

TEST REPORT

Reference No..... : WTX21X12136503W-5
FCC ID : YHLBLUF91
Applicant : BLU Products Inc.
Address : 10814 NW 33rd St # 100 Doral, FL 33172,USA
Product Name : Smart Phone
Test Model. : F91 5G
Standards : FCC Part 15.407
Date of Receipt sample : Dec. 08, 2021
Date of Test..... : Dec. 08, 2021 to Jan.19, 2022
Date of Issue : Jan.19, 2022
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 compiler and approver.

Prepared By:

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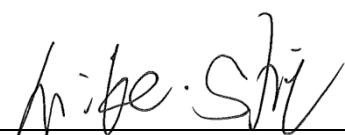
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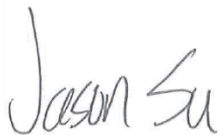
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Report version

Version No.	Date of issue	Description
Rev.00	Jan.19, 2022	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: BLU Products Inc.
 Address of applicant: 10814 NW 33rd St # 100 Doral, FL 33172,USA

Manufacturer: BLU Products Inc.
 Address of manufacturer: 10814 NW 33rd St # 100 Doral, FL 33172,USA

General Description of EUT	
Product Name:	Smart Phone
Trade Name:	BLU
Model No.:	F91 5G
Adding Model(s):	/
Rated Voltage:	DC3.85V
Battery Capacity:	5000mAh(C886549500P)
Power Adapter:	US-KB-2009 INPUT:AC100-240V, 50/60Hz, 0.6A Output:DC9V, 2000mA
Software Version:	BLU_F0030UU_V11.0.02.01_GENERIC_20211130_1144
Hardware Version:	KF5F-02
<i>Note: The test data is gathered from a production sample, provided by the manufacturer.</i>	

Technical Characteristics of EUT	
Support Standards:	802.11a, 802.11n(HT20) , 802.11n-HT40, 802.11ac-VHT80
Frequency Range:	5150-5250MHz, 5250-5350MHz, 5470-5725MHz, 5725-5850MHz
RF Output Power:	13.08dBm (Conducted)
Type of Modulation:	BPSK, QPSK,16QAM,64QAM
Type of Antenna:	Integral Antenna
Antenna Gain:	0.6dBi
<i>Note: The Antenna Gain is provided by the customer.</i>	

1.2 Test Standards

The tests were performed according to following standards:

FCC Rules Part 15.407: General technical requirements.

ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.

KDB789033 D02 v02r01: Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-Nii) Devices Part 15, Subparte.

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

1.3 Test Methodology

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

1.4 Table for parameters of Test Software setting

Enter “3646631+=” into the calculator to enter the engineer mode, you can start to test. During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Mode	Test Frequency (MHz)												
	NCB: 20MHz												
	5180	5200	5240	5260	5300	5320	5500	5580	5700	5720	5745	5785	5825
802.11a 6Mbps	16	16	16	15	15	15	15	15	15	15	14	14	14
802.11n-HT20 MCS0	15	15	15	14	14	14	14	14	14	15	13	13	13
Mode	NCB: 40MHz												
	5190	5230	5270	5310	5510	5550	5670	5710	5755	5795			
802.11n-HT40 MCS0	14	14	13	13	13	12	12	12	12	12			
Mode	NCB: 80MHz												
	5210	5290	5530	5610	5690	5775							
802.11ac-VH80 MCS0/Nss2	13	13	13	13	13	12							

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.

1.7 EUT Setup and Test Mode

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

Test Mode List		
Test Mode	Description	Remark
TM1	802.11a	5180MHz,5200MHz,5240MHz,5260MHz,5280MHz,5320MHz,5500MHz,5600MHz,5700MHz,5745MHz, 5785MHz,5825MHz
TM2	802.11n-HT20	5180MHz,5200MHz,5240MHz,5260MHz,5280MHz,5320MHz,5500MHz,5600MHz,5700MHz,5745MHz, 5785MHz,5825MHz
TM3	802.11n-HT40	5190MHz,5230MHz,5270MHz,5310MHz,5510MHz,5590MHz,5670MHz,5755MHz,5795MHz
TM4	802.11ac-VH80	5210MHz,5290MHz,5530MHz,5610MHz,5775MHz
Note: 802.11ac-VHT20, 802.11ac-VHT40 covered by 802.11n-HT20 an802.11n-HT40.		

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

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
USB Cable	1.04	Shielded	Without Ferrite
DC Cable	1.2	Unshielded	Without Ferrite

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

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
/	/	/	/

1.8 Measurement Uncertainty

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

1.9 Test Equipment List and Details

No.	Description	Manufacturer	Model	Serial No.	Cal Date	Due. Date
SEMT-1075	Communication Tester	Rohde & Schwarz	CMW500	148650	2021-03-27	2022-03-26
SEMT-1063	GSM Tester	Rohde & Schwarz	CMU200	114403	2021-03-27	2022-03-26
SEMT-1072	Spectrum Analyzer	Agilent	E4407B	MY41440400	2021-03-27	2022-03-26
SEMT-1079	Spectrum Analyzer	Agilent	N9020A	US47140102	2021-03-27	2022-03-26
SEMT-1080	Signal Generator	Agilent	83752A	3610A01453	2021-03-27	2022-03-26
SEMT-1081	Vector Signal Generator	Agilent	N5182A	MY47070202	2021-03-27	2022-03-26
SEMT-1028	Power Divider	Weinschel	1506A	PM204	2021-03-27	2022-03-26
SEMT-1082	Power Divider	RF-Lambda	RFLT4W5M18G	14110400027	2021-03-27	2022-03-26
SEMT-C001	Cable	Zheng DI	LL142-07-07-10M(A)	/	/	/
SEMT-C002	Cable	Zheng DI	ZT40-2.92J-2.92J-6M	/	/	/
SEMT-C003	Cable	Zheng DI	ZT40-2.92J-2.92J-2.5M	/	/	/
SEMT-C004	Cable	Zheng DI	2M0RFC	/	/	/
SEMT-C005	Cable	Zheng DI	1M0RFC	/	/	/
SEMT-C006	Cable	Zheng DI	1M0RFC	/	/	/
<input checked="" type="checkbox"/> Chamber A: Below 1GHz						
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2021-03-27	2022-03-26
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2021-03-27	2022-03-26
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2021-04-12	2022-04-11
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2021-03-19	2023-03-18
SEMT-1068	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2021-03-19	2023-03-18
<input checked="" type="checkbox"/> Chamber A: Above 1GHz						
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2021-03-27	2022-03-26
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2021-03-27	2022-03-26
SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2021-04-12	2022-04-11
SEMT-1042	Horn Antenna	ETS	3117	00086197	2021-03-19	2023-03-18
SEMT-1121	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA91705	2021-04-27	2023-04-26

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SEMT-1169	Pre-amplifier	Direction Systems Inc.	PAP-2640	14145-14153	2021-04-27	2022-04-26
SEMT-1163	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2021-03-27	2022-03-26
SEMT-1166	Power Limiter	Agilent	N9356B	MY45450376	2021-03-27	2022-03-26
<input type="checkbox"/> Chamber B: Below 1GHz						
SEMT-1068	Trilog Broadband Antenna	Schwarz beck	VULB9163(B)	9163-635	2021-04-09	2023-04-08
SEMT-1067	Amplifier	Agilent	8447D	2944A10179	2021-04-12	2022-04-11
SEMT-1066	EMI Test Receiver	Rohde & Schwarz	ESPI	101391	2021-05-06	2022-05-05
<input type="checkbox"/> Chamber C: Below 1GHz						
SEMT-1319	EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2021-12-03	2022-12-02
SEMT-1343	Trilog Broadband Antenna	Schwarz beck	VULB 9168	1194	2021-05-28	2023-05-27
SEMT-1333	Amplifier	HP	8447F	2944A03869	2021-04-15	2022-04-14
<input checked="" type="checkbox"/> Conducted Room 1#						
SEMT-1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2021-04-12	2022-04-11
SEMT-1002	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2021-04-15	2022-04-14
SEMT-1003	AC LISN	Schwarz beck	NSLK8126	8126-224	2021-04-12	2022-04-11
<input type="checkbox"/> Conducted Room 2#						
SEMT-1334	EMI Test Receiver	Rohde & Schwarz	ESPI	101259	2021-04-12	2022-04-11
SEMT-1336	LISN	Rohde & Schwarz	ENV 216	100097	2021-04-12	2022-04-11

Software List			
Description	Manufacturer	Model	Version
EMI Test Software (Radiated Emission)*	Farad	EZ-EMC	RA-03A1
EMI Test Software (Conducted Emission)*	Farad	EZ-EMC	RA-03A1

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

Waltek Testing Group (Shenzhen) Co., Ltd.

[Http://www.waltek.com.cn](http://www.waltek.com.cn)

2. SUMMARY OF TEST RESULTS

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

N/A: Not applicable.

3. Antenna Requirement

3.1 Standard Applicable

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

3.2 Evaluation Information

This product has an integral 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 (< 1MHz, or < 500kHz) and integrated over 1 MHz, or 500kHz bandwidth, the following adjustments to the procedures apply:

- a) Set $RBW \geq 1/T$, where T is defined in section II.B.1.a).
- b) Set $VBW \geq 3 RBW$.
- c) If measurement bandwidth of Maximum PSD is specified in 500kHz, add $10\log(500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500\text{kHz})$ 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 $10\log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1\text{MHz})$ 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 $RBW=100\text{kHz}$ 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 $\geq 3 * RBW$
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

6.3 Summary of Test Results/Plots

Please refer to Appendix B

7. Maximum Conducted Output Power

7.1 Standard Applicable

Section 15.407(a) Power limits:

(1) For the band 5.15-5.25GHz.

(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.)

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- (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.
789033 D02 v02r01 General UNII Test Procedures New Rules v01

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

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

where:

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

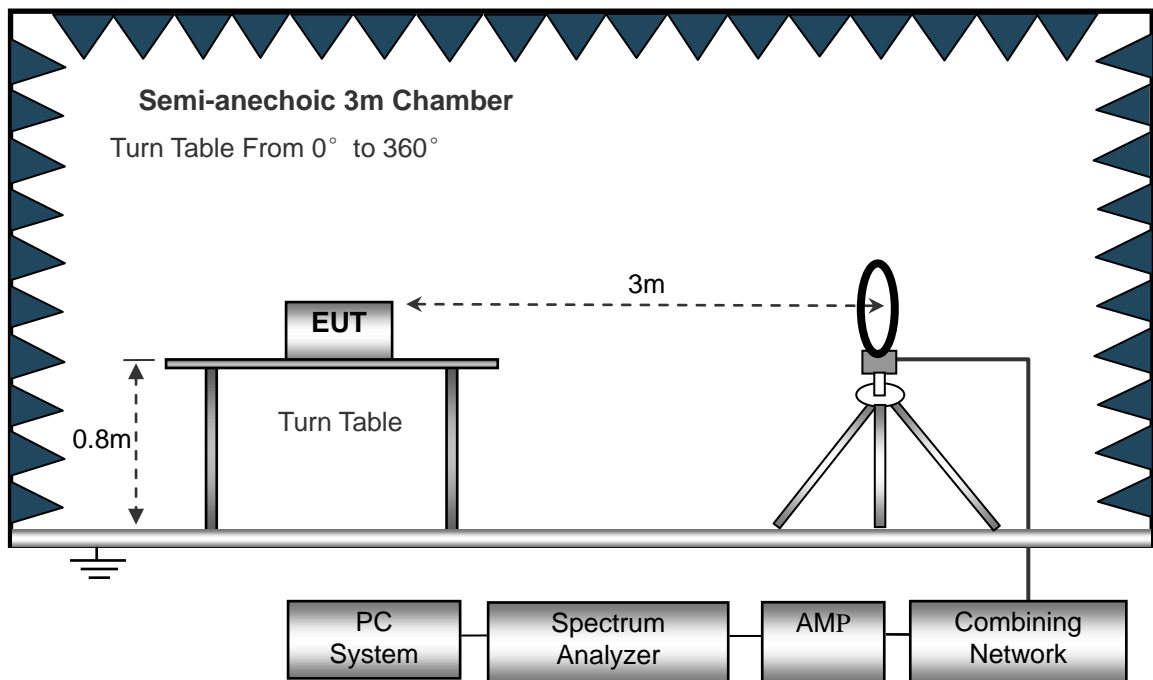
8.2 Test Procedure

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

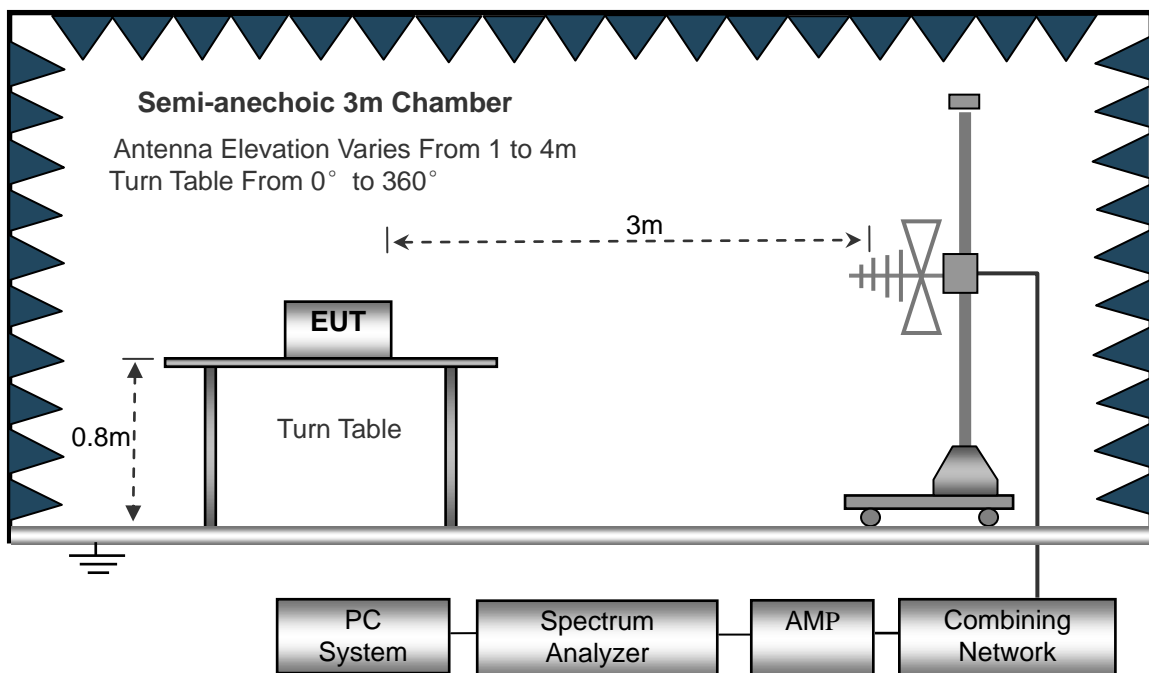
The external I/O cables were draped along the test table and formed a bundle 30 to 40cm long in the middle.

The spacing between the peripherals was 10cm.

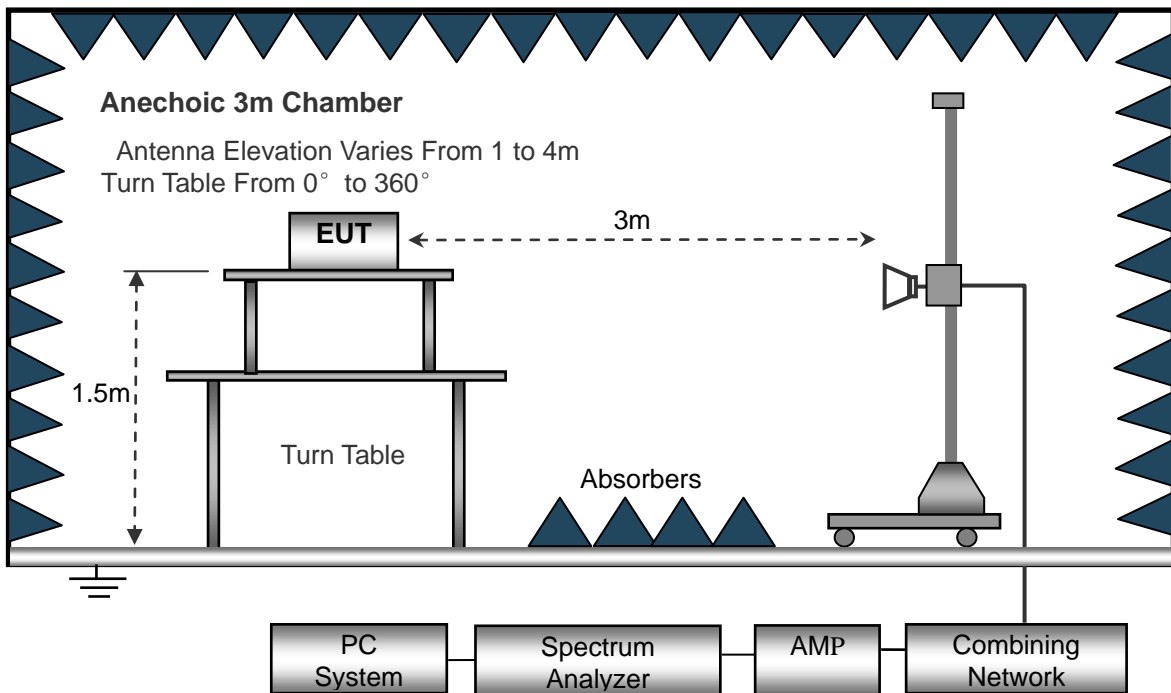
The test setup for emission measurement below 30MHz.



The test setup for emission measurement from 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:

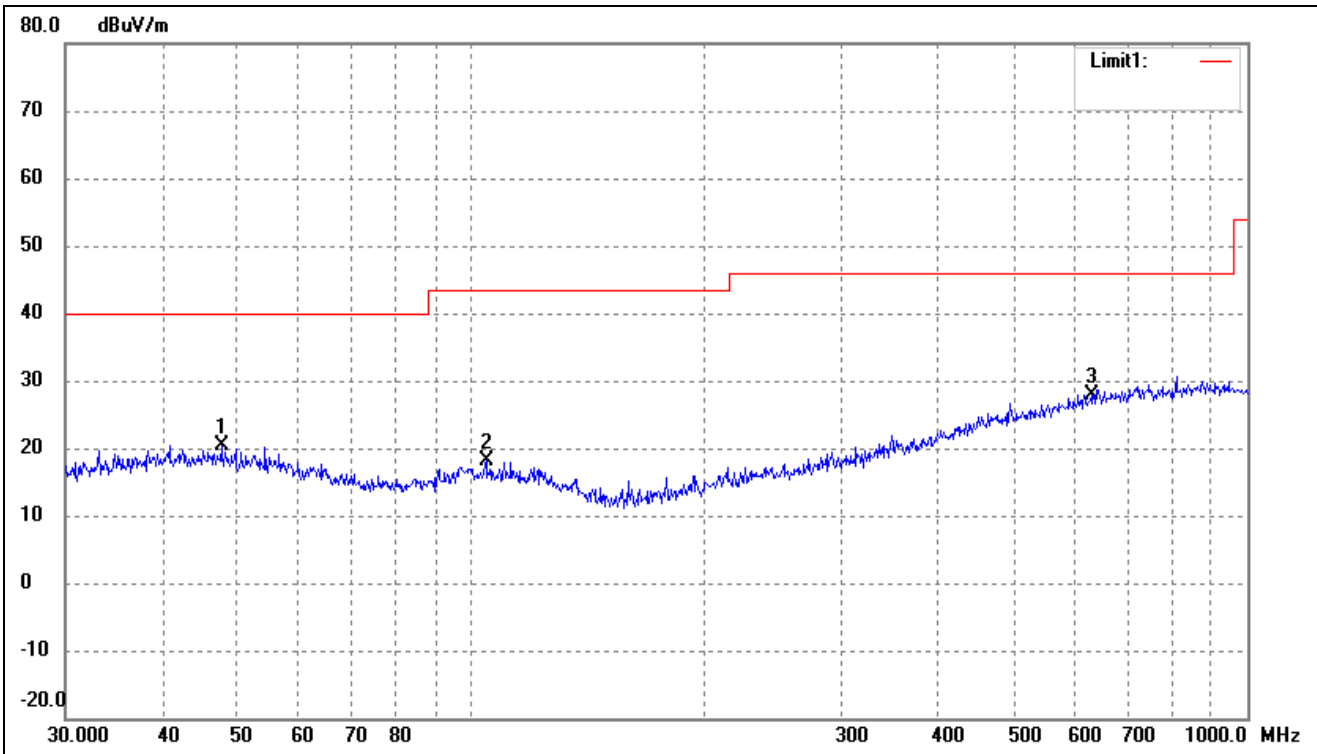
$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15 Limit}$$

8.5 Summary of Test Results/Plots

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

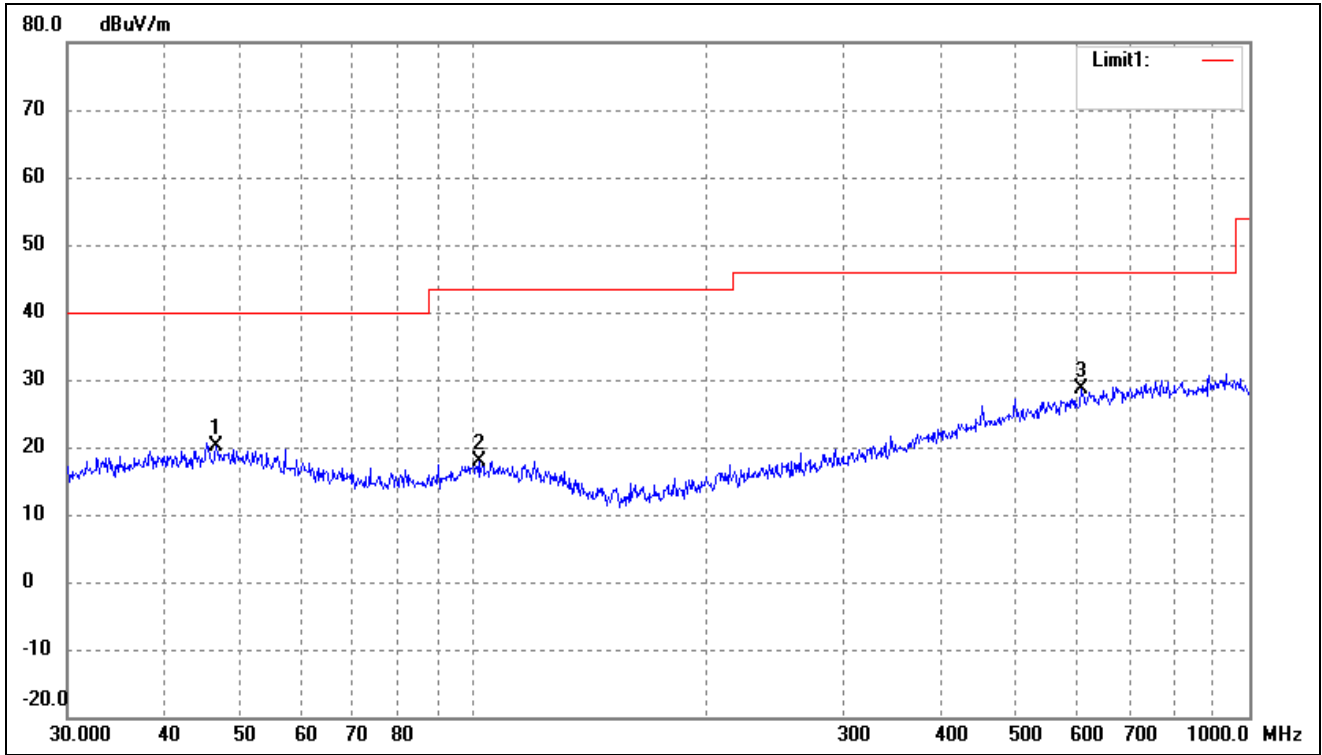
- Spurious Emission From 30MHz to 1GHz
- 5150-5250MHz

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



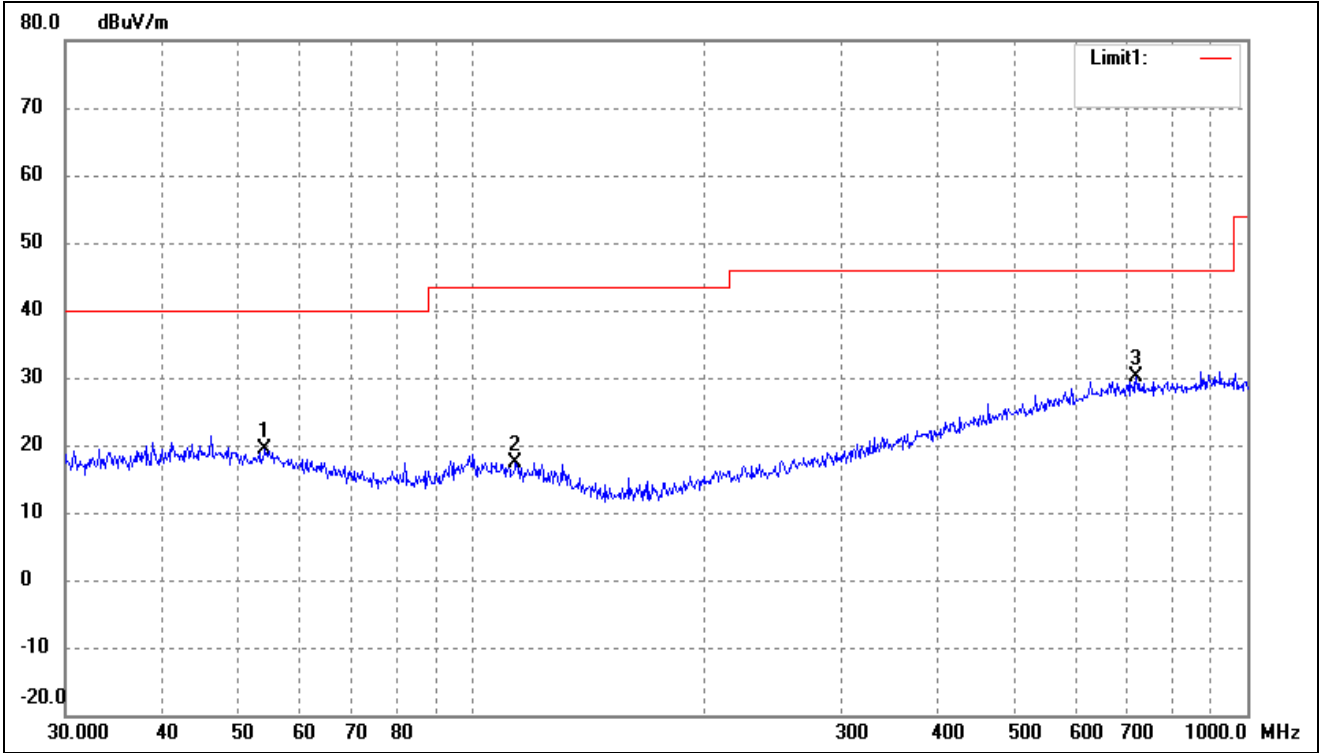
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	47.6586	27.37	-6.97	20.40	40.00	-19.60	-	-	peak
2	104.5361	26.87	-8.79	18.08	43.50	-25.42	-	-	peak
3	629.4772	27.28	0.69	27.97	46.00	-18.03	-	-	peak

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



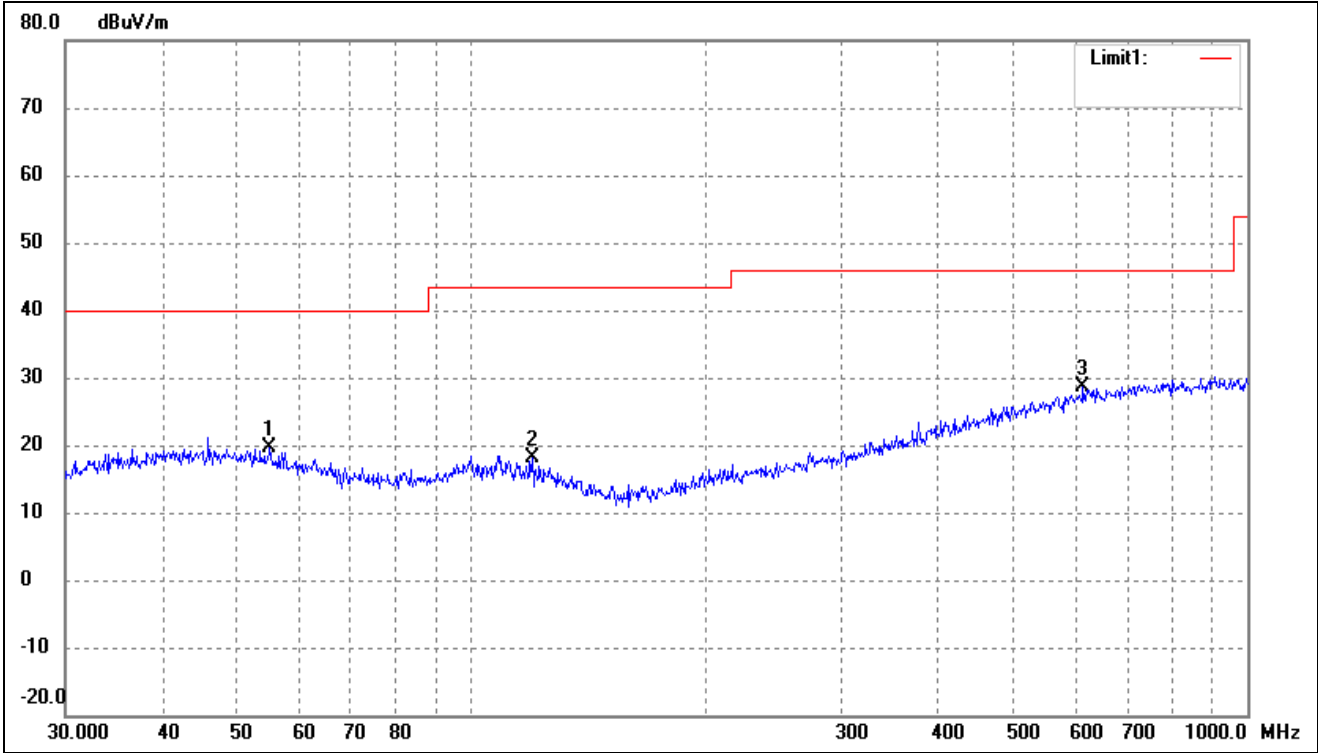
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	46.6664	27.13	-6.98	20.15	40.00	-19.85	-	-	peak
2	101.6443	26.54	-8.75	17.79	43.50	-25.71	-	-	peak
3	607.7867	28.07	0.46	28.53	46.00	-17.47	-	-	peak

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



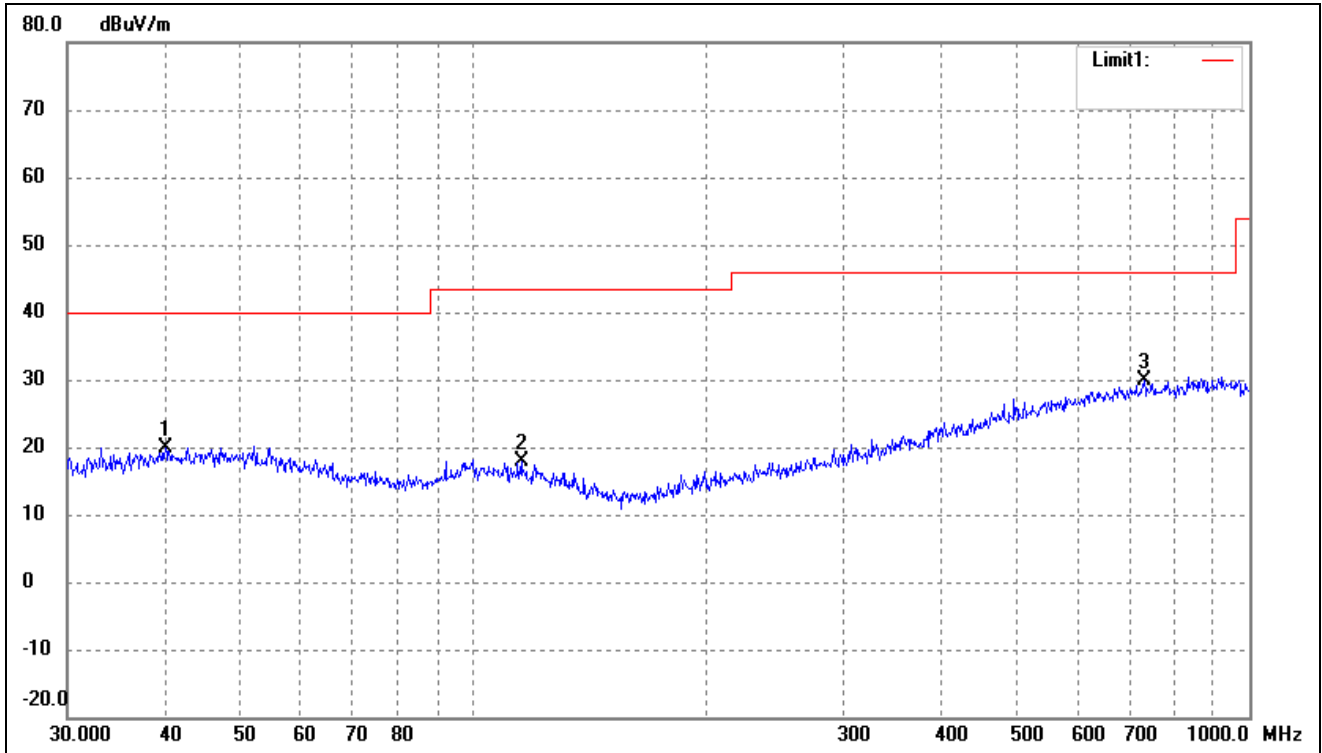
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	54.2610	26.94	-7.59	19.35	40.00	-20.65	-	-	peak
2	114.1138	26.55	-9.17	17.38	43.50	-26.12	-	-	peak
3	719.1995	28.56	1.55	30.11	46.00	-15.89	-	-	peak

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



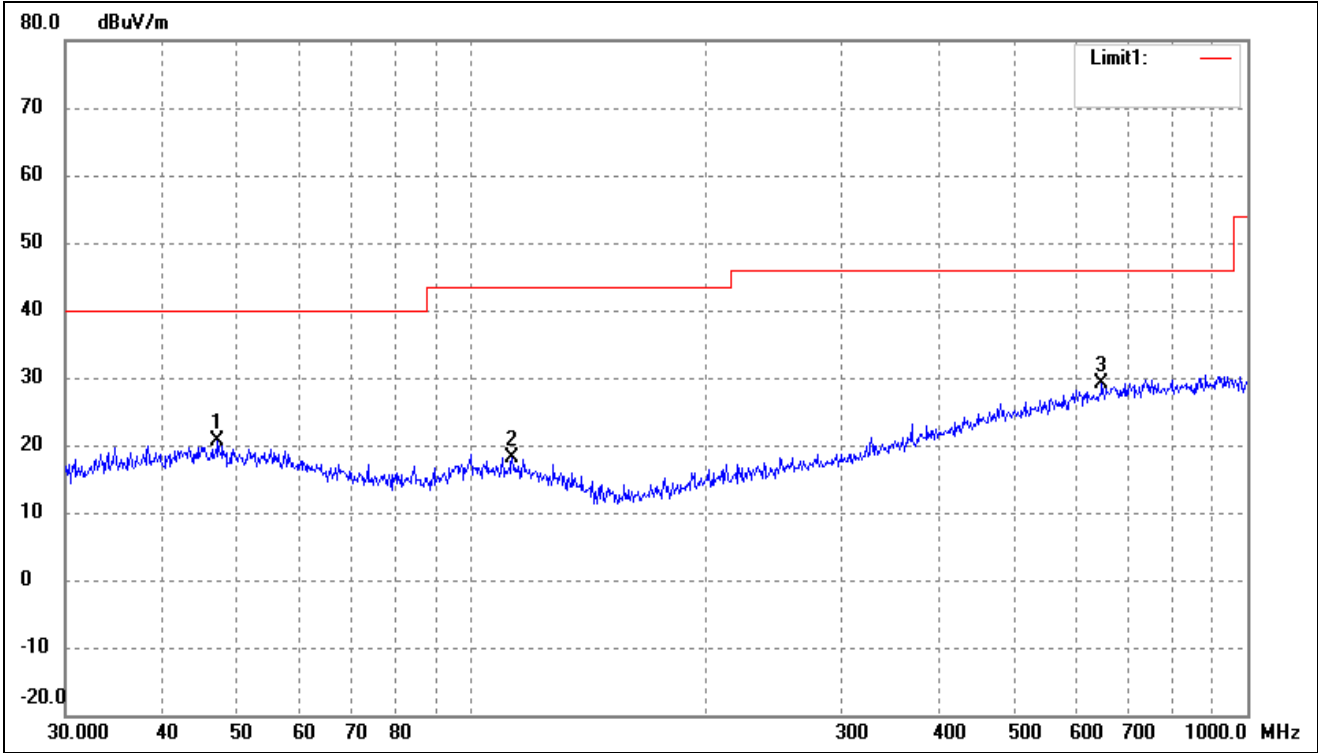
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	55.0274	27.22	-7.69	19.53	40.00	-20.47	-	-	peak
2	119.8556	27.60	-9.59	18.01	43.50	-25.49	-	-	peak
3	614.2142	28.05	0.53	28.58	46.00	-17.42	-	-	peak

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



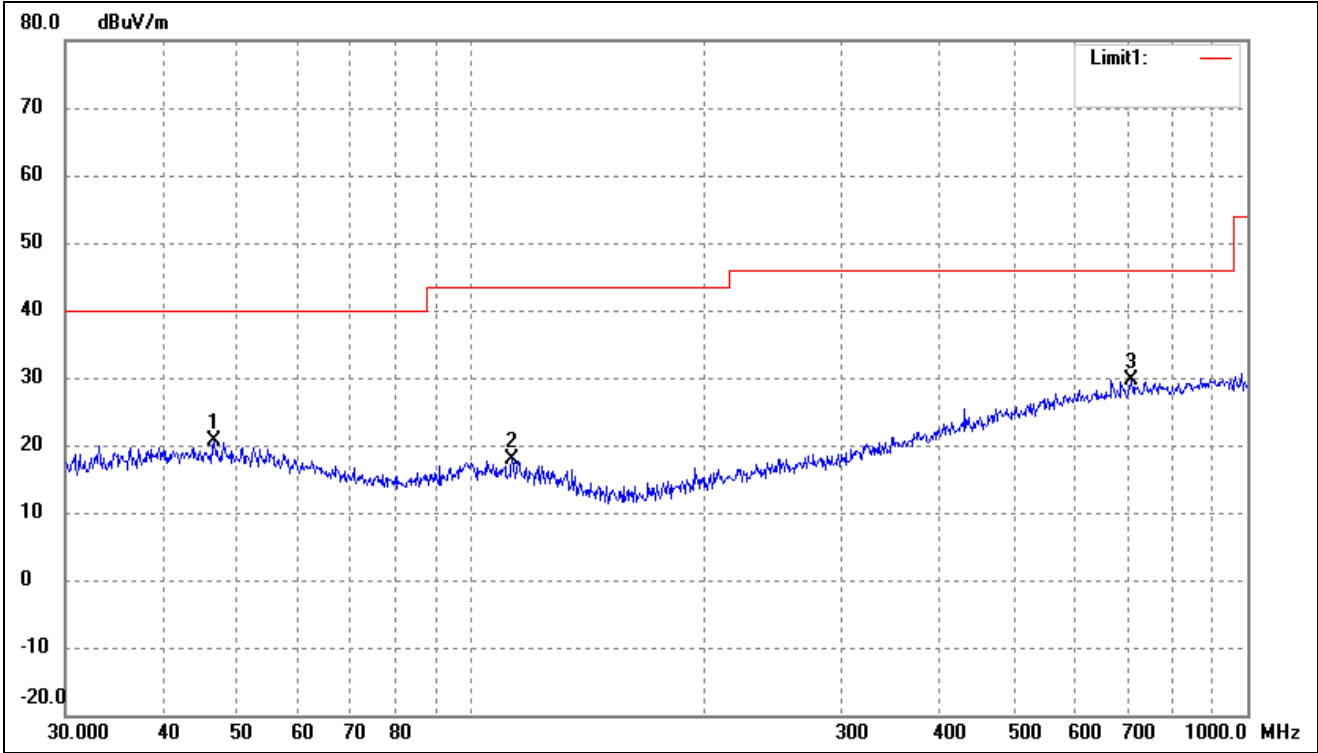
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	40.1347	26.96	-7.00	19.96	40.00	-20.04	-	-	peak
2	115.3205	27.11	-9.26	17.85	43.50	-25.65	-	-	peak
3	731.9203	28.35	1.63	29.98	46.00	-16.02	-	-	peak

