

TEST REPORT

Reference No...... : WTX24X07166855W003
FCC ID..... : 2BAHU2024021
Applicant..... : DIALN PRODUCTS INC
Address..... : 2000 Walton Road, Saint Louis, Missouri 63114, United States
Manufacturer..... : The same as Applicant
Address..... : The same as Applicant
Product Name..... : Smart Phone
Model No...... : X68
Standards..... : FCC Part 15.407
Date of Receipt sample..... : 2024-07-16
Date of Test..... : 2024-07-16 to 2024-08-24
Date of Issue..... : 2024-08-24
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.

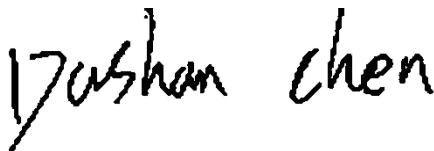
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Report version

Version No.	Date of issue	Description
Rev.00	2024-08-24	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT	
Product Name:	Smart Phone
Trade Name:	DIALN
Model No.:	X68
Adding Model(s):	/
Rated Voltage:	DC3.87V
Battery Capacity:	5000mAh
Power Adapter:	WS-D052 Input:AC100-220V 50/60Hz 0.5A Output:DC5.0V3A /9.0V2A
<i>Note: The test data is gathered from a production sample, provided by the manufacturer.</i>	

Technical Characteristics of EUT	
Support Standards:	802.11a, 802.11n-HT20, 802.11n-HT40, 802.11ac-VHT20/40 802.11ac-VHT80
Frequency Range:	5180-5240MHz, 5260-5320MHz 5500-5700MHz, 5745-5825MHz
Max. RF Output Power:	12.90dBm (Conducted)
Type of Modulation:	QPSK, 16QAM, 64QAM
Type of Antenna:	FPC Antenna
Antenna Gain:	0.44dBi
<i>Note The Antenna Gain is provided by the customer and can affect the validity of results.</i>	

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.

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

Enter *##3646633*## into the calculator to enter the engineer mode, you can start to test. During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Mode	Test Frequency (MHz)												
	NCB: 20MHz												
	5180	5200	5240	5260	5300	5320	5500	5580	5700	5720	5745	5785	5825
802.11a 6Mbps	20	21	22	22	22	23	24	24	24	24	22	20	20
802.11n-HT20 MCS0	19	20	21	21	22	23	23	24	23	23	21	19	18
802.11ac-VHT20 MCS0	19	19	21	21	22	23	23	24	23	23	21	20	19
Mode	NCB: 40MHz												
	5190	5230	5270	5310	5510	5550	5670	5710	5755	5795			
802.11n-HT40 MCS0	20	21	22	22	22	23	23	23	20	19			
802.11ac-VHT40 MCS0	20	21	22	22	23	23	23	23	21	20			

Mode	NCB: 80MHz					
	5210	5290	5530	5610	5690	5775
802.11ac-VHT8 0 MCS0/Nss2	20	22	23	23	23	20

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, Block 70 Bao'an District, Shenzhen, Guangdong, China

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 maintained 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,5260MHz,5280MHz,5320MHz,5500MHz,5600MHz,5700MHz,5745MHz, 5785MHz,5825MHz
TM2	802.11n-HT20	5180MHz,5200MHz,5240MHz,5260MHz,5280MHz,5320MHz,5500MHz,5600MHz,5700MHz,5745MHz, 5785MHz,5825MHz
TM3	802.11ac-VHT20	5180MHz,5200MHz,5240MHz,5260MHz,5280MHz,5320MHz,5500MHz,5600MHz,5700MHz,5745MHz, 5785MHz,5825MHz
TM4	802.11n-HT40	5190MHz,5230MHz,5270MHz,5310MHz,5510MHz,5590MHz,5670MHz,5755MHz,5795MHz
TM5	802.11ac-VHT40	5190MHz,5230MHz,5270MHz,5310MHz,5510MHz,5590MHz,5670MHz,5755MHz,5795MHz
TM6	802.11ac-VHT80	5210MHz,5290MHz,5530MHz,5610MHz,5775MHz

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
USB Cable	0.95	Shielded	Without Ferrite

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
Earphone 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	$\pm 0.42\text{dB}$
Occupied Bandwidth	Conducted	$\pm 1.5\%$
Power Spectral Density	Conducted	$\pm 1.8\text{dB}$
Conducted Spurious Emission	Conducted	$\pm 2.17\text{dB}$
Conducted Emissions	Conducted	9-150kHz $\pm 3.74\text{dB}$
		0.15-30MHz $\pm 3.34\text{dB}$
Transmitter Spurious Emissions	Radiated	30-200MHz $\pm 4.52\text{dB}$
		0.2-1GHz $\pm 5.56\text{dB}$
		1-6GHz $\pm 3.84\text{dB}$
		6-18GHz $\pm 3.92\text{dB}$

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	2024-02-24	2025-02-23
WTXE1005A 1005	Spectrum Analyzer	Agilent	N9020A	US471401 02	2024-03-19	2025-03-18
WTXE1084A 1001	Spectrum Analyzer	Agilent	N9020A	MY543205 48	2024-02-24	2025-02-23
WTXE1004A 1-001	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2024-02-27	2025-02-26
☐ Chamber A: Below 1GHz						
WTXE1005A 1003	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/03 5	2024-02-24	2025-02-23
WTXE1001A 1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2024-03-19	2025-03-18
WTXE1007A 1001	Amplifier	HP	8447F	2805A034 75	2024-02-24	2025-02-23
WTXE1010A 1007	Loop Antenna	Schwarz beck	FMZB 1516	9773	2024-02-26	2025-02-25
WTXE1010A 1006	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2024-02-24	2025-02-23
☐ Chamber A: Above 1GHz						
WTXE1005A 1003	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/03 5	2024-02-24	2025-02-23
WTXE1001A 1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2024-03-19	2025-03-18
WTXE1065A 1001	Amplifier	C&D	PAP-1G18	2002	2024-02-27	2025-02-26
WTXE1010A 1005	Horn Antenna	ETS	3117	00086197	2024-02-26	2025-02-25
WTXE1010A 1010	DRG Horn Antenna	A.H. SYSTEMS	SAS-574	571	2024-03-17	2025-03-16
WTXE1003A 1001	Pre-amplifier	Schwarzbeck	BBV 9721	9721-031	2024-02-29	2025-02-28
☐ Chamber B:Below 1GHz						
WTXE1010A 1006	Trilog Broadband Antenna	Schwarz beck	VULB9163(B)	9163-635	2024-03-17	2027-03-16
WTXE1038A 1001	Amplifier	Agilent	8447D	2944A104 57	2024-02-24	2025-02-23

WTXE1001A 1002	EMI Test Receiver	Rohde & Schwarz	ESPI	101391	2024-02-24	2025-02-23
☒ Chamber C: Below 1GHz						
WTXE1093A 1001	EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2024-02-27	2025-02-26
WTXE1010A 1013-1	Trilog Broadband Antenna	Schwarz beck	VULB 9168	1194	2024-04-18	2027-04-17
WTXE1007A 1002	Amplifier	HP	8447F	2944A038 69	2024-02-24	2025-02-23
WTXE1010A 1007	Loop Antenna	Schwarz beck	FMZB 1516	9773	2024-02-26	2025-02-25
☒ Chamber C: Above 1GHz						
WTXE1093A 1001	EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2024-02-27	2025-02-26
WTXE1103A 1005	Horn Antenna	POAM	RTF-118A	1820	2023-03-10	2026-03-09
WTXE1103A 1006	Amplifier	Tonscend	TAP01018050	AP22E806 235	2024-02-27	2025-02-26
WTXE1010A 1010	DRG Horn Antenna	A.H. SYSTEMS	SAS-574	571	2024-03-17	2025-03-16
WTXE1003A 1001	Pre-amplifier	Schwarzbeck	BBV 9721	9721-031	2024-02-29	2025-02-28
☐ Conducted Room 1#						
WTXE1104A 1029	EMI Test Receiver	Rohde & Schwarz	ESCI	100525	2023-12-12	2024-12-11
WTXE1002A 1001	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2024-02-24	2025-02-23
WTXE1003A 1001	AC LISN	Schwarz beck	NSLK8126	8126-279	2024-02-24	2025-02-23
☒ Conducted Room 2#						
WTXE1001A 1004	EMI Test Receiver	Rohde & Schwarz	ESPI	101259	2024-02-24	2025-02-23
WTXE1003A 1003	LISN	Rohde & Schwarz	ENV 216	100097	2024-02-24	2025-02-23

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 an FPC antenna, 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.

(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 $11 \text{ dBm} + 10 \log B$, 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 1 MHz RBW to satisfy directly the 1 MHz 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 1 MHz, 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 ($< 1\text{MHz}$, or $< 500\text{kHz}$) and integrated over 1 MHz, or 500kHz bandwidth, the following adjustments to the procedures apply:

- a) Set $\text{RBW} \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $\text{VBW} \geq 3 \text{ RBW}$.
- c) If measurement bandwidth of Maximum PSD is specified in 500kHz, add $10\log(500\text{kHz}/\text{RBW})$ to the measured result, whereas $\text{RBW} (< 500\text{kHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/\text{RBW})$ to the measured result, whereas $\text{RBW} (< 1\text{MHz})$ 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 $\text{RBW}=100\text{kHz}$ 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 6 dBi. 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 $11\text{dBm} + 10 \log B$, 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 6 dB emission bandwidth of at least 500KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ 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 6dB 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 $\geq 3 \times$ 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.

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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.

(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 6 dBi. In addition, the maximum power spectral density shall not exceed 11dBm 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 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 $11\text{dBm} + 10 \log B$, 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 colocated 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 $\geq$ 3MHz.
- (iv) Number of points in sweep $\geq$ 2 Span / RBW. (This ensures that bin-to-bin spacing is $\leq$ 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 1MHz 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 75MHz 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.

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

$$\text{EIRP} = ((E \cdot d)^2) / 30$$

where:

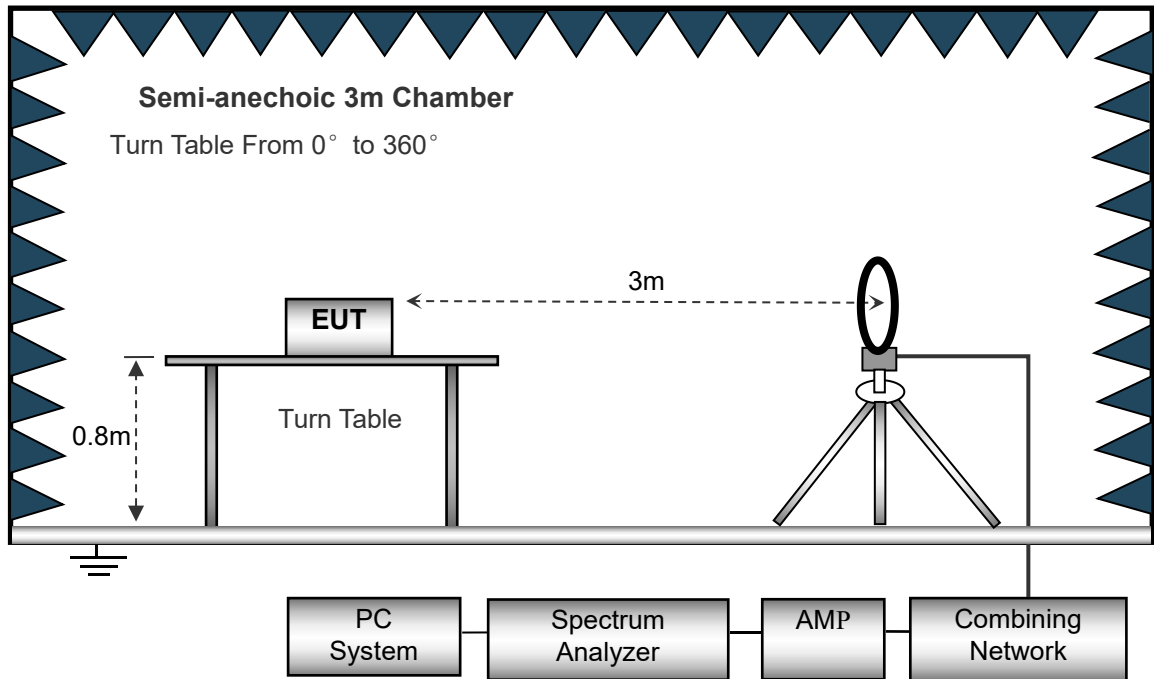
- E is the field strength in V/m;
- d is the measurement distance in meters;
- EIRP is the equivalent isotropically radiated power in watts.

8.2 Test Procedure

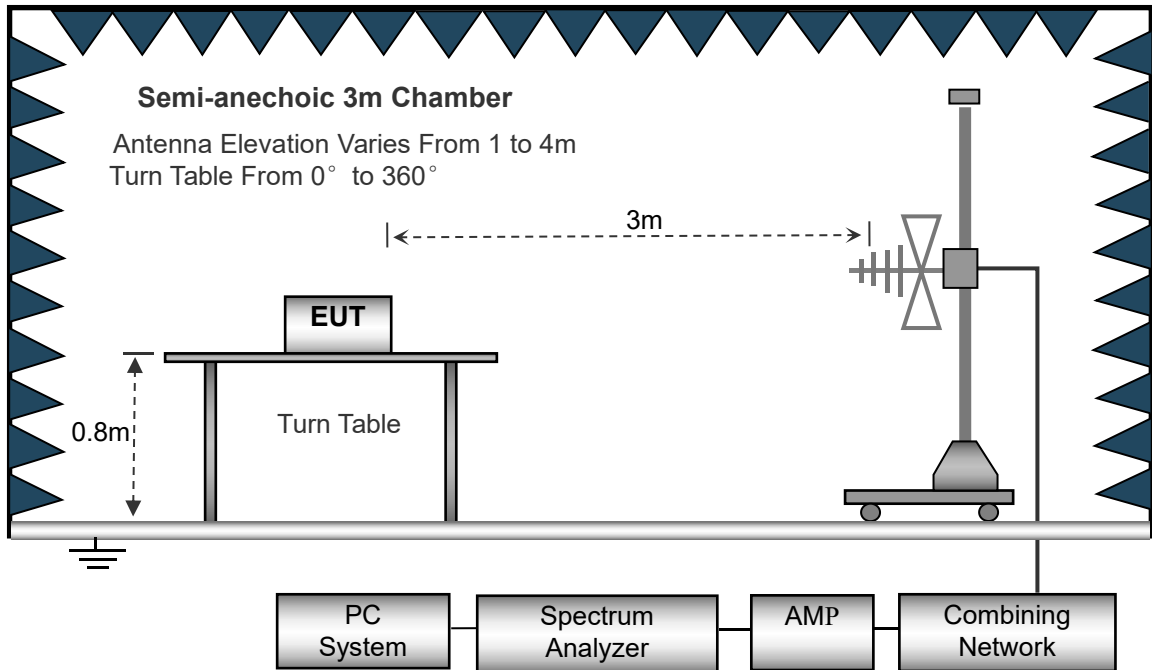
The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.205 15.407(b)(6) and FCC Part 15.209 Limit..

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.

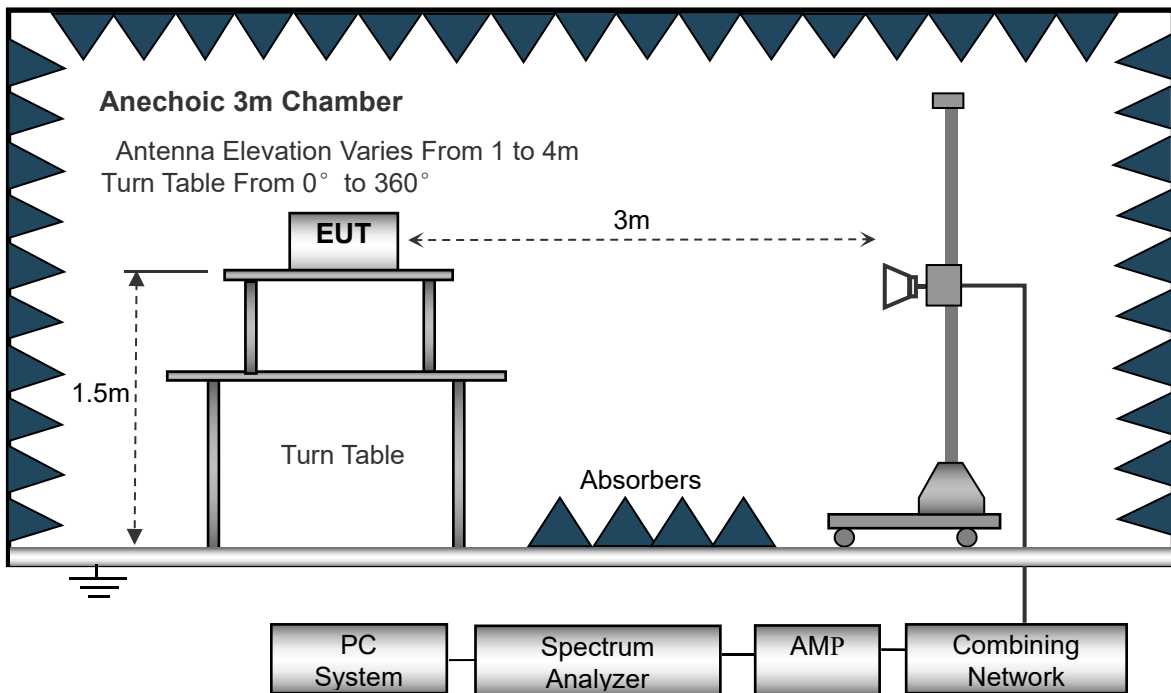
The test setup for emission measurement below 30MHz.



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



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:

$$\text{Corr. Ampl.} = \text{Indicated Reading} + \text{Ant. Factor} + \text{Cable Loss} - \text{Ampl. Gain}$$

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

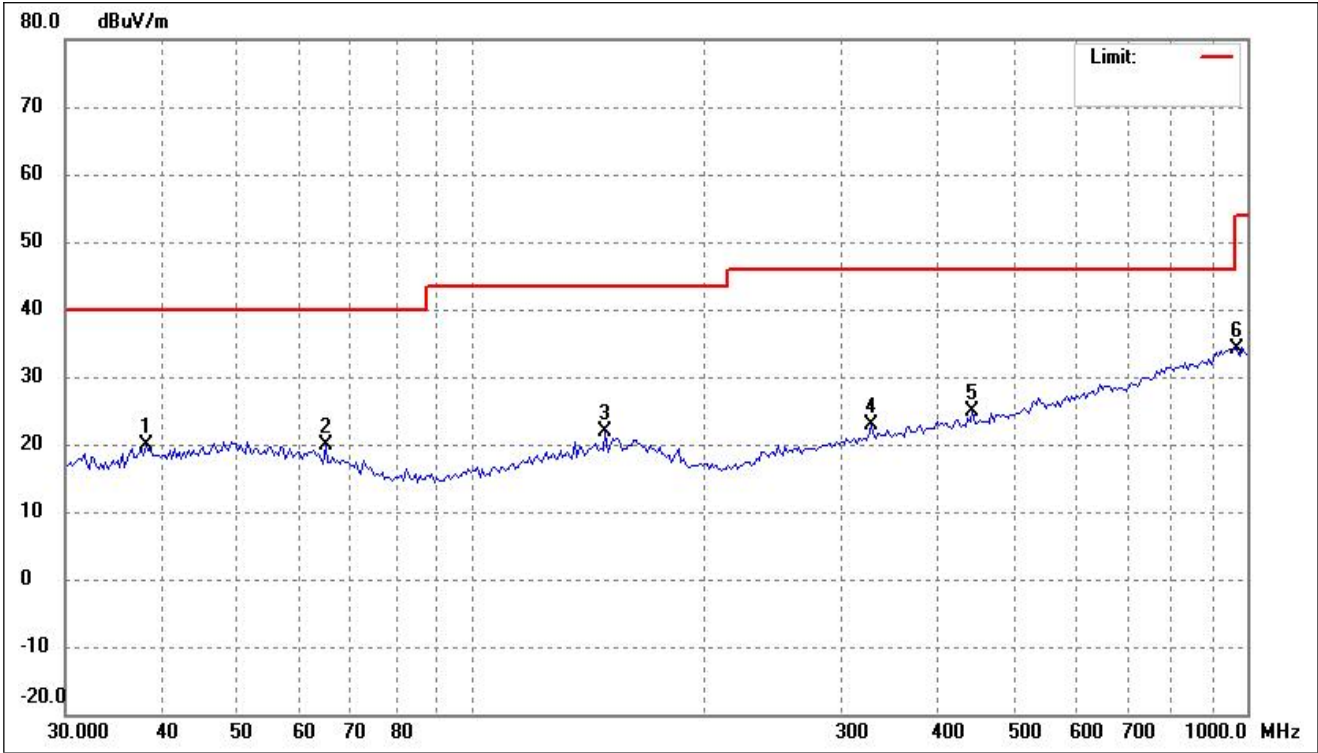
$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15 Limit}$$

8.5 Summary of Test Results/Plots

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

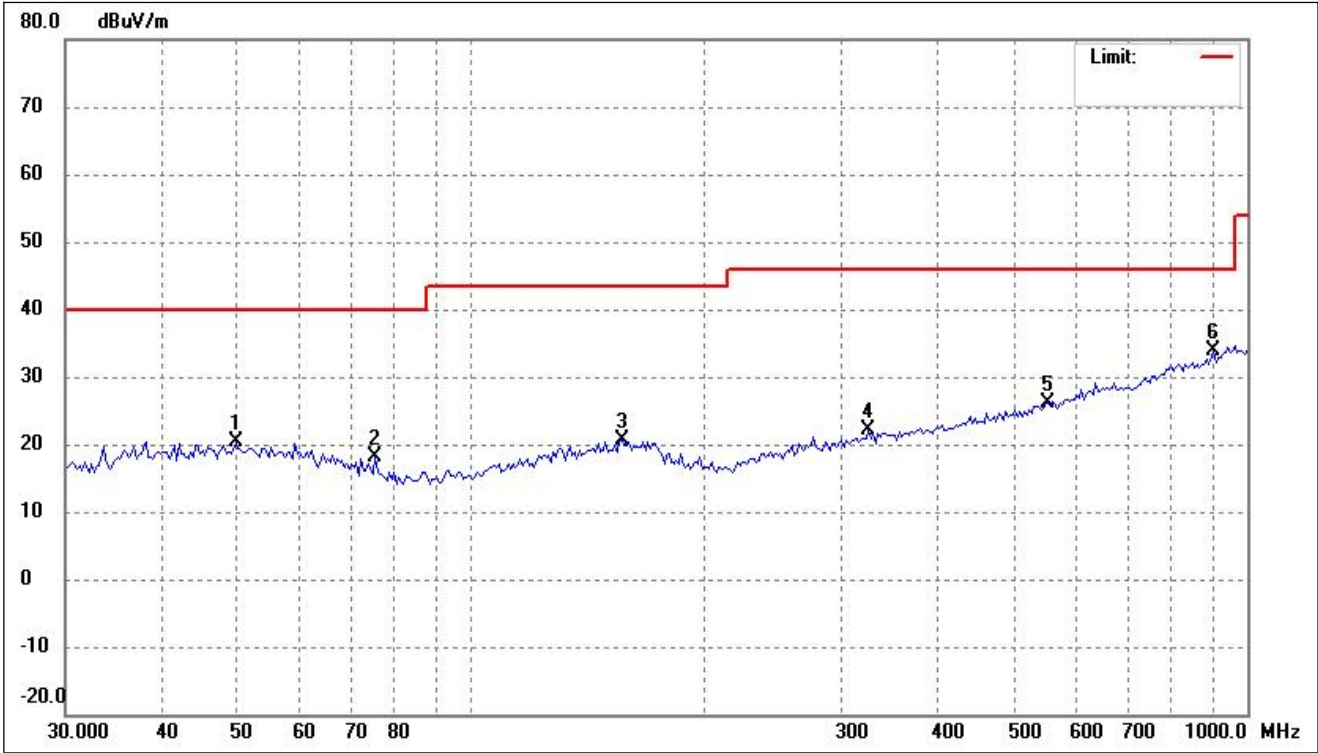
- Spurious Emission From 30MHz to 1GHz
- 5150-5250MHz

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



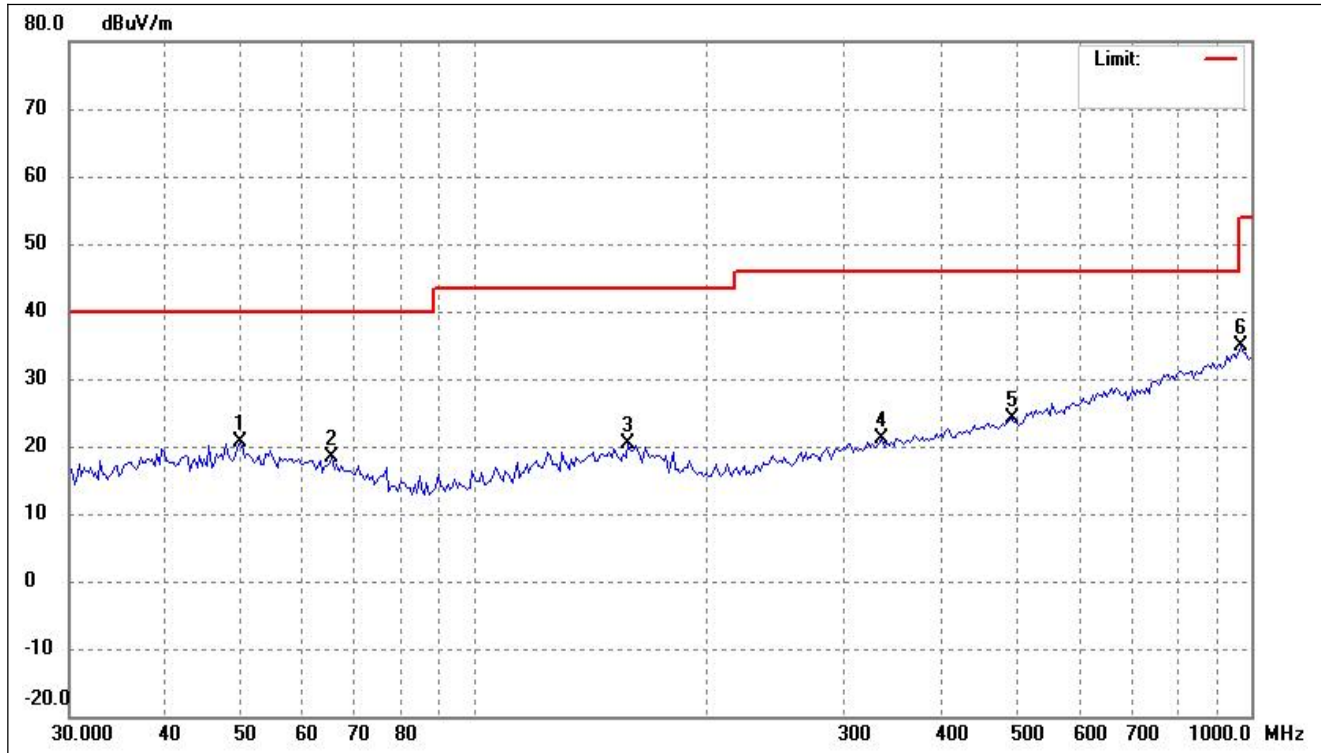
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	38.0965	28.27	-8.36	19.91	40.00	-20.09	-	-	peak
2	64.9869	29.29	-9.33	19.96	40.00	-20.04	-	-	peak
3	148.9175	29.95	-8.14	21.81	43.50	-21.69	-	-	peak
4	327.1554	30.14	-7.30	22.84	46.00	-23.16	-	-	peak
5	442.5722	30.33	-5.35	24.98	46.00	-21.02	-	-	peak
6	972.2827	30.85	3.39	34.24	54.00	-19.76	-	-	peak

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



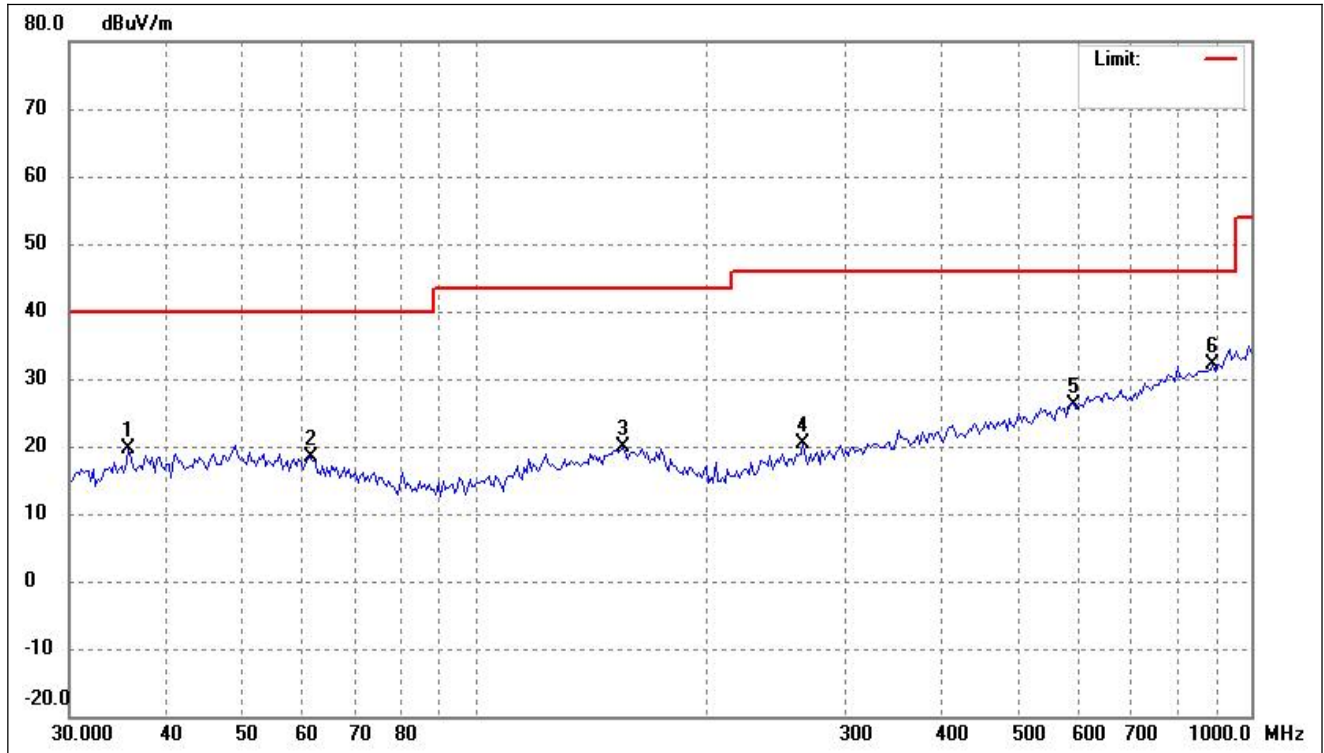
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	49.7571	27.96	-7.59	20.37	40.00	-19.63	-	-	peak
2	75.3208	29.55	-11.42	18.13	40.00	-21.87	-	-	peak
3	156.4259	28.71	-8.05	20.66	43.50	-22.84	-	-	peak
4	324.8645	29.36	-7.33	22.03	46.00	-23.97	-	-	peak
5	554.1708	29.55	-3.43	26.12	46.00	-19.88	-	-	peak
6	906.3041	31.68	2.24	33.92	46.00	-12.08	-	-	peak

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



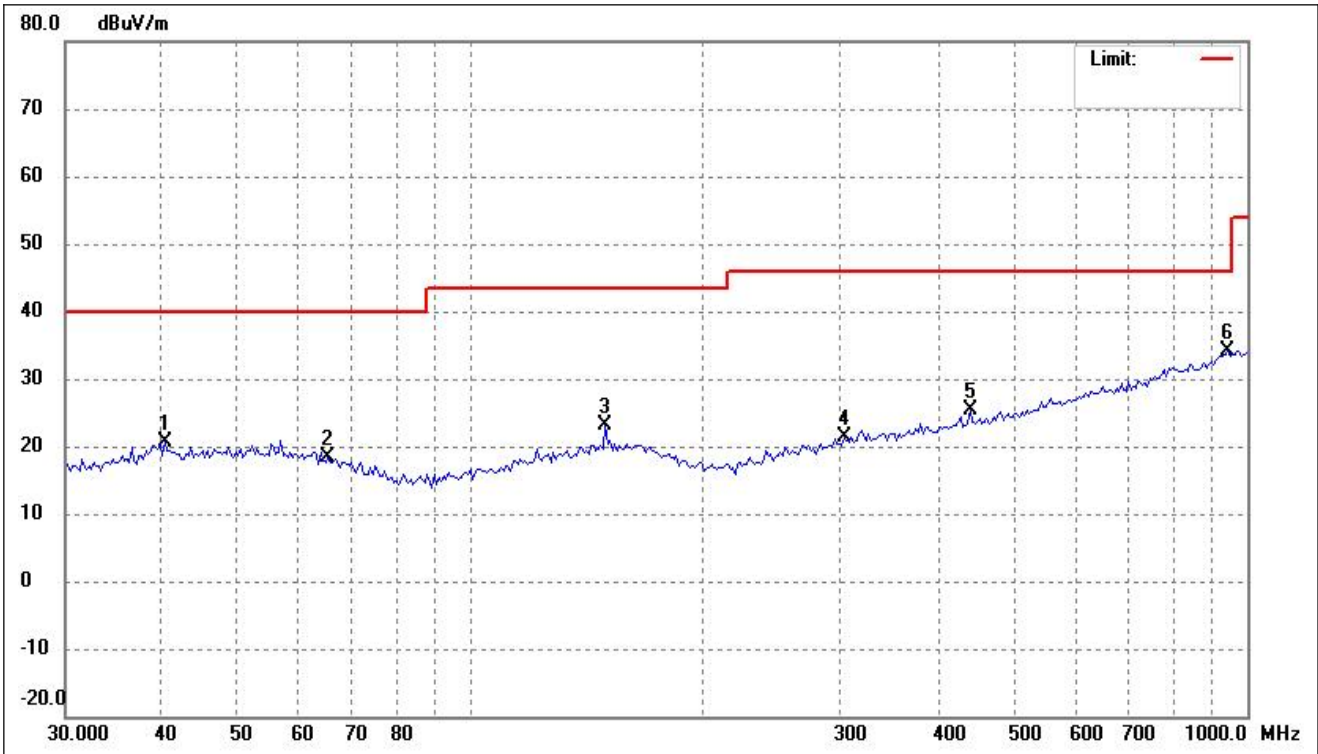
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	49.7571	28.20	-7.59	20.61	40.00	-19.39	-	-	peak
2	65.4452	27.87	-9.42	18.45	40.00	-21.55	-	-	peak
3	157.5290	28.36	-8.05	20.31	43.50	-23.19	-	-	peak
4	334.1255	28.36	-7.23	21.13	46.00	-24.87	-	-	peak
5	491.7700	28.88	-4.87	24.01	46.00	-21.99	-	-	peak
6	972.2827	31.50	3.39	34.89	54.00	-19.11	-	-	peak

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



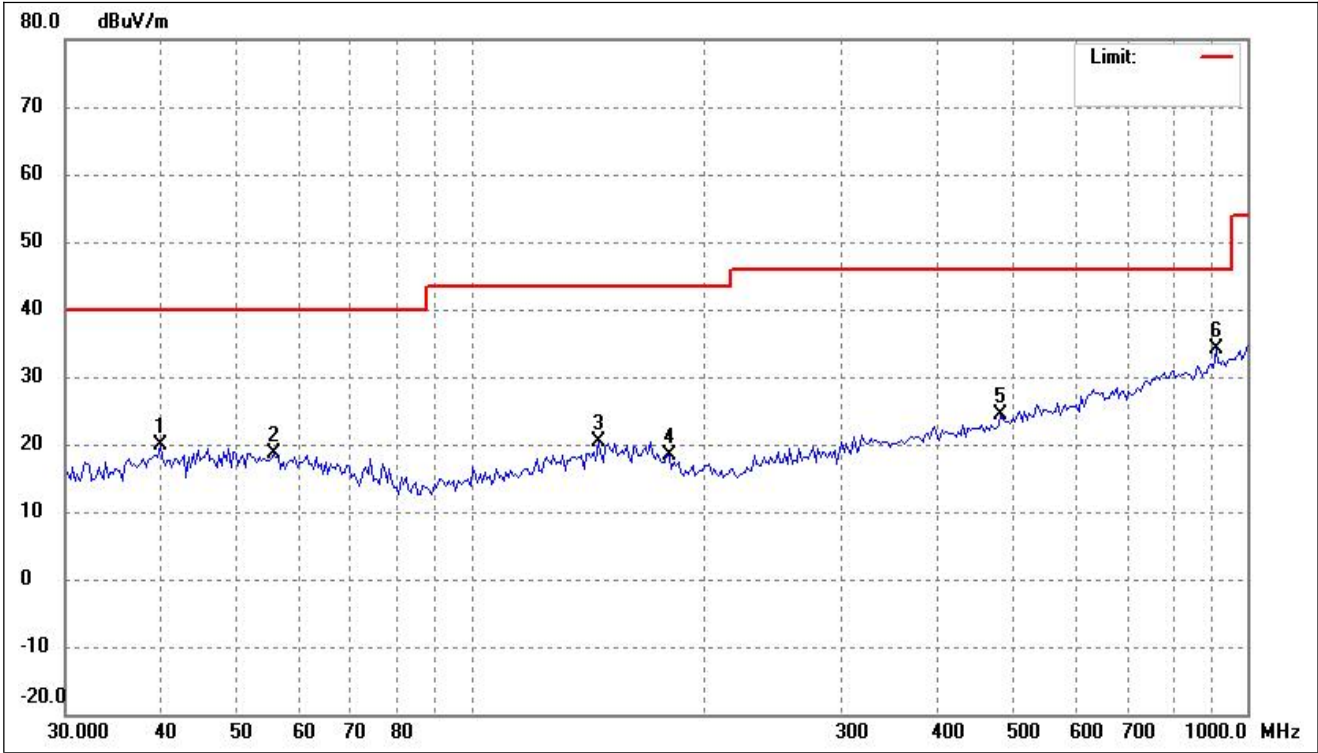
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	35.7617	28.56	-8.85	19.71	40.00	-20.29	-	-	peak
2	61.4343	27.06	-8.69	18.37	40.00	-21.63	-	-	peak
3	155.3305	27.92	-8.05	19.87	43.50	-23.63	-	-	peak
4	264.9709	29.40	-9.08	20.32	46.00	-25.68	-	-	peak
5	586.2172	28.81	-2.58	26.23	46.00	-19.77	-	-	peak
6	893.6557	30.12	2.02	32.14	46.00	-13.86	-	-	peak

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



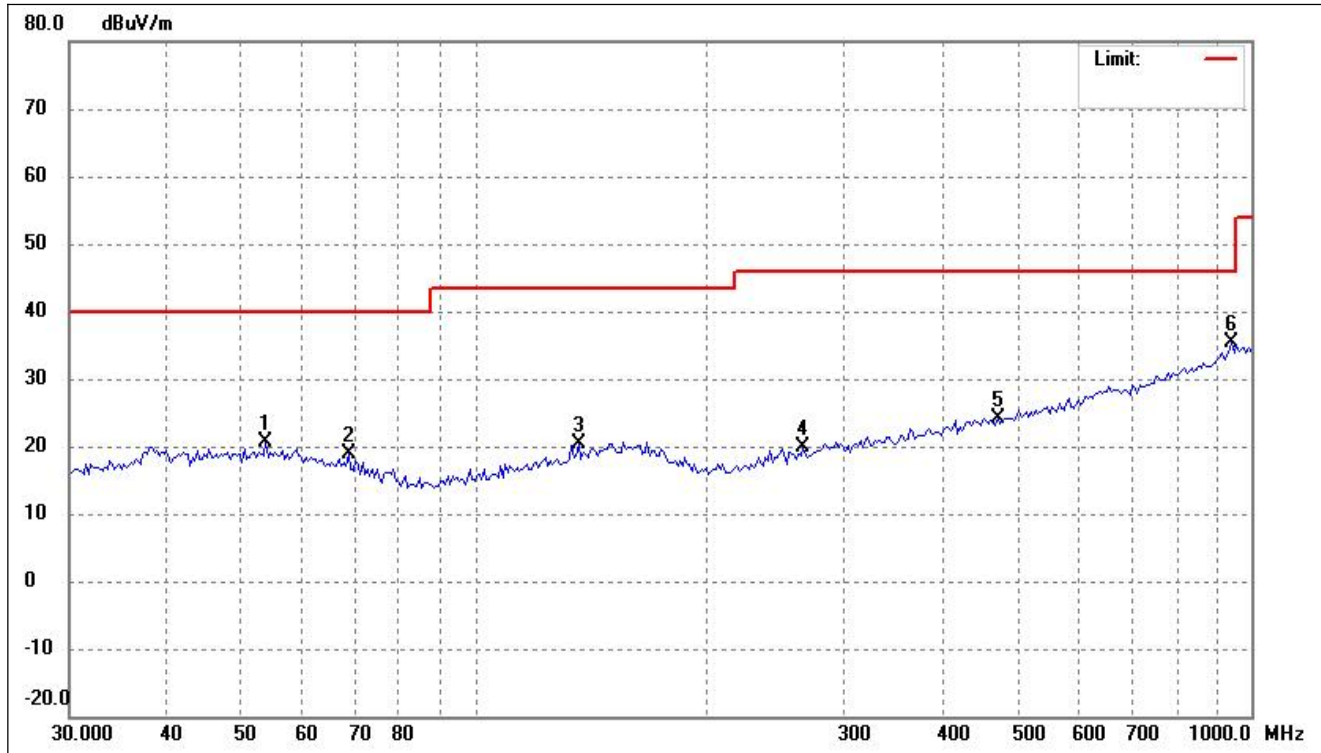
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	40.2995	28.53	-7.96	20.57	40.00	-19.43	-	-	peak
2	65.4452	27.68	-9.42	18.26	40.00	-21.74	-	-	peak
3	148.9175	31.22	-8.14	23.08	43.50	-20.42	-	-	peak
4	302.8193	29.14	-7.80	21.34	46.00	-24.66	-	-	peak
5	439.4730	30.85	-5.42	25.43	46.00	-20.57	-	-	peak
6	945.3336	30.97	3.19	34.16	46.00	-11.84	-	-	peak

