

TEST REPORT

Reference No..... : WTH22X02016901W-1
FCC ID : 2AWKZ-Q6391M2
Applicant : ENLI INCORPORATION
Address..... : 4F,No.42,Aly.5,Ln.12,Sec.3,Bade Rd.Songshan Dist,Taipei 10559,Taiwan
Manufacturer : FN-LINK TECHNOLOGY LIMITED
Address..... : No. 8, Litong Road, Liuyang Economic and Technological Development
Zone, Hunan Province, China
Product Name : Wi-Fi 6 Dual Band Dual Current 2*2 + Bluetooth (V5.1 LE) M.2 2230 Card
Model No..... : ENL-Q6391M2
Standards : FCC Part 15.407
Date of Receipt sample : 2022-02-14
Date of Test..... : 2022-02-14 to 2022-04-15
Date of Issue : 2022-04-15
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:

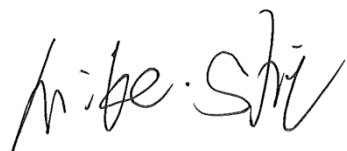
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Report version

Version No.	Date of issue	Description
Rev.00	2022-03-31	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT	
Product Name:	Wi-Fi 6 Dual Band Dual Current 2*2 + Bluetooth (V5.1 LE) M.2 2230 Card
Trade Name:	Enli
Model No.:	ENL-Q6391M2
Adding Model(s):	/
Rated Voltage:	DC3.3V
Battery Capacity:	/
Power Adapter:	/
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-VHT80, 802.11ax-HE20, 802.11ax-HE40, 802.11ax-HE80
Frequency Range:	5150-5250MHz, 5725-5850MHz
RF Output Power:	5150-5250MHz: Antenna 0: 16.51dBm (Conducted) Antenna 1:15.76dBm (Conducted) 5725-5850MHz: Antenna 0: 15.16dBm (Conducted) Antenna 1: 16.22dBm (Conducted)
Type of Modulation:	BPSK, QPSK,16QAM,64QAM, 256QAM,1024QAM

The antennas provided to the EUT, Please refer to the following table							
Antenna No.	CON No.	Brand	Model	Ant.Net Gain (dBi)	Frequency range(GHz)	Antenna Type	Connector Type
1	CON1	ARiSTO	RFA - 27 -	3	2.4-2.4835	Dipole	IPEX MHF4
	CON2	TLE	C38H1 - MHF4300	5	5.15-5.85	Dipole	IPEX MHF4
2	CON1	ARiSTO	RFA - 27 - JP326 -	3.5	2.4-2.4835	PIFA	IPEX MHF4
	CON2	TLE	MHF4300	5	5.15-5.85	PIFA	IPEX MHF4
Note: The Antenna Gain is provided by the customer and can affect the validity of results.							

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.

KDB662911 D01 Multiple Transmitter Output v02r01: Emissions Testing of Transmitters with Multiple Outputs in the Same Band.

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

Use “QRCT” and follow the instructions given by the manufacturer, you can start to test. During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. Test use the customer default power level, with a duty cycle equal to 100%, and to measure its highest possible emissions level, more detailed description as follows:

Mode	Ant.	Test Frequency (MHz)												
		NCB: 20MHz												
		5180	5200	5240	5260	5300	5320	5500	5580	5700	5720	5745	5785	5825
802.11a 6Mbps	ANT 0	17	17	17	/	/	/	/	/	/	/	18	16	16
	ANT 1	20	20	20	/	/	/	/	/	/	/	21	17	17
802.11n-HT20 MCS0	ANT 0	15	15	15	/	/	/	/	/	/	/	16	16	16
	ANT 1	19	19	19	/	/	/	/	/	/	/	18	17	17
802.11ax-HE20 MCS0	ANT 0	15	15	15	/	/	/	/	/	/	/	16	16	16
	ANT 1	19	19	19	/	/	/	/	/	/	/	18	17	17
Mode	Ant.	NCB: 40MHz												
		5190	5230	5270	5310	5510	5550	5670	5710	5755	5795			
802.11n-HT40 MCS0	ANT 0	14	14	/	/	/	/	/	/	16	16			
	ANT 1	18	18	/	/	/	/	/	/	17	17			
802.11ax-HE40	ANT 0	14	14	/	/	/	/	/	/	16	16			

MCS0	ANT 1	18	18	/	/	/	/	/	/	17	17
Mode	Ant.	NCB: 80MHz									
		5210	5290	5530	5610	5690	5775				
802.11ac-VH80 MCS0	ANT 0	13	/	/	/	/	16				
	ANT 1	18	/	/	/	/	16				
802.11ax-VE80 MCS0	ANT 0	13	/	/	/	/	16				
	ANT 1	17	/	/	/	/	16				

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	802.11ax-HE20	5180MHz,5200MHz,5240MHz, 5745MHz, 5785MHz,5825MHz
TM5	802.11ax-HE40	5190MHz,5230MHz, 5755MHz,5795MHz
TM6	802.11ac-VH80	5210MHz, 5775 MHz
TM7	802.11ax-HE80	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:	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	$\pm 0.42\text{dB}$
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

2021 Equipment Calibration List

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

SEMT-1042	Horn Antenna	ETS	3117	00086197	2021-03-19	2023-03-18
SEMT-1121	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA91705 82	2021-04-27	2023-04-26
SEMT-1169	Pre-amplifier	Direction Systems Inc.	PAP-2640	14145-1415 3	2021-04-27	2022-04-26
SEMT-1163	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2021-03-27	2022-03-26
☐ Chamber B:Below 1GHz						
SEMT-1068	Trilog Broadband Antenna	Schwarz beck	VULB9163(B)	9163-635	2021-04-09	2023-04-08
SEMT-1067	Amplifier	Agilent	8447D	2944A10179	2021-04-12	2022-04-11
SEMT-1066	EMI Test Receiver	Rohde & Schwarz	ESPI	101391	2021-05-06	2022-05-05
☐ Chamber C:Below 1GHz						
SEMT-1319	EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2021-12-03	2022-12-02
SEMT-1343	Trilog Broadband Antenna	Schwarz beck	VULB 9168	1194	2021-05-28	2023-05-27
SEMT-1333	Amplifier	HP	8447F	2944A03869	2021-04-15	2022-04-14
☒ Conducted Room 1#						
SEMT-1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2021-04-12	2022-04-11
SEMT-1002	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2021-04-15	2022-04-14
SEMT-1003	AC LISN	Schwarz beck	NSLK8126	8126-224	2021-04-12	2022-04-11
☐ Conducted Room 2#						
SEMT-1334	EMI Test Receiver	Rohde & Schwarz	ESPI	101259	2021-04-12	2022-04-11
SEMT-1336	LISN	Rohde & Schwarz	ENV 216	100097	2021-04-12	2022-04-11

2022 Equipment Calibration List

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
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	Agilent	8447F	3113A06717	2022-01-07	2023-01-06
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	BBHA9170582	2021-04-27	2023-04-26
SEMT-1169	Pre-amplifier	Direction Systems Inc.	PAP-2640	14145-14153	2021-04-27	2022-04-26

SEMT-1163	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	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	2944A10179	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	2022-01-07	2023-01-06
SEMT-1343	Trilog Broadband Antenna	Schwarz beck	VULB 9168	1194	2021-05-28	2023-05-27
SEMT-1333	Amplifier	HP	8447F	2944A03869	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 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 5.15-5.25GHz.

(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 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

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

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

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 1MHz RBW to satisfy directly the 1MHz 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 1MHz, or 500kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1MHz, or 500kHz). If

measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

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

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

5.3 Summary of Test Results/Plots

Please refer to Appendix A

6. Emission Bandwidth and Occupied Bandwidth

6.1 Standard Applicable

According to 15.407(a) and (e):

(1) For the band 5.15-5.25GHz.

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

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

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

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

- a) Set RBW = 100kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times \text{RBW}$.
- 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 $\geq 3 * \text{RBW}$
- 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 6dBi. In addition, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

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

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

7.2 Test Procedure

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

- (i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- (ii) Set RBW = 1MHz.
- (iii) Set VBW $\geq$ 3MHz.
- (iv) Number of points in sweep $\geq$ 2 Span / RBW. (This ensures that bin-to-bin spacing is $\leq$ RBW/2, so that narrowband signals are not lost between frequency bins.)

- (v) Sweep time = auto.
- (vi) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
- (vii) If transmit duty cycle < 98 percent, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle $\geq$ 98 percent, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to “free run”.
- (viii) Trace average at least 100 traces in power averaging (i.e., RMS) mode.
- (ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument’s band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 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 5.15-5.25GHz 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 75 MHz or more above or below the band edge increasing linearly to 10dBm/MHz at 25MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6dBm/MHz at 5MHz above or below the band edge, and from 5MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

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

According to §15.407(b)(7), The provisions of §15.205 apply to intentional radiators operating under this section.
789033 D02 v02r01 General UNII Test Procedures New Rules v01

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

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

where:

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

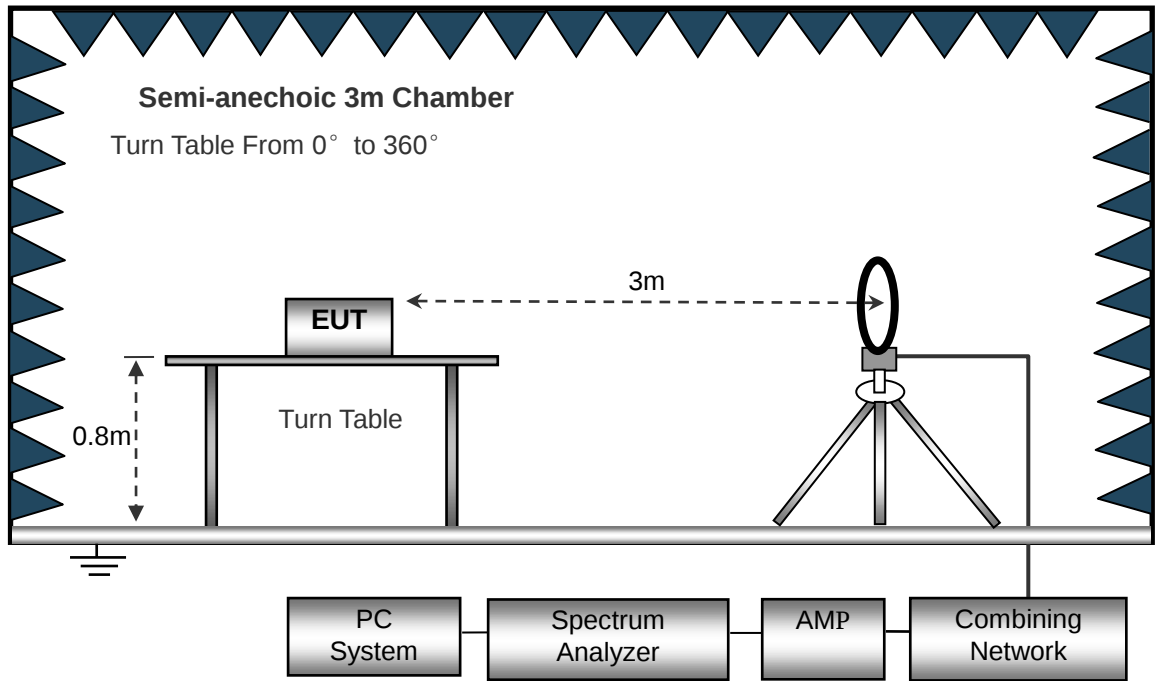
8.2 Test Procedure

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

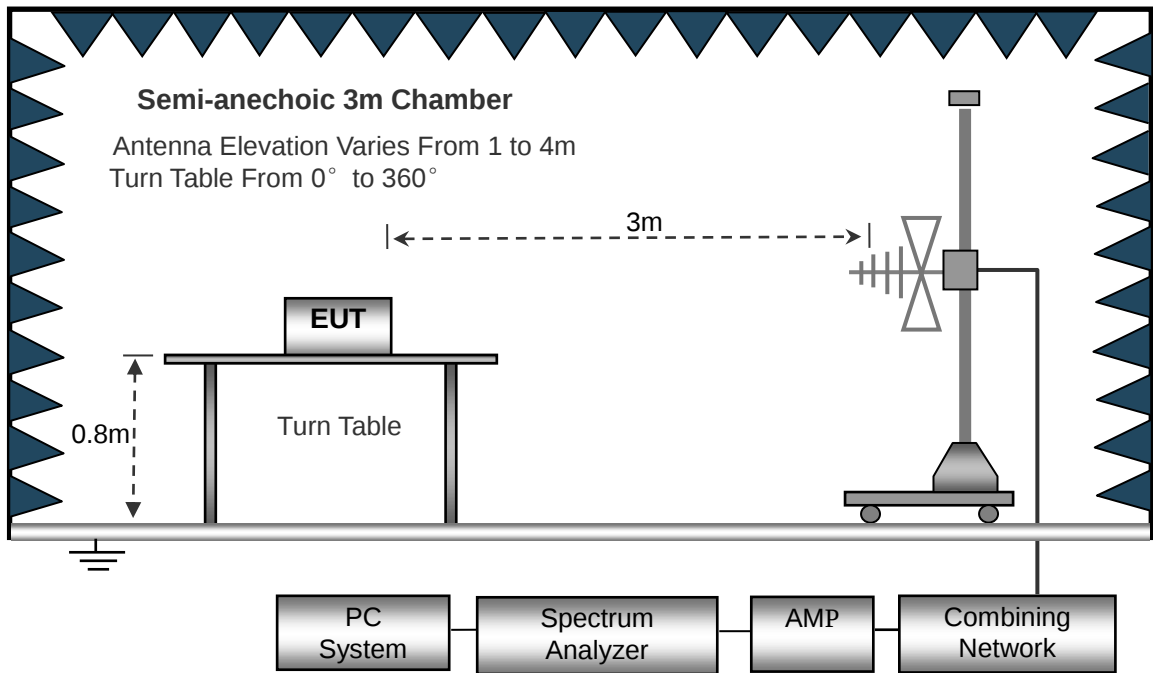
The external I/O cables were draped along the test table and formed a bundle 30 to 40cm long in the middle.

The spacing between the peripherals was 10cm.

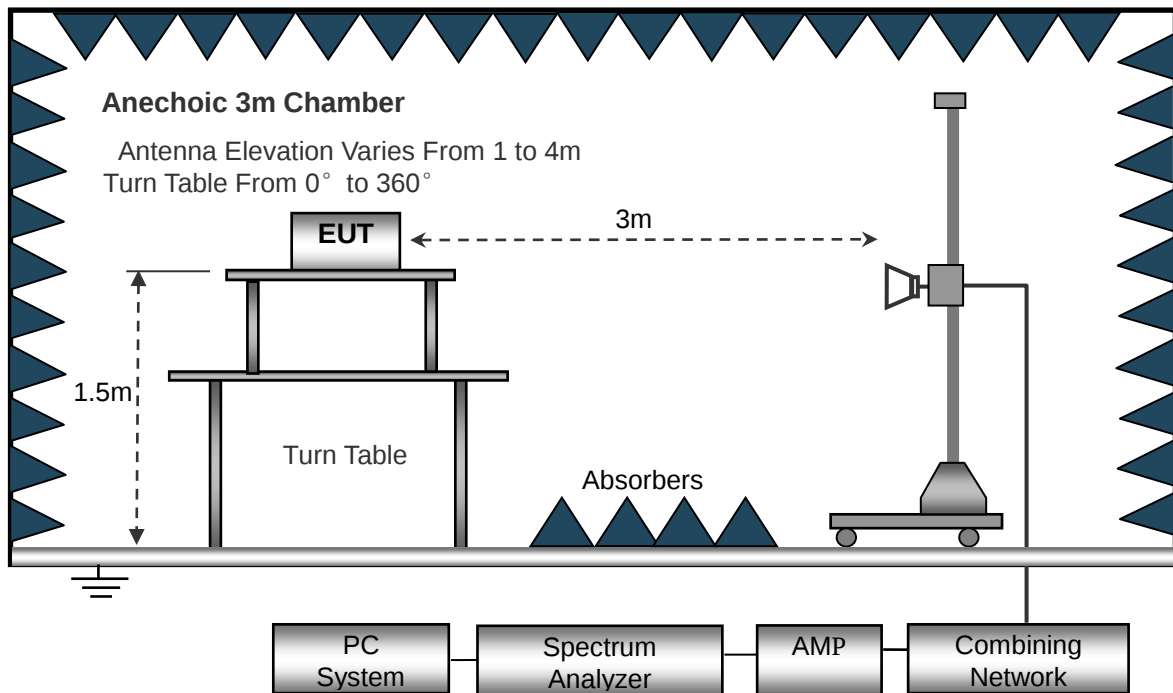
The test setup for emission measurement below 30MHz.



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



The test setup for emission measurement above 1GHz.



8.3 Test Receiver Setup

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

For peak detector:

RBW = 1000kHz, VBW = 3000kHz, Sweep Time = Auto

For average detector:

RBW = 1000kHz, VBW = 10Hz, Sweep Time = Auto

8.4 Corrected Amplitude & Margin Calculation

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

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

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

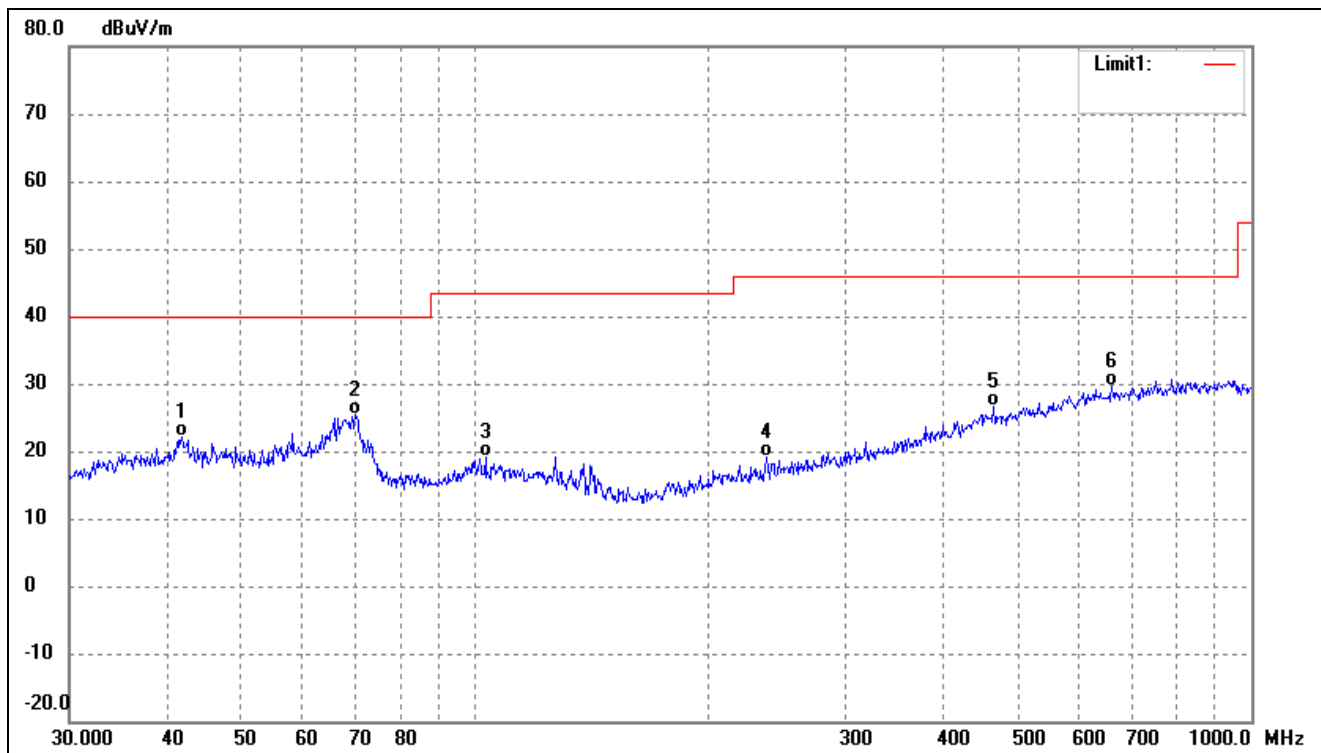
$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15 Limit}$$

8.5 Summary of Test Results/Plots

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

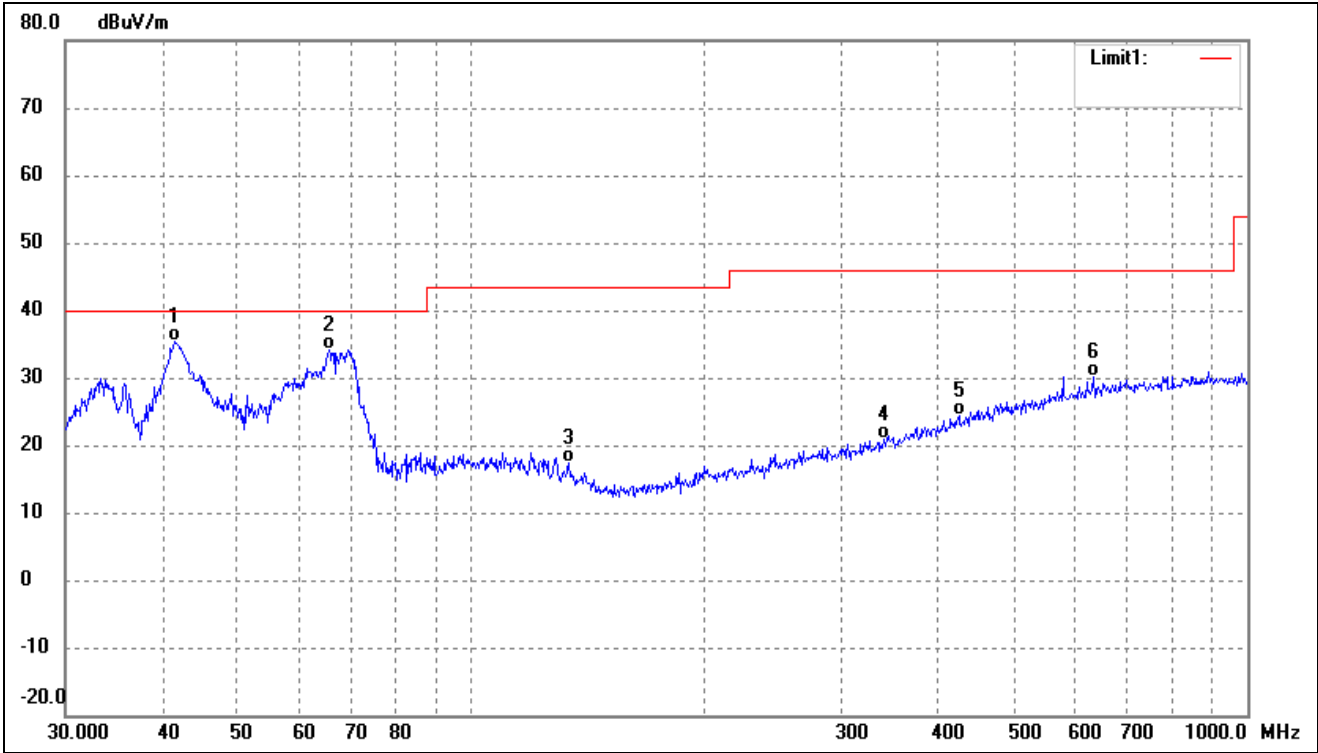
- Spurious Emission From 30MHz to 1GHz
- Antenna 0(Worst case)
- 5150-5250MHz

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



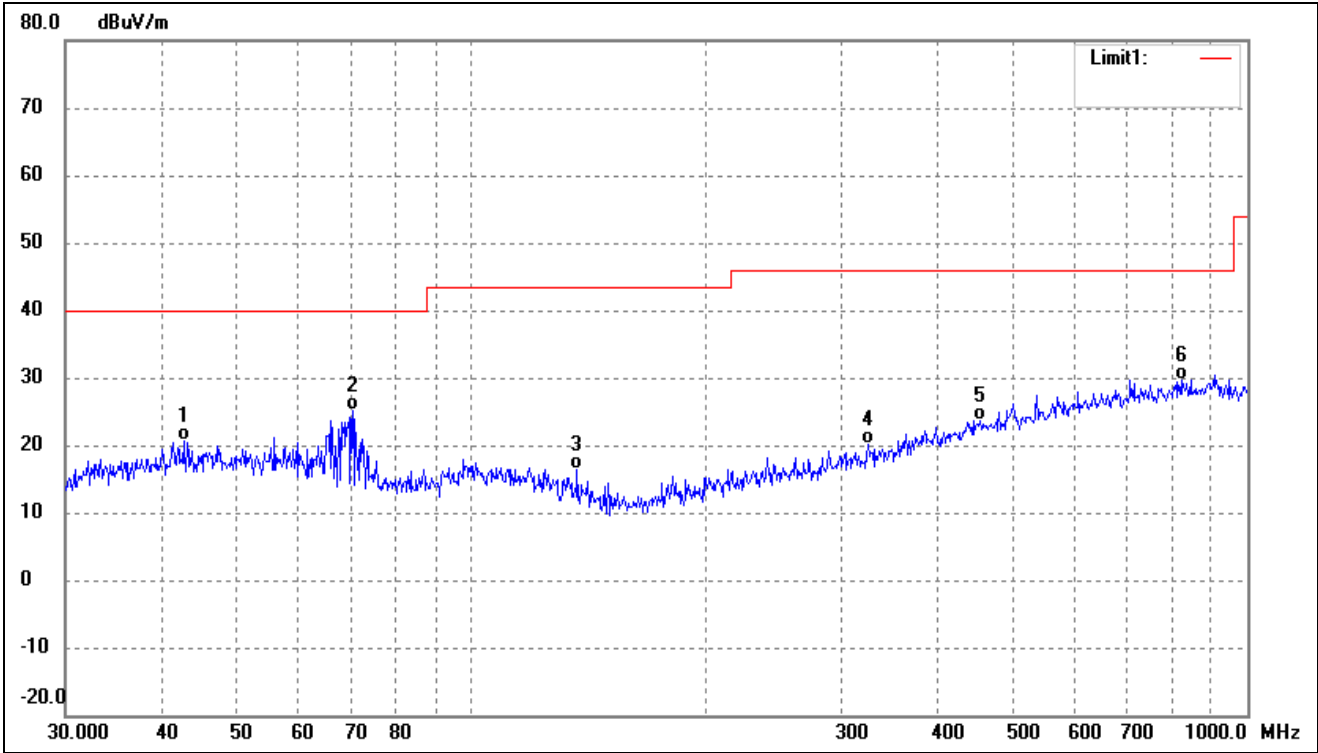
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	41.8596	29.24	-6.99	22.25	40.00	-17.75	-	-	QP
2	70.0903	35.47	-10.18	25.29	40.00	-14.71	-	-	QP
3	103.0800	27.95	-8.77	19.18	43.50	-24.32	-	-	QP
4	237.4760	27.78	-8.66	19.12	46.00	-26.88	-	-	QP
5	465.5994	28.81	-2.17	26.64	46.00	-19.36	-	-	QP
6	661.1505	28.47	1.04	29.51	46.00	-16.49	-	-	QP

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



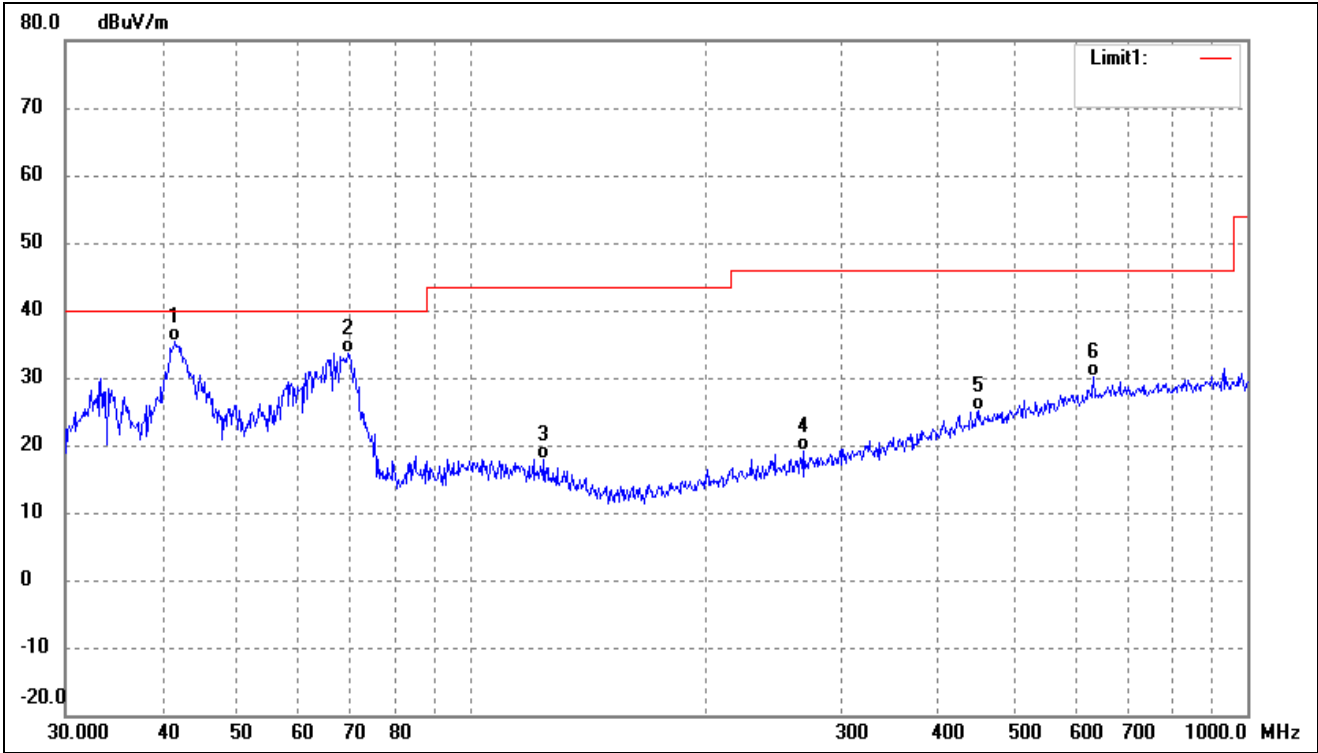
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	41.5670	42.39	-7.00	35.39	40.00	-4.61	-	-	QP
2	65.5727	43.62	-9.40	34.22	40.00	-5.78	-	-	QP
3	133.6188	29.11	-11.74	17.37	43.50	-26.13	-	-	QP
4	339.5888	26.70	-5.72	20.98	46.00	-25.02	-	-	QP
5	425.0280	27.48	-3.22	24.26	46.00	-21.74	-	-	QP
6	633.9073	29.38	0.74	30.12	46.00	-15.88	-	-	QP

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



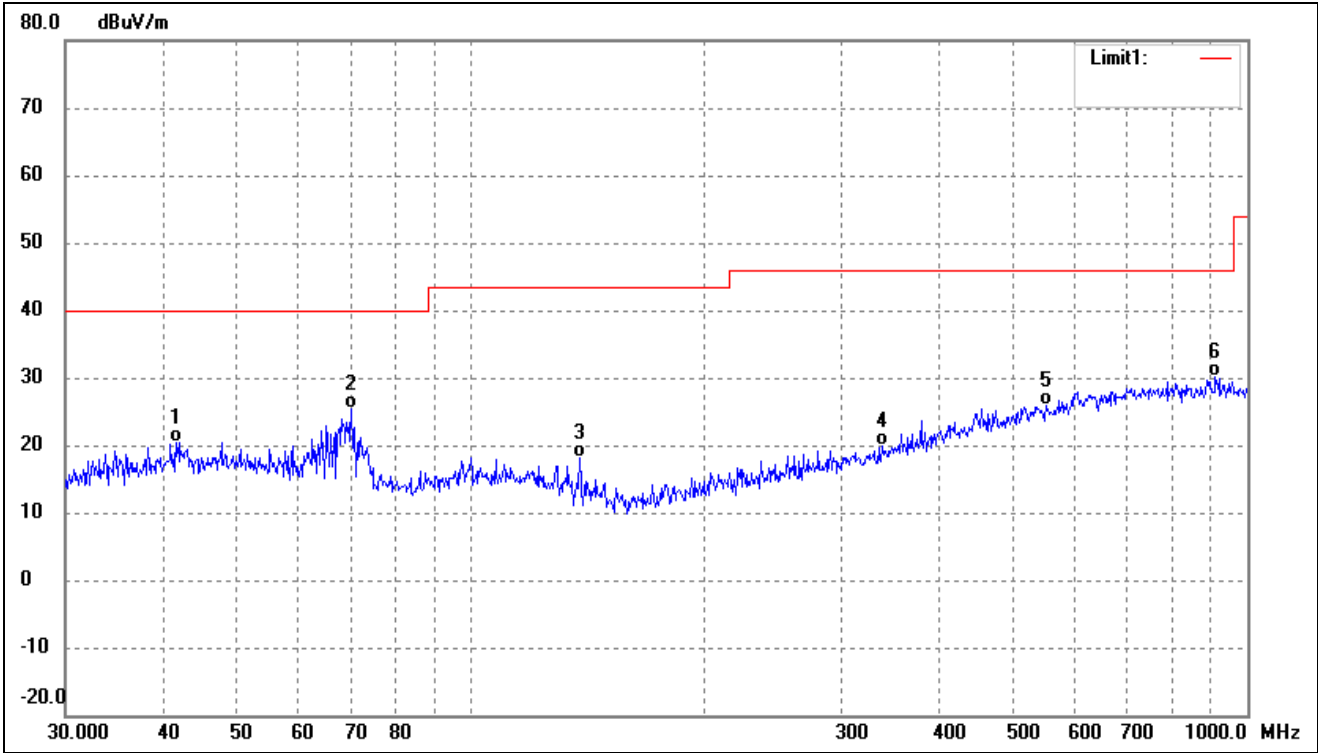
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	42.6000	27.58	-6.99	20.59	40.00	-19.41	-	-	QP
2	70.3365	35.31	-10.20	25.11	40.00	-14.89	-	-	QP
3	136.9392	28.39	-12.01	16.38	43.50	-27.12	-	-	QP
4	324.4561	26.31	-6.19	20.12	46.00	-25.88	-	-	QP
5	452.7197	26.17	-2.49	23.68	46.00	-22.32	-	-	QP
6	821.7104	27.53	2.22	29.75	46.00	-16.25	-	-	QP

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



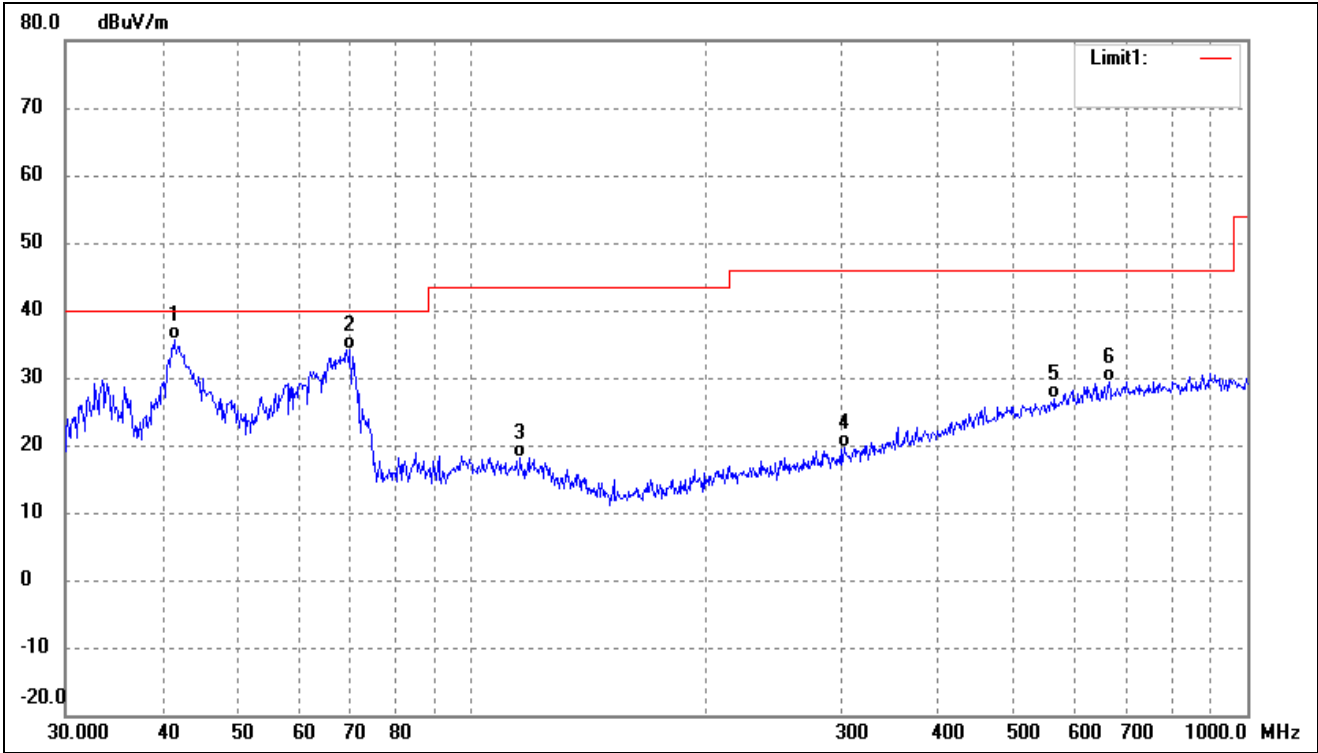
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	41.5670	42.39	-7.00	35.39	40.00	-4.61	-	-	QP
2	69.3568	43.74	-10.06	33.68	40.00	-6.32	-	-	QP
3	124.1330	28.34	-10.36	17.98	43.50	-25.52	-	-	QP
4	267.5455	27.03	-7.83	19.20	46.00	-26.80	-	-	QP
5	451.1350	27.64	-2.53	25.11	46.00	-20.89	-	-	QP
6	633.9073	29.38	0.74	30.12	46.00	-15.88	-	-	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	41.7130	27.41	-7.00	20.41	40.00	-19.59	-	-	QP
2	70.0903	35.47	-10.18	25.29	40.00	-14.71	-	-	QP
3	137.9029	30.26	-12.09	18.17	43.50	-25.33	-	-	QP
4	338.4001	25.63	-5.76	19.87	46.00	-26.13	-	-	QP
5	550.9480	26.35	-0.45	25.90	46.00	-20.10	-	-	QP
6	909.6667	27.36	2.72	30.08	46.00	-15.92	-	-	QP