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



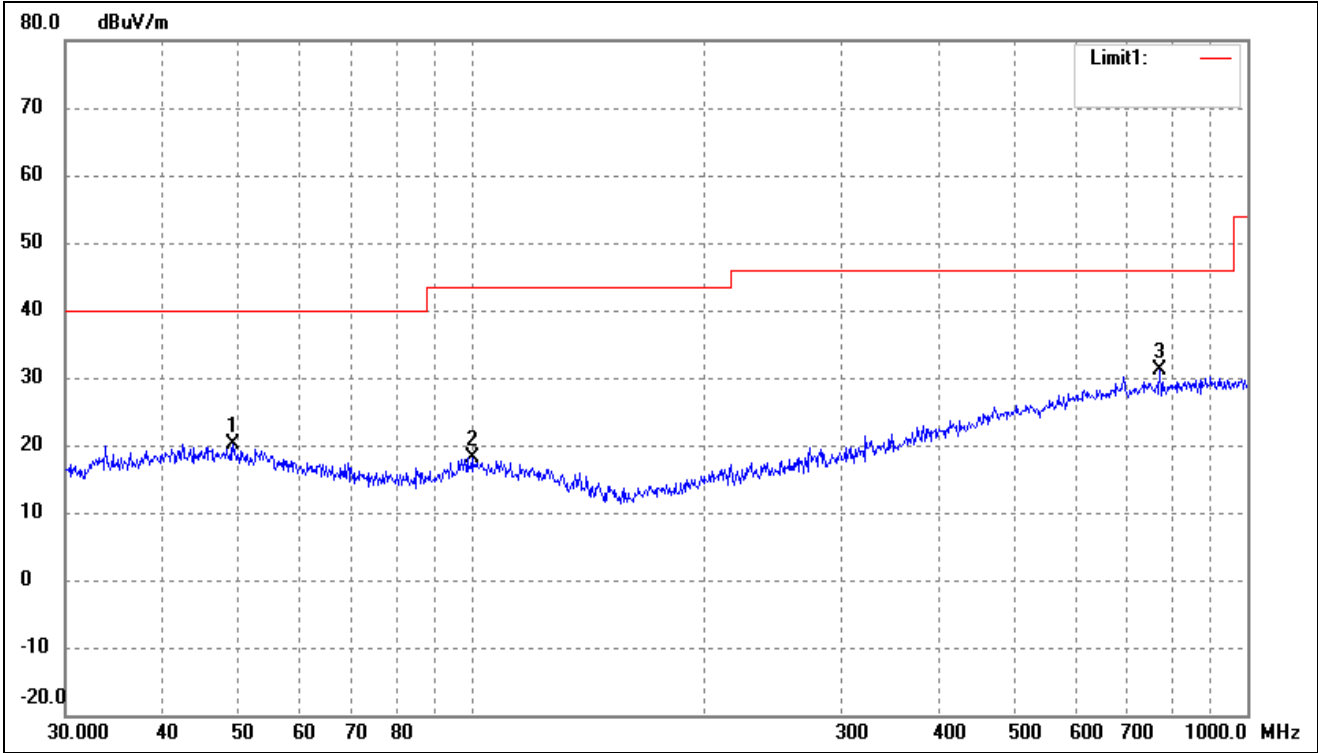
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	47.1599	27.49	-6.97	20.52	40.00	-19.48	-	-	peak
2	112.9196	27.30	-9.07	18.23	43.50	-25.27	-	-	peak
3	649.6597	28.26	0.92	29.18	46.00	-16.82	-	-	peak

802.11ac-HT80			
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	46.6664	27.54	-6.98	20.56	40.00	-19.44	-	-	peak
2	112.9196	27.07	-9.07	18.00	43.50	-25.50	-	-	peak
3	709.1823	28.25	1.48	29.73	46.00	-16.27	-	-	peak

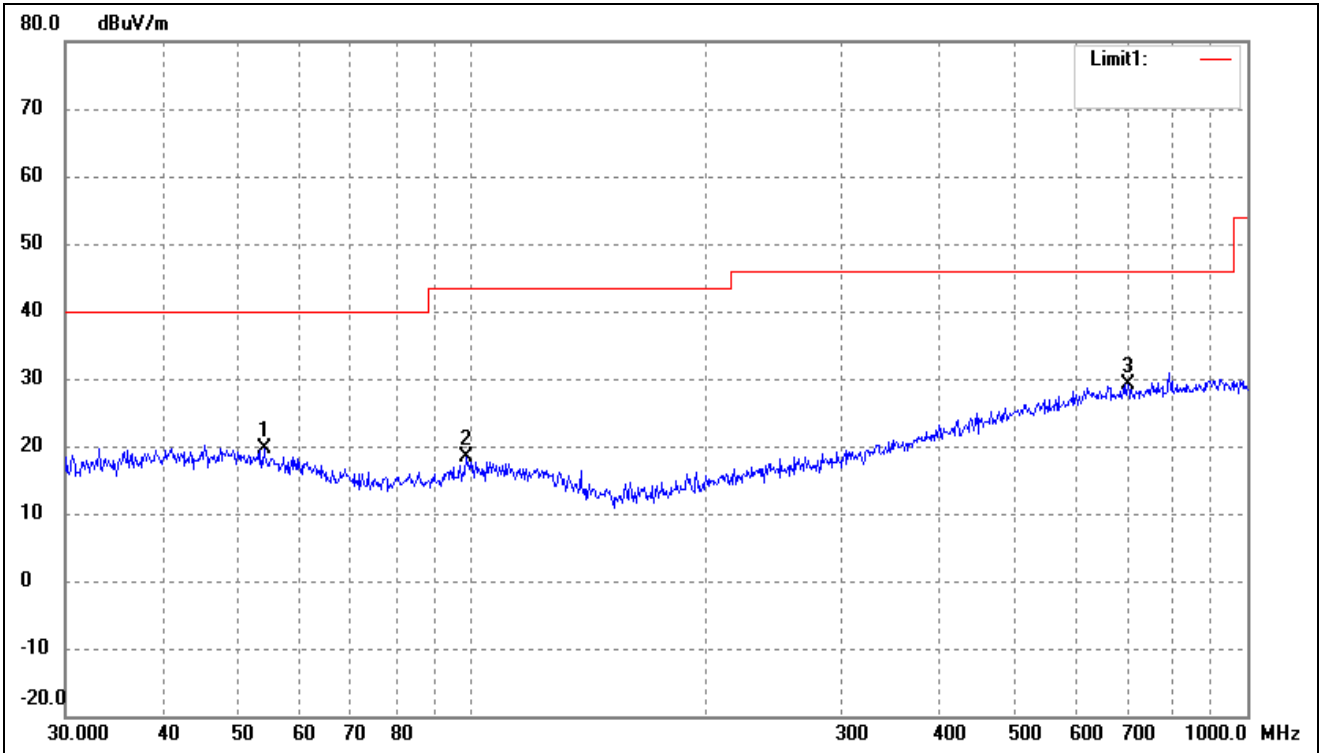
802.11ac-HT80			
Test Channel	5210MHz(worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	49.3594	27.14	-6.96	20.18	40.00	-19.82	-	-	peak
2	100.2286	26.97	-8.73	18.24	43.50	-25.26	-	-	peak
3	771.4486	29.26	1.90	31.16	46.00	-14.84	-	-	peak

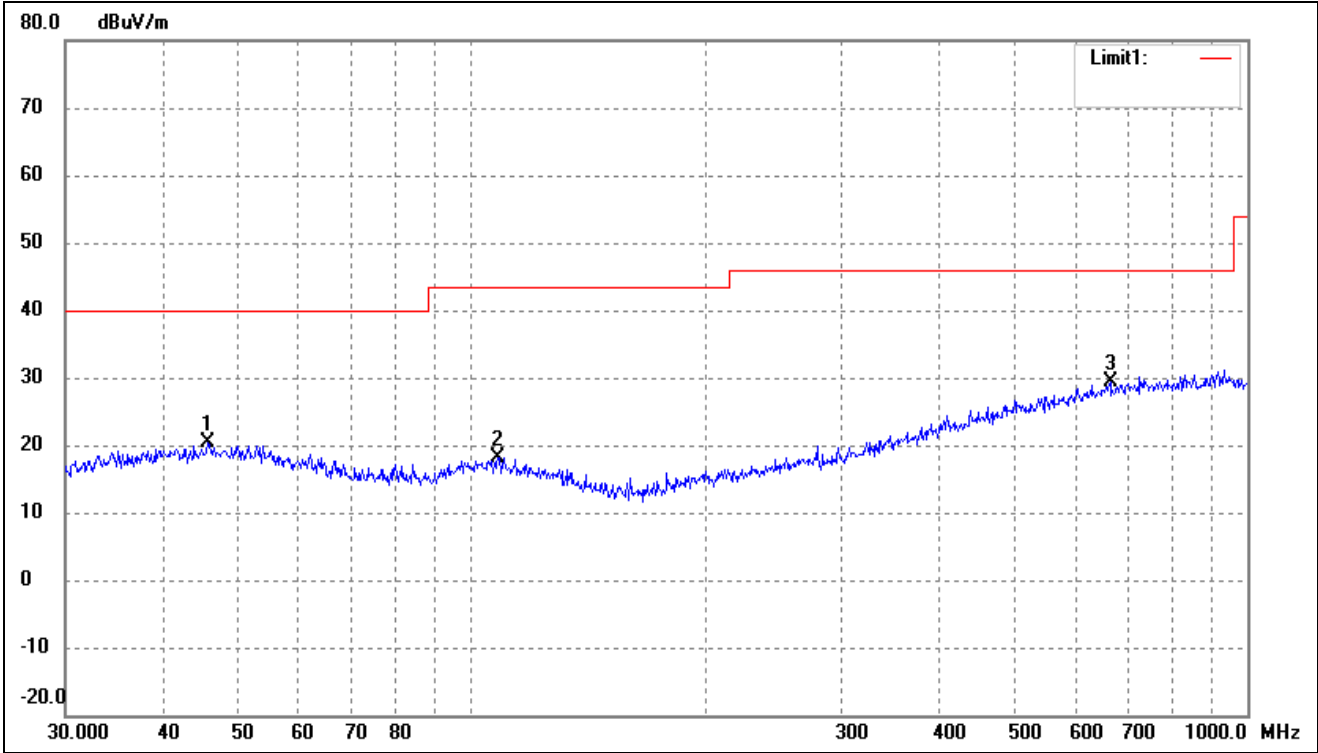
➤ 5250-5350MHz

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



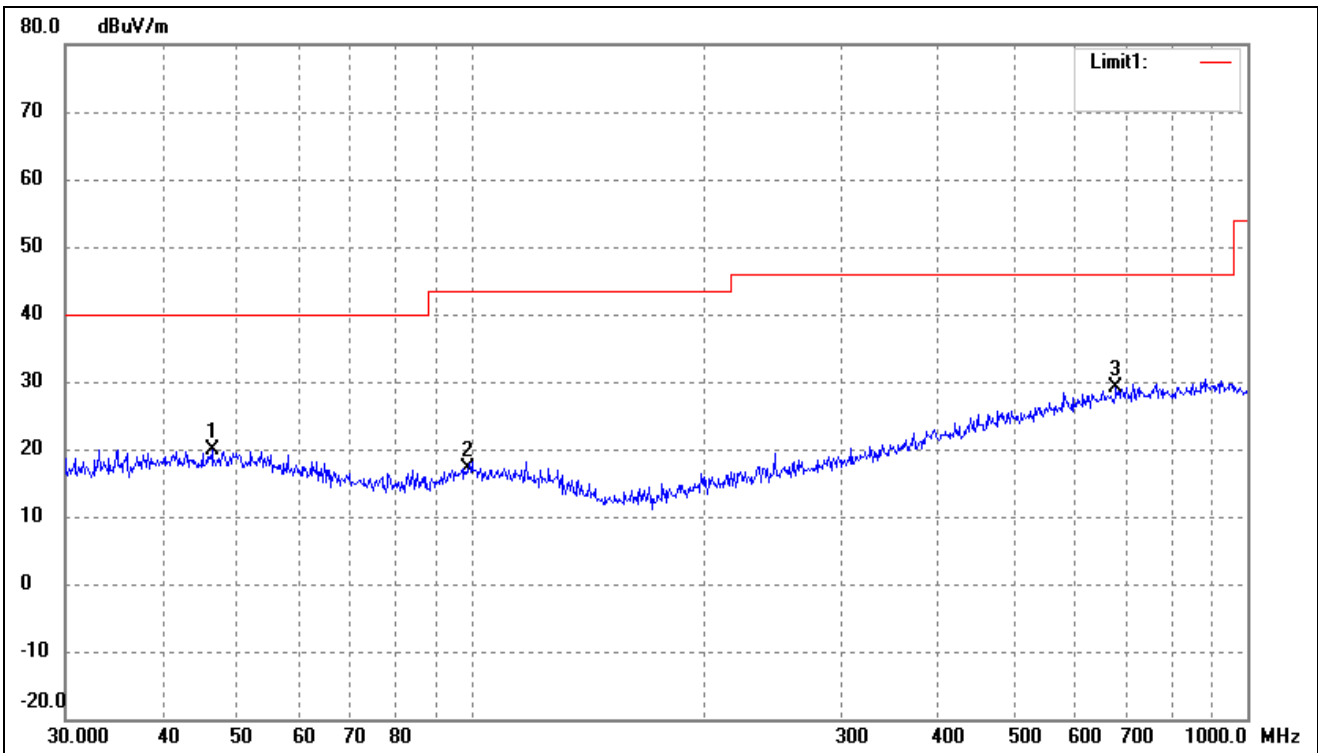
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	54.0711	27.24	-7.56	19.68	40.00	-20.32	-	-	peak
2	98.4866	27.33	-9.01	18.32	43.50	-25.18	-	-	peak
3	701.7610	27.63	1.44	29.07	46.00	-16.93	-	-	peak

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



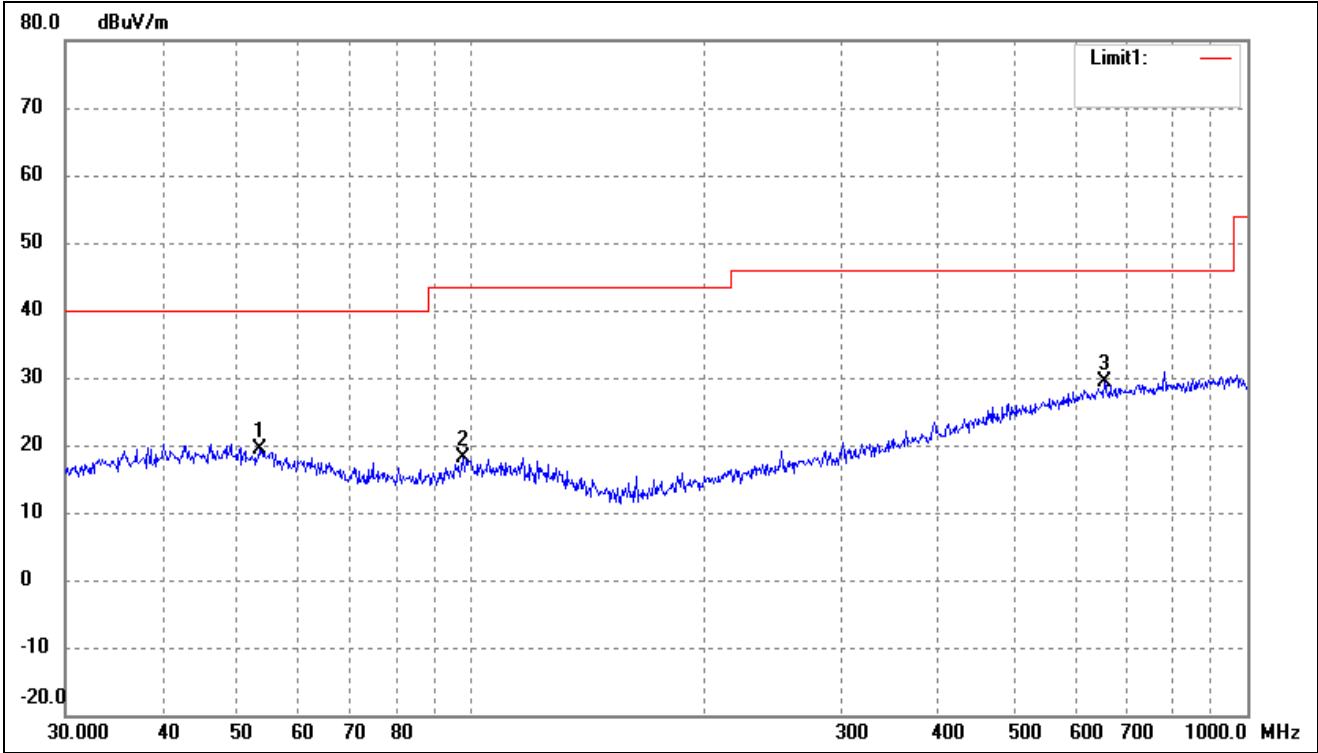
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	45.6948	27.32	-6.98	20.34	40.00	-19.66	-	-	peak
2	108.2667	27.06	-8.85	18.21	43.50	-25.29	-	-	peak
3	665.8035	28.18	1.08	29.26	46.00	-16.74	-	-	peak

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



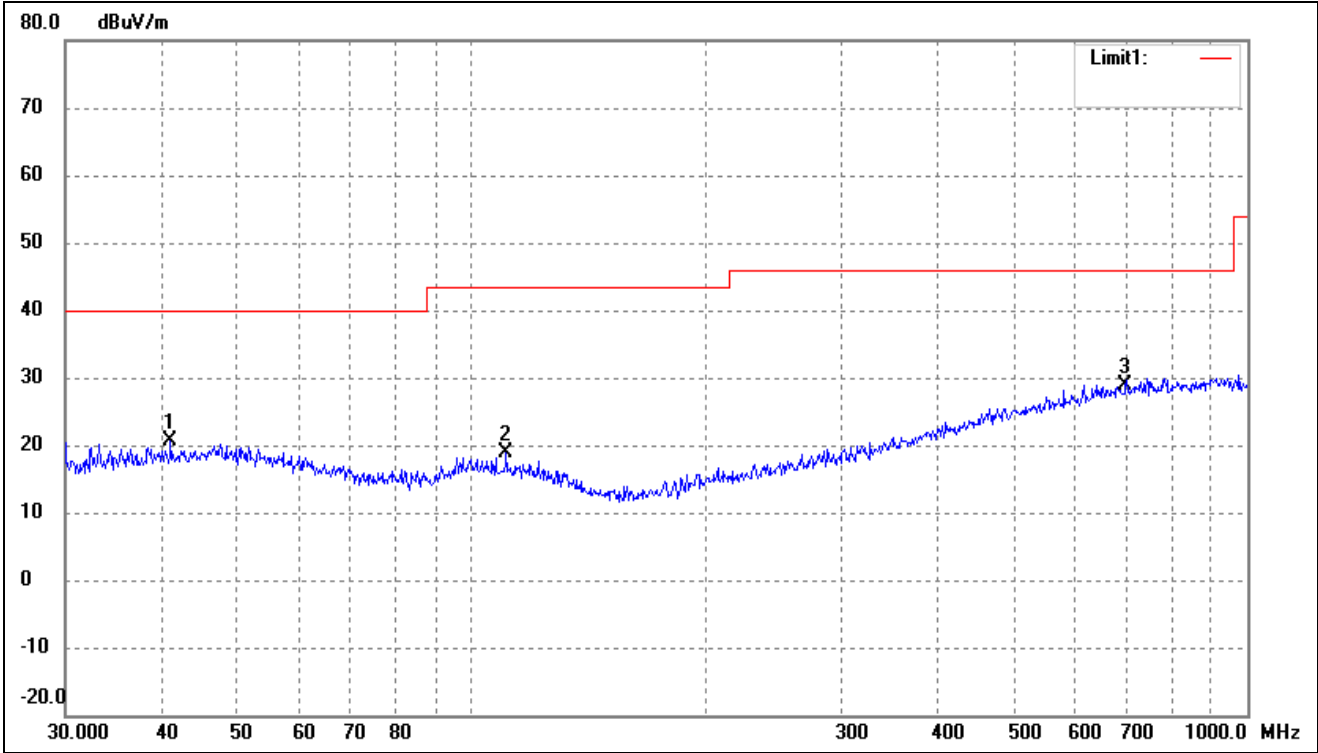
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	46.3402	26.86	-6.97	19.89	40.00	-20.11	-	-	peak
2	98.8326	26.01	-8.94	17.07	43.50	-26.43	-	-	peak
3	677.5798	27.99	1.20	29.19	46.00	-16.81	-	-	peak

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



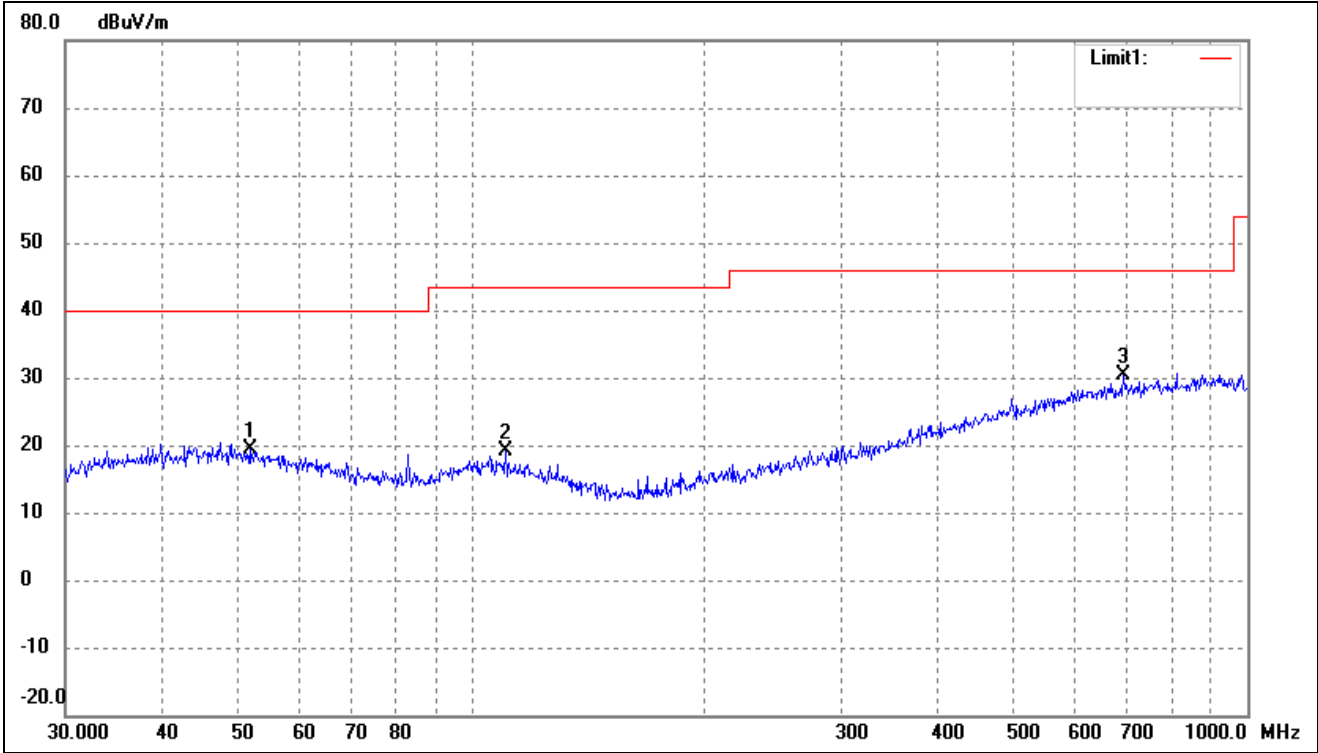
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	53.3179	26.78	-7.45	19.33	40.00	-20.67	-	-	peak
2	97.7983	27.32	-9.13	18.19	43.50	-25.31	-	-	peak
3	654.2318	28.49	0.96	29.45	46.00	-16.55	-	-	peak

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



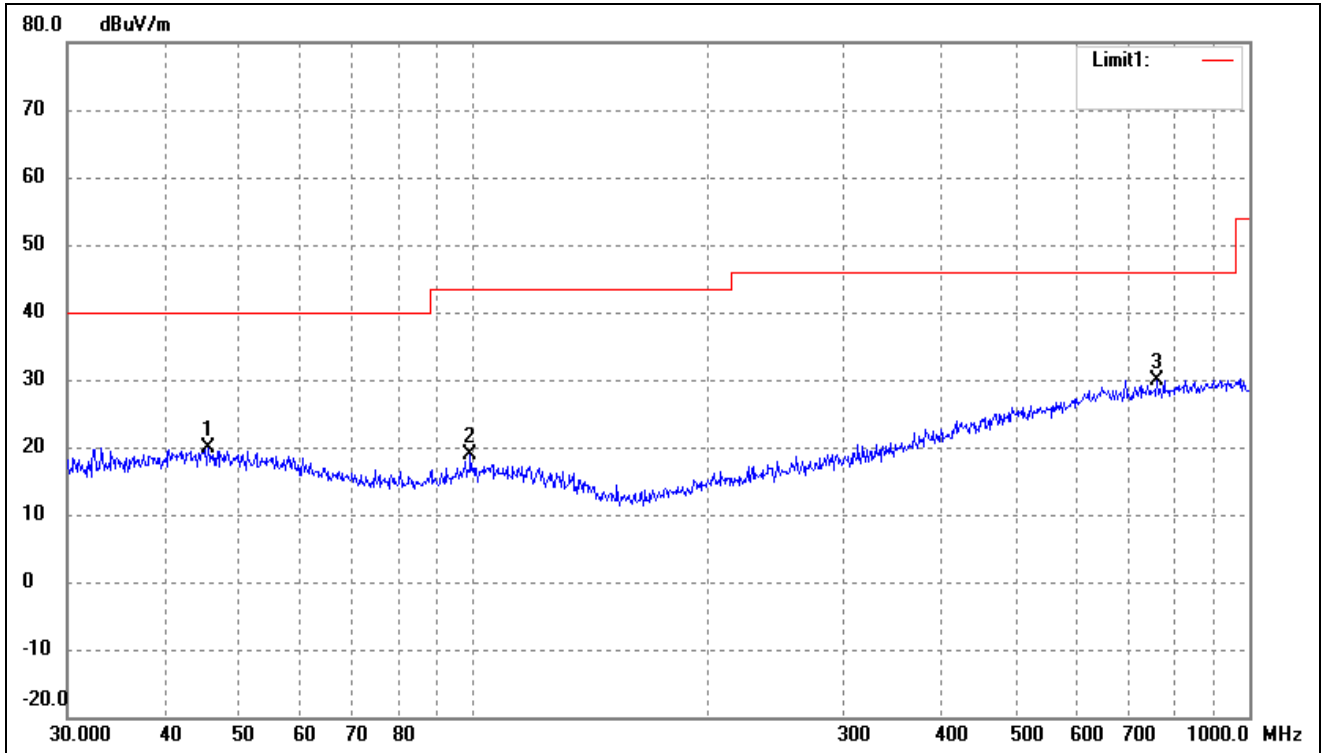
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	40.9881	27.61	-7.00	20.61	40.00	-19.39	-	-	peak
2	110.9571	27.81	-8.94	18.87	43.50	-24.63	-	-	peak
3	696.8567	27.50	1.40	28.90	46.00	-17.10	-	-	peak

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



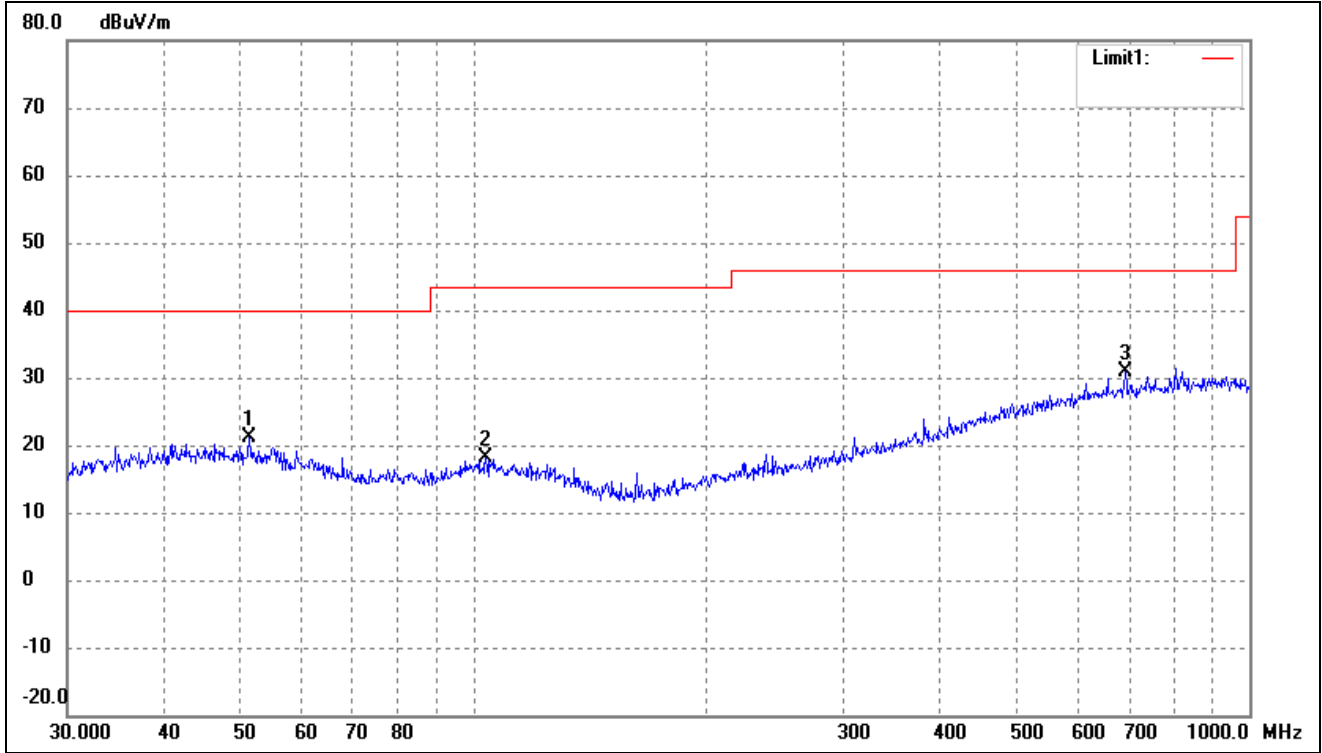
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	51.8430	26.54	-7.23	19.31	40.00	-20.69	-	-	peak
2	110.9571	28.04	-8.94	19.10	43.50	-24.40	-	-	peak
3	691.9867	28.98	1.34	30.32	46.00	-15.68	-	-	peak

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



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	45.5348	26.82	-6.98	19.84	40.00	-20.16	-	-	peak
2	99.1797	27.71	-8.88	18.83	43.50	-24.67	-	-	peak
3	760.7036	28.17	1.83	30.00	46.00	-16.00	-	-	peak

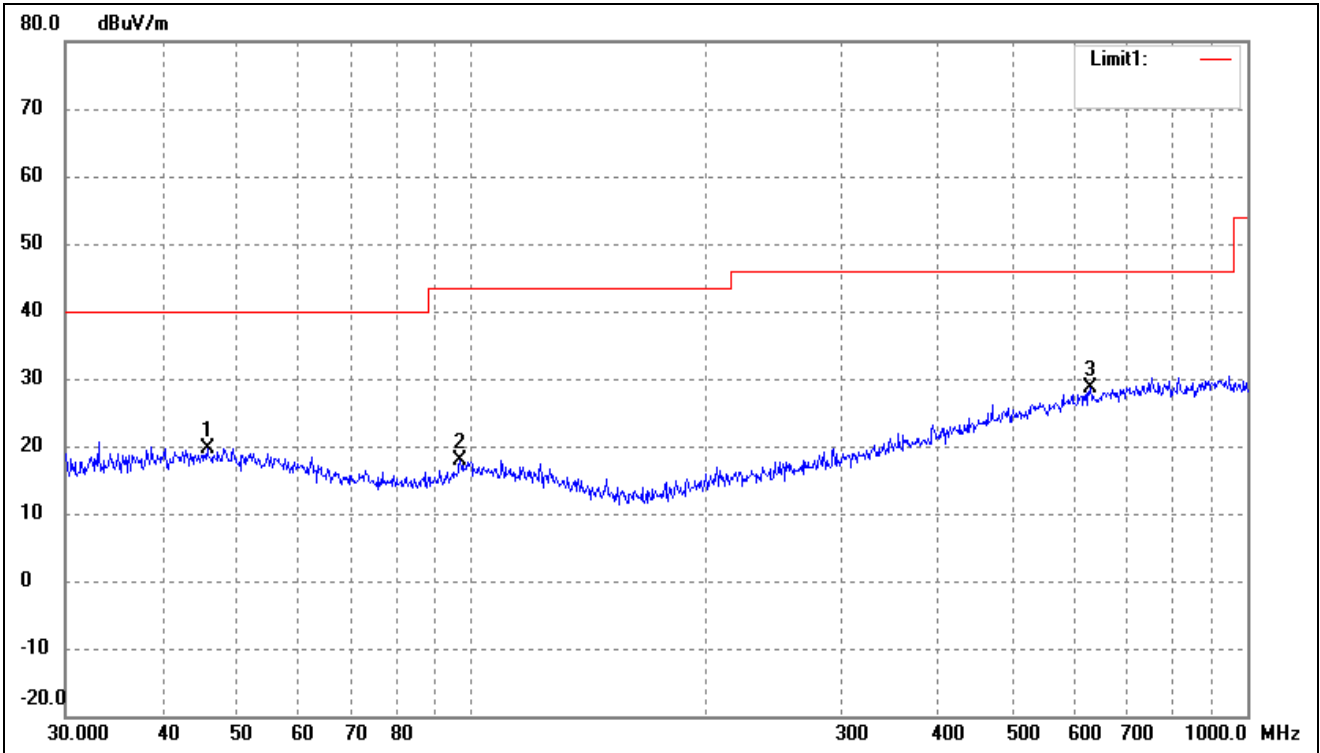
802.11ac-HT80			
Test Channel	5290MHz(worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	51.4807	28.21	-7.19	21.02	40.00	-18.98	-	-	peak
2	103.8055	26.81	-8.79	18.02	43.50	-25.48	-	-	peak
3	691.9867	29.42	1.34	30.76	46.00	-15.24	-	-	peak

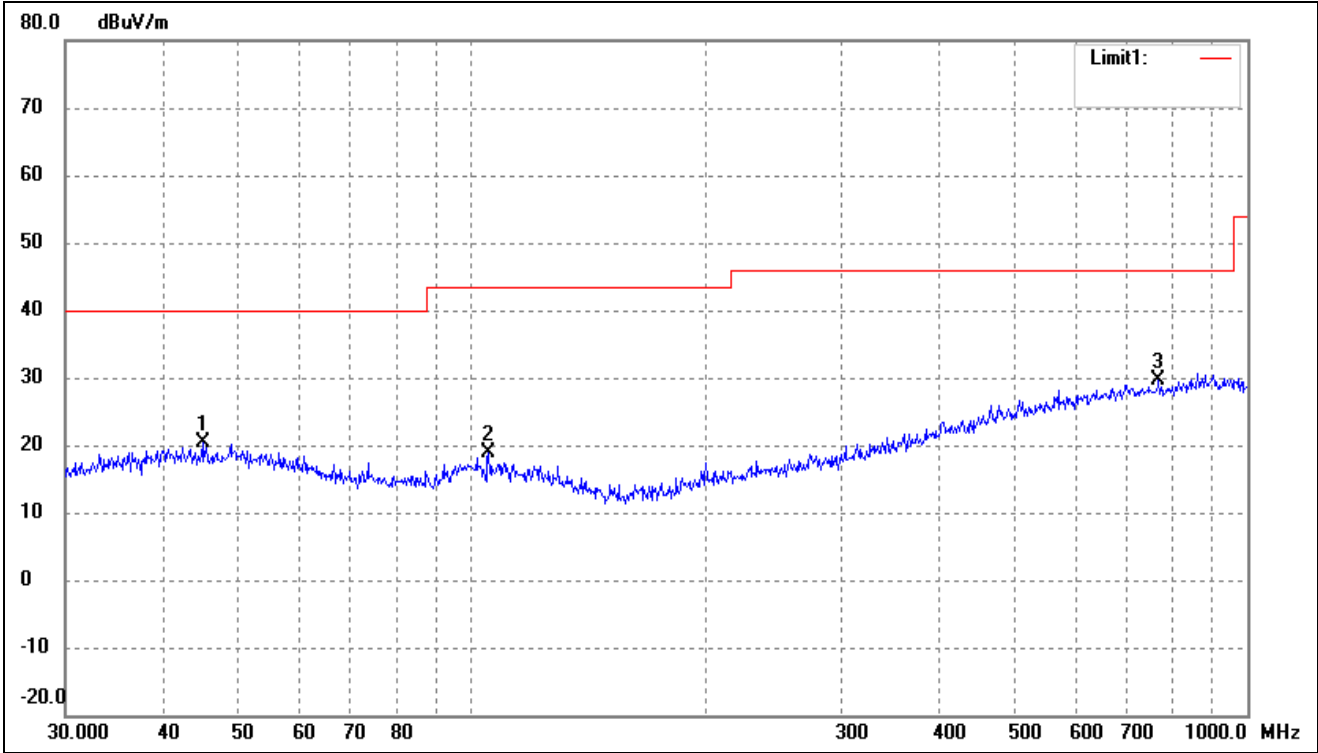
➤ 5470-5725MHz

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



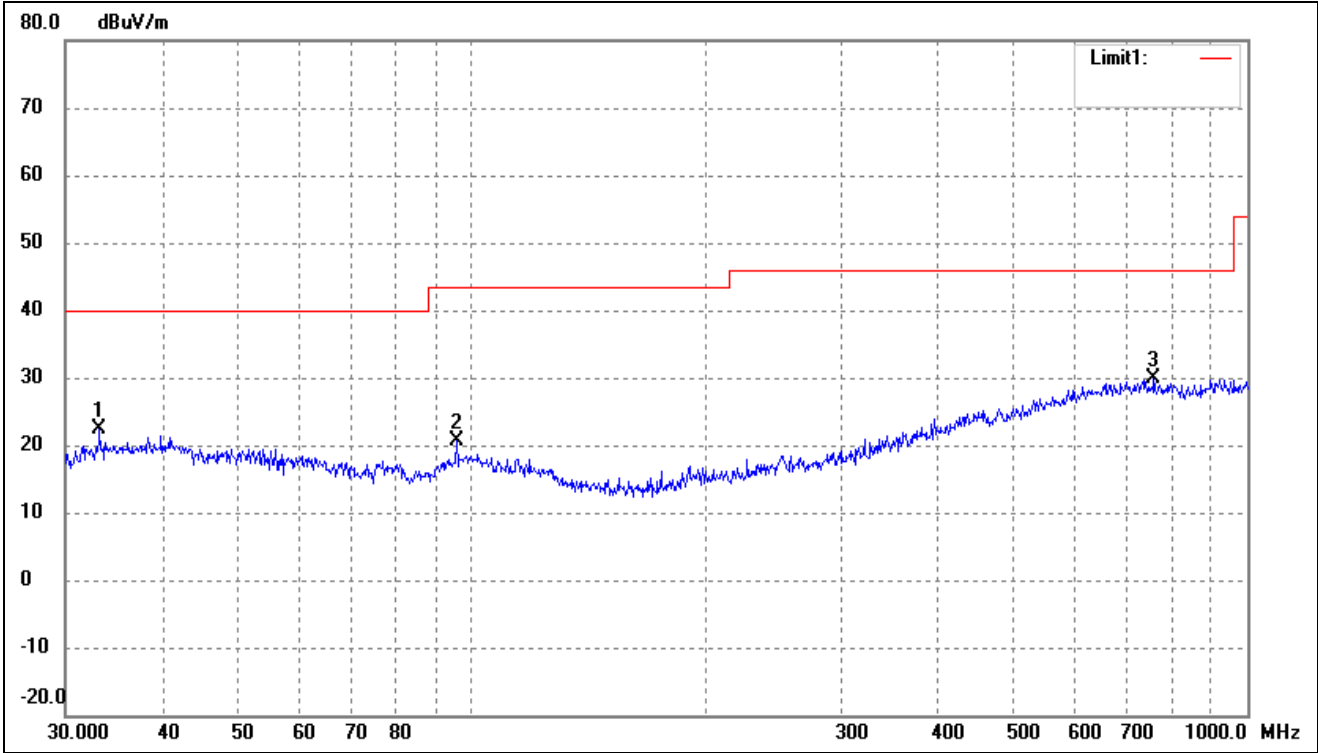
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	45.6948	26.66	-6.98	19.68	40.00	-20.32	-	-	peak
2	96.7749	27.23	-9.33	17.90	43.50	-25.60	-	-	peak
3	627.2738	27.96	0.67	28.63	46.00	-17.37	-	-	peak

