TEST REPORT

Reference No.	:	WTX23X11233816W001
FCC ID	:	2BAII-AX3000
Applicant	:	Shenzhen Waterworld Information Co., Ltd.
Address	:	1F, Building3, Dexinchang Wisdom Park, No.23 Heping Road, Longhua district, Shen Zhen city, China
Manufacturer	:	The same as Applicant
Address	:	The same as Applicant
Product Name	:	Wireless Dual Band Gigabit Router
Model No.	:	AX3000
Standards	:	FCC Part 15.407
Date of Receipt sample	:	2023-11-01
Date of Test	:	2023-11-01 to 2023-12-21
Date of Issue	:	2023-12-21
Test Report Form No.	:	WTX_Part 15_407W
Test Result	:	**Pass**

Remarks:
The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

Prepared By:

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TABLE OF CONTENTS

1. GENERAL INFORMATION 5
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) 5
1.2 TEST STANDARDS 6
1.3 TEST METHODOLOGY 6
1.4 TABLE FOR PARAMETERS OF TEST SOFTWARE SETTING 6
1.5 EUT OPERATING DURING TEST 8
1.6 TEST FACILITY 8
1.7 EUT SETUP AND TEST MODE 9
1.8 MEASUREMENT UNCERTAINTY 11
1.9 TEST EQUIPMENT LIST AND DETAILS 12
2. SUMMARY OF TEST RESULTS 15
3. ANTENNA REQUIREMENT 16
3.1 STANDARD APPLICABLE 16
3.2 EVALUATION INFORMATION 16
4. AUTOMATICALLY DISCONTINUE TRANSMISSION 17
4.1 STANDARD APPLICABLE 17
4.2 SUMMARY OF TEST RESULTS 17
5. POWER SPECTRAL DENSITY 18
5.1 STANDARD APPLICABLE 18
5.2 TEST PROCEDURE 18
5.3 SUMMARY OF TEST RESULTS/PLOTS 19
6. EMISSION BANDWIDTH AND OCCUPIED BANDWIDTH 20
6.1 STANDARD APPLICABLE 20
6.2 TEST PROCEDURE 20
6.3 SUMMARY OF TEST RESULTS/PLOTS 22
7. MAXIMUM CONDUCTED OUTPUT POWER 23
7.1 STANDARD APPLICABLE 23
7.2 TEST PROCEDURE 23
7.3 SUMMARY OF TEST RESULTS/PLOTS 24
8. RADIATED SPURIOUS EMISSIONS 25
8.1 STANDARD APPLICABLE 25
8.2 TEST PROCEDURE 25
8.3 TEST RECEIVER SETUP 27
8.4 CORRECTED AMPLITUDE & MARGIN CALCULATION 27
8.5 SUMMARY OF TEST RESULTS/PLOTS 28
9. FREQUENCY STABILITY 128
9.1 STANDARD APPLICABLE 128
9.2 TEST PROCEDURE 128
9.3 SUMMARY OF TEST RESULTS/PLOTS 128
10 CONDUCTED EMISSIONS 129
10.1 TEST PROCEDURE 129
10.2 BASIC TEST SETUP BLOCK DIAGRAM 129
10.3 TEST RECEIVER SETUP 129
10.4 SUMMARY OF TEST RESULTS/PLOTS 129
APPENDIX SUMMARY 132
APPENDIX A 133
APPENDIX B 202
APPENDIX C 336
APPENDIX D 404

APPENDIX PHOTOGRAPHS.....406

Report version

Version No.	Date of issue	Description
Rev.00	2023-12-21	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT	
Product Name:	Wireless Dual Band Gigabit Router
Trade Name:	/
Model No.:	AX3000
Adding Model(s):	/
Rated Voltage:	DC12V
Battery Capacity:	/
Power Adapter:	MODEL: GQ12-120100-CU INPUT:AC100-240V~50/60Hz 0.4A OUTPUT:DC12V,1A
Note: The test data is gathered from a production sample, provided by the manufacturer.	

Technical Characteristics of EUT	
Support Standards:	802.11a, 802.11n(HT20) , 802.11n-HT40, 802.11ac-VHT20/40/80/160, 802.11ax-HE20/40/80/160
Frequency Range:	5180-5240MHz, 5260-5320MHz, 5745-5825MHz
Max. RF Output Power:	Antenna 1: 18.68dBm (Conducted) Antenna 2: 18.86dBm (Conducted) Antenna 3: 18.71dBm (Conducted)
Type of Modulation:	QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Type of Antenna:	External Antenna
Antenna Gain:	Antenna 1:4.42dBi Antenna 2:4.42dBi Antenna 3:4.42dBi
Note The Antenna Gain is provided by the customer and can affect the validity of results.	

1.2 Test Standards

The tests were performed according to following standards:

FCC Rules Part 15.407: General technical requirements.
ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.
KDB789033 D02 v02r01: Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-Nii) Devices Part 15, Subparte.
KDB662911 D01 Multiple Transmitter Output v02r01: Emissions Testing of Transmitters with Multiple Outputs in the Same Band.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, KDB789033 D02 v02r01
The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted accordingly in reference to the Operating Instructions.

1.4 Table for parameters of Test Software setting

Use “QATool_Dbg.exe” and follow the instructions given by the manufacturer, you can start to test. During tes ting, Channel and Power Controlling Software provided by the customer was used to control the operating ch annel as well as the output power level. Test use the customer default power level, with a duty cycle equal to 100%, and to measure its highest possible emissions level, more detailed description as follows:

Mode	Ant.	Test Frequency (MHz)												
		NCB: 20MHz												
		5180	5200	5240	5260	5300	5320	5500	5580	5700	5720	5745	5785	5825
802.11a 6Mbps	ANT 1	13	13	13	13	13	13	/	/	/	/	13	13	13
	ANT 2	13	13	13	13	13	13	/	/	/	/	13	13	13
	ANT 3	13	13	13	13	13	13	/	/	/	/	13	13	13
802.11n-HT20 MCS0	ANT 1	13	13	13	13	13	13	/	/	/	/	13	13	13
	ANT 2	13	13	13	13	13	13	/	/	/	/	13	13	13
	ANT 3	13	13	13	13	13	13	/	/	/	/	13	13	13
802.11ac-VHT20 MCS0	ANT 1	13	13	13	13	13	13	/	/	/	/	13	13	13
	ANT 2	13	13	13	13	13	13	/	/	/	/	13	13	13
	ANT 3	13	13	13	13	13	13	/	/	/	/	13	13	13
802.11ax-HE20	ANT 1	13	13	13	13	13	13	/	/	/	/	13	13	13

MCS0	ANT 2	13	13	13	13	13	13	/	/	/	/	13	13	13
	ANT 3	13	13	13	13	13	13	/	/	/	/	13	13	13

Mode	Ant.	NCB: 40MHz									
		5190	5230	5270	5310	5510	5550	5670	5710	5755	5795
802.11n-HT40 MCS0	ANT 1	13	13	13	13	/	/	/	/	13	13
	ANT 2	13	13	13	13	/	/	/	/	13	13
	ANT 3	13	13	13	13	/	/	/	/	13	13
802.11ac-VHT40 MCS0	ANT 1	13	13	13	13	/	/	/	/	13	13
	ANT 2	13	13	13	13	/	/	/	/	13	13
	ANT 3	13	13	13	13	/	/	/	/	13	13
802.11ax-HE40 MCS0	ANT 1	13	13	13	13	/	/	/	/	13	13
	ANT 2	13	13	13	13	/	/	/	/	13	13
	ANT 3	13	13	13	13	/	/	/	/	13	13

Mode	Ant.	NCB: 80MHz					
		5210	5290	5530	5610	5690	5775
802.11ac-VH80 MCS0	ANT 1	13	13	/	/	/	13
	ANT 2	13	13	/	/	/	13
	ANT 3	13	13	/	/	/	13
802.11ax-VE80 MCS0	ANT 1	13	13	/	/	/	13
	ANT 2	13	13	/	/	/	13
	ANT 3	13	13	/	/	/	13

Mode	Ant.	NCB: 160MHz
		5250
802.11ac-VHT160 MCS0	ANT 1	13
	ANT 2	13
	ANT 3	13
802.11ax-HE160 MCS0	ANT 1	13
	ANT 2	13
	ANT 3	13

1.5 EUT Operating during test

EUT was programmed to be in continuously transmitting mode. During the test, EUT operation to normal function and programs under Android were executed.

1.6 Test Facility

Address of the test laboratory

Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C. (518101）

FCC – Registration No.: 125990

Waltek Testing Group (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is mai ntained in our files. The Designation Number is CN5010, and Test Firm Registration Number is 125990.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A and the CAB identifier is CN0057.

1.7 EUT Setup and Test Mode

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. All testing shall be performed under maximum output power condition, with a duty cycle equal to 100%, and to measure its highest possible emissions level, more detailed description as follows:

Test Mode List		
Test Mode	Description	Remark
TM1	802.11a	5180MHz,5200MHz,5240MHz, 5745MHz, 5785MHz,5825MHz
TM2	802.11n-HT20	5180MHz,5200MHz,5240MHz, 5745MHz, 5785MHz,5825MHz
TM3	802.11ac-VHT20	5180MHz,5200MHz,5240MHz, 5745MHz, 5785MHz,5825MHz
TM4	802.11ax-HE20	5180MHz,5200MHz,5240MHz, 5745MHz, 5785MHz,5825MHz
TM5	802.11n-HT40	5190MHz,5230MHz, 5755MHz,5795MHz
TM6	802.11ac-VHT40	5190MHz,5230MHz, 5755MHz,5795MHz
TM7	802.11ax-HE40	5190MHz,5230MHz, 5755MHz,5795MHz
TM8	802.11ac-VHT80	5210MHz, 5775 MHz
TM9	802.11ax-HE80	5210MHz, 5775 MHz
TM10	802.11ac-VHT160	5250MHz
TM11	802.11ax-HE160	5250MHz,
Note1 : All test modes (different data rate and different modulation) are performed, but only the worst case is recorded in this report. Note 2: The 5GHz WIFI has two antennas and support Multiple Outputs for 802.11n/ac/ax mode for this report; For 5150-5250MHz: Antenna 1 Gain is 4.42dBi; Antenna 2 Gain is 4.42dBi; Antenna 3 Gain is 4.42dBi; For 5725-5850MHz: Antenna 1 Gain is 4.42dBi; Antenna 2 Gain is 4.42dBi; Antenna 3 Gain is 4.42dBi; For this function is belong to Correlated Categorization equipment According to KDB 662911, for same directional gain. Directional gain = GANT + 10 log(NANT) dBi =4.42+10log(3) dBi= 9.19dBi		

Test Conditions	
Temperature:	22~25 °C
Relative Humidity:	45~55 %.
ATM Pressure:	1019 mbar

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
DC Cable	1.5	Unshielded	Without Ferrite

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
Network Cable	1.0	Unshielded	Without Ferrite

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Notebook	Lenovo	TianYi 100-14IBD	PF0F4ABV

1.8 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
RF Output Power	Conducted	±0.42dB
Occupied Bandwidth	Conducted	±1.5%
Power Spectral Density	Conducted	±1.8dB
Conducted Spurious Emission	Conducted	±2.17dB
Conducted Emissions	Conducted	9-150kHz ±3.74dB
		0.15-30MHz ±3.34dB
Transmitter Spurious Emissions	Radiated	30-200MHz ±4.52dB
		0.2-1GHz ±5.56dB
		1-6GHz ±3.84dB
		6-18GHz ±3.92dB

1.9 Test Equipment List and Details

Fixed asset Number	Description	Manufacturer	Model	Serial No.	Cal Date	Due. Date
WTXE1041A 1001	Communication Tester	Rohde & Schwarz	CMW500	148650	2023-02-25	2024-02-24
WTXE1022A 1002	GSM Tester	Rohde & Schwarz	CMU200	114403	2023-02-25	2024-02-24
WTXE1005A 1005	Spectrum Analyzer	Agilent	N9020A	US47140102	2023-02-25	2024-02-24
WTXE1084A 1001	Spectrum Analyzer	Agilent	N9020A	MY54320548	2023-02-25	2024-02-24
WTXE1044A 1001	Signal Generator	Agilent	83752A	3610A01453	2023-02-25	2024-02-24
WTXE1045A 1001	Vector Signal Generator	Agilent	N5182A	MY47070202	2023-02-25	2024-02-24
WTXE1018A 1001	Power Divider	Weinschel	1506A	PM204	2023-02-25	2024-02-24
WTXE1045A 1001	Power Divider	RF-Lambda	RFLT4W5M18G	14110400027	2023-02-25	2024-02-24
☐Chamber A: Below 1GHz						
WTXE1005A 1003	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2023-02-25	2024-02-24
WTXE1007A 1001	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2023-02-25	2024-02-24
WTXE1007A 1001	Amplifier	HP	8447F	2805A03475	2023-02-25	2024-02-24
WTXE1010A 1007	Loop Antenna	Schwarz beck	FMZB 1516	9773	2021-03-20	2024-03-19
WTXE1010A 1006	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2023-03-20	2026-03-19
☐Chamber A: Above 1GHz						
WTXE1005A 1003	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2023-02-25	2024-02-24
WTXE1007A 1001	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2023-02-25	2024-02-24
WTXE1065A 1001	Amplifier	C&D	PAP-1G18	14918	2023-02-25	2024-02-24
WTXE1010A 1005	Horn Antenna	ETS	3117	00086197	2021-03-19	2024-03-18
WTXE1010A 1010	DRG Horn Antenna	A.H. SYSTEMS	SAS-574	571	2021-03-19	2024-03-18

WTXE1003A 1001	Pre-amplifier	Schwarzbeck	BBV 9721	9721-031	2023-02-25	2024-02-24
☐Chamber B:Below 1GHz						
WTXE1010A 1006	Trilog Broadband Antenna	Schwarz beck	VULB9163(B)	9163-635	2021-04-09	2024-04-08
WTXE1038A 1001	Amplifier	Agilent	8447D	2944A104 57	2023-02-25	2024-02-24
WTXE1001A 1002	EMI Test Receiver	Rohde & Schwarz	ESPI	101391	2023-02-25	2024-02-24
☒Chamber C:Below 1GHz						
WTXE1093A 1001	EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2023-02-25	2024-02-24
WTXE1010A 1013-1	Trilog Broadband Antenna	Schwarz beck	VULB 9168	1194	2021-05-28	2024-05-27
WTXE1010A 1007	Loop Antenna	Schwarz beck	FMZB 1516	9773	2021-03-20	2024-03-19
WTXE1007A 1002	Amplifier	HP	8447F	2944A038 69	2023-02-25	2024-02-24
☒Chamber C: Above 1GHz						
WTXE1093A 1001	EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2023-02-25	2024-02-24
WTXE1103A 1005	Horn Antenna	POAM	RTF-118A	1820	2023-03-10	2026-03-09
WTXE1103A 1006	Amplifier	Tonscend	TAP01018050	AP22E806 235	2023-02-25	2024-02-24
WTXE1010A 1010	DRG Horn Antenna	A.H. SYSTEMS	SAS-574	571	2021-03-19	2024-03-18
WTXE1003A 1001	Pre-amplifier	Schwarzbeck	BBV 9721	9721-031	2023-02-25	2024-02-24
☐Conducted Room 1#						
WTXE1001A 1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2023-02-25	2024-02-24
WTXE1002A 1001	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2023-02-25	2024-02-24
WTXE1003A 1001	AC LISN	Schwarz beck	NSLK8126	8126-279	2023-02-25	2024-02-24
☒Conducted Room 2#						
WTXE1001A 1004	EMI Test Receiver	Rohde & Schwarz	ESPI	101259	2023-02-25	2024-02-24
WTXE1003A	LISN	Rohde &	ENV 216	100097	2023-02-25	2024-02-24

1003		Schwarz				

Software List			
Description	**Manufacturer**	**Model**	**Version**
EMI Test Software (Radiated Emission)*	Farad	EZ-EMC	RA-03A1
EMI Test Software (Conducted Emission Room 1#)*	Farad	EZ-EMC	RA-03A1
EMI Test Software (Conducted Emission Room 2#)*	SKET	EMC-I	V2.0

*Remark: indicates software version used in the compliance certification testing.

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§15.203; §15.405	Antenna Requirement	Compliant
15.407 (c)	Automatically Discontinue Transmission	Compliant
§15.207; §15.407(b)(6)	Conducted Emission	Compliant
§15.407(a)(1),(2)	Power Spectral Density	Compliant
§15.407(e)	Emission Bandwidth and Occupied Bandwidth	Compliant
§15.407(a)(1),(2)	Maximum Conducted Output Power	Compliant
§15.407(b)(1),(2),(3),(4)	Undesirable emission	Compliant
§15.205; §15.407(b)(1),(2),(3)	Radiated Emission	Compliant
§15.407(g)	Frequency Stability	Compliant
§15.407(h)	Dynamic Frequency Selection (DFS)	Compliant

N/A: Not applicable.

3. Antenna Requirement

3.1 Standard Applicable

According to FCC Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

3.2 Evaluation Information

This product has two External antennas, fulfill the requirement of this section.

4. Automatically Discontinue Transmission

4.1 Standard Applicable

According to FCC Part 15.407(c), the device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

4.2 Summary of Test Results

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

5. Power Spectral Density

5.1 Standard Applicable

Section 15.407(a) Power limits:

(1) For the band 5.15-5.25GHz.
(ii) For an indoor access point operating in the band 5.15 – 5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) For the 5.25-5.35GHz and 5.47-5.725GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or 11dBm + 10 log B, where B is the 26dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(3) For the band 5.725-5.85GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30dBm in any 500kHz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

5.2 Test Procedure

According to 789033 D02 v02r01 General UNII Test Procedures New Rules v02, the following is the measurement procedure.
For devices operating in the bands 5.15-5.25GHz, 5.25-5.35GHz, and 5.47-5.725GHz, the above procedures make use of 1MHz RBW to satisfy directly the 1MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85GHz, the rules specify a measurement bandwidth of 500kHz. Many spectrum analyzers do not have 500kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1MHz, or 500kHz, “provided that the measured power is integrated over the full

reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1MHz, or 500kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500kHz) and integrated over 1 MHz, or 500kHz bandwidth, the following adjustments to the procedures apply:

a) Set RBW ≥ 1/T, where T is defined in section II.B.I.a).
b) Set VBW ≥ 3 RBW.
c) If measurement bandwidth of Maximum PSD is specified in 500kHz, add 10log(500kHz/RBW) to the measured result, whereas RBW (< 500kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
d) If measurement bandwidth of Maximum PSD is specified in 1MHz, add 10log(1MHz/RBW) to the measured result, whereas RBW (< 1MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100kHz for the sections 5.c) and 5.d) above, since RBW=100kHZ is available on nearly all spectrum analyzers.

5.3 Summary of Test Results/Plots

Please refer to Appendix A

6. Emission Bandwidth and Occupied Bandwidth

6.1 Standard Applicable

According to 15.407(a) and (e):

(1) For the band 5.15-5.25GHz.
(iv) For mobile and portable client devices in the 5.15-5.25GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250mW provided the maximum antenna gain does not exceed 6dBi. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(2) For the 5.25-5.35GHz and 5.47-5.725GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or 11dBm + 10 log B, where B is the 26dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(3) For the band 5.725-5.85GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30dBm in any 500kHz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(e) Within the 5.725-5.85GHz band, the minimum 6dB bandwidth of U-NII devices shall be at least 500kHz.

6.2 Test Procedure

According to 789033 D02 v02r0r section C&D, the following is the measurement procedure.

1. Emission Bandwidth (EBW)
a) Set RBW = approximately 1% of the emission bandwidth.
b) Set the VBW > RBW.

c) Detector = Peak.
d) Trace mode = max hold.
e) Measure the maximum width of the emission that is 26dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

2. Minimum Emission Bandwidth for the band 5.725-5.85GHz
Section 15.407(e) specifies the minimum 6dB emission bandwidth of at least 500KHz for the band 5.715-5.85GHz. The following procedure shall be used for measuring this bandwidth:
a) Set RBW = 100kHz.
b) Set the video bandwidth (VBW) ≥ 3 × RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.
Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

D. 99 Percent Occupied Bandwidth
The 99-percent occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5 % of the total mean power of the given emission. Measurement of the 99-percent occupied bandwidth is required only as a condition for using the optional band-edge measurement techniques described in section II.G.3.d). Measurements of 99-percent occupied bandwidth may also optionally be used in lieu of the EBW to 789033 D02 v02r01 General UNII Test Procedures New Rules v01 define the minimum frequency range over which the spectrum is integrated when measuring maximum conducted output power as described in section II.E. However, the EBW must be measured to determine bandwidth dependent limits on maximum conducted output power in accordance with 15.407(a).

The following procedure shall be used for measuring (99 %) power bandwidth:
1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW ≥ 3 * RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency.

The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

6.3 Summary of Test Results/Plots

Please refer to Appendix B

7. Maximum Conducted Output Power

7.1 Standard Applicable

Section 15.407(a) Power limits:

(1) For the band 5.15-5.25GHz.
(ii) For an indoor access point operating in the band 5.15 – 5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) For the 5.25-5.35GHz and 5.47-5.725GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or 11dBm + 10 log B, where B is the 26dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(3) For the band 5.725-5.85GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30dBm in any 500kHz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

7.2 Test Procedure

According to KDB789033 D02 v02r01 section E, the following is the measurement procedure.

(i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.

(ii) Set RBW = 1MHz.

(iii) Set VBW ≥ 3MHz.

(iv) Number of points in sweep ≥ 2 Span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that

narrowband signals are not lost between frequency bins.)

(v) Sweep time = auto.

(vi) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.

(vii) If transmit duty cycle < 98 percent, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98 percent, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to “free run”.

(viii) Trace average at least 100 traces in power averaging (i.e., RMS) mode.

(ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument’s band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

7.3 Summary of Test Results/Plots

Please refer to Appendix C

8. Radiated Spurious Emissions

8.1 Standard Applicable

According to §15.407(b), undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

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

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

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

(4) For transmitters operating in the 5.725-5.85GHz band:

(i) All emissions shall be limited to a level of −27dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10dBm/MHz at 25MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6dBm/MHz at 5MHz above or below the band edge, and from 5MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

According to §15.407(b)(6), Unwanted emissions below 1GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

According to §15.407(b)(7), The provisions of §15.205 apply to intentional radiators operating under this section.

789033 D02 v02r01 General UNII Test Procedures New Rules v01

If radiated measurements are performed, field strength is then converted to EIRP as follows:

EIRP = ((E*d)^2) / 30

where:

• E is the field strength in V/m;

• d is the measurement distance in meters;

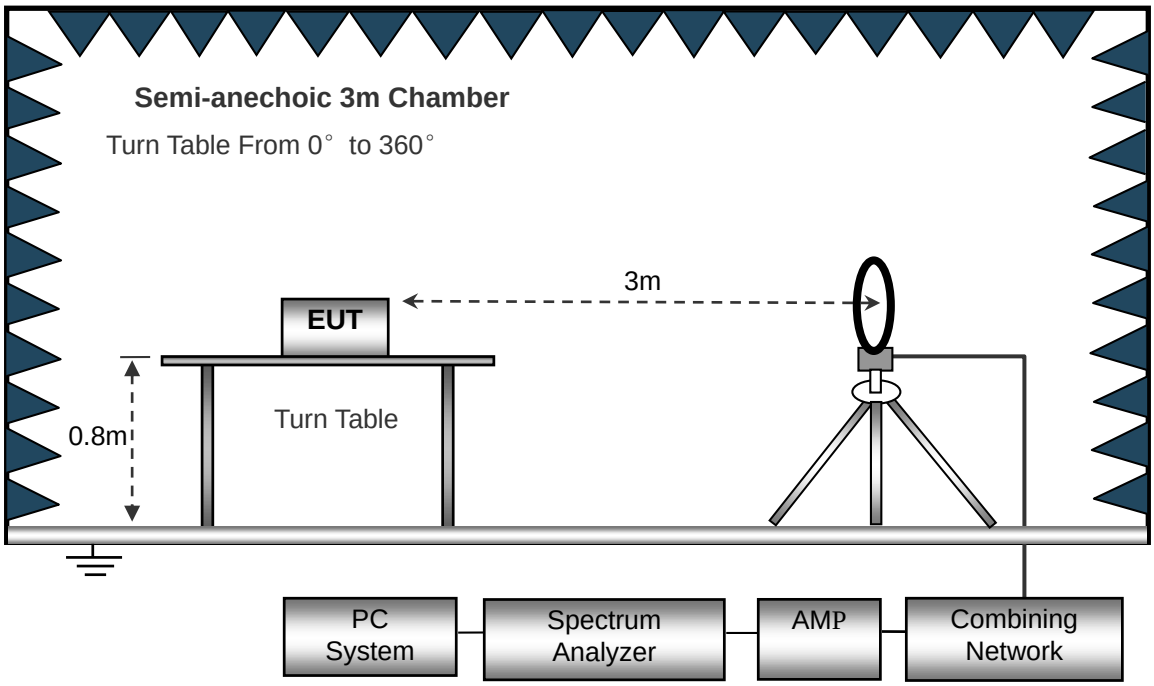
• EIRP is the equivalent isotropically radiated power in watts.

8.2 Test Procedure

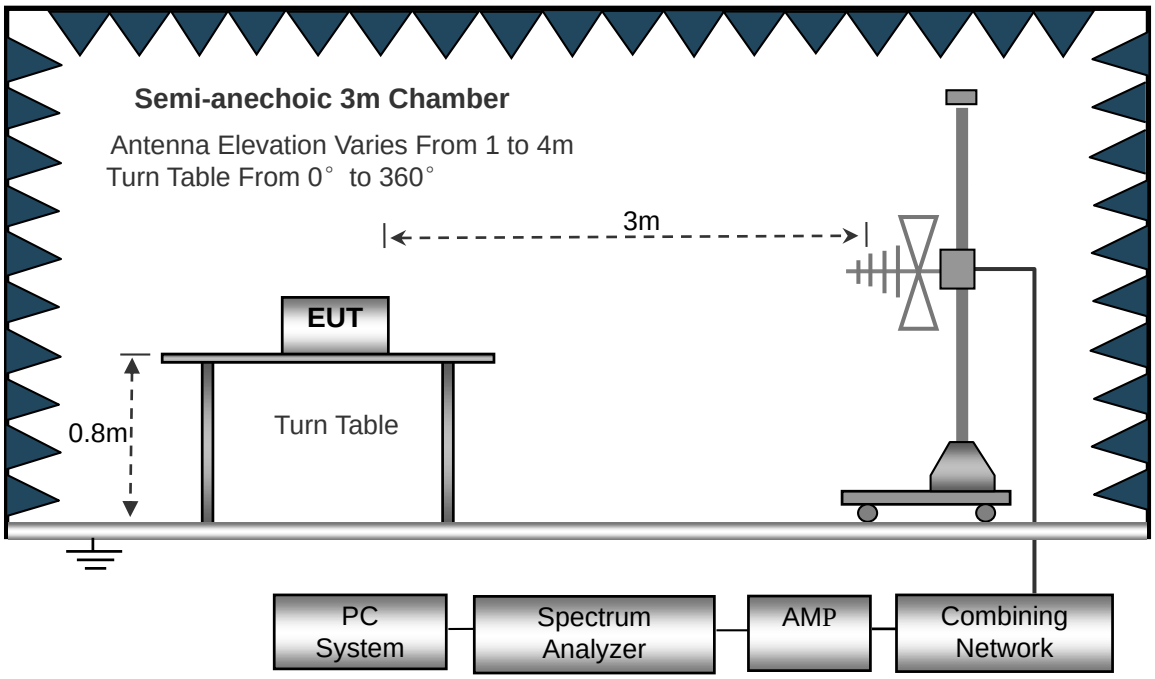
The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.205 15.407(b)(6) and FCC Part 15.209 Limit..

The external I/O cables were draped along the test table and formed a bundle 30 to 40cm long in the middle. The spacing between the peripherals was 10cm.

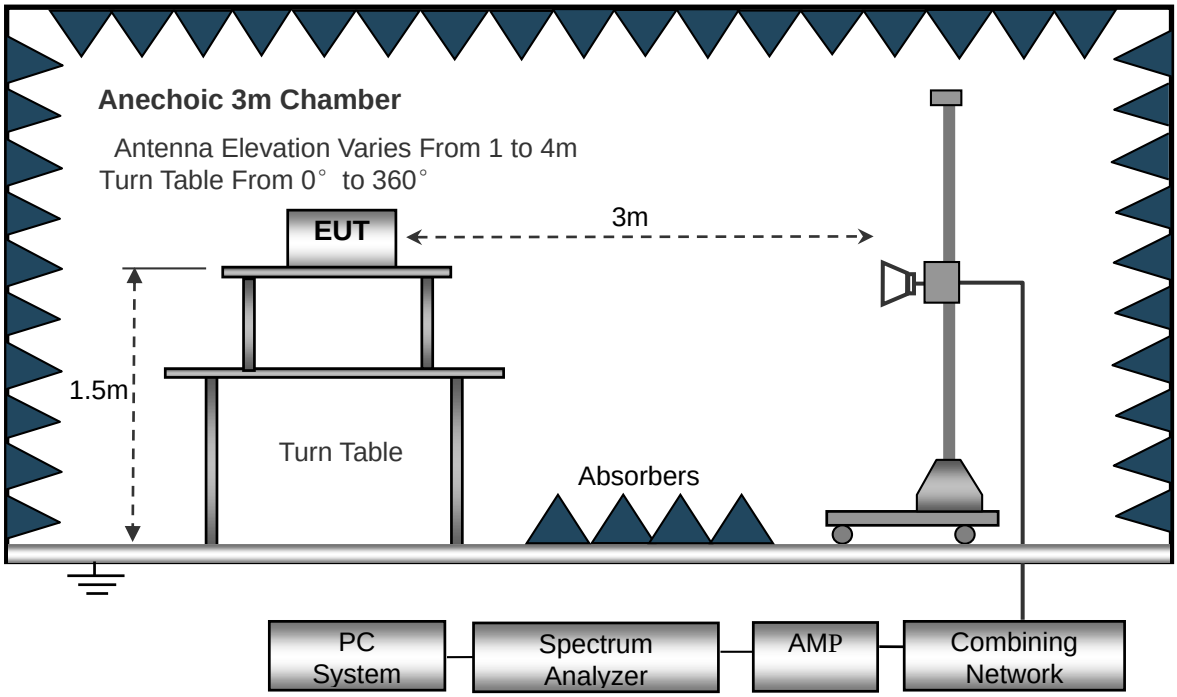
The test setup for emission measurement below 30MHz.



The test setup for emission measurement from 30 MHz to 1 GHz.



The test setup for emission measurement above 1GHz.



8.3 Test Receiver Setup

During the radiated emission test for above 1GHz, the test receiver was set with the following configurations:

For peak detector:
RBW = 1000kHz, VBW = 3000kHz, Sweep Time = Auto

For average detector:
RBW = 1000kHz, VBW = 10Hz, Sweep Time = Auto

8.4 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Ant. Factor + Cable Loss – Ampl. Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit for Class B. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – FCC Part 15 Limit

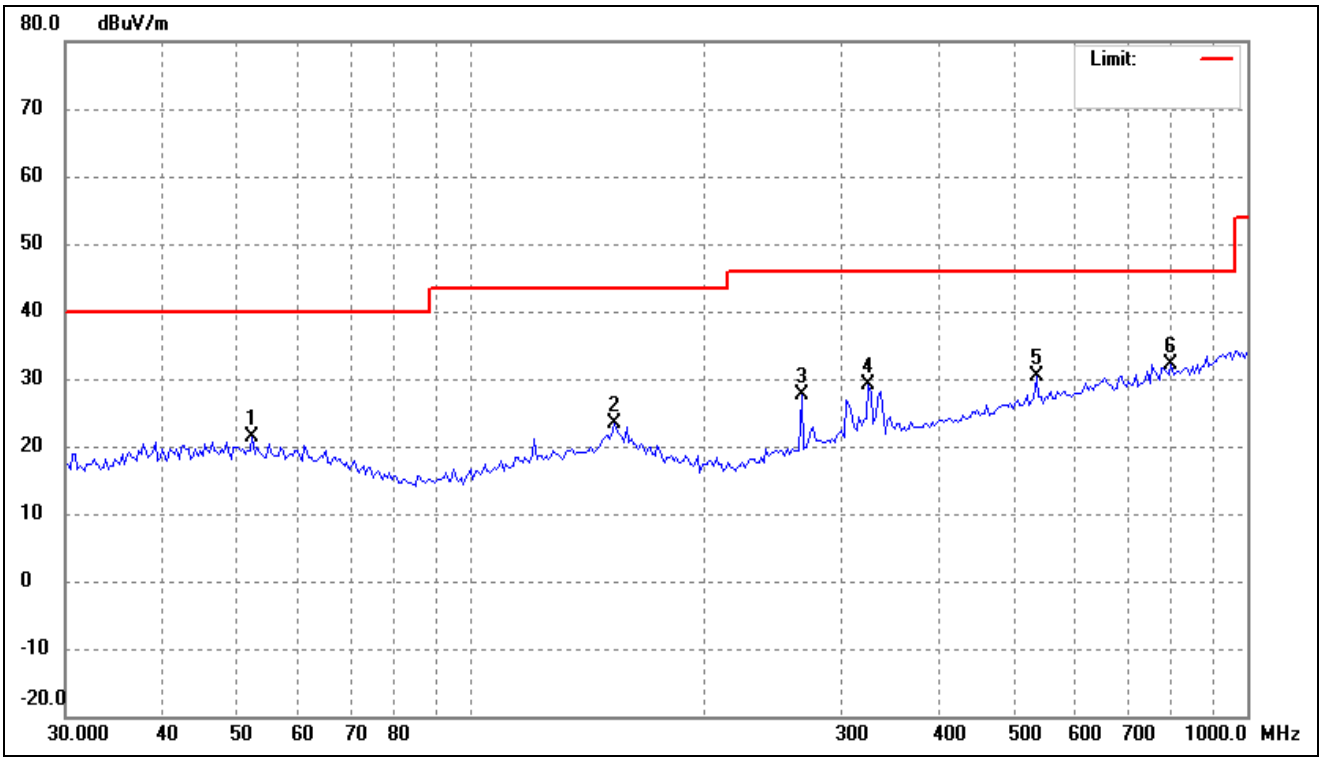
8.5 Summary of Test Results/Plots

Note: *this EUT was tested in 3 orthogonal positions and the worst case position data was reported.*

- Spurious Emission From 30MHz to 1GHz

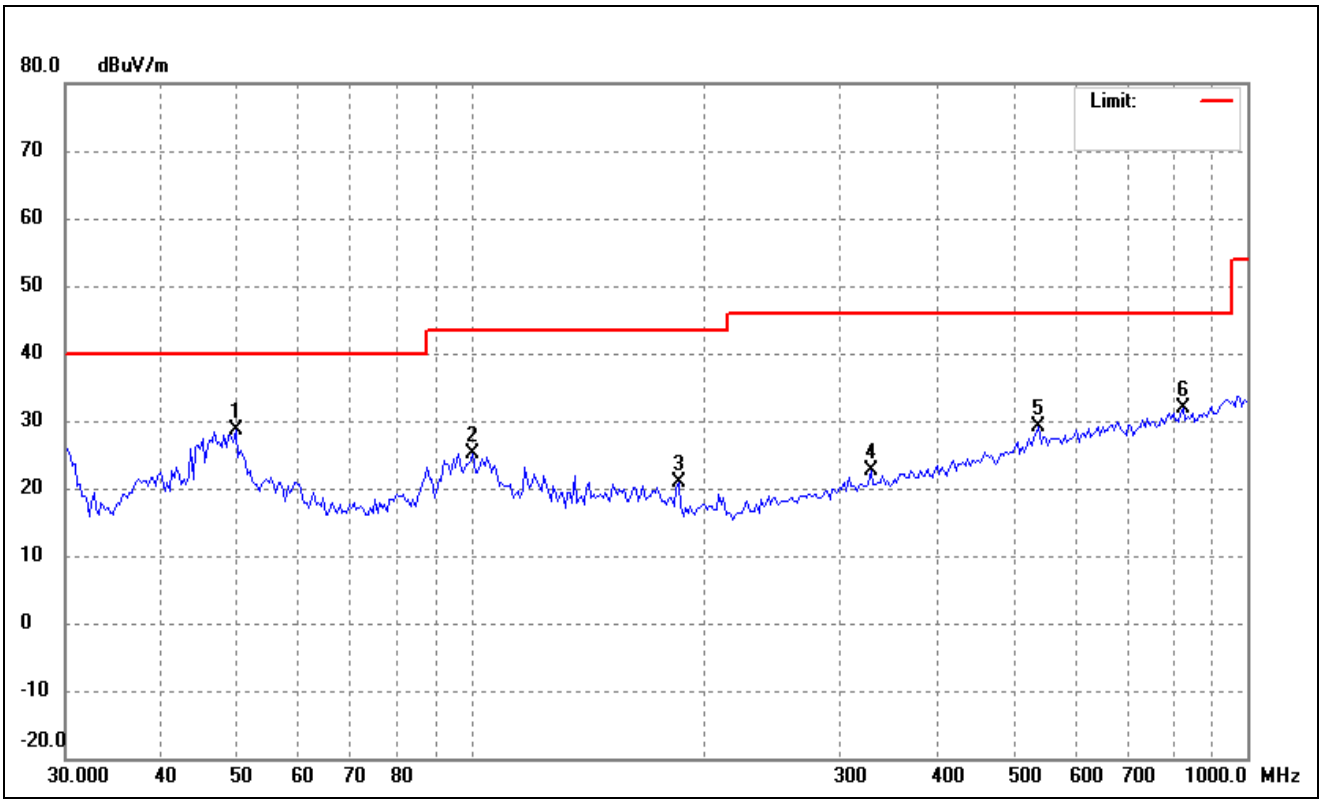
- Antenna 1
- 5180-5240MHz

802.11a			
Test Channel	5180MHz(Worst case)	Polarity:	Horizontal



No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	52.2659	29.77	-8.33	21.44	40.00	-18.56	-	-	peak
2	153.1627	32.11	-8.61	23.50	43.50	-20.00	-	-	peak
3	266.8395	37.05	-9.46	27.59	46.00	-18.41	-	-	peak
4	324.8645	36.63	-7.55	29.08	46.00	-16.92	-	-	peak
5	535.0377	33.68	-3.25	30.43	46.00	-15.57	-	-	peak
6	798.6205	31.90	0.29	32.19	46.00	-13.81	-	-	peak

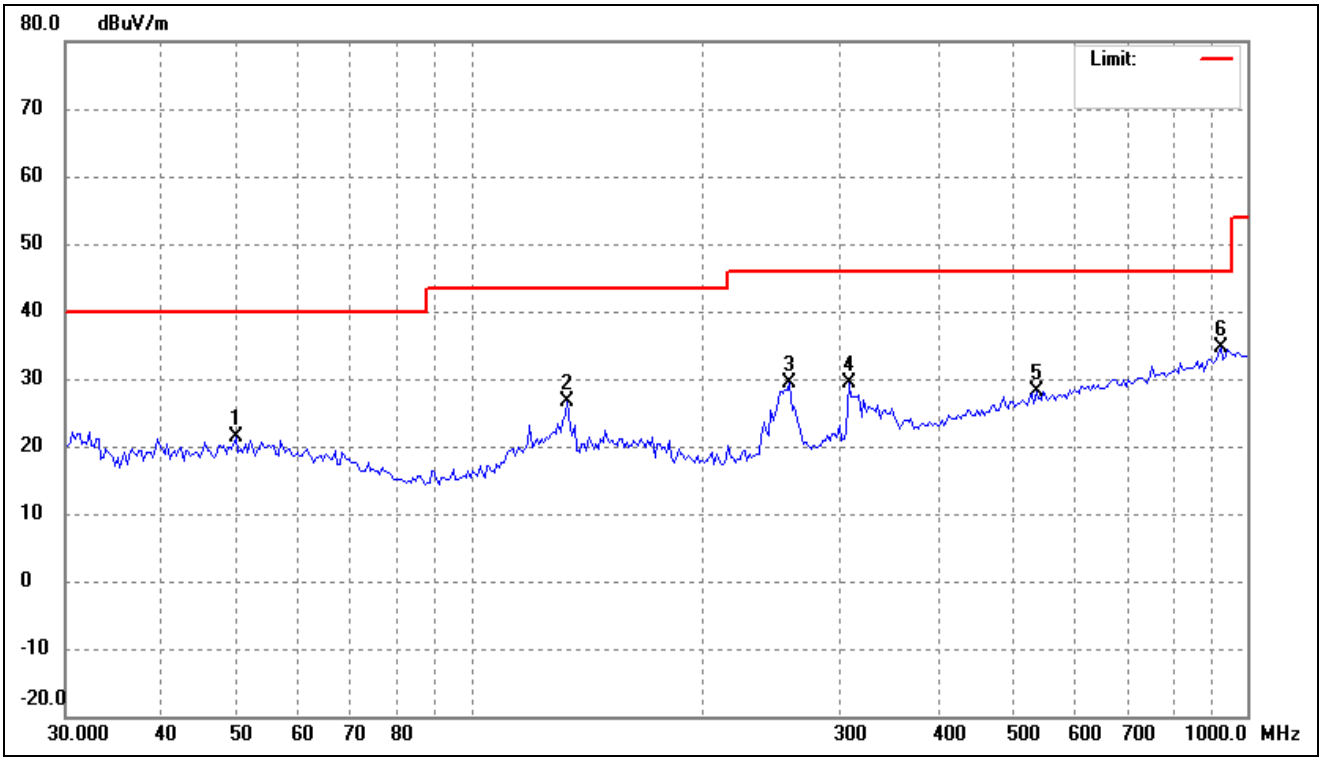
802.11a(Worst case)			
Test Channel	5180MHz(Worst case)	Polarity:	Vertical



No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	49.7571	36.73	-8.09	28.64	40.00	-11.36	-	-	peak
2	100.4712	37.56	-12.45	25.11	43.50	-18.39	-	-	peak
3	185.1626	31.74	-10.89	20.85	43.50	-22.65	-	-	peak
4	327.1554	30.16	-7.51	22.65	46.00	-23.35	-	-	peak
5	538.8106	32.30	-3.15	29.15	46.00	-16.85	-	-	peak
6	827.1795	31.43	0.54	31.97	46.00	-14.03	-	-	peak

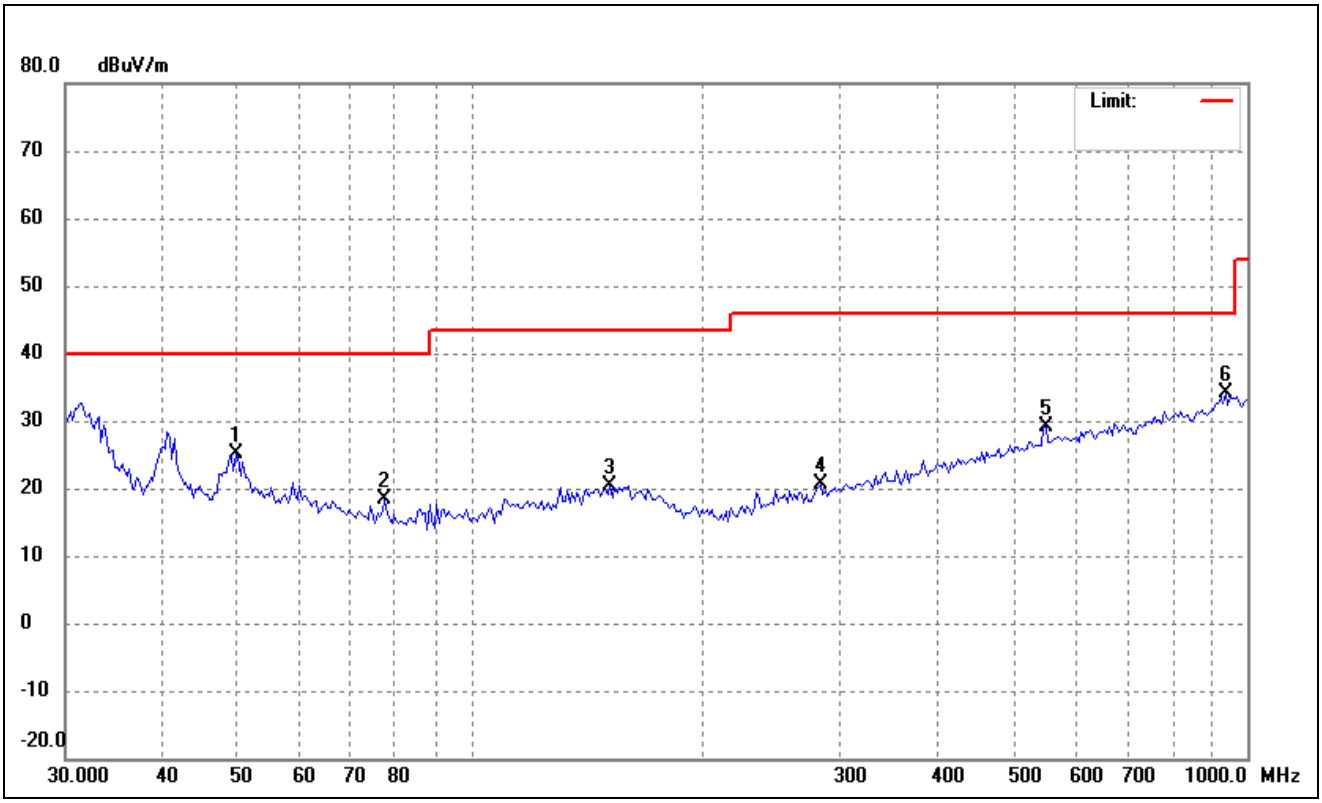
➢ 5260-5320MHz

802.11a(Worst case)			
Test Channel	5260MHz(Worst case)	Polarity:	Horizontal



No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	49.7571	29.41	-8.09	21.32	40.00	-18.68	-	-	peak
2	133.0809	36.36	-9.72	26.64	43.50	-16.86	-	-	peak
3	257.6266	39.18	-9.87	29.31	46.00	-16.69	-	-	peak
4	307.1053	37.42	-8.06	29.36	46.00	-16.64	-	-	peak
5	535.0377	31.42	-3.25	28.17	46.00	-17.83	-	-	peak
6	925.6132	32.85	1.74	34.59	46.00	-11.41	-	-	peak

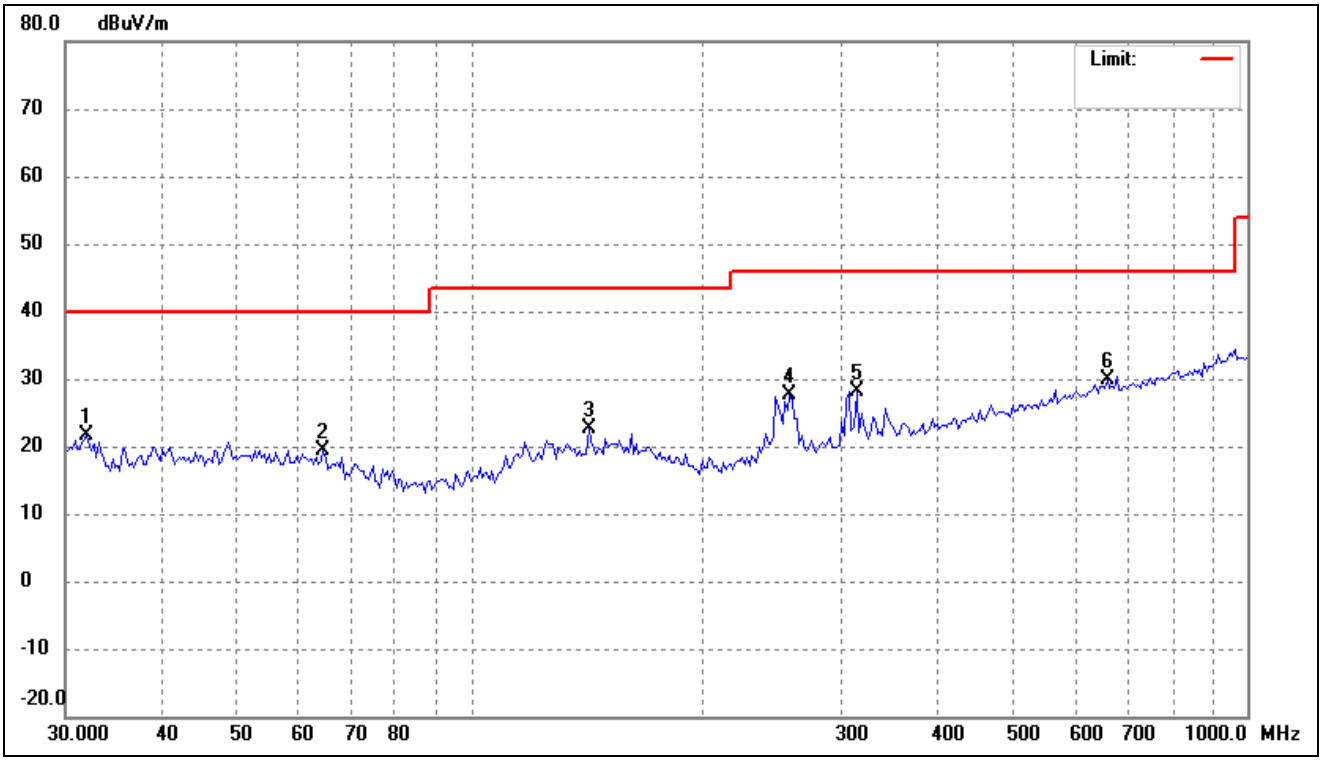
802.11a(Worst case)			
Test Channel	5260MHz(Worst case)	Polarity:	Vertical



No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	49.7571	33.12	-8.09	25.03	40.00	-14.97	-	-	peak
2	77.4680	30.75	-12.41	18.34	40.00	-21.66	-	-	peak
3	151.0252	28.90	-8.61	20.29	43.50	-23.21	-	-	peak
4	282.2702	29.39	-8.86	20.53	46.00	-25.47	-	-	peak
5	550.2902	32.08	-2.84	29.24	46.00	-16.76	-	-	peak
6	938.7139	32.10	2.01	34.11	46.00	-11.89	-	-	peak

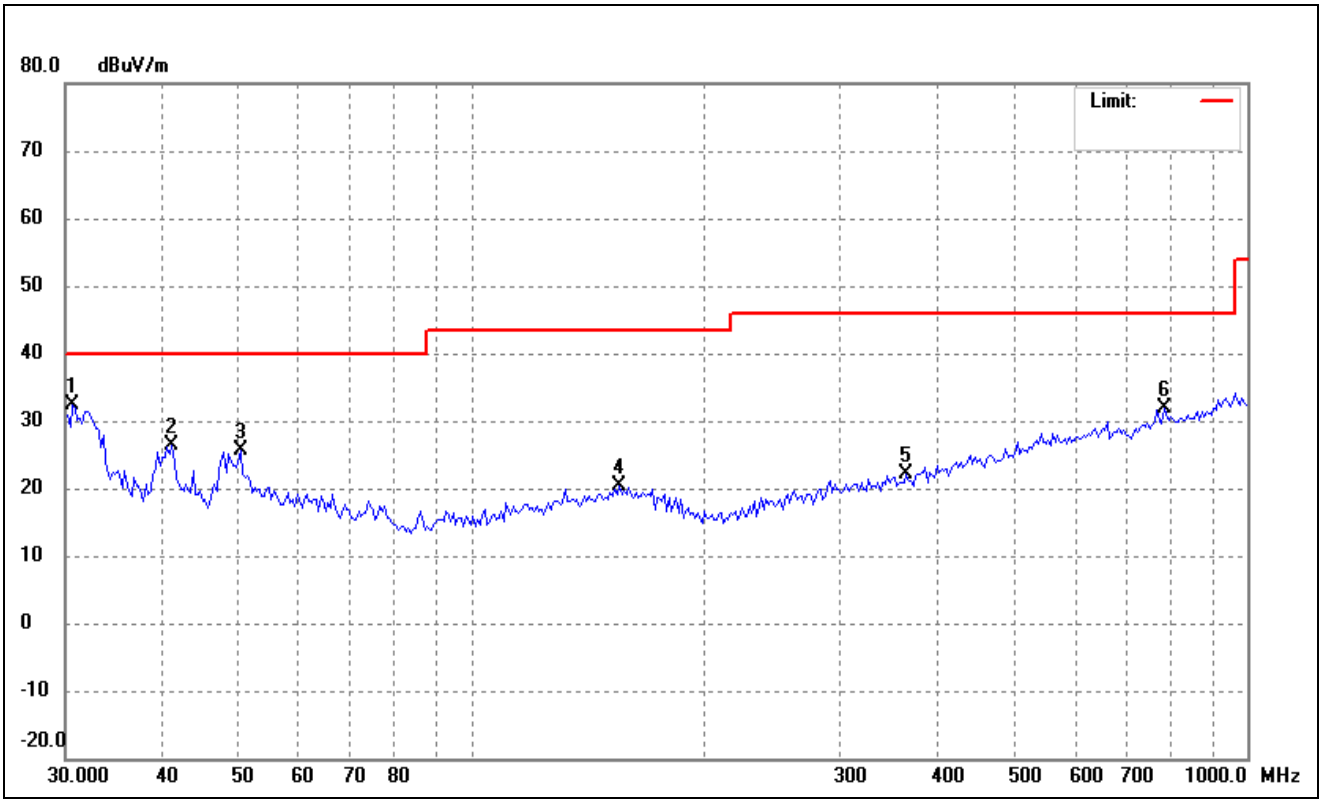
➢ 5745-5825MHz

802.11a(Worst case)			
Test Channel	5475MHz(Worst case)	Polarity:	Horizontal



No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.9586	31.45	-9.94	21.51	40.00	-18.49	-	-	peak
2	64.5319	29.21	-9.76	19.45	40.00	-20.55	-	-	peak
3	141.7694	31.80	-9.28	22.52	43.50	-20.98	-	-	peak
4	257.6266	37.41	-9.87	27.54	46.00	-18.46	-	-	peak
5	313.6483	36.02	-7.87	28.15	46.00	-17.85	-	-	peak
6	660.6025	31.27	-1.28	29.99	46.00	-16.01	-	-	peak

802.11a(Worst case)			
Test Channel	5475MHz(Worst case)	Polarity:	Vertical

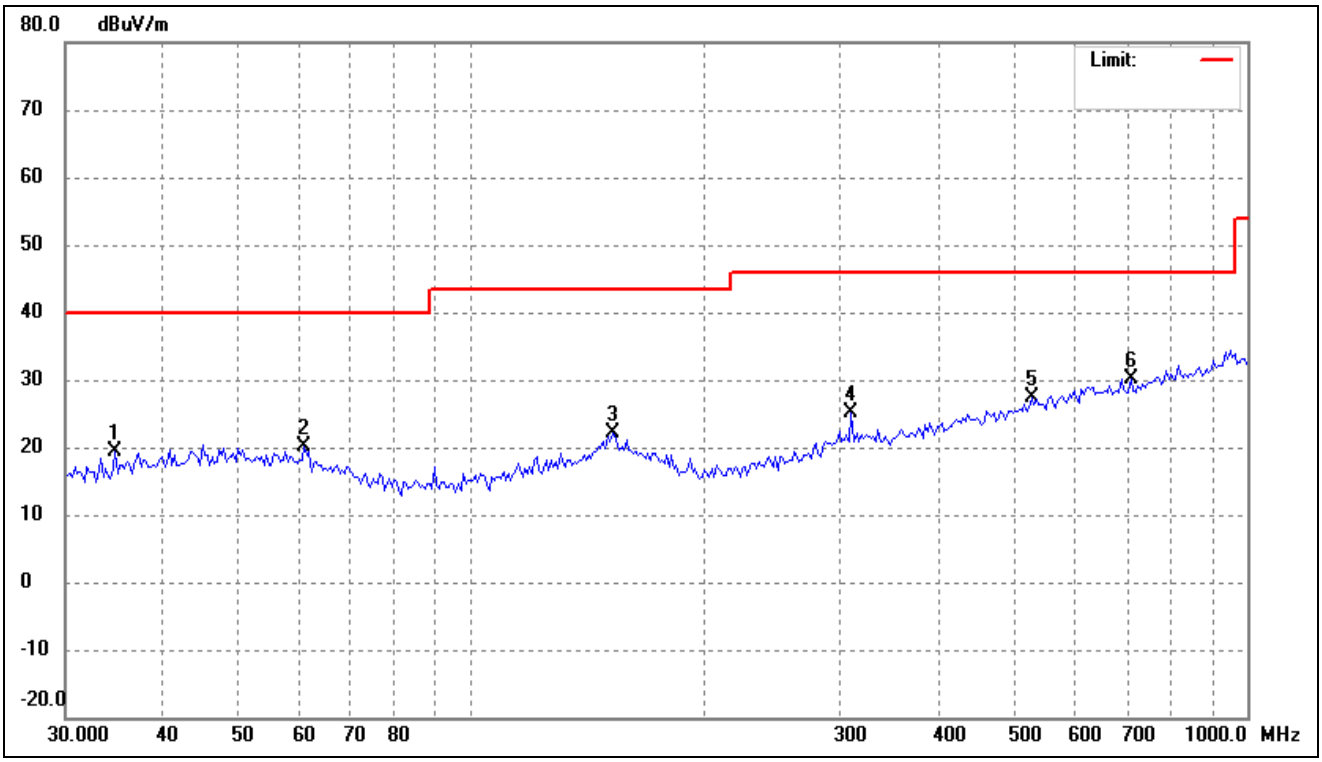


No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	30.6392	42.38	-10.11	32.27	40.00	-7.73	-	-	peak
2	41.1581	34.96	-8.48	26.48	40.00	-13.52	-	-	peak
3	50.4614	33.72	-8.14	25.58	40.00	-14.42	-	-	peak
4	155.3305	29.03	-8.61	20.42	43.50	-23.08	-	-	peak
5	363.5231	28.95	-6.76	22.19	46.00	-23.81	-	-	peak
6	781.9606	31.68	0.13	31.81	46.00	-14.19	-	-	peak

Antenna 1+ Antenna 2+ Antenna 3

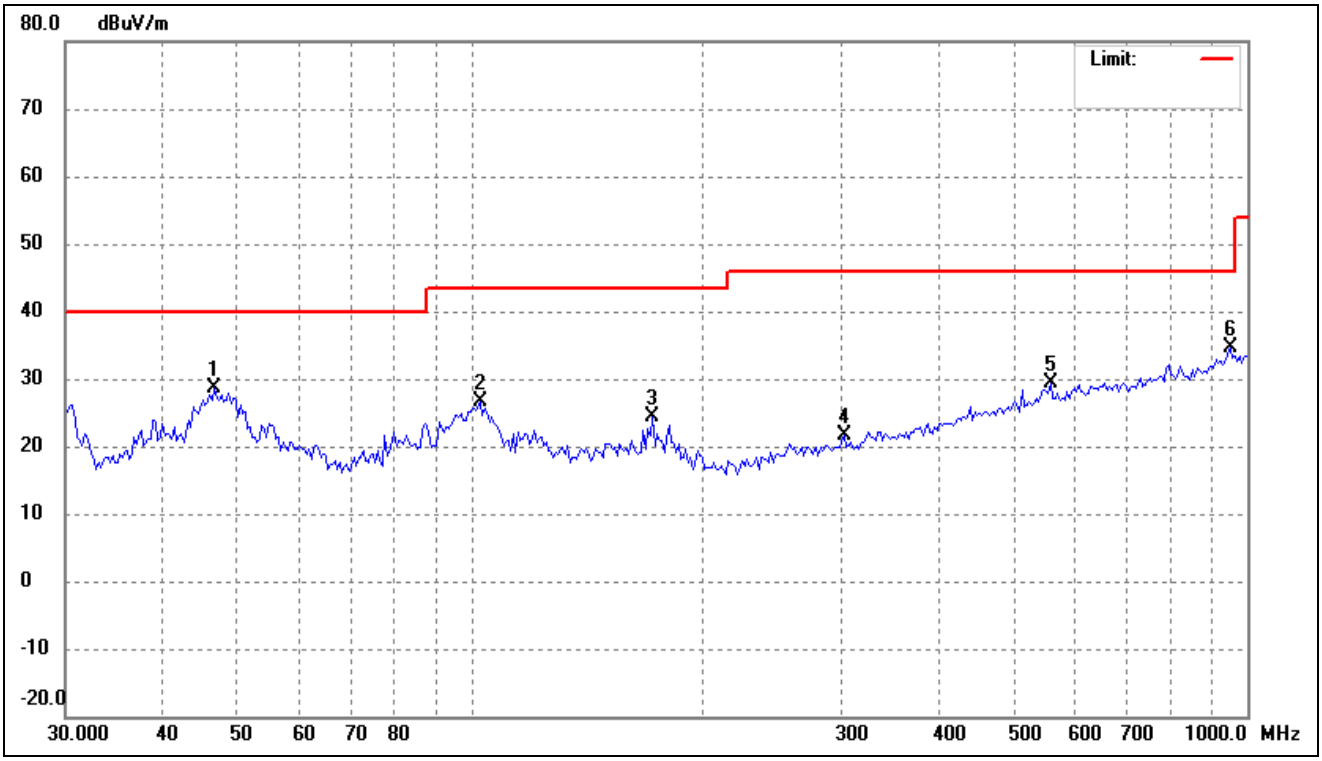
5180-5240MHz

802.11n-HT20			
Test Channel	5180MHz(worst case)	Polarity:	Horizontal



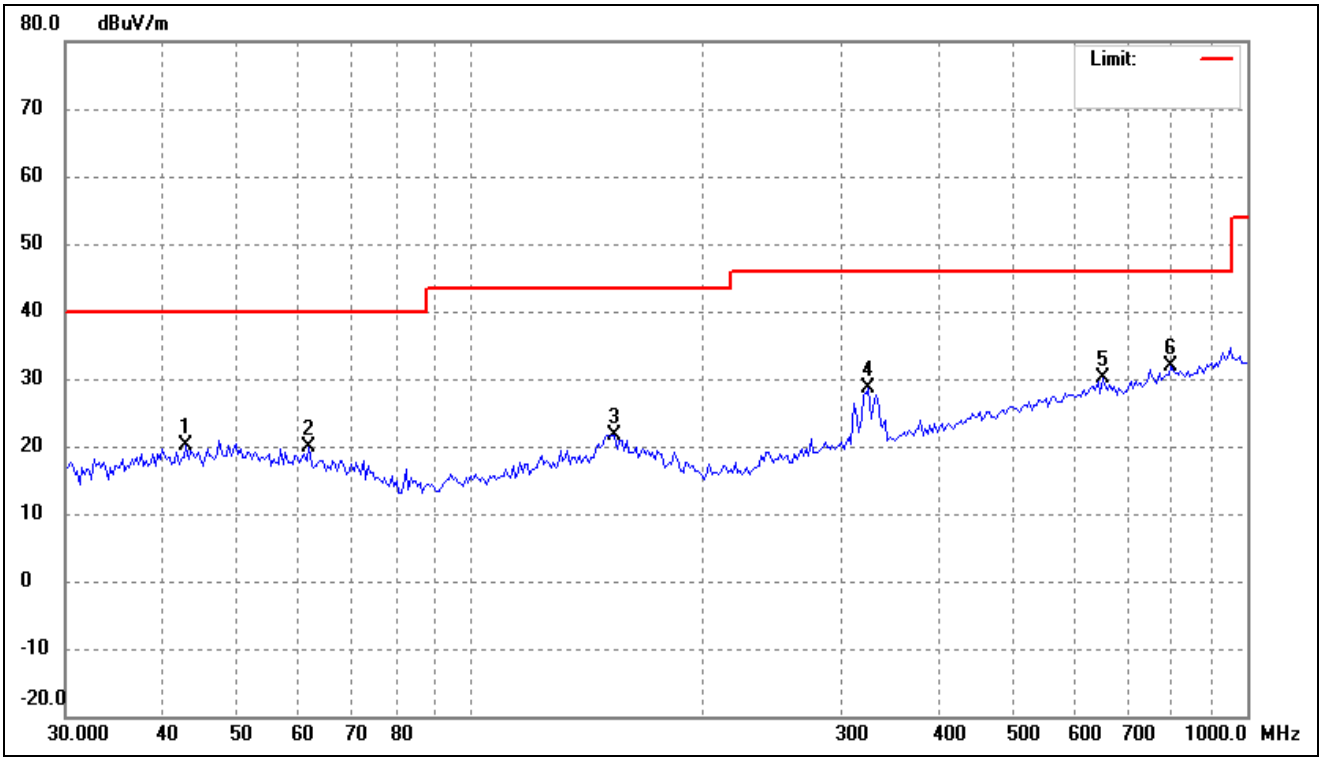
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	34.7705	29.07	-9.59	19.48	40.00	-20.52	-	-	peak
2	61.0041	29.15	-9.11	20.04	40.00	-19.96	-	-	peak
3	152.0902	30.81	-8.60	22.21	43.50	-21.29	-	-	peak
4	309.2710	33.08	-8.00	25.08	46.00	-20.92	-	-	peak
5	527.5707	30.73	-3.45	27.28	46.00	-18.72	-	-	peak
6	708.6941	30.99	-0.94	30.05	46.00	-15.95	-	-	peak

802.11n-HT20			
Test Channel	5180MHz(worst case)	Polarity:	Vertical



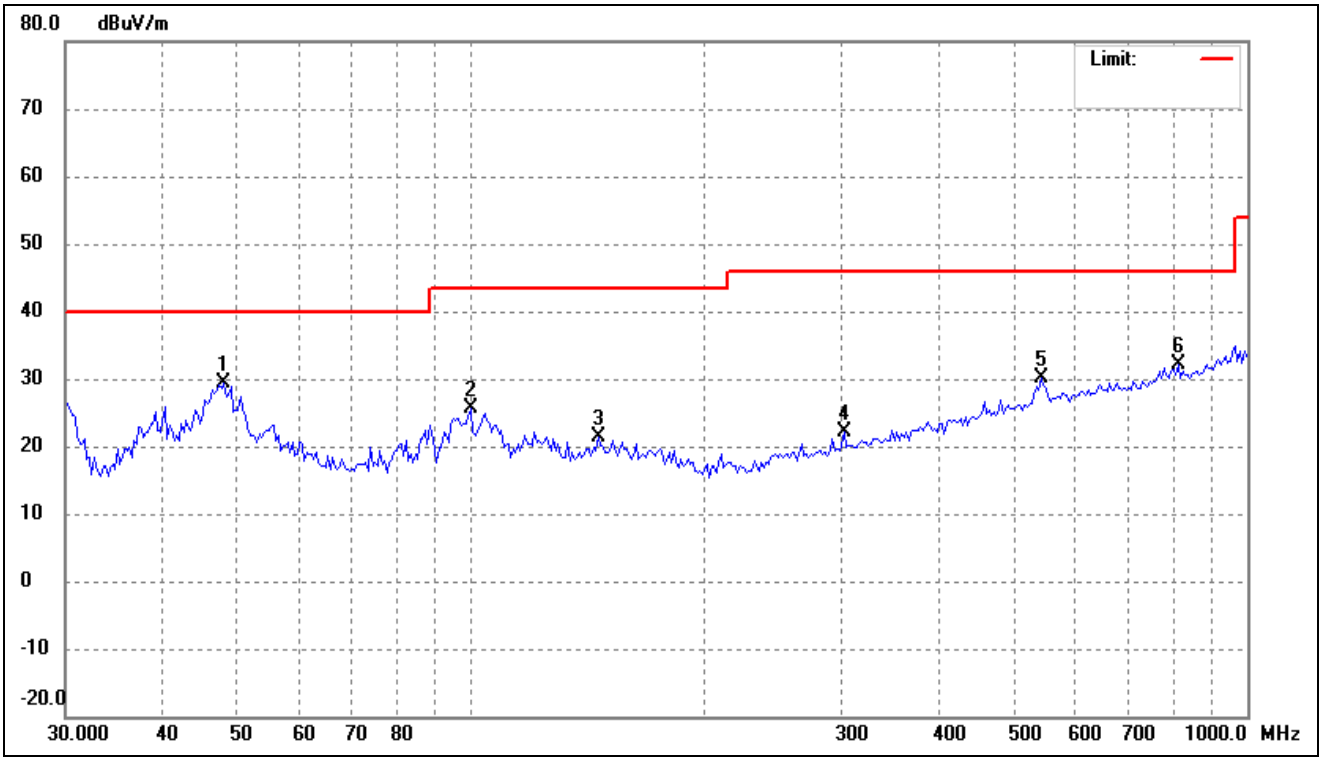
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	46.7077	36.98	-8.34	28.64	40.00	-11.36	-	-	peak
2	102.6117	38.79	-12.25	26.54	43.50	-16.96	-	-	peak
3	171.3890	33.51	-9.08	24.43	43.50	-19.07	-	-	peak
4	302.8193	29.82	-8.18	21.64	46.00	-24.36	-	-	peak
5	558.0788	32.09	-2.66	29.43	46.00	-16.57	-	-	peak
6	952.0001	32.32	2.25	34.57	46.00	-11.43	-	-	peak

802.11ac-VHT20			
Test Channel	5180MHz(worst case)	Polarity:	Horizontal



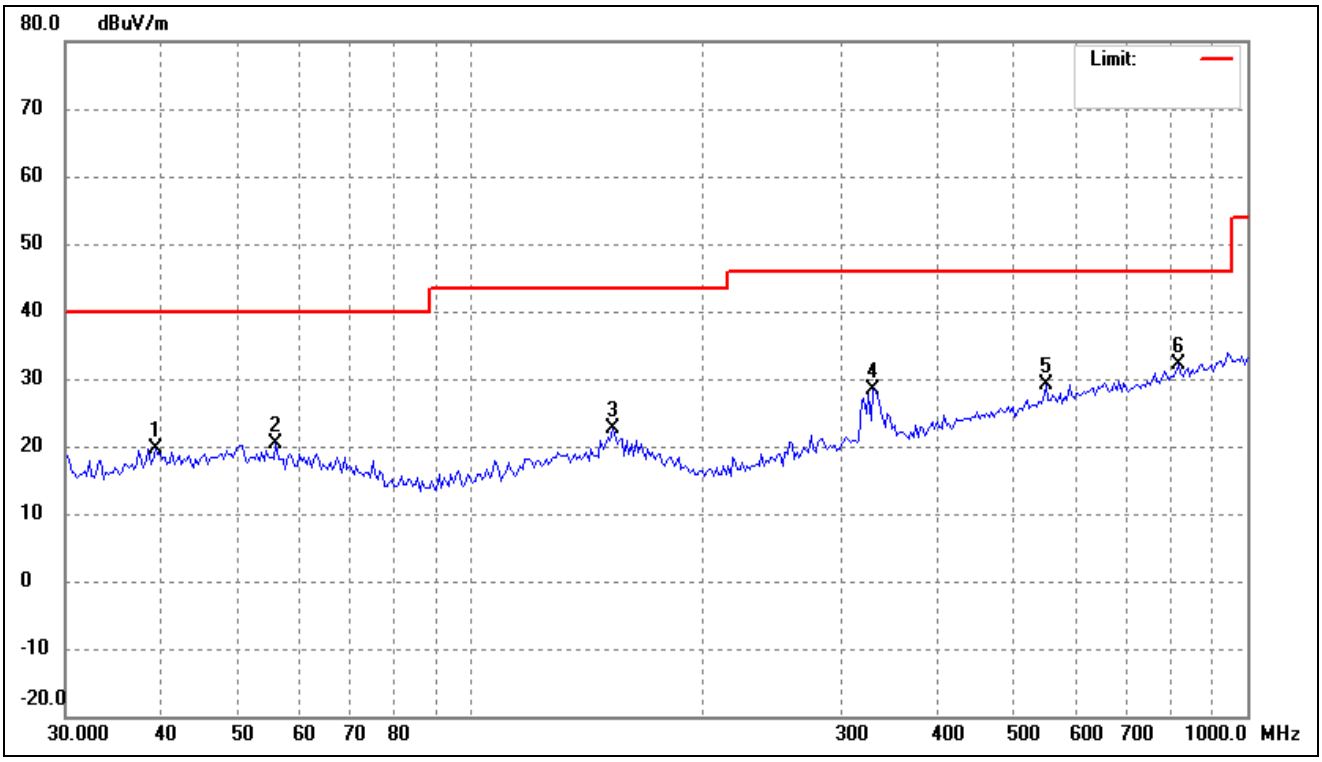
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	42.9305	28.66	-8.48	20.18	40.00	-19.82	-	-	peak
2	61.8676	29.16	-9.28	19.88	40.00	-20.12	-	-	peak
3	153.1627	30.31	-8.61	21.70	43.50	-21.80	-	-	peak
4	324.8645	36.17	-7.55	28.62	46.00	-17.38	-	-	peak
5	651.3831	31.45	-1.30	30.15	46.00	-15.85	-	-	peak
6	798.6205	31.60	0.29	31.89	46.00	-14.11	-	-	peak

