

TEST REPORT

Reference No..... : WTH20X10077099W-1
FCC ID : XOMRWOSU6547
Applicant : SHENZHEN QIYUE OPTRONICS COMPANY LIMITED
Address..... : Flat3,Tower 3, Excellence Meilin Center Plaza, Zhongkang Road 128,
Shangmeilin, Futian District, Shenzhen , China
Product Name : 65" SMART 4K UHD TV
Test Model. : RWOSU6547
Standards : FCC Part 15.407
Date of Receipt sample : Oct.22, 2020
Date of Test..... : Oct.22, 2020 to Nov.20, 2020
Date of Issue : Nov.20, 2020
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.

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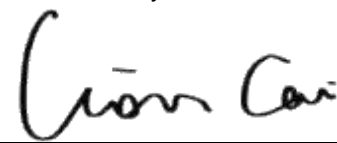
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Report version

Version No.	Date of issue	Description
Rev.00	Nov.20, 2020	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: SHENZHEN QIYUE OPTRONICS COMPANY LIMITED
 Address of applicant: Flat3,Tower 3, Excellence Meilin Center Plaza, Zhongkang Road 128, Shangmeilin, Futian District, Shenzhen , China

Manufacturer: SHENZHEN QIYUE OPTRONICS COMPANY LIMITED
 BRANCH

Address of manufacturer: SEIYU INDUSTRIAL PARK,DA SAN VILLAGE,DA SHUI KENG,GUANLAN TOWN,LONGHUA NEW DISTRICT, SHENZHEN,P.R.C

General Description of EUT	
Product Name:	65" SMART 4K UHD TV
Trade Name:	RCA, PROSCAN, RCA SCENIUM, TECHNICALOR, SYLVANIA, RCASMA TV VIRTUOSO
Model No.:	RWOSU6547
Adding Model(s):	D65A114-U-A-I, XXXXXXXXXXXX65XXXXXXXXXXXXXXXXX, (Where "X" can be any alphanumeric of A-Z or 0-9 or blank or -, indicates different client)
Rated Voltage:	AC120V/60Hz
Battery Capacity:	/
Power Adapter:	/
Software Version:	/
Hardware Version:	/

Note: The test data is gathered from a production sample, provided by the manufacturer. The appearance of others models listed in the report is different from main-test model RWOSU6547, but the circuit and the electronic construction do not change, declared by the manufacturer.

Technical Characteristics of EUT	
Support Standards:	802.11a, 802.11n(HT20) , 802.11n-HT40, 802.11ac-VHT80
Frequency Range:	5150-5250MHz, 5725-5850MHz
RF Output Power:	5150-5250MHz: 16.61dBm (Conducted) 5725-5850MHz: 16.19dBm (Conducted)
Type of Modulation:	BPSK, QPSK,16QAM,64QAM, 256QAM
Data Rate:	6-54Mbps, up to 200Mbps
Type of Antenna:	External Antenna
Antenna Gain:	2dBi

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

Mode	Ant.	Test Frequency (MHz)												
		NCB: 20MHz												
		5180	5200	5240	5260	5300	5320	5500	5580	5700	5720	5740	5780	5825
802.11a 6Mbps	ANT 1	1E	1E	1E	/	/	/	/	/	/	/	21	21	21
	ANT 2	21	21	21	/	/	/	/	/	/	/	24	24	24
802.11n-HT20 MCS0	ANT 1	1E	1E	1E	/	/	/	/	/	/	/	21	21	21
	ANT 2	21	21	21	/	/	/	/	/	/	/	24	24	24
Mode	Ant.	NCB: 40MHz												
		5190	5230	5270	5310	5510	5550	5670	5710	5755	5795			
802.11n-HT40 MCS0	ANT 1	1E	1E	/	/	/	/	/	/	/	/	21	21	
	ANT 2	21	21	/	/	/	/	/	/	/	/	24	24	
Mode	Ant.	NCB: 80MHz												
		5210	5290	5530	5610	5690	5775							
802.11ac-VH80 MCS0/Nss2	ANT 1	1C	/	/	/	/	1F							
	ANT 2	20	/	/	/	/	24							

1.5 EUT Operating during test

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

1.6 Test Facility

Address of the test laboratory

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

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

FCC – Registration No.: 125990

Waltek Testing Group (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is 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, 5745MHz, 5785MHz,5825MHz
TM2	802.11n-HT20	5180MHz,5200MHz,5240MHz, 5745MHz, 5785MHz,5825MHz
TM3	802.11n-HT40	5190MHz,5230MHz, 5755MHz,5795MHz
TM4	802.11ac-VH80	5210MHz, 5775 MHz

Note: All test modes (different data rate and different modulation) are performed, but only the worst case is recorded in this report.

Test Conditions	
Temperature:	22~25 °C
Relative Humidity:	40~55 %.
ATM Pressure:	1019 mbar

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
AC Cable	1.5	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-1072	Spectrum Analyzer	Agilent	E4407B	MY41440400	2020-04-28	2021-04-27
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2020-04-28	2021-04-27
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2020-04-28	2021-04-27
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2020-04-28	2021-04-27
SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2020-04-28	2021-04-27
SEMT-1011	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2019-05-05	2021-05-04
SEMT-1042	Horn Antenna	ETS	3117	00086197	2019-05-05	2021-05-04
SEMT-1121	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170582	2019-05-05	2021-05-04
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2019-05-05	2021-05-04
SEMT-1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2020-04-28	2021-04-27
SEMT-1003	L.I.S.N	Schwarz beck	NSLK8126	8126-224	2020-04-28	2021-04-27
SEMT-1002	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2020-04-28	2021-04-27
SEMT-1168	Pre-amplifier	Direction Systems Inc.	PAP-0126	14141-12838	2020-04-28	2021-04-27
SEMT-1169	Pre-amplifier	Direction Systems Inc.	PAP-2640	14145-14153	2020-04-28	2021-04-27
SEMT-1163	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2020-04-28	2021-04-27
SEMT-1170	DRG Horn Antenna	A.H. SYSTEMS	SAS-574	571	2019-05-05	2021-05-04
SEMT-1166	Power Limiter	Agilent	N9356B	MY45450376	2020-04-28	2021-04-27
SEMT-1048	RF Limiter	ATTEN	AT-BSF-2400~2500	/	2020-04-28	2021-04-27
SEMT-1076	RF Switcher	Top Precision	RCS03-A2	/	2020-04-28	2021-04-27
SEMT-C001	Cable	Zheng DI	LL142-07-07-10M(A)	/	2020-03-17	2021-03-16
SEMT-C002	Cable	Zheng DI	ZT40-2.92J-2.92J-6M	/	2020-03-17	2021-03-16
SEMT-C003	Cable	Zheng DI	ZT40-2.92J-2.92J-2.5M	/	2020-03-17	2021-03-16
SEMT-C004	Cable	Zheng DI	2M0RFC	/	2020-03-17	2021-03-16
SEMT-C005	Cable	Zheng DI	1M0RFC	/	2020-03-17	2021-03-16
SEMT-C006	Cable	Zheng DI	1M0RFC	/	2020-03-17	2021-03-16

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

2. SUMMARY OF TEST RESULTS

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

N/A: Not applicable

3. Antenna Requirement

3.1 Standard Applicable

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

3.2 Evaluation Information

This product has two External antennas, fulfill the requirement of this section. And the signals at the antennas are completely uncorrelated.

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 5.15-5.25 GHz.

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

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

(3) For the band 5.725-5.85 GHz, 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 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi 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 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, 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 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500

kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) 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 ≥ 3 RBW.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/\text{RBW})$ to the measured result, whereas RBW (< 500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/\text{RBW})$ to the measured result, whereas RBW (< 1 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 100 kHz for the sections 5.c) and 5.d) above, since RBW=100 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 5.15-5.25 GHz.

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

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

(3) For the band 5.725-5.85 GHz, 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 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi 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 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

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 26 dB 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 5.725-5.85 GHz

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- 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 6 dB relative to the maximum level measured in the fundamental emission.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

D. 99 Percent Occupied Bandwidth

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

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW $\geq 3 * RBW$
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 5.15-5.25 GHz.

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

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

(3) For the band 5.725-5.85 GHz, 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 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi 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 = 1 MHz.
- (iii) Set VBW \geq 3 MHz.
- (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 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

7.3 Summary of Test Results/Plots

Please refer to Appendix C

8. Radiated Spurious Emissions

8.1 Standard Applicable

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

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
 - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

According to §15.407(b)(6), Unwanted emissions below 1 GHz 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.

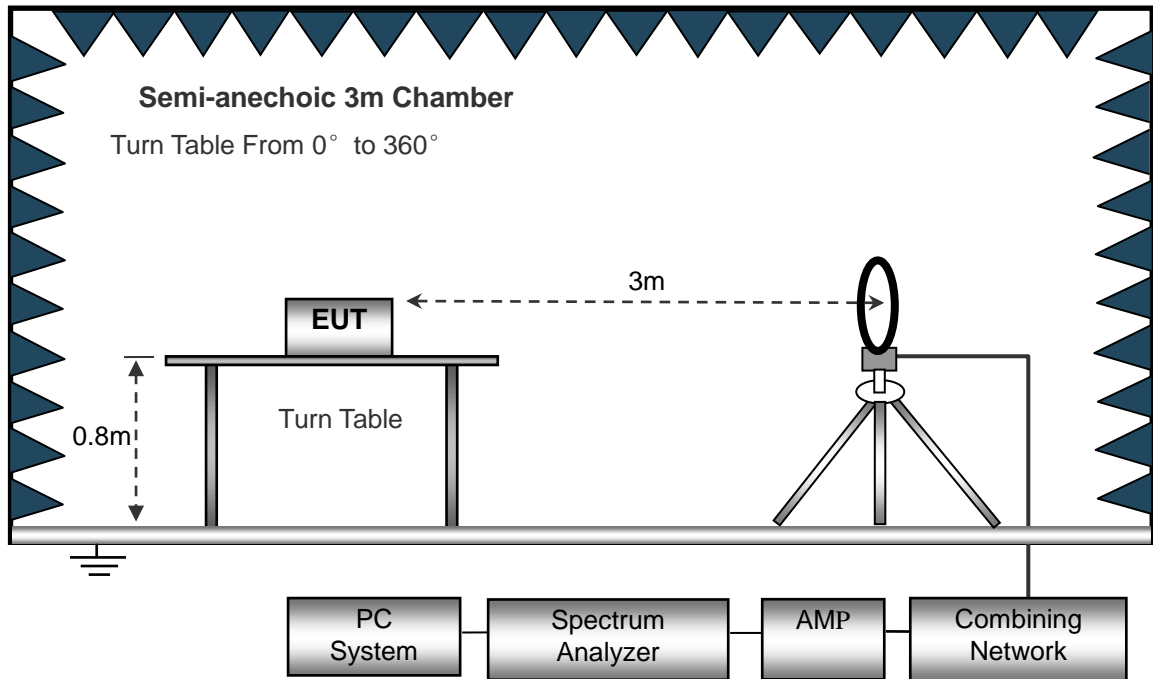
8.2 Test Procedure

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..

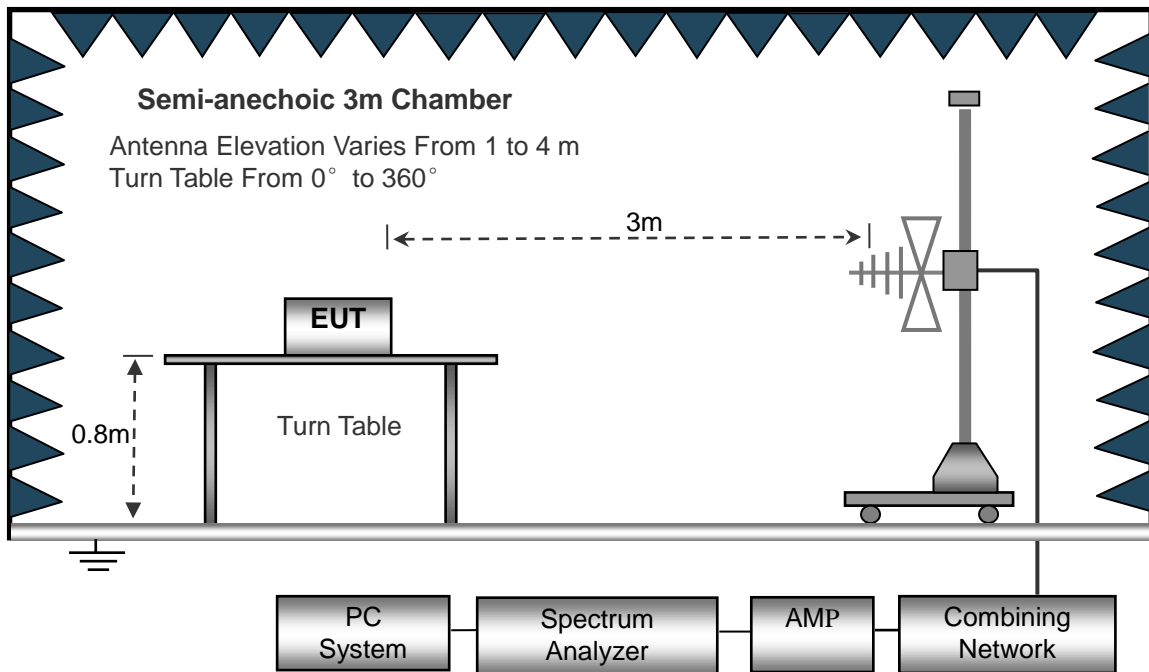
The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

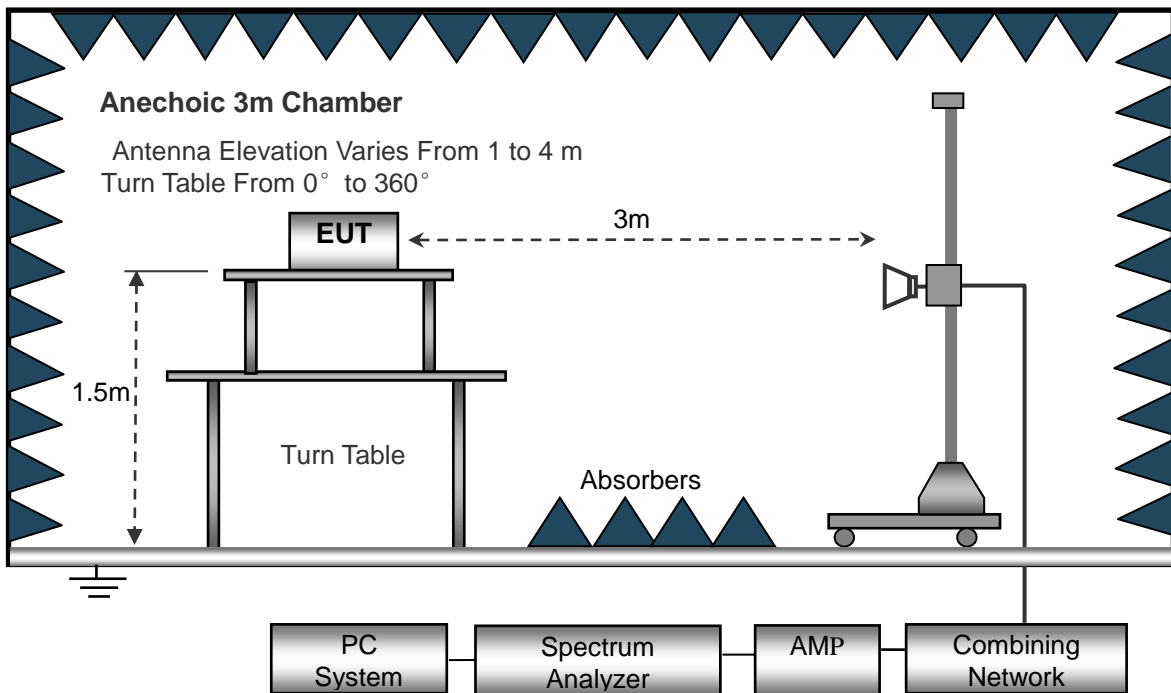
The test setup for emission measurement below 30MHz..



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



The test setup for emission measurement above 1 GHz..



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:

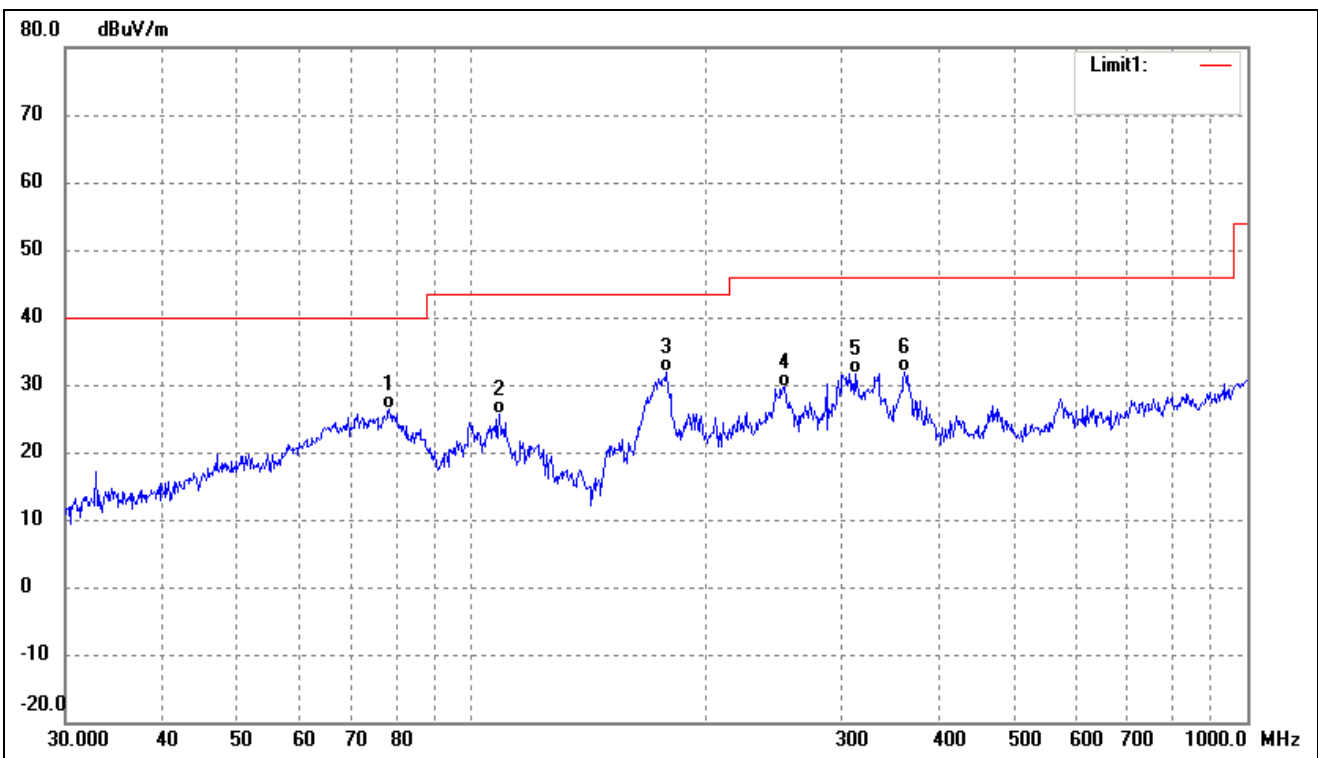
$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15 Limit}$$

8.5 Summary of Test Results/Plots

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

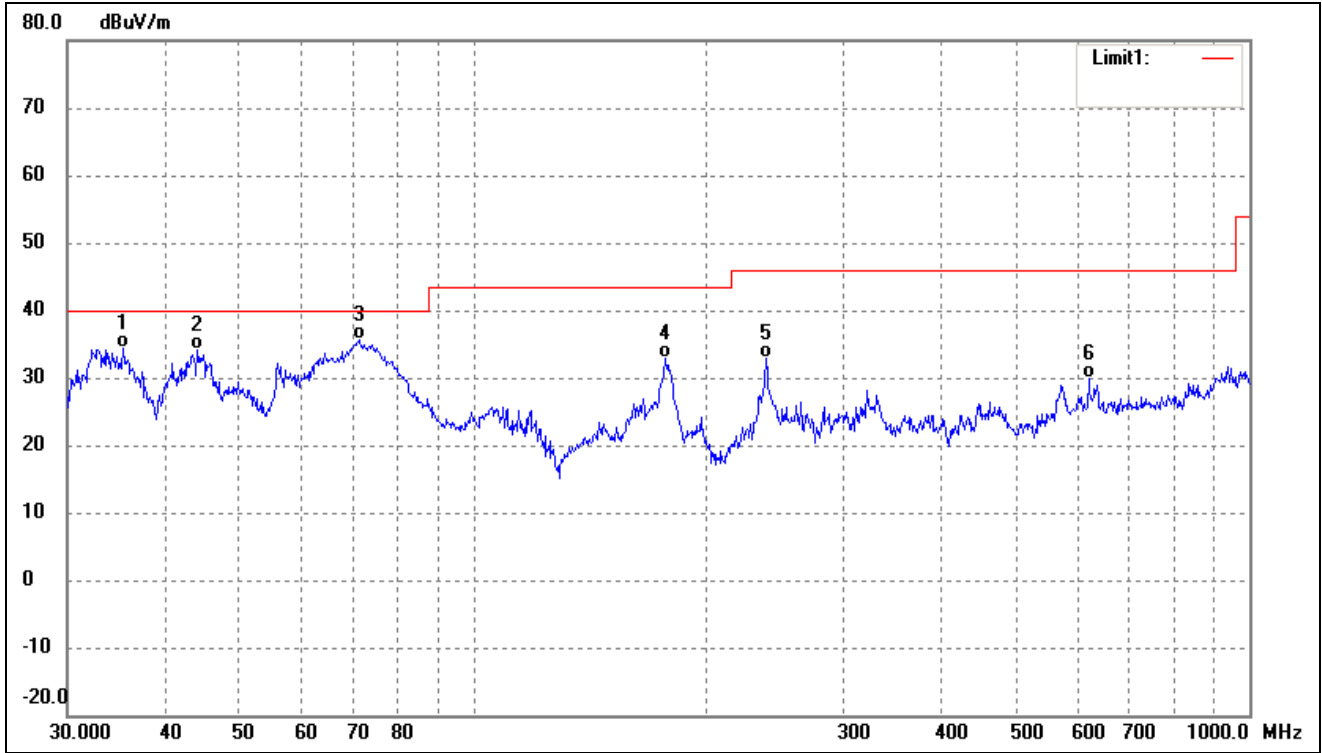
- Spurious Emission From 30 MHz to 1 GHz
- Antenna 1(worst case)
- 5150-5250MHz

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



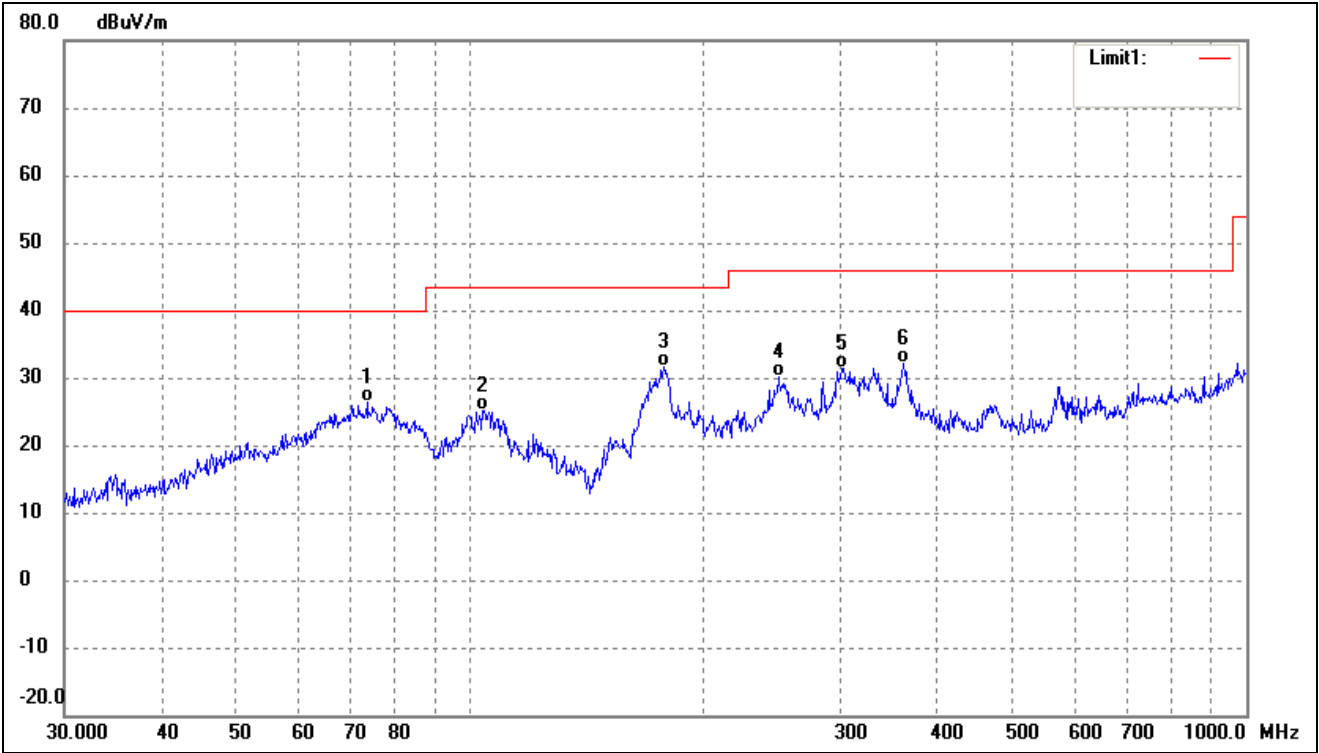
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	78.4134	40.44	-14.09	26.35	40.00	-13.65	-	-	QP
2	108.6470	37.83	-12.18	25.65	43.50	-17.85	-	-	QP
3	178.1327	45.25	-13.39	31.86	43.50	-11.64	-	-	QP
4	253.8367	38.91	-9.21	29.70	46.00	-16.30	-	-	QP
5	312.1794	38.97	-7.32	31.65	46.00	-14.35	-	-	QP
6	361.7139	37.72	-5.92	31.80	46.00	-14.20	-	-	QP

