

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)
Report No.: RFBCUN-WTW-P25020520-8
FCC ID: H8NPCTE020
Product: Mobile Computer
Brand: Askey
Model No.: RC40
Received Date: 2025/3/11
Test Date: 2025/4/11 ~ 2025/6/3
Issued Date: 2025/7/4
Applicant: Askey Computer Corporation
Address: 10F, No.119, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY, TAIWAN
Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories
Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location: No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, Taiwan
FCC Registration / 788550 / TW0003
Designation Number:

Approved by: _____

Jeremy Lin

, Date: _____

2025/7/4

Jeremy Lin / Project Engineer

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Prepared by : Vera Huang / Specialist



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Table of Contents

Release Control Record	4
1 Certificate.....	5
2 Summary of Test Results	6
2.1 Measurement Uncertainty	6
2.2 Supplementary Information	6
3 General Information	7
3.1 General Description of EUT	7
3.2 Antenna Description of EUT	9
3.3 Channel List.....	10
3.4 Test Mode Applicability and Tested Channel Detail.....	12
3.5 Duty Cycle of Test Signal.....	15
3.6 Test Program Used and Operation Descriptions	17
3.7 Connection Diagram of EUT and Peripheral Devices	17
3.8 Configuration of Peripheral Devices and Cable Connections	17
4 Test Instruments	18
4.1 Maximum RF Output Power	18
4.2 Maximum Power Spectral Density	18
4.3 Emission Bandwidth	18
4.4 In-Band Emission Mask.....	18
4.5 Occupied Bandwidth.....	18
4.6 Contention-based Protocol.....	19
4.7 AC Power Conducted Emissions	19
4.8 Unwanted Emissions below 1 GHz	20
4.9 Unwanted Emissions above 1 GHz.....	21
5 Limits of Test Items.....	22
5.1 Maximum RF Output Power	22
5.2 Maximum Power Spectral Density	22
5.3 Emission Bandwidth	22
5.4 In-Band Emission Mask.....	22
5.5 Occupied Bandwidth.....	22
5.6 Contention-based Protocol.....	23
5.7 AC Power Conducted Emissions	23
5.8 Unwanted Emissions below 1 GHz	23
5.9 Unwanted Emissions above 1 GHz.....	24
6 Test Arrangements.....	25
6.1 Maximum RF Output Power	25
6.1.1 Test Setup	25
6.1.2 Test Procedure	25
6.2 Maximum Power Spectral Density	25
6.2.1 Test Setup	25
6.2.2 Test Procedure	25
6.3 Emission Bandwidth	26
6.3.1 Test Setup	26
6.3.2 Test Procedure	26
6.4 In-Band Emission Mask.....	26
6.4.1 Test Setup	26
6.4.2 Test Procedure	26
6.5 Occupied Bandwidth.....	27
6.5.1 Test Setup	27
6.5.2 Test Procedure	27
6.6 Contention-based Protocol.....	28
6.6.1 Test Setup	28
6.6.2 Test Procedure	28
6.7 AC Power Conducted Emissions	29

6.7.1	Test Setup	29
6.7.2	Test Procedure	29
6.8	Unwanted Emissions below 1 GHz	30
6.8.1	Test Setup	30
6.8.2	Test Procedure	31
6.9	Unwanted Emissions above 1 GHz	32
6.9.1	Test Setup	32
6.9.2	Test Procedure	32
7	Test Results of Test Item	33
7.1	Maximum RF Output Power	33
7.2	Maximum Power Spectral Density	40
7.3	Emission Bandwidth	48
7.4	In-Band Emission Mask	53
7.5	Occupied Bandwidth	80
7.6	Contention-based Protocol	85
7.7	AC Power Conducted Emissions	102
7.8	Unwanted Emissions below 1 GHz	104
7.9	Unwanted Emissions above 1 GHz	106
8	Pictures of Test Arrangements	196
9	Information of the Testing Laboratories	197

Release Control Record

Issue No.	Description	Date Issued
RFBCUN-WTW-P25020520-8	Original Release	2025/7/4

1 Certificate

Product: Mobile Computer

Brand: Askey

Test Model: RC40

Sample Status: Engineering sample

Applicant: Askey Computer Corporation

Test Date: 2025/4/11 ~ 2025/6/3

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)

Measurement ANSI C63.10-2013

procedure: KDB 987594 D02 U-NII 6 GHz EMC Measurement v03

KDB 789033 D02 General UNII Test Procedure New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Clause	Test Item	Result	Remark
15.407(a)(8)	Maximum RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(8)	Maximum Power Spectral Density	Pass	Meet the requirement of limit.
15.407(a)(11)	Emission Bandwidth	Pass	Meet the requirement of limit.
---	Occupied Bandwidth	-	Reference only.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -18.36 dB at 0.64200 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -10.0 dB at 53.28 MHz
15.407(b)(6) 15.407(b)(10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.1 dB at 7125.00 MHz
15.407(b)(7)	In-Band Emission Mask	Pass	Meet the requirement of limit.
15.407(d)(6)	Contention-based Protocol	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is ipex(MHF) not a standard connector.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Specification	Expanded Uncertainty (k=2) (±)
Occupied Bandwidth	-	72 Hz
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.90 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	2.44 dB
	30 MHz ~ 1 GHz	2.95 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	2.26 dB
	18 GHz ~ 40 GHz	1.94 dB

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Mobile Computer
Brand	Askey
Test Model	RC40
Status of EUT	Engineering sample
Power Supply Rating	5 / 9 / 12 / 15 / 20Vdc (from adapter) 3.85Vdc (from battery) 12Vdc (from Charging Cradle)
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 1024QAM for OFDMA in 11ax mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	Up to 2401.9 Mbps
Operating Frequency	5.955 GHz ~ 6.415 GHz 6.435 GHz ~ 6.525 GHz 6.535 GHz ~ 6.865 GHz 6.875 GHz ~ 7.115 GHz
Number of Channel	802.11a, 802.11ax (HE20):59 802.11ax (HE40):29 802.11ax (HE80):14 802.11ax (HE160):7
Output Power	5.955 GHz ~ 6.415 GHz : EIRP: 23.792 mW (13.76 dBm) 6.435 GHz ~ 6.525 GHz : EIRP: 23.742 mW (13.76 dBm) 6.535 GHz ~ 6.865 GHz : EIRP: 25.276 mW (14.03 dBm) 6.875 GHz ~ 7.115 GHz : EIRP: 29.246 mW (14.66 dBm)
Equipment Class	6XD: 15E 6 GHz Low-power Indoor client

Note:

1. The EUT contains following accessories.

Battery	Brand	Askey
	Model	RC40-BR-SBL500
	Nominal Voltage	3.85V
	Nominal Capacity	5000mAh, 19.25Wh
	Rated Capacity	4900mAh, 18.865Wh
	Limited Charging Voltage	4.4V
AC Adapter 1 (for Charging Cradle) (Optional)	Brand	Sunny Computer Technology Co.,LTD.
	Model	SYS1649-5012-T3
	Input	100-240V~, 1.5A MAX,50-60Hz
	Output	+12.0V=4.16A
	Output Power	50.0W MAX.
	Description	1.2M / 1core
Power Cord (for AC Adapter 1 & 3) (Optional)	Brand	I-SHENG
	Model	V5BVS33161218002
	Description	1.8M
AC Adapter 2 (Optional)	Brand	CHANNEL WELL TECHNOLOGY
	Model	A1C030AC
	Input	100-240V~, 50-60Hz, 1.2A
	Output	5.0V= 3.0A 15.0W
		9.0V= 3.0A 27.0W
12.0V= 2.5A 30.0W		
15.0V= 2.0A 30.0W		
20.0V=1.5A 30.0W		
AC Adapter 3 (for Charging Cradle) (Optional)	Brand	MASS POWER
	Model	S050-1A120416B3
	Input	100-240V~ 50-60Hz, 1.5A
	Output	12.0V 4.16A, 49.92W
Charging Cradle (Optional)	Brand	Askey
	Model	RC40-CD-TBE100
Scan Handle (Optional)	Brand	Askey
	Model	RC40-PT-TGH000

2. The EUT uses following support unit.

USB C to C Cable	Brand	HOTRON
	Model	D0018100R7XYY
	Description	0.92m

3. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna	Ant. 5	Ant. 8
Antenna Type	PIFA	PIFA
Connector Type	ipex(MHF)	ipex(MHF)
Brand	HONGBO	HONGBO
Model	290-40738	290-40738
Frequency Range	Antenna Gain (dBi)	
5.925GHz~6.425GHz	4.17	2.9
6.425GHz~6.525GHz	4.17	2.6
6.525GHz~6.875Hz	4.43	3.49
6.875Hz~7.125GHz	5.01	2.79

* Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

2. The EUT incorporates a MIMO function:

6 GHz Band		
Modulation Mode	TX & RX Configuration	
802.11a	2TX	2RX
802.11ax (HE20)	2TX	2RX
802.11ax (HE40)	2TX	2RX
802.11ax (HE80)	2TX	2RX
802.11ax (HE160)	2TX	2RX
802.11ax (RU26/52/106)	2TX	2RX

Note:

1. All of modulation mode support beamforming function except 802.11a modulation mode.
2. The EUT support Beamforming and CDD mode, therefore both mode were investigated and the worst case scenario was identified. The worst case data were presented in test report.
3. The EUT does not use channel puncturing and bandwidth reduction.

3.3 Channel List

U-NII-5:

24 channels are provided for 802.11a, 802.11ax (HE20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	5955 MHz	5	5975 MHz	9	5995 MHz	13	6015 MHz
17	6035 MHz	21	6055 MHz	25	6075 MHz	29	6095 MHz
33	6115 MHz	37	6135 MHz	41	6155 MHz	45	6175 MHz
49	6195 MHz	53	6215 MHz	57	6235 MHz	61	6255 MHz
65	6275 MHz	69	6295 MHz	73	6315 MHz	77	6335 MHz
81	6355 MHz	85	6375 MHz	89	6395 MHz	93	6415 MHz

12 channels are provided for 802.11ax (HE40):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
3	5965 MHz	11	6005 MHz	19	6045 MHz	27	6085 MHz
35	6125 MHz	43	6165 MHz	51	6205 MHz	59	6245 MHz
67	6285 MHz	75	6325 MHz	83	6365 MHz	91	6405 MHz

6 channels are provided for 802.11ax (HE80):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
7	5985 MHz	23	6065 MHz	39	6145 MHz	55	6225 MHz
71	6305 MHz	87	6385 MHz				

3 channels are provided for 802.11ax (HE160):

Channel	Frequency	Channel	Frequency	Channel	Frequency
15	6025 MHz	47	6185 MHz	79	6345 MHz

U-NII-6:

5 channels are provided for 802.11a, 802.11ax (HE20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
97	6435 MHz	101	6455 MHz	105	6475 MHz	109	6495 MHz
113	6515 MHz						

3 channels are provided for 802.11ax (HE40):

Channel	Frequency	Channel	Frequency	Channel	Frequency
99	6445 MHz	107	6485 MHz	*115	6525 MHz

1 channel is provided for 802.11ax (HE80):

Channel	Frequency
103	6465 MHz

1 channel is provided for 802.11ax (HE160):

Channel	Frequency
*111	6505 MHz

U-NII-7:

17 channels are provided for 802.11a, 802.11ax (HE20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
117	6535 MHz	121	6555 MHz	125	6575 MHz	129	6595 MHz
133	6615 MHz	137	6635 MHz	141	6655 MHz	145	6675 MHz
149	6695 MHz	153	6715 MHz	157	6735 MHz	161	6755 MHz
165	6775 MHz	169	6795 MHz	173	6815 MHz	177	6835 MHz
181	6855 MHz						

8 channels are provided for 802.11ax (HE40):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
123	6565 MHz	131	6605 MHz	139	6645 MHz	147	6685 MHz
155	6725 MHz	163	6765 MHz	171	6805 MHz	179	6845 MHz

5 channels are provided for 802.11ax (HE80):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
*119	6545 MHz	135	6625 MHz	151	6705 MHz	167	6785 MHz
*183	6865 MHz						

2 channels are provided for 802.11ax (HE160):

Channel	Frequency	Channel	Frequency
143	6665 MHz	175	*6825 MHz

U-NII-8:

13 channels are provided for 802.11a, 802.11ax (HE20):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
185	6875 MHz	189	6895 MHz	193	6915 MHz	197	6935 MHz
201	6955 MHz	205	6975 MHz	209	6995 MHz	213	7015 MHz
217	7035 MHz	221	7055 MHz	225	7075 MHz	229	7095 MHz
233	7115 MHz						

6 channels are provided for 802.11ax (HE40):

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
187	6885 MHz	195	6925 MHz	203	6965 MHz	211	7005 MHz
219	7045 MHz	227	7085 MHz				

2 channels are provided for 802.11ax (HE80):

Channel	Frequency	Channel	Frequency
199	6945 MHz	215	7025 MHz

1 channel is provided for 802.11ax (HE160):

Channel	Frequency
207	6985 MHz

Note: * mean these are straddle channels.

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. EUT can be used in the following ways: X-axis / Y-axis / Z-axis. Pre-scan these ways and find the worst case as a representative test condition. 2. EUT can be used in the following ways: EUT only + Adapter 2 / EUT + Charging Cradle + Adapter 3 / EUT + Scan Handle + Charging Cradle + Adapter 1. 3. Pre-scan these ways and find the worst case as a representative test condition.
Worst Case:	1. X-axis / Y-axis / Z-axis Worst Condition: Z-axis 2. EUT only + Adapter 2 / EUT + Charging Cradle + Adapter 3 / EUT + Scan Handle + Charging Cradle + Adapter 1 Worst Condition: EUT only + Adapter 2

Following channel(s) was (were) selected for the final test as listed below:

Test Item	Mode	Category	Signal Mode	Tested Channel	Modulation	Data Rate Parameter	RU/MRU Index
Maximum RF Output Power	802.11a	under control of a low-power indoor AP	CDD	1, 45, 93	BPSK	6Mb/s	NA
				97, 105, 113			
				117, 149, 181, 185			
				209, 233			
	802.11ax (HE20) 26-tone RU		CDD	1, 93	BPSK	MCS0	0, 8
				97, 113			0, 8
				117, 181			0, 8
				185, 233			0, 8
	802.11ax (HE20) 52-tone RU		CDD	1, 93	BPSK	MCS0	37, 40
				97, 113			37, 40
				117, 181			37, 40
				185, 233			37, 40
	802.11ax (HE20) 106-tone RU		CDD	1, 93	BPSK	MCS0	53, 54
				97, 113			53, 54
				117, 181			53, 54
				185, 233			53, 54
	802.11ax (HE20) Full RU		CDD & Beamforming	1, 45, 93	BPSK	MCS0	NA
				97, 105, 113			
				117, 149, 181, 185			
				209, 233			
	802.11ax (HE40) Full RU		CDD & Beamforming	3, 43, 91	BPSK	MCS0	NA
				99, 107, 115			
				115, 123, 155, 179			
				187, 211, 227			
	802.11ax (HE80) Full RU		CDD & Beamforming	7, 39, 87	BPSK	MCS0	NA
				103			
				119, 151, 183			
				199, 215			
	802.11ax (HE160) Full RU		CDD & Beamforming	15, 47, 79	BPSK	MCS0	NA
				111			
				143, 175			
				207			

Test Item	Mode	Category	Signal Mode	Tested Channel	Modulation	Data Rate Parameter	RU/MRU Index
Maximum Power Spectral Density / Emission Bandwidth / In-Band Emission Mask / Occupied Bandwidth	802.11a	under control of a low-power indoor AP	CDD	1, 45, 93	BPSK	6Mb/s	NA
				97, 105, 113			
				117, 149, 181, 185			
				209, 233			
	802.11ax (HE20) 26-tone RU		CDD	1, 93	BPSK	MCS0	0, 8
				97, 113			0, 8
				117, 181			0, 8
				185, 233			0, 8
	802.11ax (HE20) 52-tone RU		CDD	1, 93	BPSK	MCS0	37, 40
				97, 113			37, 40
				117, 181			37, 40
				185, 233			37, 40
	802.11ax (HE20) 106-tone RU		CDD	1, 93	BPSK	MCS0	53, 54
				97, 113			53, 54
				117, 181			53, 54
				185, 233			53, 54
	802.11ax (HE20) Full RU		CDD	1, 45, 93	BPSK	MCS0	NA
				97, 105, 113			
				117, 149, 181, 185			
				209, 233			
	802.11ax (HE40) Full RU		CDD	3, 43, 91	BPSK	MCS0	NA
				99, 107, 115			
				115, 123, 155, 179			
				187, 211, 227			
	802.11ax (HE80) Full RU		CDD	7, 39, 87	BPSK	MCS0	NA
				103			
				119, 151, 183			
				199, 215			
	802.11ax (HE160) Full RU		CDD	15, 47, 79	BPSK	MCS0	NA
				111			
				143, 175			
207							
Contention-based Protocol	802.11ax (HE20) Full RU	under control of a low-power indoor AP	CDD	45	BPSK	MCS0	NA
				105			
				149			
				209			
	802.11ax (HE160) Full RU			47	BPSK	MCS0	NA
				111			
				143			
				207			

Test Item	Mode	Category	Signal Mode	Tested Channel	Modulation	Data Rate Parameter	RU/MRU Index
AC Power Conducted Emissions	802.11ax (HE160) Full RU	under control of a low-power indoor AP	CDD	207	BPSK	MCS0	NA
Unwanted Emissions below 1 GHz	802.11ax (HE160) Full RU	under control of a low-power indoor AP	CDD	207	BPSK	MCS0	NA
Unwanted Emissions above 1 GHz	802.11a	under control of a low-power indoor AP	CDD	1, 45, 93	BPSK	6Mb/s	NA
				97, 105, 113			
				117, 149, 181, 185			
				209, 233			
	802.11ax (HE20) 26-tone RU		CDD	1, 93	BPSK	MCS0	0, 8
				97, 113			0, 8
				117, 181			0, 8
				185, 233			0, 8
	802.11ax (HE20) 52-tone RU		CDD	1, 93	BPSK	MCS0	37, 40
				97, 113			37, 40
				117, 181			37, 40
				185, 233			37, 40
	802.11ax (HE20) 106-tone RU		CDD	1, 93	BPSK	MCS0	53, 54
				97, 113			53, 54
				117, 181			53, 54
				185, 233			53, 54
	802.11ax (HE20) Full RU		CDD	1, 45, 93	BPSK	MCS0	NA
				97, 105, 113			
				117, 149, 181, 185			
				209, 233			
	802.11ax (HE40) Full RU		CDD	3, 43, 91	BPSK	MCS0	NA
				99, 107, 115			
				115, 123, 155, 179			
				187, 211, 227			
	802.11ax (HE80) Full RU		CDD	7, 39, 87	BPSK	MCS0	NA
				103			
				119, 151, 183			
				199, 215			
	802.11ax (HE160) Full RU		CDD	15, 47, 79	BPSK	MCS0	NA
				111			
				143, 175			
				207			

3.5 Duty Cycle of Test Signal

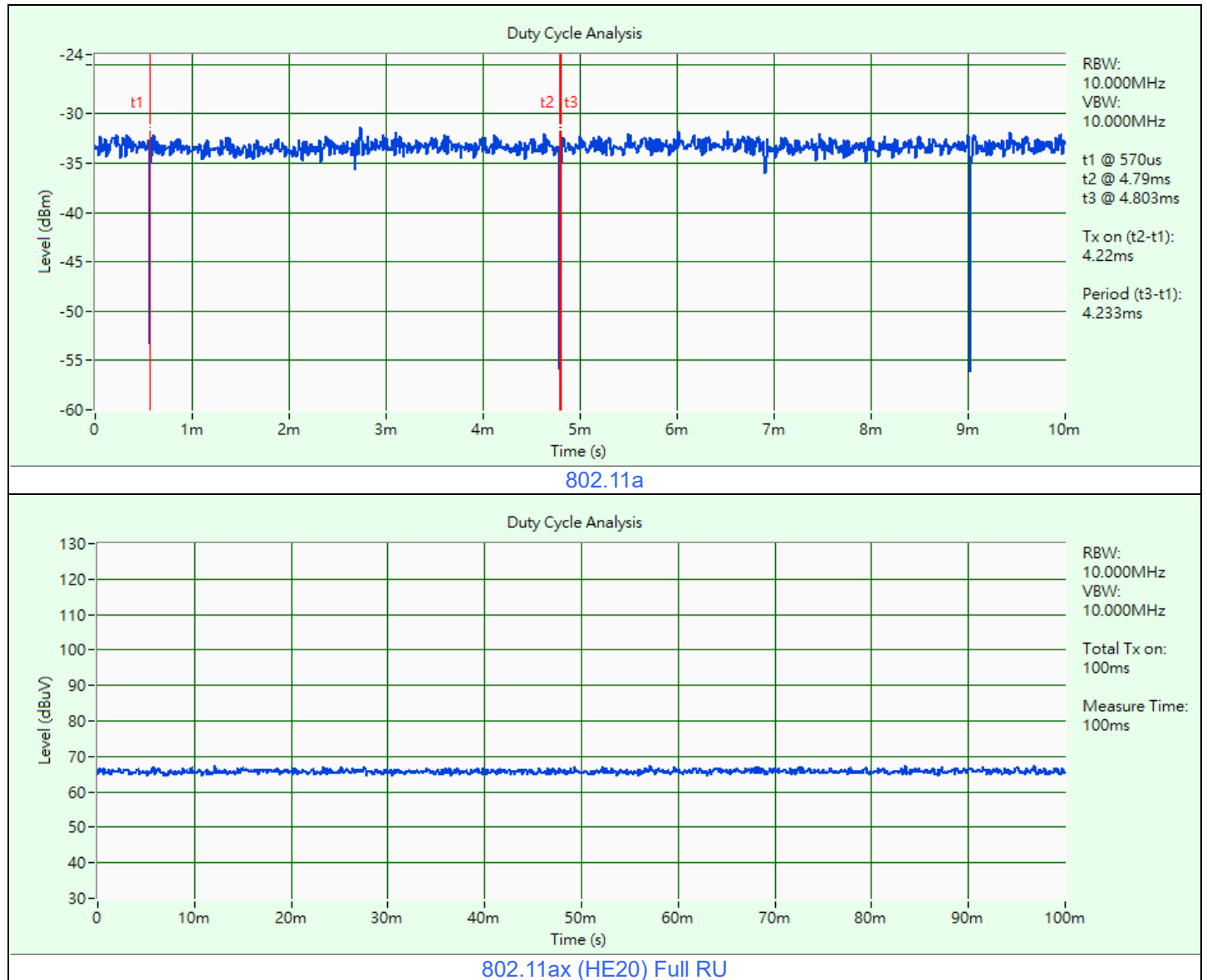
802.11a: Duty cycle = 4.22 ms / 4.233 ms x 100% = 99.7%

802.11ax (HE20) Full RU: Duty cycle = 100 ms / 100 ms x 100% = 100.0%

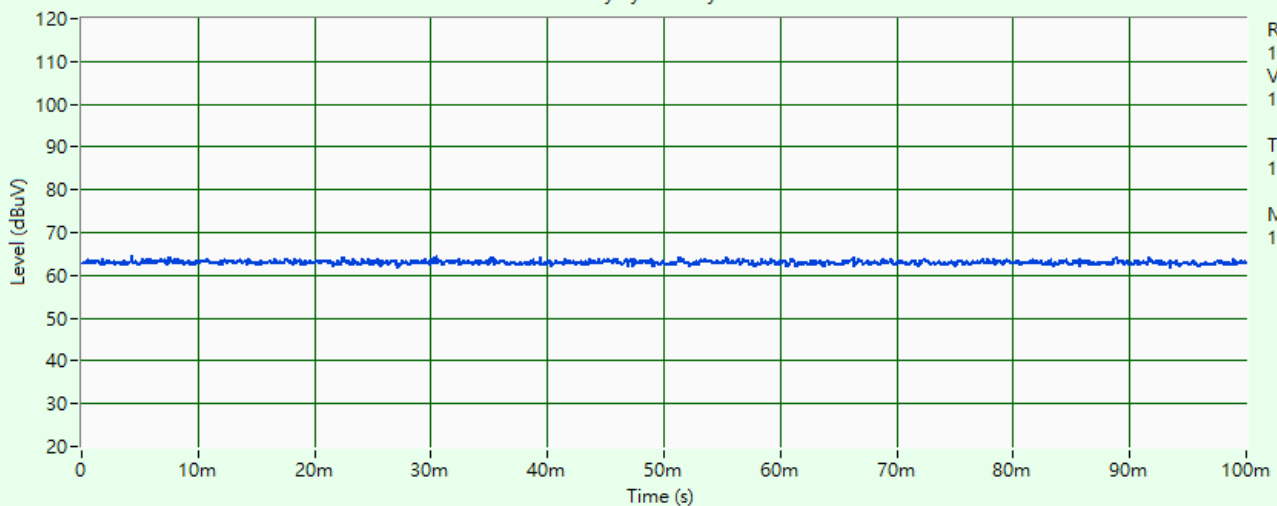
802.11ax (HE40) Full RU: Duty cycle = 100 ms / 100 ms x 100% = 100.0%

802.11ax (HE80) Full RU: Duty cycle = 100 ms / 100 ms x 100% = 100.0%

802.11ax (HE160) Full RU: Duty cycle = 100 ms / 100 ms x 100% = 100.0%

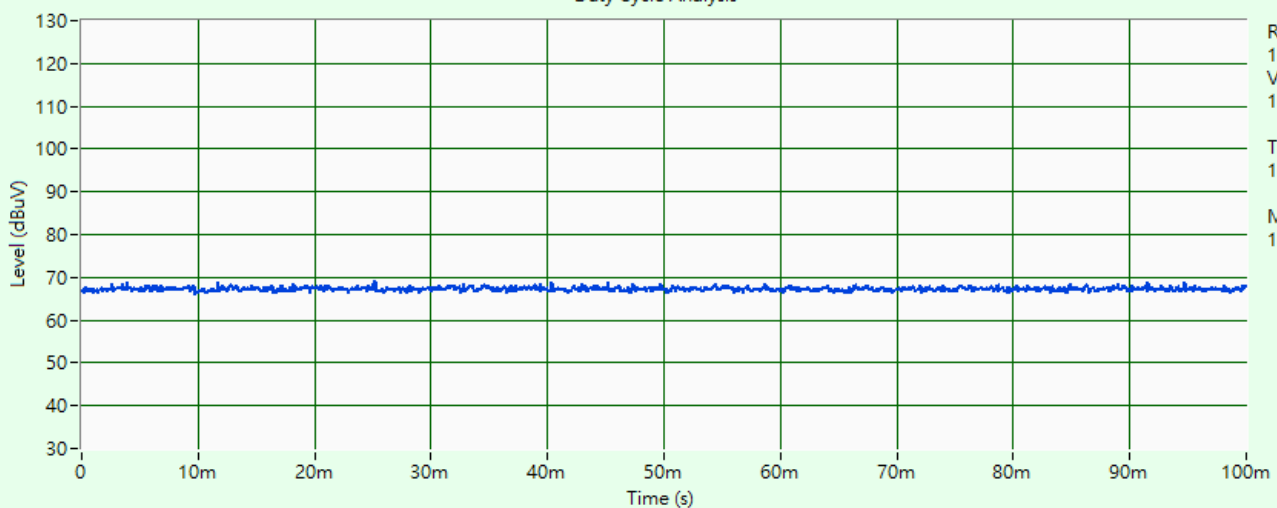


Duty Cycle Analysis



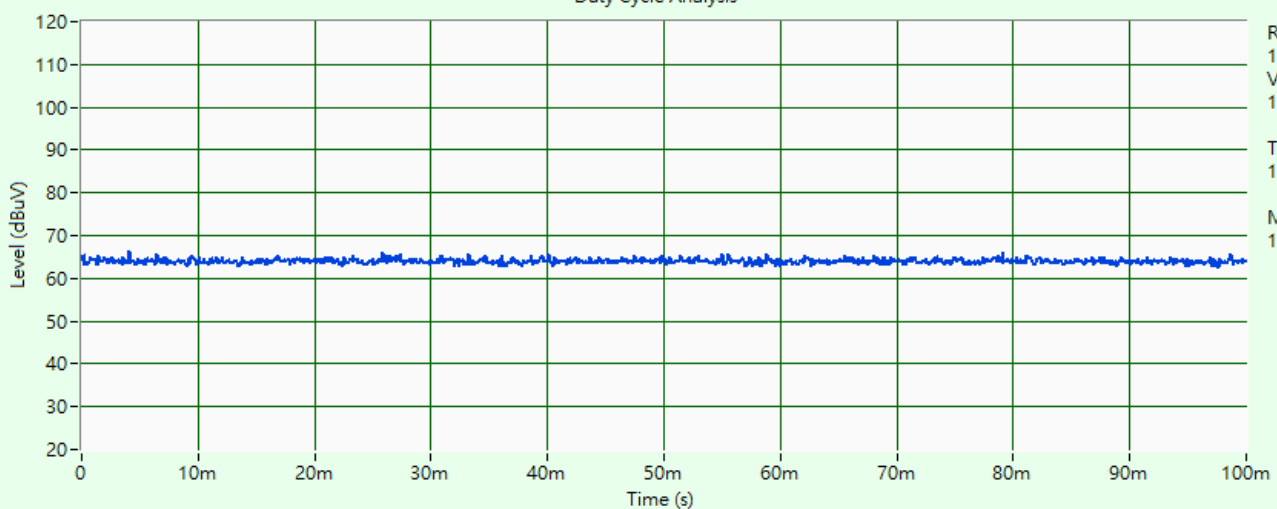
802.11ax (HE40) Full RU

Duty Cycle Analysis



802.11ax (HE80) Full RU

Duty Cycle Analysis



802.11ax (HE160) Full RU

3.6 Test Program Used and Operation Descriptions

Controlling software QRCT V4.0-00211 has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices



Under Table

3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Adapter	CHANNEL WELL TECHNOLOGY	A1C030AC	NA	NA	Supplied by applicant

No.	Cable Descriptions	Qty.	Length (m)	Shielded (Yes/ No)	Cores (Qty.)	Remark
1.	USB C to C Cable	1	0.92	No	0	Supplied by applicant

4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1 Maximum RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2024/5/29 2025/5/23	2025/5/28 2026/5/22
Peak Power Analyzer Keysight	8990B	MY51000485	2025/1/20	2026/1/19
Wideband Power Sensor Keysight	N1923A	MY58020002	2025/1/21	2026/1/20
		MY58140009	2025/1/21	2026/1/20

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2025/5/16 ~ 2025/6/3

4.2 Maximum Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2024/5/29 2025/5/23	2025/5/28 2026/5/22
Signal & Spectrum Analyzer R&S	FSV3044	101504	2024/6/18	2025/6/17
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2025/5/16 ~ 2025/6/3

4.3 Emission Bandwidth

Refer to section 4.2 to get the tested date and information of the instruments.

4.4 In-Band Emission Mask

Refer to section 4.2 to get the tested date and information of the instruments.

4.5 Occupied Bandwidth

Refer to section 4.2 to get the tested date and information of the instruments.

4.6 Contention-based Protocol

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
MXG Vector Signal Generator Agilent	N5182B	MY53050430	2024/11/29	2025/11/28
MXG Vector Signal Generator Keysight	N5182BU	MY59360189	2024/11/29	2025/11/28
Power Divider Woken	0120A02058001M	DCMD33WIK3	2025/4/27	2026/4/26
		DCMD33WIK7	2025/4/27	2026/4/26
Signal & Spectrum Analyzer R&S	FSW26	102023	2024/11/11	2025/11/10

Notes:

1. The test was performed in Adaptivity room.
2. Tested Date: 2025/5/15

4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance	E1-011279	04	2024/11/28	2025/11/27
	E1-011280	05	2024/11/28	2025/11/27
	E1-011311	09	2024/11/28	2025/11/27
DC-LISN Schwarzbeck	NNBM 8126G	8126G-069	2024/11/5	2025/11/4
EMI Test Receiver R&S	ESR3	102783	2024/12/17	2025/12/16
Fixed Attenuator STI	BNC5W10dB	PAD-COND2-01	2024/8/25	2025/8/24
LISN R&S	ESH2-Z5	100100	2025/3/5	2026/3/4
	ESH3-Z5	100312	2024/9/9	2025/9/8
RF Coaxial Cable Woken	5D-FB	Cable-cond2-01	2024/8/25	2025/8/24
Software BVADT	BVADT_Cond_ V7.4.1.0	N/A	N/A	N/A
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2024/8/28	2025/8/27

Notes:

1. The test was performed in HY - Conduction 2.
2. Tested Date: 2025/4/18

4.8 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower & Turn Max-Full	MFA-440H	AT93021705	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-472	2024/10/14	2025/10/13
EXA Signal Analyzer Agilent	N9010A	MY52220207	2024/12/30	2025/12/29
Loop Antenna TESEQ	HLA 6121	45745	2024/8/21	2025/8/20
MXE EMI Receiver Agilent	N9038A	MY51210203	2024/8/27	2025/8/26
Preamplifier EMCI	EMC 330H	980112	2024/9/24	2025/9/23
	EMC001340	980201	2024/9/24	2025/9/23
RF Coaxial Cable Woken	8D-FB	Cable-Ch10-01	2024/9/24	2025/9/23
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MFT-201SS	N/A	N/A	N/A
Turn Table Controller Max-Full	MG-7802	N/A	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2025/4/11

4.9 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower & Turn Max-Full	MFA-440H	AT93021705	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	7	N/A	N/A
EXA Signal Analyzer Agilent	N9010A	MY52220207	2024/12/30	2025/12/29
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-969	2024/11/10	2025/11/9
	BBHA 9170	148	2024/11/10	2025/11/9
MXE EMI Receiver Agilent	N9038A	MY51210203	2024/8/27	2025/8/26
MXE EMI Receiver Keysight	N9038A	MY55420137	2024/5/8	2025/5/7
Preamplifier EMCI	EMC 012645	980115	2024/9/24	2025/9/23
	EMC 184045	980116	2024/9/24	2025/9/23
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2024/7/6	2025/7/5
	EMC102-KM-KM-3000	150929	2024/7/6	2025/7/5
	EMC104-SM-SM- 8000+3000	171005	2024/9/24	2025/9/23
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	EMC104-SM-SM- 1000(140807)	2024/9/24	2025/9/23
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table Max-Full	MFT-201SS	N/A	N/A	N/A
Turn Table Controller Max-Full	MG-7802	N/A	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2025/4/16 ~ 2025/4/18

5 Limits of Test Items

5.1 Maximum RF Output Power

Operation Band	Equipment Class	Limit
		Maximum Average Power
U-NII-5 U-NII-6 U-NII-7 U-NII-8	6XD: 15E 6 GHz Low-power Indoor client	EIRP 24 dBm

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

For power measurements on all other devices: Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB.

5.2 Maximum Power Spectral Density

Operation Band	Equipment Class	Limit
		Maximum Power Density
U-NII-5 U-NII-6 U-NII-7 U-NII-8	6XD: 15E 6 GHz Low-power Indoor client	EIRP -1 dBm/MHz

5.3 Emission Bandwidth

The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 MHz.

5.4 In-Band Emission Mask

Test Item	Frequencies (MHz)	(X) dBc*1
Emission Mask	At 1 MHz outside of channel edge	20
	At one channel bandwidth from the channel center*2	28
	At one- and one-half times the channel bandwidth away from channel center*3	40
	More than one- and one-half times the channel bandwidth	40

*1 : The power spectral density must be suppressed by "x" dB

*2 : At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression,

*3 : At frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression.

5.5 Occupied Bandwidth

The results are for reference only.

5.6 Contention-based Protocol

Unlicensed indoor low-power devices must detect co-channel radio frequency power that is at least -62 dBm (The threshold is referenced to a 0 dBi antenna gain.) or lower. Additionally, indoor low-power devices must detect co-channel energy with 90% or greater certainty.