802.11ac-VHT20			
Test Channel	5180MHz(worst case)	Polarity:	Vertical



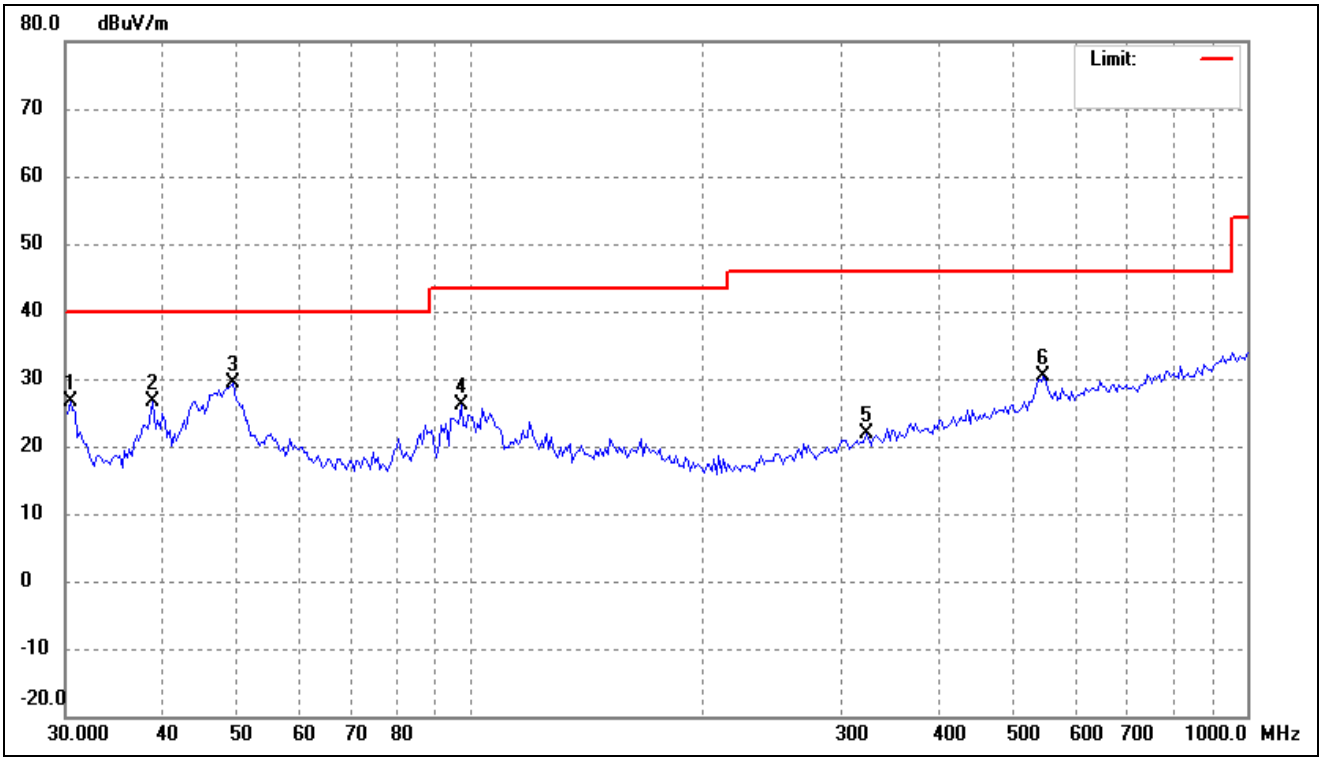
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	48.0392	37.58	-8.23	29.35	40.00	-10.65	-	-	peak
2	99.7675	38.08	-12.51	25.57	43.50	-17.93	-	-	peak
3	145.8109	30.36	-8.95	21.41	43.50	-22.09	-	-	peak
4	302.8193	30.20	-8.18	22.02	46.00	-23.98	-	-	peak
5	542.6103	33.29	-3.05	30.24	46.00	-15.76	-	-	peak
6	815.6353	31.62	0.44	32.06	46.00	-13.94	-	-	peak

802.11ax-HE20			
Test Channel	5180MHz(worst case)	Polarity:	Horizontal



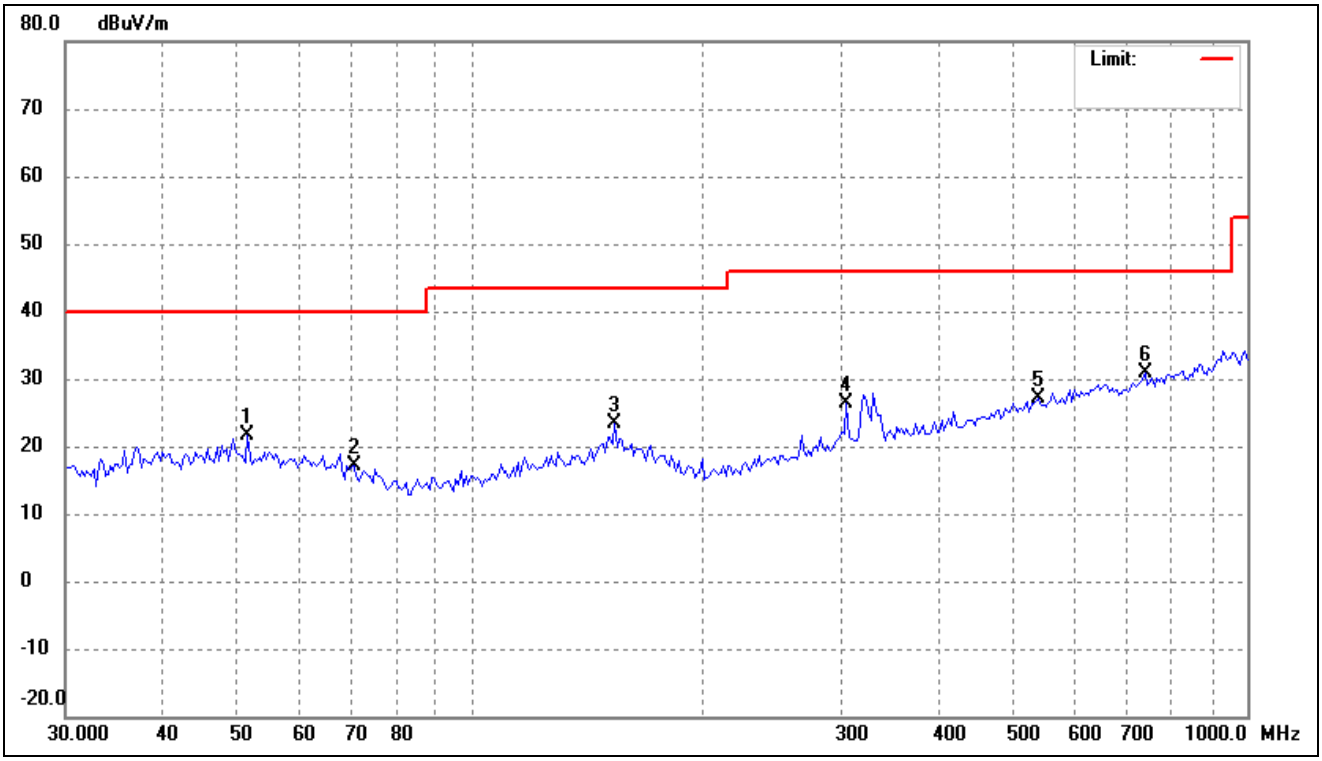
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	39.1825	28.22	-8.65	19.57	40.00	-20.43	-	-	peak
2	56.0708	29.10	-8.70	20.40	40.00	-19.60	-	-	peak
3	152.0902	31.32	-8.60	22.72	43.50	-20.78	-	-	peak
4	329.4625	35.86	-7.47	28.39	46.00	-17.61	-	-	peak
5	550.2902	31.88	-2.84	29.04	46.00	-16.96	-	-	peak
6	815.6353	31.67	0.44	32.11	46.00	-13.89	-	-	peak

802.11ax-HE20			
Test Channel	5180MHz(worst case)	Polarity:	Vertical



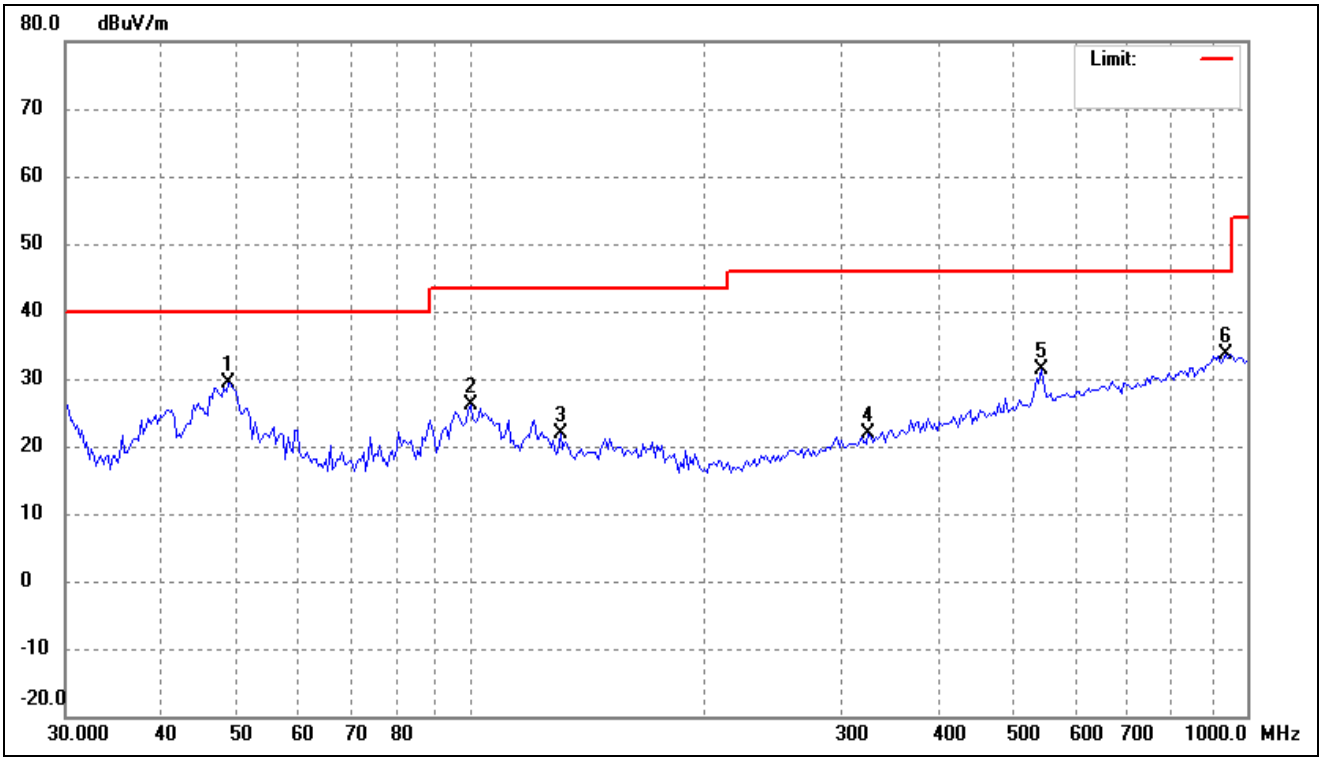
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	30.4246	36.65	-10.13	26.52	40.00	-13.48	-	-	peak
2	38.9081	35.34	-8.72	26.62	40.00	-13.38	-	-	peak
3	49.4087	37.51	-8.13	29.38	40.00	-10.62	-	-	peak
4	97.0023	38.70	-12.67	26.03	43.50	-17.47	-	-	peak
5	322.5896	29.40	-7.62	21.78	46.00	-24.22	-	-	peak
6	546.4368	33.38	-2.94	30.44	46.00	-15.56	-	-	peak

802.11n-HT40			
Test Channel	5190MHz(worst case)	Polarity:	Horizontal



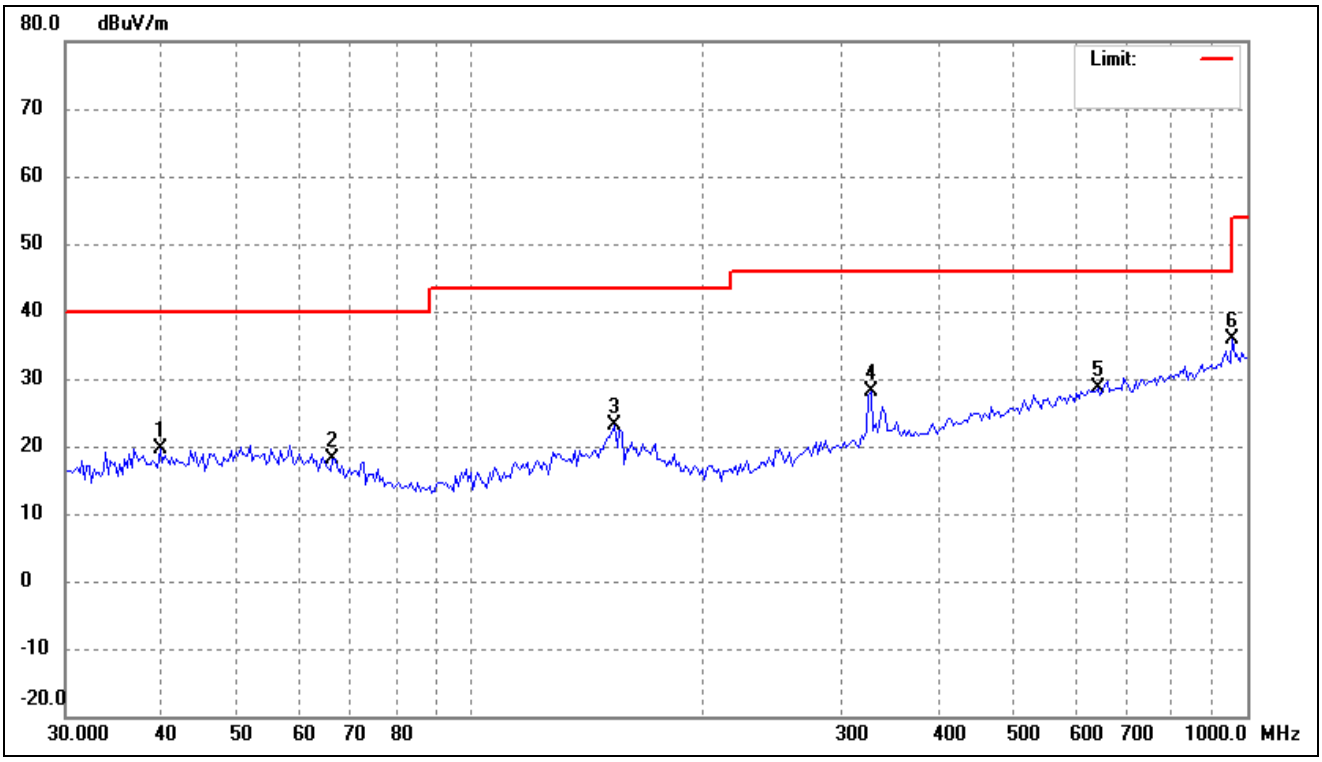
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	51.5365	29.88	-8.24	21.64	40.00	-18.36	-	-	peak
2	70.7047	28.04	-10.92	17.12	40.00	-22.88	-	-	peak
3	153.1627	31.90	-8.61	23.29	43.50	-20.21	-	-	peak
4	304.9548	34.43	-8.12	26.31	46.00	-19.69	-	-	peak
5	538.8107	30.39	-3.15	27.24	46.00	-18.76	-	-	peak
6	739.2136	31.31	-0.37	30.94	46.00	-15.06	-	-	peak

802.11n-HT40			
Test Channel	5190MHz(worst case)	Polarity:	Vertical



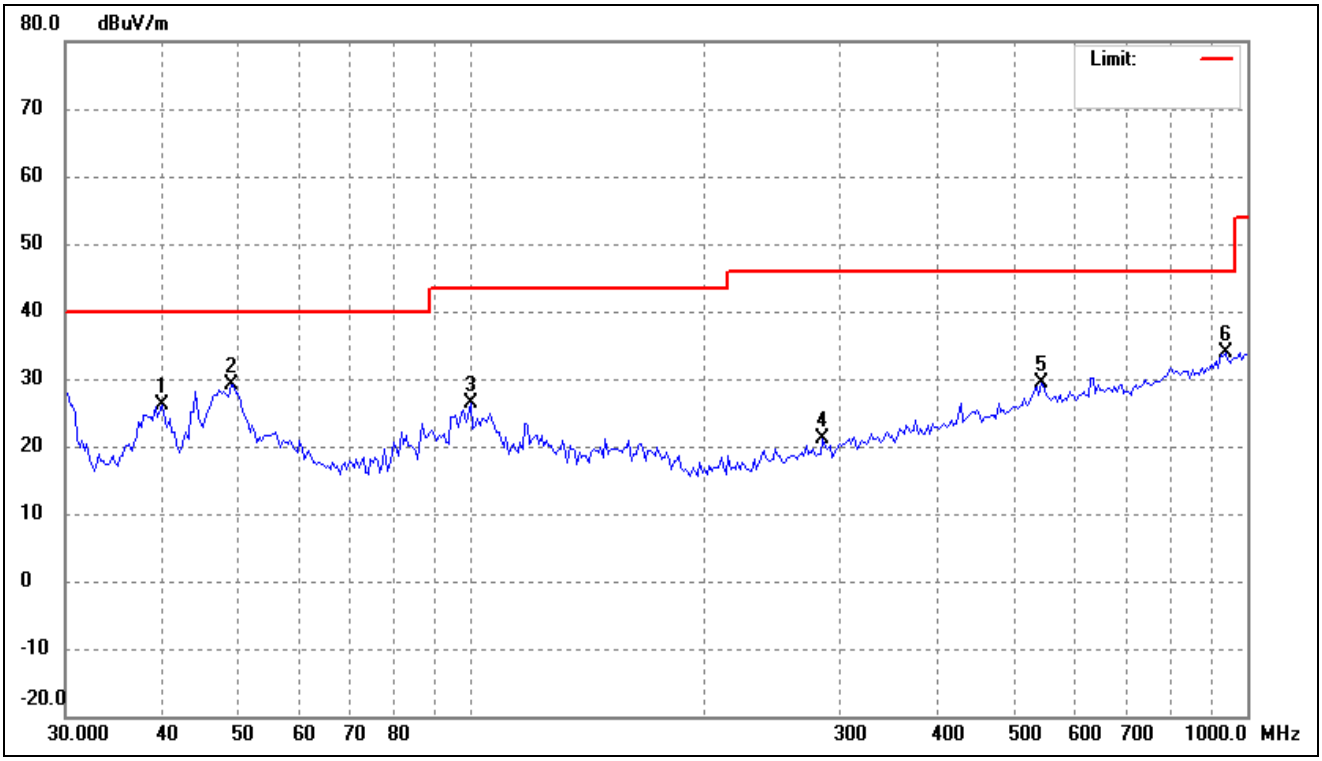
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	48.7191	37.54	-8.18	29.36	40.00	-10.64	-	-	peak
2	99.7676	38.61	-12.51	26.10	43.50	-17.40	-	-	peak
3	130.3048	31.75	-9.84	21.91	43.50	-21.59	-	-	peak
4	324.8645	29.50	-7.55	21.95	46.00	-24.05	-	-	peak
5	542.6104	34.38	-3.05	31.33	46.00	-14.67	-	-	peak
6	938.7139	31.58	2.01	33.59	46.00	-12.41	-	-	peak

802.11ac-VHT40			
Test Channel	5190MHz(worst case)	Polarity:	Horizontal



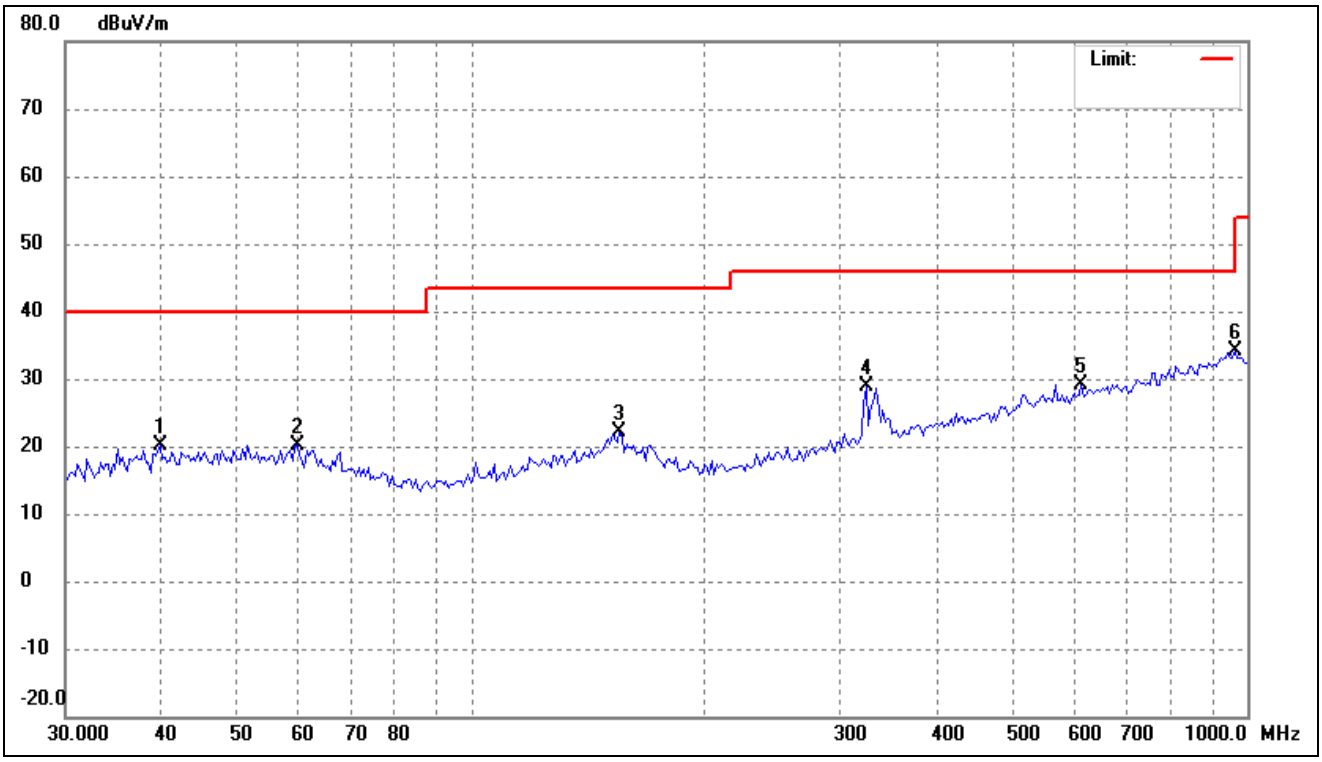
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	39.7371	28.15	-8.54	19.61	40.00	-20.39	-	-	peak
2	66.3715	28.36	-10.11	18.25	40.00	-21.75	-	-	peak
3	153.1627	31.68	-8.61	23.07	43.50	-20.43	-	-	peak
4	327.1554	35.59	-7.51	28.08	46.00	-17.92	-	-	peak
5	642.2923	29.89	-1.33	28.56	46.00	-17.44	-	-	peak
6	958.7135	33.53	2.26	35.79	46.00	-10.21	-	-	peak

802.11ac-VHT40			
Test Channel	5190MHz(worst case)	Polarity:	Vertical



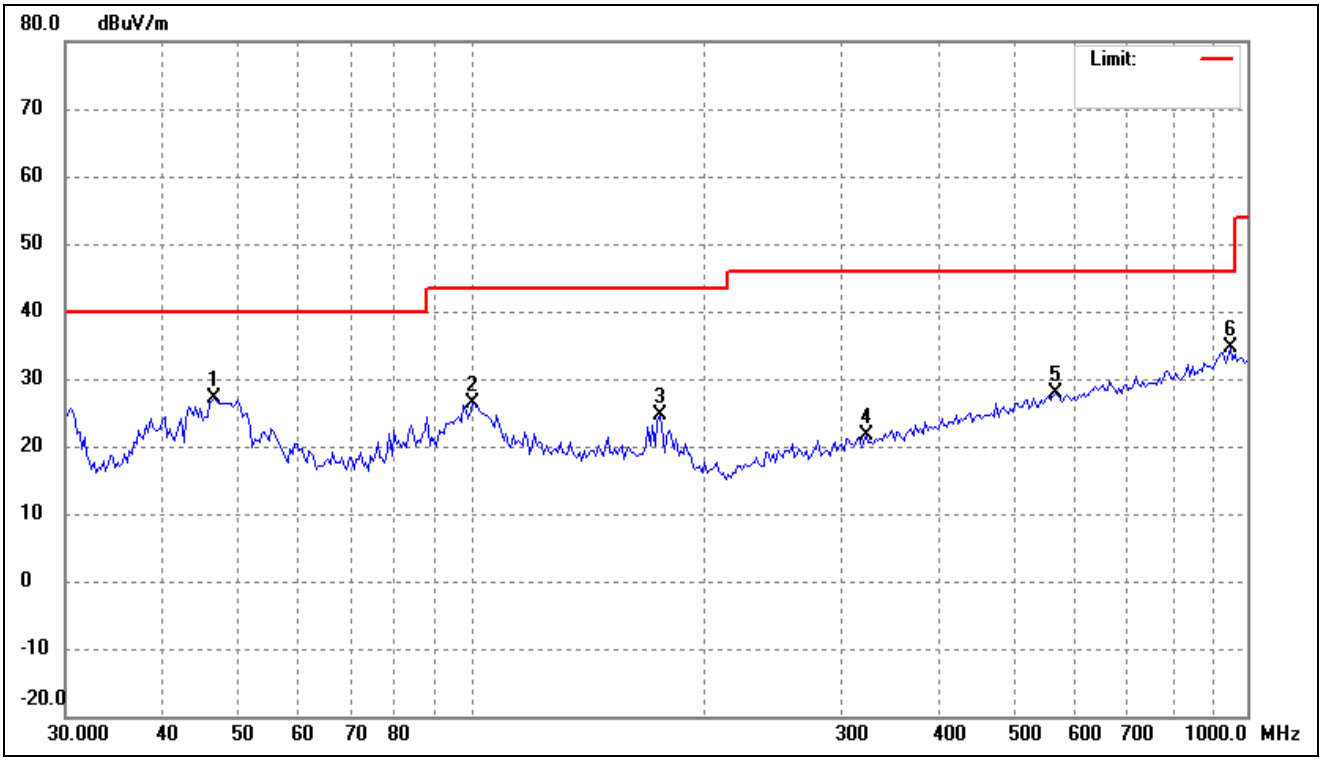
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	40.0173	34.64	-8.47	26.17	40.00	-13.83	-	-	peak
2	49.0627	37.27	-8.15	29.12	40.00	-10.88	-	-	peak
3	99.7676	38.95	-12.51	26.44	43.50	-17.06	-	-	peak
4	284.2607	29.96	-8.79	21.17	46.00	-24.83	-	-	peak
5	542.6104	32.47	-3.05	29.42	46.00	-16.58	-	-	peak
6	938.7139	31.97	2.01	33.98	46.00	-12.02	-	-	peak

802.11ax-HE40			
Test Channel	5190MHz(worst case)	Polarity:	Horizontal



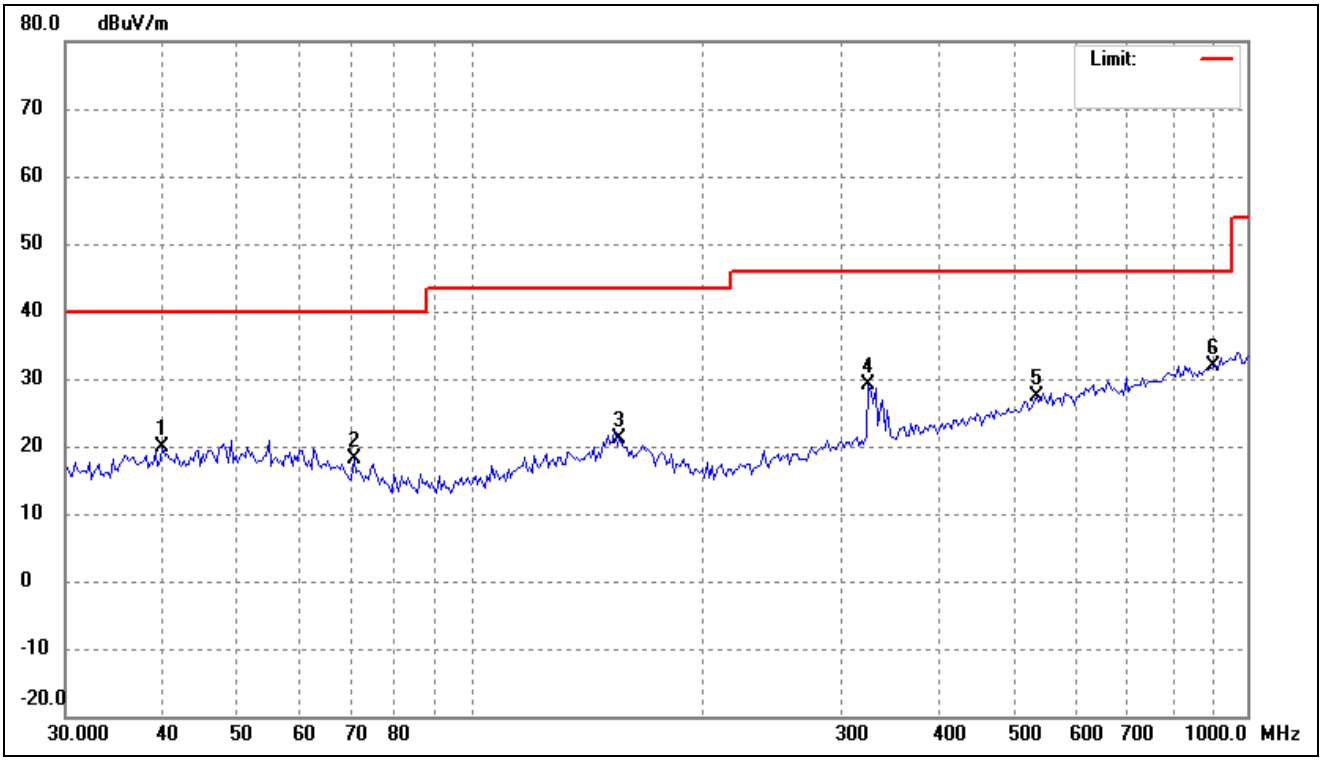
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	39.7371	28.77	-8.54	20.23	40.00	-19.77	-	-	peak
2	59.7315	28.98	-8.92	20.06	40.00	-19.94	-	-	peak
3	155.3305	30.82	-8.61	22.21	43.50	-21.29	-	-	peak
4	322.5896	36.38	-7.62	28.76	46.00	-17.24	-	-	peak
5	611.4623	30.70	-1.59	29.11	46.00	-16.89	-	-	peak
6	965.4742	31.82	2.27	34.09	54.00	-19.91	-	-	peak

802.11ax-HE40			
Test Channel	5190MHz(worst case)	Polarity:	Vertical



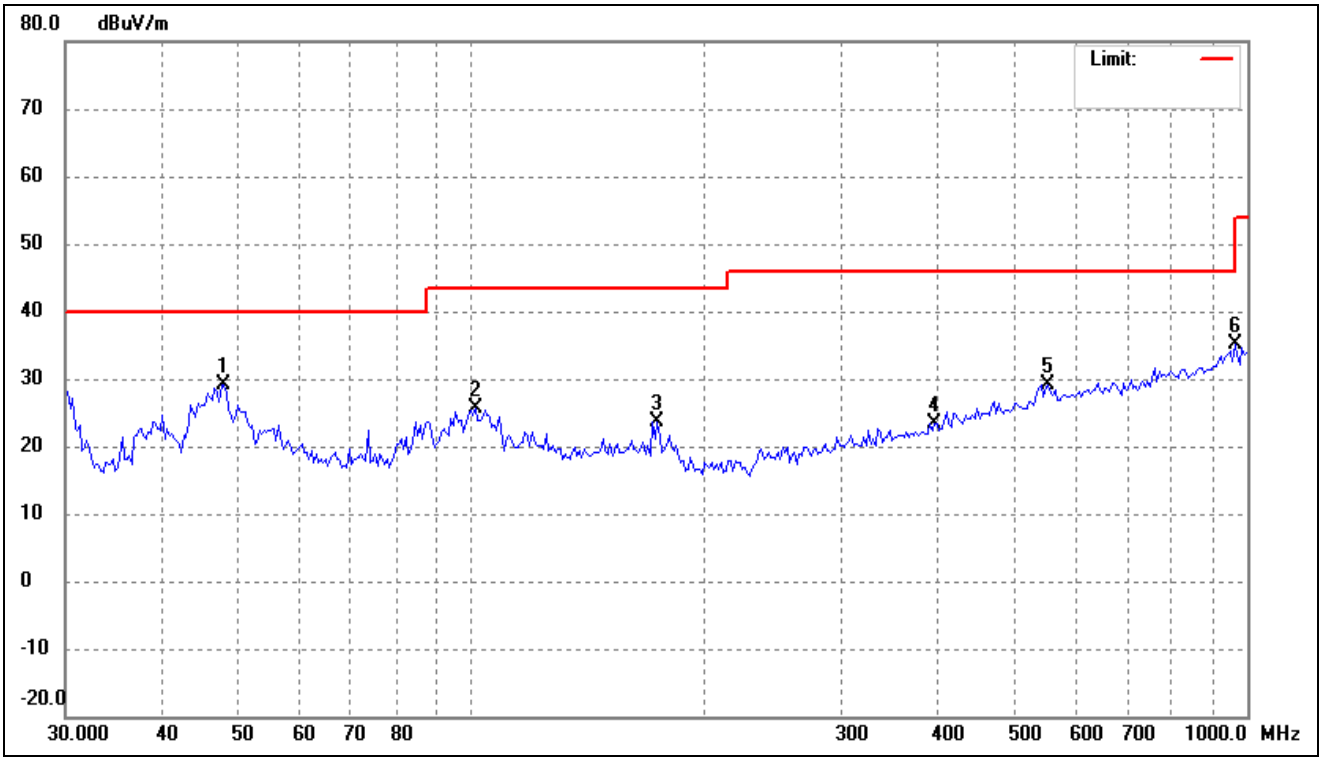
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	46.7077	35.59	-8.34	27.25	40.00	-12.75	-	-	peak
2	100.4712	38.95	-12.45	26.50	43.50	-17.00	-	-	peak
3	175.0404	34.23	-9.61	24.62	43.50	-18.88	-	-	peak
4	322.5896	29.16	-7.62	21.54	46.00	-24.46	-	-	peak
5	565.9776	30.31	-2.47	27.84	46.00	-18.16	-	-	peak
6	952.0001	32.35	2.25	34.60	46.00	-11.40	-	-	peak

802.11ac-VHT80			
Test Channel	5210MHz(worst case)	Polarity:	Horizontal



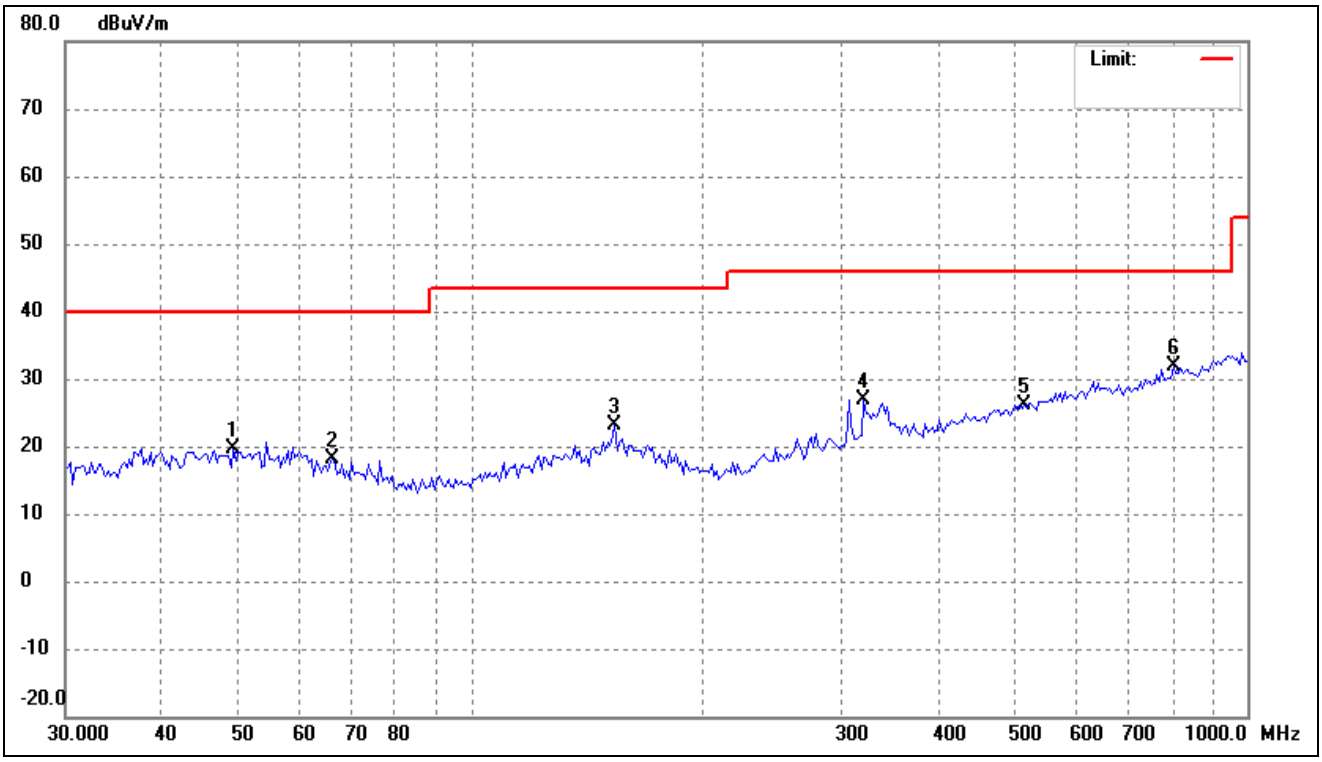
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	40.0173	28.46	-8.47	19.99	40.00	-20.01	-	-	peak
2	70.7047	29.04	-10.92	18.12	40.00	-21.88	-	-	peak
3	155.3305	29.67	-8.61	21.06	43.50	-22.44	-	-	peak
4	324.8645	36.57	-7.55	29.02	46.00	-16.98	-	-	peak
5	535.0377	30.51	-3.25	27.26	46.00	-18.74	-	-	peak
6	906.3041	30.51	1.32	31.83	46.00	-14.17	-	-	peak

802.11ac-VHT80			
Test Channel	5210MHz(worst case)	Polarity:	Vertical



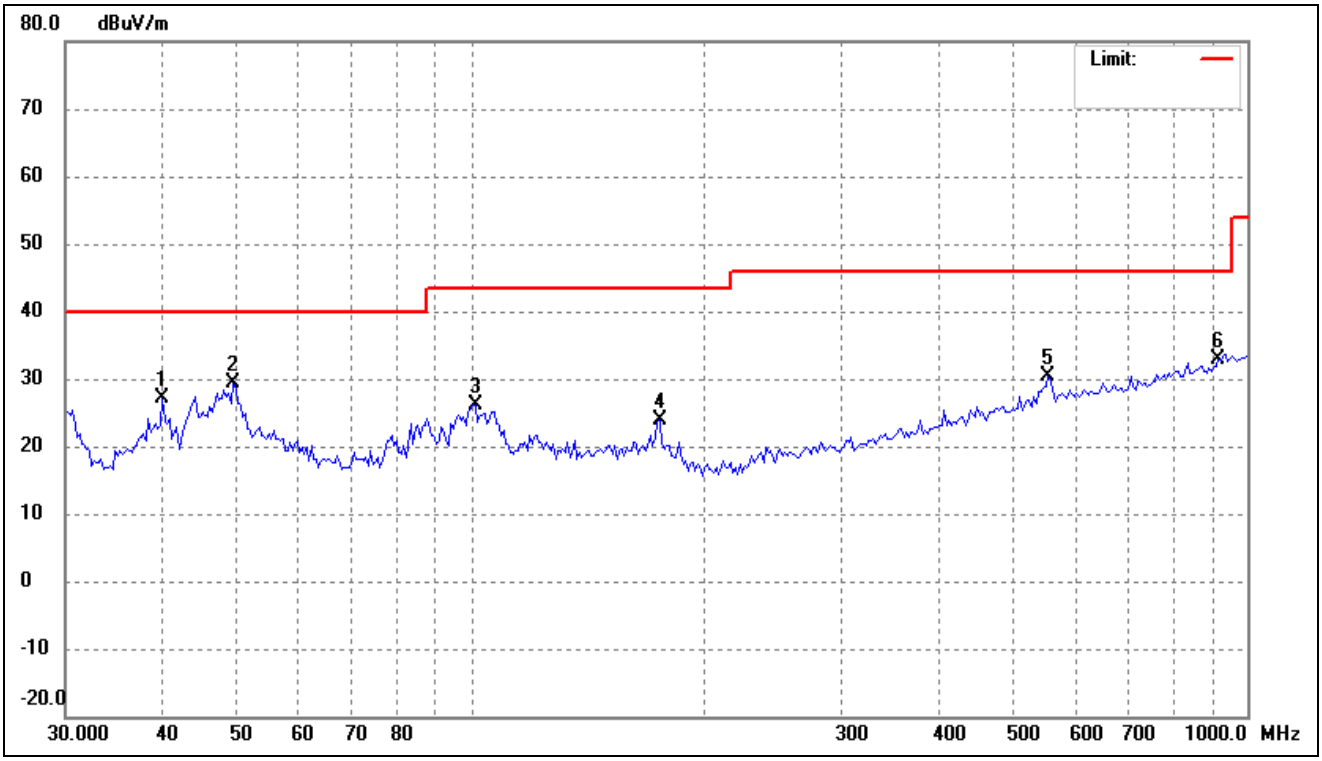
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	48.0392	37.43	-8.23	29.20	40.00	-10.80	-	-	peak
2	101.1797	38.03	-12.39	25.64	43.50	-17.86	-	-	peak
3	173.8147	32.95	-9.42	23.53	43.50	-19.97	-	-	peak
4	395.5071	29.51	-6.05	23.46	46.00	-22.54	-	-	peak
5	554.1708	31.86	-2.75	29.11	46.00	-16.89	-	-	peak
6	965.4742	32.89	2.27	35.16	54.00	-18.84	-	-	peak

802.11ax-HE80			
Test Channel	5210MHz(worst case)	Polarity:	Horizontal



No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	49.4087	27.73	-8.13	19.60	40.00	-20.40	-	-	peak
2	66.3715	28.26	-10.11	18.15	40.00	-21.85	-	-	peak
3	153.1627	31.78	-8.61	23.17	43.50	-20.33	-	-	peak
4	320.3306	34.67	-7.68	26.99	46.00	-19.01	-	-	peak
5	516.5651	29.89	-3.65	26.24	46.00	-19.76	-	-	peak
6	804.2523	31.52	0.34	31.86	46.00	-14.14	-	-	peak

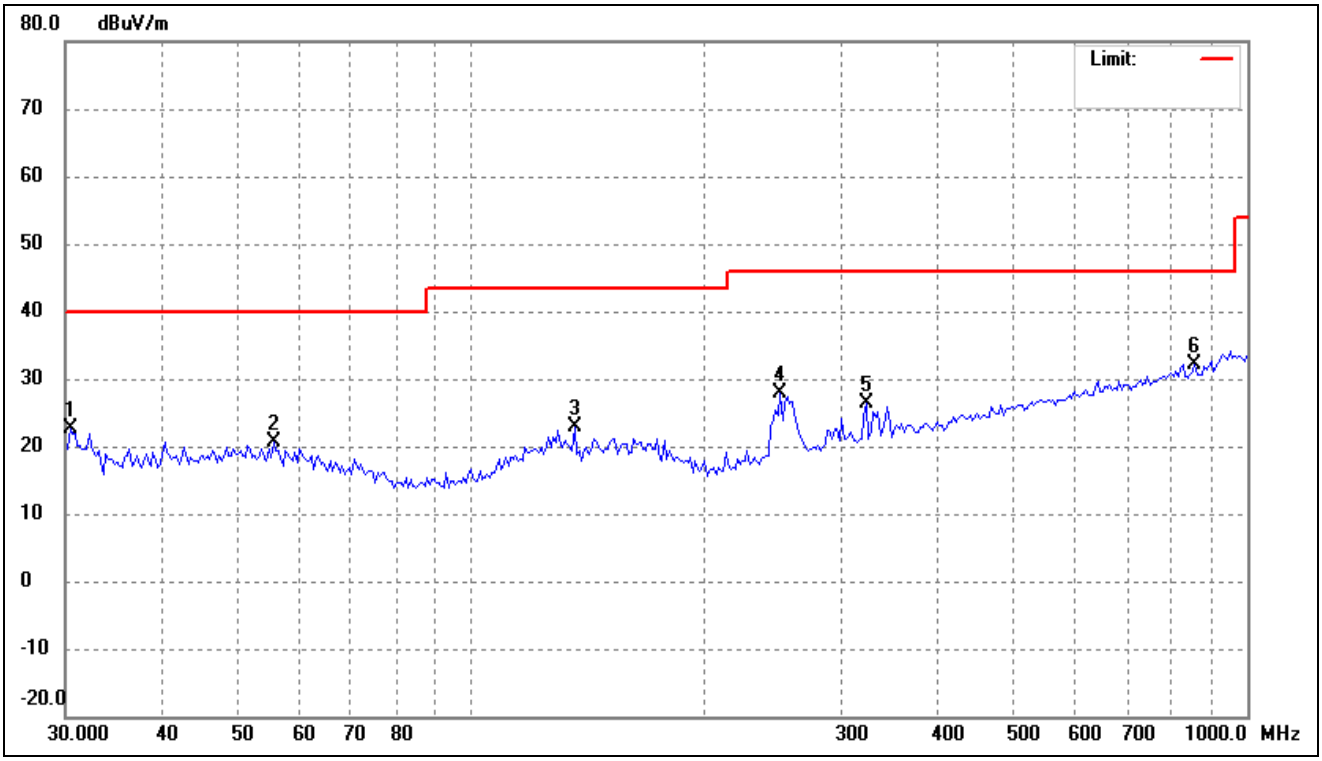
802.11ax-HE80			
Test Channel	5210MHz(worst case)	Polarity:	Vertical



No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	40.0173	35.64	-8.47	27.17	40.00	-12.83	-	-	peak
2	49.4087	37.57	-8.13	29.44	40.00	-10.56	-	-	peak
3	101.1797	38.57	-12.39	26.18	43.50	-17.32	-	-	peak
4	175.0404	33.56	-9.61	23.95	43.50	-19.55	-	-	peak
5	554.1708	33.02	-2.75	30.27	46.00	-15.73	-	-	peak
6	919.1315	31.34	1.59	32.93	46.00	-13.07	-	-	peak

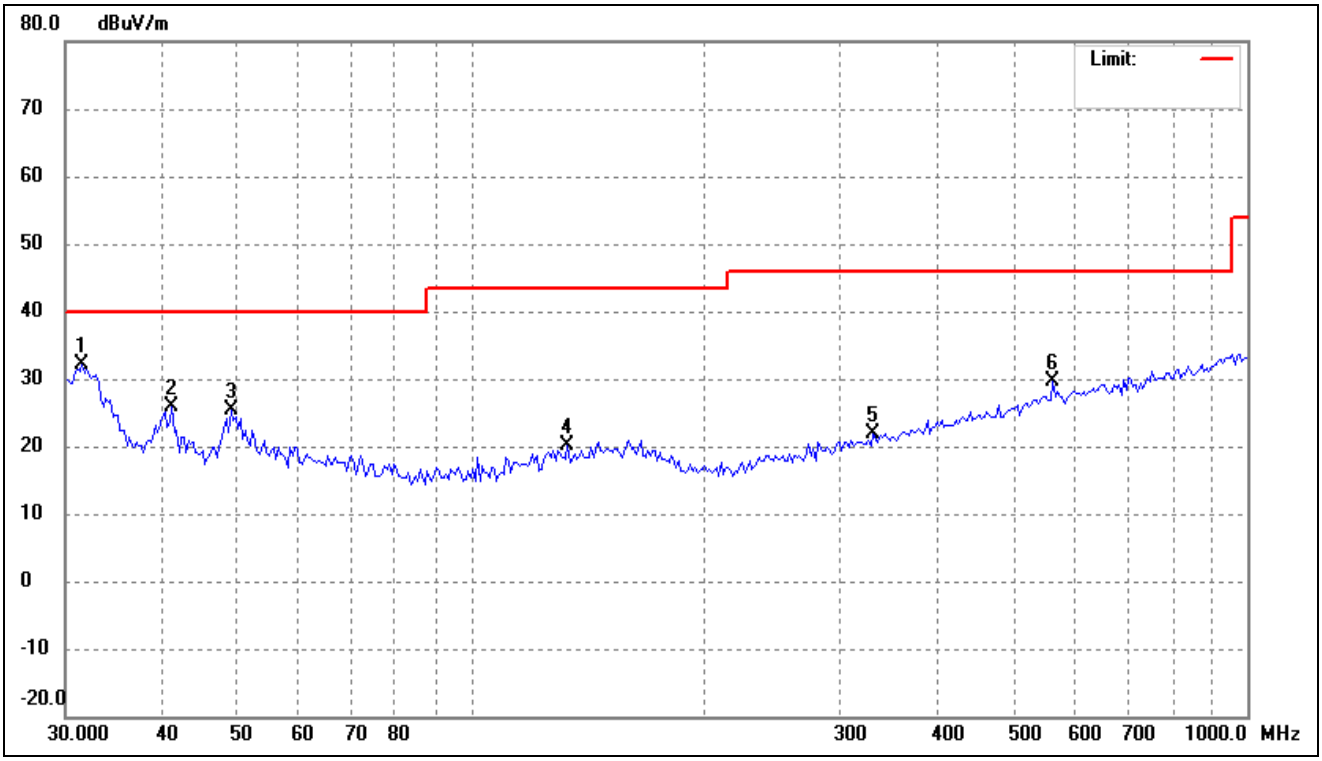
5260-5320MHz

802.11n-HT20			
Test Channel	5260MHz(worst case)	Polarity:	Horizontal



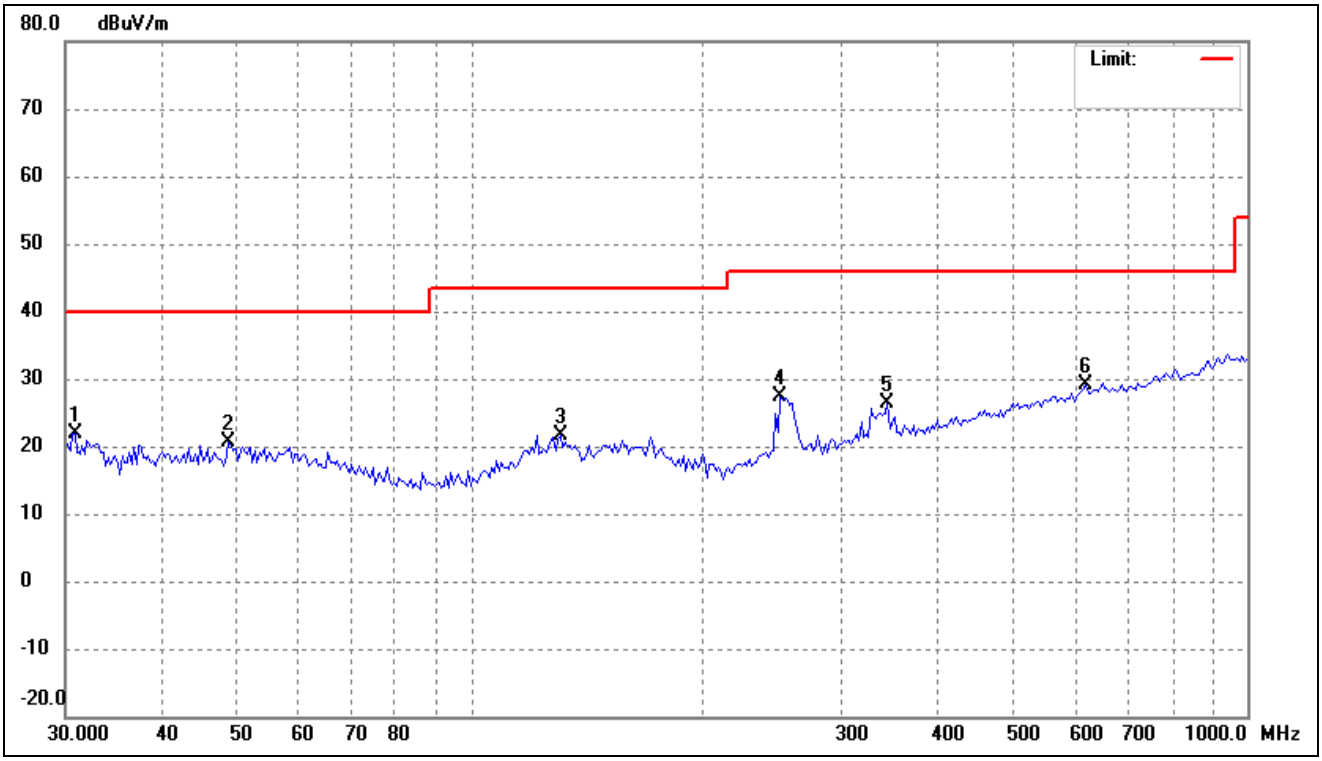
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	30.4246	32.64	-10.13	22.51	40.00	-17.49	-	-	peak
2	55.6782	29.18	-8.67	20.51	40.00	-19.49	-	-	peak
3	135.9163	32.53	-9.61	22.92	43.50	-20.58	-	-	peak
4	250.4859	38.00	-10.18	27.82	46.00	-18.18	-	-	peak
5	322.5896	33.88	-7.62	26.26	46.00	-19.74	-	-	peak
6	856.7597	31.37	0.80	32.17	46.00	-13.83	-	-	peak

802.11n-HT20			
Test Channel	5260MHz(worst case)	Polarity:	Vertical



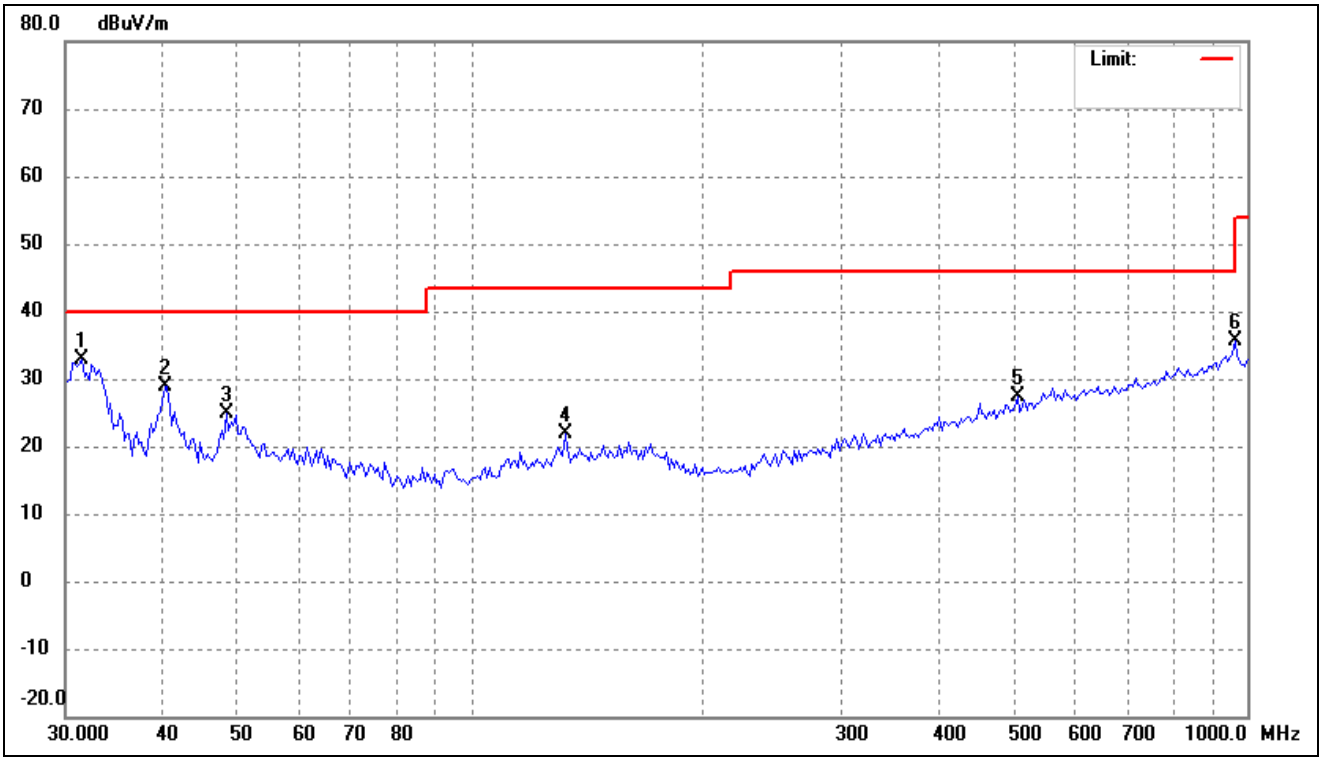
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.5126	42.03	-10.00	32.03	40.00	-7.97	-	-	peak
2	41.1581	34.46	-8.48	25.98	40.00	-14.02	-	-	peak
3	49.0627	33.51	-8.15	25.36	40.00	-14.64	-	-	peak
4	133.0809	29.74	-9.72	20.02	43.50	-23.48	-	-	peak
5	329.4625	29.44	-7.47	21.97	46.00	-24.03	-	-	peak
6	562.0143	32.09	-2.55	29.54	46.00	-16.46	-	-	peak

802.11ac-VHT20			
Test Channel	5260MHz(worst case)	Polarity:	Horizontal



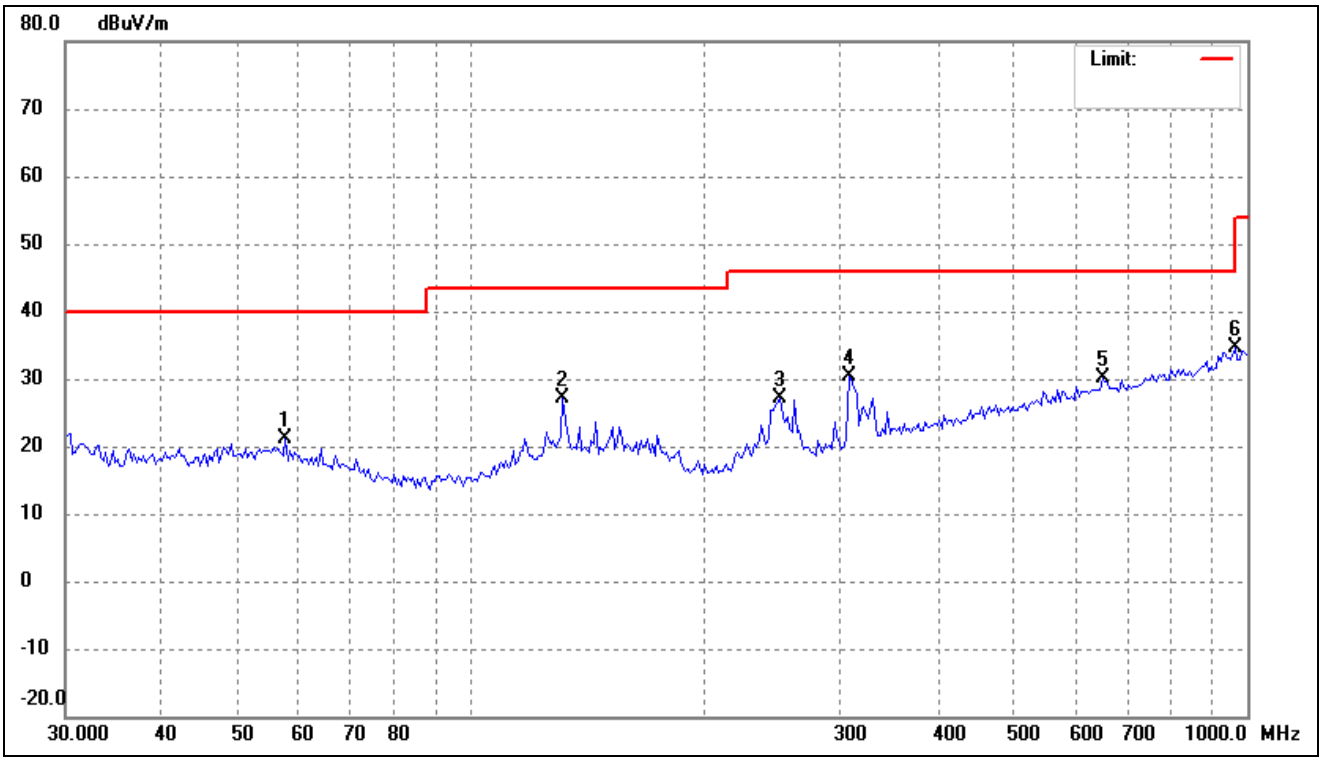
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	30.8552	32.01	-10.08	21.93	40.00	-18.07	-	-	peak
2	48.7191	28.88	-8.18	20.70	40.00	-19.30	-	-	peak
3	130.3048	31.49	-9.84	21.65	43.50	-21.85	-	-	peak
4	250.4859	37.48	-10.18	27.30	46.00	-18.70	-	-	peak
5	343.6506	33.57	-7.22	26.35	46.00	-19.65	-	-	peak
6	620.1167	30.47	-1.46	29.01	46.00	-16.99	-	-	peak

802.11ac-VHT20			
Test Channel	5260MHz(worst case)	Polarity:	Vertical



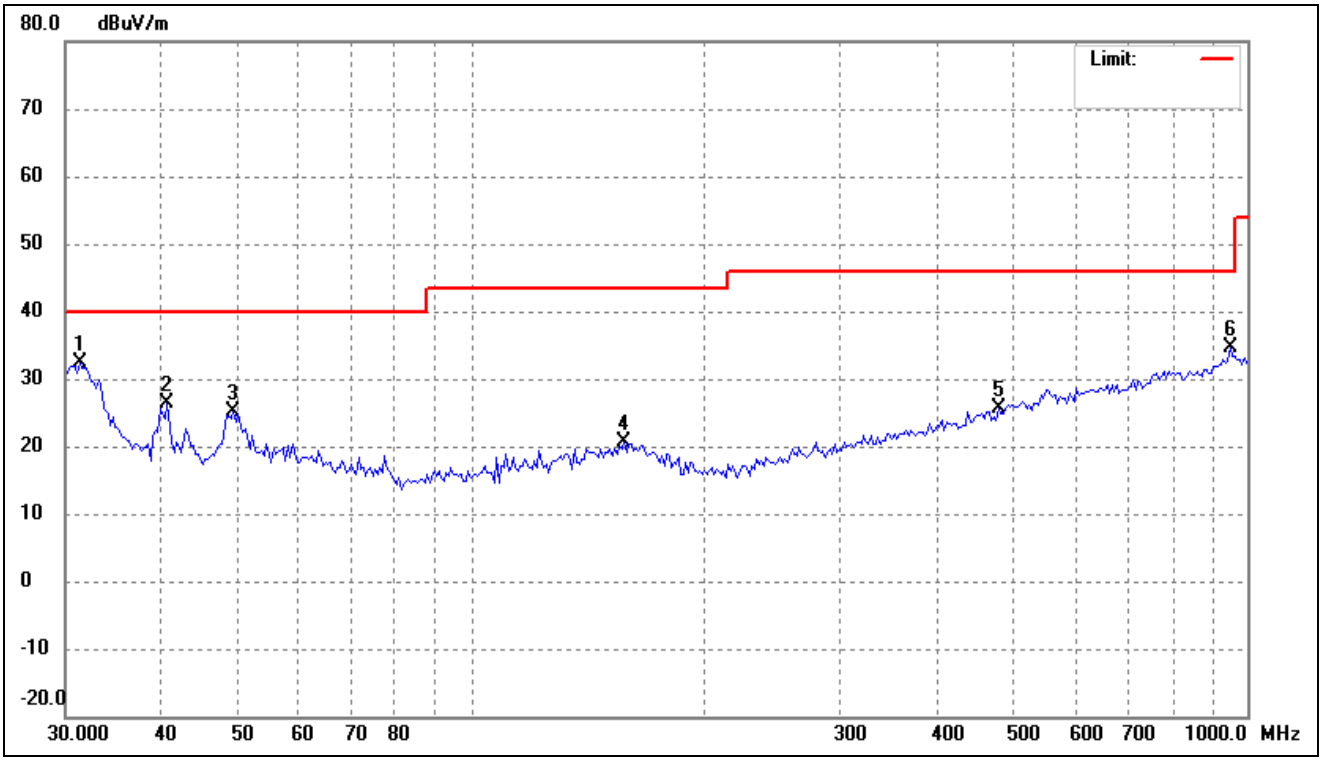
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.5126	42.90	-10.00	32.90	40.00	-7.10	-	-	peak
2	40.2995	37.37	-8.48	28.89	40.00	-11.11	-	-	peak
3	48.3780	33.18	-8.21	24.97	40.00	-15.03	-	-	peak
4	132.1490	31.63	-9.76	21.87	43.50	-21.63	-	-	peak
5	505.7891	31.29	-3.80	27.49	46.00	-18.51	-	-	peak
6	965.4742	33.47	2.27	35.74	54.00	-18.26	-	-	peak

802.11ax-HE20			
Test Channel	5260MHz(worst case)	Polarity:	Horizontal



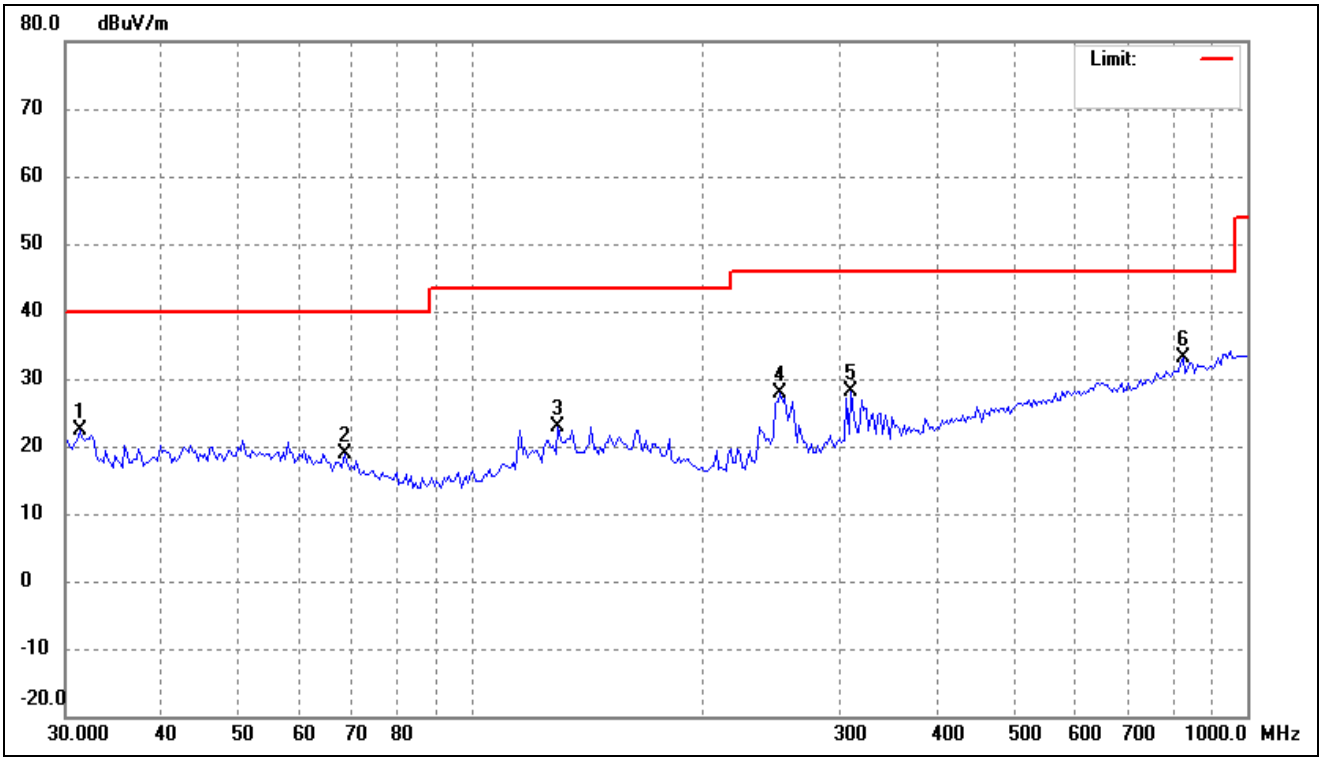
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	57.6693	29.88	-8.79	21.09	40.00	-18.91	-	-	peak
2	131.2236	36.91	-9.80	27.11	43.50	-16.39	-	-	peak
3	250.4859	37.38	-10.18	27.20	46.00	-18.80	-	-	peak
4	307.1053	38.37	-8.06	30.31	46.00	-15.69	-	-	peak
5	651.3831	31.34	-1.30	30.04	46.00	-15.96	-	-	peak
6	965.4742	32.36	2.27	34.63	54.00	-19.37	-	-	peak