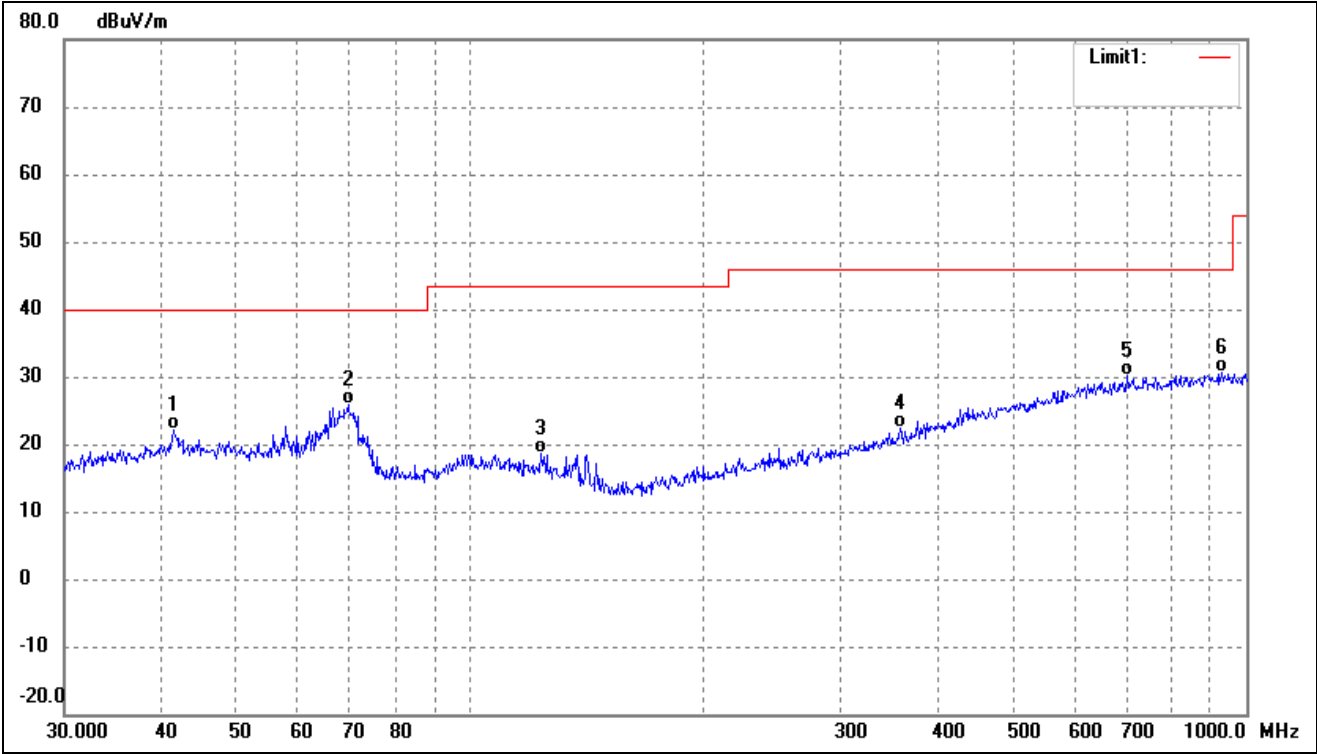
802.11a(Worst case)			
Test Channel	5240MHz	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	41.4215	42.54	-6.99	35.55	40.00	-4.45	-	-	QP
2	69.8450	44.36	-10.15	34.21	40.00	-5.79	-	-	QP
3	115.7256	27.54	-9.29	18.25	43.50	-25.25	-	-	QP
4	302.4812	26.49	-6.89	19.60	46.00	-26.40	-	-	QP
5	564.6389	27.19	-0.22	26.97	46.00	-19.03	-	-	QP
6	663.4729	28.32	1.06	29.38	46.00	-16.62	-	-	QP

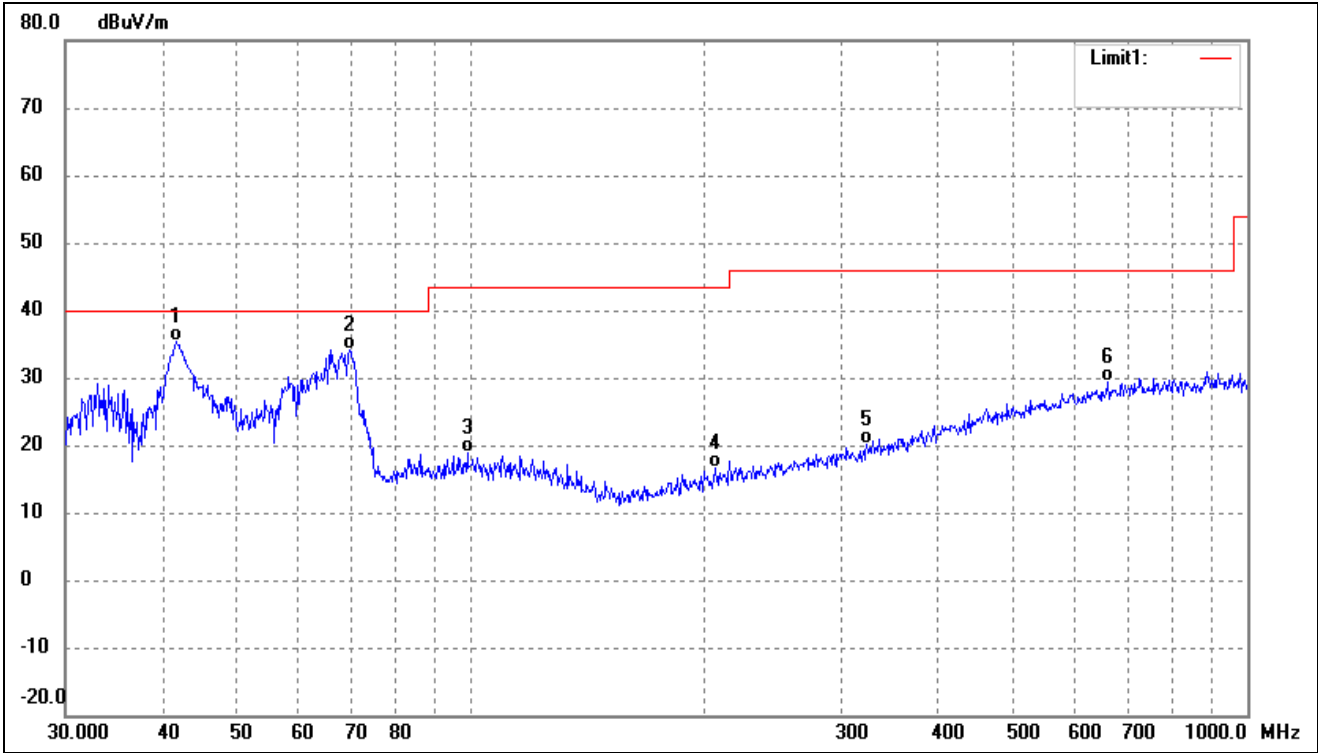
5725-5850MHz

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



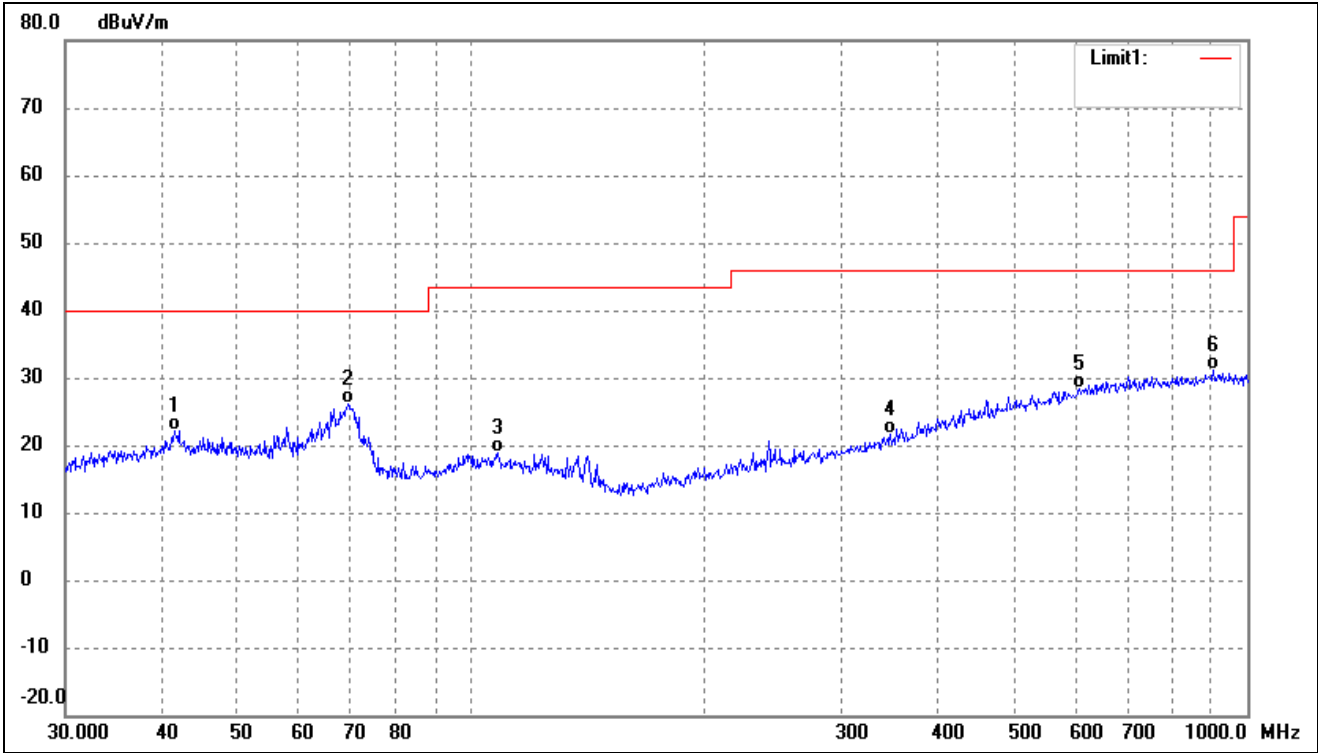
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	()	(cm)	
1	41.4215	29.18	-6.99	22.19	40.00	-17.81	-	-	QP
2	69.6005	35.94	-10.10	25.84	40.00	-14.16	-	-	QP
3	123.2655	28.76	-10.20	18.56	43.50	-24.94	-	-	QP
4	357.9287	27.46	-5.16	22.30	46.00	-23.70	-	-	QP
5	701.7610	28.77	1.44	30.21	46.00	-15.79	-	-	QP
6	929.0082	27.93	2.66	30.59	46.00	-15.41	-	-	QP

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



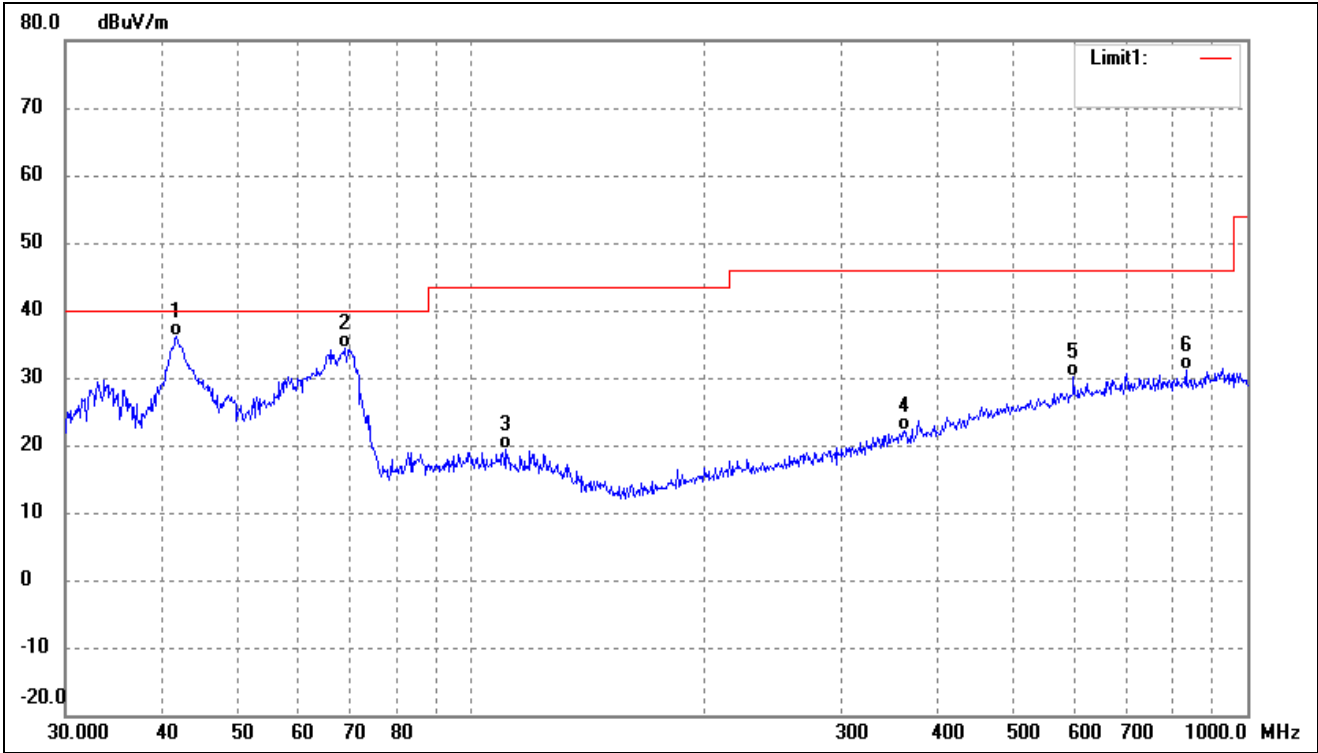
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	41.7130	42.26	-7.00	35.26	40.00	-4.74	-	-	QP
2	69.6005	44.21	-10.10	34.11	40.00	-5.89	-	-	QP
3	98.8326	27.74	-8.94	18.80	43.50	-24.70	-	-	QP
4	206.3976	26.20	-9.53	16.67	43.50	-26.83	-	-	QP
5	323.3204	26.37	-6.23	20.14	46.00	-25.86	-	-	QP
6	661.1505	28.39	1.04	29.43	46.00	-16.57	-	-	QP

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



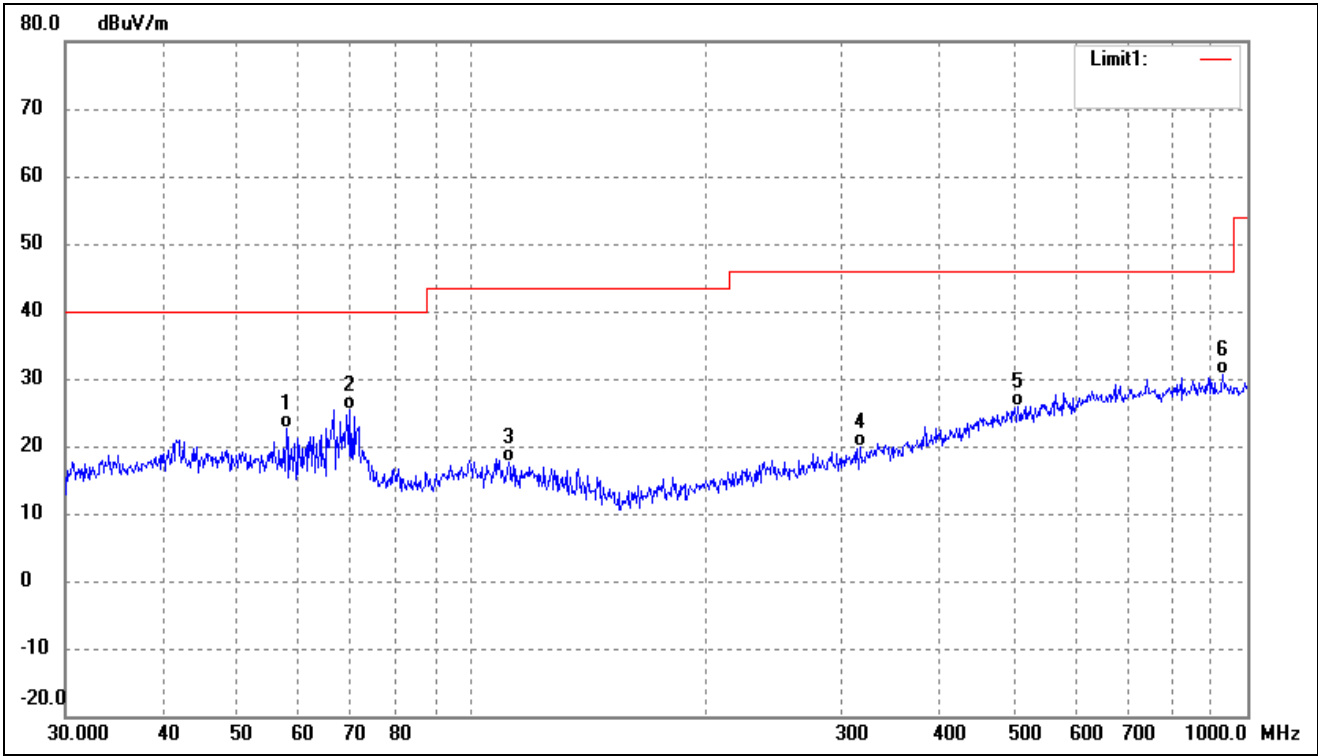
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	41.4215	29.18	-6.99	22.19	40.00	-17.81	-	-	QP
2	69.3568	36.09	-10.06	26.03	40.00	-13.97	-	-	QP
3	108.2667	27.77	-8.85	18.92	43.50	-24.58	-	-	QP
4	346.8092	27.22	-5.50	21.72	46.00	-24.28	-	-	QP
5	607.7867	27.95	0.46	28.41	46.00	-17.59	-	-	QP
6	903.3094	28.33	2.74	31.07	46.00	-14.93	-	-	QP

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



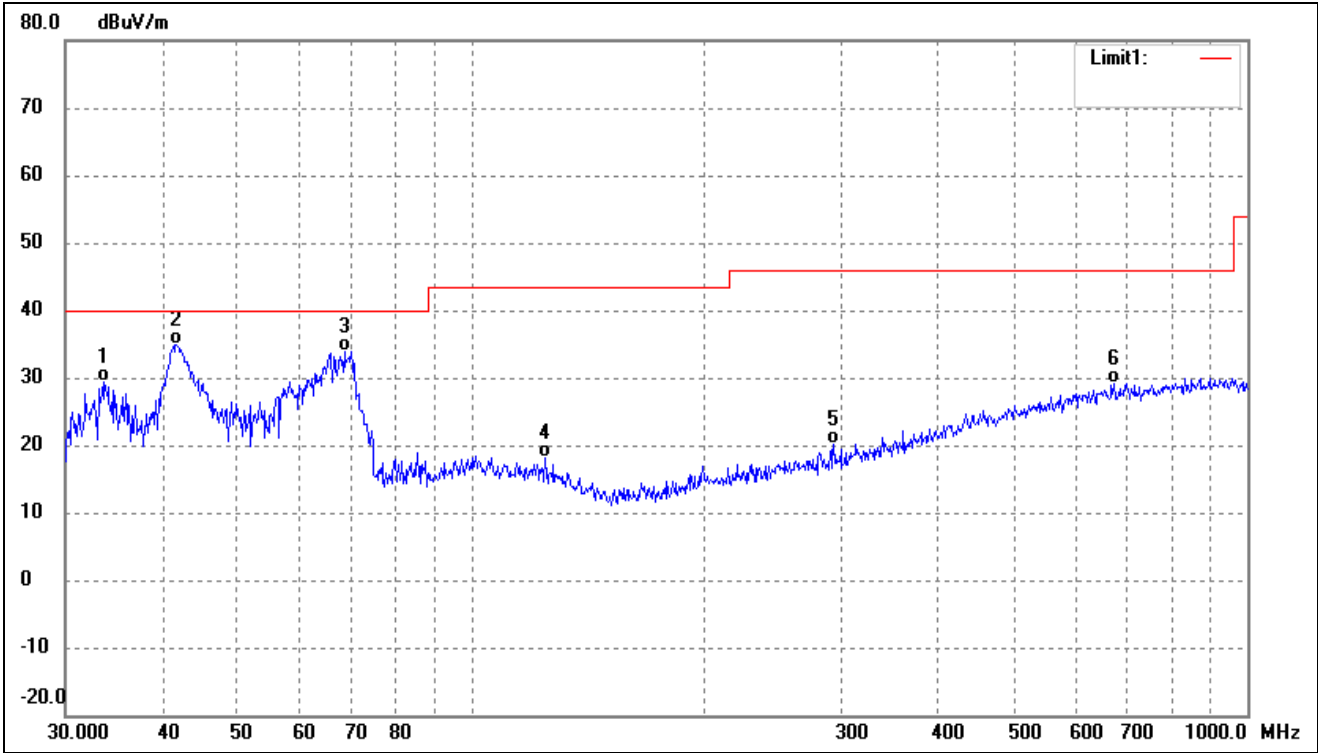
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	41.7130	43.13	-7.00	36.13	40.00	-3.87	-	-	QP
2	68.6310	44.37	-9.94	34.43	40.00	-5.57	-	-	QP
3	110.9571	28.35	-8.94	19.41	43.50	-24.09	-	-	QP
4	361.7139	27.15	-5.05	22.10	46.00	-23.90	-	-	QP
5	597.2234	29.71	0.32	30.03	46.00	-15.97	-	-	QP
6	833.3171	28.72	2.29	31.01	46.00	-14.99	-	-	QP

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



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	()	(cm)	
1	57.7962	30.70	-8.10	22.60	40.00	-17.40	-	-	QP
2	69.8450	35.63	-10.15	25.48	40.00	-14.52	-	-	QP
3	111.7380	26.63	-8.99	17.64	43.50	-25.86	-	-	QP
4	316.5890	26.20	-6.44	19.76	46.00	-26.24	-	-	QP
5	506.4791	27.09	-1.20	25.89	46.00	-20.11	-	-	QP
6	929.0082	27.93	2.66	30.59	46.00	-15.41	-	-	QP

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

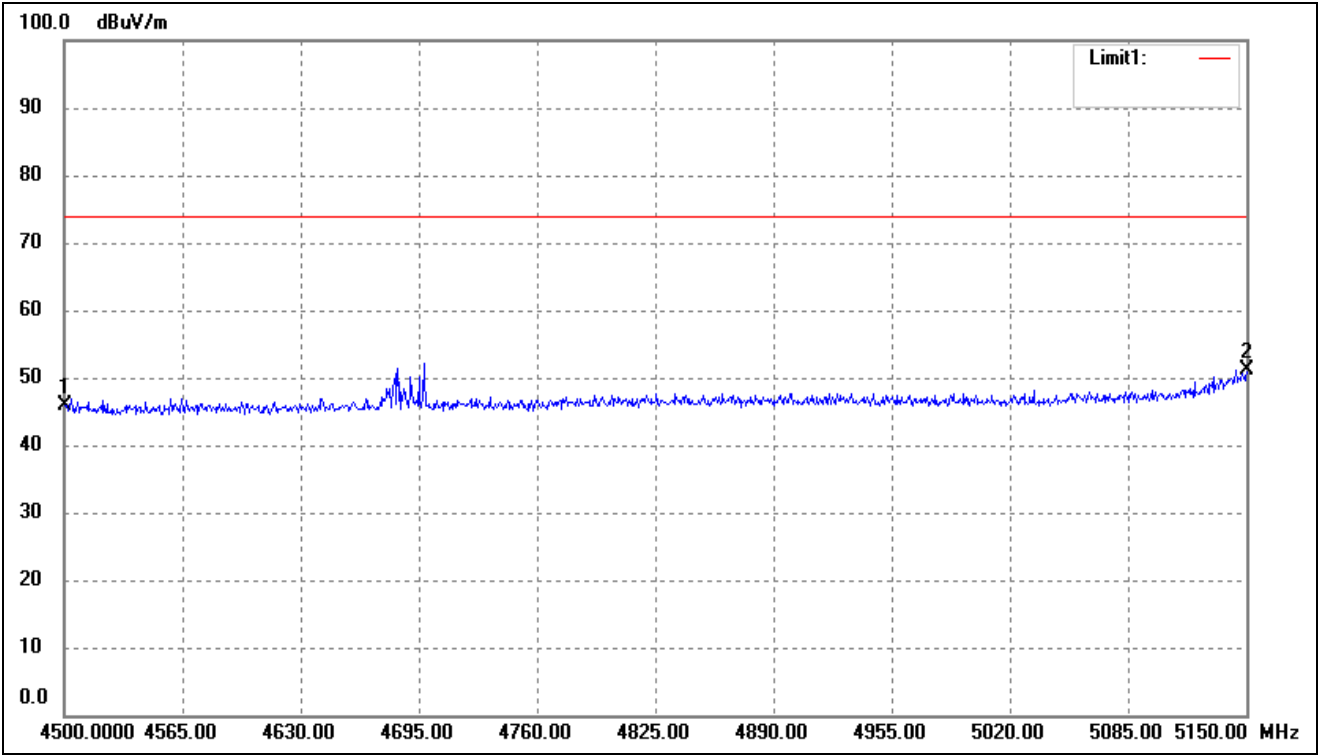


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	33.5624	38.03	-8.58	29.45	40.00	-10.55	-	-	QP
2	41.7130	41.97	-7.00	34.97	40.00	-5.03	-	-	QP
3	68.6310	43.92	-9.94	33.98	40.00	-6.02	-	-	QP
4	124.5690	28.66	-10.44	18.22	43.50	-25.28	-	-	QP
5	293.0842	27.25	-7.14	20.11	46.00	-25.89	-	-	QP
6	672.8445	27.99	1.15	29.14	46.00	-16.86	-	-	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.

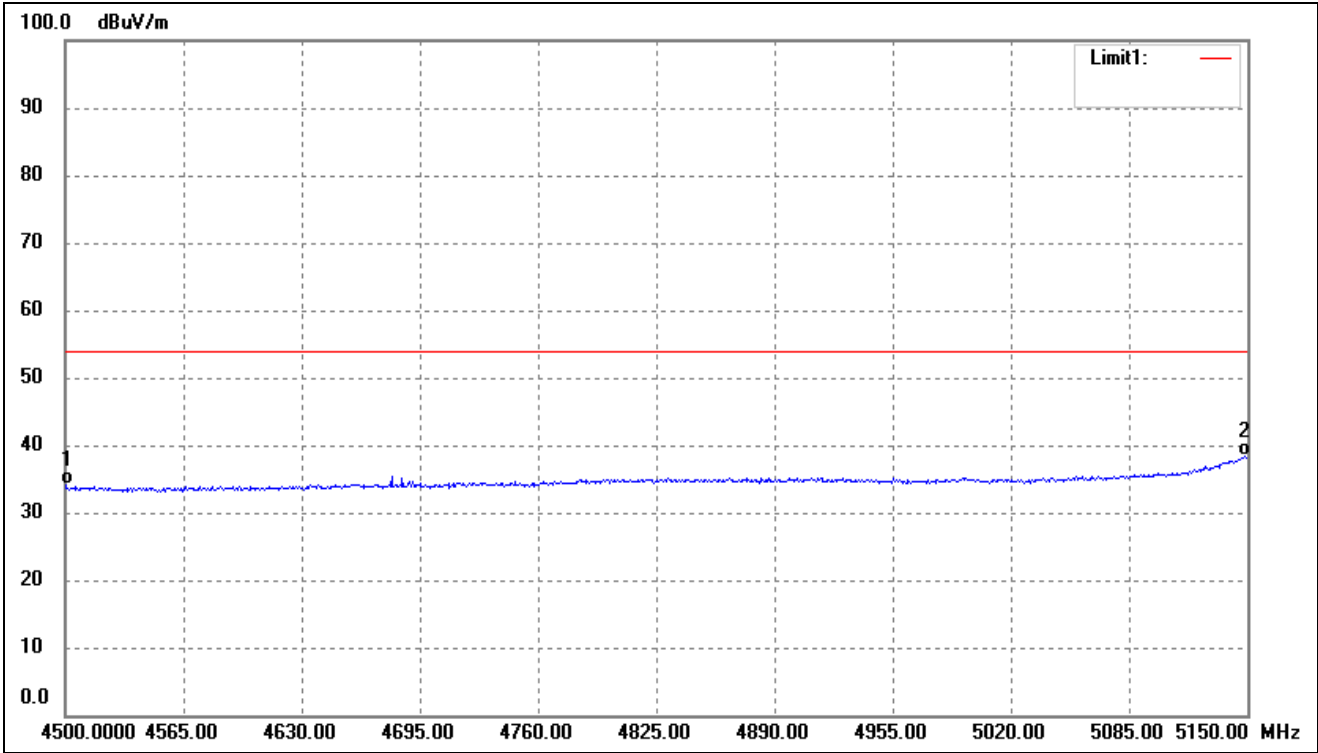
- Spurious Emission above 1GHz
- Antenna 0(worst case)

802.11a- Restricted Bandedge (worst case)			
Test Channel	band 4.50-5.15GHz	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	52.75	-6.92	45.83	74.00	-28.17	-	-	peak
2	5150.000	56.49	-5.33	51.16	74.00	-22.84	-	-	peak

802.11a- Restricted Bandedge (worst case)			
Test Channel	band 4.50-5.15GHz	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	40.93	-6.92	34.01	54.00	-19.99	-	-	AVG
2	5150.000	43.73	-5.33	38.40	54.00	-15.60	-	-	AVG

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

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

- Antenna 0(worst case)
- For the frequency band 5.15-5.25GHz, 5.725-5.850GHz (802.11a)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5180MHz)							
10360	57.09	7.11	64.20	74	-9.80	H	PK
15540	35.28	8.22	43.50	54	-10.50	H	AV
10360	58.87	7.11	65.98	74	-8.02	V	PK
15540	39.44	8.22	47.66	54	-6.34	V	AV
Middle Channel (5200MHz)							
10400	56.37	7.22	63.59	74	-10.41	H	PK
15600	36.29	8.67	44.96	54	-9.04	H	AV
10400	55.27	7.22	62.49	74	-11.51	V	PK
15600	36.13	8.67	44.80	54	-9.20	V	AV
High Channel (5240MHz)							
10480	56.23	7.69	63.92	74	-10.08	H	PK
15720	36.20	8.93	45.13	54	-8.87	H	AV
10480	54.41	7.69	62.10	74	-11.90	V	PK
15720	35.76	8.93	44.69	54	-9.31	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5745MHz)							
11490	55.89	9.45	65.34	74	-8.66	H	PK
17235	34.88	10.36	45.24	54	-8.76	H	AV
11490	55.29	9.45	64.74	74	-9.26	V	PK
17235	33.67	10.36	44.03	54	-9.97	V	AV
Middle Channel (5785MHz)							
11570	57.62	9.62	67.24	74	-6.76	H	PK
17355	34.52	10.67	45.19	54	-8.81	H	AV
11570	56.72	9.62	66.34	74	-7.66	V	PK
17355	34.74	10.67	45.41	54	-8.59	V	AV
High Channel (5825MHz)							
11650	55.75	9.84	65.59	74	-8.41	H	PK
17475	34.60	10.95	45.55	54	-8.45	H	AV
11650	54.69	9.84	64.53	74	-9.47	V	PK
17475	34.28	10.95	45.23	54	-8.77	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-35.32	-27
Highest	Above 5350	-43.56	-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	-38.36	-27
	5715 to 5725	-40.41	-17
Highest	5850 to 5860	-42.00	-17
	Above 5860	-41.77	-27
Note: the data just list the worst cases			

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

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5180MHz)							
10360	56.52	7.11	63.63	74	-10.37	H	PK
15540	37.13	8.22	45.35	54	-8.65	H	AV
10360	56.20	7.11	63.31	74	-10.69	H	PK
15540	38.43	8.22	46.65	54	-7.35	H	AV
Middle Channel (5200MHz)							
10400	55.65	7.22	62.87	74	-11.13	H	PK
15600	37.68	8.67	46.35	54	-7.65	H	AV
10400	56.49	7.22	63.71	74	-10.29	V	PK
15600	34.81	8.67	43.48	54	-10.52	V	AV
High Channel (5240MHz)							
10480	56.22	7.69	63.91	74	-10.09	H	PK
15720	35.21	8.93	44.14	54	-9.86	H	AV
10480	58.36	7.69	66.05	74	-7.95	V	PK
15720	37.50	8.93	46.43	54	-7.57	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	56.81	9.45	66.26	74	-7.74	H	PK
17235	35.86	10.36	46.22	54	-7.78	H	AV
11490	55.74	9.45	65.19	74	-8.81	V	PK
17235	36.43	10.36	46.79	54	-7.21	V	AV
Middle Channel (5785MHz)							
11570	56.77	9.62	66.39	74	-7.61	H	PK
17355	34.11	10.67	44.78	54	-9.22	H	AV
11570	54.85	9.62	64.47	74	-9.53	V	PK
17355	34.64	10.67	45.31	54	-8.69	V	AV
High Channel (5825MHz)							
11650	55.05	9.84	64.89	74	-9.11	H	PK
17475	35.54	10.95	46.49	54	-7.51	H	AV
11650	57.28	9.84	67.12	74	-6.88	V	PK
17475	36.03	10.95	46.98	54	-7.02	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-30.19	-27
Highest	Above 5350	-39.17	-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	-43.91	-27
	5715 to 5725	-35.04	-17
Highest	5850 to 5860	-38.37	-17
	Above 5860	-42.41	-27
Note: the data just list the worst cases.			

- For the frequency band 5.15-5.25GHz, 5.725-5.850GHz (802.11ax HE20)
- Harmonics And Spurious Emissions

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5180MHz)							
10360	56.47	7.11	63.58	74	-10.42	H	PK
15540	36.02	8.22	44.24	54	-9.76	H	AV
10360	56.57	7.11	63.68	74	-10.32	V	PK
15540	38.74	8.22	46.96	54	-7.04	V	AV
Middle Channel (5200MHz)							
10400	58.35	7.22	65.57	74	-8.43	H	PK
15600	36.38	8.67	45.05	54	-8.95	H	AV
10400	59.09	7.22	66.31	74	-7.69	V	PK
15600	35.71	8.67	44.38	54	-9.62	V	AV
High Channel (5240MHz)							
10480	57.34	7.69	65.03	74	-8.97	H	PK
15720	36.33	8.93	45.26	54	-8.74	H	AV
10480	59.28	7.69	66.97	74	-7.03	V	PK
15720	37.95	8.93	46.88	54	-7.12	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	58.27	9.45	67.72	74	-6.28	H	PK
17235	35.44	10.36	45.80	54	-8.20	H	AV
11490	55.45	9.45	64.90	74	-9.10	V	PK
17235	35.30	10.36	45.66	54	-8.34	V	AV
Middle Channel (5785MHz)							
11570	53.69	9.62	63.31	74	-10.69	H	PK
17355	35.35	10.67	46.02	54	-7.98	H	AV
11570	57.11	9.62	66.73	74	-7.27	V	PK
17355	36.41	10.67	47.08	54	-6.92	V	AV
High Channel (5825MHz)							
11650	55.28	9.84	65.12	74	-8.88	H	PK
17475	35.23	10.95	46.18	54	-7.82	H	AV
11650	56.25	9.84	66.09	74	-7.91	V	PK
17475	33.51	10.95	44.46	54	-9.54	V	AV

➤ Out of Band edge 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-32.09	-27
Highest	Above 5350	-40.45	-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	-47.67	-27
	5715 to 5725	-32.93	-17
Highest	5850 to 5860	-34.83	-17
	Above 5860	-45.36	-27
Note: the data just list the worst cases.			

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

- For the frequency band 5.15-5.25GHz, 5.725-5.850GHz (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	57.44	7.25	64.69	74	-9.31	H	PK
15570	36.49	8.33	44.82	54	-9.18	H	AV
10380	60.05	7.25	67.30	74	-6.70	V	PK
15570	37.74	8.33	46.07	54	-7.93	V	AV
High Channel (5230MHz)							
10460	56.82	7.54	64.36	74	-9.64	H	PK
15690	38.74	8.86	47.60	54	-6.40	H	AV
10460	58.35	7.54	65.89	74	-8.11	V	PK
15690	38.66	8.86	47.52	54	-6.48	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5755MHz)							
11510	55.60	9.65	65.25	74	-8.75	H	PK
17265	35.31	10.87	46.18	54	-7.82	H	AV
11510	57.22	9.65	66.87	74	-7.13	V	PK
17265	37.06	10.87	47.93	54	-6.07	V	AV
High Channel (5795MHz)							
11590	56.68	9.81	66.49	74	-7.51	H	PK
17385	32.63	10.89	43.52	54	-10.48	H	AV
11590	55.57	9.81	65.38	74	-8.62	V	PK
17385	36.19	10.89	47.08	54	-6.92	V	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-36.05	-27
Highest	Above 5350	-40.86	-27
Note: the data just list the worst cases.			