5.7 AC Power Conducted Emissions

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Notes:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

5.8 Unwanted Emissions below 1 GHz

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

5.9 Unwanted Emissions above 1 GHz

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
Above 960	500	3

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

Frequencies (MHz)	EIRP Limit	Equivalent Field Strength at 3 m
5925 MHz > F > 7125 MHz	Peak: -7 (dBm/MHz)	88.2 (dBuV/m)
	Average: -27 (dBm/MHz)	68.2 (dBuV/m)

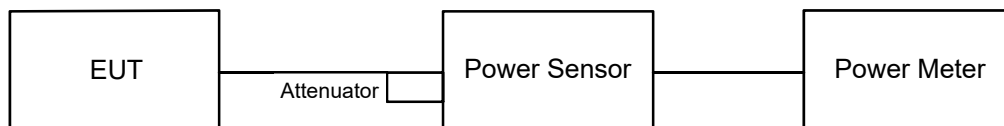
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000 \sqrt{30P}}{3} \quad \mu\text{V/m, where } P \text{ is the eirp (Watts).}$$

6 Test Arrangements

6.1 Maximum RF Output Power

6.1.1 Test Setup

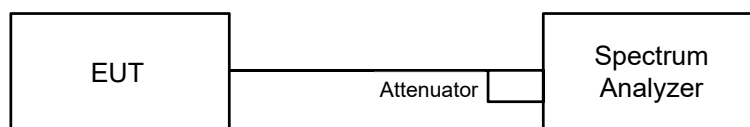


6.1.2 Test Procedure

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst and set the detector to average. Duty factor is not added to measured value.
 $EIRP\ Power = Total\ Conducted\ Power + Gain$

6.2 Maximum Power Spectral Density

6.2.1 Test Setup



6.2.2 Test Procedure

$EIRP\ PSD = Total\ Conducted\ PSD + Directional\ Gain$

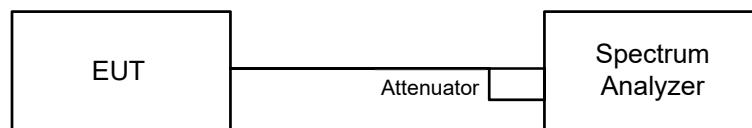
For specified measurement bandwidth 1 MHz:

Method SA-1

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz, Set VBW $\geq$ 3 MHz, Detector = RMS
- Sweep points $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Record the max value

6.3 Emission Bandwidth

6.3.1 Test Setup

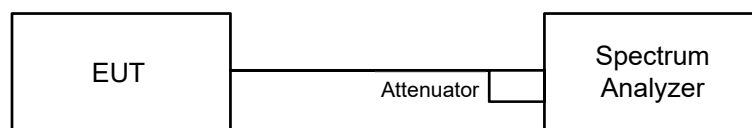


6.3.2 Test Procedure

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

6.4 In-Band Emission Mask

6.4.1 Test Setup

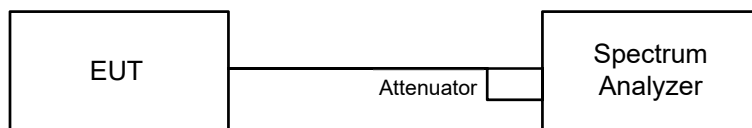


6.4.2 Test Procedure

- Connect output of the antenna port to a spectrum analyzer and adjust appropriate attenuation.
- Measure the 26 dB EBW using the test procedure 12.4.1 of ANSI C63.10-2013. (Determine the channel edge.)
- Measure the power spectral density (for emissions mask reference) using the following procedure:
 - Set the span to encompass the entire 26 dB EBW of the signal.
 - Set RBW = same RBW used for 26 dB EBW measurement.
 - Set VBW $\geq [3 \times \text{RBW}]$.
 - Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$.
 - Sweep time = auto.
 - Detector = RMS (i.e., power averaging).
 - Trace average at least 100 traces in power averaging (rms) mode.
 - Use the peak search function on the instrument to find the peak of the spectrum.
- Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
 - Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)
 - Suppressed by 28 dB at one channel bandwidth from the channel center.
 - Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
- Adjust the span to encompass the entire mask as necessary and clear trace.
- Trace average at least 100 traces in power averaging (rms) mode.
- Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask

6.5 Occupied Bandwidth

6.5.1 Test Setup

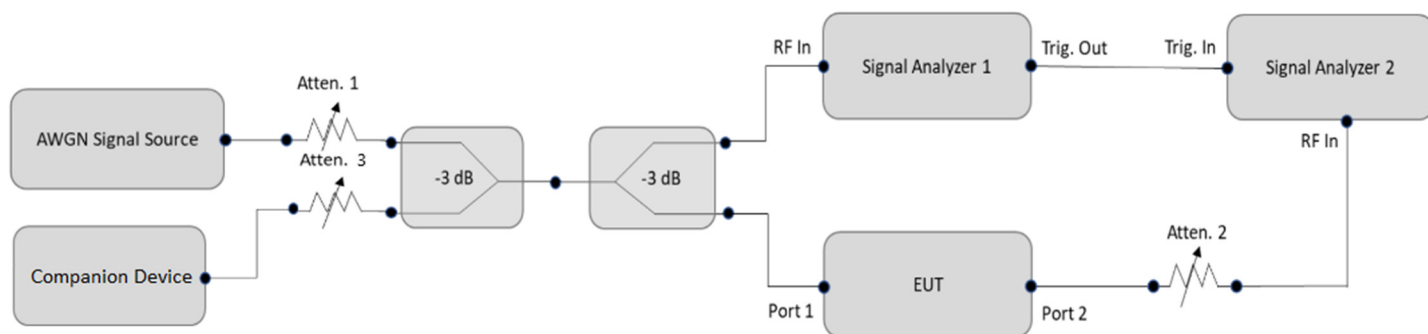


6.5.2 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to Sampling. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean power of a given emission.

6.6 Contention-based Protocol

6.6.1 Test Setup



6.6.2 Test Procedure

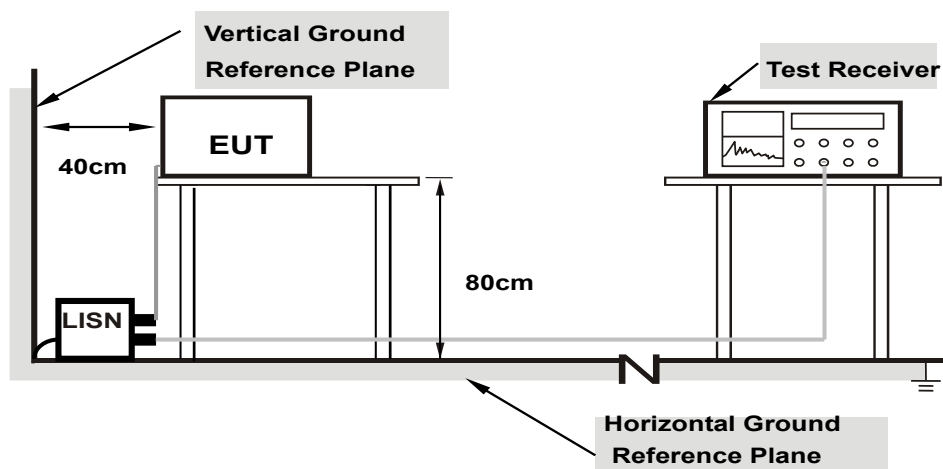
- Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
- Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters (set as following section 4.7.5 EUT operating condition).
- Determine number of times detection threshold test as following table,

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leq BW_{Inc}$	Once	Same as EUT transmission
$BW_{Inc} < BW_{EUT} \leq 2x BW_{Inc}$	Once	Contained within BW_{EUT}
$2x BW_{Inc} < BW_{EUT} \leq 4x BW_{Inc}$	Twice. (Incumbent transmission is contained within BW_{EUT})	Closely to the lower edge and upper edge of the EUT Channel
$BW_{EUT} > 4x BW_{Inc}$	Three times	Closely to the lower edge ,in the middle and upper edge of the EUT Channel

- The power measurement of AWGN signal refers to method SA-1 in section 12.4.2.2 of ANSI C63.10-2020.
- Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use step c table to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
- Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT.
- Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
- Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
- (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
- Refer to step c table to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step d, choose a different center frequency for the AWGN signal and repeat the process.

6.7 AC Power Conducted Emissions

6.7.1 Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.7.2 Test Procedure

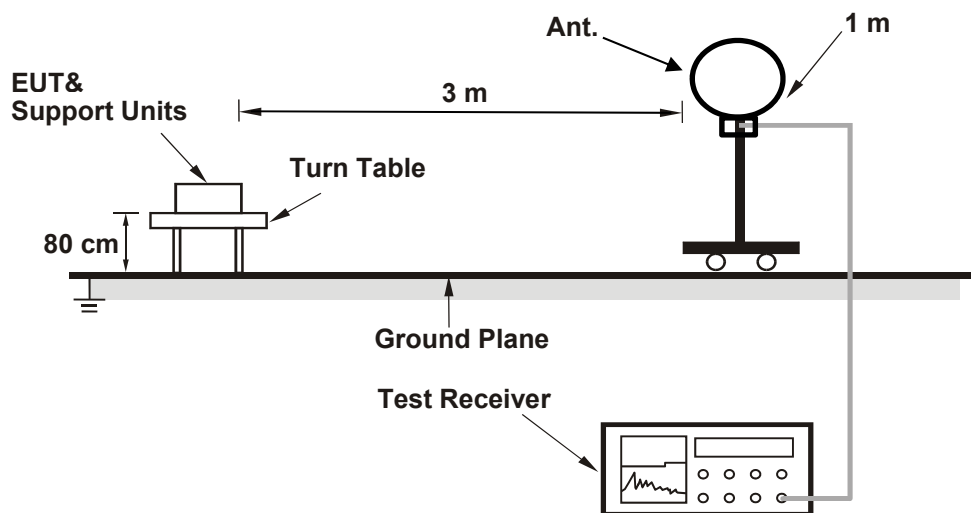
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50 uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz-30 MHz.

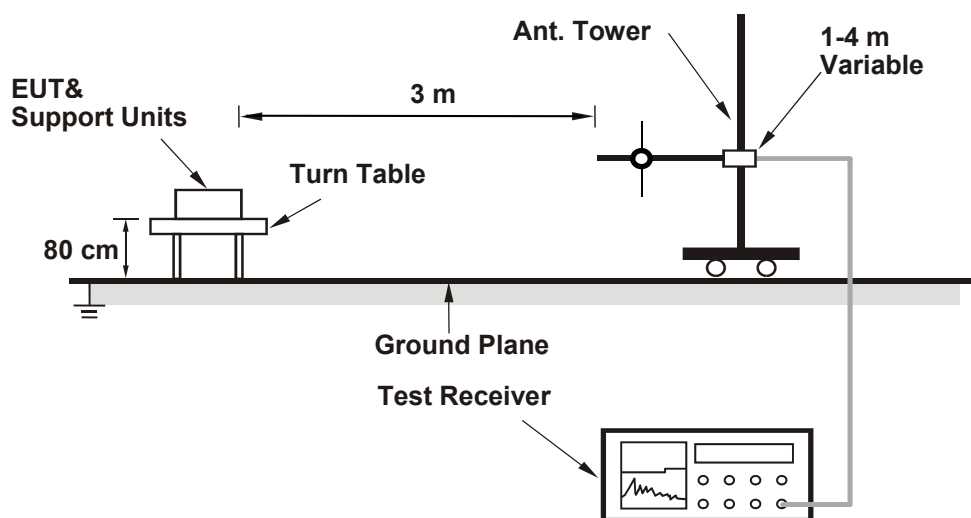
6.8 Unwanted Emissions below 1 GHz

6.8.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.8.2 Test Procedure

For Radiated emission below 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode, except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
3. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated emission above 30 MHz

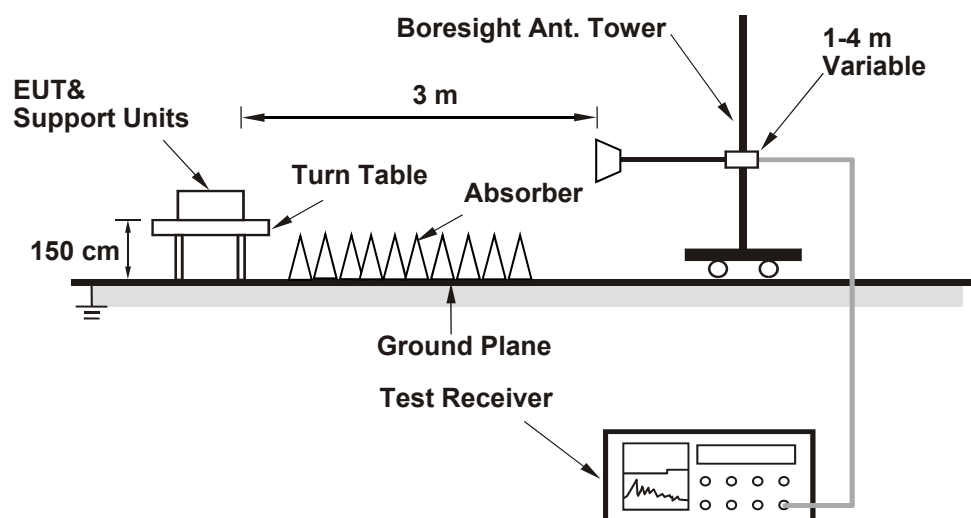
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

6.9 Unwanted Emissions above 1 GHz

6.9.1 Test Setup



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.9.2 Test Procedure

- The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Notes:

- The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) and Average detection (AV) at frequency above 1 GHz.
- For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10 Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1 GHz.

CH233 of 802.11ax (HE20) 26-tone RU / 802.11ax (HE20) 52-tone RU / 802.11ax (HE20) 106-tone RU / 802.11ax (HE20) Full RU were tested with Integration method

a) For peak emissions measurements:

- Set RBW = 100 kHz
- Detection = peak.
- Max hold.
- Perform band-power integration across the 1 MHz bandwidth in which the band-edge emission level is to be measured.

b) For average emissions measurements:

- Set RBW = 100 kHz.
- Perform band-power integration across the 1 MHz bandwidth in which the band-edge emission level is to be measured.

- All modes of operation were investigated and the worst-case emissions are reported.

7 Test Results of Test Item

7.1 Maximum RF Output Power

Input Power:	3.85 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	Match Tsui
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802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
1	5955	0.34	0.84	2.295	3.61	4.17	5.995	7.78	24	Pass
45	6175	-0.10	0.41	2.0762	3.17	4.17	5.423	7.34	24	Pass
93	6415	-0.75	-0.26	1.7833	2.51	4.17	4.658	6.68	24	Pass
97	6435	-0.29	0.20	1.9825	2.97	4.17	5.179	7.14	24	Pass
105	6475	-0.29	0.22	1.9874	2.98	4.17	5.191	7.15	24	Pass
113	6515	-0.24	0.25	2.0055	3.02	4.17	5.239	7.19	24	Pass
117	6535	0.75	1.27	2.528	4.03	4.43	7.011	8.46	24	Pass
149	6695	0.31	0.82	2.282	3.58	4.43	6.329	8.01	24	Pass
181	6855	0.31	0.80	2.276	3.57	4.43	6.312	8	24	Pass
185	6875	0.31	0.83	2.285	3.59	5.01	7.242	8.6	24	Pass
209	6995	0.24	0.75	2.245	3.51	5.01	7.116	8.52	24	Pass
233	7115	1.31	1.81	2.869	4.58	5.01	9.093	9.59	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 4.17 dBi.
3. For U-NII-6, The maximum gain is 4.17 dBi.
4. For U-NII-7, The maximum gain is 4.43 dBi.
5. For U-NII-8, The maximum gain is 5.01 dBi.

802.11ax (HE20) 26-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
1	5955	-6.49	-6.15	0.467	-3.31	4.17	1.22	0.86	24	Pass
93	6415	-6.44	-6.07	0.4742	-3.24	4.17	1.239	0.93	24	Pass
97	6435	-6.43	-5.97	0.4804	-3.18	4.17	1.255	0.99	24	Pass
113	6515	-6.55	-6.18	0.4623	-3.35	4.17	1.208	0.82	24	Pass
117	6535	-7.01	-6.63	0.4163	-3.81	4.43	1.155	0.62	24	Pass
181	6855	-7.03	-6.65	0.4144	-3.83	4.43	1.149	0.6	24	Pass
185	6875	-7.08	-6.61	0.4142	-3.83	5.01	1.313	1.18	24	Pass
233	7115	-6.44	-5.90	0.484	-3.15	5.01	1.534	1.86	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 4.17 dBi.
3. For U-NII-6, The maximum gain is 4.17 dBi.
4. For U-NII-7, The maximum gain is 4.43 dBi.
5. For U-NII-8, The maximum gain is 5.01 dBi.

802.11ax (HE20) 52-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
1	5955	-4.08	-3.62	0.8254	-0.83	4.17	2.156	3.34	24	Pass
93	6415	-4.22	-3.74	0.8011	-0.96	4.17	2.093	3.21	24	Pass
97	6435	-3.87	-3.42	0.8652	-0.63	4.17	2.26	3.54	24	Pass
113	6515	-3.92	-3.30	0.8732	-0.59	4.17	2.281	3.58	24	Pass
117	6535	-4.55	-4.00	0.7489	-1.26	4.43	2.077	3.17	24	Pass
181	6855	-4.61	-4.04	0.7404	-1.31	4.43	2.053	3.12	24	Pass
185	6875	-4.90	-4.29	0.696	-1.57	5.01	2.206	3.44	24	Pass
233	7115	-4.03	-3.67	0.8249	-0.84	5.01	2.615	4.17	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 4.17 dBi.
3. For U-NII-6, The maximum gain is 4.17 dBi.
4. For U-NII-7, The maximum gain is 4.43 dBi.
5. For U-NII-8, The maximum gain is 5.01 dBi.

802.11ax (HE20) 106-tone RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
1	5955	-0.57	-0.46	1.7765	2.50	4.17	4.641	6.67	24	Pass
93	6415	-0.60	-0.48	1.7663	2.47	4.17	4.614	6.64	24	Pass
97	6435	-0.51	-0.42	1.797	2.55	4.17	4.694	6.72	24	Pass
113	6515	-0.61	-0.48	1.7643	2.47	4.17	4.609	6.64	24	Pass
117	6535	-1.29	-1.18	1.5051	1.78	4.43	4.174	6.21	24	Pass
181	6855	-1.30	-1.21	1.4981	1.76	4.43	4.155	6.19	24	Pass
185	6875	-1.18	-1.03	1.5509	1.91	5.01	4.916	6.92	24	Pass
233	7115	-0.54	-0.43	1.7888	2.53	5.01	5.67	7.54	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 4.17 dBi.
3. For U-NII-6, The maximum gain is 4.17 dBi.
4. For U-NII-7, The maximum gain is 4.43 dBi.
5. For U-NII-8, The maximum gain is 5.01 dBi.

802.11ax (HE20) Full RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
1	5955	0.87	1.18	2.534	4.04	4.17	6.619	8.21	24	Pass
45	6175	0.24	0.77	2.251	3.52	4.17	5.88	7.69	24	Pass
93	6415	0.21	0.70	2.224	3.47	4.17	5.809	7.64	24	Pass
97	6435	0.15	0.96	2.283	3.59	4.17	5.964	7.76	24	Pass
105	6475	0.61	1.11	2.442	3.88	4.17	6.379	8.05	24	Pass
113	6515	0.23	0.76	2.246	3.51	4.17	5.867	7.68	24	Pass
117	6535	-0.21	0.28	2.0194	3.05	4.43	5.6	7.48	24	Pass
149	6695	0.21	0.72	2.23	3.48	4.43	6.185	7.91	24	Pass
181	6855	0.25	0.75	2.248	3.52	4.43	6.234	7.95	24	Pass
185	6875	0.26	0.75	2.25	3.52	5.01	7.132	8.53	24	Pass
209	6995	0.24	0.75	2.245	3.51	5.01	7.116	8.52	24	Pass
233	7115	0.69	1.21	2.493	3.97	5.01	7.902	8.98	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 4.17 dBi.
3. For U-NII-6, The maximum gain is 4.17 dBi.
4. For U-NII-7, The maximum gain is 4.43 dBi.
5. For U-NII-8, The maximum gain is 5.01 dBi.

802.11ax (HE40) Full RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	2.77	3.30	4.03	6.05	4.17	10.527	10.22	24	Pass
43	6165	3.31	3.81	4.547	6.58	4.17	11.877	10.75	24	Pass
91	6405	3.33	3.87	4.591	6.62	4.17	11.992	10.79	24	Pass
99	6445	3.26	3.79	4.512	6.54	4.17	11.786	10.71	24	Pass
107	6485	3.16	3.66	4.393	6.43	4.17	11.475	10.6	24	Pass
115	6525	3.26	3.77	4.501	6.53	4.43	12.483	10.96	24	Pass
123	6565	3.20	3.73	4.45	6.48	4.43	12.341	10.91	24	Pass
155	6725	2.76	3.27	4.011	6.03	4.43	11.124	10.46	24	Pass
179	6845	3.20	3.72	4.444	6.48	4.43	12.325	10.91	24	Pass
187	6885	3.32	3.81	4.552	6.58	5.01	14.428	11.59	24	Pass
211	7005	3.78	4.28	5.067	7.05	5.01	16.06	12.06	24	Pass
227	7085	4.28	4.79	5.692	7.55	5.01	18.041	12.56	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 4.17 dBi.
3. For U-NII-6, The maximum gain is 4.17 dBi.
4. For U-NII-7, The maximum gain is 4.43 dBi.
5. For U-NII-8, The maximum gain is 5.01 dBi.

802.11ax (HE80) Full RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	4.63	5.94	6.83	8.34	4.17	17.841	12.51	24	Pass
39	6145	4.76	5.85	6.838	8.35	4.17	17.862	12.52	24	Pass
87	6385	5.02	5.66	6.858	8.36	4.17	17.914	12.53	24	Pass
103	6465	5.79	6.30	8.059	9.06	4.17	21.051	13.23	24	Pass
119	6545	5.75	6.28	8.005	9.03	4.43	22.2	13.46	24	Pass
151	6705	5.67	6.18	7.839	8.94	4.43	21.74	13.37	24	Pass
183	6865	4.75	5.25	6.335	8.02	4.43	17.569	12.45	24	Pass
199	6945	6.19	6.70	8.836	9.46	5.01	28.006	14.47	24	Pass
215	7025	6.35	6.84	9.146	9.61	5.01	28.989	14.62	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 4.17 dBi.
3. For U-NII-6, The maximum gain is 4.17 dBi.
4. For U-NII-7, The maximum gain is 4.43 dBi.
5. For U-NII-8, The maximum gain is 5.01 dBi.

802.11ax (HE160) Full RU

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	6.22	6.92	9.108	9.59	4.17	23.792	13.76	24	Pass
47	6185	6.12	6.69	8.759	9.42	4.17	22.88	13.59	24	Pass
79	6345	6.17	6.68	8.796	9.44	4.17	22.977	13.61	24	Pass
111	6505	6.27	6.86	9.089	9.59	4.17	23.742	13.76	24	Pass
143	6665	6.26	6.88	9.102	9.59	4.43	25.243	14.02	24	Pass
175	6825	6.34	6.82	9.114	9.60	4.43	25.276	14.03	24	Pass
207	6985	6.26	6.99	9.227	9.65	5.01	29.246	14.66	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 4.17 dBi.
3. For U-NII-6, The maximum gain is 4.17 dBi.
4. For U-NII-7, The maximum gain is 4.43 dBi.
5. For U-NII-8, The maximum gain is 5.01 dBi.

802.11ax (HE20) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Directional Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
1	5955	-1.68	-1.37	1.4087	1.49	6.57	6.395	8.06	24	Pass
45	6175	-2.24	-1.72	1.27	1.04	6.57	5.765	7.61	24	Pass
93	6415	-2.31	-1.83	1.2436	0.95	6.57	5.645	7.52	24	Pass
97	6435	-2.34	-1.53	1.2865	1.09	6.43	5.655	7.52	24	Pass
105	6475	-1.84	-1.05	1.4399	1.58	6.43	6.329	8.01	24	Pass
113	6515	-2.29	-1.75	1.2585	1.00	6.43	5.532	7.43	24	Pass
117	6535	-3.17	-2.43	1.0534	0.23	6.98	5.255	7.21	24	Pass
149	6695	-2.61	-2.11	1.1635	0.66	6.98	5.805	7.64	24	Pass
181	6855	-2.54	-2.07	1.1781	0.71	6.98	5.877	7.69	24	Pass
185	6875	-1.79	-1.26	1.4104	1.49	6.98	7.036	8.47	24	Pass
209	6995	-1.80	-1.25	1.4106	1.49	6.98	7.037	8.47	24	Pass
233	7115	-1.32	-0.83	1.5639	1.94	6.98	7.802	8.92	24	Pass

Notes:

1. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
2. For U-NII-5, The directional gain is 6.57 dBi.
3. For U-NII-6, The directional gain is 6.43 dBi.
4. For U-NII-7, The directional gain is 6.98 dBi.
5. For U-NII-8, The directional gain is 6.98 dBi.

802.11ax (HE40) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Directional Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	0.35	0.87	2.306	3.63	6.57	10.468	10.2	24	Pass
43	6165	0.87	1.39	2.599	4.15	6.57	11.798	10.72	24	Pass
91	6405	0.90	1.46	2.63	4.20	6.57	11.939	10.77	24	Pass
99	6445	0.94	1.47	2.644	4.22	6.43	11.621	10.65	24	Pass
107	6485	0.83	1.35	2.575	4.11	6.43	11.318	10.54	24	Pass
115	6525	0.61	1.16	2.457	3.90	6.98	12.258	10.88	24	Pass
123	6565	0.58	1.11	2.434	3.86	6.98	12.143	10.84	24	Pass
155	6725	0.13	0.65	2.192	3.41	6.98	10.936	10.39	24	Pass
179	6845	0.59	1.10	2.434	3.86	6.98	12.143	10.84	24	Pass
187	6885	1.28	1.80	2.856	4.56	6.98	14.248	11.54	24	Pass
211	7005	1.75	2.26	3.179	5.02	6.98	15.86	12	24	Pass
227	7085	2.24	2.78	3.572	5.53	6.98	17.82	12.51	24	Pass

Notes:

1. Directional gain = $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
2. For U-NII-5, The directional gain is 6.57 dBi.
3. For U-NII-6, The directional gain is 6.43 dBi.
4. For U-NII-7, The directional gain is 6.98 dBi.
5. For U-NII-8, The directional gain is 6.98 dBi.

802.11ax (HE80) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Directional Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	2.19	3.51	3.9	5.91	6.57	17.704	12.48	24	Pass
39	6145	2.32	3.42	3.904	5.92	6.57	17.722	12.49	24	Pass
87	6385	2.58	3.24	3.92	5.93	6.57	17.795	12.5	24	Pass
103	6465	3.45	3.97	4.708	6.73	6.43	20.694	13.16	24	Pass
119	6545	3.13	3.66	4.379	6.41	6.98	21.846	13.39	24	Pass
151	6705	3.02	3.55	4.269	6.30	6.98	21.297	13.28	24	Pass
183	6865	2.13	2.63	3.465	5.40	6.98	17.286	12.38	24	Pass
199	6945	4.15	4.67	5.531	7.43	6.98	27.593	14.41	24	Pass
215	7025	4.31	4.82	5.732	7.58	6.98	28.596	14.56	24	Pass

Notes:

1. Directional gain = $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
2. For U-NII-5, The directional gain is 6.57 dBi.
3. For U-NII-6, The directional gain is 6.43 dBi.
4. For U-NII-7, The directional gain is 6.98 dBi.
5. For U-NII-8, The directional gain is 6.98 dBi.

802.11ax (HE160) Beamforming

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Directional Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	3.80	4.49	5.211	7.17	6.57	23.655	13.74	24	Pass
47	6185	3.70	4.27	5.017	7.00	6.57	22.774	13.57	24	Pass
79	6345	3.73	4.26	5.027	7.01	6.57	22.82	13.58	24	Pass
111	6505	3.95	4.53	5.321	7.26	6.43	23.388	13.69	24	Pass
143	6665	3.62	4.26	4.968	6.96	6.98	24.785	13.94	24	Pass
175	6825	3.71	4.20	4.98	6.97	6.98	24.844	13.95	24	Pass
207	6985	4.21	4.97	5.777	7.62	6.98	28.821	14.6	24	Pass

Notes:

1. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
2. For U-NII-5, The directional gain is 6.57 dBi.
3. For U-NII-6, The directional gain is 6.43 dBi.
4. For U-NII-7, The directional gain is 6.98 dBi.
5. For U-NII-8, The directional gain is 6.98 dBi.

7.2 Maximum Power Spectral Density

Input Power:	3.85 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	Match Tsui
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802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
1	5955	-12.58	-12.15	-9.35	6.57	-2.78	-1	Pass
45	6175	-13.08	-12.45	-9.74	6.57	-3.17	-1	Pass
93	6415	-13.63	-13.07	-10.33	6.57	-3.76	-1	Pass
97	6435	-13.21	-12.50	-9.83	6.43	-3.4	-1	Pass
105	6475	-13.14	-12.42	-9.75	6.43	-3.32	-1	Pass
113	6515	-13.06	-12.62	-9.82	6.43	-3.39	-1	Pass
117	6535	-12.13	-11.64	-8.87	6.98	-1.89	-1	Pass
149	6695	-12.48	-12.08	-9.27	6.98	-2.29	-1	Pass
181	6855	-12.57	-12.12	-9.33	6.98	-2.35	-1	Pass
185	6875	-12.77	-12.10	-9.41	6.98	-2.43	-1	Pass
209	6995	-12.60	-12.16	-9.36	6.98	-2.38	-1	Pass
233	7115	-11.39	-11.01	-8.19	6.98	-1.21	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-5, The directional gain is 6.57 dBi.
4. For U-NII-6, The directional gain is 6.43 dBi.
5. For U-NII-7, The directional gain is 6.98 dBi.
6. For U-NII-8, The directional gain is 6.98 dBi.

802.11ax (HE20) 26-tone RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
1	5955	-10.88	-10.37	-7.61	6.57	-1.04	-1	Pass
93	6415	-10.84	-10.38	-7.59	6.57	-1.02	-1	Pass
97	6435	-10.74	-10.29	-7.50	6.43	-1.07	-1	Pass
113	6515	-10.91	-10.54	-7.71	6.43	-1.28	-1	Pass
117	6535	-11.44	-11.01	-8.21	6.98	-1.23	-1	Pass
181	6855	-11.44	-10.69	-8.04	6.98	-1.06	-1	Pass
185	6875	-11.39	-10.93	-8.14	6.98	-1.16	-1	Pass
233	7115	-11.35	-10.89	-8.10	6.98	-1.12	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 6.57 dBi.
4. For U-NII-6, The directional gain is 6.43 dBi.
5. For U-NII-7, The directional gain is 6.98 dBi.
6. For U-NII-8, The directional gain is 6.98 dBi.

802.11ax (HE20) 52-tone RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
1	5955	-11.07	-10.51	-7.77	6.57	-1.2	-1	Pass
93	6415	-11.06	-10.58	-7.80	6.57	-1.23	-1	Pass
97	6435	-10.78	-10.37	-7.56	6.43	-1.13	-1	Pass
113	6515	-10.70	-10.31	-7.49	6.43	-1.06	-1	Pass
117	6535	-11.56	-10.97	-8.24	6.98	-1.26	-1	Pass
181	6855	-11.48	-10.81	-8.12	6.98	-1.14	-1	Pass
185	6875	-11.75	-10.91	-8.30	6.98	-1.32	-1	Pass
233	7115	-11.46	-10.96	-8.19	6.98	-1.21	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0/20}} + 10^{\text{Chain1/20}})^2 / 2]$
3. For U-NII-5, The directional gain is 6.57 dBi.
4. For U-NII-6, The directional gain is 6.43 dBi.
5. For U-NII-7, The directional gain is 6.98 dBi.
6. For U-NII-8, The directional gain is 6.98 dBi.

802.11ax (HE20) 106-tone RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
1	5955	-10.81	-10.64	-7.71	6.57	-1.14	-1	Pass
93	6415	-10.75	-10.46	-7.59	6.57	-1.02	-1	Pass
97	6435	-10.56	-10.45	-7.49	6.43	-1.06	-1	Pass
113	6515	-10.60	-10.35	-7.46	6.43	-1.03	-1	Pass
117	6535	-11.25	-11.22	-8.22	6.98	-1.24	-1	Pass
181	6855	-11.48	-11.29	-8.37	6.98	-1.39	-1	Pass
185	6875	-11.11	-11.05	-8.07	6.98	-1.09	-1	Pass
233	7115	-11.12	-10.90	-8.00	6.98	-1.02	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-5, The directional gain is 6.57 dBi.
4. For U-NII-6, The directional gain is 6.43 dBi.
5. For U-NII-7, The directional gain is 6.98 dBi.
6. For U-NII-8, The directional gain is 6.98 dBi.

802.11ax (HE20) Full RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
1	5955	-12.11	-11.81	-8.95	6.57	-2.38	-1	Pass
45	6175	-12.62	-12.17	-9.38	6.57	-2.81	-1	Pass
93	6415	-12.76	-12.14	-9.43	6.57	-2.86	-1	Pass
97	6435	-12.58	-11.97	-9.25	6.43	-2.82	-1	Pass
105	6475	-12.22	-11.73	-8.96	6.43	-2.53	-1	Pass
113	6515	-12.33	-12.12	-9.21	6.43	-2.78	-1	Pass
117	6535	-13.16	-12.65	-9.89	6.98	-2.91	-1	Pass
149	6695	-12.66	-12.17	-9.40	6.98	-2.42	-1	Pass
181	6855	-12.58	-12.12	-9.33	6.98	-2.35	-1	Pass
185	6875	-12.61	-12.01	-9.29	6.98	-2.31	-1	Pass
209	6995	-12.53	-12.11	-9.30	6.98	-2.32	-1	Pass
233	7115	-12.13	-11.77	-8.94	6.98	-1.96	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-5, The directional gain is 6.57 dBi.
4. For U-NII-6, The directional gain is 6.43 dBi.
5. For U-NII-7, The directional gain is 6.98 dBi.
6. For U-NII-8, The directional gain is 6.98 dBi.

802.11ax (HE40) Full RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
3	5965	-13.21	-12.60	-9.88	6.57	-3.31	-1	Pass
43	6165	-12.61	-12.18	-9.38	6.57	-2.81	-1	Pass
91	6405	-12.55	-12.08	-9.30	6.57	-2.73	-1	Pass
99	6445	-12.60	-12.13	-9.35	6.43	-2.92	-1	Pass
107	6485	-12.66	-12.36	-9.50	6.43	-3.07	-1	Pass
115	6525	-12.65	-12.19	-9.40	6.98	-2.42	-1	Pass
123	6565	-12.60	-12.19	-9.38	6.98	-2.4	-1	Pass
155	6725	-13.22	-12.66	-9.92	6.98	-2.94	-1	Pass
179	6845	-12.56	-12.19	-9.36	6.98	-2.38	-1	Pass
187	6885	-12.47	-12.19	-9.32	6.98	-2.34	-1	Pass
211	7005	-12.18	-11.61	-8.88	6.98	-1.9	-1	Pass
227	7085	-11.34	-11.12	-8.22	6.98	-1.24	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-5, The directional gain is 6.57 dBi.
4. For U-NII-6, The directional gain is 6.43 dBi.
5. For U-NII-7, The directional gain is 6.98 dBi.
6. For U-NII-8, The directional gain is 6.98 dBi.

802.11ax (HE80) Full RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
7	5985	-14.25	-12.93	-10.53	6.57	-3.96	-1	Pass
39	6145	-14.14	-13.02	-10.53	6.57	-3.96	-1	Pass
87	6385	-13.91	-13.21	-10.54	6.57	-3.97	-1	Pass
103	6465	-13.13	-12.55	-9.82	6.43	-3.39	-1	Pass
119	6545	-13.10	-12.52	-9.79	6.98	-2.81	-1	Pass
151	6705	-13.15	-12.62	-9.87	6.98	-2.89	-1	Pass
183	6865	-14.11	-13.62	-10.85	6.98	-3.87	-1	Pass
199	6945	-12.73	-12.25	-9.47	6.98	-2.49	-1	Pass
215	7025	-12.40	-12.02	-9.20	6.98	-2.22	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-5, The directional gain is 6.57 dBi.
4. For U-NII-6, The directional gain is 6.43 dBi.
5. For U-NII-7, The directional gain is 6.98 dBi.
6. For U-NII-8, The directional gain is 6.98 dBi.