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



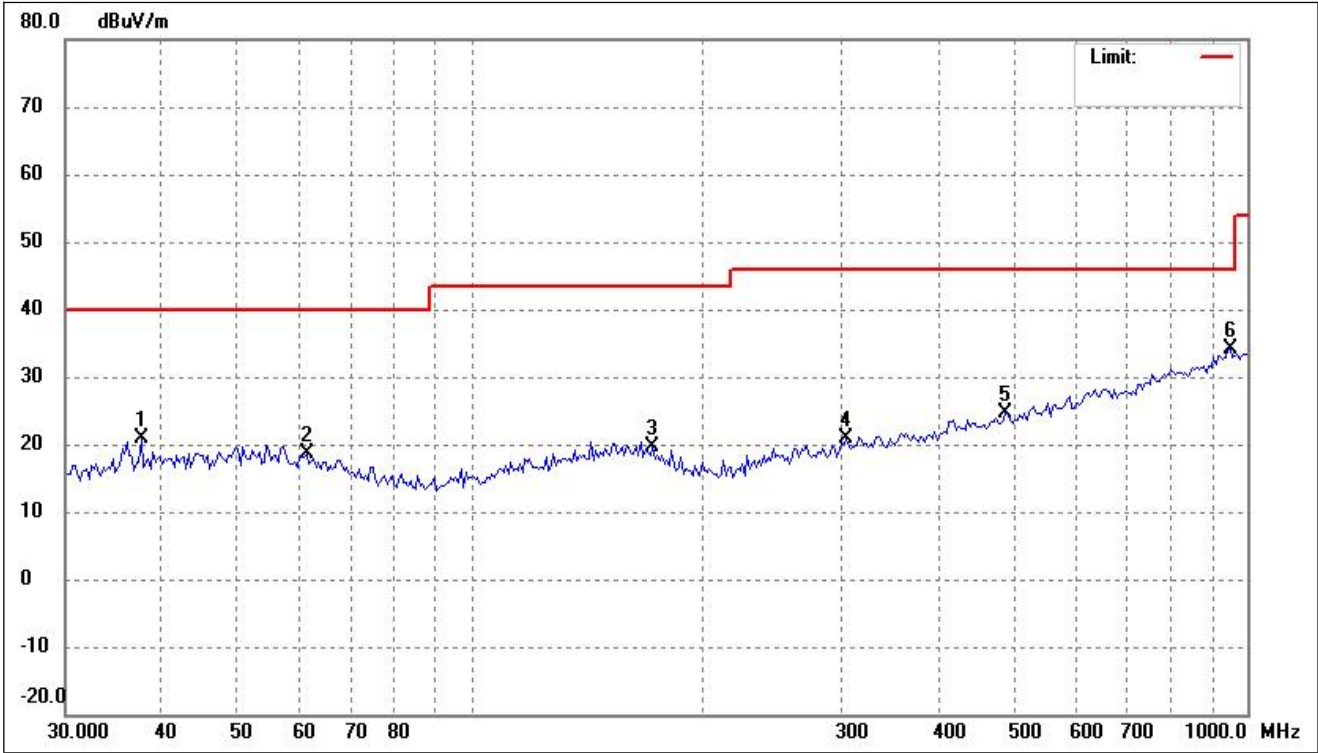
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	39.7371	27.91	-8.01	19.90	40.00	-20.10	-	-	peak
2	55.6782	26.79	-8.17	18.62	40.00	-21.38	-	-	peak
3	145.8109	28.83	-8.40	20.43	43.50	-23.07	-	-	peak
4	180.0304	28.07	-9.74	18.33	43.50	-25.17	-	-	peak
5	481.5112	29.43	-4.94	24.49	46.00	-21.51	-	-	peak
6	912.6953	31.81	2.40	34.21	46.00	-11.79	-	-	peak

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



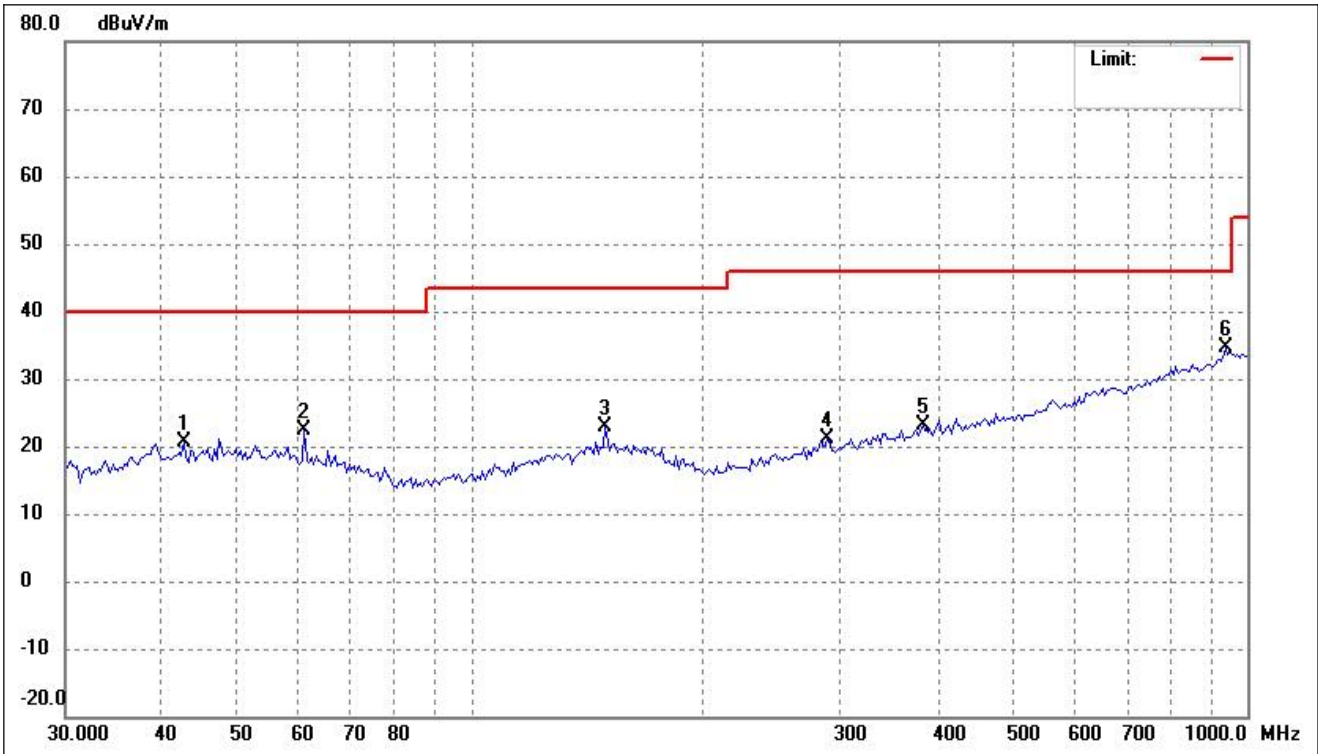
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	53.7559	28.60	-7.99	20.61	40.00	-19.39	-	-	peak
2	68.7450	28.98	-10.03	18.95	40.00	-21.05	-	-	peak
3	135.9163	29.42	-9.07	20.35	43.50	-23.15	-	-	peak
4	264.9709	28.91	-9.08	19.83	46.00	-26.17	-	-	peak
5	471.4665	29.27	-5.02	24.25	46.00	-21.75	-	-	peak
6	945.3336	32.11	3.19	35.30	46.00	-10.70	-	-	peak

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



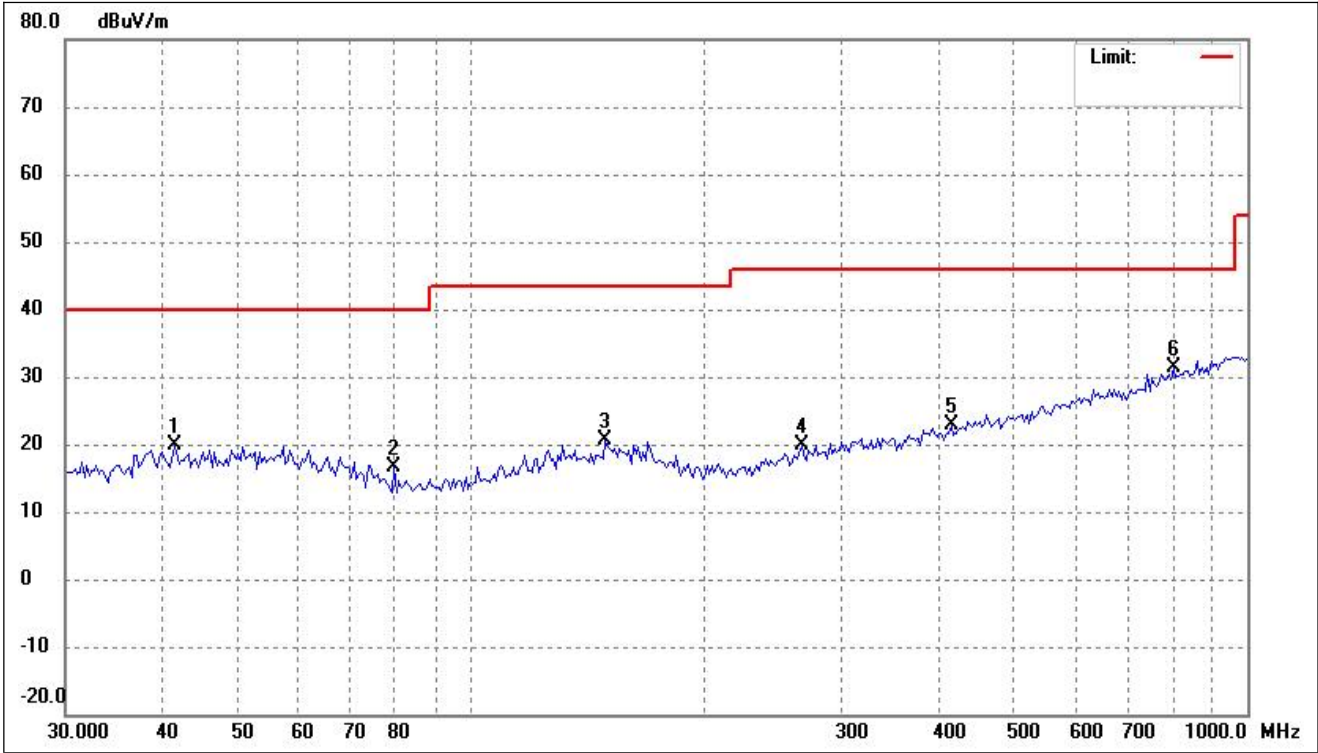
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	37.5648	29.38	-8.47	20.91	40.00	-19.09	-	-	peak
2	61.4343	27.40	-8.69	18.71	40.00	-21.29	-	-	peak
3	171.3890	28.02	-8.51	19.51	43.50	-23.99	-	-	peak
4	304.9548	28.71	-7.76	20.95	46.00	-25.05	-	-	peak
5	488.3263	29.58	-4.89	24.69	46.00	-21.31	-	-	peak
6	952.0001	30.79	3.31	34.10	46.00	-11.90	-	-	peak

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



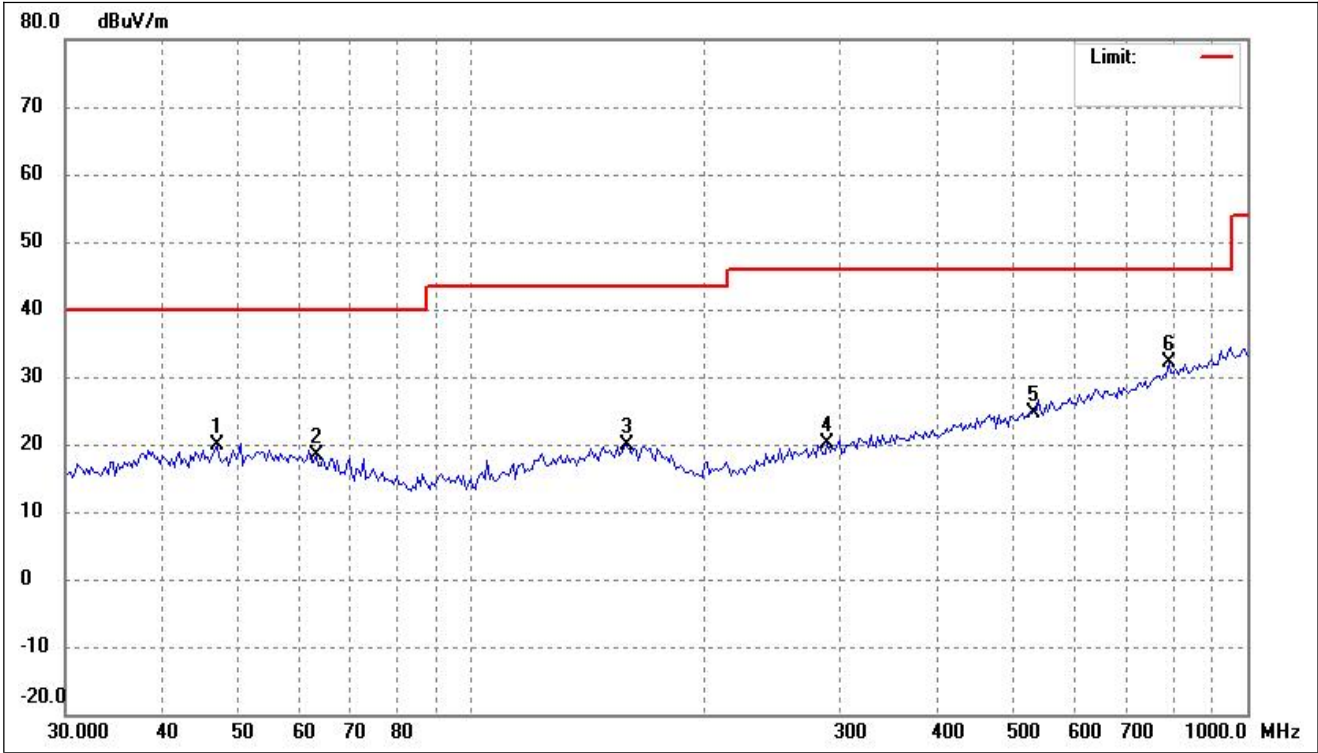
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	42.6299	28.59	-7.96	20.63	40.00	-19.37	-	-	peak
2	61.0041	31.09	-8.61	22.48	40.00	-17.52	-	-	peak
3	148.9175	31.13	-8.14	22.99	43.50	-20.51	-	-	peak
4	288.2840	29.37	-8.23	21.14	46.00	-24.86	-	-	peak
5	381.8520	29.51	-6.50	23.01	46.00	-22.99	-	-	peak
6	938.7139	31.54	3.03	34.57	46.00	-11.43	-	-	peak

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



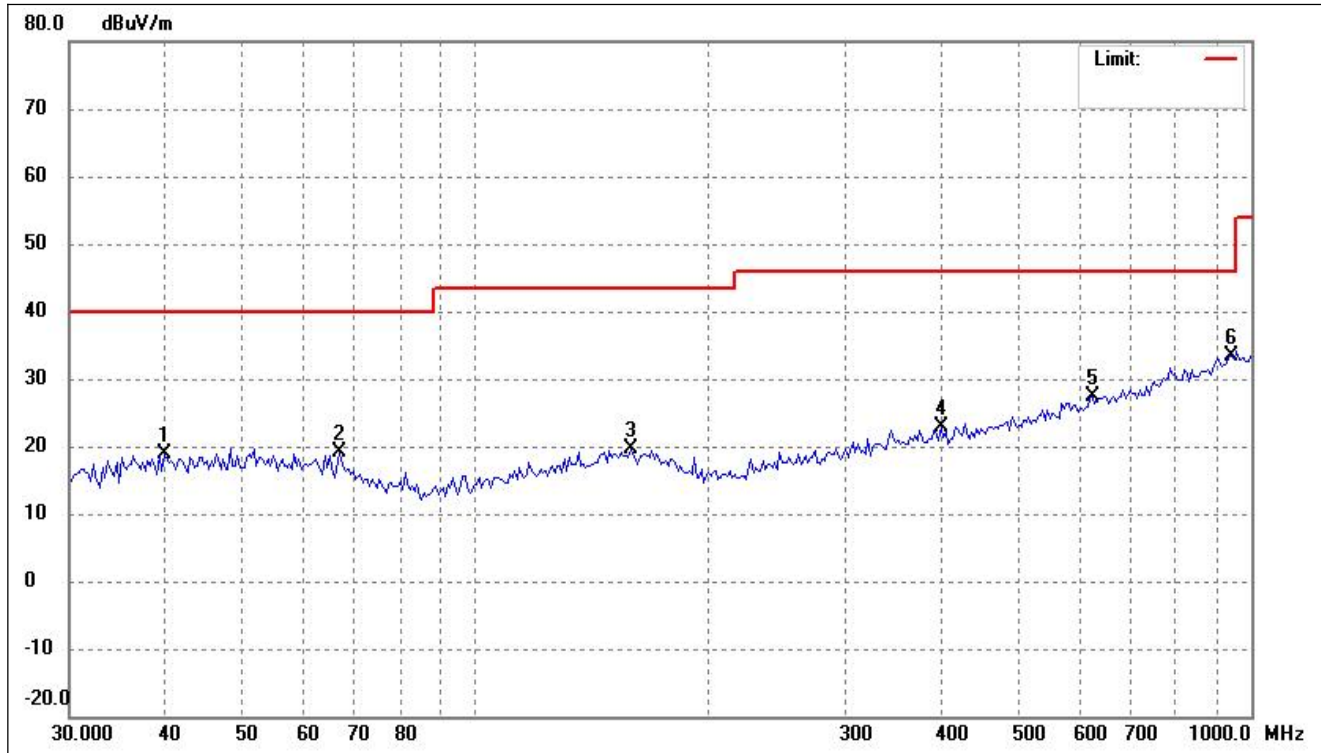
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	41.4483	27.95	-7.96	19.99	40.00	-20.01	-	-	peak
2	79.6764	28.87	-12.36	16.51	40.00	-23.49	-	-	peak
3	148.9175	28.69	-8.14	20.55	43.50	-22.95	-	-	peak
4	266.8395	28.95	-9.00	19.95	46.00	-26.05	-	-	peak
5	415.4486	28.71	-5.93	22.78	46.00	-23.22	-	-	peak
6	804.2523	30.34	1.05	31.39	46.00	-14.61	-	-	peak

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



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	47.0371	27.64	-7.81	19.83	40.00	-20.17	-	-	peak
2	63.1857	27.28	-9.01	18.27	40.00	-21.73	-	-	peak
3	158.6399	27.82	-8.05	19.77	43.50	-23.73	-	-	peak
4	288.2840	28.43	-8.23	20.20	46.00	-25.80	-	-	peak
5	527.5707	28.95	-4.24	24.71	46.00	-21.29	-	-	peak
6	793.0281	31.30	0.88	32.18	46.00	-13.82	-	-	peak

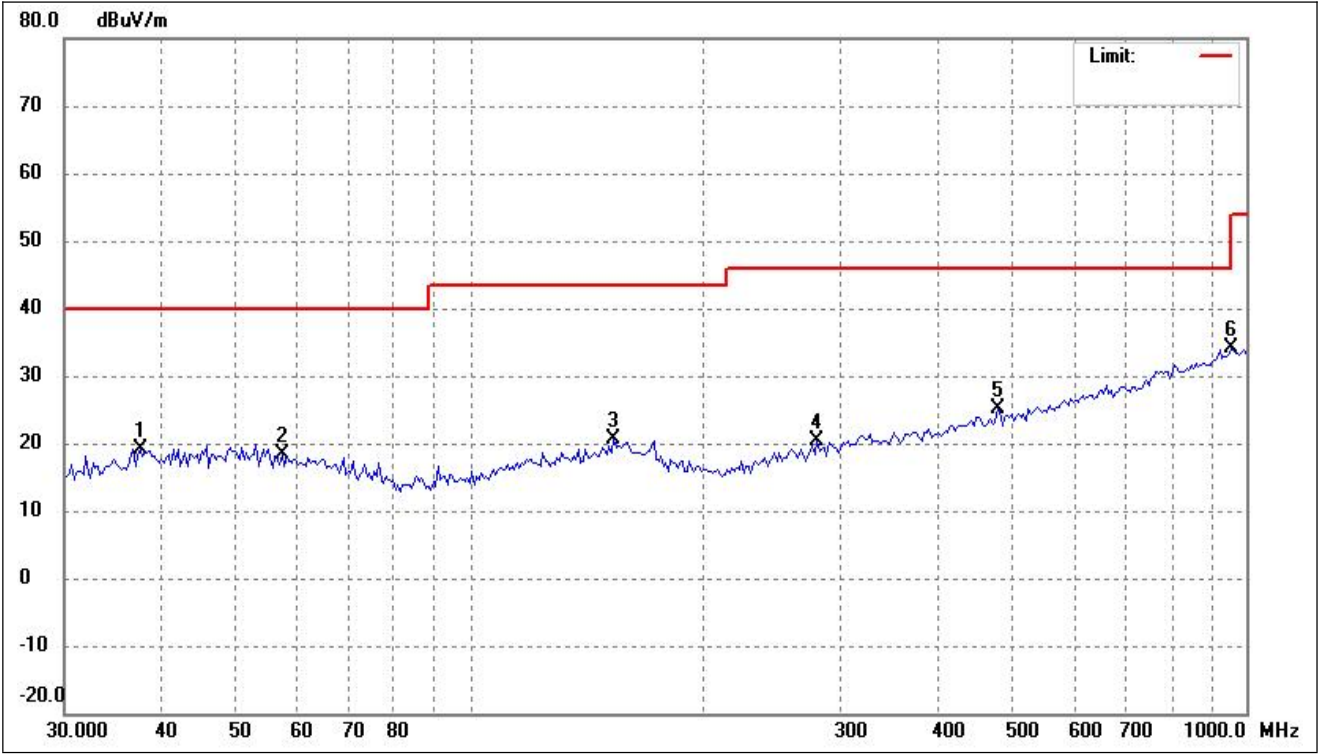
802.11ac-VHT80			
Test Channel	5210MHz(worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	39.7371	27.01	-8.01	19.00	40.00	-21.00	-	-	peak
2	66.8395	28.83	-9.67	19.16	40.00	-20.84	-	-	peak
3	158.6399	27.56	-8.05	19.51	43.50	-23.99	-	-	peak
4	398.2962	29.04	-6.28	22.76	46.00	-23.24	-	-	peak
5	624.4897	29.27	-1.78	27.49	46.00	-18.51	-	-	peak
6	945.3336	30.27	3.19	33.46	46.00	-12.54	-	-	peak

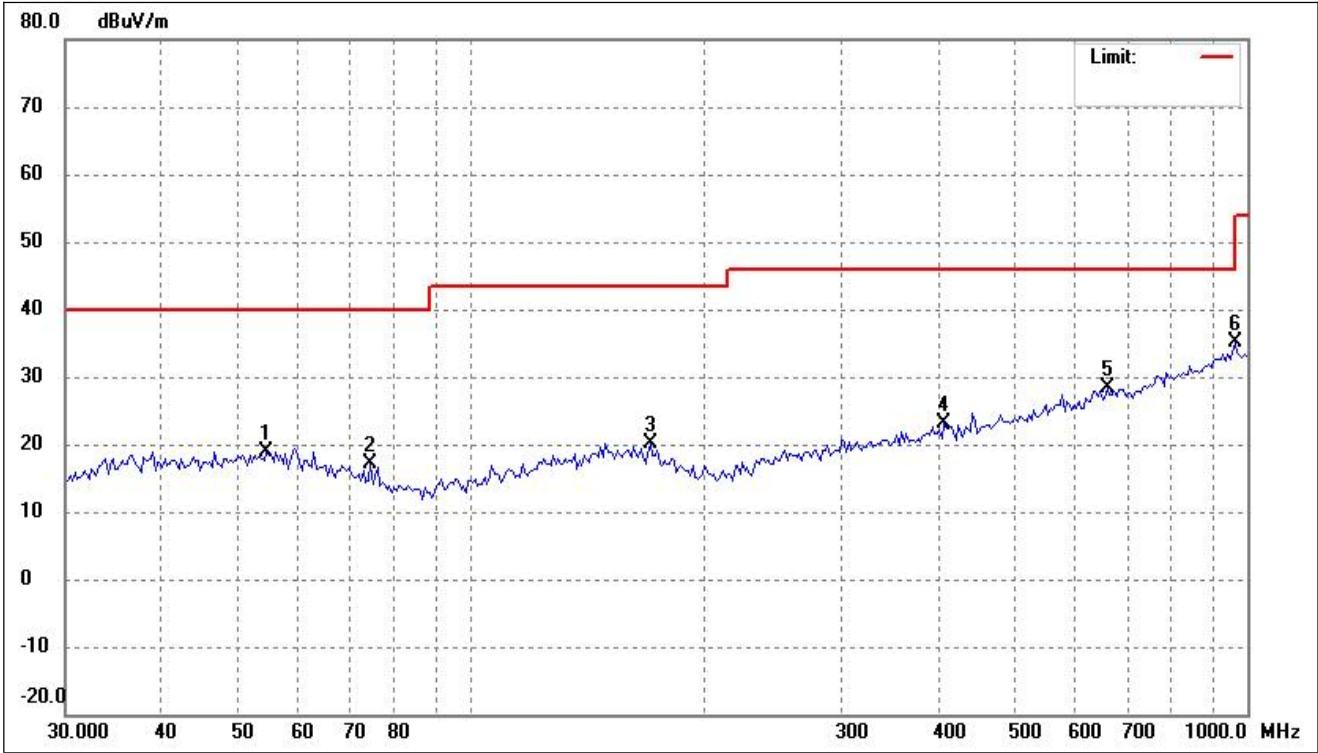
➤ 5250-5350MHz

802.11a			
Test Channel	5260MHz	Polarity:	Horizontal



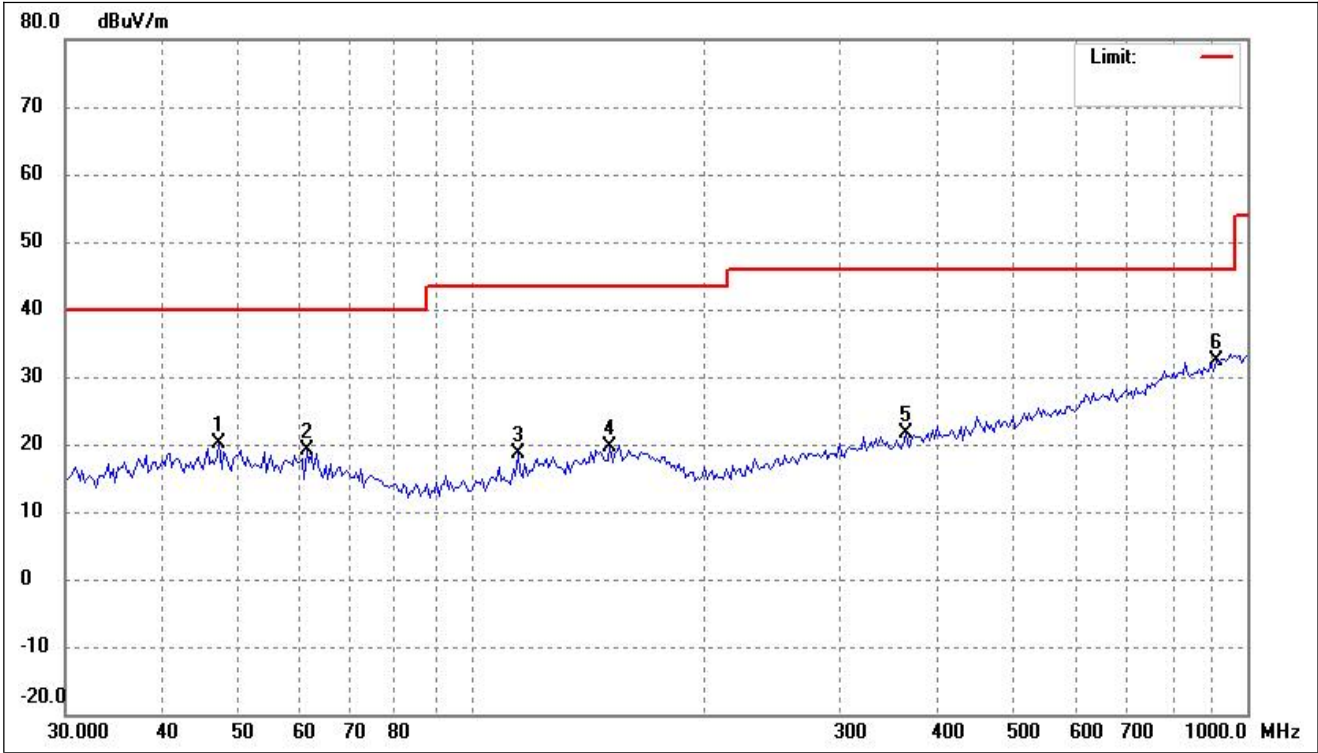
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	37.5648	27.66	-8.47	19.19	40.00	-20.81	-	-	peak
2	57.2654	26.76	-8.26	18.50	40.00	-21.50	-	-	peak
3	153.1627	28.58	-8.05	20.53	43.50	-22.97	-	-	peak
4	280.2936	28.83	-8.49	20.34	46.00	-25.66	-	-	peak
5	478.1394	30.03	-4.97	25.06	46.00	-20.94	-	-	peak
6	958.7135	30.70	3.34	34.04	46.00	-11.96	-	-	peak

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



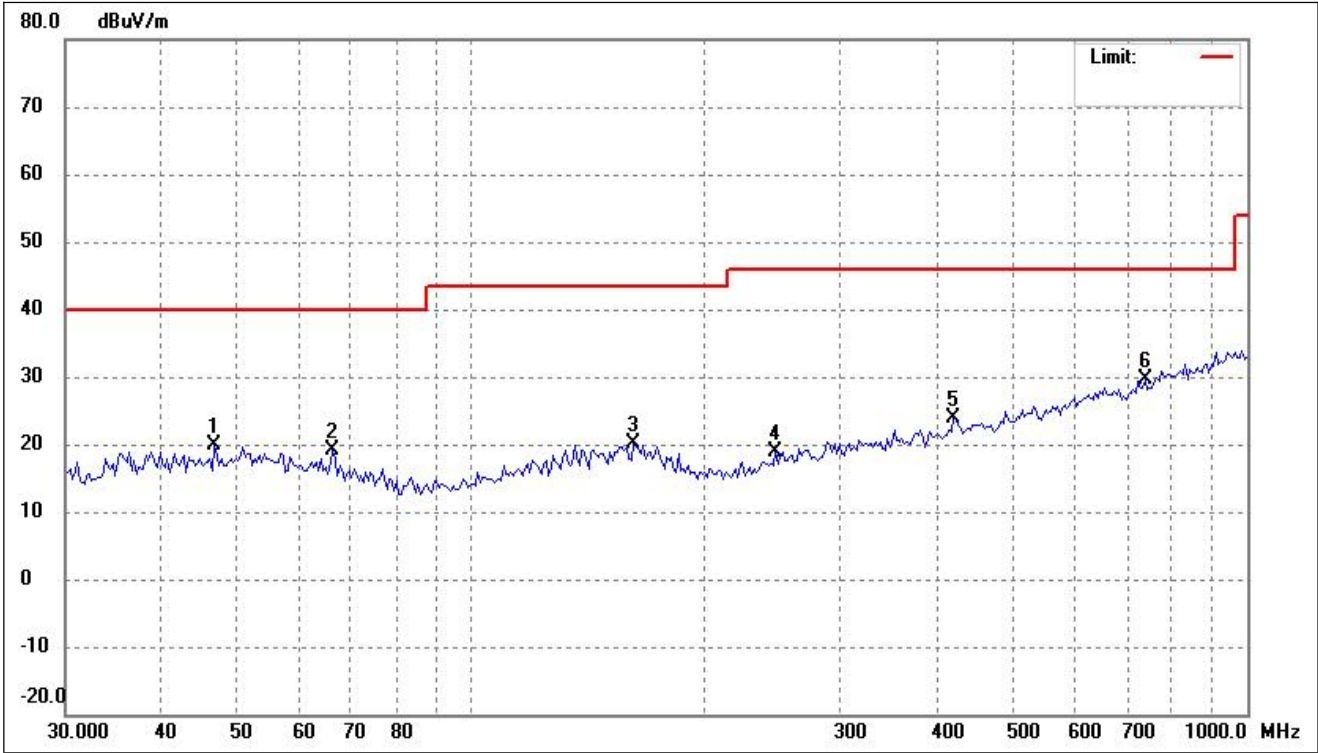
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	54.5166	26.99	-8.07	18.92	40.00	-21.08	-	-	peak
2	74.2696	28.24	-11.18	17.06	40.00	-22.94	-	-	peak
3	170.1887	28.55	-8.34	20.21	43.50	-23.29	-	-	peak
4	406.7820	29.19	-6.12	23.07	46.00	-22.93	-	-	peak
5	660.6024	29.75	-1.48	28.27	46.00	-17.73	-	-	peak
6	965.4742	31.77	3.37	35.14	54.00	-18.86	-	-	peak

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



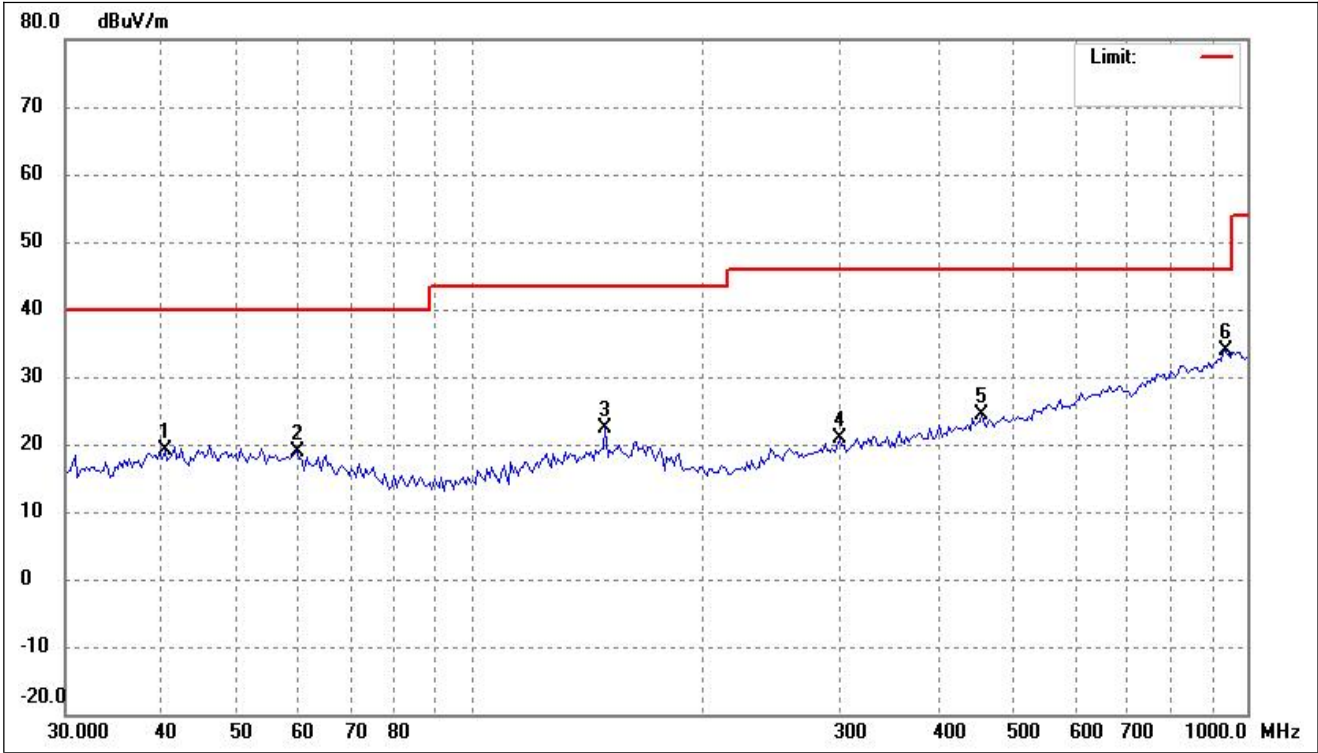
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	47.3688	27.91	-7.78	20.13	40.00	-19.87	-	-	peak
2	61.4343	27.70	-8.69	19.01	40.00	-20.99	-	-	peak
3	114.8224	29.19	-10.56	18.63	43.50	-24.87	-	-	peak
4	151.0252	27.74	-8.05	19.69	43.50	-23.81	-	-	peak
5	363.5231	28.54	-6.81	21.73	46.00	-24.27	-	-	peak
6	912.6953	29.94	2.40	32.34	46.00	-13.66	-	-	peak

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



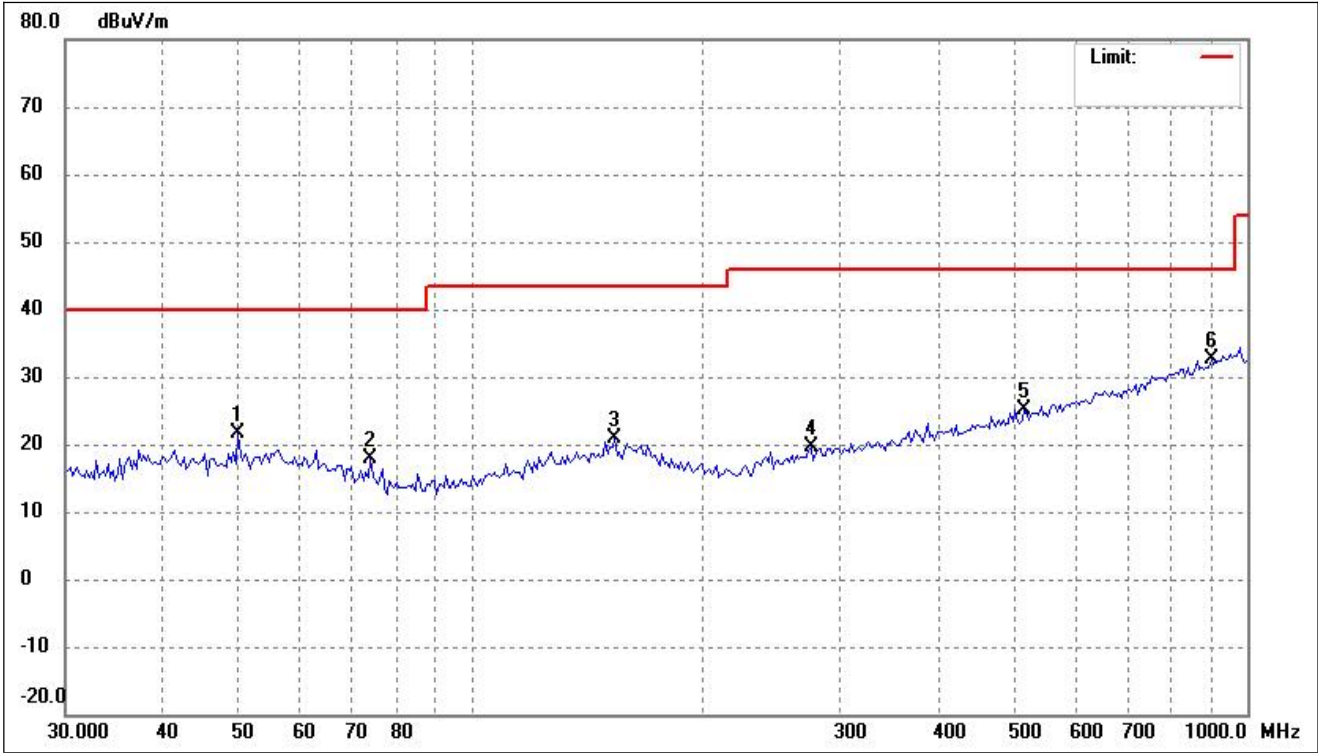
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	46.7077	27.61	-7.83	19.78	40.00	-20.22	-	-	peak
2	66.3715	28.76	-9.59	19.17	40.00	-20.83	-	-	peak
3	162.0197	28.21	-8.10	20.11	43.50	-23.39	-	-	peak
4	246.9901	28.75	-9.80	18.95	46.00	-27.05	-	-	peak
5	418.3784	29.86	-5.88	23.98	46.00	-22.02	-	-	peak
6	739.2136	29.83	-0.09	29.74	46.00	-16.26	-	-	peak