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



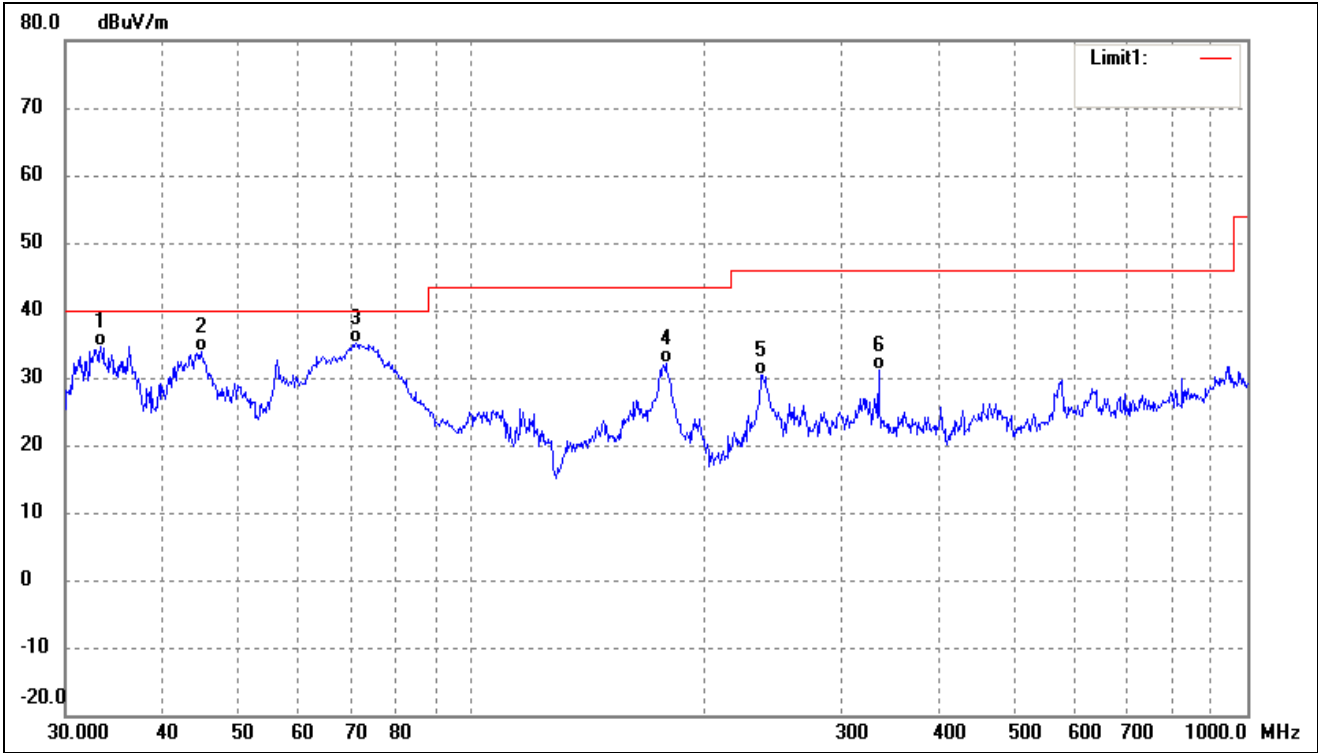
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	35.3750	46.83	-12.55	34.28	40.00	-5.72	-	-	QP
2	44.1202	44.82	-10.77	34.05	40.00	-5.95	-	-	QP
3	71.3300	49.58	-14.03	35.55	40.00	-4.45	-	-	QP
4	176.8878	46.37	-13.43	32.94	43.50	-10.56	-	-	QP
5	238.3102	42.81	-9.99	32.82	46.00	-13.18	-	-	QP
6	620.7096	32.23	-2.37	29.86	46.00	-16.14	-	-	QP

802.11a(worst case)			
Test Channel	5200MHz	Polarity:	Horizontal



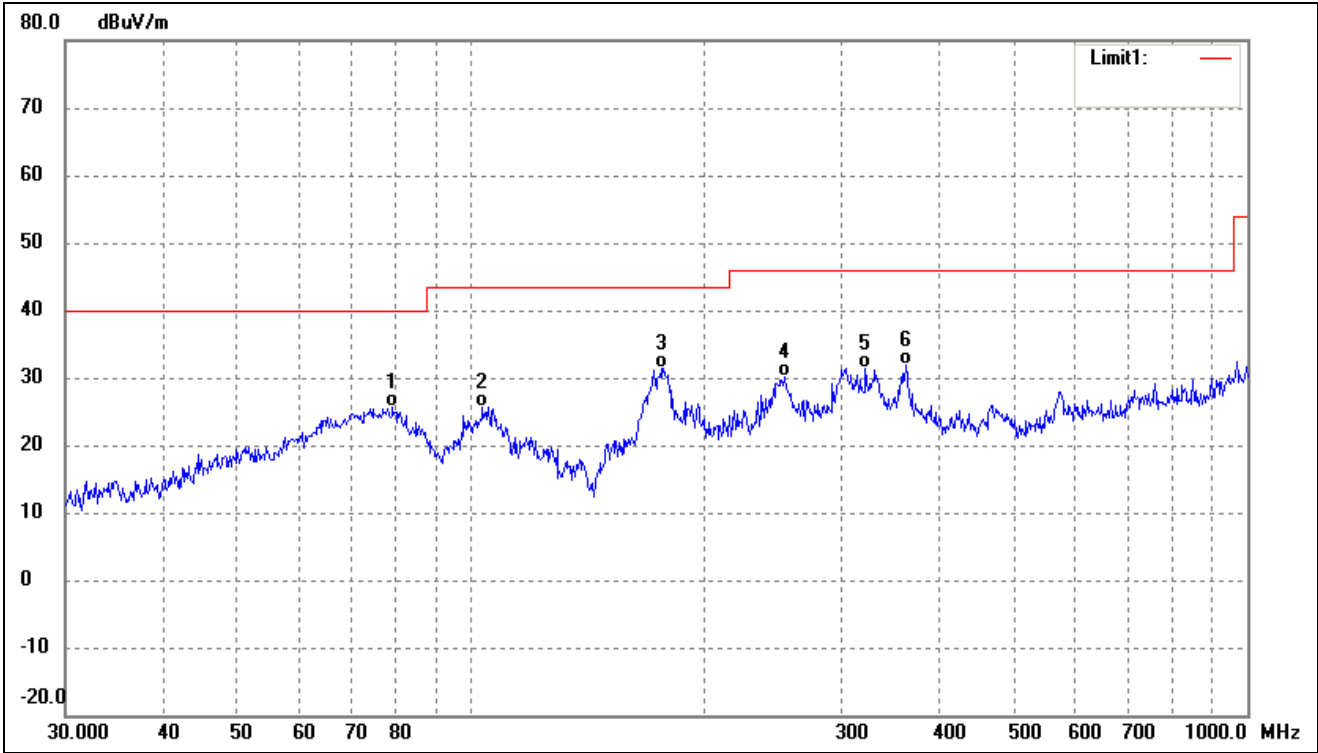
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	73.6170	40.28	-13.96	26.32	40.00	-13.68	-	-	QP
2	103.8055	37.52	-12.30	25.22	43.50	-18.28	-	-	QP
3	177.5092	44.97	-13.40	31.57	43.50	-11.93	-	-	QP
4	249.4250	39.48	-9.34	30.14	46.00	-15.86	-	-	QP
5	301.4224	38.67	-7.24	31.43	46.00	-14.57	-	-	QP
6	361.7139	38.10	-5.92	32.18	46.00	-13.82	-	-	QP

802.11a(worst case)			
Test Channel	5200MHz	Polarity:	Vertical



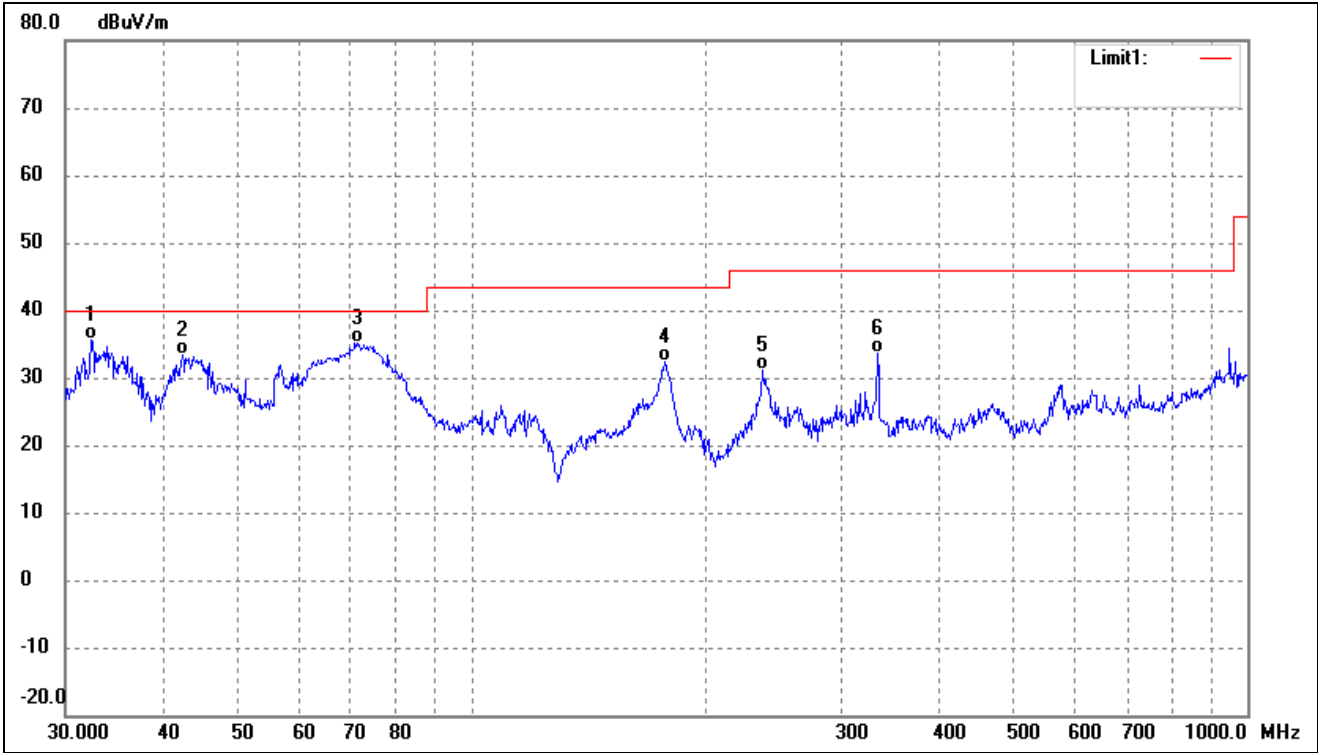
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	33.3279	47.77	-13.04	34.73	40.00	-5.27	-	-	QP
2	44.9006	44.39	-10.59	33.80	40.00	-6.20	-	-	QP
3	71.0803	49.20	-14.03	35.17	40.00	-4.83	-	-	QP
4	178.1327	45.60	-13.39	32.21	43.50	-11.29	-	-	QP
5	236.6447	40.59	-10.09	30.50	46.00	-15.50	-	-	QP
6	334.8589	38.08	-6.94	31.14	46.00	-14.86	-	-	QP

802.11a(worst case)			
Test Channel	5240MHz	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	79.2426	39.82	-14.14	25.68	40.00	-14.32	-	-	QP
2	103.4421	38.02	-12.31	25.71	43.50	-17.79	-	-	QP
3	175.6516	44.79	-13.47	31.32	43.50	-12.18	-	-	QP
4	253.8367	39.25	-9.21	30.04	46.00	-15.96	-	-	QP
5	322.1886	38.87	-7.40	31.47	46.00	-14.53	-	-	QP
6	362.9845	37.82	-5.91	31.91	46.00	-14.09	-	-	QP

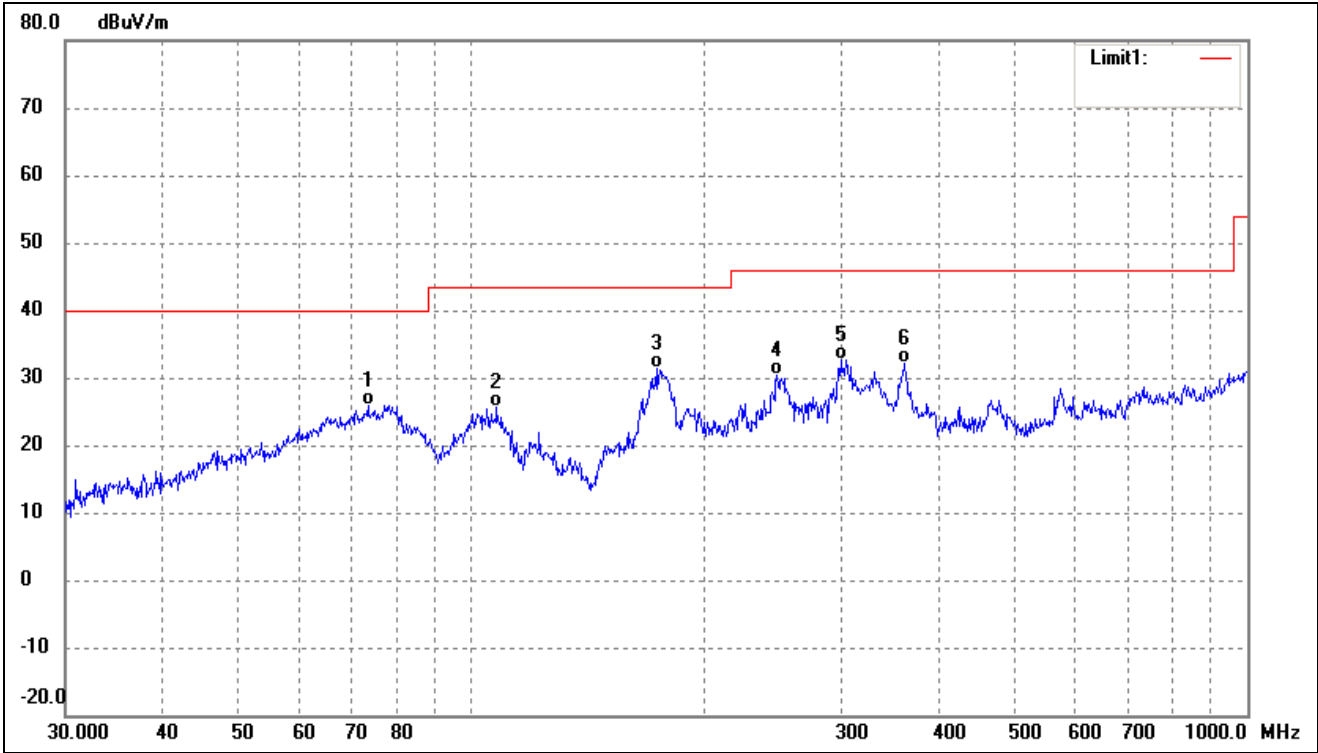
802.11a(worst case)			
Test Channel	5240MHz	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	32.4059	48.83	-13.26	35.57	40.00	-4.43	-	-	QP
2	42.4508	44.45	-11.17	33.28	40.00	-6.72	-	-	QP
3	71.3300	49.19	-14.03	35.16	40.00	-4.84	-	-	QP
4	177.5092	45.69	-13.40	32.29	43.50	-11.21	-	-	QP
5	237.4760	41.26	-10.03	31.23	46.00	-14.77	-	-	QP
6	333.6867	40.68	-7.00	33.68	46.00	-12.32	-	-	QP

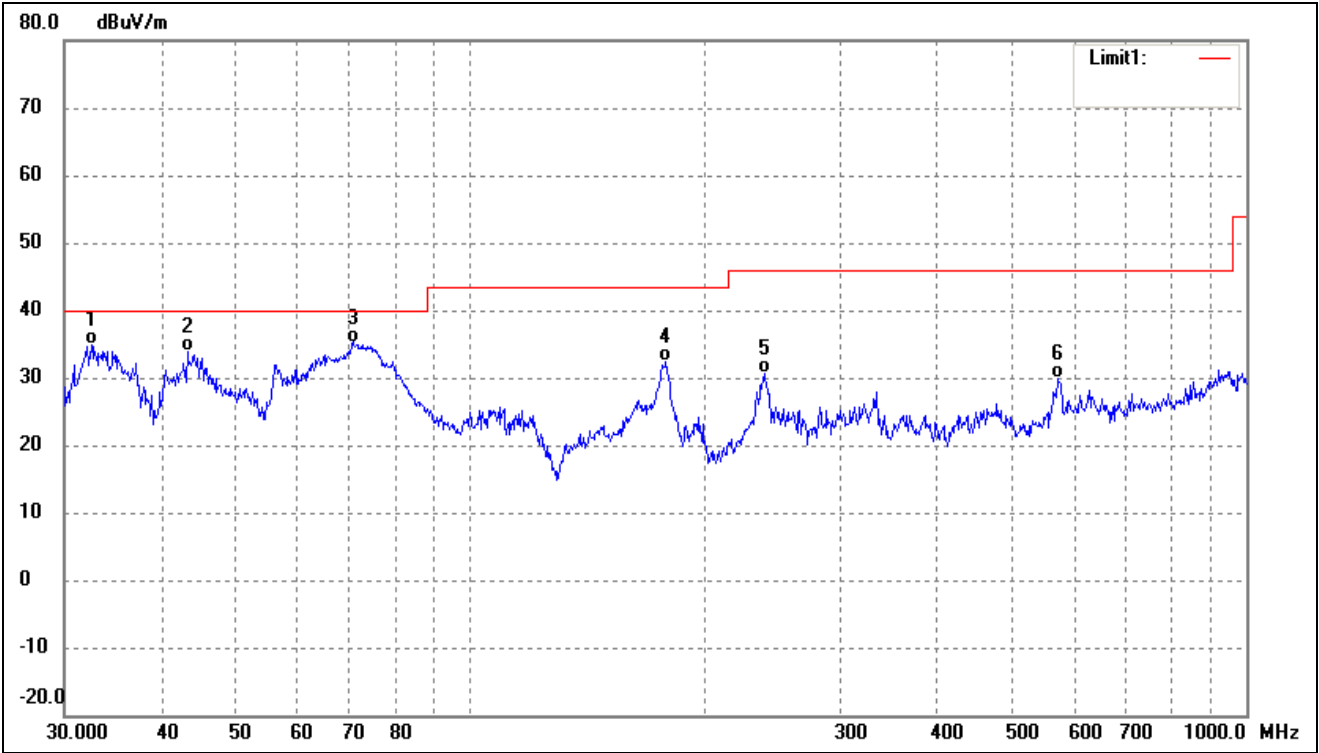
- Antenna 1 (worst case)
- 5725-5850MHz

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



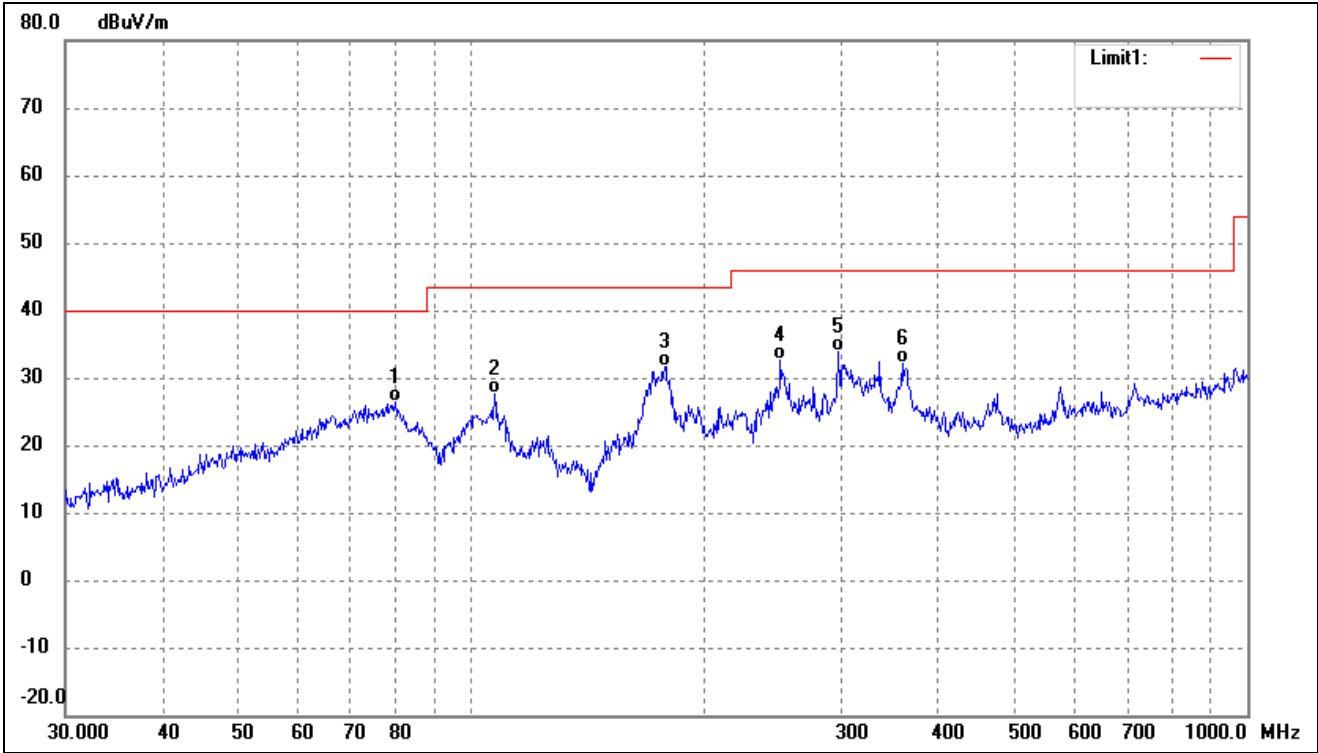
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	73.6170	39.87	-13.96	25.91	40.00	-14.09	-	-	QP
2	107.8877	37.89	-12.20	25.69	43.50	-17.81	-	-	QP
3	173.2051	44.88	-13.56	31.32	43.50	-12.18	-	-	QP
4	247.6819	39.74	-9.43	30.31	46.00	-15.69	-	-	QP
5	299.3158	39.90	-7.27	32.63	46.00	-13.37	-	-	QP
6	361.7139	37.96	-5.92	32.04	46.00	-13.96	-	-	QP

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



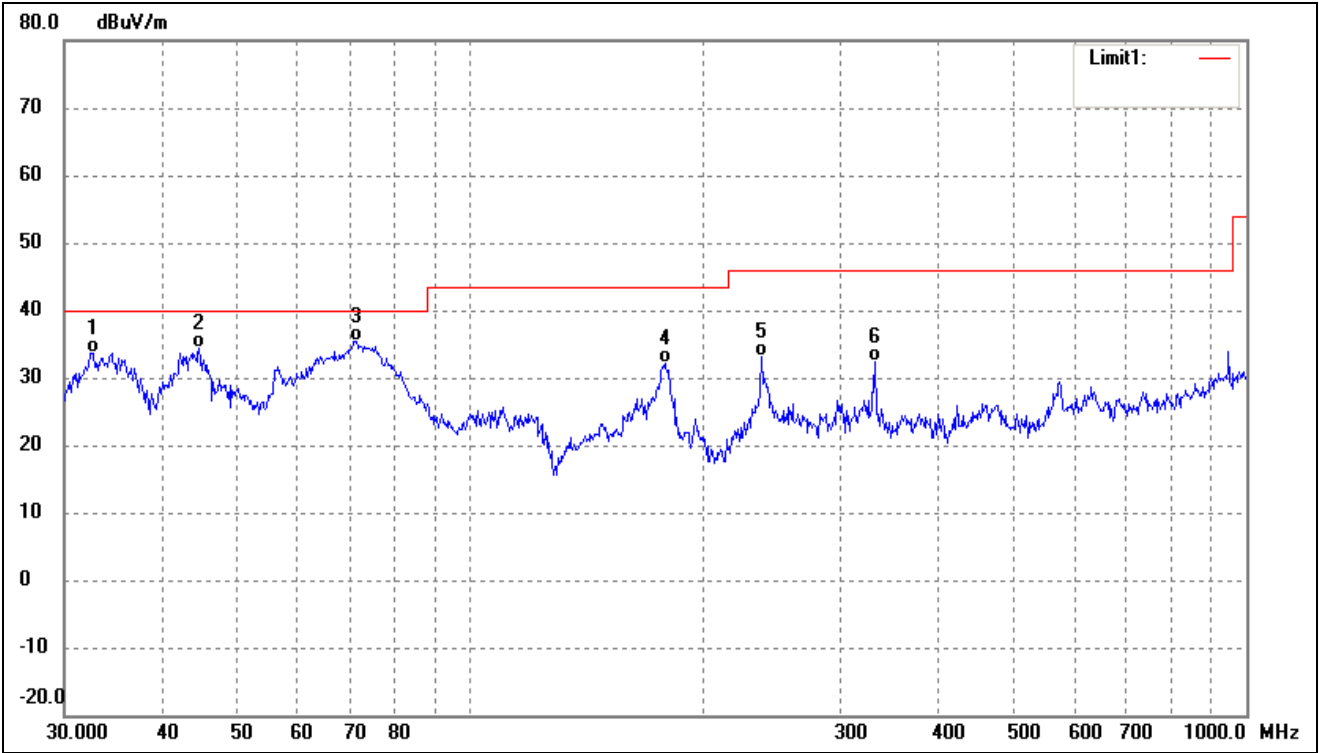
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	32.5198	48.16	-13.25	34.91	40.00	-5.09	-	-	QP
2	43.2017	44.83	-11.00	33.83	40.00	-6.17	-	-	QP
3	70.5836	49.30	-14.05	35.25	40.00	-4.75	-	-	QP
4	178.7584	45.67	-13.36	32.31	43.50	-11.19	-	-	QP
5	239.1473	40.64	-9.94	30.70	46.00	-15.30	-	-	QP
6	570.6100	32.65	-2.76	29.89	46.00	-16.11	-	-	QP