➤ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-39.23	-27
	5715 to 5725	-40.66	-17
Highest	5850 to 5860	-41.79	-17
	Above 5860	-43.30	-27
Note: the data just list the worst cases.			

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

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5190MHz)							
10380	56.95	7.25	64.20	74	-9.80	H	PK
15570	37.76	8.33	46.09	54	-7.91	H	AV
10380	57.07	7.25	64.32	74	-9.68	H	PK
15570	36.38	8.33	44.71	54	-9.29	H	AV
High Channel (5230MHz)							
10460	58.72	7.54	66.26	74	-7.74	H	PK
15690	38.45	8.86	47.31	54	-6.69	H	AV
10460	59.32	7.54	66.86	74	-7.14	H	PK
15690	38.81	8.86	47.67	54	-6.33	H	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel (5755MHz)							
11510	54.01	9.65	63.66	74	-10.34	H	PK
17265	35.27	10.87	46.14	54	-7.86	H	AV
11510	56.46	9.65	66.11	74	-7.89	H	PK
17265	34.72	10.87	45.59	54	-8.41	H	AV
High Channel (5795MHz)							
11590	54.31	9.81	64.12	74	-9.88	H	PK
17385	33.32	10.89	44.21	54	-9.79	H	AV
11590	57.47	9.81	67.28	74	-6.72	H	PK
17385	35.97	10.89	46.86	54	-7.14	H	AV

➤ Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-37.28	-27
Highest	Above 5350	-41.32	-27
Note: the data just list the worst cases.			

➤ Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-39.97	-27
	5715 to 5725	-38.49	-17
Highest	5850 to 5860	-41.73	-17
	Above 5860	-42.31	-27
Note: the data just list the worst cases.			

- For the frequency band 5.15-5.25GHz, 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	57.34	7.33	64.67	74	-9.33	H	PK
15630	36.64	8.75	45.39	54	-8.61	H	AV
10420	55.36	7.33	62.69	74	-11.31	V	PK
15630	36.94	8.75	45.69	54	-8.31	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5775MHz							
11550	55.18	9.54	64.72	74	-9.28	H	PK
17325	35.35	10.59	45.94	54	-8.06	H	AV
11550	56.62	9.54	66.16	74	-7.84	V	PK
17325	33.82	10.59	44.41	54	-9.59	V	AV

- Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-35.03	-27
Highest	Above 5350	-32.05	-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	-45.17	-27
	5715 to 5725	-32.53	-17
Highest	5850 to 5860	-31.42	-17
	Above 5860	-38.32	-27
Note: the data just list the worst cases			

- For the frequency band 5.15-5.25GHz, 5.725-5.850GHz (802.11ax HE80)
- 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	57.49	7.33	64.82	74	-9.18	H	PK
15630	35.28	8.75	44.03	54	-9.97	H	AV
10420	58.45	7.33	65.78	74	-8.22	V	PK
15630	38.68	8.75	47.43	54	-6.57	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB	(dBuV/m)	(dBuV/m)	(dB)	H/V	
5775MHz							
11550	56.93	9.54	66.47	74	-7.53	H	PK
17325	36.19	10.59	46.78	54	-7.22	H	AV
11550	55.64	9.54	65.18	74	-8.82	V	PK
17325	33.51	10.59	44.10	54	-9.90	V	AV

- Out of Band edge for 5150-5250MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5150	-34.46	-27
Highest	Above 5350	-31.17	-27
Note: the data just list the worst cases			

- Out of Band edge for 5725-5850MHz

Test CH.	Test Segment	Result	Limit
	MHz	dBm/MHz	dBm/MHz
Lowest	Below 5715	-41.81	-27
	5715 to 5725	-29.18	-17
Highest	5850 to 5860	-31.65	-17
	Above 5860	-40.00	-27
Note: the data just list the worst cases			

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

9. Frequency Stability

9.1 Standard Applicable

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

9.2 Test Procedure

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

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

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

9.3 Summary of Test Results/Plots

Please refer to Appendix D

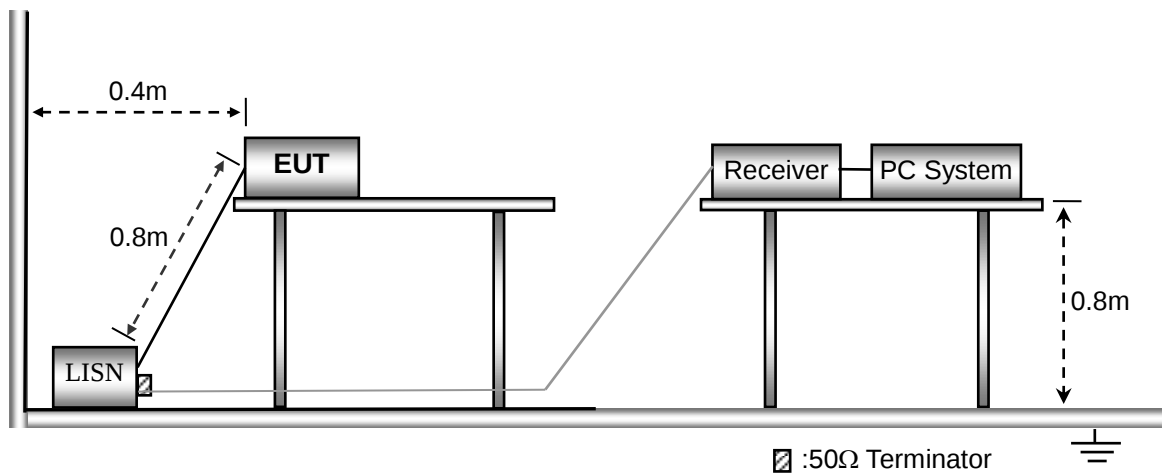
10 Conducted Emissions

10.1 Test Procedure

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

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

10.2 Basic Test Setup Block Diagram



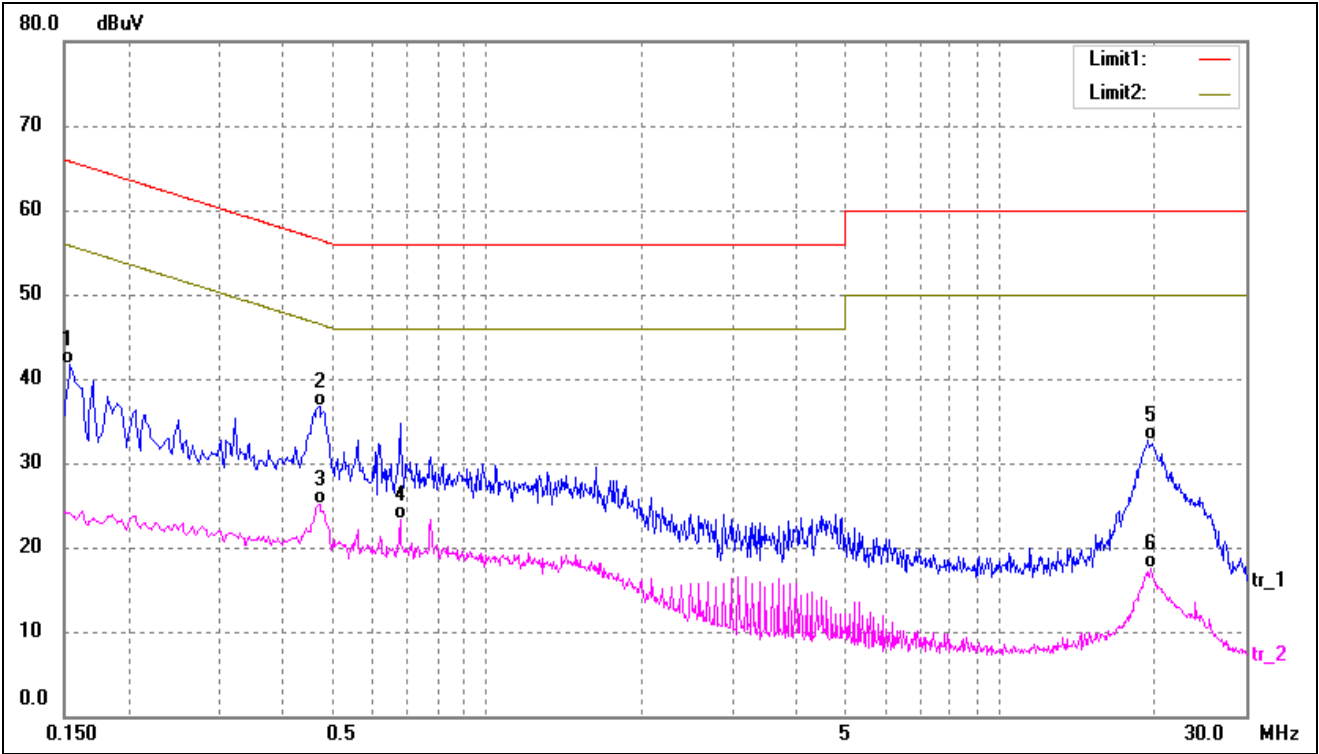
10.3 Test Receiver Setup

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

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

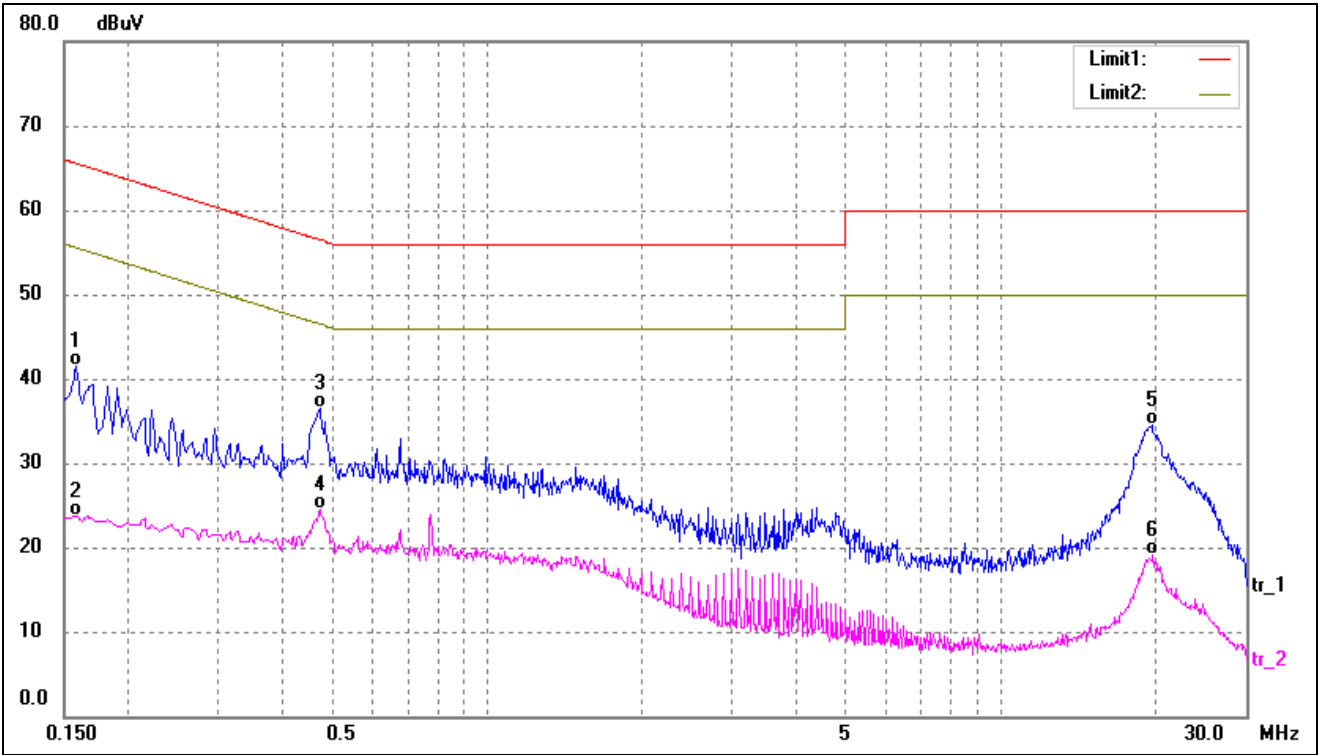
10.4 Summary of Test Results/Plots

Test Mode	Communication	AC120V 60Hz	Polarity:	Neutral
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1540	31.43	10.37	41.80	65.78	-23.98	QP
2*	0.4700	26.43	10.27	36.70	56.51	-19.81	QP
3	0.4700	14.85	10.27	25.12	46.51	-21.39	AVG
4	0.6780	12.97	10.37	23.34	46.00	-22.66	AVG
5	19.3980	22.39	10.24	32.63	60.00	-27.37	QP
6	19.5820	7.25	10.24	17.49	50.00	-32.51	AVG

Test Mode	Communication	AC120V 60Hz	Polarity:	Line
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No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1580	31.07	10.37	41.44	65.57	-24.13	QP
2	0.1580	13.38	10.37	23.75	55.57	-31.82	AVG
3*	0.4700	26.30	10.27	36.57	56.51	-19.94	QP
4	0.4700	14.23	10.27	24.50	46.51	-22.01	AVG
5	19.6380	24.31	10.24	34.55	60.00	-25.45	QP
6	19.7620	8.86	10.25	19.11	50.00	-30.89	AVG

APPENDIX SUMMARY

Project No.	WTH22X02016901W	Test Engineer	Gala
Start date	2022/3/28	Finish date	2022/3/28
Temperature	23℃	Humidity	45%
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

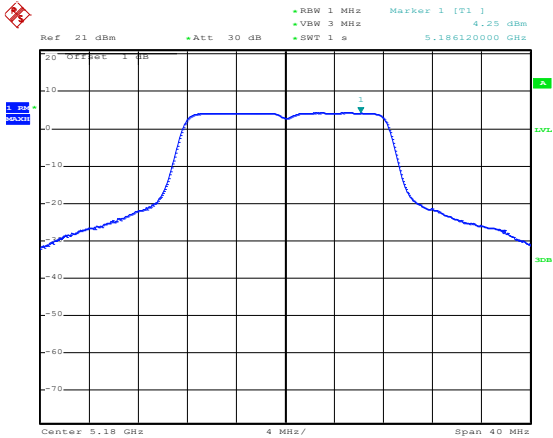
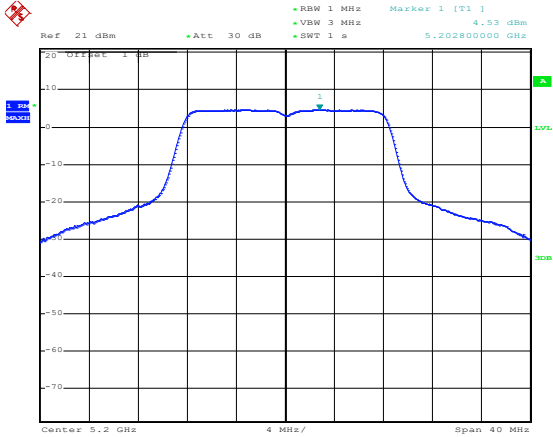
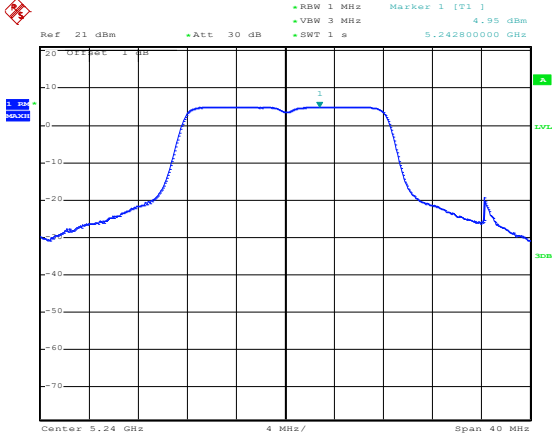
APPENDIX A

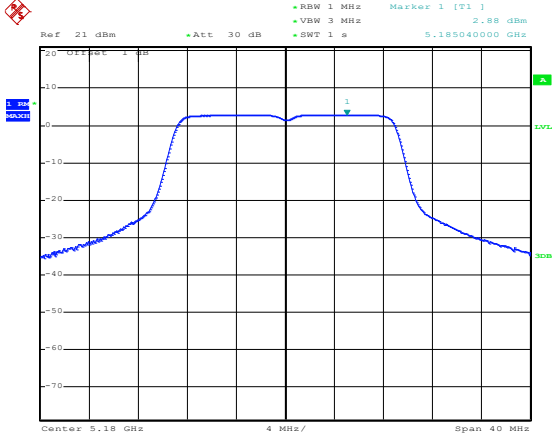
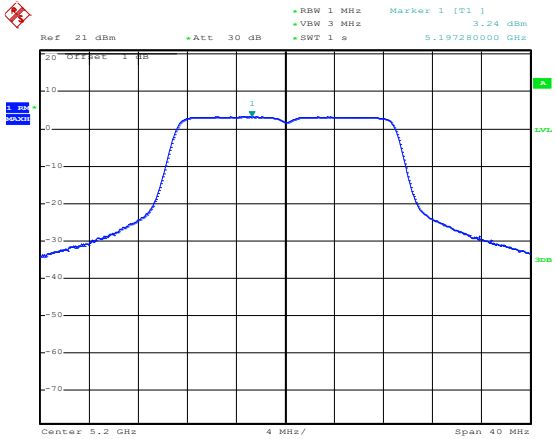
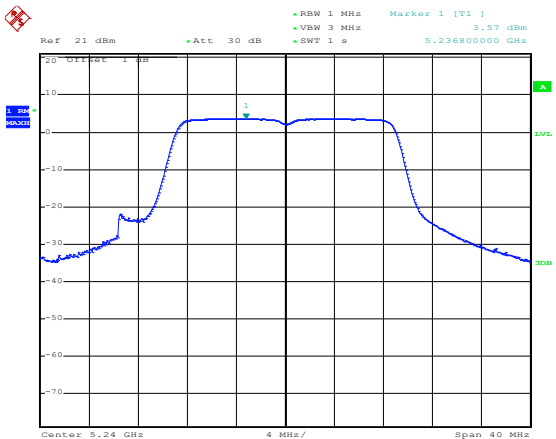
Power Spectral Density					
U-NII-1:5150-5250MHz					
Operating mode	Test Channel	ANT 0 dBm/MHz	ANT 1 dBm/MHz	Total dBm/MHz	Limit (dBm/MHz)
802.11a	5180	4.25	2.61	/	11
	5200	4.53	2.66	/	11
	5240	4.95	2.98	/	11
802.11n-HT20	5180	2.88	-3.68	3.75	11
	5200	3.24	-3.25	4.12	11
	5240	3.57	-3.38	4.37	11
802.11n-HT40	5190	-2.99	-1.51	0.82	11
	5230	2.64	-1.16	4.15	11
802.11ax-HE20	5180	2.59	0.89	4.83	11
	5200	-2.94	1.10	2.54	11
	5240	3.20	1.30	5.36	11
802.11ax-HE40	5190	-3.17	-1.62	0.68	11
	5230	-2.96	-1.17	1.04	11
802.11ac-HT80	5210	-7.59	-5.52	-3.42	11
802.11ax-HE80	5210	-7.96	-5.82	-3.75	11

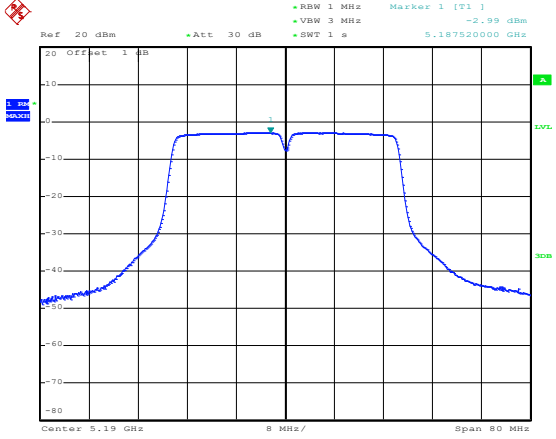
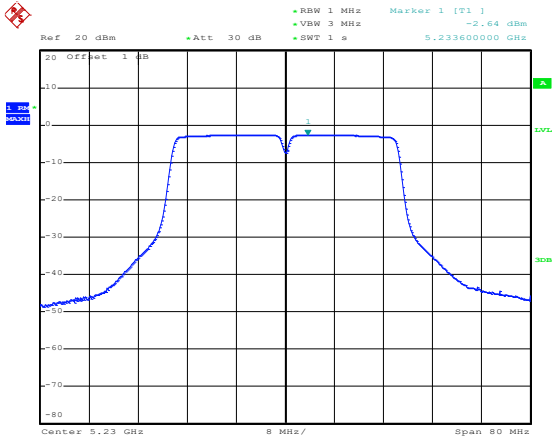
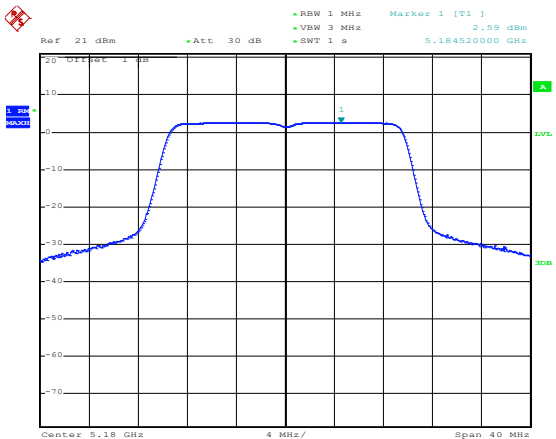
Power Spectral Density							
U-NII-3: 5725-5850MHz							
Operating mode	Test Channel	ANT 0 dBm/300kHz	ANT 1 dBm/300kHz	Factor	ANT 0 dBm/500kHz*	ANT 1 dBm/500kHz*	Limit dBm/500kHz
802.11a	5745	-5.87	-1.88	2.22	-3.65	0.34	30
	5785	-4.91	-1.70	2.22	-2.69	0.52	30
	5825	-4.27	-1.19	2.22	-2.05	1.03	30
*Note: Maximum PSD=PSD(dBm/300kHz)+10log(500kHz/300kHz)=2.22							

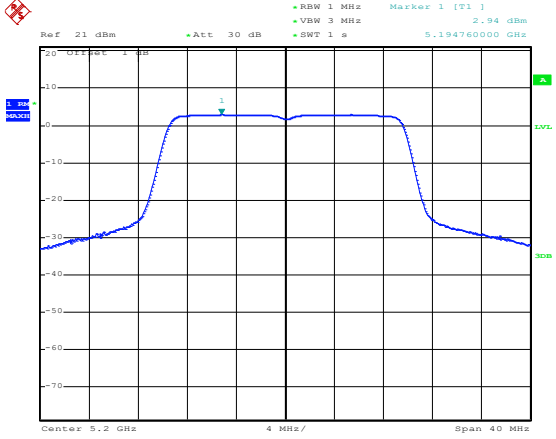
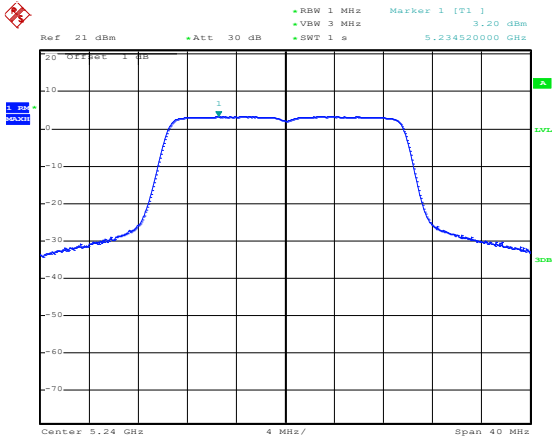
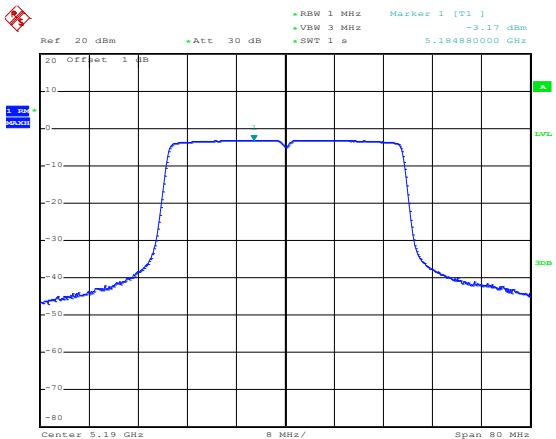
Power Spectral Density						
U-NII-3: 5725-5850MHz						
Operating mode	Test Channel	ANT 0 dBm/300kHz	ANT 1 dBm/300kHz	Factor	Total dBm/500kHz*	Limit dBm/500kHz
802.11n-HT20	5745	-5.98	-4.33	2.22	0.15	30
	5785	-5.14	-3.74	2.22	0.85	30
	5825	-4.48	-3.32	2.22	1.37	30
802.11n HT40	5755	-6.05	-3.93	2.22	0.37	30
	5795	-5.46	-3.53	2.22	0.84	30
802.11ax-HE20	5745	-6.24	-4.20	2.22	0.13	30
	5785	-5.71	-5.30	2.22	-0.27	30
	5825	-2.90	-4.86	2.22	1.46	30
802.11ax-HE40	5755	-6.36	-4.10	2.22	0.15	30
	5795	-5.74	-3.70	2.22	0.63	30
802.11ac-HT80	5775	-9.05	-7.80	2.22	-3.15	30
802.11ax-HE80	5775	-9.42	-8.13	2.22	-3.50	30
*Note: Maximum PSD=PSD(dBm/300kHz)+Factor Factor=10log(500kHz/300kHz)=2.22						

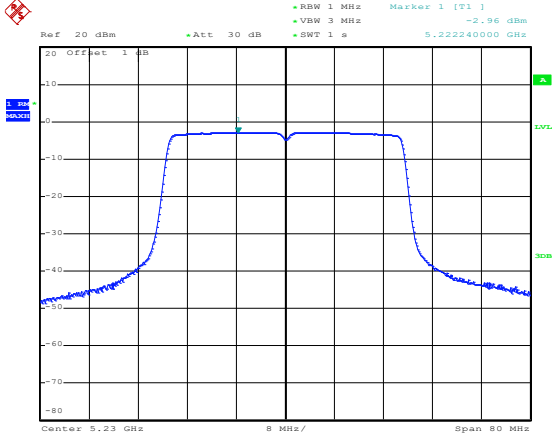
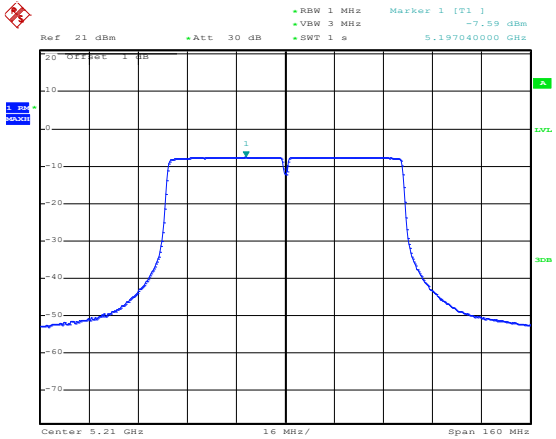
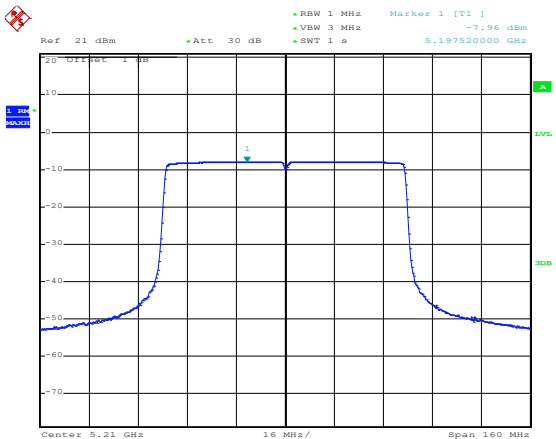
ANT 0
5150-5250MHz

802.11a-Low	 Ref: 21 dBm Att: 30 dB RBW 1 MHz VBW 3 MHz SWT 1 s Marker 1 [T1] 4.25 dBm 5.186130000 GHz Center 5.18 GHz 4 MHz/ Span 40 MHz Date: 25.MAR.2022 09:45:19
802.11a-Middle	 Ref: 21 dBm Att: 30 dB RBW 1 MHz VBW 3 MHz SWT 1 s Marker 1 [T1] 4.53 dBm 5.202800000 GHz Center 5.2 GHz 4 MHz/ Span 40 MHz Date: 25.MAR.2022 09:45:45
802.11a-High	 Ref: 21 dBm Att: 30 dB RBW 1 MHz VBW 3 MHz SWT 1 s Marker 1 [T1] 4.95 dBm 5.242800000 GHz Center 5.24 GHz 4 MHz/ Span 40 MHz Date: 25.MAR.2022 09:46:07

802.11n-HT20-Low	 Date: 25.MAR.2022 09:47:03
802.11n-HT20-Middle	 Date: 25.MAR.2022 09:47:50
802.11n-HT20-High	 Date: 25.MAR.2022 09:48:31

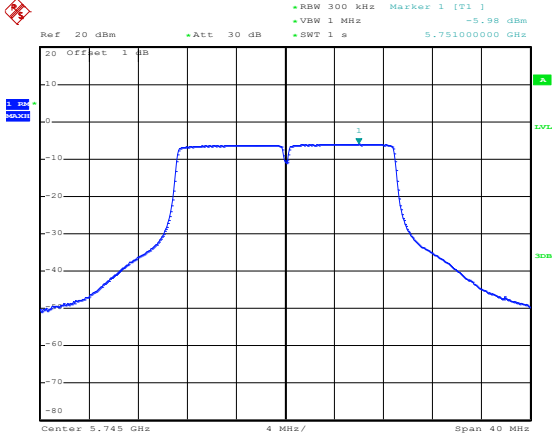
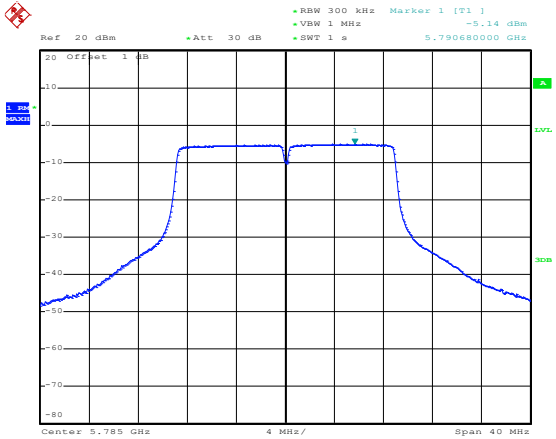
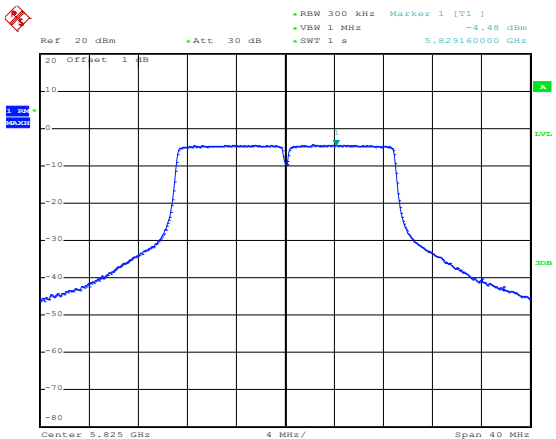
802.11n-HT40-Low	 Date: 25.MAR.2022 11:16:42
802.11n-HT40-High	 Date: 25.MAR.2022 11:17:51
802.11ax-HE20-Low	 Date: 25.MAR.2022 09:50:42

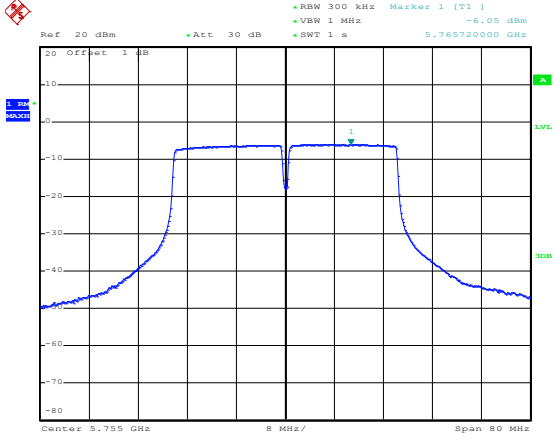
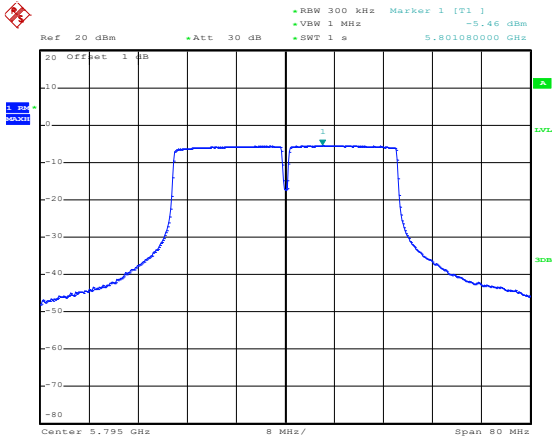
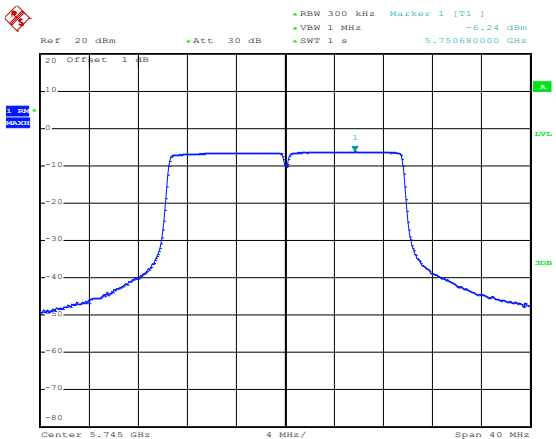
802.11ax-HE20- Middle	 Ref: 21 dBm Att: 30 dB RBW: 1 MHz VBW: 3 MHz SWT: 1 s Marker 1 [T1]: 2.94 dBm 5.194760000 GHz Center 5.2 GHz 4 MHz/ Span 40 MHz Date: 25.MAR.2022 09:51:31
802.11ax-HE20- High	 Ref: 21 dBm Att: 30 dB RBW: 1 MHz VBW: 3 MHz SWT: 1 s Marker 1 [T1]: 3.20 dBm 5.234520000 GHz Center 5.24 GHz 4 MHz/ Span 40 MHz Date: 25.MAR.2022 09:52:17
802.11ax-HE40-Low	 Ref: 20 dBm Att: 30 dB RBW: 1 MHz VBW: 3 MHz SWT: 1 s Marker 1 [T1]: -3.17 dBm 5.184880000 GHz Center 5.19 GHz 8 MHz/ Span 80 MHz Date: 25.MAR.2022 11:20:17

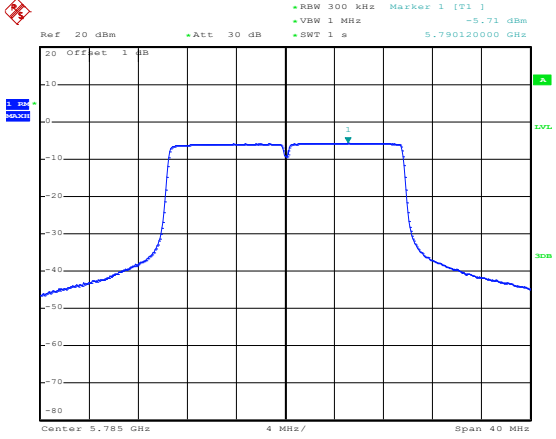
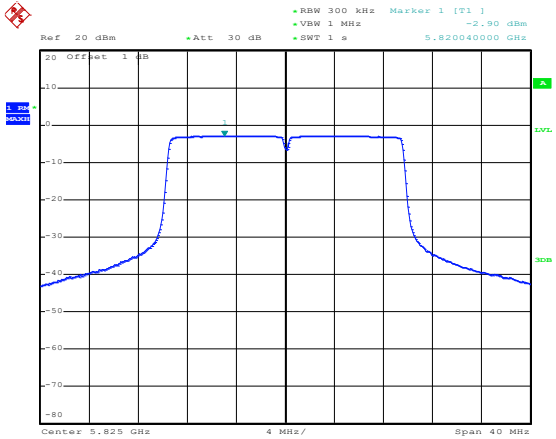
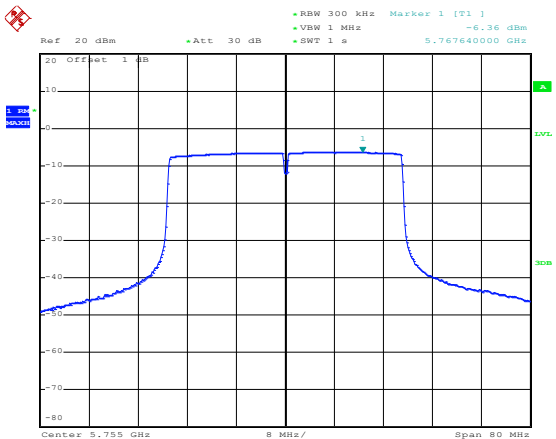
802.11ax-HE40- High	 Ref: 20 dBm Att: 30 dB RBW: 1 MHz VBW: 3 MHz SWT: 1 s Marker 1 [T1] -2.96 dBm 5.22240000 GHz Center 5.23 GHz 8 MHz/ Span 80 MHz Date: 25.MAR.2022 11:20:49
802.11ac-HT80	 Ref: 21 dBm Att: 30 dB RBW: 1 MHz VBW: 3 MHz SWT: 1 s Marker 1 [T1] -7.59 dBm 5.197040000 GHz Center 5.21 GHz 16 MHz/ Span 160 MHz Date: 25.MAR.2022 09:44:06
802.11ax-HE80	 Ref: 21 dBm Att: 30 dB RBW: 1 MHz VBW: 3 MHz SWT: 1 s Marker 1 [T1] -7.96 dBm 5.197520000 GHz Center 5.21 GHz 16 MHz/ Span 160 MHz Date: 25.MAR.2022 09:43:31