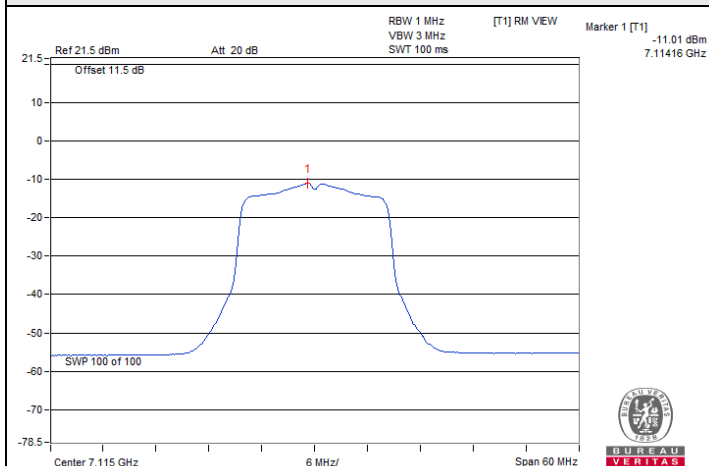
802.11ax (HE160) Full RU

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
15	6025	-15.66	-14.95	-12.28	6.57	-5.71	-1	Pass
47	6185	-15.79	-15.27	-12.51	6.57	-5.94	-1	Pass
79	6345	-15.74	-15.36	-12.54	6.57	-5.97	-1	Pass
111	6505	-15.56	-15.06	-12.29	6.43	-5.86	-1	Pass
143	6665	-15.53	-15.09	-12.29	6.98	-5.31	-1	Pass
175	6825	-15.50	-15.10	-12.29	6.98	-5.31	-1	Pass
207	6985	-15.65	-15.01	-12.31	6.98	-5.33	-1	Pass

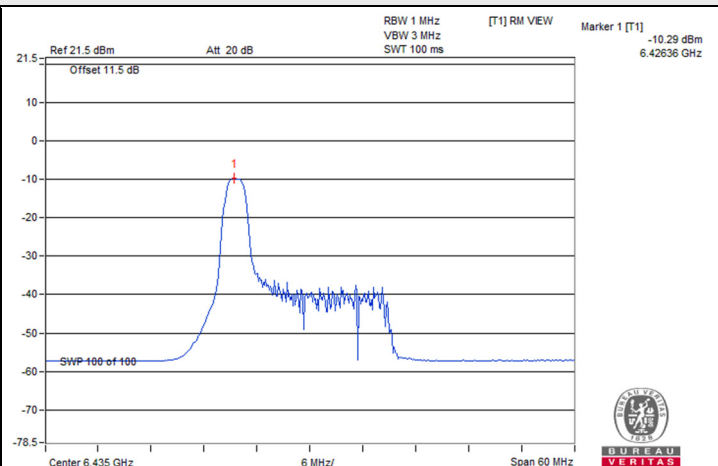
Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = $10 \log[(10^{\text{Chain0}/20} + 10^{\text{Chain1}/20})^2 / 2]$
3. For U-NII-5, The directional gain is 6.57 dBi.
4. For U-NII-6, The directional gain is 6.43 dBi.
5. For U-NII-7, The directional gain is 6.98 dBi.
6. For U-NII-8, The directional gain is 6.98 dBi.

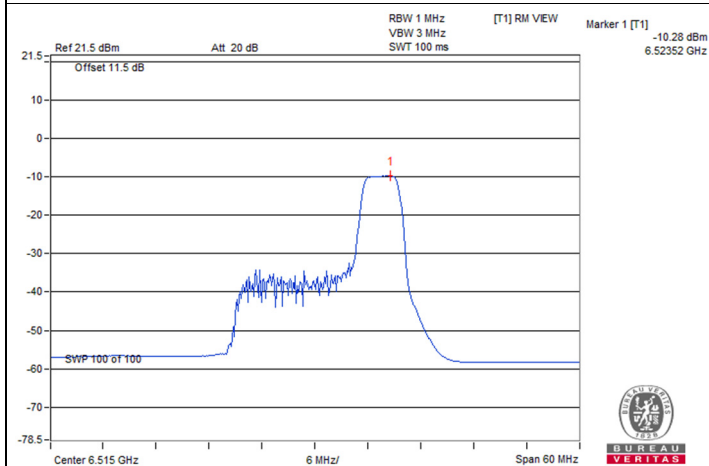
Spectrum Plot of Maximum Value



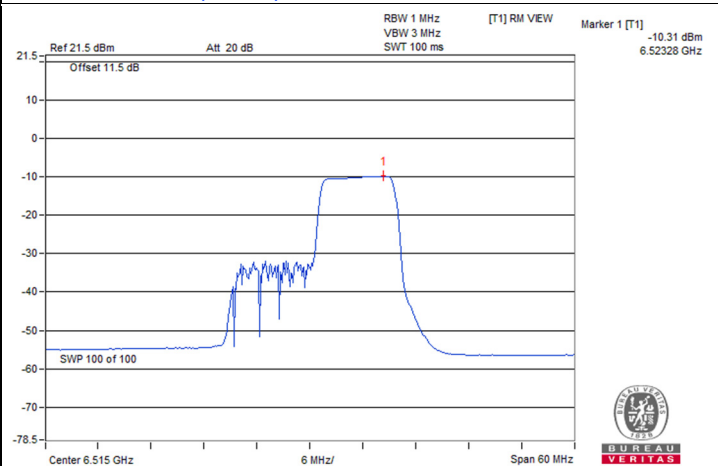
802.11a / Chain 1 : CH 233



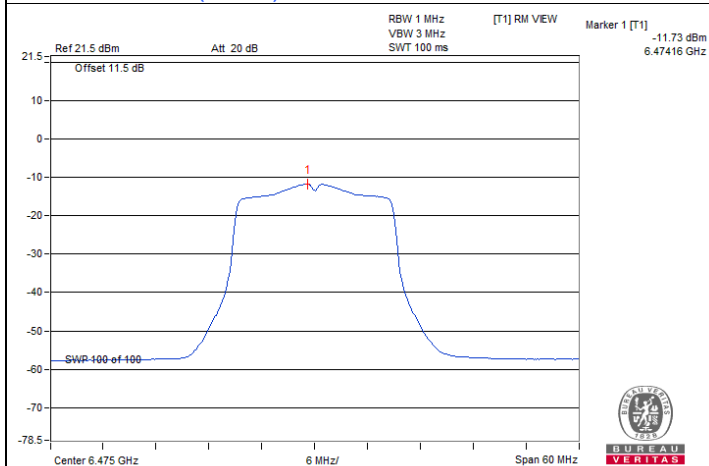
802.11ax (HE20) 26-tone RU / Chain 1 : CH 97



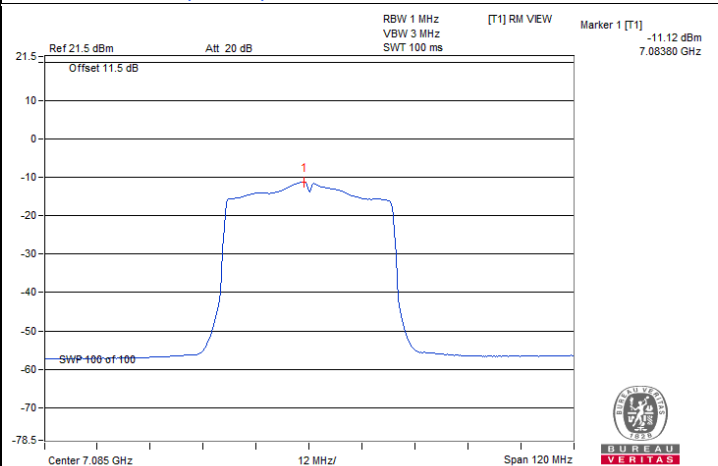
802.11ax (HE20) 52-tone RU / Chain 1 : CH 113



802.11ax (HE20) 106-tone RU / Chain 1 : CH 113

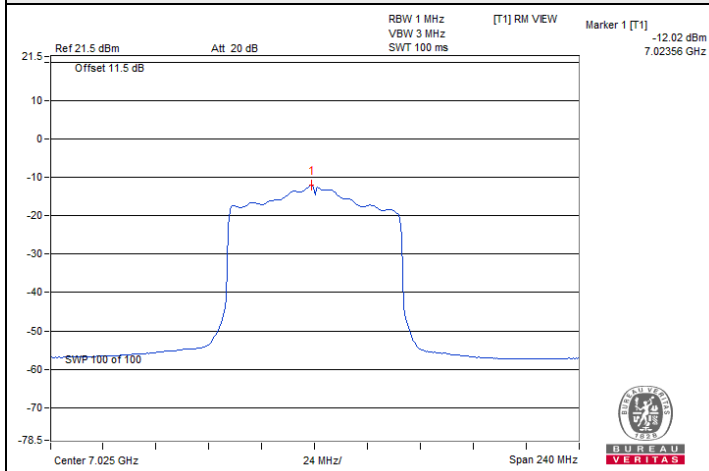


802.11ax (HE20) Full RU / Chain 1 : CH 105

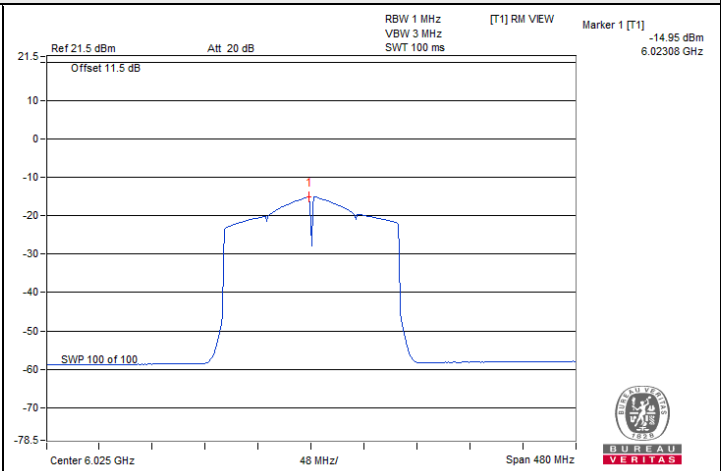


802.11ax (HE40) Full RU / Chain 1 : CH 227

Spectrum Plot of Maximum Value



802.11ax (HE80) Full RU / Chain 1 : CH 215



802.11ax (HE160) Full RU / Chain 1 : CH 15

7.3 Emission Bandwidth

Input Power:	3.85 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	Match Tsui
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802.11a

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	18.85	18.73	320	Pass
45	6175	18.96	18.80	320	Pass
93	6415	18.67	18.70	320	Pass
97	6435	18.70	19.01	320	Pass
105	6475	18.72	18.85	320	Pass
113	6515	18.73	18.82	320	Pass
117	6535	18.72	18.69	320	Pass
149	6695	18.69	18.72	320	Pass
181	6855	18.68	18.67	320	Pass
185	6875	18.68	18.68	320	Pass
209	6995	18.68	18.88	320	Pass
233	7115	18.79	18.91	320	Pass

802.11ax (HE20) 26-tone RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	21.21	21.21	320	Pass
93	6415	20.35	20.49	320	Pass
97	6435	21.35	21.37	320	Pass
113	6515	20.38	20.34	320	Pass
117	6535	21.34	21.35	320	Pass
181	6855	20.38	20.32	320	Pass
185	6875	21.23	21.24	320	Pass
233	7115	20.47	20.45	320	Pass

802.11ax (HE20) 52-tone RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	21.01	20.93	320	Pass
93	6415	20.68	20.71	320	Pass
97	6435	21.02	20.86	320	Pass
113	6515	20.63	20.60	320	Pass
117	6535	21.19	21.16	320	Pass
181	6855	20.83	20.71	320	Pass
185	6875	21.01	21.46	320	Pass
233	7115	20.76	20.92	320	Pass

802.11ax (HE20) 106-tone RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	21.40	21.37	320	Pass
93	6415	21.26	21.34	320	Pass
97	6435	21.53	21.41	320	Pass
113	6515	21.24	21.25	320	Pass
117	6535	21.66	21.54	320	Pass
181	6855	21.48	21.34	320	Pass
185	6875	21.51	21.63	320	Pass
233	7115	21.19	21.42	320	Pass

802.11ax (HE20) Full RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	20.80	20.70	320	Pass
45	6175	21.03	20.74	320	Pass
93	6415	20.64	20.85	320	Pass
97	6435	20.74	20.85	320	Pass
105	6475	20.75	20.54	320	Pass
113	6515	20.72	20.89	320	Pass
117	6535	20.78	20.83	320	Pass
149	6695	20.90	21.03	320	Pass
181	6855	20.81	20.94	320	Pass
185	6875	20.92	20.84	320	Pass
209	6995	20.92	20.84	320	Pass
233	7115	20.78	21.02	320	Pass

802.11ax (HE40) Full RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	5965	40.59	40.30	320	Pass
43	6165	40.64	40.55	320	Pass
91	6405	40.38	40.80	320	Pass
99	6445	39.87	41.02	320	Pass
107	6485	40.45	40.67	320	Pass
115	6525	40.30	40.72	320	Pass
123	6565	40.00	40.63	320	Pass
155	6725	40.66	40.61	320	Pass
179	6845	40.72	40.38	320	Pass
187	6885	40.67	40.47	320	Pass
211	7005	40.66	40.68	320	Pass
227	7085	40.72	40.60	320	Pass

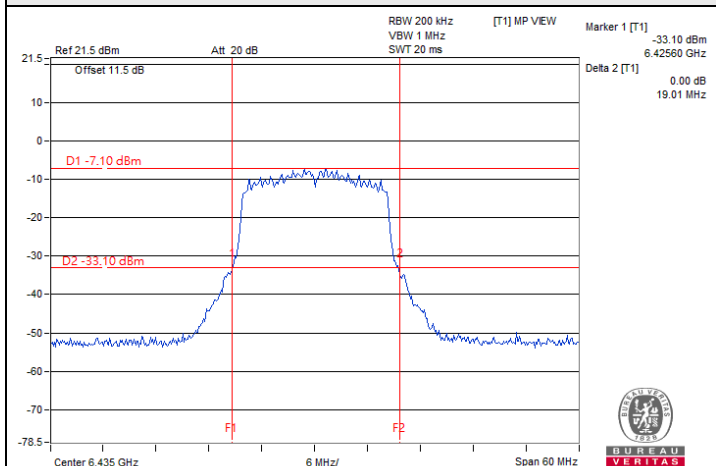
802.11ax (HE80) Full RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
7	5985	81.81	81.97	320	Pass
39	6145	82.16	82.19	320	Pass
87	6385	82.39	82.39	320	Pass
103	6465	82.01	81.97	320	Pass
119	6545	82.15	82.31	320	Pass
151	6705	82.25	82.20	320	Pass
183	6865	82.24	82.09	320	Pass
199	6945	82.52	82.22	320	Pass
215	7025	82.22	81.86	320	Pass

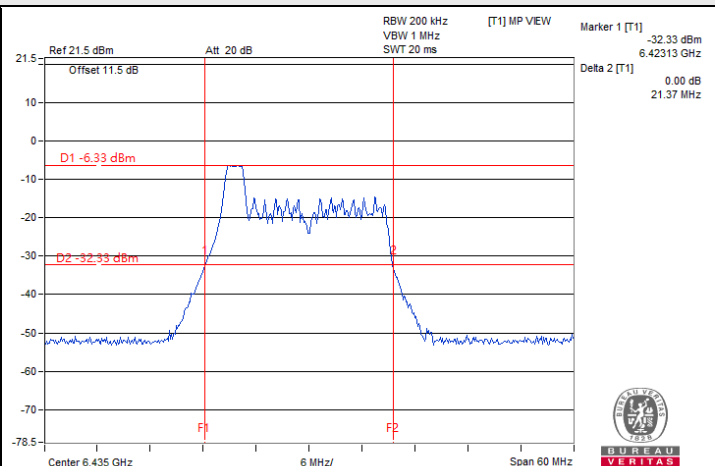
802.11ax (HE160) Full RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
15	6025	165.71	164.87	320	Pass
47	6185	165.44	165.37	320	Pass
79	6345	166.07	165.46	320	Pass
111	6505	166.79	167.40	320	Pass
143	6665	166.17	166.51	320	Pass
175	6825	165.86	166.29	320	Pass
207	6985	165.72	166.02	320	Pass

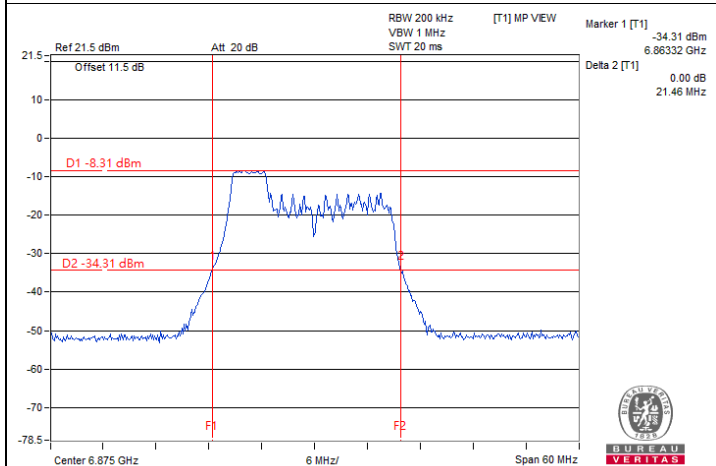
Spectrum Plot of Maximum Value



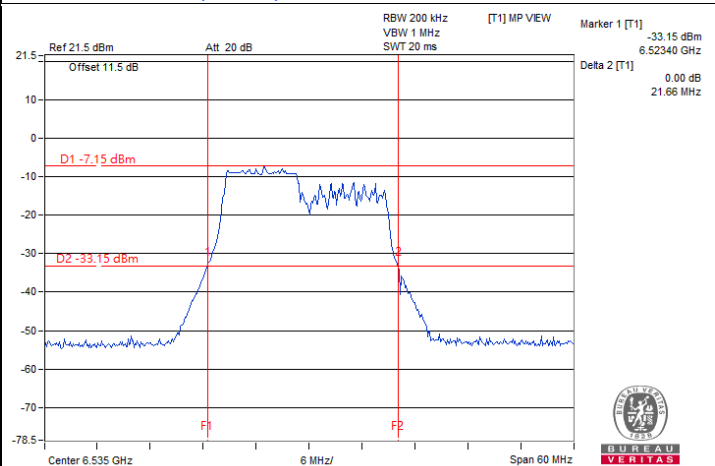
802.11a / Chain 1 : CH 97



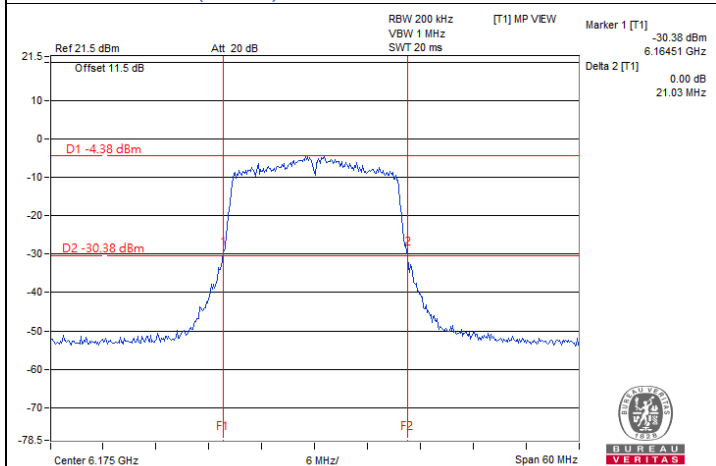
802.11ax (HE20) 26-tone RU / Chain 1 : CH 97



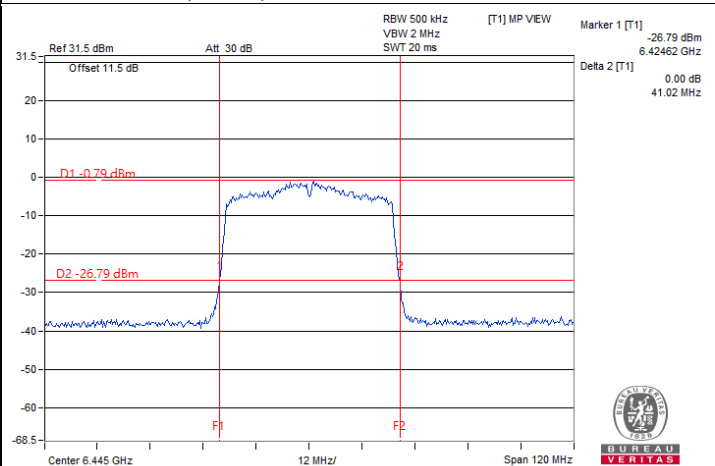
802.11ax (HE20) 52-tone RU / Chain 1 : CH 185



802.11ax (HE20) 106-tone RU / Chain 0 : CH 117

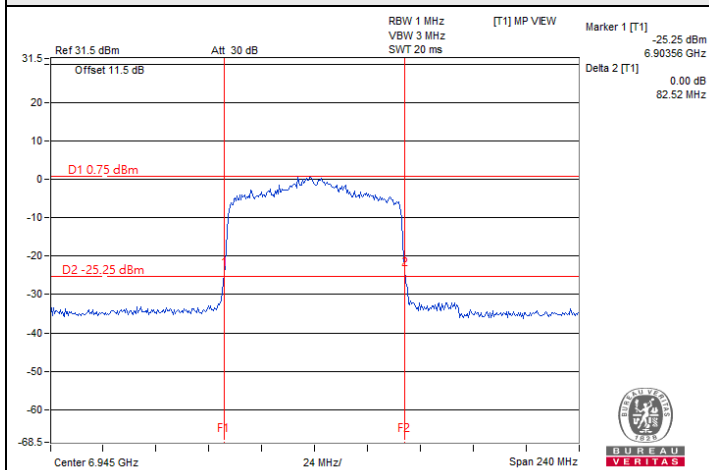


802.11ax (HE20) Full RU / Chain 0 : CH 45

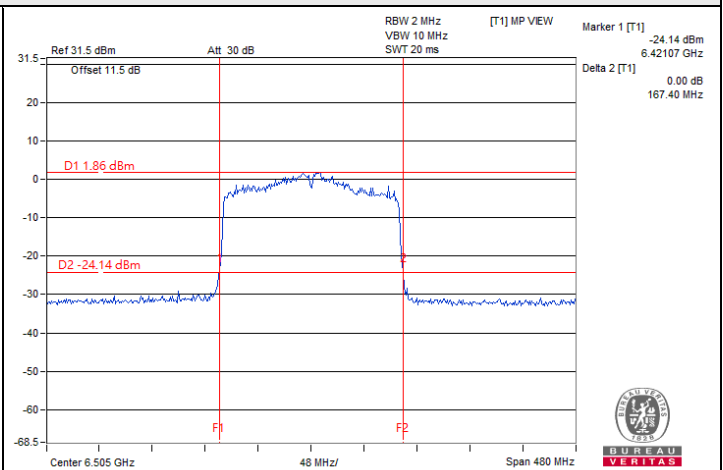


802.11ax (HE40) Full RU / Chain 1 : CH 99

Spectrum Plot of Maximum Value



802.11ax (HE80) Full RU / Chain 0 : CH 199

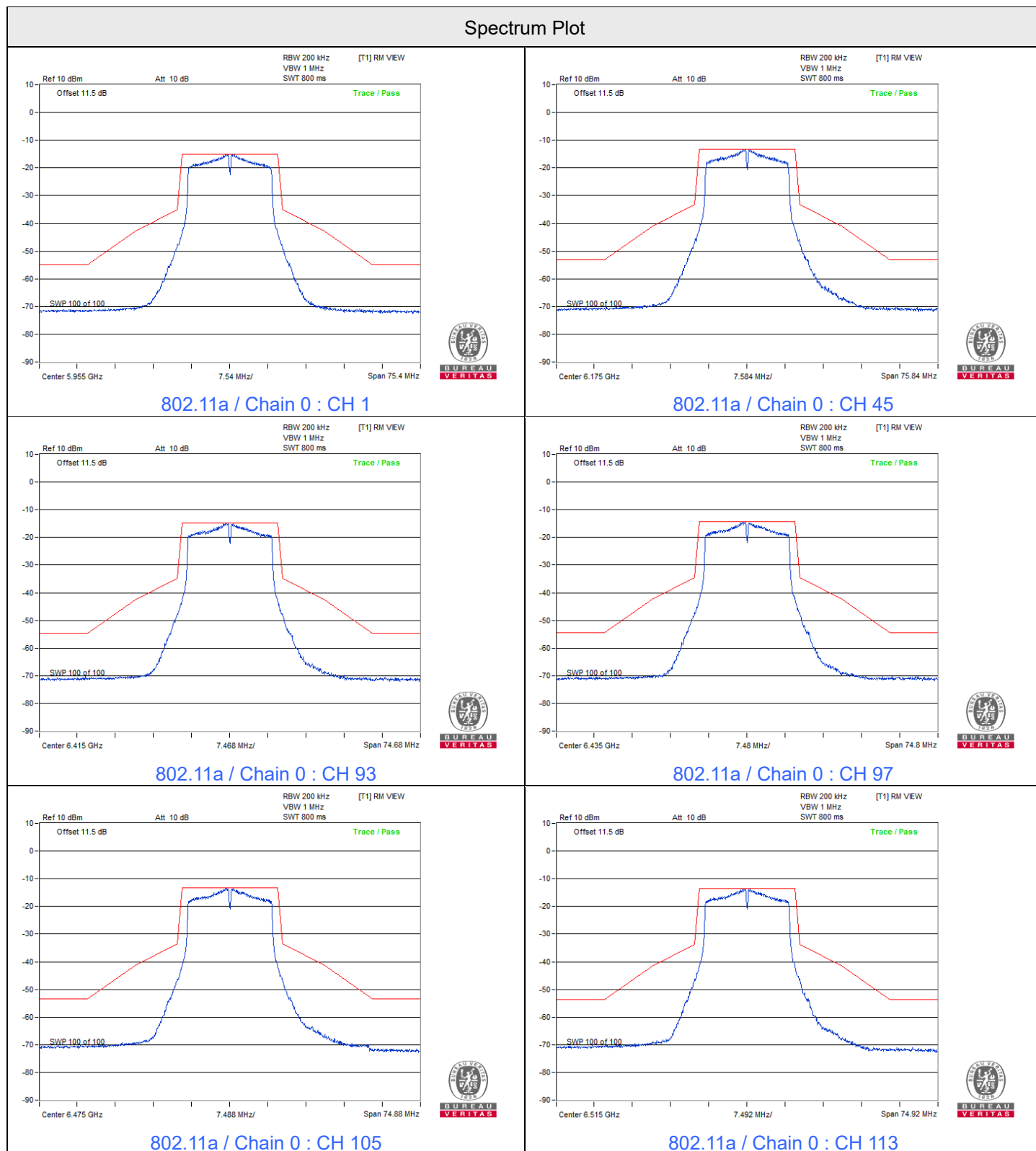


802.11ax (HE160) Full RU / Chain 1 : CH 111

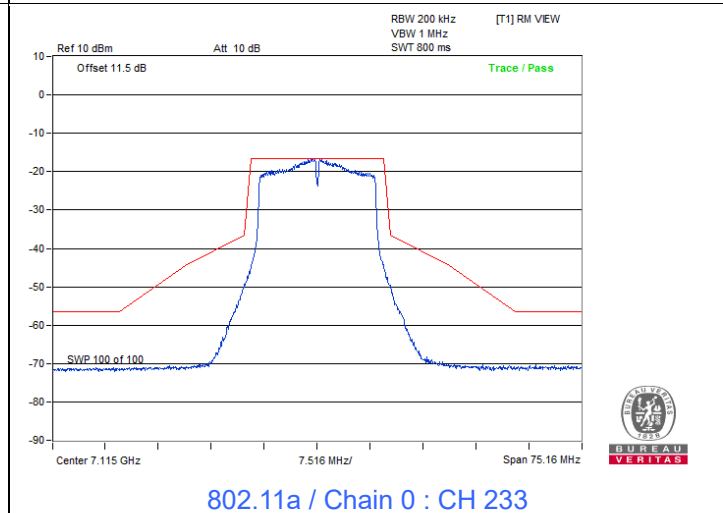
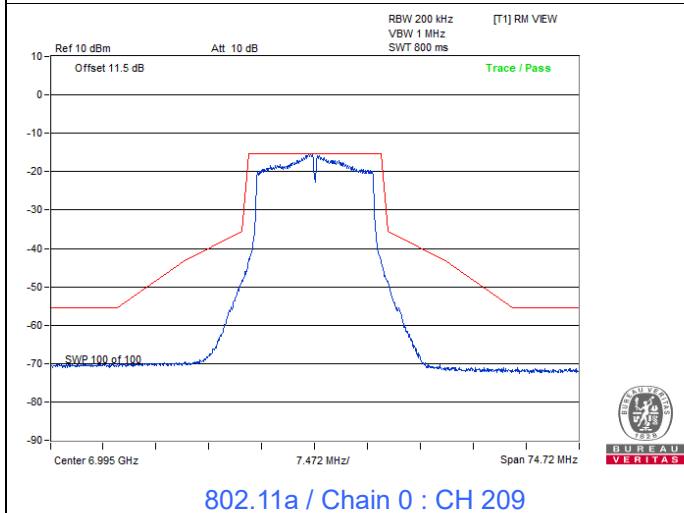
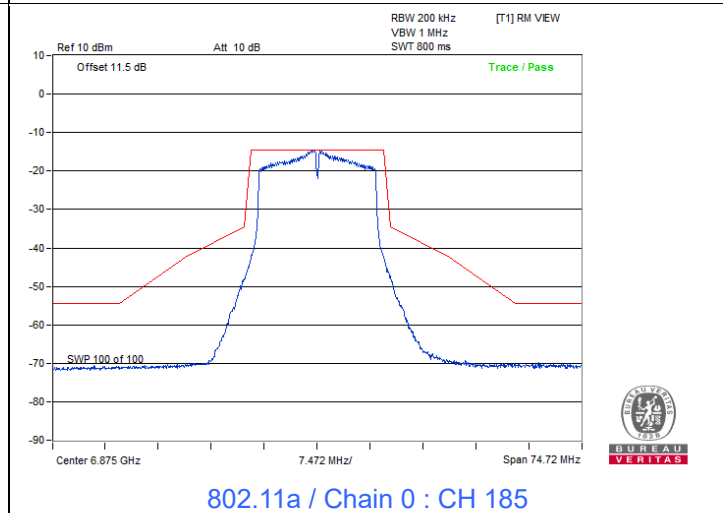
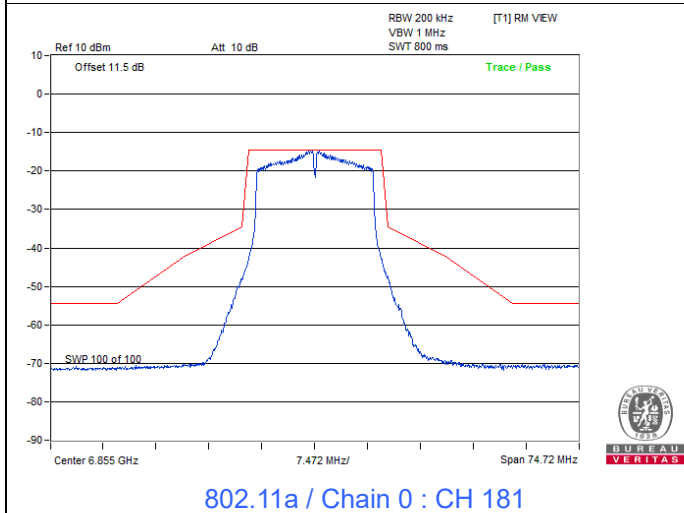
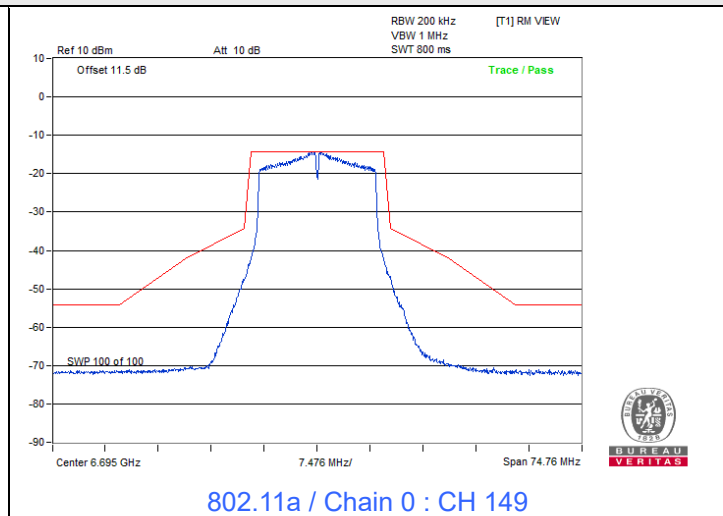
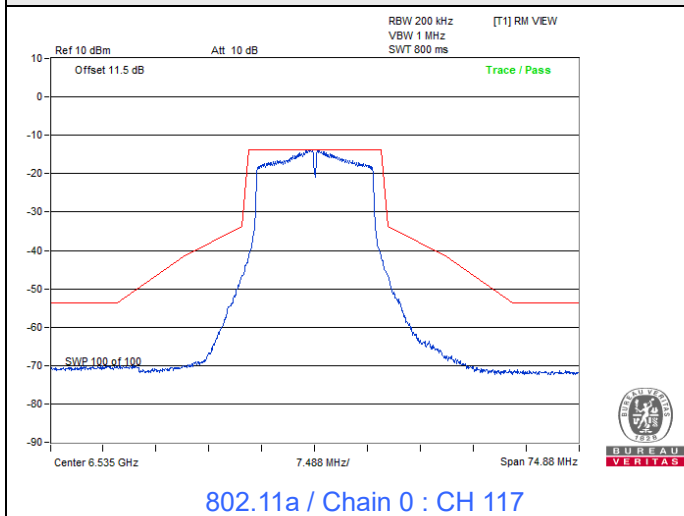
7.4 In-Band Emission Mask