802.11a(worst case)			
Test Channel	5785MHz	Polarity:	Horizontal



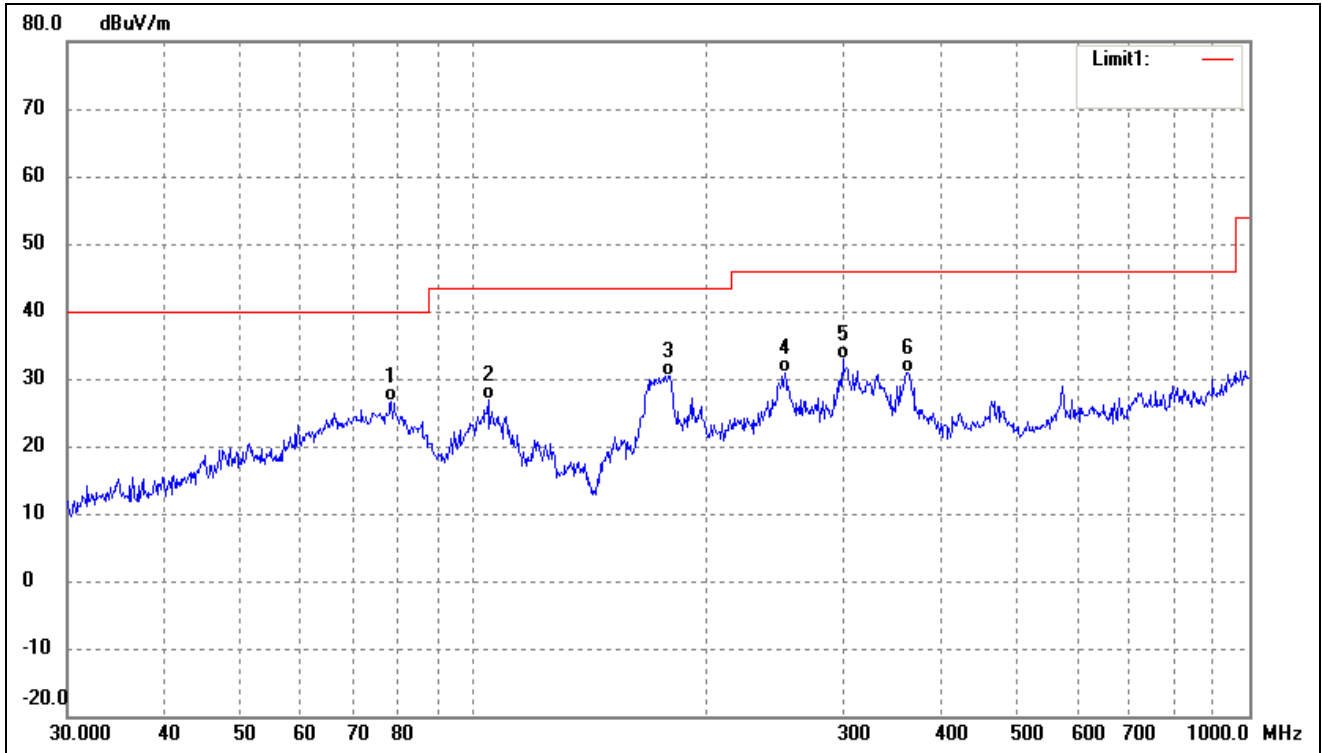
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	79.8003	40.49	-14.15	26.34	40.00	-13.66	-	-	QP
2	107.1337	39.87	-12.23	27.64	43.50	-15.86	-	-	QP
3	177.5092	45.14	-13.40	31.74	43.50	-11.76	-	-	QP
4	250.3012	41.82	-9.29	32.53	46.00	-13.47	-	-	QP
5	297.2241	41.18	-7.39	33.79	46.00	-12.21	-	-	QP
6	359.1860	37.98	-5.97	32.01	46.00	-13.99	-	-	QP

802.11a(worst case)			
Test Channel	5785MHz	Polarity:	Vertical



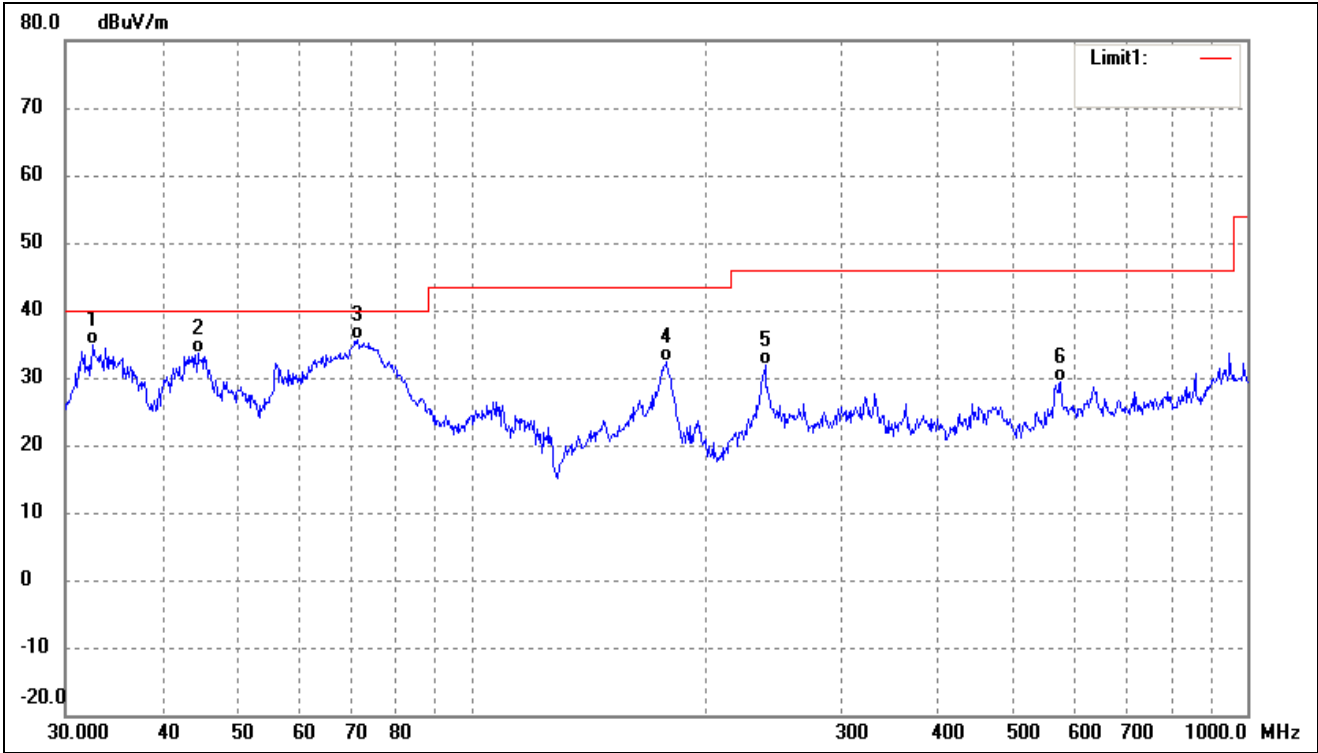
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	32.7486	46.94	-13.19	33.75	40.00	-6.25	-	-	QP
2	44.7434	44.96	-10.63	34.33	40.00	-5.67	-	-	QP
3	71.3300	49.45	-14.03	35.42	40.00	-4.58	-	-	QP
4	178.1327	45.41	-13.39	32.02	43.50	-11.48	-	-	QP
5	237.4760	43.24	-10.03	33.21	46.00	-12.79	-	-	QP
6	332.5187	39.44	-7.05	32.39	46.00	-13.61	-	-	QP

802.11a(worst case)			
Test Channel	5825MHz	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	78.4134	40.69	-14.09	26.60	40.00	-13.40	-	-	QP
2	104.5361	39.21	-12.27	26.94	43.50	-16.56	-	-	QP
3	178.1327	43.87	-13.39	30.48	43.50	-13.02	-	-	QP
4	252.0627	40.14	-9.24	30.90	46.00	-15.10	-	-	QP
5	299.3158	40.03	-7.27	32.76	46.00	-13.24	-	-	QP
6	362.9845	36.85	-5.91	30.94	46.00	-15.06	-	-	QP

802.11a(worst case)			
Test Channel	5825MHz	Polarity:	Vertical

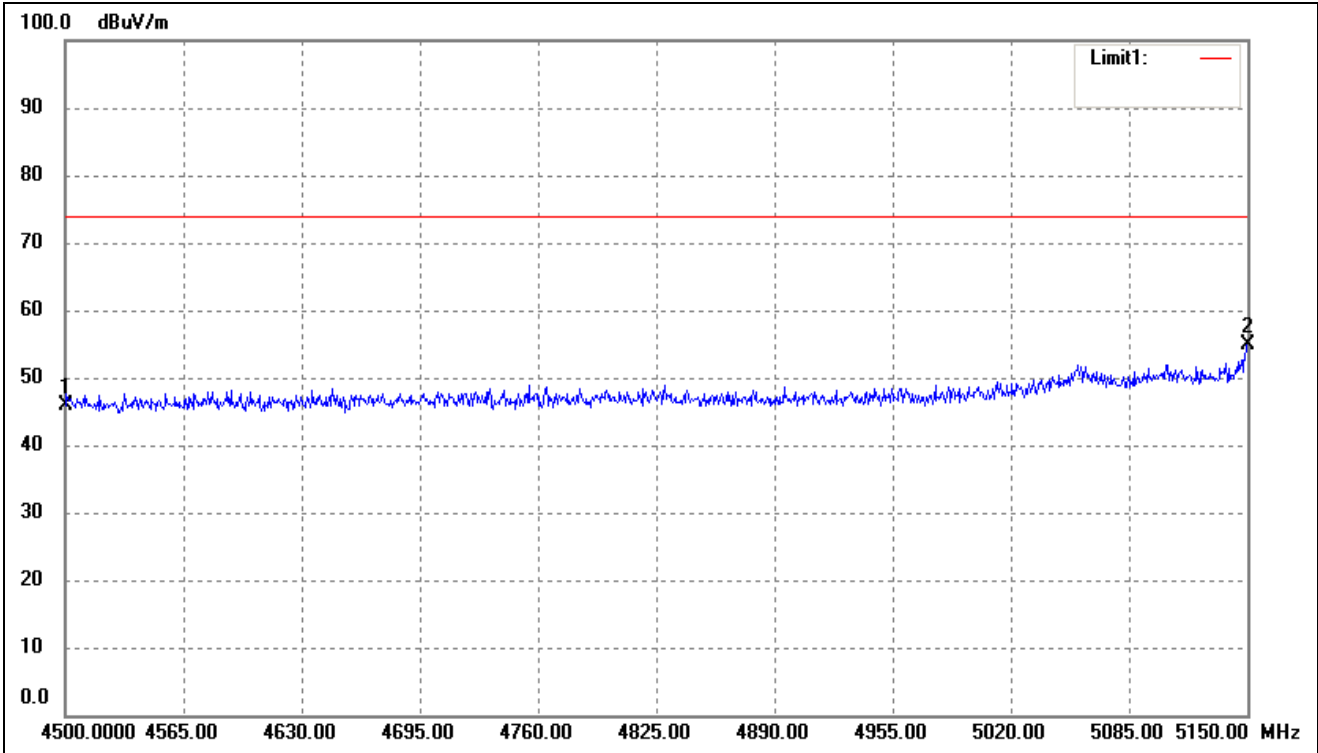


No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	32.5198	48.23	-13.25	34.98	40.00	-5.02	-	-	QP
2	44.4308	44.33	-10.70	33.63	40.00	-6.37	-	-	QP
3	71.3300	49.54	-14.03	35.51	40.00	-4.49	-	-	QP
4	178.7584	45.73	-13.36	32.37	43.50	-11.13	-	-	QP
5	239.1473	41.80	-9.94	31.86	46.00	-14.14	-	-	QP
6	574.6258	31.99	-2.57	29.42	46.00	-16.58	-	-	QP

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

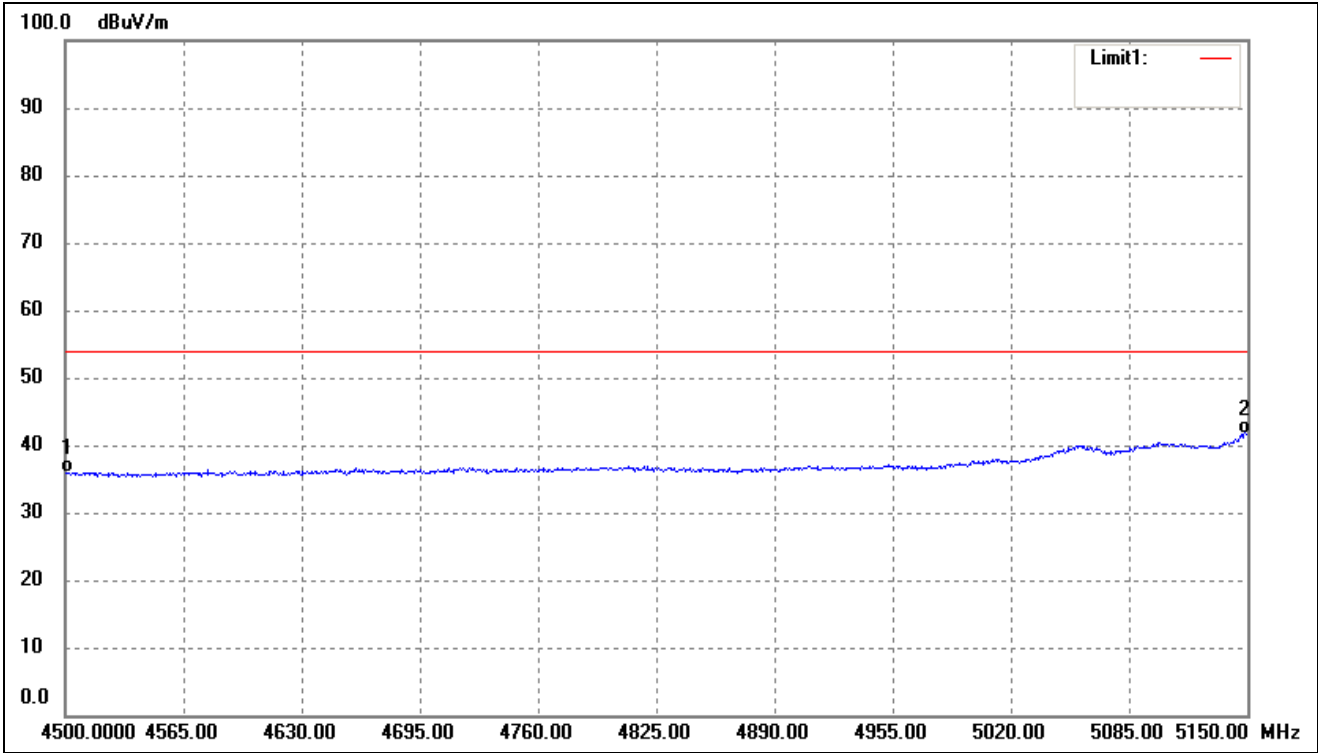
- Spurious Emission above 1GHz
- Antenna 1(worst case)

802.11a- Restricted Bandedge (worst case)			
Test Channel	band 4.5-5.15GHz	Polarity:	Horizontal (worst case)



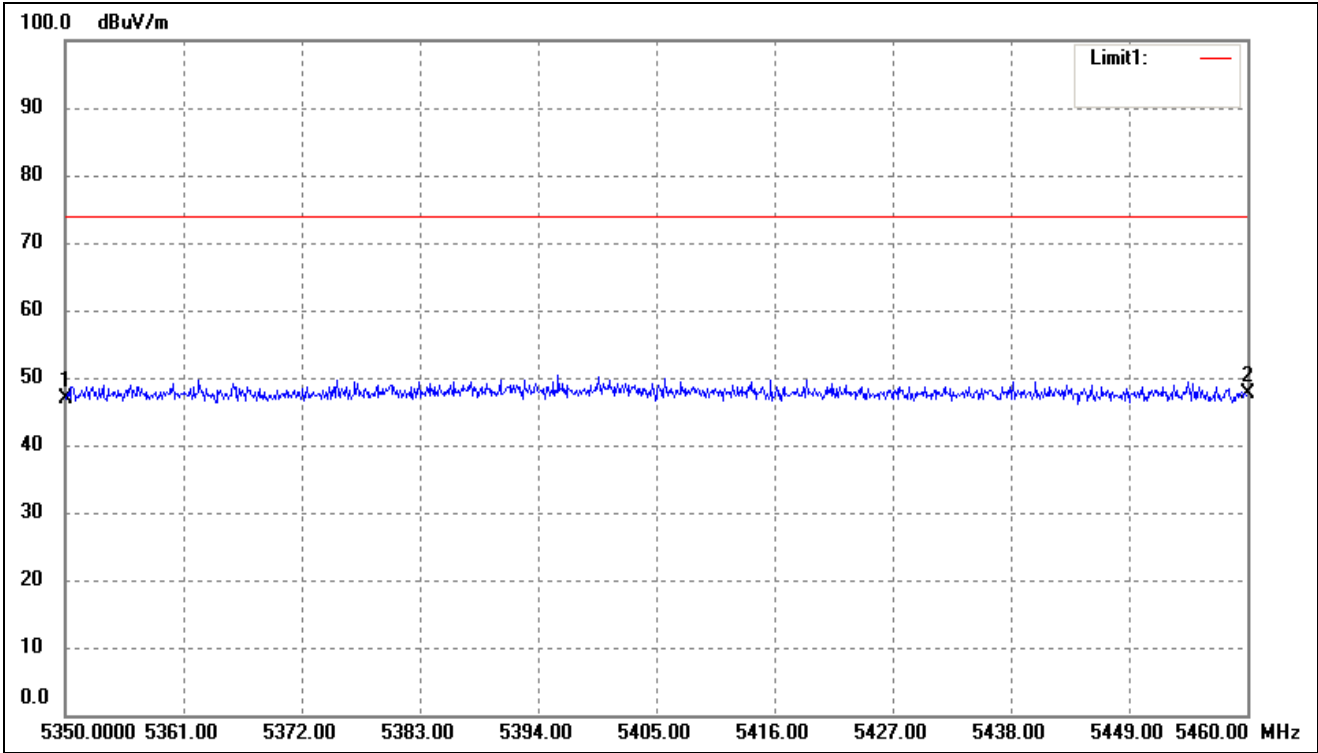
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	1	4500.000	50.69	-4.71	45.98	74.00	-	-	peak
2	2	5150.000	59.15	-4.32	54.83	74.00	-	-	peak

802.11a- Restricted Bandedge (worst case)			
Test Channel	band 4.5-5.15GHz	Polarity:	Horizontal (worst case)



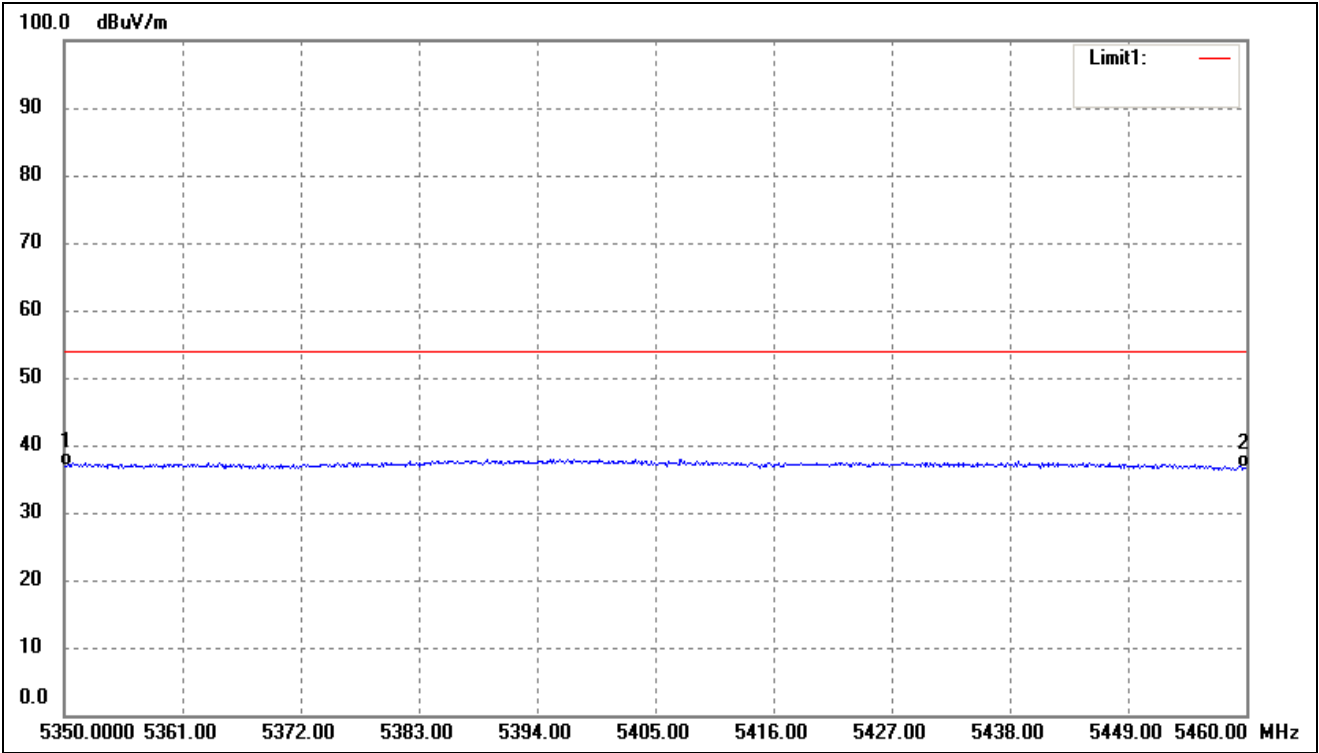
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	4500.000	40.69	-4.71	35.98	54.00	-18.02	-	-	AVG
2	5150.000	46.05	-4.32	41.73	54.00	-12.27	-	-	AVG

802.11a- Restricted Bandedge (worst case)			
Test Channel	band 5.35-5.46GHz	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	5350.000	51.05	-4.21	46.84	74.00	-27.16	-	-	peak
2	5460.000	51.89	-4.16	47.73	74.00	-26.27	-	-	peak

802.11a- Restricted Bandedge (worst case)			
Test Channel	band 5.35-5.46GHz	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	5350.000	41.21	-4.21	37.00	54.00	-17.00	-	-	AVG
2	5460.000	40.89	-4.16	36.73	54.00	-17.27	-	-	AVG

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

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

- For the frequency band 5.15-5.25GHz, 5.725-5.850GHz (802.11a)
- Antenna 1 (worst case)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5180MHz)							
10360	57.34	7.11	64.45	74.00	-9.55	H	PK
15540	39.28	8.22	47.50	54.00	-6.50	H	AV
10360	58.90	7.11	66.01	74.00	-7.99	V	PK
15540	39.62	8.22	47.84	54.00	-6.16	V	AV
Middle Channel (5200MHz)							
10400	57.51	7.22	64.73	74.00	-9.27	H	PK
15600	35.79	8.67	44.46	54.00	-9.54	H	AV
10400	55.61	7.22	62.83	74.00	-11.17	V	PK
15600	38.85	8.67	47.52	54.00	-6.48	V	AV
High Channel (5240MHz)							
10480	56.69	7.69	64.38	74.00	-9.62	H	PK
15720	37.80	8.93	46.73	54.00	-7.27	H	AV
10480	56.02	7.22	63.24	74.00	-10.76	V	PK
15720	39.75	8.67	48.42	54.00	-5.58	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5745MHz)							
11490	56.05	9.45	65.50	74.00	-8.50	H	PK
17235	33.31	10.36	43.67	54.00	-10.33	H	AV
11490	56.23	9.45	65.68	74.00	-8.32	V	PK
17235	37.48	10.36	47.84	54.00	-6.16	V	AV
Middle Channel (5785MHz)							
11570	57.77	9.62	67.39	74.00	-6.61	H	PK
17355	36.20	10.67	46.87	54.00	-7.13	H	AV
11570	57.85	9.62	67.47	74.00	-6.53	V	PK
17355	33.74	10.67	44.41	54.00	-9.59	V	AV
High Channel (5825MHz)							
11650	56.26	9.84	66.10	74.00	-7.90	H	PK
17475	34.15	10.95	45.10	54.00	-8.90	H	AV
11650	53.97	9.84	63.81	74.00	-10.19	V	PK
17475	35.01	10.95	45.96	54.00	-8.04	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-38.16	-27
Highest	Above 5350	-41.61	-27

Note: the data just list the worst cases

➤ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-38.54	-27
	5715 to 5725	-39.44	-17
Highest	5850 to 5860	-38.17	-17
	Above 5860	-44.39	-27

Note: the data just list the worst cases

- For the frequency band 5.15-5.25GHz5.725-5.850GHz (802.11n HT20)
- Antenna 1(worst case)
- 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	55.20	7.11	62.31	74.00	-11.69	H	PK
15540	36.42	8.22	44.64	54.00	-9.36	H	AV
10360	61.03	7.11	68.14	74.00	-5.86	V	PK
15540	37.07	8.22	45.29	54.00	-8.71	V	AV
Middle Channel (5200MHz)							
10400	57.91	7.22	65.13	74.00	-8.87	H	PK
15600	36.45	8.67	45.12	54.00	-8.88	H	AV
10400	58.06	7.22	65.28	74.00	-8.72	V	PK
15600	36.13	8.67	44.80	54.00	-9.20	V	AV
High Channel (5240MHz)							
10480	56.60	7.69	64.29	74.00	-9.71	H	PK
15720	35.91	8.93	44.84	54.00	-9.16	H	AV
10480	58.53	7.69	66.22	74.00	-7.78	V	PK
15720	38.62	8.93	47.55	54.00	-6.45	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5745MHz)							
11490	57.22	9.45	66.67	74.00	-7.33	H	PK
17235	35.40	10.36	45.76	54.00	-8.24	H	AV
11490	56.53	9.45	65.98	74.00	-8.02	V	PK
17235	35.41	10.36	45.77	54.00	-8.23	V	AV
Middle Channel (5785MHz)							
11570	58.03	9.62	67.65	74.00	-6.35	H	PK
17355	34.94	10.67	45.61	54.00	-8.39	H	AV
11570	57.25	9.62	66.87	74.00	-7.13	V	PK
17355	37.75	10.67	48.42	54.00	-5.58	V	AV
High Channel (5825MHz)							
11650	54.79	9.84	64.63	74.00	-9.37	H	PK
17475	34.99	10.95	45.94	54.00	-8.06	H	AV
11650	56.90	9.84	66.74	74.00	-7.26	V	PK
17475	36.51	10.95	47.46	54.00	-6.54	V	AV

➤ Out of Band edge 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-33.96	-27
Highest	Above 5350	-39.43	-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	-44.27	-27
	5715 to 5725	-35.43	-17
Highest	5850 to 5860	-38.95	-17
	Above 5860	-40.17	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.725-5.850GHz (802.11n HT40)
- Antenna 1 (worst case)
- 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	57.04	7.25	64.29	74.00	-9.71	H	PK
15570	36.16	8.33	44.49	54.00	-9.51	H	AV
10380	59.55	7.25	66.80	74.00	-7.20	V	PK
15570	38.97	8.33	47.30	54.00	-6.70	V	AV
High Channel (5230MHz)							
10460	58.40	7.54	65.94	74.00	-8.06	H	PK
15690	37.04	8.86	45.90	54.00	-8.10	H	AV
10460	60.78	7.54	68.32	74.00	-5.68	V	PK
15690	38.57	8.86	47.43	54.00	-6.57	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5755MHz)							
11510	56.27	9.65	65.92	74.00	-8.08	H	PK
17265	36.88	10.87	47.75	54.00	-6.25	H	AV
11510	56.73	9.65	66.38	74.00	-7.62	V	PK
17265	36.17	10.87	47.04	54.00	-6.96	V	AV
High Channel (5795MHz)							
11590	55.13	9.81	64.94	74.00	-9.06	H	PK
17385	34.70	10.89	45.59	54.00	-8.41	H	AV
11590	56.77	9.81	66.58	74.00	-7.42	V	PK
17385	36.62	10.89	47.51	54.00	-6.49	V	AV

- Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-33.65	-27
Highest	Above 5350	-40.95	-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	-42.01	-27
	5715 to 5725	-41.17	-17
Highest	5850 to 5860	-42.48	-17
	Above 5860	-43.46	-27

Note: the data just list the worst cases

- For the frequency band 5.15-5.25GHz, 5.725-5.850GHz (802.11ac VH80)
- Antenna 1(worst case)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5210MHz							
10420	58.81	7.33	66.14	74.00	-7.86	H	PK
15630	37.32	8.75	46.07	54.00	-7.93	H	AV
10420	57.48	7.33	64.81	74.00	-9.19	V	PK
15630	37.05	8.75	45.80	54.00	-8.20	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5775MHz							
11550	55.33	9.54	64.87	74.00	-9.13	H	PK
17325	37.45	10.59	48.04	54.00	-5.96	H	AV
11550	58.48	9.54	68.02	74.00	-5.98	V	PK
17325	33.18	10.59	43.77	54.00	-10.23	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-34.83	-27
Highest	Above 5350	-31.13	-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	-45.13	-27
	5715 to 5725	-28.73	-17
Highest	5850 to 5860	-28.66	-17
	Above 5860	-37.93	-27
Note: the data just list the worst cases			

Note: 1. This EUT was tested in the low, high channel and the worst case position data was reported.