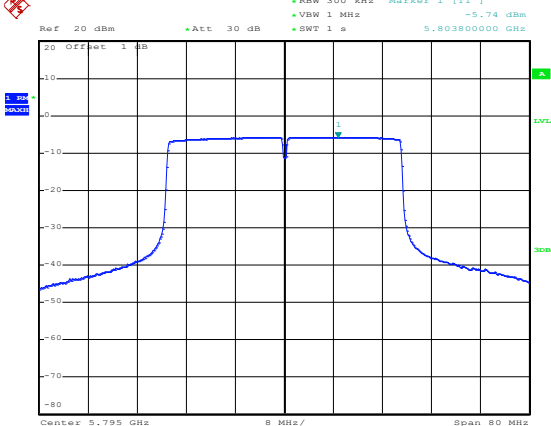
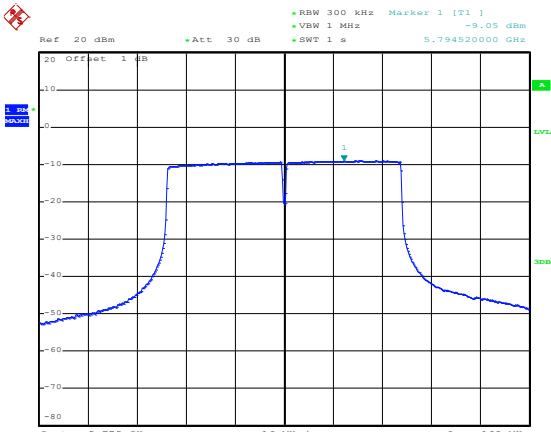
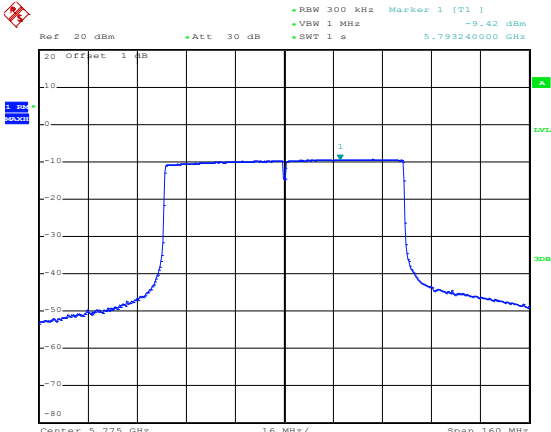
5725-5850MHz

Channel	Plot	Ref	Att	RBW	VBW	SWT	Marker 1 [T1]	Date
802.11a-Low		20 dBm	30 dB	300 kHz	1 MHz	1 s	-5.87 dBm	25.MAR.2022 15:54:54
802.11a-Middle		20 dBm	30 dB	300 kHz	1 MHz	1 s	-4.91 dBm	25.MAR.2022 15:55:32
802.11a-High		20 dBm	30 dB	300 kHz	1 MHz	1 s	-4.27 dBm	25.MAR.2022 15:56:12

802.11n-HT20-Low	 Ref: 20 dBm Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 1 s Marker 1 [T1] -5.98 dBm 5.75100000 GHz Center 5.745 GHz 4 MHz/ Span 40 MHz Date: 25.MAR.2022 15:58:39
802.11n-HT20-Middle	 Ref: 20 dBm Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 1 s Marker 1 [T1] -5.14 dBm 5.79068000 GHz Center 5.785 GHz 4 MHz/ Span 40 MHz Date: 25.MAR.2022 15:59:48
802.11n-HT20-High	 Ref: 20 dBm Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 1 s Marker 1 [T1] -4.48 dBm 5.82916000 GHz Center 5.825 GHz 4 MHz/ Span 40 MHz Date: 25.MAR.2022 16:00:25

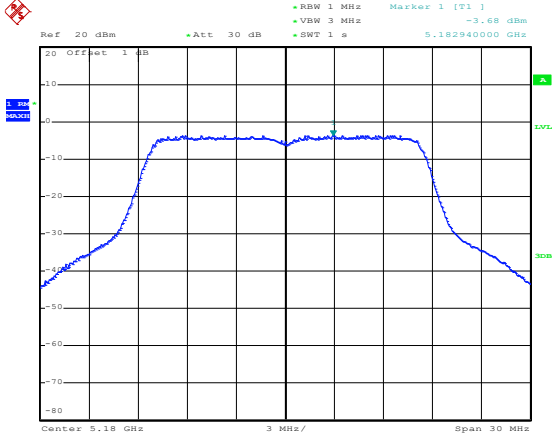
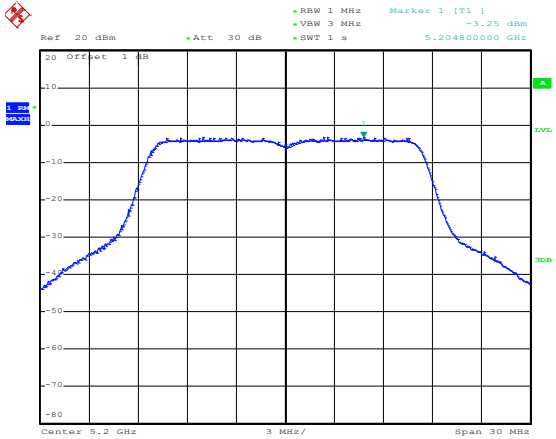
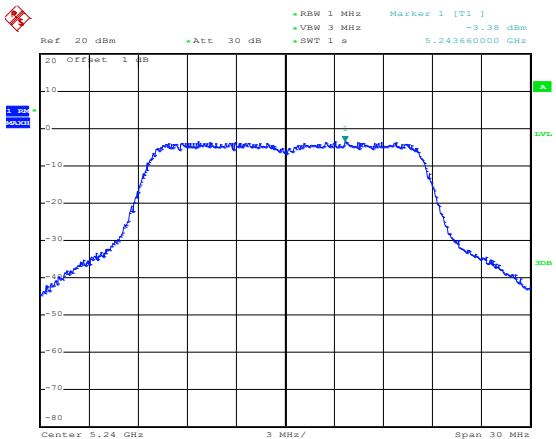
802.11n-HT40-Low	 Ref: 20 dBm Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 1 s Marker 1 [T1] -6.05 dBm 5.765720000 GHz Center 5.755 GHz 8 MHz/ Span 80 MHz Date: 25.MAR.2022 16:06:26
802.11n-HT40-High	 Ref: 20 dBm Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 1 s Marker 1 [T1] -5.46 dBm 5.801080000 GHz Center 5.795 GHz 8 MHz/ Span 80 MHz Date: 25.MAR.2022 16:06:59
802.11ax-HE20-Low	 Ref: 20 dBm Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 1 s Marker 1 [T1] -6.24 dBm 5.750680000 GHz Center 5.745 GHz 4 MHz/ Span 40 MHz Date: 25.MAR.2022 16:02:40

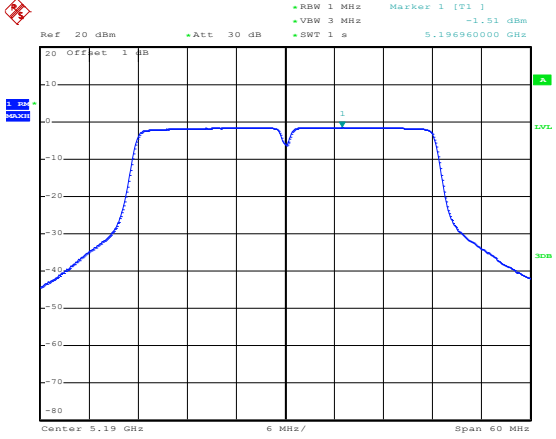
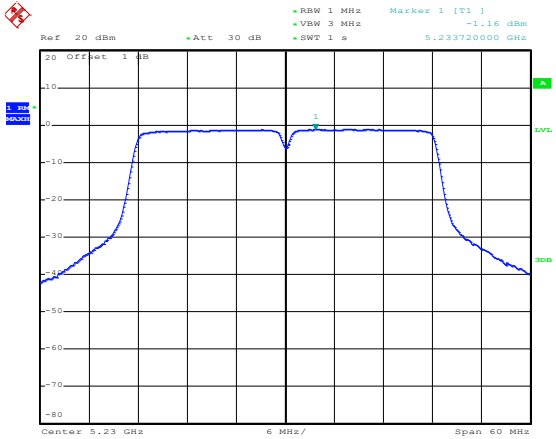
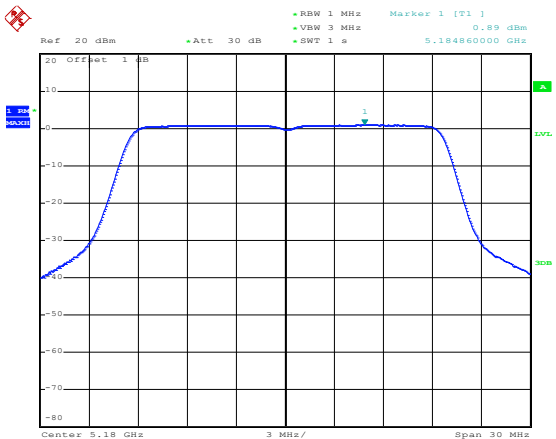
802.11ax-HE20- Middle	 Ref: 20 dBm Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 1 s Marker 1 [T1] -5.71 dBm 5.790120000 GHz Center 5.785 GHz 4 MHz/ Span 40 MHz Date: 25.MAR.2022 16:03:47
802.11ax-HE20- High	 Ref: 20 dBm Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 1 s Marker 1 [T1] -2.90 dBm 5.820040000 GHz Center 5.825 GHz 4 MHz/ Span 40 MHz Date: 25.MAR.2022 16:04:40
802.11ax-HE40-Low	 Ref: 20 dBm Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 1 s Marker 1 [T1] -6.36 dBm 5.767640000 GHz Center 5.755 GHz 8 MHz/ Span 80 MHz Date: 25.MAR.2022 16:07:50

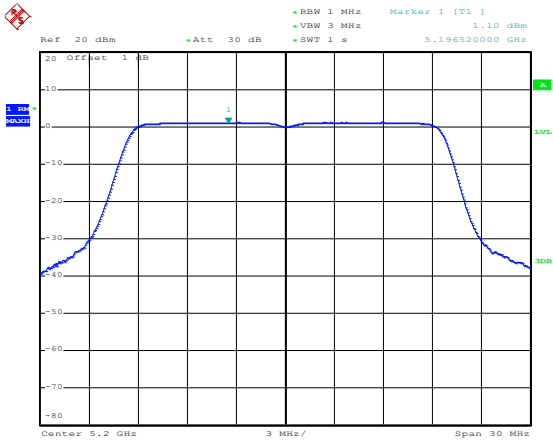
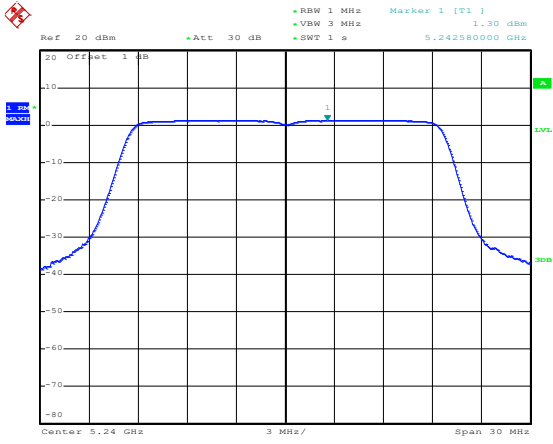
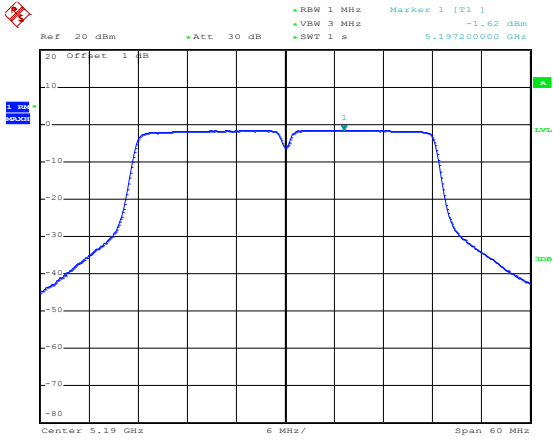
802.11ax-HE40- High	 Date: 25.MAR.2022 16:08:53
802.11ac-HT80	 Date: 25.MAR.2022 16:09:36
802.11ax-HE80	 Date: 25.MAR.2022 16:10:20

ANT 1
5150-5250MHz

802.11a-Low	Date: 26.MAR.2022 16:33:15
802.11a-Middle	Date: 26.MAR.2022 16:33:36
802.11a-High	Date: 26.MAR.2022 16:33:58

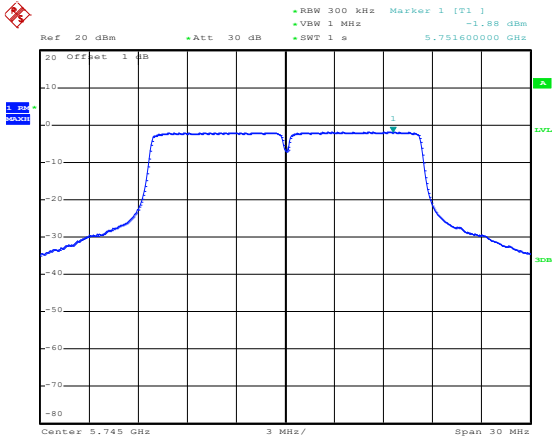
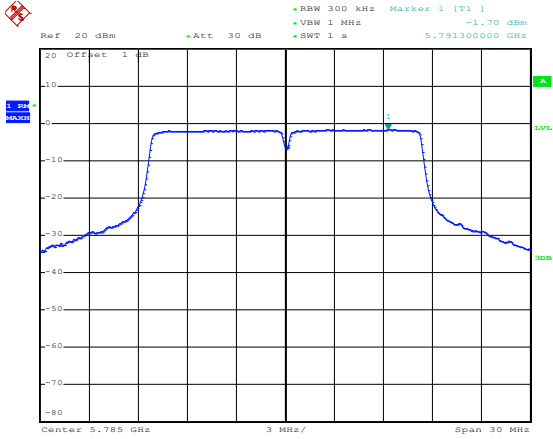
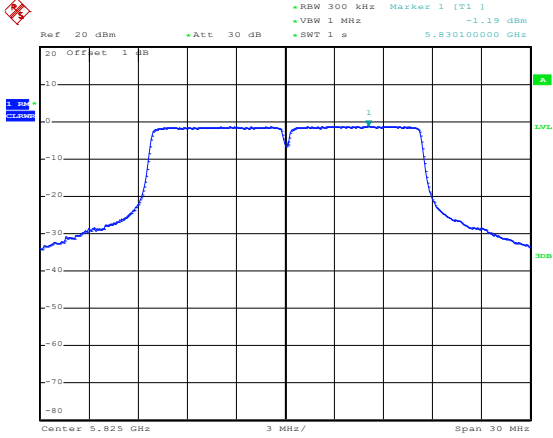
802.11n-HT20-Low	 Date: 26.MAR.2022 16:35:48
802.11n-HT20-Middle	 Date: 26.MAR.2022 16:36:43
802.11n-HT20-High	 Date: 26.MAR.2022 16:37:10

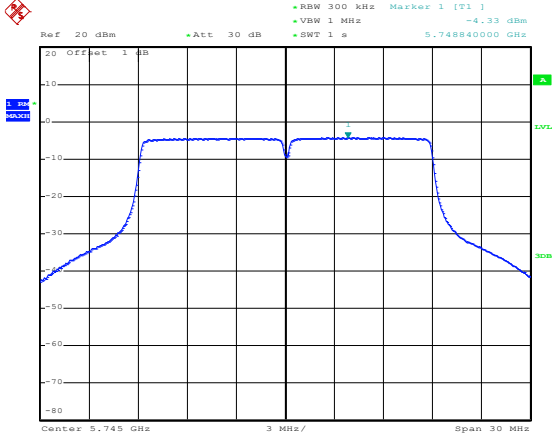
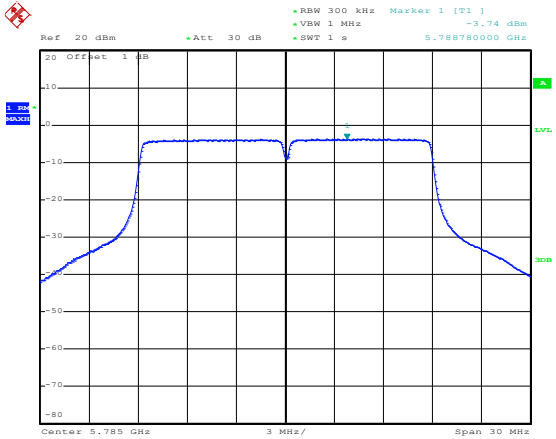
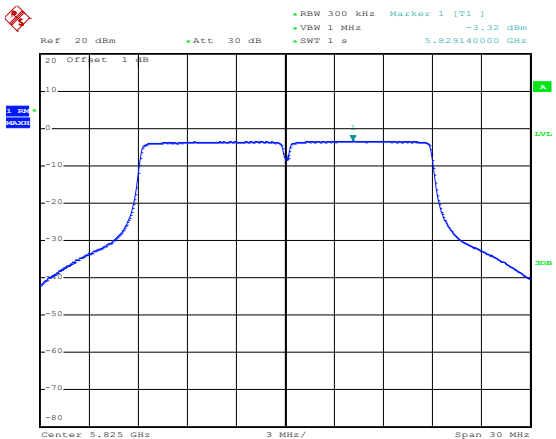
802.11n-HT40-Low	 Date: 26.MAR.2022 16:40:20
802.11n-HT40-High	 Date: 26.MAR.2022 16:40:48
802.11ax-HE20-Low	 Date: 26.MAR.2022 16:38:39

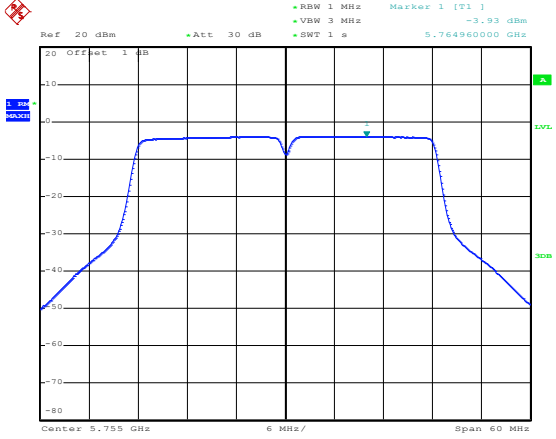
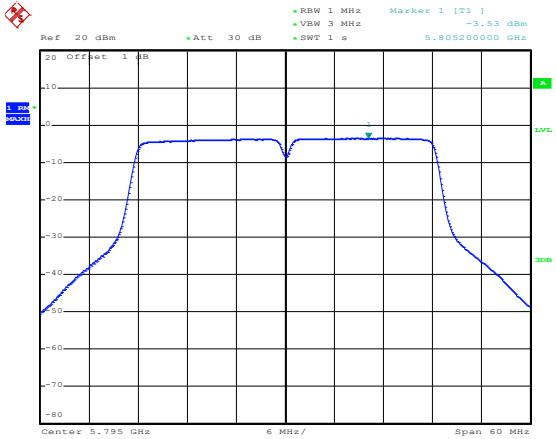
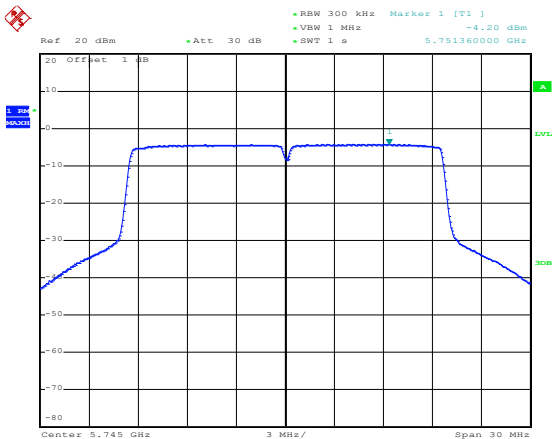
802.11ax-HE20- Middle	 Date: 26.MAR.2022 16:38:57
802.11ax-HE20- High	 Date: 26.MAR.2022 16:39:15
802.11ax-HE40-Low	 Date: 26.MAR.2022 16:41:13

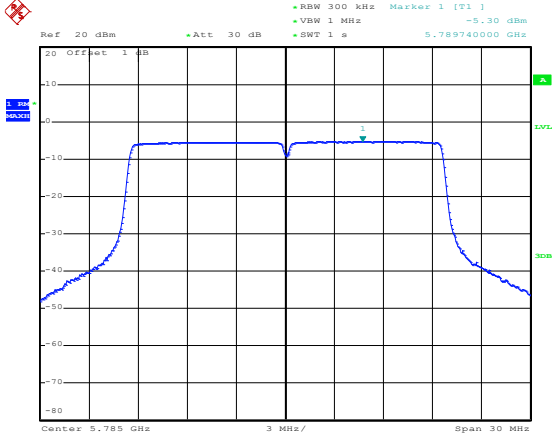
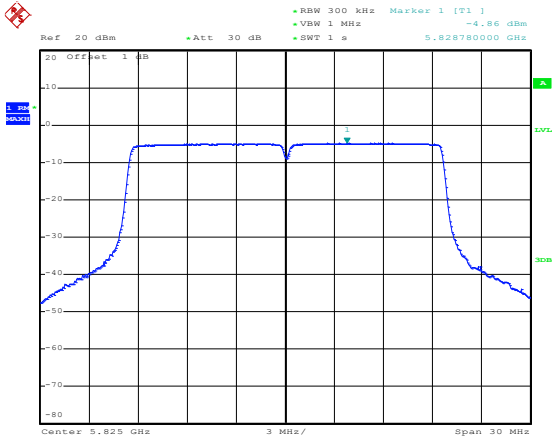
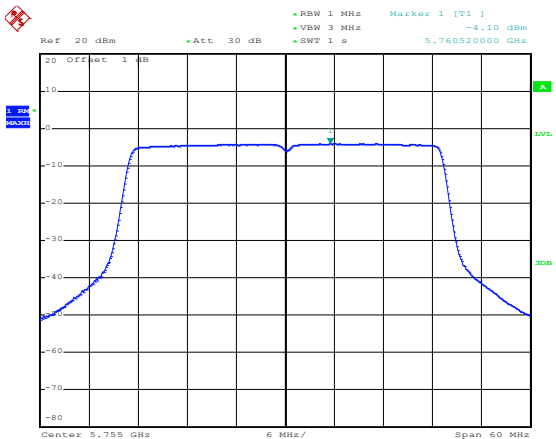
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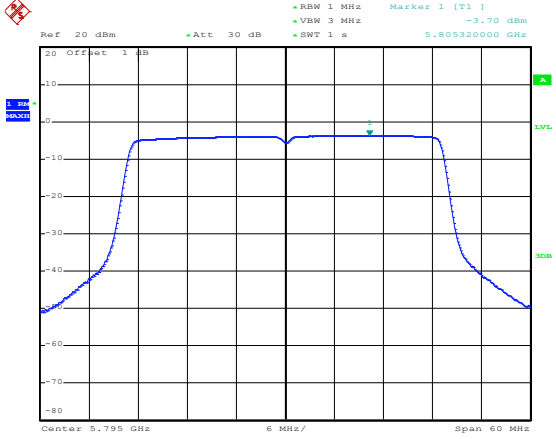
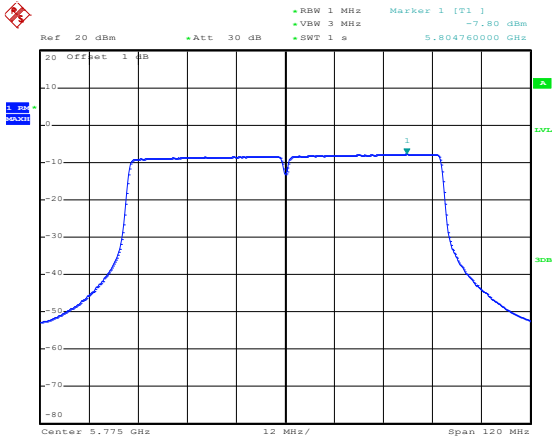
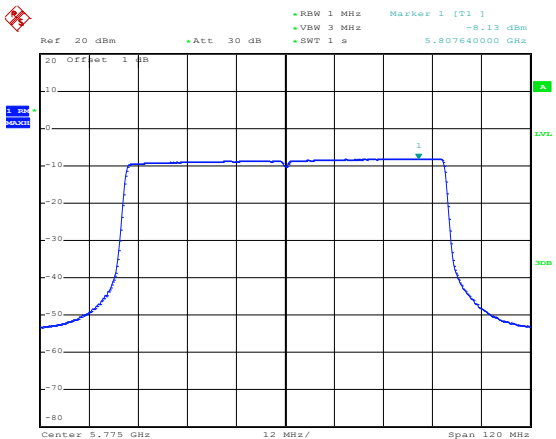
5725-5850MHz

802.11a-Low	 Date: 26.MAR.2022 17:38:29
802.11a-Middle	 Date: 26.MAR.2022 17:47:37
802.11a-High	 Date: 26.MAR.2022 17:49:26

802.11n-HT20-Low	 Date: 26.MAR.2022 17:50:27
802.11n-HT20-Middle	 Date: 26.MAR.2022 17:51:03
802.11n-HT20-High	 Date: 26.MAR.2022 17:53:39

802.11n-HT40-Low	 Ref: 20 dBm Att: 30 dB RBW: 1 MHz VBW: 3 MHz SWT: 1 s Marker 1 [T1] -3.93 dBm 5.76496000 GHz Center 5.755 GHz 6 MHz/ Span 60 MHz Date: 26.MAR.2022 18:00:34
802.11n-HT40-High	 Ref: 20 dBm Att: 30 dB RBW: 1 MHz VBW: 3 MHz SWT: 1 s Marker 1 [T1] -3.53 dBm 5.80520000 GHz Center 5.795 GHz 6 MHz/ Span 60 MHz Date: 26.MAR.2022 18:01:07
802.11ax-HE20-Low	 Ref: 20 dBm Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 1 s Marker 1 [T1] -4.20 dBm 5.75136000 GHz Center 5.745 GHz 3 MHz/ Span 30 MHz Date: 26.MAR.2022 17:54:54

802.11ax-HE20- Middle	 Ref: 20 dBm Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 1 s Marker 1 [T1] -5.30 dBm 5.789740000 GHz 20 Offset: 1 dB Center: 5.785 GHz 3 MHz/ Span: 30 MHz Date: 26.MAR.2022 17:55:19
802.11ax-HE20- High	 Ref: 20 dBm Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 1 s Marker 1 [T1] -4.86 dBm 5.828780000 GHz 20 Offset: 1 dB Center: 5.825 GHz 3 MHz/ Span: 30 MHz Date: 26.MAR.2022 17:55:36
802.11ax-HE40-Low	 Ref: 20 dBm Att: 30 dB RBW: 1 MHz VBW: 3 MHz SWT: 1 s Marker 1 [T1] -4.10 dBm 5.760520000 GHz 20 Offset: 1 dB Center: 5.755 GHz 6 MHz/ Span: 60 MHz Date: 26.MAR.2022 18:01:37

802.11ax-HE40- High	 Ref: 20 dBm Att: 30 dB RBW: 1 MHz VBW: 3 MHz SWT: 1 s Marker 1 [T1] -3.70 dBm 5.805320000 GHz Center 5.795 GHz 6 MHz/ Span 60 MHz Date: 26.MAR.2022 18:02:02
802.11ac-HT80	 Ref: 20 dBm Att: 30 dB RBW: 1 MHz VBW: 3 MHz SWT: 1 s Marker 1 [T1] -7.80 dBm 5.804760000 GHz Center 5.775 GHz 12 MHz/ Span 120 MHz Date: 26.MAR.2022 18:02:36
802.11ax-HE80	 Ref: 20 dBm Att: 30 dB RBW: 1 MHz VBW: 3 MHz SWT: 1 s Marker 1 [T1] -8.13 dBm 5.807640000 GHz Center 5.775 GHz 12 MHz/ Span 120 MHz Date: 26.MAR.2022 18:02:50

APPENDIX B

Emission Bandwidth and Occupied Bandwidth

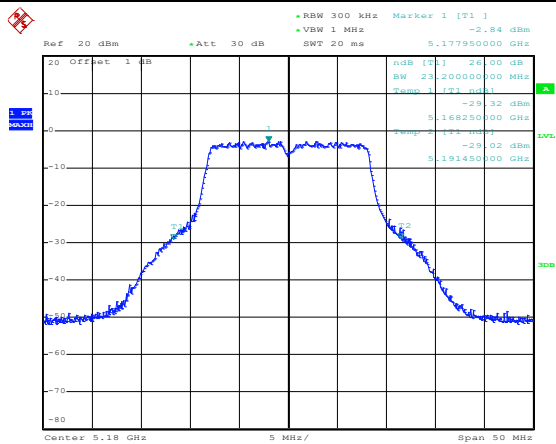
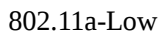
U-NII-1:5150-5250MHz						
Test Mode	Test Channel MHz	ANT 0		ANT 1		Result
		26 dB Bandwidth MHz	99% Bandwidth MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	
802.11a	5180	23.20	16.90	23.3	16.90	Pass
	5200	22.10	16.90	23.10	16.90	Pass
	5240	23.15	16.90	21.20	16.90	Pass
802.11n-HT20	5180	23.20	16.96	23.90	18.00	Pass
	5200	24.05	16.92	24.40	18.00	Pass
	5240	24.75	16.92	24.00	18.00	Pass
802.11n-HT40	5190	48.70	37.84	49.40	37.40	Pass
	5230	47.30	37.68	49.60	37.40	Pass
802.11ax-HE20	5180	22.60	16.84	22.60	19.20	Pass
	5200	22.90	16.84	22.40	19.20	Pass
	5240	23.00	16.80	22.60	19.20	Pass
802.11ax-HE40	5190	45.00	38.56	45.40	38.60	Pass
	5230	44.50	38.56	46.20	38.60	Pass
802.11ac-HT80	5210	90.40	77.12	91.20	76.80	Pass
802.11ax-HE80	5210	88.40	78.40	87.20	78.40	Pass

U-NII-3: 5725-5850MHz						
Test Mode	Test Channel MHz	ANT 0		ANT 1		Limit kHz
		6 dB Bandwidth MHz	99% Bandwidth MHz	6 dB Bandwidth MHz	99% Bandwidth MHz	
802.11a	5745	16.48	17.04	16.50	17.10	≥ 500
	5785	16.50	16.88	16.50	17.10	≥ 500
	5825	16.48	16.96	16.50	17.10	≥ 500
802.11n-HT20	5745	17.60	18.16	17.70	18.30	≥ 500
	5785	17.68	18.08	17.70	18.20	≥ 500
	5825	17.68	18.08	17.70	18.20	≥ 500
802.11n-HT40	5755	36.48	37.76	36.60	37.80	≥ 500
	5795	36.48	37.60	36.40	37.40	≥ 500
802.11ax-HE20	5745	19.12	19.20	19.10	19.20	≥ 500
	5785	19.12	19.20	19.10	19.20	≥ 500
	5825	19.12	19.20	19.10	19.20	≥ 500
802.11ax-HE40	5755	38.24	37.76	38.40	38.80	≥ 500
	5795	38.24	37.44	38.20	38.60	≥ 500
802.11ac-HT80	5775	76.32	77.12	77.00	76.80	≥ 500
802.11ax-HE80	5775	78.24	78.08	78.60	78.00	≥ 500

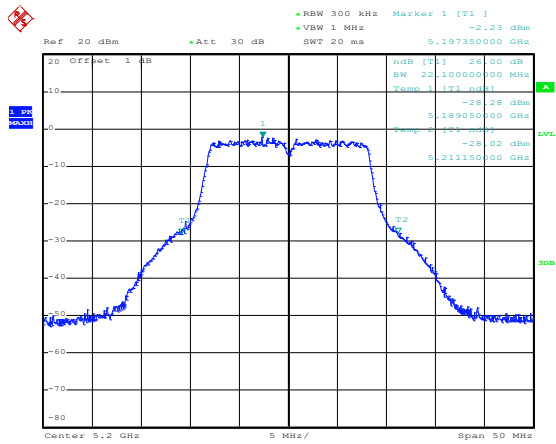
ANT 0

5150-5250MHz

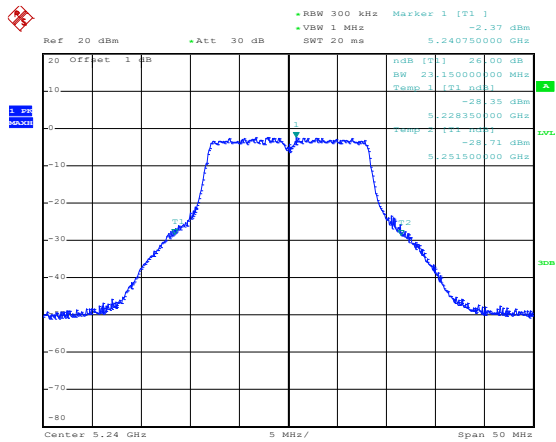
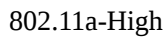
-6dB



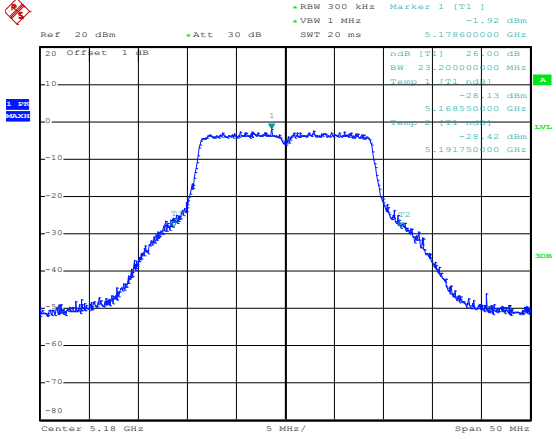
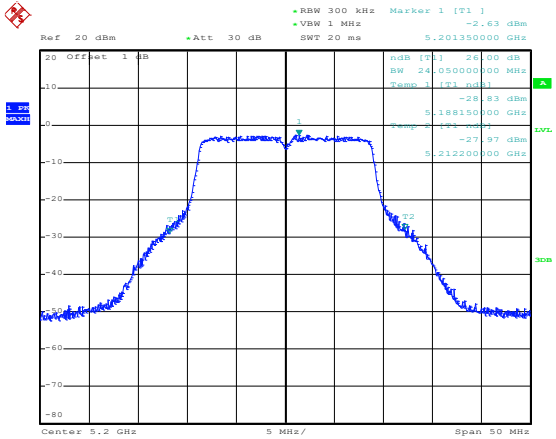
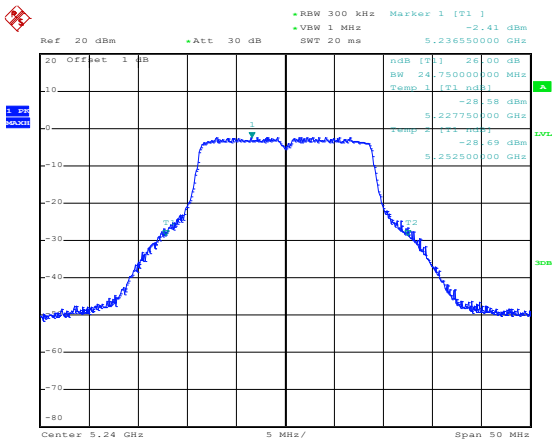
Date: 25.MAR.2022 11:35:17



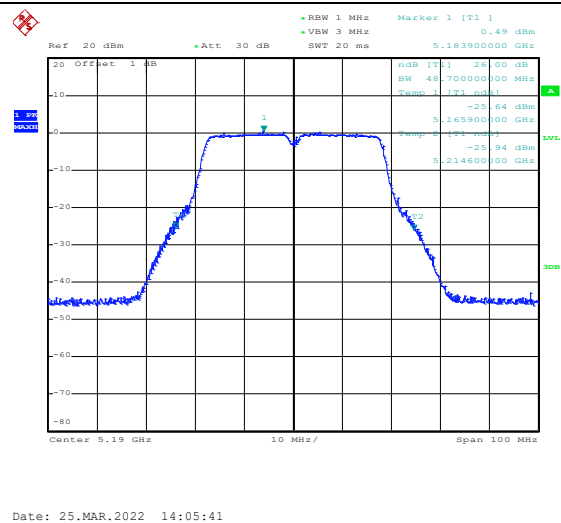
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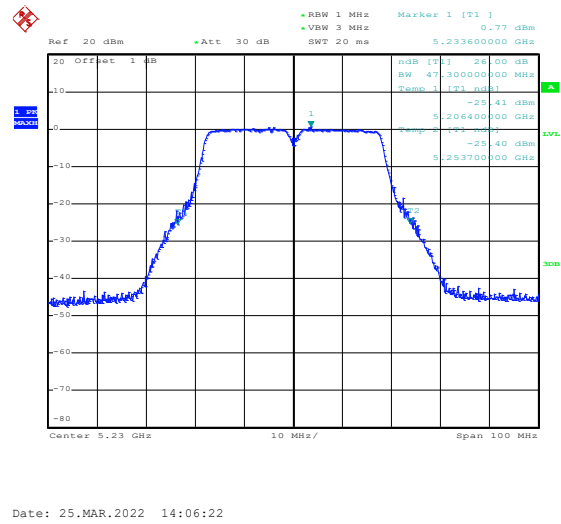
Date: 25.MAR.2022 11:36:35

802.11n-HT20-Low	 Date: 25.MAR.2022 14:02:55
802.11n-HT20-Middle	 Date: 25.MAR.2022 14:03:21
802.11n-HT20-High	 Date: 25.MAR.2022 14:04:18

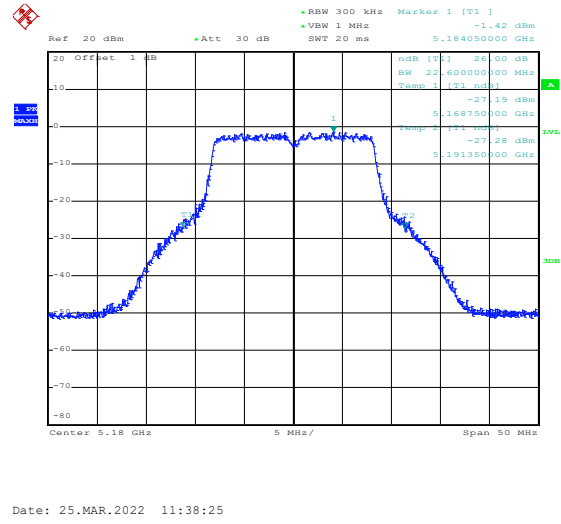
802.11n-HT40-Low

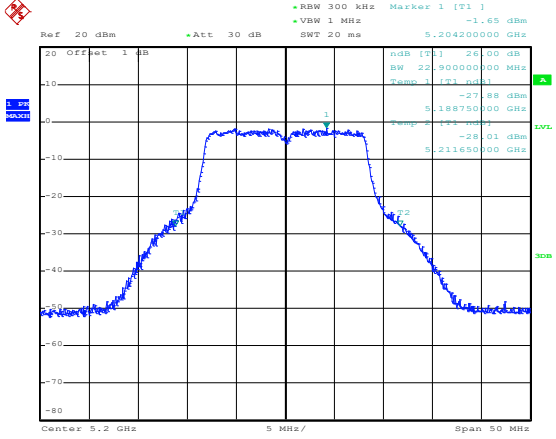
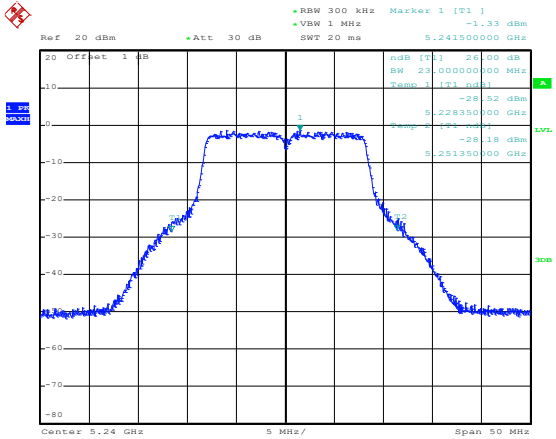
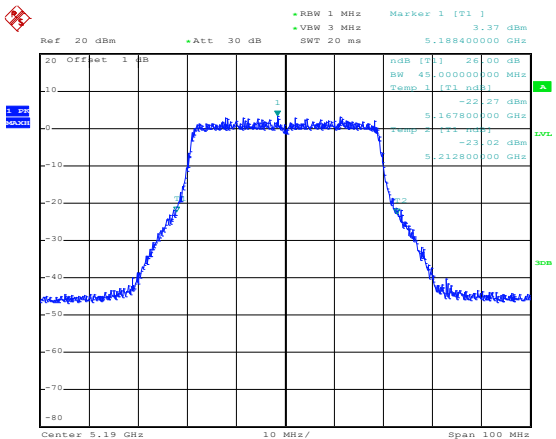


802.11n-HT40-High

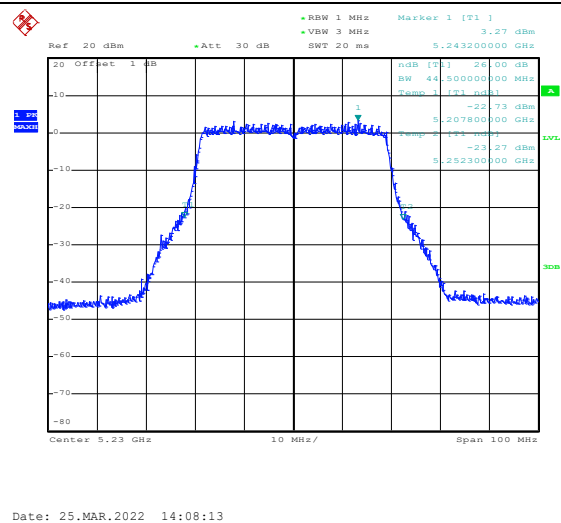


802.11ax-HE20-Low

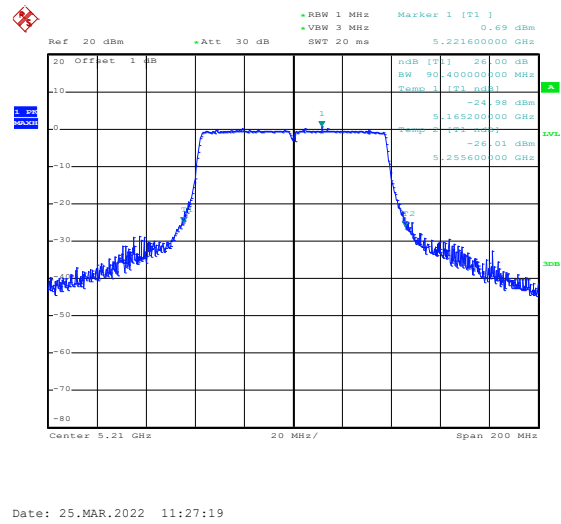


802.11ax-HE20- Middle	 Ref: 20 dBm •Att: 30 dB •RBW 300 kHz •VBW 1 MHz Marker 1 [T1] -1.65 dBm 5.204200000 GHz 20 Offset 1 dB •Att: 30 dB •RBW 300 kHz •VBW 1 MHz Marker 1 [T1] -1.65 dBm 5.204200000 GHz ndB [T1] -27.88 dBm 5.186750000 GHz Temp 1 [T1] -28.01 dBm 5.211650000 GHz Center 5.2 GHz 5 MHz/ Span 50 MHz Date: 25.MAR.2022 11:39:05
802.11ax-HE20- High	 Ref: 20 dBm •Att: 30 dB •RBW 300 kHz •VBW 1 MHz Marker 1 [T1] -1.33 dBm 5.241500000 GHz 20 Offset 1 dB •Att: 30 dB •RBW 300 kHz •VBW 1 MHz Marker 1 [T1] -1.33 dBm 5.241500000 GHz ndB [T1] -28.52 dBm 5.228350000 GHz Temp 1 [T1] -28.18 dBm 5.251350000 GHz Center 5.24 GHz 5 MHz/ Span 50 MHz Date: 25.MAR.2022 11:39:44
802.11ax-HE40-Low	 Ref: 20 dBm •Att: 30 dB •RBW 1 MHz •VBW 3 MHz Marker 1 [T1] 3.37 dBm 5.188400000 GHz 20 Offset 1 dB •Att: 30 dB •RBW 1 MHz •VBW 3 MHz Marker 1 [T1] 3.37 dBm 5.188400000 GHz ndB [T1] -22.27 dBm 5.167800000 GHz Temp 1 [T1] -23.02 dBm 5.212800000 GHz Center 5.19 GHz 10 MHz/ Span 100 MHz Date: 25.MAR.2022 14:07:39

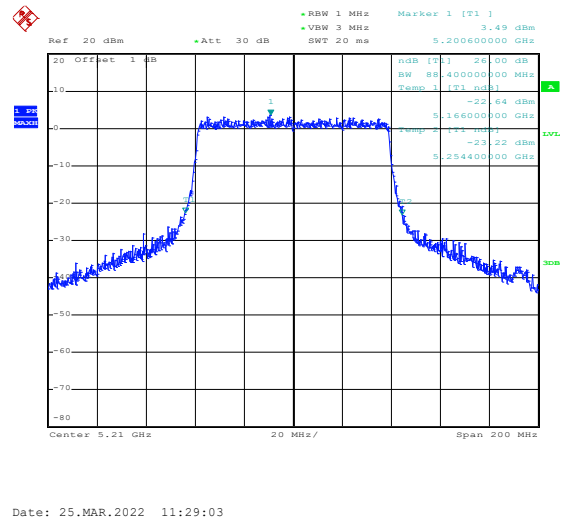
802.11ax-HE40- High



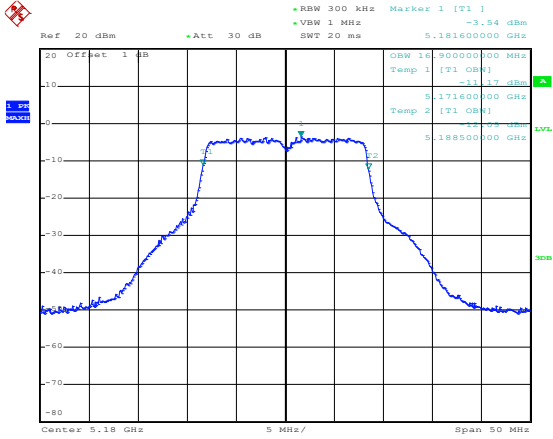
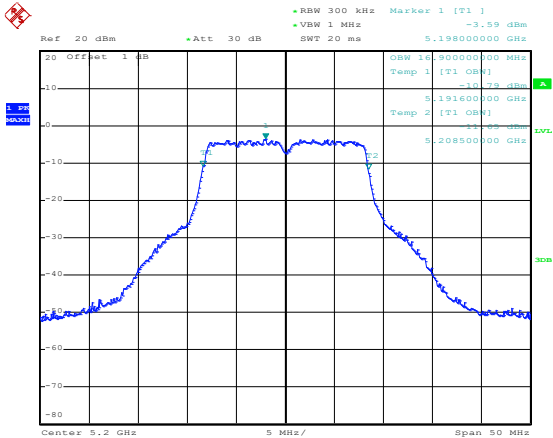
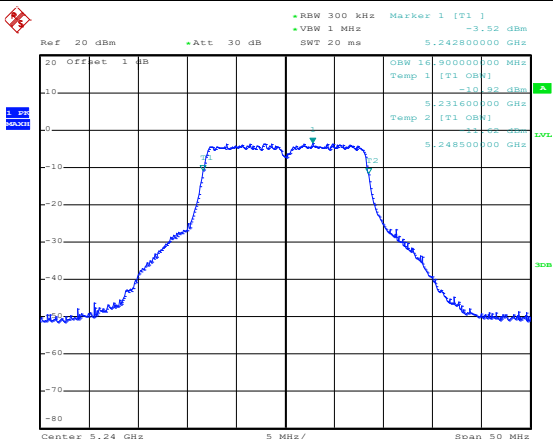
802.11ac-HT80

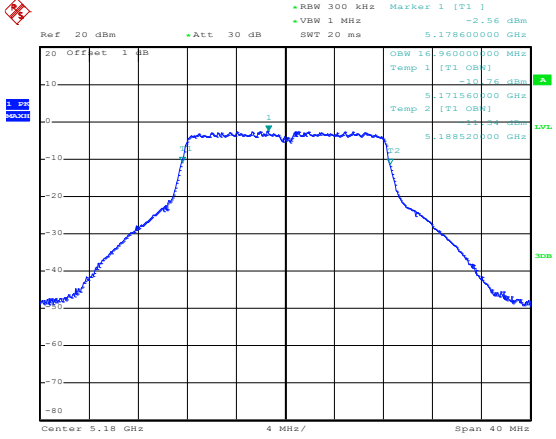
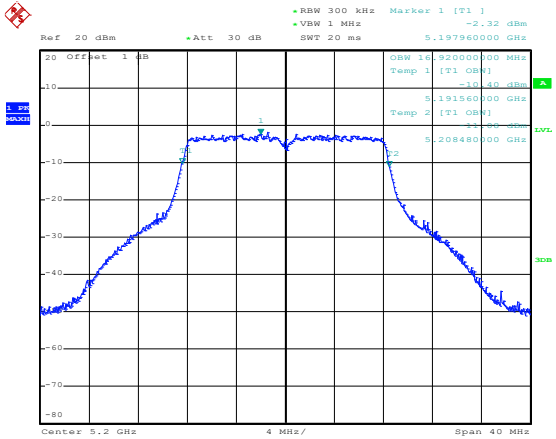
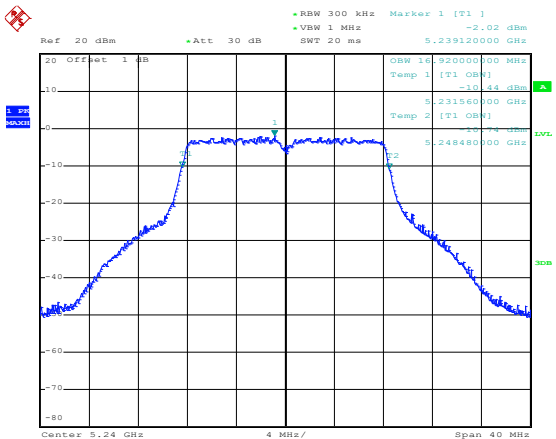


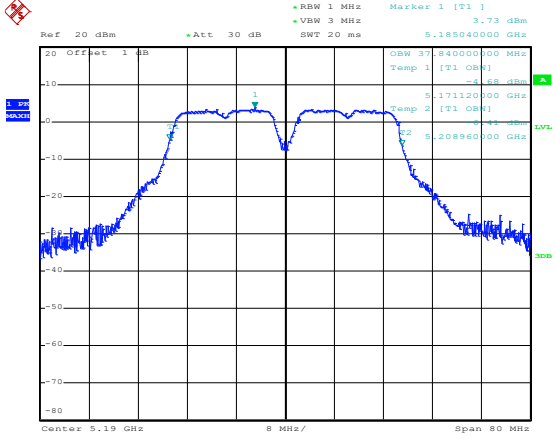
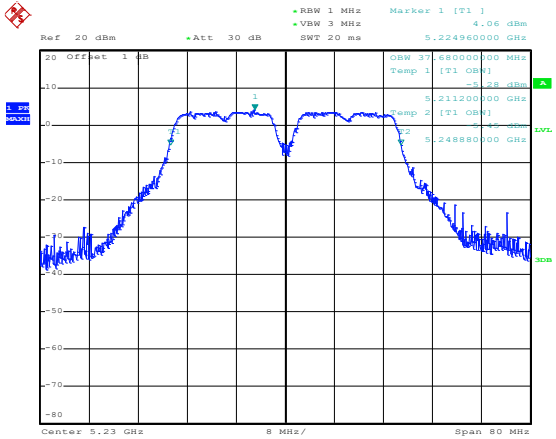
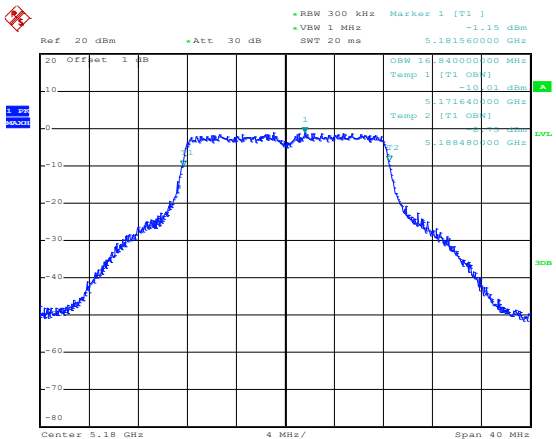
802.11ax-HE80

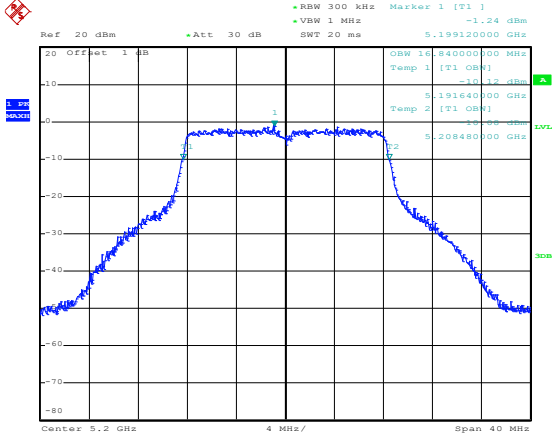
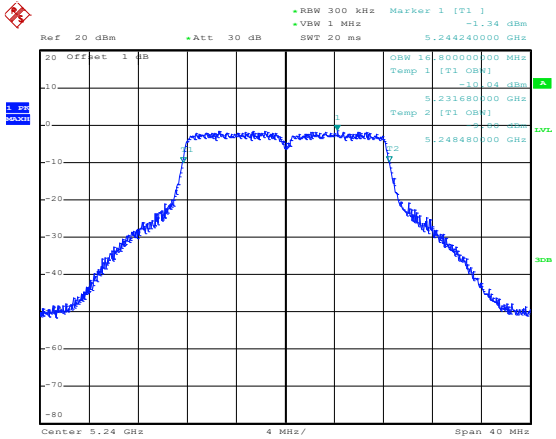
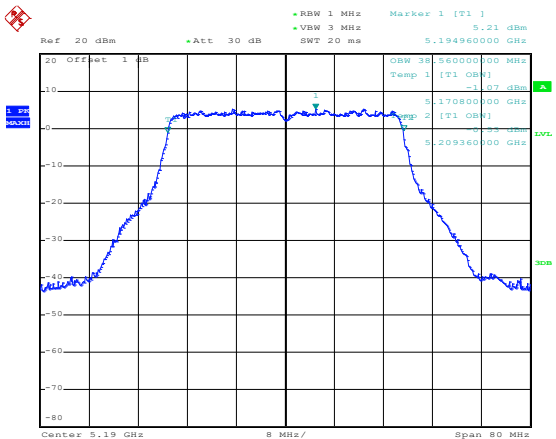


99%OBW

802.11a-Low	 Ref: 20 dBm Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 20 ms Marker 1 [T1] -3.54 dBm 5.18160000 GHz OSW: 16.90000000 MHz Temp 1 [T1] -11.17 dBm 5.17160000 GHz Temp 2 [T1] -11.17 dBm 5.18850000 GHz Center: 5.18 GHz 5 MHz/ Span: 50 MHz Date: 26.MAR.2022 17:03:26
802.11a-Middle	 Ref: 20 dBm Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 20 ms Marker 1 [T1] -3.59 dBm 5.19800000 GHz OSW: 16.90000000 MHz Temp 1 [T1] -11.17 dBm 5.19160000 GHz Temp 2 [T1] -11.17 dBm 5.20850000 GHz Center: 5.2 GHz 5 MHz/ Span: 50 MHz Date: 26.MAR.2022 17:05:00
802.11a-High	 Ref: 20 dBm Att: 30 dB RBW: 300 kHz VBW: 1 MHz SWT: 20 ms Marker 1 [T1] -3.52 dBm 5.24280000 GHz OSW: 16.90000000 MHz Temp 1 [T1] -11.17 dBm 5.23160000 GHz Temp 2 [T1] -11.17 dBm 5.24850000 GHz Center: 5.24 GHz 5 MHz/ Span: 50 MHz Date: 26.MAR.2022 17:05:24

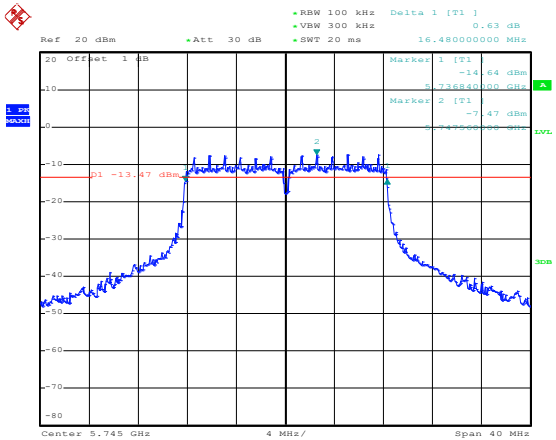
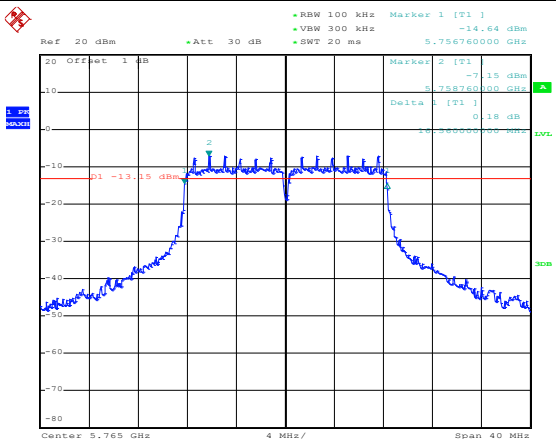
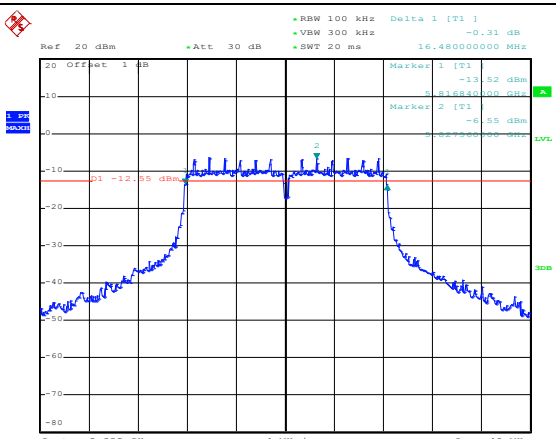
802.11n-HT20-Low	 Ref: 20 dBm Att: 30 dB RBW 300 kHz VBW 1 MHz SWT 20 ms Marker 1 [T1] -2.56 dBm 5.178600000 GHz OSW 10.96000000 MHz Temp 1 [T1] -10.75 dBm 5.171500000 GHz Temp 2 [T1] -11.84 dBm 5.188520000 GHz Center 5.18 GHz 4 MHz/ Span 40 MHz Date: 25.MAR.2022 14:23:10
802.11n-HT20-Middle	 Ref: 20 dBm Att: 30 dB RBW 300 kHz VBW 1 MHz SWT 20 ms Marker 1 [T1] -2.32 dBm 5.197960000 GHz OSW 10.92000000 MHz Temp 1 [T1] -10.40 dBm 5.191500000 GHz Temp 2 [T1] -11.80 dBm 5.208480000 GHz Center 5.2 GHz 4 MHz/ Span 40 MHz Date: 25.MAR.2022 14:23:47
802.11n-HT20-High	 Ref: 20 dBm Att: 30 dB RBW 300 kHz VBW 1 MHz SWT 20 ms Marker 1 [T1] -2.02 dBm 5.239120000 GHz OSW 10.92000000 MHz Temp 1 [T1] -10.44 dBm 5.231500000 GHz Temp 2 [T1] -11.84 dBm 5.248480000 GHz Center 5.24 GHz 4 MHz/ Span 40 MHz Date: 25.MAR.2022 14:24:35

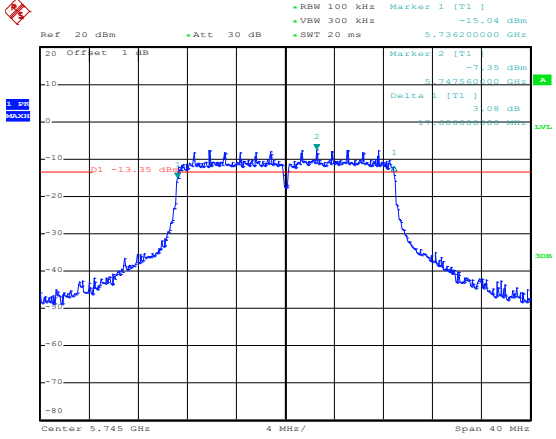
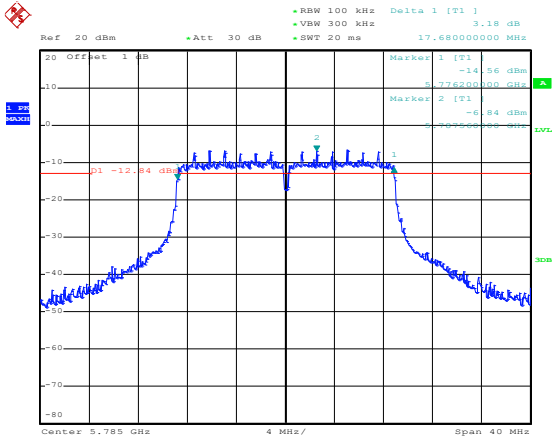
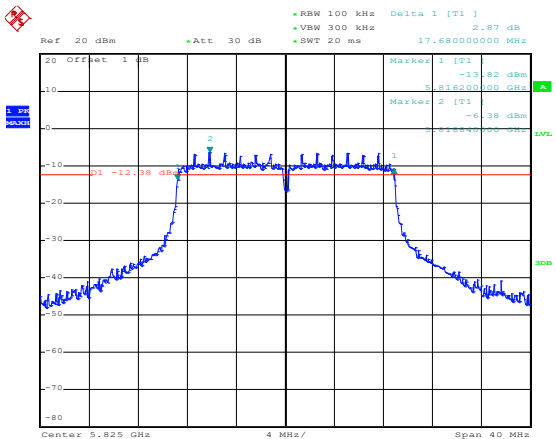
802.11n-HT40-Low	 Date: 25.MAR.2022 14:31:17
802.11n-HT40-High	 Date: 25.MAR.2022 14:31:58
802.11ax-HE20-Low	 Date: 25.MAR.2022 14:26:41

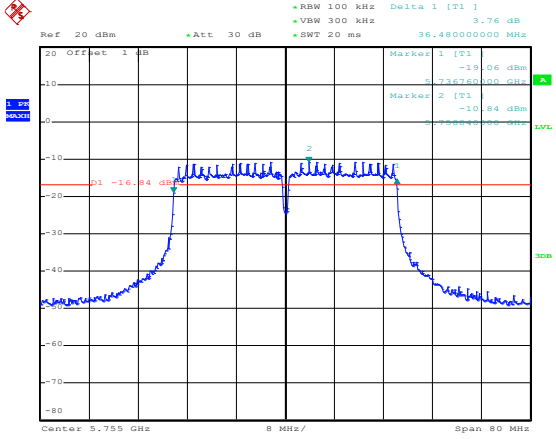
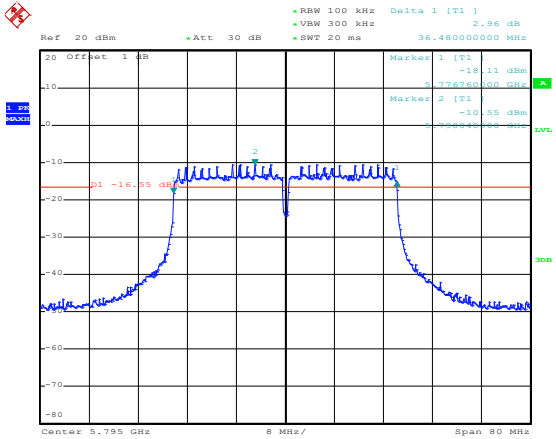
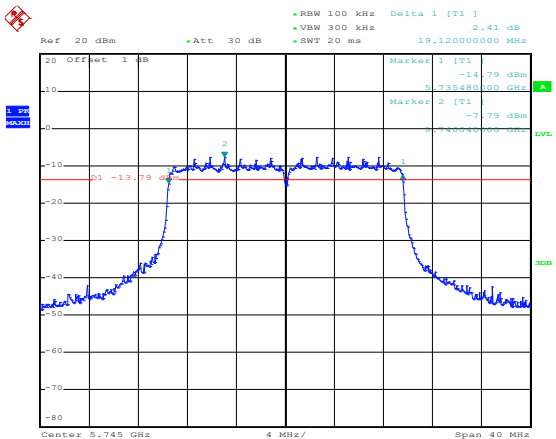
802.11ax-HE20- Middle	 Date: 25.MAR.2022 14:27:15
802.11ax-HE20- High	 Date: 25.MAR.2022 14:27:48
802.11ax-HE40-Low	 Date: 25.MAR.2022 15:07:17

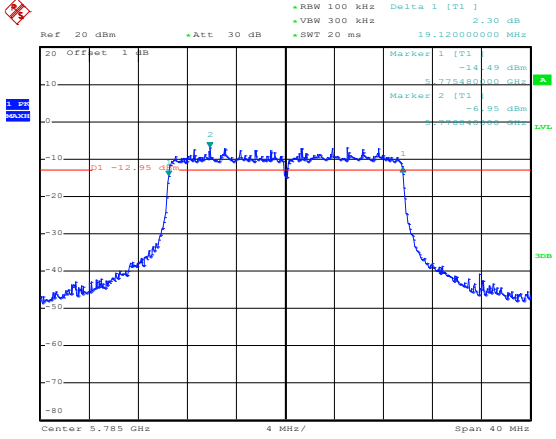
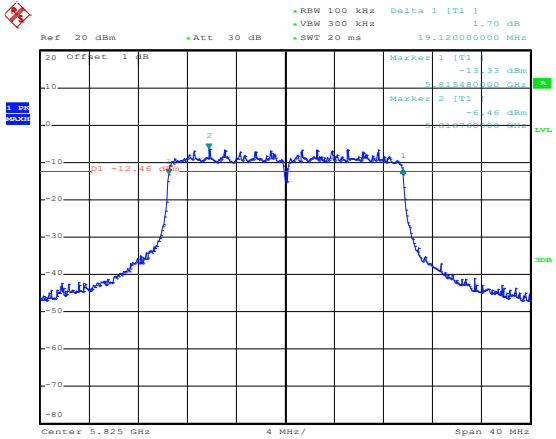
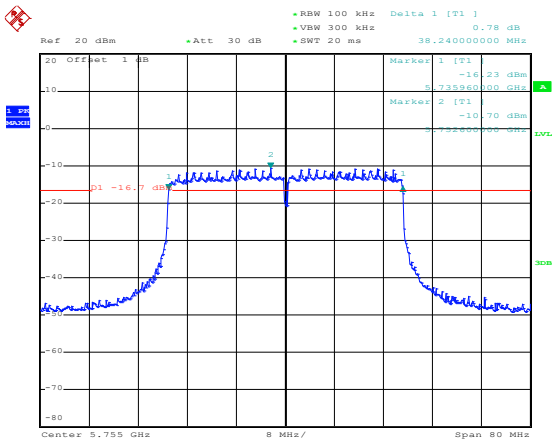
802.11ax-HE40- High	
802.11ac-HT80	
802.11ax-HE80	

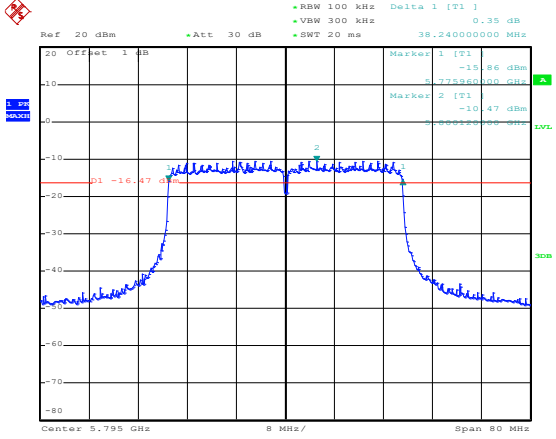
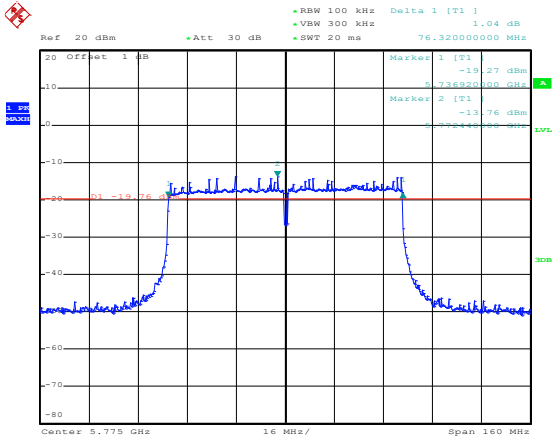
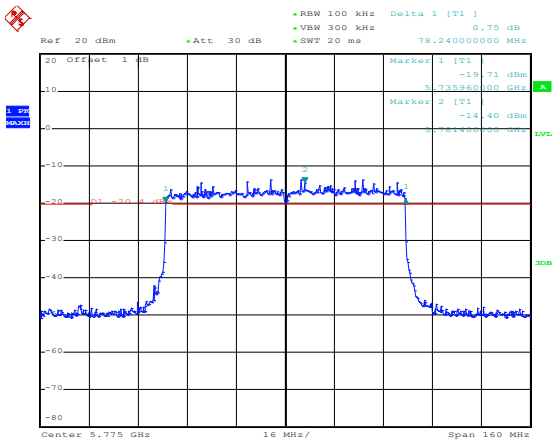
6 dB Bandwidth
5725-5850MHz

802.11a-Low	 Ref: 20 dBm Att: 30 dB RBW: 100 kHz VBW: 300 kHz SWT: 20 ms Delta 1 [T1]: 0.63 dB Marker 1 [T1]: -14.64 dBm 5.736840000 GHz Marker 2 [T1]: -7.47 dBm 5.847500000 GHz Delta 1 [T1]: 0.63 dB Center: 5.745 GHz 4 MHz/ Span: 40 MHz Date: 26.MAR.2022 15:20:25
802.11a-Middle	 Ref: 20 dBm Att: 30 dB RBW: 100 kHz VBW: 300 kHz SWT: 20 ms Delta 1 [T1]: -14.64 dBm Marker 1 [T1]: -7.15 dBm 5.758760000 GHz Marker 2 [T1]: -0.18 dBm 5.869000000 GHz Delta 1 [T1]: 0.18 dB Center: 5.765 GHz 4 MHz/ Span: 40 MHz Date: 26.MAR.2022 15:21:32
802.11a-High	 Ref: 20 dBm Att: 30 dB RBW: 100 kHz VBW: 300 kHz SWT: 20 ms Delta 1 [T1]: -0.31 dB Marker 1 [T1]: -13.52 dBm 5.816840000 GHz Marker 2 [T1]: -6.55 dBm 5.827500000 GHz Delta 1 [T1]: 0.31 dB Center: 5.825 GHz 4 MHz/ Span: 40 MHz Date: 26.MAR.2022 15:22:20

802.11n-HT20-Low	 Ref 20 dBm Att 30 dB BW 100 kHz VBW 300 kHz SWT 20 ms Marker 1 [T1] -13.95 dBm 5.736200000 GHz Marker 2 [T2] -7.35 dBm 5.745500000 GHz Delta 1 [T1] 3.08 dB Center 5.745 GHz 4 MHz/ Span 40 MHz Date: 26.MAR.2022 15:23:38
802.11n-HT20-Middle	 Ref 20 dBm Att 30 dB BW 100 kHz VBW 300 kHz SWT 20 ms Marker 1 [T1] -14.56 dBm 5.776200000 GHz Marker 2 [T2] -6.84 dBm 5.785500000 GHz Delta 1 [T1] 3.18 dB Center 5.785 GHz 4 MHz/ Span 40 MHz Date: 26.MAR.2022 15:24:41
802.11n-HT20-High	 Ref 20 dBm Att 30 dB BW 100 kHz VBW 300 kHz SWT 20 ms Marker 1 [T1] -13.82 dBm 5.816200000 GHz Marker 2 [T2] -6.39 dBm 5.825500000 GHz Delta 1 [T1] 2.87 dB Center 5.825 GHz 4 MHz/ Span 40 MHz Date: 26.MAR.2022 15:26:09

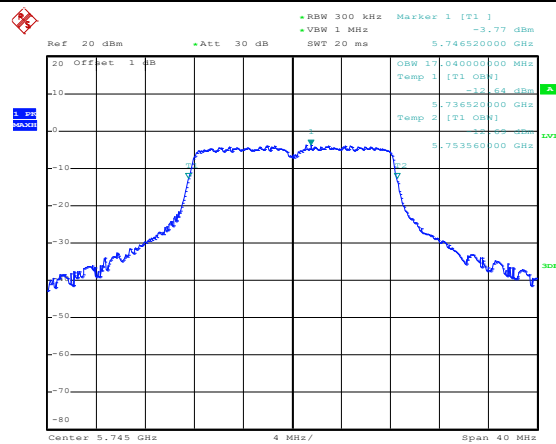
802.11n-HT40-Low	 Ref: 20 dBm Att: 30 dB RBW: 100 kHz VBW: 300 kHz SWT: 20 ms Delta 1 [T1]: 3.76 dB Marker 1 [T1]: -19.06 dBm Marker 2 [T1]: -10.84 dBm Center: 5.755 GHz Span: 80 MHz Date: 26.MAR.2022 16:07:50
802.11n-HT40-High	 Ref: 20 dBm Att: 30 dB RBW: 100 kHz VBW: 300 kHz SWT: 20 ms Delta 1 [T1]: 2.96 dB Marker 1 [T1]: -18.11 dBm Marker 2 [T1]: -10.55 dBm Center: 5.795 GHz Span: 80 MHz Date: 26.MAR.2022 16:09:28
802.11ax-HE20-Low	 Ref: 20 dBm Att: 30 dB RBW: 100 kHz VBW: 300 kHz SWT: 20 ms Delta 1 [T1]: 2.41 dB Marker 1 [T1]: -14.79 dBm Marker 2 [T1]: -7.79 dBm Center: 5.745 GHz Span: 40 MHz Date: 26.MAR.2022 15:28:36

