

**FCC Part 15.407**  
**RSS-247 ISSUE 3, August 2023**  
**RSS-GEN Issue 5, February 2021 Amendment 2**

**TEST REPORT**

For

**Fortinet, Inc.**

909 Kifer Road, Sunnyvale, CA 94086, USA

**FCC ID: TVE-FON780B**  
**IC: 7280B-FON780B**

<b>Report Type:</b> Original Report	<b>Product Type:</b> FortiFone 780B
<b>Report Producer :</b> <u>Coco Lin</u>	
<b>Report Number :</b> <u>RXZ250213056RF03</u>	
<b>Report Date :</b> <u>2025-05-26</u>	
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## Revision History

Revision	No.	Report Number	Issue Date	Description	Author/ Revised by
0.0	RXZ250213056	RXZ250213056RF03	2025-05-26	Original Report	Coco Lin

## **TABLE OF CONTENTS**

<b>1</b>	<b>General Information</b>	5
1.1	Product Description for Equipment under Test (EUT)	5
1.2	Objective	6
1.3	Test Methodology	6
1.4	Statement	6
1.5	Measurement Uncertainty	7
1.6	Environmental Conditions	7
1.7	Test Facility	7
<b>2</b>	<b>System Test Configuration</b>	8
2.1	Description of Test Configuration	8
2.2	EUT Exercise Software	10
2.3	Equipment Modifications	11
2.4	Test Mode	11
2.5	Support Equipment List and Details	11
2.6	External Cable List and Details	12
2.7	Block Diagram of Test Setup	12
2.8	Duty Cycle	15
<b>3</b>	<b>Summary of Test Results</b>	18
<b>4</b>	<b>Test Equipment List and Details</b>	19
<b>5</b>	<b>FCC §15.203 &amp; RSS-GEN §6.8 – Antenna Requirements</b>	20
5.1	Applicable Standard	20
5.2	Antenna Information	20
<b>6</b>	<b>FCC §15.407(b)(9), §15.207(a) &amp; RSS-GEN §8 – AC Line Conducted Emissions</b>	21
6.1	Applicable Standard	21
6.2	EUT Setup	21
6.3	EMI Test Receiver Setup	22
6.4	Test Procedure	22
6.5	Corrected Factor & Over Limit Calculation	22
6.6	Test Results	23
<b>7</b>	<b>FCC §15.209, §15.205, §15.407(b) &amp; RSS-247 §6.2, RSS-GEN §8.9, RSS-GEN §8.10 – Spurious Emissions</b>	27
7.1	Applicable Standard	27
7.2	EUT Setup	30
7.3	EMI Test Receiver & Spectrum Analyzer Setup	31
7.4	Test Procedure	31
7.5	Corrected Factor & Margin Calculation	32
7.6	Test Results	33
<b>8</b>	<b>RSS-247 §6.2.1.2 – 26dB Attenuated Below The Channel Power</b>	77
8.1	Applicable Standard	77
8.2	Test Procedure	77
8.3	Test Results	77
<b>9</b>	<b>FCC §15.407(a)(e) &amp; RSS-247 §6.2, RSS-GEN §6.7 – Emission Bandwidth And Occupied Bandwidth</b>	83

9.1	Applicable Standard.....	83
9.2	Test Procedure .....	83
9.3	Test Results.....	85
<b>10</b>	<b>FCC §15.407(a) &amp; RSS-247 §6.2 – Maximum Output Power.....</b>	<b>125</b>
10.1	Applicable Standard.....	125
10.2	Test Procedure .....	126
10.3	Test Results.....	127
<b>11</b>	<b>FCC §15.407(a) &amp; RSS-247 §6.2 – Power Spectral Density.....</b>	<b>129</b>
11.1	Applicable Standard.....	129
11.2	Test Procedure .....	130
11.3	Test Results.....	131
<b>12</b>	<b>RSS-247 §6.4 – Additional requirements.....</b>	<b>152</b>
12.1	Applicable Standard.....	152
12.2	Judgment.....	153

# 1 General Information

## 1.1 Product Description for Equipment under Test (EUT)

Applicant	Fortinet, Inc. 909 Kifer Road, Sunnyvale, CA 94086, USA
Brand(Trade) Name	FORTINET
Product (Equipment) / PMN	FortiFone 780B
Main Model Name	FON-780B
HVIN	FON-780B
Series Model Name (Only FCC)	FON-780Bxxxxxxxxx, FortiFone 780Bxxxxxxxxx, FORTIFONE 780Bxxxxxxxxx (where “x” can be used as “0-9”, or“A-Z”,or“_”, or blank for software changes or marketing purpose only)
Frequency Range	5180 MHz ~ 5240 MHz, 5260 MHz ~ 5320 MHz 5500 MHz ~ 5700 MHz, 5745 MHz ~ 5825 MHz Note: frequency range 5600-5650MHz can't be used in Canada
Maximum Conducted Average Output Power	5180-5240 MHz: 13.79 dBm 5260-5320 MHz: 13.88 dBm 5500-5700 MHz: 13.07 dBm 5745-5825 MHz: 12.36 dBm
Modulation Technique	OFDM
Power Operation (Voltage Range)	12Vdc from Adapter, 48Vdc from POE
Sample Received Date	2025/03/24

\*All measurement and test data in this report was gathered from production sample serial number:

RXZ250213056-1(Assigned by BACL, New Taipei Laboratory).

## **1.2 Objective**

This report is prepared on behalf of *Fortinet, Inc.* in accordance with Part 2, Subpart J, Part 15, Subparts A, and E of the Federal Communication Commission's rules and RSS-247 Issue 3, August 2023 and RSS-GEN Issue 5, February 2021 Amendment 2 of the Innovation, Science and Economic Development Canada.

## **1.3 Test Methodology**

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

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

## **1.4 Statement**

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

1. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (New Taipei Laboratory).
2. 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.
3. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
4. 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.
5. 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
	30 MHz~1 GHz
	1 GHz~18 GHz
	18 GHz~40 GHz
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 (%)	Test Engineer
AC Line Conducted Emissions	2025/5/5	19.2	46	Sean
Radiation Spurious Emissions	2025/4/17~2025/5/7	23.3~24.6	57~68	Nick
Duty Cycle	2025/4/16	25.9	47	Jing
26dB attenuated below the channel power	2025/4/25	25.7	57	Jing
Emission Bandwidth And Occupied Bandwidth	2025/4/25	25.7	57	Jing
Maximum Output Power	2025/4/16~2025/4/25	25.5~26.7	44~57	Jing
Power Spectral Density	2025/4/25	25.7	57	Jing

## 1.7 Test Facility

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

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

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

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

## 2 System Test Configuration

### 2.1 Description of Test Configuration

The system supports 802.11a/n ht20/n ht40/ac vht20/ac vht40/ac vht80 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 5150 ~ 5250MHz

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

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:

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

1 channel is provided for 802.11ac VHT80:

Channel	Frequency (MHz)
42	5210

802.11a mode Channel 36, 40, 48 were tested.

802.11ac40 mode Channel 38, 46 were tested.

802.11ac80 mode Channel 42 was tested.

#### For 5250 ~ 5350MHz

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

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
56	5280	64	5320

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

Channel	Frequency (MHz)	Channel	Frequency (MHz)
54	5270	62	5310

1 channel is provided for 802.11ac VHT80:

Channel	Frequency (MHz)
58	5290

802.11a/ac20 mode Channel 52, 60, 64 were tested.

802.11ac40 mode Channel 54, 62 were tested.

802.11ac80 mode Channel 58 was tested.

**For 5470 ~ 5725MHz**

Note: \*frequency range 5600-5650MHz can't be used in Canada.

11 channels are provided for 802.11a, 802.11n HT20, 802.11ac VHT20:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	124	5620*
104	5520	128	5640*
108	5540	132	5660
112	5560	136	5680
116	5580	140	5700
120	5600*	/	/

5 channels are provided for 802.11n HT40, 802.11ac VHT40:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
102	5510	126	5630*
110	5550	134	5670
118	5590*	/	/

2 channels are provided for 802.11ac VHT80:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
106	5530	122	5610*

802.11a/ac20 mode Channel 100, 116, 140 were tested.

802.11ac40 mode Channel 102, 110, 134 were tested.

802.11ac80 mode Channel 106, 122 was tested.

**For 5725 ~ 5825MHz:**

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

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:

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

1 channel is provided for 802.11ac VHT80:

Channel	Frequency (MHz)
155	5775

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

802.11ac40 mode Channel 151, 159 were tested.

802.11ac80 mode Channel 155 was tested.

## 2.2 EUT Exercise Software

The test software was used “adb v1.0.41”

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

UNII Band	Mode	Channel	Frequency (MHz)	Power Setting
UNII-1	802.11a	36	5180	12
		40	5200	12
		48	5240	12
		52	5260	12
		60	5300	12
		64	5320	12
		100	5500	12
		116	5580	12
		140	5700	12
		149	5745	12
		157	5785	12
		165	5825	12
UNII-2A	802.11n HT20 / 802.11ac VHT20	36	5180	12
		40	5200	12
		48	5240	12
		52	5260	12
		60	5300	12
		64	5320	12
		100	5500	12
		116	5580	12
		140	5700	12
		149	5745	12
		157	5785	12
		165	5825	12
UNII-2C	802.11n HT40 / 802.11ac VHT40	38	5190	11
		46	5230	11
		54	5270	11
		62	5310	11
		102	5510	11
		110	5550	11
		134	5670	11
		151	5755	11
		159	5795	11
		42	5210	13
		58	5290	13
		106	5530	13
UNII-3	802.11ac VHT80	122	5610	13
		155	5775	13

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

### 2.3 Equipment Modifications

No modification was made to the EUT.

### 2.4 Test Mode

Pre-scan

AC Line Conducted Emissions and Radiated Spurious Emissions

Mode 1: FON-780B + Adapter

Mode 2: FON-780B + POE

Worst case is the Mode 1: FON-780B + Adapter

Mode 1: FON-780B + Adapter tested all measure item.

Mode 2: FON-780B + POE test Below 1GHz Radiated Spurious Emissions and AC Line Conducted Emissions.

### 2.5 Support Equipment List and Details

Description	Manufacturer	Model Number
NB	DELL	E6410
POE Adapter	Cisco	SB-PWR-INJ2
Adapter	Zhuzhou Dachuan Electronic Technology Co., Ltd	DCT18W120150US-A0

## 2.6 External Cable List and Details

Description	Manufacturer	Model Number
USB Cable	BACL	1.5m
RJ-45 Cable	BACL	8m
RJ-45 Cable	BACL	8m
RJ-11 Cable	BACL	1m
RJ-11 Cable	Dongguan Haoyu Yong Industrial Co., Ltd.	4C2.8mP+P B019#

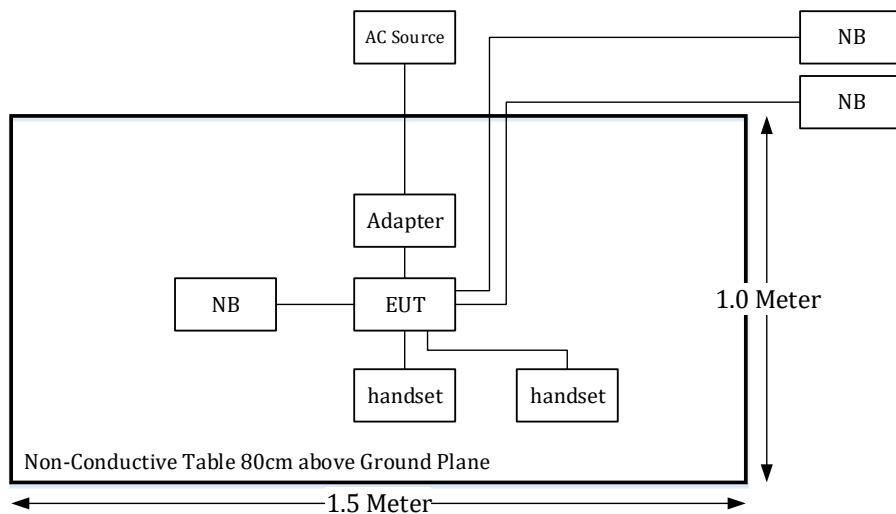
## 2.7 Block Diagram of Test Setup

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

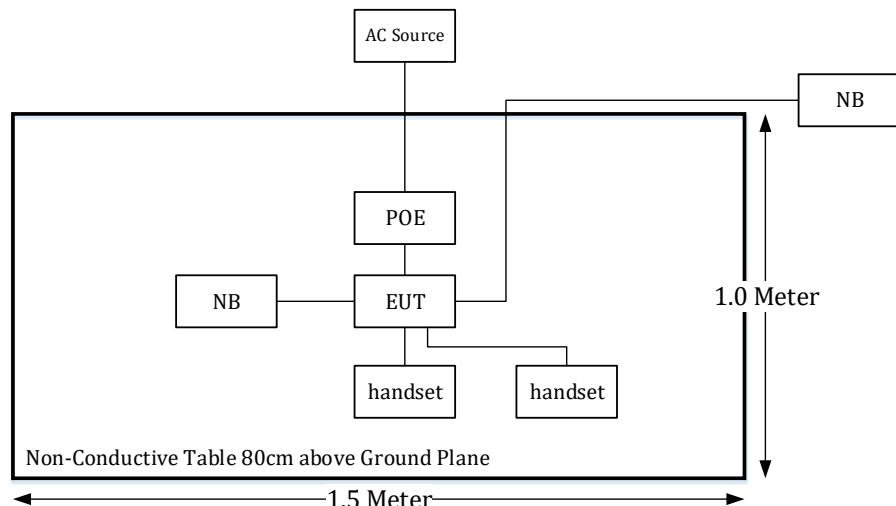
### Radiation:

Below 1GHz

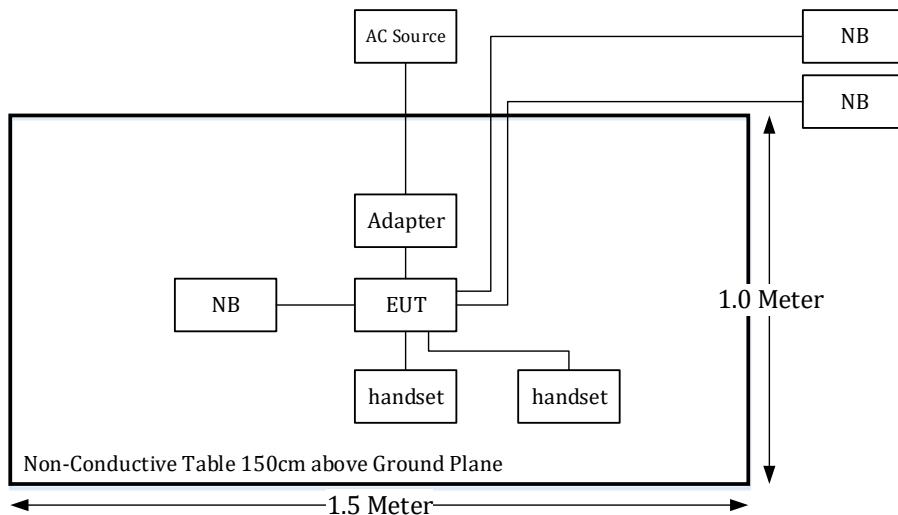
Adapter:



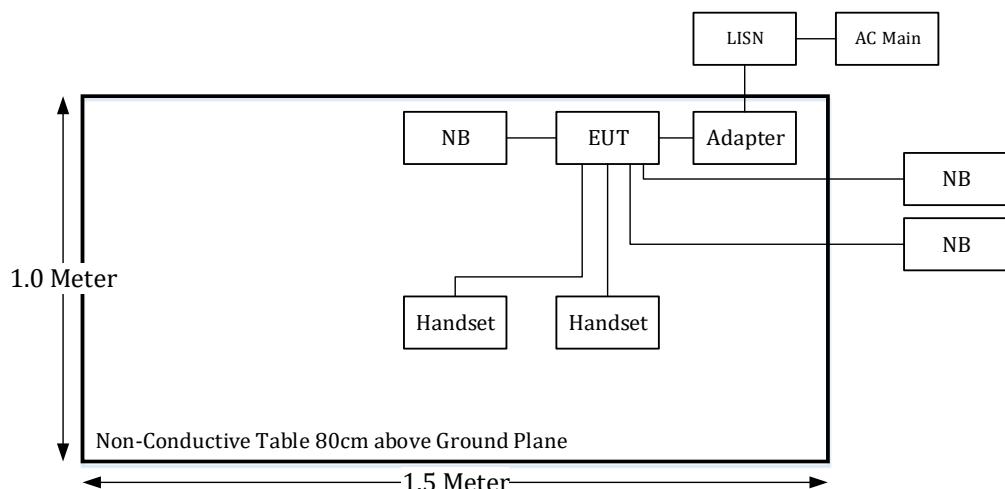
POE:



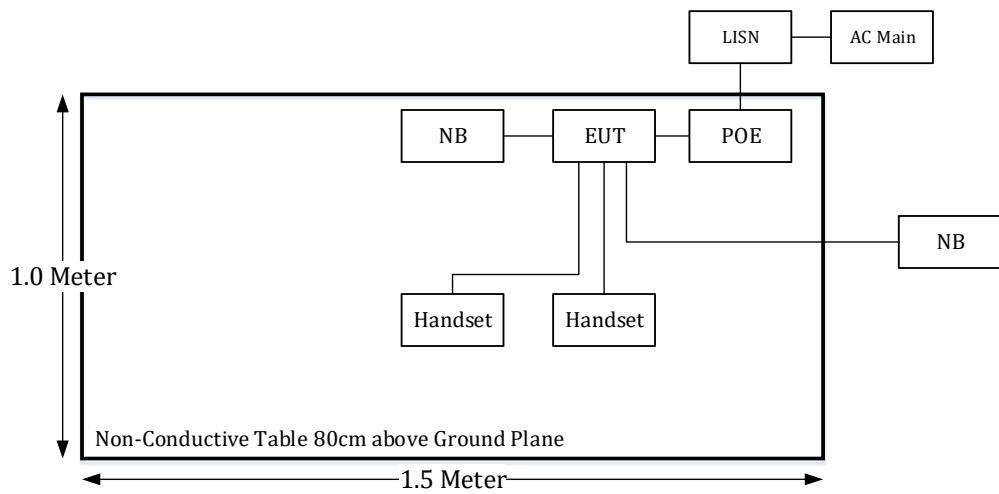
Above 1GHz:

**Conduction:**

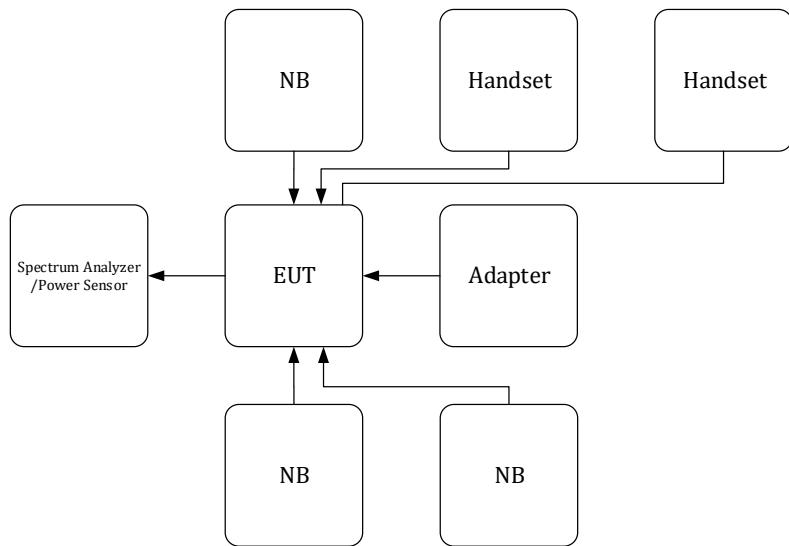
Adapter:



POE:



Conducted:



## 2.8 Duty Cycle

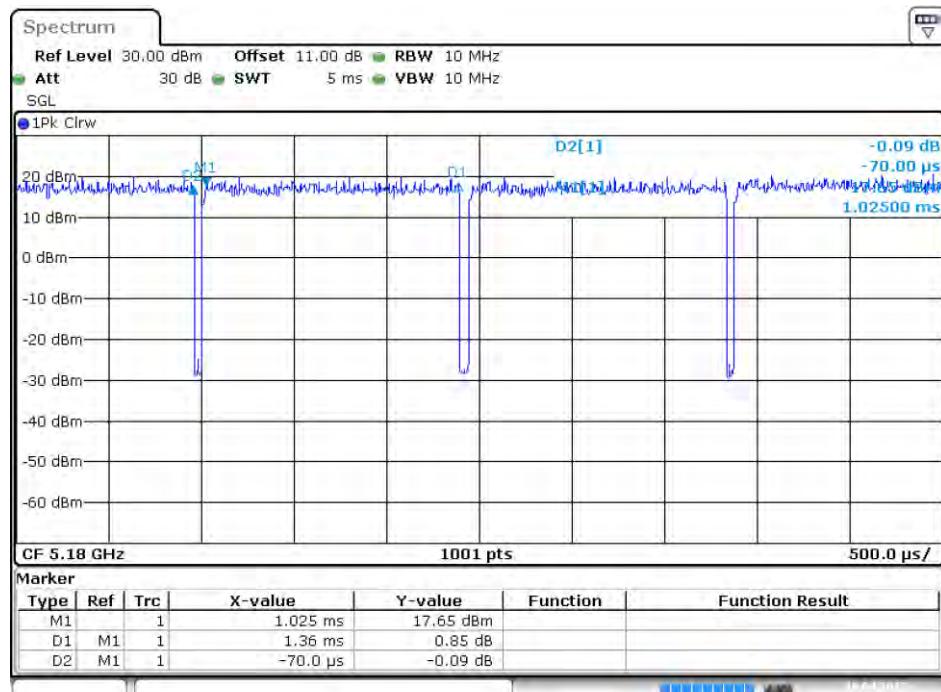
The duty cycle as below:

Radio Mode	On Time (ms)	Off Time (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T (kHz)	VBW Setting (kHz)
802.11a	1.36	0.07	95	0.22	0.74	1
802.11ac 20	1.292	0.073	95	0.22	0.77	1
802.11ac 40	1.316	0.045	97	0.13	0.76	1
802.11ac 80	0.314	0.052	86	0.66	3.18	5

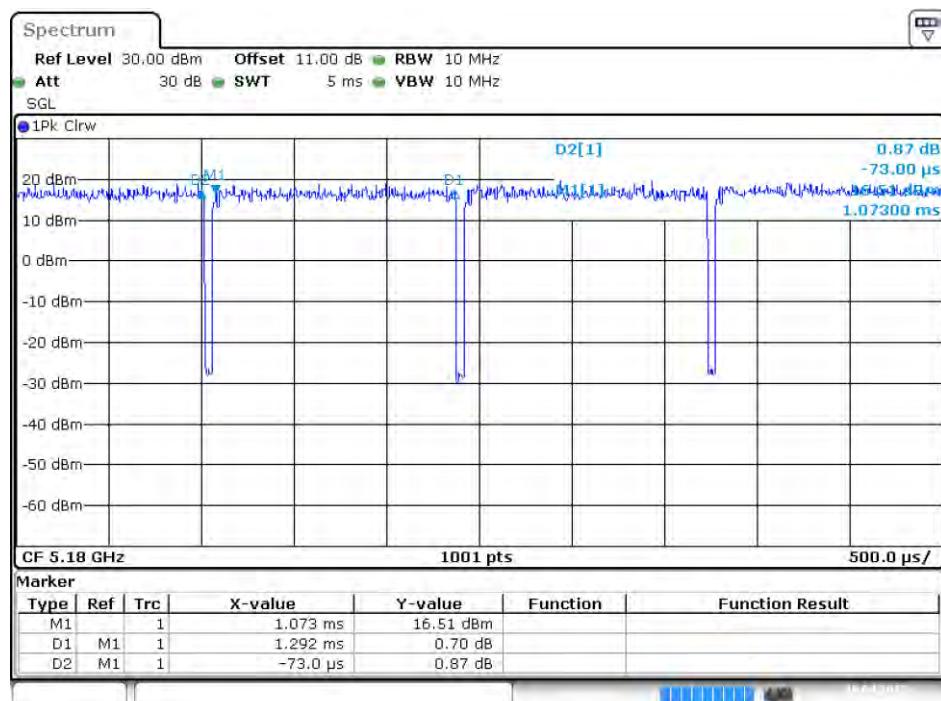
Note: Duty Cycle Correction Factor =  $10 * \log(1/\text{duty cycle})$

Please refer to the following plots.

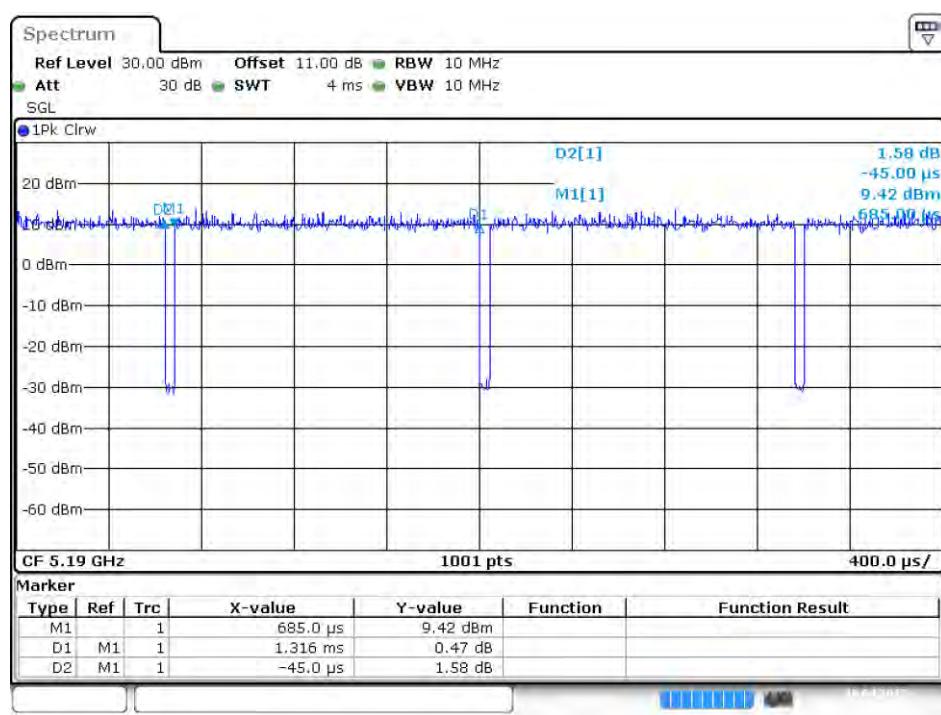
### 802.11a Mode



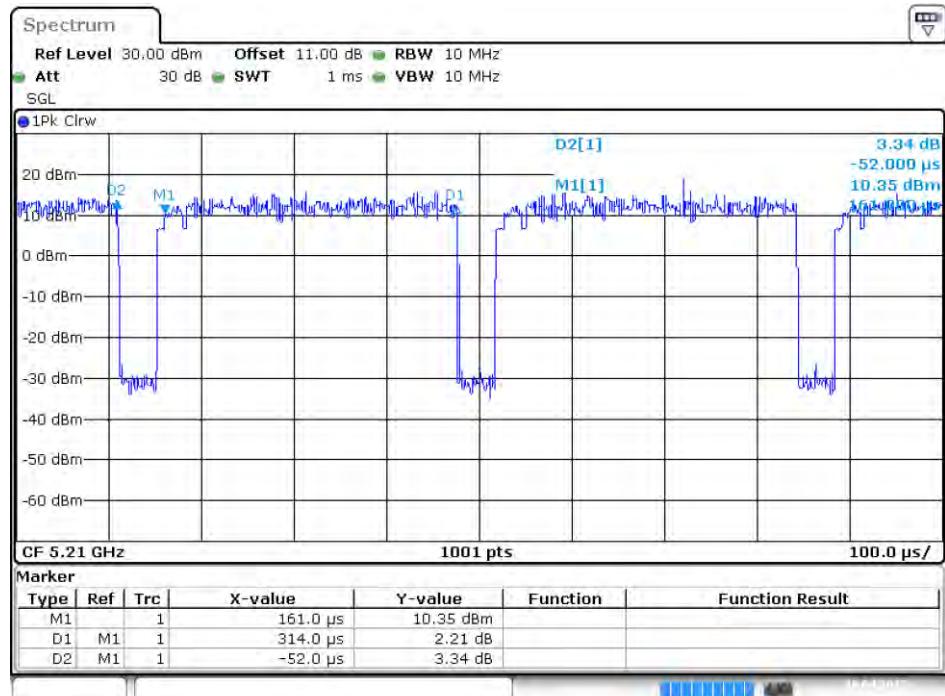
## 802.11ac VHT20 Mode



## 802.11ac VHT40 Mode



## 802.11ac VHT80 Mode



Date: 16 APR 2025 13:21:58

### 3 Summary of Test Results

Standard(s) Section	Description of Test	Results
§15.203 RSS-GEN §6.8	Antenna Requirement	Compliance
§15.407(b)(9) & §15.207(a) RSS- GEN §8.8	AC Line Conducted Emissions	Compliance
§15.205 & §15.209 & §15.407(b) RSS-247 §6.2 RSS-GEN §8.9 RSS-GEN §8.10	Unwanted Emission	Compliance
RSS-247 §6.2.1.2	26dB Attenuated Below The Channel Power	Compliance
§15.407(a)(e) RSS-247 §6.2 RSS- GEN §6.7	Emission Bandwidth	Compliance
§15.407(a) RSS-247 §6.2	Conducted Transmitter Output Power	Compliance
§15.407(a) RSS-247 §6.2	Power Spectral Density	Compliance
RSS-247 §6.4	Additional requirements	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	2025/2/17	2026/2/17
EMI Test Receiver	Rohde & Schwarz	ESW8	100947	2024/5/24	2025/5/24
RF Cable	EMEC	EM-CB5D	1	2024/6/5	2025/6/5
Software	AUDIX	E3	V9.150826k	N.C.R	N.C.R
Radiation 3M Room (966-A)					
Active Loop Antenna	ETS-Lindgren	6502	35796	2025/3/27	2026/3/27
Bilog Antenna with 6 dB Attenuator	SUNOL SCIENCES & MINI-CIRCUITS	JB6/UNAT-6+	A050115/1554 2_01	2025/1/16	2026/1/16
Double Ridged Guide Horn Antenna	A.H. system	SAS-571	1020	2024/5/21	2025/5/21
Horn Antenna	ETS-Lindgren	3116	62638	2024/8/30	2025/8/30
Preamplifier	Sonoma	310N	130602	2024/6/18	2025/6/18
Preamplifier	Channel	ERA-100M-18G-01D1748	EC2300051	2025/4/10	2026/4/10
Preamplifier	BACL	BACL-1313-A18 40	4011511	2025/2/12	2026/2/12
Spectrum Analyzer	Rohde & Schwarz	FSV40	101939	2025/3/27	2026/3/27
EMI Test Receiver	Rohde & Schwarz(R&S)	ESR3	102099	2024/6/24	2025/6/24
Microflex Cable	UTIFLEX	UFB197C-1-2362 -70U-70U	225757-001	2024/12/20	2025/12/20
Coaxial Cable	UTIFLEX	UFB311A-Q-144 0-300300	220490-006	2024/12/20	2025/12/20
Coaxial Cable	COMMATE	PEWC	8Dr	2024/12/20	2025/12/20
Cable	EMC	EMC105-SM-SM -10000	201003	2024/12/20	2025/12/20
Coaxial Cable	JUNFLON	J12J102248-00-B -5	AUG-07-15-0 44	2024/12/20	2025/12/20
Coaxial Cable	ROSNOL	K1K50-UP0264-K1K50-450CM	160309-1	2025/1/21	2026/1/21
Microflex Cable	ROSNOL	K1K50-UP0264-K1K50-80CM	160309-2	2025/1/21	2026/1/21
Band-stop filter	SinoSciTe	BSF5150-5850M N-0899-002	001	2024/10/19	2025/10/19
High-pass filter	XINGBOKEJI	XBLBQ-GTA29	200121-3-26	2024/10/19	2025/10/19
Software	AUDIX	E3	18621a	N.C.R	N.C.R
Conducted Room					
Spectrum Analyzer	Rohde & Schwarz(R&S)	FSV40	101204	2024/5/30	2025/5/30
Cable	UTIFLEX	UFA210A	9435	2024/10/1	2025/10/1
Power Sensor	Agilent	U2021XA	MY54080018	2025/2/5	2026/2/5
Attenuator	MCL	BW-S10W5+	1419	2025/3/6	2026/3/6

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

## 5 FCC §15.203 & RSS-GEN §6.8 – Antenna Requirements

### 5.1 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.

According to RSS-Gen §6.8, The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level.

However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below).

When measurements at the antenna port are used to determine the RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer. The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested. For licence-exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location:

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

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

### 5.2 Antenna Information

Manufacturer	Antenna Type	Antenna Gain (dBi)	Input impedance
Dongguan YiJia Electronics Communication Technology Co.,Ltd.	FPC Antenna	5150~5250 MHz: 5.2 5250~5350 MHz: 4.5 5470~5725 MHz: 4.0 5725~5850 MHz: 4.3	50Ω

Unit uses a unique coupling to the intentional radiator.