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



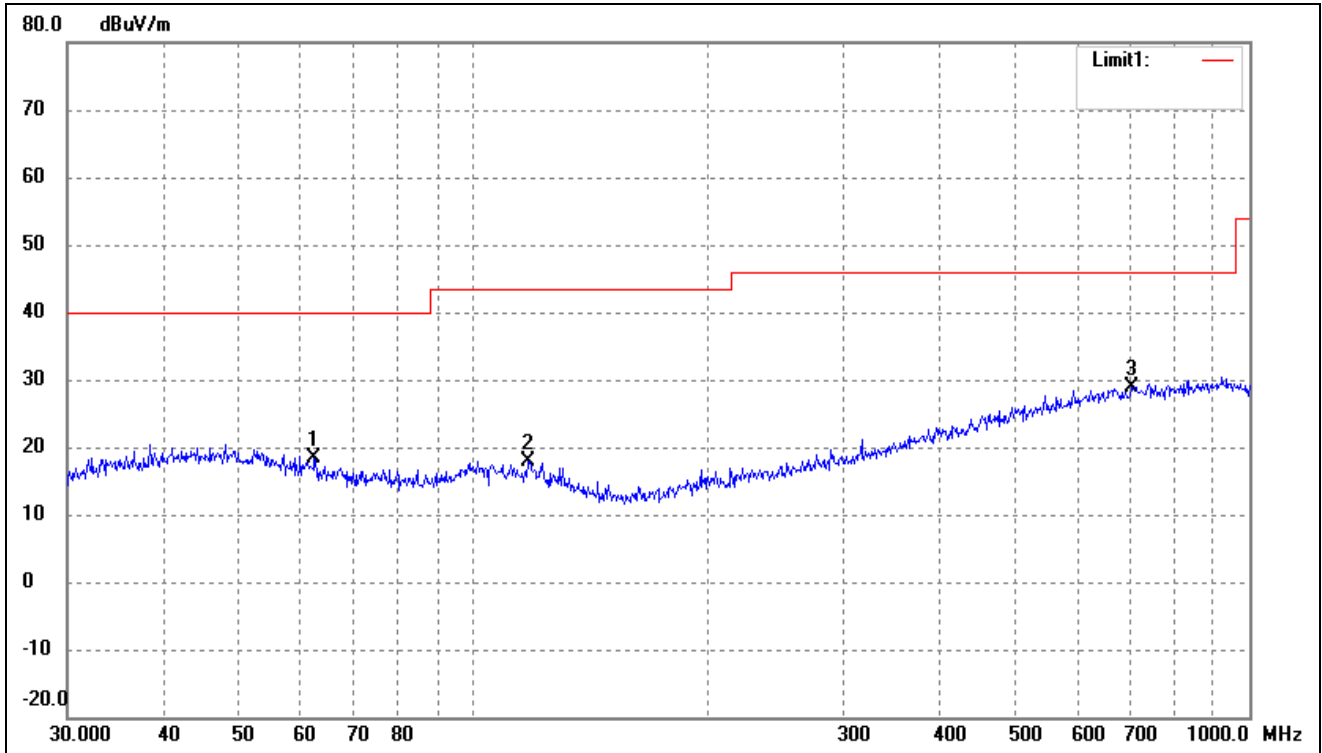
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	45.0583	27.29	-6.98	20.31	40.00	-19.69	-	-	peak
2	105.2718	27.73	-8.80	18.93	43.50	-24.57	-	-	peak
3	768.7482	27.82	1.89	29.71	46.00	-16.29	-	-	peak

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



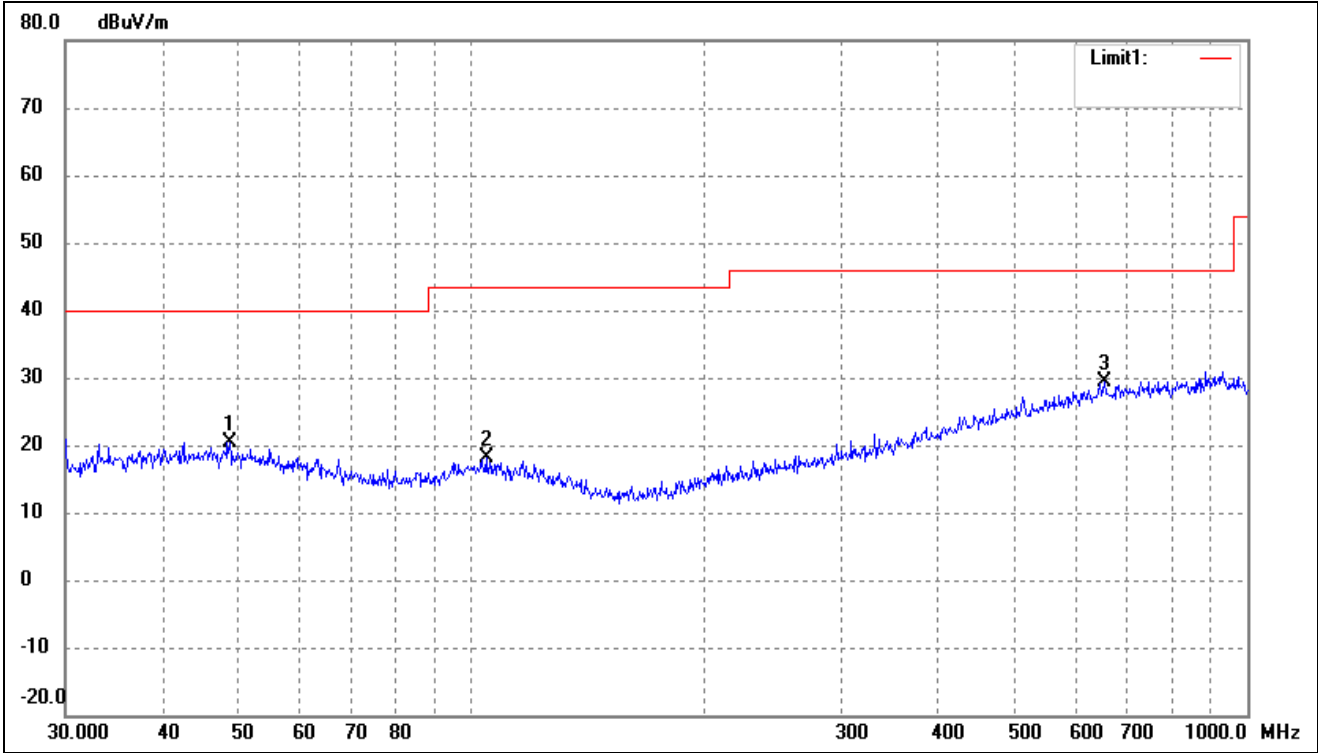
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	33.2111	30.97	-8.67	22.30	40.00	-17.70	-	-	peak
2	95.7622	30.09	-9.51	20.58	43.50	-22.92	-	-	peak
3	758.0407	28.05	1.82	29.87	46.00	-16.13	-	-	peak

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



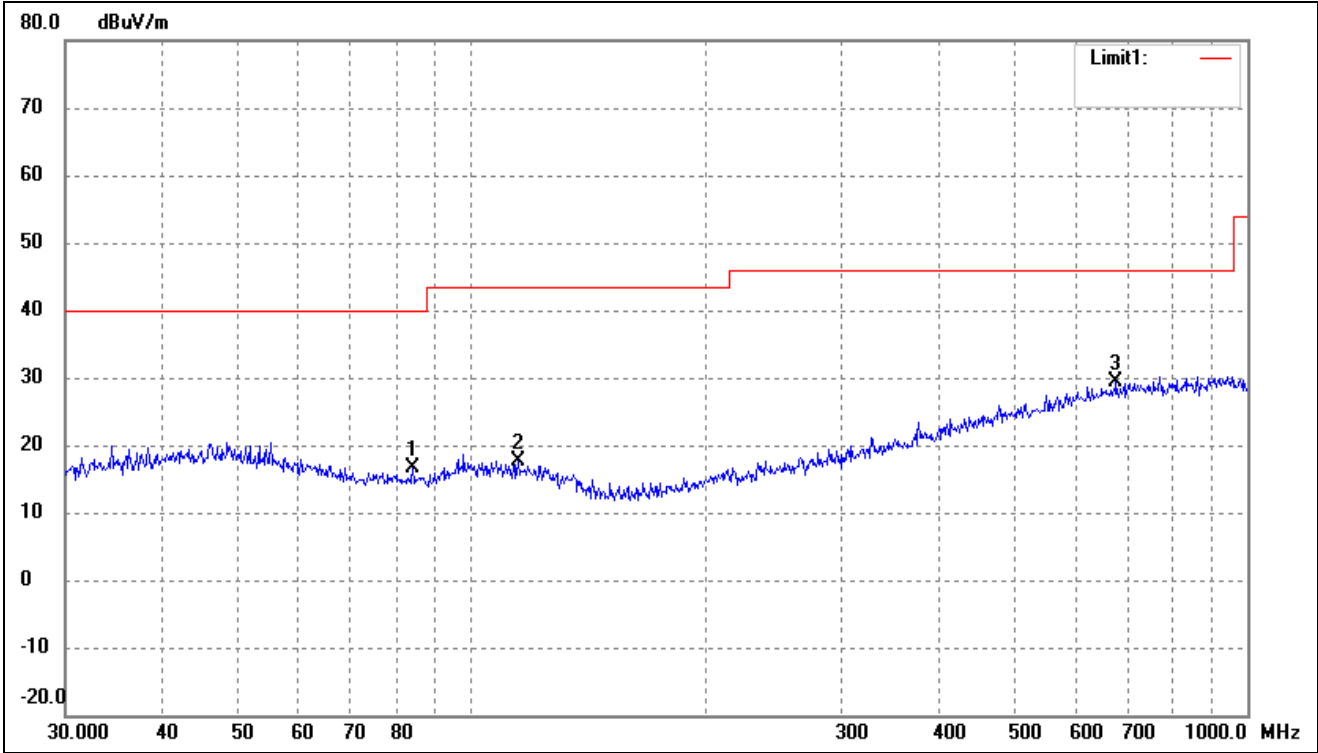
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	62.4314	27.33	-8.85	18.48	40.00	-21.52	-	-	peak
2	117.7725	27.29	-9.43	17.86	43.50	-25.64	-	-	peak
3	704.2261	27.30	1.46	28.76	46.00	-17.24	-	-	peak

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



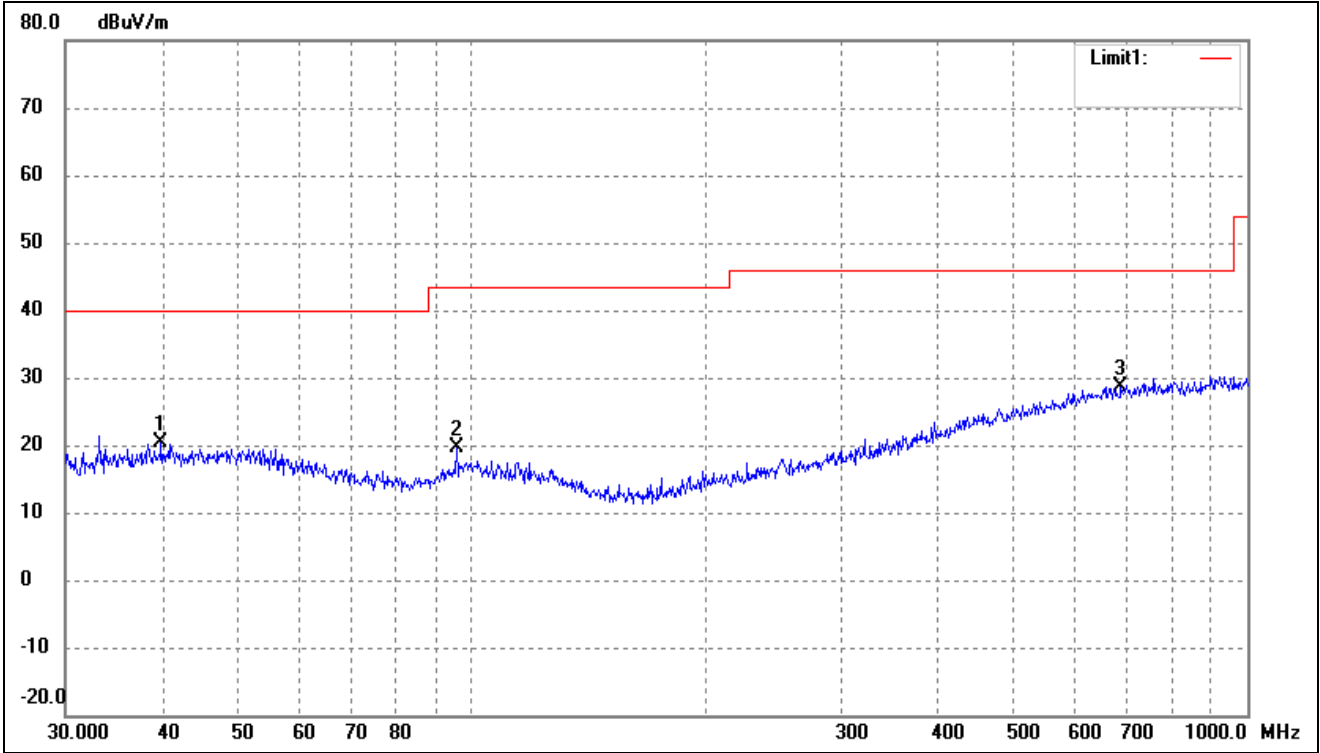
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	48.8429	27.42	-6.97	20.45	40.00	-19.55	-	-	peak
2	104.5361	27.04	-8.79	18.25	43.50	-25.25	-	-	peak
3	654.2318	28.32	0.96	29.28	46.00	-16.72	-	-	peak

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



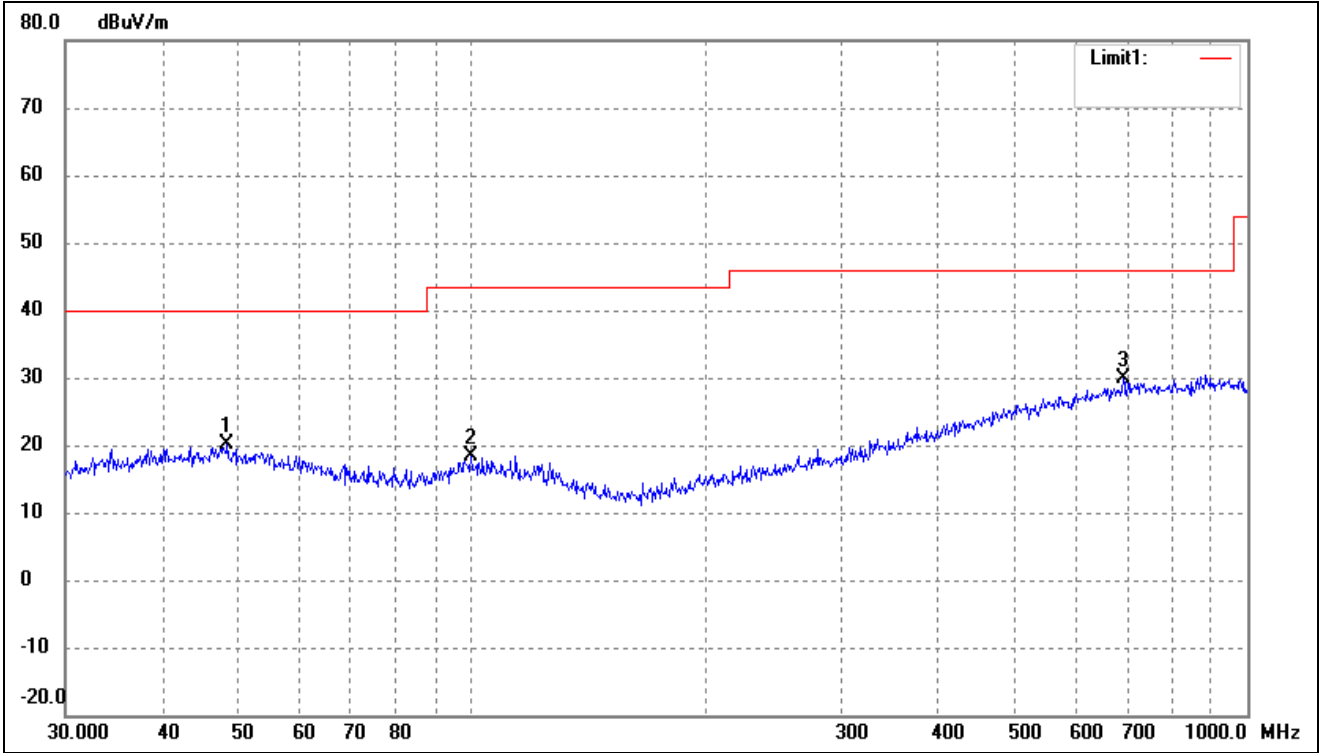
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	84.1100	27.40	-10.67	16.73	40.00	-23.27	-	-	peak
2	114.9169	26.93	-9.23	17.70	43.50	-25.80	-	-	peak
3	677.5798	28.22	1.20	29.42	46.00	-16.58	-	-	peak

802.11ac-HT80			
Test Channel	5530MHz(worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	39.8542	27.30	-7.03	20.27	40.00	-19.73	-	-	peak
2	95.7622	29.09	-9.51	19.58	43.50	-23.92	-	-	peak
3	687.1507	27.45	1.30	28.75	46.00	-17.25	-	-	peak

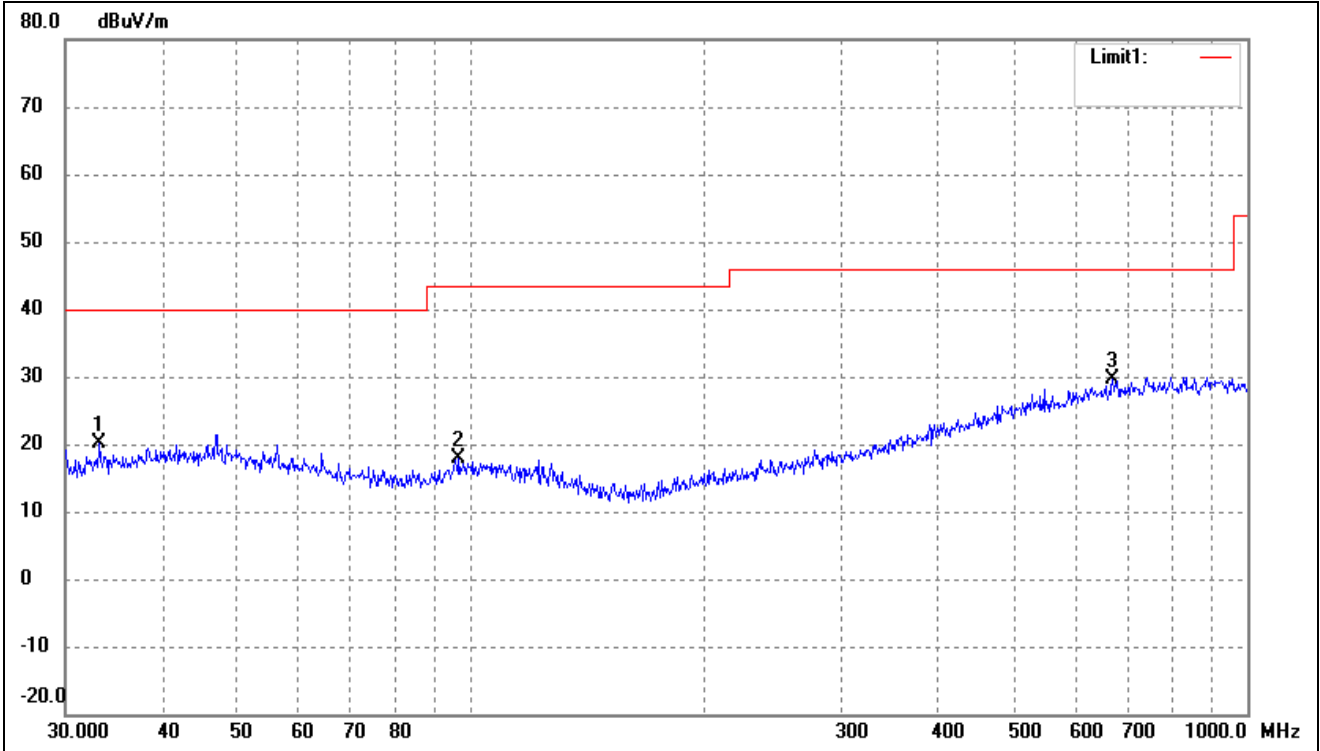
802.11ac-HT80			
Test Channel	5530MHz(worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	48.5016	27.18	-6.97	20.21	40.00	-19.79	-	-	peak
2	99.8777	27.18	-8.75	18.43	43.50	-25.07	-	-	peak
3	691.9867	28.52	1.34	29.86	46.00	-16.14	-	-	peak

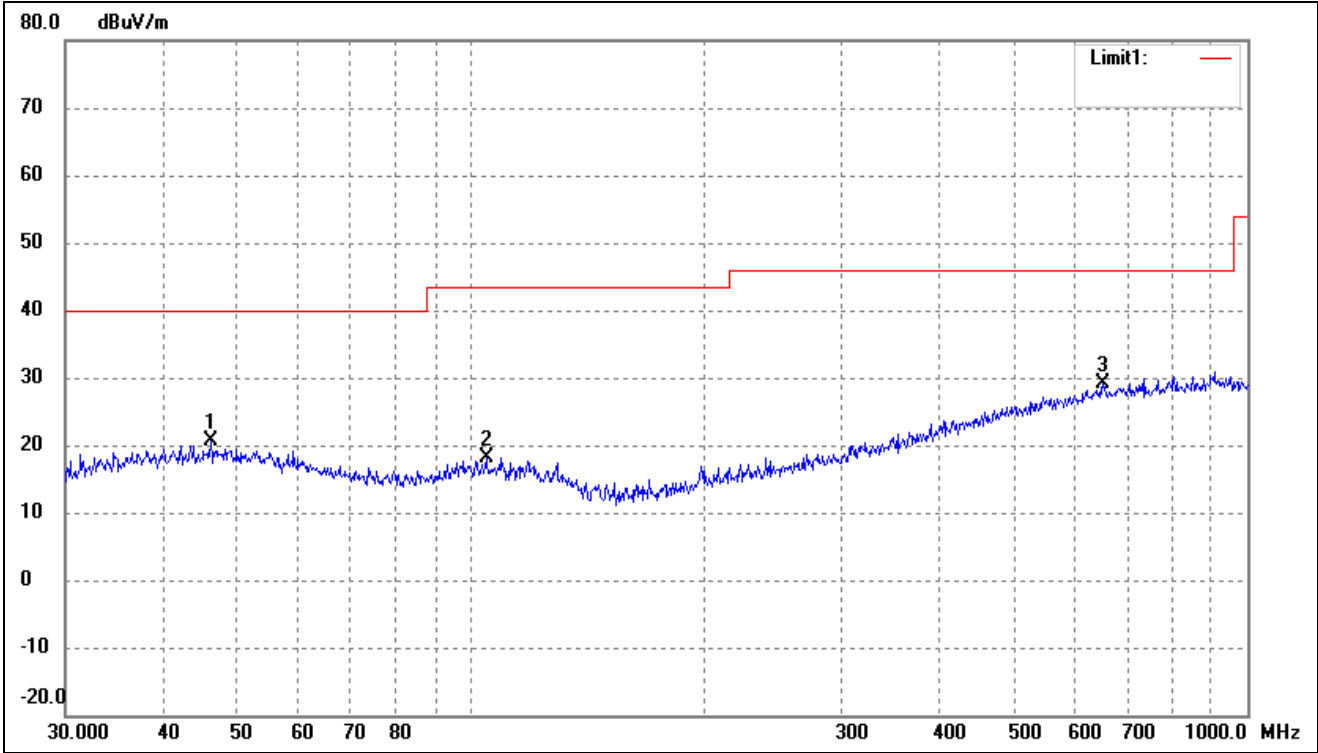
➤ 5725-5850MHz

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



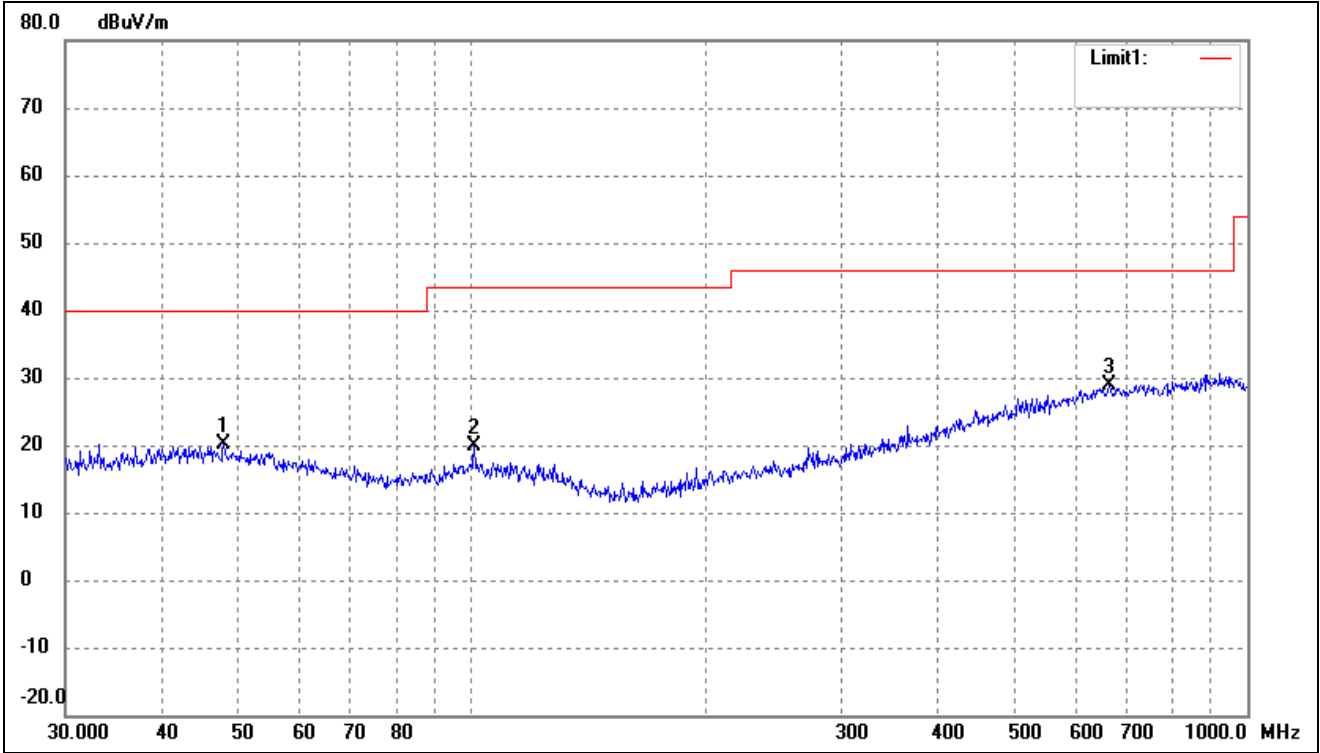
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	33.2112	28.68	-8.67	20.01	40.00	-19.99	-	-	peak
2	96.4362	27.17	-9.40	17.77	43.50	-25.73	-	-	peak
3	670.4893	28.60	1.14	29.74	46.00	-16.26	-	-	peak

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



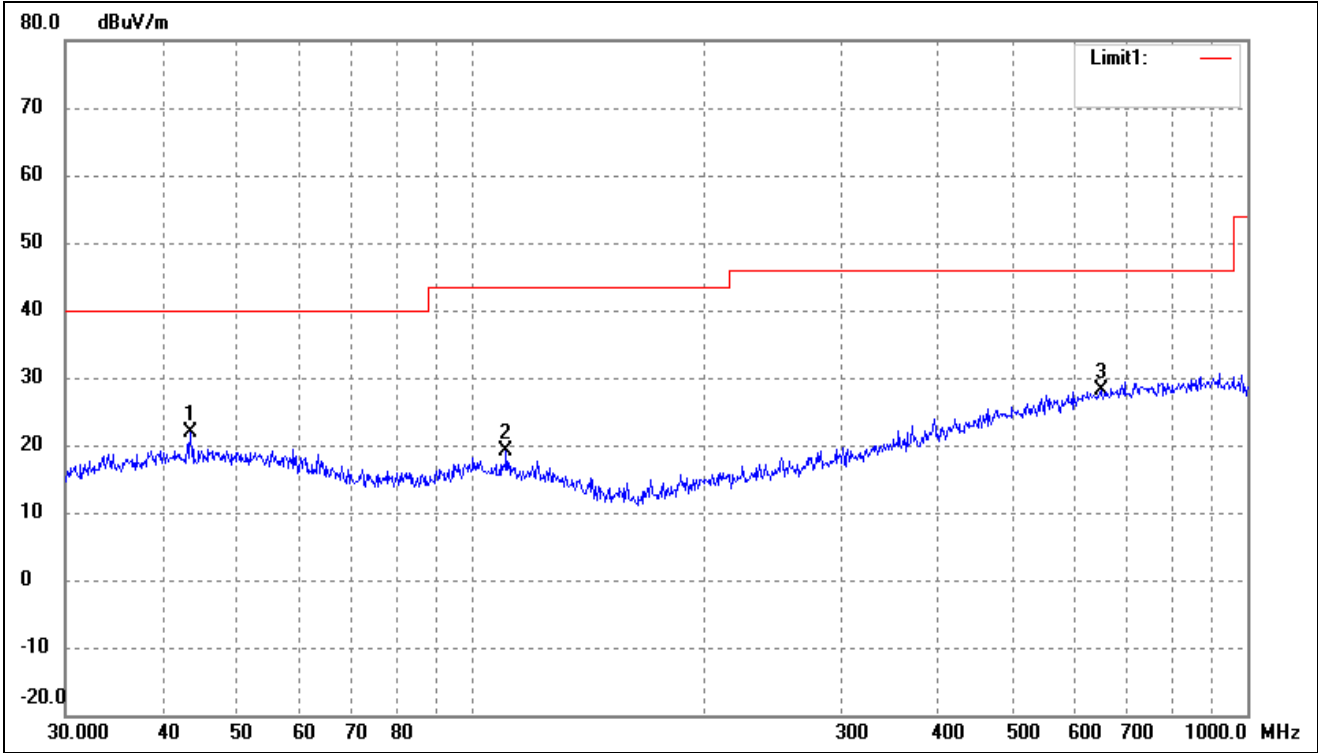
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	46.1780	27.64	-6.98	20.66	40.00	-19.34	-	-	peak
2	104.5361	26.92	-8.79	18.13	43.50	-25.37	-	-	peak
3	651.9417	28.09	0.94	29.03	46.00	-16.97	-	-	peak

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



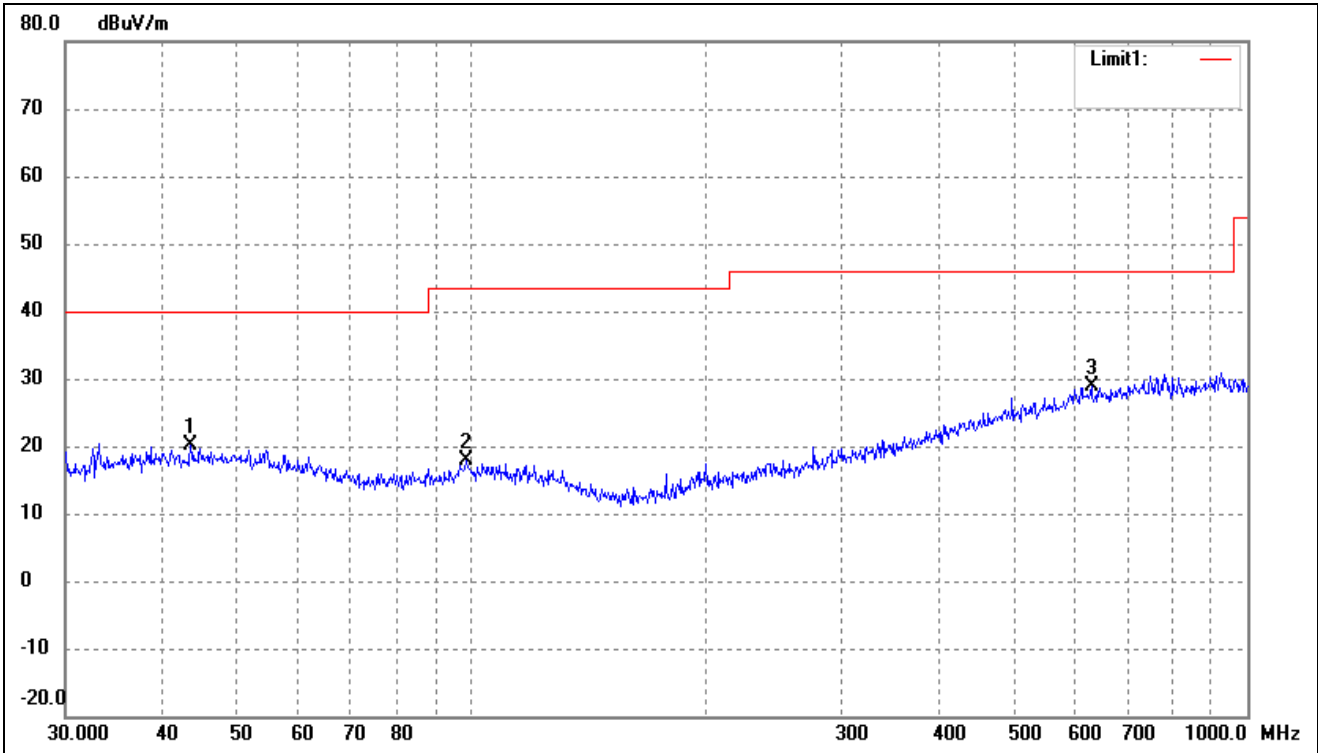
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	47.9940	27.08	-6.97	20.11	40.00	-19.89	-	-	peak
2	100.9340	28.64	-8.74	19.90	43.50	-23.60	-	-	peak
3	663.4729	27.89	1.06	28.95	46.00	-17.05	-	-	peak

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



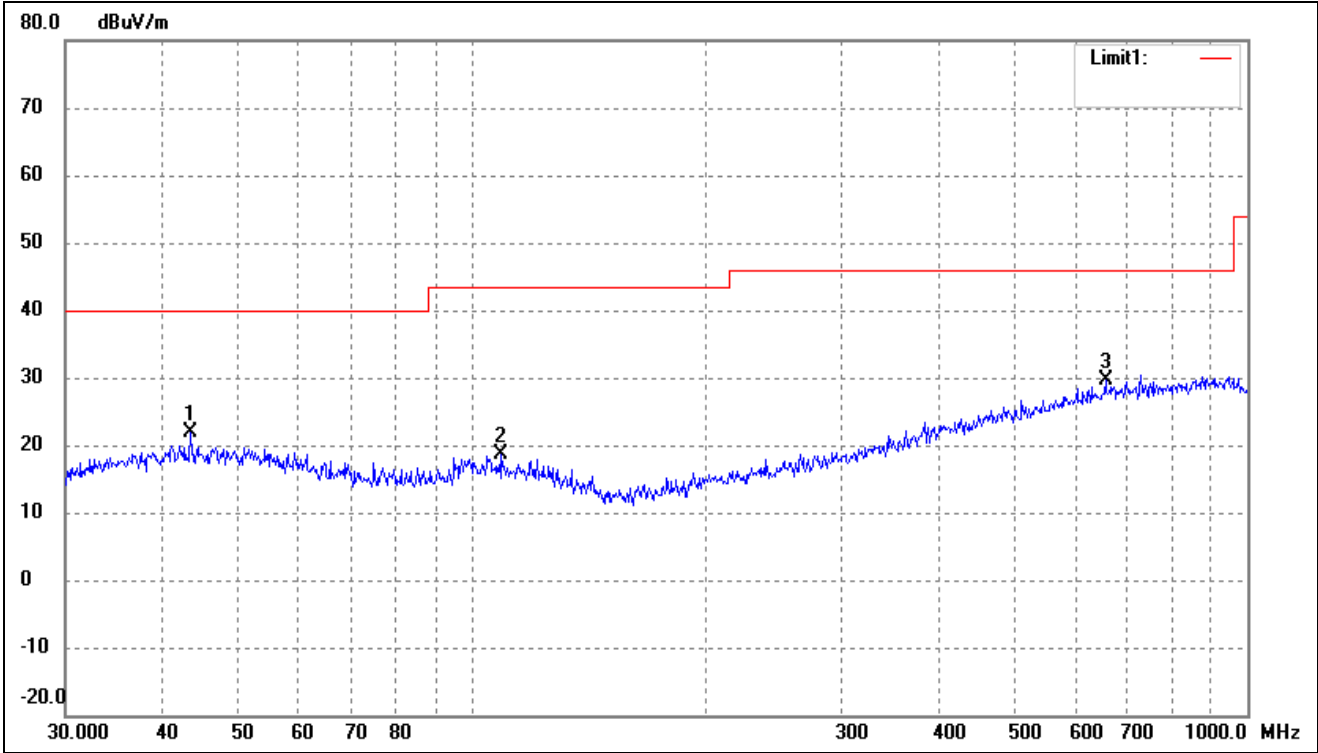
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	43.5057	28.84	-6.99	21.85	40.00	-18.15	-	-	peak
2	110.9571	27.98	-8.94	19.04	43.50	-24.46	-	-	peak
3	647.3856	27.21	0.89	28.10	46.00	-17.90	-	-	peak

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



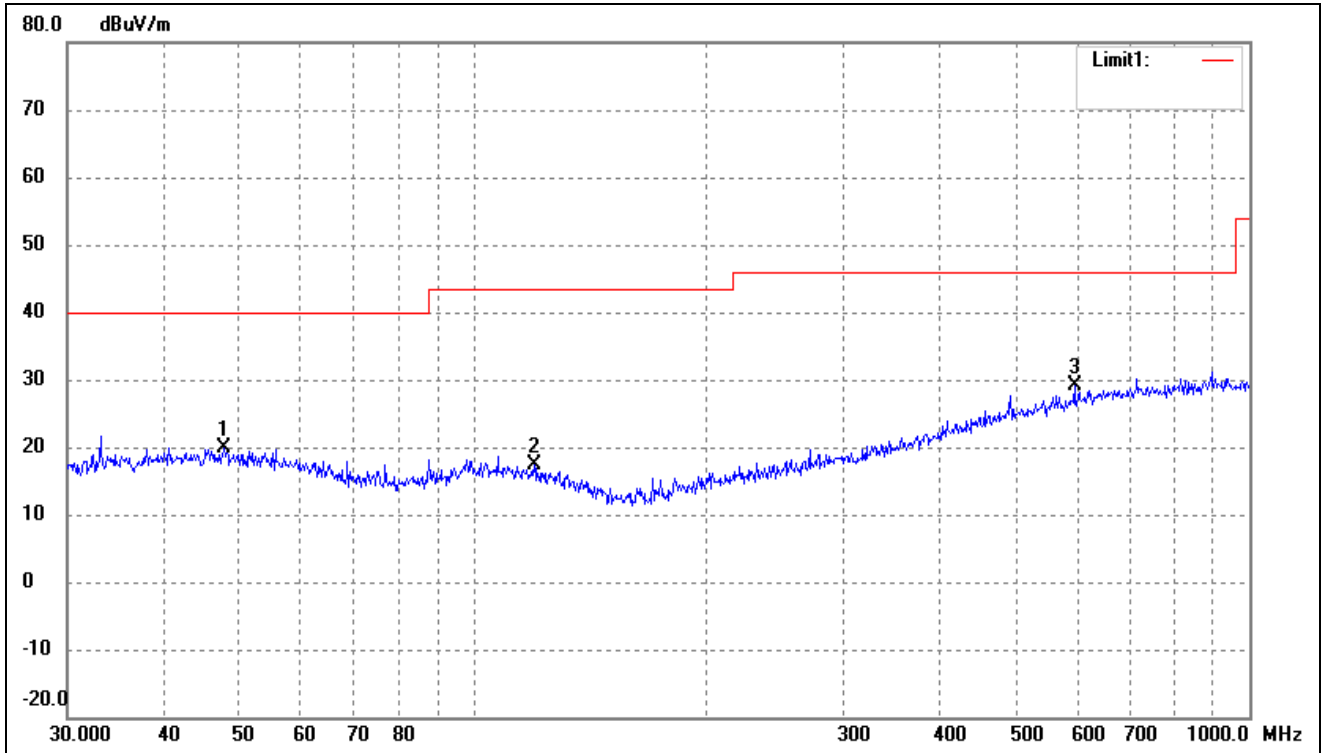
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	43.5057	27.22	-6.99	20.23	40.00	-19.77	-	-	peak
2	98.4866	26.83	-9.01	17.82	43.50	-25.68	-	-	peak
3	629.4772	28.31	0.69	29.00	46.00	-17.00	-	-	peak

