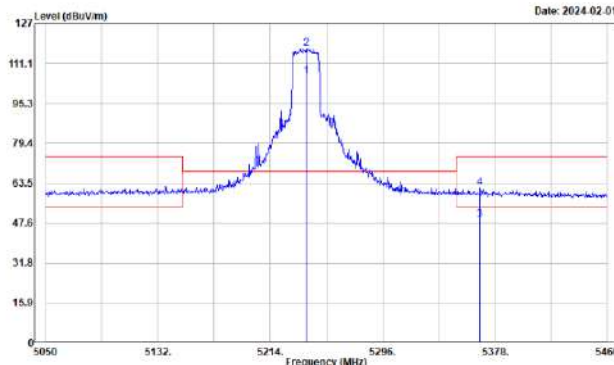
802.11ax HE20 Mode, 5240 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5240.000	106.87	-4.14	102.73			119	273	Average
5240.000	118.87	-4.14	114.73			119	273	Peak
5364.060	53.13	-4.38	48.75	54.00	-5.25	119	273	Average
5364.060	66.06	-4.38	61.68	74.00	-12.32	119	273	Peak

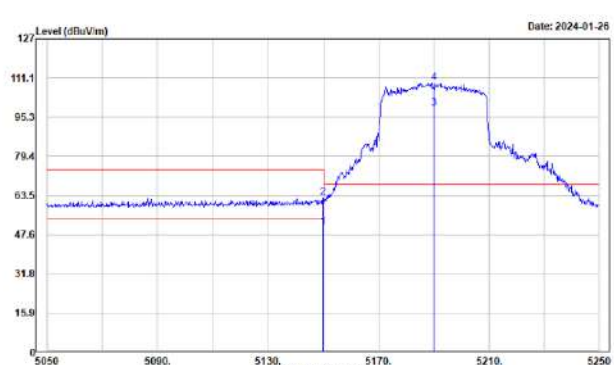
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5240.000	110.19	-4.14	106.05			108	109	Average
5240.000	121.28	-4.14	117.14			108	109	Peak
5366.930	53.42	-4.40	49.02	54.00	-4.98	108	109	Average
5366.930	65.84	-4.40	61.44	74.00	-12.56	108	109	Peak

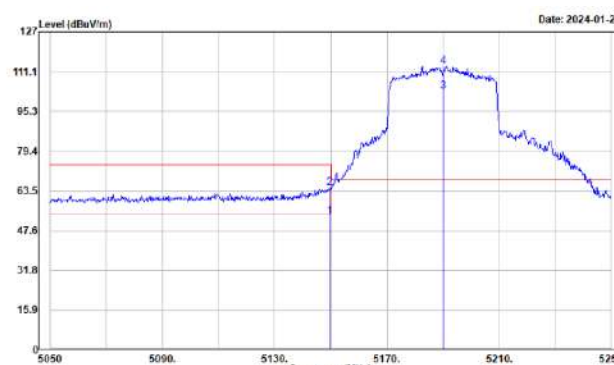
802.11ax HE40 Mode, 5190 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5149.000	54.43	-3.84	50.59	54.00	-3.41	105	268	Average
5149.000	66.47	-3.84	62.63	74.00	-11.37	105	268	Peak
5190.000	102.95	-4.11	98.84			105	268	Average
5190.000	113.27	-4.11	109.16			105	268	Peak

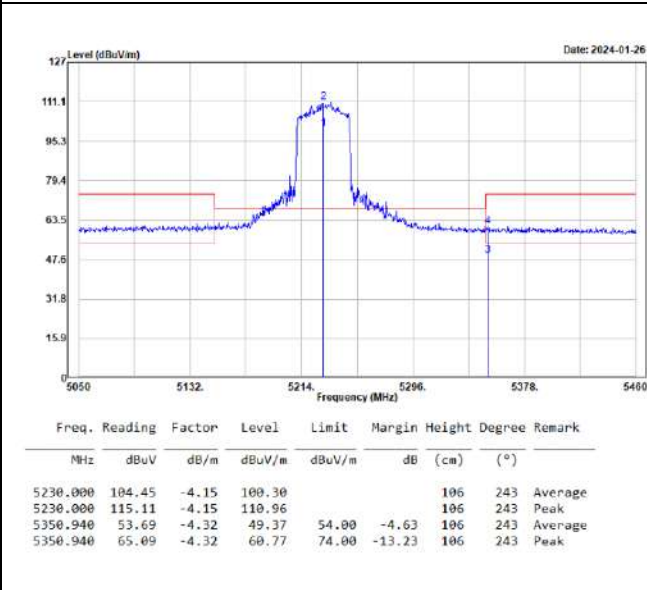
Vertical



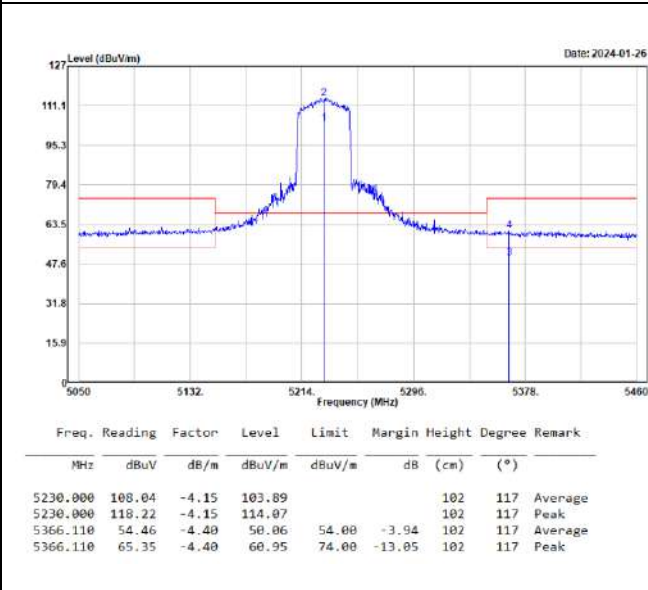
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5149.000	57.35	-3.84	53.51	54.00	-0.49	106	100	Average
5149.000	68.50	-3.84	64.66	74.00	-9.34	106	100	Peak
5190.000	107.35	-4.11	103.24			106	100	Average
5190.000	117.48	-4.11	113.37			106	100	Peak

802.11ax HE40 Mode, 5230 MHz

Horizontal

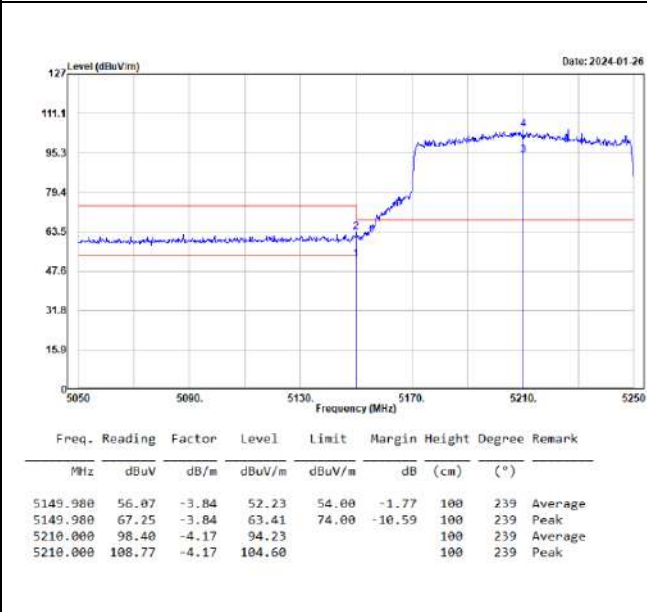


Vertical

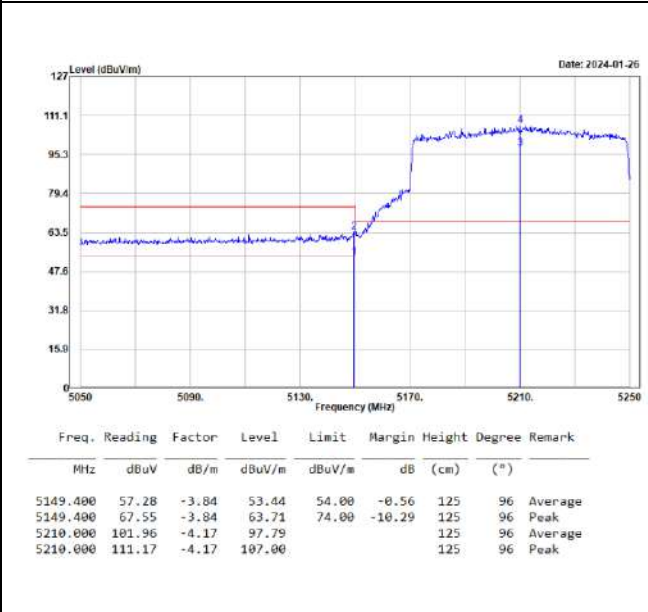


802.11ax HE80 Mode, 5210 MHz

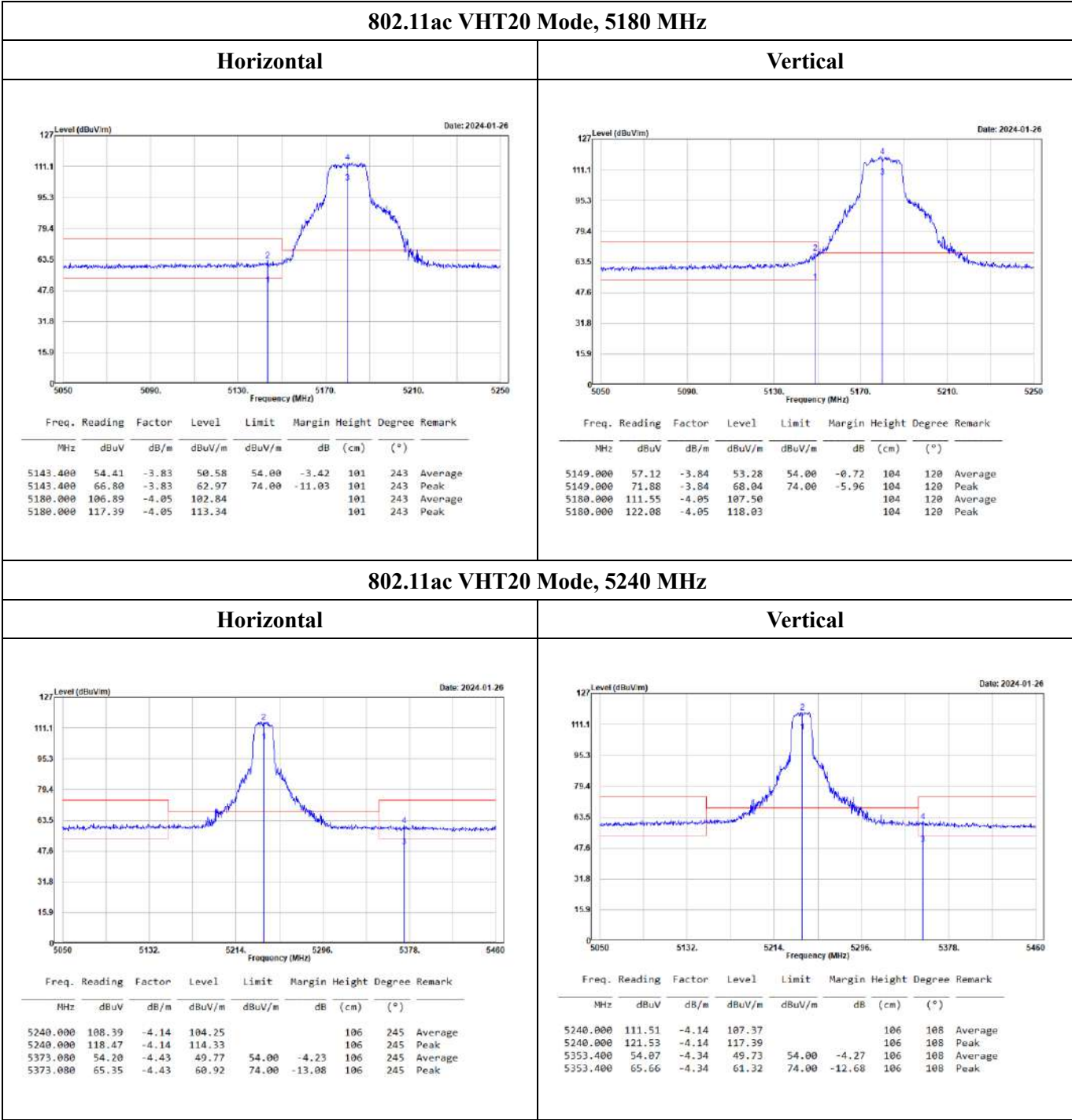
Horizontal



Vertical

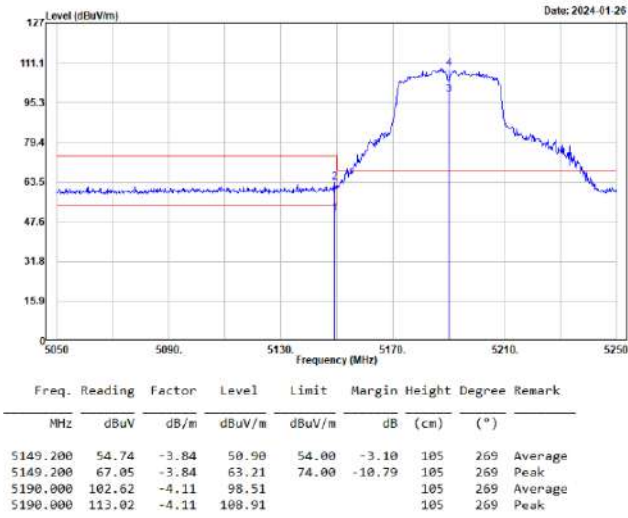


Beamforming Mode:

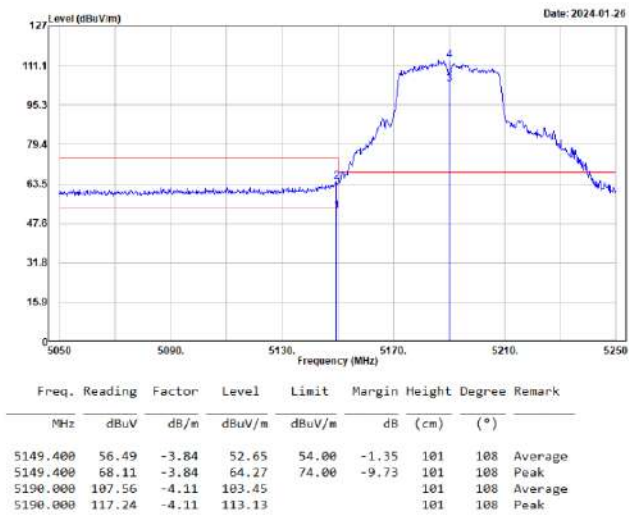


802.11ac VHT40 Mode, 5190 MHz

Horizontal

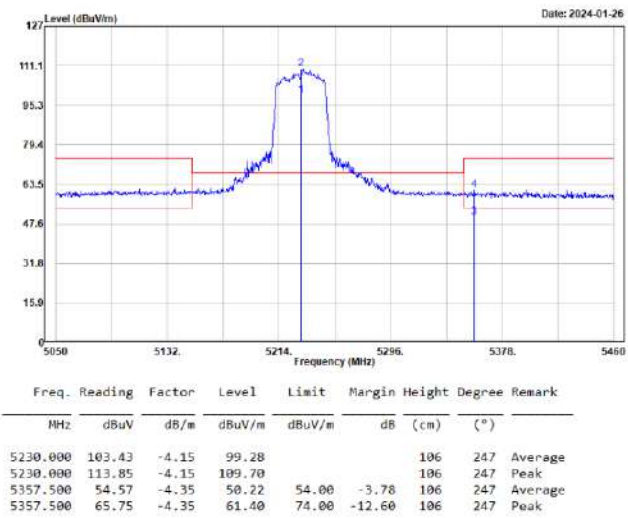


Vertical

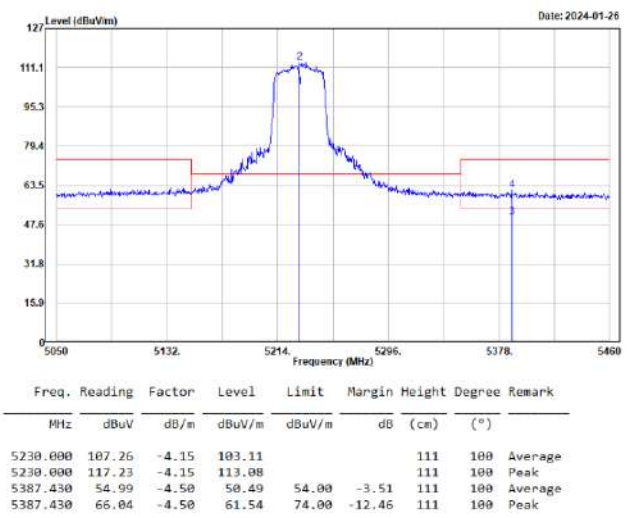


802.11ac VHT40 Mode, 5230 MHz

Horizontal

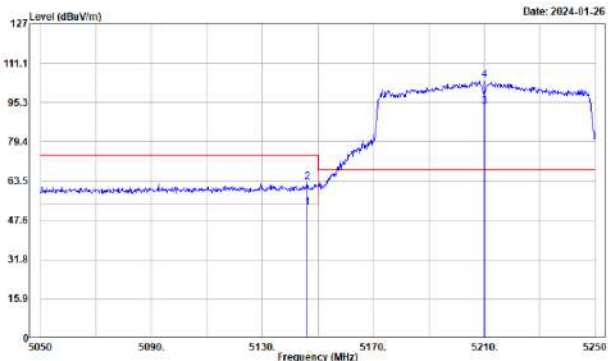


Vertical



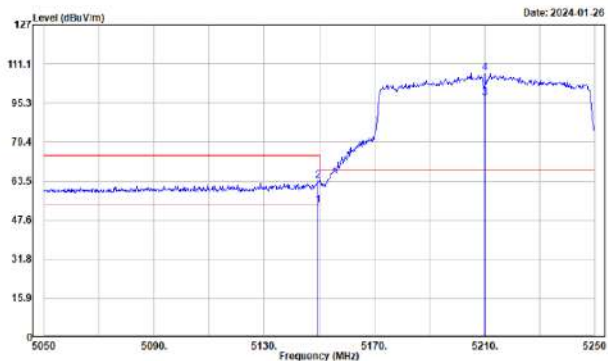
802.11ac VHT80 Mode, 5210 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5146.200	56.38	-3.83	52.55	54.00	-1.45	103	239	Average
5146.200	66.76	-3.83	62.93	74.00	-11.07	103	239	Peak
5210.000	97.86	-4.17	93.69			103	239	Average
5210.000	108.60	-4.17	104.43			103	239	Peak