### Result: Compliance

## 6 FCC §15.407(b)(9), §15.207(a) & RSS-GEN §8 – AC Line Conducted Emissions

### 6.1 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

RSS-Gen Clause 8.8

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

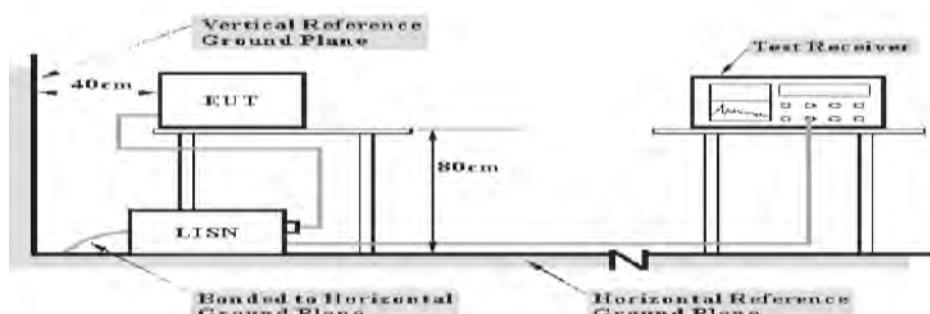
For an EUT that connects to the AC power lines indirectly, through another device, the requirement for compliance with the limits in table 4 shall apply at the terminals of the AC power-line mains cable of a representative support device, while it provides power to the EUT. The lower limit applies at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

**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 <sup>Note 1</sup>	56 to 46 <sup>Note 1</sup>
0.5-5	56	46
5-30	60	50

*Note 1: Decreases with the logarithm of the frequency.*

### 6.2 EUT Setup



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

### 6.3 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

### 6.4 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.

### 6.5 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:

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

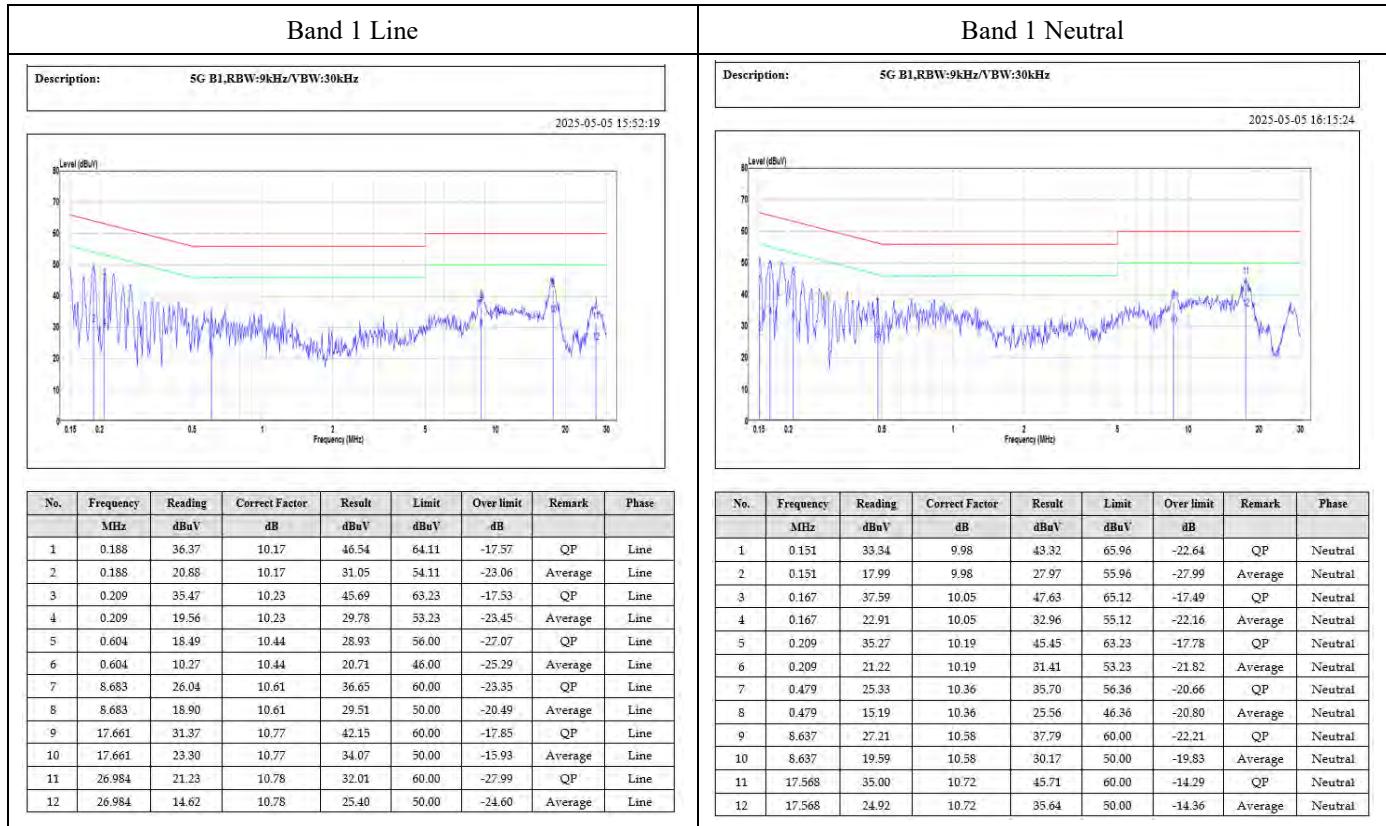
## 6.6 Test Results

Test Mode: Transmitting

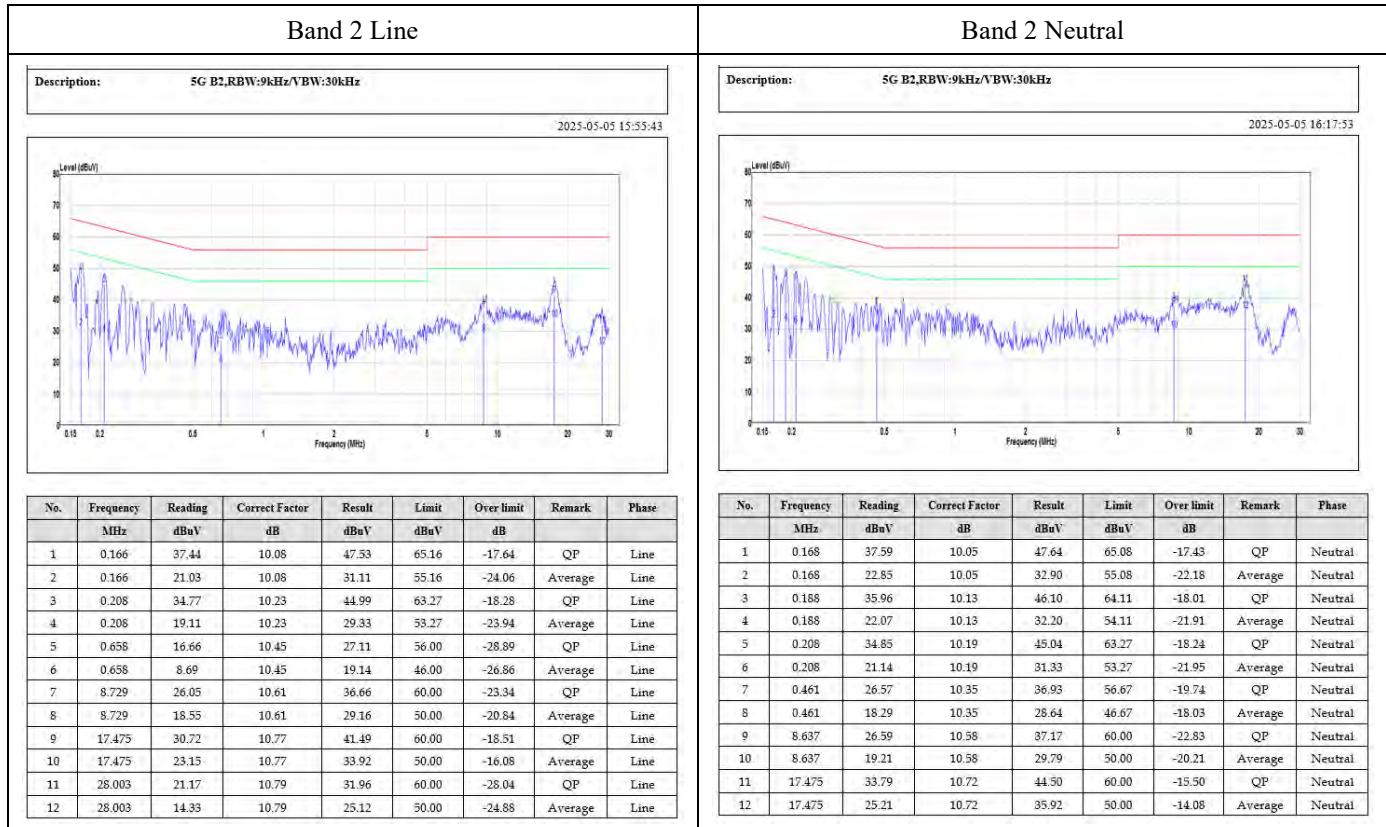
Main: AC120 V, 60 Hz

Adapter:

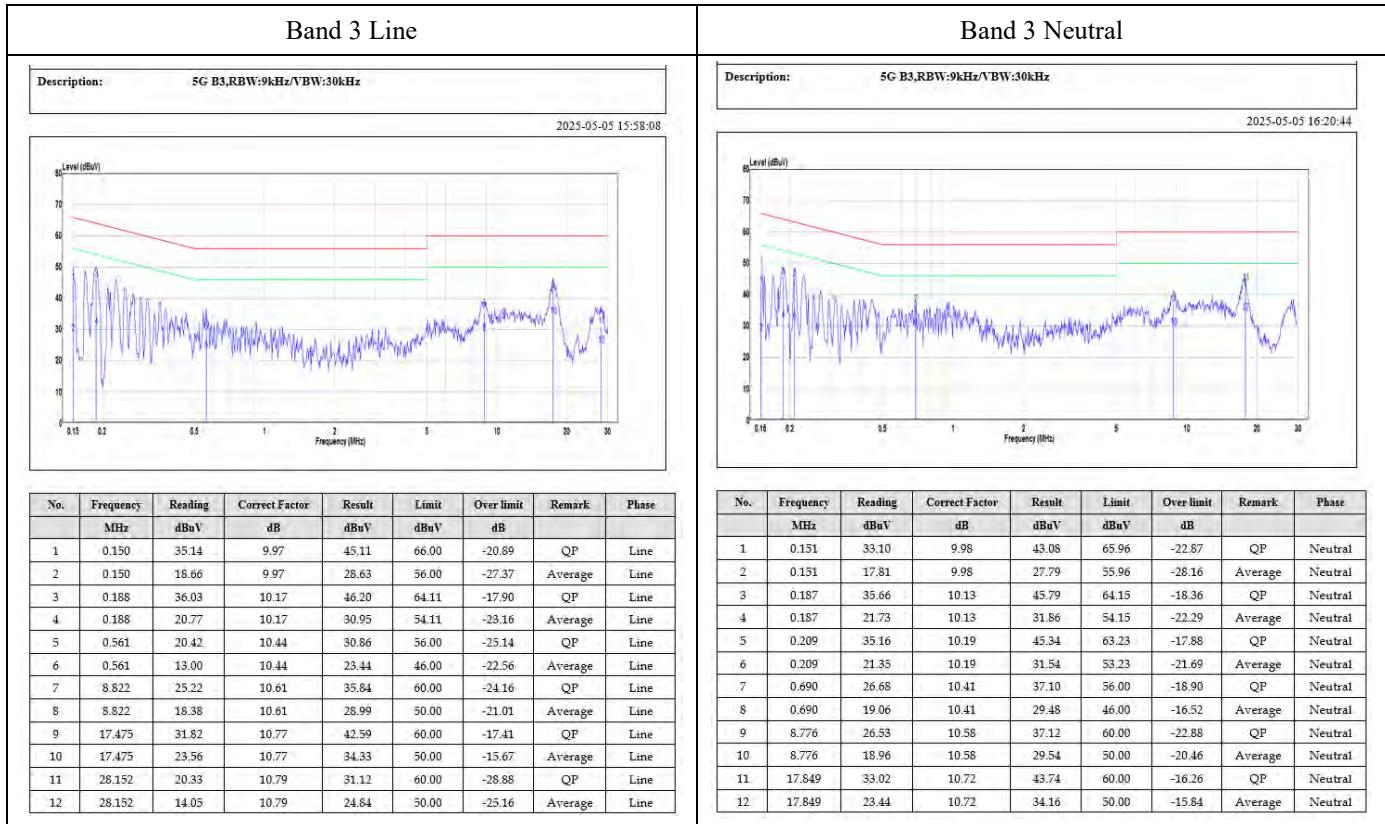
Worst case is 802.11a mode 5200 MHz



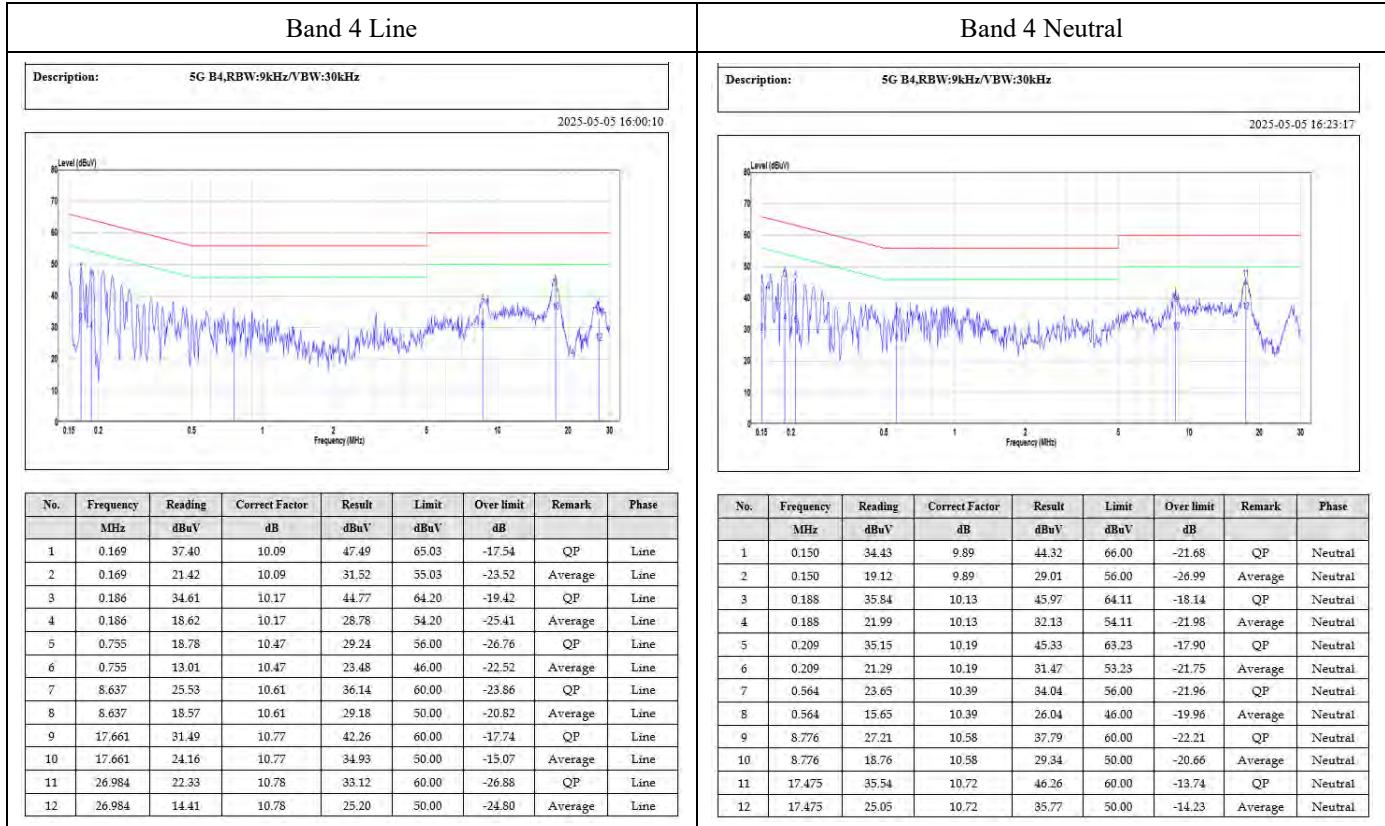
Worst case is 802.11a mode 5320 MHz



Worst case is 802.11a mode 5500 MHz



Worst case is 802.11a mode 5745 MHz



Note:

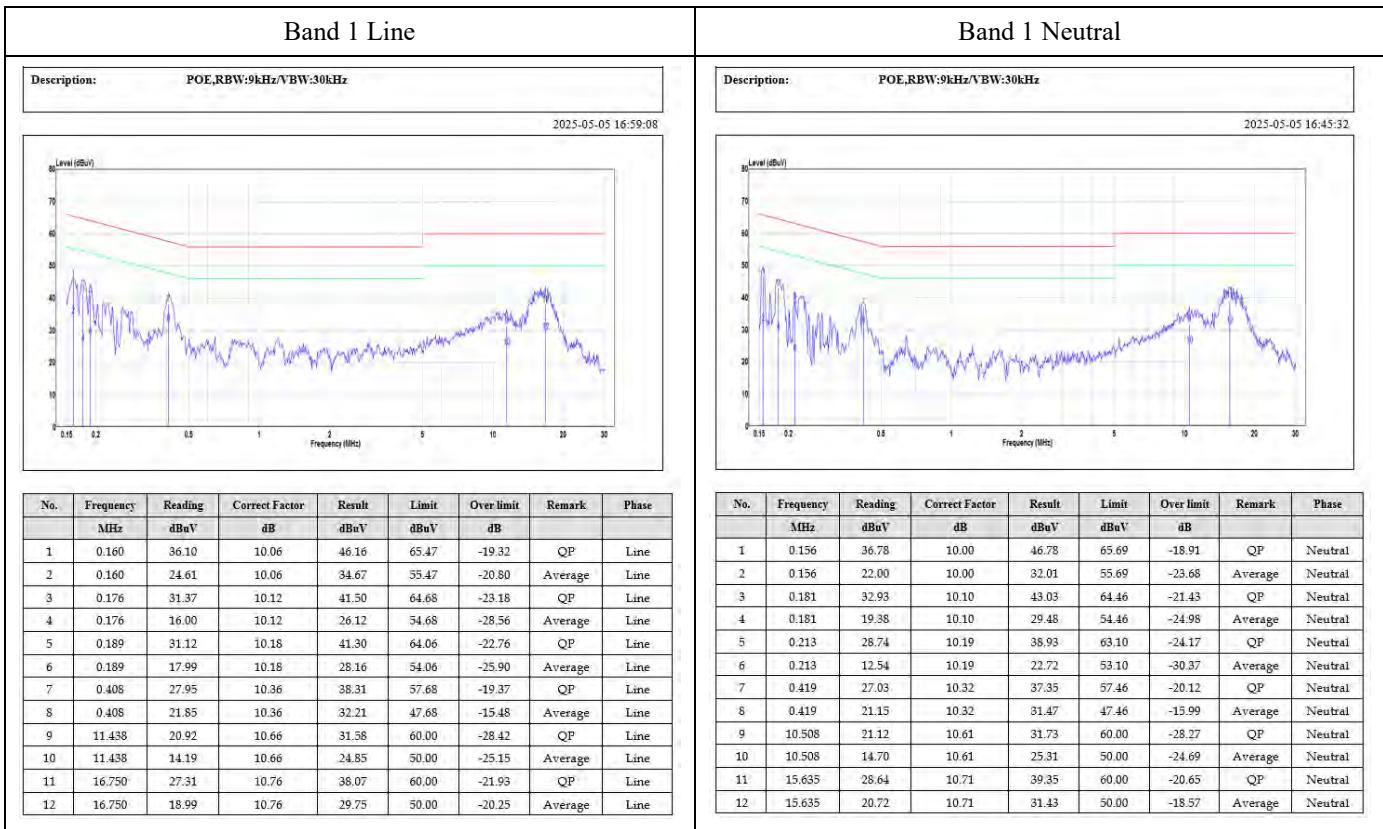
Result = Read Level + Factor

Over Limit = Result - Limit Line

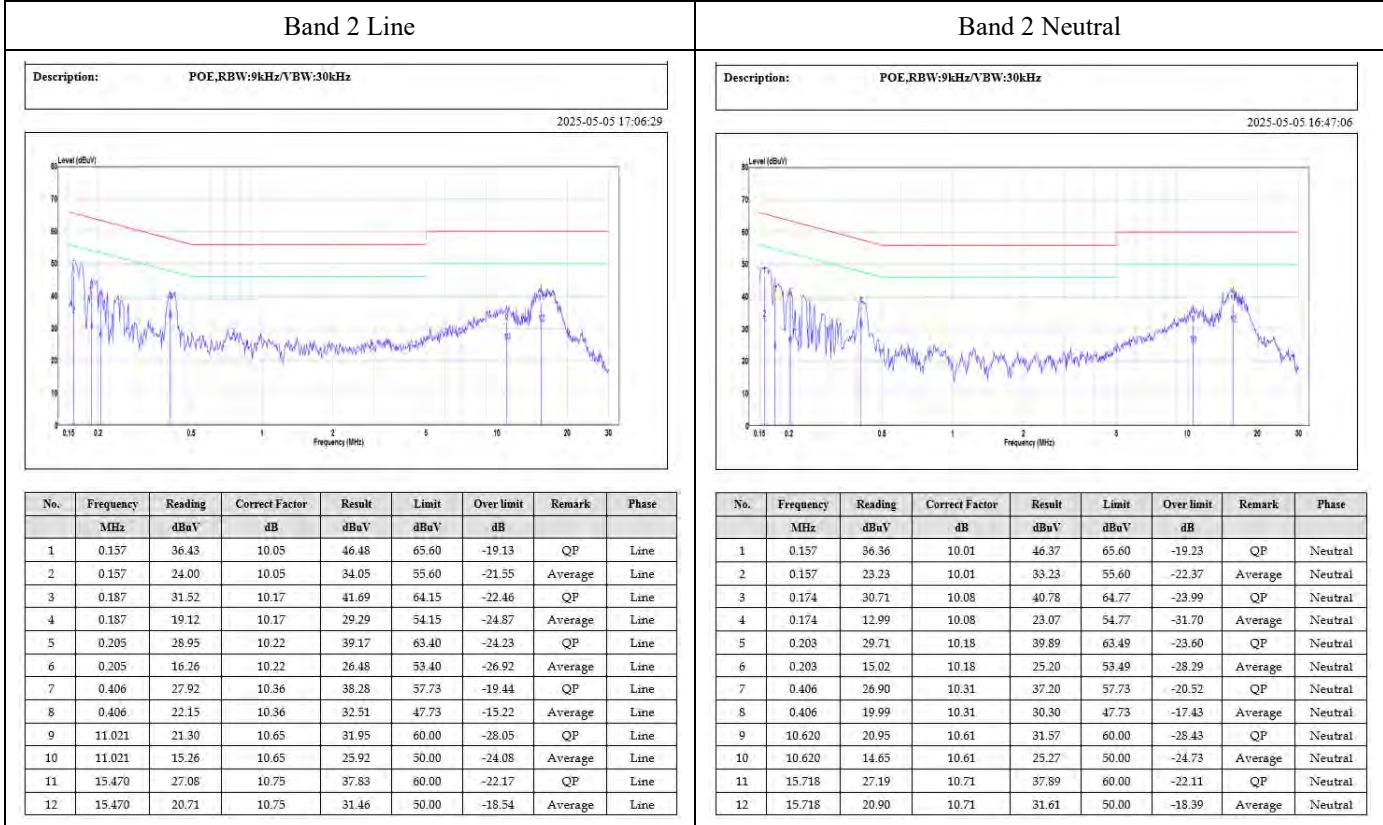
Factor = (LISN, ISN, PLC or current probe) Factor + Cable Loss + Attenuator

PoE:

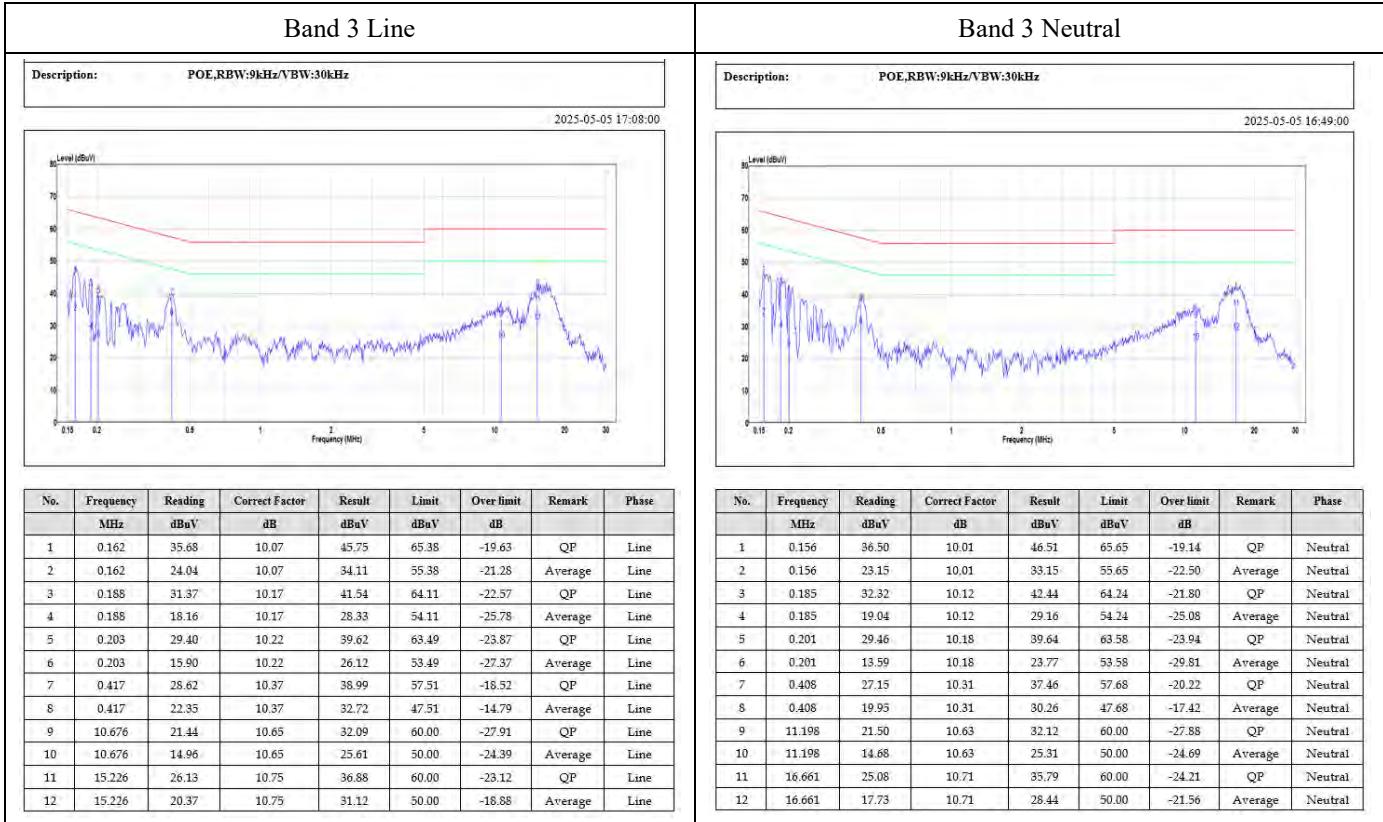
Worst case is 802.11a mode 5200 MHz



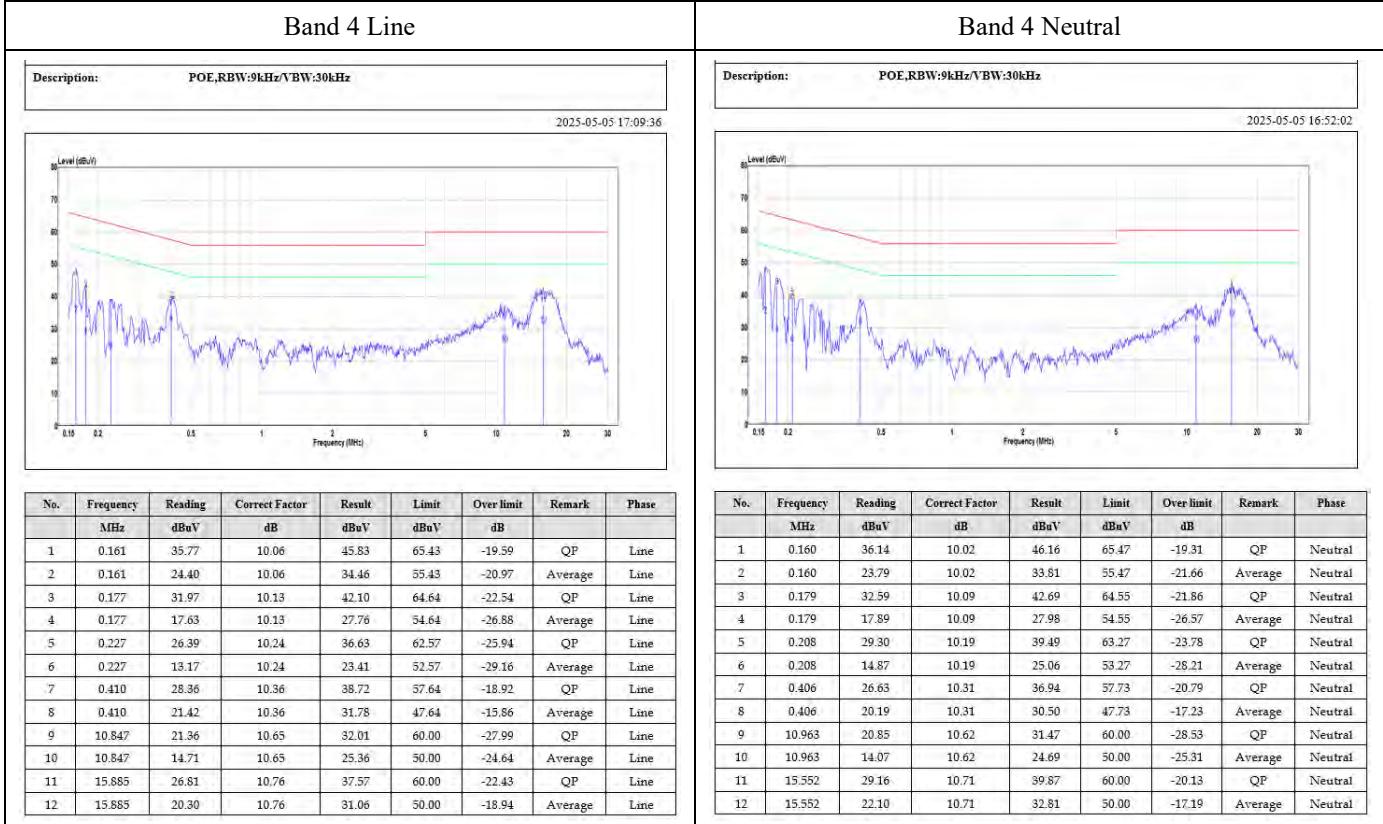
Worst case is 802.11a mode 5320 MHz



Worst case is 802.11a mode 5500 MHz



Worst case is 802.11a mode 5745 MHz



Note:

Result = Read Level + Factor

Over Limit = Result - Limit Line

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

## 7 FCC §15.209, §15.205, §15.407(b) & RSS-247 §6.2, RSS-GEN §8.9, RSS-GEN §8.10 – Spurious Emissions

### 7.1 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.

As per RSS-GEN §8.9: Except where otherwise indicated in the applicable RSS, radiated emissions shall comply with the field strength limits shown in table 5 and table 6. Additionally, the level of any transmitter unwanted emission shall not exceed the level of the transmitter's fundamental emission.

**Table 5 – General field strength limits at frequencies above 30 MHz**

Frequency (MHz)	Field Strength ( $\mu$ V/m at 3 m)
30 - 88	100
88 - 216	150
216 - 960	200
Above 960	500

**Table 6 – General field strength limits at frequencies below 30 MHz**

Frequency (MHz)	Field Strength (H-Field) ( $\mu$ A/m)	Measurement distance (m)
9 - 490 kHz <sup>Note 1</sup>	6.37/F (F in kHz)	300
490 - 1705 kHz	63.7/F (F in kHz)	30
1.705 - 30 MHz	0.08	30

Note 1: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

Note 2: The limit was added 51.5dB to convert the limit from dBuA/m to dBuV/m.

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.

RSS-247 Clause 6.2

#### 5.15-5.25 GHz

For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS)and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

#### 5.25-5.35 GHz

All emissions outside the band 5250-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p.; or All emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. and its power shall comply with the spectral power density for operation within the band 5150-5250 MHz. The device, except devices installed in vehicles, shall be labelled or include in the user manual the following text “for indoor use only.”

#### 5.47-5.725 GHz

Emissions outside the band 5470-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, devices with bandwidth overlapping the band edge of 5725 MHz can meet the emission limit of -27 dBm/MHz e.i.r.p. at 5850 MHz instead of 5725 MHz.

#### 5.725-5.850 GHz

Devices operating in the band 5725-5850 MHz with antenna gain greater than 10 dBi can have unwanted emissions that comply with either the limits in this section or in section 5.5 until six (6) months after the publication date of this standard for certification. Certified devices that do not comply with emission limits in this section shall not be manufactured, imported, distributed, leased, offered for sale or sold after April 1, 2018.

Devices operating in the band 5725-5850 MHz with antenna gain of 10 dBi or less can have unwanted emissions that comply with either the limits in this section or in section 5.5 until April 1, 2018 for certification. Certified devices that do not comply with emission limits in this section shall not be manufactured, imported, distributed, leased, offered for sale or sold after April 1, 2020.

Devices operating in the band 5725-5850 MHz shall have e.i.r.p. of unwanted emissions comply with the following:

27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 Bm/MHz at 5 MHz above or below the band edges;

15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;

10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and

-27 dBm/MHz at frequencies more than 75 MHz above or below the band edges.

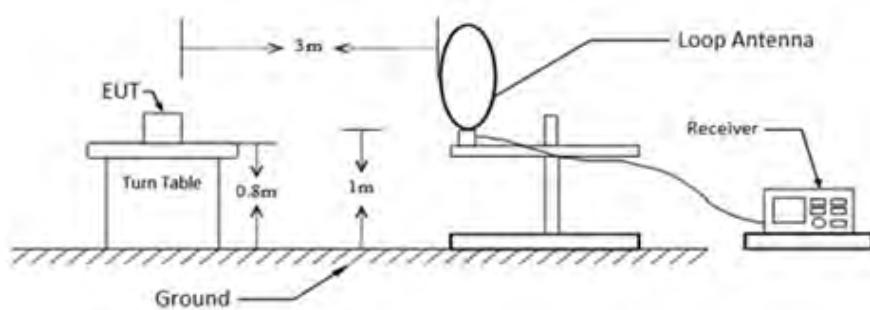
According to ANSI C63.10-2013, section 5.3.3

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).

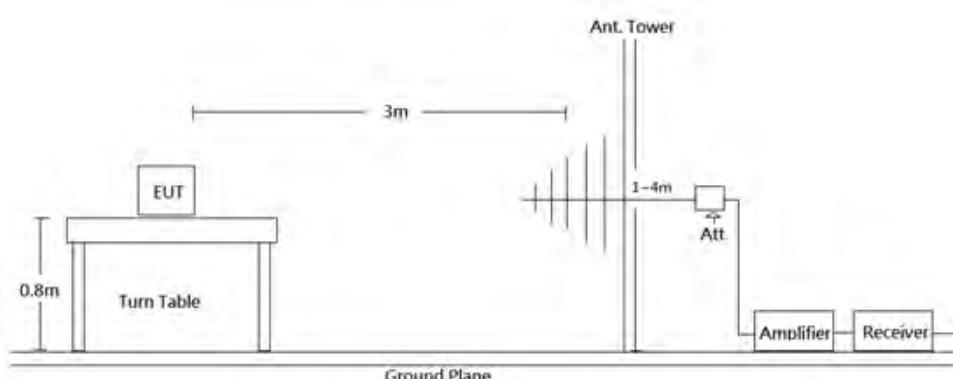
Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. Measurements from 18 GHz to 40 GHz are typically made at distances significantly less than 3 m from 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).

## 7.2 EUT Setup

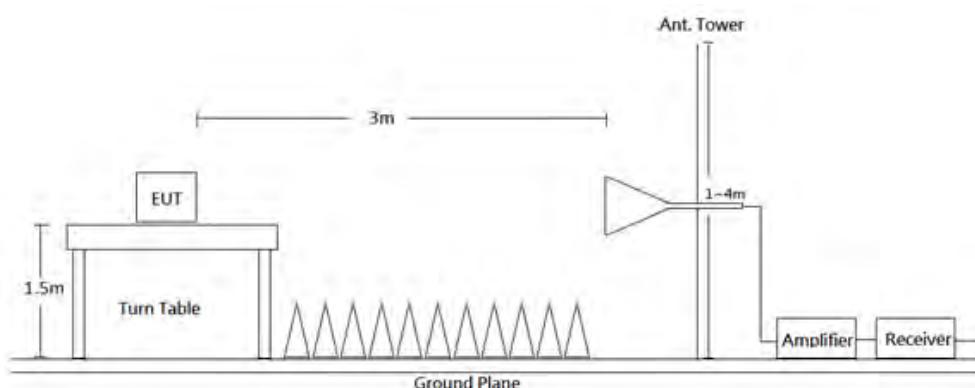
9kHz-30MHz:



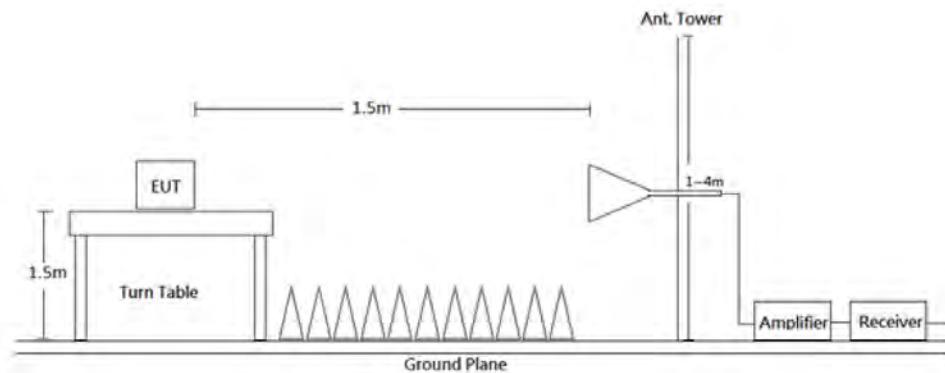
30MHz-1GHz:



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, RSS-247, RSS-GEN Limits.

### 7.3 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	Detector
9 kHz - 150 kHz	200 Hz/300 Hz	1 kHz	/	QP/AV	QP/AV
150 kHz - 30 MHz	9 kHz/10 kHz	30 kHz	/	QP/AV	QP/AV
30-1000 MHz	120 kHz	300 kHz	/	QP	QP
Pre-scan :					
Above 1 GHz	1 MHz	3 MHz	/	PK	PK
	1 MHz	1 kHz	>98%	Ave	PK
	1 MHz	≥ 1/Ton, not less than 1 kHz	<98%	Ave	PK
Final measurement for emission identified during pre-scan :					
	1 MHz	3 MHz	/	PK	PK
	1 MHz	10 Hz	>98%	Ave	PK
	1 MHz	≥ 1/Ton	<98%	Ave	PK

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.

### 7.4 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:  $E [\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] + 95.2$ , for  $d = 3$  meters.