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



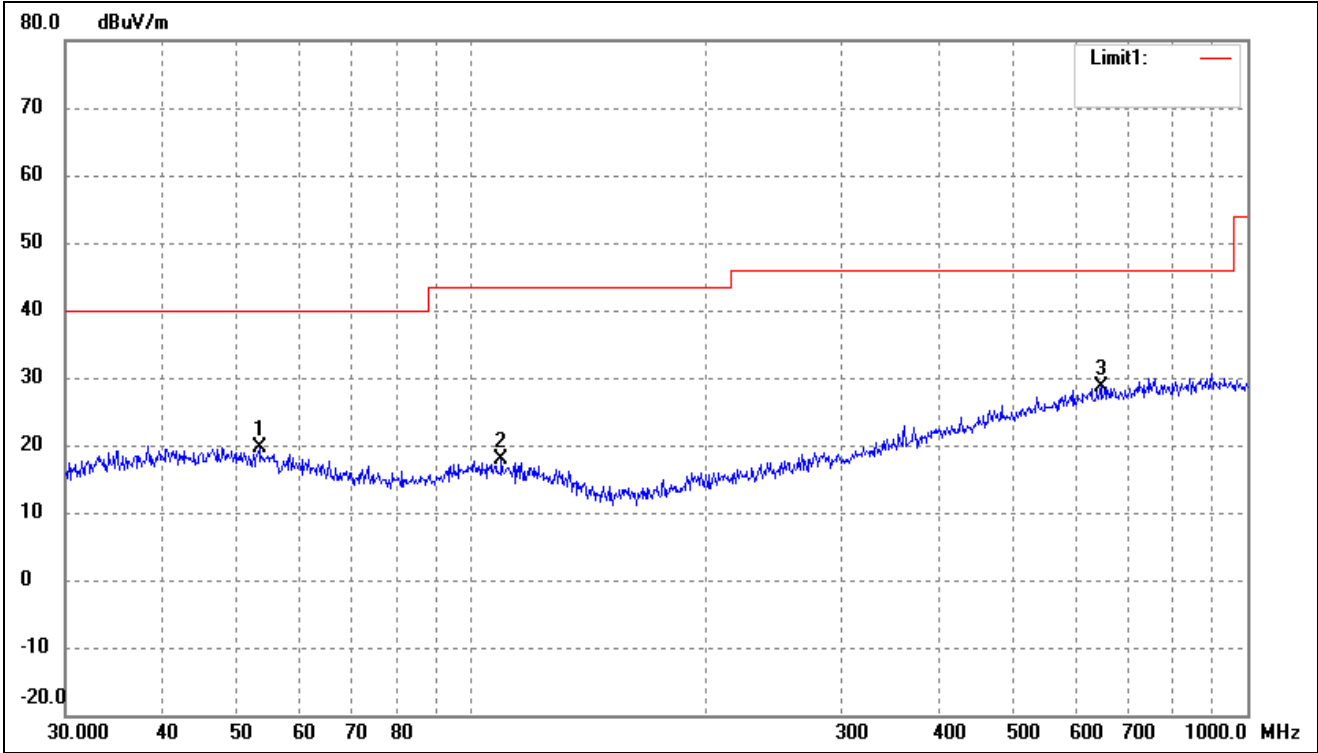
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	43.5057	28.86	-6.99	21.87	40.00	-18.13	-	-	peak
2	109.4116	27.49	-8.86	18.63	43.50	-24.87	-	-	peak
3	656.5300	28.62	0.98	29.60	46.00	-16.40	-	-	peak

802.11ac-HT80			
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	47.8260	26.88	-6.96	19.92	40.00	-20.08	-	-	peak
2	119.8556	26.99	-9.59	17.40	43.50	-26.10	-	-	peak
3	595.1329	28.76	0.29	29.05	46.00	-16.95	-	-	peak

802.11ac-HT80			
Test Channel	5775MHz(worst case)	Polarity:	Vertical

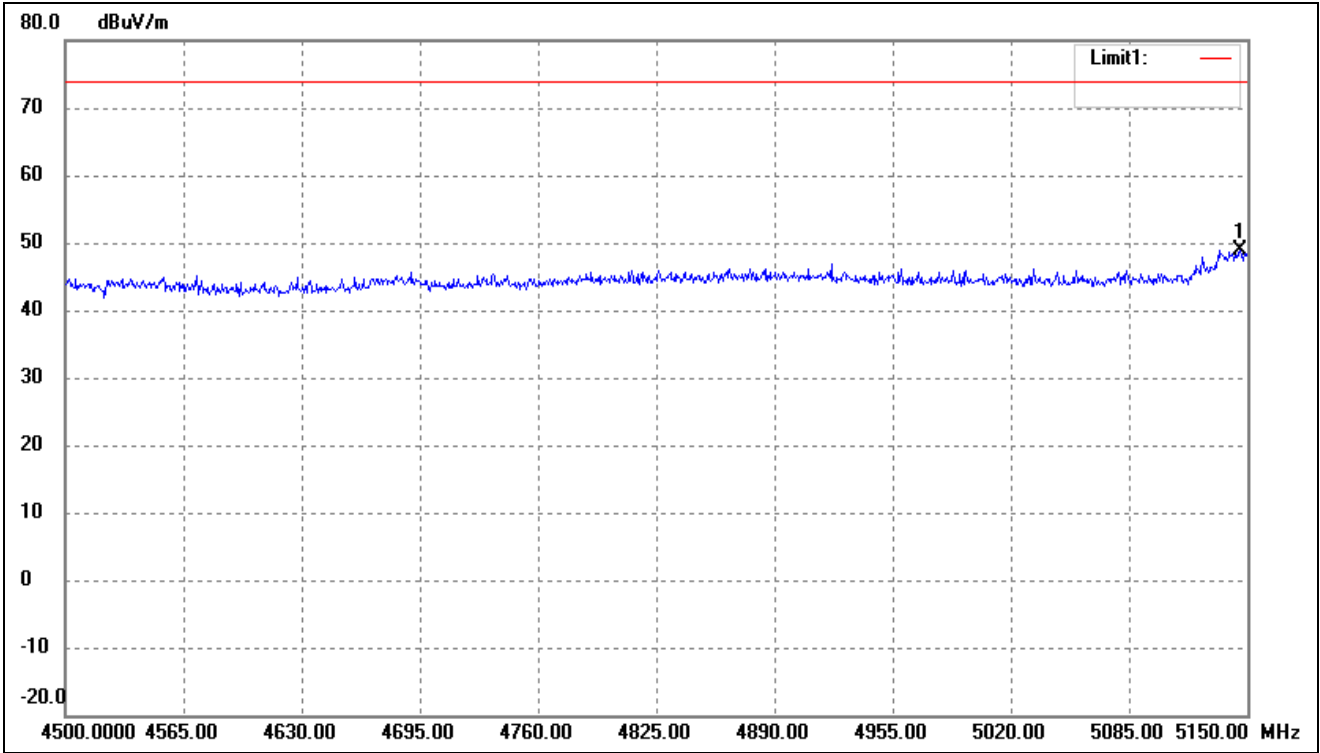


No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	53.3179	27.06	-7.45	19.61	40.00	-20.39	-	-	peak
2	109.4116	26.85	-8.86	17.99	43.50	-25.51	-	-	peak
3	647.3856	27.86	0.89	28.75	46.00	-17.25	-	-	peak

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

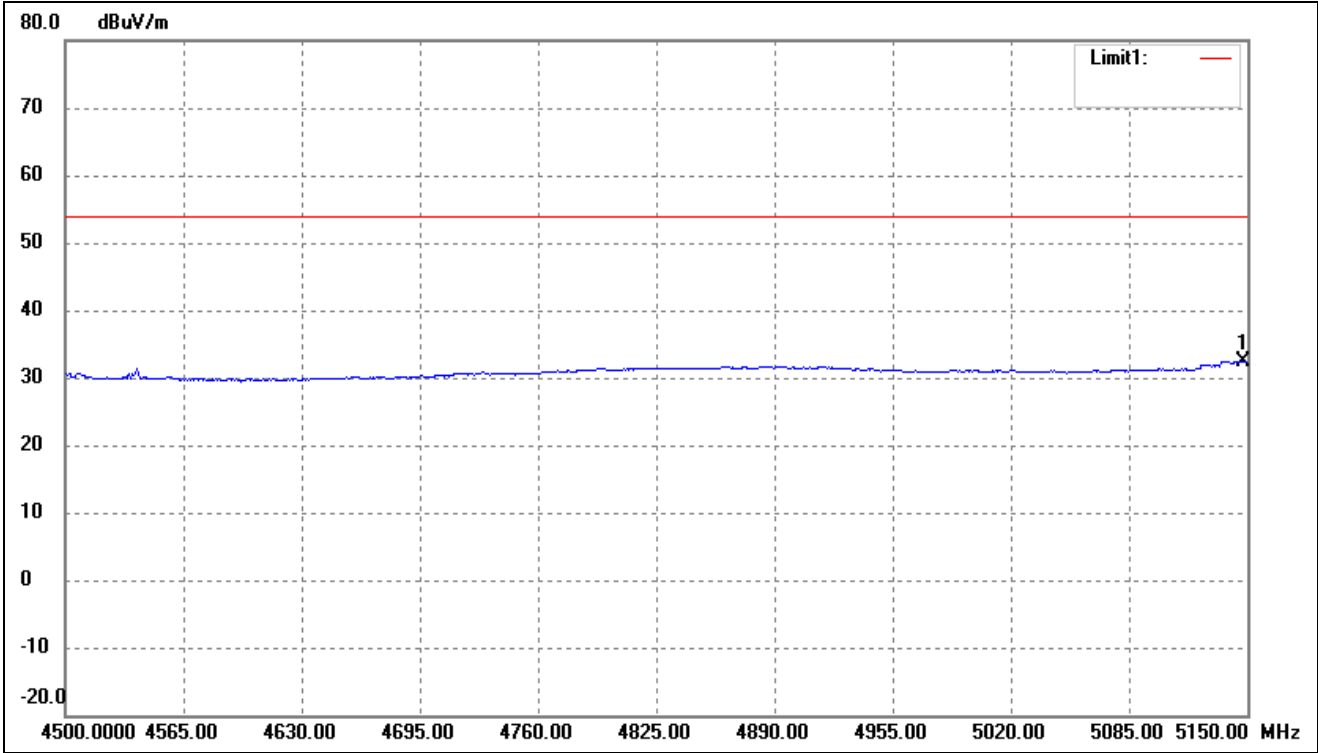
➤ Spurious Emission above 1GHz

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



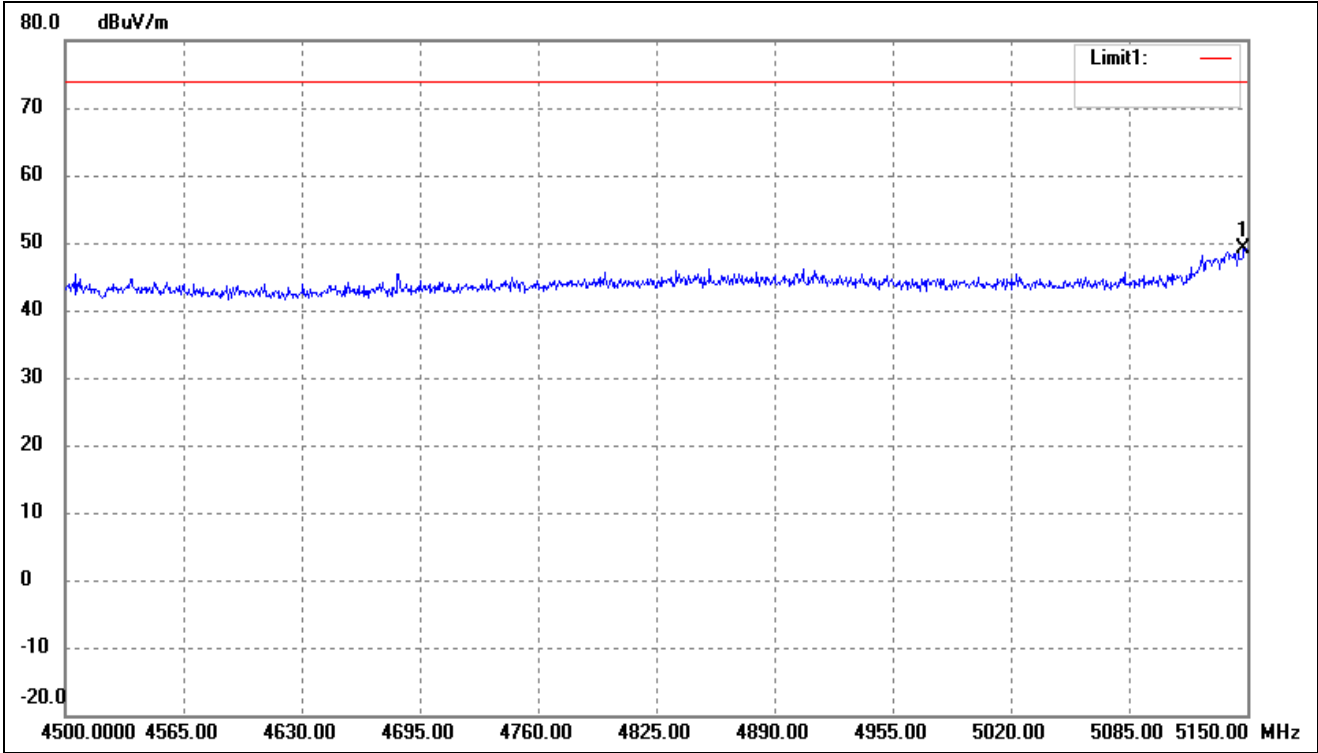
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5146.100	54.14	-5.35	48.79	74.00	-25.21	-	-	peak

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



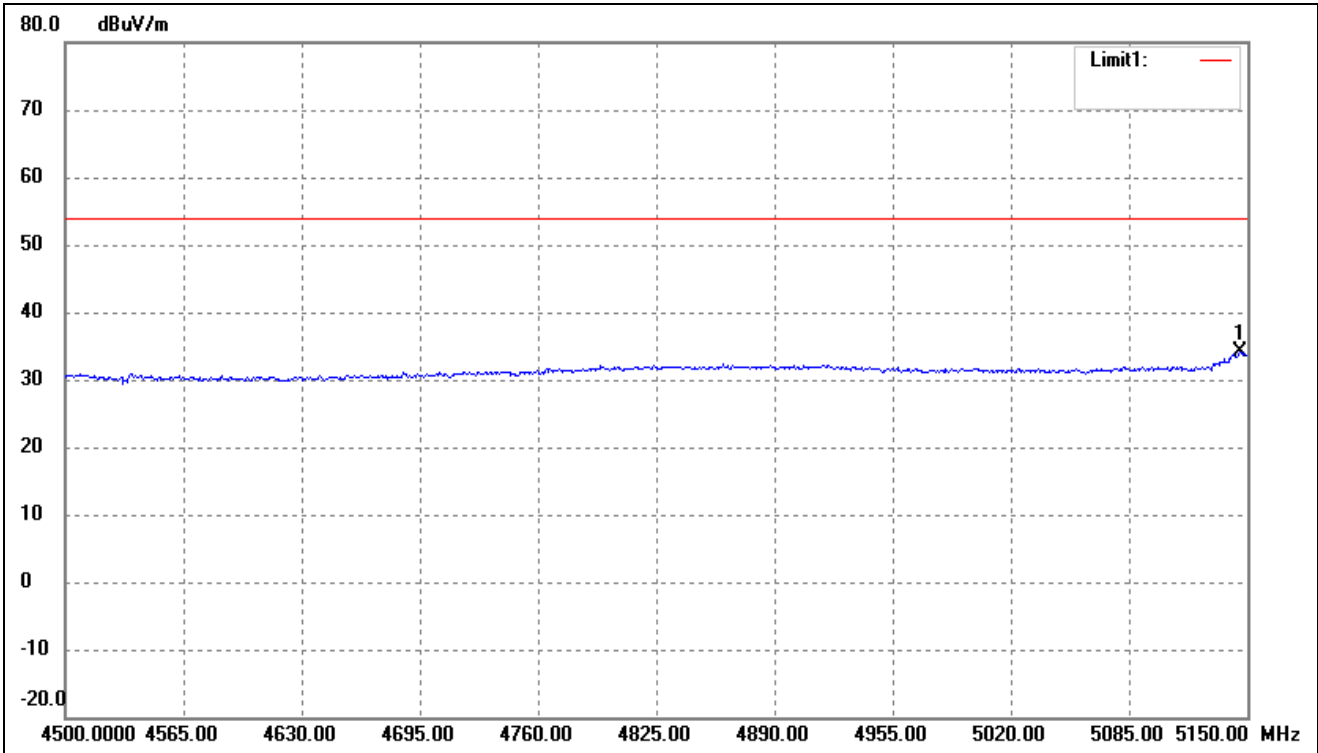
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5147.400	37.76	-5.34	32.42	54.00	-21.58	-	-	peak

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



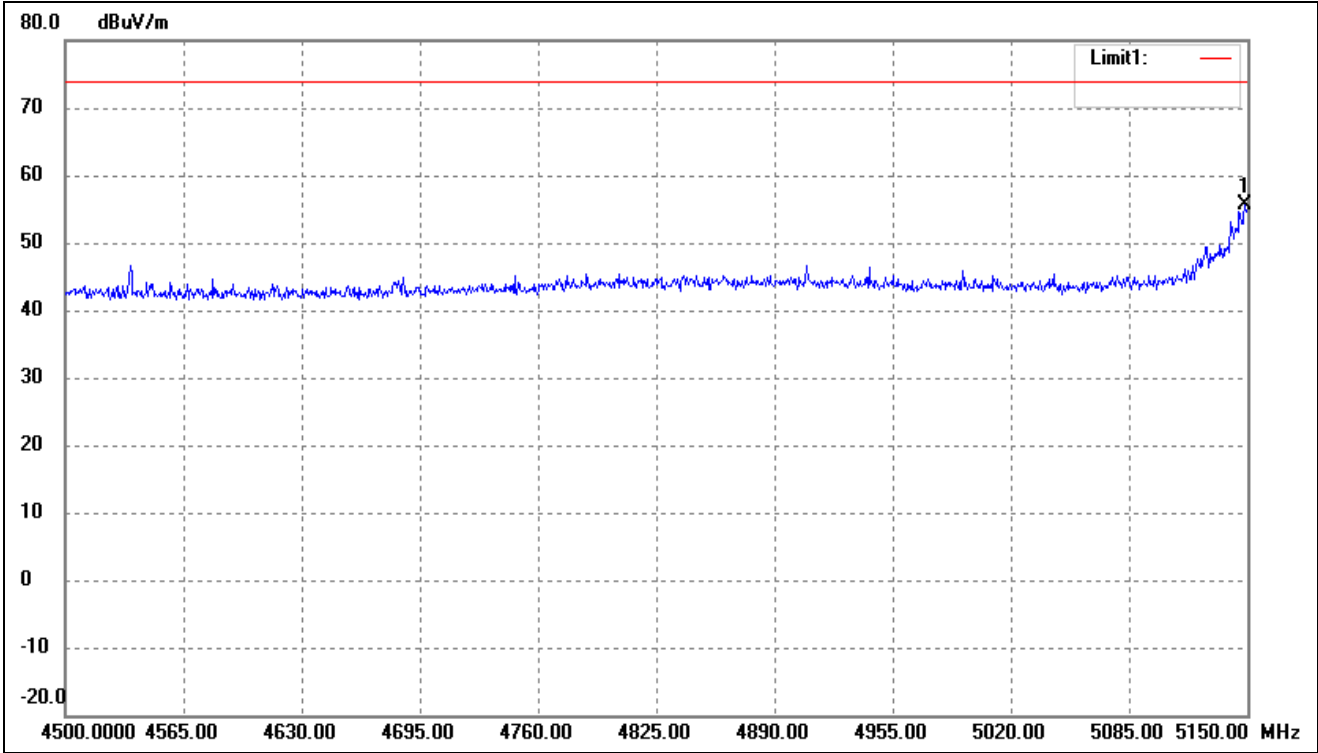
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5148.050	54.54	-5.34	49.20	74.00	-24.80	-	-	peak

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



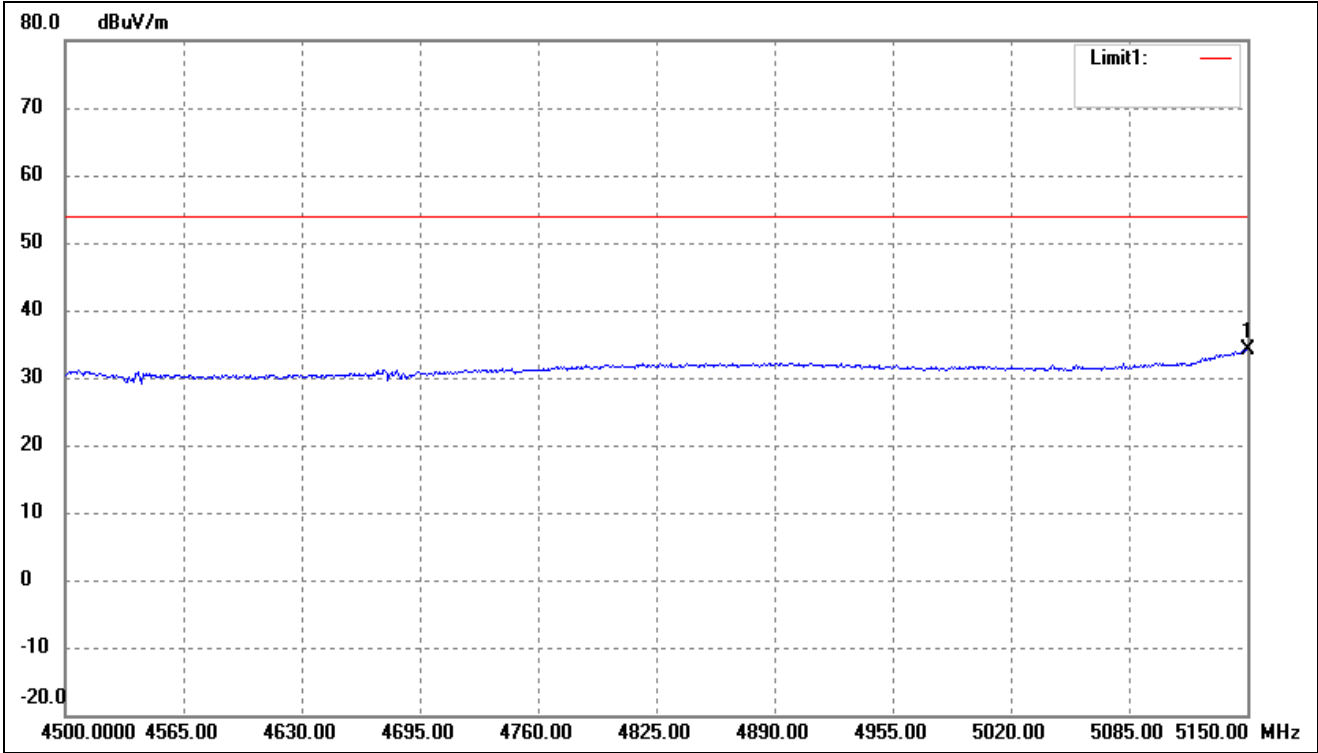
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5146.100	39.55	-5.35	34.20	54.00	-19.80	-	-	peak

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



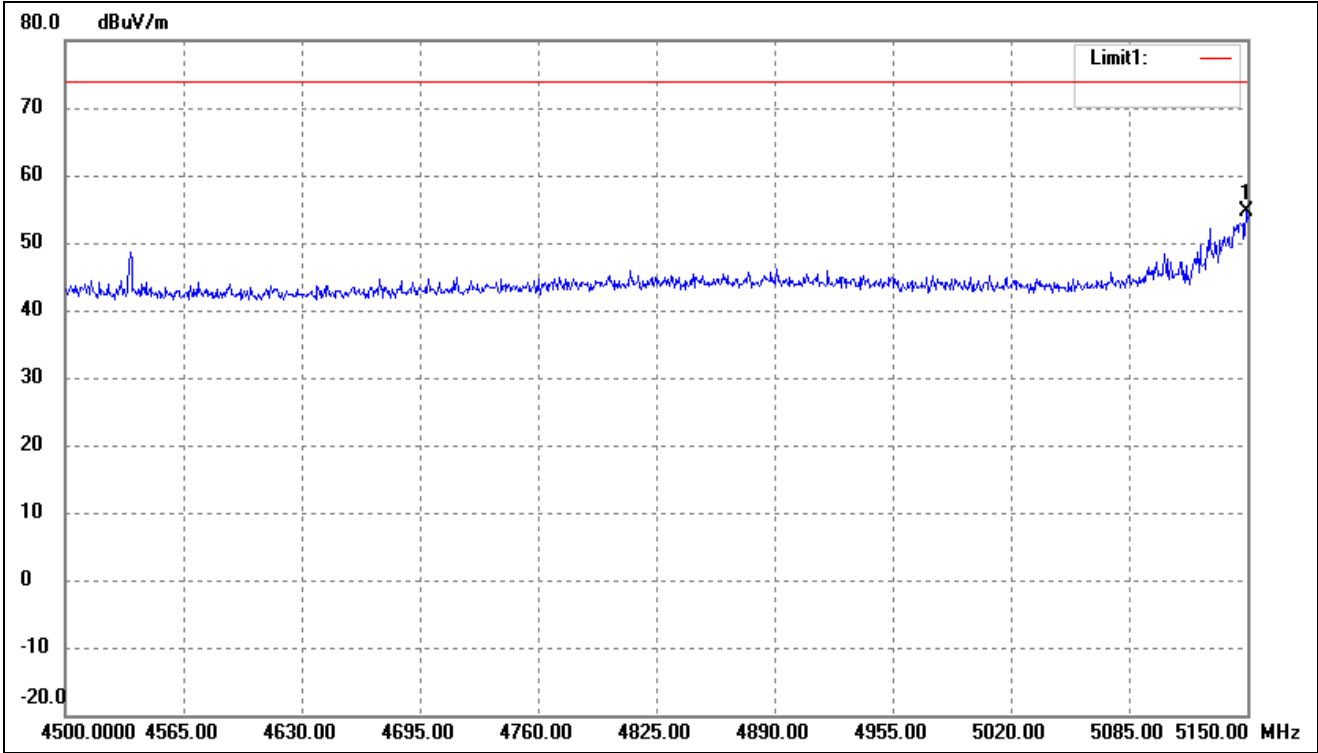
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5148.700	60.90	-5.33	55.57	74.00	-18.43	-	-	peak

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



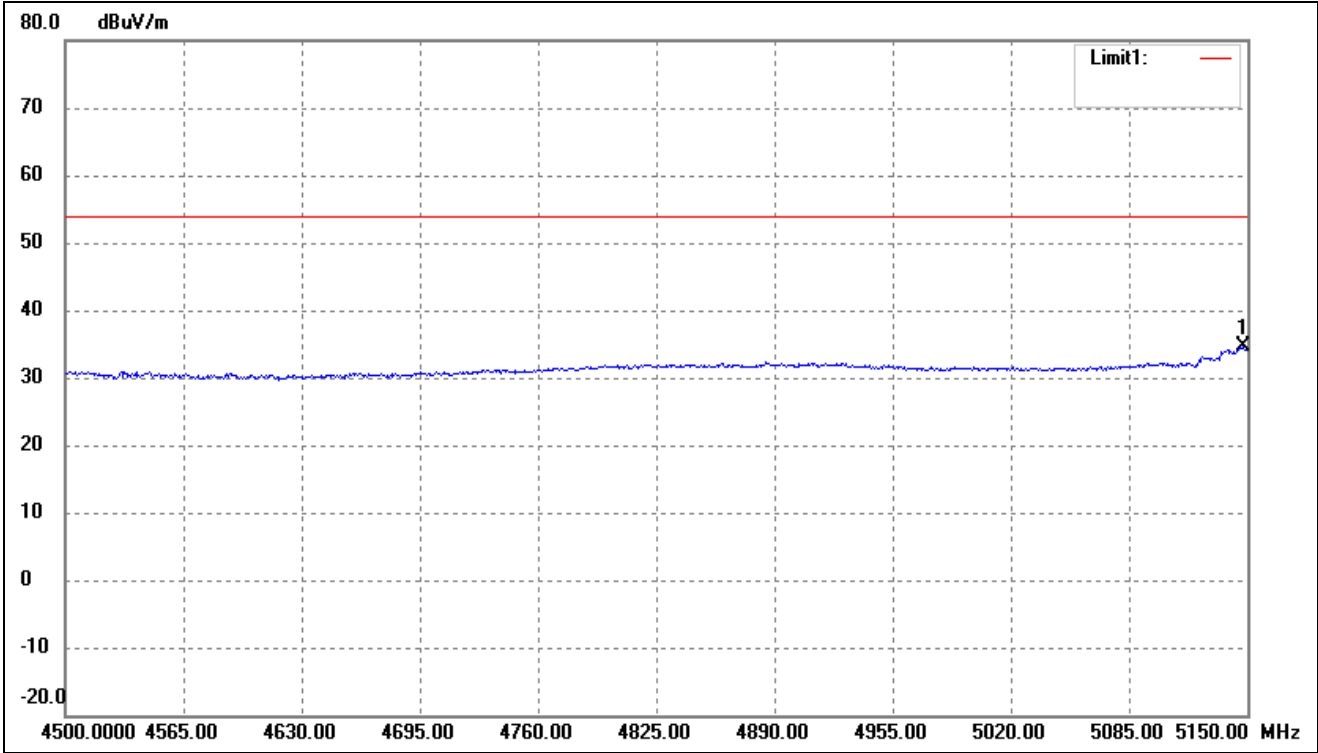
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5150.000	39.58	-5.33	34.25	54.00	-19.75	-	-	peak

802.11ac-HT80- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal (worst case)



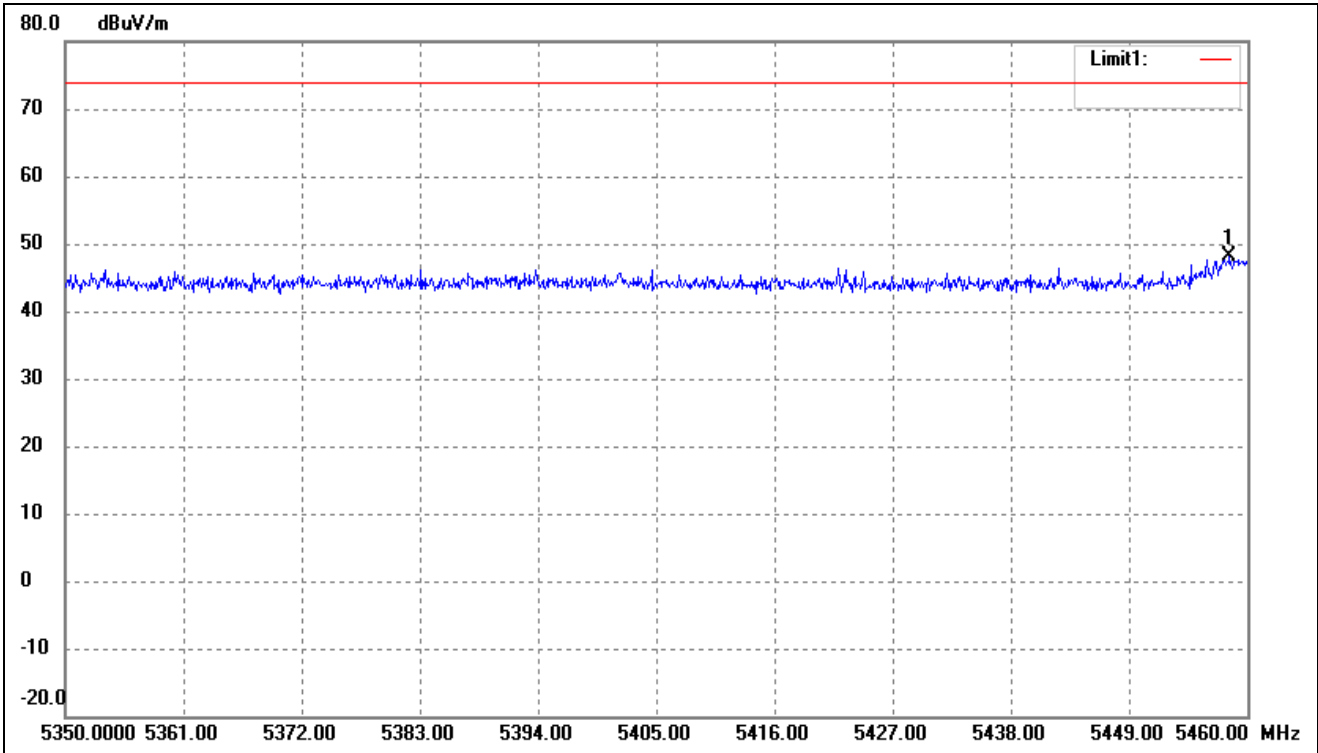
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5149.350	59.95	-5.33	54.62	74.00	-19.38	-	-	peak

802.11ac-HT80- Restricted Bandedge			
Test Channel	band 5.15-5.25GHz	Polarity:	Horizontal (worst case)



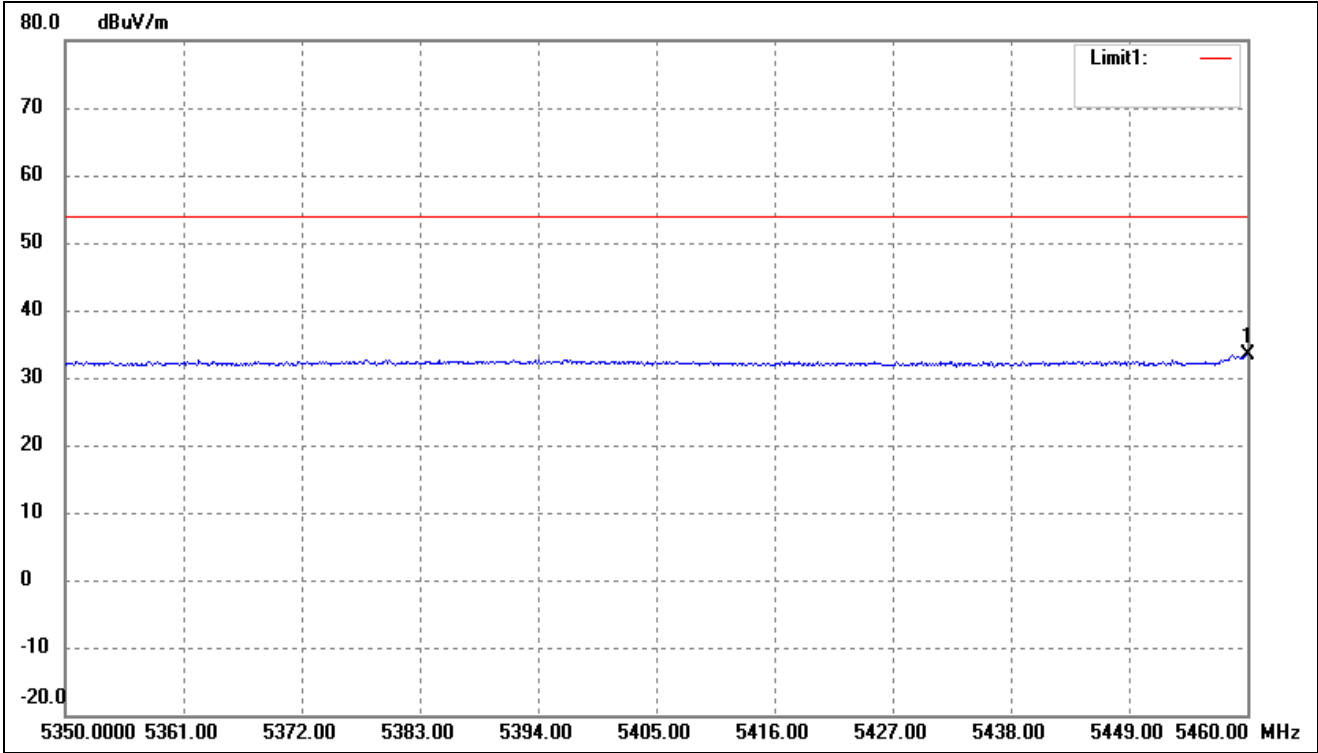
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5147.400	39.88	-5.34	34.54	54.00	-19.46	-	-	peak

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



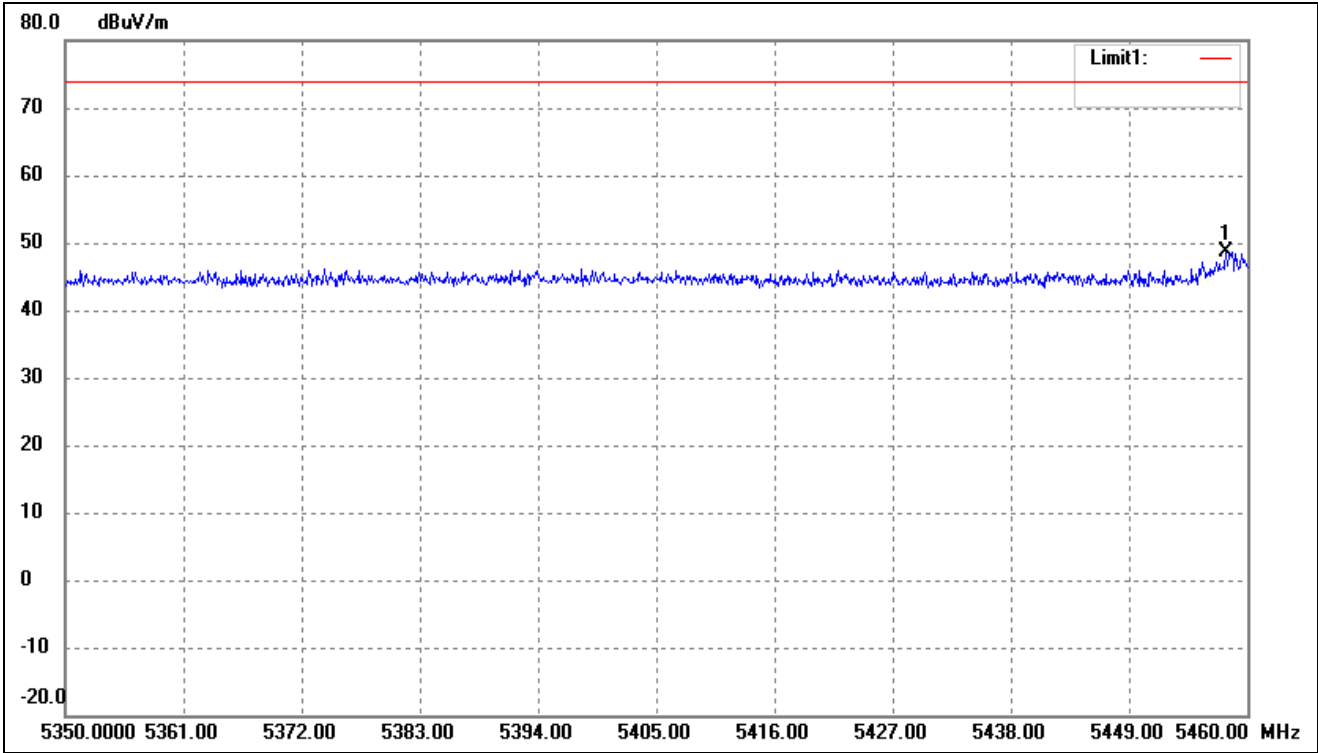
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5458.350	52.87	-4.77	48.10	74.00	-25.90	-	-	peak

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



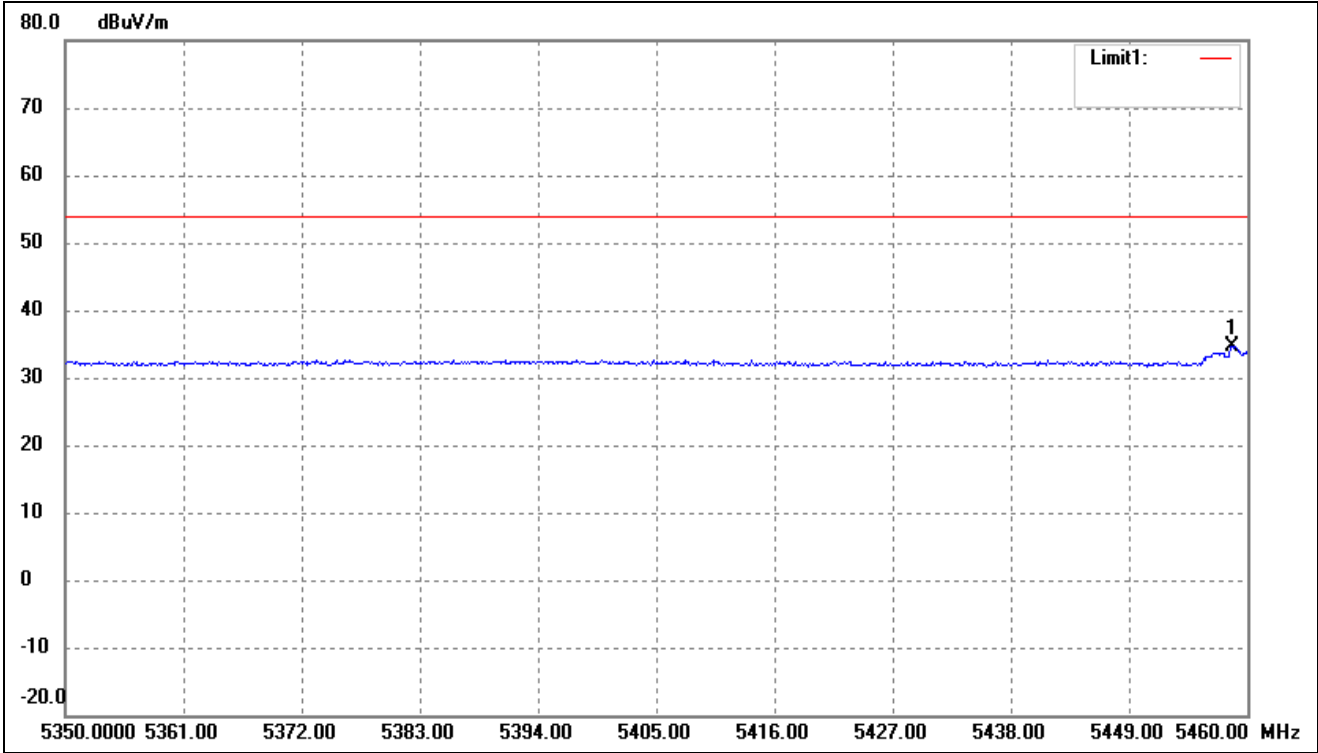
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5460.000	38.12	-4.77	33.35	54.00	-20.65	-	-	peak