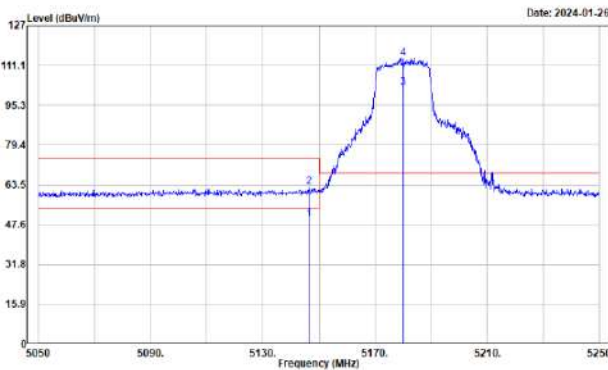
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5149.600	57.39	-3.84	53.55	54.00	-0.45	111	74	Average
5149.600	67.34	-3.84	63.50	74.00	-10.50	111	74	Peak
5210.000	101.44	-4.17	97.27			111	74	Average
5210.000	111.50	-4.17	107.33			111	74	Peak

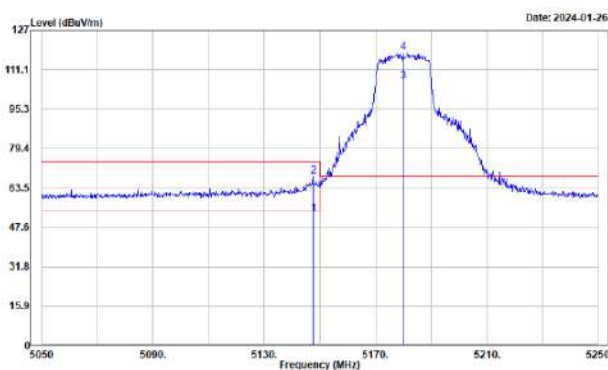
802.11ax HE20 Mode, 5180 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5146.400	53.87	-3.83	50.04	54.00	-3.96	104	239	Average
5146.400	66.33	-3.83	62.50	74.00	-11.50	104	239	Peak
5180.000	106.14	-4.05	102.09			104	239	Average
5180.000	118.11	-4.05	114.06			104	239	Peak

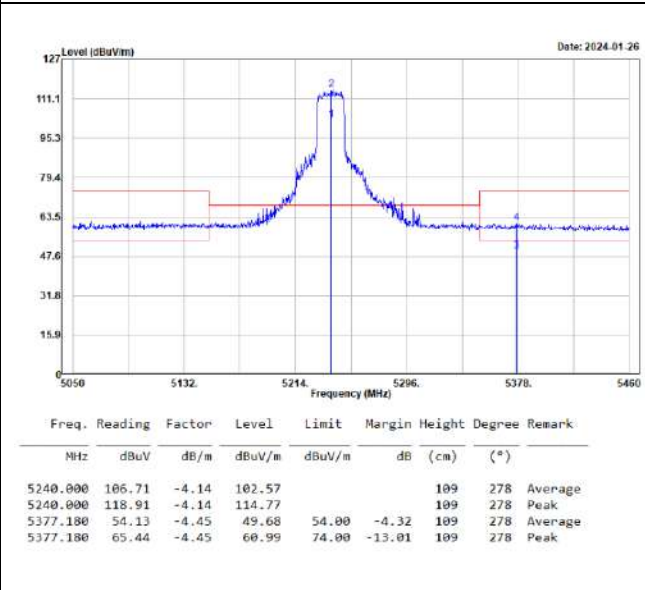
Vertical



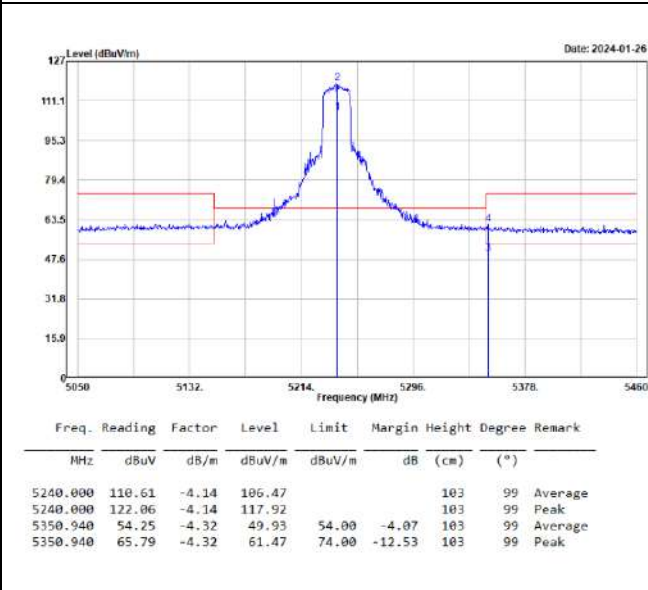
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5147.600	56.72	-3.83	52.89	54.00	-1.11	101	110	Average
5147.600	71.89	-3.83	68.06	74.00	-5.94	101	110	Peak
5180.000	110.55	-4.05	106.50			101	110	Average
5180.000	122.06	-4.05	118.01			101	110	Peak

802.11ax HE20 Mode, 5240 MHz

Horizontal

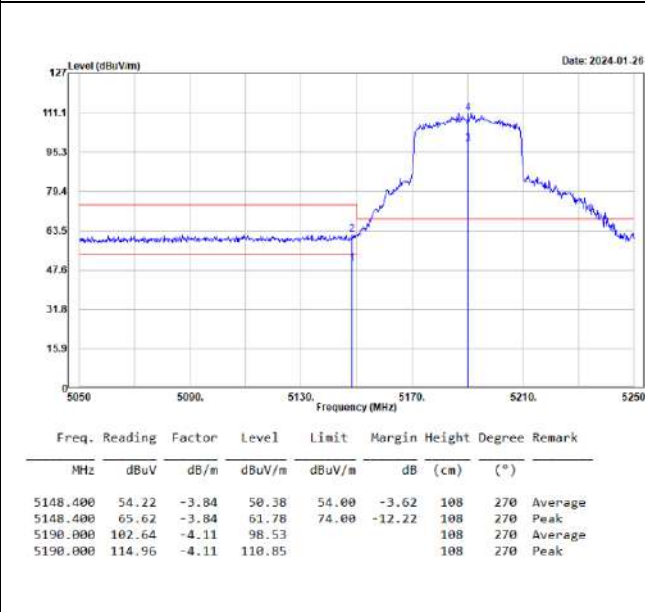


Vertical

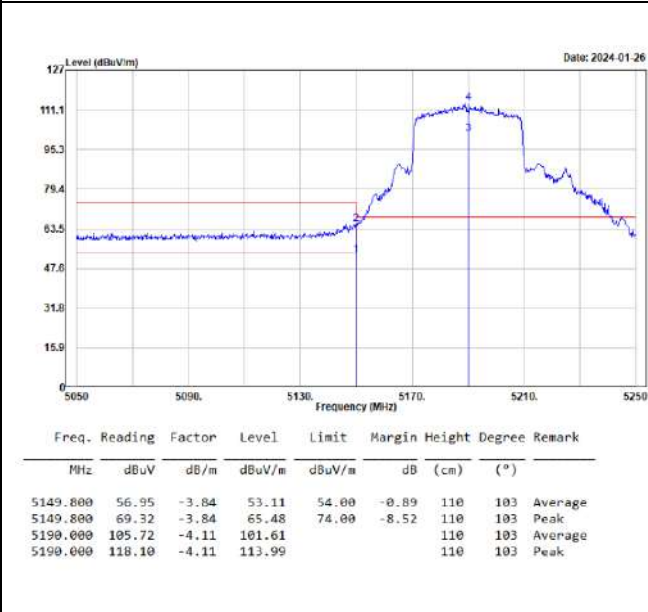


802.11ax HE40 Mode, 5190 MHz

Horizontal

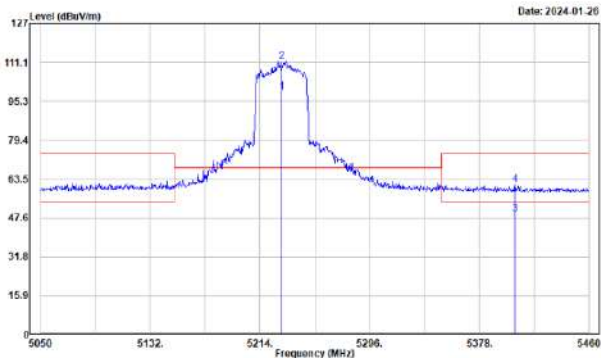


Vertical



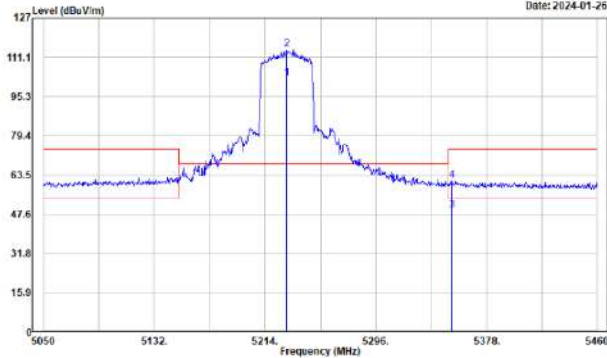
802.11ax HE40 Mode, 5230 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5230.000	103.27	-4.15	99.12	54.00	-4.70	105	246	Average
5230.000	115.81	-4.15	111.66	54.00	-4.70	105	246	Peak
5404.650	53.89	-4.59	49.30	74.00	-12.74	105	246	Average
5404.650	65.85	-4.59	61.26	74.00	-12.74	105	246	Peak

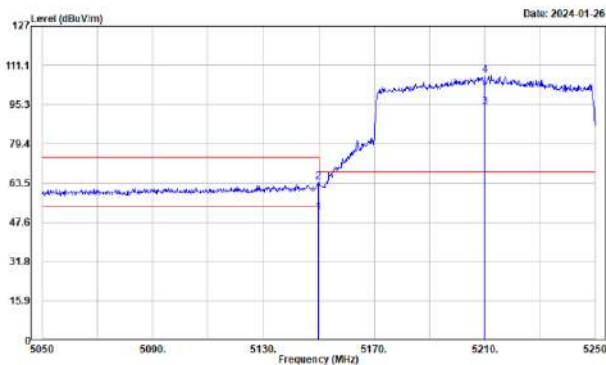
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5230.000	106.82	-4.15	102.67	54.00	-4.86	113	100	Average
5230.000	118.55	-4.15	114.40	54.00	-4.86	113	100	Peak
5352.580	53.48	-4.34	49.14	74.00	-12.71	113	100	Average
5352.580	65.63	-4.34	61.29	74.00	-12.71	113	100	Peak

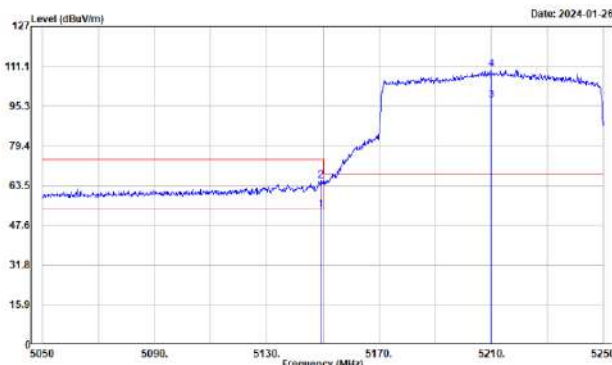
802.11ax HE80 Mode, 5210 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5149.920	55.62	-3.84	51.78	54.00	-2.22	106	245	Average
5149.920	67.73	-3.84	63.89	54.00	-10.11	106	245	Peak
5210.000	98.43	-4.17	94.26	74.00	-10.11	106	245	Average
5210.000	111.16	-4.17	106.99	74.00	-10.11	106	245	Peak

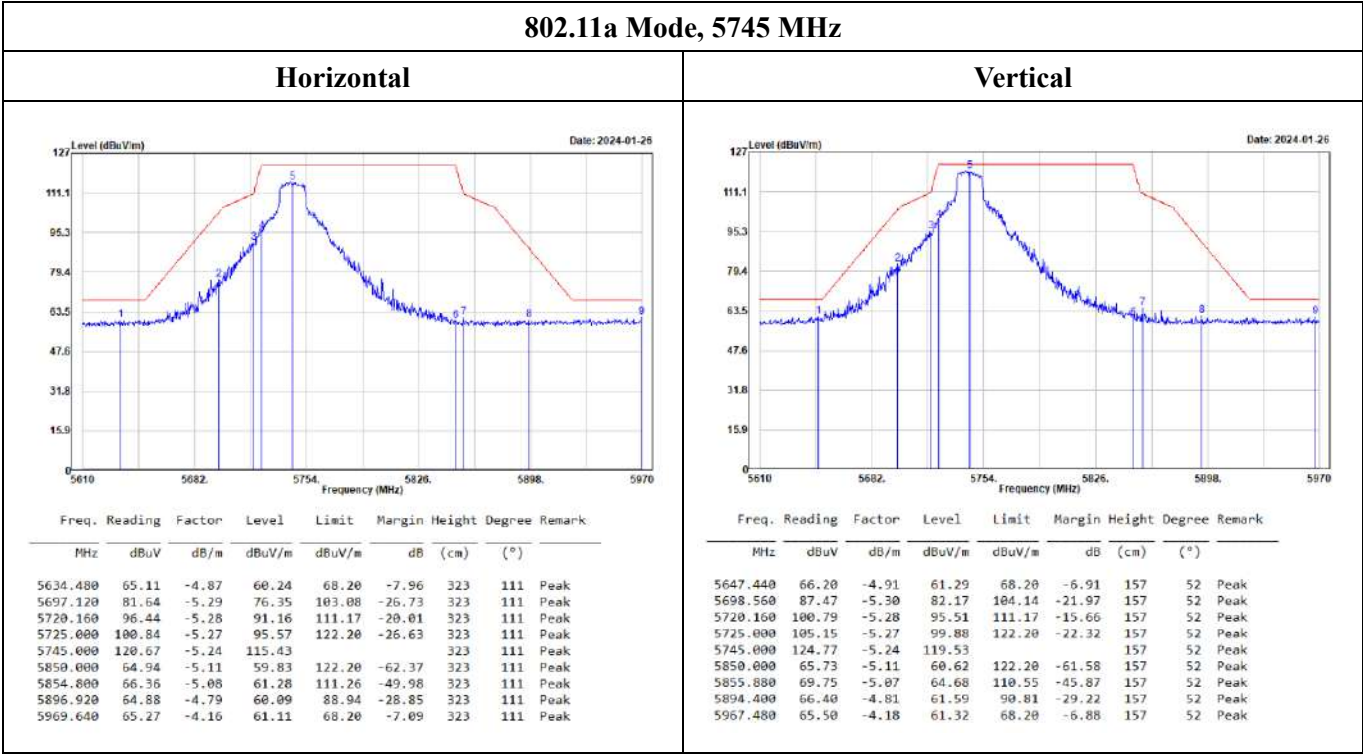
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5149.200	57.48	-3.84	53.64	54.00	-0.36	136	107	Average
5149.200	69.27	-3.84	65.43	54.00	-8.57	136	107	Peak
5210.000	101.71	-4.17	97.54	74.00	-10.11	136	107	Average
5210.000	113.92	-4.17	109.75	74.00	-10.11	136	107	Peak