802.11ax-HE20- Middle	 Ref 20 dBm Att 30 dB RBW 100 kHz Delta 1 [T1] 2.30 dB VBW 300 kHz SWT 20 ms 19.120000000 MHz Marker 1 [T1] -14.49 dBm 5.778880000 GHz Marker 2 [T1] -6.95 dBm 5.788000000 GHz Center 5.785 GHz 4 MHz/ Span 40 MHz Date: 26.MAR.2022 16:04:28
802.11ax-HE20- High	 Ref 20 dBm Att 30 dB RBW 100 kHz Delta 1 [T1] 1.70 dB VBW 300 kHz SWT 20 ms 19.120000000 MHz Marker 1 [T1] -13.33 dBm 5.816880000 GHz Marker 2 [T1] -6.46 dBm 5.826000000 GHz Center 5.825 GHz 4 MHz/ Span 40 MHz Date: 26.MAR.2022 16:03:25
802.11ax-HE40-Low	 Ref 20 dBm Att 30 dB RBW 100 kHz Delta 1 [T1] 0.78 dB VBW 300 kHz SWT 20 ms 38.240000000 MHz Marker 1 [T1] -16.23 dBm 5.738960000 GHz Marker 2 [T1] -10.70 dBm 5.772000000 GHz Center 5.755 GHz 8 MHz/ Span 80 MHz Date: 26.MAR.2022 16:11:39

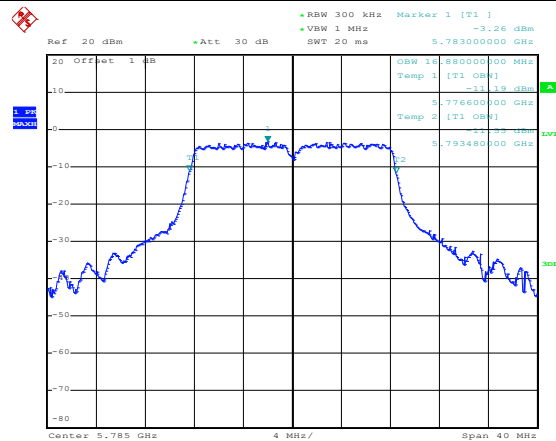
802.11ax-HE40- High	 Ref: 20 dBm Att: 30 dB RBW: 100 kHz VBW: 300 kHz Delta: 1 [T1] 0.35 dB Marker 1 [T1] -15.86 dBm 5.778960000 GHz Marker 2 [T1] -10.47 dBm 5.780000000 GHz Center: 5.795 GHz Span: 80 MHz Date: 26.MAR.2022 16:14:23
802.11ac-HT80	 Ref: 20 dBm Att: 30 dB RBW: 100 kHz VBW: 300 kHz Delta: 1 [T1] 1.04 dB Marker 1 [T1] -19.27 dBm 5.736920000 GHz Marker 2 [T1] -13.76 dBm 5.738400000 GHz Center: 5.775 GHz Span: 160 MHz Date: 26.MAR.2022 16:15:40
802.11ax-HE80	 Ref: 20 dBm Att: 30 dB RBW: 100 kHz VBW: 300 kHz Delta: 1 [T1] 0.75 dB Marker 1 [T1] -19.71 dBm 5.738960000 GHz Marker 2 [T1] -14.40 dBm 5.740000000 GHz Center: 5.775 GHz Span: 160 MHz Date: 26.MAR.2022 16:16:17

99% Bandwidth

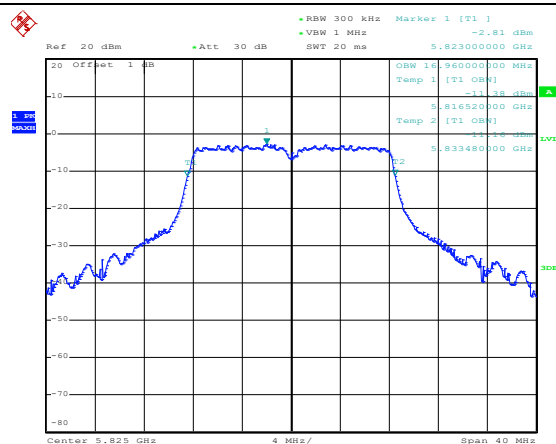
5725-5850MHz



Date: 25.MAR.2022 17:46:41

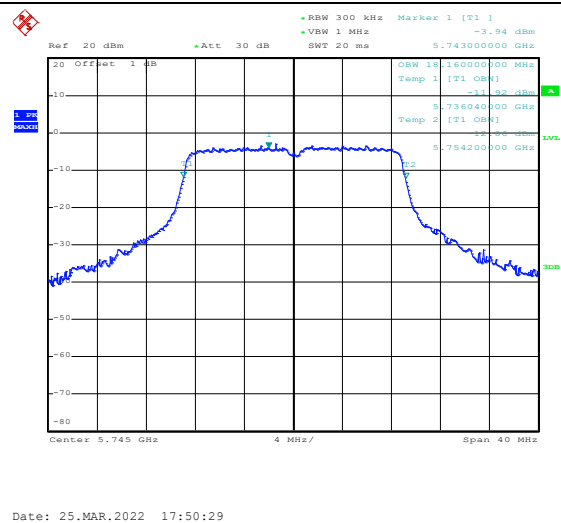


Date: 25.MAR.2022 17:47:08

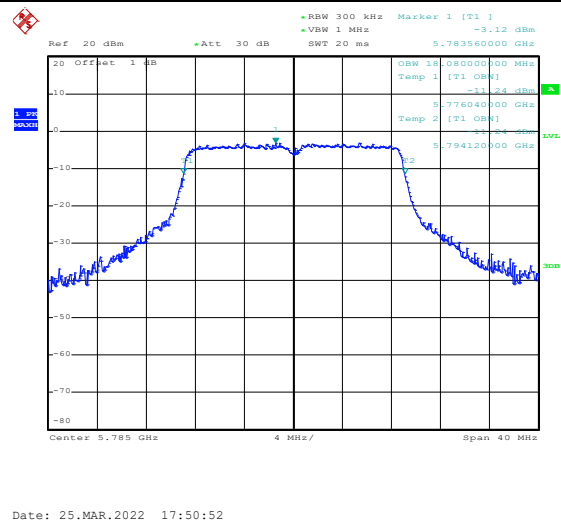


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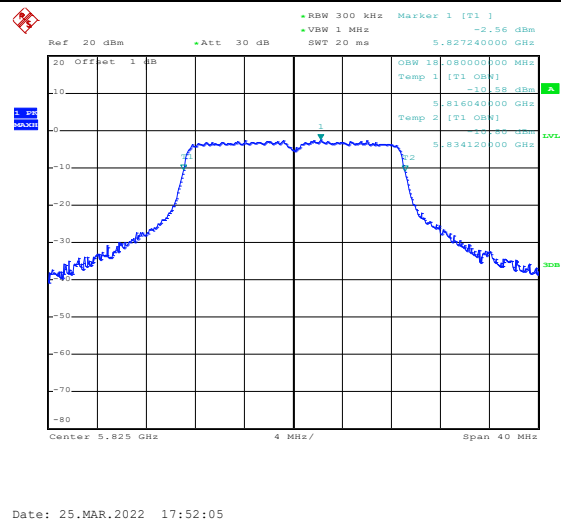
802.11n-HT20-Low

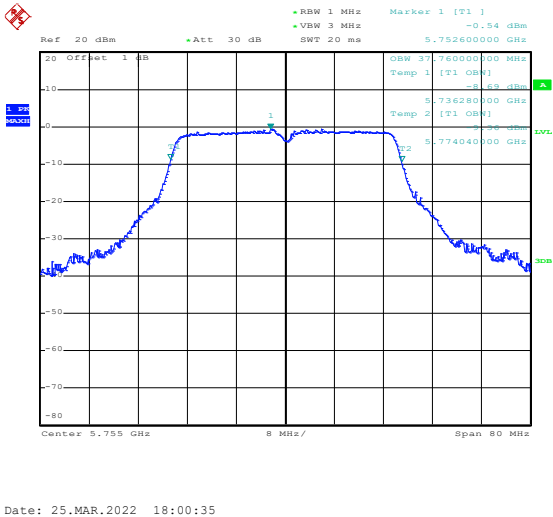
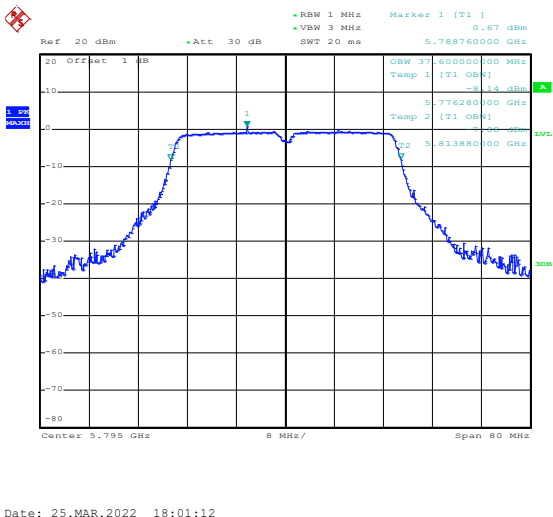
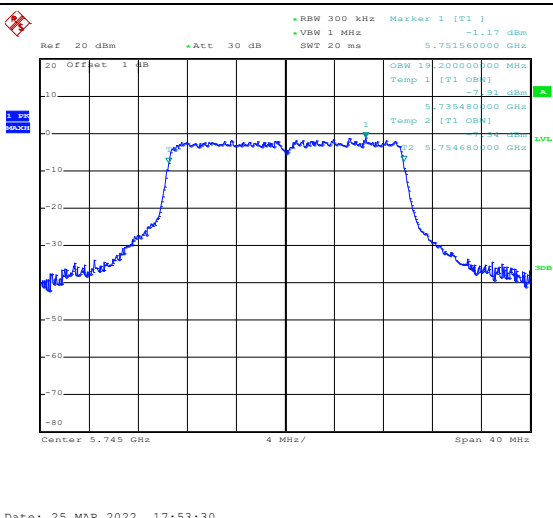


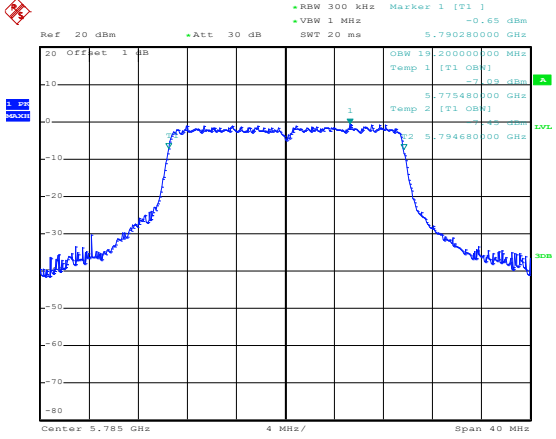
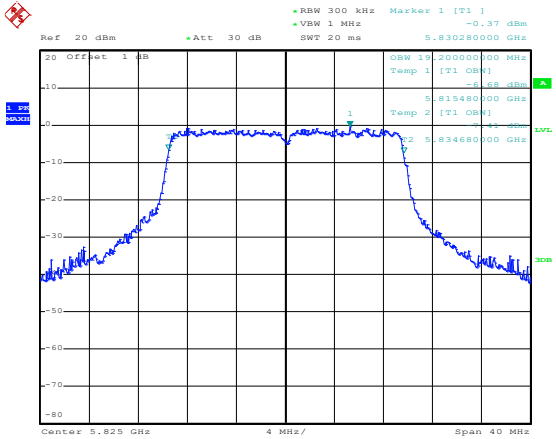
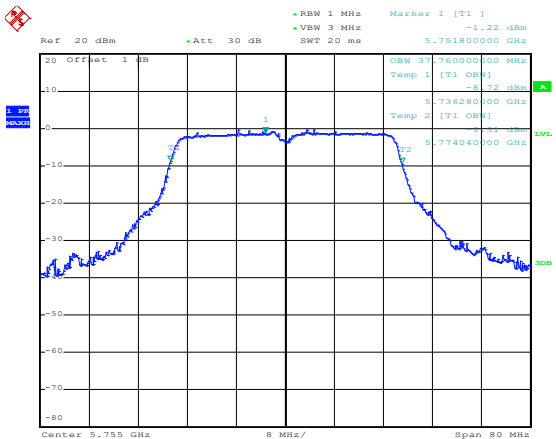
802.11n-HT20-Middle

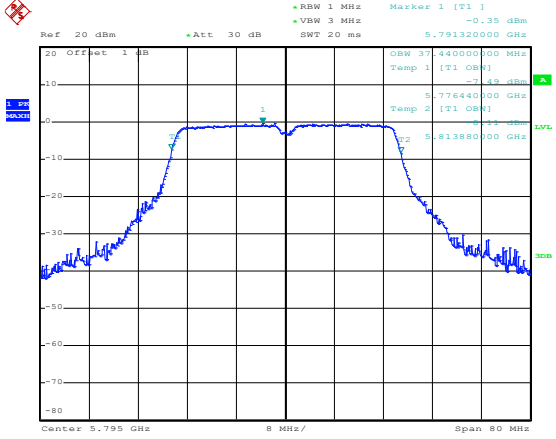
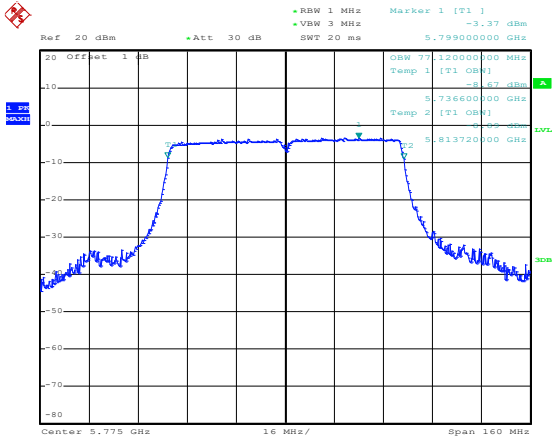
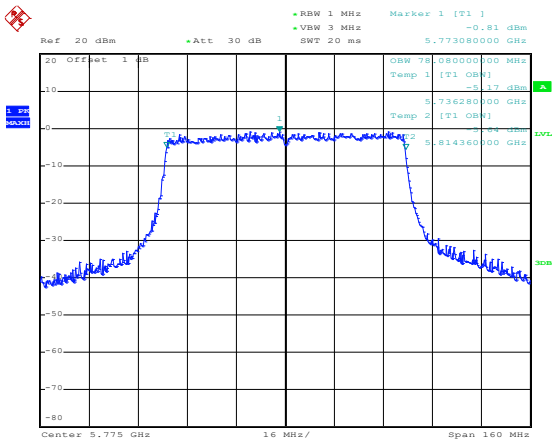


802.11n-HT20-High

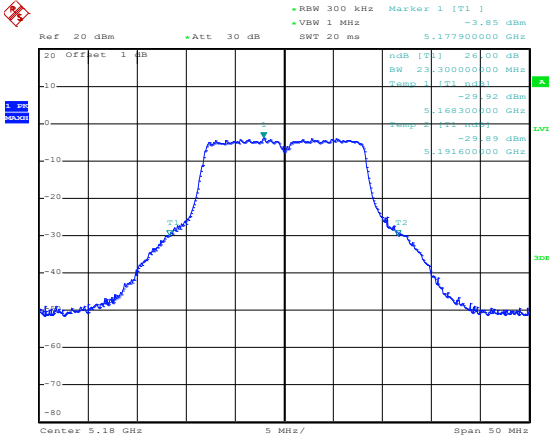
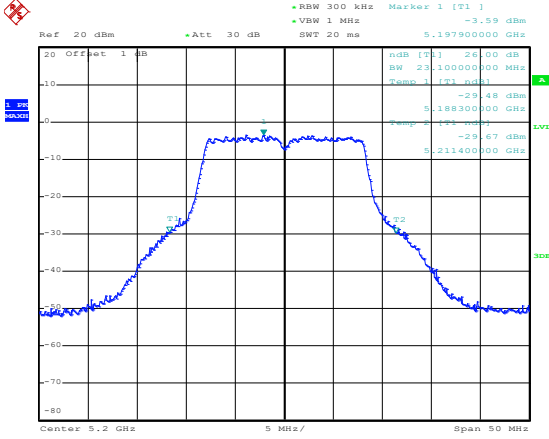
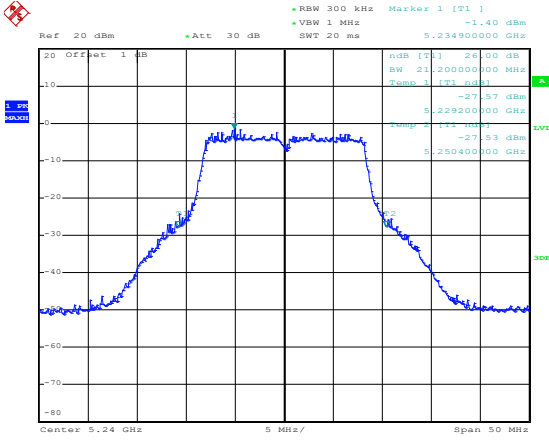


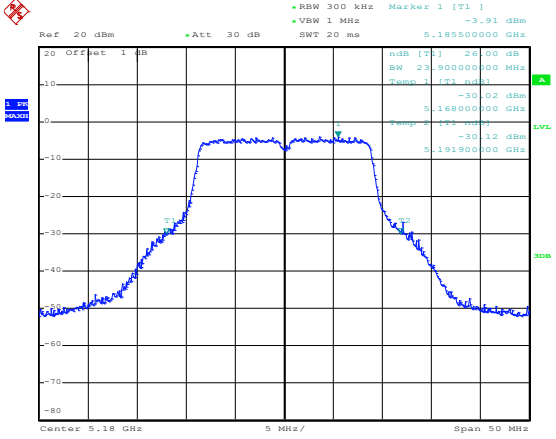
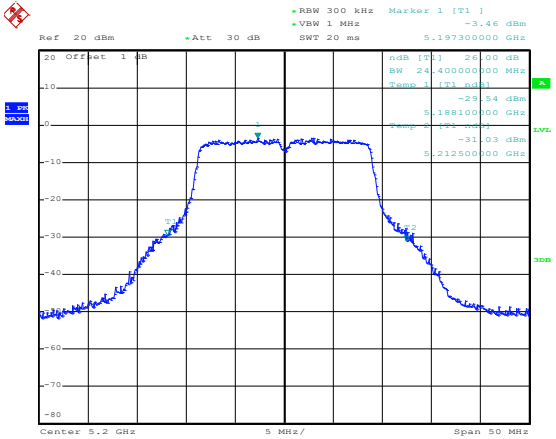
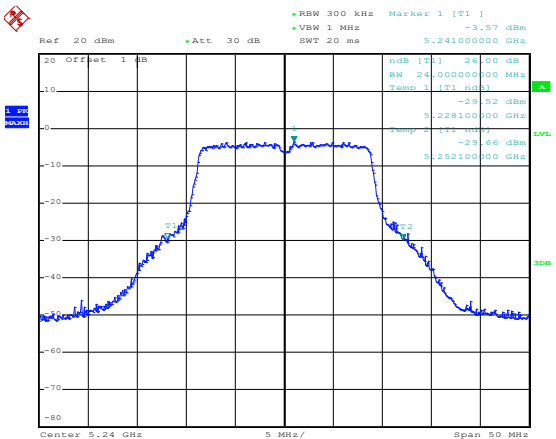
802.11n-HT40-Low	 Ref: 20 dBm Att: 30 dB SWT: 20 ms Marker 1 [T1] -0.54 dBm OSW: 1.76000000 MHz Temp 1 [T1] -0.54 dBm Temp 2 [T1] -0.54 dBm Center: 5.755 GHz Span: 80 MHz Date: 25.MAR.2022 18:00:35
802.11n-HT40-High	 Ref: 20 dBm Att: 30 dB SWT: 20 ms Marker 1 [T1] 0.67 dBm OSW: 1.60000000 MHz Temp 1 [T1] -0.54 dBm Temp 2 [T1] -0.54 dBm Center: 5.795 GHz Span: 80 MHz Date: 25.MAR.2022 18:01:12
802.11ax-HE20-Low	 Ref: 20 dBm Att: 30 dB SWT: 20 ms Marker 1 [T1] -1.17 dBm OSW: 1.20000000 MHz Temp 1 [T1] -0.54 dBm Temp 2 [T1] -0.54 dBm Center: 5.745 GHz Span: 40 MHz Date: 25.MAR.2022 17:53:30

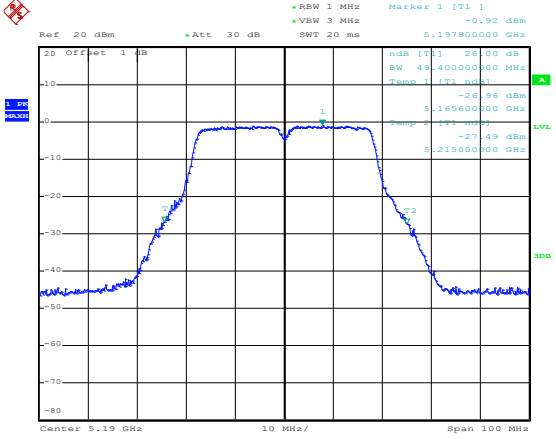
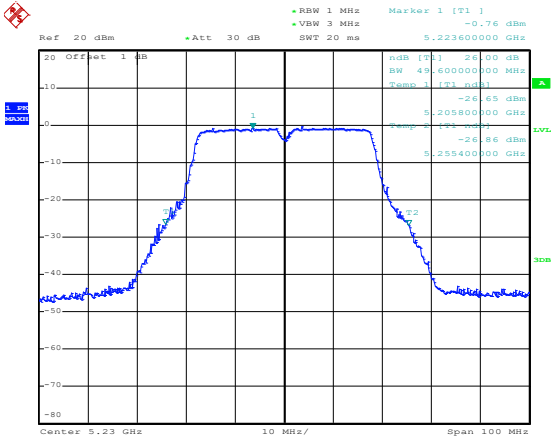
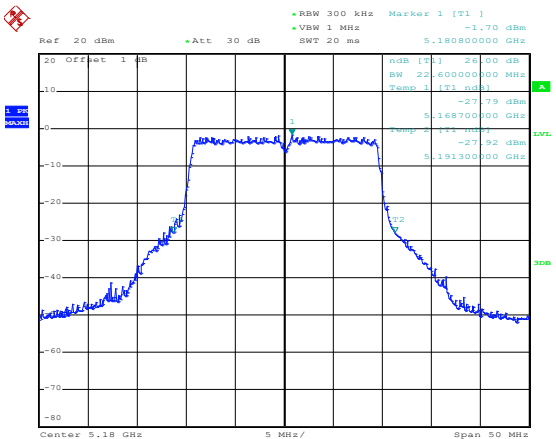
802.11ax-HE20- Middle	 Ref: 20 dBm Att: 30 dB SWT: 20 ms Marker 1 [T1] -0.65 dBm 5.790280000 GHz OSW: 20.00000000 MHz Temp 1 [T1] -0.65 dBm Temp 2 [T1] -0.65 dBm Center: 5.785 GHz 4 MHz/ Span: 40 MHz Date: 25.MAR.2022 17:54:19
802.11ax-HE20- High	 Ref: 20 dBm Att: 30 dB SWT: 20 ms Marker 1 [T1] -0.37 dBm 5.830280000 GHz OSW: 20.00000000 MHz Temp 1 [T1] -0.37 dBm Temp 2 [T1] -0.37 dBm Center: 5.825 GHz 4 MHz/ Span: 40 MHz Date: 25.MAR.2022 17:54:54
802.11ax-HE40-Low	 Ref: 20 dBm Att: 30 dB SWT: 20 ms Marker 1 [T1] -1.22 dBm 5.751800000 GHz OSW: 37.76000000 MHz Temp 1 [T1] -1.22 dBm Temp 2 [T1] -1.22 dBm Center: 5.755 GHz 8 MHz/ Span: 80 MHz Date: 25.MAR.2022 18:02:17

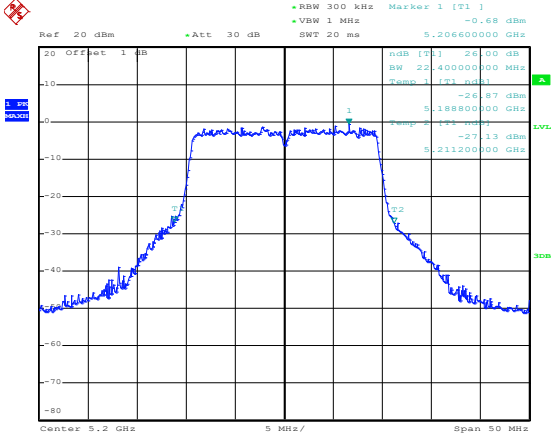
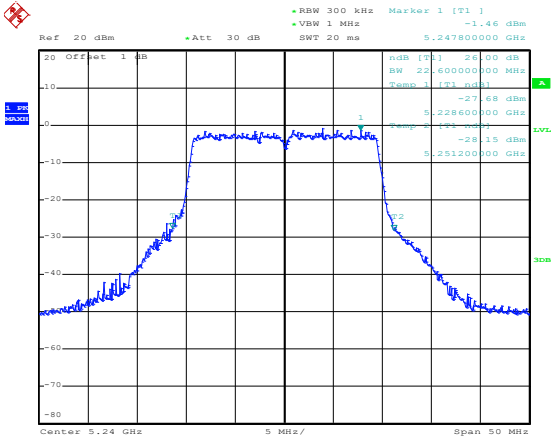
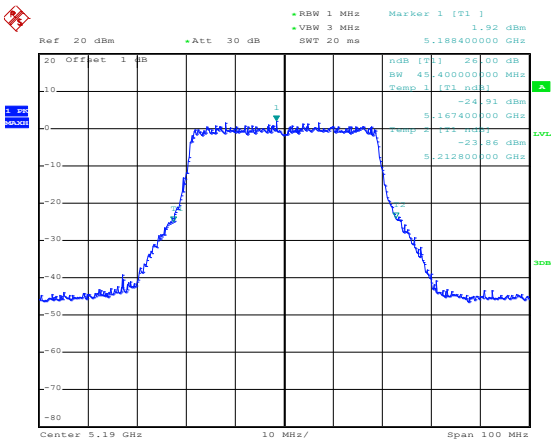
802.11ax-HE40- High	 Date: 25.MAR.2022 18:03:16
802.11ac-HT80	 Date: 25.MAR.2022 18:04:38
802.11ax-HE80	 Date: 25.MAR.2022 18:05:46

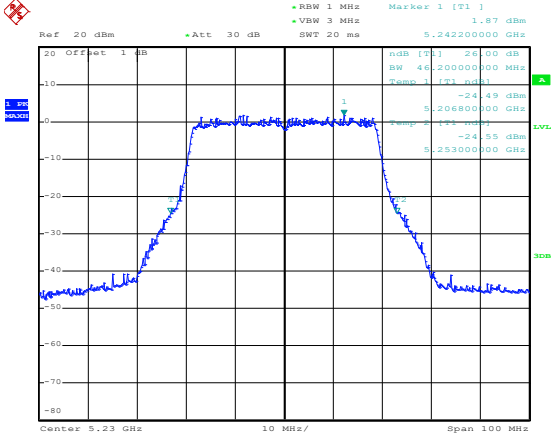
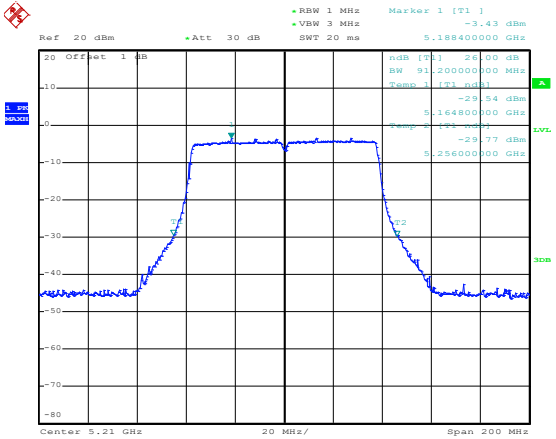
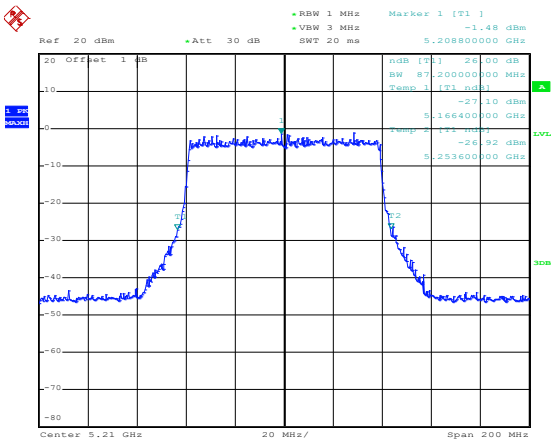
ANT 1
5150-5250MHz
-26dB OBW

802.11a-Low	 Date: 26.MAR.2022 16:49:12
802.11a-Middle	 Date: 26.MAR.2022 16:48:35
802.11a-High	 Date: 26.MAR.2022 16:49:34

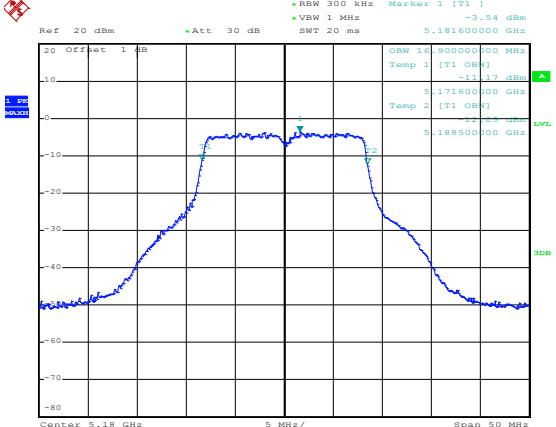
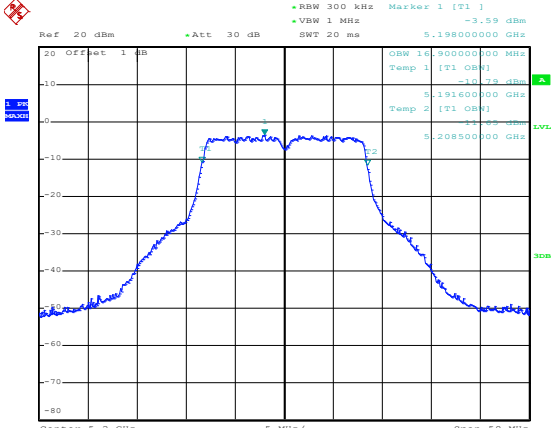
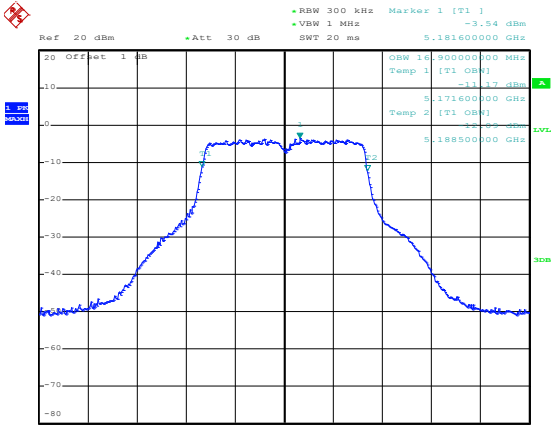
802.11n-HT20-Low	 Ref 20 dBm Att 30 dB RBW 300 kHz VBW 1 MHz SWT 20 ms Marker 1 [T1] -3.91 dBm Center 5.18 GHz 5 MHz/ Span 50 MHz Date: 26.MAR.2022 16:50:28
802.11n-HT20-Middle	 Ref 20 dBm Att 30 dB RBW 300 kHz VBW 1 MHz SWT 20 ms Marker 1 [T1] -3.46 dBm Center 5.2 GHz 5 MHz/ Span 50 MHz Date: 26.MAR.2022 16:50:51
802.11n-HT20-High	 Ref 20 dBm Att 30 dB RBW 300 kHz VBW 1 MHz SWT 20 ms Marker 1 [T1] -3.57 dBm Center 5.24 GHz 5 MHz/ Span 50 MHz Date: 26.MAR.2022 16:51:15

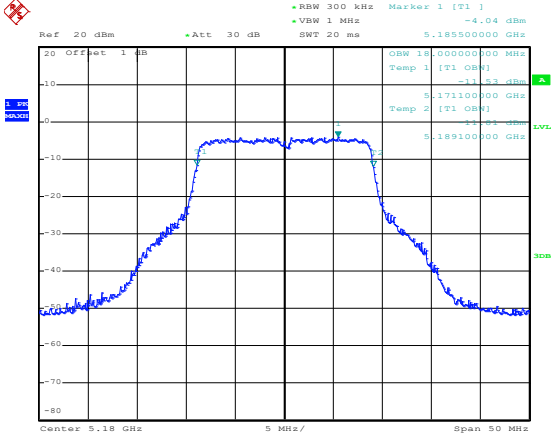
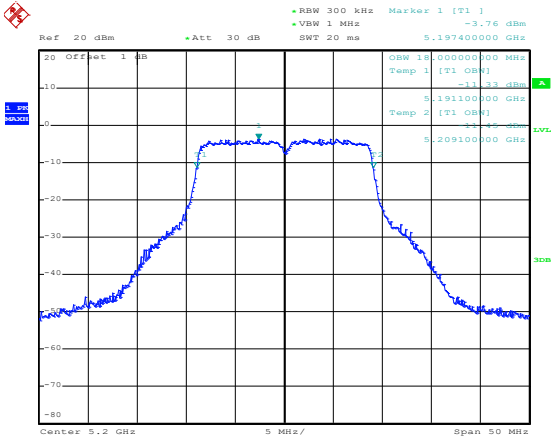
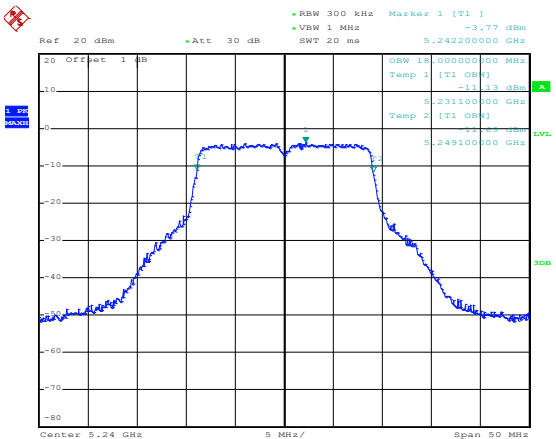
802.11n-HT40-Low	 Ref 20 dBm Att 30 dB SWT 20 ms Marker 1 [T1] -0.92 dBm 5.197800000 GHz 20 Offset 1 dB 10 MHz/ Span 100 MHz Center 5.19 GHz Date: 26.MAR.2022 16:54:55
802.11n-HT40-High	 Ref 20 dBm Att 30 dB SWT 20 ms Marker 1 [T1] -0.76 dBm 5.223600000 GHz 20 Offset 1 dB 10 MHz/ Span 100 MHz Center 5.23 GHz Date: 26.MAR.2022 16:55:43
802.11ax-HE20-Low	 Ref 20 dBm Att 30 dB SWT 20 ms Marker 1 [T1] -1.70 dBm 5.180800000 GHz 20 Offset 1 dB 5 MHz/ Span 50 MHz Center 5.18 GHz Date: 26.MAR.2022 16:51:56

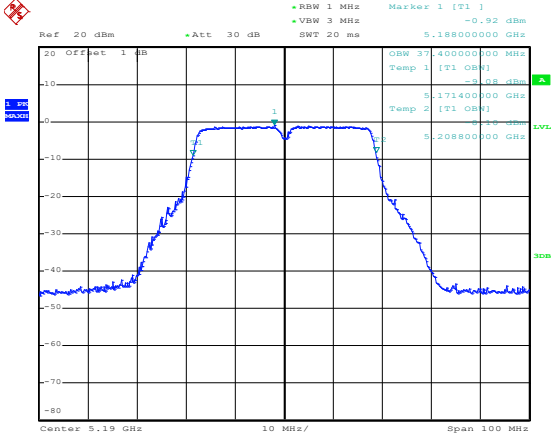
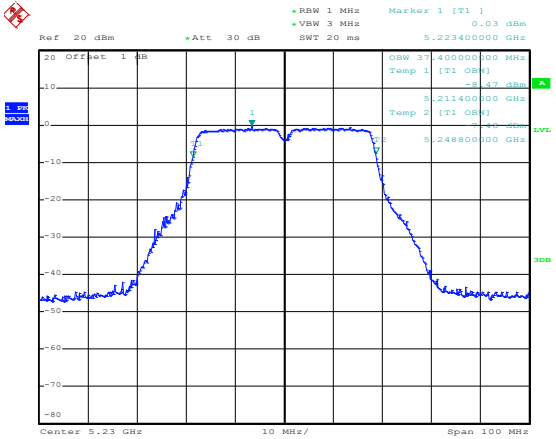
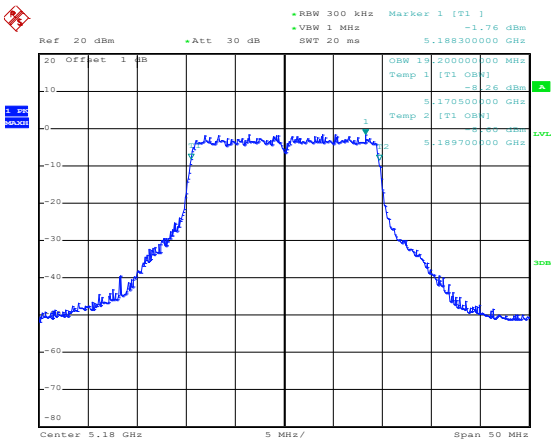
802.11ax-HE20- Middle	 Ref 20 dBm Att 30 dB RBW 300 kHz Marker 1 [T1] -0.68 dBm VSW 1 MHz SWT 20 ms 5.206600000 GHz 1dB Offset 1 dB 1dB [T1] -26.87 dBm BW 22.400000000 MHz Temp 1 [T1] n881 1dB [T1] -27.13 dBm BW 22.120000000 MHz Center 5.2 GHz 5 MHz/ Span 50 MHz Date: 26.MAR.2022 16:52:29
802.11ax-HE20- High	 Ref 20 dBm Att 30 dB RBW 300 kHz Marker 1 [T1] -1.46 dBm VSW 1 MHz SWT 20 ms 5.247800000 GHz 1dB Offset 1 dB 1dB [T1] -27.68 dBm BW 22.600000000 MHz Temp 1 [T1] n881 1dB [T1] -28.15 dBm BW 22.512000000 MHz Center 5.24 GHz 5 MHz/ Span 50 MHz Date: 26.MAR.2022 16:52:50
802.11ax-HE40-Low	 Ref 20 dBm Att 30 dB RBW 1 MHz Marker 1 [T1] 1.92 dBm VSW 3 MHz SWT 20 ms 5.188400000 GHz 1dB Offset 1 dB 1dB [T1] -24.91 dBm BW 45.400000000 MHz Temp 1 [T1] n881 1dB [T1] -25.86 dBm BW 5.212800000 MHz Center 5.19 GHz 10 MHz/ Span 100 MHz Date: 26.MAR.2022 16:56:17