Input Power:	3.85 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	Match Tsui
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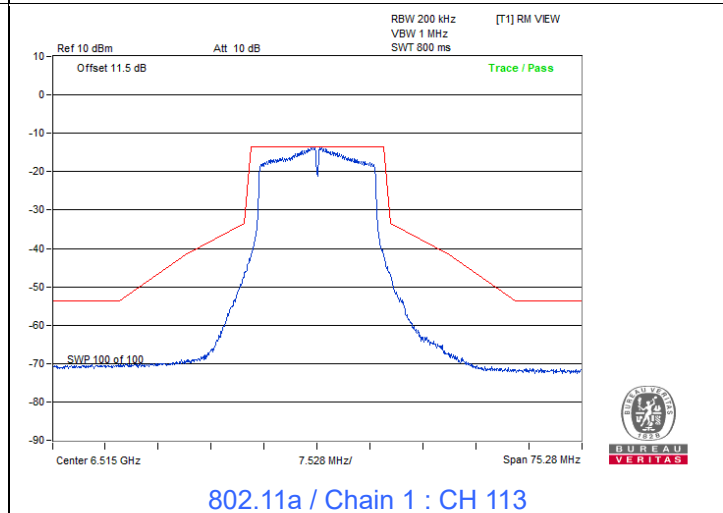
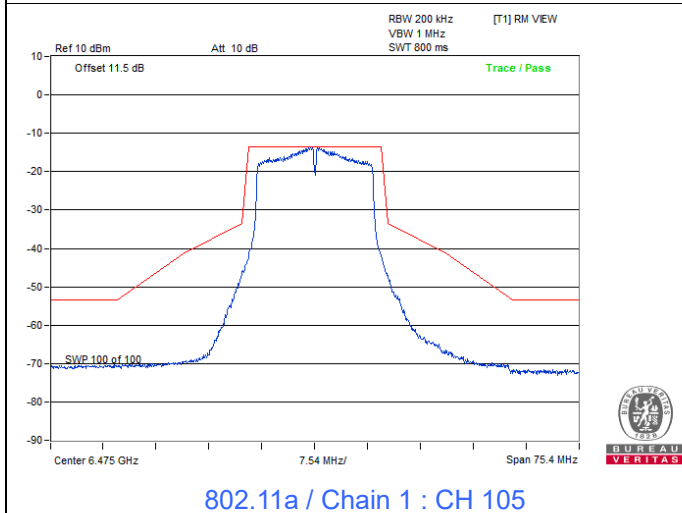
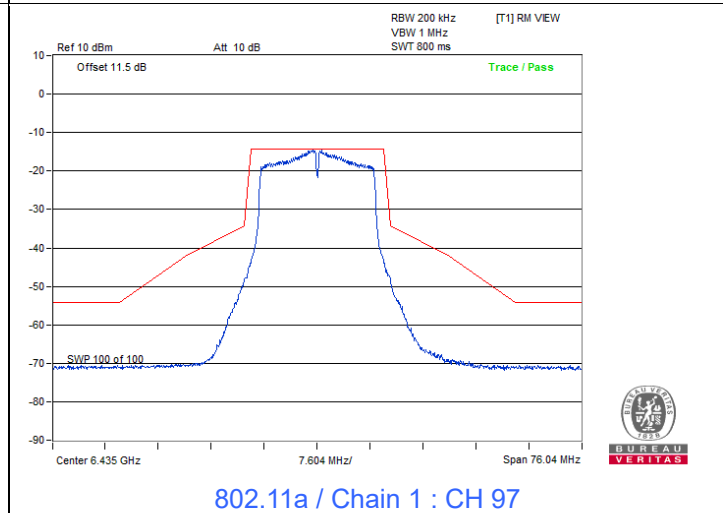
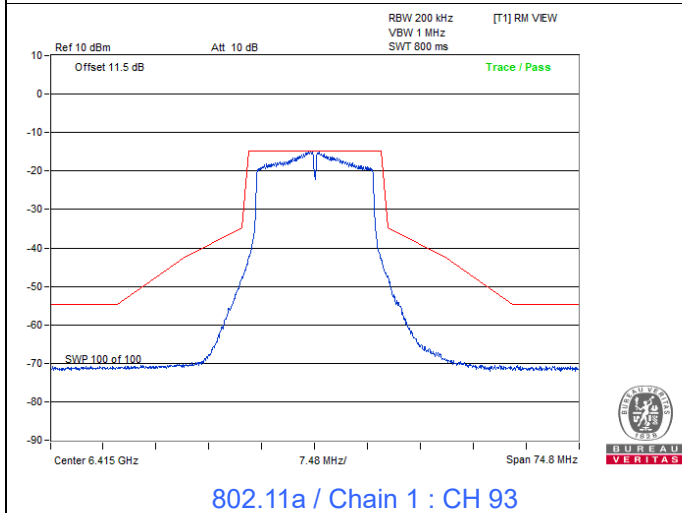
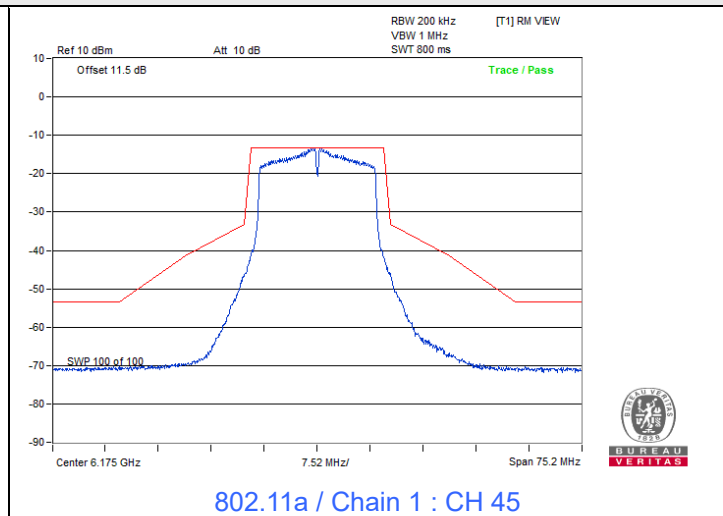
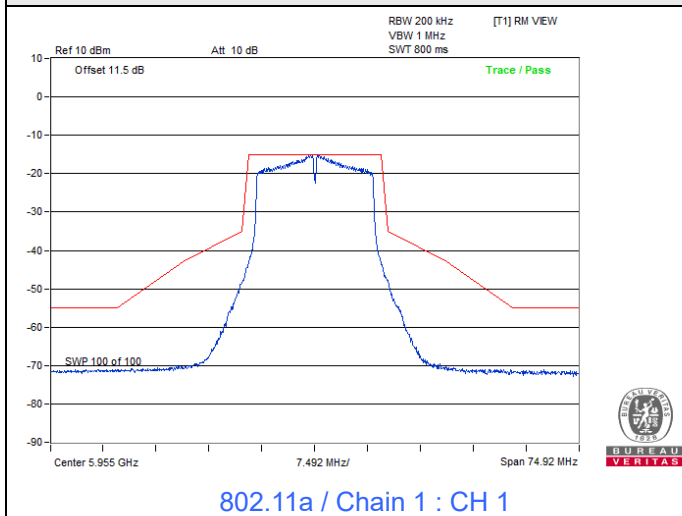
802.11a



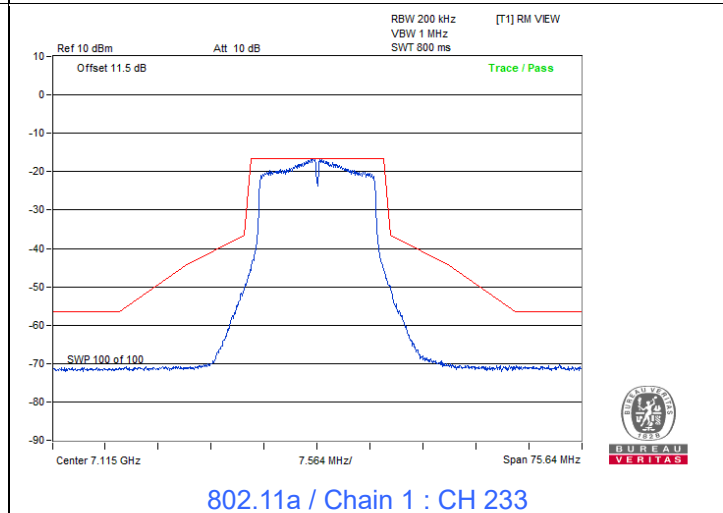
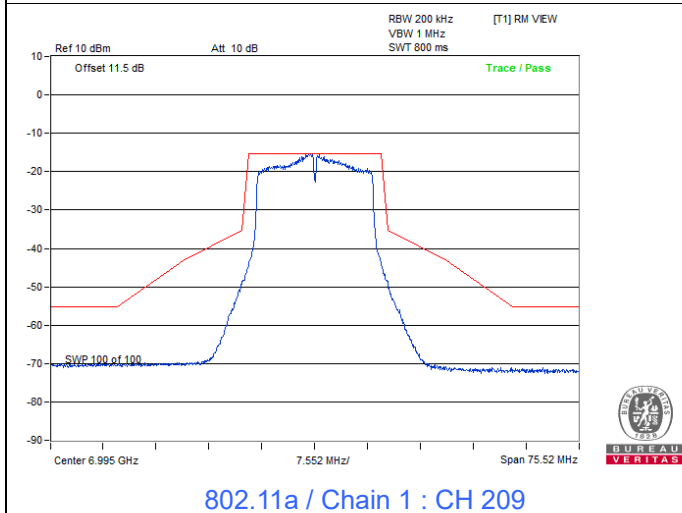
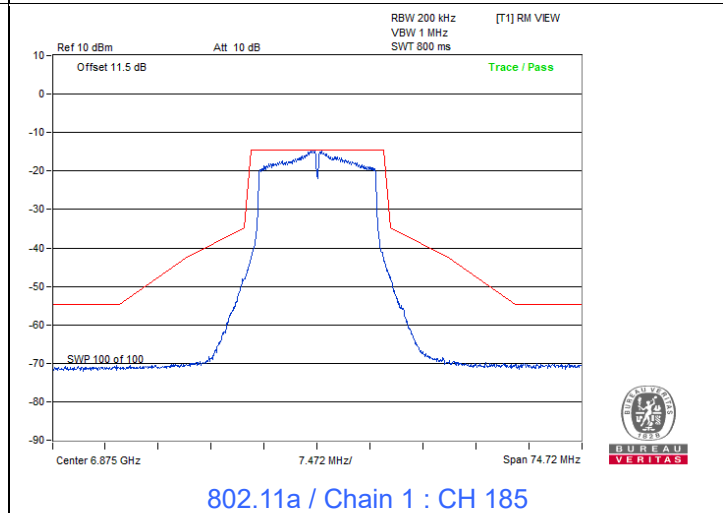
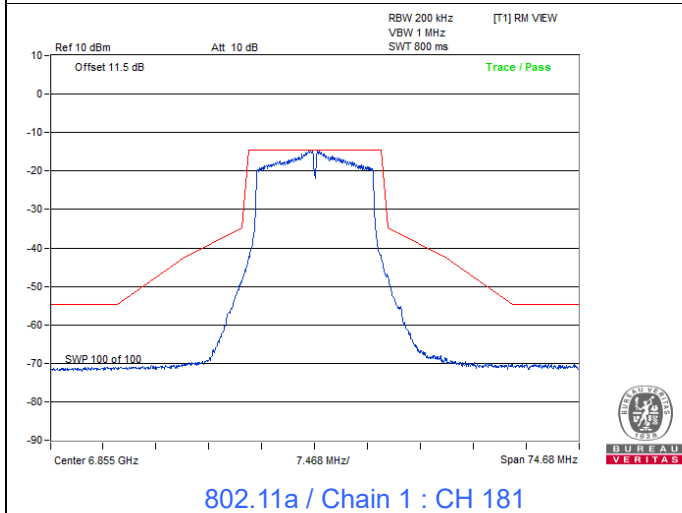
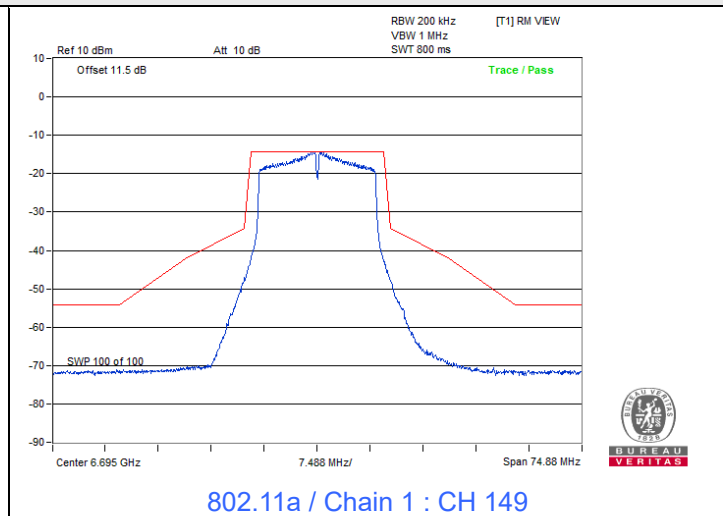
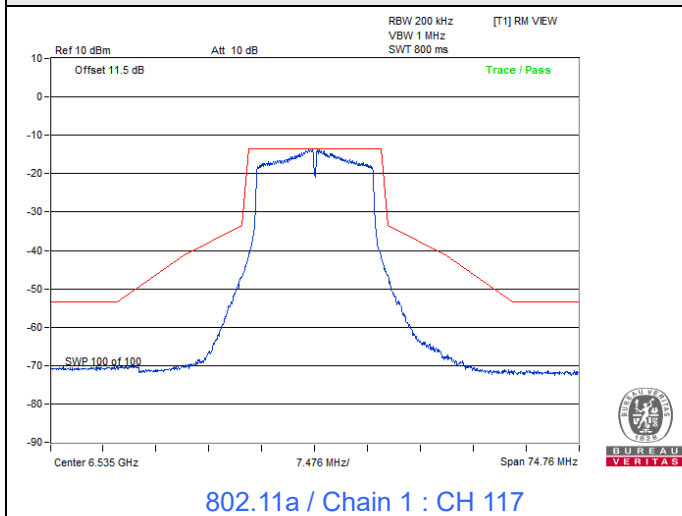
Spectrum Plot



Spectrum Plot

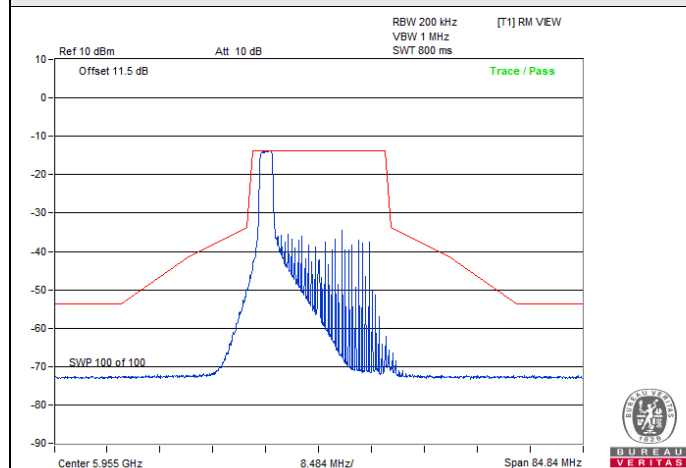


Spectrum Plot

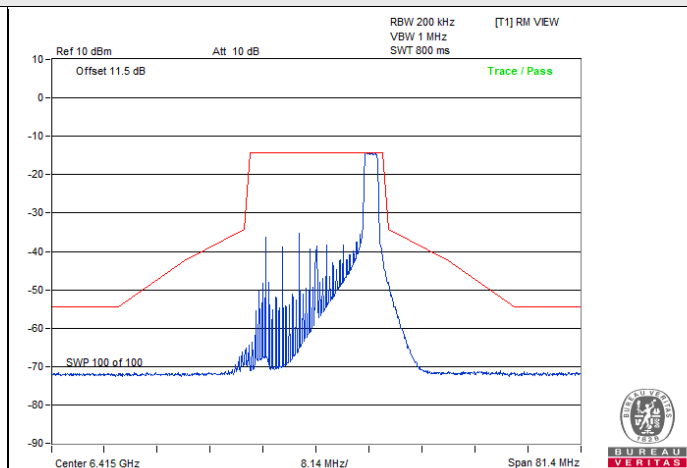


802.11ax (HE20) 26-tone RU

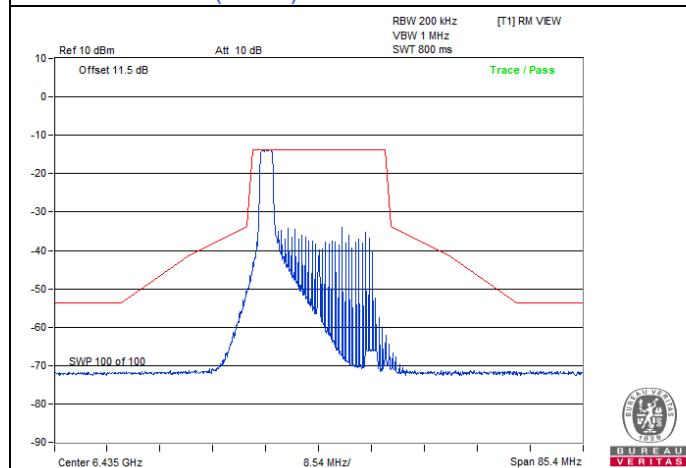
Spectrum Plot



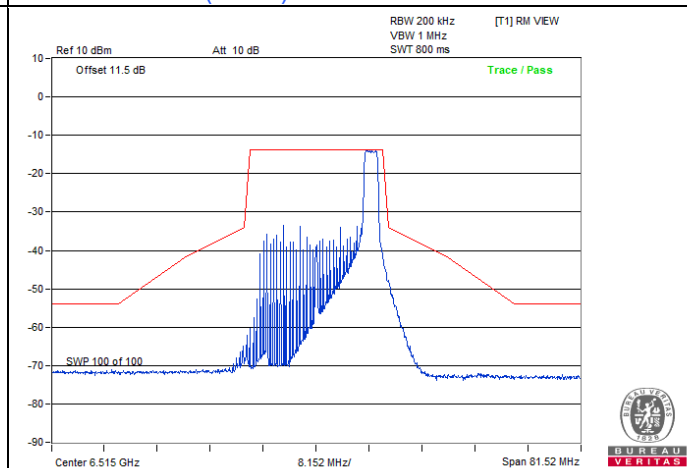
802.11ax (HE20) 26-tone RU / Chain 0 : CH 1



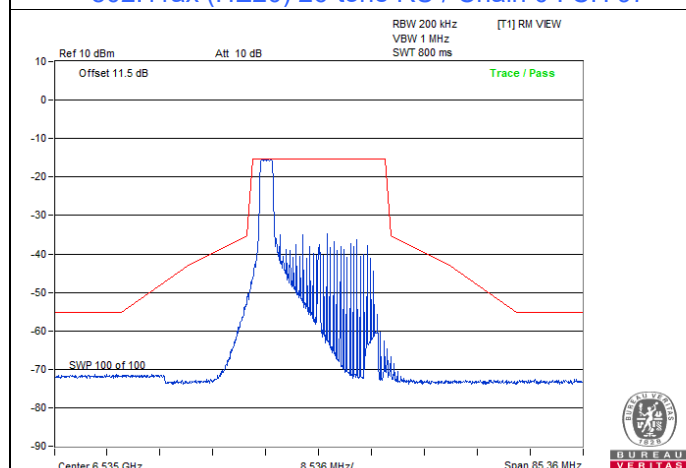
802.11ax (HE20) 26-tone RU / Chain 0 : CH 93



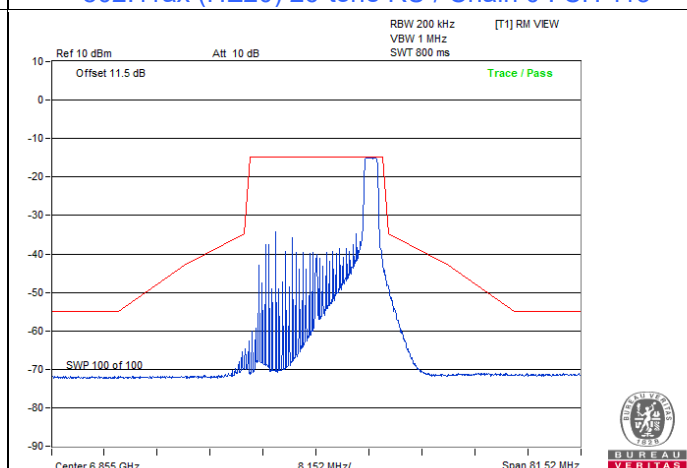
802.11ax (HE20) 26-tone RU / Chain 0 : CH 97



802.11ax (HE20) 26-tone RU / Chain 0 : CH 113

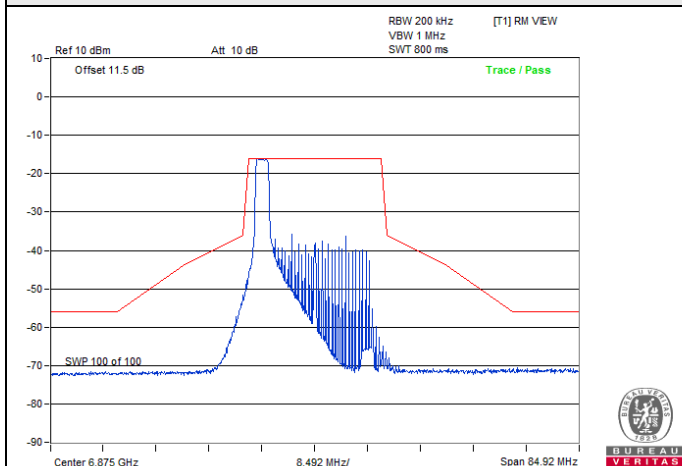


802.11ax (HE20) 26-tone RU / Chain 0 : CH 117

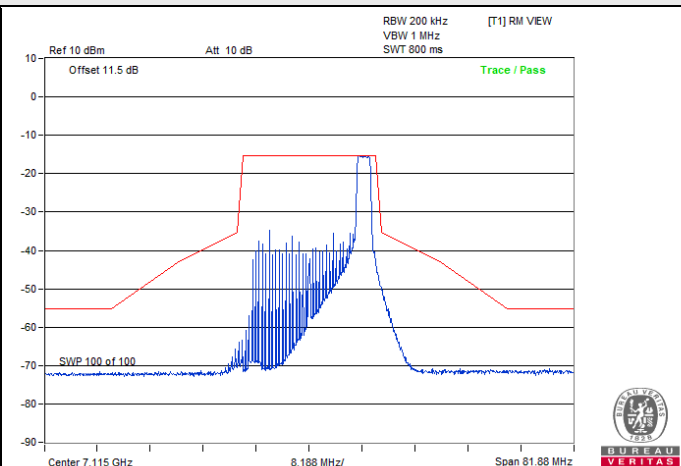


802.11ax (HE20) 26-tone RU / Chain 0 : CH 181

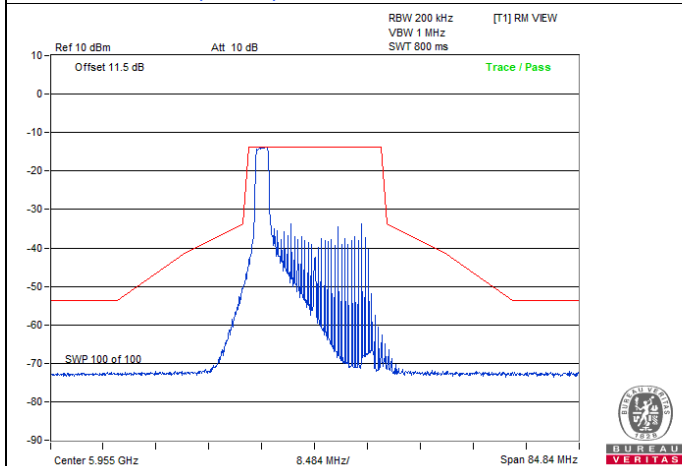
Spectrum Plot



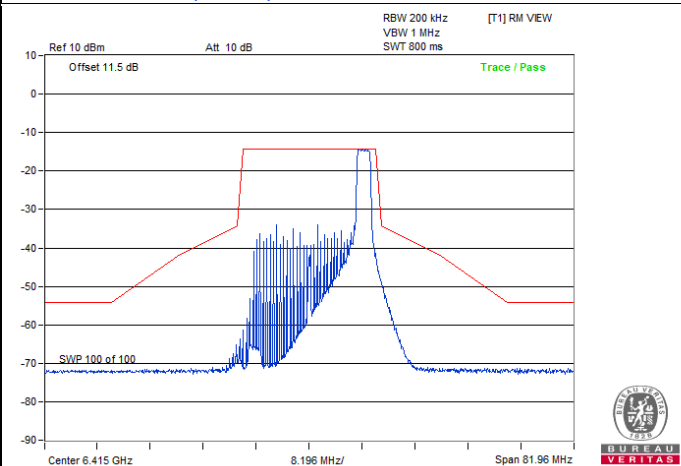
802.11ax (HE20) 26-tone RU / Chain 0 : CH 185



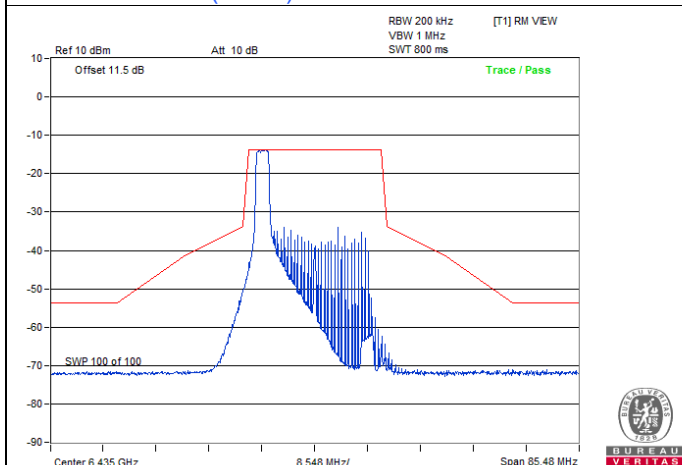
802.11ax (HE20) 26-tone RU / Chain 0 : CH 233



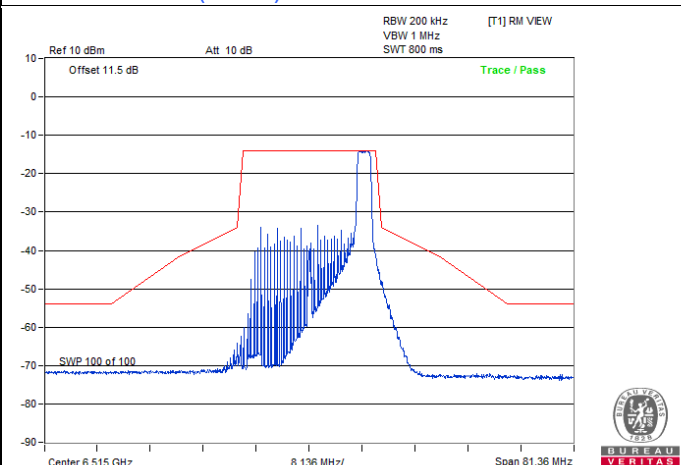
802.11ax (HE20) 26-tone RU / Chain 1 : CH 1



802.11ax (HE20) 26-tone RU / Chain 1 : CH 93

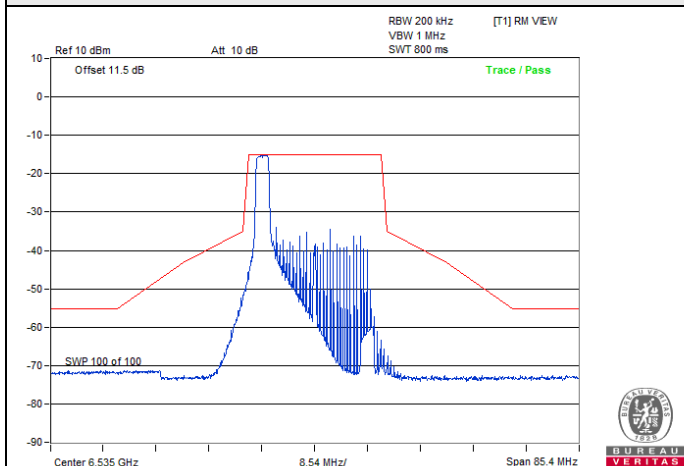


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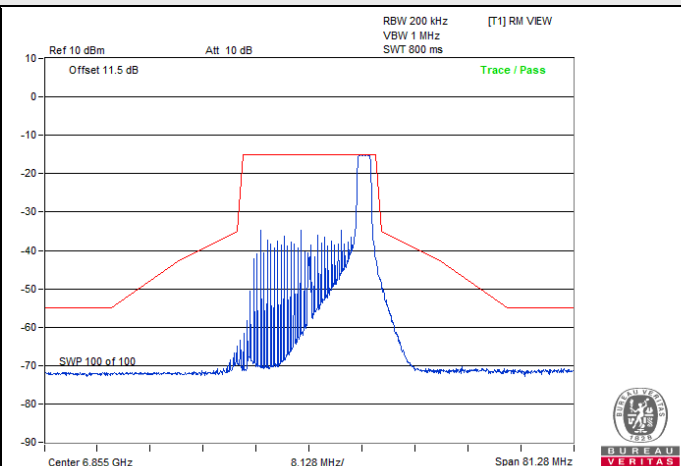


802.11ax (HE20) 26-tone RU / Chain 1 : CH 113

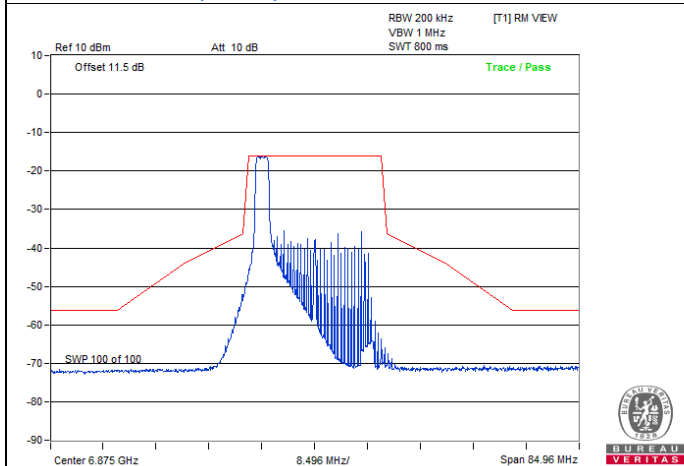
Spectrum Plot



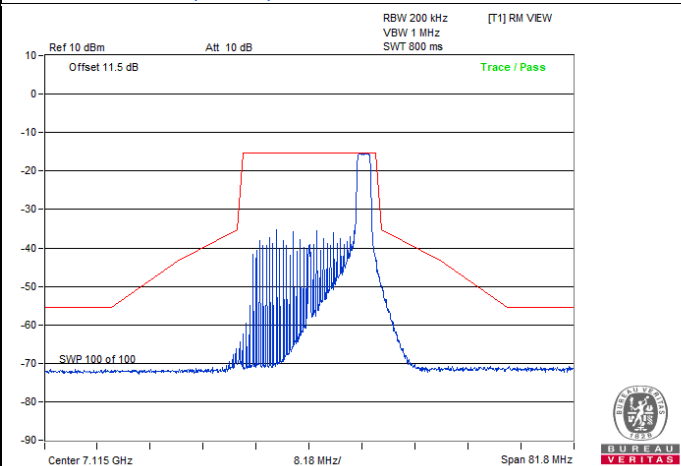
802.11ax (HE20) 26-tone RU / Chain 1 : CH 117



802.11ax (HE20) 26-tone RU / Chain 1 : CH 181



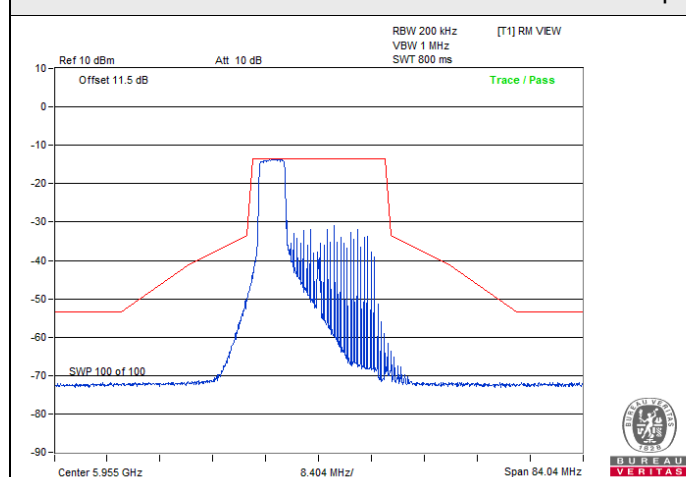
802.11ax (HE20) 26-tone RU / Chain 1 : CH 185



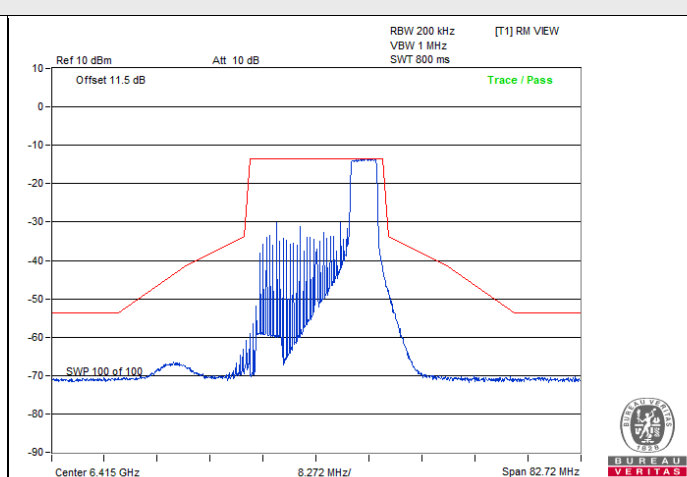
802.11ax (HE20) 26-tone RU / Chain 1 : CH 233

802.11ax (HE20) 52-tone RU

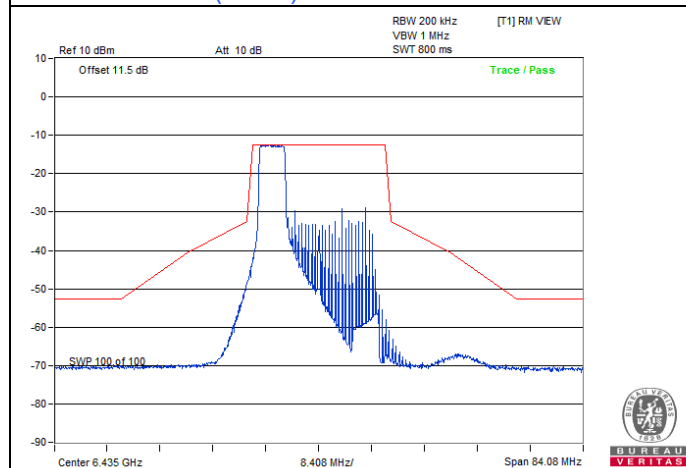
Spectrum Plot



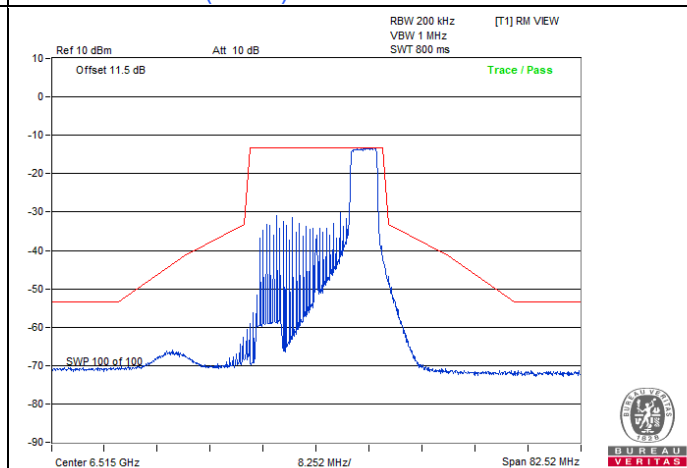
802.11ax (HE20) 52-tone RU / Chain 0 : CH 1



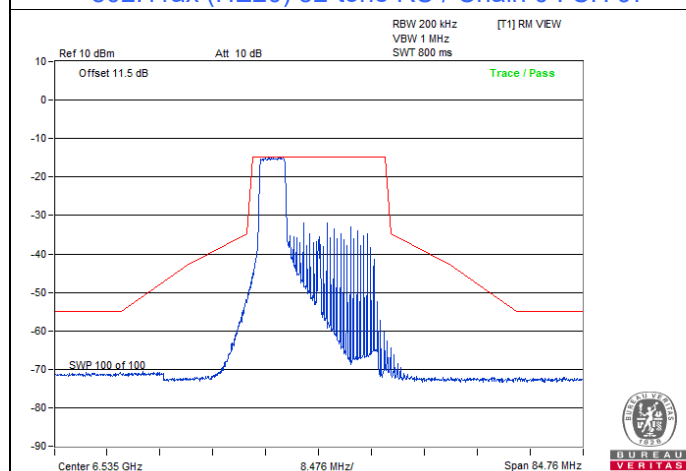
802.11ax (HE20) 52-tone RU / Chain 0 : CH 93



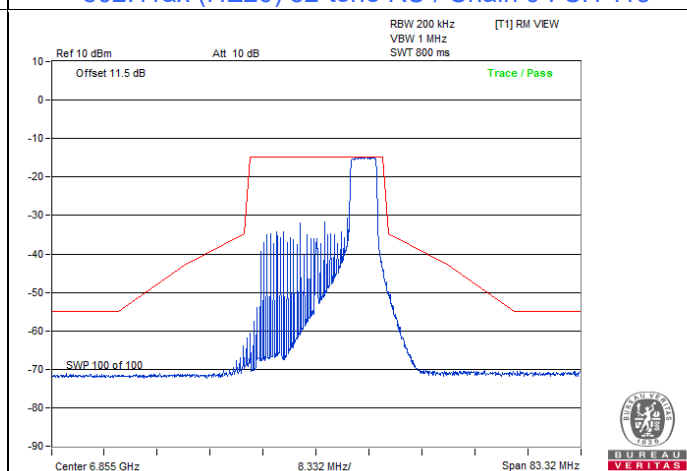
802.11ax (HE20) 52-tone RU / Chain 0 : CH 97