802.11ax-HE20			
Test Channel	5260MHz(worst case)	Polarity:	Vertical



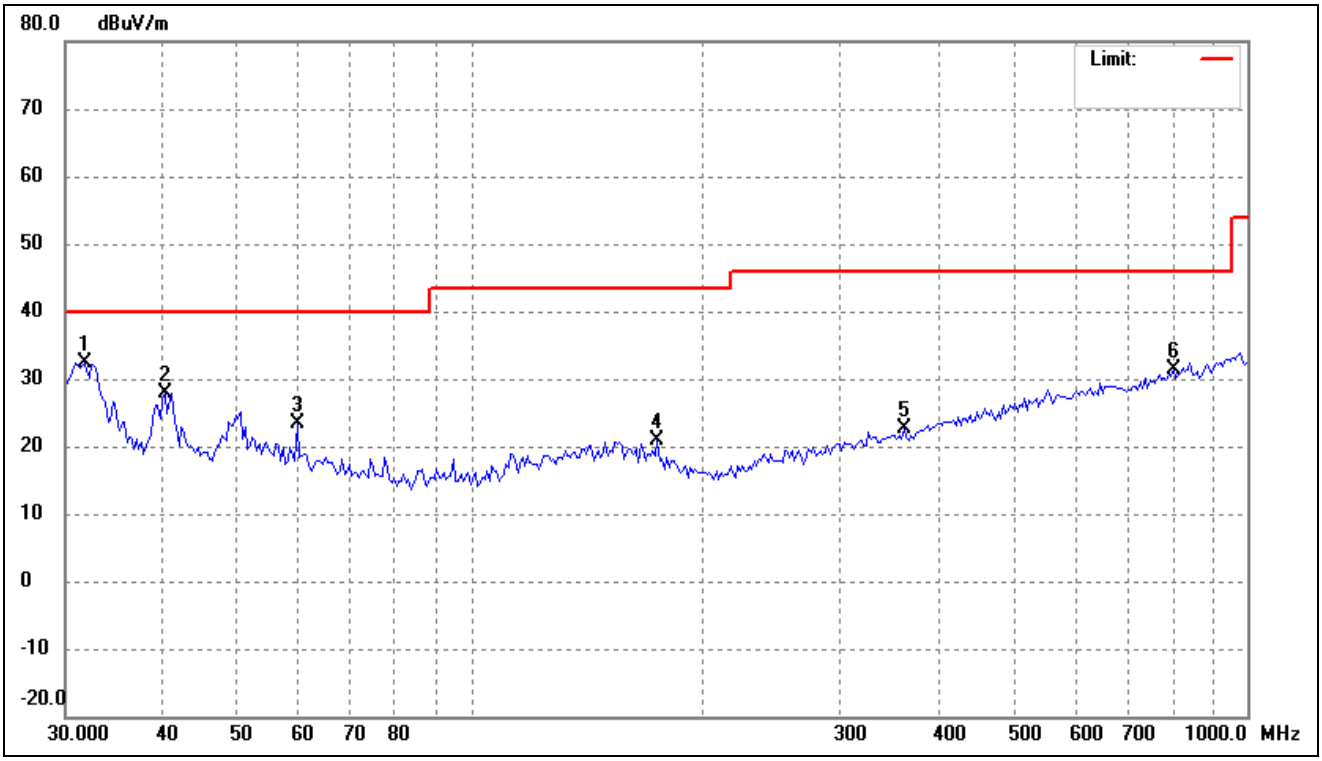
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.2919	42.40	-10.02	32.38	40.00	-7.62	-	-	peak
2	40.5837	34.77	-8.48	26.29	40.00	-13.71	-	-	peak
3	49.4087	33.15	-8.13	25.02	40.00	-14.98	-	-	peak
4	157.5290	29.25	-8.61	20.64	43.50	-22.86	-	-	peak
5	478.1394	29.72	-4.20	25.52	46.00	-20.48	-	-	peak
6	952.0001	32.44	2.25	34.69	46.00	-11.31	-	-	peak

802.11n-HT40			
Test Channel	5270MHz(worst case)	Polarity:	Horizontal



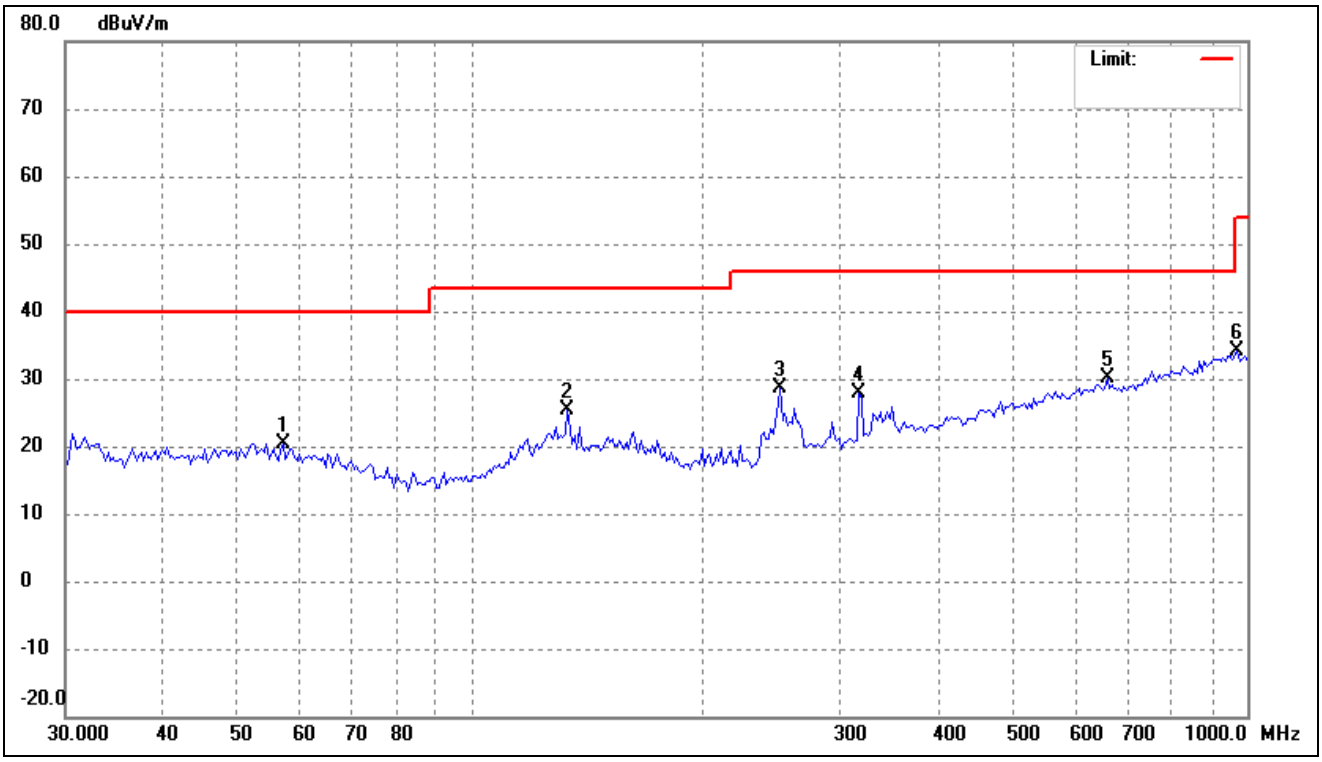
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.2919	32.33	-10.02	22.31	40.00	-17.69	-	-	peak
2	68.7450	29.39	-10.54	18.85	40.00	-21.15	-	-	peak
3	129.3923	32.82	-9.89	22.93	43.50	-20.57	-	-	peak
4	250.4859	37.97	-10.18	27.79	46.00	-18.21	-	-	peak
5	309.2710	36.07	-8.00	28.07	46.00	-17.93	-	-	peak
6	827.1795	32.55	0.54	33.09	46.00	-12.91	-	-	peak

802.11n-HT40			
Test Channel	5190MHz(worst case)	Polarity:	Vertical



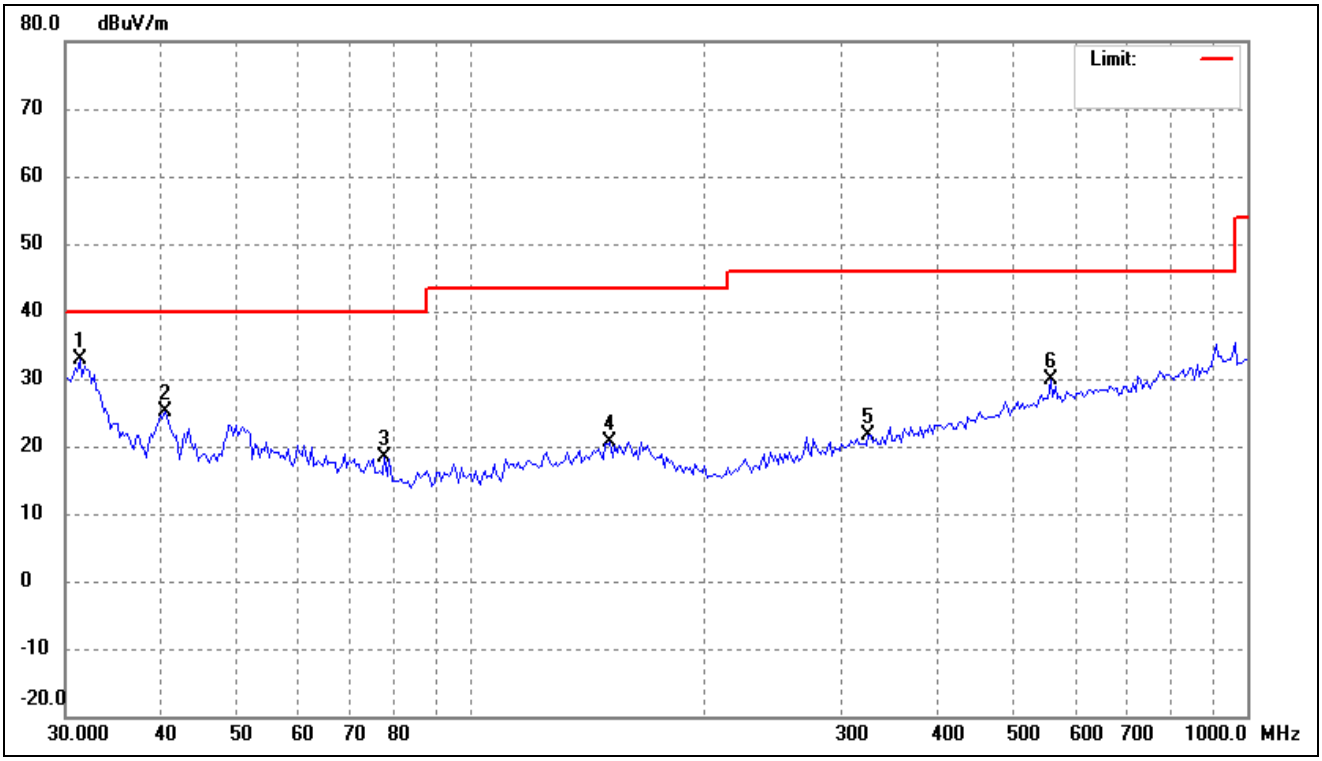
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.7348	42.39	-9.98	32.41	40.00	-7.59	-	-	peak
2	40.2995	36.39	-8.48	27.91	40.00	-12.09	-	-	peak
3	59.7315	32.28	-8.92	23.36	40.00	-16.64	-	-	peak
4	173.8147	30.24	-9.42	20.82	43.50	-22.68	-	-	peak
5	360.9775	29.46	-6.83	22.63	46.00	-23.37	-	-	peak
6	804.2523	30.98	0.34	31.32	46.00	-14.68	-	-	peak

802.11ac-VHT40			
Test Channel	5270MHz(worst case)	Polarity:	Horizontal



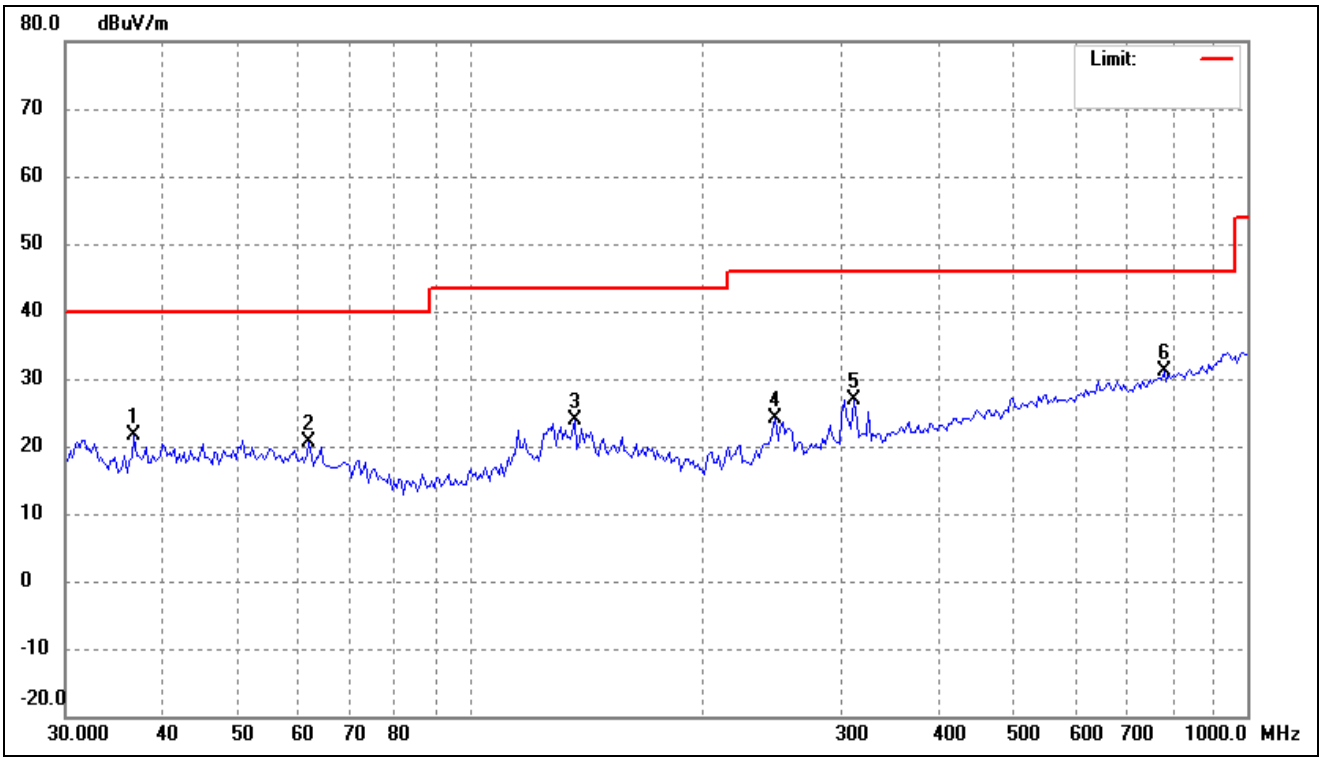
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	57.2654	29.09	-8.77	20.32	40.00	-19.68	-	-	peak
2	133.0809	35.06	-9.72	25.34	43.50	-18.16	-	-	peak
3	250.4859	38.86	-10.18	28.68	46.00	-17.32	-	-	peak
4	315.8601	35.61	-7.81	27.80	46.00	-18.20	-	-	peak
5	660.6025	31.50	-1.28	30.22	46.00	-15.78	-	-	peak
6	972.2827	31.84	2.27	34.11	54.00	-19.89	-	-	peak

802.11ac-VHT40			
Test Channel	5270MHz(worst case)	Polarity:	Vertical



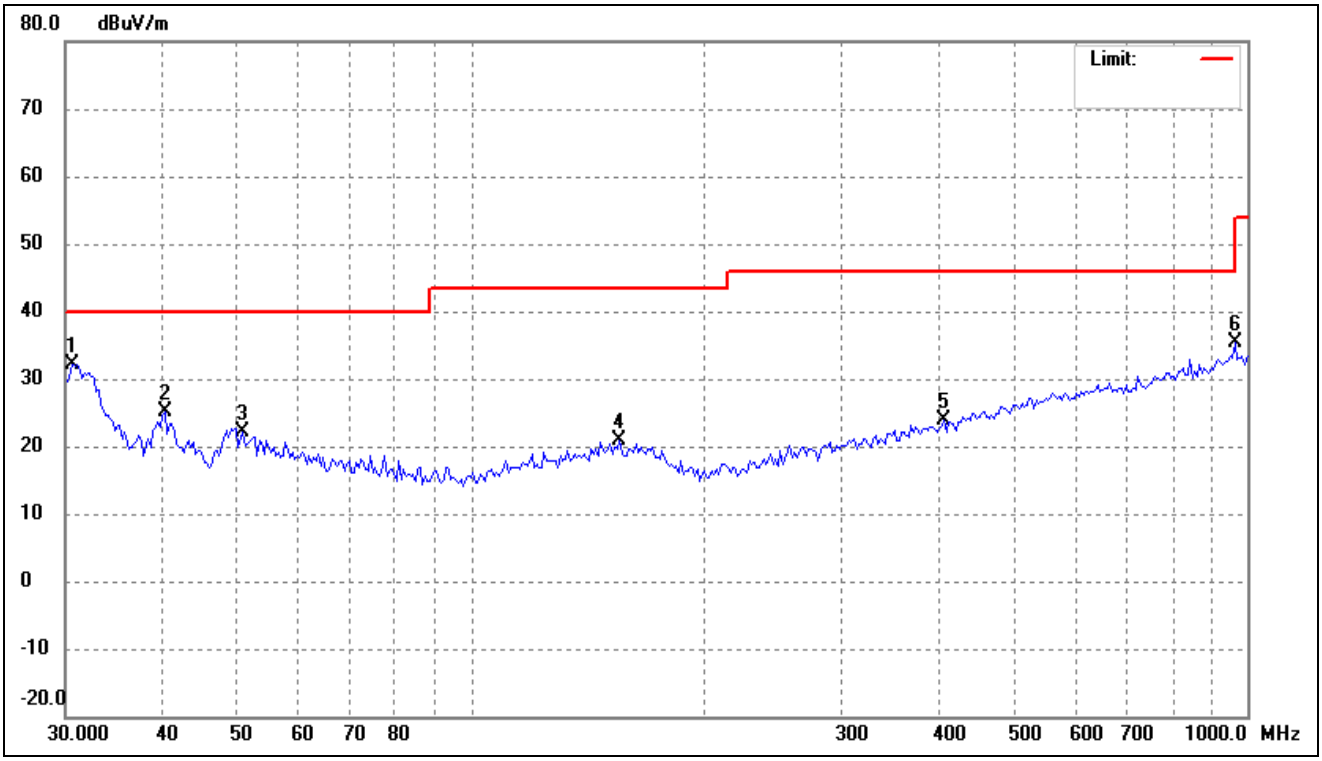
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.2919	42.81	-10.02	32.79	40.00	-7.21	-	-	peak
2	40.2995	33.64	-8.48	25.16	40.00	-14.84	-	-	peak
3	77.4680	30.75	-12.41	18.34	40.00	-21.66	-	-	peak
4	151.0252	29.36	-8.61	20.75	43.50	-22.75	-	-	peak
5	324.8645	29.20	-7.55	21.65	46.00	-24.35	-	-	peak
6	558.0788	32.43	-2.66	29.77	46.00	-16.23	-	-	peak

802.11ax-HE40			
Test Channel	5270MHz(worst case)	Polarity:	Horizontal



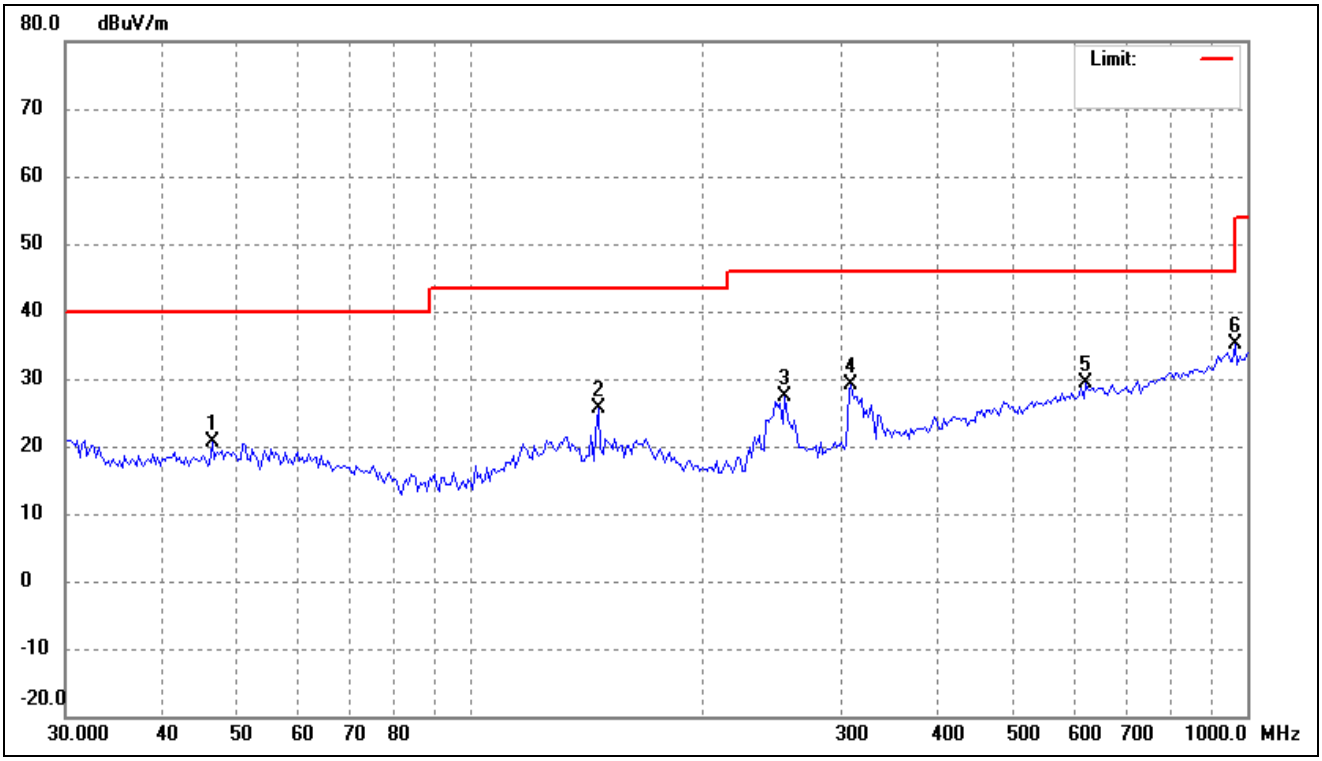
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	36.7811	30.81	-9.17	21.64	40.00	-18.36	-	-	peak
2	61.8676	29.88	-9.28	20.60	40.00	-19.40	-	-	peak
3	135.9163	33.42	-9.61	23.81	43.50	-19.69	-	-	peak
4	246.9901	34.46	-10.30	24.16	46.00	-21.84	-	-	peak
5	311.4519	34.90	-7.93	26.97	46.00	-19.03	-	-	peak
6	781.9606	31.02	0.13	31.15	46.00	-14.85	-	-	peak

802.11ax-HE40			
Test Channel	5270MHz(worst case)	Polarity:	Vertical



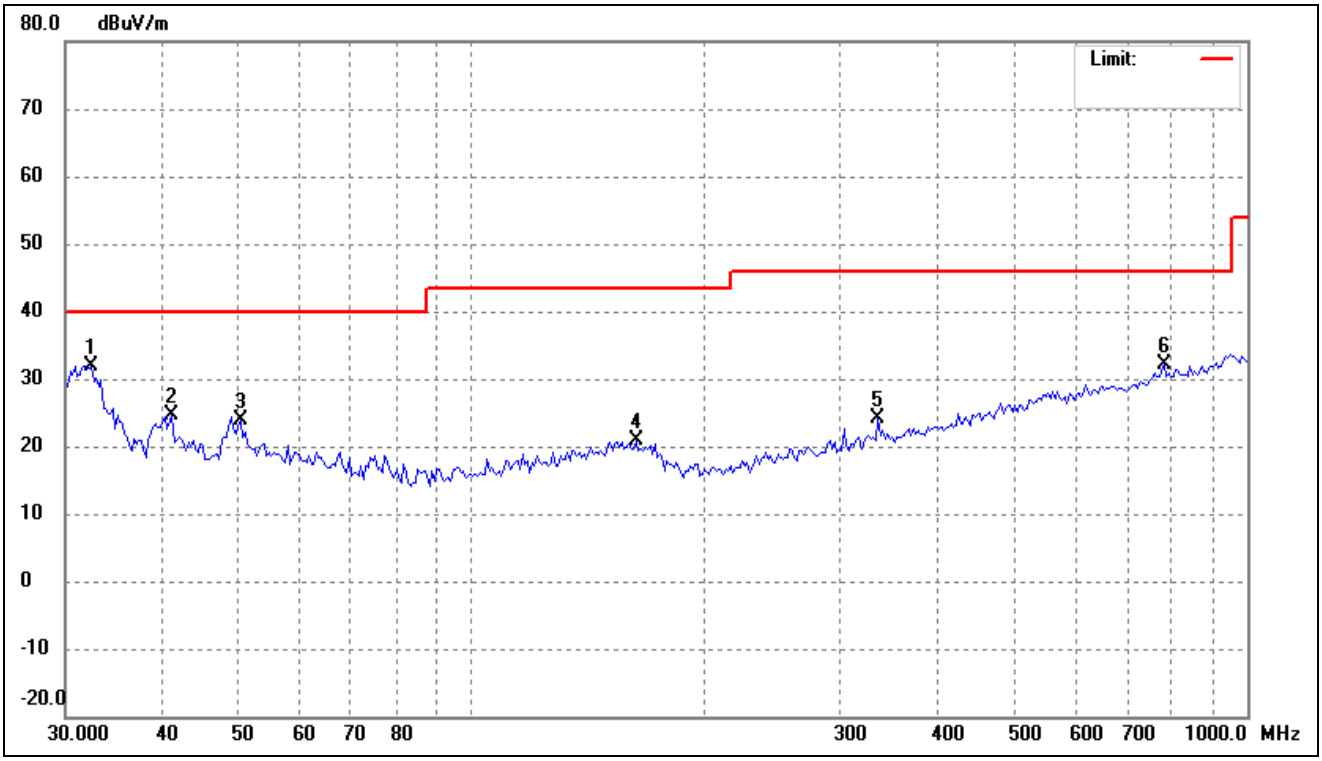
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	30.6392	42.24	-10.11	32.13	40.00	-7.87	-	-	peak
2	40.2995	33.59	-8.48	25.11	40.00	-14.89	-	-	peak
3	50.8172	30.25	-8.17	22.08	40.00	-17.92	-	-	peak
4	155.3305	29.49	-8.61	20.88	43.50	-22.62	-	-	peak
5	406.7820	29.63	-5.78	23.85	46.00	-22.15	-	-	peak
6	965.4742	33.19	2.27	35.46	54.00	-18.54	-	-	peak

802.11ac-VHT80			
Test Channel	5290MHz(worst case)	Polarity:	Horizontal



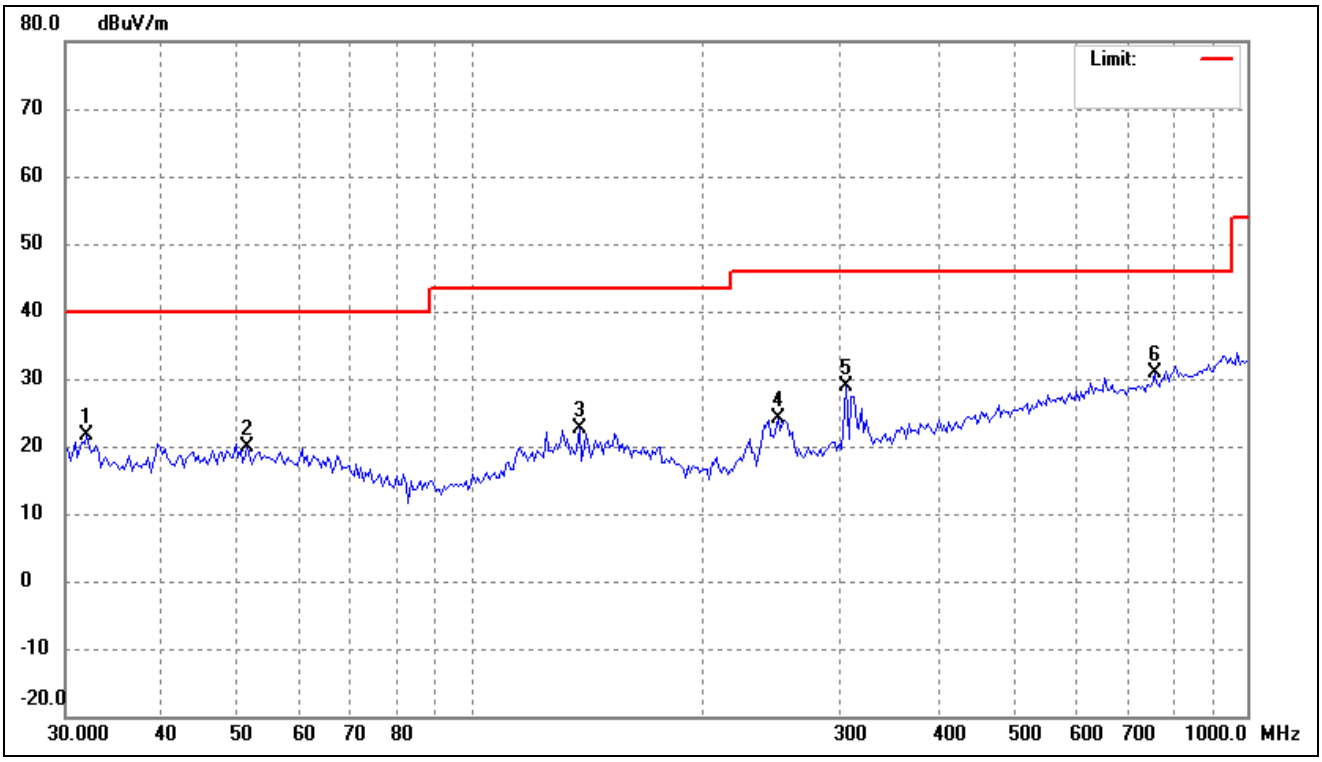
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	46.3806	29.05	-8.37	20.68	40.00	-19.32	-	-	peak
2	145.8109	34.58	-8.95	25.63	43.50	-17.87	-	-	peak
3	254.0312	37.45	-10.03	27.42	46.00	-18.58	-	-	peak
4	309.2710	37.10	-8.00	29.10	46.00	-16.90	-	-	peak
5	620.1167	30.79	-1.46	29.33	46.00	-16.67	-	-	peak
6	965.4742	32.74	2.27	35.01	54.00	-18.99	-	-	peak

802.11ac-HT80			
Test Channel	5290MHz(worst case)	Polarity:	Vertical



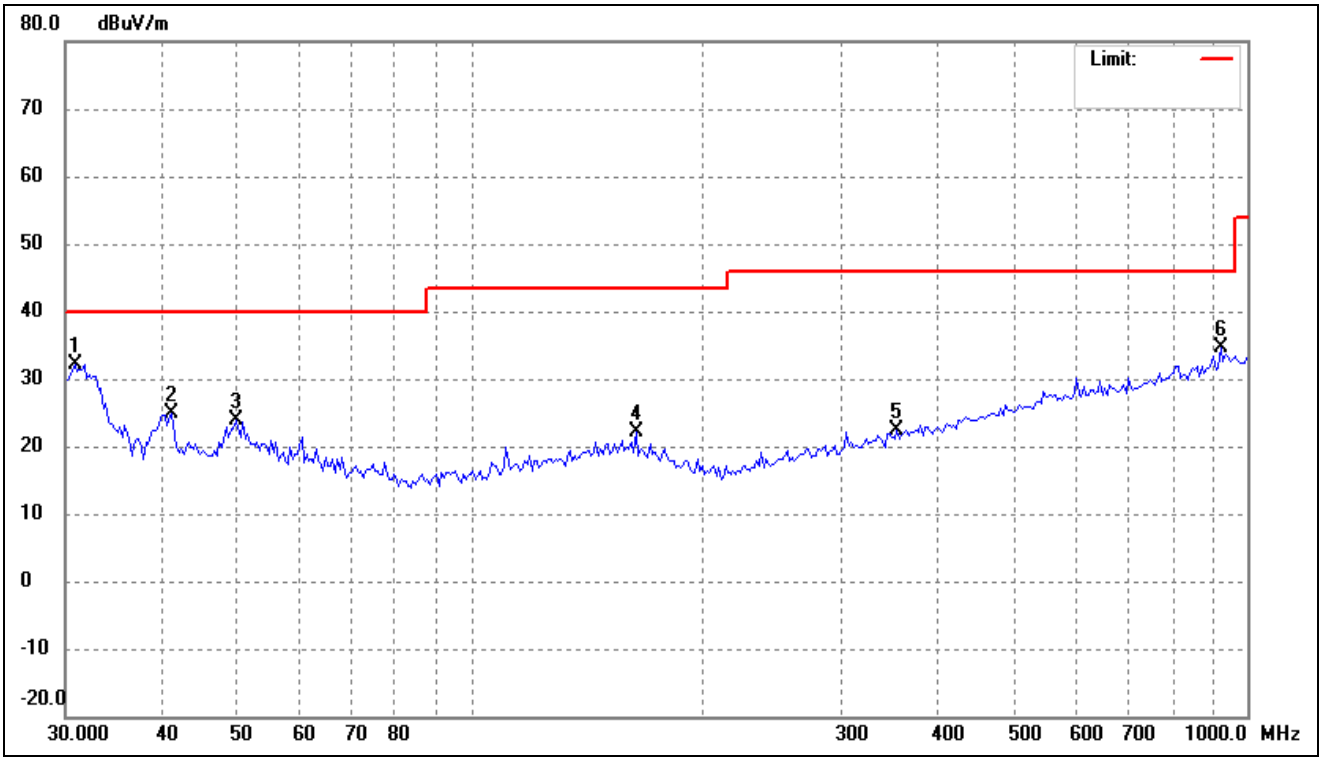
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	32.4109	41.86	-9.88	31.98	40.00	-8.02	-	-	peak
2	41.1580	33.15	-8.48	24.67	40.00	-15.33	-	-	peak
3	50.4613	31.99	-8.14	23.85	40.00	-16.15	-	-	peak
4	163.1622	29.54	-8.70	20.84	43.50	-22.66	-	-	peak
5	334.1255	31.51	-7.39	24.12	46.00	-21.88	-	-	peak
6	781.9605	32.02	0.13	32.15	46.00	-13.85	-	-	peak

802.11ax-HE80			
Test Channel	5290MHz(worst case)	Polarity:	Horizontal



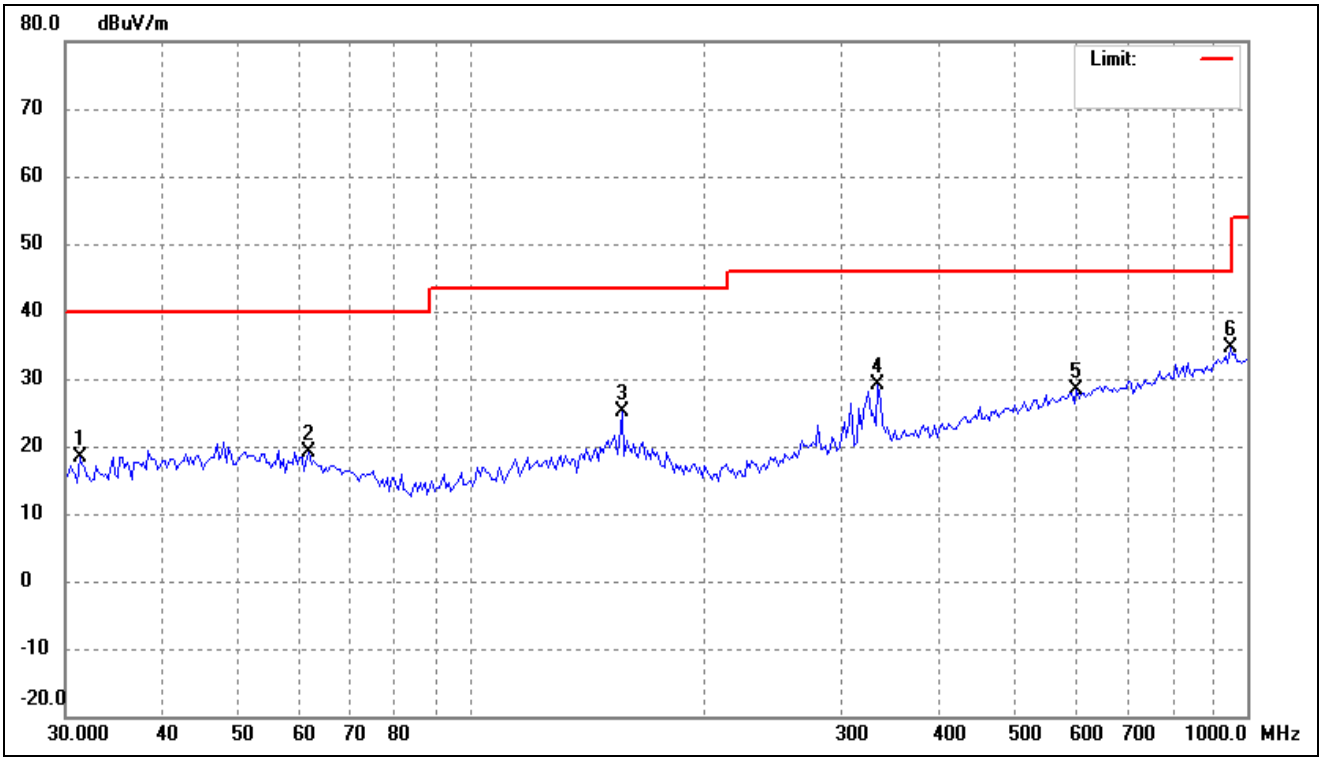
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.9586	31.60	-9.94	21.66	40.00	-18.34	-	-	peak
2	51.5365	28.13	-8.24	19.89	40.00	-20.11	-	-	peak
3	137.8400	32.16	-9.52	22.64	43.50	-20.86	-	-	peak
4	248.7319	34.39	-10.26	24.13	46.00	-21.87	-	-	peak
5	304.9548	37.09	-8.12	28.97	46.00	-17.03	-	-	peak
6	760.2867	30.96	-0.07	30.89	46.00	-15.11	-	-	peak

802.11ax-HE80			
Test Channel	5290MHz(worst case)	Polarity:	Vertical



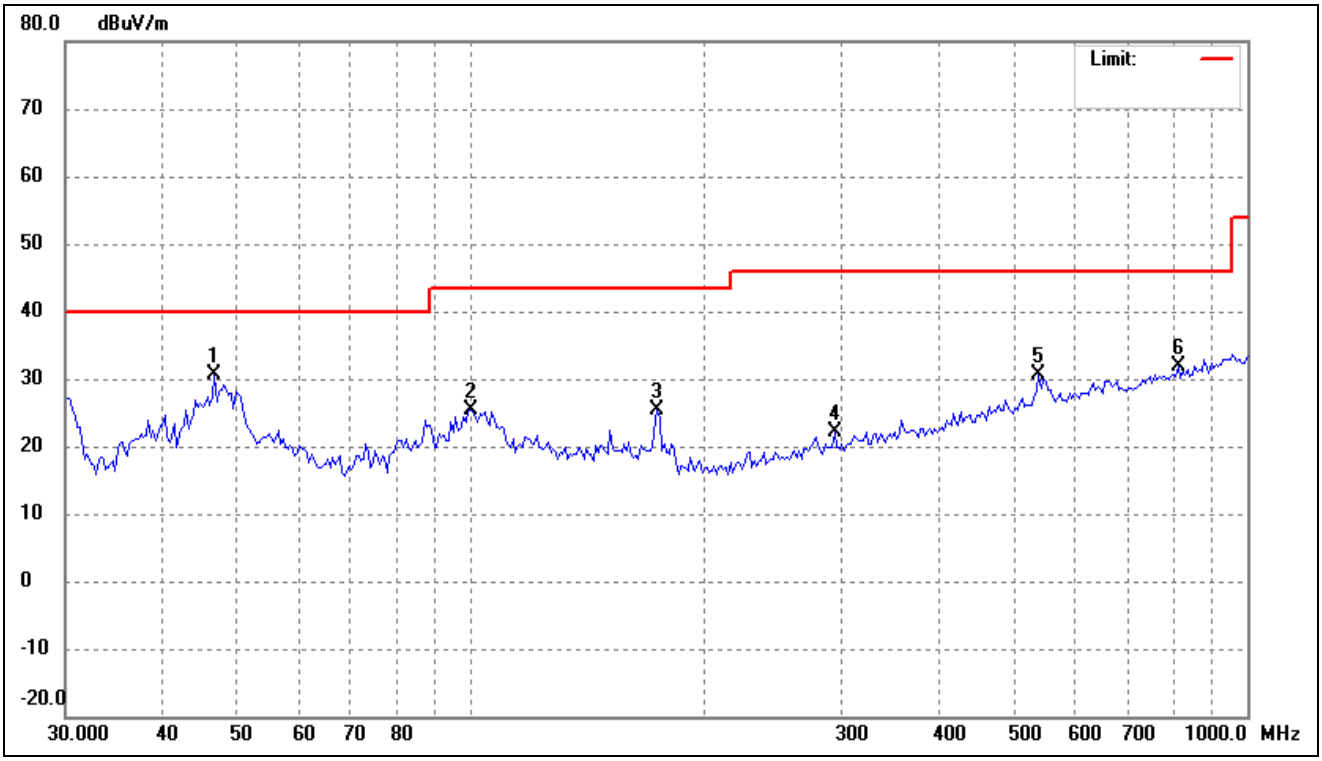
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	30.8552	42.12	-10.08	32.04	40.00	-7.96	-	-	peak
2	41.1581	33.45	-8.48	24.97	40.00	-15.03	-	-	peak
3	49.7571	32.04	-8.09	23.95	40.00	-16.05	-	-	peak
4	163.1623	30.93	-8.70	22.23	43.50	-21.27	-	-	peak
5	353.4472	29.49	-7.02	22.47	46.00	-23.53	-	-	peak
6	925.6132	32.86	1.74	34.60	46.00	-11.40	-	-	peak

802.11ac-VHT160			
Test Channel	5250MHz(worst case)	Polarity:	Horizontal



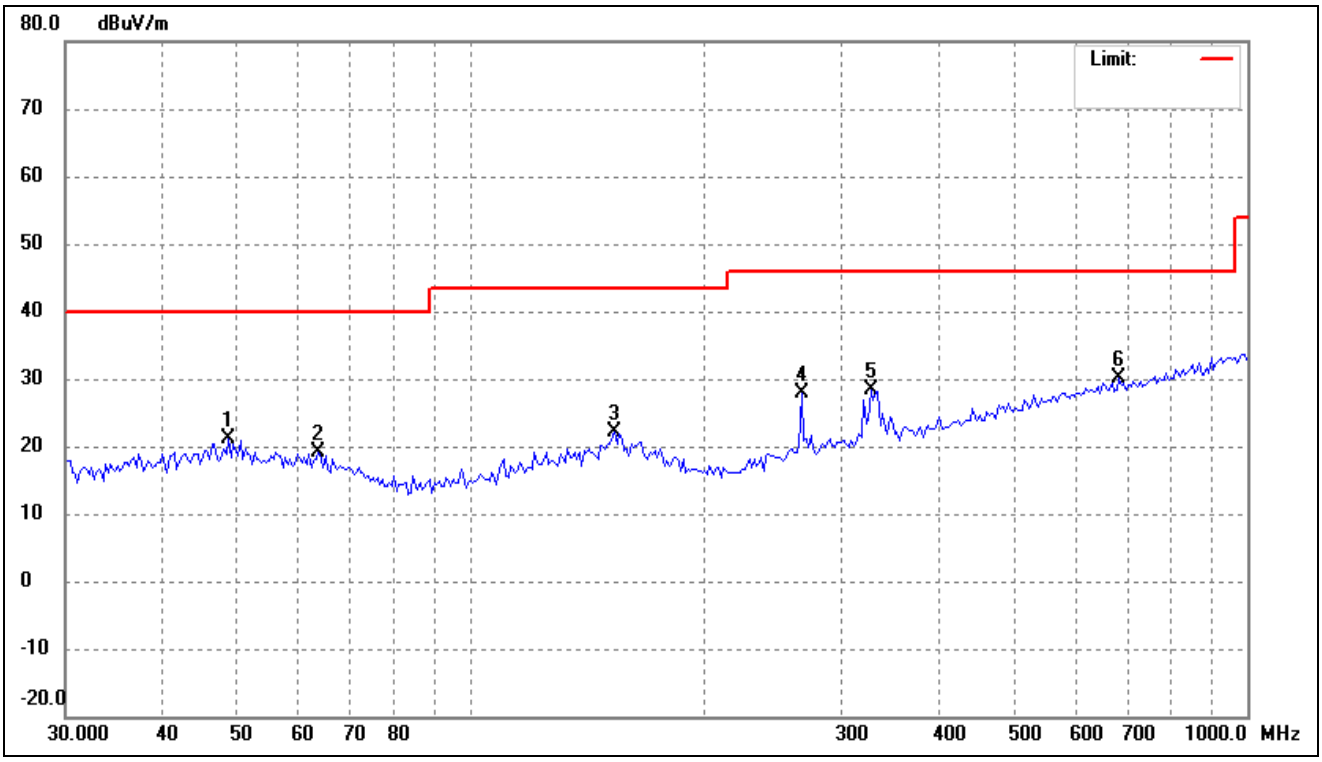
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.2919	28.39	-10.02	18.37	40.00	-21.63	-	-	peak
2	61.8676	28.46	-9.28	19.18	40.00	-20.82	-	-	peak
3	156.4259	33.74	-8.60	25.14	43.50	-18.36	-	-	peak
4	334.1255	36.45	-7.39	29.06	46.00	-16.94	-	-	peak
5	602.9287	29.98	-1.71	28.27	46.00	-17.73	-	-	peak
6	952.0001	32.33	2.25	34.58	46.00	-11.42	-	-	peak

802.11ac-VHT160			
Test Channel	5250MHz(worst case)	Polarity:	Vertical



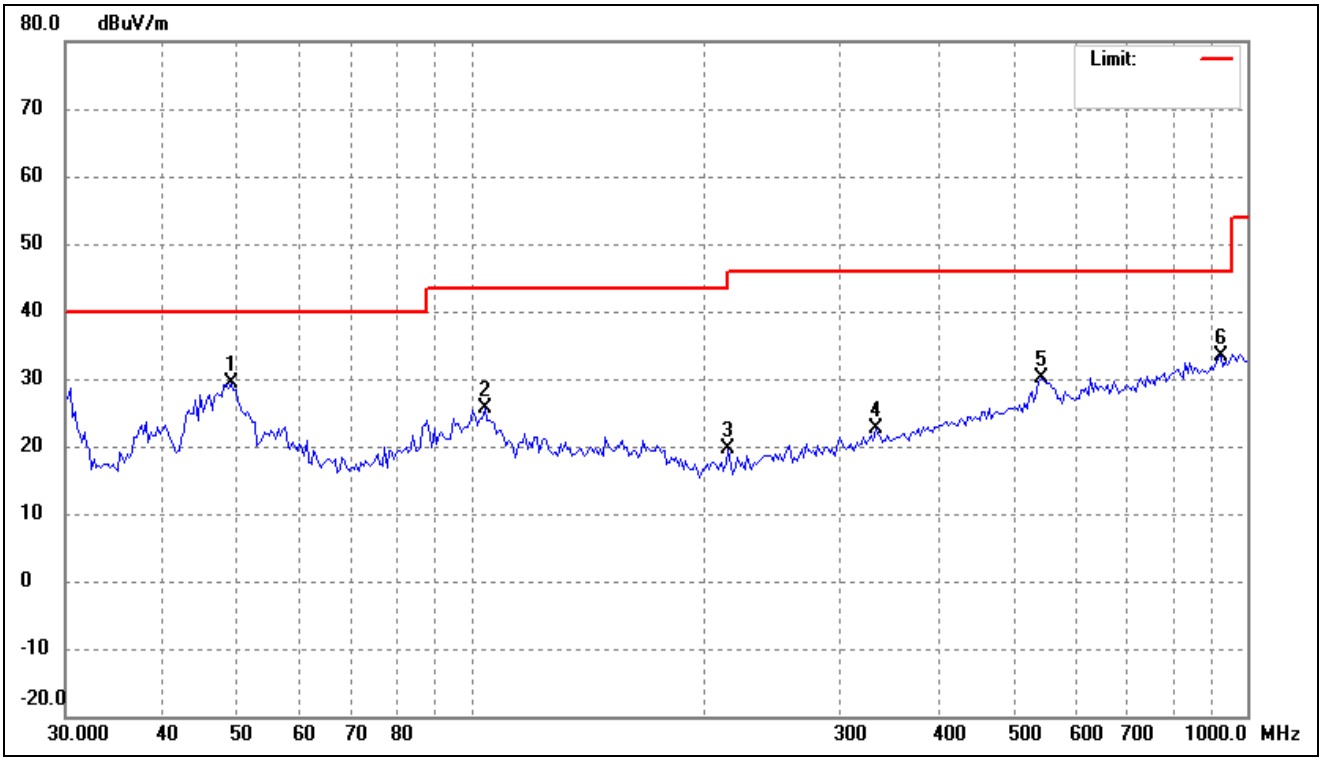
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	46.7077	38.91	-8.34	30.57	40.00	-9.43	-	-	peak
2	99.7676	37.87	-12.51	25.36	43.50	-18.14	-	-	peak
3	173.8147	34.90	-9.42	25.48	43.50	-18.02	-	-	peak
4	294.4260	30.65	-8.45	22.20	46.00	-23.80	-	-	peak
5	538.8107	33.73	-3.15	30.58	46.00	-15.42	-	-	peak
6	815.6353	31.48	0.44	31.92	46.00	-14.08	-	-	peak

802.11ax-HE160			
Test Channel	5250MHz(worst case)	Polarity:	Horizontal



No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	48.7191	29.35	-8.18	21.17	40.00	-18.83	-	-	peak
2	63.6312	28.70	-9.59	19.11	40.00	-20.89	-	-	peak
3	153.1627	30.78	-8.61	22.17	43.50	-21.33	-	-	peak
4	266.8395	37.33	-9.46	27.87	46.00	-18.13	-	-	peak
5	327.1554	35.87	-7.51	28.36	46.00	-17.64	-	-	peak
6	684.2259	31.45	-1.20	30.25	46.00	-15.75	-	-	peak

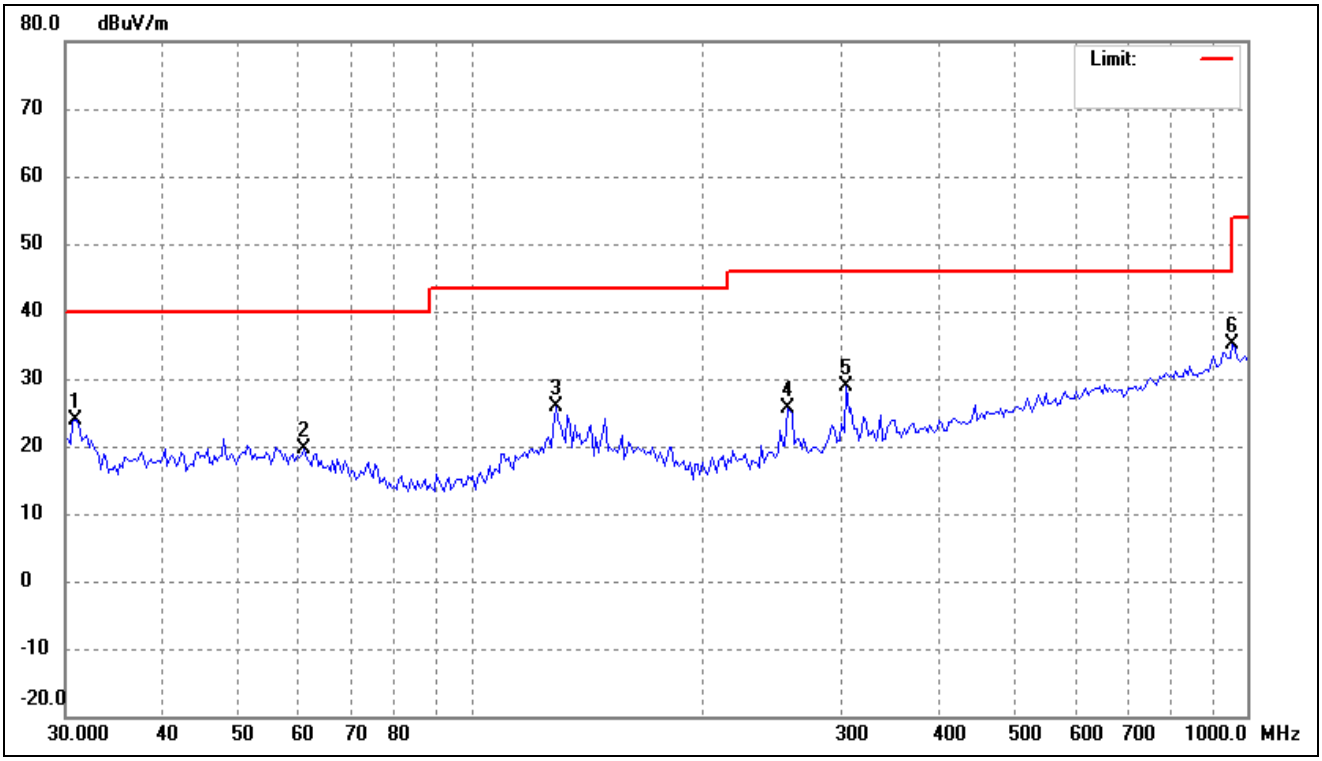
802.11ax-HE160			
Test Channel	5250MHz(worst case)	Polarity:	Vertical



No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	49.0627	37.44	-8.15	29.29	40.00	-10.71	-	-	peak
2	104.0640	37.80	-12.12	25.68	43.50	-17.82	-	-	peak
3	214.6063	31.70	-12.13	19.57	43.50	-23.93	-	-	peak
4	331.7858	30.03	-7.43	22.60	46.00	-23.40	-	-	peak
5	542.6104	33.20	-3.05	30.15	46.00	-15.85	-	-	peak
6	925.6132	31.63	1.74	33.37	46.00	-12.63	-	-	peak

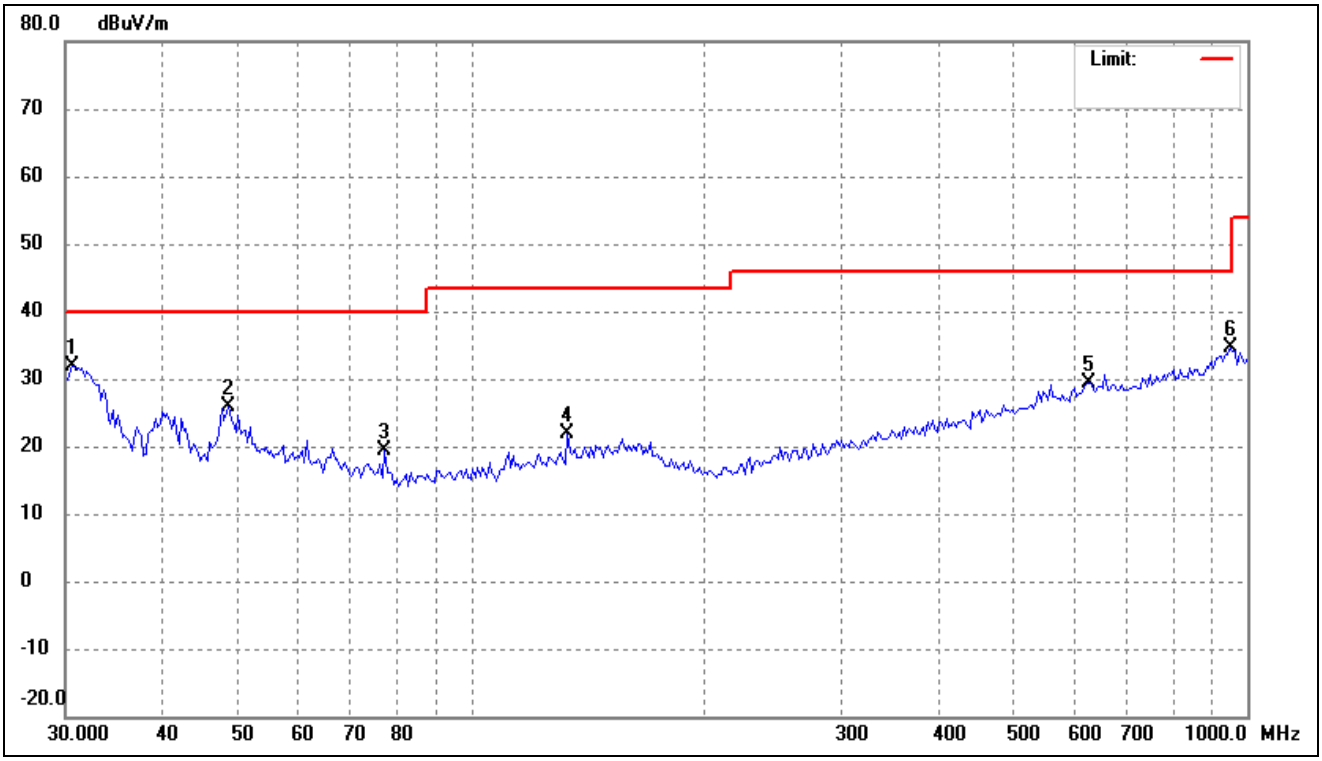
5745-5825MHz

802.11n-HT20			
Test Channel	5745MHz(worst case)	Polarity:	Horizontal



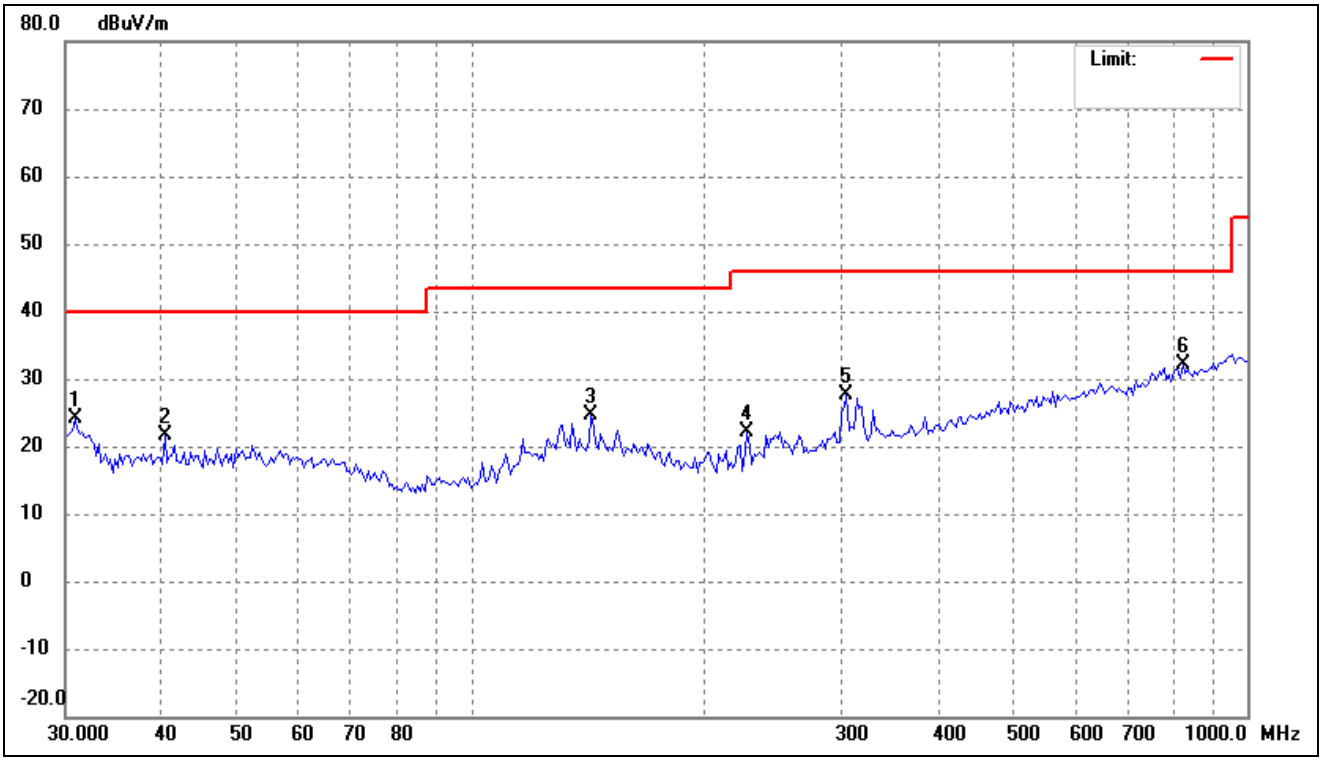
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	30.8552	34.07	-10.08	23.99	40.00	-16.01	-	-	peak
2	61.0041	28.86	-9.11	19.75	40.00	-20.25	-	-	peak
3	128.4862	35.94	-9.96	25.98	43.50	-17.52	-	-	peak
4	255.8226	35.49	-9.96	25.53	46.00	-20.47	-	-	peak
5	304.9548	37.09	-8.12	28.97	46.00	-17.03	-	-	peak
6	958.7135	32.77	2.26	35.03	46.00	-10.97	-	-	peak

802.11n-HT20			
Test Channel	5745MHz(worst case)	Polarity:	Vertical



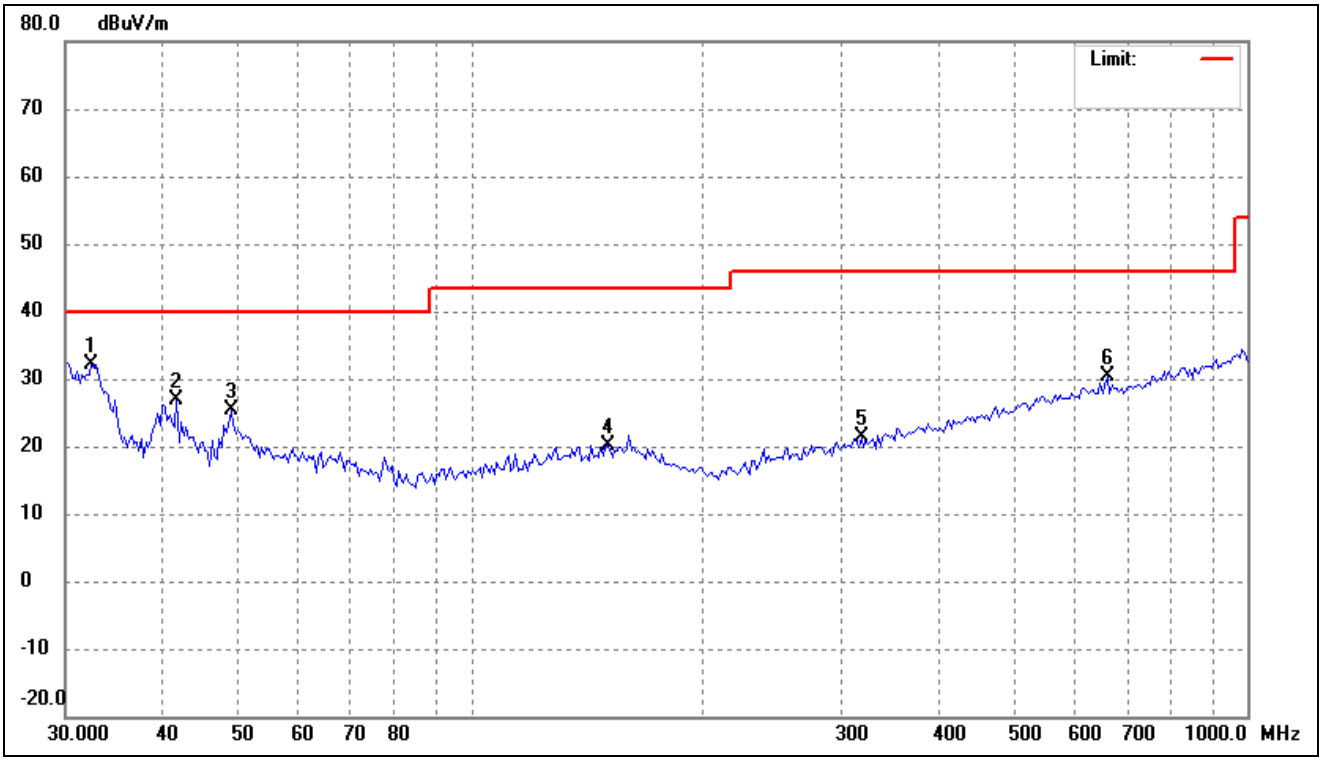
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	30.6392	42.04	-10.11	31.93	40.00	-8.07	-	-	peak
2	48.7191	34.06	-8.18	25.88	40.00	-14.12	-	-	peak
3	77.4680	31.67	-12.41	19.26	40.00	-20.74	-	-	peak
4	133.0809	31.61	-9.72	21.89	43.50	-21.61	-	-	peak
5	624.4897	30.81	-1.41	29.40	46.00	-16.60	-	-	peak
6	952.0001	32.32	2.25	34.57	46.00	-11.43	-	-	peak

802.11ac-HT20			
Test Channel	5745MHz(worst case)	Polarity:	Horizontal



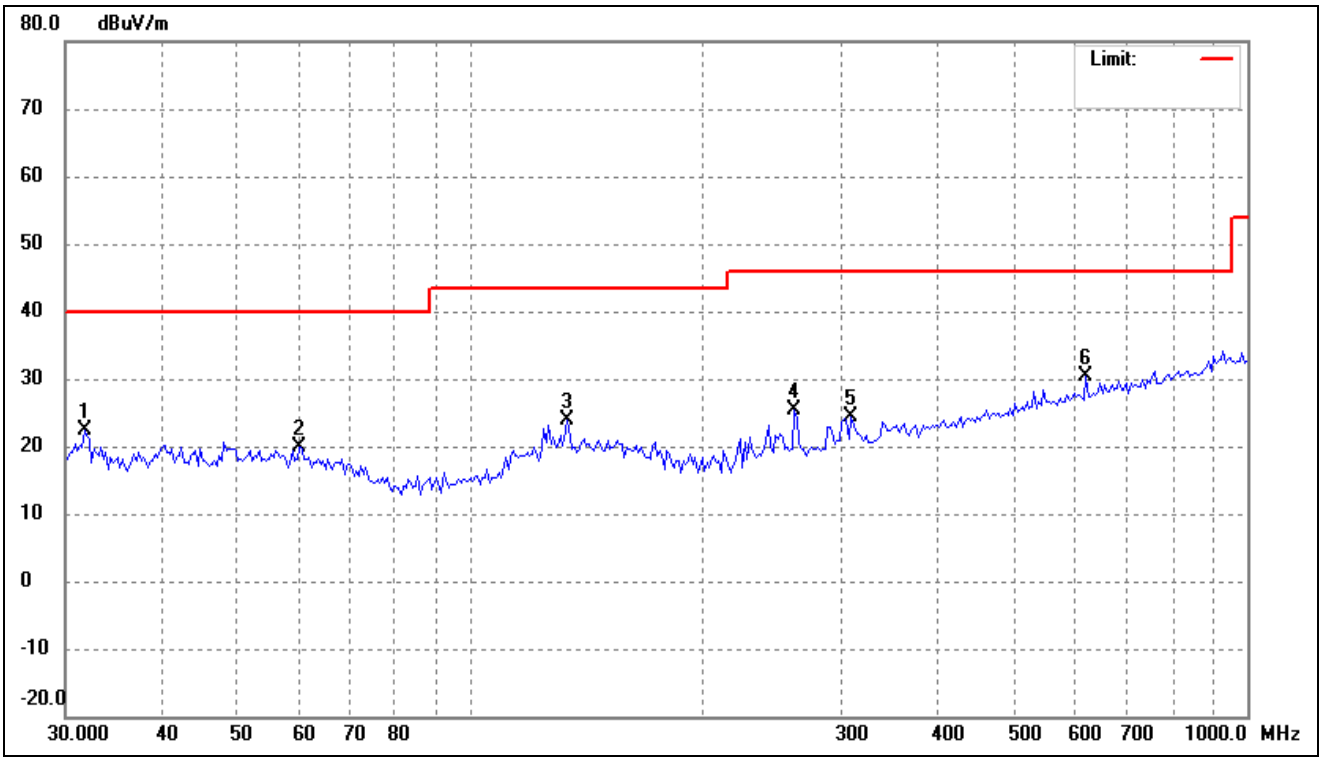
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	30.8552	34.09	-10.08	24.01	40.00	-15.99	-	-	peak
2	40.2995	30.18	-8.48	21.70	40.00	-18.30	-	-	peak
3	142.7692	33.81	-9.20	24.61	43.50	-18.89	-	-	peak
4	227.0164	33.89	-11.76	22.13	46.00	-23.87	-	-	peak
5	304.9548	35.74	-8.12	27.62	46.00	-18.38	-	-	peak
6	827.1795	31.52	0.54	32.06	46.00	-13.94	-	-	peak

802.11ac-VHT20			
Test Channel	5745MHz(worst case)	Polarity:	Vertical



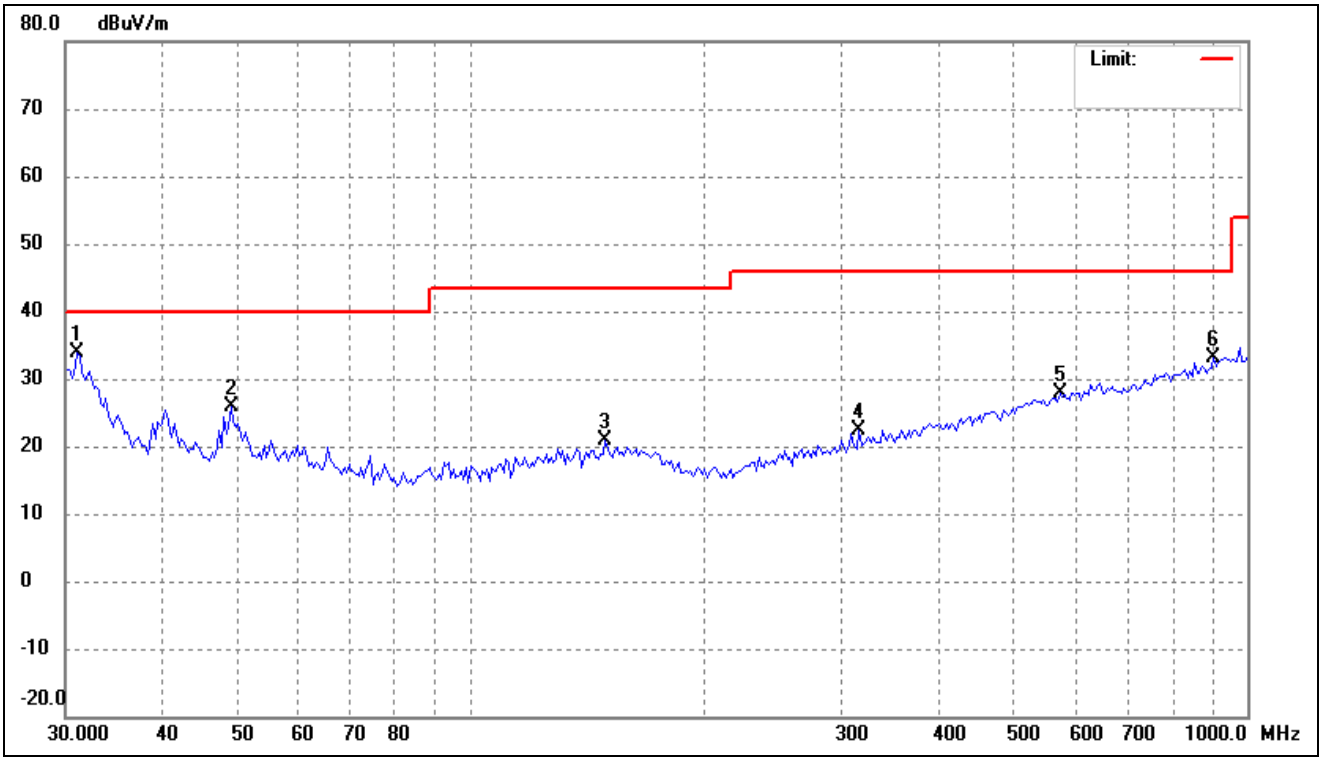
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	32.4109	42.05	-9.88	32.17	40.00	-7.83	-	-	peak
2	41.7406	35.33	-8.47	26.86	40.00	-13.14	-	-	peak
3	49.0627	33.55	-8.16	25.39	40.00	-14.61	-	-	peak
4	149.9676	28.77	-8.59	20.18	43.50	-23.32	-	-	peak
5	318.0875	29.14	-7.75	21.39	46.00	-24.61	-	-	peak
6	660.6024	31.57	-1.28	30.29	46.00	-15.71	-	-	peak