2. Radiated measurements are performed; field strength is then converted to EIRP as follows:

$$EIRP[dBm] = E[dB\mu V/m] - 95.2$$

3. 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

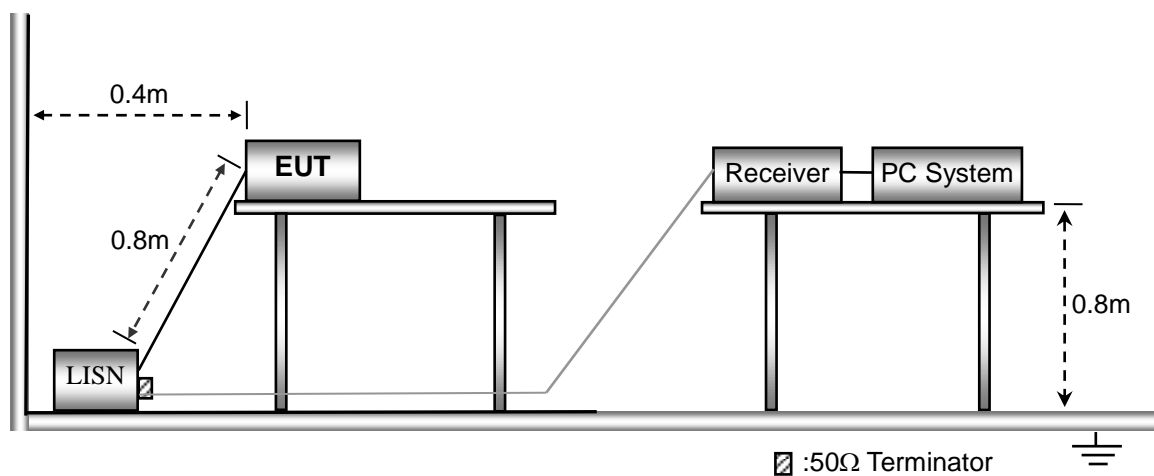
10.1 Test Procedure

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 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

10.2 Basic Test Setup Block Diagram



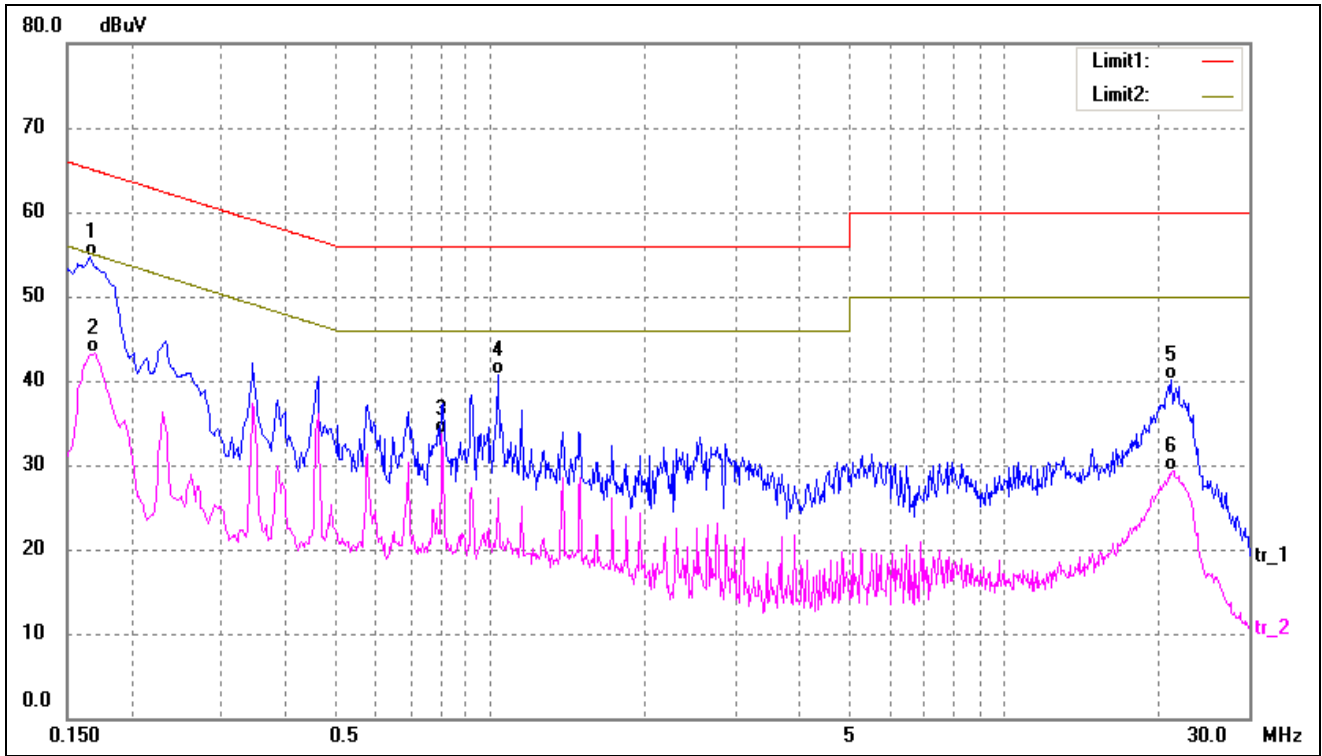
10.3 Test Receiver Setup

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

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

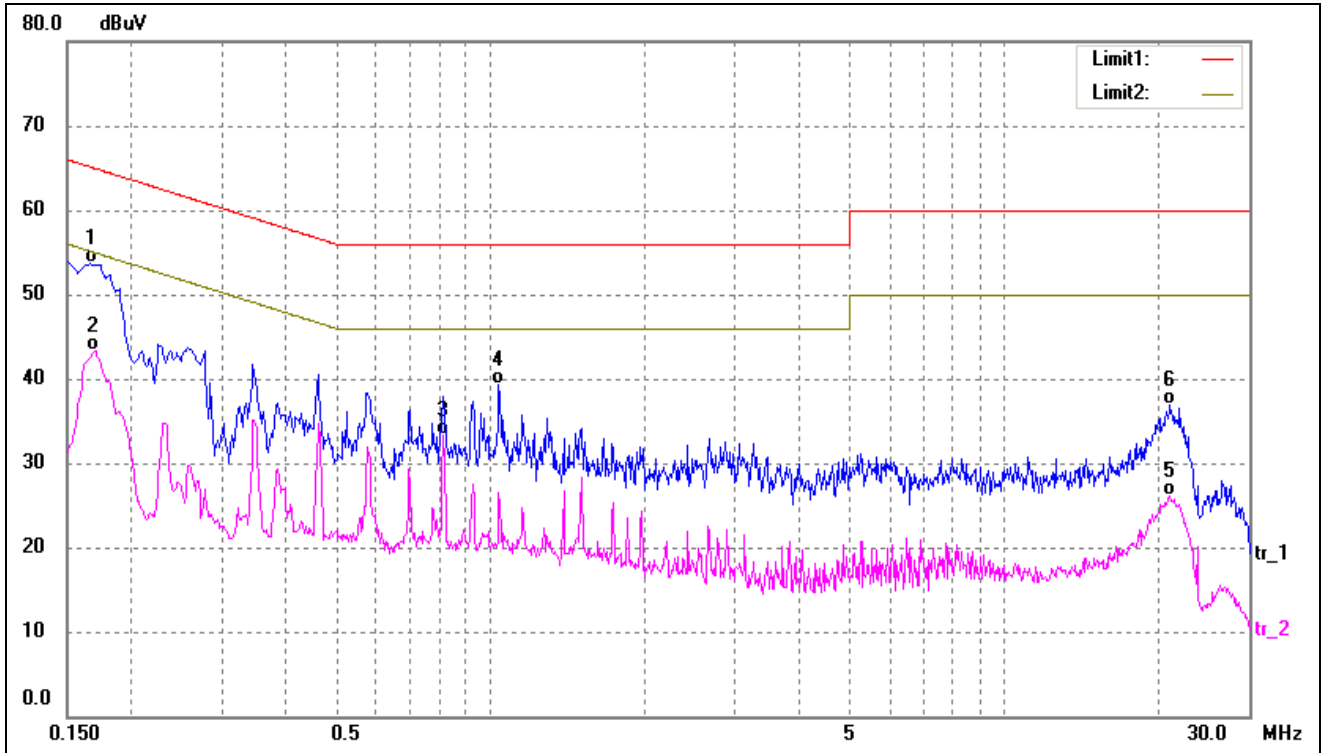
10.4 Summary of Test Results/Plots

Test Mode	Communication	AC120V 60Hz	Polarity:	Neutral
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1660	44.35	10.26	54.61	65.16	-10.55	QP
2	0.1700	32.98	10.25	43.23	54.96	-11.73	AVG
3	0.8060	23.44	10.18	33.62	46.00	-12.38	AVG
4	1.0340	30.55	10.20	40.75	56.00	-15.25	QP
5	21.1780	29.44	10.60	40.04	60.00	-19.96	QP
6	21.2980	18.69	10.59	29.28	50.00	-20.72	AVG

Test Mode	Communication	AC120V 60Hz	Polarity:	Line
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1660	43.38	10.26	53.64	65.16	-11.52	QP
2	0.1700	33.07	10.25	43.32	54.96	-11.64	AVG
3	0.8100	23.21	10.19	33.40	46.00	-12.60	AVG
4	1.0420	29.12	10.20	39.32	56.00	-16.68	QP
5	20.9540	15.46	10.59	26.05	50.00	-23.95	AVG
6	21.0620	26.25	10.59	36.84	60.00	-23.16	QP

APPENDIX SUMMARY

Project No.	WTH20X10077099W	Test Engineer	Shaw
Start date	2020/11/19	Finish date	2020/11/19
Temperature	25°C	Humidity	57%
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	ANT 1 dBm/MHz	ANT 2 dBm/MHz	Total dBm/MHz	Limit (dBm/MHz)
802.11a	5180	4.62	4.20	/	11
	5200	5.11	4.65	/	11
	5240	5.34	4.43	/	11
802.11n-HT20	5180	3.58	3.22	6.41	11
	5200	3.93	3.58	6.77	11
	5240	4.37	3.52	6.98	11
802.11n-HT40	5190	0.31	-0.34	3.01	11
	5230	0.57	-0.31	3.16	11
802.11ac-HT80	5210	-2.73	-3.91	-0.27	11

Power Spectral Density							
U-NII-3: 5725-5850MHz							
Operating mode	Test Channel	ANT 1 dBm/300kHz	ANT 2 dBm/300kHz	Factor	ANT 1 dBm/500kHz*	ANT 2 dBm/500kHz*	Limit dBm/500kHz
802.11a	5745	2.44	0.17	2.22	4.66	2.39	30
	5785	3.22	-0.40	2.22	5.44	1.82	30
	5825	1.76	0.05	2.22	3.98	2.27	30

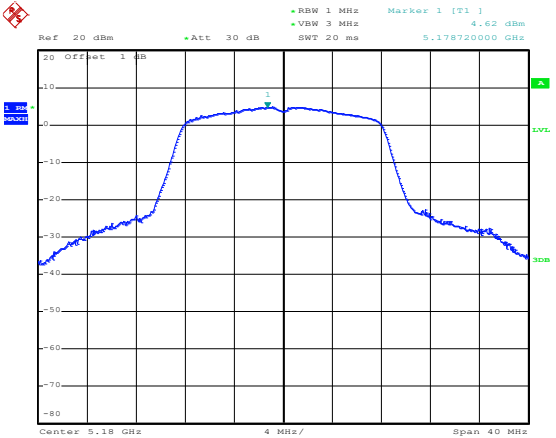
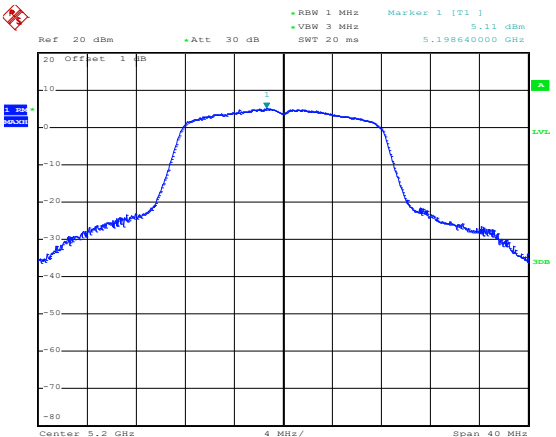
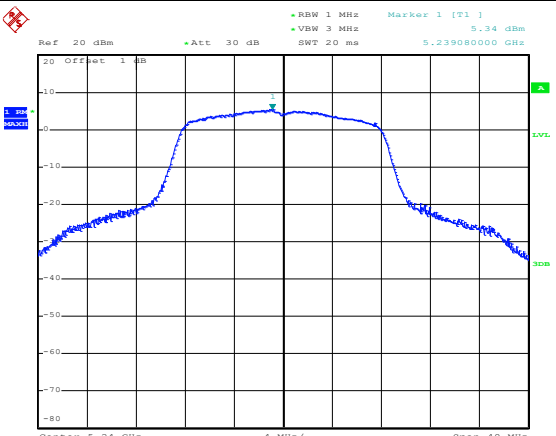
*Note: Maximum PSD=PSD(dBm/300kHz)+10log(500kHz/300kHz)=2.22

Power Spectral Density							
U-NII-3: 5725-5850MHz							
Operating mode	Test Channel	ANT 1 dBm/300kHz	ANT 2 dBm/300kHz	Factor	Total dBm/500kHz*	Limit dBm/500kHz	
802.11n-HT20	5745	0.51	-0.11	2.22	5.44	30	
	5785	0.63	-0.09	2.22	5.52	30	
	5825	0.92	-0.19	2.22	5.63	30	
802.11n HT40	5755	-3.36	-4.38	2.22	1.39	30	
	5795	-2.80	-4.12	2.22	1.82	30	
802.11ac VH80	5775	-8.31	-8.16	2.22	-3.00	30	

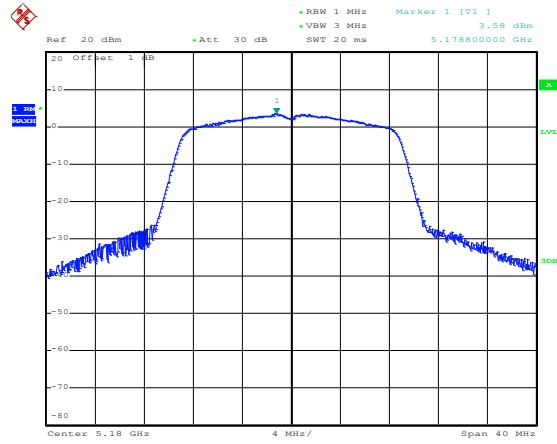
*Note: Maximum PSD=PSD(dBm/300kHz)+10log(500kHz/300kHz)=2.22

ANT 1

5150-5250MHz

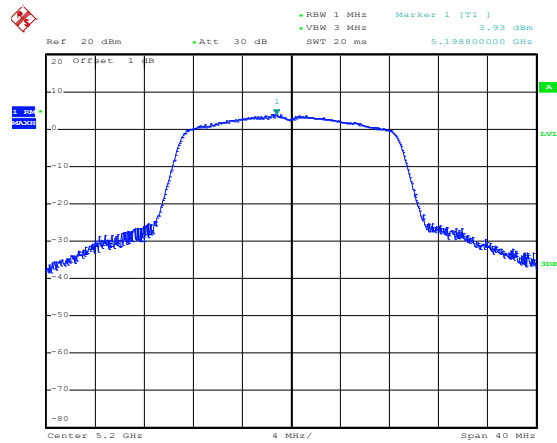
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<p>802.11a-Middle</p>	 <p>Date: 19.NOV.2020 17:46:36</p>
<p>802.11a-High</p>	 <p>Date: 19.NOV.2020 17:46:59</p>

802.11n-HT20-Low



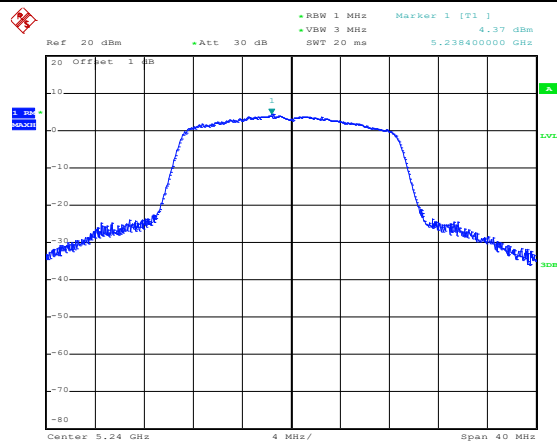
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802.11n-HT20-Middle



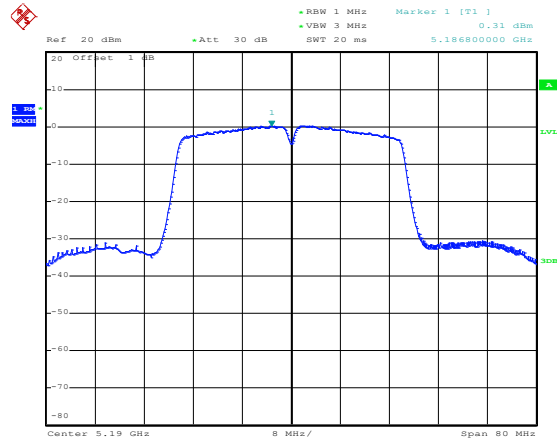
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802.11n-HT20-High



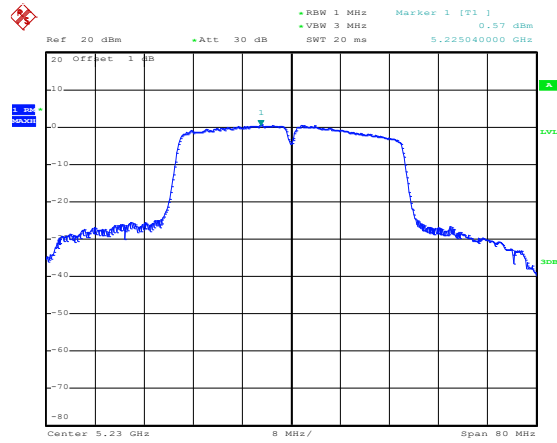
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802.11n-HT40-Low



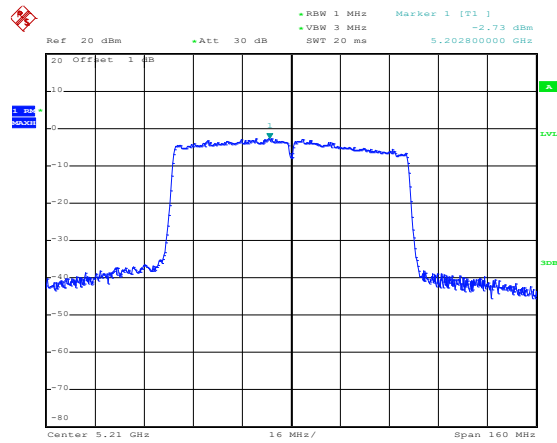
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802.11n-HT40-High



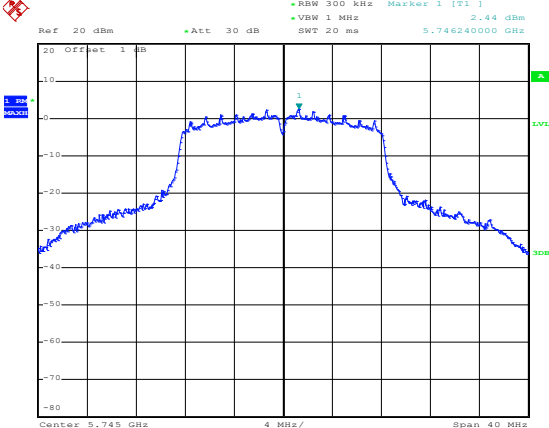
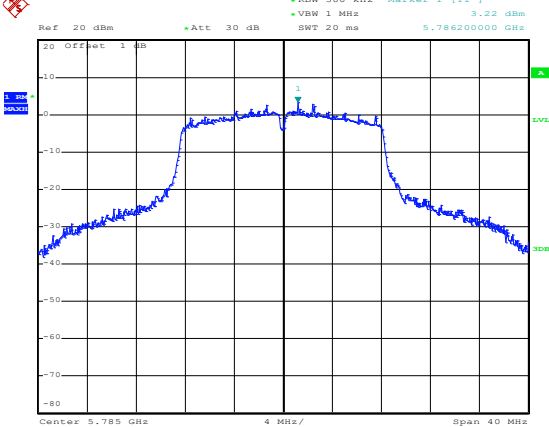
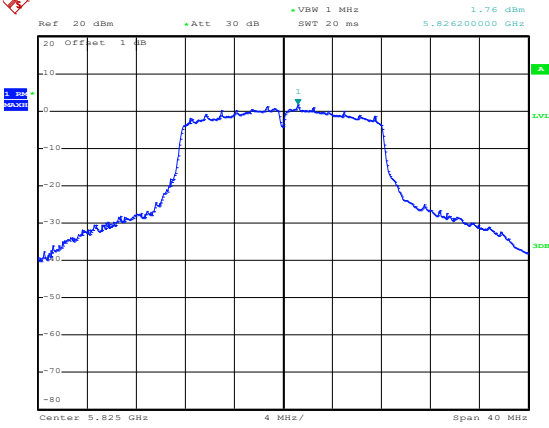
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802.11ac-HT80

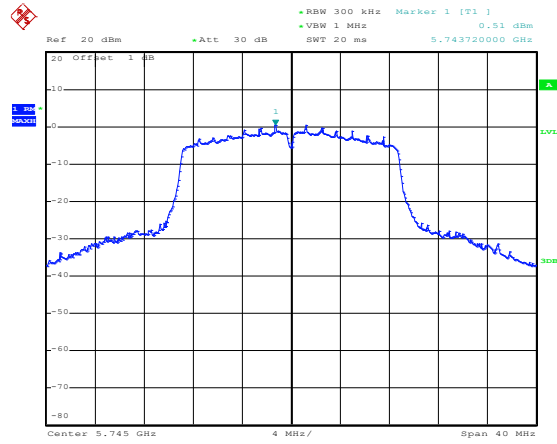


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5725-5850MHz

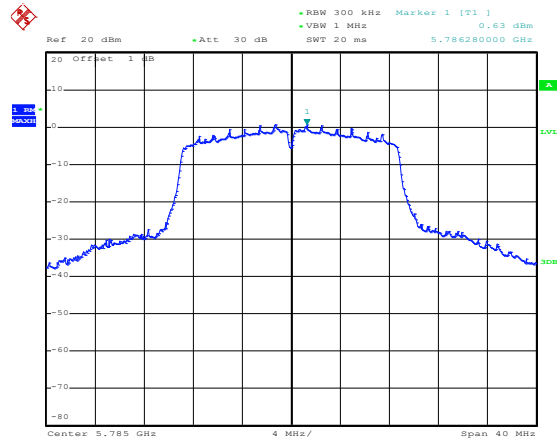
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<p>802.11a-High</p>	 <p>Date: 19.NOV.2020 17:56:55</p>

802.11n-HT20-Low



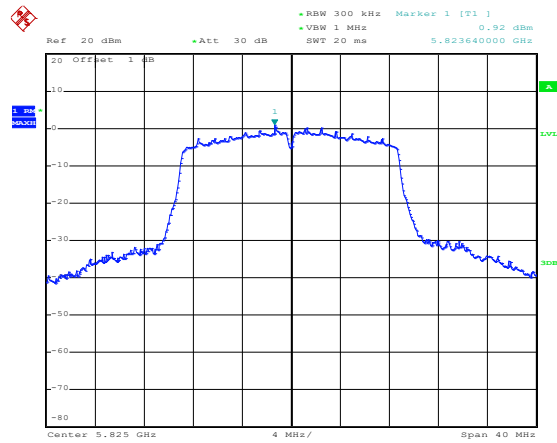
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802.11n-HT20-Middle



