TEST REPORT

Reference No.	:	WTX23X02023511W004
FCC ID	:	2AAH8-OSIDDV2
Applicant	:	Orpyx Medical Technologies Inc.
Address	:	Suite 205, 1240 - 20th Avenue S.E. Calgary, AB T2G 1M8 Canada
Manufacturer	:	The same as Applicant
Address	:	The same as Applicant
Product Name	:	Mobile Phone
Model No.	:	OSIDDV2
Standards	:	FCC Part 15.407
Date of Receipt sample	:	2023-02-17
Date of Test	:	2023-02-17 to 2023-03-14
Date of Issue	:	2023-03-14
Test Report Form No.	:	WTX_Part 15_407W
Test Result	:	**Pass**

Remarks:

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

Prepared By:

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Approved by:

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Rev.00	2023-03-14	Original
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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT	
Product Name:	Mobile Phone
Trade Name:	Orpyx
Model No.:	OSIDDV2
Adding Model(s):	/
Rated Voltage:	DC3.85V
Battery Capacity:	4000mAh (15.4Wh)
Power Adapter:	TPA-46050200UU INPUT:AC100-240V 50/60Hz 0.3A OUTPUT:DC5V 2.0A
Note: The test data is gathered from a production sample, provided by the manufacturer.	

Technical Characteristics of EUT	
Support Standards:	802.11a, 802.11n(HT20), 802.11n(HT40), 802.11ac(VHT20), 802.11ac(VHT40), 802.11ac(VHT80)
Frequency Range:	5150-5250MHz, 5250-5350MHz, 5725-5850MHz
RF Output Power:	11.94dBm (Conducted)
Type of Modulation:	BPSK, QPSK,16QAM, 64QAM, 256QAM
Type of Antenna:	PIFA Antenna
Antenna Gain:	-2.2dBi

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

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

Mode	Test Frequency (MHz)												
	NCB: 20MHz												
	5180	5200	5240	5260	5300	5320	5720	5745	5785	5825			
802.11a 6Mbps	19	19	19	18	18	18	23	23	23	23	/	/	/
802.11n-HT20 MCS0	18	18	18	17	17	17	22	22	22	22	/	/	/
Mode	NCB: 40MHz												
	5190	5230	5270	5310	5710	5755	5795						
802.11n-HT40 MCS0	17	17	17	17	21	21	21	/	/	/			
Mode	NCB: 80MHz												
	5210		5290		5775								
802.11ac-VH80 MCS0/Nss2	17		17		20	/		/		/			

1.5 EUT Operating during test

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

1.6 Test Facility

Address of the test laboratory

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

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China

FCC – Registration No.: 125990

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

Industry Canada (IC) Registration No.: 11464A

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

1.7 EUT Setup and Test Mode

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

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

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

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

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

1.9 Test Equipment List and Details

No.	Description	Manufacturer	Model	Serial No.	Cal Date	Due. Date
SEMT-1075	Communication Tester	Rohde & Schwarz	CMW500	148650	2022-03-22	2023-03-21
SEMT-1063	GSM Tester	Rohde & Schwarz	CMU200	114403	2022-03-22	2023-03-21
SEMT-1072	Spectrum Analyzer	Agilent	E4407B	MY41440400	2022-03-25	2023-03-24
SEMT-1079	Spectrum Analyzer	Agilent	N9020A	US47140102	2022-03-22	2023-03-21
SMET-1313	Spectrum Analyzer	Agilent	N9020A	MY54320548	2022-03-22	2023-03-21
SEMT-1080	Signal Generator	Agilent	83752A	3610A01453	2022-03-22	2023-03-21
SEMT-1081	Vector Signal Generator	Agilent	N5182A	MY47070202	2022-03-22	2023-03-21
SEMT-1028	Power Divider	Weinschel	1506A	PM204	2022-03-22	2023-03-21
SEMT-C001	Cable	Zheng DI	LL142-07-07-10M(A)	/	/	/
SEMT-C002	Cable	Zheng DI	ZT40-2.92J-2.92J-6M	/	/	/
SEMT-C003	Cable	Zheng DI	ZT40-2.92J-2.92J-2.5M	/	/	/
SEMT-C004	Cable	Zheng DI	2M0RFC	/	/	/
SEMT-C005	Cable	Zheng DI	1M0RFC	/	/	/
SEMT-C006	Cable	Zheng DI	1M0RFC	/	/	/
☒Chamber A: Below 1GHz						
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2022-03-22	2023-03-21
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2022-03-22	2023-03-21
SEMT-1008	Amplifier	HP	8447F	2805A03475	2022-12-30	2023-12-29
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2021-03-20	2023-03-19
SEMT-1068	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2021-03-20	2023-03-19
☒Chamber A: Above 1GHz						
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2022-03-22	2023-03-21
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2022-03-22	2023-03-21

SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2022-03-22	2023-03-21
SEMT-1042	Horn Antenna	ETS	3117	00086197	2021-03-19	2023-03-18
SEMT-1121	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA917 0582	2021-04-27	2023-04-26
SEMT-1216	Pre-amplifier	Schwarzbeck	BBV 9721	9721-031	2022-03-25	2023-03-24
SEMT-1163	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2022-03-22	2023-03-21
☐Chamber B:Below 1GHz						
SEMT-1068	Trilog Broadband Antenna	Schwarz beck	VULB9163(B)	9163-635	2021-04-09	2023-04-08
SEMT-1067	Amplifier	Agilent	8447D	2944A101 79	2022-03-22	2023-03-21
SEMT-1066	EMI Test Receiver	Rohde & Schwarz	ESPI	101391	2022-03-22	2023-03-21
☐Chamber C:Below 1GHz						
SEMT-1319	EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2022-12-30	2023-12-29
SEMT-1343	Trilog Broadband Antenna	Schwarz beck	VULB 9168	1194	2021-05-28	2023-05-27
SEMT-1333	Amplifier	HP	8447F	2944A038 69	2022-03-22	2023-03-21
☒Conducted Room 1#						
SEMT-1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2022-03-21	2023-03-20
SEMT-1002	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2022-03-25	2023-03-24
SEMT-1003	AC LISN	Schwarz beck	NSLK8126	8126-224	2022-03-22	2023-03-21
☐Conducted Room 2#						
SEMT-1334	EMI Test Receiver	Rohde & Schwarz	ESPI	101259	2022-03-22	2023-03-21
SEMT-1336	LISN	Rohde & Schwarz	ENV 216	100097	2022-03-22	2023-03-21

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 a PIFA antenna, fulfill the requirement of this section.

4. Automatically Discontinue Transmission

4.1 Standard Applicable

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

4.2 Summary of Test Results

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

5. Power Spectral Density

5.1 Standard Applicable

Section 15.407(a) Power limits:

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

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

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

5.2 Test Procedure

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

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

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

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

5.3 Summary of Test Results/Plots

Please refer to Appendix A

6. Emission Bandwidth and Occupied Bandwidth

6.1 Standard Applicable

According to 15.407(a) and (e):

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

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

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

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

6.2 Test Procedure

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

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

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

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

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

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

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

6.3 Summary of Test Results/Plots

Please refer to Appendix B

7. Maximum Conducted Output Power

7.1 Standard Applicable

Section 15.407(a) Power limits:

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

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

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

7.2 Test Procedure

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

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

(ii) Set RBW = 1MHz.

(iii) Set VBW ≥ 3MHz.

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

narrowband signals are not lost between frequency bins.)

(v) Sweep time = auto.

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

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

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

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

7.3 Summary of Test Results/Plots

Please refer to Appendix C

8. Radiated Spurious Emissions

8.1 Standard Applicable

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

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

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

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

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

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

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

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

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

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

where:

• E is the field strength in V/m;

• d is the measurement distance in meters;

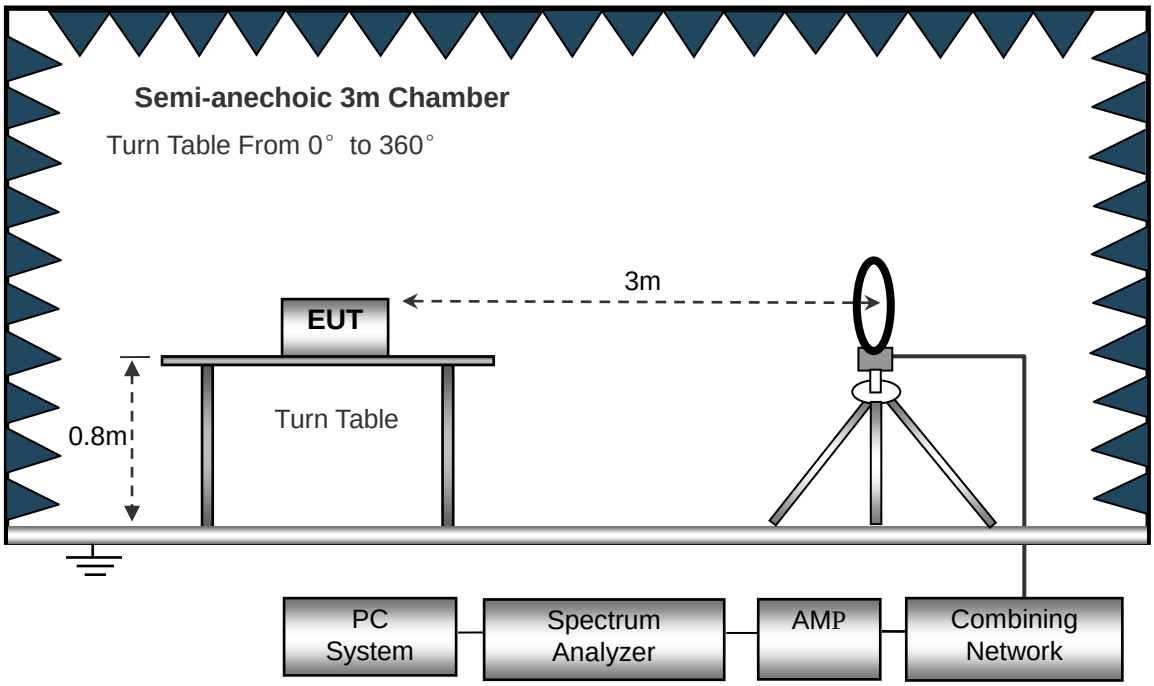
• EIRP is the equivalent isotropically radiated power in watts.

8.2 Test Procedure

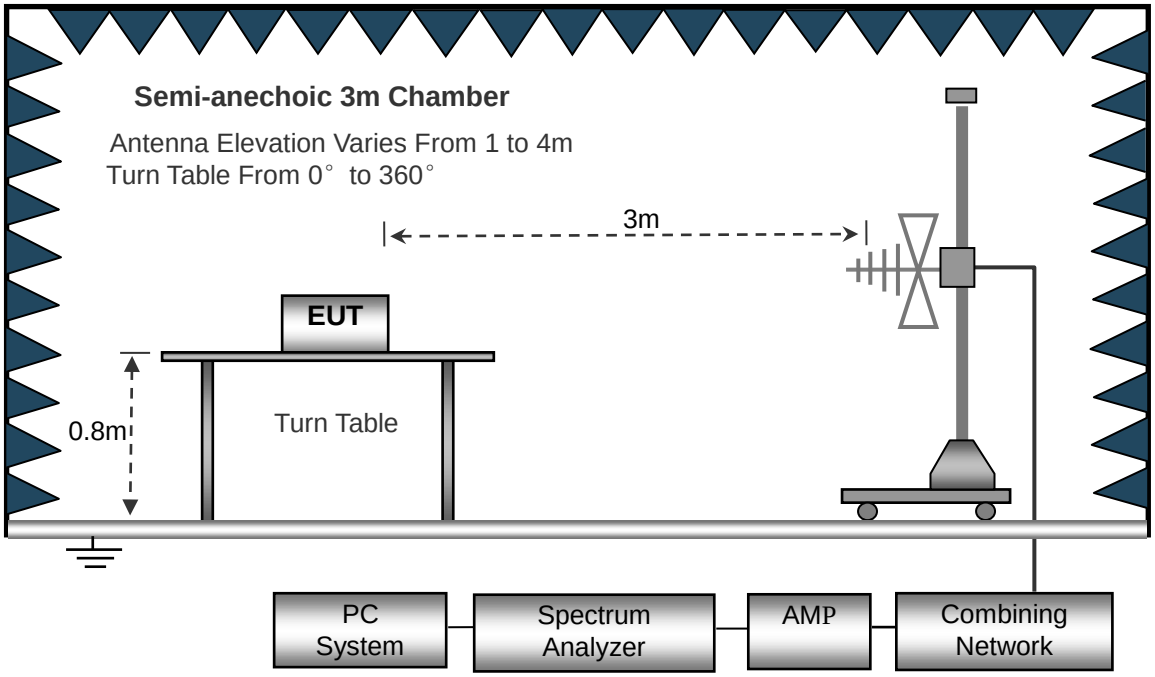
The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.205 15.407(b)(6) and FCC Part 15.209 Limit..

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

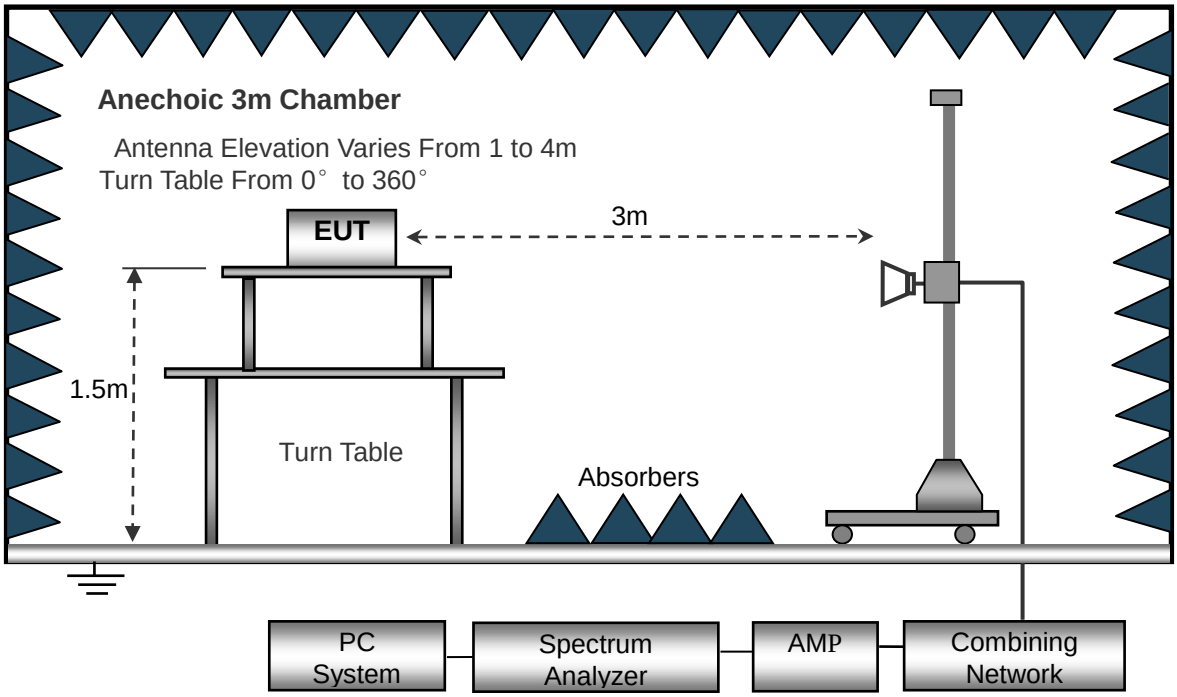
The test setup for emission measurement below 30MHz.



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



The test setup for emission measurement above 1GHz.



8.3 Test Receiver Setup

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

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

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

8.4 Corrected Amplitude & Margin Calculation

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

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

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

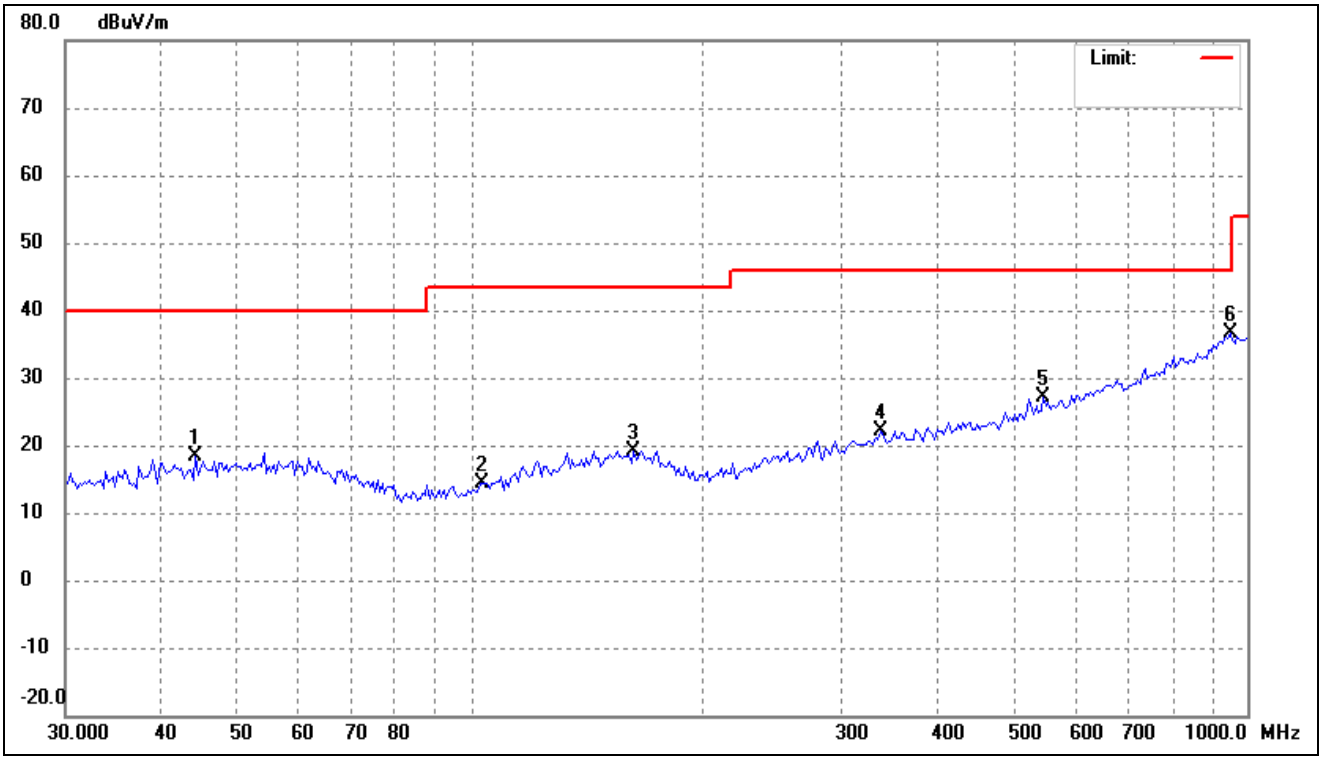
Margin = Corr. Ampl. – FCC Part 15 Limit

8.5 Summary of Test Results/Plots

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

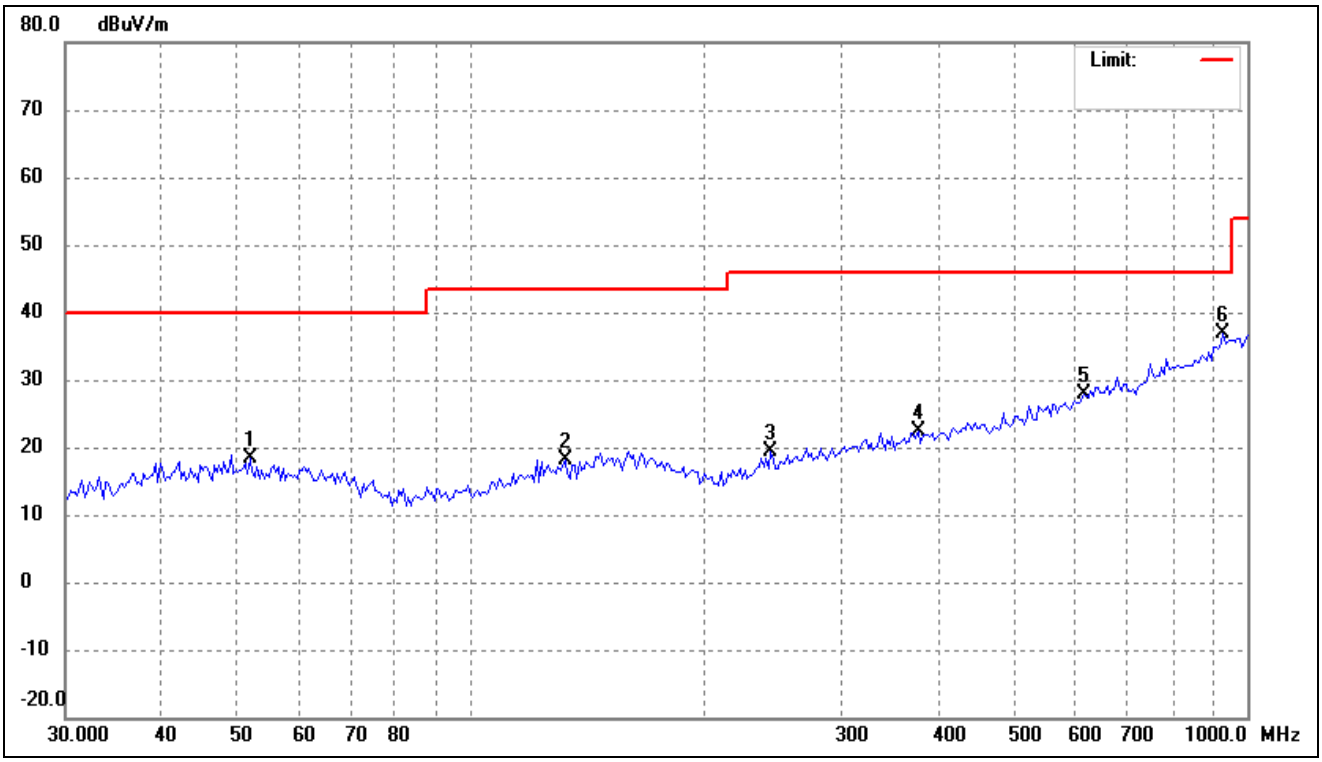
- Spurious Emission From 30MHz to 1GHz
- 5150-5250MHz