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



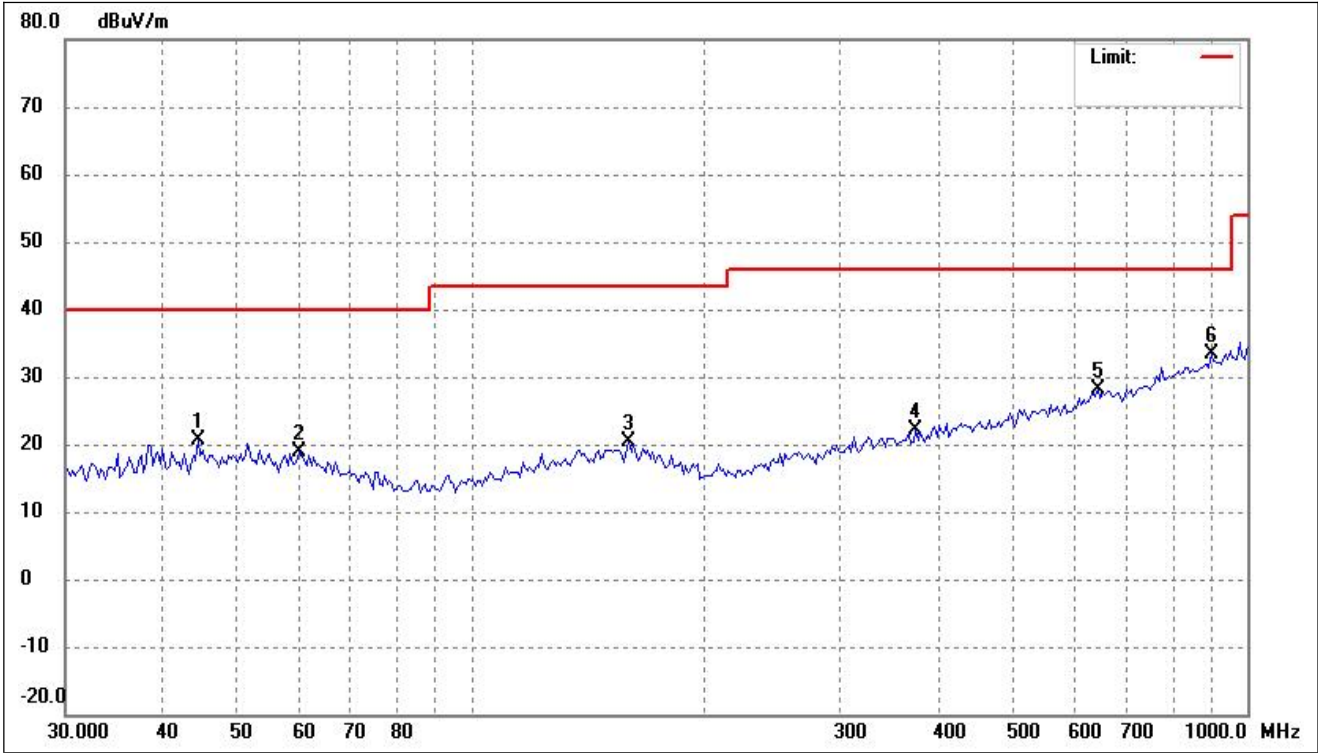
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	40.2995	27.13	-7.96	19.17	40.00	-20.83	-	-	peak
2	59.7315	27.31	-8.41	18.90	40.00	-21.10	-	-	peak
3	148.9175	30.56	-8.14	22.42	43.50	-21.08	-	-	peak
4	298.5932	28.87	-7.90	20.97	46.00	-25.03	-	-	peak
5	455.1888	29.44	-5.15	24.29	46.00	-21.71	-	-	peak
6	938.7139	30.79	3.03	33.82	46.00	-12.18	-	-	peak

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



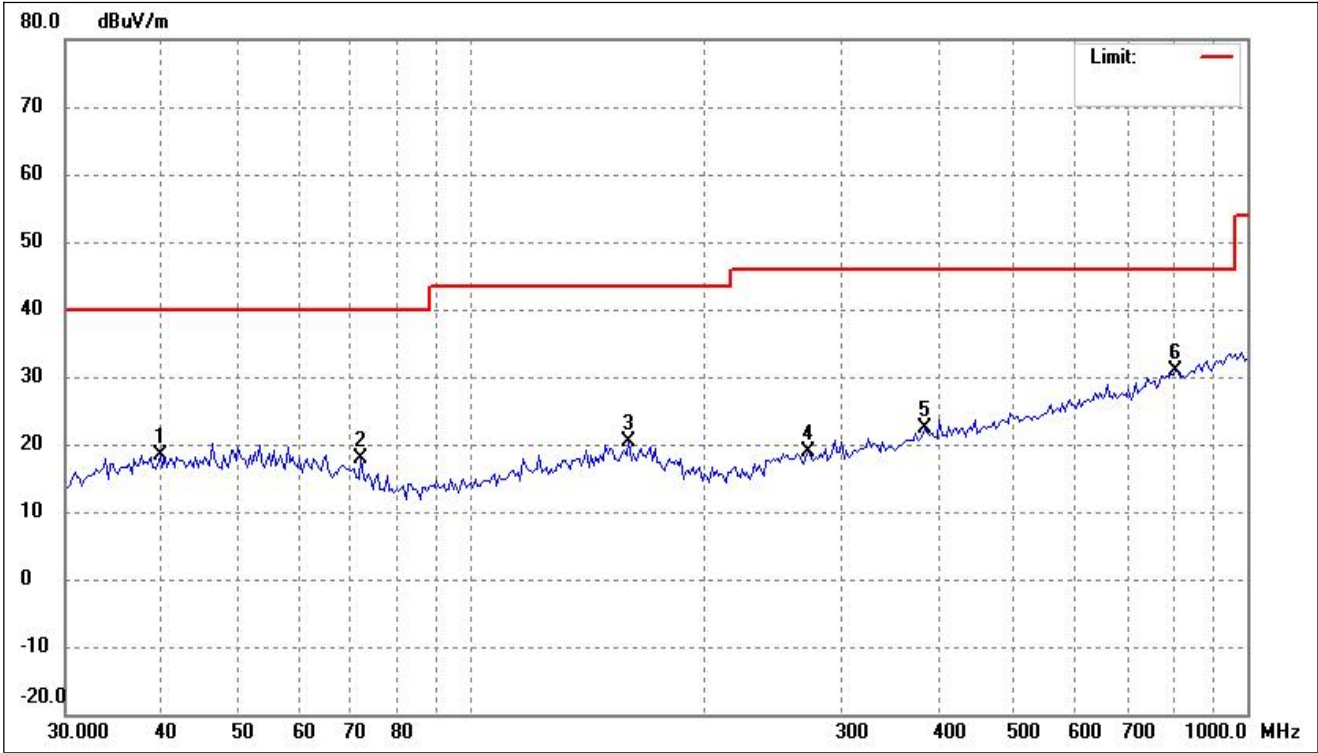
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	50.1080	29.10	-7.59	21.51	40.00	-18.49	-	-	peak
2	74.2696	28.94	-11.18	17.76	40.00	-22.24	-	-	peak
3	153.1627	28.93	-8.05	20.88	43.50	-22.62	-	-	peak
4	274.4464	28.25	-8.68	19.57	46.00	-26.43	-	-	peak
5	516.5651	29.58	-4.48	25.10	46.00	-20.90	-	-	peak
6	899.9577	30.57	2.09	32.66	46.00	-13.34	-	-	peak

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



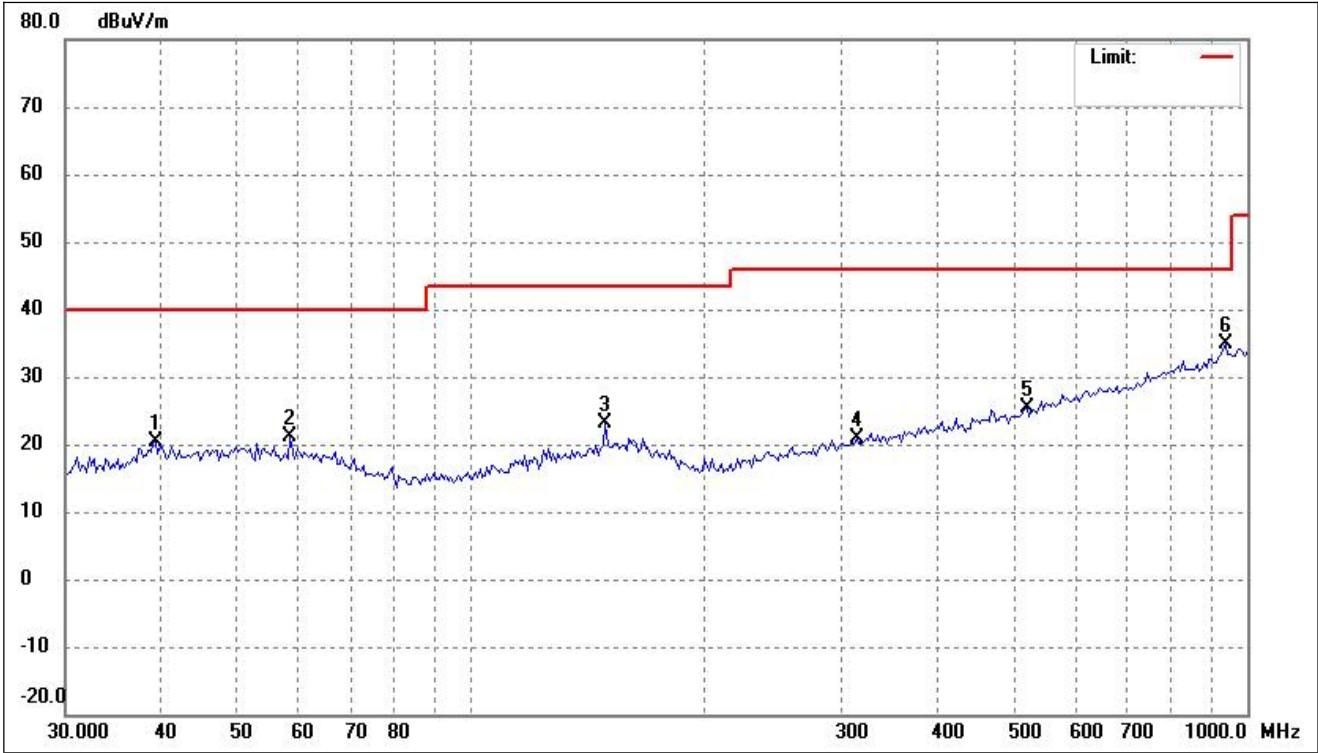
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	44.4657	28.62	-7.96	20.66	40.00	-19.34	-	-	peak
2	60.1528	27.46	-8.46	19.00	40.00	-21.00	-	-	peak
3	159.7586	28.38	-8.05	20.33	43.50	-23.17	-	-	peak
4	373.8862	28.73	-6.62	22.11	46.00	-23.89	-	-	peak
5	642.2923	29.72	-1.62	28.10	46.00	-17.90	-	-	peak
6	899.9577	31.27	2.09	33.36	46.00	-12.64	-	-	peak

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



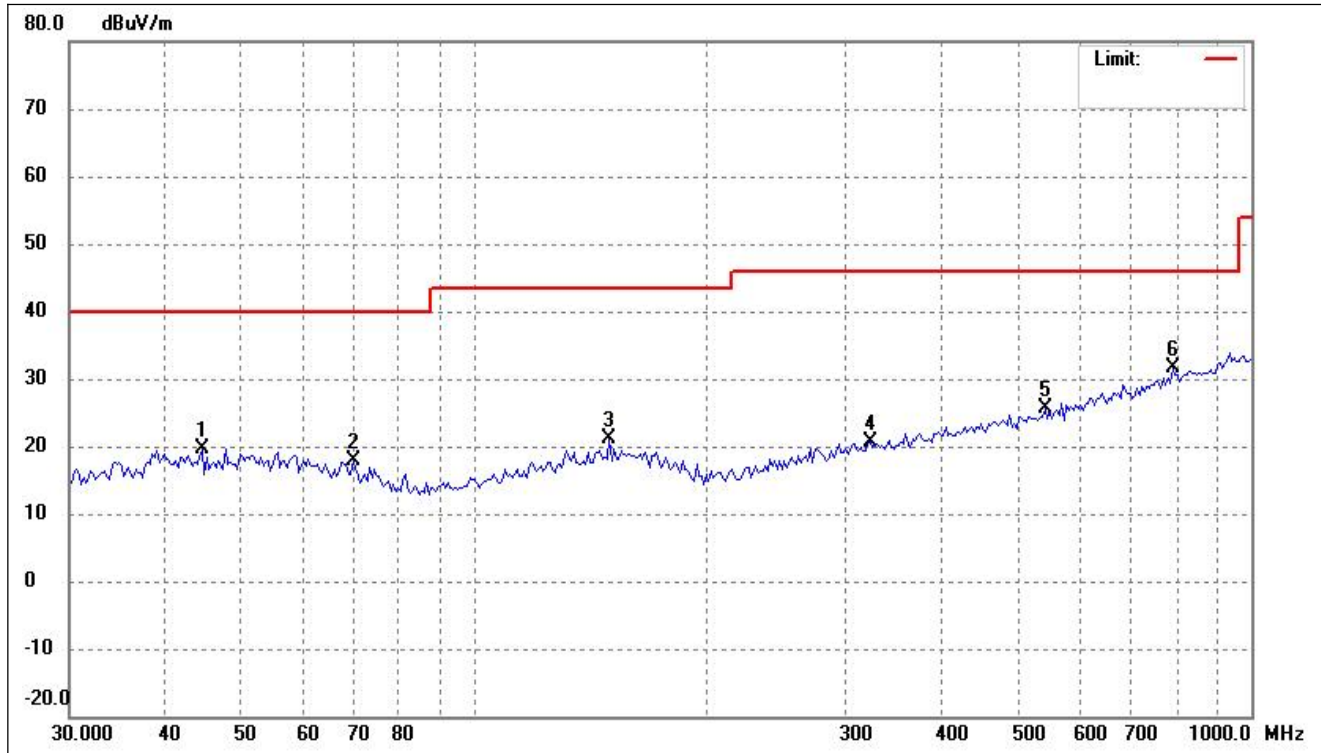
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	39.7371	26.36	-8.01	18.35	40.00	-21.65	-	-	peak
2	72.2111	28.50	-10.74	17.76	40.00	-22.24	-	-	peak
3	159.7586	28.42	-8.05	20.37	43.50	-23.13	-	-	peak
4	272.5246	27.68	-8.76	18.92	46.00	-27.08	-	-	peak
5	384.5447	28.78	-6.48	22.30	46.00	-23.70	-	-	peak
6	809.9238	29.72	1.11	30.83	46.00	-15.17	-	-	peak

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



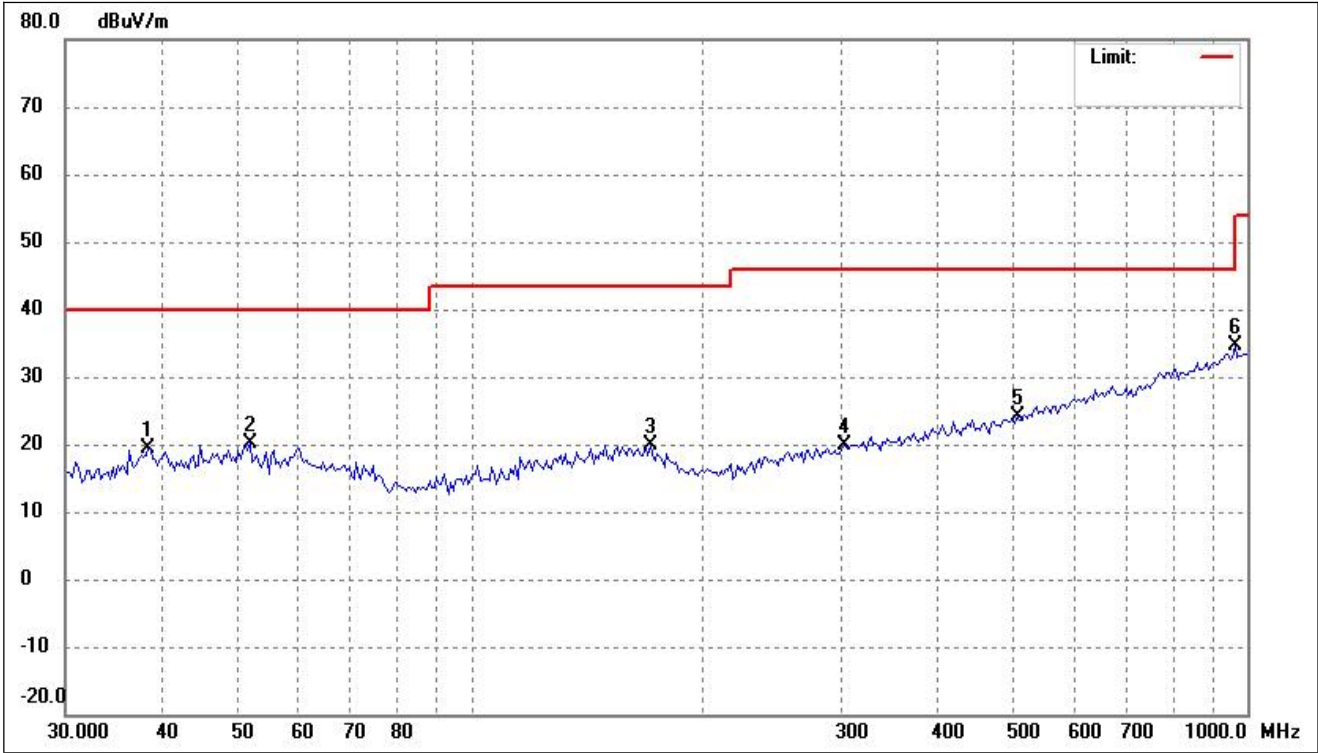
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	39.1825	28.39	-8.12	20.27	40.00	-19.73	-	-	peak
2	58.4855	29.37	-8.34	21.03	40.00	-18.97	-	-	peak
3	148.9175	31.18	-8.14	23.04	43.50	-20.46	-	-	peak
4	313.6483	28.49	-7.57	20.92	46.00	-25.08	-	-	peak
5	520.2079	29.70	-4.41	25.29	46.00	-20.71	-	-	peak
6	938.7139	31.86	3.03	34.89	46.00	-11.11	-	-	peak

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



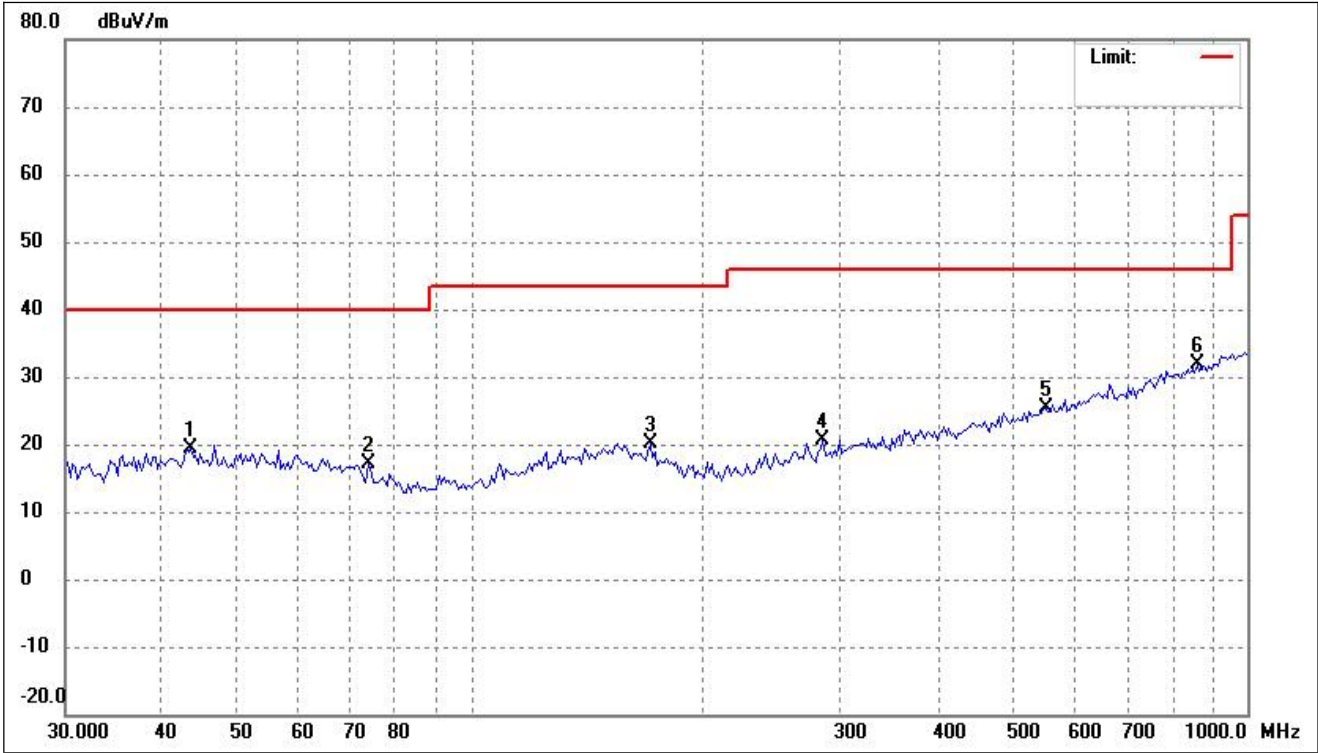
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	44.4657	27.67	-7.96	19.71	40.00	-20.29	-	-	peak
2	69.7179	28.05	-10.20	17.85	40.00	-22.15	-	-	peak
3	148.9175	29.31	-8.14	21.17	43.50	-22.33	-	-	peak
4	322.5896	28.06	-7.38	20.68	46.00	-25.32	-	-	peak
5	542.6104	29.50	-3.78	25.72	46.00	-20.28	-	-	peak
6	793.0281	30.82	0.88	31.70	46.00	-14.30	-	-	peak

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



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	38.3651	27.68	-8.30	19.38	40.00	-20.62	-	-	peak
2	51.8999	28.03	-7.79	20.24	40.00	-19.76	-	-	peak
3	170.1888	28.33	-8.34	19.99	43.50	-23.51	-	-	peak
4	302.8193	27.79	-7.80	19.99	46.00	-26.01	-	-	peak
5	505.7891	28.76	-4.69	24.07	46.00	-21.93	-	-	peak
6	965.4742	31.33	3.37	34.70	54.00	-19.30	-	-	peak

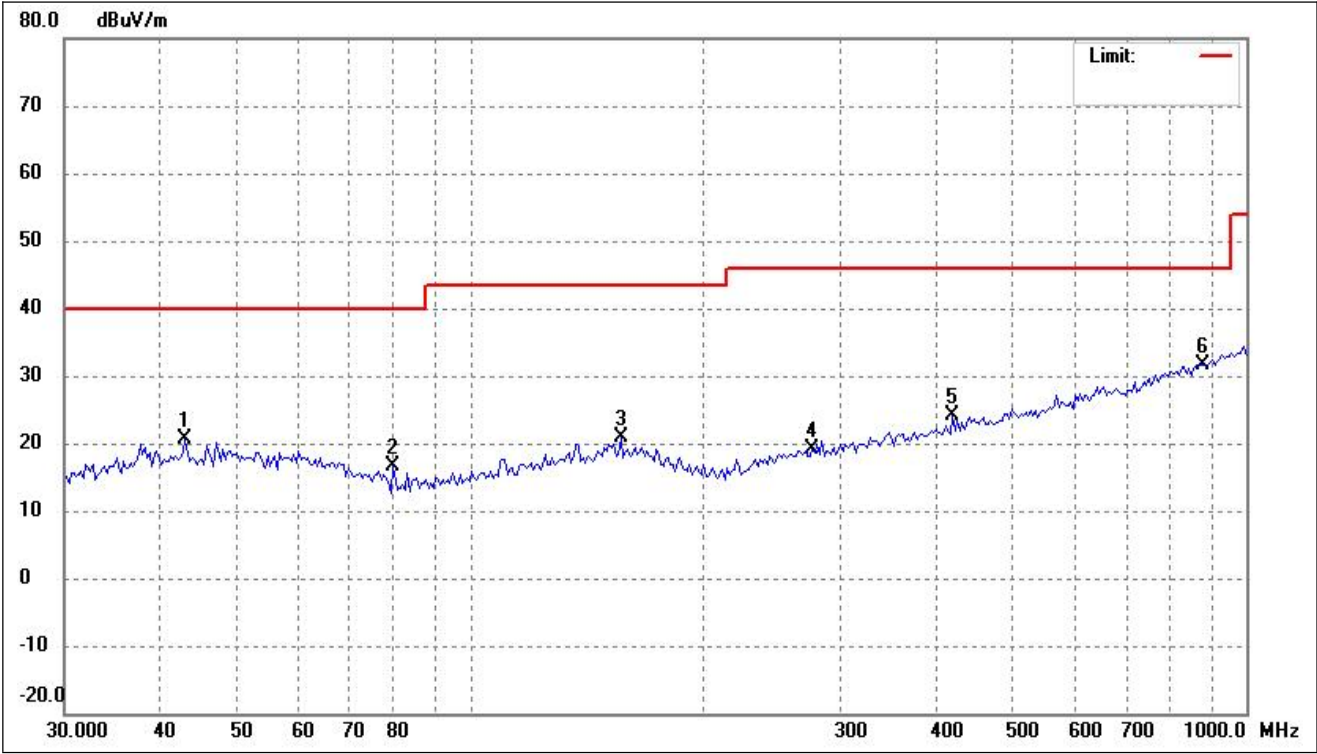
802.11ac-VHT80			
Test Channel	5290MHz(worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	43.5381	27.38	-7.95	19.43	40.00	-20.57	-	-	peak
2	73.7496	28.11	-11.08	17.03	40.00	-22.97	-	-	peak
3	170.1888	28.54	-8.34	20.20	43.50	-23.30	-	-	peak
4	284.2607	29.09	-8.36	20.73	46.00	-25.27	-	-	peak
5	550.2902	28.92	-3.54	25.38	46.00	-20.62	-	-	peak
6	862.8015	30.27	1.68	31.95	46.00	-14.05	-	-	peak

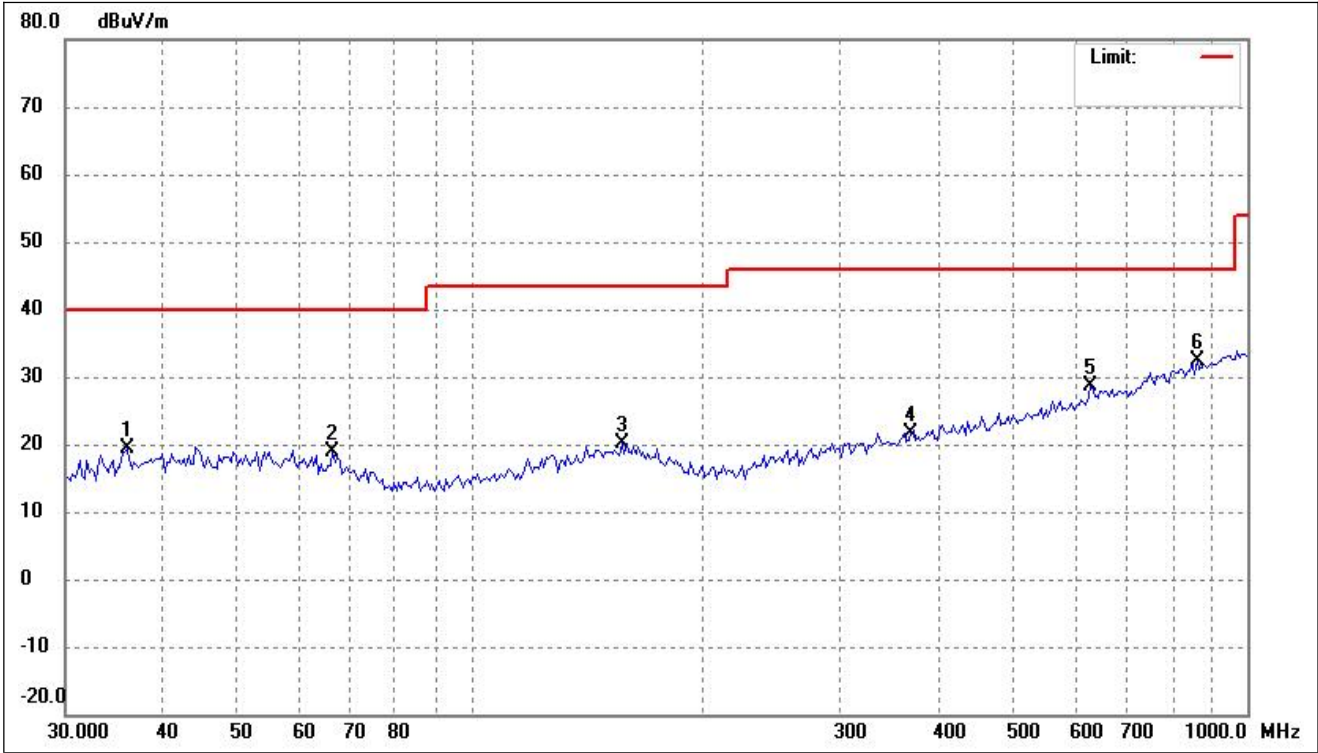
➤ 5470-5725MHz

802.11a			
Test Channel	5500MHz(worst case)	Polarity:	Horizontal



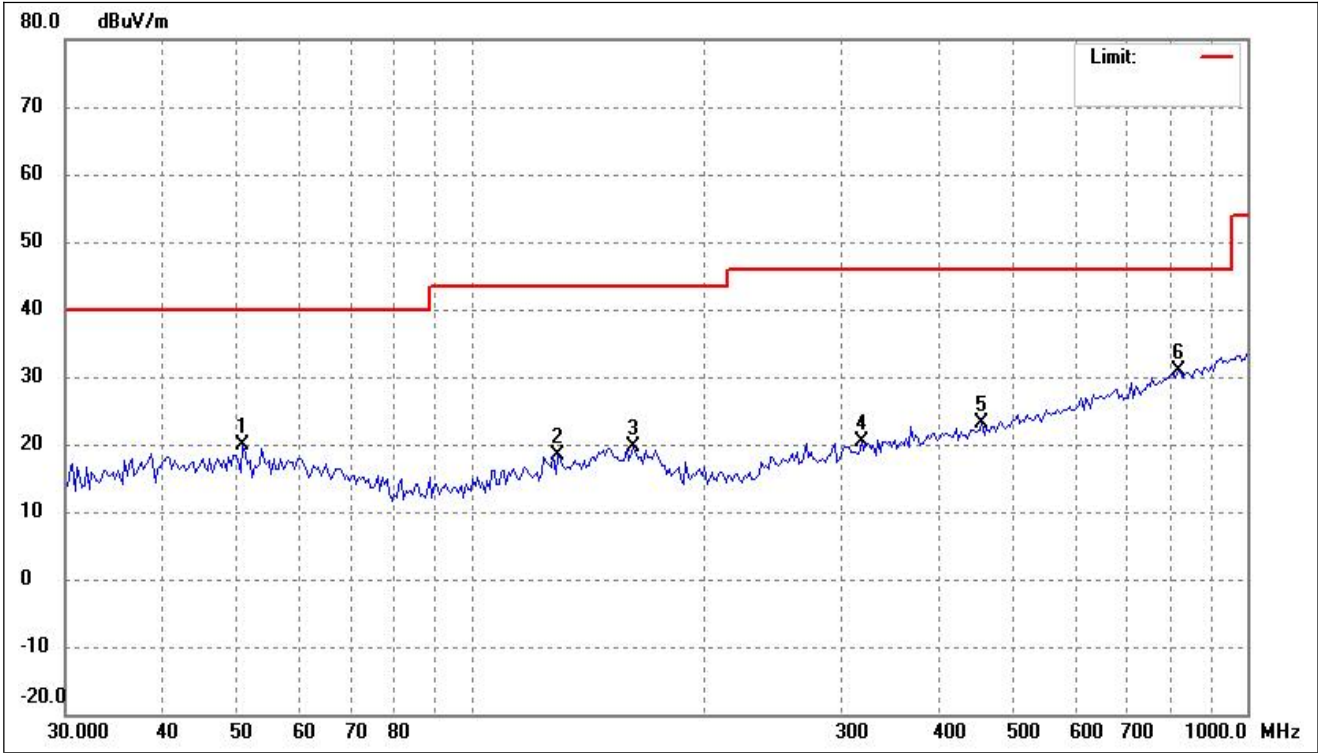
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	42.9305	28.64	-7.96	20.68	40.00	-19.32	-	-	peak
2	79.6764	28.94	-12.36	16.58	40.00	-23.42	-	-	peak
3	156.4259	28.97	-8.05	20.92	43.50	-22.58	-	-	peak
4	276.3818	27.87	-8.62	19.25	46.00	-26.75	-	-	peak
5	418.3784	30.05	-5.88	24.17	46.00	-21.83	-	-	peak
6	881.1838	29.78	1.88	31.66	46.00	-14.34	-	-	peak

802.11a			
Test Channel	5500MHz(worst case)	Polarity:	Vertical



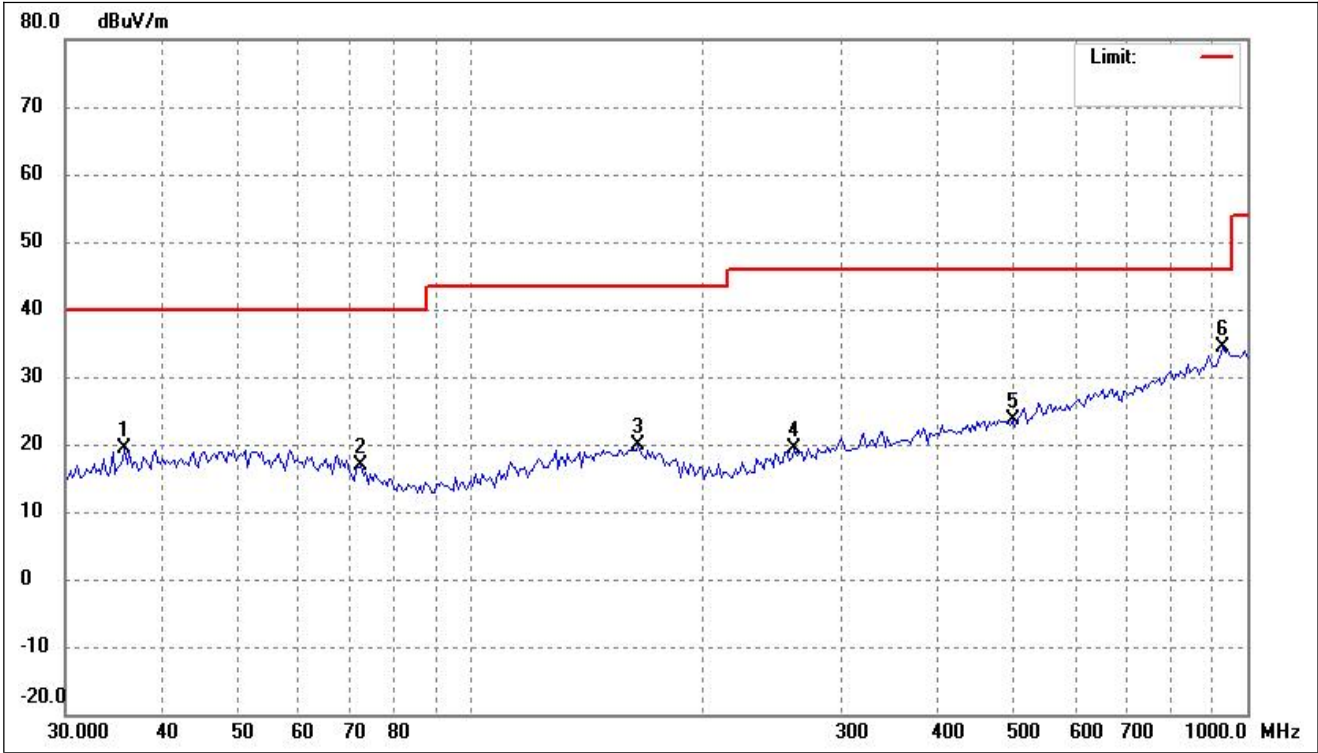
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	36.0139	28.12	-8.80	19.32	40.00	-20.68	-	-	peak
2	66.3715	28.54	-9.59	18.95	40.00	-21.05	-	-	peak
3	156.4259	28.21	-8.05	20.16	43.50	-23.34	-	-	peak
4	368.6682	28.38	-6.71	21.67	46.00	-24.33	-	-	peak
5	628.8936	30.35	-1.74	28.61	46.00	-17.39	-	-	peak
6	862.8015	30.70	1.68	32.38	46.00	-13.62	-	-	peak

802.11n-HT20			
Test Channel	5500MHz(worst case)	Polarity:	Horizontal



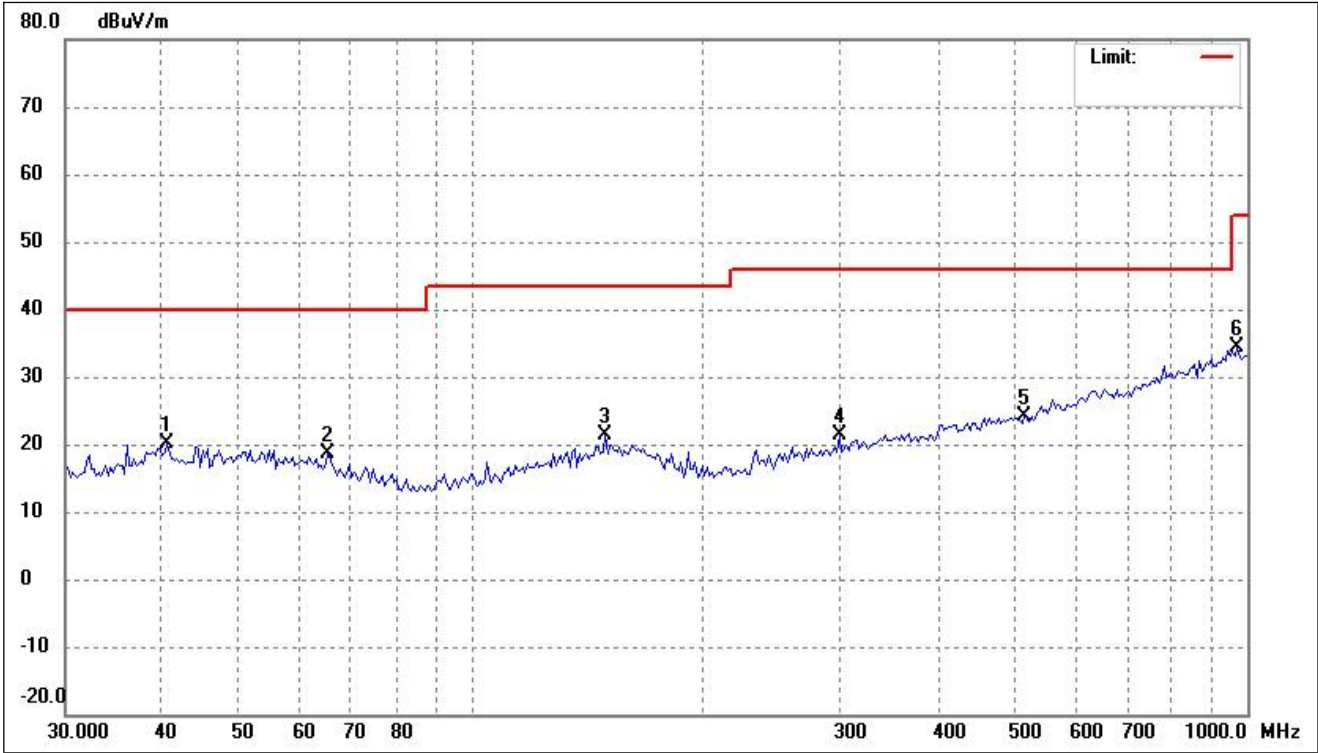
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	50.8172	27.63	-7.67	19.96	40.00	-20.04	-	-	peak
2	129.3923	27.66	-9.36	18.30	43.50	-25.20	-	-	peak
3	162.0197	27.64	-8.10	19.54	43.50	-23.96	-	-	peak
4	318.0875	27.74	-7.47	20.27	46.00	-25.73	-	-	peak
5	455.1888	28.25	-5.15	23.10	46.00	-22.90	-	-	peak
6	815.6353	29.77	1.17	30.94	46.00	-15.06	-	-	peak

802.11n-HT20			
Test Channel	5500MHz(worst case)	Polarity:	Vertical



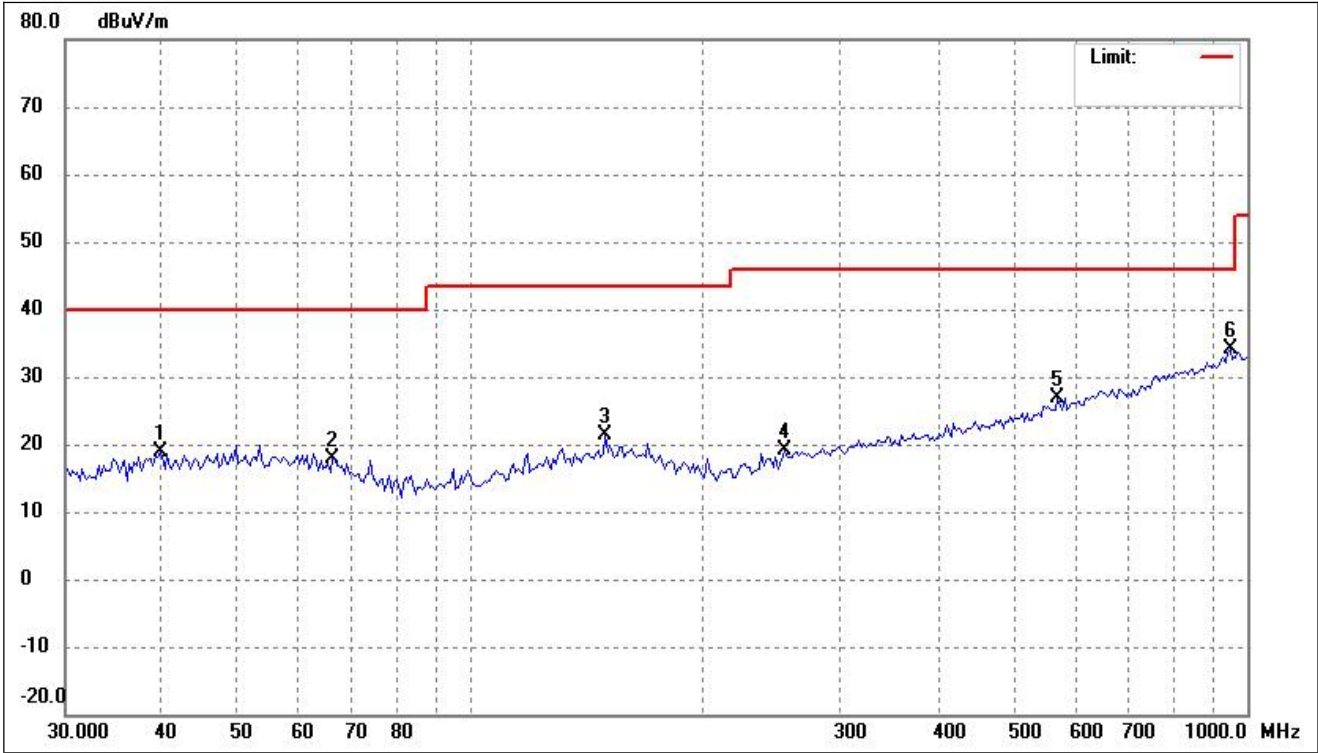
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	35.7617	28.23	-8.85	19.38	40.00	-20.62	-	-	peak
2	72.2111	27.50	-10.74	16.76	40.00	-23.24	-	-	peak
3	164.3129	28.08	-8.16	19.92	43.50	-23.58	-	-	peak
4	261.2730	28.51	-9.24	19.27	46.00	-26.73	-	-	peak
5	498.7303	28.47	-4.81	23.66	46.00	-22.34	-	-	peak
6	932.1405	31.40	2.87	34.27	46.00	-11.73	-	-	peak