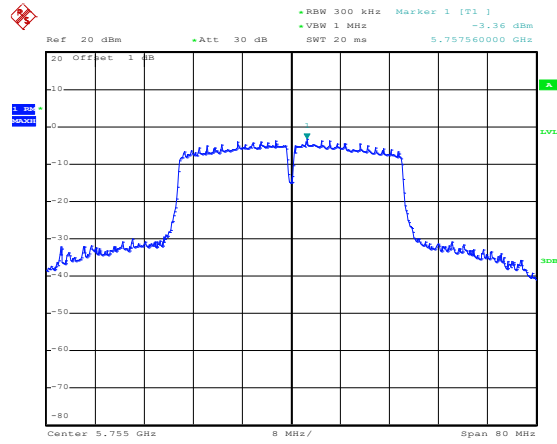
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802.11n-HT20-High



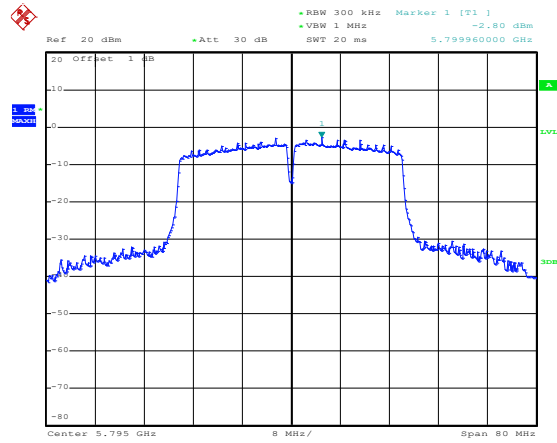
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802.11n-HT40-Low



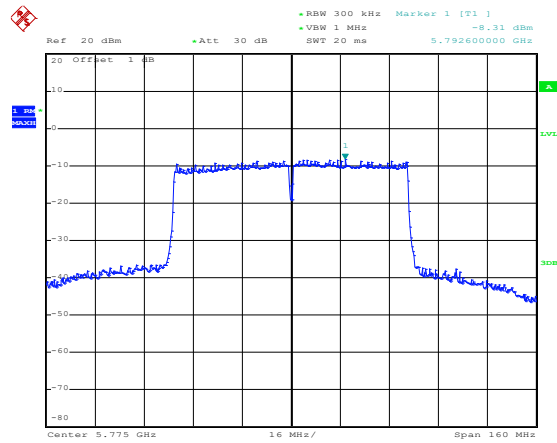
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802.11n-HT40-High



Date: 19.NOV.2020 18:00:38

802.11ac-HT80

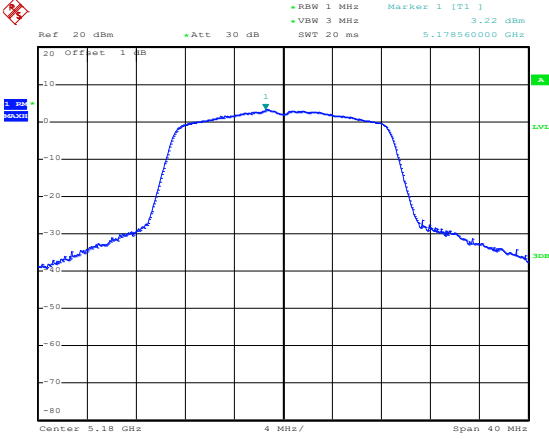
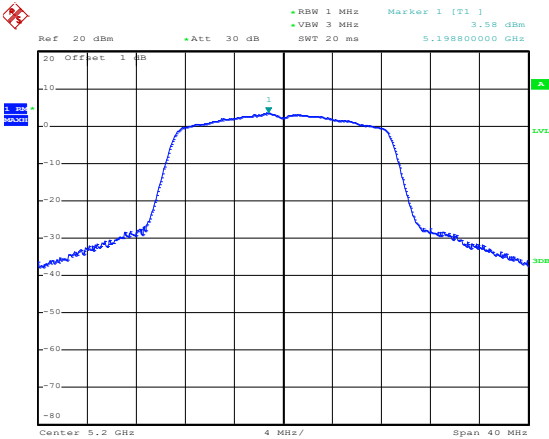
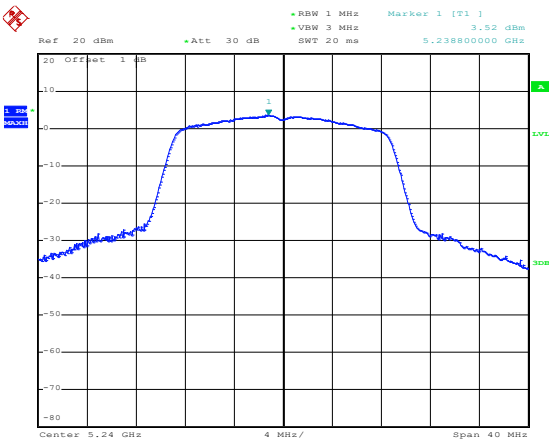


Date: 19.NOV.2020 18:01:50

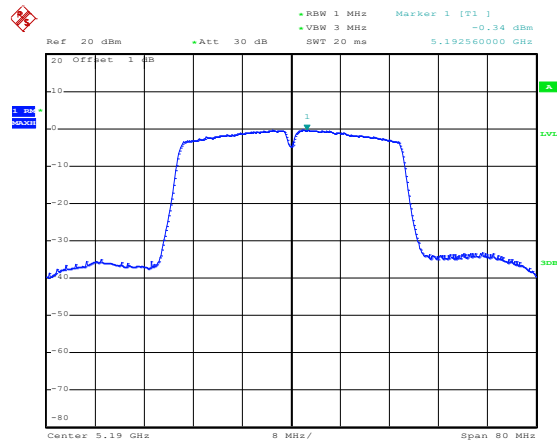
ANT 2

5150-5250MHz

<p>802.11a-Low</p>	<p>Date: 19.NOV.2020 14:25:33</p>
<p>802.11a-Middle</p>	<p>Date: 19.NOV.2020 14:26:27</p>
<p>802.11a-High</p>	<p>Date: 19.NOV.2020 14:27:01</p>

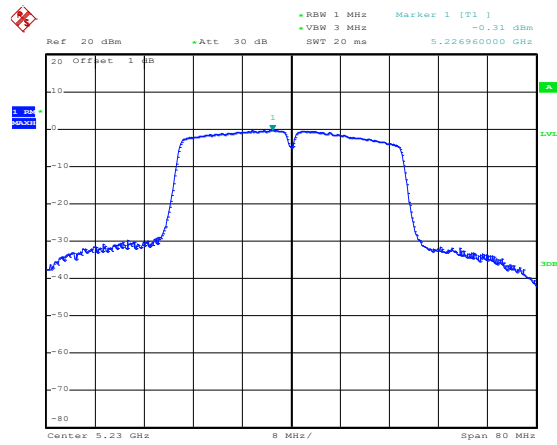
<p>802.11n-HT20-Low</p>	 <p>Ref 20 dBm +Att 30 dB RBW 1 MHz Marker 1 [T1] 3.22 dBm VSW 3 MHz SWT 20 ms 5.178560000 GHz</p> <p>20 Offset 1 dB -10 0 -10 -20 -30 -40 -50 -60 -70 -80</p> <p>Center 5.18 GHz 4 MHz/ Span 40 MHz</p> <p>Date: 19.NOV.2020 14:27:59</p>
<p>802.11n-HT20-Middle</p>	 <p>Ref 20 dBm +Att 30 dB RBW 1 MHz Marker 1 [T1] 3.58 dBm VSW 3 MHz SWT 20 ms 5.198800000 GHz</p> <p>20 Offset 1 dB -10 0 -10 -20 -30 -40 -50 -60 -70 -80</p> <p>Center 5.2 GHz 4 MHz/ Span 40 MHz</p> <p>Date: 19.NOV.2020 14:28:36</p>
<p>802.11n-HT20-High</p>	 <p>Ref 20 dBm +Att 30 dB RBW 1 MHz Marker 1 [T1] 3.52 dBm VSW 3 MHz SWT 20 ms 5.238800000 GHz</p> <p>20 Offset 1 dB -10 0 -10 -20 -30 -40 -50 -60 -70 -80</p> <p>Center 5.24 GHz 4 MHz/ Span 40 MHz</p> <p>Date: 19.NOV.2020 14:29:51</p>

802.11n-HT40-Low



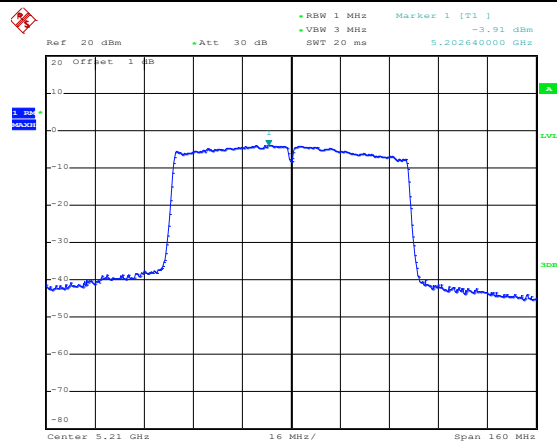
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802.11n-HT40-High



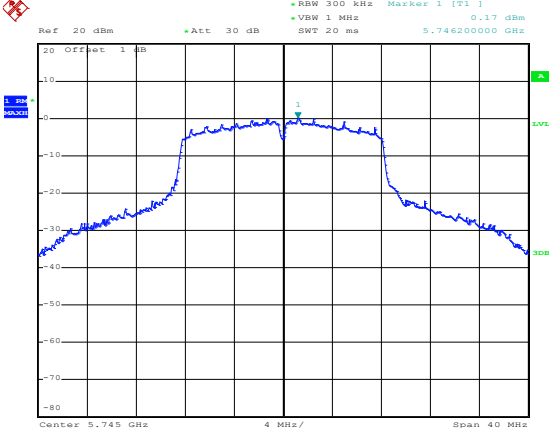
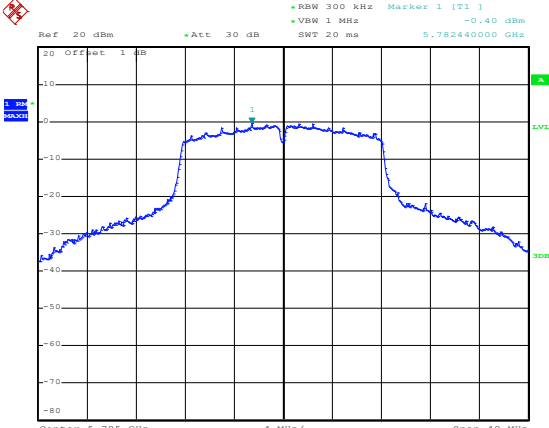
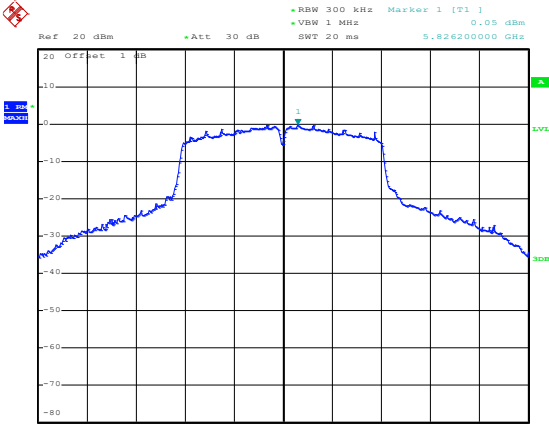
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802.11ac-HT80

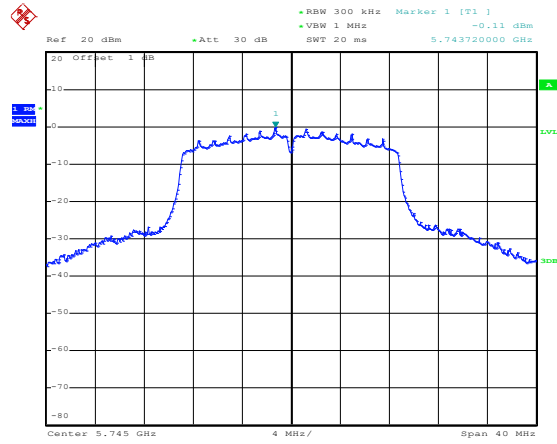


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5725-5850MHz

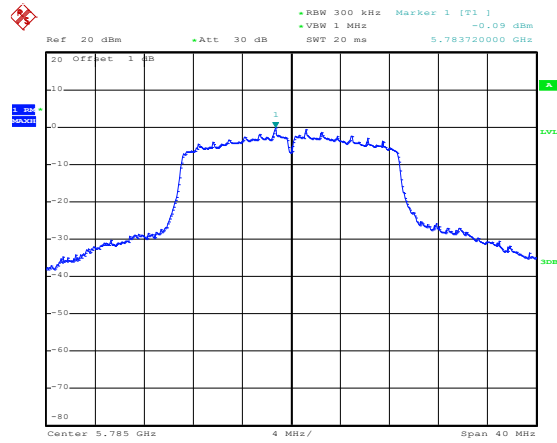
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<p>802.11a-Middle</p>	 <p>Date: 19.NOV.2020 14:39:58</p>
<p>802.11a-High</p>	 <p>Date: 19.NOV.2020 14:40:38</p>

802.11n-HT20-Low



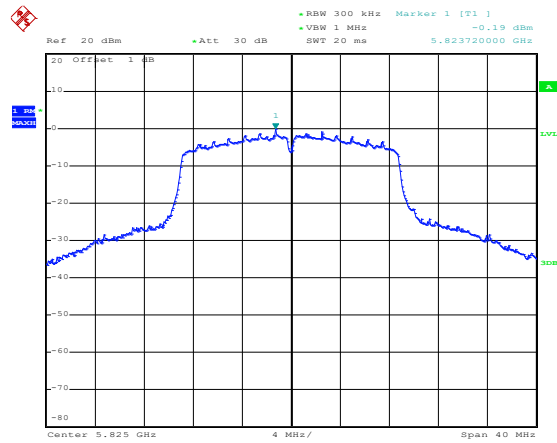
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802.11n-HT20-Middle



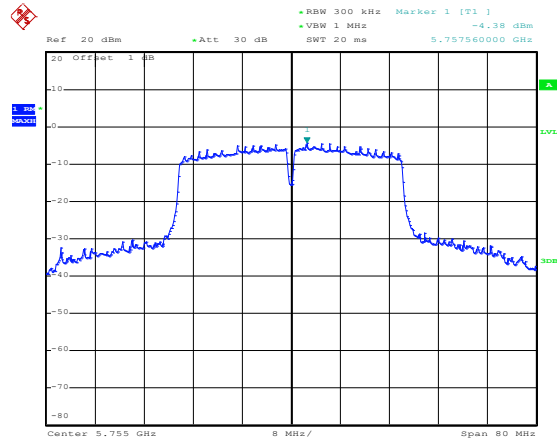
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802.11n-HT20-High



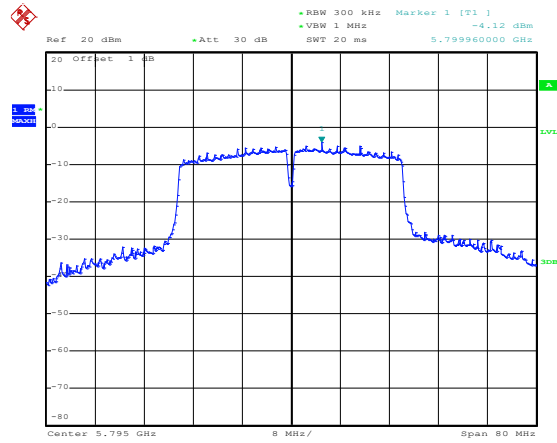
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802.11n-HT40-Low



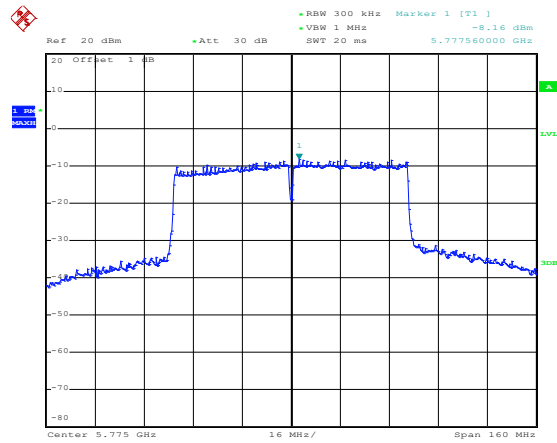
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802.11n-HT40-High



Date: 19.NOV.2020 14:45:44

802.11ac-HT80



Date: 19.NOV.2020 14:46:43

APPENDIX B**Emission Bandwidth and Occupied Bandwidth**

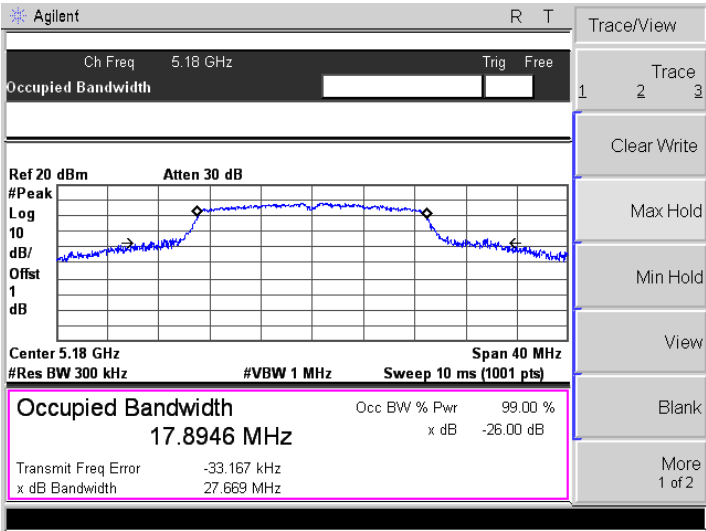
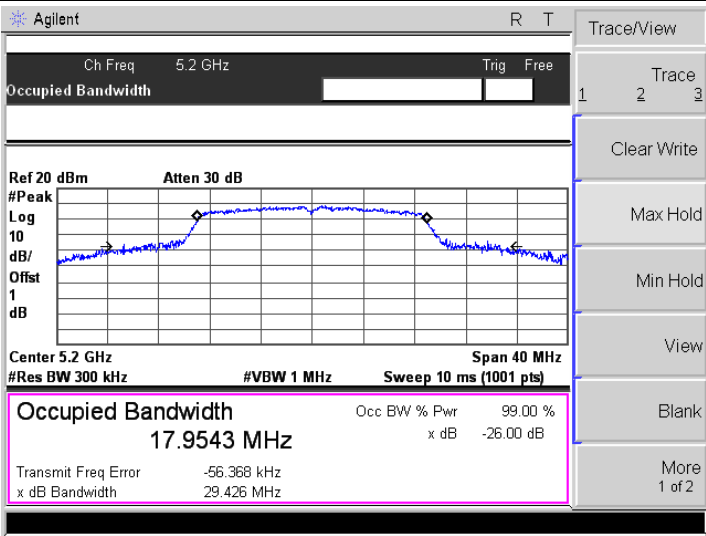
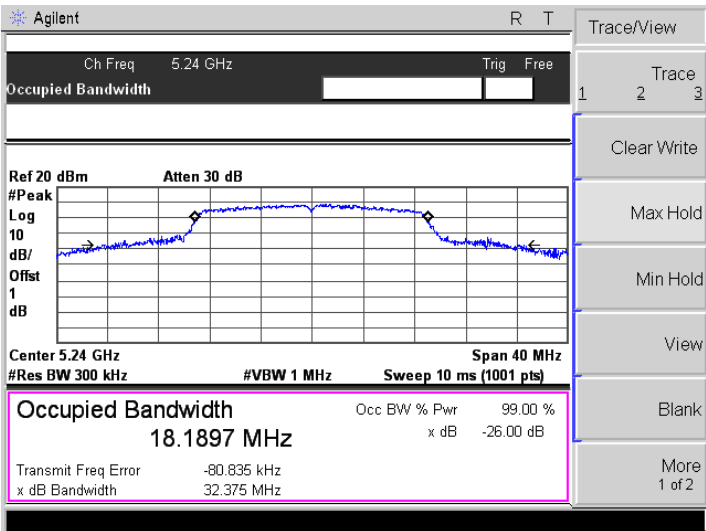
U-NII-1:5150-5250MHz						
Test Mode	Test Channel MHz	ANT 1		ANT 2		Result
		26 dB Bandwidth MHz	99% Bandwidth MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	
802.11a	5180	27.647	17.0338	23.702	16.8097	Pass
	5200	29.313	17.1117	25.812	16.8178	Pass
	5240	30.897	17.5106	25.892	16.8983	Pass
802.11n-HT20	5180	27.669	17.8946	23.166	17.7752	Pass
	5200	29.426	17.9543	24.127	17.7278	Pass
	5240	32.375	18.1897	24.688	17.7953	Pass
802.11n-HT40	5190	62.903	36.1326	40.012	36.0787	Pass
	5230	58.529	36.2461	40.807	36.1400	Pass
802.11ac-HT80	5210	89.994	75.7643	81.040	75.6892	Pass

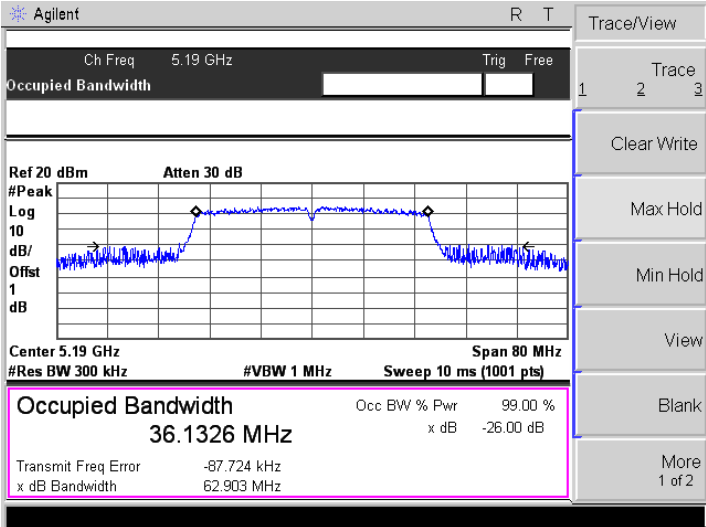
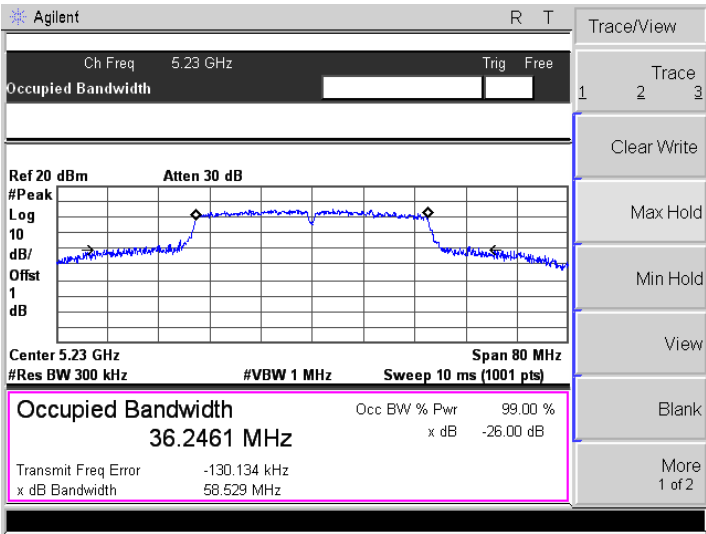
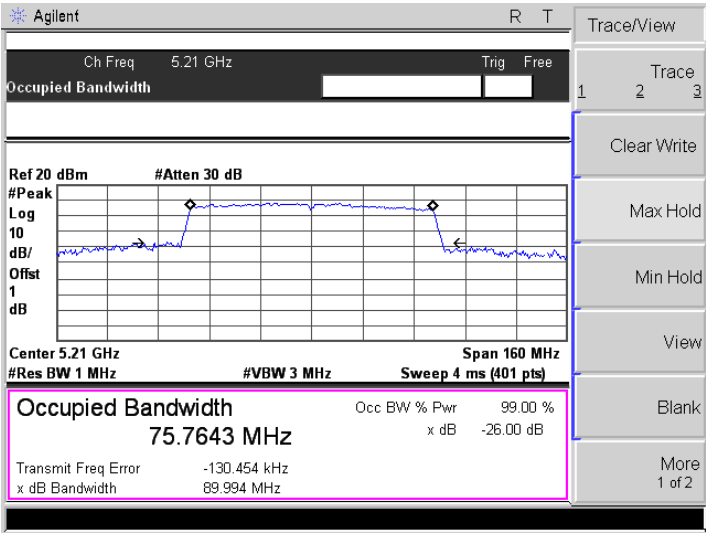
U-NII-3: 5725-5850MHz						
Test Mode	Test Channel MHz	ANT 1		ANT 2		Limit kHz
		6 dB Bandwidth MHz	99% Bandwidth MHz	6 dB Bandwidth MHz	99% Bandwidth MHz	
802.11a	5745	15.064	18.2363	13.895	17.3538	≥500
	5785	15.138	18.1935	14.435	17.4471	≥500
	5825	14.703	16.9758	15.068	17.2495	≥500
802.11n-HT20	5745	15.033	18.2720	14.681	18.0320	≥500
	5785	15.056	18.2661	16.285	18.0247	≥500
	5825	14.692	17.8428	15.114	17.9687	≥500
802.11n-HT40	5755	35.028	37.7830	33.915	37.0438	≥500
	5795	35.263	37.4315	33.869	37.0997	≥500
802.11ac-HT80	5775	76.345	77.1069	75.927	76.3389	≥500

ANT 1

5150-5250MHz

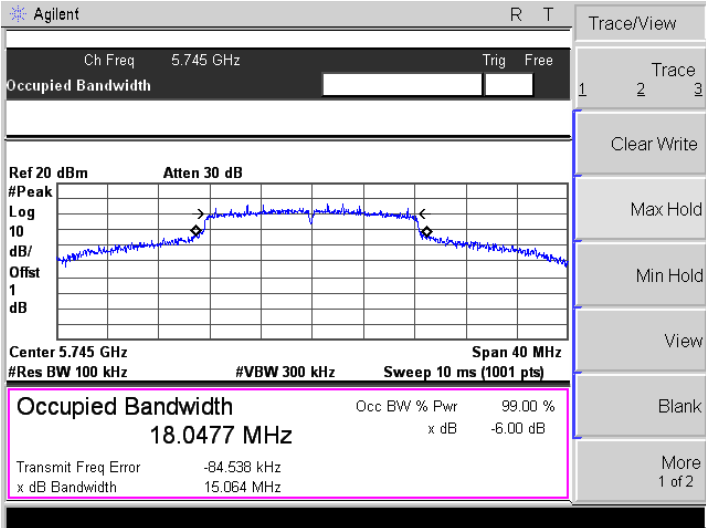
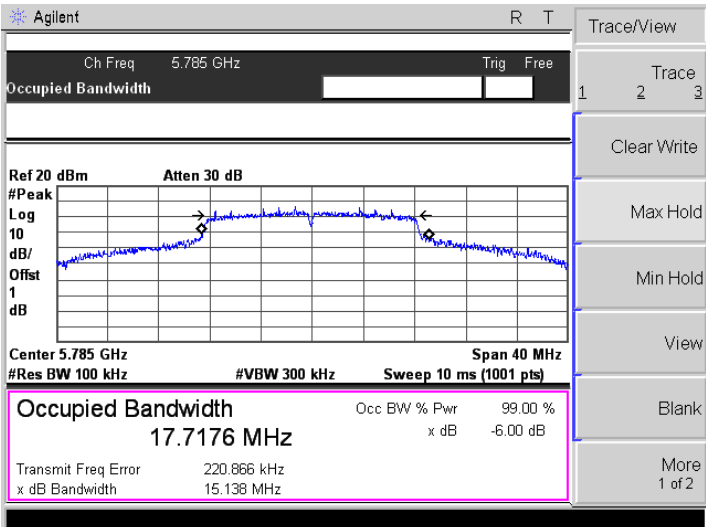
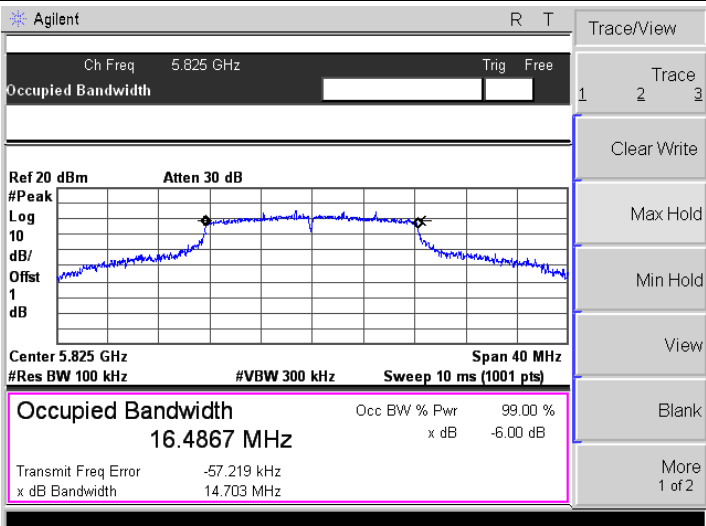
<p>802.11a-Low</p>	<p>Agilent R T</p> <p>Ch Freq 5.18 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/ Offst 1 dB</p> <p>Center 5.18 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td>17.0338 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td></td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td></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 %	17.0338 MHz	x dB	-26.00 dB	Transmit Freq Error			x dB Bandwidth		
Occupied Bandwidth	Occ BW % Pwr	99.00 %											
17.0338 MHz	x dB	-26.00 dB											
Transmit Freq Error													
x dB Bandwidth													
<p>802.11a-Middle</p>	<p>Agilent R T</p> <p>Ch Freq 5.2 GHz Trig Free</p> <p>Occupied Bandwidth</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 #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>17.1117 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td></td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td></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 %	17.1117 MHz	x dB	-26.00 dB	Transmit Freq Error			x dB Bandwidth		
Occupied Bandwidth	Occ BW % Pwr	99.00 %											
17.1117 MHz	x dB	-26.00 dB											
Transmit Freq Error													
x dB Bandwidth													
<p>802.11a-High</p>	<p>Agilent R T</p> <p>Ch Freq 5.24 GHz Trig Free</p> <p>Occupied Bandwidth</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 #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>17.5106 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td></td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td></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 %	17.5106 MHz	x dB	-26.00 dB	Transmit Freq Error			x dB Bandwidth		
Occupied Bandwidth	Occ BW % Pwr	99.00 %											
17.5106 MHz	x dB	-26.00 dB											
Transmit Freq Error													
x dB Bandwidth													

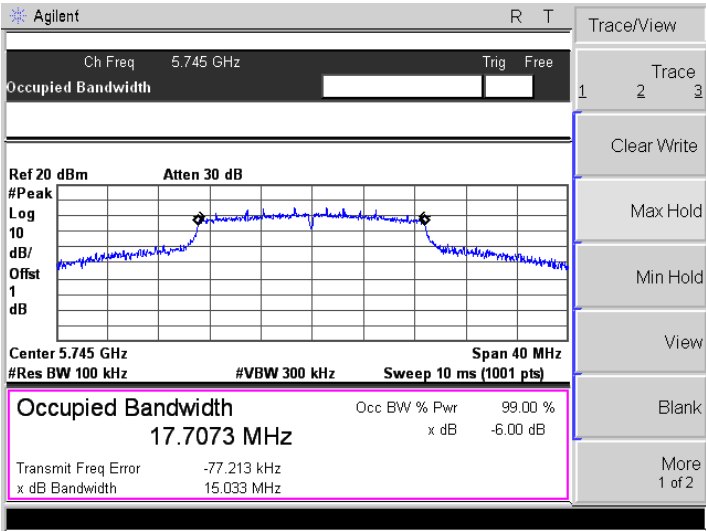
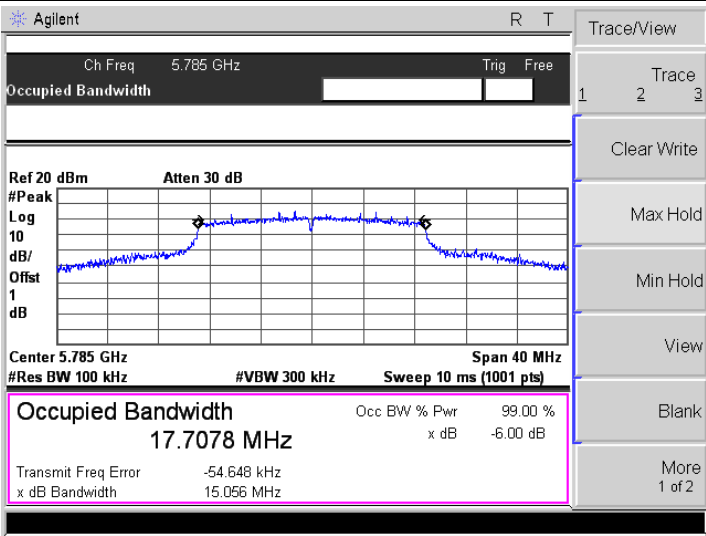
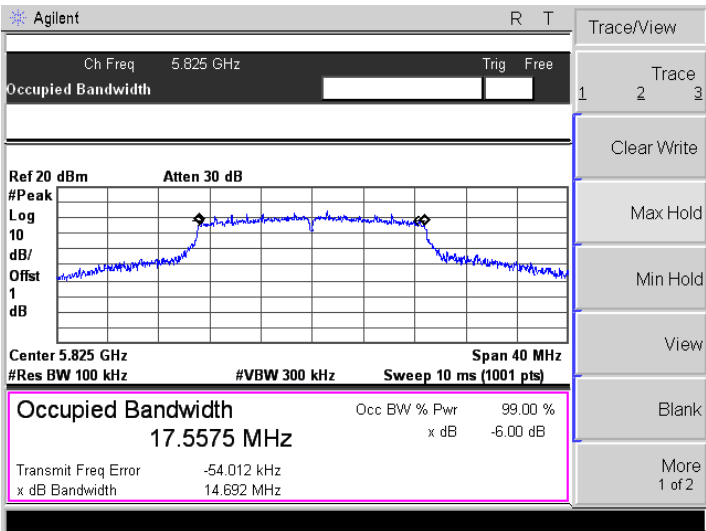
<p>802.11n-HT20-Low</p>	 <p>Agilent R T</p> <p>Ch Freq 5.18 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log</p> <p>10 dB/</p> <p>Offst</p> <p>1 dB</p> <p>Center 5.18 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.8946 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error -33.167 kHz</p> <p>x dB Bandwidth 27.669 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>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 5.2 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.9543 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error -56.368 kHz</p> <p>x dB Bandwidth 29.426 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 R T</p> <p>Ch Freq 5.24 GHz Trig Free</p> <p>Occupied Bandwidth</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 5.24 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 18.1897 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error -80.835 kHz</p> <p>x dB Bandwidth 32.375 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>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>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> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td>36.1326 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td></td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td></td> <td></td> </tr> <tr> <td>-87.724 kHz</td> <td></td> <td></td> </tr> <tr> <td>62.903 MHz</td> <td></td> <td></td> </tr> </table> <p>Trace/View</p> <p>1 Trace 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 %	36.1326 MHz	x dB	-26.00 dB	Transmit Freq Error			x dB Bandwidth			-87.724 kHz			62.903 MHz		
Occupied Bandwidth	Occ BW % Pwr	99.00 %																	
36.1326 MHz	x dB	-26.00 dB																	
Transmit Freq Error																			
x dB Bandwidth																			
-87.724 kHz																			
62.903 MHz																			
<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>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>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> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td>36.2461 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td></td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td></td> <td></td> </tr> <tr> <td>-130.134 kHz</td> <td></td> <td></td> </tr> <tr> <td>58.529 MHz</td> <td></td> <td></td> </tr> </table> <p>Trace/View</p> <p>1 Trace 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 %	36.2461 MHz	x dB	-26.00 dB	Transmit Freq Error			x dB Bandwidth			-130.134 kHz			58.529 MHz		
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Transmit Freq Error																			
x dB Bandwidth																			
-130.134 kHz																			
58.529 MHz																			
<p>802.11ac-HT80</p>	 <p>Agilent R T</p> <p>Ch Freq 5.21 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm #Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.21 GHz Span 160 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts)</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td>75.7643 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td></td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td></td> <td></td> </tr> <tr> <td>-130.454 kHz</td> <td></td> <td></td> </tr> <tr> <td>89.994 MHz</td> <td></td> <td></td> </tr> </table> <p>Trace/View</p> <p>1 Trace 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 %	75.7643 MHz	x dB	-26.00 dB	Transmit Freq Error			x dB Bandwidth			-130.454 kHz			89.994 MHz		
Occupied Bandwidth	Occ BW % Pwr	99.00 %																	
75.7643 MHz	x dB	-26.00 dB																	
Transmit Freq Error																			
x dB Bandwidth																			
-130.454 kHz																			
89.994 MHz																			

5725-5850MHz

6 dB Bandwidth

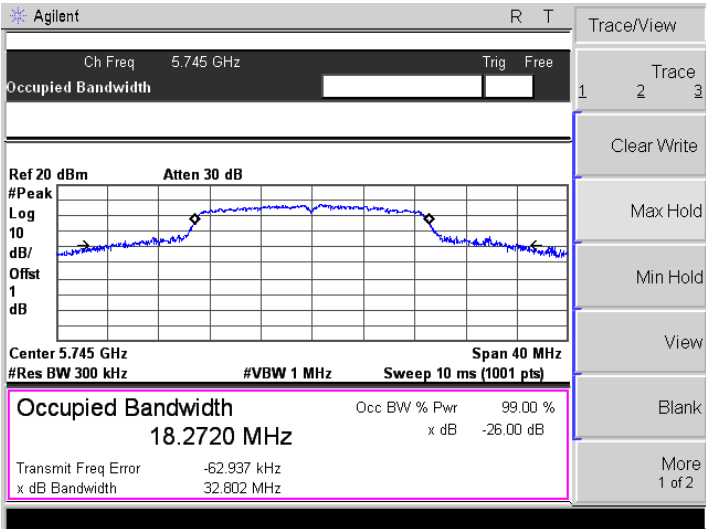
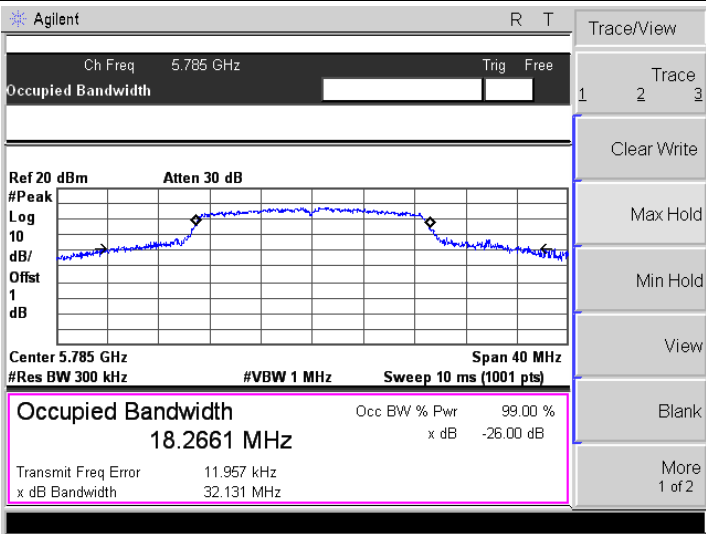
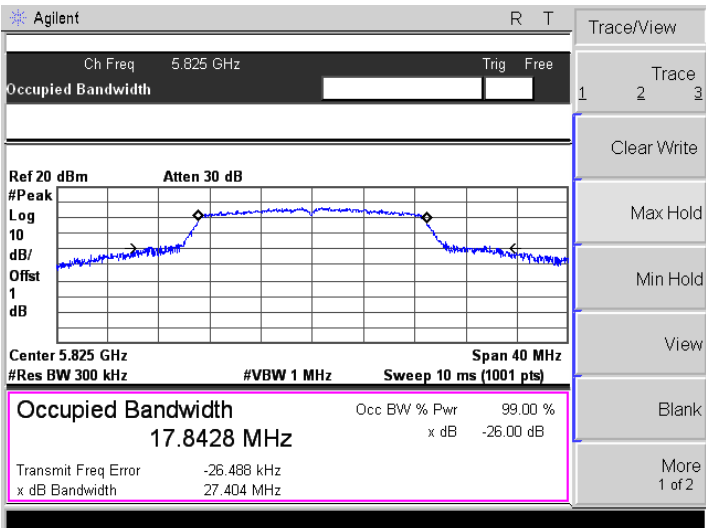
<p>802.11a-Low</p>	 <p>Agilent R T</p> <p>Ch Freq 5.745 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10</p> <p>dB/</p> <p>Offset 1</p> <p>dB</p> <p>Center 5.745 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth Occ BW % Pwr 99.00 %</p> <p>18.0477 MHz x dB -6.00 dB</p> <p>Transmit Freq Error -94.538 kHz</p> <p>x dB Bandwidth 15.064 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 5.785 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10</p> <p>dB/</p> <p>Offset 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 Occ BW % Pwr 99.00 %</p> <p>17.7176 MHz x dB -6.00 dB</p> <p>Transmit Freq Error 220.866 kHz</p> <p>x dB Bandwidth 15.138 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 5.825 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10</p> <p>dB/</p> <p>Offset 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 Occ BW % Pwr 99.00 %</p> <p>16.4867 MHz x dB -6.00 dB</p> <p>Transmit Freq Error -57.219 kHz</p> <p>x dB Bandwidth 14.703 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>

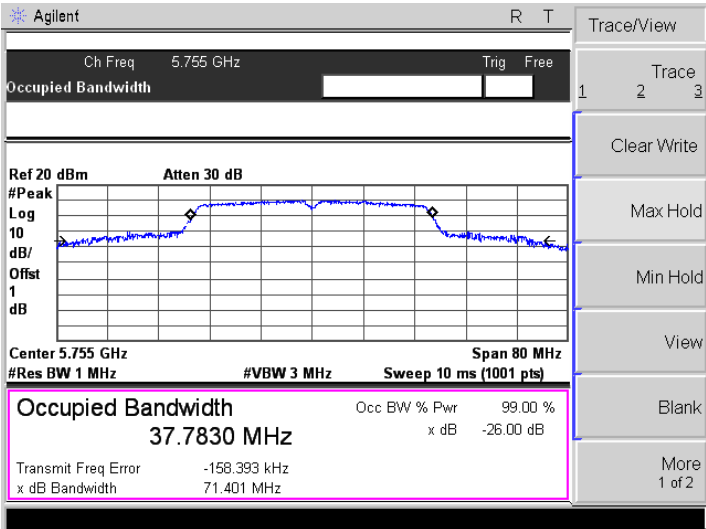
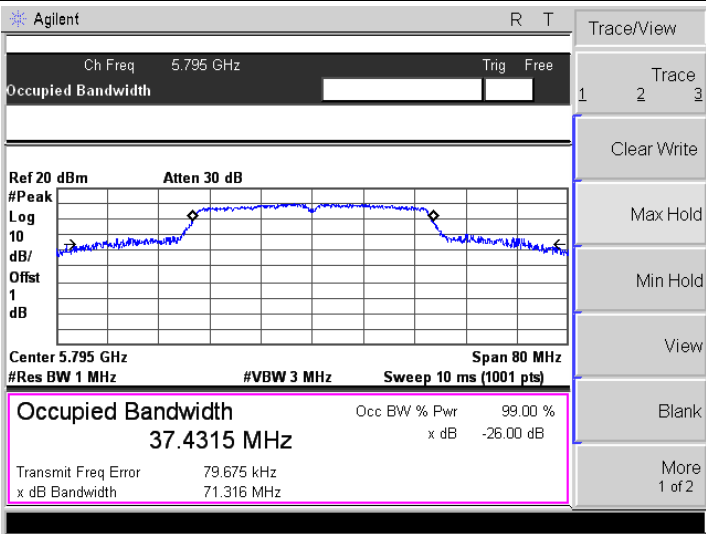
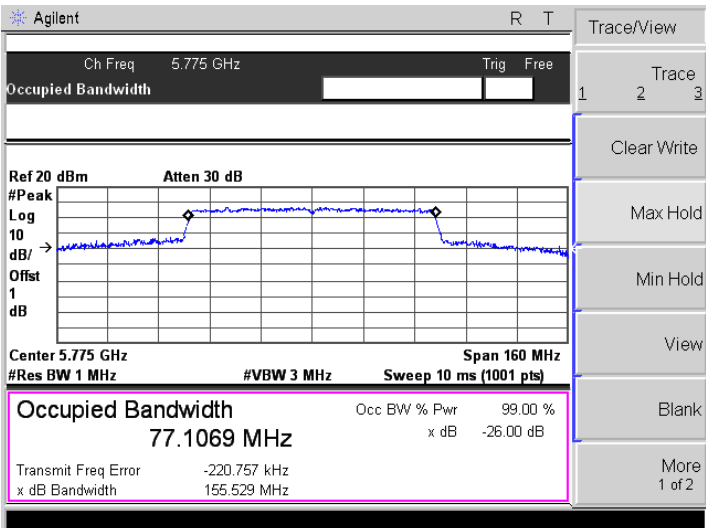
<p>802.11n-HT20-Low</p>	 <p>Agilent R T</p> <p>Ch Freq 5.745 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.745 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.7073 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -6.00 dB</p> <p>Transmit Freq Error -77.213 kHz</p> <p>x dB Bandwidth 15.033 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 5.785 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.785 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.7078 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -6.00 dB</p> <p>Transmit Freq Error -54.648 kHz</p> <p>x dB Bandwidth 15.056 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 R T</p> <p>Ch Freq 5.825 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.825 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.5575 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -6.00 dB</p> <p>Transmit Freq Error -54.012 kHz</p> <p>x dB Bandwidth 14.692 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 5.755 GHz Trig Free</p> <p>Occupied Bandwidth</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> <p>Occupied Bandwidth 36.3681 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -6.00 dB</p> <p>Transmit Freq Error -111.273 kHz</p> <p>x dB Bandwidth 35.028 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 5.795 GHz Trig Free</p> <p>Occupied Bandwidth</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> <p>Occupied Bandwidth 36.2669 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -6.00 dB</p> <p>Transmit Freq Error -37.548 kHz</p> <p>x dB Bandwidth 35.263 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>802.11ac-HT80</p>	<p>Agilent R T</p> <p>Ch Freq 5.21 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm #Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.21 GHz Span 160 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 4 ms (401 pts)</p> <p>Occupied Bandwidth 75.6892 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error -46.070 kHz</p> <p>x dB Bandwidth 81.040 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>

99%Bandwidth

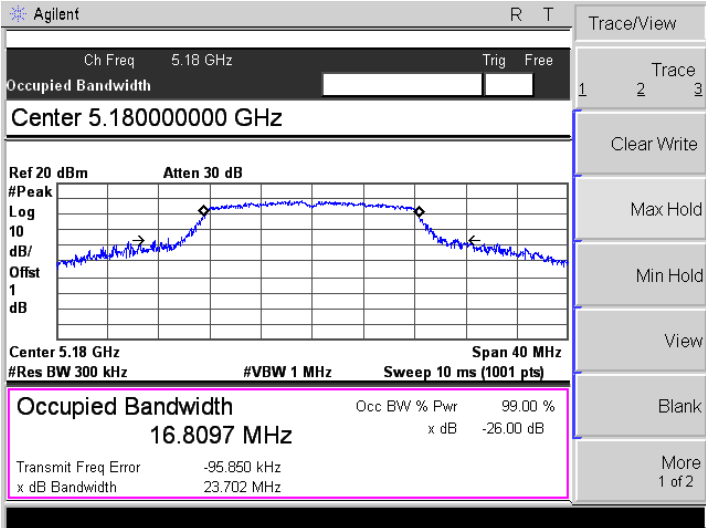
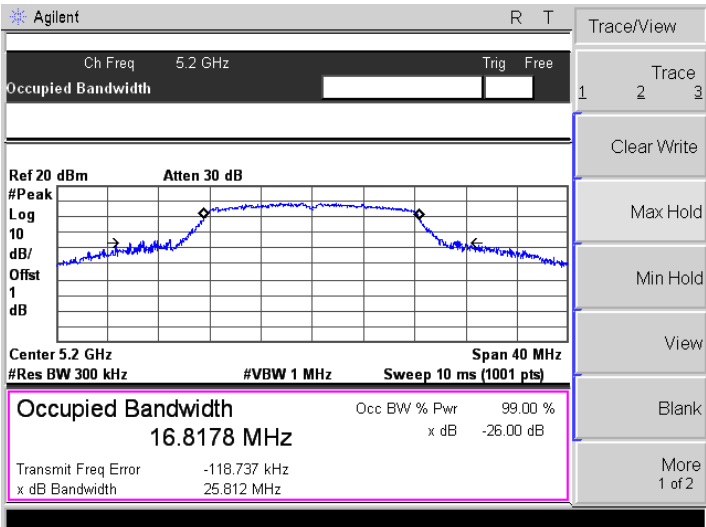
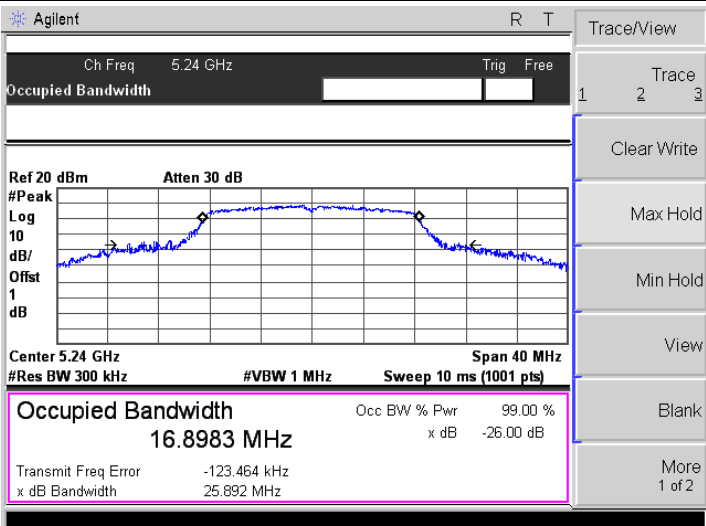
<p>802.11a-Low</p>	<p>Agilent R T</p> <p>Ch Freq 5.745 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offset 1 dB</p> <p>Center 5.745 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td>18.2363 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td colspan="2">-85.147 kHz</td> </tr> <tr> <td>x dB Bandwidth</td> <td colspan="2">33.848 MHz</td> </tr> </table> <p>Trace/View: Trace 1 2 3, Clear Write, Max Hold, Min Hold, View, Blank, More 1 of 2</p>	Occupied Bandwidth	Occ BW % Pwr	99.00 %	18.2363 MHz	x dB	-26.00 dB	Transmit Freq Error	-85.147 kHz		x dB Bandwidth	33.848 MHz	
Occupied Bandwidth	Occ BW % Pwr	99.00 %											
18.2363 MHz	x dB	-26.00 dB											
Transmit Freq Error	-85.147 kHz												
x dB Bandwidth	33.848 MHz												
<p>802.11a-Middle</p>	<p>Agilent R T</p> <p>Ch Freq 5.785 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offset 1 dB</p> <p>Center 5.785 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>18.1935 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td colspan="2">158.279 kHz</td> </tr> <tr> <td>x dB Bandwidth</td> <td colspan="2">33.223 MHz</td> </tr> </table> <p>Trace/View: Trace 1 2 3, Clear Write, Max Hold, Min Hold, View, Blank, More 1 of 2</p>	Occupied Bandwidth	Occ BW % Pwr	99.00 %	18.1935 MHz	x dB	-26.00 dB	Transmit Freq Error	158.279 kHz		x dB Bandwidth	33.223 MHz	
Occupied Bandwidth	Occ BW % Pwr	99.00 %											
18.1935 MHz	x dB	-26.00 dB											
Transmit Freq Error	158.279 kHz												
x dB Bandwidth	33.223 MHz												
<p>802.11a-High</p>	<p>Agilent R T</p> <p>Ch Freq 5.825 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offset 1 dB</p> <p>Center 5.825 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>16.9758 MHz</td> <td>x dB</td> <td>-26.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td colspan="2">-49.464 kHz</td> </tr> <tr> <td>x dB Bandwidth</td> <td colspan="2">28.500 MHz</td> </tr> </table> <p>Trace/View: Trace 1 2 3, Clear Write, Max Hold, Min Hold, View, Blank, More 1 of 2</p>	Occupied Bandwidth	Occ BW % Pwr	99.00 %	16.9758 MHz	x dB	-26.00 dB	Transmit Freq Error	-49.464 kHz		x dB Bandwidth	28.500 MHz	
Occupied Bandwidth	Occ BW % Pwr	99.00 %											
16.9758 MHz	x dB	-26.00 dB											
Transmit Freq Error	-49.464 kHz												
x dB Bandwidth	28.500 MHz												

<p>802.11n-HT20-Low</p>	 <p>Agilent R T</p> <p>Ch Freq 5.745 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.745 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 18.2720 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error -62.937 kHz</p> <p>x dB Bandwidth 32.802 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 5.785 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.785 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 18.2661 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error 11.957 kHz</p> <p>x dB Bandwidth 32.131 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 R T</p> <p>Ch Freq 5.825 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.825 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.8428 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error -26.488 kHz</p> <p>x dB Bandwidth 27.404 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>

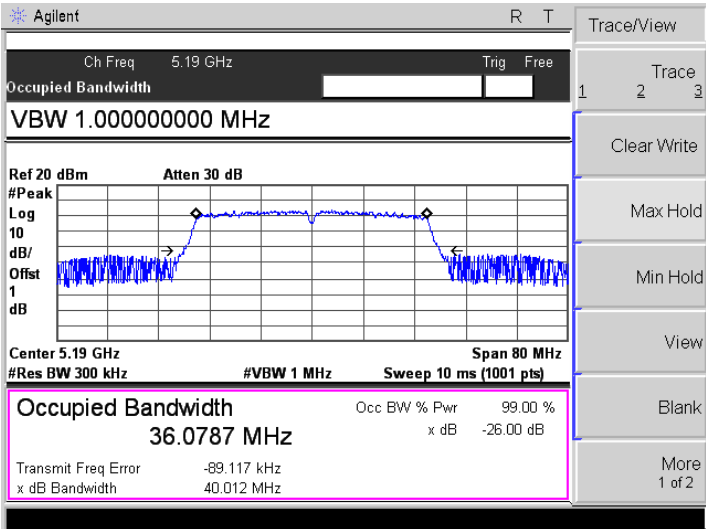
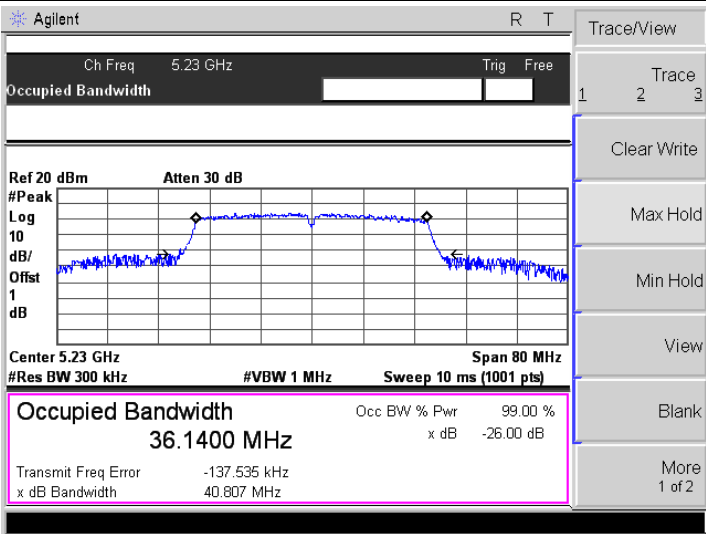
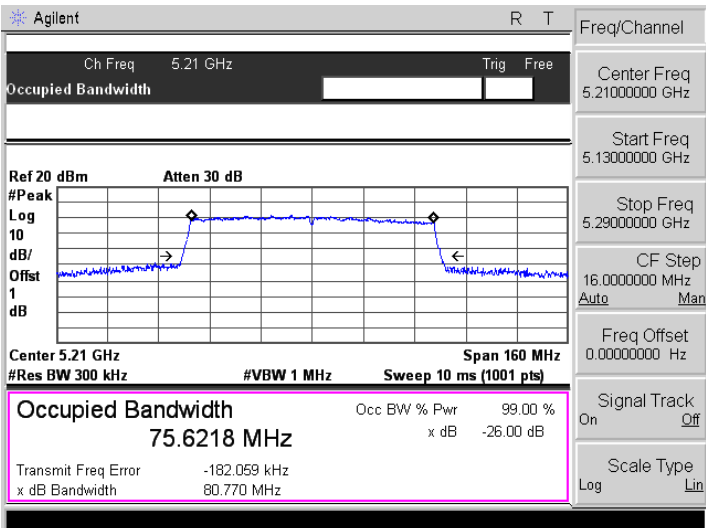
<p>802.11n-HT40-Low</p>	 <p>Agilent R T</p> <p>Ch Freq 5.755 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log</p> <p>10 dB/</p> <p>Offst</p> <p>1 dB</p> <p>Center 5.755 GHz Span 80 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 37.7830 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error -158.393 kHz</p> <p>x dB Bandwidth 71.401 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 5.795 GHz Trig Free</p> <p>Occupied Bandwidth</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 5.795 GHz Span 80 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 37.4315 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error 79.675 kHz</p> <p>x dB Bandwidth 71.316 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>802.11ac-HT80</p>	 <p>Agilent R T</p> <p>Ch Freq 5.775 GHz Trig Free</p> <p>Occupied Bandwidth</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 5.775 GHz Span 160 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 77.1069 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error -220.757 kHz</p> <p>x dB Bandwidth 155.529 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>

ANT 2

5150-5250MHz

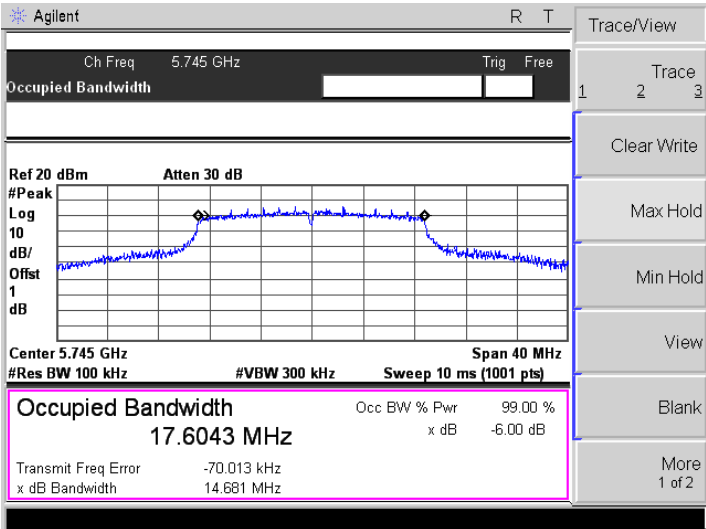
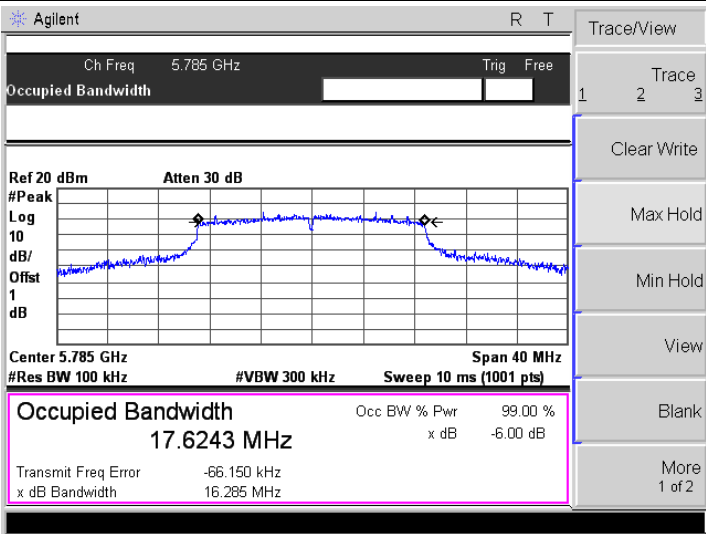
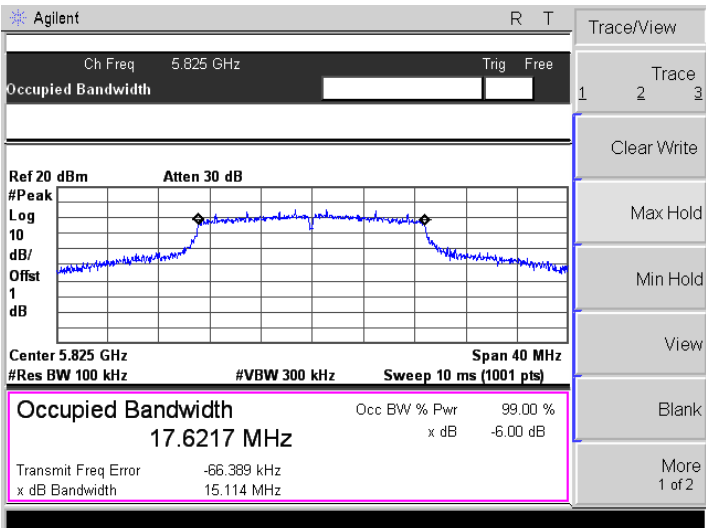
<p>802.11a-Low</p>	 <p>Agilent R T</p> <p>Ch Freq 5.18 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.18000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/ Offst 1 dB</p> <p>Center 5.18 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.8097 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -95.850 kHz x dB Bandwidth 23.702 MHz</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 5.2 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 16.8178 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -118.737 kHz x dB Bandwidth 25.812 MHz</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 5.24 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 16.8983 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -123.464 kHz x dB Bandwidth 25.892 MHz</p>

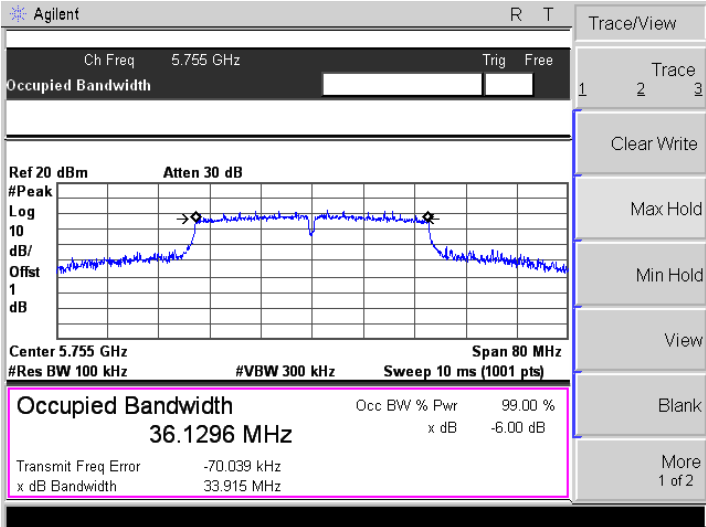
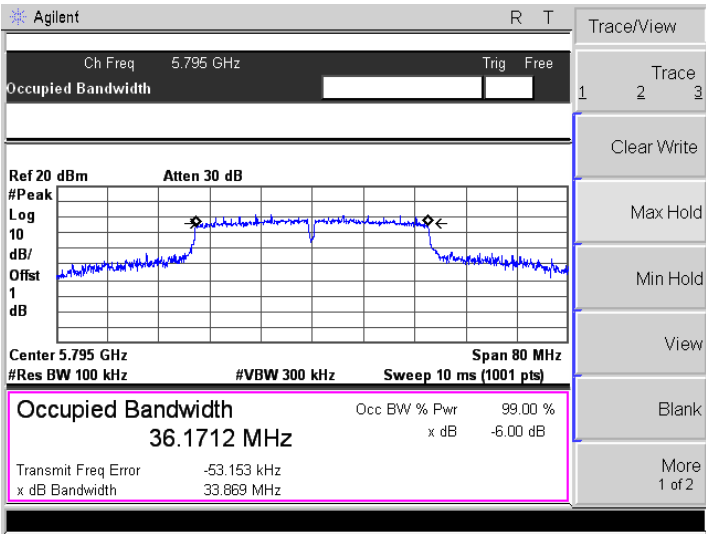
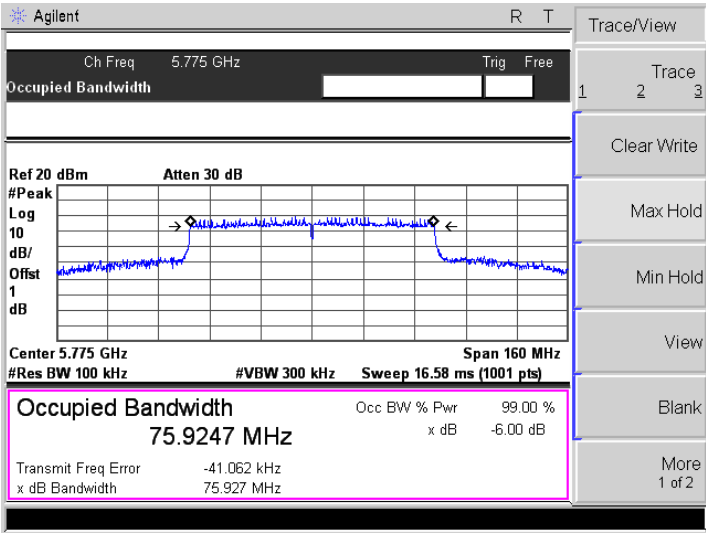
<p>802.11n-HT20-Low</p>	<p>Agilent R T</p> <p>Ch Freq 5.18 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/ Offst 1 dB</p> <p>Center 5.18 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.7752 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -68.539 kHz x dB Bandwidth 23.166 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 R T</p> <p>Ch Freq 5.2 GHz Trig Free</p> <p>Occupied Bandwidth</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 17.7278 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -82.513 kHz x dB Bandwidth 24.127 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.2000000 GHz</p> <p>Start Freq 5.1800000 GHz</p> <p>Stop Freq 5.2200000 GHz</p> <p>CF Step 4.0000000 MHz Auto Man</p> <p>Freq Offset 0.0000000 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>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 17.7953 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -111.982 kHz x dB Bandwidth 24.688 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.2400000 GHz</p> <p>Start Freq 5.2200000 GHz</p> <p>Stop Freq 5.2600000 GHz</p> <p>CF Step 4.0000000 MHz Auto Man</p> <p>Freq Offset 0.0000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</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>VBW 1.00000000 MHz</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 5.19 GHz Span 80 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 36.0787 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -89.117 kHz</p> <p>x dB Bandwidth 40.012 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>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 5.23 GHz Span 80 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 36.1400 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -137.535 kHz</p> <p>x dB Bandwidth 40.807 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>802.11ac-HT80</p>	 <p>Agilent R T</p> <p>Ch Freq 5.21 GHz Trig Free</p> <p>Occupied Bandwidth</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 5.21 GHz Span 160 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 75.6218 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -182.059 kHz</p> <p>x dB Bandwidth 80.770 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.21000000 GHz</p> <p>Start Freq 5.13000000 GHz</p> <p>Stop Freq 5.29000000 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>

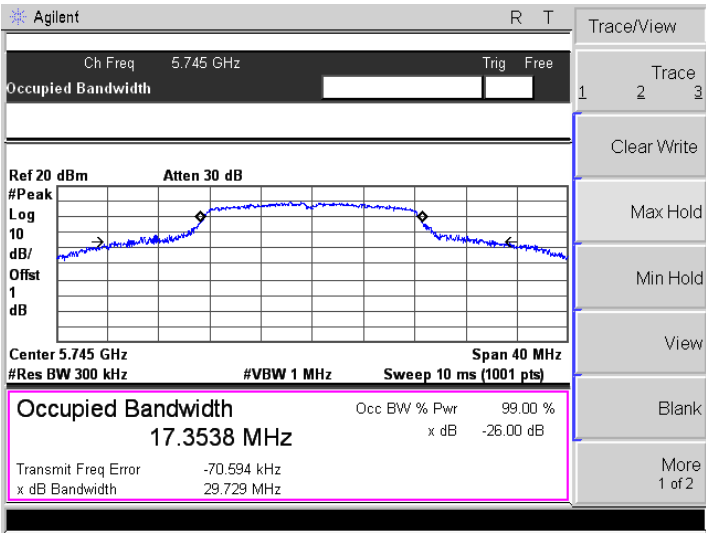
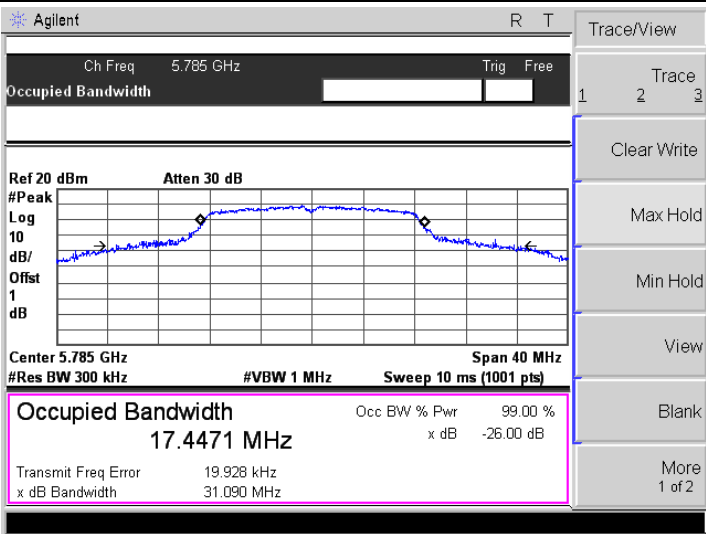
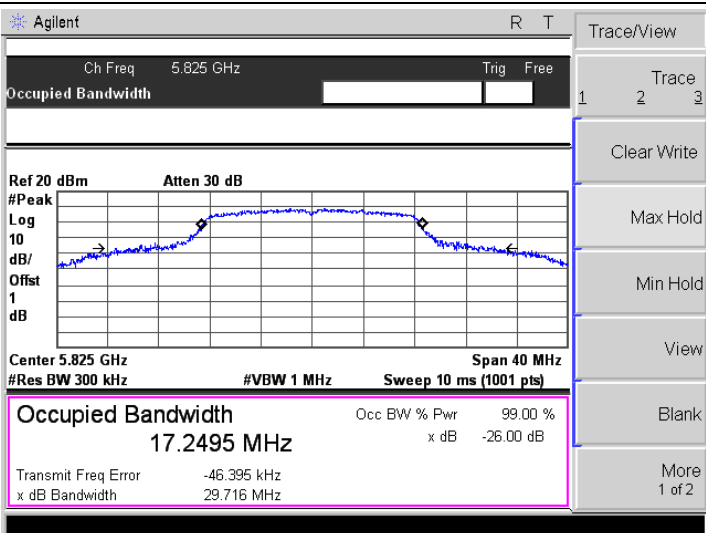
5725-5850MHz
6 dB Bandwidth

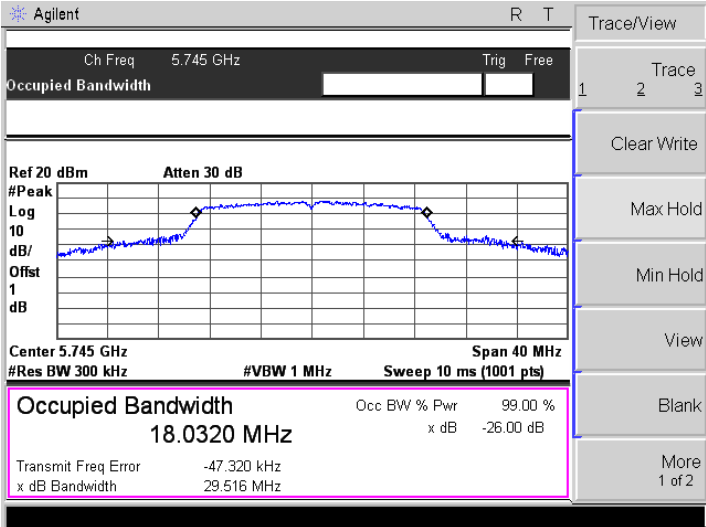
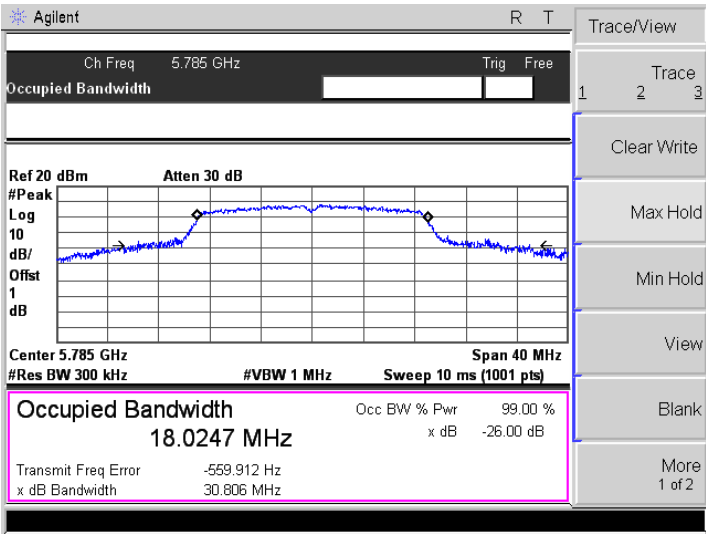
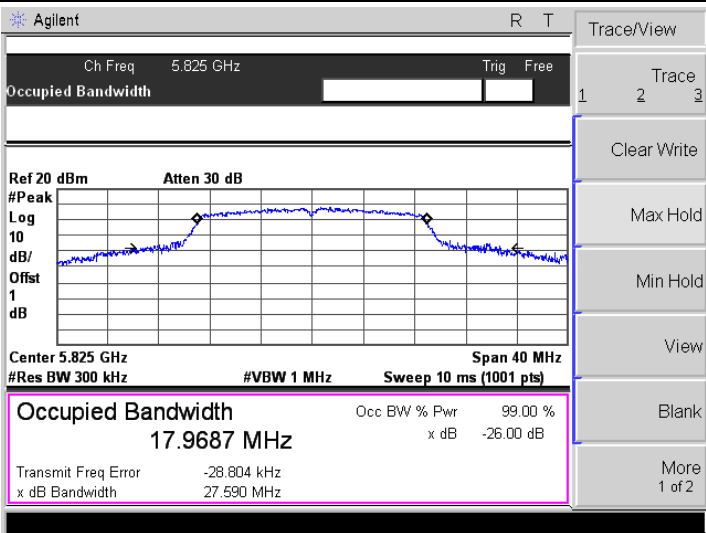
<p>802.11a-Low</p>	<p>Agilent R T</p> <p>Ch Freq 5.745 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offset 1 dB</p> <p>Center 5.745 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.5643 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -89.596 kHz x dB Bandwidth 13.895 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.7450000 GHz</p> <p>Start Freq 5.7250000 GHz</p> <p>Stop Freq 5.7650000 GHz</p> <p>CF Step 4.0000000 MHz Auto Man</p> <p>Freq Offset 0.0000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>
<p>802.11a-Middle</p>	<p>Agilent R T</p> <p>Ch Freq 5.785 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offset 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 16.6790 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -32.915 kHz x dB Bandwidth 14.435 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 5.825 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offset 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 16.5605 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -6.00 dB</p> <p>Transmit Freq Error -57.573 kHz x dB Bandwidth 15.068 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>

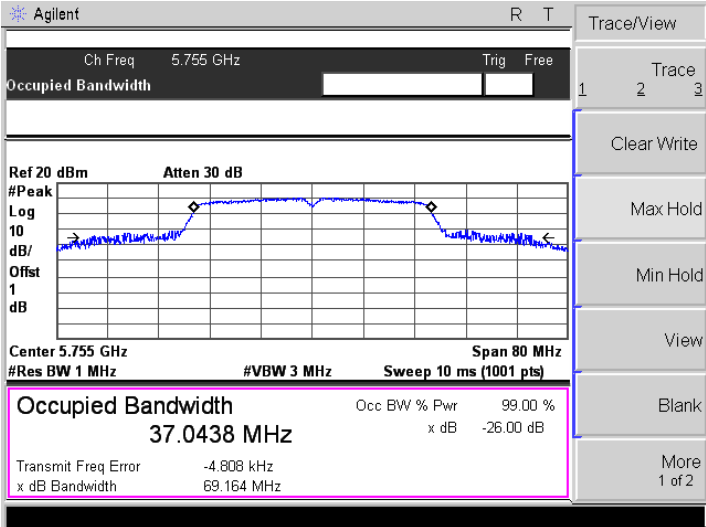
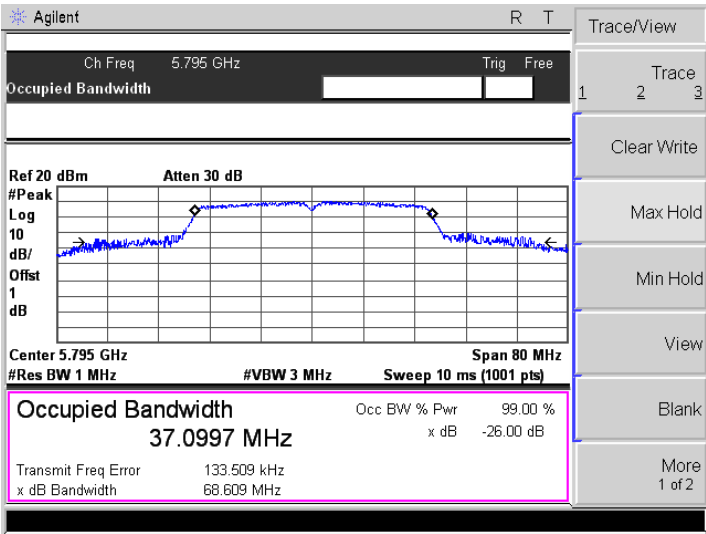
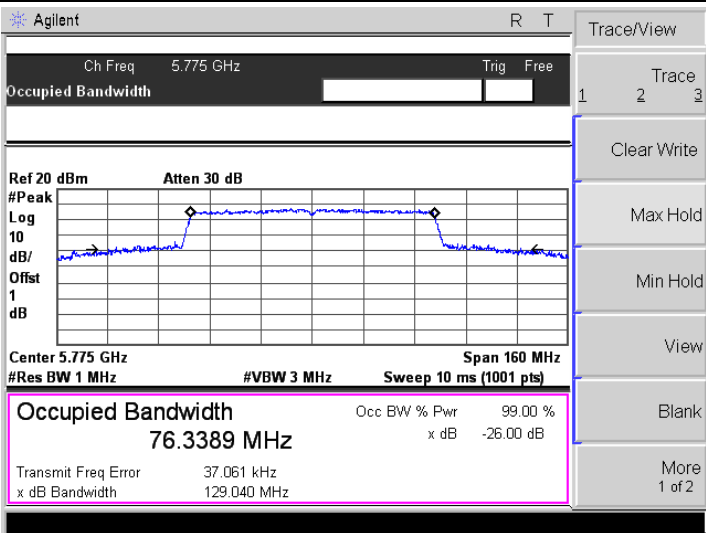
<p>802.11n-HT20-Low</p>	 <p>Agilent R T</p> <p>Ch Freq 5.745 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.745 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.6043 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -6.00 dB</p> <p>Transmit Freq Error -70.013 kHz</p> <p>x dB Bandwidth 14.681 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 5.785 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.785 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.6243 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -6.00 dB</p> <p>Transmit Freq Error -66.150 kHz</p> <p>x dB Bandwidth 16.285 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 R T</p> <p>Ch Freq 5.825 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.825 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.6217 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -6.00 dB</p> <p>Transmit Freq Error -66.389 kHz</p> <p>x dB Bandwidth 15.114 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 5.755 GHz Trig Free</p> <p>Occupied Bandwidth</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> <p>Occupied Bandwidth 36.1296 MHz Occ BW % Pwr 99.00 %</p> <p>x dB -6.00 dB</p> <p>Transmit Freq Error -70.039 kHz</p> <p>x dB Bandwidth 33.915 MHz</p> <p>Trace/View</p> <p>1 Trace 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 5.795 GHz Trig Free</p> <p>Occupied Bandwidth</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> <p>Occupied Bandwidth 36.1712 MHz Occ BW % Pwr 99.00 %</p> <p>x dB -6.00 dB</p> <p>Transmit Freq Error -53.153 kHz</p> <p>x dB Bandwidth 33.869 MHz</p> <p>Trace/View</p> <p>1 Trace 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>802.11ac-HT80</p>	 <p>Agilent R T</p> <p>Ch Freq 5.775 GHz Trig Free</p> <p>Occupied Bandwidth</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> <p>Occupied Bandwidth 75.9247 MHz Occ BW % Pwr 99.00 %</p> <p>x dB -6.00 dB</p> <p>Transmit Freq Error -41.062 kHz</p> <p>x dB Bandwidth 75.927 MHz</p> <p>Trace/View</p> <p>1 Trace 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>