802.11ax-HE20			
Test Channel	5745MHz(worst case)	Polarity:	Horizontal



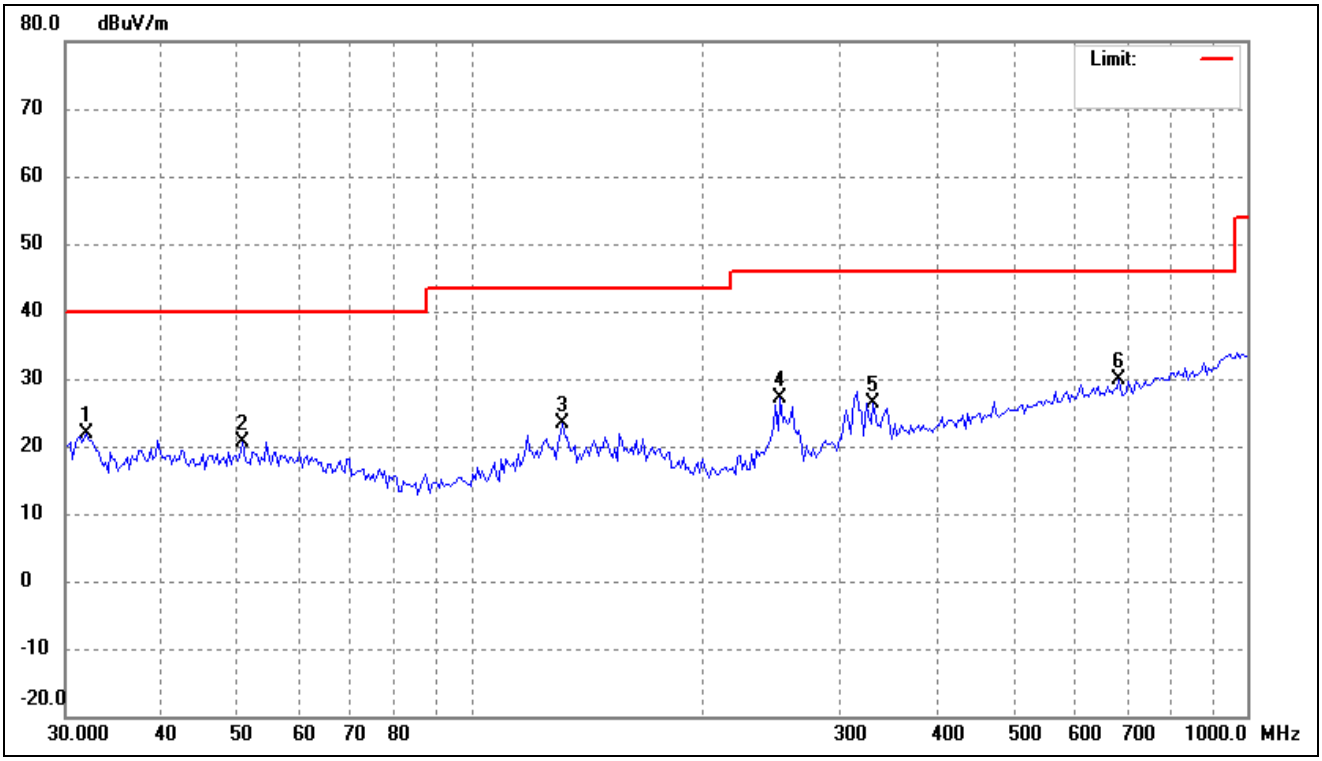
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.7348	32.34	-9.98	22.36	40.00	-17.64	-	-	peak
2	60.1528	28.83	-8.97	19.86	40.00	-20.14	-	-	peak
3	133.0809	33.65	-9.72	23.93	43.50	-19.57	-	-	peak
4	261.2730	35.18	-9.71	25.47	46.00	-20.53	-	-	peak
5	309.2710	32.36	-8.00	24.36	46.00	-21.64	-	-	peak
6	620.1167	31.82	-1.46	30.36	46.00	-15.64	-	-	peak

802.11ax-HE20			
Test Channel	5745MHz(worst case)	Polarity:	Vertical



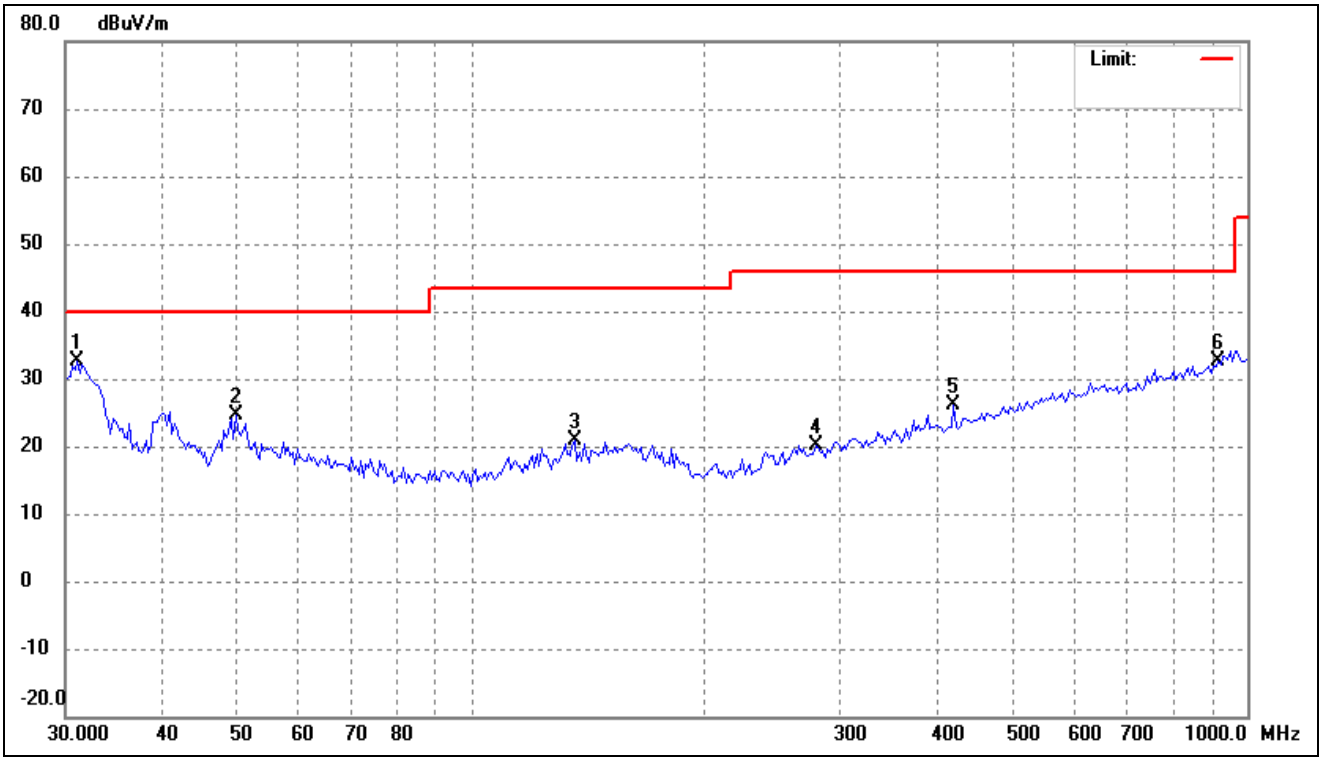
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.0728	43.85	-10.06	33.79	40.00	-6.21	-	-	peak
2	49.0627	34.01	-8.15	25.86	40.00	-14.14	-	-	peak
3	148.9175	29.50	-8.68	20.82	43.50	-22.68	-	-	peak
4	315.8601	30.27	-7.81	22.46	46.00	-23.54	-	-	peak
5	573.9882	30.20	-2.27	27.93	46.00	-18.07	-	-	peak
6	906.3041	31.88	1.32	33.20	46.00	-12.80	-	-	peak

802.11n-HT40			
Test Channel	5755MHz(worst case)	Polarity:	Horizontal



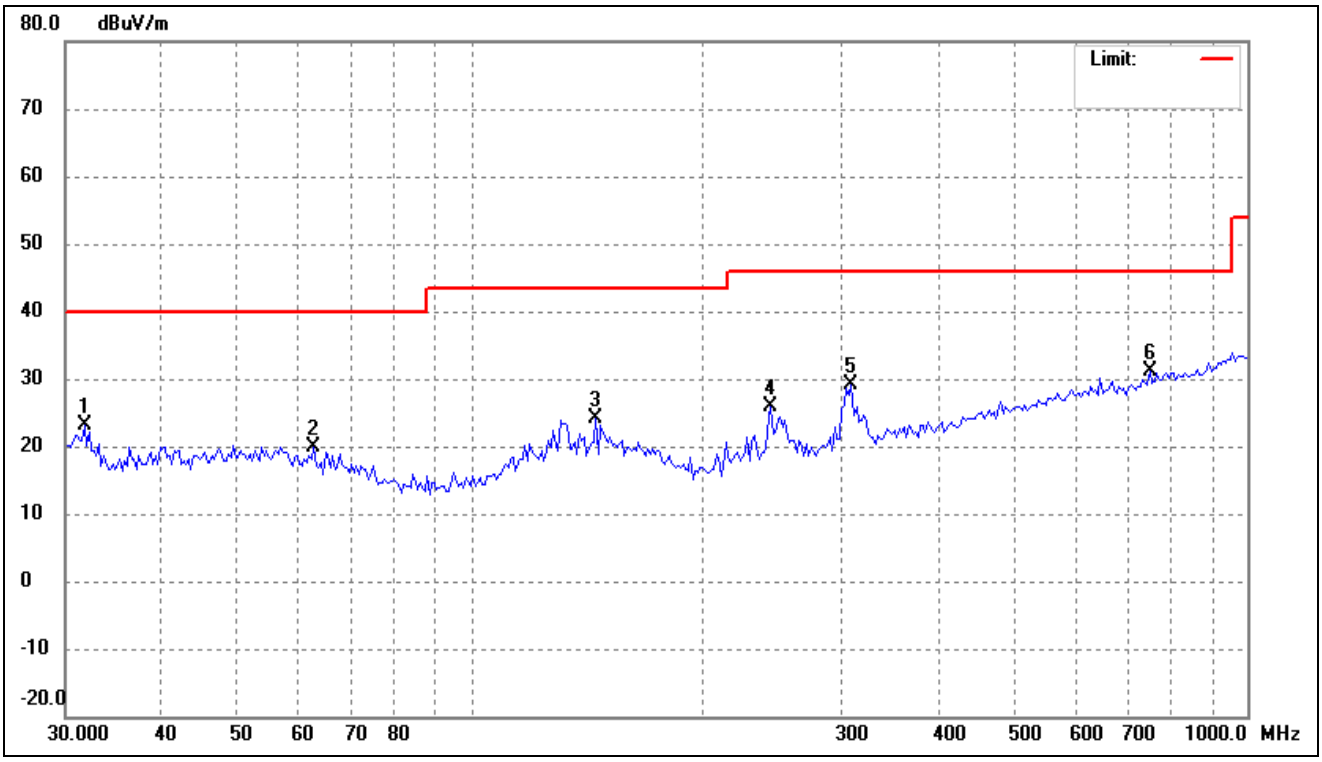
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.9586	31.75	-9.94	21.81	40.00	-18.19	-	-	peak
2	50.8172	28.80	-8.17	20.63	40.00	-19.37	-	-	peak
3	131.2236	33.12	-9.80	23.32	43.50	-20.18	-	-	peak
4	250.4859	37.32	-10.18	27.14	46.00	-18.86	-	-	peak
5	329.4625	33.94	-7.47	26.47	46.00	-19.53	-	-	peak
6	684.2259	31.20	-1.20	30.00	46.00	-16.00	-	-	peak

802.11n-HT40			
Test Channel	5755MHz(worst case)	Polarity:	Vertical



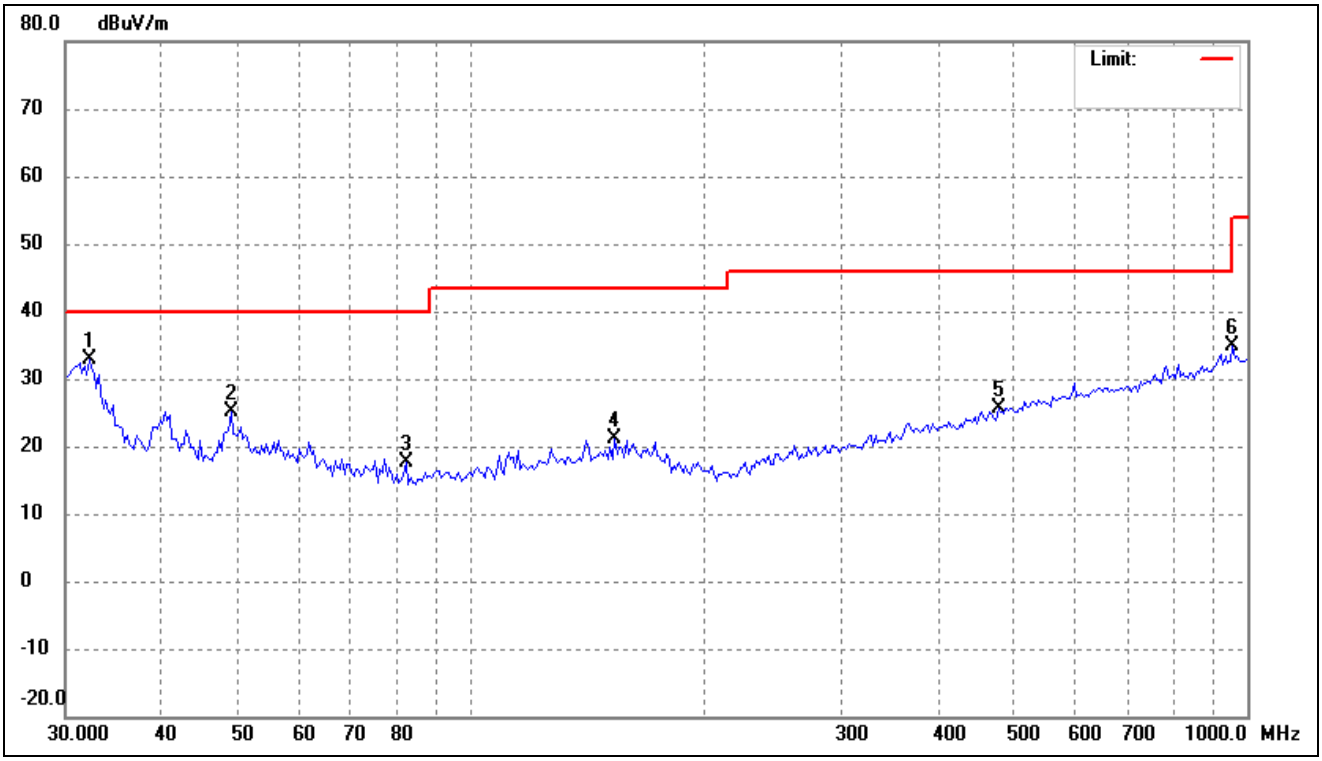
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.0728	42.81	-10.06	32.75	40.00	-7.25	-	-	peak
2	49.7571	32.67	-8.09	24.58	40.00	-15.42	-	-	peak
3	135.9163	30.51	-9.61	20.90	43.50	-22.60	-	-	peak
4	278.3308	29.22	-9.00	20.22	46.00	-25.78	-	-	peak
5	418.3784	31.58	-5.47	26.11	46.00	-19.89	-	-	peak
6	919.1315	30.93	1.59	32.52	46.00	-13.48	-	-	peak

802.11ac-VHT40			
Test Channel	5755MHz(worst case)	Polarity:	Horizontal



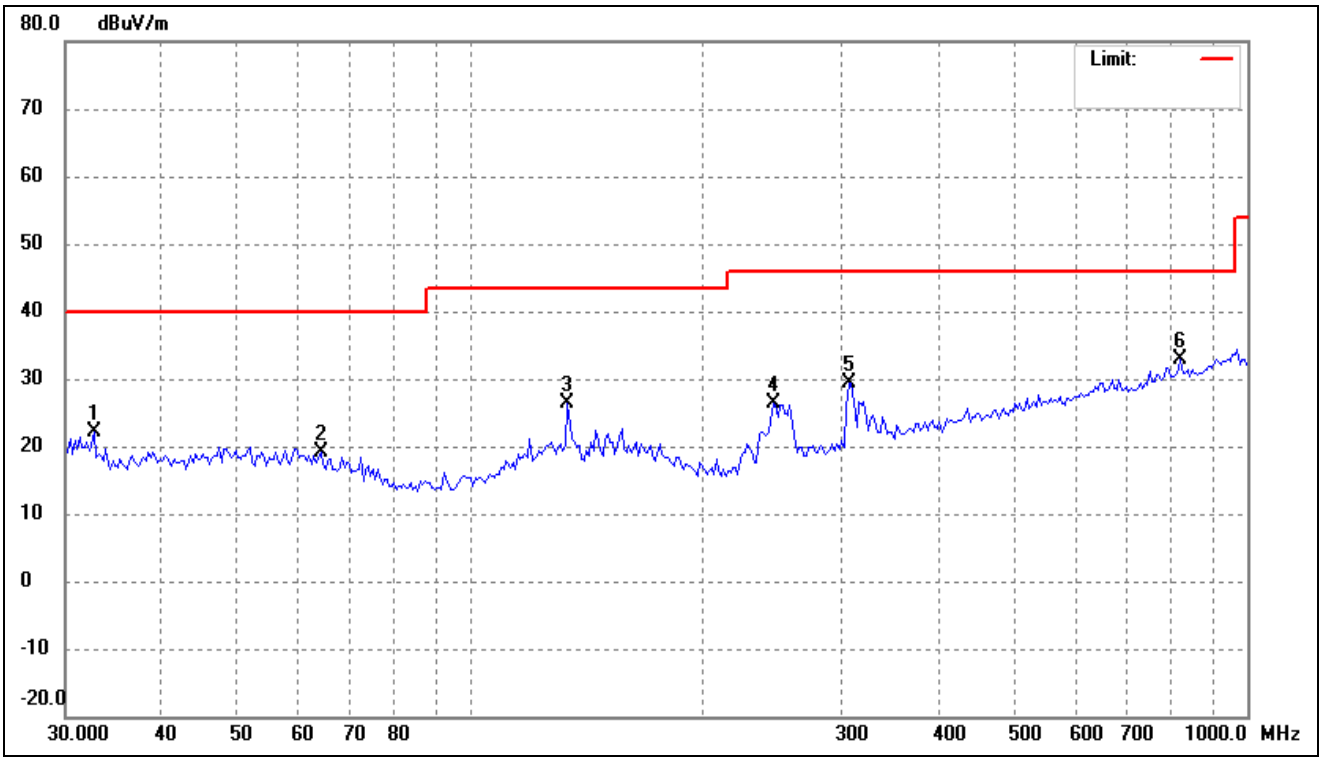
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.7348	33.14	-9.98	23.16	40.00	-16.84	-	-	peak
2	62.7432	29.39	-9.44	19.95	40.00	-20.05	-	-	peak
3	144.7899	33.07	-9.03	24.04	43.50	-19.46	-	-	peak
4	243.5431	36.25	-10.42	25.83	46.00	-20.17	-	-	peak
5	309.2710	37.14	-8.00	29.14	46.00	-16.86	-	-	peak
6	749.6761	31.33	-0.18	31.15	46.00	-14.85	-	-	peak

802.11ac-VHT40			
Test Channel	5755MHz(worst case)	Polarity:	Vertical



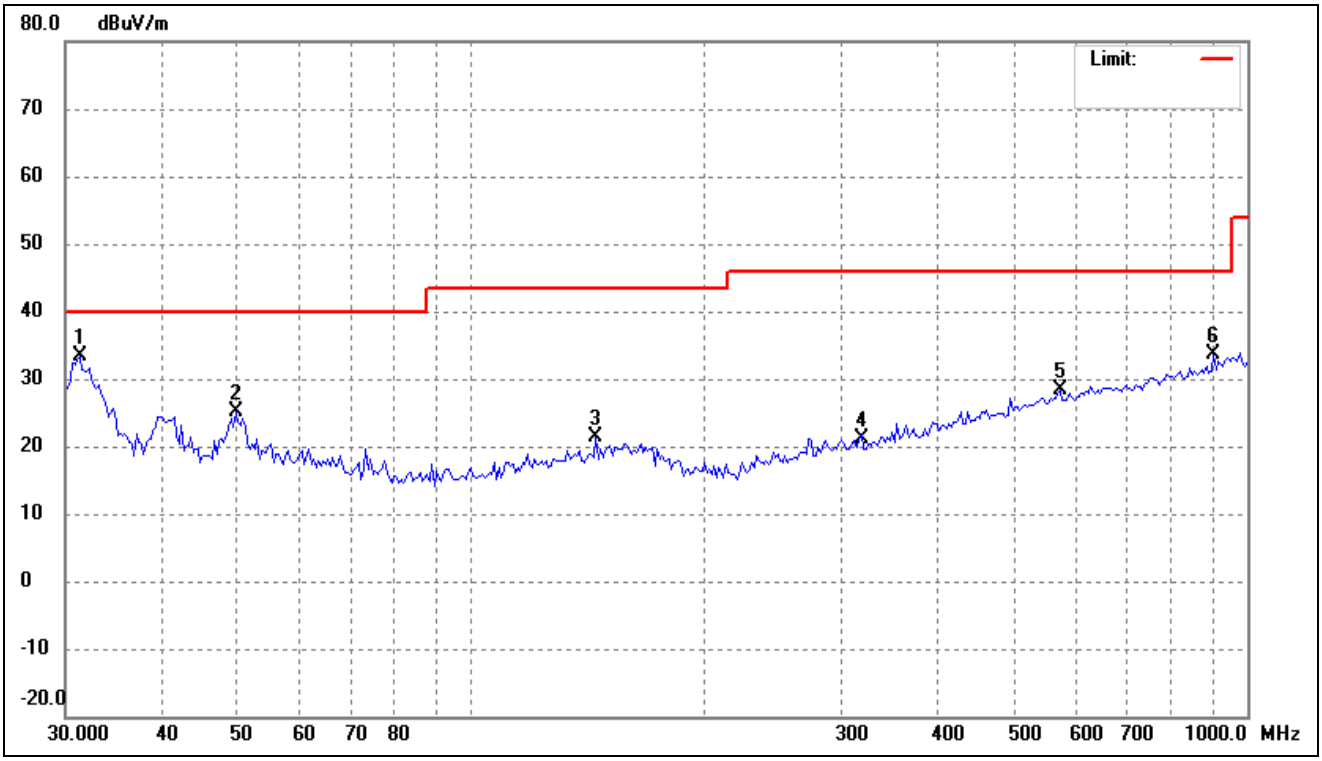
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	32.1840	42.83	-9.91	32.92	40.00	-7.08	-	-	peak
2	49.0627	33.36	-8.15	25.21	40.00	-14.79	-	-	peak
3	82.5257	30.67	-13.00	17.67	40.00	-22.33	-	-	peak
4	153.1627	29.66	-8.61	21.05	43.50	-22.45	-	-	peak
5	478.1394	29.81	-4.20	25.61	46.00	-20.39	-	-	peak
6	958.7135	32.60	2.26	34.86	46.00	-11.14	-	-	peak

802.11ax-HE40			
Test Channel	5755MHz(worst case)	Polarity:	Horizontal



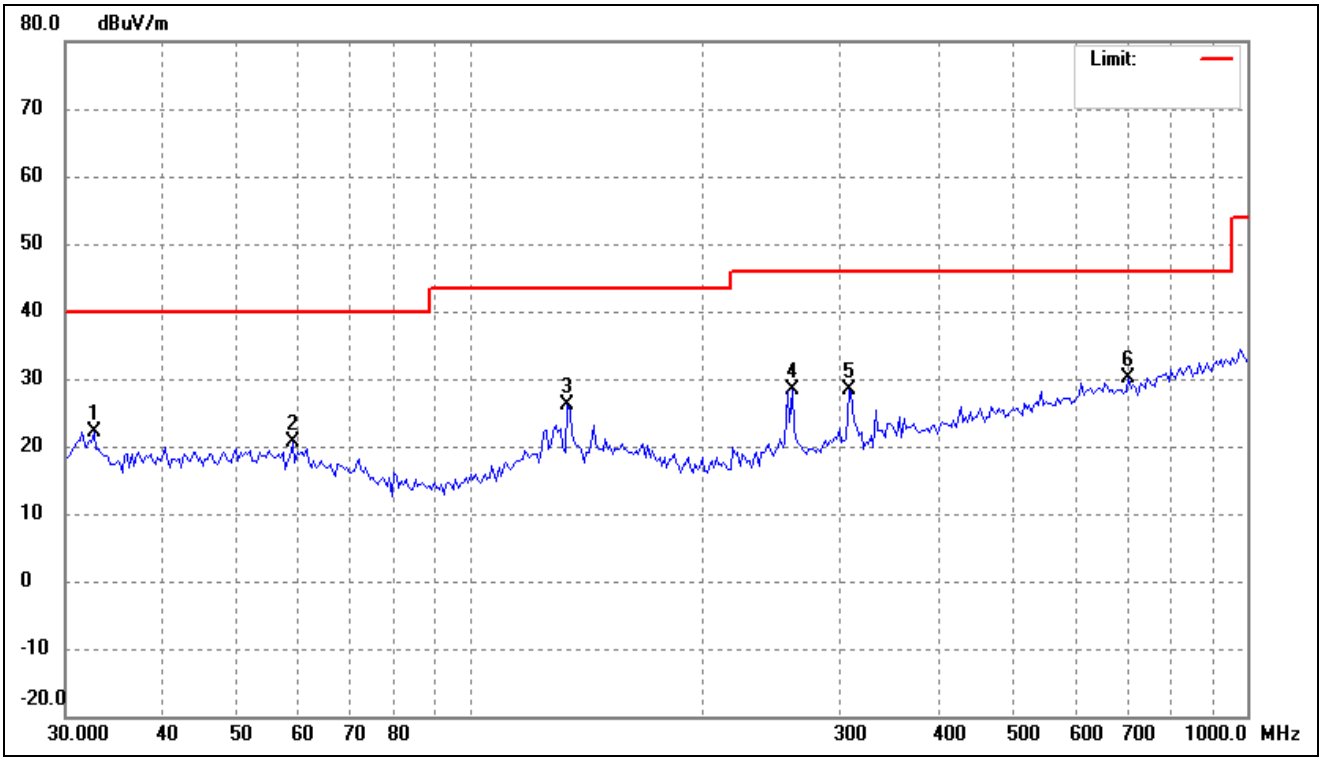
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	32.6395	32.07	-9.85	22.22	40.00	-17.78	-	-	peak
2	64.0800	28.78	-9.68	19.10	40.00	-20.90	-	-	peak
3	133.0809	36.08	-9.72	26.36	43.50	-17.14	-	-	peak
4	245.2606	36.65	-10.36	26.29	46.00	-19.71	-	-	peak
5	307.1053	37.53	-8.06	29.47	46.00	-16.53	-	-	peak
6	821.3871	32.31	0.49	32.80	46.00	-13.20	-	-	peak

802.11ax-HE40			
Test Channel	5755MHz(worst case)	Polarity:	Vertical



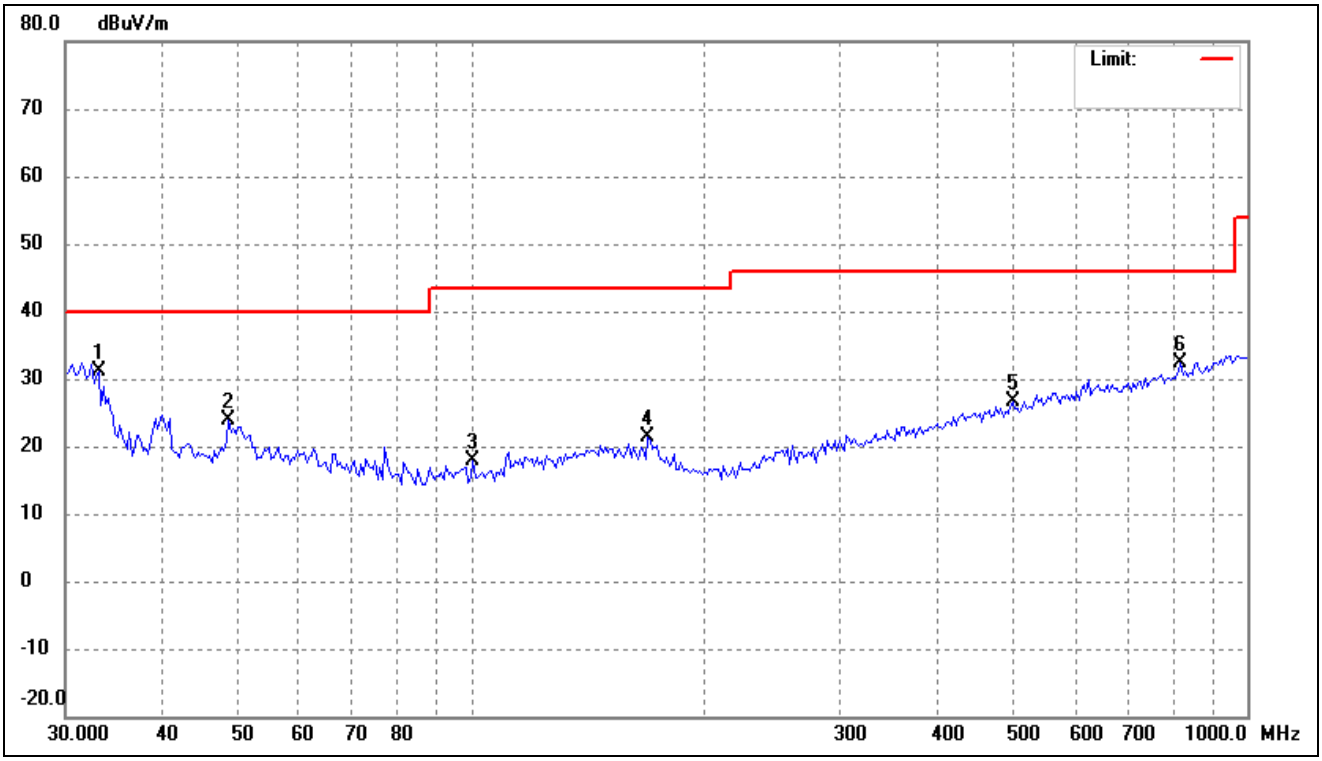
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.2919	43.35	-10.02	33.33	40.00	-6.67	-	-	peak
2	49.7571	33.33	-8.09	25.24	40.00	-14.76	-	-	peak
3	144.7899	30.36	-9.03	21.33	43.50	-22.17	-	-	peak
4	315.8601	29.05	-7.81	21.24	46.00	-24.76	-	-	peak
5	573.9882	30.57	-2.27	28.30	46.00	-17.70	-	-	peak
6	906.3041	32.28	1.32	33.60	46.00	-12.40	-	-	peak

802.11ac-VHT80			
Test Channel	5775MHz(worst case)	Polarity:	Horizontal



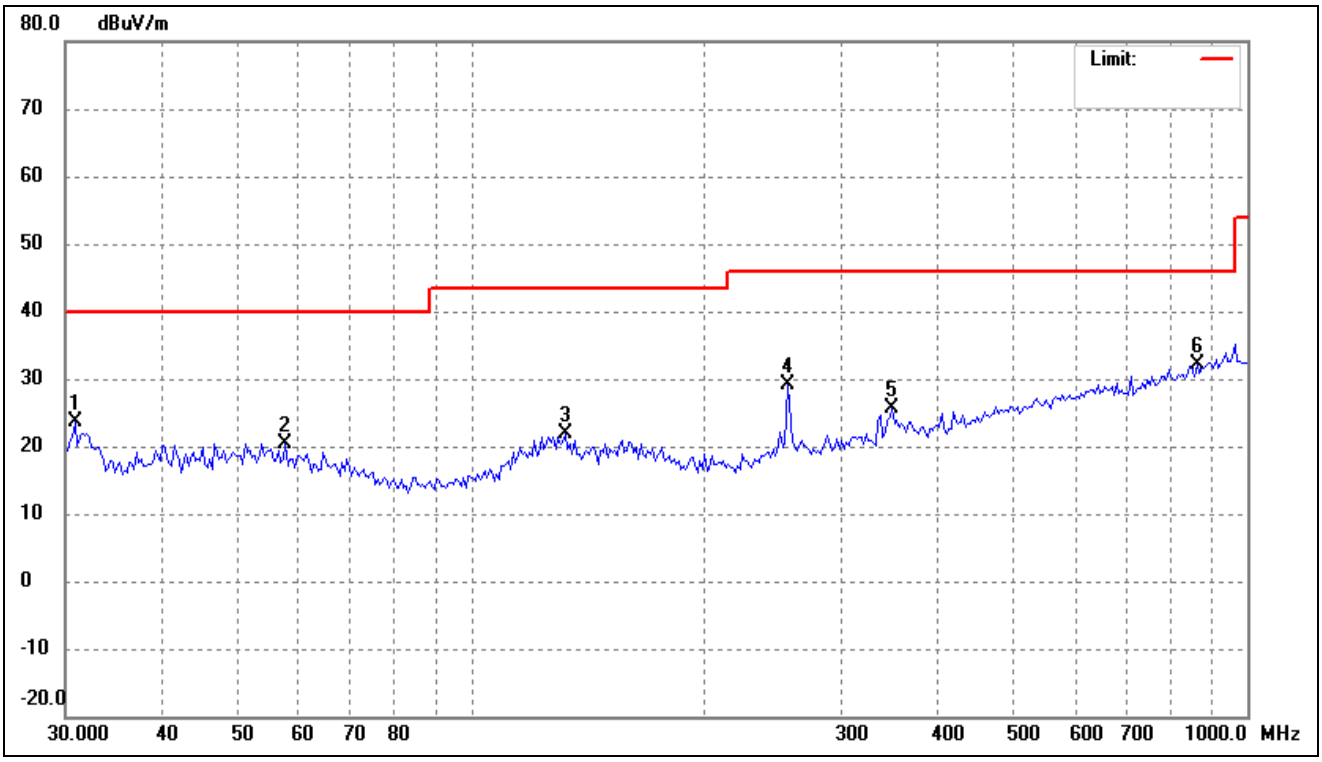
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	32.6395	31.92	-9.85	22.07	40.00	-17.93	-	-	peak
2	58.8979	29.46	-8.87	20.59	40.00	-19.41	-	-	peak
3	133.0809	35.83	-9.72	26.11	43.50	-17.39	-	-	peak
4	259.4434	38.25	-9.79	28.46	46.00	-17.54	-	-	peak
5	307.1053	36.55	-8.06	28.49	46.00	-17.51	-	-	peak
6	703.7314	31.23	-1.02	30.21	46.00	-15.79	-	-	peak

802.11ac-VHT80			
Test Channel	5775MHz(worst case)	Polarity:	Vertical



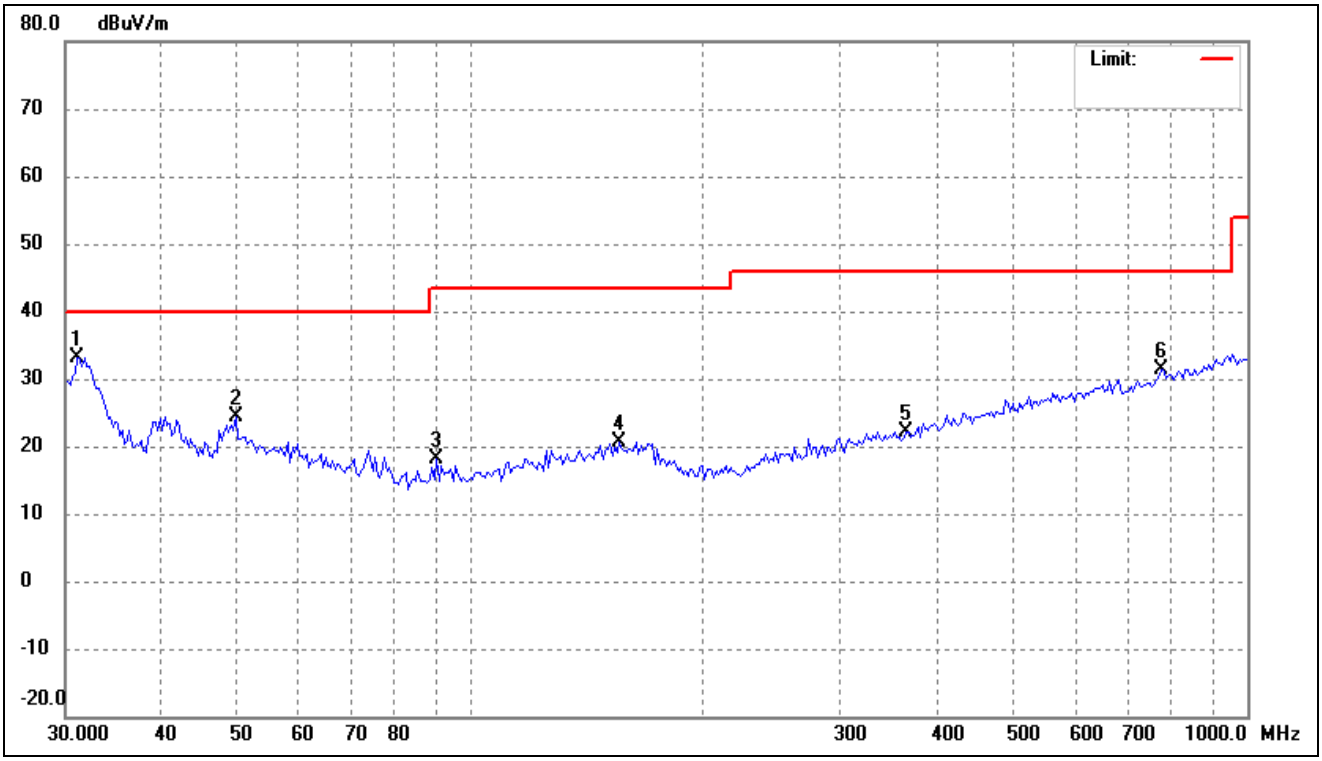
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	33.1015	41.02	-9.80	31.22	40.00	-8.78	-	-	peak
2	48.7191	32.14	-8.18	23.96	40.00	-16.04	-	-	peak
3	100.4712	30.25	-12.45	17.80	43.50	-25.70	-	-	peak
4	168.9970	30.21	-8.85	21.36	43.50	-22.14	-	-	peak
5	498.7303	30.48	-3.92	26.56	46.00	-19.44	-	-	peak
6	821.3871	31.83	0.49	32.32	46.00	-13.68	-	-	peak

802.11ax-HE80			
Test Channel	5775MHz(worst case)	Polarity:	Horizontal



No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	30.8552	33.67	-10.08	23.59	40.00	-16.41	-	-	peak
2	57.6693	29.08	-8.79	20.29	40.00	-19.71	-	-	peak
3	132.1490	31.52	-9.76	21.76	43.50	-21.74	-	-	peak
4	255.8226	39.21	-9.96	29.25	46.00	-16.75	-	-	peak
5	348.5145	32.71	-7.14	25.57	46.00	-20.43	-	-	peak
6	862.8015	31.19	0.85	32.04	46.00	-13.96	-	-	peak

802.11ax-HE80			
Test Channel	5775MHz(worst case)	Polarity:	Vertical



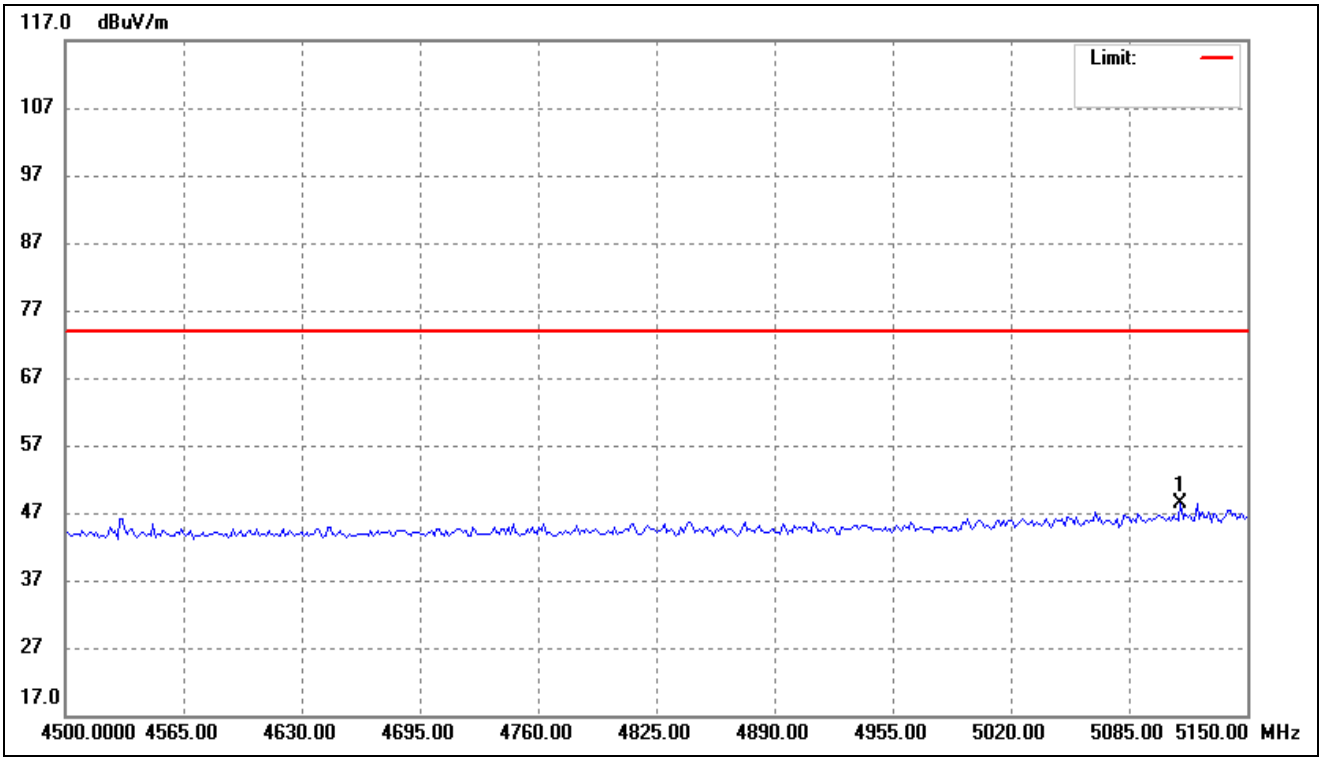
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	31.0728	43.12	-10.06	33.06	40.00	-6.94	-	-	peak
2	49.7571	32.43	-8.09	24.34	40.00	-15.66	-	-	peak
3	90.4198	31.16	-13.08	18.08	43.50	-25.42	-	-	peak
4	155.3305	29.35	-8.61	20.74	43.50	-22.76	-	-	peak
5	363.5231	28.96	-6.76	22.20	46.00	-23.80	-	-	peak
6	776.4849	31.39	0.08	31.47	46.00	-14.53	-	-	peak

Remark: '-'Means' the test Degree and Height are not recorded by the test software and only show the worst case in the test report.

- Spurious Emission above 1GHz

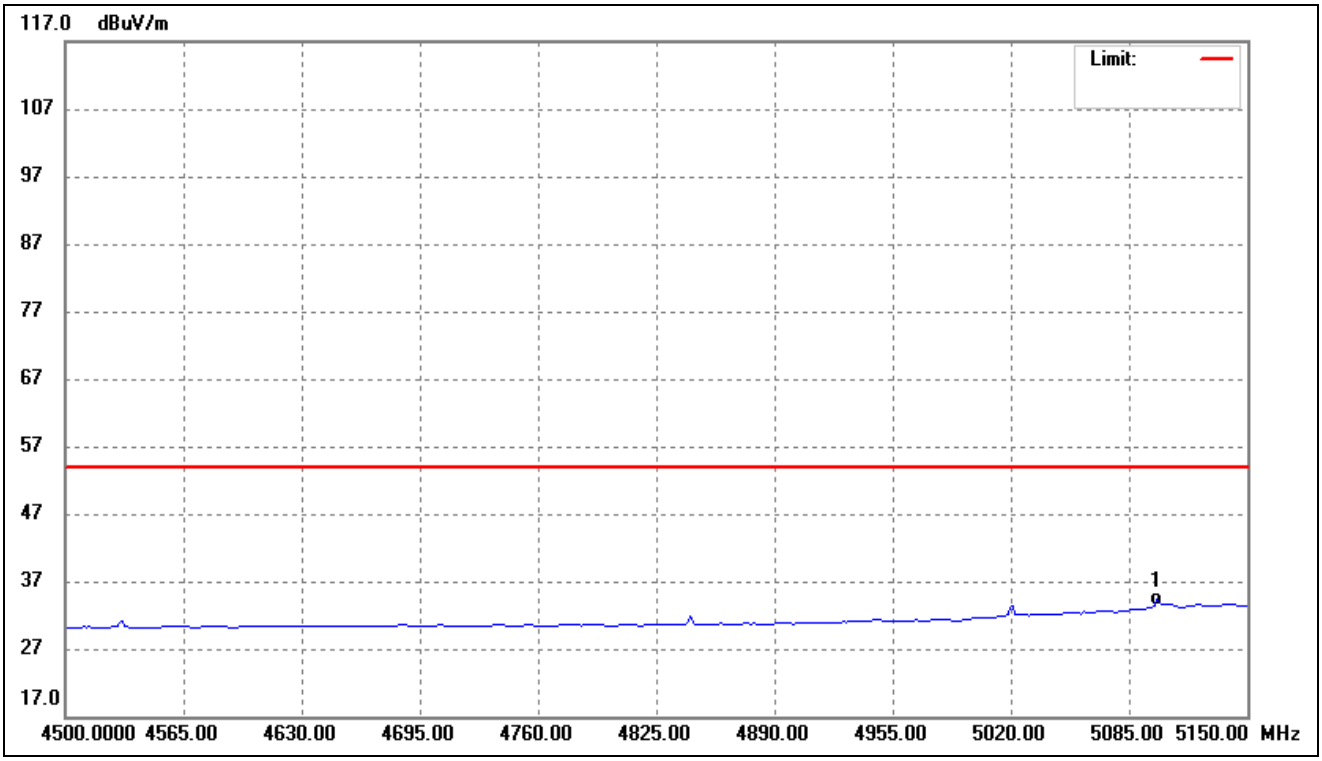
- Antenna 1+ Antenna 2+ Antenna 3

802.11a- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



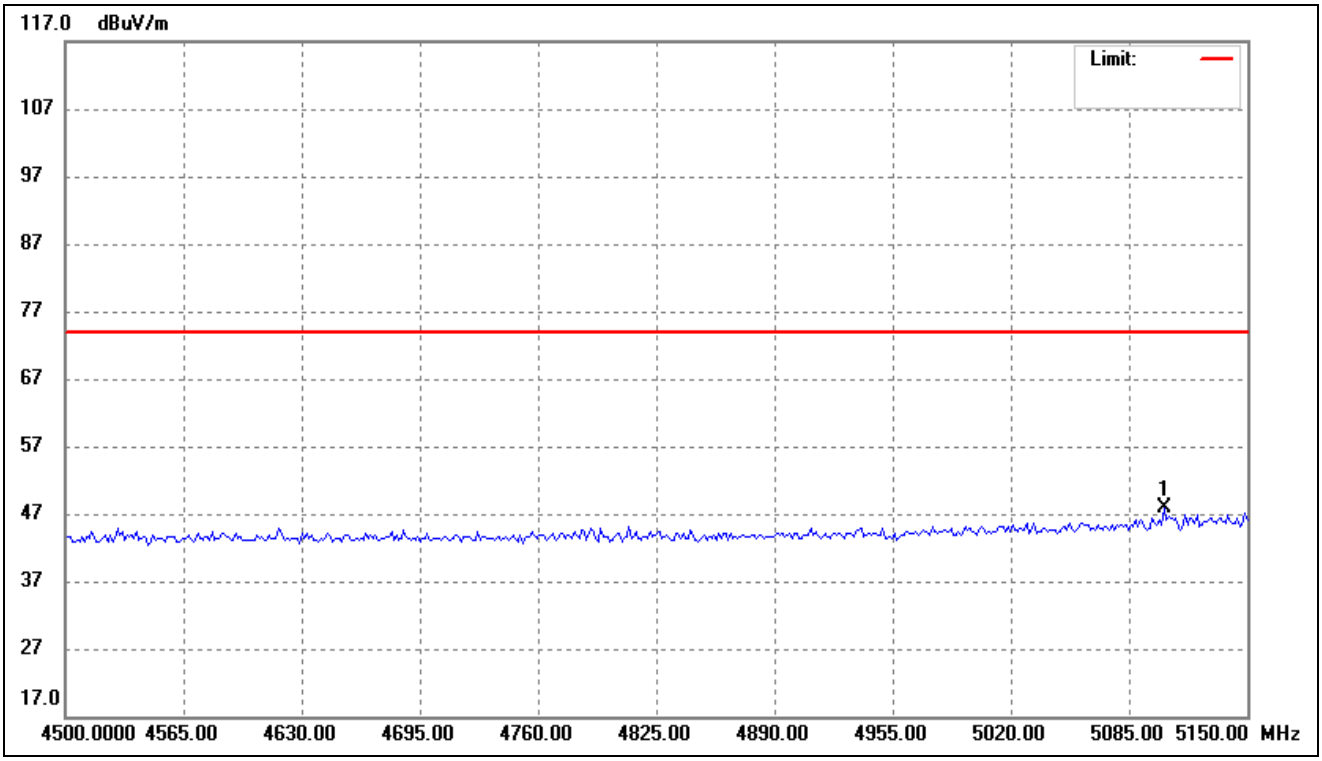
No.	Frequency	Reading	Corr.	Result	Limit	Margin	Deg.	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5113.527	60.24	-11.83	48.41	74.00	-25.59	-	-	peak

802.11a- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



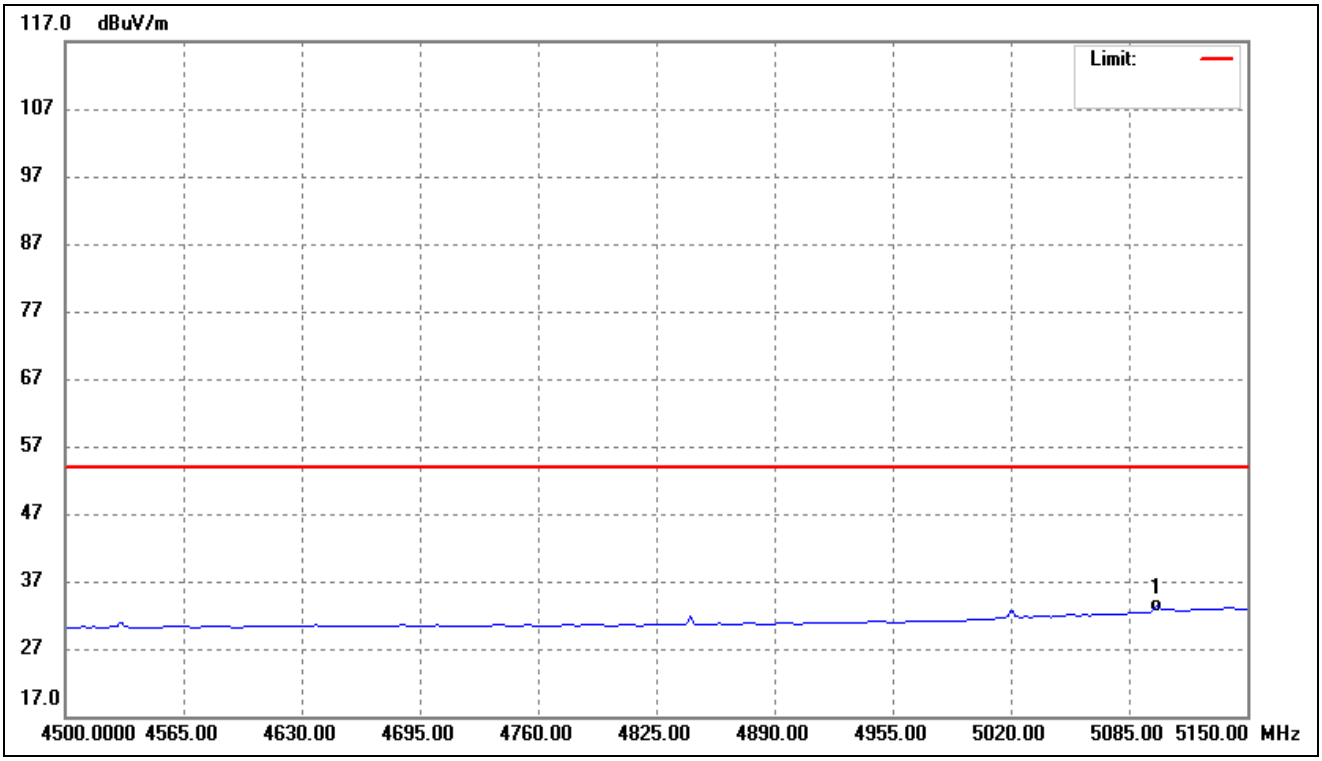
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5100.501	46.17	-11.90	34.27	54.00	-19.73	-	-	AVG

802.11n-HT20- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



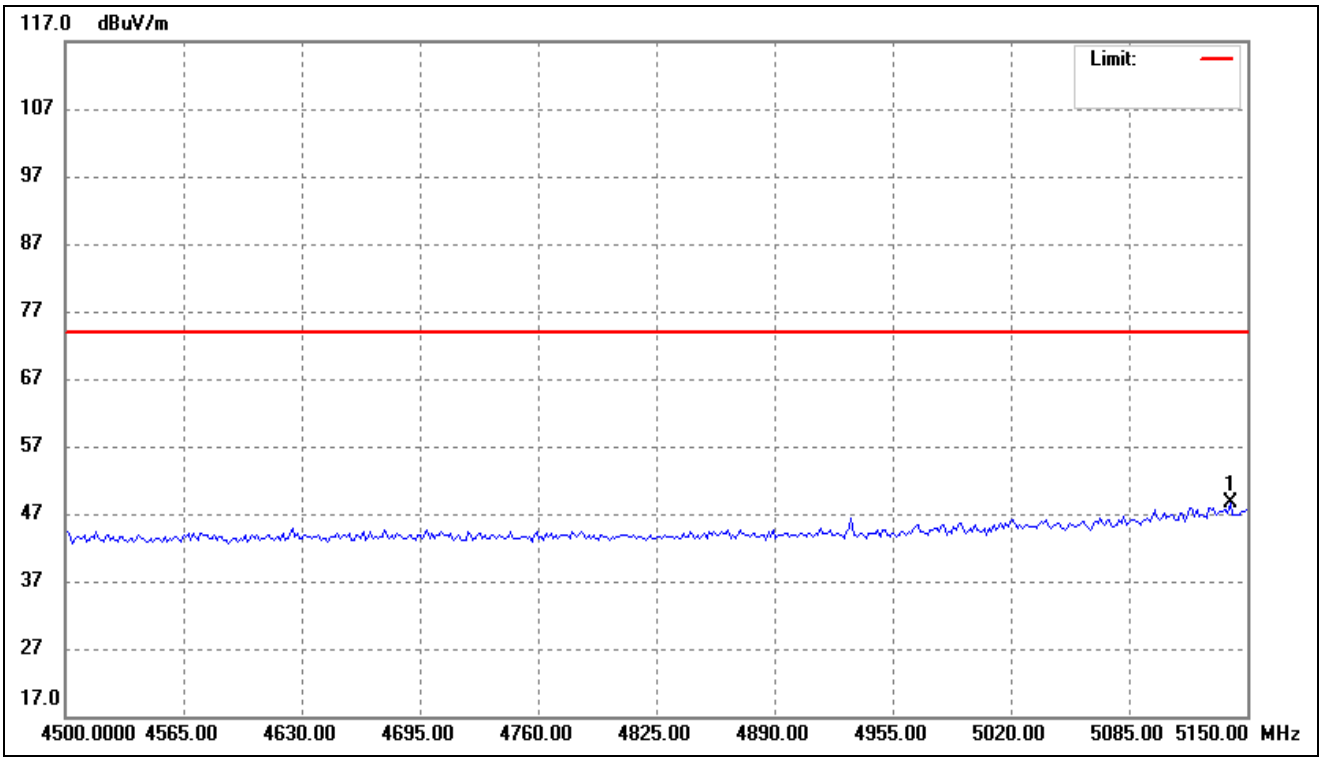
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5104.409	59.64	-11.88	47.76	74.00	-26.24	-	-	peak

802.11n-HT20- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



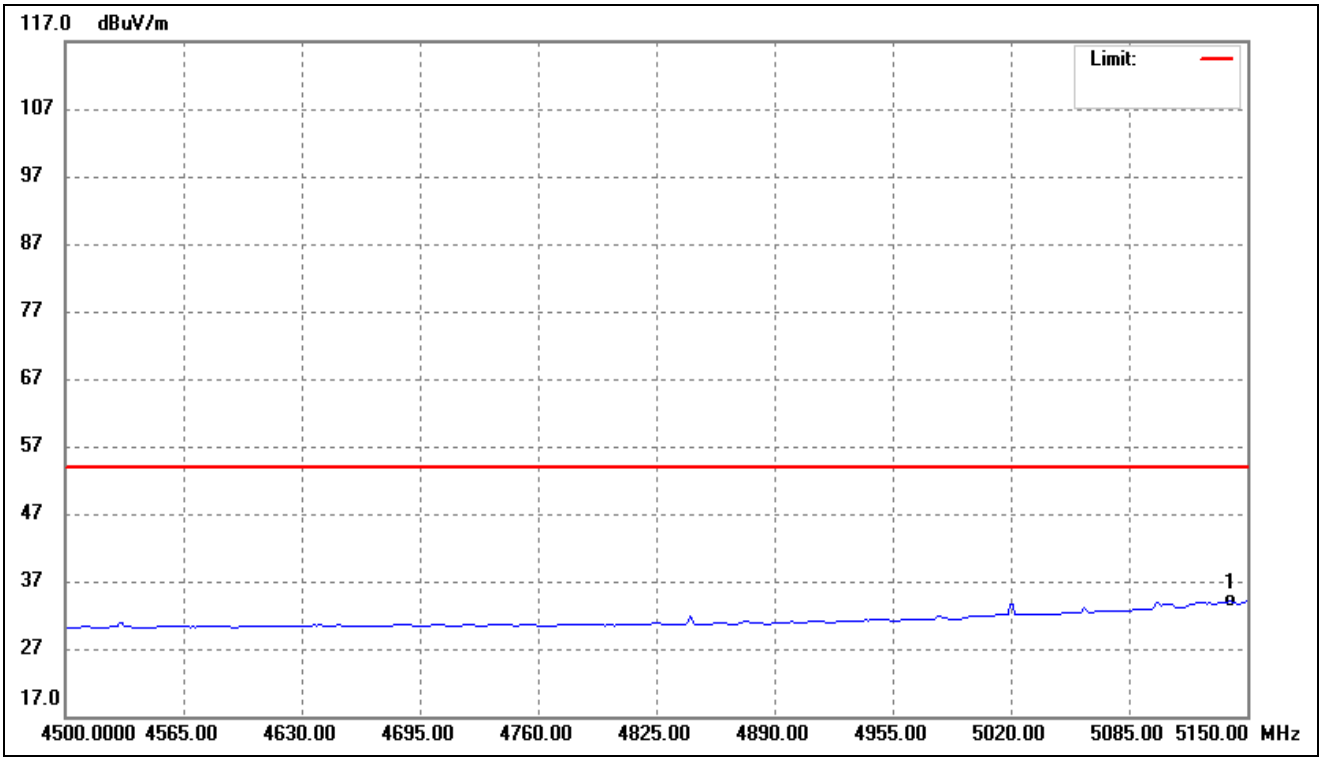
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5100.501	45.27	-11.90	33.37	54.00	-20.63	-	-	AVG

802.11ac-VHT20- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



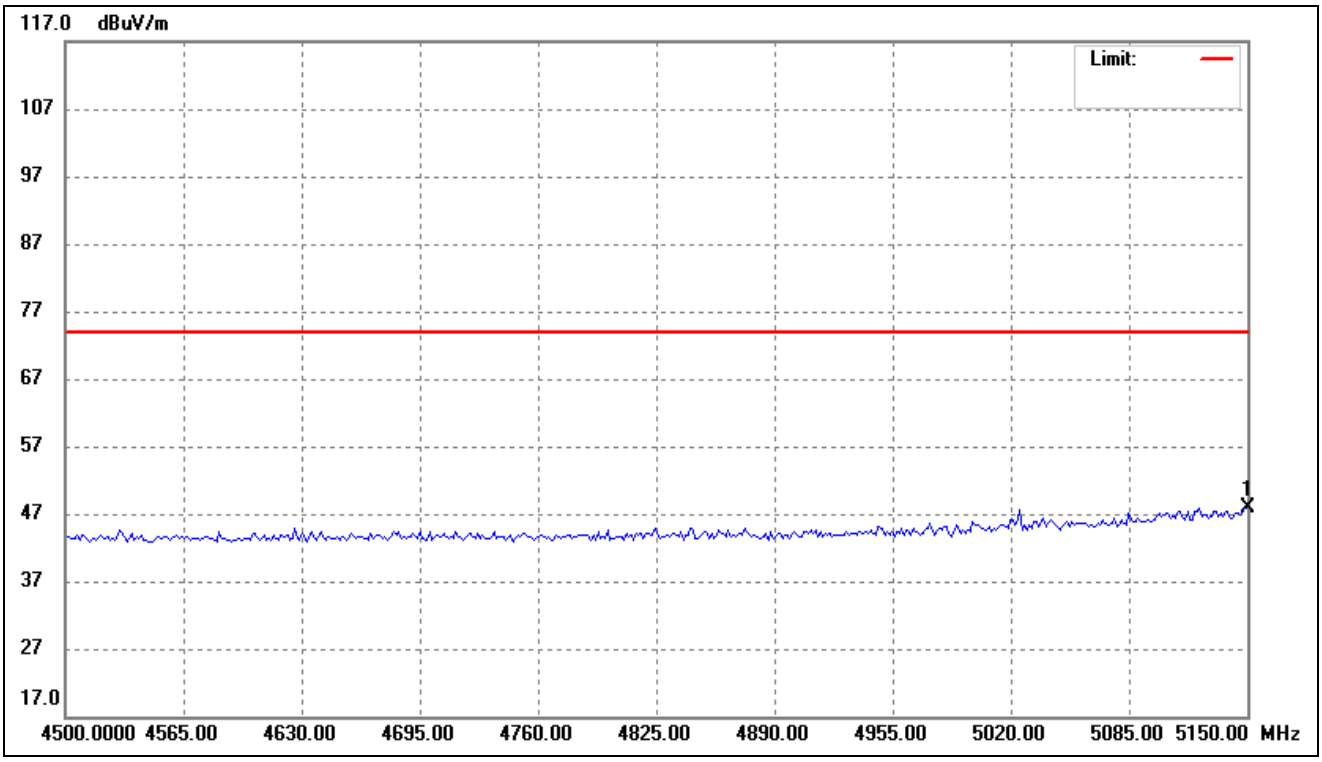
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5140.882	60.28	-11.70	48.58	74.00	-25.42	-	-	peak

802.11ac-VHT20- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



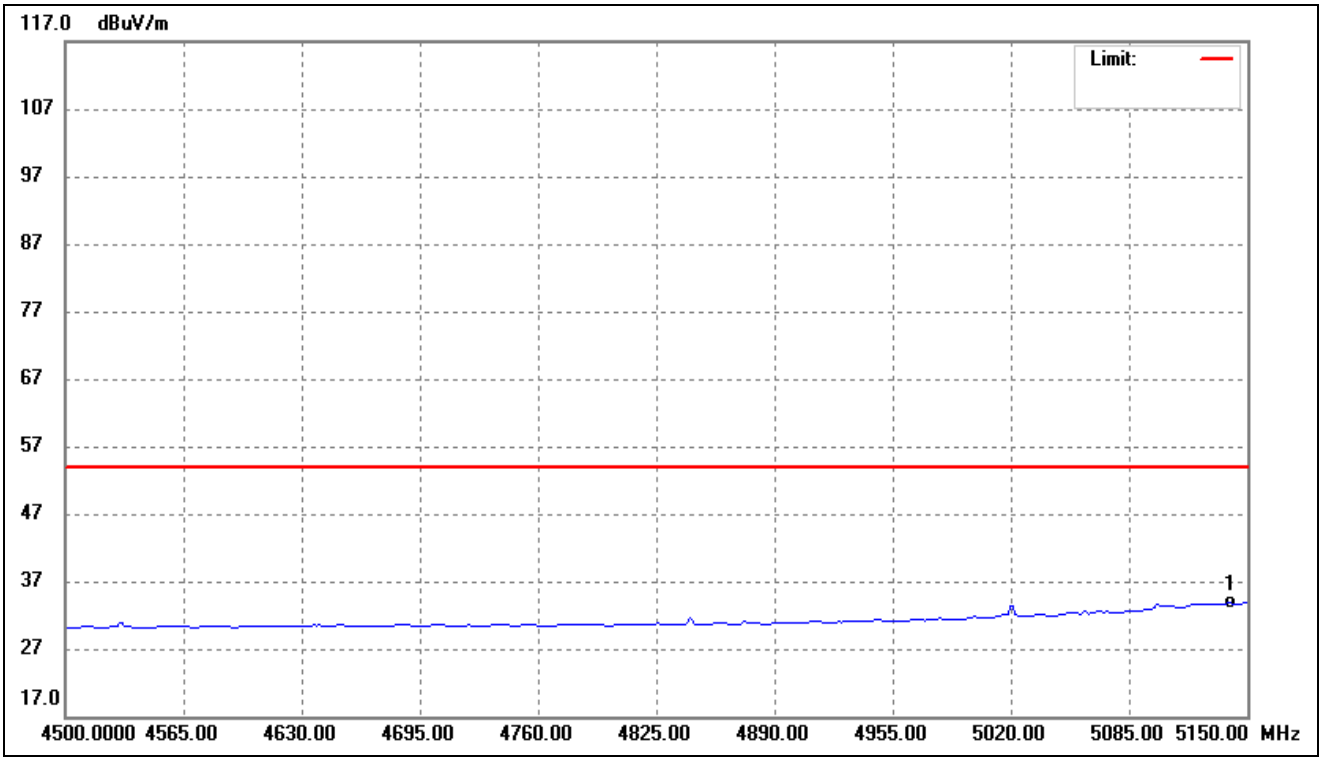
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5140.882	45.76	-11.70	34.06	54.00	-19.94	-	-	AVG

802.11ax-HE20- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



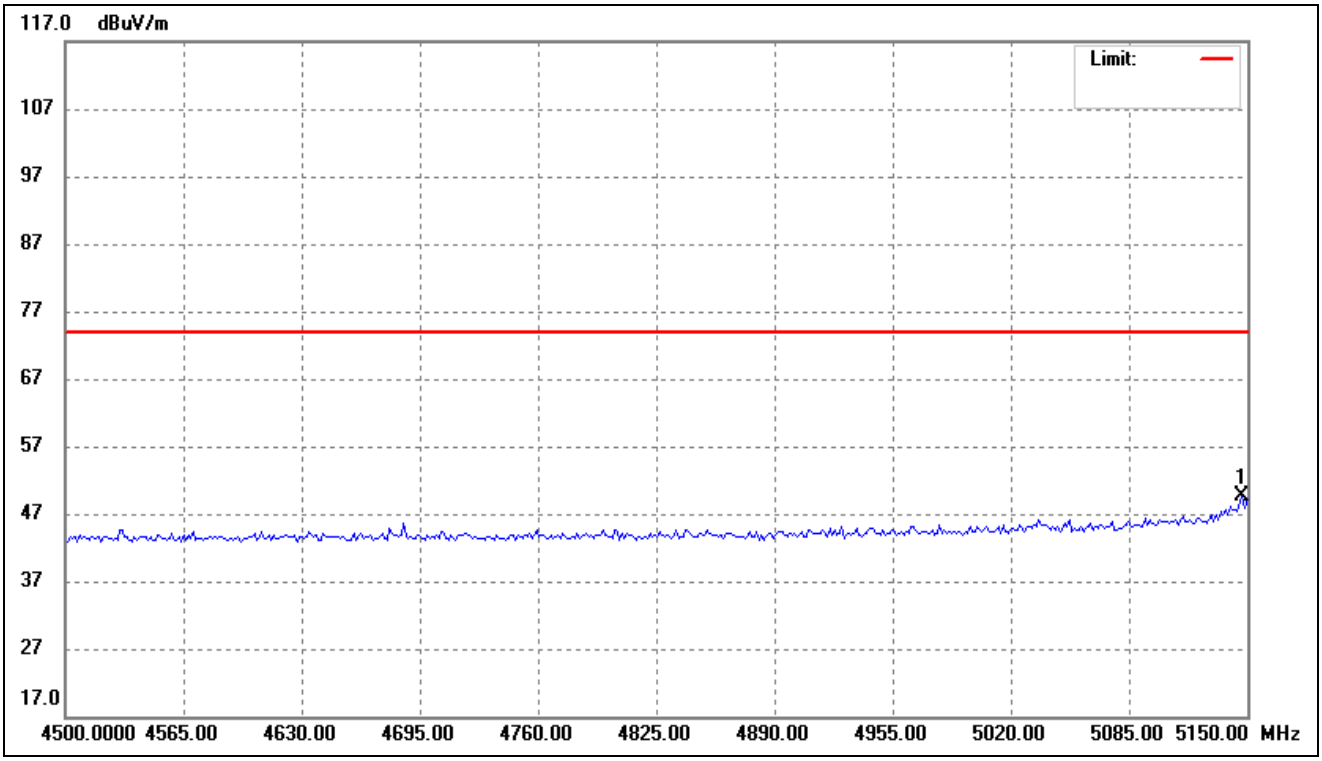
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5150.000	59.65	-11.66	47.99	74.00	-26.01	-	-	peak