802.11ac-VHT20			
Test Channel	5500MHz(worst case)	Polarity:	Horizontal



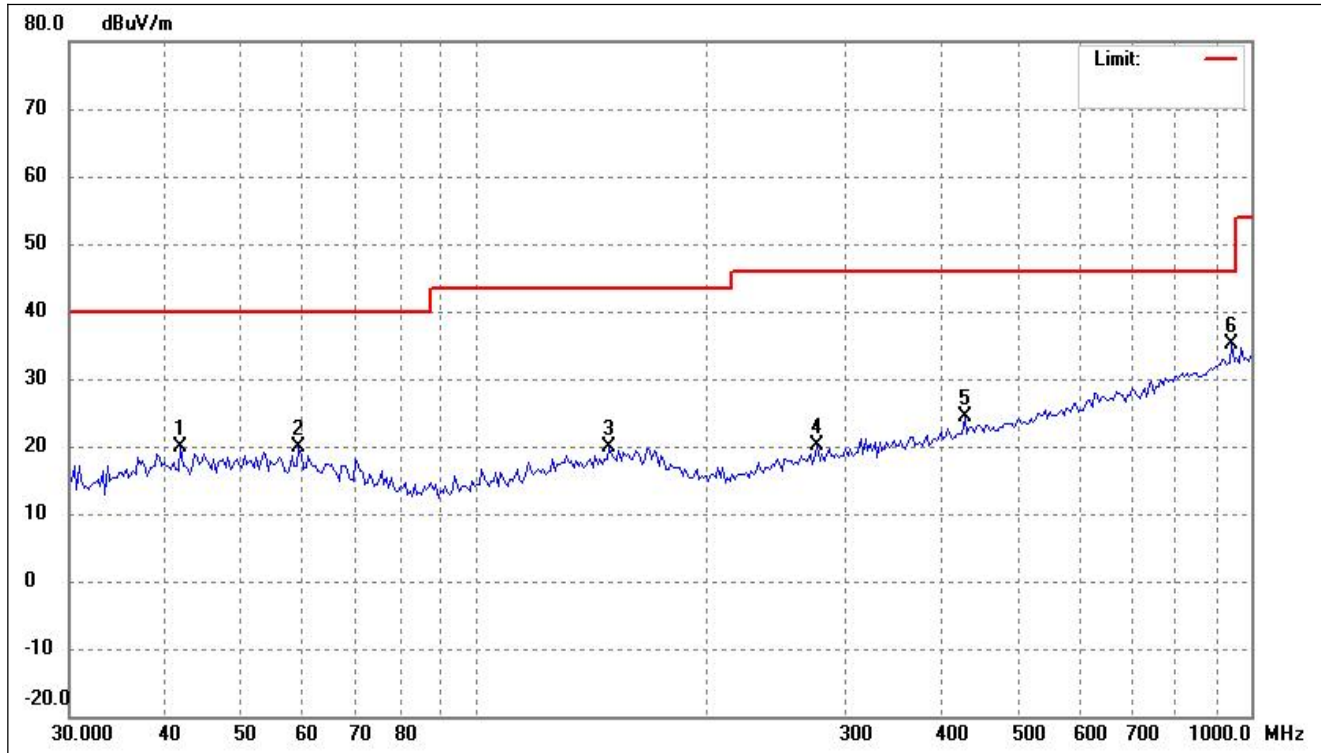
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	40.5837	27.98	-7.96	20.02	40.00	-19.98	-	-	peak
2	65.4452	27.93	-9.42	18.51	40.00	-21.49	-	-	peak
3	148.9175	29.40	-8.14	21.26	43.50	-22.24	-	-	peak
4	298.5932	29.33	-7.90	21.43	46.00	-24.57	-	-	peak
5	516.5651	28.69	-4.48	24.21	46.00	-21.79	-	-	peak
6	972.2827	30.97	3.39	34.36	54.00	-19.64	-	-	peak

802.11ac-VHT20			
Test Channel	5500MHz(worst case)	Polarity:	Vertical



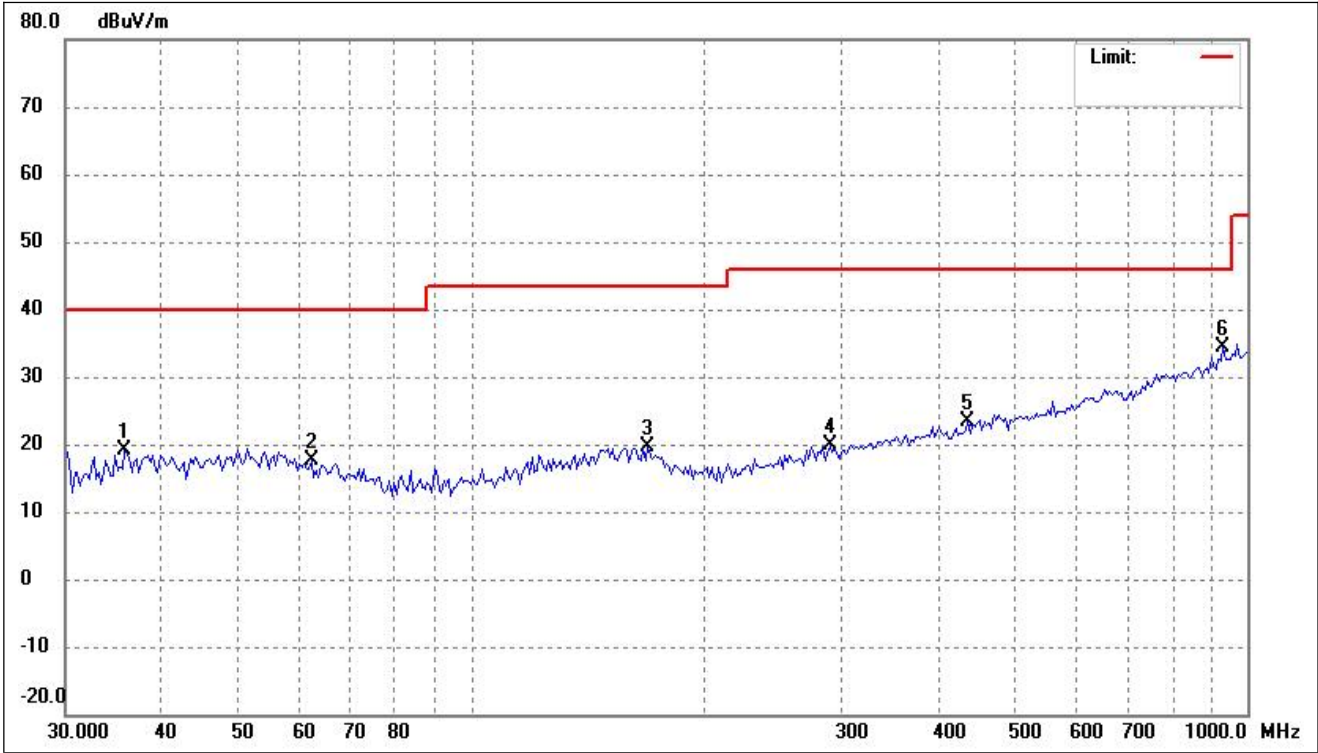
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	39.7371	26.86	-8.01	18.85	40.00	-21.15	-	-	peak
2	66.8395	27.62	-9.67	17.95	40.00	-22.05	-	-	peak
3	148.9175	29.45	-8.14	21.31	43.50	-22.19	-	-	peak
4	254.0312	28.71	-9.54	19.17	46.00	-26.83	-	-	peak
5	569.9688	29.97	-2.98	26.99	46.00	-19.01	-	-	peak
6	952.0001	30.72	3.31	34.03	46.00	-11.97	-	-	peak

802.11n-HT40			
Test Channel	5510MHz(worst case)	Polarity:	Horizontal



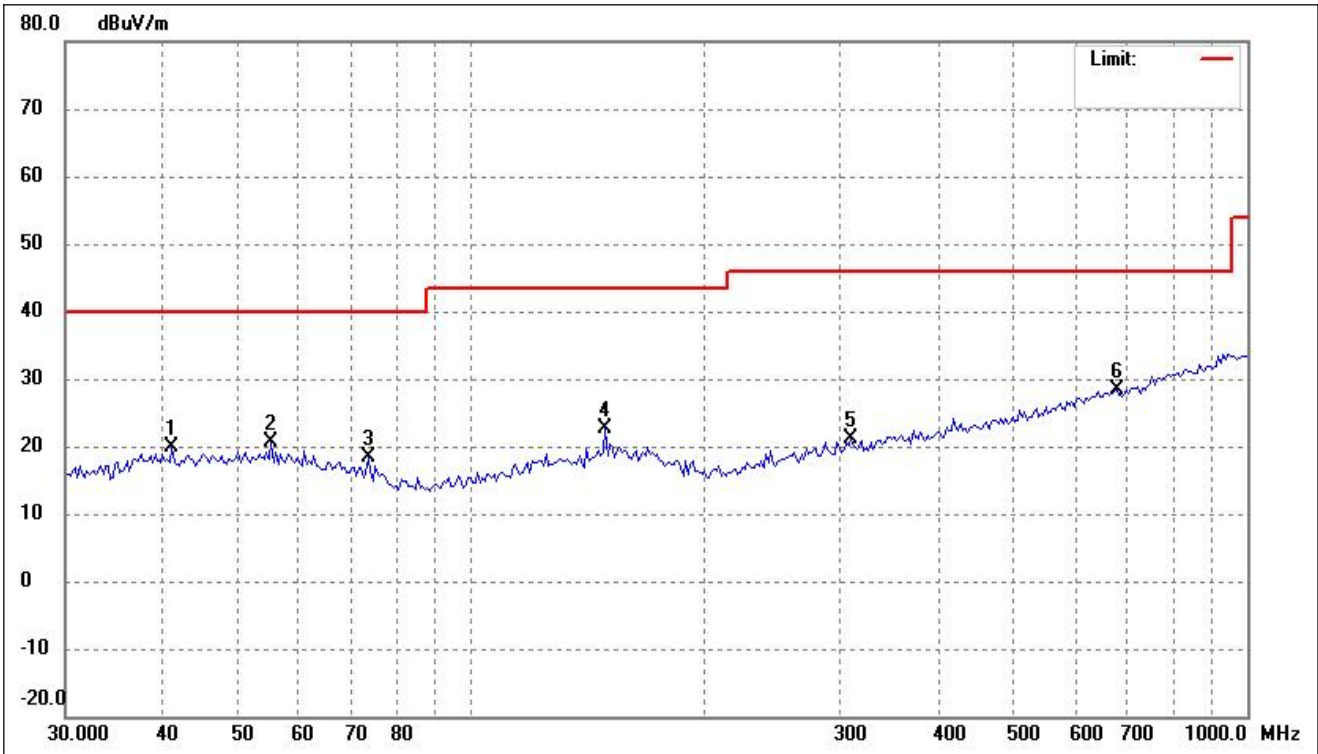
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	41.7406	27.76	-7.95	19.81	40.00	-20.19	-	-	peak
2	59.3133	28.22	-8.39	19.83	40.00	-20.17	-	-	peak
3	148.9175	27.96	-8.14	19.82	43.50	-23.68	-	-	peak
4	276.3818	28.81	-8.62	20.19	46.00	-25.81	-	-	peak
5	427.2920	30.16	-5.68	24.48	46.00	-21.52	-	-	peak
6	945.3336	31.84	3.19	35.03	46.00	-10.97	-	-	peak

802.11n-HT40			
Test Channel	5510MHz(worst case)	Polarity:	Vertical



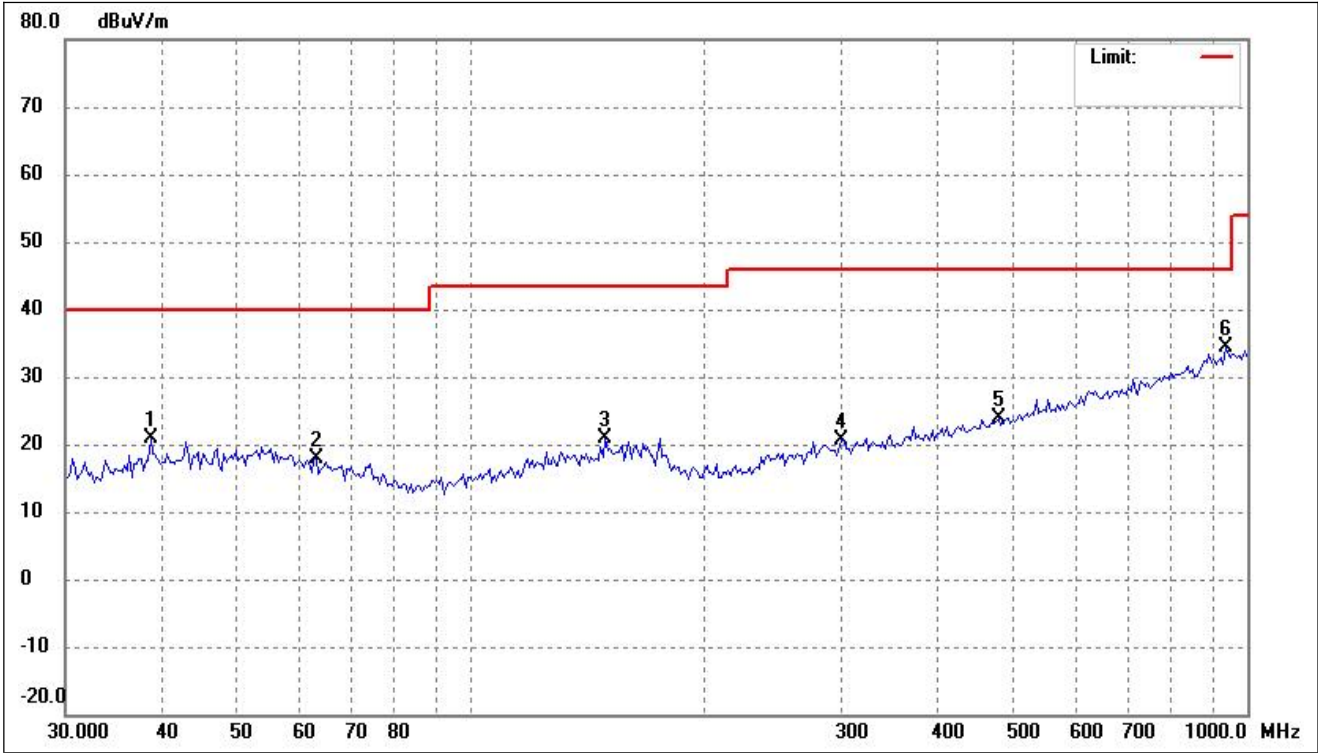
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	35.7617	27.90	-8.85	19.05	40.00	-20.95	-	-	peak
2	62.3038	26.37	-8.84	17.53	40.00	-22.47	-	-	peak
3	168.9970	27.99	-8.29	19.70	43.50	-23.80	-	-	peak
4	290.3170	28.03	-8.16	19.87	46.00	-26.13	-	-	peak
5	436.3956	28.77	-5.47	23.30	46.00	-22.70	-	-	peak
6	932.1405	31.62	2.87	34.49	46.00	-11.51	-	-	peak

802.11ac-VHT40			
Test Channel	5510MHz(worst case)	Polarity:	Horizontal



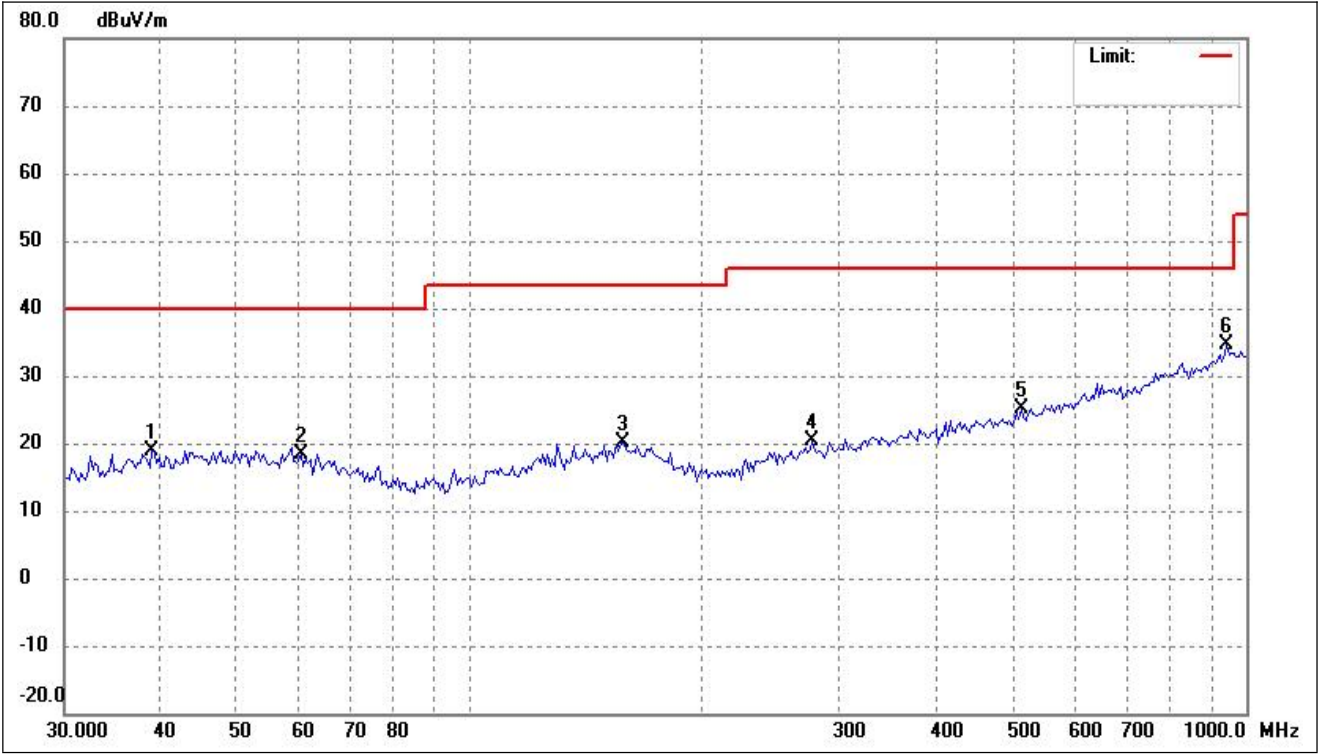
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	41.1581	27.85	-7.96	19.89	40.00	-20.11	-	-	peak
2	55.2883	28.72	-8.14	20.58	40.00	-19.42	-	-	peak
3	73.7496	29.40	-11.08	18.32	40.00	-21.68	-	-	peak
4	148.9175	30.81	-8.14	22.67	43.50	-20.83	-	-	peak
5	309.2710	28.78	-7.66	21.12	46.00	-24.88	-	-	peak
6	679.4346	29.59	-1.33	28.26	46.00	-17.74	-	-	peak

802.11ac-VHT40			
Test Channel	5510MHz(worst case)	Polarity:	Vertical



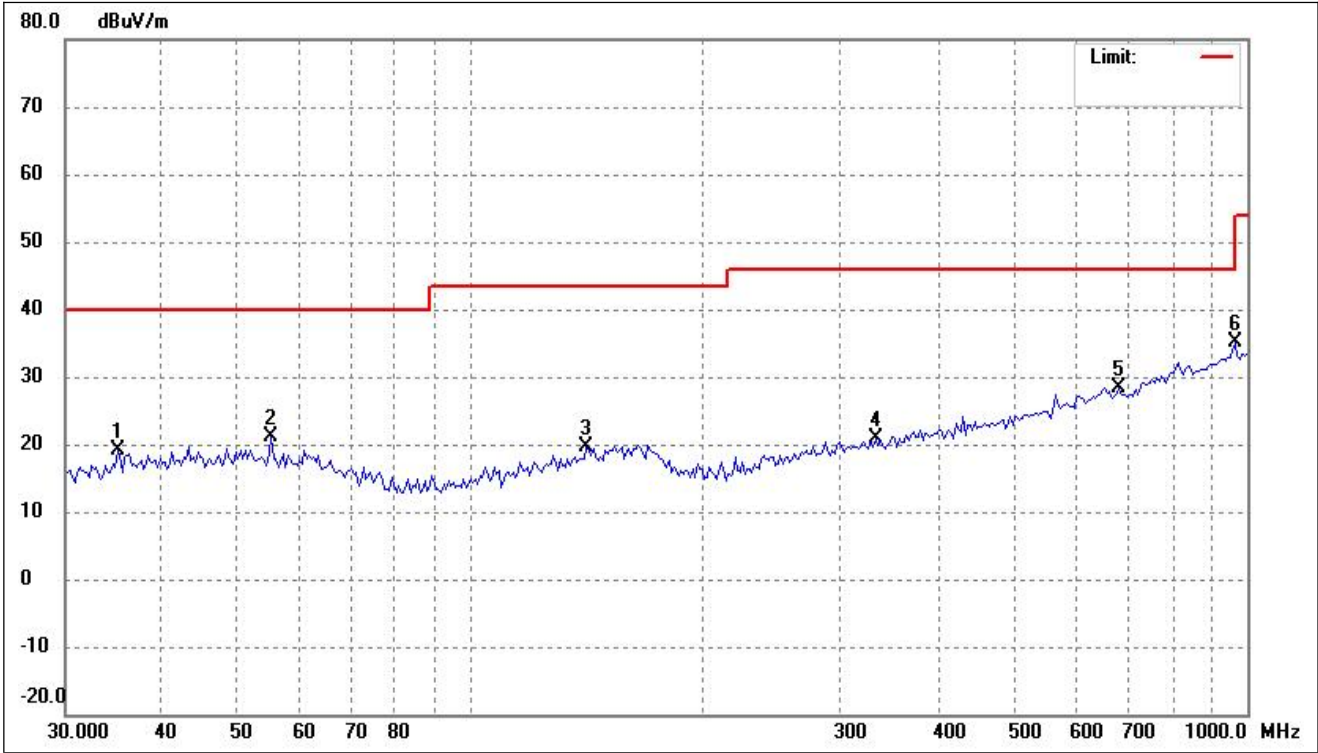
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	38.6357	29.02	-8.25	20.77	40.00	-19.23	-	-	peak
2	63.1857	26.91	-9.01	17.90	40.00	-22.10	-	-	peak
3	148.9175	29.11	-8.14	20.97	43.50	-22.53	-	-	peak
4	300.6988	28.52	-7.85	20.67	46.00	-25.33	-	-	peak
5	478.1394	28.75	-4.97	23.78	46.00	-22.22	-	-	peak
6	938.7139	31.32	3.03	34.35	46.00	-11.65	-	-	peak

802.11ac-VHT80			
Test Channel	5530MHz(worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	38.9081	26.95	-8.19	18.76	40.00	-21.24	-	-	peak
2	60.5769	26.90	-8.54	18.36	40.00	-21.64	-	-	peak
3	157.5290	28.23	-8.05	20.18	43.50	-23.32	-	-	peak
4	276.3818	28.91	-8.62	20.29	46.00	-25.71	-	-	peak
5	512.9478	29.75	-4.56	25.19	46.00	-20.81	-	-	peak
6	945.3336	31.32	3.19	34.51	46.00	-11.49	-	-	peak

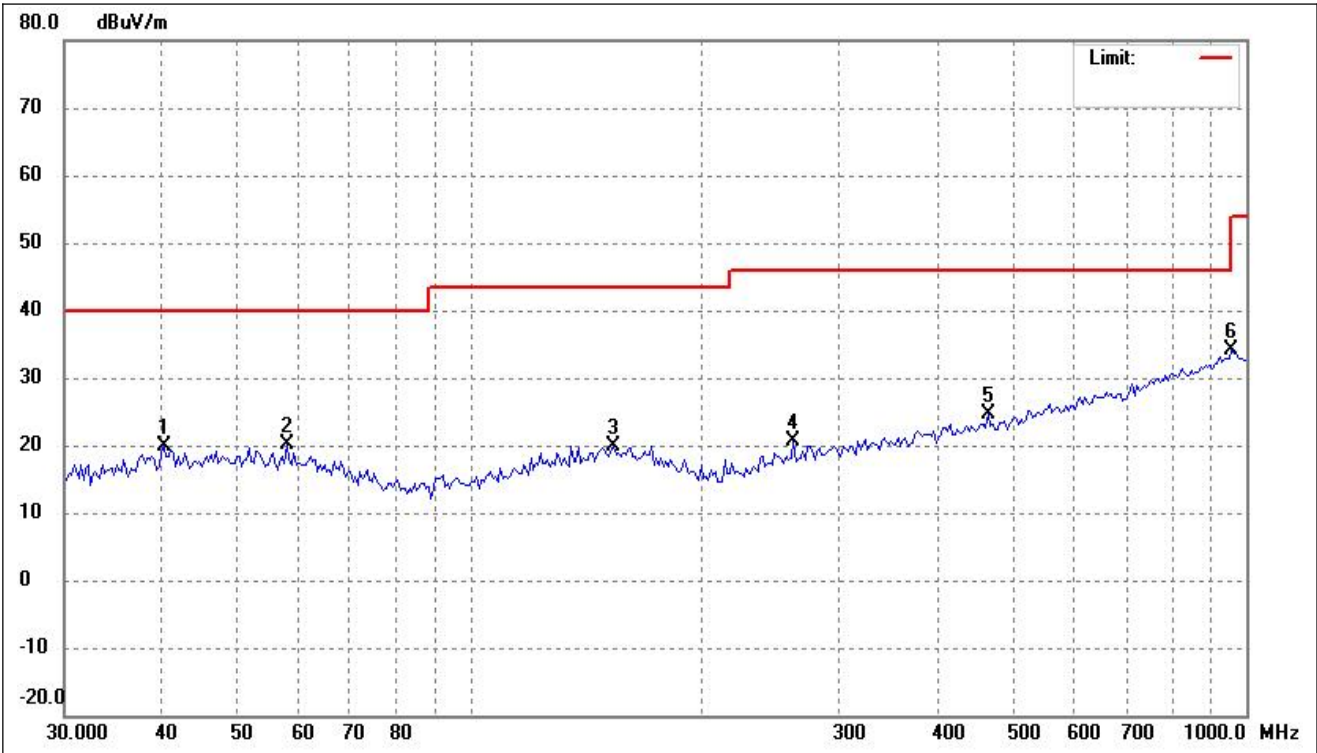
802.11ac-VHT80			
Test Channel	5530MHz(worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	35.0157	28.11	-9.01	19.10	40.00	-20.90	-	-	peak
2	55.2883	29.16	-8.14	21.02	40.00	-18.98	-	-	peak
3	140.7767	28.51	-8.83	19.68	43.50	-23.82	-	-	peak
4	331.7858	28.14	-7.25	20.89	46.00	-25.11	-	-	peak
5	684.2259	29.67	-1.27	28.40	46.00	-17.60	-	-	peak
6	965.4742	31.72	3.37	35.09	54.00	-18.91	-	-	peak

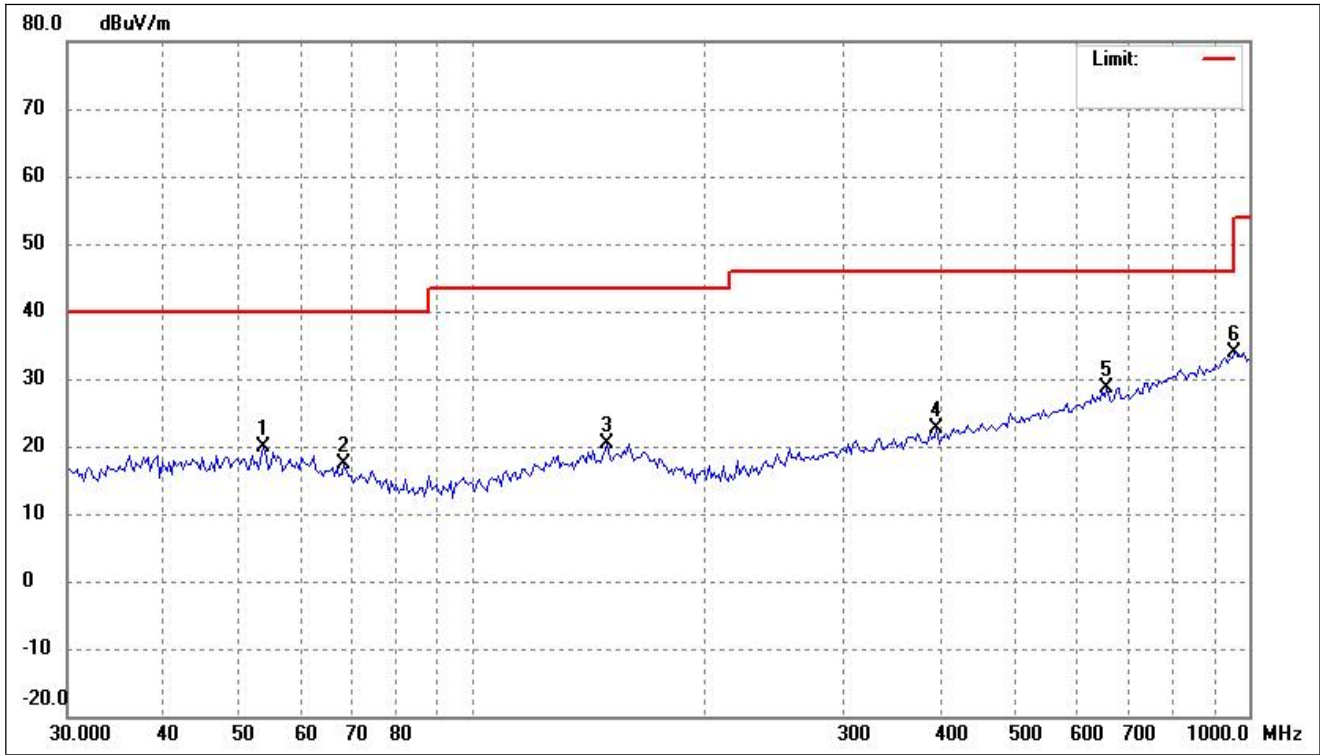
➤ 5725-5850MHz

802.11a			
Test Channel	5745MHz(worst case)	Polarity:	Horizontal



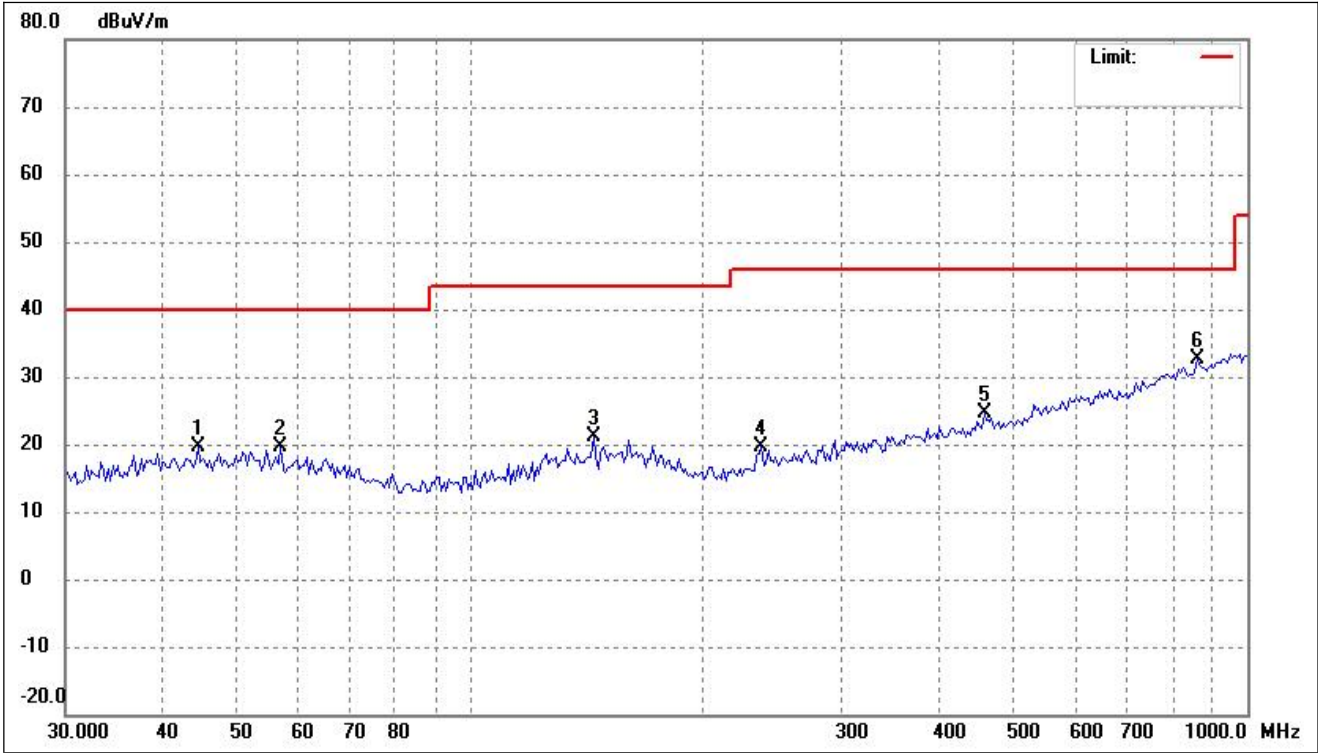
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	40.2994	27.85	-7.96	19.89	40.00	-20.11	-	-	peak
2	58.0759	28.39	-8.32	20.07	40.00	-19.93	-	-	peak
3	153.1627	27.99	-8.05	19.94	43.50	-23.56	-	-	peak
4	261.2729	29.95	-9.24	20.71	46.00	-25.29	-	-	peak
5	464.8867	29.62	-5.06	24.56	46.00	-21.44	-	-	peak
6	958.7134	30.89	3.34	34.23	46.00	-11.77	-	-	peak

802.11a			
Test Channel	5745MHz(worst case)	Polarity:	Vertical



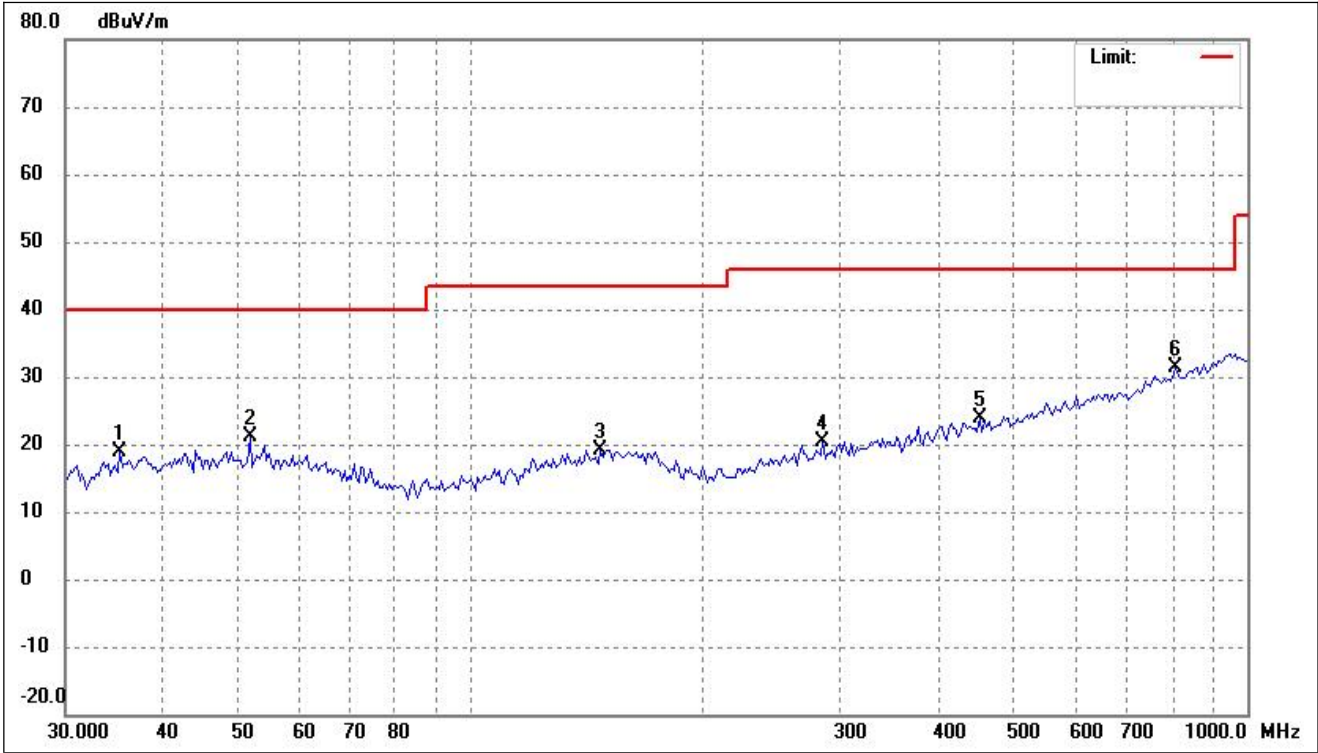
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	53.7559	27.98	-7.99	19.99	40.00	-20.01	-	-	peak
2	68.2636	27.41	-9.94	17.47	40.00	-22.53	-	-	peak
3	148.9175	28.42	-8.14	20.28	43.50	-23.22	-	-	peak
4	395.5071	28.83	-6.31	22.52	46.00	-23.48	-	-	peak
5	655.9766	30.27	-1.52	28.75	46.00	-17.25	-	-	peak
6	958.7135	30.58	3.34	33.92	46.00	-12.08	-	-	peak

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



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	44.4657	27.62	-7.96	19.66	40.00	-20.34	-	-	peak
2	56.8644	27.82	-8.24	19.58	40.00	-20.42	-	-	peak
3	143.7760	29.59	-8.57	21.02	43.50	-22.48	-	-	peak
4	236.7928	29.87	-10.36	19.51	46.00	-26.49	-	-	peak
5	458.3987	29.73	-5.12	24.61	46.00	-21.39	-	-	peak
6	862.8015	30.87	1.68	32.55	46.00	-13.45	-	-	peak

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



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	35.2626	27.73	-8.96	18.77	40.00	-21.23	-	-	peak
2	51.8999	28.93	-7.79	21.14	40.00	-18.86	-	-	peak
3	146.8392	27.47	-8.31	19.16	43.50	-24.34	-	-	peak
4	284.2607	28.72	-8.36	20.36	46.00	-25.64	-	-	peak
5	452.0013	29.07	-5.17	23.90	46.00	-22.10	-	-	peak
6	809.9238	30.16	1.11	31.27	46.00	-14.73	-	-	peak

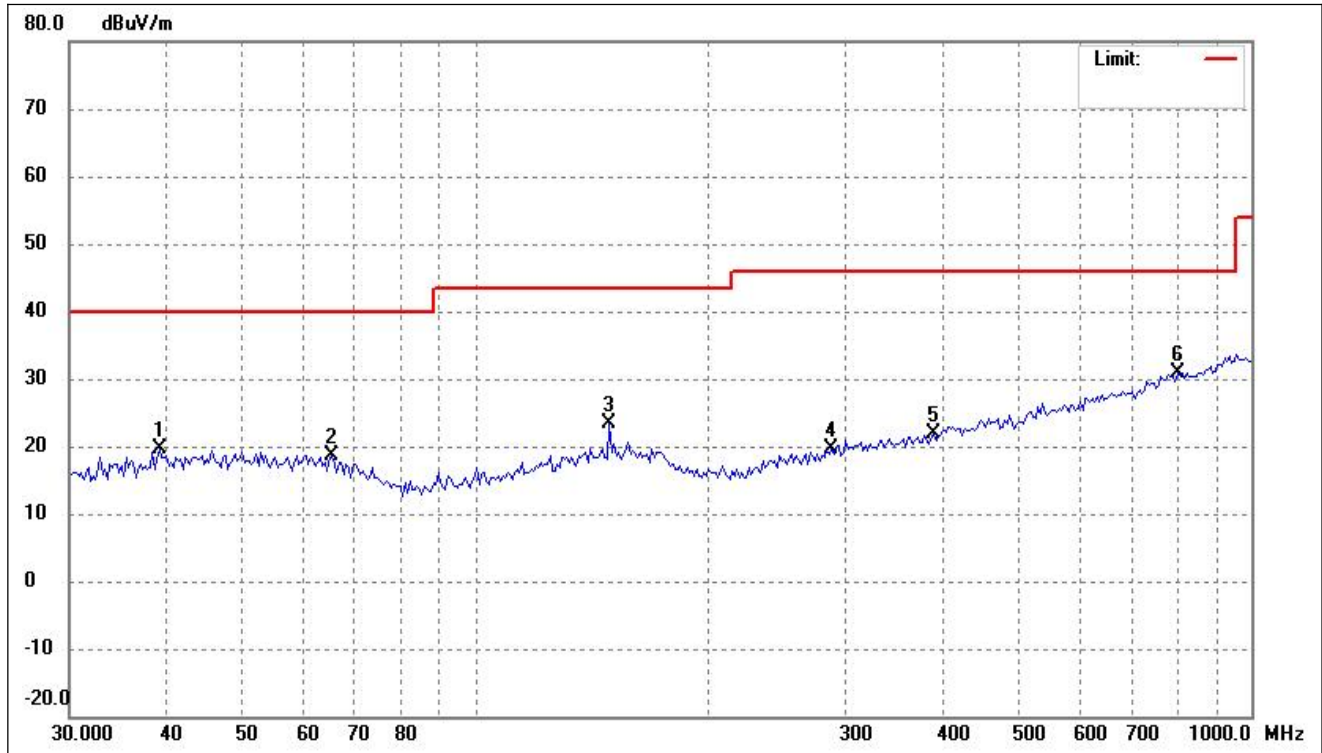
802.11ac-VHT20

Test Channel

5745MHz(worst case)

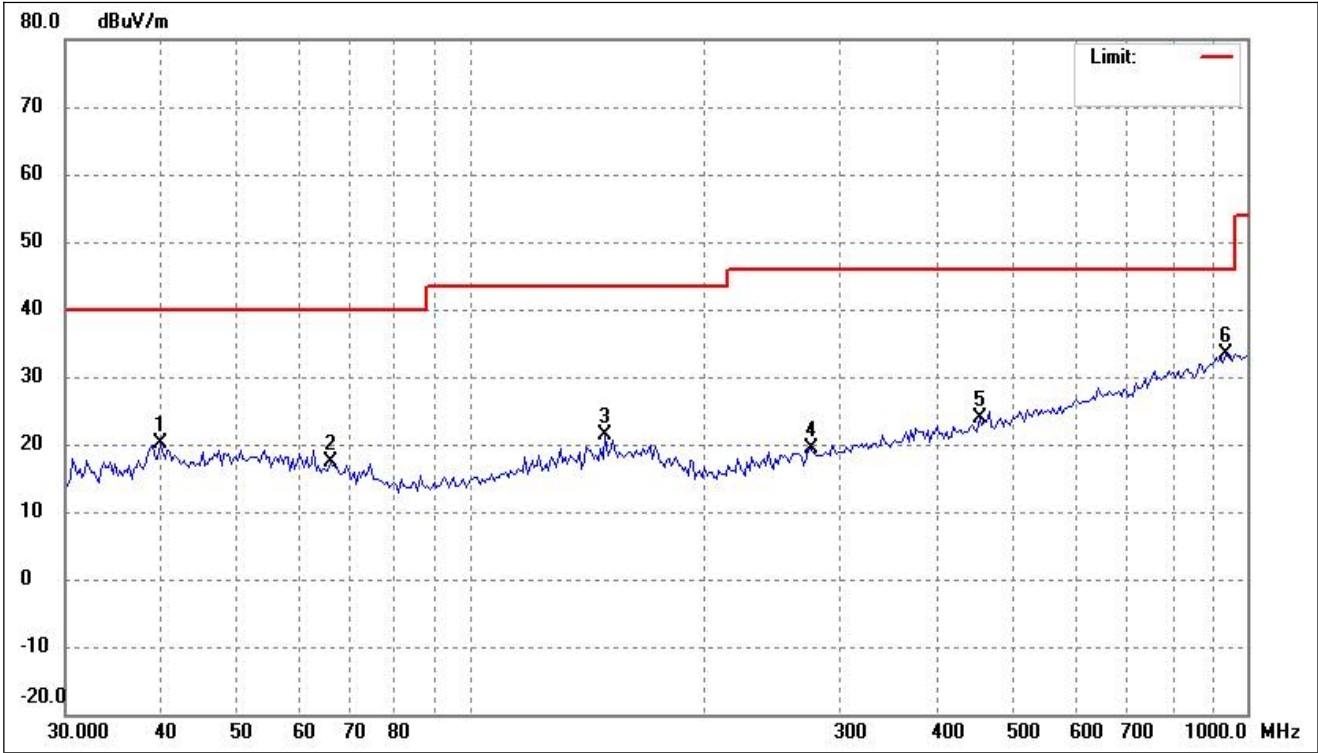
Polarity:

Horizontal



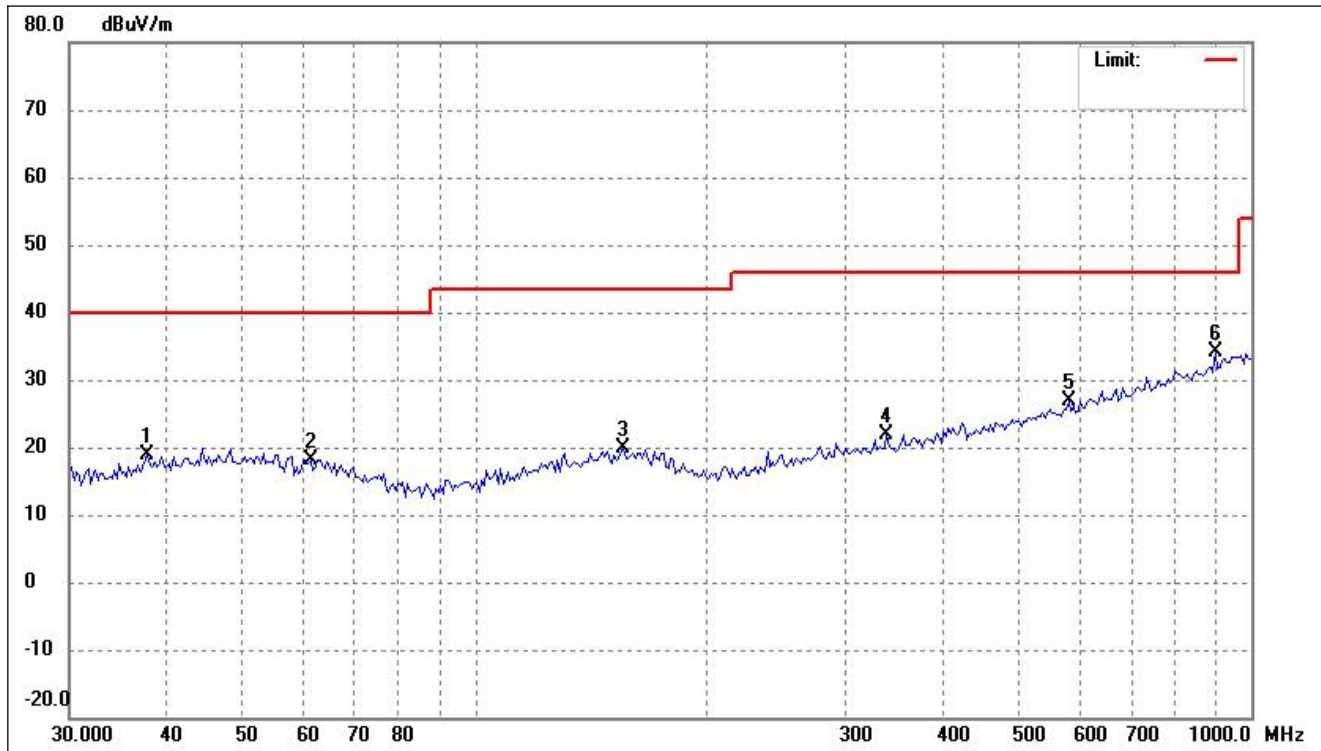
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	39.1825	27.74	-8.12	19.62	40.00	-20.38	-	-	peak
2	65.4452	28.10	-9.42	18.68	40.00	-21.32	-	-	peak
3	148.9175	31.41	-8.14	23.27	43.50	-20.23	-	-	peak
4	288.2840	27.96	-8.23	19.73	46.00	-26.27	-	-	peak
5	389.9874	28.20	-6.39	21.81	46.00	-24.19	-	-	peak
6	804.2523	29.89	1.05	30.94	46.00	-15.06	-	-	peak

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



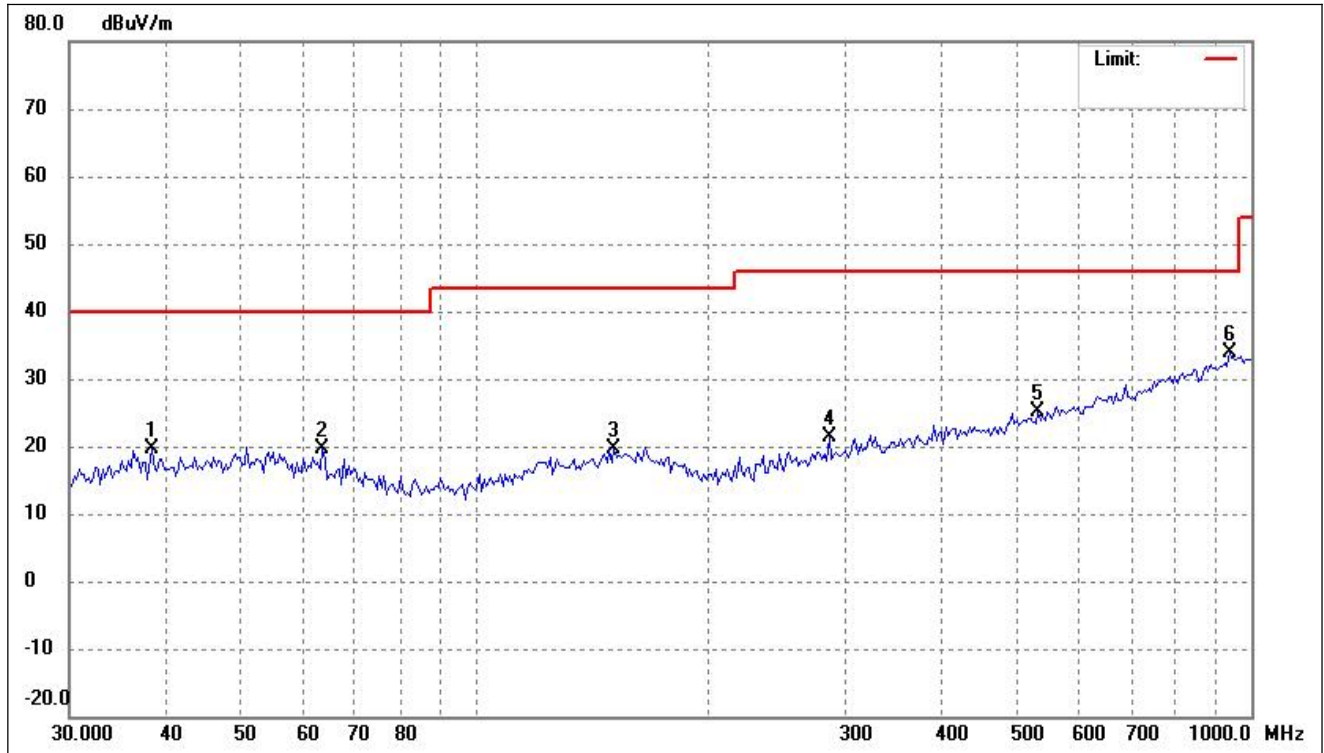
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	39.7371	28.20	-8.01	20.19	40.00	-19.81	-	-	peak
2	65.9067	26.87	-9.51	17.36	40.00	-22.64	-	-	peak
3	148.9175	29.42	-8.14	21.28	43.50	-22.22	-	-	peak
4	272.5246	28.02	-8.76	19.26	46.00	-26.74	-	-	peak
5	452.0013	28.93	-5.17	23.76	46.00	-22.24	-	-	peak
6	938.7139	30.47	3.03	33.50	46.00	-12.50	-	-	peak

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



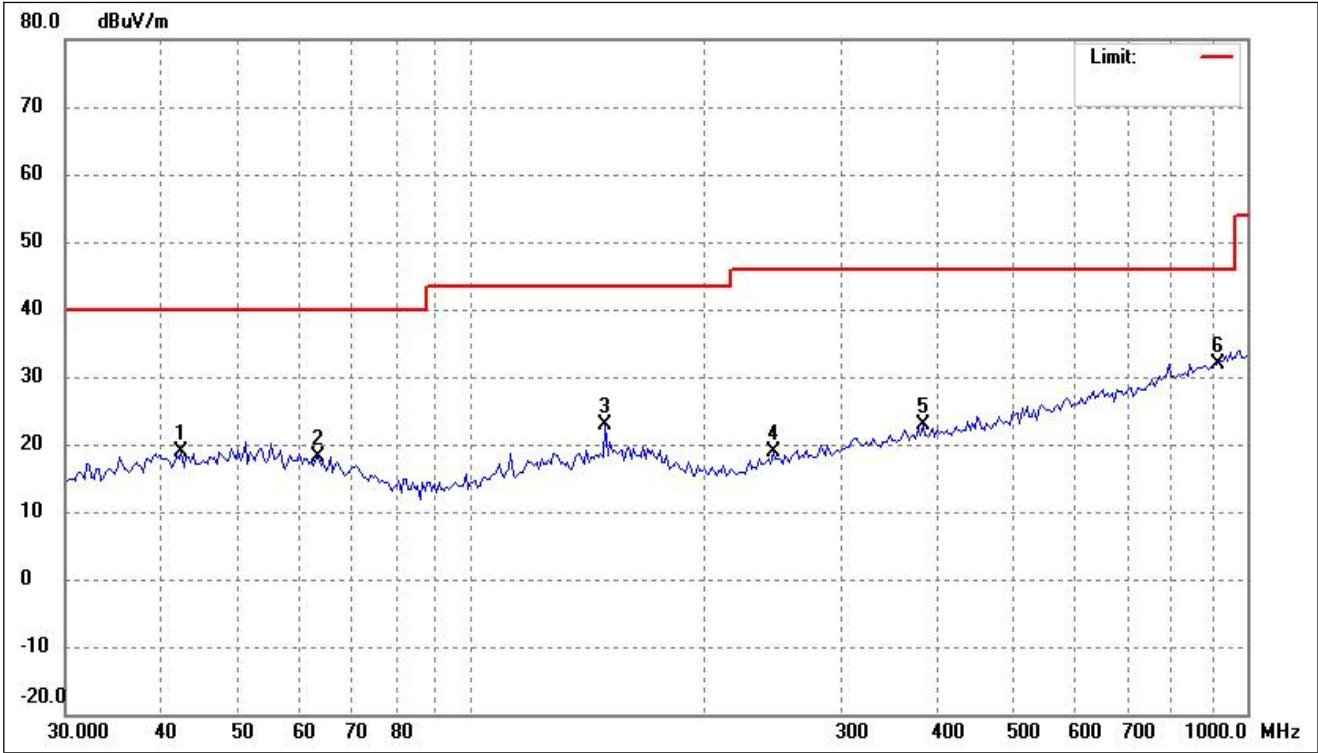
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	37.8297	27.38	-8.41	18.97	40.00	-21.03	-	-	peak
2	61.4343	26.76	-8.69	18.07	40.00	-21.93	-	-	peak
3	155.3305	27.86	-8.05	19.81	43.50	-23.69	-	-	peak
4	338.8546	28.97	-7.18	21.79	46.00	-24.21	-	-	peak
5	582.1122	29.58	-2.68	26.90	46.00	-19.10	-	-	peak
6	899.9577	32.04	2.09	34.13	46.00	-11.87	-	-	peak

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



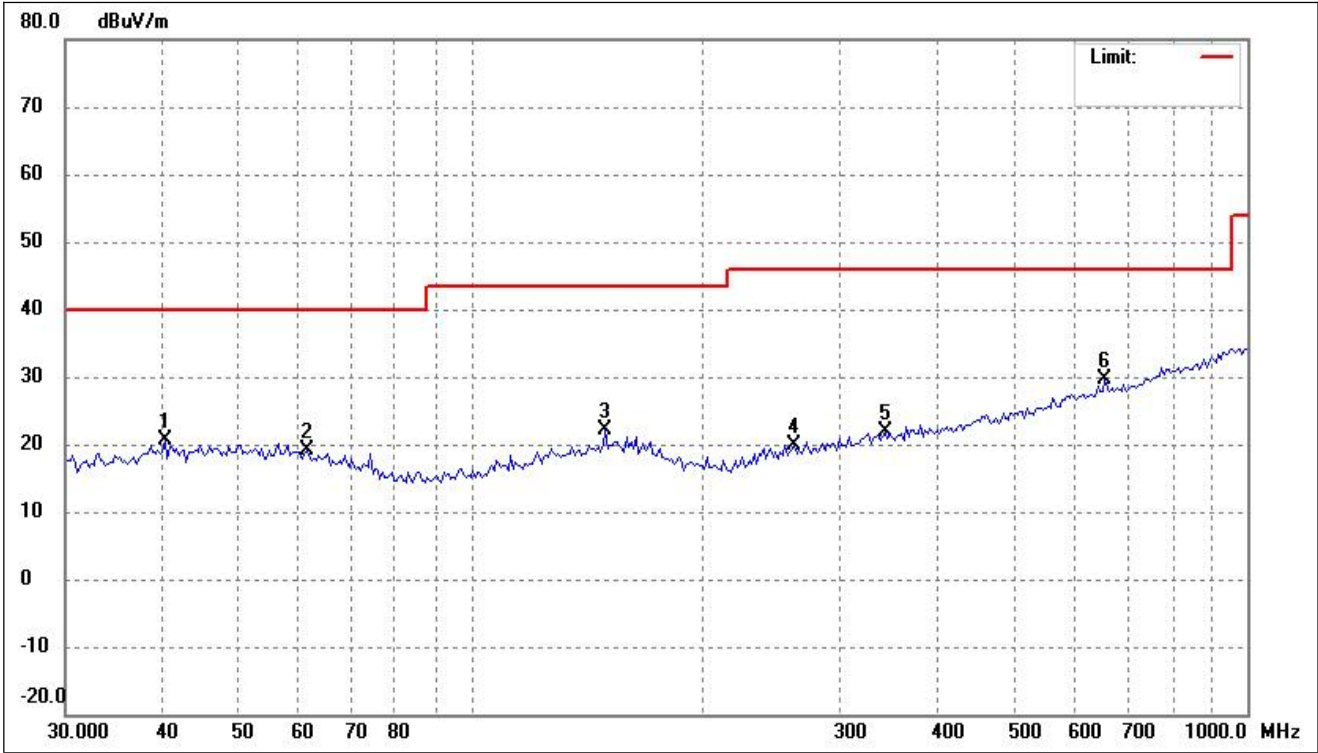
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	38.3651	28.02	-8.30	19.72	40.00	-20.28	-	-	peak
2	63.6312	28.83	-9.09	19.74	40.00	-20.26	-	-	peak
3	151.0252	27.74	-8.05	19.69	43.50	-23.81	-	-	peak
4	286.2653	29.61	-8.30	21.31	46.00	-24.69	-	-	peak
5	531.2910	29.28	-4.12	25.16	46.00	-20.84	-	-	peak
6	938.7139	30.87	3.03	33.90	46.00	-12.10	-	-	peak

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



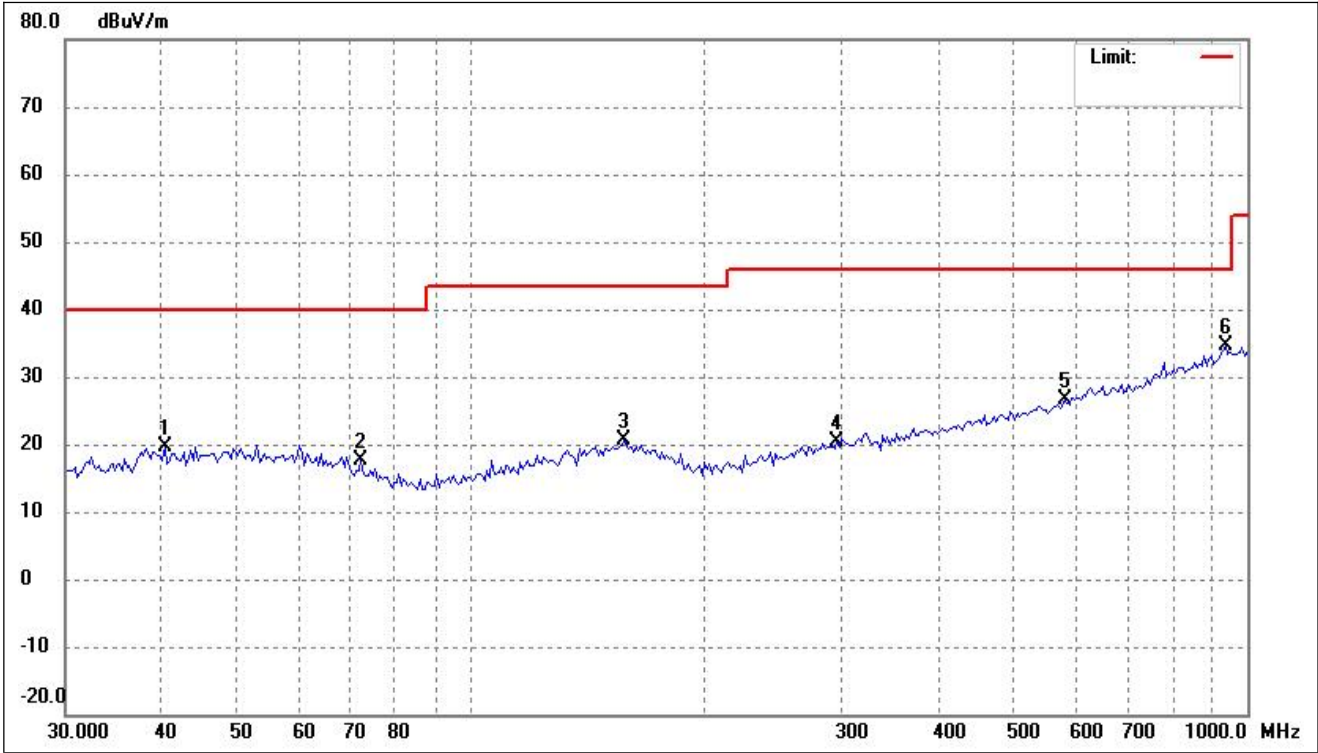
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	42.3314	26.89	-7.96	18.93	40.00	-21.07	-	-	peak
2	63.6312	27.22	-9.09	18.13	40.00	-21.87	-	-	peak
3	148.9175	31.04	-8.14	22.90	43.50	-20.60	-	-	peak
4	245.2606	28.85	-9.85	19.00	46.00	-27.00	-	-	peak
5	381.8520	29.39	-6.50	22.89	46.00	-23.11	-	-	peak
6	912.6953	29.59	2.40	31.99	46.00	-14.01	-	-	peak

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



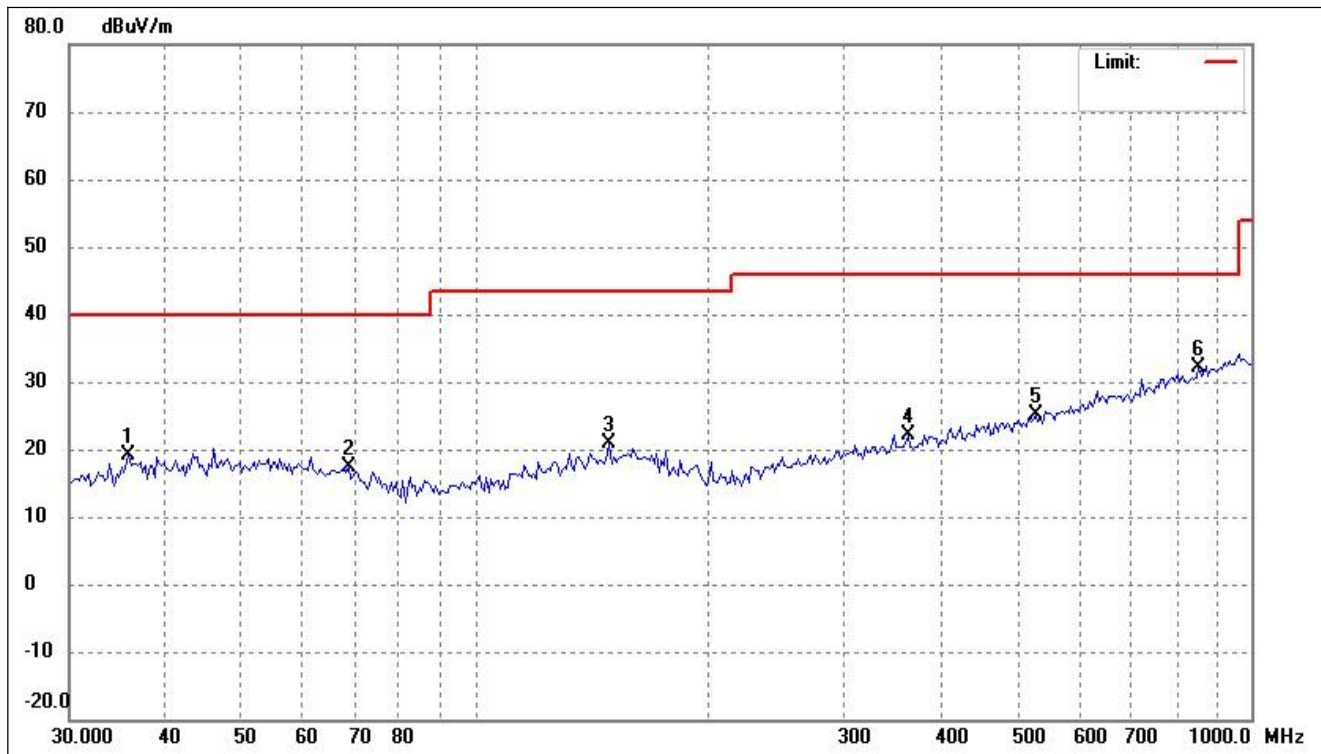
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	40.2994	28.50	-7.96	20.54	40.00	-19.46	-	-	peak
2	61.4343	27.84	-8.69	19.15	40.00	-20.85	-	-	peak
3	148.9174	30.20	-8.14	22.06	43.50	-21.44	-	-	peak
4	261.2729	29.18	-9.24	19.94	46.00	-26.06	-	-	peak
5	341.2441	29.06	-7.15	21.91	46.00	-24.09	-	-	peak
6	655.9765	31.22	-1.52	29.70	46.00	-16.30	-	-	peak

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



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	40.2995	27.71	-7.96	19.75	40.00	-20.25	-	-	peak
2	72.2111	28.32	-10.74	17.58	40.00	-22.42	-	-	peak
3	157.5290	28.72	-8.05	20.67	43.50	-22.83	-	-	peak
4	296.5023	28.37	-7.98	20.39	46.00	-25.61	-	-	peak
5	582.1122	29.37	-2.68	26.69	46.00	-19.31	-	-	peak
6	938.7139	31.55	3.03	34.58	46.00	-11.42	-	-	peak

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

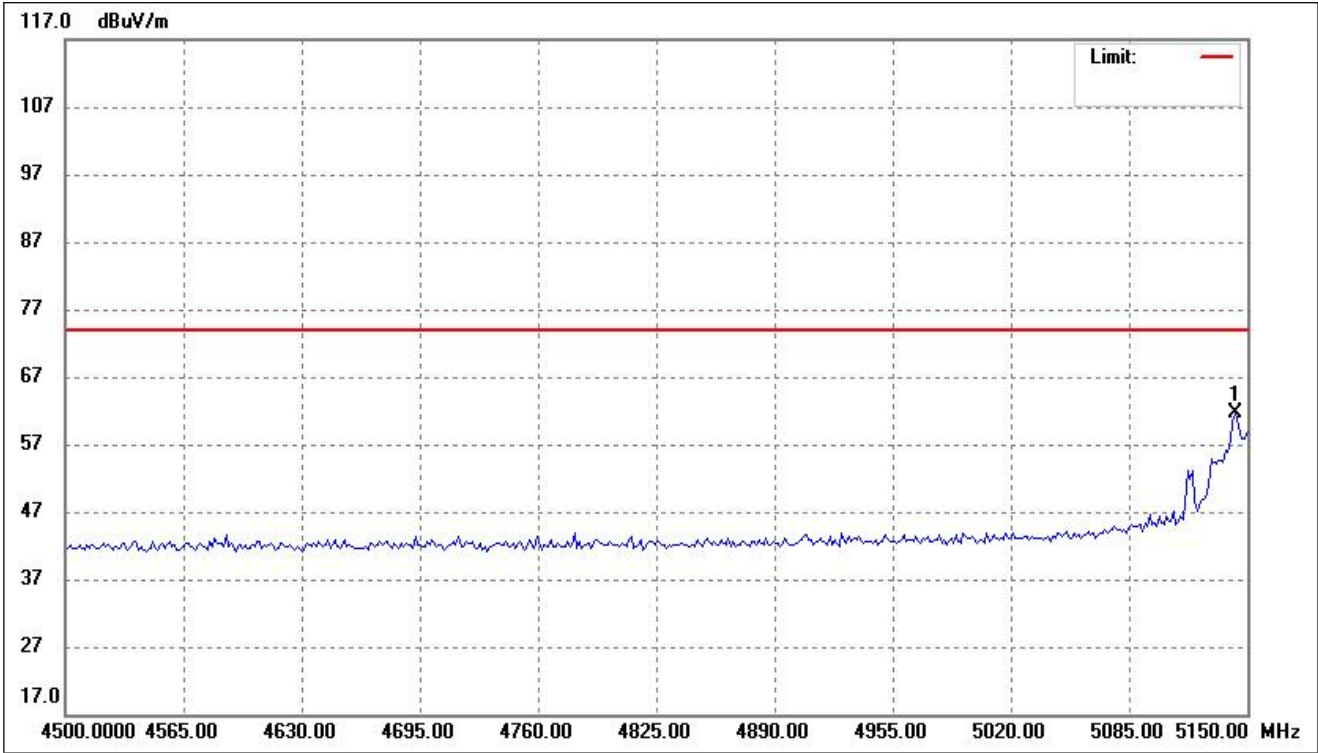


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	35.7617	28.09	-8.85	19.24	40.00	-20.76	-	-	peak
2	68.7450	27.32	-10.03	17.29	40.00	-22.71	-	-	peak
3	148.9175	29.10	-8.14	20.96	43.50	-22.54	-	-	peak
4	360.9775	29.11	-6.86	22.25	46.00	-23.75	-	-	peak
5	527.5707	29.38	-4.24	25.14	46.00	-20.86	-	-	peak
6	856.7597	30.40	1.61	32.01	46.00	-13.99	-	-	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.

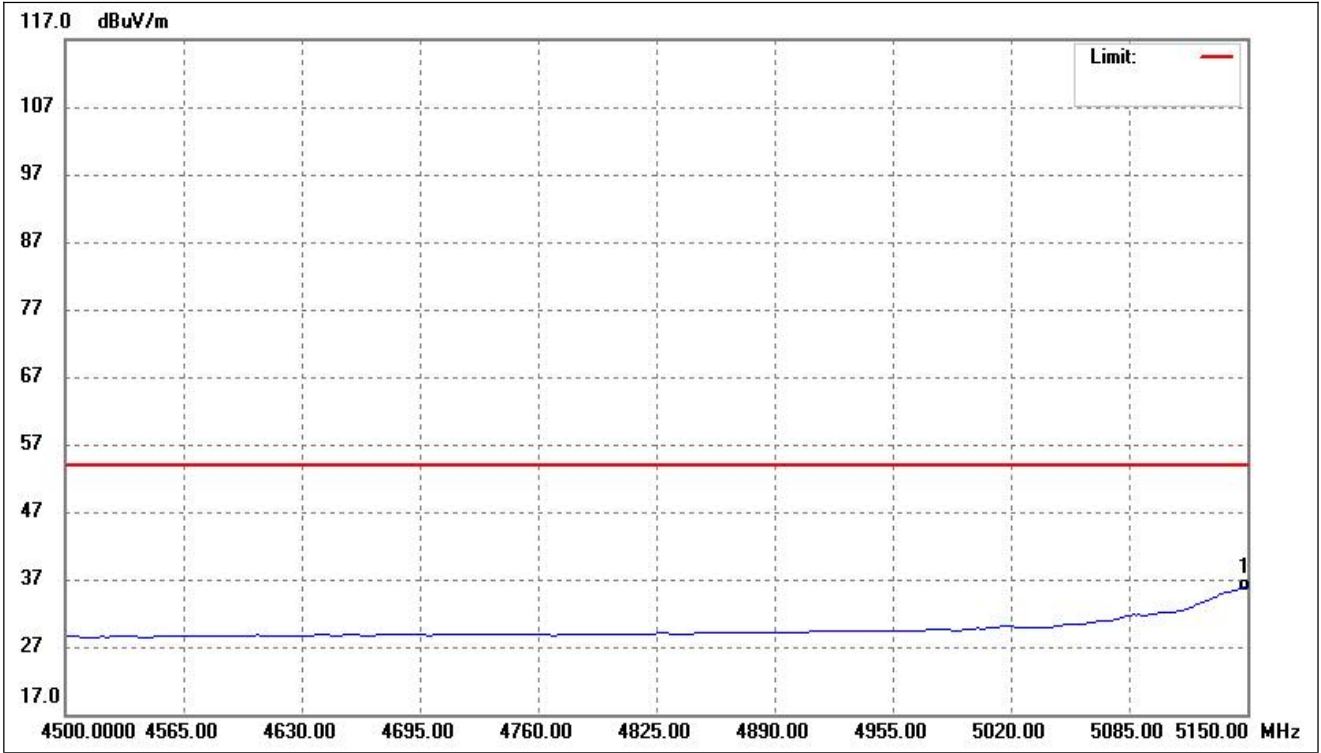
➤ Spurious Emission above 1GHz

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



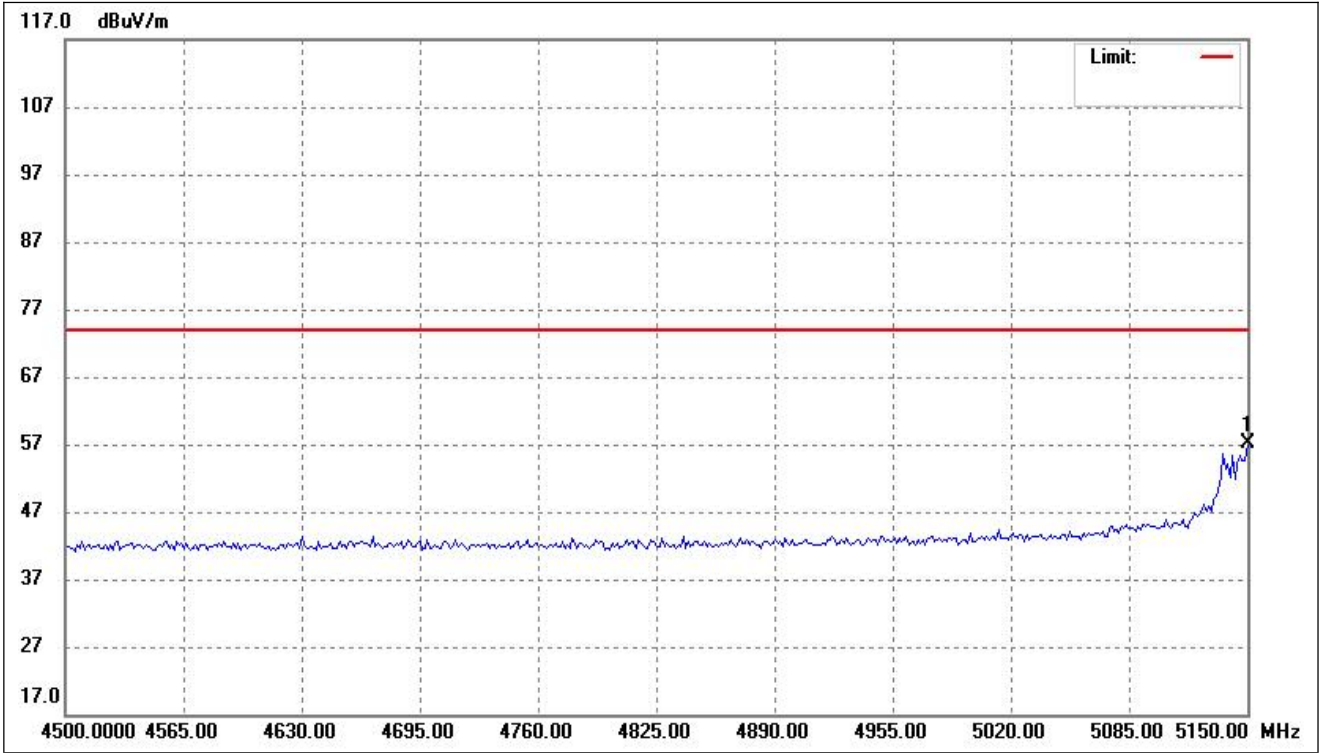
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5143.487	74.09	-12.57	61.52	74.00	-12.48	-	-	peak

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



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	48.70	-12.53	36.17	54.00	-17.83	-	-	AVG

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



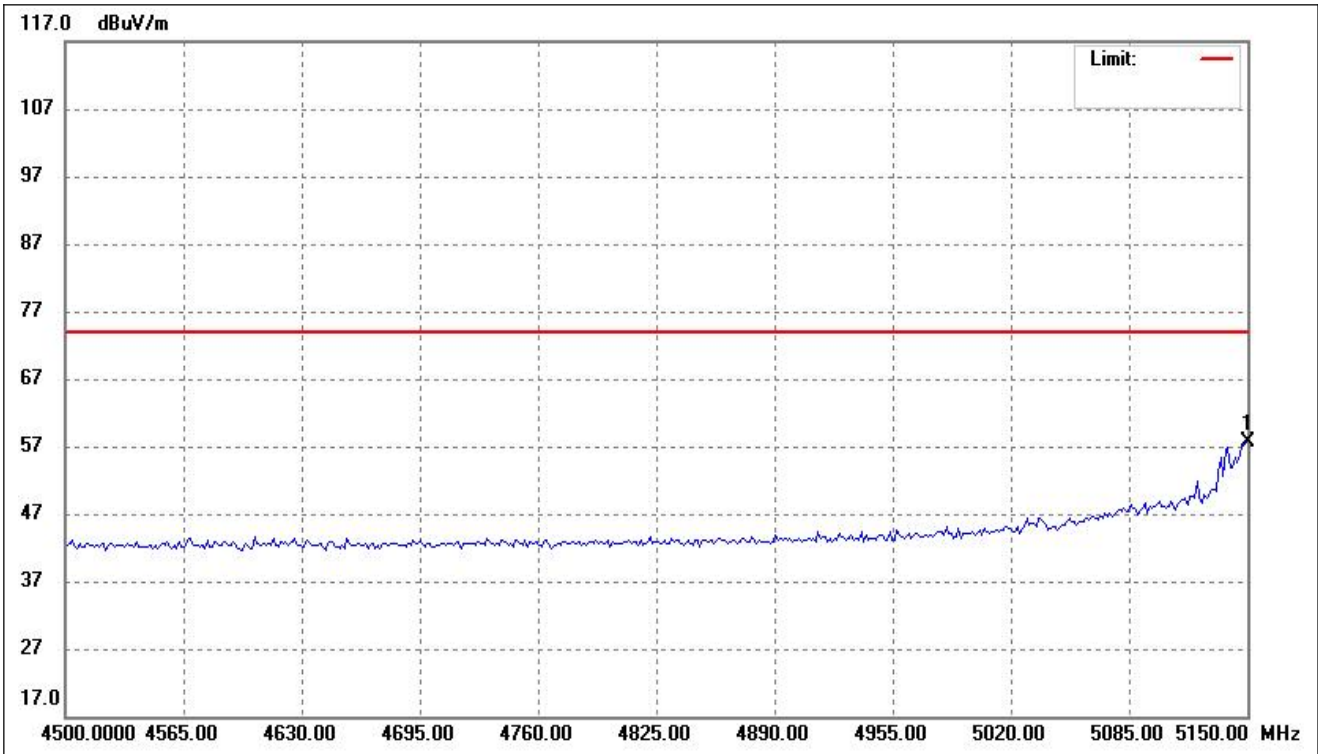
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	69.57	-12.53	57.04	74.00	-16.96	-	-	peak

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



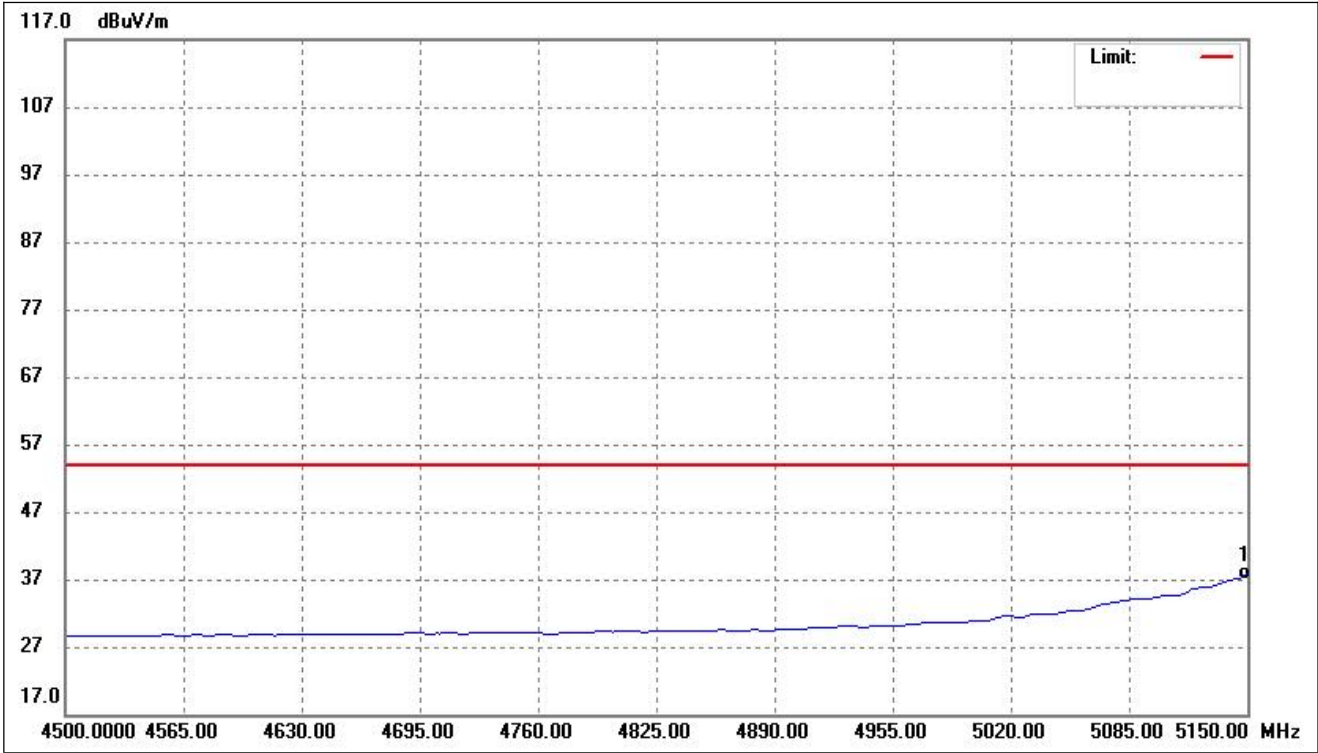
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	47.22	-12.53	34.69	54.00	-19.31	-	-	AVG

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



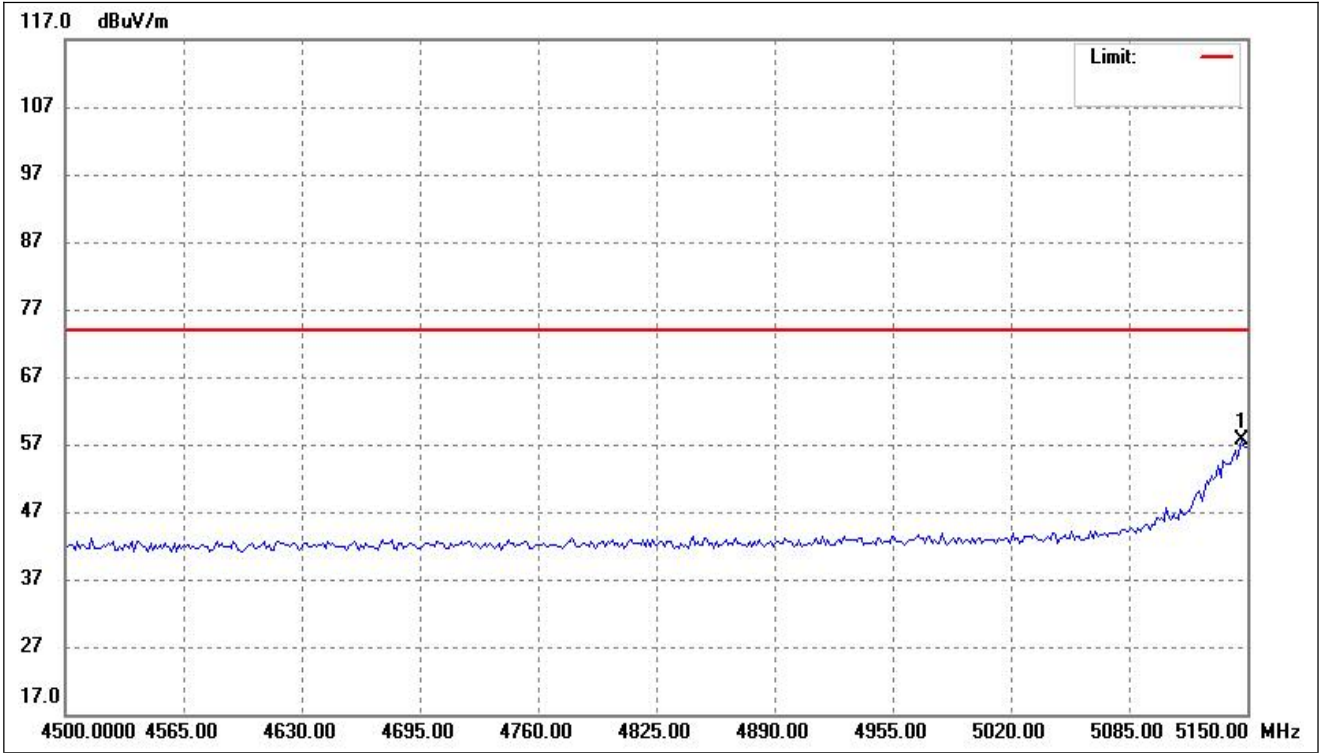
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	70.06	-12.53	57.53	74.00	-16.47	-	-	peak

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



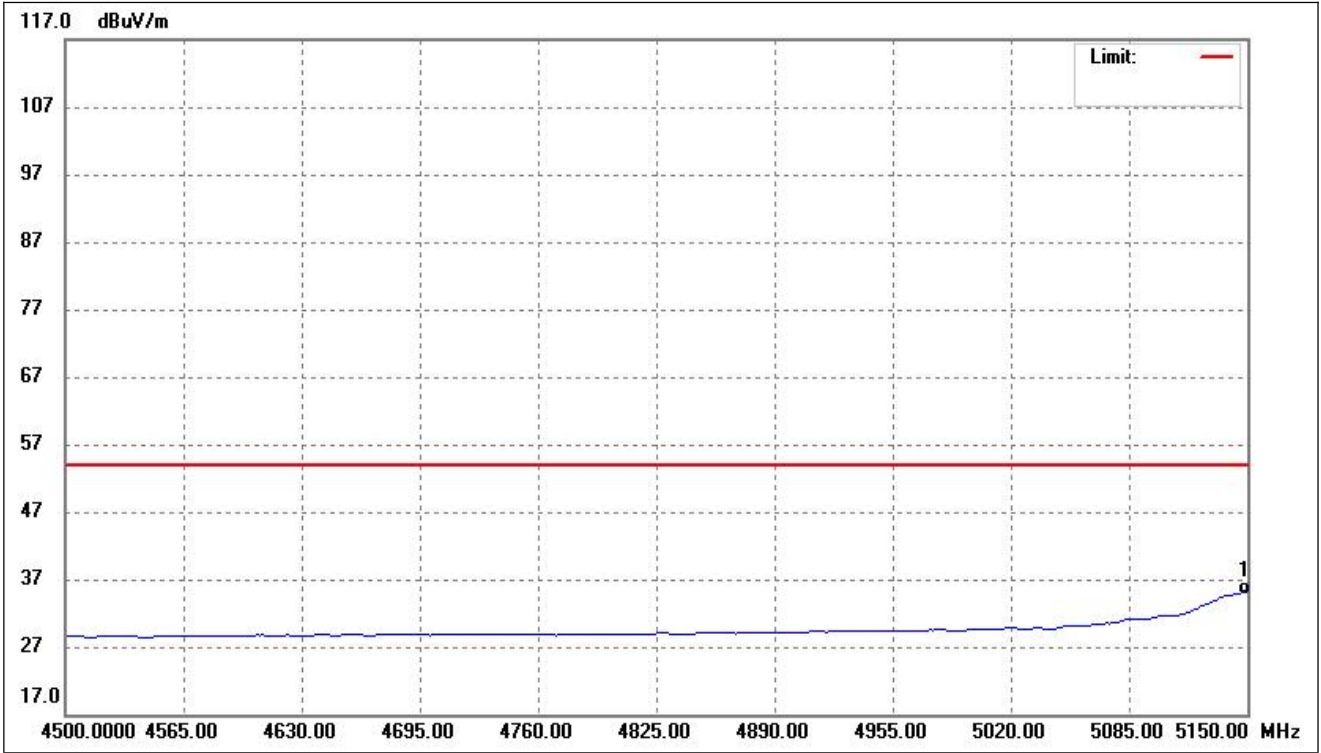
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	50.46	-12.53	37.93	54.00	-16.07	-	-	AVG

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



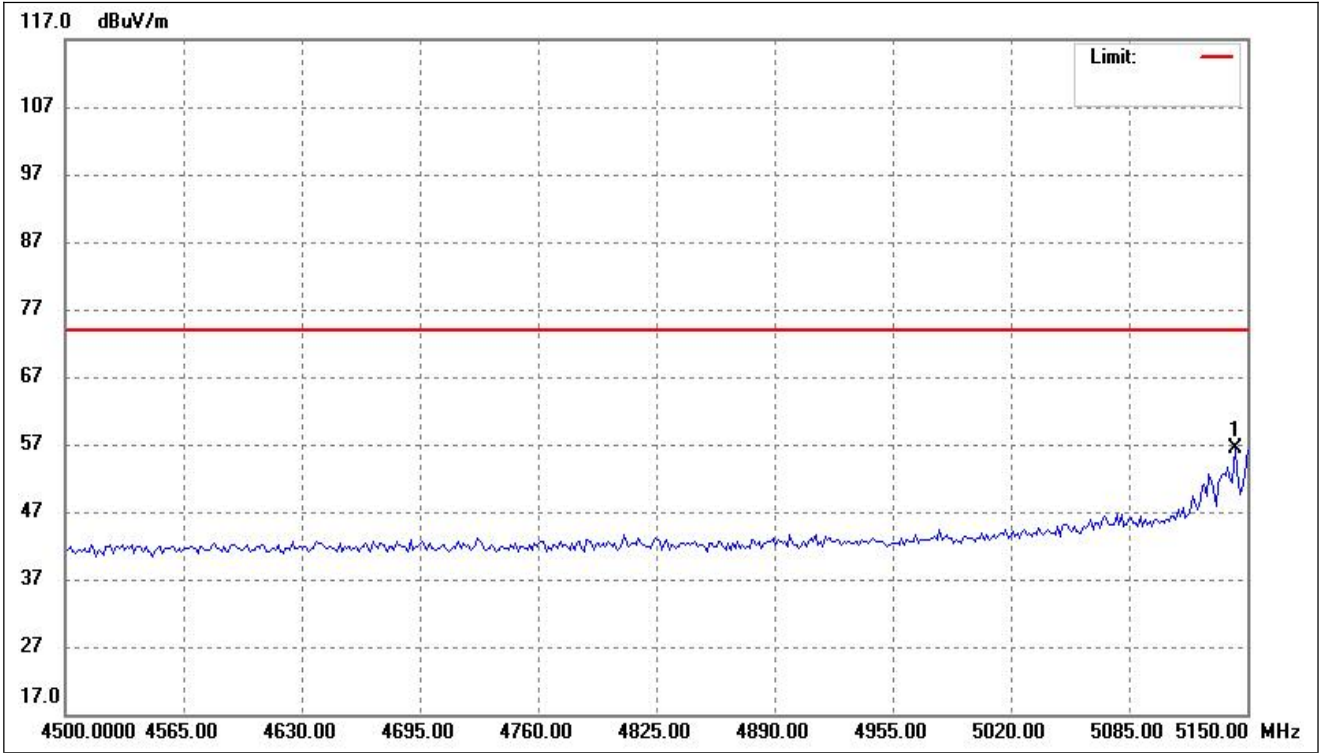
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5147.395	70.06	-12.54	57.52	74.00	-16.48	-	-	peak

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



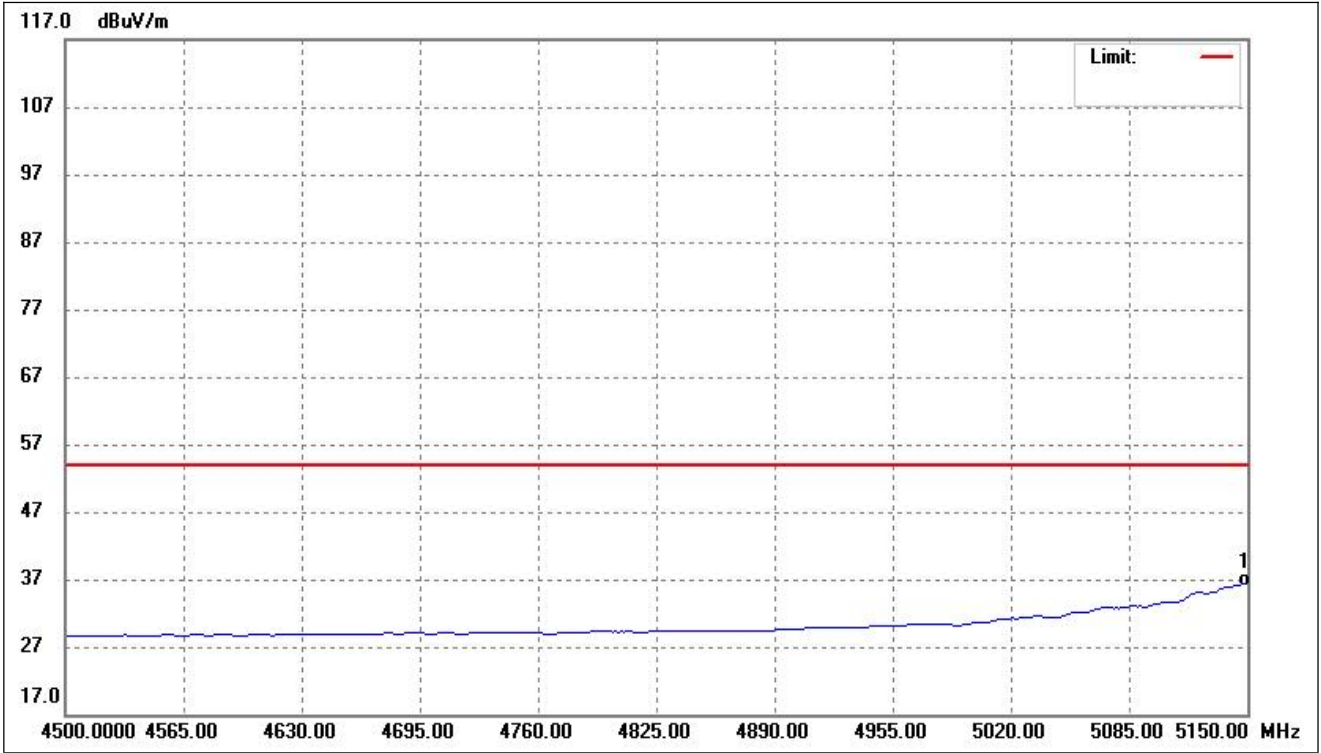
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	48.13	-12.53	35.60	54.00	-18.40	-	-	AVG

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



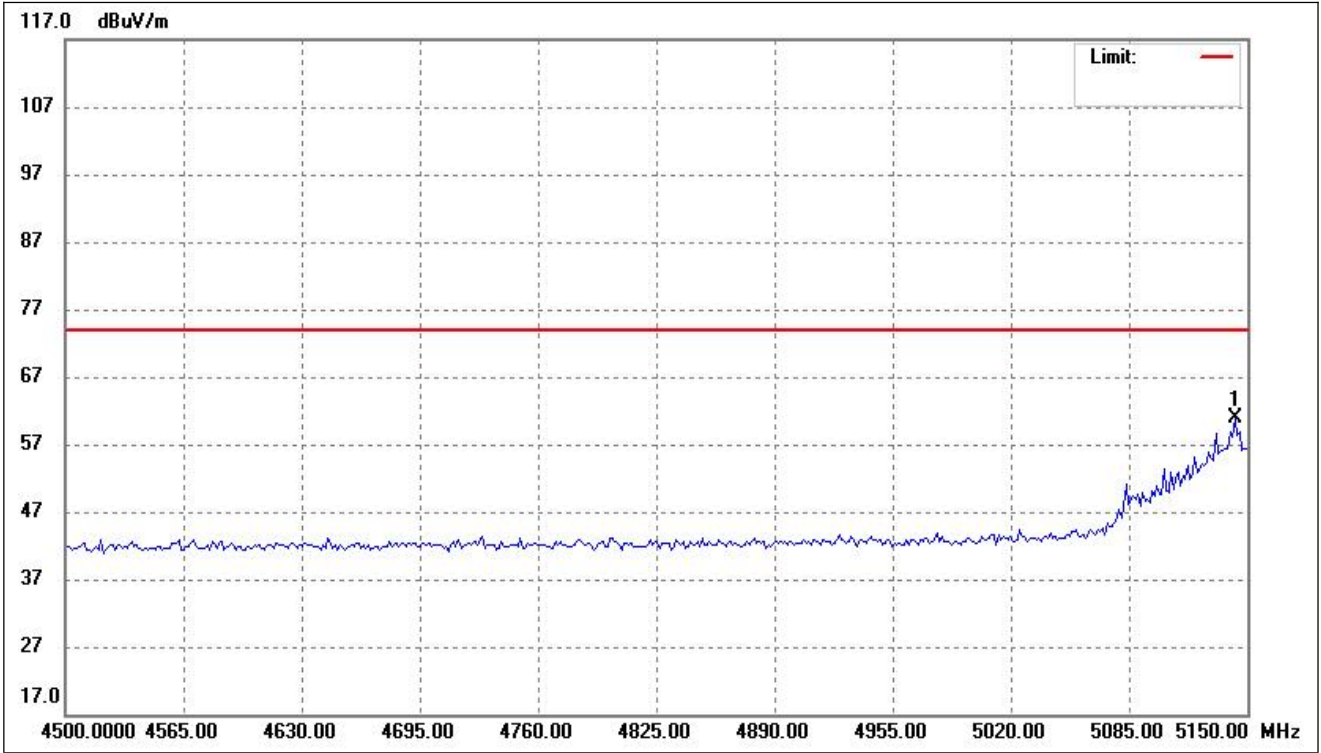
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5143.487	68.91	-12.57	56.34	74.00	-17.66	-	-	peak

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



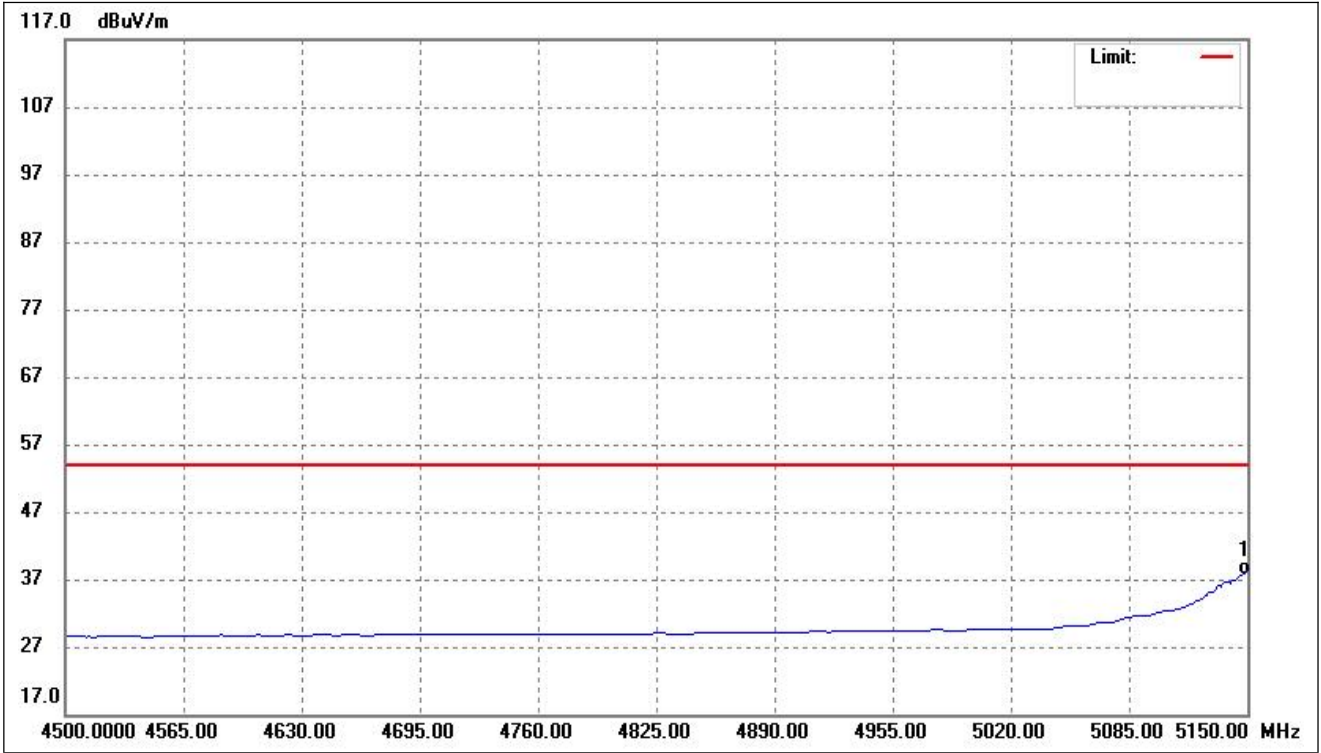
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	49.36	-12.53	36.83	54.00	-17.17	-	-	AVG

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



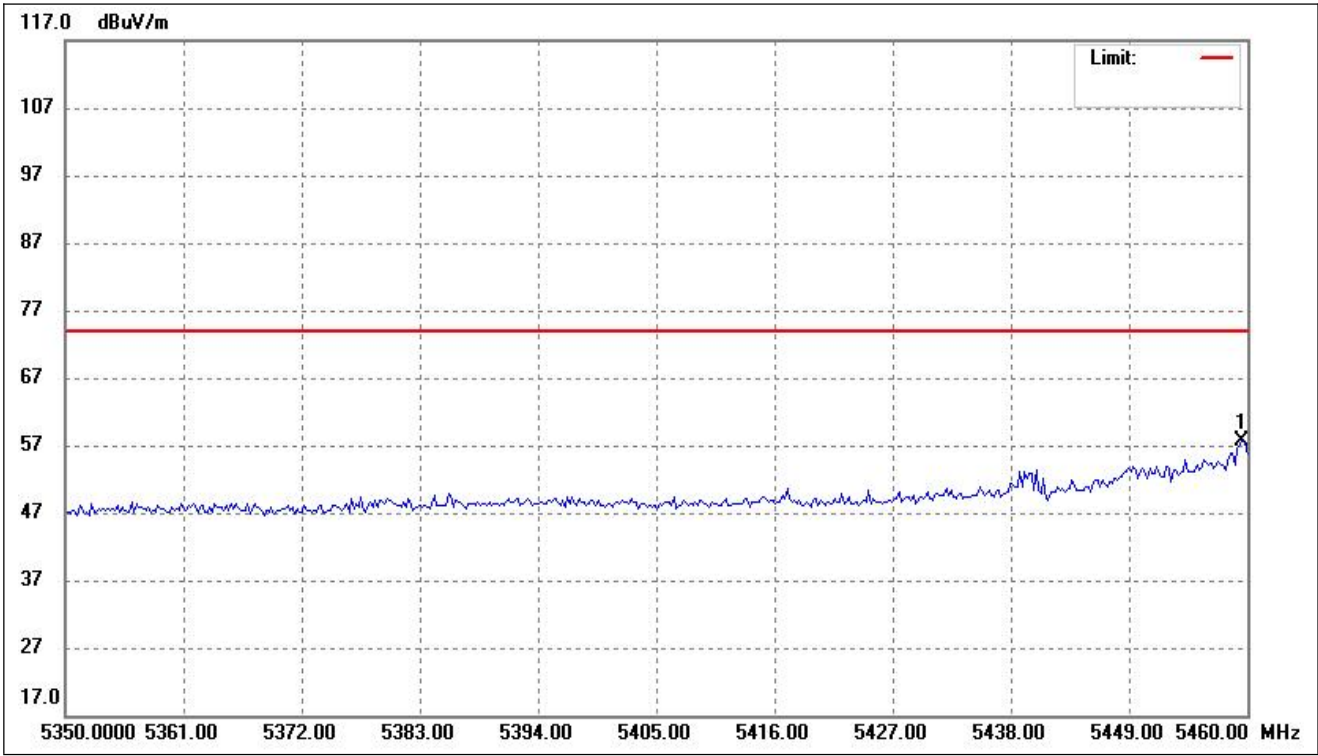
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5143.487	73.33	-12.57	60.76	74.00	-13.24	-	-	peak

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



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	51.25	-12.53	38.72	54.00	-15.28	-	-	AVG

802.11a- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)



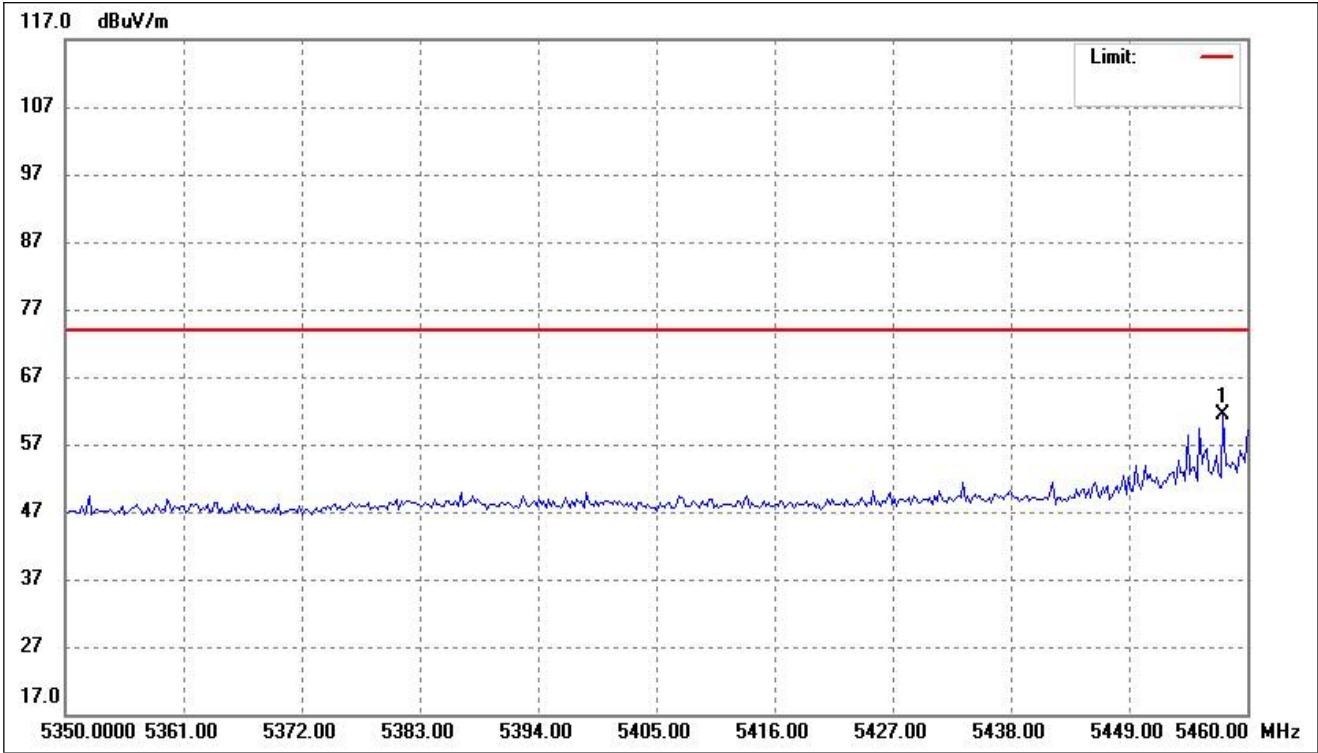
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5459.559	68.71	-10.99	57.72	74.00	-16.28	-	-	peak

802.11a- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5460.000	47.44	-10.99	36.45	54.00	-17.55	-	-	AVG

802.11n-HT20- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)



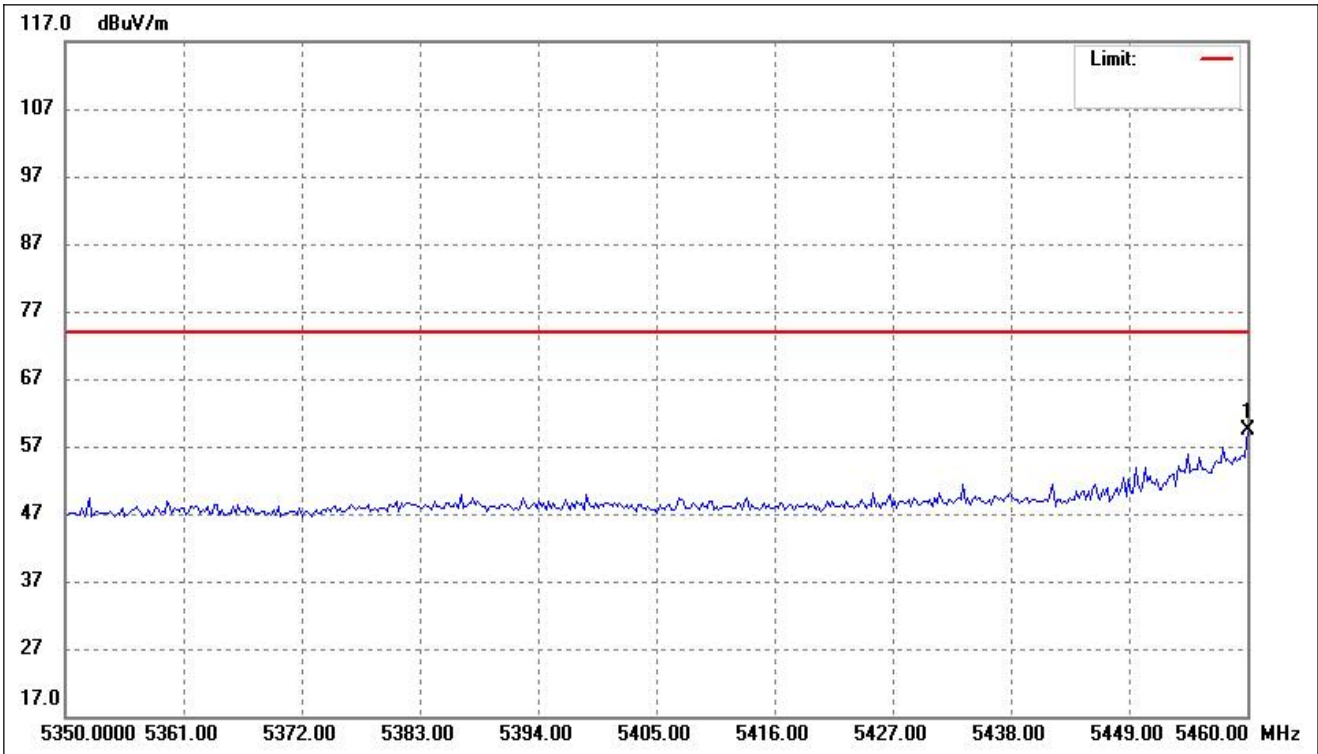
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5457.796	72.32	-11.00	61.32	74.00	-12.68	-	-	peak

802.11n-HT20- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5455.371	46.10	-11.01	35.09	54.00	-18.91	-	-	AVG

802.11ac-VHT20- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)



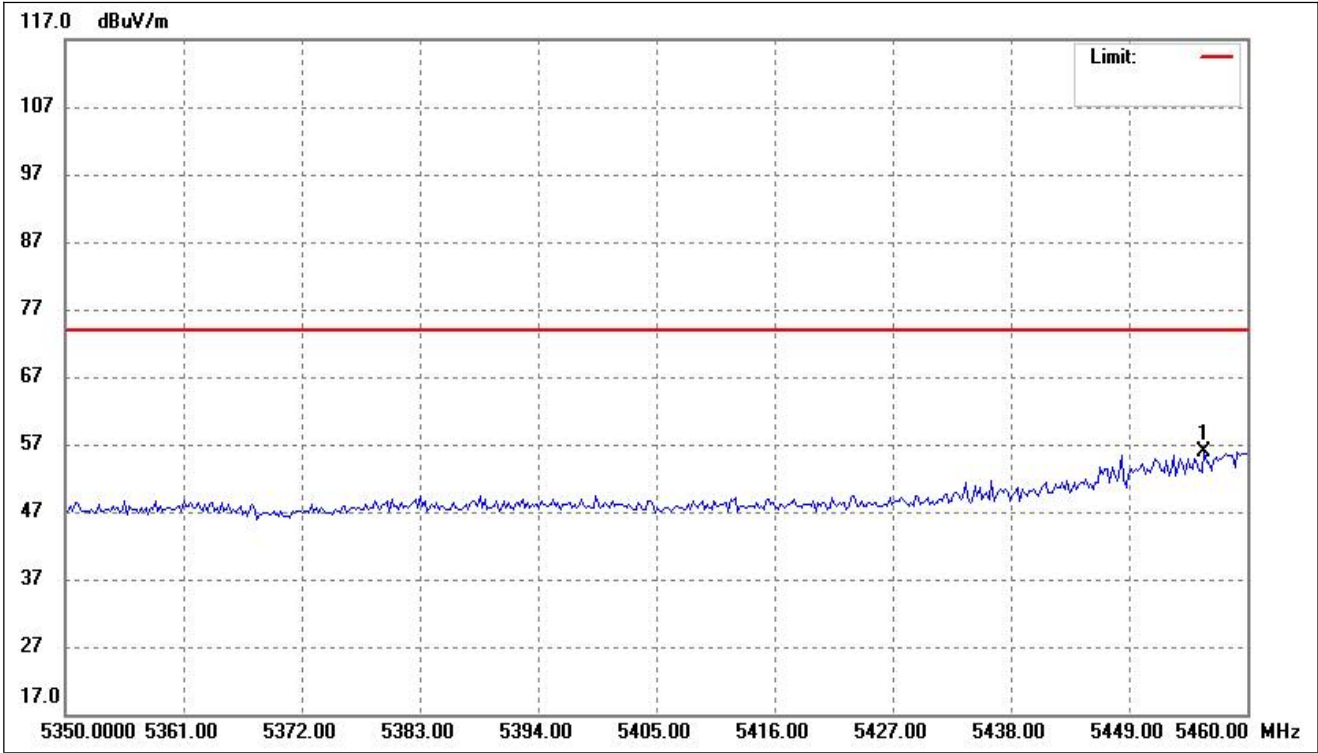
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5460.000	70.38	-10.99	59.39	74.00	-14.61	-	-	peak

802.11ac-VHT20- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)



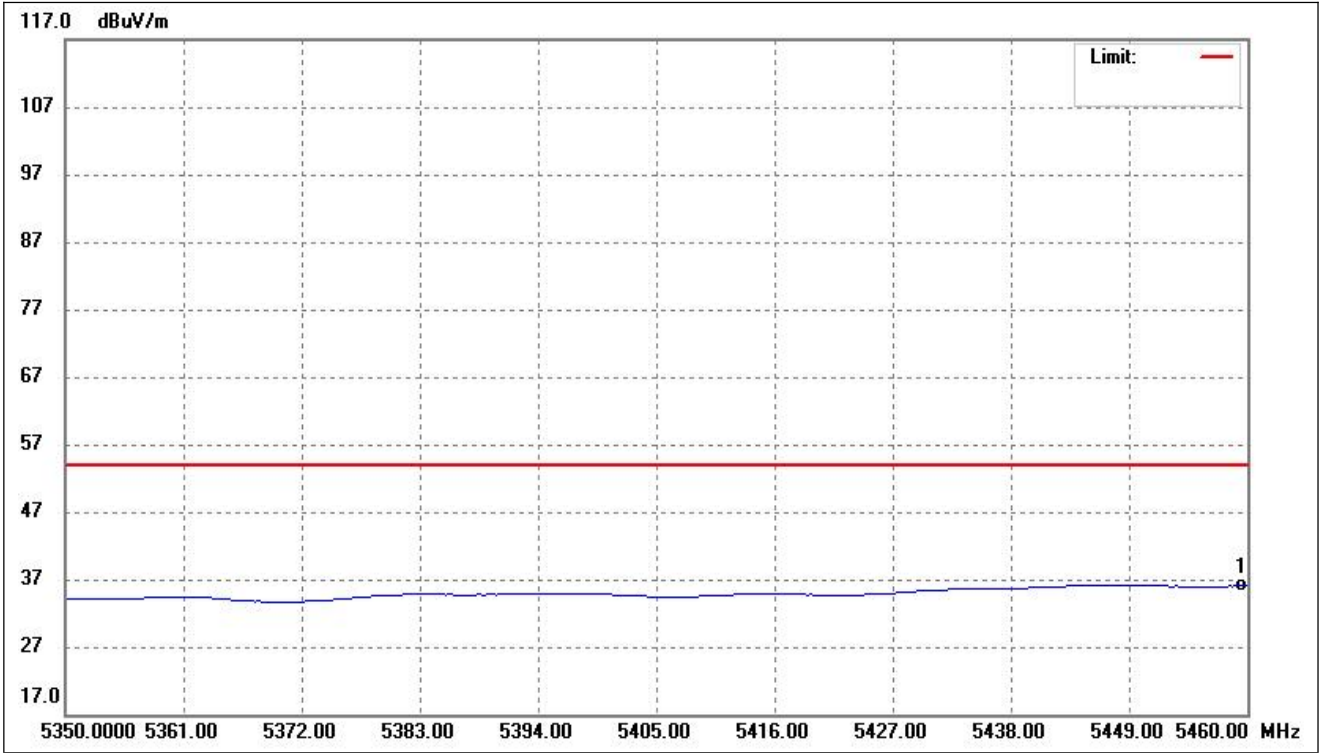
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5459.118	46.55	-10.99	35.56	54.00	-18.44	-	-	AVG

802.11n-HT40- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)



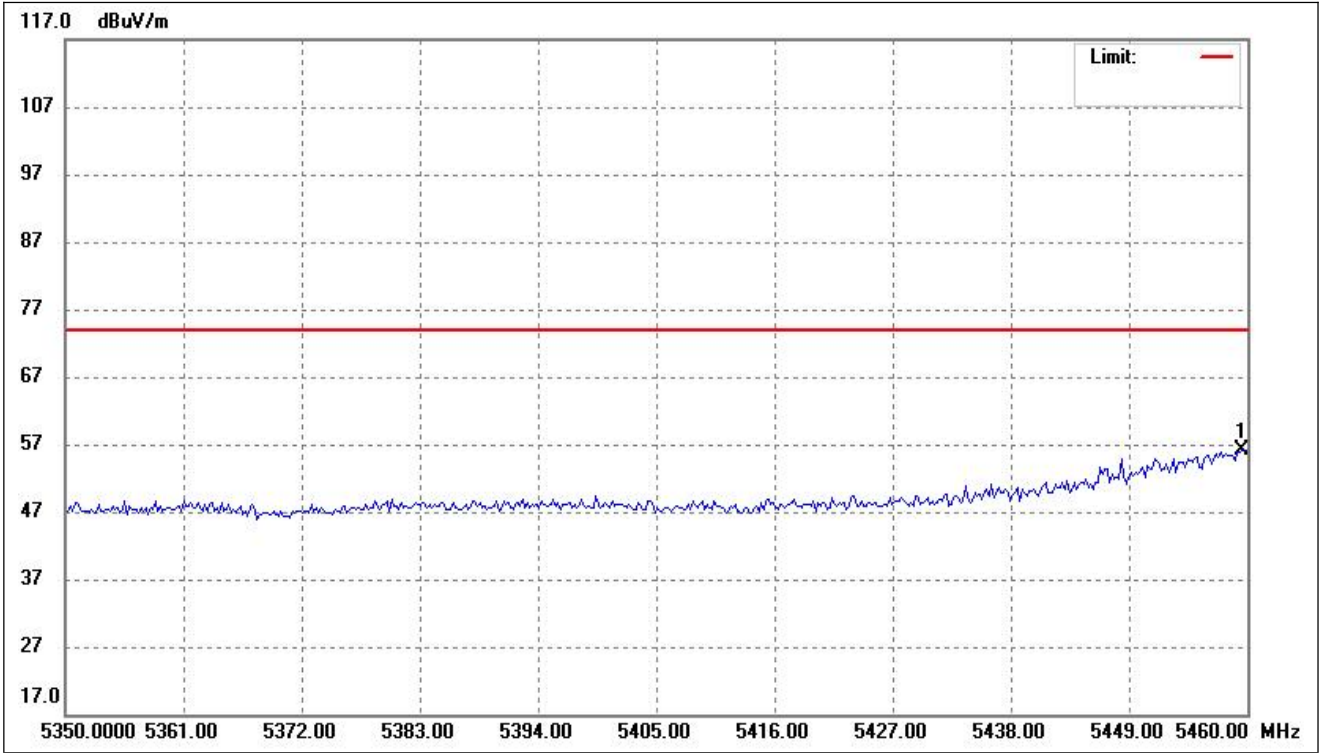
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5456.032	66.78	-11.00	55.78	74.00	-18.22	-	-	peak

802.11n-HT40- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5460.000	47.16	-10.99	36.17	54.00	-17.83	-	-	AVG

802.11ac-VHT40- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)