99%Bandwidth

<p>802.11a-Low</p>	 <p>Agilent R T</p> <p>Ch Freq 5.745 GHz Trig Free</p> <p>Occupied Bandwidth</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 17.3538 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -70.594 kHz x dB Bandwidth 29.729 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 R T</p> <p>Ch Freq 5.785 GHz Trig Free</p> <p>Occupied Bandwidth</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 17.4471 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 19.928 kHz x dB Bandwidth 31.090 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 R T</p> <p>Ch Freq 5.825 GHz Trig Free</p> <p>Occupied Bandwidth</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 17.2495 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -46.395 kHz x dB Bandwidth 29.716 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 R T</p> <p>Ch Freq 5.745 GHz Trig Free</p> <p>Occupied Bandwidth</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 18.0320 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -47.320 kHz x dB Bandwidth 29.516 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-Middle</p>	 <p>Agilent R T</p> <p>Ch Freq 5.785 GHz Trig Free</p> <p>Occupied Bandwidth</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 18.0247 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -559.912 Hz x dB Bandwidth 30.806 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-High</p>	 <p>Agilent R T</p> <p>Ch Freq 5.825 GHz Trig Free</p> <p>Occupied Bandwidth</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 17.9687 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -28.804 kHz x dB Bandwidth 27.590 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-HT40-Low</p>	 <p>Agilent R T</p> <p>Ch Freq 5.755 GHz Trig Free</p> <p>Occupied Bandwidth</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 1 MHz #VBW 3 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 37.0438 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -4.808 kHz x dB Bandwidth 69.164 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-HT40-High</p>	 <p>Agilent R T</p> <p>Ch Freq 5.795 GHz Trig Free</p> <p>Occupied Bandwidth</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 1 MHz #VBW 3 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 37.0997 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 133.509 kHz x dB Bandwidth 68.609 MHz</p> <p>Trace/View: Trace 1 2 3, Clear Write, Max Hold, Min Hold, View, Blank, More 1 of 2</p>
<p>802.11ac-HT80</p>	 <p>Agilent R T</p> <p>Ch Freq 5.775 GHz Trig Free</p> <p>Occupied Bandwidth</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> <p>Occupied Bandwidth 76.3389 MHz</p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 37.061 kHz x dB Bandwidth 129.040 MHz</p> <p>Trace/View: Trace 1 2 3, Clear Write, Max Hold, Min Hold, View, Blank, More 1 of 2</p>

APPENDIX C

Maximum Conducted Output Power

U-NII-1:5150-5250MHz					
Test mode	Frequency MHz	Output Power dBm		Total dBm	Limit dBm
		ANT 1	ANT 2		
802.11a	5180	14.59	14.92	/	23.98
	5200	14.66	14.61	/	23.98
	5240	14.43	14.58	/	23.98
802.11n-HT20	5180	13.49	13.35	16.43	23.98
	5200	13.60	13.51	16.57	23.98
	5240	13.51	13.68	16.61	23.98
802.11n-HT40	5190	13.44	13.22	16.34	23.98
	5230	13.76	13.32	16.56	23.98
802.11ac VH80	5210	12.72	12.64	15.69	23.98

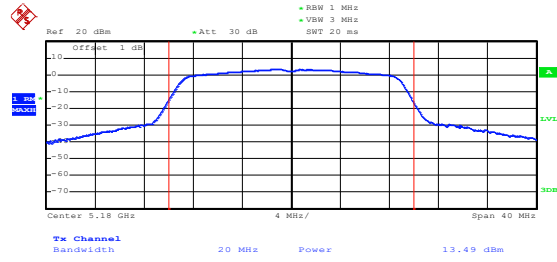
U-NII-3: 5725-5850MHz					
Test mode	Frequency MHz	Output Power dBm		Total dBm	Limit dBm
		ANT 1	ANT 2		
802.11a	5745	14.69	13.36	/	30
	5785	14.66	13.25	/	30
	5825	14.72	13.33	/	30
802.11n-HT20	5745	13.32	12.17	15.79	30
	5785	13.68	12.25	16.03	30
	5825	13.78	12.48	16.19	30
802.11n-HT40	5755	13.30	12.33	15.85	30
	5795	13.76	12.37	16.13	30
802.11ac VH80	5775	12.48	11.87	15.20	30

ANT 1

5150-5250MHz

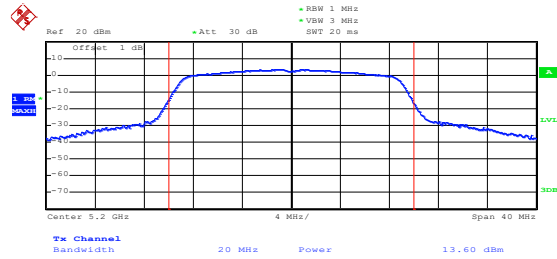
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<p>802.11a-Middle</p>	<p>Date: 19.NOV.2020 17:21:27</p>
<p>802.11a-High</p>	<p>Date: 19.NOV.2020 17:22:12</p>

802.11n-HT20-Low



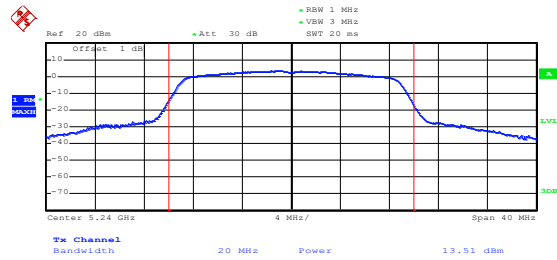
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802.11n-HT20-Middle



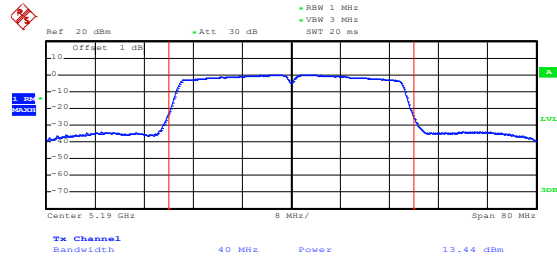
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802.11n-HT20-High



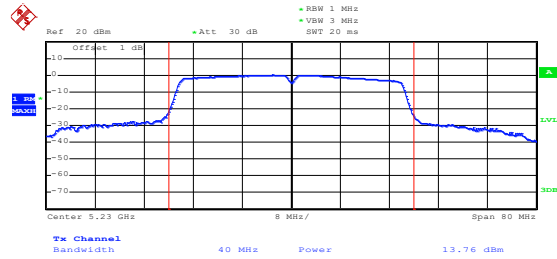
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802.11n-HT40-Low



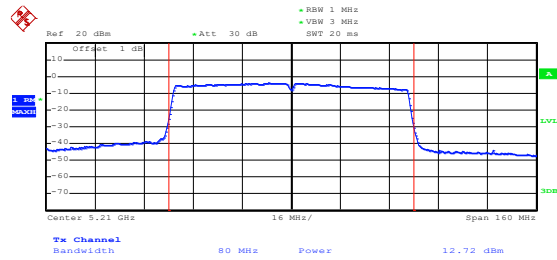
Date: 19.NOV.2020 17:36:09

802.11n-HT40-High



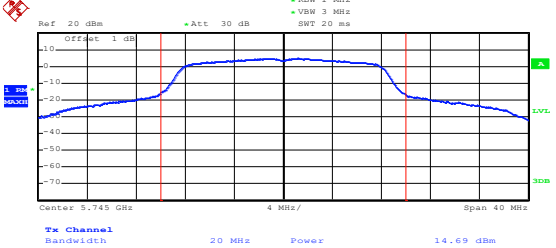
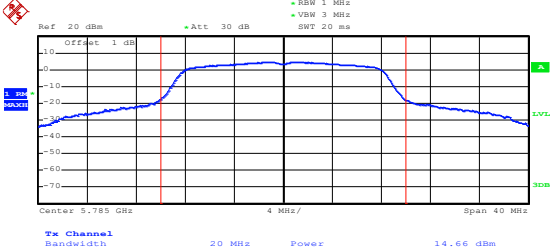
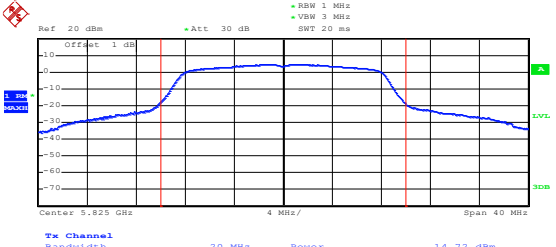
Date: 19.NOV.2020 17:37:07

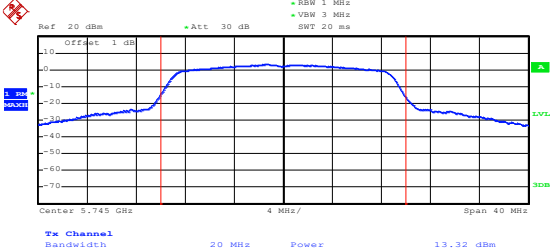
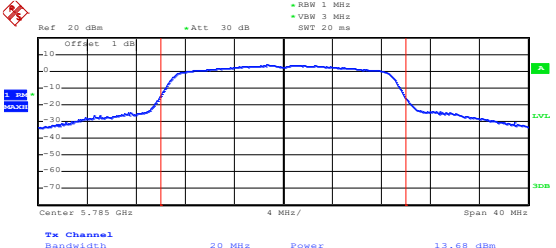
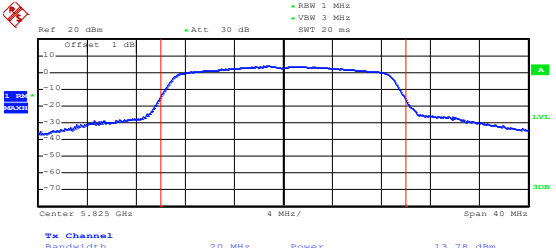
802.11ac-HT80



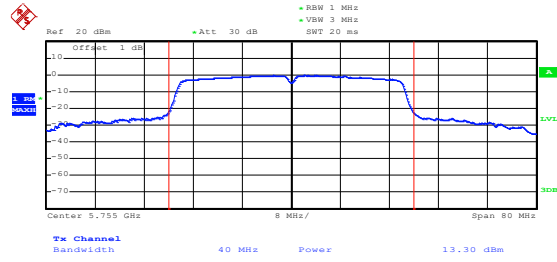
Date: 19.NOV.2020 17:41:17

5725-5850MHz

<p>802.11a-Low</p>	 <p>Date: 19.NOV.2020 17:27:26</p>
<p>802.11a-Middle</p>	 <p>Date: 19.NOV.2020 17:27:57</p>
<p>802.11a-High</p>	 <p>Date: 19.NOV.2020 17:28:31</p>

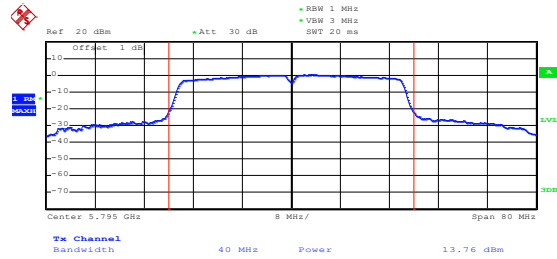
<p>802.11n-HT20-Low</p>	 <p>Ref: 20 dBm, Offset: 1 dB, Att: 30 dB, RBW: 1 MHz, VBW: 3 MHz, SWT: 20 ms</p> <p>Center: 5.745 GHz, Span: 40 MHz, Tx Channel Bandwidth: 20 MHz, Power: 13.32 dBm</p> <p>Date: 19.NOV.2020 17:29:09</p>
<p>802.11n-HT20-Middle</p>	 <p>Ref: 20 dBm, Offset: 1 dB, Att: 30 dB, RBW: 1 MHz, VBW: 3 MHz, SWT: 20 ms</p> <p>Center: 5.785 GHz, Span: 40 MHz, Tx Channel Bandwidth: 20 MHz, Power: 13.68 dBm</p> <p>Date: 19.NOV.2020 17:29:32</p>
<p>802.11n-HT20-High</p>	 <p>Ref: 20 dBm, Offset: 1 dB, Att: 30 dB, RBW: 1 MHz, VBW: 3 MHz, SWT: 20 ms</p> <p>Center: 5.825 GHz, Span: 40 MHz, Tx Channel Bandwidth: 20 MHz, Power: 13.78 dBm</p> <p>Date: 19.NOV.2020 17:29:55</p>

802.11n-HT40-Low



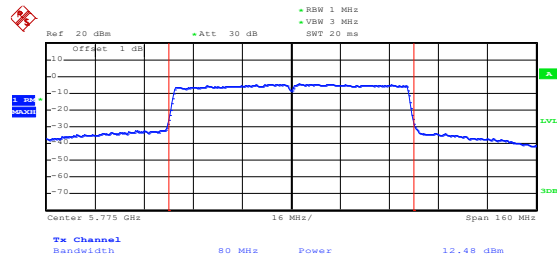
Date: 19.NOV.2020 17:34:25

802.11n-HT40-High



Date: 19.NOV.2020 17:34:49

802.11ac-HT80



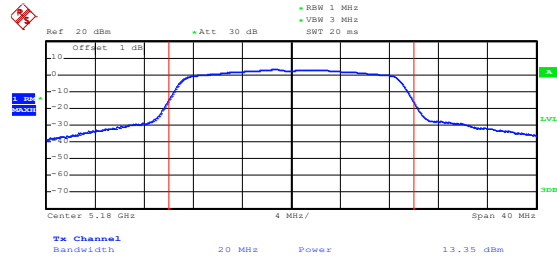
Date: 19.NOV.2020 17:43:49

ANT 2

5150-5250MHz

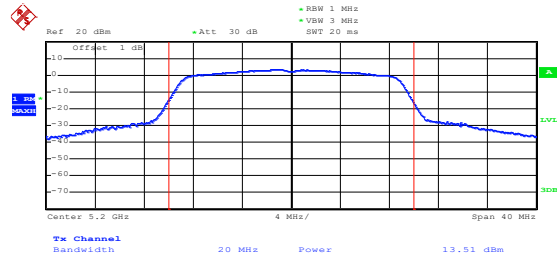
<p>802.11a-Low</p>	<p>Date: 19.NOV.2020 13:44:20</p>
<p>802.11a-Middle</p>	<p>Date: 19.NOV.2020 13:46:17</p>
<p>802.11a-High</p>	<p>Date: 19.NOV.2020 13:46:52</p>

802.11n-HT20-Low



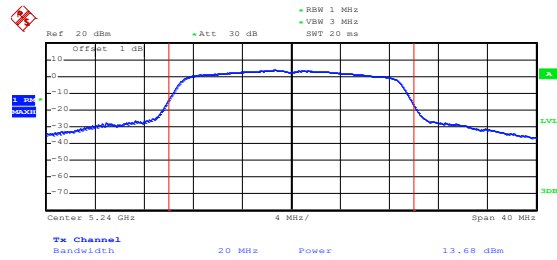
Date: 19.NOV.2020 13:48:59

802.11n-HT20-Middle



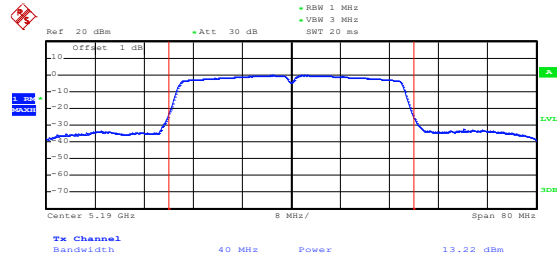
Date: 19.NOV.2020 13:49:51

802.11n-HT20-High



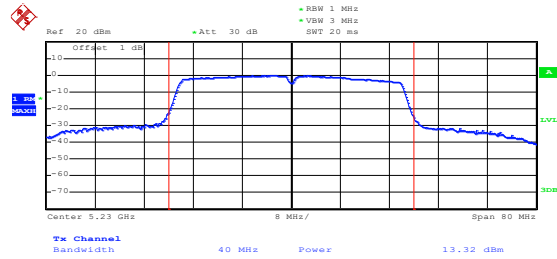
Date: 19.NOV.2020 13:50:33

802.11n-HT40-Low



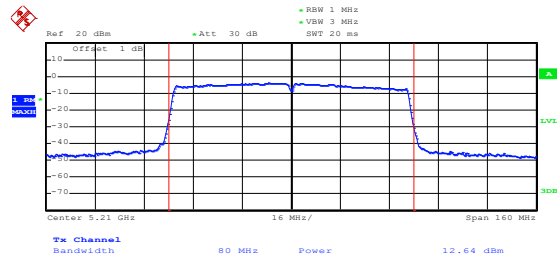
Date: 19.NOV.2020 14:16:17

802.11n-HT40-High



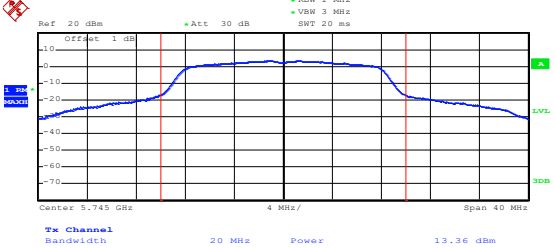
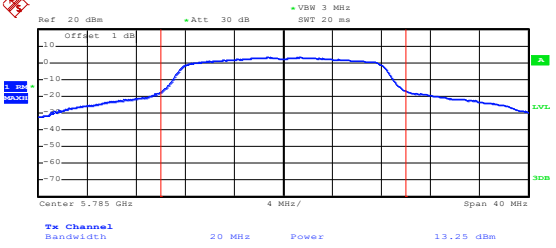
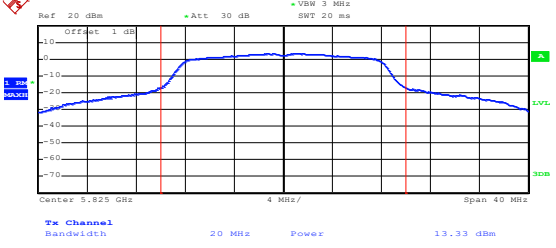
Date: 19.NOV.2020 14:17:01

802.11ac-HT80

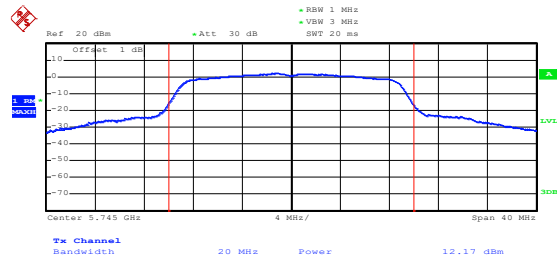


Date: 19.NOV.2020 14:18:58

5725-5850MHz

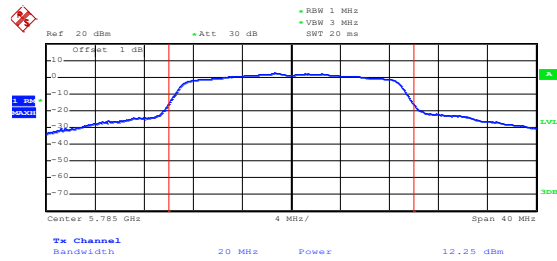
<p>802.11a-Low</p>	 <p>Date: 19.NOV.2020 14:03:57</p>
<p>802.11a-Middle</p>	 <p>Date: 19.NOV.2020 14:06:23</p>
<p>802.11a-High</p>	 <p>Date: 19.NOV.2020 14:08:23</p>

802.11n-HT20-Low



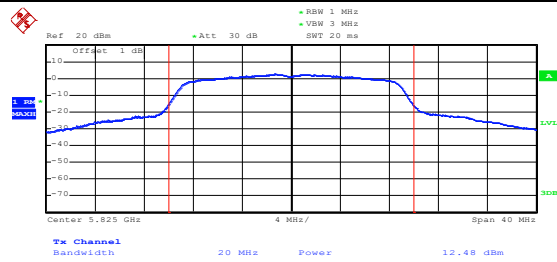
Date: 19.NOV.2020 14:09:49

802.11n-HT20-Middle



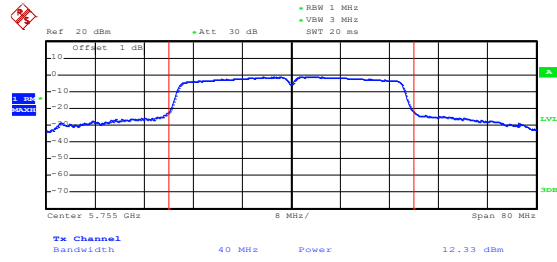
Date: 19.NOV.2020 14:10:47

802.11n-HT20-High



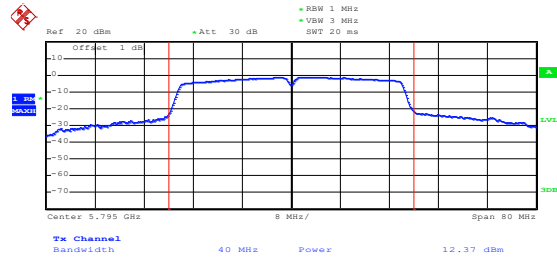
Date: 19.NOV.2020 14:11:30

802.11n-HT40-Low



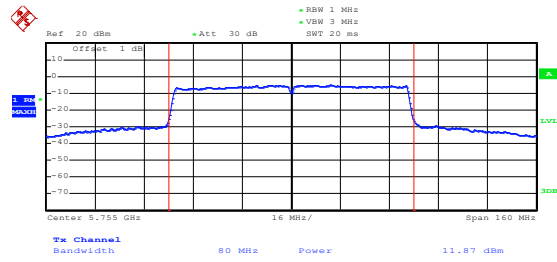
Date: 19.NOV.2020 14:14:13

802.11n-HT40-High



Date: 19.NOV.2020 14:14:45

802.11ac-HT80



Date: 19.NOV.2020 14:20:26

APPENDIX D**Frequency Stability****ANT 1**

U-NII-1:5150-5250MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VAC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	120	-30	1488	0.2862
100%		-20	1280	0.2461
100%		-10	1438	0.2766
100%		0	1334	0.2565
100%		+10	1207	0.2321
100%		+20	1502	0.2889
100%		+30	1029	0.1979
100%		+40	1554	0.2988
100%		+50	1318	0.2535
Low Battery power		102	+20	1550
High Battery power	138	+20	1487	0.2860

U-NII-1:5725-5850MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VAC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	120	-30	1486	0.2569
100%		-20	1272	0.2198
100%		-10	1432	0.2476
100%		0	1334	0.2306
100%		+10	1201	0.2076
100%		+20	1506	0.2604
100%		+30	1022	0.1767
100%		+40	1555	0.2687
100%		+50	1316	0.2275
Low Battery power		102	+20	1560
High Battery power	138	+20	1489	0.2573

ANT 2

U-NII-1:5150-5250MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VAC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	120	-30	1485	0.2855
100%		-20	1278	0.2457
100%		-10	1431	0.2752
100%		0	1335	0.2568
100%		+10	1202	0.2311
100%		+20	1500	0.2885
100%		+30	1028	0.1977
100%		+40	1560	0.2999
100%		+50	1317	0.2533
Low Battery power		102	+20	1552
High Battery power	138	+20	1488	0.2862

U-NII-1:5725-5850MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VAC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	120	-30	1485	0.2567
100%		-20	1273	0.2201
100%		-10	1432	0.2475
100%		0	1332	0.2302
100%		+10	1208	0.2088
100%		+20	1504	0.2600
100%		+30	1025	0.1771
100%		+40	1551	0.2680
100%		+50	1319	0.2280
Low Battery power		102	+20	1551
High Battery power	138	+20	1488	0.2573

APPENDIX PHOTOGRAPHS

Please refer to “ANNEX”

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