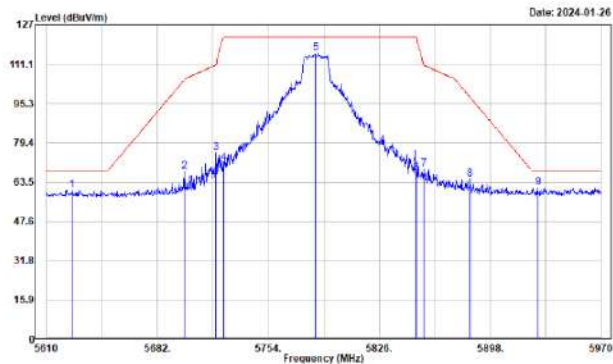
5725-5850 MHz

Non Beamforming Mode



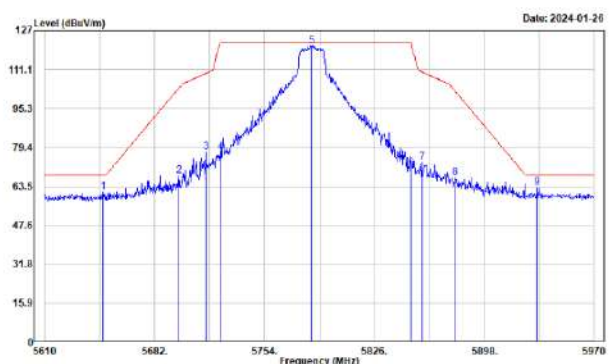
802.11a Mode, 5785 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5626.560	65.17	-4.83	60.34	68.20	-7.86	305	117	Peak
5699.640	72.95	-5.31	67.64	104.93	-37.29	305	117	Peak
5720.160	80.62	-5.28	75.34	111.17	-35.83	305	117	Peak
5725.000	76.56	-5.27	71.29	122.20	-50.91	305	117	Peak
5785.000	120.95	-5.18	115.77			305	117	Peak
5850.000	72.36	-5.11	67.25	122.20	-54.95	305	117	Peak
5854.800	74.02	-5.08	68.94	111.26	-42.32	305	117	Peak
5885.040	69.66	-4.87	64.79	97.75	-32.96	305	117	Peak
5928.960	65.60	-4.49	61.11	68.20	-7.09	305	117	Peak

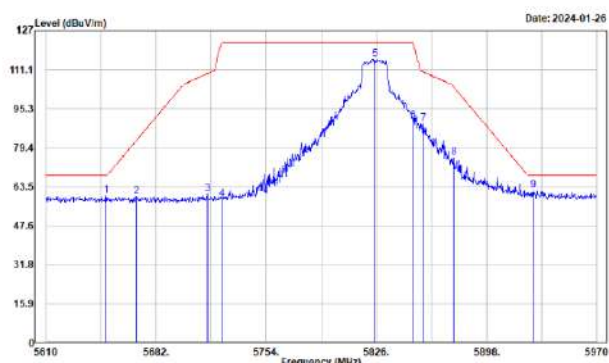
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5648.160	66.29	-4.92	61.37	68.20	-6.83	117	83	Peak
5697.840	73.19	-5.30	67.89	103.61	-35.72	117	83	Peak
5715.480	82.64	-5.29	77.35	109.54	-32.19	117	83	Peak
5725.000	82.75	-5.27	77.48	122.20	-44.72	117	83	Peak
5785.000	126.02	-5.18	120.84			117	83	Peak
5850.000	75.92	-5.11	70.81	122.20	-51.39	117	83	Peak
5856.960	78.22	-5.06	73.16	110.25	-37.09	117	83	Peak
5870.920	72.05	-4.92	67.13	102.29	-35.16	117	83	Peak
5932.560	67.41	-4.45	62.96	68.20	-5.24	117	83	Peak

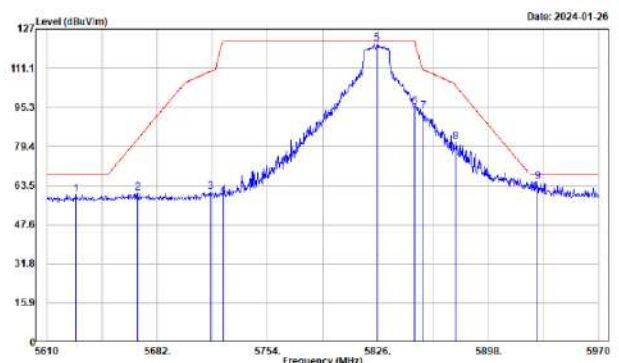
802.11a Mode, 5825 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5649.240	64.64	-4.92	59.72	68.20	-8.48	299	114	Peak
5669.040	64.73	-5.06	59.67	82.33	-22.66	299	114	Peak
5715.480	66.03	-5.29	60.74	109.54	-48.80	299	114	Peak
5725.000	63.66	-5.27	58.39	122.20	-63.81	299	114	Peak
5825.000	120.36	-5.14	115.22			299	114	Peak
5850.000	95.31	-5.11	90.20	122.20	-32.00	299	114	Peak
5856.600	94.28	-5.07	89.21	110.35	-21.14	299	114	Peak
5876.760	80.32	-4.94	75.38	103.89	-28.51	299	114	Peak
5928.600	66.38	-4.49	61.89	68.20	-6.31	299	114	Peak

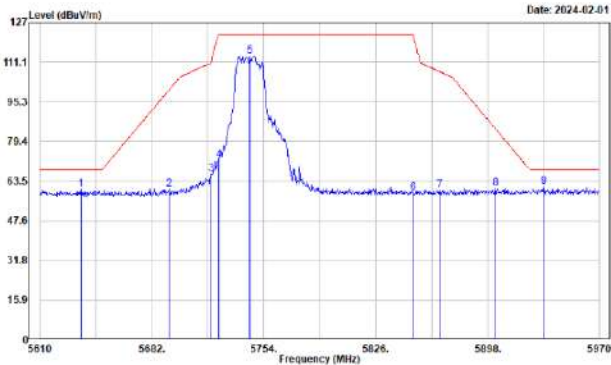
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5628.720	64.66	-4.84	59.82	68.20	-8.38	123	79	Peak
5669.040	65.57	-5.06	60.51	82.33	-21.82	123	79	Peak
5715.560	66.07	-5.29	60.78	109.84	-49.06	123	79	Peak
5725.000	64.80	-5.27	59.53	122.20	-62.67	123	79	Peak
5825.000	126.34	-5.14	121.20			123	79	Peak
5850.000	100.46	-5.11	95.35	122.20	-26.85	123	79	Peak
5856.520	98.64	-5.08	93.56	110.65	-17.09	123	79	Peak
5876.760	86.27	-4.94	81.33	103.89	-22.56	123	79	Peak
5930.400	69.59	-4.48	65.11	68.20	-3.09	123	79	Peak

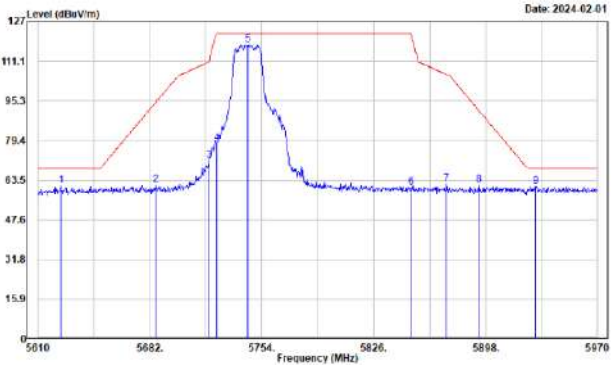
802.11ac VHT20 Mode, 5745 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5636.280	65.11	-4.87	60.24	68.20	-7.96	256	291	Peak
5692.800	65.61	-5.26	60.35	99.89	-39.54	256	291	Peak
5719.800	71.56	-5.28	66.28	110.74	-44.46	256	291	Peak
5725.000	77.15	-5.27	71.88	122.20	-50.32	256	291	Peak
5745.000	118.71	-5.24	113.47			256	291	Peak
5850.000	63.98	-5.11	58.87	122.20	-63.33	256	291	Peak
5867.400	65.02	-4.99	60.03	107.33	-47.30	256	291	Peak
5903.040	65.38	-4.74	60.64	84.41	-23.77	256	291	Peak
5934.000	65.80	-4.44	61.36	68.20	-6.84	256	291	Peak

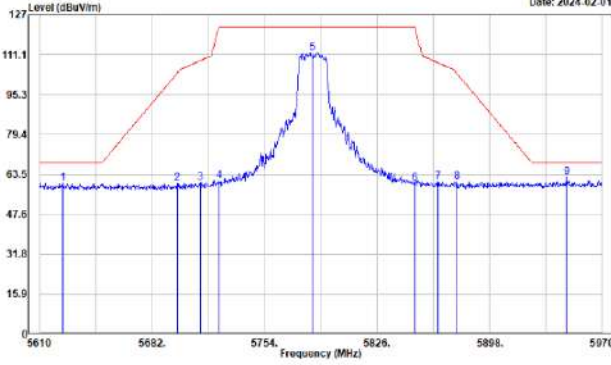
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5624.760	66.25	-4.83	61.42	68.20	-6.78	105	83	Peak
5685.960	66.93	-5.20	61.73	94.84	-33.11	105	83	Peak
5720.160	76.64	-5.28	71.36	111.17	-39.81	105	83	Peak
5725.000	83.29	-5.27	78.02	122.20	-44.18	105	83	Peak
5745.000	123.01	-5.24	117.77			105	83	Peak
5850.000	65.70	-5.11	60.59	122.20	-61.61	105	83	Peak
5872.800	66.90	-4.96	61.94	105.82	-43.88	105	83	Peak
5893.680	66.39	-4.82	61.57	91.34	-29.77	105	83	Peak
5930.400	65.50	-4.48	61.02	68.20	-7.18	105	83	Peak

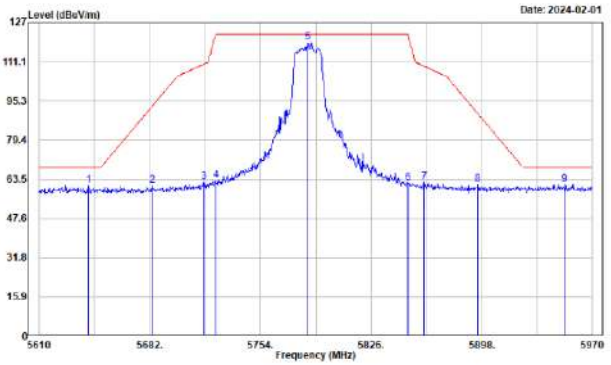
802.11ac VHT20 Mode, 5785 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5624.760	64.88	-4.83	60.05	68.20	-8.15	102	302	Peak
5698.200	65.24	-5.30	59.94	103.87	-43.93	102	302	Peak
5712.960	65.52	-5.29	60.23	108.03	-48.00	102	302	Peak
5725.000	66.05	-5.27	60.78	122.20	-61.42	102	302	Peak
5785.000	117.13	-5.18	111.95			102	302	Peak
5850.000	64.88	-5.11	59.77	122.20	-62.43	102	302	Peak
5864.880	65.67	-5.01	60.66	108.03	-47.37	102	302	Peak
5877.120	65.49	-4.93	60.56	103.62	-43.06	102	302	Peak
5947.320	66.53	-4.31	62.22	68.20	-5.98	102	302	Peak

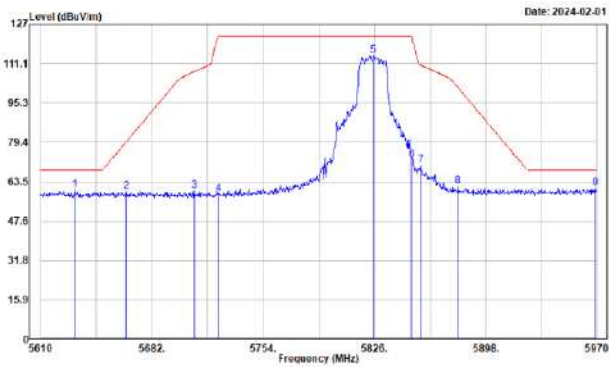
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5642.040	65.75	-4.89	60.86	68.20	-7.34	106	89	Peak
5683.440	66.21	-5.18	61.03	92.98	-31.95	106	89	Peak
5717.280	67.71	-5.29	62.42	110.04	-47.62	106	89	Peak
5725.000	68.25	-5.27	62.98	122.20	-59.22	106	89	Peak
5785.000	123.89	-5.18	118.71			106	89	Peak
5850.000	66.96	-5.11	61.85	122.20	-60.35	106	89	Peak
5860.560	67.23	-5.05	62.18	109.24	-47.06	106	89	Peak
5895.480	66.10	-4.81	61.29	90.01	-28.72	106	89	Peak
5952.000	65.65	-4.28	61.37	68.20	-6.83	106	89	Peak

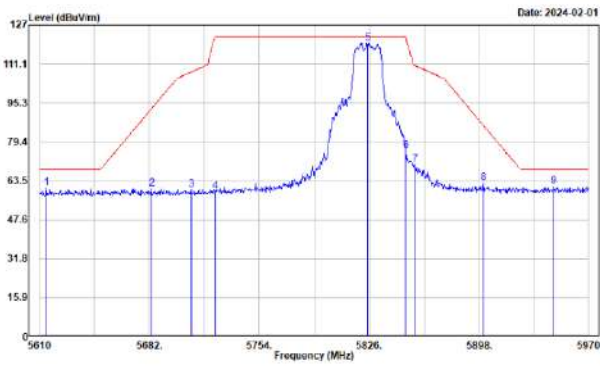
802.11ac VHT20 Mode, 5825 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5631.960	64.92	-4.86	60.06	68.20	-8.14	100	308	Peak
5665.440	64.57	-5.04	59.53	79.66	-20.13	100	308	Peak
5709.360	65.03	-5.29	59.74	107.82	-48.08	100	308	Peak
5725.000	63.85	-5.27	58.58	122.20	-63.62	100	308	Peak
5825.000	119.45	-5.14	114.31			100	308	Peak
5850.000	77.23	-5.11	72.12	122.20	-50.08	100	308	Peak
5855.880	75.38	-5.07	70.31	110.55	-40.24	100	308	Peak
5880.000	66.36	-4.91	61.45	101.49	-40.04	100	308	Peak
5968.920	65.07	-4.16	60.91	68.20	-7.29	100	308	Peak

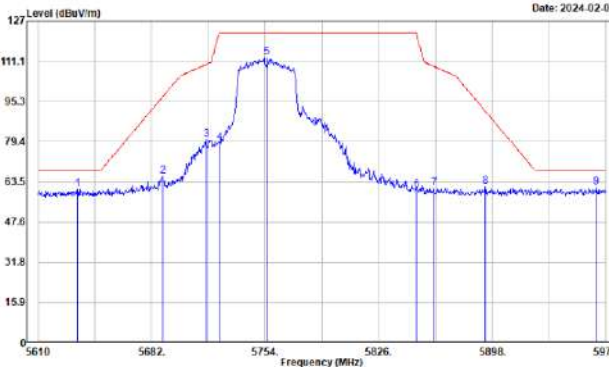
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5614.320	65.20	-4.80	60.40	68.20	-7.80	100	84	Peak
5683.440	65.58	-5.18	60.40	92.98	-32.58	100	84	Peak
5709.360	65.28	-5.29	59.99	107.82	-47.83	100	84	Peak
5725.000	64.62	-5.27	59.35	122.20	-62.85	100	84	Peak
5825.000	124.73	-5.14	119.59			100	84	Peak
5850.000	81.00	-5.11	75.89	122.20	-46.31	100	84	Peak
5856.240	75.14	-5.07	70.07	110.45	-40.38	100	84	Peak
5900.880	67.30	-4.76	62.54	86.01	-23.47	100	84	Peak
5946.960	65.50	-4.31	61.19	68.20	-7.01	100	84	Peak

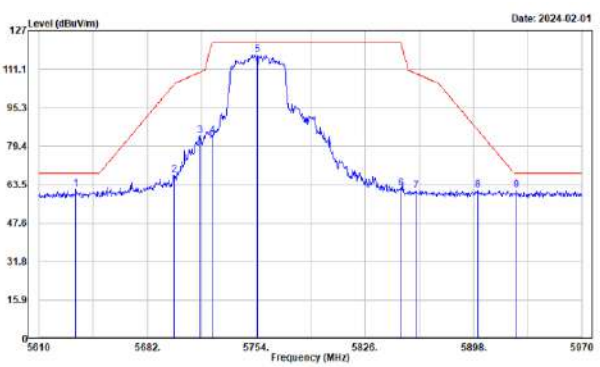
802.11ac VHT40 Mode, 5755 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5634.840	65.60	-4.87	60.73	68.20	-7.47	100	241	Peak
5688.840	70.86	-5.22	65.64	96.97	-31.33	100	241	Peak
5716.560	85.61	-5.29	80.32	109.84	-29.52	100	241	Peak
5725.000	84.18	-5.27	78.91	122.20	-43.29	100	241	Peak
5755.000	117.70	-5.23	112.47			100	241	Peak
5850.000	65.28	-5.11	60.17	122.20	-62.03	100	241	Peak
5860.920	66.12	-5.04	61.08	109.14	-48.06	100	241	Peak
5893.680	66.44	-4.82	61.62	91.34	-29.72	100	241	Peak
5963.880	65.32	-4.20	61.12	68.20	-7.08	100	241	Peak