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



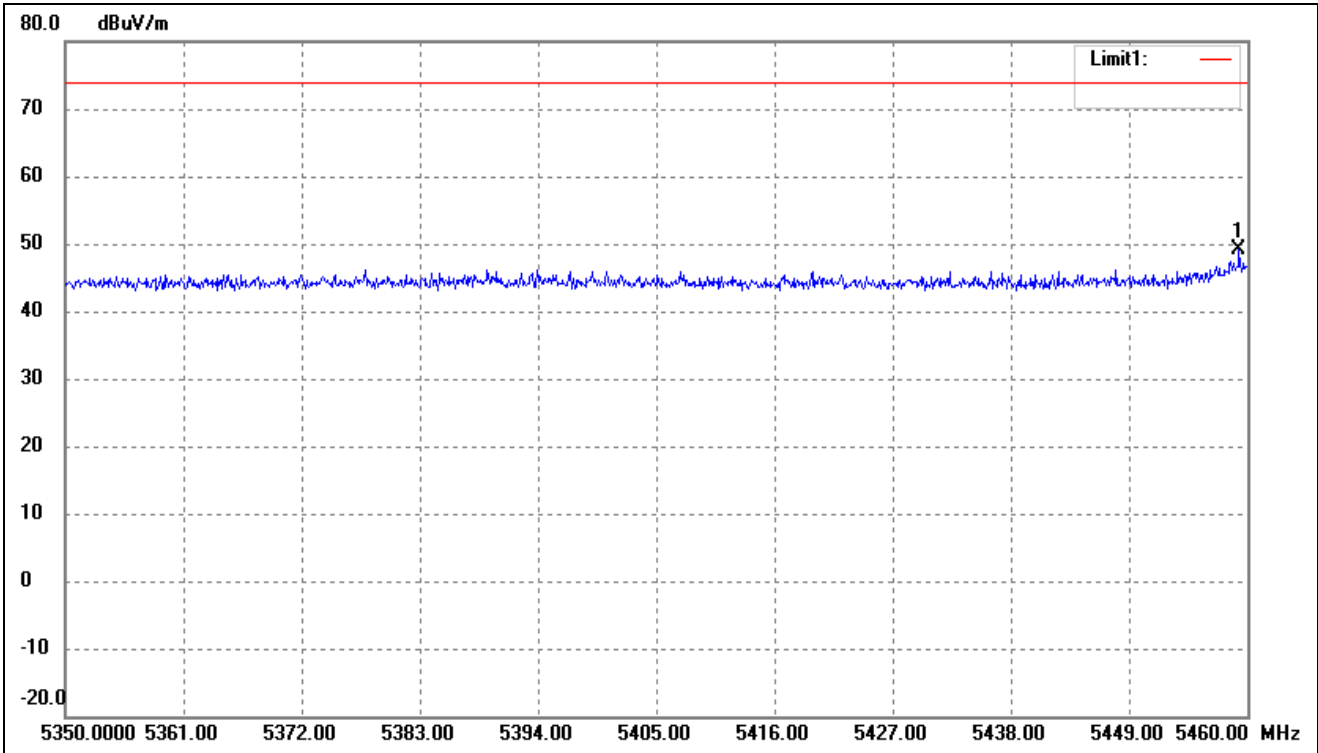
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5458.020	53.35	-4.77	48.58	74.00	-25.42	-	-	peak

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



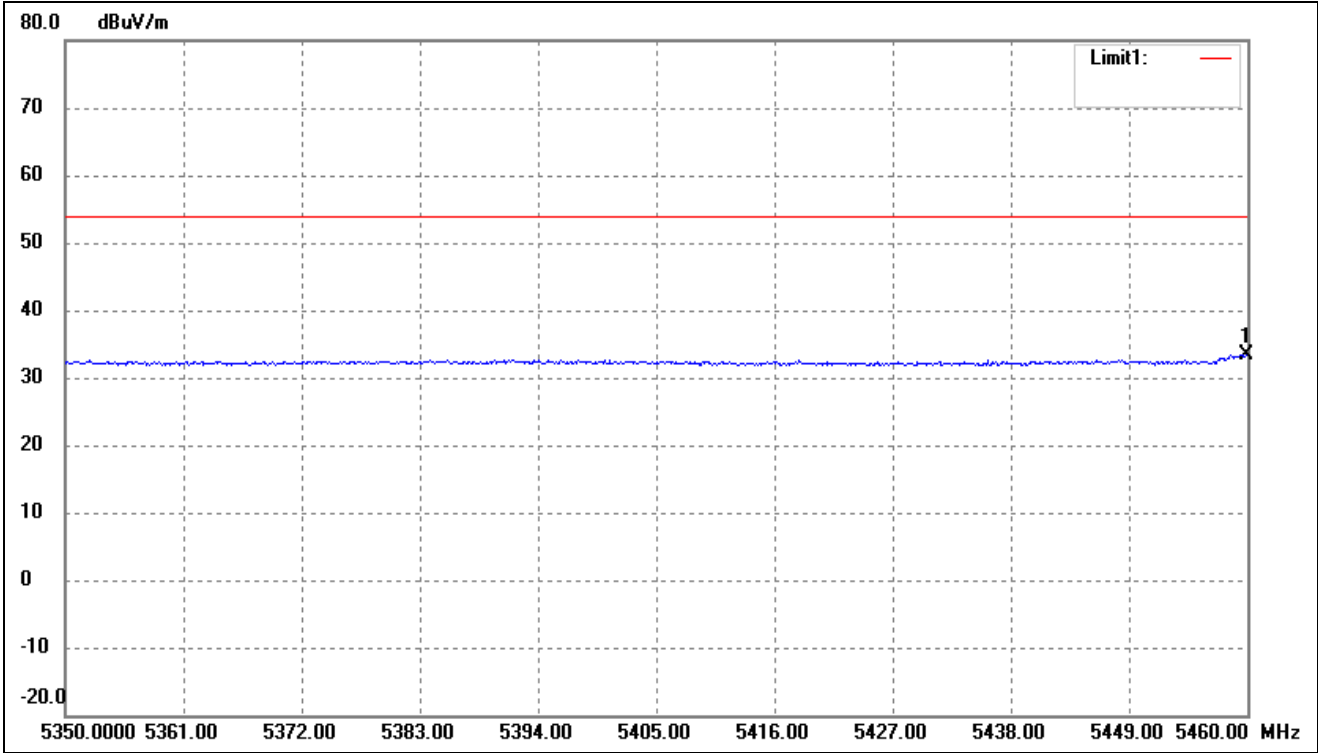
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5458.570	39.45	-4.77	34.68	54.00	-19.32	-	-	peak

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



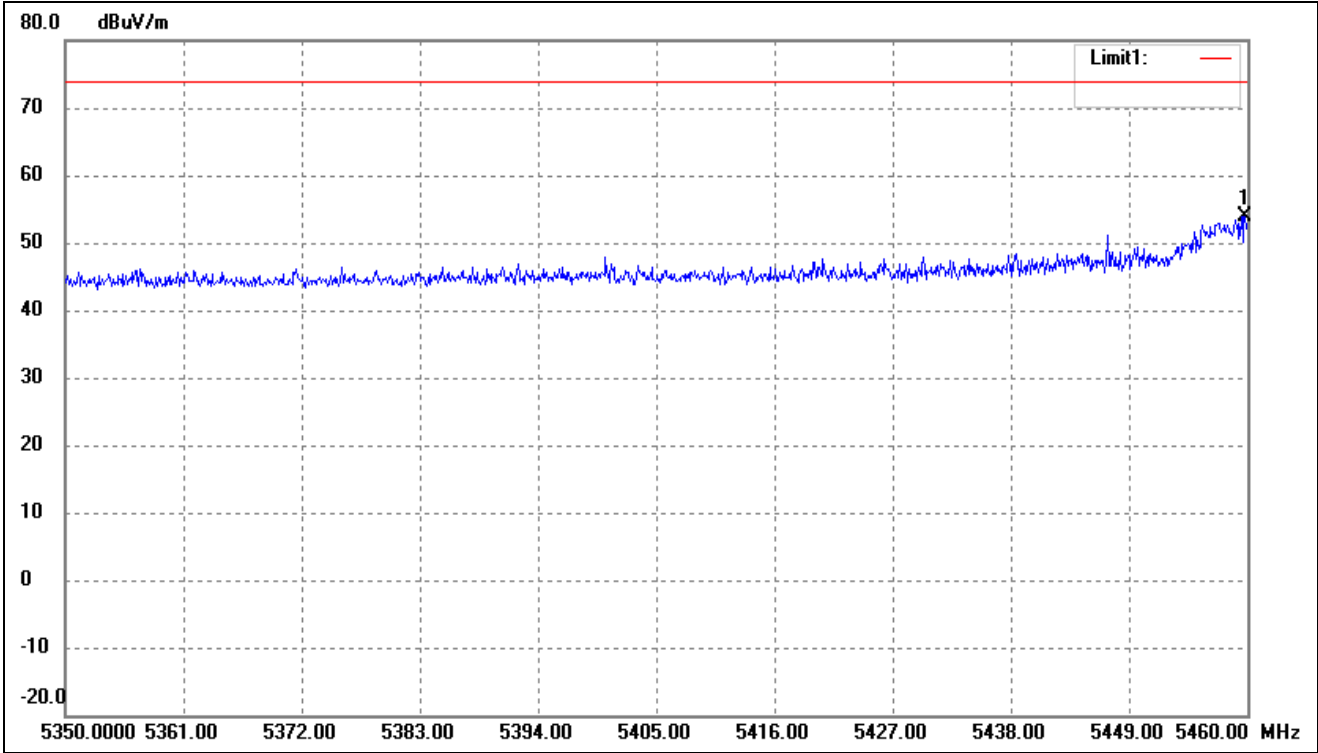
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5459.230	53.94	-4.77	49.17	74.00	-24.83	-	-	peak

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



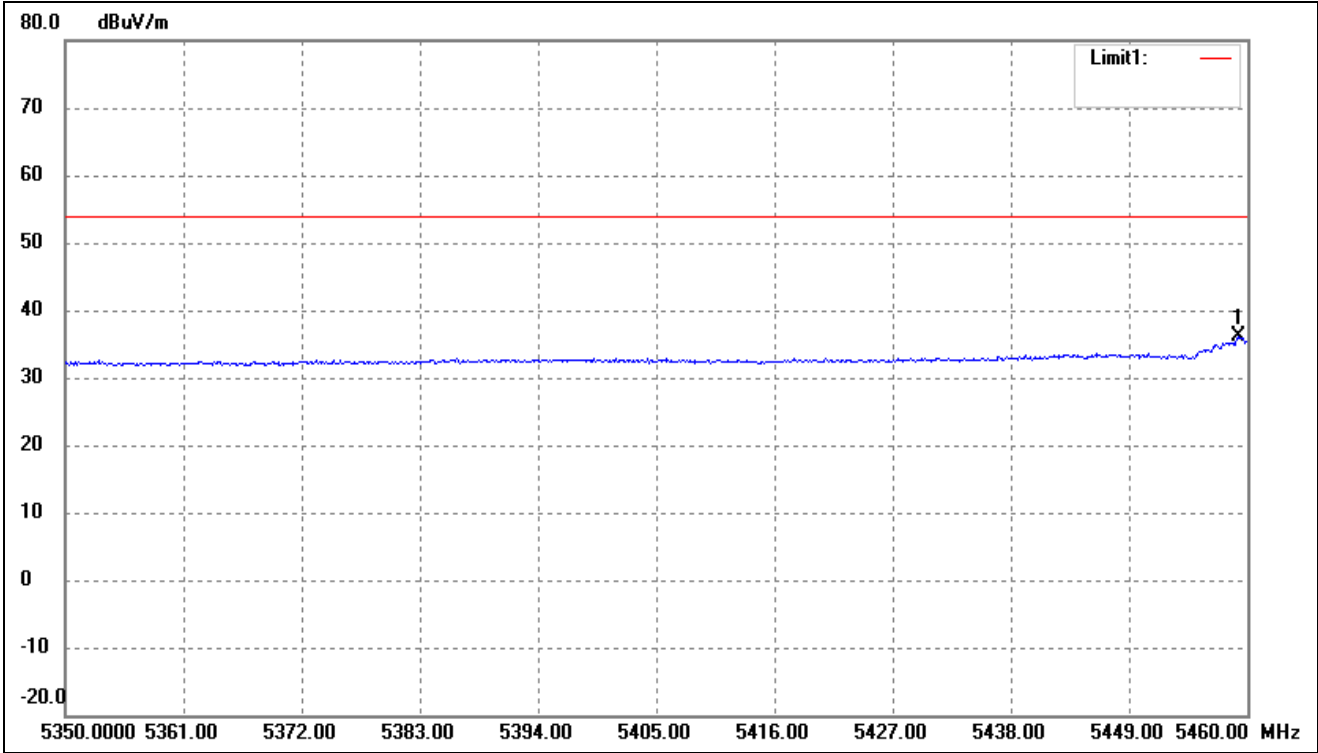
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5459.890	38.12	-4.77	33.35	54.00	-20.65	-	-	peak

802.11ac-HT80- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal (worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5459.780	58.70	-4.77	53.93	74.00	-20.07	-	-	peak

802.11ac-HT80- Restricted Bandedge			
Test Channel	band 5.35-5.47GHz	Polarity:	Horizontal (worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	5459.120	40.79	-4.77	36.02	54.00	-17.98	-	-	peak

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

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

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

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5180MHz)							
10360	55.14	7.11	62.25	74	-11.75	H	PK
15540	39.63	7.11	46.74	54	-7.26	H	AV
10360	55.86	7.11	62.97	74	-11.03	V	PK
15540	37.82	7.11	44.93	54	-9.07	V	AV
Middle Channel (5200MHz)							
10400	54.14	7.22	61.36	74	-12.64	H	PK
15600	38.56	7.22	45.78	54	-8.22	H	AV
10400	53.89	7.22	61.11	74	-12.89	V	PK
15600	37.95	7.22	45.17	54	-8.83	V	AV
High Channel (5240MHz)							
10480	55.85	7.69	63.54	74	-10.46	H	PK
15720	40.87	7.69	48.56	54	-5.44	H	AV
10480	54.00	7.69	61.69	74	-12.31	V	PK
15720	40.66	7.69	48.35	54	-5.65	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5260MHz)							
10520	54.88	7.96	62.84	74	-11.16	H	PK
15780	40.51	7.96	48.47	54	-5.53	H	AV
10520	53.94	7.96	61.90	74	-12.10	V	PK
15780	40.75	7.96	48.71	54	-5.29	V	AV
Middle Channel (5280MHz)							
10560	52.86	8.02	60.88	74	-13.12	H	PK
15840	38.86	8.02	46.88	54	-7.12	H	AV
10560	55.16	8.02	63.18	74	-10.82	V	PK
15840	38.61	8.02	46.63	54	-7.37	V	AV
High Channel (5320MHz)							
10640	56.11	8.35	64.46	74	-9.54	H	PK
15960	37.10	8.35	45.45	54	-8.55	H	AV
10640	55.90	8.35	64.25	74	-9.75	V	PK
15960	38.82	8.35	47.17	54	-6.83	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5500MHz)							
11000	55.46	8.82	64.28	74	-9.72	H	PK
16500	40.09	8.82	48.91	54	-5.09	H	AV
11000	52.11	8.82	60.93	74	-13.07	V	PK
16500	40.21	8.82	49.03	54	-4.97	V	AV
Middle Channel (5600MHz)							
11200	55.20	8.92	64.12	74	-9.88	H	PK
16800	39.41	8.92	48.33	54	-5.67	H	AV
11200	55.35	8.92	64.27	74	-9.73	V	PK
16800	40.65	8.92	49.57	54	-4.43	V	AV
High Channel (5700MHz)							
11400	53.60	9.36	62.96	74	-11.04	H	PK
17100	38.00	9.36	47.36	54	-6.64	H	AV
11400	55.36	9.36	64.72	74	-9.28	V	PK
17100	38.44	9.36	47.80	54	-6.20	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	55.93	9.45	65.38	74	-8.62	H	PK
17235	39.38	9.45	48.83	54	-5.17	H	AV
11490	54.46	9.45	63.91	74	-10.09	V	PK
17235	40.92	9.45	50.37	54	-3.63	V	AV
Middle Channel (5785MHz)							
11570	55.35	9.62	64.97	74	-9.03	H	PK
17355	40.84	9.62	50.46	54	-3.54	H	AV
11570	55.18	9.62	64.80	74	-9.20	V	PK
17355	38.34	9.62	47.96	54	-6.04	V	AV
High Channel (5825MHz)							
11650	54.85	9.84	64.69	74	-9.31	H	PK
17475	38.34	9.84	48.18	54	-5.82	H	AV
11650	53.21	9.84	63.05	74	-10.95	V	PK
17475	38.82	9.84	48.66	54	-5.34	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-39.52	-27
Highest	Above 5350	-42.36	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-38.12	-27
Highest	Above 5350	-41.28	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-38.69	-27
Highest	Above 5725	-42.36	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-40.98	-27
	5715 to 5725	-35.93	-17
Highest	5850 to 5860	-34.35	-17
	Above 5860	-40.41	-27

Note: the data just list the worst cases

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

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5180MHz)							
10360	56.12	7.11	63.23	74	-10.77	H	PK
10360	37.17	7.11	44.28	54	-9.72	H	AV
10360	55.68	7.11	62.79	74	-11.21	V	PK
10360	40.90	7.11	48.01	54	-5.99	V	AV
Middle Channel (5200MHz)							
10400	54.47	7.22	61.69	74	-12.31	H	PK
10400	39.40	7.22	46.62	54	-7.38	H	AV
10400	52.85	7.22	60.07	74	-13.93	V	PK
10400	40.72	7.22	47.94	54	-6.06	V	AV
High Channel (5240MHz)							
10480	53.80	7.69	61.49	74	-12.51	H	PK
10480	37.06	7.69	44.75	54	-9.25	H	AV
10480	55.81	7.69	63.50	74	-10.50	V	PK
10480	38.24	7.69	45.93	54	-8.07	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5260MHz)							
10520	55.28	7.96	63.24	74	-10.76	H	PK
10520	39.61	7.96	47.57	54	-6.43	H	AV
10520	52.22	7.96	60.18	74	-13.82	V	PK
10520	38.76	7.96	46.72	54	-7.28	V	AV
Middle Channel (5280MHz)							
10560	53.15	8.02	61.17	74	-12.83	H	PK
10560	37.45	8.02	45.47	54	-8.53	H	AV
10560	54.67	8.02	62.69	74	-11.31	V	PK
10560	37.47	8.02	45.49	54	-8.51	V	AV
High Channel (5320MHz)							
10640	54.69	8.35	63.04	74	-10.96	H	PK
10640	39.45	8.35	47.80	54	-6.20	H	AV
10640	55.80	8.35	64.15	74	-9.85	V	PK
10640	38.07	8.35	46.42	54	-7.58	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5500MHz)							
11000	53.93	8.82	62.75	74	-11.25	H	PK
11000	37.07	8.82	45.89	54	-8.11	H	AV
11000	53.97	8.82	62.79	74	-11.21	V	PK
11000	40.36	8.82	49.18	54	-4.82	V	AV
Middle Channel (5600MHz)							
11200	53.58	8.92	62.50	74	-11.50	H	PK
11200	39.65	8.92	48.57	54	-5.43	H	AV
11200	53.64	8.92	62.56	74	-11.44	V	PK
11200	37.95	8.92	46.87	54	-7.13	V	AV
High Channel (5700MHz)							
11400	56.39	9.84	66.23	74	-7.77	H	PK
11400	39.42	9.84	49.26	54	-4.74	H	AV
11400	54.89	9.84	64.73	74	-9.27	V	PK
11400	38.40	9.84	48.24	54	-5.76	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	55.11	9.45	64.56	74	-9.44	H	PK
11490	39.59	9.45	49.04	54	-4.96	H	AV
11490	55.46	9.45	64.91	74	-9.09	V	PK
11490	40.87	9.45	50.32	54	-3.68	V	AV
Middle Channel (5785MHz)							
11570	55.65	9.62	65.27	74	-8.73	H	PK
11570	40.60	9.62	50.22	54	-3.78	H	AV
11570	54.78	9.62	64.40	74	-9.60	V	PK
11570	39.29	9.62	48.91	54	-5.09	V	AV
High Channel (5825MHz)							
11650	56.32	9.84	66.16	74	-7.84	H	PK
11650	36.28	9.84	46.12	54	-7.88	H	AV
11650	52.28	9.84	62.12	74	-11.88	V	PK
11650	37.35	9.84	47.19	54	-6.81	V	AV

➤ Out of Band edge 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-41.01	-27
Highest	Above 5350	-39.45	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-42.82	-27
Highest	Above 5350	-38.12	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-36.28	-27
Highest	Above 5725	-38.41	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-39.32	-27
	5715 to 5725	-37.52	-17
Highest	5850 to 5860	-36.32	-17
	Above 5860	-37.12	-27

Note: the data just list the worst cases

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

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

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5190MHz)							
10380	55.61	7.89	63.50	74	-10.50	H	PK
10380	41.31	7.89	49.20	54	-4.80	H	AV
10380	54.98	7.89	62.87	74	-11.13	V	PK
10380	38.87	7.89	46.76	54	-7.24	V	AV
High Channel (5230MHz)							
10460	55.07	7.97	63.04	74	-10.96	H	PK
10460	39.31	7.97	47.28	54	-6.72	H	AV
10460	52.28	7.97	60.25	74	-13.75	V	PK
10460	38.47	7.97	46.44	54	-7.56	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5270MHz)							
10540	56.41	8.16	64.57	74	-9.43	H	PK
10540	36.44	8.16	44.60	54	-9.40	H	AV
10540	55.79	8.16	63.95	74	-10.05	V	PK
10540	37.54	8.16	45.70	54	-8.30	V	AV
High Channel (5310MHz)							
10620	57.12	8.57	65.69	74	-8.31	H	PK
10620	37.24	8.57	45.81	54	-8.19	H	AV
10620	52.43	8.57	61.00	74	-13.00	V	PK
10620	37.00	8.57	45.57	54	-8.43	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5510MHz)							
11020	55.37	9.16	64.53	74	-9.47	H	PK
11020	39.20	9.16	48.36	54	-5.64	H	AV
11020	55.73	9.16	64.89	74	-9.11	V	PK
11020	39.05	9.16	48.21	54	-5.79	V	AV
Middle Channel (5590MHz)							
11180	54.95	9.08	64.03	74	-9.97	H	PK
11180	38.88	9.08	47.96	54	-6.04	H	AV
11180	55.37	9.08	64.45	74	-9.55	V	PK
11180	36.72	9.08	45.80	54	-8.20	V	AV
High Channel (5670MHz)							
11340	54.82	9.43	64.25	74	-9.75	H	PK
11340	36.18	9.43	45.61	54	-8.39	H	AV
11340	54.93	9.43	64.36	74	-9.64	V	PK
11340	36.36	9.43	45.79	54	-8.21	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	55.89	9.45	65.34	74	-8.66	H	PK
11510	36.08	9.45	45.53	54	-8.47	H	AV
11510	53.44	9.45	62.89	74	-11.11	V	PK
11510	36.92	9.45	46.37	54	-7.63	V	AV
High Channel (5795MHz)							
11590	54.24	9.27	63.51	74	-10.49	H	PK
11590	37.66	9.27	46.93	54	-7.07	H	AV
11590	54.74	9.27	64.01	74	-9.99	V	PK
11590	38.16	9.27	47.43	54	-6.57	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-38.42	-27
Highest	Above 5350	-36.32	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-40.21	-27
Highest	Above 5350	-41.87	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-37.52	-27
Highest	Above 5725	-38.31	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-42.35	-27
	5715 to 5725	-34.27	-17
Highest	5850 to 5860	-41.01	-17
	Above 5860	-33.58	-27

Note: the data just list the worst cases

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.470-5.725GHz, 5.725-5.850GHz (802.11ac VH80)
- 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	53.61	7.53	61.14	74	-12.86	H	PK
10420	42.38	7.53	49.91	54	-4.09	H	AV
10420	52.60	7.53	60.13	74	-13.87	H	PK
10420	39.54	7.53	47.07	54	-6.93	H	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5290MHz							
10580	54.16	7.95	62.11	74	-11.89	H	PK
10580	42.45	7.95	50.40	54	-3.60	H	AV
10580	53.88	7.95	61.83	74	-12.17	V	PK
10580	40.52	7.95	48.47	54	-5.53	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5530MHz)							
11060	56.08	9.42	65.50	74	-8.50	H	PK
11060	38.27	9.42	47.69	54	-6.31	H	AV
11060	55.30	9.42	64.72	74	-9.28	V	PK
11060	37.49	9.42	46.91	54	-7.09	V	AV
High Channel (5610MHz)							
11220	54.17	9.69	63.86	74	-10.14	H	PK
11220	39.10	9.69	48.79	54	-5.21	H	AV
11220	53.34	9.69	63.03	74	-10.97	V	PK
11220	37.60	9.69	47.29	54	-6.71	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5775MHz							
11550	54.28	9.93	64.21	74	-9.79	H	PK
11550	38.98	9.93	48.91	54	-5.09	H	AV
11550	54.44	9.93	64.37	74	-9.63	V	PK
11550	39.21	9.93	49.14	54	-4.86	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-34.28	-27
Highest	Above 5350	-36.78	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-37.24	-27
Highest	Above 5350	-39.65	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5470-5725MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5470	-35.42	-27
Highest	Above 5725	-39.31	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-40.25	-27
	5715 to 5725	-36.27	-17
Highest	5850 to 5860	-41.28	-17
	Above 5860	-36.31	-27

Note: the data just list the worst cases

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

9. Frequency Stability

9.1 Standard Applicable

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

9.2 Test Procedure

According to §2.1055, the following test procedure was performed.

The Frequency Stability is measured directly with a Frequency Domain Analyzer. Frequency Deviation in ppm is calculated from the measured peak to peak value.

The Carrier Frequency Stability over Power Supply Voltage and over Temperature is measured with a Frequency Domain Analyzer in histogram mode.

9.3 Summary of Test Results/Plots

Please refer to Appendix D

10. Conducted Emissions

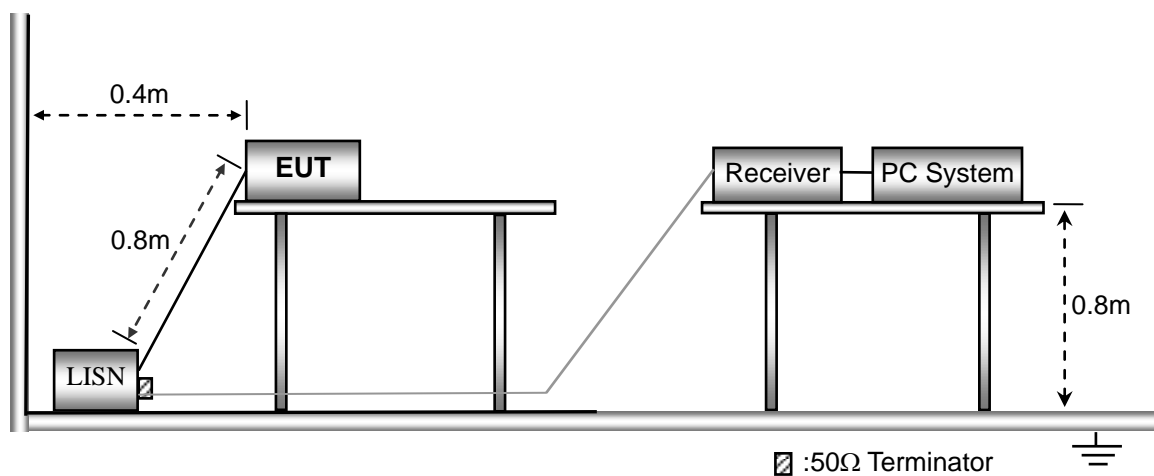
10.1 Test Procedure

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

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

The spacing between the peripherals was 10cm.

10.2 Basic Test Setup Block Diagram



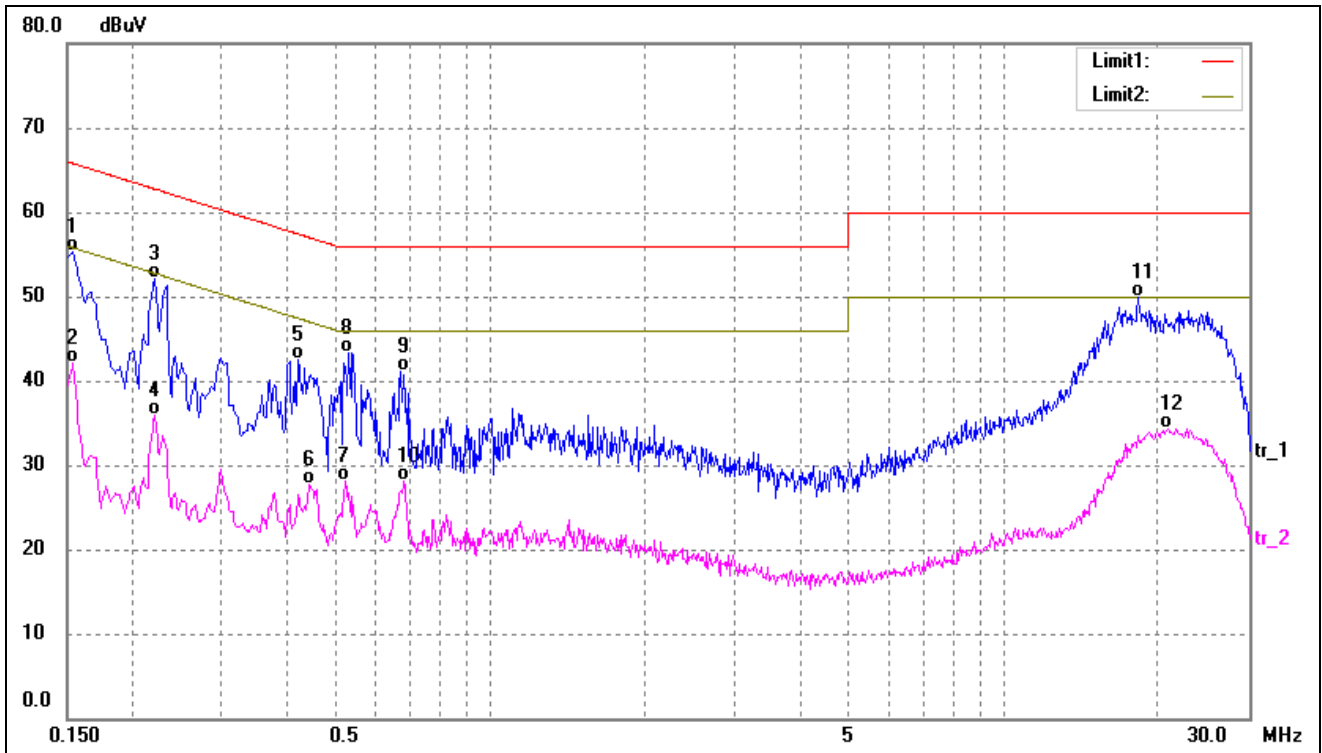
10.3 Test Receiver Setup

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

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

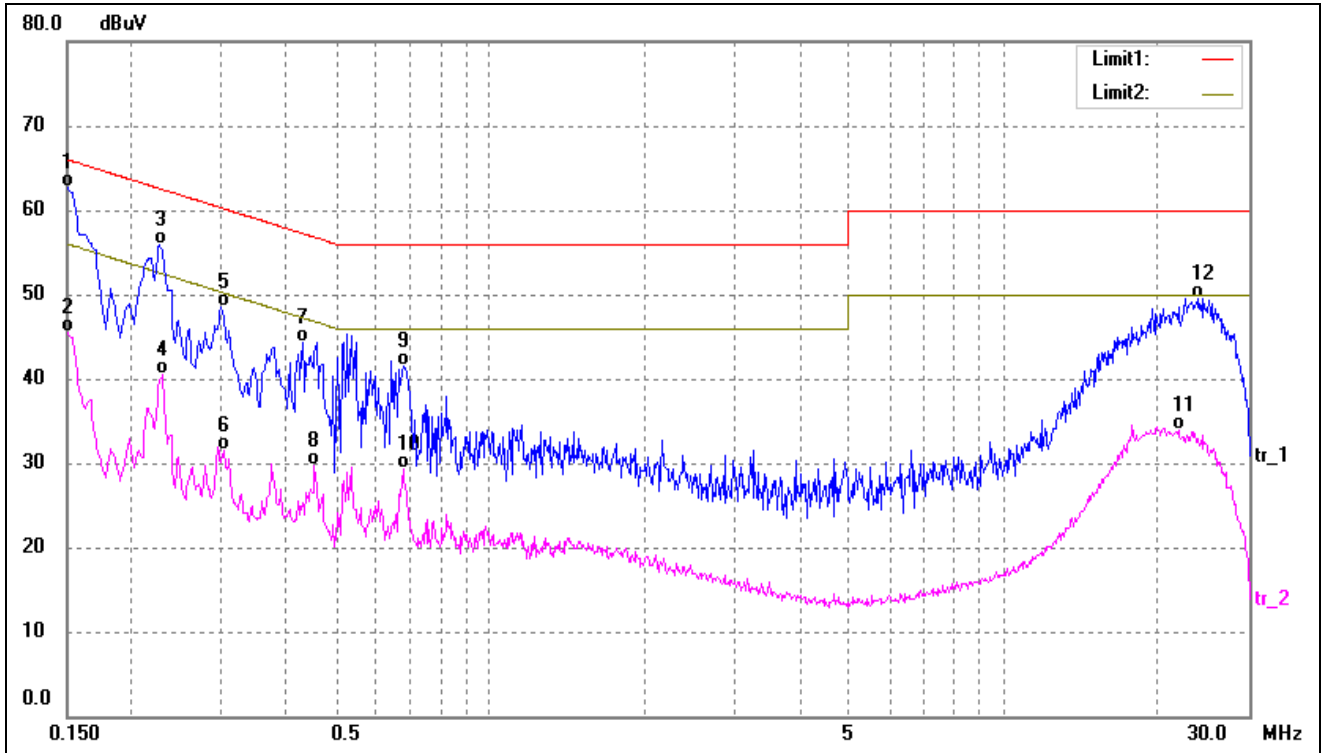
10.4 Summary of Test Results/Plots

Test Mode	Communication	AC120V 60Hz	Polarity:	Neutral
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1540	44.88	10.37	55.25	65.78	-10.53	QP
2	0.1540	31.72	10.37	42.09	55.78	-13.69	AVG
3	0.2220	41.73	10.36	52.09	62.74	-10.65	QP
4	0.2220	25.56	10.36	35.92	52.74	-16.82	AVG
5	0.4220	32.18	10.29	42.47	57.41	-14.94	QP
6	0.4420	17.34	10.28	27.62	47.02	-19.40	AVG
7	0.5220	17.82	10.27	28.09	46.00	-17.91	AVG
8	0.5300	33.07	10.28	43.35	56.00	-12.65	QP
9	0.6700	30.71	10.36	41.07	56.00	-14.93	QP
10	0.6820	17.69	10.37	28.06	46.00	-17.94	AVG
11*	18.2900	39.61	10.22	49.83	60.00	-10.17	QP
12	20.8780	24.09	10.24	34.33	50.00	-15.67	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*	0.1500	52.31	10.38	62.69	66.00	-3.31	QP
2	0.1500	35.05	10.38	45.43	56.00	-10.57	AVG
3	0.2260	45.61	10.36	55.97	62.60	-6.63	QP
4	0.2300	30.17	10.36	40.53	52.45	-11.92	AVG
5	0.2980	38.07	10.34	48.41	60.30	-11.89	QP
6	0.3020	21.08	10.34	31.42	50.19	-18.77	AVG
7	0.4300	34.04	10.28	44.32	57.25	-12.93	QP
8	0.4540	19.44	10.28	29.72	46.80	-17.08	AVG
9	0.6780	31.17	10.37	41.54	56.00	-14.46	QP
10	0.6780	19.00	10.37	29.37	46.00	-16.63	AVG
11	21.9420	23.63	10.23	33.86	50.00	-16.14	AVG
12	23.9740	39.33	10.22	49.55	60.00	-10.45	QP

APPENDIX SUMMARY

Project No.	WTX21X12136503W	Test Engineer	Gala
Start date	2021/12/16	Finish date	2021/12/25
Temperature	23°C	Humidity	49%
RF specifications	U-NII		

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

APPENDIX A

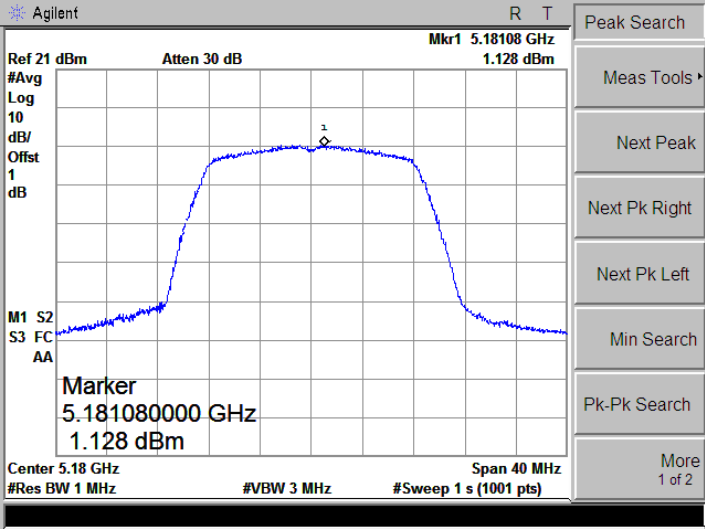
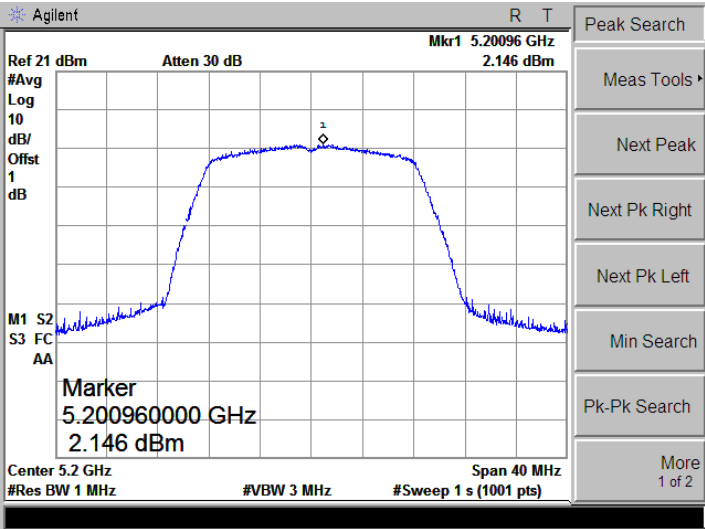
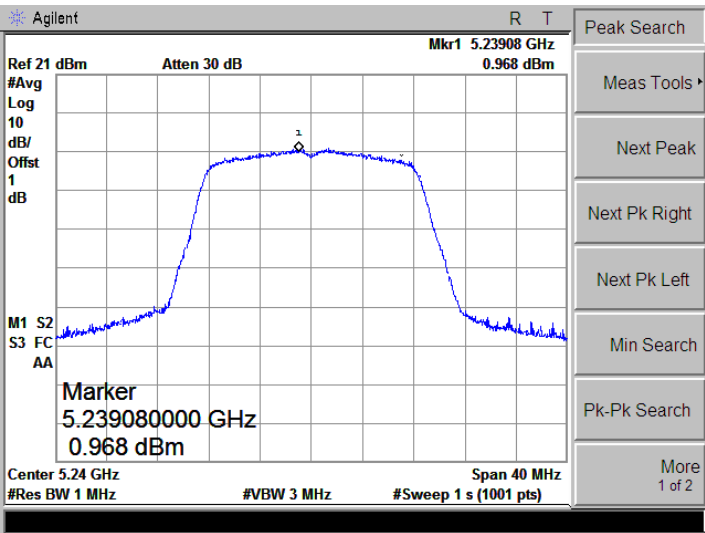
Power Spectral Density			
U-NII-1:5150-5250MHz			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a	5180	1.128	11
	5200	2.146	11
	5240	0.968	11
802.11n-HT20	5180	-0.243	11
	5200	1.599	11
	5240	0.433	11
802.11n-HT40	5190	-3.344	11
	5230	-3.361	11
802.11ac-HT80	5210	-6.961	11