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



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	44.1544	26.85	-8.39	18.46	40.00	-21.54	-	-	peak
2	103.3353	27.05	-12.58	14.47	43.50	-29.03	-	-	peak
3	162.0197	28.15	-9.00	19.15	43.50	-24.35	-	-	peak
4	336.4817	29.82	-7.77	22.05	46.00	-23.95	-	-	peak
5	546.4368	31.15	-4.03	27.12	46.00	-18.88	-	-	peak
6	952.0001	33.37	3.15	36.52	46.00	-9.48	-	-	peak

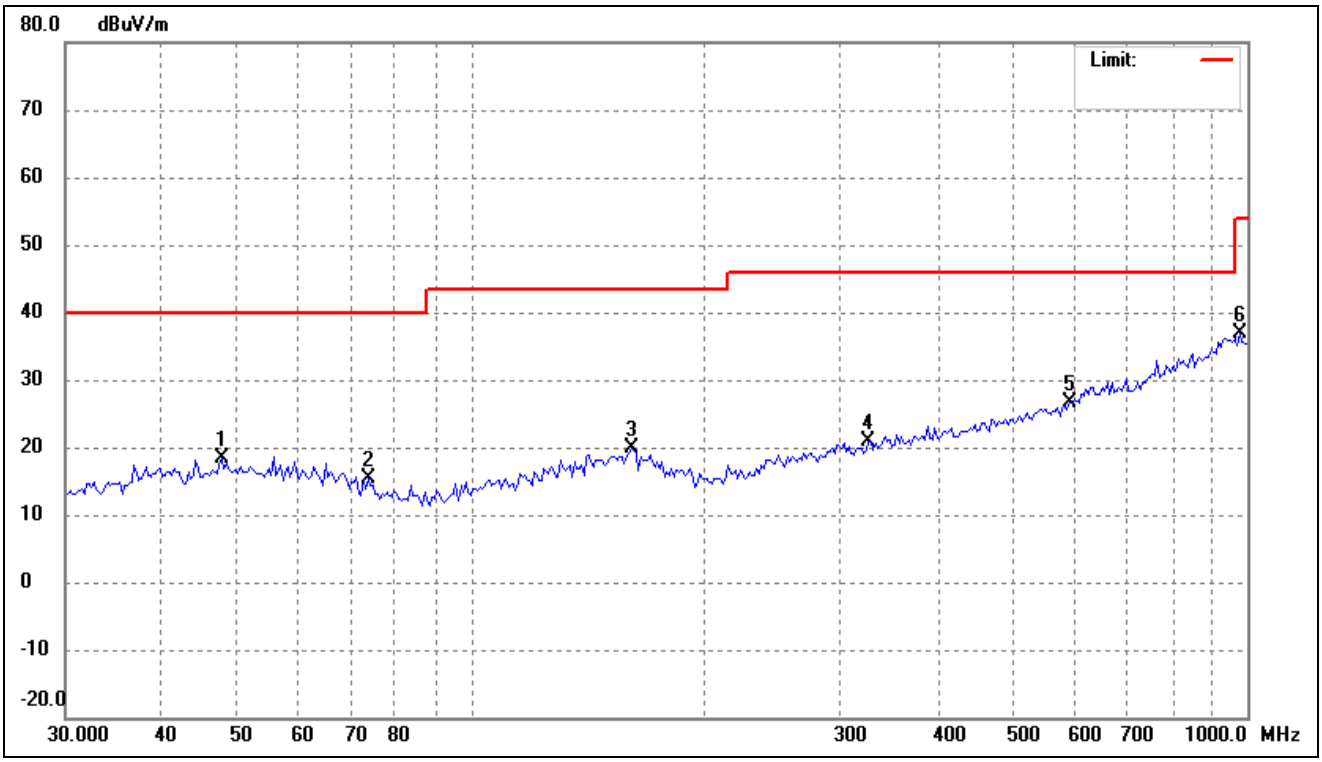
802.11a(Worst case)			
Test Channel	5180MHz(Worst case)	Polarity:	Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	51.8999	26.49	-8.21	18.28	40.00	-21.72	-	-	peak
2	132.1490	28.36	-10.13	18.23	43.50	-25.27	-	-	peak
3	243.5431	30.09	-10.67	19.42	46.00	-26.58	-	-	peak
4	376.5228	29.41	-7.10	22.31	46.00	-23.69	-	-	peak
5	615.7743	29.99	-2.16	27.83	46.00	-18.17	-	-	peak
6	932.1405	34.04	2.73	36.77	46.00	-9.23	-	-	peak

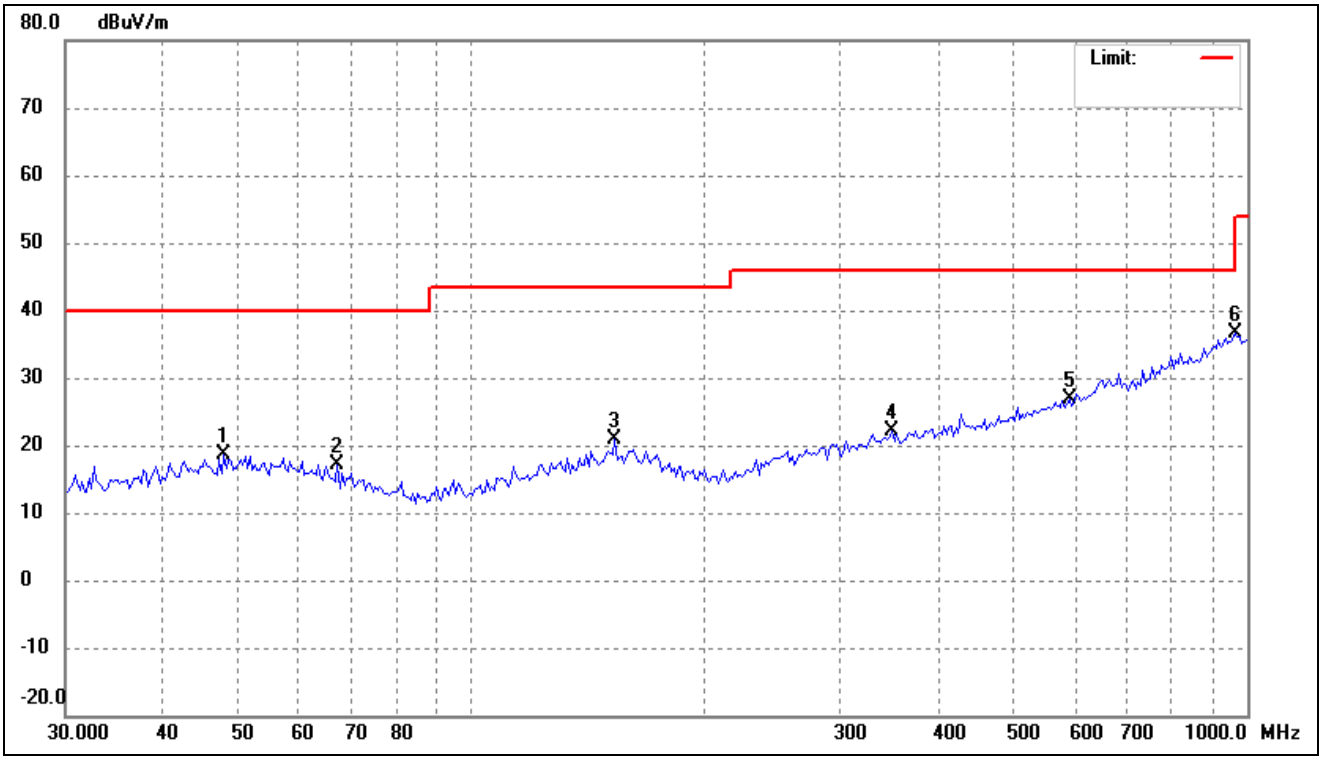
➢ 5250-5350MHz

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



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	47.7028	26.57	-8.17	18.40	40.00	-21.60	-	-	peak
2	73.7496	27.04	-11.73	15.31	40.00	-24.69	-	-	peak
3	160.8852	28.96	-8.98	19.98	43.50	-23.52	-	-	peak
4	324.8645	28.86	-7.90	20.96	46.00	-25.04	-	-	peak
5	590.3511	29.31	-2.74	26.57	46.00	-19.43	-	-	peak
6	979.1392	33.69	3.24	36.93	54.00	-17.07	-	-	peak

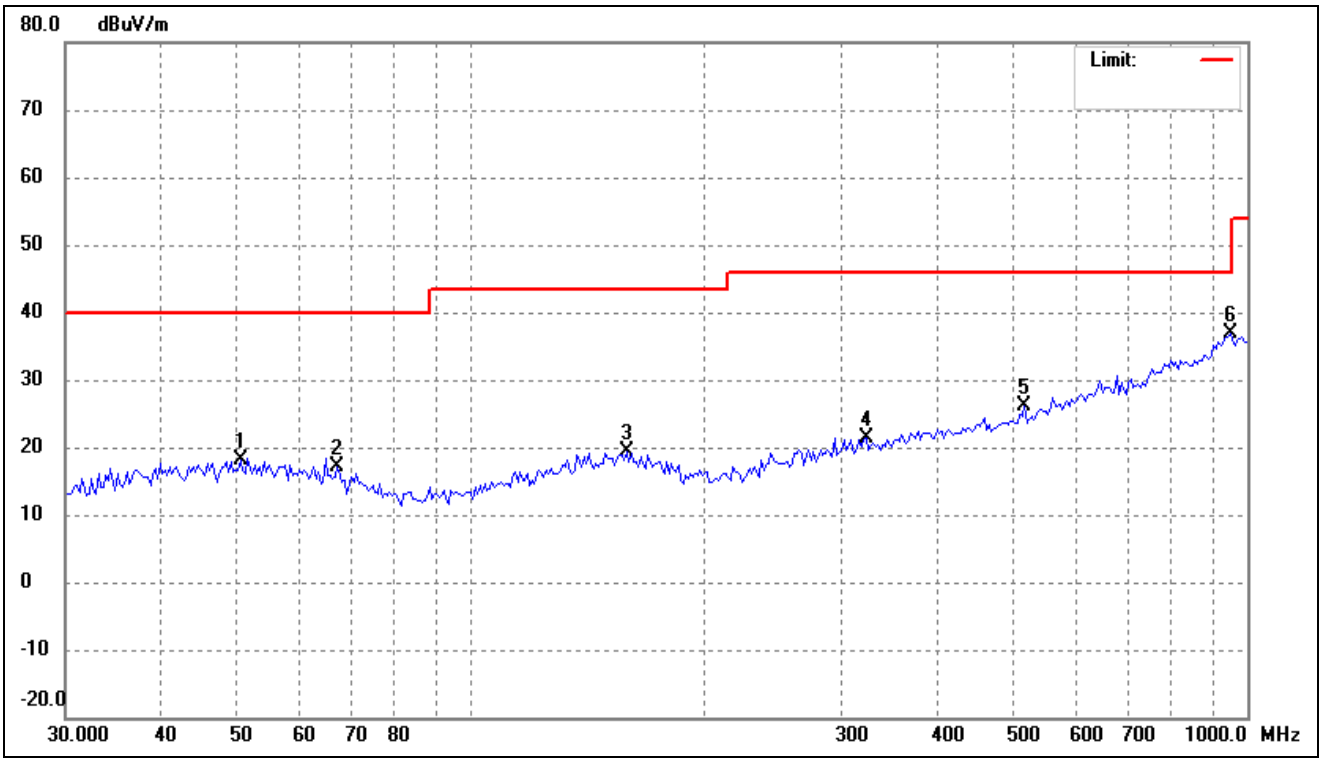
802.11a(worst case)			
Test Channel	5260MHz(worst case)	Polarity:	Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	48.0392	26.80	-8.14	18.66	40.00	-21.34	-	-	peak
2	67.3109	27.59	-10.35	17.24	40.00	-22.76	-	-	peak
3	153.1627	29.77	-8.95	20.82	43.50	-22.68	-	-	peak
4	348.5145	29.82	-7.63	22.19	46.00	-23.81	-	-	peak
5	590.3511	29.62	-2.74	26.88	46.00	-19.12	-	-	peak
6	965.4742	33.53	3.20	36.73	54.00	-17.27	-	-	peak

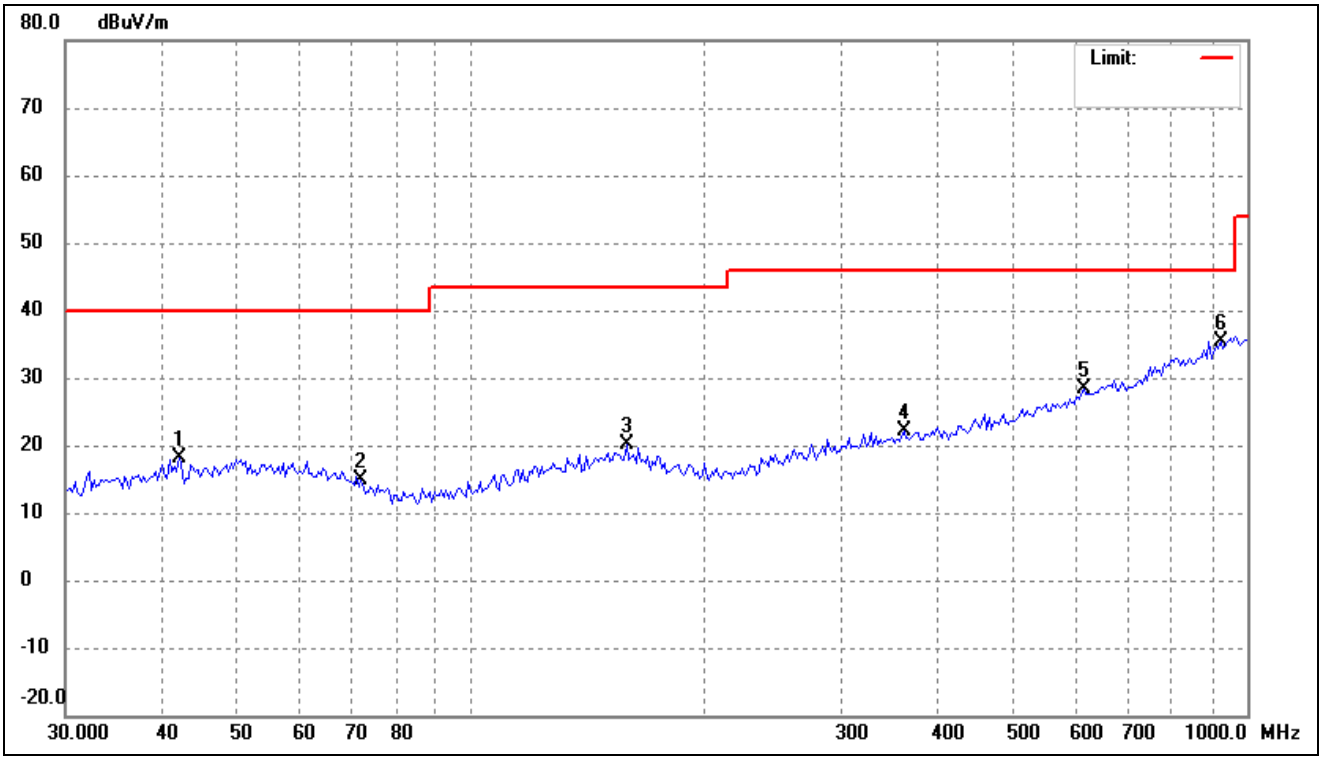
➢ 5725-5850MHz

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



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	50.4614	26.23	-8.04	18.19	40.00	-21.81	-	-	peak
2	67.3109	27.51	-10.35	17.16	40.00	-22.84	-	-	peak
3	158.6399	28.30	-8.95	19.35	43.50	-24.15	-	-	peak
4	322.5896	29.29	-7.96	21.33	46.00	-24.67	-	-	peak
5	516.5651	31.15	-4.94	26.21	46.00	-19.79	-	-	peak
6	952.0001	33.68	3.15	36.83	46.00	-9.17	-	-	peak

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

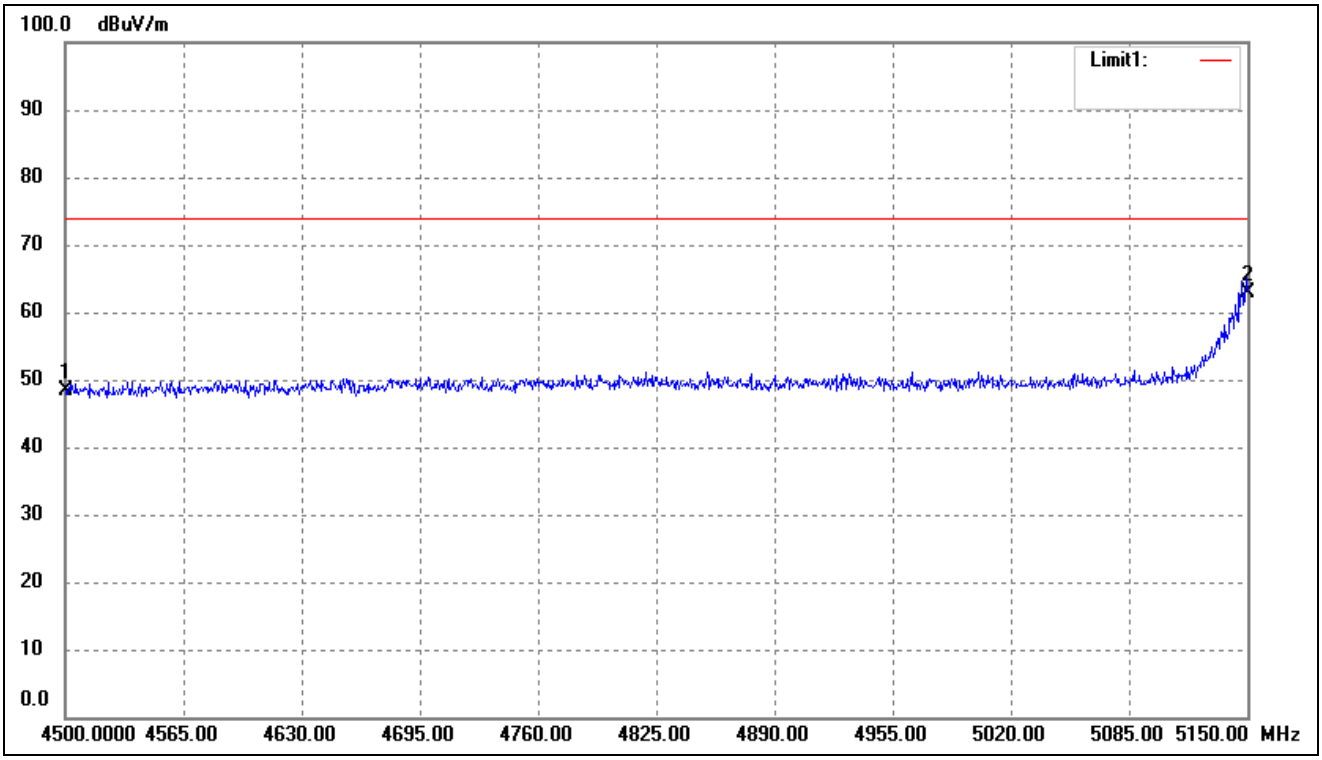


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	42.0350	26.64	-8.39	18.25	40.00	-21.75	-	-	peak
2	72.2111	26.30	-11.38	14.92	40.00	-25.08	-	-	peak
3	158.6399	29.02	-8.95	20.07	43.50	-23.43	-	-	peak
4	360.9775	29.49	-7.40	22.09	46.00	-23.91	-	-	peak
5	615.7743	30.46	-2.16	28.30	46.00	-17.70	-	-	peak
6	925.6132	32.85	2.59	35.44	46.00	-10.56	-	-	peak

