

Test Report

Product	Collaboration Endpoint with Wifi and Bluetooth
Name and address of the applicant	Cisco Systems Norway AS Philip Pedersens vei 1 1366 Lysaker, NORWAY
Name and address of the manufacturer	Cisco Systems, Inc. 170 West Tasman Drive San Jose, CA 95134, USA
Model	TTC4-01
Rating	Mains (100-240V AC, 50-60Hz, 2.0-1.2A)
Trademark	CISCO
Additional information	Bluetooth LE, Bluetooth Classic, WiFi 6
Tested according to	FCC Part 15.407 Unlicensed National Information Infrastructure Devices (U-NII) Industry Canada RSS-247, Issue 2 Licence-Exempt Local Area Network (LE-LAN) Devices
Order number	PRJ0019248
Tested in period	2023-02-06 and 2023-03-23
Issue date	2023-06-21
Name and address of the testing laboratory	 Nemko Scandinavia AS Instituttveien 6 2007 Kjeller, Norway www.nemko.com CAB Number: FCC: NO0001 ISED: NO0470 ISED No: 2040D-1   NORWEGIAN ACCREDITATION TEST 033 An accredited technical test executed under the Norwegian accreditation scheme
 Prepared by [Frode Sveinsen]  Approved by [G.Suhanthakumar]	
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Revision history

Revision	Date	Comment	Sign
A	2023-06-01	First Edition	FS
B	2023-06-21	Corrected Antenna Gain Statement	FS

GENERAL REMARKS

This report applies only to the sample(s) tested. It is the manufacturer's responsibility to ensure the additional production units of this product are manufactured with identical electrical and mechanical components. The manufacturer is solely responsible for any modifications that could result in non-compliance with the relevant regulations.

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Opinions expressed within this report regarding general assessments and qualifications for PASS or FAIL to the standards limits and requirements, are not part of the current accreditation. Neither are opinions expressed regarding model variants covered by the testing of this report.

CALIBRATION

All instruments used in the tests given in this test report are calibrated and traceable to national or international standards. Between calibrations all test set-ups are controlled and verified on a regular basis by periodic checks to ensure, with 95% confidence, that the instruments remain within the calibrated levels.

MEASUREMENT UNCERTAINTY

Measurement uncertainties are calculated or considered for all instruments and instrument set-ups used during these tests. Uncertainty figures are found in a separate clause in this report.

CONTENTS

2	INFORMATION	4
2.1	Test Item	4
2.3	Normal test conditions	5
2.4	Test Engineer(s)	5
2.5	Antenna Requirement	5
2.6	Worst-Case Configuration	5
2.7	EUT Operating Modes	5
2.8	Maximum Antenna Gain	5
2.9	Comments	5
2.10	Power Levels	6
3	TEST REPORT SUMMARY	7
3.1	General	7
3.2	Test Summary	7
4	TEST RESULTS	8
4.1	Power Line Conducted Emissions	8
4.2	Maximum Output Power, EIRP	9
4.3	Emission Bandwidth	32
4.4	DTS Bandwidth	48
4.5	Peak Power Spectral Density	51
4.6	Unwanted Emissions	69
4.7	Restricted Bands of operation	93
4.8	Radiated Emissions, 30 – 1000 MHz	94
4.9	Radiated Emissions, 1 – 40 GHz	96
4.10	Dynamic Frequency Selection	118
5	Measurement Uncertainty	120
6	LIST OF TEST EQUIPMENT	121
7	BLOCK DIAGRAM	122
7.1	Power Line Conducted Emission	122
7.2	Conducted Tests	122
7.3	Test Site Radiated Emission	123

2 INFORMATION

2.1 Test Item

Name	Cisco Room Bar Pro
Model	TTC4-01
FCC ID	LDK0401B2757
ISED ID	2461N-0401B2757
Serial number	Radiated Sample: FOC2650J4Y5 50 Ohm Sample: TTCFOC2641N3SK (TTC6-15)
Hardware identity and/or version	DV1
Software identity and/or version	RoomOS 10.20.X
Frequency Ranges	U-NII 1 : 5180 – 5240 MHz: 4 channels U-NII 2A : 5260 – 5320 MHz: 4 channels U-NII 2C : 5500 – 5700 MHz: 11 channels U-NII 3 : 5745 – 5825 MHz: 5 channels
Operating Modes	802.11a 802.11n (20/40 MHz BW) 802.11ac (20/40/80 MHz BW) 802.11ax (20/40/80 MHz BW)
Type of Modulation	Digital (OFDM - Orthogonal frequency-division multiplexing)
Conducted Output Power	5180 – 5240 MHz: 25.1 mW 5260 – 5320 MHz: 23.4 mW 5500 – 5700 MHz: 31.6 mW 5745 – 5825 MHz: 35.5 mW
Antenna Connector	Internal U-FL
Number of Antennas	2
Antenna Diversity Supported	Yes
Smart Antennas Supported	MIMO
TPC Supported	Not implemented. Not required when EIRP is below 500 mW
DFS Supported	No, EUT is a Client Device without Radar Detection
Ad-hoc Mode	EUT does not support Ad-hoc Mode in DFS Bands*
Hotspot Mode	EUT does not support Hotspot Mode in DFS Bands*
Power Supply	Powered from Mains (120V 60Hz)
Antennas	Antenna 1: Ampenol Model OCF654-15-000-R Antenna 2: Ampenol Model OCF655-15-000-R

*If the EUT supports Ad-hoc or Hotspot mode in the DFS Bands, it is to be considered a Master Device

Description of Test Item

The tested EUT is a Collaboration Endpoint with WiFi and Bluetooth.

The radio module is identical to the radio module in the already approved Cisco model TTC6-15 (FCC ID: LDK0615C2718, IC: 2461N-0615C2718), but this model has different antennas.

All 50 Ohm measurements were performed on Cisco TTC6-15.

The WiFi 5GHz part has been tested as a NII system and fulfils all requirements for NII systems.

2.3 Normal test conditions

Temperature:	20 - 24 °C
Relative humidity:	20 - 50 %
Normal test voltage:	120 V 60 Hz

The values are the limit registered during the test period.

2.4 Test Engineer

Frode Sveinsen

2.5 Antenna Requirement

Is the antenna detachable?	☒ Yes	☐ No
If detachable, is the antenna connector non-standard?	☒ Yes	☐ No
Type of antenna connector: RP-SMA		

2.6 Worst-Case Configuration

Radiated Emissions and Power Line Conducted Emissions were performed with the EUT set to transmit at the channel with the highest output power as worst-case scenario.

2.7 EUT Operating Modes

Description of operating modes	Continuous TX, 5 GHz 802.11a/n/ac/ax 20/40/80 MHz Mode
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2.8 Maximum Antenna Gain

Maximum Antenna Gain				
Frequency (MHz)	Gain Ant 1 (dBi)	Gain Ant 2 (dBi)	Gain MIMO Mode (dBi)	Reduction in Allowed Output Power, MIMO Mode (dB)
5150 – 5250	5.7	3.0	8.7	2.7
5250 – 5350	5.7	3.0	8.7	2.7
5470 – 5725	4.4	3.4	7.8	1.8
5725 – 5850	4.0	4.2	8.2	2.2

The values above are from the document "TTC4-10 Antenna report.pptx", supplied by the applicant.

2.9 Comments

The measurements were done with the EUT powered by 120 V AC. It was checked that power variations between 85% and 115% did not have any influence on the measurements.

MIMO measurements were performed with the EUT transmitting in MIMO mode on both antennas (P0 and P1). When measuring radiated the direction was locked and the maximum position was found.

Measurements in SISO mode was performed on P0 when measuring at the antenna connector, and on both antennas when measuring radiated.

2.10 Power Levels

Ch.No.	Freq MHz	11a	11n HT20 SISO	11n HT20 MIMO	11ac HT20 SISO		11ac HT20 MIMO		11ax HT20 SISO			11ax HT20 MIMO		
					MCS0- MCS7	MCS8	MCS0- 7	MCS8	MCS0- MCS7	MCS8- MCS9	MCS10- MCS11	MCS0- MCS7	MCS8- MCS9	MCS10- MCS11
36	5180	13	11	8	11	11	8	8	9	9	9	6	6	6
40	5200	13	11	8	11	11	8	8	9	9	9	6	6	6
44	5220	16	14	11	14	12	11	9	12	10	9	9	7	6
48	5240	16	14	11	14	12	11	9	12	10	9	9	7	6
52	5260	16	14	11	14	12	11	9	12	10	9	9	7	6
56	5280	16	14	11	14	12	11	9	12	10	9	9	7	6
60	5300	13	11	8	11	11	8	8	9	9	9	6	6	6
64	5320	13	11	8	11	11	8	8	9	9	9	6	6	6
100	5500	13	11	8	11	11	8	8	9	9	9	6	6	6
104	5520	13	11	8	11	11	8	8	9	9	9	6	6	6
108	5540	16	14	11	14	12	11	9	12	10	9	9	7	6
112	5560	16	14	11	14	12	11	9	12	10	9	9	7	6
116	5580	16	14	11	14	12	11	9	12	10	9	9	7	6
132	5660	16	14	11	14	12	11	9	12	10	9	9	7	6
136	5680	16	14	11	14	12	11	9	12	10	9	9	7	6
140	5700	15	13	11	13	12	11	9	12	10	9	9	7	6
144	5720	16	14	11	14	12	11	9	12	10	9	9	7	6
149	5745	16	14	11	14	12	11	9	12	10	9	9	7	6
153	5765	16	14	11	14	12	11	9	12	10	9	9	7	6
157	5785	16	14	11	14	12	11	9	12	10	9	9	7	6
161	5805	13	11	8	11	11	8	8	9	9	9	6	6	6
165	5825	13	11	8	11	11	8	8	9	9	9	6	6	6
Ch.No.	Freq MHz	11ac HT40 SISO		11ac HT40 MIMO		11ax HT40 SISO			11ax HT40 MIMO					
		MCS0- MCS7	MCS8- MCS9	MCS0- MCS7	MCS8- MCS9	MCS0- MCS7	MCS8- MCS9	MCS10- MCS11	MCS0- MCS7	MCS8- MCS9	MCS10- MCS11			
38	5190	11	11	8	8	9	9	9	6	6	6			
46	5230	14	12	11	9	12	10	9	9	7	6			
54	5270	14	12	11	9	12	10	9	9	7	6			
62	5310	11	11	8	8	9	9	9	6	6	6			
102	5510	11	11	8	8	9	9	9	6	6	6			
110	5550	14	12	11	9	12	10	9	9	7	6			
134	5670	14	12	11	9	12	10	9	9	7	6			
142	5710	14	12	11	9	12	10	9	9	7	6			
151	5755	14	12	11	9	12	10	9	9	7	6			
159	5795	11	11	8	8	9	9	9	6	6	6			
Ch.No.	Freq MHz	11ac HT80 SISO		11ac HT80 MIMO		11ax HT80 SISO			11ax HT80 MIMO					
		MCS0- MCS7	MCS8- MCS9	MCS0- MCS7	MCS8- MCS9	MCS0- MCS7	MCS8- MCS9	MCS10- MCS11	MCS0- MCS7	MCS8- MCS9	MCS10- MCS11			
42	5210	11	11	8	8	9	9	9	6	6	6			
58	5290	11	11	8	8	9	9	9	6	6	6			
106	5530	11	11	8	8	9	9	9	6	6	6			
138	5690	14	12	11	9	12	10	9	9	7	6			
155	5775	11	11	8	8	9	9	9	6	6	6			

Power levels above were used for all tests and shall also be programmed WiFi transmitter when put on the market.
Levels in red were modified from the default levels.

3 TEST REPORT SUMMARY

3.1 General

The tests were performed to demonstrate compliance with FCC CFR 47 Part 15, paragraph 15.407 and ISSED RSS-247 Issue 2.

Tests were performed in accordance with ANSI C63.4-2014 and ANSI C63.10-2013.

Radiated tests were performed in a semi-anechoic chamber at measuring distances of 1m and 3m.

☒ New Submission	☒ Production Unit
☐ Class II Permissive Change	☐ Pre-production Unit
NII Equipment Code	☐ Family Listing

3.2 Test Summary

Name of test	FCC Part 15 reference	RSS-247 Issue 2 RSS-GEN Issue 5 reference	Result
Supply Voltage Variations	15.31(e)	6.11 (RSS-GEN)	Complies
Antenna Requirement	15.203	6.8 (RSS-GEN)	Complies
Power Line Conducted Emission	15.107(a) 15.207(a)	7.2 / 8.8 (RSS-GEN)	Complies
Maximum Output Power	15.407(a)	6.2	Complies
Power Spectral Density	15.407(a)	6.2	Complies
Emission Bandwidth	15.407(a)(2)	6.2	Complies
Unwanted Emissions	15.407(b)	6.2	Complies
Discontinuation of Transmission	15.407(c)	6.3	N/T ¹
6 dB Bandwidth	15.407(e)	6.2.4	Complies
Transmit Power Control	15.407(h)	6.2.3	N/A ²
Dynamic Frequency Selection	15.407(h)	6.3	Complies ³
Radiated Emissions	15.205 15.209	7.3 (RSS-GEN) 8.9 (RSS-GEN)	Complies

¹ See manufacturers declaration.

² Transmit Power Control is not required when Max EIRP is below 500 mW.

³ The EUT is a Client Device without Radar Detection.

4 TEST RESULTS

4.1 Power Line Conducted Emissions

FCC Part 15.207

ISED RSS-GEN Issue 5, Clause 7.2 / 8.8

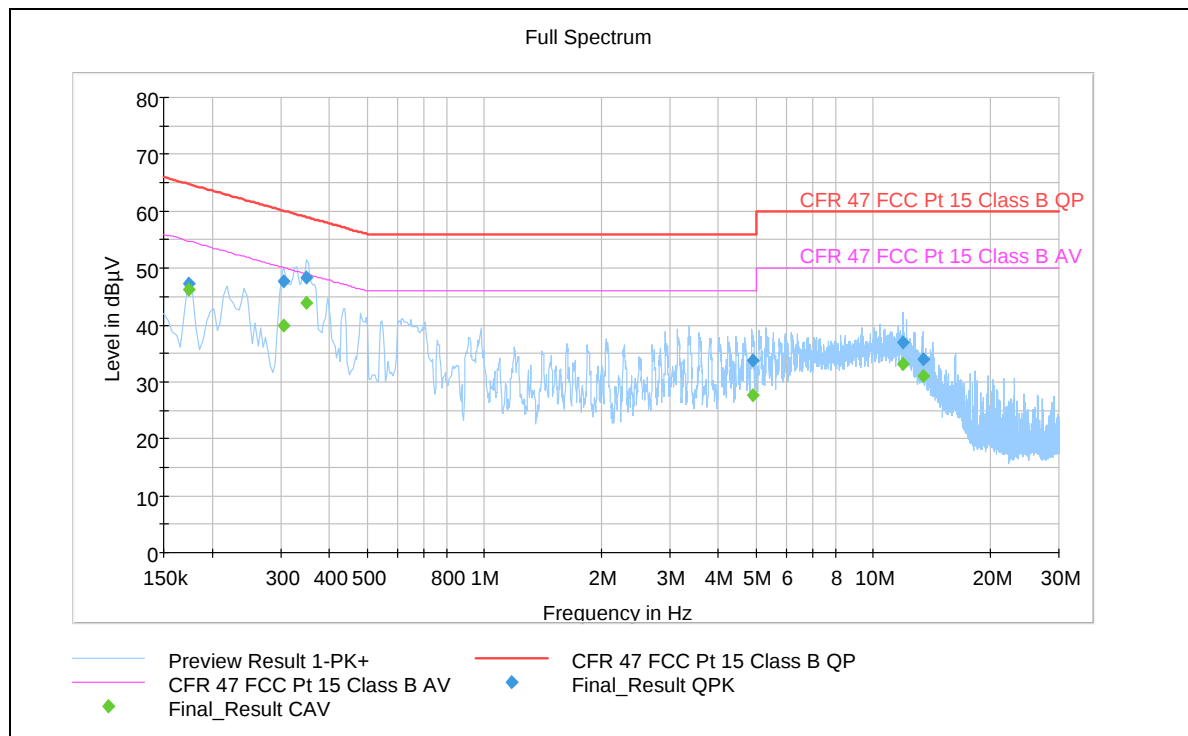
Measurement procedure: ANSI C63.4-2014 using 50 μ H/50 ohms LISN.

Test Results: Complies

Measurement Data: 120V 60Hz, See attached plots.

Highest measured value (L1 and N):

Frequency (MHz)	QuasiPeak (dB μ V)	CAverage (dB μ V)	Limit (dB μ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.174000	---	46.25	54.77	8.51	15000.0	9.000	L1	OFF	9.7
0.174000	47.25	---	64.77	17.52	15000.0	9.000	L1	OFF	9.7
0.306000	---	39.91	50.08	10.17	15000.0	9.000	N	OFF	9.7
0.306000	47.76	---	60.08	12.32	15000.0	9.000	N	OFF	9.7
0.350000	48.30	---	58.96	10.66	15000.0	9.000	L1	OFF	9.7
0.350000	---	43.88	48.96	5.08	15000.0	9.000	L1	OFF	9.7
4.894000	---	27.60	46.00	18.40	15000.0	9.000	L1	OFF	9.8
4.894000	33.72	---	56.00	22.28	15000.0	9.000	L1	OFF	9.8
11.954000	36.85	---	60.00	23.15	15000.0	9.000	L1	OFF	9.9
11.954000	---	33.09	50.00	16.91	15000.0	9.000	L1	OFF	9.9
13.482000	---	31.00	50.00	19.00	15000.0	9.000	N	OFF	9.7
13.482000	33.93	---	60.00	26.07	15000.0	9.000	N	OFF	9.7



4.2 Maximum Output Power, EIRP

FCC 15.407 (a)

ISED RSS-247, Issue 2, Clause 6.2

Measurement procedure: ANSI C63.10-2013 Clause 12.3, method SA-2

Test Results: Complies

Measurement Data:

Maximum Conducted Output Power (dBm)						
Ch. No.	Nominal Frequency (MHz)	802.11a	802.11n HT20 SISO	802.11n HT20 MIMO	802.11ax HT20 SISO	802.11ax HT20 MIMO
36	5180	10.7	8.6	8.5	5.6	5.9
44	5220	13.7	11.6	11.5	8.7	9.4
48	5240	14.0	12.0	11.9	8.9	9.8
52	5260	13.7	11.8	11.5	9.2	9.9
56	5280	13.4	11.6	11.5	8.6	9.7
64	5320	10.7	8.8	8.5	6.0	6.0
100	5500	11.6	9.8	8.8	7.8	6.7
108	5540	14.0	12.3	11.4	9.6	10.0
116	5580	14.7	12.6	11.4	9.6	10.1
140	5700	15.0	12.6	11.8	10.9	10.6
144	5720	14.6	11.8	12.1	10.9	10.6
149	5745	15.5	13.4	12.3	11.5	10.8
157	5785	15.5	13.5	12.1	11.0	10.8
165	5825	13.1	11.1	9.5	8.9	7.1

Maximum Conducted Output Power (dBm)									
Ch. No.	Nominal Frequency (MHz)	802.11ac HT40 SISO	802.11ac HT40 MIMO	802.11ac HT80 SISO	802.11ac HT80 MIMO	802.11ax HT40 SISO	802.11ax HT40 MIMO	802.11ax HT80 SISO	802.11ax HT80 MIMO
38	5190	7.7	8.9			5.3	6.1		
46	5230	10.5	12.3			8.5	9.6		
54	5270	10.1	11.9			8.4	9.5		
62	5310	7.1	8.7			5.3	6.2		
102	5510	8.3	8.9			7.1	6.6		
110	5550	11.2	12.2			9.5	10.1		
134	5670	12.4	12.5			10.5	10.4		
142	5710	12.4	12.2			10.5	10.0		
151	5755	13.2	12.8			11.1	10.7		
159	5795	9.8	9.4			8.0	6.8		
42	5210			7.5	8.7			4.9	6.7
58	5290			7.1	8.9			5.1	6.9
106	5530			8.2	8.7			6.8	7.0
138	5690			12.4	12.0			10.4	10.5
155	5775			10.0	9.5			8.3	7.7

Maximum Conducted Output Power (mW)						
Ch. No.	Nominal Frequency (MHz)	802.11a	802.11n HT20 SISO	802.11n HT20 MIMO	802.11ax HT20 SISO	802.11ax HT20 MIMO
36	5180	11.7	7.2	7.1	3.6	3.9
44	5220	23.4	14.5	14.1	7.4	8.7
48	5240	25.1	15.8	15.5	7.8	9.5
52	5260	23.4	15.1	14.1	8.3	9.8
56	5280	21.9	14.5	14.1	7.2	9.3
64	5320	11.7	7.6	7.1	4.0	4.0
100	5500	14.5	9.5	7.6	6.0	4.7
108	5540	25.1	17.0	13.8	9.1	10.0
116	5580	29.5	18.2	13.8	9.1	10.2
140	5700	31.6	18.2	15.1	12.3	11.5
144	5720	28.8	15.1	16.2	12.3	11.5
149	5745	35.5	21.9	17.0	14.1	12.0
157	5785	35.5	22.4	16.2	12.6	12.0
165	5825	20.4	12.9	8.9	7.8	5.1

Maximum Conducted Output Power (mW)									
Ch. No.	Nominal Frequency (MHz)	802.11n HT40 SISO	802.11n HT40 MIMO	802.11ac HT80 SISO	802.11ac HT80 MIMO	802.11ax HT40 SISO	802.11ax HT40 MIMO	802.11ax HT80 SISO	802.11ax HT80 MIMO
38	5190	5.9	7.8			3.4	4.1		
46	5230	11.2	17.0			7.1	9.1		
54	5270	10.2	15.5			6.9	8.9		
62	5310	5.1	7.4			3.4	4.2		
102	5510	6.8	7.8			5.1	4.6		
110	5550	13.2	16.6			8.9	10.2		
134	5670	17.4	17.8			11.2	11.0		
142	5710	17.4	16.6			11.2	10.0		
151	5755	20.9	19.1			12.9	11.7		
159	5795	9.5	8.7			6.3	4.8		
42	5210			5.6	7.4			3.1	4.7
58	5290			5.1	7.8			3.2	4.9
106	5530			6.6	7.4			4.8	5.0
138	5690			17.4	15.8			11.0	11.2
155	5775			10.0	8.9			6.8	5.9

The EUT operates with a constant duty cycle, method SA-2 of ANSI C63.10-2013 clause 12.3 was used.

Output Power reported is Average Power measured with a wideband power meter.

Output Power on P0 and P1 in SISO mode is identical. All SISO measurements in conducted mode were performed on P0.

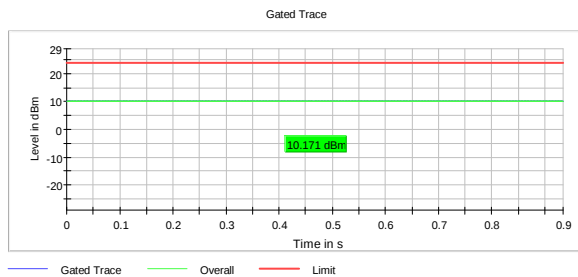
Output in MIMO mode is the sum power of P0+P1. The measurement was performed simultaneously with two power meters and the sum power was calculated. The R&S TS8997 Test System contains 8 identical power meters, however for this EUT only two of them were used.

Maximum Antenna Gain in MIMO mode is more than 6 dBi, Maximum Allowed Output Power in MIMO Mode is therefore reduced by the amount exceeding 6 dBi.

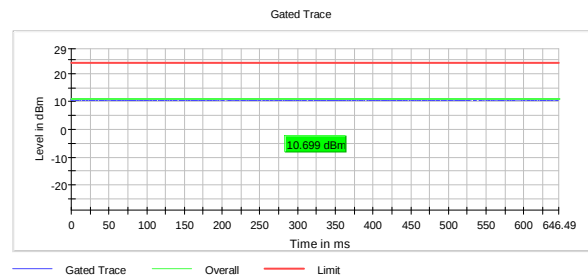
This is an indoor device.

Limits for Indoor Device:

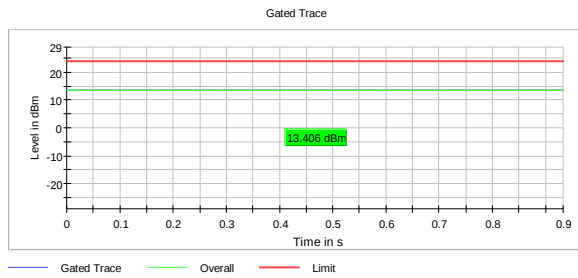
Frequency Band	FCC 15.407(a)	ISED RSS-247 Issue 2
5150 – 5250 MHz	Less than 250 mW (24 dBm) for client device Less than 1 W (30 dBm) for master device	Less than the lesser of 200 mW e.i.r.p. or $10 + 10 \log_{10} B$ dBm e.i.r.p.
5250 – 5350 MHz	Less than the lesser of 250 mW (24 dBm) or $11 + 10 \log_{10} B$ dBm	Less than the lesser of 250 mW or $11 + 10 \log_{10} B$ dBm, and Less than the lesser of 1 W e.i.r.p. or $17 + 10 \log_{10} B$ dBm e.i.r.p. Devices with e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W
5470 – 5725 MHz		
5725 – 5825 MHz	Less than 1 Watt	Less than 1 Watt If Antenna Gain is more than 6 dBi the Power Limit is reduced by the amount exceeding 6 dBi
	If Antenna Gain is more than 6 dBi the Power Limit is reduced by the amount exceeding 6 dBi	
	B is the 26dB emission bandwidth in MHz	B is the 99% emission bandwidth in MHz



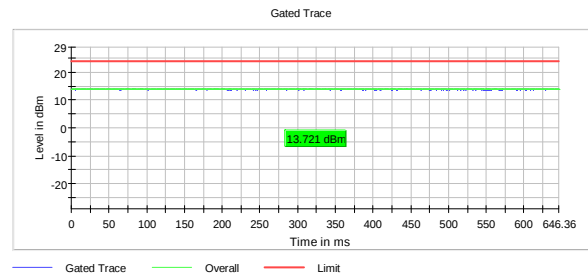
RMS Conducted Power, 5180 MHz, 802.11a, 6Mb



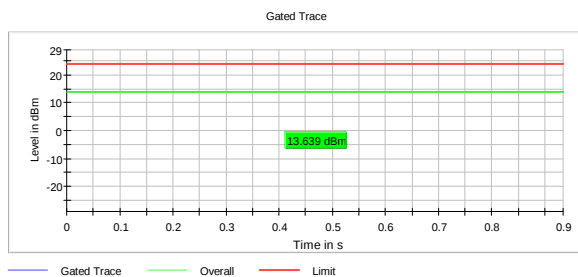
54Mb



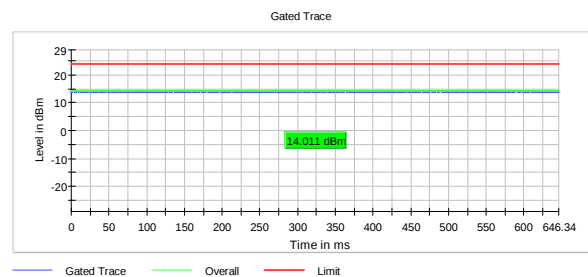
RMS Conducted Power, 5220 MHz, 802.11a, 6Mb



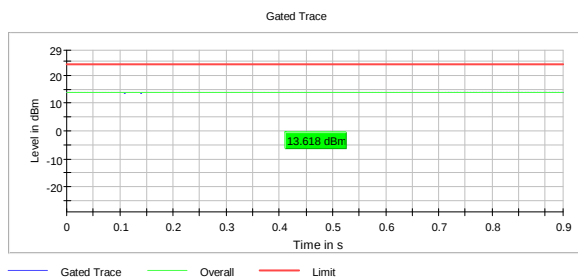
54Mb



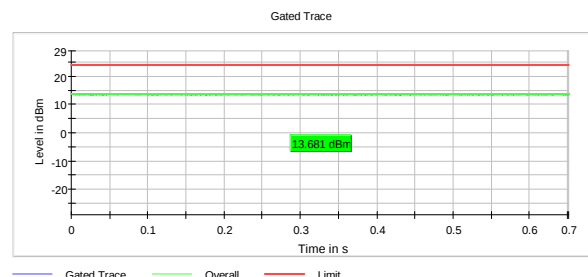
RMS Conducted Power, 5240 MHz, 802.11a, 6Mb



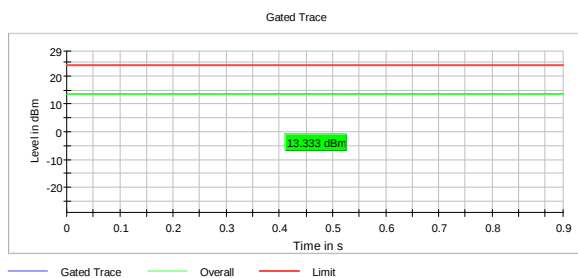
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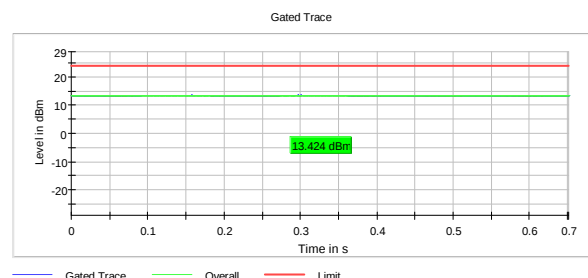
RMS Conducted Power, 5260 MHz, 802.11a, 6Mb



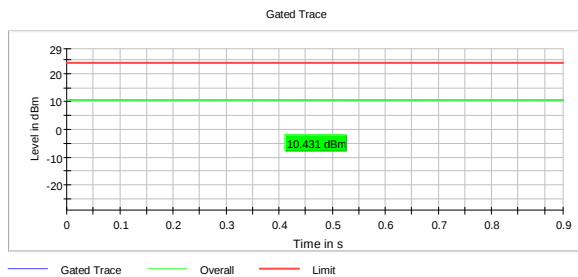
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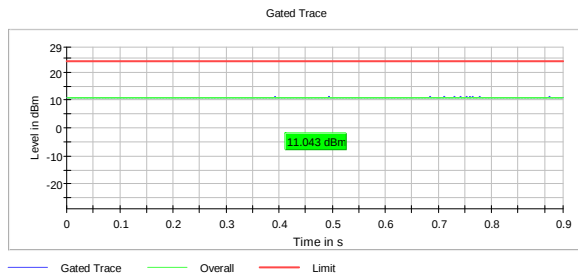
RMS Conducted Power, 5280 MHz, 802.11a, 6Mb



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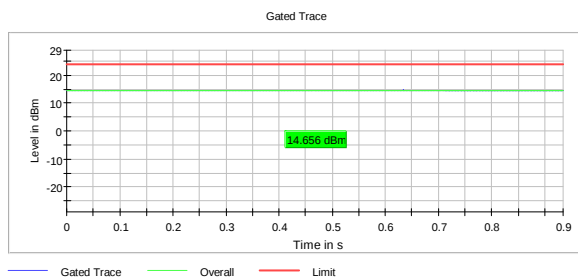
RMS Conducted Power, 5320 MHz, 802.11a, 6Mb



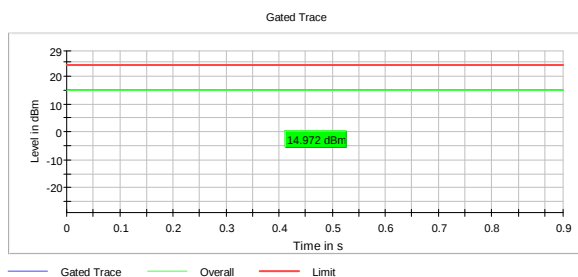
RMS Conducted Power, 5500 MHz, 802.11a, 6Mb



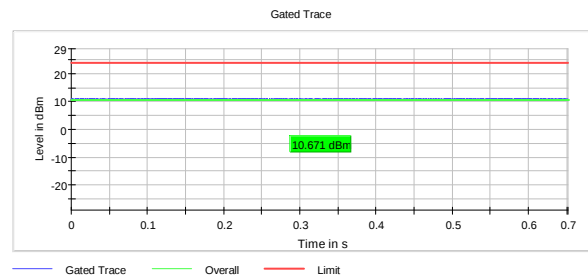
RMS Conducted Power, 5540 MHz, 802.11a, 6Mb



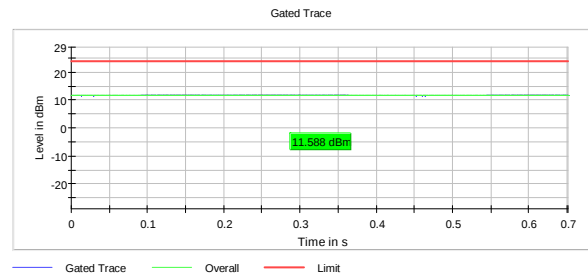
RMS Conducted Power, 5580 MHz, 802.11a, 6Mb



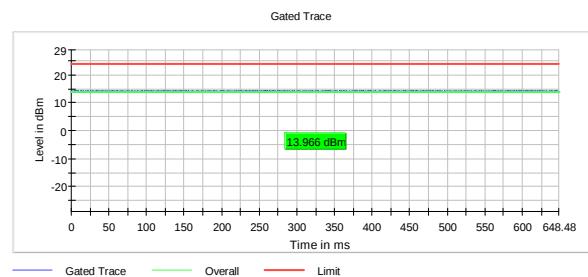
RMS Conducted Power, 5700 MHz, 802.11a, 6Mb



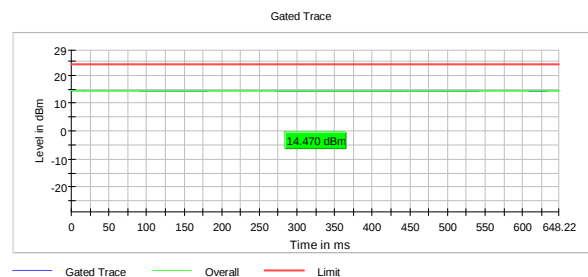
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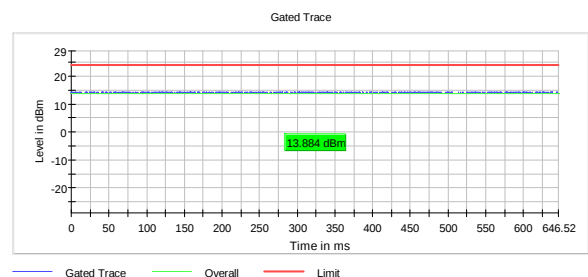
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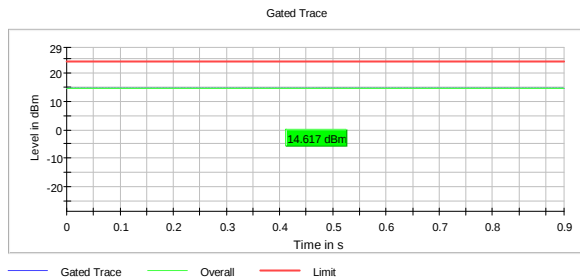
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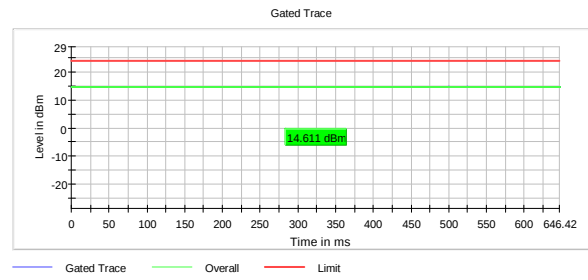
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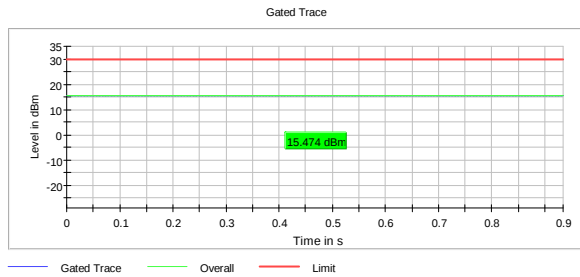
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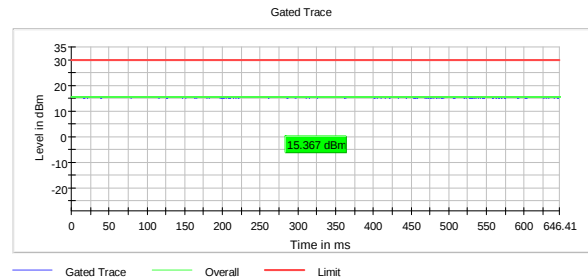
RMS Conducted Power, 5720 MHz, 802.11a, 6Mb



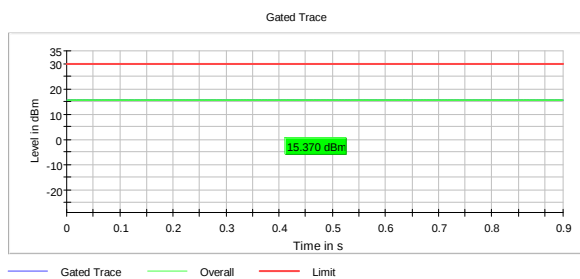
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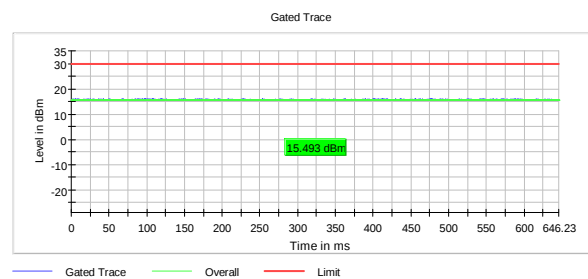
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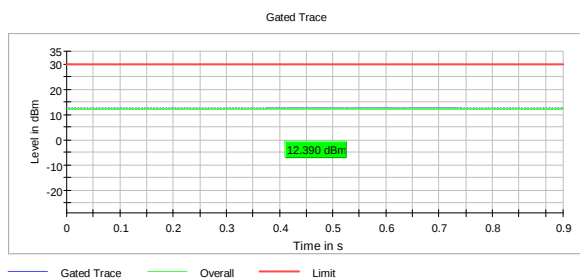
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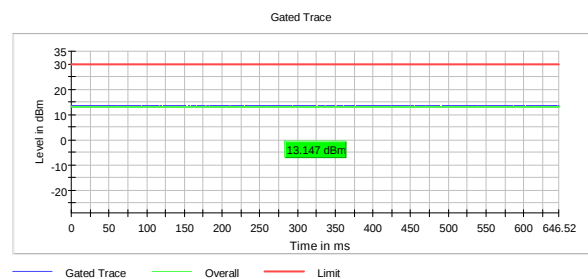
RMS Conducted Power, 5785 MHz, 802.11a, 6Mb



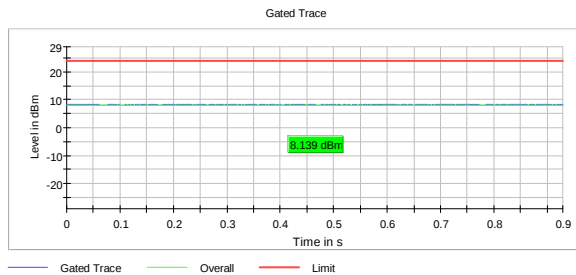
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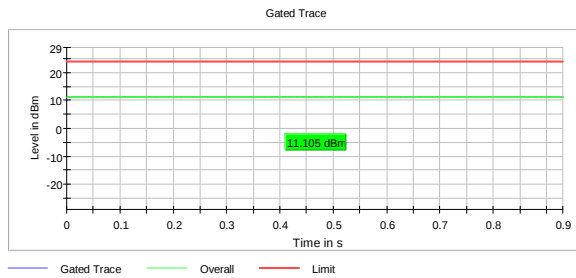
RMS Conducted Power, 5825 MHz, 802.11a, 6Mb



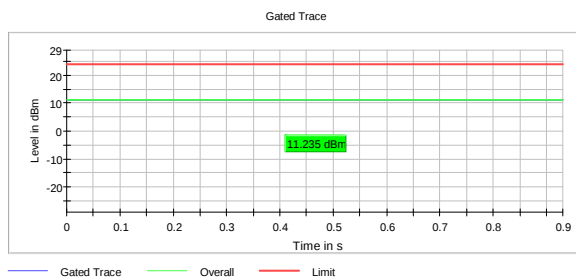
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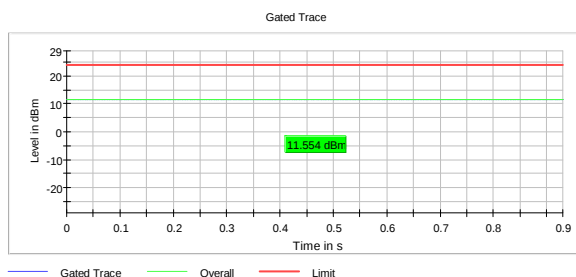
RMS Conducted Power, 5180 MHz, 802.11n, HT20, MCS0



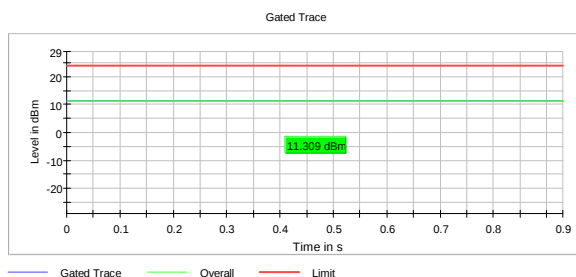
RMS Conducted Power, 5220 MHz, 802.11n, HT20, MCS0



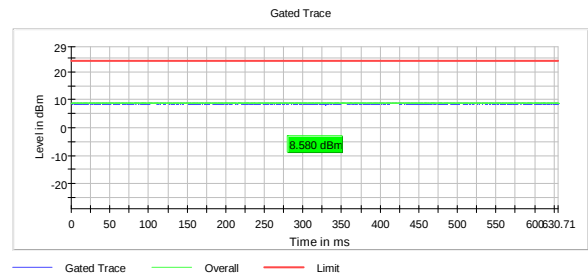
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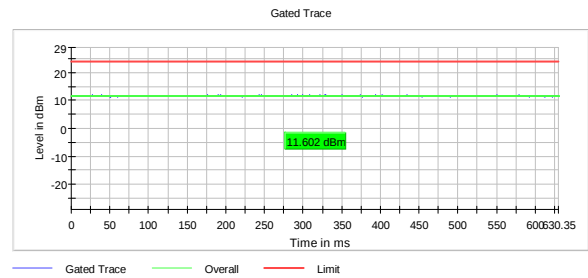
RMS Conducted Power, 5260 MHz, 802.11n, HT20, MCS0



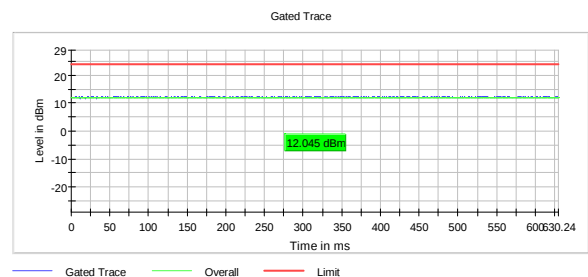
RMS Conducted Power, 5280 MHz, 802.11n, HT20, MCS0



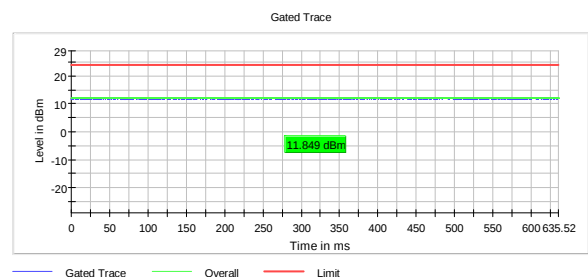
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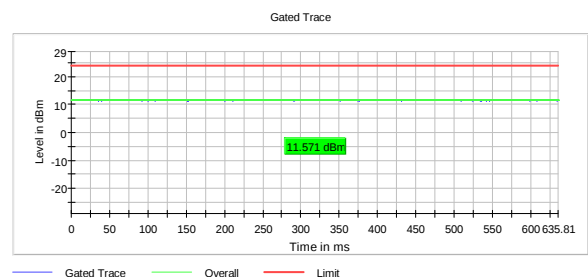
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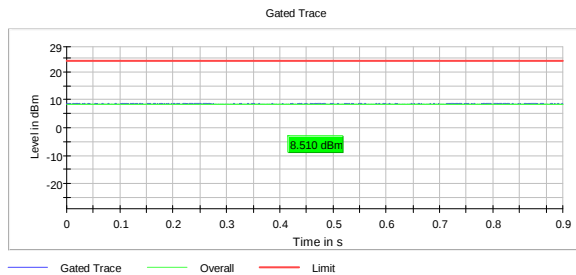
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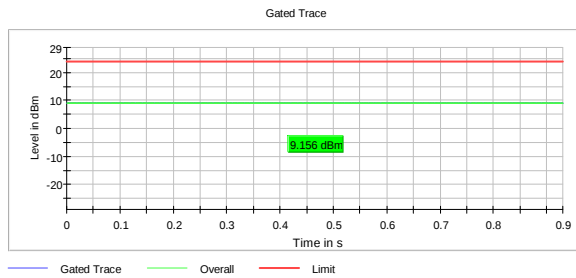
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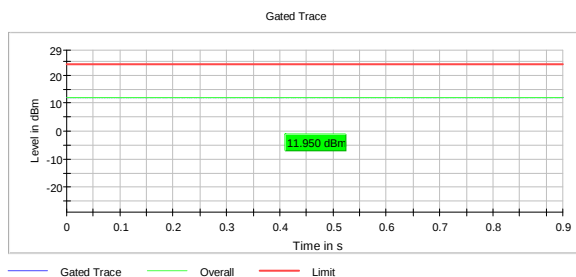
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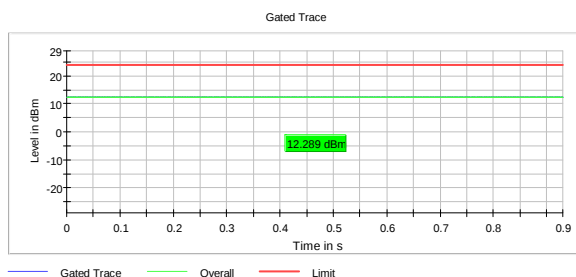
RMS Conducted Power, 5320 MHz, 802.11n, HT20, MCS0



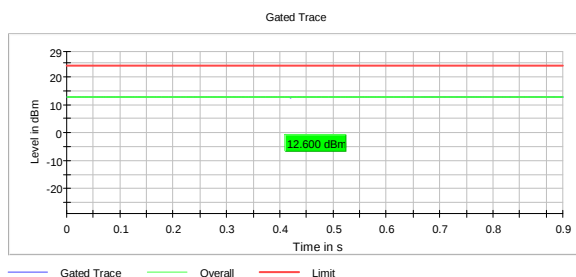
RMS Conducted Power, 5500 MHz, 802.11n, HT20, MCS0



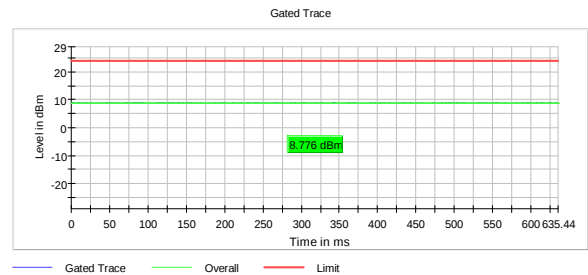
RMS Conducted Power, 5540 MHz, 802.11n, HT20, MCS0



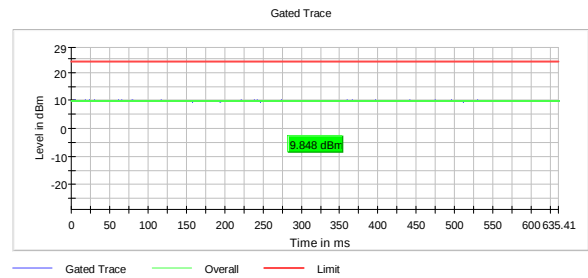
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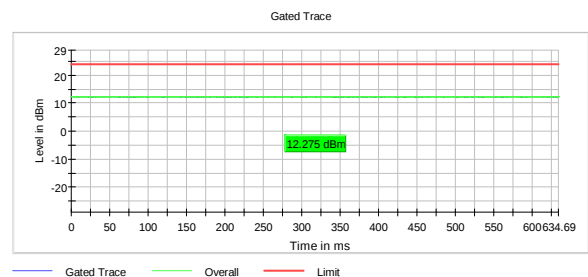
RMS Conducted Power, 5700 MHz, 802.11n, HT20, MCS0



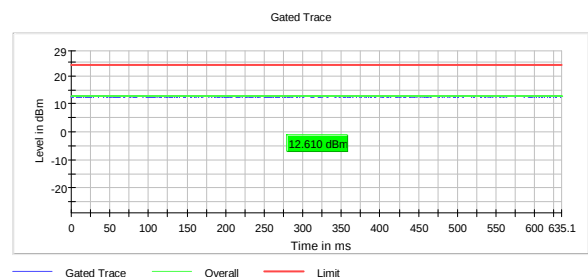
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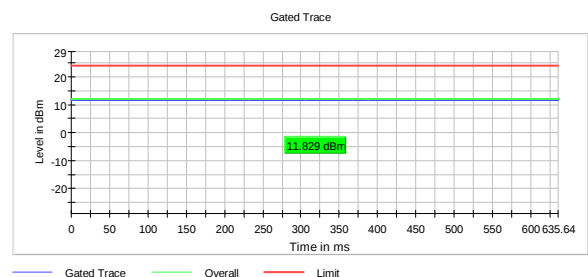
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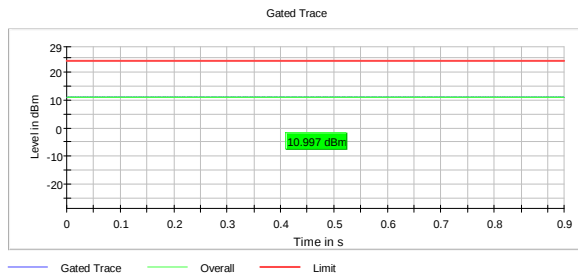
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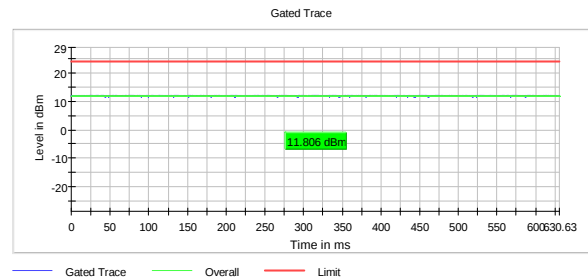
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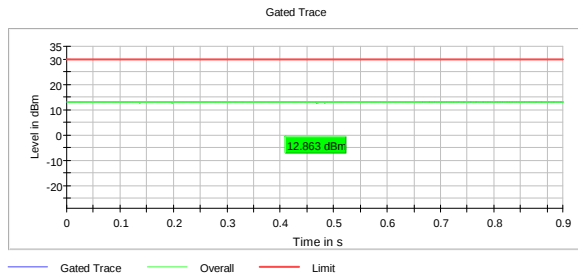
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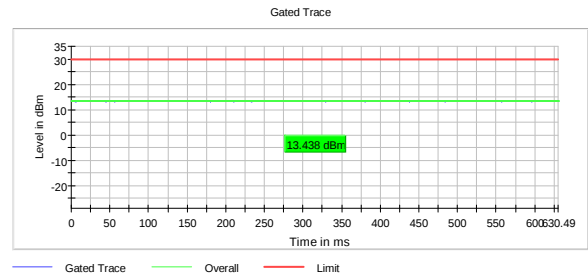
RMS Conducted Power, 5720 MHz, 802.11n, HT20, MCS0



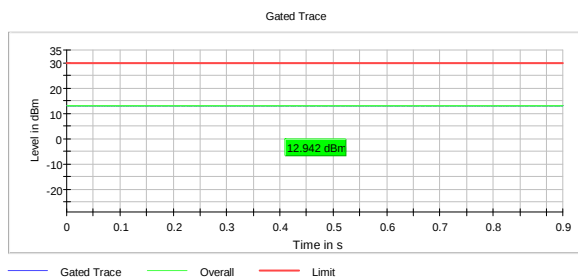
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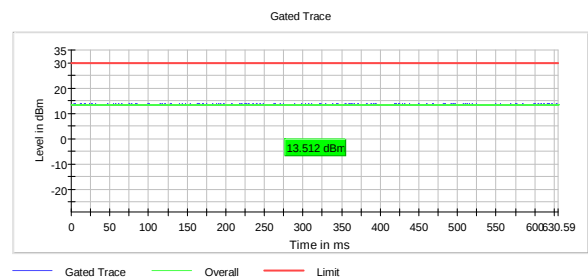
RMS Conducted Power, 5745 MHz, 802.11n, HT20, MCS0



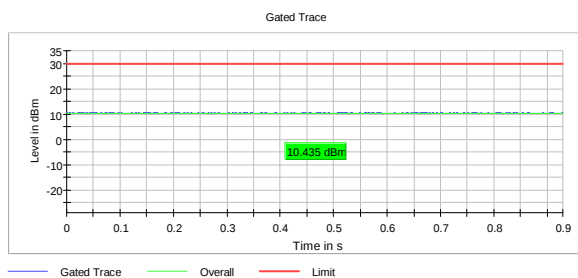
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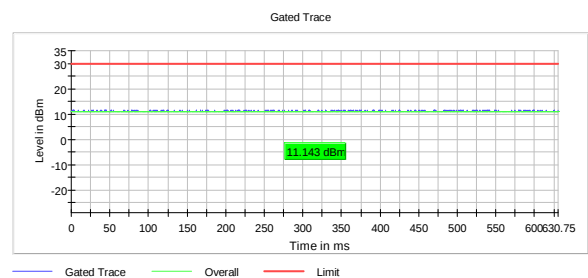
RMS Conducted Power, 5785 MHz, 802.11n, HT20, MCS0



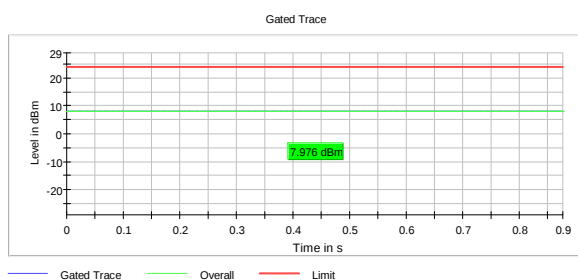
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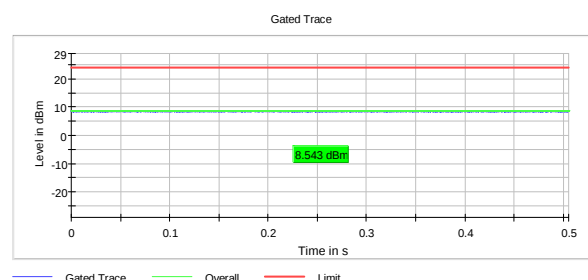
RMS Conducted Power, 5825 MHz, 802.11n, HT20, MCS0



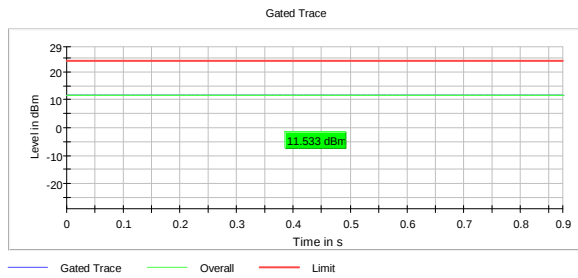
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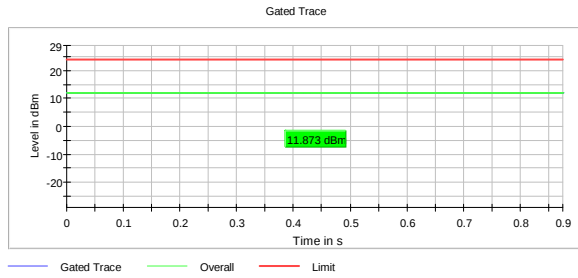
RMS Conducted Power, 5180 MHz, 802.11n, HT20, MCS8, MIMO



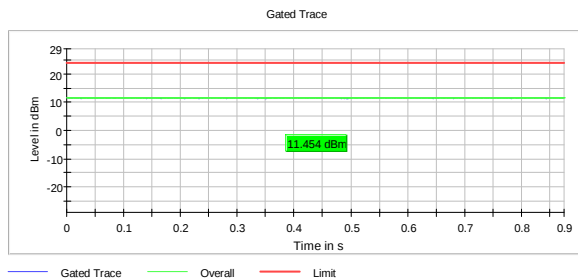
MCS15, MIMO



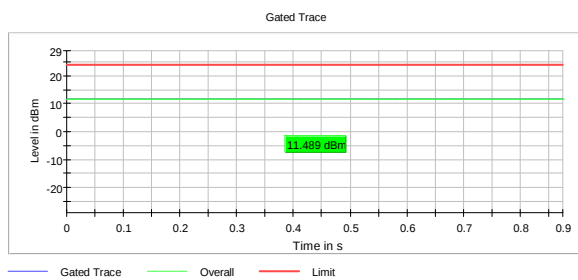
RMS Conducted Power, 5220 MHz, 802.11n, HT20, MCS8, MIMO



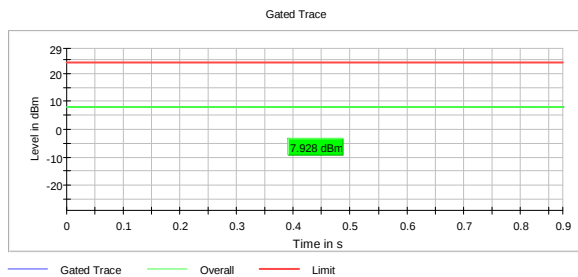
RMS Conducted Power, 5240 MHz, 802.11n, HT20, MCS8, MIMO



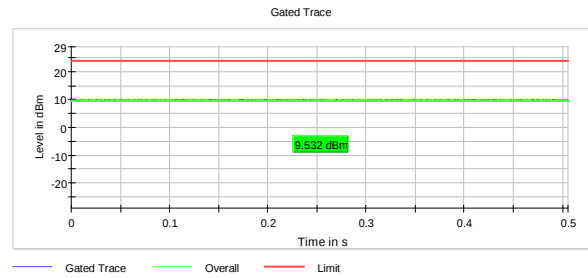
RMS Conducted Power, 5260 MHz, 802.11n, HT20, MCS8, MIMO



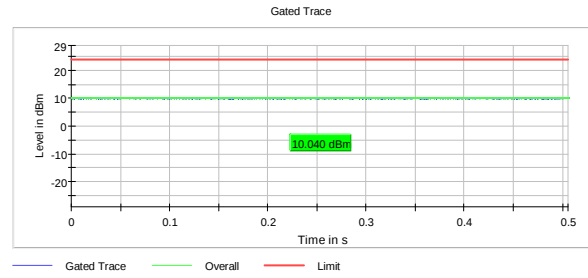
RMS Conducted Power, 5280 MHz, 802.11n, HT20, MCS8, MIMO



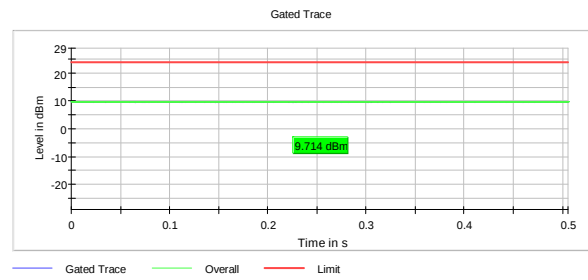
RMS Conducted Power, 5320 MHz, 802.11n, HT20, MCS8, MIMO



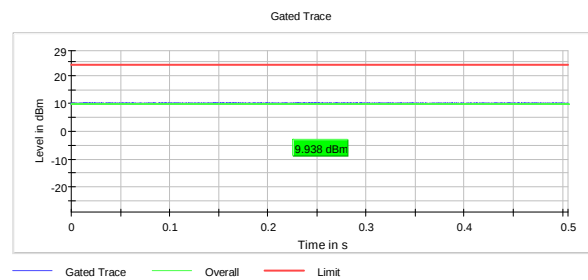
MCS15, MIMO



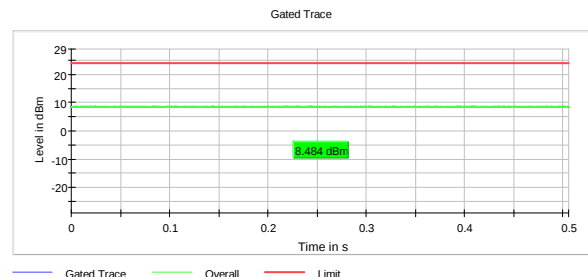
MCS15, MIMO



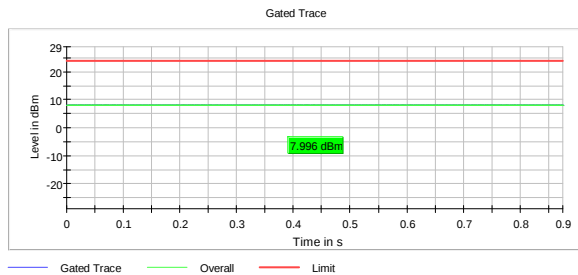
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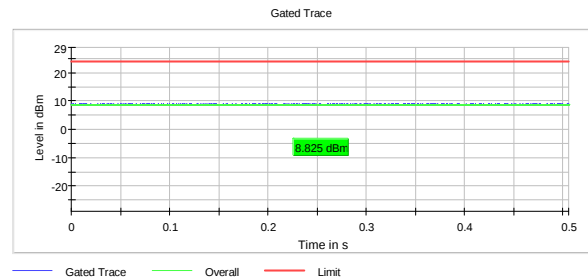
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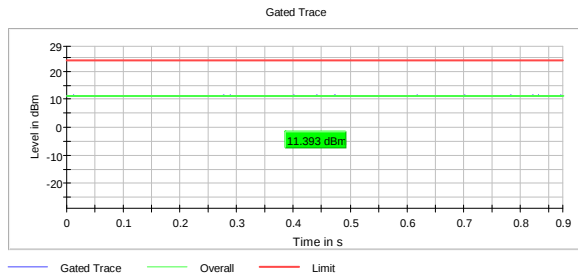
MCS15, MIMO



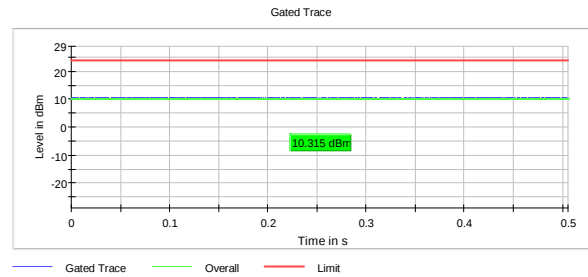
RMS Conducted Power, 5500 MHz, 802.11n, HT20, MCS8, MIMO



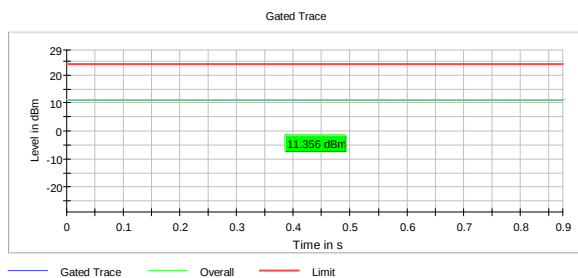
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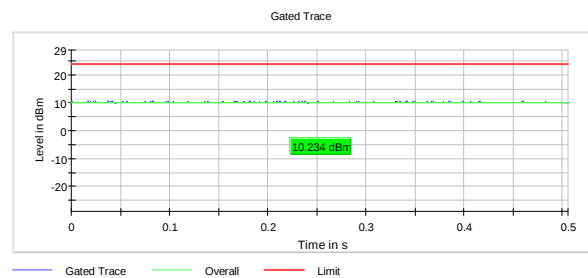
RMS Conducted Power, 5540 MHz, 802.11n, HT20, MCS8, MIMO



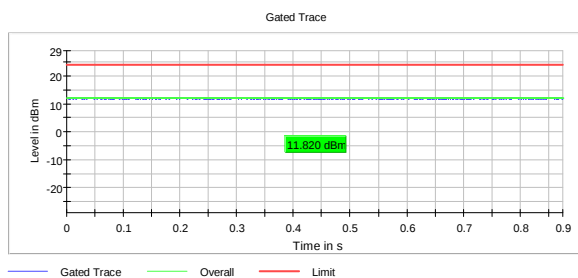
MCS15, MIMO



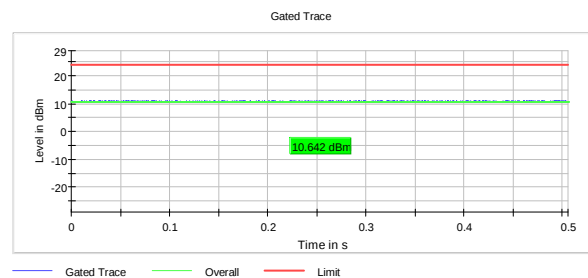
RMS Conducted Power, 5580 MHz, 802.11n, HT20, MCS8, MIMO



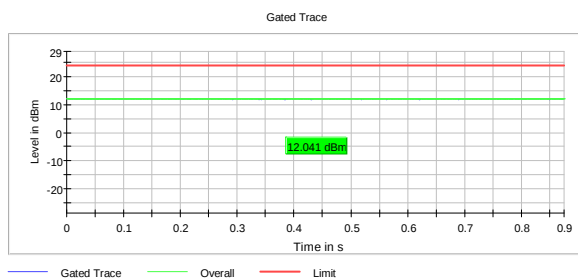
MCS15, MIMO



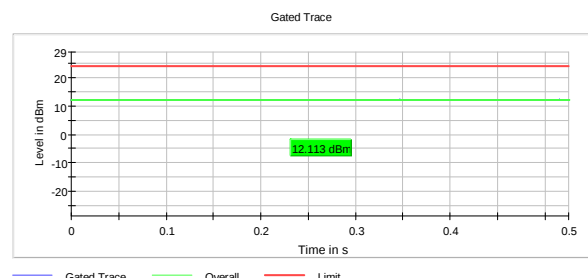
RMS Conducted Power, 5700 MHz, 802.11n, HT20, MCS8, MIMO



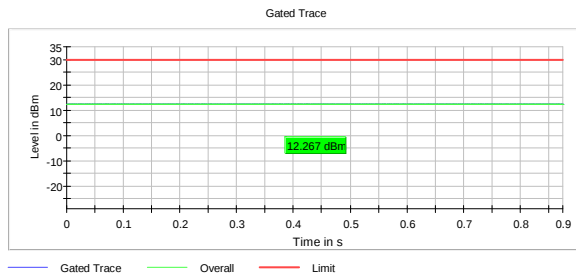
MCS15, MIMO



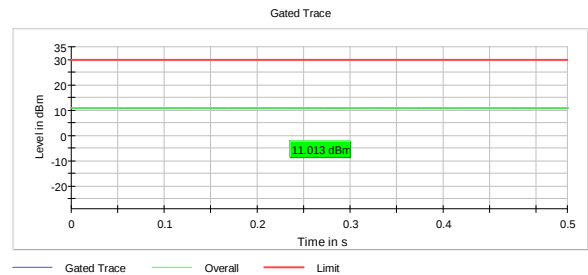
RMS Conducted Power, 5720 MHz, 802.11n, HT20, MCS8, MIMO



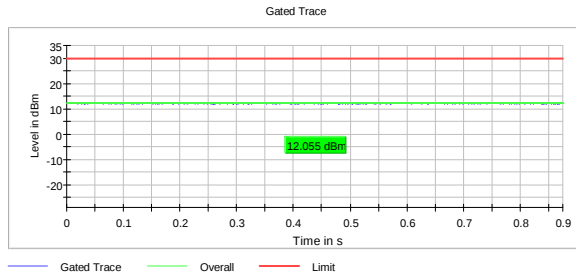
MCS15, MIMO



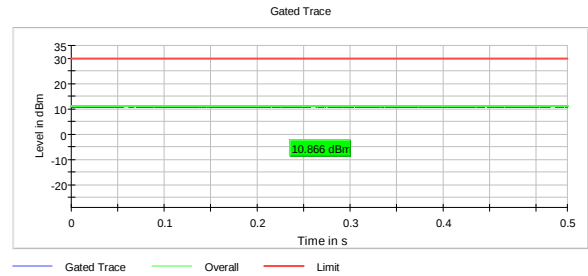
RMS Conducted Power, 5745 MHz, 802.11n, HT20, MCS8, MIMO



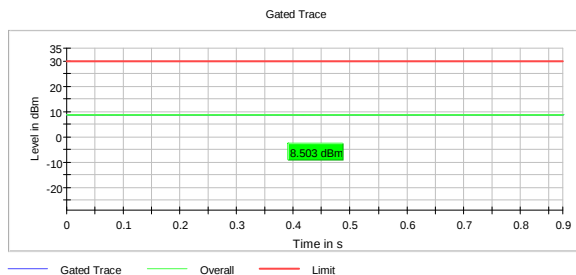
MCS15, MIMO



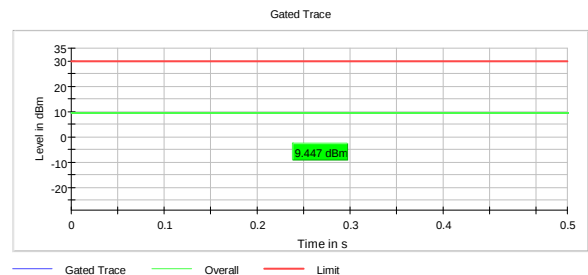
RMS Conducted Power, 5785 MHz, 802.11n, HT20, MCS8, MIMO