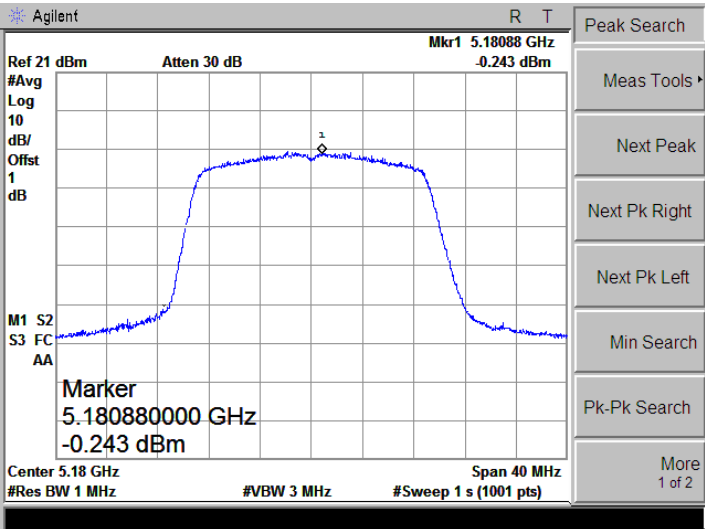
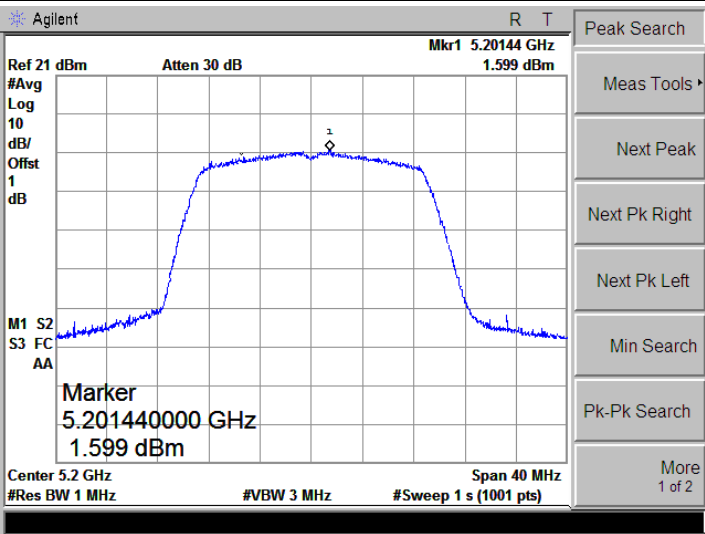
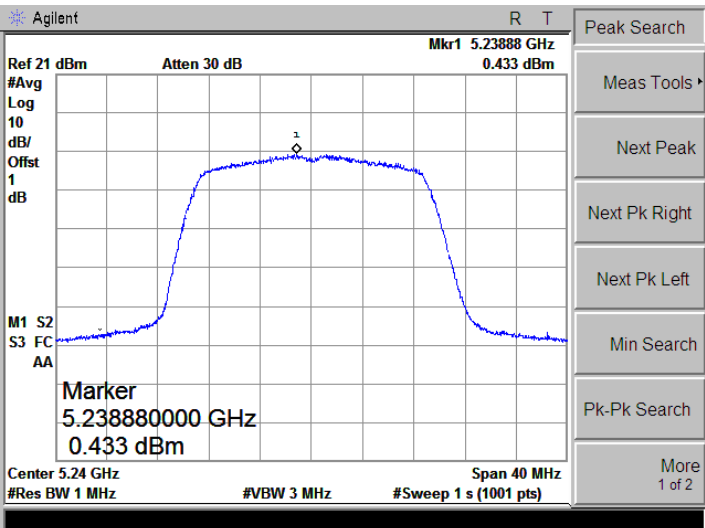
U-NII-2A: 5250-5350MHz			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a	5260	2.407	11
	5280	1.709	11
	5320	1.594	11
802.11n-HT20	5260	0.043	11
	5280	0.354	11
	5320	0.537	11
802.11n-HT40	5270	-3.636	11
	5310	-3.169	11
802.11ac-HT80	5290	-6.786	11

U-NII-2C: 5470-5725MHz			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a	5500	2.606	11
	5580	2.084	11
	5700	2.543	11
802.11n-HT20	5500	0.467	11
	5580	1.267	11
	5700	-0.126	11
802.11n-HT40	5510	-3.585	11
	5550	-3.582	11
	5670	-3.032	11
802.11ac-HT80	5530	-7.044	11
802.11ac-HT80	5610	-7.456	11

U-NII-3: 5725-5850MHz					
Operating mode	Test Channel	Power Spectral Density dBm/300kHz	Factor	Power Spectral Density* dBm/500kHz	Limit dBm/500kHz
802.11a	5745	-2.907	2.22	-0.687	30
	5785	-2.659	2.22	-0.439	30
	5825	-3.298	2.22	-1.078	30
802.11n-HT20	5745	-5.135	2.22	-2.915	30
	5785	-4.507	2.22	-2.287	30
	5825	-5.092	2.22	-2.872	30
802.11n HT40	5755	-8.563	2.22	-6.343	30
	5795	-8.142	2.22	-5.922	30
802.11ac VH80	5775	-12.51	2.22	-10.29	30
*Note: Factor= $10\log(500\text{kHz}/300\text{kHz})=2.22$					
*Note: Maximum PSD=PSD(dBm/300kHz)+ $10\log(500\text{kHz}/300\text{kHz})$					

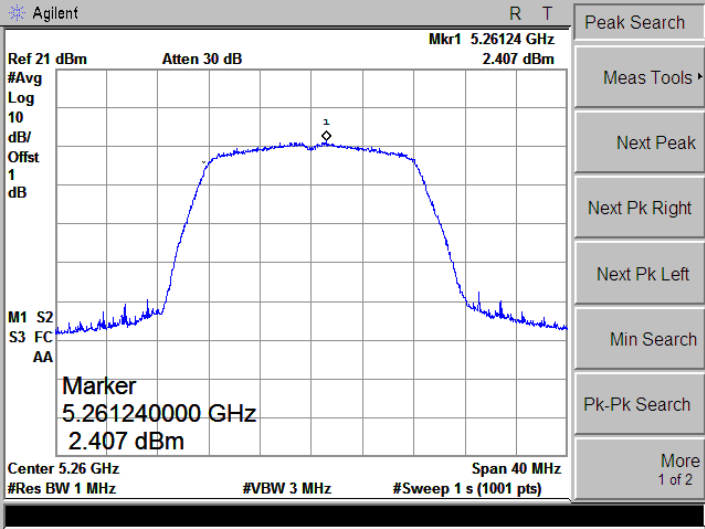
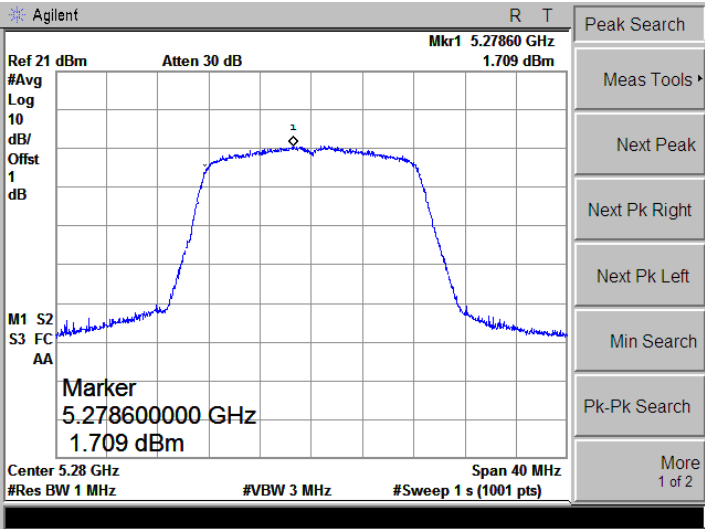
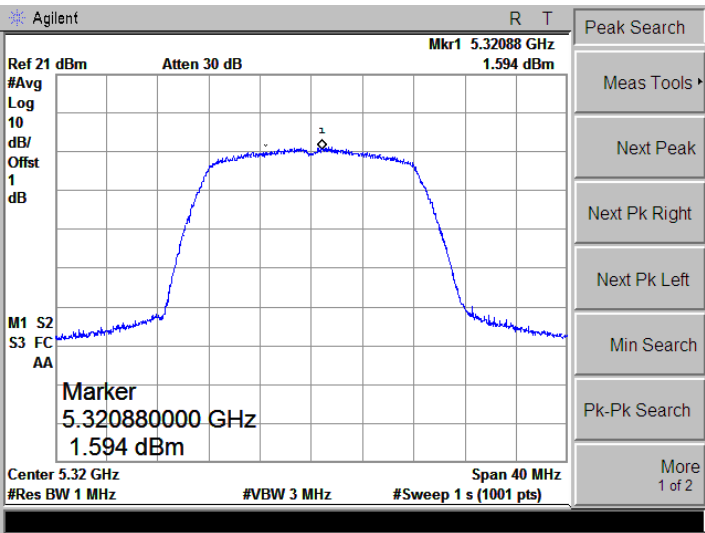
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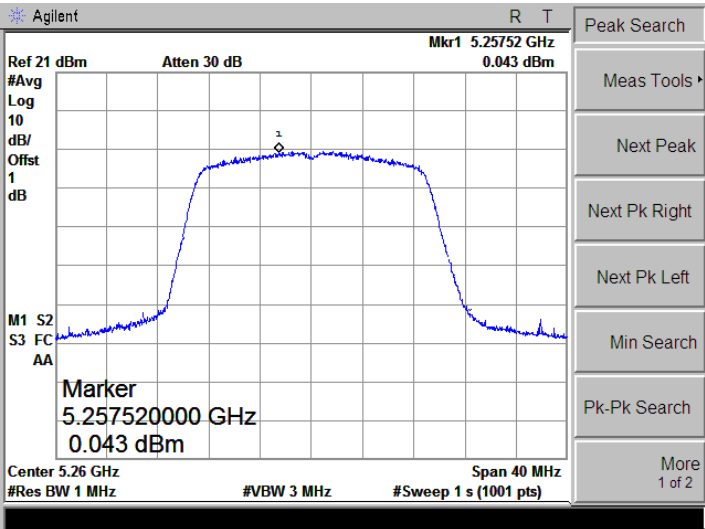
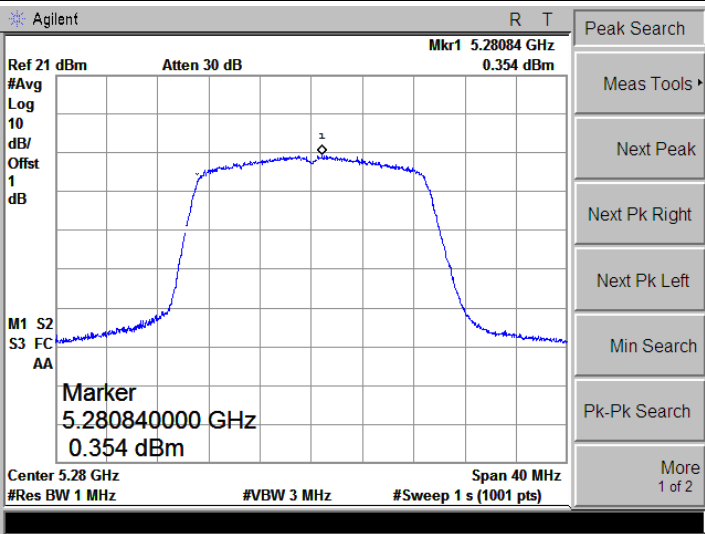
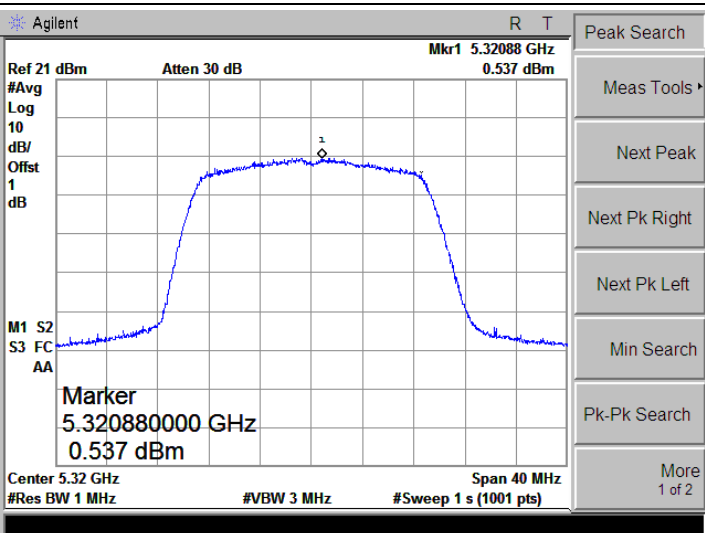
<p>802.11a-Low</p>	
<p>802.11a-Middle</p>	
<p>802.11a-High</p>	

<p>802.11n-HT20-Low</p>	
<p>802.11n-HT20-Middle</p>	
<p>802.11n-HT20-High</p>	

<p>802.11n-HT40-Low</p>	<p>Agilent R T Ref 21 dBm Atten 30 dB Mkr1 5.18832 GHz -3.344 dBm #Avg 10 Log dB/ Offst 1 dB M1 S2 S3 FC AA Marker 5.188320000 GHz -3.344 dBm Center 5.19 GHz Span 80 MHz #Res BW 1 MHz #VBW 3 MHz #Sweep 1 s (1001 pts)</p>
<p>802.11n-HT40-High</p>	<p>Agilent R T Ref 21 dBm Atten 30 dB Mkr1 5.22784 GHz -3.361 dBm #Avg 10 Log dB/ Offst 1 dB M1 S2 S3 FC AA Marker 5.227840000 GHz -3.361 dBm Center 5.23 GHz Span 80 MHz #Res BW 1 MHz #VBW 3 MHz #Sweep 1 s (1001 pts)</p>
<p>802.11ac-HT80-Low</p>	<p>Agilent R T Ref 21 dBm Atten 30 dB Mkr1 5.20872 GHz -6.961 dBm #Avg 10 Log dB/ Offst 1 dB M1 S2 S3 FC AA Marker 5.208720000 GHz -6.961 dBm Center 5.21 GHz Span 160 MHz #Res BW 1 MHz #VBW 3 MHz #Sweep 1 s (1001 pts)</p>

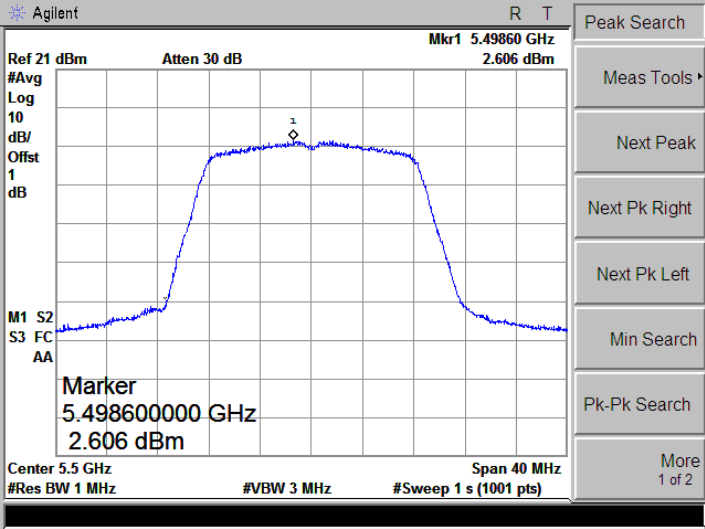
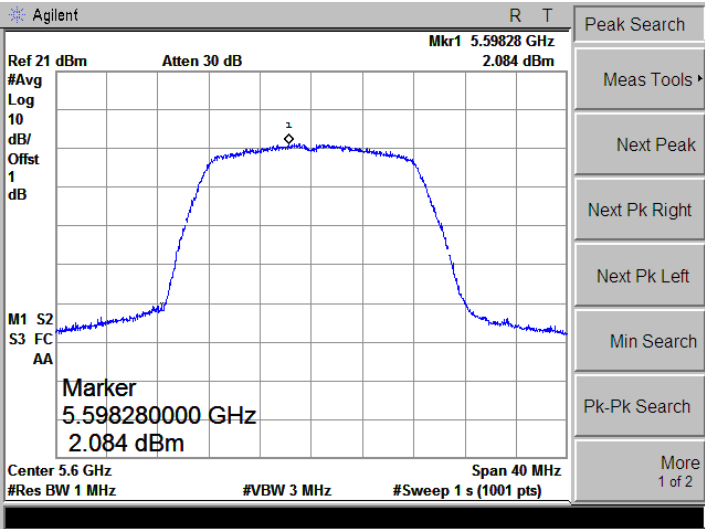
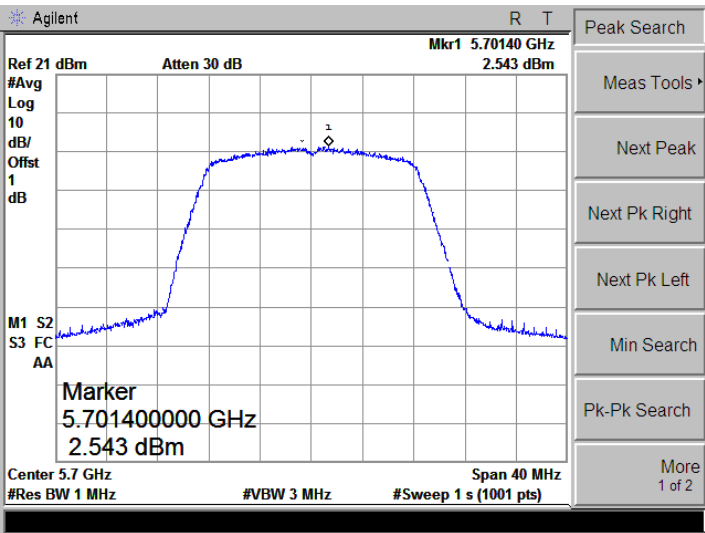
5250-5350MHz

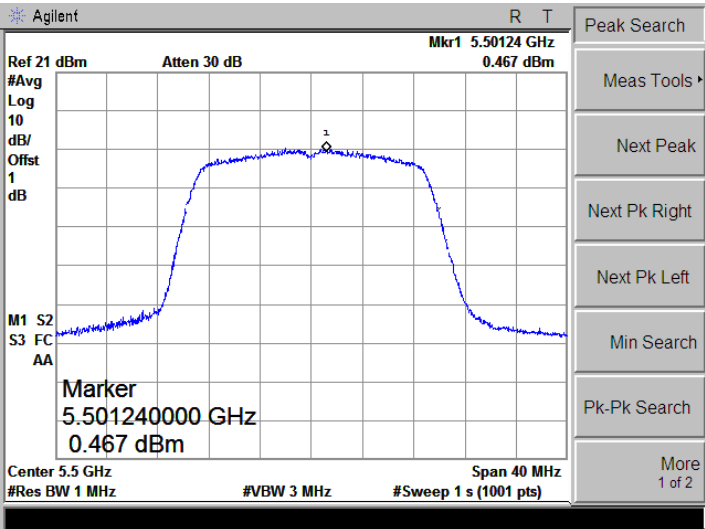
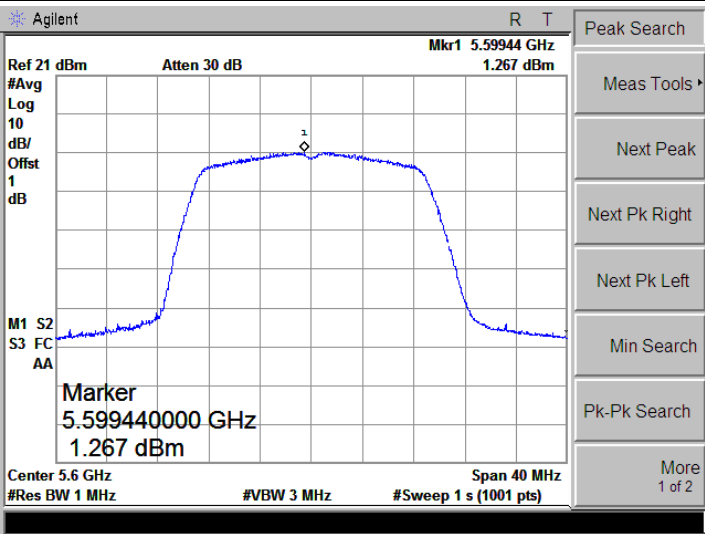
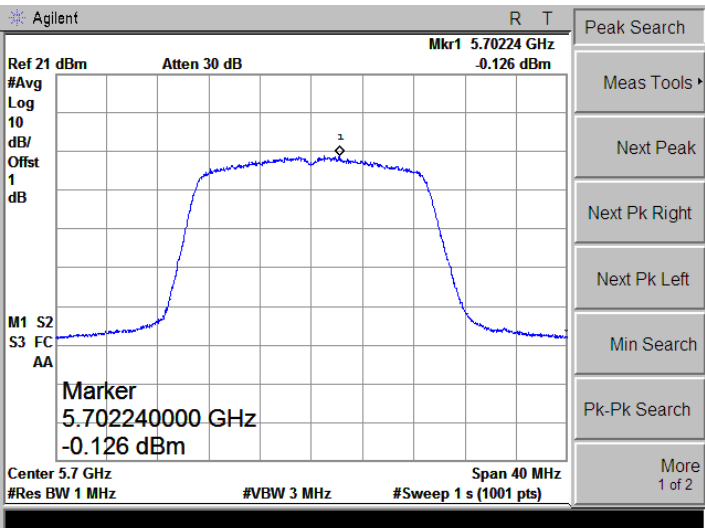
<p>802.11a-Low</p>	
<p>802.11a-Middle</p>	
<p>802.11a-High</p>	

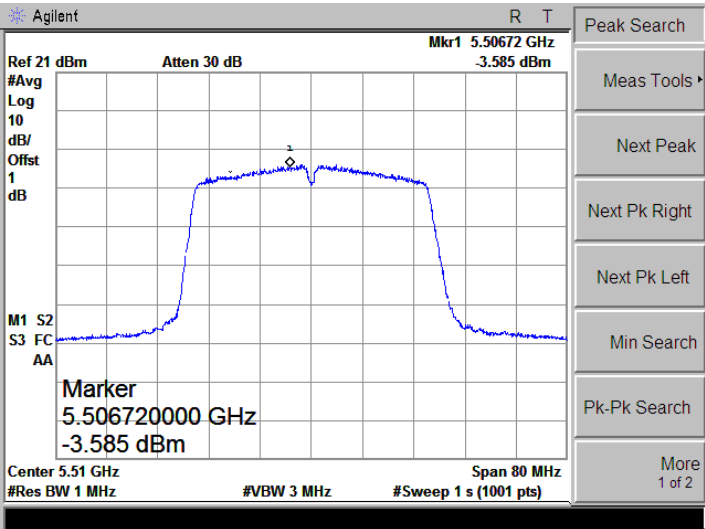
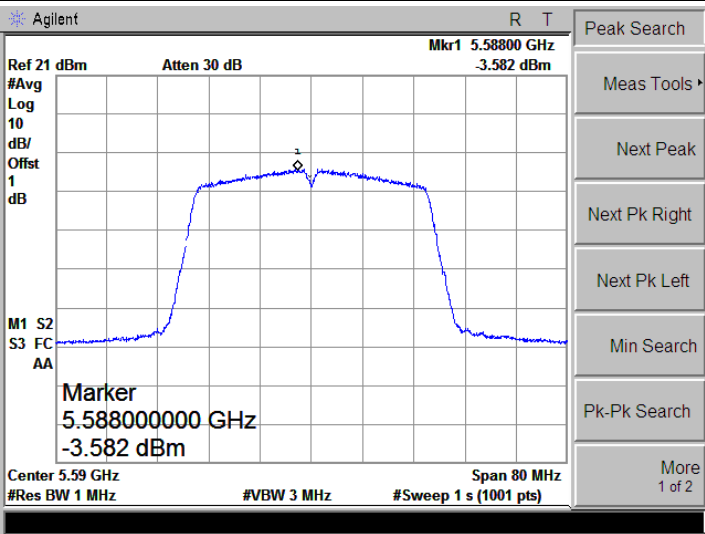
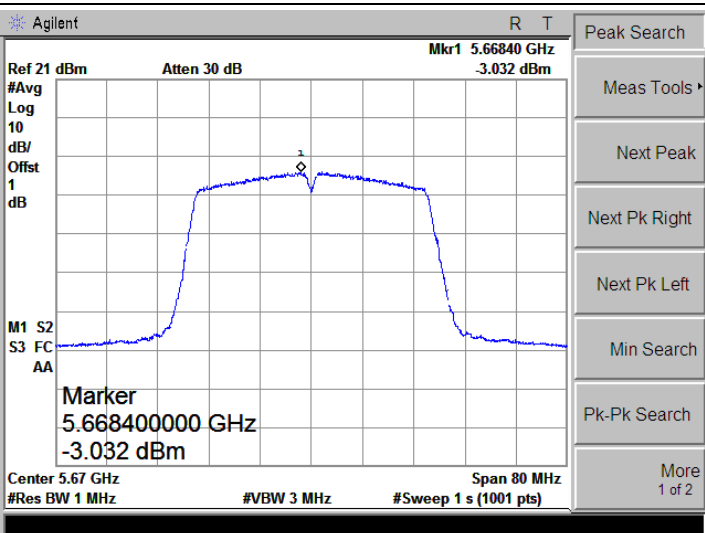
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<p>802.11n-HT20-High</p>	

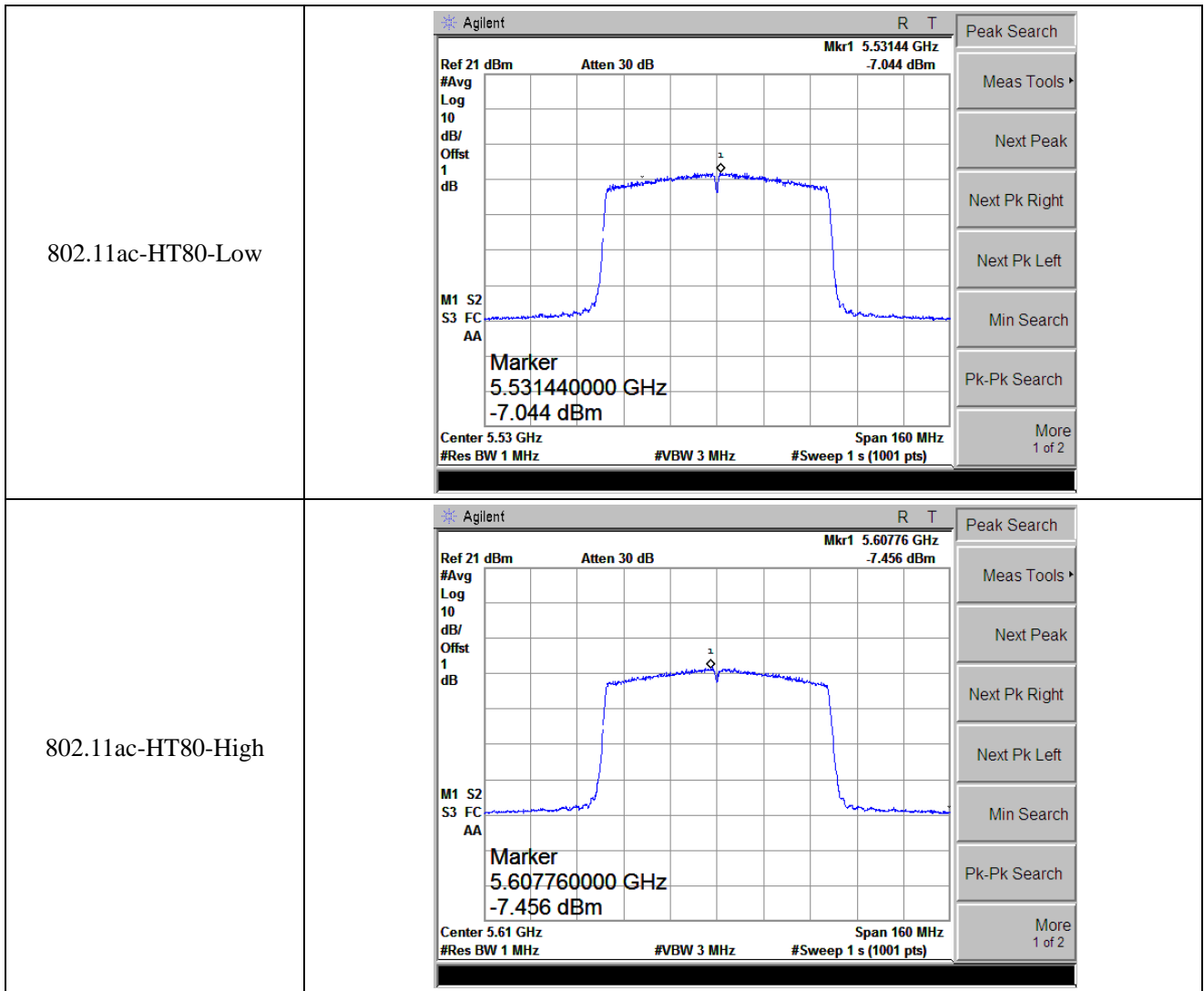
<p>802.11n-HT40-Low</p>	<p>Agilent R T</p> <p>Ref 21 dBm Atten 30 dB Mkr1 5.26840 GHz -3.636 dBm</p> <p>#Avg Log 10 dB/ Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.26840000 GHz -3.636 dBm</p> <p>Center 5.27 GHz Span 80 MHz #Res BW 1 MHz #VBW 3 MHz #Sweep 1 s (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>
<p>802.11n-HT40-High</p>	<p>Agilent R T</p> <p>Ref 21 dBm Atten 30 dB Mkr1 5.31400 GHz -3.169 dBm</p> <p>#Avg Log 10 dB/ Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.31400000 GHz -3.169 dBm</p> <p>Center 5.31 GHz Span 80 MHz #Res BW 1 MHz #VBW 3 MHz #Sweep 1 s (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>
<p>802.11ac-HT80-Low</p>	<p>Agilent R T</p> <p>Ref 21 dBm Atten 30 dB Mkr1 5.29288 GHz -6.786 dBm</p> <p>#Avg Log 10 dB/ Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.29288000 GHz -6.786 dBm</p> <p>Center 5.29 GHz Span 160 MHz #Res BW 1 MHz #VBW 3 MHz #Sweep 1 s (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>

5470-5725MHz

<p>802.11a-Low</p>	
<p>802.11a-Middle</p>	
<p>802.11a-High</p>	

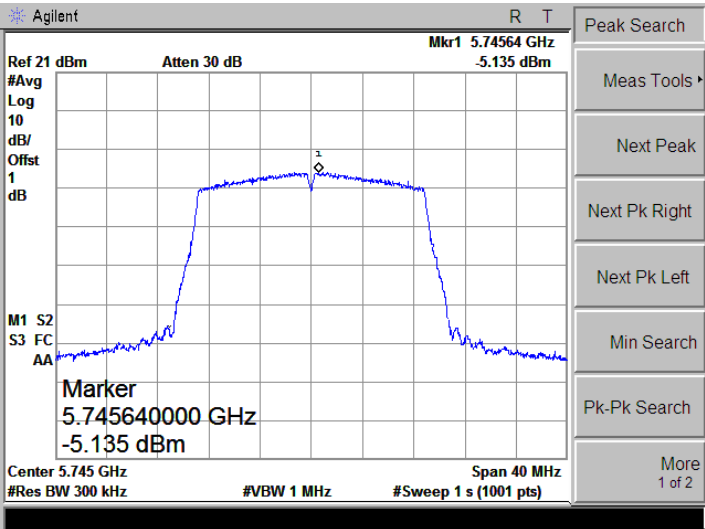
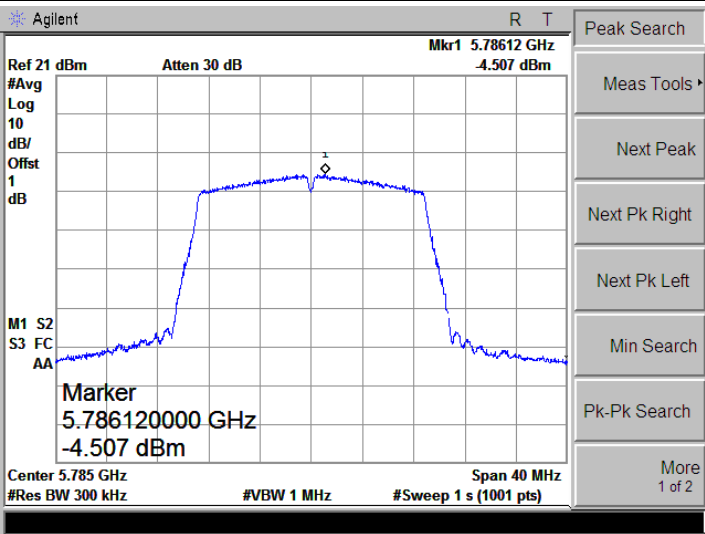
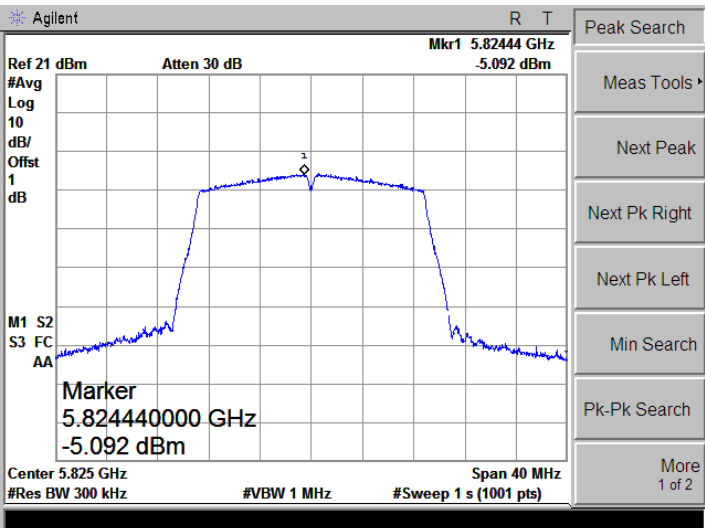
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<p>802.11n-HT20-Middle</p>	
<p>802.11n-HT20-High</p>	

<p>802.11n-HT40-Low</p>	
<p>802.11n-HT40- Middle</p>	
<p>802.11n-HT40-High</p>	



5725-5850MHz

<p>802.11a-Low</p>	<p>Agilent R T</p> <p>Ref 21 dBm Atten 30 dB Mkr1 5.74548 GHz -2.907 dBm</p> <p>#Avg Log 10 dB/Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.745480000 GHz -2.907 dBm</p> <p>Center 5.745 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz #Sweep 1 s (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>
<p>802.11a-Middle</p>	<p>Agilent R T</p> <p>Ref 21 dBm Atten 30 dB Mkr1 5.78460 GHz -2.659 dBm</p> <p>#Avg Log 10 dB/Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.784600000 GHz -2.659 dBm</p> <p>Center 5.785 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz #Sweep 1 s (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>
<p>802.11a-High</p>	<p>Agilent R T</p> <p>Ref 21 dBm Atten 30 dB Mkr1 5.82632 GHz -3.298 dBm</p> <p>#Avg Log 10 dB/Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.826320000 GHz -3.298 dBm</p> <p>Center 5.825 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz #Sweep 1 s (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>

<p>802.11n-HT20-Low</p>	
<p>802.11n-HT20-Middle</p>	
<p>802.11n-HT20-High</p>	

<p>802.11n-HT40-Low</p>	<p>Agilent R T Ref 21 dBm Atten 30 dB Mkr1 5.75292 GHz -8.563 dBm #Avg 10 Log dB/ Offst 1 dB M1 S2 S3 FC AA Marker 5.752920000 GHz -8.563 dBm Center 5.755 GHz Span 80 MHz #Res BW 300 kHz #VBW 1 MHz #Sweep 1 s (1001 pts)</p>
<p>802.11n-HT40-High</p>	<p>Agilent R T Ref 21 dBm Atten 30 dB Mkr1 5.79588 GHz -8.142 dBm #Avg 10 Log dB/ Offst 1 dB M1 S2 S3 FC AA Marker 5.795880000 GHz -8.142 dBm Center 5.795 GHz Span 80 MHz #Res BW 300 kHz #VBW 1 MHz #Sweep 1 s (1001 pts)</p>
<p>802.11ac-HT80-Low</p>	<p>Agilent R T Ref 21 dBm Atten 30 dB Mkr1 5.77052 GHz -12.51 dBm #Avg 10 Log dB/ Offst 1 dB M1 S2 S3 FC AA Marker 5.770520000 GHz -12.51 dBm Center 5.775 GHz Span 160 MHz #Res BW 300 kHz #VBW 1 MHz #Sweep 1 s (1001 pts)</p>

APPENDIX B

Emission Bandwidth and Occupied Bandwidth

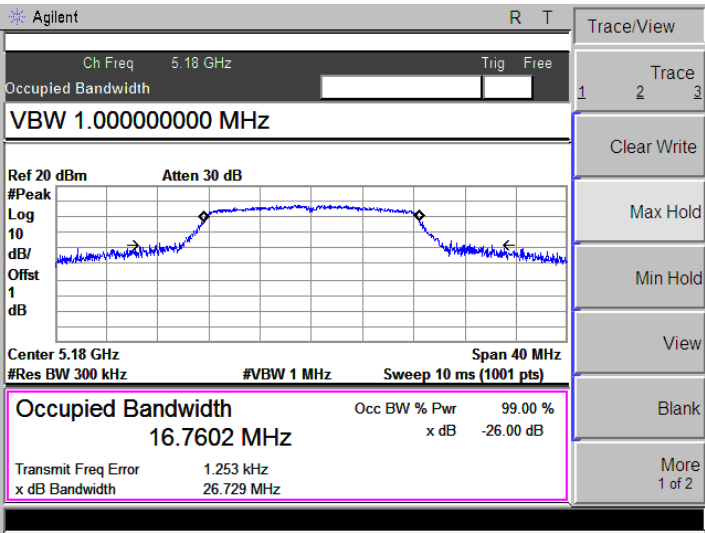
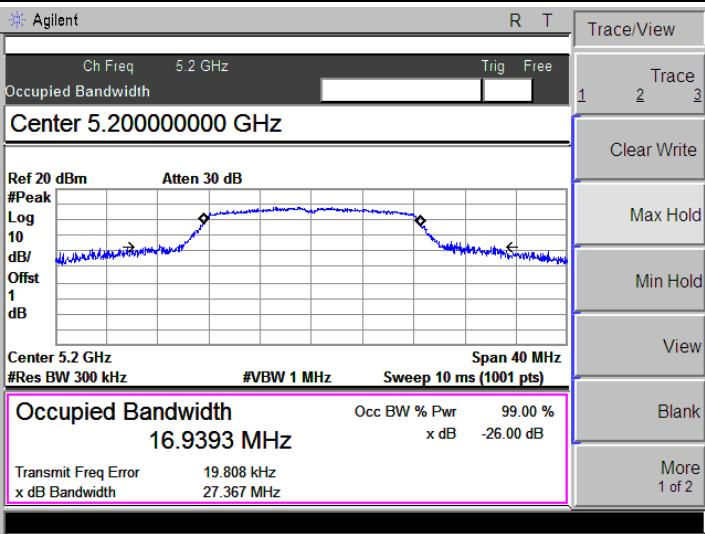
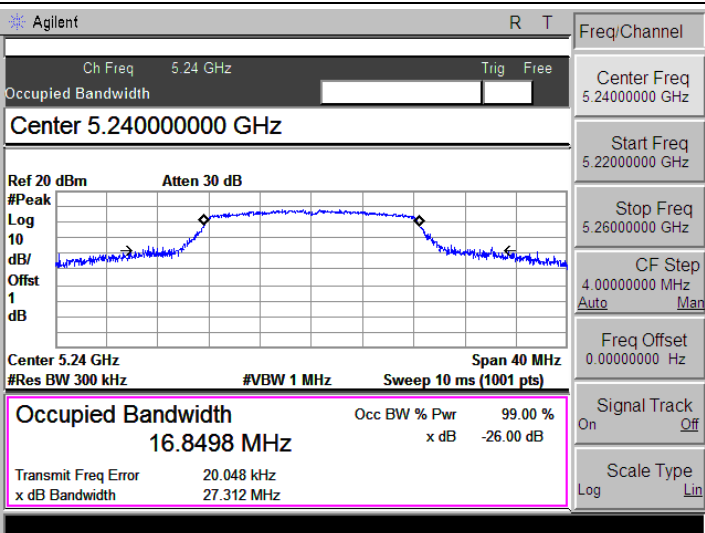
U-NII-1:5150-5250MHz				
Test Mode	Test Channel MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5180	26.729	16.7602	Pass
	5200	27.367	16.9393	Pass
	5240	27.312	16.8498	Pass
802.11n-HT20	5180	20.576	17.7060	Pass
	5200	23.297	17.7861	Pass
	5240	20.451	17.6934	Pass
802.11n-HT40	5190	40.332	35.8888	Pass
	5230	40.046	35.8714	Pass
802.11ac-HT80	5210	81.232	75.1342	Pass