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

## 7.5 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:

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

## 7.6 Test Results

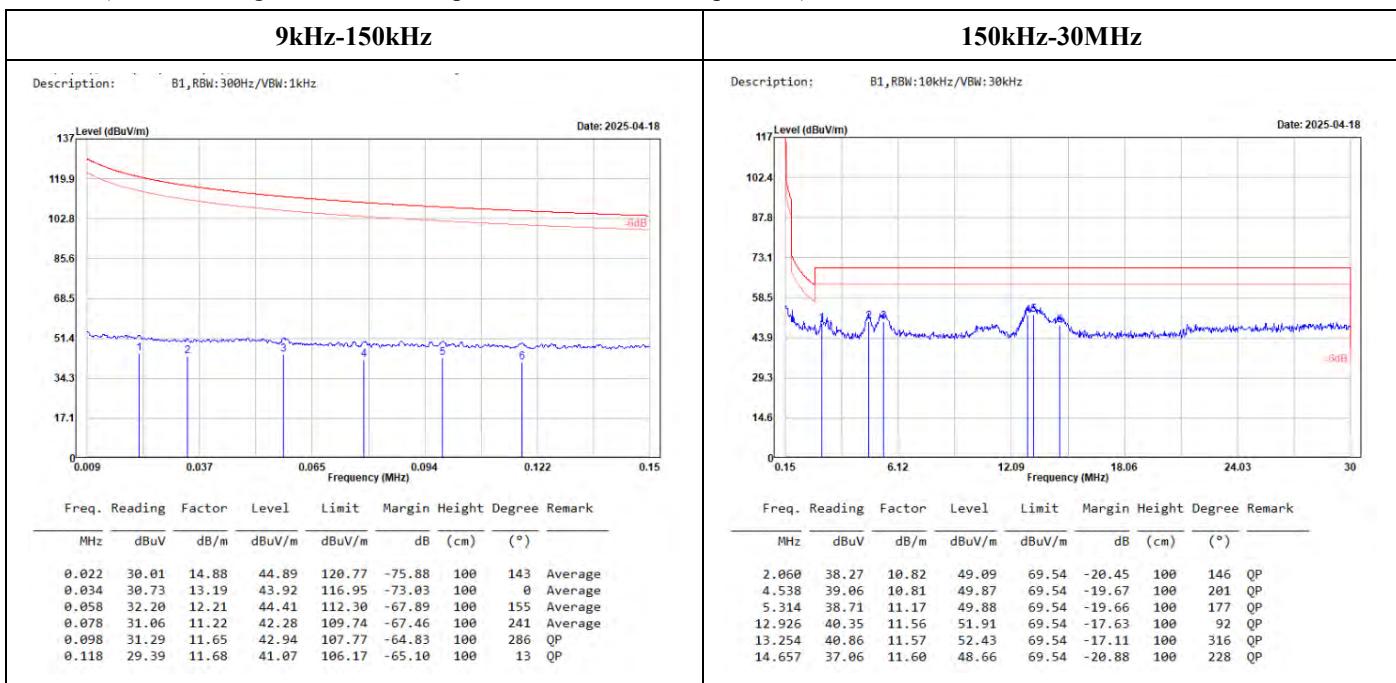
Test Mode: Transmitting

(Use Y axis test)

### 9kHz-30MHz:

(Worst case is 802.11a mode, 5200MHz)

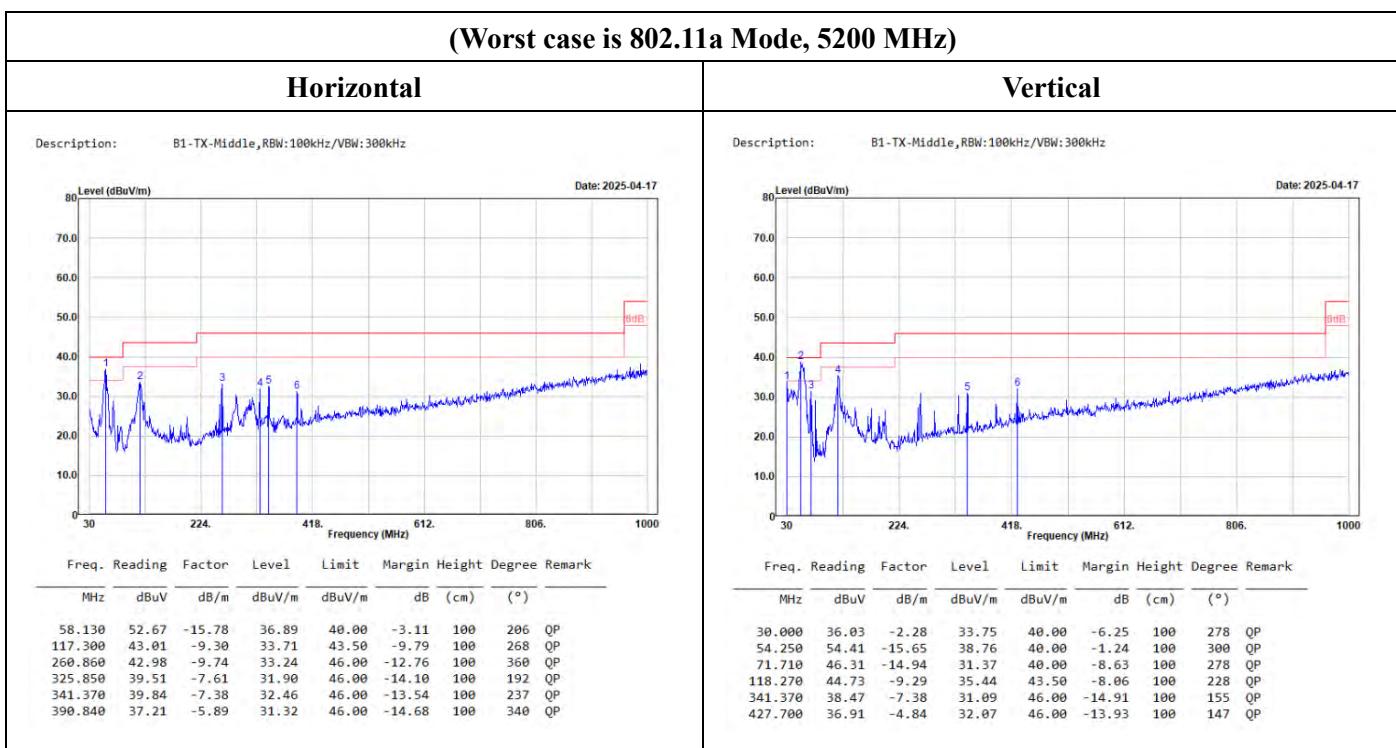
(Pre-scan using three directional polarities, worst case as parallel.)



### 30MHz-1GHz:

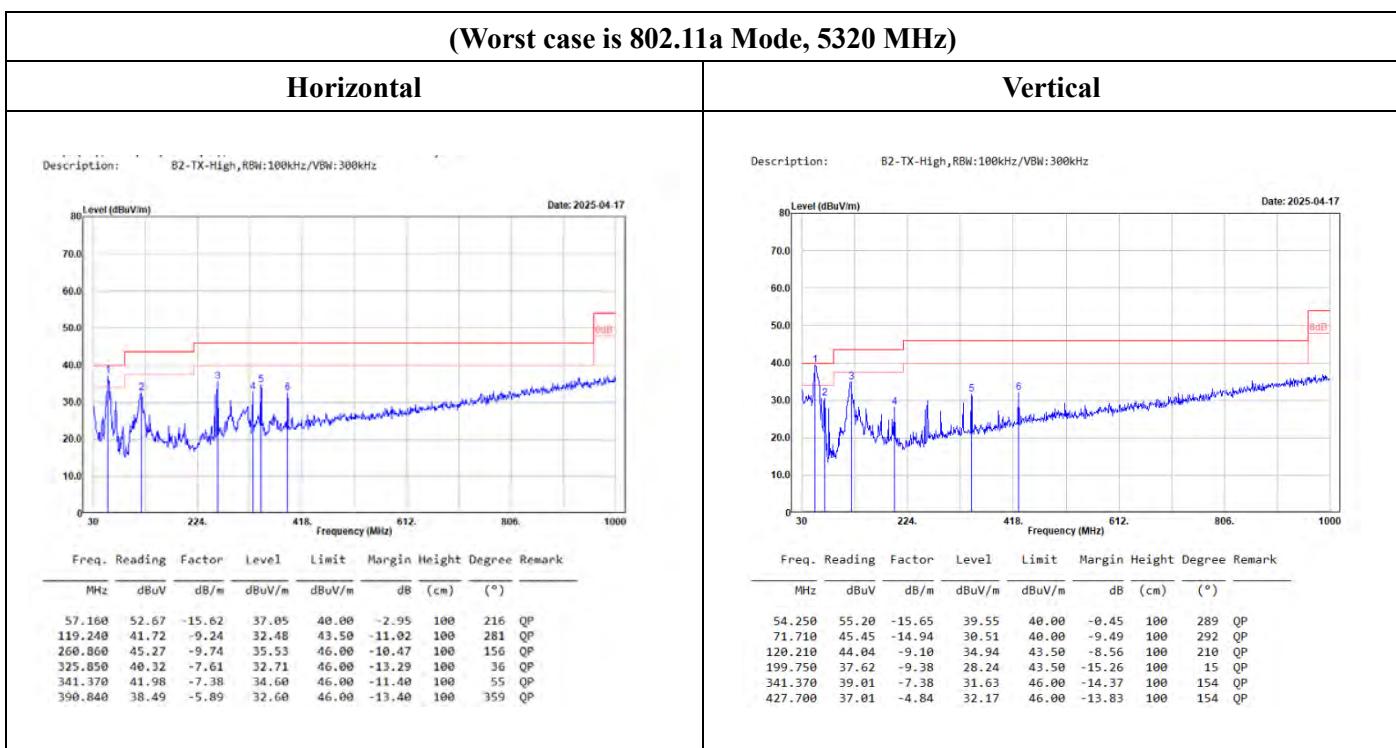
Adapter Mode:

5150~5250 MHz



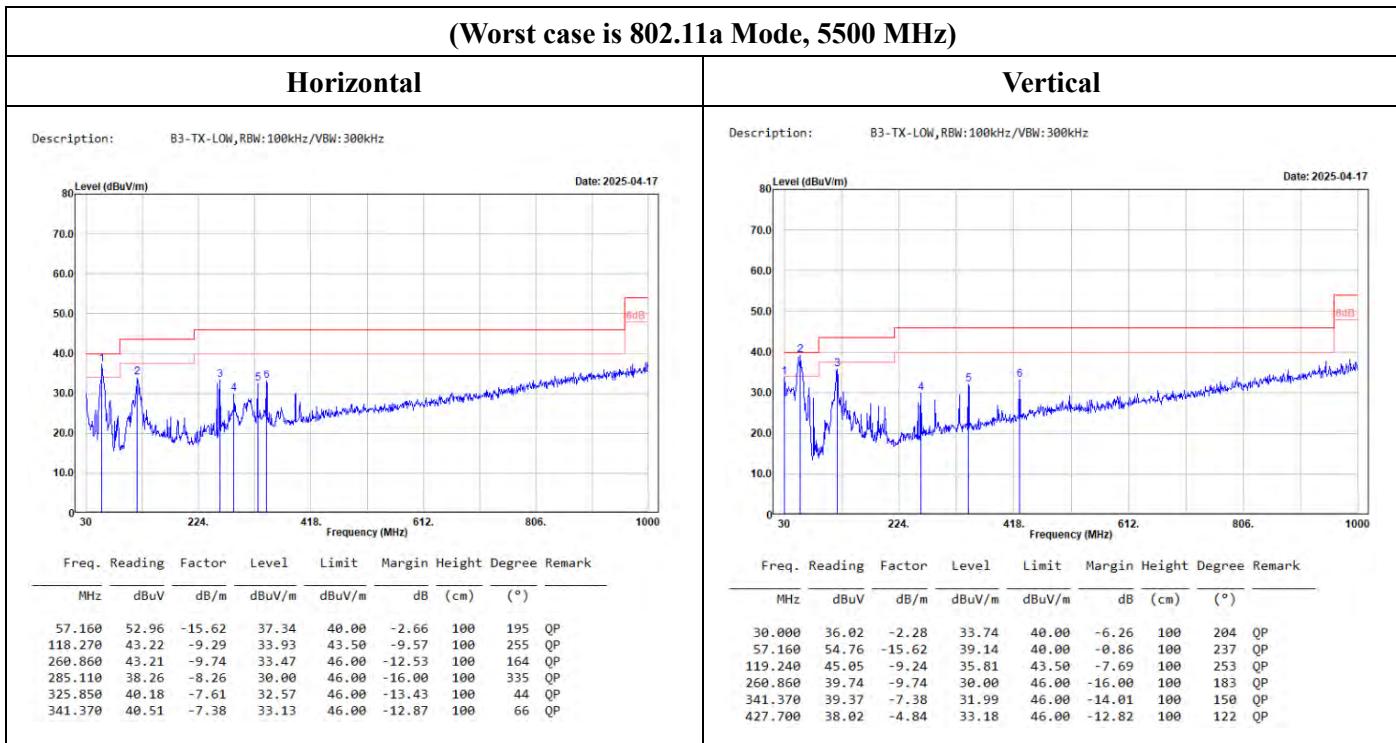
## 5250~5350 MHz

## (Worst case is 802.11a Mode, 5320 MHz)



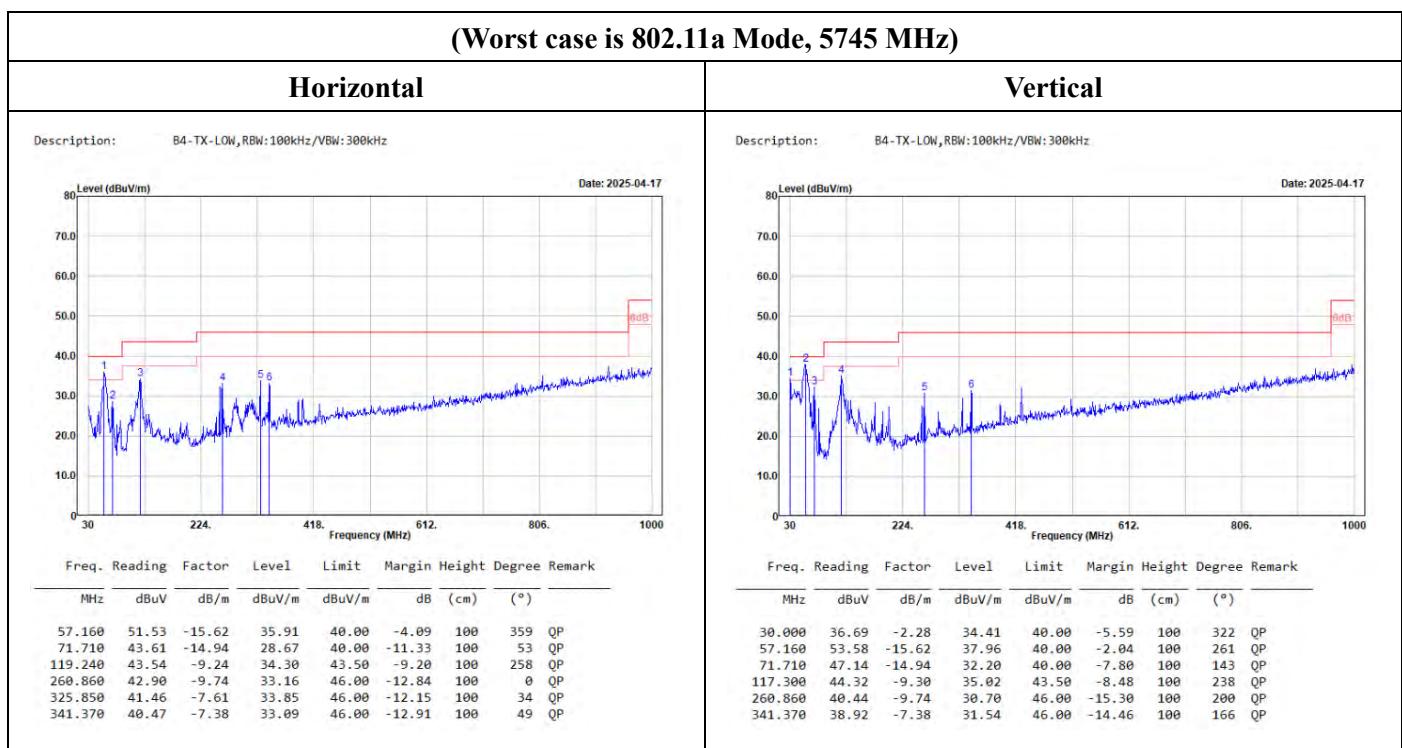
## 5470~5725 MHz

## (Worst case is 802.11a Mode, 5500 MHz)



## 5725~5850 MHz

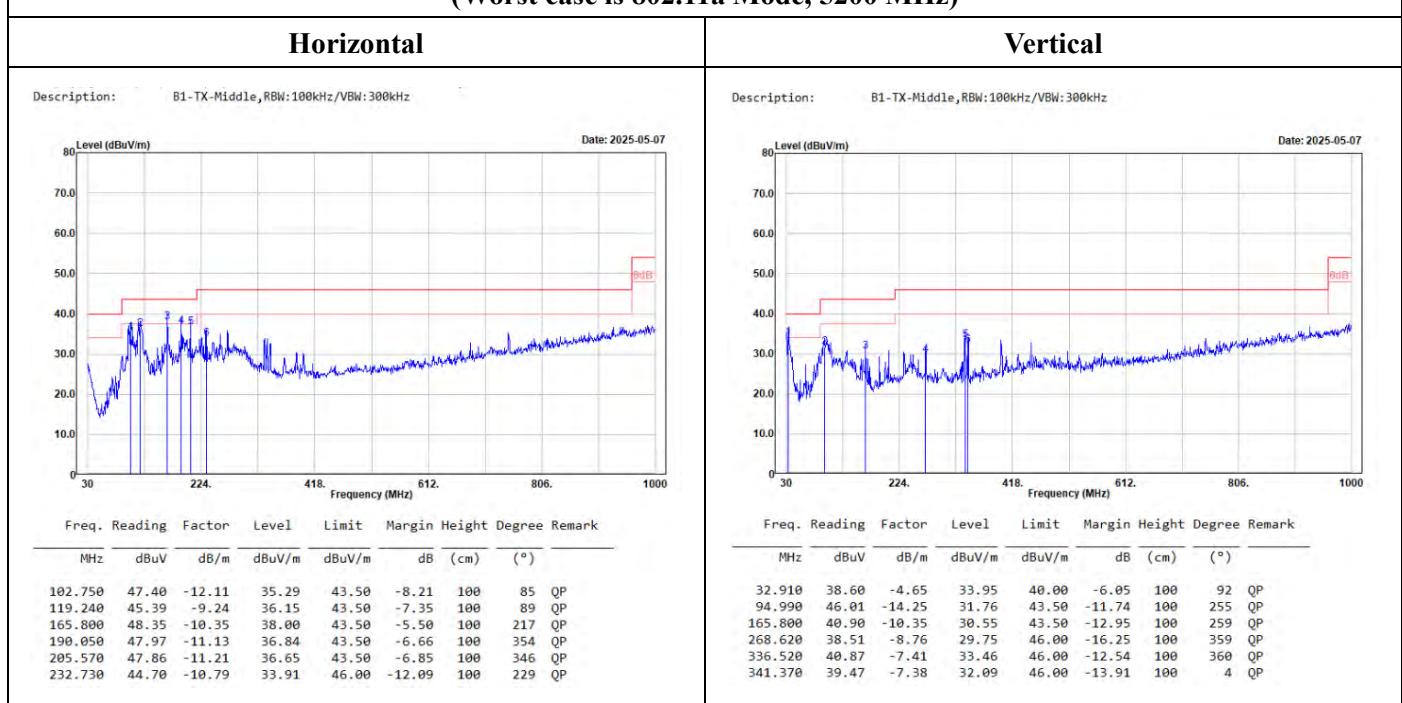
## (Worst case is 802.11a Mode, 5745 MHz)



## POE Mode:

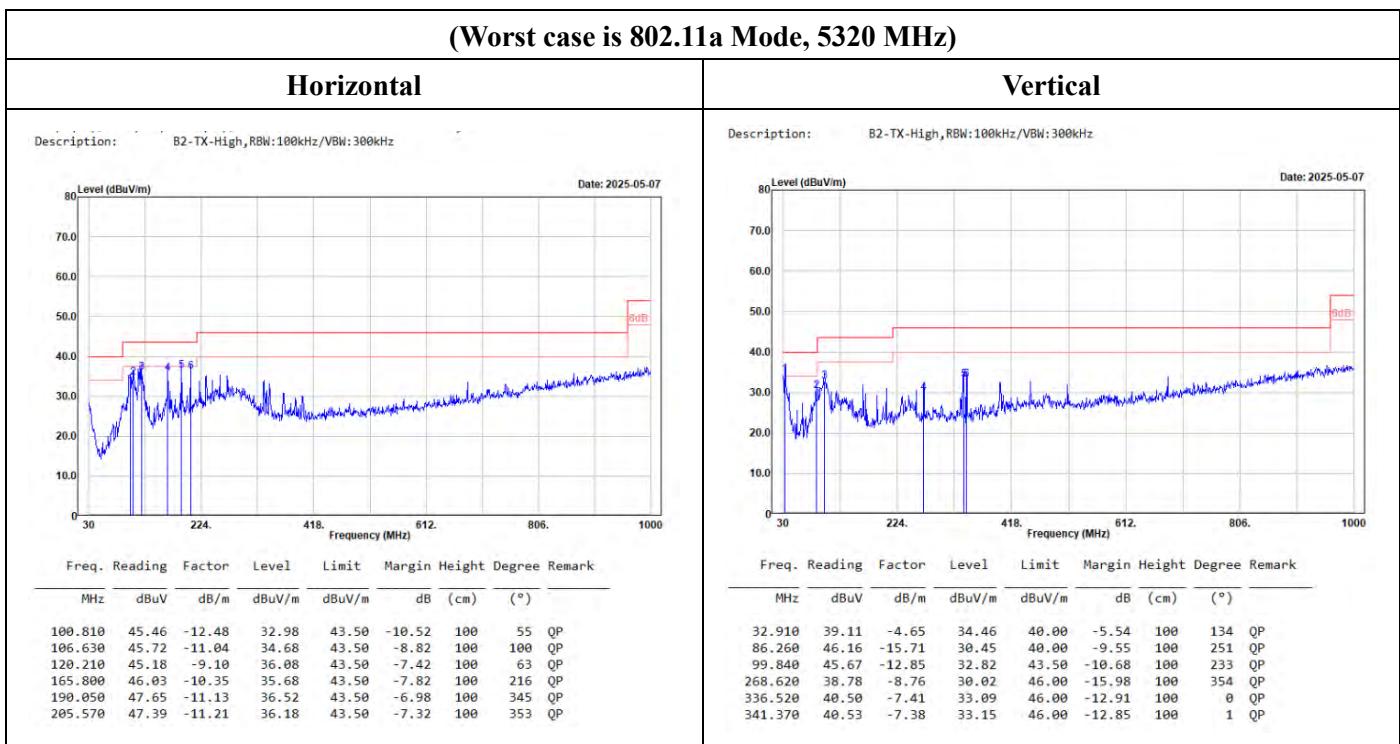
## 5150~5250 MHz

## (Worst case is 802.11a Mode, 5200 MHz)



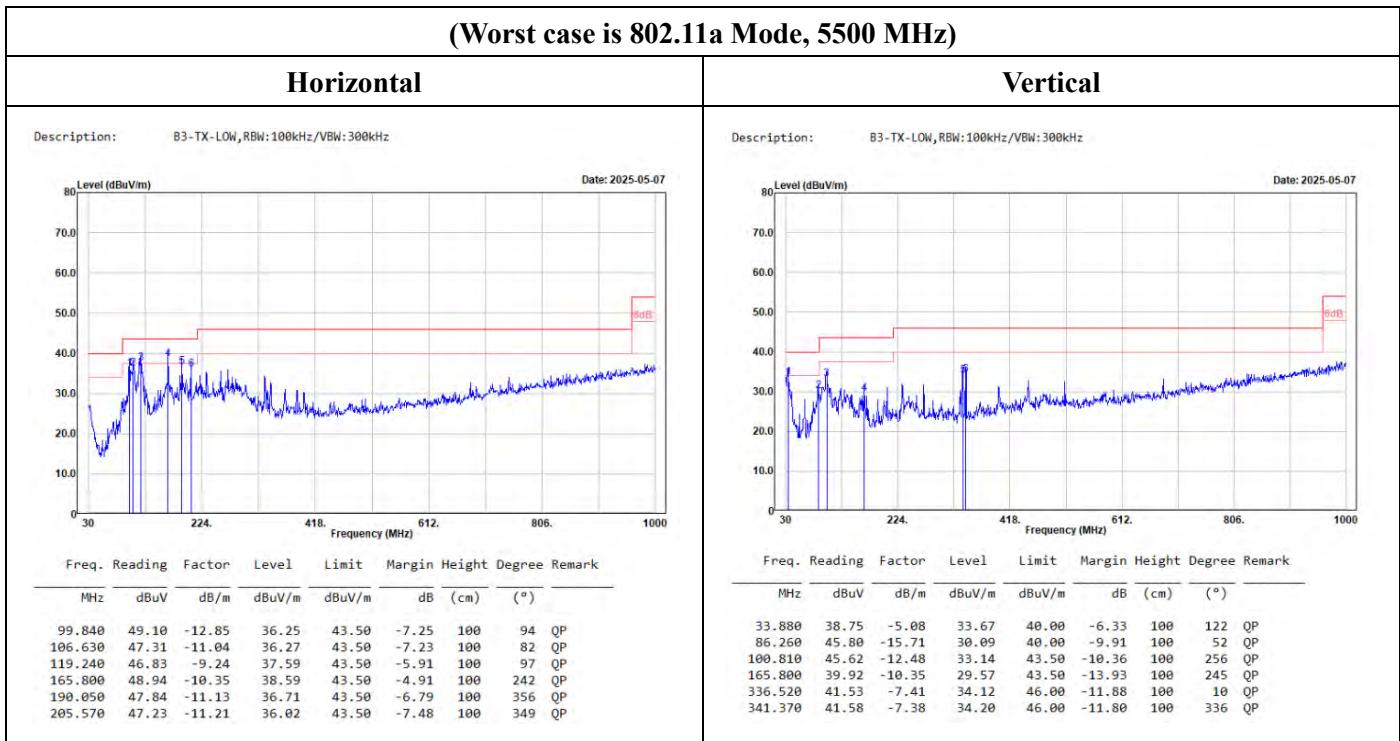
## 5250~5350 MHz

## (Worst case is 802.11a Mode, 5320 MHz)



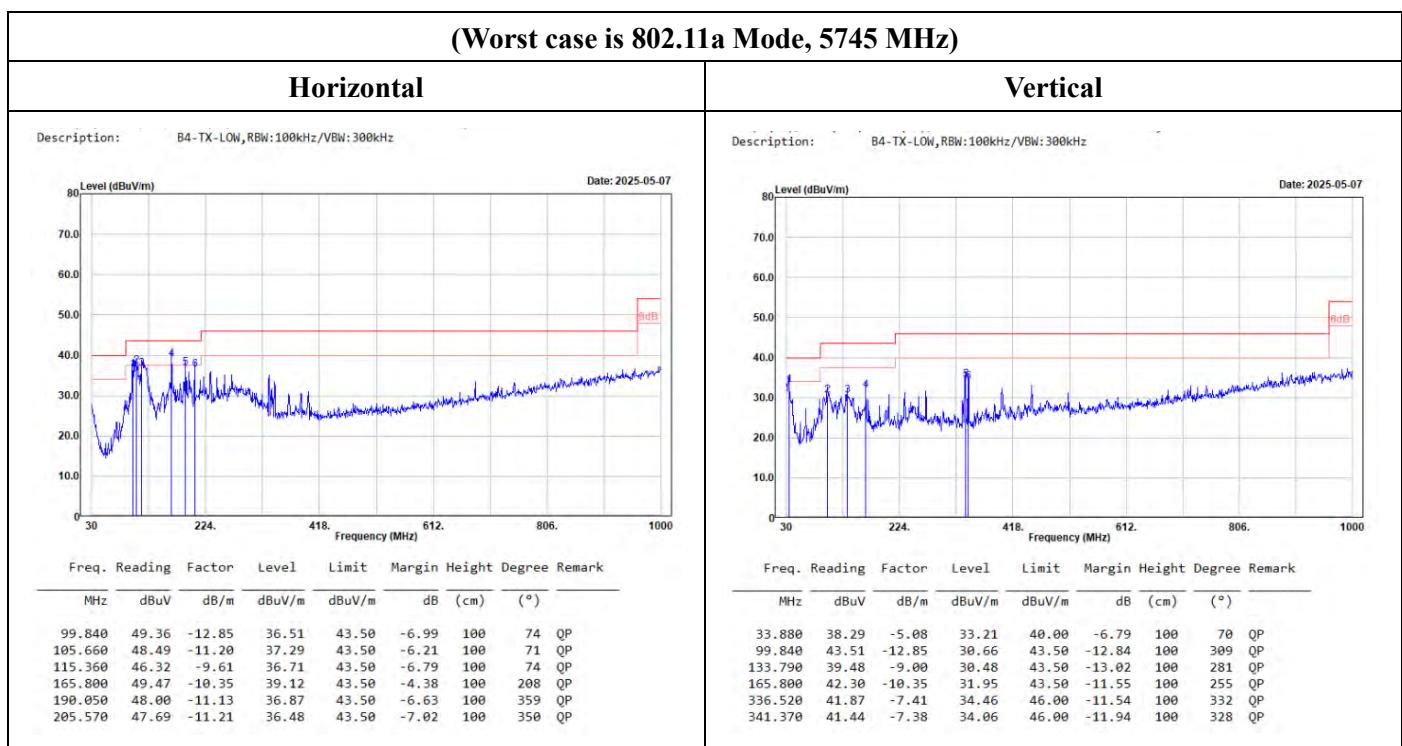
## 5470~5725 MHz

## (Worst case is 802.11a Mode, 5500 MHz)



## 5725~5850 MHz

(Worst case is 802.11a Mode, 5745 MHz)



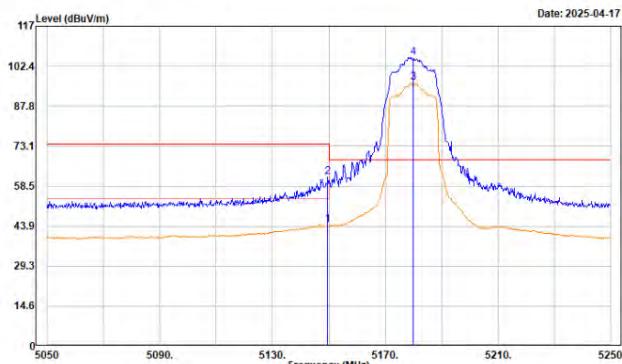
Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

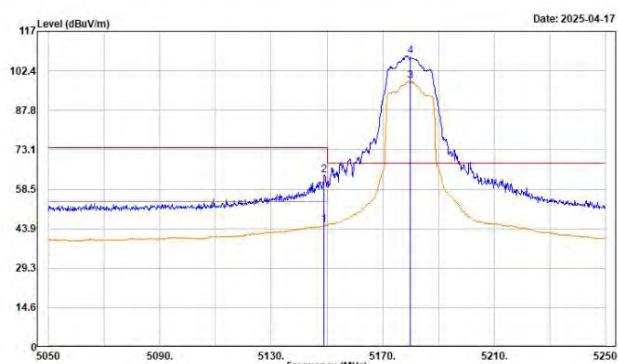
**Band-Edge****5150-5250 MHz****802.11a Mode, 5180 MHz****Horizontal****Vertical**

Description: A-TX-5180, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5149.600	47.08	-2.79	44.29	54.00	-9.71	289	71	Average
5149.600	64.67	-2.79	61.88	74.00	-12.12	289	71	Peak
5180.000	99.23	-2.87	96.36			289	71	Average
5180.000	108.43	-2.87	105.56			289	71	Peak

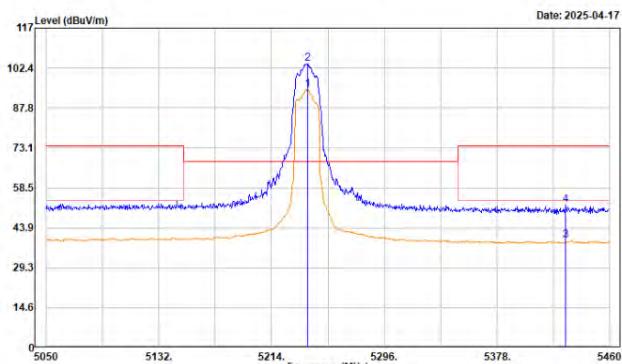
Description: A-TX-5180, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5149.000	47.99	-2.79	45.20	54.00	-8.80	232	359	Average
5149.000	66.68	-2.79	63.89	74.00	-10.11	232	359	Peak
5180.000	101.54	-2.87	98.67			232	359	Average
5180.000	110.83	-2.87	107.96			232	359	Peak

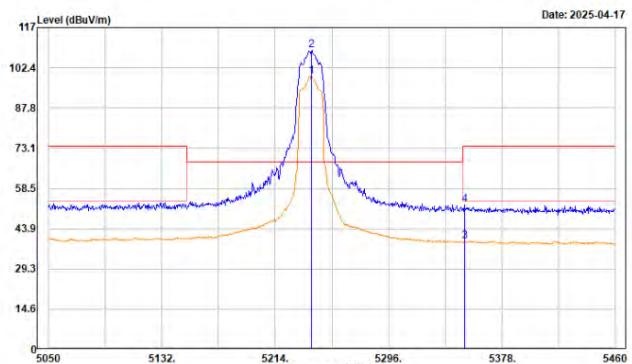
**802.11a Mode, 5240 MHz****Horizontal****Vertical**

Description: A-TX-5240, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5240.000	97.80	-3.17	94.63			200	76	Average
5240.000	107.15	-3.17	103.98			200	76	Peak
5248.020	42.87	-3.69	39.18	54.00	-14.82	200	76	Average
5248.020	55.90	-3.69	52.21	74.00	-21.79	200	76	Peak

Description: A-TX-5240, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



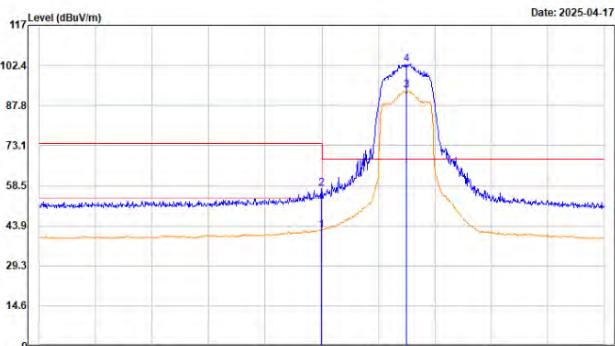
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5240.000	102.47	-3.17	99.30			193	78	Average
5240.000	111.86	-3.17	108.69			193	78	Peak
5350.940	42.95	-3.50	39.45	54.00	-14.55	193	78	Average
5350.940	56.17	-3.50	52.67	74.00	-21.33	193	78	Peak

## 802.11ac VHT20 Mode, 5180 MHz

## Horizontal

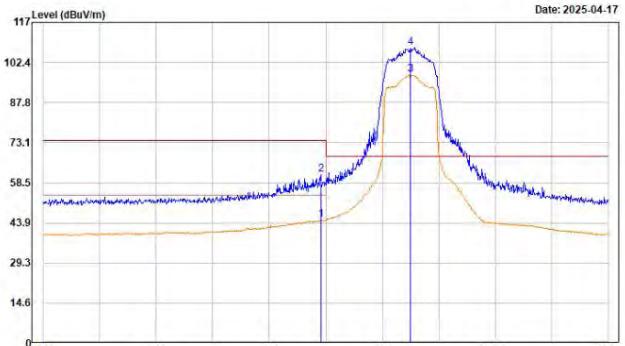
## Vertical

Description: AC20-TX-5180,Peak RBW:1MHz/VBW:3MHz,Avg RBW:1MHz/VBW:1kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5149.800	45.07	-2.79	42.28	54.00	-11.72	248	34	Average
5149.800	60.17	-2.79	57.38	74.00	-16.62	248	34	Peak
5180.000	95.97	-2.87	93.10			248	34	Average
5180.000	105.64	-2.87	102.77			248	34	Peak

Description: AC20-TX-5180,Peak RBW:1MHz/VBW:3MHz,Avg RBW:1MHz/VBW:1kHz



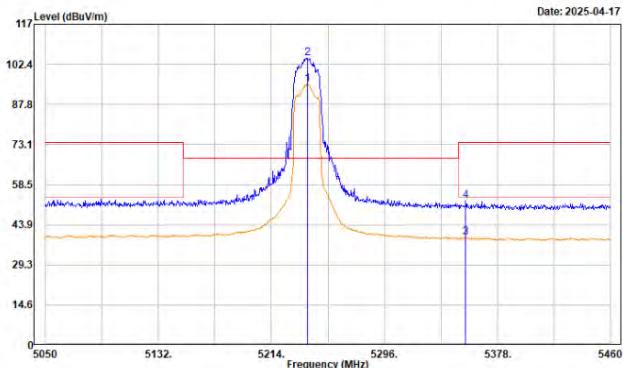
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5148.200	47.72	-2.78	44.94	54.00	-9.06	146	359	Average
5148.200	64.33	-2.78	61.55	74.00	-12.45	146	359	Peak
5180.000	100.73	-2.87	97.86			146	359	Average
5180.000	110.72	-2.87	107.85			146	359	Peak