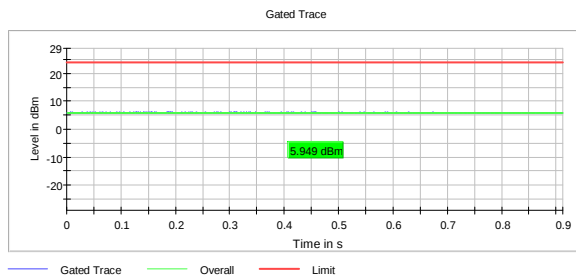
MCS15, MIMO



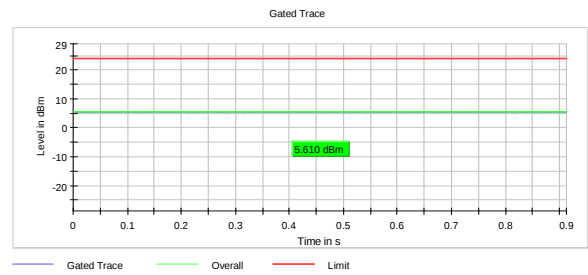
RMS Conducted Power, 5825 MHz, 802.11n, HT20, MCS8, MIMO



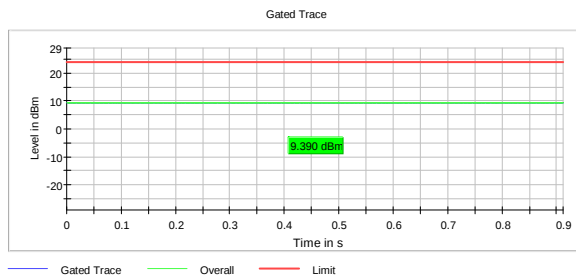
MCS15, MIMO



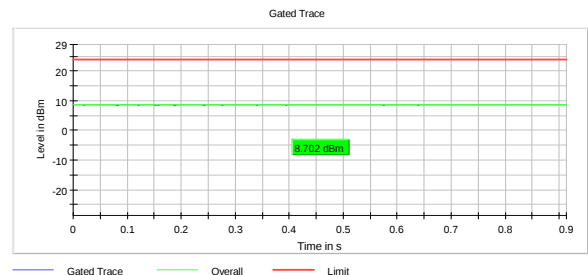
RMS Conducted Power, 5180 MHz, 802.11ax, HT20, MCS0, MIMO



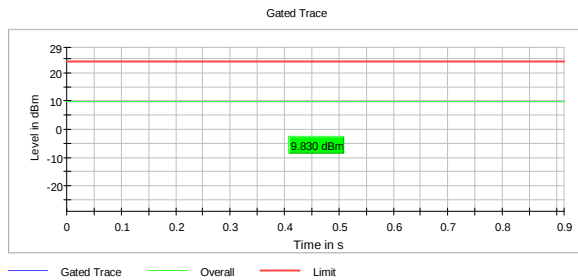
RMS Conducted Power, 5180 MHz, 802.11ax, HT20, MCS0, SISO



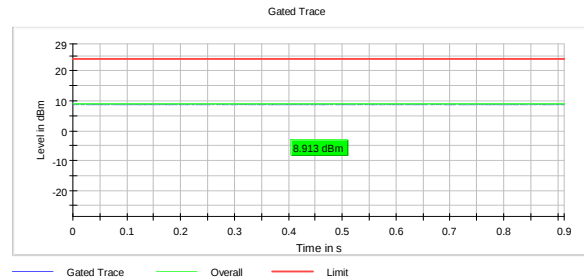
RMS Conducted Power, 5220 MHz, 802.11ax, HT20, MCS0, MIMO



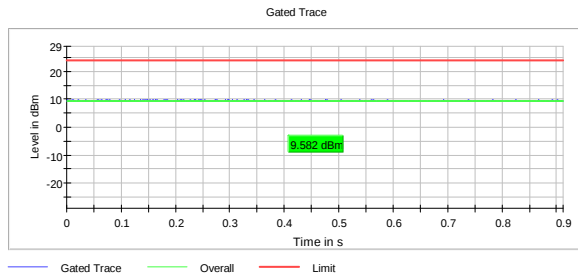
RMS Conducted Power, 5220 MHz, 802.11ax, HT20, MCS0, SISO



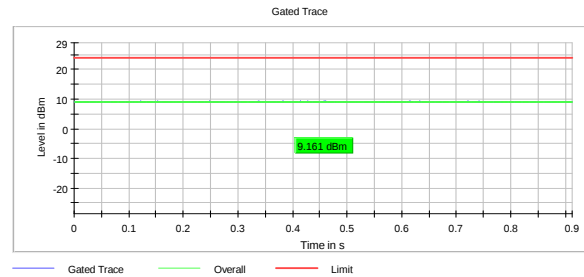
RMS Conducted Power, 5240 MHz, 802.11ax, HT20, MCS0, MIMO



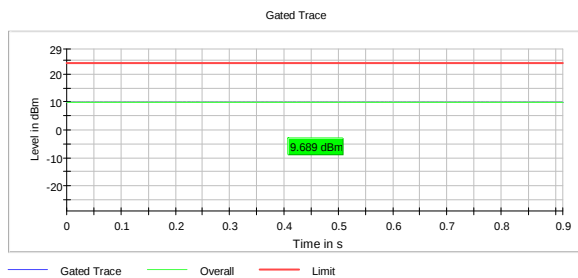
RMS Conducted Power, 5240 MHz, 802.11ax, HT20, MCS0, SISO



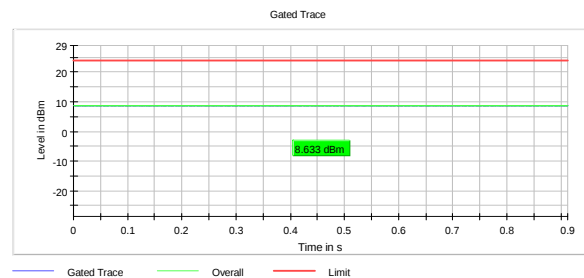
RMS Conducted Power, 5260 MHz, 802.11ax, HT20, MCS0, MIMO



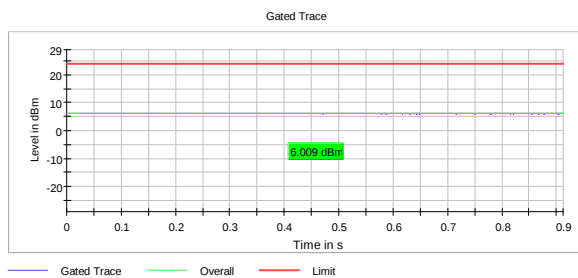
RMS Conducted Power, 5260 MHz, 802.11ax, HT20, MCS0, SISO



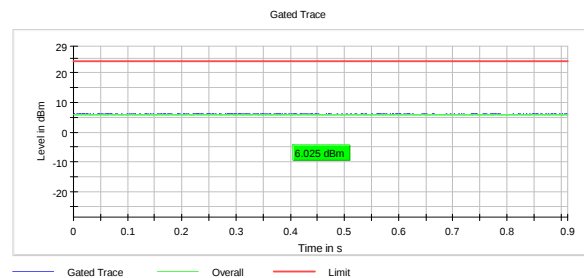
RMS Conducted Power, 5280 MHz, 802.11ax, HT20, MCS0, MIMO



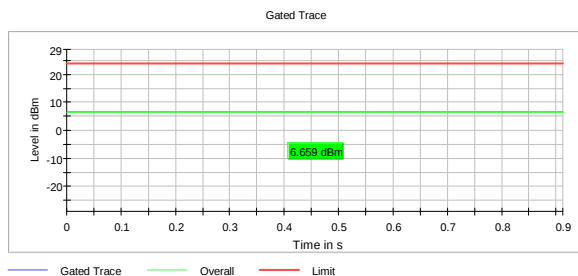
RMS Conducted Power, 5280 MHz, 802.11ax, HT20, MCS0, SISO



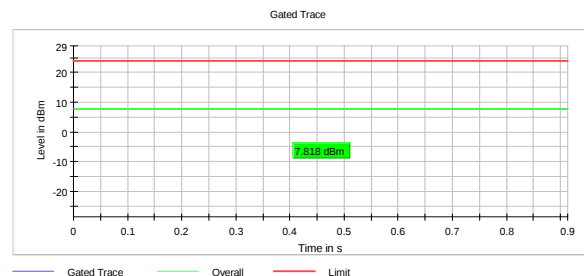
RMS Conducted Power, 5320 MHz, 802.11ax, HT20, MCS0, MIMO



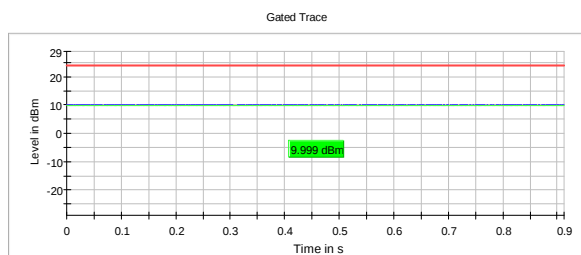
RMS Conducted Power, 5320 MHz, 802.11ax, HT20, MCS0, SISO



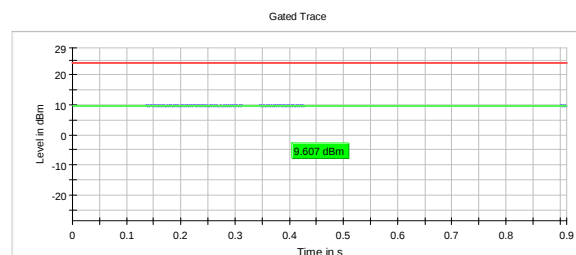
RMS Conducted Power, 5500 MHz, 802.11ax, HT20, MCS0, MIMO



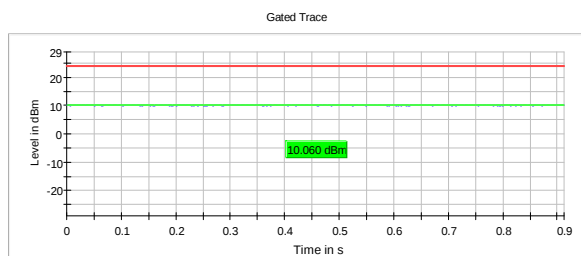
RMS Conducted Power, 5500 MHz, 802.11ax, HT20, MCS0, SISO



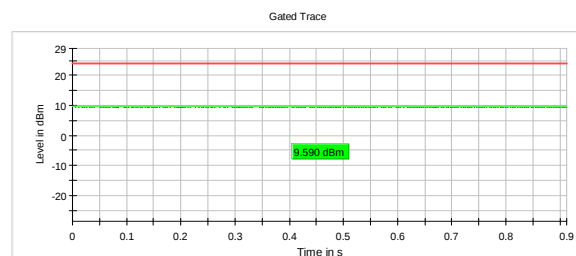
RMS Conducted Power, 5540 MHz, 802.11ax, HT20, MCS0, MIMO



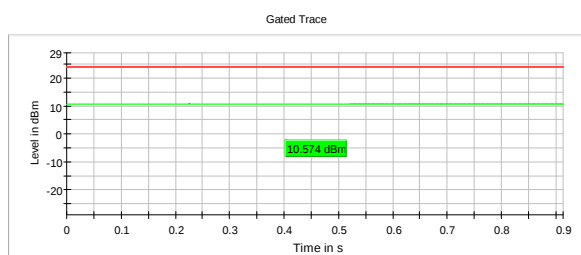
RMS Conducted Power, 5540 MHz, 802.11ax, HT20, MCS0, SISO



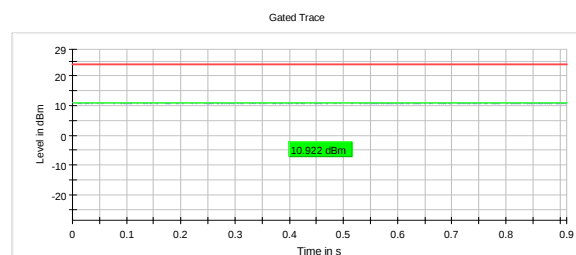
RMS Conducted Power, 5580 MHz, 802.11ax, HT20, MCS0, MIMO



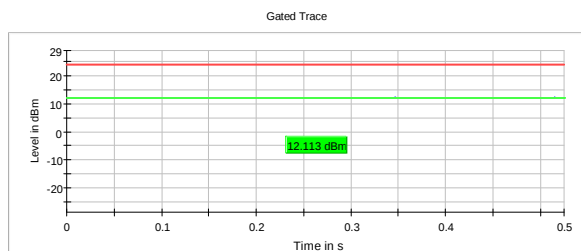
RMS Conducted Power, 5580 MHz, 802.11ax, HT20, MCS0, SISO



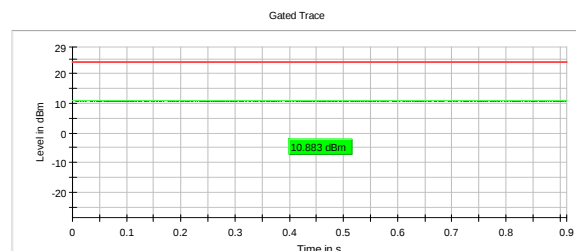
RMS Conducted Power, 5700 MHz, 802.11ax, HT20, MCS0, MIMO



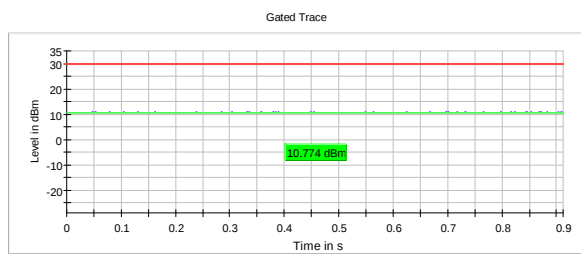
RMS Conducted Power, 5700 MHz, 802.11ax, HT20, MCS0, SISO



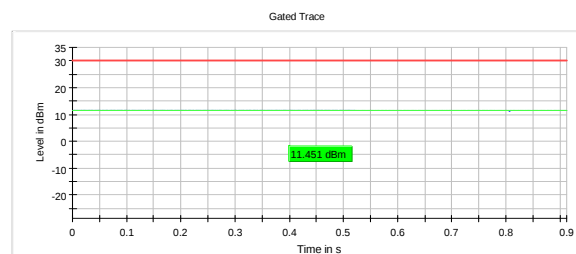
RMS Conducted Power, 5720 MHz, 802.11ax, HT20, MCS0, MIMO



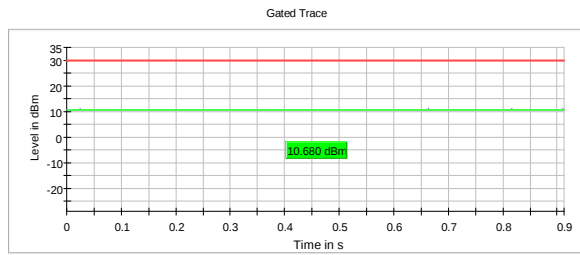
RMS Conducted Power, 5720 MHz, 802.11ax, HT20, MCS0, SISO



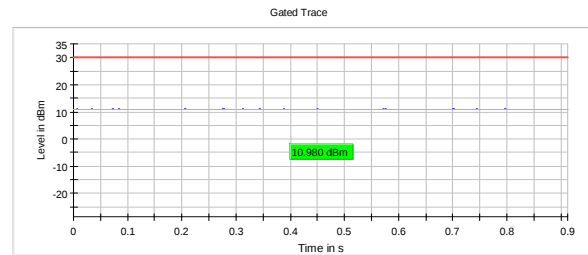
RMS Conducted Power, 5745 MHz, 802.11ax, HT20, MCS0, MIMO



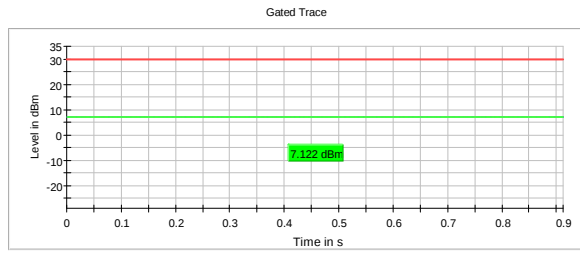
RMS Conducted Power, 5745 MHz, 802.11ax, HT20, MCS0, SISO



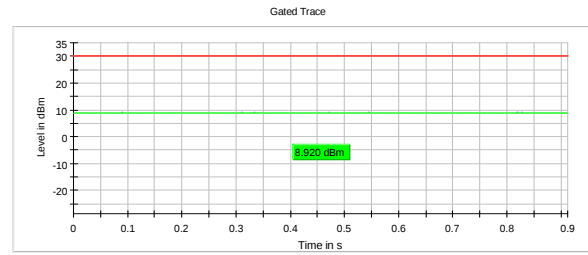
RMS Conducted Power, 5785 MHz, 802.11ax, HT20, MCS0, MIMO



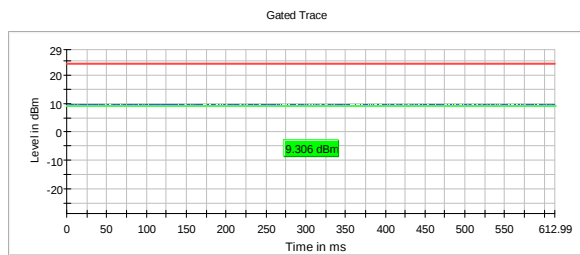
RMS Conducted Power, 5785 MHz, 802.11ax, HT20, MCS0, SISO



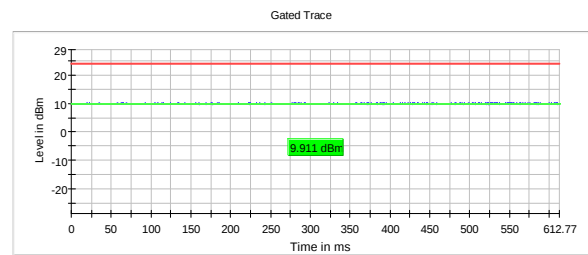
RMS Conducted Power, 5825 MHz, 802.11ax, HT20, MCS0, MIMO



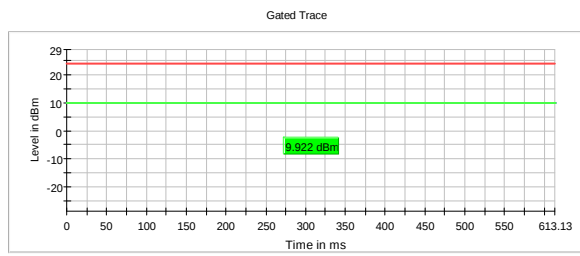
RMS Conducted Power, 5825 MHz, 802.11ax, HT20, MCS0, SISO



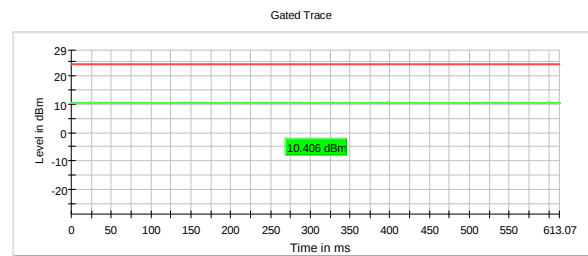
RMS Conducted Power, 5240 MHz, 802.11ax, HT20, MCS7, MIMO



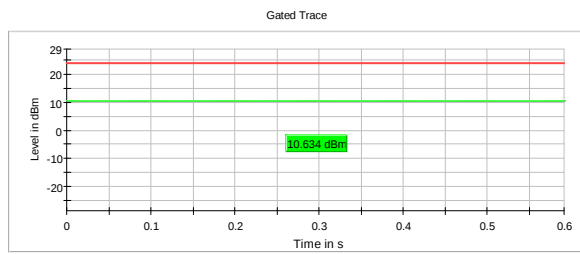
RMS Conducted Power, 5260 MHz, 802.11ax, HT20, MCS7, MIMO



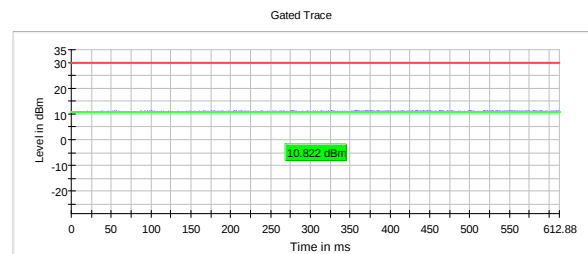
RMS Conducted Power, 5580 MHz, 802.11ax, HT20, MCS7, MIMO



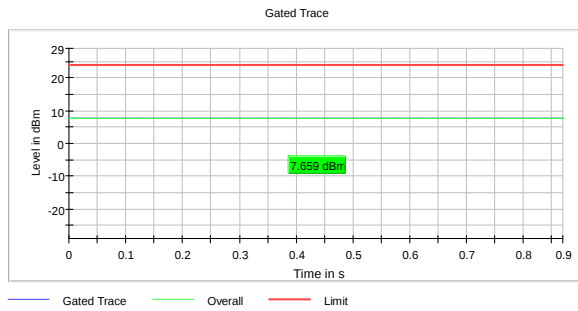
RMS Conducted Power, 5700 MHz, 802.11ax, HT20, MCS7, MIMO



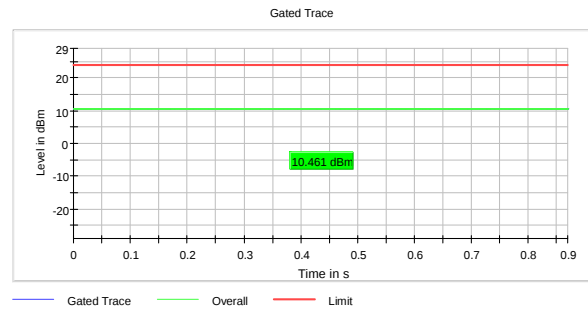
RMS Conducted Power, 5720 MHz, 802.11ax, HT20, MCS7, MIMO



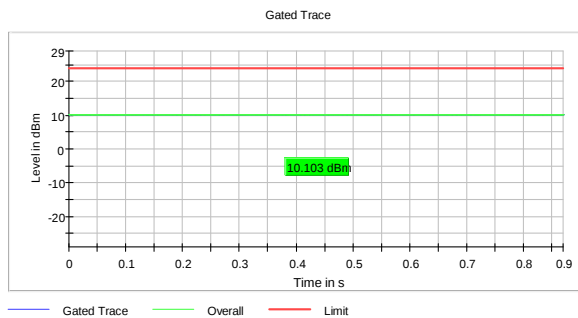
RMS Conducted Power, 5785 MHz, 802.11ax, HT20, MCS7, MIMO



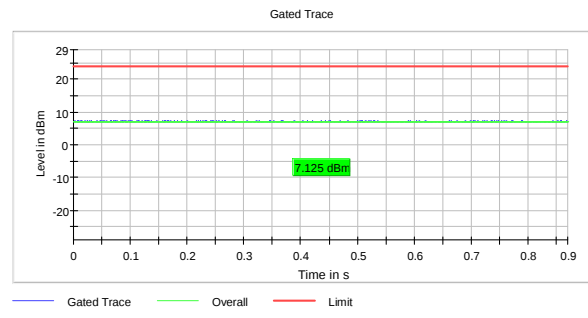
RMS Conducted Power, 5190 MHz, 802.11ac, HT40, MCS0, SISO



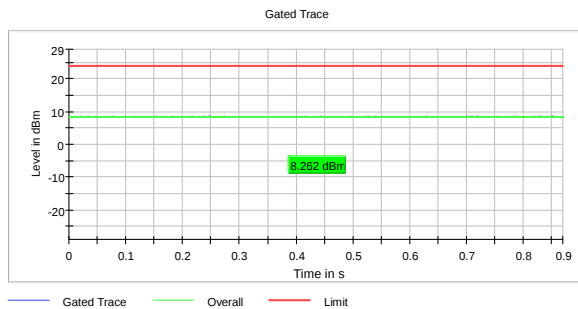
RMS Conducted Power, 5230 MHz, 802.11ac, HT40, MCS0, SISO



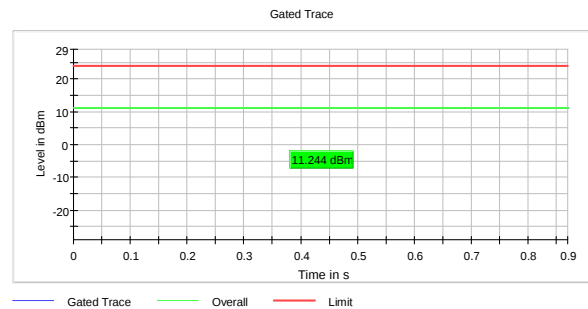
RMS Conducted Power, 5270 MHz, 802.11ac, HT40, MCS0, SISO



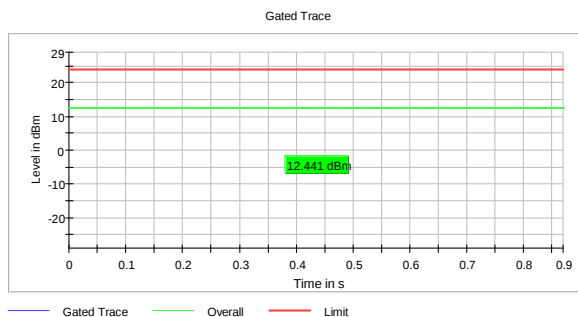
RMS Conducted Power, 5310 MHz, 802.11ac, HT40, MCS0, SISO



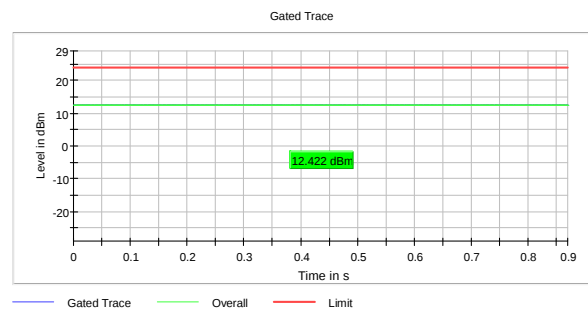
RMS Conducted Power, 5510 MHz, 802.11ac, HT40, MCS0, SISO



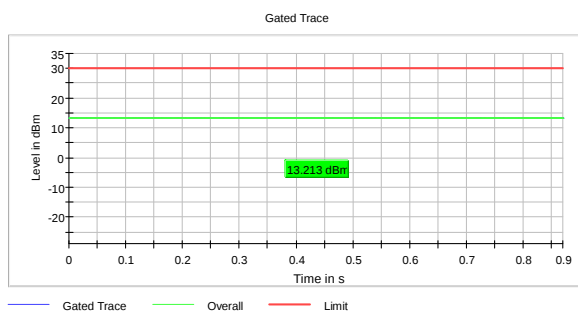
RMS Conducted Power, 5550 MHz, 802.11ac, HT40, MCS0, SISO



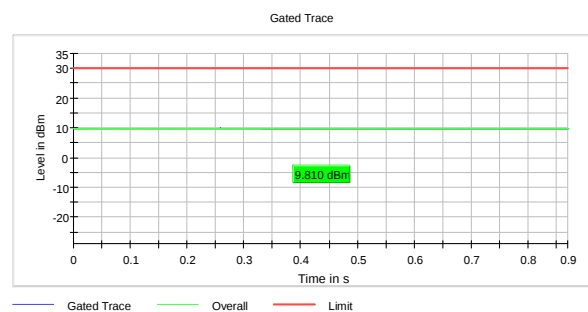
RMS Conducted Power, 5670 MHz, 802.11ac, HT40, MCS0, SISO



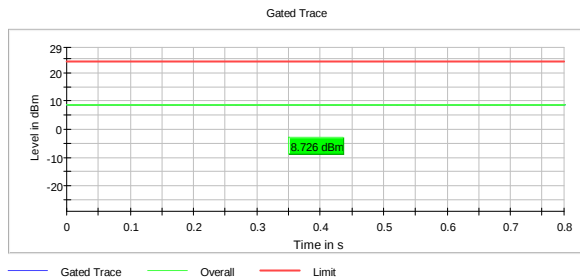
RMS Conducted Power, 5710 MHz, 802.11ac, HT40, MCS0, SISO



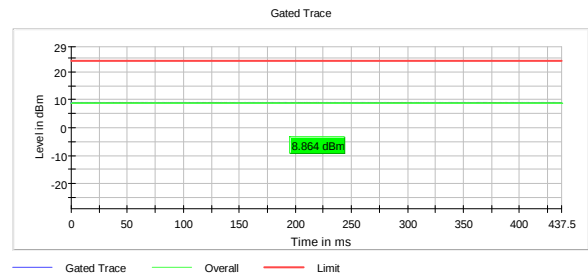
RMS Conducted Power, 5755 MHz, 802.11ac, HT40, MCS0, SISO



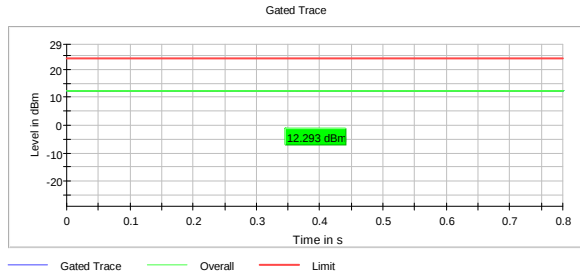
RMS Conducted Power, 5795 MHz, 802.11ac, HT40, MCS0, SISO



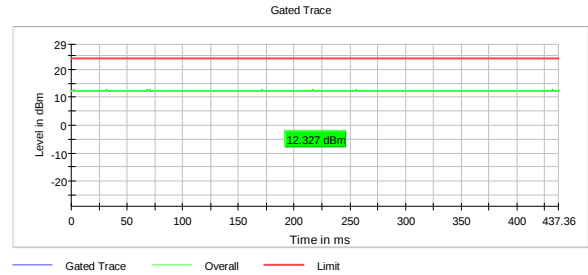
RMS Conducted Power, 5190 MHz, 802.11ac, HT40, MCS0, MIMO



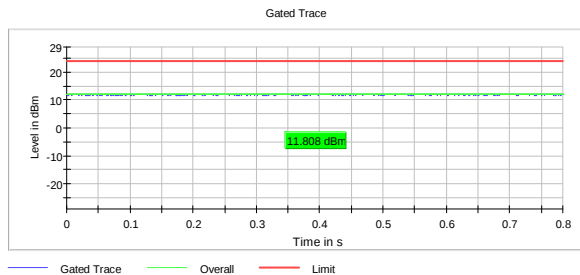
MCS7, MIMO



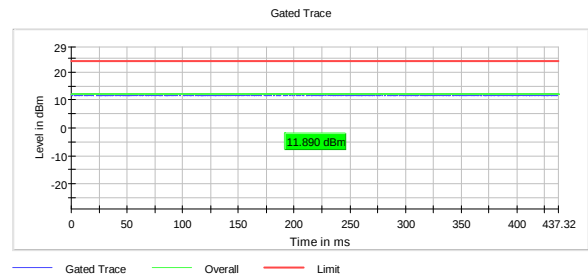
RMS Conducted Power, 5230 MHz, 802.11ac, HT40, MCS0, MIMO



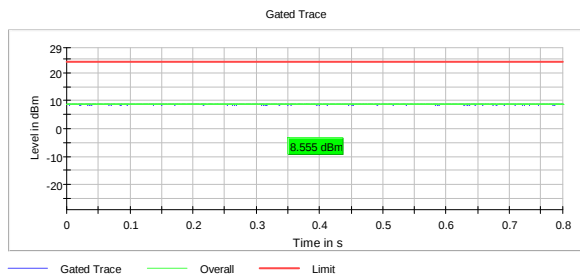
MCS7, MIMO



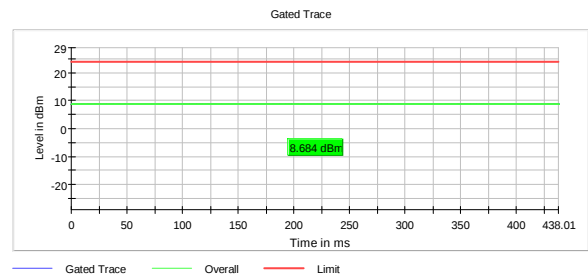
RMS Conducted Power, 5270 MHz, 802.11ac, HT40, MCS0, MIMO



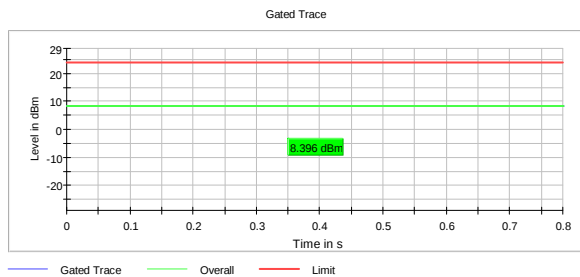
MCS7, MIMO



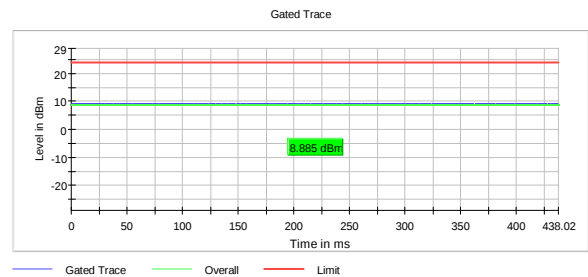
RMS Conducted Power, 5310 MHz, 802.11ac, HT40, MCS0, MIMO



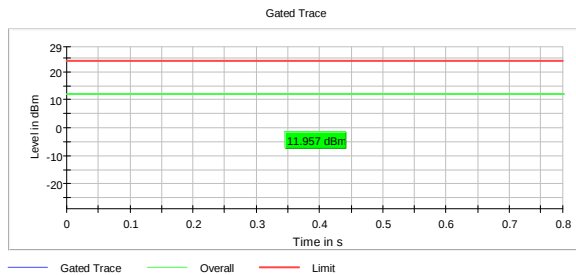
MCS7, MIMO



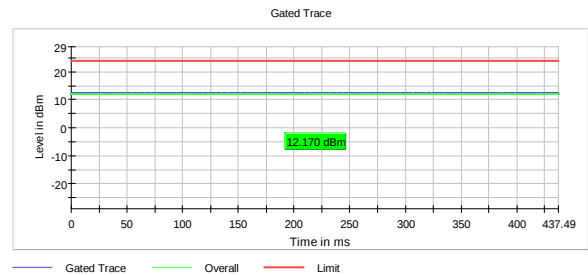
RMS Conducted Power, 5510 MHz, 802.11ac, HT40, MCS0, MIMO



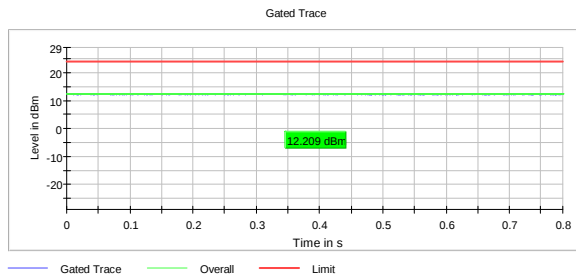
MCS7, MIMO



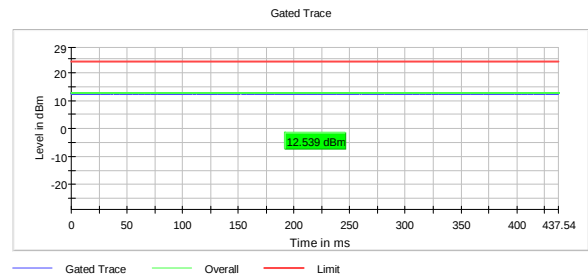
RMS Conducted Power, 5550 MHz, 802.11ac, HT40, MCS0, MIMO



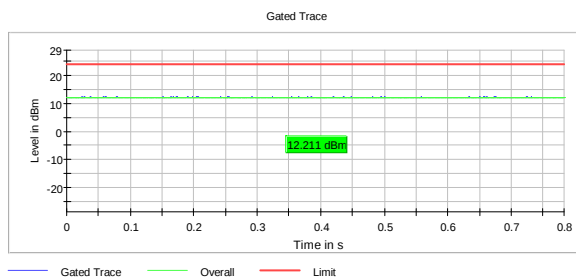
MCS7, MIMO



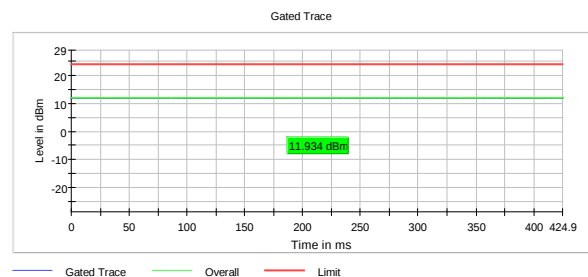
RMS Conducted Power, 5670 MHz, 802.11ac, HT40, MCS0, MIMO



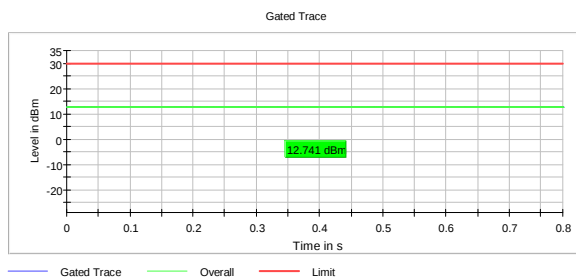
MCS7, MIMO



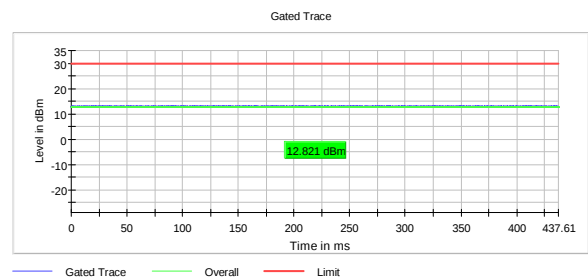
RMS Conducted Power, 5710 MHz, 802.11ac, HT40, MCS0, MIMO



MCS7, MIMO



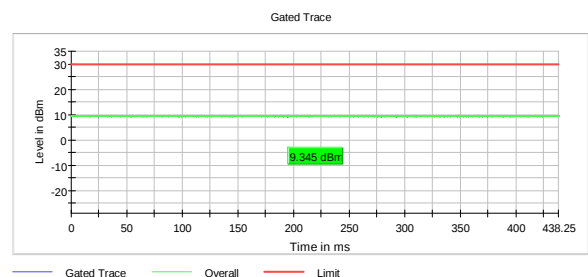
RMS Conducted Power, 5755 MHz, 802.11ac, HT40, MCS0, MIMO



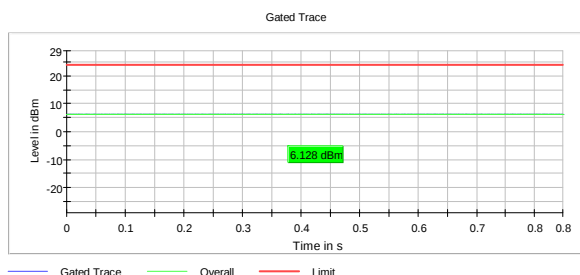
MCS7, MIMO



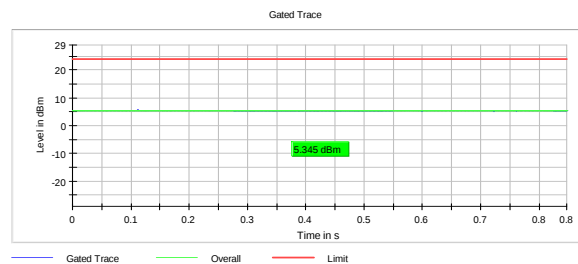
RMS Conducted Power, 5795 MHz, 802.11ac, HT40, MCS0, MIMO



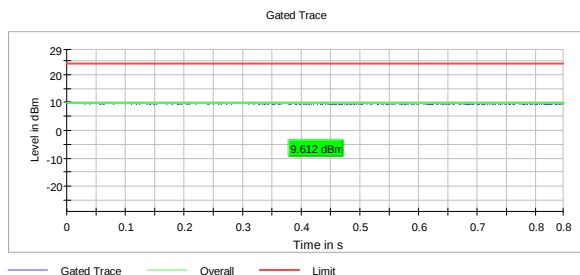
MCS7, MIMO



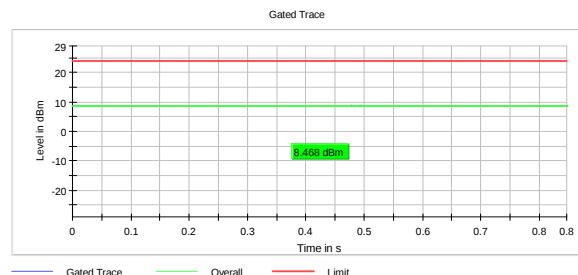
RMS Conducted Power, 5190 MHz, 802.11ax, HT40, MCS0, MIMO



RMS Conducted Power, 5190 MHz, 802.11ax, HT40, MCS0, SISO



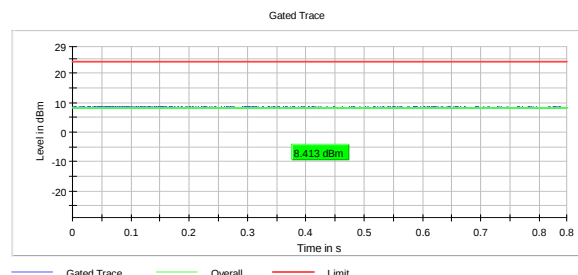
RMS Conducted Power, 5230 MHz, 802.11ax, HT40, MCS0, MIMO



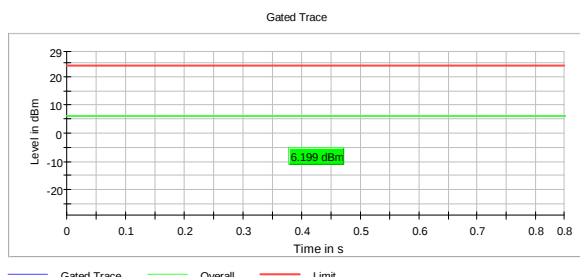
RMS Conducted Power, 5230 MHz, 802.11ax, HT40, MCS0, SISO



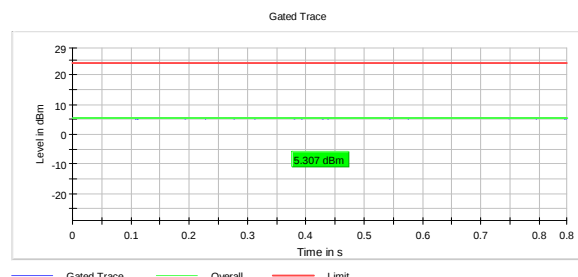
RMS Conducted Power, 5270 MHz, 802.11ax, HT40, MCS0, MIMO



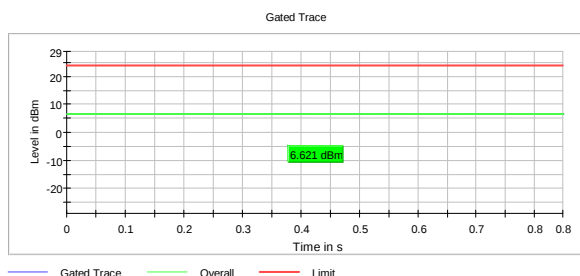
RMS Conducted Power, 5270 MHz, 802.11ax, HT40, MCS0, SISO



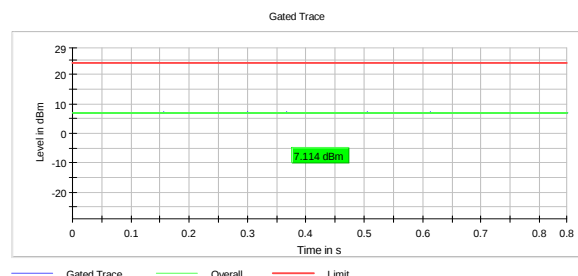
RMS Conducted Power, 5310 MHz, 802.11ax, HT40, MCS0, MIMO



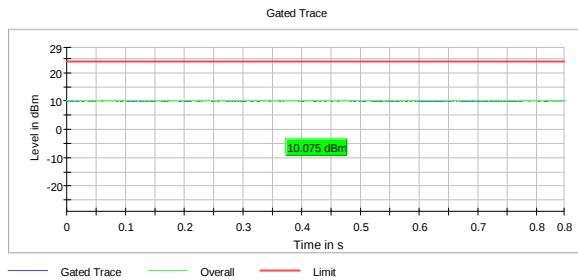
RMS Conducted Power, 5670 MHz, 802.11ax, HT40, MCS0, SISO



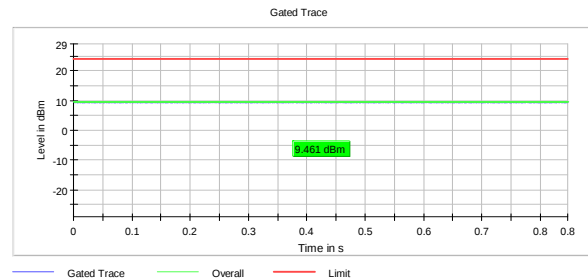
RMS Conducted Power, 5510 MHz, 802.11ax, HT40, MCS0, MIMO



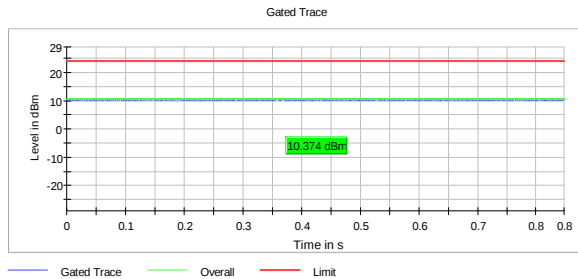
RMS Conducted Power, 5510 MHz, 802.11ax, HT40, MCS0, SISO



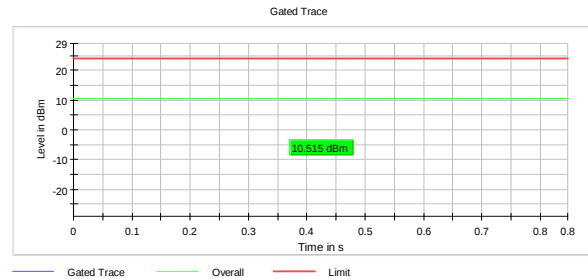
RMS Conducted Power, 5550 MHz, 802.11ax, HT40, MCS0, MIMO



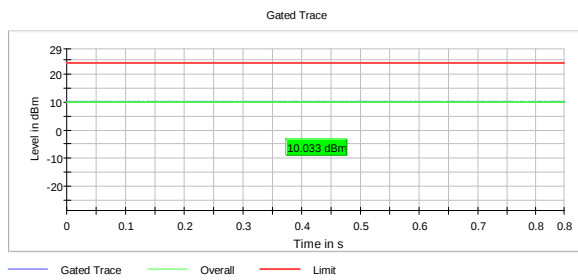
RMS Conducted Power, 5550 MHz, 802.11ax, HT40, MCS0, SISO



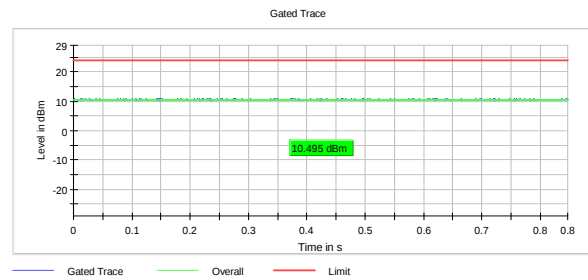
RMS Conducted Power, 5670 MHz, 802.11ax, HT40, MCS0, MIMO



RMS Conducted Power, 5670 MHz, 802.11ax, HT40, MCS0, SISO



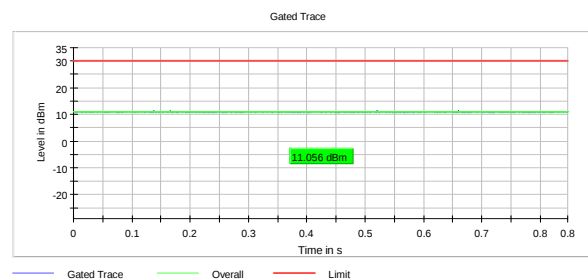
RMS Conducted Power, 5710 MHz, 802.11ax, HT40, MCS0, MIMO



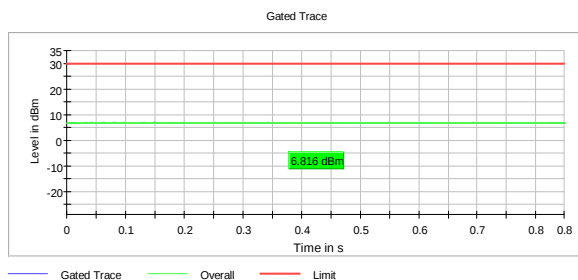
RMS Conducted Power, 5710 MHz, 802.11ax, HT40, MCS0, SISO



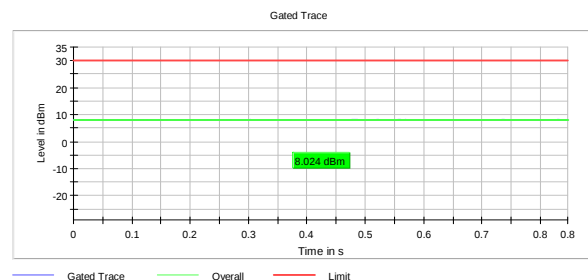
RMS Conducted Power, 5755 MHz, 802.11ax, HT40, MCS0, MIMO



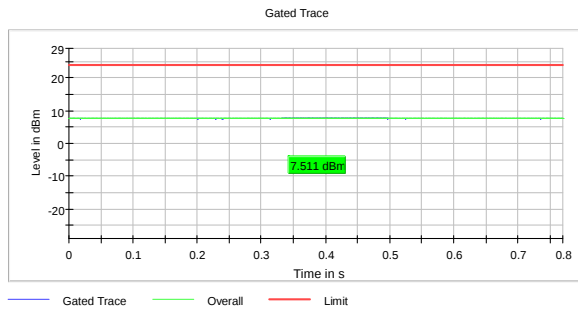
RMS Conducted Power, 5755 MHz, 802.11ax, HT40, MCS0, SISO



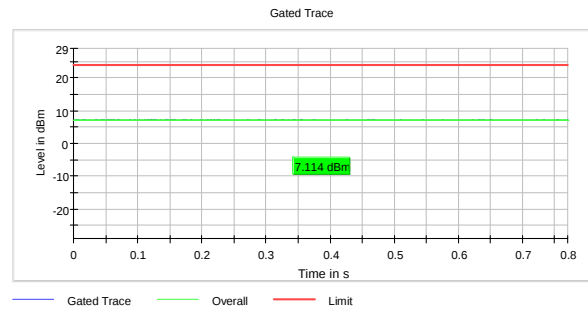
RMS Conducted Power, 5795 MHz, 802.11ax, HT40, MCS0, MIMO



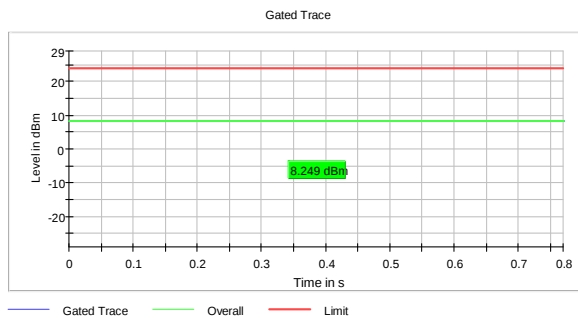
RMS Conducted Power, 5795 MHz, 802.11ax, HT40, MCS0, SISO



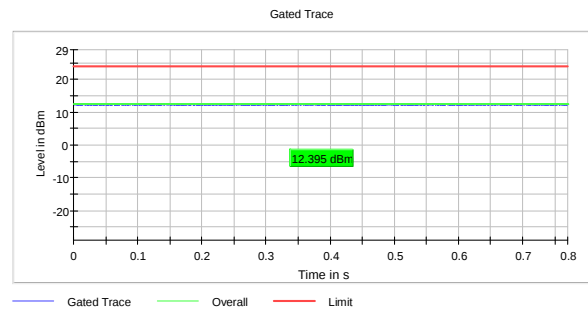
RMS Conducted Power, 5210 MHz, 802.11ac, HT80, MCS0, SISO



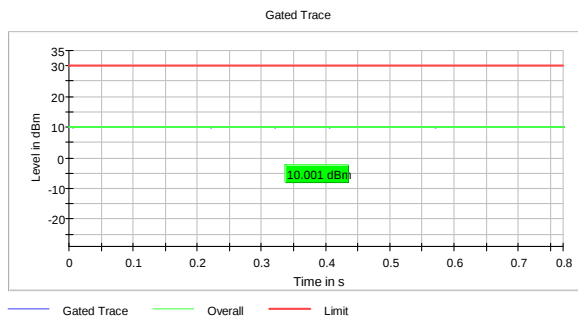
RMS Conducted Power, 5290 MHz, 802.11ac, HT80, MCS0, SISO



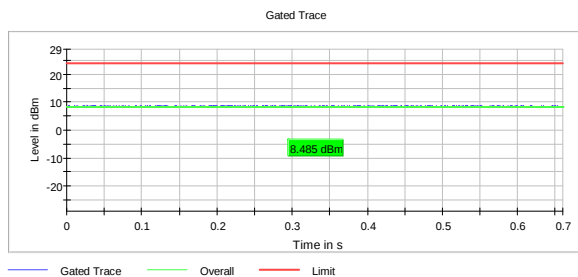
RMS Conducted Power, 5530 MHz, 802.11ac, HT80, MCS0, SISO



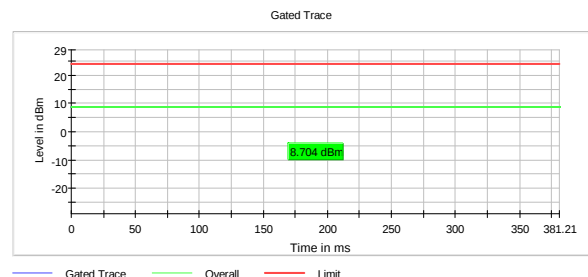
RMS Conducted Power, 5690 MHz, 802.11ac, HT80, MCS0, SISO



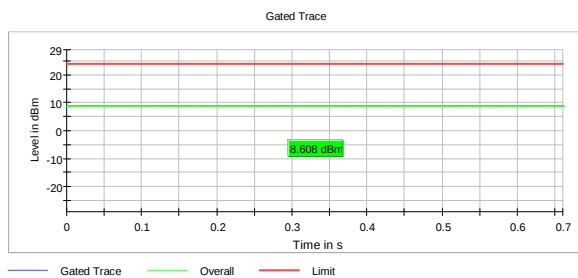
RMS Conducted Power, 5775 MHz, 802.11ac, HT80, MCS0, SISO



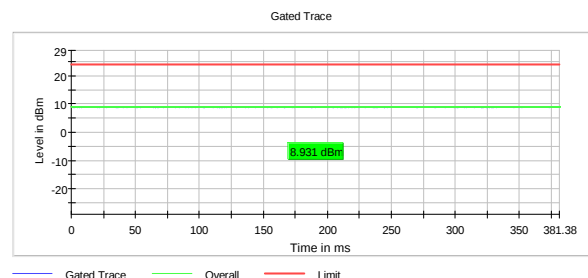
RMS Conducted Power, 5210 MHz, 802.11ac, HT80, MCS0, MIMO



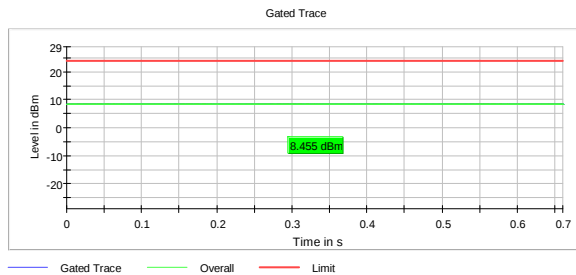
MCS7, MIMO



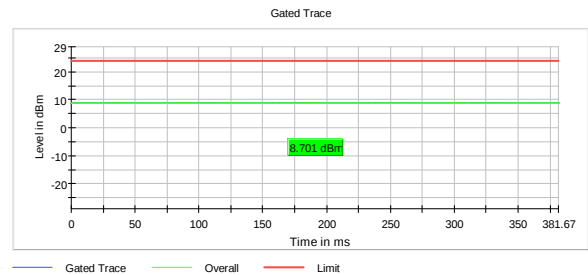
RMS Conducted Power, 5290 MHz, 802.11ac, HT80, MCS0, MIMO



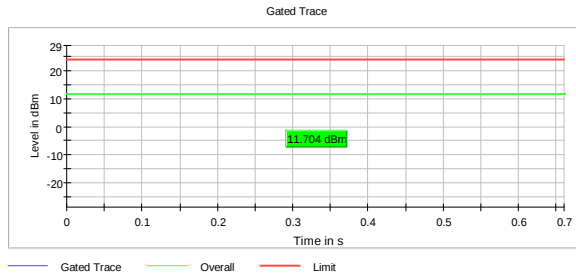
MCS7, MIMO



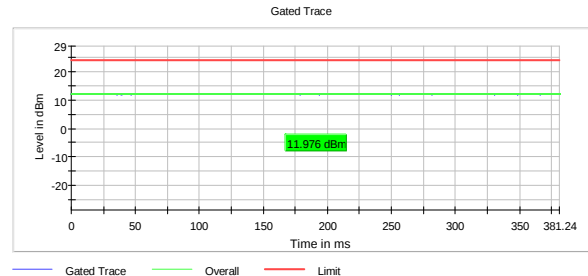
RMS Conducted Power, 5530 MHz, 802.11ac, HT80, MCS0, MIMO



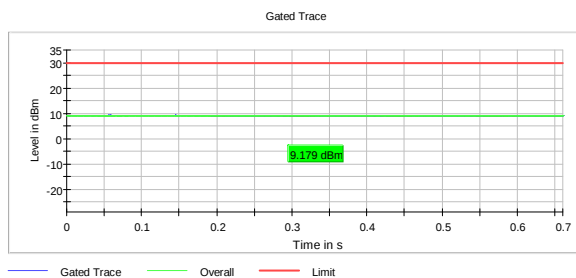
MCS7, MIMO



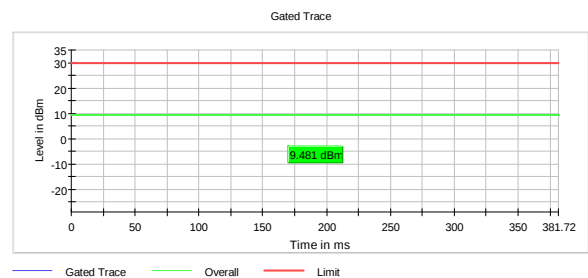
RMS Conducted Power, 5690 MHz, 802.11ac, HT80, MCS0, MIMO



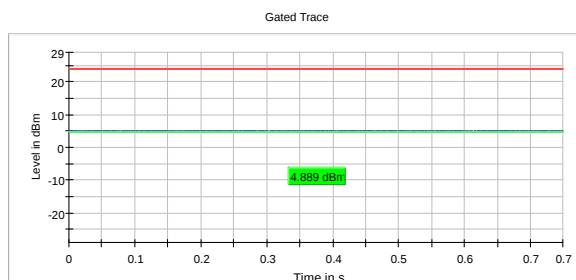
MCS7, MIMO



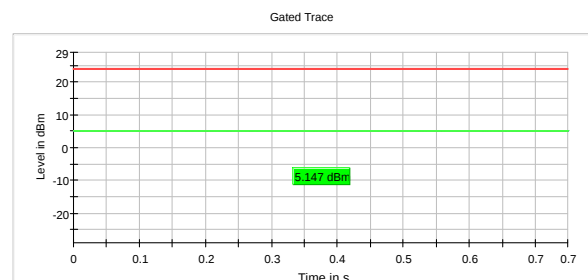
RMS Conducted Power, 5775 MHz, 802.11ac, HT80, MCS0, MIMO



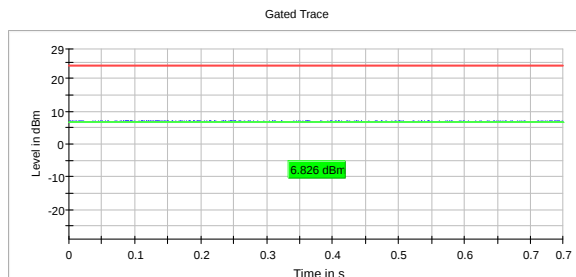
MCS7, MIMO



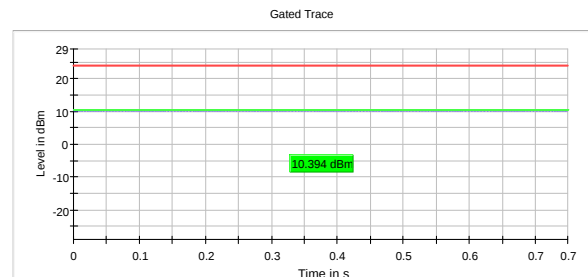
RMS Conducted Power, 5210 MHz, 802.11ax, HT80, MCS0, SISO



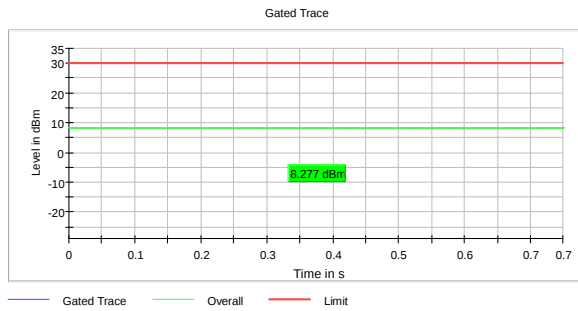
RMS Conducted Power, 5290 MHz, 802.11ax, HT80, MCS0, SISO



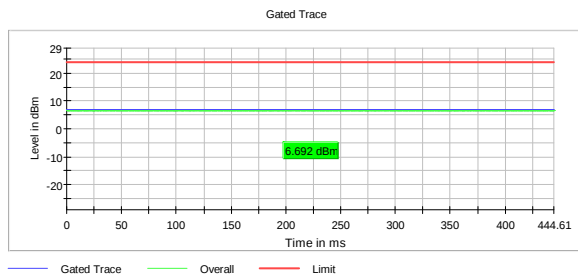
RMS Conducted Power, 5530 MHz, 802.11ax, HT80, MCS0, SISO



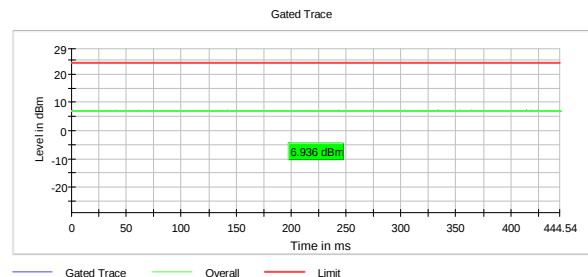
RMS Conducted Power, 5690 MHz, 802.11ax, HT80, MCS0, SISO



RMS Conducted Power, 5775 MHz, 802.11ax, HT80, MCS0, SISO



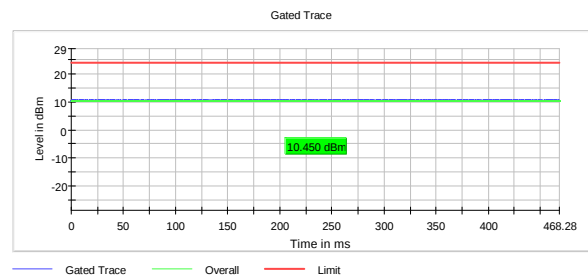
RMS Conducted Power, 5210 MHz, 802.11ax, HT80, MCS11, MIMO



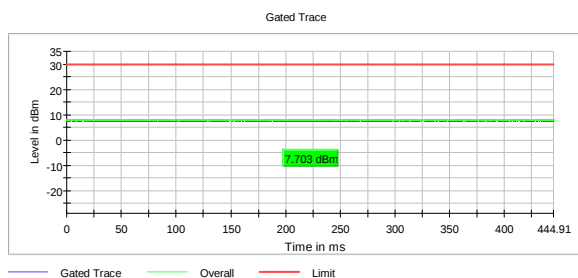
RMS Conducted Power, 5290 MHz, 802.11ax, HT80, MCS11, MIMO



RMS Conducted Power, 5530 MHz, 802.11ax, HT80, MCS11, MIMO



RMS Conducted Power, 5690 MHz, 802.11ax, HT80, MCS7, MIMO



RMS Conducted Power, 5775 MHz, 802.11ax, HT80, MCS11, MIMO

4.3 Emission Bandwidth

Para. No.: 15.407(a)(2)

ISED RSS-247, Issue 2, Clause 6.2

Measurement procedure: ANSI C63.10-2013 Clause 6.9.3 and 12.4.1

Test Results: Complies

Measurement Data:

Ch. No.	Nominal Frequency (MHz)	FCC Emission Bandwidth (26dB BW), Measured Values (MHz)						
		802.11a	802.11n HT20	802.11ax HT20	802.11n HT40	802.11ax HT40	802.11ac HT80	802.11ax HT80
36	5180	20.9	21.4					
48	5240	20.6	21.3	21.6				
52	5260	21.0	21.4					
64	5320	21.0	21.2					
100	5500	20.9	21.4					
116	5580	21.0	21.5	21.7				
140	5700	21.0	21.4					
144	5720	20.8	21.5					
38	5190				39.9			
46	5230				39.8	40.1		
54	5270				39.9	39.9		
62	5310				39.6			
102	5510				39.6			
110	5550				39.8	40.1		
134	5670				39.8			
42	5210						82.0	83.0
58	5290						82.0	83.0
106	5530							83.0
138	5690						82.5	82.5

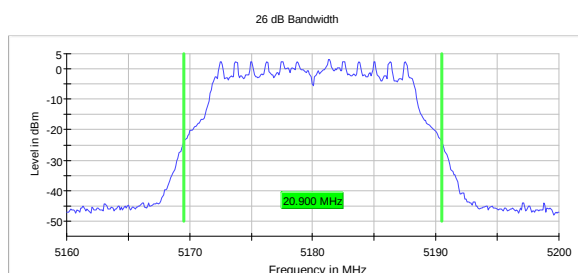
Maximum value for each channel and bandwidth is reported above.

Ch. No.	Nominal Frequency (MHz)	ISED Canada 99% Occupied Bandwidth, Measured Values (MHz)						
		802.11a	802.11n HT20	802.11ax HT20	802.11n HT40	802.11ax HT40	802.11ac HT80	802.11ax HT80
36	5180	16.5	17.7					
44	5220	16.5	17.7					
48	5240	16.5	17.7	19.1				
52	5260	16.5	17.7					
64	5320	16.5	17.7					
100	5500	16.6	17.8					
116	5580	16.6	17.7	19.1				
140	5700	16.6	17.8					
144	5720	16.5	17.7					
149	5745	16.6	17.7					
157	5785	16.5	17.7	19.1				
165	5825	16.5	17.7					
38	5190				36.8			
46	5230				36.5	37.8		
54	5270				36.8	37.8		
62	5310				36.8			
102	5510				36.5			
110	5550				36.5	37.8		
134	5670				36.5			
151	5755				36.5	37.8		
159	5795				36.5			
42	5210						76.5	77.5
58	5290						76.5	77.5
106	5530						76.0	77.5
138	5690							77.0
155	5775						76.0	77.5

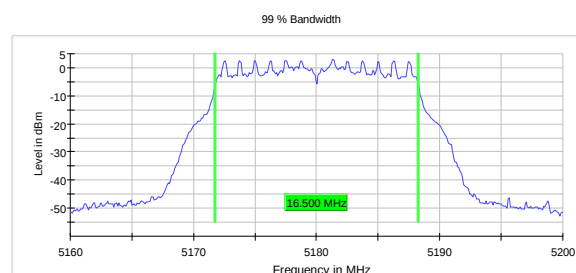
Maximum value for each channel and bandwidth is reported above.

Limit:

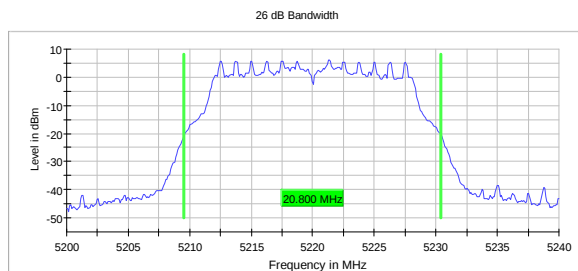
No requirements as long as the emissions are within the band-edges.