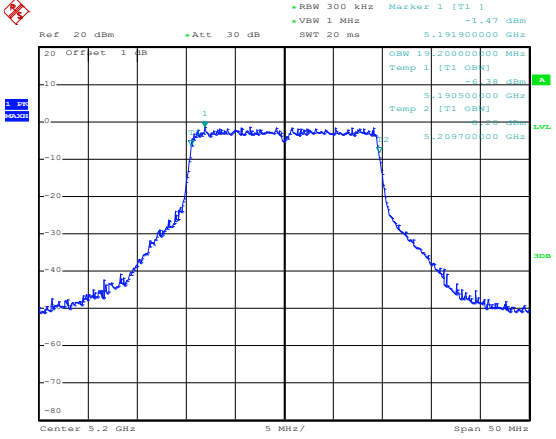
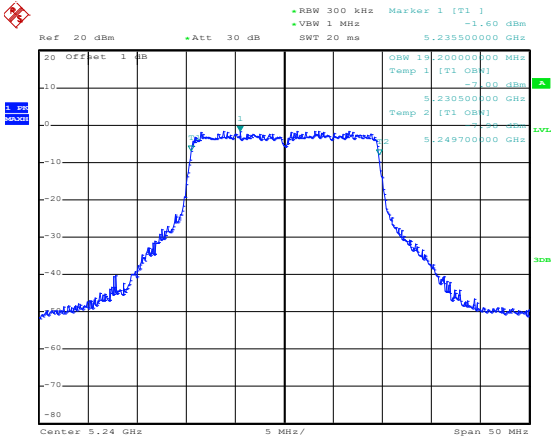
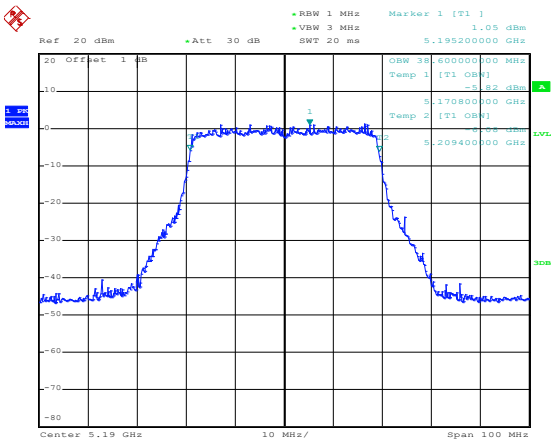
802.11ax-HE40- High	 Ref 20 dBm Att 30 dB SW 20 ms Marker 1 [T1] -24.49 dBm 5.242200000 GHz Center 5.23 GHz 10 MHz/ Span 100 MHz Date: 26.MAR.2022 16:56:37
802.11ac-HT80	 Ref 20 dBm Att 30 dB SW 20 ms Marker 1 [T1] -29.54 dBm 5.188400000 GHz Center 5.21 GHz 20 MHz/ Span 200 MHz Date: 26.MAR.2022 16:57:15
802.11ax-HE80	 Ref 20 dBm Att 30 dB SW 20 ms Marker 1 [T1] -27.10 dBm 5.208800000 GHz Center 5.21 GHz 20 MHz/ Span 200 MHz Date: 26.MAR.2022 16:57:45

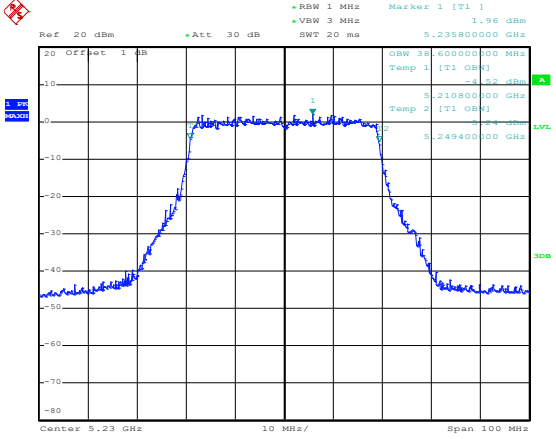
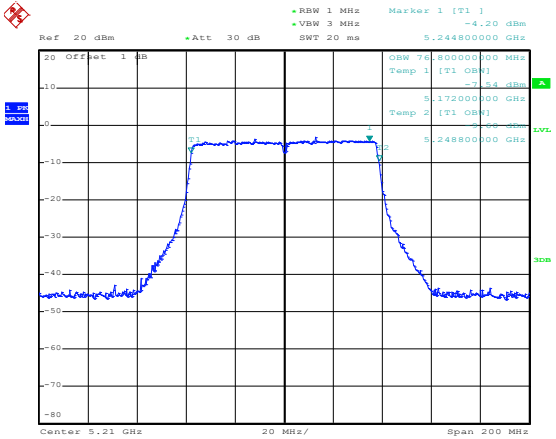
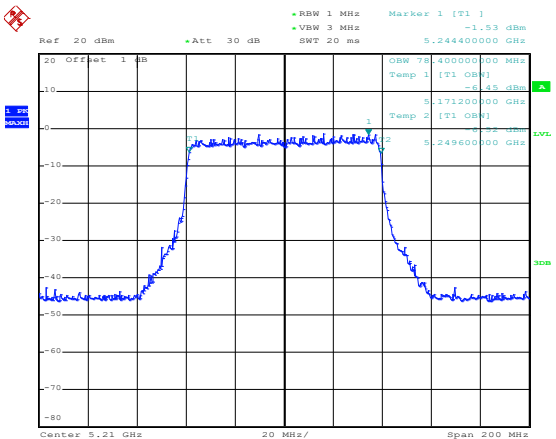
99%OBW

802.11a-Low	 Date: 26.MAR.2022 17:03:26
802.11a-Middle	 Date: 26.MAR.2022 17:05:00
802.11a-High	 Date: 26.MAR.2022 17:03:26

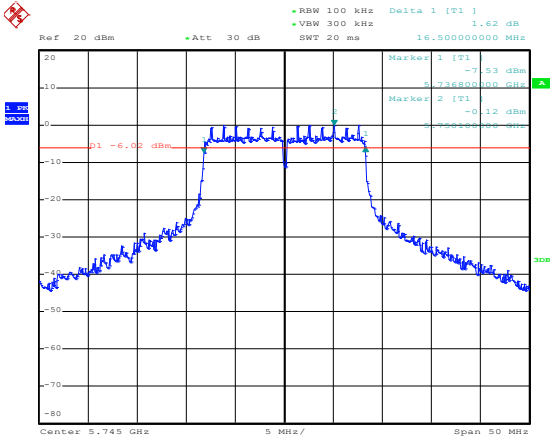
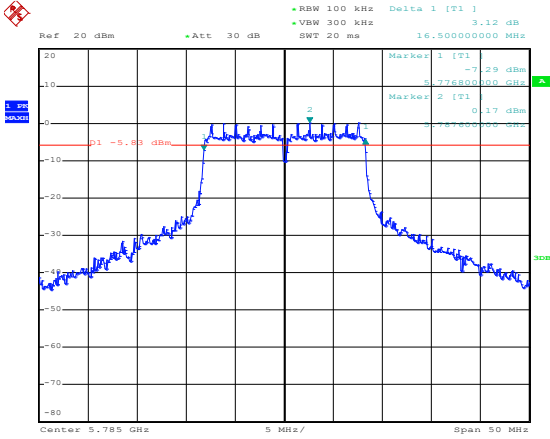
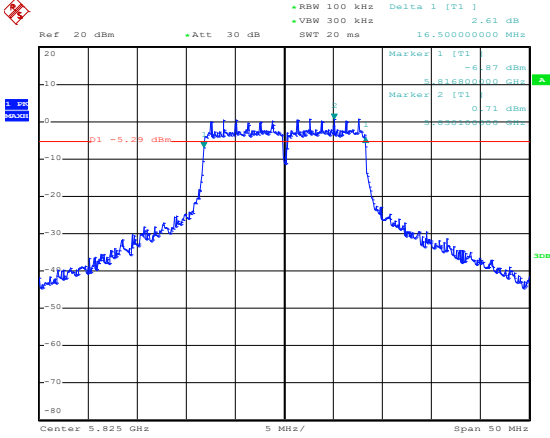
802.11n-HT20-Low	 Ref 20 dBm Att 30 dB RBW 300 kHz VSW 1 MHz SWT 20 ms Marker 1 [T1] -4.04 dBm 5.185500000 GHz OSW 10.00000000 MHz Temp 1 [T1] -11.53 dBm 5.171000000 GHz Temp 2 [T1] -11.53 dBm 5.189100000 GHz Center 5.18 GHz 5 MHz/ Span 50 MHz Date: 26.MAR.2022 17:05:51
802.11n-HT20-Middle	 Ref 20 dBm Att 30 dB RBW 300 kHz VSW 1 MHz SWT 20 ms Marker 1 [T1] -3.76 dBm 5.197400000 GHz OSW 10.00000000 MHz Temp 1 [T1] -11.53 dBm 5.191000000 GHz Temp 2 [T1] -11.53 dBm 5.209100000 GHz Center 5.2 GHz 5 MHz/ Span 50 MHz Date: 26.MAR.2022 17:06:09
802.11n-HT20-High	 Ref 20 dBm Att 30 dB RBW 300 kHz VSW 1 MHz SWT 20 ms Marker 1 [T1] -3.77 dBm 5.242200000 GHz OSW 10.00000000 MHz Temp 1 [T1] -11.53 dBm 5.231000000 GHz Temp 2 [T1] -11.53 dBm 5.249100000 GHz Center 5.24 GHz 5 MHz/ Span 50 MHz Date: 26.MAR.2022 17:06:27

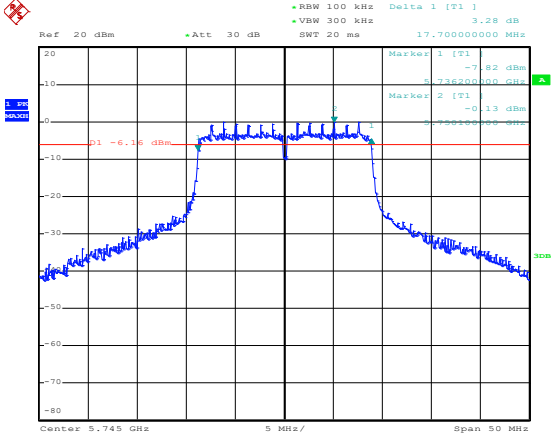
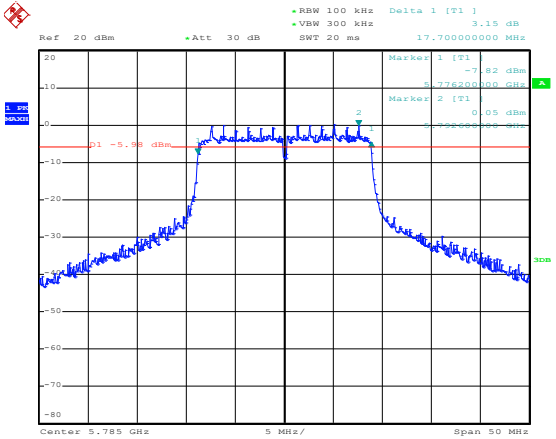
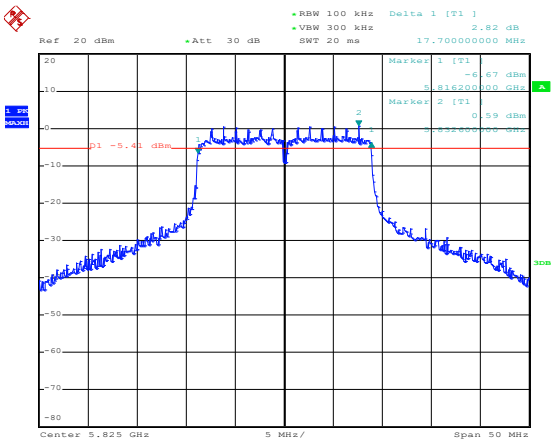
802.11n-HT40-Low	 Date: 26.MAR.2022 17:09:22
802.11n-HT40-High	 Date: 26.MAR.2022 17:09:44
802.11ax-HE20-Low	 Date: 26.MAR.2022 17:07:29

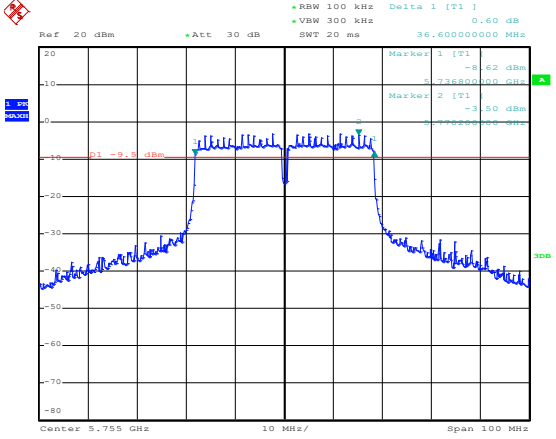
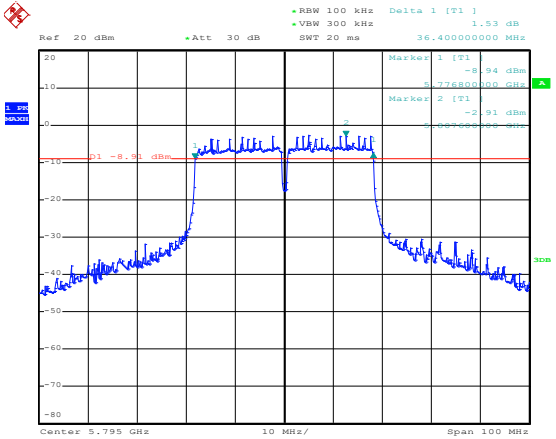
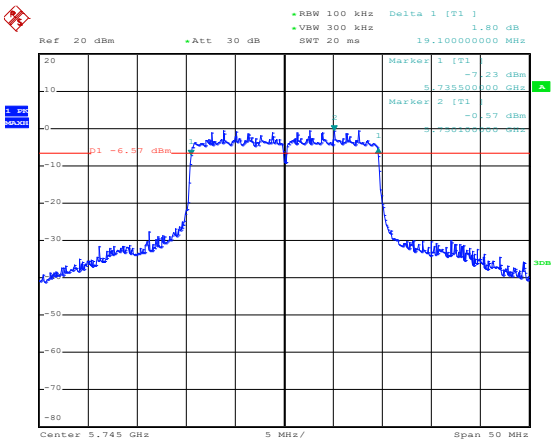
802.11ax-HE20- Middle	 Date: 26.MAR.2022 17:07:54
802.11ax-HE20- High	 Date: 26.MAR.2022 17:08:22
802.11ax-HE40-Low	 Date: 26.MAR.2022 17:11:14

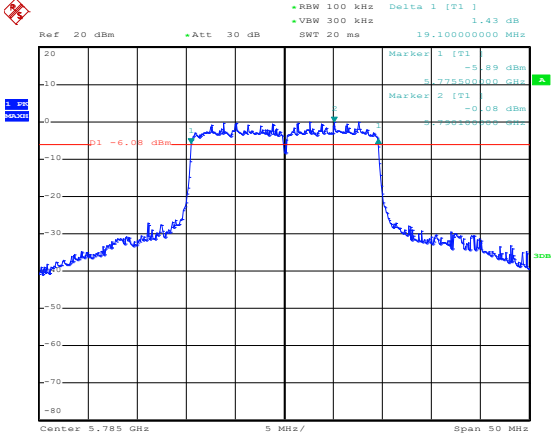
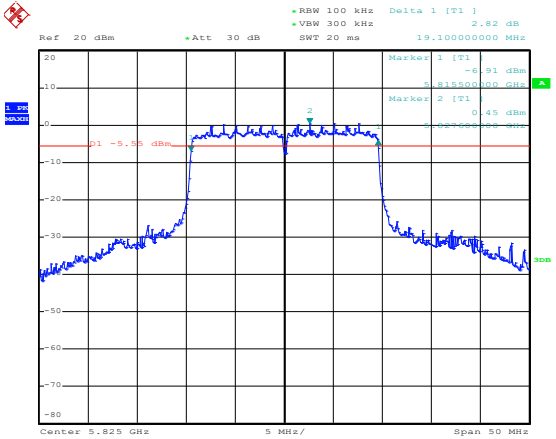
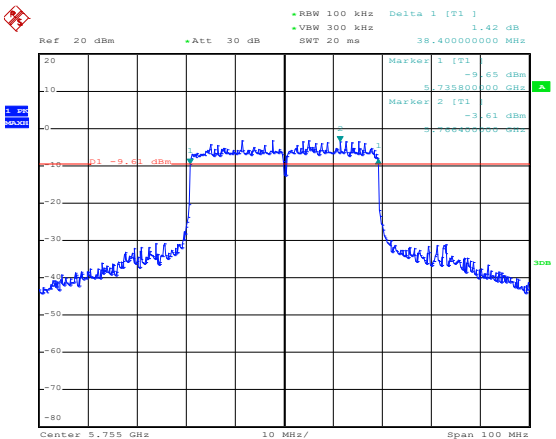
802.11ax-HE40- High	 Date: 26.MAR.2022 17:11:34
802.11ac-HT80	 Date: 26.MAR.2022 17:12:14
802.11ax-HE80	 Date: 26.MAR.2022 17:12:35

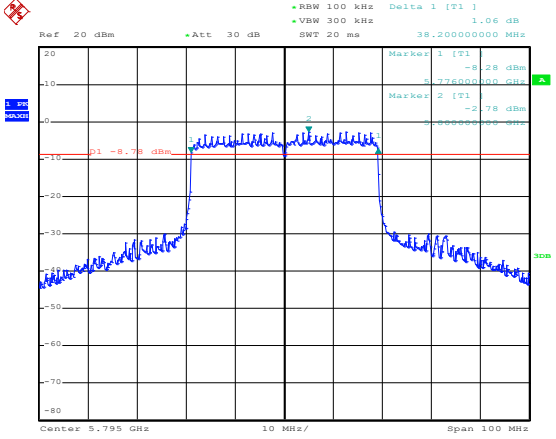
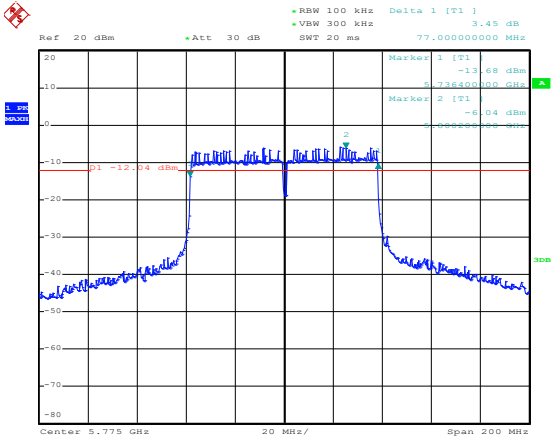
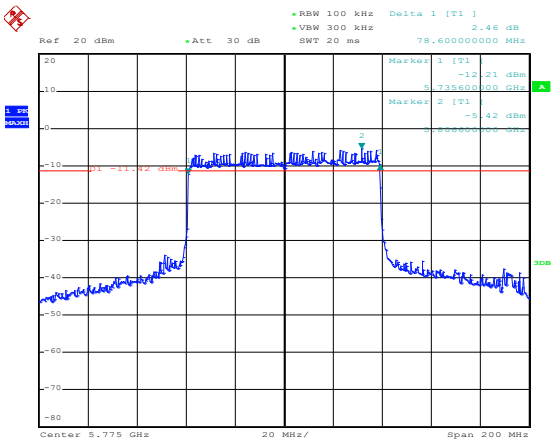
6 dB Bandwidth
5725-5850MHz

802.11a-Low	 Date: 28.MAR.2022 10:38:49
802.11a-Middle	 Date: 28.MAR.2022 10:40:03
802.11a-High	 Date: 28.MAR.2022 10:41:12

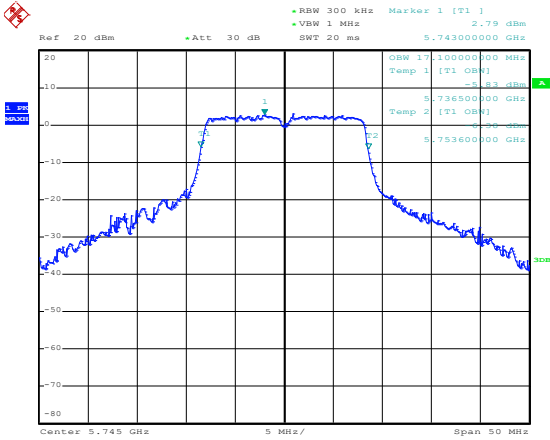
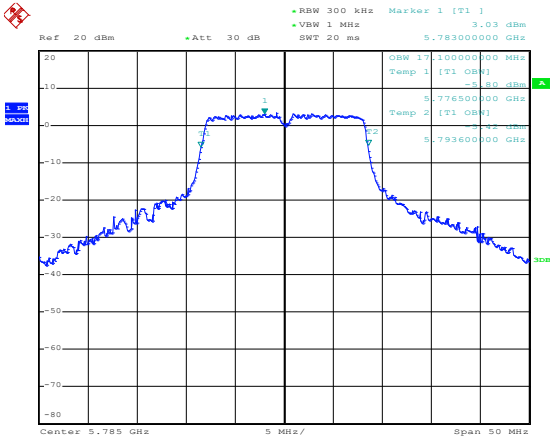
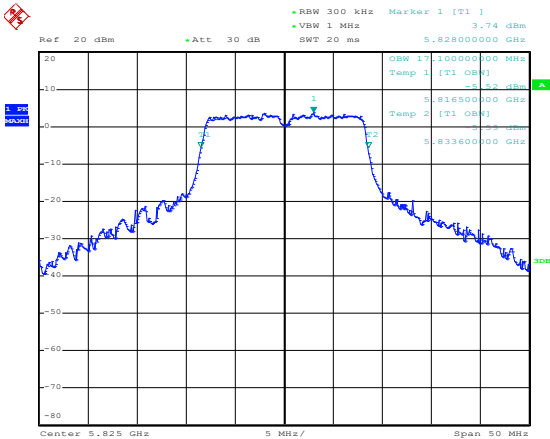
802.11n-HT20-Low	 Ref 20 dBm Att 30 dB RBW 100 kHz VSW 300 kHz SWT 20 ms Delta 1 [T1] 3.28 dB Marker 1 [T1] -7.82 dBm 5.736200000 GHz Marker 2 [T1] -0.13 dBm 5.750000000 GHz D1 -6.16 dBm Center 5.745 GHz 5 MHz/ Span 50 MHz Date: 28.MAR.2022 10:42:47
802.11n-HT20-Middle	 Ref 20 dBm Att 30 dB RBW 100 kHz VSW 300 kHz SWT 20 ms Delta 1 [T1] 3.15 dB Marker 1 [T1] -7.82 dBm 5.776200000 GHz Marker 2 [T1] 0.05 dBm 5.790000000 GHz D1 -5.98 dBm Center 5.785 GHz 5 MHz/ Span 50 MHz Date: 28.MAR.2022 10:44:39
802.11n-HT20-High	 Ref 20 dBm Att 30 dB RBW 100 kHz VSW 300 kHz SWT 20 ms Delta 1 [T1] 2.82 dB Marker 1 [T1] -6.67 dBm 5.816200000 GHz Marker 2 [T1] 0.59 dBm 5.830000000 GHz D1 -5.43 dBm Center 5.825 GHz 5 MHz/ Span 50 MHz Date: 28.MAR.2022 10:46:03

802.11n-HT40-Low	 Ref 20 dBm Att 30 dB RBW 100 kHz VSW 300 kHz SWT 20 ms Delta 1 [T1] 0.60 dB Marker 1 [T1] -8.62 dBm 5.755000000 GHz Marker 2 [T1] -3.50 dBm 5.755000000 GHz 3dB 19.10000000 MHz Center 5.755 GHz 10 MHz/ Span 100 MHz Date: 28.MAR.2022 11:02:50
802.11n-HT40-High	 Ref 20 dBm Att 30 dB RBW 100 kHz VSW 300 kHz SWT 20 ms Delta 1 [T1] 1.53 dB Marker 1 [T1] -8.94 dBm 5.795000000 GHz Marker 2 [T1] -2.91 dBm 5.795000000 GHz 3dB 19.10000000 MHz Center 5.795 GHz 10 MHz/ Span 100 MHz Date: 28.MAR.2022 11:04:06
802.11ax-HE20-Low	 Ref 20 dBm Att 30 dB RBW 100 kHz VSW 300 kHz SWT 20 ms Delta 1 [T1] 1.80 dB Marker 1 [T1] -7.23 dBm 5.735500000 GHz Marker 2 [T1] -0.57 dBm 5.735500000 GHz 3dB 19.10000000 MHz Center 5.745 GHz 5 MHz/ Span 50 MHz Date: 28.MAR.2022 10:47:27

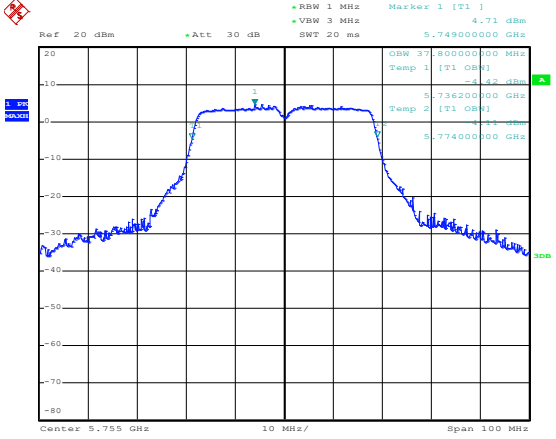
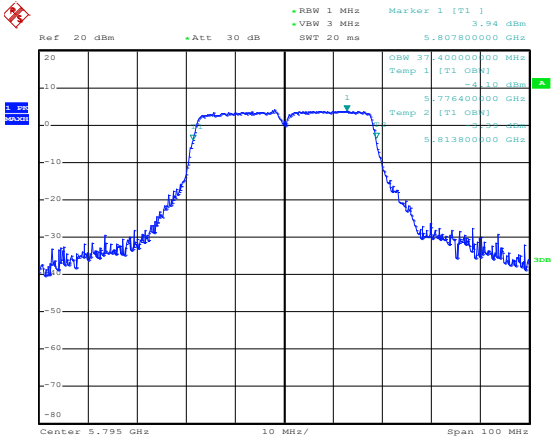
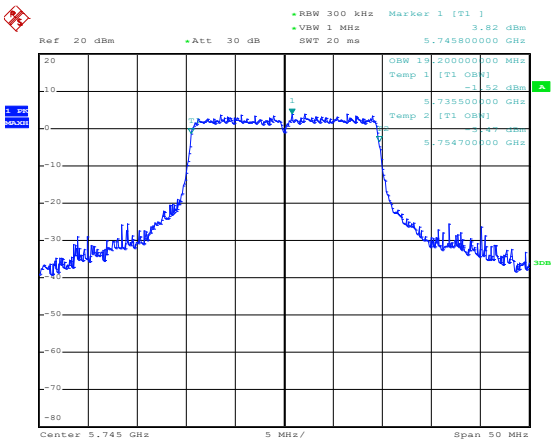
802.11ax-HE20- Middle	 Ref 20 dBm Att 30 dB RBW 100 kHz VSW 300 kHz SWT 20 ms Delta 1 [T1] 1.43 dB Marker 1 [T1] -5.89 dBm 5.77500000 GHz Marker 2 [T1] -0.08 dBm 5.78500000 GHz D1 -6.08 dBm Center 5.785 GHz 5 MHz/ Span 50 MHz Date: 28.MAR.2022 10:56:52
802.11ax-HE20- High	 Ref 20 dBm Att 30 dB RBW 100 kHz VSW 300 kHz SWT 20 ms Delta 1 [T1] 2.82 dB Marker 1 [T1] -6.91 dBm 5.81500000 GHz Marker 2 [T1] 0.45 dBm 5.82500000 GHz D1 -5.59 dBm Center 5.825 GHz 5 MHz/ Span 50 MHz Date: 28.MAR.2022 10:58:33
802.11ax-HE40-Low	 Ref 20 dBm Att 30 dB RBW 100 kHz VSW 300 kHz SWT 20 ms Delta 1 [T1] 1.42 dB Marker 1 [T1] -9.65 dBm 5.73580000 GHz Marker 2 [T1] -9.61 dBm 5.75500000 GHz D1 -9.61 dBm Center 5.755 GHz 10 MHz/ Span 100 MHz Date: 28.MAR.2022 11:05:00

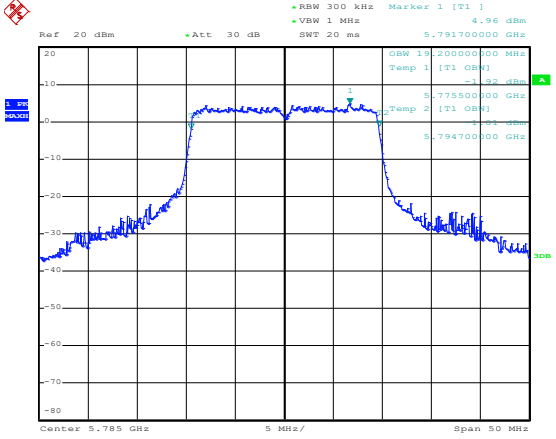
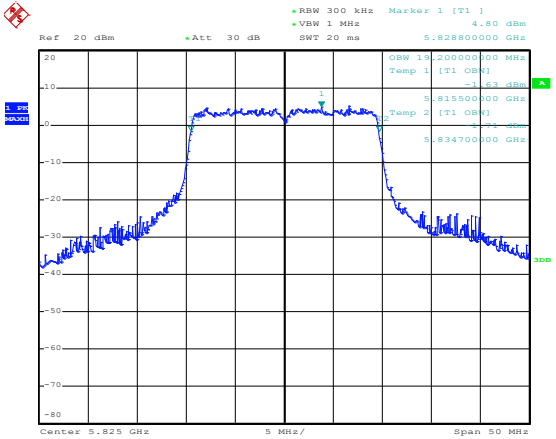
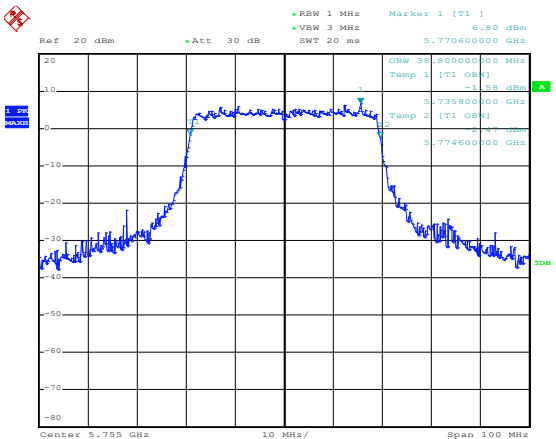
802.11ax-HE40- High	 Ref 20 dBm Att 30 dB RBW 100 kHz VSW 300 kHz SWT 20 ms Delta 1 [T1] 1.06 dB Marker 1 [T1] -8.28 dBm 5.79500000 GHz Marker 2 [T1] -2.78 dBm 5.80000000 GHz Center 5.795 GHz 10 MHz/ Span 100 MHz Date: 28.MAR.2022 11:06:43
802.11ac-HT80	 Ref 20 dBm Att 30 dB RBW 100 kHz VSW 300 kHz SWT 20 ms Delta 1 [T1] 3.45 dB Marker 1 [T1] -13.68 dBm 5.73500000 GHz Marker 2 [T1] -6.04 dBm 5.80000000 GHz Center 5.775 GHz 20 MHz/ Span 200 MHz Date: 28.MAR.2022 11:08:06
802.11ax-HE80	 Ref 20 dBm Att 30 dB RBW 100 kHz VSW 300 kHz SWT 20 ms Delta 1 [T1] 2.46 dB Marker 1 [T1] -12.21 dBm 5.73500000 GHz Marker 2 [T1] -5.42 dBm 5.80000000 GHz Center 5.775 GHz 20 MHz/ Span 200 MHz Date: 28.MAR.2022 11:09:46

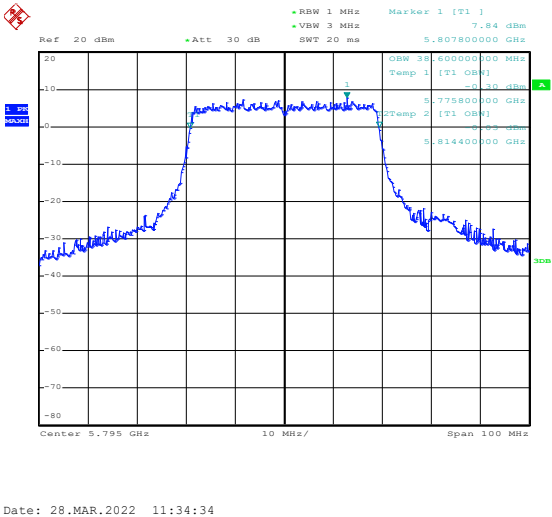
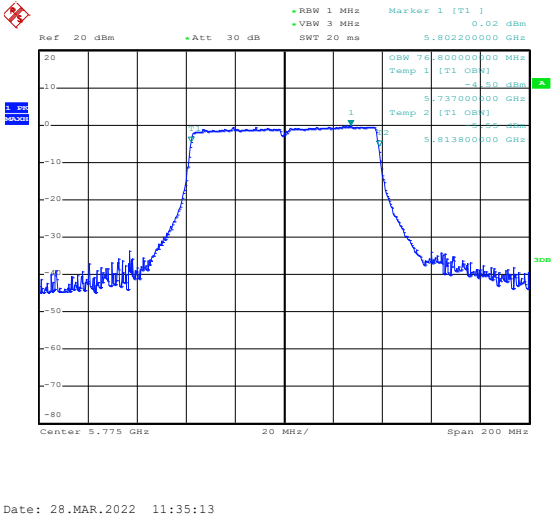
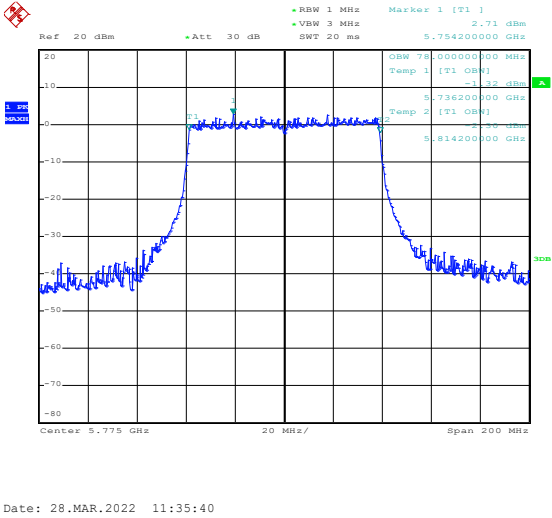
99% dB Bandwidth
5725-5850MHz

802.11a-Low	 Date: 28.MAR.2022 11:18:15
802.11a-Middle	 Date: 28.MAR.2022 11:19:54
802.11a-High	 Date: 28.MAR.2022 11:20:39

[illegible]

802.11n-HT40-Low	 Date: 28.MAR.2022 11:32:53
802.11n-HT40-High	 Date: 28.MAR.2022 11:33:45
802.11ax-HE20-Low	 Date: 28.MAR.2022 11:24:18

802.11ax-HE20- Middle	 Date: 28.MAR.2022 11:27:08
802.11ax-HE20- High	 Date: 28.MAR.2022 11:27:51
802.11ax-HE40-Low	 Date: 28.MAR.2022 11:33:15