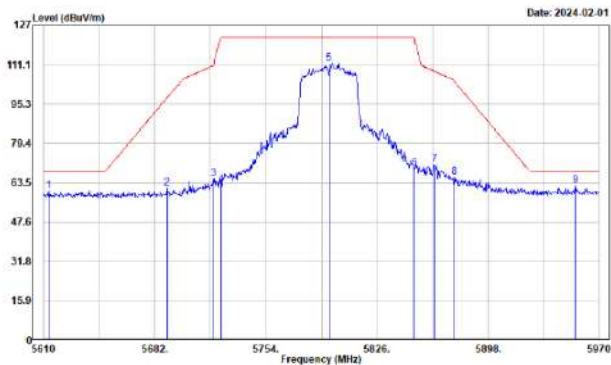
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5634.480	66.64	-4.87	61.77	68.20	-6.43	100	85	Peak
5699.640	72.87	-5.31	67.56	104.93	-37.37	100	85	Peak
5716.560	88.85	-5.29	83.56	109.84	-26.28	100	85	Peak
5725.000	88.92	-5.27	83.65	122.20	-38.55	100	85	Peak
5755.000	122.26	-5.23	117.03			100	85	Peak
5850.000	66.99	-5.11	61.88	122.20	-60.32	100	85	Peak
5860.200	65.90	-5.05	60.85	109.34	-48.49	100	85	Peak
5900.880	66.18	-4.76	61.42	86.01	-24.59	100	85	Peak
5926.440	65.90	-4.51	61.39	68.20	-6.81	100	85	Peak

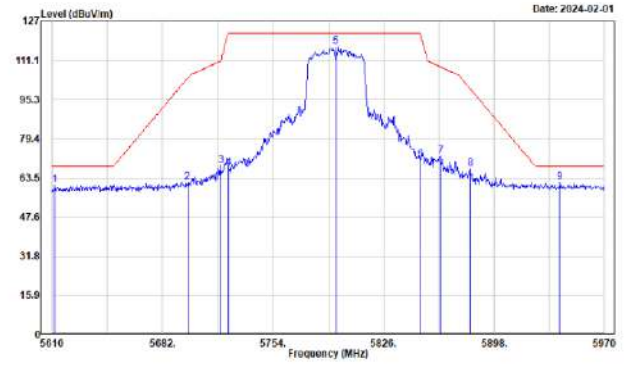
802.11ac VHT40 Mode, 5795 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5613.240	65.20	-4.80	60.40	68.20	-7.80	100	235	Peak
5689.920	66.42	-5.23	61.19	97.77	-36.58	100	235	Peak
5719.800	70.31	-5.28	65.03	110.74	-45.71	100	235	Peak
5725.000	67.94	-5.27	62.67	122.20	-59.53	100	235	Peak
5795.000	116.60	-5.17	111.43			100	235	Peak
5850.000	74.24	-5.11	69.13	122.20	-53.07	100	235	Peak
5863.080	75.83	-5.03	70.80	108.54	-37.74	100	235	Peak
5876.040	70.79	-4.94	65.85	104.43	-38.58	100	235	Peak
5954.520	66.56	-4.26	62.30	68.20	-5.90	100	235	Peak

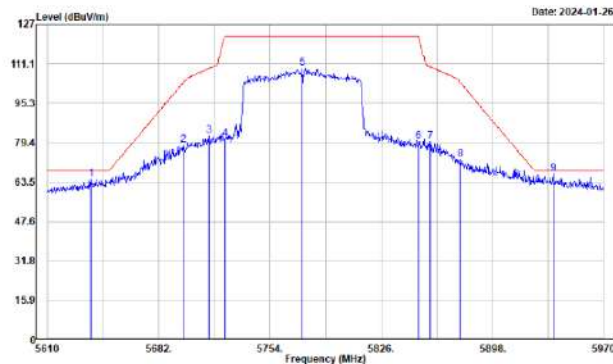
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5611.800	65.31	-4.78	60.53	68.20	-7.67	101	86	Peak
5698.200	66.97	-5.30	61.67	103.87	-42.20	101	86	Peak
5719.800	73.62	-5.28	68.34	110.74	-42.40	101	86	Peak
5725.000	72.69	-5.27	67.42	122.20	-54.78	101	86	Peak
5795.000	121.75	-5.17	116.58			101	86	Peak
5850.000	75.97	-5.11	70.86	122.20	-51.34	101	86	Peak
5863.080	77.37	-5.03	72.34	108.54	-36.20	101	86	Peak
5882.520	71.84	-4.89	66.95	99.62	-32.67	101	86	Peak
5940.840	65.96	-4.36	61.60	68.20	-6.60	101	86	Peak

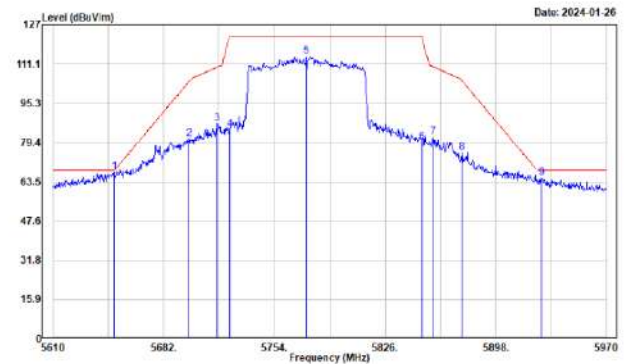
802.11ac VHT80 Mode, 5775 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5638.080	69.50	-4.89	64.61	68.20	-3.59	107	270	Peak
5697.840	83.66	-5.30	78.36	103.61	-25.25	107	270	Peak
5714.400	87.39	-5.29	82.10	109.23	-27.13	107	270	Peak
5725.000	86.23	-5.27	80.96	122.20	-41.24	107	270	Peak
5775.000	114.74	-5.20	109.54			107	270	Peak
5850.000	85.03	-5.11	79.92	122.20	-42.28	107	270	Peak
5857.680	84.77	-5.06	79.71	110.05	-30.34	107	270	Peak
5877.120	77.66	-4.93	72.73	103.62	-30.89	107	270	Peak
5937.240	71.30	-4.41	66.89	68.20	-1.31	107	270	Peak

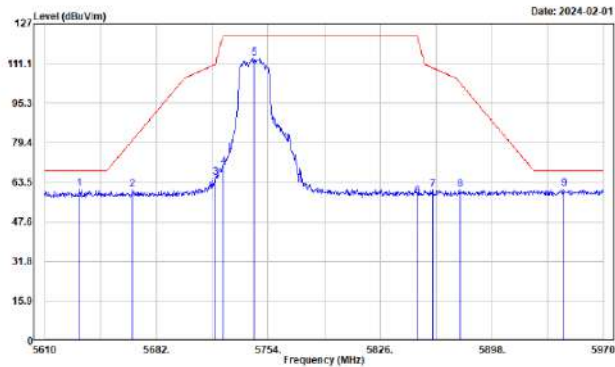
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5649.600	72.28	-4.92	67.36	68.20	-0.84	111	85	Peak
5698.560	86.31	-5.30	81.01	104.14	-23.13	111	85	Peak
5716.920	92.52	-5.29	87.23	109.94	-22.71	111	85	Peak
5725.000	89.92	-5.27	84.65	122.20	-37.55	111	85	Peak
5775.000	119.42	-5.20	114.22			111	85	Peak
5850.000	84.51	-5.11	79.40	122.20	-42.80	111	85	Peak
5856.960	86.53	-5.06	81.47	110.25	-28.78	111	85	Peak
5876.040	80.39	-4.94	75.45	104.43	-28.98	111	85	Peak
5927.880	69.40	-4.49	64.91	68.20	-3.29	111	85	Peak

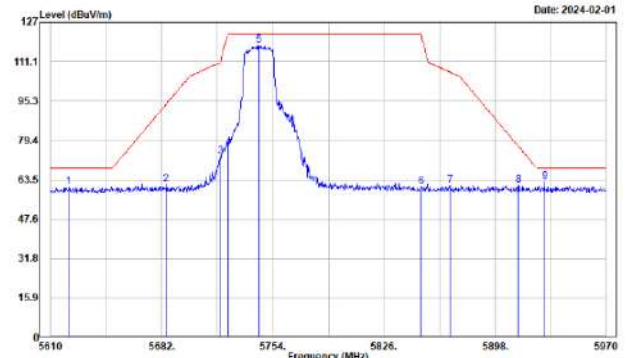
802.11ax HE20 Mode, 5745 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5632.320	65.70	-4.86	60.84	68.20	-7.36	251	292	Peak
5666.520	65.61	-5.05	60.56	80.46	-19.90	251	292	Peak
5719.800	70.63	-5.28	65.35	110.74	-45.39	251	292	Peak
5725.000	74.63	-5.27	69.36	122.20	-52.84	251	292	Peak
5745.000	118.64	-5.24	113.40			251	292	Peak
5850.000	62.94	-5.11	57.83	122.20	-64.37	251	292	Peak
5859.840	65.45	-5.05	60.40	109.44	-49.04	251	292	Peak
5877.480	65.56	-4.93	60.63	103.36	-42.73	251	292	Peak
5944.800	65.22	-4.33	60.89	68.20	-7.31	251	292	Peak

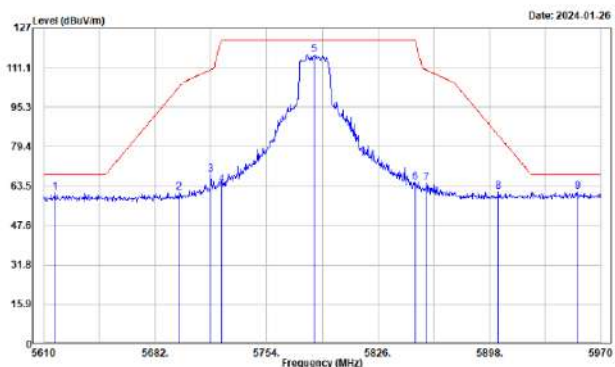
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5621.880	65.31	-4.82	60.49	68.20	-7.71	103	84	Peak
5684.880	66.88	-5.19	61.69	94.05	-32.36	103	84	Peak
5719.800	78.27	-5.28	72.99	110.74	-37.75	103	84	Peak
5725.000	81.61	-5.27	76.34	122.20	-45.86	103	84	Peak
5745.000	122.79	-5.24	117.55			103	84	Peak
5850.000	65.68	-5.11	60.57	122.20	-61.63	103	84	Peak
5868.840	66.10	-4.98	61.12	106.92	-45.80	103	84	Peak
5913.120	66.06	-4.64	61.42	76.96	-15.54	103	84	Peak
5930.040	67.01	-4.48	62.53	68.20	-5.67	103	84	Peak

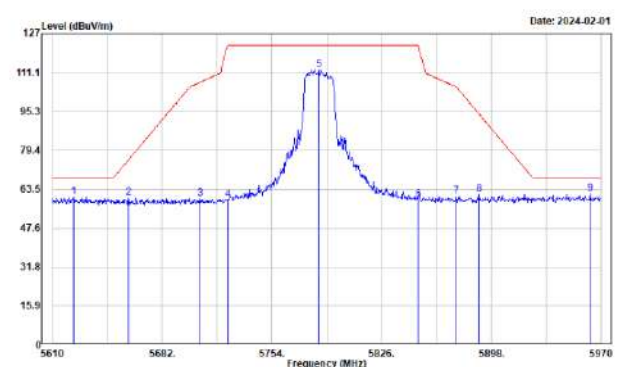
802.11ax HE20 Mode, 5785 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5617.200	65.56	-4.80	60.76	68.20	-7.44	272	289	Peak
5697.120	66.26	-5.29	60.97	103.08	-42.11	272	289	Peak
5718.000	73.36	-5.28	68.08	110.24	-42.16	272	289	Peak
5725.000	69.38	-5.27	64.11	122.20	-58.09	272	289	Peak
5785.000	121.55	-5.18	116.37			272	289	Peak
5850.000	70.20	-5.11	65.09	122.20	-57.11	272	289	Peak
5857.320	69.69	-5.06	64.63	110.15	-45.52	272	289	Peak
5903.760	65.90	-4.73	61.17	83.88	-22.71	272	289	Peak
5954.880	65.62	-4.25	61.37	68.20	-6.83	272	289	Peak

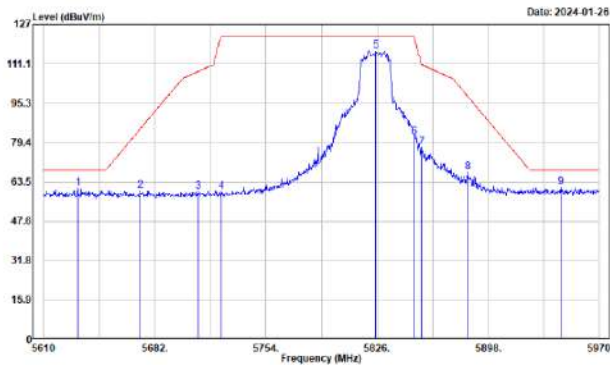
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5624.040	65.09	-4.83	60.26	68.20	-7.94	100	273	Peak
5659.680	65.05	-5.00	60.05	75.39	-15.34	100	273	Peak
5706.840	64.73	-5.30	59.43	107.12	-47.69	100	273	Peak
5725.000	64.55	-5.27	59.28	122.20	-62.92	100	273	Peak
5785.000	117.44	-5.18	112.26			100	273	Peak
5850.000	64.22	-5.11	59.11	122.20	-63.09	100	273	Peak
5874.960	65.63	-4.94	60.69	105.21	-44.52	100	273	Peak
5890.080	66.10	-4.84	61.26	94.01	-32.75	100	273	Peak
5962.800	65.82	-4.20	61.62	68.20	-6.58	100	273	Peak

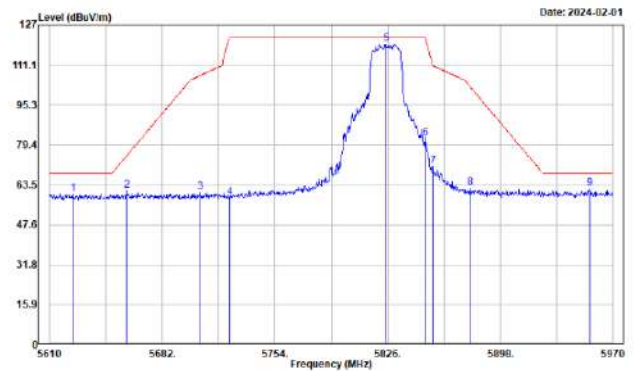
802.11ax HE20 Mode, 5825 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5631.960	65.69	-4.86	60.83	68.20	-7.37	274	291	Peak
5672.640	65.07	-5.11	59.96	84.99	-25.03	274	291	Peak
5719.080	64.82	-5.30	59.52	108.02	-48.50	274	291	Peak
5725.000	64.70	-5.27	59.43	122.20	-62.77	274	291	Peak
5825.000	121.42	-5.14	116.28			274	291	Peak
5850.000	86.82	-5.11	81.71	122.20	-40.49	274	291	Peak
5854.800	82.42	-5.08	77.34	111.26	-33.92	274	291	Peak
5884.680	72.23	-4.87	67.36	98.01	-30.65	274	291	Peak
5945.160	65.42	-4.33	61.09	68.20	-7.11	274	291	Peak

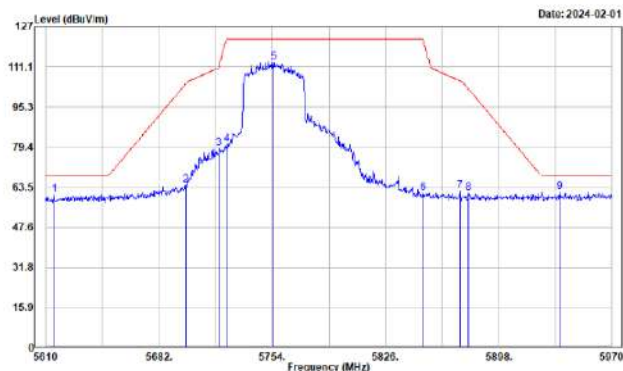
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5624.760	64.85	-4.83	60.02	68.20	-8.18	104	83	Peak
5658.960	66.41	-4.99	61.42	74.85	-13.43	104	83	Peak
5706.120	65.71	-5.30	60.41	106.92	-46.51	104	83	Peak
5725.000	63.70	-5.27	58.43	122.20	-63.77	104	83	Peak
5825.000	124.41	-5.14	119.27			104	83	Peak
5850.000	87.14	-5.11	82.03	122.20	-40.17	104	83	Peak
5854.800	75.87	-5.08	70.79	111.26	-40.47	104	83	Peak
5878.560	67.30	-4.92	62.38	102.56	-40.18	104	83	Peak
5955.240	66.35	-4.25	62.10	68.20	-6.10	104	83	Peak

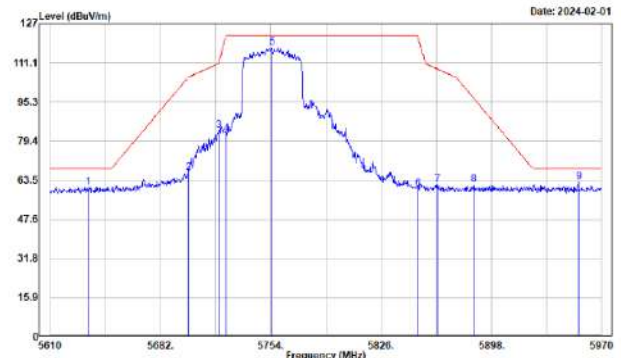
802.11ax HE40 Mode, 5755 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5615.400	65.53	-4.80	60.73	68.20	-7.47	100	239	Peak
5698.920	69.60	-5.30	64.30	104.40	-40.10	100	239	Peak
5720.160	83.93	-5.28	78.65	111.17	-32.52	100	239	Peak
5725.000	85.77	-5.27	80.50	122.20	-41.70	100	239	Peak
5755.000	118.15	-5.23	112.92			100	239	Peak
5850.000	66.24	-5.11	61.13	122.20	-61.07	100	239	Peak
5873.520	67.04	-4.95	62.09	105.61	-43.52	100	239	Peak
5878.920	66.09	-4.92	61.17	102.29	-41.12	100	239	Peak
5936.880	66.07	-4.41	61.66	68.20	-6.54	100	239	Peak