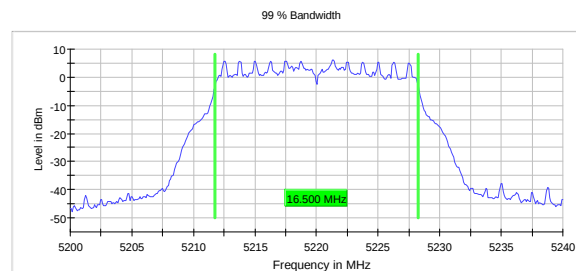
Emission BW (26 dB), 5180 MHz, 802.11a, 6Mb



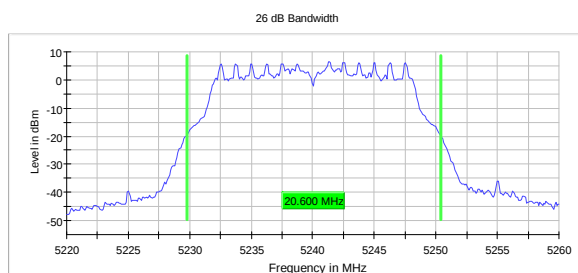
Occupied BW (99%), 5180 MHz, 802.11a, 6Mb



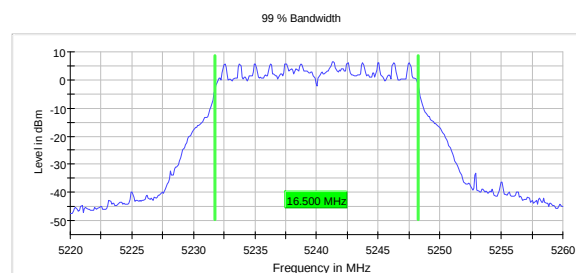
Emission BW (26 dB), 5220 MHz, 802.11a, 6Mb



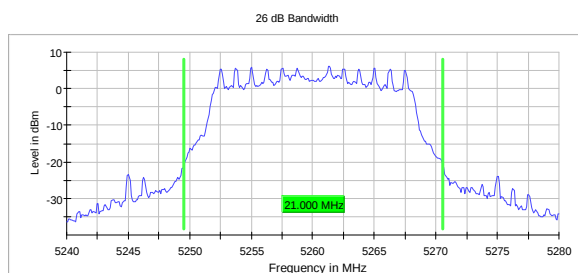
Occupied BW (99%), 5220 MHz, 802.11a, 6Mb



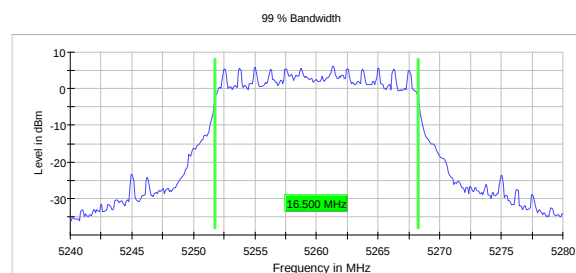
Emission BW (26 dB), 5240 MHz, 802.11a, 6Mb



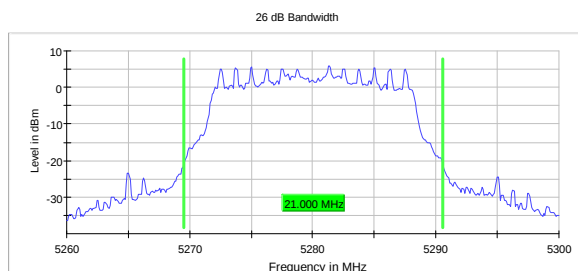
Occupied BW (99%), 5240 MHz, 802.11a, 6Mb



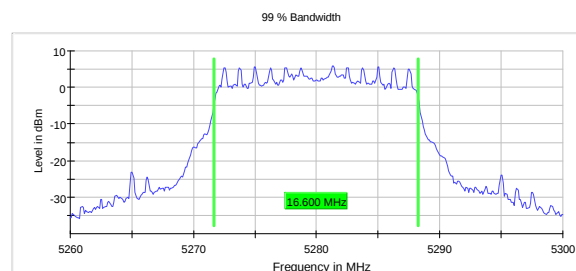
Emission BW (26 dB), 5260 MHz, 802.11a, 6Mb



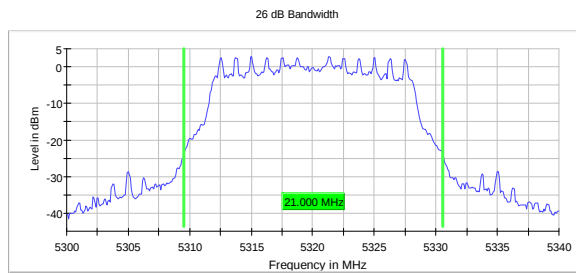
Occupied BW (99%), 5260 MHz, 802.11a, 6Mb



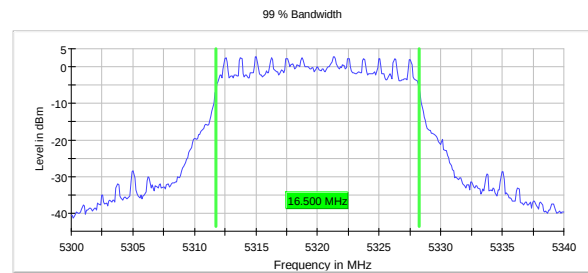
Emission BW (26 dB), 5280 MHz, 802.11a, 6Mb



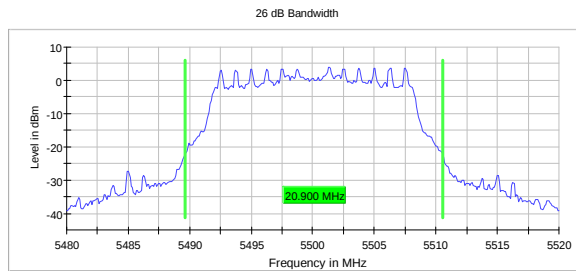
Occupied BW (99%), 5280 MHz, 802.11a, 6Mb



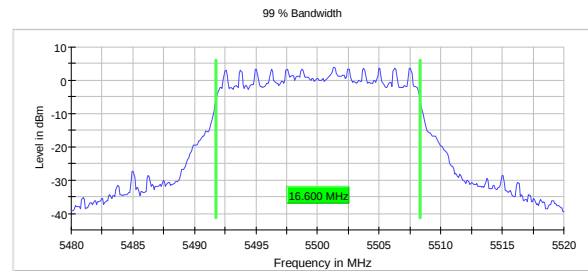
Emission BW (26 dB), 5320 MHz, 802.11a, 6Mb



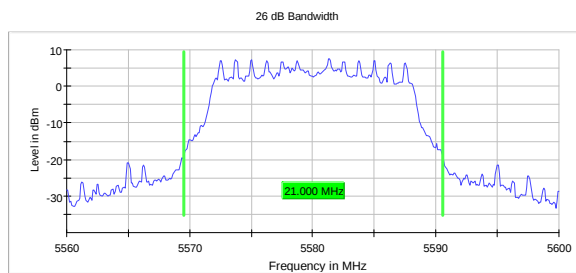
Occupied BW (99%), 5320 MHz, 802.11a, 6Mb



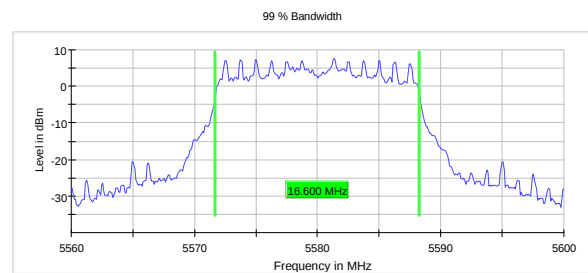
Emission BW (26 dB), 5500 MHz, 802.11a, 6Mb



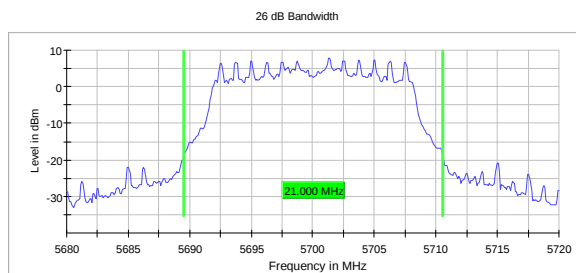
Occupied BW (99%), 5500 MHz, 802.11a, 6Mb



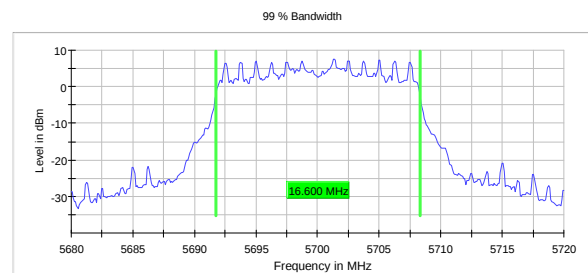
Emission BW (26 dB), 5580 MHz, 802.11a, 6Mb



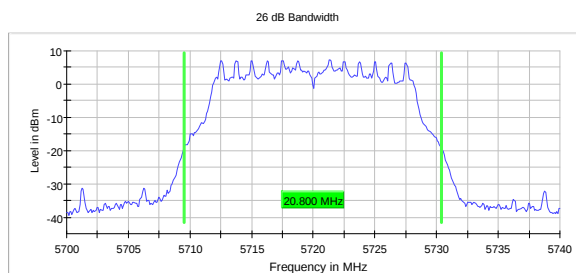
Occupied BW (99%), 5580 MHz, 802.11a, 6Mb



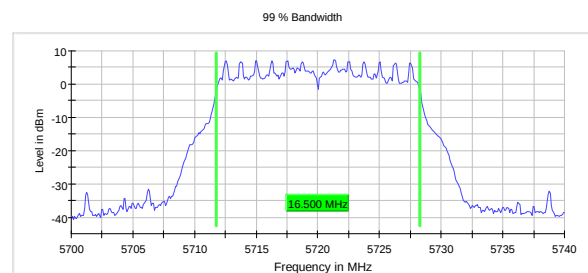
Emission BW (26 dB), 5700 MHz, 802.11a, 6Mb



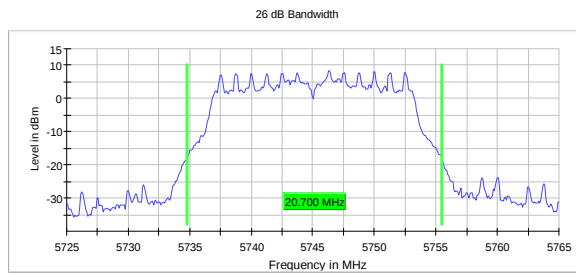
Occupied BW (99%), 5700 MHz, 802.11a, 6Mb



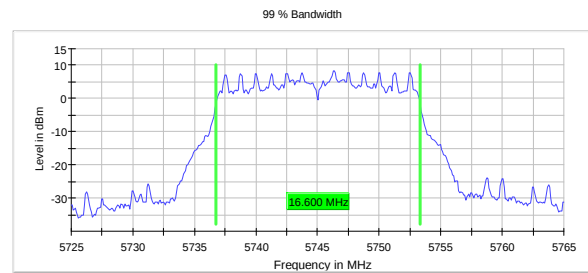
Emission BW (26 dB), 5720 MHz, 802.11a, 6Mb



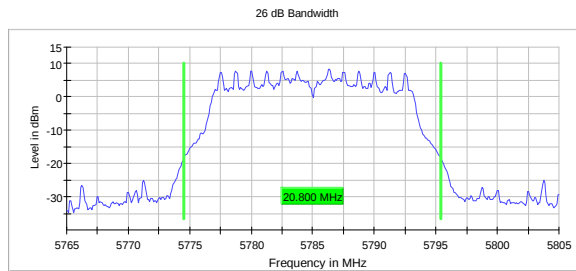
Occupied BW (99%), 5720 MHz, 802.11a, 6Mb



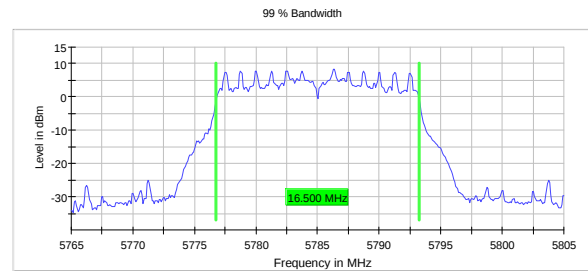
Emission BW (26 dB), 5745 MHz, 802.11a, 6Mb



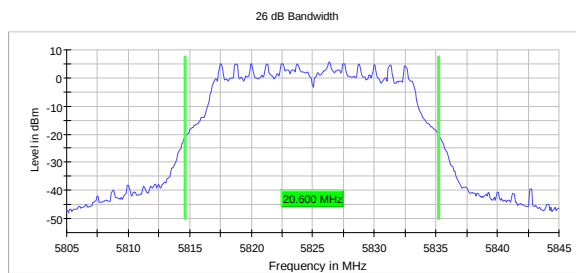
Occupied BW (99%), 5745 MHz, 802.11a, 6Mb



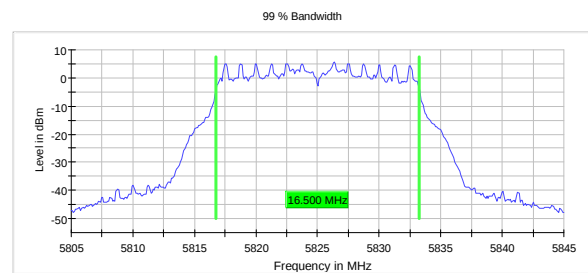
Emission BW (26 dB), 5785 MHz, 802.11a, 6Mb



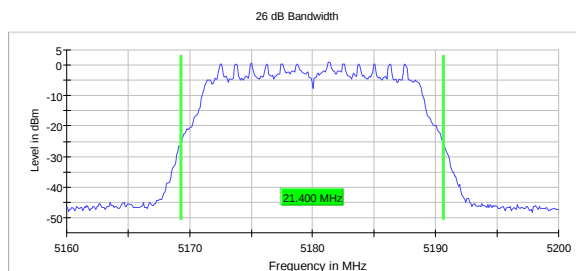
Occupied BW (99%), 5785 MHz, 802.11a, 6Mb



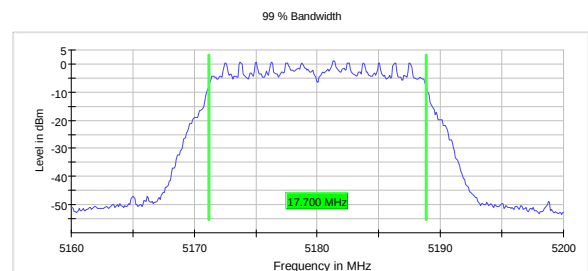
Emission BW (26 dB), 5825 MHz, 802.11a, 6Mb



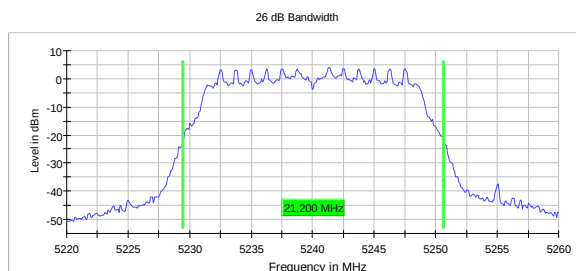
Occupied BW (99%), 5825 MHz, 802.11a, 6Mb



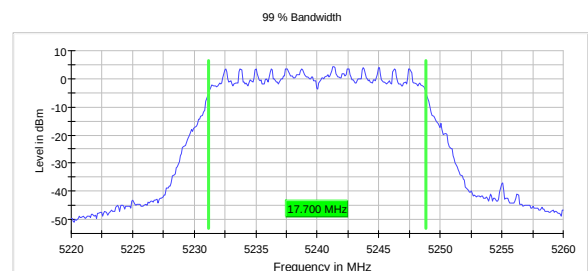
Emission BW (26 dB), 5180 MHz, 802.11n, HT20, MCS0



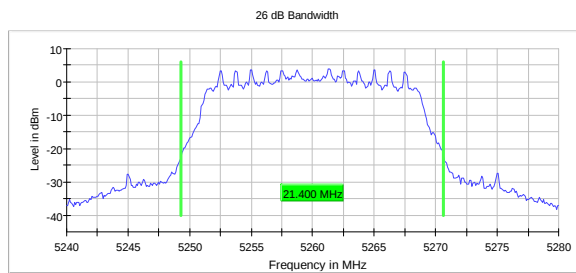
Occupied BW (99%), 5180 MHz, 802.11n, HT20, MCS0



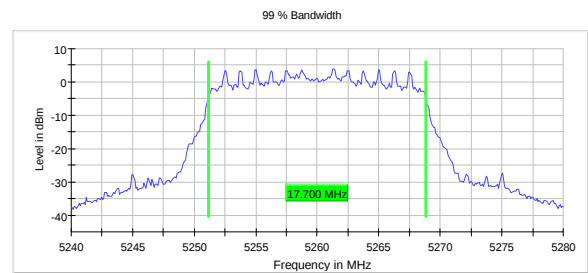
Emission BW (26 dB), 5240 MHz, 802.11n, HT20, MCS0



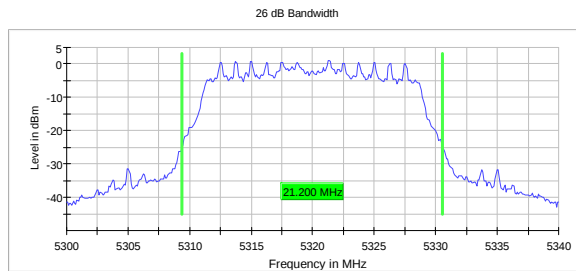
Occupied BW (99%), 5240 MHz, 802.11n, HT20, MCS0



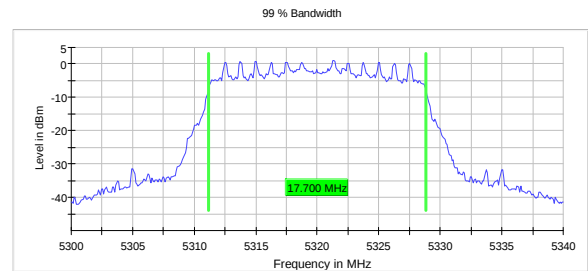
Emission BW (26 dB), 5260 MHz, 802.11n, HT20, MCS0



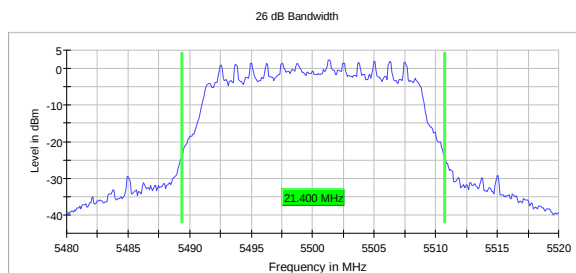
Occupied BW (99%), 5260 MHz, 802.11n, HT20, MCS0



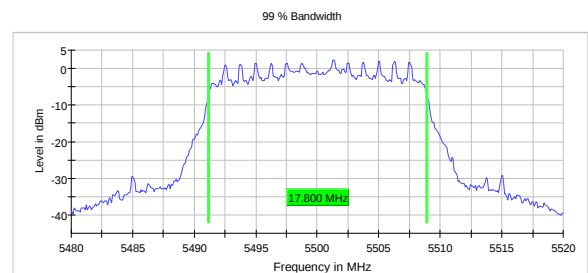
Emission BW (26 dB), 5320 MHz, 802.11n, HT20, MCS0



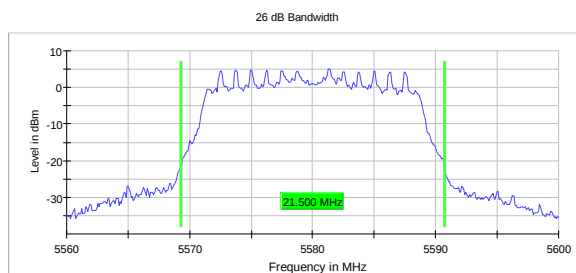
Occupied BW (99%), 5320 MHz, 802.11n, HT20, MCS0



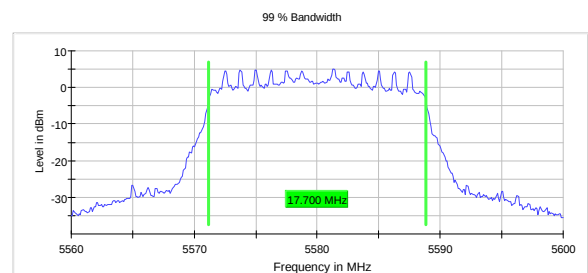
Emission BW (26 dB), 5500 MHz, 802.11n, HT20, MCS0



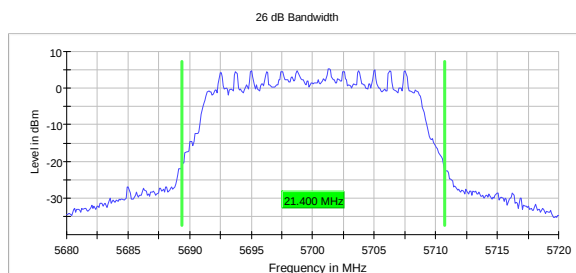
Occupied BW (99%), 5500 MHz, 802.11n, HT20, MCS0



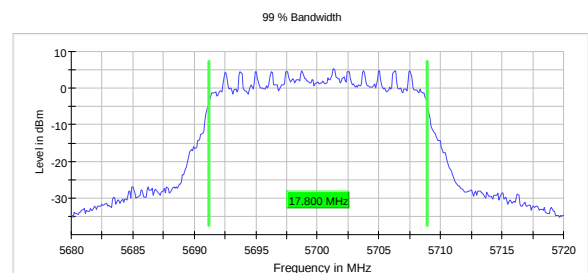
Emission BW (26 dB), 5580 MHz, 802.11n, HT20, MCS0



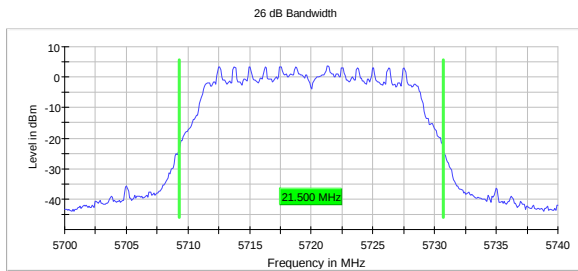
Occupied BW (99%), 5580 MHz, 802.11n, HT20, MCS0



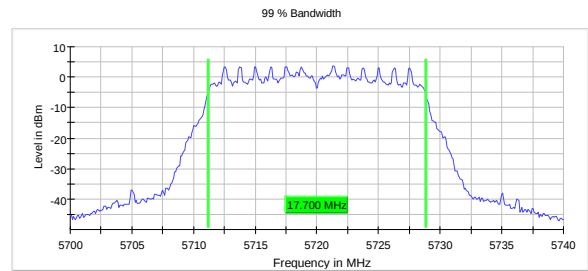
Emission BW (26 dB), 5700 MHz, 802.11n, HT20, MCS0



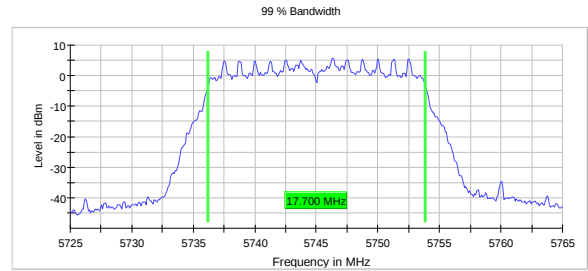
Occupied BW (99%), 5700 MHz, 802.11n, HT20, MCS0



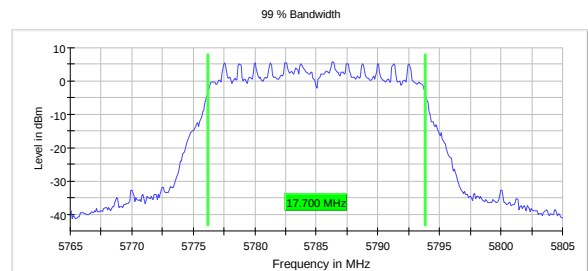
Emission BW (26 dB), 5720 MHz, 802.11n, HT20, MCS0



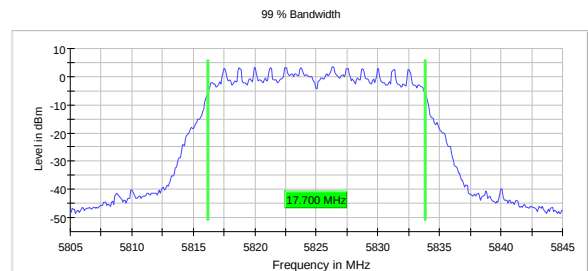
Occupied BW (99%), 5720 MHz, 802.11n, HT20, MCS0



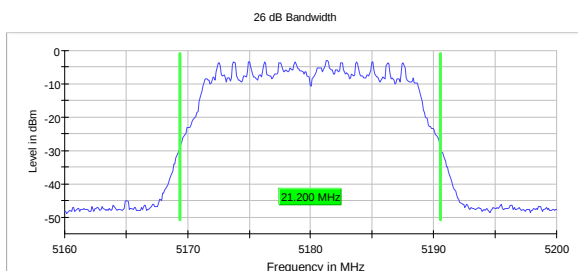
Occupied BW (99%), 5745 MHz, 802.11n, HT20, MCS0



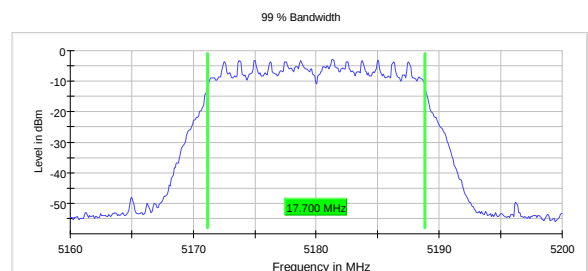
Occupied BW (99%), 5785 MHz, 802.11n, HT20, MCS0



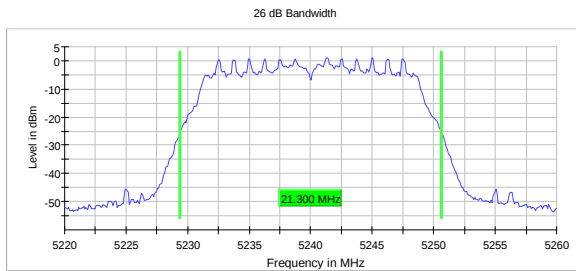
Occupied BW (99%), 5825 MHz, 802.11n, HT20, MCS0



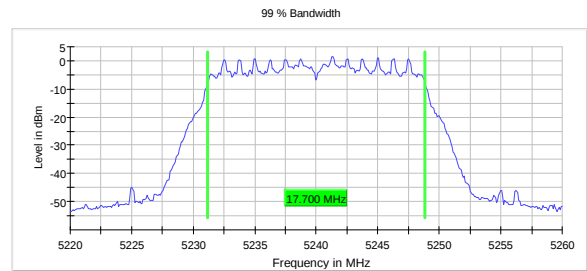
Emission BW (26 dB), 5180 MHz, 802.11n, HT20, MCS8, MIMO



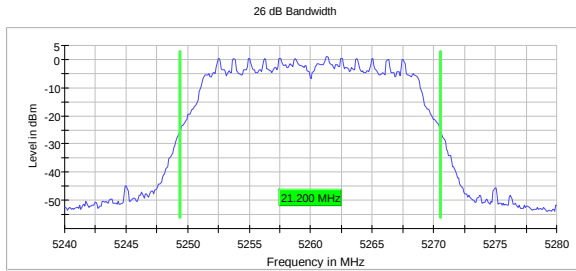
Occupied BW (99%), 5180 MHz, 802.11n, HT20, MCS8, MIMO



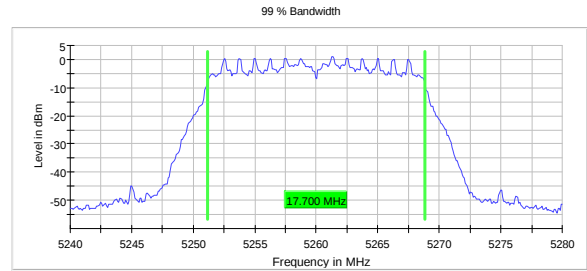
Emission BW (26 dB), 5240 MHz, 802.11n, HT20, MCS8, MIMO



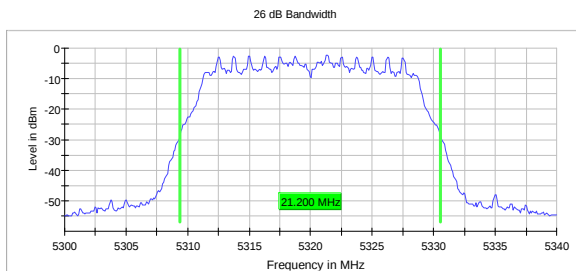
Occupied BW (99%), 5240 MHz, 802.11n, HT20, MCS8, MIMO



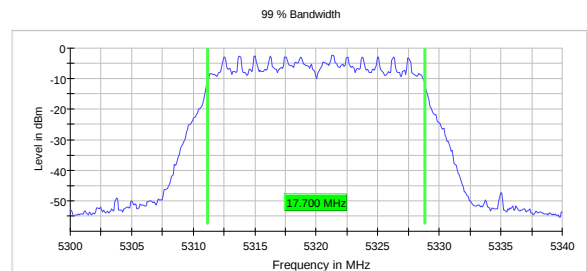
Emission BW (26 dB), 5260 MHz, 802.11n, HT20, MCS8, MIMO



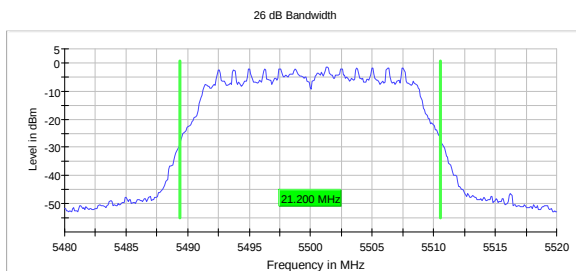
Occupied BW (99%), 5260 MHz, 802.11n, HT20, MCS8, MIMO



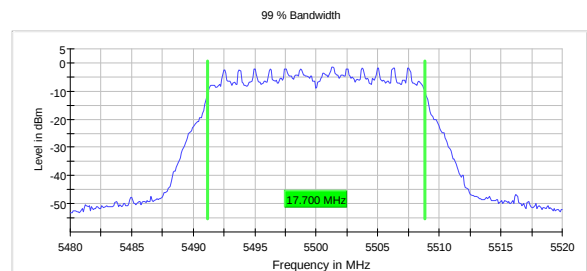
Emission BW (26 dB), 5320 MHz, 802.11n, HT20, MCS8, MIMO



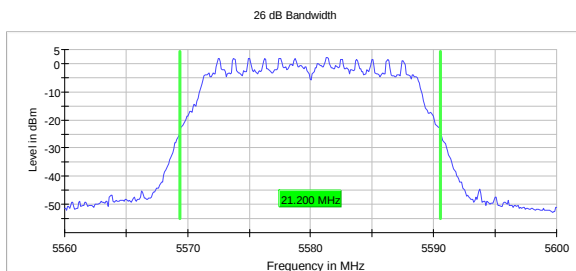
Occupied BW (99%), 5320 MHz, 802.11n, HT20, MCS8, MIMO



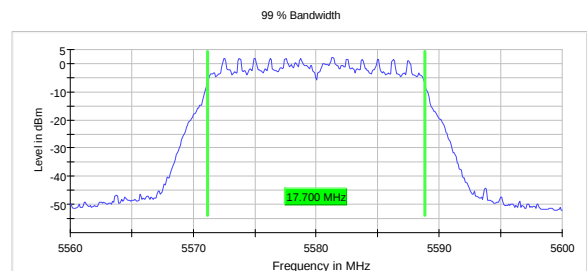
Emission BW (26 dB), 5500 MHz, 802.11n, HT20, MCS8, MIMO



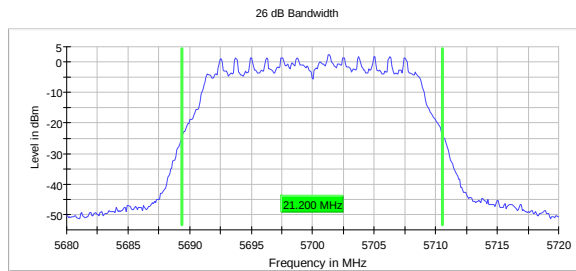
Occupied BW (99%), 5500 MHz, 802.11n, HT20, MCS8, MIMO



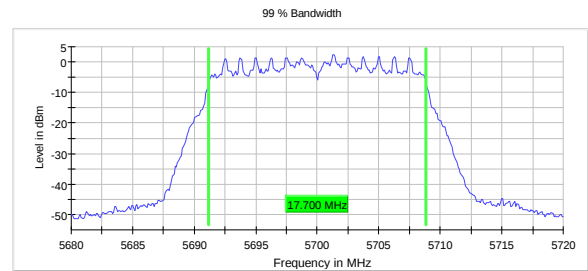
Emission BW (26 dB), 5580 MHz, 802.11n, HT20, MCS8, MIMO



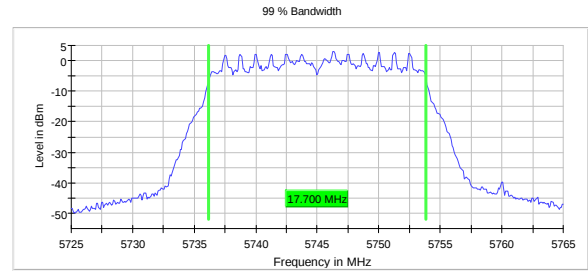
Occupied BW (99%), 5580 MHz, 802.11n, HT20, MCS8, MIMO



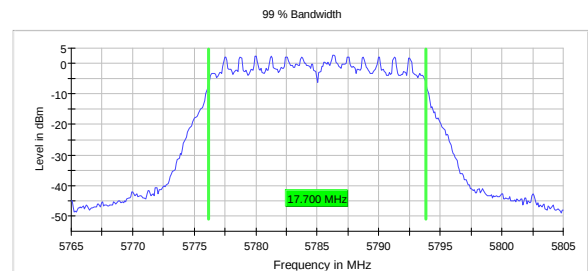
Emission BW (26 dB), 5700 MHz, 802.11n, HT20, MCS8, MIMO



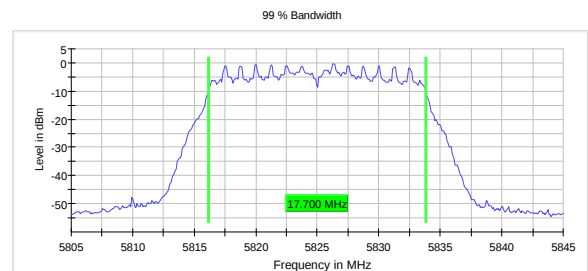
Occupied BW (99%), 5700 MHz, 802.11n, HT20, MCS8, MIMO



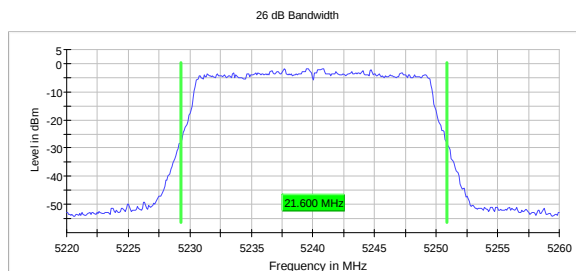
Occupied BW (99%), 5745 MHz, 802.11n, HT20, MCS8, MIMO



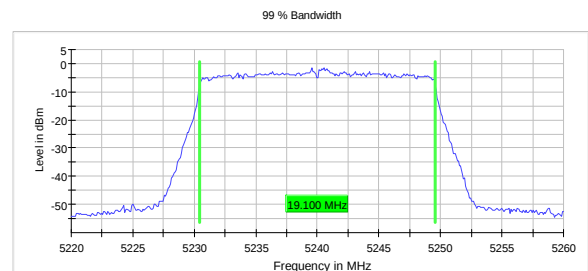
Occupied BW (99%), 5785 MHz, 802.11n, HT20, MCS8, MIMO



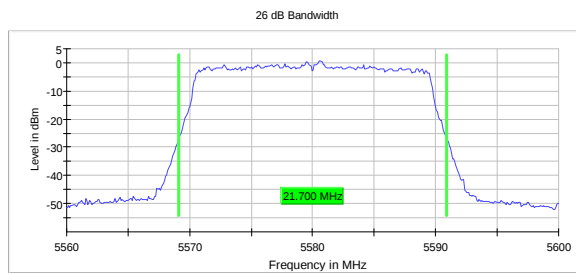
Occupied BW (99%), 5825 MHz, 802.11n, HT20, MCS8, MIMO



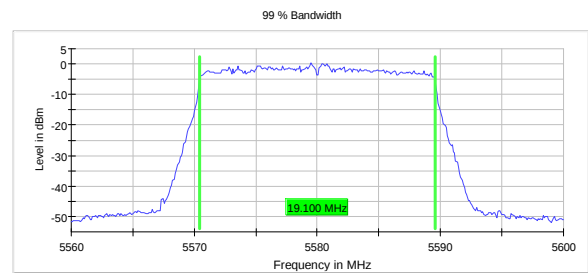
Emission BW (26 dB), 5240 MHz, 802.11ax, HT20, MCS0, MIMO



Occupied BW (99%), 5240 MHz, 802.11ax, HT20, MCS0, MIMO



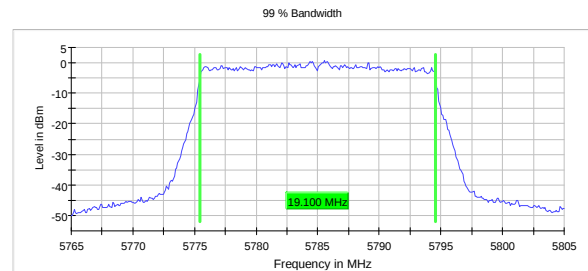
Emission BW (26 dB), 5580 MHz, 802.11ax, HT20, MCS0, MIMO



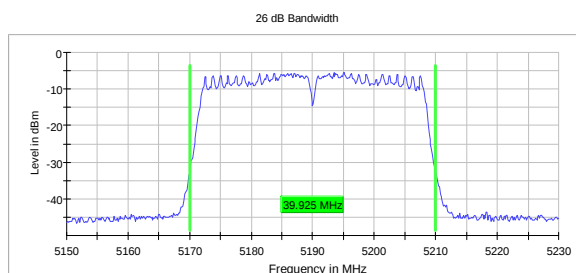
Occupied BW (99%), 5580 MHz, 802.11ax, HT20, MCS0, MIMO



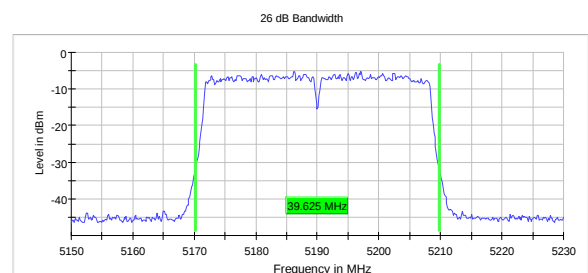
Emission BW (26 dB), 5190 MHz, 802.11ac, HT40, MCS0



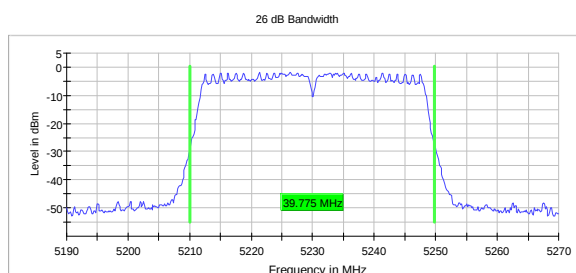
Occupied BW (99%), 5190 MHz, 802.11ac, HT40, MCS0, MIMO



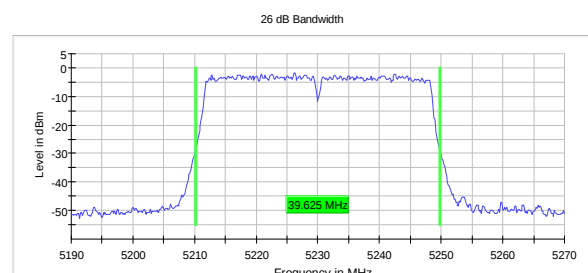
Emission BW (26 dB), 5230 MHz, 802.11ac, HT40, MCS0



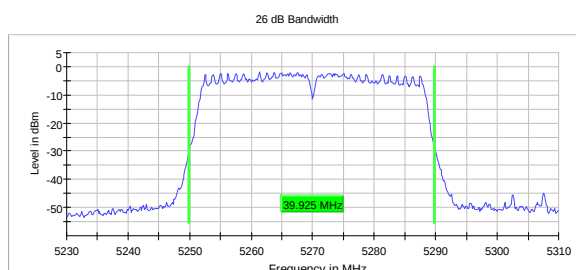
MCS7



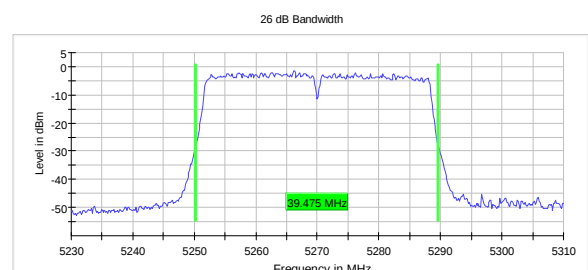
Emission BW (26 dB), 5270 MHz, 802.11ac, HT40, MCS0



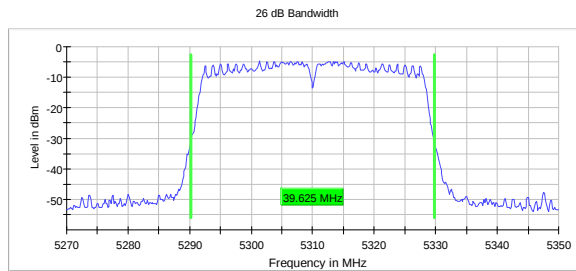
MCS7



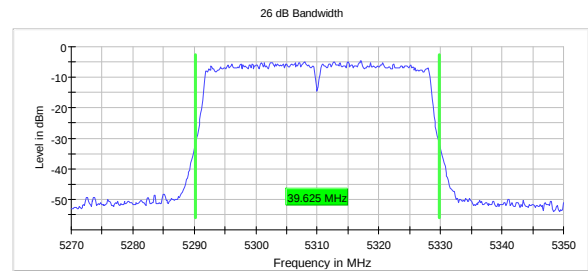
Emission BW (26 dB), 5270 MHz, 802.11ac, HT40, MCS0



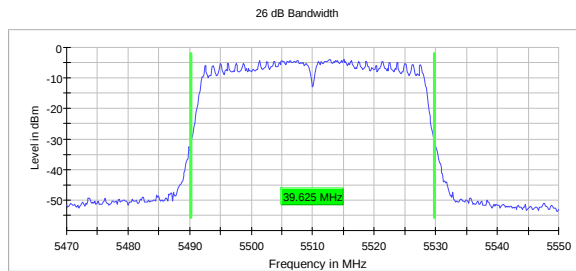
MCS7



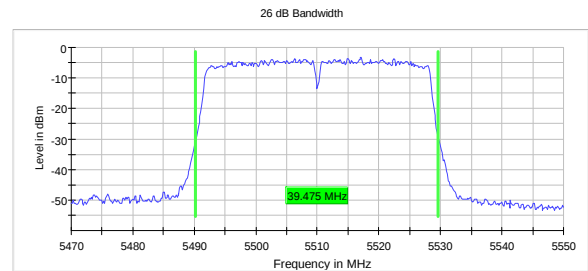
Emission BW (26 dB), 5310 MHz, 802.11ac, HT40, MCS0



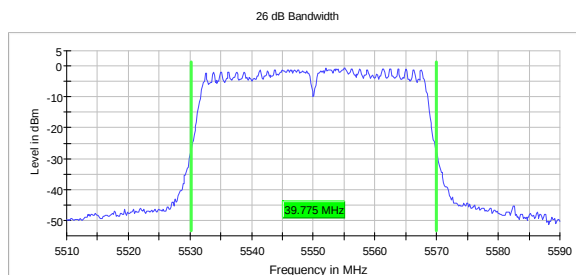
MCS7



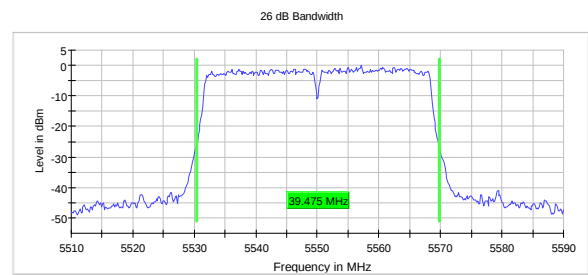
Emission BW (26 dB), 5510 MHz, 802.11ac, HT40, MCS0



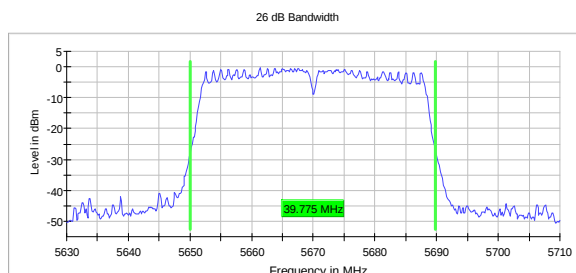
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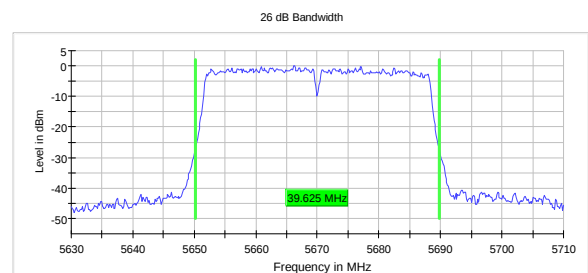
Emission BW (26 dB), 5550 MHz, 802.11ac, HT40, MCS0



MCS7



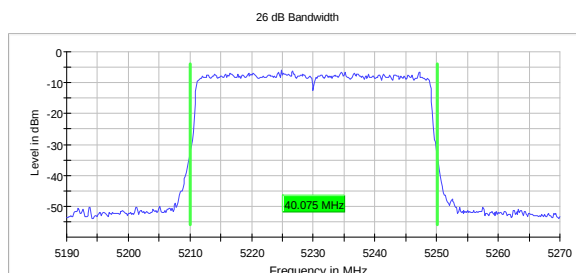
Emission BW (26 dB), 5670 MHz, 802.11ac, HT40, MCS0



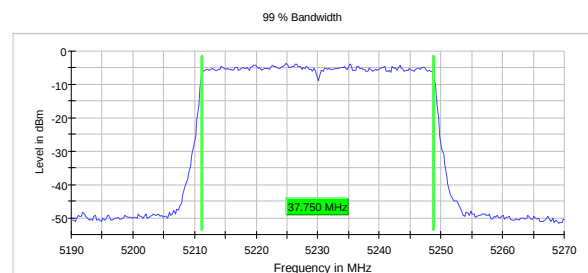
MCS7

Emission BW (26 dB), 5710 MHz, 802.11ac, HT40, MCS0

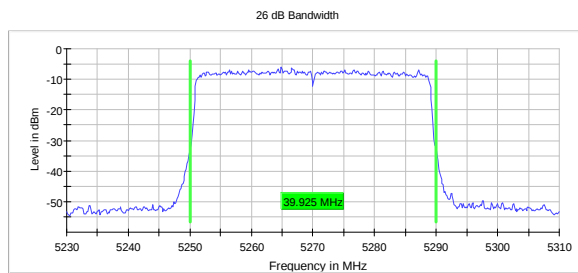
MCS7



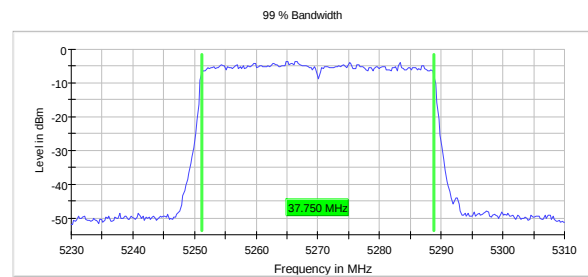
Emission BW (26 dB), 5230 MHz, 802.11ax, HT20, MIMO



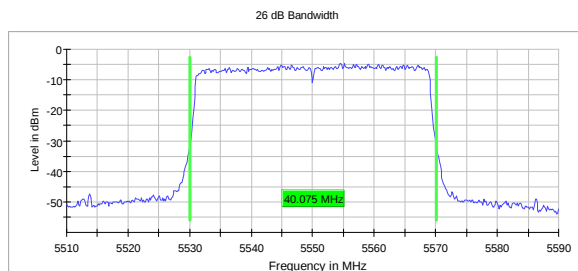
Occupied BW (99%), 5230 MHz, 802.11ax, HT20, MIMO



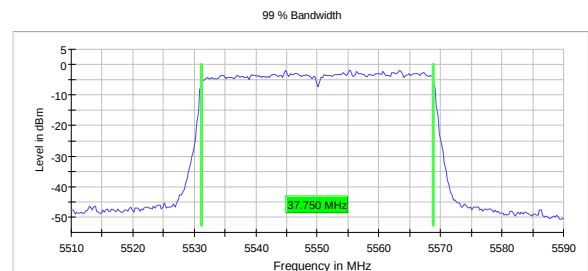
Emission BW (26 dB), 5270 MHz, 802.11ax, HT20, MIMO



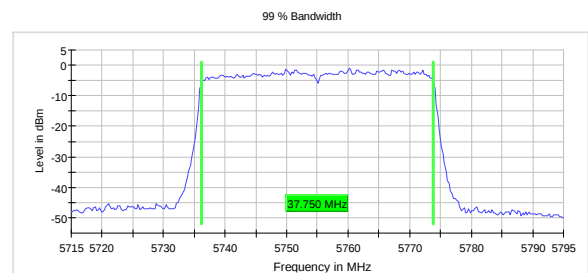
Occupied BW (99%), 5270 MHz, 802.11ax, HT20, MIMO



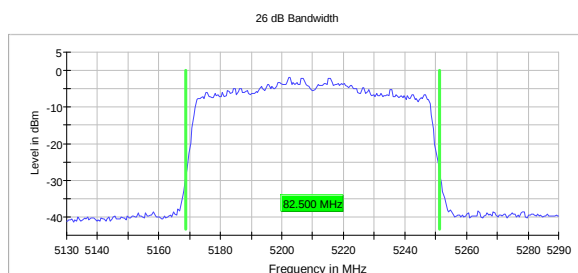
Emission BW (26 dB), 5550 MHz, 802.11ax, HT20, MIMO



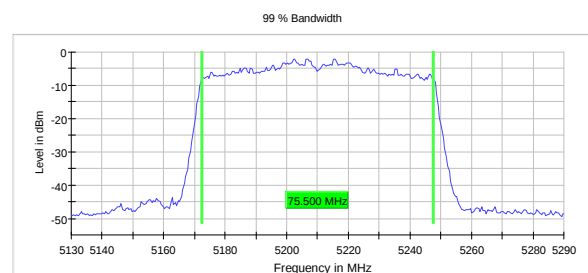
Occupied BW (99%), 5550 MHz, 802.11ax, HT20, MIMO



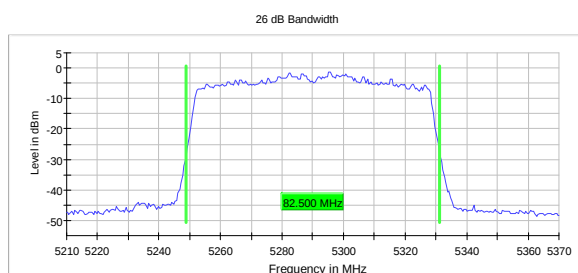
Occupied BW (99%), 5755 MHz, 802.11ax, HT20, MIMO



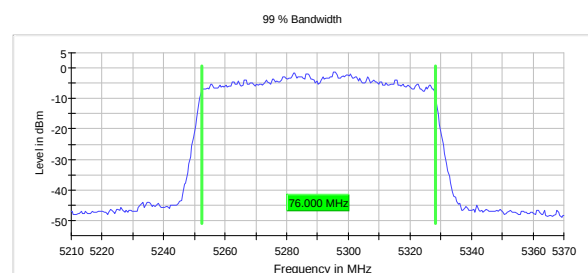
Emission BW (26 dB), 5210 MHz, 802.11ac, HT80, MCS0



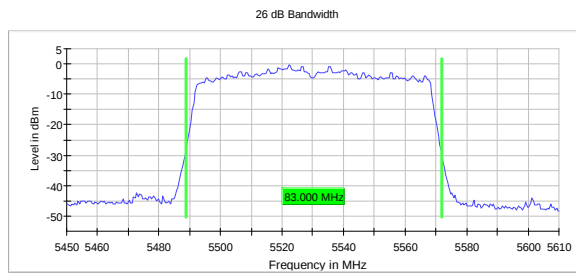
Occupied BW (99%), 5210 MHz, 802.11ac, HT80, MCS0



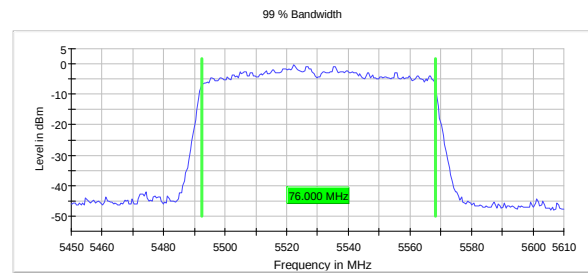
Emission BW (26 dB), 5290 MHz, 802.11ac, HT80, MCS0



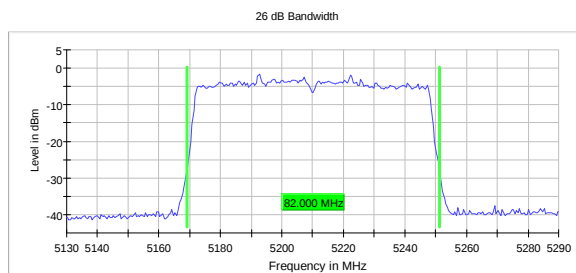
Occupied BW (99%), 5290 MHz, 802.11ac, HT80, MCS0



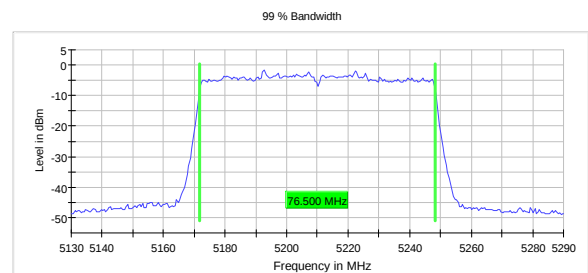
Emission BW (26 dB), 5530 MHz, 802.11ac, HT80, MCS0



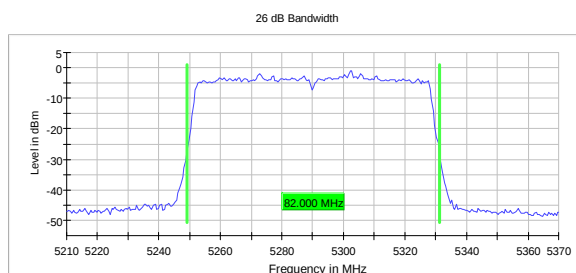
Occupied BW (99%), 5530 MHz, 802.11ac, HT80, MCS0



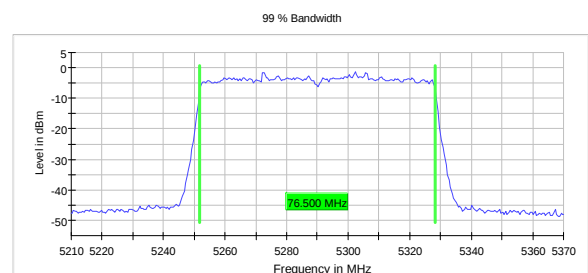
Emission BW (26 dB), 5210 MHz, 802.11ac, HT80, MCS7



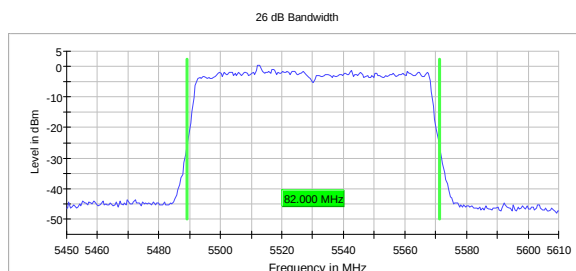
Occupied BW (99%), 5210 MHz, 802.11ac, HT80, MCS7



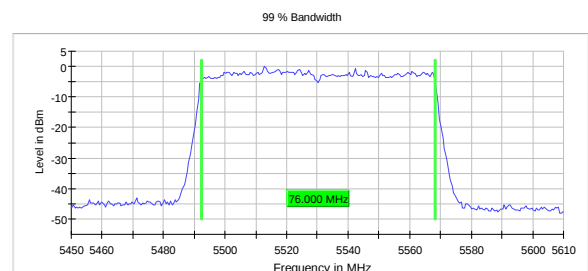
Emission BW (26 dB), 5290 MHz, 802.11ac, HT80, MCS7



Occupied BW (99%), 5290 MHz, 802.11ac, HT80, MCS7



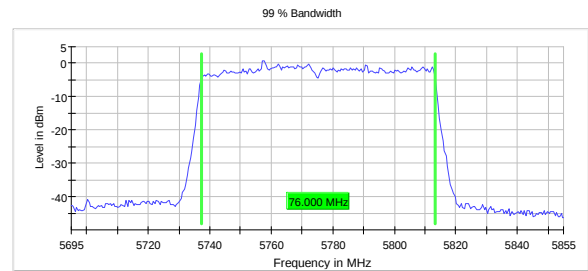
Emission BW (26 dB), 5530 MHz, 802.11ac, HT80, MCS7



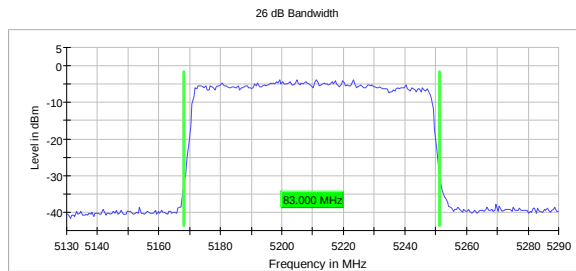
Occupied BW (99%), 5530 MHz, 802.11ac, HT80, MCS7

Emission BW (26 dB), 5690 MHz, 802.11ac, HT80, MCS7

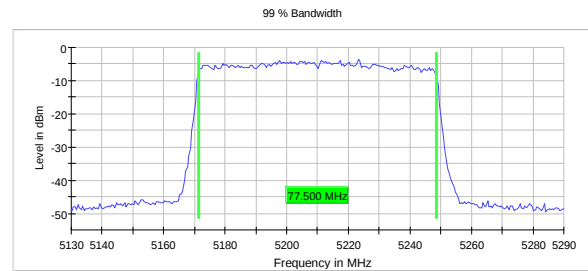
Occupied BW (99%), 5690 MHz, 802.11ac, HT80, MCS7



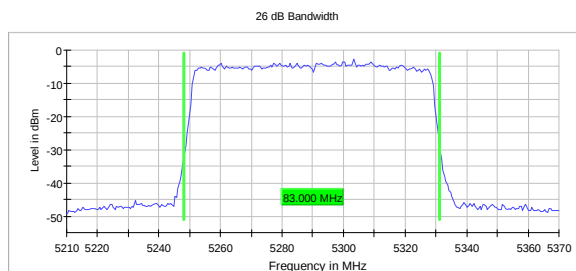
Occupied BW (99%), 5775 MHz, 802.11ac, HT80, MCS7



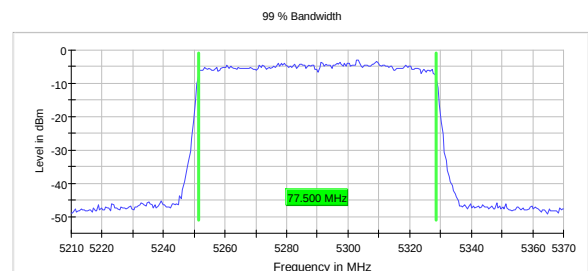
Emission BW (26 dB), 5210 MHz, 802.11ac, HT80, MCS11



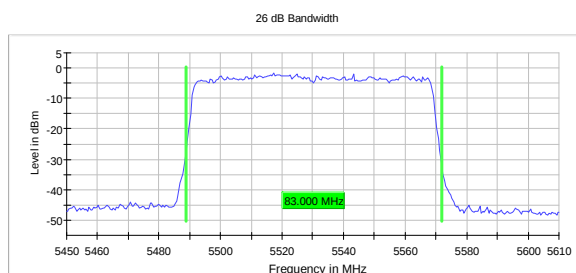
Occupied BW (99%), 5210 MHz, 802.11ac, HT80, MCS11



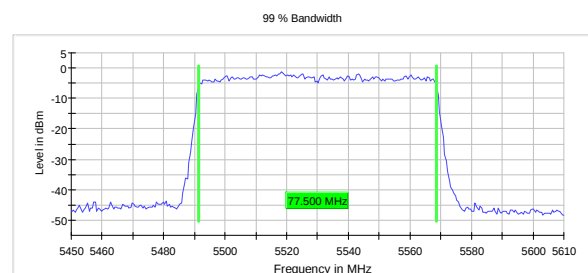
Emission BW (26 dB), 5290 MHz, 802.11ac, HT80, MCS11



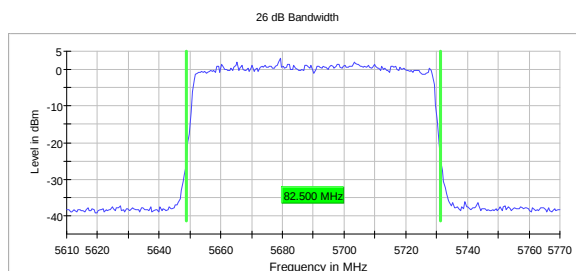
Occupied BW (99%), 5290 MHz, 802.11ac, HT80, MCS11



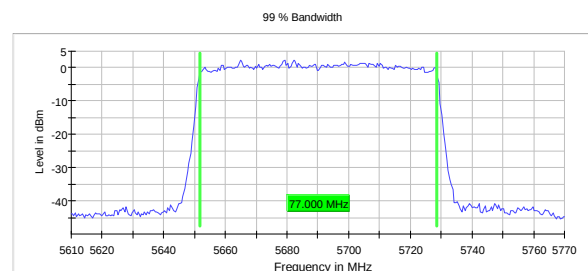
Emission BW (26 dB), 5530 MHz, 802.11ac, HT80, MCS11



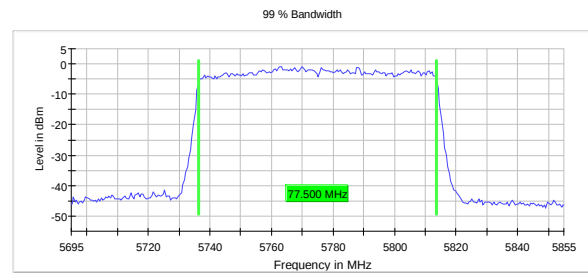
Occupied BW (99%), 5530 MHz, 802.11ac, HT80, MCS11



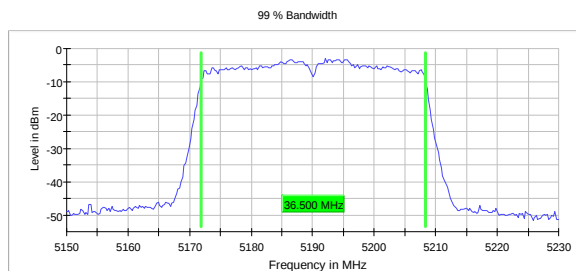
Emission BW (26 dB), 5690 MHz, 802.11ac, HT80, MCS7



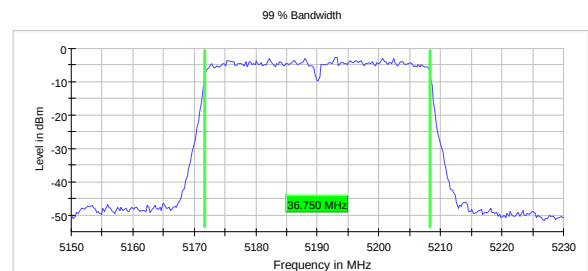
Occupied BW (99%), 5690 MHz, 802.11ac, HT80, MCS7



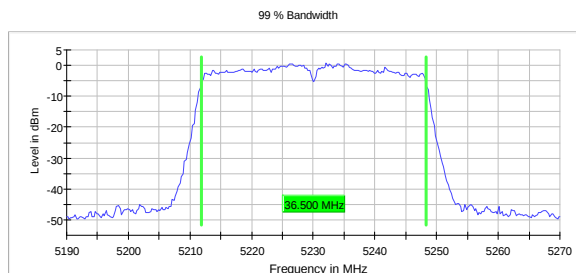
Occupied BW (99%), 5775 MHz, 802.11ax, HT80, MCS11



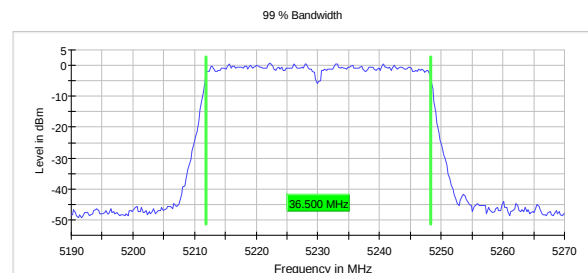
Occupied BW (99%), 5190 MHz, 802.11n, HT40, MCS0



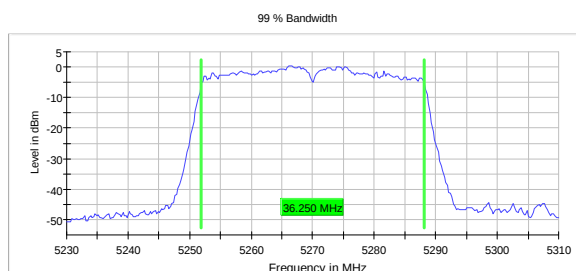
MCS7



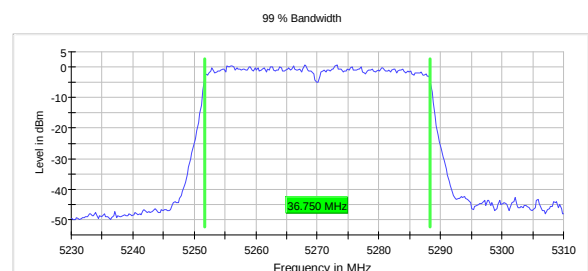
Occupied BW (99%), 5230 MHz, 802.11n, HT40, MCS0



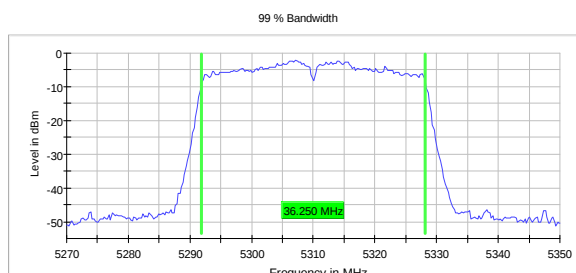
MCS7



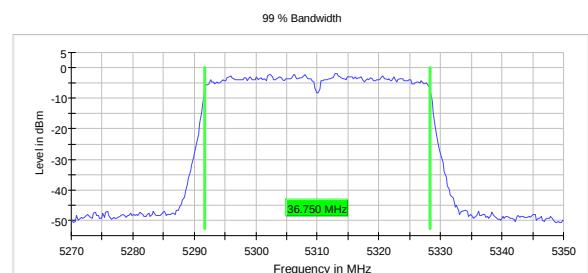
Occupied BW (99%), 5270 MHz, 802.11n, HT40, MCS0



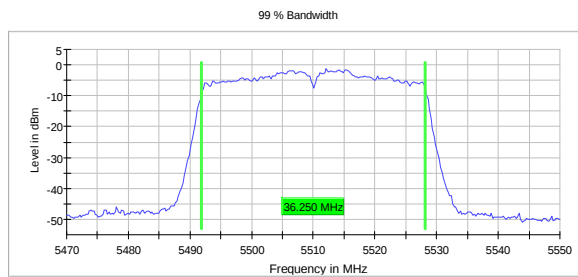
MCS7



Occupied BW (99%), 5310 MHz, 802.11n, HT40, MCS0

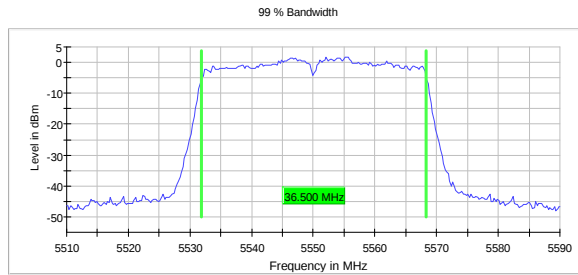
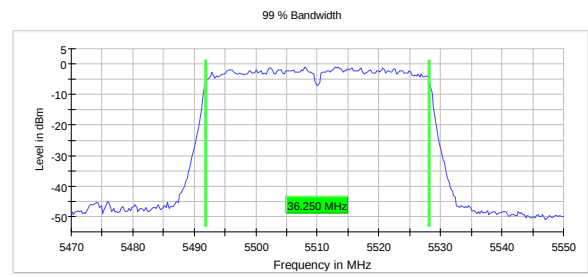


MCS7



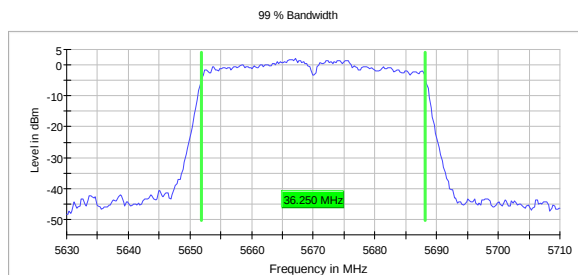
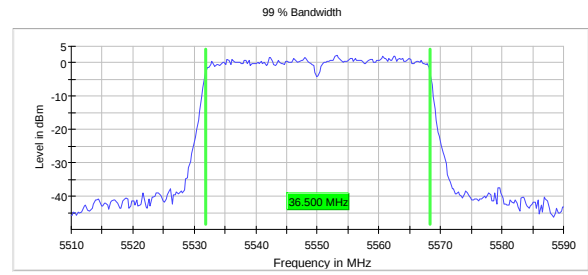
Occupied BW (99%), 5510 MHz, 802.11n, HT40, MCS0

MCS7



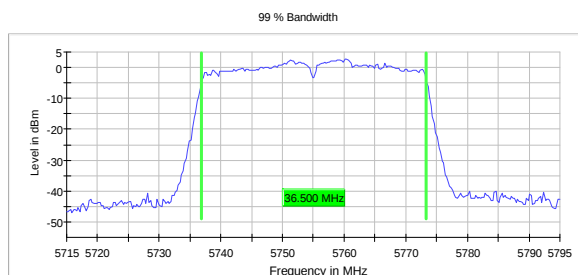
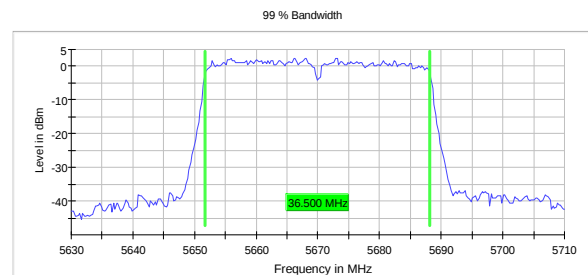
Occupied BW (99%), 5550 MHz, 802.11n, HT40, MCS0

MCS7



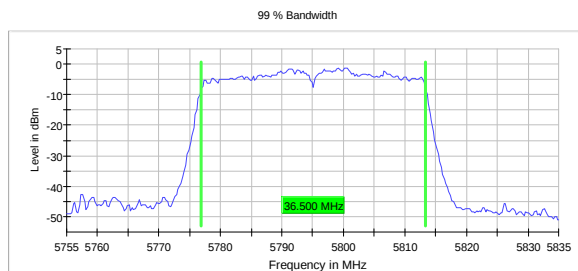
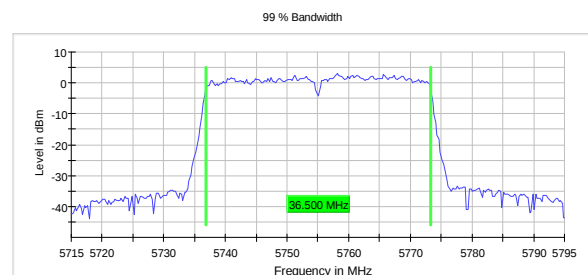
Occupied BW (99%), 5670 MHz, 802.11n, HT40, MCS0

MCS7



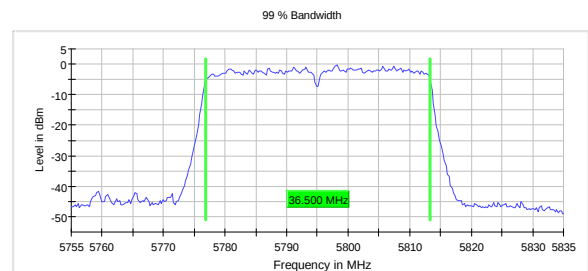
Occupied BW (99%), 5755 MHz, 802.11n, HT40, MCS0

MCS7



Occupied BW (99%), 5795 MHz, 802.11n, HT40, MCS0

MCS7



4.4 DTS Bandwidth

Para. No.: 15.407(e)

ISED RSS-247, Issue 2, Clause 6.2.4

Measurement procedure: ANSI C63.10-2013 Clause 11.8, Option 1

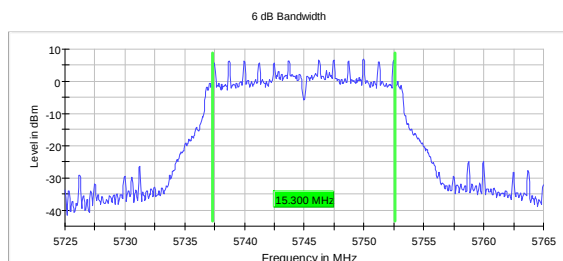
Test Results: Complies

Measurement Data:

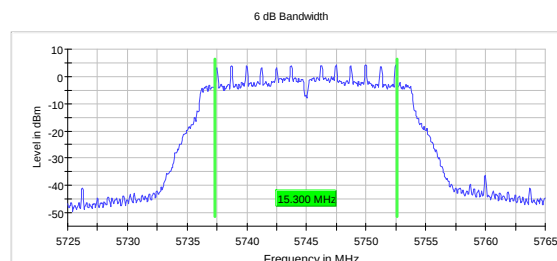
Ch. No.	Nominal Frequency (MHz)	DTS Bandwidth, Measured Values (MHz)						
		802.11a	802.11n HT20	802.11ax HT20	802.11n HT40	802.11ax HT40	802.11ac HT80	802.11ac HT80
149	5745	15.3	15.3					
157	5785	15.3	15.3	19.1				
165	5825	15.3	15.3					
151	5755				35.3	37.8		
159	5795				35.3	37.8		
155	5775						75.2	77.5

Limit:

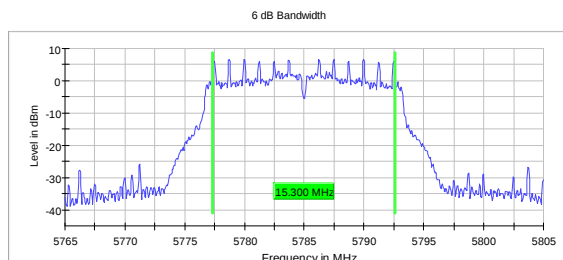
Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.