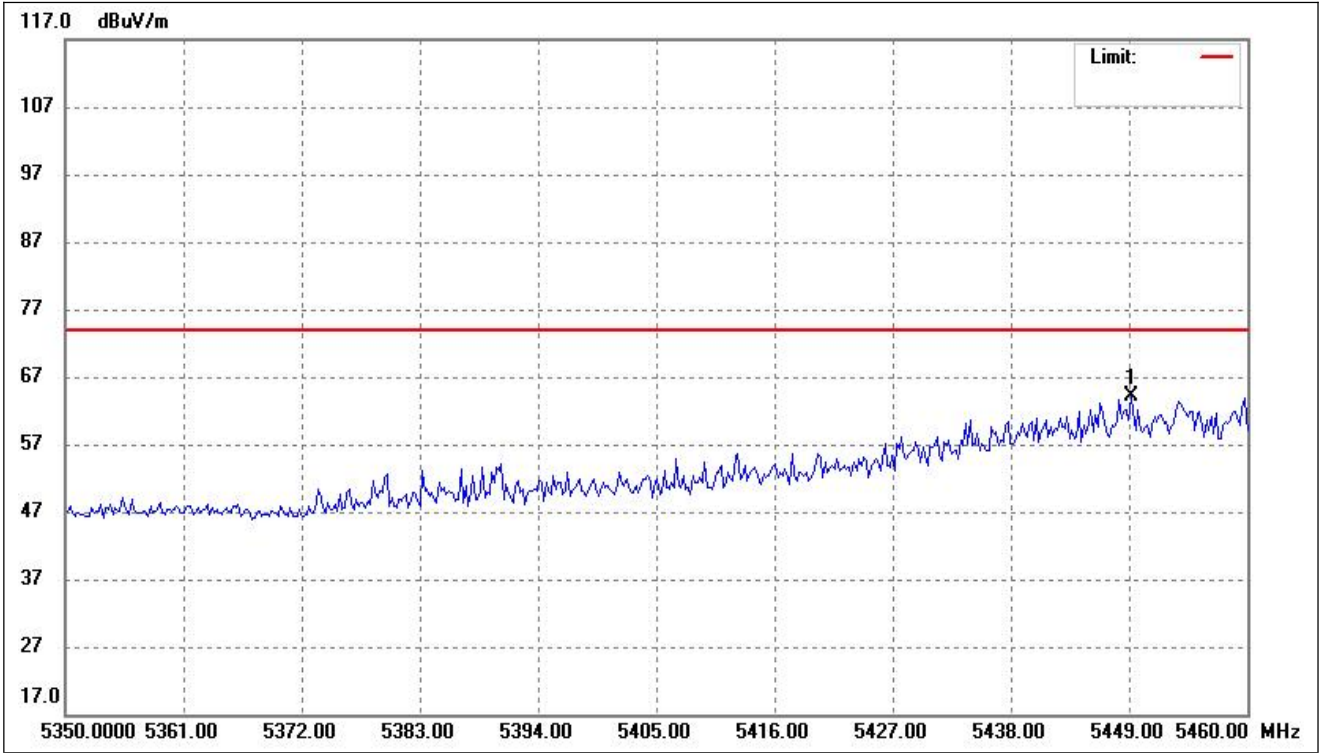
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5459.559	67.19	-10.99	56.20	74.00	-17.80	-	-	peak

802.11ac-VHT40- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5460.000	47.66	-10.99	36.67	54.00	-17.33	-	-	AVG

802.11ac-VHT80- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5449.198	75.26	-11.04	64.22	74.00	-9.78	-	-	peak

802.11ac-VHT80- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal(worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5458.016	52.40	-11.00	41.40	54.00	-12.60	-	-	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, 5.470-5.725GHz, 5.725-5.850GHz (802.11a)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5180MHz)							
10360	57.26	7.11	64.37	74	-9.63	H	PK
10360	40.86	7.11	47.97	54	-6.03	H	AV
10360	57.16	7.11	64.27	74	-9.73	V	PK
10360	38.68	7.11	45.79	54	-8.21	V	AV
Middle Channel (5200MHz)							
10400	57.49	7.22	64.71	74	-9.29	H	PK
10400	41.02	7.22	48.24	54	-5.76	H	AV
10400	57.96	7.22	65.18	74	-8.82	V	PK
10400	38.20	7.22	45.42	54	-8.58	V	AV
High Channel (5240MHz)							
10480	56.69	7.69	64.38	74	-9.62	H	PK
10480	40.72	7.69	48.41	54	-5.59	H	AV
10480	58.36	7.69	66.05	74	-7.95	V	PK
10480	40.26	7.69	47.95	54	-6.05	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	57.81	7.96	65.77	74	-8.23	H	PK
10520	41.80	7.96	49.76	54	-4.24	H	AV
10520	57.38	7.96	65.34	74	-8.66	V	PK
10520	40.37	7.96	48.33	54	-5.67	V	AV
Middle Channel (5280MHz)							
10560	58.35	8.02	66.37	74	-7.63	H	PK
10560	38.78	8.02	46.80	54	-7.20	H	AV
10560	56.33	8.02	64.35	74	-9.65	V	PK
10560	38.23	8.02	46.25	54	-7.75	V	AV
High Channel (5320MHz)							
10640	56.24	8.35	64.59	74	-9.41	H	PK
10640	38.96	8.35	47.31	54	-6.69	H	AV
10640	58.10	8.35	66.45	74	-7.55	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 (5500MHz)							
11000	56.93	8.82	65.75	74	-8.25	H	PK
11000	40.47	8.82	49.29	54	-4.71	H	AV
11000	56.34	8.82	65.16	74	-8.84	V	PK
11000	40.20	8.82	49.02	54	-4.98	V	AV
Middle Channel (5600MHz)							
11200	59.00	8.92	67.92	74	-6.08	H	PK
11200	41.21	8.92	50.13	54	-3.87	H	AV
11200	57.18	8.92	66.10	74	-7.90	V	PK
11200	40.17	8.92	49.09	54	-4.91	V	AV
High Channel (5700MHz)							
11400	55.20	9.36	64.56	74	-9.44	H	PK
11400	40.85	9.36	50.21	54	-3.79	H	AV
11400	56.60	9.36	65.96	74	-8.04	V	PK
11400	41.14	9.36	50.50	54	-3.50	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	56.35	9.45	65.80	74	-8.20	H	PK
11490	41.84	9.45	51.29	54	-2.71	H	AV
11490	55.27	9.45	64.72	74	-9.28	V	PK
11490	41.87	9.45	51.32	54	-2.68	V	AV
Middle Channel (5785MHz)							
11570	56.60	9.62	66.22	74	-7.78	H	PK
11570	40.31	9.62	49.93	54	-4.07	H	AV
11570	57.45	9.62	67.07	74	-6.93	V	PK
11570	39.19	9.62	48.81	54	-5.19	V	AV
High Channel (5825MHz)							
11650	56.38	9.84	66.22	74	-7.78	H	PK
11650	38.47	9.84	48.31	54	-5.69	H	AV
11650	55.33	9.84	65.17	74	-8.83	V	PK
11650	39.99	9.84	49.83	54	-4.17	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-41.59	-27
Highest	Above 5350	-40.62	-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	-42.23	-27
Highest	Above 5350	-41.52	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-40.36	-27
Highest	Above 5725	-38.29	-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	-36.69	-27
	5715 to 5725	-35.40	-17
Highest	5850 to 5860	-28.33	-17
	Above 5860	-27.21	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11n HT20)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5180MHz)							
10360	58.95	7.11	66.06	74	-7.94	H	PK
10360	40.91	7.11	48.02	54	-5.98	H	AV
10360	56.78	7.11	63.89	74	-10.11	V	PK
10360	39.32	7.11	46.43	54	-7.57	V	AV
Middle Channel (5200MHz)							
10400	56.84	7.22	64.06	74	-9.94	H	PK
10400	39.02	7.22	46.24	54	-7.76	H	AV
10400	56.35	7.22	63.57	74	-10.43	V	PK
10400	38.51	7.22	45.73	54	-8.27	V	AV
High Channel (5240MHz)							
10480	57.33	7.69	65.02	74	-8.98	H	PK
10480	40.55	7.69	48.24	54	-5.76	H	AV
10480	58.72	7.69	66.41	74	-7.59	V	PK
10480	38.20	7.69	45.89	54	-8.11	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	55.19	7.96	63.15	74	-10.85	H	PK
10520	38.01	7.96	45.97	54	-8.03	H	AV
10520	58.76	7.96	66.72	74	-7.28	V	PK
10520	38.98	7.96	46.94	54	-7.06	V	AV
Middle Channel (5280MHz)							
10560	57.84	8.02	65.86	74	-8.14	H	PK
10560	41.09	8.02	49.11	54	-4.89	H	AV
10560	57.28	8.02	65.30	74	-8.70	V	PK
10560	41.48	8.02	49.50	54	-4.50	V	AV
High Channel (5320MHz)							
10640	58.41	8.35	66.76	74	-7.24	H	PK
10640	41.11	8.35	49.46	54	-4.54	H	AV
10640	55.17	8.35	63.52	74	-10.48	V	PK
10640	38.52	8.35	46.87	54	-7.13	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5500MHz)							
11000	57.03	8.82	65.85	74	-8.15	H	PK
11000	41.64	8.82	50.46	54	-3.54	H	AV
11000	55.00	8.82	63.82	74	-10.18	V	PK
11000	38.47	8.82	47.29	54	-6.71	V	AV
Middle Channel (5600MHz)							
11200	58.33	8.92	67.25	74	-6.75	H	PK
11200	38.62	8.92	47.54	54	-6.46	H	AV
11200	58.04	8.92	66.96	74	-7.04	V	PK
11200	39.60	8.92	48.52	54	-5.48	V	AV
High Channel (5700MHz)							
11400	58.08	9.84	67.92	74	-6.08	H	PK
11400	41.69	9.84	51.53	54	-2.47	H	AV
11400	55.25	9.84	65.09	74	-8.91	V	PK
11400	38.03	9.84	47.87	54	-6.13	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	57.46	9.45	66.91	74	-7.09	H	PK
11490	39.38	9.45	48.83	54	-5.17	H	AV
11490	58.68	9.45	68.13	74	-5.87	V	PK
11490	38.42	9.45	47.87	54	-6.13	V	AV
Middle Channel (5785MHz)							
11570	56.91	9.62	66.53	74	-7.47	H	PK
11570	41.61	9.62	51.23	54	-2.77	H	AV
11570	55.36	9.62	64.98	74	-9.02	V	PK
11570	41.51	9.62	51.13	54	-2.87	V	AV
High Channel (5825MHz)							
11650	58.00	9.84	67.84	74	-6.16	H	PK
11650	39.76	9.84	49.60	54	-4.40	H	AV
11650	56.50	9.84	66.34	74	-7.66	V	PK
11650	40.03	9.84	49.87	54	-4.13	V	AV

➤ Out of Band edge 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-40.67	-27
Highest	Above 5350	-41.72	-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	-41.65	-27
Highest	Above 5350	-42.34	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-38.29	-27
Highest	Above 5725	-39.14	-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	-41.58	-27
	5715 to 5725	-37.31	-17
Highest	5850 to 5860	-47.26	-17
	Above 5860	-48.18	-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, 5.470-5.725GHz, 5.725-5.850GHz (802.11ac-VHT20)
- Harmonics And Spurious Emissions

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5180MHz)							
10360	58.13	7.11	65.24	74	-8.76	H	PK
10360	41.18	7.11	48.29	54	-5.71	H	AV
10360	58.69	7.11	65.80	74	-8.20	V	PK
10360	41.16	7.11	48.27	54	-5.73	V	AV
Middle Channel (5200MHz)							
10400	55.90	7.22	63.12	74	-10.88	H	PK
10400	40.11	7.22	47.33	54	-6.67	H	AV
10400	58.96	7.22	66.18	74	-7.82	V	PK
10400	40.36	7.22	47.58	54	-6.42	V	AV
High Channel (5240MHz)							
10480	56.05	7.69	63.74	74	-10.26	H	PK
10480	40.59	7.69	48.28	54	-5.72	H	AV
10480	58.65	7.69	66.34	74	-7.66	V	PK
10480	41.13	7.69	48.82	54	-5.18	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	56.66	7.96	64.62	74	-9.38	H	PK
10520	40.82	7.96	48.78	54	-5.22	H	AV
10520	58.60	7.96	66.56	74	-7.44	V	PK
10520	40.87	7.96	48.83	54	-5.17	V	AV
Middle Channel (5280MHz)							
10560	56.57	8.02	64.59	74	-9.41	H	PK
10560	41.88	8.02	49.90	54	-4.10	H	AV
10560	56.50	8.02	64.52	74	-9.48	V	PK
10560	38.07	8.02	46.09	54	-7.91	V	AV
High Channel (5320MHz)							
10640	55.44	8.35	63.79	74	-10.21	H	PK
10640	38.58	8.35	46.93	54	-7.07	H	AV
10640	57.64	8.35	65.99	74	-8.01	V	PK
10640	41.01	8.35	49.36	54	-4.64	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5500MHz)							
11000	56.75	8.82	65.57	74	-8.43	H	PK
11000	39.95	8.82	48.77	54	-5.23	H	AV
11000	58.70	8.82	67.52	74	-6.48	V	PK
11000	38.70	8.82	47.52	54	-6.48	V	AV
Middle Channel (5600MHz)							
11200	57.76	8.92	66.68	74	-7.32	H	PK
11200	42.00	8.92	50.92	54	-3.08	H	AV
11200	58.86	8.92	67.78	74	-6.22	V	PK
11200	41.39	8.92	50.31	54	-3.69	V	AV
High Channel (5700MHz)							
11400	56.48	9.84	66.32	74	-7.68	H	PK
11400	41.57	9.84	51.41	54	-2.59	H	AV
11400	57.32	9.84	67.16	74	-6.84	V	PK
11400	38.45	9.84	48.29	54	-5.71	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	58.04	9.45	67.49	74	-6.51	H	PK
11490	39.73	9.45	49.18	54	-4.82	H	AV
11490	57.33	9.45	66.78	74	-7.22	V	PK
11490	41.74	9.45	51.19	54	-2.81	V	AV
Middle Channel (5785MHz)							
11570	55.84	9.62	65.46	74	-8.54	H	PK
11570	39.18	9.62	48.80	54	-5.20	H	AV
11570	58.86	9.62	68.48	74	-5.52	V	PK
11570	41.22	9.62	50.84	54	-3.16	V	AV
High Channel (5825MHz)							
11650	57.77	9.84	67.61	74	-6.39	H	PK
11650	38.48	9.84	48.32	54	-5.68	H	AV
11650	57.48	9.84	67.32	74	-6.68	V	PK
11650	41.27	9.84	51.11	54	-2.89	V	AV

➤ Out of Band edge 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-40.89	-27
Highest	Above 5350	-41.76	-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	-41.75	-27
Highest	Above 5350	-42.39	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-38.48	-27
Highest	Above 5725	-39.72	-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	-42.65	-27
	5715 to 5725	-38.85	-17
Highest	5850 to 5860	-47.72	-17
	Above 5860	-48.93	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11n HT40)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5190MHz)							
10380	55.27	7.89	63.16	74	-10.84	H	PK
10380	39.98	7.89	47.87	54	-6.13	H	AV
10380	57.47	7.89	65.36	74	-8.64	V	PK
10380	39.10	7.89	46.99	54	-7.01	V	AV
High Channel (5230MHz)							
10460	55.32	7.97	63.29	74	-10.71	H	PK
10460	40.65	7.97	48.62	54	-5.38	H	AV
10460	58.17	7.97	66.14	74	-7.86	V	PK
10460	38.02	7.97	45.99	54	-8.01	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	57.85	8.16	66.01	74	-7.99	H	PK
10540	38.31	8.16	46.47	54	-7.53	H	AV
10540	55.25	8.16	63.41	74	-10.59	V	PK
10540	39.86	8.16	48.02	54	-5.98	V	AV
High Channel (5310MHz)							
10620	58.51	8.57	67.08	74	-6.92	H	PK
10620	39.36	8.57	47.93	54	-6.07	H	AV
10620	56.60	8.57	65.17	74	-8.83	V	PK
10620	39.19	8.57	47.76	54	-6.24	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5510MHz)							
11020	56.21	9.16	65.37	74	-8.63	H	PK
11020	39.45	9.16	48.61	54	-5.39	H	AV
11020	55.25	9.16	64.41	74	-9.59	V	PK
11020	41.71	9.16	50.87	54	-3.13	V	AV
Middle Channel (5590MHz)							
11180	55.68	9.29	64.97	74	-9.03	H	PK
11180	40.15	9.29	49.44	54	-4.56	H	AV
11180	55.79	9.29	65.08	74	-8.92	V	PK
11180	41.44	9.29	50.73	54	-3.27	V	AV
High Channel (5670MHz)							
11340	55.63	9.43	65.06	74	-8.94	H	PK
11340	39.50	9.43	48.93	54	-5.07	H	AV
11340	58.06	9.43	67.49	74	-6.51	V	PK
11340	38.15	9.43	47.58	54	-6.42	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	57.57	9.45	67.02	74	-6.98	H	PK
11510	38.23	9.45	47.68	54	-6.32	H	AV
11510	57.10	9.45	66.55	74	-7.45	V	PK
11510	39.37	9.45	48.82	54	-5.18	V	AV
High Channel (5795MHz)							
11590	56.66	9.27	65.93	74	-8.07	H	PK
11590	40.78	9.27	50.05	54	-3.95	H	AV
11590	57.51	9.27	66.78	74	-7.22	V	PK
11590	38.65	9.27	47.92	54	-6.08	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-39.76	-27
Highest	Above 5350	-38.34	-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	-37.19	-27
Highest	Above 5350	-38.57	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-35.22	-27
Highest	Above 5725	-37.38	-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	-41.75	-27
	5715 to 5725	-35.26	-17
Highest	5850 to 5860	-37.41	-17
	Above 5860	-38.29	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11ac-VHT40)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5190MHz)							
10380	55.30	7.89	63.19	74	-10.81	H	PK
10380	38.16	7.89	46.05	54	-7.95	H	AV
10380	57.38	7.89	65.27	74	-8.73	V	PK
10380	38.67	7.89	46.56	54	-7.44	V	AV
High Channel (5230MHz)							
10460	55.97	7.97	63.94	74	-10.06	H	PK
10460	41.73	7.97	49.70	54	-4.30	H	AV
10460	55.38	7.97	63.35	74	-10.65	V	PK
10460	38.92	7.97	46.89	54	-7.11	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	56.05	8.16	64.21	74	-9.79	H	PK
10540	38.82	8.16	46.98	54	-7.02	H	AV
10540	56.51	8.16	64.67	74	-9.33	V	PK
10540	41.92	8.16	50.08	54	-3.92	V	AV
High Channel (5310MHz)							
10620	58.28	8.57	66.85	74	-7.15	H	PK
10620	39.84	8.57	48.41	54	-5.59	H	AV
10620	57.47	8.57	66.04	74	-7.96	V	PK
10620	40.86	8.57	49.43	54	-4.57	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5510MHz)							
11020	58.72	9.16	67.88	74	-6.12	H	PK
11020	38.56	9.16	47.72	54	-6.28	H	AV
11020	55.83	9.16	64.99	74	-9.01	V	PK
11020	40.42	9.16	49.58	54	-4.42	V	AV
Middle Channel (5590MHz)							
11180	55.72	9.29	65.01	74	-8.99	H	PK
11180	40.60	9.29	49.89	54	-4.11	H	AV
11180	58.13	9.29	67.42	74	-6.58	V	PK
11180	38.96	9.29	48.25	54	-5.75	V	AV
High Channel (5670MHz)							
11340	56.11	9.43	65.54	74	-8.46	H	PK
11340	41.57	9.43	51.00	54	-3.00	H	AV
11340	57.73	9.43	67.16	74	-6.84	V	PK
11340	39.86	9.43	49.29	54	-4.71	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	58.51	9.45	67.96	74	-6.04	H	PK
11510	39.11	9.45	48.56	54	-5.44	H	AV
11510	56.65	9.45	66.10	74	-7.90	V	PK
11510	40.94	9.45	50.39	54	-3.61	V	AV
High Channel (5795MHz)							
11590	55.98	9.27	65.25	74	-8.75	H	PK
11590	38.28	9.27	47.55	54	-6.45	H	AV
11590	56.64	9.27	65.91	74	-8.09	V	PK
11590	38.72	9.27	47.99	54	-6.01	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-37.93	-27
Highest	Above 5350	-36.52	-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	-38.16	-27
Highest	Above 5350	-37.52	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-35.68	-27
Highest	Above 5725	-37.76	-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	-41.45	-27
	5715 to 5725	-35.39	-17
Highest	5850 to 5860	-37.71	-17
	Above 5860	-38.67	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11ac-VHT80)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5210MHz							
10420	58.87	7.53	66.40	74	-7.60	H	PK
10420	38.42	7.53	45.95	54	-8.05	H	AV
10420	57.78	7.53	65.31	74	-8.69	H	PK
10420	38.03	7.53	45.56	54	-8.44	H	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5290MHz							
10580	58.11	7.95	66.06	74	-7.94	H	PK
10580	40.43	7.95	48.38	54	-5.62	H	AV
10580	58.55	7.95	66.50	74	-7.50	V	PK
10580	38.81	7.95	46.76	54	-7.24	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5530MHz)							
11060	56.38	9.42	65.80	74	-8.20	H	PK
11060	40.70	9.42	50.12	54	-3.88	H	AV
11060	57.11	9.42	66.53	74	-7.47	V	PK
11060	41.34	9.42	50.76	54	-3.24	V	AV
High Channel (5610MHz)							
11220	58.59	9.69	68.28	74	-5.72	H	PK
11220	38.18	9.69	47.87	54	-6.13	H	AV
11220	55.46	9.69	65.15	74	-8.85	V	PK
11220	41.59	9.69	51.28	54	-2.72	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5775MHz							
11550	55.55	9.93	65.48	74	-8.52	H	PK
11550	39.14	9.93	49.07	54	-4.93	H	AV
11550	57.80	9.93	67.73	74	-6.27	V	PK
11550	38.97	9.93	48.90	54	-5.10	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-37.82	-27
Highest	Above 5350	-36.59	-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	-38.25	-27
Highest	Above 5350	-36.34	-27
Note: the data just list the worst cases			

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-39.19	
Highest	Above 5725	-37.24	
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	-38.53	-27
	5715 to 5725	-37.16	-17
Highest	5850 to 5860	-35.28	-17
	Above 5860	-37.10	-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

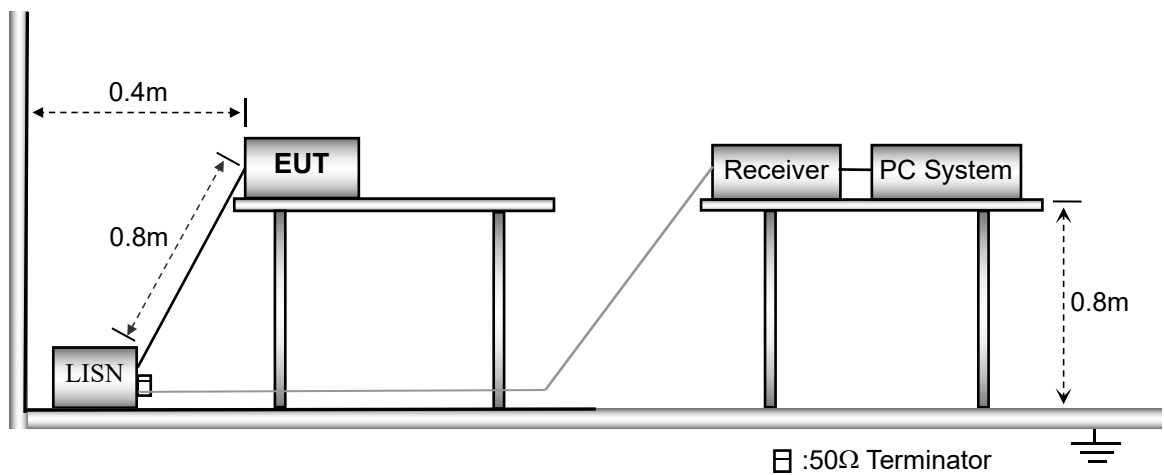
10. Conducted Emissions

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



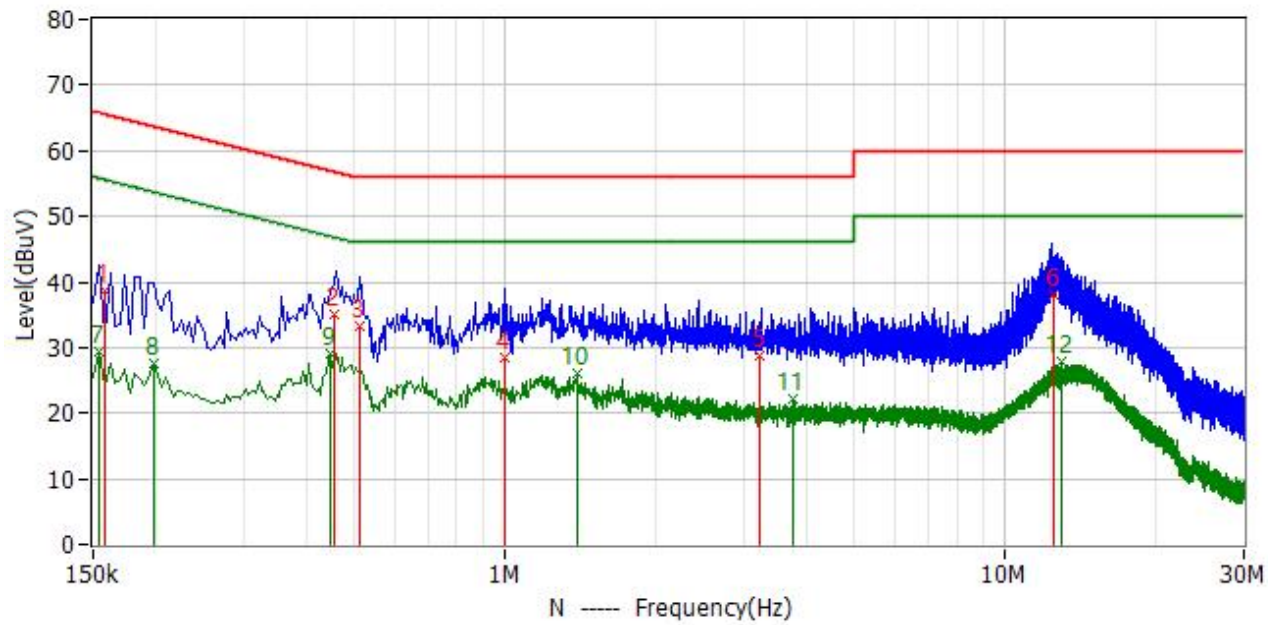
10.3 Test Receiver Setup

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

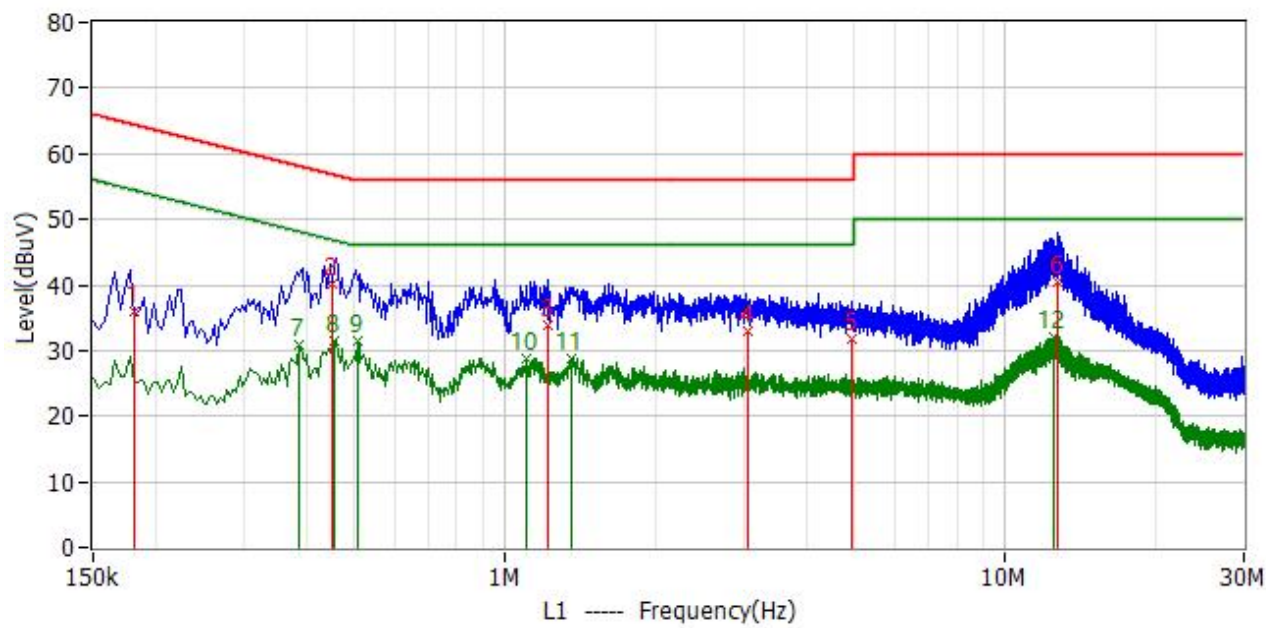
10.4 Summary of Test Results/Plots

Test Mode	Communication	AC120V 60Hz	Polarity:	Neutral
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No.	Frequency	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Delta dB	Detector
1	158.000kHz	29.1	9.7	38.8	65.6	-26.8	QP
2	454.000kHz	25.3	9.7	35.0	56.8	-21.8	QP
3	510.000kHz	23.6	9.7	33.3	56.0	-22.7	QP
4	1.002MHz	18.8	9.6	28.4	56.0	-27.6	QP
5	3.230MHz	19.2	9.6	28.8	56.0	-27.2	QP
6	12.478MHz	28.2	9.8	38.0	60.0	-22.0	QP
7*	154.000kHz	19.6	9.7	29.3	55.8	-26.5	AV
8*	198.000kHz	18.0	9.5	27.5	53.7	-26.2	AV
9*	446.000kHz	19.4	9.7	29.1	46.9	-17.9	AV
10*	1.394MHz	16.5	9.6	26.1	46.0	-19.9	AV
11*	3.754MHz	12.5	9.6	22.1	46.0	-23.9	AV
12*	13.014MHz	18.1	9.8	27.9	50.0	-22.1	AV

Test Mode	Communication	AC120V 60Hz	Polarity:	Line
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No.	Frequency	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Delta dB	Detector
1	182.000kHz	26.4	9.6	36.0	64.4	-28.4	QP
2	450.000kHz	30.4	9.7	40.1	56.9	-16.8	QP
3	1.214MHz	24.2	9.6	33.8	56.0	-22.2	QP
4	3.050MHz	23.4	9.6	33.0	56.0	-23.0	QP
5	4.914MHz	22.3	9.6	31.9	56.0	-24.1	QP
6	12.722MHz	30.7	9.8	40.5	60.0	-19.5	QP
7*	386.000kHz	21.2	9.6	30.8	48.1	-17.4	AV
8*	454.000kHz	21.8	9.7	31.5	46.8	-15.3	AV
9*	506.000kHz	21.7	9.7	31.4	46.0	-14.6	AV
10*	1.102MHz	19.2	9.6	28.8	46.0	-17.2	AV
11*	1.358MHz	19.2	9.6	28.8	46.0	-17.2	AV
12*	12.478MHz	22.3	9.8	32.1	50.0	-17.9	AV

APPENDIX SUMMARY

Project No.	WTX24X07166855W	Test Engineer	Timi Huang
Start date	2024/7/25	Finish date	2024/8/24
Temperature	22℃	Humidity	60%
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-1:5150-5250MHz			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a	5180	1.48	11
	5200	2.21	11
	5240	1.95	11
802.11n-HT20	5180	0.62	11
	5200	0.87	11
	5240	0.57	11
802.11n-HT40	5190	-1.51	11
	5230	-1.92	11
802.11ac-VHT20	5180	0.07	11
	5200	-0.17	11
	5240	0.78	11
802.11ac-VHT40	5190	-1.68	11
	5230	-2.40	11
802.11ac-VHT80	5210	-5.90	11

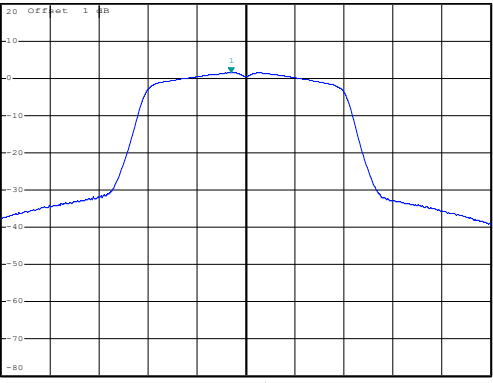
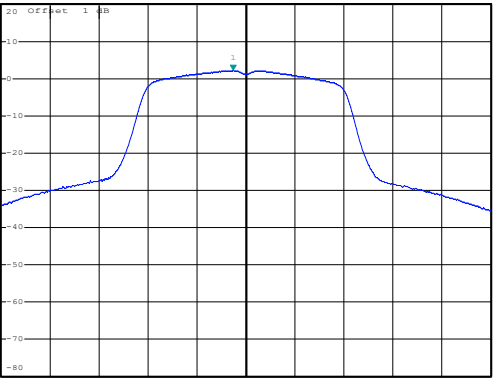
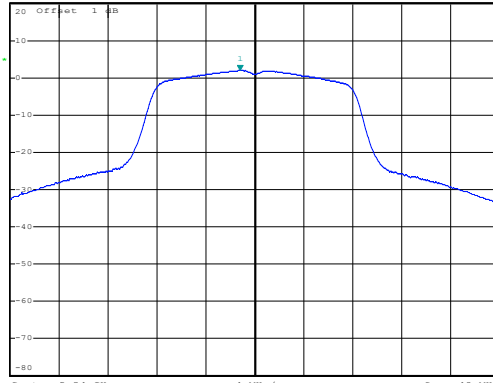
U-NII-2A: 5250-5350MHz			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a	5260	1.37	11
	5280	1.59	11
	5320	1.69	11
802.11n-HT20	5260	0.23	11
	5280	0.97	11
	5320	0.75	11
802.11n-HT40	5270	-1.72	11
	5310	-2.29	11
802.11ac-VHT20	5260	-0.26	11
	5280	0.98	11
	5320	0.93	11
802.11ac-VHT40	5270	-1.77	11
	5310	-2.74	11
802.11ac-VHT80	5290	-5.90	11

U-NII-2C: 5470-5725MHz			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a	5500	1.52	11
	5600	1.70	11
	5700	2.23	11
802.11n-HT20	5500	0.21	11
	5600	1.52	11
	5700	0.68	11
802.11n-HT40	5510	-2.18	11
	5590	-2.40	11
	5670	-2.34	11
802.11ac-VHT20	5500	0.20	11
	5600	0.98	11
	5700	0.86	11
802.11ac-VHT40	5510	-2.19	11
	5590	-2.72	11
	5670	-2.60	11
802.11ac-VHT80	5530	-5.97	11
	5610	-6.14	11

U-NII-3: 5725-5850MHz					
Operating mode	Test Channel	Power Spectral Density dBm/300kHz	Factor	Power Spectral Density* dBm/500kHz	Limit dBm/500kHz
802.11a	5745	-2.86	2.22	-0.64	30
	5785	-3.01	2.22	-0.79	30
	5825	-2.24	2.22	-0.02	30
802.11n-HT20	5745	-3.80	2.22	-1.58	30
	5785	-4.14	2.22	-1.92	30
	5825	-4.45	2.22	-2.23	30
802.11n HT40	5755	-7.50	2.22	-5.28	30
	5795	-7.02	2.22	-4.80	30
802.11ac-VHT20	5745	-4.29	2.22	-2.07	30
	5785	-3.84	2.22	-1.62	30
	5825	-3.90	2.22	-1.68	30
802.11ac-VHT40	5755	-6.84	2.22	-4.62	30
	5795	-6.51	2.22	-4.29	30
802.11ac-VHT80	5775	-10.44	2.22	-8.22	30

*Note: Maximum PSD=PSD(dBm/300kHz)+10log(500kHz/300kHz)=2.22

5150-5250MHz

802.11a-Low	 Date: 17.AUG.2024 09:10:46
802.11a-Middle	 Date: 17.AUG.2024 09:11:09
802.11a-High	 Date: 17.AUG.2024 09:11:33

802.11n-HT20-Low

Ref: 20 dBm, Att: 30 dB, RBW: 1 MHz, VSW: 3 MHz, SWT: 1 s, Marker 1 [T1]: 0.62 dBm, 5.180960000 GHz. The plot shows a signal centered at 5.18 GHz with a peak level of approximately -2 dBm. The signal is contained within a 4 MHz span, with a 4 MHz resolution bandwidth. The signal is centered at 5.18 GHz.

Date: 17.AUG.2024 09:12:49

802.11n-HT20-Middle

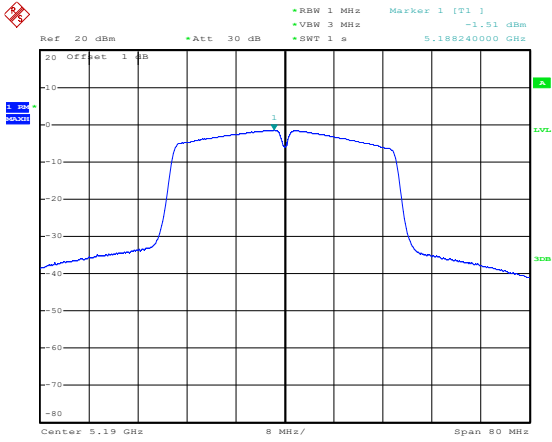
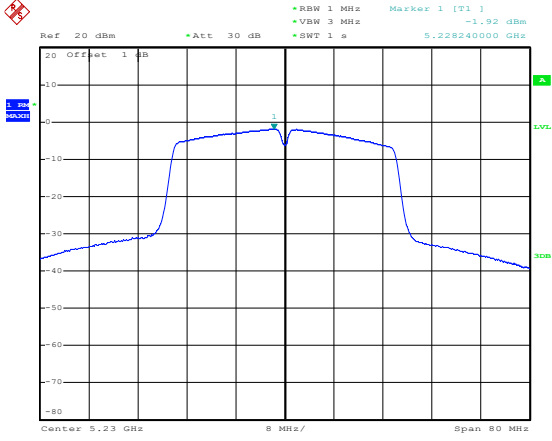
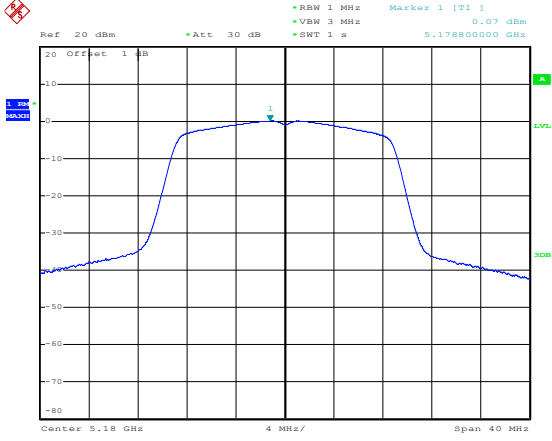
Ref: 20 dBm, Att: 30 dB, RBW: 1 MHz, VSW: 3 MHz, SWT: 1 s, Marker 1 [T1]: 0.87 dBm, 5.199600000 GHz. The plot shows a signal centered at 5.199 GHz with a peak level of approximately -2 dBm. The signal is contained within a 4 MHz span, with a 4 MHz resolution bandwidth. The signal is centered at 5.199 GHz.

Date: 17.AUG.2024 09:12:30

802.11n-HT20-High

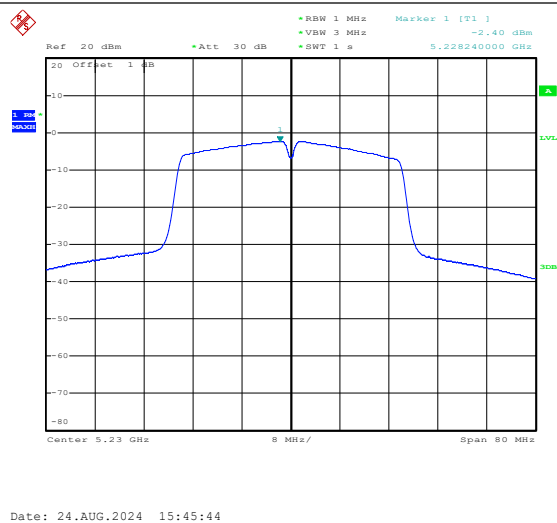
Ref: 20 dBm, Att: 30 dB, RBW: 1 MHz, VSW: 3 MHz, SWT: 1 s, Marker 1 [T1]: 0.87 dBm, 5.239600000 GHz. The plot shows a signal centered at 5.239 GHz with a peak level of approximately -2 dBm. The signal is contained within a 4 MHz span, with a 4 MHz resolution bandwidth. The signal is centered at 5.239 GHz.