802.11ax-HE20- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



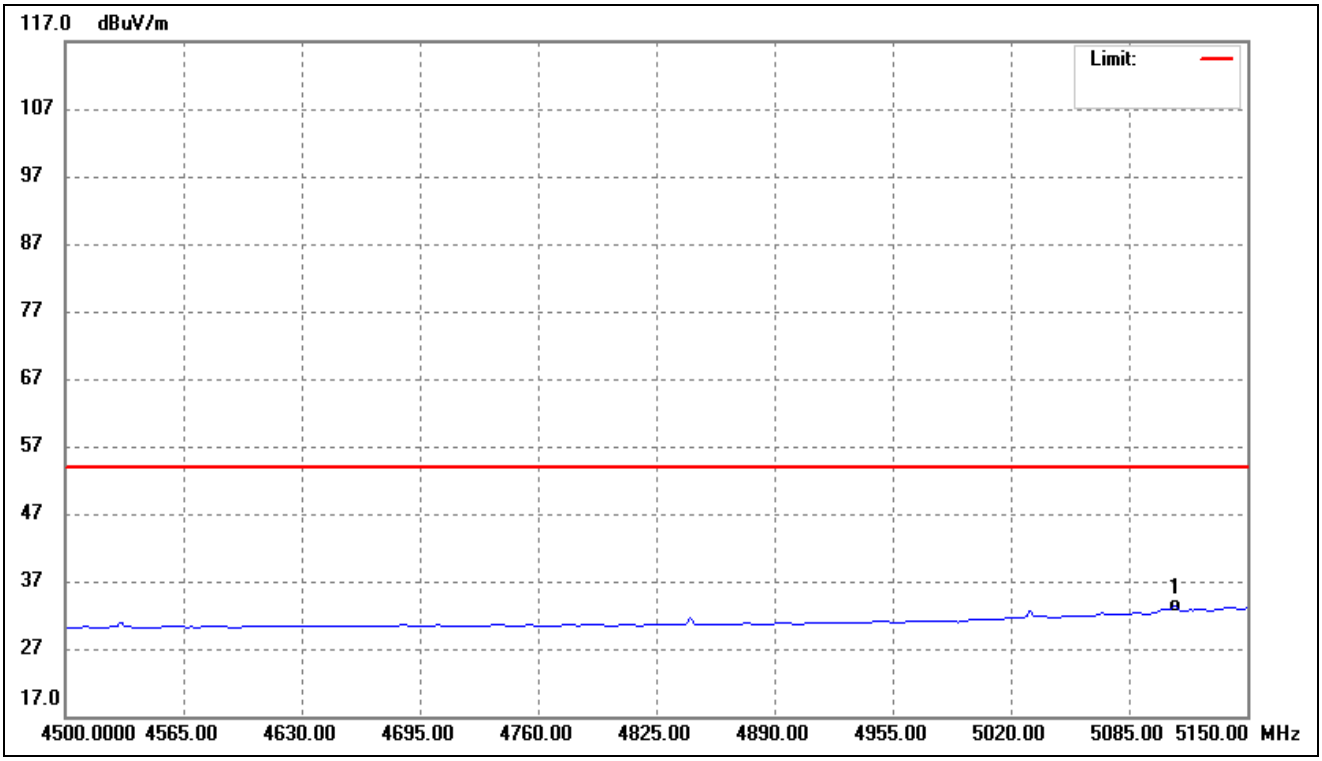
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5140.882	45.57	-11.70	33.87	54.00	-20.13	-	-	AVG

802.11n-HT40- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



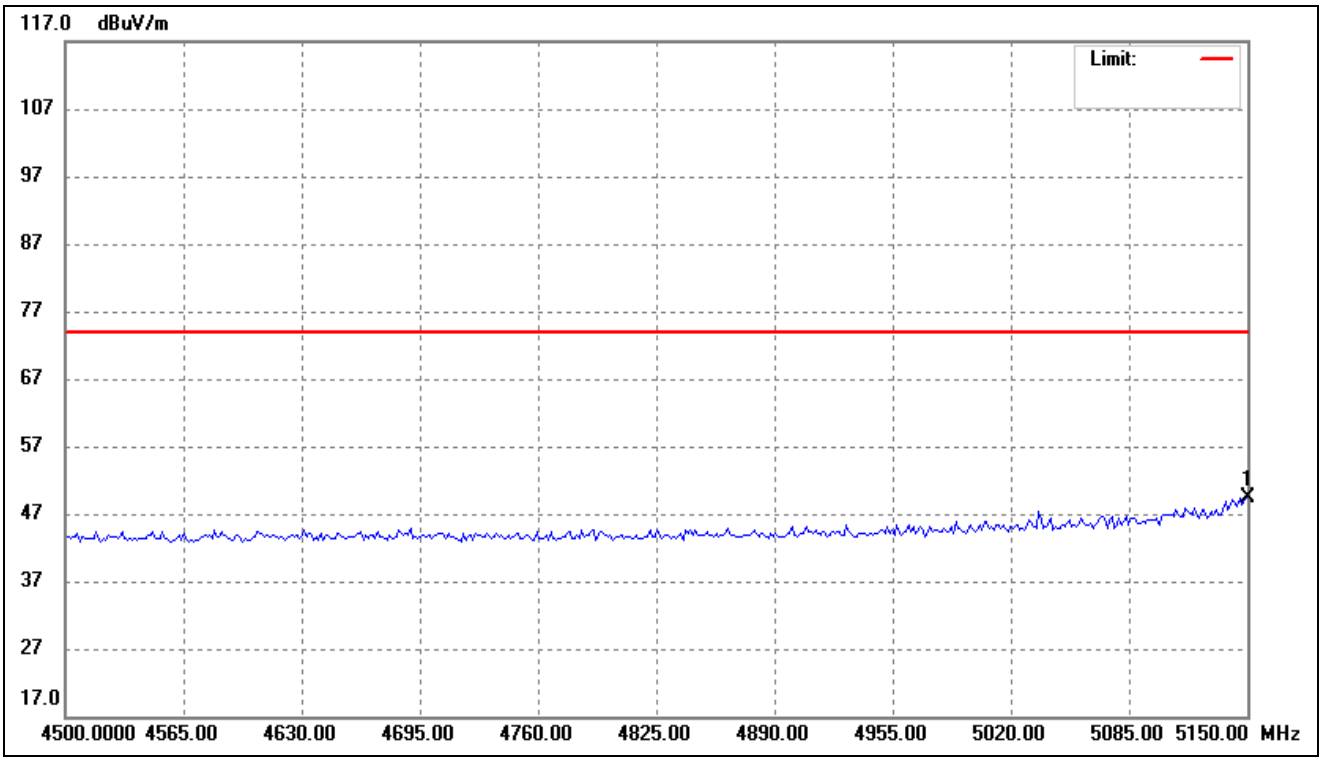
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5147.395	61.23	-11.67	49.56	74.00	-24.44	-	-	peak

802.11n-HT40- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



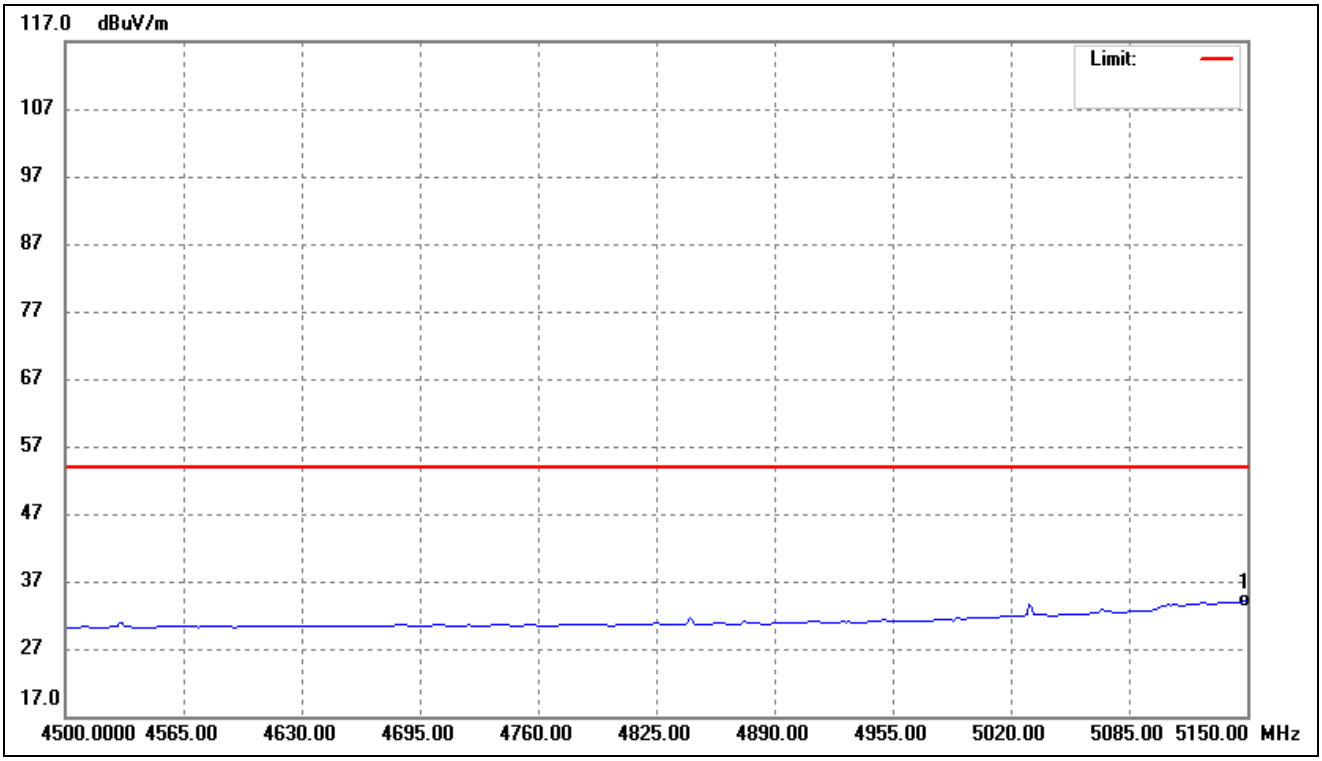
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5110.922	45.30	-11.84	33.46	54.00	-20.54	-	-	AVG

802.11ac-VHT40- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



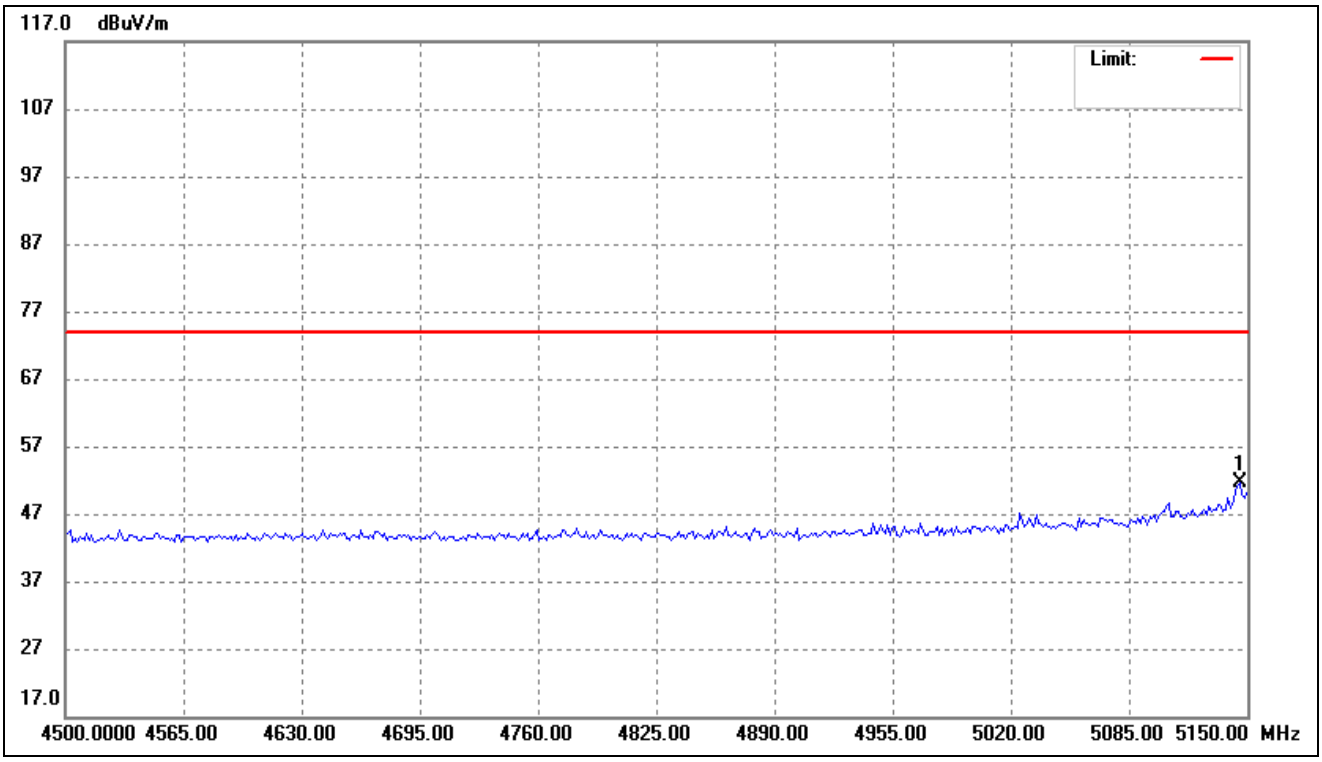
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5150.000	61.10	-11.66	49.44	74.00	-24.56	-	-	peak

802.11ac-VHT40- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



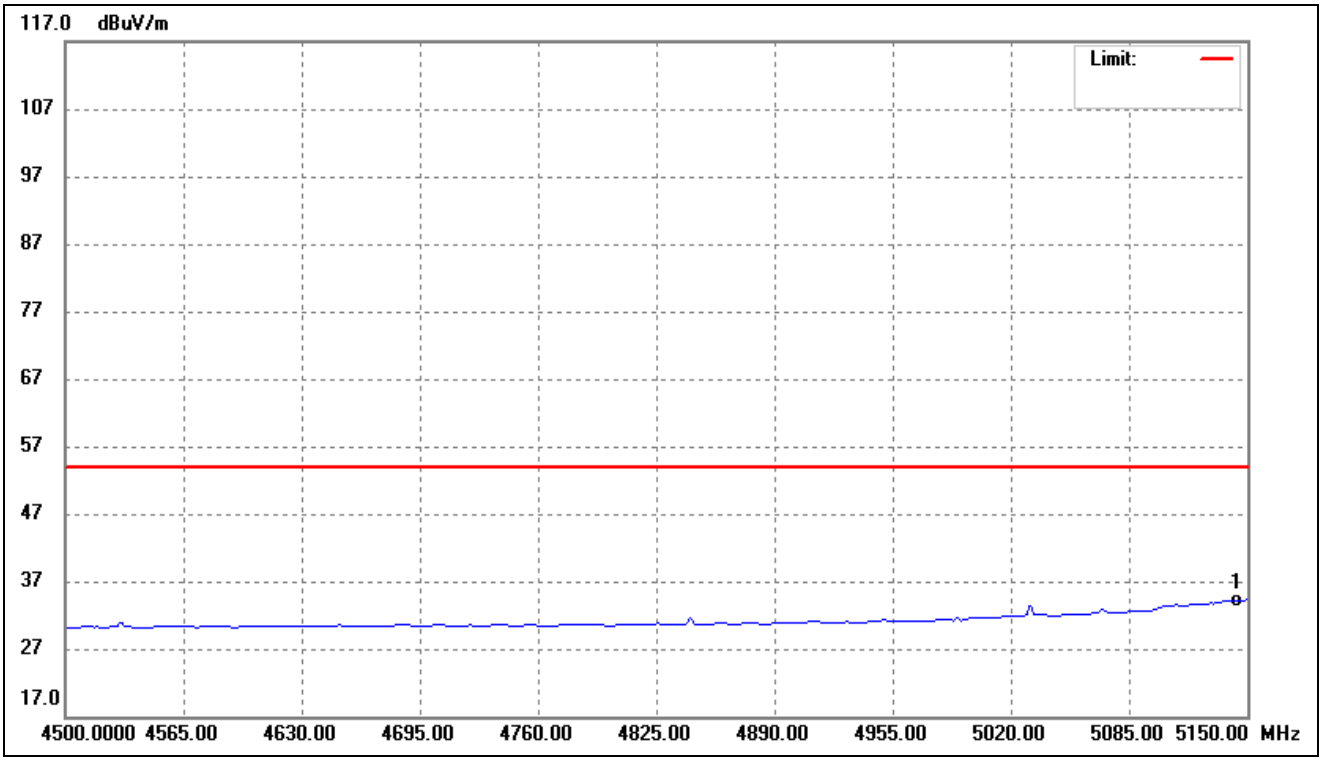
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5150.000	45.90	-11.66	34.24	54.00	-19.76	-	-	AVG

802.11ax-HE40- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



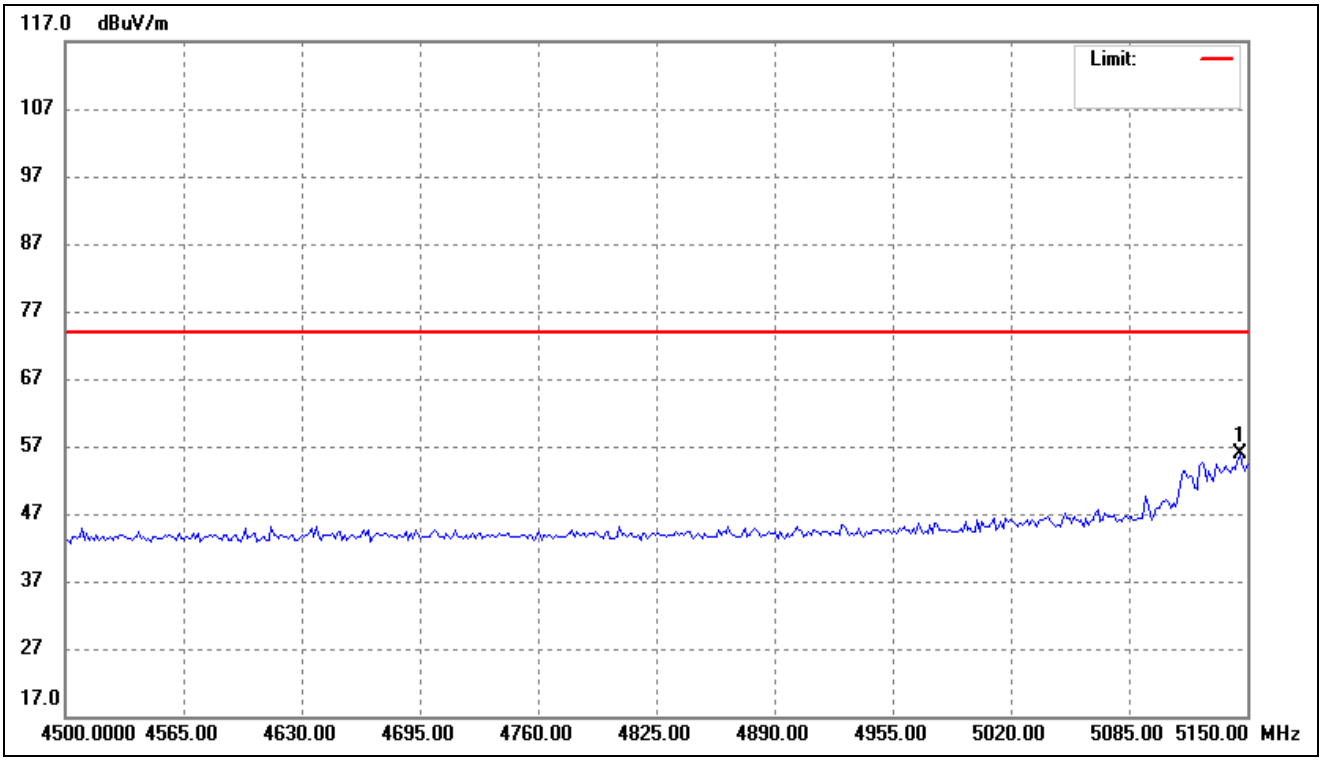
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5146.092	63.38	-11.67	51.71	74.00	-22.29	-	-	peak

802.11ax-HE40- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



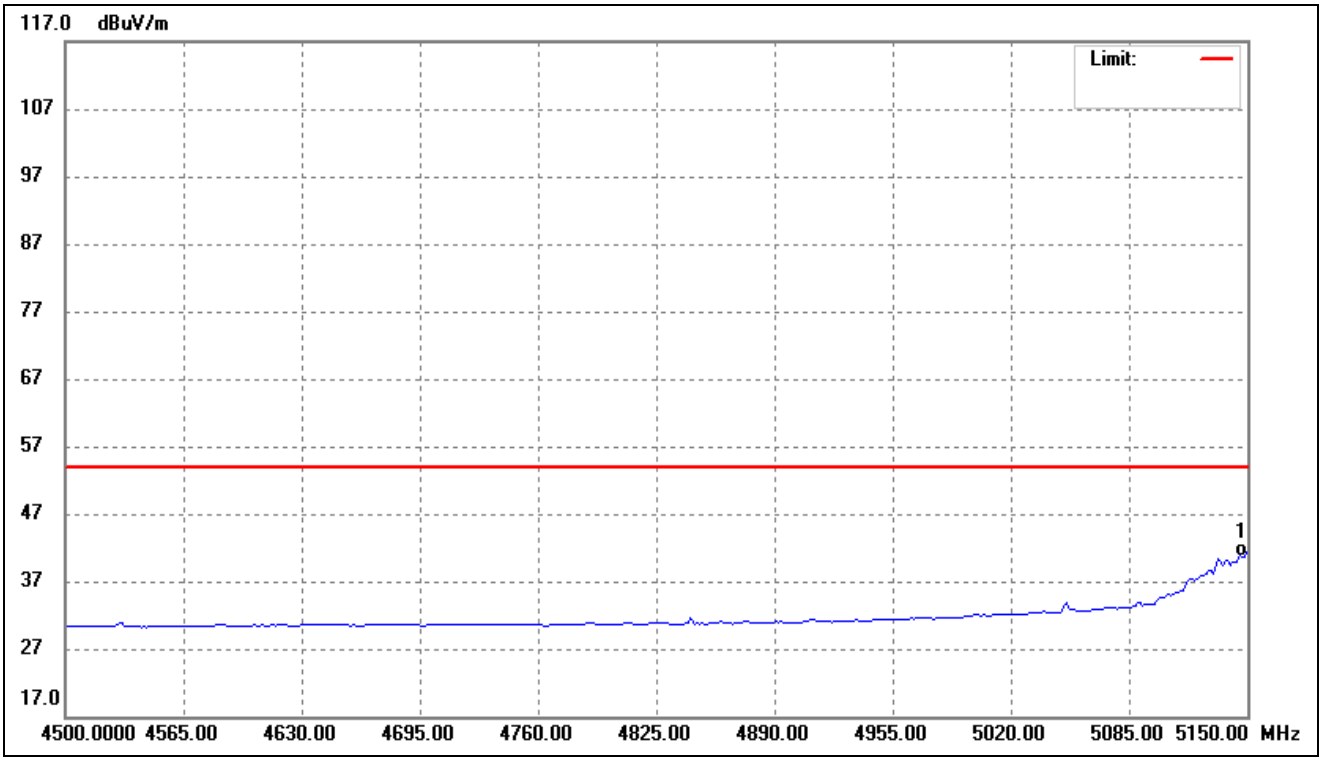
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5144.790	45.76	-11.69	34.07	54.00	-19.93	-	-	AVG

802.11ac-VHT80- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



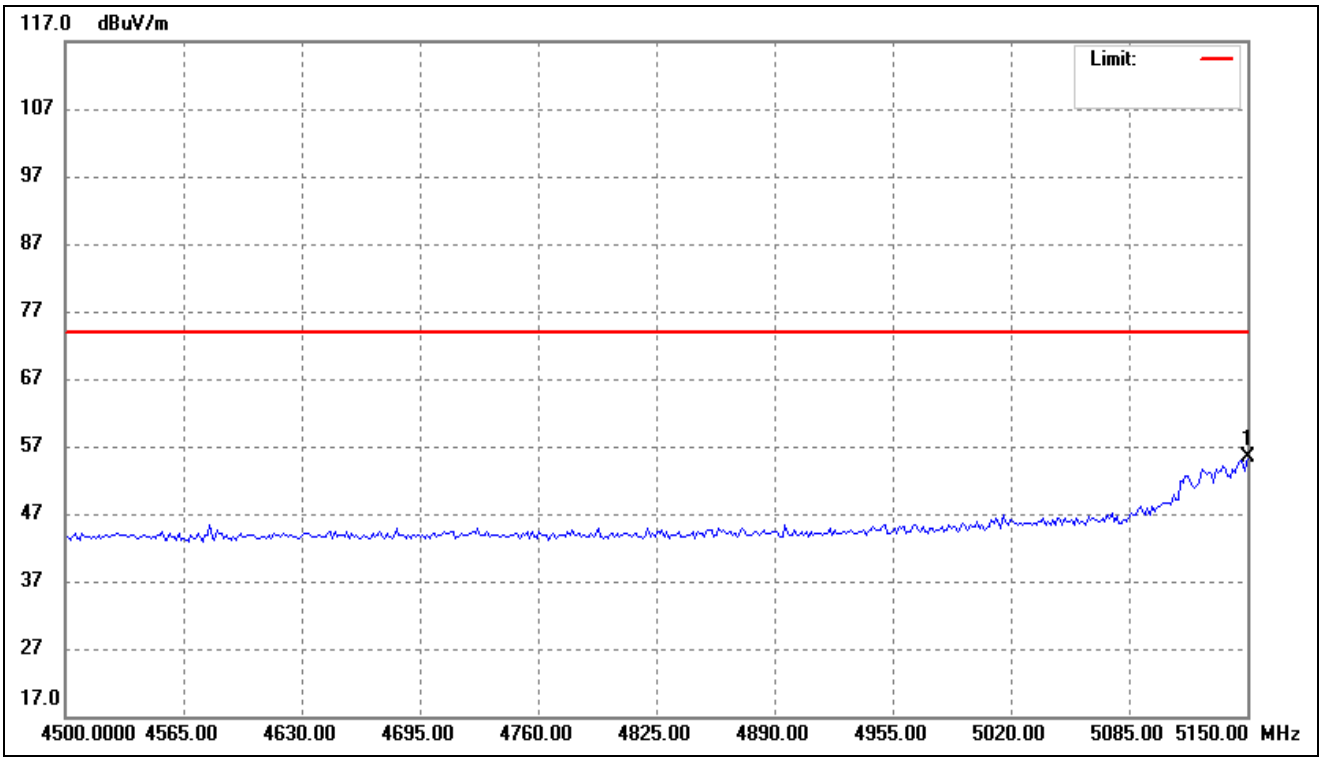
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5146.092	67.55	-11.67	55.88	74.00	-18.12	-	-	peak

802.11ac-VHT80- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



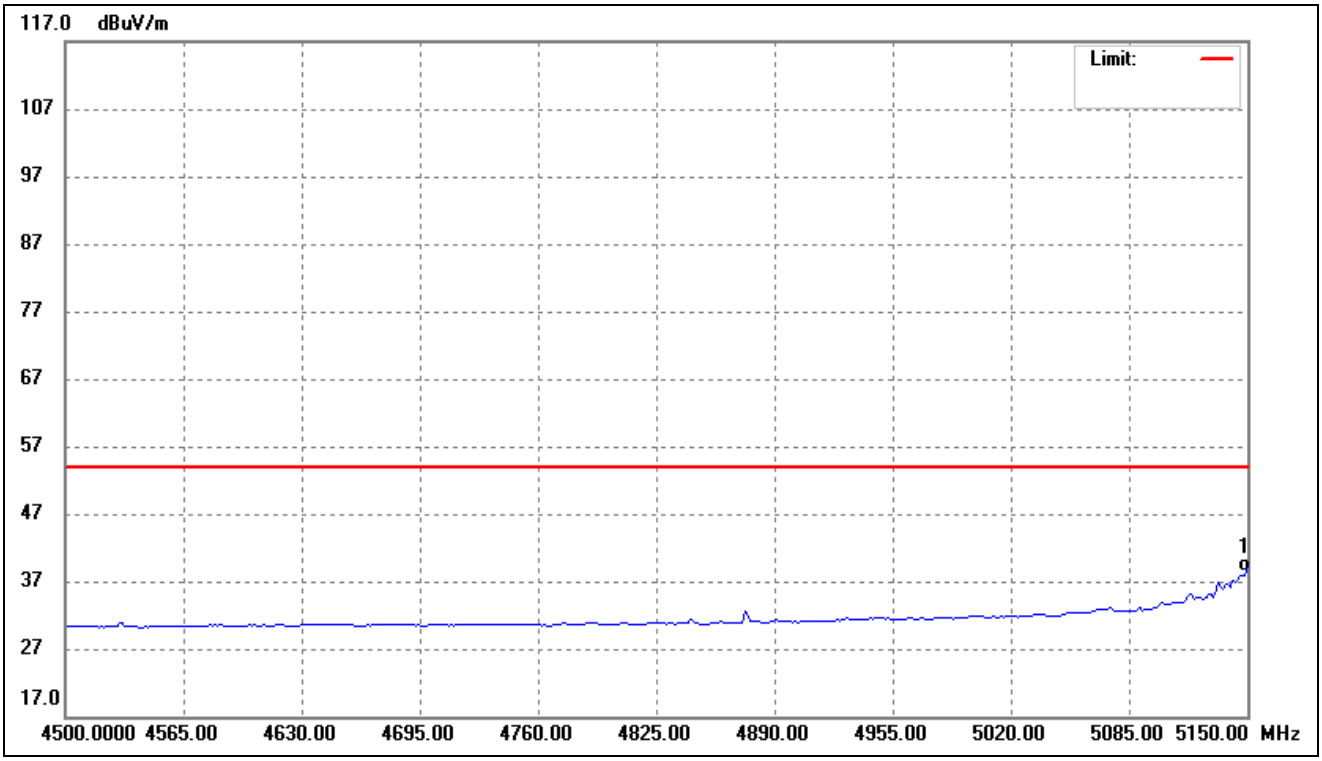
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5150.000	53.29	-11.66	41.63	54.00	-12.37	-	-	AVG

802.11ax-HE80- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



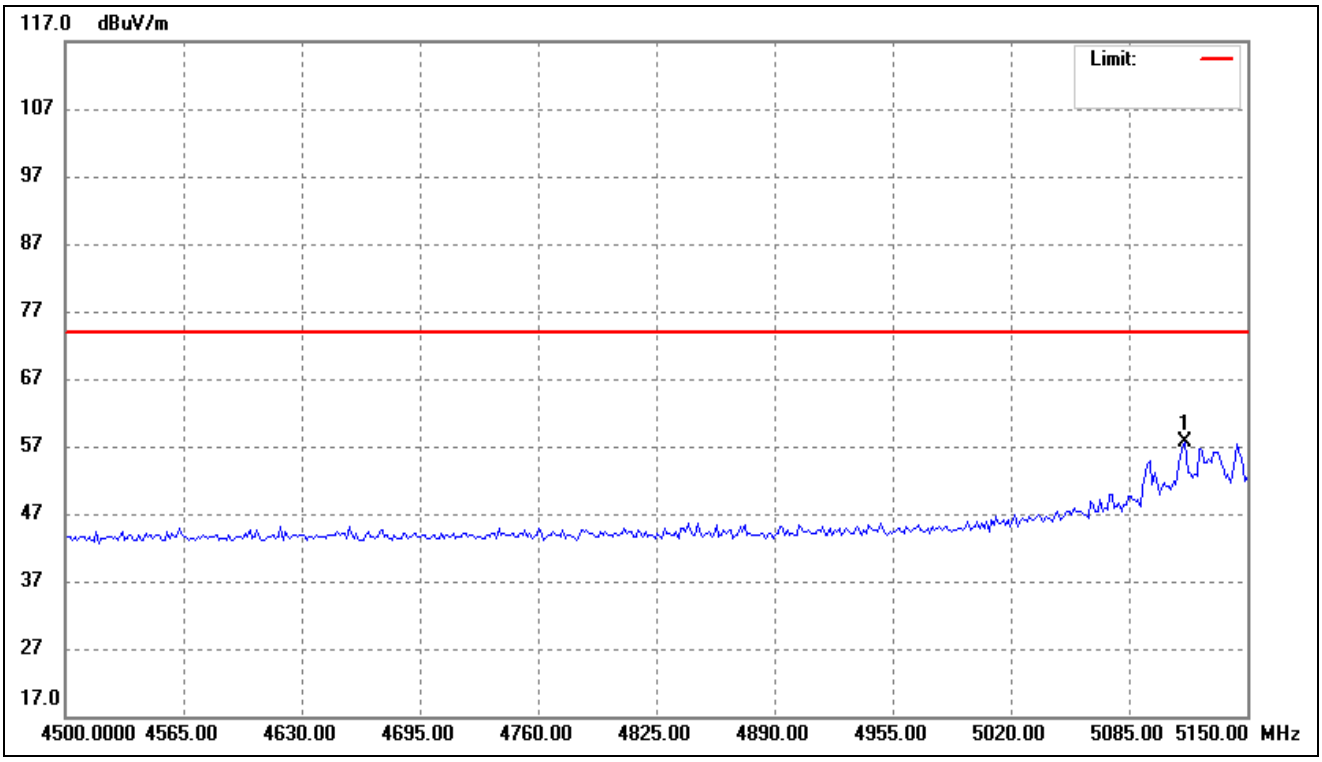
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5150.000	67.14	-11.66	55.48	74.00	-18.52	-	-	peak

802.11ax-HE80- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



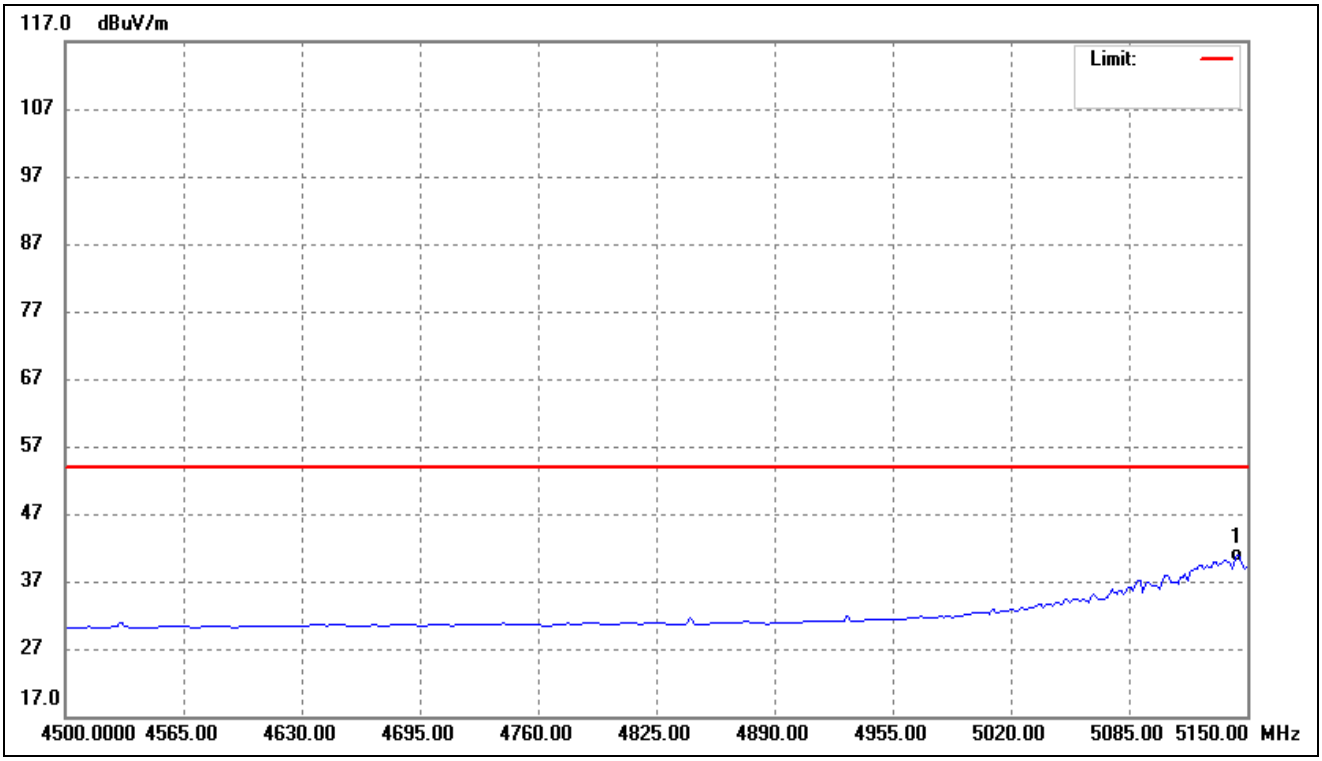
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5150.000	51.08	-11.66	39.42	54.00	-14.58	-	-	AVG

802.11ac-VHT160- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



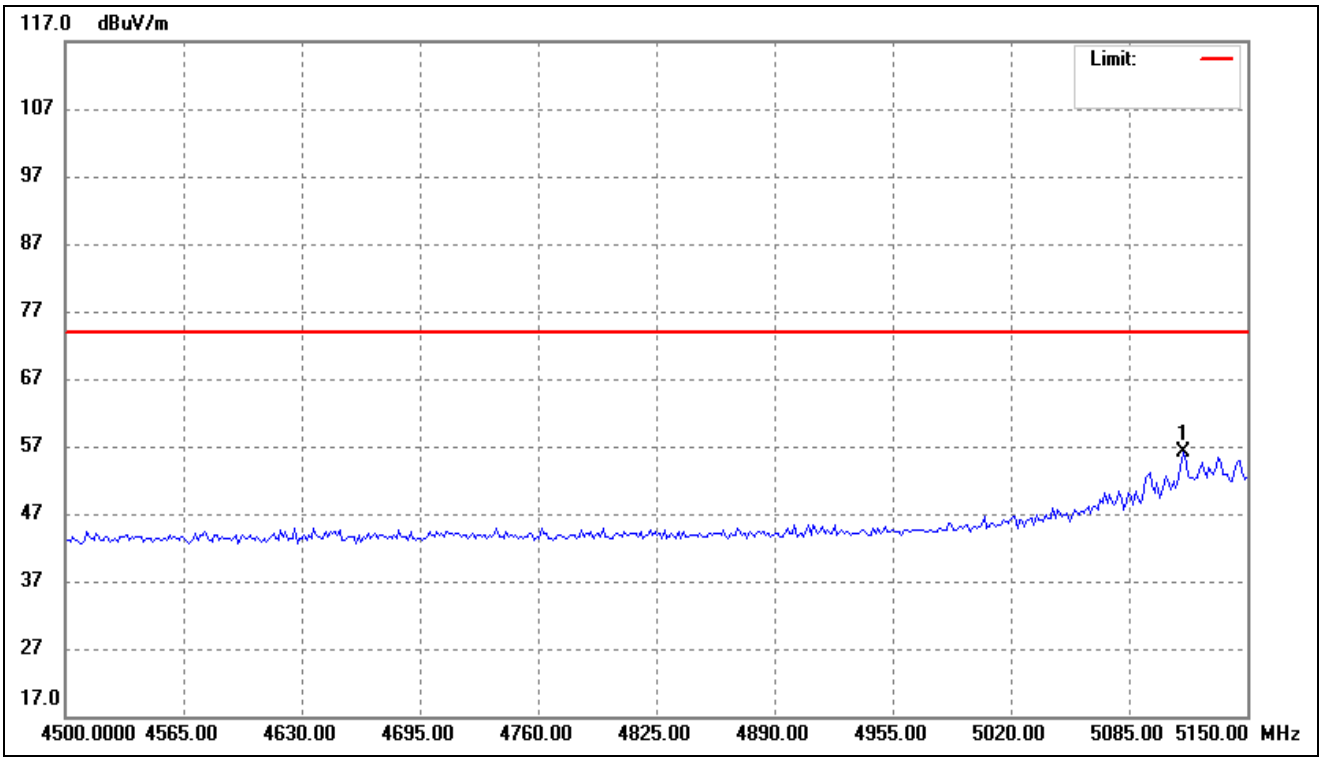
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5116.132	69.56	-11.82	57.74	74.00	-16.26	-	-	peak

802.11ac-VHT160- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



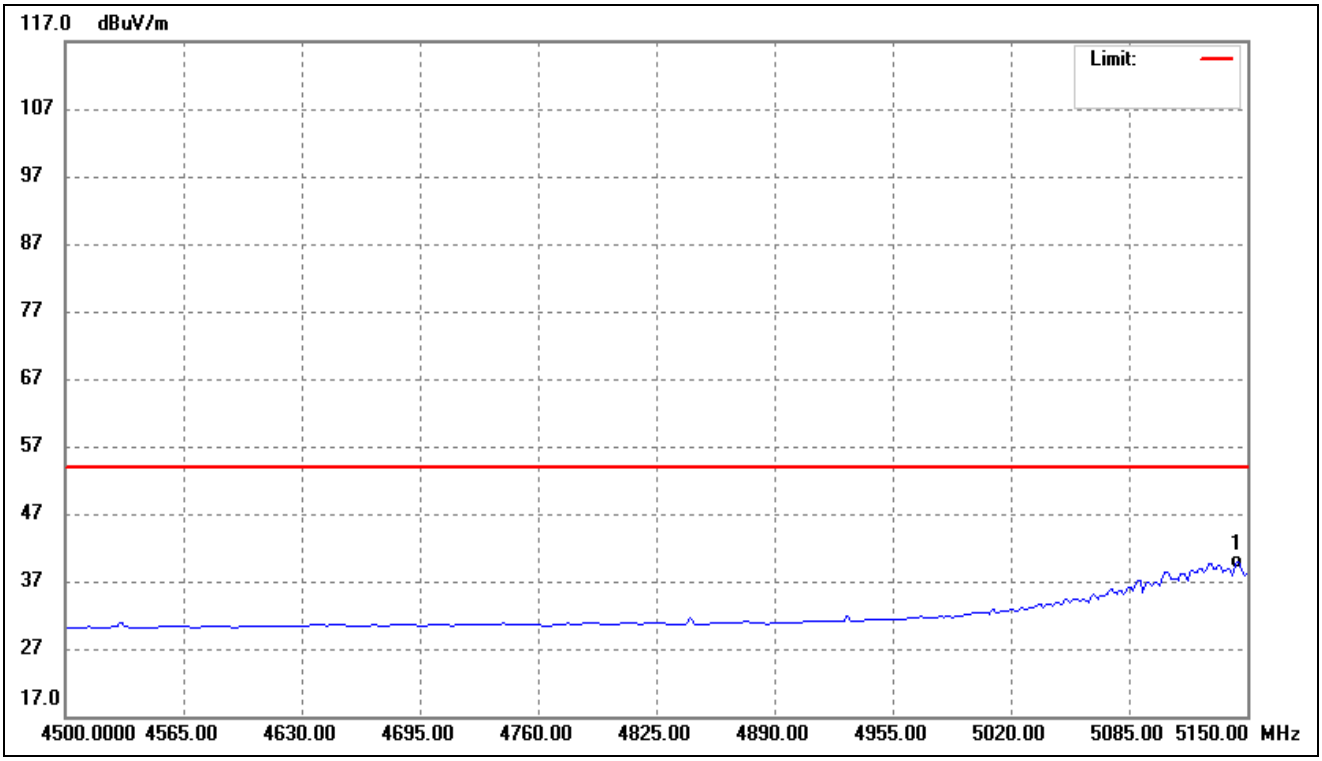
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5144.790	52.48	-11.69	40.79	54.00	-13.21	-	-	AVG

802.11ax-HE160- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5114.830	68.08	-11.83	56.25	74.00	-17.75	-	-	peak

802.11ax-HE160- Restricted Band edge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal(worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	5144.790	51.48	-11.69	39.79	54.00	-14.21	-	-	AVG

Note: The Restricted Bandedge was tested in Horizontal /Vertical and the worst case position data was reported.

Remark: '-'Means' the test Degree and Height is not recorded by the test software and only show the worst case in the test report.

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.725-5.850GHz (802.11a)
- Harmonics And Spurious Emissions

Antenna 1

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5180MHz)							
10360	54.74	7.11	61.85	74	-12.15	H	PK
10360	40.44	7.11	47.55	54	-6.45	H	AV
10360	55.86	7.11	62.97	74	-11.03	V	PK
10360	37.65	7.11	44.76	54	-9.24	V	AV
Middle Channel (5200MHz)							
10400	53.67	7.22	60.89	74	-13.11	H	PK
10400	38.50	7.22	45.72	54	-8.28	H	AV
10400	55.00	7.22	62.22	74	-11.78	V	PK
10400	39.30	7.22	46.52	54	-7.48	V	AV
High Channel (5240MHz)							
10480	53.49	7.69	61.18	74	-12.82	H	PK
10480	40.95	7.69	48.64	54	-5.36	H	AV
10480	52.19	7.69	59.88	74	-14.12	V	PK
10480	39.98	7.69	47.67	54	-6.33	V	AV

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5260MHz)							
10520	56.45	7.96	64.41	74	-9.59	H	PK
10520	37.97	7.96	45.93	54	-8.07	H	AV
10520	53.31	7.96	61.27	74	-12.73	V	PK
10520	40.68	7.96	48.64	54	-5.36	V	AV
Middle Channel (5280MHz)							
10560	55.54	8.02	63.56	74	-10.44	H	PK
10560	38.17	8.02	46.19	54	-7.81	H	AV
10560	55.08	8.02	63.10	74	-10.90	V	PK
10560	39.52	8.02	47.54	54	-6.46	V	AV
High Channel (5320MHz)							
10640	54.41	8.35	62.76	74	-11.24	H	PK
10640	40.96	8.35	49.31	54	-4.69	H	AV
10640	53.37	8.35	61.72	74	-12.28	V	PK
10640	39.37	8.35	47.72	54	-6.28	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5745MHz)							
11490	55.43	9.45	64.88	74	-9.12	H	PK
11490	40.76	9.45	50.21	54	-3.79	H	AV
11490	54.21	9.45	63.66	74	-10.34	V	PK
11490	40.60	9.45	50.05	54	-3.95	V	AV
Middle Channel (5785MHz)							
11570	52.56	9.62	62.18	74	-11.82	H	PK
11570	39.32	9.62	48.94	54	-5.06	H	AV
11570	55.49	9.62	65.11	74	-8.89	V	PK
11570	37.95	9.62	47.57	54	-6.43	V	AV
High Channel (5825MHz)							
11650	53.29	9.84	63.13	74	-10.87	H	PK
11650	39.28	9.84	49.12	54	-4.88	H	AV
11650	53.46	9.84	63.30	74	-10.70	V	PK
11650	36.06	9.84	45.90	54	-8.10	V	AV

- Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-36.54	-27
Highest	Above 5350	-35.98	-27
Note: the data just list the worst cases			

- Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-37.45	-27
Highest	Above 5350	-36.97	-27
Note: the data just list the worst cases			

- Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-37.42	-27
	5715 to 5725	-34.39	-17
Highest	5850 to 5860	-26.41	-17
	Above 5860	-35.27	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.725-5.850GHz (802.11n HT20)
- Harmonics And Spurious Emissions

Antenna 1+ Antenna 2+ Antenna 3

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5180MHz)							
10360	56.11	7.11	63.22	74	-10.78	H	PK
10360	38.69	7.11	45.80	54	-8.20	H	AV
10360	55.94	7.11	63.05	74	-10.95	V	PK
10360	38.73	7.11	45.84	54	-8.16	V	AV
Middle Channel (5200MHz)							
10400	55.42	7.22	62.64	74	-11.36	H	PK
10400	37.01	7.22	44.23	54	-9.77	H	AV
10400	53.97	7.22	61.19	74	-12.81	V	PK
10400	40.81	7.22	48.03	54	-5.97	V	AV
High Channel (5240MHz)							
10480	54.48	7.69	62.17	74	-11.83	H	PK
10480	40.36	7.69	48.05	54	-5.95	H	AV
10480	53.67	7.69	61.36	74	-12.64	V	PK
10480	39.57	7.69	47.26	54	-6.74	V	AV

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5260MHz)							
10520	55.10	7.96	63.06	74	-10.94	H	PK
10520	38.89	7.96	46.85	54	-7.15	H	AV
10520	54.35	7.96	62.31	74	-11.69	V	PK
10520	39.13	7.96	47.09	54	-6.91	V	AV
Middle Channel (5280MHz)							
10560	53.89	8.02	61.91	74	-12.09	H	PK
10560	37.60	8.02	45.62	54	-8.38	H	AV
10560	55.80	8.02	63.82	74	-10.18	V	PK
10560	37.98	8.02	46.00	54	-8.00	V	AV
High Channel (5320MHz)							
10640	54.32	8.35	62.67	74	-11.33	H	PK
10640	39.64	8.35	47.99	54	-6.01	H	AV
10640	55.53	8.35	63.88	74	-10.12	V	PK
10640	38.35	8.35	46.70	54	-7.30	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5745MHz)							
11490	54.46	9.45	63.91	74	-10.09	H	PK
11490	38.27	9.45	47.72	54	-6.28	H	AV
11490	54.20	9.45	63.65	74	-10.35	V	PK
11490	37.21	9.45	46.66	54	-7.34	V	AV
Middle Channel (5785MHz)							
11570	53.06	9.62	62.68	74	-11.32	H	PK
11570	37.30	9.62	46.92	54	-7.08	H	AV
11570	54.52	9.62	64.14	74	-9.86	V	PK
11570	39.67	9.62	49.29	54	-4.71	V	AV
High Channel (5825MHz)							
11650	53.52	9.84	63.36	74	-10.64	H	PK
11650	37.79	9.84	47.63	54	-6.37	H	AV
11650	52.84	9.84	62.68	74	-11.32	V	PK
11650	37.38	9.84	47.22	54	-6.78	V	AV

- Out of Band edge 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-38.45	-27
Highest	Above 5350	-42.65	-27
Note: the data just list the worst cases			

- Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-36.52	-27
Highest	Above 5350	-37.45	-27
Note: the data just list the worst cases			

- Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-39.98	-27
	5715 to 5725	-35.45	-17
Highest	5850 to 5860	-34.21	-17
	Above 5860	-36.67	-27
Note: the data just list the worst cases			

Note: this EUT was tested in the low, high channel and the worst case position data was reported.

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.725-5.850GHz (802.11ac VHT20)
- Harmonics And Spurious Emissions
- Antenna 1+ Antenna 2+ Antenna 3

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5180MHz)							
10360	53.35	7.11	60.46	74	-13.54	H	PK
10360	38.25	7.11	45.36	54	-8.64	H	AV
10360	53.61	7.11	60.72	74	-13.28	V	PK
10360	39.29	7.11	46.40	54	-7.60	V	AV
Middle Channel (5200MHz)							
10400	54.38	7.22	61.60	74	-12.40	H	PK
10400	40.74	7.22	47.96	54	-6.04	H	AV
10400	53.65	7.22	60.87	74	-13.13	V	PK
10400	37.41	7.22	44.63	54	-9.37	V	AV
High Channel (5240MHz)							
10480	55.27	7.69	62.96	74	-11.04	H	PK
10480	38.38	7.69	46.07	54	-7.93	H	AV
10480	55.85	7.69	63.54	74	-10.46	V	PK
10480	39.28	7.69	46.97	54	-7.03	V	AV

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5260MHz)							
10520	55.33	7.96	63.29	74	-10.71	H	PK
10520	40.83	7.96	48.79	54	-5.21	H	AV
10520	55.56	7.96	63.52	74	-10.48	V	PK
10520	38.04	7.96	46.00	54	-8.00	V	AV
Middle Channel (5280MHz)							
10560	54.13	8.02	62.15	74	-11.85	H	PK
10560	39.10	8.02	47.12	54	-6.88	H	AV
10560	54.43	8.02	62.45	74	-11.55	V	PK
10560	37.08	8.02	45.10	54	-8.90	V	AV
High Channel (5320MHz)							
10640	53.64	8.35	61.99	74	-12.01	H	PK
10640	40.51	8.35	48.86	54	-5.14	H	AV
10640	53.49	8.35	61.84	74	-12.16	V	PK
10640	37.23	8.35	45.58	54	-8.42	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5745MHz)							
11490	52.97	9.45	62.42	74	-11.58	H	PK
11490	40.52	9.45	49.97	54	-4.03	H	AV
11490	52.77	9.45	62.22	74	-11.78	V	PK
11490	38.53	9.45	47.98	54	-6.02	V	AV
Middle Channel (5785MHz)							
11570	55.72	9.62	65.34	74	-8.66	H	PK
11570	39.25	9.62	48.87	54	-5.13	H	AV
11570	55.74	9.62	65.36	74	-8.64	V	PK
11570	38.02	9.62	47.64	54	-6.36	V	AV
High Channel (5825MHz)							
11650	55.65	9.84	65.49	74	-8.51	H	PK
11650	36.77	9.84	46.61	54	-7.39	H	AV
11650	53.48	9.84	63.32	74	-10.68	V	PK
11650	38.01	9.84	47.85	54	-6.15	V	AV

- Out of Band edge 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-35.54	-27
Highest	Above 5350	-36.98	-27
Note: the data just list the worst cases			

- Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-39.45	-27
Highest	Above 5350	-35.32	-27
Note: the data just list the worst cases			

- Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-39.42	-27
	5715 to 5725	-32.42	-17
Highest	5850 to 5860	-33.74	-17
	Above 5860	-36.68	-27
Note: the data just list the worst cases			

Note: this EUT was tested in the low, high channel and the worst case position data was reported.

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.725-5.850GHz (802.11ax HE20)
- Harmonics And Spurious Emissions
- Antenna 1+ Antenna 2+ Antenna 3

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5180MHz)							
10360	54.20	7.11	61.31	74	-12.69	H	PK
10360	39.99	7.11	47.10	54	-6.90	H	AV
10360	54.49	7.11	61.60	74	-12.40	V	PK
10360	40.93	7.11	48.04	54	-5.96	V	AV
Middle Channel (5200MHz)							
10400	55.47	7.22	62.69	74	-11.31	H	PK
10400	37.26	7.22	44.48	54	-9.52	H	AV
10400	53.92	7.22	61.14	74	-12.86	V	PK
10400	40.70	7.22	47.92	54	-6.08	V	AV
High Channel (5240MHz)							
10480	54.09	7.69	61.78	74	-12.22	H	PK
10480	37.73	7.69	45.42	54	-8.58	H	AV
10480	54.14	7.69	61.83	74	-12.17	V	PK
10480	37.69	7.69	45.38	54	-8.62	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5260MHz)							
10520	55.14	7.96	63.10	74	-10.90	H	PK
10520	40.38	7.96	48.34	54	-5.66	H	AV
10520	52.05	7.96	60.01	74	-13.99	V	PK
10520	39.37	7.96	47.33	54	-6.67	V	AV
Middle Channel (5280MHz)							
10560	53.00	8.02	61.02	74	-12.98	H	PK
10560	37.86	8.02	45.88	54	-8.12	H	AV
10560	54.92	8.02	62.94	74	-11.06	V	PK
10560	40.60	8.02	48.62	54	-5.38	V	AV
High Channel (5320MHz)							
10640	55.02	8.35	63.37	74	-10.63	H	PK
10640	37.96	8.35	46.31	54	-7.69	H	AV
10640	55.58	8.35	63.93	74	-10.07	V	PK
10640	37.71	8.35	46.06	54	-7.94	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5745MHz)							
11490	53.30	9.45	62.75	74	-11.25	H	PK
11490	39.22	9.45	48.67	54	-5.33	H	AV
11490	54.98	9.45	64.43	74	-9.57	V	PK
11490	37.96	9.45	47.41	54	-6.59	V	AV
Middle Channel (5785MHz)							
11570	53.46	9.62	63.08	74	-10.92	H	PK
11570	38.66	9.62	48.28	54	-5.72	H	AV
11570	55.48	9.62	65.10	74	-8.90	V	PK
11570	40.72	9.62	50.34	54	-3.66	V	AV
High Channel (5825MHz)							
11650	56.28	9.84	66.12	74	-7.88	H	PK
11650	36.17	9.84	46.01	54	-7.99	H	AV
11650	53.23	9.84	63.07	74	-10.93	V	PK
11650	39.47	9.84	49.31	54	-4.69	V	AV

- Out of Band edge 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-38.98	-27
Highest	Above 5350	-37.59	-27
Note: the data just list the worst cases			

- Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-37.45	-27
Highest	Above 5350	-39.64	-27
Note: the data just list the worst cases			

- Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-38.45	-27
	5715 to 5725	-39.52	-17
Highest	5850 to 5860	-40.24	-17
	Above 5860	-41.02	-27
Note: the data just list the worst cases			

Note: this EUT was tested in the low, high channel and the worst case position data was reported.

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz,, 5.725-5.850GHz (802.11n HT40)
- Harmonics And Spurious Emissions
- Antenna 1+ Antenna 2+ Antenna 3

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5190MHz)							
10380	57.14	7.89	65.03	74	-8.97	H	PK
10380	40.98	7.89	48.87	54	-5.13	H	AV
10380	52.39	7.89	60.28	74	-13.72	V	PK
10380	40.60	7.89	48.49	54	-5.51	V	AV
High Channel (5230MHz)							
10460	55.50	7.97	63.47	74	-10.53	H	PK
10460	39.25	7.97	47.22	54	-6.78	H	AV
10460	54.17	7.97	62.14	74	-11.86	V	PK
10460	39.38	7.97	47.35	54	-6.65	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5270MHz)							
10540	56.11	8.16	64.27	74	-9.73	H	PK
10540	39.51	8.16	47.67	54	-6.33	H	AV
10540	54.07	8.16	62.23	74	-11.77	V	PK
10540	36.73	8.16	44.89	54	-9.11	V	AV
High Channel (5310MHz)							
10620	53.57	8.57	62.14	74	-11.86	H	PK
10620	38.48	8.57	47.05	54	-6.95	H	AV
10620	54.69	8.57	63.26	74	-10.74	V	PK
10620	39.45	8.57	48.02	54	-5.98	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5755MHz)							
11510	52.80	56.30	9.45	65.75	74	H	PK
11510	38.68	39.22	9.45	48.67	54	H	AV
11510	53.03	52.16	9.45	61.61	74	V	PK
11510	41.49	37.36	9.45	46.81	54	V	AV
High Channel (5795MHz)							
11590	56.59	9.27	65.86	74	-8.14	H	PK
11590	38.19	9.27	47.46	54	-6.54	H	AV
11590	55.38	9.27	64.65	74	-9.35	V	PK
11590	38.92	9.27	48.19	54	-5.81	V	AV

- Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-35.97	-27
Highest	Above 5350	-36.87	-27
Note: the data just list the worst cases			

- Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-41.52	-27
Highest	Above 5350	-39.65	-27
Note: the data just list the worst cases			

- Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-38.56	-27
	5715 to 5725	-32.45	-17
Highest	5850 to 5860	-36.31	-17
	Above 5860	-37.58	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz,, 5.725-5.850GHz (802.11ac VHT40)
- Harmonics And Spurious Emissions
- Antenna 1+ Antenna 2+ Antenna 3

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5190MHz)							
10380	54.89	7.89	62.78	74	-11.22	H	PK
10380	41.30	7.89	49.19	54	-4.81	H	AV
10380	55.04	7.89	62.93	74	-11.07	V	PK
10380	39.81	7.89	47.70	54	-6.30	V	AV
High Channel (5230MHz)							
10460	57.26	7.97	65.23	74	-8.77	H	PK
10460	39.94	7.97	47.91	54	-6.09	H	AV
10460	55.00	7.97	62.97	74	-11.03	V	PK
10460	40.92	7.97	48.89	54	-5.11	V	AV

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5270MHz)							
10540	54.93	8.16	63.09	74	-10.91	H	PK
10540	36.42	8.16	44.58	54	-9.42	H	AV
10540	52.60	8.16	60.76	74	-13.24	V	PK
10540	36.08	8.16	44.24	54	-9.76	V	AV
High Channel (5310MHz)							
10620	56.41	8.57	64.98	74	-9.02	H	PK
10620	38.99	8.57	47.56	54	-6.44	H	AV
10620	53.71	8.57	62.28	74	-11.72	V	PK
10620	36.66	8.57	45.23	54	-8.77	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5755MHz)							
11510	56.77	9.45	66.22	74	-7.78	H	PK
11510	38.10	9.45	47.55	54	-6.45	H	AV
11510	53.54	9.45	62.99	74	-11.01	V	PK
11510	36.61	9.45	46.06	54	-7.94	V	AV
High Channel (5795MHz)							
11590	56.33	9.27	65.60	74	-8.40	H	PK
11590	39.57	9.27	48.84	54	-5.16	H	AV
11590	55.99	9.27	65.26	74	-8.74	V	PK
11590	38.48	9.27	47.75	54	-6.25	V	AV

- Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-35.67	-27
Highest	Above 5350	-36.14	-27
Note: the data just list the worst cases			

- Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-38.45	-27
Highest	Above 5350	-37.02	-27
Note: the data just list the worst cases			

- Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-36.52	-27
	5715 to 5725	-31.02	-17
Highest	5850 to 5860	-29.12	-17
	Above 5860	-36.77	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz,, 5.725-5.850GHz (802.11ax HE40)
- Harmonics And Spurious Emissions
- Antenna 1+ Antenna 2+ Antenna 3

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5190MHz)							
10380	55.94	7.89	63.83	74	-10.17	H	PK
10380	40.65	7.89	48.54	54	-5.46	H	AV
10380	55.08	7.89	62.97	74	-11.03	V	PK
10380	40.17	7.89	48.06	54	-5.94	V	AV
High Channel (5230MHz)							
10460	54.00	7.97	61.97	74	-12.03	H	PK
10460	39.30	7.97	47.27	54	-6.73	H	AV
10460	53.91	7.97	61.88	74	-12.12	V	PK
10460	40.12	7.97	48.09	54	-5.91	V	AV

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5270MHz)							
10540	55.96	8.16	64.12	74	-9.88	H	PK
10540	38.48	8.16	46.64	54	-7.36	H	AV
10540	54.88	8.16	63.04	74	-10.96	V	PK
10540	36.15	8.16	44.31	54	-9.69	V	AV
High Channel (5310MHz)							
10620	56.87	8.57	65.44	74	-8.56	H	PK
10620	36.94	8.57	45.51	54	-8.49	H	AV
10620	55.23	8.57	63.80	74	-10.20	V	PK
10620	37.86	8.57	46.43	54	-7.57	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5755MHz)							
11510	54.62	9.45	64.07	74	-9.93	H	PK
11510	38.03	9.45	47.48	54	-6.52	H	AV
11510	52.42	9.45	61.87	74	-12.13	V	PK
11510	36.28	9.45	45.73	54	-8.27	V	AV
High Channel (5795MHz)							
11590	55.57	9.27	64.84	74	-9.16	H	PK
11590	39.54	9.27	48.81	54	-5.19	H	AV
11590	54.24	9.27	63.51	74	-10.49	V	PK
11590	39.38	9.27	48.65	54	-5.35	V	AV

- Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-36.65	-27
Highest	Above 5350	-37.15	-27
Note: the data just list the worst cases			

- Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-36.52	-27
Highest	Above 5350	-37.12	-27
Note: the data just list the worst cases			

- Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-38.52	-27
	5715 to 5725	-32.17	-17
Highest	5850 to 5860	-31.33	-17
	Above 5860	-37.05	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz , 5.725-5.850GHz (802.11ac VHT80)
- Harmonics And Spurious Emissions
- Antenna 1+ Antenna 2+ Antenna 3

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5210MHz							
10420	55.74	7.53	63.27	74	-10.73	H	PK
10420	39.18	7.53	46.71	54	-7.29	H	AV
10420	53.90	7.53	61.43	74	-12.57	H	PK
10420	36.11	7.53	43.64	54	-10.36	H	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5290MHz							
10580	53.72	7.95	61.67	74	-12.33	H	PK
10580	37.57	7.95	45.52	54	-8.48	H	AV
10580	55.57	7.95	63.52	74	-10.48	V	PK
10580	36.99	7.95	44.94	54	-9.06	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5775MHz							
11550	56.20	9.93	66.13	74	-7.87	H	PK
11550	39.46	9.93	49.39	54	-4.61	H	AV
11550	53.78	9.93	63.71	74	-10.29	V	PK
11550	37.84	9.93	47.77	54	-6.23	V	AV

➢ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-38.74	-27
Highest	Above 5350	-36.54	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-35.58	-27
Highest	Above 5350	-37.56	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-39.25	-27
	5715 to 5725	-33.21	-17
Highest	5850 to 5860	-30.49	-17
	Above 5860	-38.45	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz , 5.725-5.850GHz (802.11ax HE80)
- Harmonics And Spurious Emissions
- Antenna 1+ Antenna 2+ Antenna 3

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5210MHz							
10420	56.94	7.53	64.47	74	-9.53	H	PK
10420	37.62	7.53	45.15	54	-8.85	H	AV
10420	55.89	7.53	63.42	74	-10.58	H	PK
10420	36.83	7.53	44.36	54	-9.64	H	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5290MHz							
10580	54.11	7.95	62.06	74	-11.94	H	PK
10580	37.14	7.95	45.09	54	-8.91	H	AV
10580	55.26	7.95	63.21	74	-10.79	V	PK
10580	39.05	7.95	47.00	54	-7.00	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5775MHz							
11550	53.77	9.93	63.70	74	-10.30	H	PK
11550	38.53	9.93	48.46	54	-5.54	H	AV
11550	55.77	9.93	65.70	74	-8.30	V	PK
11550	39.80	9.93	49.73	54	-4.27	V	AV

➢ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-35.45	-27
Highest	Above 5350	-36.98	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-36.45	-27
Highest	Above 5350	-35.32	-27
Note: the data just list the worst cases			

➢ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-35.65	-27
	5715 to 5725	-31.52	-17
Highest	5850 to 5860	-32.77	-17
	Above 5860	-33.69	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz (802.11ac VHT160)
- Harmonics And Spurious Emissions
- Antenna 1+ Antenna 2+ Antenna 3

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5250MHz							
10500	56.89	8.25	65.14	74	-8.86	H	PK
10500	39.28	8.25	47.53	54	-6.47	H	AV
10500	52.96	8.25	61.21	74	-12.79	H	PK
10500	39.44	8.25	47.69	54	-6.31	H	AV

- Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-35.69	-27
Highest	Above 5350	-36.12	-27
Note: the data just list the worst cases			

- Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-36.68	-27
Highest	Above 5350	-34.02	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz (802.11ax HE160)
- Harmonics And Spurious Emissions
- Antenna 1+ Antenna 2+ Antenna 3

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5250MHz							
10500	57.14	8.25	65.39	74	-8.61	H	PK
10500	38.60	8.25	46.85	54	-7.15	H	AV
10500	53.27	8.25	61.52	74	-12.48	H	PK
10500	37.81	8.25	46.06	54	-7.94	H	AV

- Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-34.25	-27
Highest	Above 5350	-36.68	-27
Note: the data just list the worst cases			

- Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-36.32	-27
Highest	Above 5350	-35.97	-27
Note: the data just list the worst cases			

Note: Testing is carried out with frequency rang 9kHz to 40GHz, other than listed in the table above are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

9. Frequency Stability

9.1 Standard Applicable

According to §15.407(g), manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

9.2 Test Procedure

According to §2.1055, the following test procedure was performed.
The Frequency Stability is measured directly with a Frequency Domain Analyzer. Frequency Deviation in ppm is calculated from the measured peak to peak value.
The Carrier Frequency Stability over Power Supply Voltage and over Temperature is measured with a Frequency Domain Analyzer in histogram mode.

9.3 Summary of Test Results/Plots

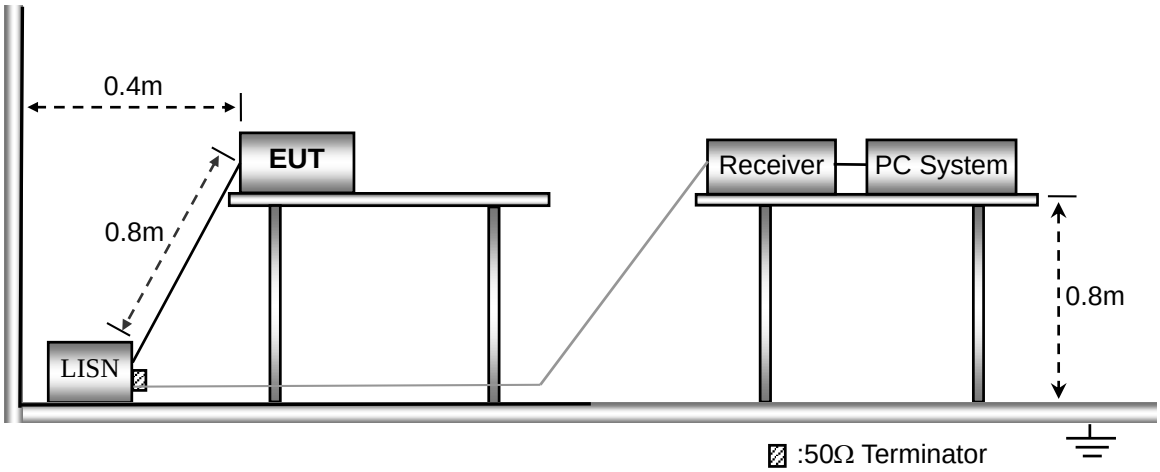
Please refer to Appendix D

10 Conducted Emissions

10.1 Test Procedure

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 Limit.
The external I/O cables were draped along the test table and formed a bundle 30 to 40cm long in the middle. The spacing between the peripherals was 10cm.