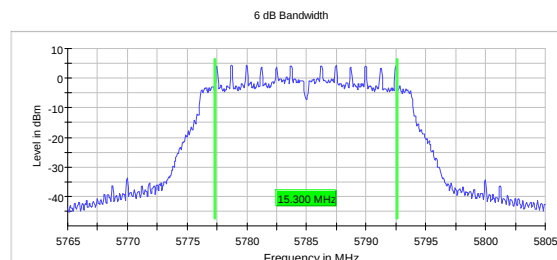
DTS BW, 5745 MHz, 802.11a, 6Mb



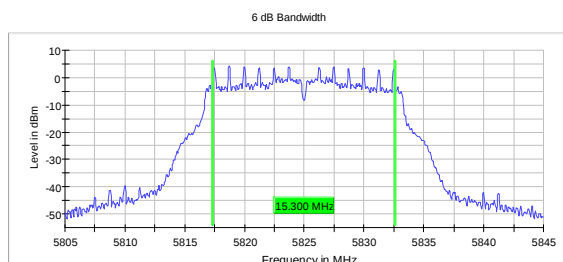
DTS BW, 5745 MHz, 802.11n, HT20



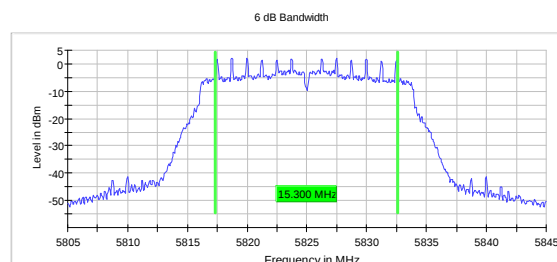
DTS BW, 5785 MHz, 802.11a, 6Mb



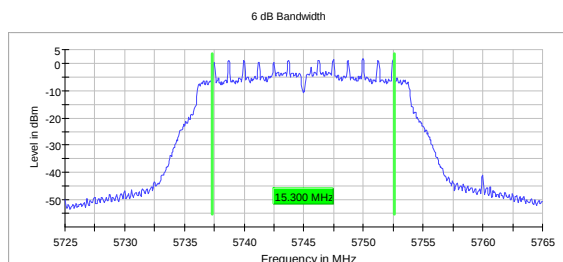
DTS BW, 5785 MHz, 802.11n, HT20



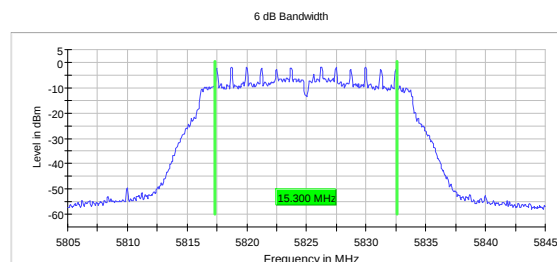
DTS BW, 5825 MHz, 802.11a, 6Mb



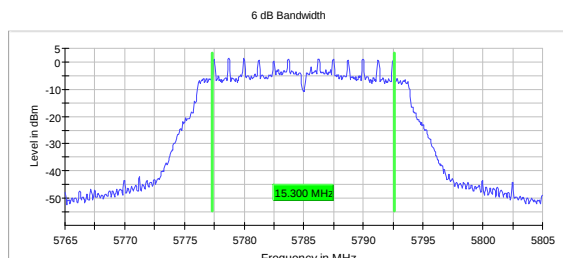
DTS BW, 5825 MHz, 802.11n, HT20



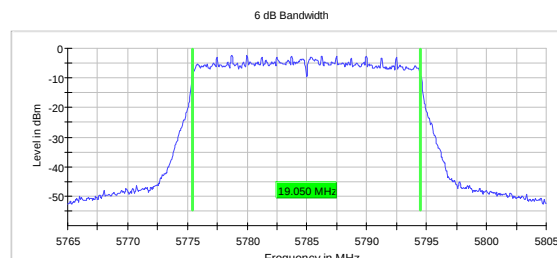
DTS BW, 5745 MHz, 802.11n, HT20, MIMO



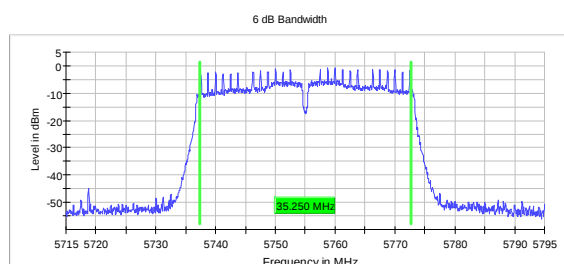
DTS BW, 5825 MHz, 802.11n, HT20, MIMO



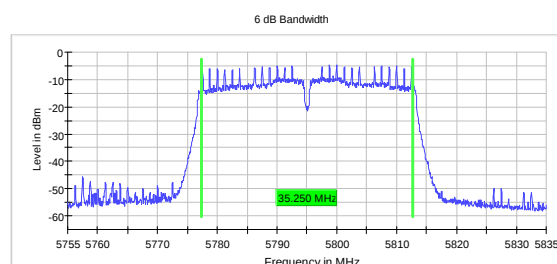
DTS BW, 5785 MHz, 802.11n, HT20, MIMO



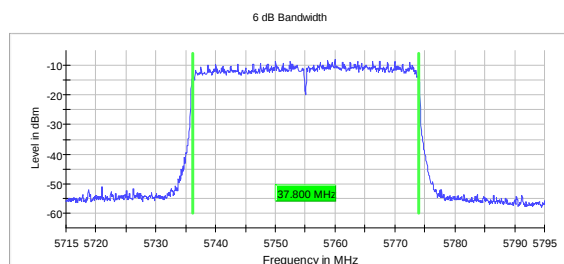
DTS BW, 5785 MHz, 802.11ax, HT20, MIMO



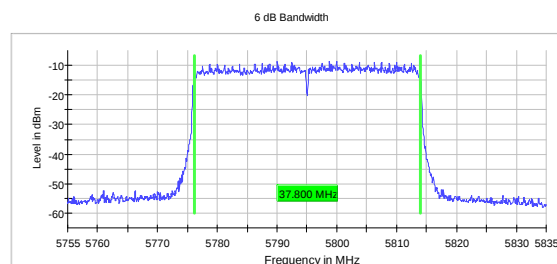
DTS BW, 5755 MHz, 802.11n, HT40, MIMO



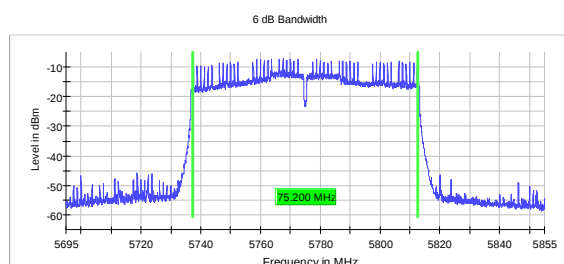
DTS BW, 5795 MHz, 802.11n, HT40, MIMO



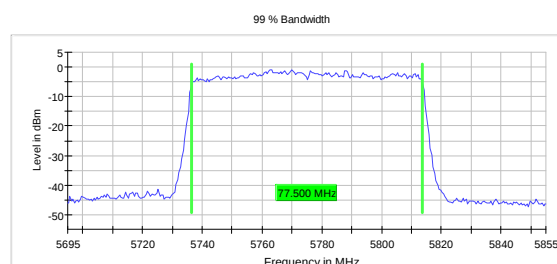
DTS BW, 5755 MHz, 802.11ax, HT40, MIMO



DTS BW, 5795 MHz, 802.11ax, HT40, MIMO



Emission BW, 5775 MHz, 802.11ac, HT80, MIMO



Emission BW, 5775 MHz, 802.11ax, HT80, MIMO

4.5 Peak Power Spectral Density

FCC 15.407(a)

ISED RSS-247, Issue 2, Clause 6.2

Measurement procedure: ANSI C63.10-2013 Clause 12.5

Test Results: Complies

Measurement Data:

Ch. No.	Nominal Frequency (MHz)	Peak Power Spectral Density, Measured Values (dBm/MHz)			
		802.11a 6M	802.11n HT20	802.11n HT40	802.11ac HT80
36	5180	-0.7	-2.8		
44	5220	2.7	0.5		
48	5240	2.8	0.6		
52	5260	2.7	0.7		
56	5280	2.6	0.2		
64	5320	-0.4	-2.3		
100	5500	0.7	-1.5		
116	5580	4.2	1.4		
140	5700	4.2	1.5		
144	5720	3.7	0.8		
38	5190			-5.8	
46	5230			-2.5	
54	5270			-2.9	
62	5310			-5.8	
102	5510			-5.8	
110	5550			-2.3	
134	5670			-2.4	
142	5710			-2.5	
42	5210				-9.7
58	5290				-9.7
106	5530				-9.8
138	5690				-6.5

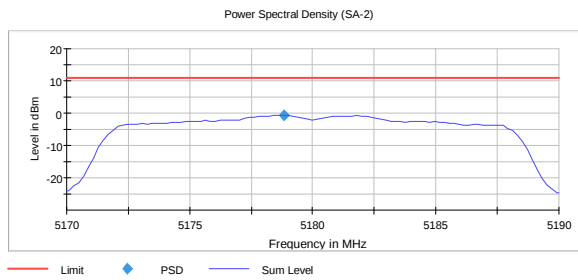
Ch. No.	Nominal Frequency (MHz)	Peak Power Spectral Density, Measured Values (dBm/500kHz)			
		802.11a 6M	802.11n HT20	802.11n HT40	802.11ac HT80
149	5745	1.7	-1.2		
157	5785	1.6	-1.0		
165	5825	-1.0	-3.3		
149	5755			-4.8	
159	5795			-8.2	
155	5775				-11.7

Antenna Gain is less than 6 dBi for all frequencies above.

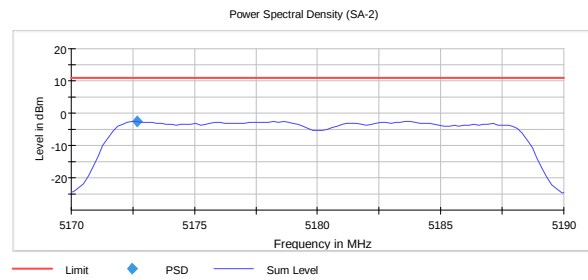
Maximum value for each channel and bandwidth is reported above.

Limits:

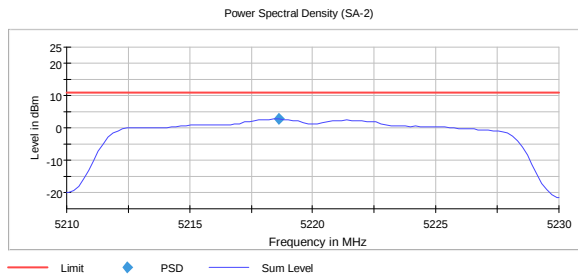
Frequency Band	FCC 15.407(a)	RSS-247, Issue 2
5150 – 5250 MHz	Less than 17 dBm/MHz for master device Less than 11 dBm/MHz for client device	Less than 10 dBm/MHz e.i.r.p. (only indoor allowed)
5250 – 5350 MHz	Less than 11 dBm/MHz	Less than 11 dBm/MHz
5470 – 5725 MHz	Less than 11 dBm/MHz	Less than 11 dBm/MHz
5725 – 5825 MHz	Less than 30 dBm/500kHz	Less than 30 dBm/500kHz
	If Antenna Gain is more than 6 dBi the limit above is reduced by the amount exceeding 6 dBi	



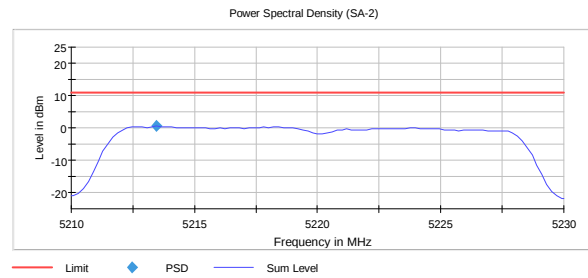
PSD, 5180 MHz, 802.11a, 6Mb -0.7 dBm



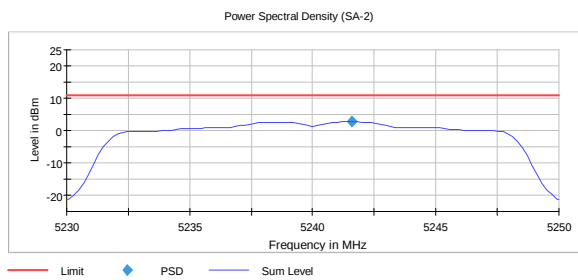
54Mb -2.5 dBm



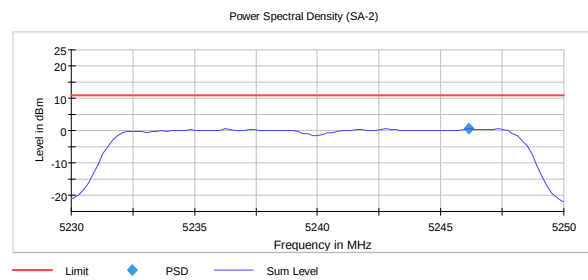
PSD, 5220 MHz, 802.11a, 6Mb 2.7 dBm



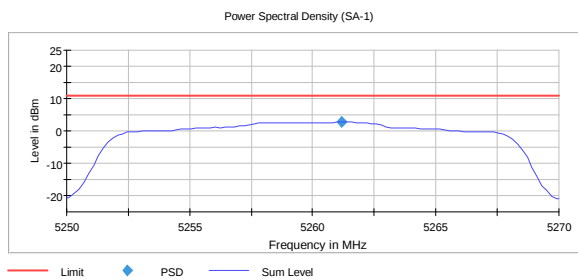
54Mb 0.5 dBm



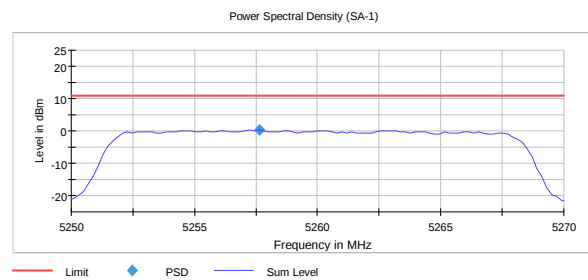
PSD, 5240 MHz, 802.11a, 6Mb 2.8 dBm



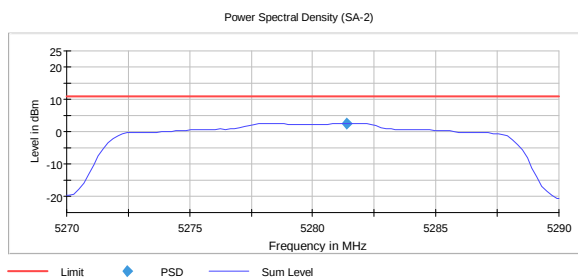
54Mb 0.5 dBm



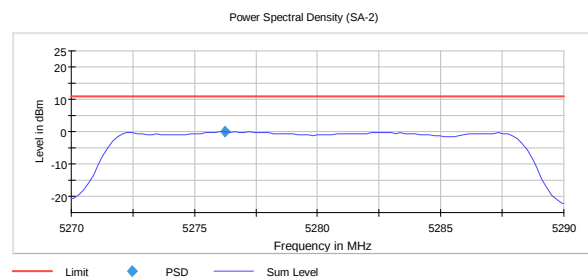
PSD, 5260 MHz, 802.11a, 6Mb 2.7 dBm



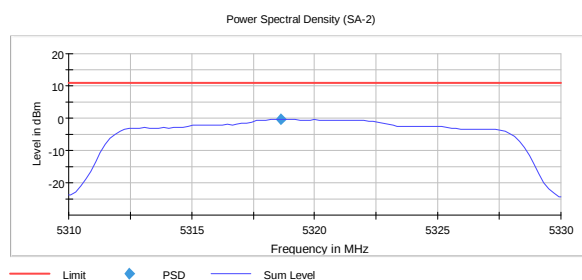
54Mb 0.2 dBm



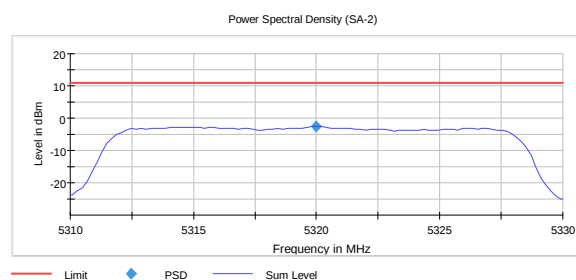
PSD, 5280 MHz, 802.11a, 6Mb 2.6 dBm



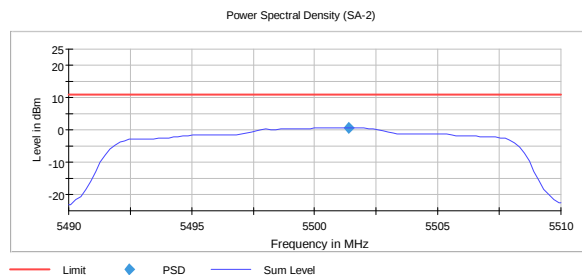
54Mb -0.1 dBm



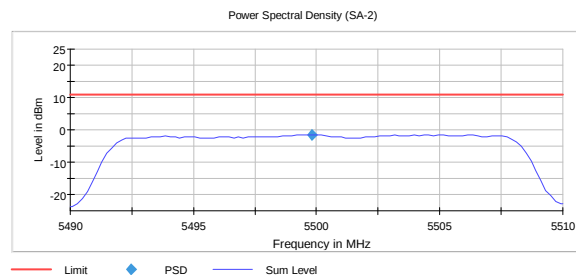
PSD, 5320 MHz, 802.11a, 6Mb -0.4 dBm



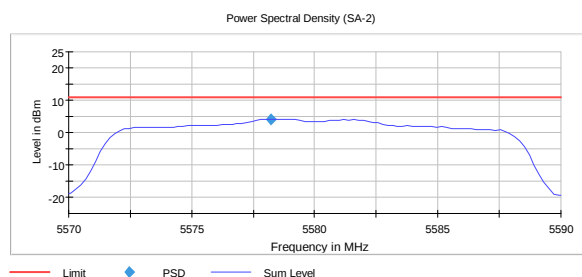
54Mb -2.5 dBm



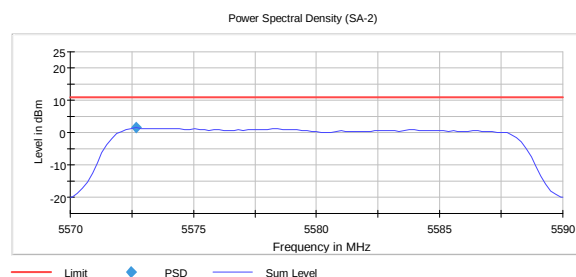
PSD, 5500 MHz, 802.11a, 6Mb 0.7 dBm



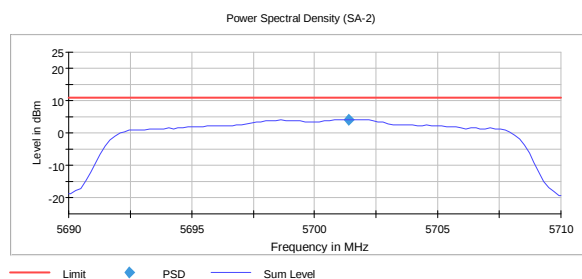
54Mb -1.4 dBm



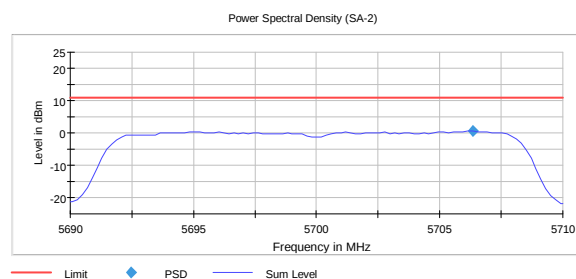
PSD, 5580 MHz, 802.11a, 6Mb 4.2 dBm



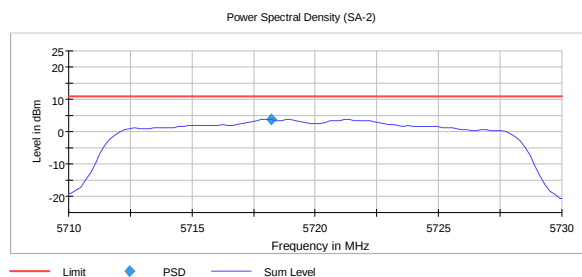
54Mb 1.5 dBm



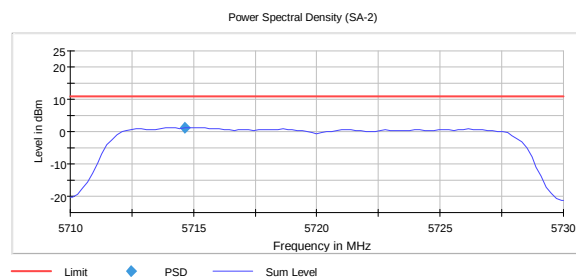
PSD, 5700 MHz, 802.11a, 6Mb 4.2 dBm



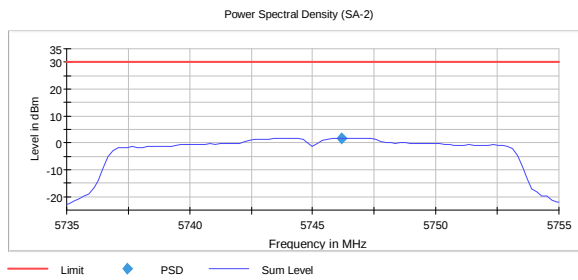
54Mb 0.6 dBm



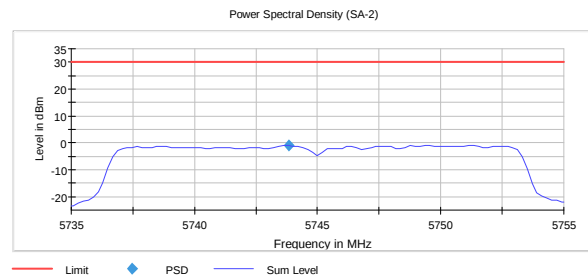
PSD, 5720 MHz, 802.11a, 6Mb 3.7 dBm



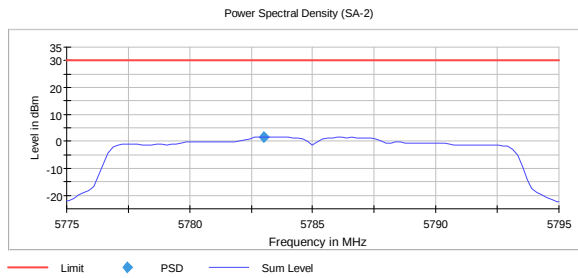
54Mb 1.2 dBm



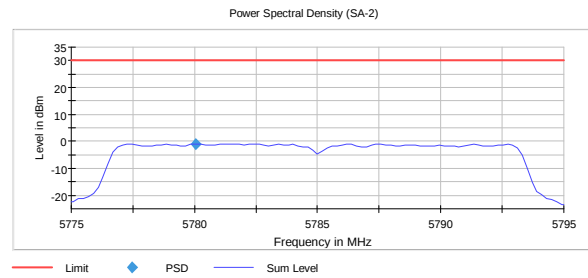
PSD, 5745 MHz, 802.11a, 6Mb 1.7 dBm



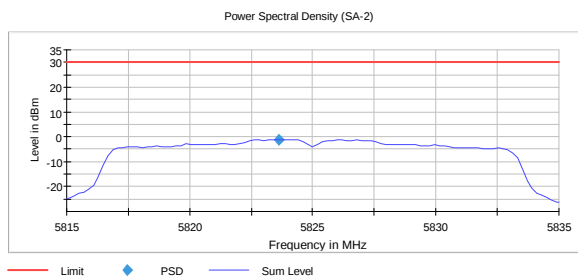
54Mb -0.8 dBm



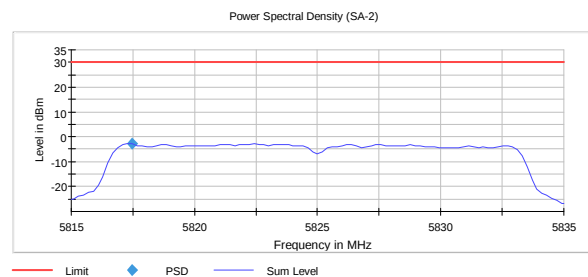
PSD, 5785 MHz, 802.11a, 6Mb 1.6 dBm



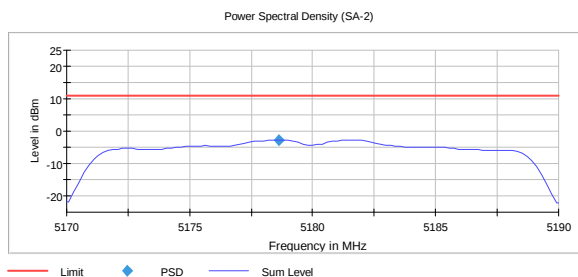
54Mb -0.8 dBm



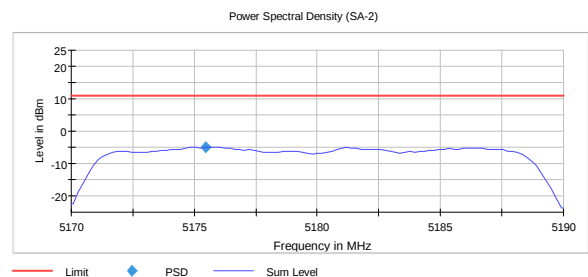
PSD, 5825 MHz, 802.11a, 6Mb -1.0 dBm



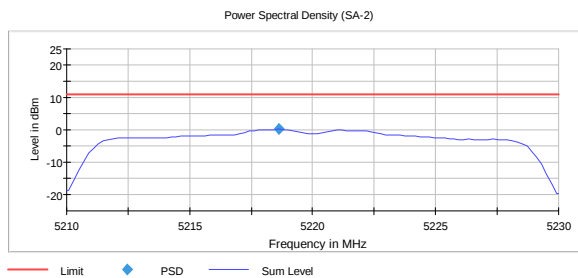
54Mb -2.9 dBm



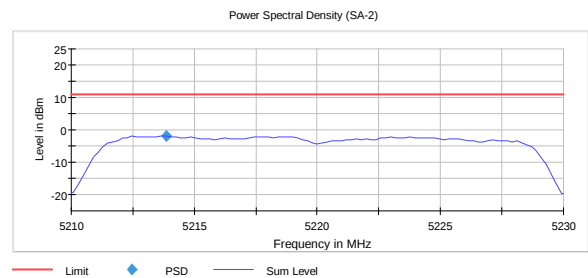
PSD, 5180 MHz, 802.11n, HT20, MCS0 -2.8 dBm



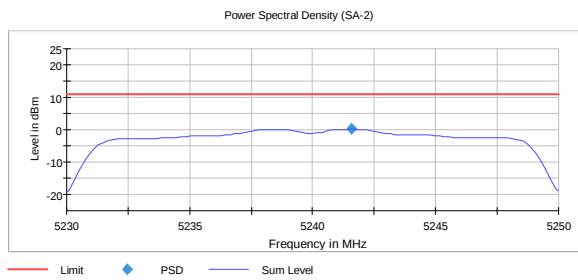
MCS7 -5.1 dBm



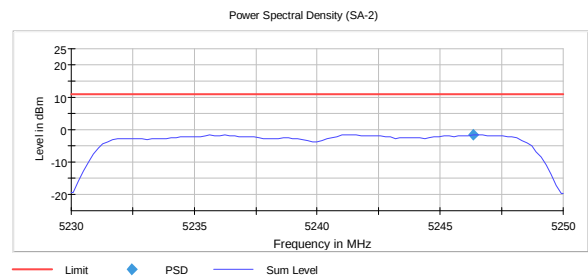
PSD, 5220 MHz, 802.11n, HT20, MCS0 0.2 dBm



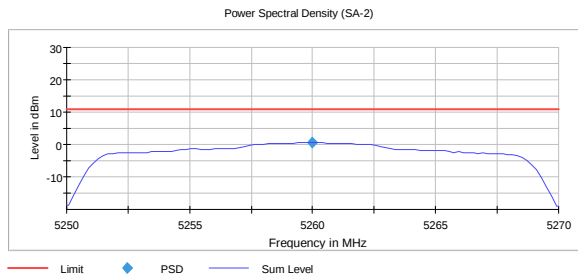
MCS7 -1.8 dBm



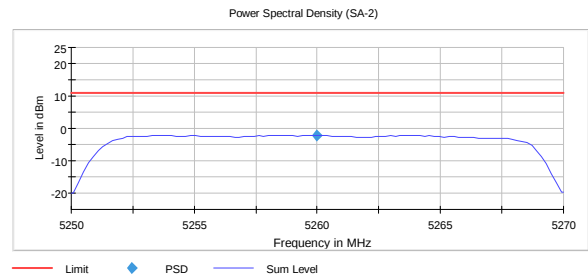
PSD, 5240 MHz, 802.11n, HT20, MCS0 0.2 dBm



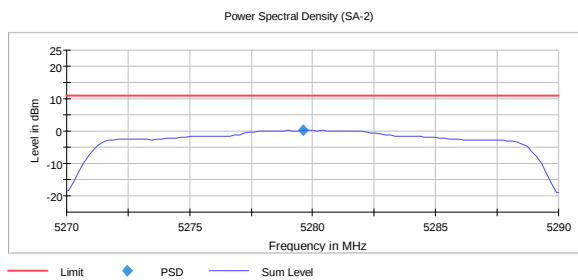
MCS7 -1.5 dBm



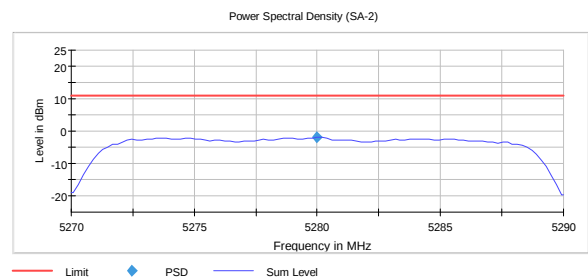
PSD, 5260 MHz, 802.11n, HT20, MCS0 0.7 dBm



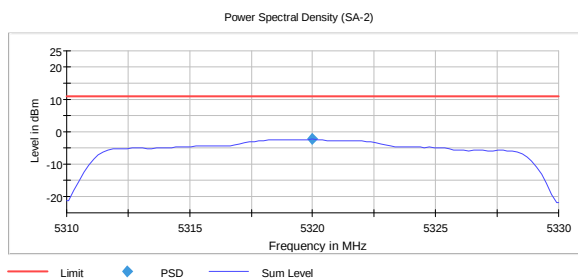
MCS7 -2.0 dBm



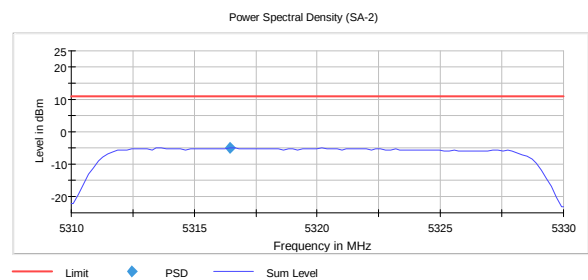
PSD, 5280 MHz, 802.11n, HT20, MCS0 0.2 dBm



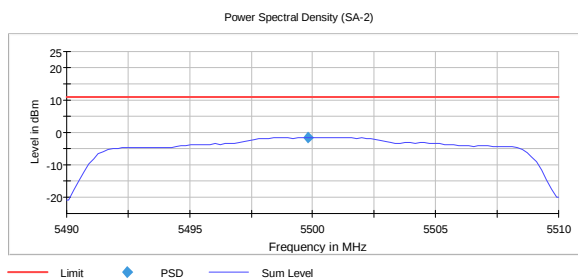
MCS7 -1.8 dBm



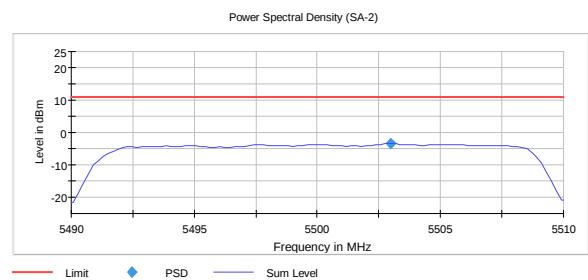
PSD, 5320 MHz, 802.11n, HT20, MCS0 -2.3 dBm



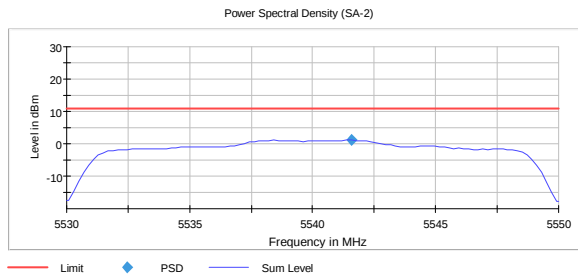
MCS7 -5.0 dBm



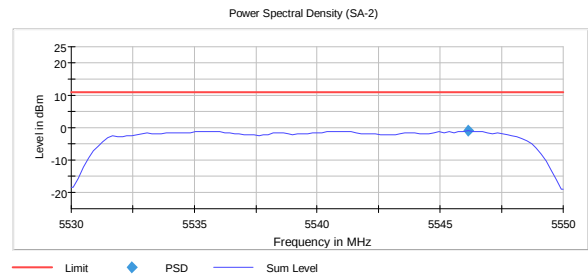
PSD, 5500 MHz, 802.11n, HT20, MCS0 -1.5 dBm



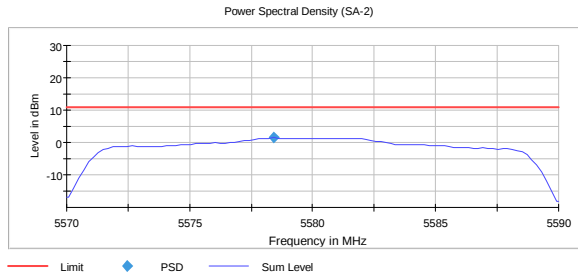
MCS7 -3.4 dBm



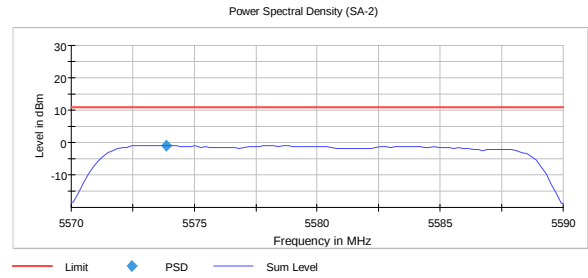
PSD, 5540 MHz, 802.11n, HT20, MCS0 1.2 dBm



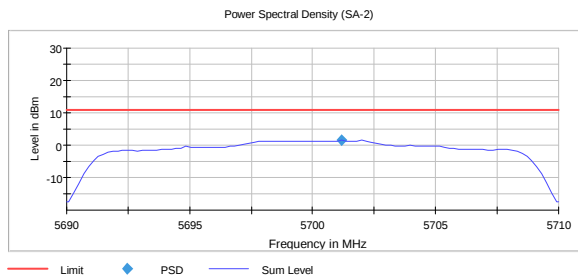
MCS7 -1.1 dBm



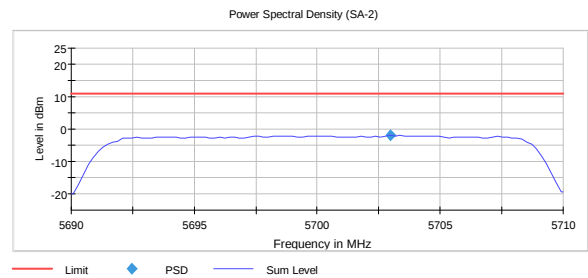
PSD, 5580 MHz, 802.11n, HT20, MCS0 1.4 dBm



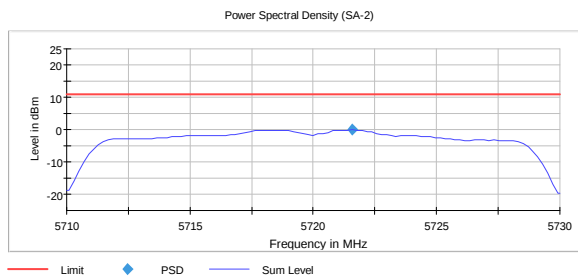
MCS7 -0.8 dBm



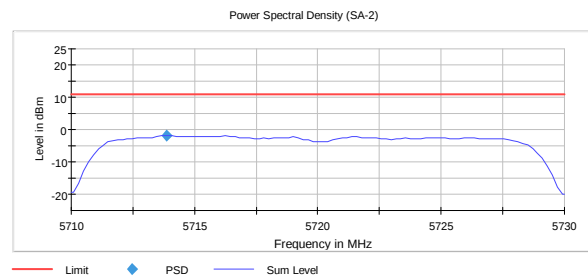
PSD, 5700 MHz, 802.11n, HT20, MCS0 1.5 dBm



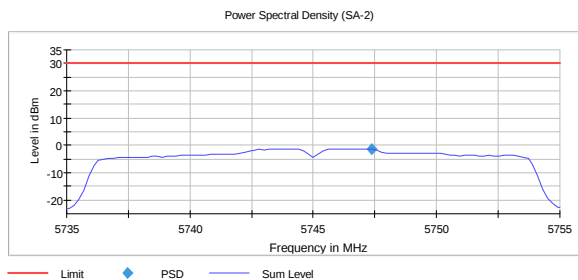
MCS7 -2.0 dBm



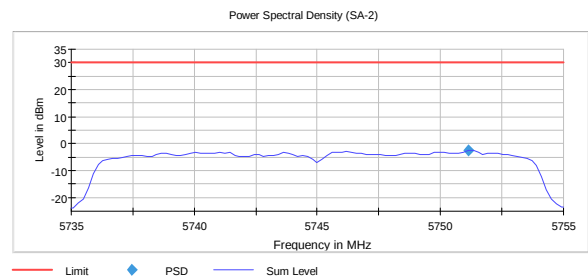
PSD, 5720 MHz, 802.11n, HT20, MCS0 -0.2 dBm



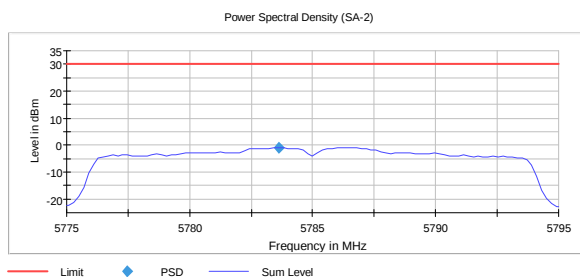
MCS7 -1.9 dBm



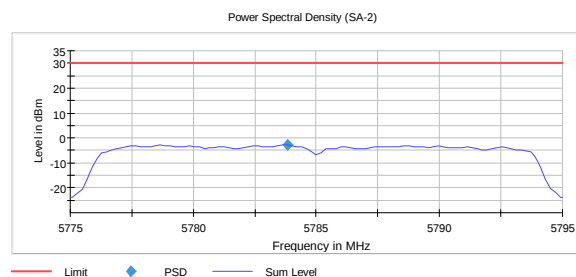
PSD, 5745 MHz, 802.11n, HT20, MCS0 -1.2 dBm



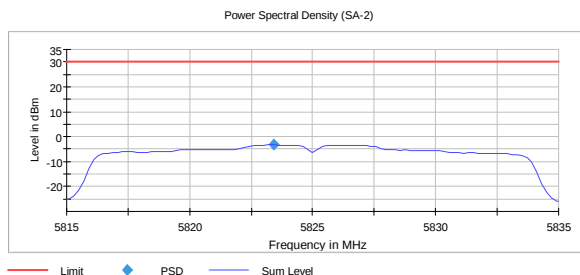
MCS7 -2.5 dBm



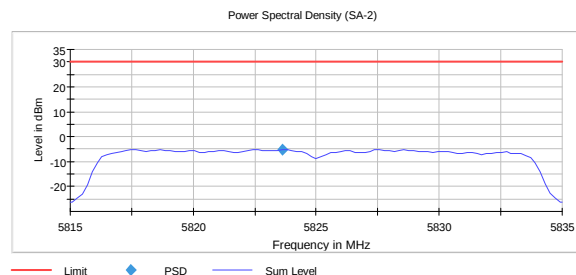
PSD, 5785 MHz, 802.11n, HT20, MCS0 -1.0 dBm



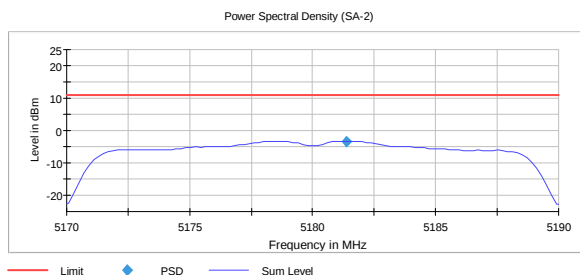
MCS7 -2.8 dBm



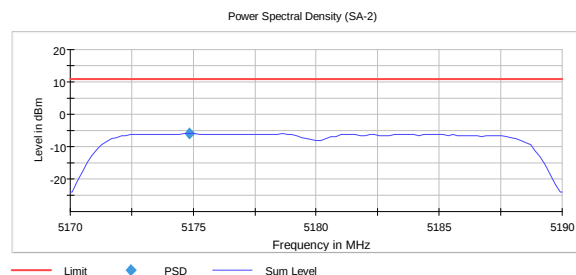
PSD, 5825 MHz, 802.11n, HT20, MCS0 -3.3 dBm



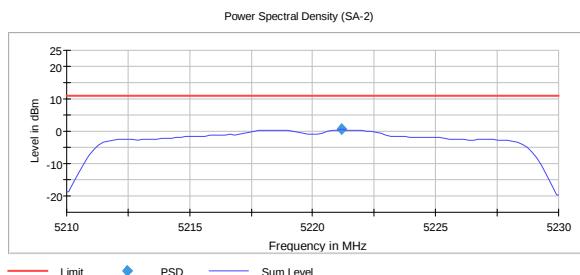
MCS7 -5.2 dBm



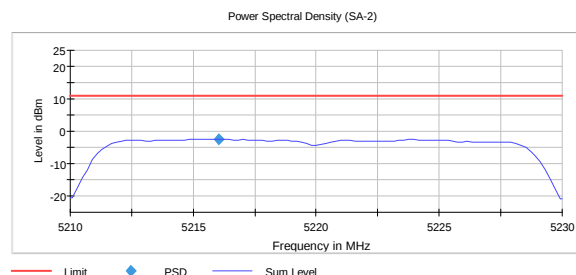
PSD, 5180 MHz, 802.11n, HT20, MCS8, MIMO -3.3 dBm



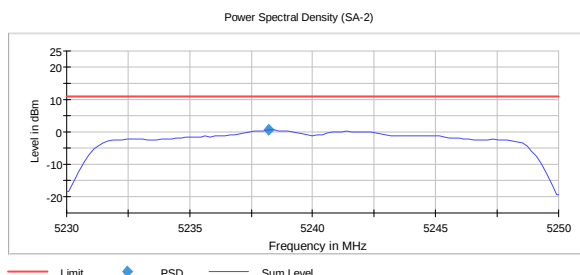
MCS15 -5.9 dBm



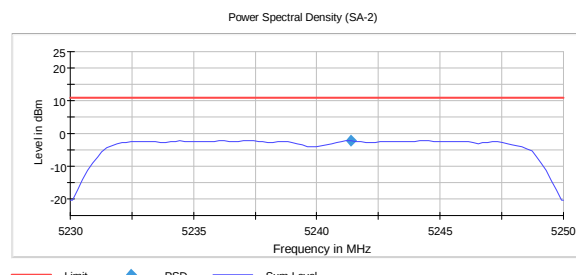
PSD, 5220 MHz, 802.11n, HT20, MCS8, MIMO 0.5 dBm



MCS15 -2.5 dBm



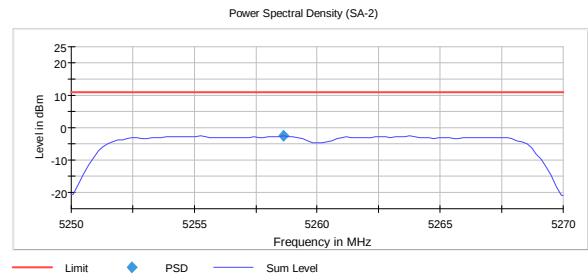
PSD, 5240 MHz, 802.11n, HT20, MCS8, MIMO 0.6 dBm



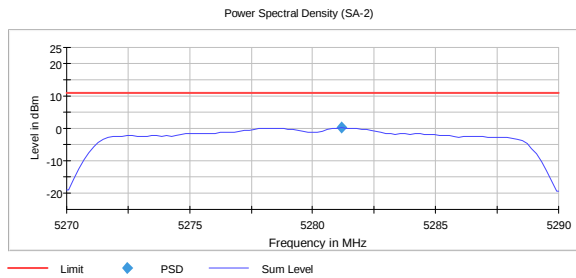
MCS15 -2.2 dBm



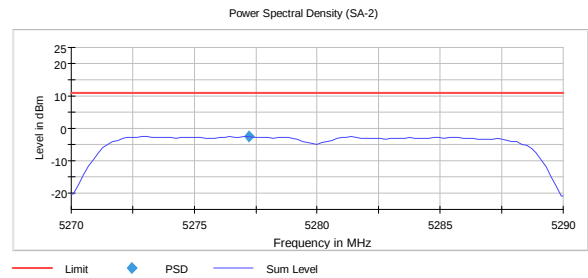
PSD, 5260 MHz, 802.11n, HT20, MCS8, MIMO 0.1 dBm



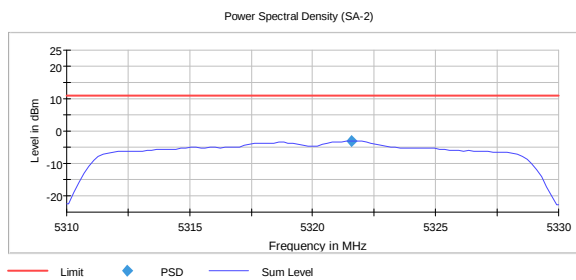
MCS15 -2.6 dBm



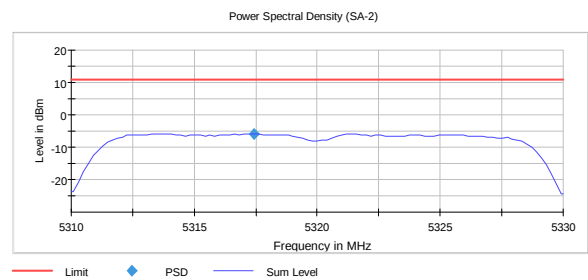
PSD, 5280 MHz, 802.11n, HT20, MCS8, MIMO 0.2 dBm



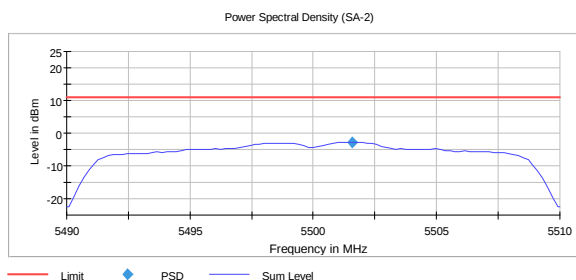
MCS15 -2.5 dBm



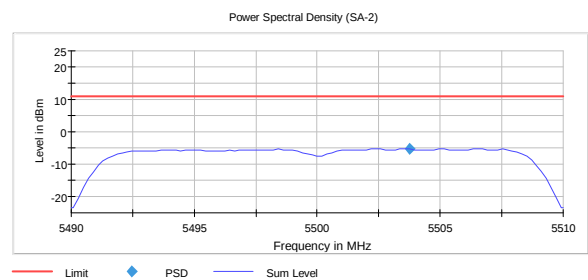
PSD, 5320 MHz, 802.11n, HT20, MCS8, MIMO -3.2 dBm



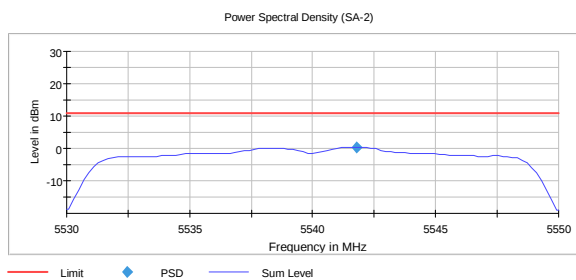
MCS15 -5.9 dBm



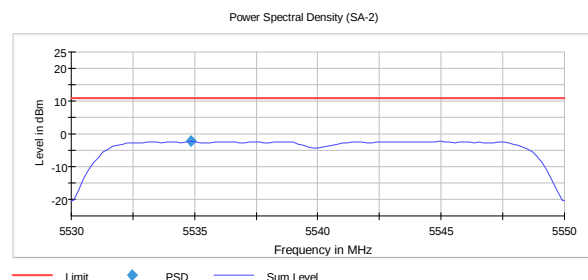
PSD, 5500 MHz, 802.11n, HT20, MCS8, MIMO -2.7 dBm



MCS15 -5.2 dBm



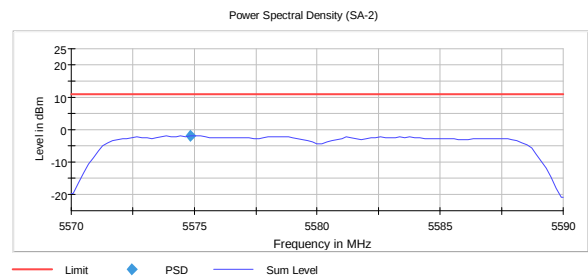
PSD, 5540 MHz, 802.11n, HT20, MCS8, MIMO 0.3 dBm



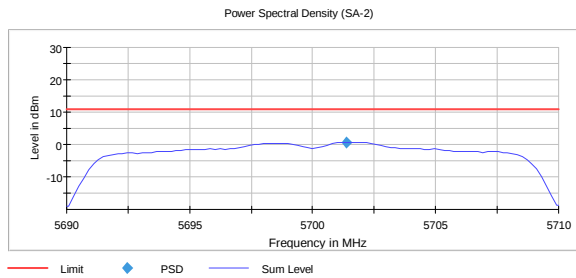
MCS15 -2.3 dBm



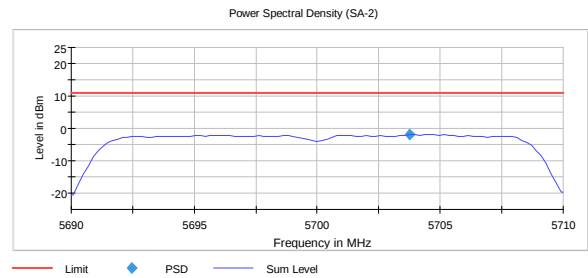
PSD, 5580 MHz, 802.11n, HT20, MCS8, MIMO 0.3 dBm



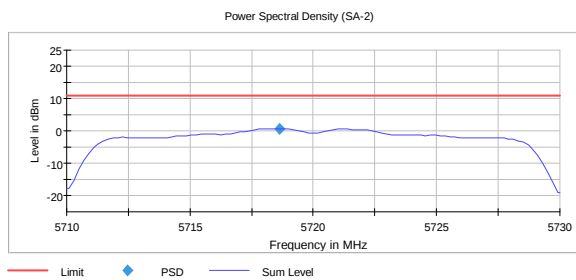
MCS15 -1.9 dBm



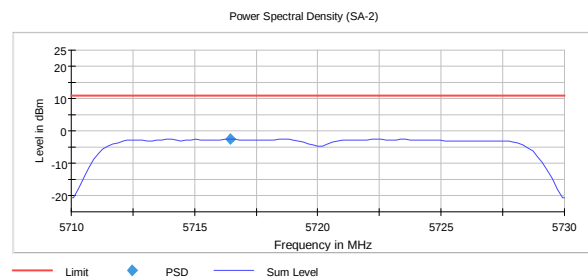
PSD, 5700 MHz, 802.11n, HT20, MCS8, MIMO 0.7 dBm



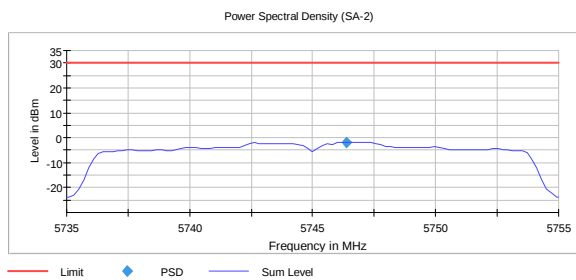
MCS15 -1.9 dBm



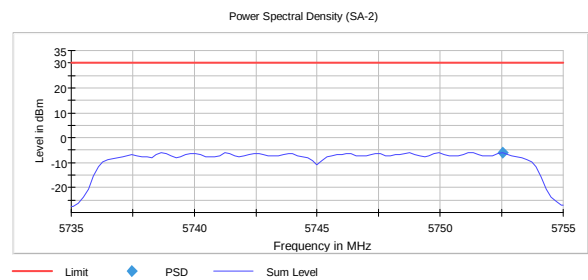
PSD, 5720 MHz, 802.11n, HT20, MCS8, MIMO 0.8 dBm



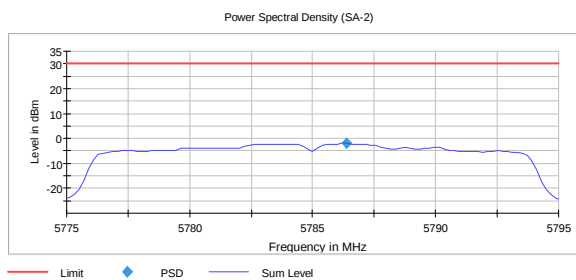
MCS15 -2.4 dBm



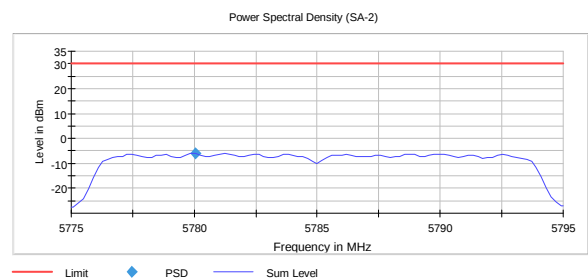
PSD, 5745 MHz, 802.11n, HT20, MCS8, MIMO -1.9 dBm



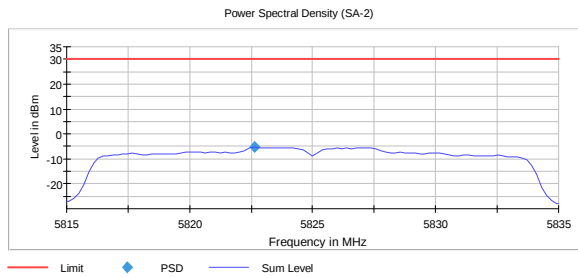
MCS15 -6.0 dBm



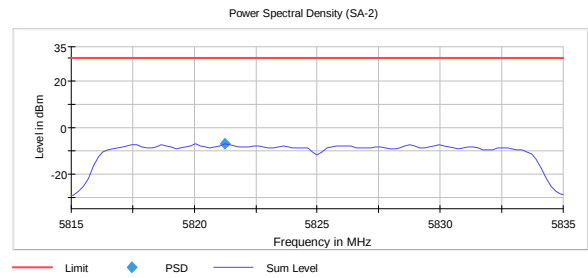
PSD, 5785 MHz, 802.11n, HT20, MCS8, MIMO -2.1 dBm



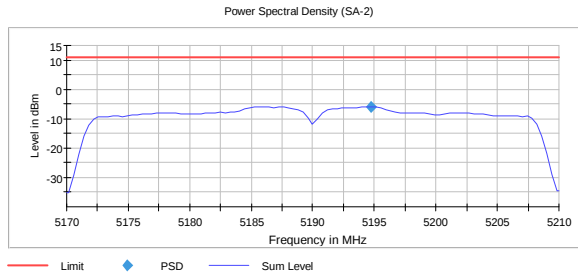
MCS15 -6.1 dBm



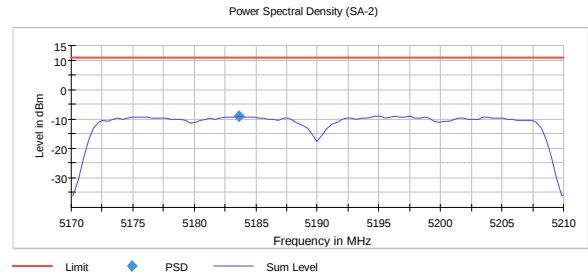
PSD, 5825 MHz, 802.11n, HT20, MCS8, MIMO -5.4 dBm



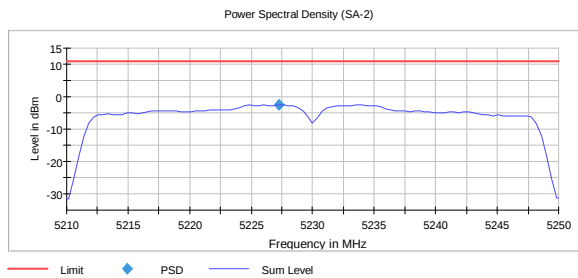
MCS15 -7.1 dBm



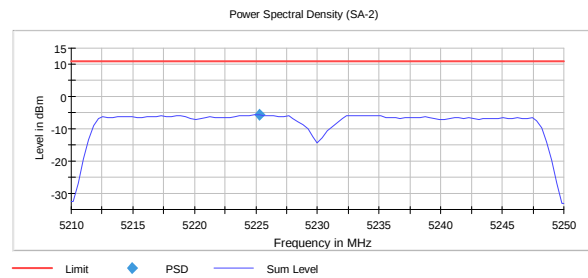
PSD, 5190 MHz, 802.11ac, HT40, MCS0, MIMO -5.8 dBm



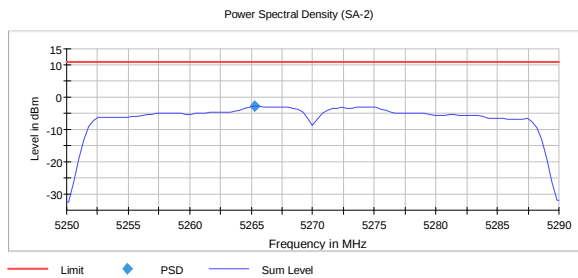
MCS7, MIMO -9.0 dBm



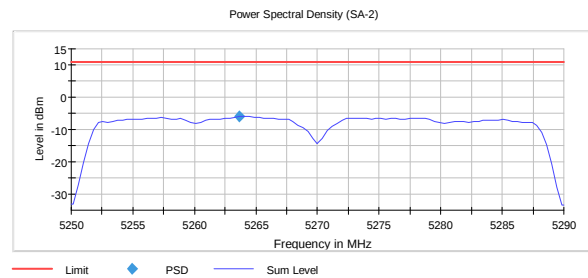
PSD, 5230 MHz, 802.11ac, HT40, MCS0, MIMO -2.5 dBm



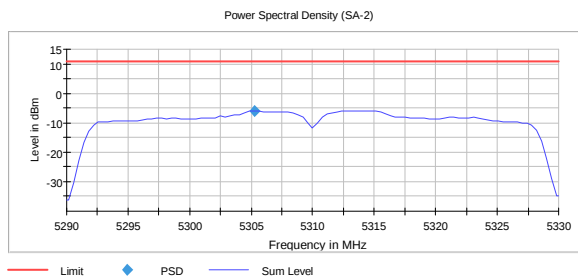
MCS7, MIMO -5.7 dBm



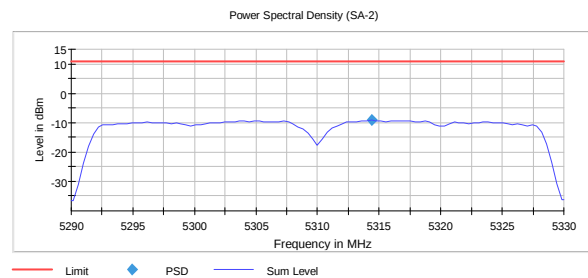
PSD, 5270 MHz, 802.11ac, HT40, MCS0, MIMO -2.9 dBm



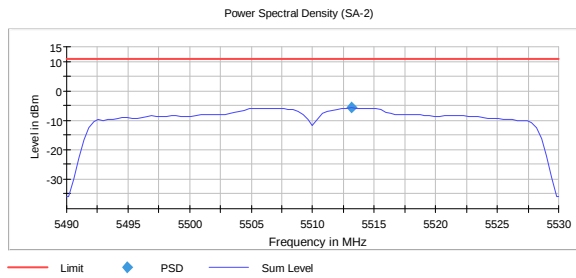
MCS7, MIMO -5.9 dBm



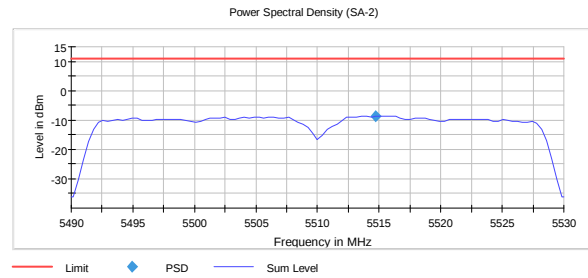
PSD, 5310 MHz, 802.11ac, HT40, MCS0, MIMO -5.8 dBm



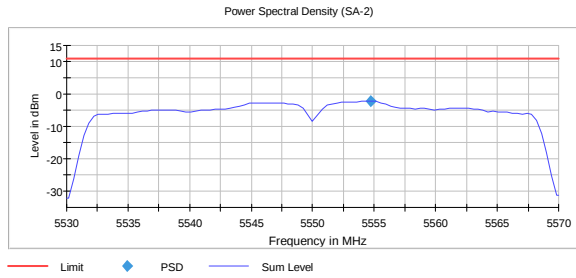
MCS7, MIMO -9.2 dBm



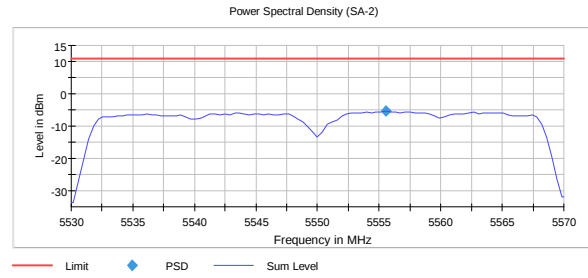
PSD, 5510 MHz, 802.11ac, HT40, MCS0, MIMO -5.8 dBm



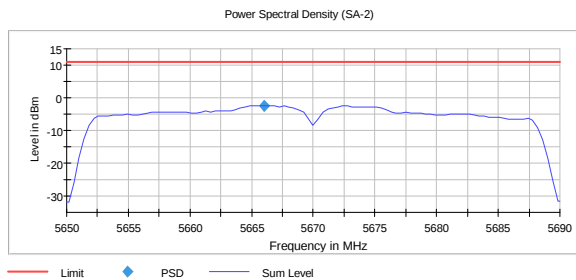
MCS7, MIMO -8.7 dBm



PSD, 5550 MHz, 802.11ac, HT40, MCS0, MIMO -2.3 dBm



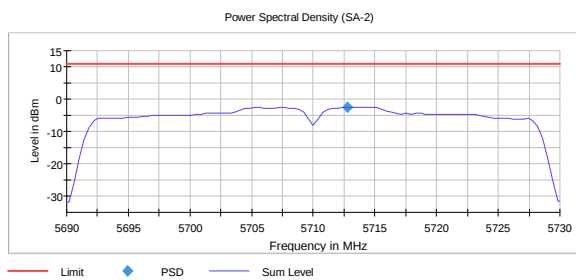
MCS7, MIMO -5.5 dBm



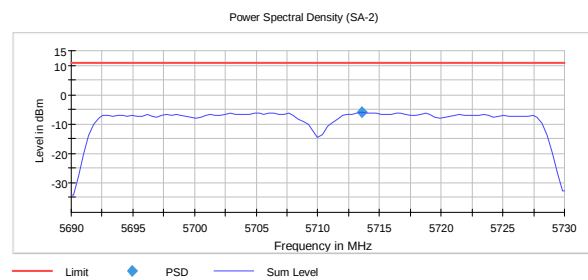
PSD, 5670 MHz, 802.11ac, HT40, MCS0, MIMO -2.4 dBm