802.11ax (HE20) 52-tone RU / Chain 0 : CH 113

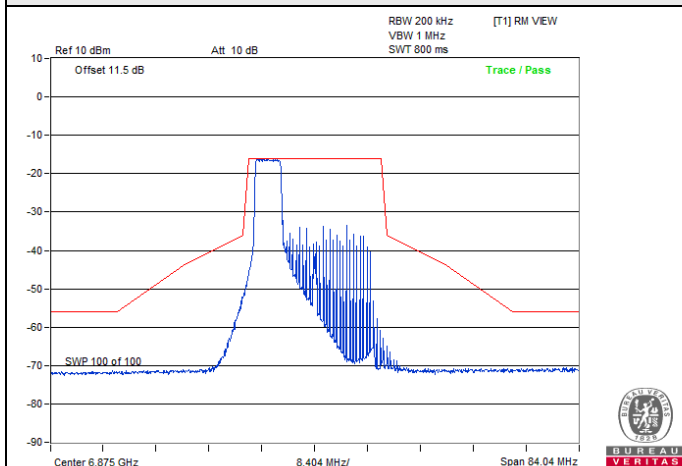


802.11ax (HE20) 52-tone RU / Chain 0 : CH 117

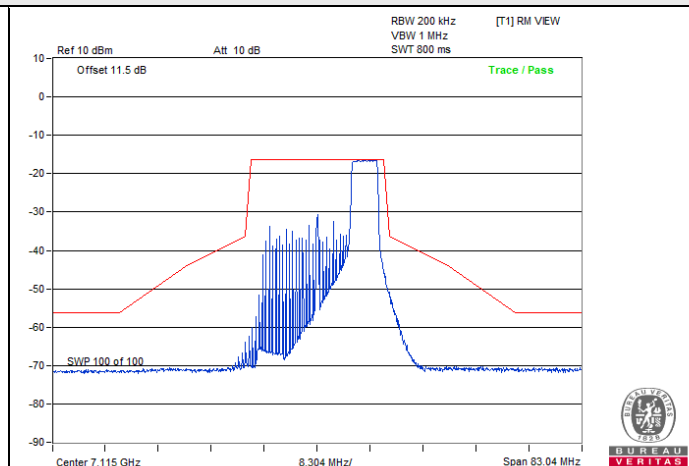


802.11ax (HE20) 52-tone RU / Chain 0 : CH 181

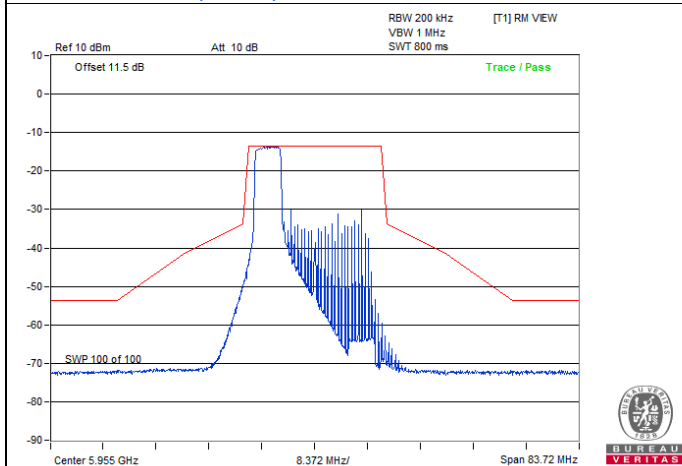
Spectrum Plot



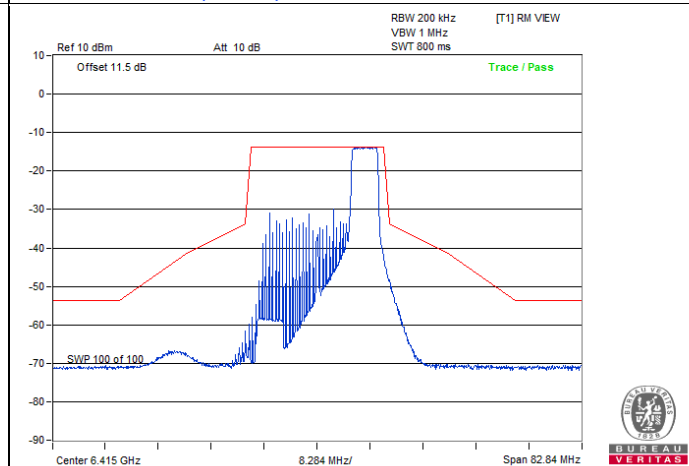
802.11ax (HE20) 52-tone RU / Chain 0 : CH 185



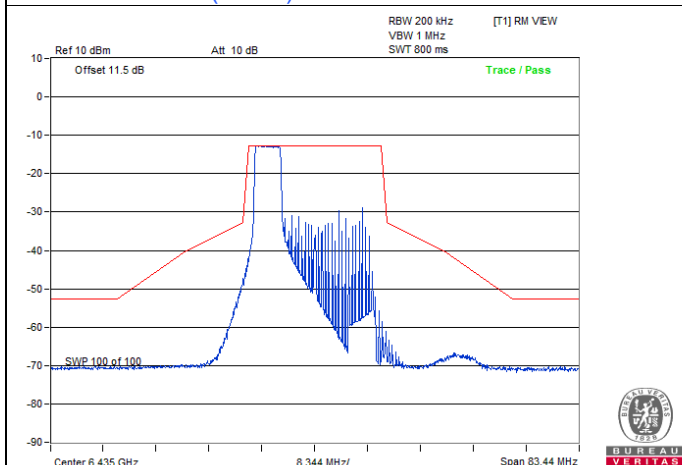
802.11ax (HE20) 52-tone RU / Chain 0 : CH 233



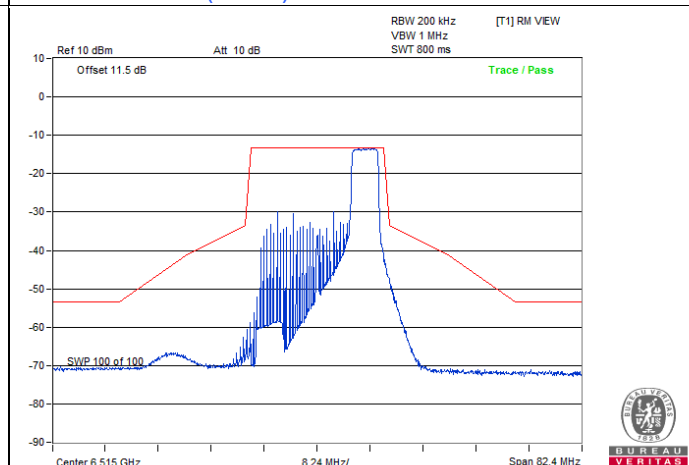
802.11ax (HE20) 52-tone RU / Chain 1 : CH 1



802.11ax (HE20) 52-tone RU / Chain 1 : CH 93

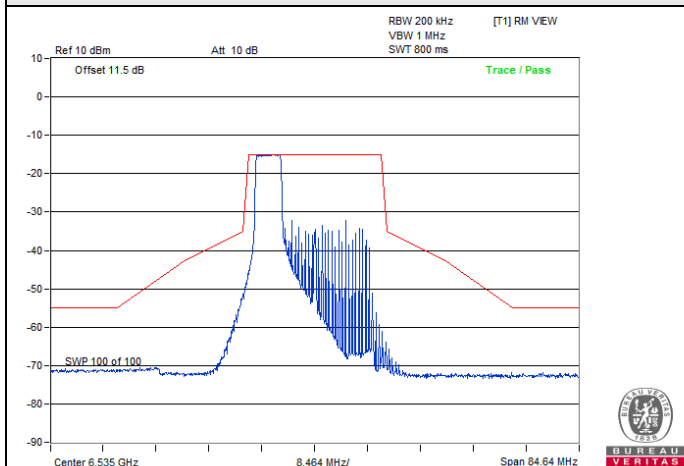


802.11ax (HE20) 52-tone RU / Chain 1 : CH 97

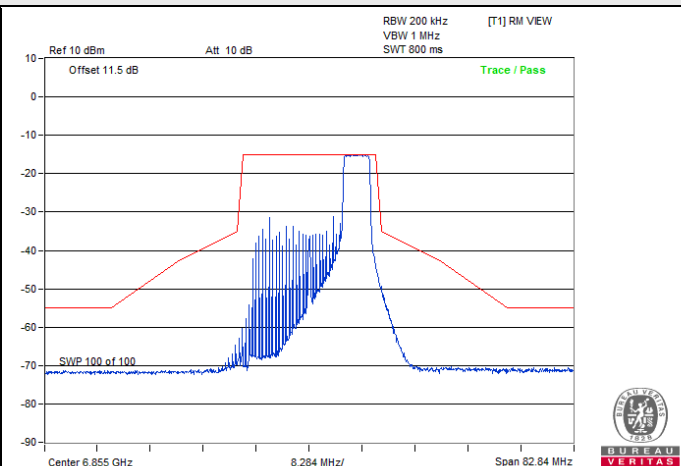


802.11ax (HE20) 52-tone RU / Chain 1 : CH 113

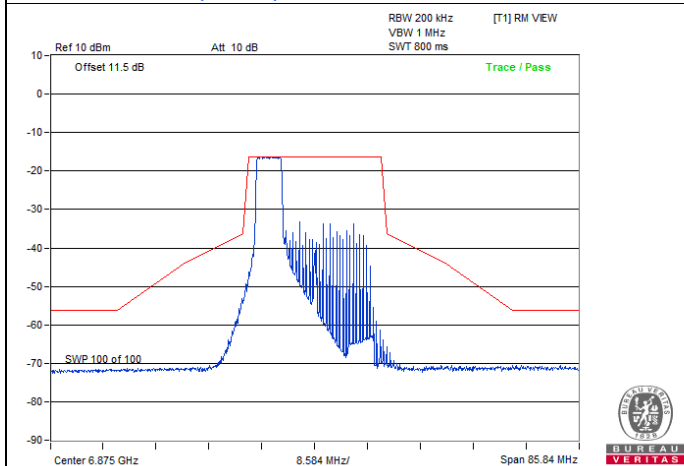
Spectrum Plot



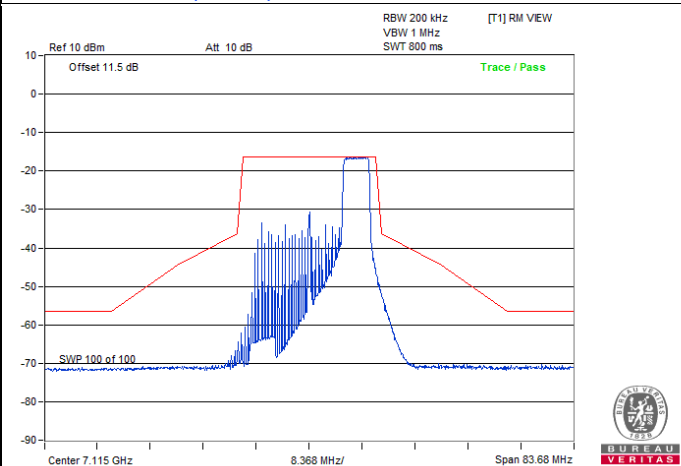
802.11ax (HE20) 52-tone RU / Chain 1 : CH 117



802.11ax (HE20) 52-tone RU / Chain 1 : CH 181



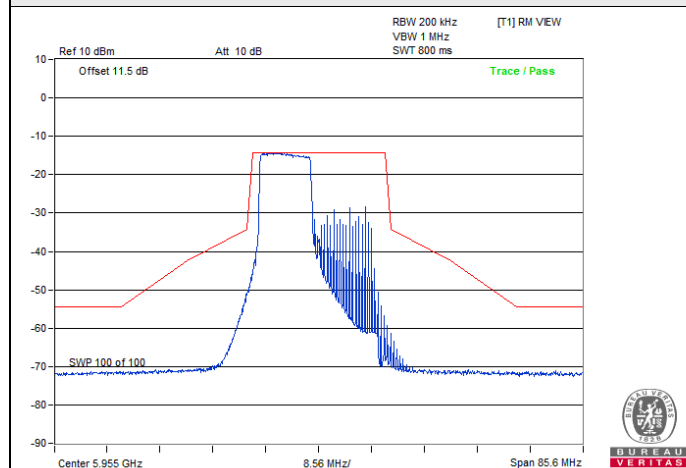
802.11ax (HE20) 52-tone RU / Chain 1 : CH 185



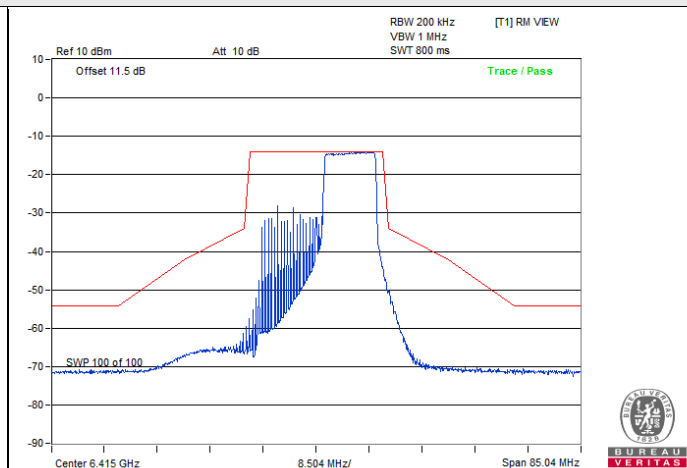
802.11ax (HE20) 52-tone RU / Chain 1 : CH 233

802.11ax (HE20) 106-tone RU

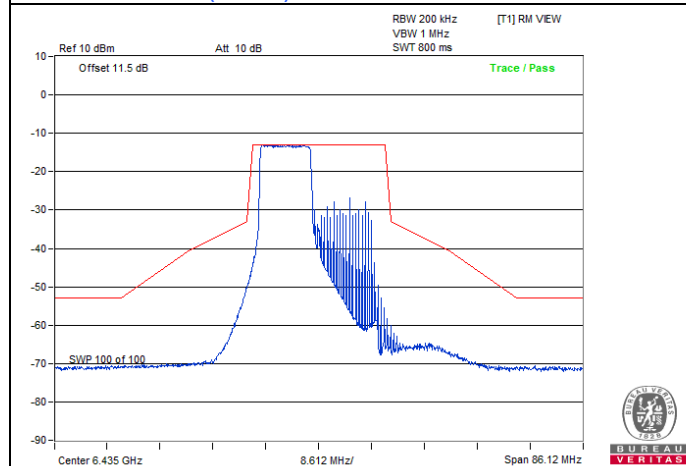
Spectrum Plot



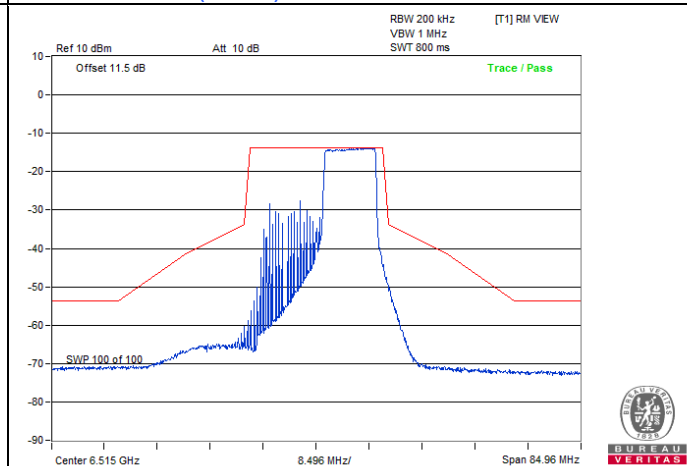
802.11ax (HE20) 106-tone RU / Chain 0 : CH 1



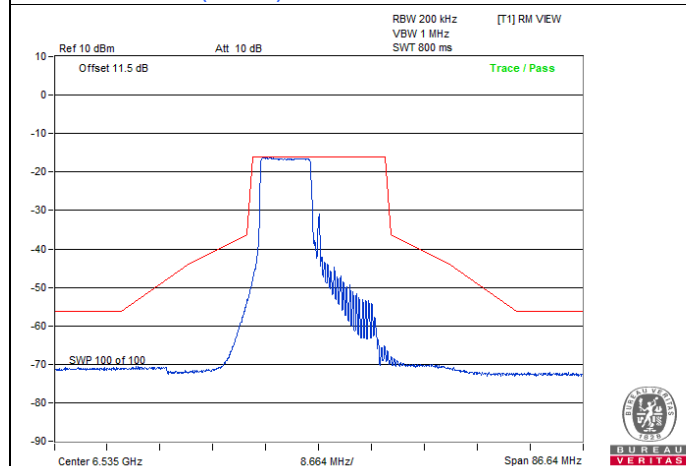
802.11ax (HE20) 106-tone RU / Chain 0 : CH 93



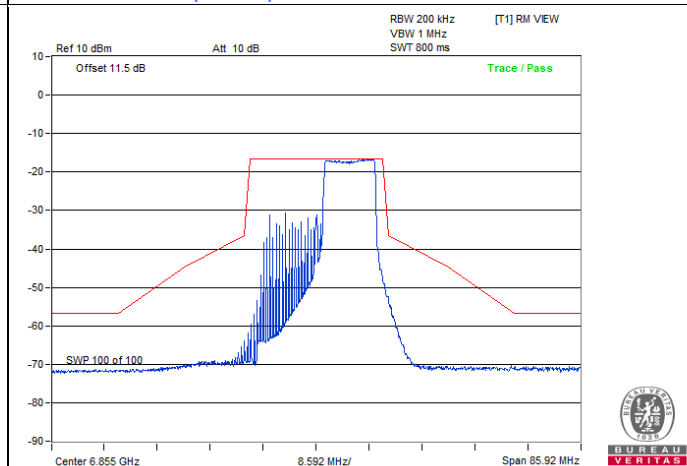
802.11ax (HE20) 106-tone RU / Chain 0 : CH 97



802.11ax (HE20) 106-tone RU / Chain 0 : CH 113

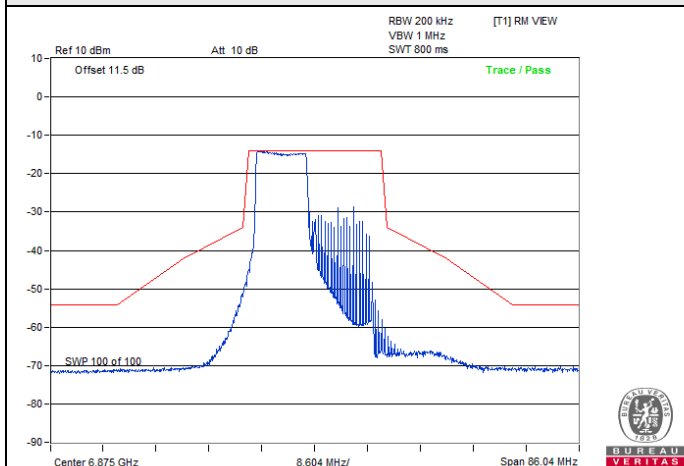


802.11ax (HE20) 106-tone RU / Chain 0 : CH 117

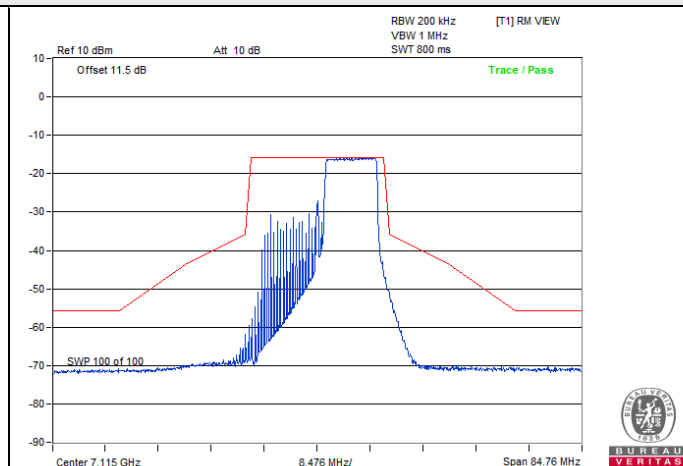


802.11ax (HE20) 106-tone RU / Chain 0 : CH 181

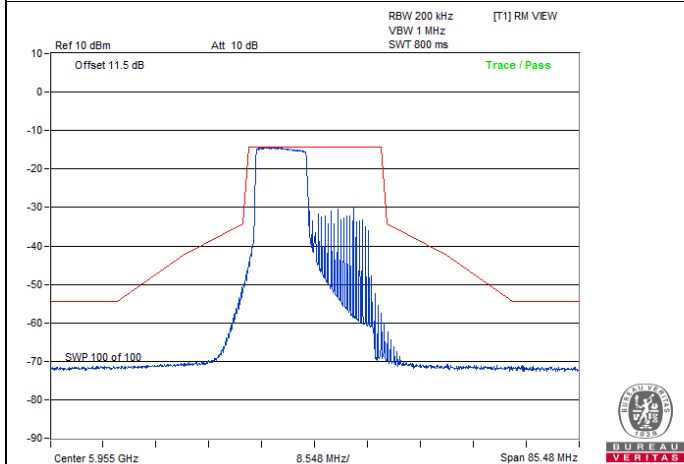
Spectrum Plot



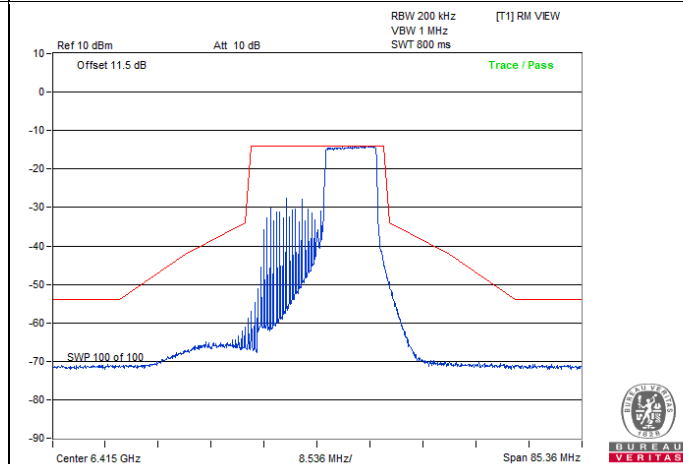
802.11ax (HE20) 106-tone RU / Chain 0 : CH 185



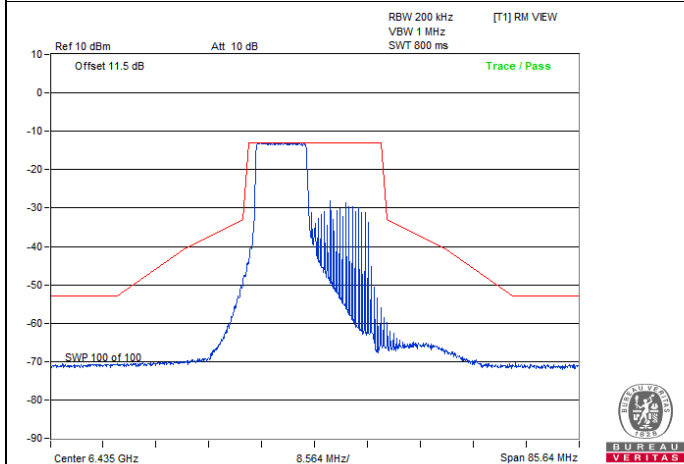
802.11ax (HE20) 106-tone RU / Chain 0 : CH 233



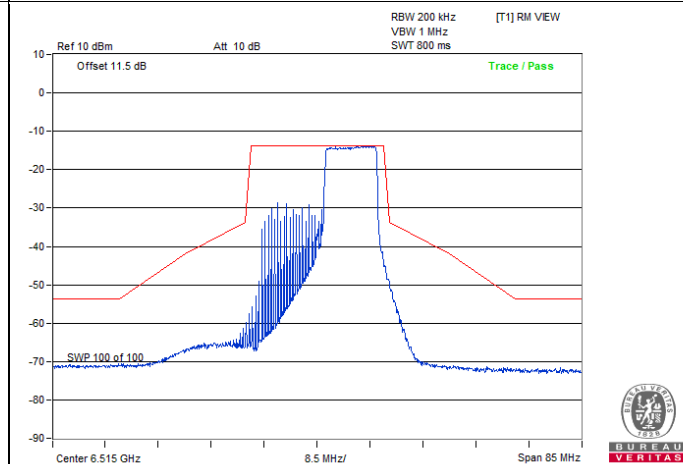
802.11ax (HE20) 106-tone RU / Chain 1 : CH 1



802.11ax (HE20) 106-tone RU / Chain 1 : CH 93

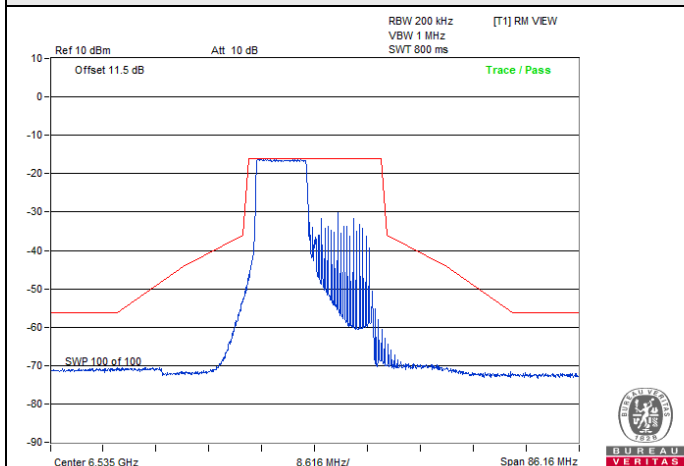


802.11ax (HE20) 106-tone RU / Chain 1 : CH 97

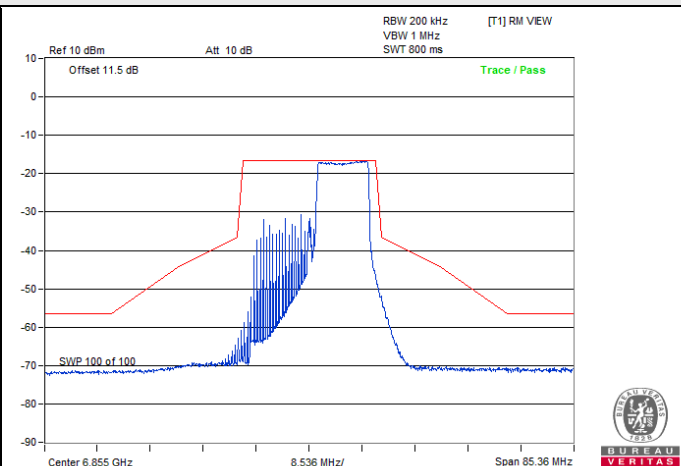


802.11ax (HE20) 106-tone RU / Chain 1 : CH 113

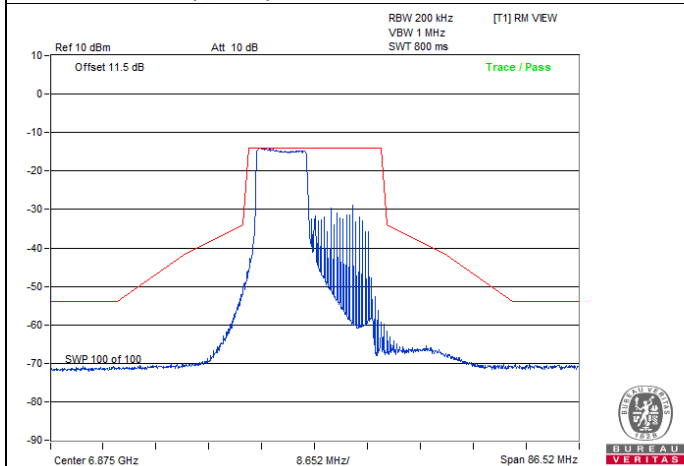
Spectrum Plot



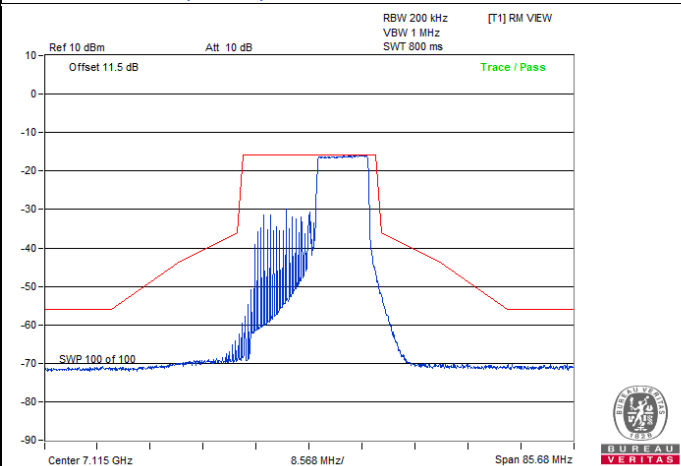
802.11ax (HE20) 106-tone RU / Chain 1 : CH 117



802.11ax (HE20) 106-tone RU / Chain 1 : CH 181



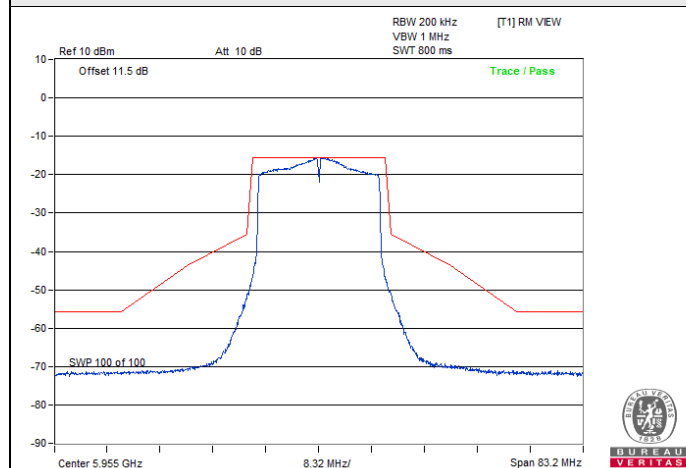
802.11ax (HE20) 106-tone RU / Chain 1 : CH 185



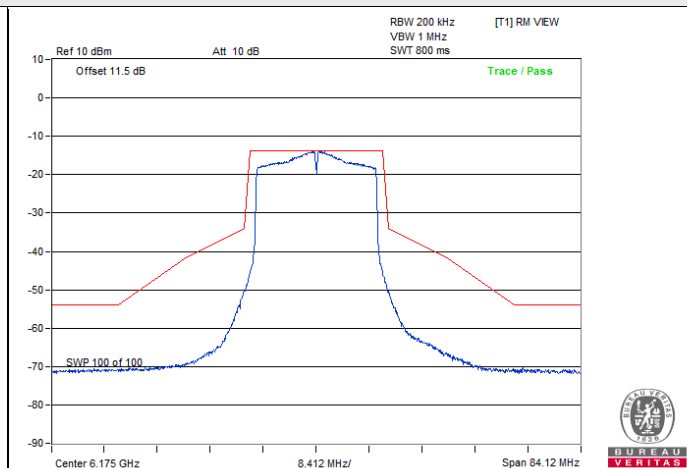
802.11ax (HE20) 106-tone RU / Chain 1 : CH 233

802.11ax (HE20) Full RU

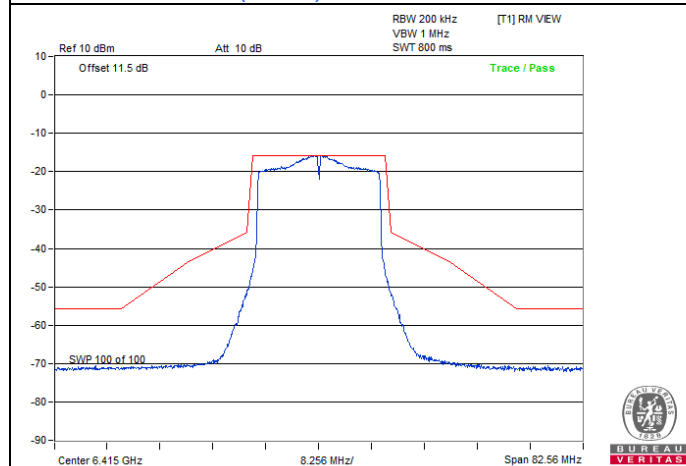
Spectrum Plot



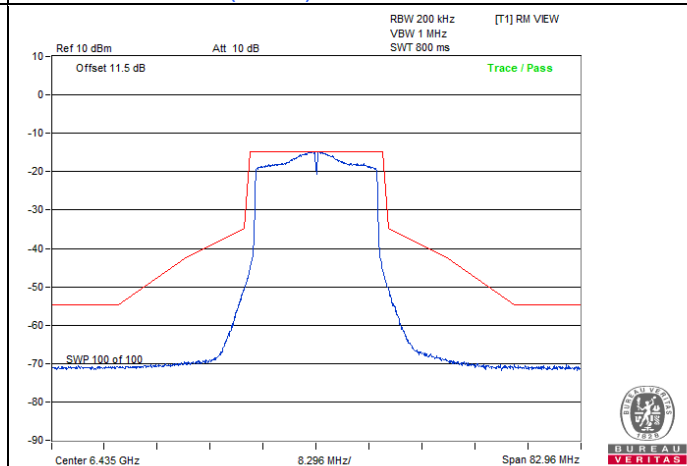
802.11ax (HE20) Full RU / Chain 0 : CH 1



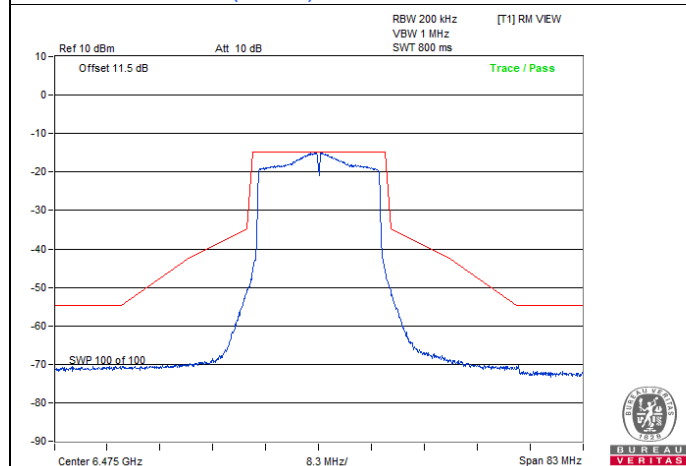
802.11ax (HE20) Full RU / Chain 0 : CH 45



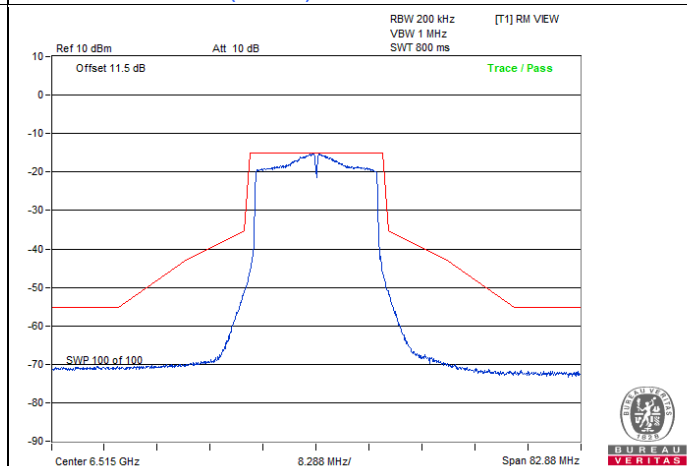
802.11ax (HE20) Full RU / Chain 0 : CH 93