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

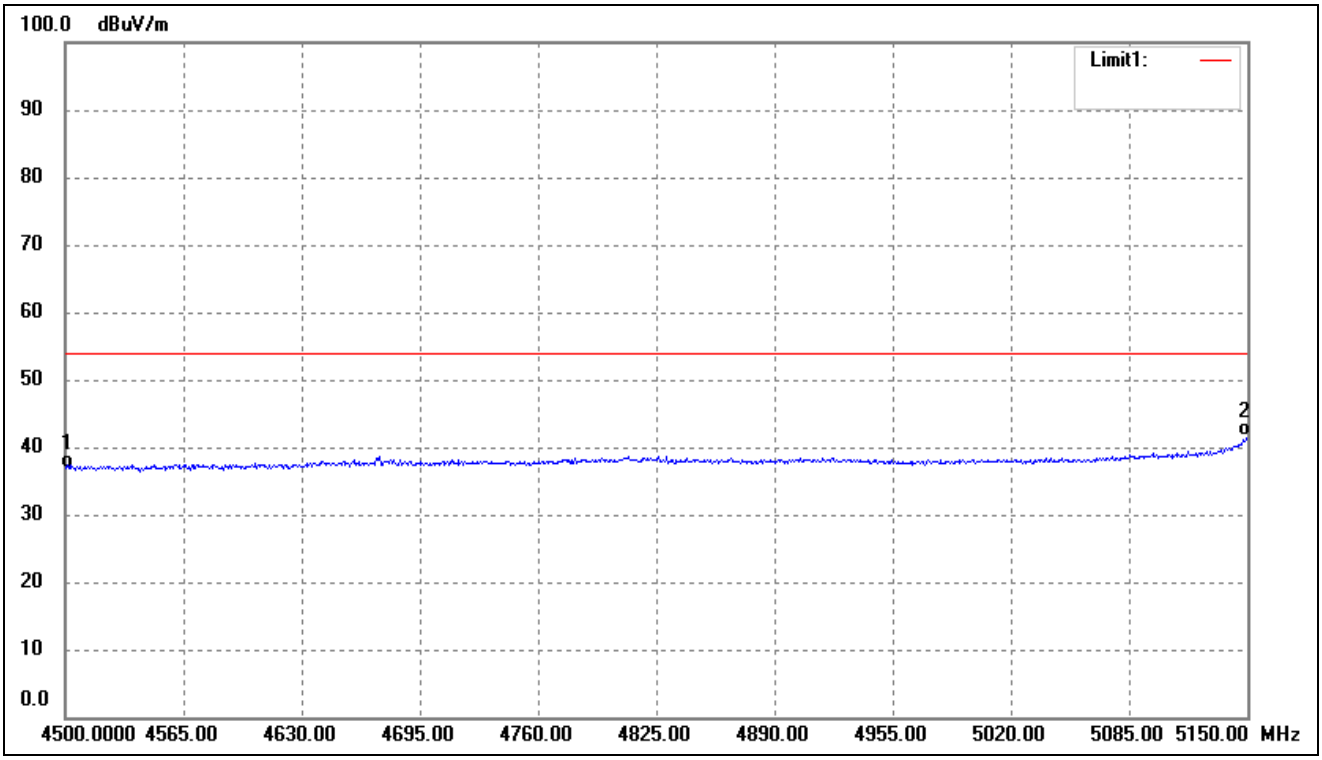
➢ Spurious Emission above 1GHz

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



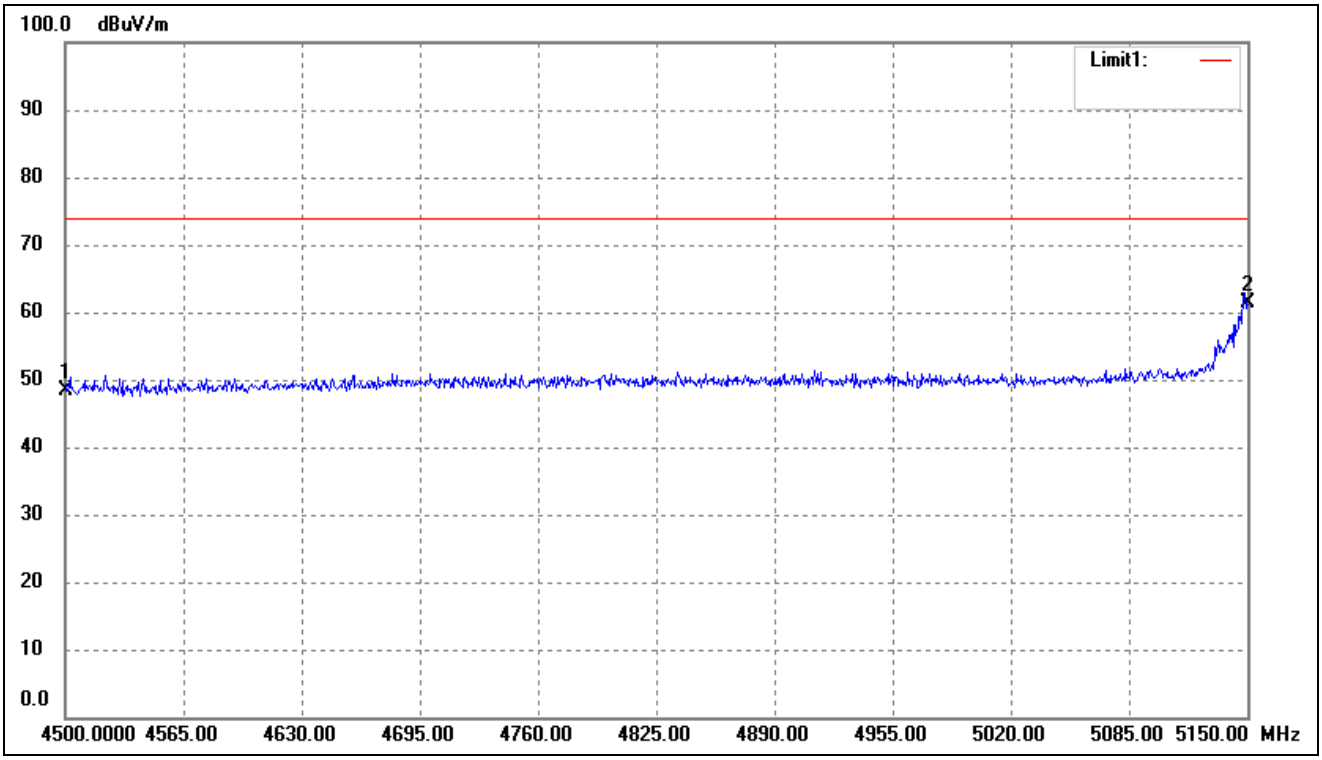
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	4500.000	51.94	-3.45	48.49	74.00	-25.51	-	-	peak
2	5150.000	65.18	-2.23	62.95	74.00	-11.05	-	-	peak

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



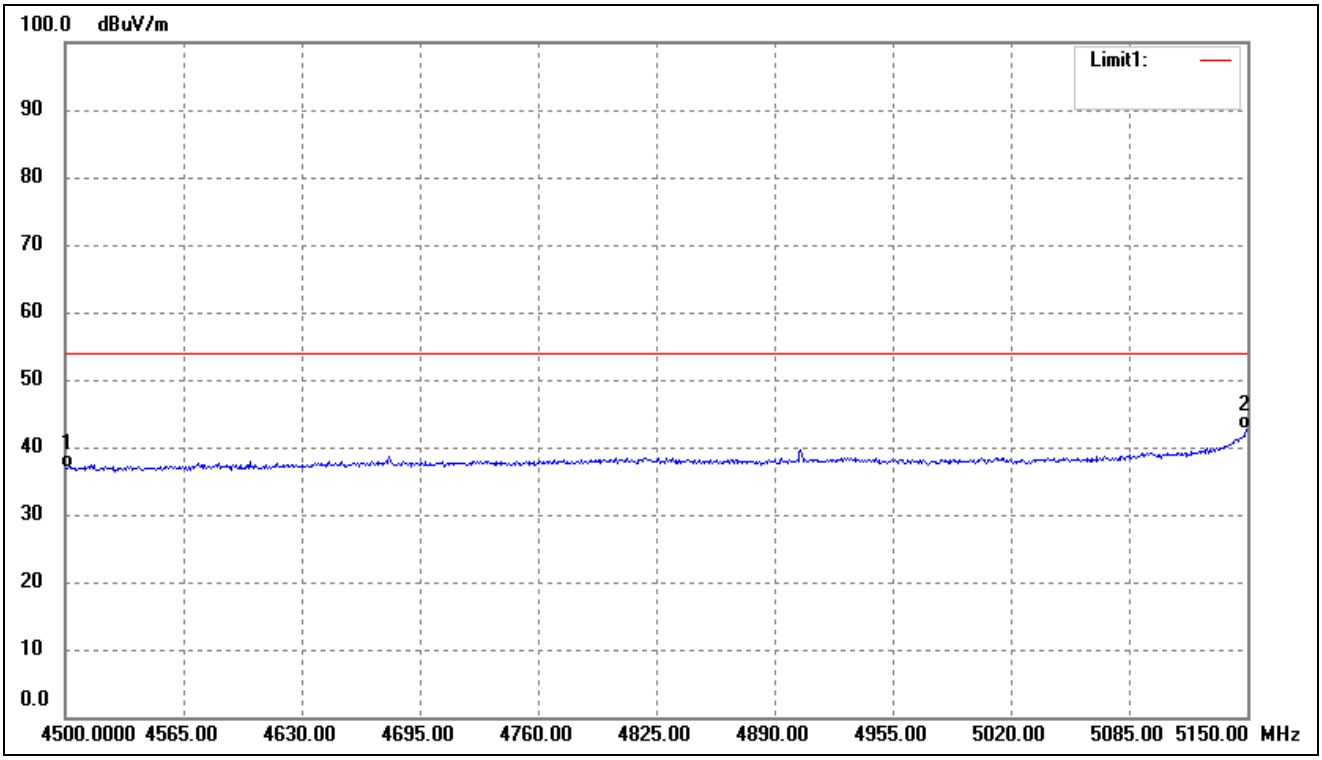
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	4500.000	40.33	-3.45	36.88	54.00	-17.12	-	-	AVG
2	5150.000	43.79	-2.23	41.56	54.00	-12.44	-	-	AVG

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



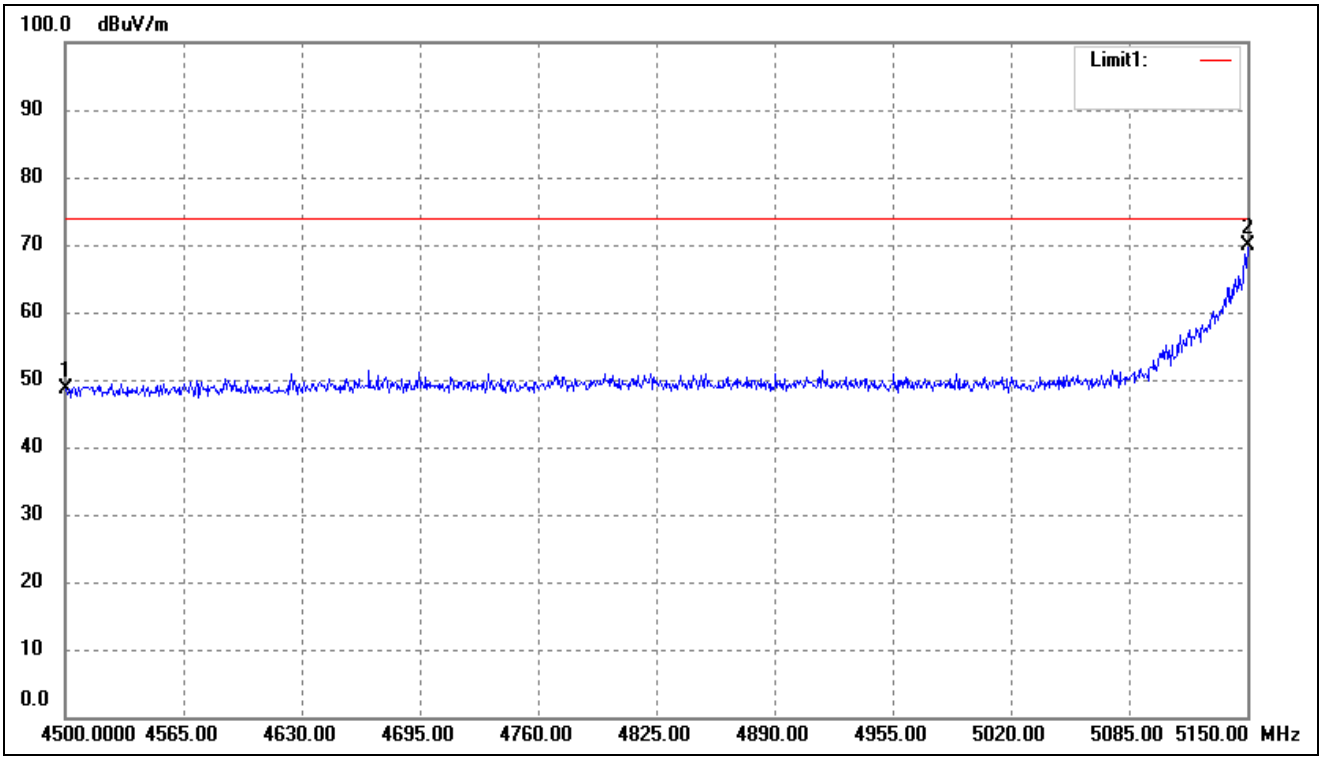
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	4500.000	51.75	-3.45	48.30	74.00	-25.70	-	-	peak
2	5150.000	63.60	-2.23	61.37	74.00	-12.63	-	-	peak

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



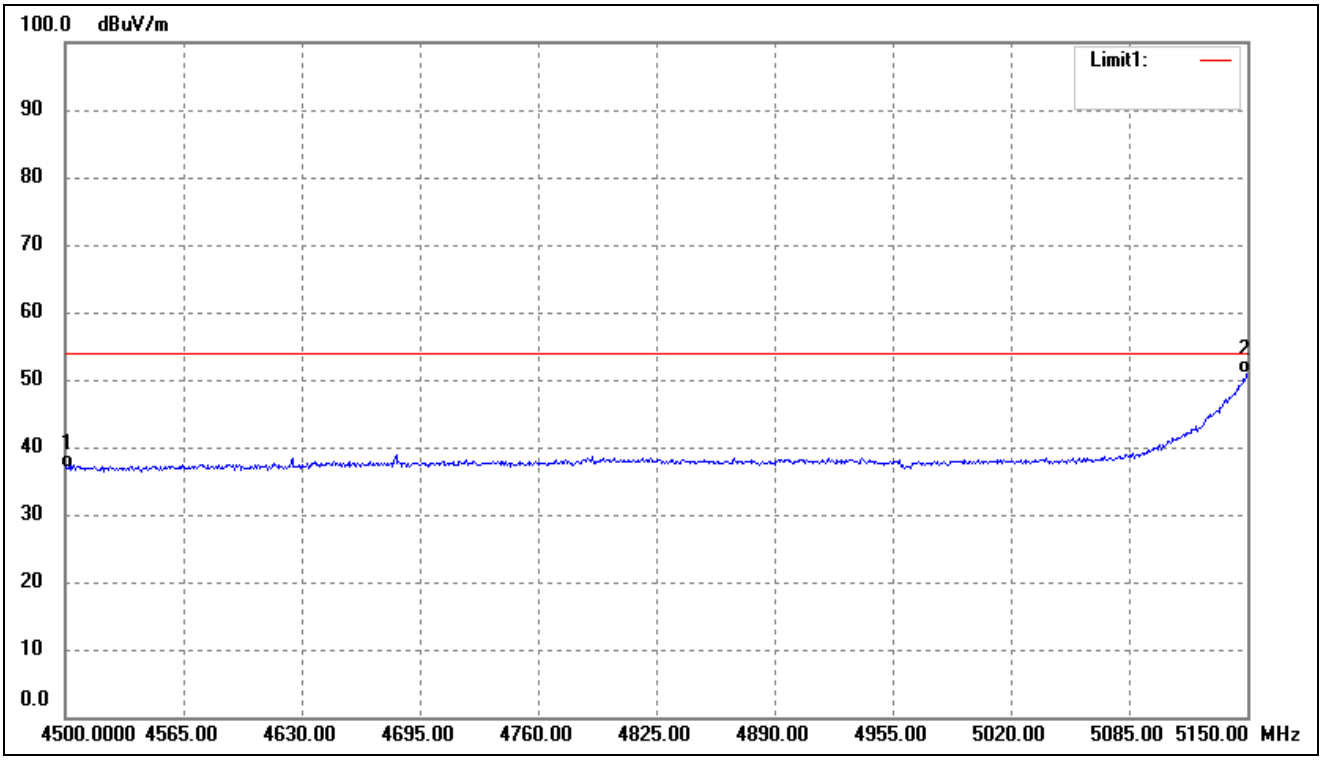
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	4500.000	40.43	-3.45	36.98	54.00	-17.02	-	-	AVG
2	5150.000	44.98	-2.23	42.75	54.00	-11.25	-	-	AVG

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



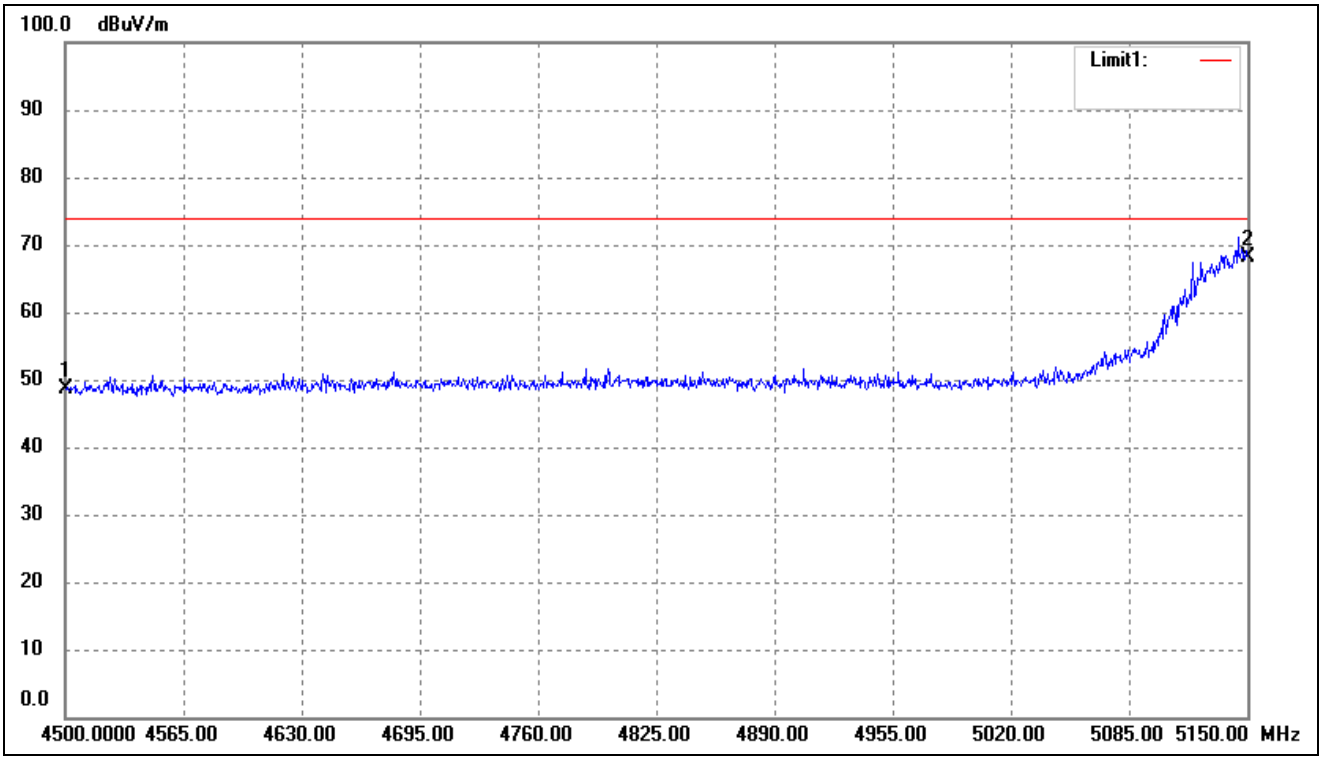
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	4500.000	51.99	-3.45	48.54	74.00	-25.46	-	-	peak
2	5150.000	72.06	-2.23	69.83	74.00	-4.17	-	-	peak

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



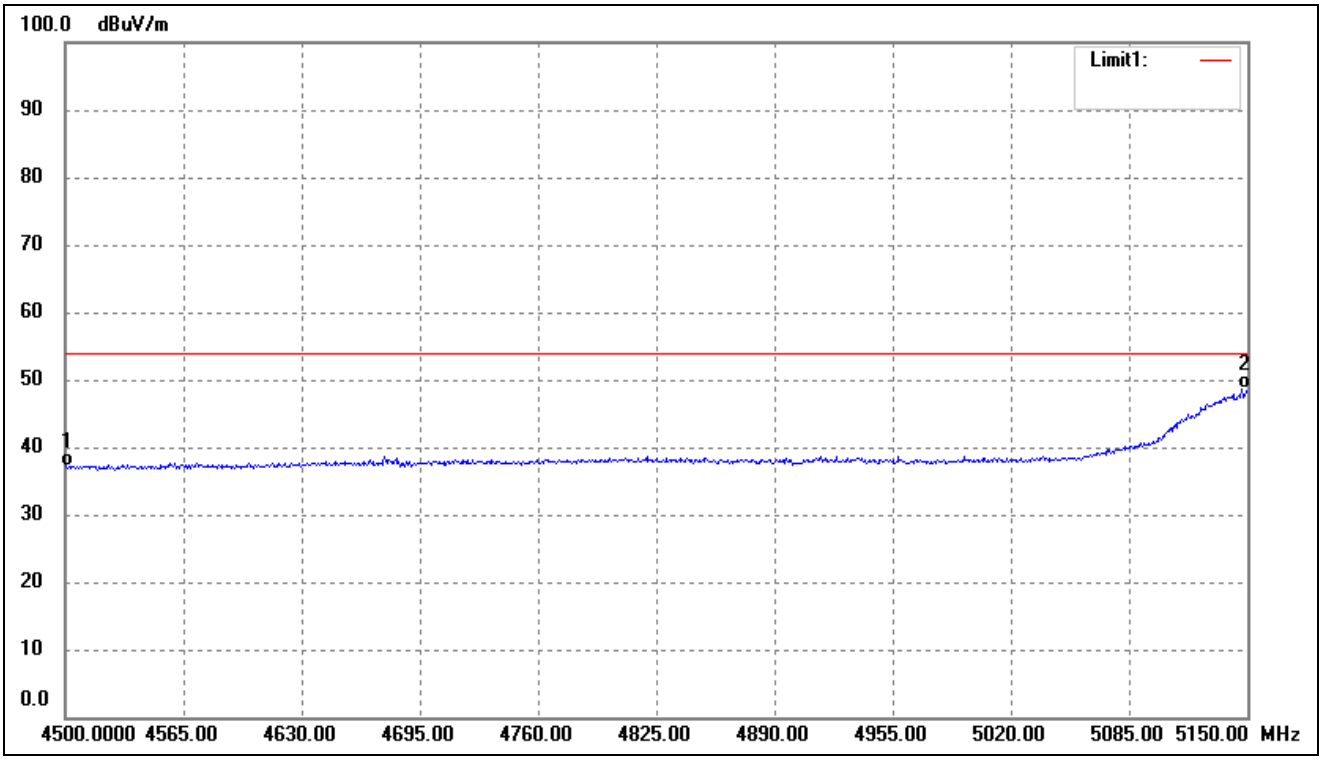
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	4500.000	40.22	-3.45	36.77	54.00	-17.23	-	-	AVG
2	5150.000	53.23	-2.23	51.00	54.00	-3.00	-	-	AVG

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



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	4500.000	51.96	-3.45	48.51	74.00	-25.49	-	-	peak
2	5150.000	70.43	-2.23	68.20	74.00	-5.80	-	-	peak

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



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	4500.000	40.51	-3.45	37.06	54.00	-16.94	-	-	AVG
2	5150.000	50.76	-2.23	48.53	54.00	-5.47	-	-	AVG

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

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

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

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5180MHz)							
10360	59.58	7.11	66.69	74	-7.31	H	PK
10360	40.38	7.11	47.49	54	-6.51	H	AV
10360	57.78	7.11	64.89	74	-9.11	V	PK
10360	38.91	7.11	46.02	54	-7.98	V	AV
Middle Channel (5200MHz)							
10400	55.13	7.22	62.35	74	-11.65	H	PK
10400	41.44	7.22	48.66	54	-5.34	H	AV
10400	56.69	7.22	63.91	74	-10.09	V	PK
10400	41.34	7.22	48.56	54	-5.44	V	AV
High Channel (5240MHz)							
10480	59.31	7.69	67	74	-7.00	H	PK
10480	41.1	7.69	48.79	54	-5.21	H	AV
10480	60.13	7.69	67.82	74	-6.18	V	PK
10480	38.53	7.69	46.22	54	-7.78	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5260MHz)							
10520	59.37	7.96	67.33	74	-6.67	H	PK
10520	40.66	7.96	48.62	54	-5.38	H	AV
10520	55.42	7.96	63.38	74	-10.62	V	PK
10520	39.98	7.96	47.94	54	-6.06	V	AV
Middle Channel (5280MHz)							
10560	58.43	8.02	66.45	74	-7.55	H	PK
10560	41.56	8.02	49.58	54	-4.42	H	AV
10560	57.81	8.02	65.83	74	-8.17	V	PK
10560	40.76	8.02	48.78	54	-5.22	V	AV
High Channel (5320MHz)							
10640	58.38	8.35	66.73	74	-7.27	H	PK
10640	41.56	8.35	49.91	54	-4.09	H	AV
10640	59.62	8.35	67.97	74	-6.03	V	PK
10640	39.32	8.35	47.67	54	-6.33	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5745MHz)							
11490	58.14	9.45	67.59	74	-6.41	H	PK
11490	42.64	9.45	52.09	54	-1.91	H	AV
11490	55.01	9.45	64.46	74	-9.54	V	PK
11490	39.41	9.45	48.86	54	-5.14	V	AV
Middle Channel (5785MHz)							
11570	57.21	9.62	66.83	74	-7.17	H	PK
11570	41.72	9.62	51.34	54	-2.66	H	AV
11570	56.05	9.62	65.67	74	-8.33	V	PK
11570	39.93	9.62	49.55	54	-4.45	V	AV
High Channel (5825MHz)							
11650	58.05	9.84	67.89	74	-6.11	H	PK
11650	39.41	9.84	49.25	54	-4.75	H	AV
11650	59.73	9.84	69.57	74	-4.43	V	PK
11650	41.26	9.84	51.1	54	-2.9	V	AV

- Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-40.58	-27
Highest	Above 5350	-41.34	-27
Note: the data just list the worst cases			

- Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-40.64	-27
Highest	Above 5350	-39.57	-27
Note: the data just list the worst cases			

- Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5650	-46.90	-27
	5650 to 5700	-36.76	-27 to -17
	5700 to 5720	-27.50	-17 to 15.6
	5720 to 5725	-18.20	15.6 to 27
Highest	5850 to 5855	-16.19	27 to 15.6
	5855 to 5875	-26.43	15.6 to -17
	5875 to 5925	-35.71	-17 to -27
	Above 5925	-39.58	-27
Note: the data just list the worst cases			

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

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5180MHz)							
10360	58.23	7.11	65.34	74	-8.66	H	PK
10360	43.63	7.11	50.74	54	-3.26	H	AV
10360	56.6	7.11	63.71	74	-10.29	V	PK
10360	40.04	7.11	47.15	54	-6.85	V	AV
Middle Channel (5200MHz)							
10400	56.62	7.22	63.84	74	-10.16	H	PK
10400	39.06	7.22	46.28	54	-7.72	H	AV
10400	55.83	7.22	63.05	74	-10.95	V	PK
10400	38.54	7.22	45.76	54	-8.24	V	AV
High Channel (5240MHz)							
10480	61.49	7.69	69.18	74	-4.82	H	PK
10480	38.27	7.69	45.96	54	-8.04	H	AV
10480	59.00	7.69	66.69	74	-7.31	V	PK
10480	39.22	7.69	46.91	54	-7.09	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5260MHz)							
10520	59.49	7.96	67.45	74	-6.55	H	PK
10520	43.46	7.96	51.42	54	-2.58	H	AV
10520	58.61	7.96	66.57	74	-7.43	V	PK
10520	41.19	7.96	49.15	54	-4.85	V	AV
Middle Channel (5280MHz)							
10560	56.72	8.02	64.74	74	-9.26	H	PK
10560	41.36	8.02	49.38	54	-4.62	H	AV
10560	55.62	8.02	63.64	74	-10.36	V	PK
10560	41.62	8.02	49.64	54	-4.36	V	AV
High Channel (5320MHz)							
10640	58.95	8.35	67.3	74	-6.7	H	PK
10640	39.47	8.35	47.82	54	-6.18	H	AV
10640	61.36	8.35	69.71	74	-4.29	V	PK
10640	41.64	8.35	49.99	54	-4.01	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	59.46	9.45	68.91	74	-5.09	H	PK
11490	40.99	9.45	50.44	54	-3.56	H	AV
11490	58.84	9.45	68.29	74	-5.71	V	PK
11490	41.93	9.45	51.38	54	-2.62	V	AV
Middle Channel (5785MHz)							
11570	55.83	9.62	65.45	74	-8.55	H	PK
11570	38.34	9.62	47.96	54	-6.04	H	AV
11570	57.93	9.62	67.55	74	-6.45	V	PK
11570	38.49	9.62	48.11	54	-5.89	V	AV
High Channel (5825MHz)							
11650	60.52	9.84	70.36	74	-3.64	H	PK
11650	41.44	9.84	51.28	54	-2.72	H	AV
11650	60.08	9.84	69.92	74	-4.08	V	PK
11650	39.30	9.84	49.14	54	-4.86	V	AV

- Out of Band edge 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-42.53	-27
Highest	Above 5350	-46.17	-27
Note: the data just list the worst cases			

- Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-46.97	-27
Highest	Above 5350	-42.34	-27
Note: the data just list the worst cases			

- Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5650	-45.69	-27
	5650 to 5700	-37.91	-27 to -17
	5700 to 5720	-28.11	-17 to 15.6
	5720 to 5725	-16.89	15.6 to 27
Highest	5850 to 5855	-14.88	27 to 15.6
	5855 to 5875	-26.04	15.6 to -17
	5875 to 5925	-36.01	-17 to -27
	Above 5925	-38.72	-27
Note: the data just list the worst cases			

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

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5190MHz)							
10380	61.02	7.89	68.91	74	-5.09	H	PK
10380	40.31	7.89	48.2	54	-5.80	H	AV
10380	55.84	7.89	63.73	74	-10.27	V	PK
10380	41.51	7.89	49.4	54	-4.60	V	AV
High Channel (5230MHz)							
10460	55.84	7.97	63.81	74	-10.19	H	PK
10460	38.79	7.97	46.76	54	-7.24	H	AV
10460	57.89	7.97	65.86	74	-8.14	V	PK
10460	41.61	7.97	49.58	54	-4.42	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5270MHz)							
10540	58.41	8.16	66.57	74	-7.43	H	PK
10540	38.50	8.16	46.66	54	-7.34	H	AV
10540	61.54	8.16	69.7	74	-4.30	V	PK
10540	41.26	8.16	49.42	54	-4.58	V	AV
High Channel (5310MHz)							
10620	58.60	8.57	67.17	74	-6.83	H	PK
10620	41.95	8.57	50.52	54	-3.48	H	AV
10620	60.20	8.57	68.77	74	-5.23	V	PK
10620	39.81	8.57	48.38	54	-5.62	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5755MHz)							
11510	58.8	9.45	68.25	74	-5.75	H	PK
11510	41.52	9.45	50.97	54	-3.03	H	AV
11510	56.96	9.45	66.41	74	-7.59	V	PK
11510	38.21	9.45	47.66	54	-6.34	V	AV
High Channel (5795MHz)							
11590	57.15	9.27	66.42	74	-7.58	H	PK
11590	41.01	9.27	50.28	54	-3.72	H	AV
11590	55.25	9.27	64.52	74	-9.48	V	PK
11590	41.12	9.27	50.39	54	-3.61	V	AV

- Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-39.57	-27
Highest	Above 5350	-41.30	-27
Note: the data just list the worst cases			

- Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-41.19	-27
Highest	Above 5350	-39.85	-27
Note: the data just list the worst cases			

- Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5650	-45.91	-27
	5650 to 5700	-36.25	-27 to -17
	5700 to 5720	-27.47	-17 to 15.6
	5720 to 5725	-17.16	15.6 to 27
Highest	5850 to 5855	-15.46	27 to 15.6
	5855 to 5875	-26.07	15.6 to -17
	5875 to 5925	-37.65	-17 to -27
	Above 5925	-39.44	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.250-5.350GHz, 5.725-5.850GHz (802.11ac VH80)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5210MHz							
10420	58.94	7.53	66.47	74	-7.53	H	PK
10420	43.31	7.53	50.84	54	-3.16	H	AV
10420	55.18	7.53	62.71	74	-11.29	H	PK
10420	41.04	7.53	48.57	54	-5.43	H	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5290MHz							
10580	55.48	7.95	63.43	74	-10.57	H	PK
10580	40.51	7.95	48.46	54	-5.54	H	AV
10580	55.2	7.95	63.15	74	-10.85	V	PK
10580	38.26	7.95	46.21	54	-7.79	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5775MHz							
11550	59.94	9.93	69.87	74	-4.13	H	PK
11550	39.31	9.93	49.24	54	-4.76	H	AV
11550	58.38	9.93	68.31	74	-5.69	V	PK
11550	39.04	9.93	48.97	54	-5.03	V	AV

- Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-40.64	-27
Highest	Above 5350	-39.63	-27
Note: the data just list the worst cases			

- Out of Band edge for 5250-5350MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-39.58	-27
Highest	Above 5350	-39.26	-27
Note: the data just list the worst cases			

- Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5650	-46.83	-27
	5650 to 5700	-36.66	-27 to -17
	5700 to 5720	-27.75	-17 to 15.6
	5720 to 5725	-16.42	15.6 to 27
Highest	5850 to 5855	-15.02	27 to 15.6
	5855 to 5875	-26.45	15.6 to -17
	5875 to 5925	-37.33	-17 to -27
	Above 5925	-40.11	-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. Testing is carried out with frequency rang 9kHz to 40Ghz, other than listed in the table above are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

9. Frequency Stability

9.1 Standard Applicable

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

9.2 Test Procedure

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

9.3 Summary of Test Results/Plots

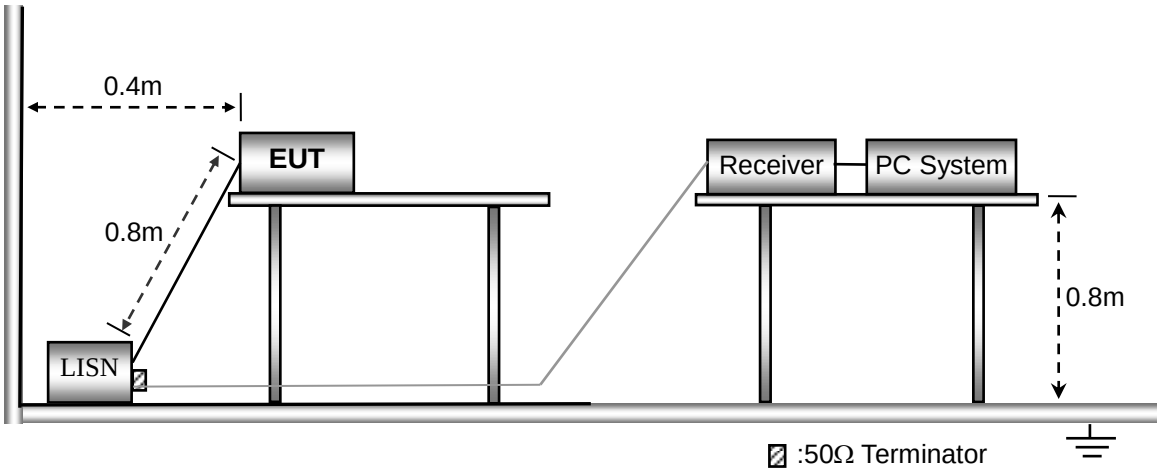
Please refer to Appendix D

10. Conducted Emissions

10.1 Test Procedure

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

10.2 Basic Test Setup Block Diagram



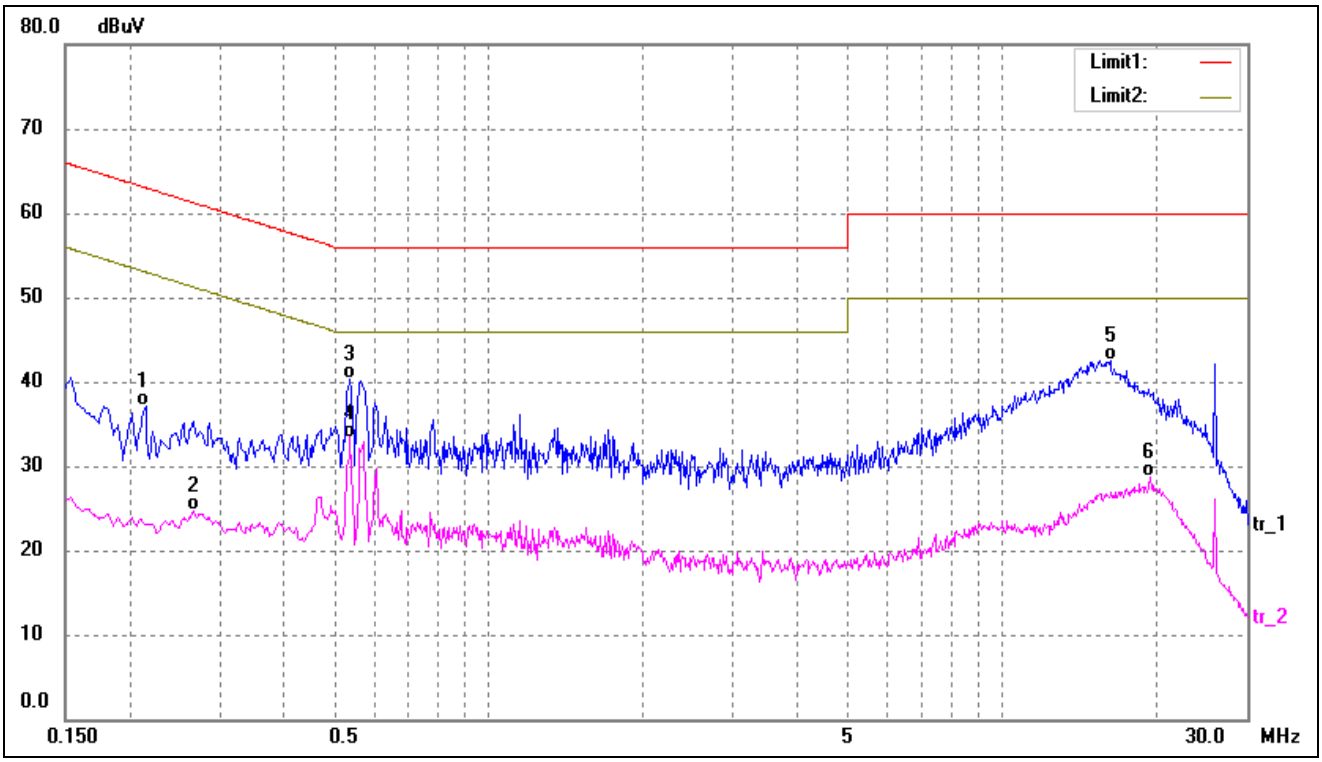
10.3 Test Receiver Setup

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

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

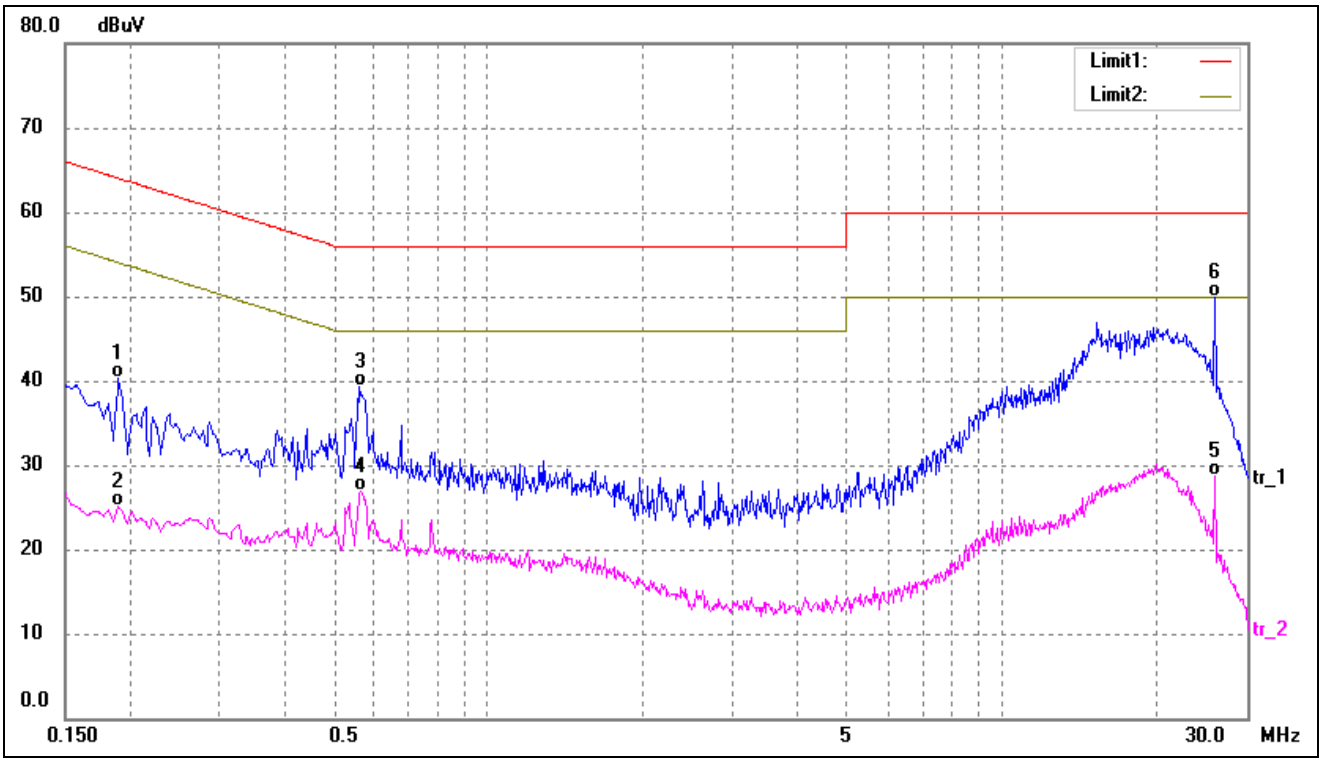
10.4 Summary of Test Results/Plots

Test Mode	Communication	AC120V 60Hz	Polarity:	Neutral



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.2139	26.72	10.29	37.01	63.05	-26.04	QP
2	0.2660	14.43	10.25	24.68	51.24	-26.56	AVG
3	0.5380	30.10	10.22	40.32	56.00	-15.68	QP
4*	0.5380	23.18	10.22	33.40	46.00	-12.60	AVG
5	16.2500	32.20	10.27	42.47	60.00	-17.53	QP
6	19.4980	18.29	10.36	28.65	50.00	-21.35	AVG

Test Mode	Communication	AC120V 60Hz	Polarity:	Line



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1900	30.01	10.30	40.31	64.03	-23.72	QP
2	0.1900	14.82	10.30	25.12	54.03	-28.91	AVG
3	0.5580	29.08	10.21	39.29	56.00	-16.71	QP
4	0.5660	16.64	10.21	26.85	46.00	-19.15	AVG
5	26.0018	18.25	10.39	28.64	50.00	-21.36	AVG
6*	26.0020	39.56	10.39	49.95	60.00	-10.05	QP

APPENDIX SUMMARY

Project No.	WTX23X02023511W	Test Engineer	Timi Huang
Start date	2023/2/27	Finish date	2023/3/14
Temperature	23℃	Humidity	48%
RF specifications	U-NII		

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

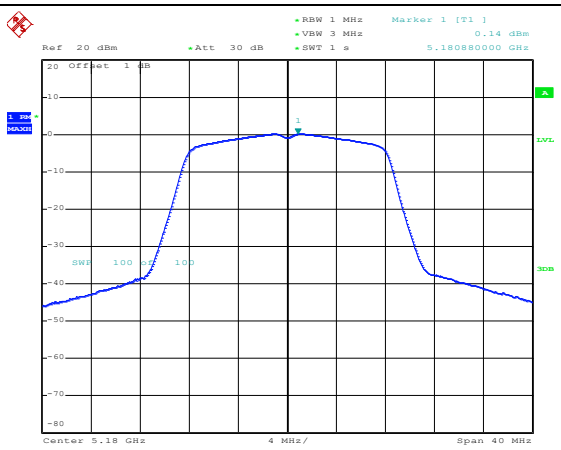
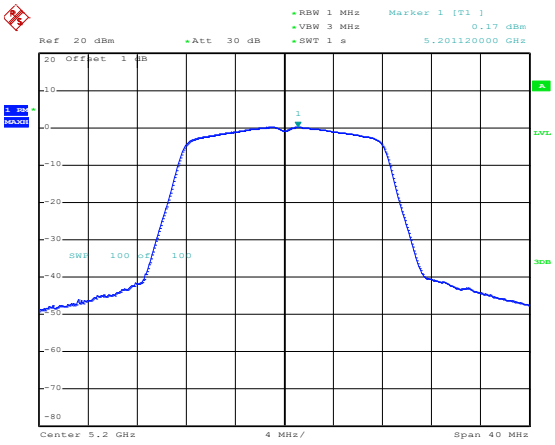
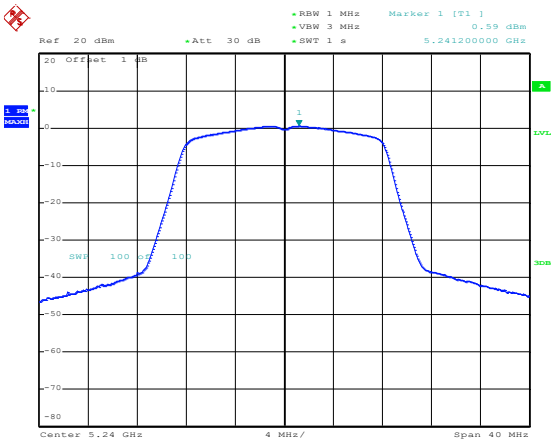
APPENDIX A

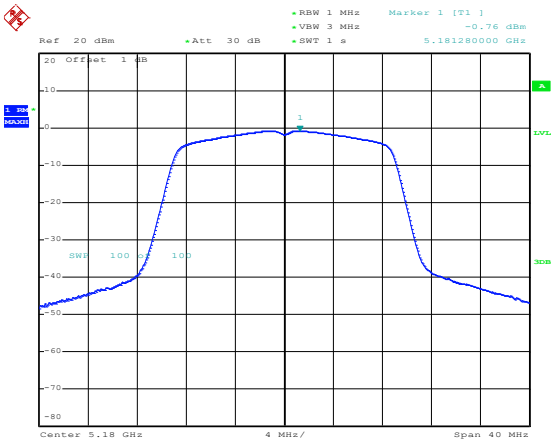
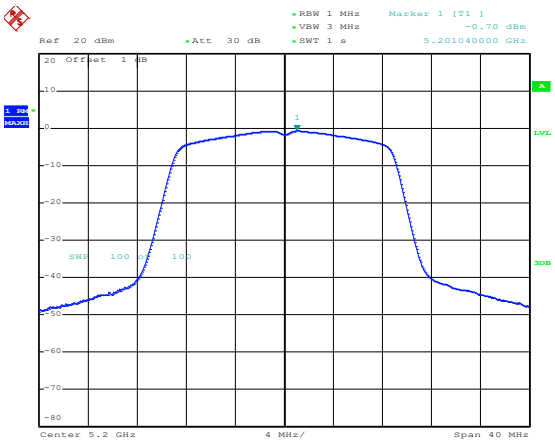
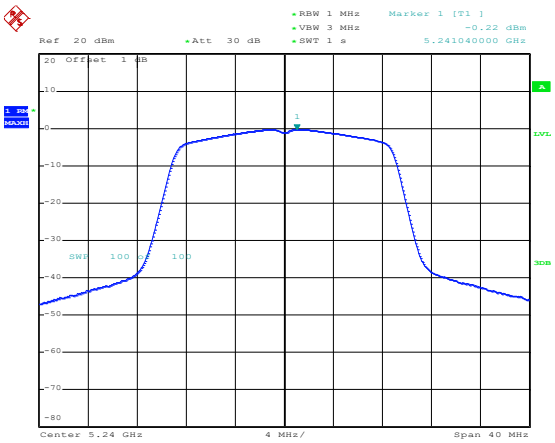
Power Spectral Density			
U-NII-1:5150-5250MHz			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a	5180	0.14	11
	5200	0.17	11
	5240	0.59	11
802.11n-HT20	5180	-0.76	11
	5200	-0.70	11
	5240	-0.22	11
802.11n-HT40	5190	-4.68	11
	5230	-4.46	11
802.11ac-VHT80	5210	-9.05	11

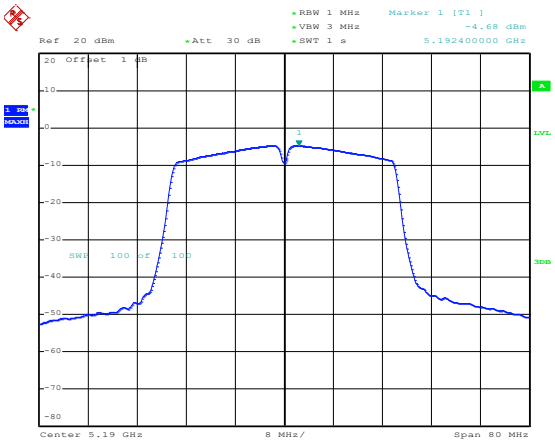
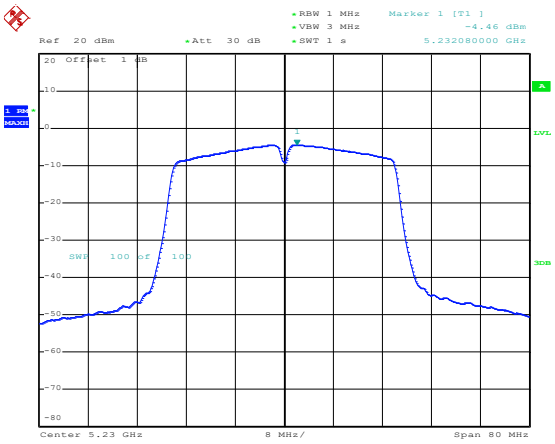
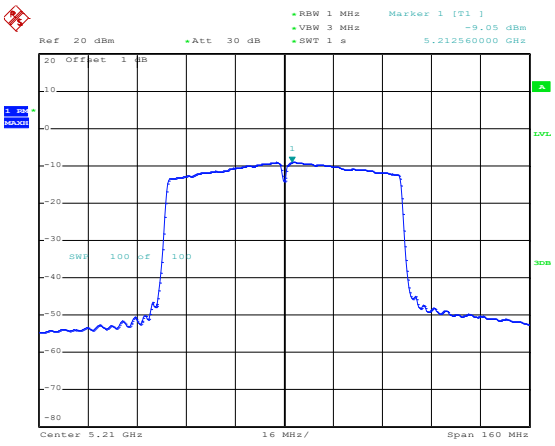
U-NII-2A: 5250-5350MHz			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a	5260	0.88	11
	5280	1.16	11
	5320	1.07	11
802.11n-HT20	5260	-0.53	11
	5280	-0.35	11
	5320	-0.28	11
802.11n-HT40	5270	-4.35	11
	5310	-4.31	11
802.11ac-VHT80	5290	-8.81	11

U-NII-3: 5725-5850MHz			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit dBm/500kHz
802.11a	5745	-2.67	30
	5785	-3.01	30
	5825	-3.06	30
802.11n-HT20	5745	-3.56	30
	5785	-3.83	30
	5825	-3.99	30
802.11n HT40	5755	-6.20	30
	5795	-6.36	30
802.11ac VH80	5775	-10.96	30

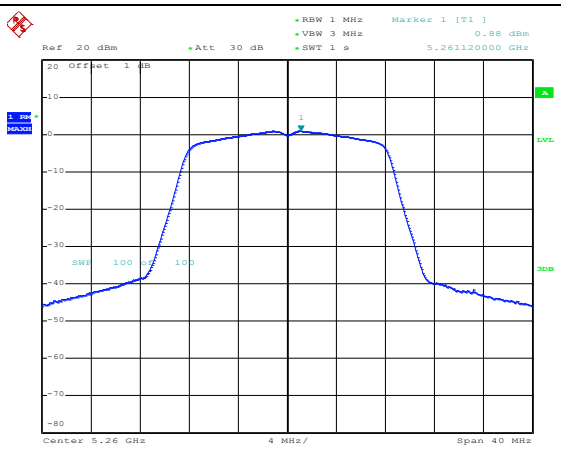
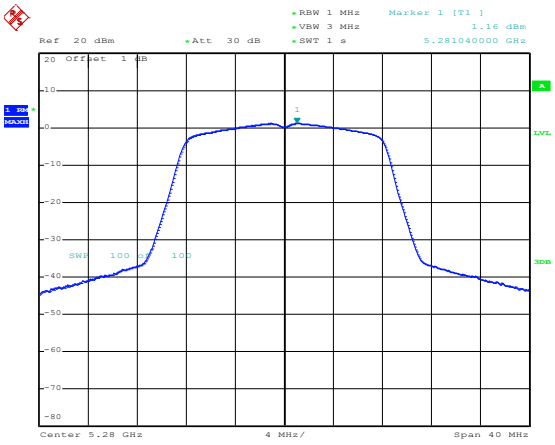
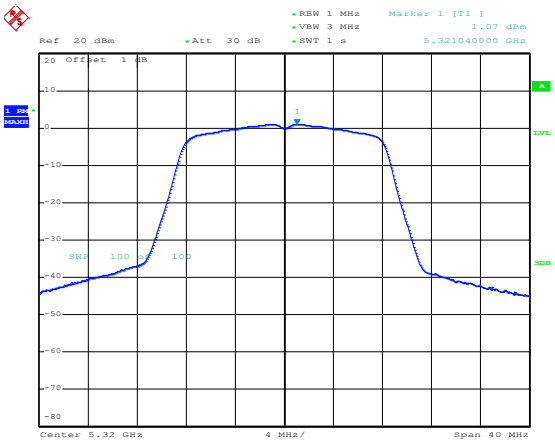
5150-5250MHz

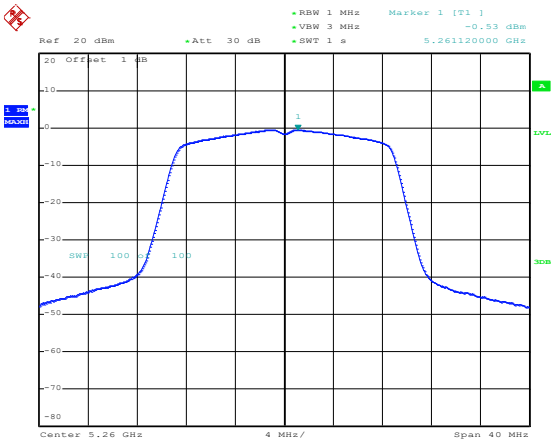
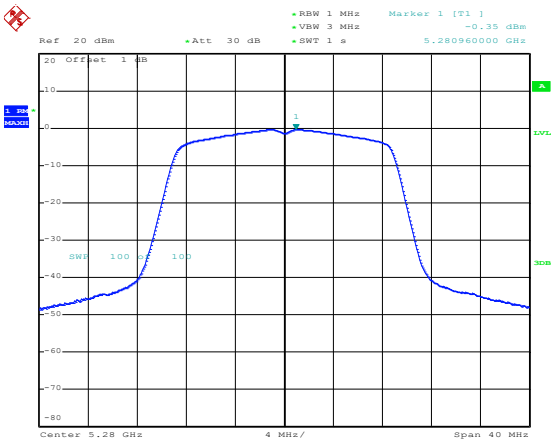
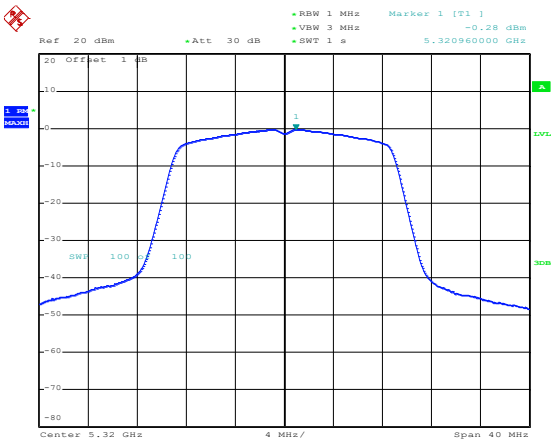
802.11a-Low	
802.11a-Middle	
802.11a-High	

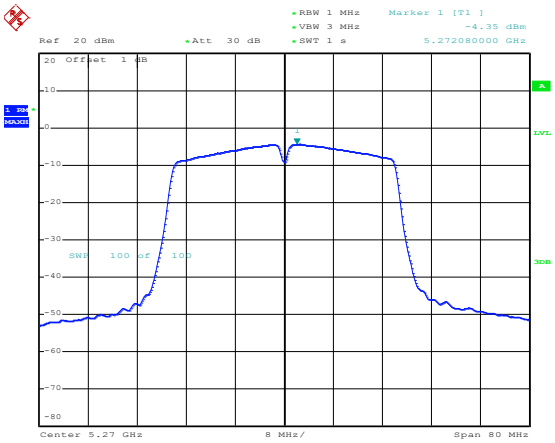
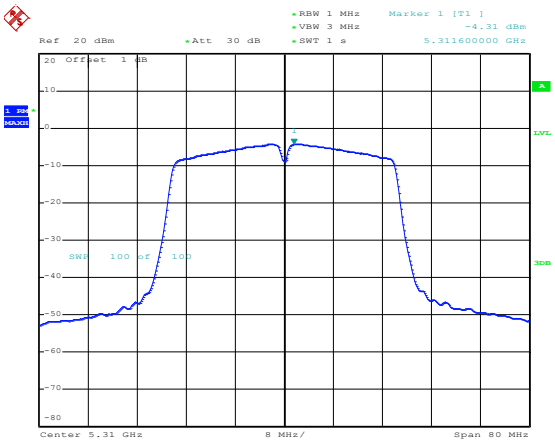
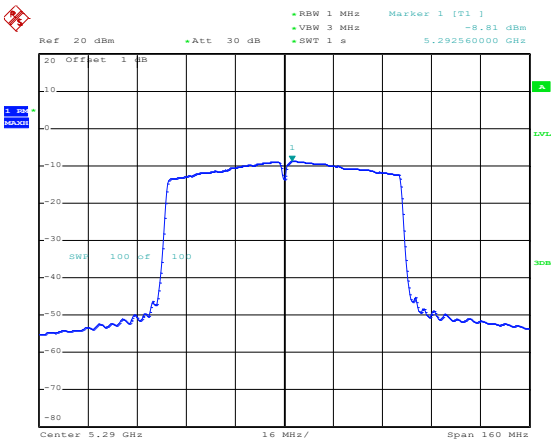
802.11n-HT20-Low	 Date: 14.MAR.2023 10:07:05
802.11n-HT20-Middle	 Date: 14.MAR.2023 10:11:28
802.11n-HT20-High	 Date: 14.MAR.2023 10:13:38

802.11n-HT40-Low	
802.11n-HT40-High	
802.11ac-VHT80-Low	

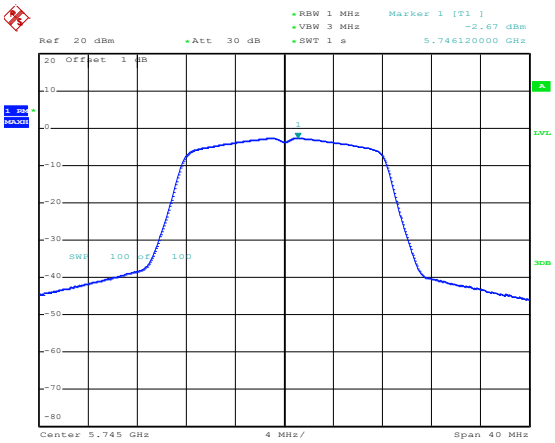
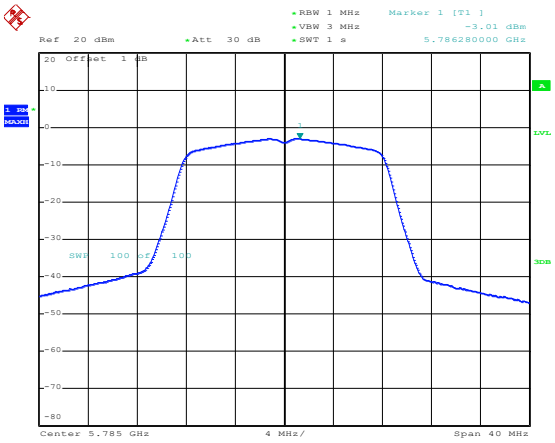
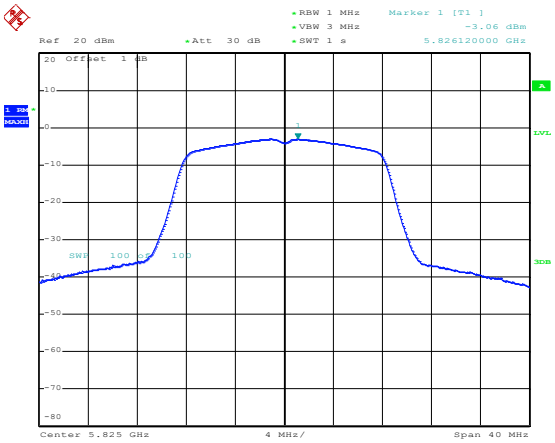
5250-5350MHz

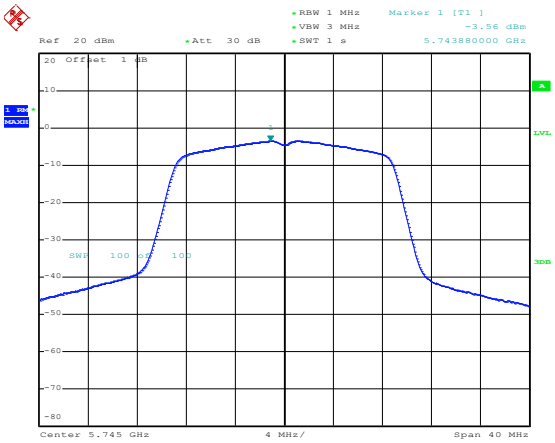
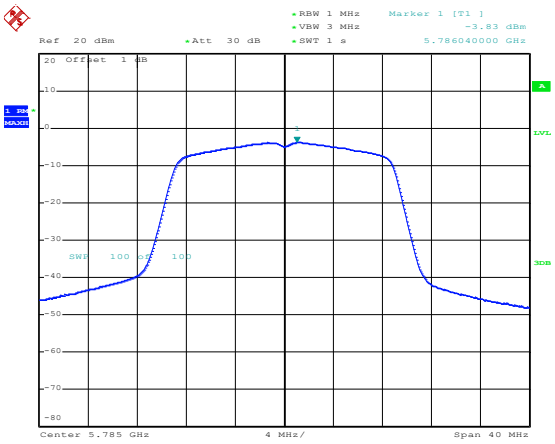
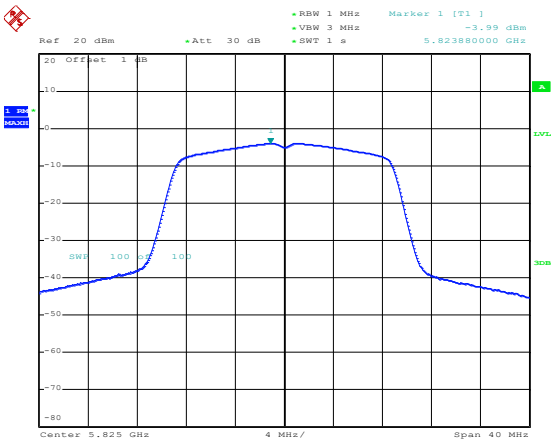
802.11a-Low	
802.11a-Middle	
802.11a-High	

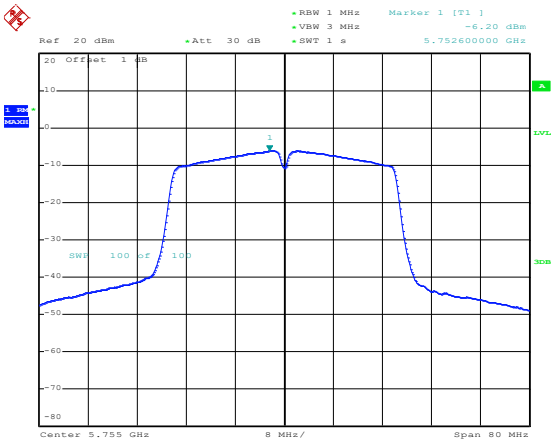
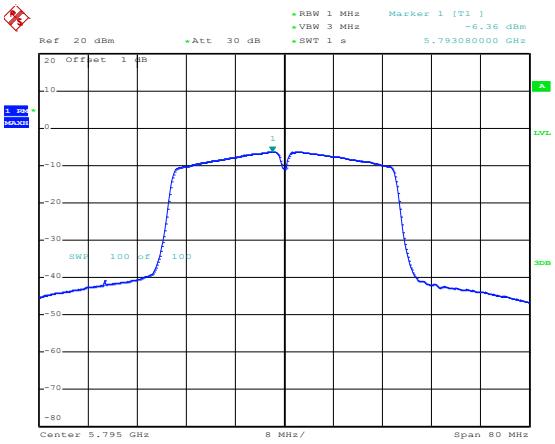
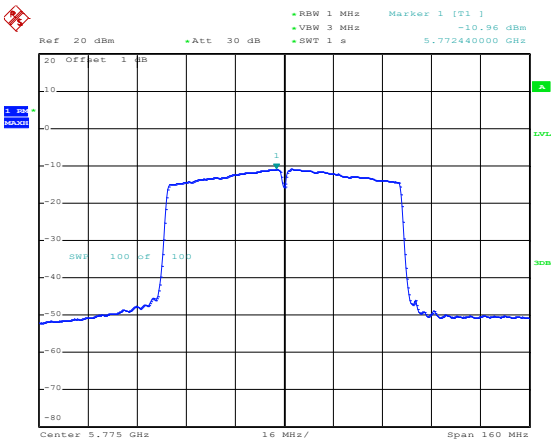
802.11n-HT20-Low	 Date: 14.MAR.2023 10:52:55
802.11n-HT20-Middle	 Date: 14.MAR.2023 10:56:14
802.11n-HT20-High	 Date: 14.MAR.2023 10:58:49

802.11n-HT40-Low	
802.11n-HT40-High	
802.11ac-VHT80-Low	

5725-5850MHz

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

802.11n-HT20-Low	 Date: 14.MAR.2023 13:40:20
802.11n-HT20-Middle	 Date: 14.MAR.2023 13:42:51
802.11n-HT20-High	 Date: 14.MAR.2023 13:45:11

802.11n-HT40-Low	
802.11n-HT40-High	
802.11ac-VHT80-Low	

APPENDIX B

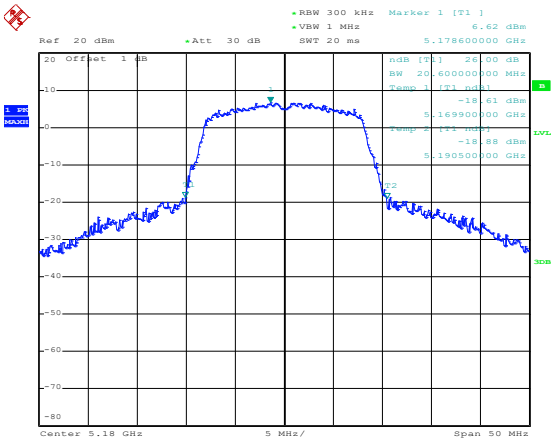
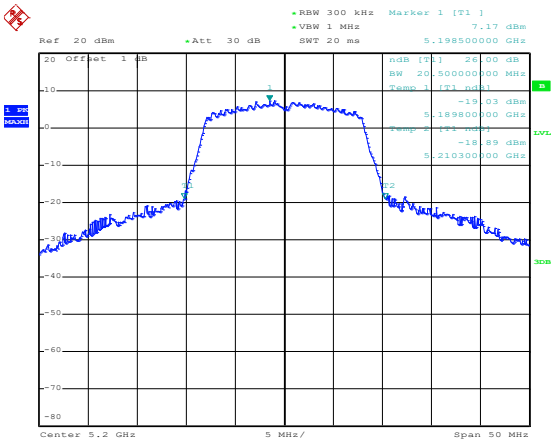
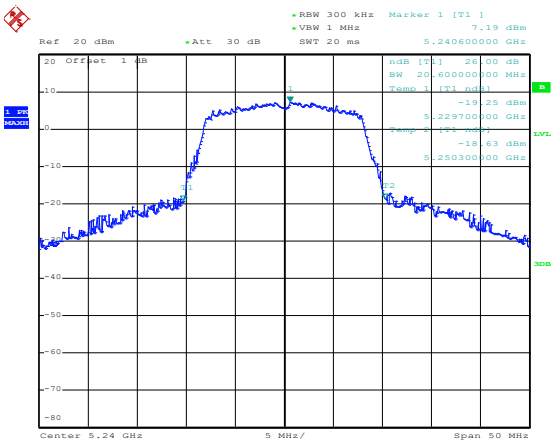
Emission Bandwidth and Occupied Bandwidth

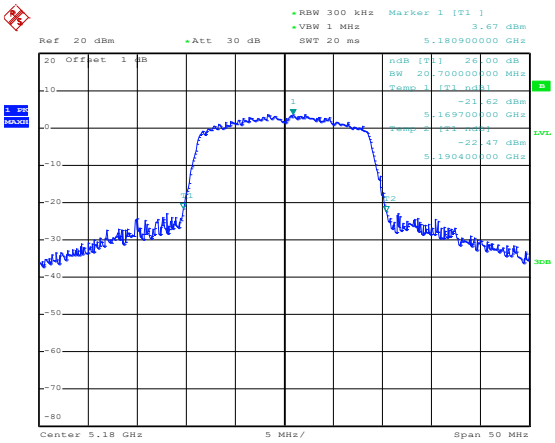
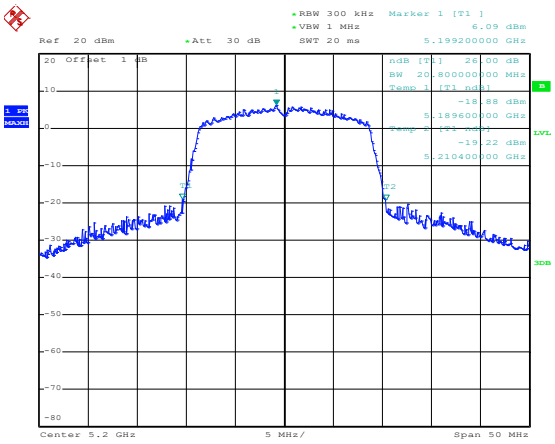
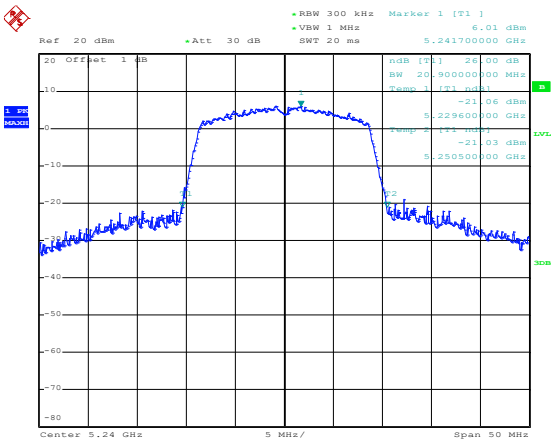
U-NII-1:5150-5250MHz				
Test Mode	**Test Channel MHz**	**26 dB Bandwidth MHz**	**99% Bandwidth MHz**	**Limit MHz**
802.11a	5180	20.60	17.10	Pass
	5200	20.50	17.10	Pass
	5240	20.60	17.30	Pass
802.11n-HT20	5180	20.70	17.90	Pass
	5200	20.80	18.00	Pass
	5240	20.90	17.90	Pass
802.11n-HT40	5190	42.00	36.80	Pass
	5230	42.20	37.00	Pass
802.11ac-VHT80	5210	82.00	75.60	Pass

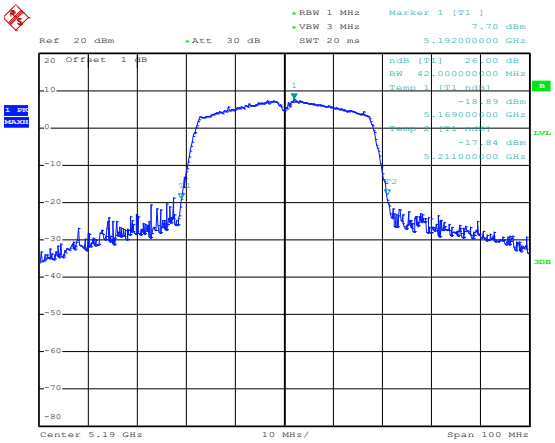
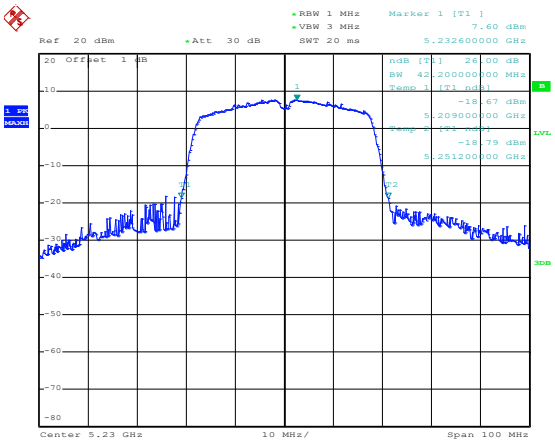
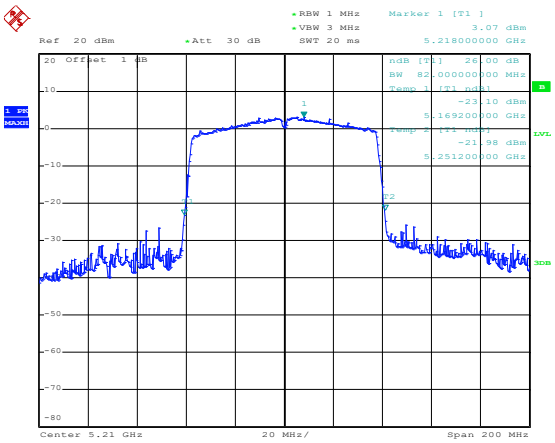
U-NII-2A: 5250-5350MHz				
Test Mode	**Test Channel MHz**	**26 dB Bandwidth MHz**	**99% Bandwidth MHz**	**Limit MHz**
802.11a	5260	20.70	17.10	Pass
	5280	20.70	17.10	Pass
	5320	20.50	17.00	Pass
802.11n-HT20	5260	20.90	17.90	Pass
	5280	20.80	17.90	Pass
	5320	20.80	17.90	Pass
802.11n-HT40	5270	42.00	36.80	Pass
	5310	42.00	36.80	Pass
802.11ac-VHT80	5290	94.00	75.60	Pass

U-NII-3: 5725-5850MHz				
Test Mode	**Test Channel MHz**	**6 dB Bandwidth MHz**	**99% Bandwidth MHz**	**Limit MHz**
802.11a	5745	16.60	20.50	≥500
	5785	16.60	21.40	≥500
	5825	16.60	23.20	≥500
802.11n-HT20	5745	17.80	19.00	≥500
	5785	17.80	19.50	≥500
	5825	17.80	20.70	≥500
802.11n-HT40	5755	36.60	37.60	≥500
	5795	36.60	38.20	≥500
802.11ac VH80	5775	76.80	76.80	≥500

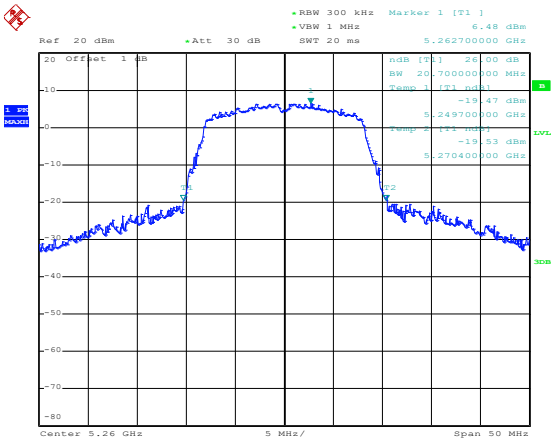
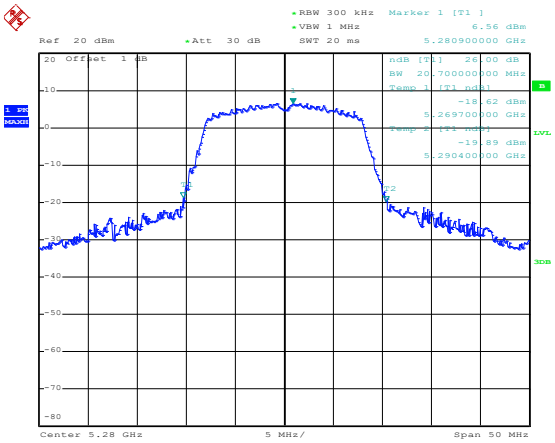
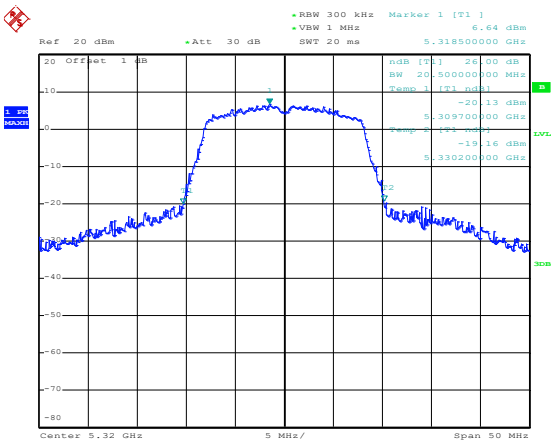
5150-5250MHz

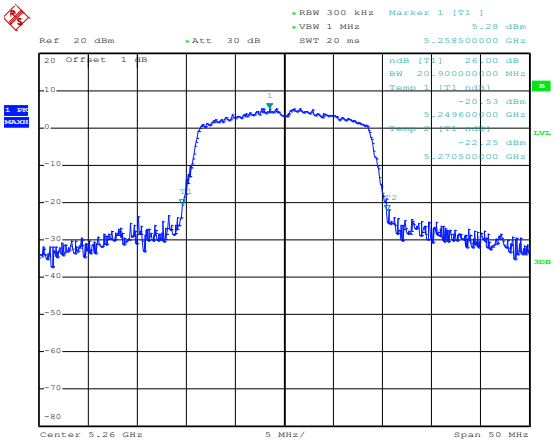
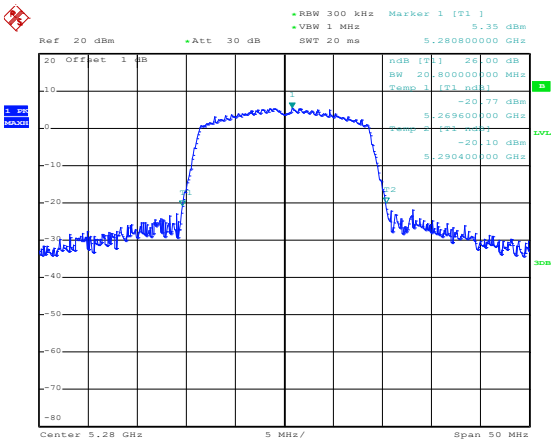
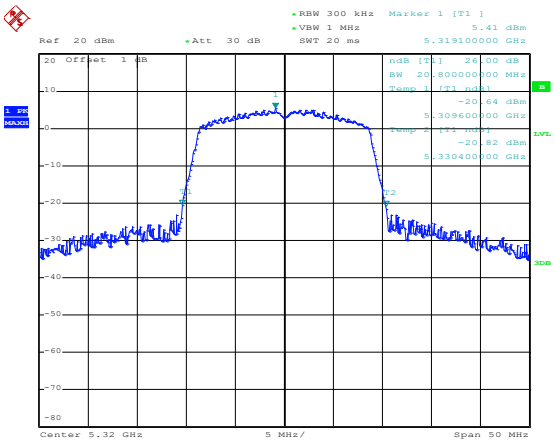
802.11a-Low	
802.11a-Middle	
802.11a-High	

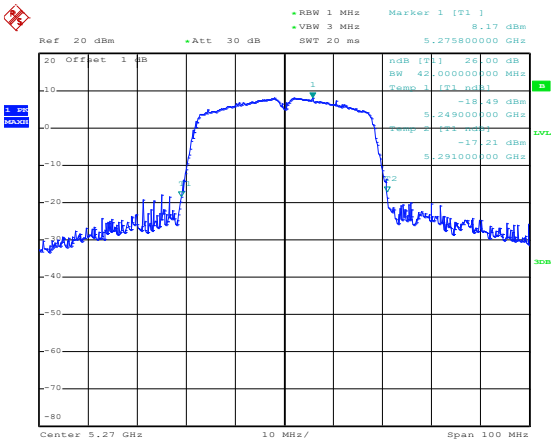
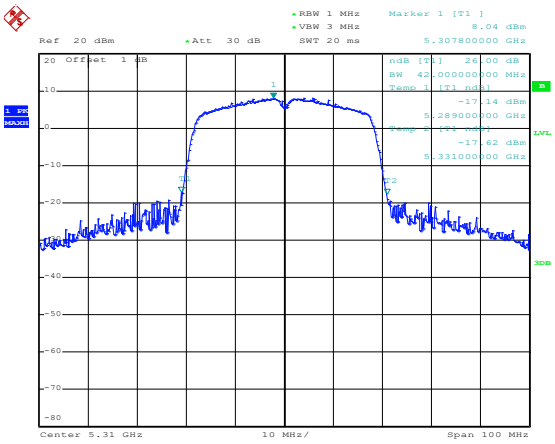
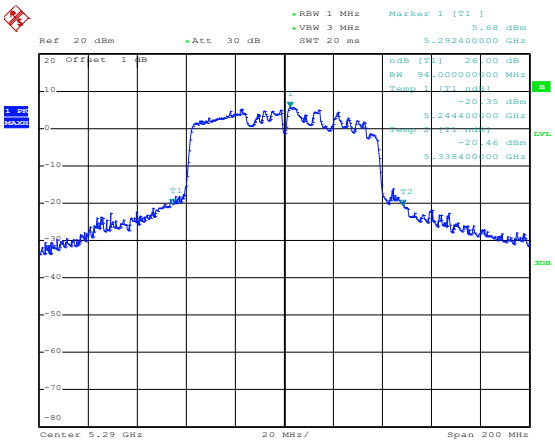
802.11n-HT20-Low	 Date: 27.FEB.2023 18:07:50
802.11n-HT20-Middle	 Date: 27.FEB.2023 18:08:20
802.11n-HT20-High	 Date: 27.FEB.2023 18:08:50

802.11n-HT40-Low	 Date: 27.FEB.2023 18:09:42
802.11n-HT40-High	 Date: 27.FEB.2023 18:10:21
802.11ac-VHT80-Low	 Date: 27.FEB.2023 18:04:36

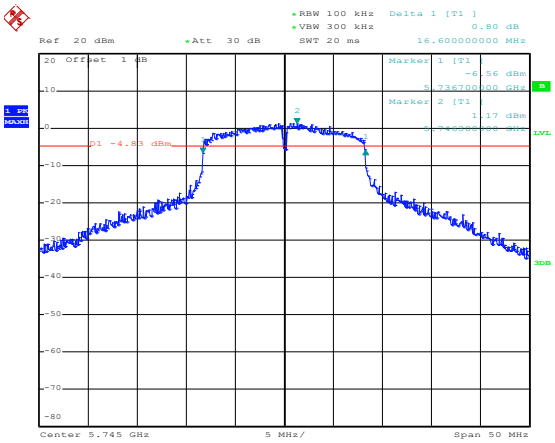
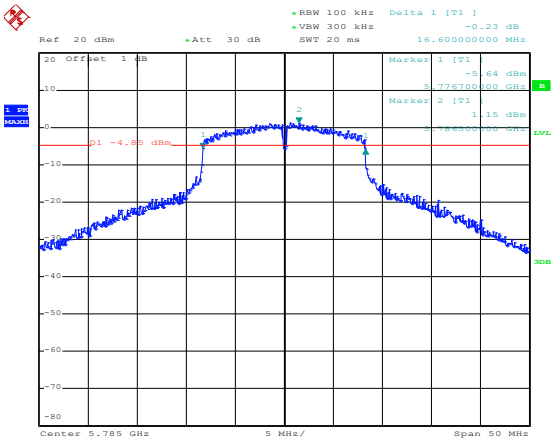
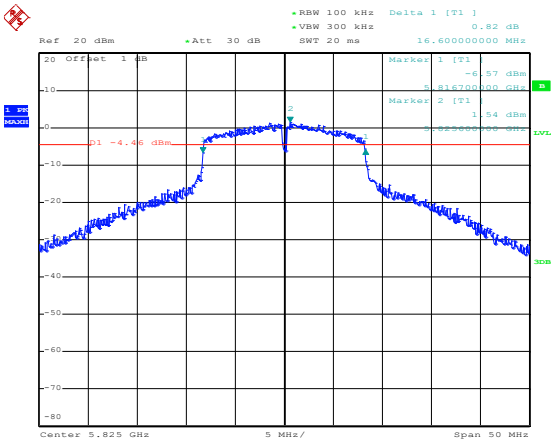
5250-5350MHz

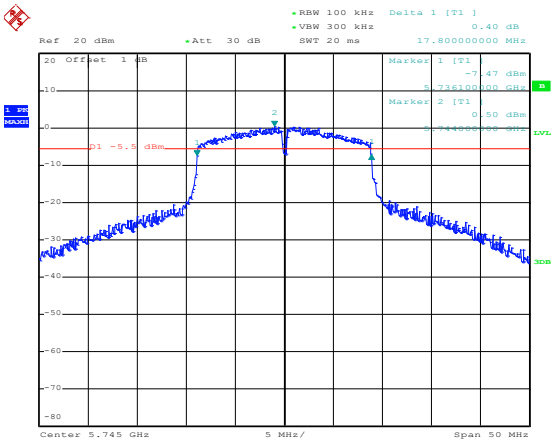
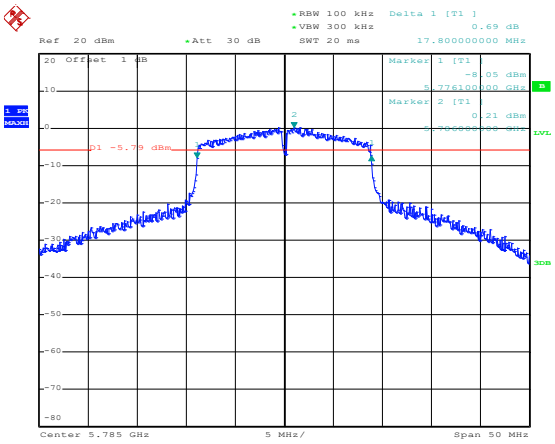
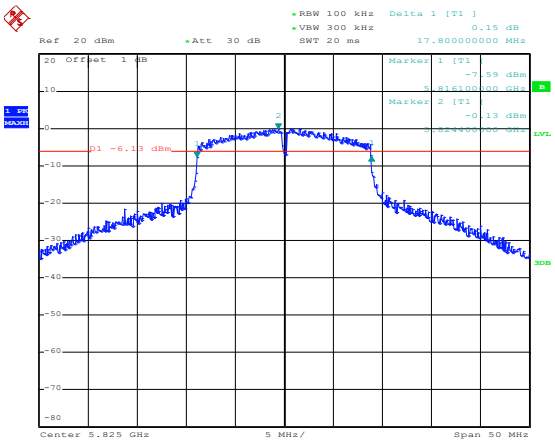
802.11a-Low	
802.11a-Middle	
802.11a-High	

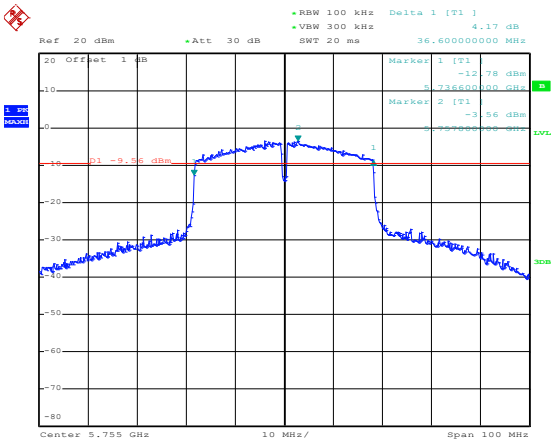
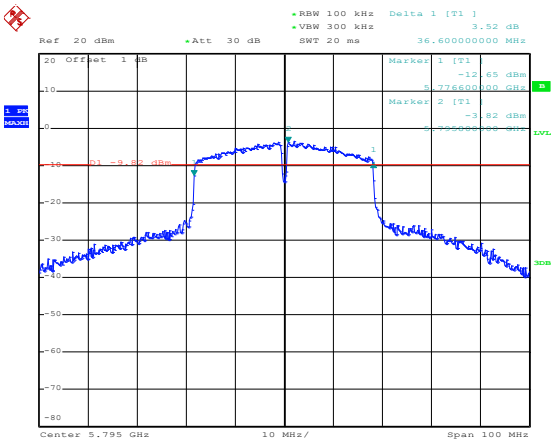
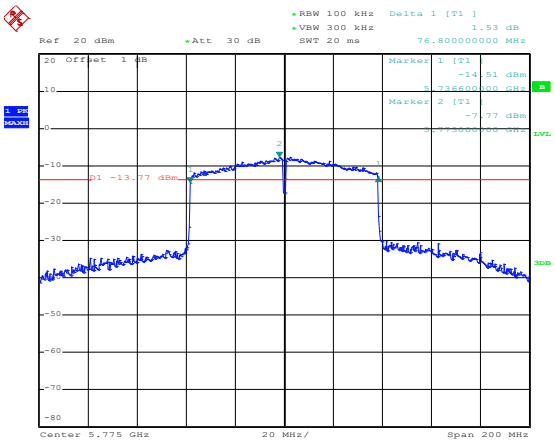
802.11n-HT20-Low	 Date: 27.FEB.2023 18:15:23
802.11n-HT20-Middle	 Date: 27.FEB.2023 18:15:58
802.11n-HT20-High	 Date: 27.FEB.2023 18:16:42

802.11n-HT40-Low	 Date: 27.FEB.2023 18:17:27
802.11n-HT40-High	 Date: 27.FEB.2023 18:18:08
802.11ac-VHT80-Low	 Date: 27.FEB.2023 18:12:51

5725-5850MHz

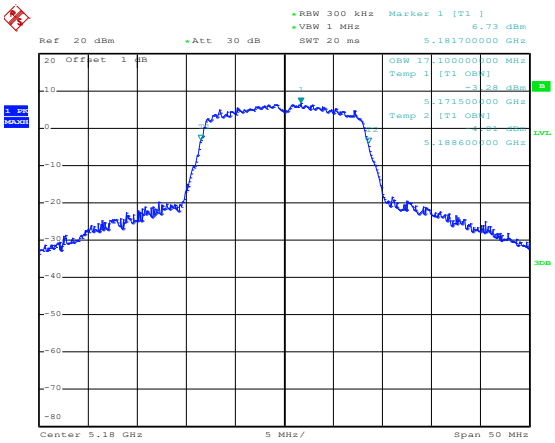
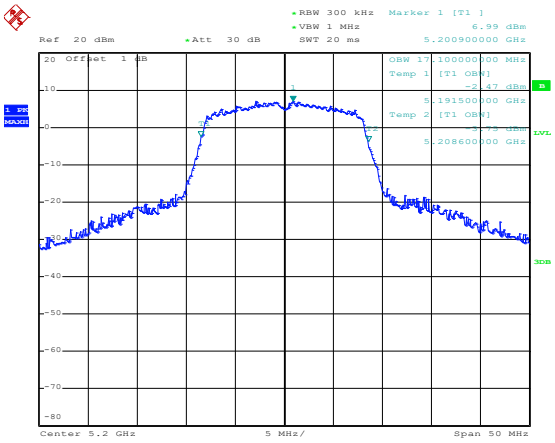
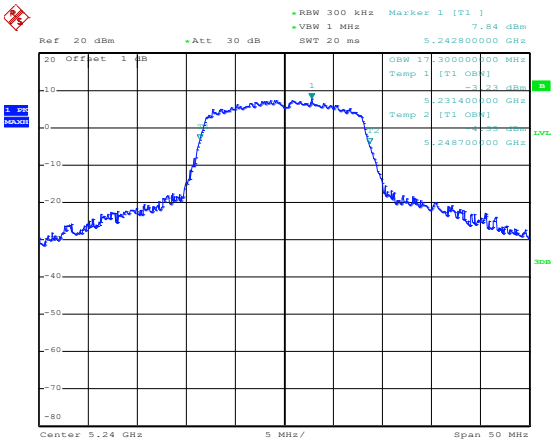
802.11a-Low	 Date: 27.FEB.2023 18:23:03
802.11a-Middle	 Date: 27.FEB.2023 18:26:10
802.11a-High	 Date: 27.FEB.2023 18:27:09

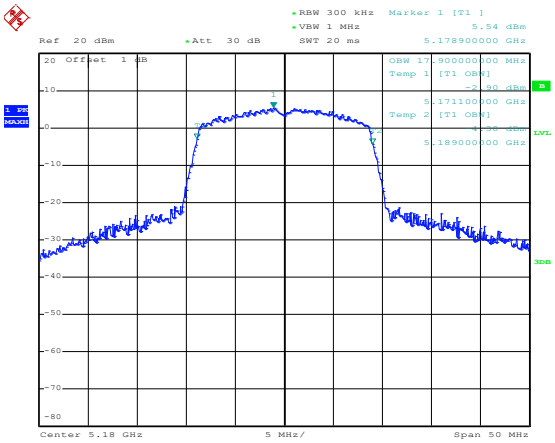
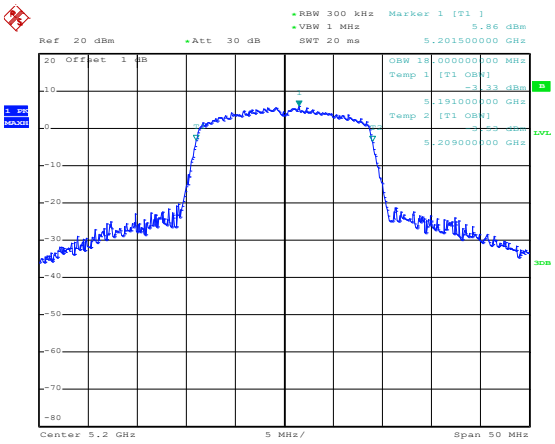
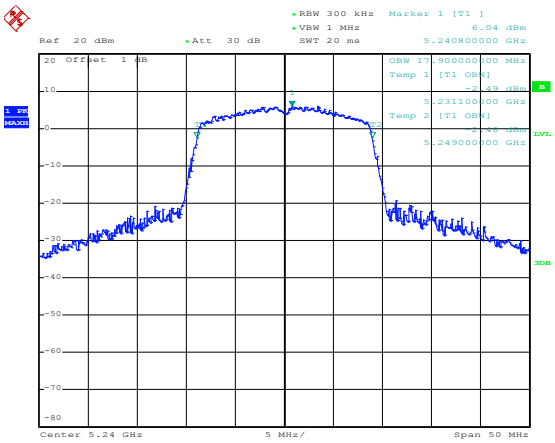
802.11n-HT20-Low	
802.11n-HT20-Middle	
802.11n-HT20-High	

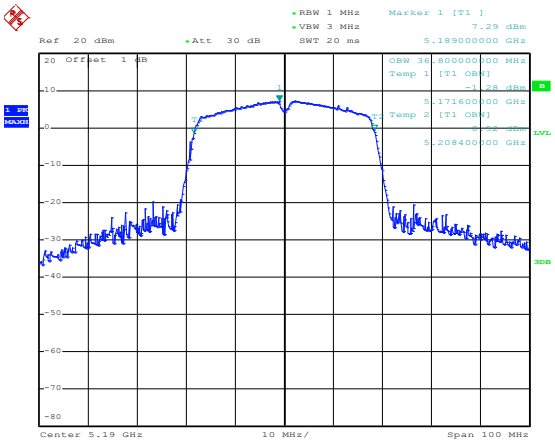
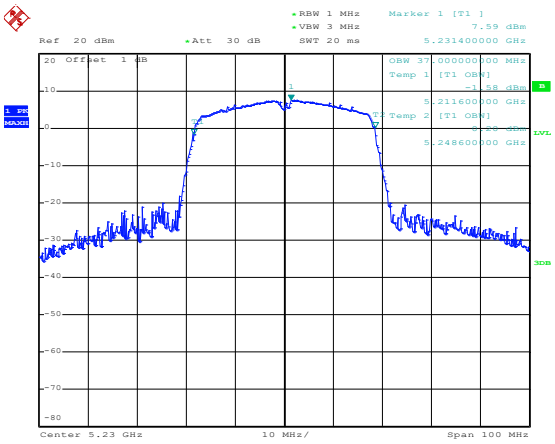
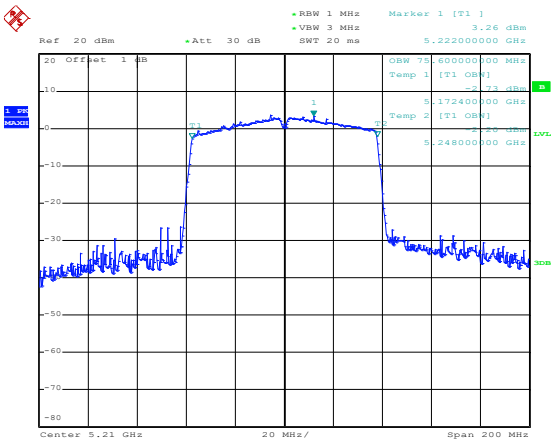
802.11n-HT40-Low	
802.11n-HT40-High	
802.11ac-VHT80-Low	

99% BandwidthMHz

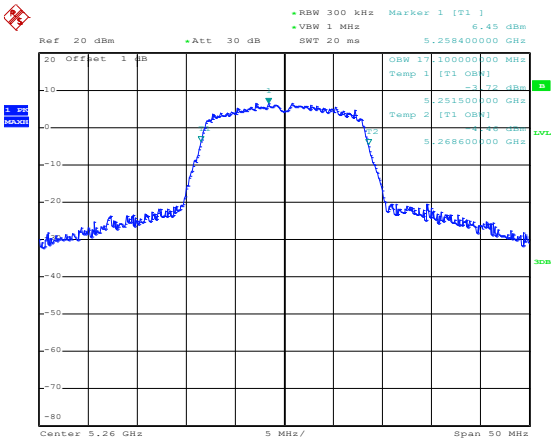
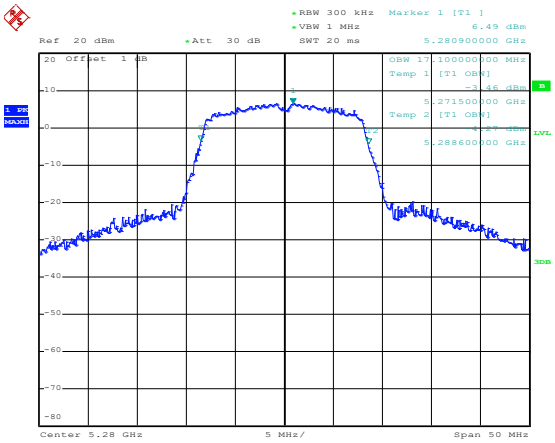
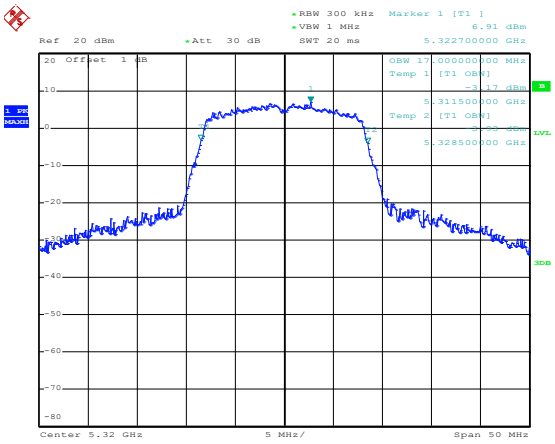
5150-5250MHz

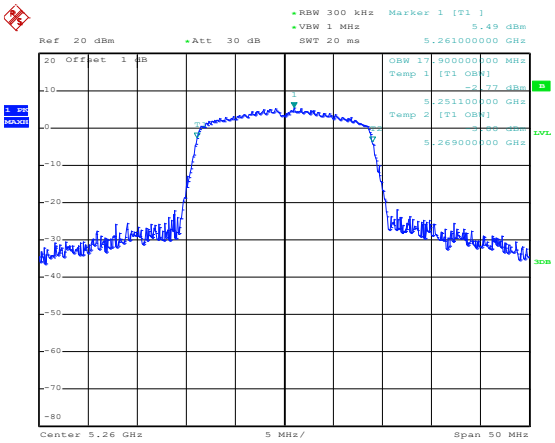
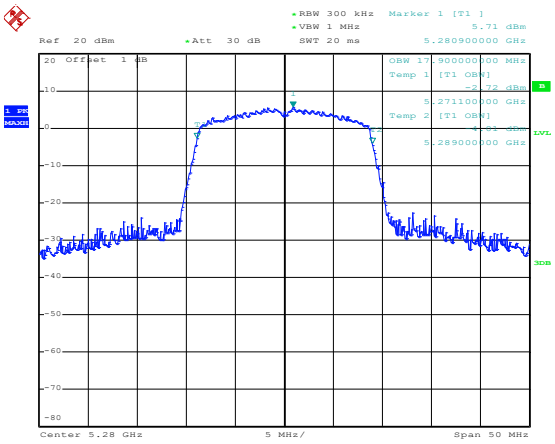
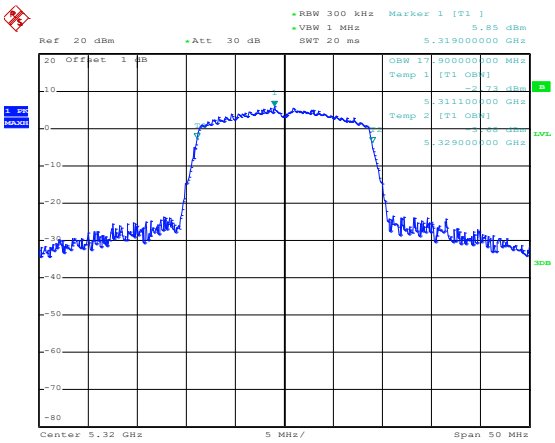
802.11a-Low	 Date: 27.FEB.2023 18:36:41
802.11a-Middle	 Date: 27.FEB.2023 18:37:12
802.11a-High	 Date: 27.FEB.2023 18:37:45

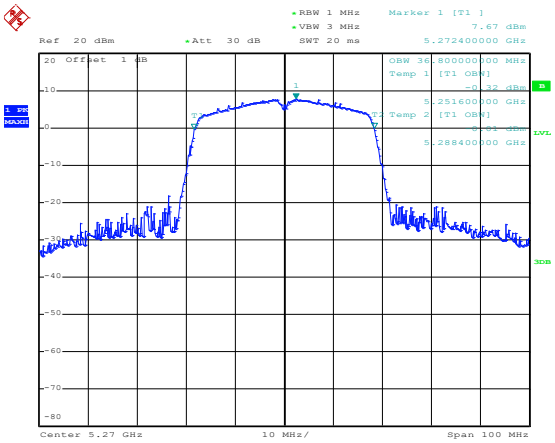
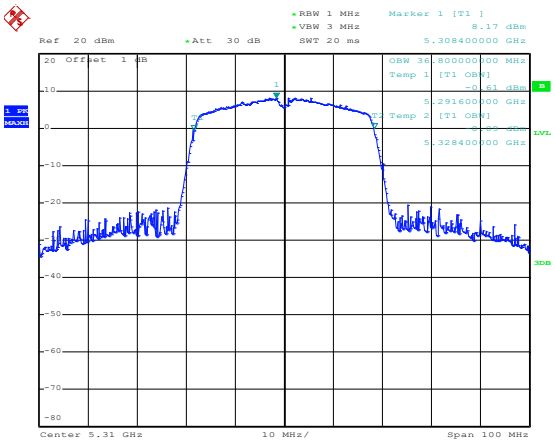
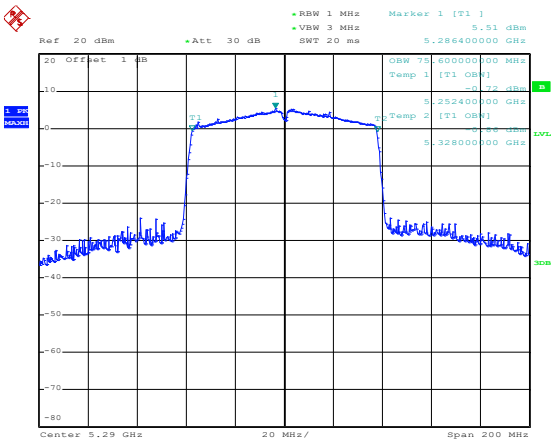
802.11n-HT20-Low	 Date: 27.FEB.2023 18:38:56
802.11n-HT20-Middle	 Date: 27.FEB.2023 18:39:27
802.11n-HT20-High	 Date: 27.FEB.2023 18:39:56

802.11n-HT40-Low	 Date: 27.FEB.2023 18:40:39
802.11n-HT40-High	 Date: 27.FEB.2023 18:41:08
802.11ac-VHT80-Low	 Date: 27.FEB.2023 18:35:29

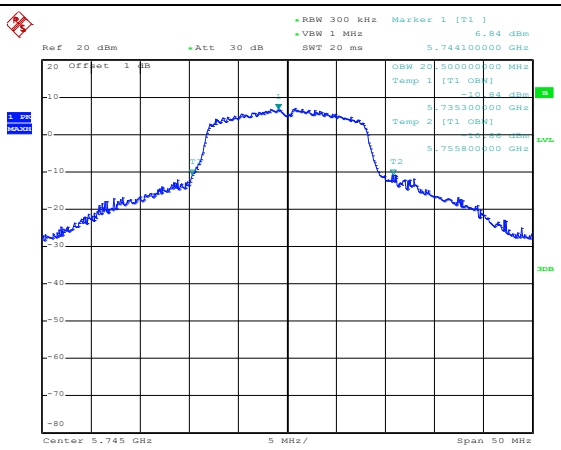
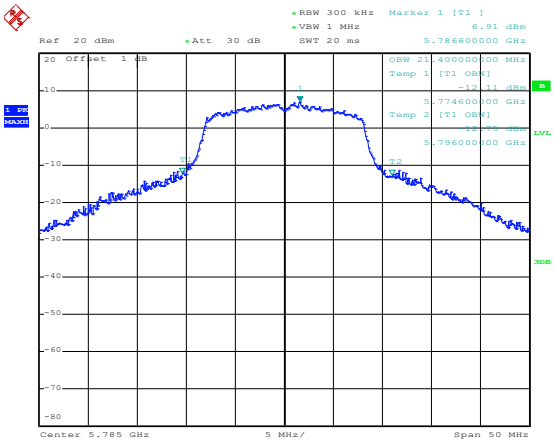
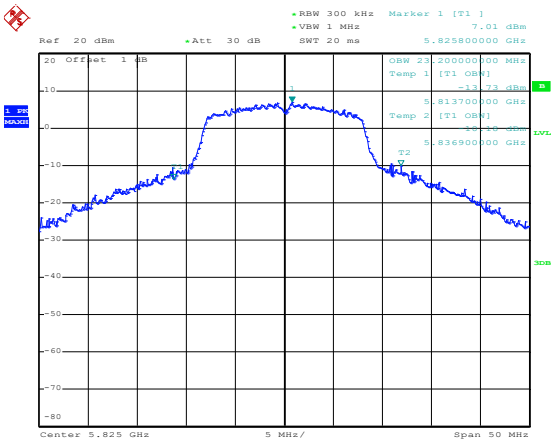
5250-5350MHz

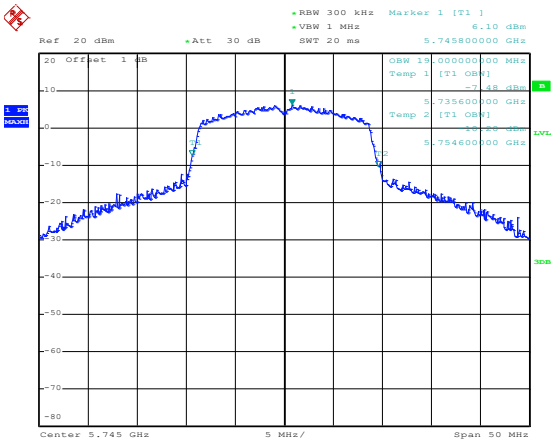
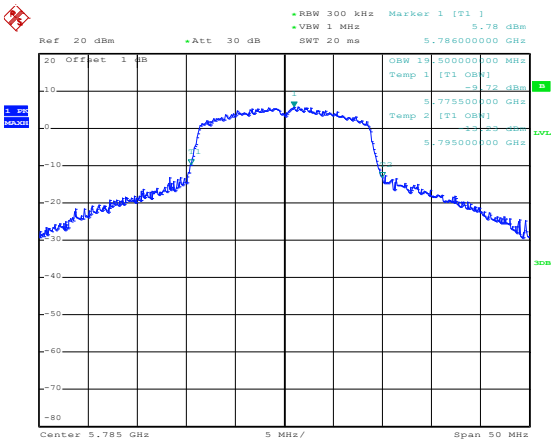
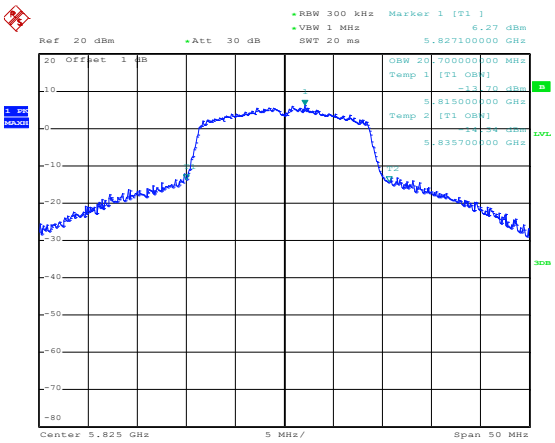
802.11a-Low	 Date: 27.FEB.2023 18:44:19
802.11a-Middle	 Date: 27.FEB.2023 18:44:45
802.11a-High	 Date: 27.FEB.2023 18:45:11