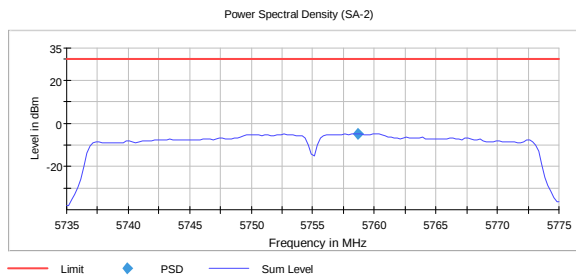
MCS7, MIMO -5.2 dBm



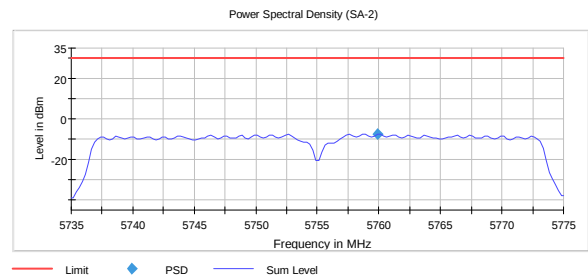
PSD, 5710 MHz, 802.11ac, HT40, MCS0, MIMO -2.5 dBm



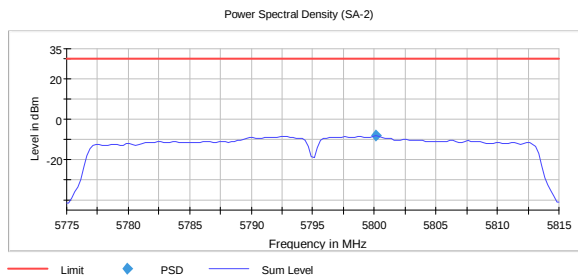
MCS7, MIMO -6.1 dBm



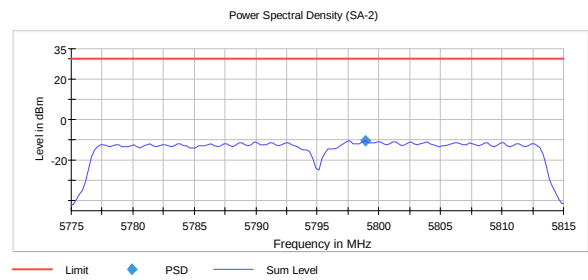
PSD, 5755 MHz, 802.11ac, HT40, MCS0, MIMO -4.8 dBm



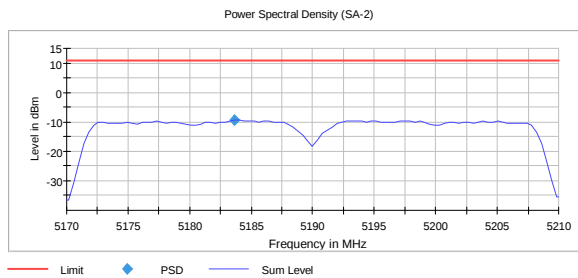
MCS7, MIMO -7.4 dBm



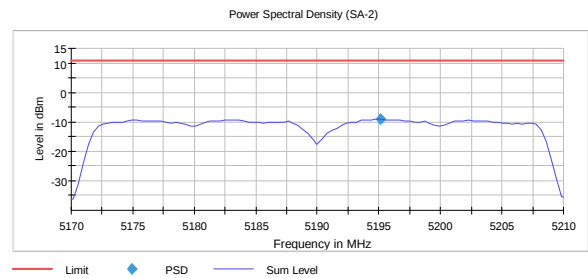
PSD, 5795 MHz, 802.11ac, HT40, MCS0, MIMO -8.2 dBm



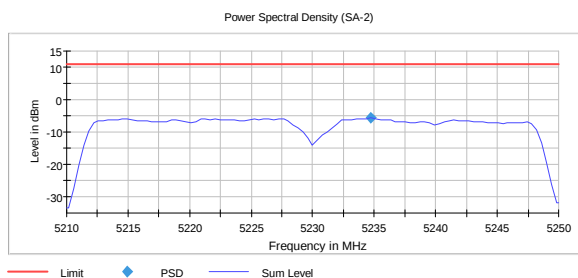
MCS7, MIMO -10.6 dBm



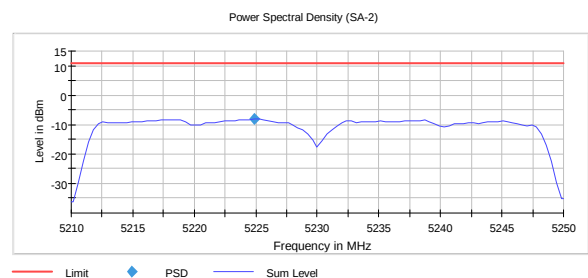
PSD, 5190 MHz, 802.11ac, HT40, MCS8 -9.4 dBm



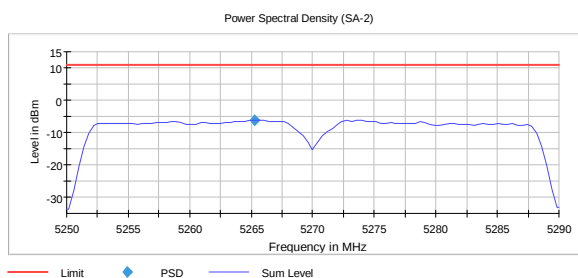
MCS9 -9.0 dBm



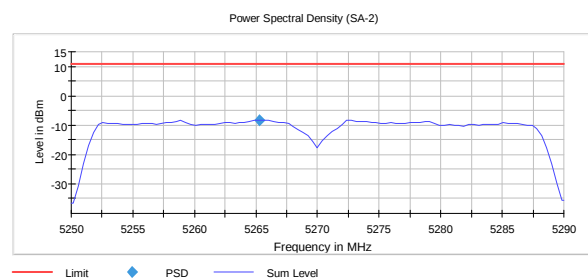
PSD, 5230 MHz, 802.11ac, HT40, MCS8 -5.7 dBm



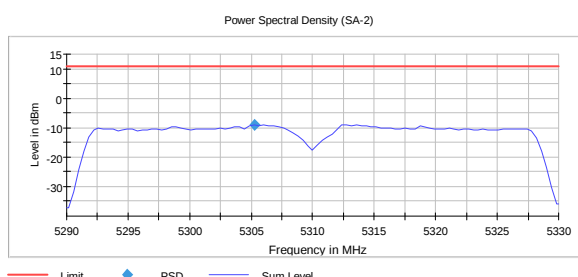
MCS9 -8.0 dBm



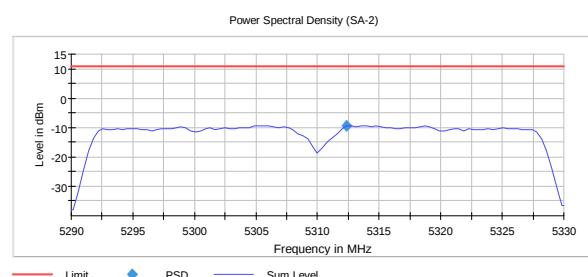
PSD, 5270 MHz, 802.11ac, HT40, MCS8 -6.1 dBm



MCS9 -8.3 dBm



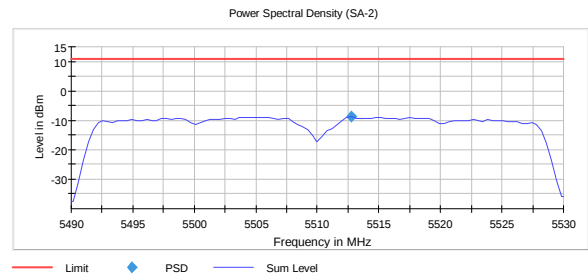
PSD, 5310 MHz, 802.11ac, HT40, MCS8 -9.1 dBm



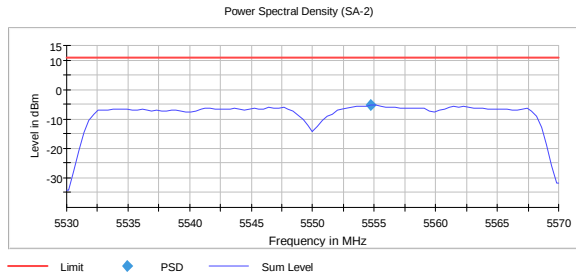
MCS9 -9.3 dBm



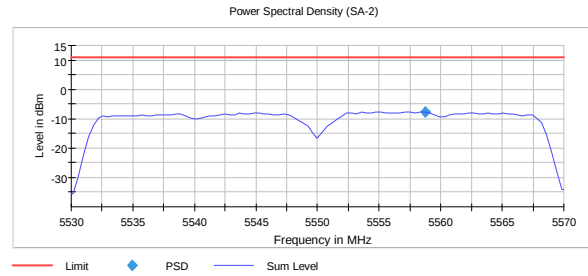
PSD, 5510 MHz, 802.11ac, HT40, MCS8 -8.9 dBm



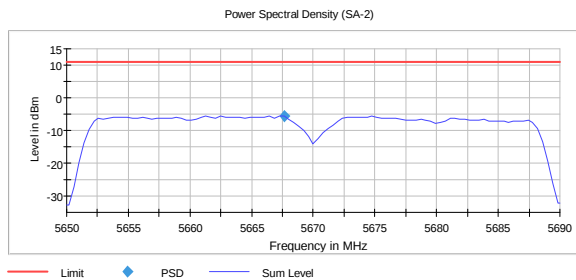
MCS9 -8.8 dBm



PSD, 5550 MHz, 802.11ac, HT40, MCS8 -5.3 dBm



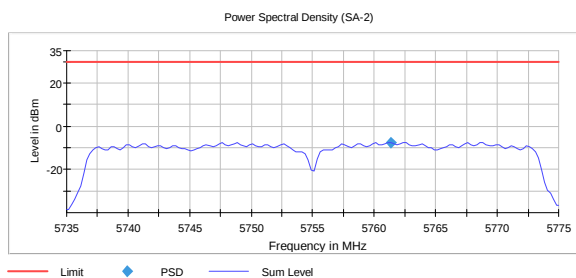
MCS9 -7.7 dBm



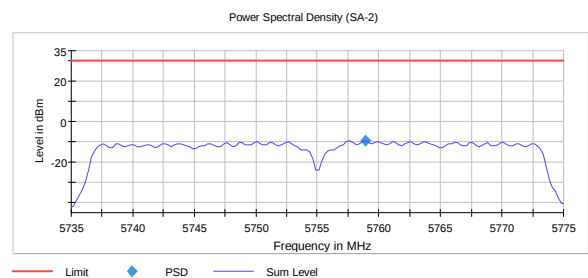
PSD, 5670 MHz, 802.11ac, HT40, MCS8 -5.5 dBm



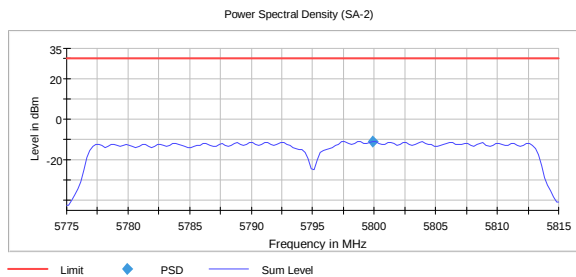
MCS9 -7.7 dBm



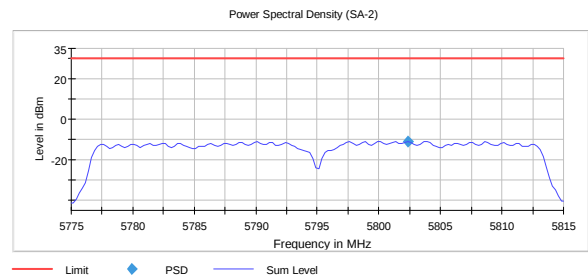
PSD, 5755 MHz, 802.11ac, HT40, MCS8 -7.5 dBm



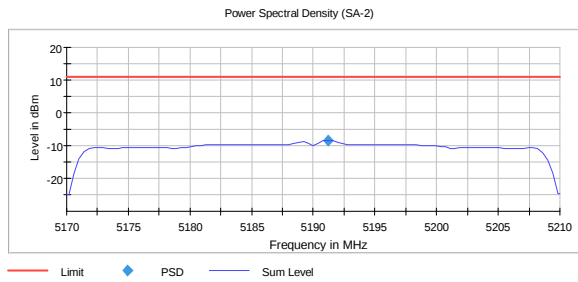
MCS9 -9.7 dBm



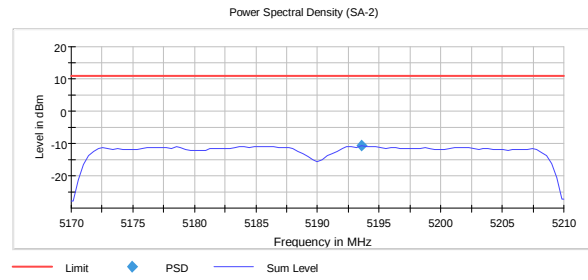
PSD, 5795 MHz, 802.11ac, HT40, MCS8 -10.9 dBm



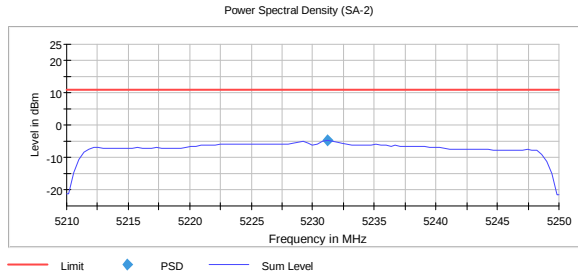
MCS9 -10.8 dBm



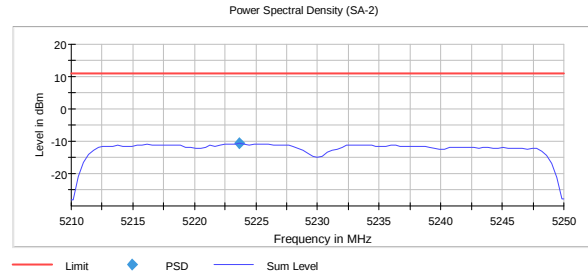
PSD, 5190 MHz, 802.11ax, HT40, MCS0 -8.3 dBm



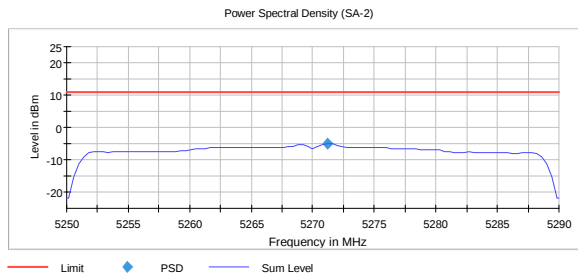
MCS11 -10.6 dBm



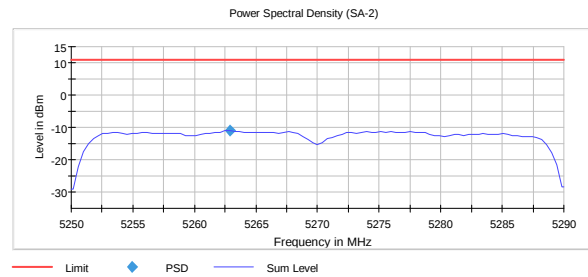
PSD, 5230 MHz, 802.11ax, HT40, MCS0 -4.7 dBm



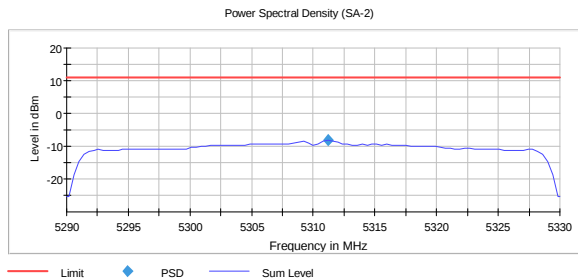
MCS11 -10.8 dBm



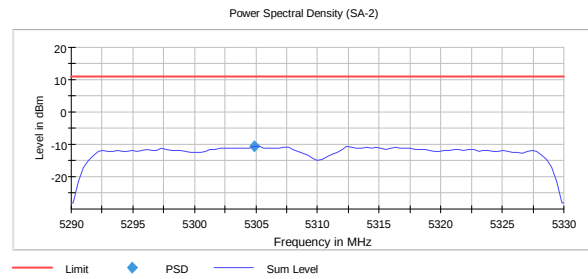
PSD, 5270 MHz, 802.11ax, HT40, MCS0 -4.9 dBm



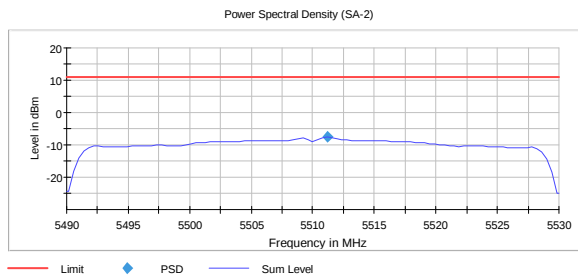
MCS11 -11.0 dBm



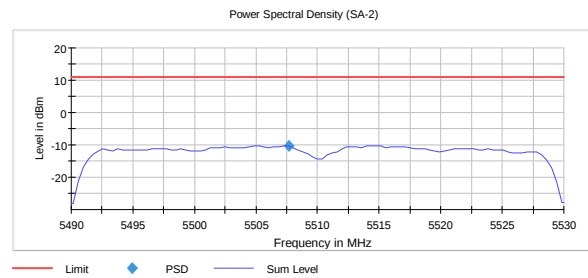
PSD, 5310 MHz, 802.11ax, HT40, MCS0 -8.1 dBm



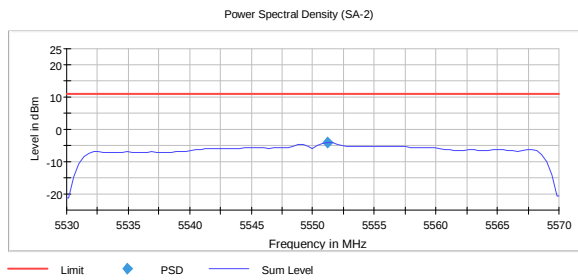
MCS11 -10.7 dBm



PSD, 5510 MHz, 802.11ax, HT40, MCS0 -7.6 dBm



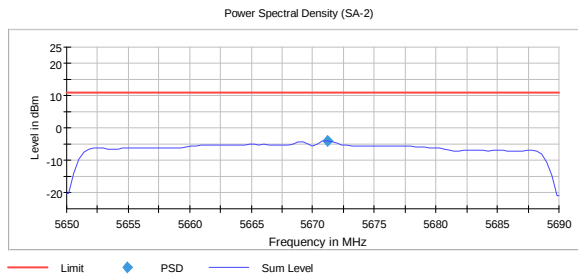
MCS11 -10.3 dBm



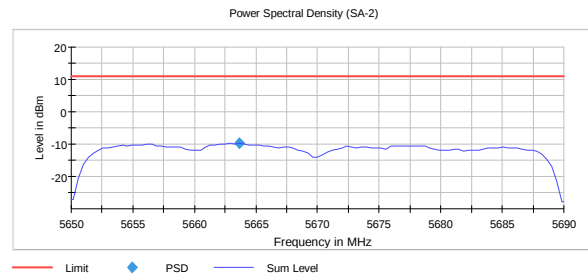
PSD, 5550 MHz, 802.11ax, HT40, MCS0 -4.0 dBm



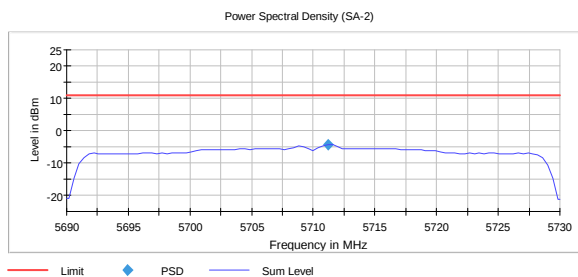
MCS11 -10.2 dBm



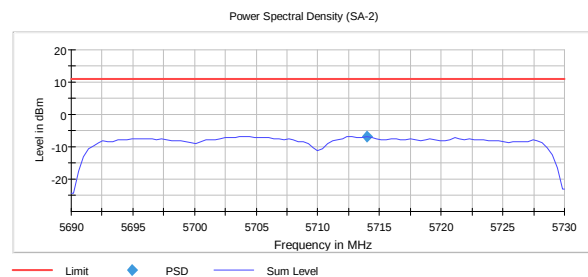
PSD, 5670 MHz, 802.11ax, HT40, MCS0 -4.2 dBm



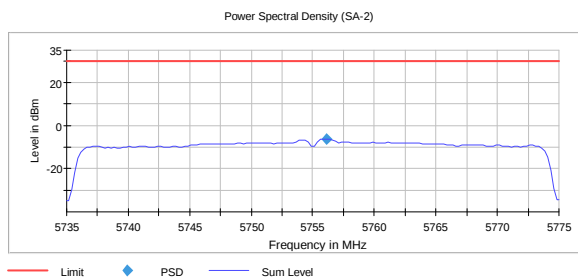
MCS11 -9.7 dBm



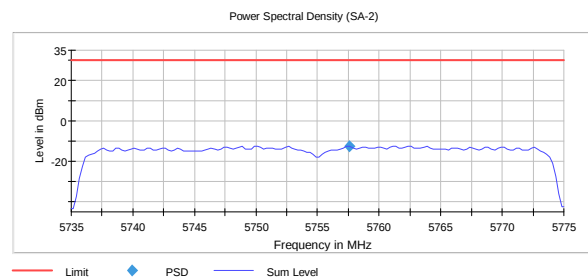
PSD, 5710 MHz, 802.11ax, HT40, MCS0 -4.4



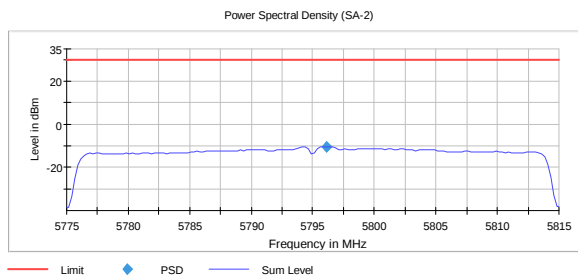
MCS7 6.9



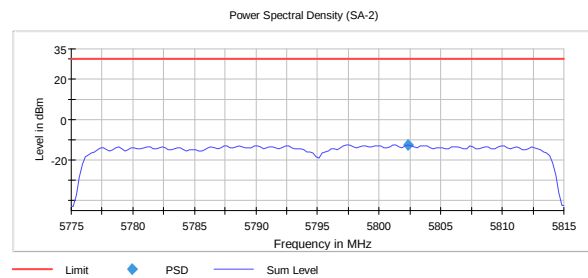
PSD, 5755 MHz, 802.11ax, HT40, MCS0 -6.4 dBm



MCS11 -12.3 dBm



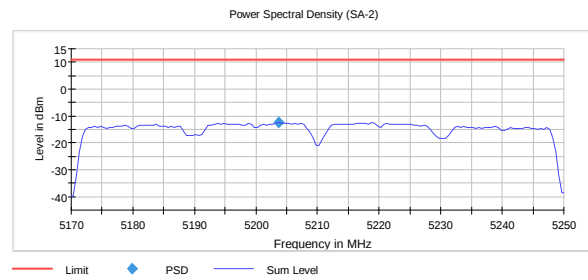
PSD, 5795 MHz, 802.11ax, HT40, MCS0 -10.2 dBm



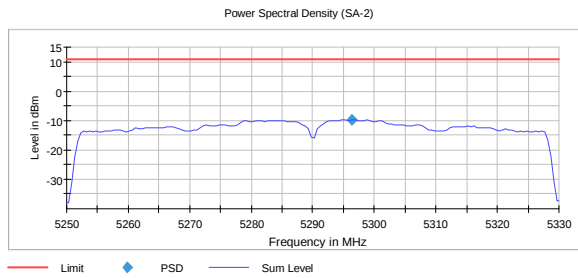
MCS11 -12.5 dBm



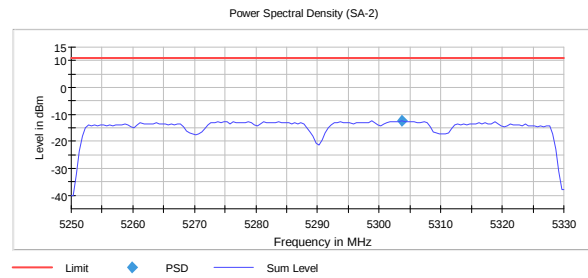
PSD, 5210 MHz, 802.11ac, HT80, MCS0 -9.7 dBm



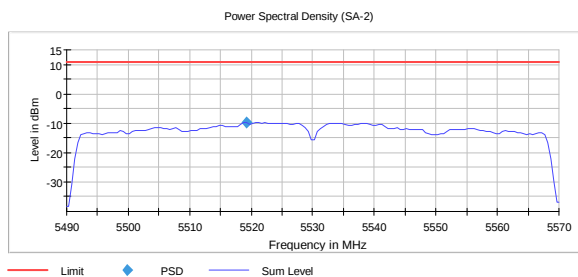
MCS7 -12.4 dBm



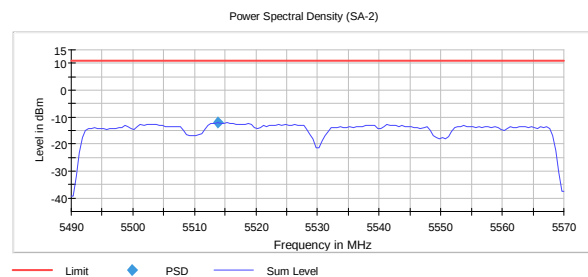
PSD, 5290 MHz, 802.11ac, HT80, MCS0 -9.7 dBm



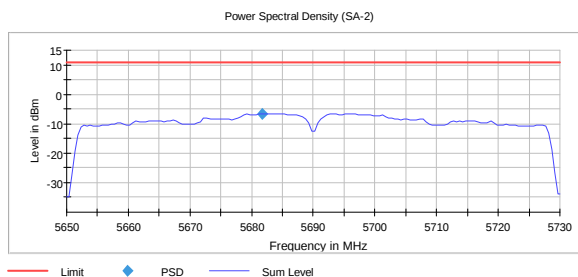
MCS7 -12.3 dBm



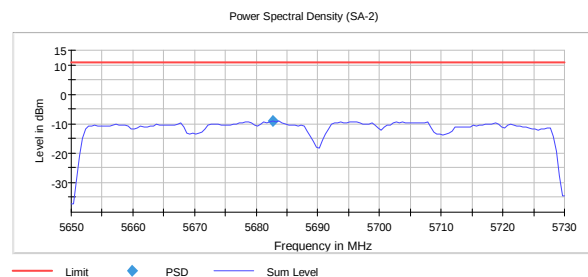
PSD, 5530 MHz, 802.11ac, HT80, MCS0 -9.8 dBm



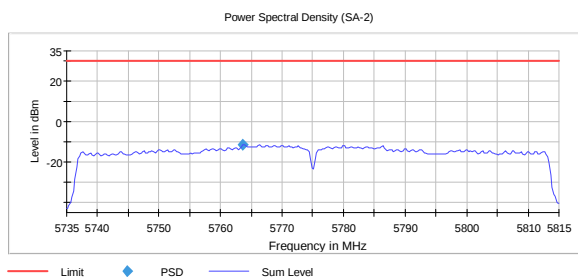
MCS7 -11.9 dBm



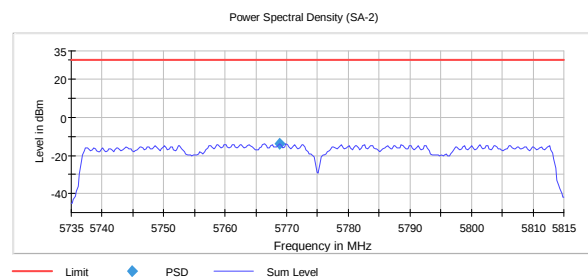
PSD, 5690 MHz, 802.11ac, HT80, MCS0 -6.5 dBm



MCS7 -9.1 dBm



PSD, 5775 MHz, 802.11ac, HT80, MCS0 -11.7 dBm



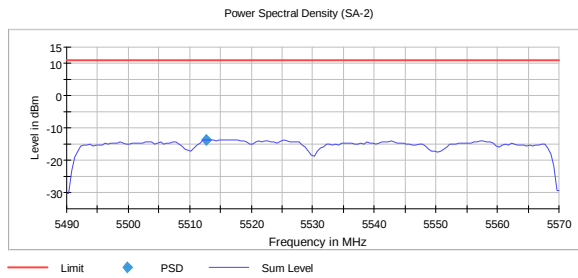
MCS7 -13.9 dBm



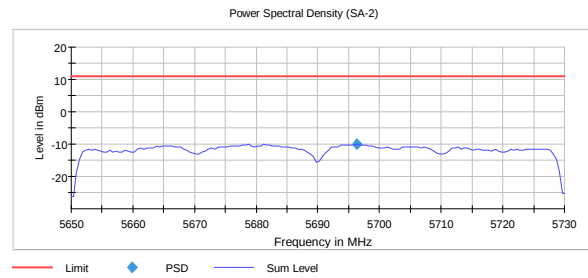
PSD, 5210 MHz, 802.11ax, HT80, MCS11 -14.2 dBm



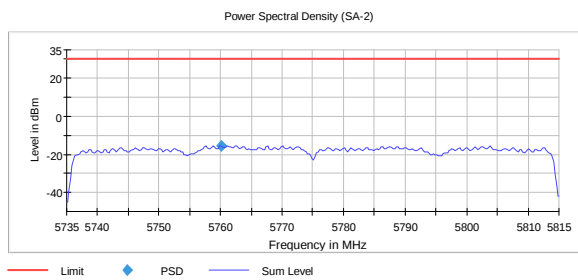
PSD, 5290 MHz, 802.11ax, HT80, MCS11 -14.0 dBm



PSD, 5530 MHz, 802.11ax, HT80, MCS11 -13.7 dBm



PSD, 5690 MHz, 802.11ax, HT80, MCS11 -11.0 dBm



PSD, 5775 MHz, 802.11ax, HT80, MCS11 -15.4 dBm

4.6 Unwanted Emissions

FCC 15.407 (b)

ISED RSS-247, Issue 2, clause 6.2

Measurement procedure: ANSI C63.10-2013 Clause 12.7

Test Results: Complies

Measurement Data:

Band Edge Emissions:

Band Edge Frequency (MHz)	Measured Values (dBm/MHz e.i.r.p.)			
	802.11a	802.11n/ac/ax HT20	802.11n/ac/ax HT40	802.11ac/ax HT80
5150	< -27	< -27	< -27	< -27
5350	< -27	< -27	< -27	< -27
5470	< -27	< -27	< -27	< -27
5725	< -27	< -27	< -27	< -27
5650	< -40	< -40	< -40	< -40
5700	< -45	< -45	< -45	< -45
5875	< -45	< -45	< -45	< -45
5925	< -40	< -40	< -40	< -40

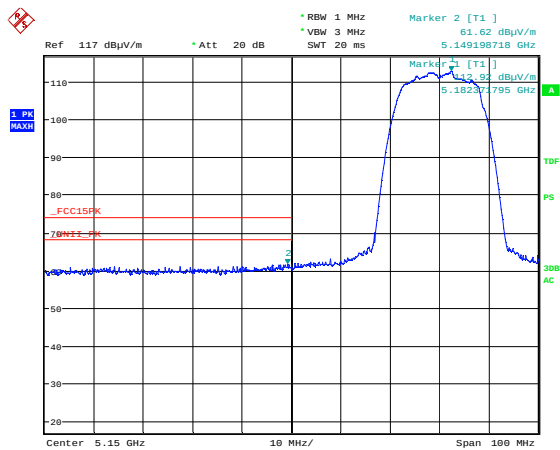
Band Edge Measurement were performed radiated. EIRP values were calculated from field strength using the method in KDB 412172 D01.

The tested equipment is for indoor use only, no band-edge requirements apply at 5250 MHz.

Limits:

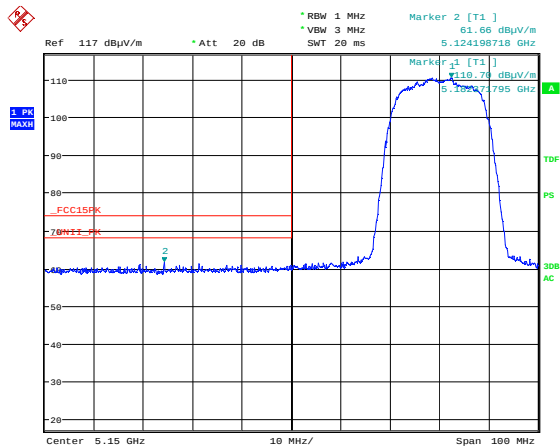
Operating Frequency band	Limit for Emissions Outside Operating Frequency Band
5150 – 5250 MHz	-27 dBm/MHz e.i.r.p.
5250 – 5350 MHz	-27 dBm/MHz e.i.r.p.
5470 – 5725 MHz	-27 dBm/MHz e.i.r.p.
5725 – 5825 MHz	See FCC 15.407(b)(4)(i) or 15.407(b)(4)(ii)

Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band.



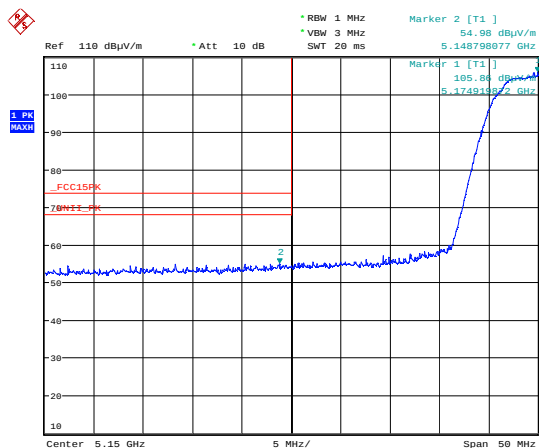
Date: 6.FEB.2023 14:28:06

Band Edge 5150 MHz, ch036, 802.11a 6Mb, Radiated, Max



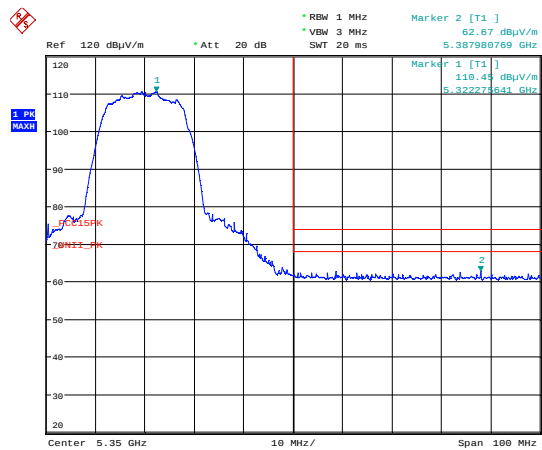
Date: 6.FEB.2023 14:11:48

Band Edge 5150 MHz, ch036, 802.11n MCS0, Radiated, Max



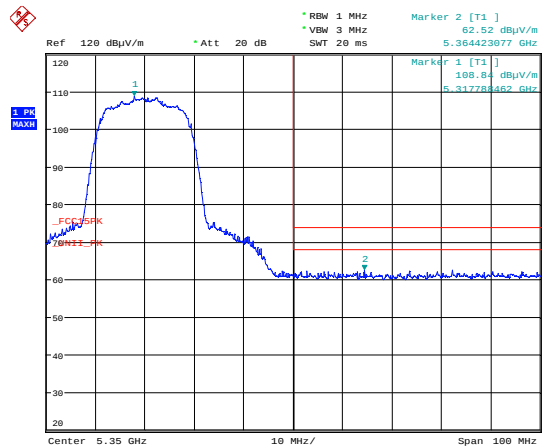
Date: 7.FEB.2023 13:02:25

Band Edge 5150 MHz, ch036, 802.11n MCS8 MIMO, Radiated, Max



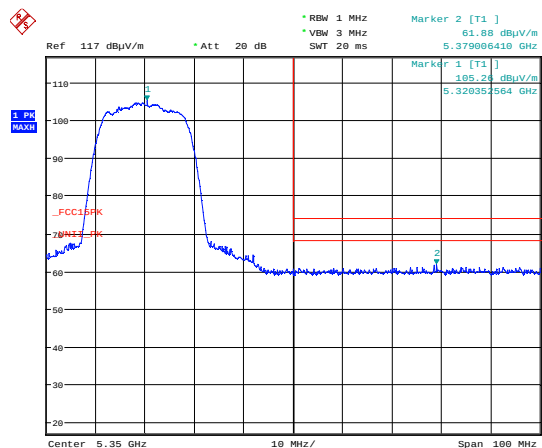
Date: 6.FEB.2023 14:51:57

Band Edge 5350 MHz, ch064, 802.11a 6Mb, Radiated, Max



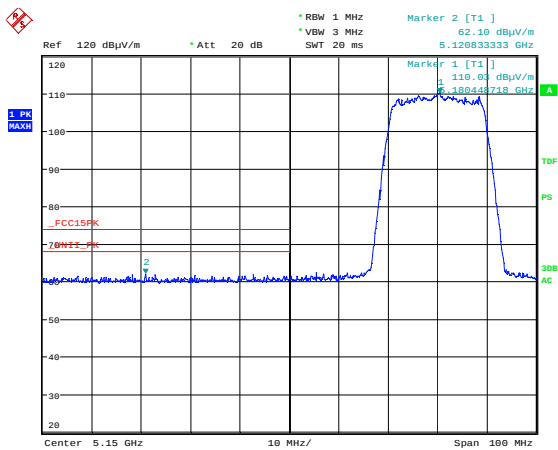
Date: 6.FEB.2023 14:54:53

Band Edge 5350 MHz, ch036, 802.11n MCS0, Radiated, Max



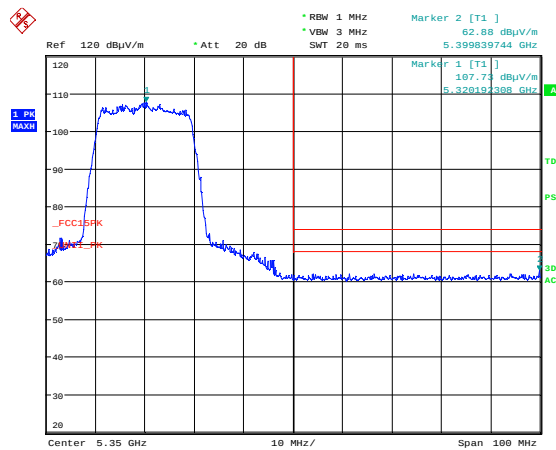
Date: 7.FEB.2023 13:24:51

Band Edge 5350 MHz, ch064, 802.11n MCS8 MIMO, Radiated, Max



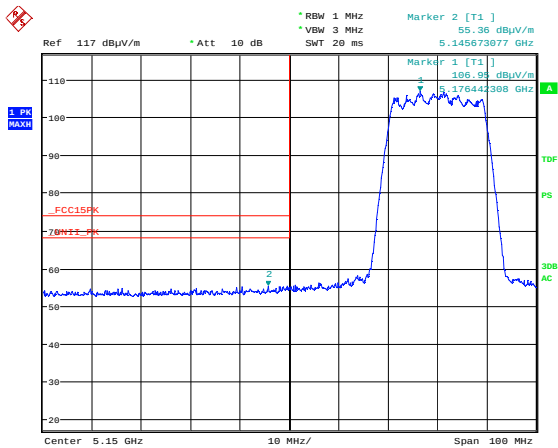
Date: 6.FEB.2023 16:03:06

Band Edge 5150 MHz, ch036, 802.11ax MCS0 SISO, Radiated, Max



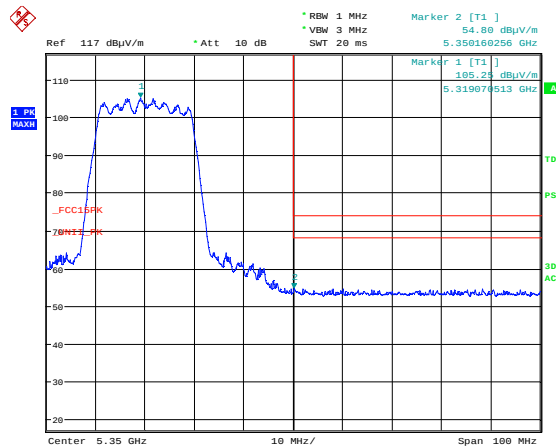
Date: 6.FEB.2023 16:13:17

Band Edge 5350 MHz, ch064, 802.11ax MCS11 SISO, Radiated, Max



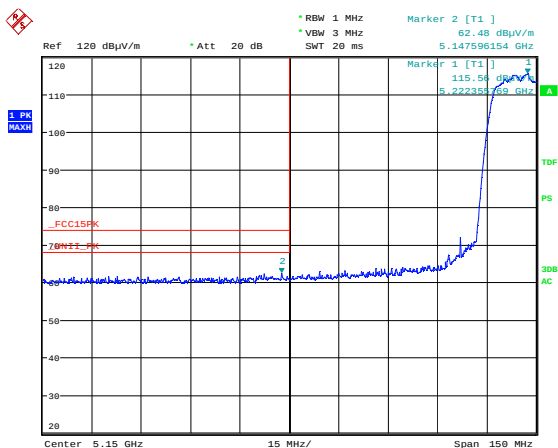
Date: 7.FEB.2023 14:42:11

Band Edge 5150 MHz, ch036, 802.11ax MCS0 MIMO, Radiated, Max



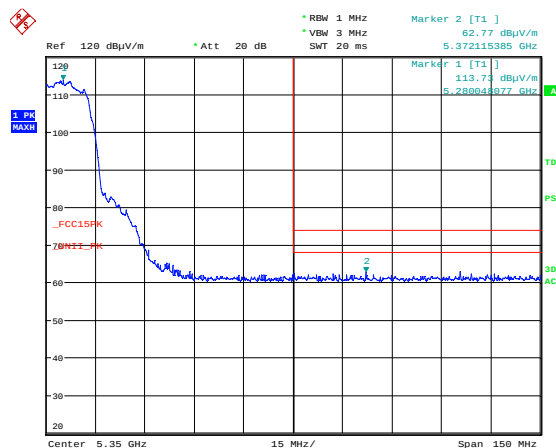
Date: 7.FEB.2023 14:25:22

Band Edge 5350 MHz, ch064, 802.11ax MCS11 MIMO, Radiated, Max



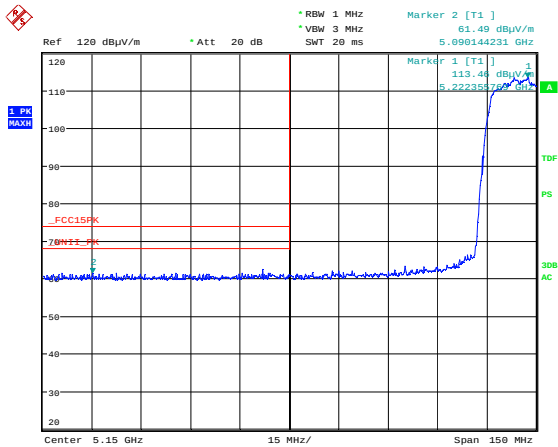
Date: 6.FEB.2023 14:32:20

Band Edge 5150 MHz, ch044, 802.11a 6Mb, Radiated, Max



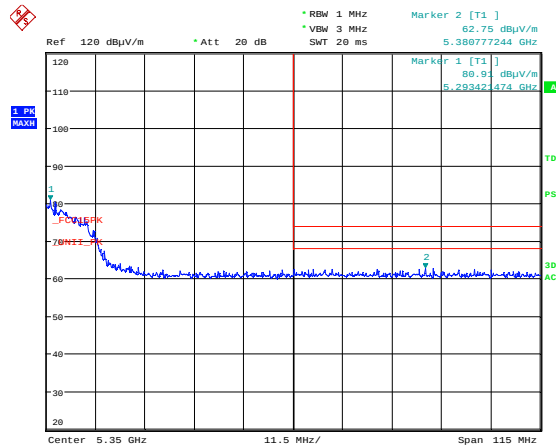
Date: 6.FEB.2023 14:45:06

Band Edge 5350 MHz, ch056, 802.11a 6Mb, Radiated, Max



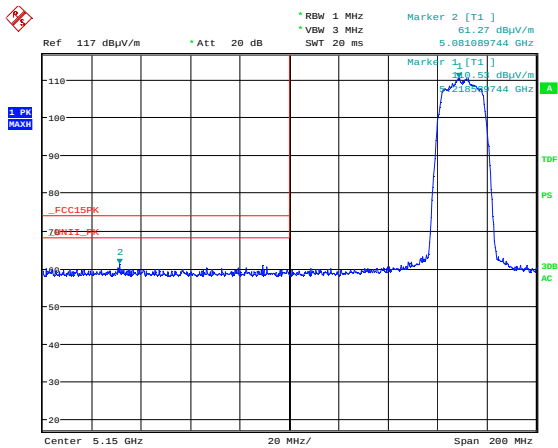
Date: 6.FEB.2023 14:35:39

Band Edge 5150 MHz, ch044, 802.11n MCS0, Radiated, Max



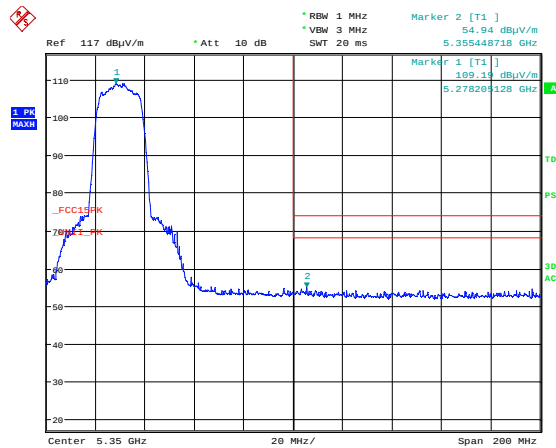
Date: 6.FEB.2023 14:38:55

Band Edge 5350 MHz, ch056, 802.11n MCS0, Radiated, Max



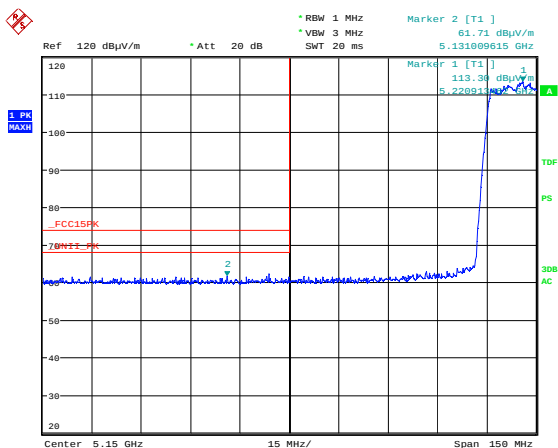
Date: 7.FEB.2023 13:13:32

Band Edge 5150 MHz, ch044, 802.11n MCS8 MIMO, Radiated, Max



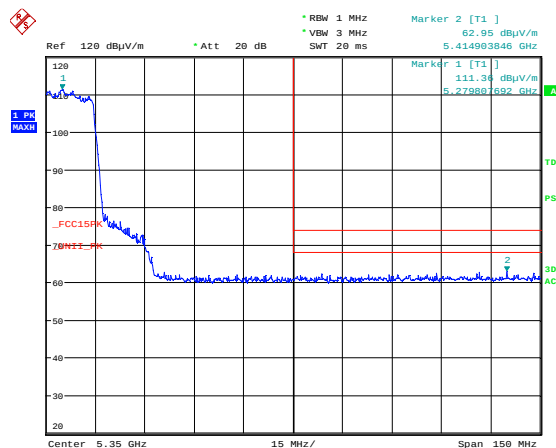
Date: 7.FEB.2023 13:17:42

Band Edge 5350 MHz, ch056, 802.11n MCS8 MIMO, Radiated, Max



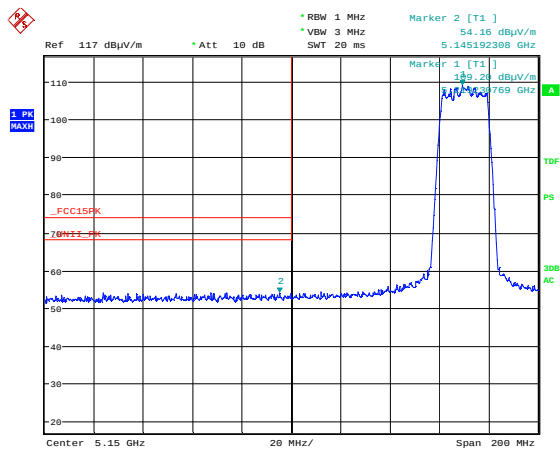
Date: 6.FEB.2023 16:06:34

Band Edge 5150 MHz, ch044, 802.11ax MCS0 SISO, Radiated, Max



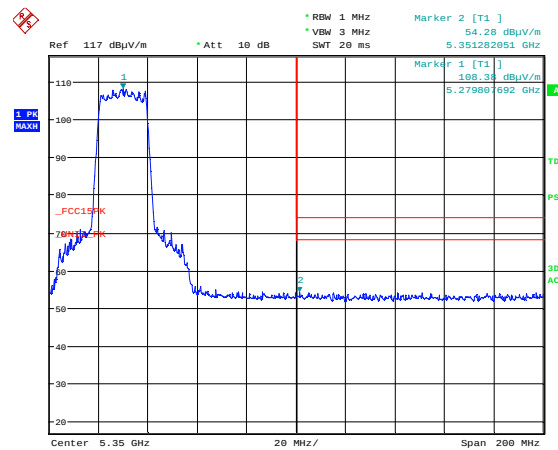
Date: 6.FEB.2023 16:10:15

Band Edge 5350 MHz, ch056, 802.11ax MCS0 SISO, Radiated, Max



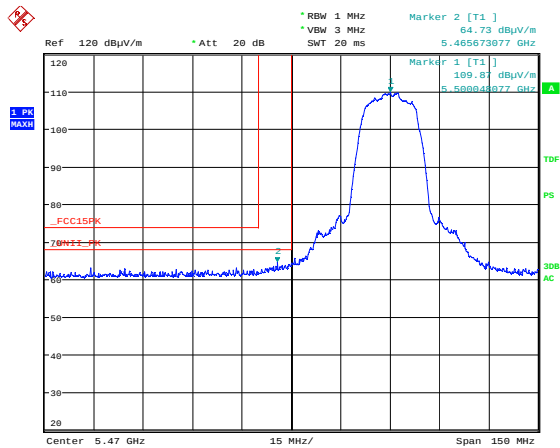
Date: 7.FEB.2023 14:39:01

Band Edge 5150 MHz, ch044, 802.11ax MCS0 MIMO, Radiated, Max



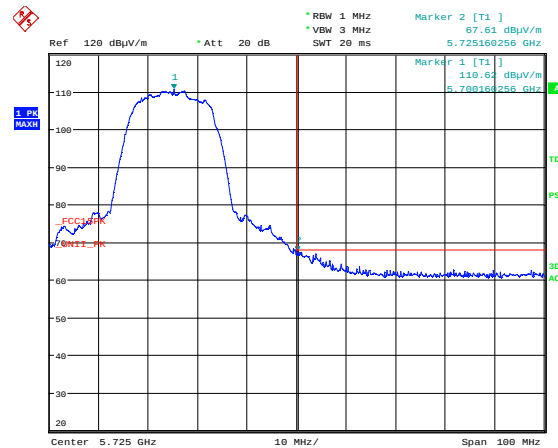
Date: 7.FEB.2023 14:33:57

Band Edge 5350 MHz, ch056, 802.11ax MCS0 MIMO, Radiated, Max



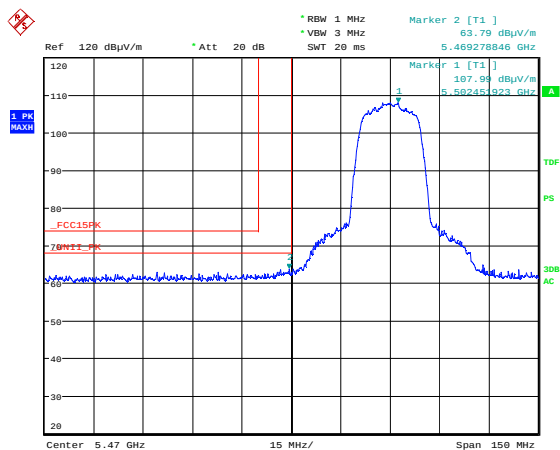
Date: 6.FEB.2023 15:02:04

Band Edge 5470 MHz, ch100, 802.11a 6Mb, Radiated, Max



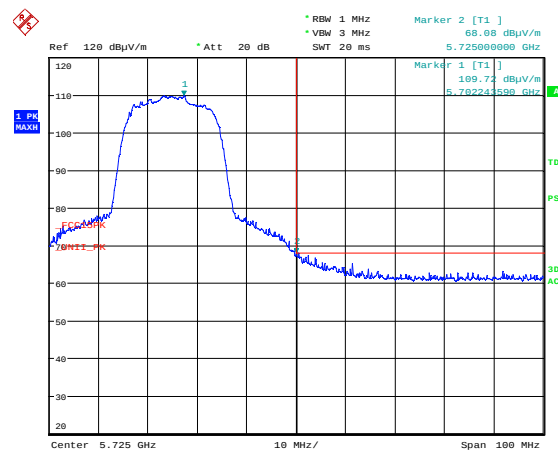
Date: 6.FEB.2023 15:27:40

Band Edge 5725 MHz, ch140, 802.11a 6Mb, Radiated, Max, PL13.5



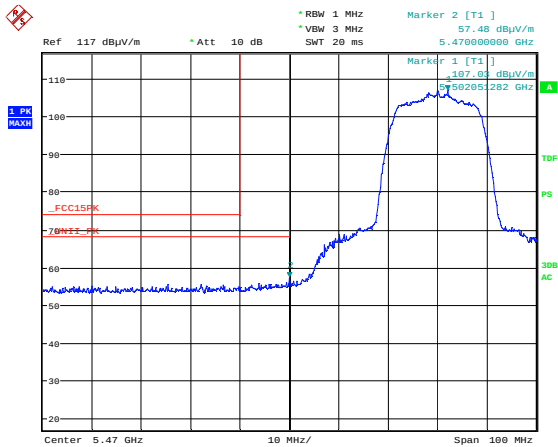
Date: 6.FEB.2023 14:57:34

Band Edge 5470 MHz, ch100, 802.11n MCS0, Radiated, Max



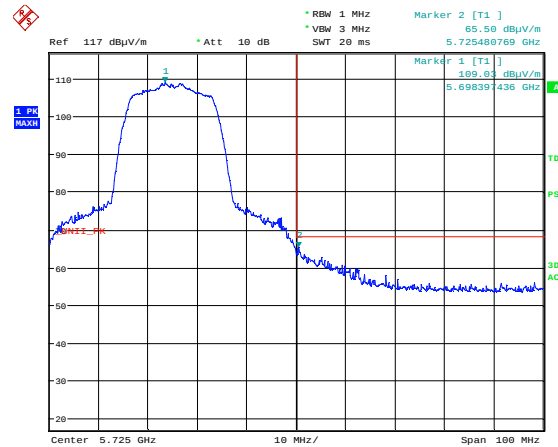
Date: 6.FEB.2023 15:21:37

Band Edge 5725 MHz, ch140, 802.11n MCS0, Radiated, Max PL13



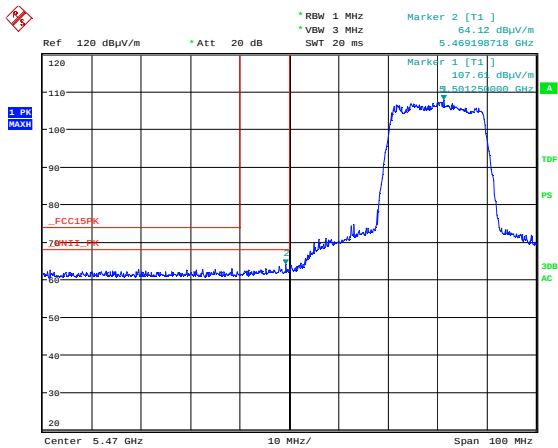
Date: 7.FEB.2023 13:33:51

Band Edge 5470 MHz, ch100, 802.11n MCS8 MIMO, Radiated, Max



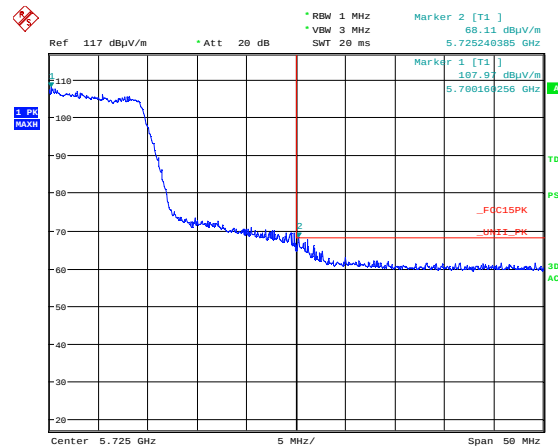
Date: 7.FEB.2023 13:45:49

Band Edge 5725 MHz, ch140, 802.11n MCS8 MIMO, Radiated, Max



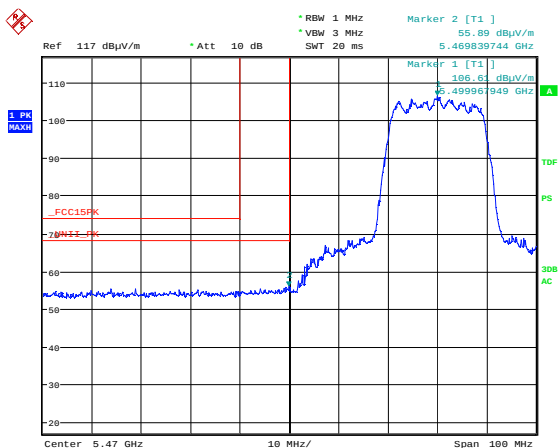
Date: 6.FEB.2023 16:15:48

Band Edge 5470 MHz, ch100, 802.11ax MCS0 SISO, Radiated, Max



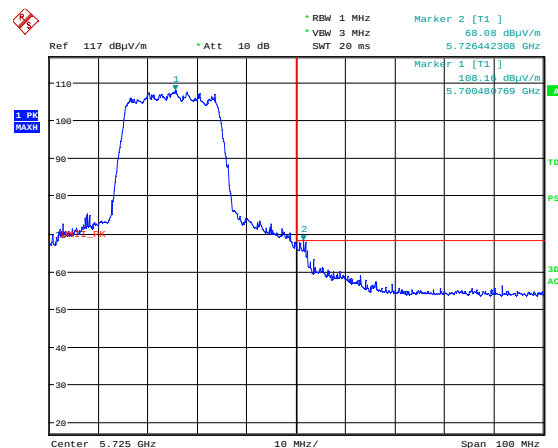
Date: 6.FEB.2023 16:28:27

Band Edge 5725 MHz, ch140, 802.11ax MCS0 SISO, Radiated, Max PL9



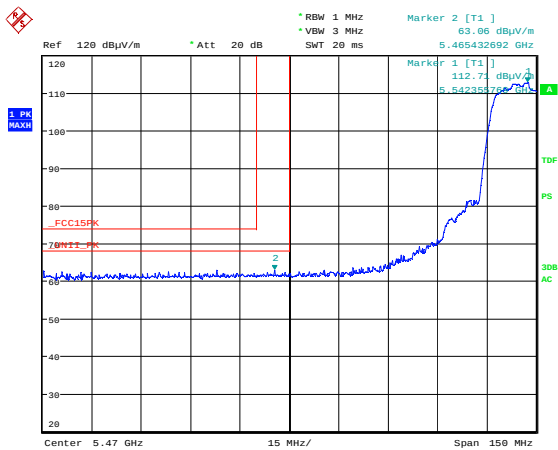
Date: 7.FEB.2023 14:20:40

Band Edge 5470 MHz, ch100, 802.11ax MCS0 MIMO, Radiated, Max



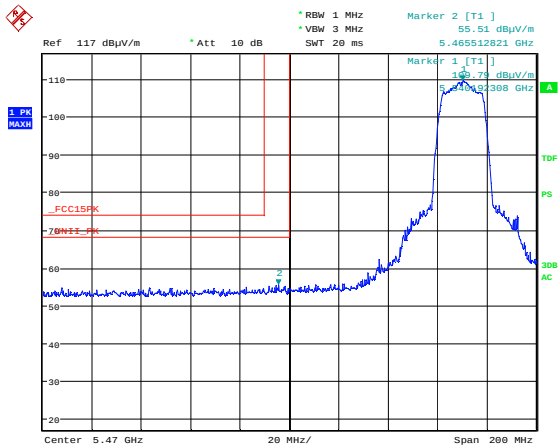
Date: 7.FEB.2023 14:12:01

Band Edge 5725 MHz, ch140, 802.11ax MCS0 MIMO, Radiated, Max



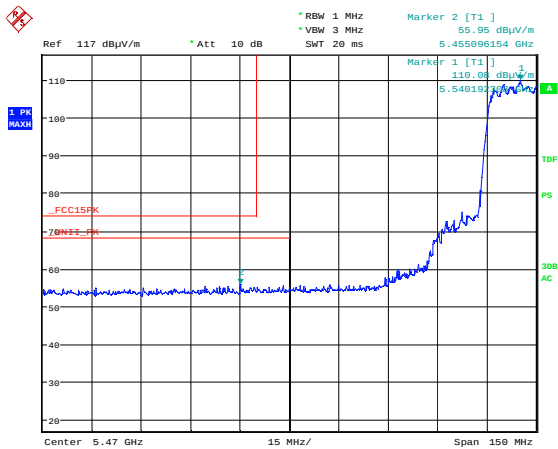
Date: 6.FEB.2023 15:07:59

Band Edge 5470 MHz, ch108, 802.11a 6M, Radiated, Max



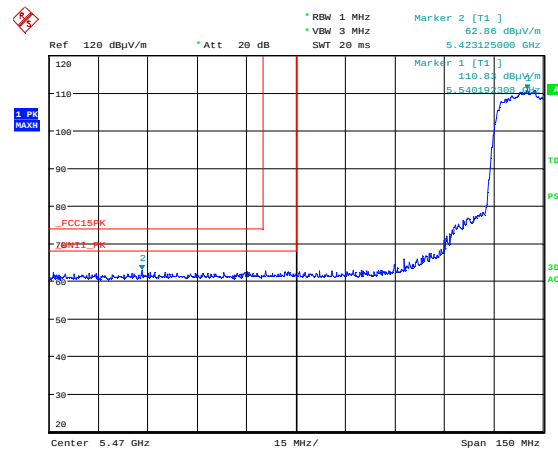
Date: 7.FEB.2023 13:37:50

Band Edge 5470 MHz, ch108, 802.11n MCS8 MIMO, Radiated, Max



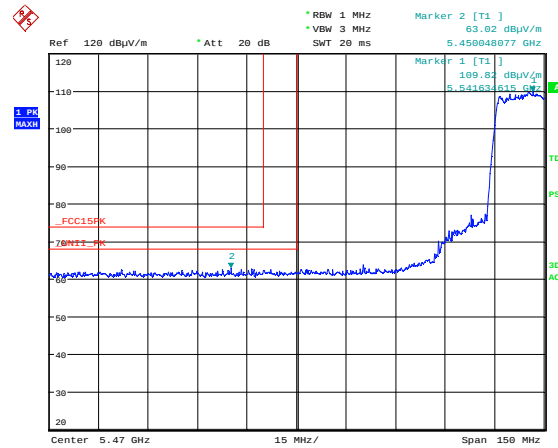
Date: 7.FEB.2023 14:17:27

Band Edge 5470 MHz, ch108, 802.11ax MCS0 MIMO, Radiated, Max



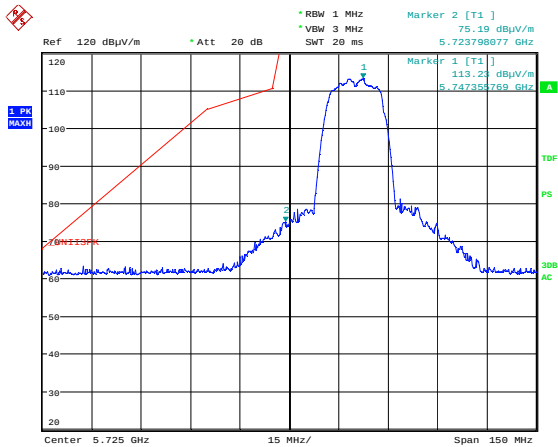
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Band Edge 5470 MHz, ch108, 802.11n MCS0, Radiated, Max



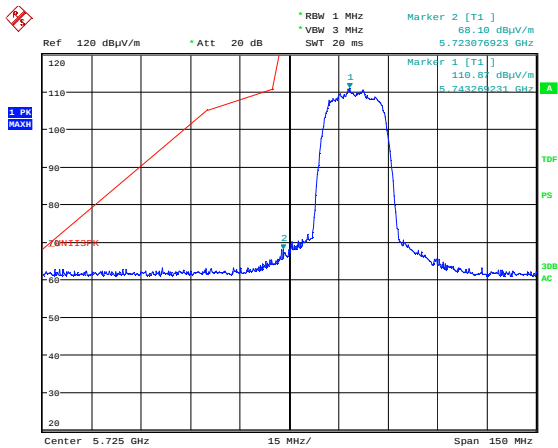
Date: 6.FEB.2023 16:18:50

Band Edge 5470 MHz, ch108, 802.11ax MCS0 SISO, Radiated, Max



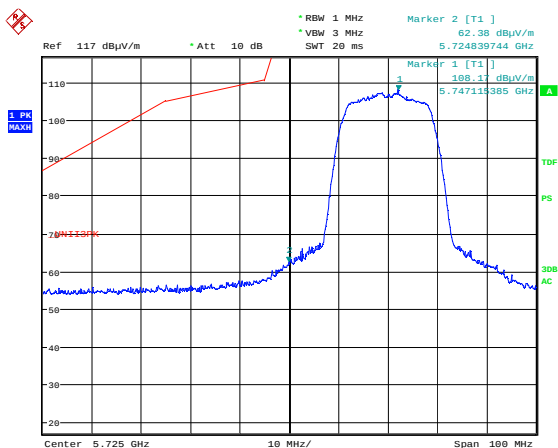
Date: 6.FEB.2023 15:45:35

Band Edge 5725 MHz, ch149, 802.11a 6Mb, Radiated, Max



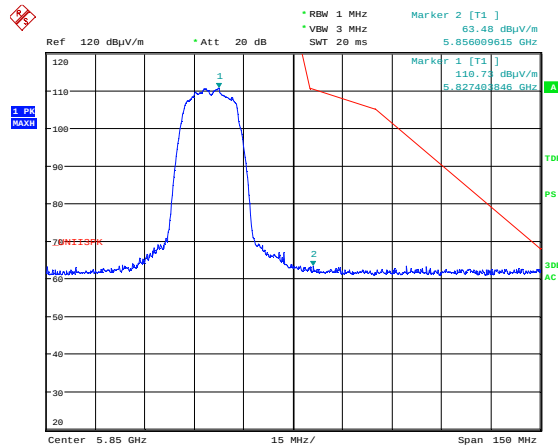
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Band Edge 5725 MHz, ch149, 802.11n MCS0, Radiated, Max



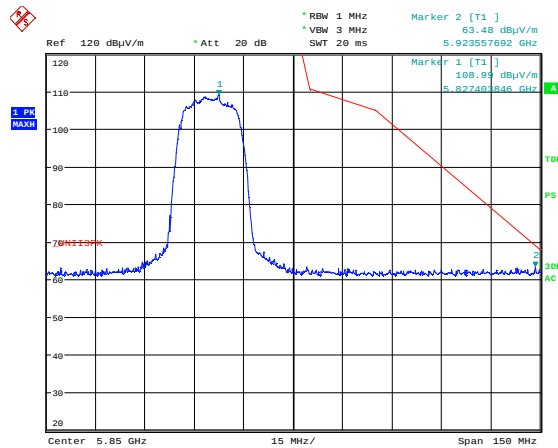
Date: 7.FEB.2023 13:52:08

Band Edge 5725 MHz, ch149, 802.11n MCS8 MIMO, Radiated, Max



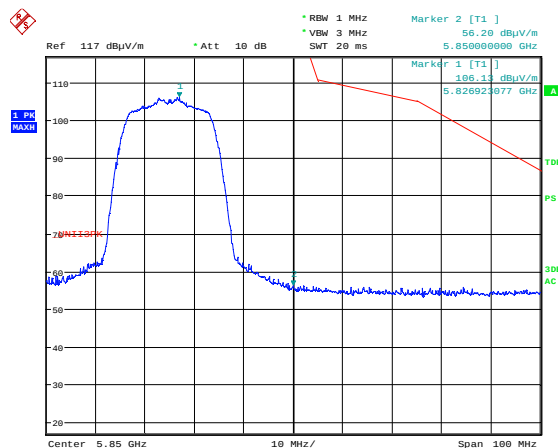
Date: 6.FEB.2023 15:50:59

Band Edge 5850 MHz, ch157, 802.11a 6Mb, Radiated, Max



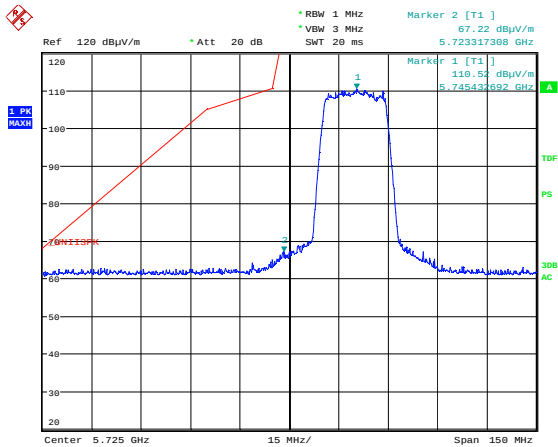
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Band Edge 5850 MHz, ch157, 802.11n MCS0, Radiated, Max