Date: 17.AUG.2024 09:12:02

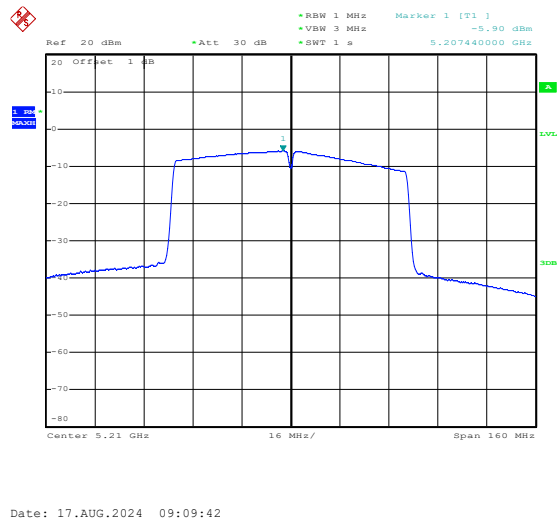
802.11n-HT40-Low	 Ref 20 dBm *Att 30 dB *RBW 1 MHz Marker 1 [T1] -1.51 dBm *VSW 3 MHz *SWT 1 s 5.188240000 GHz 20 Offset 1 dB Center 5.19 GHz 8 MHz/ Span 80 MHz Date: 17.AUG.2024 09:13:26
802.11n-HT40-High	 Ref 20 dBm *Att 30 dB *RBW 1 MHz Marker 1 [T1] -1.92 dBm *VSW 3 MHz *SWT 1 s 5.228240000 GHz 20 Offset 1 dB Center 5.23 GHz 8 MHz/ Span 80 MHz Date: 17.AUG.2024 09:13:47
802.11ac-VHT20-Low	 Ref 20 dBm *Att 30 dB *RBW 1 MHz Marker 1 [T1] 0.07 dBm *VSW 3 MHz *SWT 1 s 5.178800000 GHz 20 Offset 1 dB Center 5.18 GHz 4 MHz/ Span 40 MHz Date: 24.AUG.2024 15:47:48

Channel	Frequency (GHz)	Power (dBm)	Bandwidth (MHz)	Offset (dB)	Att (dB)	SWT (s)	Marker (T1)
802.11ac-VHT20-Middle	5.198720000	-0.17	4	1	30	1	5.198720000
802.11ac-VHT20-High	5.238880000	0.78	4	1	30	1	5.238880000
802.11ac-VHT40-Low	5.188240000	-1.68	8	1	30	1	5.188240000

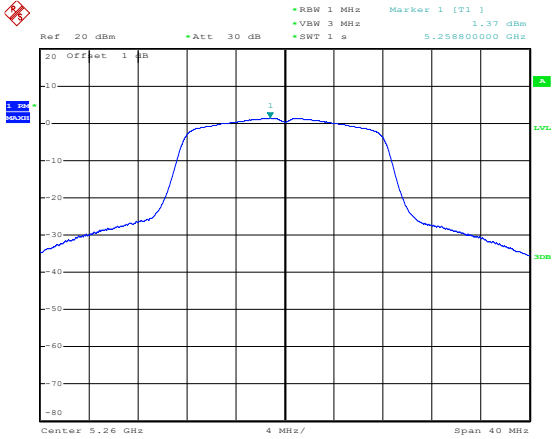
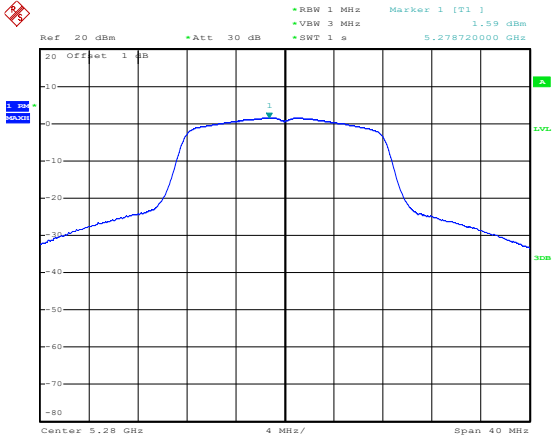
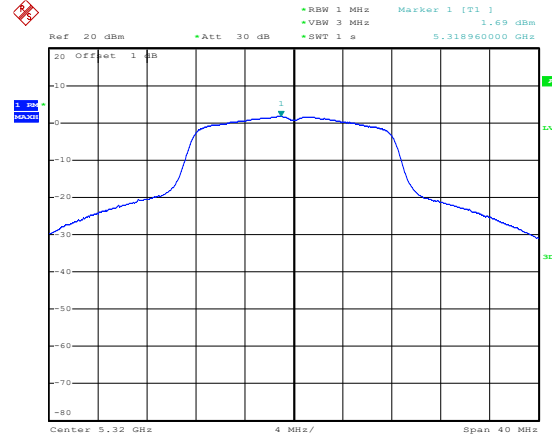
802.11ac-VHT40-High



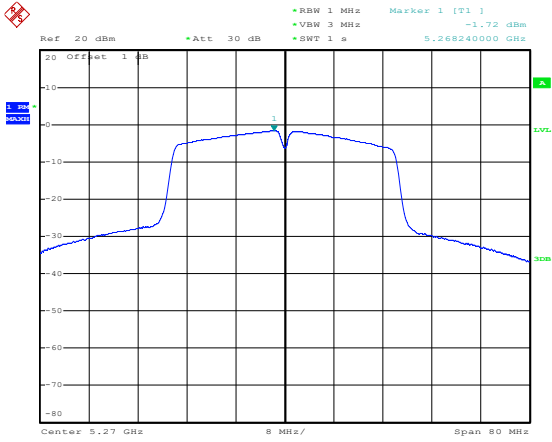
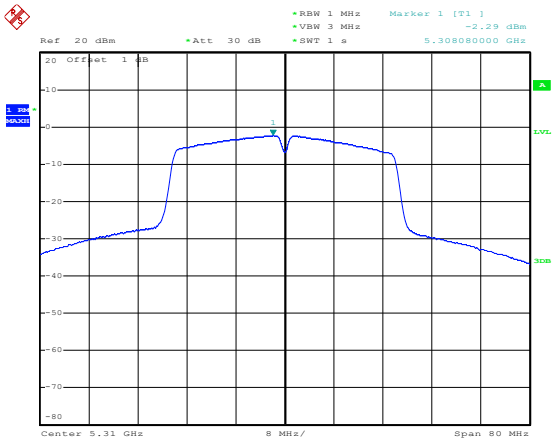
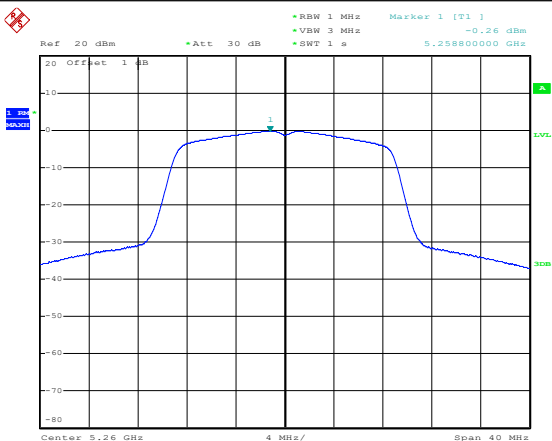
802.11ac-VHT80-Low

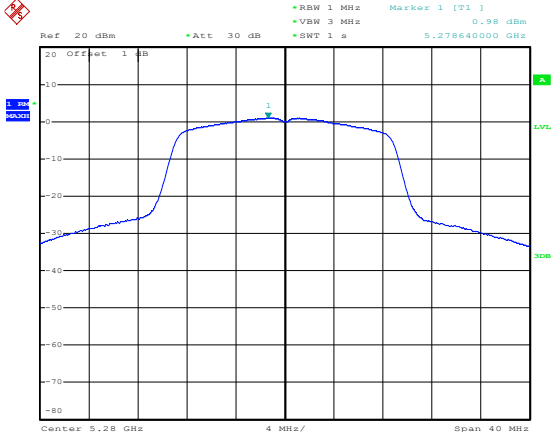
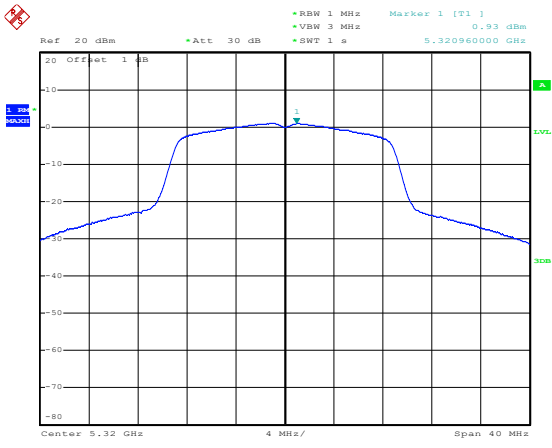
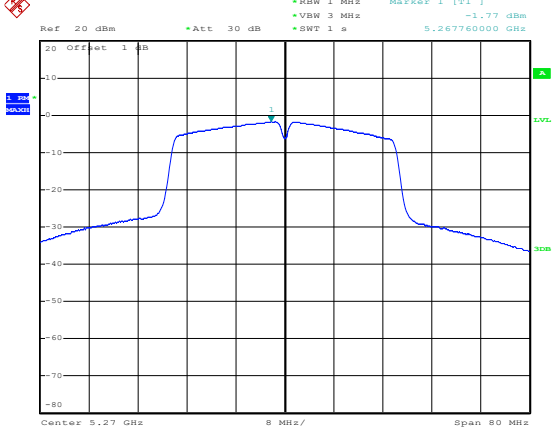


5250-5350MHz

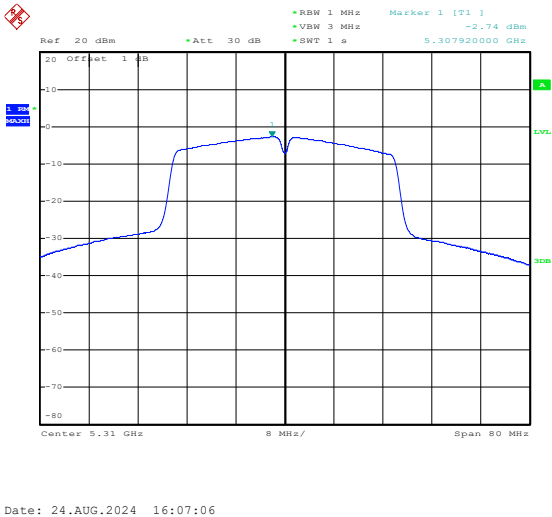
802.11a-Low	 Date: 17.AUG.2024 09:27:45
802.11a-Middle	 Date: 17.AUG.2024 09:28:13
802.11a-High	 Date: 17.AUG.2024 09:28:51

Channel	Frequency (GHz)	Power (dBm)	Bandwidth (MHz)	SWT (s)	Marker 1 [T1]
802.11n-HT20-Low	5.26	0.23	3	1	5.25860000 GHz
802.11n-HT20-Middle	5.28	0.97	3	1	5.27860000 GHz
802.11n-HT20-High	5.32	0.75	3	1	5.31870000 GHz

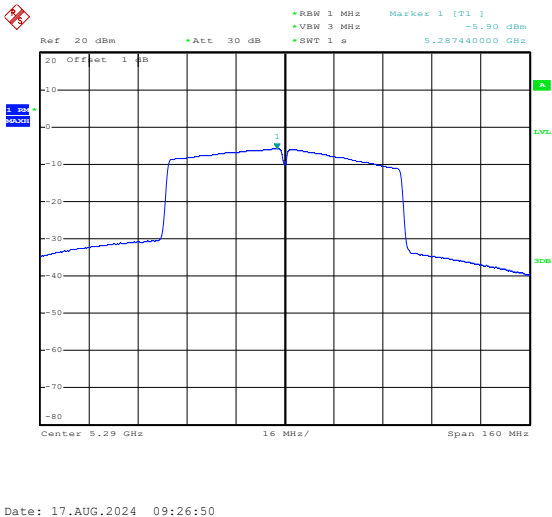
802.11n-HT40-Low	 Date: 17.AUG.2024 09:30:43
802.11n-HT40-High	 Date: 17.AUG.2024 09:31:07
802.11ac-VHT20-Low	 Date: 24.AUG.2024 16:10:54

Channel	Plot	Ref	Att	RBW	VBW	SWT	Marker 1 [T1]	Center	Span	Date
802.11ac-VHT20-Middle		20 dBm	30 dB	1 MHz	3 MHz	1 s	0.98 dBm	5.28 GHz	40 MHz	24.AUG.2024 16:11:21
802.11ac-VHT20-High		20 dBm	30 dB	1 MHz	3 MHz	1 s	0.93 dBm	5.32 GHz	40 MHz	24.AUG.2024 16:11:58
802.11ac-VHT40-Low		20 dBm	30 dB	1 MHz	3 MHz	1 s	-1.77 dBm	5.27 GHz	80 MHz	24.AUG.2024 16:07:48

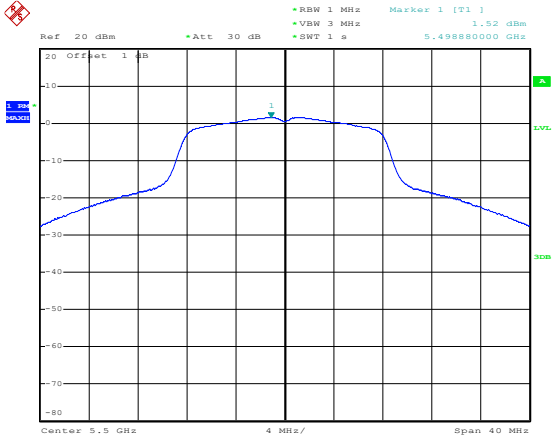
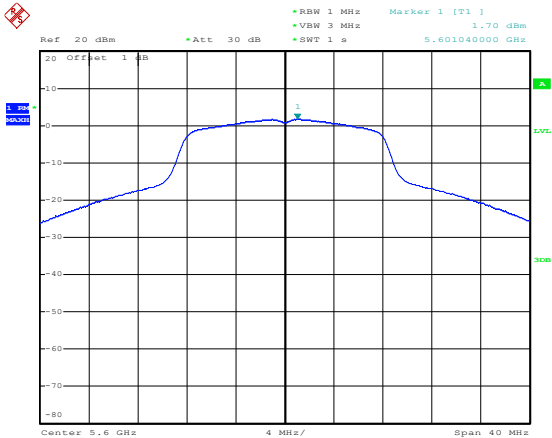
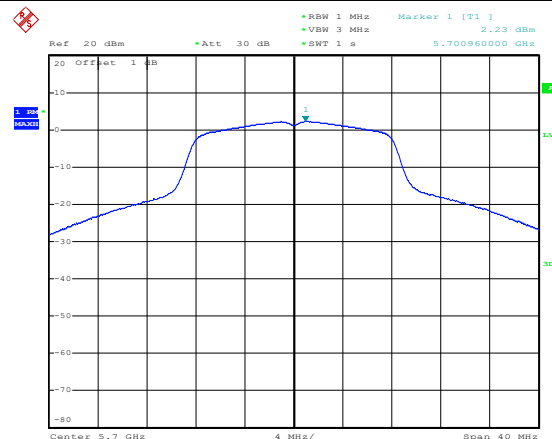
802.11ac-VHT40-High

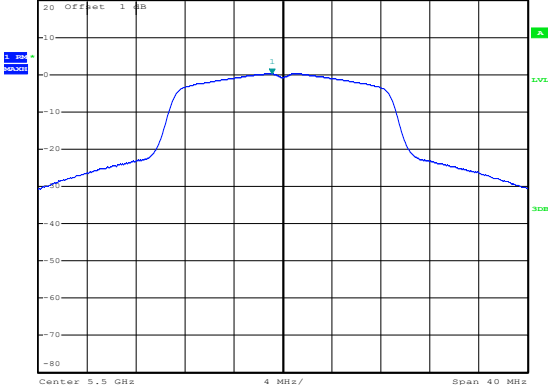
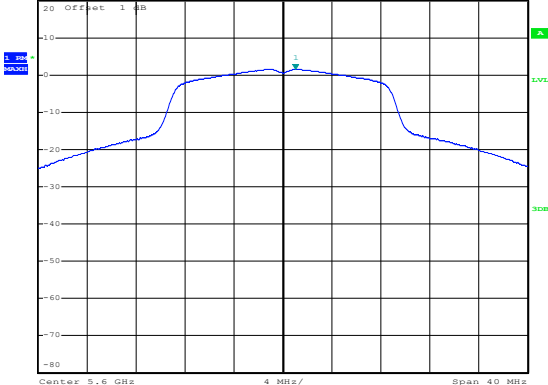
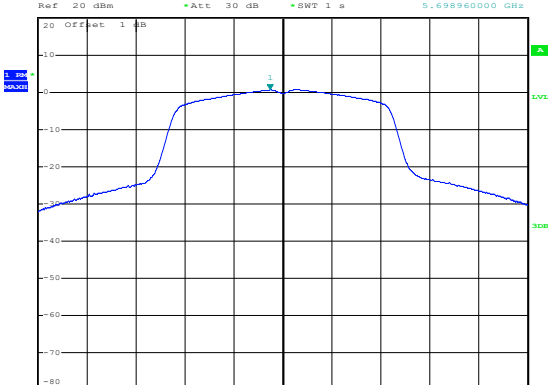


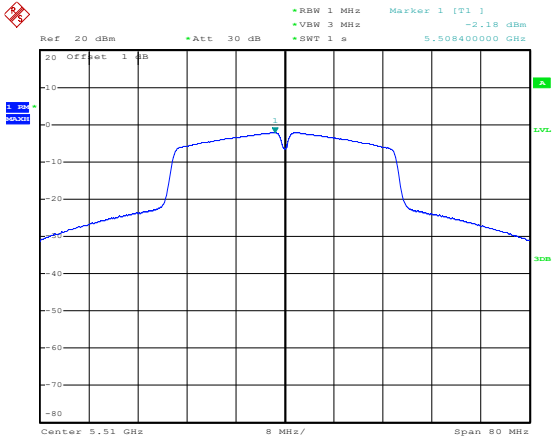
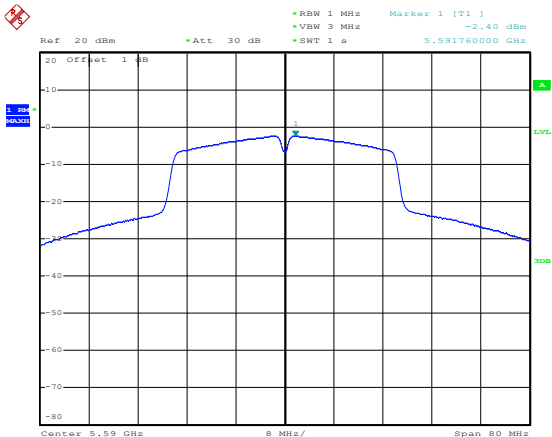
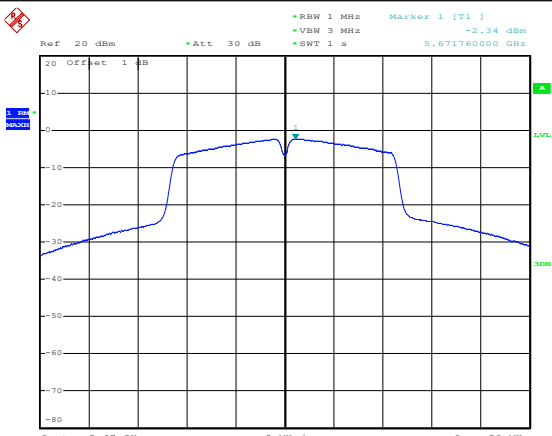
802.11ac-VHT80-Low

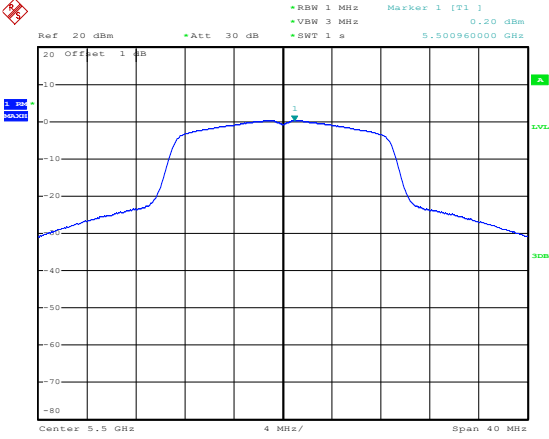
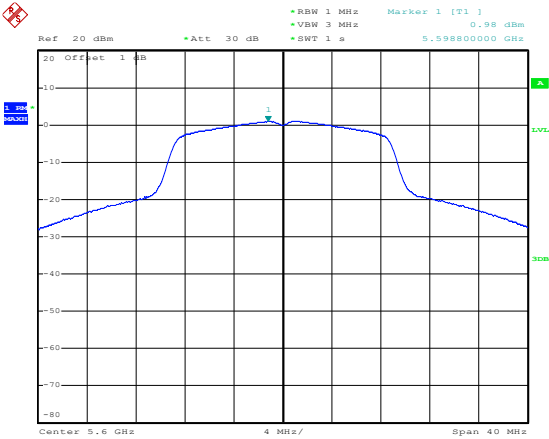
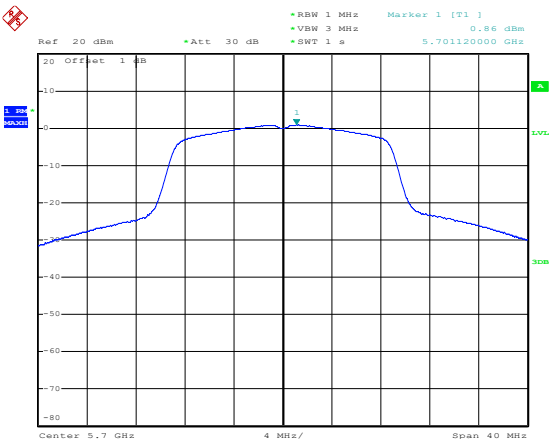


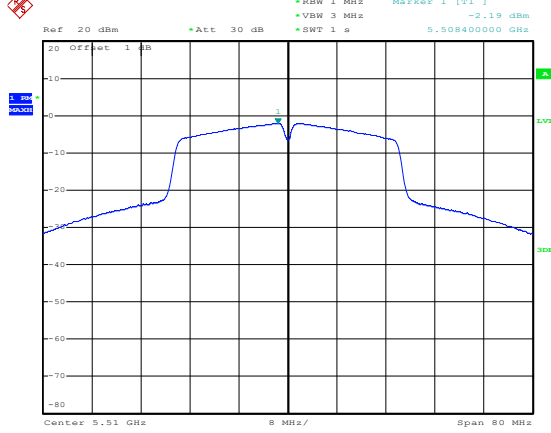
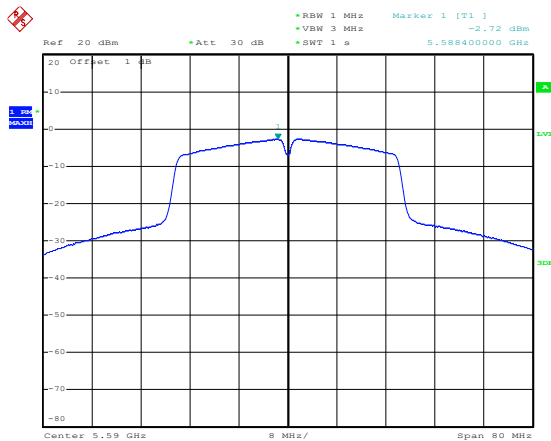
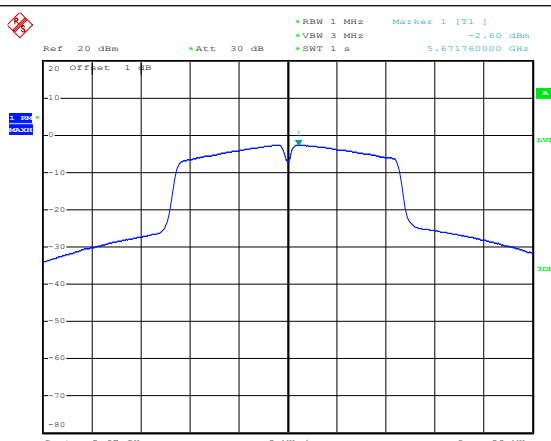
5470-5725MHz

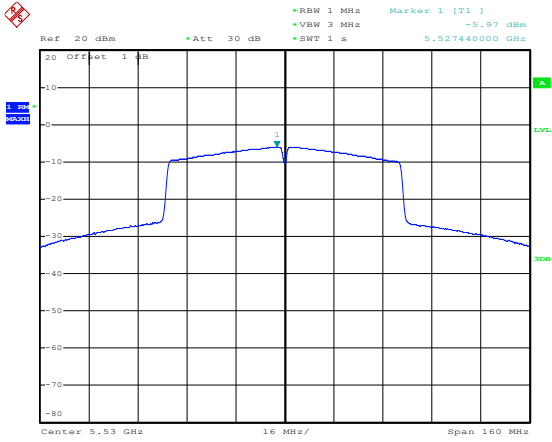
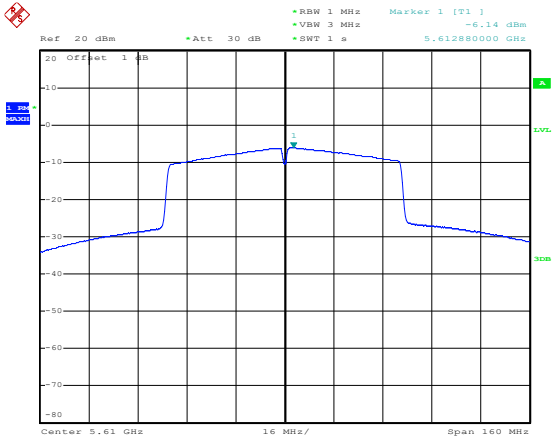
802.11a-Low	 Date: 17.AUG.2024 09:44:24
802.11a-Middle	 Date: 17.AUG.2024 09:44:44
802.11a-High	 Date: 17.AUG.2024 09:45:06

Channel	Plot	Ref	Att	RBW	VBW	SWT	Marker 1 [T1]	Level
802.11n-HT20-Low		20 dBm	30 dB	1 MHz	3 MHz	1 s	5.499120000 GHz	0.21 dBm
802.11n-HT20-Middle		20 dBm	30 dB	1 MHz	3 MHz	1 s	5.601040000 GHz	1.52 dBm
802.11n-HT20-High		20 dBm	30 dB	1 MHz	3 MHz	1 s	5.698960000 GHz	0.68 dBm

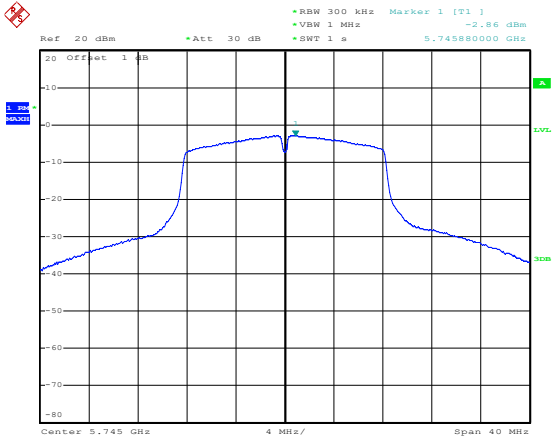
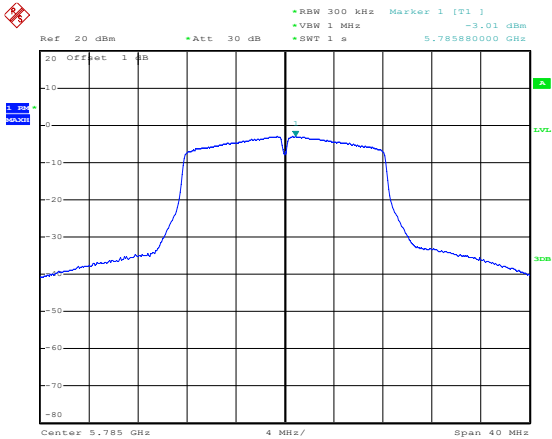
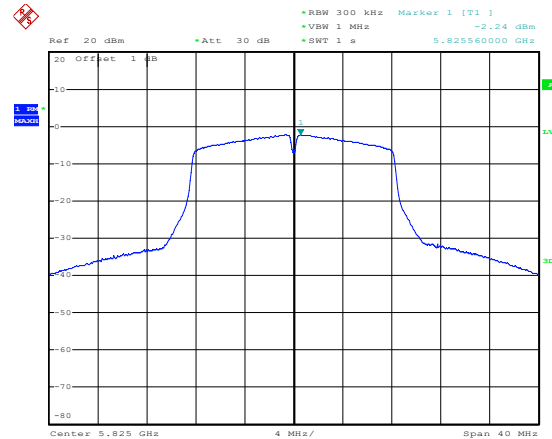
802.11n-HT40-Low	 Date: 17.AUG.2024 09:47:05
802.11n-HT40- Middle	 Date: 17.AUG.2024 09:47:32
802.11n-HT40-High	 Date: 17.AUG.2024 09:47:55

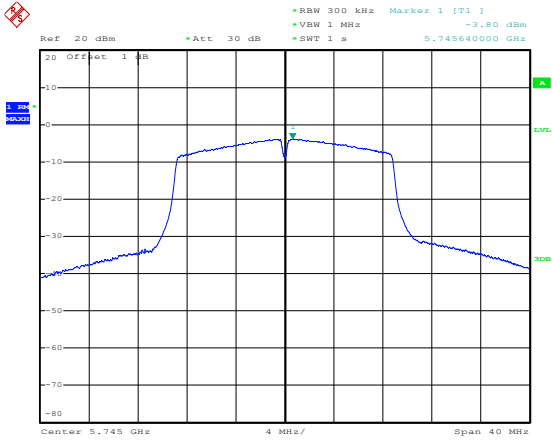
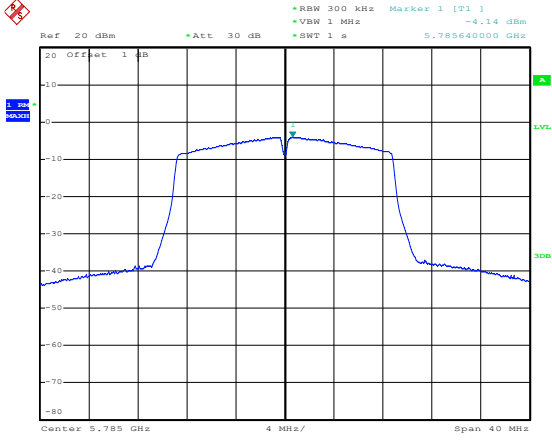
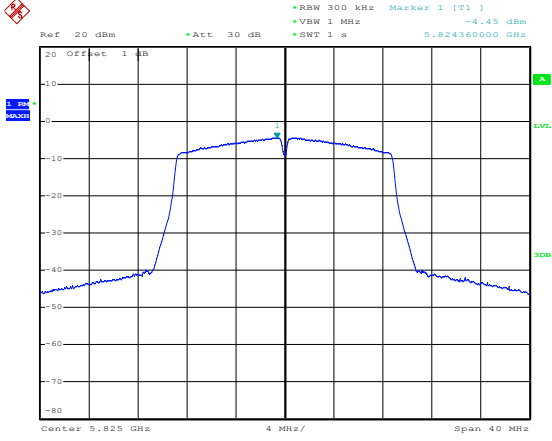
802.11ac-VHT20-Low	 Date: 24.AUG.2024 16:44:22
802.11ac-VHT20-Middle	 Date: 24.AUG.2024 16:44:48
802.11ac-VHT20-High	 Date: 24.AUG.2024 16:45:11

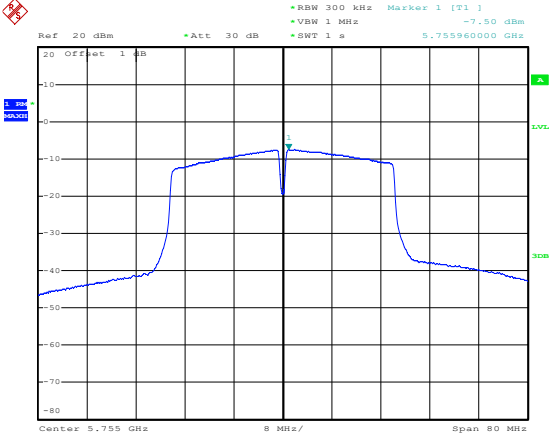
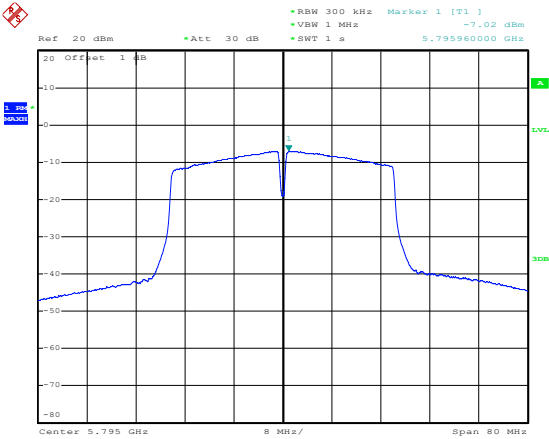
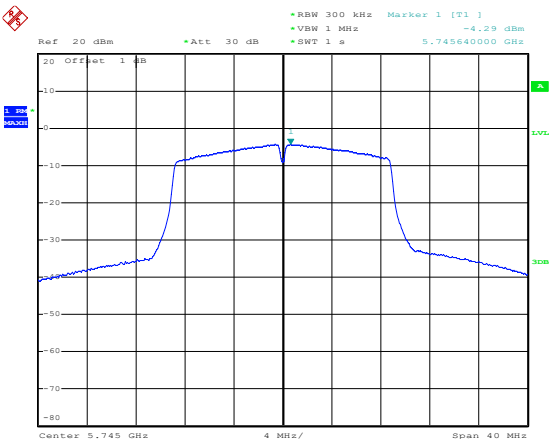
Channel	Plot	Ref	Att	RBW	VBW	SWT	Marker 1 [T1]	Date
802.11ac-VHT40-Low		20 dBm	30 dB	1 MHz	3 MHz	1 s	-2.19 dBm	24.AUG.2024 16:43:17
802.11ac-VHT40-Middle		20 dBm	30 dB	1 MHz	3 MHz	1 s	-2.72 dBm	24.AUG.2024 16:42:54
802.11ac-VHT40-High		20 dBm	30 dB	1 MHz	3 MHz	1 s	-2.60 dBm	24.AUG.2024 16:42:29

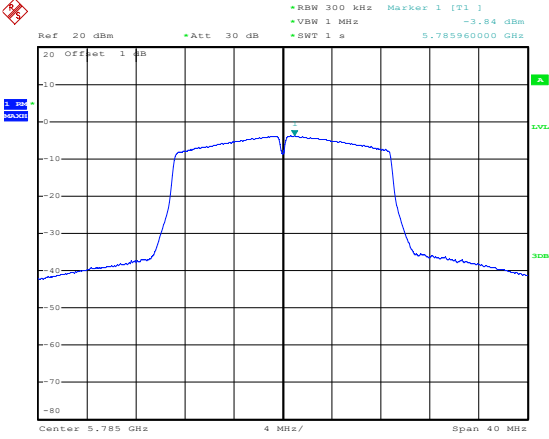
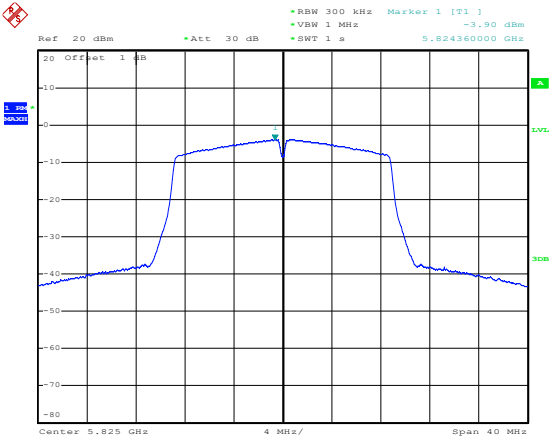
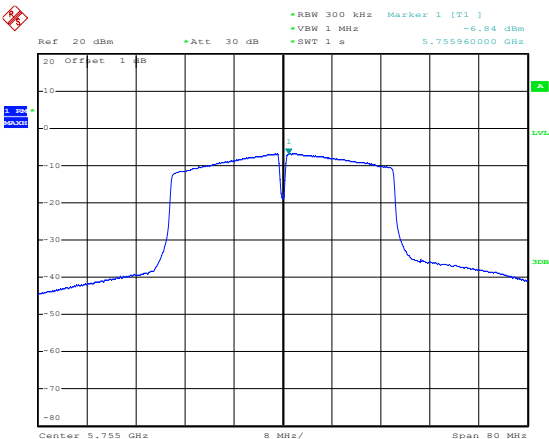
802.11ac-VHT80-Low	 Date: 17.AUG.2024 09:43:33
802.11ac-VHT80-High	 Date: 17.AUG.2024 09:43:14

5725-5850MHz

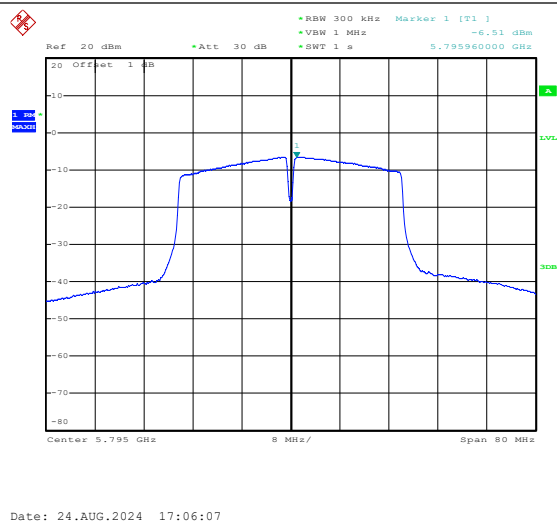
802.11a-Low	 Date: 17.AUG.2024 13:56:38
802.11a-Middle	 Date: 17.AUG.2024 13:57:00
802.11a-High	 Date: 17.AUG.2024 13:57:23

802.11n-HT20-Low	 Date: 17.AUG.2024 13:58:31
802.11n-HT20-Middle	 Date: 17.AUG.2024 13:58:07
802.11n-HT20-High	 Date: 17.AUG.2024 13:57:48

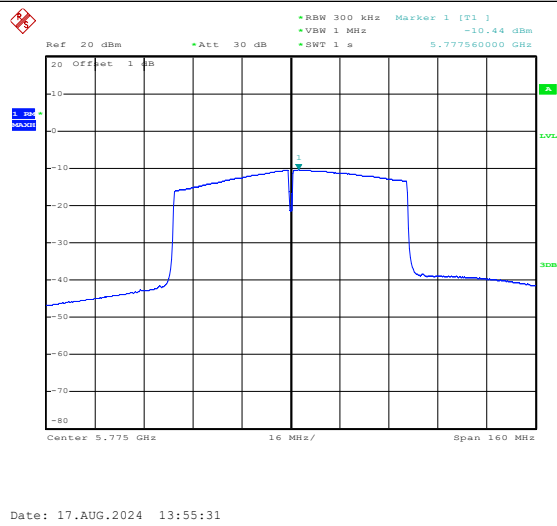
802.11n-HT40-Low	 Date: 17.AUG.2024 14:00:01
802.11n-HT40-High	 Date: 17.AUG.2024 14:00:43
802.11ac-VHT20-Low	 Date: 24.AUG.2024 17:03:59

802.11ac-VHT20-Middle	 Date: 24.AUG.2024 17:04:45
802.11ac-VHT20-High	 Date: 24.AUG.2024 17:05:05
802.11ac-VHT40-Low	 Date: 24.AUG.2024 17:05:41

802.11ac-VHT40-High



802.11ac-VHT80-Low



APPENDIX B

Emission Bandwidth and Occupied Bandwidth

U-NII-1:5150-5250MHz				
Test Mode	Test Channel MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5180	20.4	17.28	Pass
	5200	20.7	17.28	Pass
	5240	20.7	17.12	Pass
802.11n-HT20	5180	20.8	17.92	Pass
	5200	20.8	17.92	Pass
	5240	20.8	17.92	Pass
802.11n-HT40	5190	40.6	37.12	Pass
	5230	40.6	36.80	Pass
802.11ac-VHT20	5180	21.20	18.16	Pass
	5200	21.10	18.08	Pass
	5240	23.50	18.24	Pass
802.11ac-VHT40	5190	40.80	37.60	Pass
	5230	42.20	37.92	Pass
802.11ac-VHT80	5210	82.08	75.84	Pass

U-NII-2A: 5250-5350MHz				
Test Mode	Test Channel MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5260	20.8	17.04	Pass
	5280	20.5	17.12	Pass
	5320	21.0	17.12	Pass
802.11n-HT20	5260	20.9	18.00	Pass
	5280	20.9	17.92	Pass
	5320	20.7	18.00	Pass
802.11n-HT40	5270	40.8	36.80	Pass
	5310	40.8	36.96	Pass
802.11ac-VHT20	5260	26.52	18.56	Pass
	5280	33.12	18.56	Pass
	5320	38.08	23.00	Pass
802.11ac-VHT40	5270	60.48	38.72	Pass
	5310	68.04	39.84	Pass
802.11ac-VHT80	5290	82.08	75.52	Pass

U-NII-2C: 5470-5725MHz				
Test Mode	Test Channel MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5500	20.4	17.04	Pass
	5600	20.2	16.96	Pass
	5700	20.6	16.96	Pass
802.11n-HT20	5500	20.8	17.92	Pass
	5600	20.7	17.92	Pass
	5700	20.8	17.84	Pass
802.11n-HT40	5510	40.4	36.80	Pass
	5590	40.6	36.80	Pass
	5670	40.8	36.80	Pass
802.11ac-VHT20	5500	37.60	22.70	Pass
	5600	42.80	28.32	Pass
	5700	37.76	22.44	Pass
802.11ac-VHT40	5510	79.68	48.00	Pass
	5590	79.04	48.20	Pass
	5670	78.72	45.60	Pass
802.11ac-VHT80	5530	81.72	75.52	Pass
	5610	82.08	75.52	Pass

U-NII-3: 5725-5850MHz				
Test Mode	Test Channel MHz	6 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5745	16.48	16.96	≥500
	5785	16.48	17.12	≥500
	5825	16.48	17.20	≥500
802.11n-HT20	5745	17.76	17.92	≥500
	5785	17.76	17.92	≥500
	5825	17.76	17.92	≥500
802.11n-HT40	5755	36.48	36.96	≥500
	5795	36.48	37.12	≥500
802.11ac-VHT20	5745	17.76	18.48	≥500
	5785	17.76	18.16	≥500
	5825	17.76	18.08	≥500
802.11ac-VHT40	5755	36.48	37.76	≥500
	5795	36.64	37.60	≥500
802.11ac-VHT80	5775	76.80	75.52	≥500

26 dB BandwidthMHz
5150-5250MHz

802.11a-Low	Date: 25.JUL.2024 19:58:54
802.11a-Middle	Date: 25.JUL.2024 19:59:57
802.11a-High	Date: 25.JUL.2024 20:00:33

[illegible]