10.2 Basic Test Setup Block Diagram



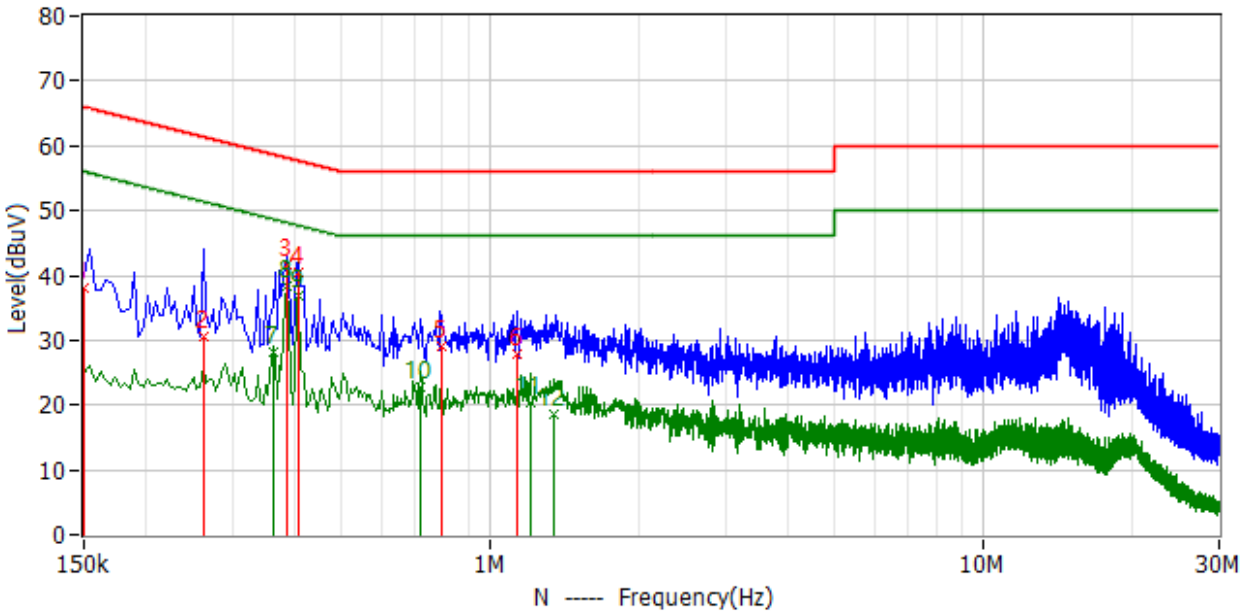
10.3 Test Receiver Setup

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

Start Frequency 150kHz
Stop Frequency 30MHz
Sweep Speed ..... Auto
IF Bandwidth..... 10kHz
Quasi-Peak Adapter Bandwidth 9kHz
Quasi-Peak Adapter Mode ..... Normal

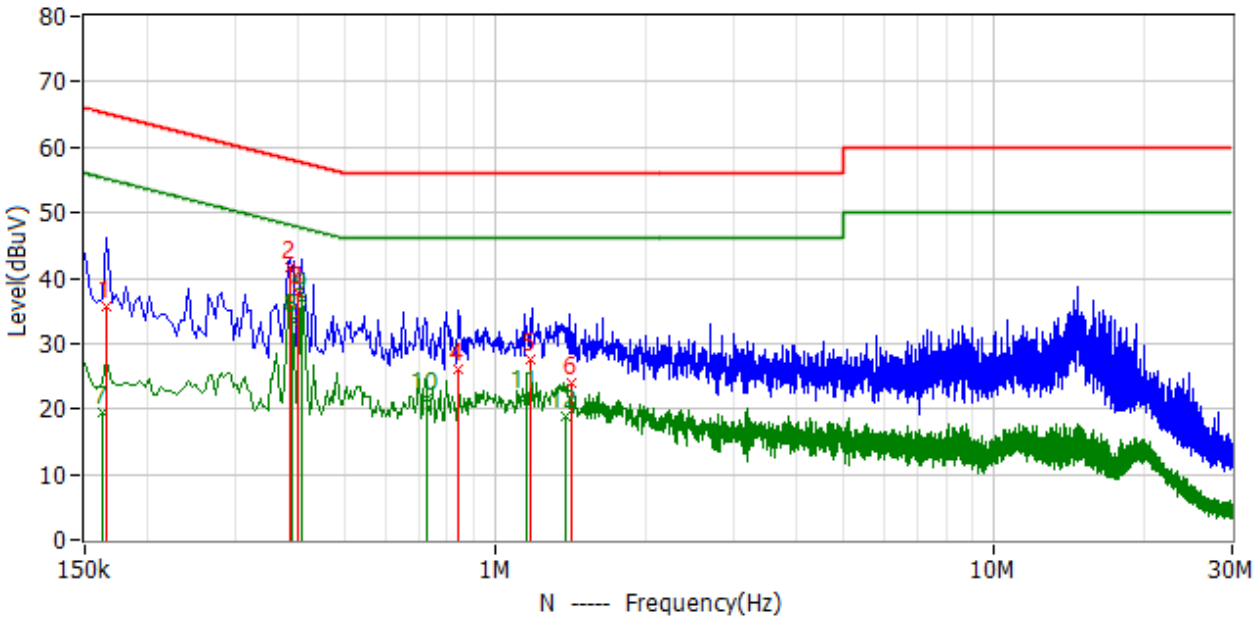
10.4 Summary of Test Results/Plots

Test Mode	Communication	AC120V 60Hz	Polarity:	Neutral



No.	Frequency	Limit dBuV	Level dBuV	Delta dB	Reading dBuV	Factor dB	Detector
1	150.000kHz	66.0	38.1	-27.9	28.4	9.7	QP
2	262.000kHz	61.4	30.7	-30.6	20.8	9.9	QP
3	386.000kHz	58.1	41.6	-16.6	31.7	9.9	QP
4	410.000kHz	57.6	40.5	-17.1	30.6	9.9	QP
5	798.000kHz	56.0	29.2	-26.8	19.5	9.7	QP
6	1.130MHz	56.0	28.0	-28.0	18.3	9.7	QP
7	362.000kHz	48.7	28.2	-20.5	18.3	9.9	CAV
8	386.000kHz	48.1	38.4	-9.7	28.5	9.9	CAV
9	410.000kHz	47.6	36.9	-10.8	27.0	9.9	CAV
10	722.000kHz	46.0	22.8	-23.2	13.1	9.7	CAV
11	1.206MHz	46.0	20.4	-25.6	10.7	9.7	CAV
12	1.350MHz	46.0	18.7	-27.3	9.0	9.7	CAV

Test Mode	Communication	AC120V 60Hz	Polarity:	Line



No.	Frequency	Limit dBuV	Level dBuV	Delta dB	Reading dBuV	Factor dB	Detector
1	254.000kHz	61.6	29.5	-32.2	19.6	9.9	QP
2	386.000kHz	58.1	44.0	-14.1	34.1	9.9	QP
3	410.000kHz	57.6	42.8	-14.8	32.9	9.9	QP
4	794.000kHz	56.0	36.8	-19.2	27.0	9.8	QP
5	1.266MHz	56.0	28.3	-27.7	18.5	9.8	QP
6	2.286MHz	56.0	27.4	-28.6	17.5	9.9	QP
7	382.000kHz	48.2	34.7	-13.5	24.8	9.9	CAV
8	410.000kHz	47.6	35.4	-12.3	25.5	9.9	CAV
9	794.000kHz	46.0	24.0	-22.0	14.2	9.8	CAV
10	1.158MHz	46.0	20.3	-25.7	10.5	9.8	CAV
11	1.350MHz	46.0	19.4	-26.6	9.6	9.8	CAV
12	2.402MHz	46.0	19.4	-26.6	9.5	9.9	CAV

APPENDIX SUMMARY

Project No.	WTX23X11233816W	Test Engineer	BAIdi Zhong
Start date	2023/11/5	Finish date	2023/12/7
Temperature	21.9℃	Humidity	35%
RF specifications	U-NII		

APPENDIX	Description of Test Item	Result
A	Power Spectral Density	Compliant
B	Emission Bandwidth and Occupied Bandwidth	Compliant
C	Maximum Conducted Output Power	Compliant
D	Frequency Stability	Compliant

APPENDIX A

Power Spectral Density						
U-NII-1:5180-5240MHz						
Operating mode	Test Channel	ANT 1 dBm/MHz	ANT 2 dBm/MHz	ANT 3 dBm/MHz	Total dBm/MHz	Limit (dBm/MHz)
802.11a	5180	5.77	6.60	5.28	/	17
	5200	5.77	6.43	5.23	/	17
	5240	5.91	6.64	5.54	/	17
802.11n-HT20	5180	5.27	5.40	5.29	10.09	17
	5200	5.40	5.61	5.31	10.21	17
	5240	5.27	5.58	5.20	10.12	17
802.11ac-VHT20	5180	4.78	5.55	5.11	9.93	17
	5200	4.67	5.76	5.00	9.94	17
	5240	4.71	5.99	5.22	10.11	17
802.11ax-HE20	5180	4.42	5.75	5.03	6.94	17
	5200	4.67	5.76	5.00	6.93	17
	5240	4.80	6.50	5.40	7.93	17
802.11n-HT40	5190	2.44	2.33	2.02	7.04	17
	5230	2.50	2.86	2.00	7.24	17
802.11ac-VHT40	5190	1.85	2.95	2.43	7.20	17
	5230	1.92	3.24	2.52	7.36	17
802.11ax-HE40	5190	1.99	3.30	2.48	7.40	17
	5230	2.32	3.50	2.62	7.61	17
802.11ac-VHT80	5210	-0.81	0.44	-0.29	4.58	17
802.11ax-HE80	5210	-1.41	0.33	-0.50	4.30	17

Power Spectral Density						
U-NII-1 & U-NII-2A: 5180-5240MHz & 5260-5320MHz						
Operating mode	Test Channel	ANT 1 dBm/MHz	ANT 2 dBm/MHz	ANT 3 dBm/MHz	Total dBm/MHz	Limit (dBm/MHz)
802.11ac-VHT160	5250	-2.22	-2.65	-4.76	1.69	11
802.11ax-HE160	5250	-2.24	-2.23	-4.11	2.00	11

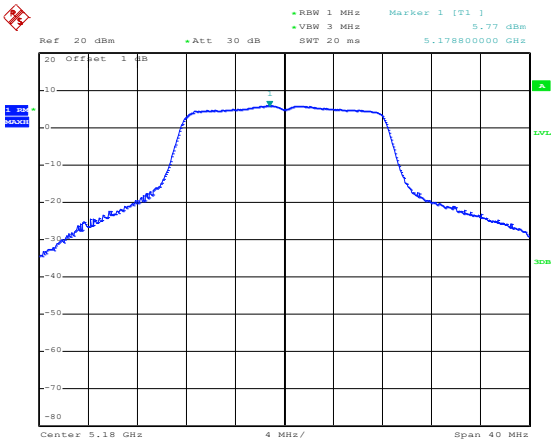
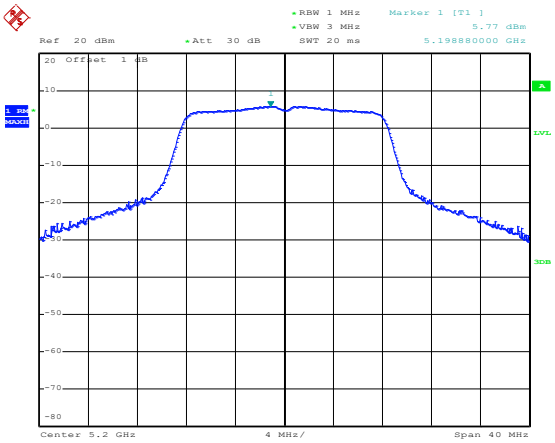
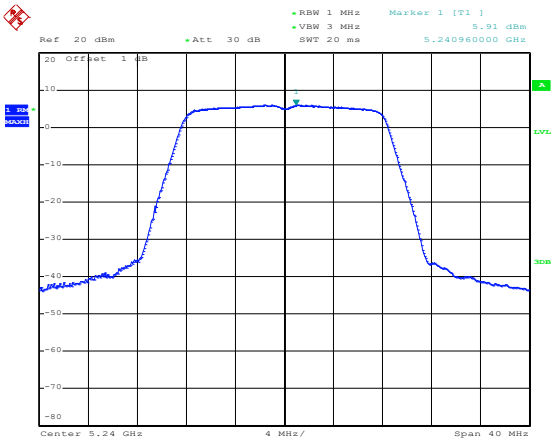
Power Spectral Density						
U-NII-2A: 5260-5320MHz						
Operating mode	Test Channel	ANT 1 dBm/MHz	ANT 2 dBm/MHz	ANT 3 dBm/MHz	Total dBm/MHz	Limit (dBm/MHz)
802.11a	5260	6.24	5.69	5.28	/	11
	5280	6.39	6.12	5.58	/	11
	5320	5.78	5.18	5.05	/	11
802.11n-HT20	5260	4.94	3.99	4.63	9.31	11
	5280	5.48	4.40	4.76	9.67	11
	5320	4.63	4.58	4.14	9.23	11
802.11ac-VHT20	5260	4.98	5.91	5.33	10.19	11
	5280	4.74	5.81	5.60	10.18	11
	5320	4.00	5.12	5.08	9.53	11
802.11ax-HE20	5260	4.69	4.96	4.77	9.58	11
	5280	4.74	5.81	5.60	10.18	11
	5320	4.94	4.52	4.50	9.43	11
802.11n-HT40	5270	2.34	2.29	2.28	7.07	11
	5310	1.80	1.72	1.92	6.59	11
802.11ac-VHT40	5270	2.24	2.75	2.51	7.28	11
	5310	1.82	2.37	2.10	6.87	11
802.11ax-HE40	5270	2.40	3.03	2.60	7.46	11
	5310	1.61	2.46	2.51	6.98	11
802.11ac-VHT80	5290	-1.15	-0.61	-0.79	3.93	11
802.11ax-HE80	5290	-1.50	-0.93	-0.82	3.70	11

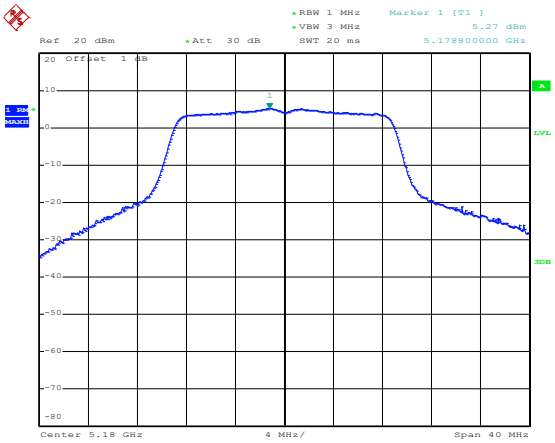
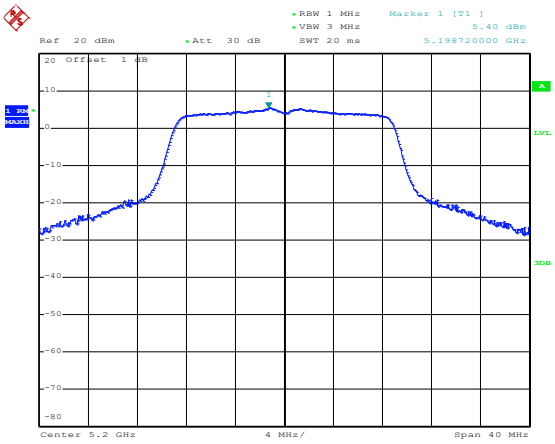
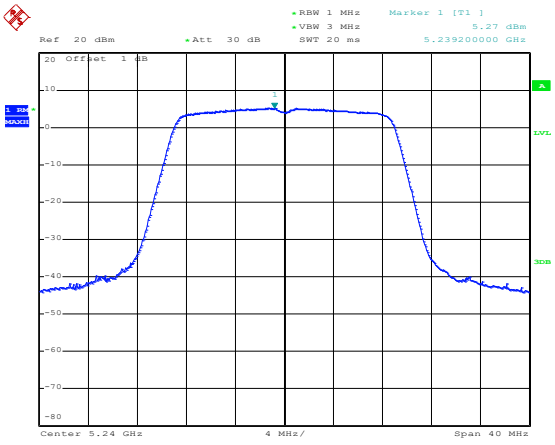
Power Spectral Density									
U-NII-3: 5745-5825MHz									
Operating mode	Test Channel	ANT 1 dBm/300kHz	ANT 2 dBm/300kHz	ANT 3 dBm/300kHz	Factor	ANT 1 dBm/500kHz*	ANT 2 dBm/500kHz*	ANT 3 dBm/500kHz*	Limit dBm/500kHz
802.11a	5745	1.72	5.12	2.73	2.22	4.95	7.34	3.94	30
	5785	2.31	5.99	3.17	2.22	5.39	8.21	4.53	30
	5825	2.41	6.34	3.02	2.22	5.24	8.56	4.63	30
*Note: Maximum PSD=PSD(dBm/300kHz)+10log(500kHz/300kHz)=2.22									

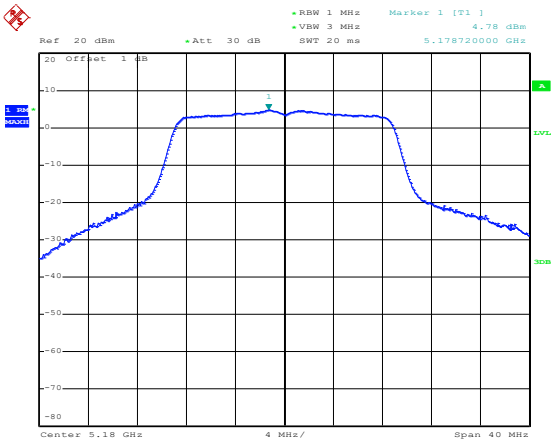
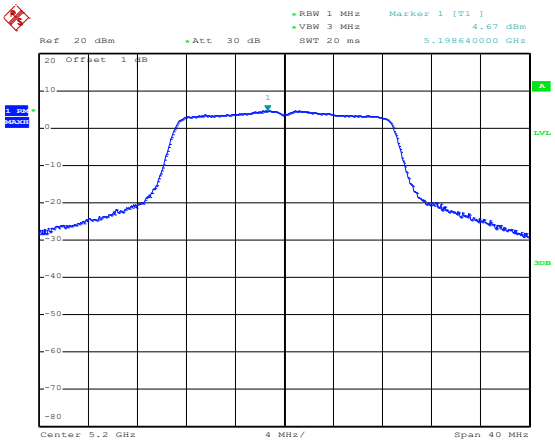
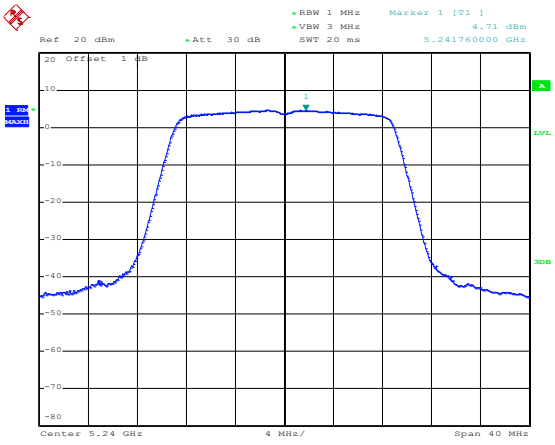
Power Spectral Density							
U-NII-3: 5745-5825MHz							
Operating mode	Test Channel	ANT 1 dBm/300kHz	ANT 1 dBm/300kHz	ANT 3 dBm/300kHz	Factor	Total dBm/500kHz *	Limit dBm/500kHz
802.11n-HT20	5745	1.21	4.61	2.69	2.22	10.05	30
	5785	2.11	5.45	3.56	2.22	10.91	30
	5825	1.71	5.73	3.18	2.22	10.86	30
802.11ac-VHT20	5745	2.11	5.00	2.83	2.22	10.48	30
	5785	2.63	5.82	3.69	2.22	11.25	30
	5825	2.22	6.27	3.65	2.22	11.37	30
802.11ax-HE20	5745	1.99	4.67	2.63	2.22	10.24	30
	5785	2.63	5.82	3.69	2.22	11.25	30
	5825	2.23	5.68	3.54	2.22	11.04	30
802.11n HT40	5755	-0.54	1.98	-0.55	2.22	7.46	30
	5795	-0.95	2.31	-0.19	2.22	7.61	30
802.11ac VHT40	5755	-0.76	1.96	-0.24	2.22	7.48	30
	5795	-0.41	2.99	0.38	2.22	8.23	30
802.11ax HE40	5755	-0.81	2.42	-0.79	2.22	7.55	30
	5795	-0.53	2.57	0.14	2.22	7.93	30
802.11ac VHT80	5775	-3.5252	0.01	-2.68	2.22	5.20	30
802.11ax HE80	5775	-4.11	-0.45	-3.11	2.22	4.72	30
*Note: Maximum PSD=PSD(dBm/300kHz)+10log(500kHz/300kHz)=2.22							

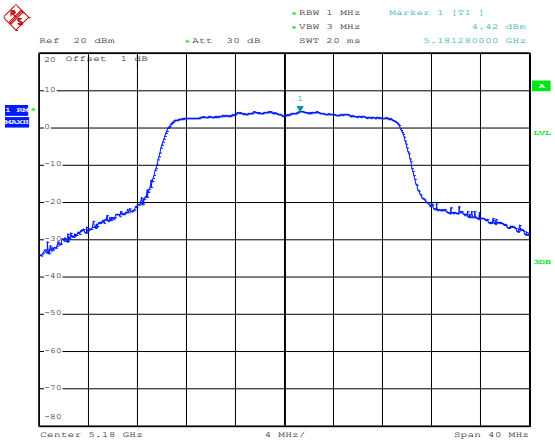
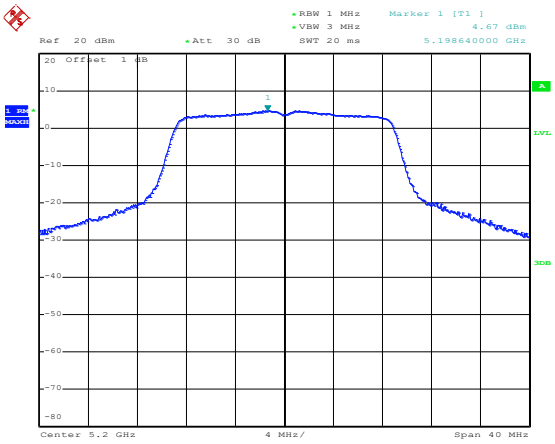
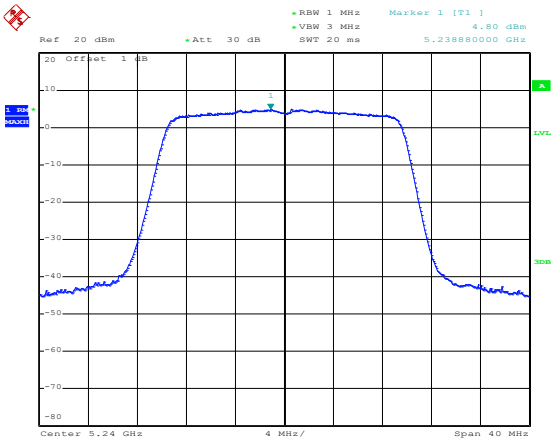
ANT 1

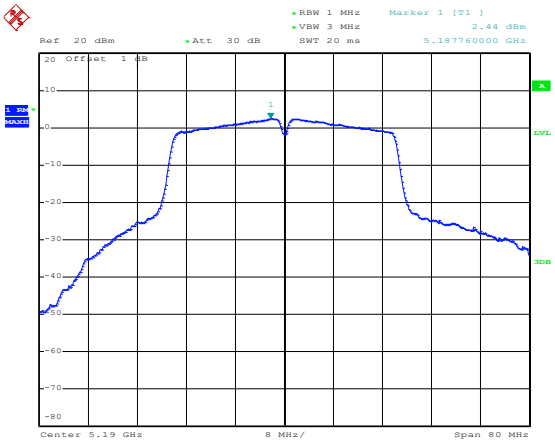
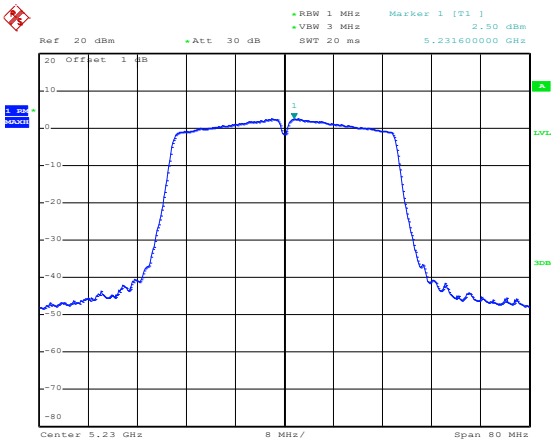
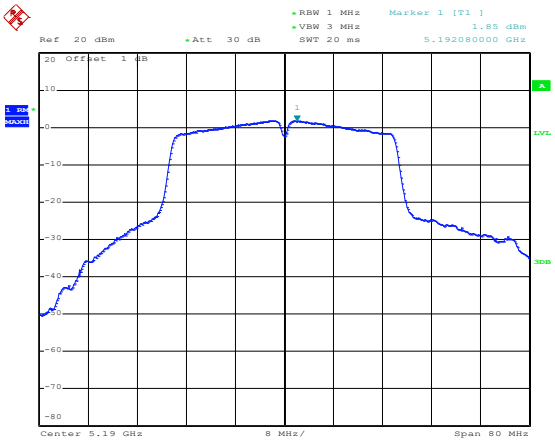
5180-5240MHz

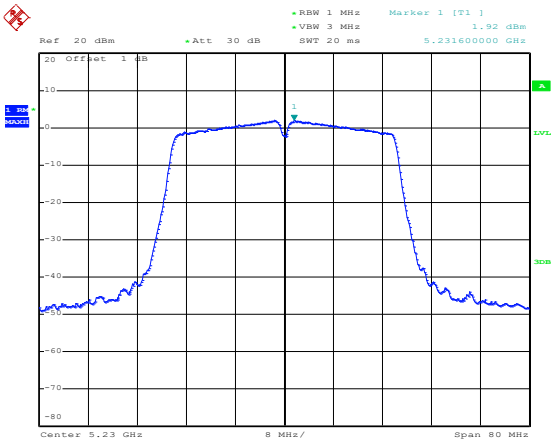
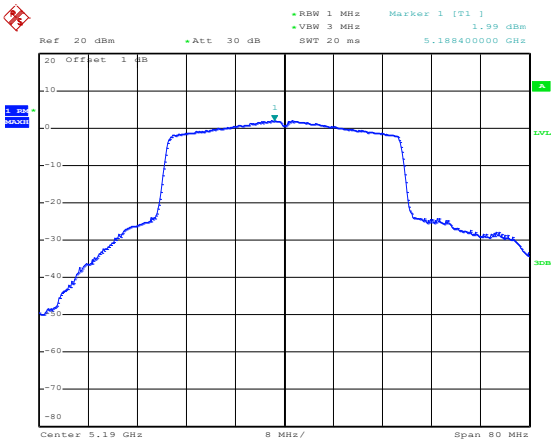
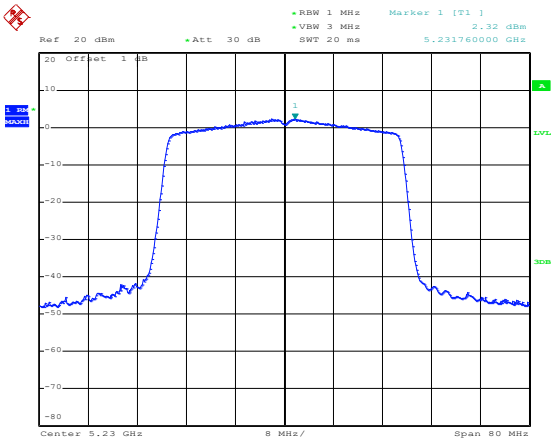
802.11a-Low	 Date: 29.NOV.2023 15:32:23
802.11a-Middle	 Date: 29.NOV.2023 15:33:01
802.11a-High	 Date: 29.NOV.2023 15:34:05

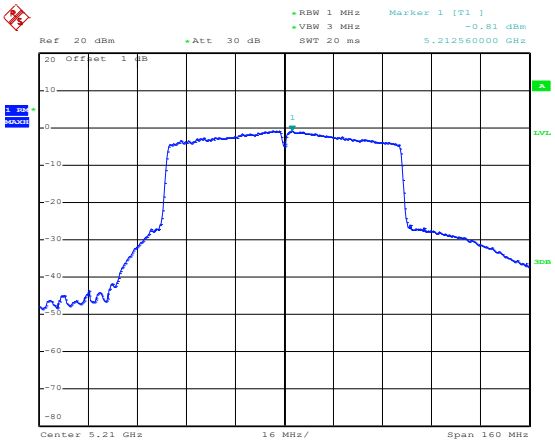
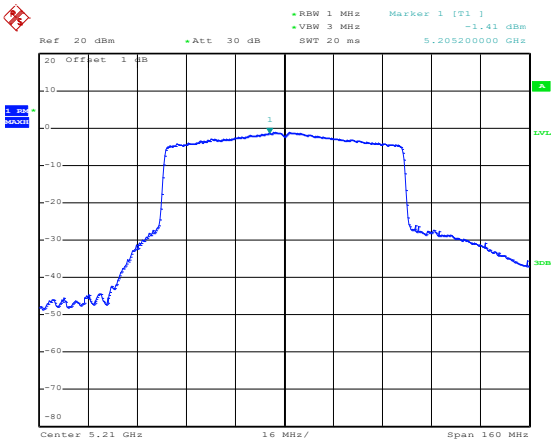
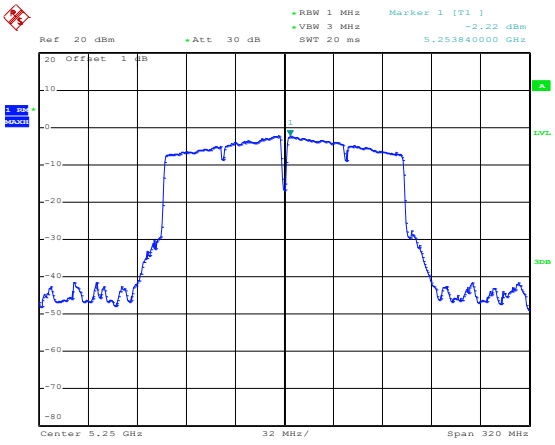
802.11n-HT20-Low	 Date: 29.NOV.2023 15:35:20
802.11n-HT20-Middle	 Date: 29.NOV.2023 15:36:52
802.11n-HT20-High	 Date: 29.NOV.2023 15:37:26

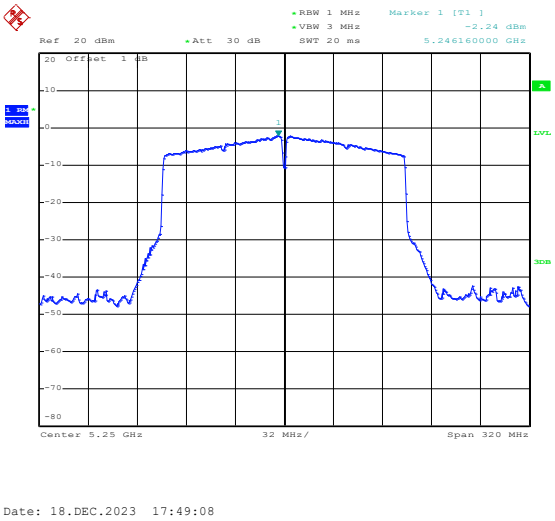
802.11ac-VHT20-Low	 Date: 29.NOV.2023 15:38:27
802.11ac-VHT20-Middle	 Date: 29.NOV.2023 15:40:07
802.11ac-VHT20-High	 Date: 29.NOV.2023 15:40:52

802.11ax-HE20-Low	 Date: 29.NOV.2023 15:41:45
802.11ax-HE20-Middle	 Date: 29.NOV.2023 15:40:07
802.11ax-HE20-High	 Date: 29.NOV.2023 15:43:02

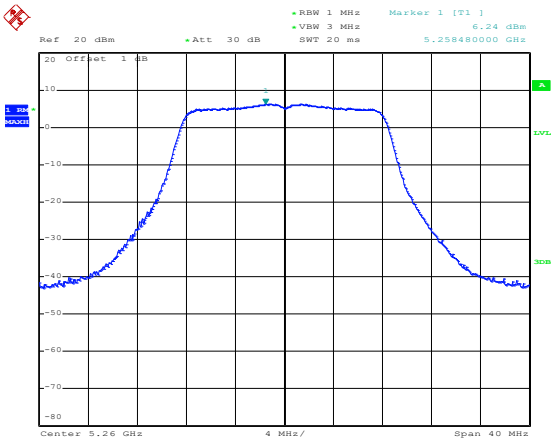
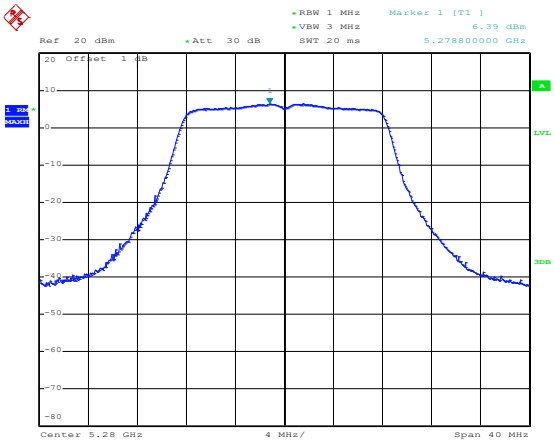
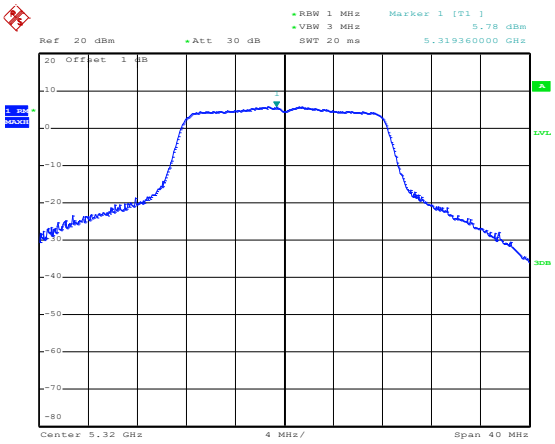
802.11n-HT40-Low	 Date: 29.NOV.2023 15:45:58
802.11n-HT40-High	 Date: 29.NOV.2023 15:46:42
802.11ac-VHT40-Low	 Date: 29.NOV.2023 15:49:06

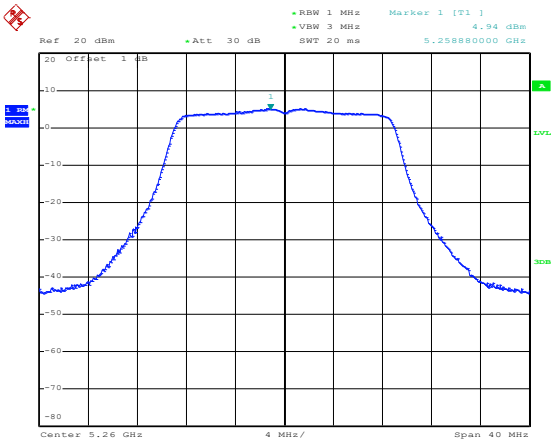
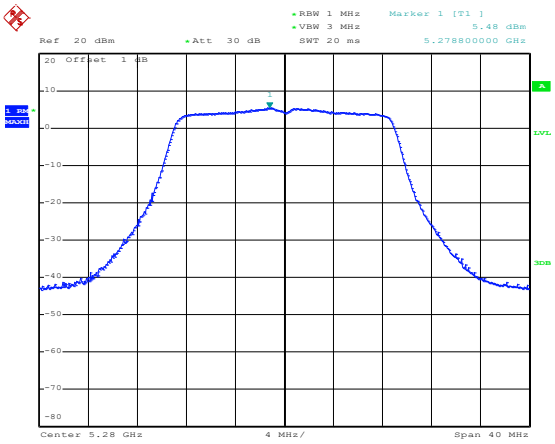
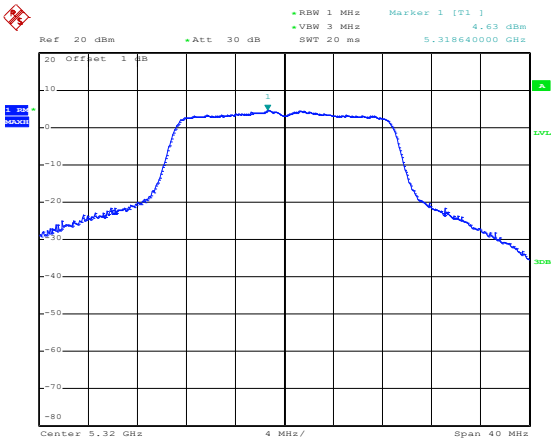
802.11ac-VHT40-High	 Date: 29.NOV.2023 15:49:33
802.11ax-HE40-Low	 Date: 29.NOV.2023 15:50:26
802.11ax-HE40-High	 Date: 29.NOV.2023 15:52:07

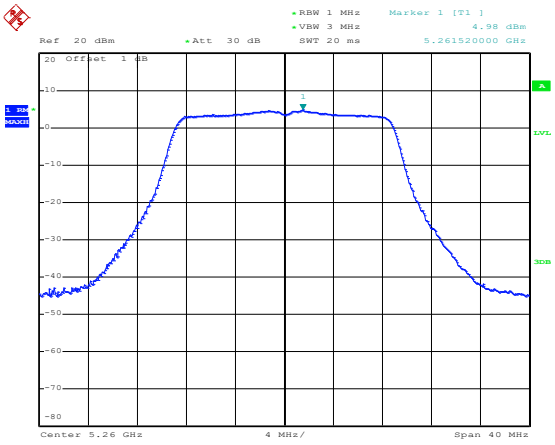
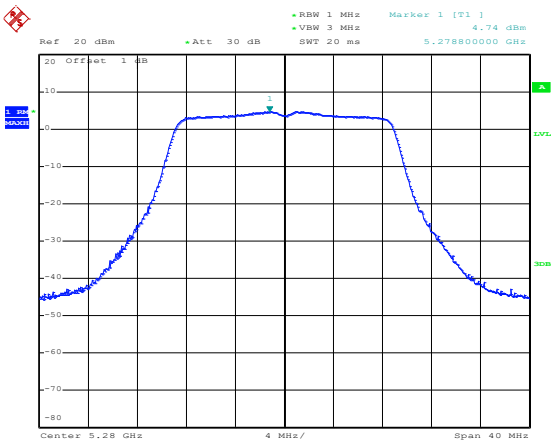
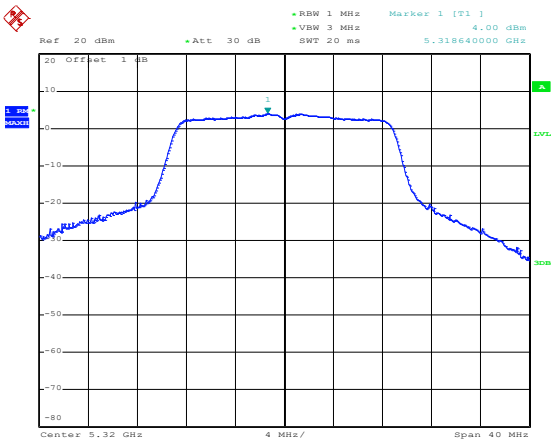
802.11ac-VHT80	 Date: 29.NOV.2023 15:54:38
802.11ax-HE80	 Date: 29.NOV.2023 15:57:15
802.11ac-VHT160	 Date: 18.DEC.2023 17:48:36

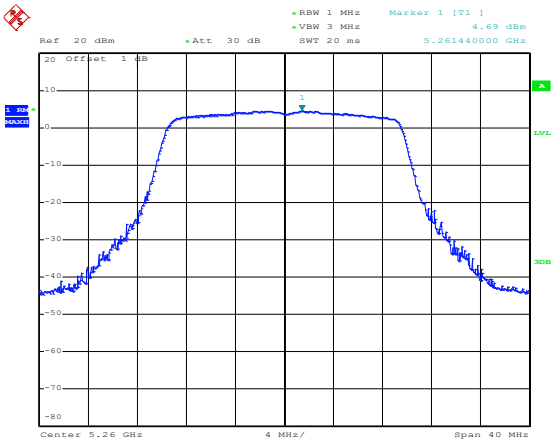
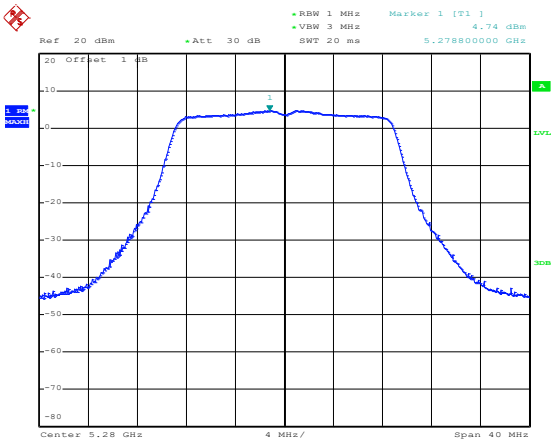
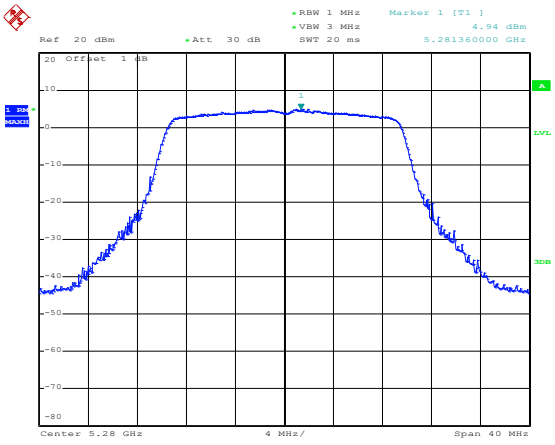
802.11ax-HE160	

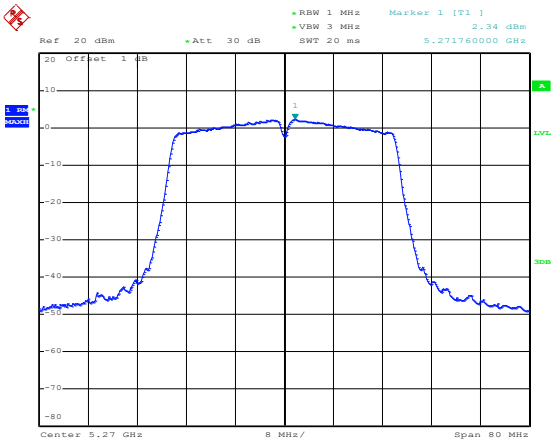
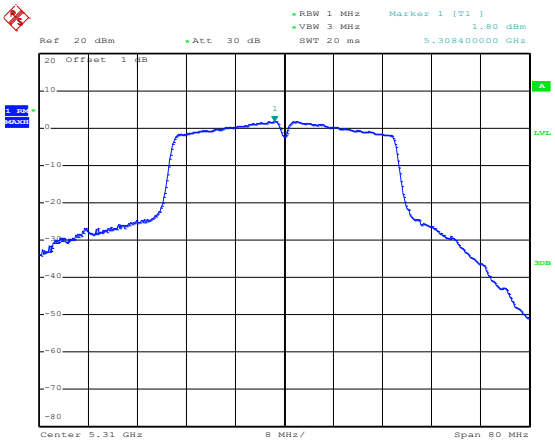
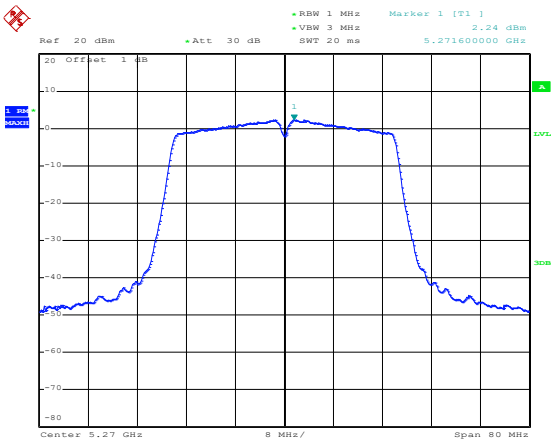
5260-5320MHz

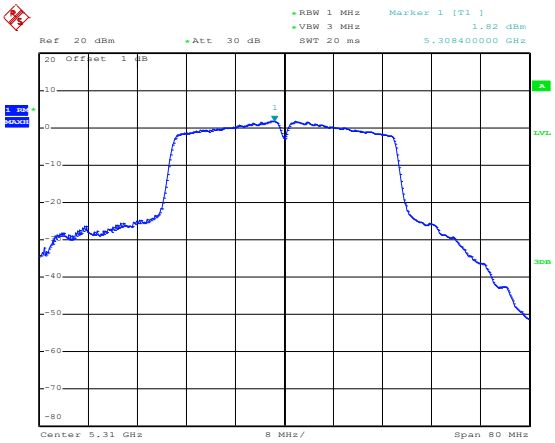
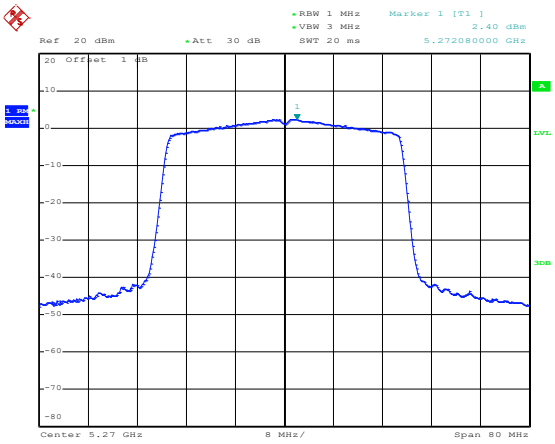
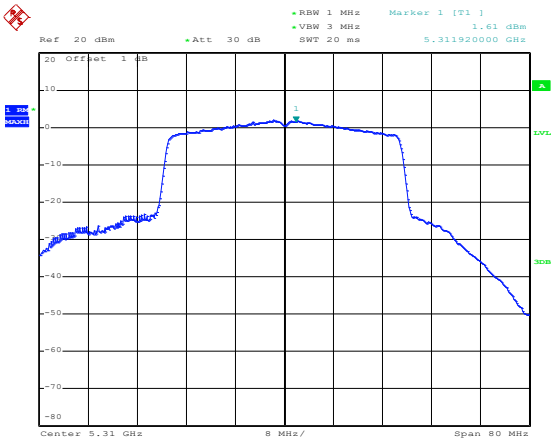
802.11a-Low	 Date: 29.NOV.2023 19:12:52
802.11a-Middle	 Date: 29.NOV.2023 19:13:09
802.11a-High	 Date: 29.NOV.2023 19:13:33

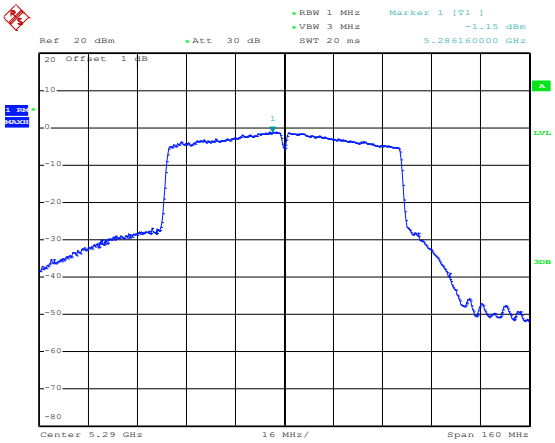
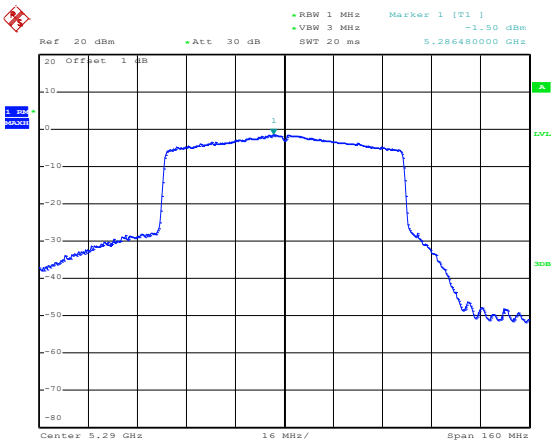
802.11n-HT20-Low	 Date: 29.NOV.2023 19:14:03
802.11n-HT20-Middle	 Date: 29.NOV.2023 19:14:57
802.11n-HT20-High	 Date: 29.NOV.2023 19:15:25

802.11ac-VHT20-Low	
802.11ac-VHT20-Middle	
802.11ac-VHT20-High	

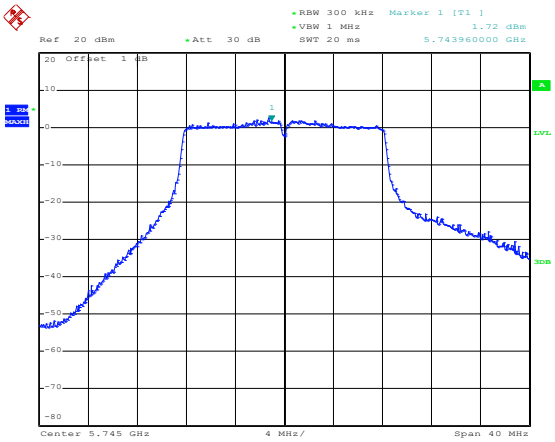
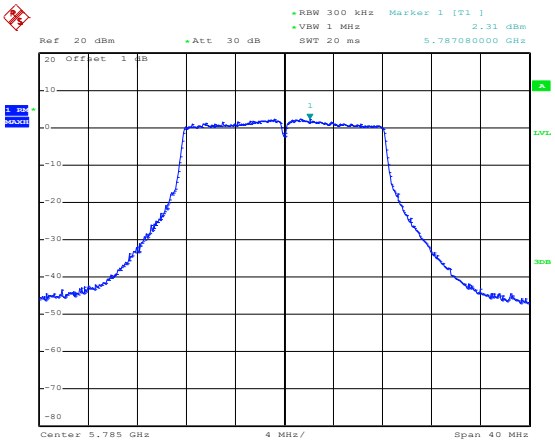
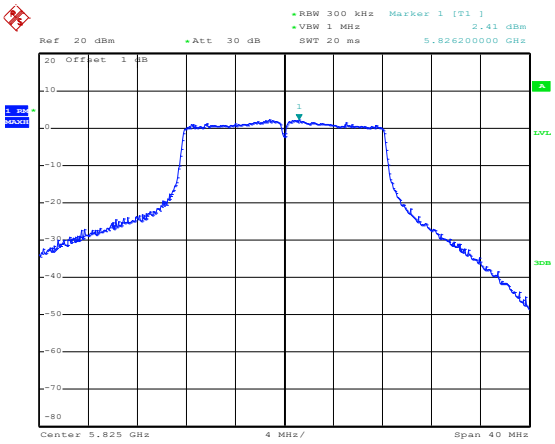
802.11ax-HE20-Low	
802.11ax-HE20-Middle	
802.11ax-HE20-High	

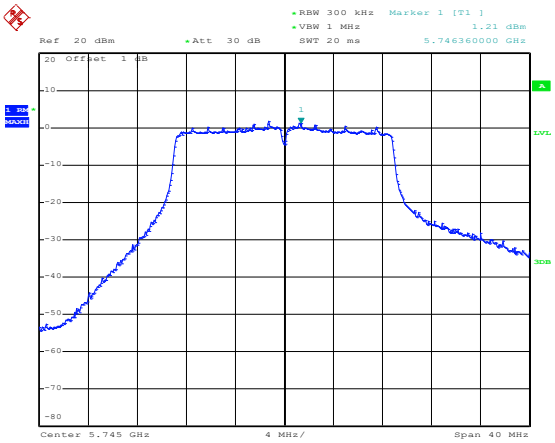
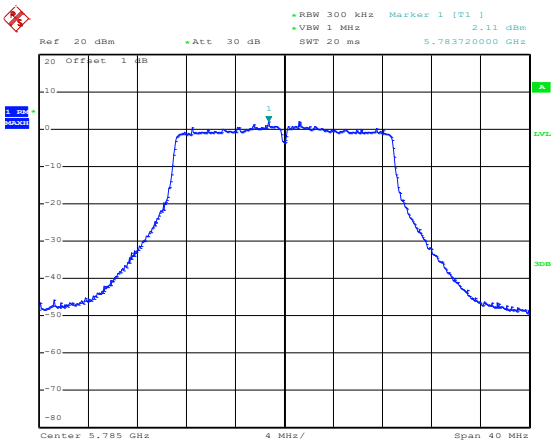
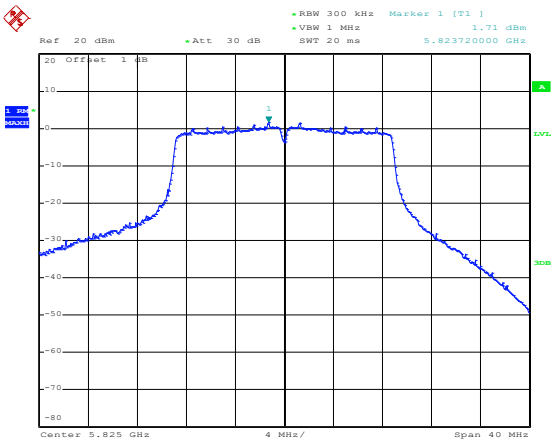
802.11n-HT40-Low	 Date: 29.NOV.2023 19:20:13
802.11n-HT40-High	 Date: 29.NOV.2023 19:20:39
802.11ac-VHT40-Low	 Date: 29.NOV.2023 19:21:06

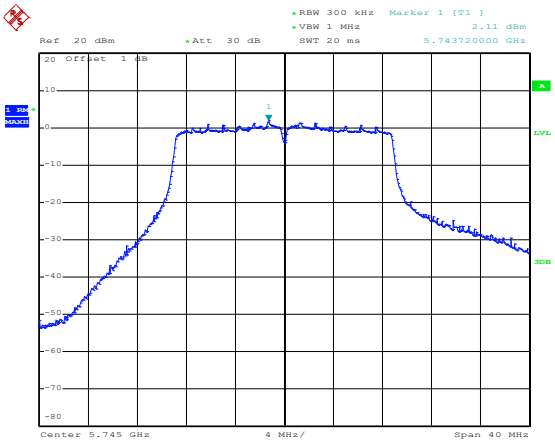
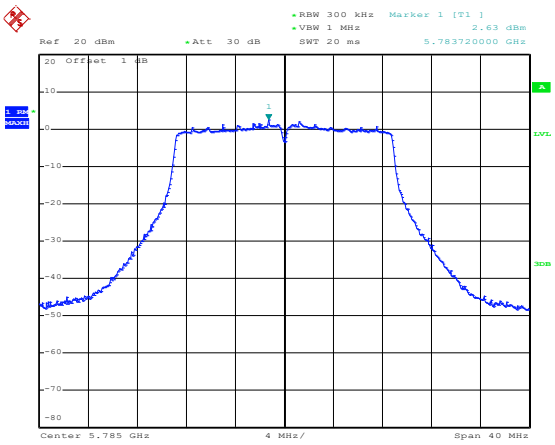
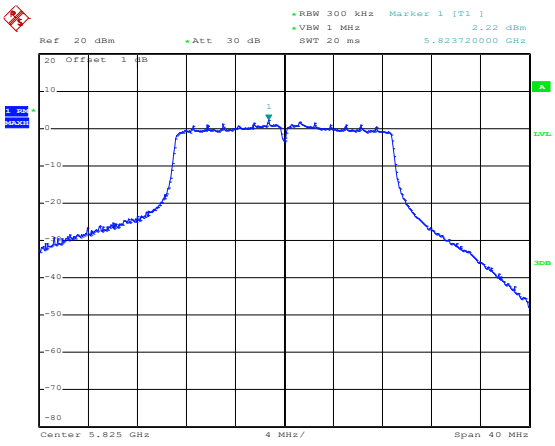
802.11ac-VHT40-High	 Date: 29.NOV.2023 19:21:24
802.11ax-HE40-Low	 Date: 29.NOV.2023 19:22:15
802.11ax-HE40-High	 Date: 29.NOV.2023 19:22:40

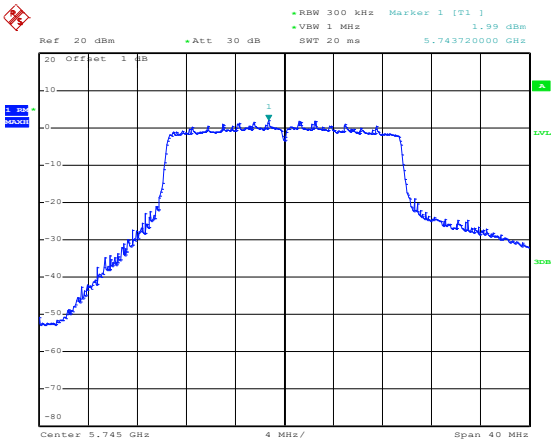
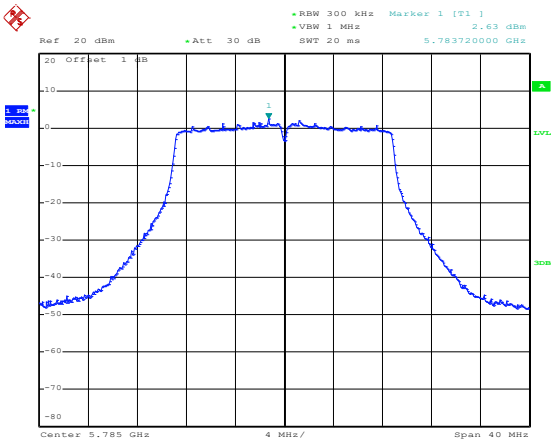
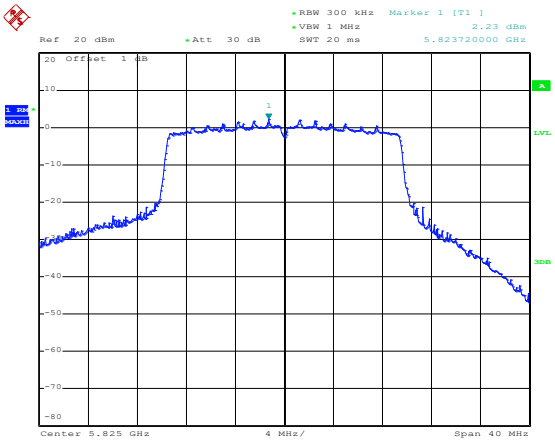
802.11ac-VHT80	
802.11ax-HE80	

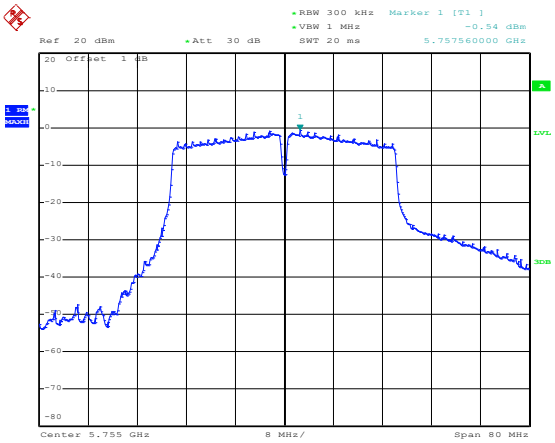
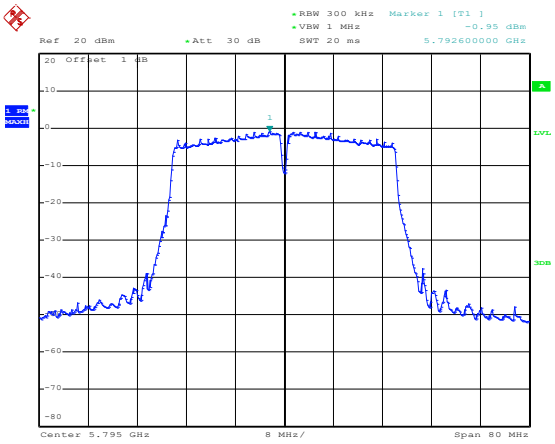
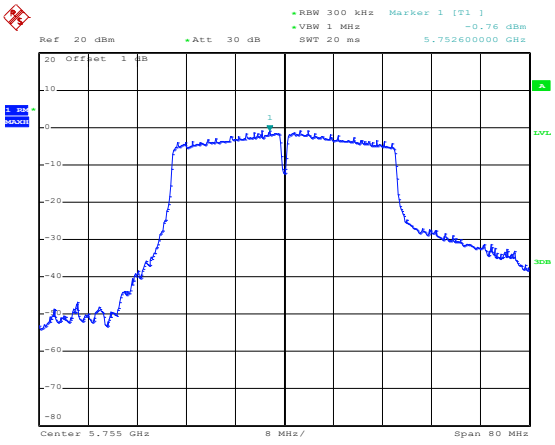
5745-5825MHz

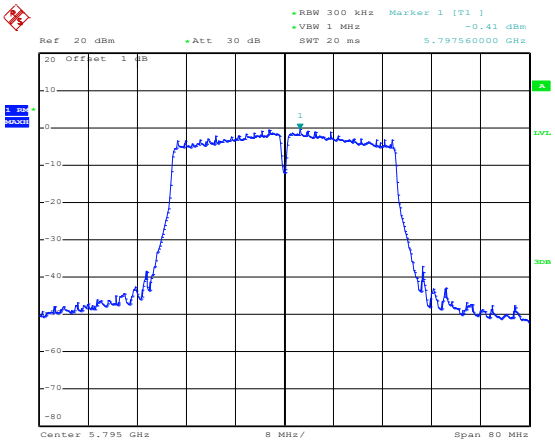
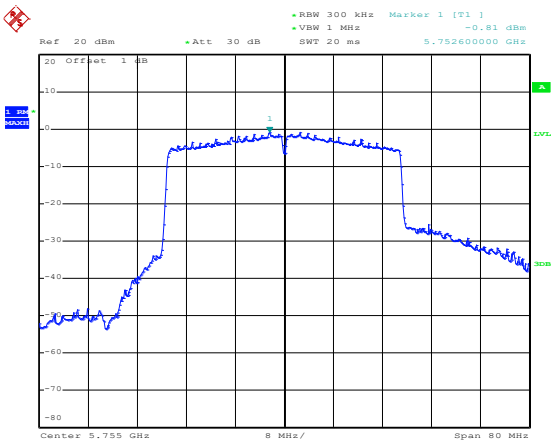
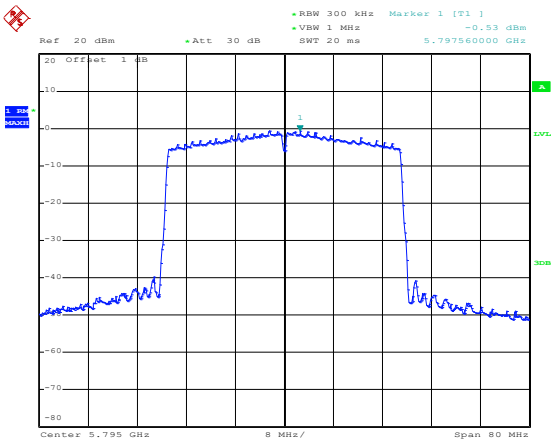
802.11a-Low	 Date: 30.NOV.2023 14:57:23
802.11a-Middle	 Date: 30.NOV.2023 14:57:35
802.11a-High	 Date: 30.NOV.2023 14:57:50

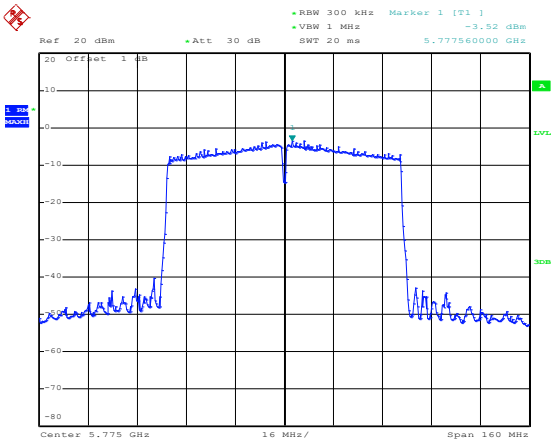
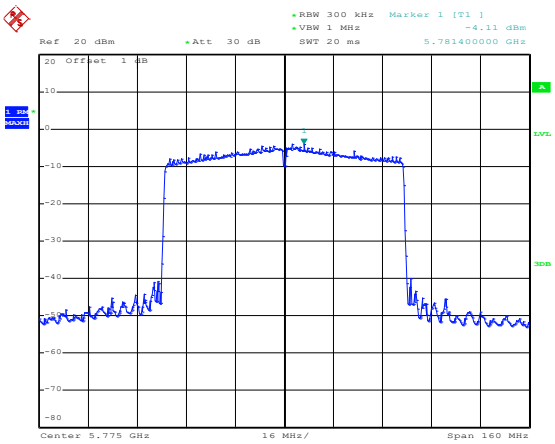
802.11n-HT20-Low	
802.11n-HT20-Middle	
802.11n-HT20-High	

802.11ac-VHT20-Low	
802.11ac-VHT20-Middle	
802.11ac-VHT20-High	

802.11ax-HE20-Low	
802.11ax-HE20-Middle	
802.11ax-HE20-High	

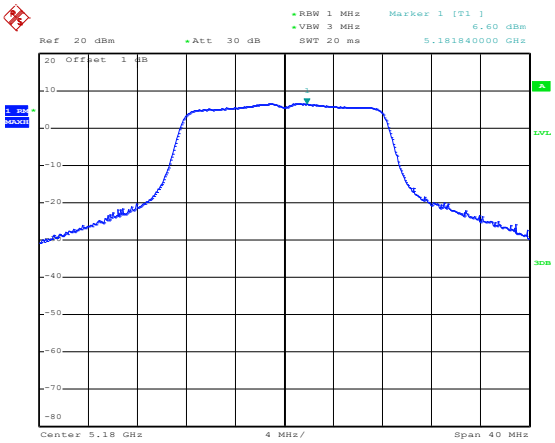
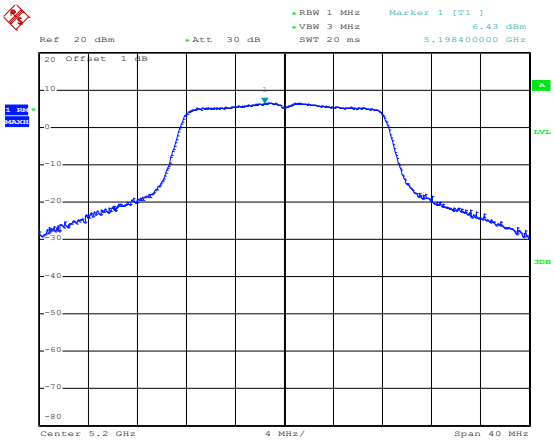
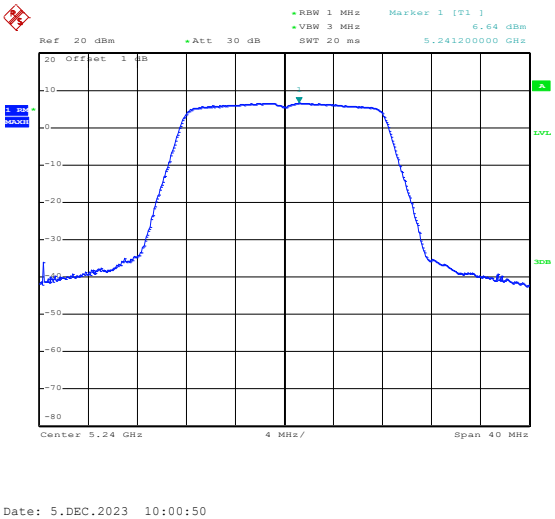
802.11n-HT40-Low	
802.11n-HT40-High	
802.11ac-VHT40-Low	

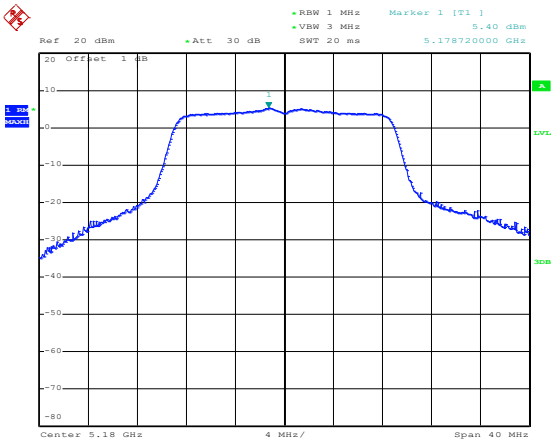
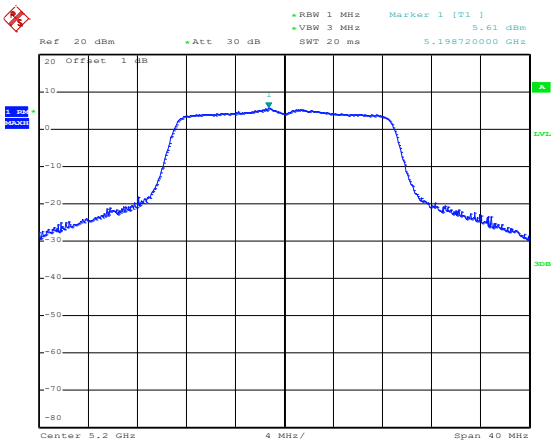
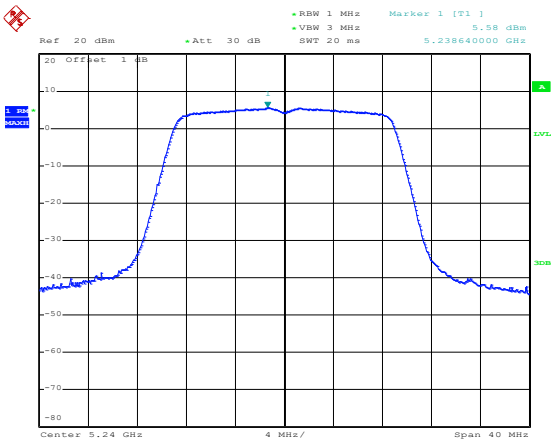
802.11ac-VHT40-High	
802.11ax-HE40-Low	
802.11ax-HE40-High	

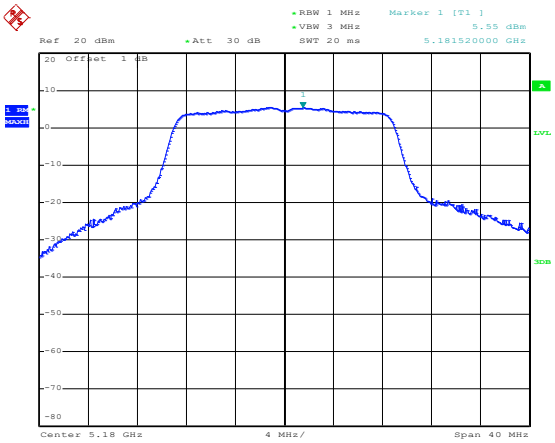
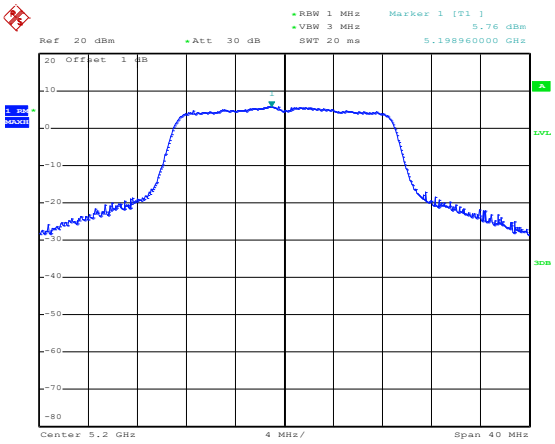
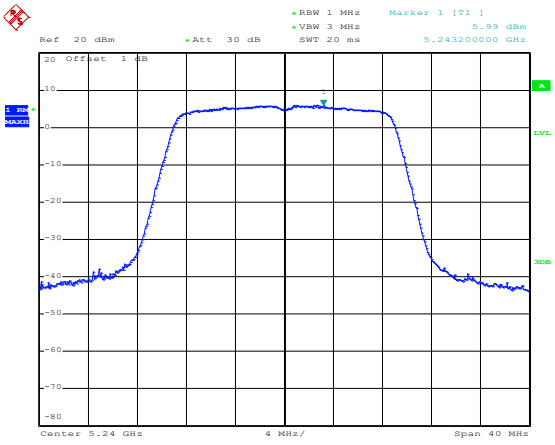
802.11ac-VHT80	
802.11ax-HE80	

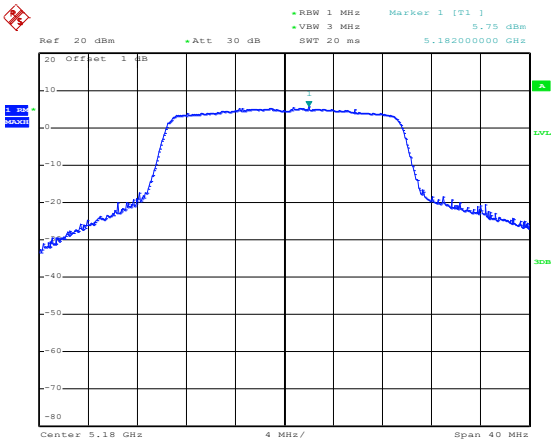
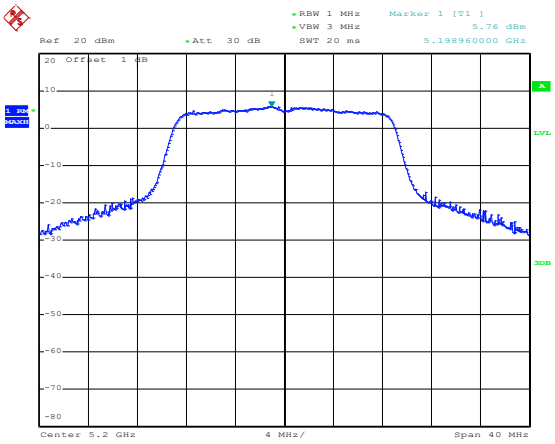
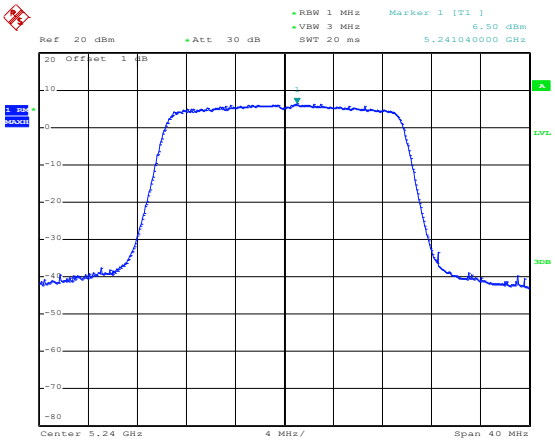
ANT 2

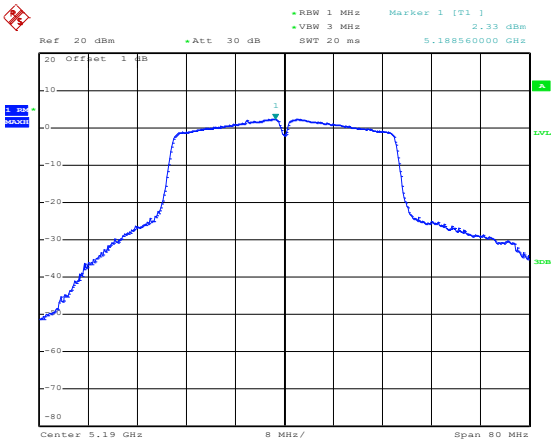
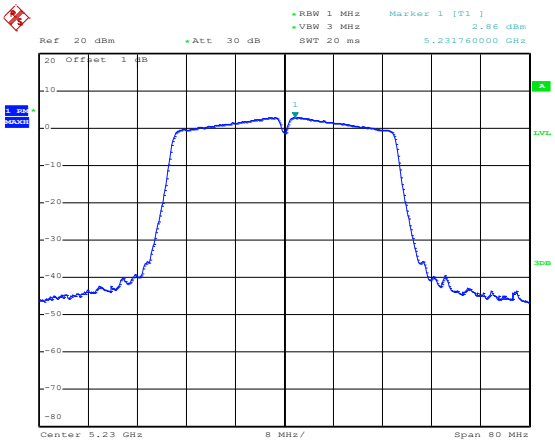
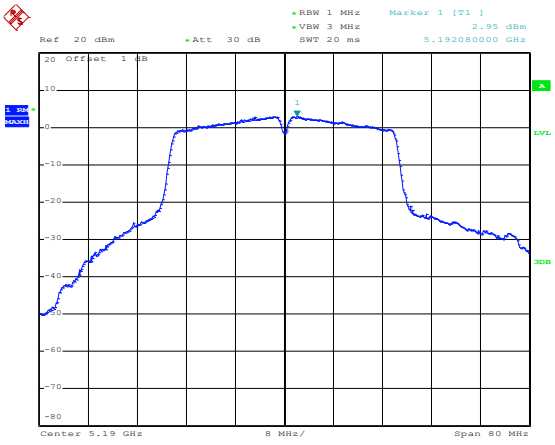
5180-5240MHz

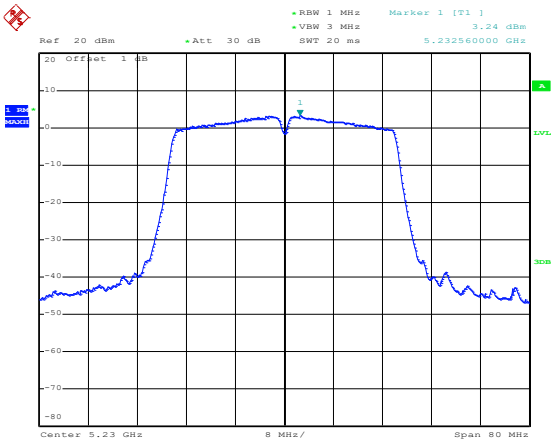
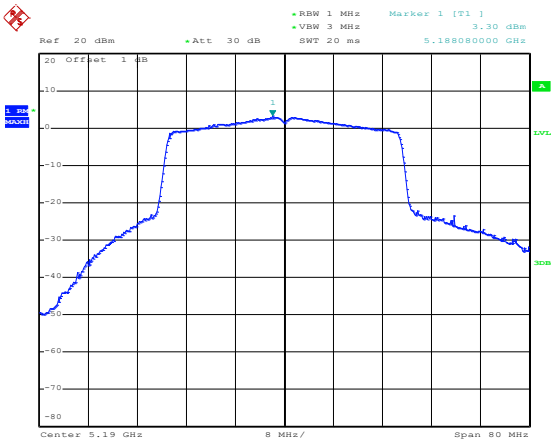
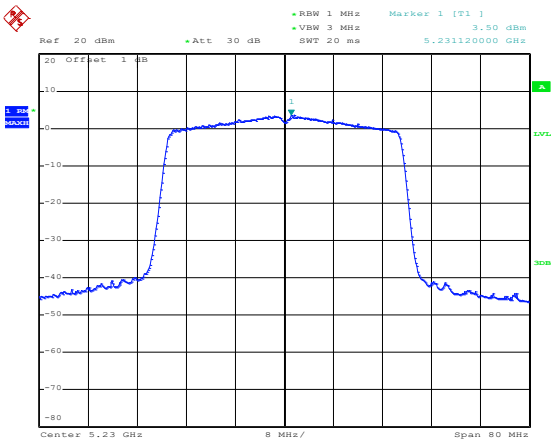
802.11a-Low	
802.11a-Middle	
802.11a-High	

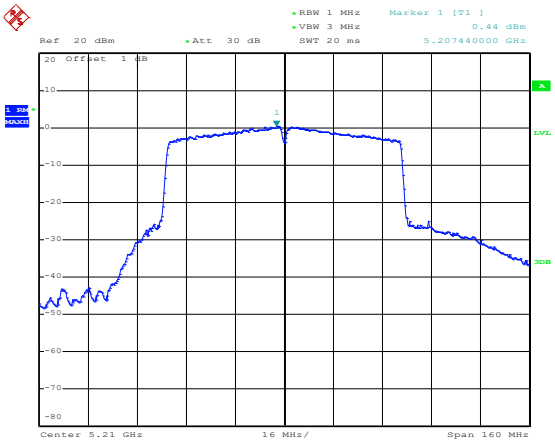
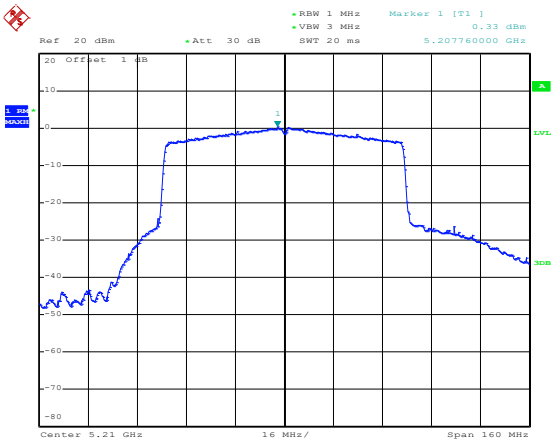
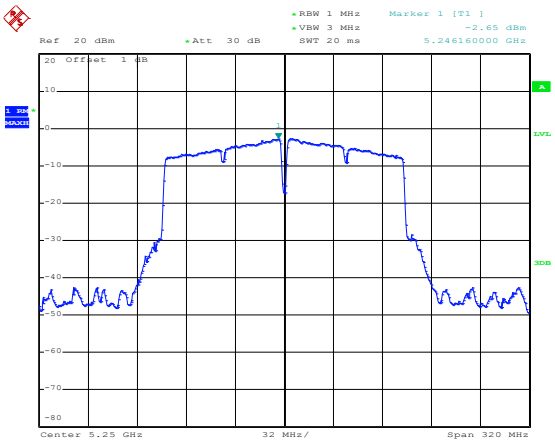
802.11n-HT20-Low	
802.11n-HT20-Middle	
802.11n-HT20-High	

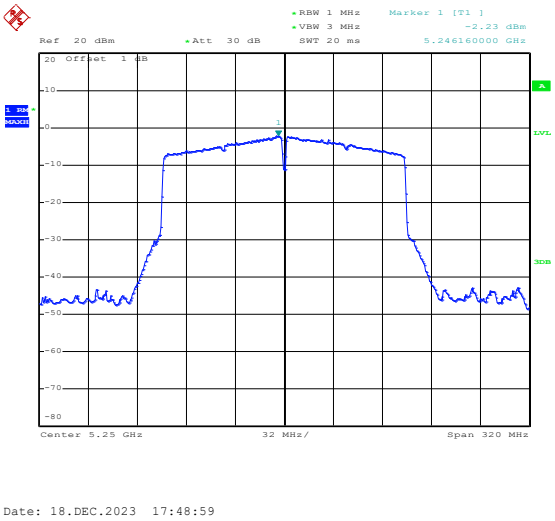
802.11ac-VHT20-Low	 Date: 5.DEC.2023 10:02:26
802.11ac-VHT20-Middle	 Date: 5.DEC.2023 10:02:49
802.11ac-VHT20-High	 Date: 5.DEC.2023 10:03:13

802.11ax-HE20-Low	 Date: 5.DEC.2023 10:03:50
802.11ax-HE20-Middle	 Date: 5.DEC.2023 10:02:49
802.11ax-HE20-High	 Date: 5.DEC.2023 10:08:18

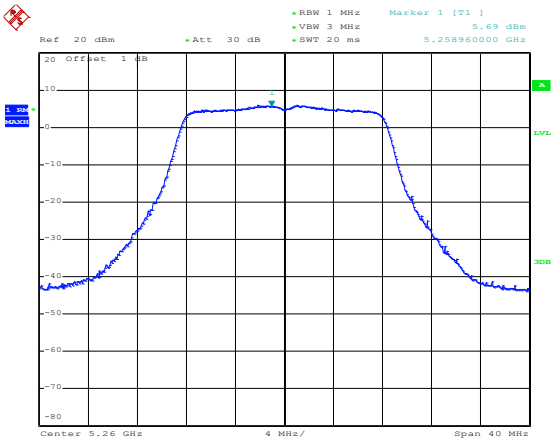
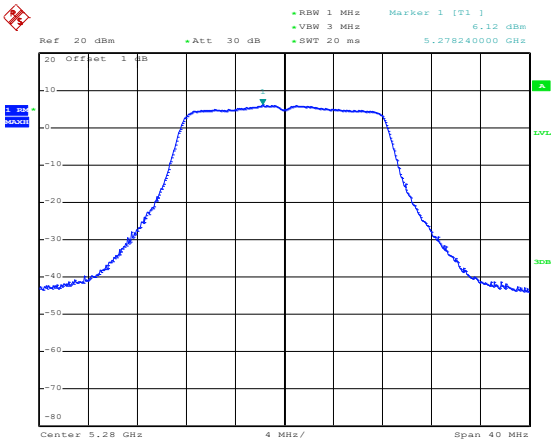
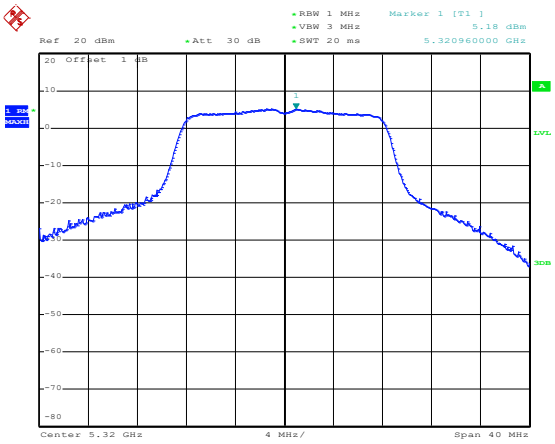
802.11n-HT40-Low	 Date: 5.DEC.2023 10:08:44
802.11n-HT40-High	 Date: 5.DEC.2023 10:12:04
802.11ac-VHT40-Low	 Date: 5.DEC.2023 10:12:43

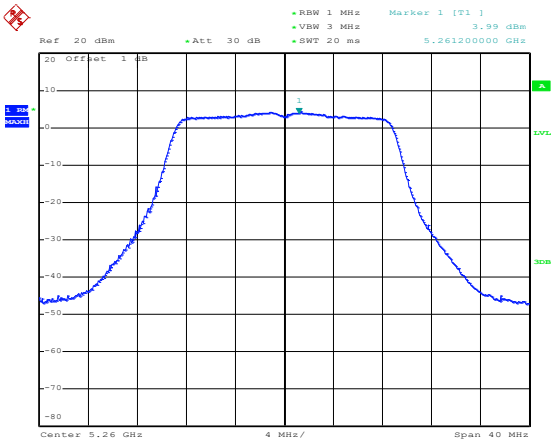
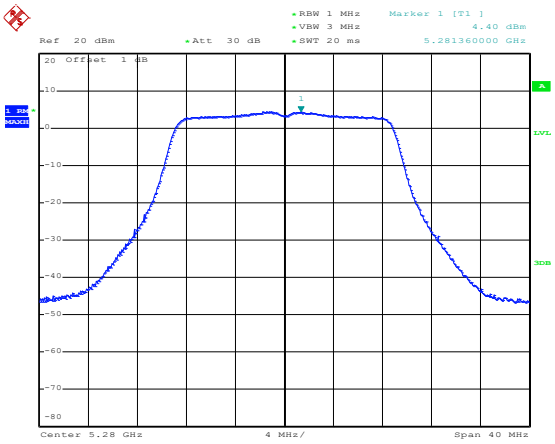
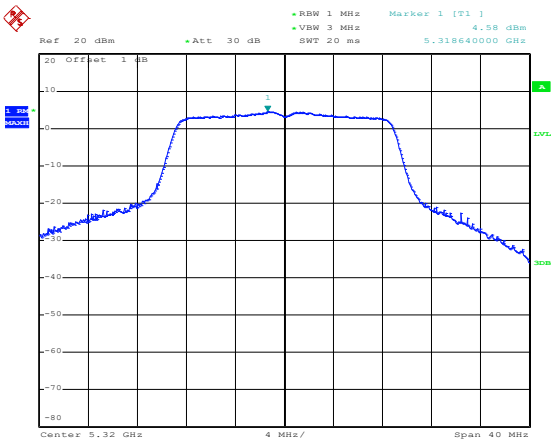
802.11ac-VHT40-High	 Date: 5.DEC.2023 10:13:22
802.11ax-HE40-Low	 Date: 5.DEC.2023 10:14:08
802.11ax-HE40-High	 Date: 5.DEC.2023 10:15:26

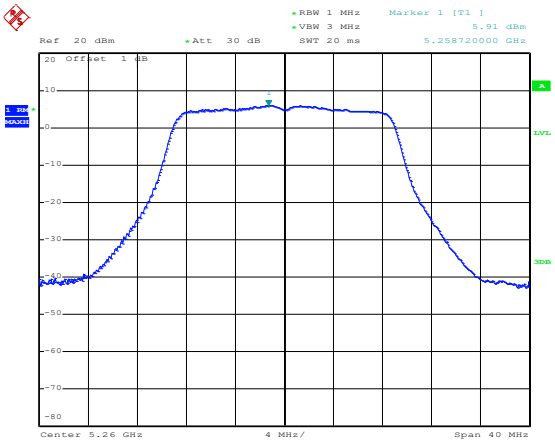
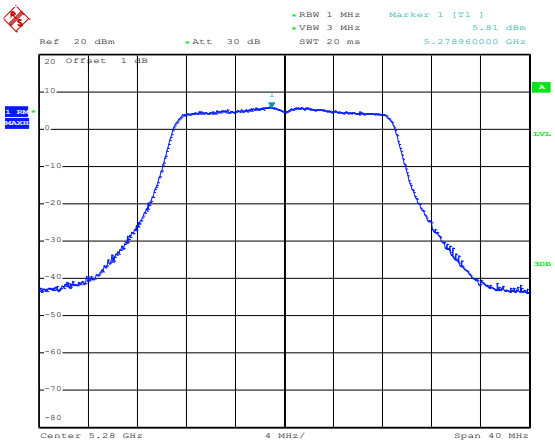
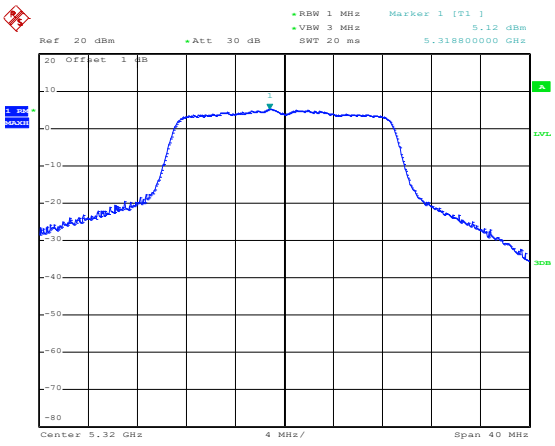
802.11ac-VHT80	 Date: 5.DEC.2023 10:17:37
802.11ax-HE80	 Date: 5.DEC.2023 10:20:57
802.11ac-VHT160	 Date: 18.DEC.2023 17:48:13

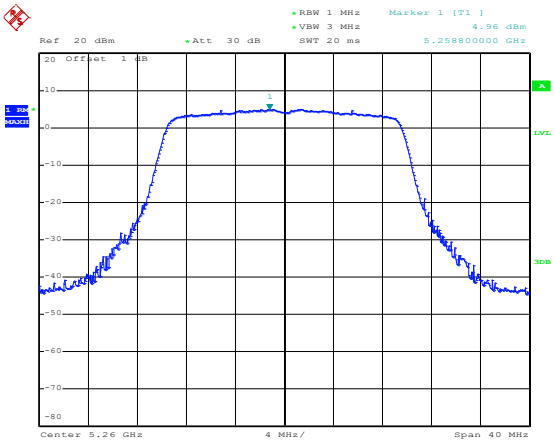
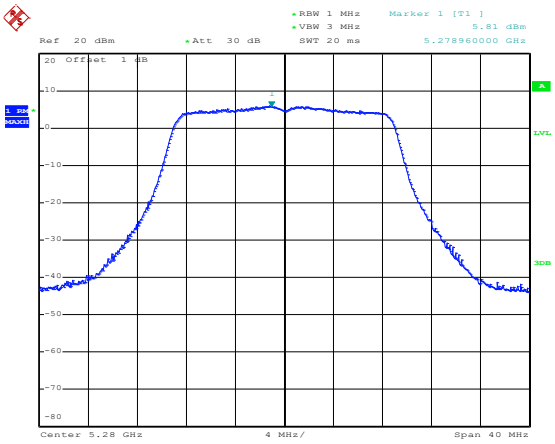
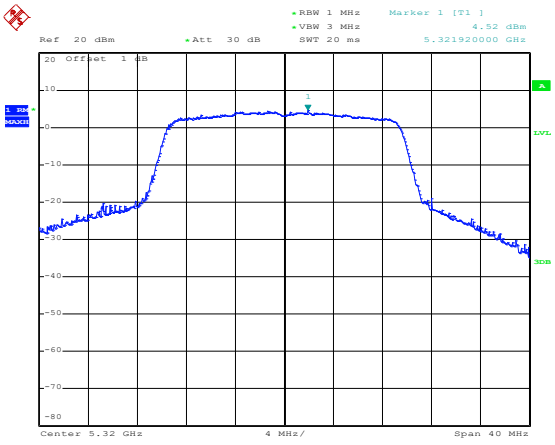
802.11ax-HE160	

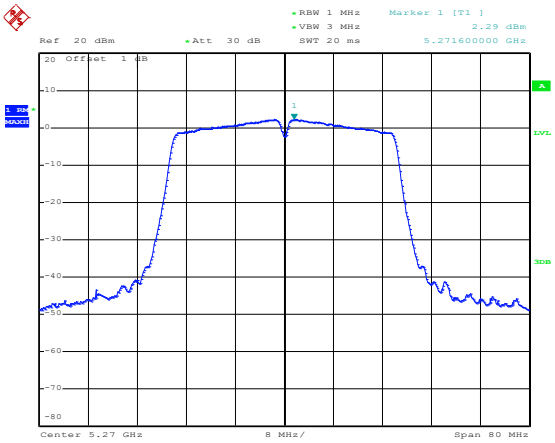
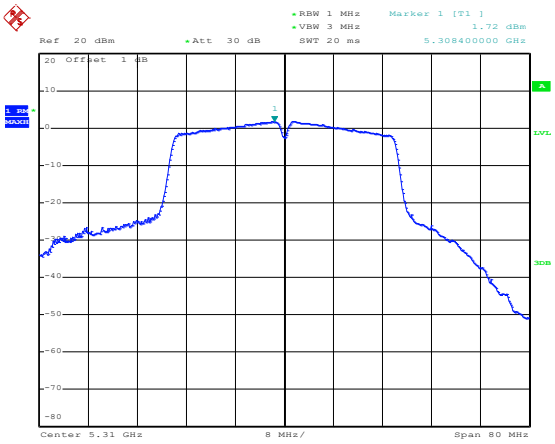
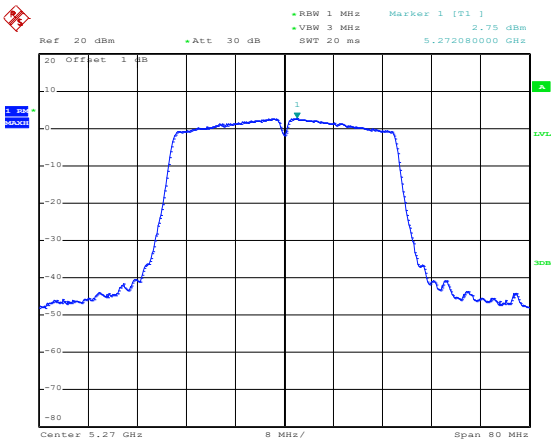
5260-5320MHz

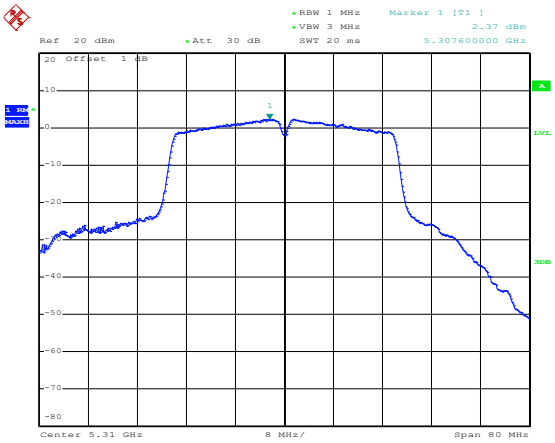
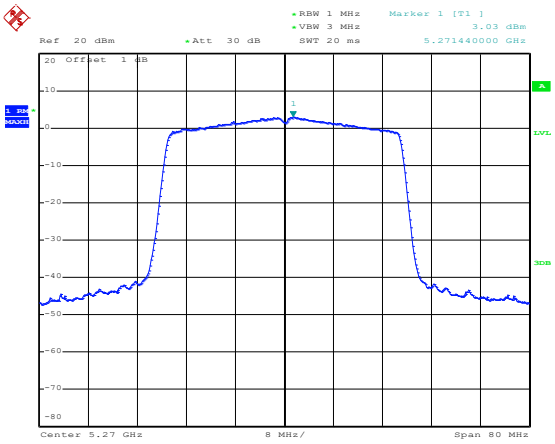
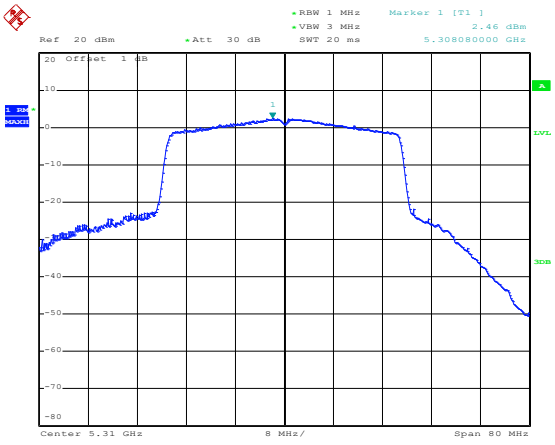
802.11a-Low	 Date: 5.DEC.2023 13:03:39
802.11a-Middle	 Date: 5.DEC.2023 13:03:58
802.11a-High	 Date: 5.DEC.2023 13:04:24

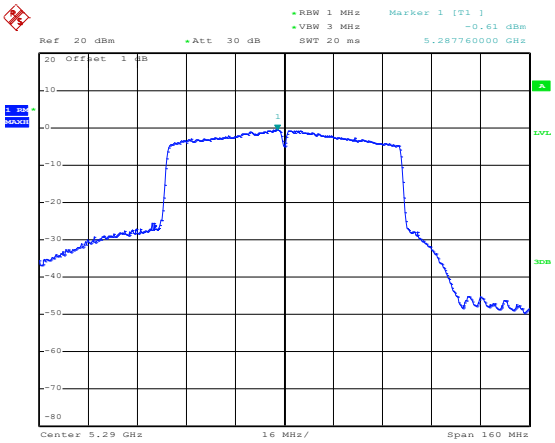
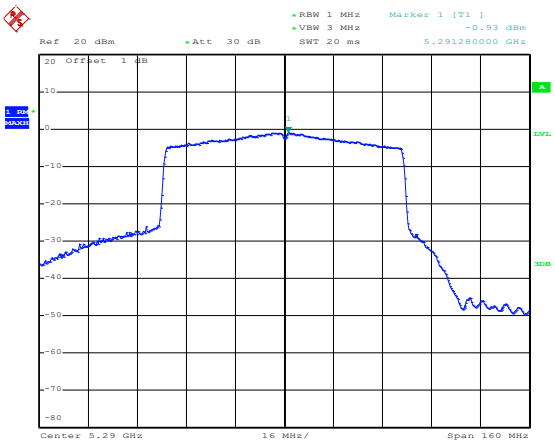
802.11n-HT20-Low	 Date: 5.DEC.2023 13:04:42
802.11n-HT20-Middle	 Date: 5.DEC.2023 13:05:08
802.11n-HT20-High	 Date: 5.DEC.2023 14:54:47

802.11ac-VHT20-Low	
802.11ac-VHT20-Middle	
802.11ac-VHT20-High	

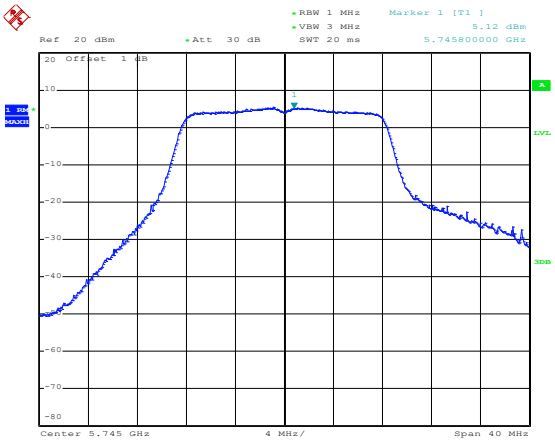
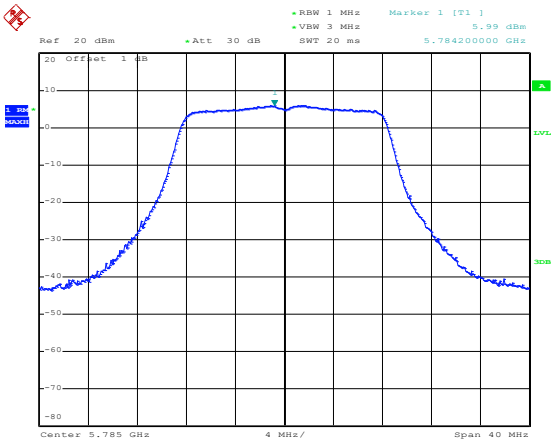
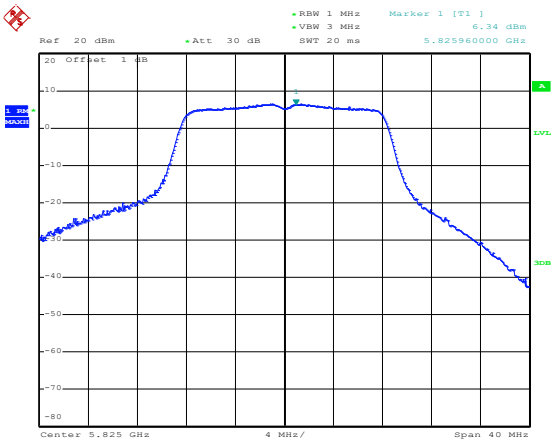
802.11ax-HE20-Low	 Date: 5.DEC.2023 14:58:40
802.11ax-HE20-Middle	 Date: 5.DEC.2023 14:57:52
802.11ax-HE20-High	 Date: 5.DEC.2023 14:59:19

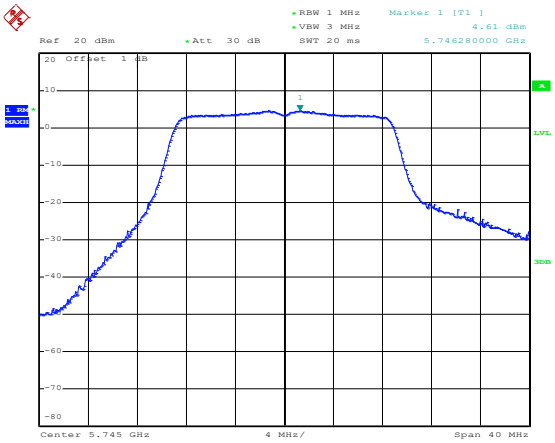
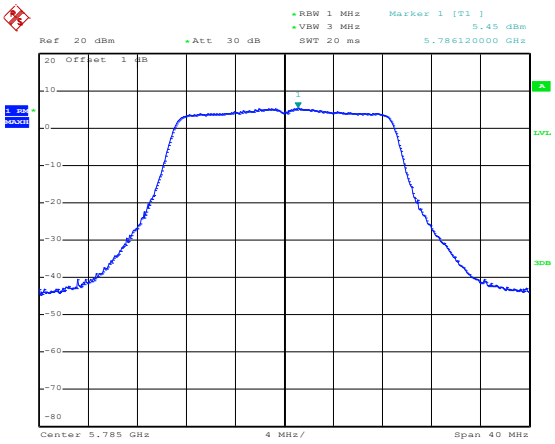
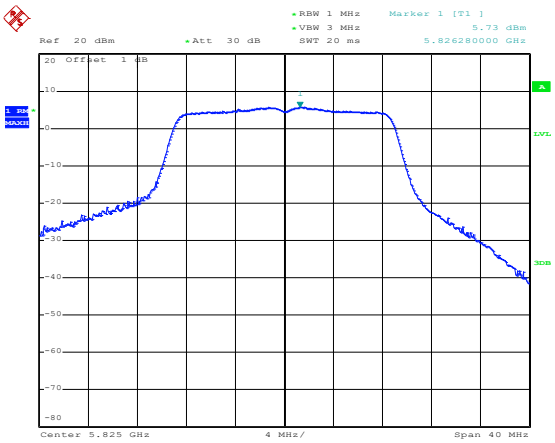
802.11n-HT40-Low	 Date: 5.DEC.2023 14:59:45
802.11n-HT40-High	 Date: 5.DEC.2023 14:59:57
802.11ac-VHT40-Low	 Date: 5.DEC.2023 15:00:20

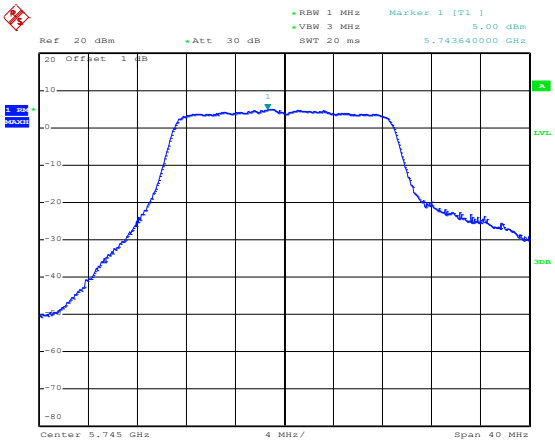
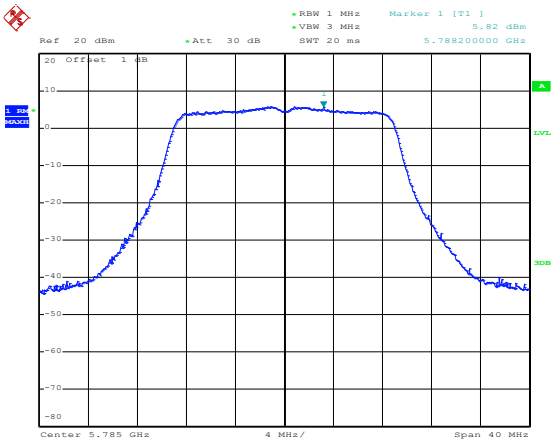
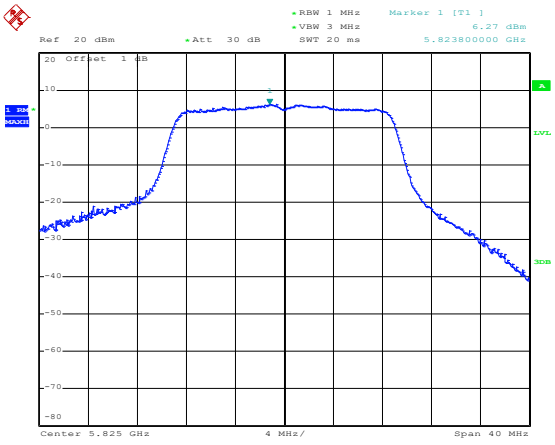
802.11ac-VHT40-High	 Date: 5.DEC.2023 15:00:49
802.11ax-HE40-Low	 Date: 5.DEC.2023 15:01:22
802.11ax-HE40-High	 Date: 5.DEC.2023 15:01:59

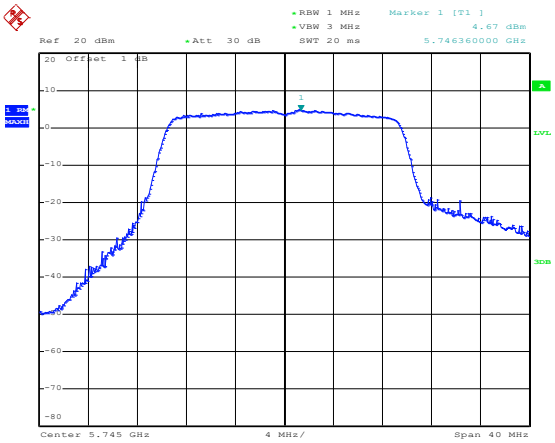
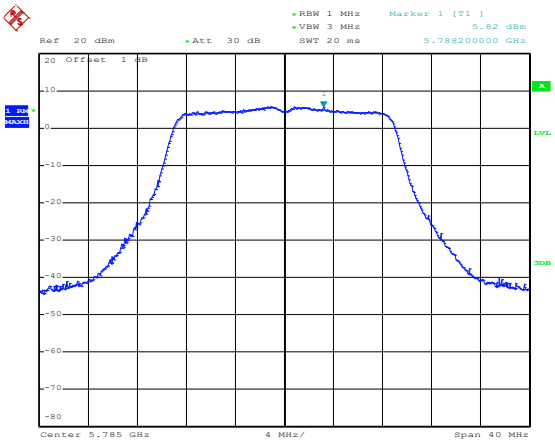
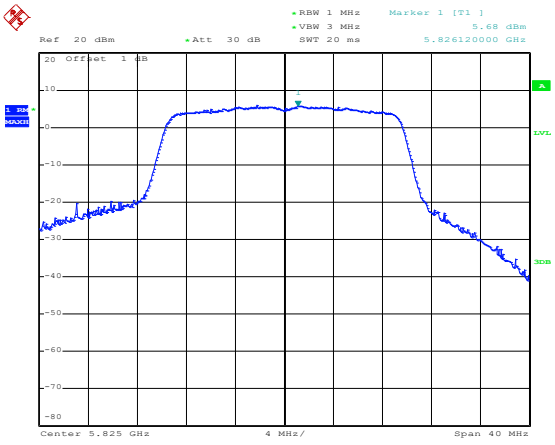
802.11ac-VHT80	
802.11ax-HE80	

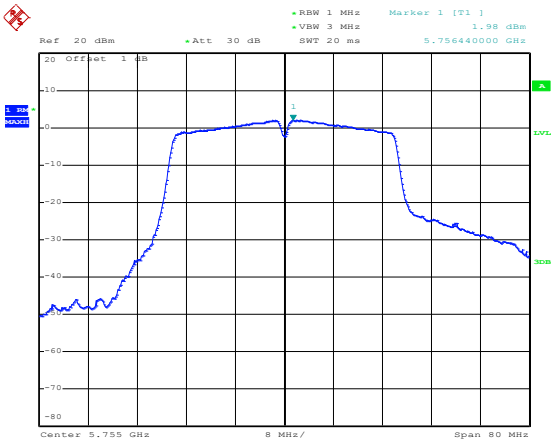
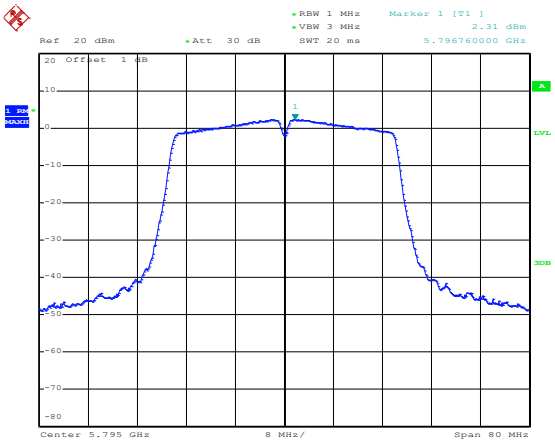
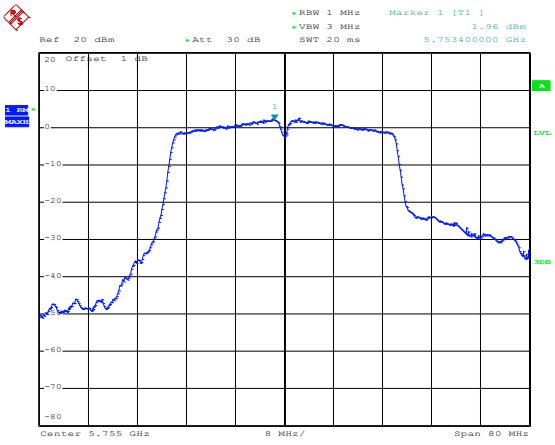
5745-5825MHz

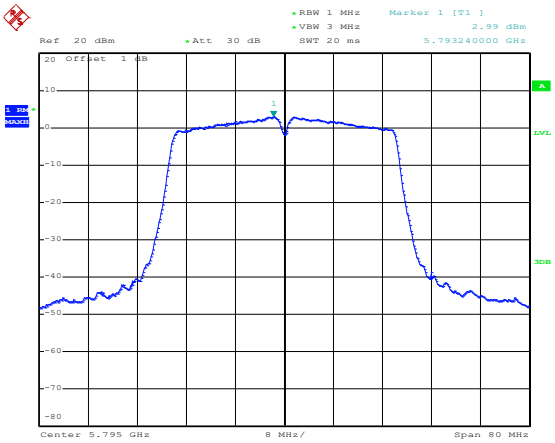
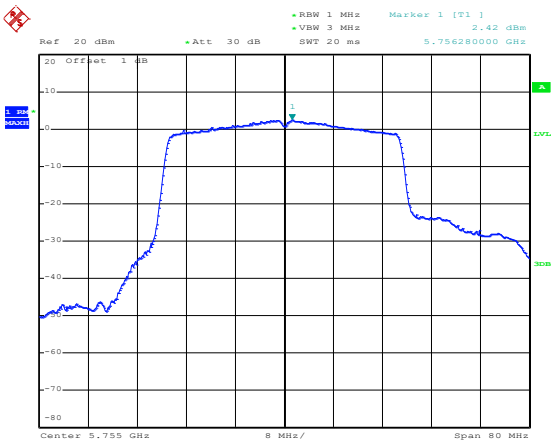
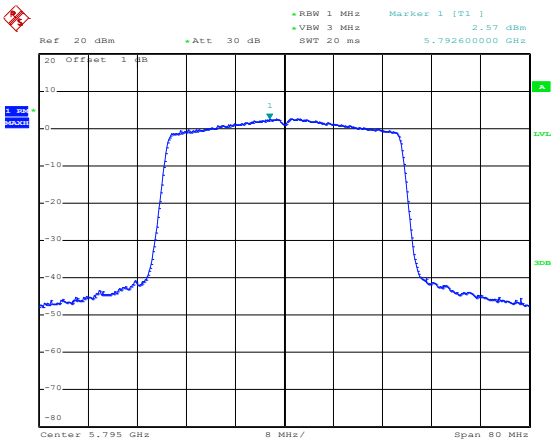
802.11a-Low	 Date: 5.DEC.2023 15:30:18
802.11a-Middle	 Date: 5.DEC.2023 15:30:27
802.11a-High	 Date: 5.DEC.2023 15:30:37

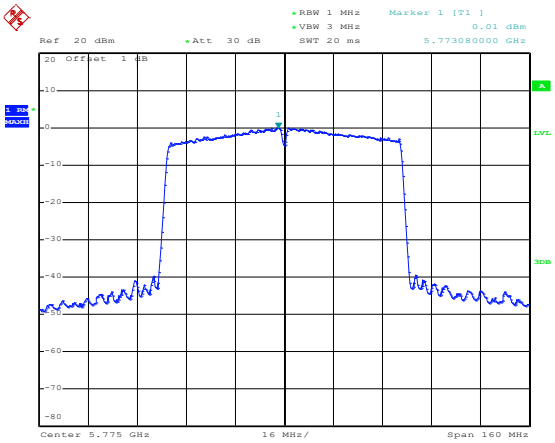
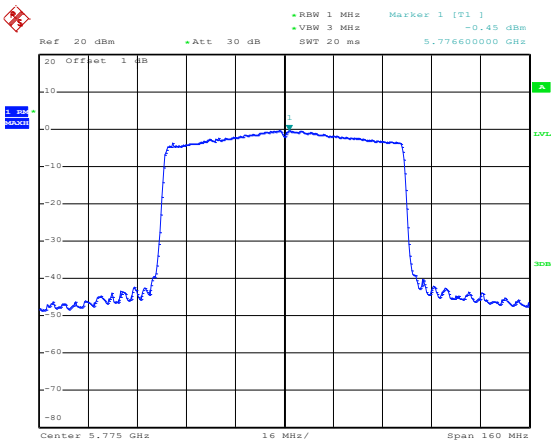
802.11n-HT20-Low	 Date: 5.DEC.2023 15:30:59
802.11n-HT20-Middle	 Date: 5.DEC.2023 15:31:11
802.11n-HT20-High	 Date: 5.DEC.2023 15:31:27

802.11ac-VHT20-Low	 Date: 5.DEC.2023 15:34:15
802.11ac-VHT20-Middle	 Date: 5.DEC.2023 15:34:25
802.11ac-VHT20-High	 Date: 5.DEC.2023 15:34:37

802.11ax-HE20-Low	 Date: 5.DEC.2023 15:34:52
802.11ax-HE20-Middle	 Date: 5.DEC.2023 15:34:25
802.11ax-HE20-High	 Date: 5.DEC.2023 15:35:20

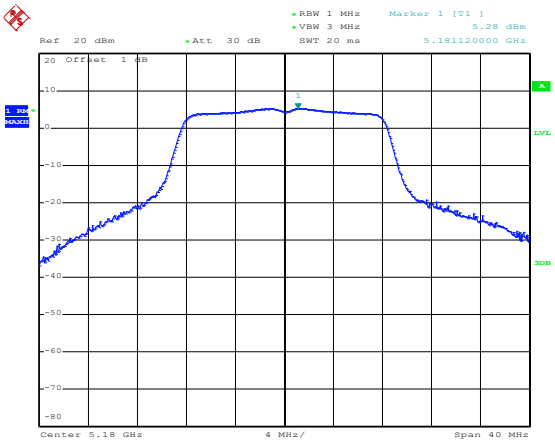
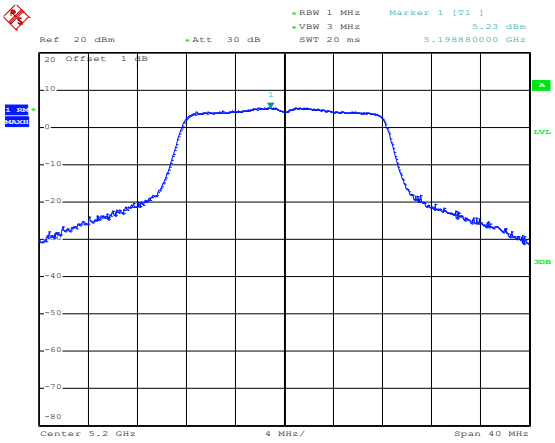
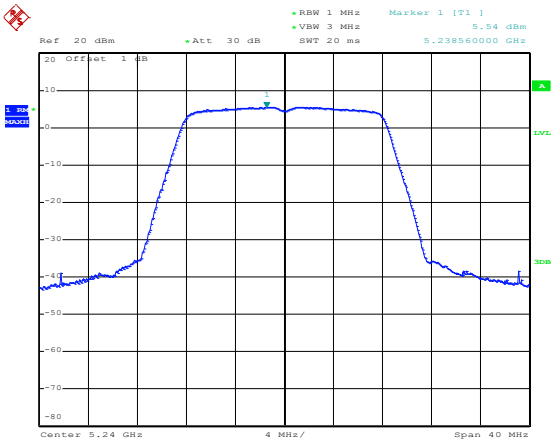
802.11n-HT40-Low	 Date: 5.DEC.2023 15:36:07
802.11n-HT40-High	 Date: 5.DEC.2023 15:36:20
802.11ac-VHT40-Low	 Date: 5.DEC.2023 15:36:40

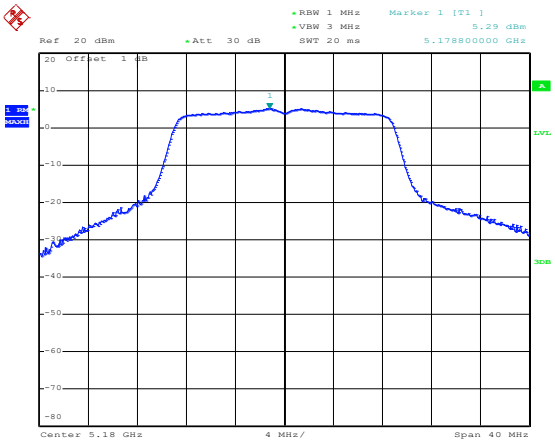
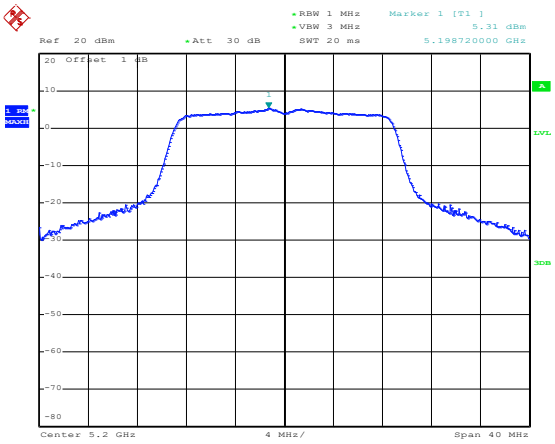
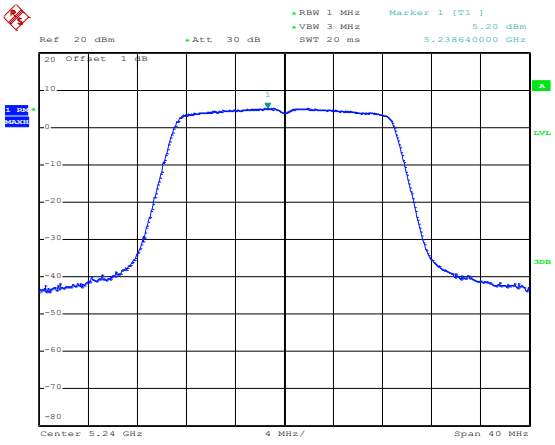
802.11ac-VHT40-High	
802.11ax-HE40-Low	
802.11ax-HE40-High	

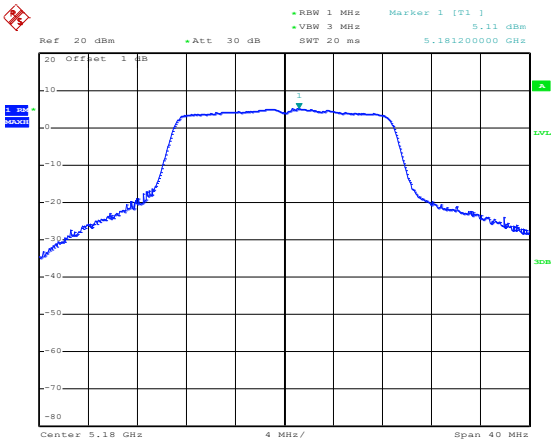
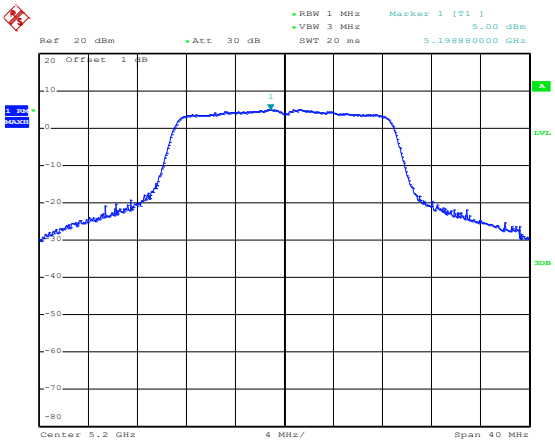
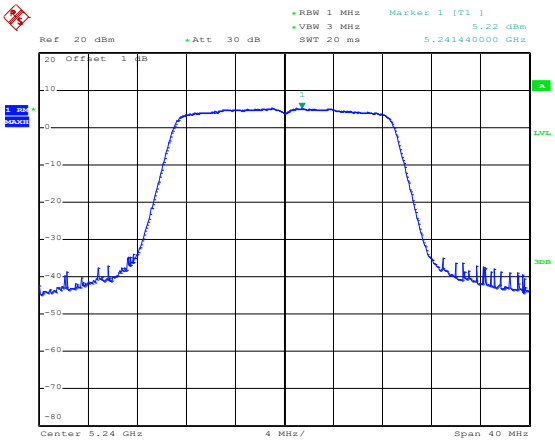
802.11ac-VHT80	 Date: 5.DEC.2023 15:38:24
802.11ax-HE80	 Date: 5.DEC.2023 15:38:37

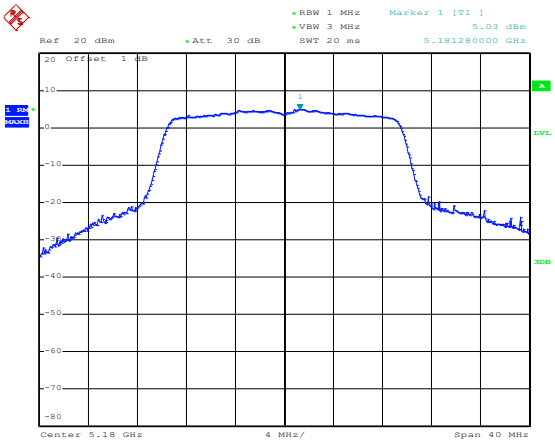
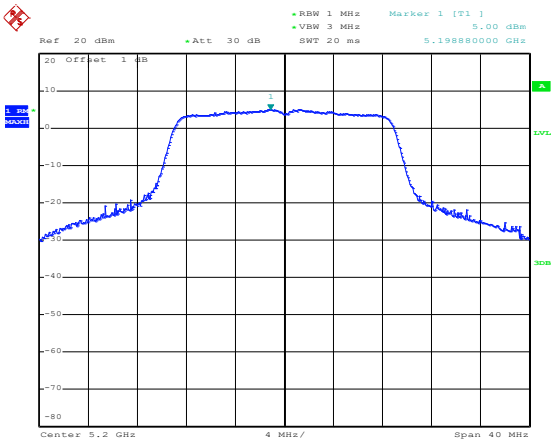
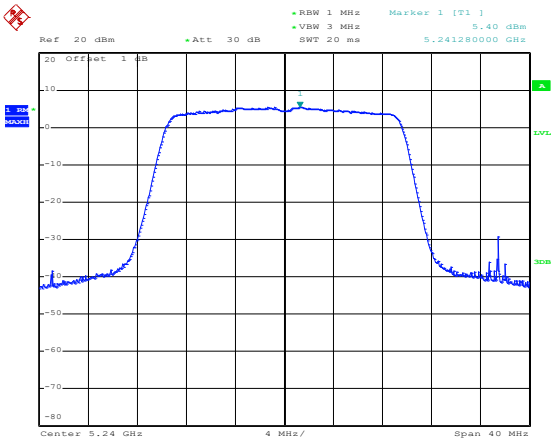
ANT 3

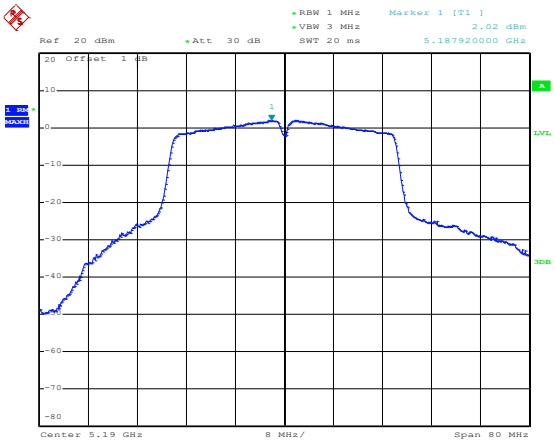
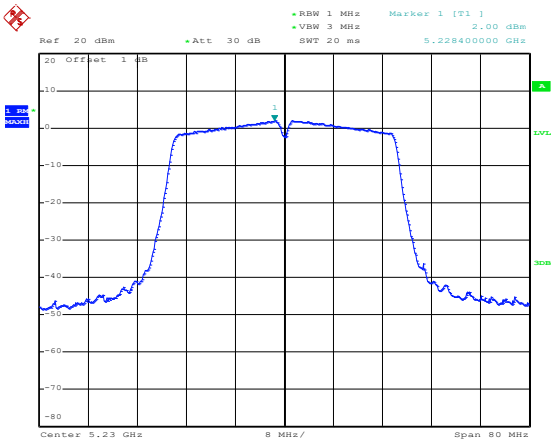
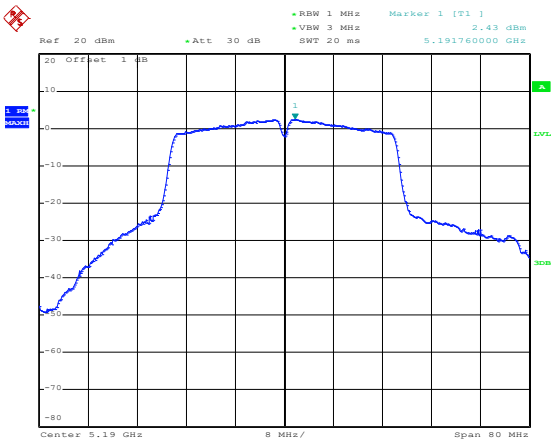
5180-5240MHz

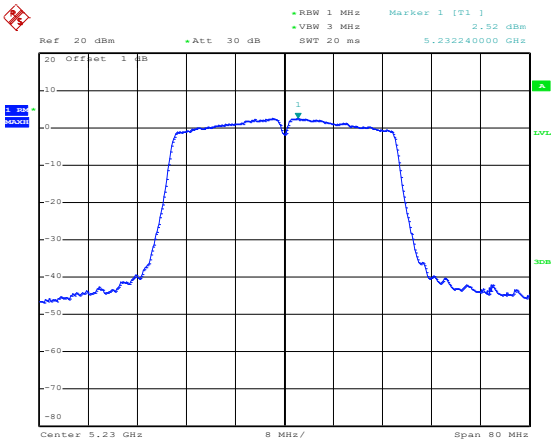
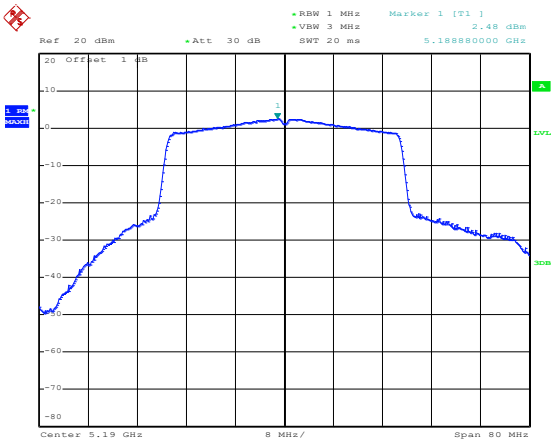
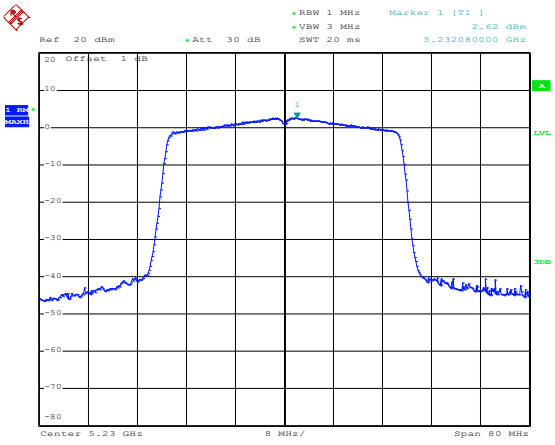
802.11a-Low	
802.11a-Middle	
802.11a-High	

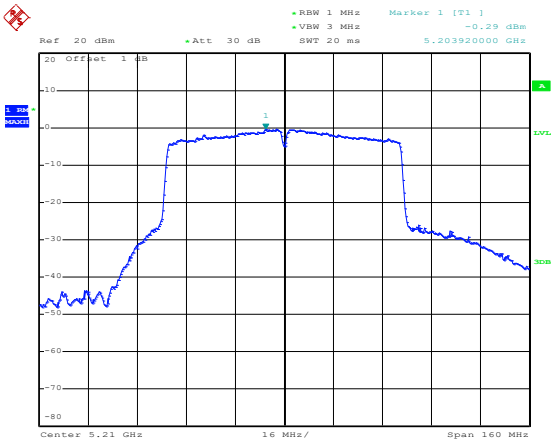
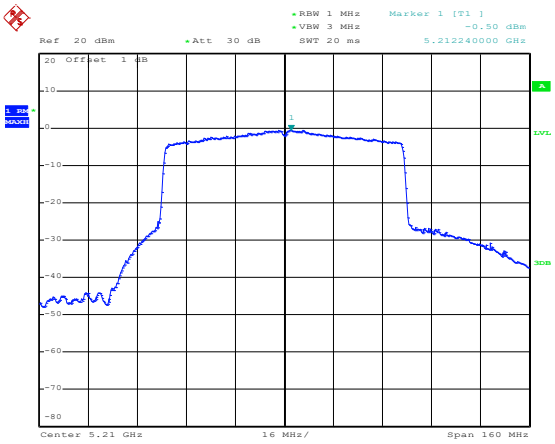
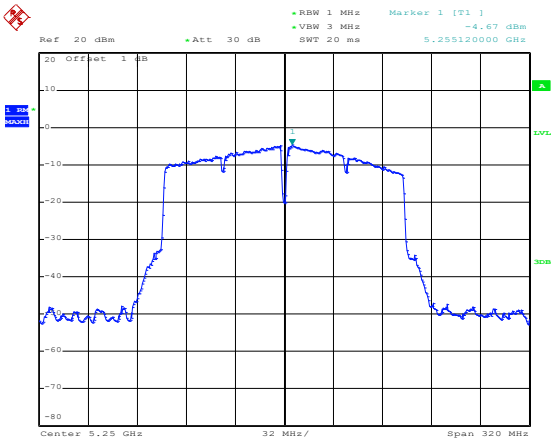
802.11n-HT20-Low	 Date: 7.DEC.2023 11:20:57
802.11n-HT20-Middle	 Date: 7.DEC.2023 11:21:22
802.11n-HT20-High	 Date: 7.DEC.2023 11:21:53

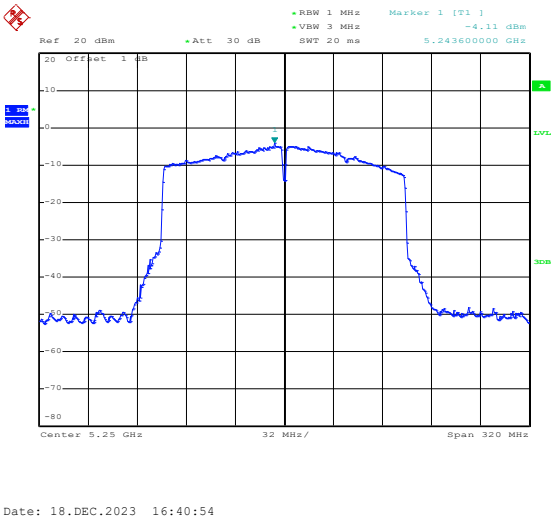
802.11ac-VHT20-Low	 Date: 7.DEC.2023 11:24:21
802.11ac-VHT20-Middle	 Date: 7.DEC.2023 11:24:35
802.11ac-VHT20-High	 Date: 7.DEC.2023 11:24:50

802.11ax-HE20-Low	 Date: 7.DEC.2023 11:25:15
802.11ax-HE20-Middle	 Date: 7.DEC.2023 11:24:35
802.11ax-HE20-High	 Date: 7.DEC.2023 11:26:46

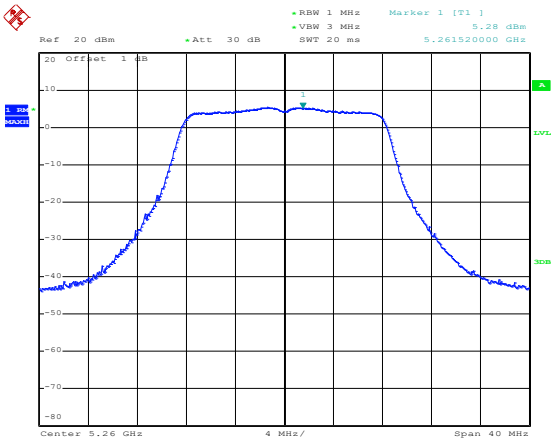
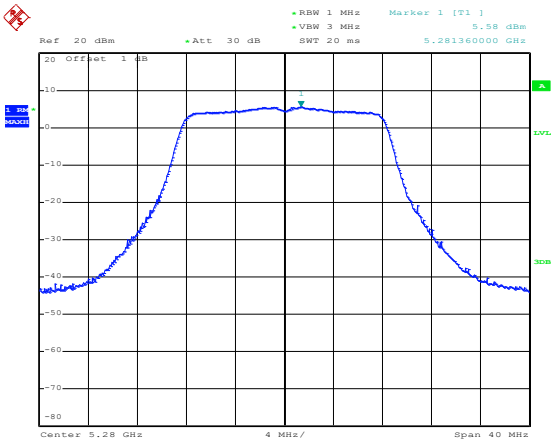
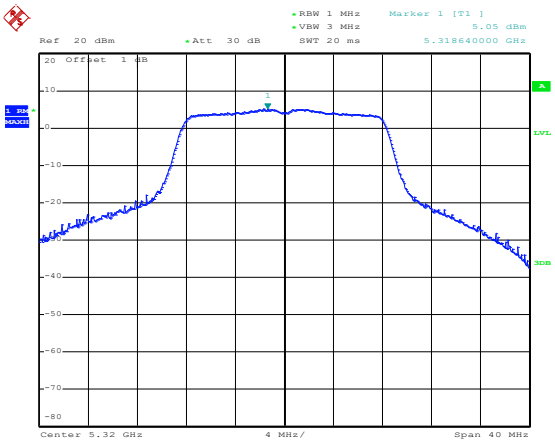
802.11n-HT40-Low	 Date: 7.DEC.2023 11:27:51
802.11n-HT40-High	 Date: 7.DEC.2023 11:28:10
802.11ac-VH40-Low	 Date: 7.DEC.2023 11:29:11

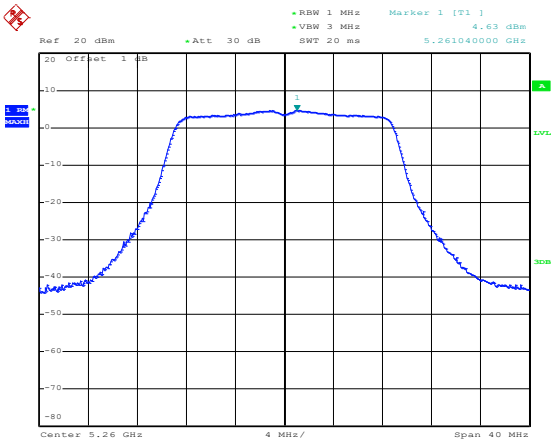
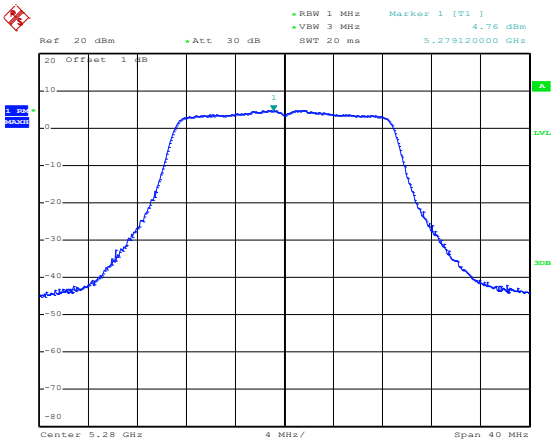
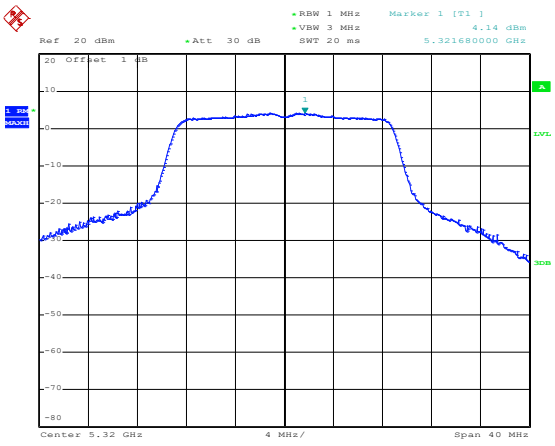
802.11ac-VHT40-High	 Date: 7.DEC.2023 11:30:34
802.11ax-HE40-Low	 Date: 7.DEC.2023 11:31:32
802.11ax-HE40-High	 Date: 7.DEC.2023 11:32:03

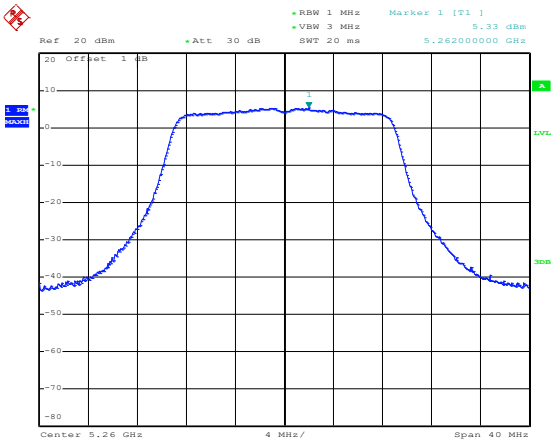
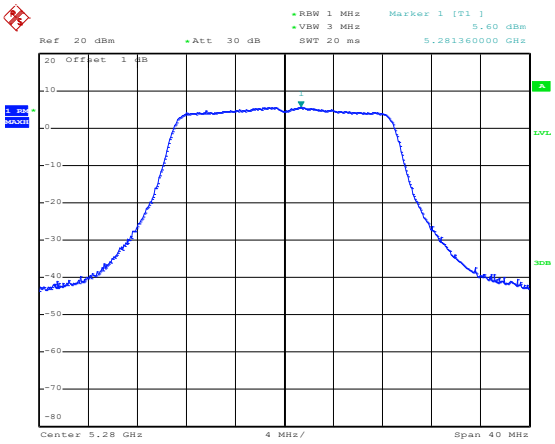
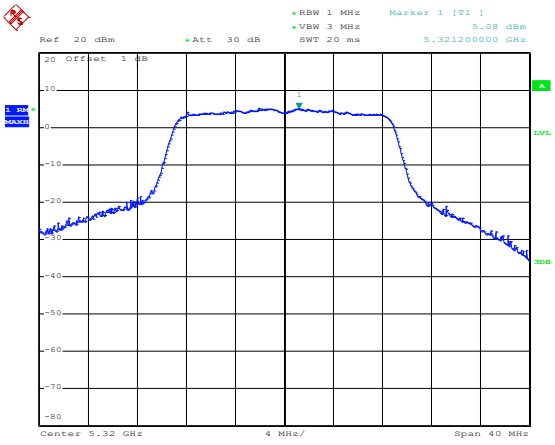
802.11ac-VHT80	 Date: 7.DEC.2023 11:32:40
802.11ax-HE80	 Date: 7.DEC.2023 11:33:54
802.11ac-VHT160	 Date: 18.DEC.2023 16:41:26