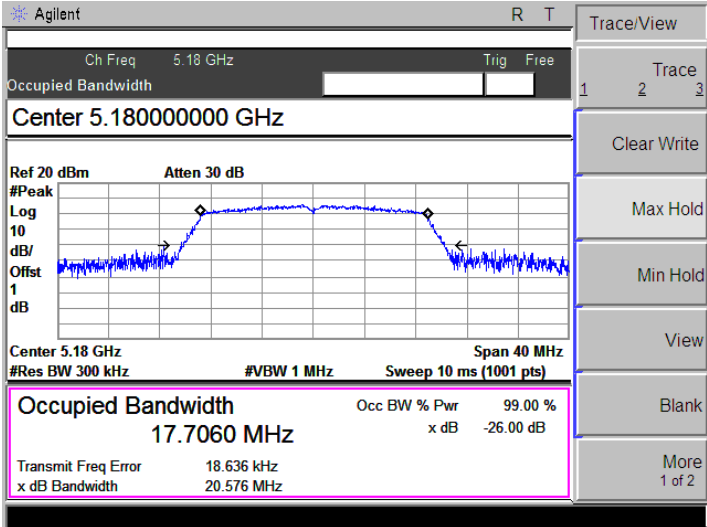
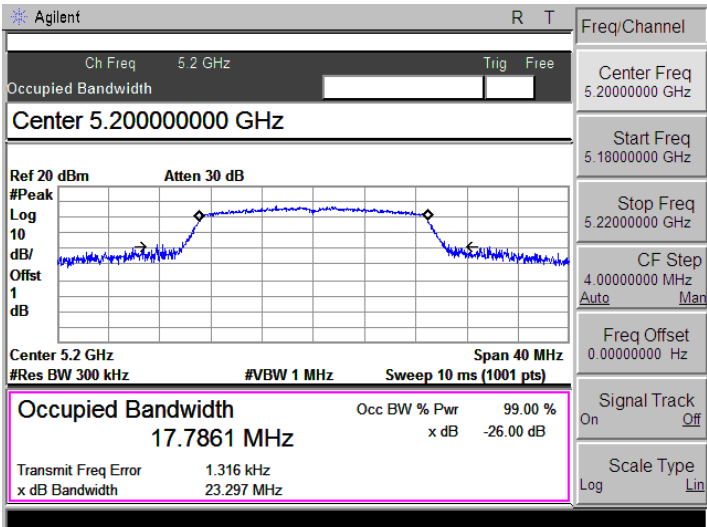
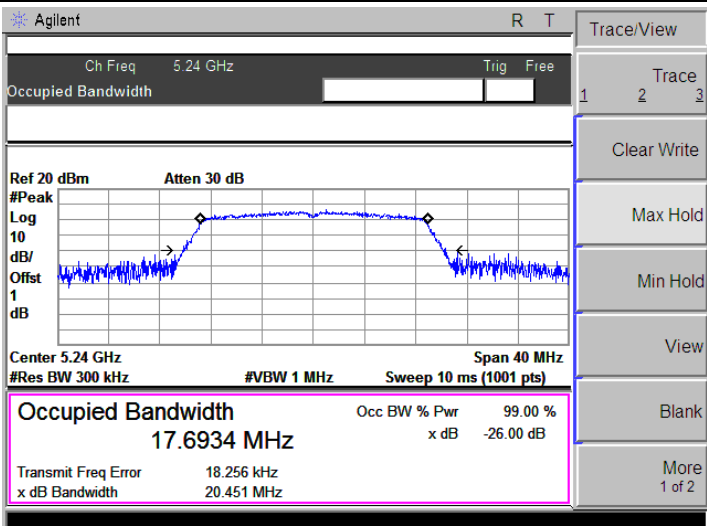
U-NII-2A: 5250-5350MHz				
Test Mode	Test Channel MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5260	28.290	16.8601	Pass
	5280	28.860	16.9021	Pass
	5320	25.101	16.8249	Pass
802.11n-HT20	5260	22.242	17.7326	Pass
	5280	21.970	17.7084	Pass
	5320	24.092	17.7480	Pass
802.11n-HT40	5270	39.770	35.9001	Pass
	5310	40.137	35.8995	Pass
802.11ac-HT80	5290	81.445	75.1466	Pass

U-NII-2C: 5470-5725MHz				
Test Mode	Test Channel MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5500	25.549	16.8956	Pass
	5580	21.482	16.7258	Pass
	5700	22.902	16.8273	Pass
802.11n-HT20	5500	17.7485	24.575	Pass
	5580	17.7755	24.046	Pass
	5700	17.7652	24.043	Pass
802.11n-HT40	5510	39.655	35.9150	Pass
	5550	39.949	35.9323	Pass
	5670	40.175	35.8927	Pass
802.11ac-HT80	5530	80.941	75.1050	Pass
802.11ac-HT80	5610	81.043	75.1142	Pass

U-NII-3: 5725-5850MHz				
Test Mode	Test Channel MHz	6 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5745	15.121	17.0319	≥500
	5785	14.013	16.9956	≥500
	5825	13.340	16.8467	≥500
802.11n-HT20	5745	14.622	17.7404	≥500
	5785	15.022	17.7143	≥500
	5825	15.438	17.7480	≥500
802.11n-HT40	5755	32.657	35.8544	≥500
	5795	35.147	35.9499	≥500
802.11ac VH80	5775	75.326	75.8061	≥500

5150-5250MHz

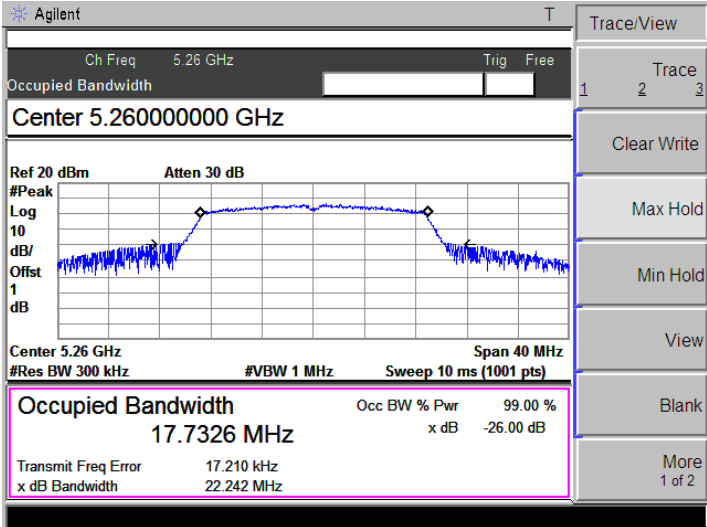
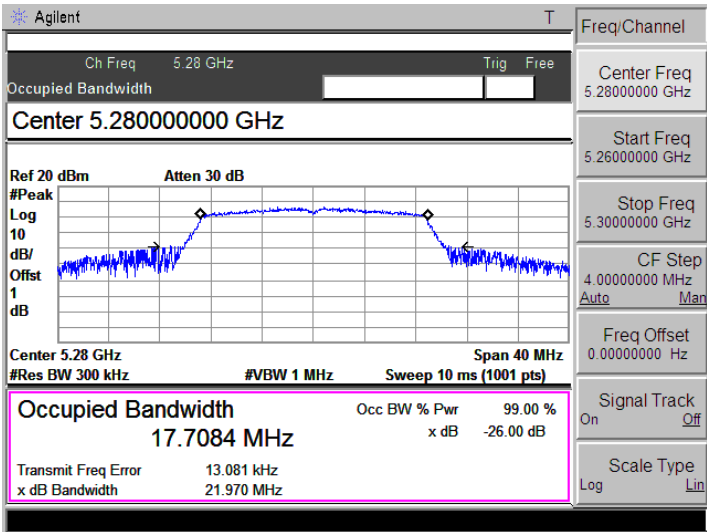
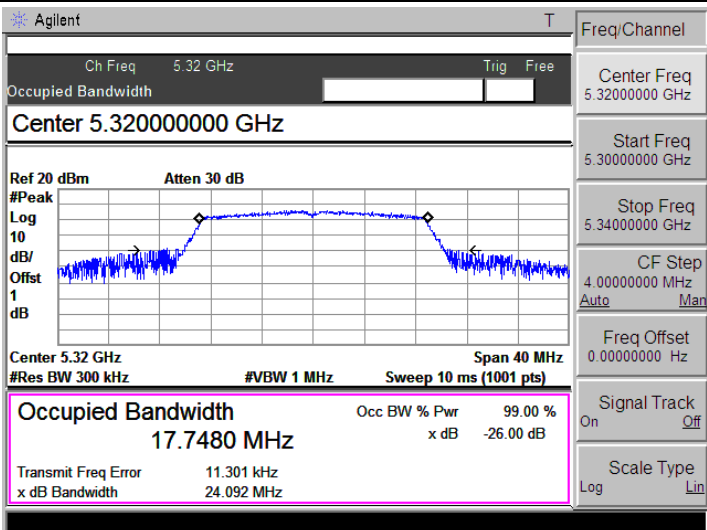
<p>802.11a-Low</p>	 <p>Agilent R T</p> <p>Ch Freq 5.18 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>VBW 1.00000000 MHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.18 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.7602 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 1.253 kHz x dB Bandwidth 26.729 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
<p>802.11a-Middle</p>	 <p>Agilent R T</p> <p>Ch Freq 5.2 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.20000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.2 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.9393 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 19.808 kHz x dB Bandwidth 27.367 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
<p>802.11a-High</p>	 <p>Agilent R T</p> <p>Ch Freq 5.24 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.24000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.24 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.8498 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 20.048 kHz x dB Bandwidth 27.312 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.24000000 GHz</p> <p>Start Freq 5.22000000 GHz</p> <p>Stop Freq 5.26000000 GHz</p> <p>CF Step 4.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>

<p>802.11n-HT20-Low</p>	 <p>Agilent R T</p> <p>Ch Freq 5.18 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.18000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/ Offst 1 dB</p> <p>Center 5.18 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.7060 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 18.636 kHz x dB Bandwidth 20.576 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
<p>802.11n-HT20-Middle</p>	 <p>Agilent R T</p> <p>Ch Freq 5.2 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.20000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/ Offst 1 dB</p> <p>Center 5.2 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.7861 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 1.316 kHz x dB Bandwidth 23.297 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.20000000 GHz</p> <p>Start Freq 5.18000000 GHz</p> <p>Stop Freq 5.22000000 GHz</p> <p>CF Step 4.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>
<p>802.11n-HT20-High</p>	 <p>Agilent R T</p> <p>Ch Freq 5.24 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.24000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/ Offst 1 dB</p> <p>Center 5.24 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.6934 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 18.256 kHz x dB Bandwidth 20.451 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>

<p>802.11n-HT40-Low</p>	<p>Agilent R T</p> <p>Ch Freq 5.19 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Span 80.00000000 MHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.19 GHz Span 80 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 35.8888 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 33.540 kHz x dB Bandwidth 40.332 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
<p>802.11n-HT40-High</p>	<p>Agilent R T</p> <p>Ch Freq 5.23 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.230000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.23 GHz Span 80 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 35.8714 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 20.010 kHz x dB Bandwidth 40.046 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.23000000 GHz</p> <p>Start Freq 5.19000000 GHz</p> <p>Stop Freq 5.27000000 GHz</p> <p>CF Step 8.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>
<p>802.11ac-HT80-Low</p>	<p>Agilent R T</p> <p>Ch Freq 5.21 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Span 160 MHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.21 GHz Span 160 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 75.1342 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 150.334 kHz x dB Bandwidth 81.232 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>

5250-5350MHz

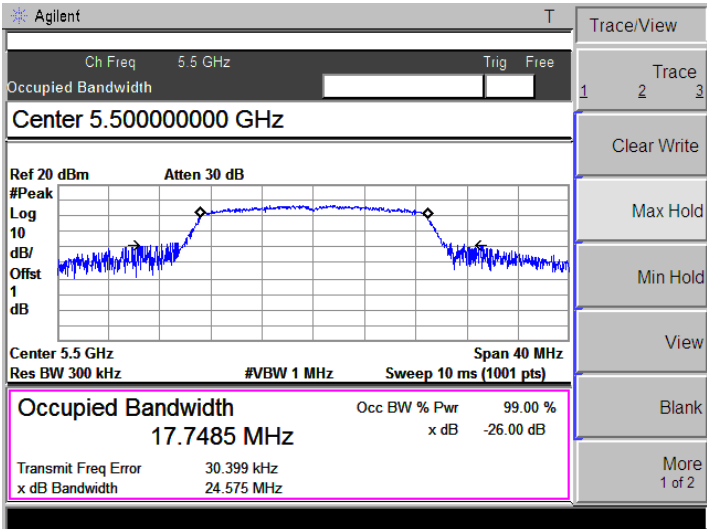
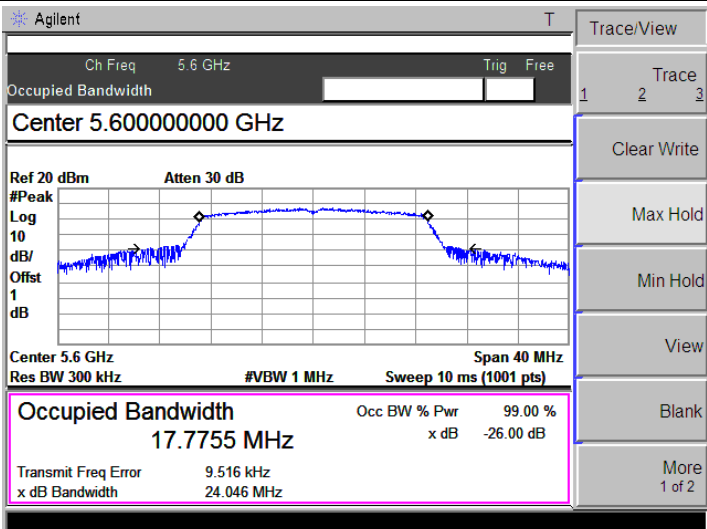
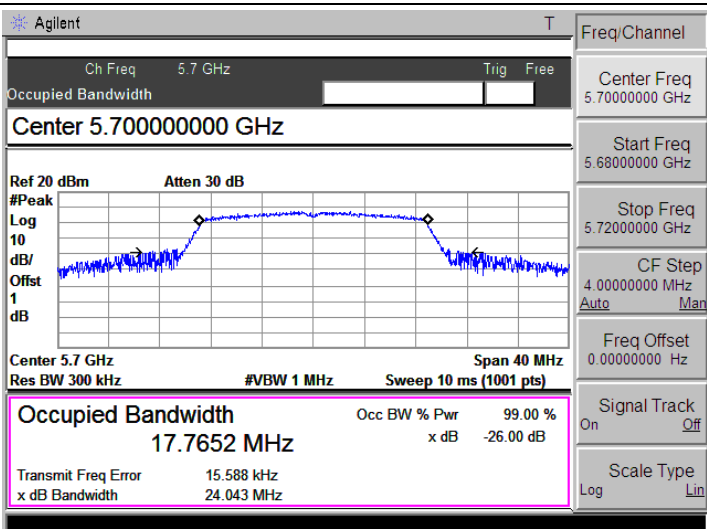
<p>802.11a-Low</p>	<p>Agilent T</p> <p>Ch Freq 5.26 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>VBW 1.00000000 MHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.26 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td>16.8601 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td>6.246 kHz</td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>28.290 MHz</td> <td></td> </tr> </table> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>	Occupied Bandwidth	Occ BW % Pwr	99.00 %	16.8601 MHz	x dB	-26.00 dB	Transmit Freq Error	6.246 kHz		x dB Bandwidth	28.290 MHz	
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Transmit Freq Error	6.246 kHz												
x dB Bandwidth	28.290 MHz												
<p>802.11a-Middle</p>	<p>Agilent T</p> <p>Ch Freq 5.28 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.28000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.28 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td>16.9021 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td>31.194 kHz</td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>28.860 MHz</td> <td></td> </tr> </table> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>	Occupied Bandwidth	Occ BW % Pwr	99.00 %	16.9021 MHz	x dB	-26.00 dB	Transmit Freq Error	31.194 kHz		x dB Bandwidth	28.860 MHz	
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<p>802.11a-High</p>	<p>Agilent T</p> <p>Ch Freq 5.32 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.32000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.32 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td>16.8249 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td>7.274 kHz</td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>25.101 MHz</td> <td></td> </tr> </table> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>	Occupied Bandwidth	Occ BW % Pwr	99.00 %	16.8249 MHz	x dB	-26.00 dB	Transmit Freq Error	7.274 kHz		x dB Bandwidth	25.101 MHz	
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Transmit Freq Error	7.274 kHz												
x dB Bandwidth	25.101 MHz												

<p>802.11n-HT20-Low</p>	 <p>Agilent T</p> <p>Ch Freq 5.26 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.26000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.26 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 %</p> <p>17.7326 MHz x dB -26.00 dB</p> <p>Transmit Freq Error 17.210 kHz</p> <p>x dB Bandwidth 22.242 MHz</p> <p>Trace/View</p> <p>1 2 3</p> <p>Trace</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
<p>802.11n-HT20-Middle</p>	 <p>Agilent T</p> <p>Ch Freq 5.28 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.28000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.28 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 %</p> <p>17.7084 MHz x dB -26.00 dB</p> <p>Transmit Freq Error 13.081 kHz</p> <p>x dB Bandwidth 21.970 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.28000000 GHz</p> <p>Start Freq 5.26000000 GHz</p> <p>Stop Freq 5.30000000 GHz</p> <p>CF Step 4.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>
<p>802.11n-HT20-High</p>	 <p>Agilent T</p> <p>Ch Freq 5.32 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.32000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.32 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 %</p> <p>17.7480 MHz x dB -26.00 dB</p> <p>Transmit Freq Error 11.301 kHz</p> <p>x dB Bandwidth 24.092 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.32000000 GHz</p> <p>Start Freq 5.30000000 GHz</p> <p>Stop Freq 5.34000000 GHz</p> <p>CF Step 4.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>

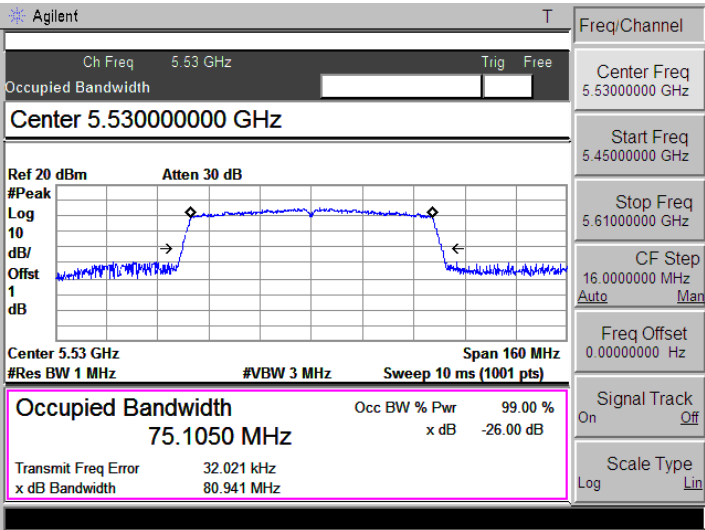
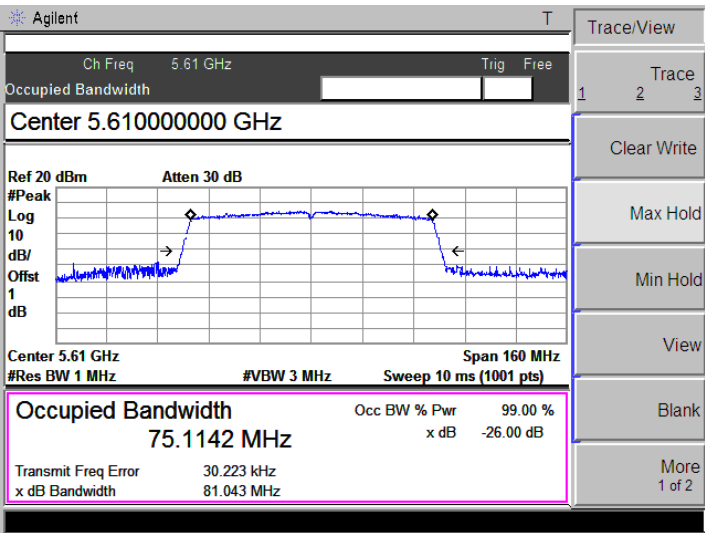
<p>802.11n-HT40-Low</p>	<p>Agilent T</p> <p>Ch Freq 5.27 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.27000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.27 GHz Span 80 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 %</p> <p>35.9001 MHz x dB -26.00 dB</p> <p>Transmit Freq Error 27.923 kHz</p> <p>x dB Bandwidth 39.770 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
<p>802.11n-HT40-High</p>	<p>Agilent T</p> <p>Ch Freq 5.31 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.31000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.31 GHz Span 80 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 %</p> <p>35.8995 MHz x dB -26.00 dB</p> <p>Transmit Freq Error 19.824 kHz</p> <p>x dB Bandwidth 40.137 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.31000000 GHz</p> <p>Start Freq 5.27000000 GHz</p> <p>Stop Freq 5.35000000 GHz</p> <p>CF Step 8.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>
<p>802.11ac-HT80-Low</p>	<p>Agilent T</p> <p>Ch Freq 5.29 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.29000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.29 GHz Span 160 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 %</p> <p>75.1466 MHz x dB -26.00 dB</p> <p>Transmit Freq Error 109.788 kHz</p> <p>x dB Bandwidth 81.445 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>

5470-5725MHz

<p>802.11a-Low</p>	<p>Agilent T</p> <p>Ch Freq 5.5 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>VBW 1.00000000 MHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offset 1 dB</p> <p>Center 5.5 GHz Span 40 MHz Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.8956 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -9.153 kHz x dB Bandwidth 25.549 MHz</p> <p>Trace/View Trace 1 2 3 Clear Write Max Hold Min Hold View Blank More 1 of 2</p>
<p>802.11a-Middle</p>	<p>Agilent T</p> <p>Ch Freq 5.6 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.60000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offset 1 dB</p> <p>Center 5.6 GHz Span 40 MHz Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.7258 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -2.885 kHz x dB Bandwidth 21.482 MHz</p> <p>Trace/View Trace 1 2 3 Clear Write Max Hold Min Hold View Blank More 1 of 2</p>
<p>802.11a-High</p>	<p>Agilent T</p> <p>Ch Freq 5.7 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.70000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offset 1 dB</p> <p>Center 5.7 GHz Span 40 MHz Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.8273 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 27.630 kHz x dB Bandwidth 22.902 MHz</p> <p>Trace/View Trace 1 2 3 Clear Write Max Hold Min Hold View Blank More 1 of 2</p>

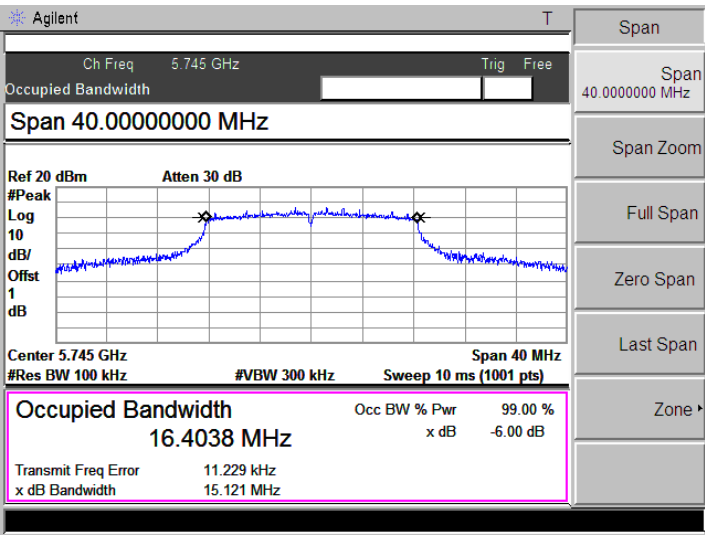
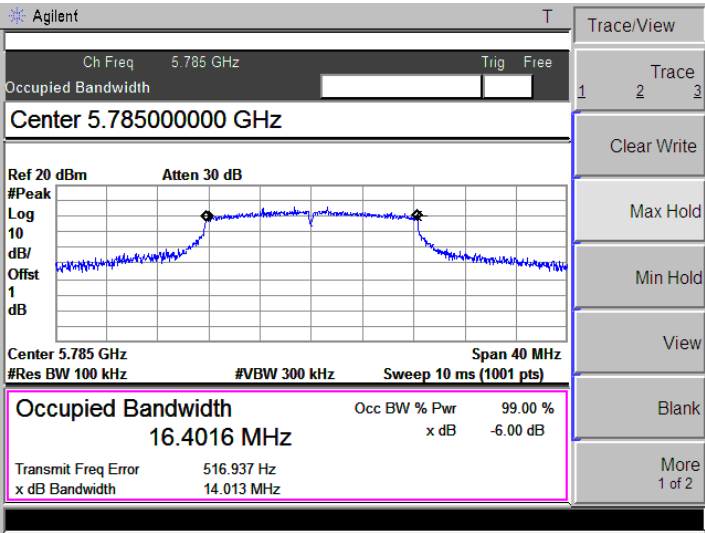
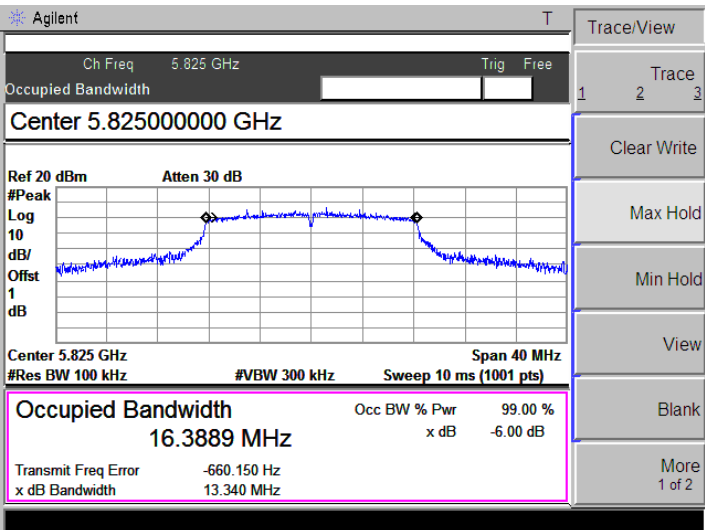
<p>802.11n-HT20-Low</p>	 <p>Agilent T</p> <p>Ch Freq 5.5 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.50000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log</p> <p>10 dB/</p> <p>Offst</p> <p>1 dB</p> <p>Center 5.5 GHz Span 40 MHz</p> <p>Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.7485 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 30.399 kHz</p> <p>x dB Bandwidth 24.575 MHz</p> <p>Trace/View</p> <p>1 2 3</p> <p>Trace</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
<p>802.11n-HT20-Middle</p>	 <p>Agilent T</p> <p>Ch Freq 5.6 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.60000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log</p> <p>10 dB/</p> <p>Offst</p> <p>1 dB</p> <p>Center 5.6 GHz Span 40 MHz</p> <p>Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.7755 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 9.516 kHz</p> <p>x dB Bandwidth 24.046 MHz</p> <p>Trace/View</p> <p>1 2 3</p> <p>Trace</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
<p>802.11n-HT20-High</p>	 <p>Agilent T</p> <p>Ch Freq 5.7 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.70000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log</p> <p>10 dB/</p> <p>Offst</p> <p>1 dB</p> <p>Center 5.7 GHz Span 40 MHz</p> <p>Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.7652 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 15.588 kHz</p> <p>x dB Bandwidth 24.043 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.70000000 GHz</p> <p>Start Freq 5.68000000 GHz</p> <p>Stop Freq 5.72000000 GHz</p> <p>CF Step 4.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>

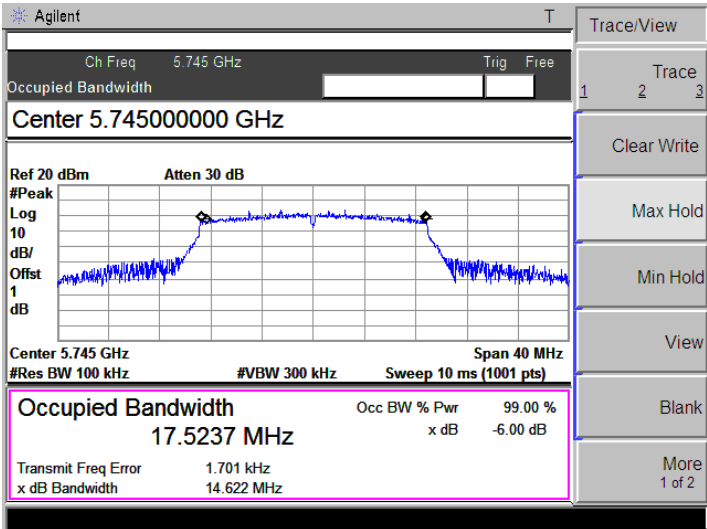
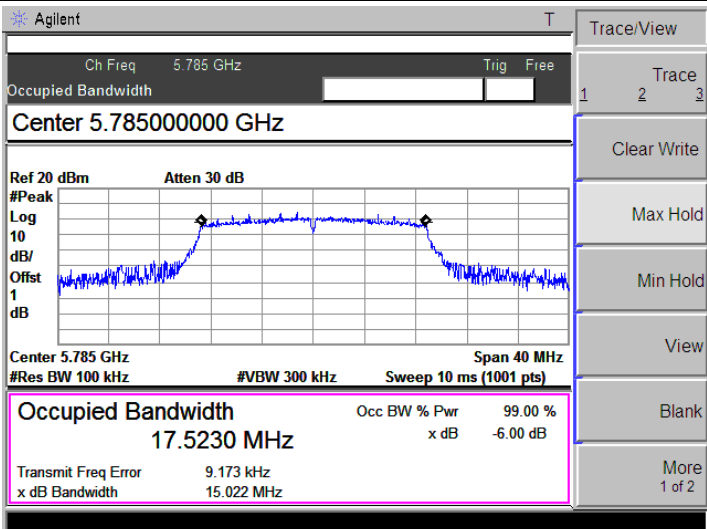
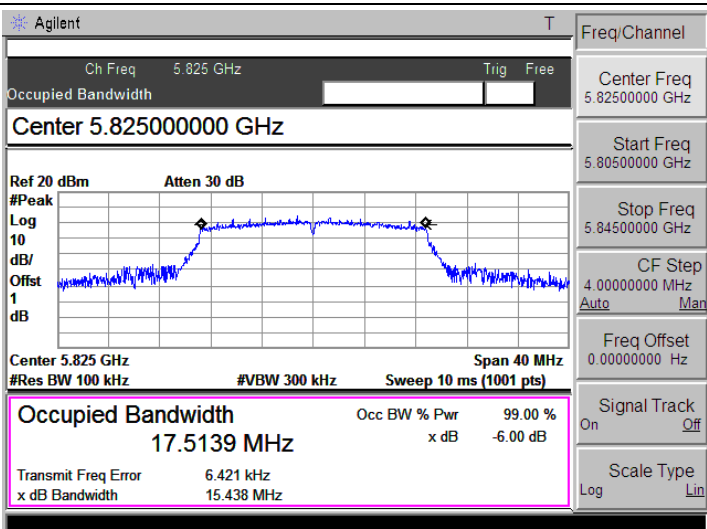
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<p>802.11n-HT40- Middle</p>	
<p>802.11n-HT40-High</p>	

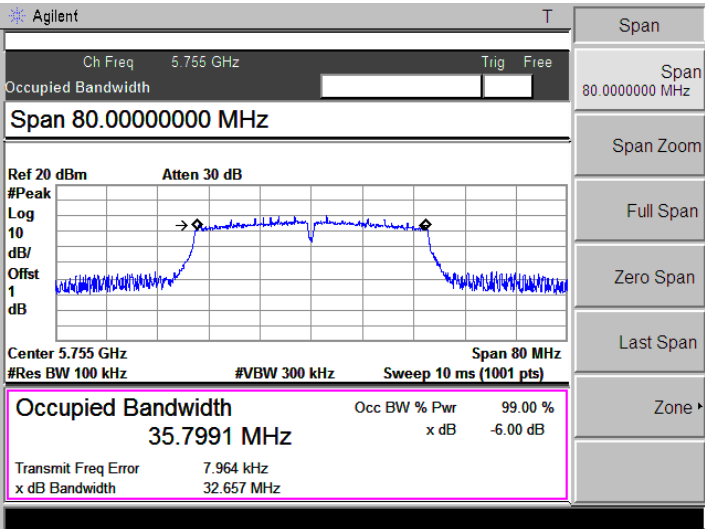
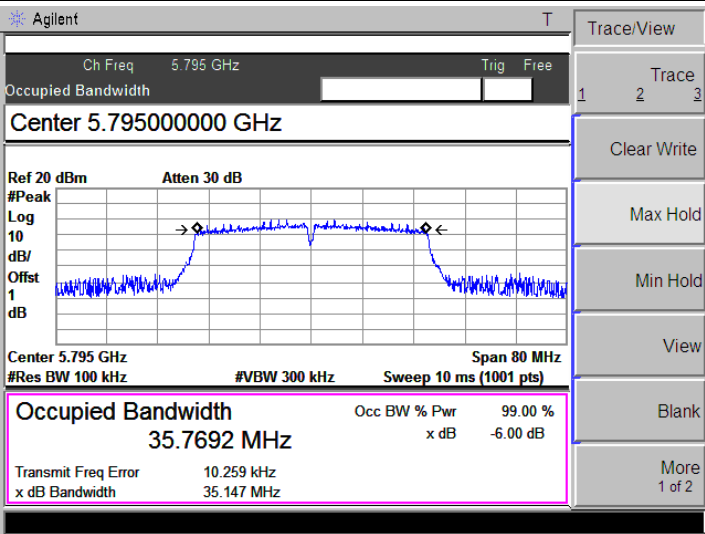
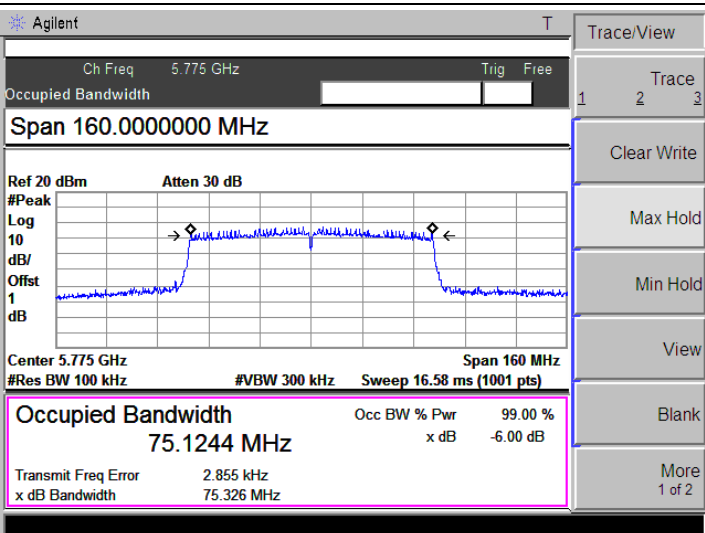
<p>802.11ac-HT80-Low</p>	 <p>Agilent T</p> <p>Ch Freq 5.53 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.53000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.53 GHz #Res BW 1 MHz #VBW 3 MHz Sweep 10 ms (1001 pts) Span 160 MHz</p> <p>Occupied Bandwidth 75.1050 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 32.021 kHz x dB Bandwidth 80.941 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.53000000 GHz</p> <p>Start Freq 5.45000000 GHz</p> <p>Stop Freq 5.61000000 GHz</p> <p>CF Step 16.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>
<p>802.11ac-HT80-High</p>	 <p>Agilent T</p> <p>Ch Freq 5.61 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.61000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.61 GHz #Res BW 1 MHz #VBW 3 MHz Sweep 10 ms (1001 pts) Span 160 MHz</p> <p>Occupied Bandwidth 75.1142 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 30.223 kHz x dB Bandwidth 81.043 MHz</p> <p>Trace/View</p> <p>1 2 3</p> <p>Trace</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>

5725-5850MHz

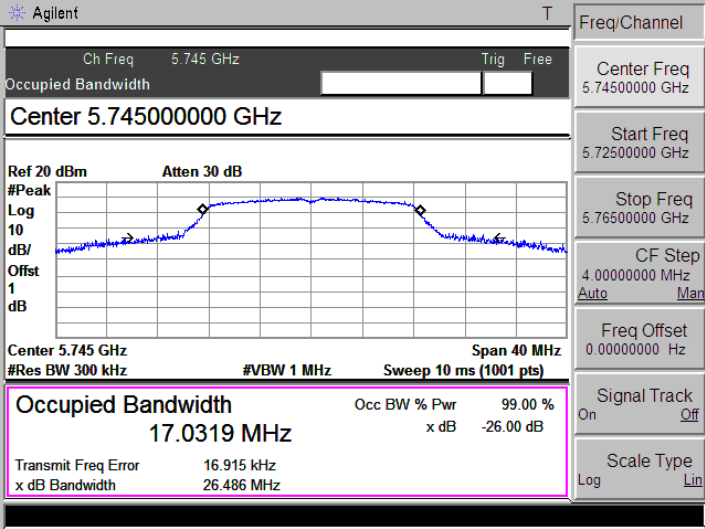
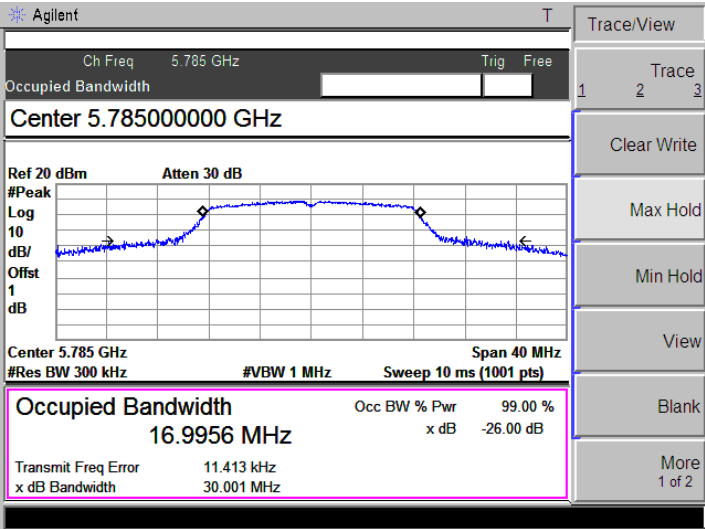
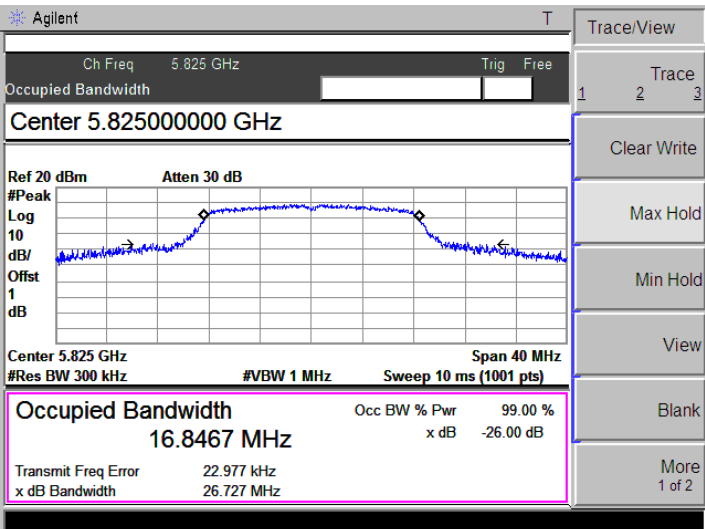
6 dB Bandwidth

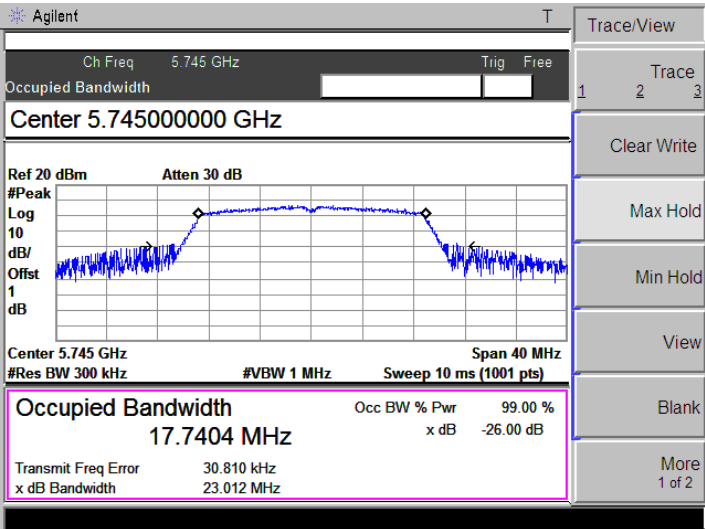
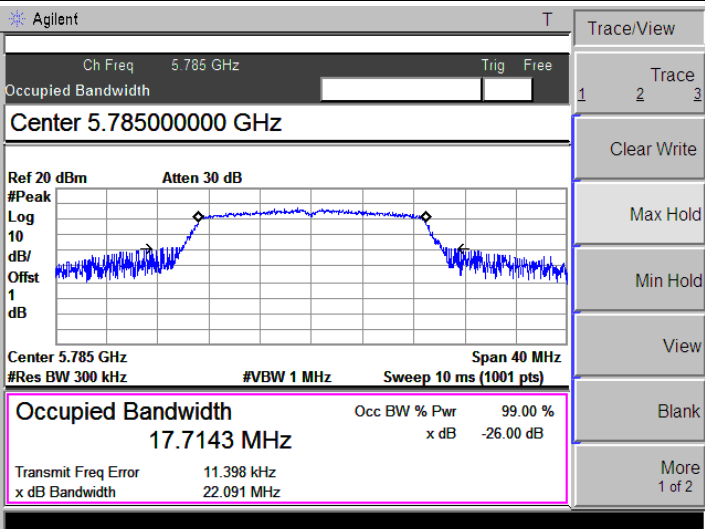
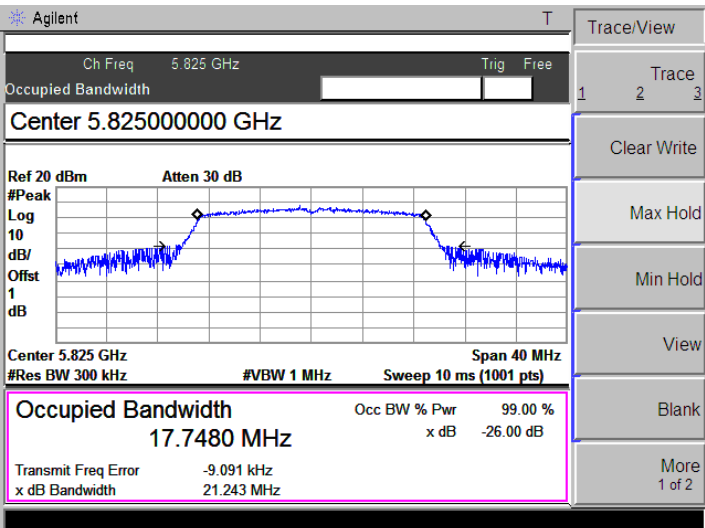
<p>802.11a-Low</p>	 <p>Agilent T</p> <p>Ch Freq 5.745 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Span 40.00000000 MHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10</p> <p>dB/</p> <p>Offst 1</p> <p>dB</p> <p>Center 5.745 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.4038 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error 11.229 kHz</p> <p>x dB Bandwidth 15.121 MHz</p>
<p>802.11a-Middle</p>	 <p>Agilent T</p> <p>Ch Freq 5.785 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.78500000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10</p> <p>dB/</p> <p>Offst 1</p> <p>dB</p> <p>Center 5.785 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.4016 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error 516.937 Hz</p> <p>x dB Bandwidth 14.013 MHz</p>
<p>802.11a-High</p>	 <p>Agilent T</p> <p>Ch Freq 5.825 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.82500000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10</p> <p>dB/</p> <p>Offst 1</p> <p>dB</p> <p>Center 5.825 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.3889 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -660.150 Hz</p> <p>x dB Bandwidth 13.340 MHz</p>