802.11ax (HE20) Full RU / Chain 0 : CH 97

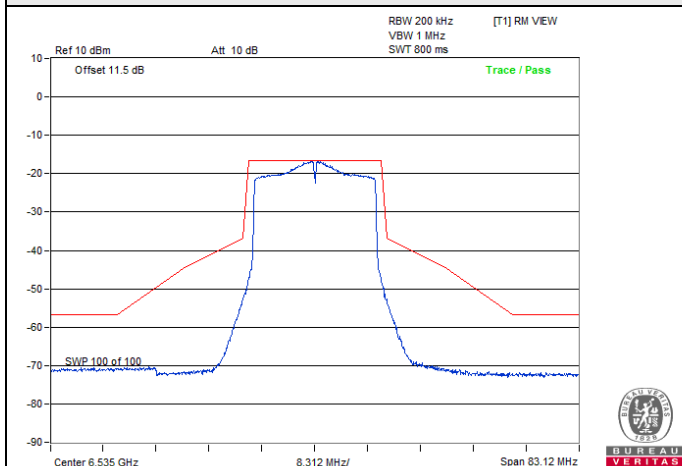


802.11ax (HE20) Full RU / Chain 0 : CH 105

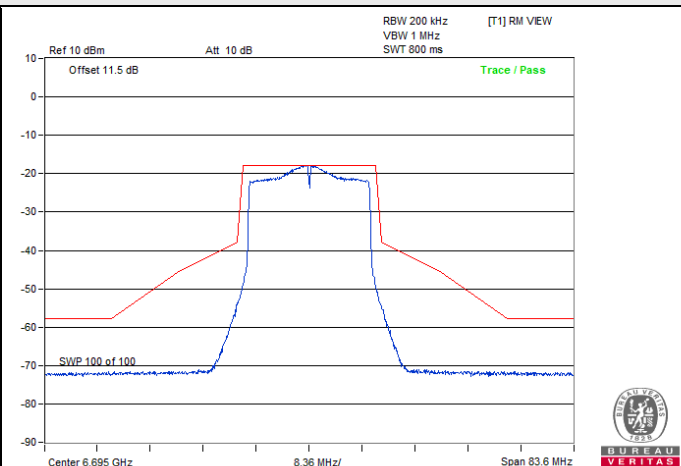


802.11ax (HE20) Full RU / Chain 0 : CH 113

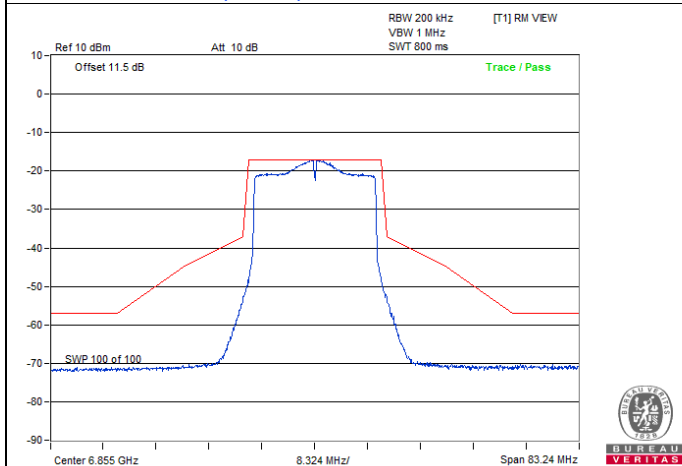
Spectrum Plot



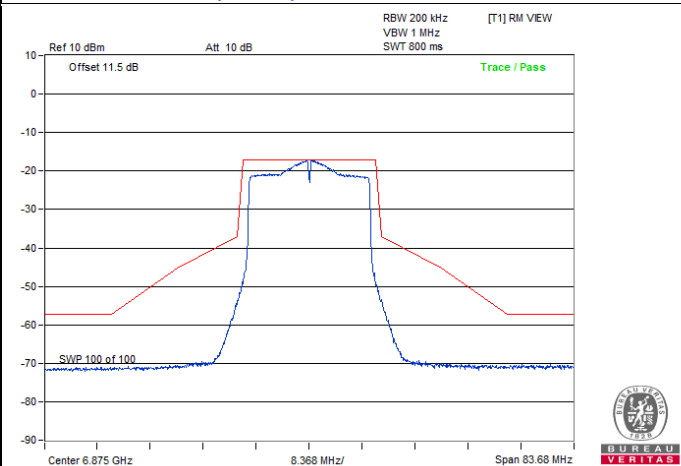
802.11ax (HE20) Full RU / Chain 0 : CH 117



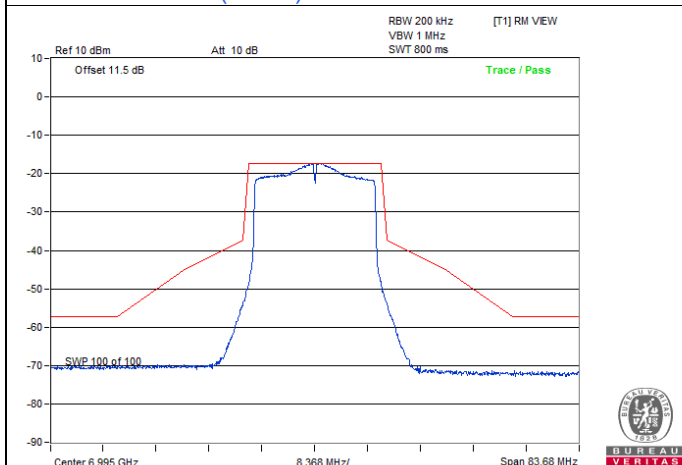
802.11ax (HE20) Full RU / Chain 0 : CH 149



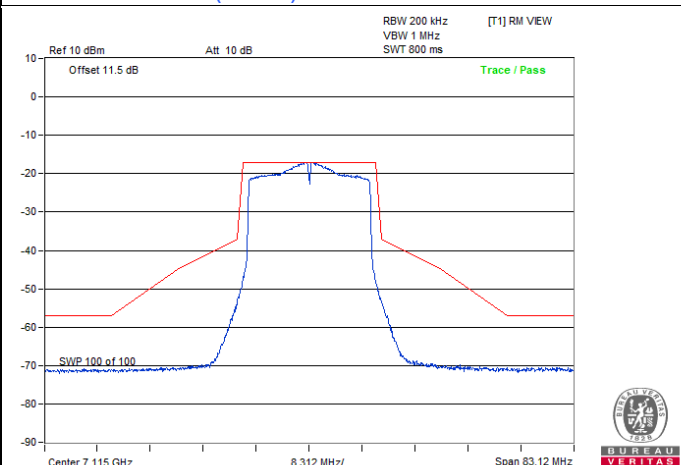
802.11ax (HE20) Full RU / Chain 0 : CH 181



802.11ax (HE20) Full RU / Chain 0 : CH 185

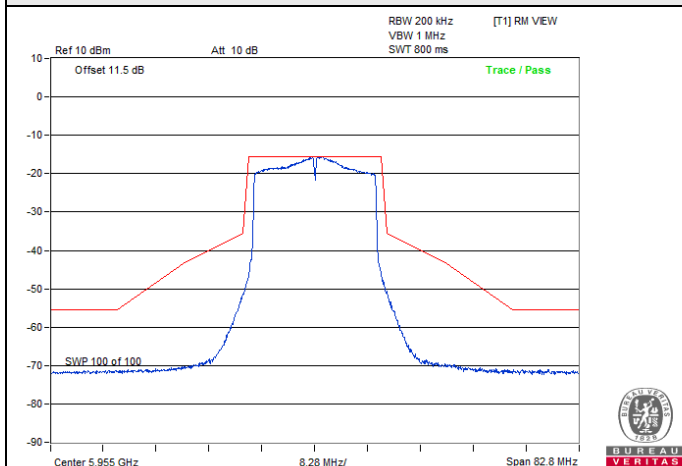


802.11ax (HE20) Full RU / Chain 0 : CH 209

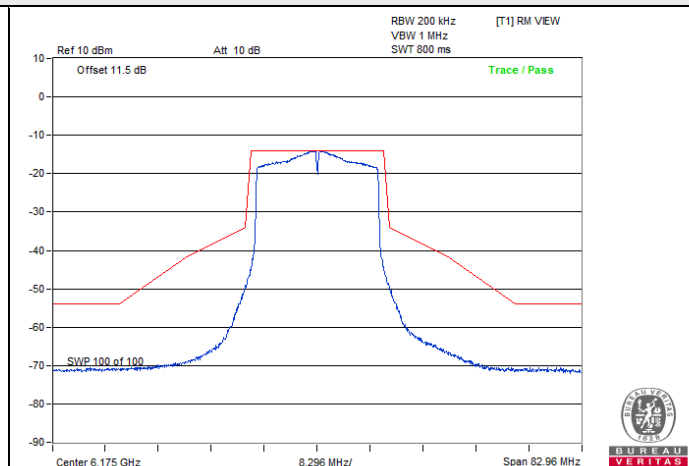


802.11ax (HE20) Full RU / Chain 0 : CH 233

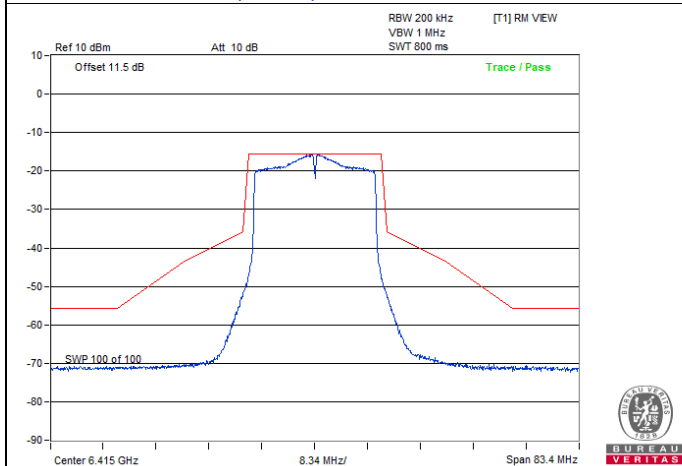
Spectrum Plot



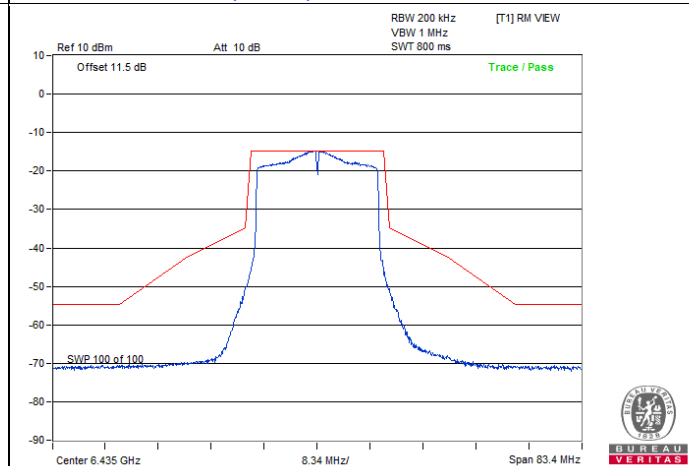
802.11ax (HE20) Full RU / Chain 1 : CH 1



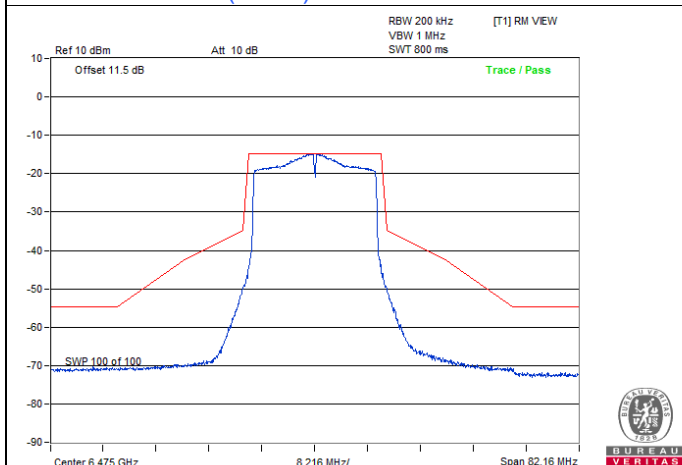
802.11ax (HE20) Full RU / Chain 1 : CH 45



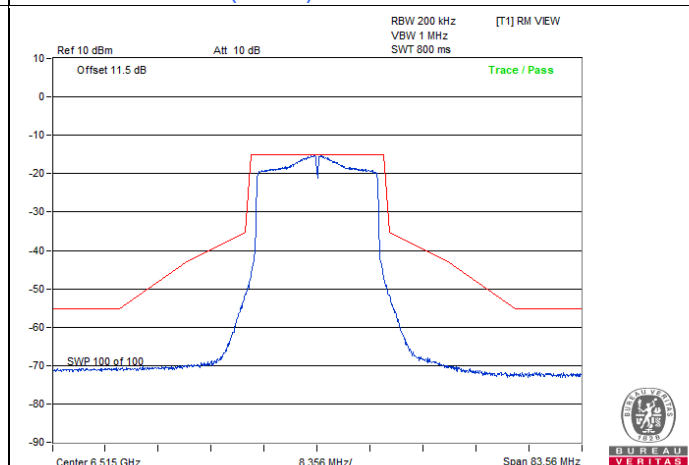
802.11ax (HE20) Full RU / Chain 1 : CH 93



802.11ax (HE20) Full RU / Chain 1 : CH 97

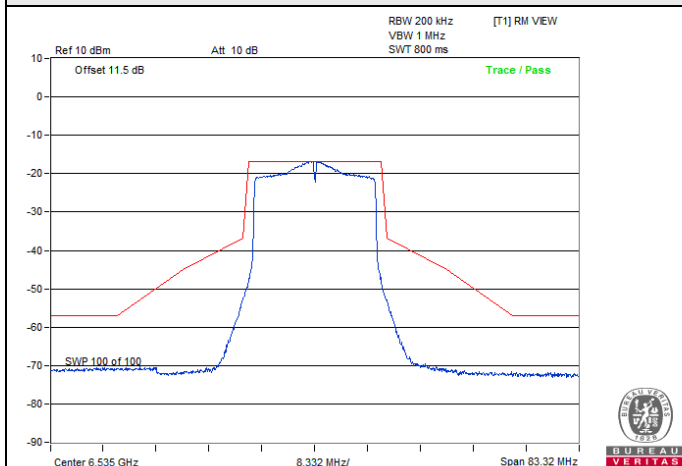


802.11ax (HE20) Full RU / Chain 1 : CH 105

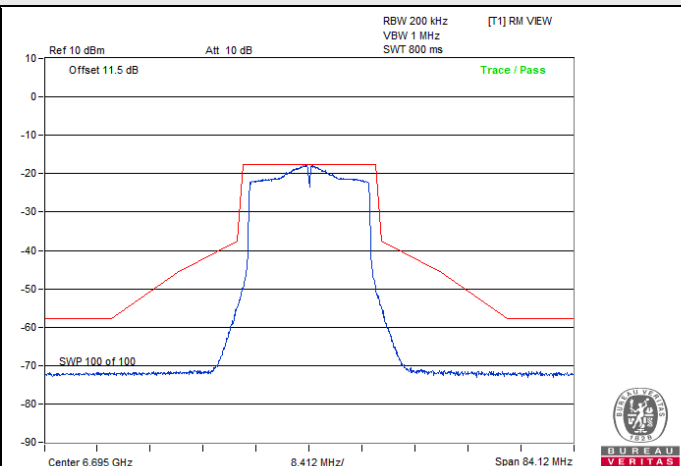


802.11ax (HE20) Full RU / Chain 1 : CH 113

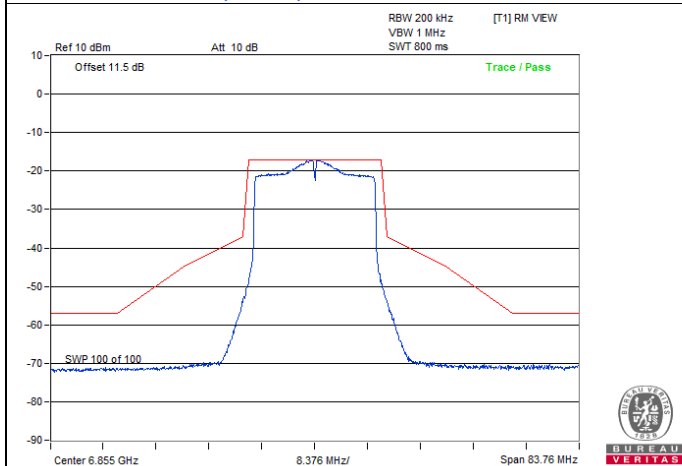
Spectrum Plot



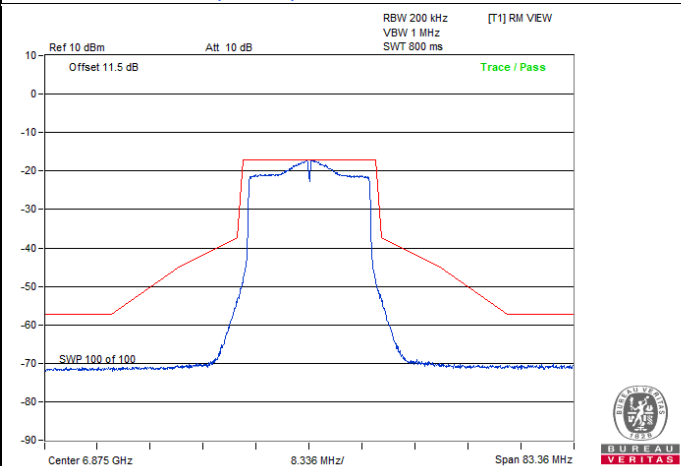
802.11ax (HE20) Full RU / Chain 1 : CH 117



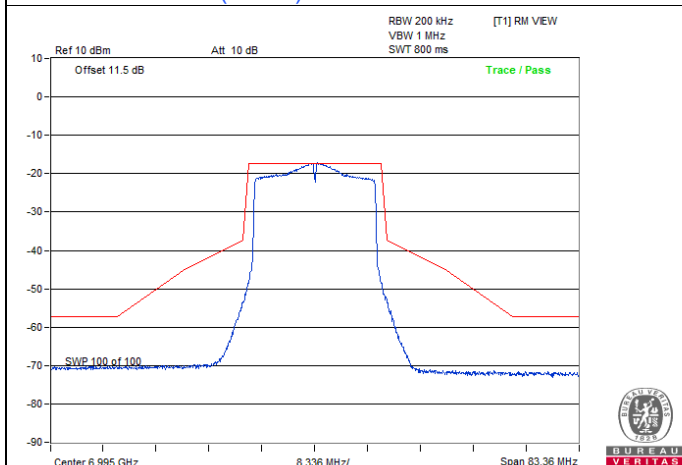
802.11ax (HE20) Full RU / Chain 1 : CH 149



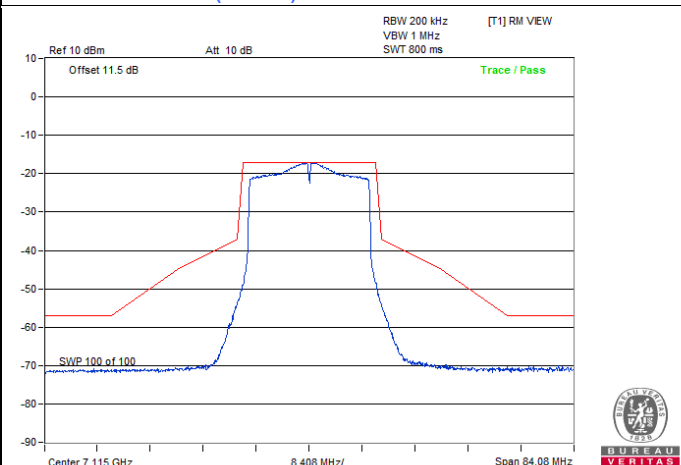
802.11ax (HE20) Full RU / Chain 1 : CH 181



802.11ax (HE20) Full RU / Chain 1 : CH 185



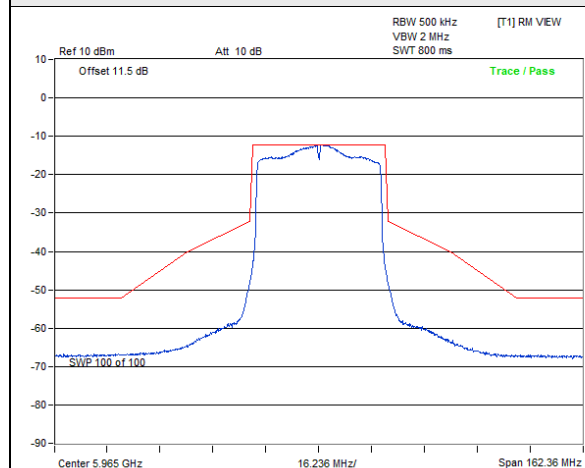
802.11ax (HE20) Full RU / Chain 1 : CH 209



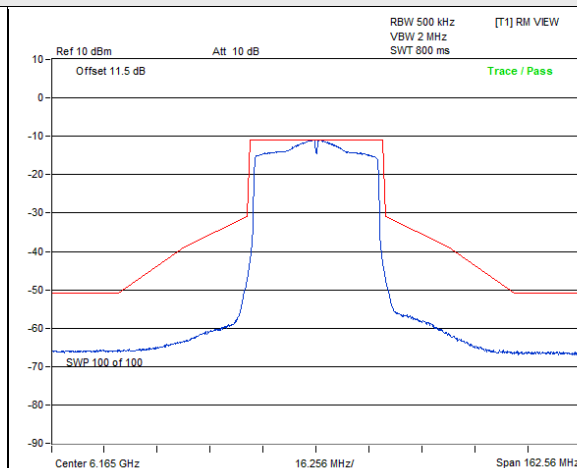
802.11ax (HE20) Full RU / Chain 1 : CH 233

802.11ax (HE40) Full RU

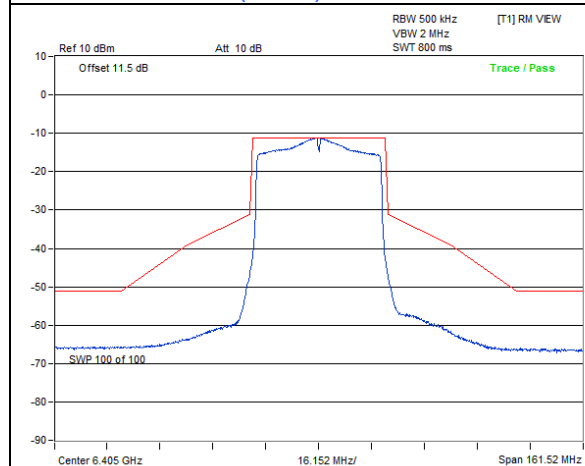
Spectrum Plot



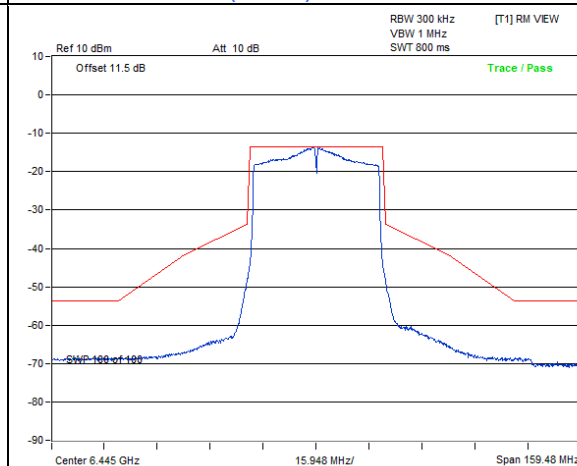
802.11ax (HE40) Full RU / Chain 0 : CH 3



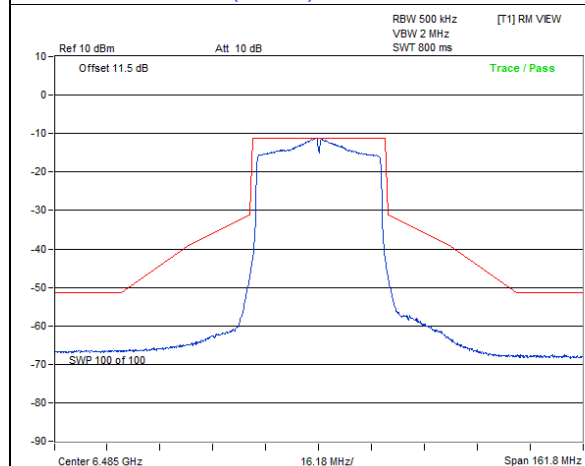
802.11ax (HE40) Full RU / Chain 0 : CH 43



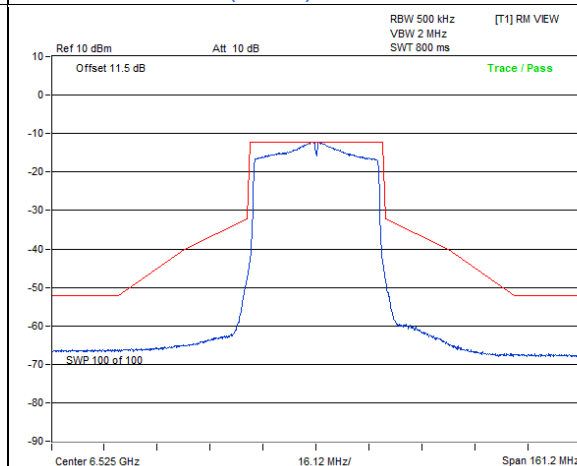
802.11ax (HE40) Full RU / Chain 0 : CH 91



802.11ax (HE40) Full RU / Chain 0 : CH 99

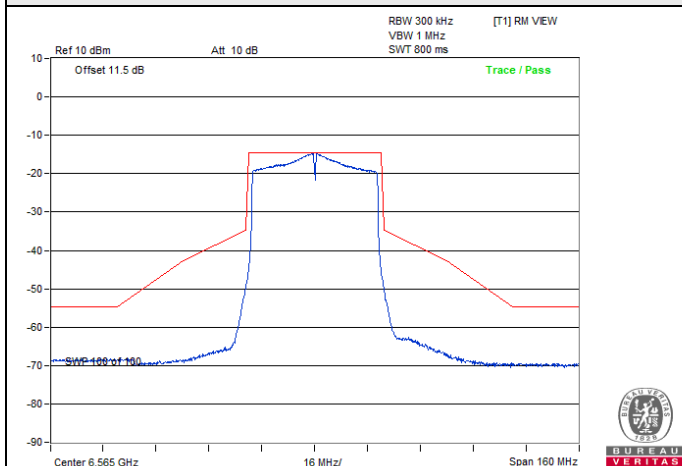


802.11ax (HE40) Full RU / Chain 0 : CH 107

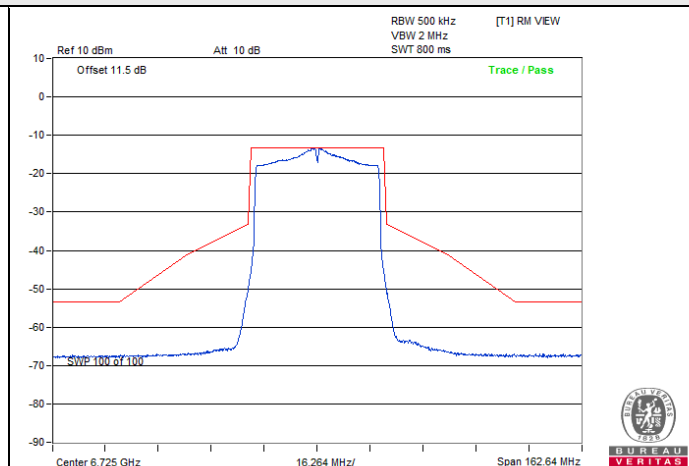


802.11ax (HE40) Full RU / Chain 0 : CH 115

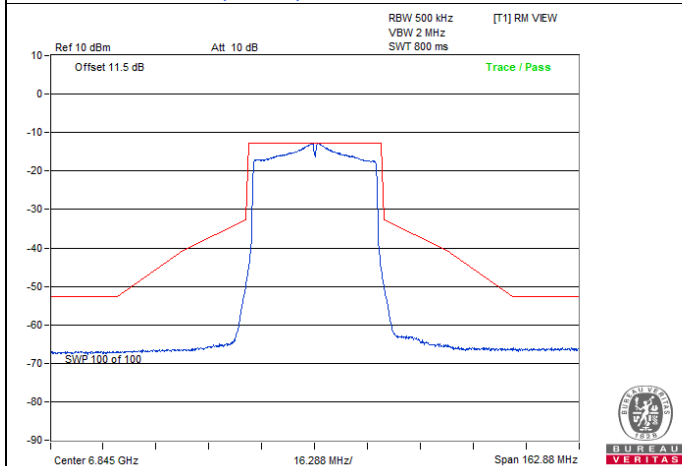
Spectrum Plot



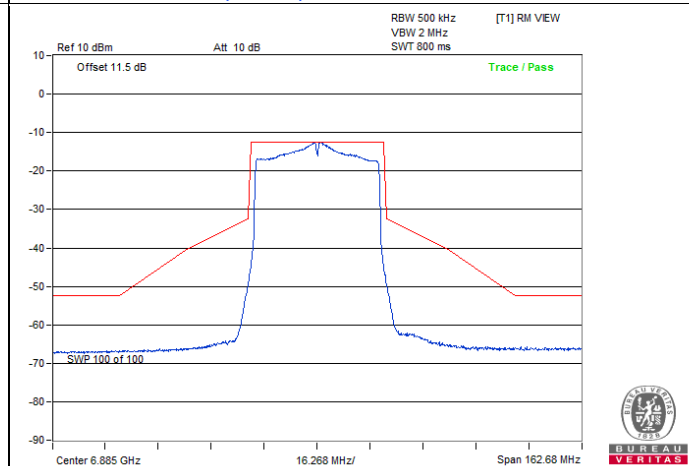
802.11ax (HE40) Full RU / Chain 0 : CH 123



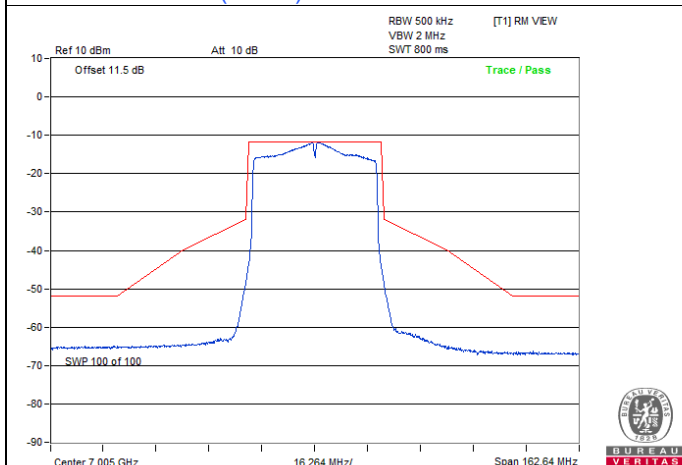
802.11ax (HE40) Full RU / Chain 0 : CH 155



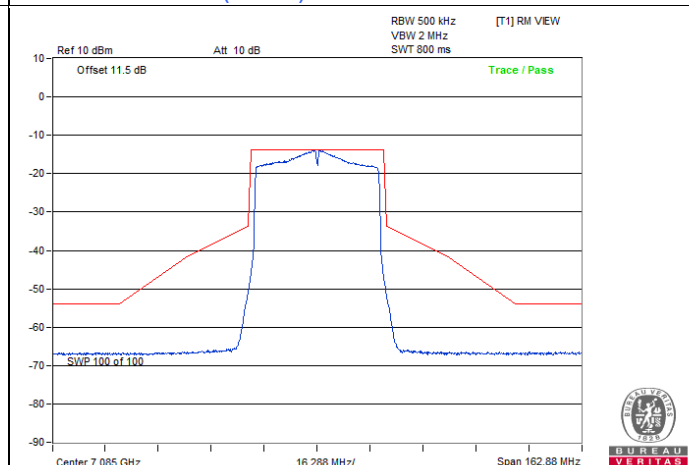
802.11ax (HE40) Full RU / Chain 0 : CH 179



802.11ax (HE40) Full RU / Chain 0 : CH 187

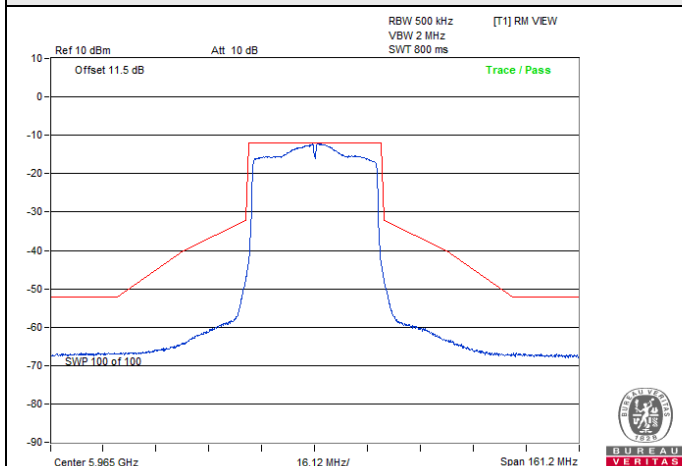


802.11ax (HE40) Full RU / Chain 0 : CH 211

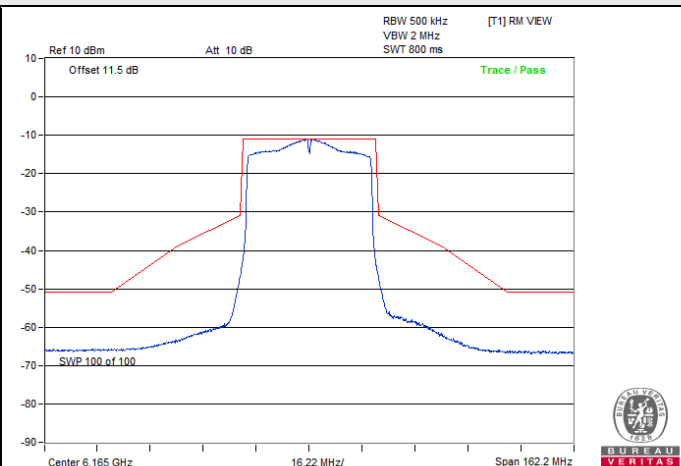


802.11ax (HE40) Full RU / Chain 0 : CH 227

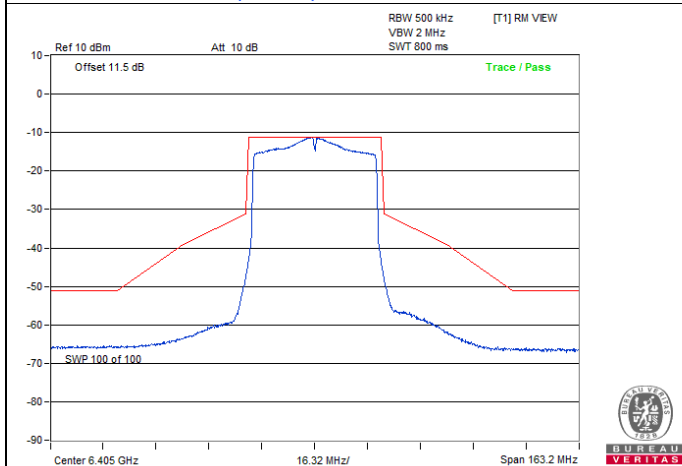
Spectrum Plot



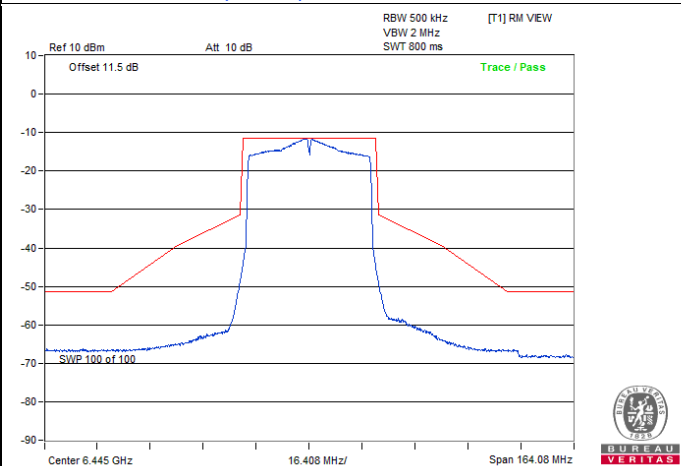
802.11ax (HE40) Full RU / Chain 1 : CH 3



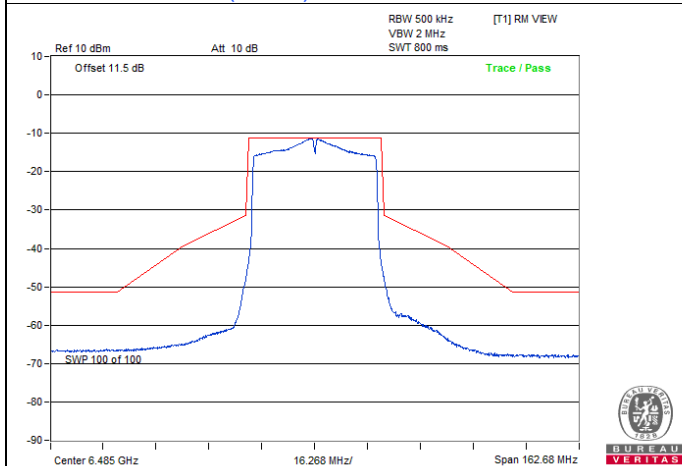
802.11ax (HE40) Full RU / Chain 1 : CH 43