## 802.11ac VHT20 Mode, 5240 MHz

## Horizontal

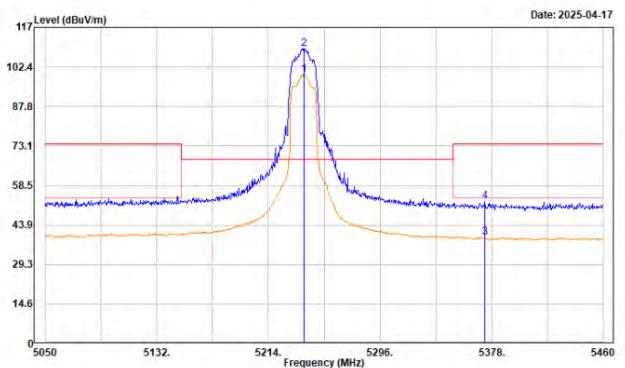
## Vertical

Description: AC20-TX-5240,Peak RBW:1MHz/VBW:3MHz,Avg RBW:1MHz/VBW:1kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5240.000	98.35	-3.17	95.18		186	77	75	Average
5240.000	107.90	-3.17	104.73		186	77	75	Peak
5355.040	42.73	-3.52	39.21	54.00	-14.79	186	77	Average
5355.040	56.10	-3.52	52.58	74.00	-21.42	186	77	Peak

Description: AC20-TX-5240,Peak RBW:1MHz/VBW:3MHz,Avg RBW:1MHz/VBW:1kHz



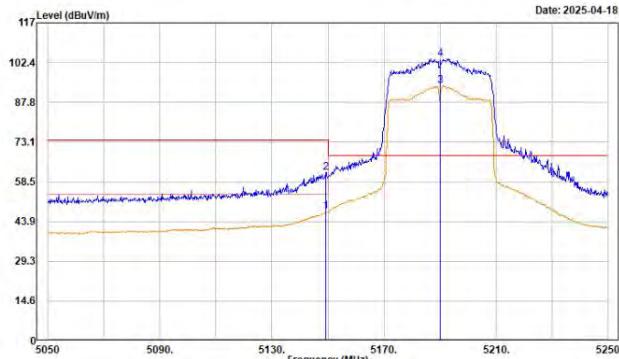
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5240.000	102.87	-3.17	99.70		214	75	75	Average
5240.000	112.23	-3.17	109.06		214	75	75	Peak
5373.080	43.07	-3.62	39.45	54.00	-14.55	214	75	Average
5373.080	56.17	-3.62	52.55	74.00	-21.45	214	75	Peak

## 802.11ac VHT40 Mode, 5190 MHz

## Horizontal

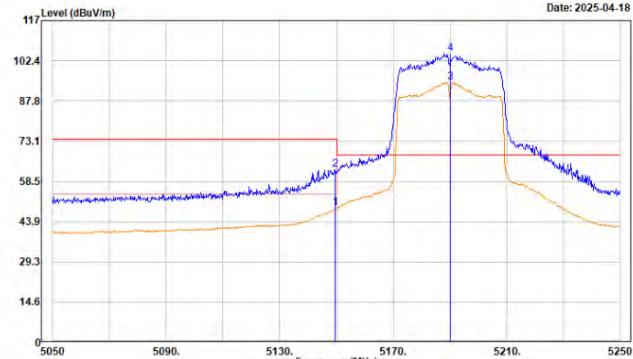
## Vertical

Description: AC40-TX-5190, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)
5149.200	50.29	-2.79	47.50	54.00	-6.50	126	71 Average
5149.200	64.66	-2.79	61.87	74.00	-12.13	126	71 Peak
5190.000	96.67	-2.90	93.77			126	71 Average
5190.000	106.72	-2.90	103.82			126	71 Peak

Description: AC40-TX-5190, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



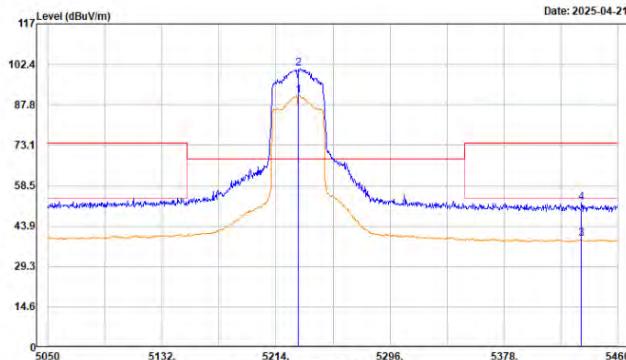
Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)
5149.400	51.50	-2.79	48.71	54.00	-5.29	193	22 Average
5149.400	65.50	-2.79	62.71	74.00	-11.29	193	22 Peak
5190.000	97.50	-2.90	94.60			193	22 Average
5190.000	107.93	-2.90	105.03			193	22 Peak

## 802.11ac VHT40 Mode, 5230 MHz

## Horizontal

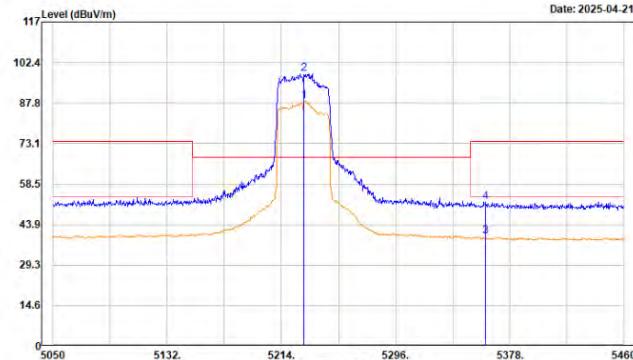
## Vertical

Description: AC40-TX-5230, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)
5230.000	94.14	-3.11	91.03		196	103	Average
5230.000	104.08	-3.17	100.91		196	103	Peak
5433.760	42.87	-3.68	39.19	54.00	-14.81	196	103 Average
5433.760	56.11	-3.68	52.43	74.00	-21.57	196	103 Peak

Description: AC40-TX-5230, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



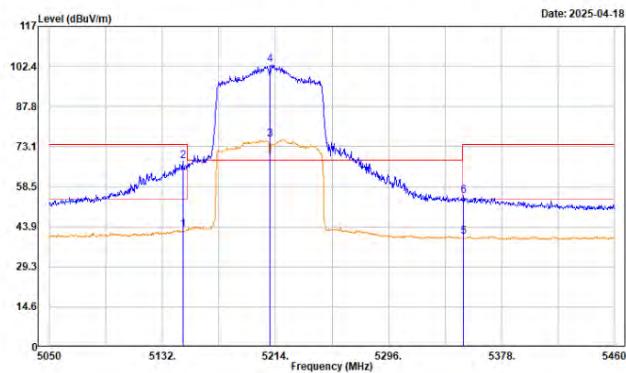
Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)
5230.000	91.57	-3.11	88.46		217	76	Average
5230.000	101.38	-3.17	98.21		217	76	Peak
5360.780	43.02	-3.54	39.48	54.00	-14.52	217	76 Average
5360.780	55.62	-3.54	52.08	74.00	-21.92	217	76 Peak

## 802.11ac VHT80 Mode, 5210 MHz

## Horizontal

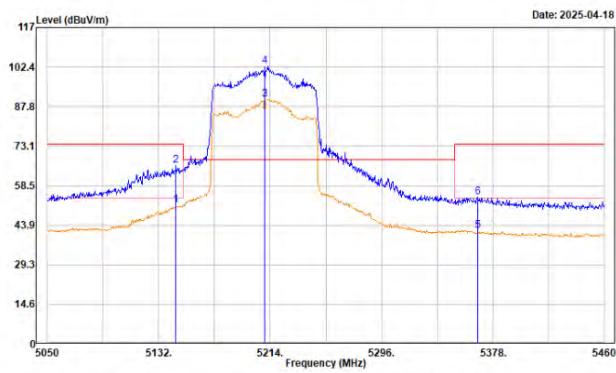
## Vertical

Description: AC80-TX-5210, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:5kHz



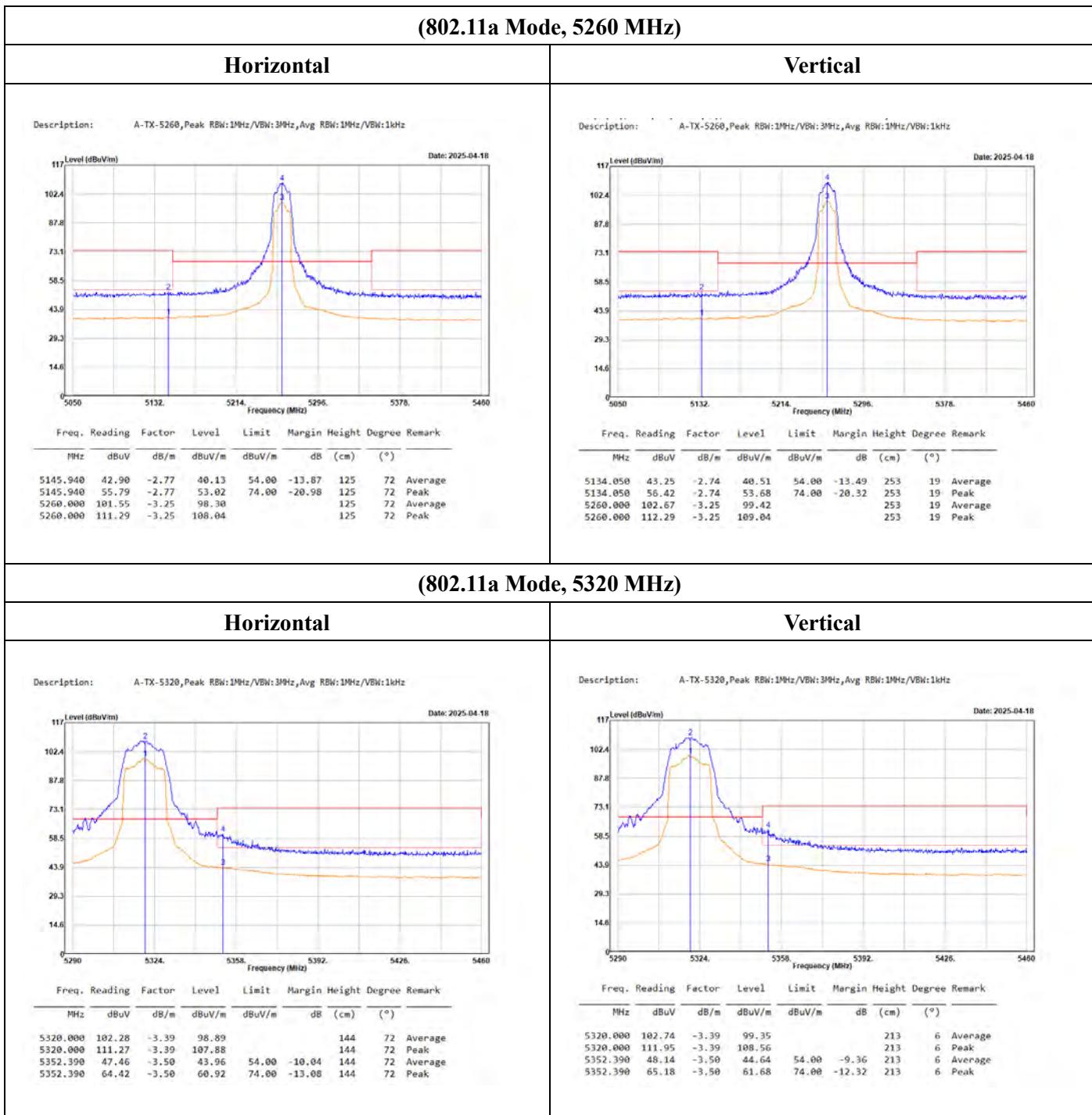
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5146.760	45.43	-2.78	42.65	54.00	-11.35	124	71	Average
5146.760	70.74	-2.78	67.96	74.00	-6.04	124	71	Peak
5210.000	78.81	-3.00	75.81			124	71	Average
5210.000	106.08	-3.00	103.08			124	71	Peak
5350.530	43.81	-3.49	40.32	54.00	-13.68	124	71	Average
5350.530	58.68	-3.49	55.19	74.00	-18.81	124	71	Peak

Description: AC80-TX-5210, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:5kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5144.710	54.02	-2.78	51.24	54.00	-2.76	166	350	Average
5144.710	68.68	-2.78	65.90	74.00	-8.10	166	350	Peak
5210.000	93.51	-3.00	90.51			166	350	Average
5210.000	105.58	-3.00	102.58			166	350	Peak
5366.520	45.50	-3.59	41.91	54.00	-12.09	166	350	Average
5366.520	57.71	-3.59	54.12	74.00	-19.88	166	350	Peak

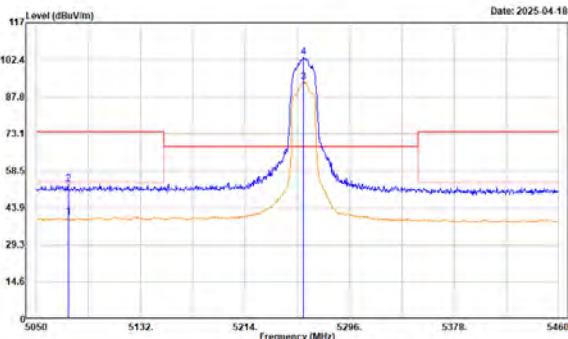
## 5250-5350 MHz



## (802.11ac VHT20 Mode, 5260 MHz)

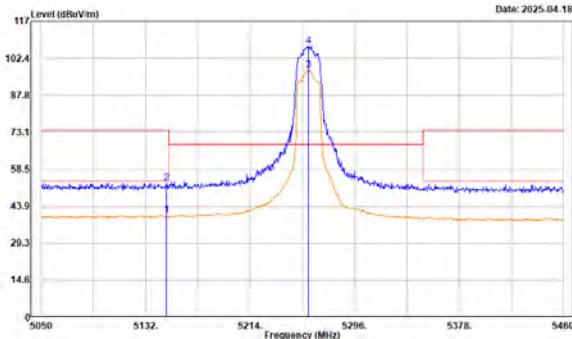
## Horizontal

Description: AC28-TX-5260,Peak RBW:1MHz/VBW:3MHz,Avg RBW:1MHz/VBW:1kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5075.010	42.89	-2.76	40.13	54.00	-13.87	200	63	Average
5075.010	56.81	-2.76	53.25	74.00	-20.75	200	63	Peak
5260.000	96.80	-3.25	93.55			200	63	Average
5260.000	106.54	-3.25	103.29			200	63	Peak

Description: AC28-TX-5260,Peak RBW:1MHz/VBW:3MHz,Avg RBW:1MHz/VBW:1kHz

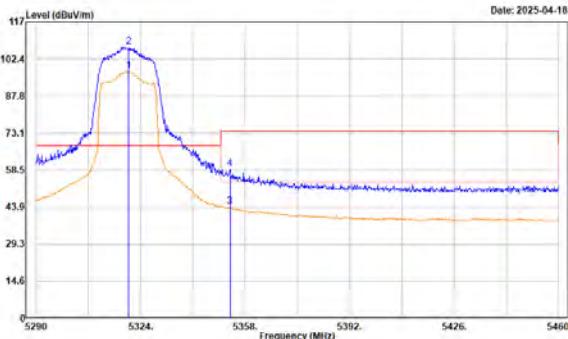


Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5148.400	42.92	-2.78	40.14	54.00	-13.86	144	64	Average
5148.400	55.87	-2.78	53.09	74.00	-20.91	144	64	Peak
5260.000	100.85	-3.25	97.60			144	64	Average
5260.000	110.57	-3.25	107.32			144	64	Peak

## (802.11ac VHT20 Mode, 5320 MHz)

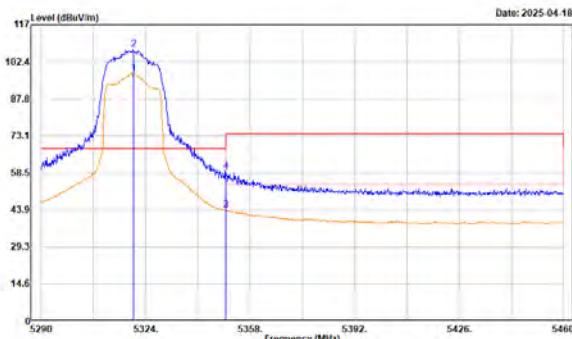
## Horizontal

Description: AC28-TX-5320,Peak RBW:1MHz/VBW:3MHz,Avg RBW:1MHz/VBW:1kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5320.000	100.94	-3.39	97.55			143	70	Average
5320.000	110.57	-3.39	107.18			143	70	Peak
5353.070	47.58	-3.51	44.07	54.00	-9.93	143	70	Average
5353.070	62.41	-3.51	58.90	74.00	-15.10	143	70	Peak

Description: AC28-TX-5320,Peak RBW:1MHz/VBW:3MHz,Avg RBW:1MHz/VBW:1kHz



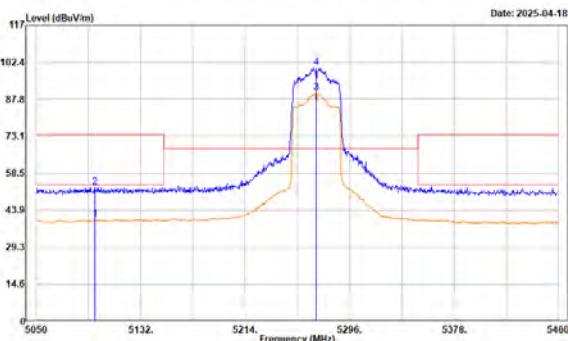
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5320.000	101.96	-3.39	97.67			272	96	Average
5320.000	110.62	-3.39	107.23			272	96	Peak
5350.010	47.22	-3.49	43.73	54.00	-10.27	272	96	Average
5350.010	62.39	-3.49	58.90	74.00	-15.10	272	96	Peak

## (802.11ac VHT40 Mode, 5270 MHz)

## Horizontal

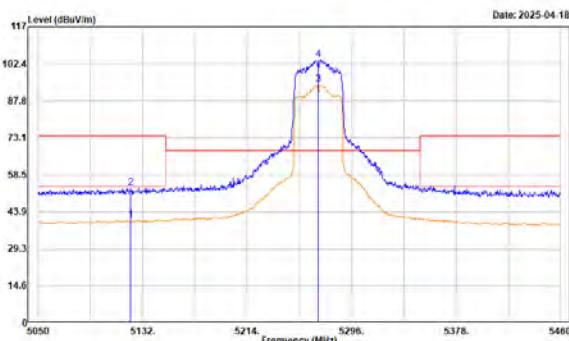
## Vertical

Description: AC48-TX-5270, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5095.920	42.93	-2.66	40.27	54.00	-13.73	210	54	Average
5095.920	55.68	-2.66	52.94	74.00	-21.06	210	54	Peak
5270.000	93.48	-3.27	98.21			210	54	Average
5270.000	103.31	-3.27	108.04			210	54	Peak

Description: AC48-TX-5270, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



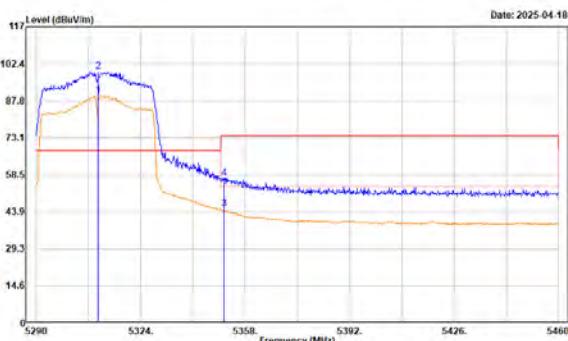
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5122.570	43.38	-2.78	40.60	54.00	-13.40	213	41	Average
5122.570	55.99	-2.78	53.29	74.00	-20.71	213	41	Peak
5270.000	97.41	-3.27	94.14			213	41	Average
5270.000	107.11	-3.27	103.84			213	41	Peak

## (802.11ac VHT40 Mode, 5310 MHz)

## Horizontal

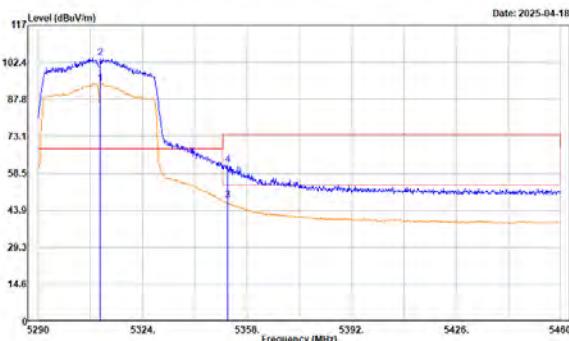
## Vertical

Description: AC48-TX-5310, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5310.000	93.00	-3.36	89.64			150	27	Average
5310.000	102.59	-3.36	99.23			150	27	Peak
5351.030	48.43	-3.50	44.93	54.00	-9.07	150	27	Average
5351.030	68.66	-3.50	57.16	74.00	-16.84	150	27	Peak

Description: AC48-TX-5310, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



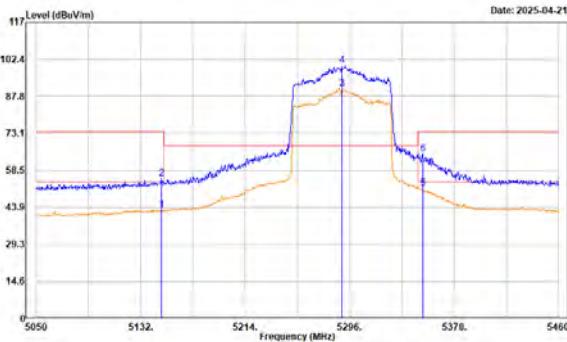
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5310.000	97.36	-3.36	94.00			157	66	Average
5310.000	107.27	-3.36	103.91			157	66	Peak
5351.540	51.51	-3.50	48.01	54.00	-5.99	157	66	Average
5351.540	65.36	-3.50	61.86	74.00	-12.14	157	66	Peak

## (802.11ac VHT80 Mode, 5290 MHz)

## Horizontal

## Vertical

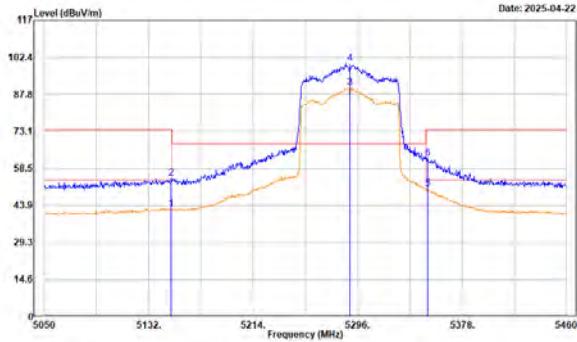
Description: AC80-TX-5290, Peak RBW:1MHz/VBW:3MHz,Avg RBW:1MHz/VBW:5kHz



Freq. Reading Factor Level Limit Margin Height Degree Remark

MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5147.990	45.62	-2.78	42.84	54.00	-11.16	205	25	Average
5147.990	58.03	-2.78	55.25	74.00	-18.75	205	25	Peak
5290.000	94.13	-3.38	90.83			205	25	Average
5290.000	105.09	-3.38	99.79			205	25	Peak
5353.400	54.74	-3.51	51.23	54.00	-2.77	205	25	Average
5353.400	68.54	-3.51	65.03	74.00	-8.97	205	25	Peak

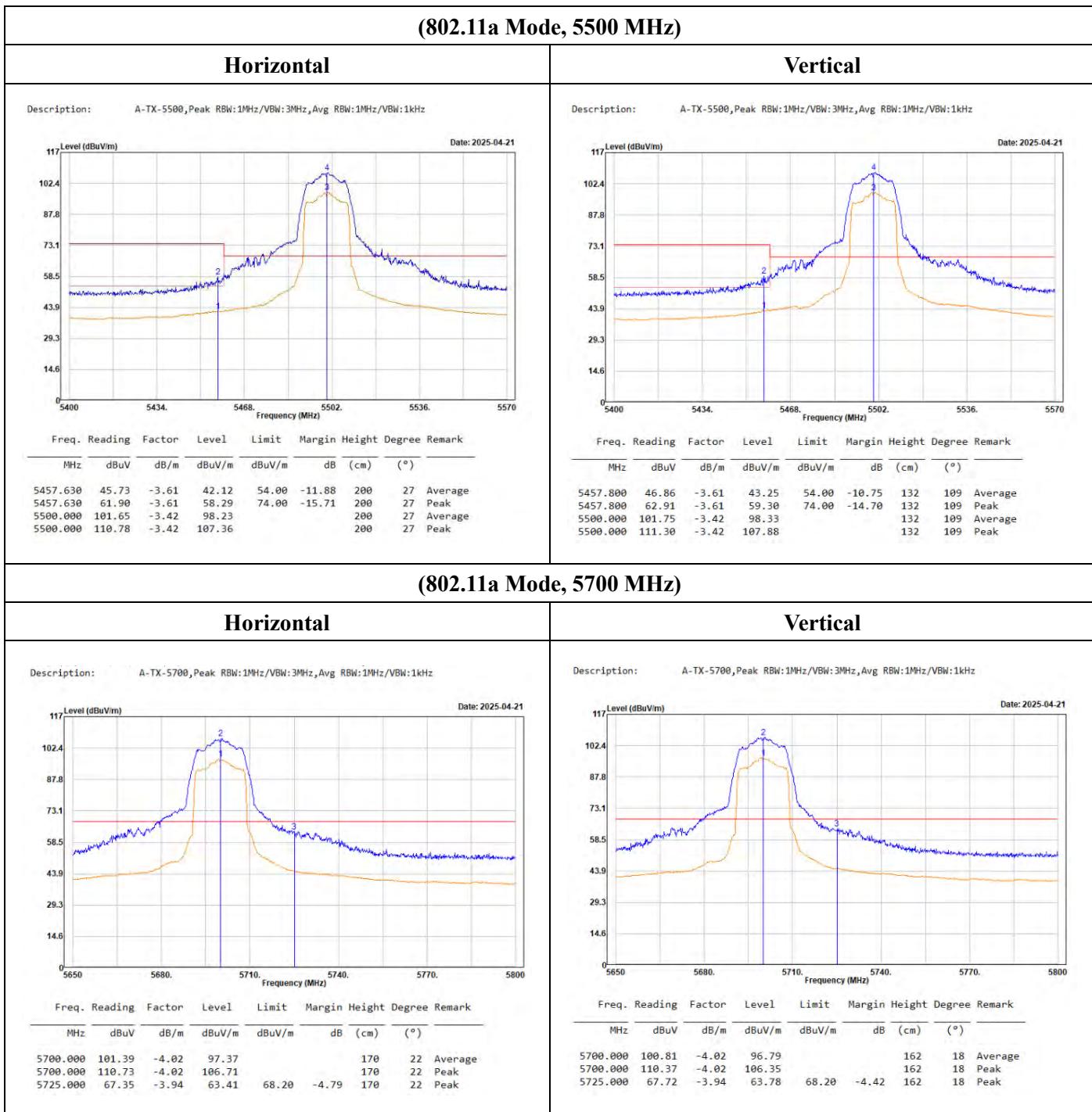
Description: AC80-TX-5290, Peak RBW:1MHz/VBW:3MHz,Avg RBW:1MHz/VBW:5kHz



Freq. Reading Factor Level Limit Margin Height Degree Remark

MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5149.630	45.37	-2.79	42.58	54.00	-11.42	229	43	Average
5149.630	57.25	-2.79	54.46	74.00	-19.54	229	43	Peak
5290.000	93.54	-3.38	90.24			229	43	Average
5290.000	103.14	-3.38	99.84			229	43	Peak
5351.350	53.97	-3.58	50.47	54.00	-3.53	229	43	Average
5351.350	66.03	-3.58	62.53	74.00	-11.47	229	43	Peak

## 5470-5725 MHz



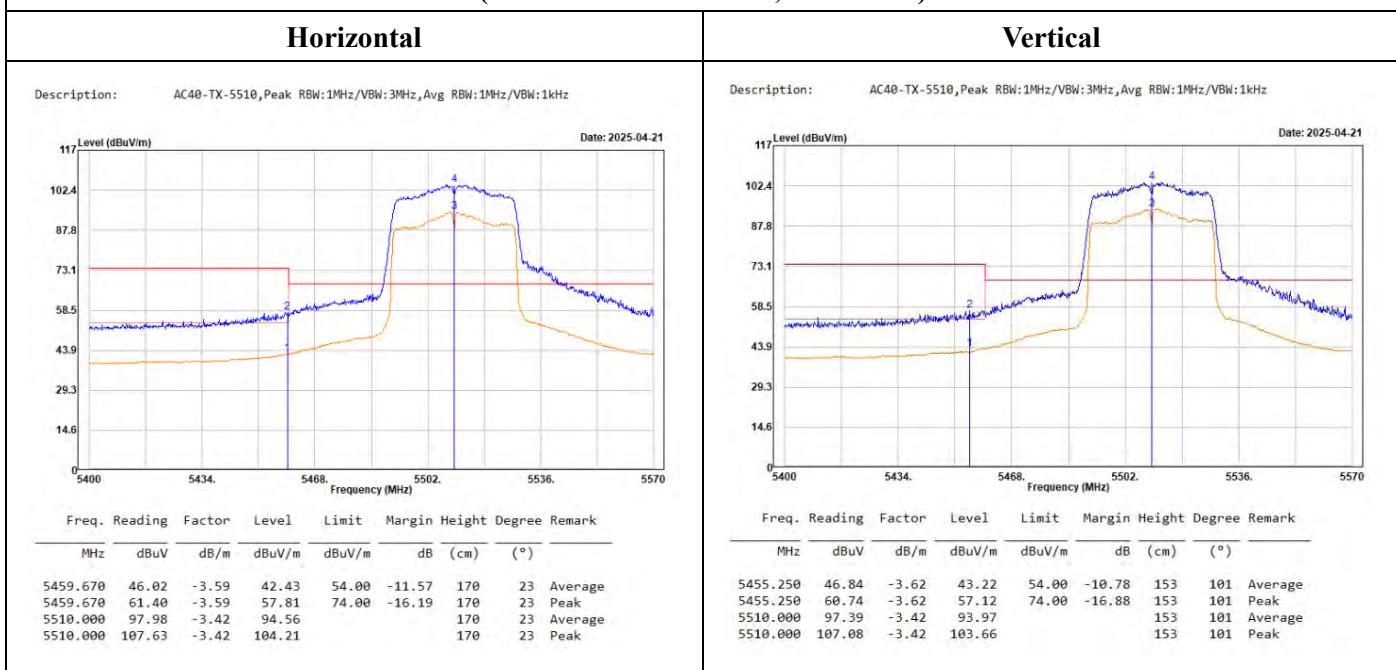
## (802.11ac VHT20 Mode, 5500 MHz)

Horizontal	Vertical																																																																																																
<p>Description: AC20-TX-5500, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz</p> <p>Date: 2025-04-21</p> <table border="1"> <thead> <tr> <th>Freq. Reading</th> <th>Factor</th> <th>Level</th> <th>Limit</th> <th>Margin</th> <th>Height</th> <th>Degree</th> <th>Remark</th> </tr> <tr> <th>MHz</th> <th>dBuV</th> <th>dB/m</th> <th>dBuV/m</th> <th>dBuV/m</th> <th>dB</th> <th>(cm)</th> <th>(°)</th> </tr> </thead> <tbody> <tr> <td>5459.670</td> <td>44.24</td> <td>-3.59</td> <td>40.65</td> <td>54.00</td> <td>-13.35</td> <td>126</td> <td>19 Average</td> </tr> <tr> <td>5459.670</td> <td>61.02</td> <td>-3.59</td> <td>57.43</td> <td>74.00</td> <td>-16.57</td> <td>126</td> <td>19 Peak</td> </tr> <tr> <td>5500.000</td> <td>99.91</td> <td>-3.42</td> <td>96.49</td> <td></td> <td></td> <td>126</td> <td>19 Average</td> </tr> <tr> <td>5500.000</td> <td>110.10</td> <td>-3.42</td> <td>106.68</td> <td></td> <td></td> <td>126</td> <td>19 Peak</td> </tr> </tbody> </table>	Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	5459.670	44.24	-3.59	40.65	54.00	-13.35	126	19 Average	5459.670	61.02	-3.59	57.43	74.00	-16.57	126	19 Peak	5500.000	99.91	-3.42	96.49			126	19 Average	5500.000	110.10	-3.42	106.68			126	19 Peak	<p>Description: AC20-TX-5500, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz</p> <p>Date: 2025-04-21</p> <table border="1"> <thead> <tr> <th>Freq. Reading</th> <th>Factor</th> <th>Level</th> <th>Limit</th> <th>Margin</th> <th>Height</th> <th>Degree</th> <th>Remark</th> </tr> <tr> <th>MHz</th> <th>dBuV</th> <th>dB/m</th> <th>dBuV/m</th> <th>dBuV/m</th> <th>dB</th> <th>(cm)</th> <th>(°)</th> </tr> </thead> <tbody> <tr> <td>5457.970</td> <td>44.60</td> <td>-3.61</td> <td>40.99</td> <td>54.00</td> <td>-13.01</td> <td>100</td> <td>294 Average</td> </tr> <tr> <td>5457.970</td> <td>61.46</td> <td>-3.61</td> <td>57.85</td> <td>74.00</td> <td>-16.15</td> <td>100</td> <td>294 Peak</td> </tr> <tr> <td>5500.000</td> <td>99.83</td> <td>-3.42</td> <td>96.41</td> <td></td> <td></td> <td>100</td> <td>294 Average</td> </tr> <tr> <td>5500.000</td> <td>110.10</td> <td>-3.42</td> <td>106.68</td> <td></td> <td></td> <td>100</td> <td>294 Peak</td> </tr> </tbody> </table>	Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	5457.970	44.60	-3.61	40.99	54.00	-13.01	100	294 Average	5457.970	61.46	-3.61	57.85	74.00	-16.15	100	294 Peak	5500.000	99.83	-3.42	96.41			100	294 Average	5500.000	110.10	-3.42	106.68			100	294 Peak
Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark																																																																																										
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)																																																																																										
5459.670	44.24	-3.59	40.65	54.00	-13.35	126	19 Average																																																																																										
5459.670	61.02	-3.59	57.43	74.00	-16.57	126	19 Peak																																																																																										
5500.000	99.91	-3.42	96.49			126	19 Average																																																																																										
5500.000	110.10	-3.42	106.68			126	19 Peak																																																																																										
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MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)																																																																																										
5457.970	44.60	-3.61	40.99	54.00	-13.01	100	294 Average																																																																																										
5457.970	61.46	-3.61	57.85	74.00	-16.15	100	294 Peak																																																																																										
5500.000	99.83	-3.42	96.41			100	294 Average																																																																																										
5500.000	110.10	-3.42	106.68			100	294 Peak																																																																																										

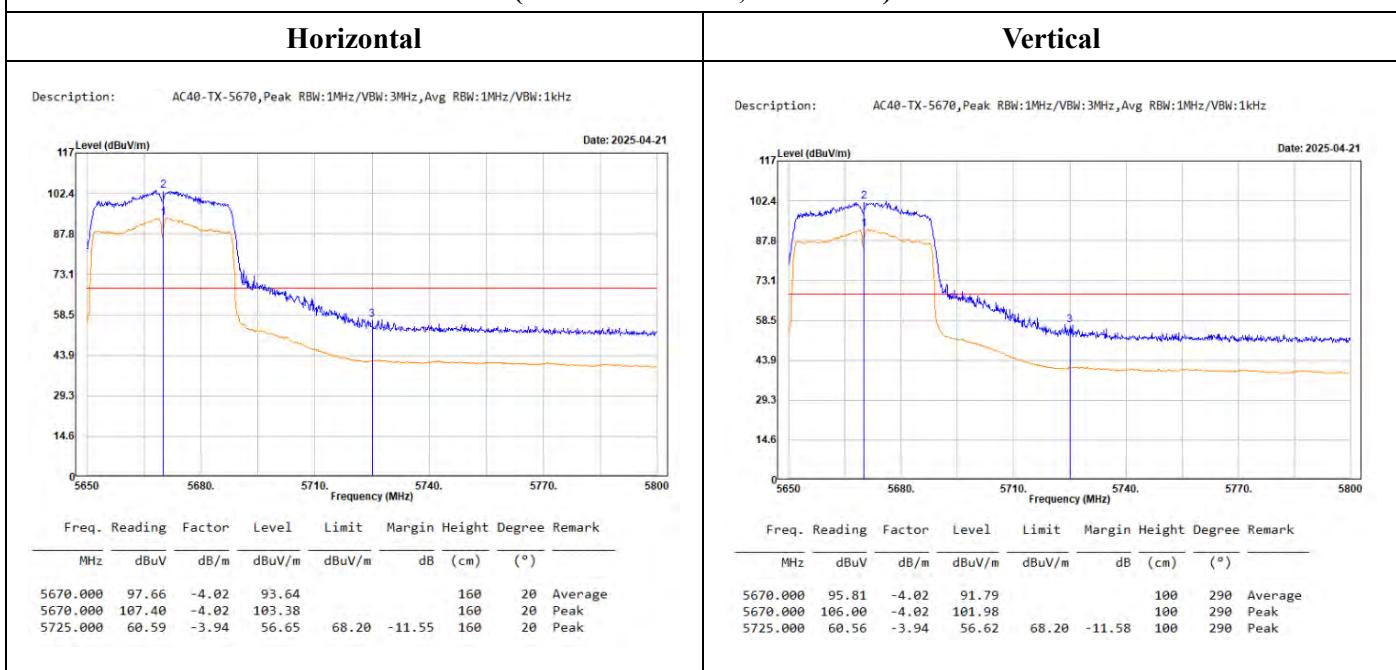
## (802.11ac VHT20 Mode, 5700 MHz)