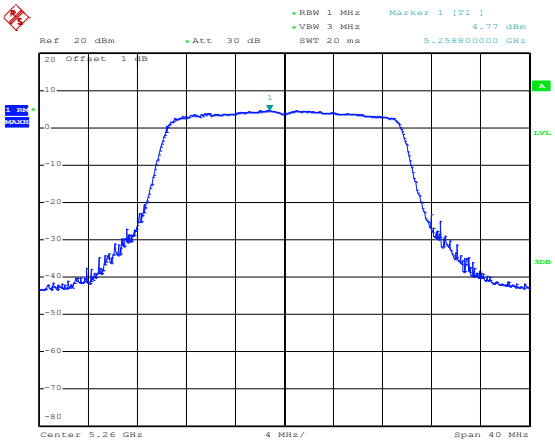
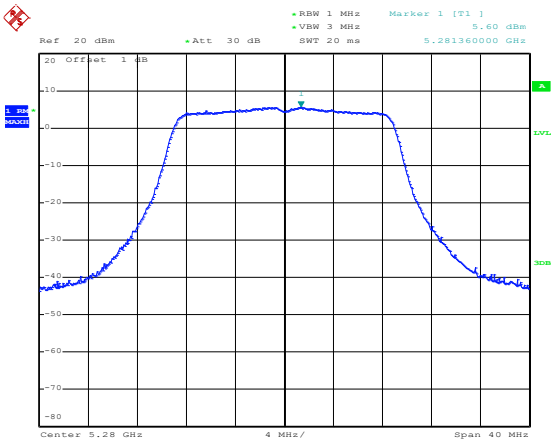
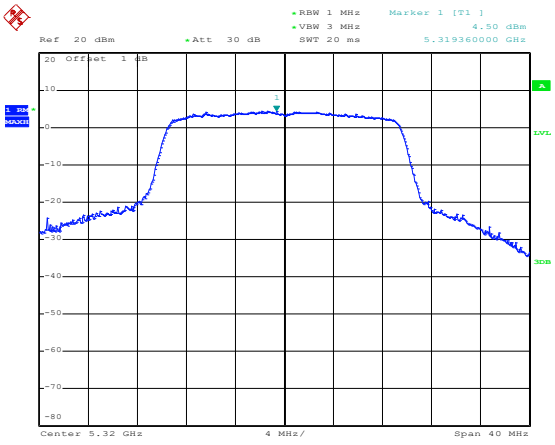
802.11ax-HE160	

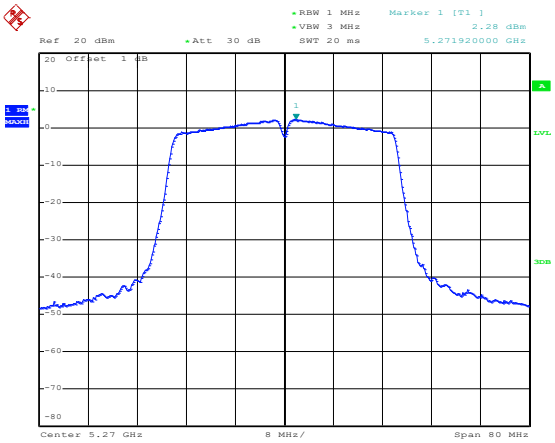
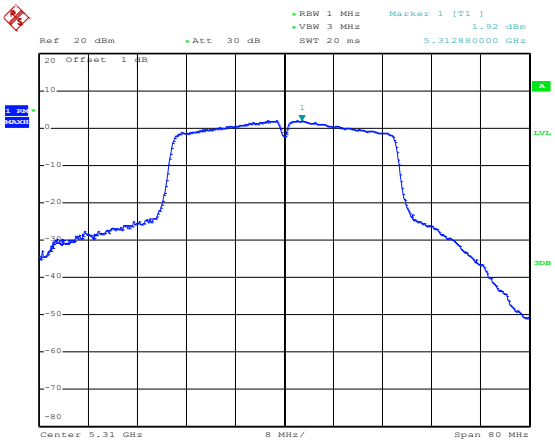
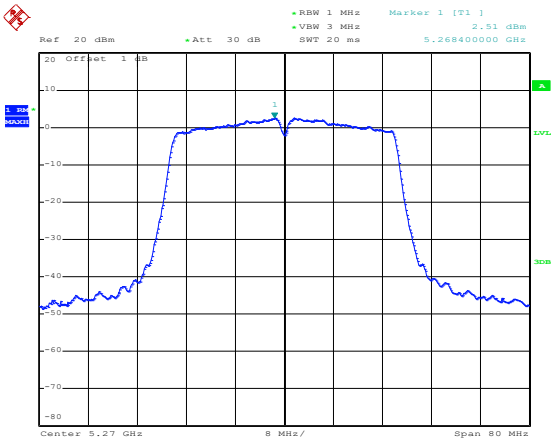
5260-5320MHz

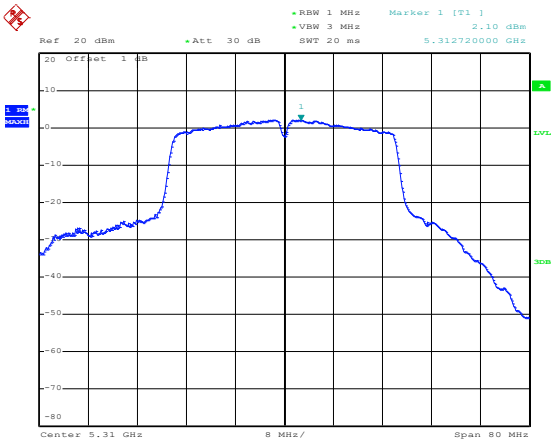
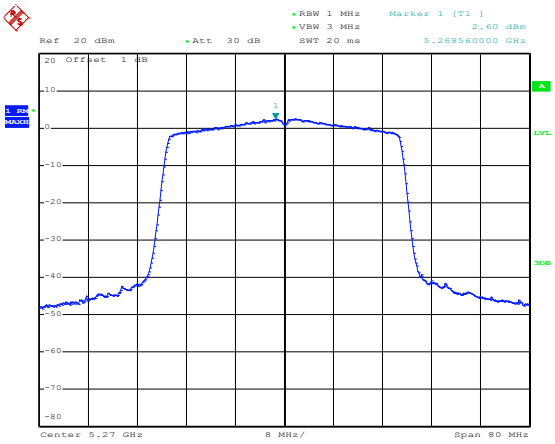
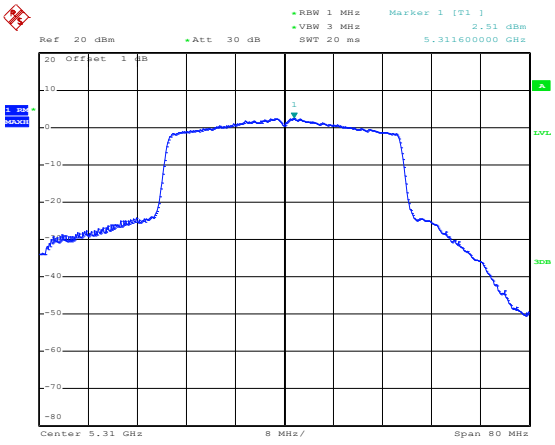
802.11a-Low	 Date: 7.DEC.2023 13:51:14
802.11a-Middle	 Date: 7.DEC.2023 13:51:27
802.11a-High	 Date: 7.DEC.2023 13:51:47

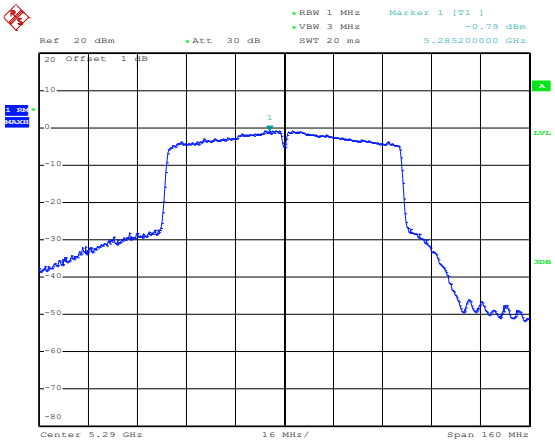
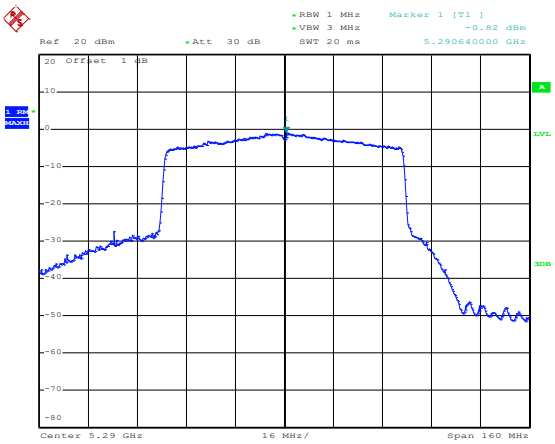
802.11n-HT20-Low	
802.11n-HT20-Middle	
802.11n-HT20-High	

802.11ac-VHT20-Low	 Date: 7.DEC.2023 13:53:06
802.11ac-VHT20-Middle	 Date: 7.DEC.2023 13:53:21
802.11ac-VHT20-High	 Date: 7.DEC.2023 13:53:39

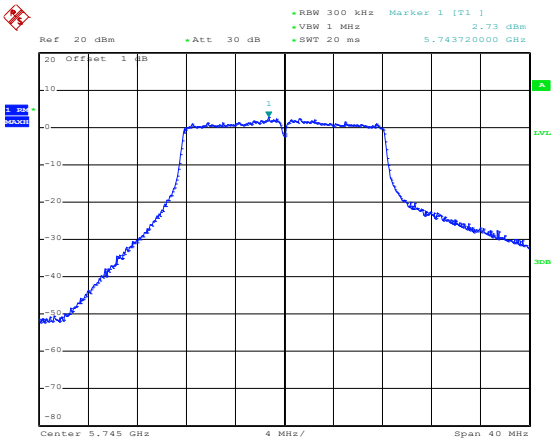
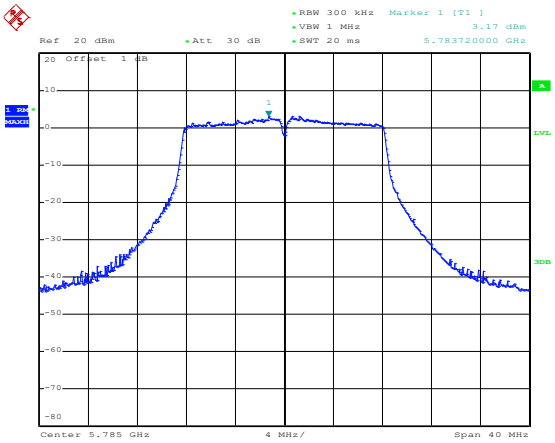
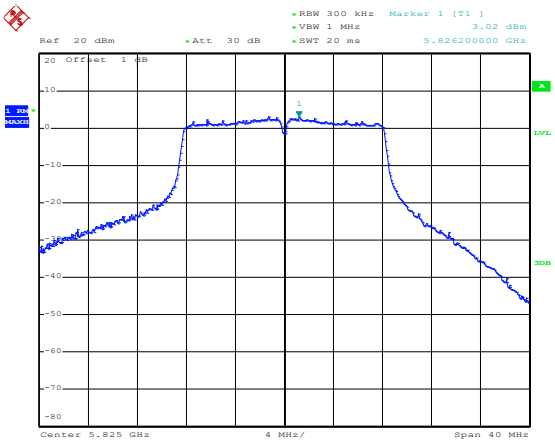
802.11ax-HE20-Low	 Date: 7.DEC.2023 13:54:02
802.11ax-HE20-Middle	 Date: 7.DEC.2023 13:53:21
802.11ax-HE20-High	 Date: 7.DEC.2023 13:54:33

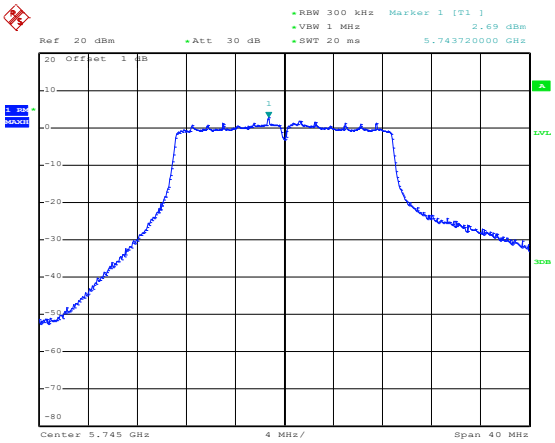
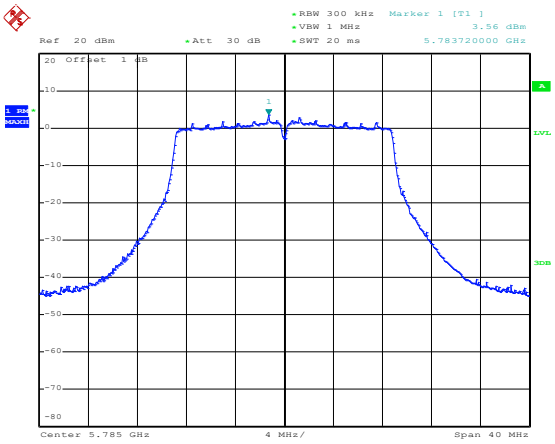
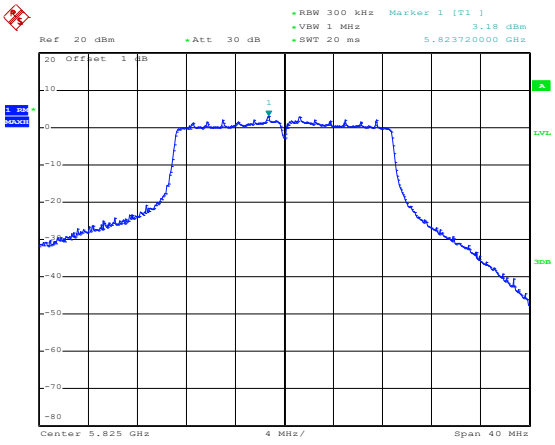
802.11n-HT40-Low	 Date: 7.DEC.2023 13:55:00
802.11n-HT40-High	 Date: 7.DEC.2023 13:55:16
802.11ac-VHT40-Low	 Date: 7.DEC.2023 13:55:37

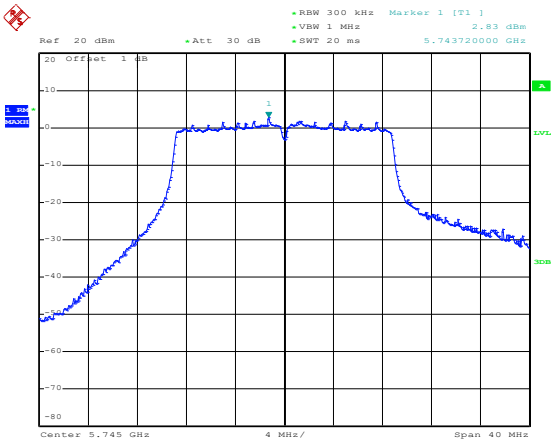
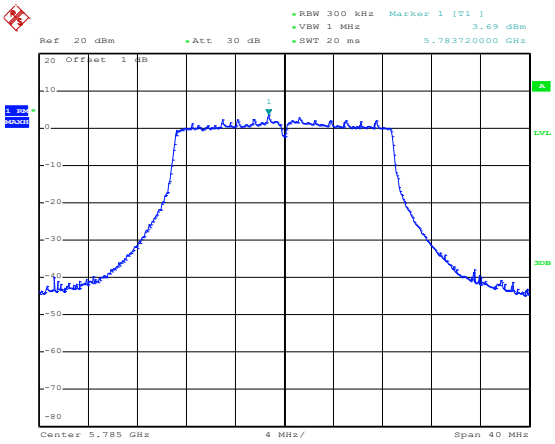
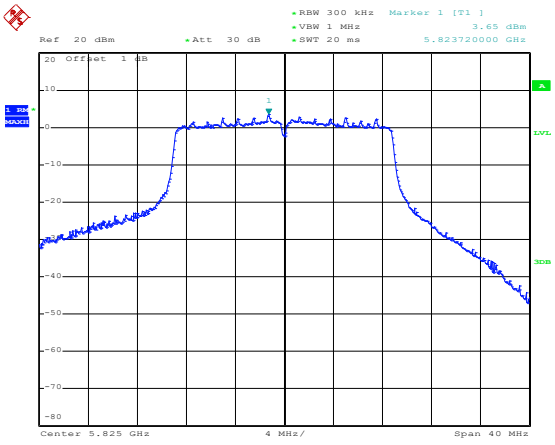
802.11ac-VHT40-High	 Date: 7.DEC.2023 13:55:52
802.11ax-HE40-Low	 Date: 7.DEC.2023 13:56:07
802.11ax-HE40-High	 Date: 7.DEC.2023 13:56:20

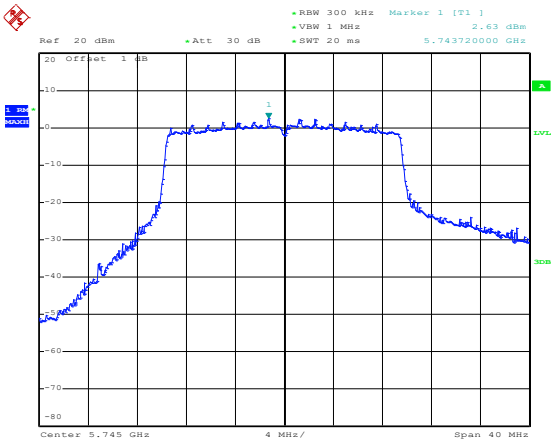
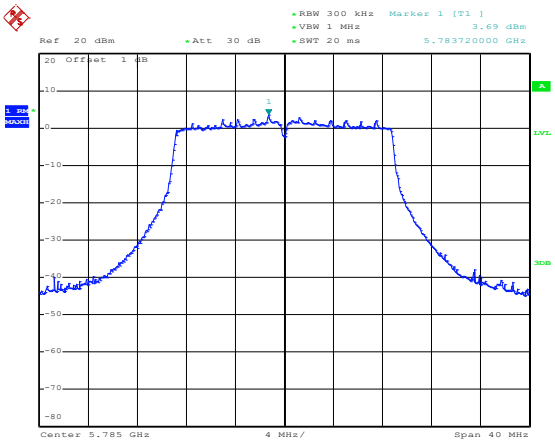
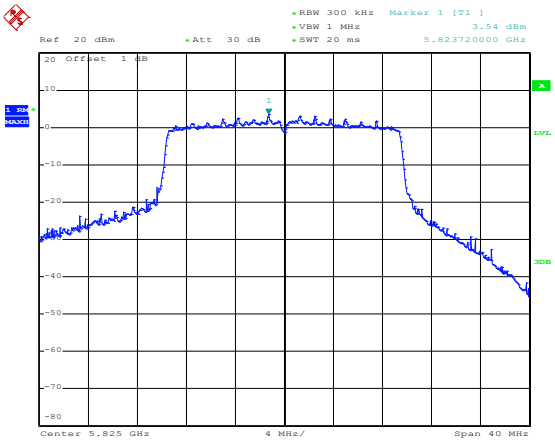
802.11ac-VHT80	
802.11ax-HE80	

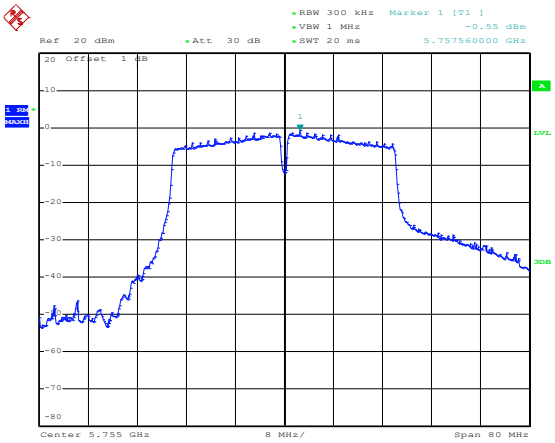
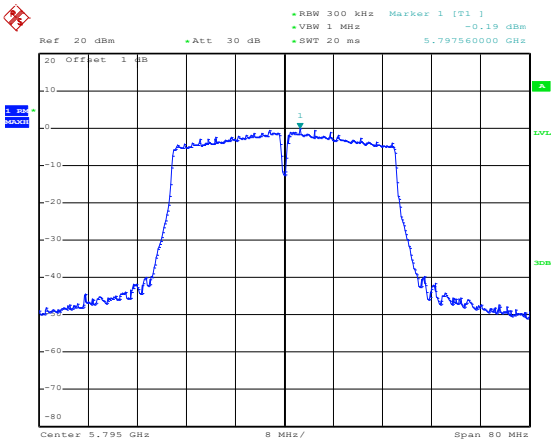
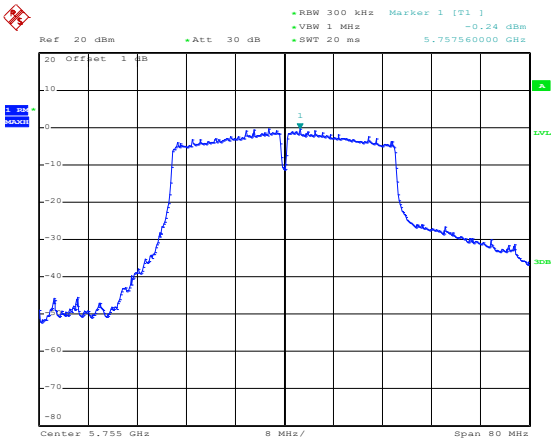
5745-5825MHz

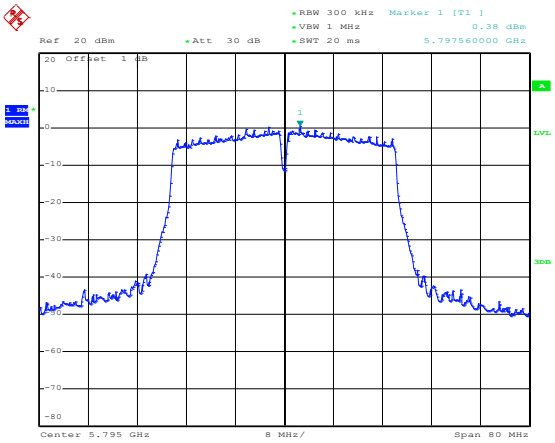
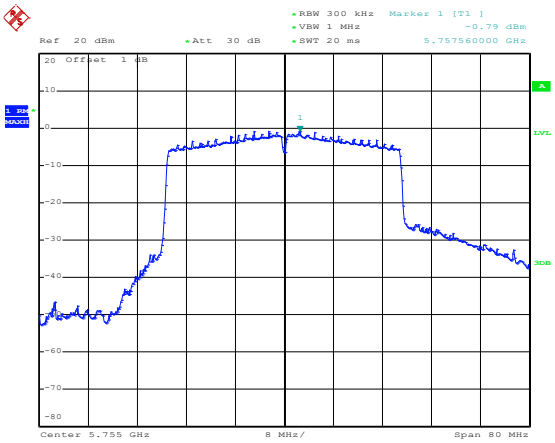
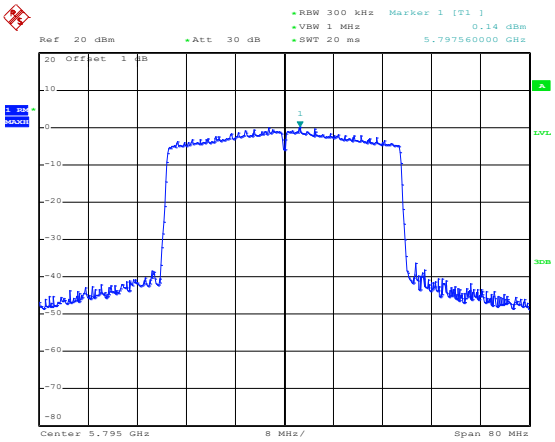
802.11a-Low	 Date: 7.DEC.2023 14:47:18
802.11a-Middle	 Date: 7.DEC.2023 14:48:11
802.11a-High	 Date: 7.DEC.2023 14:49:08

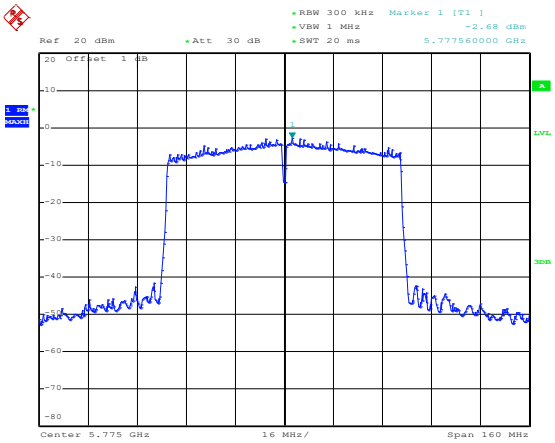
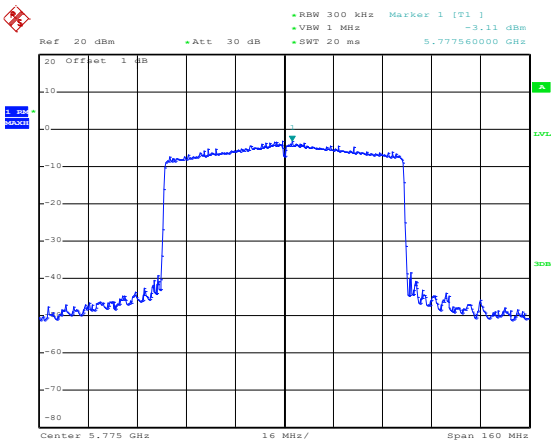
802.11n-HT20-Low	 Date: 7.DEC.2023 14:50:23
802.11n-HT20-Middle	 Date: 7.DEC.2023 14:51:03
802.11n-HT20-High	 Date: 7.DEC.2023 14:51:36

802.11ac-VHT20-Low	 Date: 7.DEC.2023 14:52:33
802.11ac-VHT20-Middle	 Date: 7.DEC.2023 14:53:08
802.11ac-VHT20-High	 Date: 7.DEC.2023 14:53:39

802.11ax-HE20-Low	 Date: 7.DEC.2023 14:54:21
802.11ax-HE20-Middle	 Date: 7.DEC.2023 14:53:08
802.11ax-HE20-High	 Date: 7.DEC.2023 14:56:05

802.11n-HT40-Low	 Date: 7.DEC.2023 14:56:43
802.11n-HT40-High	 Date: 7.DEC.2023 14:56:59
802.11ac-VHT40-Low	 Date: 7.DEC.2023 15:03:24

802.11ac-VHT40-High	 Date: 7.DEC.2023 15:03:45
802.11ax-HE40-Low	 Date: 7.DEC.2023 15:04:12
802.11ax-HE40-High	 Date: 7.DEC.2023 15:05:05

802.11ac-VHT80	
802.11ax-HE80	

APPENDIX B

Emission Bandwidth and Occupied Bandwidth

U-NII-1:5180-5240MHz								
Test Mode	Test Channel MHz	ANT 1		ANT 2		ANT 3		Result
		26 dB Bandwidth MHz	99% Bandwidth MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	
802.11a	5180	28.08	17.76	24.80	17.60	26.80	17.44	Pass
	5200	26.76	17.60	27.00	17.36	25.90	17.36	Pass
	5240	20.64	16.96	20.50	17.12	20.60	17.04	Pass
802.11n-VHT20	5180	29.40	18.24	27.40	18.56	27.80	18.48	Pass
	5200	30.72	18.24	28.10	18.64	26.60	18.56	Pass
	5240	20.88	17.92	20.80	18.08	20.80	18.00	Pass
802.11ac-VHT20	5180	32.40	18.56	25.00	18.24	27.20	18.32	Pass
	5200	36.76	18.64	25.90	18.24	27.40	18.40	Pass
	5240	20.88	18.08	20.60	17.76	20.80	17.84	Pass
802.11ax-HE20	5180	27.12	19.36	24.00	19.36	24.10	19.28	Pass
	5200	26.76	18.64	25.90	18.24	27.40	18.40	Pass
	5240	20.40	19.88	20.20	18.88	20.20	18.88	Pass
802.11n-HT40	5190	44.20	37.28	44.80	37.12	43.40	37.28	Pass
	5230	40.60	36.80	40.60	36.80	40.60	36.80	Pass
802.11ac-VHT40	5190	44.20	37.44	42.00	37.44	41.80	37.28	Pass
	5230	40.80	36.80	40.40	36.64	40.20	36.64	Pass
802.11ax-HE40	5190	40.00	38.24	40.00	38.08	40.20	38.08	Pass
	5230	39.60	37.76	39.80	37.92	39.60	37.76	Pass
802.11ac-VHT80	5210	101.16	77.44	84.96	77.12	97.20	77.44	Pass
802.11ax-HE80	5210	71.72	78.72	83.16	79.36	82.80	79.36	Pass
802.11ac-VHT160	5250	169.40	154.24	166.60	154.88	162.40	153.60	Pass
802.11ax-HE160	5250	167.30	156.24	170.80	156.16	161.70	154.88	Pass

U-NII-2A: 5250-5350MHz								
Test Mode	Test Channel MHz	ANT 1		ANT 2		ANT 3		Result
		26 dB Bandwidth MHz	99% Bandwidth MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	
802.11a	5260	21.40	16.88	21.70	16.88	21.40	16.88	Pass
	5280	21.80	16.80	21.80	16.88	21.90	16.96	Pass
	5320	24.90	17.36	24.50	17.28	27.50	17.44	Pass
802.11n-HT20	5260	22.80	18.00	22.10	18.00	22.50	18.00	Pass
	5280	22.70	18.00	22.90	17.92	22.70	18.08	Pass
	5320	26.80	18.40	27.90	18.32	30.30	18.48	Pass
802.11ac-VHT20	5260	22.60	18.00	21.70	17.84	22.00	17.84	Pass
	5280	22.70	18.00	21.80	17.76	22.40	17.84	Pass
	5320	27.00	18.56	25.90	18.16	29.00	18.48	Pass
802.11ax-HE20	5260	22.80	19.20	22.50	19.12	22.10	19.12	Pass
	5280	22.70	18.00	21.80	17.76	22.40	17.84	Pass
	5320	23.20	19.28	27.30	19.44	25.10	19.28	Pass
802.11n-HT40	5270	40.80	37.28	40.48	36.80	40.60	36.80	Pass
	5310	42.60	37.76	42.40	37.12	43.20	37.44	Pass
802.11ac-VHT40	5270	40.40	36.80	40.00	36.80	40.40	36.48	Pass
	5310	45.40	37.44	42.20	37.28	42.20	37.12	Pass
802.11ax-HE40	5270	39.60	36.80	39.60	37.76	39.60	37.76	Pass
	5310	41.40	38.24	40.20	38.24	40.40	38.24	Pass
802.11ac-VHT80	5290	94.40	77.12	90.72	77.44	86.76	77.12	Pass
802.11ax-HE80	5290	88.40	78.72	82.80	79.36	84.96	78.40	Pass

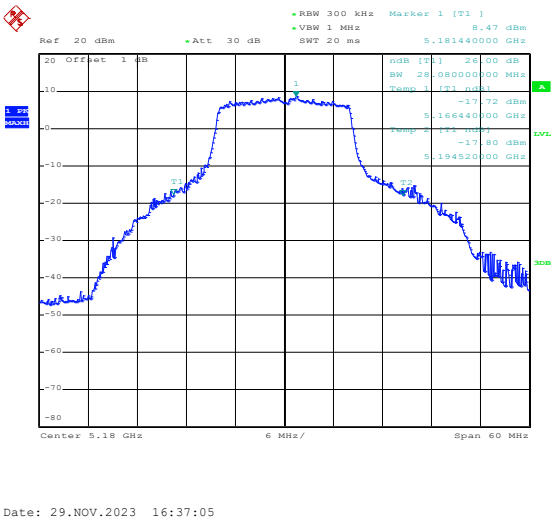
U-NII-3: 5725-5850MHz								
Test Mode	Test Channel MHz	ANT 1		ANT 2		ANT 3		Result
		6 dB Bandwidth MHz	99% Bandwidth MHz	6 dB Bandwidth MHz	99% Bandwidth MHz	6 dB Bandwidth MHz	99% Bandwidth MHz	
802.11a	5745	16.48	17.44	16.48	17.12	16.48	17.44	≥500
	5785	16.48	16.96	16.48	16.80	16.48	16.80	≥500
	5825	16.48	17.20	16.48	16.88	16.48	17.28	≥500
802.11n-HT20	5745	17.76	18.32	17.76	18.24	17.76	18.24	≥500
	5785	17.68	18.08	17.76	18.00	17.52	18.00	≥500

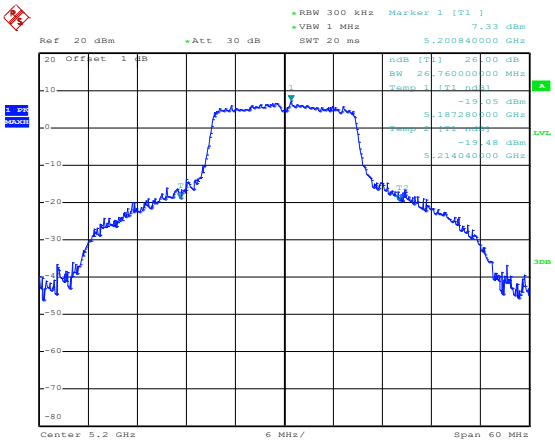
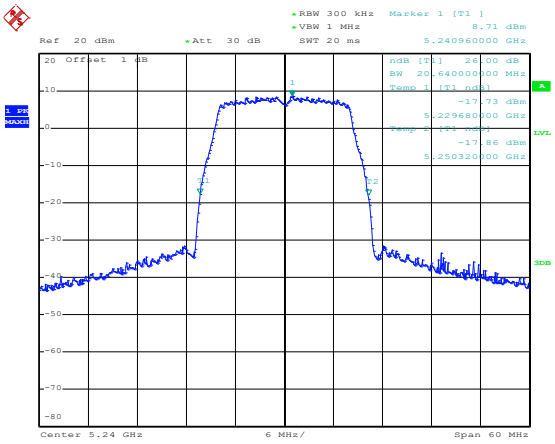
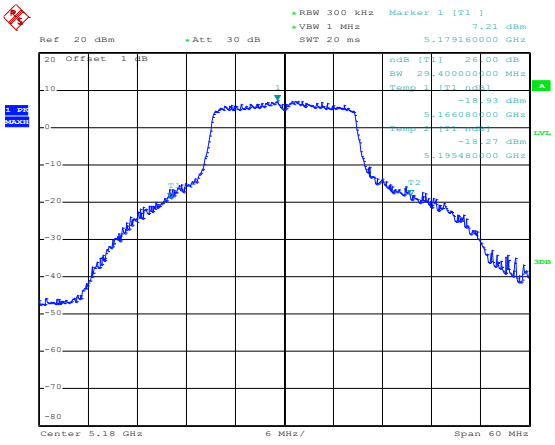
	5825	17.68	18.40	17.76	18.24	17.60	18.32	≥500
802.11ac-VHT20	5745	17.76	18.32	17.76	18.16	17.76	18.08	≥500
	5785	17.76	18.00	17.76	17.76	17.76	17.92	≥500
	5825	17.68	18.24	17.76	18.08	17.68	18.08	≥500
802.11ax-HE20	5745	19.12	19.28	19.12	19.20	19.12	19.28	≥500
	5785	17.76	18.00	17.76	17.76	17.76	17.92	≥500
	5825	19.20	19.28	19.20	18.12	19.12	19.28	≥500
802.11n-HT40	5755	35.52	37.60	35.52	37.12	35.52	37.12	≥500
	5795	35.52	37.12	35.52	36.64	35.52	36.80	≥500
802.11ac-VHT40	5755	35.52	37.12	36.00	37.12	35.52	37.12	≥500
	5795	35.52	36.96	35.20	36.80	35.52	36.64	≥500
802.11ax-HE40	5755	37.76	38.24	37.76	38.24	36.64	38.08	≥500
	5795	37.28	37.92	37.92	37.92	37.28	37.92	≥500
802.11ac-VHT80	5775	76.16	76.16	76.16	76.48	76.16	76.16	≥500
802.11ax-HE80	5775	76.16	78.08	76.16	77.76	76.16	78.08	≥500

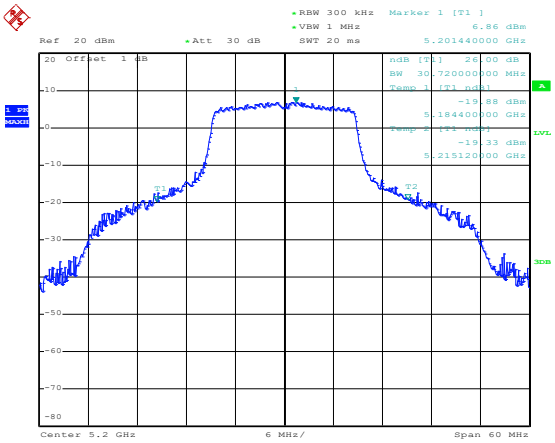
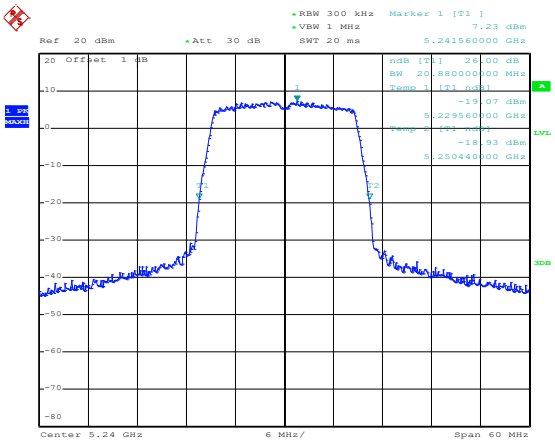
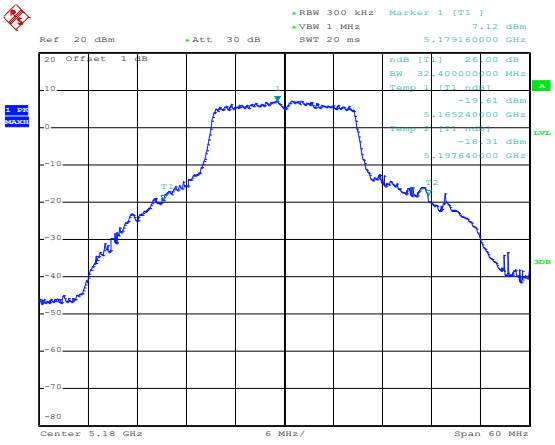
26 dB Bandwidth

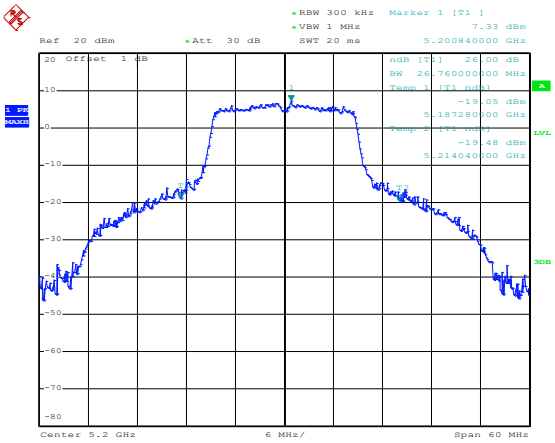
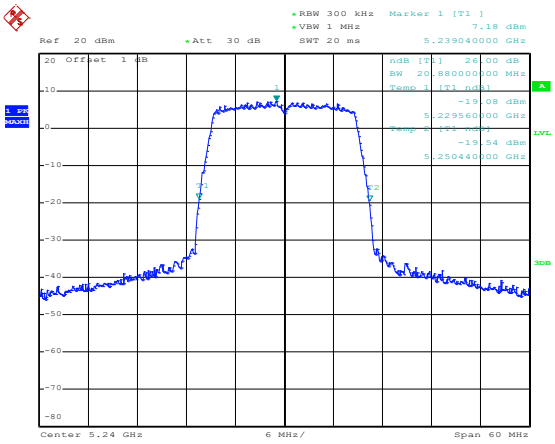
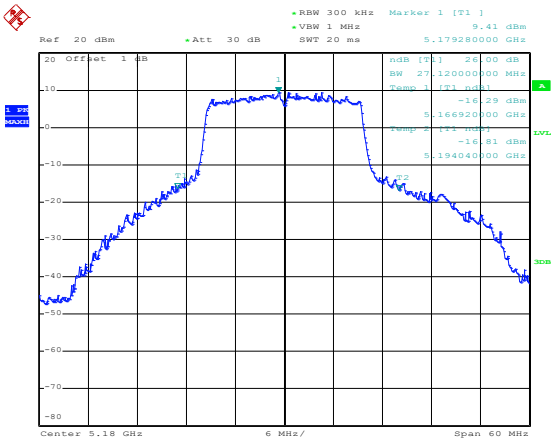
ANT 1

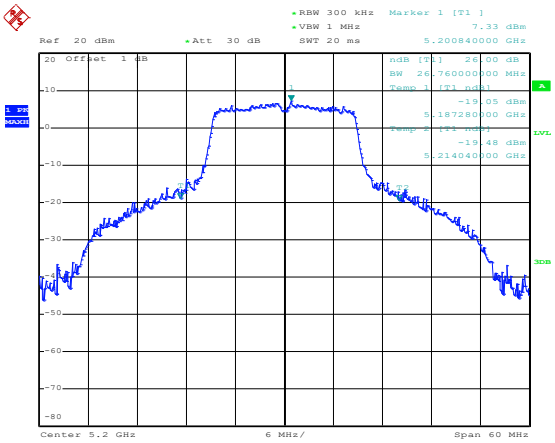
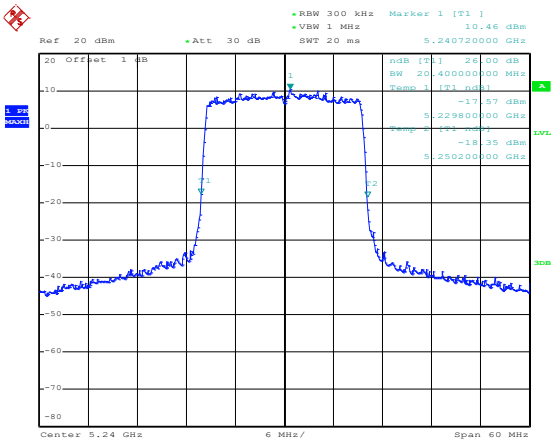
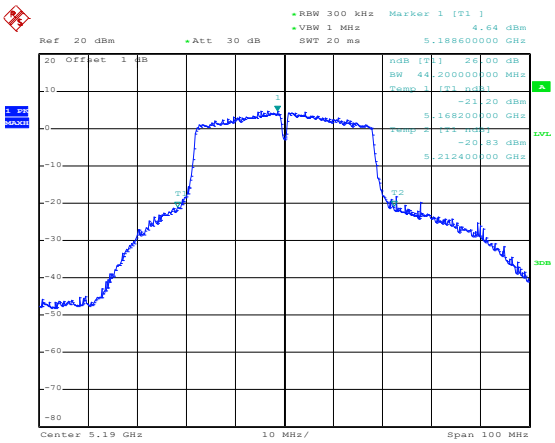
5180-5240MHz

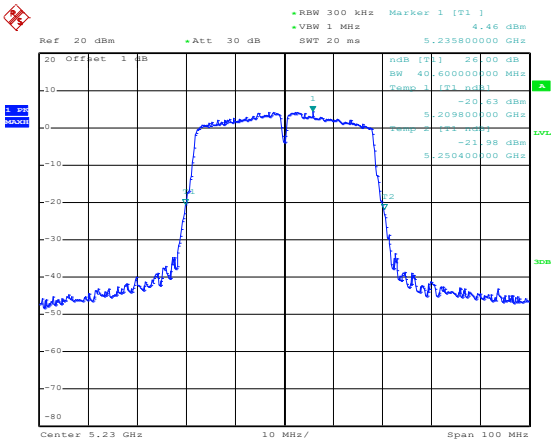
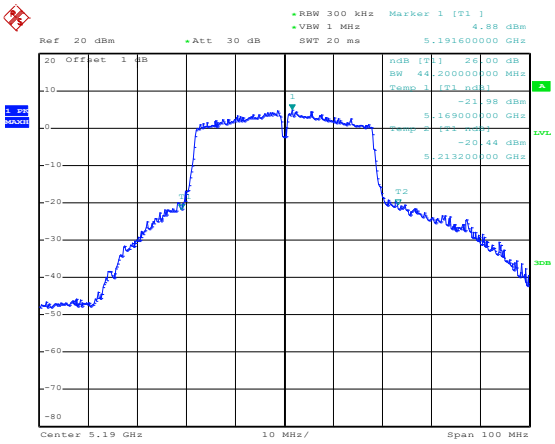
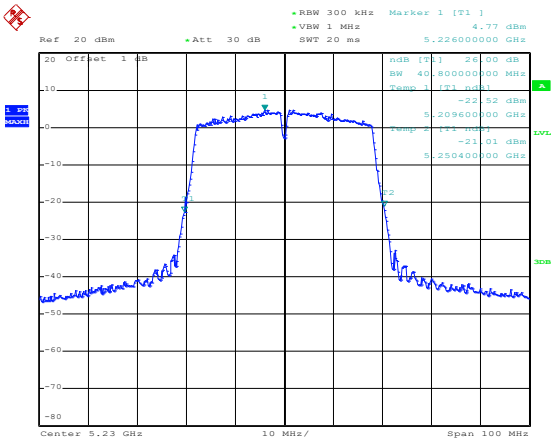
802.11a-Low	

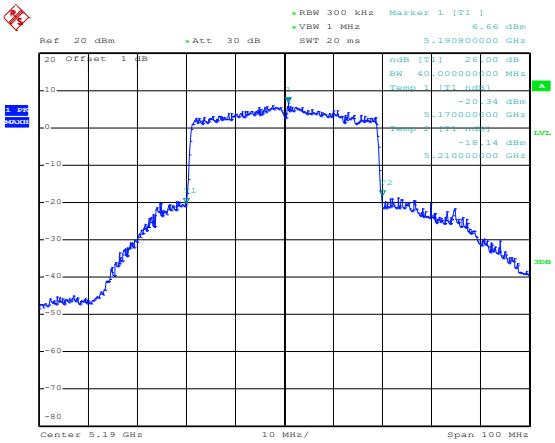
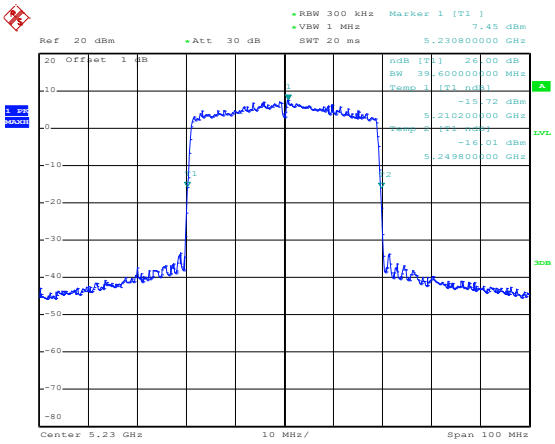
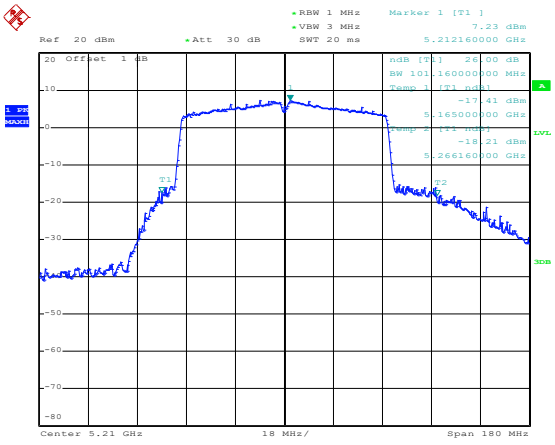
802.11a-Middle	 Date: 29.NOV.2023 16:44:45
802.11a-High	 Date: 29.NOV.2023 16:38:16
802.11n-HT20-Low	 Date: 29.NOV.2023 16:39:11

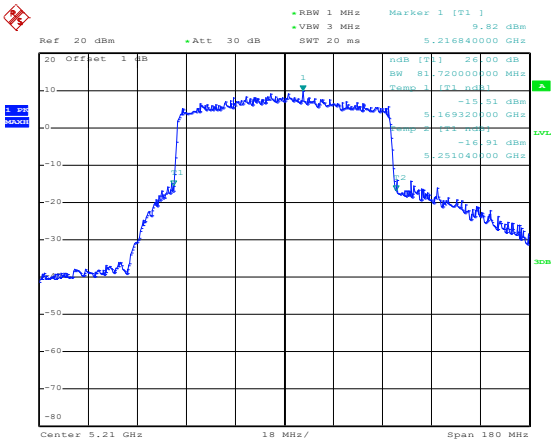
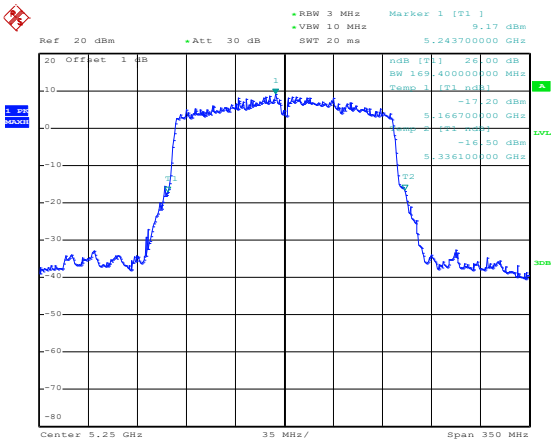
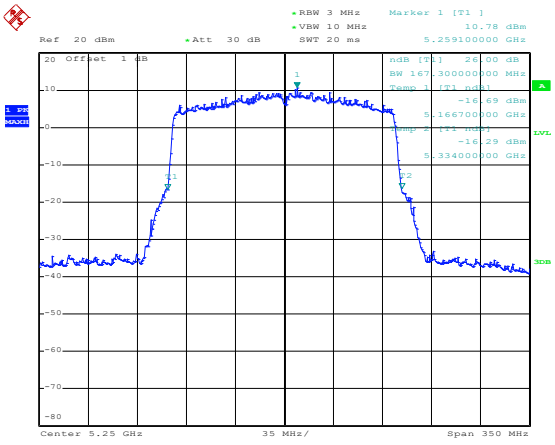
802.11n-HT20-Middle	 Date: 29.NOV.2023 16:39:51
802.11n-HT20-High	 Date: 29.NOV.2023 16:40:24
802.11ac-VHT20-Low	 Date: 29.NOV.2023 16:44:17

802.11ac-VHT20-Middle	 Date: 29.NOV.2023 16:44:45
802.11ac-VHT20-High	 Date: 29.NOV.2023 16:45:12
802.11ax-HE20-Low	 Date: 29.NOV.2023 16:47:28

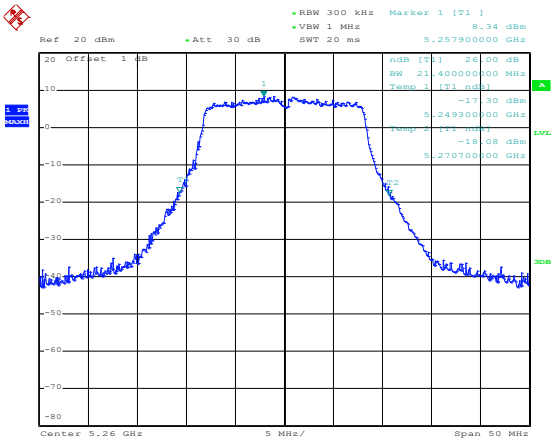
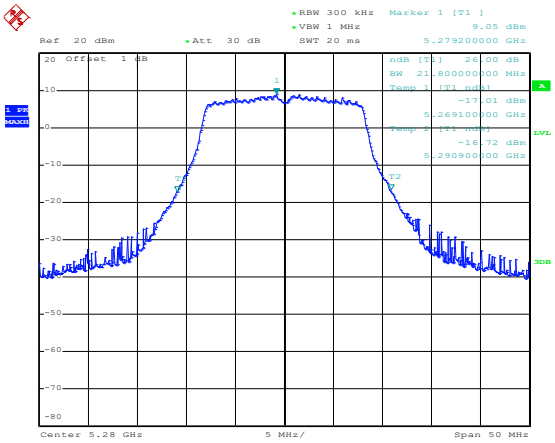
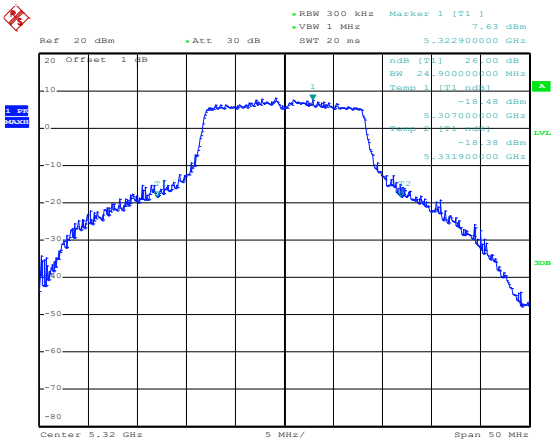
802.11ax-HE20-Middle	 Date: 29.NOV.2023 16:44:45
802.11ax-HE20-High	 Date: 29.NOV.2023 16:49:05
802.11n-HT40-Low	 Date: 29.NOV.2023 16:49:43

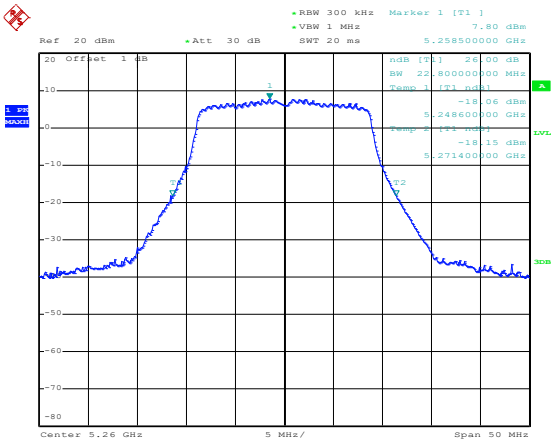
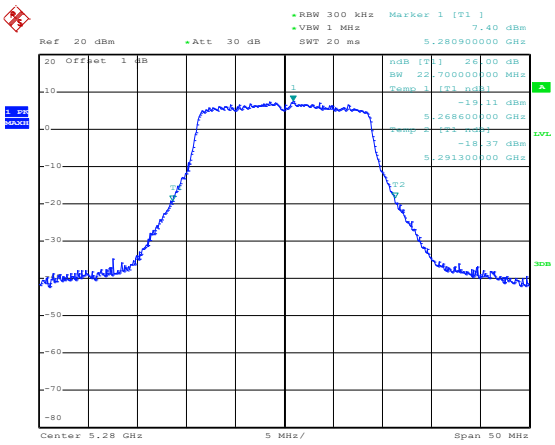
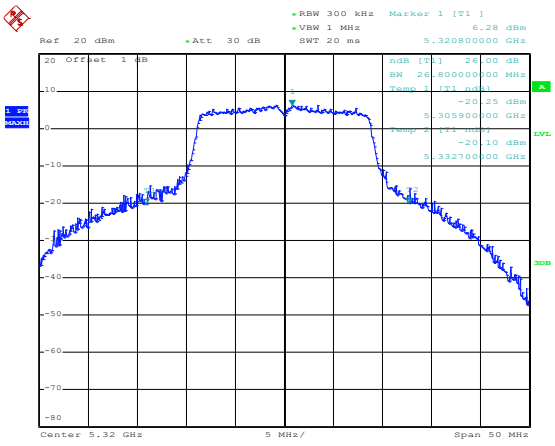
802.11n-HT40-High	 Date: 29.NOV.2023 16:49:59
802.11ac-VHT40-Low	 Date: 29.NOV.2023 16:50:26
802.11ac-VHT40-High	 Date: 29.NOV.2023 16:51:12

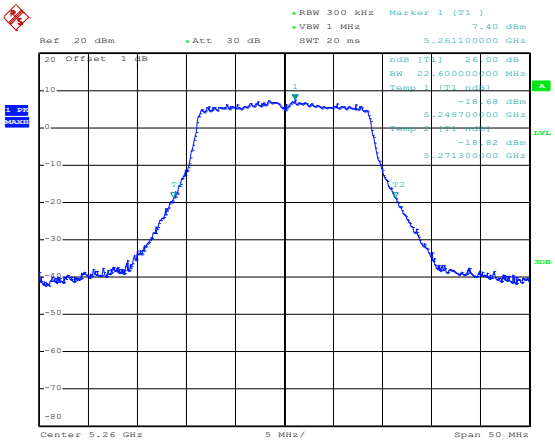
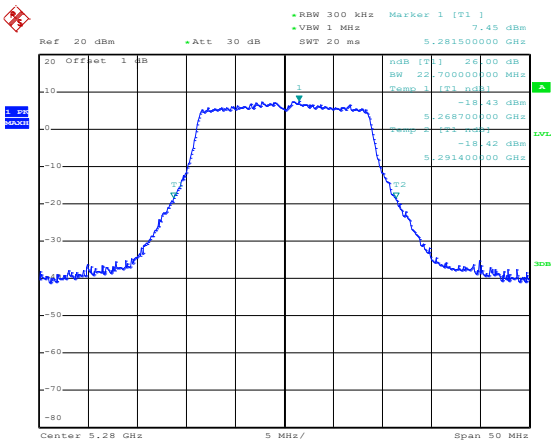
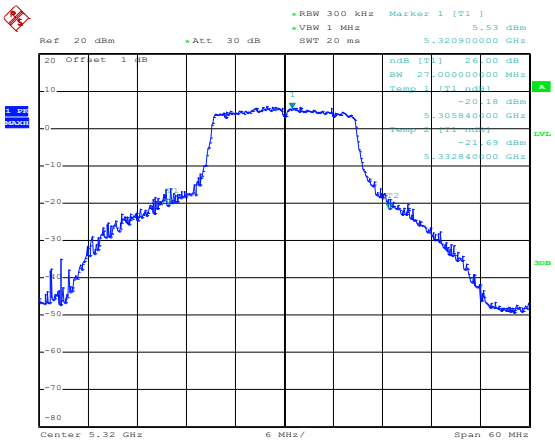
802.11ax-HE40-Low	
802.11ax-HE40-High	
802.11ac-VHT80	

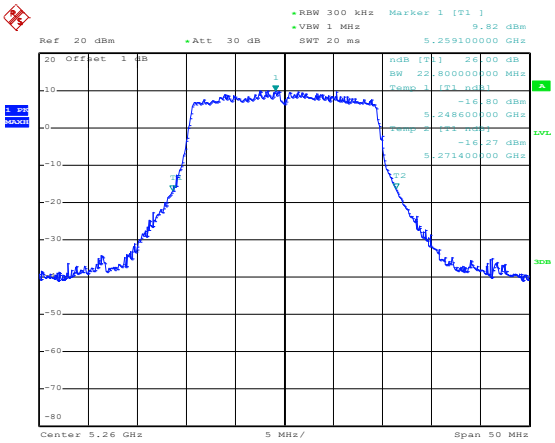
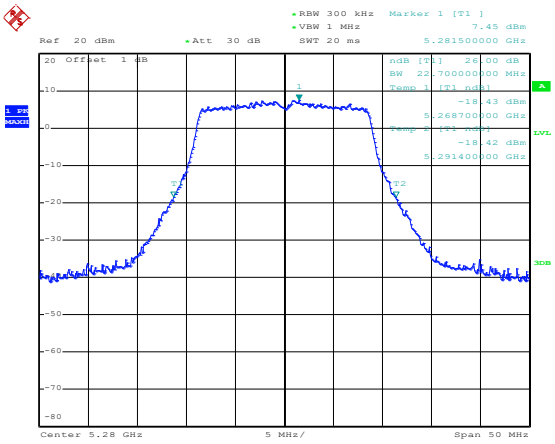
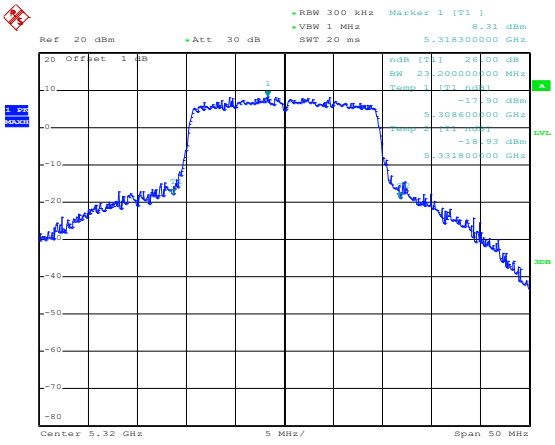
802.11ax-HE80	 Date: 29.NOV.2023 16:54:02
802.11ac-VHT160	 Date: 18.DEC.2023 16:33:23
802.11ax-HE160	 Date: 18.DEC.2023 16:33:08

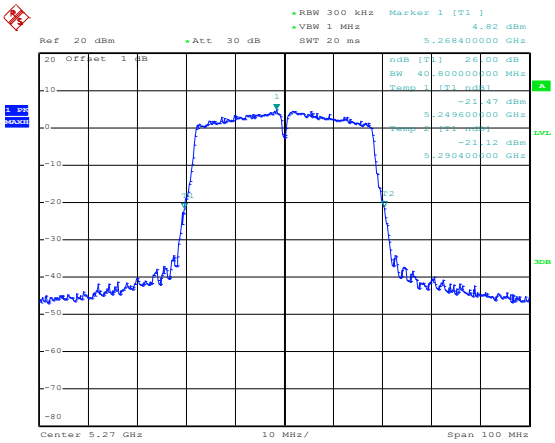
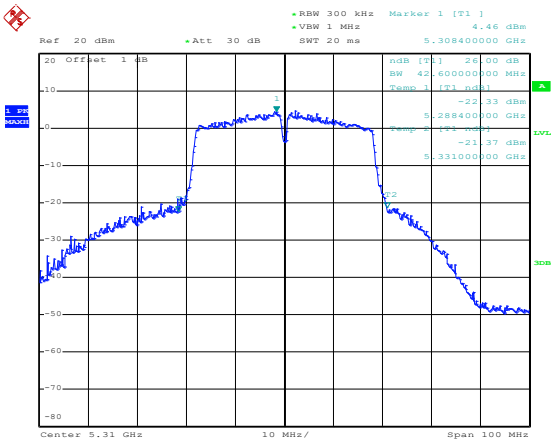
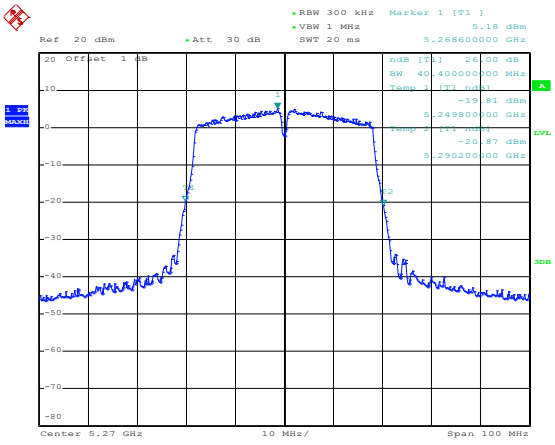
5260-5320MHz

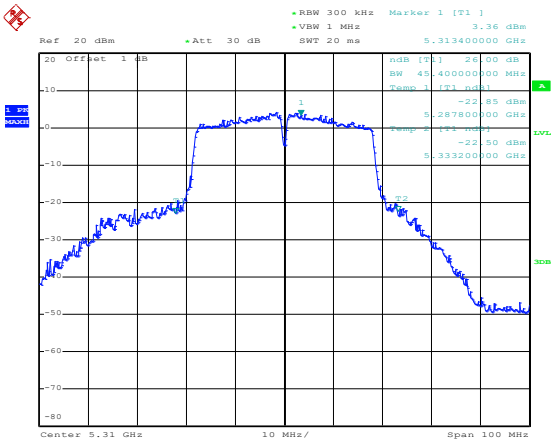
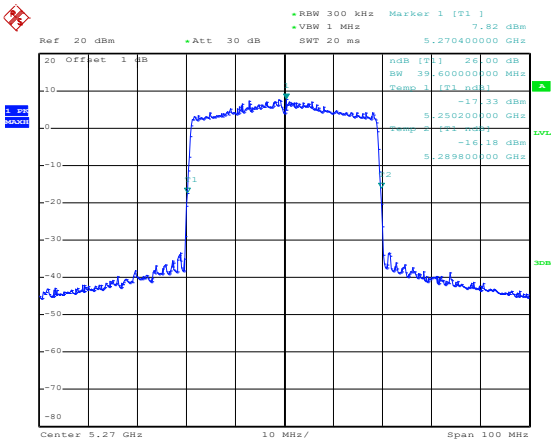
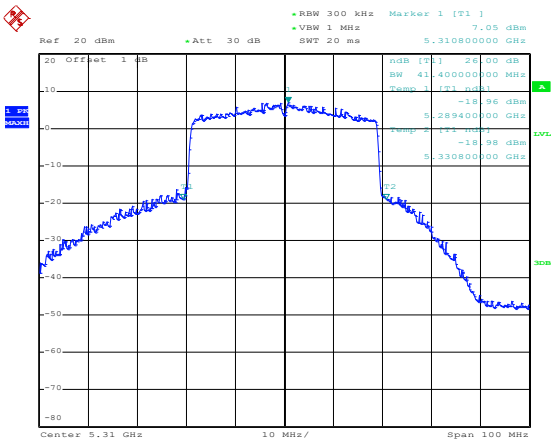
802.11a-Low	 Date: 30.NOV.2023 14:23:15
802.11a-Middle	 Date: 30.NOV.2023 14:23:59
802.11a-High	 Date: 30.NOV.2023 14:24:11

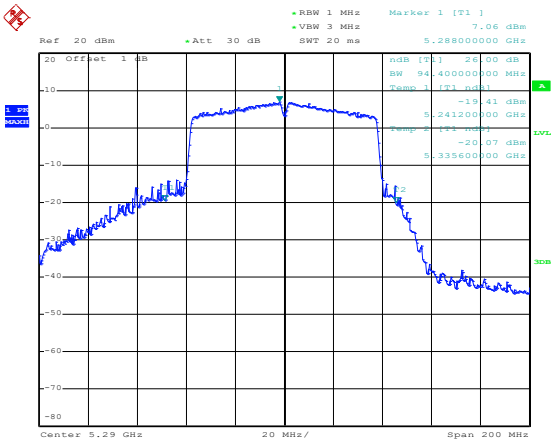
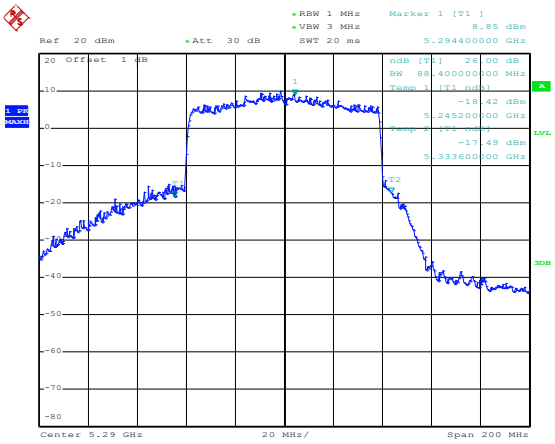
802.11n-HT20-Low	
802.11n-HT20-Middle	
802.11n-HT20-High	

802.11ac-VHT20-Low	
802.11ac-VHT20-Middle	
802.11ac-VHT20-High	

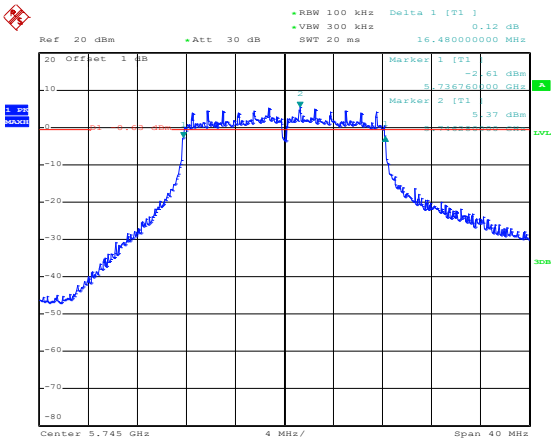
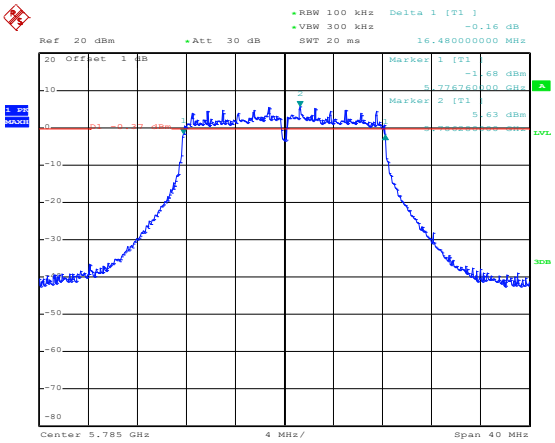
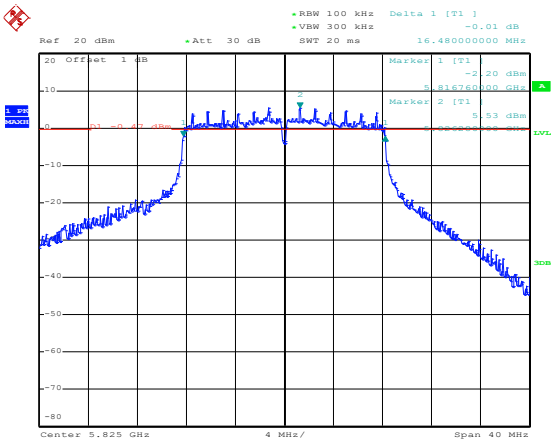
802.11ax-HE20-Low	 Date: 30.NOV.2023 14:34:53
802.11ax-HE20-Middle	 Date: 30.NOV.2023 14:33:01
802.11ax-HE20-High	 Date: 30.NOV.2023 14:35:30

802.11n-HT40-Low	
802.11n-HT40-High	
802.11ac-VHT40-Low	

802.11ac-VHT40-High	 Date: 30.NOV.2023 14:40:13
802.11ax-HE40-Low	 Date: 30.NOV.2023 14:41:20
802.11ax-HE40-High	 Date: 30.NOV.2023 14:42:30

802.11ac-VHT80	 Date: 30.NOV.2023 14:44:43
802.11ax-HE80	 Date: 30.NOV.2023 14:45:20

5745-5825MHz

802.11a-Low	 Date: 5.DEC.2023 09:30:33
802.11a-Middle	 Date: 5.DEC.2023 09:33:51
802.11a-High	 Date: 5.DEC.2023 09:34:28