

TEST REPORT

Reference No...... : WTX25X05124828W001
FCC ID : 2AKIT-HMG04
Applicant : Lumi United Technology Co., Ltd
Address : B1, Chongwen Park, Nanshan iPark, Liuxian Avenue, Taoyuan Residential District, Nanshan District, Shenzhen, China
Manufacturer : The same as Applicant
Address : The same as Applicant
Product Name : Edge Hub M300
Model No...... : HM-G04D
Standards : FCC Part 15.407
Date of Receipt sample : 2025-05-16
Date of Test..... : 2025-07-28 to 2025-08-14
Date of Issue : 2025-08-14
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.

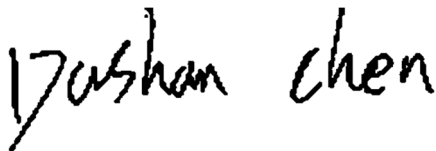
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Report version

Version No.	Date of issue	Description
Rev.00	2025-08-14	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT	
Product Name:	Edge Hub M300
Trade Name:	Aqara
Model No.:	HM-G04D
Adding Model(s):	HM-G04E
Rated Voltage:	DC5V POE:DC48V
Battery Capacity:	/
Power Adapter:	/
<i>Note: The test data is gathered from a production sample, provided by the manufacturer. The appearance of others models listed in the report is different from main-test model HM-G04D, but the circuit and the electronic construction do not change, declared by the manufacturer.</i>	

Technical Characteristics of EUT	
Support Standards:	802.11a, 802.11n(HT20), 802.11n-HT40, 802.11ac-VHT20/40/80
Frequency Range:	5180-5240MHz, 5745-5825MHz
Max. RF Output Power:	15.69dBm (Conducted)
Type of Modulation:	QPSK, 16QAM, 64QAM, 256QAM
Type of Antenna:	PIFA Antenna
Antenna Gain:	0.5dBi
<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 C63.10-2020: American National Standard of Procedures for Compliance Testing of 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 C63.10-2020, KDB789033 D02 v02r01. The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted accordingly in reference to the Operating Instructions.

1.4 Table for parameters of Test Software setting

Use “QCOM_V1.6.exe” and follow the instructions given by the manufacturer, 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. Test use the customer default power level, and to measure its highest possible emissions level, more detailed description as follows:

Mode	Test Frequency (MHz)											
	NCB: 20MHz											
	5180	5200	5240	5745	5785	5825						
802.11a 6Mbps	50	50	50	49	49	49						
802.11n-HT20 MCS0	48	48	48	48	48	48						
802.11ac-VHT 20MCS0	49	49	49	47	47	47						
Mode	NCB: 40MHz											
	5190	5230	5755	5795								
802.11n-HT40 MCS0	47	47	48	48								
802.11ac-VHT 40MCS0	47	47	48	48								

Mode	NCB: 80MHz									
	5210	5775								
802.11ac-VHT 80MCS0	45	49								

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, 5745MHz, 5785MHz,5825MHz
TM2	802.11n-HT20	5180MHz,5200MHz,5240MHz, 5745MHz, 5785MHz,5825MHz
TM3	802.11ac-VHT20	5180MHz,5200MHz,5240MHz, 5745MHz, 5785MHz,5825MHz
TM4	802.11n-HT40	5190MHz,5230MHz,5270MHz, 5755MHz,5795MHz
TM5	802.11ac-VHT40	5190MHz,5230MHz,5270MHz, 5755MHz,5795MHz
TM6	802.11ac-VHT80	5210MHz,5775MHz

Test Conditions	
Temperature:	22~25 °C
Relative Humidity:	45~75 %
ATM Pressure:	1019 mbar

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

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

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Adapter	Xiaomi	MDY-08-EH	/
Wireless Router	MERCURY	MS08CP	/

1.8 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
RF Output Power	Conducted	0.57dB
Occupied Bandwidth	Conducted	0.015MHz
Power Spectral Density	Conducted	1.8dB
Conducted Spurious Emission	Conducted	2.17dB
Conducted Emissions	Conducted	9-150kHz, 3.74dB
		0.15-30MHz, 3.34dB
Transmitter Spurious Emissions	Radiated	30-200MHz, 4.52dB
		0.2-1GHz 5.56dB
		1-6GHz, 3.84dB
		6-18GHz, 3.92dB

1.9 Test Equipment List and Details

Fixed asset Number	Description	Manufacturer	Model	Serial No.	Cal Date	Due. Date
WTXE1041A 1001	Communication Tester	Rohde & Schwarz	CMW500	148650	2025-02-23	2026-02-22
WTXE1005A 1005	Spectrum Analyzer	Agilent	N9020A	US471401 02	2025-02-23	2026-02-22
WTXE1084A 1001	Spectrum Analyzer	Agilent	N9020A	MY543205 48	2025-02-23	2026-02-22
WTXE1004A 1-001	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2025-02-23	2026-02-22
WTXE1103A 1003	Attenuator	Pasternack	PE4007-4	/	2025-02-23	2026-02-22
WTXE1003A 1-005	Coaxial Cable	/	0M4RFC	/	2025-02-23	2026-02-22
☐ Chamber A: Below 1GHz						
WTXE1005A 1003	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/03 5	2025-02-23	2026-02-22
WTXE1001A 1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2025-02-23	2026-02-22
WTXE1007A 1001	Amplifier	HP	8447F	2805A034 75	2025-02-23	2026-02-22
WTXE1010A 1007	Loop Antenna	Schwarz beck	FMZB 1516	9773	2024-02-26	2026-02-25
WTXE1010A 1006	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2025-02-23	2026-02-22
WTXE1104A 1032-1	Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
WTXE1104A 1032-2	Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
WTXE1104A 1032-3	Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
☐ Chamber A: Above 1GHz						
WTXE1005A 1003	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/03 5	2025-02-23	2026-02-22
WTXE1001A 1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2025-02-23	2026-02-22
WTXE1065A 1001	Amplifier	C&D	PAP-1.0G18	14918	2025-02-23	2026-02-22
WTXE1010A 1005	Horn Antenna	ETS	3117	00086197	2025-02-23	2026-02-22

WTXE1010A 1010	DRG Horn Antenna	A.H. SYSTEMS	SAS-574	571	2024-03-17	2026-03-16
WTXE1003A 1001	Pre-amplifier	Schwarzbeck	BBV 9721	9721-031	2025-02-23	2026-02-22
WTXE1104A 1033-1	Coaxial Cable	/	C16-07-07	/	2025-02-23	2026-02-22
WTXE1104A 1033-2	Coaxial Cable	/	C16-07-07	/	2025-02-23	2026-02-22
WTXE1104A 1033-3	Coaxial Cable	/	C16-07-07	/	2025-02-23	2026-02-22
☐ 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	2025-02-23	2026-02-22
WTXE1001A 1002	EMI Test Receiver	Rohde & Schwarz	ESPI	101391	2025-02-23	2026-02-22
WTXE1104A 1031-1	Coaxial Cable	/	1.5MRFC-LWB3	/	2025-02-23	2026-02-22
WTXE1104A 1031-2	Coaxial Cable	/	RG 316	/	2025-02-23	2026-02-22
WTXE1104A 1031-3	Coaxial Cable	/	RG 316	/	2025-02-23	2026-02-22
☒ Chamber C:Below 1GHz						
WTXE1093A 1001	EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2025-02-23	2026-02-22
WTXE1004A 1-001	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2025-02-23	2026-02-22
WTXE1010A 1013-1	Trilog Broadband Antenna	Schwarz beck	VULB 9168	1194	2024-04-18	2027-04-17
WTXE1010A 1007	Loop Antenna	Schwarz beck	FMZB 1516	9773	2024-02-26	2026-02-25
WTXE1007A 1002	Amplifier	HP	8447F	2944A038 69	2025-02-23	2026-02-22
WTXE1104A 1034-1	Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
WTXE1104A 1034-2	Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22
WTXE1104A 1034-3	Coaxial Cable	/	RC_6G-N-M	/	2025-02-23	2026-02-22

☒ Chamber C: Above 1GHz						
WTXE1093A 1001	EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2025-02-23	2026-02-22
WTXE1004A 1-001	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2025-02-23	2026-02-22
WTXE1103A 1005	Horn Antenna	POAM	RTF-118A	1820	2025-06-13	2027-06-12
WTXE1103A 1006	Amplifier	Tonscend	TAP01018050	AP22E806 235	2025-02-23	2026-02-22
WTXE1010A 1010	DRG Horn Antenna	A.H. SYSTEMS	SAS-574	571	2024-03-17	2026-03-16
WTXE1003A 1001	Pre-amplifier	Schwarzbeck	BBV 9721	9721-031	2025-02-23	2026-02-22
WTXE1104A 1035-1	Coaxial Cable	/	RC-18G-N-M	/	2025-02-23	2026-02-22
WTXE1104A 1035-2	Coaxial Cable	/	RC-18G-N-M	/	2025-02-23	2026-02-22
WTXE1104A 1035-3	Coaxial Cable	/	RC-18G-N-M	/	2025-02-23	2026-02-22
☐ Conducted Room 1#						
WTXE1104A 1029	EMI Test Receiver	Rohde & Schwarz	ESCI	100525	2024-12-08	2025-12-07
WTXE1002A 1001	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2025-02-23	2026-02-22
WTXE1003A 1001	AC LISN	Schwarz beck	NSLK8126	8126-279	2025-02-23	2026-02-22
WTXE1104A 1036	Coaxial Cable	/	RG 316	/	2025-02-23	2026-02-22
WTXE1104A 1038	Coaxial Cable	/	6MRFC-DP	/	2025-02-23	2026-02-22
☒ Conducted Room 2#						
WTXE1001A 1004	EMI Test Receiver	Rohde & Schwarz	ESPI	101259	2025-02-23	2026-02-22
WTXE1003A 1003	LISN	Rohde & Schwarz	ENV 216	100097	2025-02-23	2026-02-22
WTXE1104A 1037	Coaxial Cable	/	RG 316	/	2025-02-23	2026-02-22

Software List			
Description	Manufacturer	Model	Version
EMI Test Software (Radiated Emission A)	Farad	EZ-EMC	RA-03A1 (1.1.4.2)
EMI Test Software (Radiated Emission B)	Farad	EZ-EMC	RA-03A1 (1.1.4.2)
EMI Test Software (Radiated Emission C)	Farad	EZ-EMC	RA-03A1-2 (1.1.4.2)
EMI Test Software (Conducted Emission Room 1#)	Farad	EZ-EMC	3A1*CE-RE 1.1.4.3
EMI Test Software (Conducted Emission Room 2#)	Farad	EZ-EMC	3A1*CE-RE 1.1.4.3

*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 a PIFA 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.

Reference No.: WTX25X05124828W001

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 collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

7.2 Test Procedure

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

- (i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- (ii) Set RBW = 1MHz.
- (iii) Set VBW $\geq$ 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 $\geq$ 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:

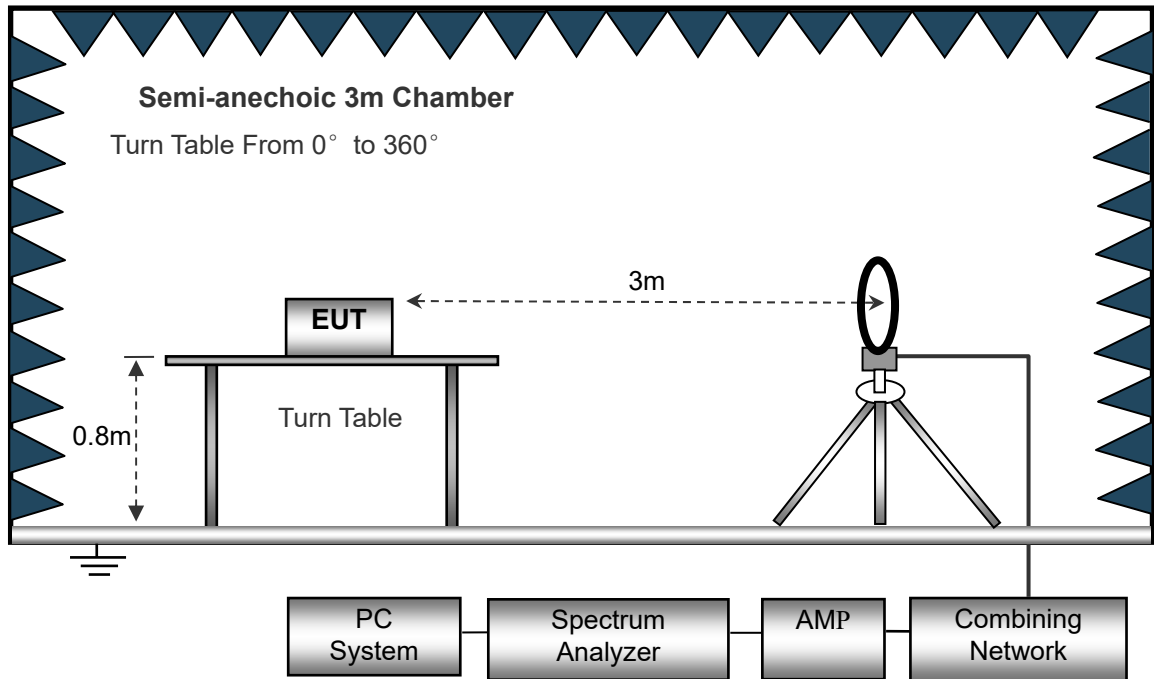
- E is the field strength in V/m;
- d is the measurement distance in meters;
- EIRP is the equivalent isotropically radiated power in watts.

8.2 Test Procedure

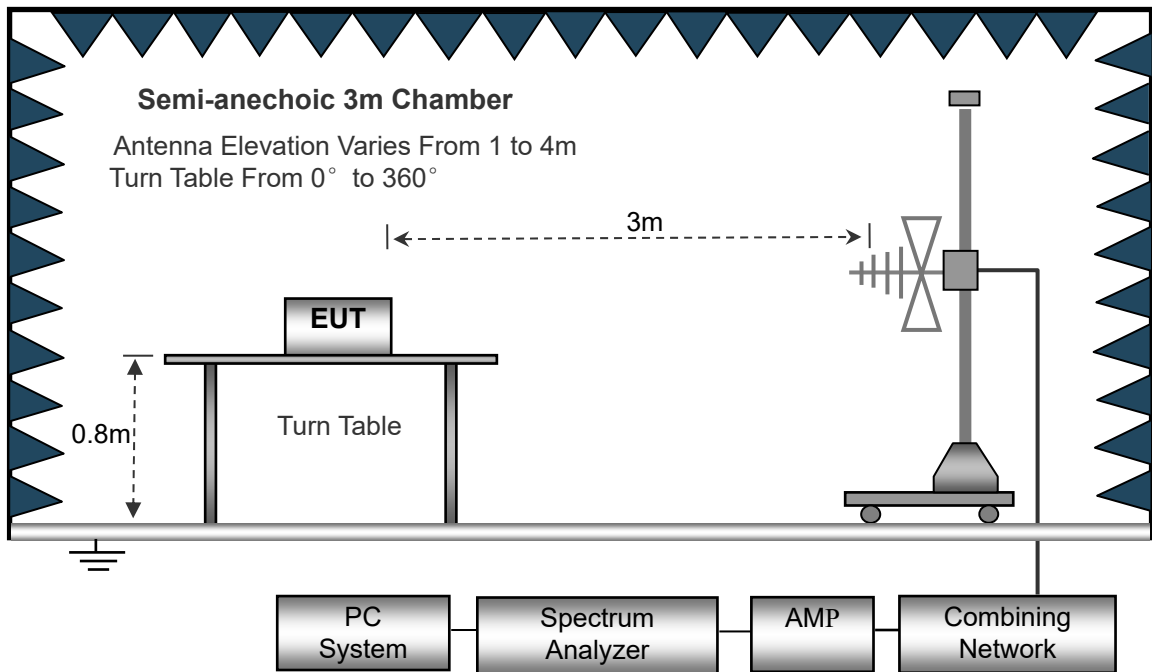
The setup of EUT is according with per ANSI C63.10-2020 measurement procedure. The specification used was with the FCC Part 15.205 15.407(b)(6) and FCC Part 15.209 Limit..

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.

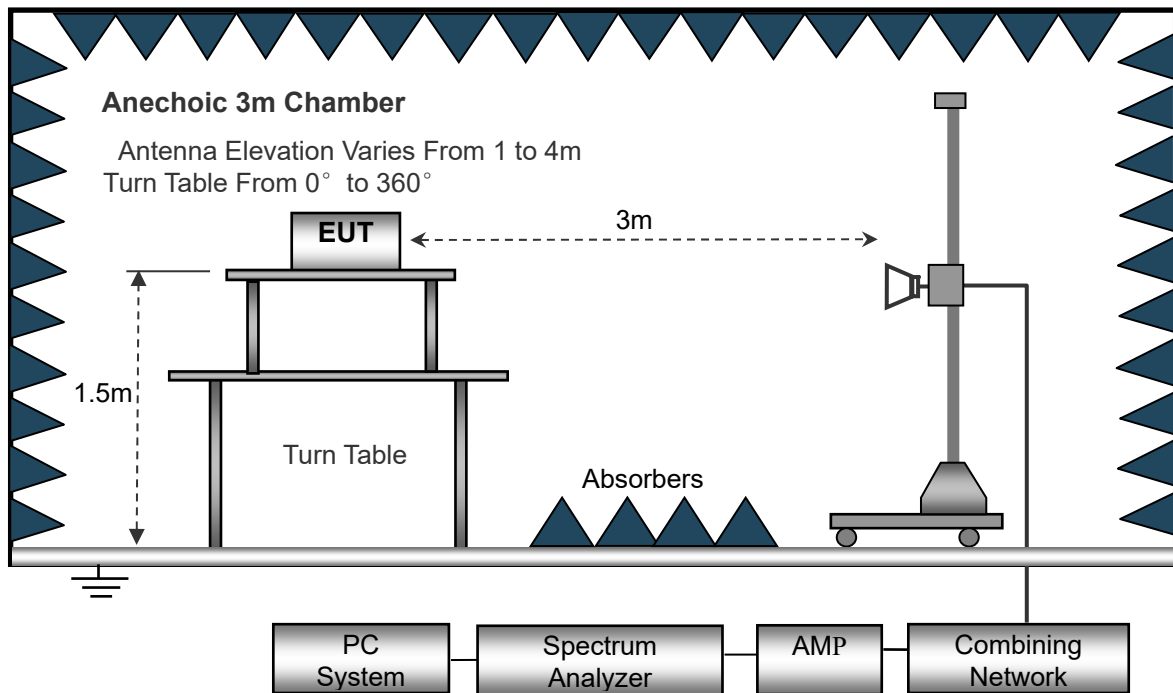
The test setup for emission measurement below 30MHz.



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:

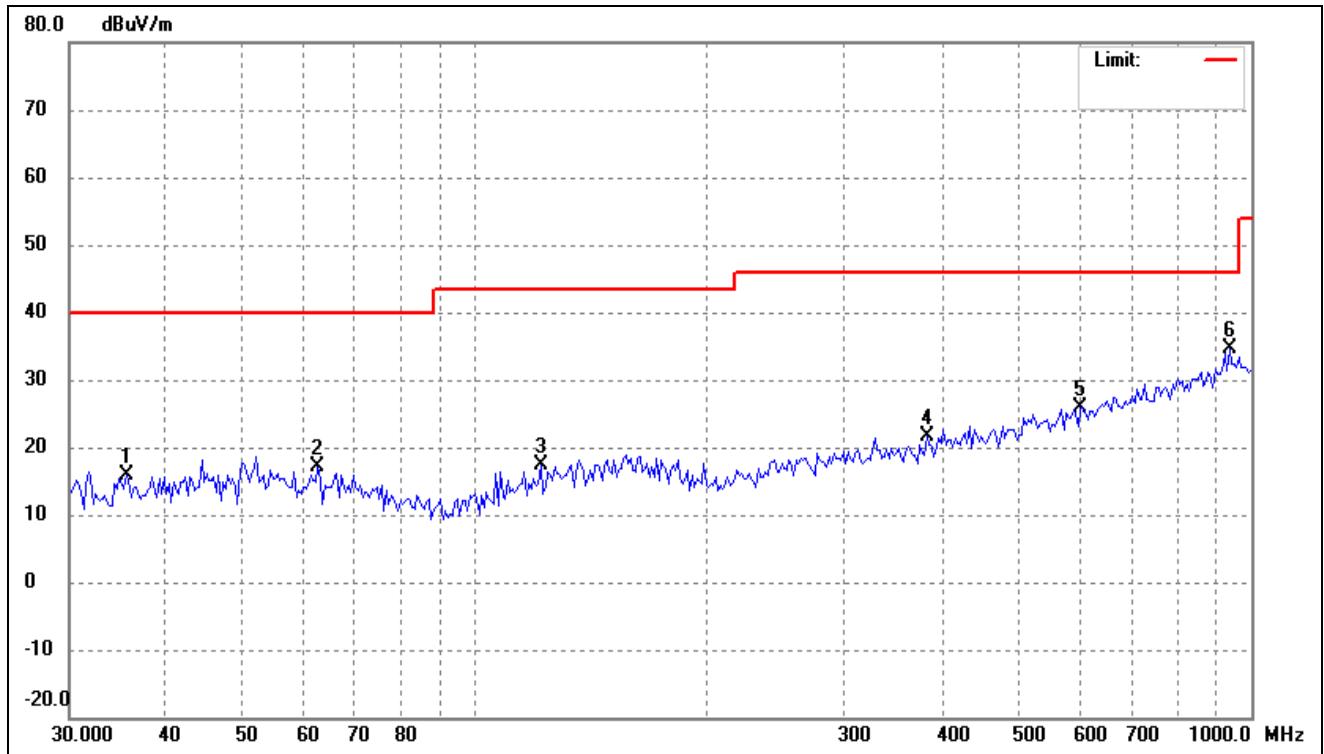
$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15 Limit}$$

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

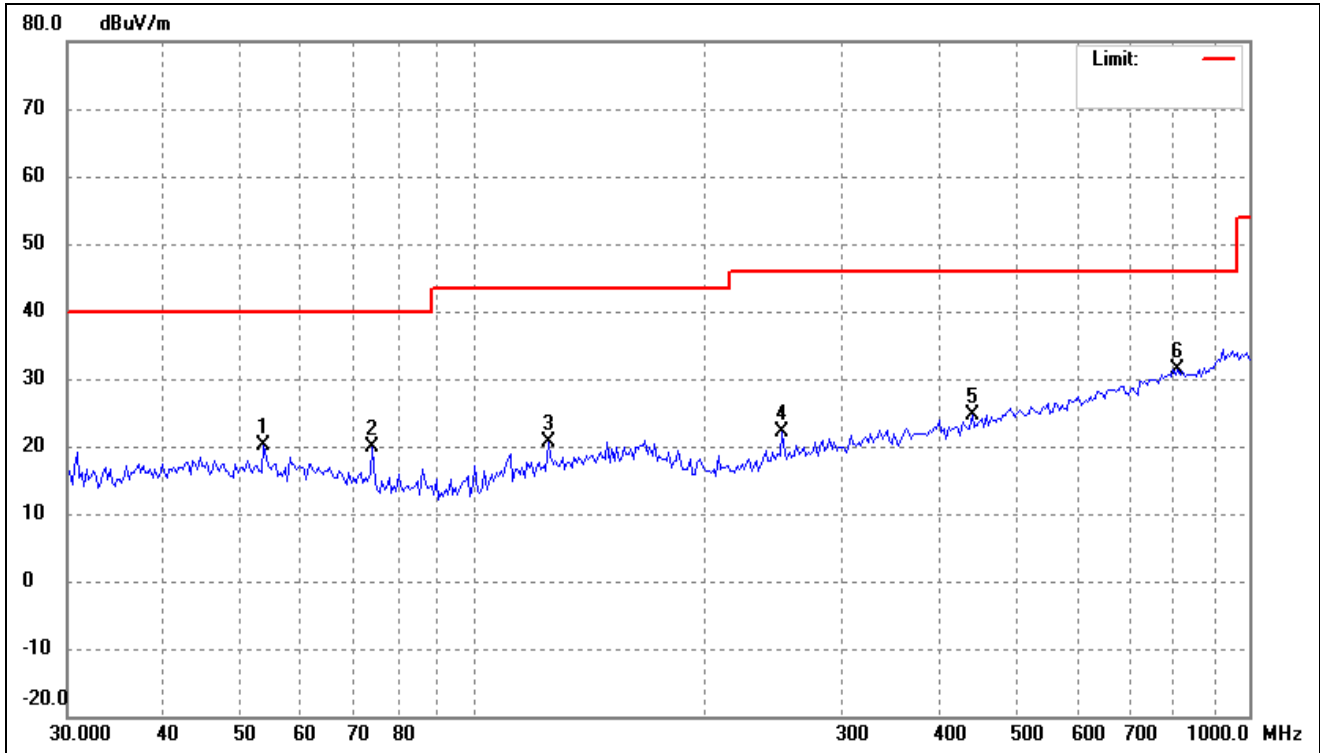
802.11a			
Test Channel	5180MHz(worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	35.5112	25.36	-9.40	15.96	40.00	-24.04	-	-	peak
2	62.7432	26.36	-9.20	17.16	40.00	-22.84	-	-	peak
3	121.4623	27.17	-9.91	17.26	43.50	-26.24	-	-	peak
4	381.8520	27.14	-5.54	21.60	46.00	-24.40	-	-	peak
5	602.9287	27.12	-1.26	25.86	46.00	-20.14	-	-	peak
6	938.7139	31.25	3.46	34.71	46.00	-11.29	-	-	peak

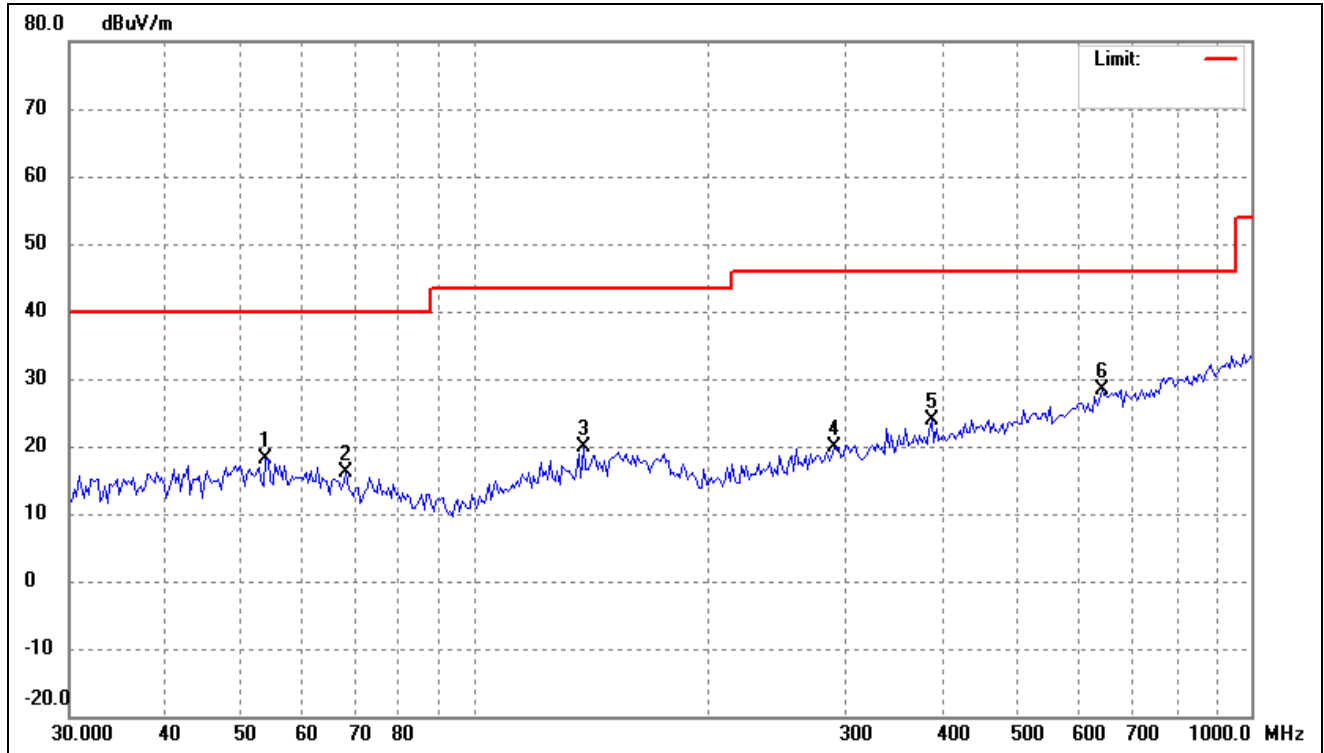
802.11a

Test Channel	5180MHz(worst case)	Polarity:	Vertical
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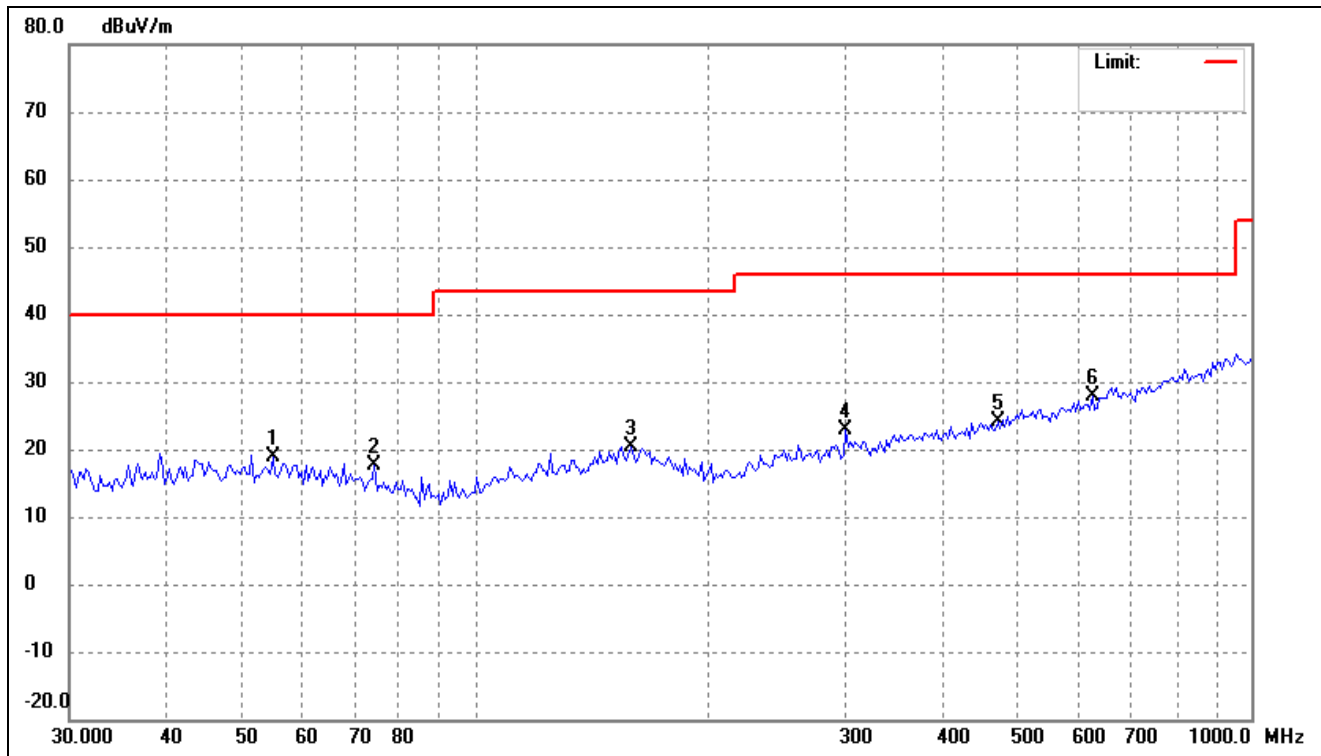
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	53.7559	28.61	-8.39	20.22	40.00	-19.78	-	-	peak
2	74.2696	31.10	-11.20	19.90	40.00	-20.10	-	-	peak
3	124.9249	30.40	-9.68	20.72	43.50	-22.78	-	-	peak
4	250.4859	30.81	-8.77	22.04	46.00	-23.96	-	-	peak
5	439.4730	29.00	-4.45	24.55	46.00	-21.45	-	-	peak
6	809.9238	29.78	1.70	31.48	46.00	-14.52	-	-	peak

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



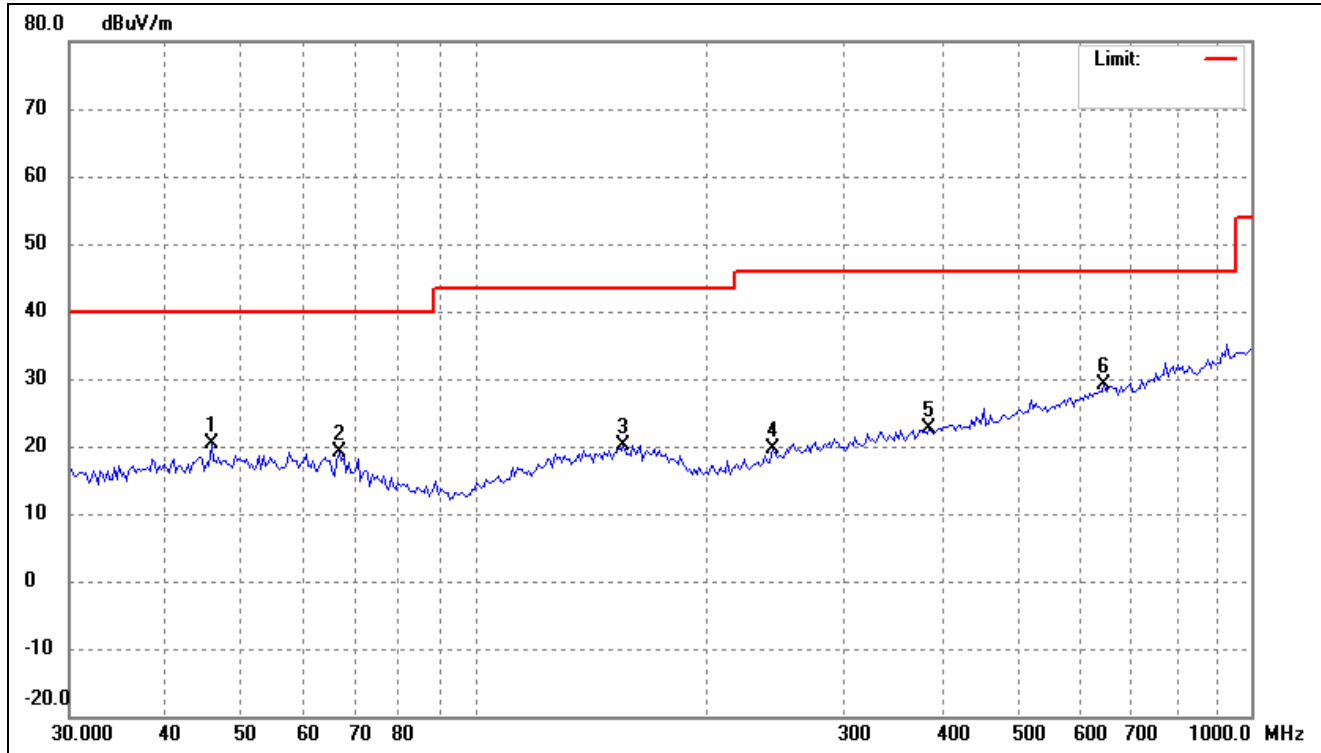
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	53.7559	26.59	-8.39	18.20	40.00	-21.80	-	-	peak
2	68.2636	26.18	-10.09	16.09	40.00	-23.91	-	-	peak
3	137.8400	28.54	-8.68	19.86	43.50	-23.64	-	-	peak
4	290.3170	26.90	-7.10	19.80	46.00	-26.20	-	-	peak
5	387.2565	29.45	-5.45	24.00	46.00	-22.00	-	-	peak
6	642.2923	29.19	-0.83	28.36	46.00	-17.64	-	-	peak

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



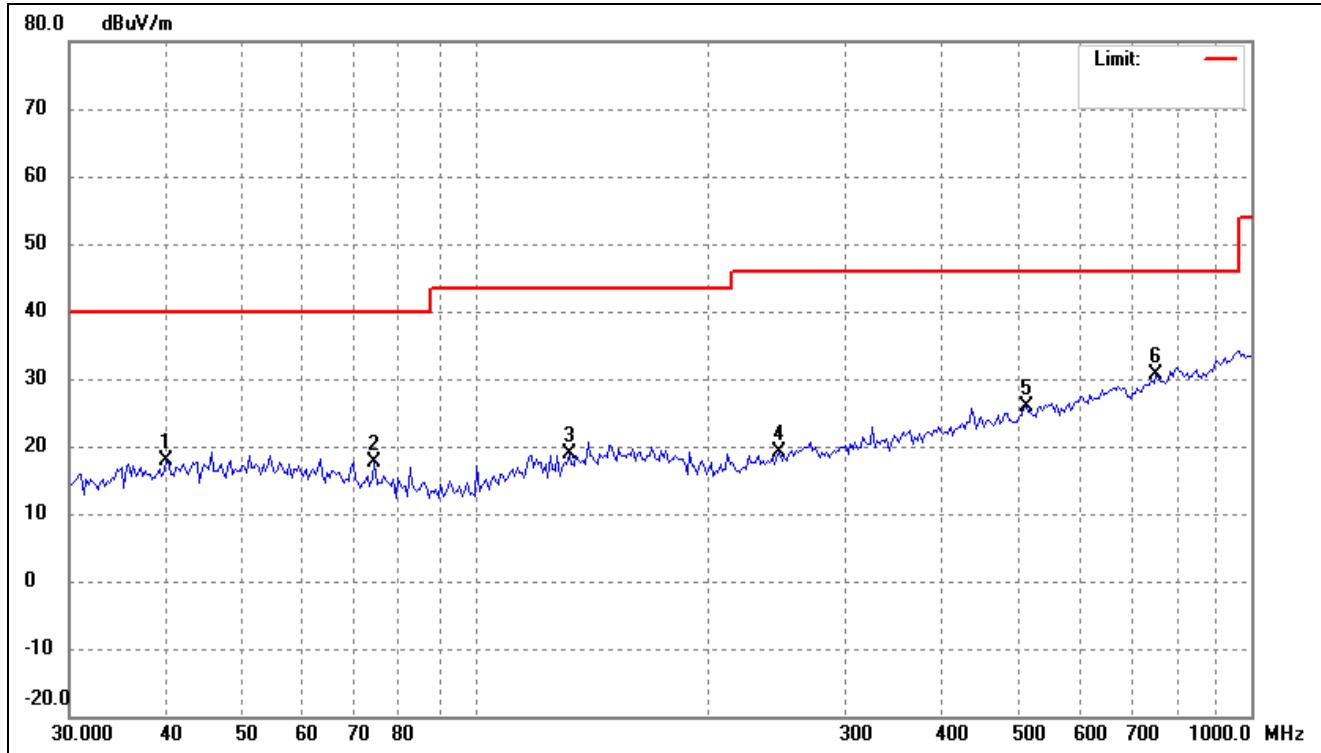
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	54.9011	27.26	-8.48	18.78	40.00	-21.22	-	-	peak
2	74.2696	28.73	-11.20	17.53	40.00	-22.47	-	-	peak
3	158.6399	28.16	-7.72	20.44	43.50	-23.06	-	-	peak
4	300.6988	29.76	-6.83	22.93	46.00	-23.07	-	-	peak
5	471.4665	28.18	-4.04	24.14	46.00	-21.86	-	-	peak
6	624.4897	29.30	-1.36	27.94	46.00	-18.06	-	-	peak

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



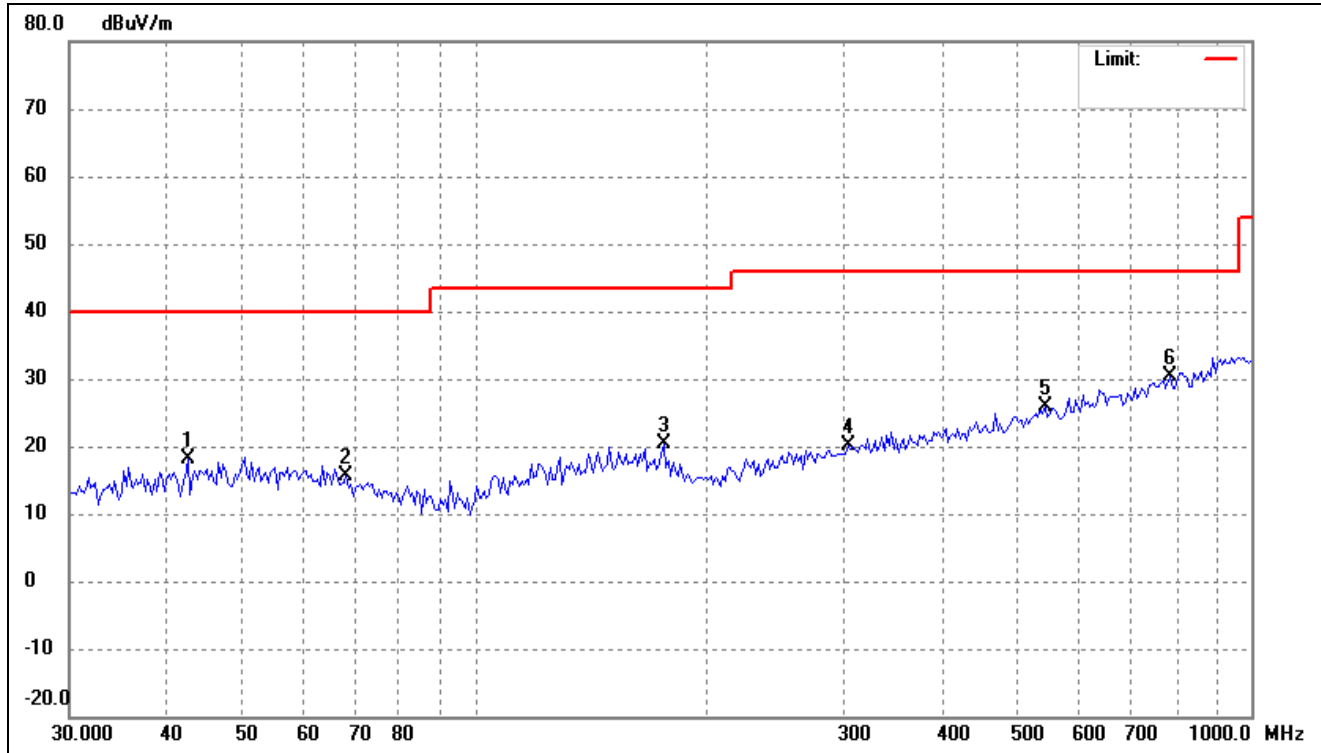
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	45.7333	28.62	-8.30	20.32	40.00	-19.68	-	-	peak
2	66.8395	28.81	-9.79	19.02	40.00	-20.98	-	-	peak
3	155.3305	27.91	-7.77	20.14	43.50	-23.36	-	-	peak
4	241.8377	28.79	-9.13	19.66	46.00	-26.34	-	-	peak
5	384.5447	28.06	-5.51	22.55	46.00	-23.45	-	-	peak
6	646.8217	29.82	-0.70	29.12	46.00	-16.88	-	-	peak

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



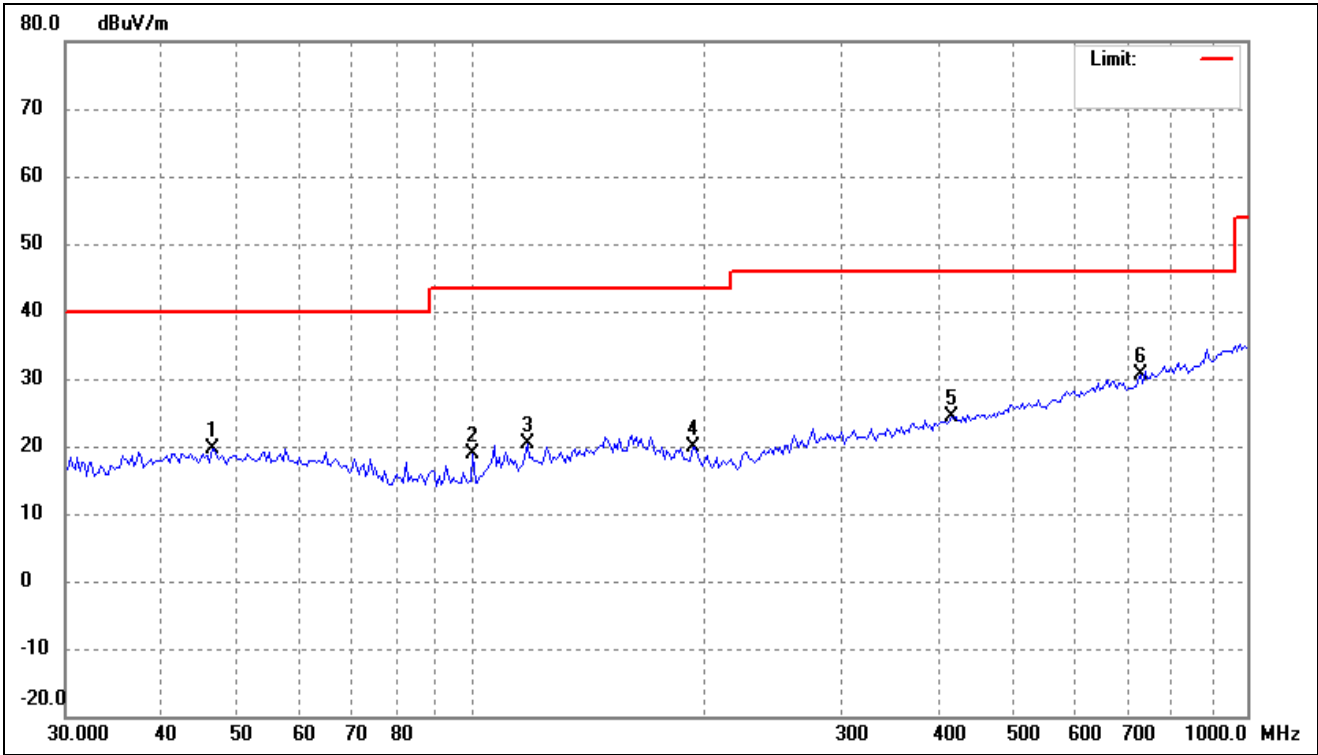
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	40.0173	26.63	-8.81	17.82	40.00	-22.18	-	-	peak
2	74.2696	28.88	-11.20	17.68	40.00	-22.32	-	-	peak
3	132.1490	27.89	-9.12	18.77	43.50	-24.73	-	-	peak
4	246.9901	27.94	-8.92	19.02	46.00	-26.98	-	-	peak
5	512.9478	29.21	-3.29	25.92	46.00	-20.08	-	-	peak
6	754.9628	29.55	0.97	30.52	46.00	-15.48	-	-	peak

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



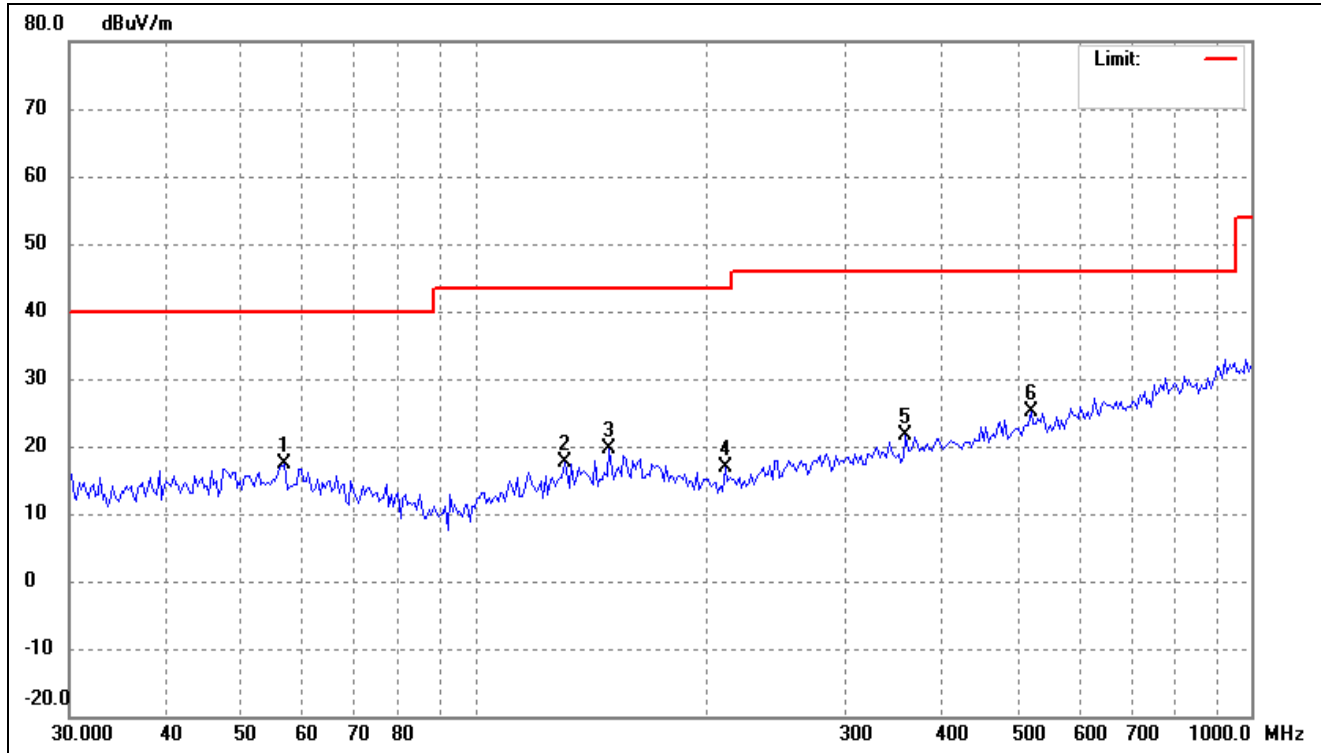
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	42.6299	26.63	-8.55	18.08	40.00	-21.92	-	-	peak
2	68.2636	25.84	-10.09	15.75	40.00	-24.25	-	-	peak
3	175.0404	28.76	-8.44	20.32	43.50	-23.18	-	-	peak
4	302.8193	26.81	-6.78	20.03	46.00	-25.97	-	-	peak
5	542.6104	28.79	-3.01	25.78	46.00	-20.22	-	-	peak
6	787.4749	28.96	1.50	30.46	46.00	-15.54	-	-	peak

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



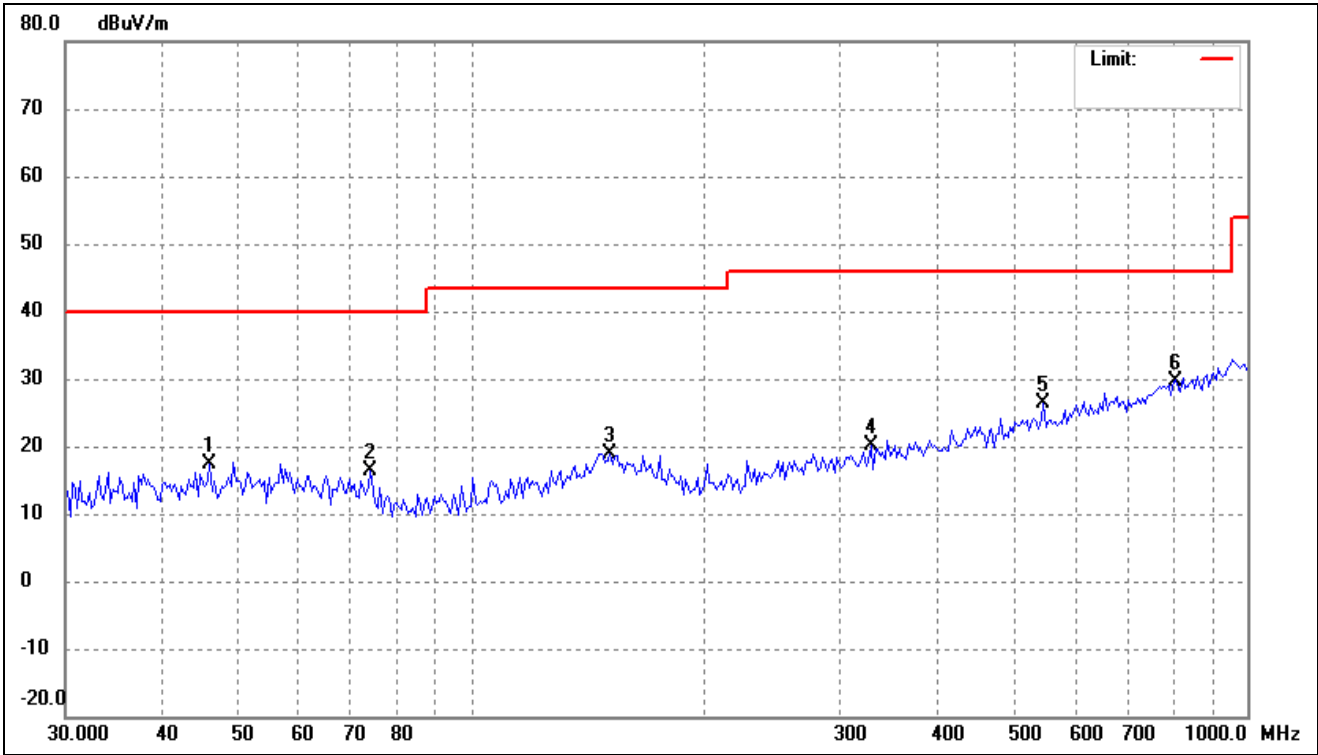
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	46.3806	28.02	-8.29	19.73	40.00	-20.27	-	-	peak
2	100.4712	31.49	-12.70	18.79	43.50	-24.71	-	-	peak
3	118.0957	30.54	-10.26	20.28	43.50	-23.22	-	-	peak
4	193.1366	30.47	-10.59	19.88	43.50	-23.62	-	-	peak
5	415.4486	29.30	-5.01	24.29	46.00	-21.71	-	-	peak
6	728.8971	30.33	0.40	30.73	46.00	-15.27	-	-	peak

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



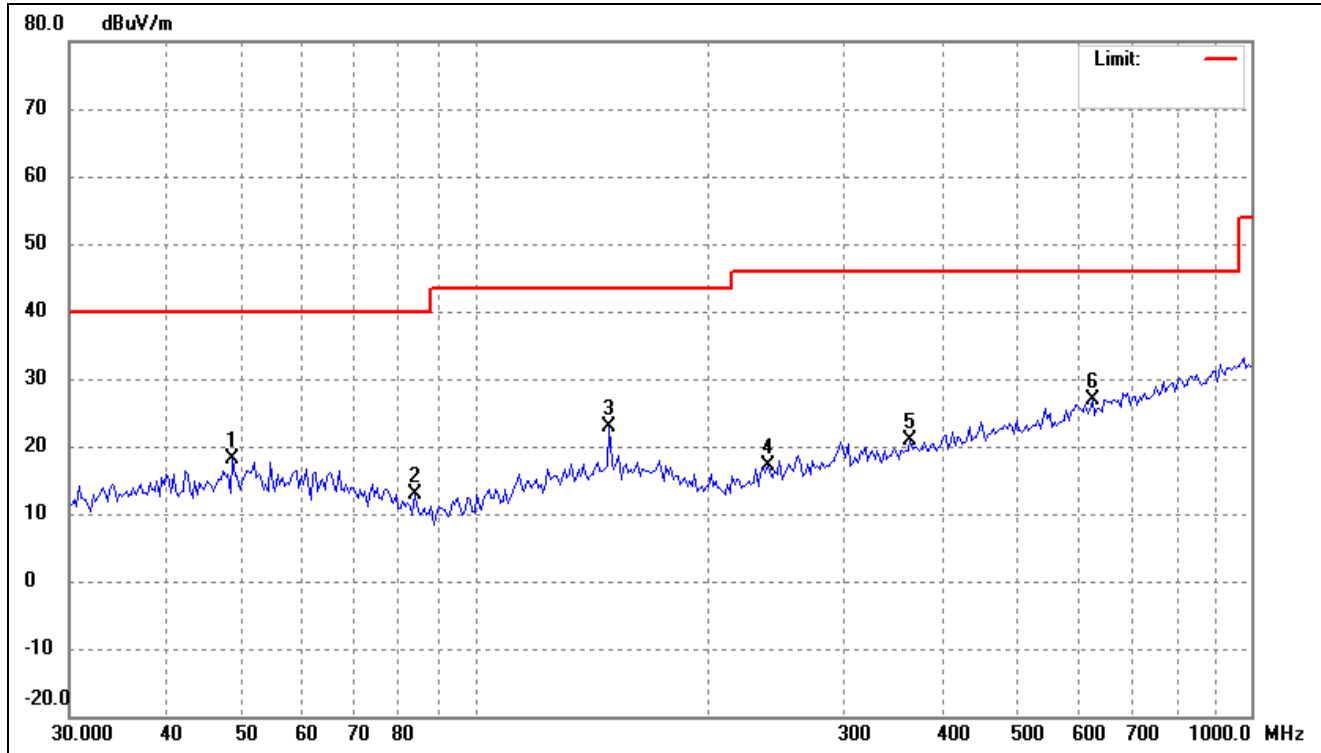
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	56.8644	26.58	-9.30	17.28	40.00	-22.72	-	-	peak
2	130.3048	27.77	-10.07	17.70	43.50	-25.80	-	-	peak
3	148.9175	28.53	-8.91	19.62	43.50	-23.88	-	-	peak
4	210.1294	28.55	-11.71	16.84	43.50	-26.66	-	-	peak
5	358.4497	28.49	-6.88	21.61	46.00	-24.39	-	-	peak
6	520.2079	28.95	-3.94	25.01	46.00	-20.99	-	-	peak

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



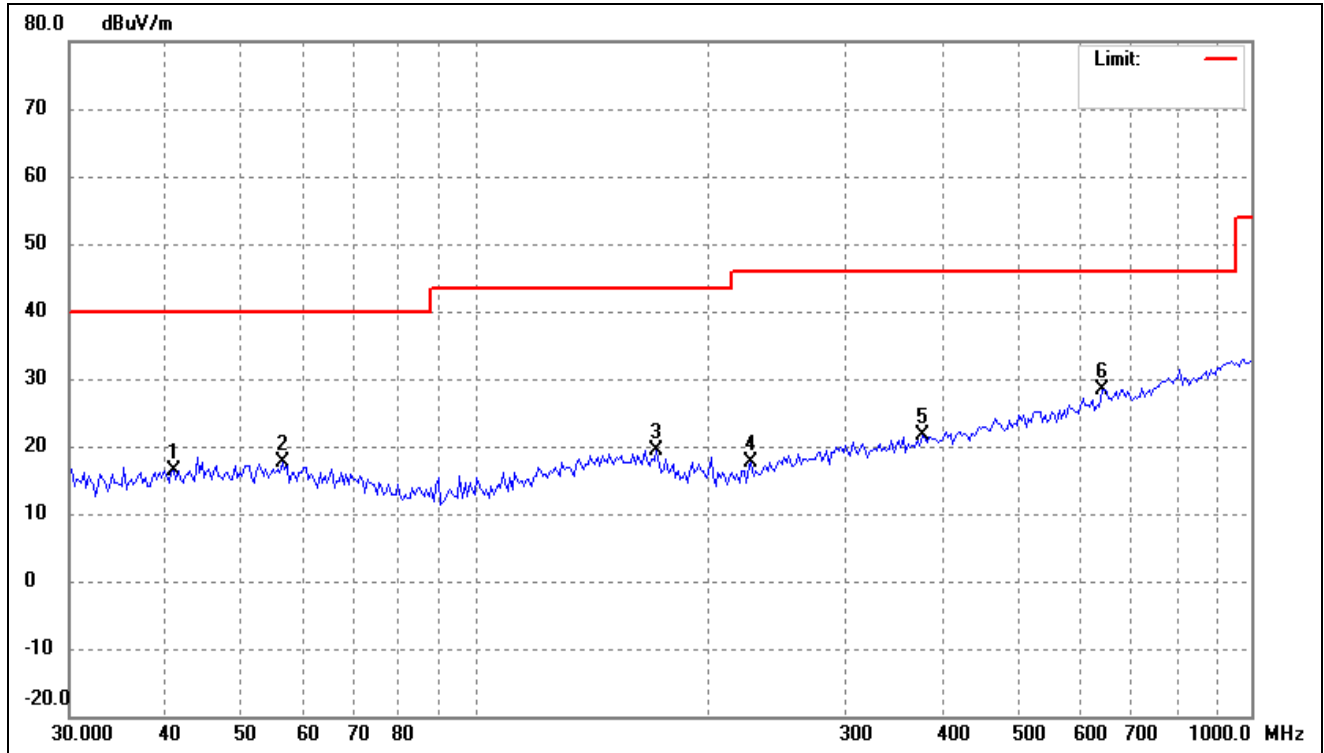
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	46.0558	26.31	-9.03	17.28	40.00	-22.72	-	-	peak
2	74.2696	28.27	-11.92	16.35	40.00	-23.65	-	-	peak
3	151.0252	27.88	-8.90	18.98	43.50	-24.52	-	-	peak
4	327.1554	27.26	-7.15	20.11	46.00	-25.89	-	-	peak
5	546.4368	30.16	-3.80	26.36	46.00	-19.64	-	-	peak
6	804.2523	28.54	1.01	29.55	46.00	-16.45	-	-	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	48.7191	27.26	-9.02	18.24	40.00	-21.76	-	-	peak
2	83.6937	26.53	-13.72	12.81	40.00	-27.19	-	-	peak
3	148.9175	31.72	-8.91	22.81	43.50	-20.69	-	-	peak
4	238.4626	27.25	-10.08	17.17	46.00	-28.83	-	-	peak
5	363.5231	27.58	-6.79	20.79	46.00	-25.21	-	-	peak
6	624.4897	29.08	-2.14	26.94	46.00	-19.06	-	-	peak

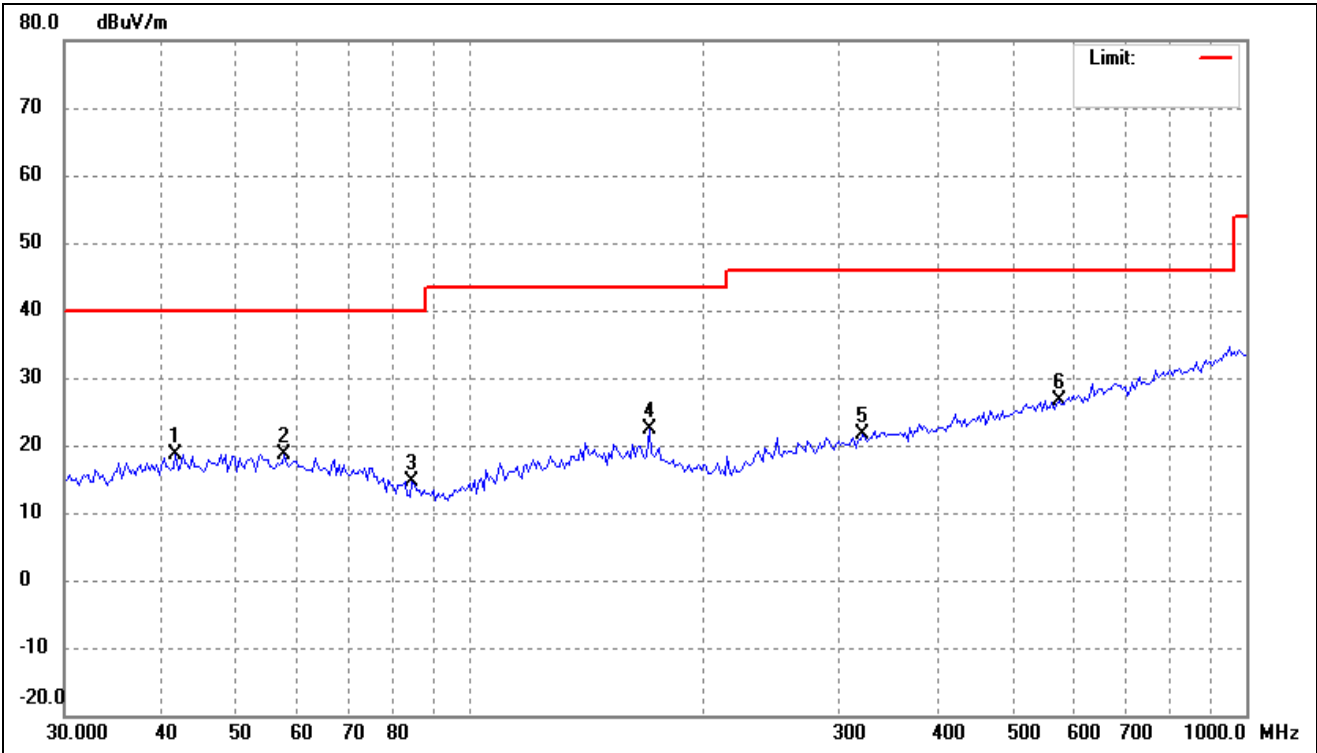
802.11ac-VHT80			
Test Channel	5210MHz(worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	40.8699	26.00	-9.51	16.49	40.00	-23.51	-	-	peak
2	56.4662	27.03	-9.28	17.75	40.00	-22.25	-	-	peak
3	171.3890	28.39	-8.98	19.41	43.50	-24.09	-	-	peak
4	227.0164	28.88	-11.13	17.75	46.00	-28.25	-	-	peak
5	376.5228	28.08	-6.55	21.53	46.00	-24.47	-	-	peak
6	642.2923	29.91	-1.59	28.32	46.00	-17.68	-	-	peak

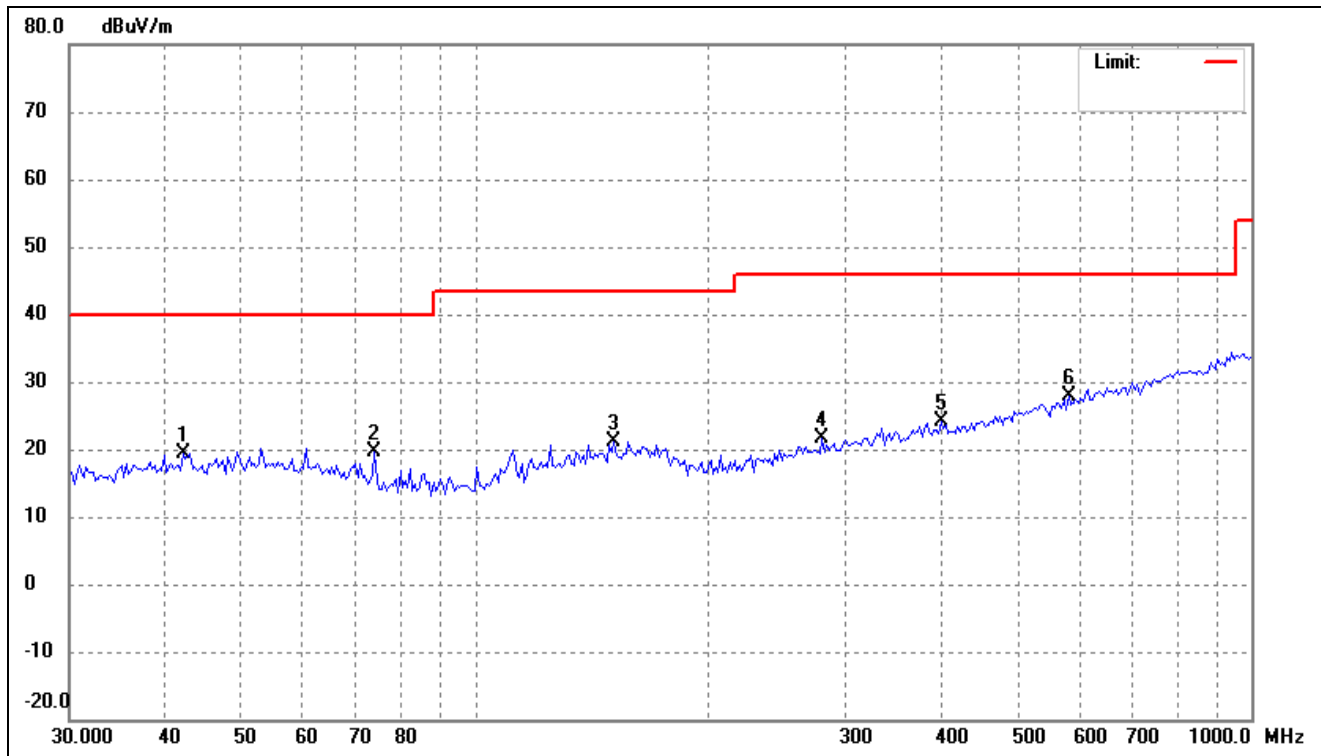
➤ 5725-5850MHz

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



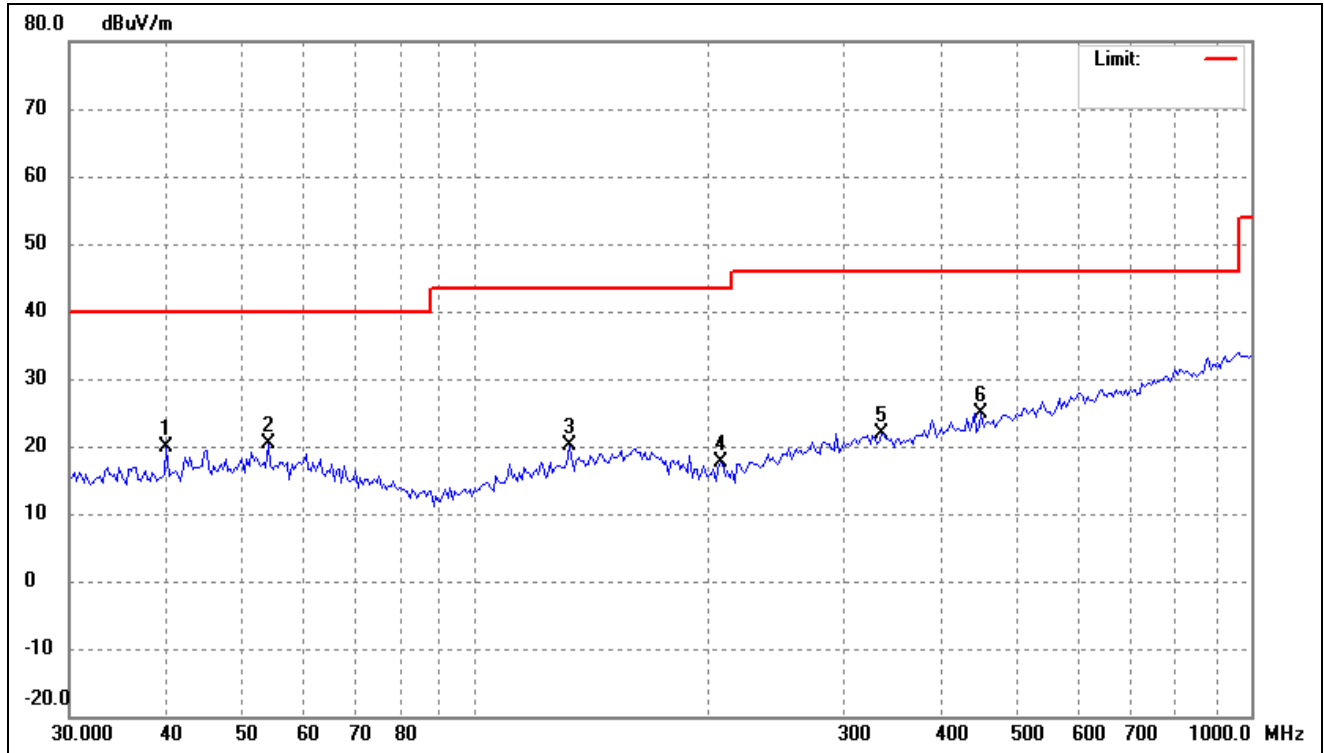
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	41.7406	27.25	-8.67	18.58	40.00	-21.42	-	-	peak
2	57.6693	27.17	-8.64	18.53	40.00	-21.47	-	-	peak
3	84.2839	27.67	-13.07	14.60	40.00	-25.40	-	-	peak
4	170.1888	30.34	-8.04	22.30	43.50	-21.20	-	-	peak
5	320.3306	27.96	-6.39	21.57	46.00	-24.43	-	-	peak
6	573.9882	28.84	-2.09	26.75	46.00	-19.25	-	-	peak

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



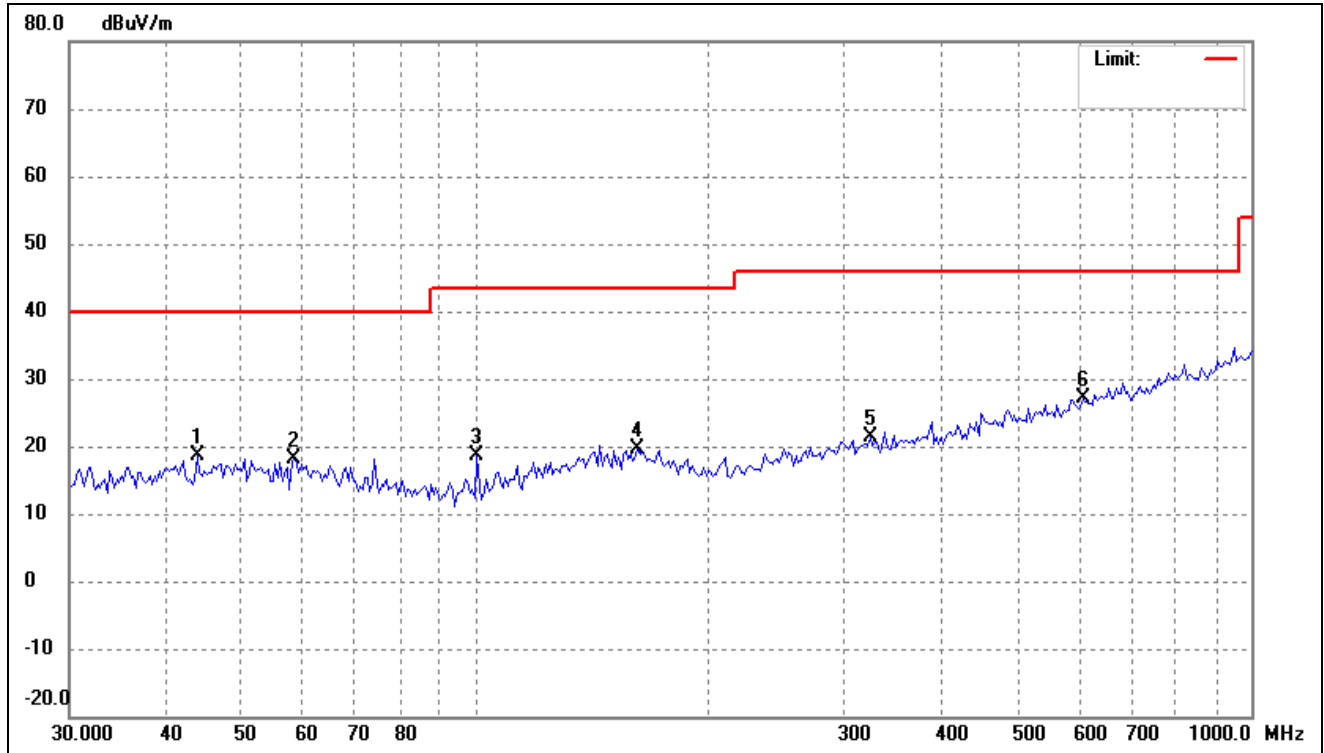
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	42.0350	27.99	-8.64	19.35	40.00	-20.65	-	-	peak
2	74.2696	30.93	-11.20	19.73	40.00	-20.27	-	-	peak
3	151.0252	29.16	-8.05	21.11	43.50	-22.39	-	-	peak
4	280.2936	28.97	-7.43	21.54	46.00	-24.46	-	-	peak
5	398.2962	29.34	-5.22	24.12	46.00	-21.88	-	-	peak
6	582.1122	29.79	-1.82	27.97	46.00	-18.03	-	-	peak

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



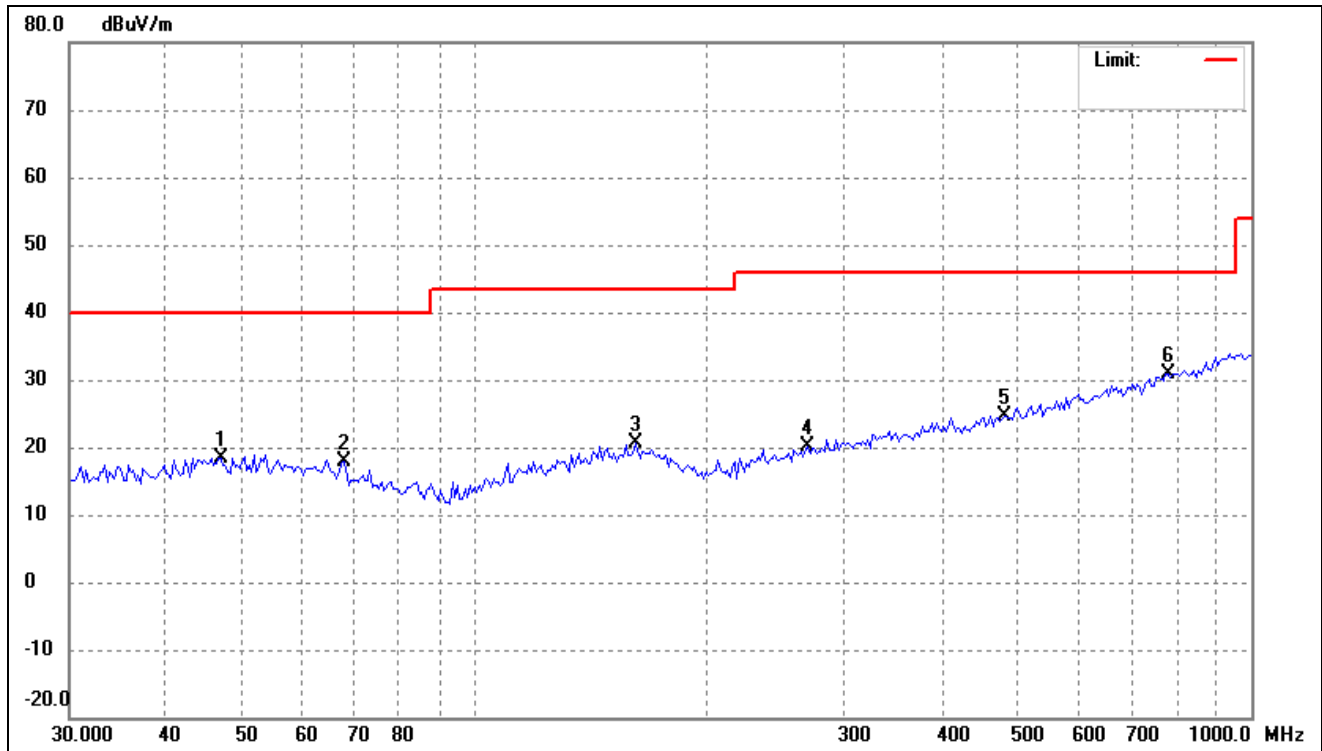
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	40.0173	28.62	-8.81	19.81	40.00	-20.19	-	-	peak
2	54.1349	28.83	-8.42	20.41	40.00	-19.59	-	-	peak
3	132.1490	29.16	-9.12	20.04	43.50	-23.46	-	-	peak
4	207.1968	28.46	-10.94	17.52	43.50	-25.98	-	-	peak
5	334.1255	28.09	-6.18	21.91	46.00	-24.09	-	-	peak
6	448.8361	29.09	-4.15	24.94	46.00	-21.06	-	-	peak

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



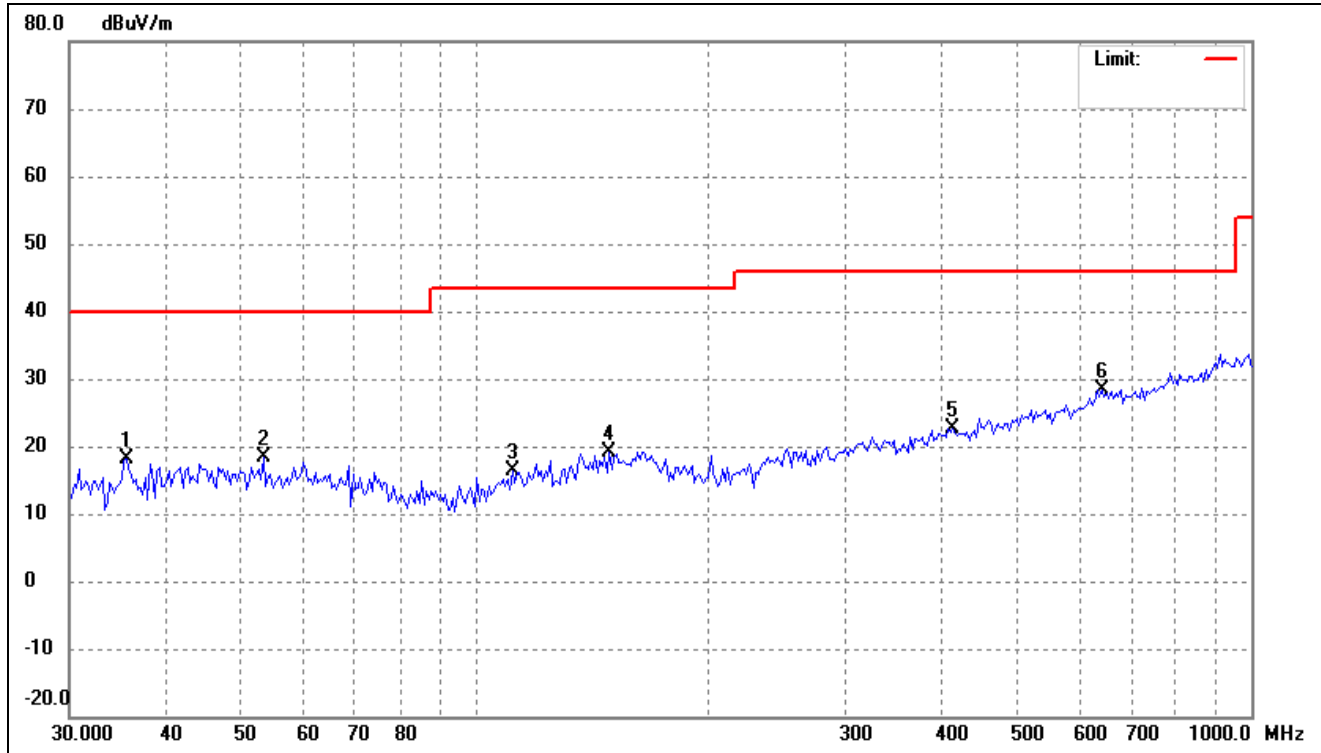
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	43.8452	27.17	-8.42	18.75	40.00	-21.25	-	-	peak
2	58.4855	26.87	-8.69	18.18	40.00	-21.82	-	-	peak
3	100.4712	31.40	-12.70	18.70	43.50	-24.80	-	-	peak
4	162.0197	27.33	-7.69	19.64	43.50	-23.86	-	-	peak
5	322.5896	27.71	-6.36	21.35	46.00	-24.65	-	-	peak
6	607.1806	28.38	-1.28	27.10	46.00	-18.90	-	-	peak

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



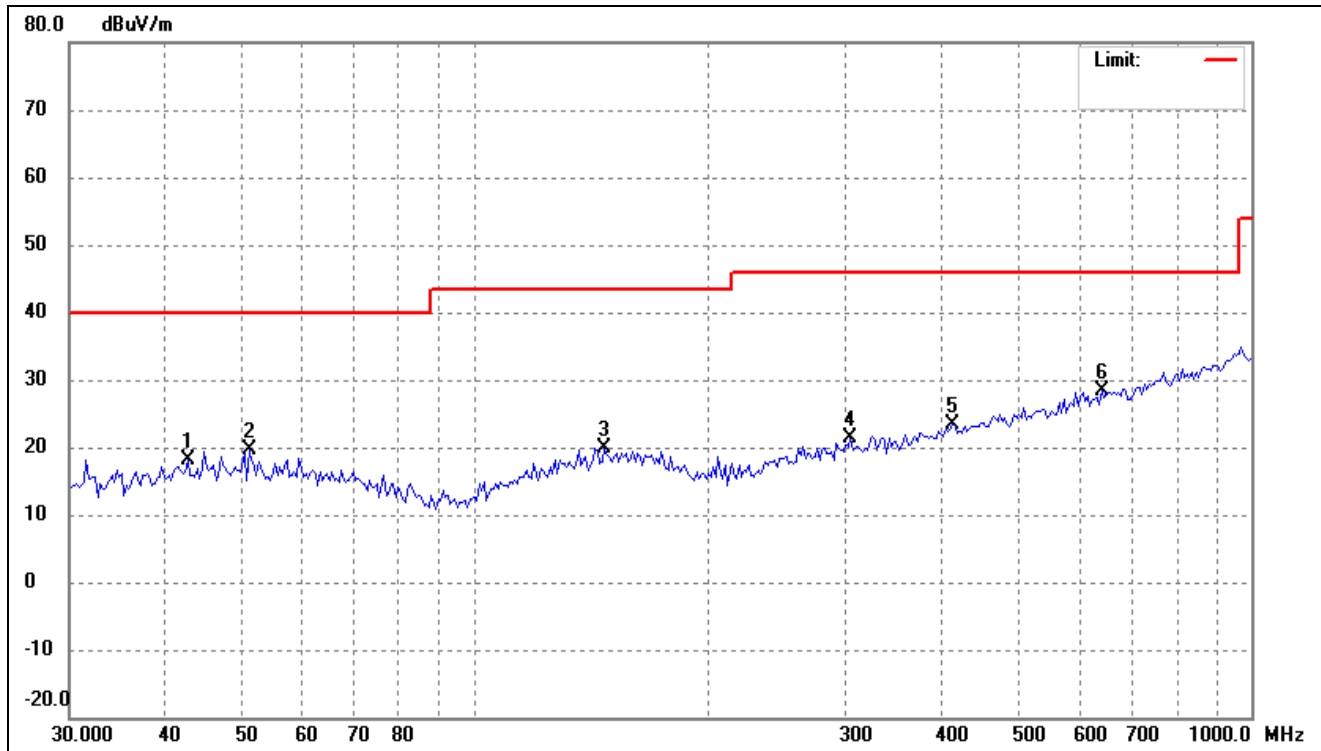
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	47.0371	26.78	-8.28	18.50	40.00	-21.50	-	-	peak
2	67.7856	27.82	-9.98	17.84	40.00	-22.16	-	-	peak
3	160.8852	28.20	-7.68	20.52	43.50	-22.98	-	-	peak
4	268.7212	28.22	-8.03	20.19	46.00	-25.81	-	-	peak
5	481.5112	28.56	-3.90	24.66	46.00	-21.34	-	-	peak
6	781.9606	29.50	1.41	30.91	46.00	-15.09	-	-	peak

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



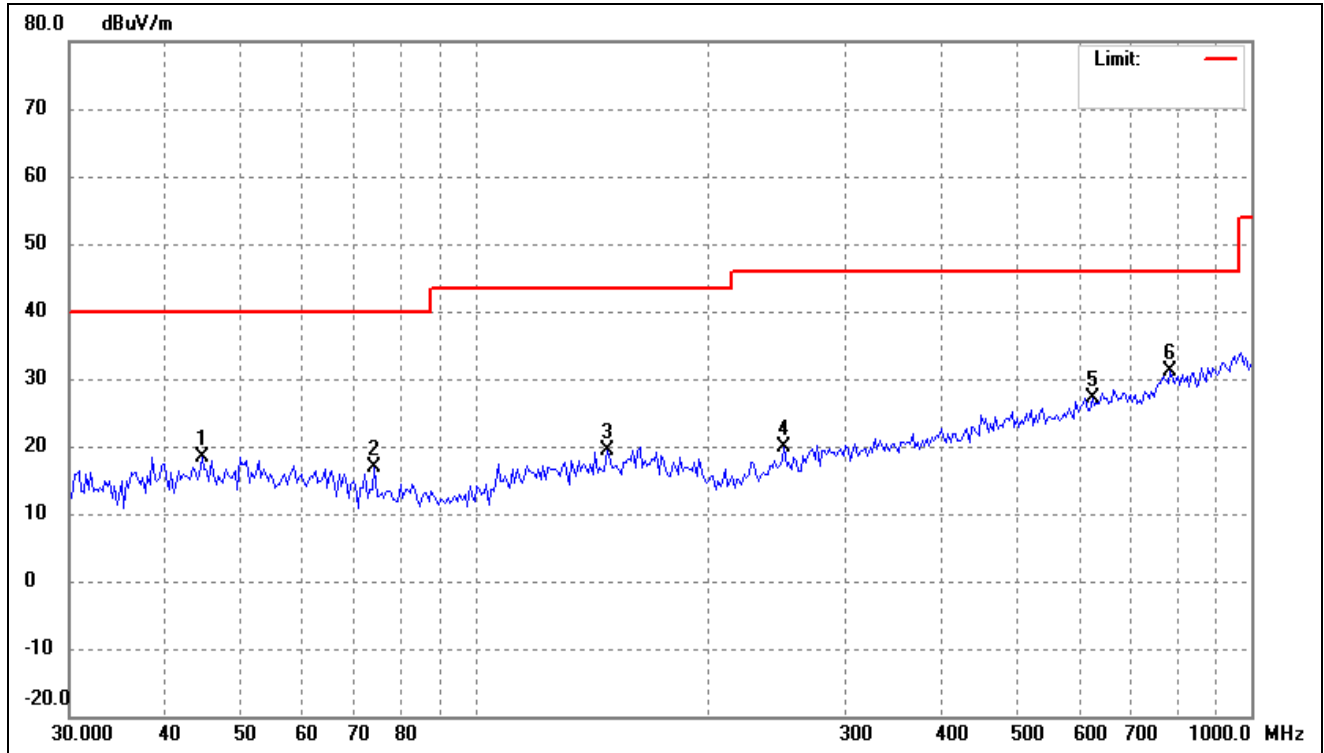
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	35.5112	27.48	-9.40	18.08	40.00	-21.92	-	-	peak
2	53.3794	26.81	-8.37	18.44	40.00	-21.56	-	-	peak
3	111.6399	27.40	-10.95	16.45	43.50	-27.05	-	-	peak
4	148.9175	27.17	-8.07	19.10	43.50	-24.40	-	-	peak
5	412.5395	27.80	-5.05	22.75	46.00	-23.25	-	-	peak
6	642.2923	29.29	-0.83	28.46	46.00	-17.54	-	-	peak

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



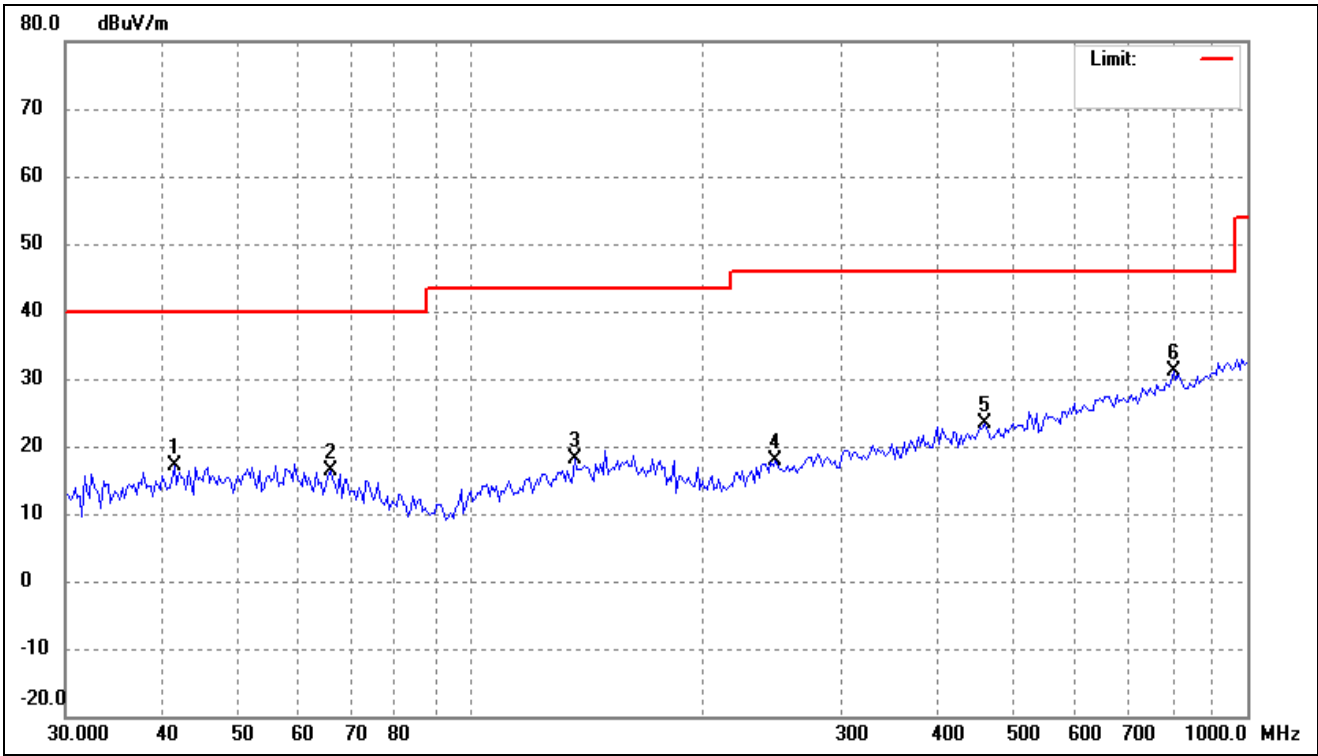
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	42.6299	26.68	-8.55	18.13	40.00	-21.87	-	-	peak
2	51.1756	27.79	-8.27	19.52	40.00	-20.48	-	-	peak
3	146.8392	28.00	-8.20	19.80	43.50	-23.70	-	-	peak
4	304.9548	28.21	-6.75	21.46	46.00	-24.54	-	-	peak
5	412.5395	28.49	-5.05	23.44	46.00	-22.56	-	-	peak
6	642.2923	29.30	-0.83	28.47	46.00	-17.53	-	-	peak

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



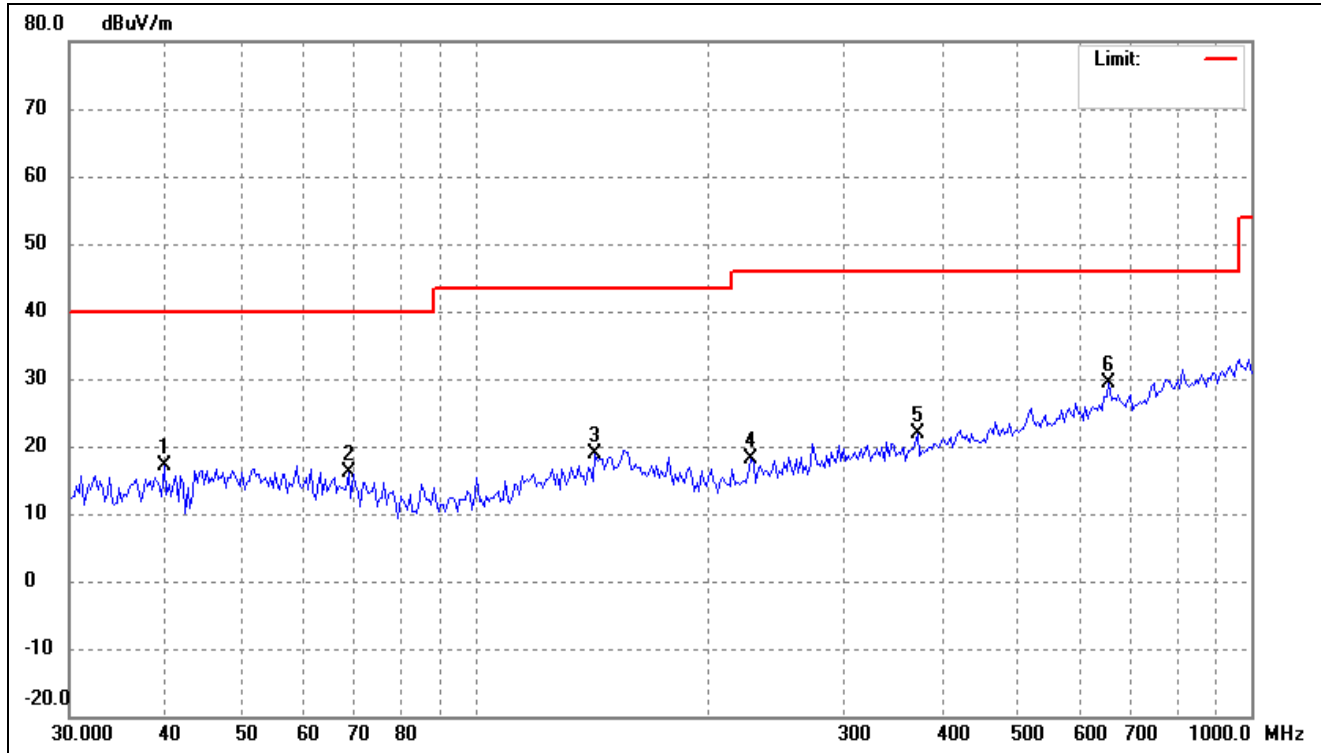
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	44.4657	26.63	-8.36	18.27	40.00	-21.73	-	-	peak
2	74.2696	28.00	-11.20	16.80	40.00	-23.20	-	-	peak
3	147.8747	27.43	-8.12	19.31	43.50	-24.19	-	-	peak
4	250.4859	28.73	-8.77	19.96	46.00	-26.04	-	-	peak
5	624.4897	28.61	-1.36	27.25	46.00	-18.75	-	-	peak
6	787.4749	29.53	1.50	31.03	46.00	-14.97	-	-	peak

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



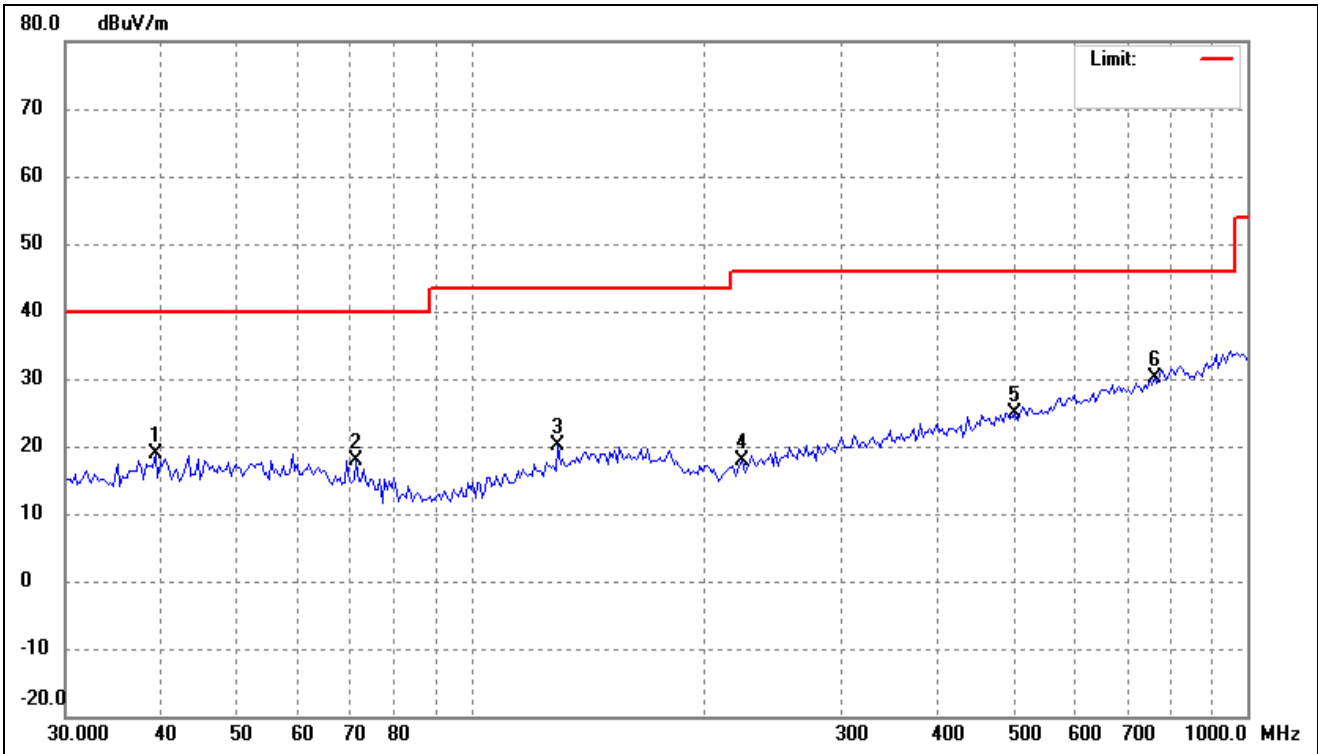
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	41.4483	26.68	-9.45	17.23	40.00	-22.77	-	-	peak
2	65.9067	26.76	-10.34	16.42	40.00	-23.58	-	-	peak
3	135.9163	27.72	-9.60	18.12	43.50	-25.38	-	-	peak
4	246.9901	27.58	-9.71	17.87	46.00	-28.13	-	-	peak
5	458.3987	28.22	-4.93	23.29	46.00	-22.71	-	-	peak
6	804.2523	30.12	1.01	31.13	46.00	-14.87	-	-	peak

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



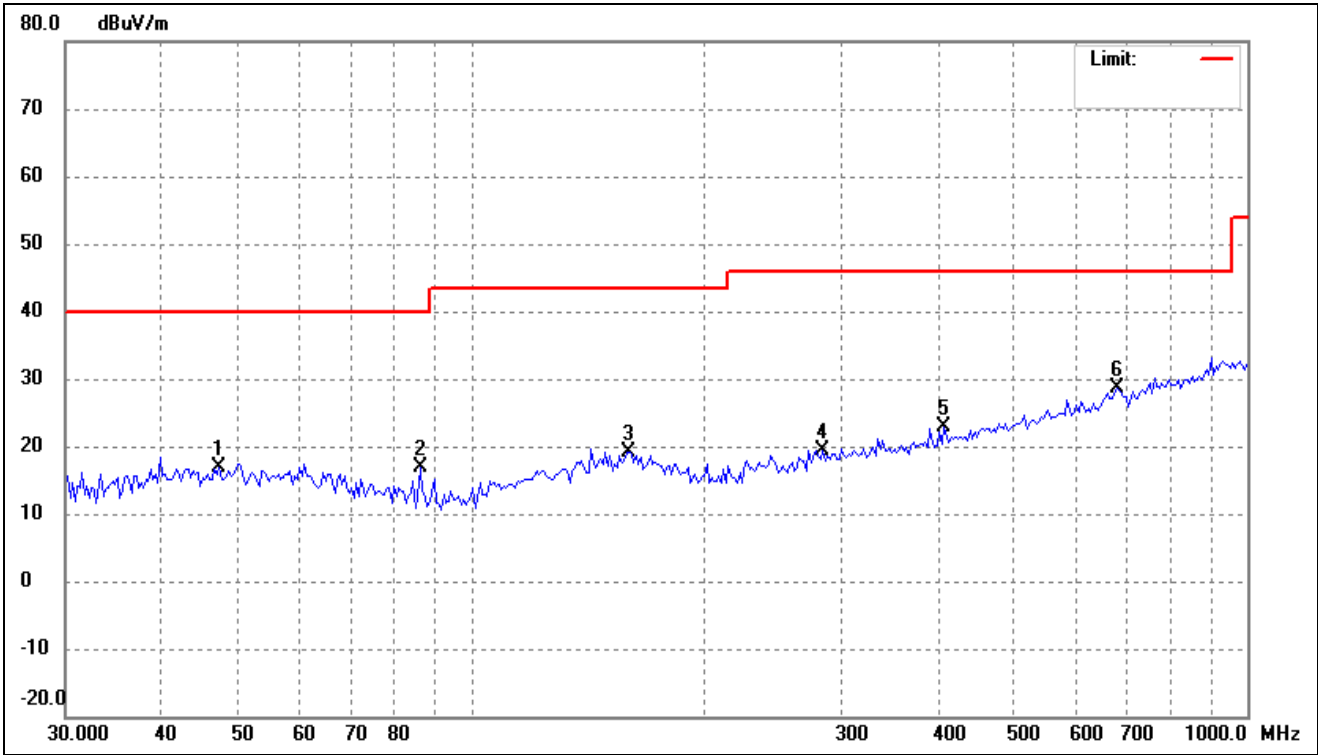
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	39.7371	26.78	-9.61	17.17	40.00	-22.83	-	-	peak
2	68.7450	27.00	-10.91	16.09	40.00	-23.91	-	-	peak
3	142.7692	27.99	-9.19	18.80	43.50	-24.70	-	-	peak
4	227.0164	29.18	-11.13	18.05	46.00	-27.95	-	-	peak
5	371.2680	28.61	-6.66	21.95	46.00	-24.05	-	-	peak
6	655.9766	30.68	-1.30	29.38	46.00	-16.62	-	-	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	39.1825	27.89	-8.90	18.99	40.00	-21.01	-	-	peak
2	71.2033	28.50	-10.62	17.88	40.00	-22.12	-	-	peak
3	129.3923	29.43	-9.29	20.14	43.50	-23.36	-	-	peak
4	223.8482	28.41	-10.65	17.76	46.00	-28.24	-	-	peak
5	502.2473	28.42	-3.51	24.91	46.00	-21.09	-	-	peak
6	760.2867	29.20	1.05	30.25	46.00	-15.75	-	-	peak

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

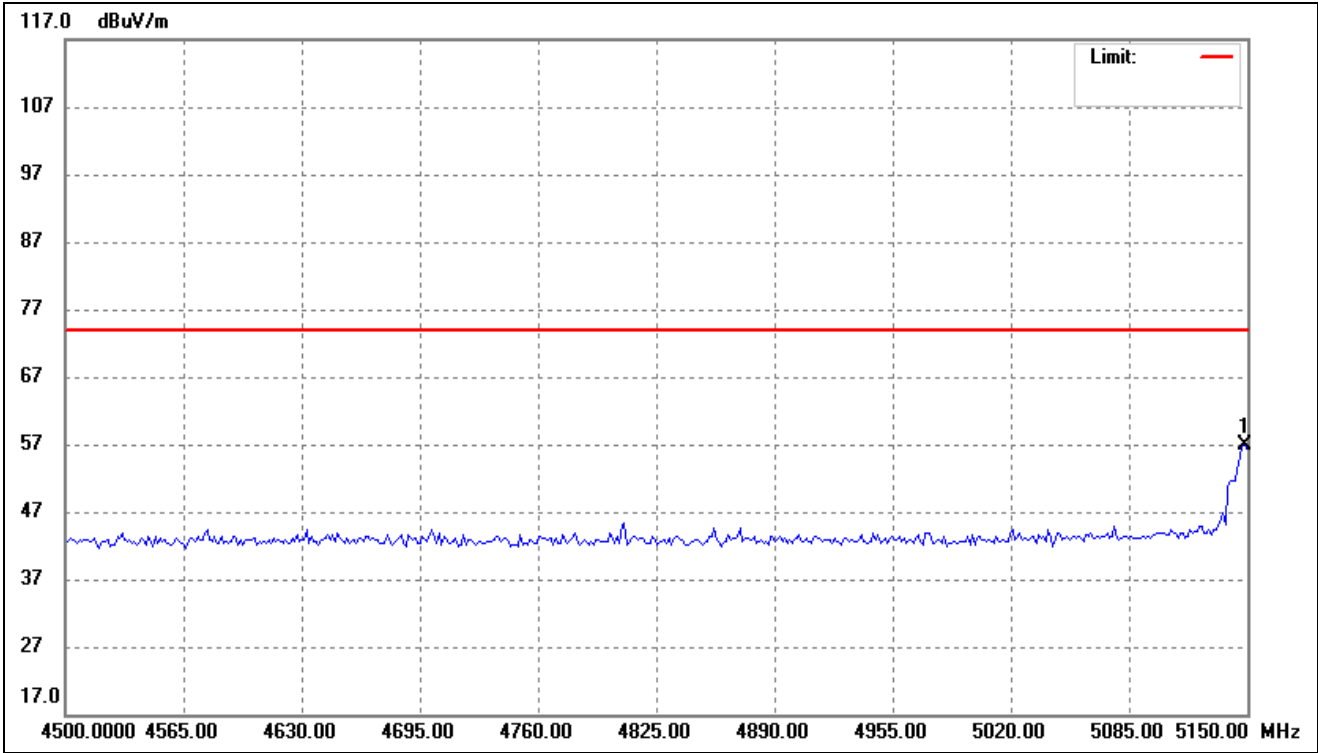


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	47.3688	25.80	-9.01	16.79	40.00	-23.21	-	-	peak
2	86.0796	30.97	-14.07	16.90	40.00	-23.10	-	-	peak
3	159.7586	27.61	-8.53	19.08	43.50	-24.42	-	-	peak
4	284.2607	27.59	-8.17	19.42	46.00	-26.58	-	-	peak
5	406.7820	28.81	-6.01	22.80	46.00	-23.20	-	-	peak
6	679.4346	29.64	-1.11	28.53	46.00	-17.47	-	-	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.

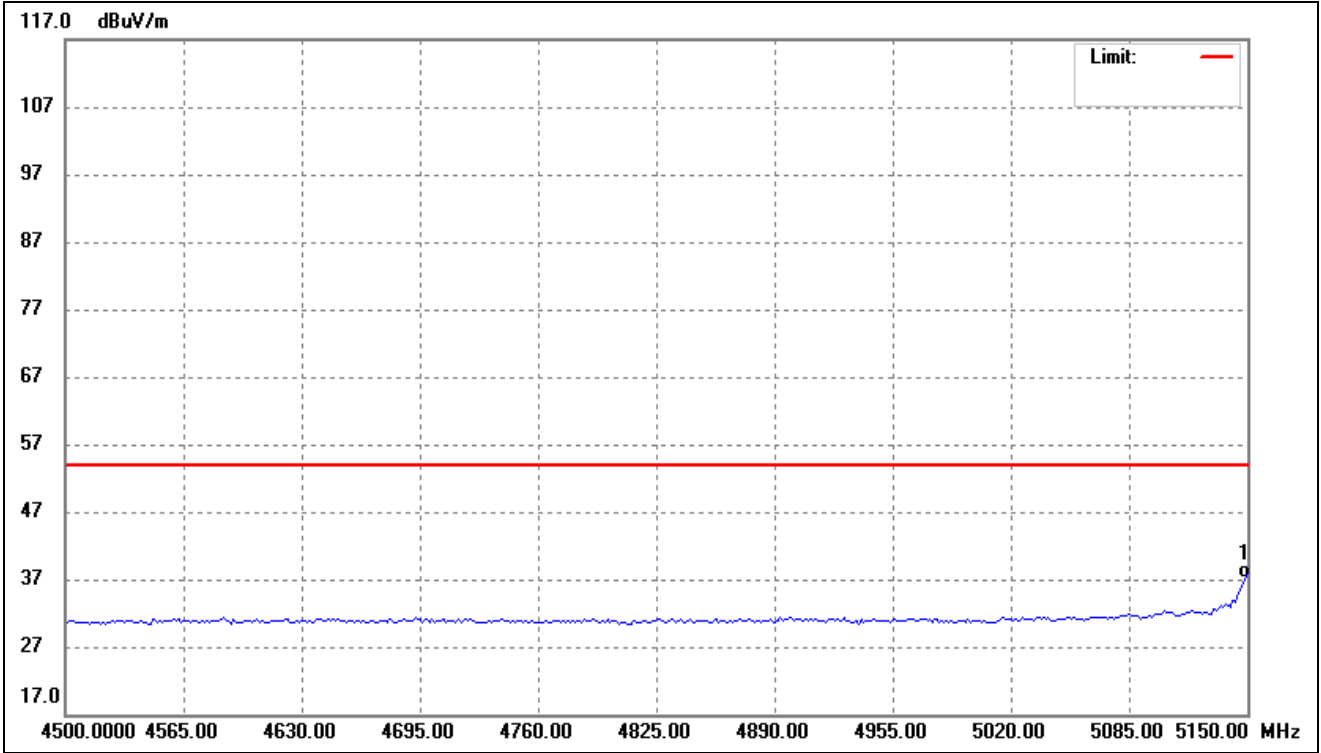
➤ Spurious Emission above 1GHz

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



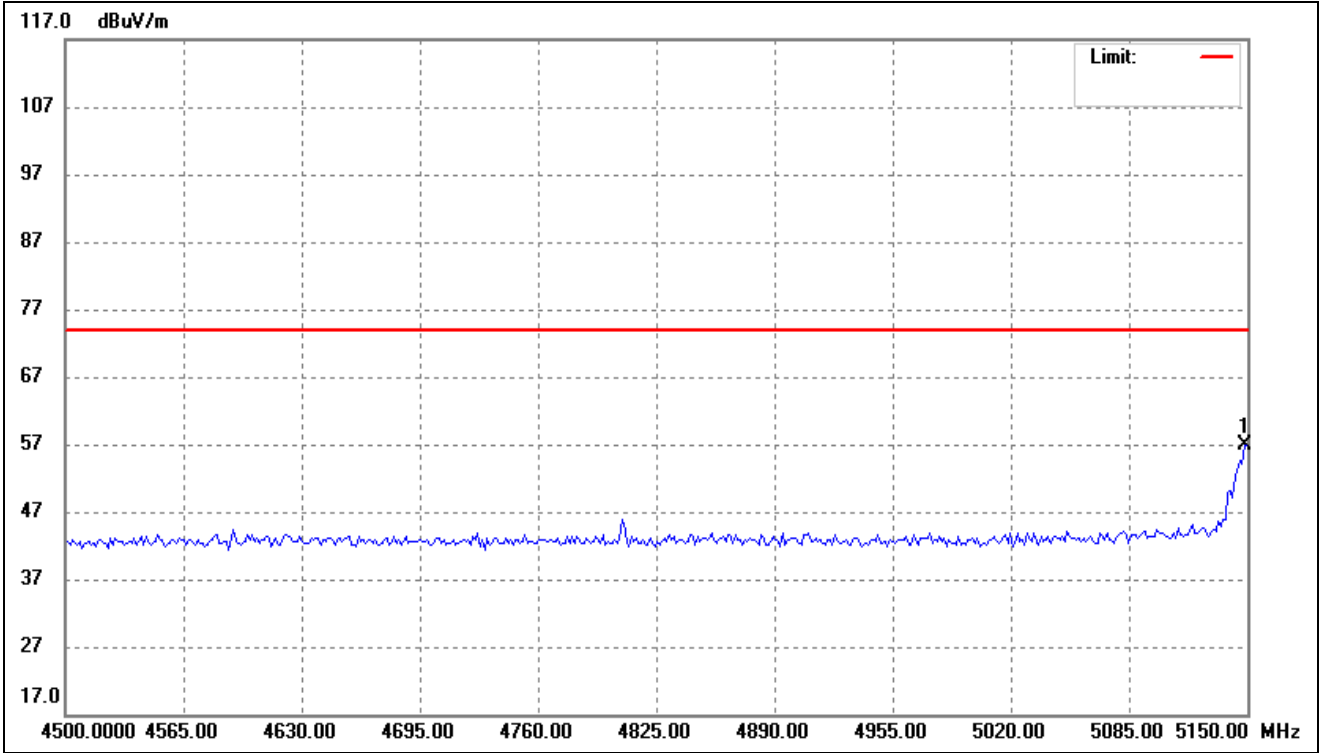
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5148.697	68.69	-11.82	56.87	74.00	-17.13	-	-	peak

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



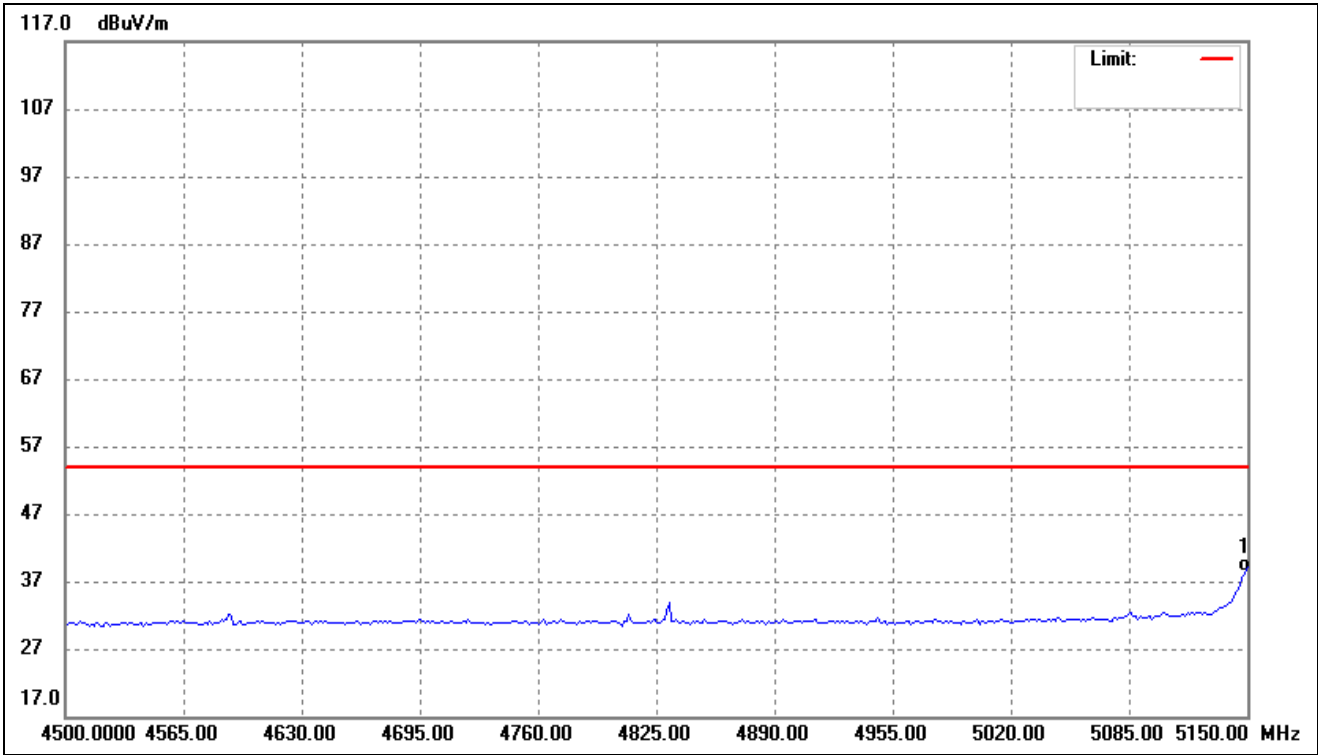
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	49.93	-11.81	38.12	54.00	-15.88	-	-	AVG

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



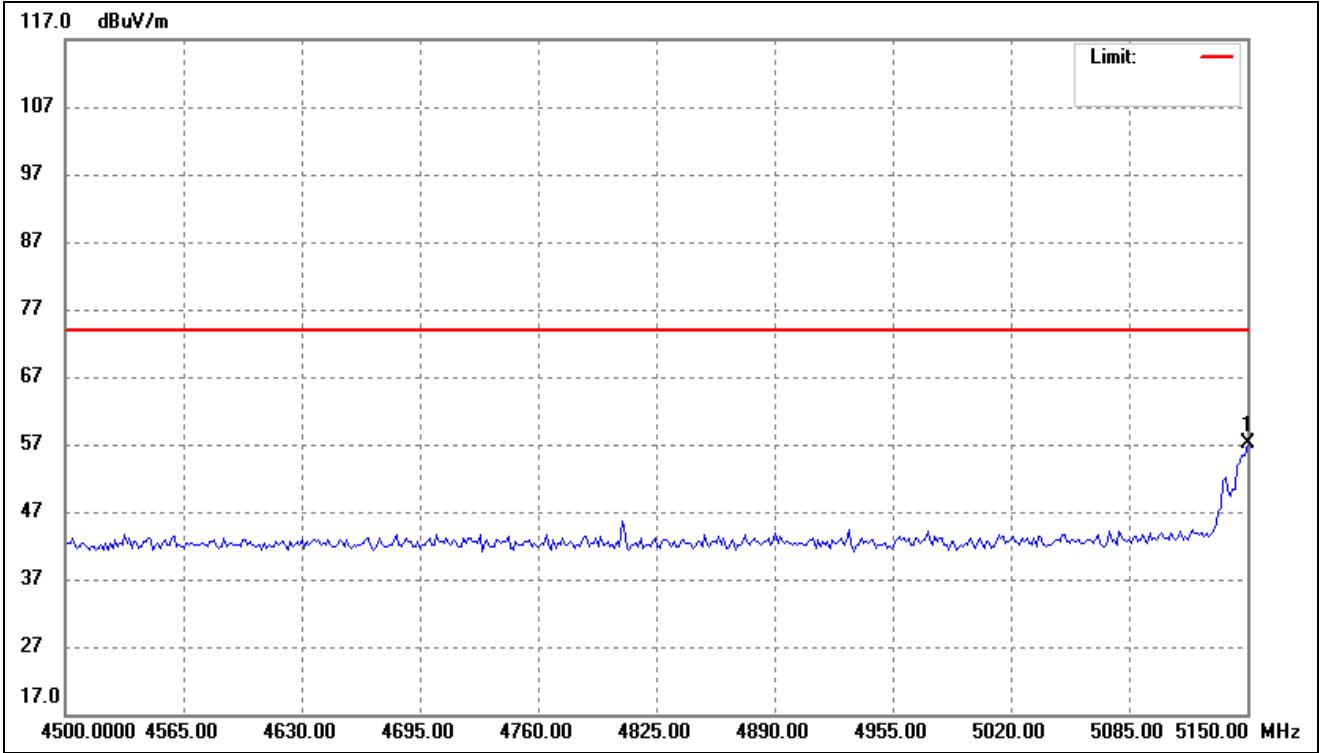
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5148.697	68.73	-11.82	56.91	74.00	-17.09	-	-	peak

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



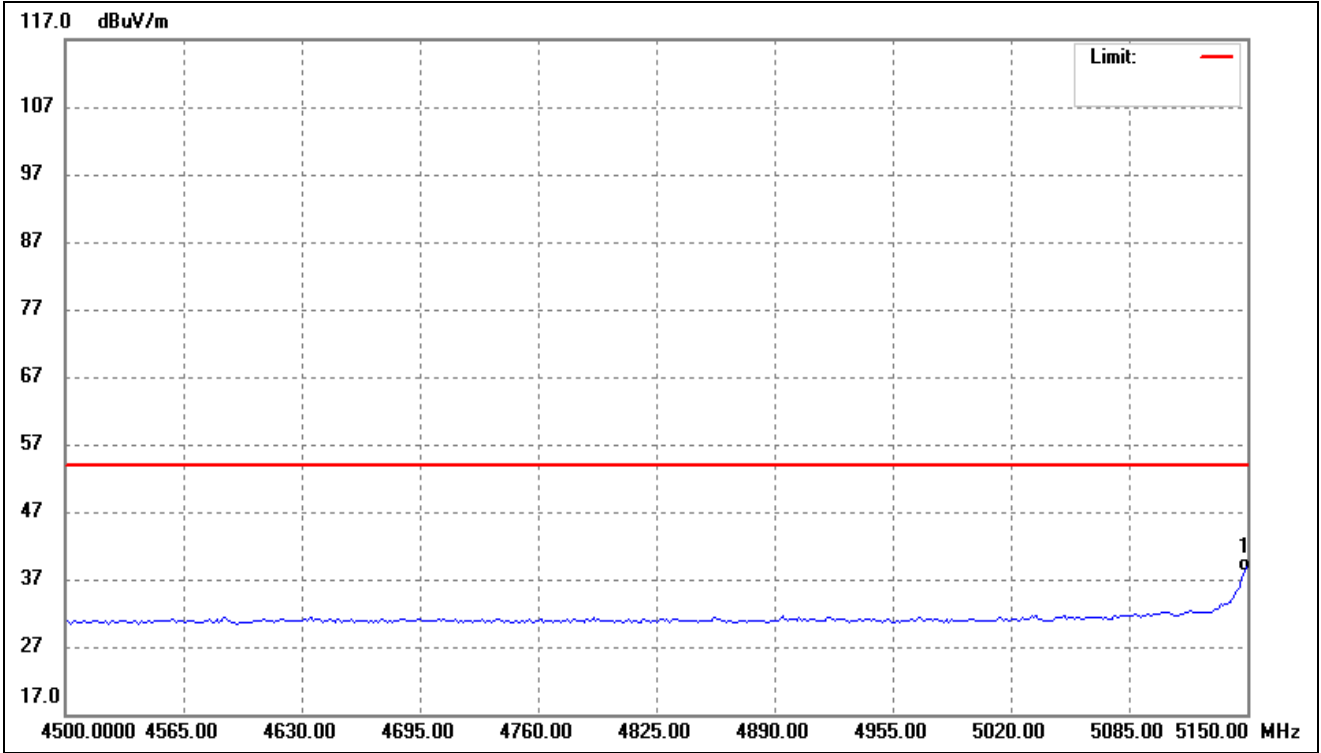
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	51.29	-11.81	39.48	54.00	-14.52	-	-	AVG

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



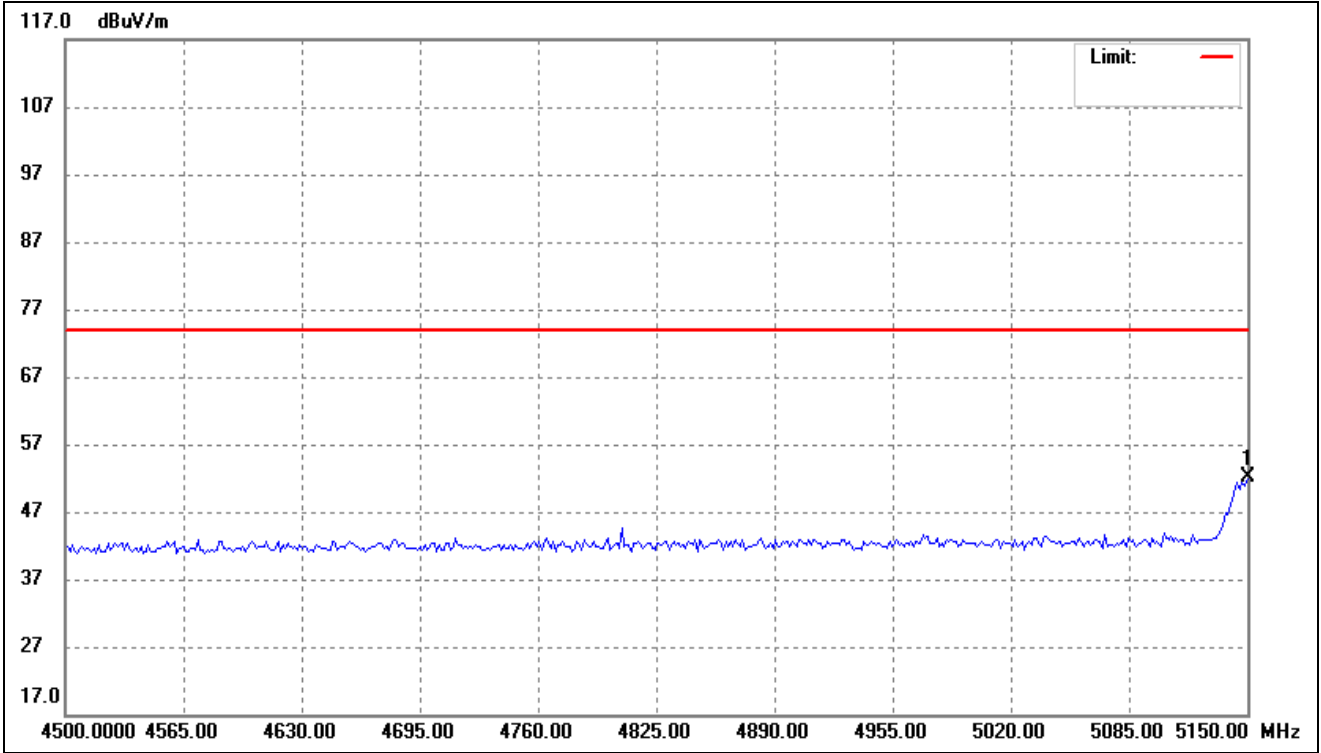
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	69.01	-11.81	57.20	74.00	-16.80	-	-	peak

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



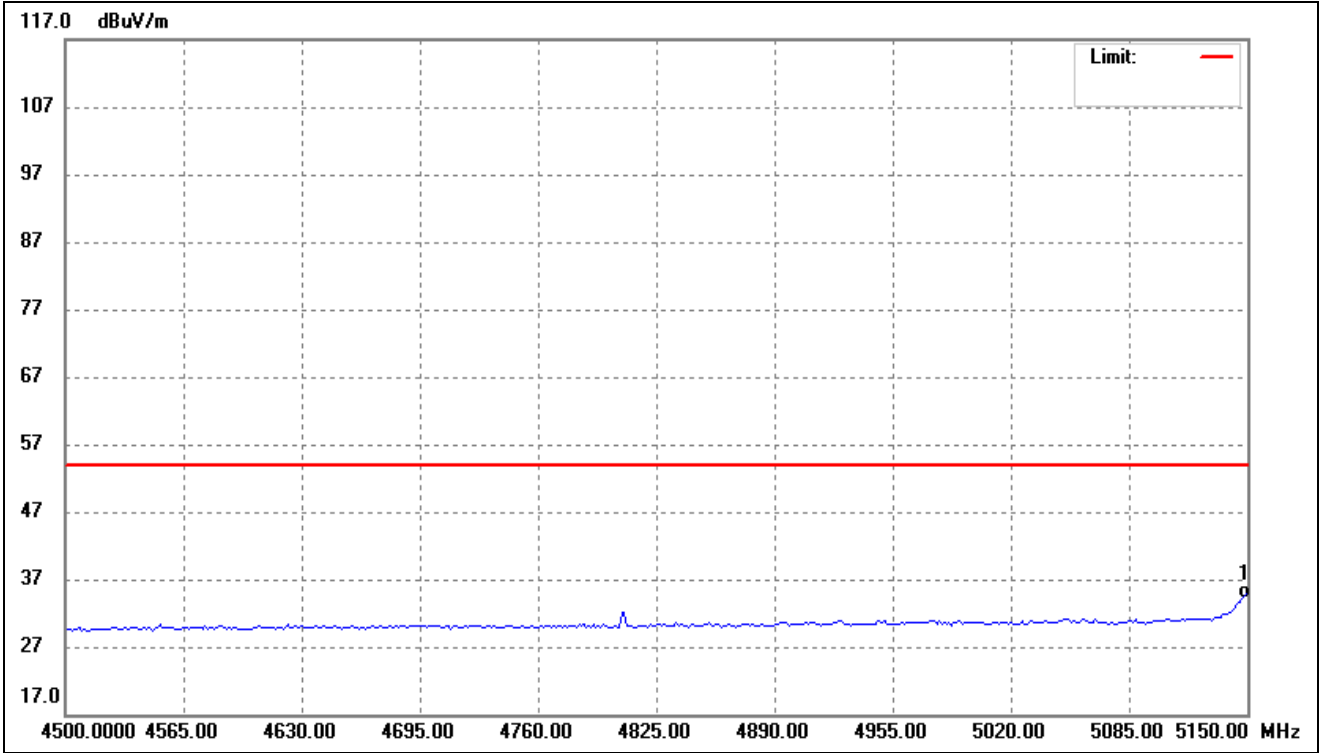
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	50.89	-11.81	39.08	54.00	-14.92	-	-	AVG

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



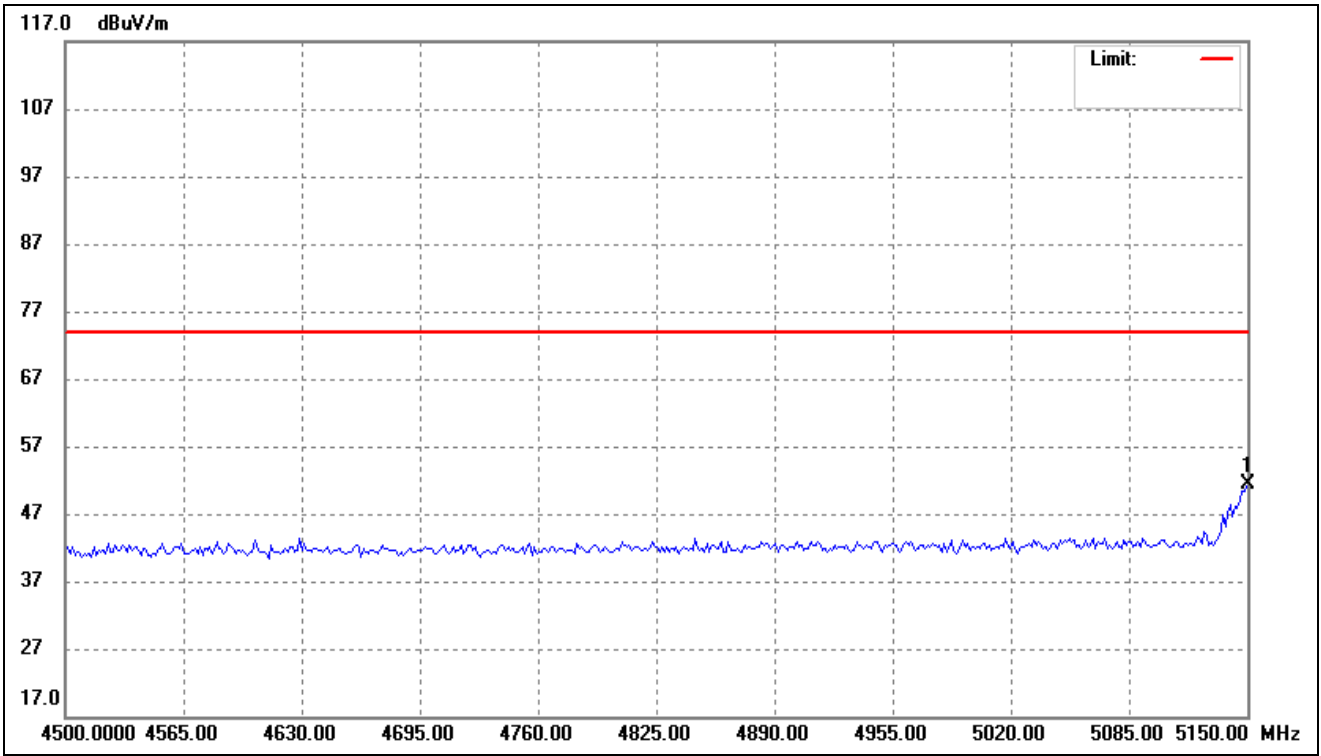
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	64.41	-12.21	52.20	74.00	-21.80	-	-	peak

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



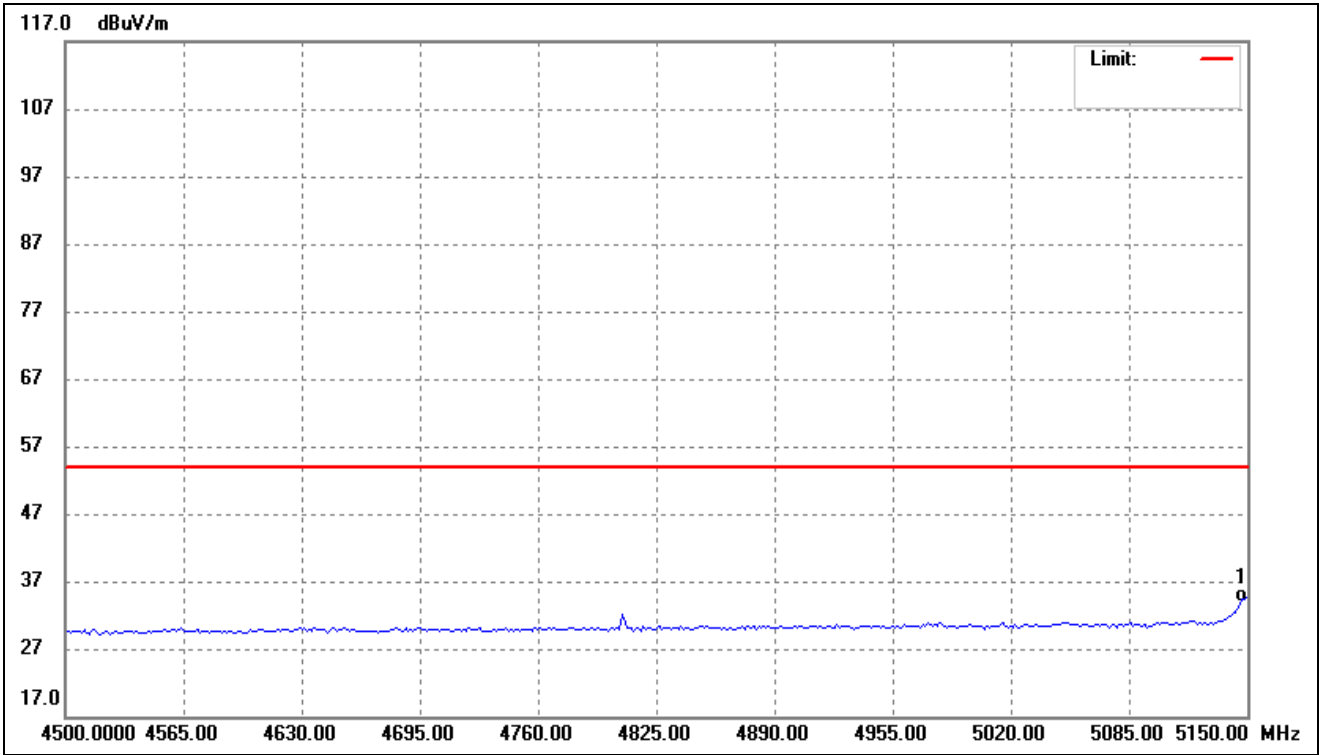
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	47.35	-12.21	35.14	54.00	-18.86	-	-	AVG

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



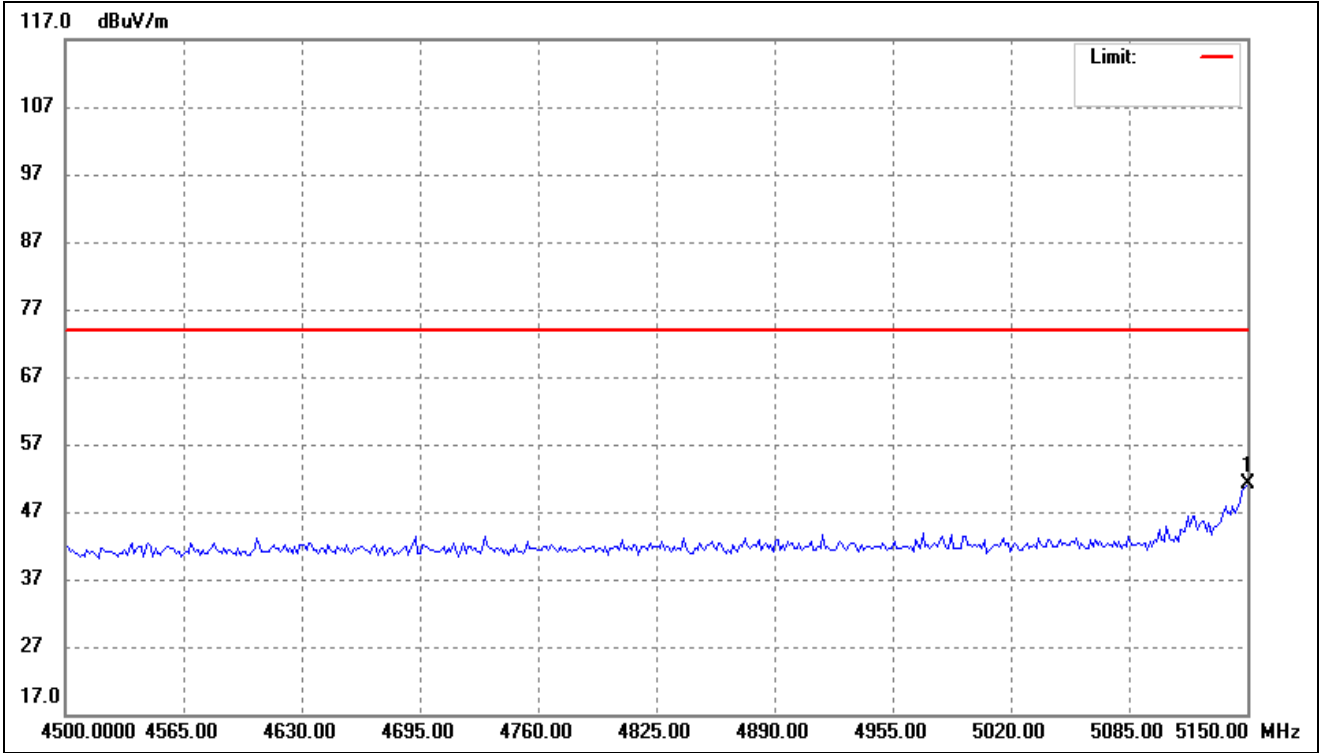
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	()	(cm)	
1	5150.000	63.53	-12.21	51.32	74.00	-22.68	-	-	peak

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



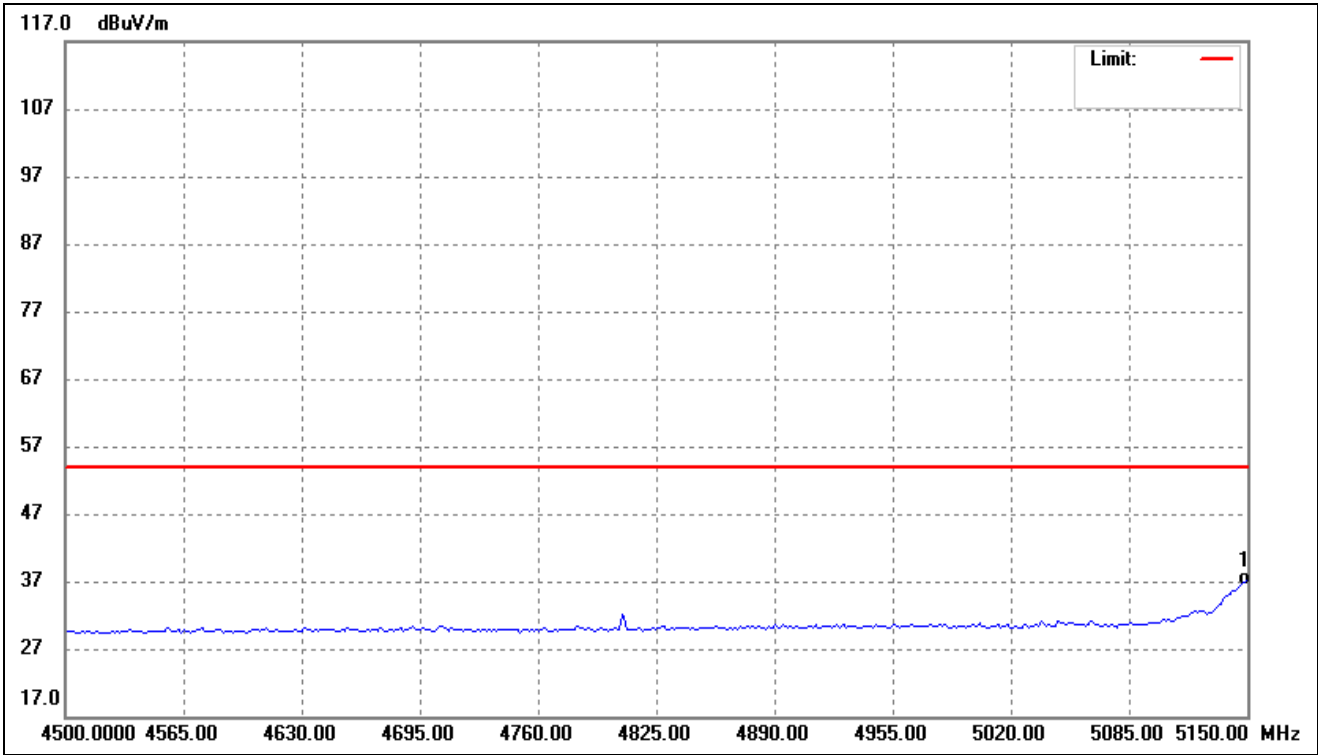
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	47.18	-12.21	34.97	54.00	-19.03	-	-	AVG

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	5150.000	63.30	-12.21	51.09	74.00	-22.91	-	-	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	49.57	-12.21	37.36	54.00	-16.64	-	-	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, 5.725-5.850GHz (802.11a)
- 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	58.56	7.11	65.67	74	-8.33	H	PK
10360	39.94	7.11	47.05	54	-6.95	H	AV
10360	55.12	7.11	62.23	74	-11.77	V	PK
10360	39.51	7.11	46.62	54	-7.38	V	AV
Middle Channel (5200MHz)							
10400	56.51	7.22	63.73	74	-10.27	H	PK
10400	41.83	7.22	49.05	54	-4.95	H	AV
10400	57.40	7.22	64.62	74	-9.38	V	PK
10400	40.22	7.22	47.44	54	-6.56	V	AV
High Channel (5240MHz)							
10480	55.07	7.69	62.76	74	-11.24	H	PK
10480	40.28	7.69	47.97	54	-6.03	H	AV
10480	55.44	7.69	63.13	74	-10.87	V	PK
10480	39.99	7.69	47.68	54	-6.32	V	AV

Frequency (MHz)	Reading (dBuV/m)	Correct dB	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polar H/V	Detector
Low Channel (5745MHz)							
11490	58.20	9.45	67.65	74	-6.35	H	PK
11490	38.78	9.45	48.23	54	-5.77	H	AV
11490	57.95	9.45	67.40	74	-6.60	V	PK
11490	41.69	9.45	51.14	54	-2.86	V	AV
Middle Channel (5785MHz)							
11570	58.54	9.62	68.16	74	-5.84	H	PK
11570	38.65	9.62	48.27	54	-5.73	H	AV
11570	57.22	9.62	66.84	74	-7.16	V	PK
11570	38.19	9.62	47.81	54	-6.19	V	AV
High Channel (5825MHz)							
11650	56.85	9.84	66.69	74	-7.31	H	PK
11650	39.56	9.84	49.40	54	-4.60	H	AV
11650	55.94	9.84	65.78	74	-8.22	V	PK
11650	40.35	9.84	50.19	54	-3.81	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-43.73	-27
Highest	Above 5350	-42.85	-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 5650	-46.24	-27
	5650 to 5700	-33.81	-27 to -17
	5700 to 5720	-27.65	-17 to 15.6
	5720 to 5725	-17.34	15.6 to 27
Highest	5850 to 5855	-14.62	27 to 15.6
	5855 to 5875	-21.70	15.6 to -17
	5875 to 5925	-33.59	-17 to -27
	Above 5925	-38.31	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 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	57.44	7.11	64.55	74	-9.45	H	PK
10360	38.93	7.11	46.04	54	-7.96	H	AV
10360	56.71	7.11	63.82	74	-10.18	V	PK
10360	39.24	7.11	46.35	54	-7.65	V	AV
Middle Channel (5200MHz)							
10400	56.83	7.22	64.05	74	-9.95	H	PK
10400	41.93	7.22	49.15	54	-4.85	H	AV
10400	57.98	7.22	65.20	74	-8.80	V	PK
10400	40.64	7.22	47.86	54	-6.14	V	AV
High Channel (5240MHz)							
10480	57.56	7.69	65.25	74	-8.75	H	PK
10480	40.42	7.69	48.11	54	-5.89	H	AV
10480	58.20	7.69	65.89	74	-8.11	V	PK
10480	39.07	7.69	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 (5745MHz)							
11490	55.99	9.45	65.44	74	-8.56	H	PK
11490	38.06	9.45	47.51	54	-6.49	H	AV
11490	57.51	9.45	66.96	74	-7.04	V	PK
11490	38.87	9.45	48.32	54	-5.68	V	AV
Middle Channel (5785MHz)							
11570	55.08	9.62	64.70	74	-9.30	H	PK
11570	38.45	9.62	48.07	54	-5.93	H	AV
11570	56.34	9.62	65.96	74	-8.04	V	PK
11570	40.53	9.62	50.15	54	-3.85	V	AV
High Channel (5825MHz)							
11650	58.87	9.84	68.71	74	-5.29	H	PK
11650	40.32	9.84	50.16	54	-3.84	H	AV
11650	57.78	9.84	67.62	74	-6.38	V	PK
11650	39.10	9.84	48.94	54	-5.06	V	AV

➤ Out of Band edge 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-42.67	-27
Highest	Above 5350	-40.28	-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 5650	-46.76	-27
	5650 to 5700	-33.65	-27 to -17
	5700 to 5720	-27.85	-17 to 15.6
	5720 to 5725	-17.29	15.6 to 27
Highest	5850 to 5855	-14.34	27 to 15.6
	5855 to 5875	-21.76	15.6 to -17
	5875 to 5925	-33.12	-17 to -27
	Above 5925	-38.65	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.725-5.850GHz (802.11ac 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	56.96	7.11	64.07	74	-9.93	H	PK
10360	41.61	7.11	48.72	54	-5.28	H	AV
10360	58.27	7.11	65.38	74	-8.62	V	PK
10360	41.04	7.11	48.15	54	-5.85	V	AV
Middle Channel (5200MHz)							
10400	55.11	7.22	62.33	74	-11.67	H	PK
10400	39.41	7.22	46.63	54	-7.37	H	AV
10400	56.31	7.22	63.53	74	-10.47	V	PK
10400	38.56	7.22	45.78	54	-8.22	V	AV
High Channel (5240MHz)							
10480	58.06	7.69	65.75	74	-8.25	H	PK
10480	41.68	7.69	49.37	54	-4.63	H	AV
10480	55.54	7.69	63.23	74	-10.77	V	PK
10480	39.13	7.69	46.82	54	-7.18	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	56.56	9.45	66.01	74	-7.99	H	PK
11490	38.01	9.45	47.46	54	-6.54	H	AV
11490	56.57	9.45	66.02	74	-7.98	V	PK
11490	40.43	9.45	49.88	54	-4.12	V	AV
Middle Channel (5785MHz)							
11570	55.31	9.62	64.93	74	-9.07	H	PK
11570	38.17	9.62	47.79	54	-6.21	H	AV
11570	56.84	9.62	66.46	74	-7.54	V	PK
11570	40.59	9.62	50.21	54	-3.79	V	AV
High Channel (5825MHz)							
11650	55.23	9.84	65.07	74	-8.93	H	PK
11650	38.99	9.84	48.83	54	-5.17	H	AV
11650	55.22	9.84	65.06	74	-8.94	V	PK
11650	39.28	9.84	49.12	54	-4.88	V	AV

➤ Out of Band edge 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-40.16	-27
Highest	Above 5350	-41.37	-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 5650	-46.25	-27
	5650 to 5700	-33.16	-27 to -17
	5700 to 5720	-27.39	-17 to 15.6
	5720 to 5725	-17.46	15.6 to 27
Highest	5850 to 5855	-14.57	27 to 15.6
	5855 to 5875	-21.32	15.6 to -17
	5875 to 5925	-33.41	-17 to -27
	Above 5925	-38.60	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 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	56.20	7.89	64.09	74	-9.91	H	PK
10380	40.06	7.89	47.95	54	-6.05	H	AV
10380	55.33	7.89	63.22	74	-10.78	V	PK
10380	40.90	7.89	48.79	54	-5.21	V	AV
High Channel (5230MHz)							
10460	57.91	7.97	65.88	74	-8.12	H	PK
10460	39.54	7.97	47.51	54	-6.49	H	AV
10460	58.53	7.97	66.50	74	-7.50	V	PK
10460	41.26	7.97	49.23	54	-4.77	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5755MHz)							
11510	56.97	9.27	66.24	74	-7.76	H	PK
11510	38.68	9.27	47.95	54	-6.05	H	AV
11510	55.84	9.27	65.11	74	-8.89	V	PK
11510	40.44	9.27	49.71	54	-4.29	V	AV
High Channel (5795MHz)							
11590	57.67	9.45	67.12	74	-6.88	H	PK
11590	38.11	9.45	47.56	54	-6.44	H	AV
11590	58.49	9.45	67.94	74	-6.06	V	PK
11590	41.04	9.45	50.49	54	-3.51	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-39.58	-27
Highest	Above 5350	-38.20	-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 5650	-46.76	-27
	5650 to 5700	-33.75	-27 to -17
	5700 to 5720	-27.36	-17 to 15.6
	5720 to 5725	-17.24	15.6 to 27
Highest	5850 to 5855	-14.16	27 to 15.6
	5855 to 5875	-21.37	15.6 to -17
	5875 to 5925	-33.12	-17 to -27
	Above 5925	-38.68	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.725-5.850GHz (802.11ac 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	56.08	7.89	63.97	74	-10.03	H	PK
10380	40.18	7.89	48.07	54	-5.93	H	AV
10380	55.97	7.89	63.86	74	-10.14	V	PK
10380	39.06	7.89	46.95	54	-7.05	V	AV
High Channel (5230MHz)							
10460	55.07	7.97	63.04	74	-10.96	H	PK
10460	39.74	7.97	47.71	54	-6.29	H	AV
10460	55.94	7.97	63.91	74	-10.09	V	PK
10460	39.71	7.97	47.68	54	-6.32	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	58.16	9.27	67.43	74	-6.57	H	PK
11510	40.21	9.27	49.48	54	-4.52	H	AV
11510	55.49	9.27	64.76	74	-9.24	V	PK
11510	40.40	9.27	49.67	54	-4.33	V	AV
High Channel (5795MHz)							
11590	56.65	9.45	66.10	74	-7.90	H	PK
11590	39.07	9.45	48.52	54	-5.48	H	AV
11590	58.11	9.45	67.56	74	-6.44	V	PK
11590	39.40	9.45	48.85	54	-5.15	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-39.72	-27
Highest	Above 5350	-38.96	-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 5650	-45.76	-27
	5650 to 5700	-32.29	-27 to -17
	5700 to 5720	-26.64	-17 to 15.6
	5720 to 5725	-16.81	15.6 to 27
Highest	5850 to 5855	-14.60	27 to 15.6
	5855 to 5875	-21.75	15.6 to -17
	5875 to 5925	-33.24	-17 to -27
	Above 5925	-38.30	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 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	58.53	7.53	66.06	74	-7.94	H	PK
10420	38.70	7.53	46.23	54	-7.77	H	AV
10420	58.04	7.53	65.57	74	-8.43	H	PK
10420	39.89	7.53	47.42	54	-6.58	H	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5775MHz							
11550	56.23	9.93	66.16	74	-7.84	H	PK
11550	39.37	9.93	49.30	54	-4.70	H	AV
11550	56.87	9.93	66.80	74	-7.20	V	PK
11550	40.01	9.93	49.94	54	-4.06	V	AV

- Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-37.76	-27
Highest	Above 5350	-36.29	-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 5650	-46.15	-27
	5650 to 5700	-33.76	-27 to -17
	5700 to 5720	-27.38	-17 to 15.6
	5720 to 5725	-17.45	15.6 to 27
Highest	5850 to 5855	-14.26	27 to 15.6
	5855 to 5875	-22.38	15.6 to -17
	5875 to 5925	-33.16	-17 to -27
	Above 5925	-38.37	-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

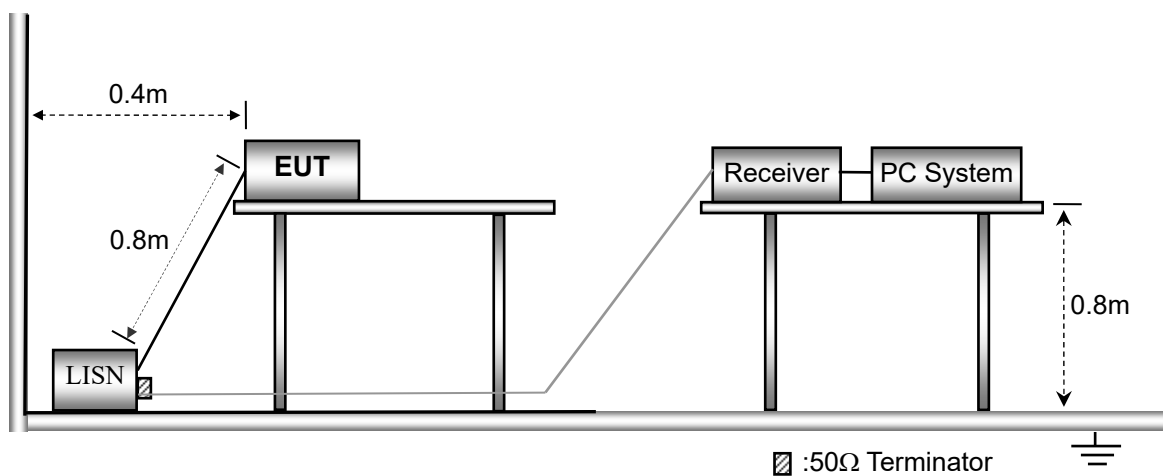
10. Conducted Emissions

10.1 Test Procedure

The setup of EUT is according with per ANSI C63.10-2020 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



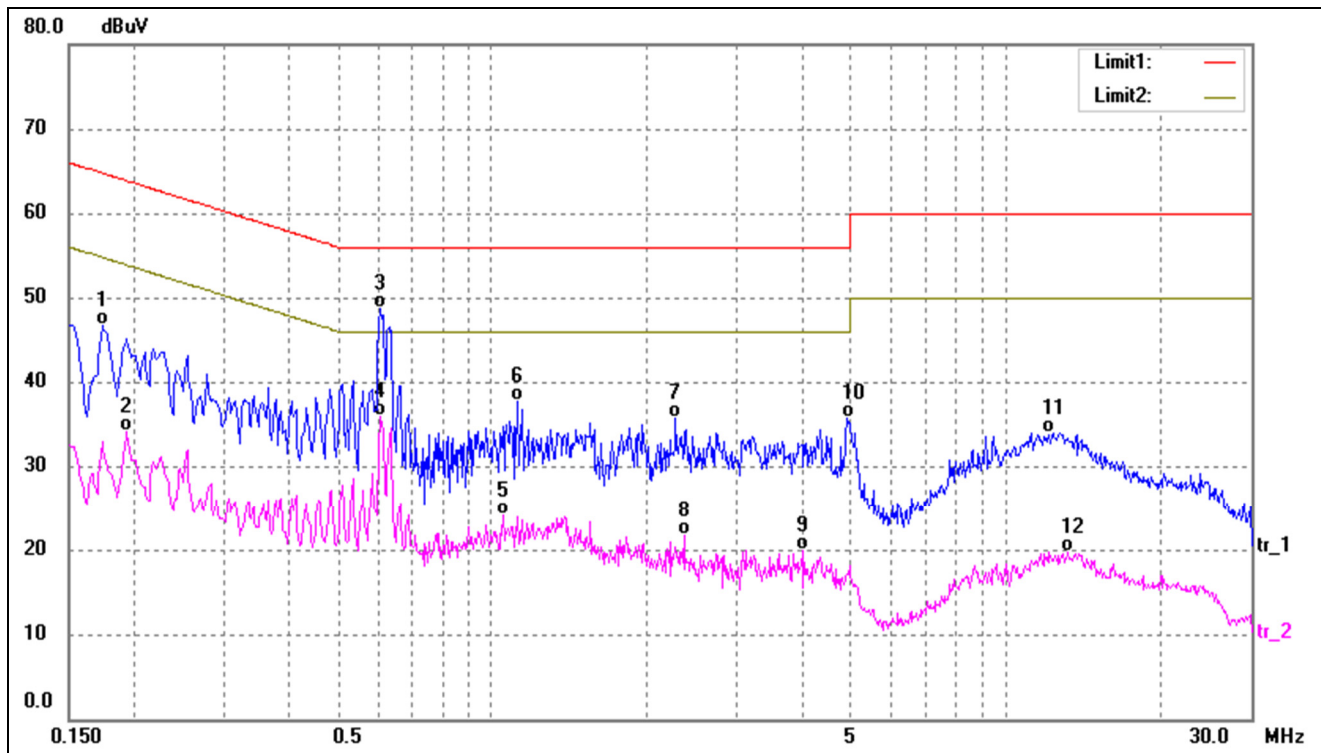
10.3 Test Receiver Setup

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

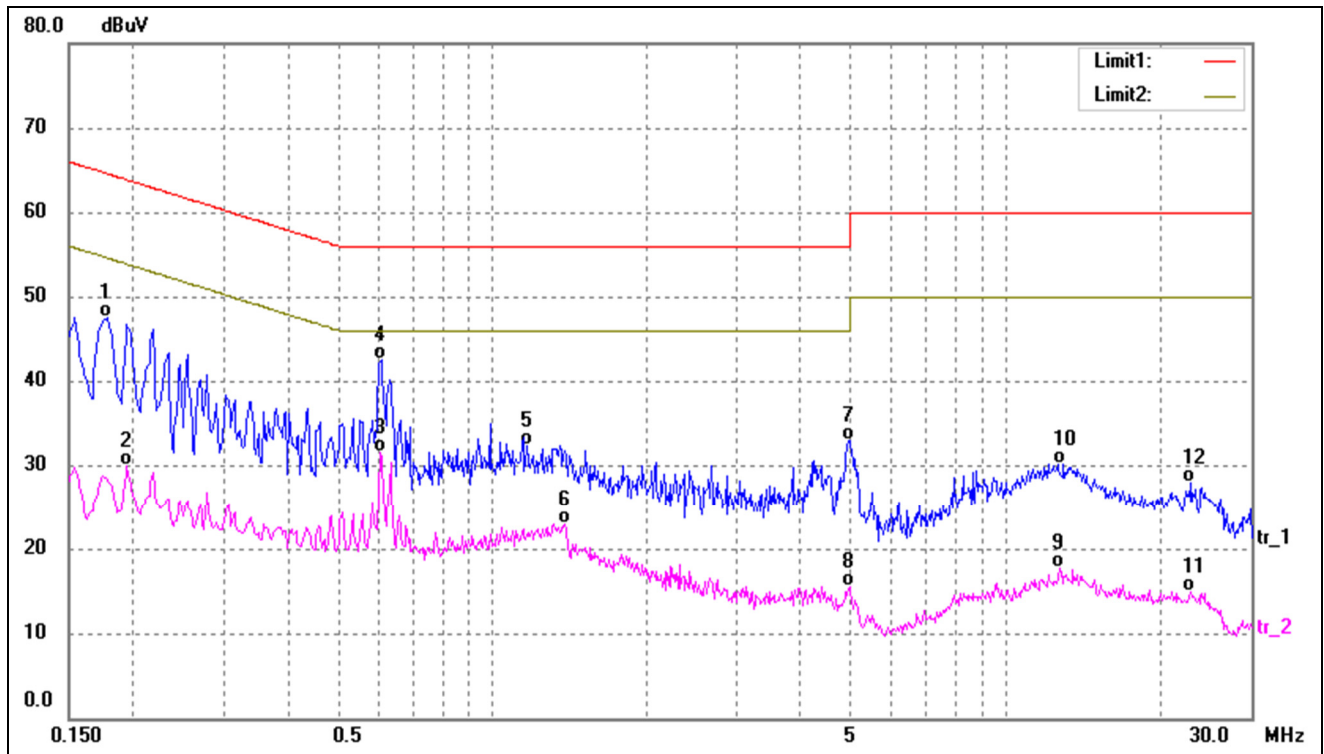
10.4 Summary of Test Results/Plots

Test Mode	Communication	AC120V 60Hz	Polarity:	Neutral
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1740	37.10	9.53	46.63	64.76	-18.13	QP
2	0.1940	24.55	9.61	34.16	53.86	-19.70	AVG
3*	0.6060	38.96	9.69	48.65	56.00	-7.35	QP
4	0.6060	26.20	9.69	35.89	46.00	-10.11	AVG
5	1.0500	14.37	9.74	24.11	46.00	-21.89	AVG
6	1.1180	27.95	9.71	37.66	56.00	-18.34	QP
7	2.2820	26.42	9.37	35.79	56.00	-20.21	QP
8	2.3660	12.28	9.38	21.66	46.00	-24.34	AVG
9	4.0260	10.45	9.46	19.91	46.00	-26.09	AVG
10	4.9180	26.17	9.56	35.73	56.00	-20.27	QP
11	12.3220	24.28	9.67	33.95	60.00	-26.05	QP
12	13.2180	10.01	9.62	19.63	50.00	-30.37	AVG

Test Mode	Communication	AC120V 60Hz	Polarity:	Line
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1780	37.94	9.54	47.48	64.57	-17.09	QP
2	0.1940	20.23	9.61	29.84	53.86	-24.02	AVG
3	0.6060	21.85	9.69	31.54	46.00	-14.46	AVG
4*	0.6100	32.90	9.69	42.59	56.00	-13.41	QP
5	1.1700	22.67	9.69	32.36	56.00	-23.64	QP
6	1.3860	13.25	9.61	22.86	46.00	-23.14	AVG
7	4.9460	23.41	9.56	32.97	56.00	-23.03	QP
8	4.9660	5.86	9.57	15.43	46.00	-30.57	AVG
9	12.7620	8.11	9.64	17.75	50.00	-32.25	AVG
10	12.9819	20.50	9.63	30.13	60.00	-29.87	QP
11	22.8580	5.41	9.54	14.95	50.00	-35.05	AVG
12	23.0140	18.45	9.54	27.99	60.00	-32.01	QP

APPENDIX SUMMARY

Project No.	WTX25X05124828W	Test Engineer	Jennifer Song
Start date	2025/8/4	Finish date	2025/8/7
Temperature	22.4℃	Humidity	65%
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

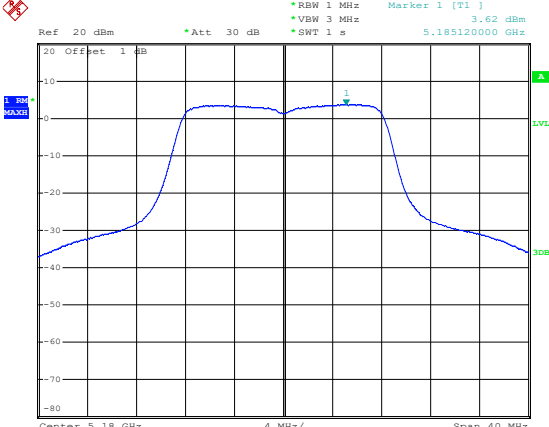
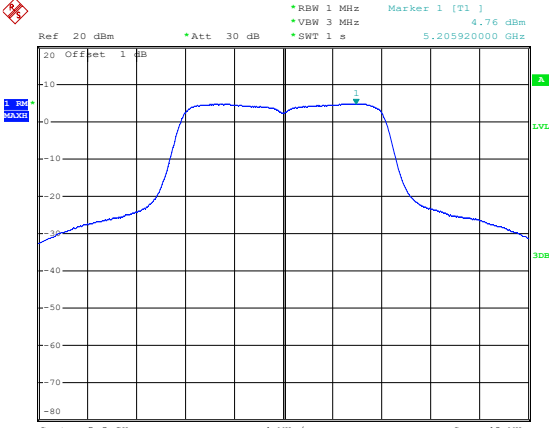
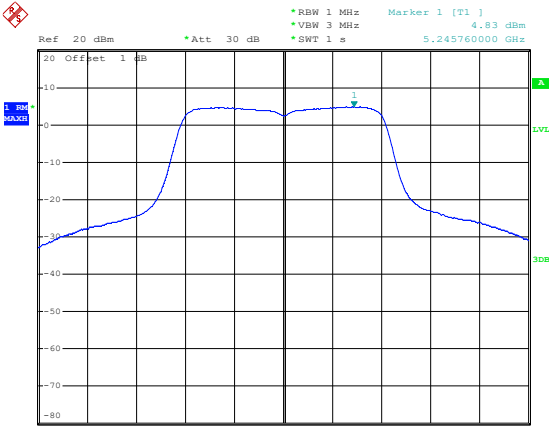
APPENDIX A

Power Spectral Density			
U-NII-1:5150-5250MHz			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a	5180	3.62	11
	5200	4.76	11
	5240	4.83	11
802.11n-HT20	5180	3.86	11
	5200	3.88	11
	5240	4.26	11
802.11n-HT40	5190	1.22	11
	5230	1.16	11
802.11ac-VHT20	5180	2.10	11
	5200	3.88	11
	5240	4.19	11
802.11ac-VHT40	5190	0.56	11
	5230	1.01	11
802.11ac-VHT80	5210	-1.16	11

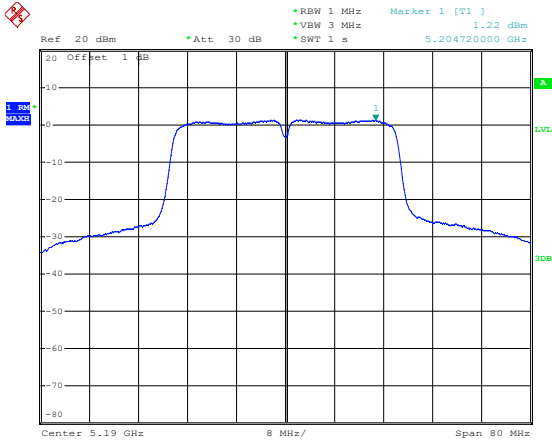
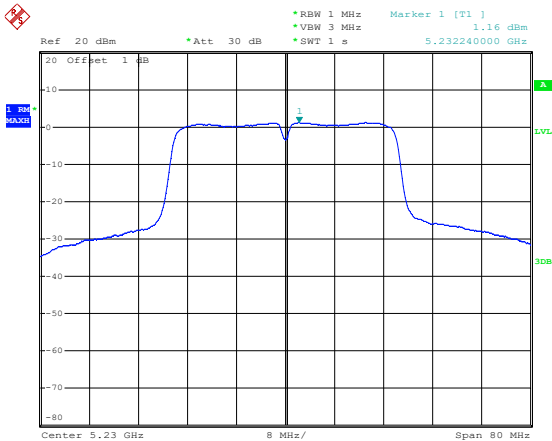
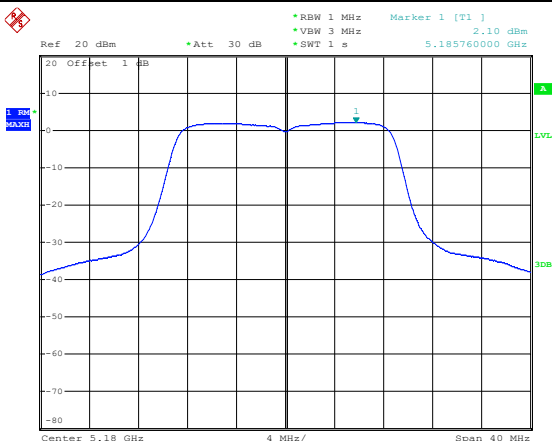
U-NII-3: 5725-5850MHz					
Operating mode	Test Channel	Power Spectral Density dBm/300kHz	Factor	Power Spectral Density* dBm/500kHz	Limit dBm/500kHz
802.11a	5745	-4.49	2.22	-2.27	30
	5785	-4.67	2.22	-2.45	30
	5825	-4.47	2.22	-2.25	30
802.11n-HT20	5745	-5.52	2.22	-3.30	30
	5785	-5.63	2.22	-3.41	30
	5825	-5.40	2.22	-3.18	30
802.11n-HT40	5755	-8.76	2.22	-6.54	30
	5795	-8.37	2.22	-6.15	30
802.11ac-VHT20	5745	-6.14	2.22	-3.92	30
	5785	-5.96	2.22	-3.74	30
	5825	-6.08	2.22	-3.86	30
802.11ac-VHT40	5755	-8.57	2.22	-6.35	30
	5795	-8.36	2.22	-6.14	30
802.11ac-VHT80	5775	-10.28	2.22	-8.06	30

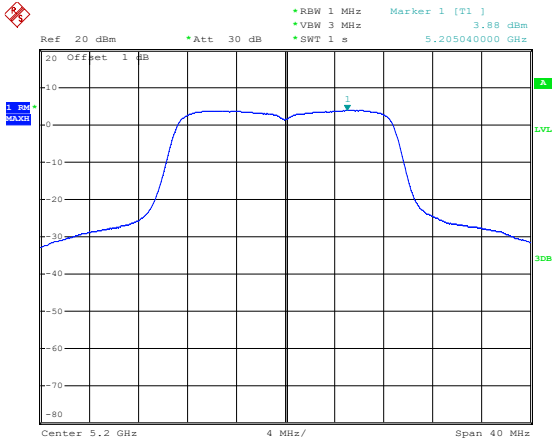
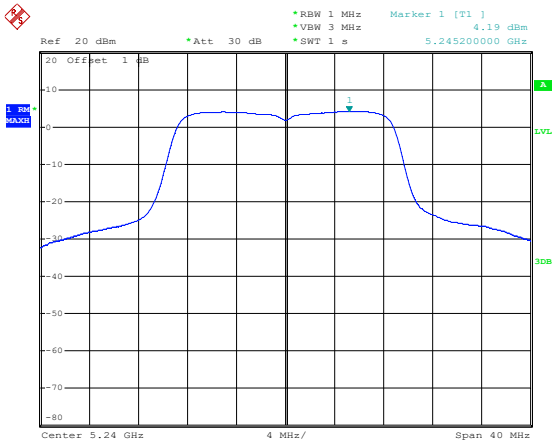
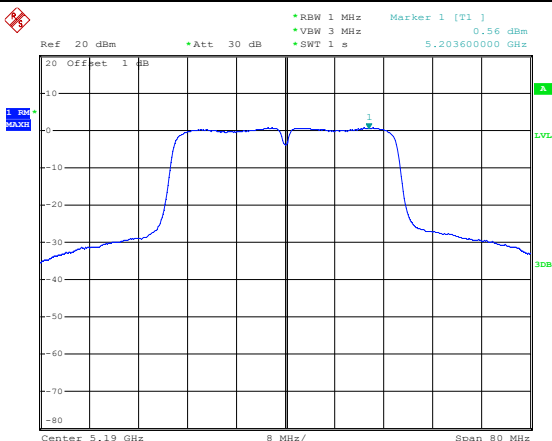
*Note: Maximum PSD=PSD(dBm/300kHz)+10log(500kHz/300kHz)=2.22

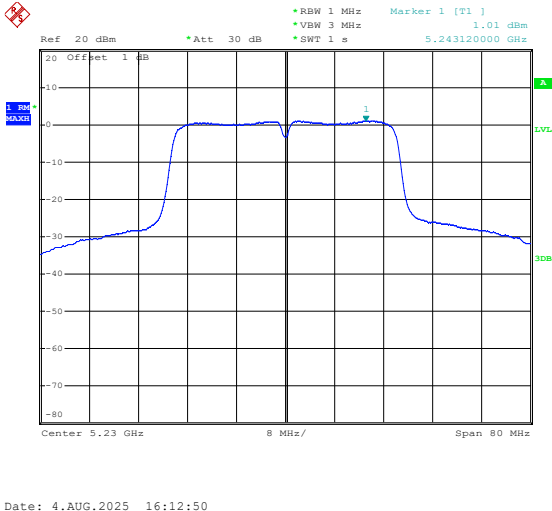
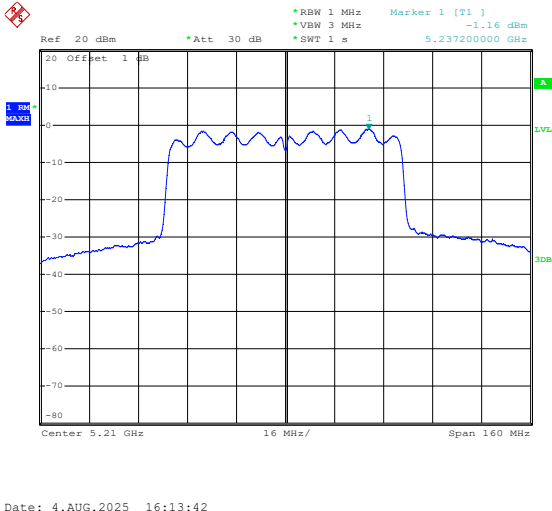
5150-5250MHz

802.11a-Low	 Date: 4.AUG.2025 16:01:24
802.11a-Middle	 Date: 4.AUG.2025 16:03:40
802.11a-High	 Date: 4.AUG.2025 16:04:06

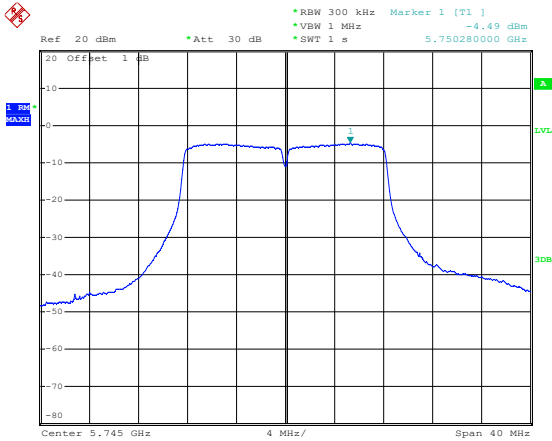
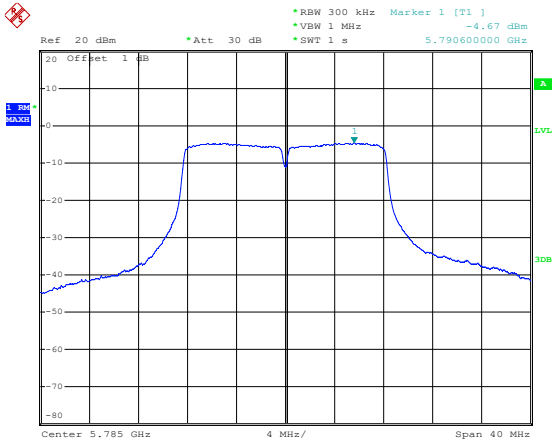
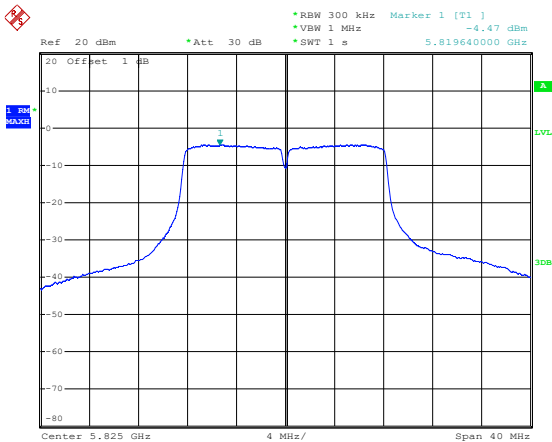
Channel	Frequency (GHz)	Power Level (dBm)	Bandwidth (MHz)	Span (MHz)	Offset (dB)	Att (dB)	SWT (s)	Marker 1 [T1]
802.11n-HT20-Low	5.18	3.86	3	40	1	30	1	5.185120000
802.11n-HT20-Middle	5.205360000	3.88	3	40	1	30	1	5.205360000
802.11n-HT20-High	5.245200000	4.26	3	40	1	30	1	5.245200000

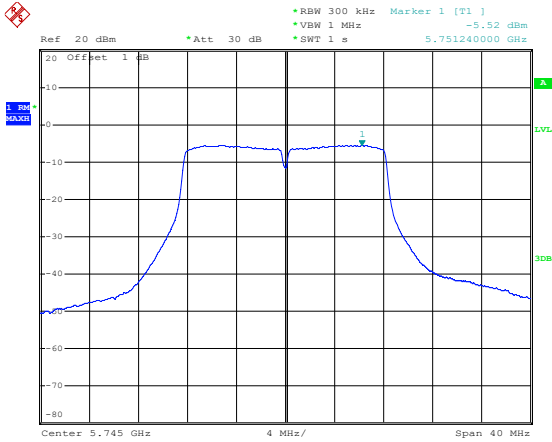
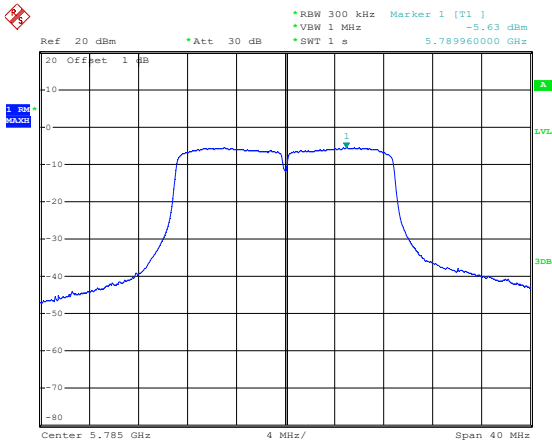
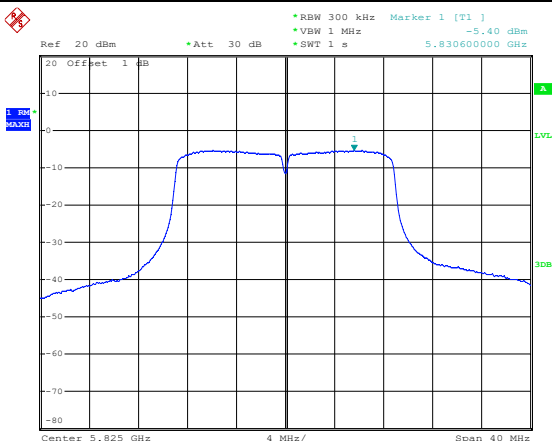
802.11n-HT40-Low	 Ref 20 dBm *Att 30 dB *RBW 1 MHz Marker 1 [T1] 1.22 dBm *VBW 3 MHz *SWT 1 s 5.204720000 GHz Center 5.19 GHz 8 MHz/ Span 80 MHz Date: 4.AUG.2025 16:07:45
802.11n-HT40-High	 Ref 20 dBm *Att 30 dB *RBW 1 MHz Marker 1 [T1] 1.16 dBm *VBW 3 MHz *SWT 1 s 5.232240000 GHz Center 5.23 GHz 8 MHz/ Span 80 MHz Date: 4.AUG.2025 16:08:44
802.11ac-VHT20-Low	 Ref 20 dBm *Att 30 dB *RBW 1 MHz Marker 1 [T1] 2.10 dBm *VBW 3 MHz *SWT 1 s 5.185760000 GHz Center 5.18 GHz 4 MHz/ Span 40 MHz Date: 4.AUG.2025 16:10:40

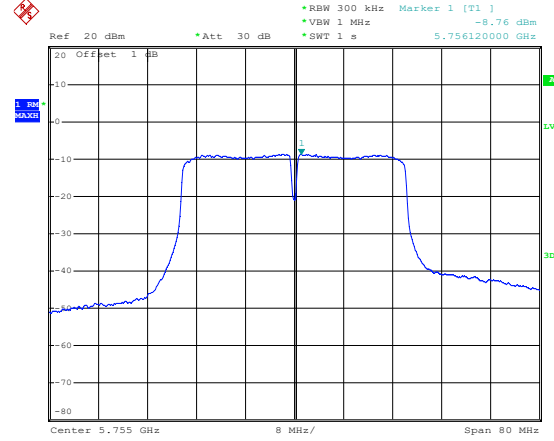
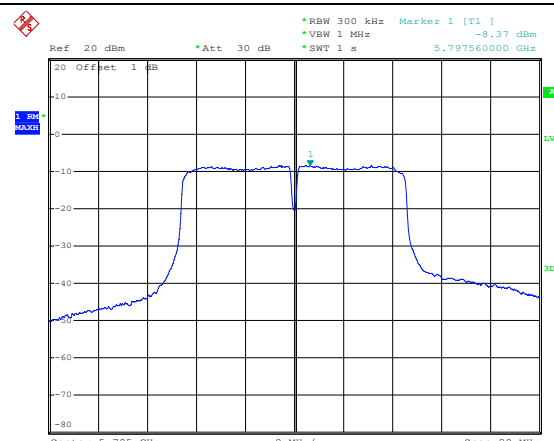
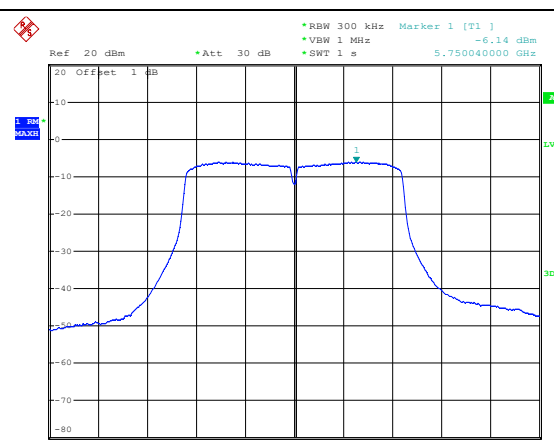
802.11ac-VHT20-Middle	 Ref 20 dBm *Att 30 dB *RBW 1 MHz *VSW 3 MHz *SWT 1 s Marker 1 [T1] 3.88 dBm 5.205040000 GHz 20 Offset 1 dB Center 5.2 GHz 4 MHz/ Span 40 MHz Date: 4.AUG.2025 16:11:06
802.11ac-VHT20-High	 Ref 20 dBm *Att 30 dB *RBW 1 MHz *VSW 3 MHz *SWT 1 s Marker 1 [T1] 4.19 dBm 5.245200000 GHz 20 Offset 1 dB Center 5.24 GHz 4 MHz/ Span 40 MHz Date: 4.AUG.2025 16:11:33
802.11ac-VHT40-Low	 Ref 20 dBm *Att 30 dB *RBW 1 MHz *VSW 3 MHz *SWT 1 s Marker 1 [T1] 0.56 dBm 5.203600000 GHz 20 Offset 1 dB Center 5.19 GHz 8 MHz/ Span 80 MHz Date: 4.AUG.2025 16:12:18

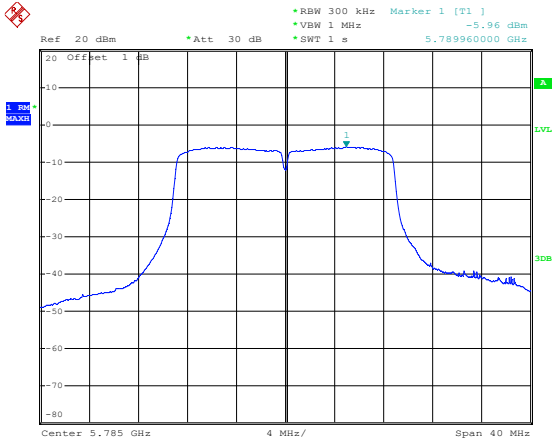
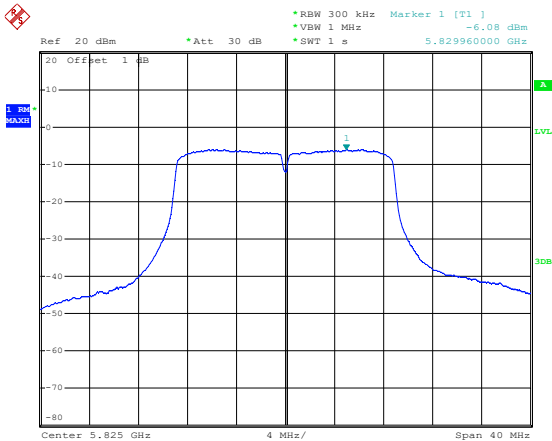
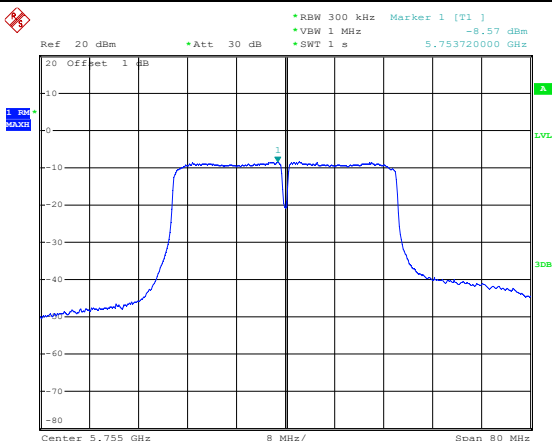
802.11ac-VHT40-High	 Date: 4.AUG.2025 16:12:50
802.11ac-VHT80-Low	 Date: 4.AUG.2025 16:13:42

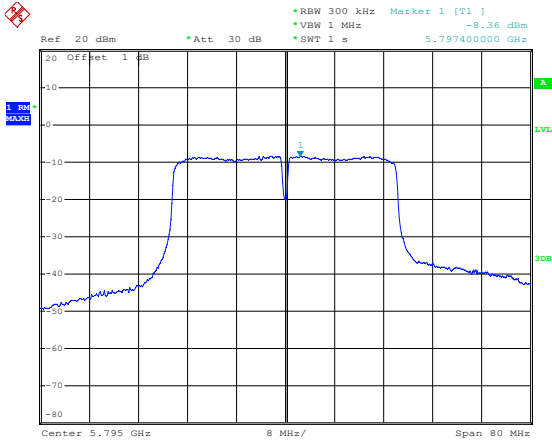
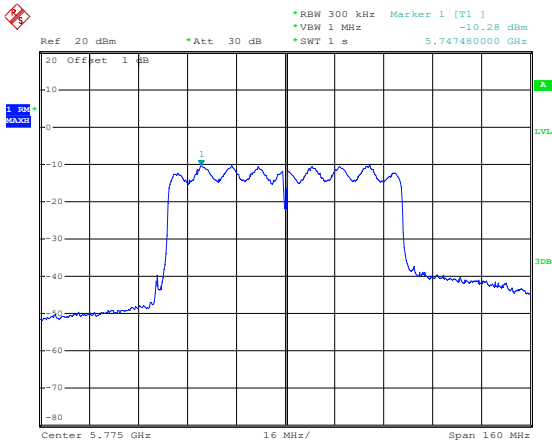
5725-5850MHz

802.11a-Low	 Date: 5.AUG.2025 09:32:55
802.11a-Middle	 Date: 5.AUG.2025 09:33:31
802.11a-High	 Date: 5.AUG.2025 09:34:03

802.11n-HT20-Low	 Ref 20 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1] -5.52 dBm *VBW 1 MHz *SWT 1 s 5.751240000 GHz Center 5.745 GHz 4 MHz/ Span 40 MHz Date: 5.AUG.2025 09:35:08
802.11n-HT20-Middle	 Ref 20 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1] -5.63 dBm *VBW 1 MHz *SWT 1 s 5.789960000 GHz Center 5.785 GHz 4 MHz/ Span 40 MHz Date: 5.AUG.2025 09:36:28
802.11n-HT20-High	 Ref 20 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1] -5.40 dBm *VBW 1 MHz *SWT 1 s 5.830600000 GHz Center 5.825 GHz 4 MHz/ Span 40 MHz Date: 5.AUG.2025 09:37:36

802.11n-HT40-Low	 Ref: 20 dBm Offset: 1 dB Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 1 s Marker 1 [T1] -8.76 dBm 5.756120000 GHz Center: 5.755 GHz Span: 80 MHz Date: 5.AUG.2025 09:39:36
802.11n-HT40-High	 Ref: 20 dBm Offset: 1 dB Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 1 s Marker 1 [T1] -8.37 dBm 5.797560000 GHz Center: 5.795 GHz Span: 80 MHz Date: 5.AUG.2025 09:40:09
802.11ac-VHT20-Low	 Ref: 20 dBm Offset: 1 dB Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 1 s Marker 1 [T1] -6.14 dBm 5.750040000 GHz Center: 5.745 GHz Span: 40 MHz Date: 5.AUG.2025 09:41:19

802.11ac-VHT20-Middle	 Ref 20 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1] -5.96 dBm *VBW 1 MHz *SWT 1 s 5.785960000 GHz Center 5.785 GHz 4 MHz/ Span 40 MHz Date: 5.AUG.2025 09:41:58
802.11ac-VHT20-High	 Ref 20 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1] -6.08 dBm *VBW 1 MHz *SWT 1 s 5.825960000 GHz Center 5.825 GHz 4 MHz/ Span 40 MHz Date: 5.AUG.2025 09:43:04
802.11ac-VHT40-Low	 Ref 20 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1] -8.57 dBm *VBW 1 MHz *SWT 1 s 5.753720000 GHz Center 5.755 GHz 8 MHz/ Span 80 MHz Date: 5.AUG.2025 09:44:10

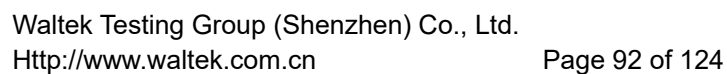
802.11ac-VHT40-High	 Ref 20 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1] -8.36 dBm *VBW 1 MHz *SWT 1 s 5.79740000 GHz 20 Offset 1 dB Center 5.795 GHz 8 MHz/ Span 80 MHz Date: 5.AUG.2025 09:44:44
802.11ac-VHT80-Low	 Ref 20 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1] -10.28 dBm *VBW 1 MHz *SWT 1 s 5.74748000 GHz 20 Offset 1 dB Center 5.775 GHz 16 MHz/ Span 160 MHz Date: 5.AUG.2025 09:47:30

APPENDIX B

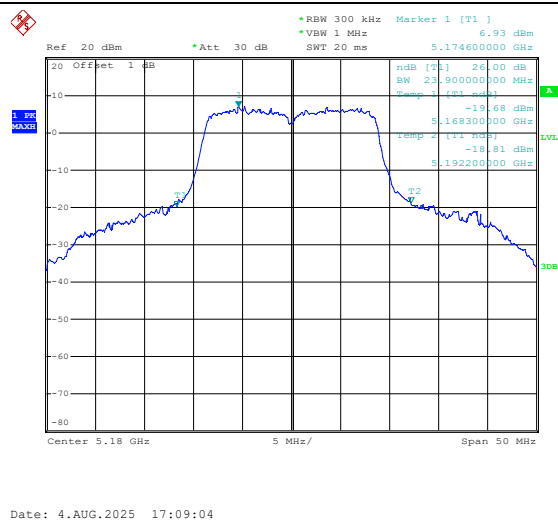
Emission Bandwidth and Occupied Bandwidth

U-NII-1:5150-5250MHz				
Test Mode	Test Channel MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5180	23.80	18.10	Pass
	5200	23.50	18.10	Pass
	5240	24.00	18.20	Pass
802.11n-HT20	5180	23.90	18.10	Pass
	5200	23.90	18.30	Pass
	5240	24.00	18.30	Pass
802.11n-HT40	5190	43.40	37.60	Pass
	5230	45.40	37.80	Pass
802.11ac-VHT20	5180	23.90	17.20	Pass
	5200	23.80	17.20	Pass
	5240	23.50	17.30	Pass
802.11ac-VHT40	5190	42.60	37.40	Pass
	5230	44.00	37.80	Pass
802.11ac-VHT80	5210	89.20	76.40	Pass

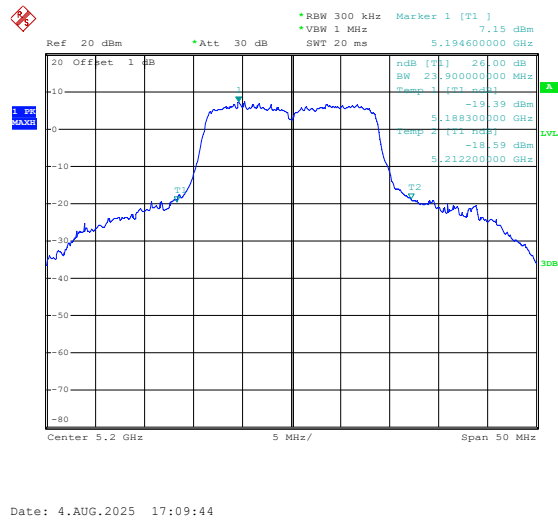
U-NII-3: 5725-5850MHz				
Test Mode	Test Channel MHz	6 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5745	16.50	17.00	≥500
	5785	16.60	17.00	≥500
	5825	16.50	17.20	≥500
802.11n-HT20	5745	17.70	18.20	≥500
	5785	17.80	18.00	≥500
	5825	17.80	18.20	≥500
802.11n-HT40	5755	36.80	37.00	≥500
	5795	36.40	37.20	≥500
802.11ac-VHT20	5745	17.80	18.00	≥500
	5785	17.60	18.10	≥500
	5825	17.60	17.90	≥500
802.11ac-VHT40	5755	36.80	37.00	≥500
	5795	36.60	37.20	≥500
802.11ac-VHT80	5775	76.00	76.00	≥500



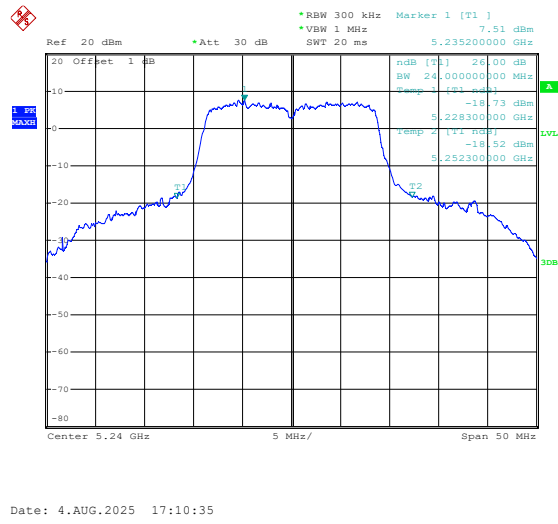
802.11n-HT20-Low



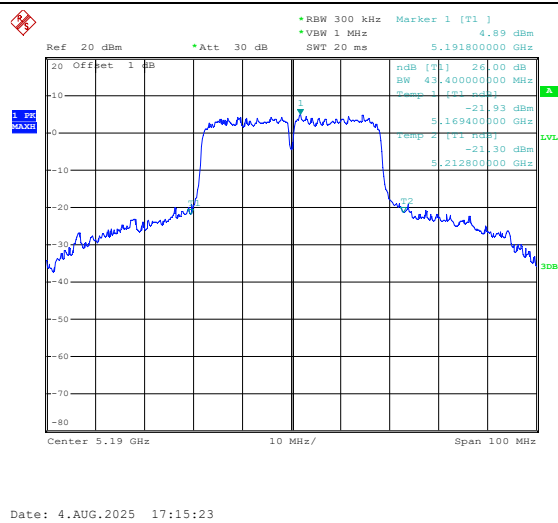
802.11n-HT20-Middle



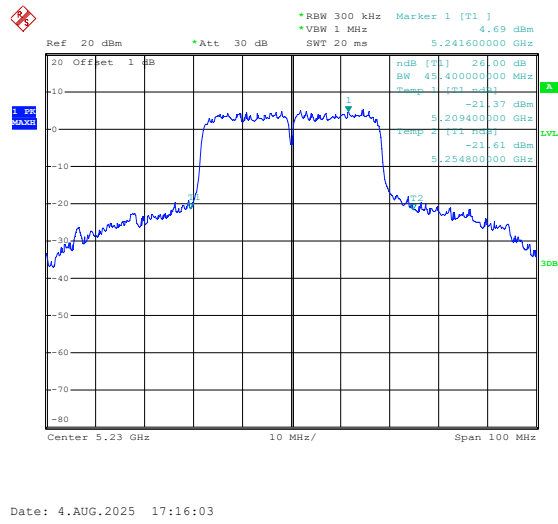
802.11n-HT20-High



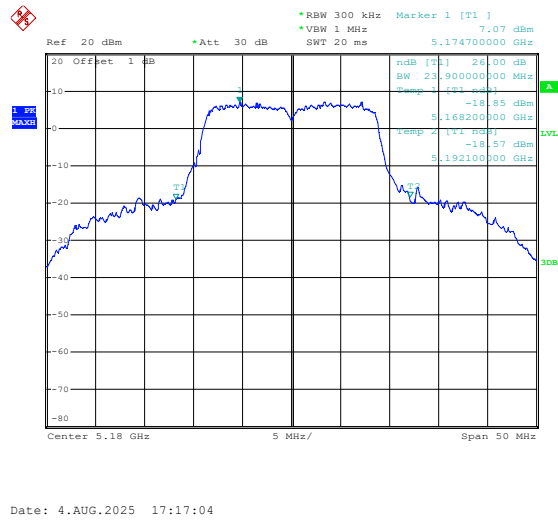
802.11n-HT40-Low

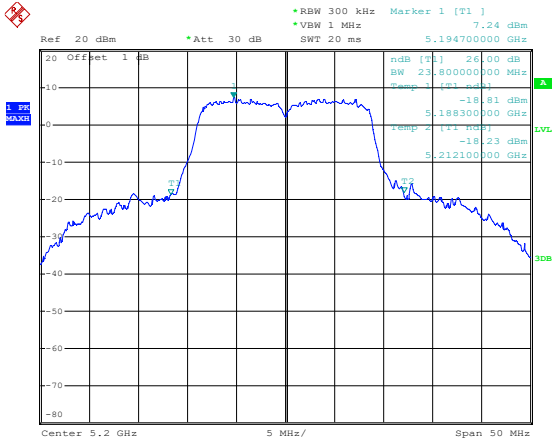
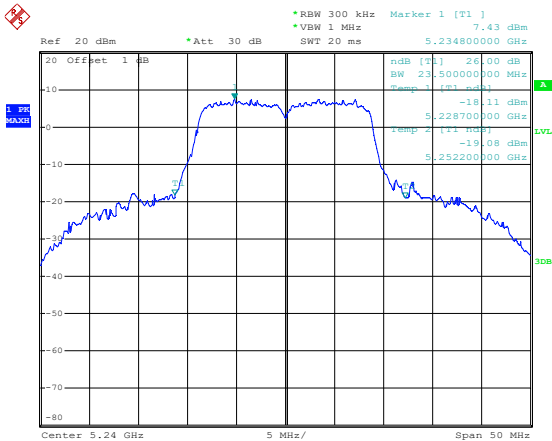
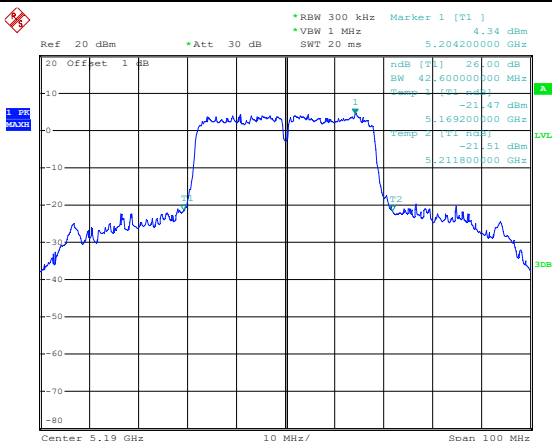


802.11n-HT40-High

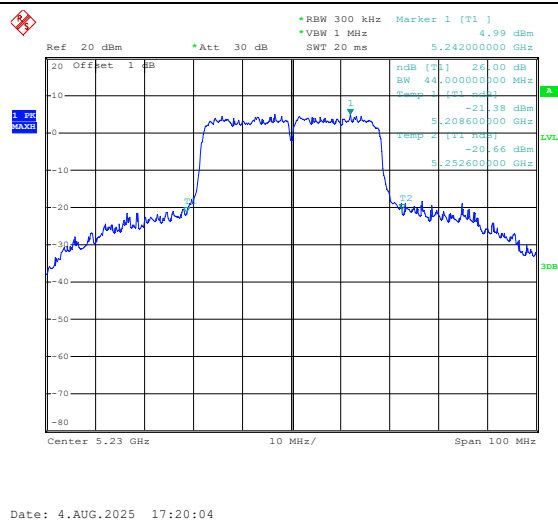


802.11ac-VHT20-Low

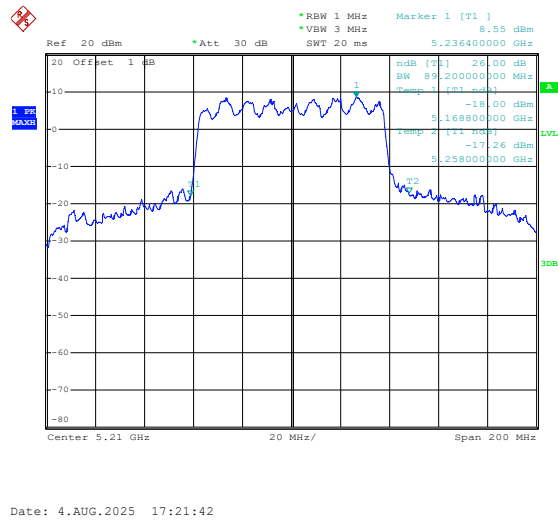


802.11ac-VHT20-Middle	 Ref 20 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1] 7.24 dBm *VBW 1 MHz SWT 20 ms 5.194700000 GHz ndB [T1] 26.00 dB BW 23.50000000 MHz Sweep 1 [T1 5000] -18.81 dBm 5.188300000 GHz Temp 2 [T2 1000] -18.23 dBm 5.212100000 GHz Center 5.2 GHz 5 MHz/ Span 50 MHz Date: 4.AUG.2025 17:17:40
802.11ac-VHT20-High	 Ref 20 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1] 7.43 dBm *VBW 1 MHz SWT 20 ms 5.234800000 GHz ndB [T1] 26.00 dB BW 23.50000000 MHz Sweep 1 [T1 5000] -18.11 dBm 5.228700000 GHz Temp 2 [T2 1000] -19.08 dBm 5.252200000 GHz Center 5.24 GHz 5 MHz/ Span 50 MHz Date: 4.AUG.2025 17:18:09
802.11ac-VHT40-Low	 Ref 20 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1] 4.34 dBm *VBW 1 MHz SWT 20 ms 5.204200000 GHz ndB [T1] 26.00 dB BW 42.60000000 MHz Sweep 1 [T1 5000] -21.47 dBm 5.169200000 GHz Temp 2 [T2 1000] -21.51 dBm 5.211800000 GHz Center 5.19 GHz 10 MHz/ Span 100 MHz Date: 4.AUG.2025 17:19:29

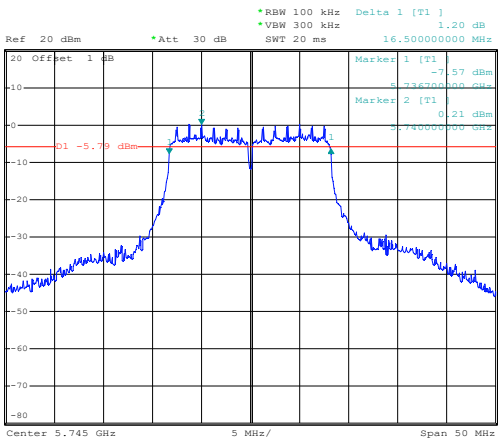
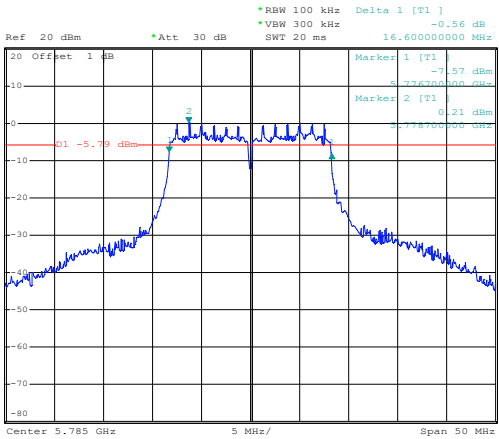
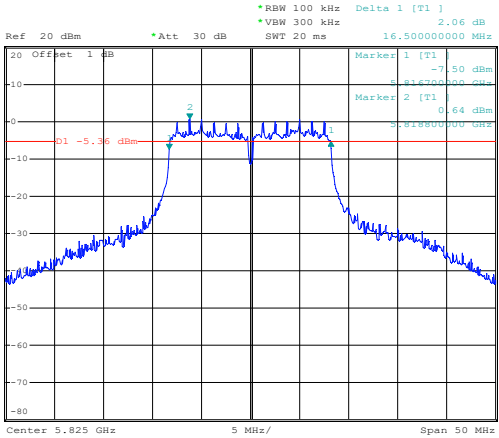
802.11ac-VHT40-High

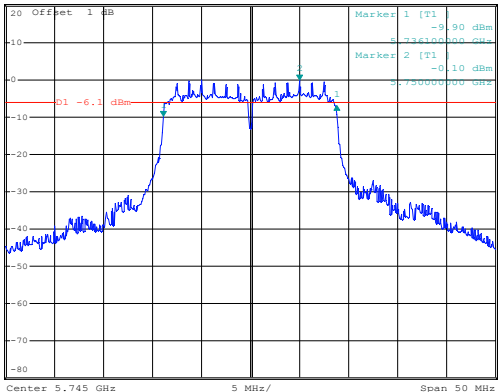
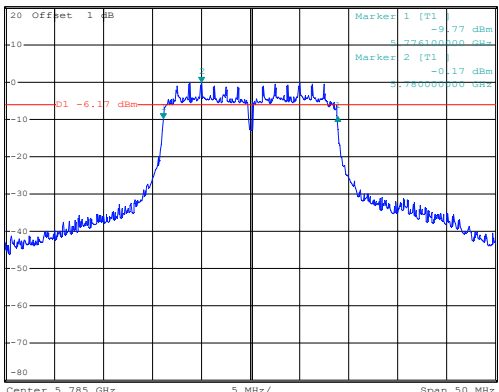
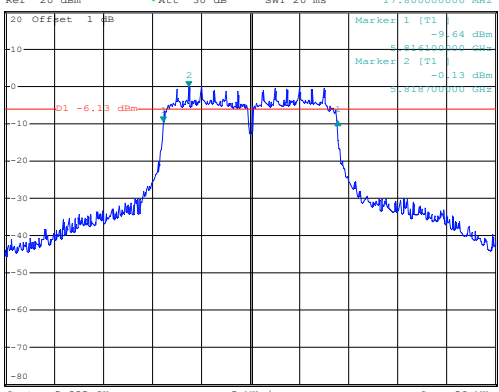


802.11ac-VHT80-Low

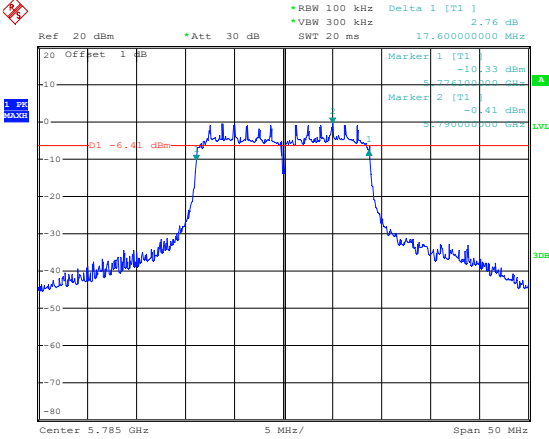
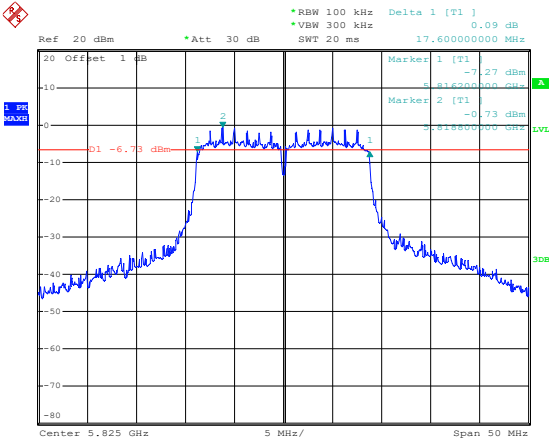
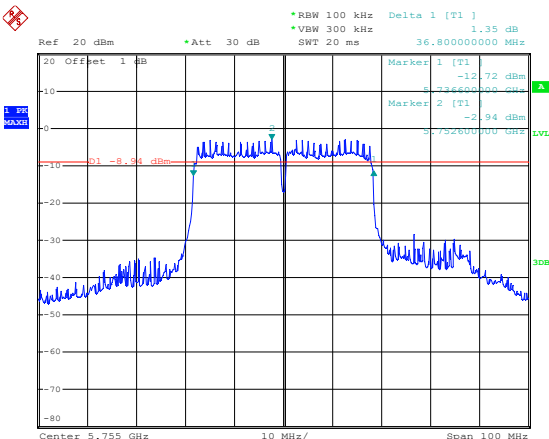


6 dB Bandwidth MHz
5725-5850MHz

802.11a-Low	 Ref 20 dBm *Att 30 dB *RBW 100 kHz Delta 1 [T1] 1.20 dB *VBW 300 kHz SWF 20 ms 16.500000000 MHz Marker 1 [T1] -7.57 dBm Marker 2 [T1] 0.21 dBm 01 -5.79 dBm Center 5.745 GHz 5 MHz/ Span 50 MHz Date: 5.AUG.2025 09:55:14
802.11a-Middle	 Ref 20 dBm *Att 30 dB *RBW 100 kHz Delta 1 [T1] -0.56 dB *VBW 300 kHz SWF 20 ms 16.600000000 MHz Marker 1 [T1] -7.57 dBm Marker 2 [T1] 0.21 dBm 01 -5.79 dBm Center 5.785 GHz 5 MHz/ Span 50 MHz Date: 5.AUG.2025 09:56:15
802.11a-High	 Ref 20 dBm *Att 30 dB *RBW 100 kHz Delta 1 [T1] 2.06 dB *VBW 300 kHz SWF 20 ms 16.500000000 MHz Marker 1 [T1] -7.50 dBm Marker 2 [T1] 0.64 dBm 01 -5.36 dBm Center 5.825 GHz 5 MHz/ Span 50 MHz Date: 5.AUG.2025 09:58:35

802.11n-HT20-Low	 Ref 20 dBm *Att 30 dB *RBW 100 kHz Delta 1 [T1] 3.02 dB *VBW 300 kHz SWT 20 ms 17.700000000 MHz Marker 1 [T1] -9.90 dBm Marker 2 [T1] -0.10 dBm Offset 1 dB Center 5.745 GHz 5 MHz/ Span 50 MHz Date: 5.AUG.2025 09:59:48
802.11n-HT20-Middle	 Ref 20 dBm *Att 30 dB *RBW 100 kHz Delta 1 [T1] 0.54 dB *VBW 300 kHz SWT 20 ms 17.800000000 MHz Marker 1 [T1] -9.77 dBm Marker 2 [T1] -0.17 dBm Offset 1 dB Center 5.785 GHz 5 MHz/ Span 50 MHz Date: 5.AUG.2025 10:01:18
802.11n-HT20-High	 Ref 20 dBm *Att 30 dB *RBW 100 kHz Delta 1 [T1] 0.43 dB *VBW 300 kHz SWT 20 ms 17.800000000 MHz Marker 1 [T1] -9.64 dBm Marker 2 [T1] -0.13 dBm Offset 1 dB Center 5.825 GHz 5 MHz/ Span 50 MHz Date: 5.AUG.2025 10:02:09

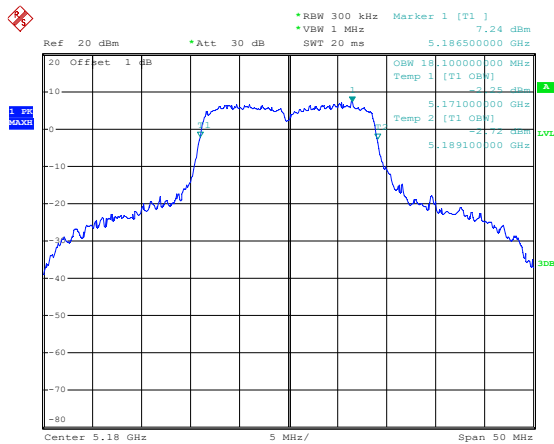
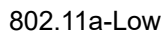
802.11n-HT40-Low	Ref 20 dBm *Att 30 dB SWT 20 ms 36.80000000 MHz Marker 1 [T1] -12.36 dBm 5.75500000 GHz Marker 2 [T1] -3.15 dBm 5.75800000 GHz Center 5.755 GHz 10 MHz/ Span 100 MHz Date: 5.AUG.2025 10:03:36
802.11n-HT40-High	Ref 20 dBm *Att 30 dB SWT 20 ms 36.40000000 MHz Marker 1 [T1] -10.91 dBm 5.79500000 GHz Marker 2 [T1] -2.62 dBm 5.79800000 GHz Center 5.795 GHz 10 MHz/ Span 100 MHz Date: 5.AUG.2025 10:04:30
802.11ac-VHT20-Low	Ref 20 dBm *Att 30 dB SWT 20 ms 17.80000000 MHz Marker 1 [T1] -10.15 dBm 5.74500000 GHz Marker 2 [T1] -0.61 dBm 5.75000000 GHz Center 5.745 GHz 5 MHz/ Span 50 MHz Date: 5.AUG.2025 10:06:26

802.11ac-VHT20-Middle	 Ref 20 dBm *Att 30 dB RBW 100 kHz Delta 1 [T1] 2.76 dB *VBW 300 kHz SWT 20 ms 17.60000000 MHz Marker 1 [T1] -10.33 dBm Marker 2 [T1] -0.41 dBm Center 5.785 GHz 5 MHz/ Span 50 MHz Date: 5.AUG.2025 10:07:40
802.11ac-VHT20-High	 Ref 20 dBm *Att 30 dB RBW 100 kHz Delta 1 [T1] 0.09 dB *VBW 300 kHz SWT 20 ms 17.60000000 MHz Marker 1 [T1] -7.27 dBm Marker 2 [T1] -0.73 dBm Center 5.825 GHz 5 MHz/ Span 50 MHz Date: 5.AUG.2025 10:08:54
802.11ac-VHT40-Low	 Ref 20 dBm *Att 30 dB RBW 100 kHz Delta 1 [T1] 1.35 dB *VBW 300 kHz SWT 20 ms 36.80000000 MHz Marker 1 [T1] -12.72 dBm Marker 2 [T1] -2.94 dBm Center 5.755 GHz 10 MHz/ Span 100 MHz Date: 5.AUG.2025 10:10:57

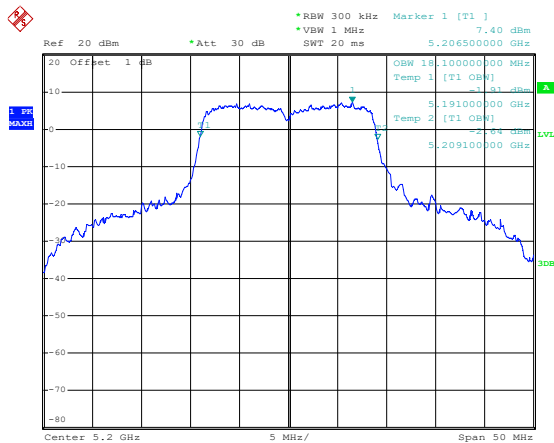
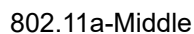
802.11ac-VHT40-High	Date: 5.AUG.2025 10:18:19
802.11ac-VHT80-Low	Date: 5.AUG.2025 10:22:11

99% Bandwidth MHz

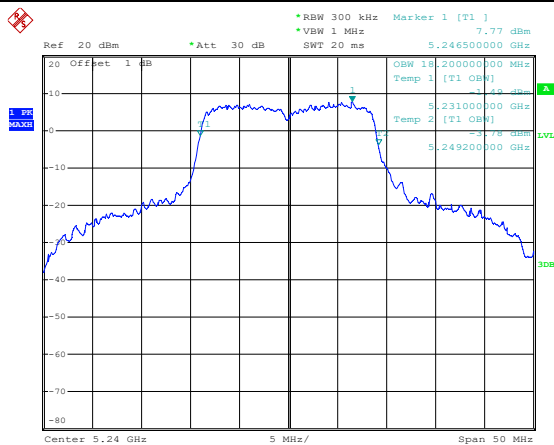
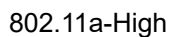
5150-5250MHz



Date: 4.AUG.2025 16:57:12

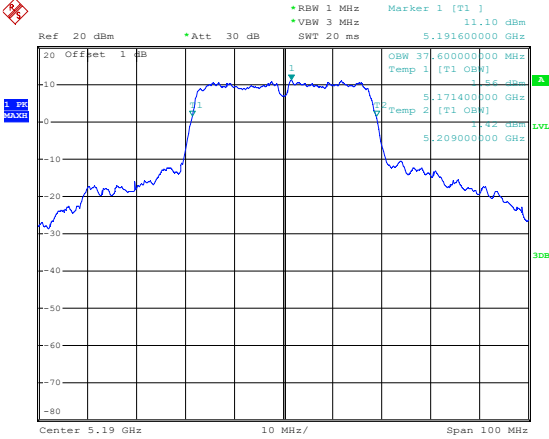
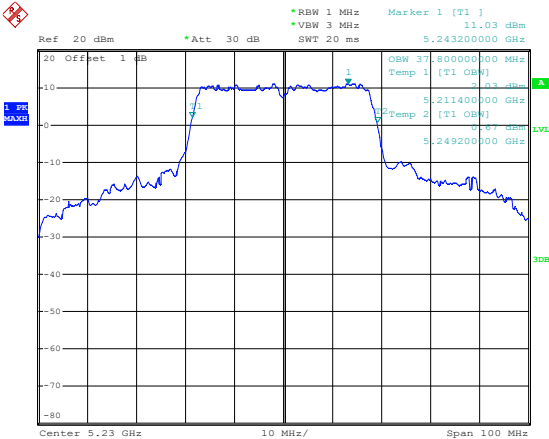
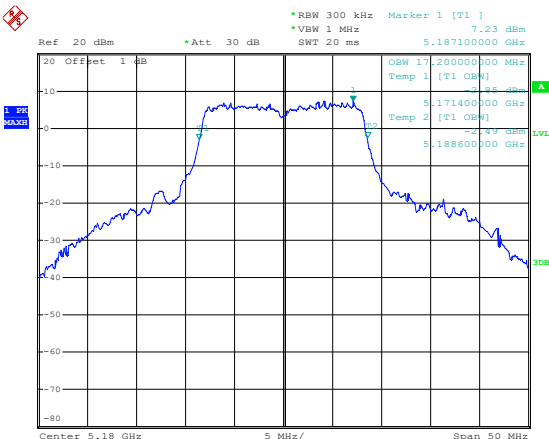


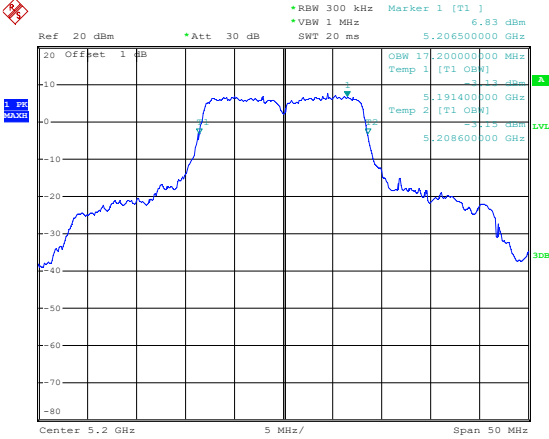
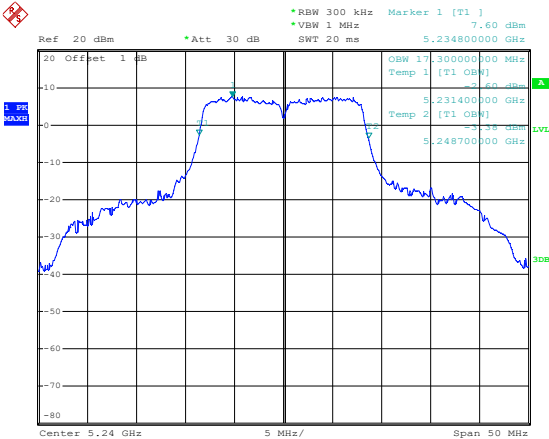
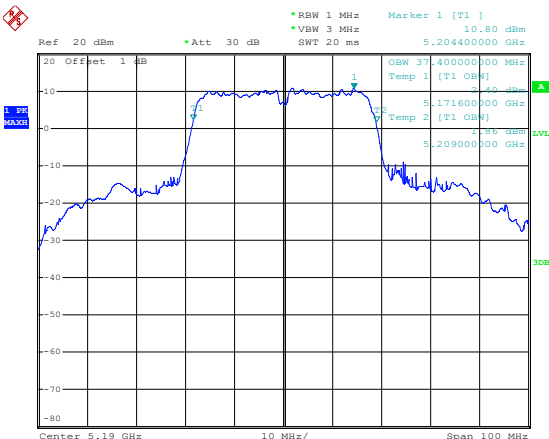
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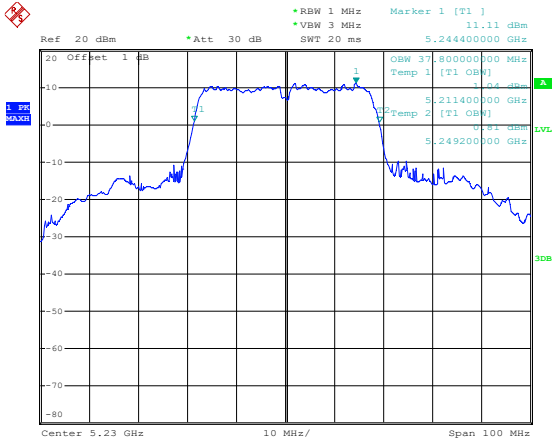
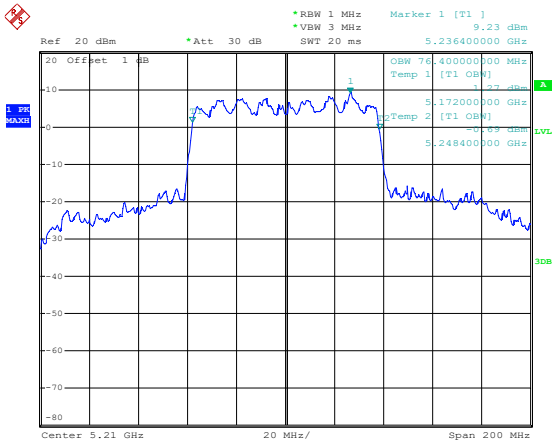


Date: 4.AUG.2025 16:57:58

[illegible]

802.11n-HT40-Low	 Ref 20 dBm *Att 30 dB SWT 20 ms Marker 1 [T1] 11.10 dBm OSW 37.60000000 MHz Temp 1 [T1 OBW] 11.10 dBm 5.171400000 GHz Temp 2 [T1 OBW] 11.10 dBm 5.209000000 GHz Center 5.19 GHz 10 MHz/ Span 100 MHz Date: 4.AUG.2025 16:42:06
802.11n-HT40-High	 Ref 20 dBm *Att 30 dB SWT 20 ms Marker 1 [T1] 11.03 dBm OSW 37.60000000 MHz Temp 1 [T1 OBW] 11.03 dBm 5.211400000 GHz Temp 2 [T1 OBW] 11.03 dBm 5.249200000 GHz Center 5.23 GHz 10 MHz/ Span 100 MHz Date: 4.AUG.2025 16:42:43
802.11ac-VHT20-Low	 Ref 20 dBm *Att 30 dB SWT 20 ms Marker 1 [T1] 7.23 dBm OSW 17.20000000 MHz Temp 1 [T1 OBW] 7.23 dBm 5.171400000 GHz Temp 2 [T1 OBW] 7.23 dBm 5.188600000 GHz Center 5.18 GHz 5 MHz/ Span 50 MHz Date: 4.AUG.2025 16:55:06

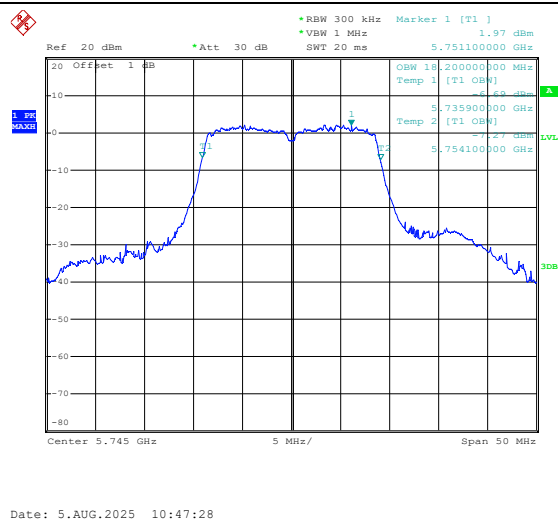
802.11ac-VHT20-Middle	 Date: 4.AUG.2025 16:55:54
802.11ac-VHT20-High	 Date: 4.AUG.2025 16:56:18
802.11ac-VHT40-Low	 Date: 4.AUG.2025 16:50:26

802.11ac-VHT40-High	 Ref: 20 dBm *Att: 30 dB SWT: 20 ms Marker 1 [T1] 11.11 dBm Center 5.23 GHz 10 MHz/ Span 100 MHz Date: 4.AUG.2025 16:51:42
802.11ac-VHT80-Low	 Ref: 20 dBm *Att: 30 dB SWT: 20 ms Marker 1 [T1] 9.23 dBm Center 5.21 GHz 20 MHz/ Span 200 MHz Date: 4.AUG.2025 16:53:08

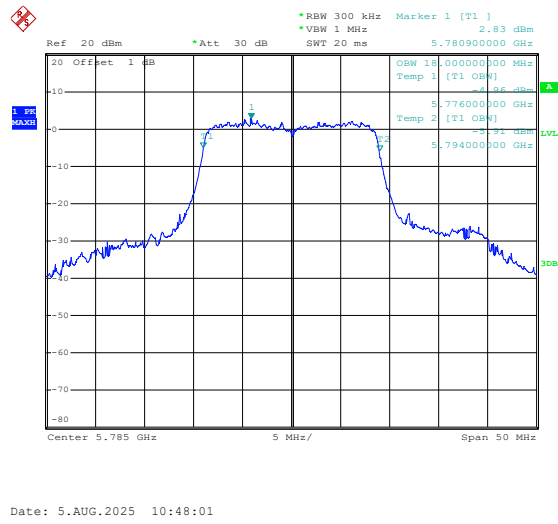
5725-5850MHz

802.11a-Low	Date: 5.AUG.2025 10:25:08
802.11a-Middle	Date: 5.AUG.2025 10:45:37
802.11a-High	Date: 5.AUG.2025 10:46:29

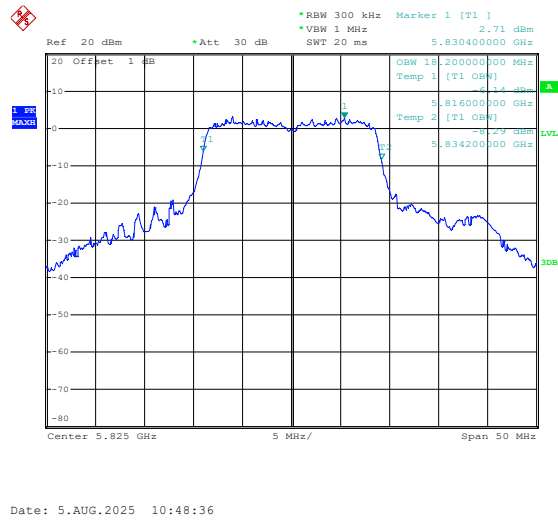
802.11n-HT20-Low

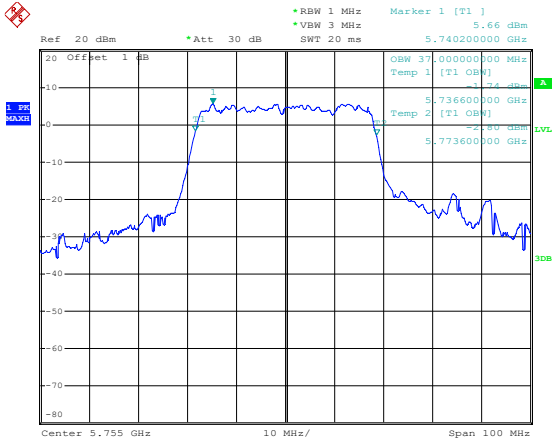
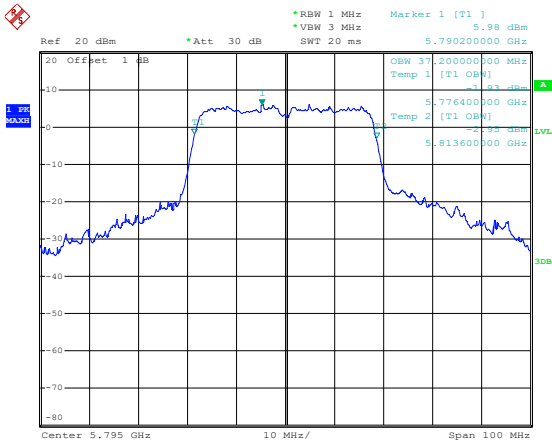
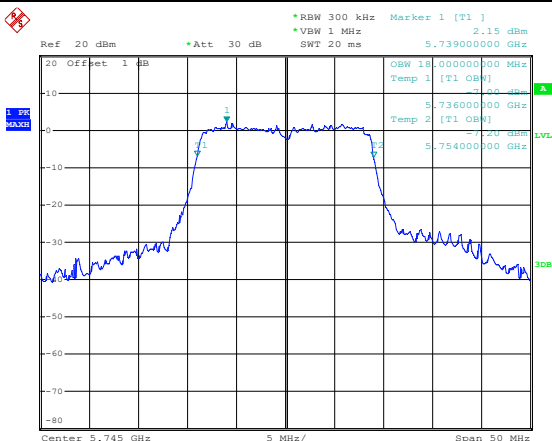


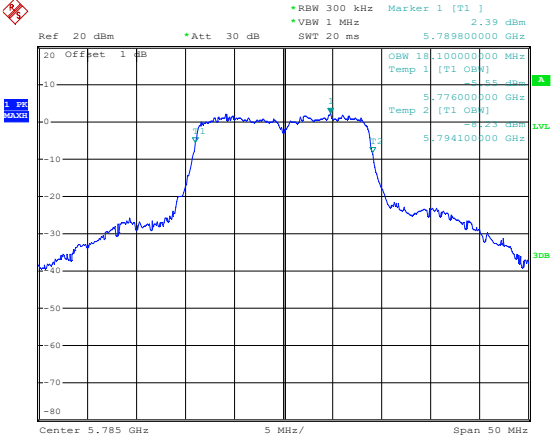
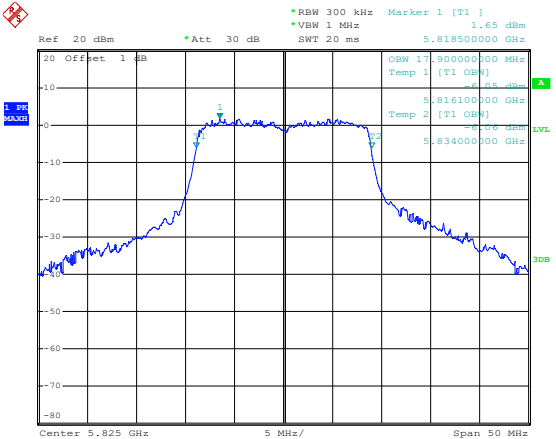
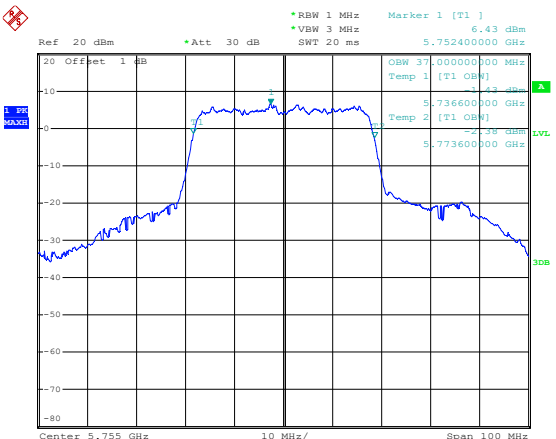
802.11n-HT20-Middle



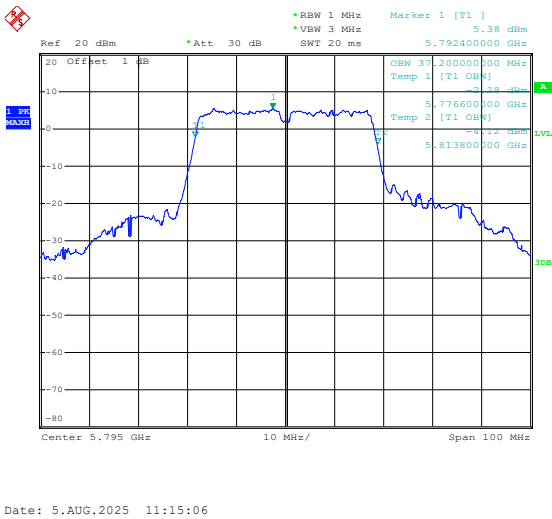
802.11n-HT20-High



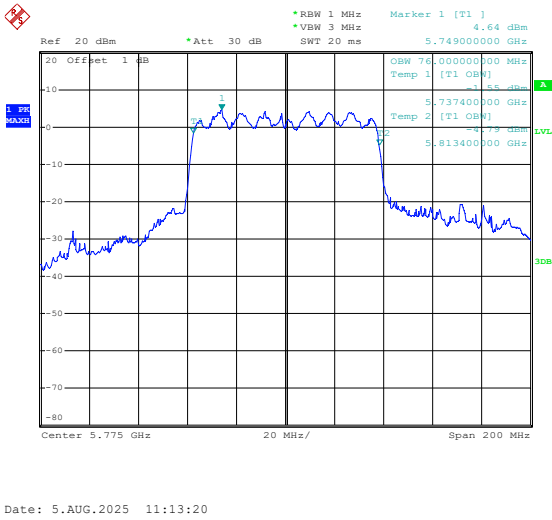
802.11n-HT40-Low	 Ref 20 dBm *Att 30 dB SWT 20 ms 5.740200000 GHz Marker 1 [T1] 5.66 dBm OSW 37.00000000 MHz Temp 1 [T1 OBW] 5.736000000 GHz Temp 2 [T1 OBW] 5.773600000 GHz Center 5.755 GHz 10 MHz/ Span 100 MHz Date: 5.AUG.2025 10:49:35
802.11n-HT40-High	 Ref 20 dBm *Att 30 dB SWT 20 ms 5.790200000 GHz Marker 1 [T1] 5.98 dBm OSW 37.20000000 MHz Temp 1 [T1 OBW] 5.776400000 GHz Temp 2 [T1 OBW] 5.813600000 GHz Center 5.795 GHz 10 MHz/ Span 100 MHz Date: 5.AUG.2025 10:50:01
802.11ac-VHT20-Low	 Ref 20 dBm *Att 30 dB SWT 20 ms 5.739000000 GHz Marker 1 [T1] 2.15 dBm OSW 18.00000000 MHz Temp 1 [T1 OBW] 5.736000000 GHz Temp 2 [T1 OBW] 5.754000000 GHz Center 5.745 GHz 5 MHz/ Span 50 MHz Date: 5.AUG.2025 10:51:05

802.11ac-VHT20-Middle	 Ref 20 dBm *Att 30 dB RBW 300 kHz Marker 1 [T1] 2.39 dBm VSW 1 MHz SWT 20 ms 5.785000000 GHz OSW 18.100000000 MHz Temp 1 [T1 OBW] -5.55 dBm 5.776000000 GHz Temp 2 [T1 OBW] -5.23 dBm 5.794100000 GHz Center 5.785 GHz 5 MHz/ Span 50 MHz Date: 5.AUG.2025 10:51:34
802.11ac-VHT20-High	 Ref 20 dBm *Att 30 dB RBW 300 kHz Marker 1 [T1] 1.65 dBm VSW 1 MHz SWT 20 ms 5.818500000 GHz OSW 17.900000000 MHz Temp 1 [T1 OBW] -5.05 dBm 5.816100000 GHz Temp 2 [T1 OBW] -5.06 dBm 5.834000000 GHz Center 5.825 GHz 5 MHz/ Span 50 MHz Date: 5.AUG.2025 10:52:10
802.11ac-VHT40-Low	 Ref 20 dBm *Att 30 dB RBW 1 MHz Marker 1 [T1] 6.43 dBm VSW 3 MHz SWT 20 ms 5.752400000 GHz OSW 37.000000000 MHz Temp 1 [T1 OBW] -5.43 dBm 5.736600000 GHz Temp 2 [T1 OBW] -2.19 dBm 5.773600000 GHz Center 5.755 GHz 10 MHz/ Span 100 MHz Date: 5.AUG.2025 11:14:28

802.11ac-VHT40-High



802.11ac-VHT80-Low



APPENDIX C

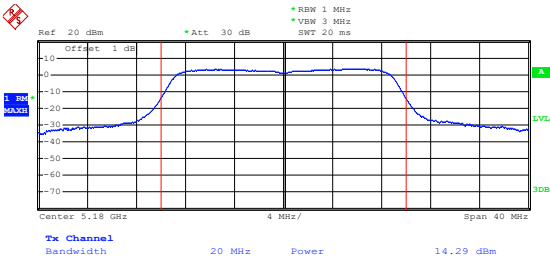
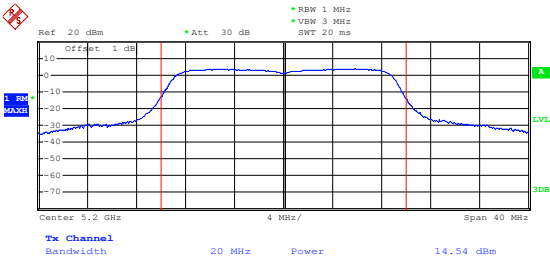
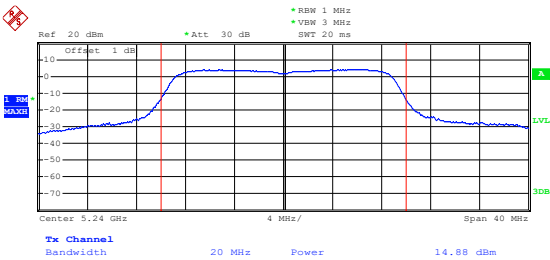
Maximum Conducted Output Power

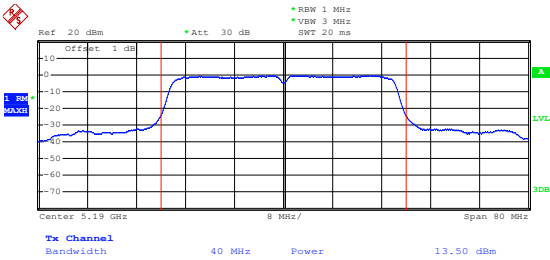
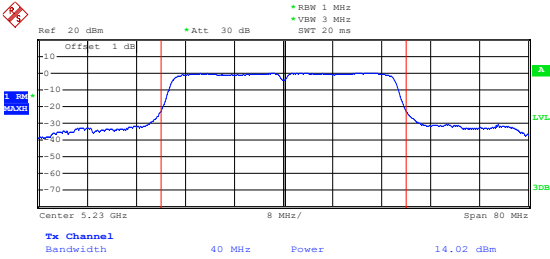
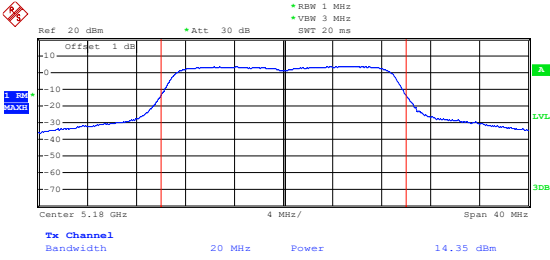
U-NII-1:5150-5250MHz			
Test mode	Frequency MHz	Output Power dBm	Limit dBm
802.11a	5180	15.01	23.98
	5200	15.19	23.98
	5240	15.69	23.98
802.11n-HT20	5180	14.29	23.98
	5200	14.54	23.98
	5240	14.88	23.98
802.11n-HT40	5190	13.50	23.98
	5230	14.02	23.98
802.11ac-VHT20	5180	14.35	23.98
	5200	14.47	23.98
	5240	14.90	23.98
802.11ac-VHT40	5190	13.52	23.98
	5230	14.06	23.98
802.11ac-VHT80	5210	12.95	23.98

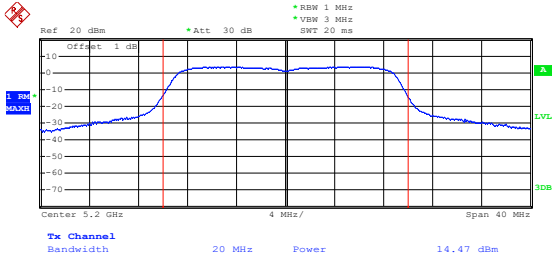
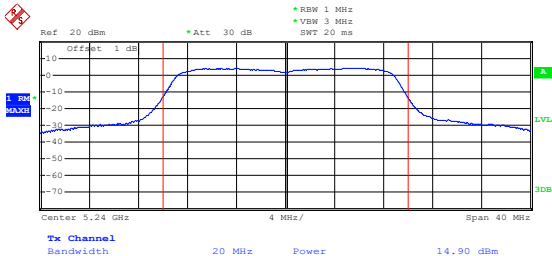
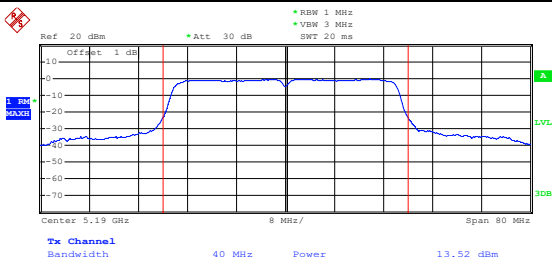
U-NII-3: 5725-5850MHz			
Test mode	Frequency MHz	Output Power dBm	Limit dBm
802.11a	5745	12.97	30.00
	5785	13.35	30.00
	5825	13.88	30.00
802.11n-HT20	5745	12.69	30.00
	5785	13.19	30.00
	5825	13.76	30.00
802.11n-HT40	5755	13.04	30.00
	5795	11.21	30.00
802.11ac-VHT20	5745	10.93	30.00
	5785	10.65	30.00
	5825	11.20	30.00
802.11ac-VHT40	5755	11.13	30.00
	5795	10.96	30.00
802.11ac-VHT80	5775	11.33	30.00

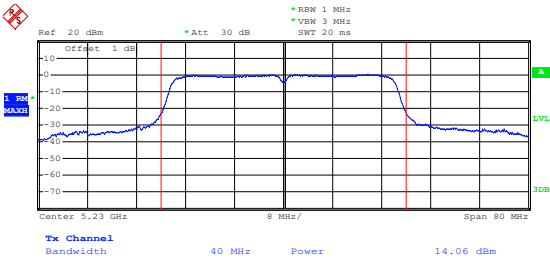
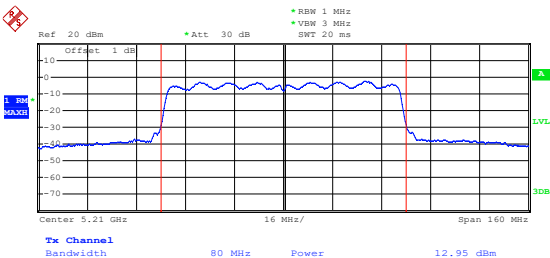
5150-5250MHz

802.11a-Low	Ref: 20 dBm *Att: 30 dB RBW: 1 MHz VBW: 3 MHz SWT: 20 ms Offset: 1 dB Center: 5.18 GHz 4 MHz/ Span: 40 MHz Tx Channel Bandwidth: 20 MHz Power: 15.01 dBm Date: 4.AUG.2025 15:37:47
802.11a-Middle	Ref: 20 dBm *Att: 30 dB RBW: 1 MHz VBW: 3 MHz SWT: 20 ms Offset: 1 dB Center: 5.2 GHz 4 MHz/ Span: 40 MHz Tx Channel Bandwidth: 20 MHz Power: 15.19 dBm Date: 4.AUG.2025 15:38:21
802.11a-High	Ref: 20 dBm *Att: 30 dB RBW: 1 MHz VBW: 3 MHz SWT: 20 ms Offset: 1 dB Center: 5.24 GHz 4 MHz/ Span: 40 MHz Tx Channel Bandwidth: 20 MHz Power: 15.69 dBm Date: 4.AUG.2025 15:38:47

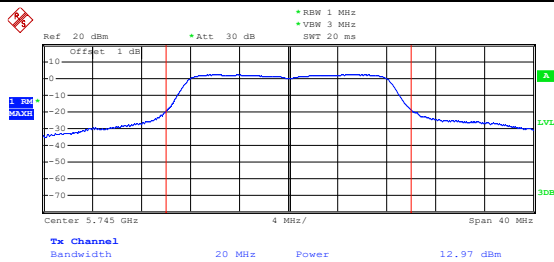
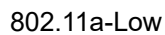
802.11n-HT20-Low	 Date: 4.AUG.2025 15:47:12
802.11n-HT20-Middle	 Date: 4.AUG.2025 15:46:50
802.11n-HT20-High	 Date: 4.AUG.2025 15:46:29

802.11n-HT40-Low	 Date: 4.AUG.2025 15:49:39
802.11n-HT40-High	 Date: 4.AUG.2025 15:50:06
802.11ac-VHT20-Low	 Date: 4.AUG.2025 15:39:45

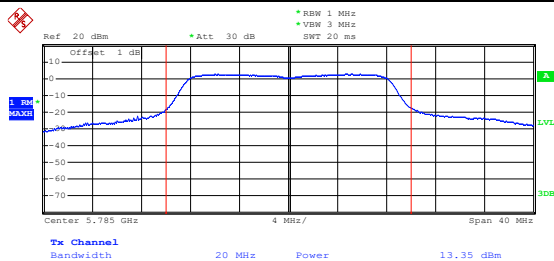
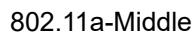
802.11ac-VHT20-Middle	
802.11ac-VHT20-High	
802.11ac-VHT40-Low	

802.11ac-VHT40-High	 Ref 20 dBm *Att 30 dB *RBW 1 MHz *VBW 3 MHz *SWT 20 ms Offset 1 dB Center 5.23 GHz 8 MHz/ Span 80 MHz Tx Channel Bandwidth 40 MHz Power 14.06 dBm Date: 4.AUG.2025 15:51:32
802.11ac-VHT80-Low	 Ref 20 dBm *Att 30 dB *RBW 1 MHz *VBW 3 MHz *SWT 20 ms Offset 1 dB Center 5.21 GHz 16 MHz/ Span 160 MHz Tx Channel Bandwidth 80 MHz Power 12.95 dBm Date: 4.AUG.2025 15:53:16

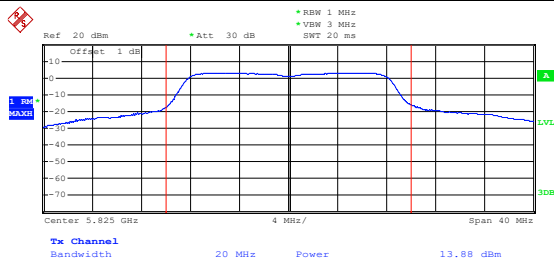
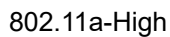
5725-5850MHz



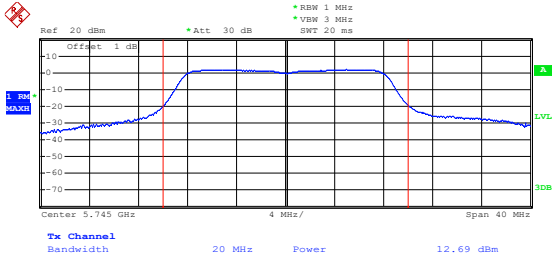
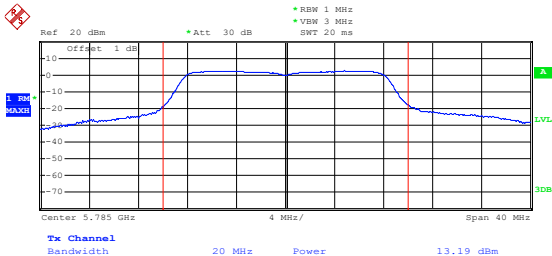
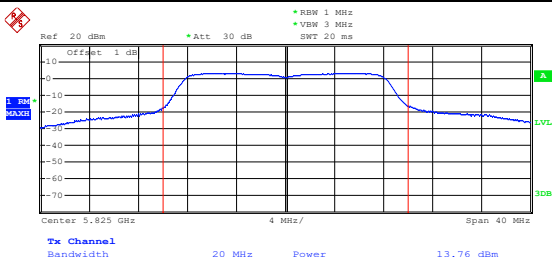
Date: 4.AUG.2025 17:26:27



Date: 4.AUG.2025 17:27:04



Date: 4.AUG.2025 17:27:52

802.11n-HT20-Low	 Ref 20 dBm *Att 30 dB *RBW 1 MHz Offset 1 dB *VBW 3 MHz SWT 20 ms Center 5.745 GHz 4 MHz/ Span 40 MHz Tx Channel Bandwidth 20 MHz Power 12.69 dBm 1.00 V/div A LVL 3dB Date: 4.AUG.2025 17:28:23
802.11n-HT20-Middle	 Ref 20 dBm *Att 30 dB *RBW 1 MHz Offset 1 dB *VBW 3 MHz SWT 20 ms Center 5.785 GHz 4 MHz/ Span 40 MHz Tx Channel Bandwidth 20 MHz Power 13.19 dBm 1.00 V/div A LVL 3dB Date: 4.AUG.2025 17:28:39
802.11n-HT20-High	 Ref 20 dBm *Att 30 dB *RBW 1 MHz Offset 1 dB *VBW 3 MHz SWT 20 ms Center 5.825 GHz 4 MHz/ Span 40 MHz Tx Channel Bandwidth 20 MHz Power 13.76 dBm 1.00 V/div A LVL 3dB Date: 4.AUG.2025 17:28:57

802.11n-HT40-Low	Date: 4.AUG.2025 17:30:13
802.11n-HT40-High	Date: 4.AUG.2025 17:31:41
802.11ac-VHT20-Low	Date: 4.AUG.2025 17:49:18

802.11ac-VHT20-Middle	Date: 4.AUG.2025 17:50:55
802.11ac-VHT20-High	Date: 4.AUG.2025 17:52:24
802.11ac-VHT40-Low	Date: 4.AUG.2025 17:55:01

802.11ac-VHT40-High

Ref 20 dBm

Offset 1 dB

Att 30 dB

RBW 1 MHz

VBW 3 MHz

SNT 20 ms

1. PR

MAX

10

-10

-20

-30

-40

-50

-60

-70

Center 5.795 GHz

8 MHz/

Span 80 MHz

Tx Channel

Bandwidth 40 MHz

Power 10.96 dBm

A

LVL

30B

Date: 4.AUG.2025 17:57:12

802.11ac-VHT80-Low

Ref 20 dBm

Offset 1 dB

Att 30 dB

RBW 1 MHz

VBW 3 MHz

SNT 20 ms

1. PR

MAX

10

-10

-20

-30

-40

-50

-60

-70

Center 5.775 GHz

16 MHz/

Span 160 MHz

Tx Channel

Bandwidth 80 MHz

Power 11.33 dBm

A

LVL

30B

Date: 4.AUG.2025 17:59:55

APPENDIX D

Frequency Stability

U-NII-1:5150-5250MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VDC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	5.0	-30	496	0.095
100%		-20	502	0.096
100%		-10	497	0.096
100%		0	505	0.097
100%		+10	505	0.097
100%		+20	497	0.096
100%		+30	502	0.097
100%		+40	495	0.095
100%		+50	502	0.097
Low Battery power	4.5	+20	495	0.095
High Battery power	5.5	+20	505	0.097

U-NII-1:5725-5850MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VDC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	5.0	-30	500	0.086
100%		-20	501	0.087
100%		-10	505	0.087
100%		0	495	0.086
100%		+10	500	0.086
100%		+20	498	0.086
100%		+30	498	0.086
100%		+40	499	0.086
100%		+50	495	0.086
Low Battery power	4.5	+20	497	0.086
High Battery power	5.5	+20	500	0.086

APPENDIX PHOTOGRAPHS

Please refer to “ANNEX”

***** END OF REPORT *****