Horizontal	Vertical																																																																																
<p>Description: AC20-TX-5700, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz</p> <p>Date: 2025-04-21</p> <table border="1"> <thead> <tr> <th>Freq. Reading</th> <th>Factor</th> <th>Level</th> <th>Limit</th> <th>Margin</th> <th>Height</th> <th>Degree</th> <th>Remark</th> </tr> <tr> <th>MHz</th> <th>dBuV</th> <th>dB/m</th> <th>dBuV/m</th> <th>dBuV/m</th> <th>dB</th> <th>(cm)</th> <th>(°)</th> </tr> </thead> <tbody> <tr> <td>5700.000</td> <td>99.17</td> <td>-4.02</td> <td>95.15</td> <td></td> <td>107</td> <td>16</td> <td>Average</td> </tr> <tr> <td>5700.000</td> <td>109.07</td> <td>-4.02</td> <td>105.05</td> <td></td> <td>107</td> <td>16</td> <td>Peak</td> </tr> <tr> <td>5725.000</td> <td>65.98</td> <td>-3.94</td> <td>62.04</td> <td>68.20</td> <td>-6.16</td> <td>107</td> <td>16 Peak</td> </tr> </tbody> </table>	Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	5700.000	99.17	-4.02	95.15		107	16	Average	5700.000	109.07	-4.02	105.05		107	16	Peak	5725.000	65.98	-3.94	62.04	68.20	-6.16	107	16 Peak	<p>Description: AC20-TX-5700, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz</p> <p>Date: 2025-04-21</p> <table border="1"> <thead> <tr> <th>Freq. Reading</th> <th>Factor</th> <th>Level</th> <th>Limit</th> <th>Margin</th> <th>Height</th> <th>Degree</th> <th>Remark</th> </tr> <tr> <th>MHz</th> <th>dBuV</th> <th>dB/m</th> <th>dBuV/m</th> <th>dBuV/m</th> <th>dB</th> <th>(cm)</th> <th>(°)</th> </tr> </thead> <tbody> <tr> <td>5700.000</td> <td>98.54</td> <td>-4.02</td> <td>94.52</td> <td></td> <td></td> <td>100</td> <td>291 Average</td> </tr> <tr> <td>5700.000</td> <td>109.20</td> <td>-4.02</td> <td>105.18</td> <td></td> <td></td> <td>100</td> <td>291 Peak</td> </tr> <tr> <td>5725.000</td> <td>65.14</td> <td>-3.94</td> <td>61.20</td> <td>68.20</td> <td>-7.00</td> <td>100</td> <td>291 Peak</td> </tr> </tbody> </table>	Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	5700.000	98.54	-4.02	94.52			100	291 Average	5700.000	109.20	-4.02	105.18			100	291 Peak	5725.000	65.14	-3.94	61.20	68.20	-7.00	100	291 Peak
Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark																																																																										
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)																																																																										
5700.000	99.17	-4.02	95.15		107	16	Average																																																																										
5700.000	109.07	-4.02	105.05		107	16	Peak																																																																										
5725.000	65.98	-3.94	62.04	68.20	-6.16	107	16 Peak																																																																										
Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark																																																																										
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)																																																																										
5700.000	98.54	-4.02	94.52			100	291 Average																																																																										
5700.000	109.20	-4.02	105.18			100	291 Peak																																																																										
5725.000	65.14	-3.94	61.20	68.20	-7.00	100	291 Peak																																																																										

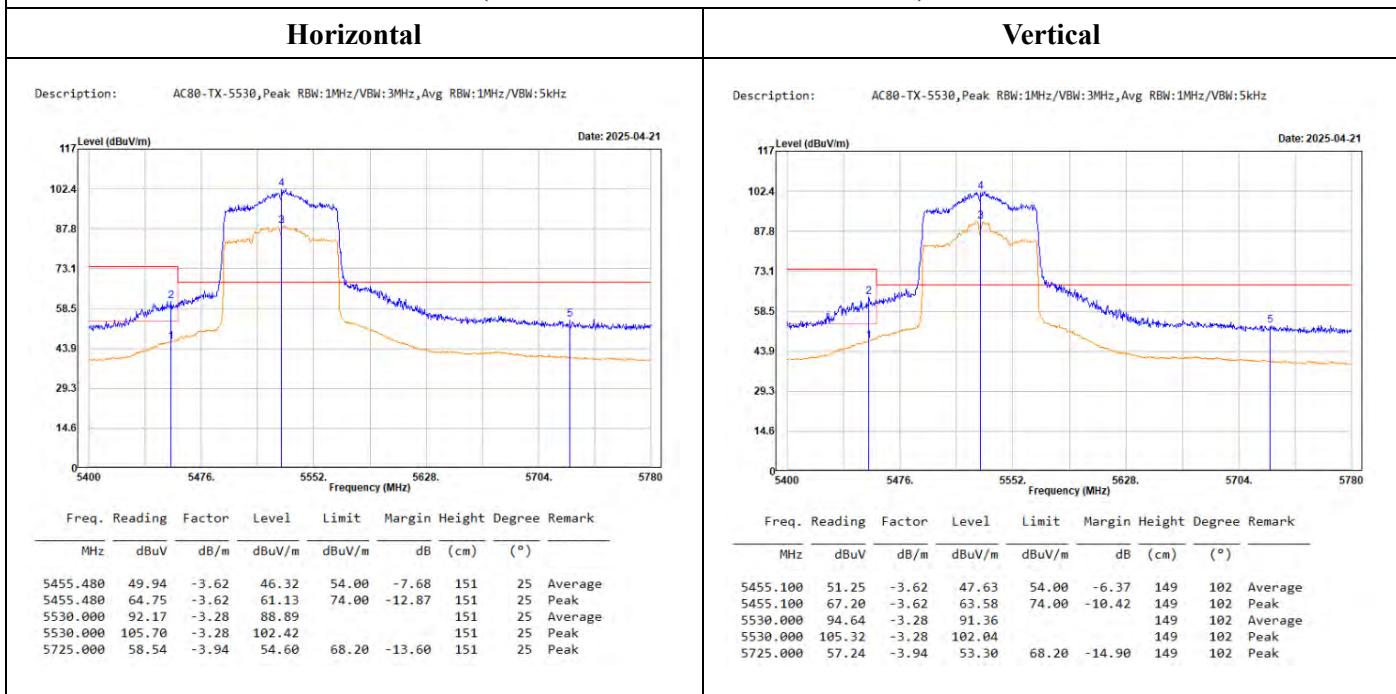
## (802.11ac VHT40 Mode, 5510 MHz)



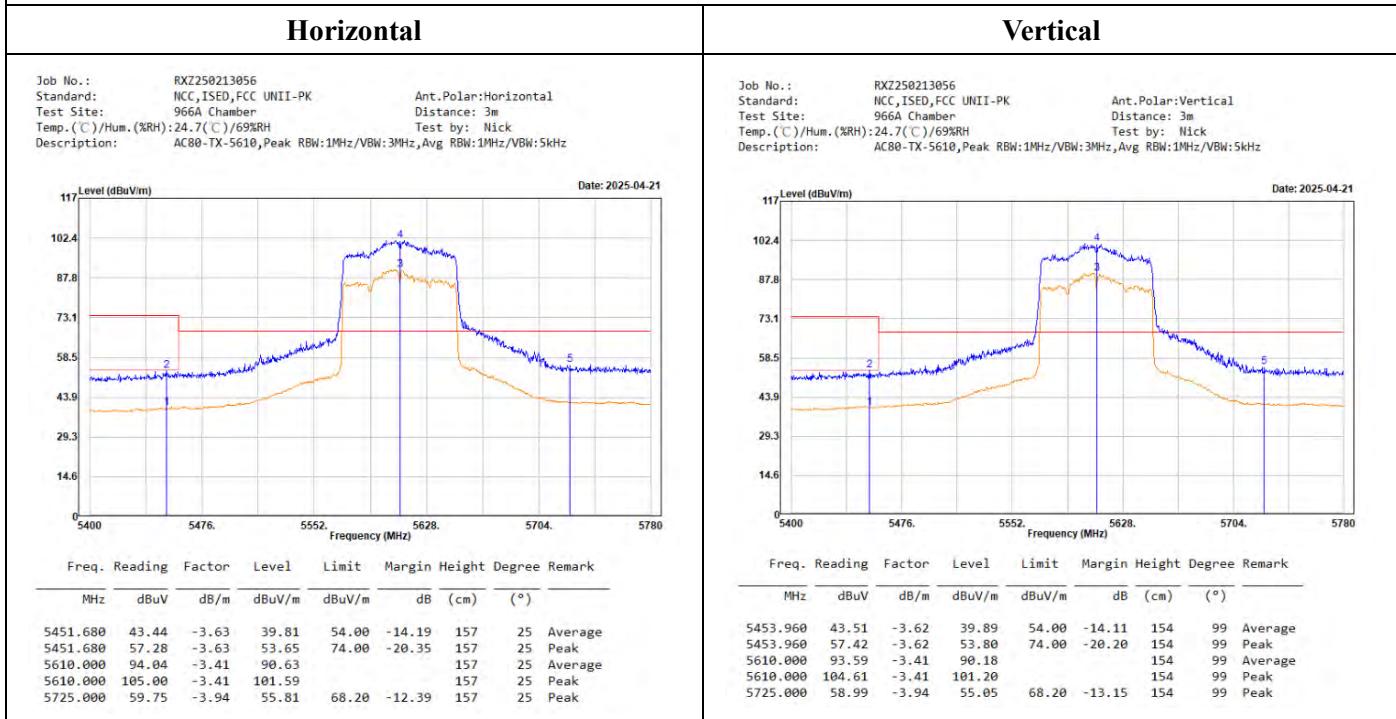
## (802.11ac 40Mode, 5670 MHz)



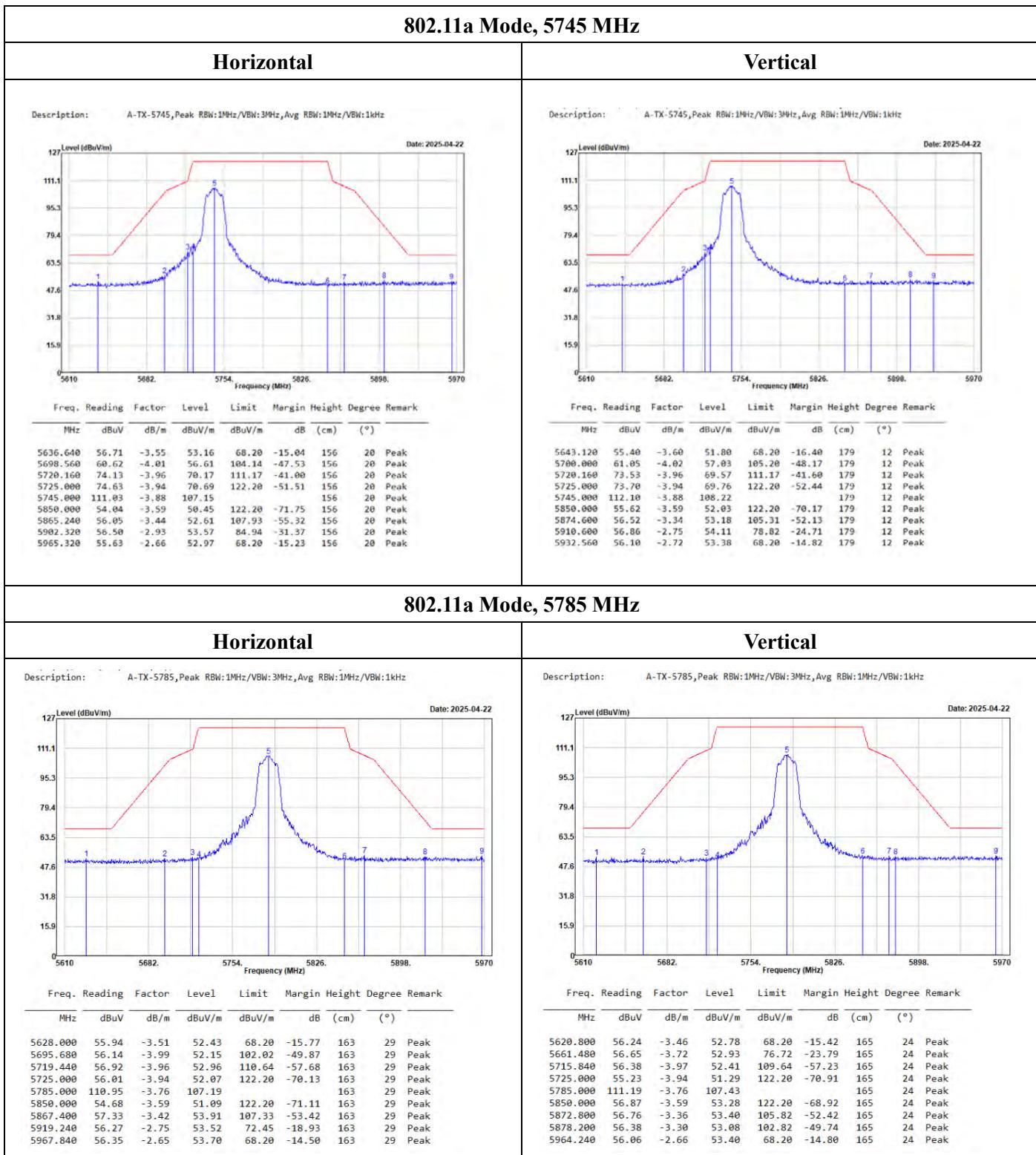
## (802.11ac VHT80 Mode, 5530 MHz)



## (802.11ac VHT80 Mode, 5610 MHz)



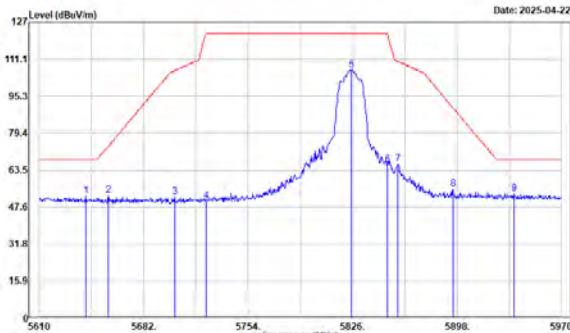
## 5725-5850 MHz



## 802.11a Mode, 5825 MHz

## Horizontal

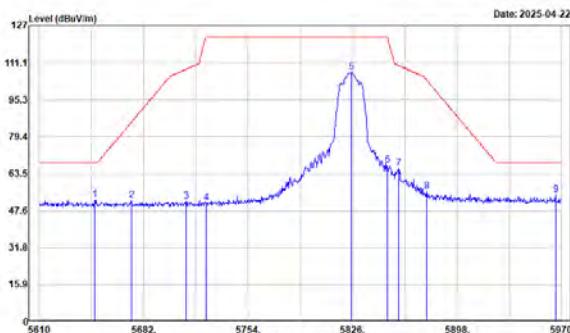
Description: A-TX-5825, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5642.040	55.75	-3.59	52.16	68.20	-16.04	154	27	Peak
5657.520	56.23	-3.69	52.54	73.79	-21.25	154	27	Peak
5703.240	55.89	-4.01	51.88	106.11	-54.23	154	27	Peak
5725.000	54.26	-3.94	50.32	122.20	-71.88	154	27	Peak
5825.000	110.16	-3.65	106.51			154	27	Peak
5850.000	69.39	-3.59	65.80	122.20	-56.40	154	27	Peak
5857.320	69.49	-3.52	65.97	110.15	-44.18	154	27	Peak
5895.120	58.59	-3.12	55.47	90.27	-34.80	154	27	Peak
5937.240	56.15	-2.72	53.43	68.20	-14.77	154	27	Peak

## Vertical

Description: A-TX-5825, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz

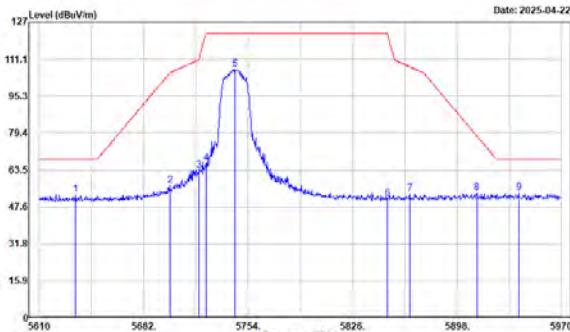


Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5648.160	55.81	-3.63	52.18	68.20	-16.02	148	26	Peak
5673.360	55.81	-3.81	52.00	85.53	-33.53	148	26	Peak
5711.160	55.65	-3.99	51.66	108.33	-56.67	148	26	Peak
5725.060	54.94	-3.94	51.00	122.20	-71.20	148	26	Peak
5825.000	110.76	-3.65	107.11			148	26	Peak
5850.000	78.66	-3.59	67.87	122.20	-55.13	148	26	Peak
5857.680	69.32	-3.51	65.81	110.85	-44.24	148	26	Peak
5877.120	59.28	-3.31	55.89	103.62	-47.73	148	26	Peak
5966.040	56.96	-2.66	54.30	68.20	-13.90	148	26	Peak

## 802.11ac VHT20 Mode, 5745 MHz

## Horizontal

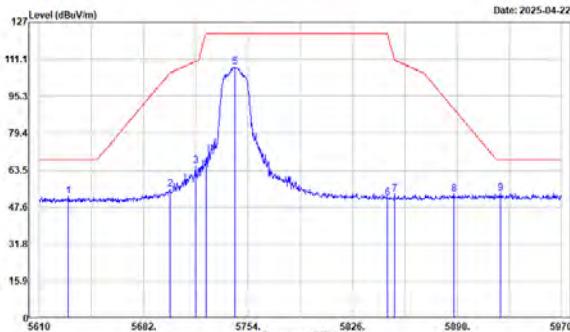
Description: AC20-TX-5745, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5634.840	56.55	-3.54	53.01	68.20	-15.19	170	21	Peak
5700.000	60.81	-4.02	56.79	105.20	-48.41	170	21	Peak
5720.160	67.41	-3.96	63.45	111.17	-47.72	170	21	Peak
5725.000	70.27	-3.94	66.33	122.20	-55.87	170	21	Peak
5745.000	110.67	-3.88	106.79			170	21	Peak
5850.000	54.81	-3.59	51.22	122.20	-70.98	170	21	Peak
5865.240	56.76	-3.44	53.32	107.93	-54.61	170	21	Peak
5911.680	56.52	-2.75	53.77	78.03	-24.26	170	21	Peak
5940.480	56.39	-2.70	53.69	68.20	-14.51	170	21	Peak

## Vertical

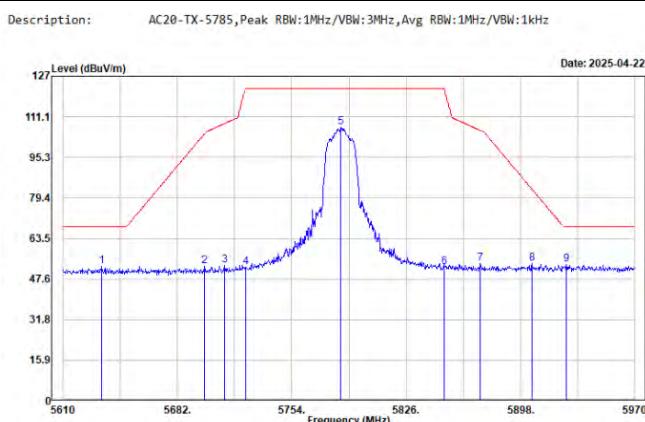
Description: AC20-TX-5745, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5630.160	55.76	-3.51	52.25	68.20	-15.95	189	8	Peak
5700.000	59.55	-4.02	55.53	105.20	-49.67	189	8	Peak
5717.640	69.36	-3.96	65.40	110.14	-44.74	189	8	Peak
5725.000	68.93	-3.94	64.99	122.20	-57.21	189	8	Peak
5745.000	111.67	-3.88	107.79			189	8	Peak
5850.000	55.05	-3.59	51.46	122.20	-70.74	189	8	Peak
5854.800	56.88	-3.54	53.34	111.26	-57.92	189	8	Peak
5895.840	56.45	-3.11	53.34	89.74	-36.40	189	8	Peak
5928.240	56.43	-2.73	53.70	68.20	-14.50	189	8	Peak

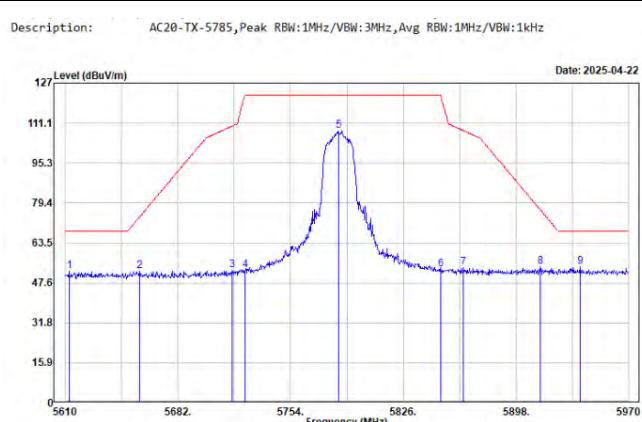
## 802.11ac VHT20 Mode, 5785 MHz

## Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBm		dBm	dBm		cm	(°)	
5634.480	56.08	-3.54	52.54	68.20	-15.66	179	24	Peak
5699.280	56.80	-4.01	52.79	104.67	-51.88	179	24	Peak
5711.520	56.94	-3.99	52.95	108.43	-55.48	179	24	Peak
5725.000	56.12	-3.94	52.18	122.20	-70.02	179	24	Peak
5785.000	110.90	-3.76	107.14			179	24	Peak
5850.000	56.00	-3.59	52.41	122.20	-69.79	179	24	Peak
5872.800	56.99	-3.36	53.63	105.82	-52.19	179	24	Peak
5905.200	56.57	-2.77	53.80	82.81	-29.01	179	24	Peak
5926.800	56.05	-2.74	53.31	68.20	-14.89	179	24	Peak

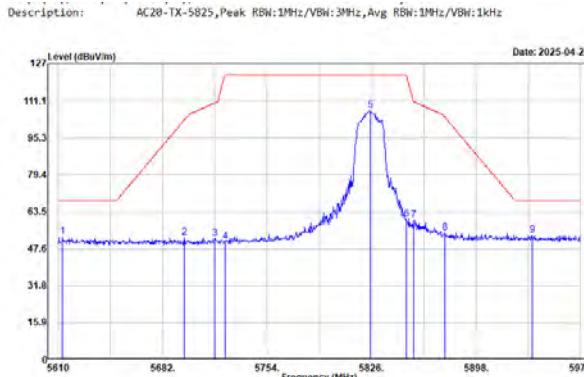
## Vertical



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBm		dBm	dBm		cm	(°)	
5612.520	55.87	-3.42	52.45	68.20	-15.75	180	8	Peak
5657.520	56.02	-3.69	52.33	73.79	-21.46	180	8	Peak
5716.920	56.66	-3.97	52.69	109.94	-57.25	180	8	Peak
5725.000	56.56	-3.94	52.62	122.20	-69.58	180	8	Peak
5785.000	111.79	-3.76	108.03			180	8	Peak
5850.000	56.51	-3.59	52.92	122.20	-69.28	180	8	Peak
5864.520	56.99	-3.44	53.55	108.13	-54.58	180	8	Peak
5913.480	56.75	-2.75	54.00	76.70	-22.70	180	8	Peak
5939.040	56.64	-2.70	53.94	68.20	-14.26	180	8	Peak

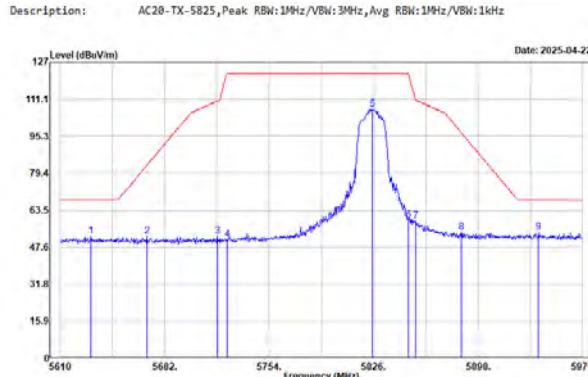
## 802.11ac VHT20 Mode, 5825 MHz

## Horizontal



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBm		dBm	dBm		cm	(°)	
5612.880	56.03	-3.42	52.61	68.20	-15.59	168	30	Peak
5696.760	56.21	-3.99	52.22	102.81	-50.59	168	30	Peak
5718.000	56.04	-3.96	52.08	110.24	-58.16	168	30	Peak
5725.000	54.64	-3.94	50.70	122.20	-71.50	168	30	Peak
5825.000	110.61	-3.66	106.95			168	30	Peak
5850.000	63.93	-3.59	66.34	122.20	-61.86	168	30	Peak
5854.800	63.30	-3.54	59.76	111.26	-51.58	168	30	Peak
5876.760	57.61	-3.31	54.30	103.89	-49.59	168	30	Peak
5936.880	55.99	-2.72	53.27	68.20	-14.93	168	30	Peak

## Vertical

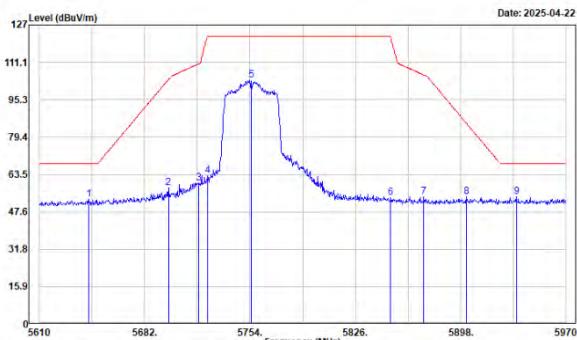


Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBm		dBm	dBm		cm	(°)	
5631.240	55.74	-3.52	52.22	68.20	-15.98	144	24	Peak
5669.760	56.07	-3.79	52.28	82.86	-30.58	144	24	Peak
5718.360	56.20	-3.96	52.24	110.34	-58.10	144	24	Peak
5725.000	54.83	-3.94	50.89	122.20	-71.31	144	24	Peak
5825.000	110.48	-3.66	106.82			144	24	Peak
5850.000	62.74	-3.59	59.15	122.20	-63.05	144	24	Peak
5854.800	62.49	-3.54	58.95	111.26	-52.31	144	24	Peak
5886.480	57.40	-3.22	54.18	96.68	-42.50	144	24	Peak
5939.760	56.75	-2.70	54.05	68.20	-14.15	144	24	Peak

## 802.11ac VHT40 Mode, 5755 MHz

## Horizontal

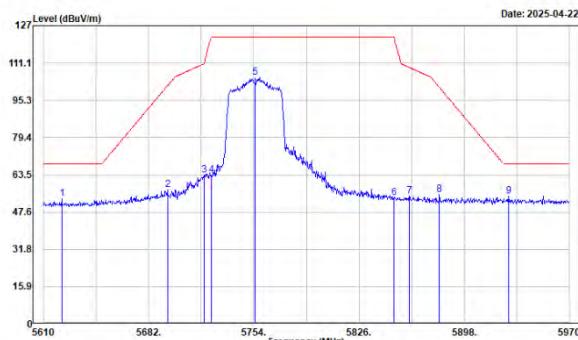
Description: AC48-TX-5755, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5643.480	56.47	-3.60	52.87	68.20	-15.33	184	25	Peak
5698.200	61.67	-4.01	57.66	103.87	-46.21	184	25	Peak
5718.720	63.83	-3.96	59.87	110.44	-50.57	184	25	Peak
5725.000	67.07	-3.94	63.13	122.20	-59.07	184	25	Peak
5755.000	107.28	-3.85	103.43			184	25	Peak
5850.000	57.32	-3.59	53.73	122.20	-68.47	184	25	Peak
5872.800	57.38	-3.36	54.02	105.82	-51.80	184	25	Peak
5901.960	56.85	-2.95	53.90	85.21	-31.31	184	25	Peak
5936.160	56.82	-2.72	54.10	68.20	-14.10	184	25	Peak

## Vertical

Description: AC48-TX-5755, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz

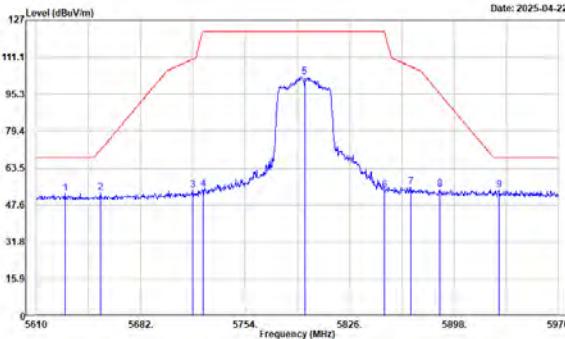


Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5622.600	56.73	-3.48	53.25	68.20	-14.95	183	14	Peak
5694.960	60.97	-3.98	56.99	101.49	-44.50	183	14	Peak
5719.880	67.21	-3.96	63.25	110.74	-47.49	183	14	Peak
5725.000	67.26	-3.94	63.32	122.20	-58.88	183	14	Peak
5755.000	108.83	-3.85	104.98			183	14	Peak
5850.000	57.29	-3.59	53.70	122.20	-68.50	183	14	Peak
5860.560	57.89	-3.47	54.42	109.24	-54.82	183	14	Peak
5881.080	58.34	-3.27	55.07	100.68	-45.61	183	14	Peak
5928.600	57.24	-2.73	54.51	68.20	-13.69	183	14	Peak

## 802.11ac VHT40 Mode, 5795 MHz

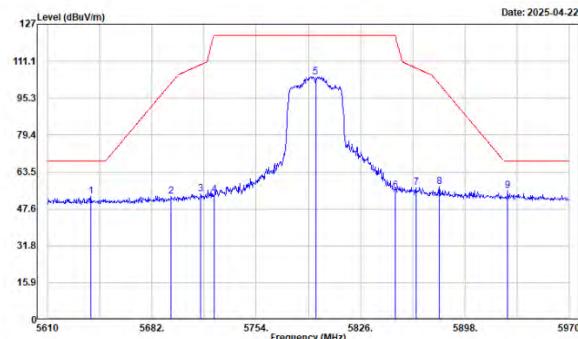
## Horizontal

Description: AC48-TX-5795, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz

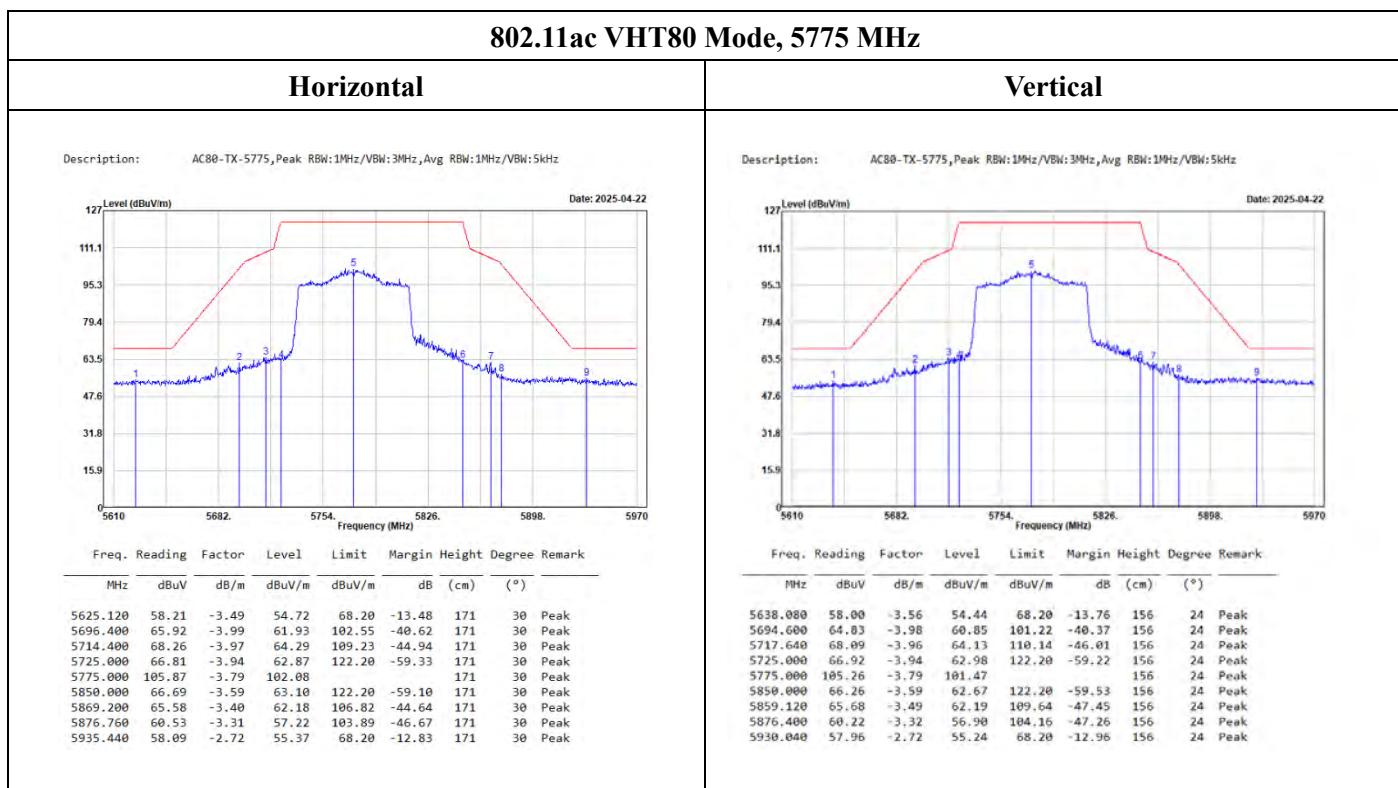


Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5629.800	56.30	-3.52	52.78	68.20	-15.42	183	31	Peak
5654.280	56.53	-3.66	52.87	71.38	-18.51	183	31	Peak
5718.000	58.00	-3.96	54.04	110.24	-56.28	183	31	Peak
5725.000	58.27	-3.94	54.33	122.20	-67.87	183	31	Peak
5795.000	106.20	-3.73	102.47			183	31	Peak
5850.000	57.60	-3.59	54.01	122.20	-68.19	183	31	Peak
5868.480	58.74	-3.41	55.33	107.02	-51.69	183	31	Peak
5887.920	57.56	-3.20	54.36	95.61	-41.25	183	31	Peak
5928.960	56.74	-2.72	54.02	68.20	-14.18	183	31	Peak

Description: AC48-TX-5795, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



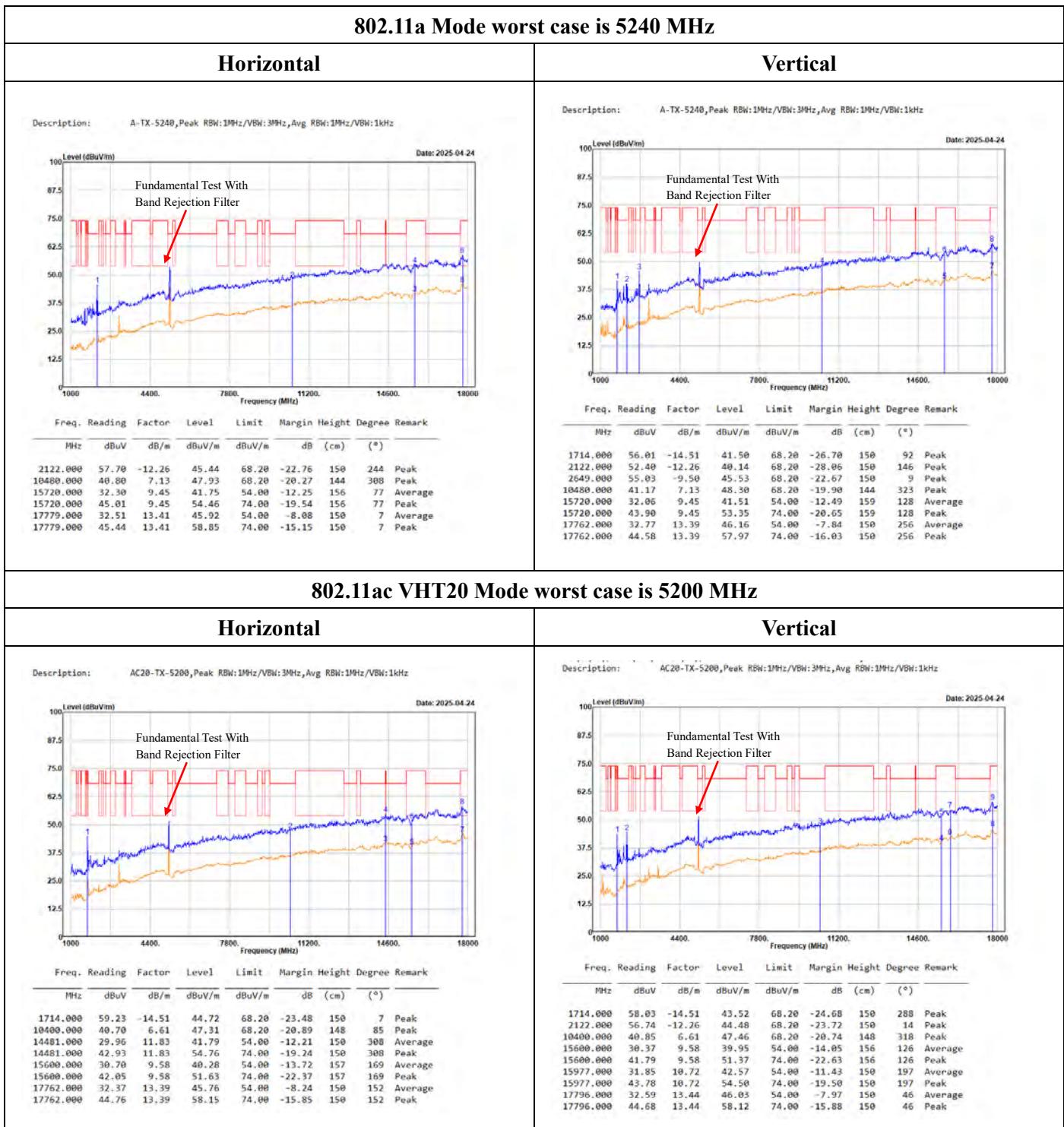
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
5639.880	56.51	-3.58	52.93	68.20	-15.27	185	11	Peak
5695.320	57.07	-3.98	53.89	101.75	-48.66	185	11	Peak
5715.840	58.07	-3.97	54.10	109.64	-55.54	185	11	Peak
5725.000	57.69	-3.94	53.75	122.20	-68.45	185	11	Peak
5795.000	108.18	-3.73	104.45			185	11	Peak
5850.000	58.92	-3.59	55.33	122.20	-66.87	185	11	Peak
5864.160	60.25	-3.45	56.80	108.23	-51.43	185	11	Peak
5880.360	60.52	-3.28	57.24	101.22	-43.98	185	11	Peak
5927.520	58.19	-2.74	55.45	68.20	-12.75	185	11	Peak



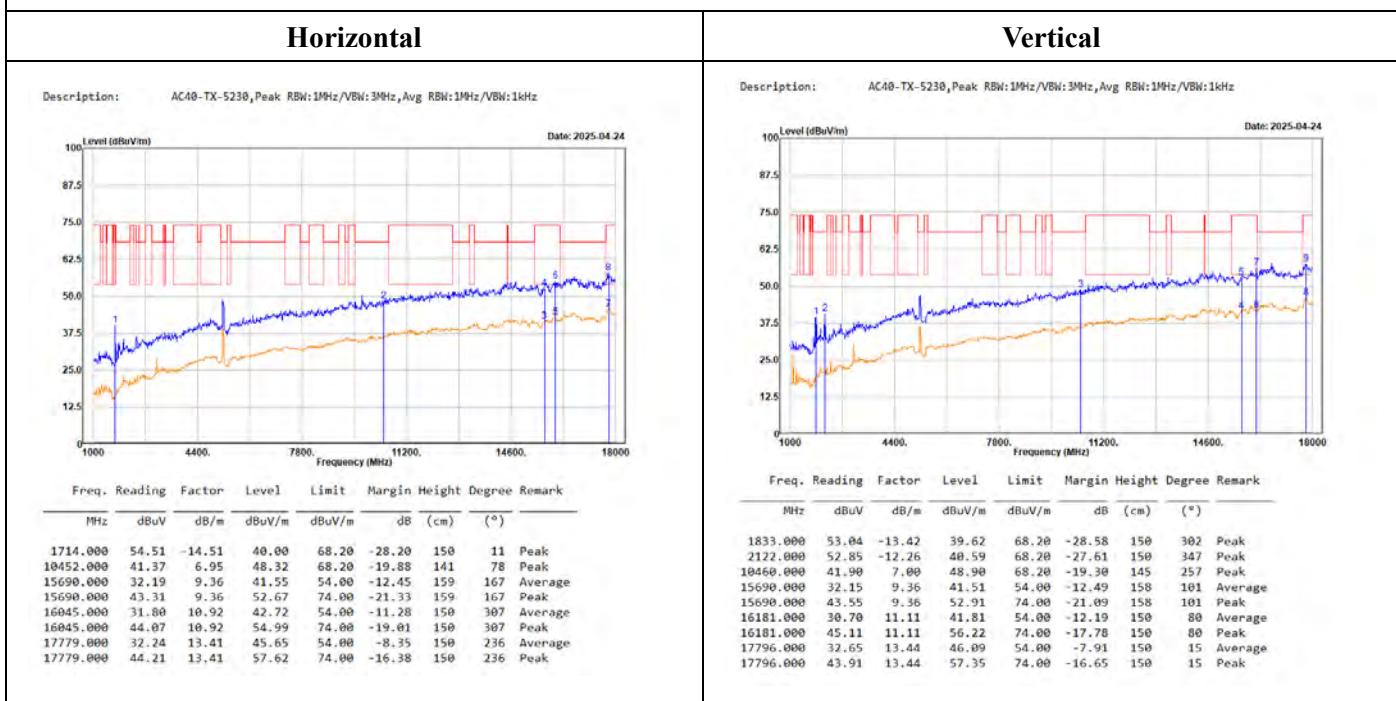
Level = Reading + Factor.

Margin = Level – Limit.

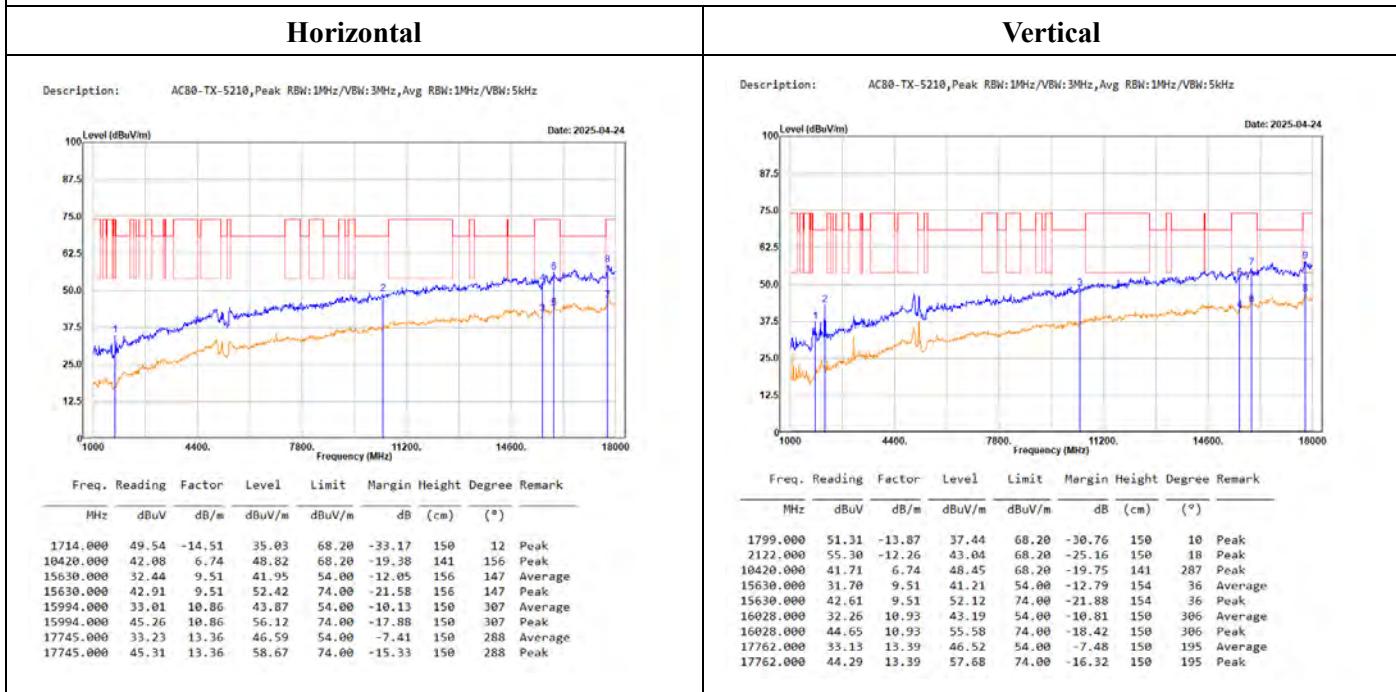
Factor = Antenna Factor + Cable Loss – Amplifier Gain.

**1GHz-18GHz:****5150-5250 MHz**

## 802.11ac VHT40 Mode worst case is 5230 MHz



## 802.11ac VHT80 Mode worst case is 5210 MHz

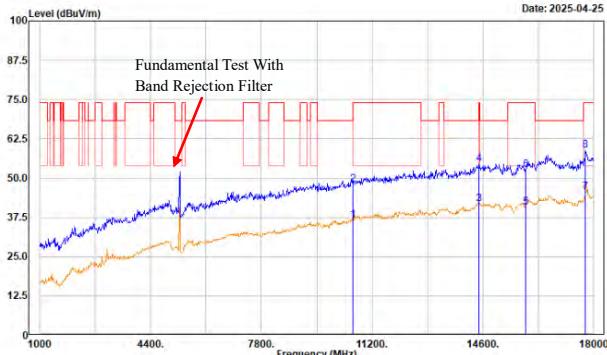


## 5250-5350 MHz

## 802.11a Mode worst case is 5300 MHz

## Horizontal

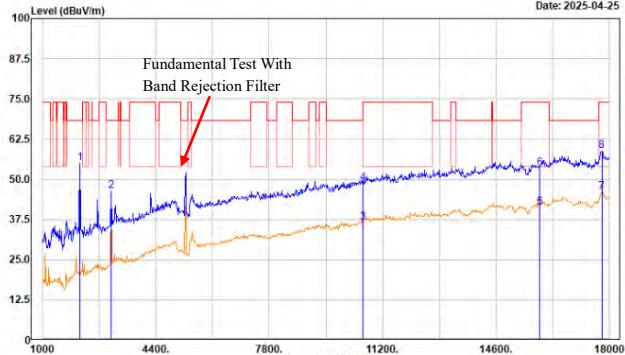
Description: A-TX-5300, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)
10600.000	29.40	7.31	36.71	54.00	-17.29	146	296 Average
10600.000	40.74	7.31	48.05	68.20	-20.15	146	296 Peak
14481.000	30.01	11.83	41.84	54.00	-12.16	158	34 Average
14481.000	42.58	11.83	54.41	74.00	-19.59	150	34 Peak
15900.000	30.64	10.03	40.67	54.00	-13.33	152	124 Average
15900.000	42.68	10.03	52.71	74.00	-21.29	153	124 Peak
17745.000	32.18	13.36	45.54	54.00	-8.46	150	147 Average
17745.000	45.39	13.36	58.75	74.00	-15.25	150	147 Peak

## Vertical

Description: A-TX-5300, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz

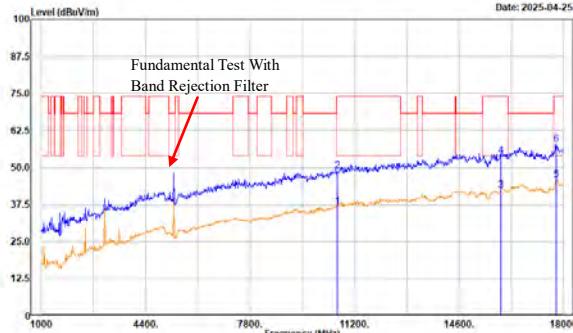


Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)
2122.000	67.36	-12.26	55.10	68.20	-13.10	150	46 Peak
3874.000	54.36	-7.96	46.40	68.20	-21.88	259	40 Peak
10600.000	29.48	7.31	36.71	54.00	-17.29	146	286 Average
10600.000	41.57	7.31	48.88	68.20	-19.32	146	286 Peak
15900.000	31.13	10.03	41.16	54.00	-12.84	156	318 Average
15900.000	43.46	10.03	53.49	74.00	-20.51	156	319 Peak
17779.000	32.57	13.41	45.98	54.00	-8.02	150	211 Average
17779.000	45.51	13.41	58.92	74.00	-15.08	150	211 Peak

## 802.11ac VHT20 Mode worst case is 5320 MHz

## Horizontal

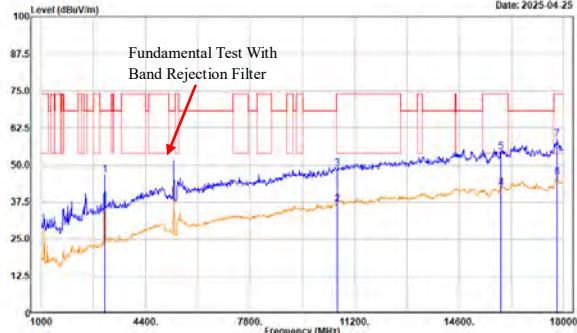
Description: AC28-TX-5320, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)
10640.000	29.59	7.34	36.93	54.00	-17.07	152	136 Average
10640.000	41.31	7.34	48.65	74.00	-25.35	152	136 Peak
15960.000	31.78	10.56	42.34	54.00	-11.66	144	112 Average
15960.000	43.38	10.56	53.94	74.00	-20.06	144	112 Peak
17762.000	32.30	13.39	45.69	54.00	-8.31	150	267 Average
17762.000	44.25	13.39	57.64	74.00	-16.36	150	267 Peak

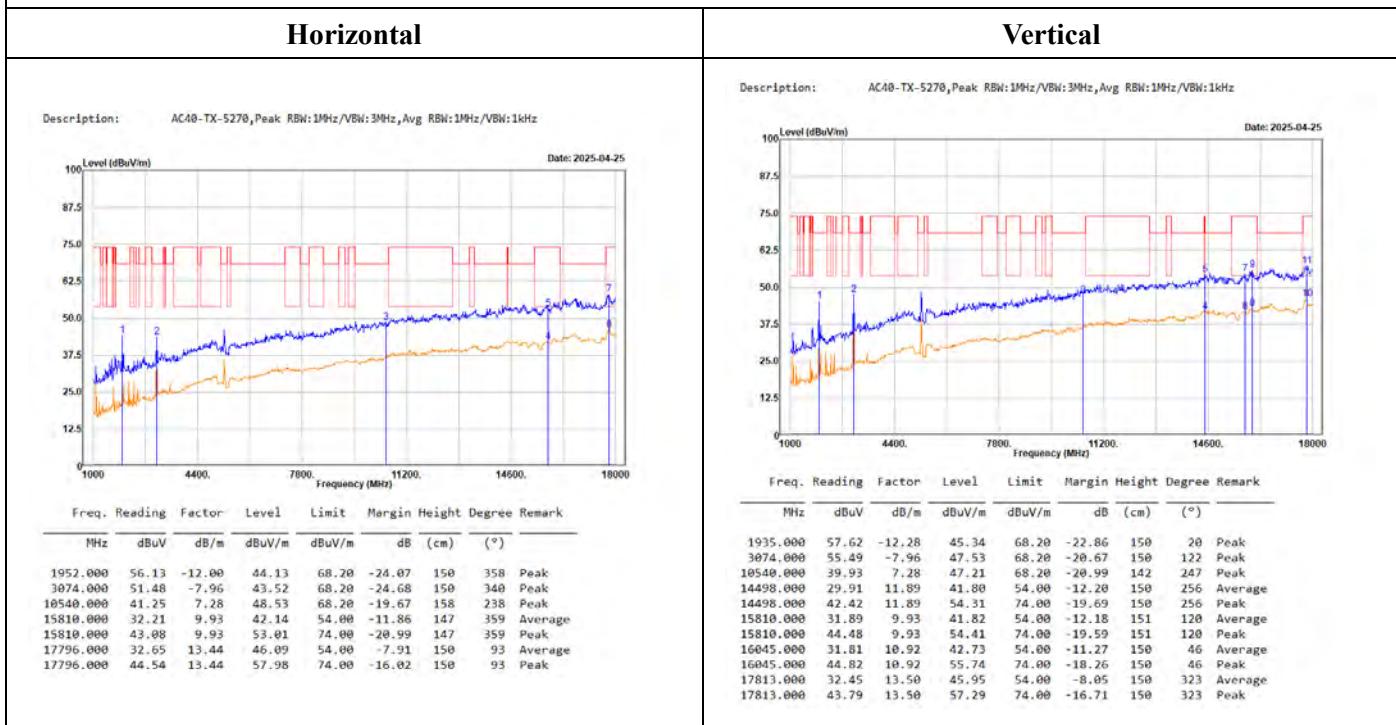
## Vertical

Description: AC28-TX-5320, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz

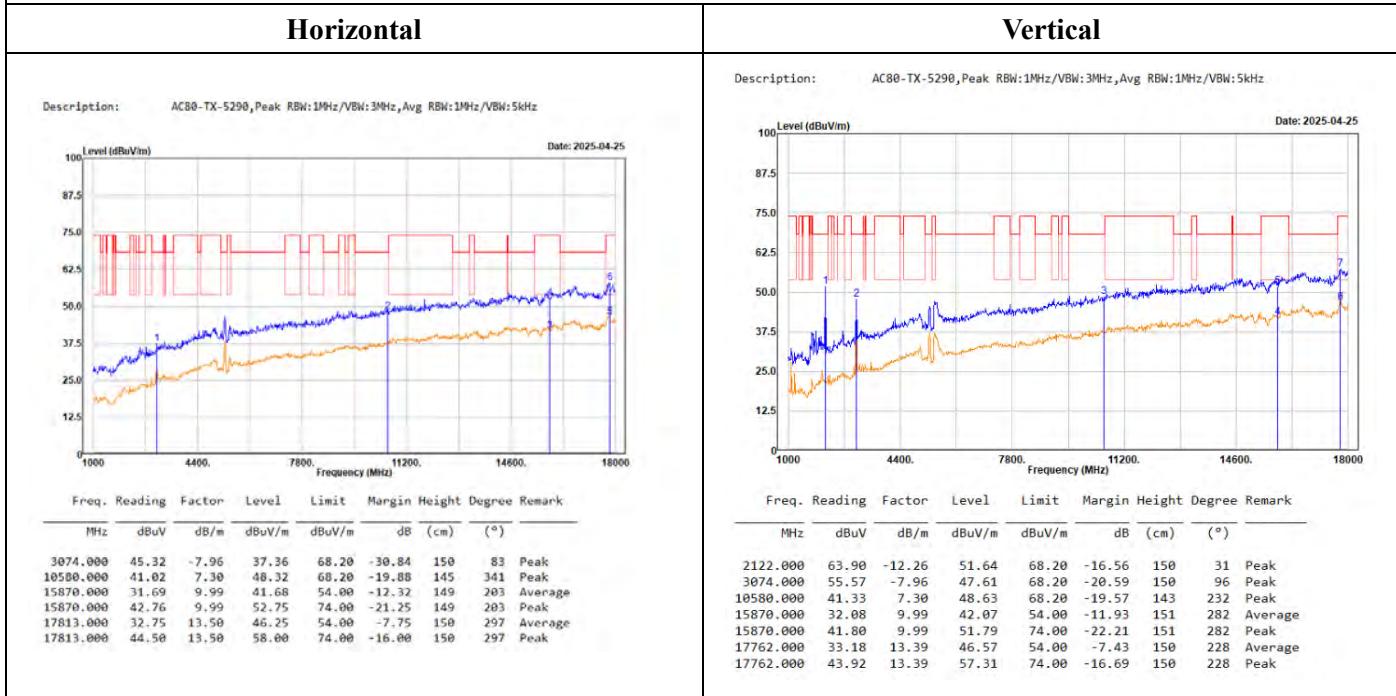


Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)
3074.000	54.66	-7.96	46.70	68.20	-21.50	150	16 Peak
10640.000	29.44	7.34	36.78	54.00	-17.22	149	267 Average
10640.000	41.51	7.34	48.85	74.00	-25.15	149	267 Peak
15960.000	31.77	10.56	42.33	54.00	-11.67	151	125 Average
15960.000	43.82	10.56	54.38	74.00	-19.62	151	125 Peak
17796.000	32.35	13.44	45.79	54.00	-8.21	150	245 Average
17796.000	45.40	13.44	58.84	74.00	-15.16	150	245 Peak

## 802.11ac VHT40 Mode worst case is 5270 MHz



## 802.11ac VHT80 Mode worst case is 5290 MHz

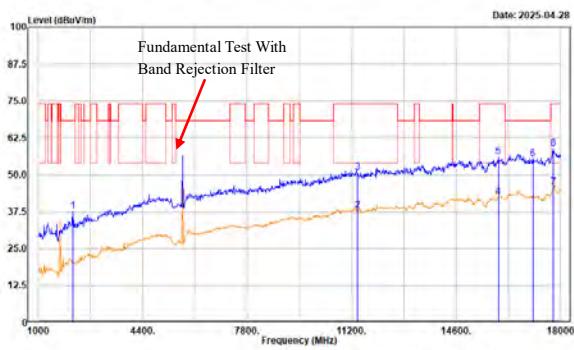


## 5470-5725 MHz

## 802.11a Mode worst case is 5700 MHz

## Horizontal

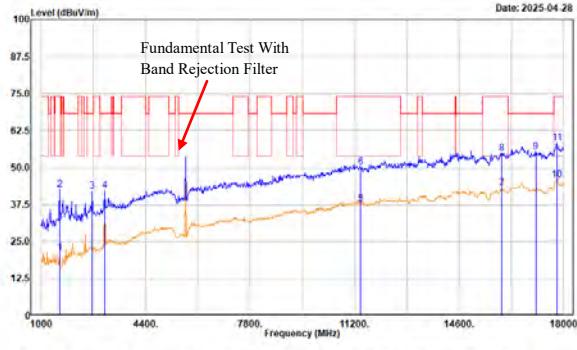
Description: A-TX-5700, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2122.000	50.04	-12.26	37.78	68.20	-30.42	150	201	Peak
11400.000	29.41	8.58	37.99	54.00	-16.01	141	3	Average
11400.000	42.19	8.58	50.77	74.00	-23.23	141	3	Peak
15977.000	31.95	10.72	42.67	54.00	-11.33	150	355	Average
15977.000	45.33	10.72	56.05	74.00	-17.95	150	355	Peak
17100.000	42.89	12.52	55.41	68.20	-12.79	156	12	Peak
17762.000	32.51	13.39	45.90	54.00	-8.10	150	119	Average
17762.000	45.52	13.39	58.91	74.00	-15.09	150	119	Peak

## Vertical

Description: A-TX-5700, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz

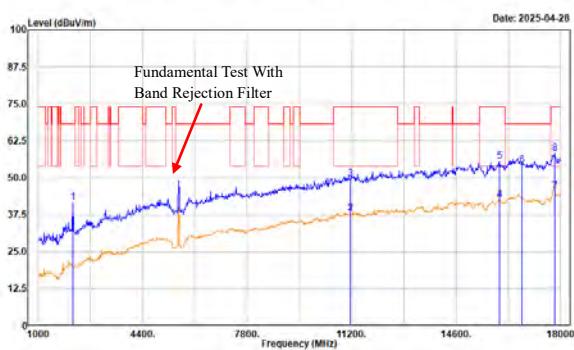


Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
1595.000	35.87	-14.78	21.09	54.00	-32.91	150	6	Average
1595.000	57.31	-14.78	42.53	74.00	-31.47	150	6	Peak
2649.000	51.48	-9.58	41.98	68.20	-26.22	150	19	Peak
3074.000	50.24	-7.96	42.28	68.20	-25.92	150	88	Peak
11400.000	29.17	8.58	37.75	54.00	-16.25	144	190	Average
11400.000	41.55	8.58	50.13	74.00	-23.87	144	190	Peak
15994.000	32.14	10.86	43.00	54.00	-11.00	150	315	Average
15994.000	43.92	10.86	54.78	74.00	-19.22	150	315	Peak
17100.000	42.60	12.52	55.32	68.20	-12.88	155	50	Peak
17779.000	32.32	13.41	45.73	54.00	-8.27	150	204	Average
17779.000	44.94	13.41	58.35	74.00	-15.65	150	204	Peak

## 802.11ac VHT20 Mode worst case is 5580 MHz

## Horizontal

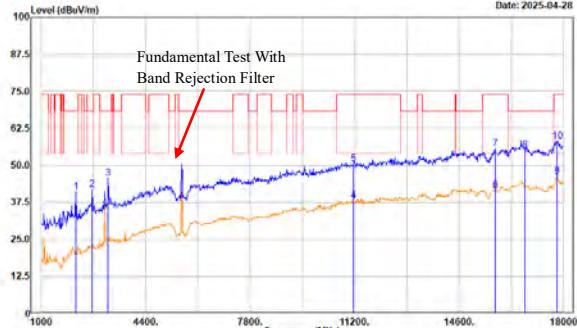
Description: AC20-TX-5580, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2122.000	53.92	-12.26	41.66	68.20	-26.54	150	22	Peak
11160.000	29.27	8.72	37.99	54.00	-16.01	143	156	Average
11160.000	40.76	8.72	49.48	74.00	-24.52	143	156	Peak
16028.000	31.68	10.93	42.61	54.00	-11.39	150	236	Average
16028.000	44.72	10.93	55.65	74.00	-18.35	150	236	Peak
16740.000	42.10	12.22	54.32	68.20	-13.88	156	311	Peak
17813.000	32.14	13.58	45.64	54.00	-8.36	150	5	Average
17813.000	44.88	13.58	58.30	74.00	-15.70	150	5	Peak

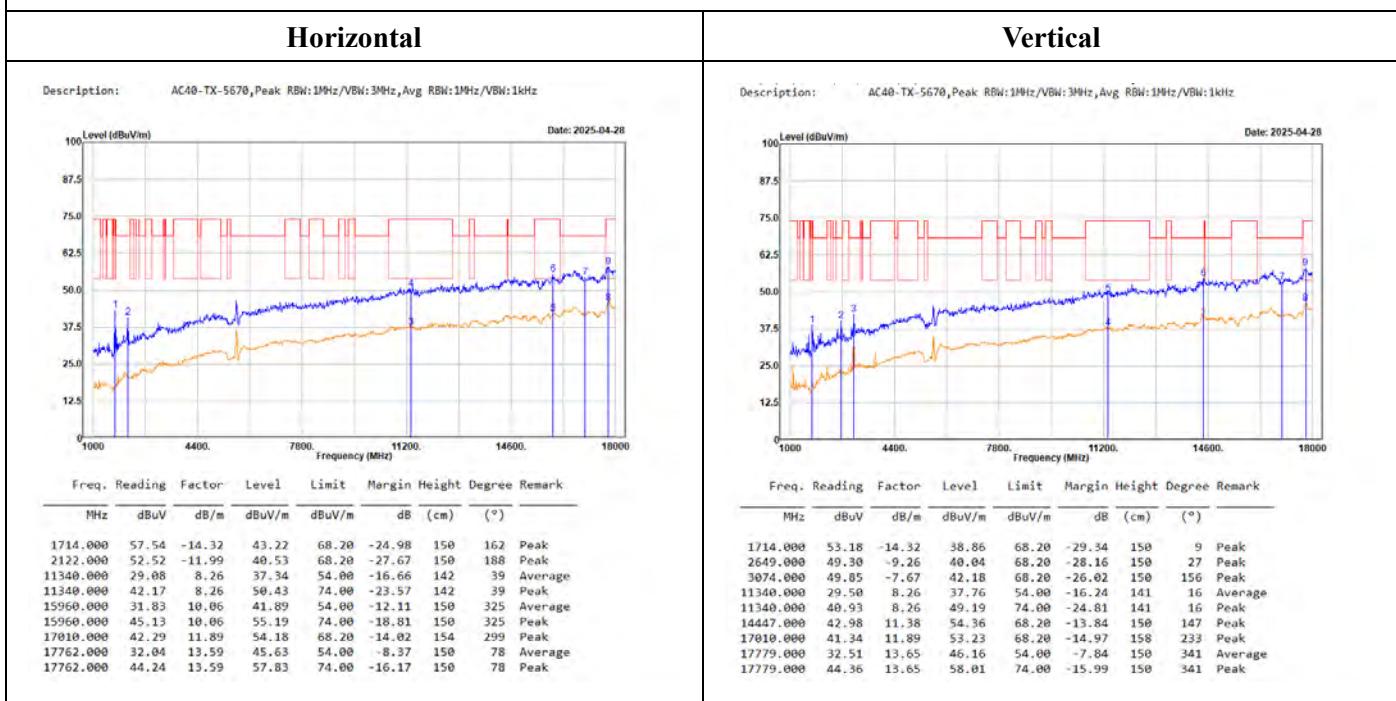
## Vertical

Description: AC20-TX-5580, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz

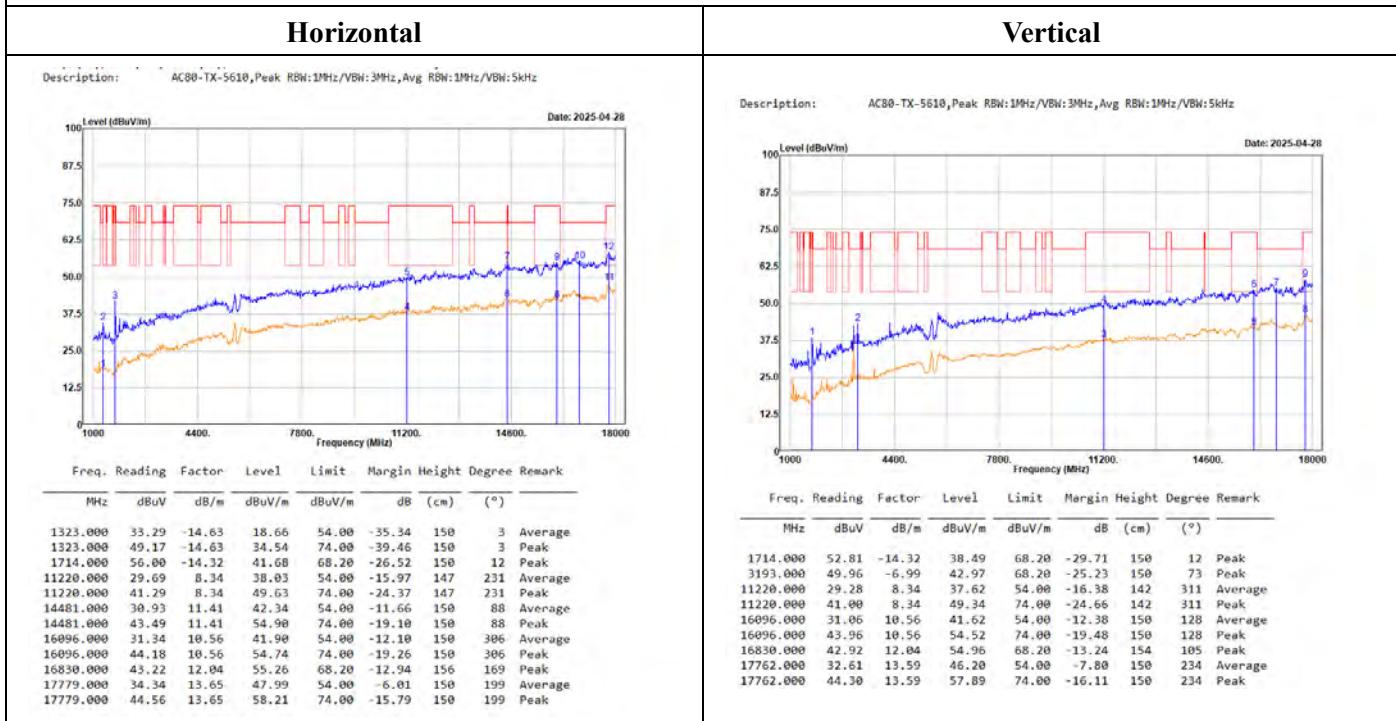


Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
2122.000	53.13	-12.26	40.87	68.20	-27.33	150	6	Peak
2649.000	51.31	-9.58	41.81	68.20	-26.39	150	25	Peak
3176.000	52.88	-7.38	45.50	68.20	-22.70	150	33	Peak
11160.000	29.69	8.72	37.81	54.00	-16.19	147	156	Average
11160.000	41.60	8.72	50.32	74.00	-23.68	147	156	Peak
15773.000	31.84	9.75	41.59	54.00	-12.41	150	344	Average
15773.000	45.77	9.75	55.52	74.00	-18.48	150	344	Peak
16740.000	42.82	12.22	55.04	68.20	-13.16	157	274	Peak
17796.000	32.67	13.44	46.11	54.00	-7.89	150	91	Average
17796.000	44.62	13.44	58.06	74.00	-15.94	150	91	Peak

## 802.11ac VHT40 Mode worst case is 5670 MHz



## 802.11ac VHT80 Mode worst case is 5610 MHz

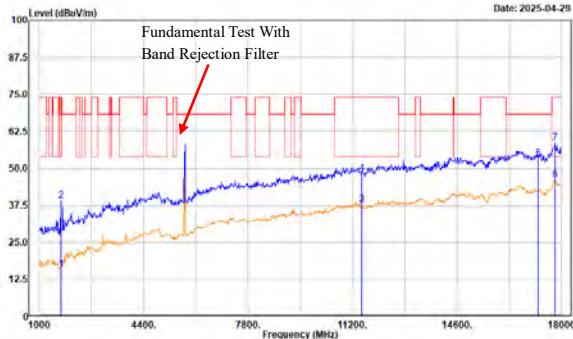


## 5725-5850 MHz

## 802.11a Mode worst case is 5745 MHz

## Horizontal

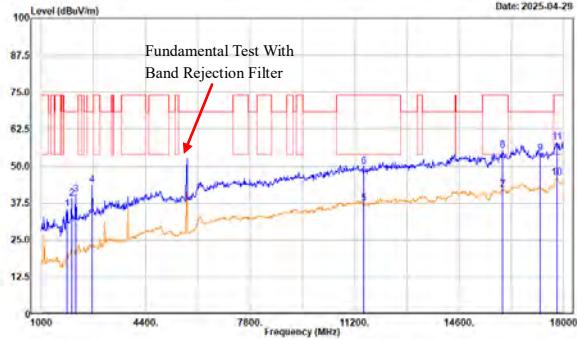
Description: A-TX-5745, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)
1697.000	30.27	-14.46	15.81	54.00	-38.19	150	96 Average
1697.000	53.37	-14.46	38.91	74.00	-35.09	150	96 Peak
11490.000	29.34	8.21	37.55	54.00	-16.45	145	236 Average
11490.000	40.13	8.21	48.34	74.00	-25.66	145	236 Peak
17235.000	40.41	12.63	53.04	68.20	-15.16	159	17 Peak
17796.000	32.29	13.72	46.01	54.00	-7.99	150	349 Average
17796.000	44.87	13.72	58.59	74.00	-15.41	150	349 Peak

## Vertical

Description: A-TX-5745, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz

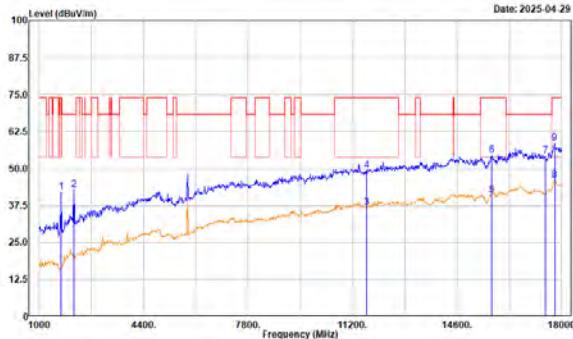


Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)
1833.000	48.67	-13.21	35.46	68.20	-32.74	150	359 Peak
1986.000	50.63	-11.54	39.09	68.20	-29.11	150	324 Peak
2122.000	52.32	-11.99	40.33	68.20	-27.87	150	299 Peak
2649.000	52.89	-9.26	43.63	68.20	-24.57	150	238 Peak
11490.000	29.25	8.21	37.46	54.00	-16.54	142	166 Average
11490.000	41.53	8.21	49.74	74.00	-24.26	142	166 Peak
16028.000	31.61	10.38	41.99	54.00	-12.01	150	9 Average
16028.000	44.98	10.38	55.36	74.00	-18.64	150	9 Peak
17235.000	41.51	12.63	54.14	68.20	-14.06	152	32 Peak
17779.000	32.49	13.65	46.14	54.00	-7.86	150	77 Average
17779.000	44.35	13.65	58.00	74.00	-16.00	150	77 Peak

## 802.11ac VHT20 Mode worst case is 5825 MHz

## Horizontal

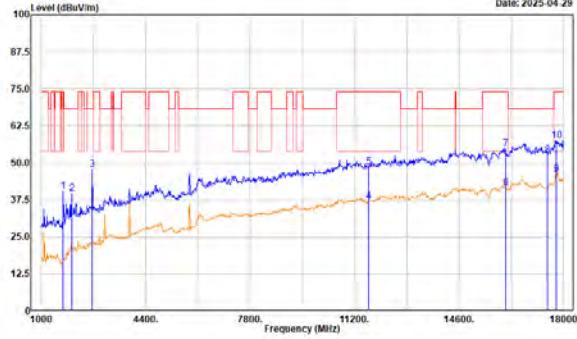
Description: AC28-TX-5825, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz



Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)
1714.000	56.27	-14.32	41.95	68.20	-26.25	150	109 Peak
2122.000	54.72	-11.99	42.73	68.20	-25.47	150	138 Peak
11650.000	28.50	8.38	36.88	54.00	-17.12	149	238 Average
11650.000	41.86	8.38	49.44	74.00	-24.56	149	238 Peak
15722.000	31.92	9.09	41.01	54.00	-12.99	150	29 Average
15722.000	45.50	9.09	54.59	74.00	-19.41	150	29 Peak
17475.000	41.95	12.18	54.13	68.20	-14.07	153	9 Peak
17779.000	32.30	13.65	45.95	54.00	-8.05	150	146 Average
17779.000	44.90	13.65	58.55	74.00	-15.45	150	146 Peak

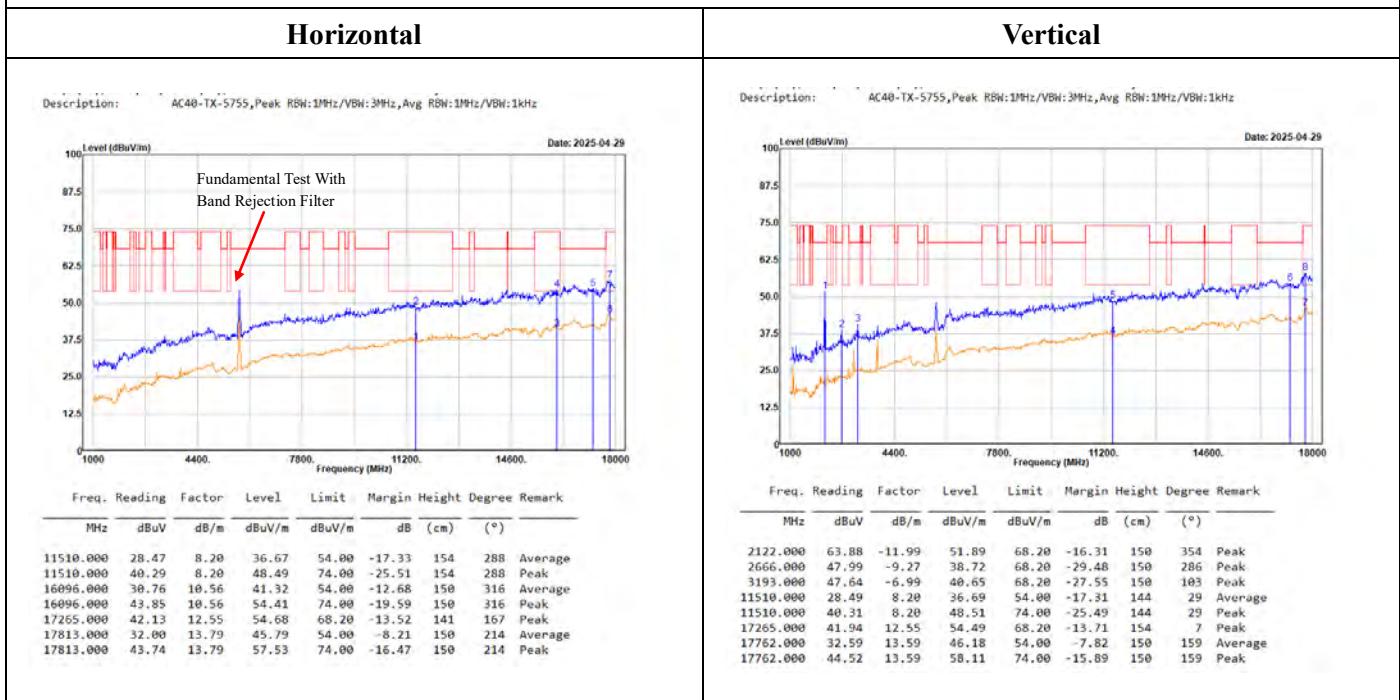
## Vertical

Description: AC28-TX-5825, Peak RBW:1MHz/VBW:3MHz, Avg RBW:1MHz/VBW:1kHz

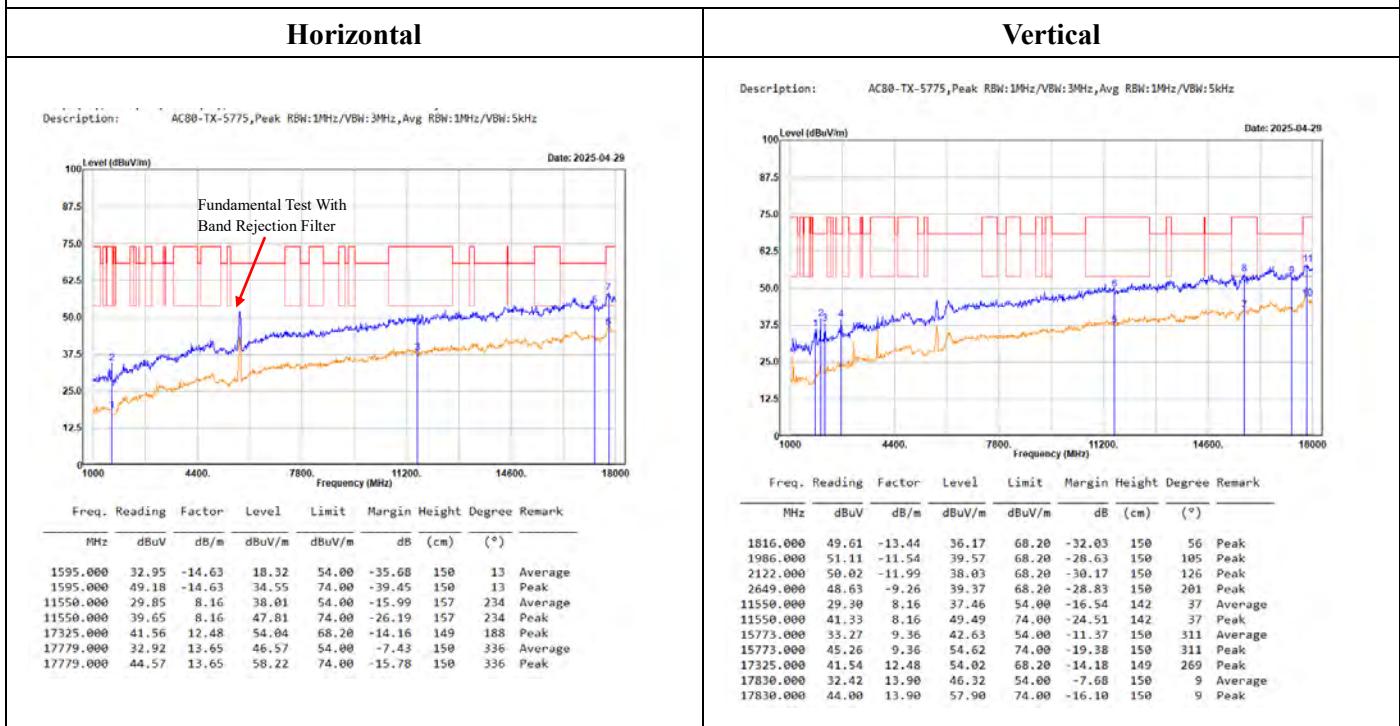


Freq. Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)
1714.000	54.79	-14.32	40.47	68.20	-27.73	150	288 Peak
1986.000	51.01	-11.54	39.47	68.20	-28.73	150	339 Peak
2649.000	56.95	-9.26	47.69	68.20	-20.51	150	5 Peak
11650.000	28.41	8.38	36.79	54.00	-17.21	143	29 Average
11650.000	40.01	8.38	48.39	74.00	-25.61	143	29 Peak
16113.000	30.77	10.59	41.36	54.00	-12.64	150	251 Average
16113.000	44.10	10.59	54.69	74.00	-19.31	150	251 Peak
17475.000	40.36	12.18	52.54	68.20	-15.66	156	321 Peak
17762.000	32.52	13.59	46.11	54.00	-7.89	150	199 Average
17762.000	43.99	13.59	57.58	74.00	-16.42	150	199 Peak

## 802.11ac VHT40 Mode worst case is 5755 MHz



## 802.11ac VHT80 Mode worst case is 5775 MHz



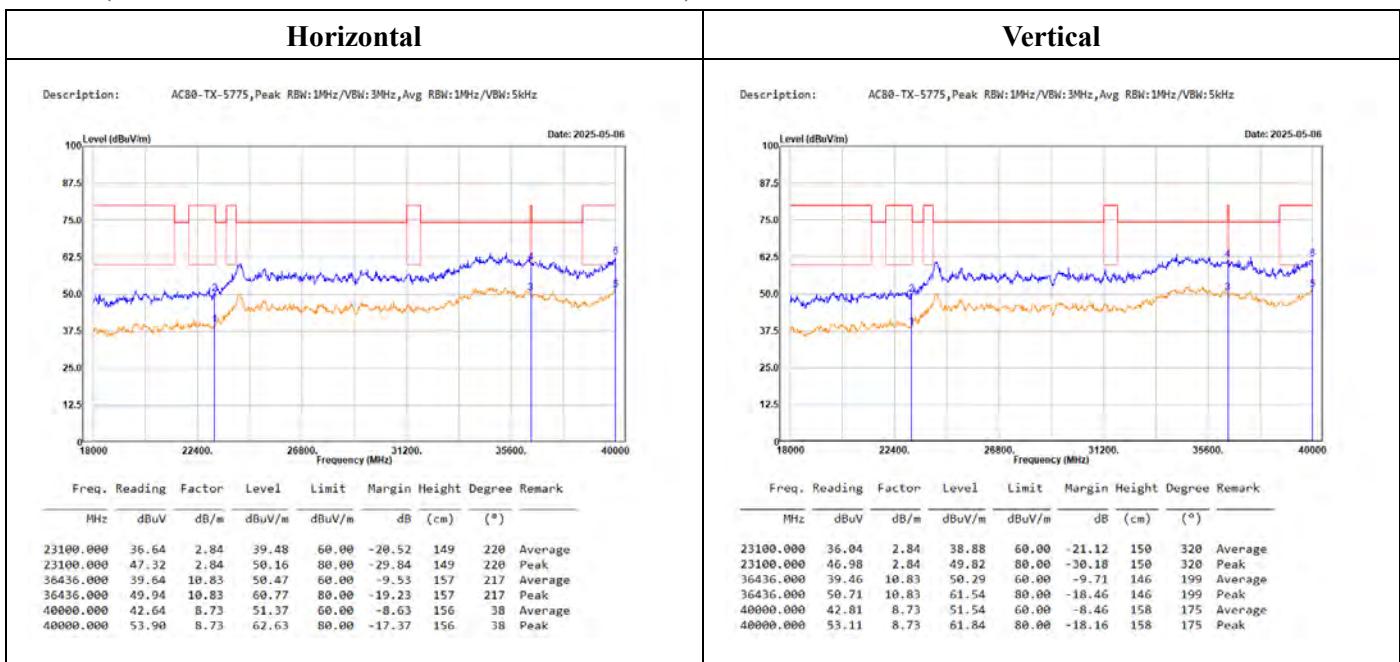
Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

**18GHz-40GHz:**

(Worst case is 802.11ac VHT80 Mode 5775 MHz)



Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

For 18-26.5GHz Convert the test distance limit of 3 meters to a limit of 1.5 meter:

Conversion factor =  $20 \log (1.5m/3m) = 6 \text{ dB}$ ,Average Limit =  $54+6 = 60 \text{ dBuV/m}@1.5m$  , Peak Limit =  $60+20 = 80 \text{ dBuV/m}@1.5m$

**Above 1GHz:****5150-5250 MHz****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)	(°)			
2649.000	48.28	-9.50	38.78	68.20	-29.42	150	327	Peak		
3074.000	47.15	-7.96	39.19	68.20	-29.01	150	166	Peak		
10360.000	41.40	6.61	48.01	68.20	-20.19	141	90	Peak		
15540.000	30.21	9.39	39.60	54.00	-14.40	156	213	Average		
15540.000	41.87	9.39	51.26	74.00	-22.74	156	213	Peak		
17745.000	31.80	13.36	45.16	54.00	-8.84	150	108	Average		
17745.000	44.08	13.36	57.44	74.00	-16.56	150	108	Peak		
1714.000	68.07	-14.51	53.56	68.20	-14.64	150	243	Peak		
2122.000	62.58	-12.26	50.32	68.20	-17.88	150	5	Peak		
10360.000	41.60	6.61	48.21	68.20	-19.99	147	309	Peak		
15540.000	30.33	9.39	39.72	54.00	-14.28	156	119	Average		
15540.000	41.33	9.39	50.72	74.00	-23.28	156	119	Peak		
16011.000	31.73	18.92	42.65	54.00	-11.35	150	43	Average		
16011.000	44.17	10.92	55.09	74.00	-18.91	150	43	Peak		
17745.000	32.20	13.36	45.56	54.00	-8.44	150	156	Average		
17745.000	44.61	13.36	57.97	74.00	-16.03	150	156	Peak		
5200 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
1714.000	50.81	-14.51	36.30	68.20	-31.90	150	123	Peak		
10400.000	40.42	6.61	47.03	68.20	-21.17	142	46	Peak		
15600.000	30.64	9.58	40.22	54.00	-13.78	157	299	Average		
15600.000	42.13	9.58	51.71	74.00	-22.29	157	299	Peak		
17813.000	32.55	13.58	46.05	54.00	-7.95	150	14	Average		
17813.000	44.68	13.58	58.18	74.00	-15.82	150	14	Peak		
2122.000	60.79	-12.26	48.53	68.20	-19.67	150	123	Peak		
10400.000	40.53	6.61	47.14	68.20	-21.06	149	309	Peak		
14481.000	30.02	11.83	41.85	54.00	-12.15	150	79	Average		
14481.000	43.32	11.83	55.15	74.00	-18.85	150	79	Peak		
15600.000	30.38	9.58	39.96	54.00	-14.04	150	16	Average		
15600.000	43.32	9.58	52.99	74.00	-21.10	155	16	Peak		
17779.000	32.39	13.41	45.80	54.00	-8.20	150	3	Average		
17779.000	45.68	13.41	59.09	74.00	-14.91	150	3	Peak		
5240 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
2122.000	57.70	-12.26	45.44	68.20	-22.76	150	244	Peak		
10488.000	40.88	7.13	47.93	68.20	-20.27	144	308	Peak		
15720.000	32.30	9.45	41.75	54.00	-12.25	156	77	Average		
15720.000	45.01	9.45	54.46	74.00	-19.54	156	77	Peak		
17779.000	32.51	13.41	45.92	54.00	-8.08	150	7	Average		
17779.000	45.44	13.41	58.85	74.00	-15.15	150	7	Peak		
1714.000	56.01	-14.51	41.50	68.20	-26.70	150	92	Peak		
2122.000	52.40	-12.26	40.14	68.20	-28.06	150	146	Peak		
2649.000	55.03	-9.50	45.53	68.20	-22.67	150	9	Peak		
10488.000	41.17	7.13	48.30	68.20	-19.90	144	323	Peak		
15720.000	32.06	9.45	41.51	54.00	-12.49	159	128	Average		
15720.000	43.99	9.45	53.35	74.00	-20.65	159	128	Peak		
17762.000	32.77	13.39	46.16	54.00	-7.84	150	256	Average		
17762.000	44.58	13.39	57.97	74.00	-16.03	150	256	Peak		

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

## 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)	(°)	
1697.000	47.98	-14.64	33.34	54.00	-20.66	150	17	Average	1714.000	63.19	-14.51	48.68	68.20	-19.52	150	168	Peak
1697.000	53.00	-14.64	38.36	74.00	-35.64	150	17	Peak	10360.000	48.91	6.61	47.52	68.20	-20.68	146	42	Peak
2122.000	50.89	-12.26	38.63	68.20	-29.57	150	44	Peak	14498.000	29.98	11.89	41.87	54.00	-12.13	150	213	Average
2649.000	49.43	-9.50	39.93	68.20	-28.27	150	175	Peak	14498.000	42.25	11.89	54.14	74.00	-19.86	150	213	Peak
10360.000	41.19	6.61	47.88	68.20	-26.40	141	42	Peak	15540.000	30.01	9.39	39.40	54.00	-14.60	156	315	Average
15540.000	30.18	9.39	39.49	54.00	-14.51	157	192	Average	15540.000	41.08	9.39	50.39	74.00	-23.61	156	315	Peak
15540.000	41.75	9.39	51.14	74.00	-22.86	157	192	Peak	16011.000	31.94	10.92	42.86	54.00	-11.14	150	279	Average
16028.000	31.77	10.93	42.70	54.00	-11.30	150	307	Average	16011.000	44.71	10.92	55.63	74.00	-18.37	150	279	Peak
16028.000	44.24	10.93	55.17	74.00	-18.83	150	307	Peak	17762.000	32.39	13.39	45.78	54.00	-8.22	150	78	Average
17779.000	32.11	13.41	45.52	54.00	-8.48	150	267	Average	17762.000	44.71	13.39	58.10	74.00	-15.90	150	78	Peak
17779.000	44.51	13.41	57.92	74.00	-16.08	150	267	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)	(°)	
1714.000	59.23	-14.51	44.72	68.20	-23.48	150	7	Peak	1714.000	58.03	-14.51	43.52	68.20	-24.68	150	288	Peak
10400.000	40.70	6.61	47.31	68.20	-20.89	148	85	Peak	2122.000	56.74	-12.26	44.48	68.20	-23.72	150	14	Peak
14481.000	29.96	11.83	41.79	54.00	-12.21	150	308	Average	10400.000	48.85	6.61	47.46	68.20	-20.74	148	318	Peak
14481.000	42.93	11.83	54.76	74.00	-19.24	150	308	Peak	15600.000	30.37	9.58	39.95	54.00	-14.05	156	126	Average
15600.000	30.70	9.58	48.28	54.00	-13.72	157	169	Average	15600.000	41.79	9.58	51.37	74.00	-22.63	156	126	Peak
15600.000	42.05	9.58	51.63	74.00	-22.37	157	169	Peak	15977.000	31.85	10.72	42.57	54.00	-11.43	150	197	Average
17762.000	32.37	13.39	45.76	54.00	-8.24	150	152	Average	15977.000	43.78	10.72	54.50	74.00	-19.50	150	197	Peak
17762.000	44.76	13.39	58.15	74.00	-15.85	150	152	Peak	17796.000	32.59	13.44	46.03	54.00	-7.97	150	46	Average
17796.000	44.68	13.44	58.12	74.00	-15.88	150	152	Peak	17796.000	44.68	13.44	58.12	74.00	-15.88	150	46	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)	(°)	
1714.000	66.98	-14.51	52.47	68.20	-15.73	150	114	Peak	1697.000	33.17	-14.64	18.53	54.00	-35.47	150	189	Average
10400.000	41.31	7.13	48.44	68.20	-19.76	143	307	Peak	1697.000	64.53	-14.64	49.89	74.00	-24.11	150	189	Peak
15720.000	32.19	9.45	41.64	54.00	-12.36	157	145	Average	2122.000	58.53	-12.26	46.27	68.20	-21.93	150	6	Peak
15720.000	44.00	9.45	53.45	74.00	-20.55	157	145	Peak	2649.000	51.15	-9.50	41.65	68.20	-26.55	150	246	Peak
17796.000	32.32	13.44	45.76	54.00	-8.24	150	256	Average	10400.000	43.87	7.13	51.00	68.20	-17.20	142	300	Peak
17796.000	44.55	13.44	57.99	74.00	-16.01	150	256	Peak	15720.000	31.83	9.45	41.28	54.00	-12.72	159	76	Average
17796.000	44.28	13.41	57.69	74.00	-16.31	159	256	Peak	15720.000	45.24	9.45	54.69	74.00	-19.31	159	76	Peak
17796.000	44.28	13.41	57.69	74.00	-16.31	150	256	Peak	17779.000	32.59	13.41	46.00	54.00	-8.00	150	132	Average
17779.000	44.28	13.41	57.69	74.00	-16.31	150	256	Peak	17779.000	44.28	13.41	57.69	74.00	-16.31	150	132	Peak

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

## 802.11ac VHT40 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)	(°)	
1986.000	47.11	-11.75	35.36	68.20	-32.84	150	6	Peak	1765.000	50.45	-14.10	36.35	68.20	-31.85	150	4	Peak
10380.000	40.99	6.61	47.60	68.20	-20.60	145	156	Peak	2122.000	52.18	-12.26	39.92	68.20	-28.28	150	19	Peak
15569.000	29.53	9.48	39.01	54.00	-14.99	159	319	Average	10380.000	40.03	6.61	46.64	68.20	-21.56	144	306	Peak
15570.000	41.28	9.49	50.77	74.00	-23.23	159	319	Peak	15570.000	29.50	9.49	38.99	54.00	-15.01	157	88	Average
16028.000	31.57	10.93	42.50	54.00	-11.50	150	221	Average	15570.000	41.10	9.49	50.59	74.00	-23.41	157	88	Peak
16028.000	44.21	10.93	55.14	74.00	-18.86	150	221	Peak	15960.000	31.72	10.56	42.28	54.00	-11.72	150	101	Average
17762.000	32.35	13.39	45.74	54.00	-8.26	150	126	Average	15960.000	43.94	10.56	54.50	74.00	-19.50	150	101	Peak
17762.000	44.65	13.39	58.04	74.00	-15.96	150	126	Peak	17762.000	32.21	13.39	45.60	54.00	-8.40	150	197	Average
									17762.000	43.82	13.39	57.21	74.00	-16.79	150	197	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)	(°)	
1714.000	54.51	-14.51	40.00	68.20	-28.20	150	11	Peak	1833.000	53.04	-13.42	39.62	68.20	-28.58	150	302	Peak
10452.000	41.37	6.95	48.32	68.20	-19.88	141	78	Peak	2122.000	52.85	-12.26	48.59	68.20	-27.61	150	347	Peak
15690.000	32.19	9.36	41.55	54.00	-12.45	159	167	Average	10460.000	41.90	7.00	48.90	68.20	-19.30	145	257	Peak
15690.000	43.31	9.36	52.67	74.00	-21.33	159	167	Peak	15690.000	32.15	9.36	41.51	54.00	-12.49	158	101	Average
16045.000	31.80	10.92	42.72	54.00	-11.28	150	307	Average	15690.000	43.55	9.36	52.91	74.00	-21.09	158	101	Peak
16045.000	44.07	10.92	54.99	74.00	-19.01	150	307	Peak	16181.000	30.70	11.11	41.81	54.00	-12.19	150	80	Average
17779.000	32.24	13.41	45.65	54.00	-8.35	150	236	Average	16181.000	45.11	11.11	56.22	74.00	-17.78	150	80	Peak
17779.000	44.21	13.41	57.62	74.00	-16.38	150	236	Peak	17796.000	32.65	13.44	46.09	54.00	-7.91	150	15	Average
									17796.000	43.91	13.44	57.35	74.00	-16.65	150	15	Peak

## 802.11ac VHT80 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)	(°)	
1714.000	49.54	-14.51	35.03	68.20	-33.17	150	12	Peak	1799.000	51.31	-13.87	37.44	68.20	-30.76	150	10	Peak
10420.000	42.08	6.74	48.82	68.20	-19.38	141	156	Peak	2122.000	55.30	-12.26	43.04	68.20	-25.16	150	18	Peak
15630.000	32.44	9.51	41.95	54.00	-12.05	156	147	Average	10420.000	41.71	6.74	48.45	68.20	-19.75	141	287	Peak
15630.000	42.91	9.51	52.42	74.00	-21.58	156	147	Peak	15630.000	31.70	9.51	41.21	54.00	-12.79	154	36	Average
15994.000	33.01	10.86	43.87	54.00	-10.13	150	307	Average	15630.000	42.61	9.51	52.12	74.00	-21.88	154	36	Peak
15994.000	45.26	10.86	56.12	74.00	-17.88	150	307	Peak	16028.000	32.26	10.93	43.19	54.00	-10.81	150	306	Average
17745.000	33.23	13.36	46.59	54.00	-7.41	150	288	Average	16028.000	44.65	10.93	55.58	74.00	-18.42	150	306	Peak
17745.000	45.31	13.36	58.67	74.00	-15.33	150	288	Peak	17762.000	33.13	13.39	46.52	54.00	-7.48	150	195	Average
									17762.000	44.29	13.39	57.68	74.00	-16.32	150	195	Peak

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

**5250-5350 MHz****802.11a Mode:**

5260 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
3074.000	52.75	-7.96	44.79	68.20	-23.41	150	81	Peak		
10520.000	41.07	7.27	48.34	68.20	-19.86	145	297	Peak		
15780.000	31.96	9.88	41.76	54.00	-12.24	160	152	Average		
15780.000	43.67	9.88	53.47	74.00	-20.53	160	152	Peak		
17796.000	32.35	13.44	45.79	54.00	-8.21	150	242	Average		
17796.000	44.36	13.44	57.80	74.00	-16.20	150	242	Peak		
5300 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
10600.000	29.40	7.31	36.71	54.00	-17.29	146	296	Average		
10600.000	40.74	7.31	48.05	68.20	-20.15	146	296	Peak		
14481.000	30.01	11.83	41.84	54.00	-12.16	150	34	Average		
14481.000	42.58	11.83	54.41	74.00	-19.59	150	34	Peak		
15900.000	30.64	10.03	48.67	54.00	-13.33	153	124	Average		
15900.000	42.68	10.03	52.71	74.00	-21.29	153	124	Peak		
17745.000	32.18	13.36	45.54	54.00	-8.46	150	147	Average		
17745.000	45.39	13.36	58.75	74.00	-15.25	150	147	Peak		
5320 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
10640.000	29.38	7.34	36.72	54.00	-17.28	156	154	Average		
10640.000	41.35	7.34	48.69	74.00	-25.31	156	154	Peak		
14481.000	29.97	11.83	41.80	54.00	-12.20	150	297	Average		
14481.000	43.20	11.83	55.03	74.00	-18.97	150	297	Peak		
15960.000	32.04	10.56	42.60	54.00	-11.40	142	314	Average		
15960.000	43.72	10.56	54.28	74.00	-19.72	142	314	Peak		
17779.000	32.22	13.41	45.63	54.00	-8.37	150	143	Average		
17779.000	45.96	13.41	59.37	74.00	-14.63	150	143	Peak		

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

## 802.11ac VHT20 Mode:

5260 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
1714.000	58.15	-14.51	43.64	68.20	-24.56	150	3	Peak		
2122.000	53.92	-12.26	41.66	68.20	-26.54	150	228	Peak		
10520.000	41.67	7.27	48.94	68.20	-19.26	142	342	Peak		
14481.000	29.79	11.83	41.62	54.00	-12.38	150	326	Average		
14481.000	41.82	11.83	53.65	74.00	-20.35	150	326	Peak		
15780.000	31.72	9.88	41.52	54.00	-12.48	160	333	Average		
15780.000	42.32	9.80	52.12	74.00	-21.88	160	333	Peak		
17779.000	32.19	13.41	45.68	54.00	-8.40	150	237	Average		
17779.000	44.22	13.41	57.63	74.00	-16.37	150	237	Peak		
5300 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
2122.000	58.20	-12.26	45.94	68.20	-22.26	150	41	Peak		
2649.000	53.65	-9.50	44.15	68.20	-24.05	322	41	Peak		
10600.000	41.12	7.31	48.43	68.20	-19.77	151	164	Peak		
15900.000	31.04	10.03	41.07	54.00	-12.93	158	40	Average		
15900.000	42.74	10.03	52.77	74.00	-21.23	158	40	Peak		
17745.000	32.30	13.36	45.66	54.00	-8.34	150	193	Average		
17745.000	44.59	13.36	57.95	74.00	-16.05	150	193	Peak		
5320 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
10640.000	29.59	7.34	36.93	54.00	-17.07	152	136	Average		
10640.000	41.31	7.34	48.65	74.00	-25.35	152	136	Peak		
15960.000	31.78	10.56	42.34	54.00	-11.66	144	112	Average		
15960.000	43.38	10.56	53.94	74.00	-20.06	144	112	Peak		
17762.000	32.30	13.39	45.69	54.00	-8.31	150	267	Average		
17762.000	44.25	13.39	57.64	74.00	-16.36	150	267	Peak		
5340 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
1986.000	50.00	-11.75	38.25	68.20	-29.95	150	301	Peak		
3074.000	55.08	-7.96	47.12	68.20	-21.08	150	299	Peak		
10640.000	29.45	7.34	36.79	54.00	-17.21	143	147	Average		
10640.000	41.19	7.34	48.53	74.00	-25.47	143	147	Peak		
15960.000	31.70	10.56	42.26	54.00	-11.74	151	188	Average		
15960.000	44.04	10.56	54.60	74.00	-19.40	151	188	Peak		
17779.000	32.24	13.41	45.65	54.00	-8.35	150	9	Average		
17779.000	44.50	13.41	57.91	74.00	-16.09	150	9	Peak		

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

## 802.11ac VHT40 Mode:

5270 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
1952.000	56.13	-12.00	44.13	68.20	-24.07	150	358	Peak		
3074.000	51.48	-7.96	43.52	68.20	-24.68	150	340	Peak		
10540.000	41.25	7.28	48.53	68.20	-19.67	158	238	Peak		
15810.000	32.21	9.93	42.14	54.00	-11.86	147	359	Average		
15810.000	43.08	9.93	53.81	74.00	-20.99	147	359	Peak		
17796.000	32.65	13.44	46.09	54.00	-7.91	150	93	Average		
17796.000	44.54	13.44	57.98	74.00	-16.02	150	93	Peak		
1935.000	57.62	-12.28		45.34	68.20	-22.86	150	20	Peak	
3074.000	55.49	-7.96		47.53	68.20	-20.67	150	122	Peak	
10540.000	39.93	7.28		47.21	68.20	-20.99	142	247	Peak	
14498.000	29.91	11.89		41.80	54.00	-12.20	150	256	Average	
14498.000	42.42	11.89		54.31	74.00	-19.69	150	256	Peak	
15810.000	31.89	9.93		41.82	54.00	-12.18	151	120	Average	
15810.000	44.48	9.93		54.41	74.00	-19.59	151	120	Peak	
16045.000	31.81	10.92		42.73	54.00	-11.27	150	46	Average	
16045.000	44.82	10.92		55.74	74.00	-18.26	150	46	Peak	
17813.000	32.45	13.50		45.95	54.00	-8.05	150	323	Average	
17813.000	43.79	13.50		57.29	74.00	-16.71	150	323	Peak	

5310 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
1714.000	62.94	-14.51	48.43	68.20	-19.77	150	335	Peak		
2649.000	58.46	-9.50	48.90	68.20	-19.24	150	277	Peak		
10620.000	29.38	7.32	36.70	54.00	-17.30	145	205	Average		
10620.000	40.60	7.32	47.92	74.00	-26.08	145	205	Peak		
14481.000	30.89	11.83	41.92	54.00	-12.08	150	252	Average		
14481.000	43.25	11.83	55.08	74.00	-18.92	150	252	Peak		
15930.000	31.31	10.30	41.61	54.00	-12.39	144	212	Average		
15930.000	42.82	10.30	53.12	74.00	-20.88	144	212	Peak		
17830.000	31.26	13.61	44.87	54.00	-9.13	150	153	Average		
17830.000	45.01	13.61	58.62	74.00	-15.38	150	153	Peak		
1714.000	58.61	-14.51	44.10	68.20	-24.10	150	159	Peak		
2649.000	52.61	-9.50	43.11	68.20	-25.09	150	194	Peak		
10620.000	29.57	7.32	36.89	54.00	-17.11	160	100	Average		
10620.000	41.01	7.32	48.33	74.00	-25.67	160	100	Peak		
15930.000	31.53	10.30	41.83	54.00	-12.17	143	202	Average		
15930.000	43.55	10.30	53.85	74.00	-20.15	143	202	Peak		
17779.000	32.61	13.41	46.02	54.00	-7.98	150	40	Average		
17779.000	45.68	13.41	59.09	74.00	-14.91	150	40	Peak		

## 802.11ac VHT80 Mode:

5290 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
3074.000	45.32	-7.96	37.36	68.20	-30.84	150	83	Peak		
10580.000	41.02	7.30	48.32	68.20	-19.88	145	341	Peak		
15870.000	31.69	9.99	41.68	54.00	-12.32	149	203	Average		
15870.000	42.76	9.99	52.75	74.00	-21.25	149	203	Peak		
17813.000	32.75	13.50	46.25	54.00	-7.75	150	297	Average		
17813.000	44.50	13.50	58.00	74.00	-16.00	150	297	Peak		
2122.000	63.90	-12.26	51.64	68.20	-16.56	150	31	Peak		
3074.000	55.57	-7.96	47.61	68.20	-20.59	150	96	Peak		
10580.000	41.33	7.30	48.63	68.20	-19.57	143	232	Peak		
15870.000	32.08	9.99	42.07	54.00	-11.93	151	282	Average		
15870.000	41.80	9.99	51.79	74.00	-22.21	151	282	Peak		
17762.000	33.18	13.39	46.57	54.00	-7.43	150	228	Average		
17762.000	43.92	13.39	57.31	74.00	-16.69	150	228	Peak		

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

## 5470-5725 MHz

802.11a Mode:

5500 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)	(°)	
2428.000	47.57	-10.87	36.70	68.20	-31.50	150	24	Peak	1697.000	33.37	-14.64	18.73	54.00	-35.27	150	7	Average
3074.000	46.46	-7.96	38.50	68.20	-29.70	150	99	Peak	2122.000	60.46	-12.26	48.29	68.20	-29.00	150	34	Peak
11000.000	29.03	8.57	37.60	54.00	-16.40	148	109	Average	11000.000	29.19	8.57	37.76	54.00	-16.24	152	144	Average
11000.000	41.25	8.57	49.82	74.00	-24.18	148	109	Peak	11000.000	41.88	8.57	50.45	74.00	-23.55	152	144	Peak
16045.000	31.58	10.92	42.50	54.00	-11.50	150	194	Average	16011.000	32.04	16.92	42.96	54.00	-11.04	150	76	Average
16045.000	43.90	10.92	54.82	74.00	-19.18	150	194	Peak	16011.000	45.23	16.92	56.15	74.00	-17.85	150	76	Peak
16500.000	42.44	12.36	54.80	68.20	-13.40	157	227	Peak	16500.000	44.00	12.36	56.36	68.20	-11.84	145	255	Peak
17796.000	32.32	13.44	45.76	54.00	-8.24	150	305	Average	17779.000	32.37	13.41	45.78	54.00	-8.22	150	301	Average
17796.000	45.59	13.44	59.03	74.00	-14.97	150	305	Peak	17779.000	44.99	13.41	58.40	74.00	-15.60	150	301	Peak
5580 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)	(°)	
1595.000	35.05	-14.78	20.27	54.00	-33.73	150	357	Average	2122.000	54.37	-12.26	42.11	68.20	-26.09	150	109	Peak
1595.000	51.03	-14.78	36.25	74.00	-37.75	150	357	Peak	2649.000	55.42	-9.50	45.92	68.20	-22.28	150	182	Peak
2122.000	52.38	-12.26	40.12	68.20	-28.08	150	301	Peak	11160.000	29.16	8.72	37.88	54.00	-16.12	149	16	Average
11160.000	29.01	8.72	37.73	54.00	-16.27	145	20	Average	11160.000	40.46	8.72	49.18	74.00	-24.82	149	16	Peak
11160.000	41.00	8.72	49.72	74.00	-24.28	145	20	Peak	16028.000	31.88	10.93	42.81	54.00	-11.19	150	210	Average
16645.000	31.68	10.92	42.60	54.00	-11.40	150	178	Average	16028.000	44.60	10.93	55.53	74.00	-18.47	150	210	Peak
16645.000	44.62	10.92	55.54	74.00	-18.46	150	178	Peak	16748.000	43.00	12.22	55.22	68.20	-12.98	158	9	Peak
16740.000	42.22	12.22	54.44	68.20	-13.76	155	276	Peak	17779.000	32.39	13.41	45.80	54.00	-8.20	150	333	Average
17779.000	32.46	13.41	45.87	54.00	-8.13	150	68	Average	17779.000	44.75	13.41	58.16	74.00	-15.84	150	333	Peak
5700 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)	(°)	
2122.000	50.04	-12.26	37.78	68.20	-30.42	150	201	Peak	1595.000	35.87	-14.78	21.09	54.00	-32.91	150	6	Average
11480.000	29.41	8.58	37.99	54.00	-16.01	141	3	Average	1595.000	57.31	-14.78	42.53	74.00	-31.47	150	6	Peak
11480.000	42.19	8.58	56.77	74.00	-23.23	141	3	Peak	2649.000	51.48	-9.50	41.98	68.20	-26.22	150	19	Peak
15977.000	31.95	10.72	42.67	54.00	-11.33	150	355	Average	3074.000	50.24	-7.96	42.28	68.20	-25.92	150	88	Peak
15977.000	45.33	10.72	56.05	74.00	-17.95	150	355	Peak	11400.000	29.17	8.58	37.75	54.00	-16.25	144	190	Average
17100.000	42.89	12.52	55.41	68.20	-12.79	156	12	Peak	11400.000	41.55	8.58	50.13	74.00	-23.87	144	190	Peak
17762.000	32.51	13.39	45.90	54.00	-8.10	150	119	Average	15994.000	32.14	10.86	43.00	54.00	-11.00	150	315	Average
17762.000	45.52	13.39	58.91	74.00	-15.09	150	119	Peak	15994.000	43.92	10.86	54.78	74.00	-19.22	150	315	Peak
17779.000	32.46	13.41	45.87	54.00	-8.13	150	68	Average	17100.000	42.80	12.52	55.32	68.20	-12.88	155	50	Peak
17779.000	44.94	13.41	58.35	74.00	-15.65	150	204	Peak	17779.000	32.32	13.41	45.73	54.00	-8.27	150	204	Average

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

## 802.11ac VHT20 Mode:

5500 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
1595.000	31.48	-14.78	16.70	54.00	-37.30	150	105	Average		
1595.000	49.57	-14.78	34.79	74.00	-39.21	150	105	Peak		
3193.000	50.50	-7.25	43.25	68.20	-24.95	150	118	Peak		
11000.000	28.93	8.57	37.50	54.00	-16.50	156	21	Average		
11000.000	40.07	8.57	48.64	74.00	-25.36	156	21	Peak		
15943.000	31.24	10.42	41.66	54.00	-12.34	150	308	Average		
15943.000	45.03	10.42	55.45	74.00	-18.55	150	308	Peak		
16500.000	42.91	12.36	55.27	68.20	-12.93	141	209	Peak		
17745.000	32.09	13.36	45.45	54.00	-8.55	150	68	Average		
17745.000	44.38	13.36	57.74	74.00	-16.26	150	68	Peak		
5580 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
2122.000	53.92	-12.26	41.66	68.20	-26.54	150	22	Peak		
11160.000	29.27	8.72	37.99	54.00	-16.01	143	156	Average		
11160.000	40.76	8.72	49.48	74.00	-24.52	143	156	Peak		
16028.000	31.68	10.93	42.61	54.00	-11.39	150	236	Average		
16028.000	44.72	10.93	55.65	74.00	-18.35	150	236	Peak		
16740.000	42.10	12.22	54.32	68.20	-13.88	156	311	Peak		
17813.000	32.14	13.50	45.64	54.00	-8.36	150	5	Average		
17813.000	44.80	13.50	58.30	74.00	-15.70	150	5	Peak		
5700 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
2122.000	53.62	-12.26	41.36	68.20	-26.84	150	6	Peak		
11400.000	29.17	8.58	37.75	54.00	-16.25	142	210	Average		
11400.000	42.26	8.58	50.84	74.00	-23.16	142	210	Peak		
16028.000	31.82	10.93	42.75	54.00	-11.25	150	12	Average		
16028.000	44.48	10.93	55.41	74.00	-18.59	150	12	Peak		
17100.000	41.90	12.52	54.42	68.20	-13.78	153	159	Peak		
17796.000	32.25	13.44	45.69	54.00	-8.31	150	78	Average		
17796.000	45.45	13.44	58.89	74.00	-15.11	150	78	Peak		

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

## 802.11ac VHT40 Mode:

5510 MHz										
Horizontal							Vertical			
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
1918.000	48.01	-12.41	35.60	68.20	-32.60	150	105	Peak		
3193.000	45.75	-6.99	38.76	68.20	-29.44	150	7	Peak		
11020.000	28.82	8.21	37.03	54.00	-16.97	148	63	Average		
11020.000	40.92	8.21	49.13	74.00	-24.87	148	63	Peak		
14498.000	29.98	11.43	41.41	54.00	-12.59	150	165	Average		
14498.000	42.58	11.43	54.01	74.00	-19.99	150	165	Peak		
16045.000	31.68	10.42	42.10	54.00	-11.90	150	347	Average		
16045.000	44.93	10.42	55.35	74.00	-18.65	150	347	Peak		
16530.000	42.43	12.17	54.60	68.20	-13.60	157	222	Peak		
17796.000	32.19	13.72	45.91	54.00	-8.09	150	89	Average		
17796.000	44.37	13.72	58.09	74.00	-15.91	150	89	Peak		
5550 MHz										
Horizontal							Vertical			
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
2122.000	49.94	-11.99	37.95	68.20	-38.25	150	15	Peak		
11100.000	28.61	8.35	36.96	54.00	-17.04	146	325	Average		
11100.000	40.84	8.35	49.19	74.00	-24.81	146	325	Peak		
15994.000	31.88	10.25	42.13	54.00	-11.87	150	59	Average		
15994.000	44.55	10.25	54.80	74.00	-19.20	150	59	Peak		
16650.000	43.71	12.36	56.07	68.20	-12.13	159	221	Peak		
17779.000	32.08	13.65	45.73	54.00	-8.27	150	196	Average		
17779.000	45.81	13.65	59.46	74.00	-14.54	150	196	Peak		
5670 MHz										
Horizontal							Vertical			
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
1714.000	57.54	-14.32	43.22	68.20	-24.98	150	162	Peak		
2122.000	52.52	-11.99	40.53	68.20	-27.67	150	188	Peak		
11340.000	29.08	8.26	37.34	54.00	-16.66	142	39	Average		
11340.000	42.17	8.26	50.43	74.00	-23.57	142	39	Peak		
15960.000	31.83	10.06	41.89	54.00	-12.11	150	325	Average		
15960.000	45.13	10.06	55.19	74.00	-18.81	150	325	Peak		
17010.000	42.29	11.89	54.18	68.20	-14.02	154	299	Peak		
17762.000	32.04	13.59	45.63	54.00	-8.37	150	78	Average		
17762.000	44.24	13.59	57.83	74.00	-16.17	150	78	Peak		
5670 MHz										
Horizontal							Vertical			
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
1714.000	53.18	-14.32	38.86	68.20	-29.34	150	9	Peak		
2649.000	49.30	-9.26	40.04	68.20	-28.16	150	27	Peak		
3074.000	50.60	-7.67	42.93	68.20	-25.27	150	326	Peak		
11100.000	28.91	8.35	37.26	54.00	-16.74	140	26	Average		
11100.000	40.09	8.35	48.44	74.00	-25.56	140	26	Peak		
16028.000	31.86	10.38	42.24	54.00	-11.76	150	177	Average		
16028.000	44.58	10.38	54.96	74.00	-19.04	150	177	Peak		
16650.000	44.07	12.36	56.43	68.20	-11.77	155	193	Peak		
17779.000	32.47	13.65	46.12	54.00	-7.88	150	269	Average		
17779.000	44.06	13.65	57.71	74.00	-16.29	150	269	Peak		

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

## 802.11ac VHT80 Mode:

5530 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
1714.000	54.89	-14.32	40.57	68.20	-27.63	150	357	Peak		
11060.000	30.28	8.28	38.56	54.00	-15.44	146	111	Average		
11060.000	40.44	8.28	48.72	74.00	-25.28	146	111	Peak		
16590.000	43.18	12.30	55.48	68.20	-12.72	152	43	Peak		
17796.000	33.20	13.72	46.92	54.00	-7.08	150	212	Average		
17796.000	44.42	13.72	58.14	74.00	-15.86	150	212	Peak		
1986.000	47.82	-11.54	36.28	68.20	-31.92	150	14	Peak		
3193.000	51.57	-6.99	44.58	68.20	-23.62	150	72	Peak		
11060.000	29.81	8.28	38.09	54.00	-15.91	149	317	Average		
11060.000	40.42	8.28	48.70	74.00	-25.30	149	317	Peak		
15960.000	32.26	10.06	42.32	54.00	-11.68	150	256	Average		
15960.000	44.37	10.06	54.43	74.00	-19.57	150	256	Peak		
16590.000	43.29	12.30	55.59	68.20	-12.61	157	152	Peak		
17779.000	32.93	13.65	46.58	54.00	-7.42	150	8	Average		
17779.000	45.00	13.65	58.65	74.00	-15.35	150	8	Peak		
5610 MHz										
Horizontal						Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
1323.000	33.29	-14.63	18.66	54.00	-35.34	150	3	Average		
1323.000	49.17	-14.63	34.54	74.00	-39.46	150	3	Peak		
1714.000	56.00	-14.32	41.68	68.20	-26.52	150	12	Peak		
11220.000	29.69	8.34	38.03	54.00	-15.97	147	231	Average		
11220.000	41.29	8.34	49.63	74.00	-24.37	147	231	Peak		
14481.000	30.93	11.41	42.34	54.00	-11.66	150	88	Average		
14481.000	43.49	11.41	54.90	74.00	-19.10	150	88	Peak		
16096.000	31.34	10.56	41.90	54.00	-12.10	150	306	Average		
16096.000	44.18	10.56	54.74	74.00	-19.26	150	306	Peak		
16830.000	43.22	12.04	55.26	68.20	-12.94	156	169	Peak		
17779.000	34.34	13.65	47.99	54.00	-6.01	150	199	Average		
17779.000	44.56	13.65	58.21	74.00	-15.79	150	199	Peak		
1714.000	52.81	-14.32	38.49	68.20	-29.71	150	12	Peak		
3193.000	49.96	-6.99	42.97	68.20	-25.23	150	73	Peak		
11220.000	29.28	8.34	37.62	54.00	-16.38	142	311	Average		
11220.000	41.00	8.34	49.34	74.00	-24.66	142	311	Peak		
16096.000	31.06	10.56	41.62	54.00	-12.38	150	128	Average		
16096.000	43.96	10.56	54.52	74.00	-19.48	150	128	Peak		
16830.000	42.92	12.04	54.96	68.20	-13.24	154	105	Peak		
17762.000	32.61	13.59	46.20	54.00	-7.80	150	234	Average		
17762.000	44.30	13.59	57.89	74.00	-16.11	150	234	Peak		

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

**5725-5850 MHz****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)	(°)			
1697.000	30.27	-14.46	15.81	54.00	-38.19	150	96	Average		
1697.000	53.37	-14.46	38.91	74.00	-35.09	150	96	Peak		
11490.000	29.34	8.21	37.55	54.00	-16.45	145	236	Average		
11490.000	40.13	8.21	48.34	74.00	-25.66	145	236	Peak		
17235.000	40.41	12.63	53.04	68.20	-15.16	159	17	Peak		
17796.000	32.29	13.72	46.01	54.00	-7.99	150	349	Average		
17796.000	44.87	13.72	58.59	74.00	-15.41	150	349	Peak		
1833.000 48.67 -13.21 35.46 68.20 -32.74 150 359 Peak										
1986.000 50.63 -11.54 39.09 68.20 -29.11 150 324 Peak										
2122.000 52.32 -11.99 40.33 68.20 -27.87 150 299 Peak										
2649.000 52.89 -9.26 43.63 68.20 -24.57 150 238 Peak										
11490.000 29.25 8.21 37.46 54.00 -16.54 142 166 Average										
11490.000 41.53 8.21 49.74 74.00 -24.26 142 166 Peak										
16028.000 31.61 18.38 41.99 54.00 -12.01 150 9 Average										
16028.000 44.98 18.38 55.36 74.00 -18.64 150 9 Peak										
17235.000 41.51 12.63 54.14 68.20 -14.06 152 32 Peak										
17779.000 32.49 13.65 46.14 54.00 -7.86 150 77 Average										
17779.000 44.35 13.65 58.00 74.00 -16.00 150 77 Peak										
5785 MHz										
Horizontal							Vertical			
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
1748.000	63.22	-14.02	49.20	68.20	-19.00	150	318	Peak		
11570.000	28.47	8.15	36.62	54.00	-17.38	143	256	Average		
11570.000	40.26	8.15	48.41	74.00	-25.59	143	256	Peak		
16028.000	31.49	10.38	41.87	54.00	-12.13	150	8	Average		
16028.000	44.21	10.38	54.59	74.00	-19.41	150	8	Peak		
17355.000	41.19	12.47	53.66	68.20	-14.54	158	120	Peak		
17830.000	31.48	13.90	45.30	54.00	-8.70	150	43	Average		
17830.000	44.39	13.90	58.29	74.00	-15.71	150	43	Peak		
1748.000 61.68 -14.02 47.66 68.20 -20.54 150 299 Peak										
11570.000 52.94 -9.26 43.68 68.20 -24.52 150 317 Peak										
11570.000 28.63 8.15 36.78 54.00 -17.22 141 149 Average										
11570.000 40.03 8.15 48.18 74.00 -25.82 141 149 Peak										
17355.000 41.21 12.47 53.68 68.20 -14.52 156 28 Peak										
17796.000 32.28 13.72 46.00 54.00 -8.00 150 5 Average										
17796.000 44.25 13.72 57.97 74.00 -16.03 150 5 Peak										
5825 MHz										
Horizontal							Vertical			
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark		
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)			
1595.000	32.45	-14.63	17.82	54.00	-36.18	150	101	Average		
1595.000	49.19	-14.63	34.56	74.00	-39.44	150	101	Peak		
2649.000	48.90	-9.26	39.64	68.20	-28.56	150	259	Peak		
11650.000	28.48	8.38	36.78	54.00	-17.22	149	317	Average		
11650.000	40.14	8.38	48.52	74.00	-25.48	149	317	Peak		
17475.000	40.91	12.18	53.09	68.20	-15.11	155	18	Peak		
17762.000	32.51	13.59	46.10	54.00	-7.90	150	4	Average		
17762.000	45.65	13.59	59.24	74.00	-14.76	150	4	Peak		
1714.000 54.79 -14.32 40.47 68.20 -27.73 150 288 Peak										
1986.000 51.01 -11.54 39.47 68.20 -28.73 150 339 Peak										
2649.000 56.95 -9.26 47.69 68.20 -20.51 150 5 Peak										
11650.000 28.41 8.38 36.79 54.00 -17.21 143 29 Average										
11650.000 40.01 8.38 48.39 74.00 -25.61 143 29 Peak										
16113.000 30.77 10.59 41.36 54.00 -12.64 150 251 Average										
16113.000 44.10 10.59 54.69 74.00 -19.31 150 251 Peak										
17475.000 40.36 12.18 52.54 68.20 -15.66 156 321 Peak										
17762.000 32.52 13.59 46.11 54.00 -7.89 150 199 Average										
17762.000 43.99 13.59 57.58 74.00 -16.42 150 199 Peak										

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

## 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)	(°)			
1697.000	30.50	-14.46	16.04	54.00	-37.96	150	8	Average	1714.000	54.41	-14.32	49.09	68.20	-28.11	150	270	Peak		
1697.000	51.03	-14.46	36.57	74.00	-37.43	150	8	Peak	2122.000	62.97	-11.99	50.98	68.20	-17.22	150	337	Peak		
11490.000	29.56	8.21	37.77	54.00	-16.23	143	267	Average	2649.000	54.22	-9.26	44.96	68.20	-23.24	150	351	Peak		
11490.000	48.71	8.21	48.92	74.00	-25.08	143	267	Peak	11490.000	29.05	8.21	37.26	54.00	-16.74	157	39	Average		
17235.000	41.84	12.63	54.47	68.20	-13.73	157	103	Peak	11490.000	39.77	8.21	47.93	74.00	-26.07	157	39	Peak		
17745.000	32.39	13.52	45.91	54.00	-8.09	150	153	Average	16096.000	31.03	10.56	41.59	54.00	-12.41	150	154	Average		
17745.000	45.40	13.52	58.92	74.00	-15.08	150	153	Peak	16096.000	44.14	10.56	54.70	74.00	-19.30	150	154	Peak		
											17235.000	41.52	12.63	54.15	68.20	-14.05	143	254	Peak
											17796.000	32.09	13.72	45.81	54.00	-8.19	150	7	Average
											17796.000	45.32	13.72	59.04	74.00	-14.96	150	7	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)	(°)			
1714.000	57.92	-14.32	43.60	68.20	-24.60	150	51	Peak	1714.000	53.73	-14.32	39.41	68.20	-28.79	150	52	Peak		
2122.000	53.53	-11.99	41.54	68.20	-26.66	150	74	Peak	2122.000	61.15	-11.99	49.16	68.20	-19.04	150	23	Peak		
11570.000	28.55	8.15	36.70	54.00	-17.30	141	239	Average	2649.000	55.99	-9.26	46.73	68.20	-21.47	150	340	Peak		
11570.000	40.43	8.15	48.58	74.00	-25.42	141	239	Peak	11570.000	28.84	8.15	36.99	54.00	-17.01	158	264	Average		
15756.000	32.09	9.27	41.36	54.00	-12.64	150	344	Average	15756.000	49.15	8.15	48.30	74.00	-25.70	158	264	Peak		
15756.000	45.78	9.27	55.05	74.00	-18.95	150	344	Peak	15994.000	31.49	10.25	41.74	54.00	-12.26	150	8	Average		
17355.000	39.97	12.47	52.44	68.20	-15.76	156	19	Peak	15994.000	44.51	10.25	54.76	74.00	-19.24	150	8	Peak		
17779.000	32.09	13.65	45.74	54.00	-8.26	150	101	Average	17355.000	41.13	12.47	53.60	68.20	-14.60	144	105	Peak		
17779.000	43.94	13.65	57.59	74.00	-16.41	150	101	Peak	17745.000	32.00	13.52	45.52	54.00	-8.48	150	194	Average		
											17745.000	44.54	13.52	58.06	74.00	-15.94	150	194	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)	(°)			
1714.000	56.27	-14.32	41.95	68.20	-26.25	150	109	Peak	1714.000	54.79	-14.32	40.47	68.20	-27.73	150	288	Peak		
2122.000	54.72	-11.99	42.73	68.20	-25.47	150	138	Peak	1986.000	51.01	-11.54	39.47	68.20	-28.73	150	339	Peak		
11650.000	28.50	8.38	36.88	54.00	-17.12	149	238	Average	2649.000	56.99	-9.26	47.69	68.20	-26.51	150	5	Peak		
11650.000	41.06	8.38	49.44	74.00	-24.56	149	238	Peak	11650.000	28.41	8.38	36.79	54.00	-17.21	143	29	Average		
15722.000	31.92	9.09	41.01	54.00	-12.99	150	29	Average	11650.000	40.01	8.38	48.39	74.00	-25.61	143	29	Peak		
15722.000	45.50	9.09	54.59	74.00	-19.41	150	29	Peak	16113.000	30.77	10.59	41.36	54.00	-12.64	150	251	Average		
17475.000	41.95	12.18	54.13	68.20	-14.07	153	9	Peak	16113.000	44.10	10.59	54.69	74.00	-19.31	150	251	Peak		
17779.000	32.30	13.65	45.95	54.00	-8.05	150	146	Average	17475.000	46.36	12.18	52.54	68.20	-15.66	156	321	Peak		
17779.000	44.90	13.65	58.55	74.00	-15.45	150	146	Peak	17762.000	32.52	13.59	46.11	54.00	-7.89	150	199	Average		
											17762.000	45.99	13.59	57.58	74.00	-16.42	150	199	Peak

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

## 802.11ac VHT40 Mode:

5755 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)	(°)	
11510.000	28.47	8.20	36.67	54.00	-17.33	154	288	Average	2122.000	63.88	-11.99	51.89	68.20	-16.31	150	354	Peak
11510.000	40.29	8.20	48.49	74.00	-25.51	154	288	Peak	2666.000	47.99	-9.27	38.72	68.20	-29.48	150	286	Peak
16096.000	30.76	10.56	41.32	54.00	-12.68	150	316	Average	3193.000	47.64	-6.99	40.65	68.20	-27.55	150	103	Peak
16096.000	43.85	10.56	54.41	74.00	-19.59	150	316	Peak	11510.000	28.49	8.20	36.69	54.00	-17.31	144	29	Average
17265.000	42.13	12.55	54.68	68.20	-13.52	141	167	Peak	11510.000	48.31	8.20	48.51	74.00	-25.49	144	29	Peak
17813.000	32.00	13.79	45.79	54.00	-8.21	150	214	Average	17265.000	41.94	12.55	54.49	68.20	-13.71	154	7	Peak
17813.000	43.74	13.79	57.53	74.00	-16.47	150	214	Peak	17762.000	32.59	13.59	46.18	54.00	-7.82	150	159	Average
									17762.000	44.52	13.59	58.11	74.00	-15.89	150	159	Peak

5795 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)	(°)	
1935.000	55.72	-12.08	43.64	68.20	-24.56	150	3	Peak	1935.000	57.61	-12.08	45.53	68.20	-22.67	150	231	Peak
2122.000	52.43	-11.99	49.44	68.20	-27.76	150	204	Peak	2122.000	53.64	-11.99	41.65	68.20	-26.55	150	241	Peak
11590.000	28.41	8.14	36.55	54.00	-17.45	148	324	Average	11590.000	28.81	8.14	36.95	54.00	-17.05	159	166	Average
11590.000	41.04	8.14	49.18	74.00	-24.82	148	324	Peak	11590.000	40.74	8.14	48.88	74.00	-25.12	159	166	Peak
17385.000	41.03	12.45	53.48	68.20	-14.72	154	109	Peak	15994.000	31.57	10.25	41.82	54.00	-12.18	150	8	Average
17796.000	32.25	13.72	45.97	54.00	-8.03	150	188	Average	15994.000	44.55	10.25	54.88	74.00	-19.28	150	8	Peak
17796.000	44.96	13.72	58.68	74.00	-15.32	150	188	Peak	17385.000	40.87	12.45	53.32	68.20	-14.88	146	39	Peak
									17949.000	29.69	14.46	44.15	54.00	-9.85	150	177	Average
									17949.000	44.23	14.46	58.69	74.00	-15.31	150	177	Peak

## 802.11ac VHT80 Mode:

5775 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)	(°)	
1595.000	32.95	-14.63	18.32	54.00	-35.68	150	13	Average	1816.000	49.61	-13.44	36.17	68.20	-32.03	150	56	Peak
1595.000	49.18	-14.63	34.55	74.00	-39.45	150	13	Peak	1986.000	51.11	-11.54	39.57	68.20	-28.63	150	105	Peak
11590.000	29.85	8.16	38.01	54.00	-15.99	157	234	Average	2122.000	50.02	-11.99	38.03	68.20	-30.17	150	126	Peak
11590.000	39.65	8.16	47.81	74.00	-26.19	157	234	Peak	2649.000	48.63	-9.26	39.37	68.20	-28.83	150	201	Peak
17325.000	41.56	12.48	54.04	68.20	-14.16	149	188	Peak	11550.000	29.30	8.16	37.46	54.00	-16.54	142	37	Average
17779.000	32.92	13.65	46.57	54.00	-7.43	150	336	Average	11550.000	41.33	8.16	49.49	74.00	-24.51	142	37	Peak
17779.000	44.57	13.65	58.22	74.00	-15.78	150	336	Peak	15773.000	33.27	9.36	42.63	54.00	-11.37	150	311	Average
									15773.000	45.26	9.36	54.62	74.00	-19.38	150	311	Peak
									17325.000	41.54	12.48	54.02	68.20	-14.18	149	269	Peak
									17830.000	32.42	13.90	46.32	54.00	-7.68	150	9	Average
									17830.000	44.00	13.90	57.90	74.00	-16.10	150	9	Peak

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

## 8 RSS-247 §6.2.1.2 – 26dB Attenuated Below The Channel Power

### 8.1 Applicable Standard

RSS-247 Clause 6.2.1.2

For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

### 8.2 Test Procedure

1. Set RBW = 1%~5% of the emission bandwidth.
2. Set the VBW > RBW.
3. Detector = RMS.
4. Trace mode = max hold
5. Measure the emission attenuated below the channel power

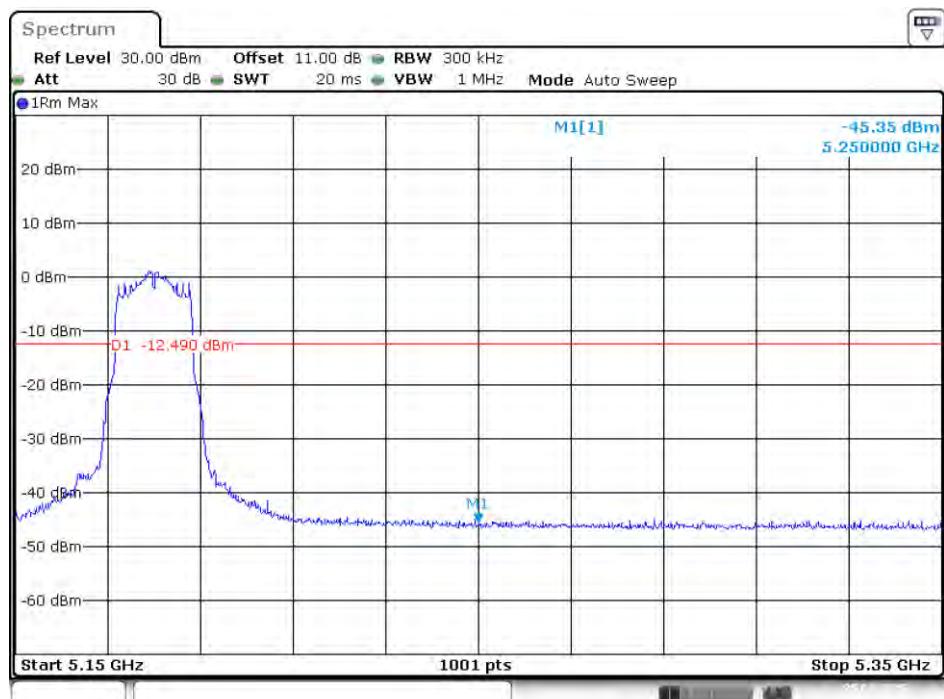
### 8.3 Test Results

The requirement is for 5150-5250 MHz band. The channel power please refer to the power test result in section 10.3.

Transmitting Mode:

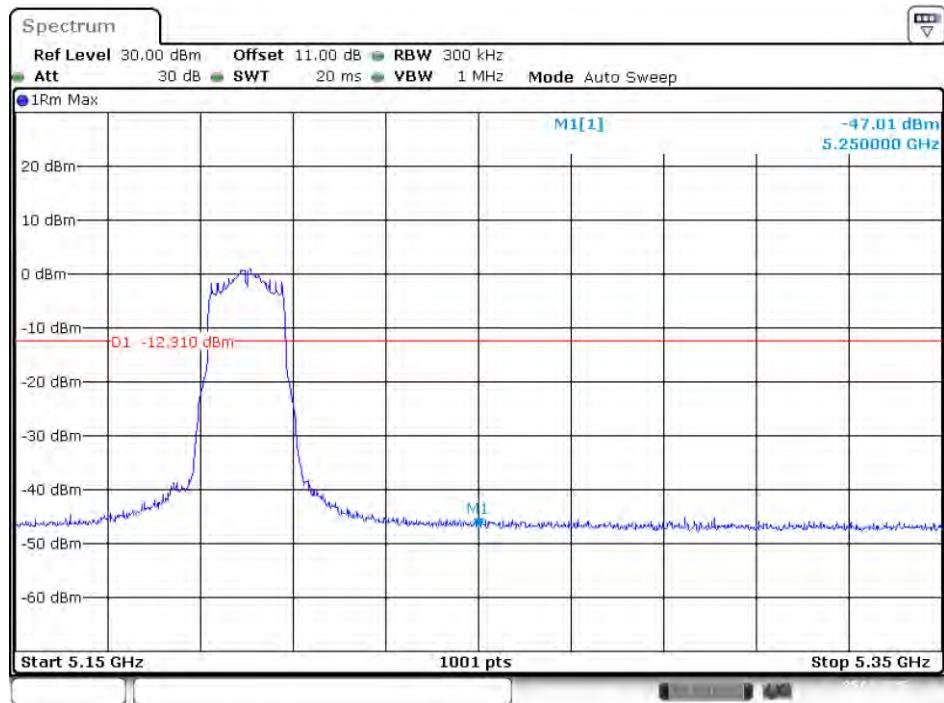
### IEEE 802.11a Mode / 5150 ~ 5250MHz

5180MHz



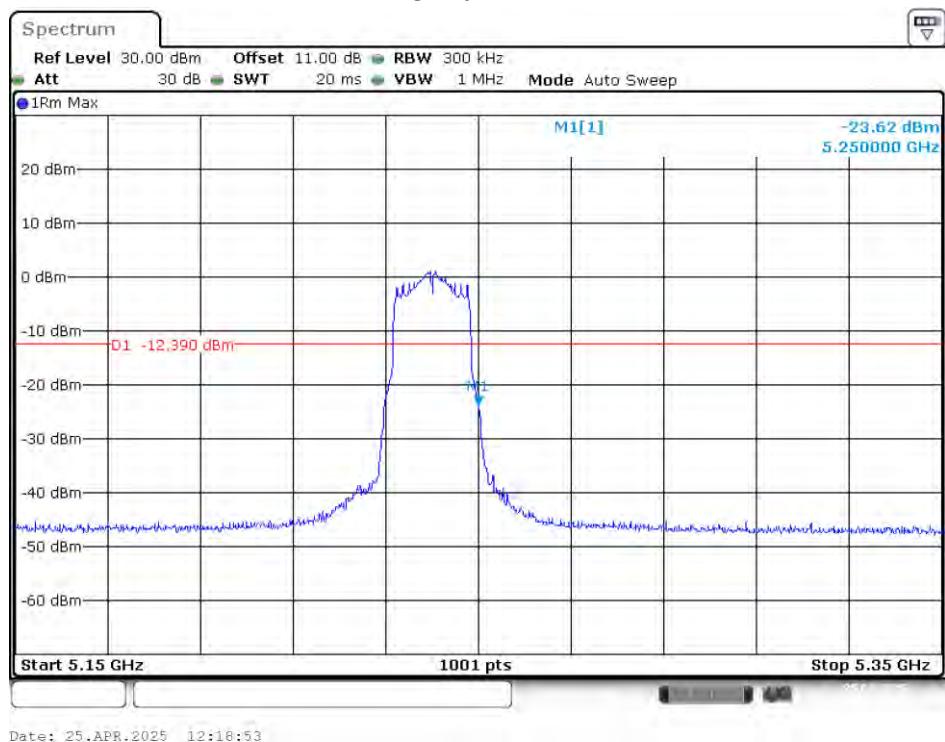
Date: 25.APR.2025 12:16:33

5200MHz



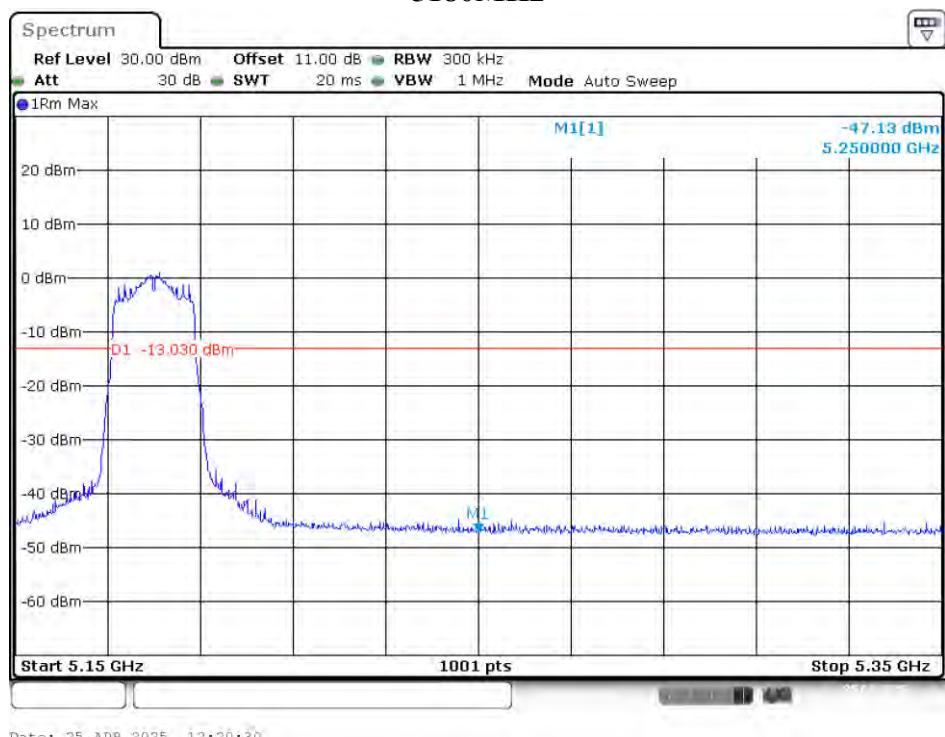
Date: 25.APR.2025 12:17:59

## 5240MHz



## IEEE 802.11ac VHT20 Mode / 5150 ~ 5250MHz

## 5180MHz

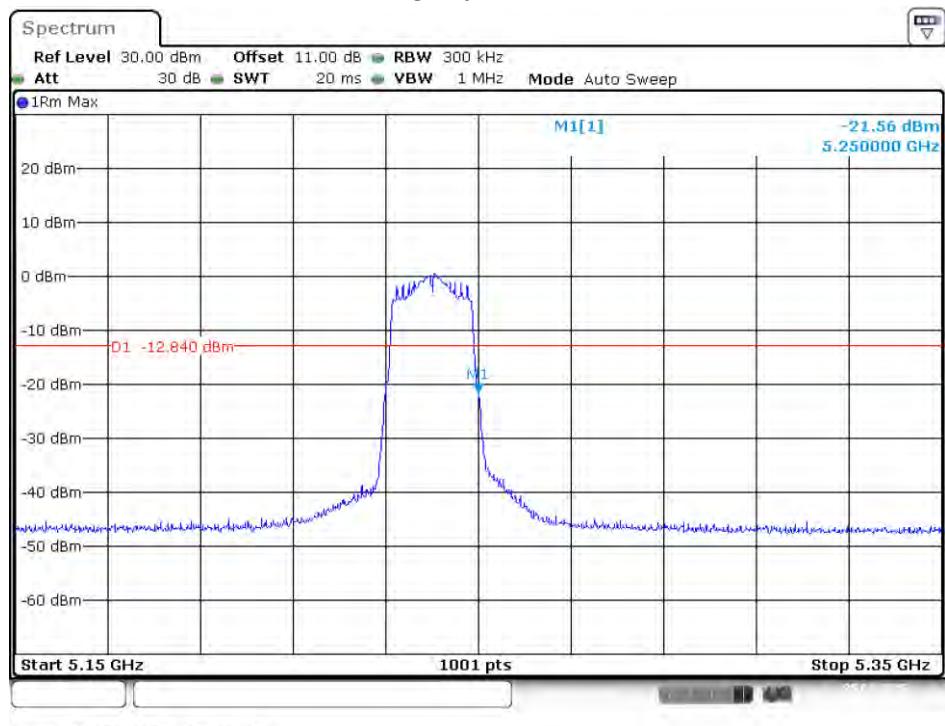


## 5200MHz



Date: 25.APR.2025 12:21:23

## 5240MHz



Date: 25.APR.2025 12:22:15