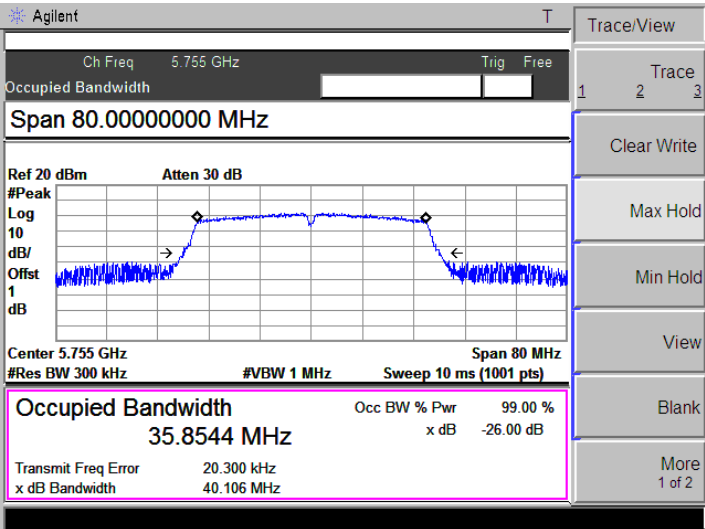
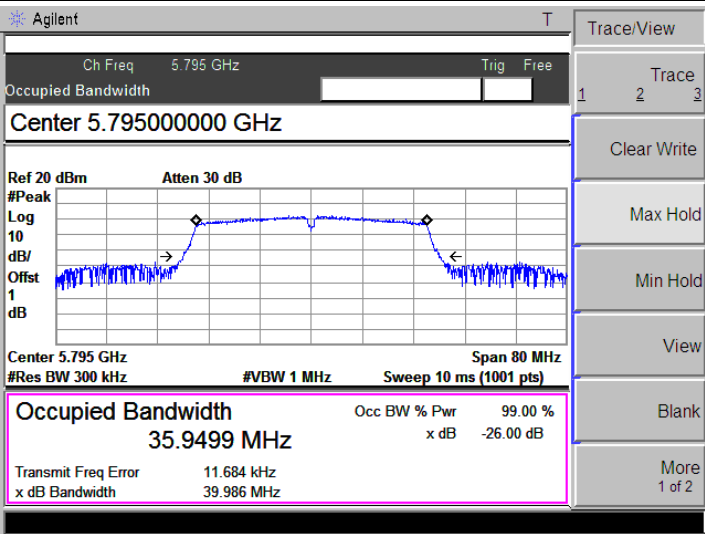
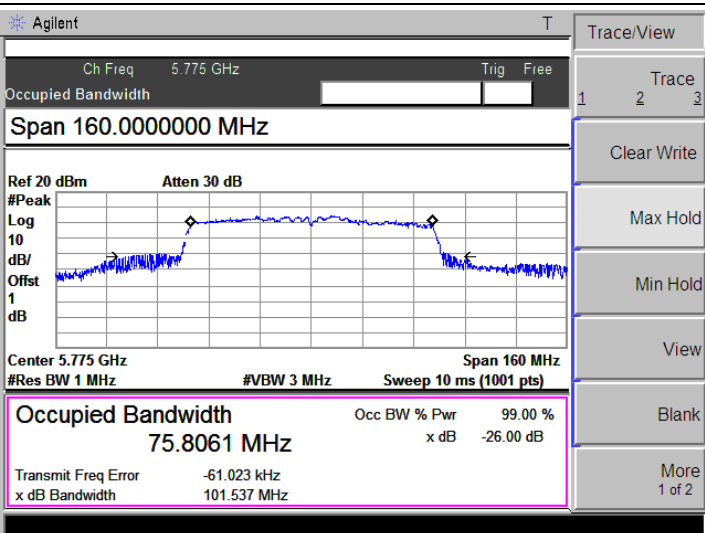
<p>802.11n-HT20-Low</p>	 <p>Agilent T</p> <p>Ch Freq 5.745 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.74500000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/ Offst 1 dB</p> <p>Center 5.745 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.5237 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error 1.701 kHz x dB Bandwidth 14.622 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
<p>802.11n-HT20-Middle</p>	 <p>Agilent T</p> <p>Ch Freq 5.785 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.78500000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/ Offst 1 dB</p> <p>Center 5.785 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.5230 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error 9.173 kHz x dB Bandwidth 15.022 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
<p>802.11n-HT20-High</p>	 <p>Agilent T</p> <p>Ch Freq 5.825 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.82500000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/ Offst 1 dB</p> <p>Center 5.825 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.5139 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error 6.421 kHz x dB Bandwidth 15.438 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.82500000 GHz</p> <p>Start Freq 5.80500000 GHz</p> <p>Stop Freq 5.84500000 GHz</p> <p>CF Step 4.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>

<p>802.11n-HT40-Low</p>	 <p>Agilent T</p> <p>Ch Freq 5.755 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Span 80.00000000 MHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.755 GHz Span 80 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td>35.7991 MHz</td> <td>x dB</td> <td>-6.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td>7.964 kHz</td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>32.657 MHz</td> <td></td> </tr> </table> <p>Span</p> <p>Span 80.00000000 MHz</p> <p>Span Zoom</p> <p>Full Span</p> <p>Zero Span</p> <p>Last Span</p> <p>Zone ▶</p>	Occupied Bandwidth	Occ BW % Pwr	99.00 %	35.7991 MHz	x dB	-6.00 dB	Transmit Freq Error	7.964 kHz		x dB Bandwidth	32.657 MHz	
Occupied Bandwidth	Occ BW % Pwr	99.00 %											
35.7991 MHz	x dB	-6.00 dB											
Transmit Freq Error	7.964 kHz												
x dB Bandwidth	32.657 MHz												
<p>802.11n-HT40-High</p>	 <p>Agilent T</p> <p>Ch Freq 5.795 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.795000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.795 GHz Span 80 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td>35.7692 MHz</td> <td>x dB</td> <td>-6.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td>10.259 kHz</td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>35.147 MHz</td> <td></td> </tr> </table> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>	Occupied Bandwidth	Occ BW % Pwr	99.00 %	35.7692 MHz	x dB	-6.00 dB	Transmit Freq Error	10.259 kHz		x dB Bandwidth	35.147 MHz	
Occupied Bandwidth	Occ BW % Pwr	99.00 %											
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Transmit Freq Error	10.259 kHz												
x dB Bandwidth	35.147 MHz												
<p>802.11ac-HT80-Low</p>	 <p>Agilent T</p> <p>Ch Freq 5.775 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Span 160.00000000 MHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.775 GHz Span 160 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 16.58 ms (1001 pts)</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td>75.1244 MHz</td> <td>x dB</td> <td>-6.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td>2.855 kHz</td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>75.326 MHz</td> <td></td> </tr> </table> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>	Occupied Bandwidth	Occ BW % Pwr	99.00 %	75.1244 MHz	x dB	-6.00 dB	Transmit Freq Error	2.855 kHz		x dB Bandwidth	75.326 MHz	
Occupied Bandwidth	Occ BW % Pwr	99.00 %											
75.1244 MHz	x dB	-6.00 dB											
Transmit Freq Error	2.855 kHz												
x dB Bandwidth	75.326 MHz												

99% Bandwidth

<p>802.11a-Low</p>	 <p>Agilent T</p> <p>Ch Freq 5.745 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.74500000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.745 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.0319 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 16.915 kHz x dB Bandwidth 26.486 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.74500000 GHz</p> <p>Start Freq 5.72500000 GHz</p> <p>Stop Freq 5.76500000 GHz</p> <p>CF Step 4.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>
<p>802.11a-Middle</p>	 <p>Agilent T</p> <p>Ch Freq 5.785 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.78500000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.785 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.9956 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 11.413 kHz x dB Bandwidth 30.001 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
<p>802.11a-High</p>	 <p>Agilent T</p> <p>Ch Freq 5.825 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.82500000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.825 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.8467 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 22.977 kHz x dB Bandwidth 26.727 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>

<p>802.11n-HT20-Low</p>	 <p>Agilent T</p> <p>Ch Freq 5.745 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.74500000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.745 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 %</p> <p>17.7404 MHz x dB -26.00 dB</p> <p>Transmit Freq Error 30.810 kHz</p> <p>x dB Bandwidth 23.012 MHz</p>
<p>802.11n-HT20-Middle</p>	 <p>Agilent T</p> <p>Ch Freq 5.785 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.78500000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.785 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 %</p> <p>17.7143 MHz x dB -26.00 dB</p> <p>Transmit Freq Error 11.398 kHz</p> <p>x dB Bandwidth 22.091 MHz</p>
<p>802.11n-HT20-High</p>	 <p>Agilent T</p> <p>Ch Freq 5.825 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.82500000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.825 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 %</p> <p>17.7480 MHz x dB -26.00 dB</p> <p>Transmit Freq Error -9.091 kHz</p> <p>x dB Bandwidth 21.243 MHz</p>

<p>802.11n-HT40-Low</p>	 <p>Agilent T</p> <p>Ch Freq 5.755 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Span 80.0000000 MHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.755 GHz Span 80 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td>35.8544 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td>20.300 kHz</td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>40.106 MHz</td> <td></td> </tr> </table> <p>Trace/View</p> <p>1 2 3 Trace</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>	Occupied Bandwidth	Occ BW % Pwr	99.00 %	35.8544 MHz	x dB	-26.00 dB	Transmit Freq Error	20.300 kHz		x dB Bandwidth	40.106 MHz	
Occupied Bandwidth	Occ BW % Pwr	99.00 %											
35.8544 MHz	x dB	-26.00 dB											
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x dB Bandwidth	40.106 MHz												
<p>802.11n-HT40-High</p>	 <p>Agilent T</p> <p>Ch Freq 5.795 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.795000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.795 GHz Span 80 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td>35.9499 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td>11.684 kHz</td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>39.986 MHz</td> <td></td> </tr> </table> <p>Trace/View</p> <p>1 2 3 Trace</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>	Occupied Bandwidth	Occ BW % Pwr	99.00 %	35.9499 MHz	x dB	-26.00 dB	Transmit Freq Error	11.684 kHz		x dB Bandwidth	39.986 MHz	
Occupied Bandwidth	Occ BW % Pwr	99.00 %											
35.9499 MHz	x dB	-26.00 dB											
Transmit Freq Error	11.684 kHz												
x dB Bandwidth	39.986 MHz												
<p>802.11ac-HT80-Low</p>	 <p>Agilent T</p> <p>Ch Freq 5.775 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Span 160.0000000 MHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.775 GHz Span 160 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 10 ms (1001 pts)</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td>75.8061 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td>-61.023 kHz</td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>101.537 MHz</td> <td></td> </tr> </table> <p>Trace/View</p> <p>1 2 3 Trace</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>	Occupied Bandwidth	Occ BW % Pwr	99.00 %	75.8061 MHz	x dB	-26.00 dB	Transmit Freq Error	-61.023 kHz		x dB Bandwidth	101.537 MHz	
Occupied Bandwidth	Occ BW % Pwr	99.00 %											
75.8061 MHz	x dB	-26.00 dB											
Transmit Freq Error	-61.023 kHz												
x dB Bandwidth	101.537 MHz												

APPENDIX C

Maximum Conducted Output Power

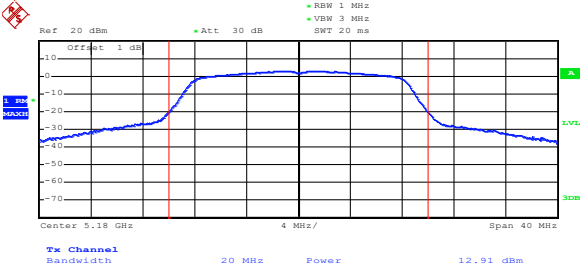
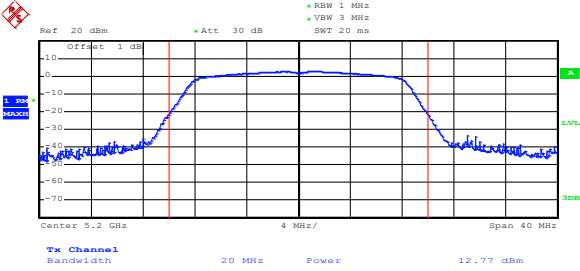
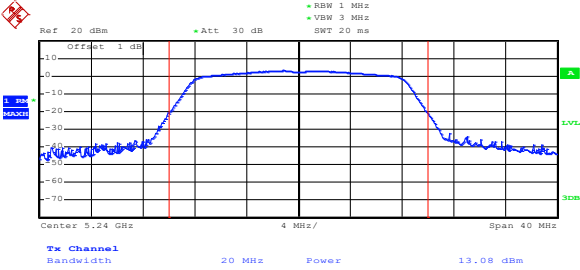
U-NII-1:5150-5250MHz			
Test mode	Frequency MHz	Output Power dBm	Limit dBm
802.11a	5180	12.91	23.98
	5200	12.77	23.98
	5240	13.08	23.98
802.11n-HT20	5180	11.37	23.98
	5200	11.45	23.98
	5240	11.70	23.98
802.11n-HT40	5190	10.46	23.98
	5230	10.61	23.98
802.11ac VH80	5210	9.35	23.98

U-NII-2A: 5250-5350MHz			
Test mode	Frequency MHz	Output Power DBm	Limit dBm
802.11a	5260	12.62	23.98
	5280	12.20	23.98
	5320	12.79	23.98
802.11n-HT20	5260	11.53	23.98
	5280	11.75	23.98
	5320	11.66	23.98
802.11n-HT40	5270	10.78	23.98
	5310	10.80	23.98
802.11ac VH80	5290	11.69	23.98

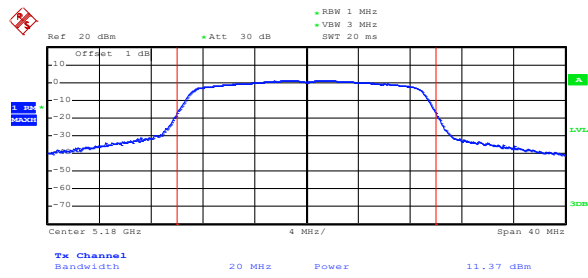
U-NII-2C: 5470-5725MHz			
Test mode	Frequency MHz	Output Power dBm	Limit dBm
802.11a	5500	12.93	23.98
	5600	12.62	23.98
	5700	12.50	23.98
802.11n-HT20	5500	11.67	23.98
	5600	11.73	23.98
	5700	11.74	23.98
802.11n-HT40	5510	10.20	23.98
	5590	9.80	23.98
	5670	10.52	23.98
802.11ac VH80	5530	10.06	23.98
802.11ac VH80	5610	10.20	23.98

U-NII-3: 5725-5850MHz			
Test mode	Frequency MHz	Output Power dBm	Limit dBm
802.11a	5745	12.42	30.00
	5785	12.06	30.00
	5825	12.27	30.00
802.11n-HT20	5745	10.25	30.00
	5785	10.47	30.00
	5825	10.72	30.00
802.11n-HT40	5755	9.39	30.00
	5795	9.77	30.00
802.11ac VH80	5775	9.31	30.00

5150-5250MHz

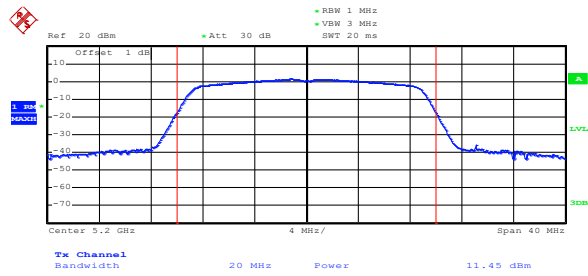
<p>802.11a-Low</p>	 <p>Ref 20 dBm Att 30 dB RBW 1 MHz VBW 3 MHz SWT 20 ms Offset 1 dB</p> <p>Center 5.18 GHz 4 MHz/ Span 40 MHz</p> <p>Tx Channel Bandwidth 20 MHz Power 12.91 dBm</p> <p>Date: 31.DEC.2021 10:49:28</p>
<p>802.11a-Middle</p>	 <p>Ref 20 dBm Att 30 dB RBW 1 MHz VBW 3 MHz SWT 20 ms Offset 1 dB</p> <p>Center 5.2 GHz 4 MHz/ Span 40 MHz</p> <p>Tx Channel Bandwidth 20 MHz Power 12.77 dBm</p> <p>Date: 31.DEC.2021 10:51:27</p>
<p>802.11a-High</p>	 <p>Ref 20 dBm Att 30 dB RBW 1 MHz VBW 3 MHz SWT 20 ms Offset 1 dB</p> <p>Center 5.24 GHz 4 MHz/ Span 40 MHz</p> <p>Tx Channel Bandwidth 20 MHz Power 13.08 dBm</p> <p>Date: 31.DEC.2021 10:52:06</p>

802.11n-HT20-Low



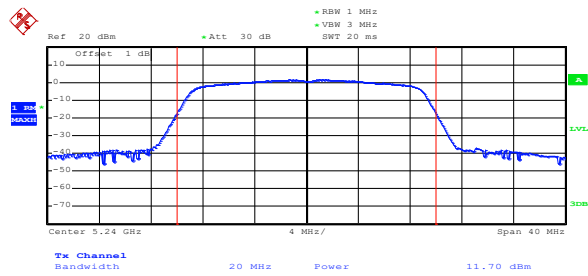
Date: 31.DEC.2021 10:54:36

802.11n-HT20-Middle

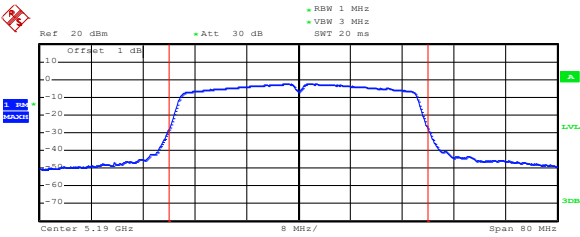
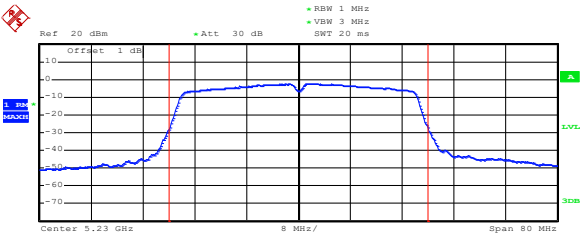
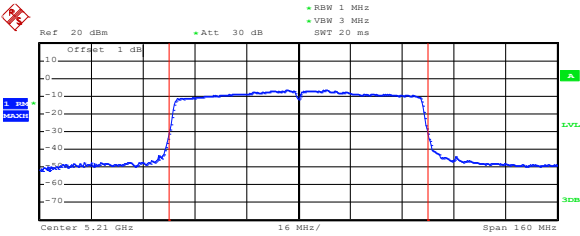


Date: 31.DEC.2021 10:55:16

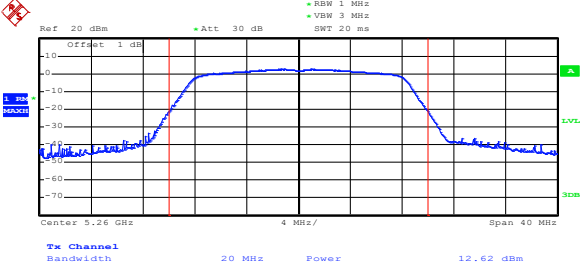
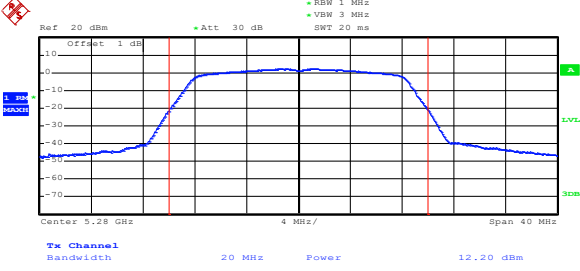
802.11n-HT20-High



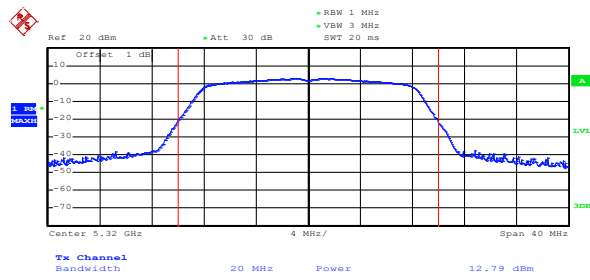
Date: 31.DEC.2021 10:56:58

<p>802.11n-HT40-Low</p>	 <p>Ref 20 dBm Att 30 dB RBW 1 MHz VBW 3 MHz SWT 20 ms</p> <p>Offset 1 dB</p> <p>Center 5.19 GHz 8 MHz/ Span 80 MHz</p> <p>Tx Channel Bandwidth 40 MHz Power 10.46 dBm</p> <p>Date: 31.DEC.2021 10:58:13</p>
<p>802.11n-HT40-High</p>	 <p>Ref 20 dBm Att 30 dB RBW 1 MHz VBW 3 MHz SWT 20 ms</p> <p>Offset 1 dB</p> <p>Center 5.23 GHz 8 MHz/ Span 80 MHz</p> <p>Tx Channel Bandwidth 40 MHz Power 10.61 dBm</p> <p>Date: 31.DEC.2021 10:58:57</p>
<p>802.11ac-HT80-Low</p>	 <p>Ref 20 dBm Att 30 dB RBW 1 MHz VBW 3 MHz SWT 20 ms</p> <p>Offset 1 dB</p> <p>Center 5.21 GHz 16 MHz/ Span 160 MHz</p> <p>Tx Channel Bandwidth 80 MHz Power 9.35 dBm</p> <p>Date: 31.DEC.2021 10:59:39</p>

5250-5350MHz

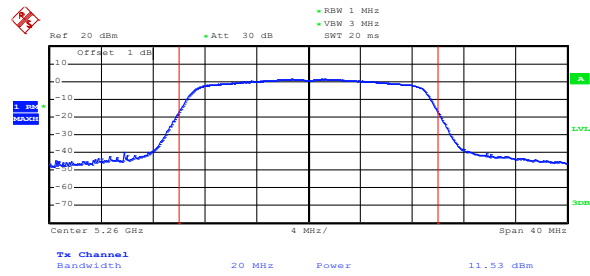
<p>802.11a-Low</p>	 <p>Date: 31.DEC.2021 11:49:58</p>
<p>802.11a-Middle</p>	 <p>Date: 31.DEC.2021 11:52:25</p>

802.11a-High



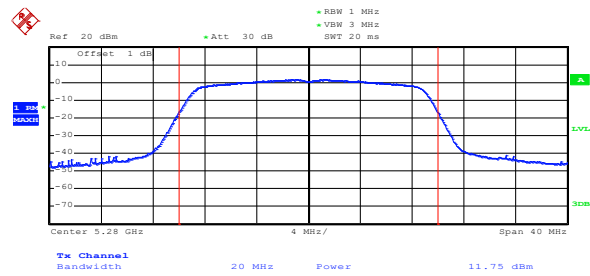
Date: 31.DEC.2021 11:52:59

802.11n-HT20-Low



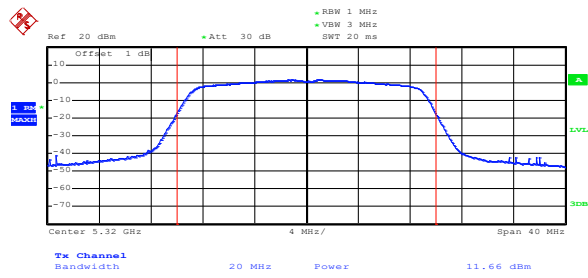
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802.11n-HT20-Middle



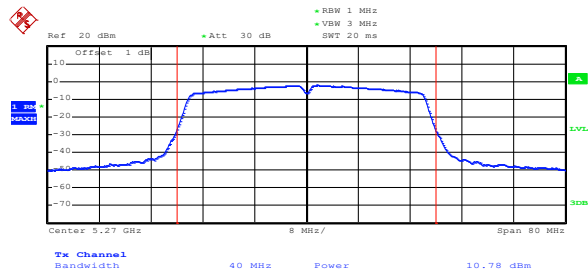
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802.11n-HT20-High



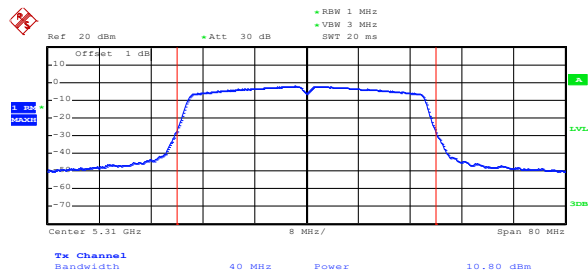
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802.11n-HT40-Low



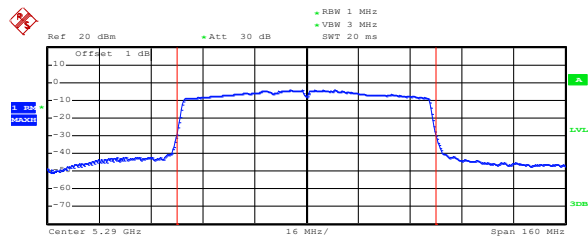
Date: 31.DEC.2021 12:00:52

802.11n-HT40-High



Date: 31.DEC.2021 12:01:10

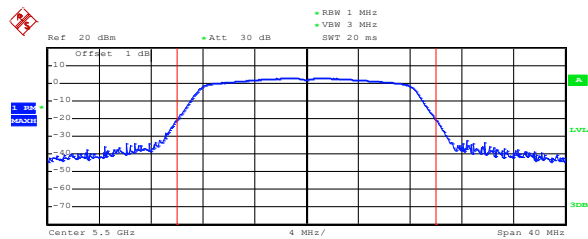
802.11ac-HT80-Low



Date: 31.DEC.2021 12:04:30

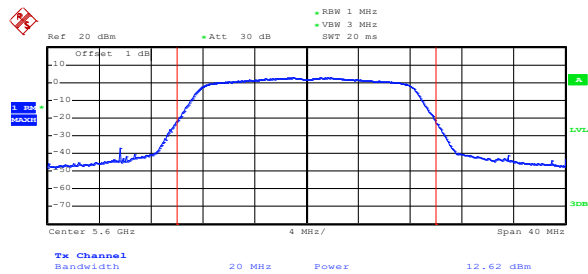
5470-5725MHz

802.11a-Low



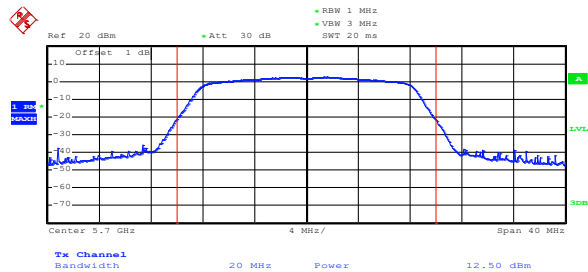
Date: 31.DEC.2021 12:07:25

802.11a-Middle



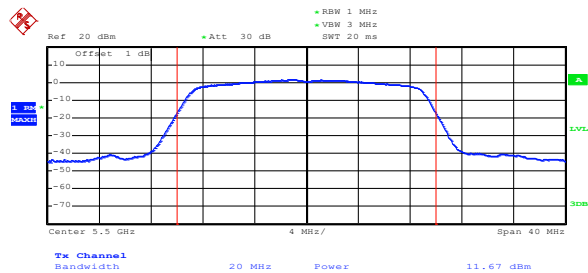
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802.11a-High

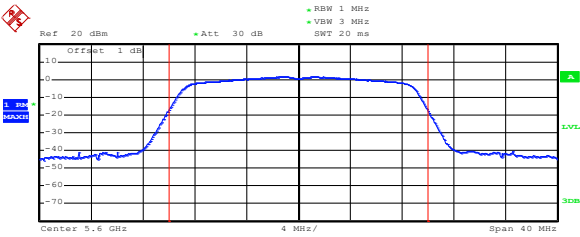
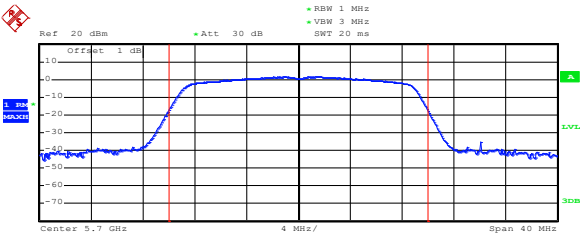
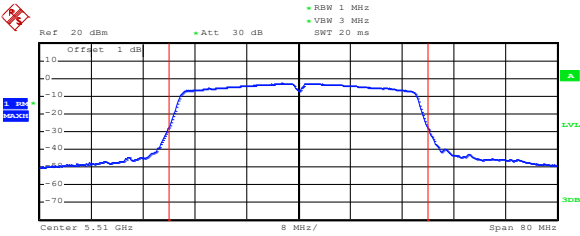


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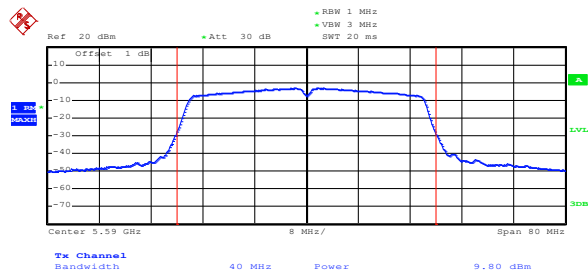
802.11n-HT20-Low



Date: 31.DEC.2021 12:09:16

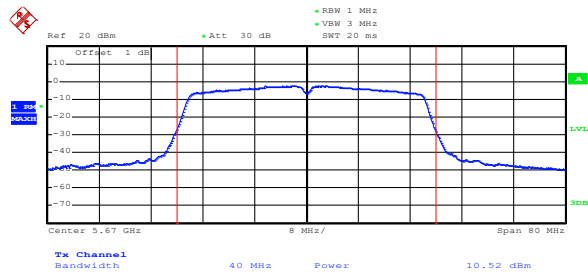
<p>802.11n-HT20-Middle</p>	 <p>Ref 20 dBm Att 30 dB RBW 1 MHz VBW 3 MHz SWT 20 ms Offset 1 dB</p> <p>Center 5.6 GHz 4 MHz/ Span 40 MHz</p> <p>Tx Channel Bandwidth 20 MHz Power 11.73 dBm</p> <p>Date: 31.DEC.2021 13:46:42</p>
<p>802.11n-HT20-High</p>	 <p>Ref 20 dBm Att 30 dB RBW 1 MHz VBW 3 MHz SWT 20 ms Offset 1 dB</p> <p>Center 5.7 GHz 4 MHz/ Span 40 MHz</p> <p>Tx Channel Bandwidth 20 MHz Power 11.74 dBm</p> <p>Date: 31.DEC.2021 13:47:06</p>
<p>802.11n-HT40-Low</p>	 <p>Ref 20 dBm Att 30 dB RBW 1 MHz VBW 3 MHz SWT 20 ms Offset 1 dB</p> <p>Center 5.51 GHz 8 MHz/ Span 80 MHz</p> <p>Tx Channel Bandwidth 40 MHz Power 10.20 dBm</p> <p>Date: 31.DEC.2021 13:49:01</p>

802.11n-HT40- Middle



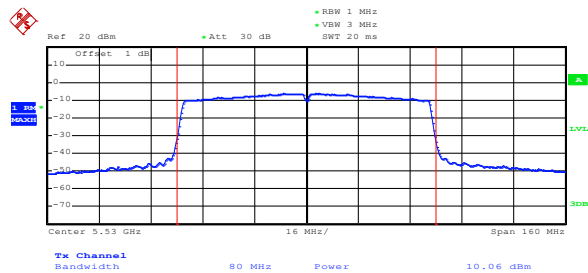
Date: 31.DEC.2021 13:49:35

802.11n-HT40-High



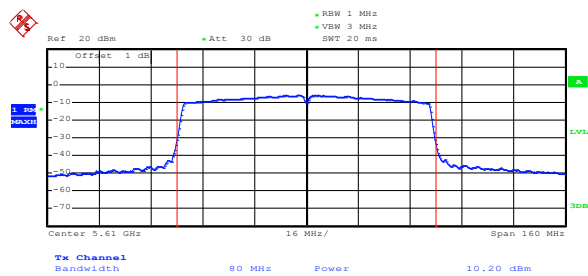
Date: 31.DEC.2021 13:50:11

802.11ac-HT80-Low



Date: 31.DEC.2021 13:53:13

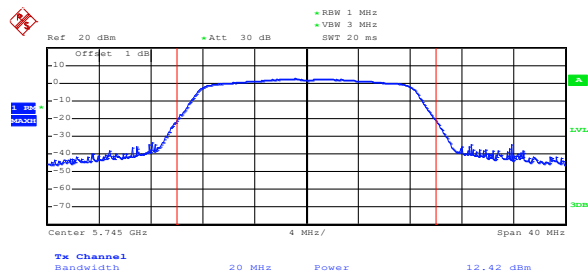
802.11ac-HT80-High



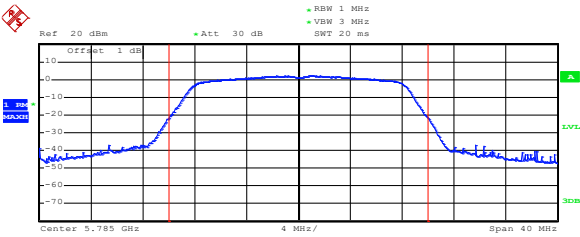
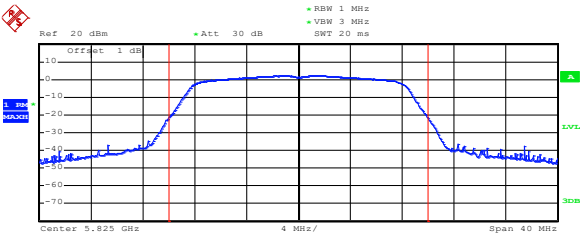
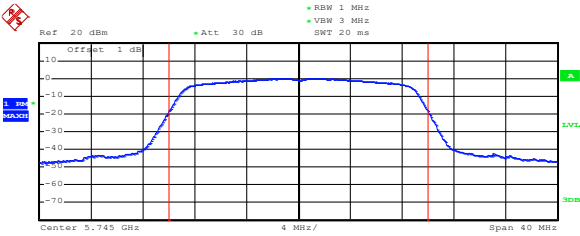
Date: 31.DEC.2021 13:54:23

5725-5850MHz

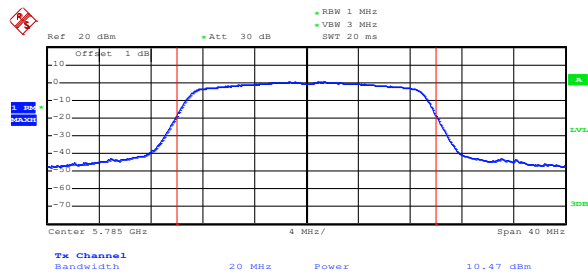
802.11a-Low



Date: 31.DEC.2021 13:59:03

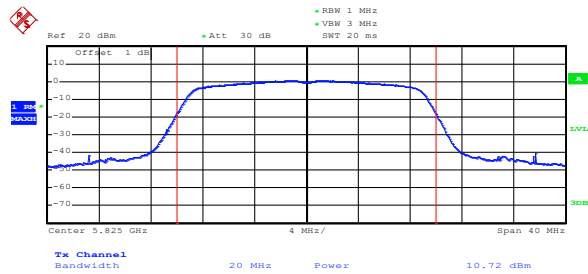
<p>802.11a-Middle</p>	 <p>Date: 31.DEC.2021 13:59:44</p>
<p>802.11a-High</p>	 <p>Date: 31.DEC.2021 14:00:21</p>
<p>802.11n-HT20-Low</p>	 <p>Date: 31.DEC.2021 14:02:09</p>

802.11n-HT20-Middle



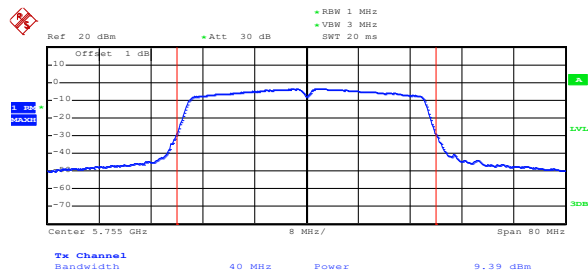
Date: 31.DEC.2021 14:02:32

802.11n-HT20-High



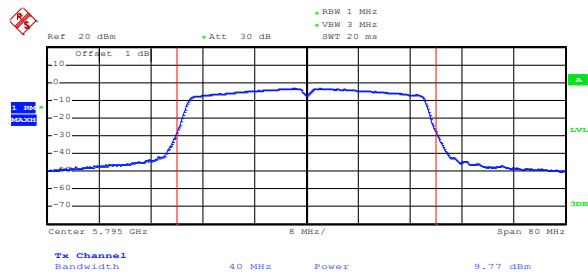
Date: 31.DEC.2021 14:02:53

802.11n-HT40-Low



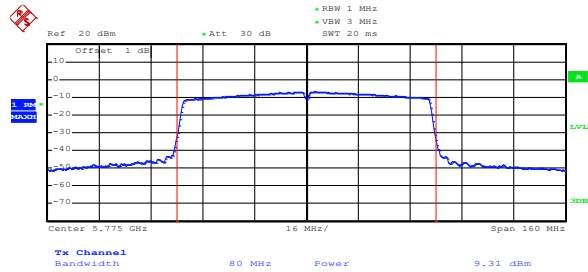
Date: 31.DEC.2021 14:04:16

802.11n-HT40-High



Date: 31.DEC.2021 14:05:35

802.11ac-HT80-Low



Date: 31.DEC.2021 14:06:48

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%	3.85	-30	118	0.0227
100%		-20	109	0.0210
100%		-10	168	0.0323
100%		0	151	0.0290
100%		+10	172	0.0331
100%		+20	142	0.0273
100%		+30	113	0.0217
100%		+40	134	0.0258
100%		+50	175	0.0337
Low Battery power		3.5	+20	140
High Battery power	4.4	+20	151	0.0290

U-NII-1: 5250-5350MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VDC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	3.85	-30	135	0.0256
100%		-20	130	0.0246
100%		-10	165	0.0313
100%		0	152	0.0288
100%		+10	119	0.0225
100%		+20	171	0.0324
100%		+30	149	0.0282
100%		+40	140	0.0265
100%		+50	150	0.0284
Low Battery power		3.5	+20	156
High Battery power	4.4	+20	138	0.0261

U-NII-1: 5470-5725MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VDC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	3.85	-30	161	0.0288
100%		-20	155	0.0277
100%		-10	104	0.0186
100%		0	160	0.0286
100%		+10	125	0.0223
100%		+20	101	0.0180
100%		+30	115	0.0205
100%		+40	163	0.0291
100%		+50	134	0.0239
Low Battery power		3.5	+20	161
High Battery power	4.4	+20	125	0.0223

U-NII-1:5725-5850MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VDC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	3.85	-30	147	0.0254
100%		-20	175	0.0303
100%		-10	117	0.0202
100%		0	112	0.0194
100%		+10	159	0.0275
100%		+20	180	0.0311
100%		+30	154	0.0266
100%		+40	124	0.0214
100%		+50	132	0.0228
Low Battery power		3.5	+20	154
High Battery power	4.4	+20	165	0.0285

APPENDIX PHOTOGRAPHS

Please refer to “ANNEX”

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