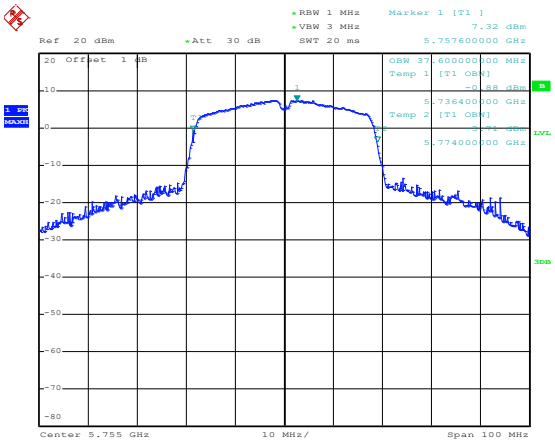
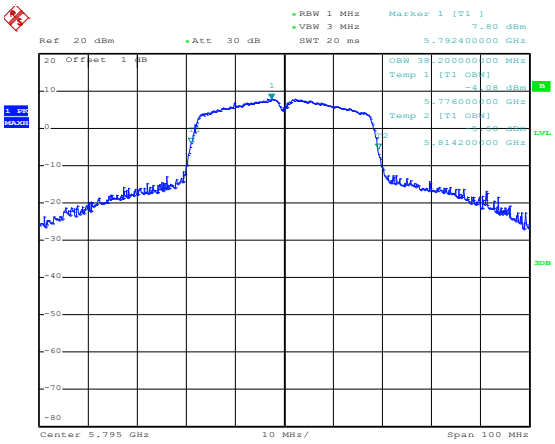
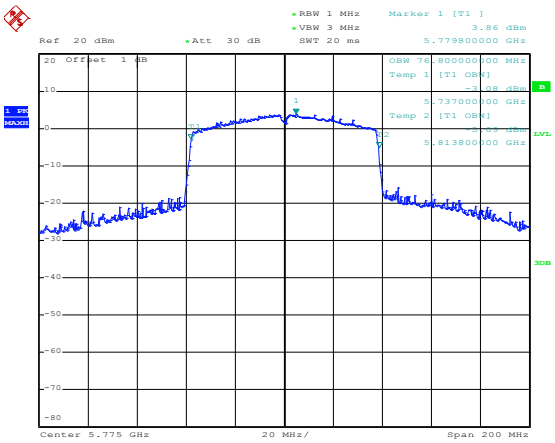
802.11n-HT20-Low	 Date: 27.FEB.2023 18:45:49
802.11n-HT20-Middle	 Date: 27.FEB.2023 18:46:18
802.11n-HT20-High	 Date: 27.FEB.2023 18:46:46

802.11n-HT40-Low	 Date: 27.FEB.2023 18:47:42
802.11n-HT40-High	 Date: 27.FEB.2023 18:48:08
802.11ac-VHT80-Low	 Date: 27.FEB.2023 18:43:17

5725-5850MHz

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

802.11n-HT20-Low	 Date: 27.FEB.2023 18:52:32
802.11n-HT20-Middle	 Date: 27.FEB.2023 18:52:57
802.11n-HT20-High	 Date: 27.FEB.2023 18:53:24

802.11n-HT40-Low	
802.11n-HT40-High	
802.11ac-VHT80-Low	

APPENDIX C

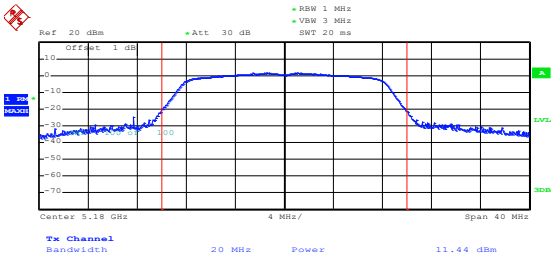
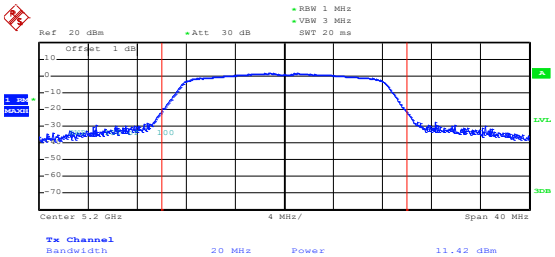
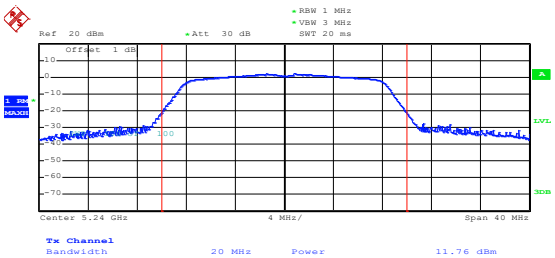
Maximum Conducted Output Power

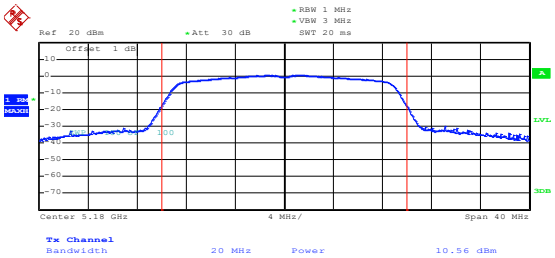
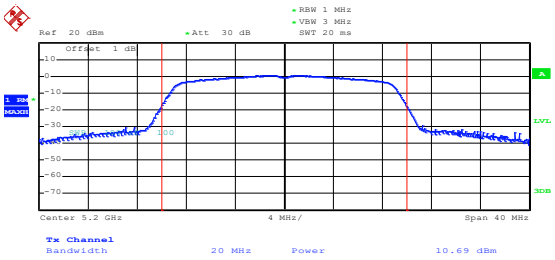
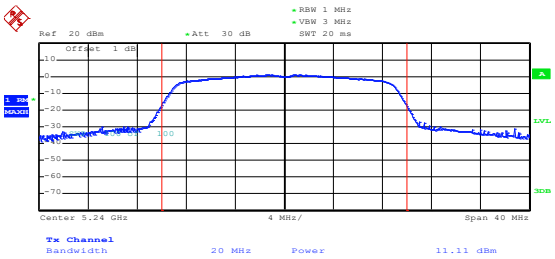
U-NII-1:5150-5250MHz				
Test mode	Frequency MHz	Output power (dBm)	Limit (dBm)	Result
802.11a	5180	11.44	23.98	Pass
	5200	11.42		
	5240	11.76		
802.11n-HT20	5180	10.56		
	5200	10.69		
	5240	11.11		
802.11n-HT40	5190	9.63		
	5230	9.73		
802.11ac VH80	5210	8.82		

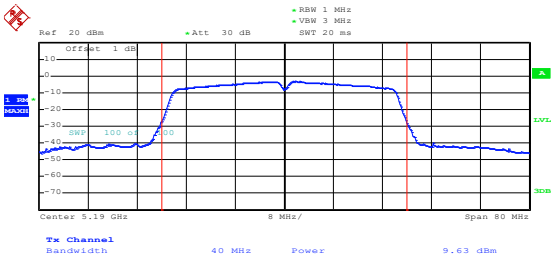
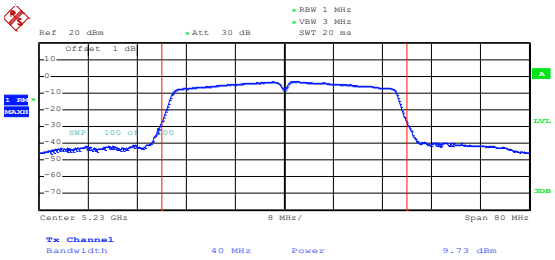
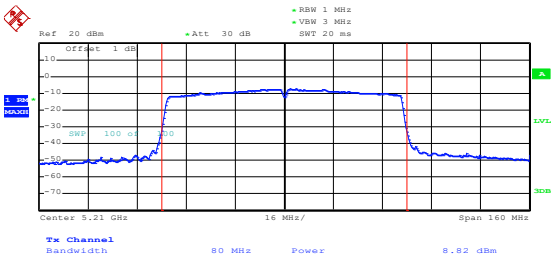
U-NII-2A: 5250-5350MHz				
Test mode	Frequency MHz	Output power (dBm)	Limit (dBm)	Result
802.11a	5260	11.51	23.98	Pass
	5280	11.84		
	5320	11.94		
802.11n-HT20	5260	10.44		
	5280	10.68		
	5320	10.52		
802.11n-HT40	5270	9.48		
	5310	9.57		
802.11ac VH80	5290	8.52		

U-NII-3: 5725-5850MHz				
Test mode	Frequency MHz	Output power (dBm)	Limit (dBm)	Result
802.11a	5745	8.81	23.98	Pass
	5785	8.29		
	5825	8.20		
802.11n-HT20	5745	7.87		
	5785	7.59		
	5825	7.06		
802.11n-HT40	5755	7.86		
	5795	7.58		
802.11ac VH80	5775	6.79		

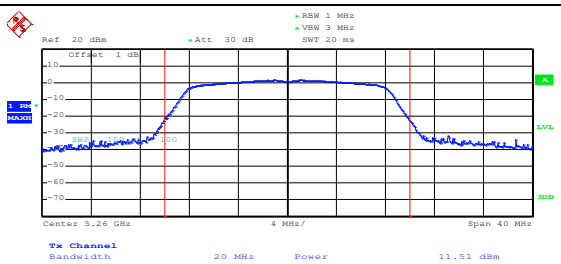
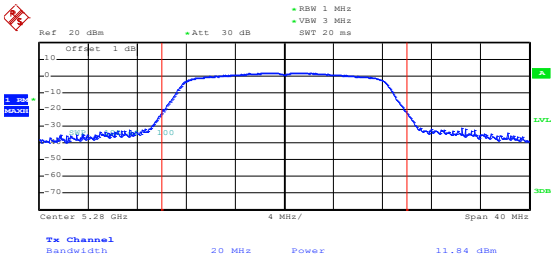
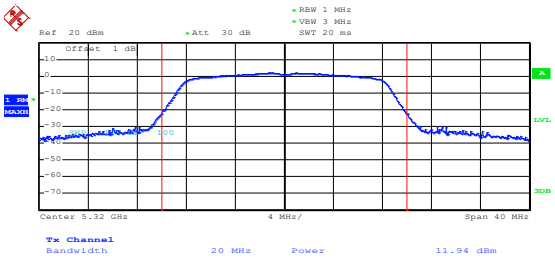
5150-5250MHz

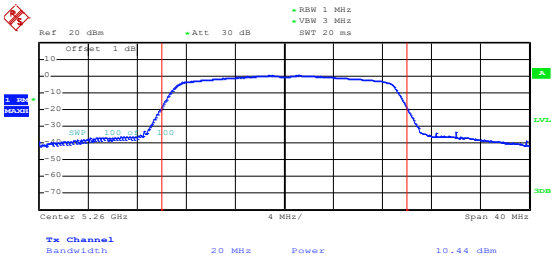
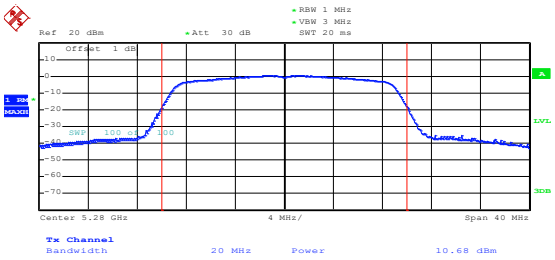
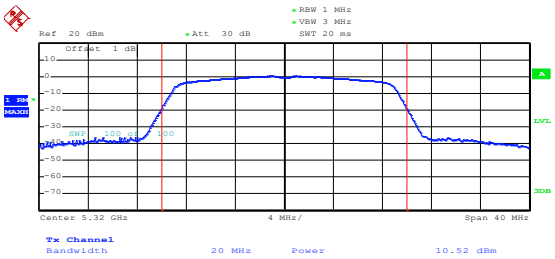
802.11a-Low	 Date: 14.MAR.2023 09:12:57
802.11a-Middle	 Date: 14.MAR.2023 09:15:26
802.11a-High	 Date: 14.MAR.2023 09:16:20

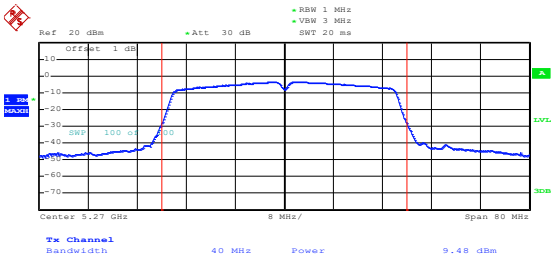
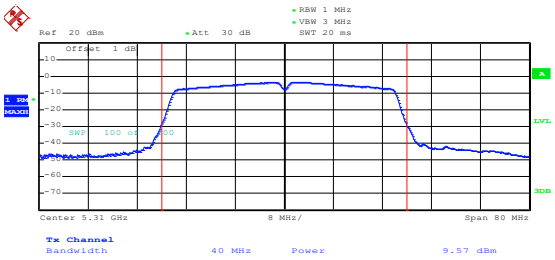
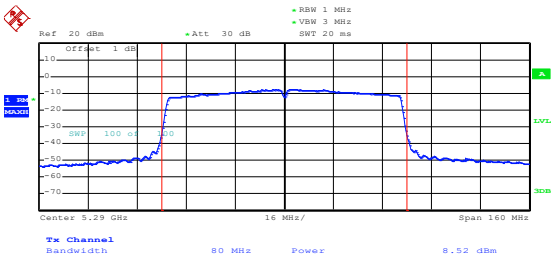
802.11n-HT20-Low	 Date: 14.MAR.2023 09:20:54
802.11n-HT20-Middle	 Date: 14.MAR.2023 09:22:07
802.11n-HT20-High	 Date: 14.MAR.2023 09:23:15

802.11n-HT40-Low	 Date: 14.MAR.2023 09:31:47
802.11n-HT40-High	 Date: 14.MAR.2023 09:32:48
802.11ac-VHT80-Low	 Date: 14.MAR.2023 09:34:36

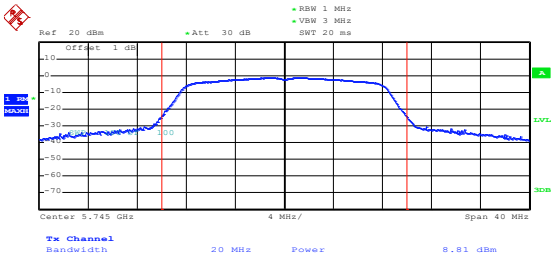
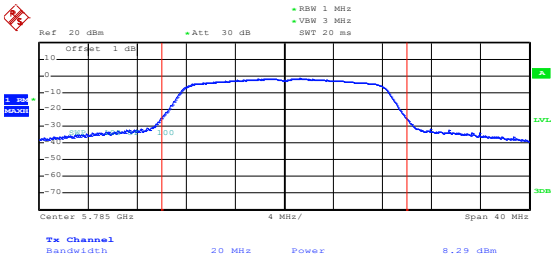
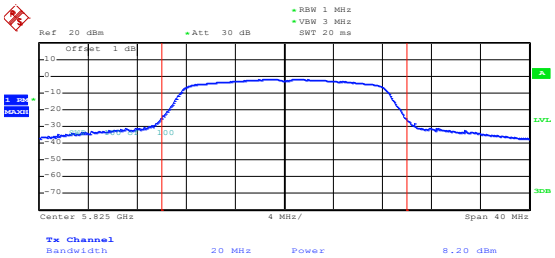
5250-5350MHz

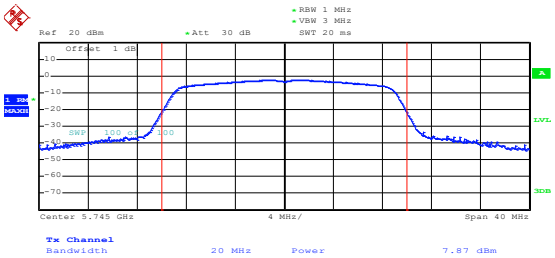
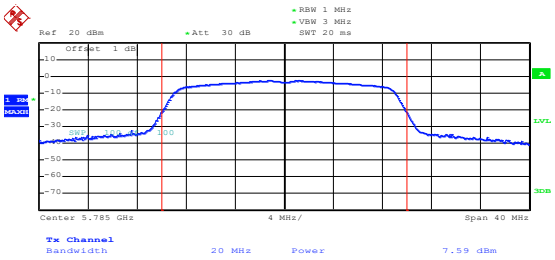
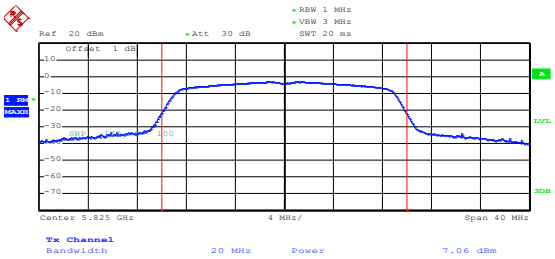
802.11a-Low	 Date: 14.MAR.2023 10:24:50
802.11a-Middle	 Date: 14.MAR.2023 10:25:49
802.11a-High	 Date: 14.MAR.2023 10:26:16

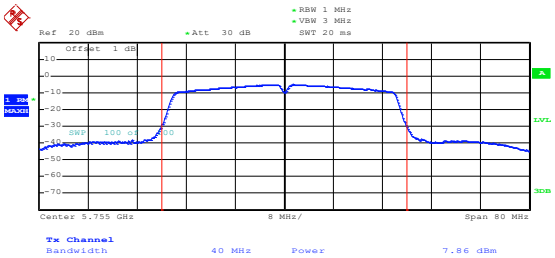
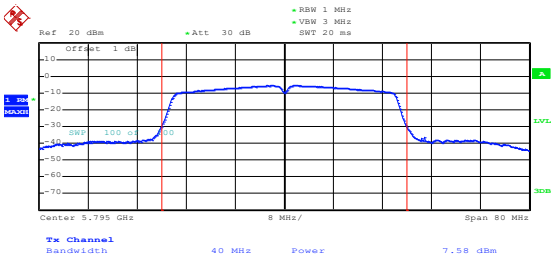
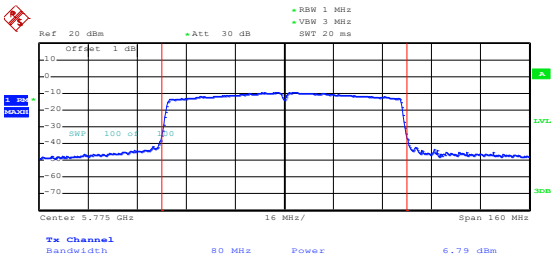
802.11n-HT20-Low	 Date: 14.MAR.2023 10:27:55
802.11n-HT20-Middle	 Date: 14.MAR.2023 10:28:42
802.11n-HT20-High	 Date: 14.MAR.2023 10:29:04

802.11n-HT40-Low	 Date: 14.MAR.2023 10:30:14
802.11n-HT40-High	 Date: 14.MAR.2023 10:30:43
802.11ac-VHT80-Low	 Date: 14.MAR.2023 10:31:57

5725-5850MHz

802.11a-Low	 Date: 14.MAR.2023 13:07:37
802.11a-Middle	 Date: 14.MAR.2023 13:08:40
802.11a-High	 Date: 14.MAR.2023 13:09:06

802.11n-HT20-Low	 Date: 14.MAR.2023 13:10:07
802.11n-HT20-Middle	 Date: 14.MAR.2023 13:10:52
802.11n-HT20-High	 Date: 14.MAR.2023 13:11:40

802.11n-HT40-Low	 Date: 14.MAR.2023 13:13:09
802.11n-HT40-High	 Date: 14.MAR.2023 13:14:21
802.11ac-VHT80-Low	 Date: 14.MAR.2023 13:15:45

APPENDIX D

Frequency Stability

U-NII-1:5150-5250MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VDC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	3.85	-30	125	0.0241
100%		-20	163	0.0315
100%		-10	148	0.0286
100%		0	164	0.0317
100%		+10	159	0.0307
100%		+20	128	0.0247
100%		+30	139	0.0268
100%		+40	134	0.0259
100%		+50	129	0.0249
Low Battery power	3.5	+20	141	0.0272
High Battery power	4.35	+20	130	0.0251

U-NII-2A: 5250-5350MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VDC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	3.85	-30	169	0.0326
100%		-20	175	0.0337
100%		-10	134	0.0258
100%		0	164	0.0316
100%		+10	135	0.0260
100%		+20	162	0.0312
100%		+30	142	0.0274
100%		+40	137	0.0264
100%		+50	152	0.0293
Low Battery power	3.5	+20	160	0.0308
High Battery power	4.35	+20	171	0.0329

U-NII-3:5725-5850MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VDC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	3.85	-30	159	0.0277
100%		-20	134	0.0233
100%		-10	162	0.0282
100%		0	138	0.0240
100%		+10	174	0.0303
100%		+20	132	0.0230
100%		+30	160	0.0279
100%		+40	124	0.0216
100%		+50	139	0.0242
Low Battery power	3.5	+20	131	0.0228
High Battery power	4.35	+20	146	0.0254

APPENDIX PHOTOGRAPHS

Please refer to “ANNEX”

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