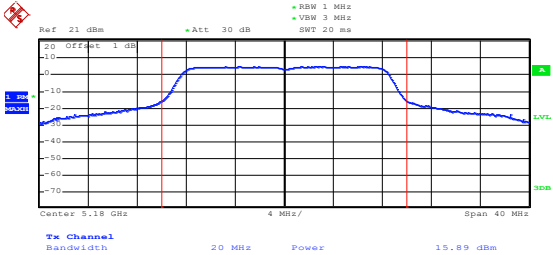
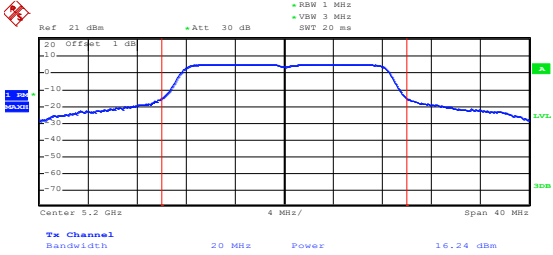
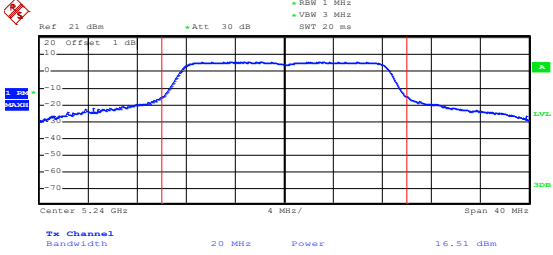
802.11ax-HE40- High	 Date: 28.MAR.2022 11:34:34
802.11ac-HT80	 Date: 28.MAR.2022 11:35:13
802.11ax-HE80	 Date: 28.MAR.2022 11:35:40

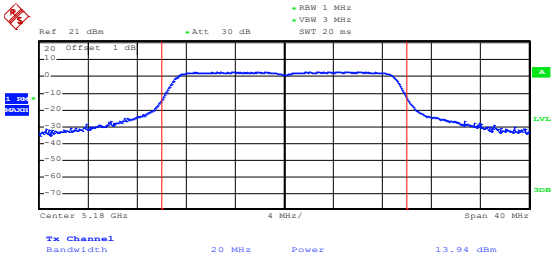
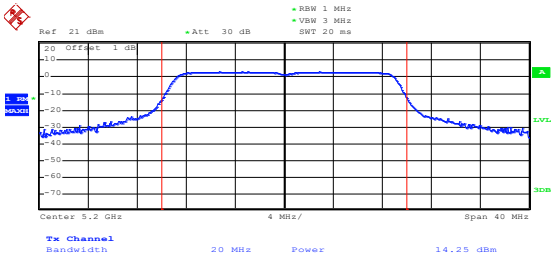
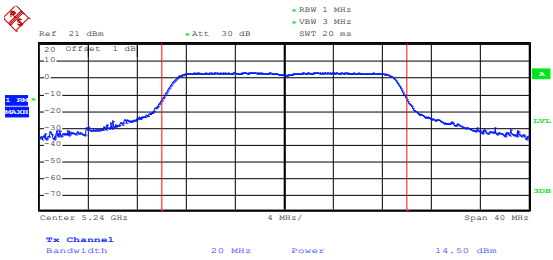
APPENDIX C**Maximum Conducted Output Power**

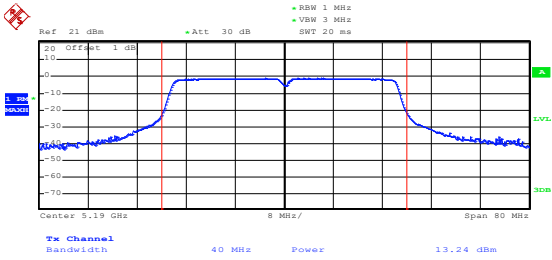
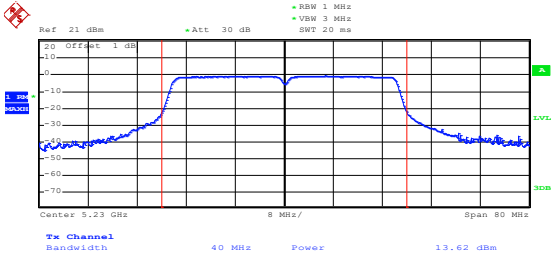
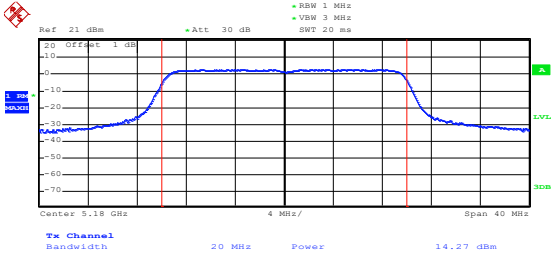
U-NII-1:5150-5250MHz					
Test mode	Frequency MHz	Output Power dBm		Total dBm	Limit dBm
		ANT 0	ANT 1		
802.11a	5180	15.89	15.42	/	24
	5200	16.24	15.53	/	24
	5240	16.51	15.76	/	24
802.11n-HT20	5180	13.94	14.32	17.14	24
	5200	14.25	14.45	17.36	24
	5240	14.50	14.68	17.60	24
802.11n-HT40	5190	13.24	13.59	16.43	24
	5230	13.62	13.87	16.76	24
802.11ax-HE20	5180	14.27	14.36	17.33	24
	5200	14.56	14.51	17.55	24
	5240	14.85	14.71	17.79	24
802.11ax-HE40	5190	13.31	13.50	16.42	24
	5230	13.64	13.87	16.77	24
802.11ac-HT80	5210	10.51	12.64	14.71	24
802.11ax-HE80	5210	10.97	12.47	14.79	24

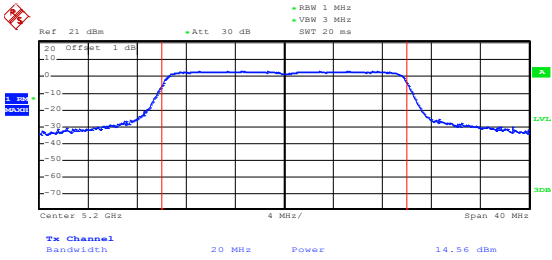
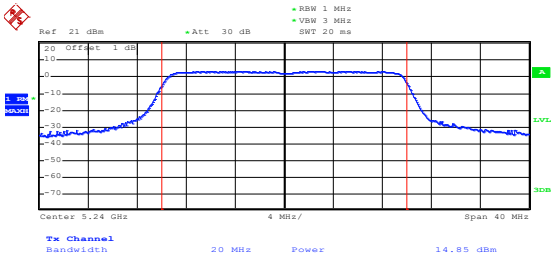
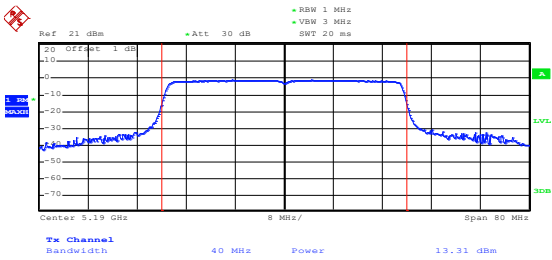
U-NII-3: 5725-5850MHz					
Test mode	Frequency MHz	Output Power dBm		Total dBm	Limit dBm
		ANT 0	ANT 1		
802.11a	5745	14.54	15.56	/	30
	5785	14.09	15.63	/	30
	5825	15.16	16.22	/	30
802.11n-HT20	5745	13.83	13.59	16.72	30
	5785	13.98	14.05	17.03	30
	5825	13.37	14.44	16.95	30
802.11n-HT40	5755	11.66	12.90	15.33	30
	5795	12.36	13.53	15.99	30
802.11ax-HE20	5745	13.36	13.77	16.58	30
	5785	12.82	14.10	16.52	30
	5825	13.53	14.47	17.04	30
802.11ax-HE40	5755	11.38	12.82	15.17	30
	5795	12.25	13.51	15.94	30
802.11ac-HT80	5775	11.67	12.92	15.35	30
802.11ax-HE80	5775	11.45	12.76	15.16	30

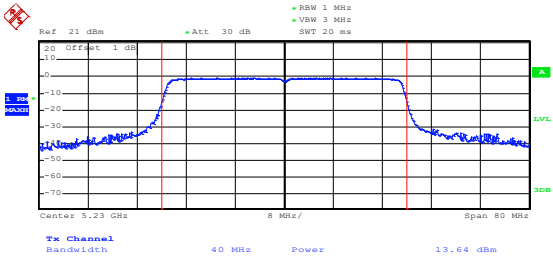
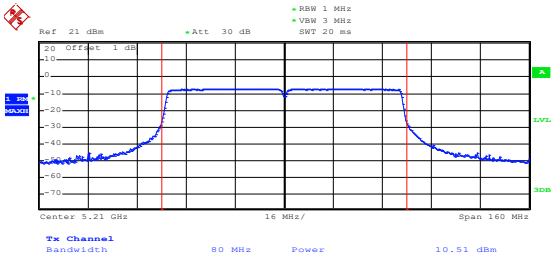
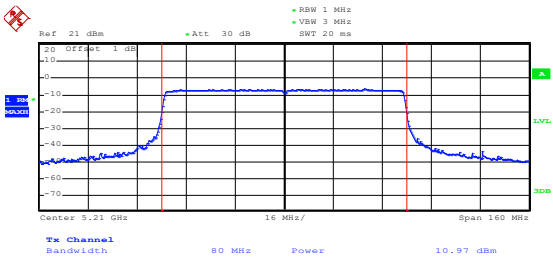
ANT 0
5150-5250MHz

802.11a-Low	 Date: 25.MAR.2022 09:29:49
802.11a-Middle	 Date: 25.MAR.2022 09:30:09
802.11a-High	 Date: 25.MAR.2022 09:30:33

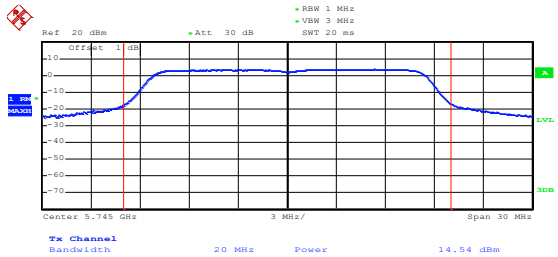
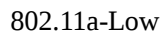
802.11n-HT20-Low	 Ref: 21 dBm +Att: 30 dB RBW: 1 MHz VBW: 3 MHz SMT: 20 ms 20 Offset: 1 dB Center: 5.18 GHz 4 MHz/ Span: 40 MHz Tx Channel Bandwidth: 20 MHz Power: 13.94 dBm Date: 25.MAR.2022 09:32:38
802.11n-HT20-Middle	 Ref: 21 dBm +Att: 30 dB RBW: 1 MHz VBW: 3 MHz SMT: 20 ms 20 Offset: 1 dB Center: 5.2 GHz 4 MHz/ Span: 40 MHz Tx Channel Bandwidth: 20 MHz Power: 14.25 dBm Date: 25.MAR.2022 09:33:01
802.11n-HT20-High	 Ref: 21 dBm +Att: 30 dB RBW: 1 MHz VBW: 3 MHz SMT: 20 ms 20 Offset: 1 dB Center: 5.24 GHz 4 MHz/ Span: 40 MHz Tx Channel Bandwidth: 20 MHz Power: 14.50 dBm Date: 25.MAR.2022 09:33:19

802.11n-HT40-Low	 Date: 25.MAR.2022 09:37:57
802.11n-HT40-High	 Date: 25.MAR.2022 09:38:17
802.11ax-HE20-Low	 Date: 25.MAR.2022 09:35:34

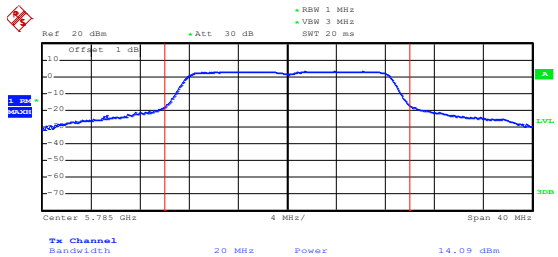
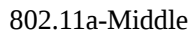
802.11ax-HE20- Middle	 Date: 25.MAR.2022 09:35:50
802.11ax-HE20- High	 Date: 25.MAR.2022 09:36:14
802.11ax-HE40-Low	 Date: 25.MAR.2022 09:38:49

802.11ax-HE40- High	 Date: 25.MAR.2022 09:39:09
802.11ac-HT80	 Date: 25.MAR.2022 09:41:14
802.11ax-HE80	 Date: 25.MAR.2022 09:42:03

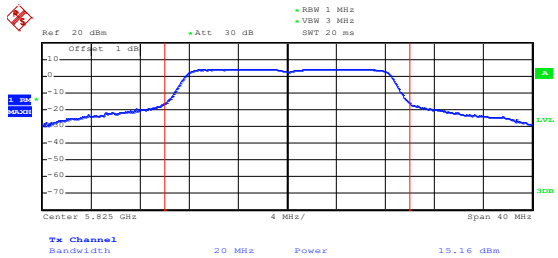
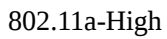
5725-5850MHz



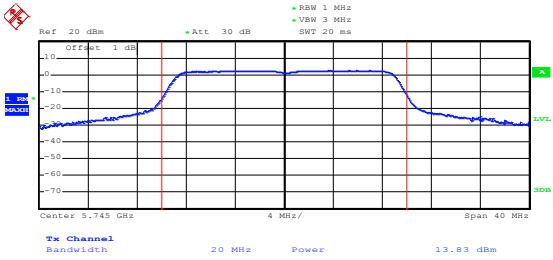
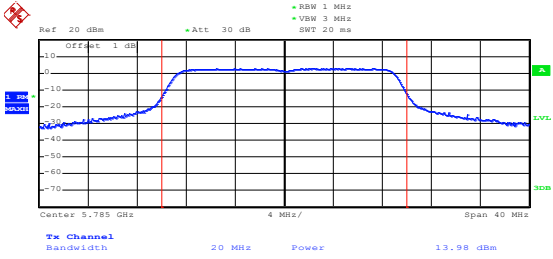
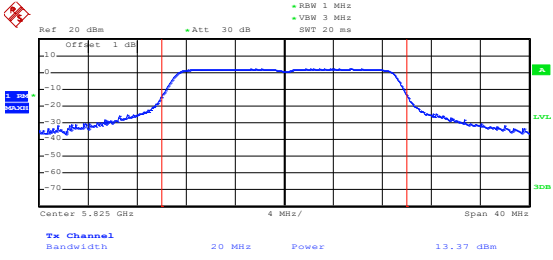
Date: 25.MAR.2022 15:25:12

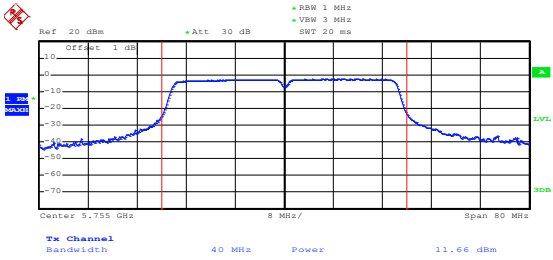
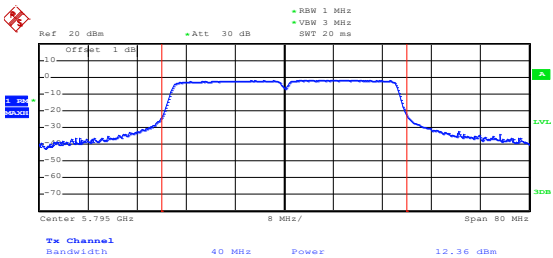
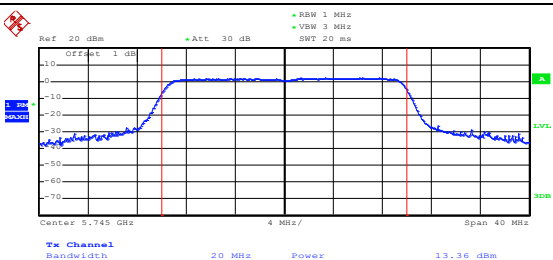


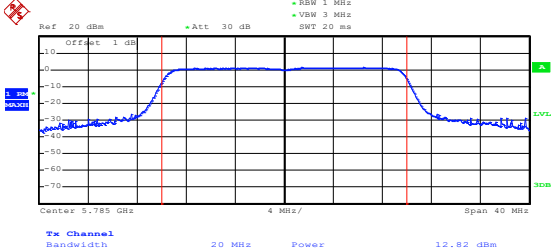
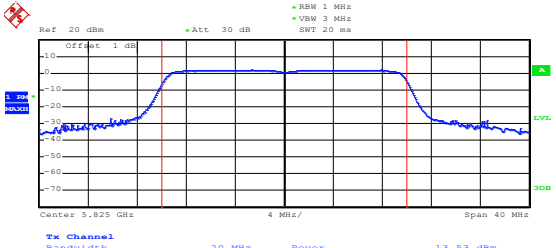
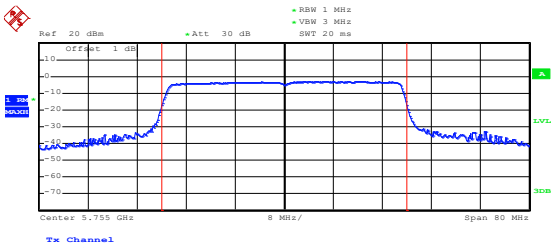
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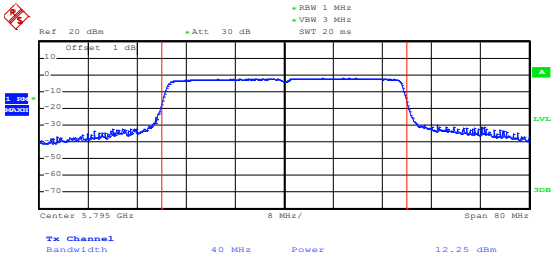
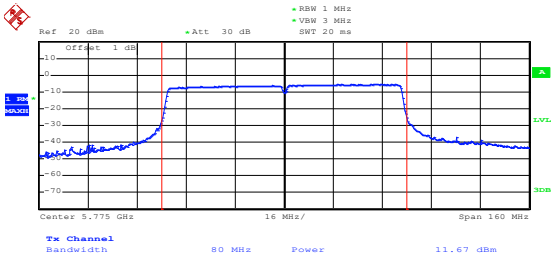
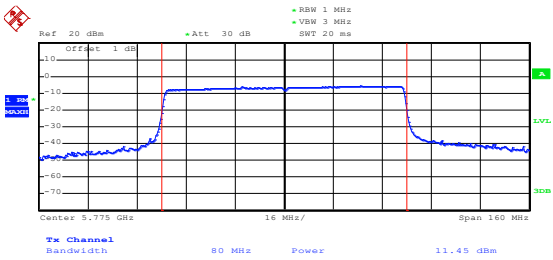


Date: 25.MAR.2022 15:28:35

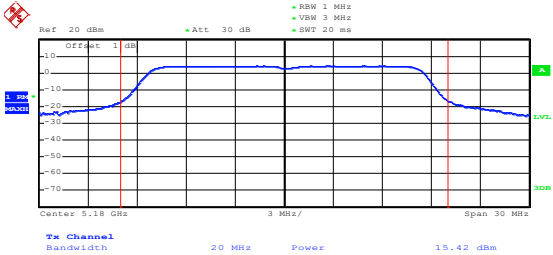
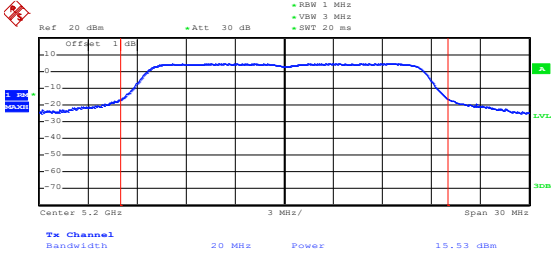
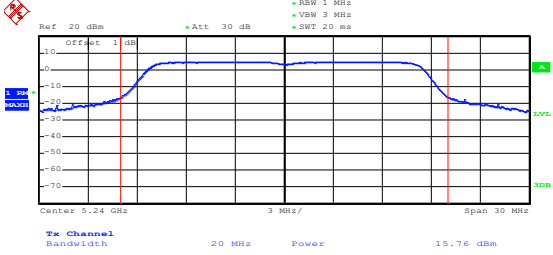
802.11n-HT20-Low	 Date: 25.MAR.2022 15:29:29
802.11n-HT20-Middle	 Date: 25.MAR.2022 15:30:08
802.11n-HT20-High	 Date: 25.MAR.2022 15:30:57

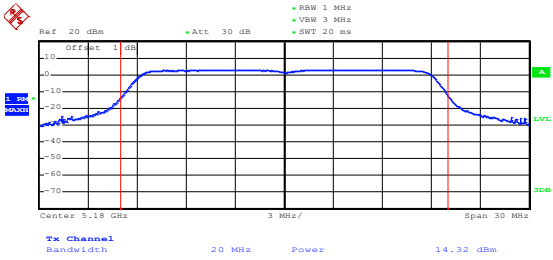
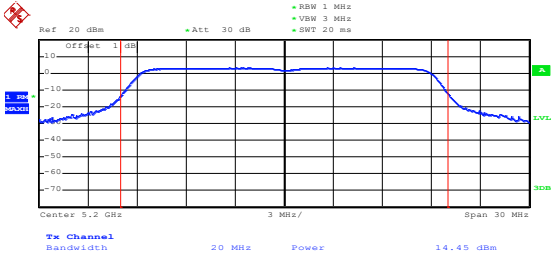
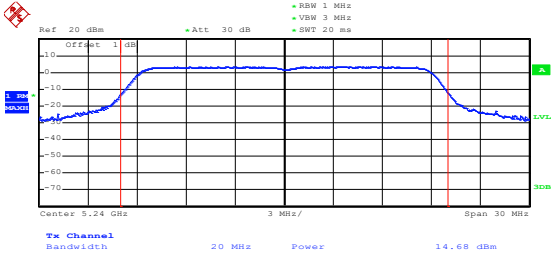
802.11n-HT40-Low	 Date: 25.MAR.2022 15:38:53
802.11n-HT40-High	 Date: 25.MAR.2022 15:39:12
802.11ax-HE20-Low	 Date: 25.MAR.2022 15:35:45

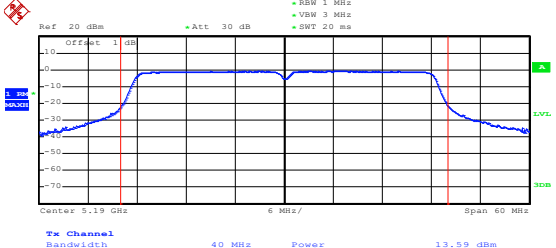
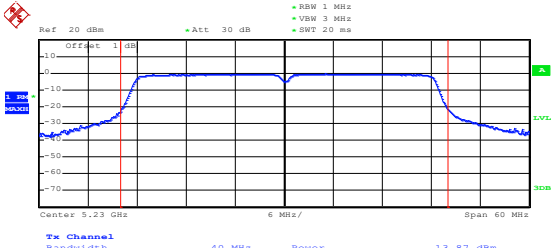
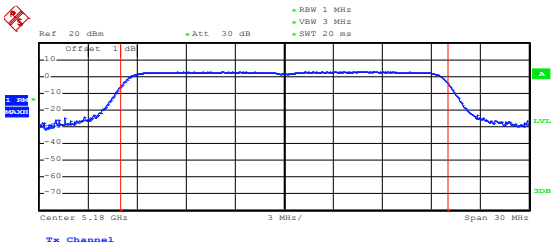
802.11ax-HE20- Middle	 Date: 25.MAR.2022 15:31:29
802.11ax-HE20- High	 Date: 25.MAR.2022 15:33:21
802.11ax-HE40-Low	 Date: 25.MAR.2022 15:39:46

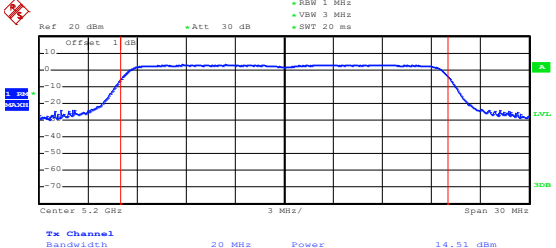
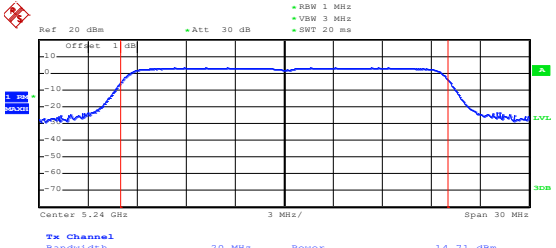
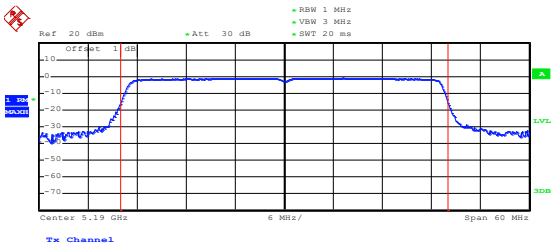
802.11ax-HE40- High	 Date: 25.MAR.2022 15:40:04
802.11ac-HT80	 Date: 25.MAR.2022 15:41:15
802.11ax-HE80	 Date: 25.MAR.2022 15:41:28

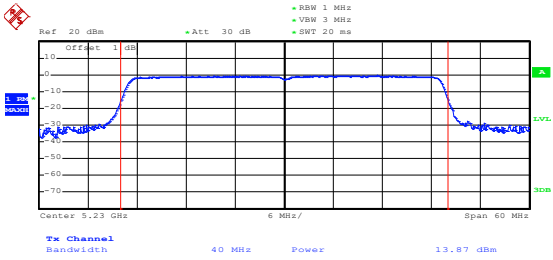
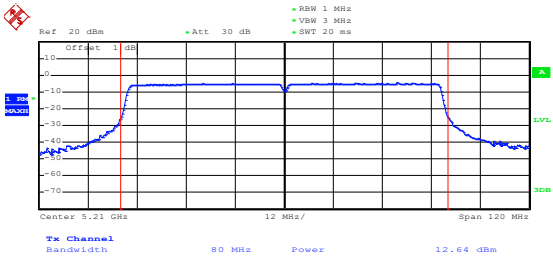
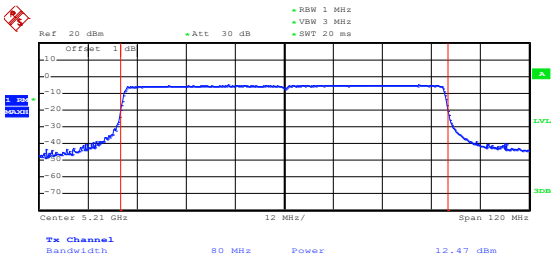
ANT 1
5150-5250MHz

802.11a-Low	 Date: 26.MAR.2022 16:21:52
802.11a-Middle	 Date: 26.MAR.2022 16:22:13
802.11a-High	 Date: 26.MAR.2022 16:22:28

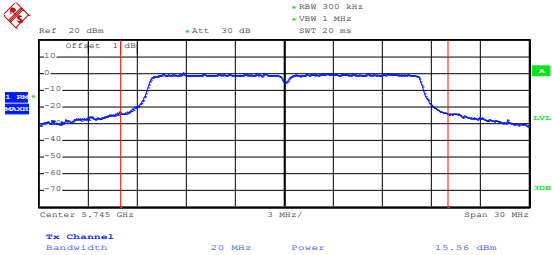
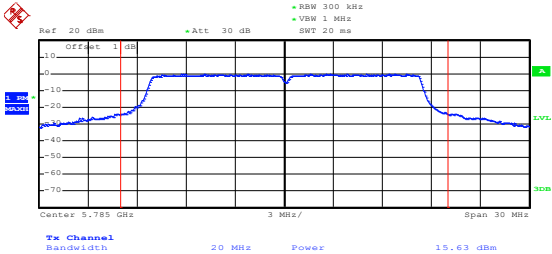
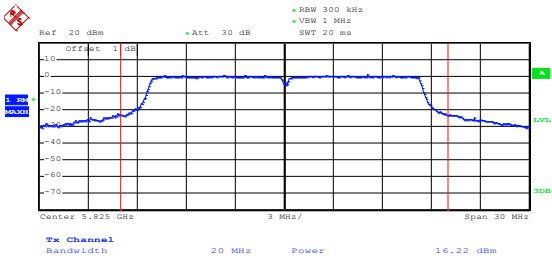
802.11n-HT20-Low	 Ref 20 dBm Offset 1 dB Att 30 dB RBW 1 MHz VBW 3 MHz SMT 20 ms Center 5.18 GHz 3 MHz/ Span 30 MHz Tx Channel Bandwidth 20 MHz Power 14.32 dBm Date: 26.MAR.2022 16:23:14
802.11n-HT20-Middle	 Ref 20 dBm Offset 1 dB Att 30 dB RBW 1 MHz VBW 3 MHz SMT 20 ms Center 5.2 GHz 3 MHz/ Span 30 MHz Tx Channel Bandwidth 20 MHz Power 14.45 dBm Date: 26.MAR.2022 16:23:41
802.11n-HT20-High	 Ref 20 dBm Offset 1 dB Att 30 dB RBW 1 MHz VBW 3 MHz SMT 20 ms Center 5.24 GHz 3 MHz/ Span 30 MHz Tx Channel Bandwidth 20 MHz Power 14.68 dBm Date: 26.MAR.2022 16:23:59

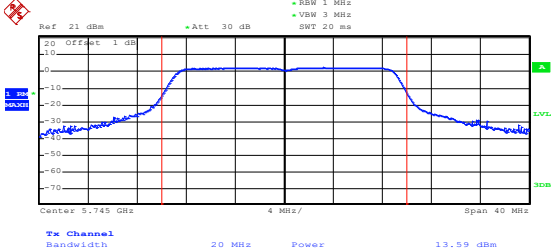
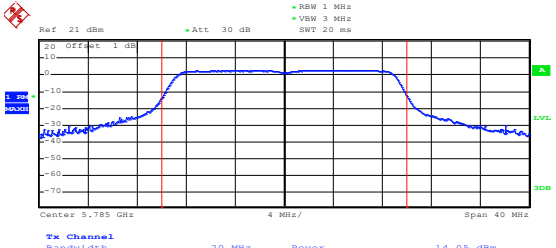
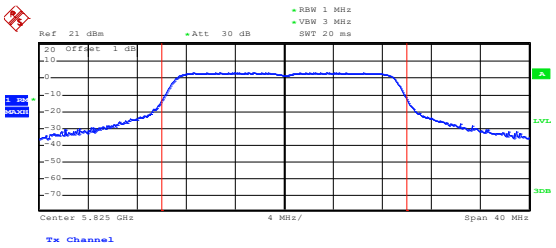
802.11n-HT40-Low	 Date: 26.MAR.2022 16:27:44
802.11n-HT40-High	 Date: 26.MAR.2022 16:28:10
802.11ax-HE20-Low	 Date: 26.MAR.2022 16:24:21

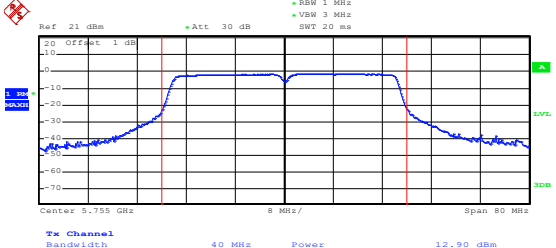
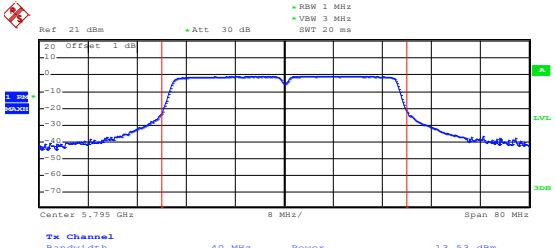
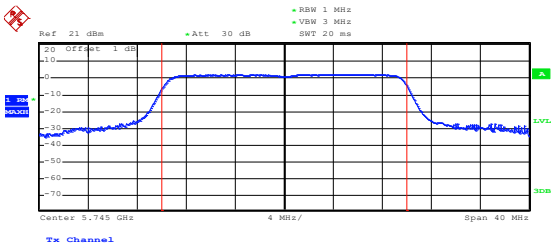
802.11ax-HE20- Middle	 Date: 26.MAR.2022 16:24:44
802.11ax-HE20- High	 Date: 26.MAR.2022 16:25:01
802.11ax-HE40-Low	 Date: 26.MAR.2022 16:28:34

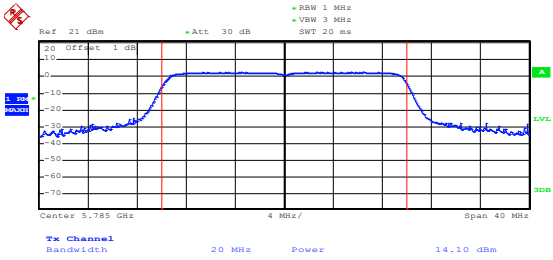
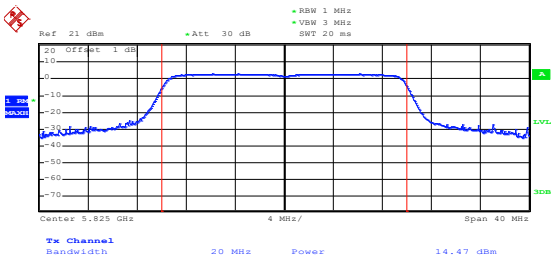
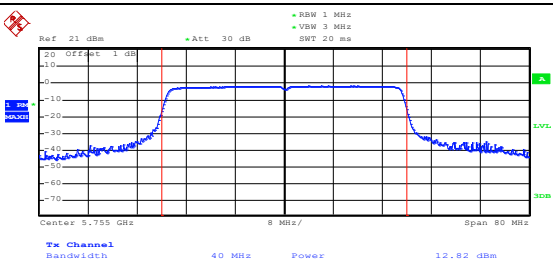
802.11ax-HE40- High	 Date: 26.MAR.2022 16:28:53
802.11ac-HT80	 Date: 26.MAR.2022 16:29:49
802.11ax-HE80	 Date: 26.MAR.2022 16:30:07

5725-5850MHz

802.11a-Low	 Ref: 20 dBm • Att: 30 dB • RBW: 300 kHz • VSW: 1 MHz • SWT: 20 ms Offset: 1 dB Center: 5.745 GHz 3 MHz/ Span: 30 MHz Tx Channel Bandwidth: 20 MHz Power: 15.56 dBm Date: 26.MAR.2022 17:18:04
802.11a-Middle	 Ref: 20 dBm • Att: 30 dB • RBW: 300 kHz • VSW: 1 MHz • SWT: 20 ms Offset: 1 dB Center: 5.785 GHz 3 MHz/ Span: 30 MHz Tx Channel Bandwidth: 20 MHz Power: 15.63 dBm Date: 26.MAR.2022 17:18:28
802.11a-High	 Ref: 20 dBm • Att: 30 dB • RBW: 300 kHz • VSW: 1 MHz • SWT: 20 ms Offset: 1 dB Center: 5.825 GHz 3 MHz/ Span: 30 MHz Tx Channel Bandwidth: 20 MHz Power: 16.22 dBm Date: 26.MAR.2022 17:18:50

802.11n-HT20-Low	 Date: 29.MAR.2022 16:55:48
802.11n-HT20-Middle	 Date: 29.MAR.2022 17:12:22
802.11n-HT20-High	 Date: 29.MAR.2022 16:56:52

802.11n-HT40-Low	 Date: 29.MAR.2022 17:05:57
802.11n-HT40-High	 Date: 29.MAR.2022 17:06:35
802.11ax-HE20-Low	 Date: 29.MAR.2022 16:59:26

802.11ax-HE20- Middle	 Date: 29.MAR.2022 17:03:11
802.11ax-HE20- High	 Date: 29.MAR.2022 17:03:42
802.11ax-HE40-Low	 Date: 29.MAR.2022 17:07:18

802.11ax-HE40- High	Date: 29.MAR.2022 17:08:11
802.11ac-HT80	Date: 29.MAR.2022 17:10:02
802.11ax-HE80	Date: 29.MAR.2022 17:10:27

APPENDIX D**Frequency Stability****Ant0**

U-NII-1:5150-5250MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VDC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	3.3	-30	1595	0.3066
100%		-20	1582	0.3043
100%		-10	1590	0.3057
100%		0	1597	0.3072
100%		+10	1599	0.3076
100%		+20	1581	0.3040
100%		+30	1593	0.3063
100%		+40	1589	0.3056
100%		+50	1590	0.3059
Low Battery power	3.45	+20	1595	0.3066
High Battery power	3.15	+20	1582	0.3043

U-NII-1:5725-5850MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VDC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	3.3	-30	1594	0.2756
100%		-20	1593	0.2754
100%		-10	1599	0.2764
100%		0	1589	0.2746
100%		+10	1587	0.2743
100%		+20	1590	0.2749
100%		+30	1599	0.2763
100%		+40	1589	0.2748
100%		+50	1597	0.2761
Low Battery power	3.45	+20	1594	0.2756
High Battery power	3.15	+20	1593	0.2754

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U-NII-1:5150-5250MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VDC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	3.3	-30	1587	0.3051
100%		-20	1598	0.3073
100%		-10	1583	0.3045
100%		0	1598	0.3073
100%		+10	1588	0.3055
100%		+20	1582	0.3043
100%		+30	1588	0.3055
100%		+40	1597	0.3071
100%		+50	1598	0.3074
Low Battery power	3.45	+20	1587	0.3051
High Battery power	3.15	+20	1598	0.3073

U-NII-1:5725-5850MHz worst case at 802.11a middle channel				
Voltage(%)	Power(VDC)	TEMP(°C)	Freq.Dev(Hz)	Deviation
100%	3.3	-30	1597	0.2760
100%		-20	1581	0.2733
100%		-10	1591	0.2750
100%		0	1587	0.2743
100%		+10	1597	0.2760
100%		+20	1585	0.2739
100%		+30	1582	0.2735
100%		+40	1585	0.2741
100%		+50	1590	0.2748
Low Battery power	3.45	+20	1597	0.2760
High Battery power	3.15	+20	1581	0.2733

APPENDIX PHOTOGRAPHS

Please refer to “ANNEX”

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