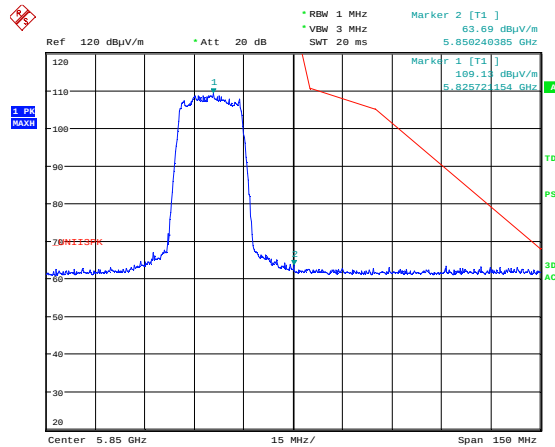
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Band Edge 5850 MHz, ch157, 802.11n MCS8 MIMO, Radiated, Max



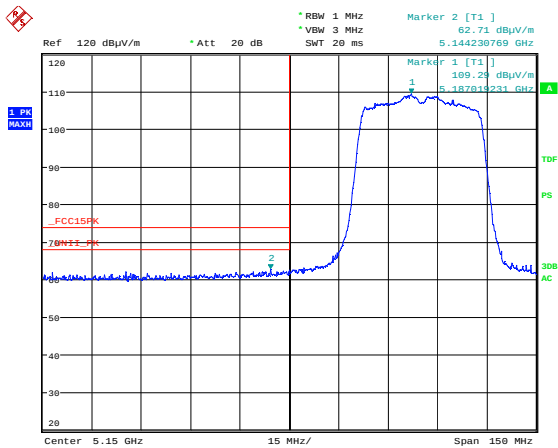
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Band Edge 5725 MHz, ch149, 802.11ax MCS0 SISO, Radiated, Max



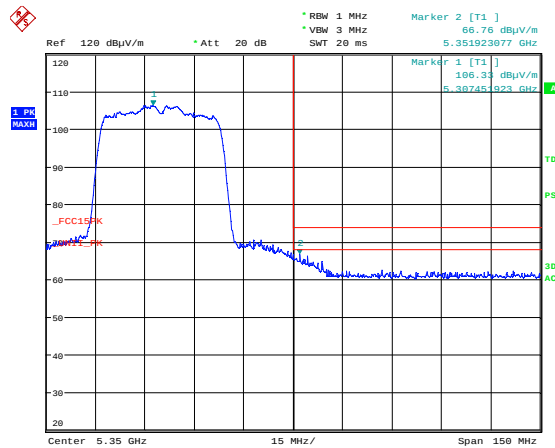
Date: 6.FEB.2023 16:36:32

Band Edge 5850 MHz, ch165, 802.11ax MCS0 SISO, Radiated, Max



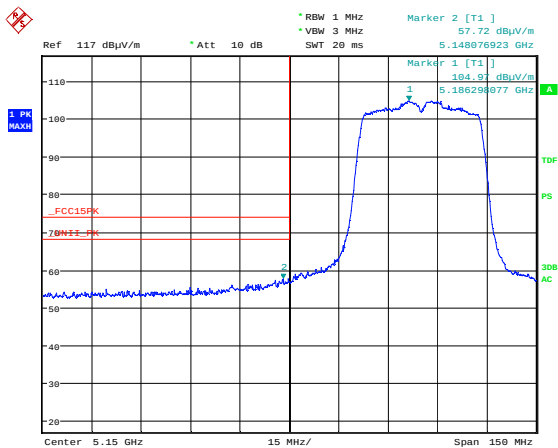
Date: 7.FEB.2023 09:12:05

Band Edge 5725 MHz, ch149, 802.11ax MCS0 SISO, Radiated, Max



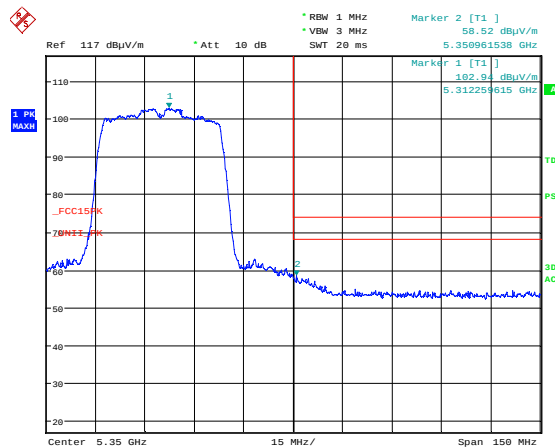
Date: 7.FEB.2023 09:27:15

Band Edge 5850 MHz, ch165, 802.11ax MCS0 SISO, Radiated, Max



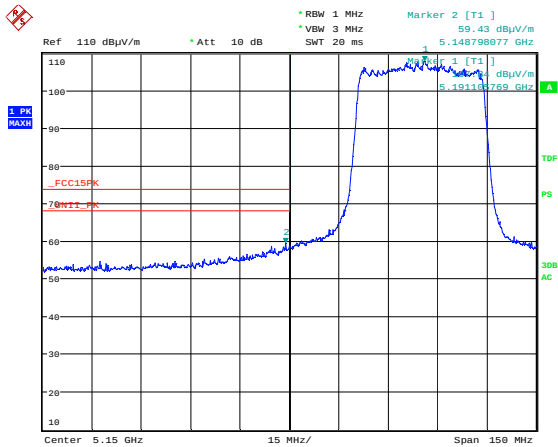
Date: 7.FEB.2023 14:47:25

Band Edge 5150 MHz, ch038, 802.11n MCS0 HT40, Radiated, Max



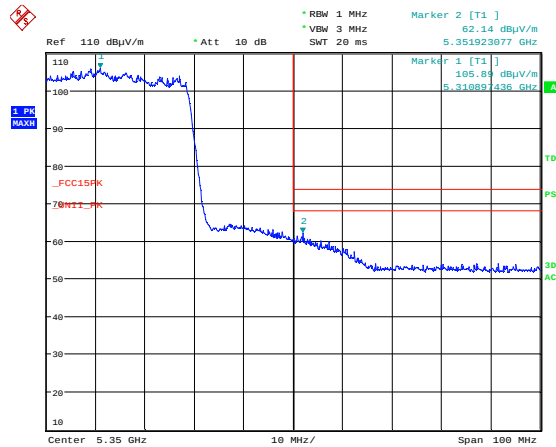
Date: 7.FEB.2023 14:59:22

Band Edge 5350 MHz, ch062, 802.11n MCS0 HT40, Radiated, Max



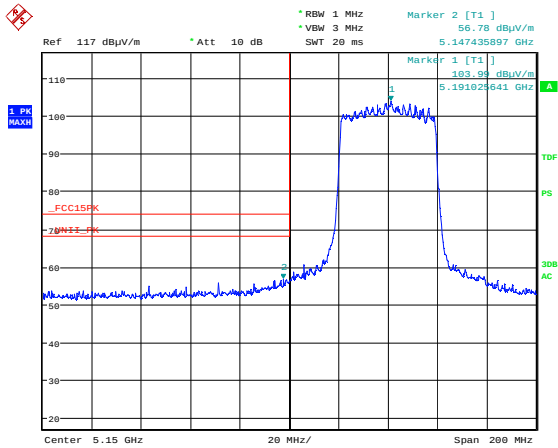
Date: 7.FEB.2023 10:55:17

Band Edge 5150 MHz, ch038, 802.11ax MCS0 HT40 SISO, Radiated, Max



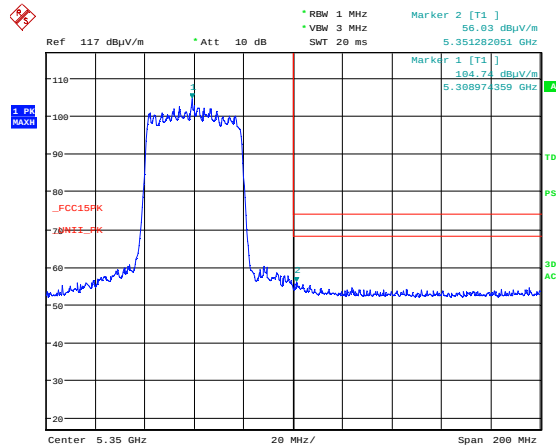
Date: 7.FEB.2023 10:41:02

Band Edge 5350 MHz, ch062, 802.11ax MCS0 HT40 SISO, Radiated, Max



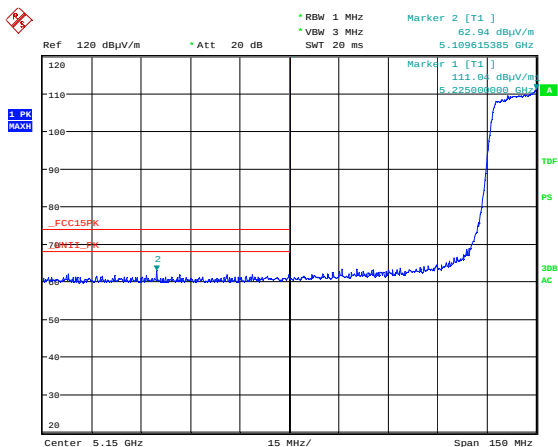
Date: 7.FEB.2023 16:06:20

Band Edge 5150 MHz, ch038, 802.11ax MCS0 HT40 MIMO, Radiated, Max



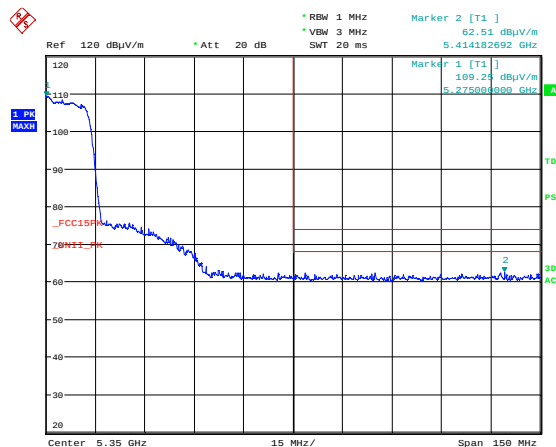
Date: 7.FEB.2023 15:55:17

Band Edge 5350 MHz, ch062, 802.11ax MCS0 HT40 MIMO, Radiated, Max



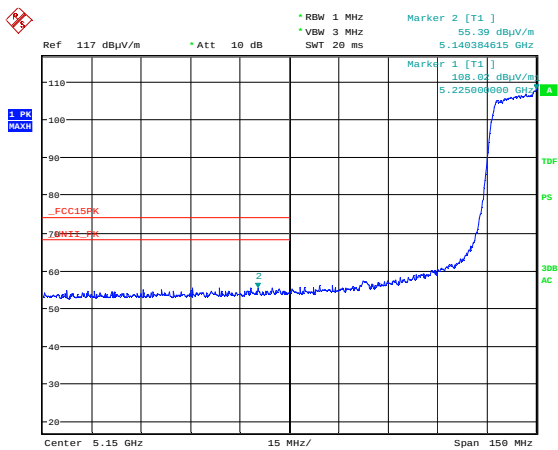
Date: 7.FEB.2023 09:18:39

Band Edge 5150 MHz, ch046, 802.11n MCS0 HT40, Radiated, Max



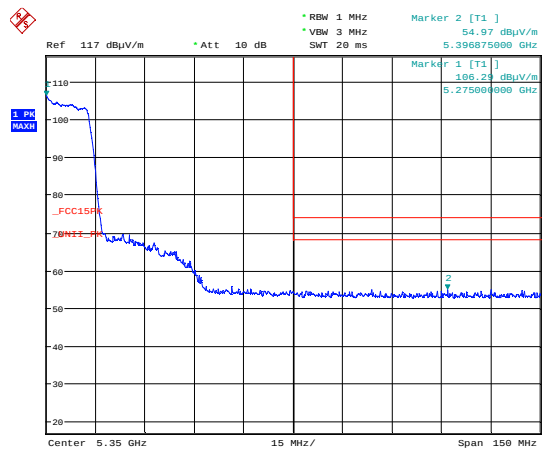
Date: 7.FEB.2023 09:24:42

Band Edge 5350 MHz, ch054, 802.11n MCS0 HT40, Radiated, Max



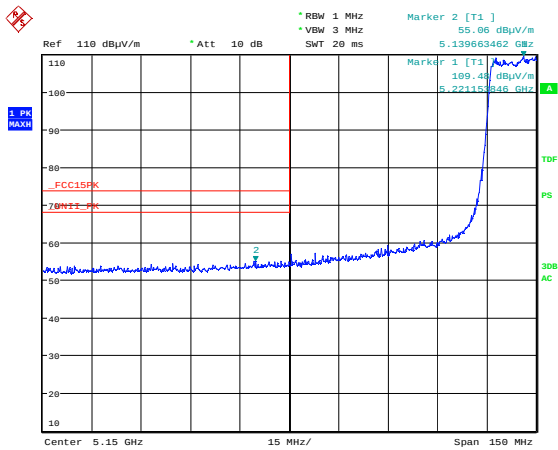
Date: 7.FEB.2023 14:50:51

Band Edge 5150 MHz, ch046, 802.11n MCS8 HT40 MIMO, Radiated, Max



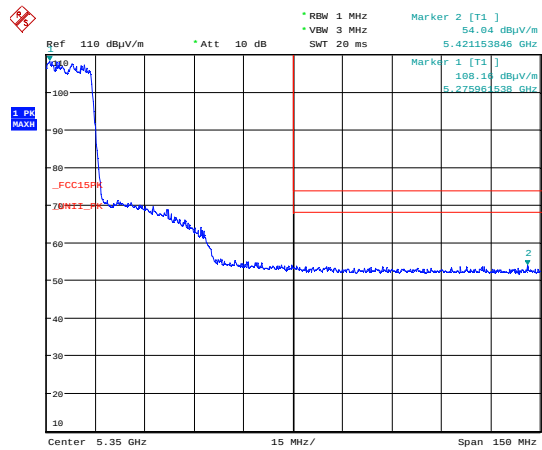
Date: 7.FEB.2023 14:55:55

Band Edge 5350 MHz, ch054, 802.11n MCS8 HT40 MIMO, Radiated, Max



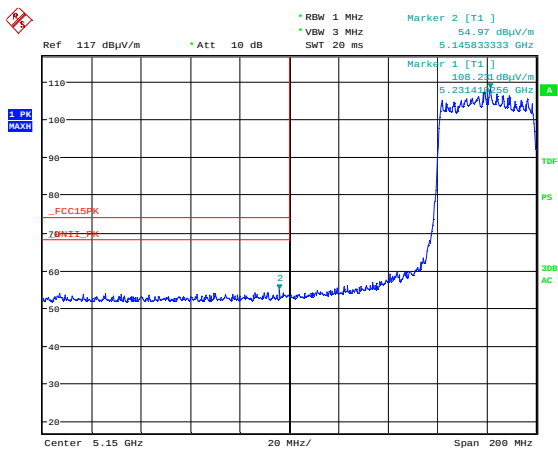
Date: 7.FEB.2023 10:48:53

Band Edge 5150 MHz, ch046, 802.11ax MCS8 HT40 MIMO, Radiated, Max



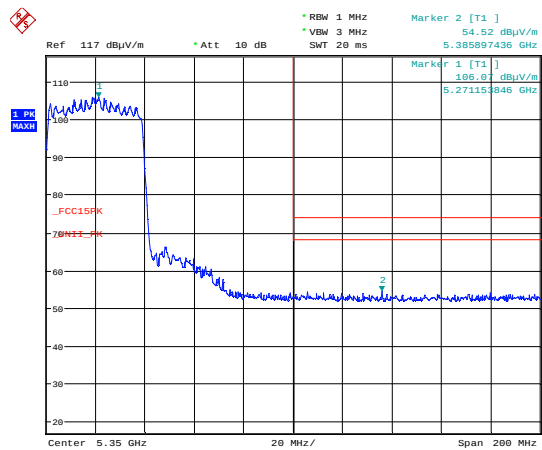
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Band Edge 5350 MHz, ch054, 802.11ax MCS8 HT40 MIMO, Radiated, Max



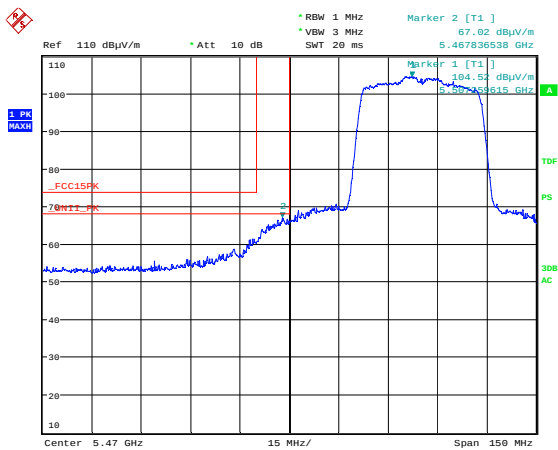
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Band Edge 5150 MHz, ch046, 802.11ax MCS0 HT40 SISO, Radiated, Max



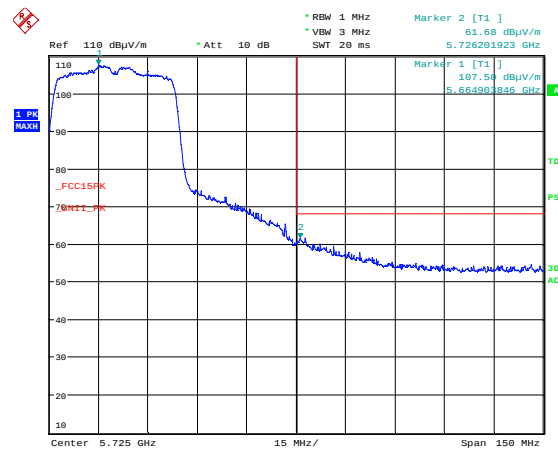
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Band Edge 5350 MHz, ch054, 802.11ax MCS0 HT40 SISO, Radiated, Max



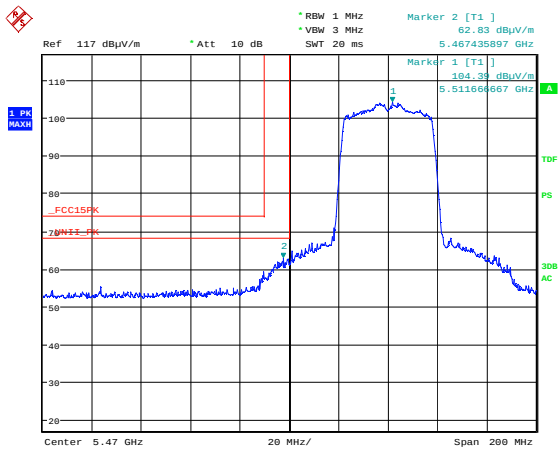
Date: 7.FEB.2023 09:46:59

Band Edge 5470 MHz, ch102, 802.11n MCS0 HT40, Radiated, Max PL9.5



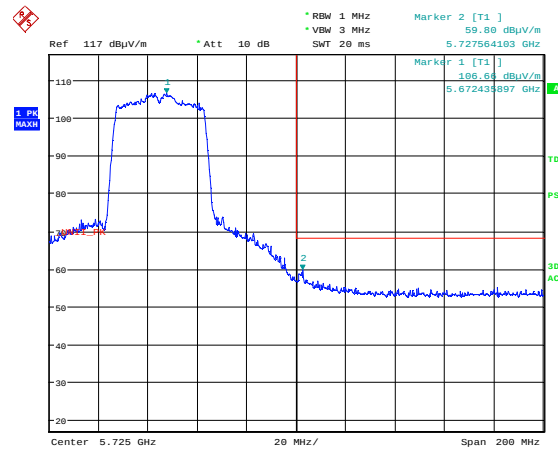
Date: 7.FEB.2023 09:53:45

Band Edge 5725 MHz, ch134, 802.11n MCS0 HT40, Radiated, Max



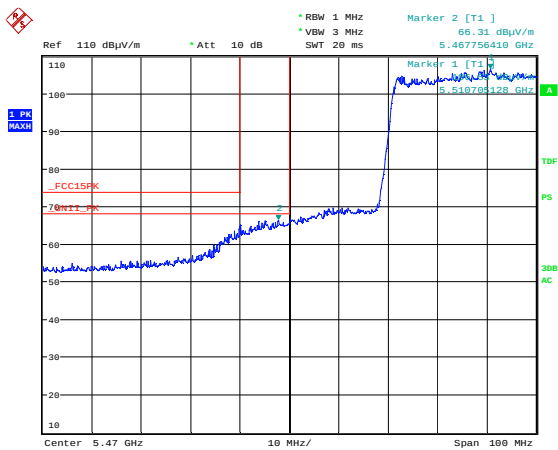
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Band Edge 5470 MHz, ch102, 802.11n MCS8 HT40 MIMO, Radiated, Max



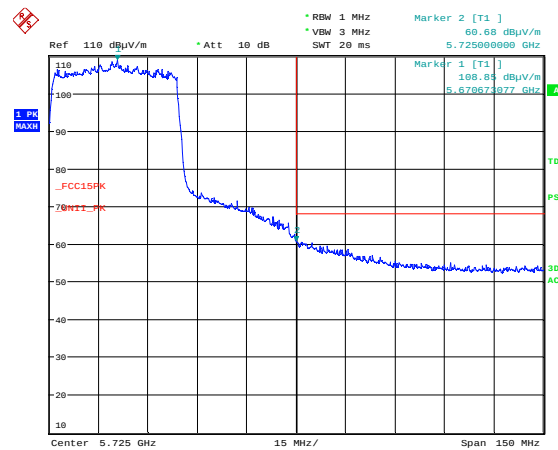
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Band Edge 5725 MHz, ch134, 802.11n MCS8 HT40 MIMO, Radiated, Max



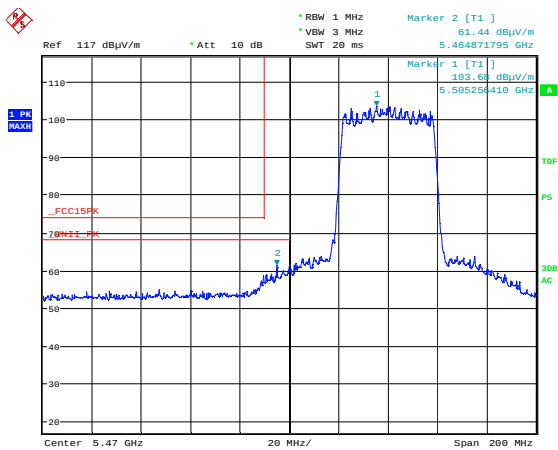
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Band Edge 5470 MHz, ch102, 802.11ax MCS0 HT40 SISO, Radiated, Max



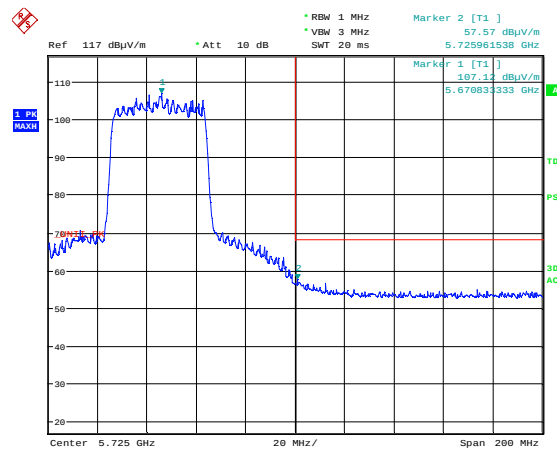
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Band Edge 5725 MHz, ch134, 802.11ax MCS0 HT40 SISO, Radiated, Max



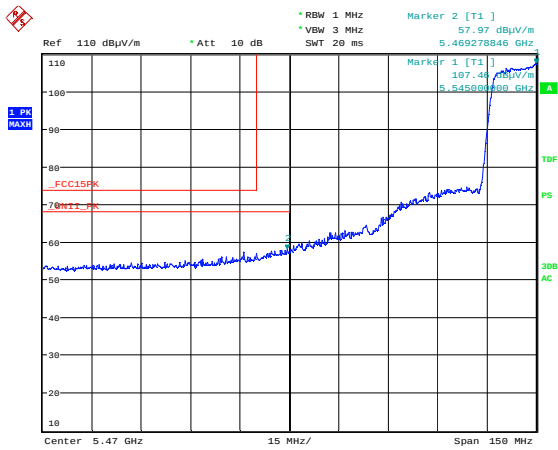
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Band Edge 5470 MHz, ch102, 802.11ax MCS0 HT40 MIMO, Radiated, Max



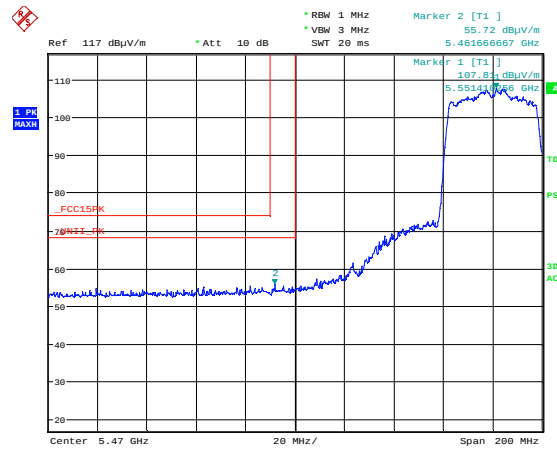
Date: 7.FEB.2023 15:41:26

Band Edge 5725 MHz, ch134, 802.11ax MCS0 HT40 MIMO, Radiated, Max



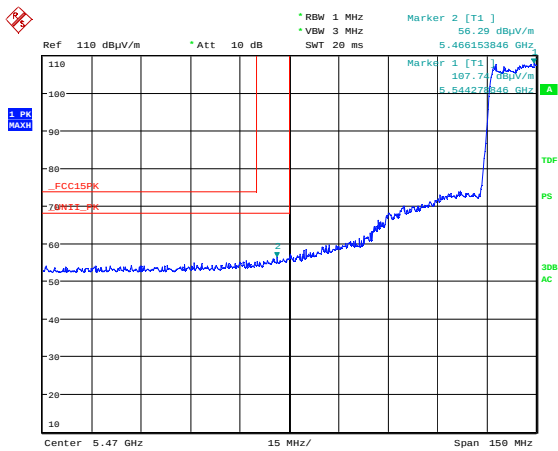
Date: 7.FEB.2023 09:49:53

Band Edge 5470 MHz, ch110, 802.11n MCS0 HT40, Radiated, Max



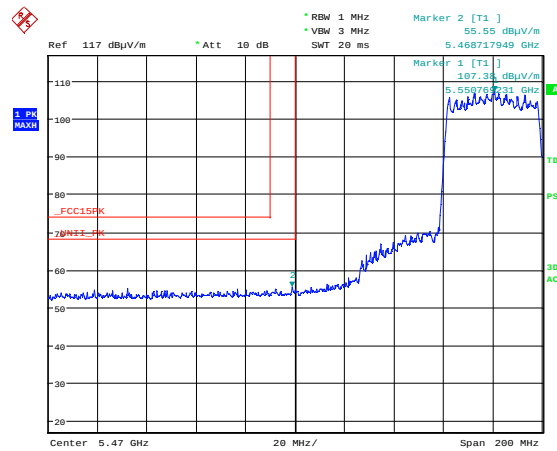
Date: 7.FEB.2023 15:08:02

Band Edge 5470 MHz, ch110, 802.11n MCS8 HT40 MIMO, Radiated, Max



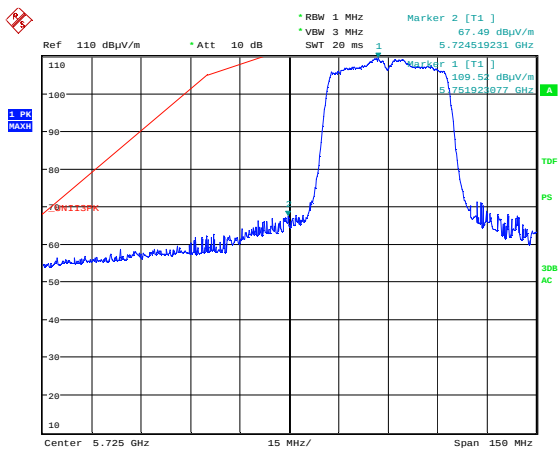
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Band Edge 5470 MHz, ch110, 802.11ax MCS0 HT40 SISO, Radiated, Max



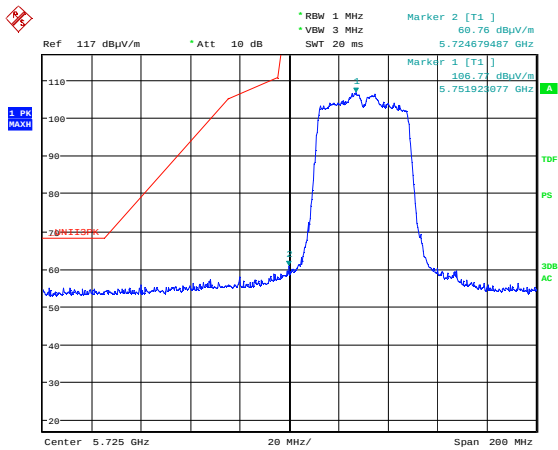
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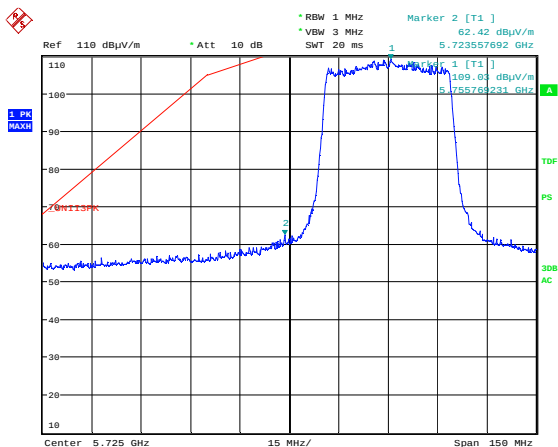
Date: 7.FEB.2023 10:01:46

Band Edge 5725 MHz, ch151, 802.11n MCS0 HT40, Radiated, Max



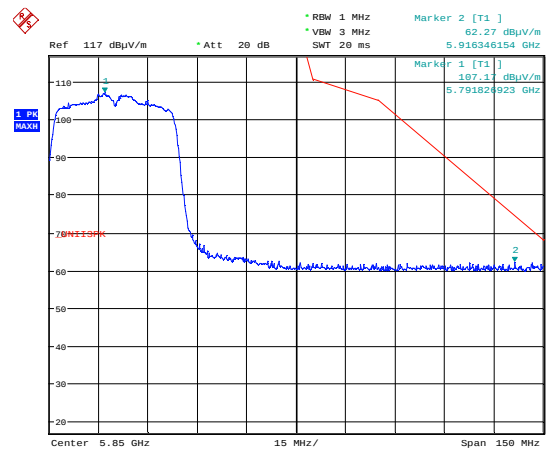
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Band Edge 5725 MHz, ch151, 802.11n MCS8 HT40 MIMO, Radiated, Max



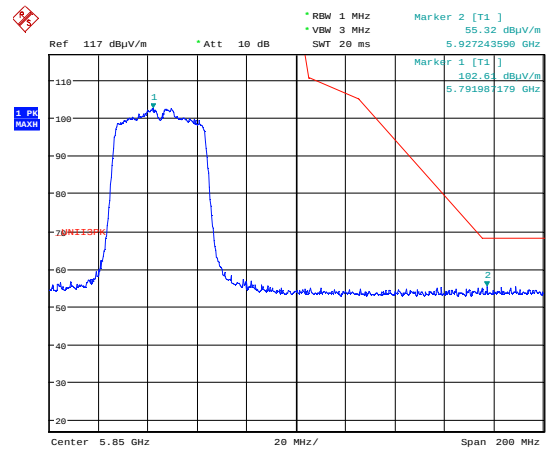
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Band Edge 5725 MHz, ch151, 802.11ax MCS0 HT40 SISO, Radiated, Max



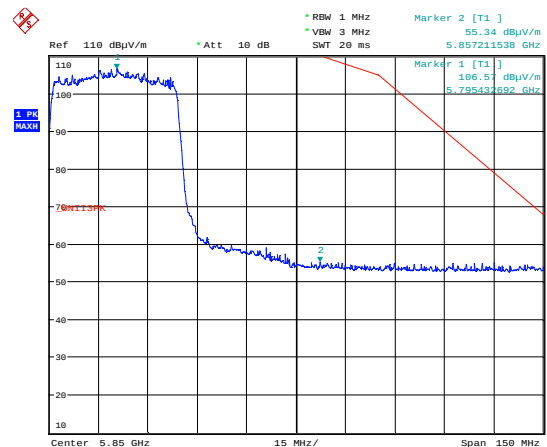
Date: 7.FEB.2023 10:06:24

Band Edge 5850 MHz, ch159, 802.11n MCS0 HT40, Radiated, Max



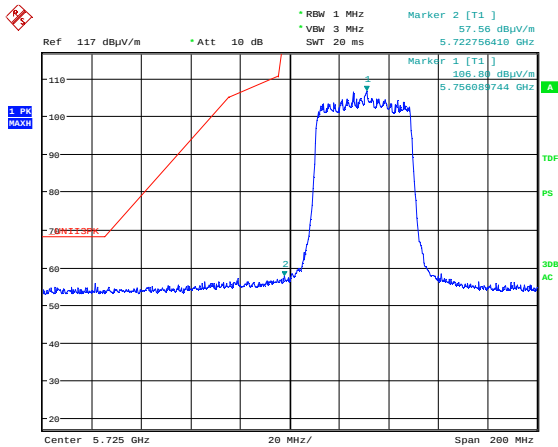
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Band Edge 5850 MHz, ch159, 802.11n MCS8 HT40 MIMO, Radiated, Max



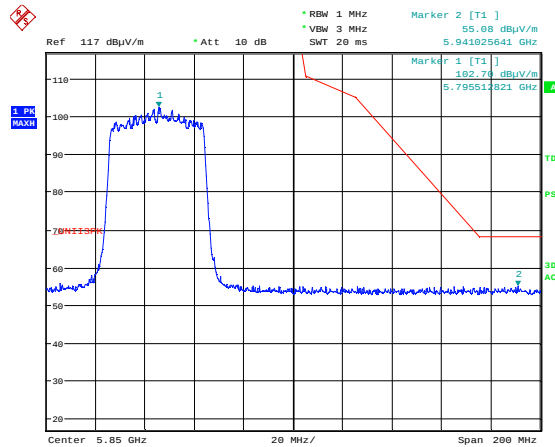
Date: 7.FEB.2023 10:13:13

Band Edge 5850 MHz, ch159, 802.11ax MCS0 HT40 SISO, Radiated, Max



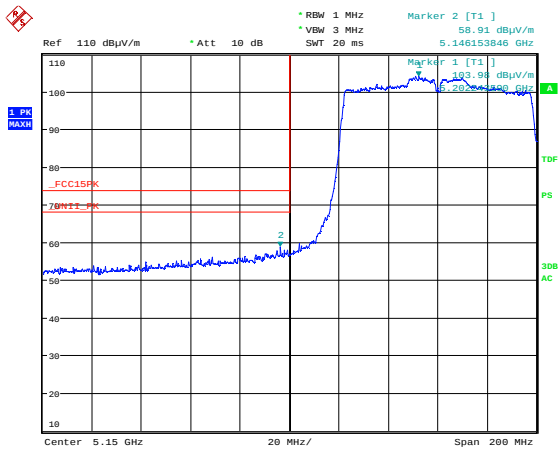
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Band Edge 5725 MHz, ch151, 802.11ax MCS0 HT40 MIMO, Radiated, Max



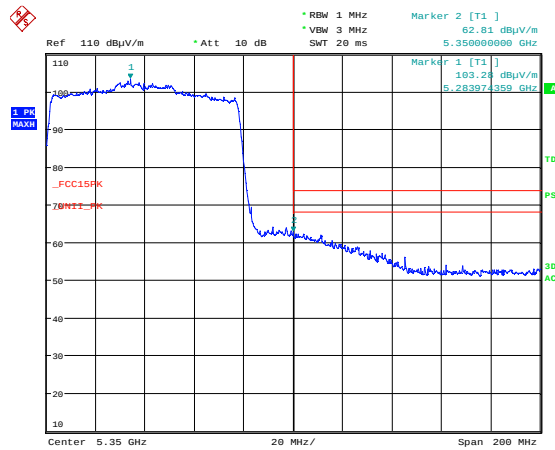
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Band Edge 5850 MHz, ch159, 802.11ax MCS0 HT40 MIMO, Radiated, Max



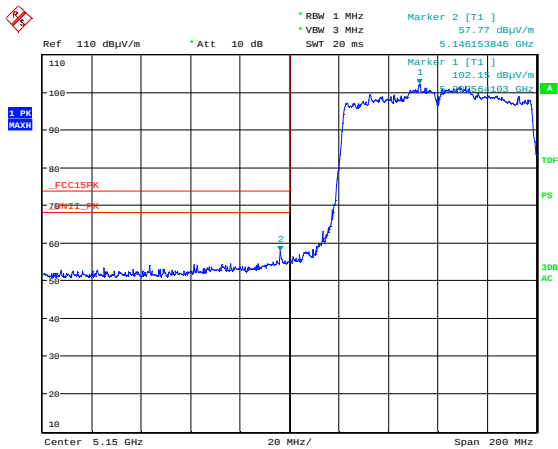
Date: 7.FEB.2023 12:43:48

Band Edge 5150 MHz, ch042, 802.11ac MCS0 HT80 SISO, Radiated, Max



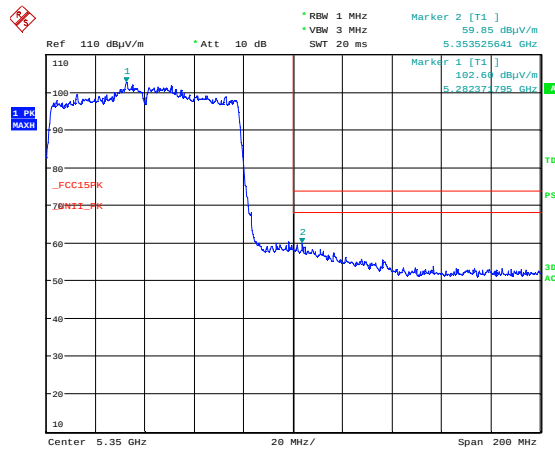
Date: 7.FEB.2023 12:40:10

Band Edge 5350 MHz, ch058, 802.11ac MCS0 HT80 SISO, Radiated, Max



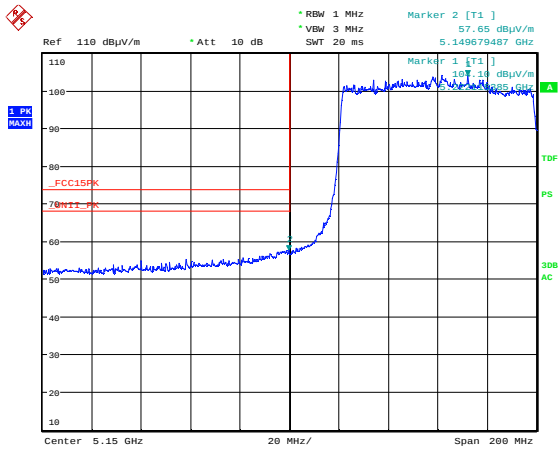
Date: 8.FEB.2023 10:43:44

Band Edge 5150 MHz, ch042, 802.11ac MCS0 HT80 MIMO, Radiated, Max



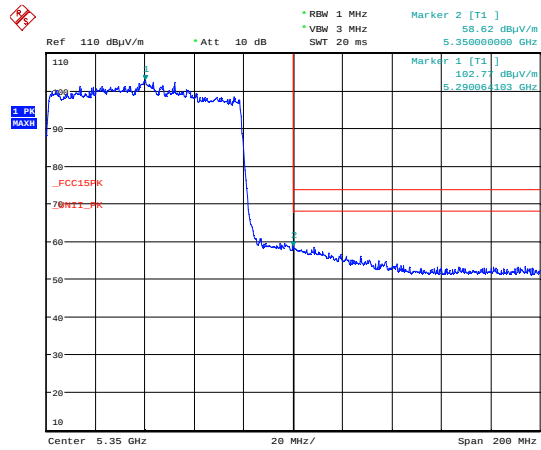
Date: 8.FEB.2023 10:48:32

Band Edge 5350 MHz, ch058, 802.11ac MCS0 HT80 MIMO, Radiated, Max



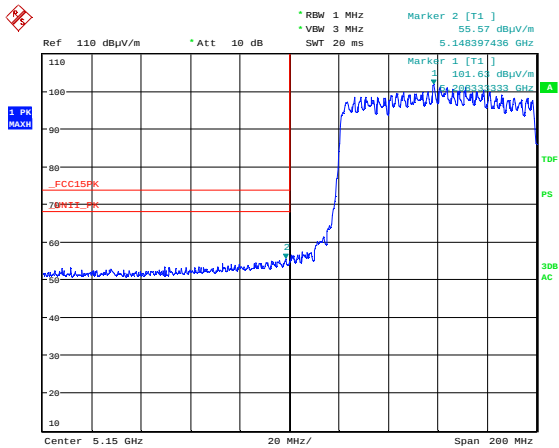
Date: 7.FEB.2023 11:05:25

Band Edge 5150 MHz, ch042, 802.11ax MCS0 HT80 SISO, Radiated, Max



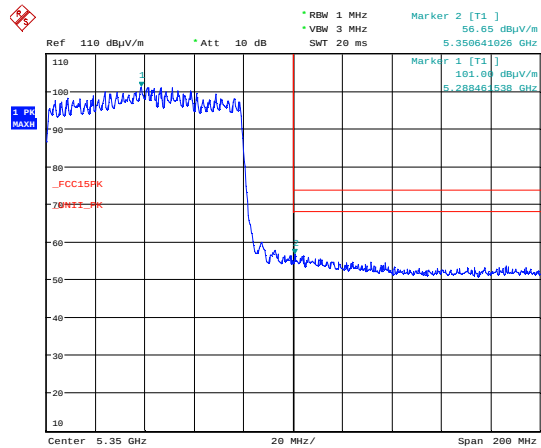
Date: 7.FEB.2023 11:08:56

Band Edge 5350 MHz, ch058, 802.11ax MCS0 HT80 SISO, Radiated, Max



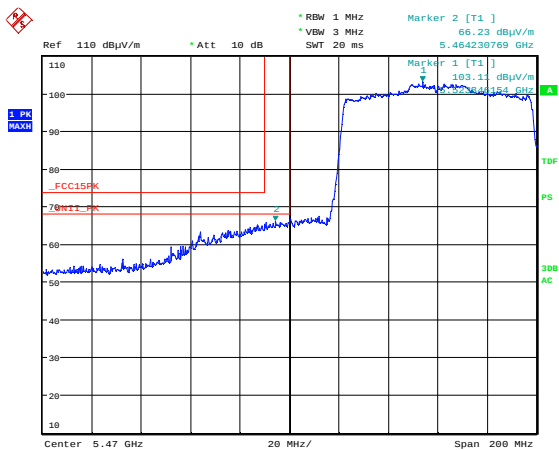
Date: 8.FEB.2023 12:08:40

Band Edge 5150 MHz, ch042, 802.11ax MCS0 HT80 MIMO, Radiated, Max



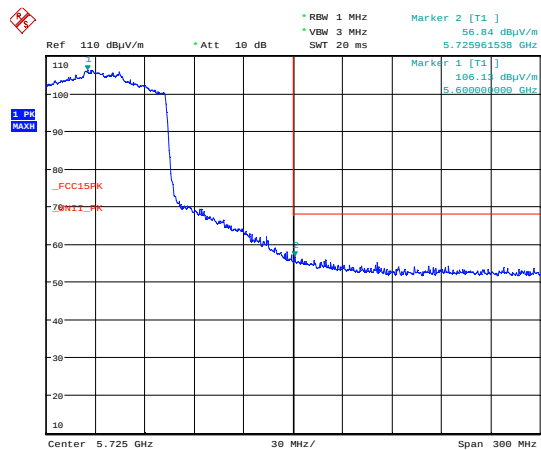
Date: 8.FEB.2023 12:03:55

Band Edge 5350 MHz, ch058, 802.11ax MCS0 HT80 MIMO, Radiated, Max



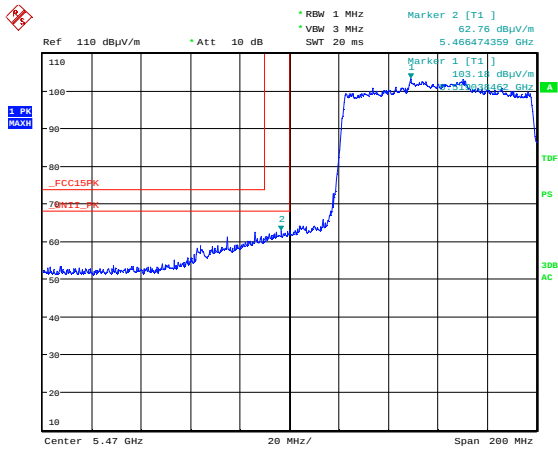
Date: 7.FEB.2023 12:36:22

Band Edge 5470 MHz, ch106, 802.11ac MCS0 HT80 SISO, Radiated, Max PL10



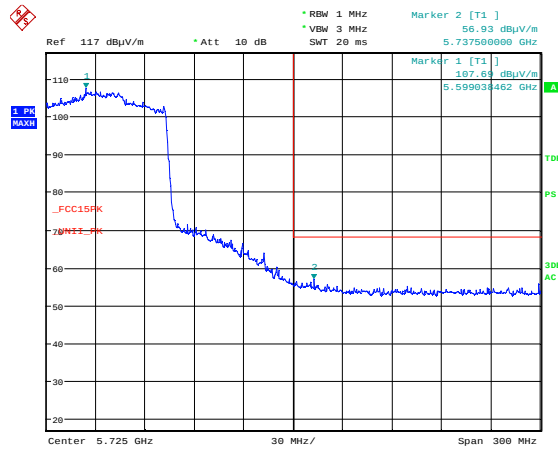
Date: 7.FEB.2023 12:23:41

Band Edge 5725 MHz, ch122, 802.11ac MCS0 HT80 SISO, Radiated, Max



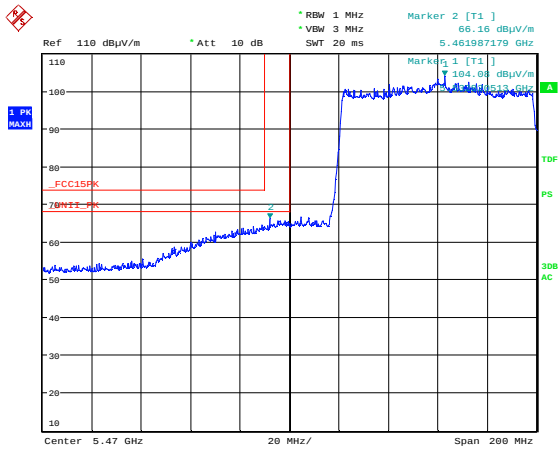
Date: 8.FEB.2023 10:53:21

Band Edge 5470 MHz, ch106, 802.11ac MCS0 HT80 MIMO, Radiated, Max



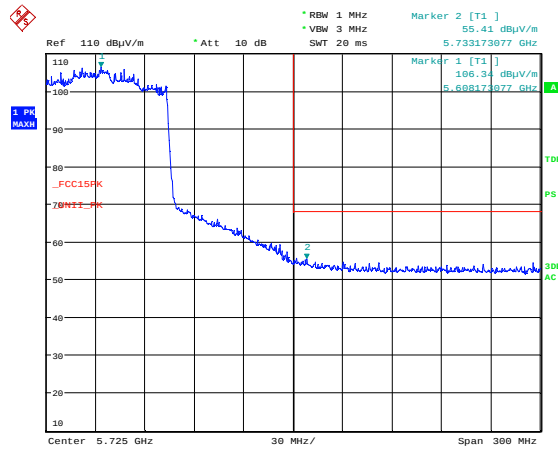
Date: 8.FEB.2023 11:00:43

Band Edge 5725 MHz, ch122, 802.11ac MCS0 HT80 MIMO, Radiated, Max



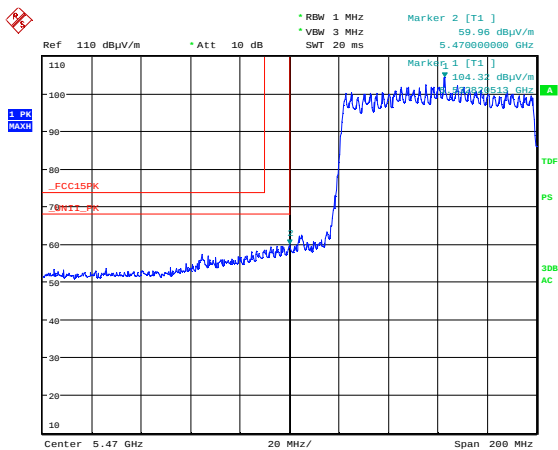
Date: 7.FEB.2023 11:18:28

Band Edge 5470 MHz, ch106, 802.11ac MCS0 HT80 MIMO, Radiated, Max



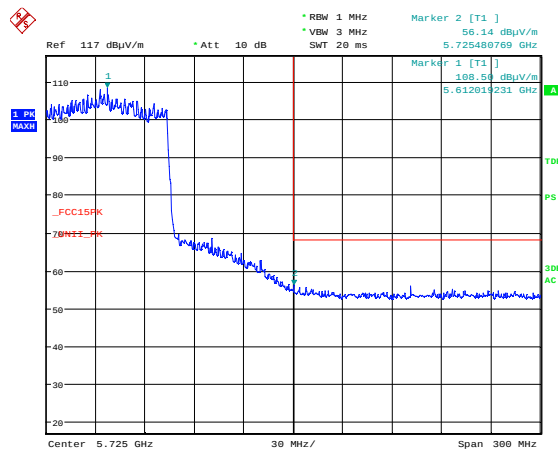
Date: 7.FEB.2023 11:23:44

Band Edge 5725 MHz, ch122, 802.11ac MCS0 HT80 MIMO, Radiated, Max



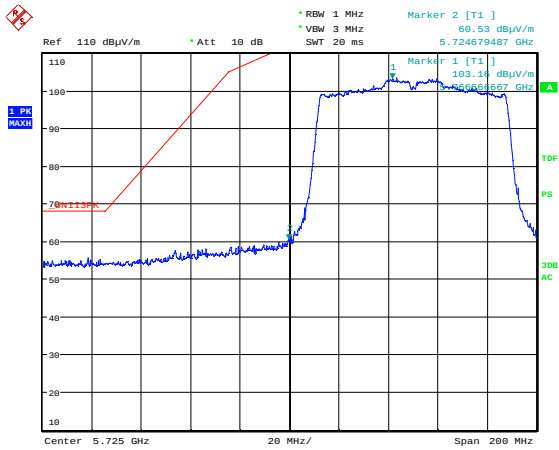
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Band Edge 5470 MHz, ch106, 802.11ax MCS0 HT80 SISO, Radiated, Max



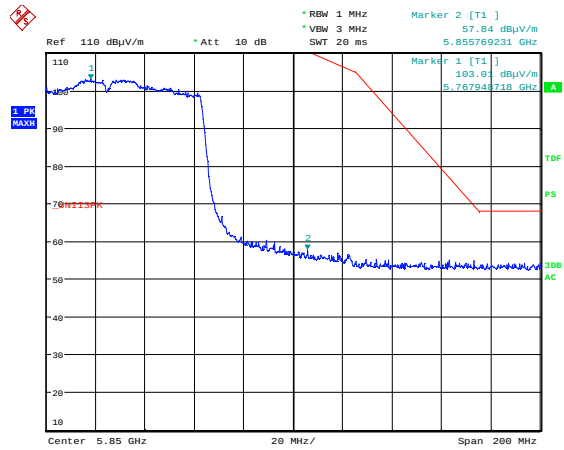
Date: 8.FEB.2023 11:50:45

Band Edge 5725 MHz, ch122, 802.11ax MCS0 HT80 SISO, Radiated, Max



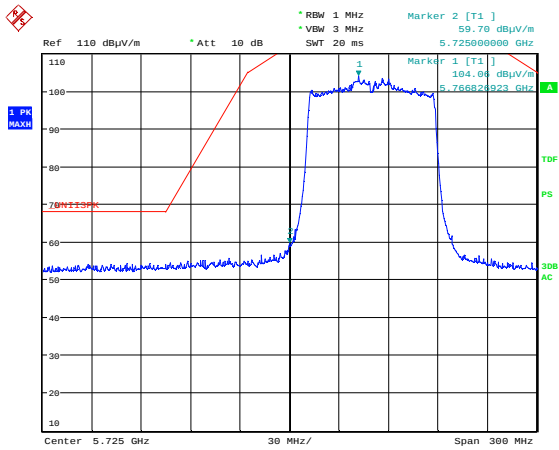
Date: 7.FEB.2023 12:19:09

Band Edge 5725 MHz, ch155, 802.11ac MCS0 HT80 SISO, Radiated, Max



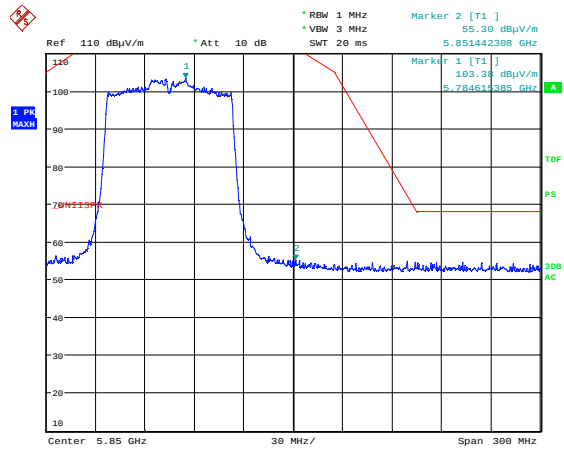
Date: 7.FEB.2023 12:17:55

Band Edge 5850 MHz, ch155, 802.11ac MCS0 HT80 SISO, Radiated, Max



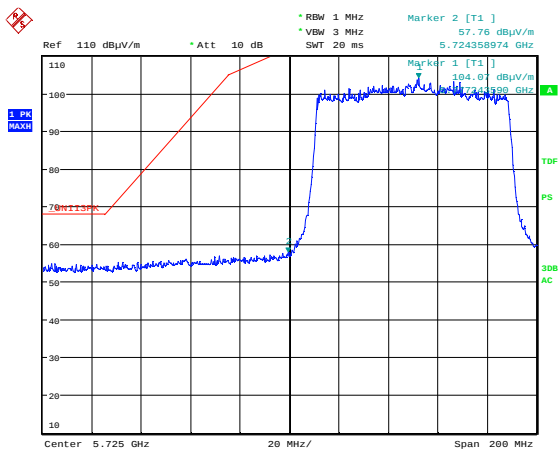
Date: 8.FEB.2023 11:09:59

Band Edge 5725 MHz, ch155, 802.11ac MCS0 HT80 MIMO, Radiated, Max



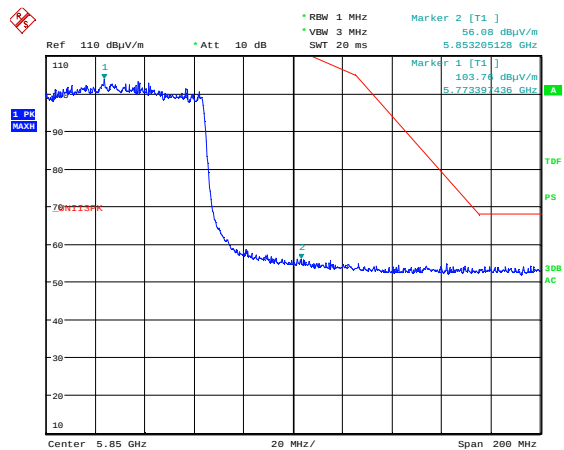
Date: 8.FEB.2023 11:10:51

Band Edge 5850 MHz, ch155, 802.11ac MCS0 HT80 MIMO, Radiated, Max



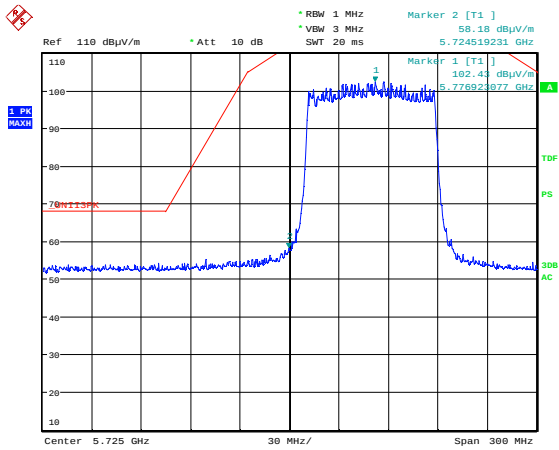
Date: 7.FEB.2023 12:04:13

Band Edge 5725 MHz, ch155, 802.11ax MCS0 HT80 SISO, Radiated, Max



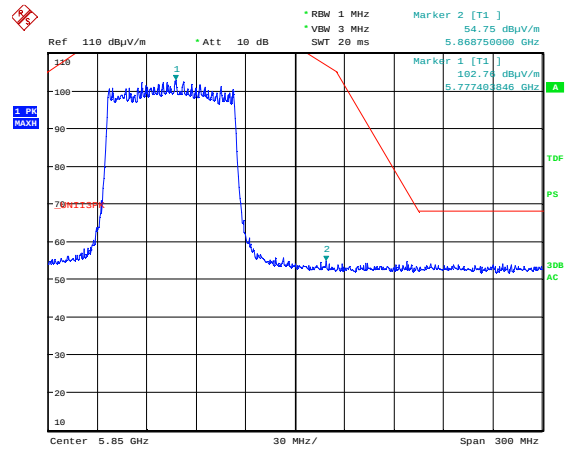
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Band Edge 5850 MHz, ch155, 802.11ax MCS0 HT80 SISO, Radiated, Max



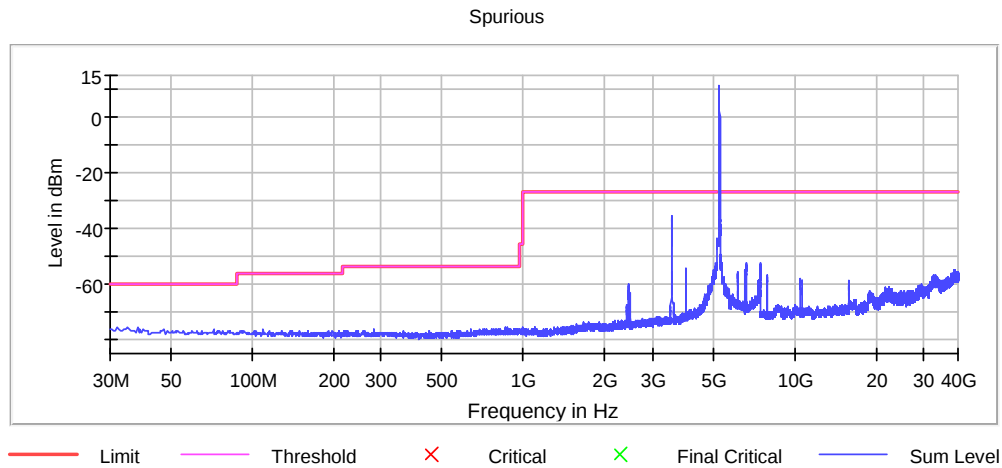
Date: 8.FEB.2023 11:42:50

Band Edge 5725 MHz, ch155, 802.11ax MCS0 HT80 MIMO, Radiated, Max

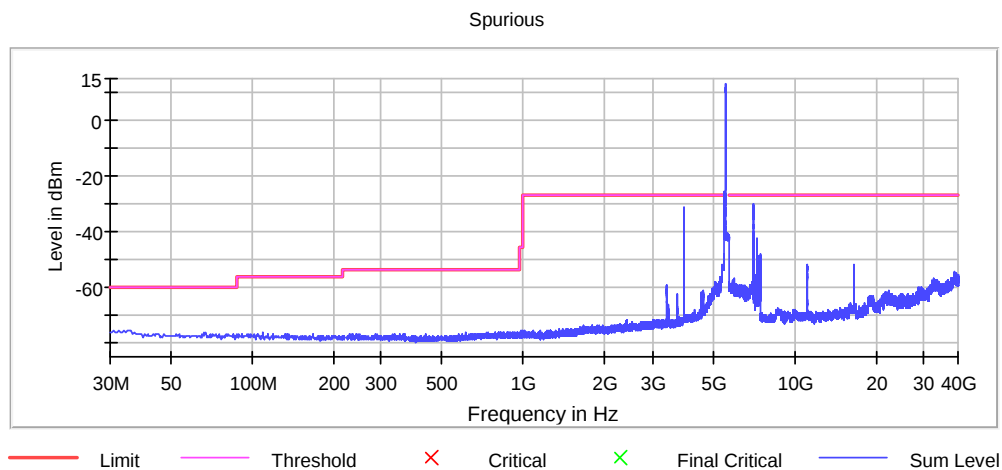


Date: 8.FEB.2023 11:43:43

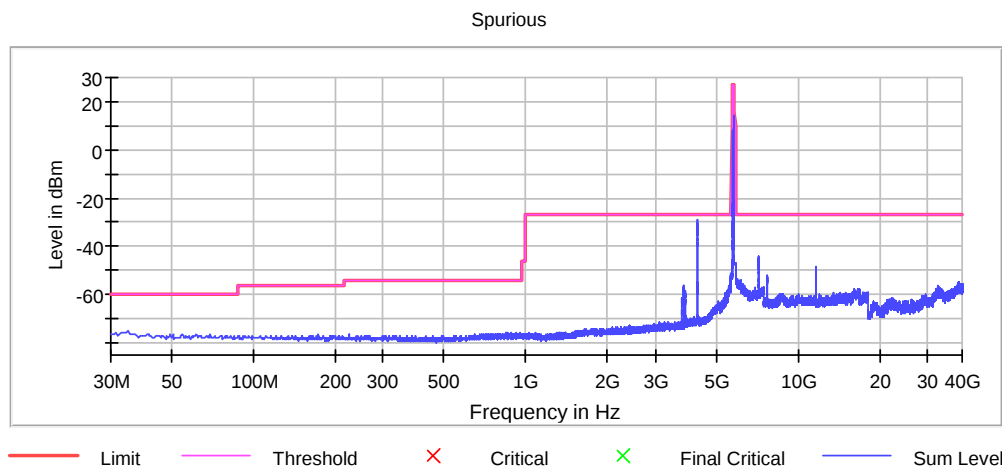
Band Edge 5850 MHz, ch155, 802.11ax MCS0 HT80 MIMO, Radiated, Max



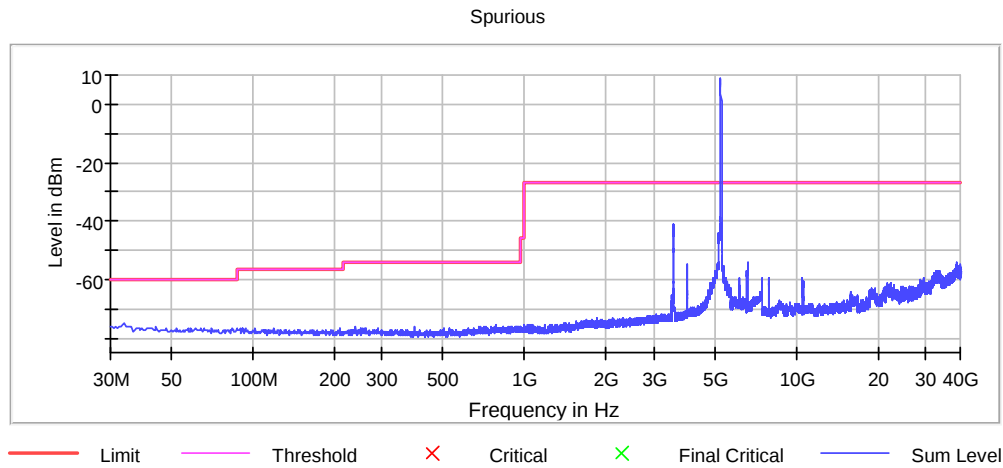
Conducted Emissions, 30M-40G, ch056, 802.11a, 6M



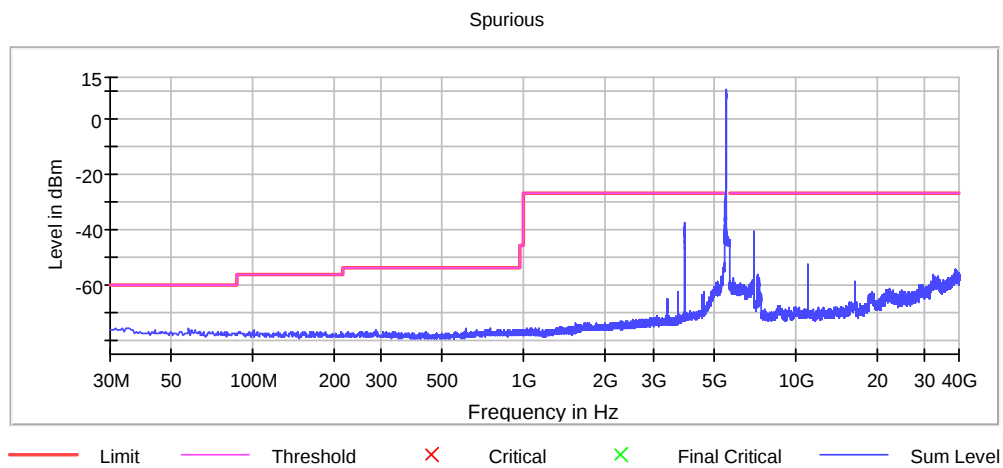
Conducted Emissions, 30M-40G, ch108, 802.11a, 6M



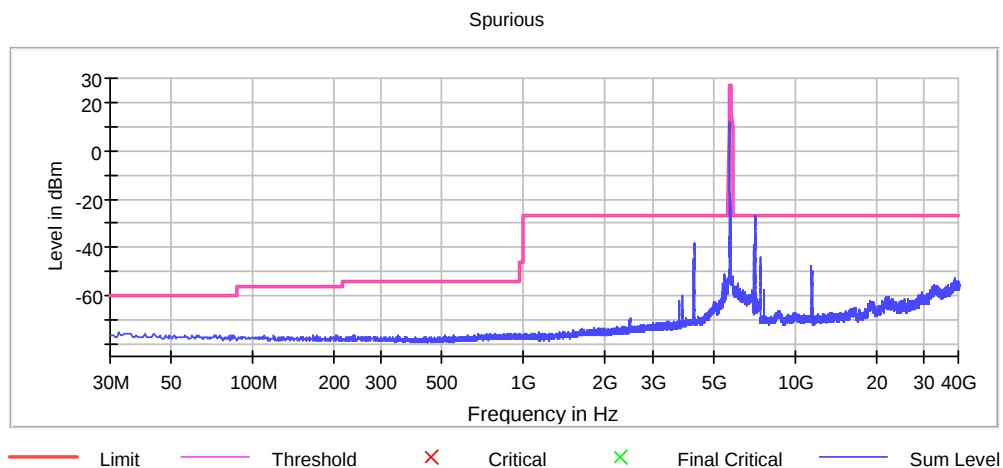
Conducted Emissions, 30M-40G, ch157, 802.11a, 6M



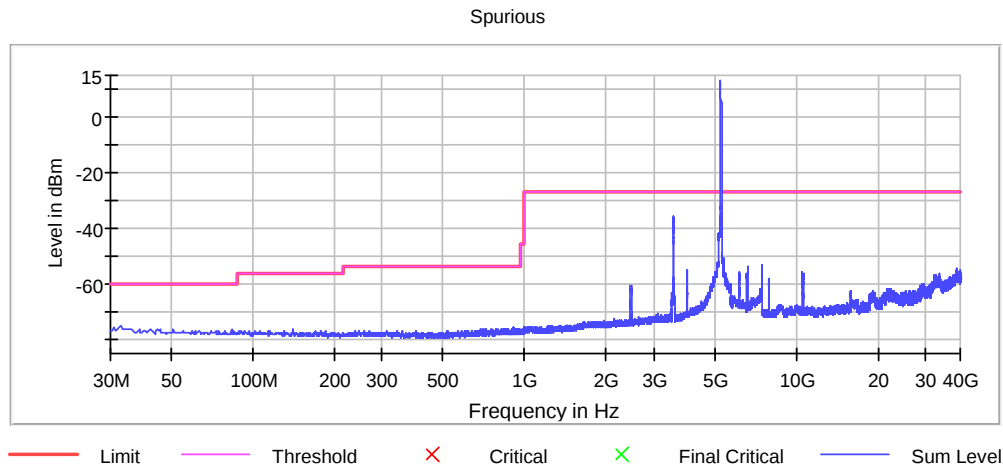
Conducted Emissions, 30M-40G, ch056, 802.11n, HT20, MCS0, Chain 0