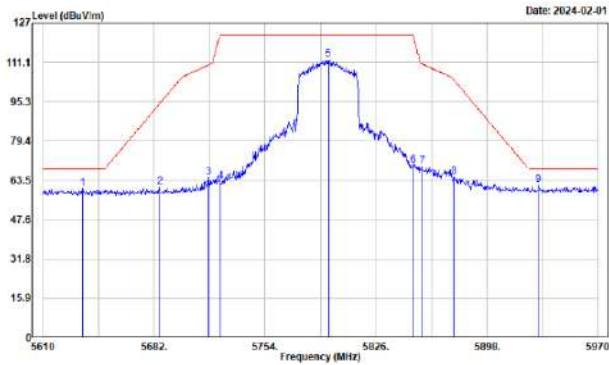
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5634.840	65.58	-4.87	60.71	68.20	-7.49	100	84	Peak
5700.000	71.59	-5.31	66.28	105.20	-38.92	100	84	Peak
5720.160	88.79	-5.28	83.51	111.17	-27.66	100	84	Peak
5725.000	87.43	-5.27	82.16	122.20	-40.04	100	84	Peak
5755.000	122.70	-5.23	117.47			100	84	Peak
5850.000	65.14	-5.11	60.03	122.20	-62.17	100	84	Peak
5862.720	66.74	-5.03	61.71	108.64	-46.93	100	84	Peak
5886.480	66.54	-4.86	61.68	96.68	-35.00	100	84	Peak
5954.880	66.77	-4.25	62.52	68.20	-5.68	100	84	Peak

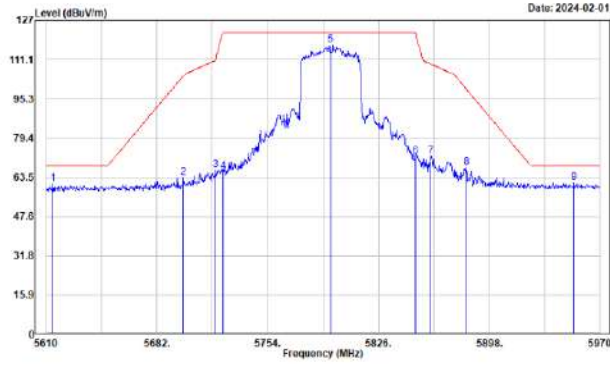
802.11ax HE40 Mode, 5795 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5635.200	65.06	-4.87	60.19	68.20	-8.01	108	279	Peak
5685.600	65.99	-5.19	60.80	94.58	-33.78	108	279	Peak
5717.280	70.17	-5.29	64.88	110.04	-45.16	108	279	Peak
5725.000	68.25	-5.27	62.98	122.20	-59.22	108	279	Peak
5795.000	117.47	-5.17	112.30			108	279	Peak
5850.000	74.68	-5.11	69.57	122.20	-52.63	108	279	Peak
5855.880	74.12	-5.07	69.05	110.55	-41.50	108	279	Peak
5876.760	69.91	-4.94	64.97	103.89	-38.92	108	279	Peak
5931.480	66.08	-4.46	61.62	68.20	-6.58	108	279	Peak

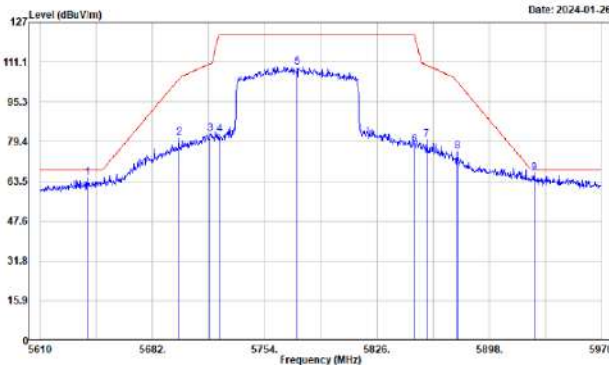
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5614.680	65.71	-4.80	60.91	68.20	-7.29	107	84	Peak
5699.280	68.51	-5.31	63.20	104.67	-41.47	107	84	Peak
5720.160	71.73	-5.28	66.45	111.17	-44.72	107	84	Peak
5725.000	70.96	-5.27	65.69	122.20	-56.51	107	84	Peak
5795.000	122.03	-5.17	116.86			107	84	Peak
5850.000	77.11	-5.11	72.00	122.20	-50.20	107	84	Peak
5860.200	77.07	-5.05	72.02	109.34	-37.32	107	84	Peak
5883.240	72.23	-4.88	67.35	99.08	-31.73	107	84	Peak
5953.080	65.60	-4.26	61.34	68.20	-6.86	107	84	Peak

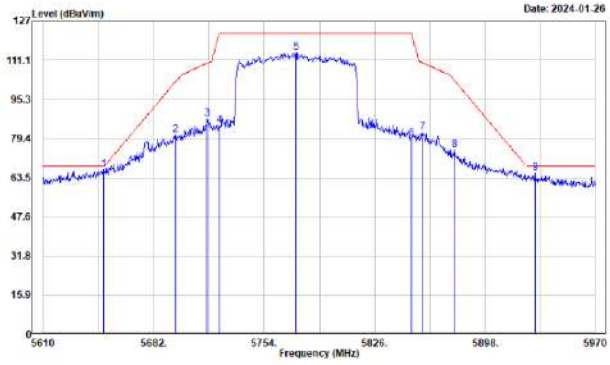
802.11ax HE80 Mode, 5775 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5640.240	69.96	-4.89	65.07	68.20	-3.13	100	253	Peak
5698.920	86.17	-5.30	80.87	104.40	-23.53	100	253	Peak
5719.080	87.93	-5.28	82.65	110.54	-27.89	100	253	Peak
5725.000	87.56	-5.27	82.29	122.20	-39.91	100	253	Peak
5775.000	114.38	-5.20	109.18			100	253	Peak
5850.000	83.39	-5.11	78.28	122.20	-43.92	100	253	Peak
5858.640	85.19	-5.06	80.13	109.95	-29.82	100	253	Peak
5877.480	80.18	-4.93	75.25	103.36	-28.11	100	253	Peak
5927.160	71.29	-4.50	66.79	68.20	-1.41	100	253	Peak

Vertical

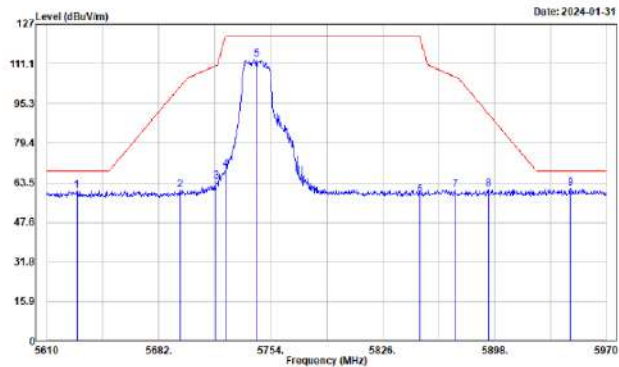


Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5649.240	71.82	-4.92	66.90	68.20	-1.30	100	86	Peak
5690.040	86.30	-5.29	81.01	102.28	-21.27	100	86	Peak
5716.920	92.58	-5.29	87.29	109.94	-22.65	100	86	Peak
5725.000	89.92	-5.27	84.65	122.20	-37.55	100	86	Peak
5775.000	119.56	-5.20	114.36			100	86	Peak
5850.000	84.66	-5.11	79.55	122.20	-42.65	100	86	Peak
5856.960	87.08	-5.06	82.02	110.25	-28.23	100	86	Peak
5878.200	79.73	-4.92	74.81	102.82	-28.01	100	86	Peak
5930.760	69.73	-4.48	65.25	68.20	-2.95	100	86	Peak

Beamforming Mode

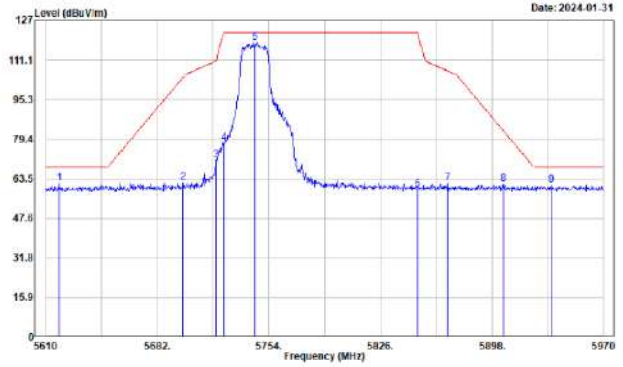
802.11ac VHT20 Mode, 5745 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5629.080	65.09	-4.84	60.25	68.20	-7.95	102	297	Peak
5695.680	65.76	-5.27	60.49	102.02	-41.53	102	297	Peak
5719.080	69.34	-5.28	64.06	110.54	-46.48	102	297	Peak
5725.000	74.11	-5.27	68.84	122.20	-53.36	102	297	Peak
5745.000	118.26	-5.24	113.02	122.20	-9.18	102	297	Peak
5850.000	63.51	-5.11	58.40	122.20	-63.80	102	297	Peak
5872.440	65.68	-4.96	60.72	105.92	-45.20	102	297	Peak
5894.040	65.60	-4.82	60.78	91.07	-30.29	102	297	Peak
5946.600	65.48	-4.31	61.17	68.20	-7.03	102	297	Peak

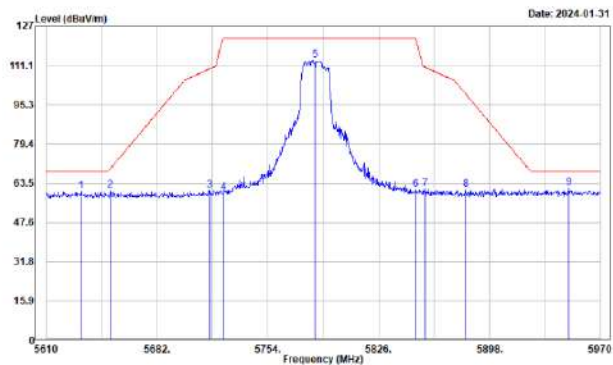
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5618.640	66.28	-4.81	61.47	68.20	-6.73	106	84	Peak
5690.560	67.25	-5.30	61.95	104.14	-42.19	106	84	Peak
5720.160	76.19	-5.28	70.91	111.17	-40.26	106	84	Peak
5725.000	83.07	-5.27	77.80	122.20	-44.40	106	84	Peak
5745.000	123.38	-5.24	118.14	122.20	-4.06	106	84	Peak
5850.000	64.34	-5.11	59.23	122.20	-62.97	106	84	Peak
5869.560	66.57	-4.97	61.60	106.72	-45.12	106	84	Peak
5905.200	65.96	-4.72	61.24	82.81	-21.57	106	84	Peak
5936.160	65.41	-4.41	61.00	68.20	-7.20	106	84	Peak

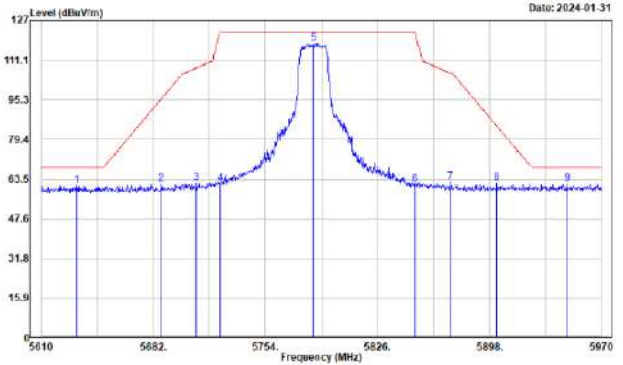
802.11ac VHT20 Mode, 5785 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5632.680	65.10	-4.87	60.23	68.20	-7.97	104	296	Peak
5651.760	65.68	-4.94	60.74	69.51	-8.77	104	296	Peak
5716.200	65.88	-5.29	60.59	109.74	-49.15	104	296	Peak
5725.000	64.91	-5.27	59.64	122.20	-62.56	104	296	Peak
5785.000	118.45	-5.18	113.27	122.20	-8.93	104	296	Peak
5850.000	66.12	-5.11	61.01	122.20	-61.19	104	296	Peak
5856.240	66.22	-5.07	61.15	110.45	-49.30	104	296	Peak
5882.520	65.82	-4.89	60.93	99.62	-38.69	104	296	Peak
5949.480	65.75	-4.28	61.47	68.20	-6.73	104	296	Peak

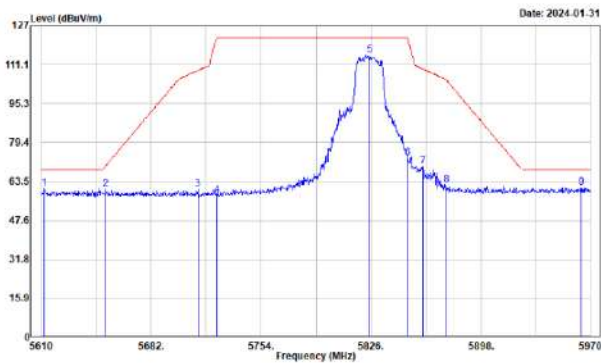
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5632.680	65.91	-4.87	61.04	68.20	-7.16	106	85	Peak
5687.040	66.77	-5.20	61.57	95.64	-34.07	106	85	Peak
5709.720	67.35	-5.29	62.06	107.92	-45.86	106	85	Peak
5725.000	66.82	-5.27	61.55	122.20	-60.65	106	85	Peak
5785.000	122.79	-5.18	117.61	122.20	-0.59	106	85	Peak
5850.000	66.26	-5.11	61.15	122.20	-61.05	106	85	Peak
5872.440	67.12	-4.96	62.16	105.92	-43.76	106	85	Peak
5902.680	66.66	-4.74	61.92	84.68	-22.76	106	85	Peak
5947.680	65.90	-4.29	61.61	68.20	-6.59	106	85	Peak

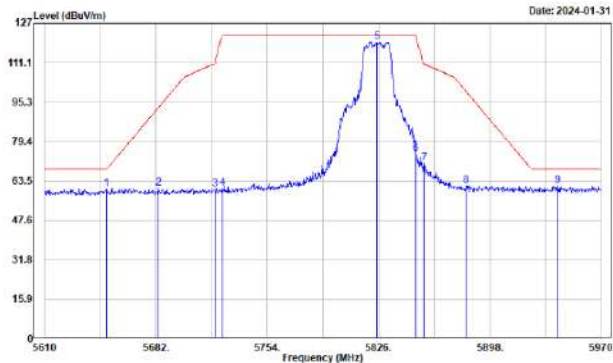
802.11ac VHT20 Mode, 5825 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5611.800	65.39	-4.78	60.61	68.20	-7.59	107	296	Peak
5652.120	65.04	-4.94	60.10	69.78	-9.68	107	296	Peak
5712.600	65.41	-5.29	60.12	108.73	-48.61	107	296	Peak
5725.000	63.18	-5.27	57.91	122.20	-64.29	107	296	Peak
5825.000	120.23	-5.14	115.09			107	296	Peak
5850.000	78.16	-5.11	73.05	122.20	-49.15	107	296	Peak
5860.200	74.61	-5.05	69.56	109.34	-39.78	107	296	Peak
5875.680	67.02	-4.94	62.08	104.69	-42.61	107	296	Peak
5963.880	65.23	-4.20	61.03	68.20	-7.17	107	296	Peak

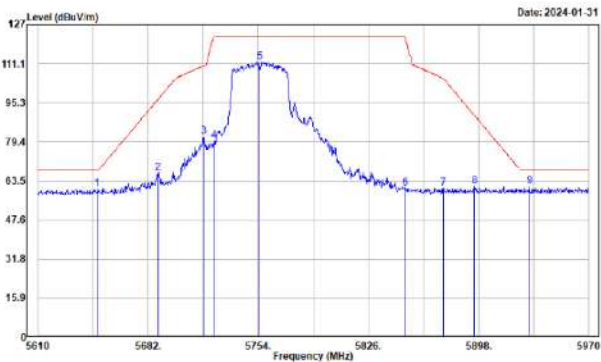
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5649.960	65.29	-4.92	60.37	68.20	-7.83	106	87	Peak
5683.800	65.73	-5.18	60.55	93.25	-32.70	106	87	Peak
5719.800	65.61	-5.28	60.33	110.74	-50.41	106	87	Peak
5725.000	65.92	-5.27	60.65	122.20	-61.55	106	87	Peak
5825.000	124.54	-5.14	119.40			106	87	Peak
5850.000	79.43	-5.11	74.32	122.20	-47.88	106	87	Peak
5855.520	75.61	-5.08	70.53	110.65	-40.12	106	87	Peak
5882.880	66.64	-4.89	61.75	99.35	-37.60	106	87	Peak
5941.560	65.91	-4.36	61.55	68.20	-6.65	106	87	Peak