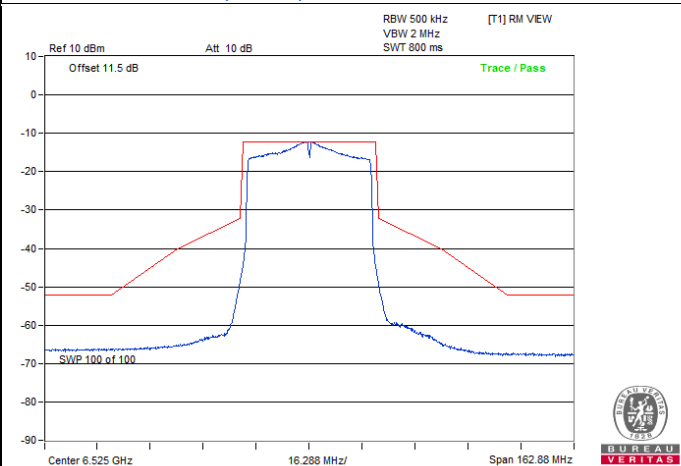
802.11ax (HE40) Full RU / Chain 1 : CH 91



802.11ax (HE40) Full RU / Chain 1 : CH 99

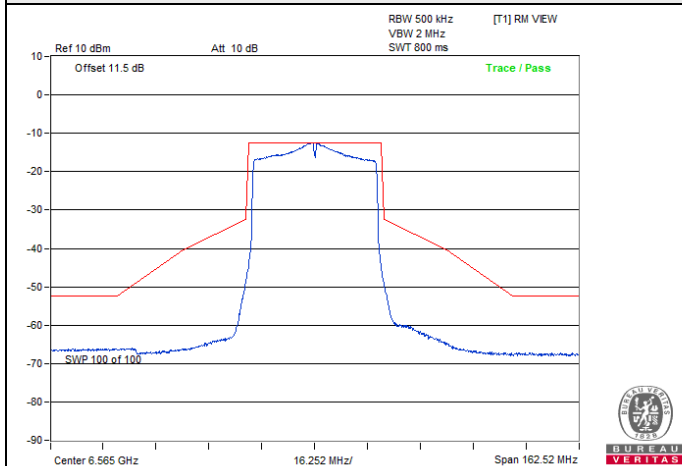


802.11ax (HE40) Full RU / Chain 1 : CH 107

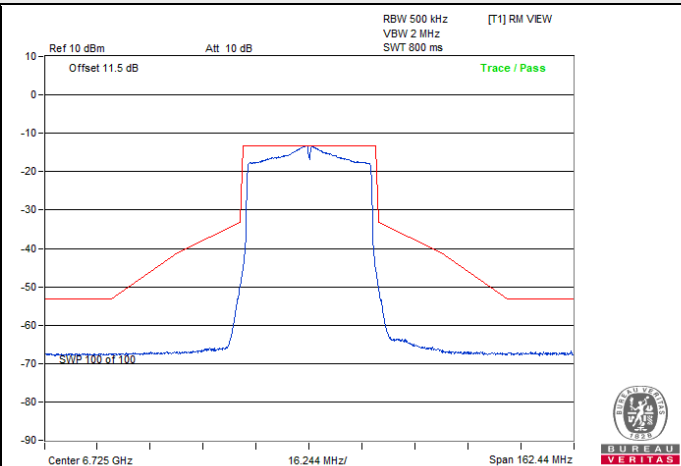


802.11ax (HE40) Full RU / Chain 1 : CH 115

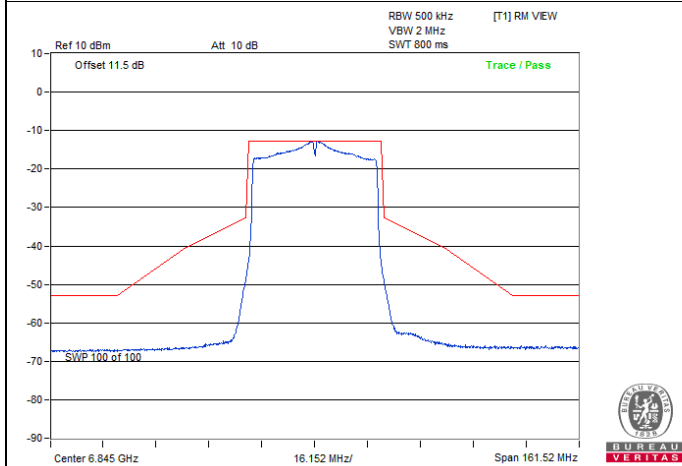
Spectrum Plot



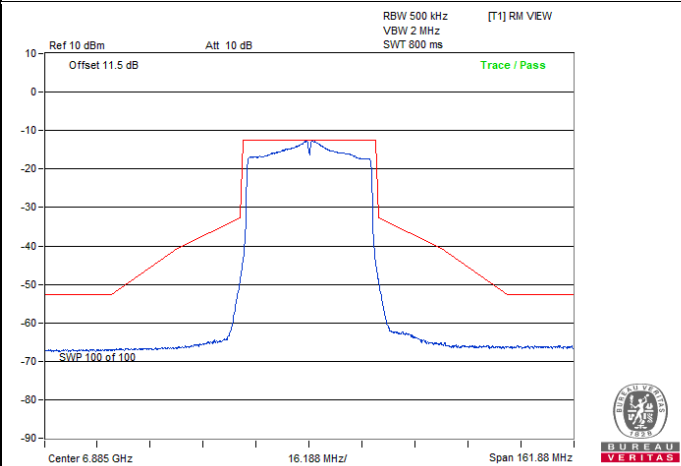
802.11ax (HE40) Full RU / Chain 1 : CH 123



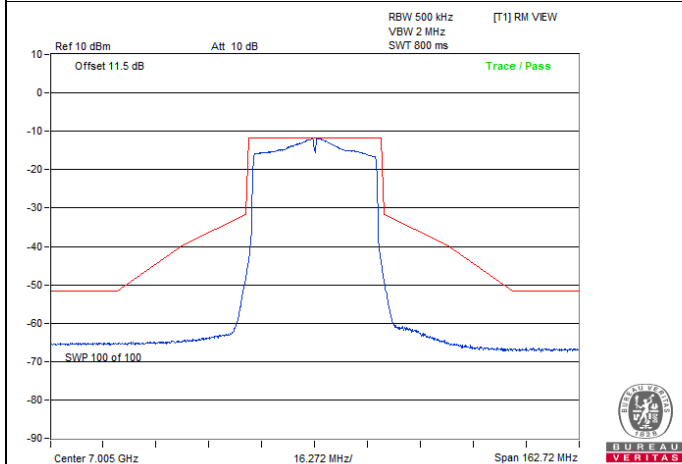
802.11ax (HE40) Full RU / Chain 1 : CH 155



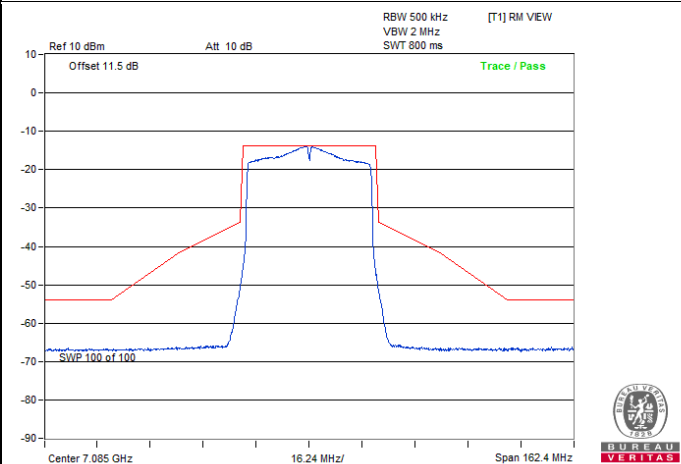
802.11ax (HE40) Full RU / Chain 1 : CH 179



802.11ax (HE40) Full RU / Chain 1 : CH 187



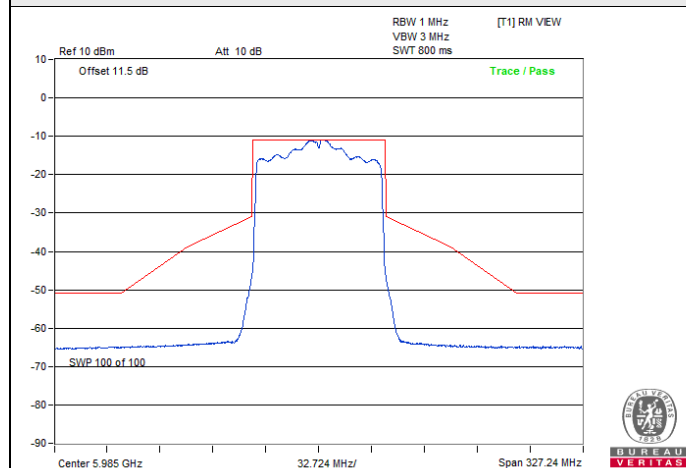
802.11ax (HE40) Full RU / Chain 1 : CH 211



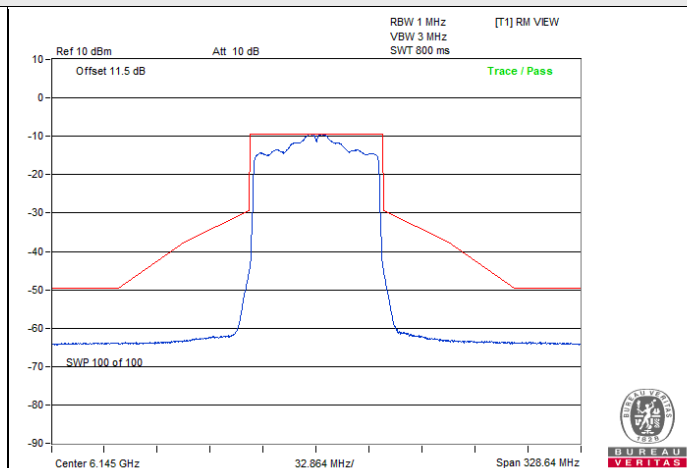
802.11ax (HE40) Full RU / Chain 1 : CH 227

802.11ax (HE80) Full RU

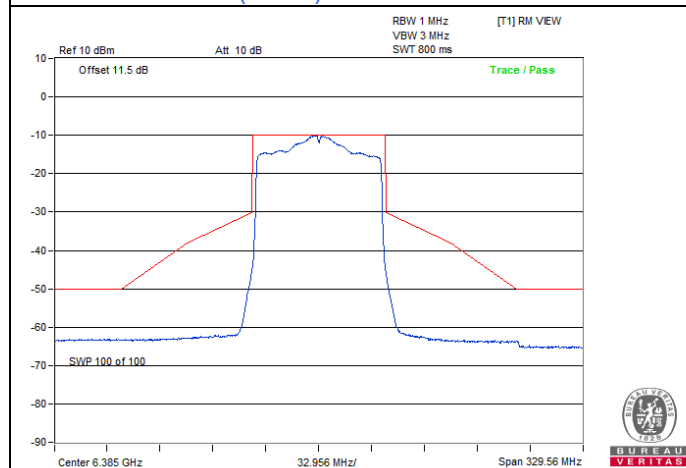
Spectrum Plot



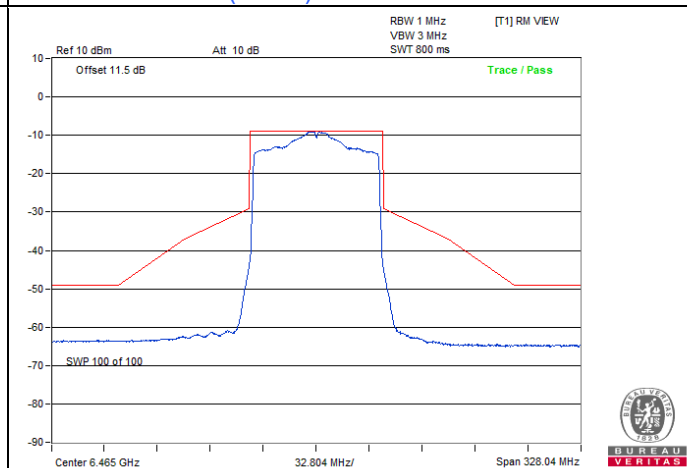
802.11ax (HE80) Full RU / Chain 0 : CH 7



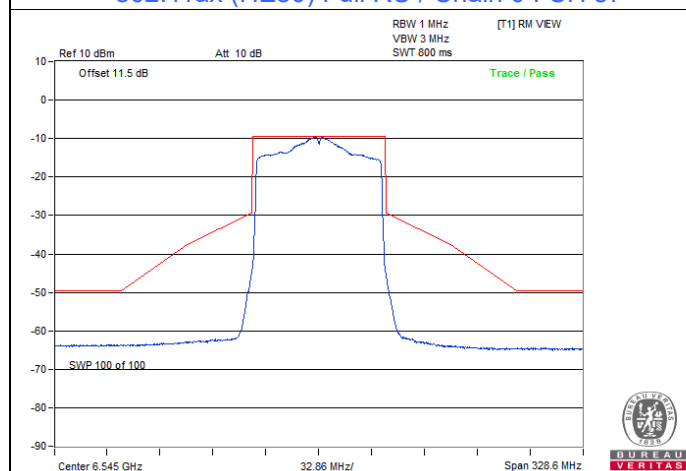
802.11ax (HE80) Full RU / Chain 0 : CH 39



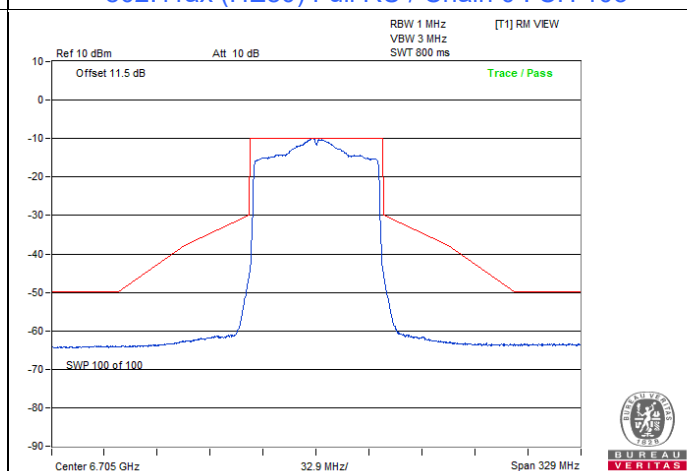
802.11ax (HE80) Full RU / Chain 0 : CH 87



802.11ax (HE80) Full RU / Chain 0 : CH 103

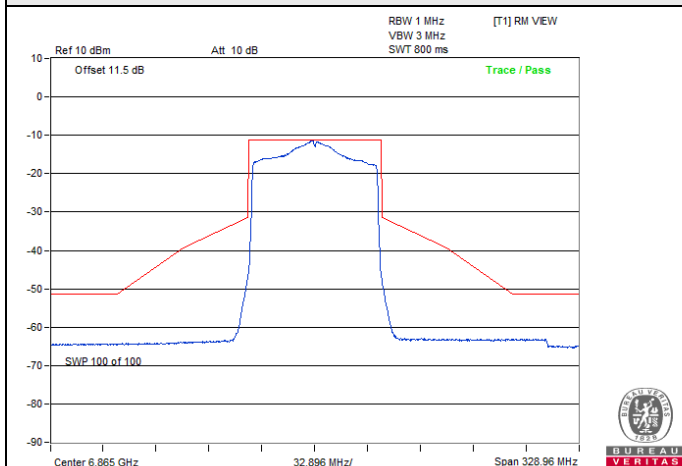


802.11ax (HE80) Full RU / Chain 0 : CH 119

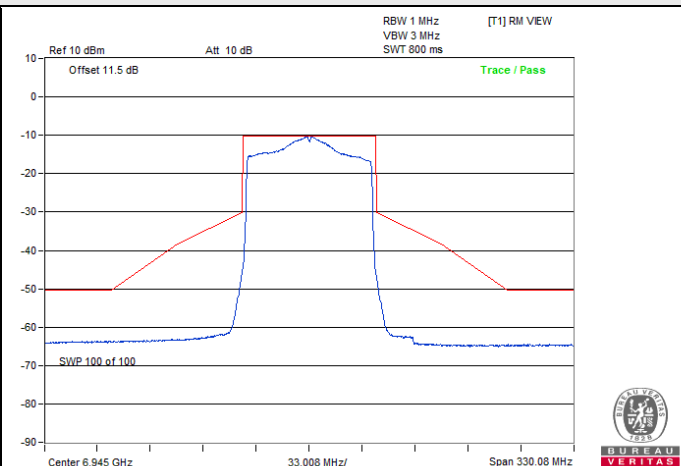


802.11ax (HE80) Full RU / Chain 0 : CH 151

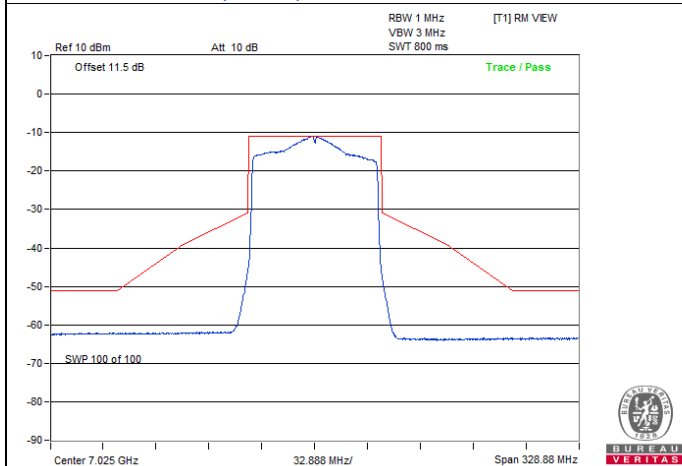
Spectrum Plot



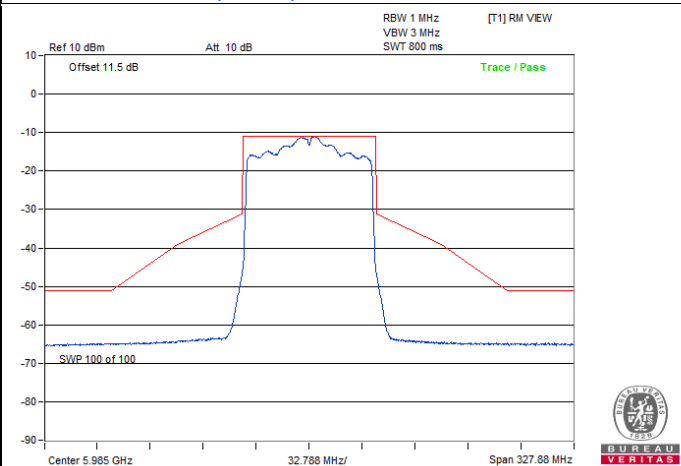
802.11ax (HE80) Full RU / Chain 0 : CH 183



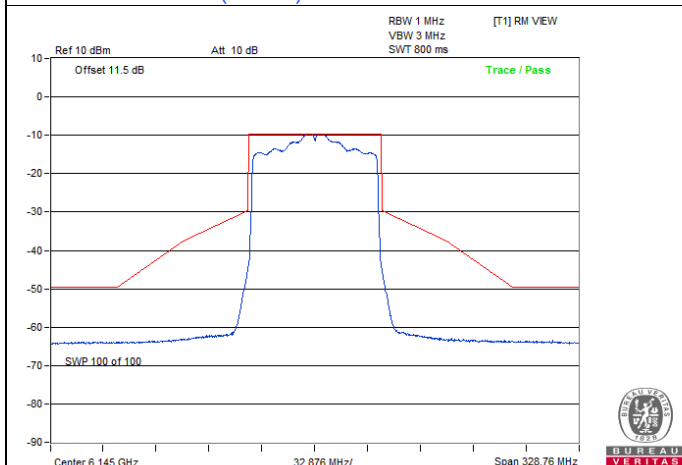
802.11ax (HE80) Full RU / Chain 0 : CH 199



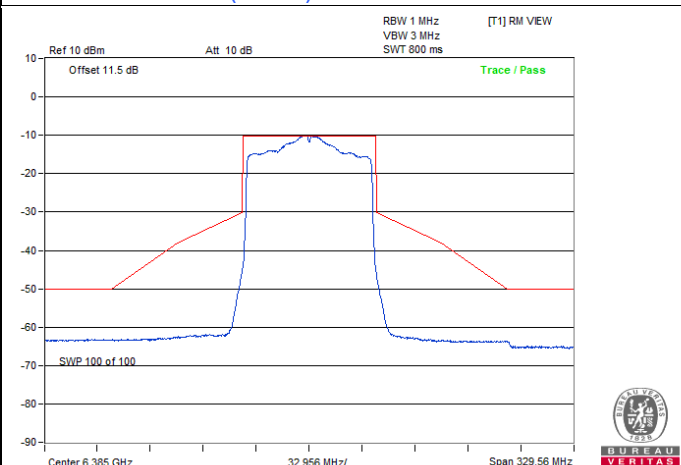
802.11ax (HE80) Full RU / Chain 0 : CH 215



802.11ax (HE80) Full RU / Chain 1 : CH 7

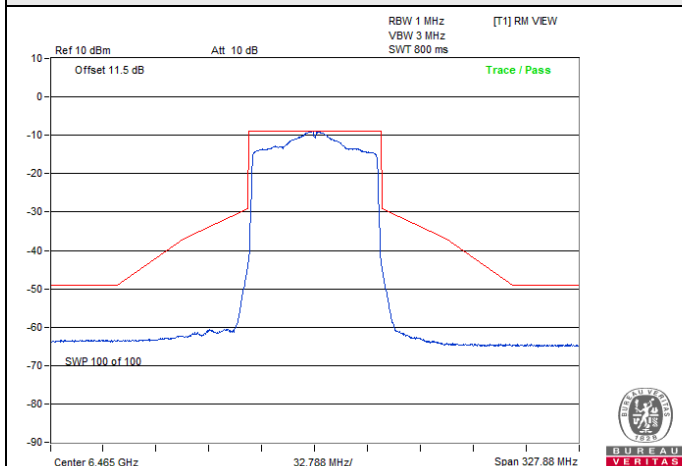


802.11ax (HE80) Full RU / Chain 1 : CH 39

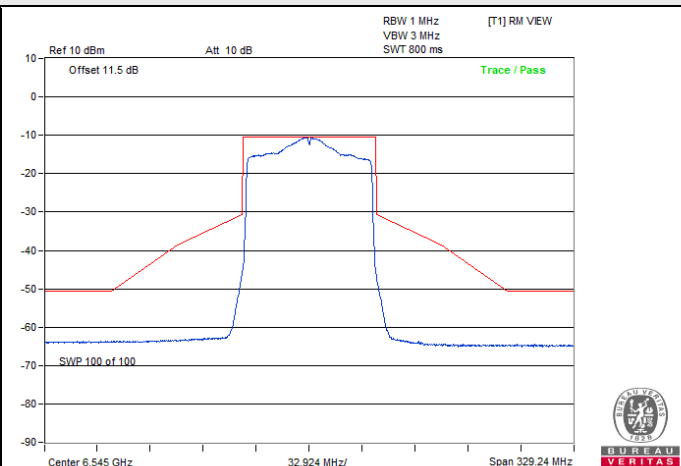


802.11ax (HE80) Full RU / Chain 1 : CH 87

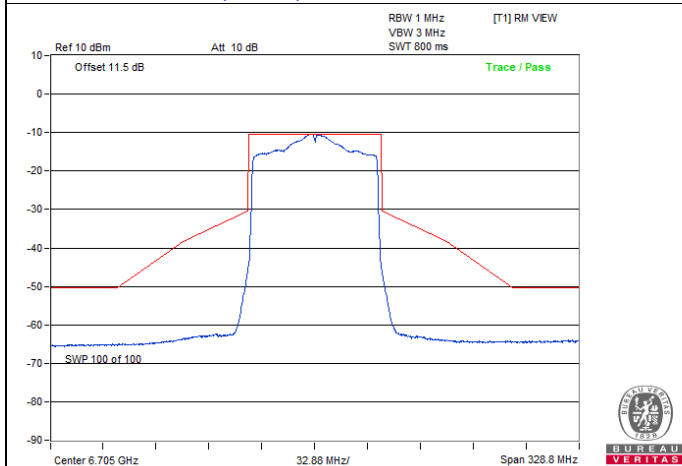
Spectrum Plot



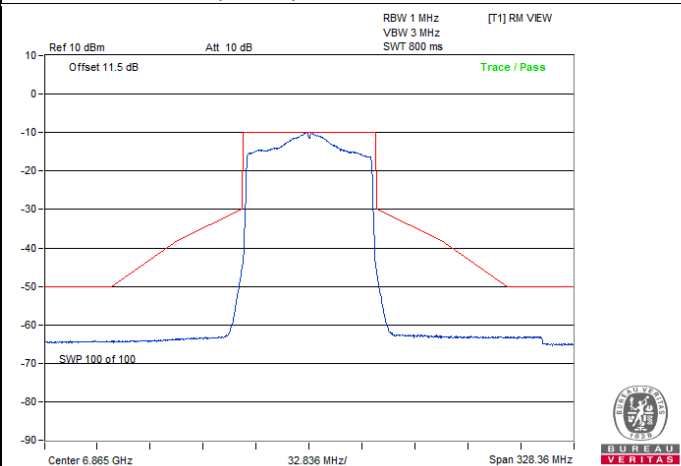
802.11ax (HE80) Full RU / Chain 1 : CH 103



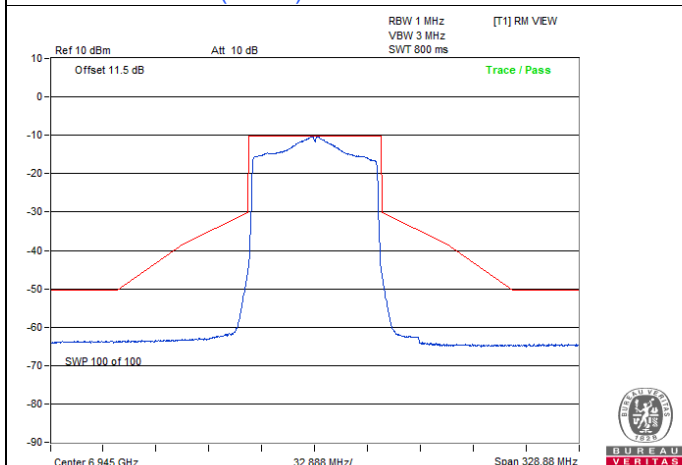
802.11ax (HE80) Full RU / Chain 1 : CH 119



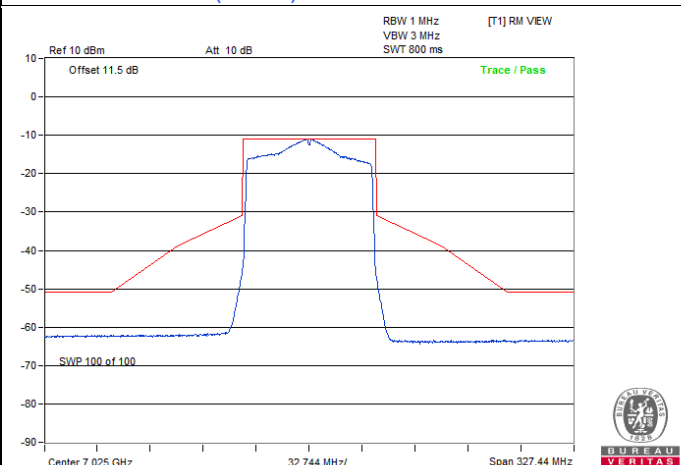
802.11ax (HE80) Full RU / Chain 1 : CH 151



802.11ax (HE80) Full RU / Chain 1 : CH 183



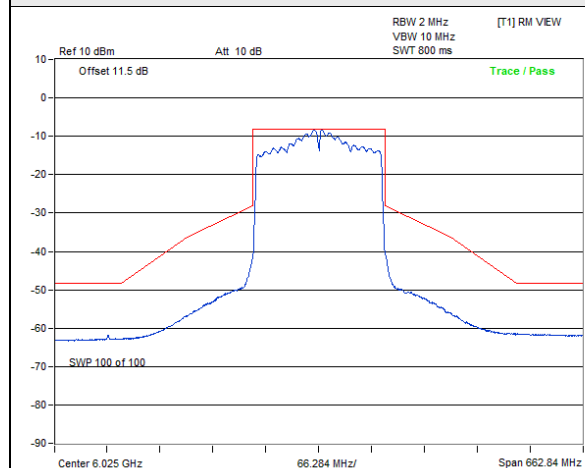
802.11ax (HE80) Full RU / Chain 1 : CH 199



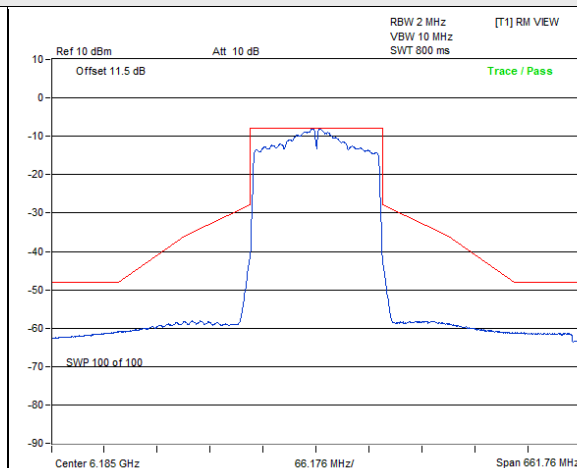
802.11ax (HE80) Full RU / Chain 1 : CH 215

802.11ax (HE160) Full RU

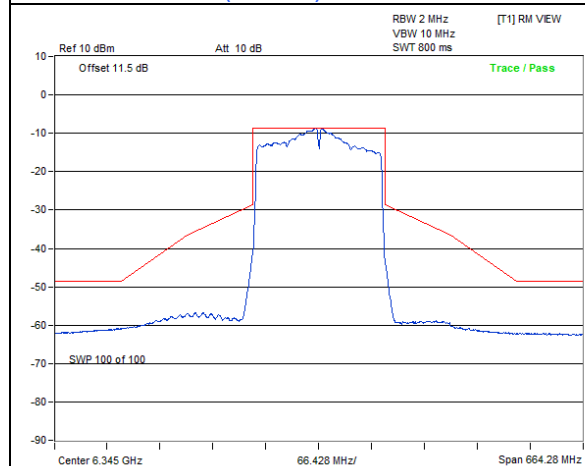
Spectrum Plot



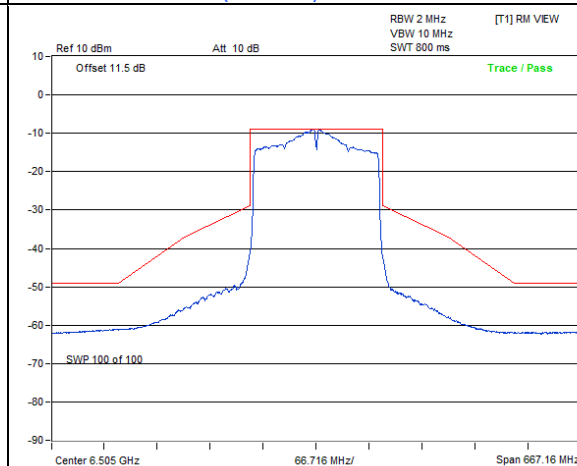
802.11ax (HE160) Full RU / Chain 0 : CH 15



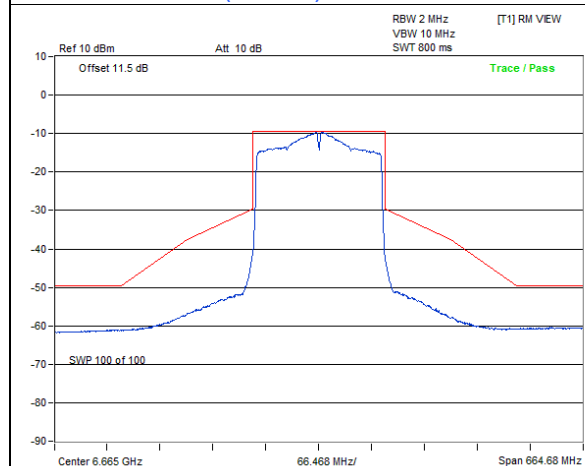
802.11ax (HE160) Full RU / Chain 0 : CH 47



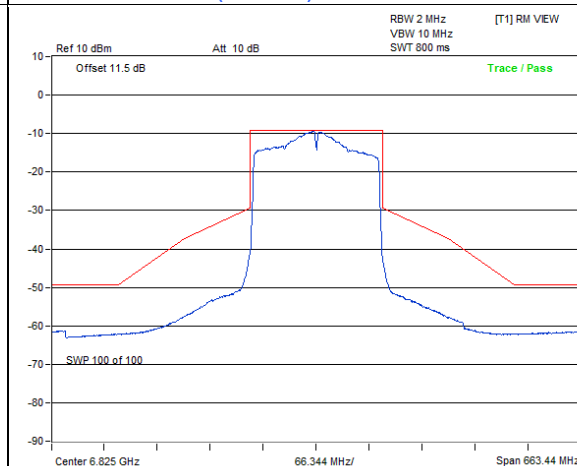
802.11ax (HE160) Full RU / Chain 0 : CH 79



802.11ax (HE160) Full RU / Chain 0 : CH 111



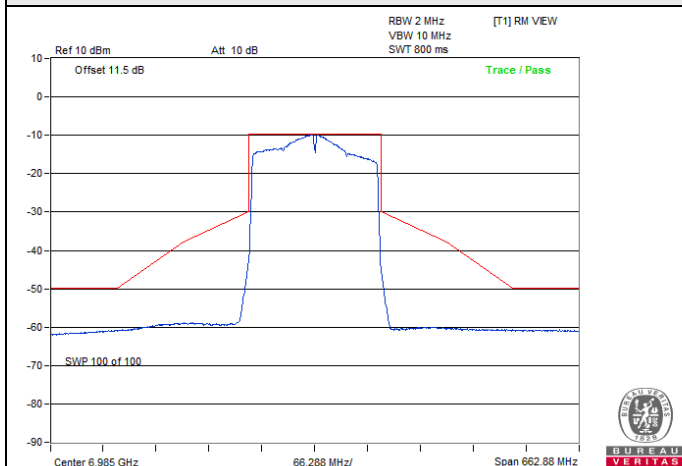
802.11ax (HE160) Full RU / Chain 0 : CH 143



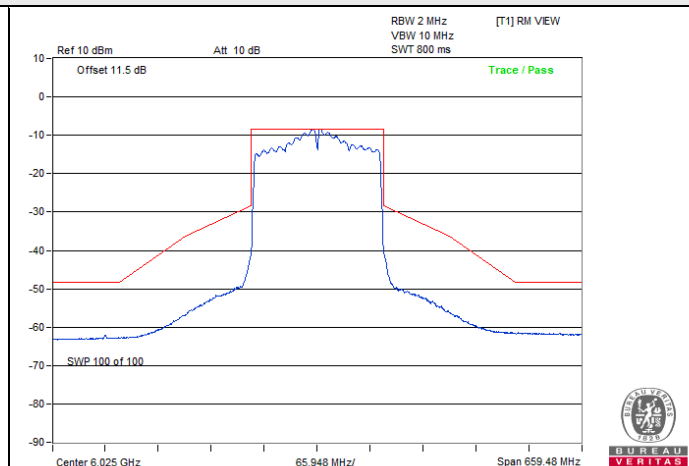
802.11ax (HE160) Full RU / Chain 0 : CH 175