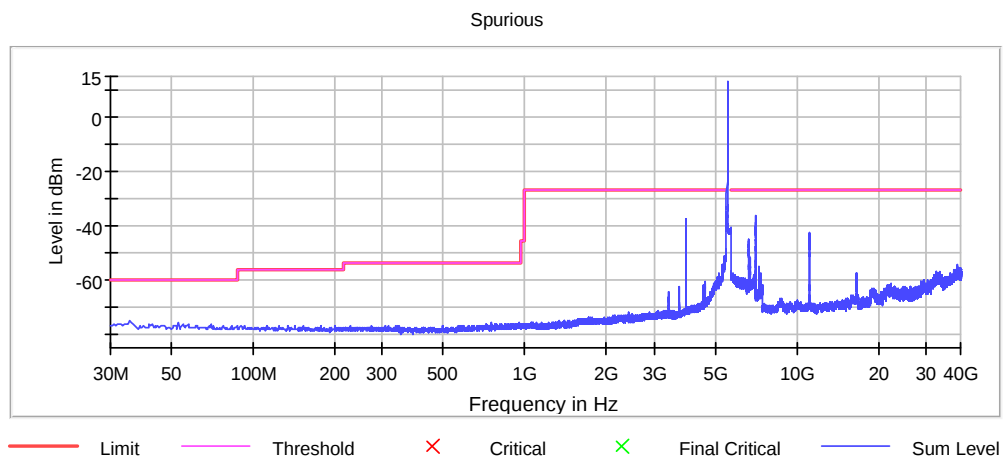
Conducted Emissions, 30M-40G, ch108, 802.11n, HT20, MCS0, Chain 0



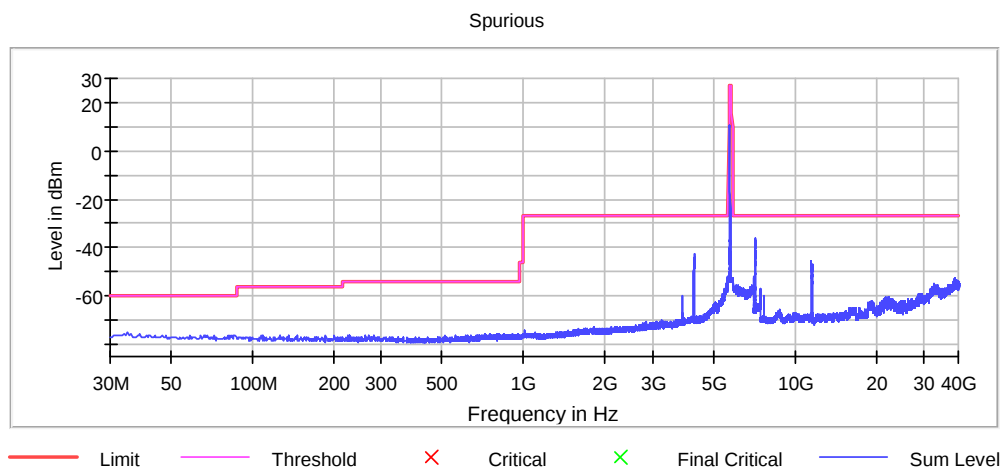
Conducted Emissions, 30M-40G, ch153, 802.11n, HT20, MCS0, Chain 0



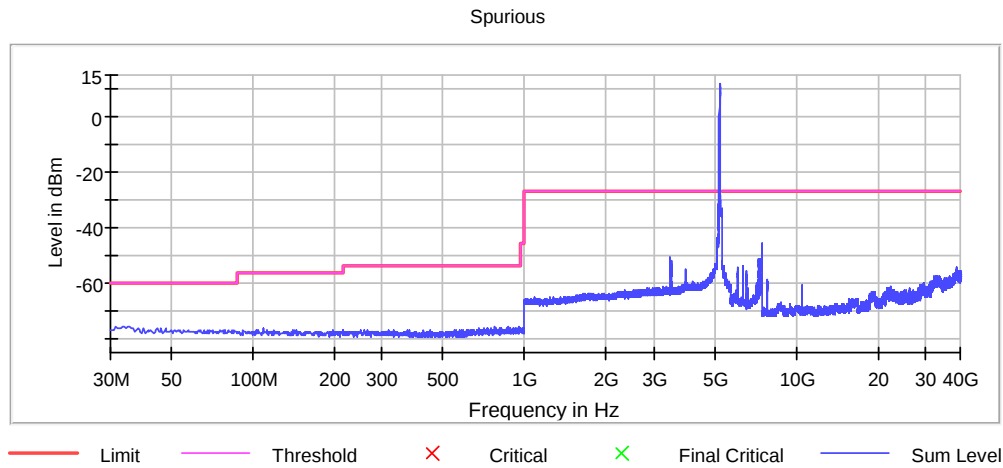
Conducted Emissions, 30M-40G, ch056, 802.11ac, HT20, MCS0, MIMO



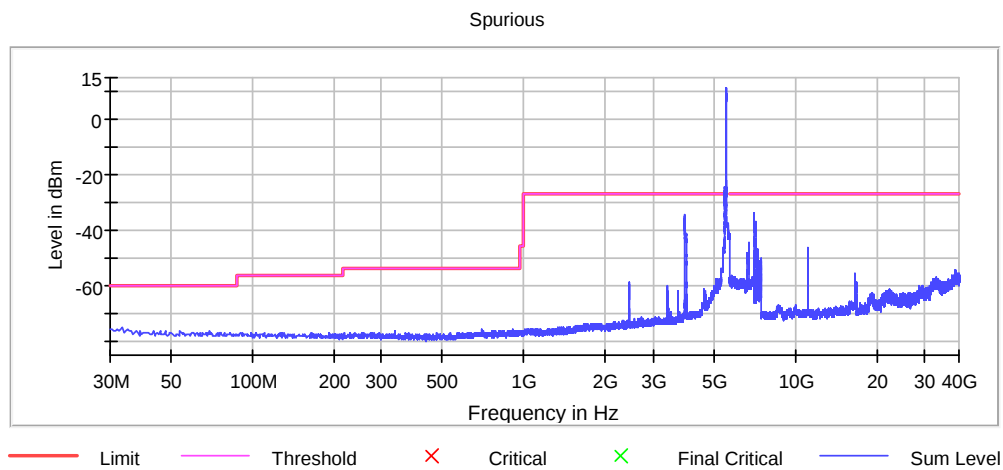
Conducted Emissions, 30M-40G, ch108, 802.11ac, HT20, MCS0, MIMO



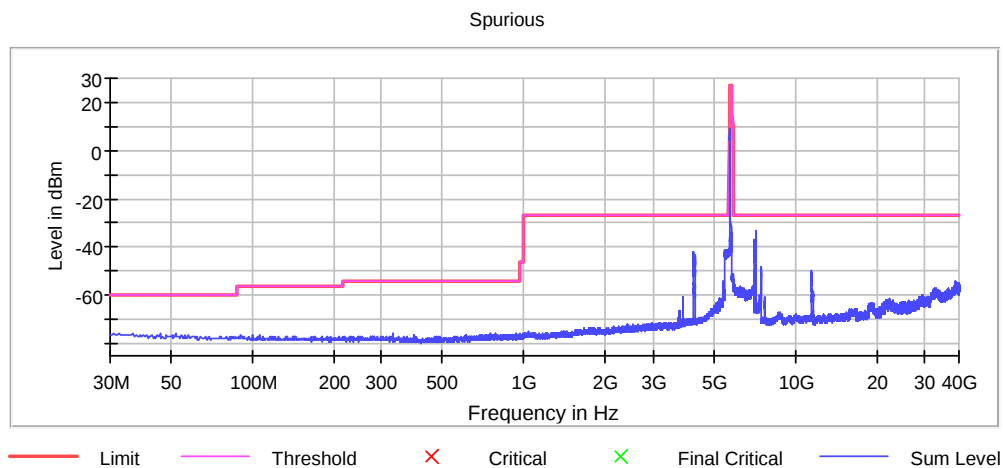
Conducted Emissions, 30M-40G, ch153, 802.11ac, HT20, MCS0, MIMO



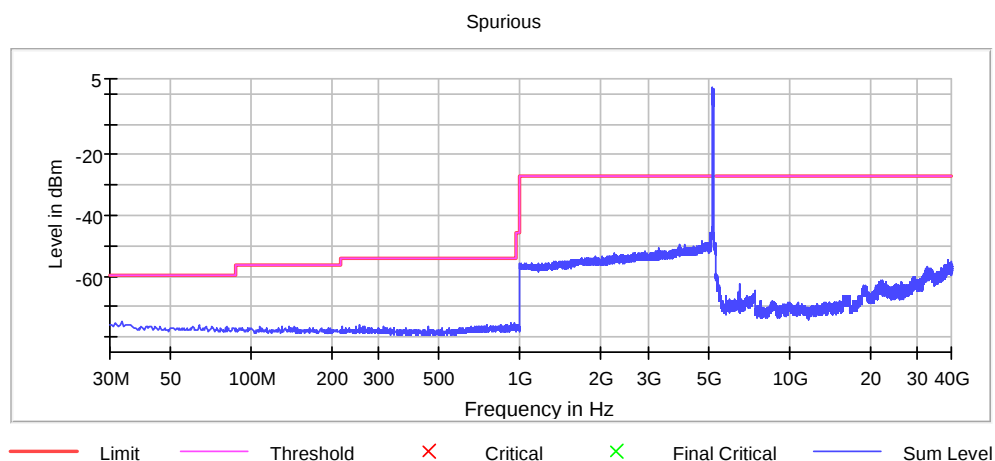
Conducted Emissions, 30M-40G, ch046, 802.11ac, HT40, MCS0, MIMO



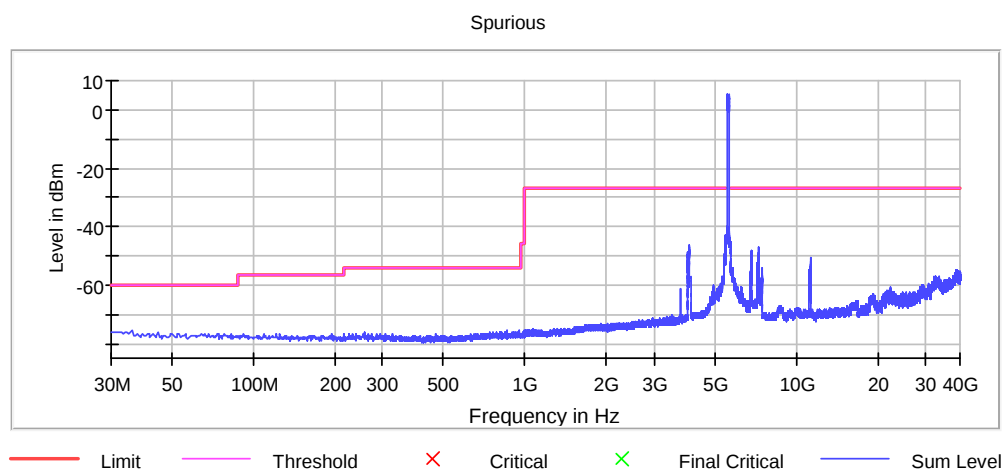
Conducted Emissions, 30M-40G, ch110, 802.11ac, HT40, MCS0, MIMO



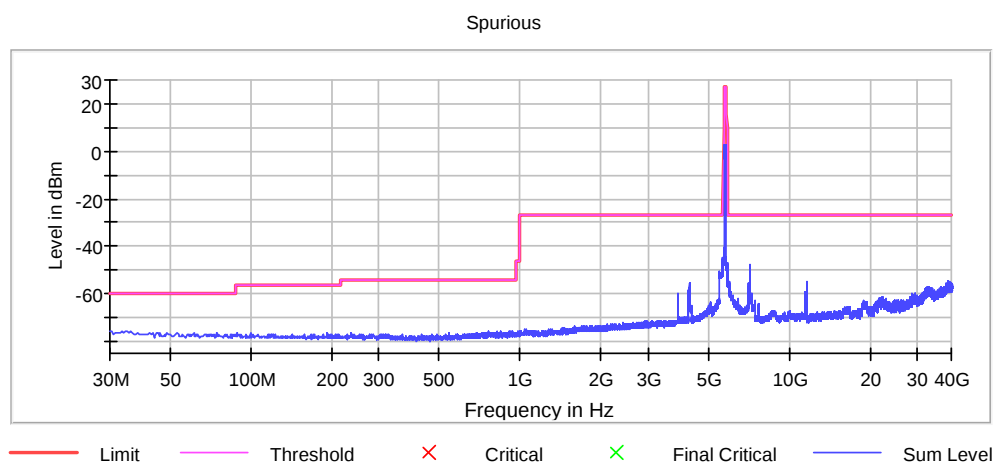
Conducted Emissions, 30M-40G, ch151, 802.11ac, HT40, MCS0, MIMO



Conducted Emissions, 30M-40G, ch042, 802.11ac, HT80, MCS0, MIMO



Conducted Emissions, 30M-40G, ch122, 802.11ac, HT80, MCS0, MIMO



Conducted Emissions, 30M-40G, ch155, 802.11ac, HT80, MCS0, MIMO

4.7 Restricted Bands of operation

Restricted Bands of operation for FCC and ISSED are defined in FCC Part 15.205 and ISSED RSS-GEN, Issue 5 clause 8.10.

Generally, no fundamentals are allowed in the restricted bands and all emissions must comply with the limits in FCC 15.209 or RSS-GEN, Issue 5, clause 8.9.

FCC (MHz)	ISED (MHz)	FCC (GHz)	ISED (GHz)
0.090-0.110		0.96-1.24 1.3-1.427	0.96-1.427
0.495-0.505		1.435-1.6265	
2.1735-2.1905		1.6455-1.6465	
	3.020-3.026	1.660-1.710	
4.125-4.128		1.7188-1.7222	
4.17725-4.17775		2.2-2.3	
4.20725-4.20775		2.31-2.39	
	5.677-5.683	2.4835-2.5	
6.215-6.218		2.69-2.9	2.655-2.9
6.26775-6.26825		3.26-3.267	
6.31175-6.31225		3.332-3.339	
8.291-8.294		3.3458-3.358	
8.362-8.366		3.6-4.4	3.5-4.4
8.37625-8.38675		4.5-5.15	
8.41425-8.41475		5.35-5.46	
12.29-12.293		7.25-7.75	
12.51975-12.52025		8.025-8.5	
12.57675-12.57725		9.0-9.2	
13.36-13.41		9.3-9.5	
16.42-16.423		10.6-12.7	
16.69475-16.69525		13.25-13.4	
16.80425-16.80475		14.47-14.5	
25.5-25.67		15.35-16.2	
37.5-38.25		17.7-21.4	
73-74.6		22.01-23.12	
74.8-75.2		23.6-24.0	
108-121.94 123-138	108-138	31.2-31.8	
149.9-150.05		36.43-36.5	
156.52475-156.52525		Above 38.6	
156.7-156.9			
162.0125-167.17			
167.72-173.2			
240-285			
322-335.4			
399.9-410			
608-614			

Frequencies in **Bold** text are specific for FCC or ISSED, all other frequencies are common.

4.8 Radiated Emissions, 30 – 1000 MHz

FCC 15.205, 15.209, 15.407

ISED RSS-GEN, Issue 5, Clause 8.9

Measurement procedure: ANSI C63.10-2013 Clause 12.7

Test Results: Complies

Measurement Data:

Detector: QuasiPeak (Pre-scan with Peak Detector)

Measuring distance 3m

Tested in test mode with EUT transmitting continuously

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
32.765030	29.49	40.00	10.51	15000.0	120.000	102.0	V	289.0	-15.4
42.692602	29.35	40.00	10.65	15000.0	120.000	102.0	V	44.0	-13.6
52.026704	26.55	40.00	13.45	15000.0	120.000	150.0	V	10.0	-13.6
98.304020	37.97	43.50	5.53	15000.0	120.000	373.0	H	0.0	-14.3
138.240104	40.28	43.50	3.22	15000.0	120.000	212.0	H	356.0	-17.5
147.455732	46.09	43.50	-2.59	15000.0	120.000	232.0	H	7.0	-17.4
181.988382	36.14	43.50	7.36	15000.0	120.000	124.0	H	157.0	-15.7
221.182878	40.24	46.00	5.76	15000.0	120.000	109.0	H	336.0	-13.5
307.198658	39.88	46.00	6.12	15000.0	120.000	104.0	H	344.0	-10.3
516.094540	40.44	46.00	5.56	15000.0	120.000	400.0	H	2.0	-5.4
614.397946	41.92	46.00	4.08	15000.0	120.000	116.0	H	310.0	-3.2
712.701966	40.00	46.00	6.00	15000.0	120.000	100.0	H	299.0	-2.4

This is a class A device; all emissions are below the Class A limit.

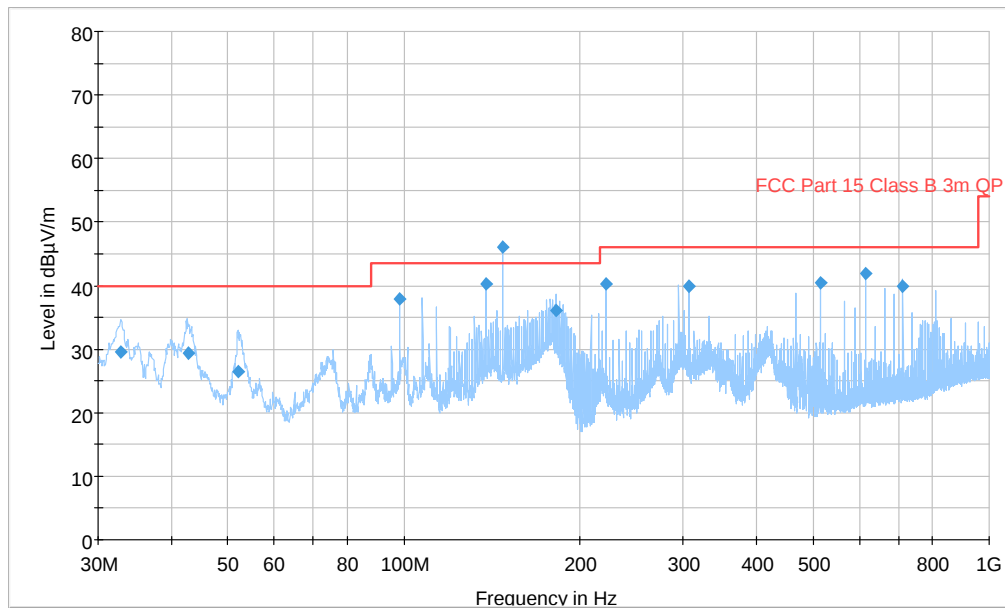
None of the emissions above are in a restricted band.

See attached plots.

Requirements/Limit

FCC	Part 15.209 @ frequencies defined in §15.205	
ISED	RSS-GEN Issue 5, Clause 8.9 @ frequencies defined in clause 8.10	
Frequency	Radiated emission limit @3 meters	
30 – 88 MHz	100 μV/m	40.0 dBμV/m
88 – 216 MHz	150 μV/m	43.5 dBμV/m
216 – 960 MHz	200 μV/m	46.0 dBμV/m
960 – 1000 MHz	500 μV/m	54.0 dBμV/m
Limits above are with Quasi Peak Detector		

Full Spectrum



Radiated Emissions, 30-1000 MHz

4.9 Radiated Emissions, 1 – 40 GHz

FCC 15.205, 15.209, 15.407

ISED RSS-GEN, Issue 5, Clause 8.9

Measurement procedure: ANSI C63.10-2013 Clause 12.7

Test Results: Complies

Measurement Data:

Measuring distance 3m up to 18 GHz, 1m above 18 GHz.

Carrier freq. (MHz)	Measured Frequency (GHz)	Modulation	Measured Emission (dBµV/m)		Limit (dBµV/m)		Margin (dB)	
			Peak	Average	Pk	Av	Pk	Av
Any	5150	Any	62.9	47.2	74	54	11.1	6.8
Any	5350	Any	66.8	51.2	74	54	7.2	2.8
Any	5460	Any	67.0	52.4	74	54	7.0	1.6
Any*	5013	Any	56.0	53.0	74	54	18.0	1.0
Any	Any	Any	< 54	< 44	74	54	> 20	> 10

*The spurious at 5013 MHz is a CW signal and is independent of carrier or modulation

A Band Stop Filter was used for all out-of band measurements from 1 to 18 GHz, except Band Edge Measurements.

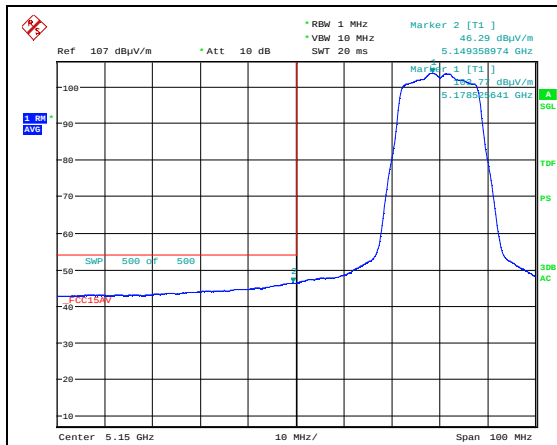
Only harmonics that fall in the restricted bands (ref. §15.205) have been measured.

Antenna factor, amplifier gain and cable loss are included in Spectrum Analyzer "Transducer factor".

See attached plots.

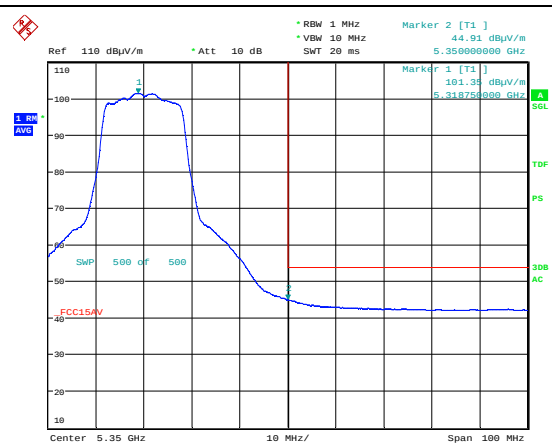
Requirements/Limit

FCC	Part 15.209 @ frequencies defined in §15.205	
ISED	RSS-GEN Issue 5, Clause 8.9 @ frequencies defined in clause 8.10	
	Radiated emission limit @3 meters	
Frequency	Average Detector (dBµV/m)	Peak Detector (dBµV/m)
1 – 40 GHz	54.0	74.0



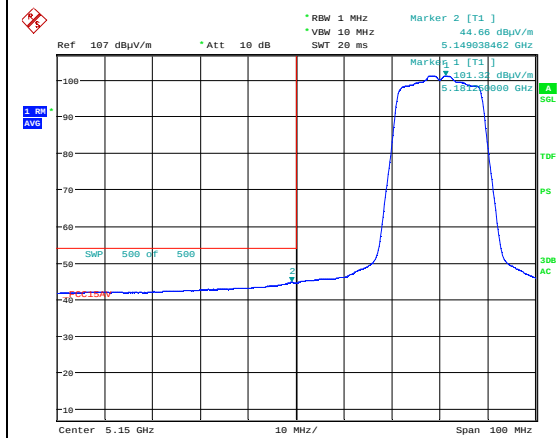
Date: 6.FEB.2023 14:27:20

Band Edge, 5150 MHz, Ch036, 802.11a 6M, Av, Max



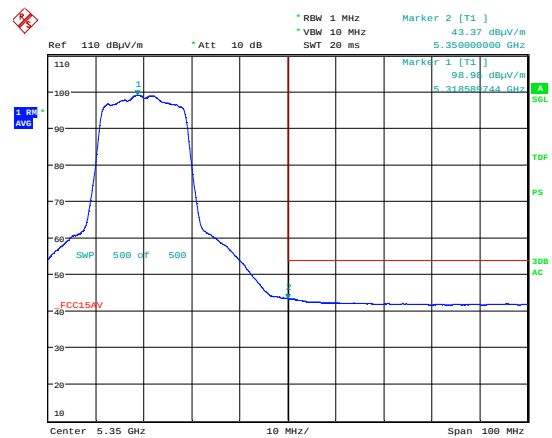
Date: 6.FEB.2023 14:51:00

Band Edge, 5350 MHz, Ch064, 802.11a 6M, Av, Max



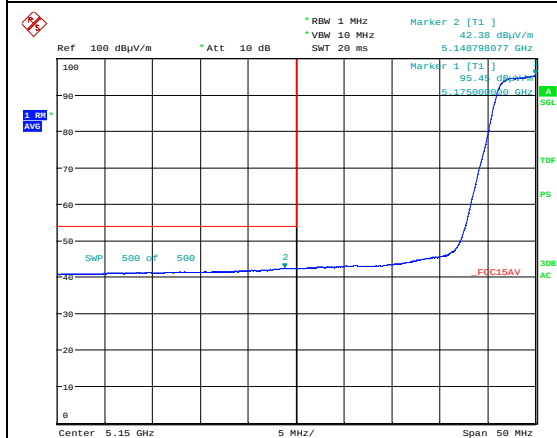
Date: 6.FEB.2023 14:11:00

Band Edge, 5150 MHz, Ch036, 802.11n MCS0, Av, Max



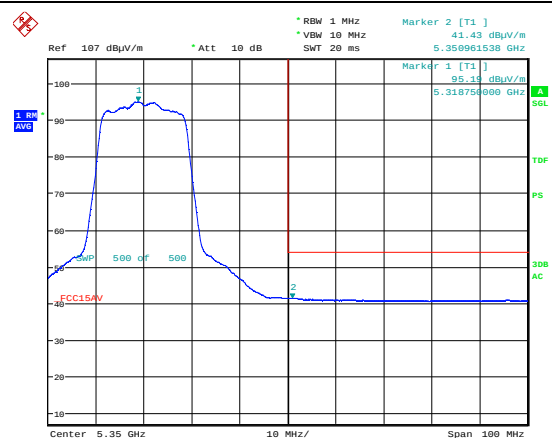
Date: 6.FEB.2023 14:53:56

Band Edge, 5350 MHz, Ch064, 802.11n MCS0, Av, Max



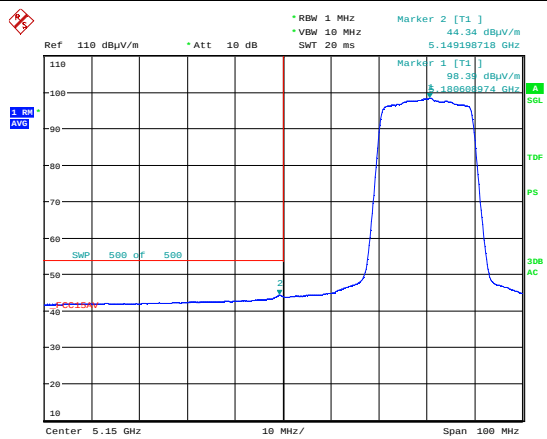
Date: 7.FEB.2023 13:02:57

Band Edge, 5150 MHz, Ch036, 802.11n MCS8 MIMO, Av, Max



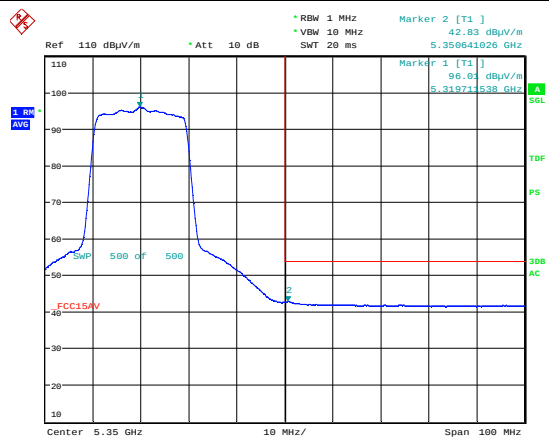
Date: 7.FEB.2023 13:25:51

Band Edge, 5350 MHz, Ch064, 802.11n MCS8 MIMO, Av, Max



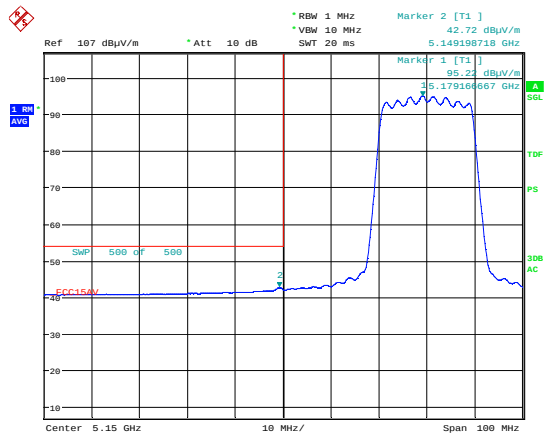
Date: 6.FEB.2023 16:03:49

Band Edge, 5150 MHz, Ch036, 802.11ax MCS0 SISO, Av, Max



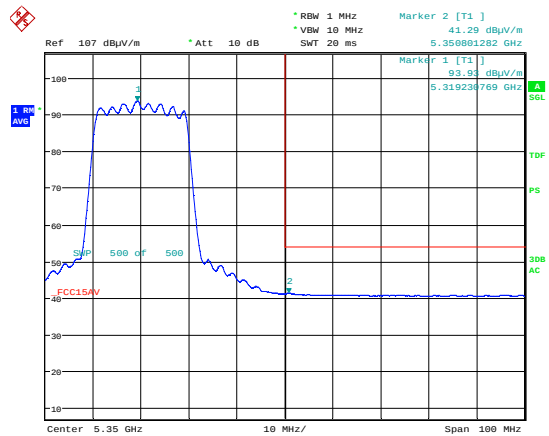
Date: 6.FEB.2023 16:12:02

Band Edge, 5350 MHz, Ch064, 802.11ax MCS0 SISO, Av, Max



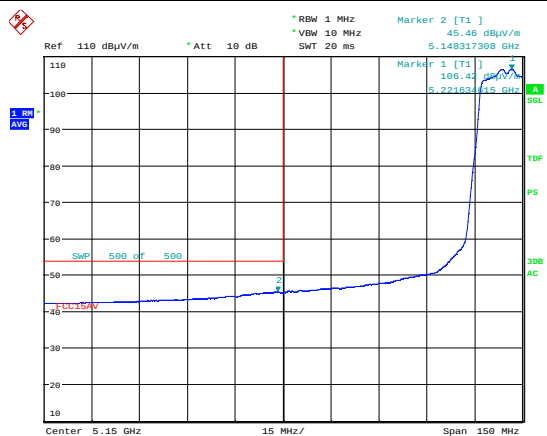
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Band Edge, 5150 MHz, Ch036, 802.11ax MCS0 MIMO, Av, Max



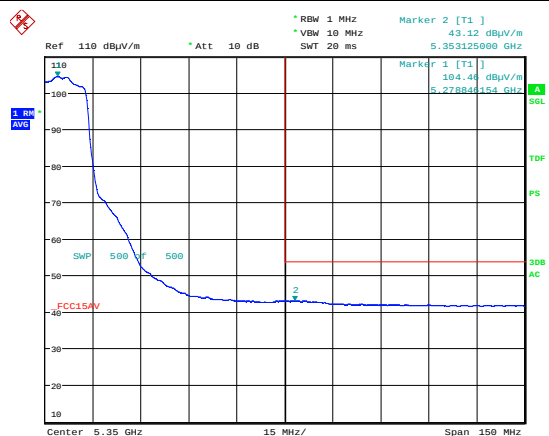
Date: 7.FEB.2023 14:25:54

Band Edge, 5350 MHz, Ch064, 802.11ax MCS0 MIMO, Av, Max



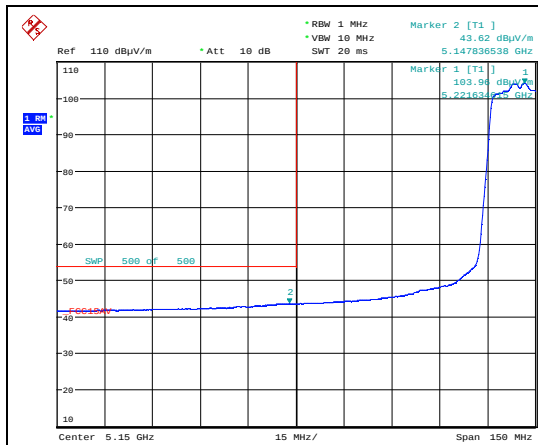
Date: 6.FEB.2023 14:31:32

Band Edge, 5150 MHz, Ch044, 802.11a 6M, Av, Max



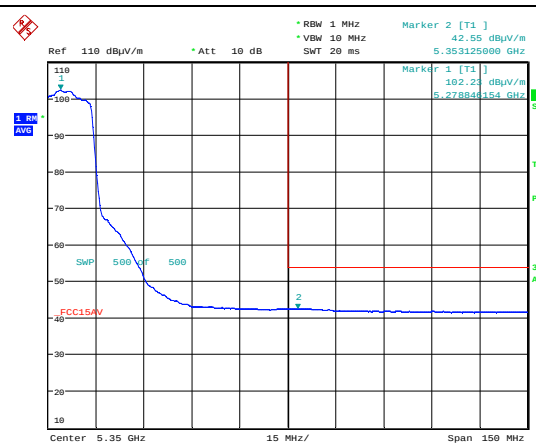
Date: 6.FEB.2023 14:42:51

Band Edge, 5350 MHz, Ch056, 802.11a 6M, Av, Max



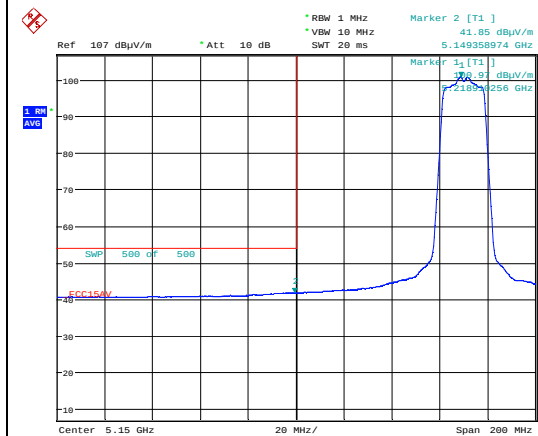
Date: 6.FEB.2023 14:34:50

Band Edge, 5150 MHz, Ch044, 802.11n MCS0, Av, Max



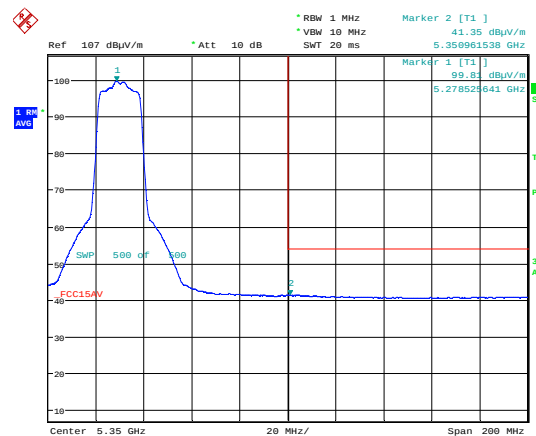
Date: 6.FEB.2023 14:39:42

Band Edge, 5350 MHz, Ch056, 802.11n MCS0, Av, Max



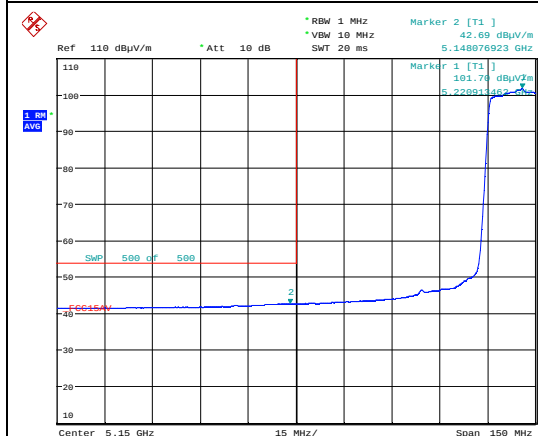
Date: 7.FEB.2023 13:14:55

Band Edge, 5150 MHz, Ch044, 802.11n MCS8 MIMO, Av, Max



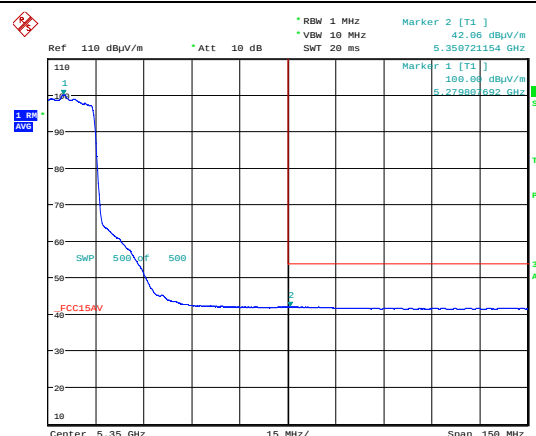
Date: 7.FEB.2023 13:19:01

Band Edge, 5350 MHz, Ch056, 802.11n MCS8 MIMO, Av, Max



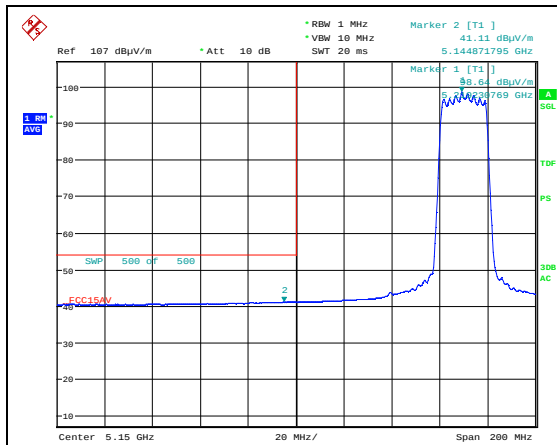
Date: 6.FEB.2023 16:05:17

Band Edge, 5150 MHz, Ch044, 802.11ax MCS0 SISO, Av, Max



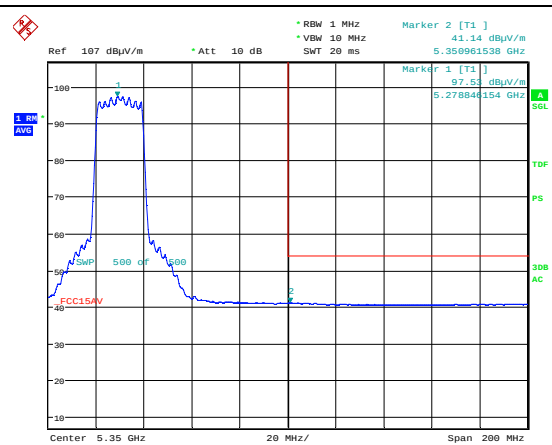
Date: 6.FEB.2023 16:08:57

Band Edge, 5350 MHz, Ch056, 802.11ax MCS0 SISO, Av, Max



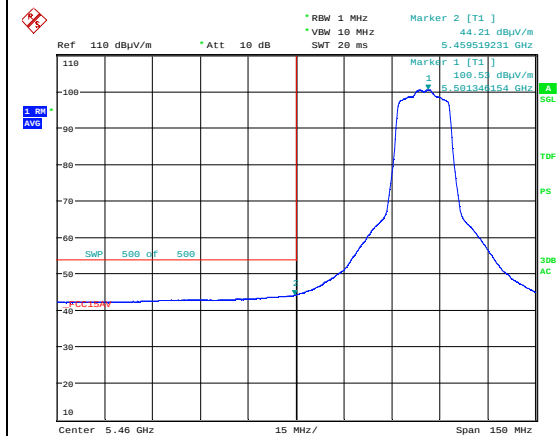
Date: 7.FEB.2023 14:40:22

Band Edge, 5150 MHz, Ch044, 802.11ax MCS0 MIMO, Av, Max



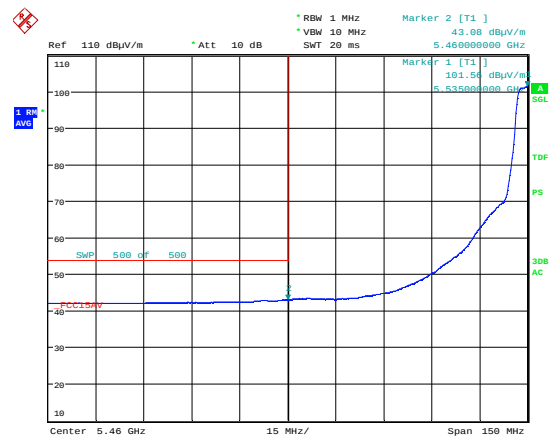
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Band Edge, 5350 MHz, Ch056, 802.11ax MCS0 MIMO, Av, Max



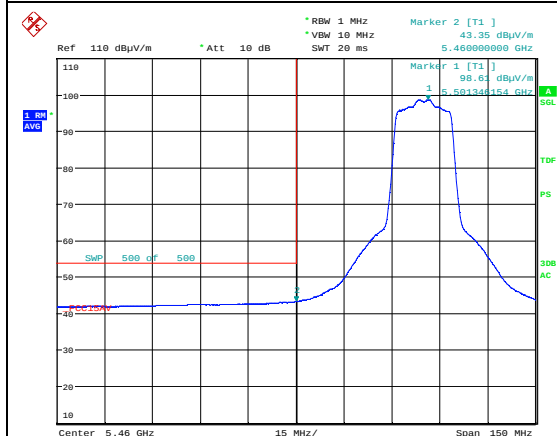
Date: 6.FEB.2023 15:03:00

Band Edge, 5460 MHz, Ch100, 802.11a 6M, Av, Max



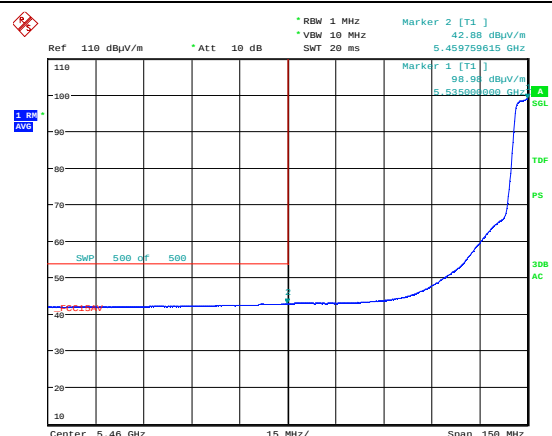
Date: 6.FEB.2023 15:06:55

Band Edge, 5460 MHz, Ch108, 802.11a 6M, Av, Max



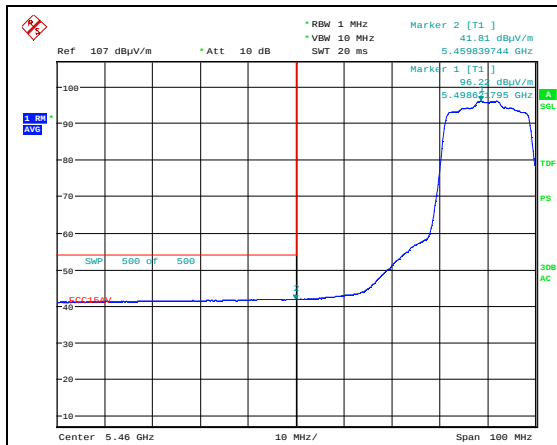
Date: 6.FEB.2023 14:56:06

Band Edge, 5460 MHz, Ch100, 802.11n MCS0, Av, Max



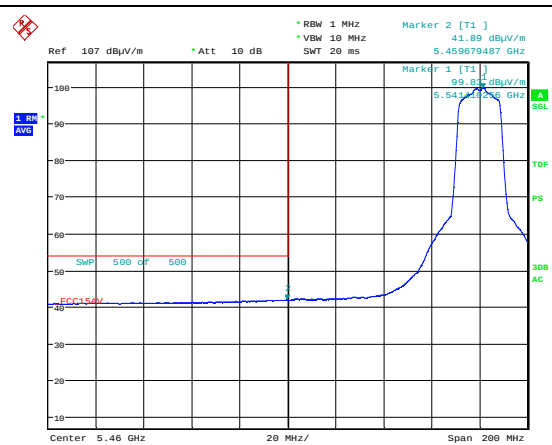
Date: 6.FEB.2023 15:09:38

Band Edge, 5460 MHz, Ch108, 802.11n MCS0, Av, Max



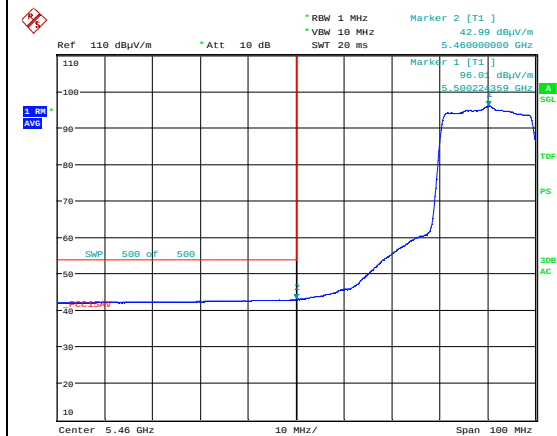
Date: 7.FEB.2023 13:34:23

Band Edge, 5460 MHz, Ch100, 802.11n MCS8 MIMO, Av, Max



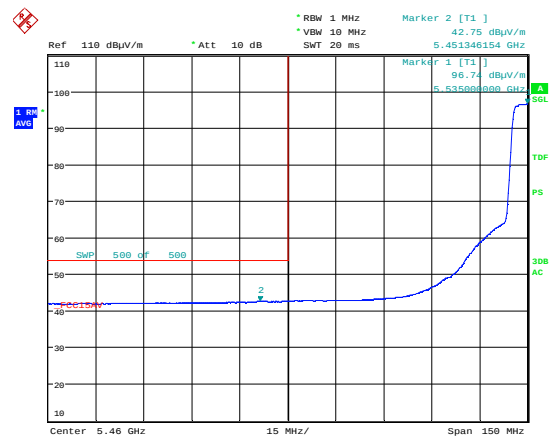
Date: 7.FEB.2023 13:39:08

Band Edge, 5460 MHz, Ch108, 802.11a MCS8 MIMO, Av, Max



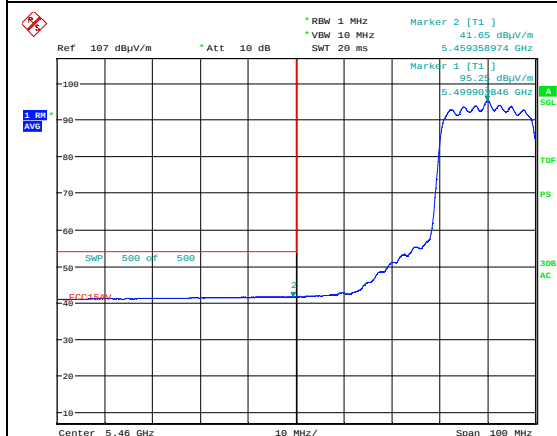
Date: 6.FEB.2023 16:14:51

Band Edge, 5460 MHz, Ch100, 802.11ax MCS0 SISO, Av, Max



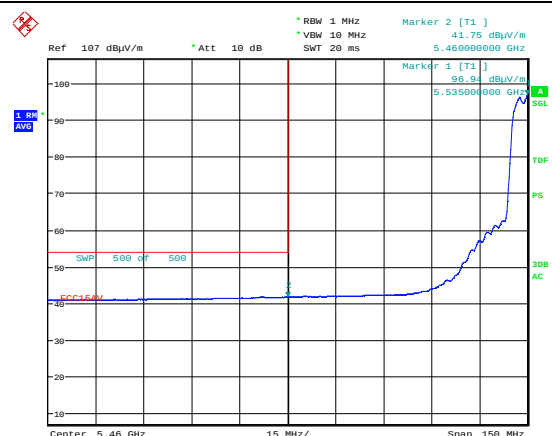
Date: 6.FEB.2023 16:17:54

Band Edge, 5460 MHz, Ch108, 802.11ax MCS0 SISO, Av, Max



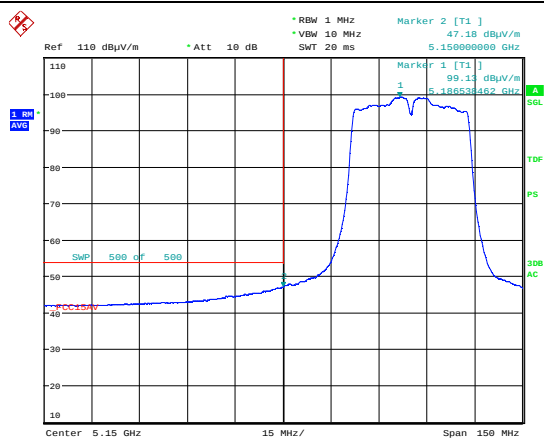
Date: 7.FEB.2023 14:21:12

Band Edge, 5460 MHz, Ch100, 802.11ax MCS0 MIMO, Av, Max



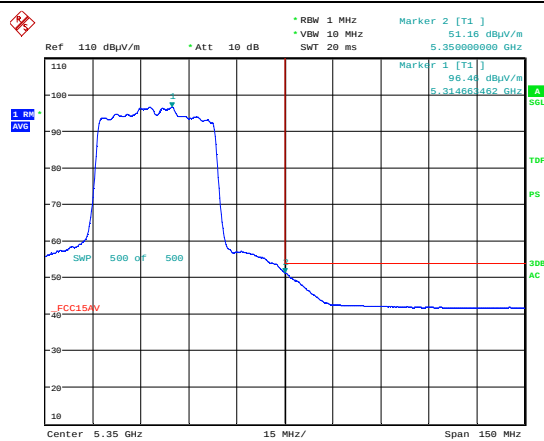
Date: 7.FEB.2023 14:17:59

Band Edge, 5460 MHz, Ch108, 802.11ax MCS0 MIMO, Av, Max



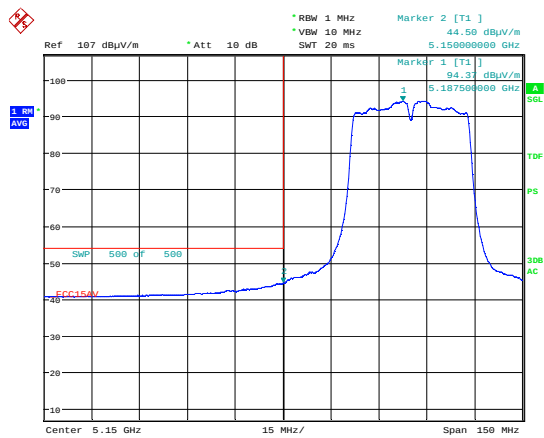
Date: 7.FEB.2023 09:12:43

Band Edge, 5150 MHz, Ch038, 802.11n MCS0 HT40 SISO, Av, Max



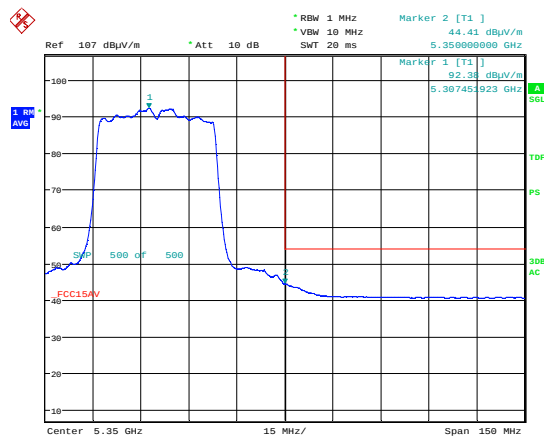
Date: 7.FEB.2023 09:27:58

Band Edge, 5350 MHz, Ch062, 802.11n MCS0 HT40 SISO, Av, Max



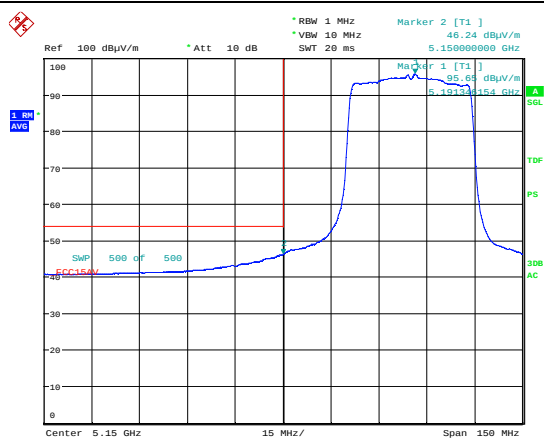
Date: 7.FEB.2023 14:47:57

Band Edge, 5150 MHz, Ch038, 802.11n MCS8 HT40 MIMO, Av, Max



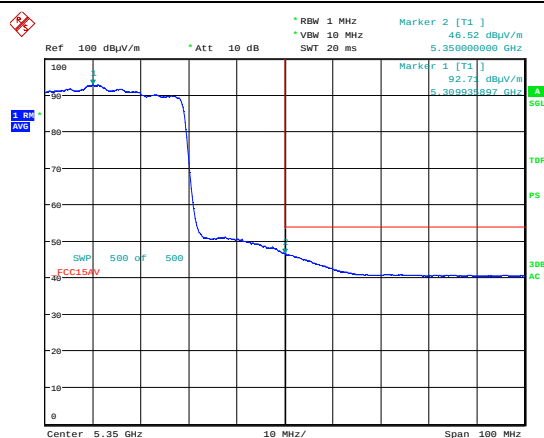
Date: 7.FEB.2023 14:59:54

Band Edge, 5350 MHz, Ch062, 802.11n MCS8 HT40 MIMO, Av, Max



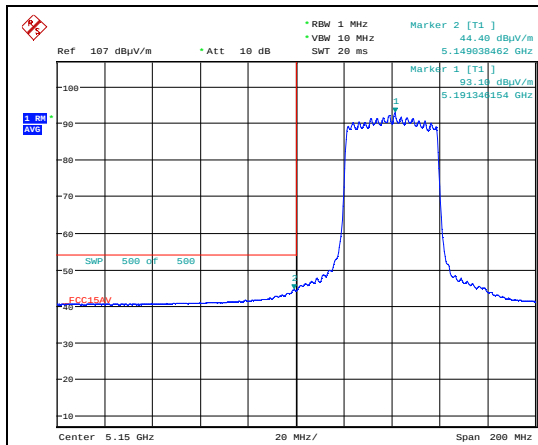
Date: 7.FEB.2023 10:55:52

Band Edge, 5150 MHz, Ch038, 802.11ax MCS0 HT40 SISO, Av, Max



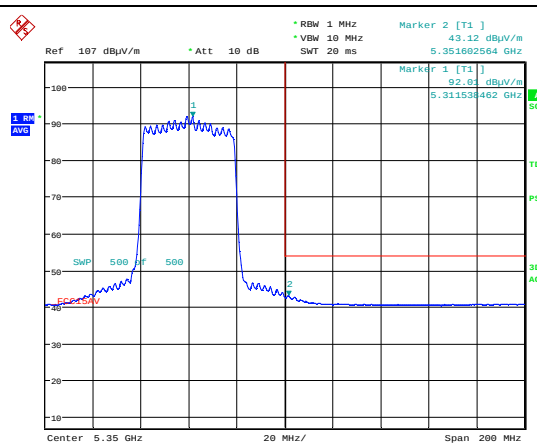
Date: 7.FEB.2023 10:41:37

Band Edge, 5350 MHz, Ch062, 802.11ax MCS0 HT40 MIMO, Av, Max



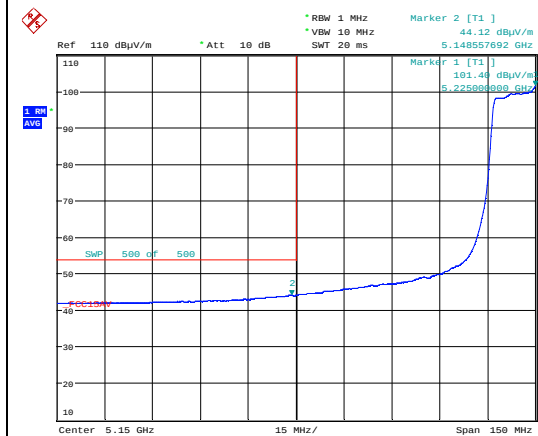
Date: 7.FEB.2023 16:07:40

Band Edge, 5150 MHz, Ch038, 802.11ax MCS0 HT40 MIMO, Av, Max



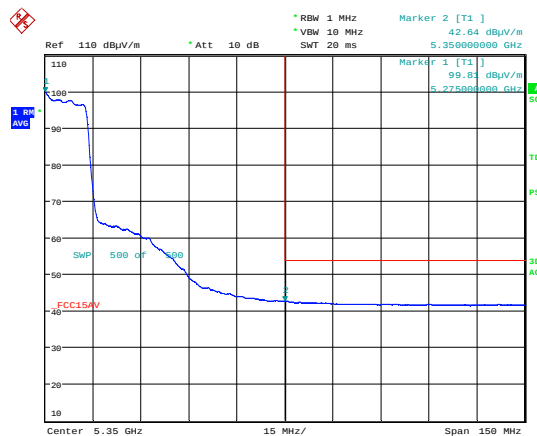
Date: 7.FEB.2023 15:56:35

Band Edge, 5350 MHz, Ch062, 802.11ax MCS0 HT40 MIMO, Av, Max



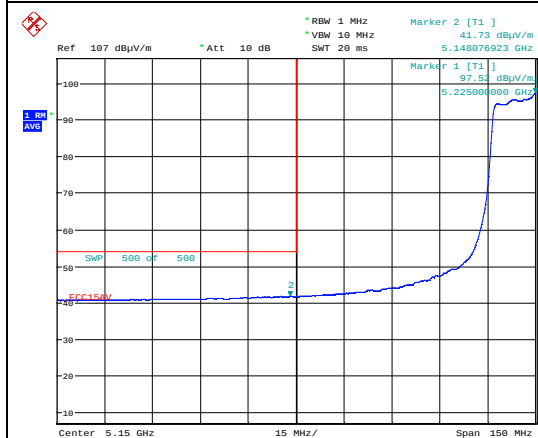
Date: 7.FEB.2023 09:19:41

Band Edge, 5150 MHz, Ch046, 802.11n MCS0 HT40 SISO, Av, Max



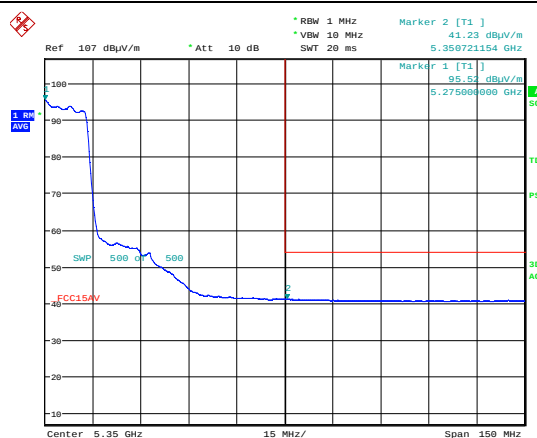
Date: 7.FEB.2023 09:25:15

Band Edge, 5350 MHz, Ch054, 802.11n MCS0 HT40 SISO, Av, Max



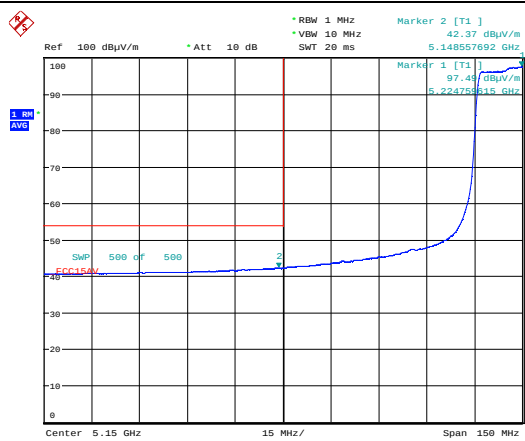
Date: 7.FEB.2023 14:51:23

Band Edge, 5150 MHz, Ch046, 802.11n MCS8 HT40 MIMO, Av, Max



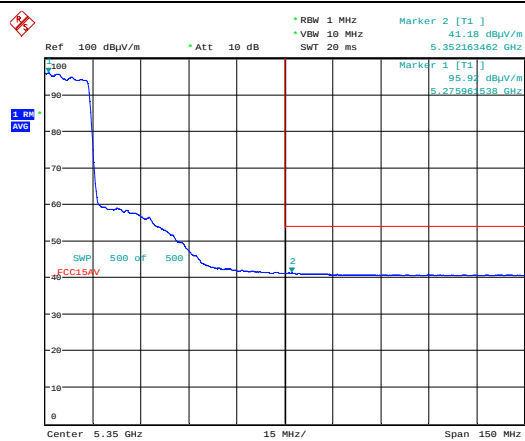
Date: 7.FEB.2023 14:56:27

Band Edge, 5350 MHz, Ch054, 802.11n MCS8 HT40 MIMO, Av, Max



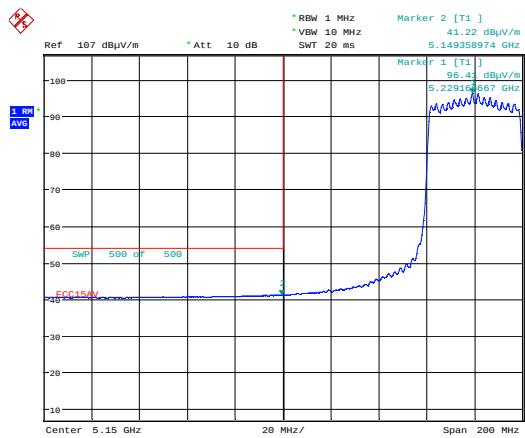
Date: 7.FEB.2023 10:50:00

Band Edge, 5150 MHz, Ch046, 802.11ax MCS0 HT40 SISO, Av, Max



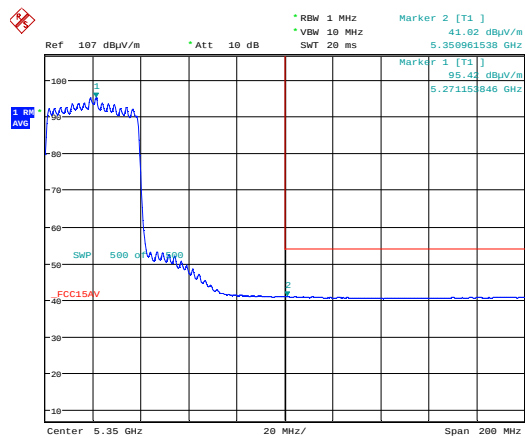
Date: 7.FEB.2023 10:46:09

Band Edge, 5350 MHz, Ch054, 802.11ax MCS0 HT40 SISO, Av, Max



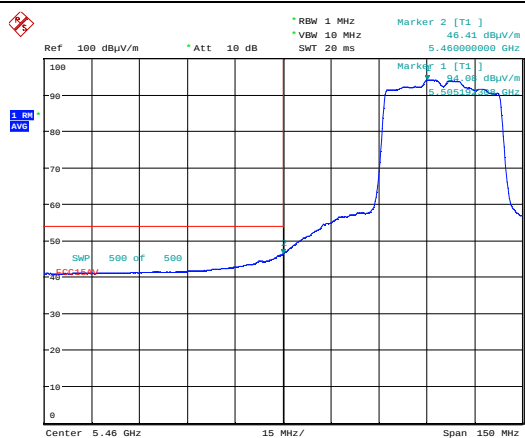
Date: 7.FEB.2023 16:04:47

Band Edge, 5150 MHz, Ch046, 802.11ax MCS0 HT40 MIMO, Av, Max



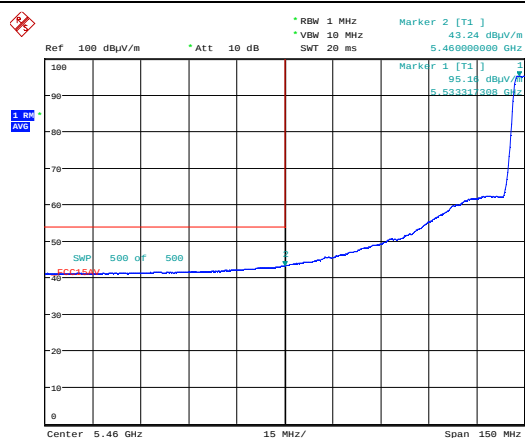
Date: 7.FEB.2023 16:00:08

Band Edge, 5350 MHz, Ch054, 802.11ax MCS0 HT40 MIMO, Av, Max



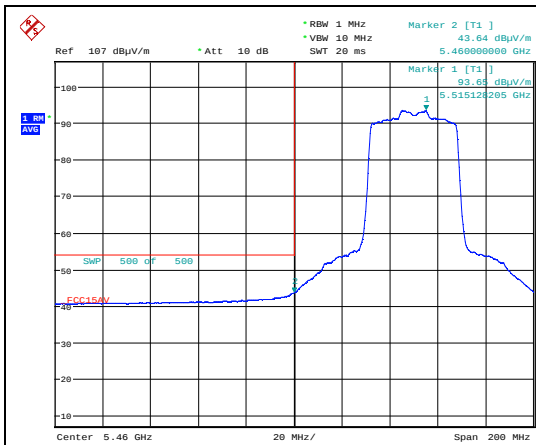
Date: 7.FEB.2023 09:48:07

Band Edge, 5460 MHz, Ch102, 802.11n MCS0 HT40 SISO, Av, Max PL9.5



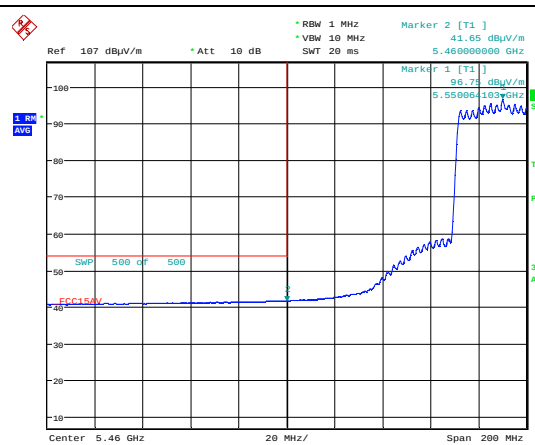
Date: 7.FEB.2023 09:50:40

Band Edge, 5460 MHz, Ch110, 802.11n MCS0 HT40 SISO, Av, Max



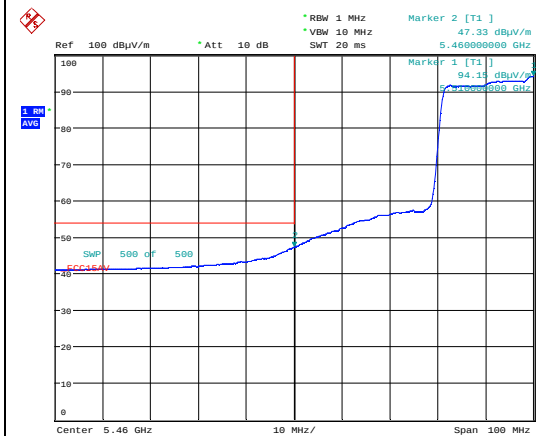
Date: 7.FEB.2023 15:06:00

Band Edge, 5460 MHz, Ch102, 802.11n MCS8 HT40 MIMO, Av, Max



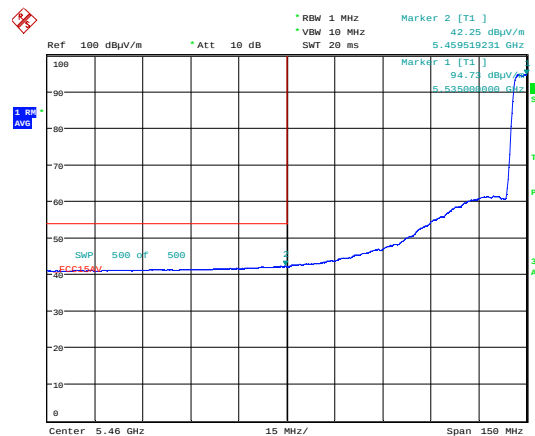
Date: 7.FEB.2023 15:45:52

Band Edge, 5460 MHz, Ch110, 802.11n MCS8 HT40 MIMO, Av, Max



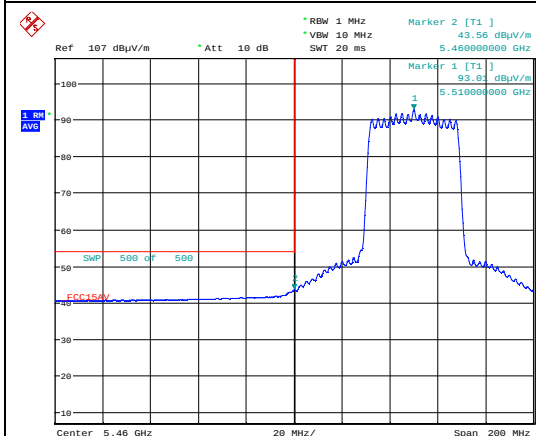
Date: 7.FEB.2023 10:37:13

Band Edge, 5460 MHz, Ch102, 802.11ax MCS0 HT40 SISO, Av, Max



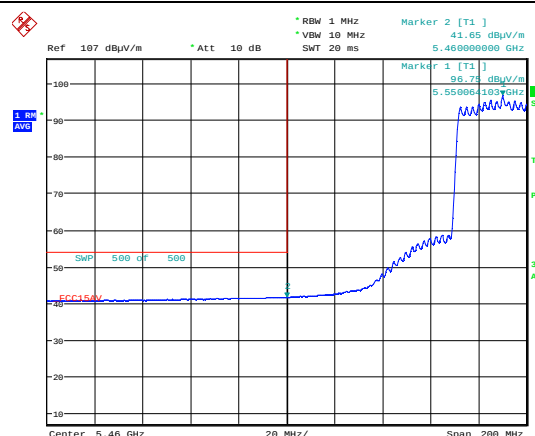
Date: 7.FEB.2023 10:32:54

Band Edge, 5460 MHz, Ch110, 802.11ax MCS0 HT40 SISO, Av, Max



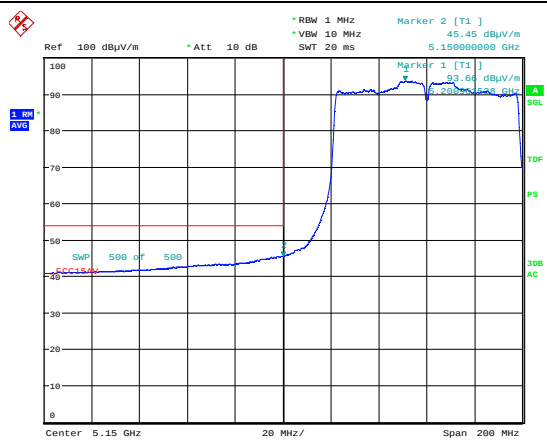
Date: 7.FEB.2023 15:51:56

Band Edge, 5460 MHz, Ch102, 802.11ax MCS0 HT40 MIMO, Av, Max



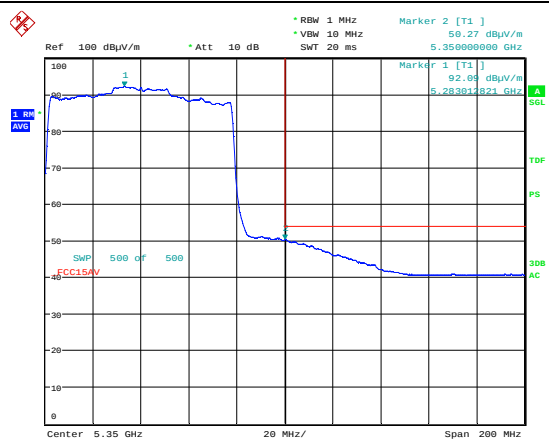
Date: 7.FEB.2023 15:45:52

Band Edge, 5460 MHz, Ch110, 802.11ax MCS0 HT40 MIMO, Av, Max



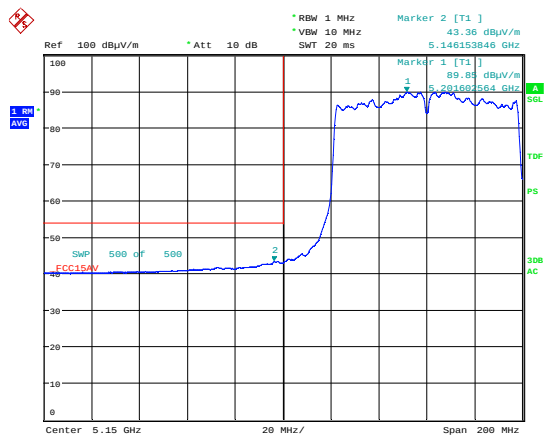
Date: 7.FEB.2023 12:45:09

Band Edge, 5150 MHz, Ch042, 802.11ac MCS0 HT80 SISO, Av, Max



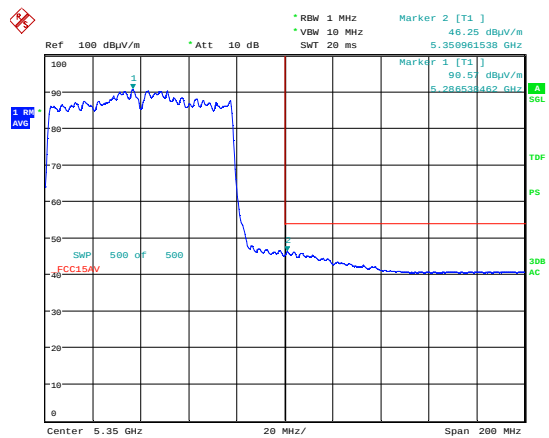
Date: 7.FEB.2023 12:41:28

Band Edge, 5350 MHz, Ch058, 802.11ac MCS0 HT80 SISO, Av, Max



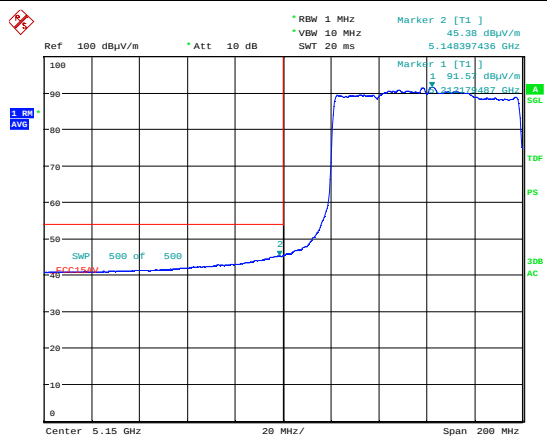
Date: 8.FEB.2023 10:45:05

Band Edge, 5150 MHz, Ch042, 802.11ac MCS0 HT80 MIMO, Av, Max



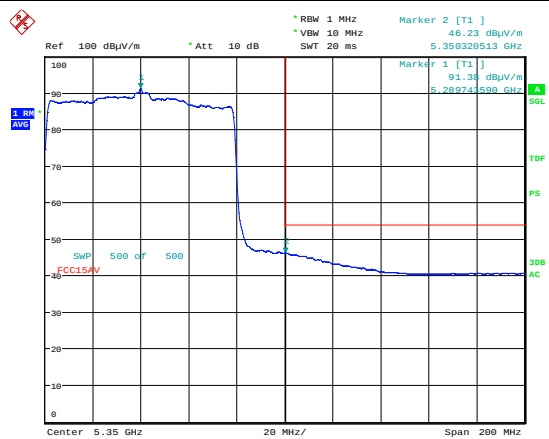
Date: 8.FEB.2023 10:49:50

Band Edge, 5350 MHz, Ch058, 802.11ac MCS0 HT80 MIMO, Av, Max



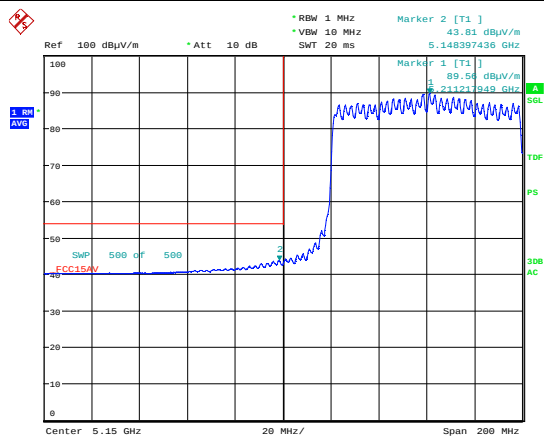
Date: 7.FEB.2023 11:06:47

Band Edge, 5150 MHz, Ch042, 802.11ax MCS0 HT80 SISO, Av, Max



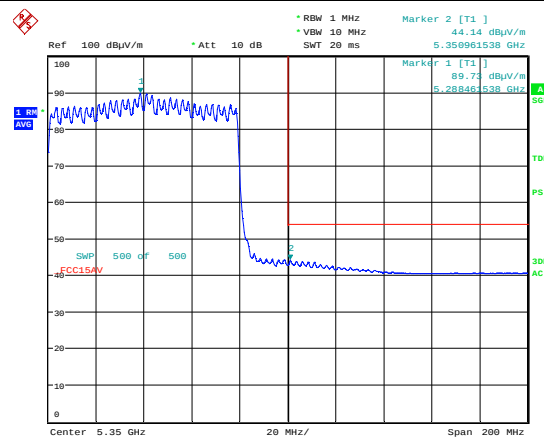
Date: 7.FEB.2023 11:10:18

Band Edge, 5350 MHz, Ch058, 802.11ax MCS0 HT80 SISO, Av, Max



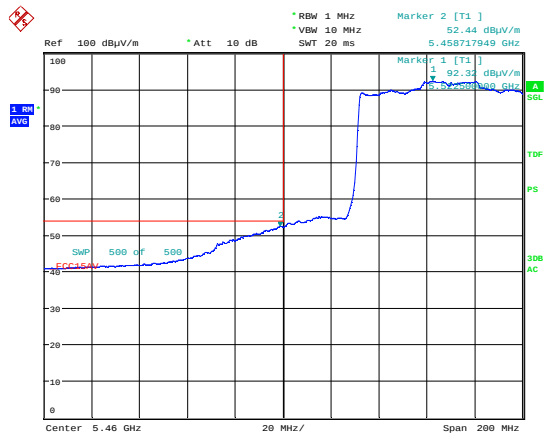
Date: 8.FEB.2023 12:10:01

Band Edge, 5150 MHz, Ch042, 802.11ax MCS0 HT80 MIMO, Av, Max



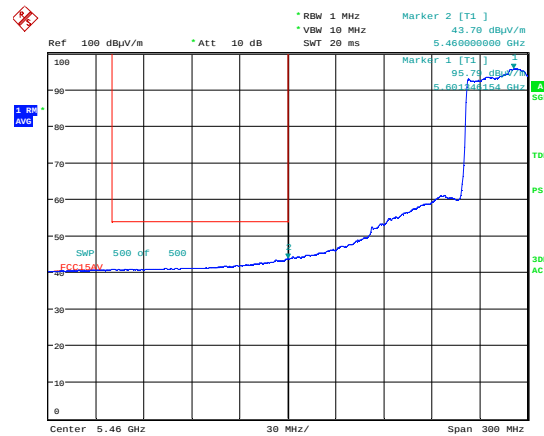
Date: 8.FEB.2023 12:05:17

Band Edge, 5350 MHz, Ch058, 802.11ax MCS0 HT80 MIMO, Av, Max



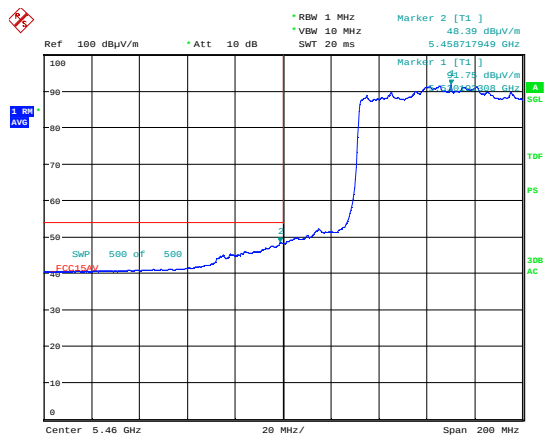
Date: 7.FEB.2023 12:37:41

Band Edge, 5460 MHz, Ch106, 802.11ac MCS0 HT80 SISO, Av, Max PL10



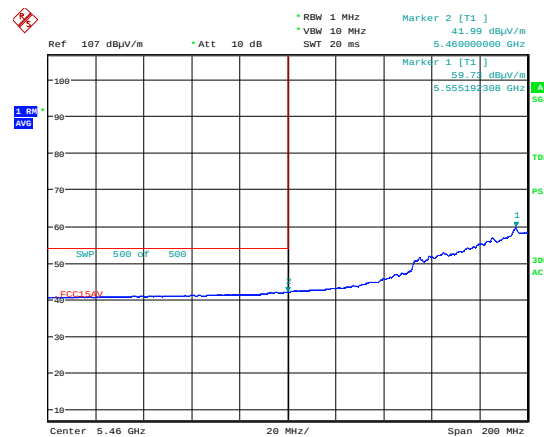
Date: 7.FEB.2023 12:25:58

Band Edge, 5460 MHz, Ch122, 802.11ac MCS0 HT80 SISO, Av, Max



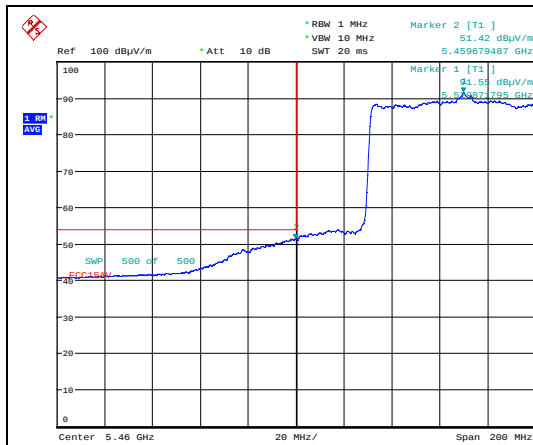
Date: 8.FEB.2023 10:54:39

Band Edge, 5460 MHz, Ch106, 802.11ac MCS0 HT80 MIMO, Av, Max



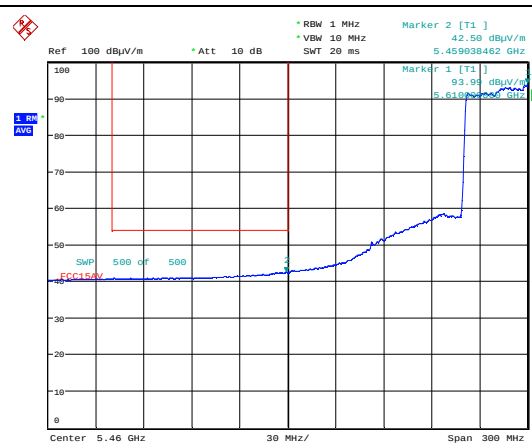
Date: 8.FEB.2023 10:59:44

Band Edge, 5460 MHz, Ch122, 802.11ac MCS0 HT80 MIMO, Av, Max



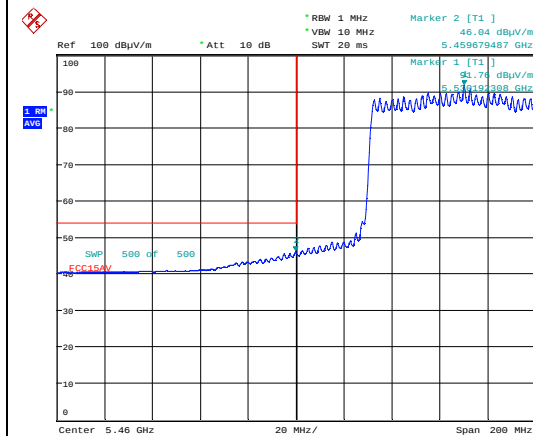
Date: 7.FEB.2023 11:19:48

Band Edge, 5460 MHz, Ch106, 802.11ax MCS0 HT80 SISO, Av, Max



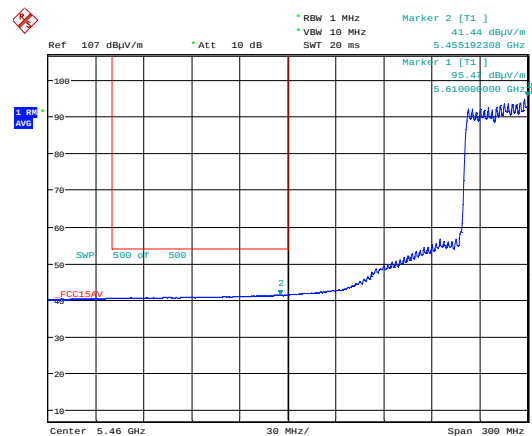
Date: 7.FEB.2023 11:26:01

Band Edge, 5460 MHz, Ch122, 802.11ax MCS0 HT80 SISO, Av, Max



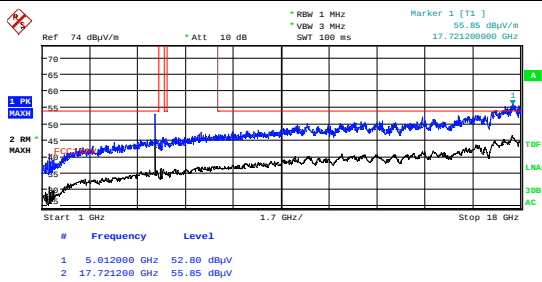
Date: 8.FEB.2023 11:59:24

Band Edge, 5460 MHz, Ch106, 802.11ax MCS0 HT80 MIMO, Av, Max



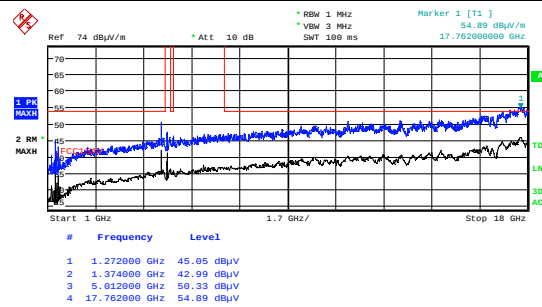
Date: 8.FEB.2023 11:52:57

Band Edge, 5460 MHz, Ch122, 802.11ax MCS0 HT80 MIMO, Av, Max



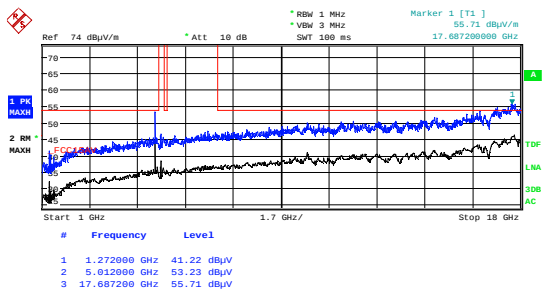
Date: 8.FEB.2023 14:02:12

Radiated Emissions 1-18 GHz, Ch044, 802.11n MCS0, Ant 0, HP



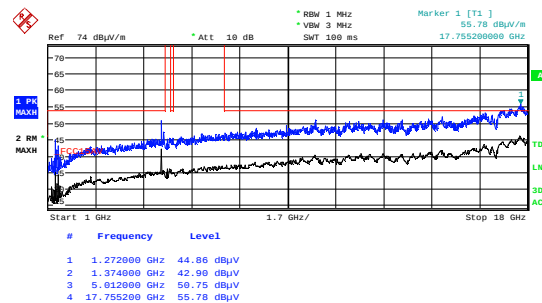
Date: 8.FEB.2023 14:00:10

VP



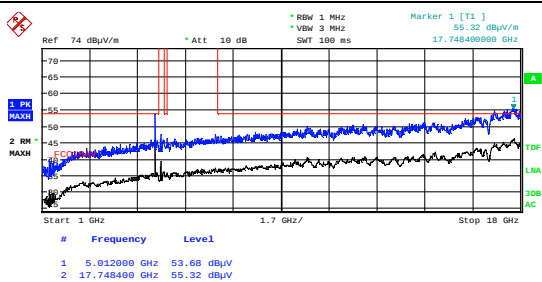
Date: 8.FEB.2023 14:10:19

Radiated Emissions 1-18 GHz, Ch044, 802.11n MCS0, Ant 1, HP



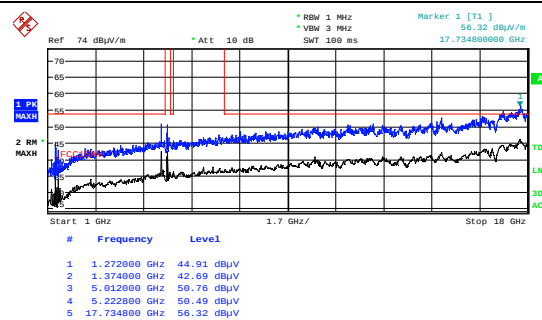
Date: 8.FEB.2023 14:08:21

VP



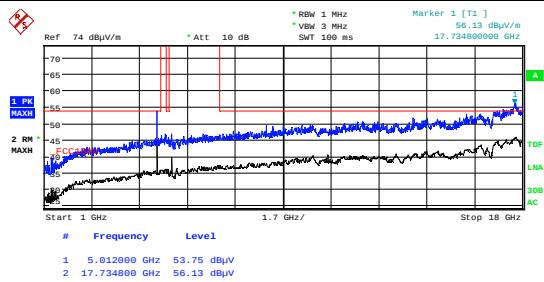
Date: 8.FEB.2023 14:17:30

Radiated Emissions 1-18 GHz, Ch044, 802.11n MCS8, MIMO, HP



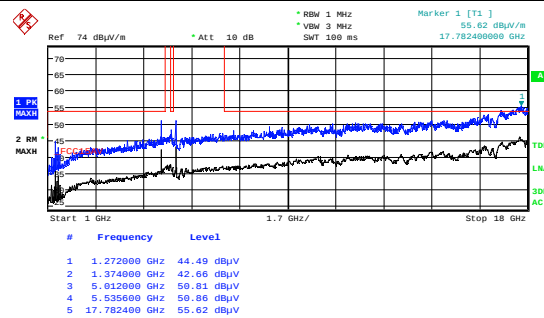
Date: 8.FEB.2023 14:15:29

VP



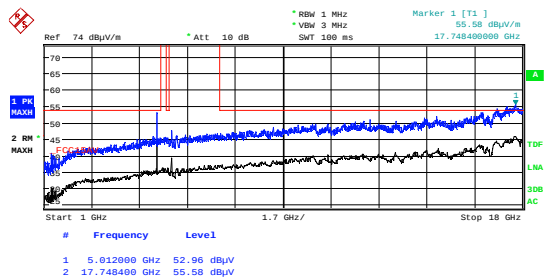
Date: 8.FEB.2023 14:42:40

Radiated Emissions 1-18 GHz, Ch108, 802.11a 6M, Ant 0, HP



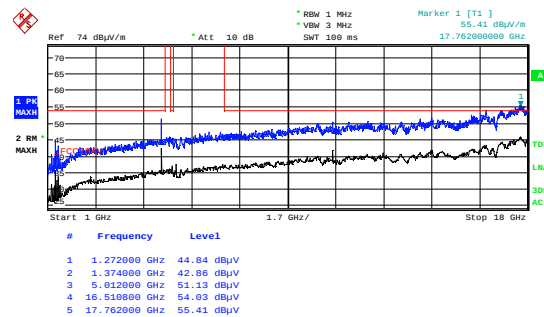
Date: 8.FEB.2023 14:40:39

VP



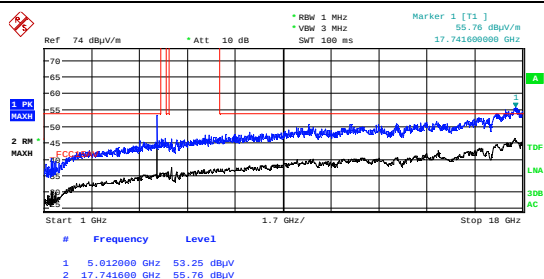
Date: 8.FEB.2023 14:48:17

Radiated Emissions 1-18 GHz, Ch108, 802.11a 6M, Ant 1, HP



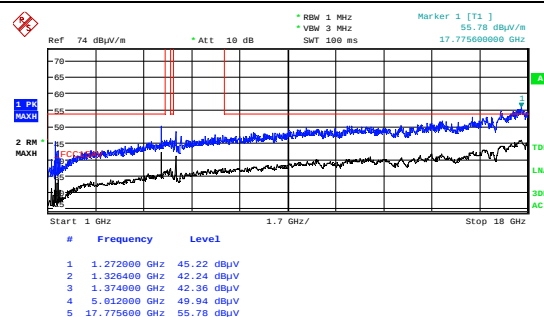
Date: 8.FEB.2023 14:46:16

VP



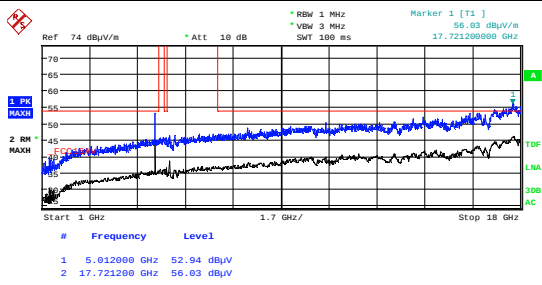
Date: 8.FEB.2023 14:32:16

Radiated Emissions 1-18 GHz, Ch108, 802.11n MCS0, Ant0, HP



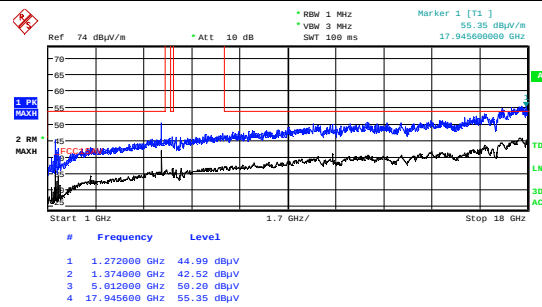
Date: 8.FEB.2023 14:30:14

VP



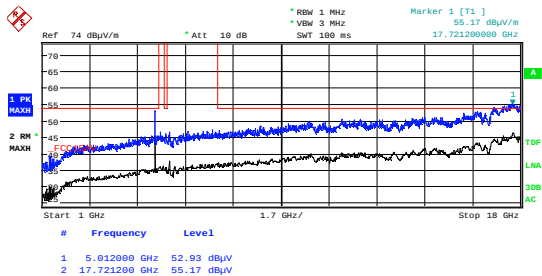
Date: 8.FEB.2023 14:37:19

Radiated Emissions 1-18 GHz, Ch116, 802.11n MCS0, Ant1, HP



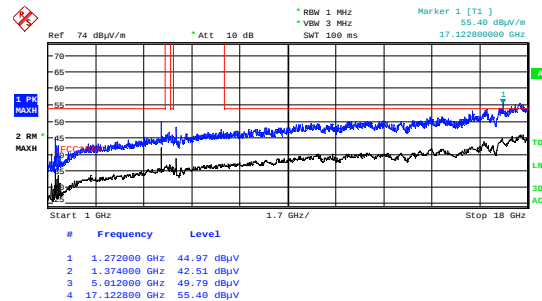
Date: 8.FEB.2023 14:35:18

VP



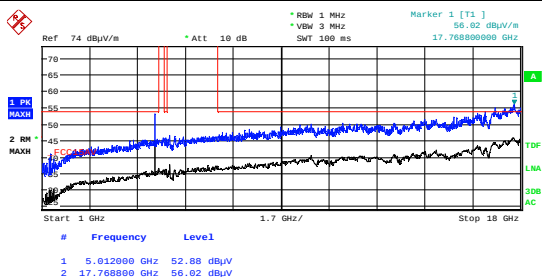
Date: 8.FEB.2023 14:26:28

Radiated Emissions 1-18 GHz, Ch108, 802.11n MCS8, MIMO, HP



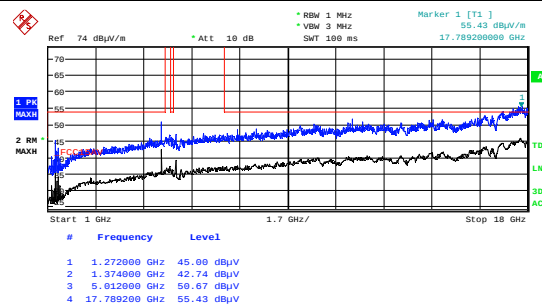
Date: 8.FEB.2023 14:24:27

VP



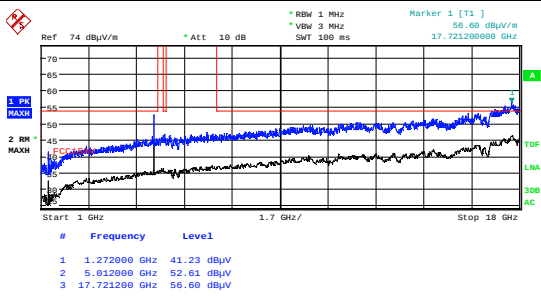
Date: 8.FEB.2023 14:54:33

Radiated Emissions 1-18 GHz, Ch116, 802.11ax MCS0, MIMO, HP



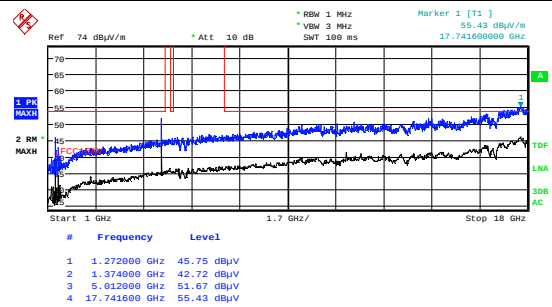
Date: 8.FEB.2023 14:52:31

VP



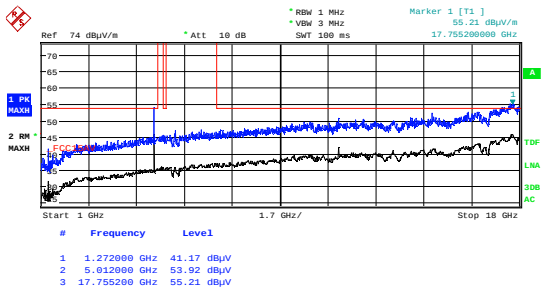
Date: 8.FEB.2023 15:16:38

Radiated Emissions 1-18 GHz, Ch157, 802.11n MCS0, Ant 0, HP



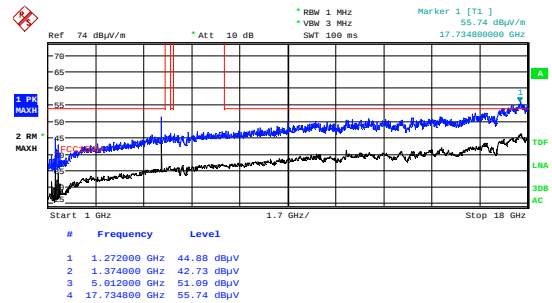
Date: 8.FEB.2023 15:14:19

VP



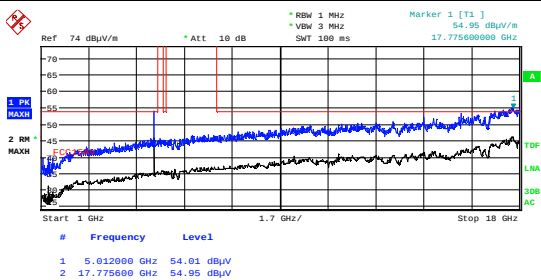
Date: 8.FEB.2023 15:22:50

Radiated Emissions 1-18 GHz, Ch157, 802.11n MCS0, Ant 1, HP



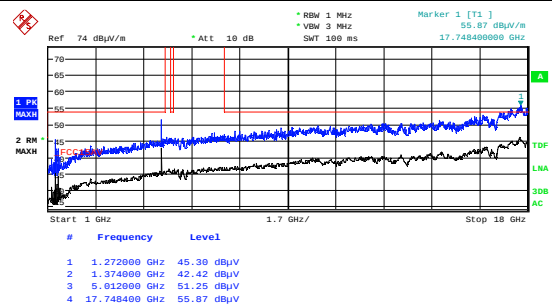
Date: 8.FEB.2023 15:20:59

VP



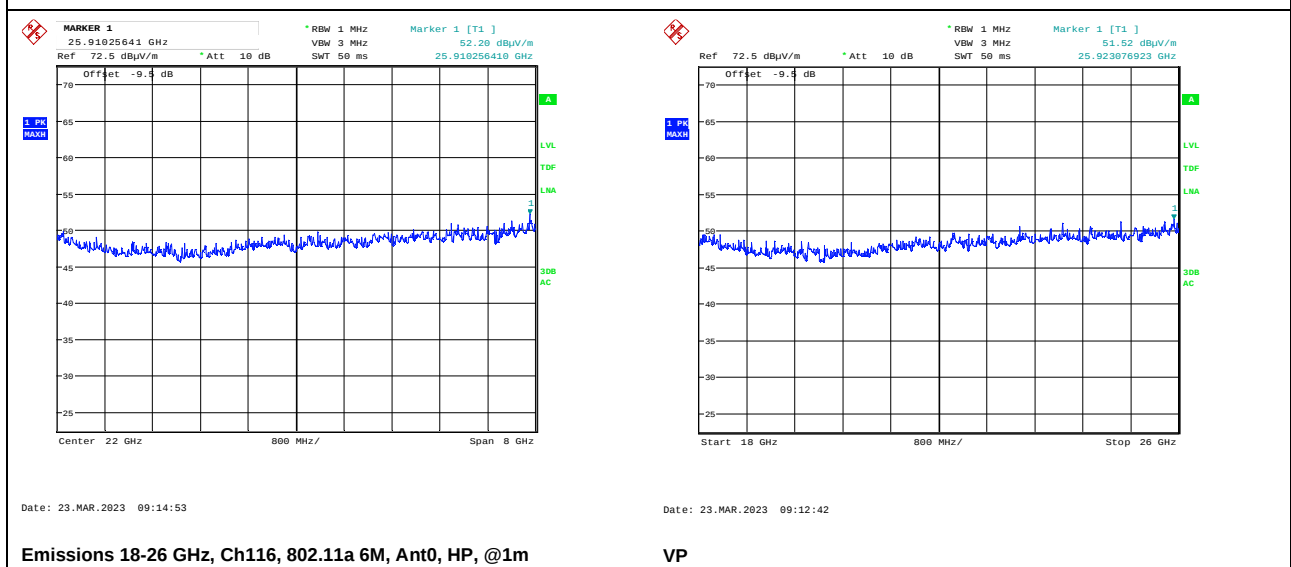
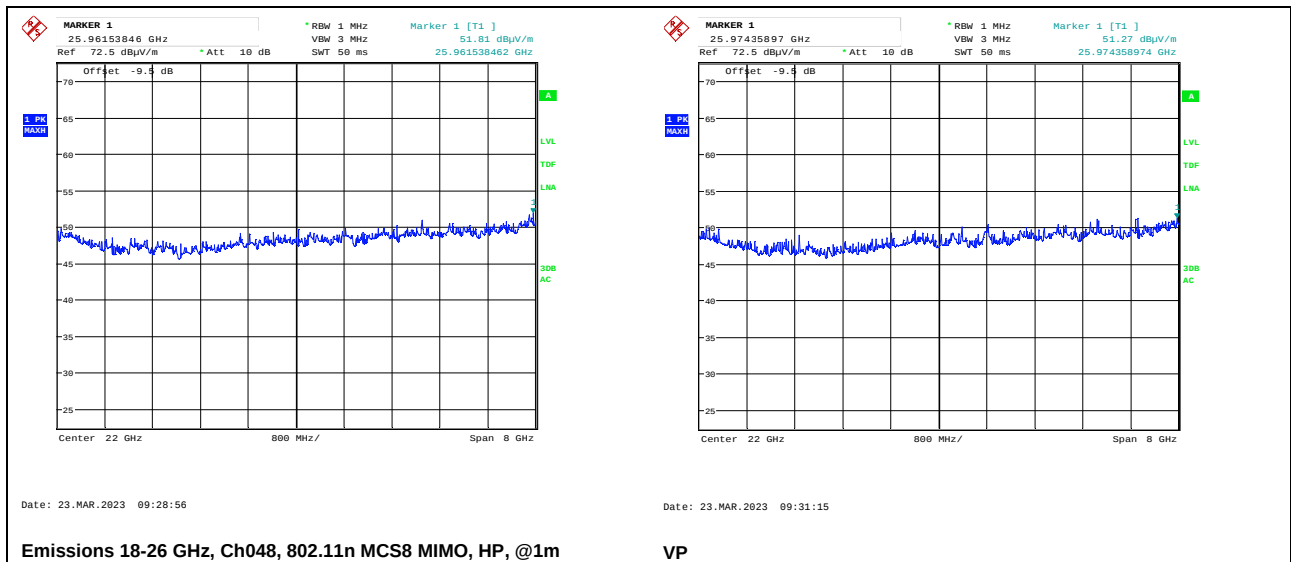
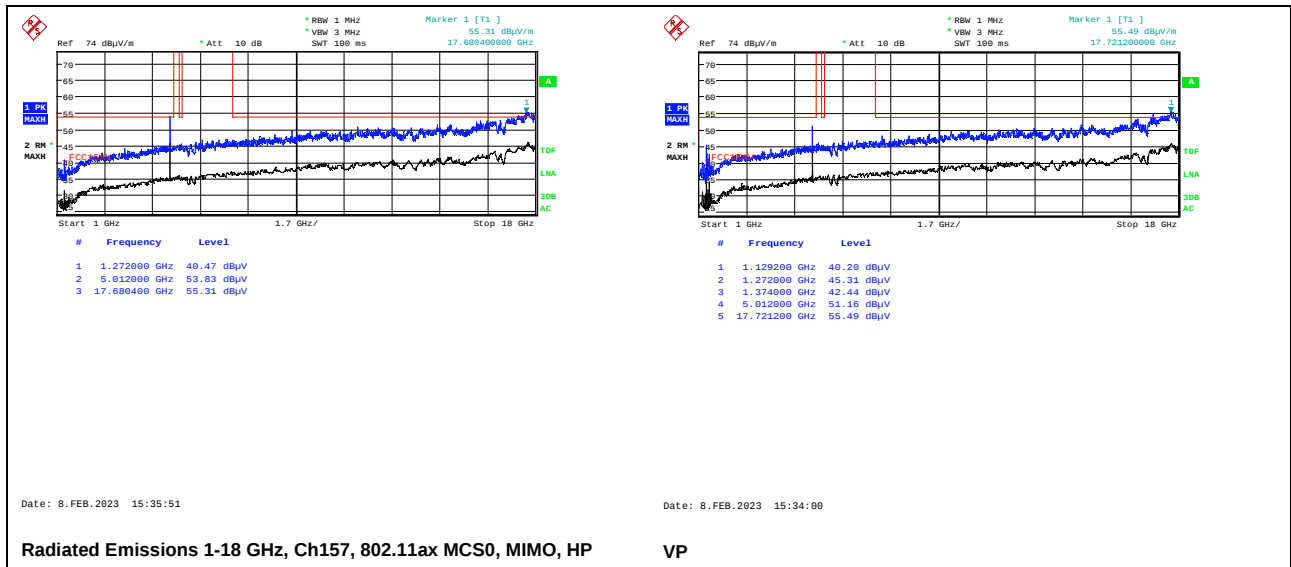
Date: 8.FEB.2023 15:29:23

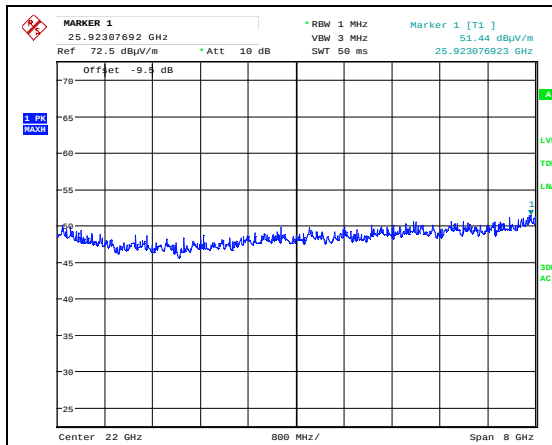
Radiated Emissions 1-18 GHz, Ch157, 802.11n MCS8, MIMO, HP



Date: 8.FEB.2023 15:27:32

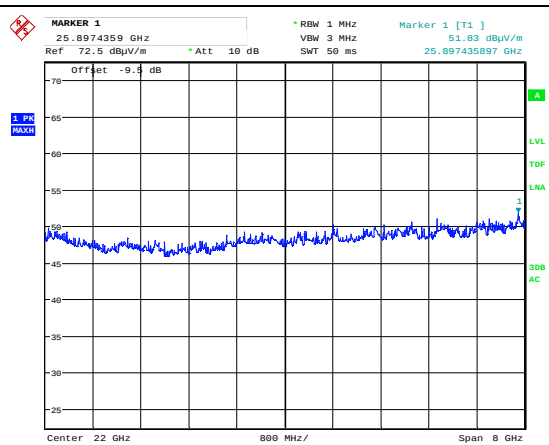
VP





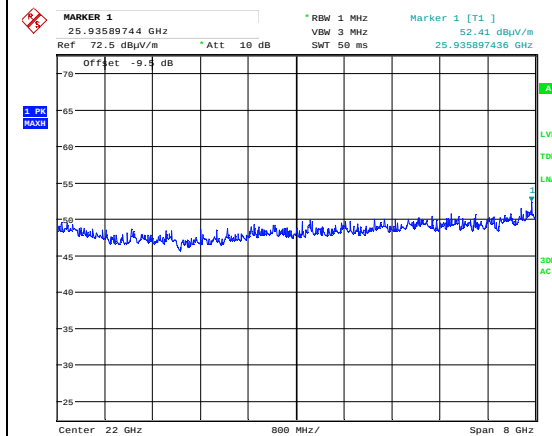
Date: 23.MAR.2023 09:17:51

Emissions 18-26 GHz, Ch116, 802.11a 6M, Ant1, HP, @1m



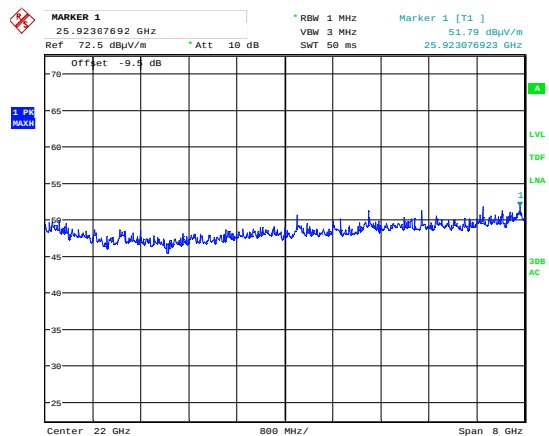
Date: 23.MAR.2023 09:19:58

VP



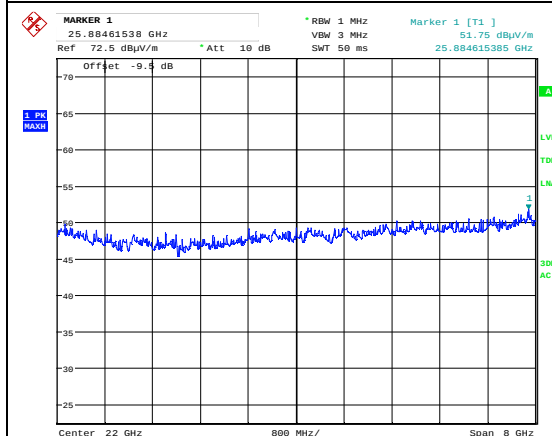
Date: 23.MAR.2023 09:25:58

Emissions 18-26 GHz, Ch116, 802.11n MCS8 MIMO, HP, @1m



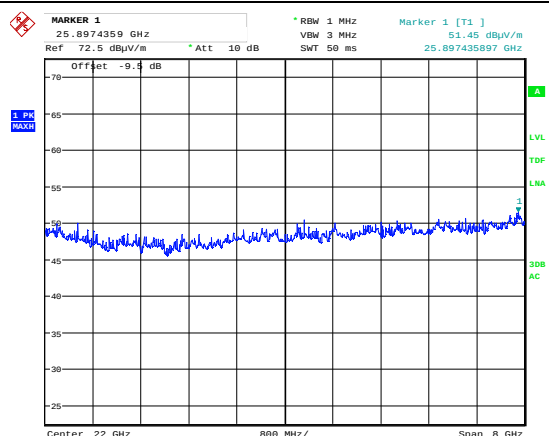
Date: 23.MAR.2023 09:23:24

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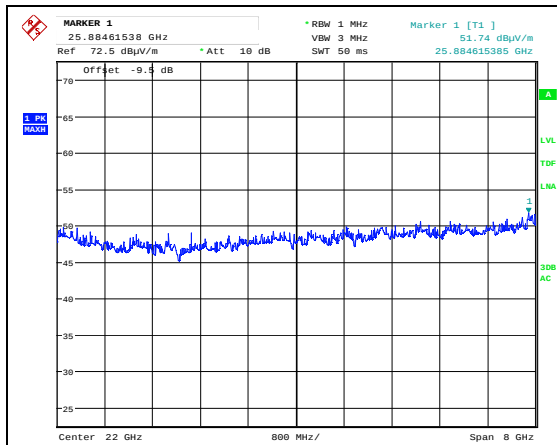
Date: 23.MAR.2023 09:44:49

Emissions 18-26 GHz, Ch116, 802.11ax MCS0 MIMO, HP, @1m



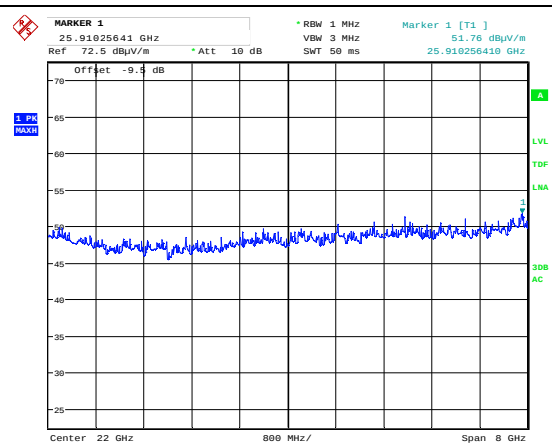
Date: 23.MAR.2023 09:47:09

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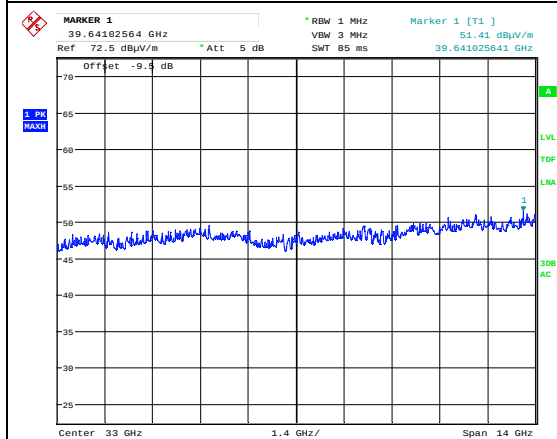
Date: 23.MAR.2023 09:37:58

Emissions 18-26 GHz, Ch157, 802.11n MCS8 MIMO, HP, @1m



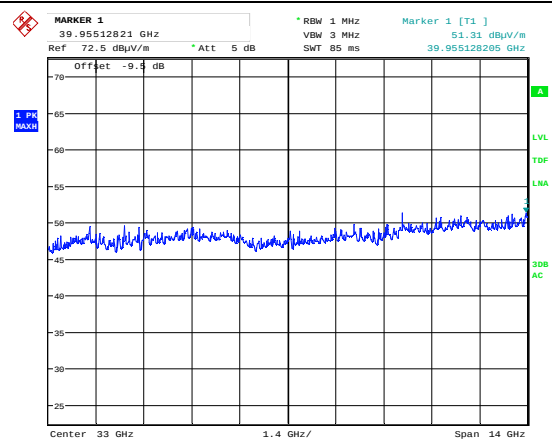
Date: 23.MAR.2023 09:35:30

VP



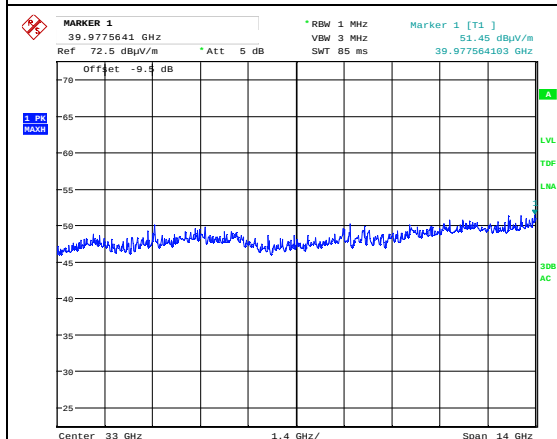
Date: 23.MAR.2023 10:28:03

Emissions 26-40 GHz, Ch048, 802.11n MCS8 MIMO, HP, @1m



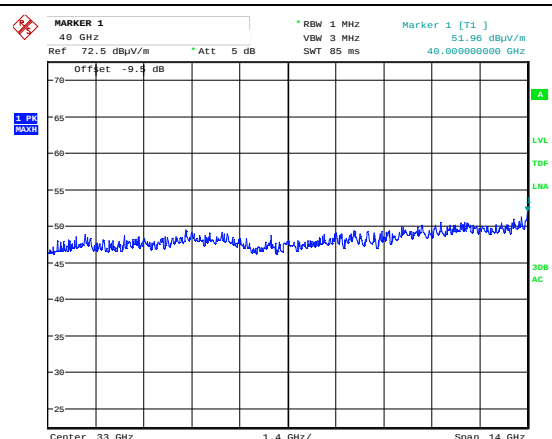
Date: 23.MAR.2023 10:25:49

VP



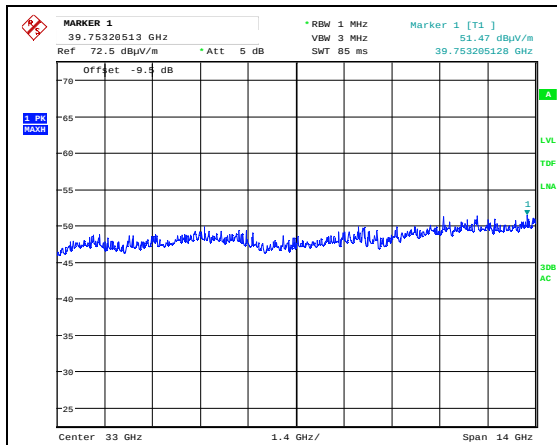
Date: 23.MAR.2023 10:16:55

Emissions 26-40 GHz, Ch048, 802.11a 6M, Ant0, HP, @1m



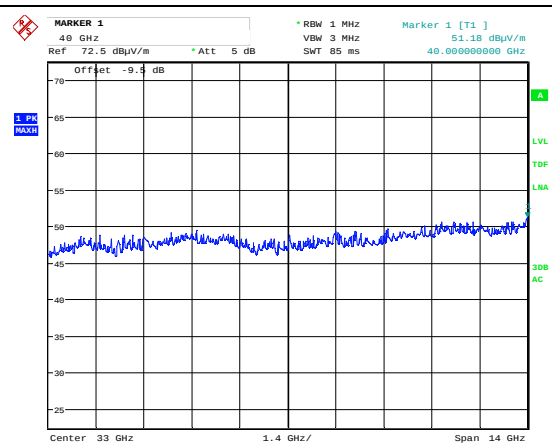
Date: 23.MAR.2023 10:14:30

VP



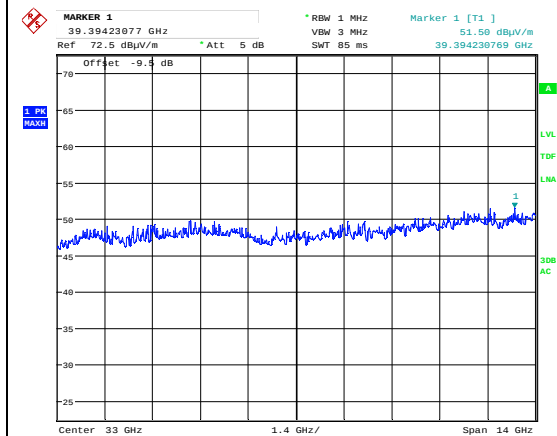
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Emissions 26-40 GHz, Ch116, 802.11a 6M, Ant1, HP, @1m



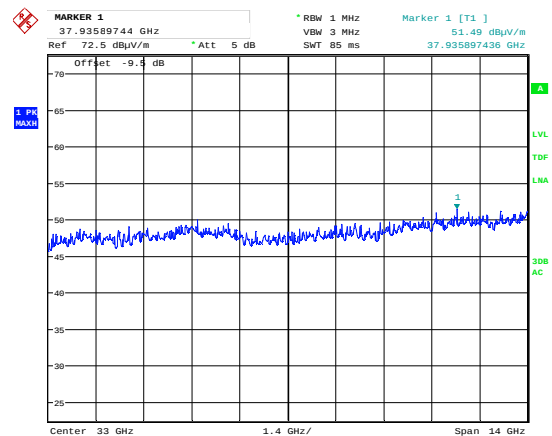
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VP



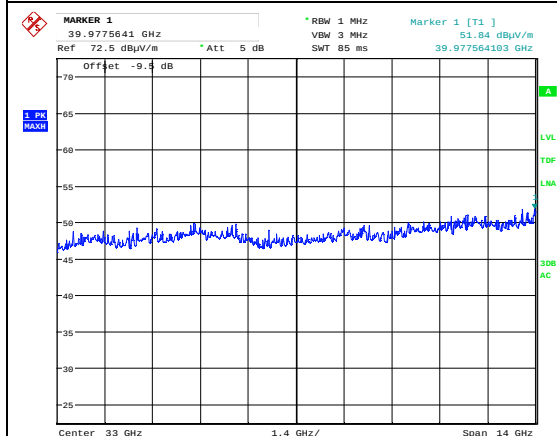
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Emissions 26-40 GHz, Ch116, 802.11n MCS8 MIMO, HP, @1m



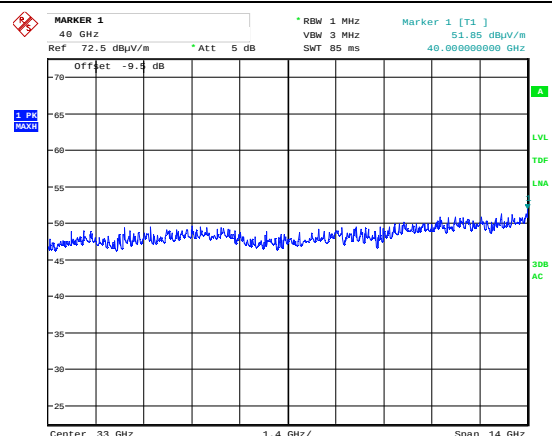
Date: 23.MAR.2023 10:06:01

VP



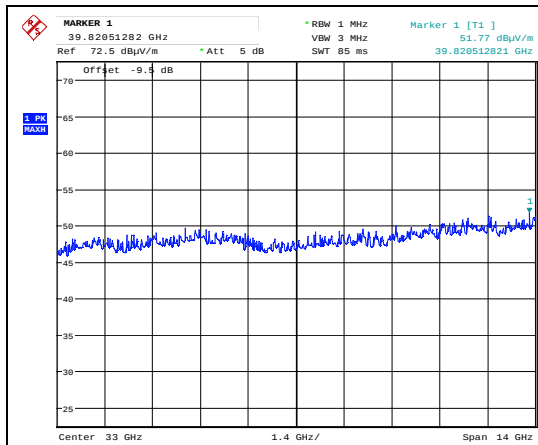
Date: 23.MAR.2023 10:00:59

Emissions 26-40 GHz, Ch116, 802.11ax MCS0 MIMO, HP, @1m



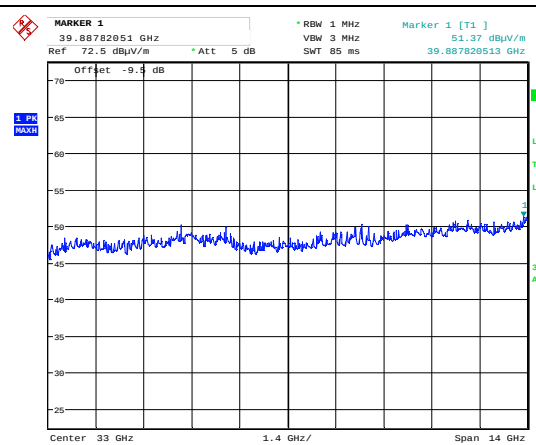
Date: 23.MAR.2023 09:58:51

VP



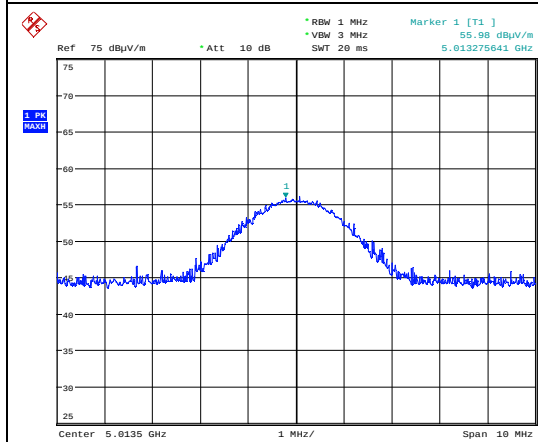
Date: 23.MAR.2023 10:31:19

Emissions 26-40 GHz, Ch157, 802.11n MCS8 MIMO, HP, @1m



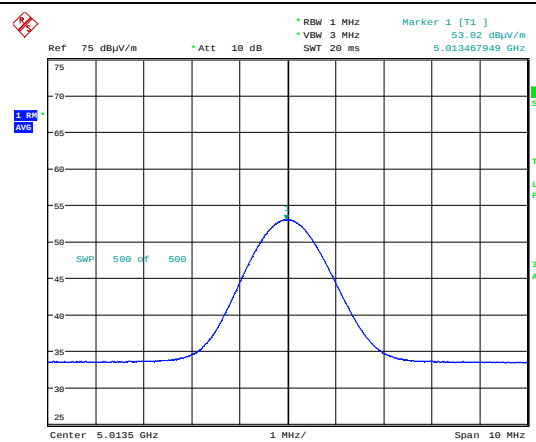
Date: 23.MAR.2023 10:33:43

VP



Date: 8.FEB.2023 15:39:30

Spurious 5013 MHz, Any Ch, Any Mod., Pk Det., Max: HP



Date: 8.FEB.2023 15:38:38

Av Det.

4.10 Dynamic Frequency Selection

FCC 15.407(h)(2)

ISED RSS-247, Issue 2, Clause 6.3

Test Results: Complies

Measurement Data:

	Measured values	
	Frequency Band 2	Frequency Band 3
Channel Move Time	2.096 sec	2.042 sec
Non-occupancy Period	>30 min	>30 min

The tested EUT is a slave or client device without radar detection capabilities. The EUT does not have ad-hoc or direct mode.

The test was performed by setting up a link between the EUT and the access point on the test channel and then applying a radar signal at a RF level of -50dBm to the Master device while the channel was monitored on the Spectrum Analyzer.

The EUT moves channel with the Master Device. See plots that illustrate Channel Move Time and Non-Occupancy Time in the frequency bands 5250 - 5350 MHz and 5470 – 5725 MHz.

The test was performed conducted according to KDB 848637.

FCC Radar Type 3 with Pulse Width 10μs, PRI 200μs and 18 pulses per burst was used (FCC 06-96 A1). Only one burst was used for each test since the Access point with DFS detected the radar every time.

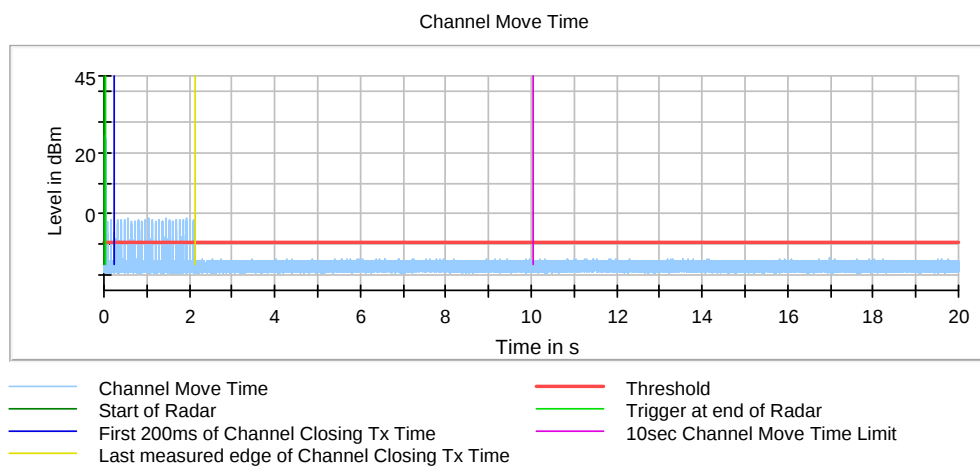
The test was performed with a Linksys WRT3200ACM wireless router (FCC ID: Q87-WRT3200ACM).

Requirements

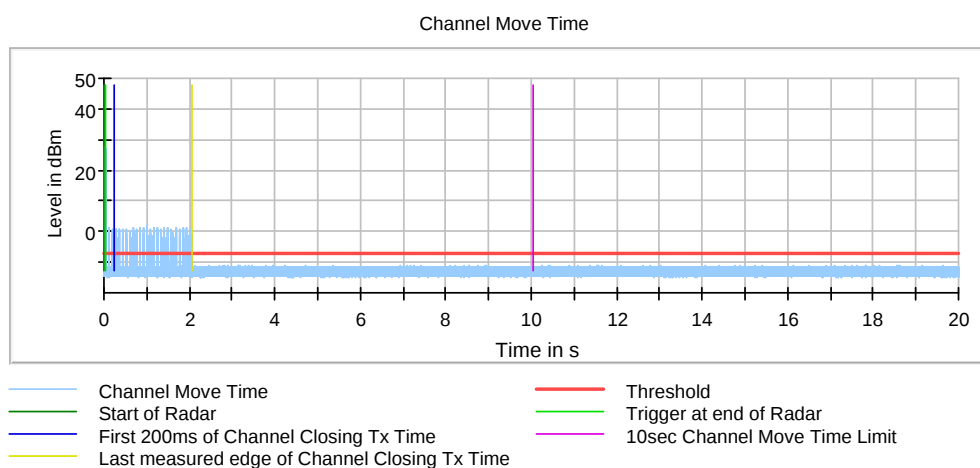
FCC 15.407(h)(2), IC RSS-247, Issue 1, Clause 6.3 (2):

Channel Move Time: After a radar's presence is detected, all transmissions shall cease on the operating channel within 10 seconds. Transmissions during this period shall consist of normal traffic for a maximum of 200 ms after detection of the radar signal. In addition, intermittent management and control signals can be sent during the remaining time to facilitate vacating the operating channel.

Non-occupancy Period: A channel that has been flagged as containing a radar system, either by a channel availability check or in-service monitoring, is subject to a non-occupancy period of at least 30 minutes. The non-occupancy period starts at the time when the radar system is detected.



Channel Closing Time, Band 2



Channel Closing Time, Band 3

5 Measurement Uncertainty

Measurement Uncertainty Values		
Test Item		Uncertainty
Output Power		±0.5 dB
Power Spectral Density		±0.5 dB
Out of Band Emissions, Conducted	< 3.6 GHz	±0.6 dB
	> 3.6 GHz	±0.9 dB
Spurious Emissions, Radiated	< 1 GHz	±2.5 dB
	> 1 GHz	±2.2 dB
Emission Bandwidth		±4 %
Power Line Conducted Emissions		+2.9 / -4.1 dB
Spectrum Mask Measurements	Frequency	±5 %
	Amplitude	±1.0 dB
Frequency Error		±0.6 ppm
Temperature Uncertainty		±1 °C

All uncertainty values are expanded standard uncertainty to give a confidence level of 95%, based on coverage factor k=2

6 LIST OF TEST EQUIPMENT

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment and ancillaries are identified (numbered) by the Test Laboratory.

No.	Model number	Description	Manufacturer	Ref. no.	Cal. date	Cal. Due
1	FSW43	Spectrum Analyzer	Rohde & Schwarz	LR 1690	2022-01 2023-01	2023-01 2024-01
2	ESU40	Measuring Receiver	Rohde & Schwarz	LR 1639	2022-01 2023-01	2023-01 2024-01
3	6810-17B	Attenuator	Suhner	LR 1669	2022-05	2023-05
4	L01G18G1	LowPass Filter (1 GHz)	Microwave Circuits	LR 1768	COU	
5	VULB 9163	BiLog Antenna	Schwarzbech	LR 1616	2021-05	2024-05
6	317	Preamplifier	Sonoma Inst.	LR 1687	2022-08	2023-08
7	8449A	Pre-amplifier	Hewlett Packard	LR 1322	2022-08	2023-08
8	3115	Horn Antenna	EMCO	LR 1226	2022-11	2027-11
9	3117-PA	Horn Antenna +PreAmp	EMCO	LR 1717	2022-08	2023-08
10	Model 638	Antenna Horn	Narda	LR 1480	N/A	
11	N0452501	BandStop Filter (5.3 GHz)	Microwave Circuits	LR 1775	COU	
12	N0555983	BandStop Filter (5.5 GHz)	Microwave Circuits	LR 1774	COU	
14	N0257881	BandStop Filter (5.8 GHz)	Microwave Circuits	LR 1764	COU	
15	Model 87 V	Multimeter	Fluke	LR 1600	2022-03	2024-03
16	6812B	AC Power Source	Agilent	LR 1515	2022-11	2024-11
17	ENV216	Two Line V-Network	Rohde & Schwarz	LR 1665	2021-12	2023-12
18	ESCI3	Measuring Receiver	Rohde & Schwarz	N-4259	2021-10	2023-10
19	Model V637	Horn Antenna	Narda	LR 099	N/A	
20	JS4-20004000	Preamplifier	Miteq	LR 1591	2022-08	2023-08
21	ST18/SMA/N/36	RF Cable	Suhner	LR 1627	COU	
22	OSP-B157W8	Peak Power Meters	Rohde & Schwarz	LR 1793	2022-02	2024-02
23	OSP-B157WX	Switch Unit	Rohde & Schwarz	LR 1806	2022-08	2023-08
24	SMW200A	Vector Signal Generator	Rohde & Schwarz	LR 1807	2022-08	2024-08
25	FSVA3044	Spectrum Analyzer	Rohde & Schwarz	LR 1808	2022-08	2023-08
26	ST18/SMA/N/36	RF Cable	Suhner	LR 1627	COU	
27	SF102/1000MM	RF Cable	Suhner	SN 50113/2	COU	
28	SF102/2000MM	RF Cable	Suhner	SN 500100/2	COU	

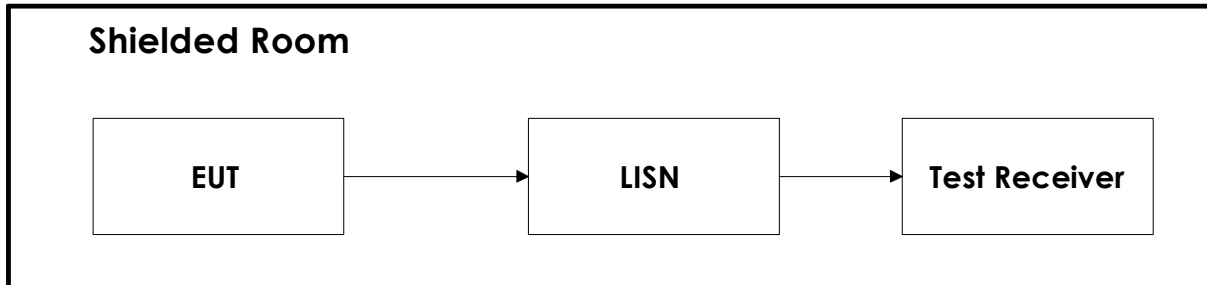
Note: COU – calibrate on use; N/A – Not Applicable

The software listed below has been used for one or more tests.

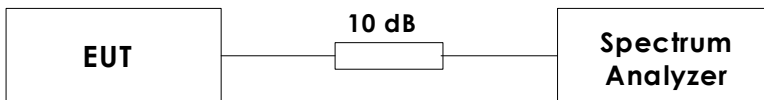
No.	Manufacturer	Name	Version	Comment
1	Rohde & Schwarz	EMC32	10.50.40	EMC test software
2	Nemko AS	RSPlot	1.0.8.0	Screen capture from R&S Spectrum Analyzers
3	Rohde & Schwarz	WMS	10.40.00	Radio Test Software

7 BLOCK DIAGRAM

7.1 Power Line Conducted Emission

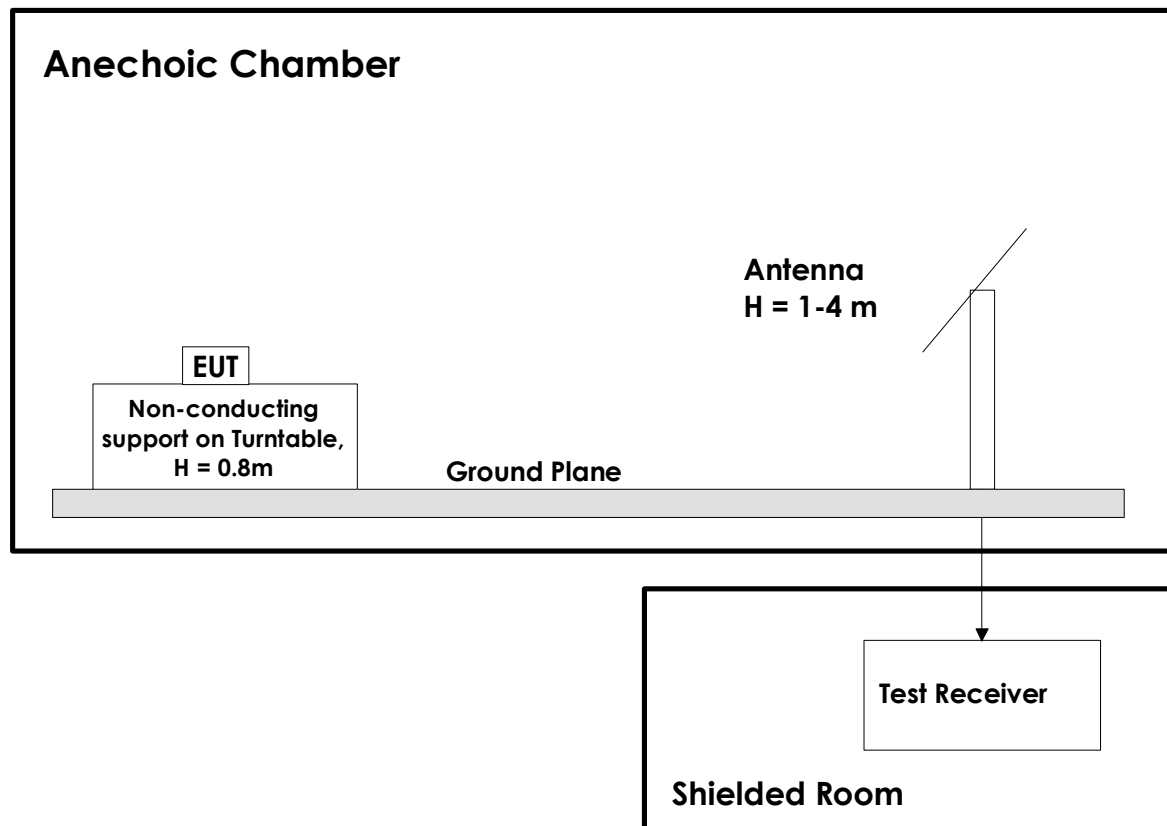


7.2 Conducted Tests



This test set-up is used for all Conducted tests. For the Frequency Stability test the EUT was placed in a climatic chamber.

7.3 Test Site Radiated Emission



This test setup is used for all radiated emissions tests. Measuring distance is 3m for all frequencies.

Emissions above 1 GHz are measured with a Spectrum Analyzer and Horn Antenna.

All measurements at 1GHz and above were performed with turntable height 1.5m and with the ground plane covered by absorbers.

A pre-amplifier is used for all measurements, and High-Pass filter is used for all harmonics.