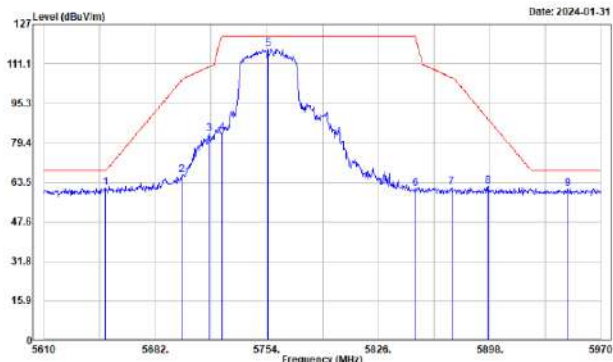
802.11ac VHT40 Mode, 5755 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5648.880	65.29	-4.92	60.37	68.20	-7.83	109	296	Peak
5688.480	71.88	-5.22	66.66	96.70	-30.04	109	296	Peak
5718.360	86.72	-5.28	81.44	110.34	-28.90	109	296	Peak
5725.000	85.11	-5.27	79.84	122.20	-42.36	109	296	Peak
5755.000	116.99	-5.23	111.76			109	296	Peak
5850.000	65.57	-5.11	60.46	122.20	-61.74	109	296	Peak
5874.960	65.65	-4.94	60.71	105.21	-44.50	109	296	Peak
5895.480	66.12	-4.81	61.31	90.01	-28.70	109	296	Peak
5931.120	65.82	-4.47	61.35	68.20	-6.85	109	296	Peak

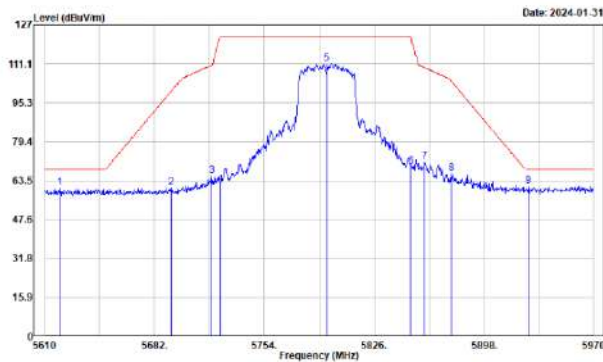
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5649.600	66.20	-4.92	61.28	68.20	-6.92	105	86	Peak
5699.280	71.87	-5.31	66.56	104.67	-38.11	105	86	Peak
5716.560	88.27	-5.29	82.98	109.84	-26.86	105	86	Peak
5725.000	88.51	-5.27	83.24	122.20	-38.96	105	86	Peak
5755.000	122.18	-5.23	116.95			105	86	Peak
5850.000	65.99	-5.11	60.88	122.20	-61.32	105	86	Peak
5873.520	66.58	-4.95	61.63	105.61	-43.98	105	86	Peak
5896.920	66.57	-4.79	61.78	88.94	-27.16	105	86	Peak
5948.400	65.29	-4.29	61.00	68.20	-7.20	105	86	Peak

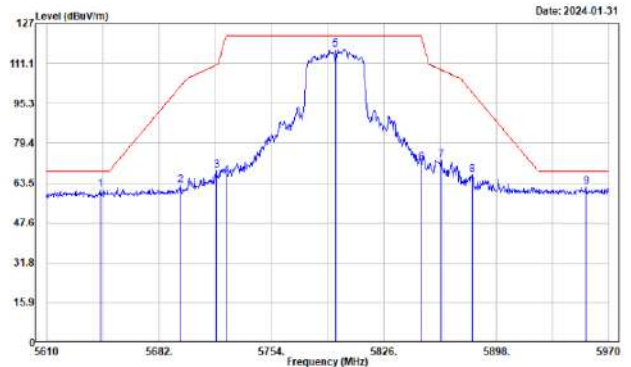
802.11ac VHT40 Mode, 5795 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5619.720	65.31	-4.81	60.50	68.20	-7.70	104	298	Peak
5693.160	65.95	-5.26	60.69	100.16	-39.47	104	298	Peak
5719.440	70.51	-5.28	65.23	110.64	-45.41	104	298	Peak
5725.000	67.33	-5.27	62.06	122.20	-60.14	104	298	Peak
5795.000	116.27	-5.17	111.10			104	298	Peak
5850.000	74.29	-5.11	69.18	122.20	-53.02	104	298	Peak
5859.120	76.29	-5.06	71.23	109.64	-38.41	104	298	Peak
5876.400	71.36	-4.94	66.42	104.16	-37.74	104	298	Peak
5927.160	65.84	-4.50	61.34	68.20	-6.86	104	298	Peak

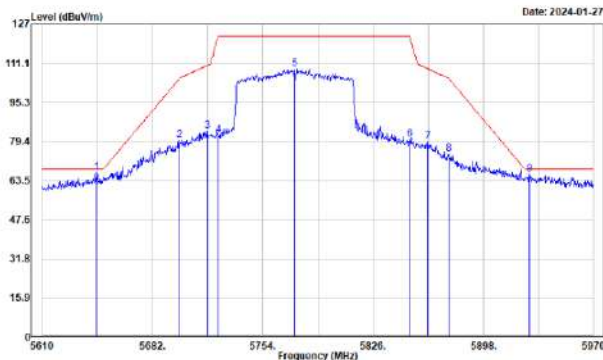
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5644.200	65.72	-4.90	60.82	68.20	-7.38	102	83	Peak
5695.680	68.07	-5.27	62.80	102.02	-39.22	102	83	Peak
5718.720	73.91	-5.28	68.63	110.44	-41.81	102	83	Peak
5725.000	71.85	-5.27	66.58	122.20	-55.62	102	83	Peak
5795.000	121.86	-5.17	116.69			102	83	Peak
5850.000	76.55	-5.11	71.44	122.20	-50.76	102	83	Peak
5862.720	77.66	-5.03	72.63	108.64	-36.01	102	83	Peak
5882.880	71.69	-4.89	66.80	99.35	-32.55	102	83	Peak
5955.600	66.14	-4.25	61.89	68.20	-6.31	102	83	Peak

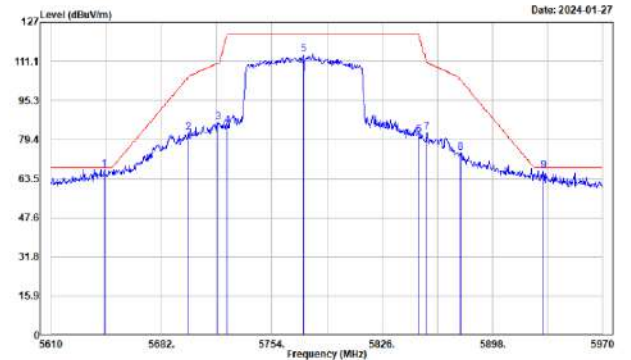
802.11ac VHT80 Mode, 5775 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5645.640	71.51	-4.90	66.61	68.20	-1.59	108	271	Peak
5699.640	85.10	-5.31	79.79	104.93	-25.14	108	271	Peak
5717.640	88.93	-5.28	83.65	110.14	-26.49	108	271	Peak
5725.000	87.28	-5.27	82.01	122.20	-40.19	108	271	Peak
5775.000	113.92	-5.20	108.72			108	271	Peak
5850.000	85.17	-5.11	80.06	122.20	-42.14	108	271	Peak
5861.640	84.32	-5.04	79.28	108.94	-29.66	108	271	Peak
5875.320	79.29	-4.95	74.34	104.96	-30.62	108	271	Peak
5928.240	70.56	-4.49	66.07	68.20	-2.13	108	271	Peak

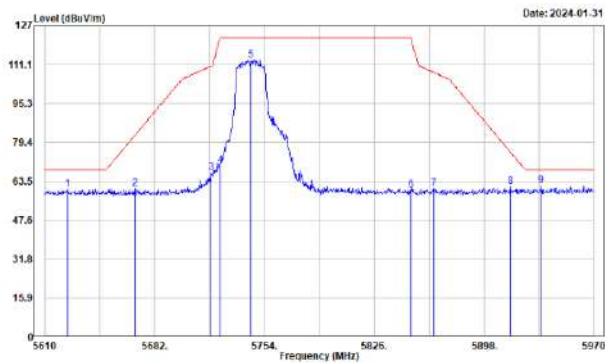
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5644.560	72.17	-4.90	67.27	68.20	-0.93	104	93	Peak
5699.640	87.70	-5.31	82.39	104.93	-22.54	104	93	Peak
5718.720	91.66	-5.28	86.38	110.44	-24.06	104	93	Peak
5725.000	90.37	-5.27	85.10	122.20	-37.10	104	93	Peak
5775.000	119.24	-5.20	114.04			104	93	Peak
5850.000	86.37	-5.11	81.26	122.20	-40.94	104	93	Peak
5854.800	87.45	-5.08	82.37	111.26	-28.89	104	93	Peak
5877.120	78.93	-4.93	74.00	103.62	-29.62	104	93	Peak
5931.480	71.19	-4.46	66.73	68.20	-1.47	104	93	Peak

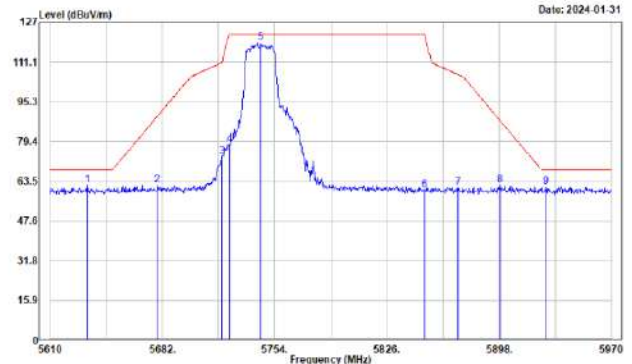
802.11ax HE20 Mode, 5745 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5625.120	65.06	-4.83	60.23	68.20	-7.97	105	251	Peak
5669.040	65.65	-5.06	60.59	82.33	-21.74	105	251	Peak
5719.080	72.42	-5.28	67.14	118.54	-43.40	105	251	Peak
5725.000	75.08	-5.27	69.81	122.20	-52.39	105	251	Peak
5745.000	118.19	-5.24	112.95			105	251	Peak
5850.000	65.10	-5.11	59.99	122.20	-62.21	105	251	Peak
5864.880	65.45	-5.01	60.44	108.03	-47.59	105	251	Peak
5915.280	65.95	-4.62	61.33	75.37	-14.04	105	251	Peak
5935.440	65.91	-4.43	61.48	68.20	-6.72	105	251	Peak

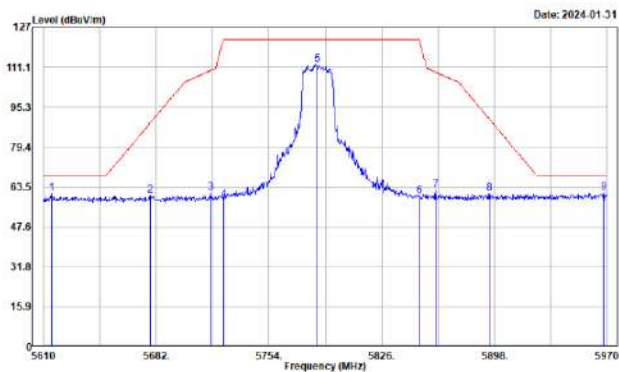
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5633.760	66.77	-4.87	61.90	68.20	-6.30	106	87	Peak
5678.760	66.99	-5.14	61.85	89.52	-27.67	106	87	Peak
5728.160	78.45	-5.28	73.17	111.17	-38.00	106	87	Peak
5725.000	83.44	-5.27	78.17	122.20	-44.03	106	87	Peak
5745.000	123.82	-5.24	118.58			106	87	Peak
5850.000	64.94	-5.11	59.83	122.20	-62.37	106	87	Peak
5871.360	65.89	-4.97	60.92	106.22	-45.30	106	87	Peak
5898.720	66.71	-4.78	61.93	87.61	-25.68	106	87	Peak
5928.240	65.90	-4.49	61.41	68.20	-6.79	106	87	Peak

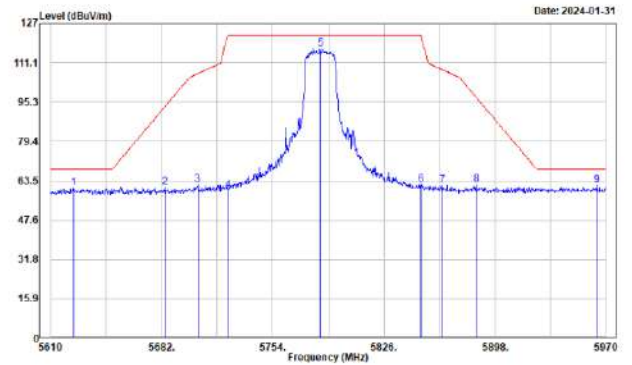
802.11ax HE20 Mode, 5785 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5615.040	65.61	-4.80	60.81	68.20	-7.39	103	291	Peak
5678.040	65.39	-5.14	60.25	88.99	-28.74	103	291	Peak
5716.560	66.47	-5.29	61.18	109.84	-48.66	103	291	Peak
5725.000	63.80	-5.27	58.53	122.20	-63.67	103	291	Peak
5785.000	117.51	-5.18	112.33			103	291	Peak
5850.000	64.93	-5.11	59.82	122.20	-62.38	103	291	Peak
5860.560	67.36	-5.05	62.31	109.24	-46.93	103	291	Peak
5894.760	65.85	-4.81	61.04	98.54	-29.50	103	291	Peak
5967.840	65.48	-4.17	61.31	68.20	-6.89	103	291	Peak

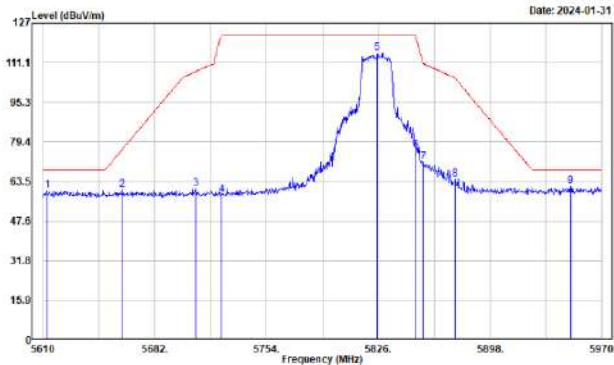
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5624.760	65.40	-4.83	60.57	68.20	-7.63	107	87	Peak
5684.160	66.14	-5.18	60.96	93.51	-32.55	107	87	Peak
5705.400	67.37	-5.30	62.07	106.71	-44.64	107	87	Peak
5725.000	64.81	-5.27	59.54	122.20	-62.66	107	87	Peak
5785.000	121.87	-5.18	116.69			107	87	Peak
5850.000	67.08	-5.11	61.97	122.20	-60.23	107	87	Peak
5863.800	66.65	-5.02	61.63	108.33	-46.70	107	87	Peak
5885.760	66.64	-4.86	61.78	97.21	-35.43	107	87	Peak
5963.880	65.78	-4.20	61.58	68.20	-6.62	107	87	Peak

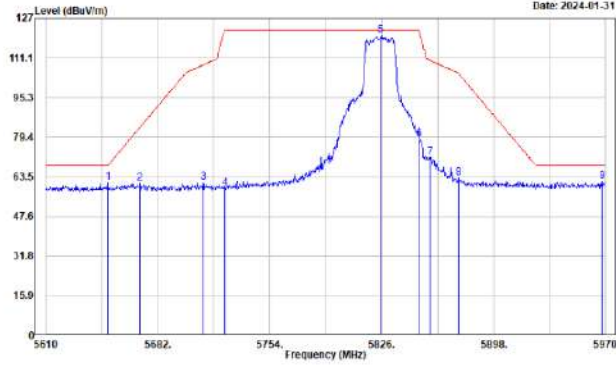
802.11ax HE20 Mode, 5825 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5612.528	64.62	-4.80	59.82	68.20	-8.38	106	256	Peak
5669.768	65.07	-5.00	60.07	76.19	-16.12	106	256	Peak
5708.288	65.74	-5.29	60.45	107.52	-47.07	106	256	Peak
5725.000	63.58	-5.27	58.31	122.20	-63.89	106	256	Peak
5825.000	120.15	-5.14	115.01			106	256	Peak
5850.000	81.31	-5.11	76.20	122.20	-46.00	106	256	Peak
5854.800	76.42	-5.08	71.34	111.26	-39.92	106	256	Peak
5875.688	69.27	-4.94	64.33	104.69	-40.36	106	256	Peak
5949.848	66.05	-4.28	61.77	68.20	-6.43	106	256	Peak

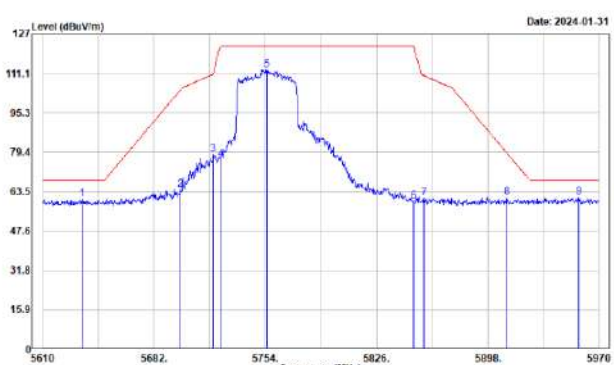
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5649.600	66.17	-4.92	61.25	68.20	-6.95	103	86	Peak
5670.480	65.96	-5.08	60.88	83.39	-22.51	103	86	Peak
5711.160	66.69	-5.30	61.39	108.33	-46.94	103	86	Peak
5725.000	64.19	-5.27	58.92	122.20	-63.28	103	86	Peak
5825.000	125.32	-5.14	120.18			103	86	Peak
5850.000	83.66	-5.11	78.55	122.20	-43.65	103	86	Peak
5856.960	76.42	-5.06	71.36	110.25	-38.89	103	86	Peak
5875.320	67.78	-4.95	62.83	104.96	-42.13	103	86	Peak
5967.840	65.76	-4.17	61.59	68.20	-6.61	103	86	Peak

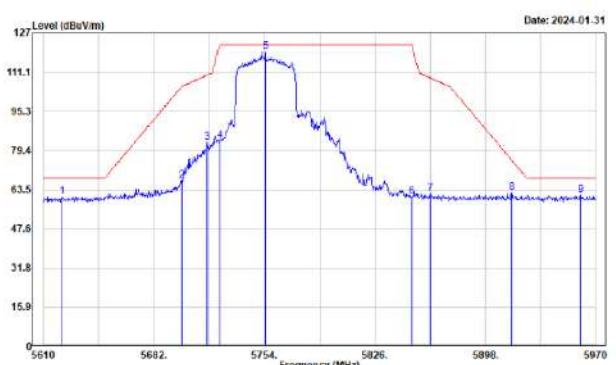
802.11ax HE40 Mode, 5755 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5635.200	65.46	-4.87	60.59	68.20	-7.61	108	294	Peak
5699.280	69.78	-5.31	64.47	104.67	-40.20	108	294	Peak
5720.160	83.63	-5.28	78.35	111.17	-32.82	108	294	Peak
5725.000	81.59	-5.27	76.32	122.20	-45.88	108	294	Peak
5755.000	117.95	-5.23	112.72			108	294	Peak
5850.000	64.59	-5.11	59.48	122.20	-62.72	108	294	Peak
5856.000	65.94	-5.07	60.87	110.35	-49.48	108	294	Peak
5910.240	66.10	-4.68	61.42	79.09	-17.67	108	294	Peak
5956.680	65.40	-4.25	61.15	68.20	-7.05	108	294	Peak

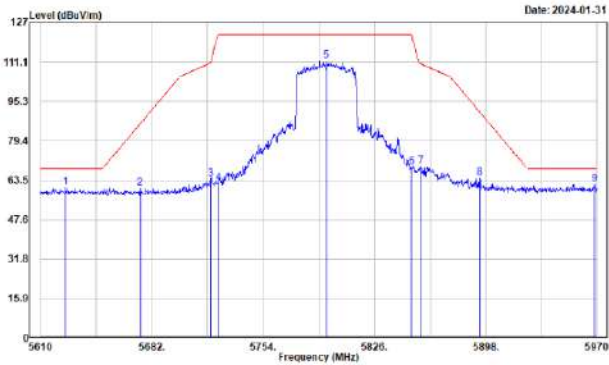
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5622.240	65.26	-4.82	60.44	68.20	-7.76	101	86	Peak
5700.000	72.26	-5.31	66.95	105.20	-38.25	101	86	Peak
5716.920	87.89	-5.29	82.60	109.94	-27.34	101	86	Peak
5725.000	88.39	-5.27	83.12	122.20	-39.08	101	86	Peak
5755.000	124.57	-5.23	119.34			101	86	Peak
5850.000	65.85	-5.11	60.74	122.20	-61.46	101	86	Peak
5862.000	67.00	-5.03	61.97	108.84	-46.87	101	86	Peak
5915.280	66.87	-4.62	62.25	75.37	-13.12	101	86	Peak
5960.280	65.65	-4.22	61.43	68.20	-6.77	101	86	Peak

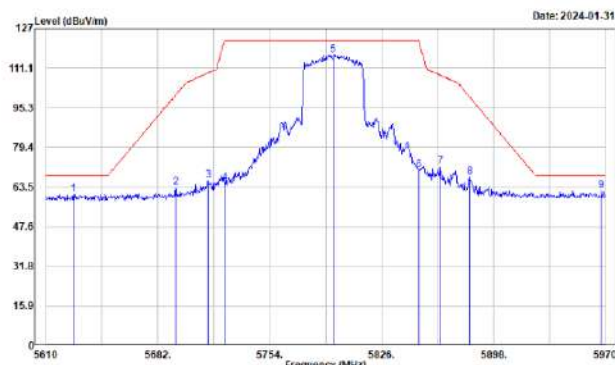
802.11ax HE40 Mode, 5795 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5626.200	65.52	-4.83	60.69	68.20	-7.51	101	298	Peak
5674.440	65.39	-5.12	60.27	86.33	-26.06	101	298	Peak
5720.160	69.22	-5.28	63.94	111.17	-47.23	101	298	Peak
5725.000	67.67	-5.27	62.40	122.20	-59.80	101	298	Peak
5795.000	116.57	-5.17	111.40			101	298	Peak
5850.000	73.95	-5.11	68.84	122.20	-53.36	101	298	Peak
5855.880	74.29	-5.07	69.22	110.55	-41.33	101	298	Peak
5894.040	69.29	-4.82	64.47	91.07	-26.60	101	298	Peak
5968.560	66.08	-4.17	61.91	68.20	-6.29	101	298	Peak

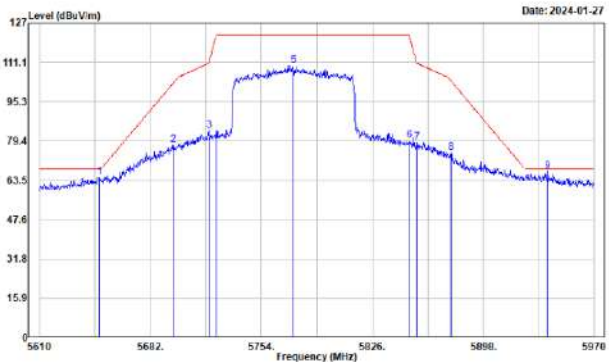
Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5627.640	65.43	-4.84	60.59	68.20	-7.61	103	85	Peak
5693.520	68.74	-5.26	63.48	100.42	-36.94	103	85	Peak
5714.400	71.38	-5.29	66.09	109.23	-43.14	103	85	Peak
5725.000	70.37	-5.27	65.10	122.20	-57.10	103	85	Peak
5795.000	121.61	-5.17	116.44			103	85	Peak
5850.000	75.23	-5.11	70.12	122.20	-52.08	103	85	Peak
5863.800	76.49	-5.02	71.47	108.33	-36.86	103	85	Peak
5892.520	72.22	-4.89	67.33	99.62	-32.29	103	85	Peak
5967.480	66.01	-4.18	61.83	68.20	-6.37	103	85	Peak

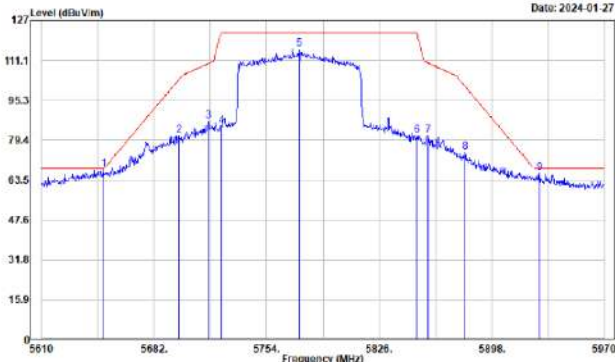
802.11ax HE80 Mode, 5775 MHz

Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5648.880	69.70	-4.92	64.78	68.20	-3.42	109	255	Peak
5696.760	82.91	-5.29	77.62	102.81	-25.19	109	255	Peak
5719.800	89.08	-5.28	83.80	110.74	-26.94	109	255	Peak
5725.000	84.48	-5.27	79.21	122.20	-42.99	109	255	Peak
5775.000	114.96	-5.20	109.76			109	255	Peak
5850.000	84.77	-5.11	79.66	122.20	-42.54	109	255	Peak
5854.800	83.96	-5.08	78.88	111.26	-32.38	109	255	Peak
5877.120	79.62	-4.93	74.69	103.62	-28.93	109	255	Peak
5939.400	71.51	-4.38	67.13	68.20	-1.07	109	255	Peak

Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5649.600	72.60	-4.92	67.68	68.20	-0.52	119	82	Peak
5697.840	86.67	-5.30	81.37	103.61	-22.24	119	82	Peak
5716.920	92.47	-5.29	87.18	109.94	-22.76	119	82	Peak
5725.000	90.12	-5.27	84.85	122.20	-37.35	119	82	Peak
5775.000	120.73	-5.20	115.53			119	82	Peak
5850.000	86.17	-5.11	81.06	122.20	-41.14	119	82	Peak
5856.960	86.19	-5.06	81.13	110.25	-29.12	119	82	Peak
5881.080	79.44	-4.90	74.54	100.68	-26.14	119	82	Peak
5928.600	71.06	-4.49	66.57	68.20	-1.63	119	82	Peak

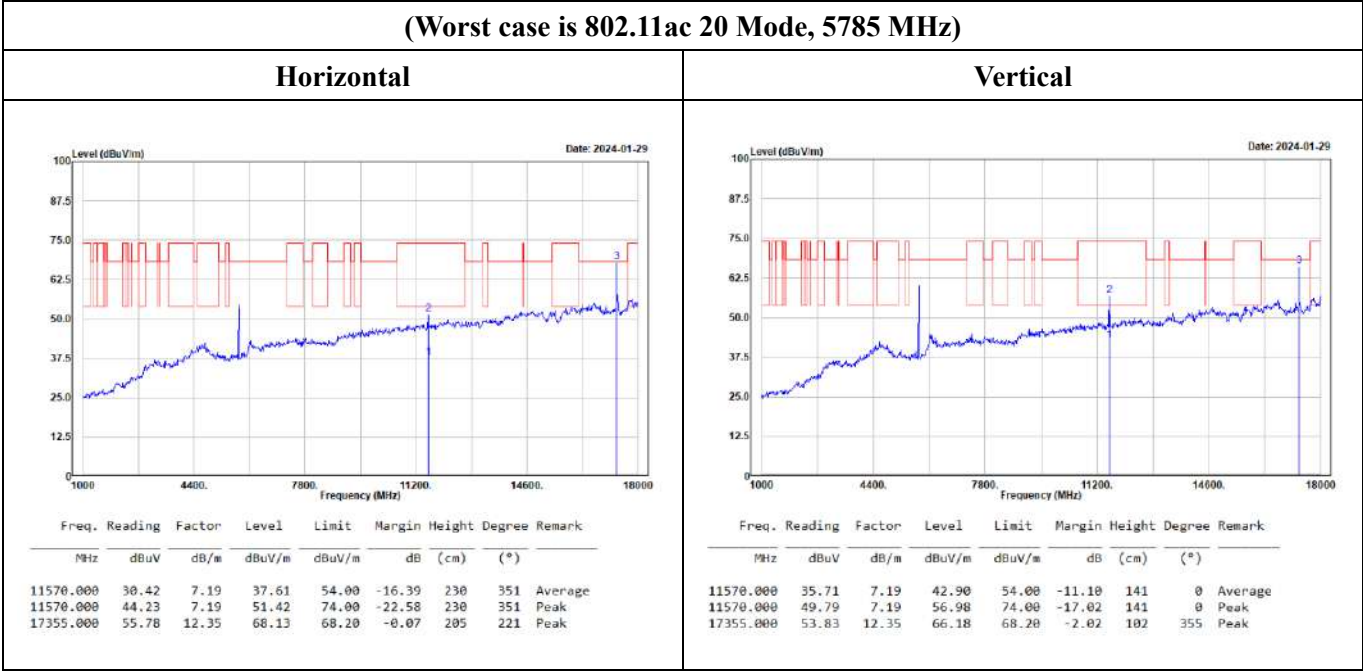
Level = Reading + Factor.

Margin = Level - Limit.

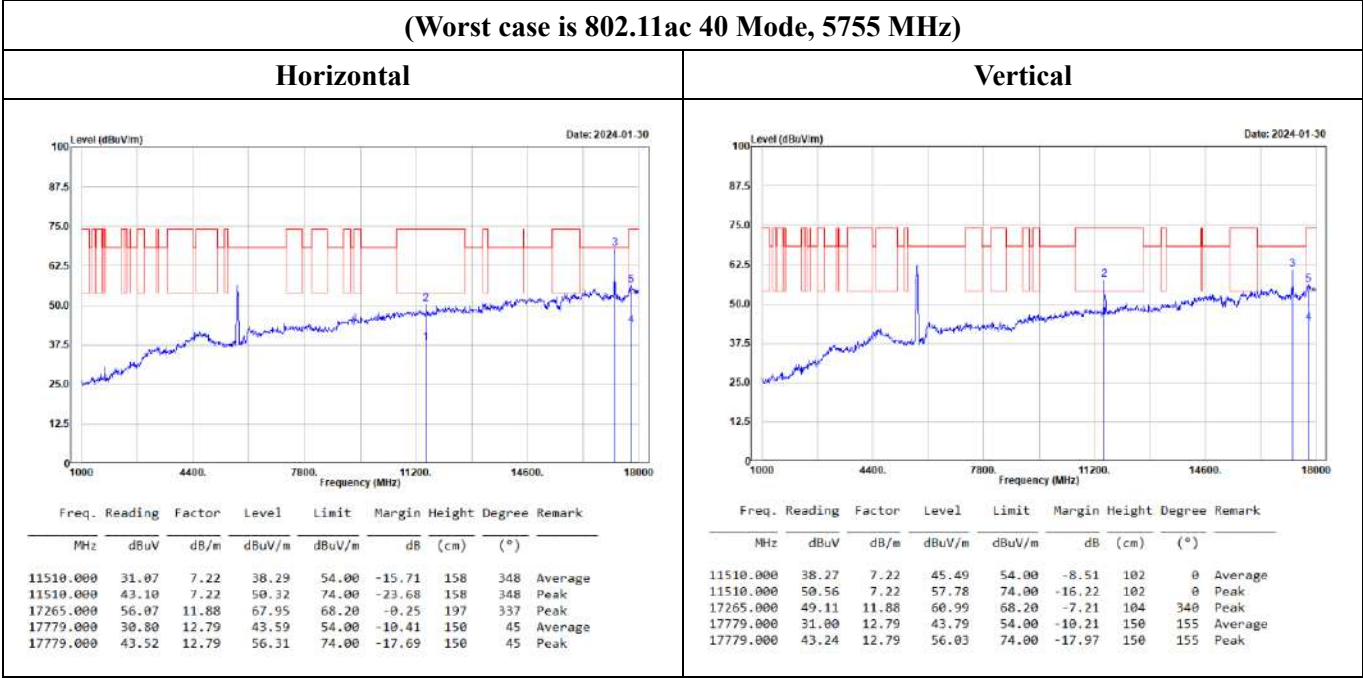
Factor = Antenna Factor + Cable Loss - Amplifier Gain.

1GHz-18GHz:

Non Beamforming Mode



Beamforming Mode:



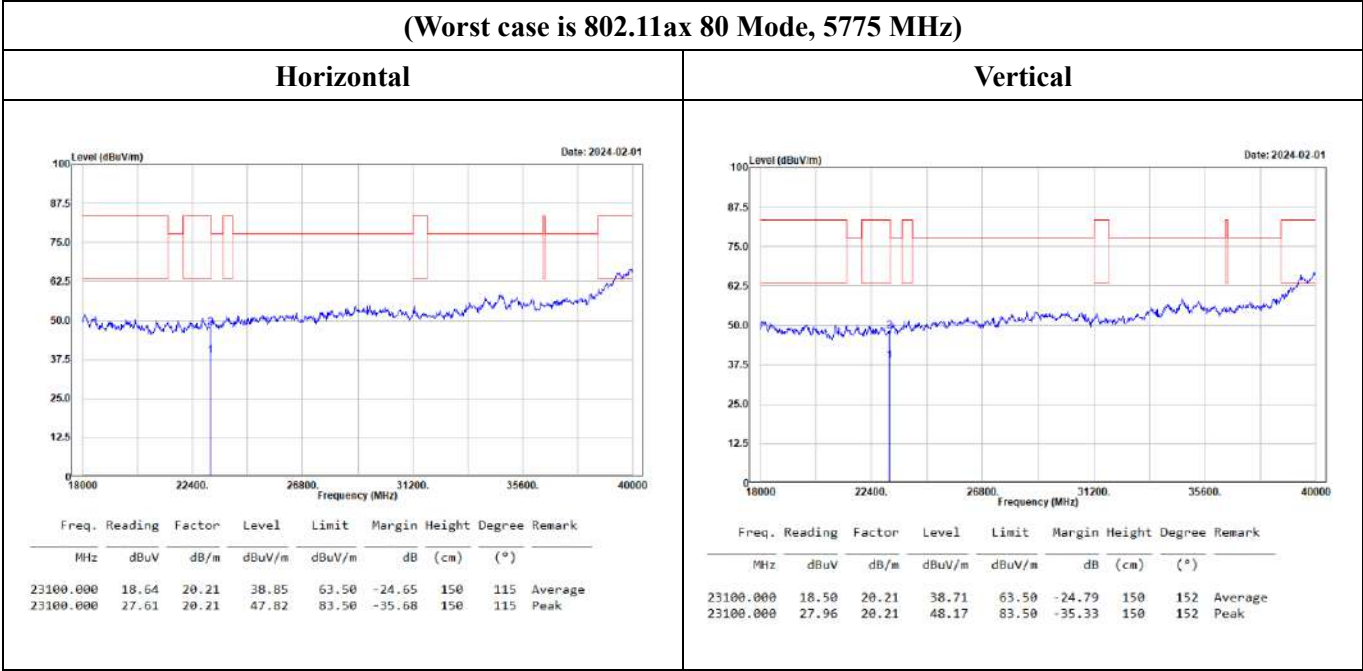
Level = Reading + Factor.

Margin = Level – Limit.

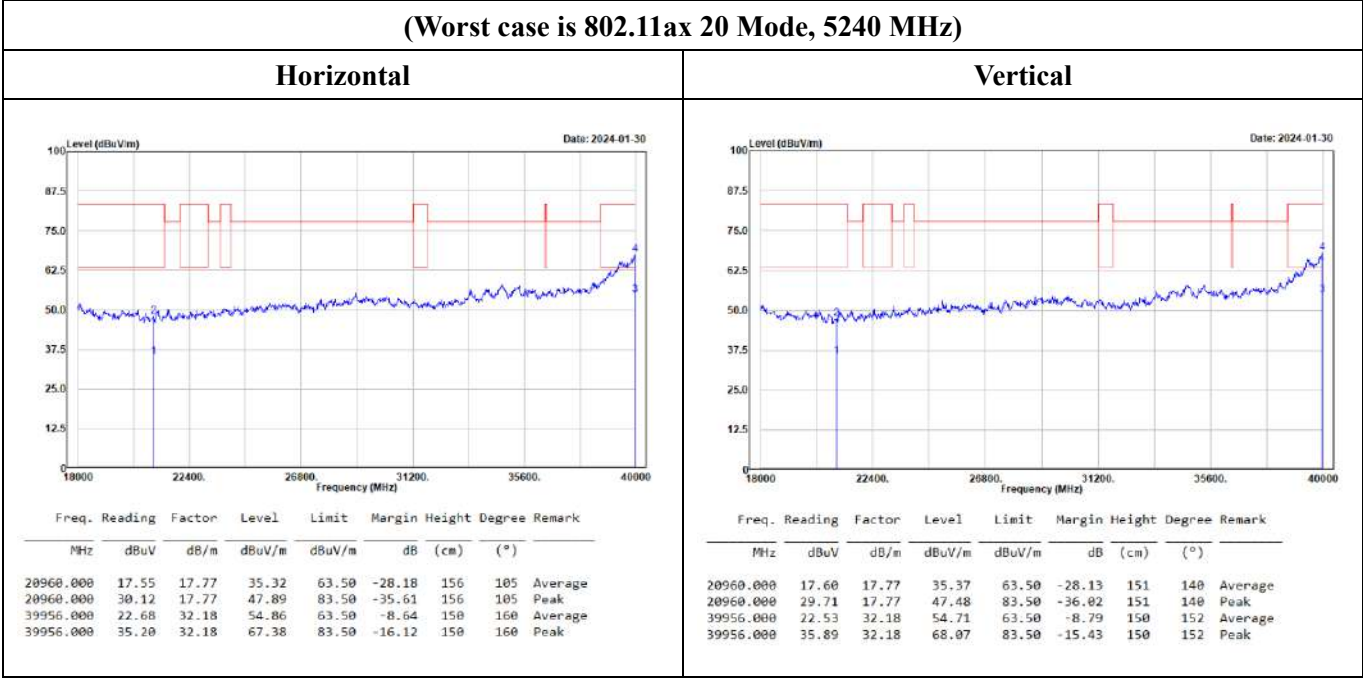
Factor = Antenna Factor + Cable Loss – Amplifier Gain.

18GHz-40GHz:

Non Beamforming Mode



Beamforming Mode:



Level = Reading + Factor.

Margin = Level – Limit.

Factor = Antenna Factor + Cable Loss – Amplifier Gain.

For 18-40GHz 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

Non Beamforming Mode:

5150-5250MHz

802.11a Mode:

5180 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10360.000	40.86	5.72	46.58	68.20	-21.62	152	7	Peak	
15540.000	27.83	8.79	36.62	54.00	-17.38	147	274	Average	
15540.000	40.79	8.79	49.58	74.00	-24.42	147	274	Peak	

Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10360.000	51.50	5.72	57.22	68.20	-10.98	100	238	Peak	
15540.000	27.83	8.79	36.62	54.00	-17.38	153	192	Average	
15540.000	40.92	8.79	49.71	74.00	-24.29	153	192	Peak	

5200 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10400.000	40.42	5.96	46.38	68.20	-21.82	154	284	Peak	
15600.000	28.05	8.78	36.83	54.00	-17.17	148	295	Average	
15600.000	41.18	8.78	49.96	74.00	-24.04	148	295	Peak	

Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10400.000	48.00	5.96	53.96	68.20	-14.24	109	232	Peak	
15600.000	28.09	8.78	36.87	54.00	-17.13	155	258	Average	
15600.000	40.77	8.78	49.55	74.00	-24.45	155	258	Peak	

5240 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10480.000	41.36	6.09	47.45	68.20	-20.75	152	4	Peak	
15720.000	30.02	9.44	39.46	54.00	-14.54	149	274	Average	
15720.000	41.98	9.44	51.42	74.00	-22.58	149	274	Peak	

Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10480.000	49.44	6.09	55.53	68.20	-12.67	100	231	Peak	
15720.000	29.96	9.44	39.40	54.00	-14.60	153	304	Average	
15720.000	42.49	9.44	51.93	74.00	-22.07	153	304	Peak	

802.11ac VHT20 Mode:

5180 MHz																	
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)	(°)	
10360.000	45.92	5.72	51.64	68.20	-16.56	244	263	Peak	10360.000	51.67	5.72	57.39	68.20	-10.81	121	11	Peak
15540.000	37.28	8.79	46.07	54.00	-7.93	204	212	Average	15540.000	39.10	8.79	47.89	54.00	-6.11	100	162	Average
15540.000	52.13	8.79	60.92	74.00	-13.08	204	212	Peak	15540.000	54.41	8.79	63.20	74.00	-10.80	100	162	Peak

5200 MHz																	
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)	(°)	
10400.000	46.54	5.96	52.50	68.20	-15.70	221	264	Peak	10400.000	51.61	5.96	57.57	68.20	-10.63	104	9	Peak
15600.000	39.14	8.78	47.92	54.00	-6.00	195	355	Average	15600.000	39.50	8.78	48.28	54.00	-5.72	208	170	Average
15600.000	55.50	8.78	64.28	74.00	-9.72	195	355	Peak	15600.000	56.01	8.78	64.79	74.00	-9.21	208	170	Peak

5240 MHz																	
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)	(°)	
10480.000	48.35	6.09	54.44	68.20	-13.76	210	121	Peak	10480.000	49.53	6.09	55.62	68.20	-12.58	141	349	Peak
15720.000	40.15	9.44	49.59	54.00	-4.41	215	202	Average	15720.000	41.03	9.44	50.47	54.00	-3.53	192	359	Average
15720.000	56.80	9.44	66.24	74.00	-7.76	215	202	Peak	15720.000	58.01	9.44	67.45	74.00	-6.55	192	359	Peak

802.11ac VHT40 Mode:

5190 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10380.000	43.37	5.84	49.21	68.20	-18.99	200	108	Peak	
15570.000	31.88	8.78	40.66	54.00	-13.34	111	186	Average	
15570.000	44.65	8.78	53.43	74.00	-20.57	111	186	Peak	

Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10380.000	46.31	5.84	52.15	68.20	-16.05	132	11	Peak	
15570.000	30.46	8.78	39.24	54.00	-14.76	205	356	Average	
15570.000	44.75	8.78	53.53	74.00	-20.47	205	356	Peak	

802.11ac VHT80 Mode:

5210 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10420.000	39.92	5.99	45.91	68.20	-22.29	146	99	Peak	
15630.000	31.45	8.93	40.38	54.00	-13.62	152	219	Average	
15630.000	41.81	8.93	50.74	74.00	-23.26	152	219	Peak	

Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10420.000	40.41	5.99	46.40	68.20	-21.80	147	230	Peak	
15630.000	31.44	8.93	40.37	54.00	-13.63	154	211	Average	
15630.000	41.48	8.93	50.41	74.00	-23.59	154	211	Peak	

802.11ax HE20 Mode:

5180 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10360.000	47.13	5.72	52.85	68.20	-15.35	204	123	Peak	
15540.000	35.95	8.79	44.74	54.00	-9.26	306	345	Average	
15540.000	51.15	8.79	59.94	74.00	-14.06	306	345	Peak	
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10360.000	50.98	5.72	56.70	68.20	-11.50	109	0	Peak	
15540.000	37.96	8.79	46.75	54.00	-7.25	207	172	Average	
15540.000	53.83	8.79	62.62	74.00	-11.38	207	172	Peak	
5200 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10400.000	41.22	5.96	47.18	68.20	-21.02	154	236	Peak	
15600.000	38.32	8.78	47.10	54.00	-6.90	110	350	Average	
15600.000	52.71	8.78	61.49	74.00	-12.51	110	350	Peak	
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10400.000	50.49	5.96	56.45	68.20	-11.75	104	0	Peak	
15600.000	36.58	8.78	45.36	54.00	-8.64	207	359	Average	
15600.000	50.84	8.78	59.62	74.00	-14.38	207	359	Peak	
5240 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10480.000	42.86	6.09	48.95	68.20	-19.25	148	122	Peak	
15720.000	42.80	9.44	52.24	54.00	-1.76	299	344	Average	
15720.000	59.43	9.44	68.87	74.00	-5.13	299	344	Peak	
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10480.000	51.52	6.09	57.61	68.20	-10.59	100	360	Peak	
15720.000	40.96	9.44	50.40	54.00	-3.60	187	357	Average	
15720.000	57.83	9.44	67.27	74.00	-6.73	187	357	Peak	

802.11ax HE40 Mode:

5190 MHz																	
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)	(°)	
10380.000	40.77	5.84	46.61	68.20	-21.59	145	334	Peak	10380.000	47.03	5.84	52.87	68.20	-15.33	100	8	Peak
15570.000	34.04	8.78	42.82	54.00	-11.18	206	213	Average	15570.000	34.51	8.78	43.29	54.00	-10.71	100	164	Average
15570.000	45.84	8.78	54.62	74.00	-19.38	206	213	Peak	15570.000	46.07	8.78	54.85	74.00	-19.15	100	164	Peak

5230 MHz																	
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)	(°)	
10460.000	40.63	6.06	46.69	68.20	-21.51	148	60	Peak	10460.000	45.24	6.06	51.30	68.20	-16.90	102	9	Peak
15690.000	38.28	9.23	47.51	54.00	-6.49	190	41	Average	15690.000	35.62	9.23	44.85	54.00	-9.15	208	360	Average
15690.000	49.54	9.23	58.77	74.00	-15.23	190	41	Peak	15690.000	49.82	9.23	59.05	74.00	-14.95	208	360	Peak

802.11ax HE80 Mode:

5210 MHz																	
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)	(°)	
10420.000	39.93	5.99	45.92	68.20	-22.28	146	295	Peak	10420.000	40.80	5.99	46.79	68.20	-21.41	148	191	Peak
15630.000	32.47	8.93	41.40	54.00	-12.60	152	1	Average	15630.000	33.02	8.93	41.95	54.00	-12.05	153	60	Average
15630.000	41.50	8.93	50.43	74.00	-23.57	152	1	Peak	15630.000	41.69	8.93	50.62	74.00	-23.38	153	60	Peak

Level = Reading + Factor.

Margin = Level – Limit.

Factor = Antenna Factor + Cable Loss – Amplifier Gain.

5725-5850MHz

802.11a Mode:

5745 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11490.000	34.25	7.23	41.48	54.00	-12.52	118	337	Average	
11490.000	46.85	7.23	54.08	74.00	-19.92	118	337	Peak	
17235.000	40.65	11.80	52.45	68.20	-15.75	153	317	Peak	
5785 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11570.000	34.32	7.19	41.51	54.00	-12.49	144	347	Average	
11570.000	48.77	7.19	55.96	74.00	-18.04	144	347	Peak	
17355.000	40.13	12.35	52.48	68.20	-15.72	151	250	Peak	
5825 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11650.000	33.45	7.20	40.65	54.00	-13.35	111	349	Average	
11650.000	48.27	7.20	55.47	74.00	-18.53	111	349	Peak	
17475.000	40.09	11.89	51.98	68.20	-16.22	151	37	Peak	
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11650.000	39.08	7.20	46.28	54.00	-7.72	107	293	Average	
11650.000	52.79	7.20	59.99	74.00	-14.01	107	293	Peak	
17475.000	39.84	11.89	51.73	68.20	-16.47	154	251	Peak	

802.11ac VHT20 Mode:

5745 MHz																	
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)	(°)	
11490.000	30.81	7.23	38.04	54.00	-15.96	109	139	Average	11490.000	36.97	7.23	44.20	54.00	-9.80	108	5	Average
11490.000	44.54	7.23	51.77	74.00	-22.23	109	139	Peak	11490.000	50.65	7.23	57.88	74.00	-16.12	108	5	Peak
17235.000	52.45	11.80	64.25	68.20	-3.95	200	355	Peak	17235.000	49.67	11.80	61.47	68.20	-6.73	111	11	Peak

5785 MHz																	
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)	(°)	
11570.000	30.42	7.19	37.61	54.00	-16.39	230	351	Average	11570.000	35.71	7.19	42.90	54.00	-11.10	141	0	Average
11570.000	44.23	7.19	51.42	74.00	-22.58	230	351	Peak	11570.000	49.79	7.19	56.98	74.00	-17.02	141	0	Peak
17355.000	55.78	12.35	68.13	68.20	-0.07	205	221	Peak	17355.000	53.83	12.35	66.18	68.20	-2.02	102	355	Peak

5825 MHz																	
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)	(°)	
11650.000	32.05	7.20	39.25	54.00	-14.75	233	351	Average	11650.000	36.09	7.20	43.29	54.00	-10.71	105	4	Average
11650.000	44.21	7.20	51.41	74.00	-22.59	233	351	Peak	11650.000	50.18	7.20	57.38	74.00	-16.62	105	4	Peak
17475.000	54.97	11.89	66.86	68.20	-1.34	196	332	Peak	17475.000	54.36	11.89	66.25	68.20	-1.95	227	163	Peak

802.11ac VHT40 Mode:

5755 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11510.000	31.22	7.22	38.44	54.00	-15.56	128	351	Average	
11510.000	44.87	7.22	52.09	74.00	-21.91	128	351	Peak	
17265.000	55.76	11.88	67.64	68.20	-0.56	202	339	Peak	

Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11510.000	36.79	7.22	44.01	54.00	-9.99	100	3	Average	
11510.000	50.24	7.22	57.46	74.00	-16.54	100	3	Peak	
17265.000	52.95	11.88	64.83	68.20	-3.37	102	355	Peak	

5795 MHz

5795 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11590.000	31.01	7.18	38.19	54.00	-15.81	100	110	Average	
11590.000	43.63	7.18	50.81	74.00	-23.19	100	110	Peak	
17385.000	54.65	12.56	67.21	68.20	-0.99	190	339	Peak	

Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11590.000	35.42	7.18	42.60	54.00	-11.40	100	6	Average	
11590.000	48.99	7.18	56.17	74.00	-17.83	100	6	Peak	
17385.000	53.26	12.56	65.82	68.20	-2.38	111	355	Peak	

802.11ac VHT80 Mode:

5775 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11550.000	30.80	7.21	38.01	54.00	-15.99	152	286	Average	
11550.000	40.28	7.21	47.49	74.00	-26.51	152	286	Peak	
17325.000	52.80	12.13	64.93	68.20	-3.27	197	332	Peak	

Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11550.000	35.15	7.21	42.36	54.00	-11.64	100	11	Average	
11550.000	47.59	7.21	54.80	74.00	-19.20	100	11	Peak	
17325.000	51.13	12.13	63.26	68.20	-4.94	205	46	Peak	

802.11ax HE20 Mode:

5745 MHz																			
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)	(°)		
11490.000	29.98	7.23	37.21	54.00	-16.79	148	293	Average		11490.000	35.08	7.23	42.31	54.00	-11.69	114	1	Average	
11490.000	44.01	7.23	51.24	74.00	-22.76	148	293	Peak		11490.000	48.75	7.23	55.98	74.00	-18.02	114	1	Peak	
17235.000	54.96	11.80	66.76	68.20	-1.44	206	336	Peak		17235.000	52.57	11.80	64.37	68.20	-3.83	207	44	Peak	

5785 MHz																			
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)	(°)		
11570.000	30.75	7.19	37.94	54.00	-16.06	147	204	Average		11570.000	37.73	7.19	44.92	54.00	-9.08	104	7	Average	
11570.000	40.38	7.19	47.57	74.00	-26.43	147	204	Peak		11570.000	49.52	7.19	56.71	74.00	-17.29	104	7	Peak	
17355.000	52.90	12.35	65.25	68.20	-2.95	196	332	Peak		17355.000	52.30	12.35	64.65	68.20	-3.55	206	45	Peak	

5825 MHz																			
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)	(°)		
11650.000	30.04	7.20	37.24	54.00	-16.76	151	305	Average		11650.000	36.92	7.20	44.12	54.00	-9.88	103	9	Average	
11650.000	40.43	7.20	47.63	74.00	-26.37	151	305	Peak		11650.000	48.61	7.20	55.81	74.00	-18.19	103	9	Peak	
17475.000	54.17	11.89	66.06	68.20	-2.14	194	330	Peak		17475.000	51.67	11.89	63.56	68.20	-4.64	203	48	Peak	