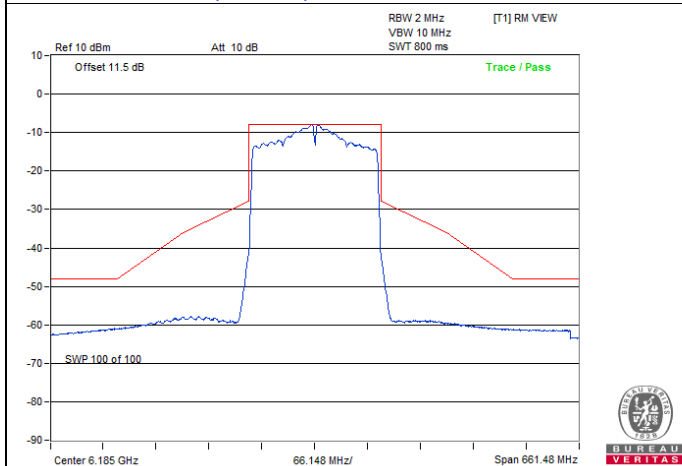
Spectrum Plot



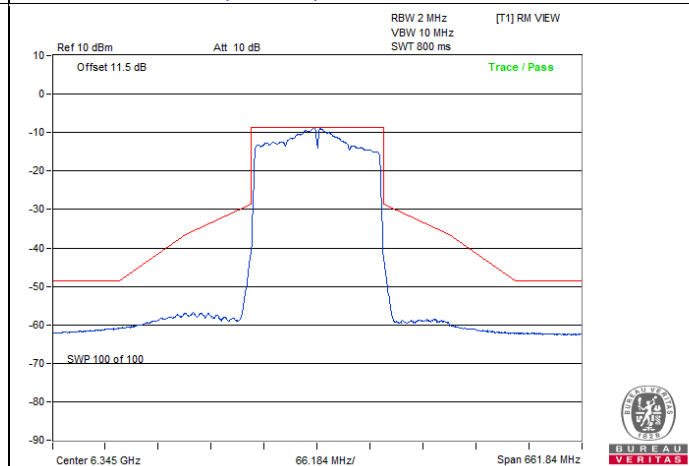
802.11ax (HE160) Full RU / Chain 0 : CH 207



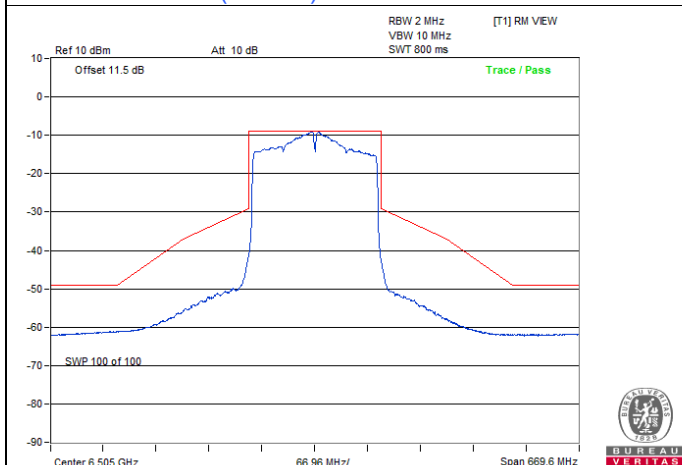
802.11ax (HE160) Full RU / Chain 1 : CH 15



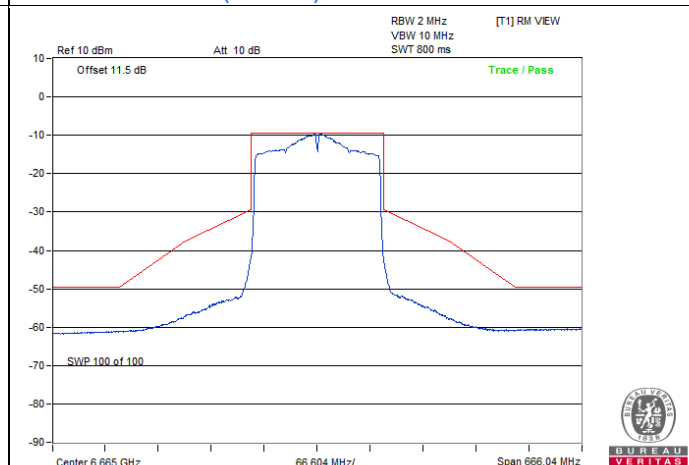
802.11ax (HE160) Full RU / Chain 1 : CH 47



802.11ax (HE160) Full RU / Chain 1 : CH 79

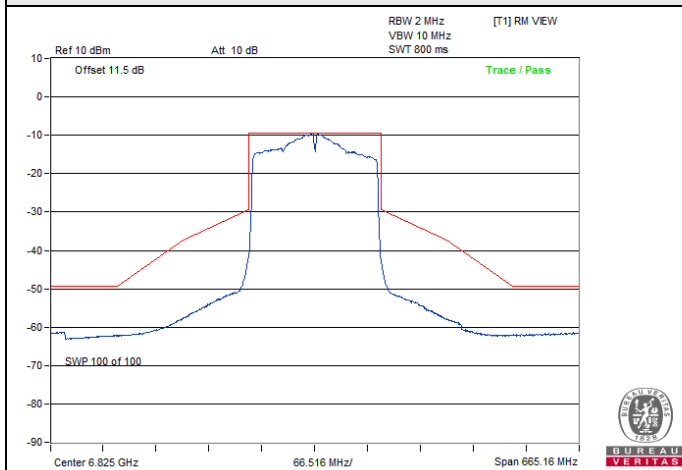


802.11ax (HE160) Full RU / Chain 1 : CH 111



802.11ax (HE160) Full RU / Chain 1 : CH 143

Spectrum Plot



802.11ax (HE160) Full RU / Chain 1 : CH 175



802.11ax (HE160) Full RU / Chain 1 : CH 207

7.5 Occupied Bandwidth

Input Power:	3.85 Vdc	Environmental Conditions:	24°C, 64% RH	Tested By:	Match Tsui
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802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
1	5955	16.32	16.32
45	6175	16.20	16.20
93	6415	16.32	16.32
97	6435	16.32	16.32
105	6475	16.32	16.32
113	6515	16.32	16.32
117	6535	16.32	16.32
149	6695	16.32	16.32
181	6855	16.32	16.20
185	6875	16.32	16.32
209	6995	16.32	16.44
233	7115	16.32	16.32

802.11ax (HE20) 26-tone RU

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
1	5955	18.84	18.84
93	6415	18.60	18.48
97	6435	18.84	18.84
113	6515	18.48	18.48
117	6535	18.84	18.84
181	6855	18.60	18.60
185	6875	18.84	18.84
233	7115	18.48	18.60

802.11ax (HE20) 52-tone RU

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
1	5955	18.36	18.48
93	6415	18.48	18.48
97	6435	18.48	18.48
113	6515	18.24	18.24
117	6535	18.48	18.48
181	6855	18.48	18.36
185	6875	18.48	18.36
233	7115	18.12	18.24

802.11ax (HE20) 106-tone RU

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
1	5955	18.48	18.48
93	6415	18.48	18.48
97	6435	18.48	18.48
113	6515	18.48	18.48
117	6535	18.48	18.48
181	6855	18.48	18.48
185	6875	18.48	18.48
233	7115	18.48	18.48

802.11ax (HE20) Full RU

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
1	5955	18.84	18.84
45	6175	18.96	18.84
93	6415	18.84	18.84
97	6435	18.84	18.84
105	6475	18.84	18.84
113	6515	18.84	18.84
117	6535	18.96	18.84
149	6695	18.84	18.84
181	6855	18.84	18.96
185	6875	18.96	18.84
209	6995	18.84	18.84
233	7115	18.84	18.84

802.11ax (HE40) Full RU

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
3	5965	37.68	37.92
43	6165	38.16	37.92
91	6405	37.68	37.68
99	6445	37.68	37.92
107	6485	37.92	37.68
115	6525	37.68	37.68
123	6565	37.92	37.68
155	6725	37.92	37.68
179	6845	38.16	37.68
187	6885	37.92	37.92
211	7005	37.92	37.68
227	7085	37.92	37.92

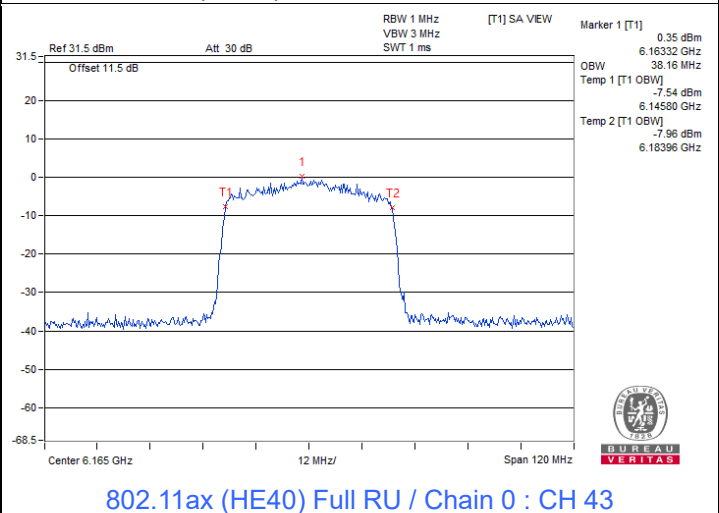
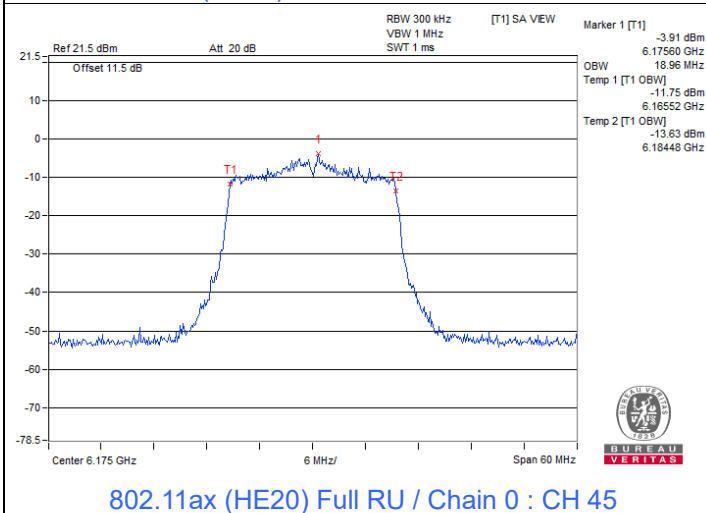
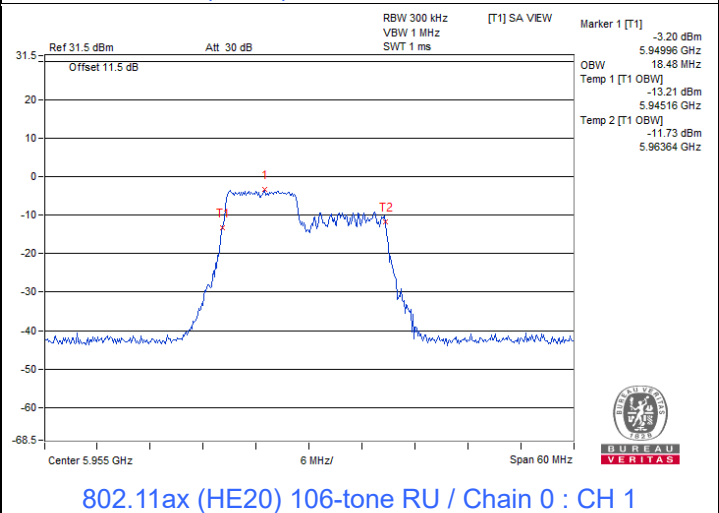
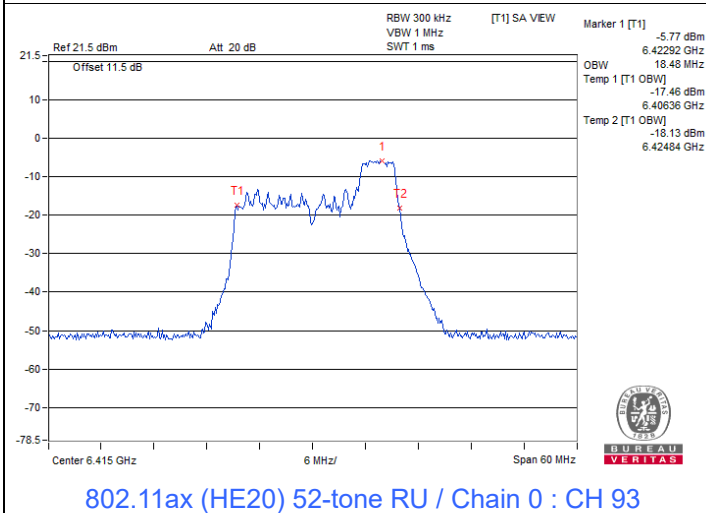
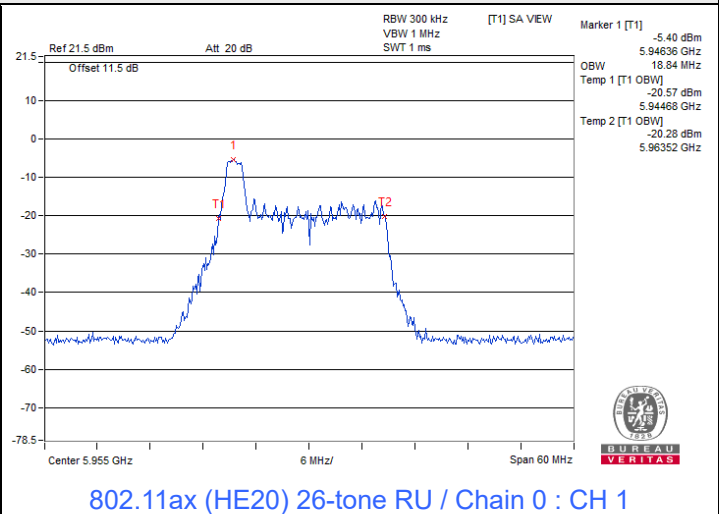
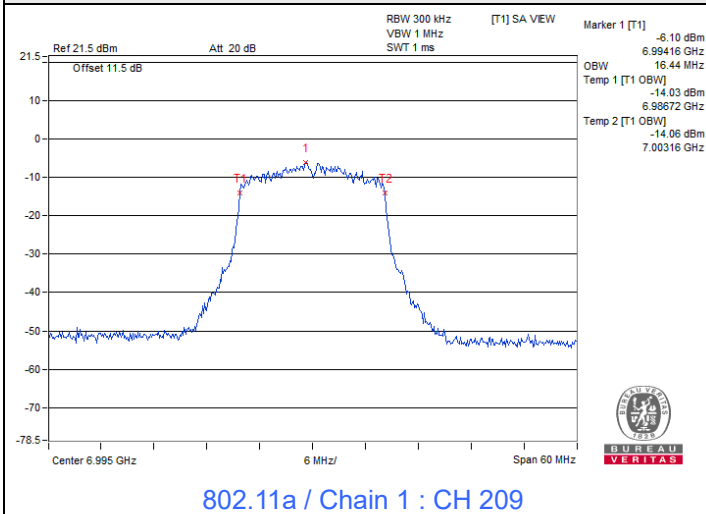
802.11ax (HE80) Full RU

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
7	5985	76.80	76.80
39	6145	77.28	76.80
87	6385	76.32	76.80
103	6465	77.28	77.28
119	6545	76.80	77.28
151	6705	76.80	76.80
183	6865	76.80	76.80
199	6945	77.28	76.80
215	7025	76.80	76.80

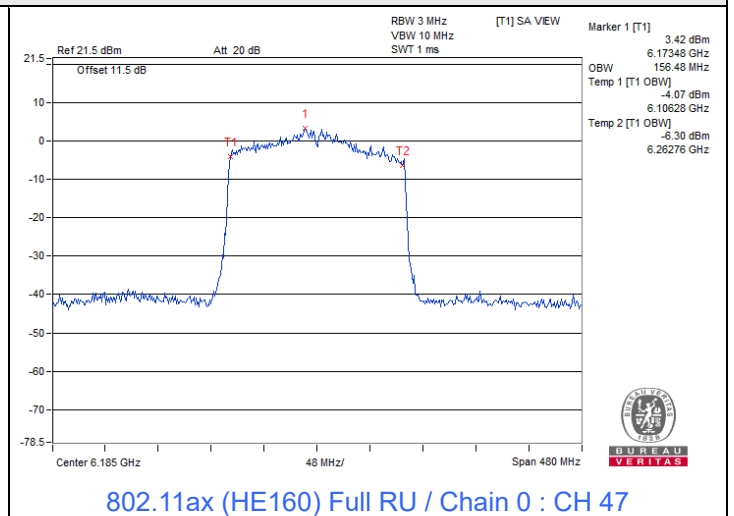
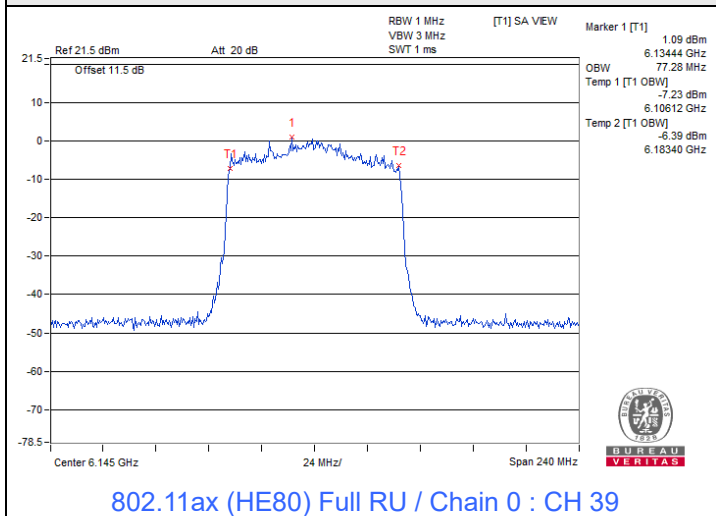
802.11ax (HE160) Full RU

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
15	6025	155.52	155.52
47	6185	156.48	156.48
79	6345	156.48	155.52
111	6505	156.48	156.48
143	6665	155.52	155.52
175	6825	155.52	156.48
207	6985	155.52	154.56

Spectrum Plot of Maximum Value



Spectrum Plot of Maximum Value



7.6 Contention-based Protocol

Environmental Conditions:	25°C, 60% RH	Tested By:	Frankie Chang
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Companion Device Information			
Product	Brand	Model No.	Software/Firmware Version
Wireless Router	NETGEAR	RS700	V1.0.7.80_2.0.79

For U-NII-5

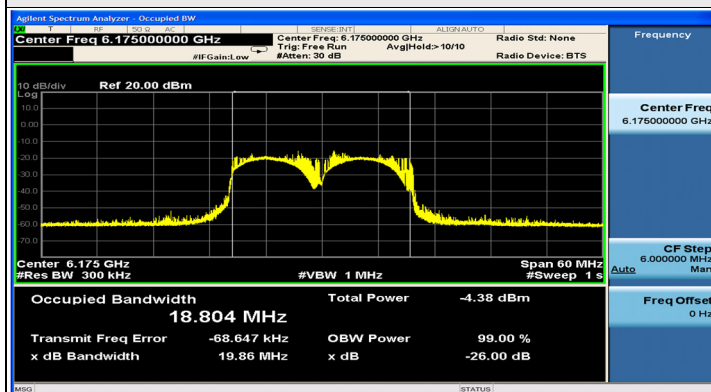
Contention Based Protocol Measurement										
Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB) (Note 3)	Adjusted Power (dBm)	Detection Limit	EUT TX Status
				Freq. (MHz)	Power (dBm)					
802.11ax	20	45	6175	6175	-68	1.19	0	-69.19	-62	OFF
					-71	1.19	0	-72.19	-62	Minimal
					-80.81	1.19	0	-82	-62	ON
	160	47	6185	6110	-68	1.19	0	-69.19	-62	OFF
					-71	1.19	0	-72.19	-62	Minimal
					-80.81	1.19	0	-82	-62	ON
				6185	-65	1.19	0	-66.19	-62	OFF
					-68	1.19	0	-69.19	-62	Minimal
					-80.81	1.19	0	-82	-62	ON
				6260	-67	1.19	0	-68.19	-62	OFF
					-70	1.19	0	-71.19	-62	Minimal
					-80.81	1.19	0	-82	-62	ON

Notes:

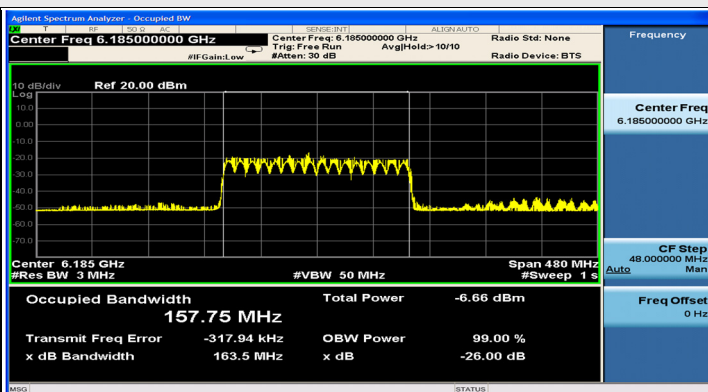
1. After investigation (consider antenna gain and path loss) , the one representative port (Chain 0) was measured and presented in the report.
2. Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
3. Antenna gain values include all the applicable path losses.
4. This device does not use the channel puncturing and bandwidth reduction mechanisms for incumbent avoidance, but instead switches to other channels to perform its function.

Contention Based Protocol Detection Probability															
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11ax	20	6175	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
	160	6110	v	v	v	v	v	v	v	v	x	v	90%	90%	Pass
		6185	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6260	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass

Plots of EUT Tx waveform

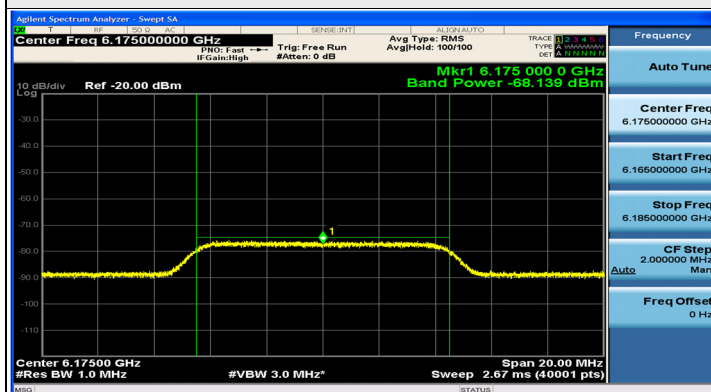


802.11ax (HE20) / CH45

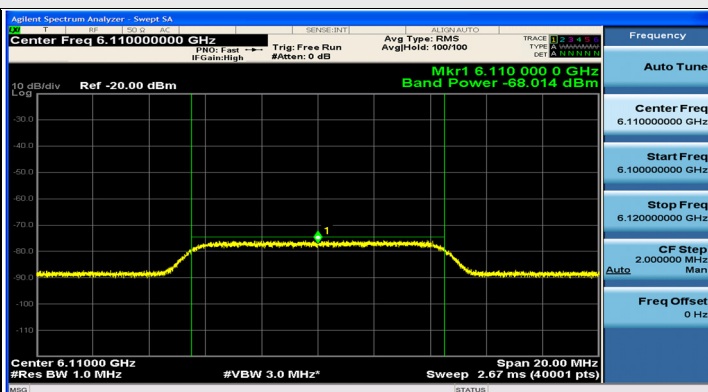


802.11ax (HE160) / CH47

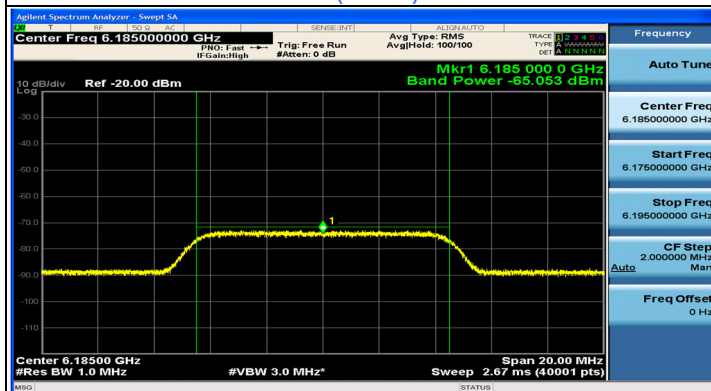
Plots of Injected signal (AWGN) level



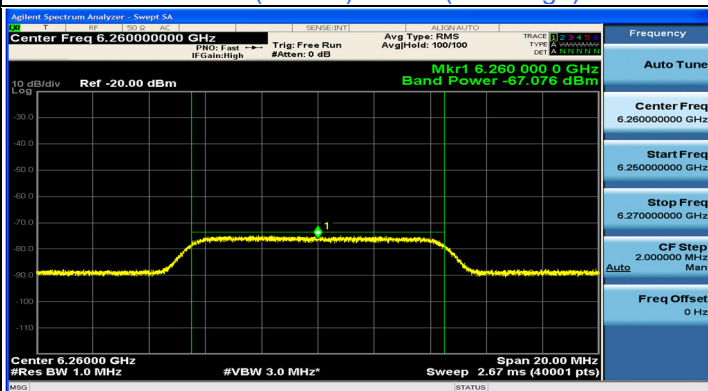
802.11ax (HE20) / CH45



802.11ax (HE160) / CH47(Low Edge)



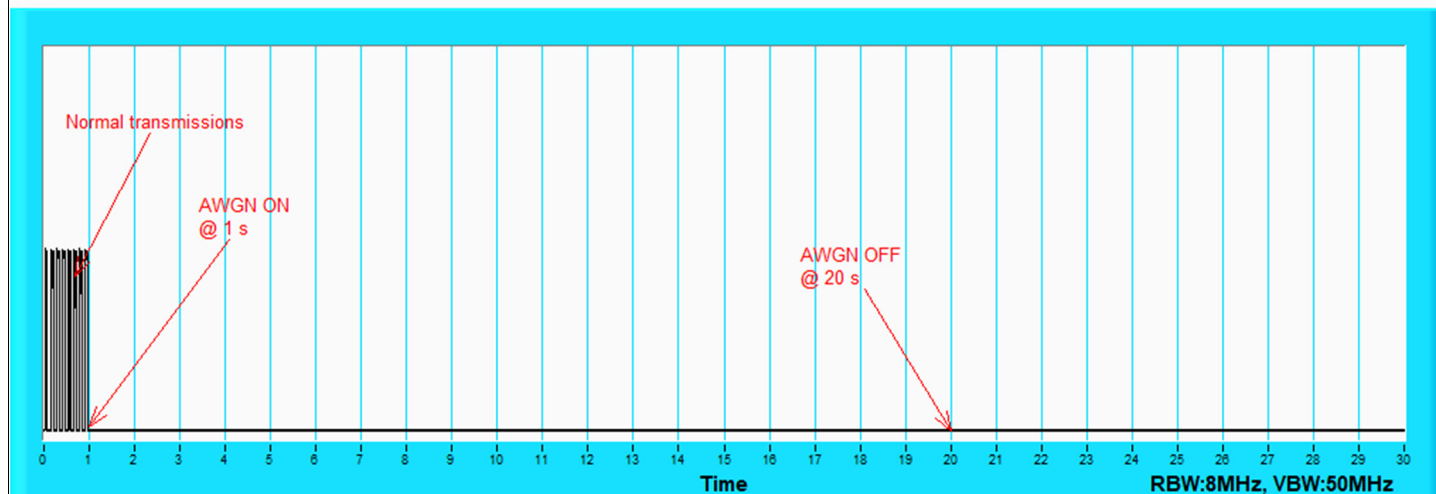
802.11ax (HE160) / CH47(Middle)



802.11ax (HE160) / CH47(High Edge)

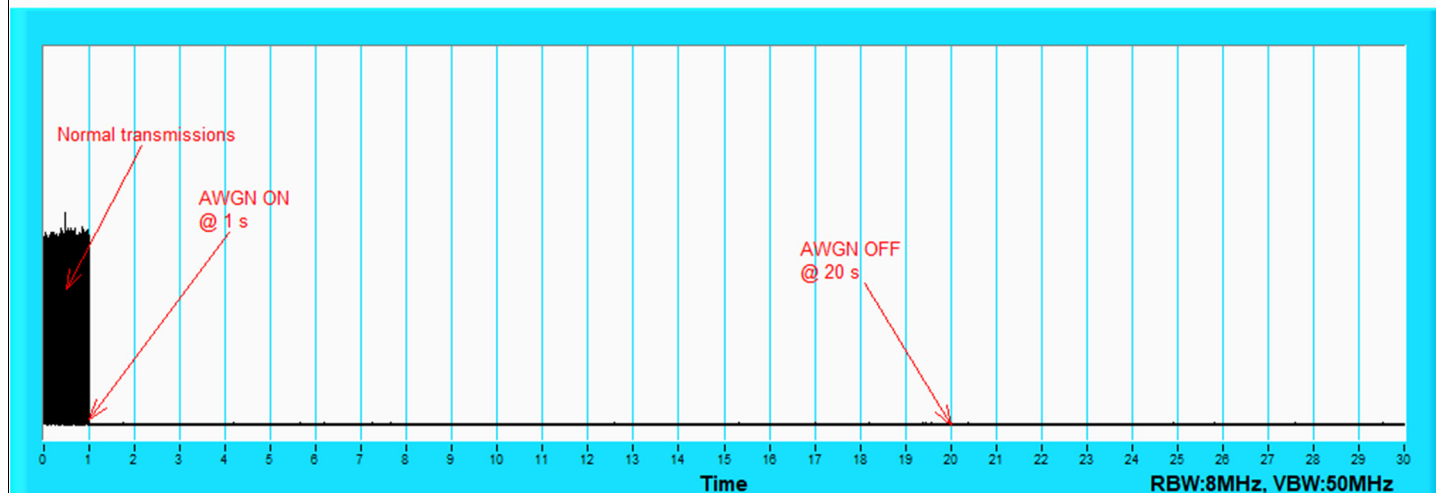
Plots of EUT ceased transmission in the time domain

CBP



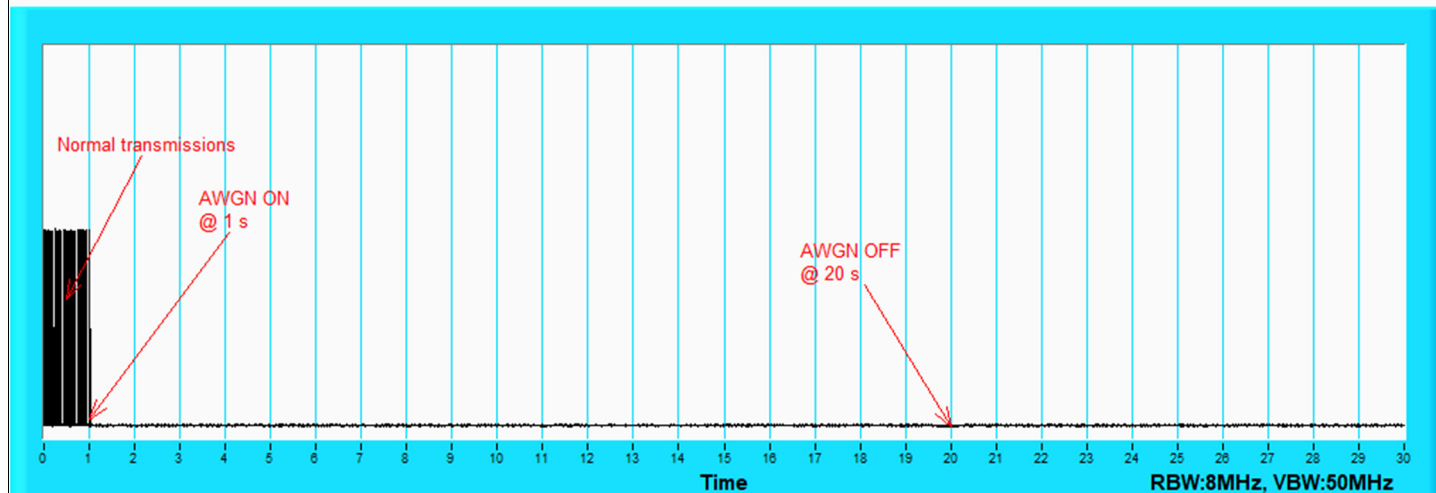
802.11ax (HE20) / CH45

CBP



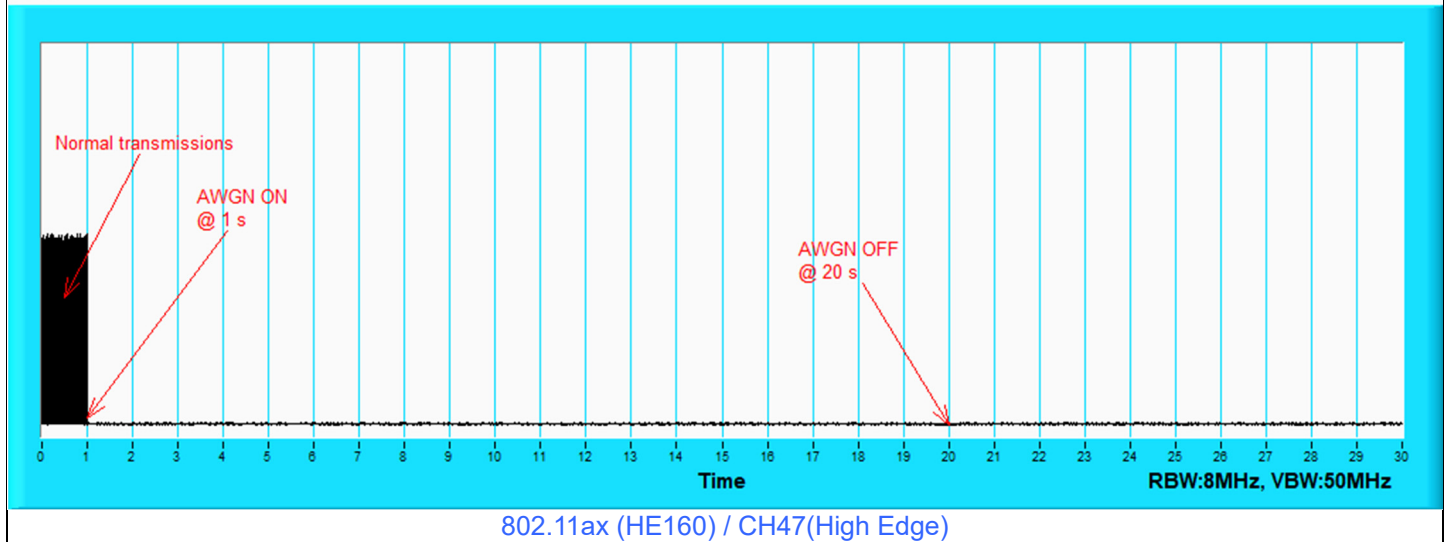
802.11ax (HE160) / CH47(Low Edge)

CBP



802.11ax (HE160) / CH47(Middle)

Plots of EUT ceased transmission in the time domain

CBP

For U-NII-6

Contention Based Protocol Measurement										
Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB) (Note 3)	Adjusted Power (dBm)	Detection Limit	EUT TX Status
				Freq. (MHz)	Power (dBm)					
802.11ax	20	105	6475	6475	-67	1.19	0	-68.19	-62	OFF
					-70	1.19	0	-71.19	-62	Minimal
					-80.81	1.19	0	-82	-62	ON
	160	111	6505	6430	-66	1.19	0	-67.19	-62	OFF
					-69	1.19	0	-70.19	-62	Minimal
					-80.81	1.19	0	-82	-62	ON
				6505	-62	1.19	0	-63.19	-62	OFF
					-66	1.19	0	-67.19	-62	Minimal
					-80.81	1.19	0	-82	-62	ON
				6580	-65	1.19	0	-66.19	-62	OFF
					-68	1.19	0	-69.19	-62	Minimal
					-80.81	1.19	0	-82	-62	ON

Notes:

1. After investigation (consider antenna gain and path loss) , the one representative port (Chain 0) was measured and presented in the report.
2. Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
3. Antenna gain values include all the applicable path losses.
4. This device does not use the channel puncturing and bandwidth reduction mechanisms for incumbent avoidance, but instead switches to other channels to perform its function.

Contention Based Protocol Detection Probability															
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11ax	20	6475	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
	160	6430	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6505	v	v	v	x	v	v	v	v	v	v	90%	90%	Pass
		6580	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass