

TEST REPORT

CERTIFICATE OF CONFORMITY

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

Report No.: RFBEIU-WTW-P25100525-4

FCC ID: MDZ-6856P6EC3M

Product: AMT6856C3M Wi-Fi Tri-band 2X2 11ax + Bluetooth 5.3 Combo Module

Brand: AmTRAN

Model No.: AMT6856C3M

Received Date: 2025/8/27

Test Date: 2025/12/11 ~ 2026/1/21

Issued Date: 2026/2/3

Applicant: Amtran Technology Co., Ltd.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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Test Location: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

FCC Registration / 198487 / TW2021

Designation Number:

Approved by: _____

Jeremy Lin

Jeremy Lin / Project Engineer

, Date: _____

2026/2/3

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Prepared by : Jessica Cheng / Senior Specialist



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Release Control Record

Issue No.	Description	Date Issued
RFBEIU-WTW-P25100525-4	Original release.	2026/2/3

1 Certificate

Product: AMT6856C3M Wi-Fi Tri-band 2X2 11ax + Bluetooth 5.3 Combo Module

Brand: AmTRAN

Test Model: AMT6856C3M

Sample Status: Engineering sample

Applicant: Amtran Technology Co., Ltd.

Test Date: 2025/12/11 ~ 2026/1/21

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

Measurement ANSI C63.10-2020

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 -15.32 dB at 0.46288 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -10.3 dB at 32.18 MHz
15.407(b)(6) 15.407(b)(10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.5 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	No antenna connector is used.

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) (±)
Maximum RF Output Power	-	1.1 dB
Maximum Power Spectral Density	-	1.3 dB
Occupied Bandwidth	-	960 Hz
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.9 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	2.55 dB
	30 MHz ~ 1 GHz	5.77 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 6 GHz	4.71 dB
	6 GHz ~ 18 GHz	5.3 dB
	18 GHz ~ 40 GHz	4.98 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	AMT6856C3M Wi-Fi Tri-band 2X2 11ax + Bluetooth 5.3 Combo Module
Brand	AmTRAN
Test Model	AMT6856C3M
Status of EUT	Engineering sample
Power Supply Rating	3.9 Vdc (system)
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
Resource Unit (RU)	Single RU: 26-tone, 52-tone, 106-tone, 242-tone, 484-tone, 996-tone Multi-RU (Large RU): 2 * 996-tone
Output Power	5.955 GHz ~ 6.415 GHz: EIRP: 80.868 mW (19.08 dBm) 6.435 GHz ~ 6.525 GHz: EIRP: 80.75 mW (19.07 dBm) 6.535 GHz ~ 6.865 GHz: EIRP: 81.435 mW (19.11 dBm) 6.875 GHz ~ 7.115 GHz: EIRP: 56.018 mW (17.48 dBm)
Equipment Class	6XD: 15E 6 GHz Low-power Indoor client

Note:

1. There are Bluetooth and WLAN (2.4 GHz & 5 GHz & 6 GHz) technologies used for the EUT.
2. Bluetooth, WLAN 2.4 GHz & WLAN 5 GHz & WLAN 6 GHz technologies cannot transmit at same time.
3. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna No.	RF Chain No.	Frequency range (GHz)	Gain (dBi)	Antenna Type	Connector Type
1(WIFI)	0/1	5.925~7.125	5.98	Dipole	ipex(MHF)

* 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 (RU26/52/106/242/484/996/996x2)	2TX	2RX
Note: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. The antenna can be used in the following ways: X / Y / Z axis. Pre-scan in these ways and find the worst case as a representative test condition. 2. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates.
Worst Case:	1. The antenna the worst case was found when positioned on (X / Y / Z axis): Y axis

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

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

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

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

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

3.5 Duty Cycle of Test Signal

802.11a: Duty cycle = 2.097 ms / 2.112 ms x 100% = 99.3%

802.11ax (HE20): Duty cycle = 5.45 ms / 5.459 ms x 100% = 99.8%

802.11ax (HE40): Duty cycle = 5.446 ms / 5.458 ms x 100% = 99.8%

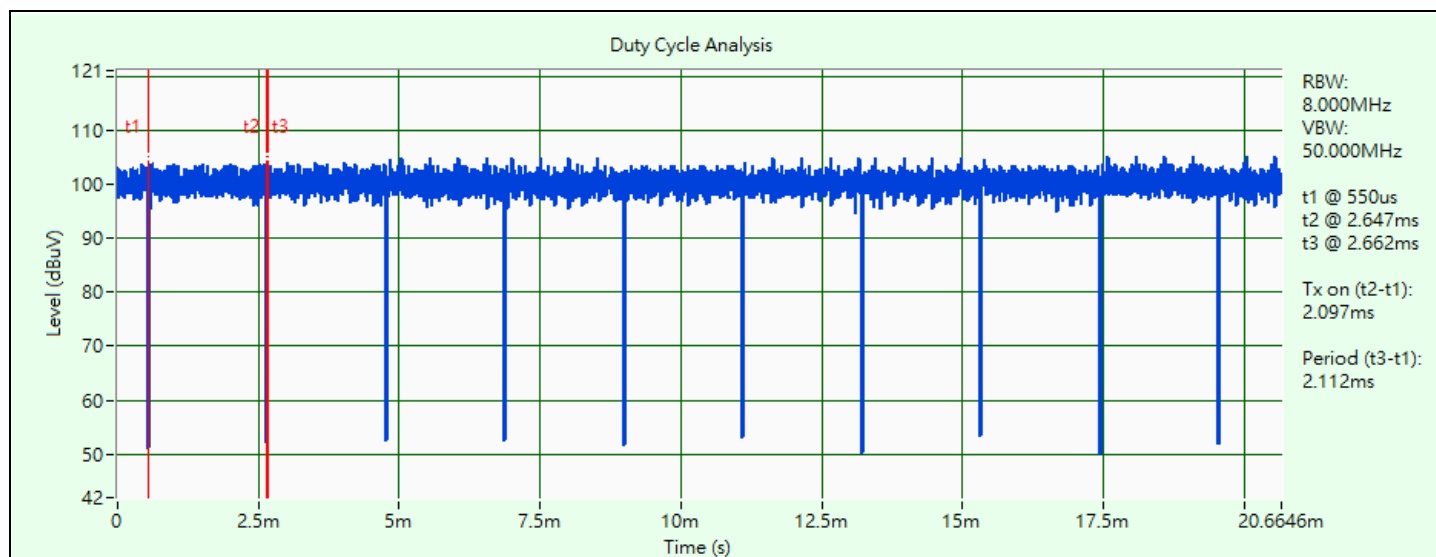
802.11ax (HE80): Duty cycle = 5.446 ms / 5.455 ms x 100% = 99.8%

802.11ax (HE160): Duty cycle = 5.449 ms / 5.459 ms x 100% = 99.8%

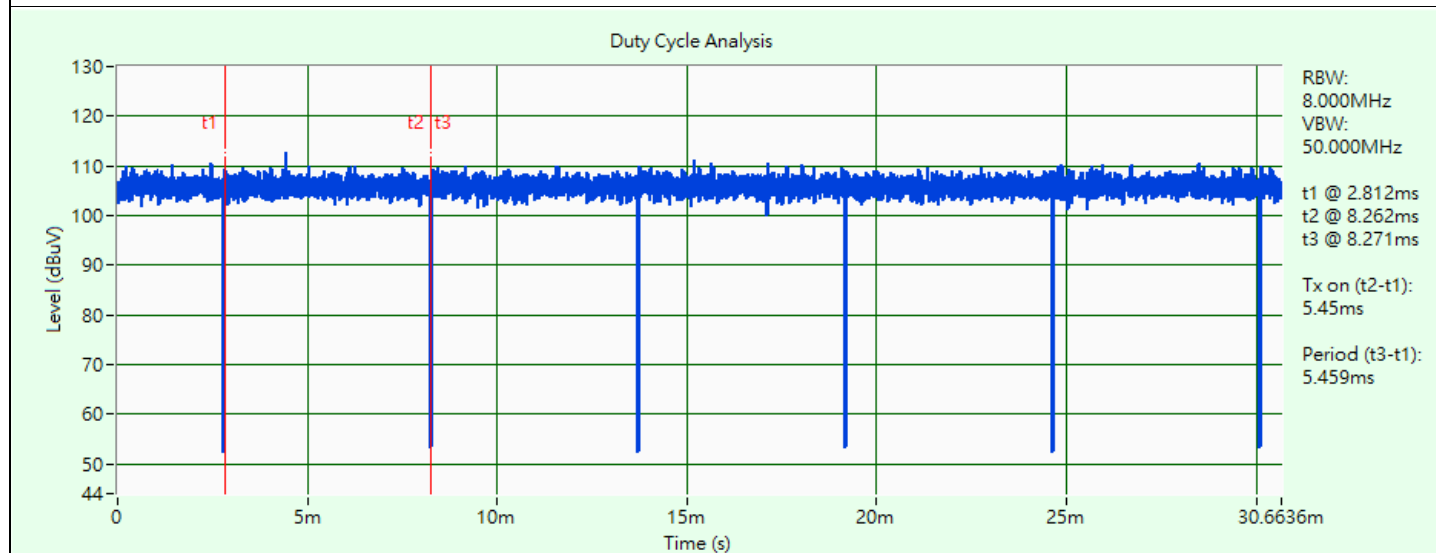
802.11ax (HE20) 26-tone RU: Duty cycle = 5.45 ms / 5.459 ms x 100% = 99.8%

802.11ax (HE20) 52-tone RU: Duty cycle = 5.45 ms / 5.459 ms x 100% = 99.8%

802.11ax (HE20) 106-tone RU: Duty cycle = 5.45 ms / 5.459 ms x 100% = 99.8%

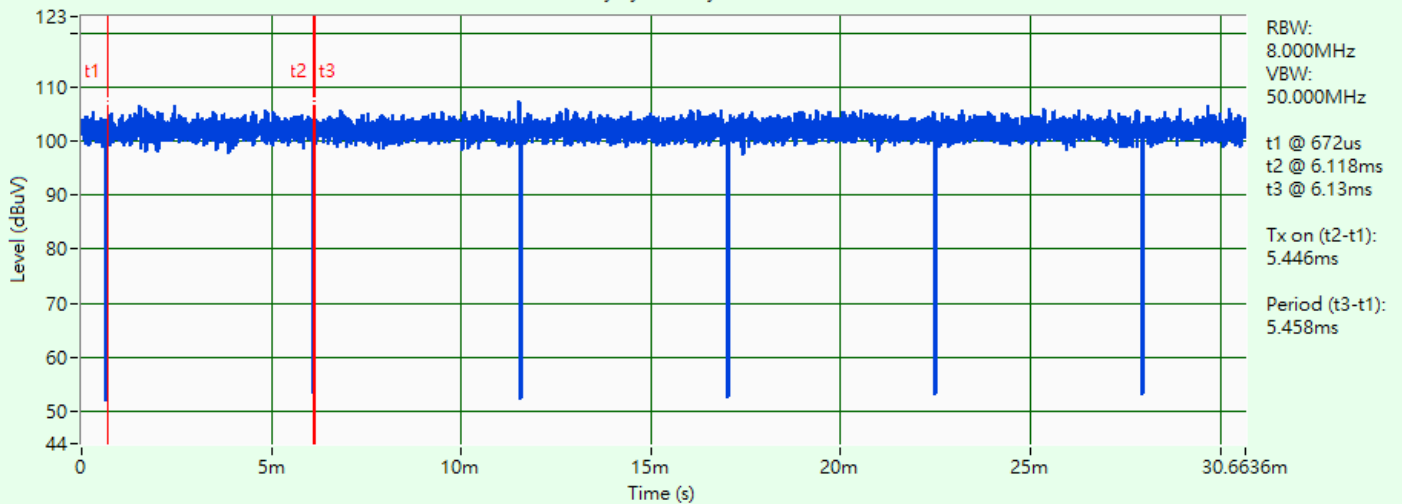


802.11a



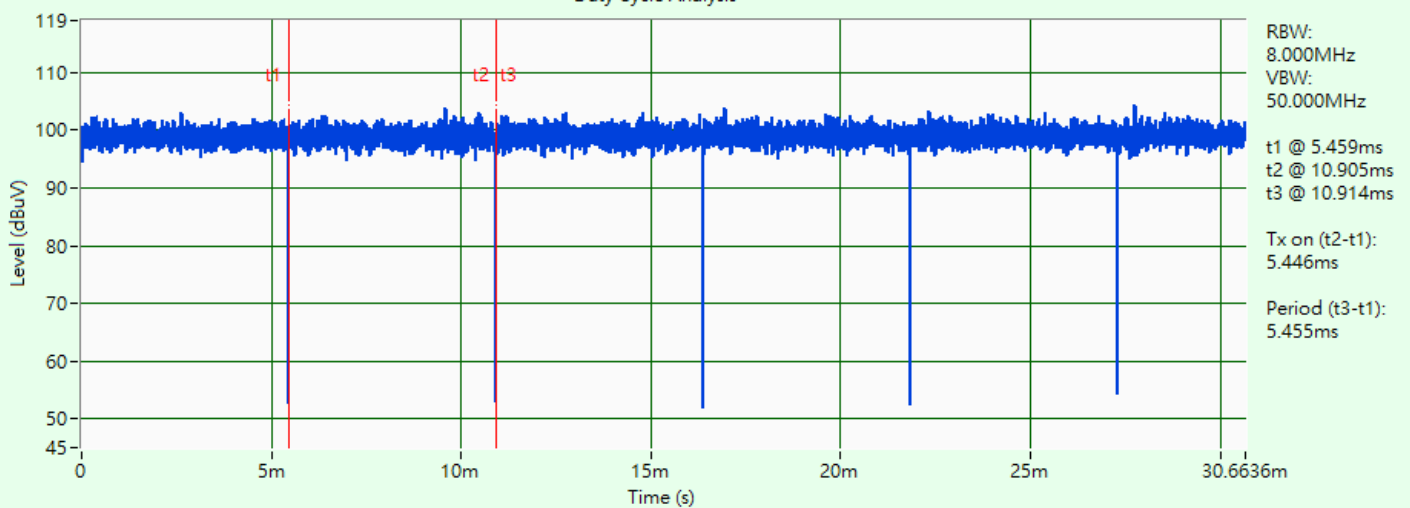
802.11ax (HE20)

Duty Cycle Analysis



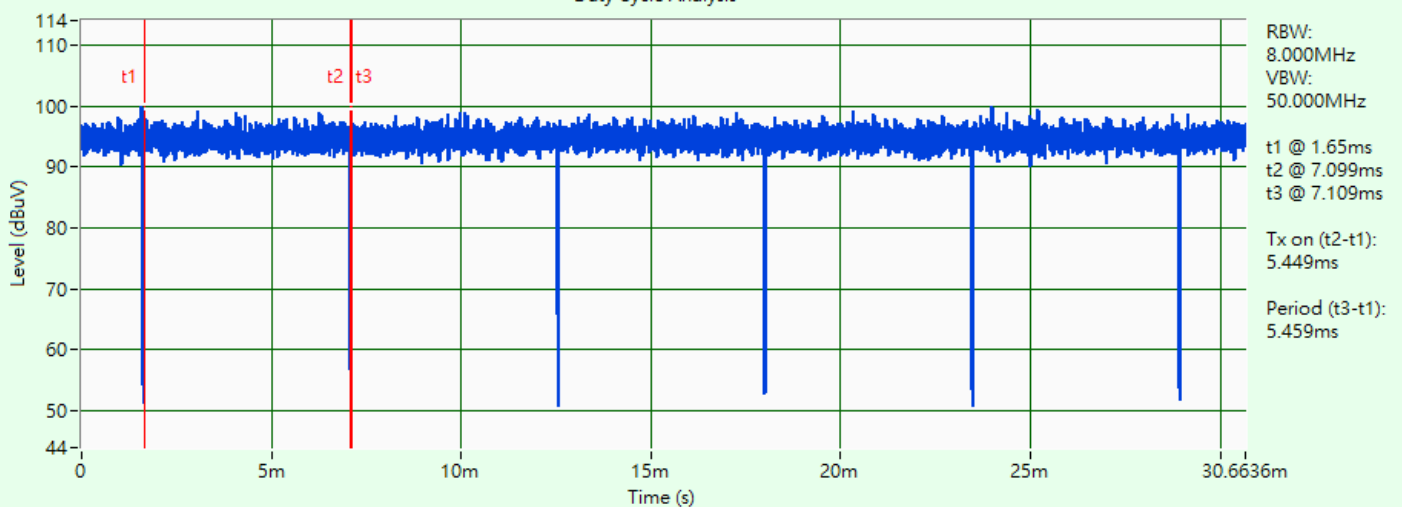
802.11ax (HE40)

Duty Cycle Analysis



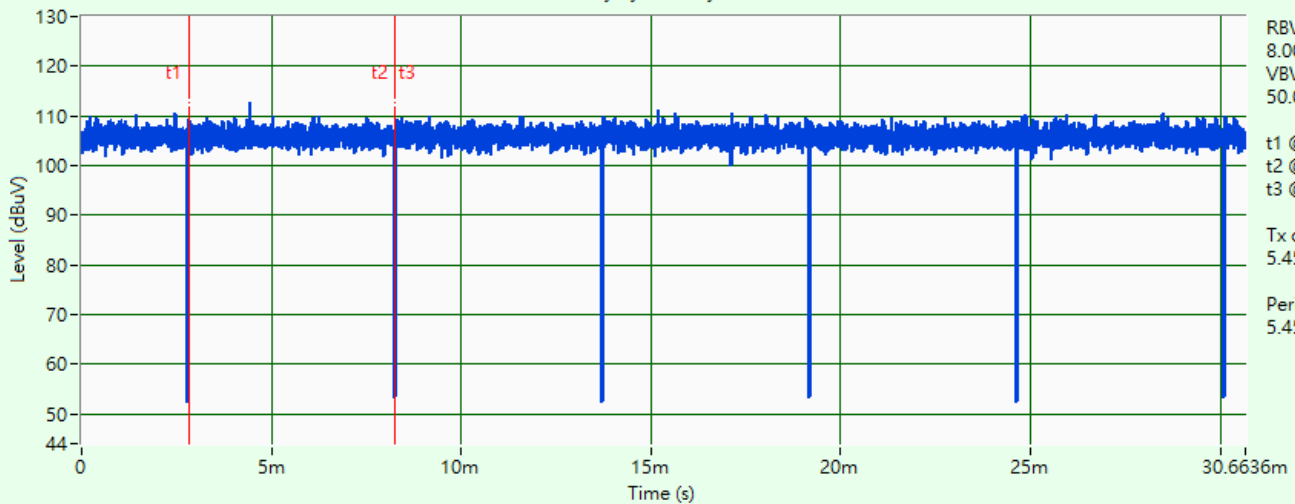
802.11ax (HE80)

Duty Cycle Analysis



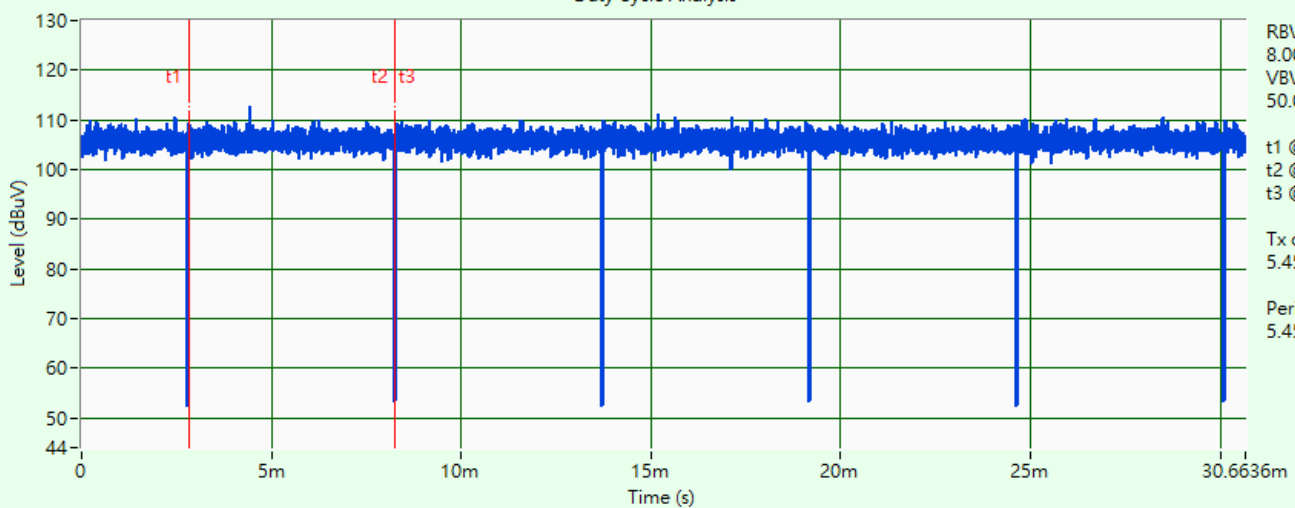
802.11ax (HE160)

Duty Cycle Analysis



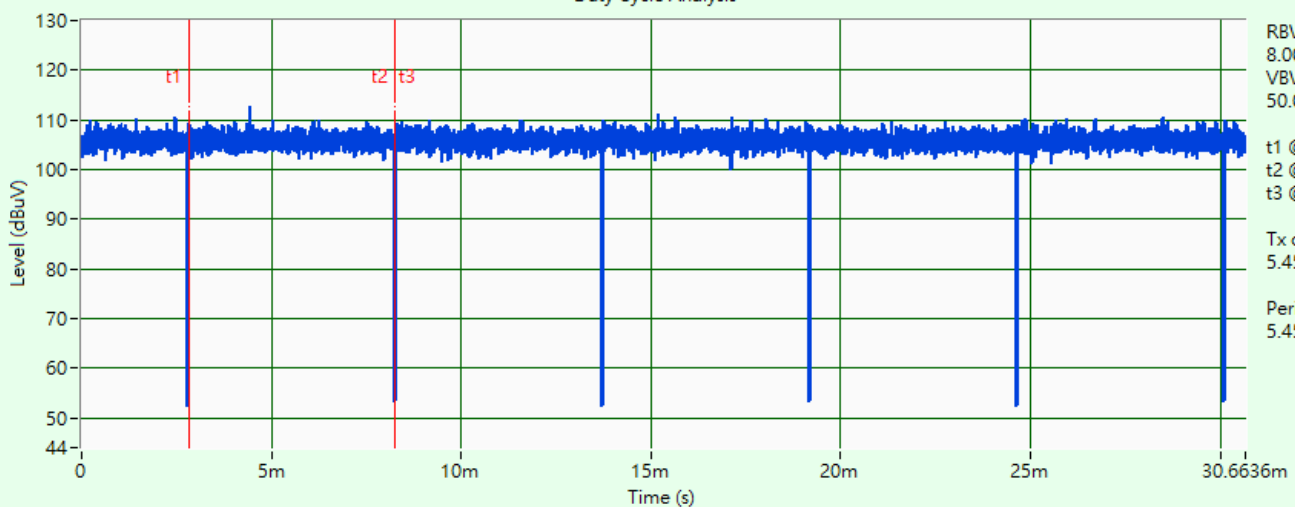
802.11ax (HE20) 26-tone RU

Duty Cycle Analysis



802.11ax (HE20) 52-tone RU

Duty Cycle Analysis

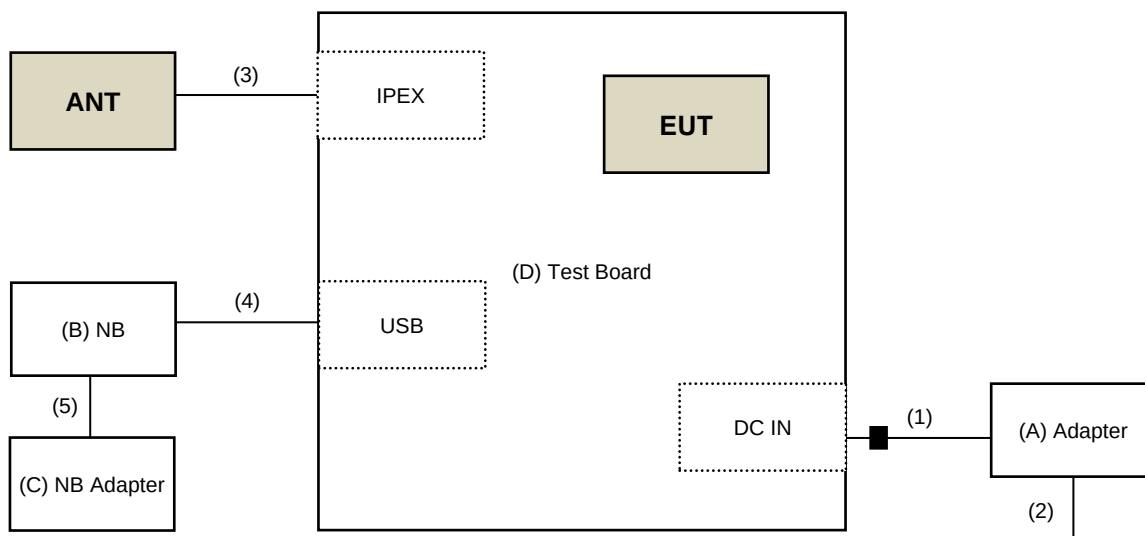


802.11ax (HE20) 106-tone RU

3.6 Test Program Used and Operation Descriptions

Controlling software (QRCT V4.1) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Adapter	LITEON	PA-1041-91	N/A	N/A	Supplied by applicant
B	NB	Lenovo	IdeaPad 5 15ITL05	N/A	N/A	Provided by Lab
C	NB Adapter	Lenovo	ADLX65CLGC05	N/A	N/A	Provided by Lab
D	Test Board	N/A	N/A	N/A	N/A	Supplied by applicant

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	Adapter DC cable	1	1.5	N	1	Supplied by applicant
2	Adapter AC cable	1	0.8	N	0	Supplied by applicant
3	ANT cable	3	0.105	N	0	Supplied by applicant
4	type C cable	1	1	Y	0	Provided by Lab
5	NB Adapter DC cable	1	1.8	N	0	Provided by Lab

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-20	00800A1K01A-20-02	2025/5/23	2026/5/22
Pulse Power Sensor Anritsu	MA2411B	1339443	2025/5/28	2026/5/27
RF Power Meter Anritsu	ML2495A	1529002	2025/6/3	2026/6/2
Wideband Power Sensor Keysight	N1923A	MY58020002	2025/1/21	2026/1/20

Notes:

1. The test was performed in LK - Oven
2. Tested Date: 2026/1/5

4.2 Maximum Power Spectral Density

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-20	00800A1K01A-20-02	2025/5/23	2026/5/22
PXA Signal Analyzer Keysight	N9030A	MY54490260	2025/7/24	2026/7/23
Signal Analyzer R&S	FSV40	101544	2025/7/1	2026/6/30
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in LK - Oven
2. Tested Date: 2026/1/5

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 KEYSIGHT	N5182B	MY53050430	2025/12/5	2026/12/4
	N5182BU(N5182BX07)	MY59360189	2025/12/5	2026/12/4
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	2025/11/14	2026/11/13

Notes:

1. The test was performed in Linkou - Adaptivity room.
2. Tested Date: 2026/1/21

4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance LYNICS	0900510	E1-01-305	2025/2/20	2026/2/19
		E1-01-306	2025/4/16	2026/4/15
DC LISN R&S	ESH3-Z6	100219	2025/7/10	2026/7/9
		844950/018	2025/7/10	2026/7/9
Diode Pulse Limiter Schwarzbeck	VTSD 9561 F-N	01631	2025/5/2	2026/5/1
EMI Test Receiver R&S	EPL 1000	101064	2025/4/17	2026/4/16
		101065	2025/4/22	2026/4/21
	ESR3	102412	2025/12/23	2026/12/22
High Pass Filter EMCI	150HPF-ME	114005	2025/5/2	2026/5/1
		114006	2025/5/2	2026/5/1
	150HPF-MF	113009	2025/5/2	2026/5/1
High Voltage Probe Schwarzbeck	TK9420	00982	2025/12/3	2026/12/2
LISN R&S	ENV216	101195	2025/7/18	2026/7/17
		101196	2025/5/19	2026/5/18
		101197	2025/7/4	2026/7/3
LISN Schwarzbeck	NNLK 8121	8121-731	2025/6/10	2026/6/9
		8121-00759	2025/8/12	2026/8/11
		8121-808	2025/4/23	2026/4/22
	NNLK 8129	00624	2025/10/9	2026/10/8
		8129229	2025/10/14	2026/10/13
	NSLK 8128	8128-244	2025/11/11	2026/11/10
Passive Voltage Probe R&S	ESH2-Z3	100073	2025/5/26	2026/5/25
RF Coaxial Cable PEWC	5D-FB	Cable-CO5-01	2025/1/17	2026/1/16
Software BVADT	Cond_V7.4.1.0	N/A	N/A	N/A

Notes:

1. The test was performed in Linkou Conduction 5.
2. Tested Date: 2025/12/30

4.8 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bi_Log Antenna Schwarzbeck	VULB 9168	137	2025/9/17	2026/9/16
Coupling / Decoupling Network Schwarzbeck	CDNE-M2	00097	2025/5/28	2026/5/27
	CDNE-M3	00091	2025/3/20	2026/3/19
MXE EMI Receiver Agilent	N9038A	MY51210114	2025/2/10	2026/2/9
Preamplifier Agilent	8447D	2944A11064	2025/2/14	2026/2/13
Radiating Loop Antenna TESEQ	RLA 6120-20	80002	2025/7/29	2026/7/28
RF Coaxial Cable Pacific	8D-FB	Cable-CH6-02	2025/6/24	2026/6/23
Signal Analyzer R&S	FSV40	101544	2025/7/1	2026/6/30
Software BVADT	Radiated_V7.7.1.1.1	N/A	N/A	N/A
Tower ADT	AT100	0306	N/A	N/A
Turn Table ADT	TT100	0306	N/A	N/A

Notes:

1. The test was performed in Linkou 966 Chamber 6 (CH 6).
2. Tested Date: 2025/12/29

4.9 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight antenna tower fixture BV	BAF-02	6	N/A	N/A
High Pass Filter Wainwright	WHK 3.1/18G-10SS	SN 8	2025/5/22	2026/5/21
Horn Antenna EMCO	3115	00028257	2025/11/9	2026/11/8
Horn Antenna ETS-Lindgren	3117-PA	00215857	2025/11/9	2026/11/8
Horn Antenna Schwarzbeck	BBHA 9170	212	2025/10/28	2026/10/27
		BBHA9170190	2025/11/9	2026/11/8
MXE EMI Receiver Agilent	N9038A	MY51210114	2025/2/10	2026/2/9
Notch Filter Micro-Tronics	BRC50703-01	010	2025/5/22	2026/5/21
	BRM17690	005	2025/5/22	2026/5/21
Preamplifier EMCI	EMC0126545	980076	2025/2/14	2026/2/13
	EMC184045B	980175	2025/8/23	2026/8/22
		980235	2025/2/14	2026/2/13
Preamplifier HP	8449B	3008A01201	2025/2/14	2026/2/13
RF Coaxial Cable EMCI	EMC104	190801	2025/7/4	2026/7/3
		190804	2025/7/4	2026/7/3
RF Coaxial Cable EMEC	EM102-KMKM-100	02	2025/7/4	2026/7/3
RF Coaxial Cable HUBER+SUHNER	SF-104	Cable-CH6-01	2025/7/4	2026/7/3
Signal Analyzer R&S	FSV40	101042	2025/9/19	2026/9/18
		101544	2025/7/1	2026/6/30
Software BVADT	Radiated_V7.7.1.1.1	N/A	N/A	N/A
Tower ADT	AT100	0306	N/A	N/A
Turn Table ADT	TT100	0306	N/A	N/A

Notes:

1. The test was performed in Linkou 966 Chamber 6 (CH 6).
2. Tested Date: 2025/12/11 ~ 2025/12/25

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)

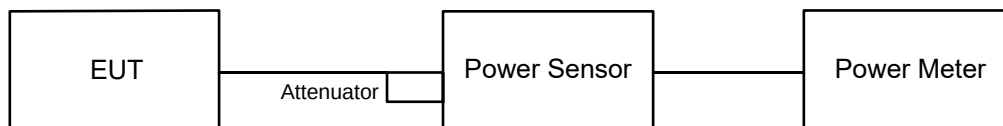
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

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.

6.2 Maximum Power Spectral Density

6.2.1 Test Setup



6.2.2 Test Procedure

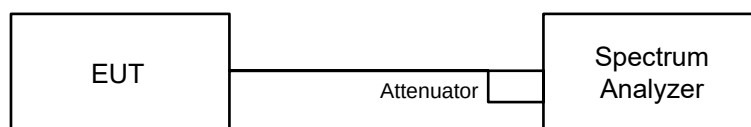
For specified measurement bandwidth 1 MHz:

Method SA-1

- Set span to encompass the entire 99% OBW 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

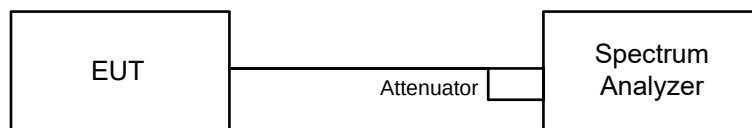


6.3.2 Test Procedure

- Set RBW = shall be in the range of 1% to 5% 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 instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is in the range of 1% to 5%.

6.4 In-Band Emission Mask

6.4.1 Test Setup

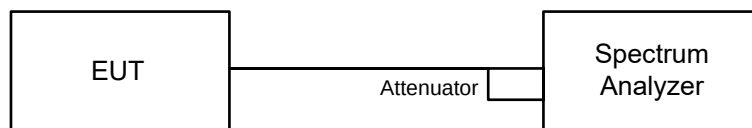


6.4.2 Test Procedure

- a. Connect output of the antenna port to a spectrum analyzer and adjust appropriate attenuation.
- b. Measure the 26 dB EBW using the test procedure 12.5.2 of ANSI C63.10-2020. (This will be used to determine the channel edge.)
- c. Measure the power spectral density (for emissions mask reference) using the following procedure:
 - a) Set the span to encompass the entire 26 dB EBW of the signal.
 - b) Set RBW = same RBW used for 26 dB EBW measurement.
 - c) Set VBW $\geq 3 \times$ RBW
 - d) Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$.
 - e) Sweep time = auto.
 - f) Detector = RMS (i.e., power averaging)
 - g) Trace average at least 100 traces in power averaging (rms) mode.
 - h) Use the peak search function on the instrument to find the peak of the spectrum.
- a. 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:
 - a) 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.)
 - b) Suppressed by 28 dB at one channel bandwidth from the channel center.
 - c) Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
- a. Adjust the span to encompass the entire mask as necessary and clear trace.
- b. Trace average at least 100 traces in power averaging (rms) mode.
- c. 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



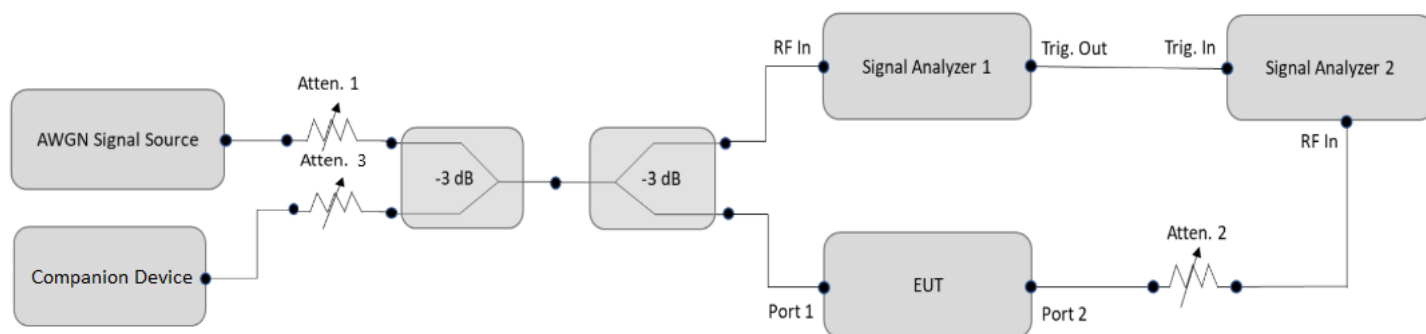
6.5.2 Test Procedure

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

- The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be at least three times the RBW, unless otherwise specified by the applicable requirement.
- Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level.
- Step a) through step c) might require iteration to adjust within the specified range.
- Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max-hold mode (until the trace stabilizes) shall be used.
- Use the 99% power bandwidth function of the instrument and report the measured bandwidth.

6.6 Contention-based Protocol

6.6.1 Test Setup



6.6.2 Test Procedure

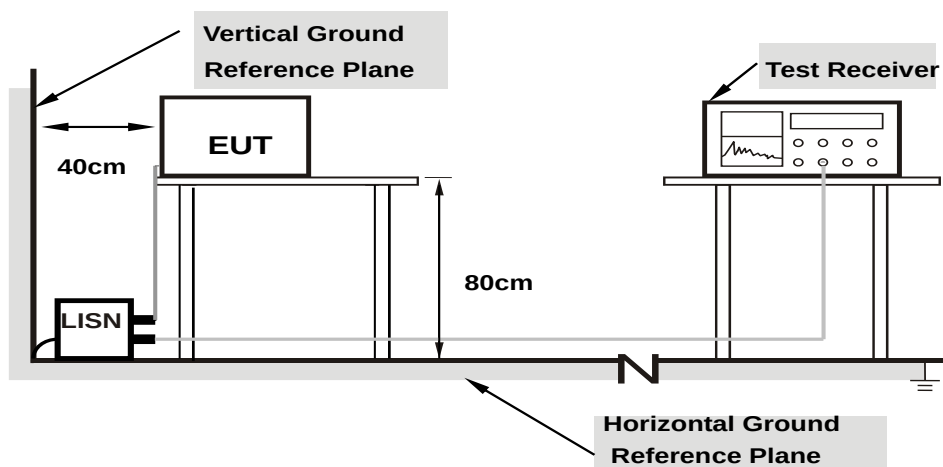
- Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2. Ensure that the attenuator 2 provides enough attenuation 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

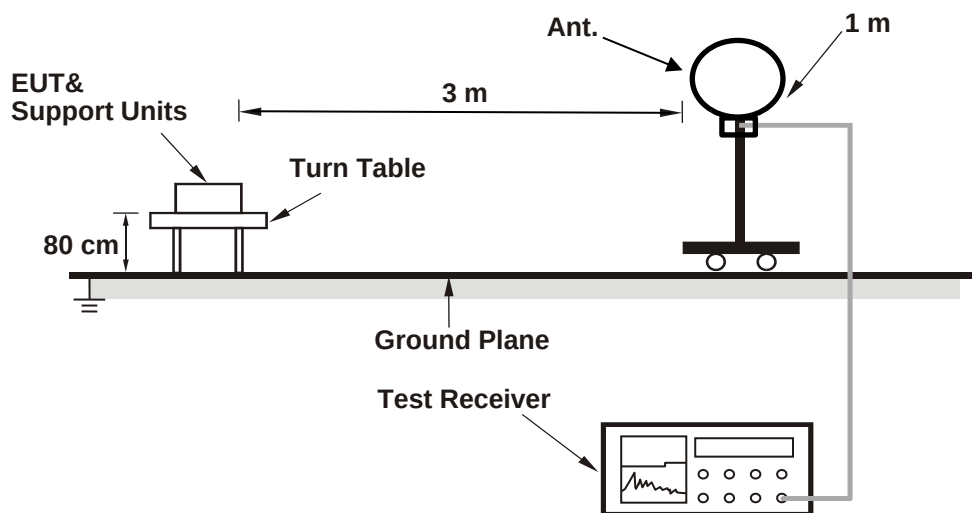
- Exploratory ac power-line conducted emission measurements: The EUT shall be operated on the mid channel and in the mode with highest output power unless the fundamental operates in the AC power-line emission test range then the EUT shall be operated in the range of typical modes of operation.
- The 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.

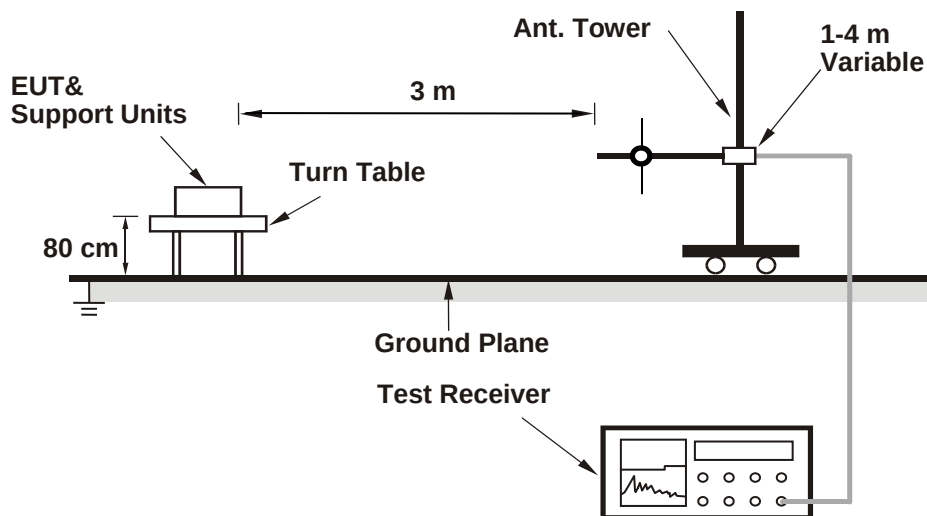
6.8 Unwanted Emissions below 1 GHz

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 (however, peak detector measurements may be used to determine compliance with QP requirements), 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

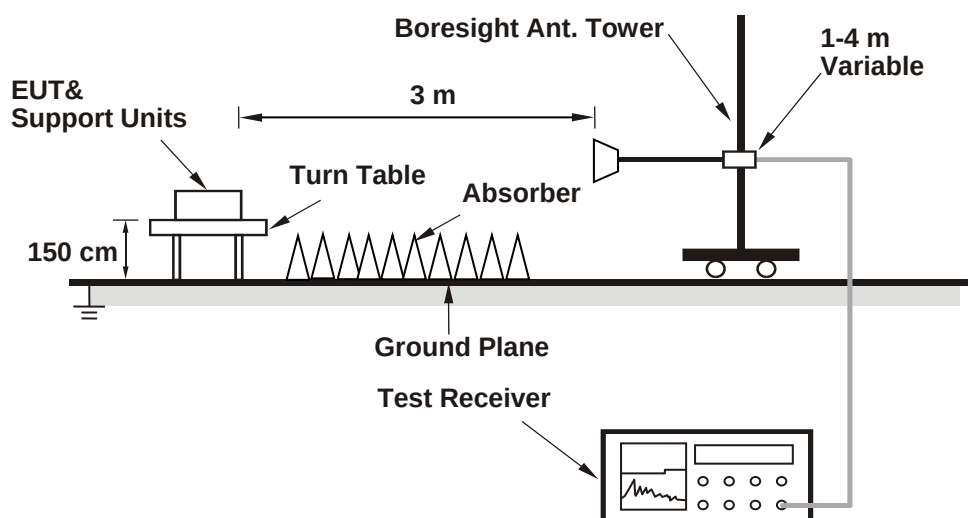
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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(QP) detect function, Average(AV) detect function, Peak(PK) detect function and specified bandwidth with maximum hold mode when the test frequencies less than or equal to 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 (however, peak detector measurements may be used to determine compliance with QP requirements).
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.
- 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 (System):	3.9 Vdc	Environmental Conditions:	25°C, 76% RH	Tested By:	Dalen Dai
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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	0.04	-0.39	1.9234	2.84	5.98	7.622	8.82	24	Pass
45	6175	0.19	0.11	2.07	3.16	5.98	8.203	9.14	24	Pass
93	6415	0.29	0.26	2.131	3.29	5.98	8.445	9.27	24	Pass
97	6435	0.46	0.25	2.171	3.37	5.98	8.603	9.35	24	Pass
105	6475	0.27	0.18	2.106	3.23	5.98	8.346	9.21	24	Pass
113	6515	0.43	0.02	2.109	3.24	5.98	8.358	9.22	24	Pass
117	6535	0.43	0.31	2.178	3.38	5.98	8.631	9.36	24	Pass
149	6695	0.46	0.27	2.176	3.38	5.98	8.623	9.36	24	Pass
181	6855	0.42	0.19	2.146	3.32	5.98	8.504	9.3	24	Pass
185	6875	0.34	0.26	2.143	3.31	5.98	8.492	9.29	24	Pass
209	6995	-0.19	-0.34	1.8819	2.75	5.98	7.458	8.73	24	Pass
233	7115	-1.28	-1.37	1.4742	1.69	5.98	5.842	7.67	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 5.98 dBi.
3. For U-NII-6, The maximum gain is 5.98 dBi.
4. For U-NII-7, The maximum gain is 5.98 dBi.
5. For U-NII-8, The maximum gain is 5.98 dBi.

802.11ax (HE20)

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	0.98	0.66	2.417	3.83	5.98	9.578	9.81	24	Pass
45	6175	1.42	1.08	2.669	4.26	5.98	10.577	10.24	24	Pass
93	6415	1.29	1.18	2.658	4.25	5.98	10.533	10.23	24	Pass
97	6435	1.31	1.04	2.623	4.19	5.98	10.394	10.17	24	Pass
105	6475	1.06	0.99	2.532	4.03	5.98	10.034	10.01	24	Pass
113	6515	1.25	0.88	2.558	4.08	5.98	10.137	10.06	24	Pass
117	6535	1.17	1.10	2.597	4.14	5.98	10.291	10.12	24	Pass
149	6695	1.20	1.06	2.595	4.14	5.98	10.283	10.12	24	Pass
181	6855	1.19	0.94	2.557	4.08	5.98	10.133	10.06	24	Pass
185	6875	1.15	0.97	2.553	4.07	5.98	10.117	10.05	24	Pass
209	6995	0.05	-0.27	1.9513	2.90	5.98	7.733	8.88	24	Pass
233	7115	-1.03	-1.14	1.558	1.93	5.98	6.174	7.91	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 5.98 dBi.
3. For U-NII-6, The maximum gain is 5.98 dBi.
4. For U-NII-7, The maximum gain is 5.98 dBi.
5. For U-NII-8, The maximum gain is 5.98 dBi.

802.11ax (HE40)

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	4.17	3.92	5.078	7.06	5.98	20.123	13.04	24	Pass
43	6165	4.19	3.87	5.062	7.04	5.98	20.06	13.02	24	Pass
91	6405	4.16	3.90	5.061	7.04	5.98	20.056	13.02	24	Pass
99	6445	4.13	3.85	5.015	7.00	5.98	19.873	12.98	24	Pass
107	6485	3.56	4.43	5.043	7.03	5.98	19.984	13.01	24	Pass
115	6525	3.61	4.32	5	6.99	5.98	19.814	12.97	24	Pass
123	6565	3.63	4.41	5.067	7.05	5.98	20.079	13.03	24	Pass
155	6725	4.42	3.52	5.016	7.00	5.98	19.877	12.98	24	Pass
179	6845	4.10	4.03	5.1	7.08	5.98	20.21	13.06	24	Pass
187	6885	4.13	4.05	5.129	7.10	5.98	20.325	13.08	24	Pass
211	7005	2.25	1.96	3.249	5.12	5.98	12.875	11.1	24	Pass
227	7085	2.08	1.64	3.073	4.88	5.98	12.178	10.86	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 5.98 dBi.
3. For U-NII-6, The maximum gain is 5.98 dBi.
4. For U-NII-7, The maximum gain is 5.98 dBi.
5. For U-NII-8, The maximum gain is 5.98 dBi.

802.11ax (HE80)

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	7.21	6.84	10.091	10.04	5.98	39.988	16.02	24	Pass
39	6145	7.14	6.79	9.951	9.98	5.98	39.434	15.96	24	Pass
87	6385	7.13	6.80	9.95	9.98	5.98	39.43	15.96	24	Pass
103	6465	7.15	6.86	10.041	10.02	5.98	39.79	16	24	Pass
119	6545	7.50	6.37	9.959	9.98	5.98	39.465	15.96	24	Pass
151	6705	7.46	6.51	10.049	10.02	5.98	39.822	16	24	Pass
183	6865	7.13	7.06	10.246	10.11	5.98	40.603	16.09	24	Pass
199	6945	7.04	7.02	10.093	10.04	5.98	39.996	16.02	24	Pass
215	7025	5.23	4.90	6.425	8.08	5.98	25.461	14.06	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 5.98 dBi.
3. For U-NII-6, The maximum gain is 5.98 dBi.
4. For U-NII-7, The maximum gain is 5.98 dBi.
5. For U-NII-8, The maximum gain is 5.98 dBi.

802.11ax (HE160)

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	10.23	9.94	20.407	13.10	5.98	80.868	19.08	24	Pass
47	6185	10.12	9.89	20.03	13.02	5.98	79.374	19	24	Pass
79	6345	10.10	9.85	19.893	12.99	5.98	78.832	18.97	24	Pass
111	6505	10.82	9.19	20.377	13.09	5.98	80.75	19.07	24	Pass
143	6665	10.77	9.35	20.55	13.13	5.98	81.435	19.11	24	Pass
175	6825	10.45	9.47	19.943	13.00	5.98	79.03	18.98	24	Pass
207	6985	8.22	8.75	14.136	11.50	5.98	56.018	17.48	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 5.98 dBi.
3. For U-NII-6, The maximum gain is 5.98 dBi.
4. For U-NII-7, The maximum gain is 5.98 dBi.
5. For U-NII-8, The maximum gain is 5.98 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	-8.32	-8.47	0.2895	-5.38	5.98	1.147	0.6	24	Pass
45	6175	-8.17	-8.39	0.2973	-5.27	5.98	1.178	0.71	24	Pass
93	6415	-8.12	-8.31	0.3017	-5.20	5.98	1.196	0.78	24	Pass
97	6435	-8.11	-8.29	0.3028	-5.19	5.98	1.2	0.79	24	Pass
105	6475	-8.09	-8.27	0.3042	-5.17	5.98	1.205	0.81	24	Pass
113	6515	-8.09	-8.43	0.2988	-5.25	5.98	1.184	0.73	24	Pass
117	6535	-8.06	-8.33	0.3032	-5.18	5.98	1.202	0.8	24	Pass
149	6695	-8.13	-8.38	0.299	-5.24	5.98	1.185	0.74	24	Pass
181	6855	-8.06	-8.20	0.3077	-5.12	5.98	1.219	0.86	24	Pass
185	6875	-7.91	-8.03	0.3192	-4.96	5.98	1.265	1.02	24	Pass
209	6995	-7.38	-6.88	0.3879	-4.11	5.98	1.537	1.87	24	Pass
233	7115	-15.33	-15.41	0.05808	-12.36	5.98	0.2302	-6.38	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 5.98 dBi.
3. For U-NII-6, The maximum gain is 5.98 dBi.
4. For U-NII-7, The maximum gain is 5.98 dBi.
5. For U-NII-8, The maximum gain is 5.98 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	-5.47	-5.73	0.5511	-2.59	5.98	2.184	3.39	24	Pass
45	6175	-5.28	-5.41	0.5842	-2.33	5.98	2.315	3.65	24	Pass
93	6415	-5.13	-5.22	0.6075	-2.16	5.98	2.407	3.82	24	Pass
97	6435	-5.24	-5.39	0.5883	-2.30	5.98	2.331	3.68	24	Pass
105	6475	-5.38	-5.44	0.5755	-2.40	5.98	2.281	3.58	24	Pass
113	6515	-5.17	-5.28	0.6006	-2.21	5.98	2.38	3.77	24	Pass
117	6535	-5.08	-5.31	0.6049	-2.18	5.98	2.397	3.8	24	Pass
149	6695	-5.12	-5.27	0.6048	-2.18	5.98	2.397	3.8	24	Pass
181	6855	-5.07	-5.24	0.6104	-2.14	5.98	2.419	3.84	24	Pass
185	6875	-4.90	-5.06	0.6355	-1.97	5.98	2.518	4.01	24	Pass
209	6995	-4.76	-4.89	0.6585	-1.81	5.98	2.609	4.17	24	Pass
233	7115	-10.06	-10.17	0.19479	-7.10	5.98	0.7719	-1.12	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 5.98 dBi.
3. For U-NII-6, The maximum gain is 5.98 dBi.
4. For U-NII-7, The maximum gain is 5.98 dBi.
5. For U-NII-8, The maximum gain is 5.98 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	-2.38	-2.66	1.1201	0.49	5.98	4.439	6.47	24	Pass
45	6175	-2.49	-2.15	1.1732	0.69	5.98	4.649	6.67	24	Pass
93	6415	-2.11	-2.34	1.1986	0.79	5.98	4.75	6.77	24	Pass
97	6435	-2.08	-2.16	1.2276	0.89	5.98	4.865	6.87	24	Pass
105	6475	-2.26	-2.42	1.1671	0.67	5.98	4.625	6.65	24	Pass
113	6515	-2.14	-2.30	1.1998	0.79	5.98	4.755	6.77	24	Pass
117	6535	-2.11	-2.37	1.1946	0.77	5.98	4.734	6.75	24	Pass
149	6695	-2.08	-2.29	1.2096	0.83	5.98	4.793	6.81	24	Pass
181	6855	-2.16	-2.33	1.1929	0.77	5.98	4.727	6.75	24	Pass
185	6875	-2.11	-2.24	1.2122	0.84	5.98	4.804	6.82	24	Pass
209	6995	-1.88	-2.43	1.2201	0.86	5.98	4.835	6.84	24	Pass
233	7115	-8.18	-8.27	0.301	-5.21	5.98	1.193	0.77	24	Pass

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-5, The maximum gain is 5.98 dBi.
3. For U-NII-6, The maximum gain is 5.98 dBi.
4. For U-NII-7, The maximum gain is 5.98 dBi.
5. For U-NII-8, The maximum gain is 5.98 dBi.

7.2 Maximum Power Spectral Density

Input Power (System):	3.9 Vdc	Environmental Conditions:	25°C, 76% RH	Tested By:	Dalen Dai
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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	-13.11	-13.40	-10.24	8.99	-1.25	-1	Pass
45	6175	-13.04	-13.20	-10.11	8.99	-1.12	-1	Pass
93	6415	-13.01	-13.21	-10.10	8.99	-1.11	-1	Pass
97	6435	-12.96	-13.16	-10.05	8.99	-1.06	-1	Pass
105	6475	-13.19	-13.38	-10.27	8.99	-1.28	-1	Pass
113	6515	-12.98	-13.41	-10.18	8.99	-1.19	-1	Pass
117	6535	-12.99	-13.14	-10.05	8.99	-1.06	-1	Pass
149	6695	-12.96	-13.19	-10.06	8.99	-1.07	-1	Pass
181	6855	-12.98	-13.28	-10.12	8.99	-1.13	-1	Pass
185	6875	-13.18	-13.29	-10.22	8.99	-1.23	-1	Pass
209	6995	-13.21	-13.39	-10.29	8.99	-1.3	-1	Pass
233	7115	-13.15	-13.31	-10.22	8.99	-1.23	-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 = gain of antenna element + 10 log (2 of TX antenna elements)
3. For U-NII-5, The directional gain is 8.99 dBi.
4. For U-NII-6, The directional gain is 8.99 dBi.
5. For U-NII-7, The directional gain is 8.99 dBi.
6. For U-NII-8, The directional gain is 8.99 dBi.

802.11ax (HE20)

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	-13.20	-13.57	-10.37	8.99	-1.38	-1	Pass
45	6175	-13.06	-13.41	-10.22	8.99	-1.23	-1	Pass
93	6415	-13.28	-13.41	-10.33	8.99	-1.34	-1	Pass
97	6435	-13.21	-13.46	-10.32	8.99	-1.33	-1	Pass
105	6475	-13.31	-13.46	-10.37	8.99	-1.38	-1	Pass
113	6515	-13.14	-13.45	-10.28	8.99	-1.29	-1	Pass
117	6535	-13.20	-13.29	-10.23	8.99	-1.24	-1	Pass
149	6695	-13.16	-13.27	-10.20	8.99	-1.21	-1	Pass
181	6855	-13.16	-13.41	-10.27	8.99	-1.28	-1	Pass
185	6875	-13.26	-13.43	-10.33	8.99	-1.34	-1	Pass
209	6995	-13.07	-13.34	-10.19	8.99	-1.2	-1	Pass
233	7115	-13.15	-13.27	-10.20	8.99	-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 = gain of antenna element + 10 log (2 of TX antenna elements)
3. For U-NII-5, The directional gain is 8.99 dBi.
4. For U-NII-6, The directional gain is 8.99 dBi.
5. For U-NII-7, The directional gain is 8.99 dBi.
6. For U-NII-8, The directional gain is 8.99 dBi.

802.11ax (HE40)

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	-13.03	-13.31	-10.16	8.99	-1.17	-1	Pass
43	6165	-13.09	-13.42	-10.24	8.99	-1.25	-1	Pass
91	6405	-13.16	-13.36	-10.25	8.99	-1.26	-1	Pass
99	6445	-12.88	-13.90	-10.35	8.99	-1.36	-1	Pass
107	6485	-13.82	-12.92	-10.34	8.99	-1.35	-1	Pass
115	6525	-13.71	-12.86	-10.25	8.99	-1.26	-1	Pass
123	6565	-13.69	-12.88	-10.26	8.99	-1.27	-1	Pass
155	6725	-12.84	-13.78	-10.27	8.99	-1.28	-1	Pass
179	6845	-13.33	-13.40	-10.35	8.99	-1.36	-1	Pass
187	6885	-13.18	-13.44	-10.30	8.99	-1.31	-1	Pass
211	7005	-13.29	-13.47	-10.37	8.99	-1.38	-1	Pass
227	7085	-13.14	-13.53	-10.32	8.99	-1.33	-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 = gain of antenna element + 10 log (2 of TX antenna elements)
3. For U-NII-5, The directional gain is 8.99 dBi.
4. For U-NII-6, The directional gain is 8.99 dBi.
5. For U-NII-7, The directional gain is 8.99 dBi.
6. For U-NII-8, The directional gain is 8.99 dBi.

802.11ax (HE80)

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	-13.10	-13.42	-10.25	8.99	-1.26	-1	Pass
39	6145	-13.18	-13.41	-10.28	8.99	-1.29	-1	Pass
87	6385	-13.18	-13.45	-10.30	8.99	-1.31	-1	Pass
103	6465	-13.17	-13.35	-10.25	8.99	-1.26	-1	Pass
119	6545	-12.79	-13.86	-10.28	8.99	-1.29	-1	Pass
151	6705	-12.86	-13.67	-10.24	8.99	-1.25	-1	Pass
183	6865	-13.19	-13.32	-10.24	8.99	-1.25	-1	Pass
199	6945	-13.27	-13.28	-10.26	8.99	-1.27	-1	Pass
215	7025	-13.14	-13.34	-10.23	8.99	-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 = gain of antenna element + 10 log (2 of TX antenna elements)
3. For U-NII-5, The directional gain is 8.99 dBi.
4. For U-NII-6, The directional gain is 8.99 dBi.
5. For U-NII-7, The directional gain is 8.99 dBi.
6. For U-NII-8, The directional gain is 8.99 dBi.

802.11ax (HE160)

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	-13.17	-13.40	-10.27	8.99	-1.28	-1	Pass
47	6185	-13.34	-13.43	-10.37	8.99	-1.38	-1	Pass
79	6345	-13.24	-13.41	-10.31	8.99	-1.32	-1	Pass
111	6505	-12.79	-13.73	-10.22	8.99	-1.23	-1	Pass
143	6665	-12.90	-13.65	-10.25	8.99	-1.26	-1	Pass
175	6825	-13.34	-13.75	-10.53	8.99	-1.54	-1	Pass
207	6985	-13.66	-13.23	-10.43	8.99	-1.44	-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 = gain of antenna element + 10 log (2 of TX antenna elements)
3. For U-NII-5, The directional gain is 8.99 dBi.
4. For U-NII-6, The directional gain is 8.99 dBi.
5. For U-NII-7, The directional gain is 8.99 dBi.
6. For U-NII-8, The directional gain is 8.99 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	-13.18	-13.35	-10.25	8.99	-1.26	-1	Pass
45	6175	-13.14	-13.32	-10.22	8.99	-1.23	-1	Pass
93	6415	-13.10	-13.27	-10.17	8.99	-1.18	-1	Pass
97	6435	-13.10	-13.25	-10.16	8.99	-1.17	-1	Pass
105	6475	-13.12	-13.32	-10.21	8.99	-1.22	-1	Pass
113	6515	-13.10	-13.38	-10.23	8.99	-1.24	-1	Pass
117	6535	-13.15	-13.32	-10.22	8.99	-1.23	-1	Pass
149	6695	-13.11	-13.39	-10.24	8.99	-1.25	-1	Pass
181	6855	-13.15	-13.38	-10.25	8.99	-1.26	-1	Pass
185	6875	-13.13	-13.29	-10.20	8.99	-1.21	-1	Pass
209	6995	-13.46	-13.09	-10.26	8.99	-1.27	-1	Pass
233	7115	-19.86	-19.99	-16.91	8.99	-7.92	-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 = gain of antenna element + 10 log (2 of TX antenna elements)
3. For U-NII-5, The directional gain is 8.99 dBi.
4. For U-NII-6, The directional gain is 8.99 dBi.
5. For U-NII-7, The directional gain is 8.99 dBi.
6. For U-NII-8, The directional gain is 8.99 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	-13.29	-13.48	-10.37	8.99	-1.38	-1	Pass
45	6175	-13.25	-13.58	-10.40	8.99	-1.41	-1	Pass
93	6415	-13.13	-13.29	-10.20	8.99	-1.21	-1	Pass
97	6435	-13.26	-13.46	-10.35	8.99	-1.36	-1	Pass
105	6475	-13.21	-13.32	-10.25	8.99	-1.26	-1	Pass
113	6515	-13.14	-13.29	-10.20	8.99	-1.21	-1	Pass
117	6535	-13.15	-13.38	-10.25	8.99	-1.26	-1	Pass
149	6695	-13.21	-13.38	-10.28	8.99	-1.29	-1	Pass
181	6855	-13.12	-13.34	-10.22	8.99	-1.23	-1	Pass
185	6875	-13.19	-13.40	-10.28	8.99	-1.29	-1	Pass
209	6995	-13.21	-13.44	-10.31	8.99	-1.32	-1	Pass
233	7115	-17.16	-17.28	-14.21	8.99	-5.22	-1	Pass

Notes:

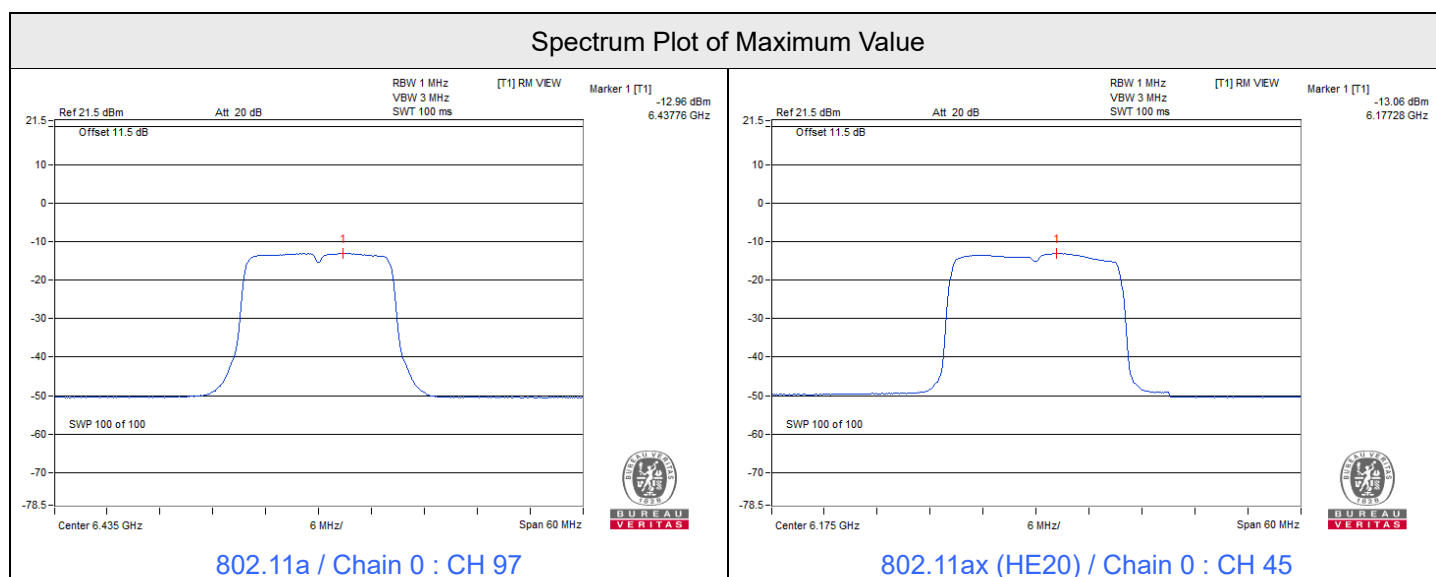
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements)
3. For U-NII-5, The directional gain is 8.99 dBi.
4. For U-NII-6, The directional gain is 8.99 dBi.
5. For U-NII-7, The directional gain is 8.99 dBi.
6. For U-NII-8, The directional gain is 8.99 dBi.

802.11ax (HE20) 106-tone RU

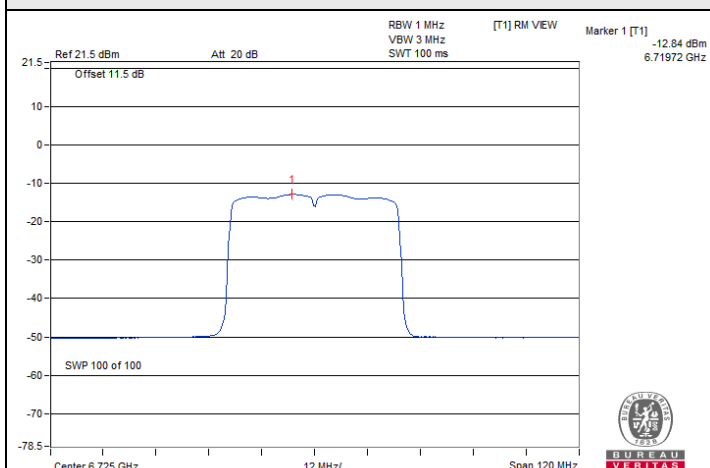
Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1					
1	5955	-13.22	-13.48	-10.34	8.99	-1.35	-1	Pass
45	6175	-13.42	-13.14	-10.27	8.99	-1.28	-1	Pass
93	6415	-13.12	-13.43	-10.26	8.99	-1.27	-1	Pass
97	6435	-13.11	-13.34	-10.21	8.99	-1.22	-1	Pass
105	6475	-13.36	-13.47	-10.40	8.99	-1.41	-1	Pass
113	6515	-13.19	-13.40	-10.28	8.99	-1.29	-1	Pass
117	6535	-12.99	-13.24	-10.10	8.99	-1.11	-1	Pass
149	6695	-13.03	-13.28	-10.14	8.99	-1.15	-1	Pass
181	6855	-13.18	-13.33	-10.24	8.99	-1.25	-1	Pass
185	6875	-13.16	-13.30	-10.22	8.99	-1.23	-1	Pass
209	6995	-13.17	-13.45	-10.30	8.99	-1.31	-1	Pass
233	7115	-18.28	-18.39	-15.32	8.99	-6.33	-1	Pass

Notes:

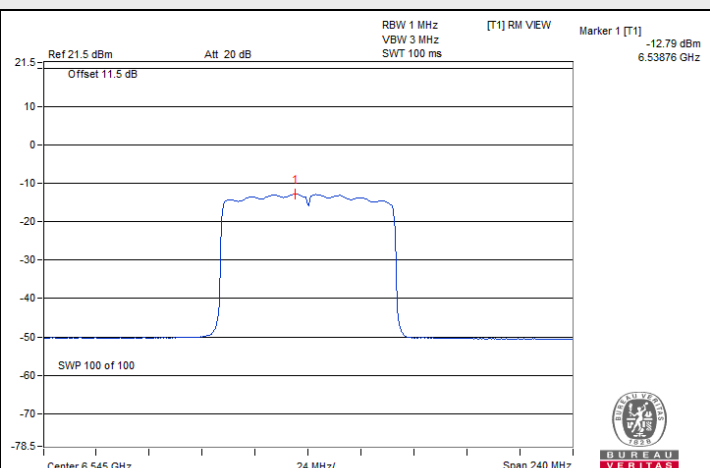
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements)
3. For U-NII-5, The directional gain is 8.99 dBi.
4. For U-NII-6, The directional gain is 8.99 dBi.
5. For U-NII-7, The directional gain is 8.99 dBi.
6. For U-NII-8, The directional gain is 8.99 dBi.



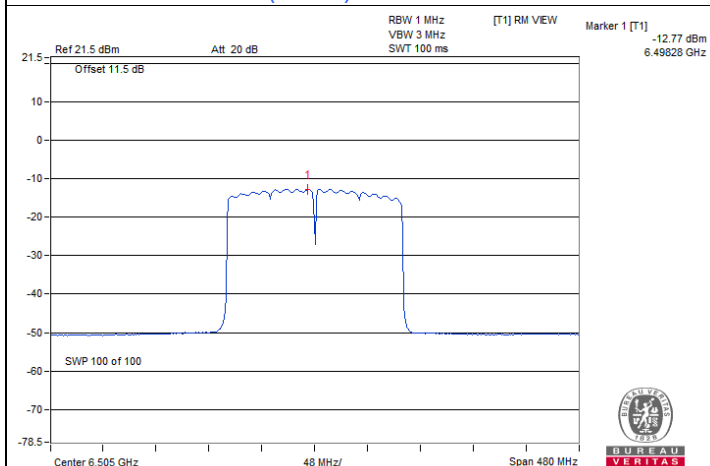
Spectrum Plot of Maximum Value



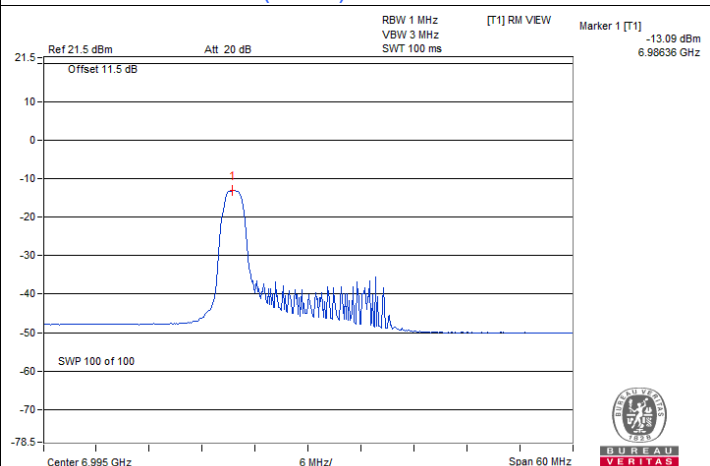
802.11ax (HE40) / Chain 0 : CH 155



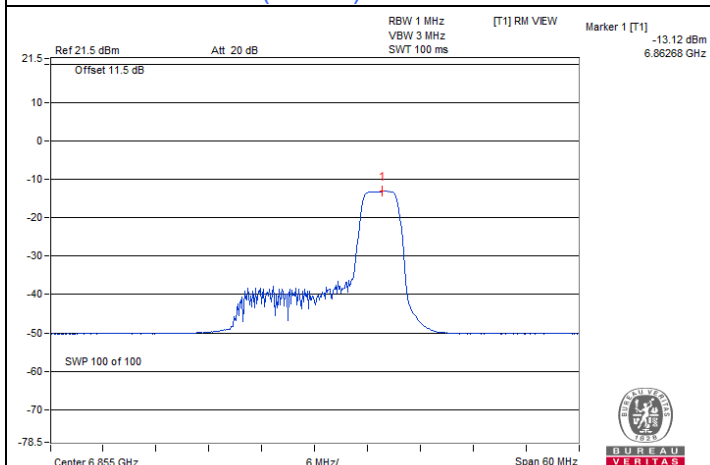
802.11ax (HE80) / Chain 0 : CH 119



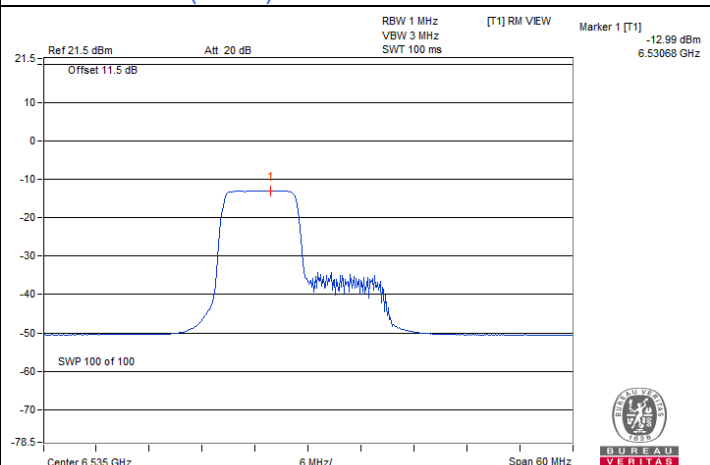
802.11ax (HE160) / Chain 0 : CH 111



802.11ax (HE20) 26-tone RU / Chain 1 : CH 209



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



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

7.3 Emission Bandwidth

Input Power (System):	3.9 Vdc	Environmental Conditions:	25°C, 76% RH	Tested By:	Dalen Dai
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802.11a

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	19.21	19.39	320	Pass
45	6175	19.32	19.39	320	Pass
93	6415	19.22	19.42	320	Pass
97	6435	19.29	19.35	320	Pass
105	6475	19.27	19.35	320	Pass
113	6515	19.34	19.39	320	Pass
117	6535	19.32	19.38	320	Pass
149	6695	19.34	19.38	320	Pass
181	6855	19.34	19.42	320	Pass
185	6875	19.22	19.41	320	Pass
209	6995	19.26	19.14	320	Pass
233	7115	19.24	19.33	320	Pass

802.11ax (HE20)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	21.36	21.30	320	Pass
45	6175	21.23	21.21	320	Pass
93	6415	21.40	21.18	320	Pass
97	6435	21.17	21.07	320	Pass
105	6475	21.20	21.16	320	Pass
113	6515	21.32	21.34	320	Pass
117	6535	21.14	21.48	320	Pass
149	6695	21.16	21.18	320	Pass
181	6855	21.27	21.14	320	Pass
185	6875	21.25	21.23	320	Pass
209	6995	21.18	21.10	320	Pass
233	7115	21.33	21.20	320	Pass

802.11ax (HE40)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	5965	40.86	41.03	320	Pass
43	6165	41.23	40.78	320	Pass
91	6405	40.86	41.11	320	Pass
99	6445	40.93	40.92	320	Pass
107	6485	41.12	40.97	320	Pass
115	6525	41.03	40.92	320	Pass
123	6565	41.08	41.16	320	Pass
155	6725	41.18	40.98	320	Pass
179	6845	40.99	40.94	320	Pass
187	6885	40.90	41.17	320	Pass
211	7005	40.58	40.81	320	Pass
227	7085	41.21	40.92	320	Pass

802.11ax (HE80)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
7	5985	82.97	83.74	320	Pass
39	6145	83.55	82.95	320	Pass
87	6385	83.26	82.86	320	Pass
103	6465	83.14	83.02	320	Pass
119	6545	82.89	82.82	320	Pass
151	6705	83.28	82.99	320	Pass
183	6865	83.19	82.96	320	Pass
199	6945	82.98	82.91	320	Pass
215	7025	82.67	82.50	320	Pass

802.11ax (HE160)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
15	6025	167.79	167.24	320	Pass
47	6185	168.13	166.65	320	Pass
79	6345	167.04	166.84	320	Pass
111	6505	167.28	166.54	320	Pass
143	6665	166.90	166.93	320	Pass
175	6825	167.66	166.24	320	Pass
207	6985	167.18	167.02	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	21.02	21.05	320	Pass
45	6175	21.28	20.85	320	Pass
93	6415	21.01	20.71	320	Pass
97	6435	21.16	21.07	320	Pass
105	6475	21.44	20.94	320	Pass
113	6515	20.69	20.70	320	Pass
117	6535	21.03	20.95	320	Pass
149	6695	21.26	21.12	320	Pass
181	6855	20.74	20.62	320	Pass
185	6875	21.36	20.93	320	Pass
209	6995	21.43	21.24	320	Pass
233	7115	21.13	20.53	320	Pass

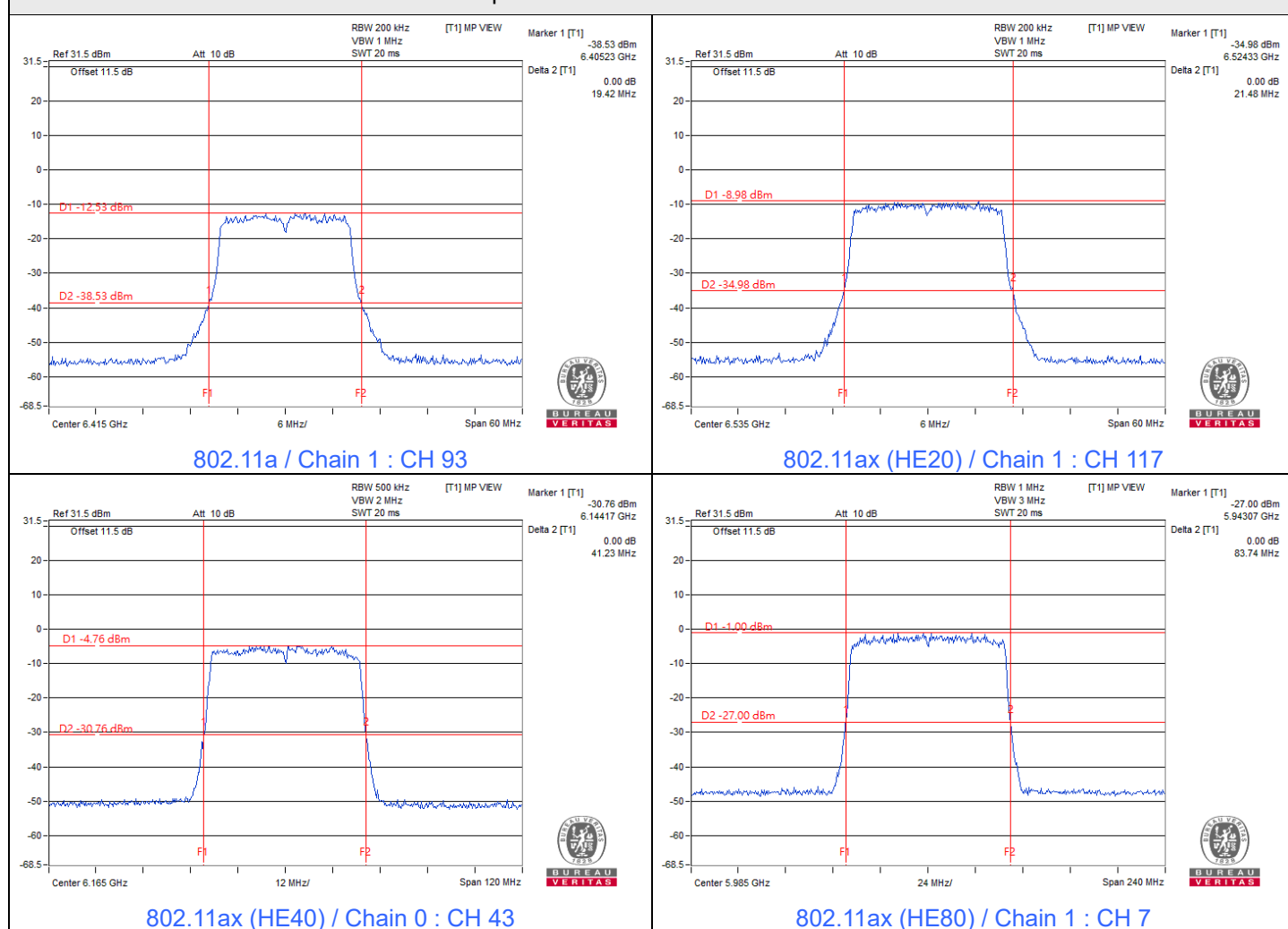
802.11ax (HE20) 52-tone RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	21.34	21.42	320	Pass
45	6175	21.49	21.14	320	Pass
93	6415	21.30	20.82	320	Pass
97	6435	21.60	21.46	320	Pass
105	6475	21.63	21.31	320	Pass
113	6515	20.95	20.69	320	Pass
117	6535	21.58	21.24	320	Pass
149	6695	21.72	21.24	320	Pass
181	6855	21.00	20.97	320	Pass
185	6875	21.08	21.31	320	Pass
209	6995	22.05	21.71	320	Pass
233	7115	21.01	20.60	320	Pass

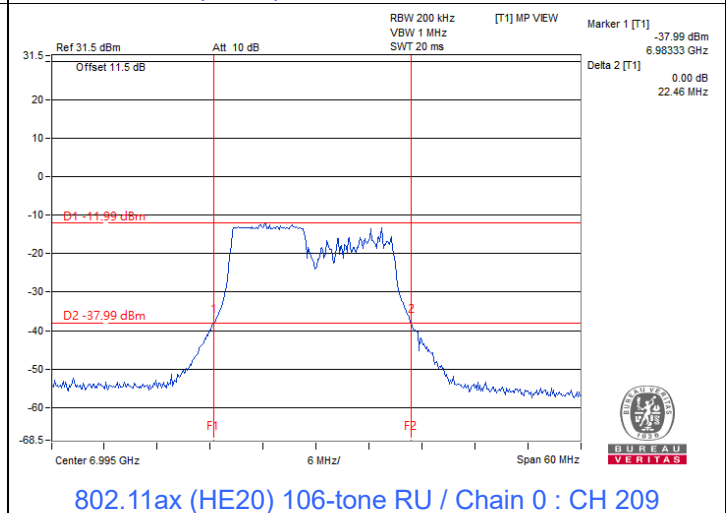
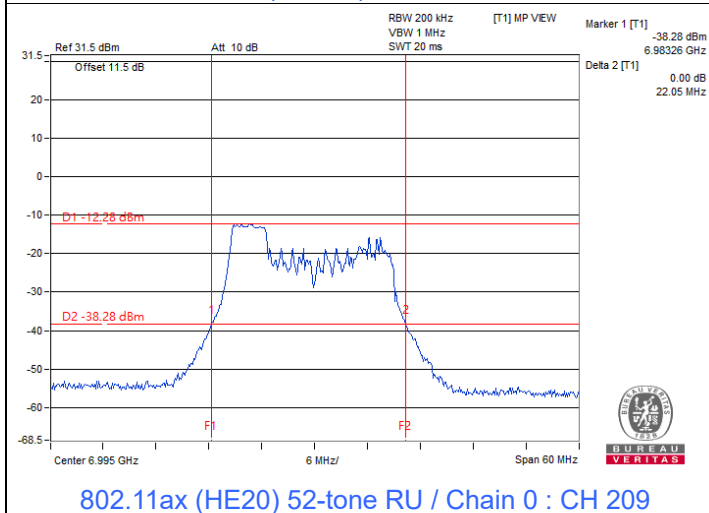
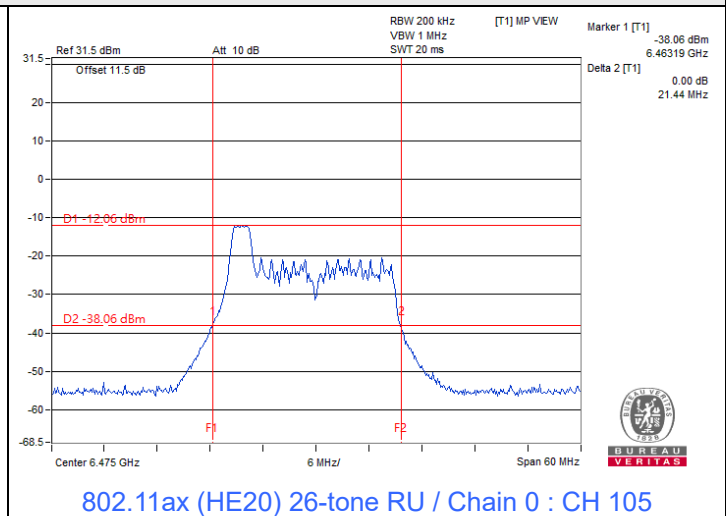
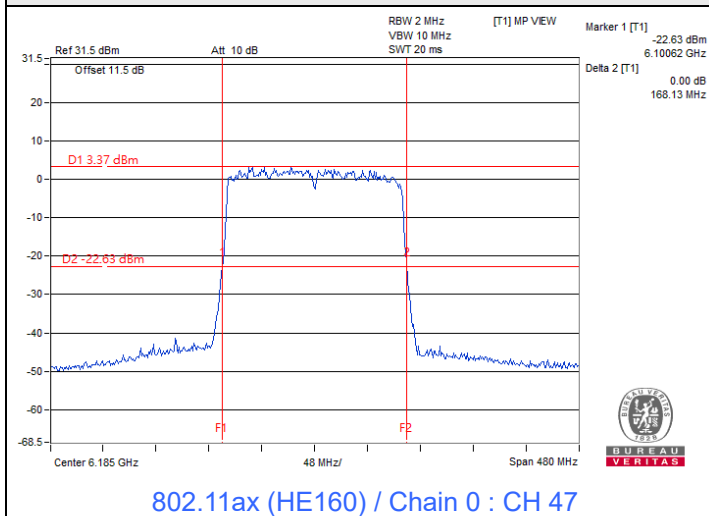
802.11ax (HE20) 106-tone RU

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	21.56	21.13	320	Pass
45	6175	22.10	21.50	320	Pass
93	6415	21.33	21.00	320	Pass
97	6435	22.17	21.36	320	Pass
105	6475	22.02	21.51	320	Pass
113	6515	21.44	20.66	320	Pass
117	6535	21.92	21.10	320	Pass
149	6695	22.14	21.51	320	Pass
181	6855	21.63	20.83	320	Pass
185	6875	21.87	21.12	320	Pass
209	6995	22.46	21.38	320	Pass
233	7115	21.47	20.96	320	Pass

Spectrum Plot of Maximum Value



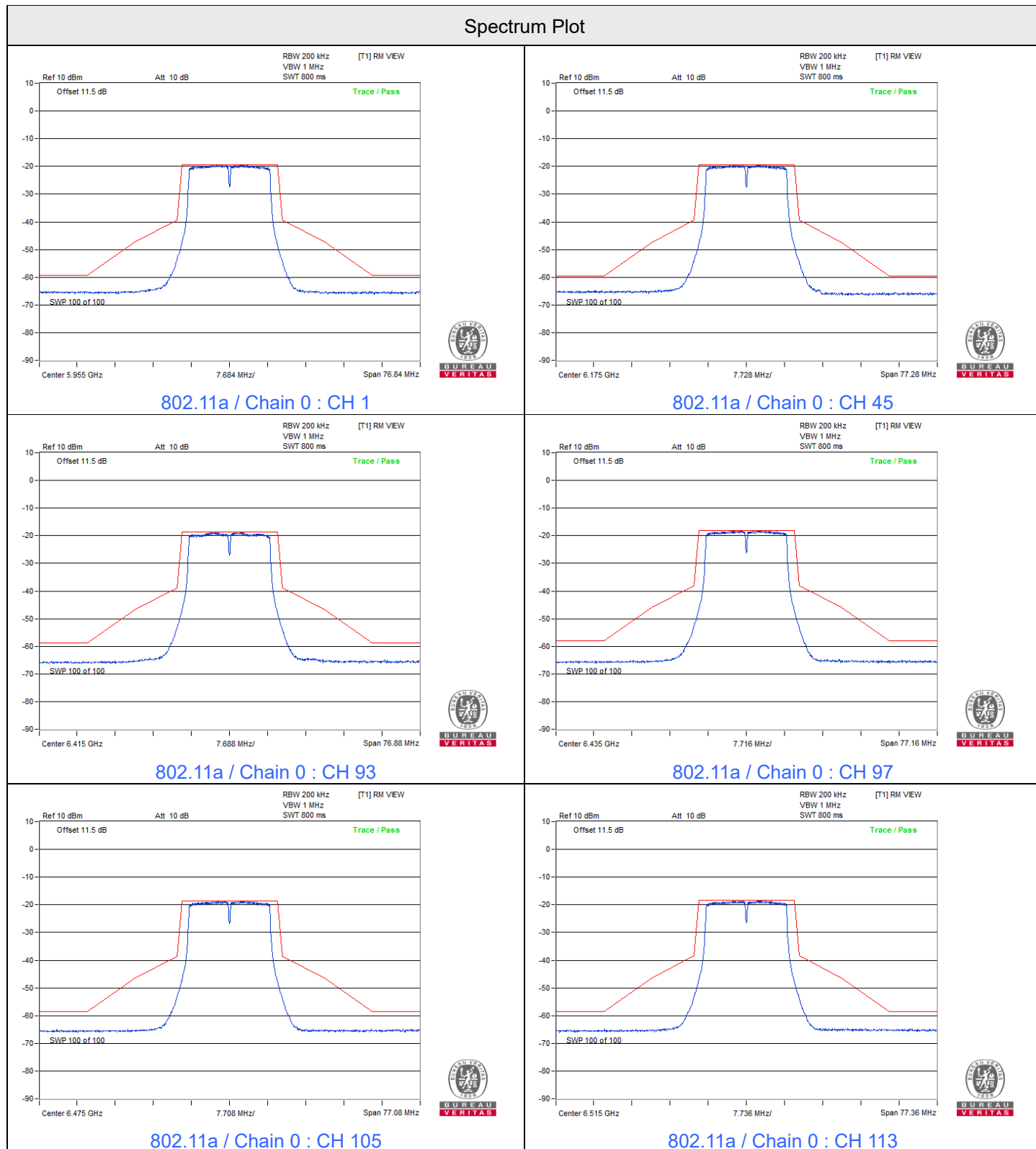
Spectrum Plot of Maximum Value



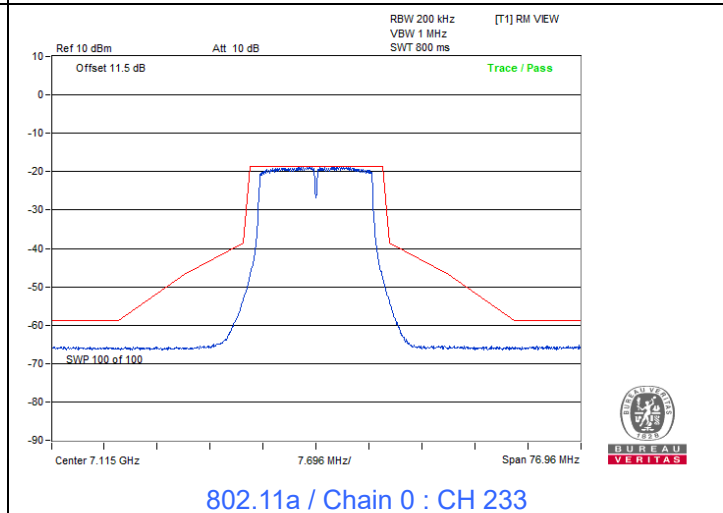
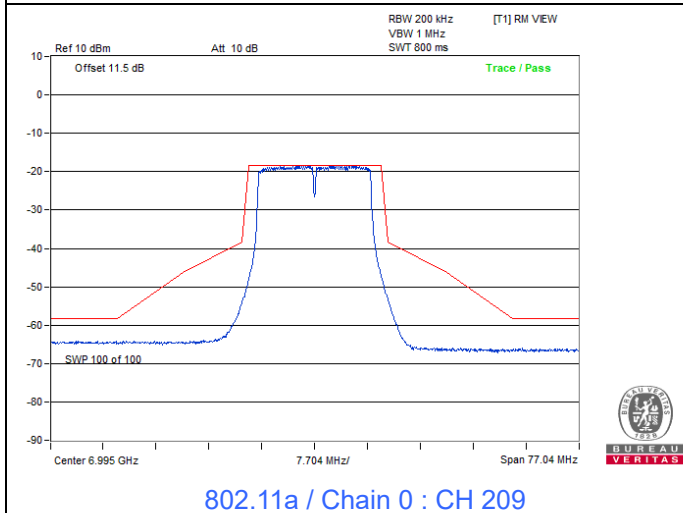
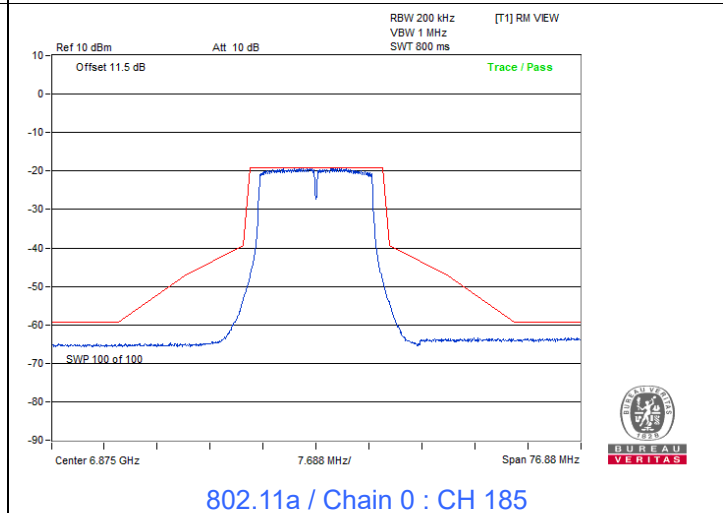
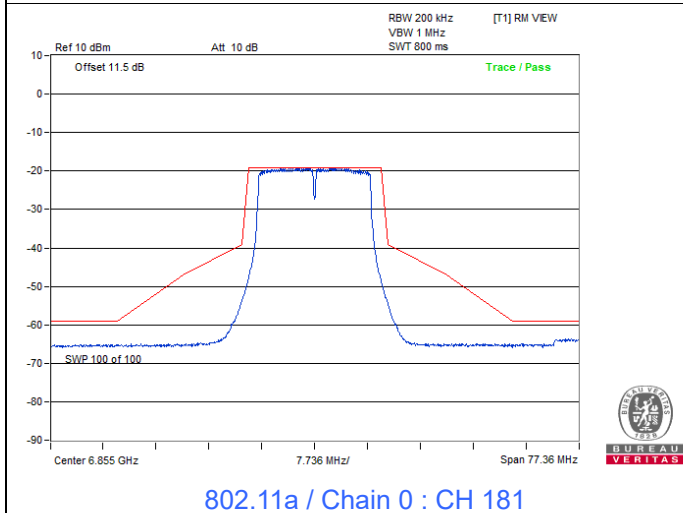
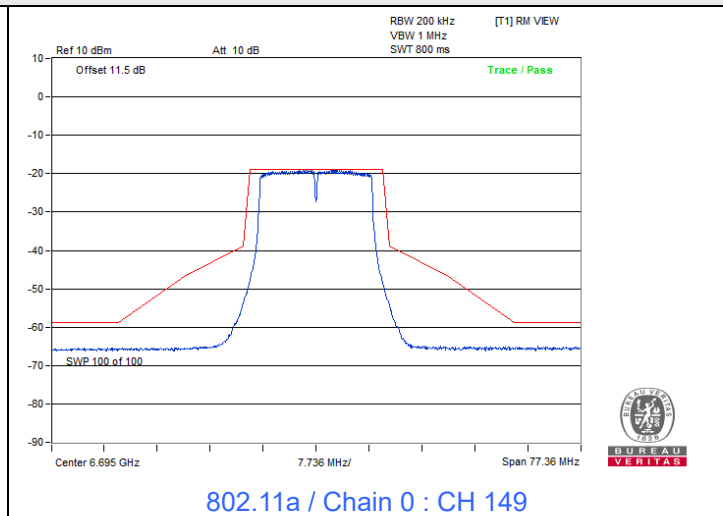
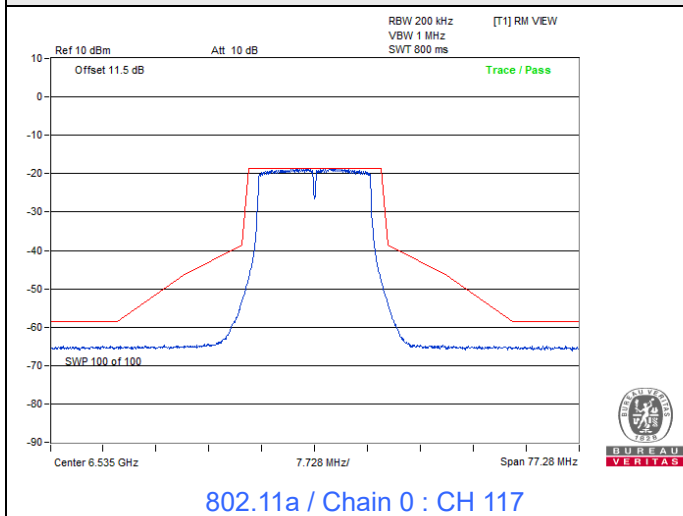
7.4 In-Band Emission Mask

Input Power (System):	3.9 Vdc	Environmental Conditions:	25°C, 76% RH	Tested By:	Dalen Dai
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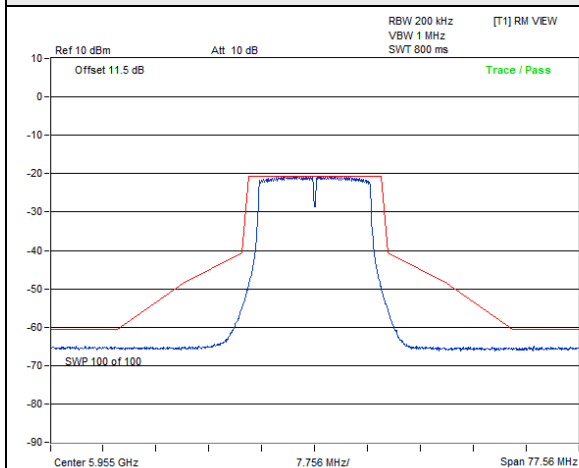
802.11a



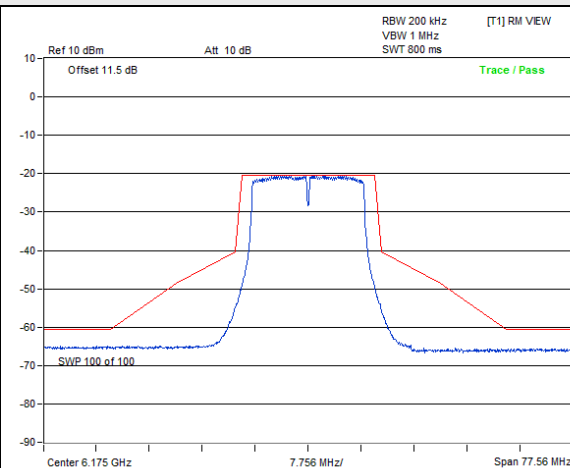
Spectrum Plot



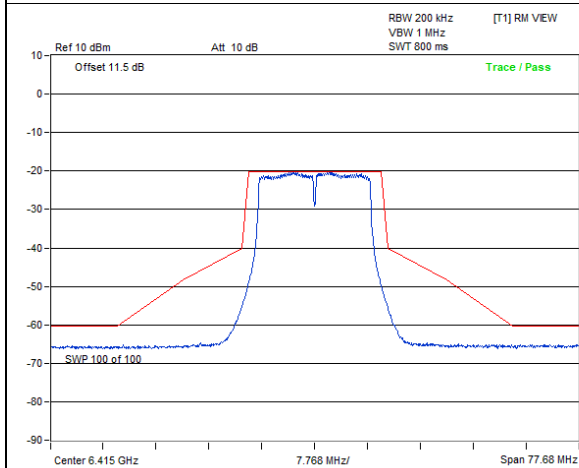
Spectrum Plot



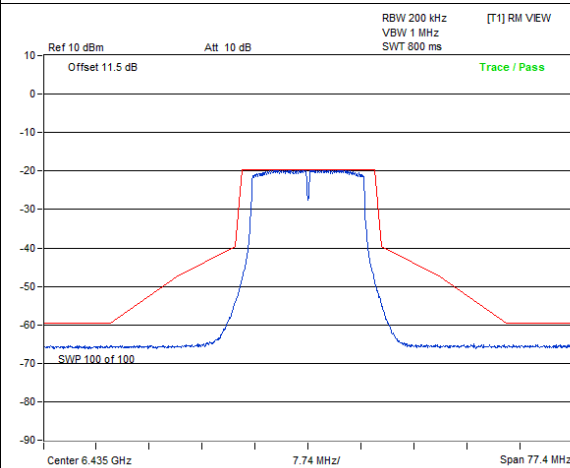
802.11a / Chain 1 : CH 1



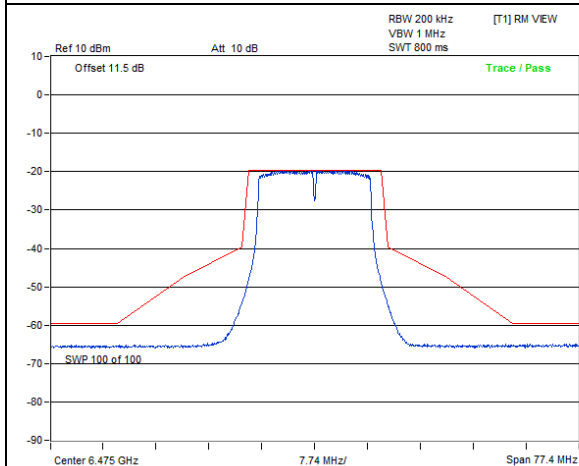
802.11a / Chain 1 : CH 45



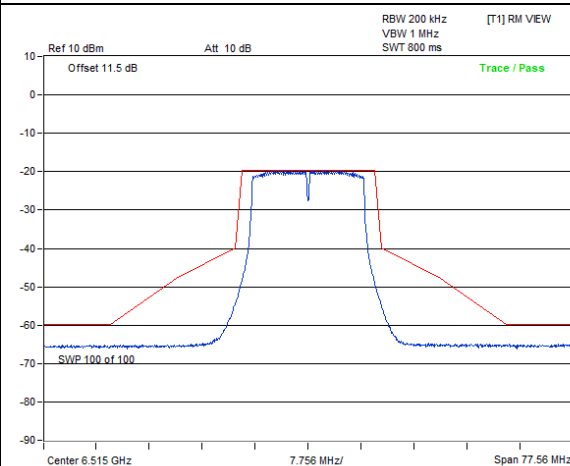
802.11a / Chain 1 : CH 93



802.11a / Chain 1 : CH 97



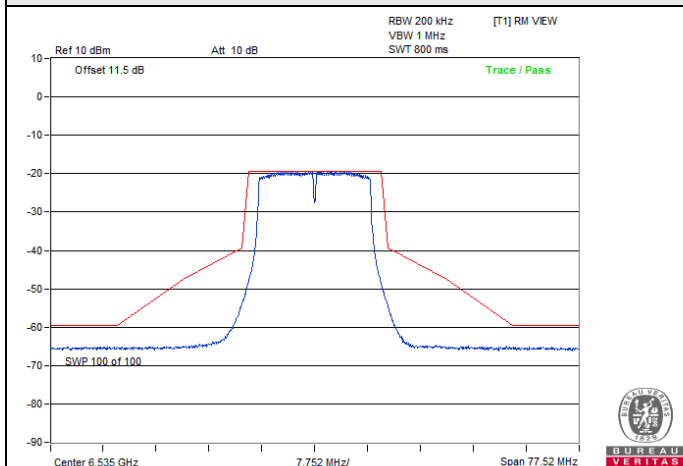
802.11a / Chain 1 : CH 105



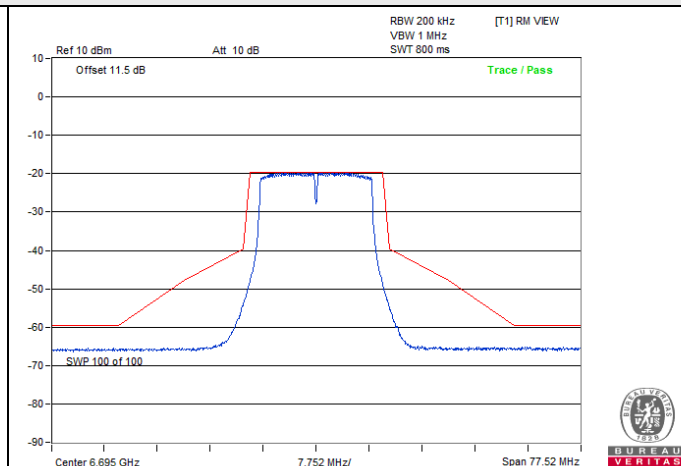
802.11a / Chain 1 : CH 113



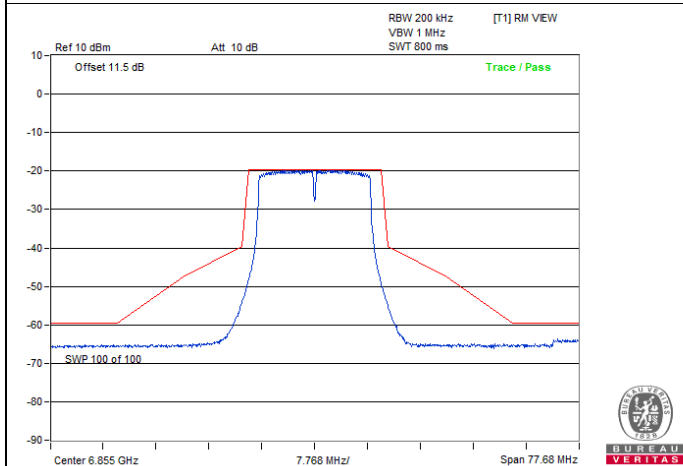
Spectrum Plot



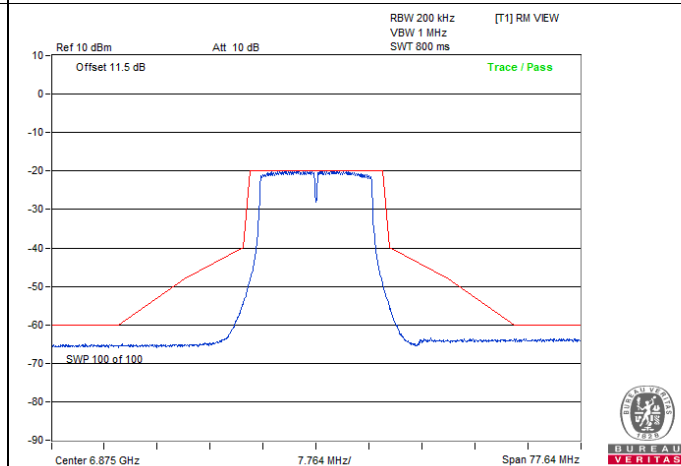
802.11a / Chain 1 : CH 117



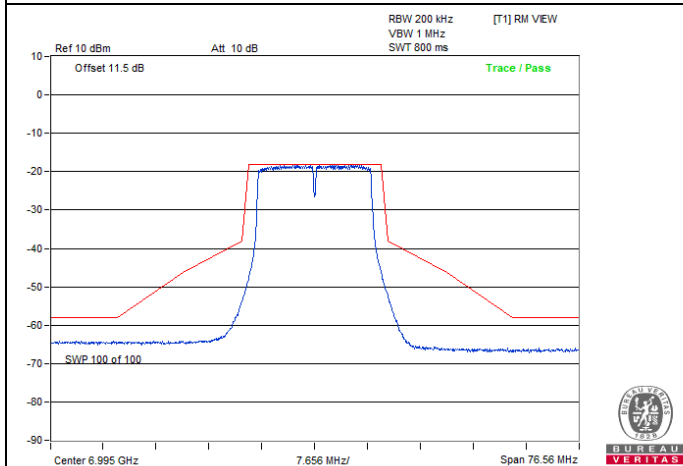
802.11a / Chain 1 : CH 149



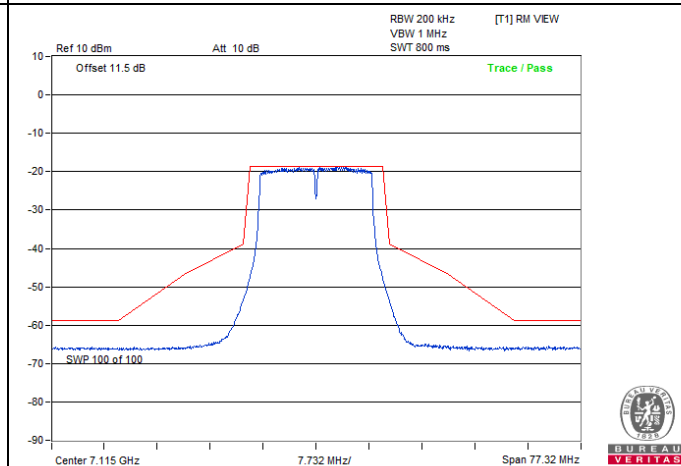
802.11a / Chain 1 : CH 181



802.11a / Chain 1 : CH 185



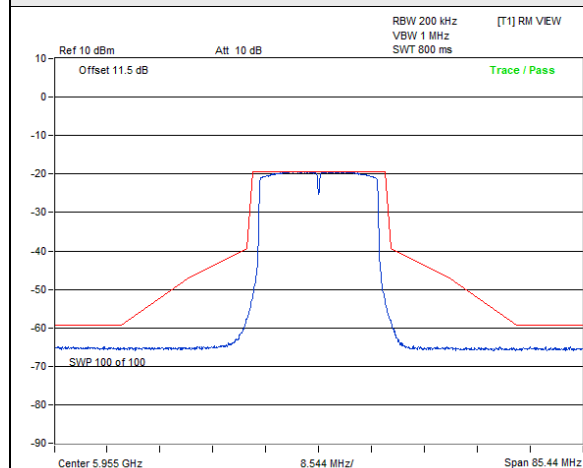
802.11a / Chain 1 : CH 209



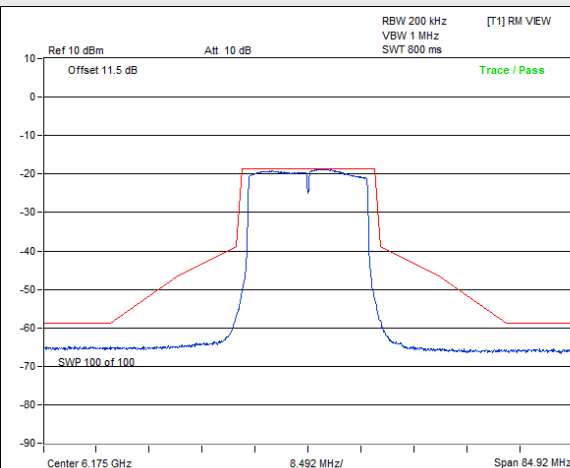
802.11a / Chain 1 : CH 233

802.11ax (HE20)

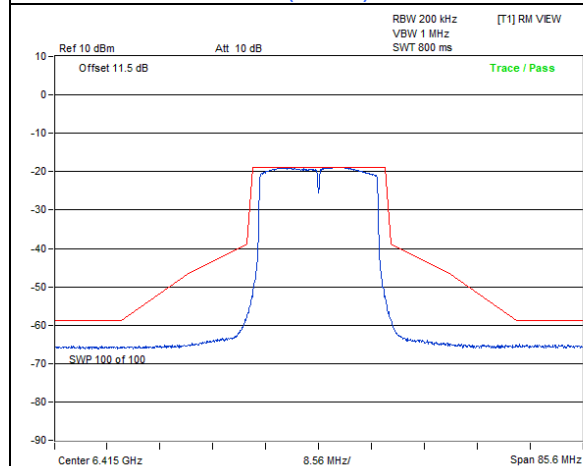
Spectrum Plot



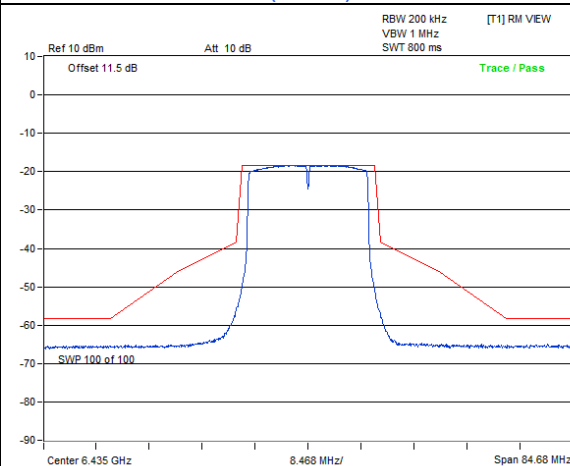
802.11ax (HE20) / Chain 0 : CH 1



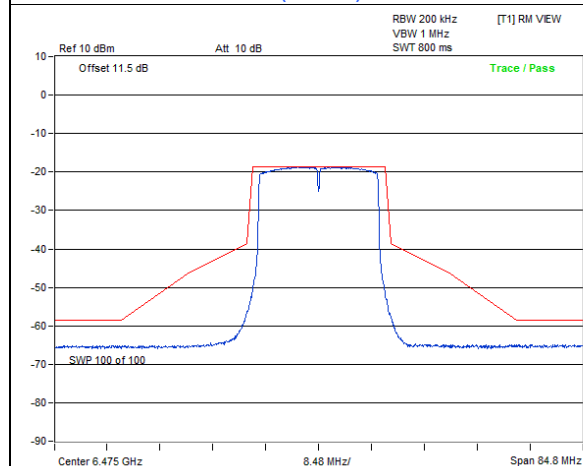
802.11ax (HE20) / Chain 0 : CH 45



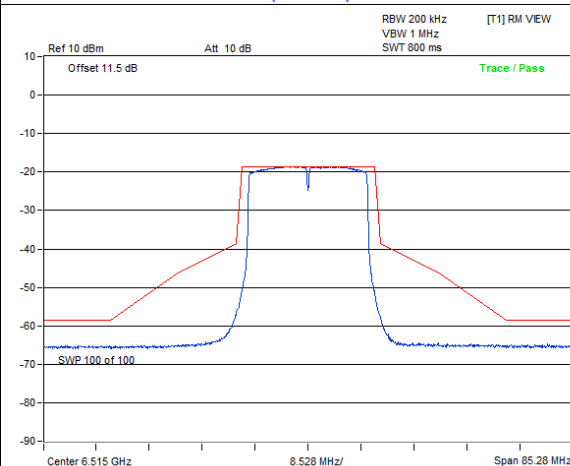
802.11ax (HE20) / Chain 0 : CH 93



802.11ax (HE20) / Chain 0 : CH 97

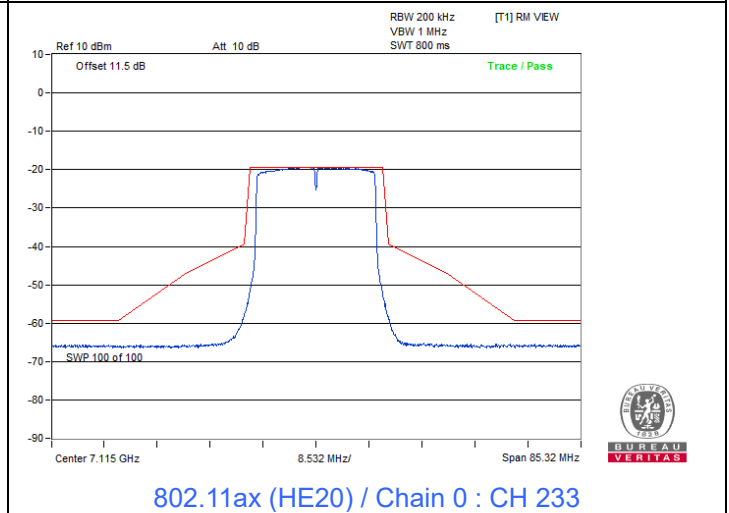
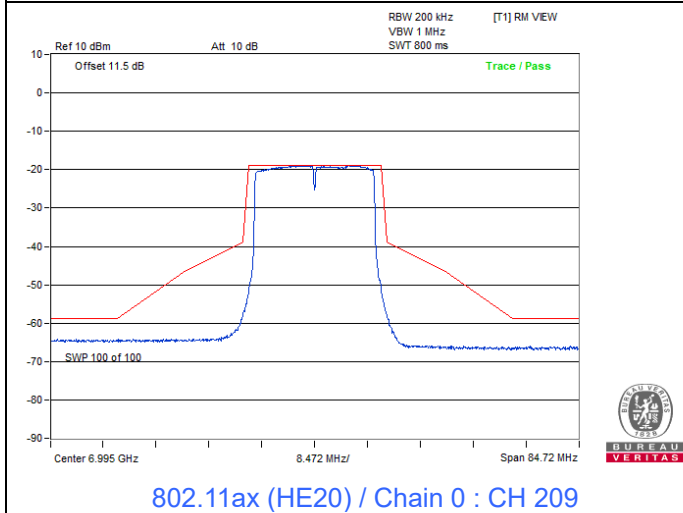
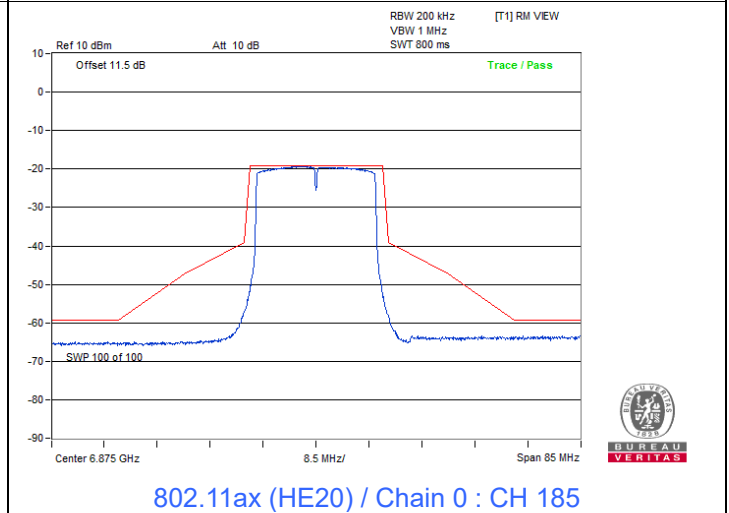
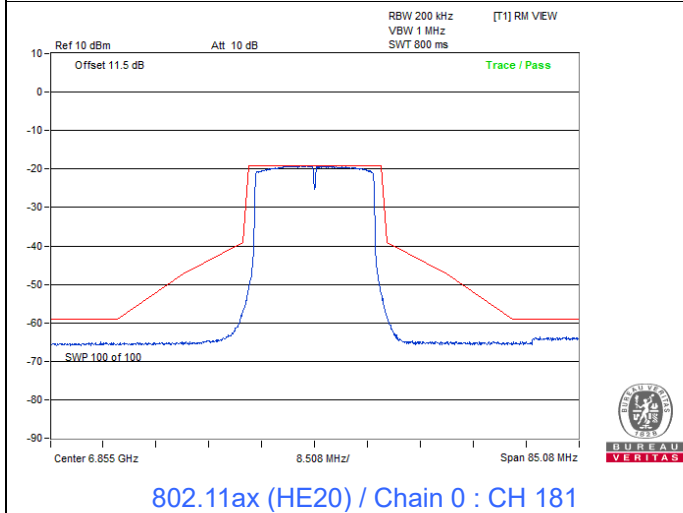
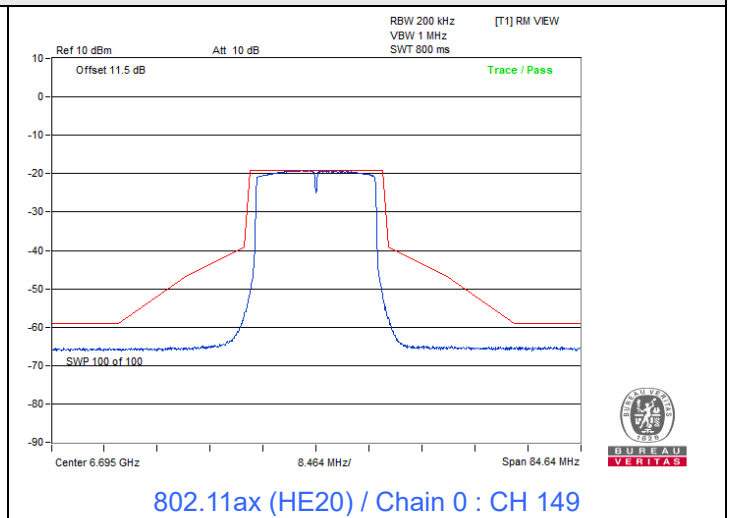
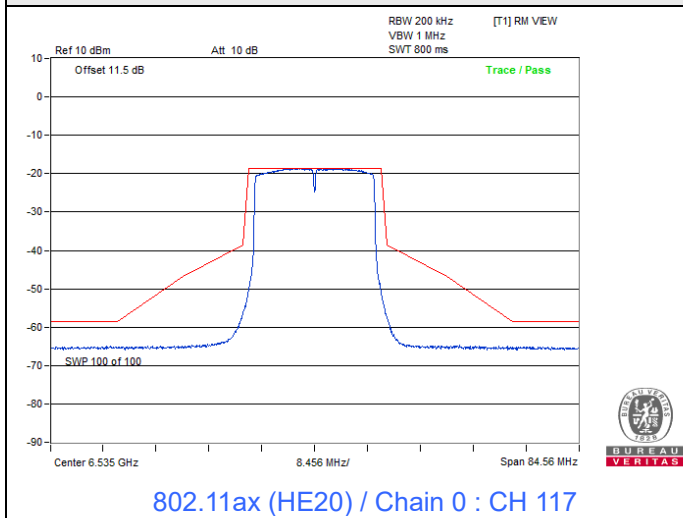


802.11ax (HE20) / Chain 0 : CH 105

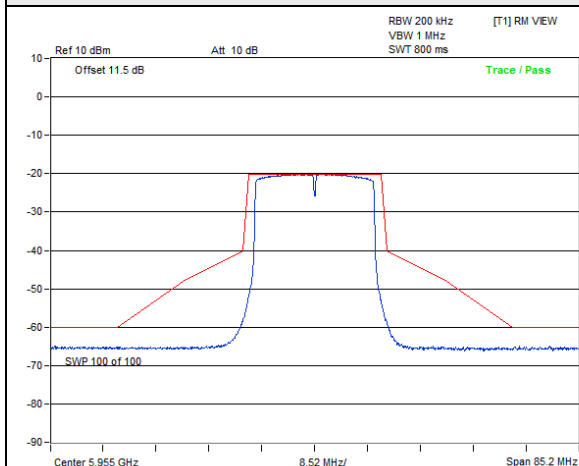


802.11ax (HE20) / Chain 0 : CH 113

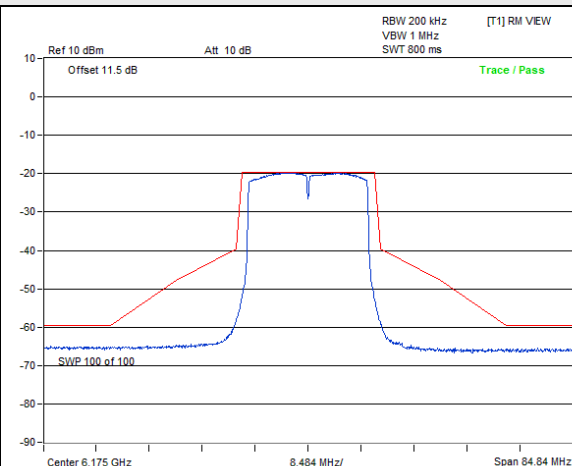
Spectrum Plot



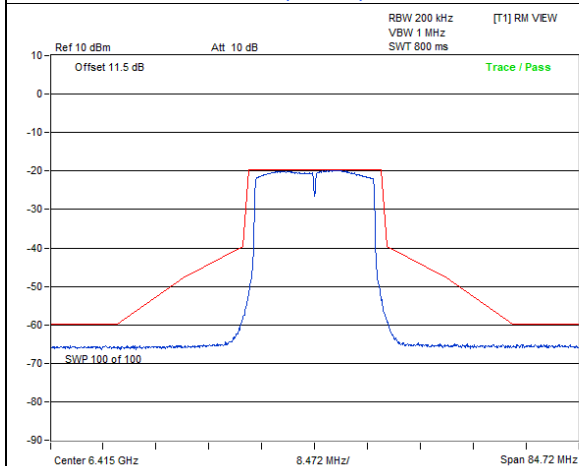
Spectrum Plot



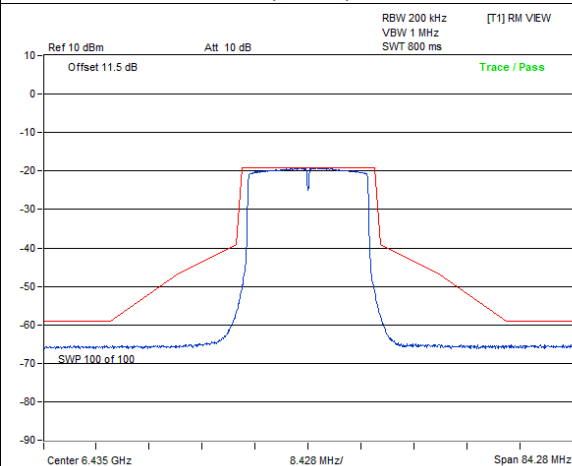
802.11ax (HE20) / Chain 1 : CH 1



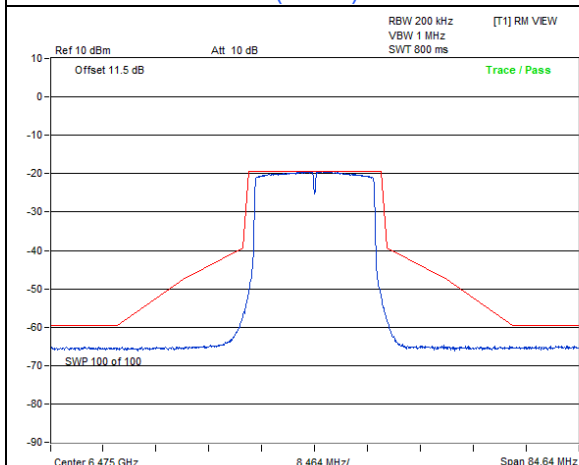
802.11ax (HE20) / Chain 1 : CH 45



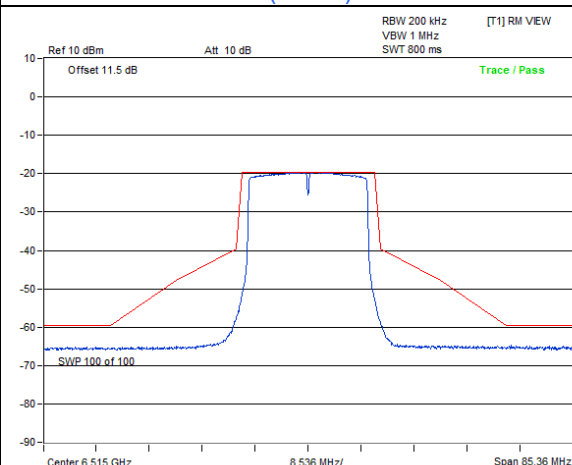
802.11ax (HE20) / Chain 1 : CH 93



802.11ax (HE20) / Chain 1 : CH 97

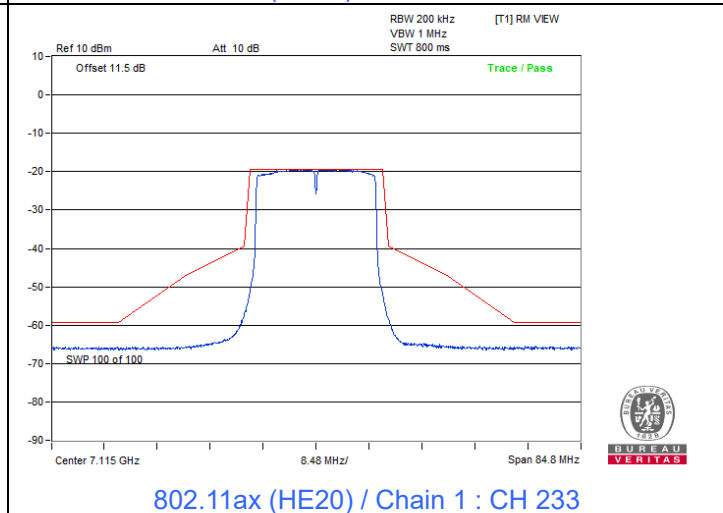
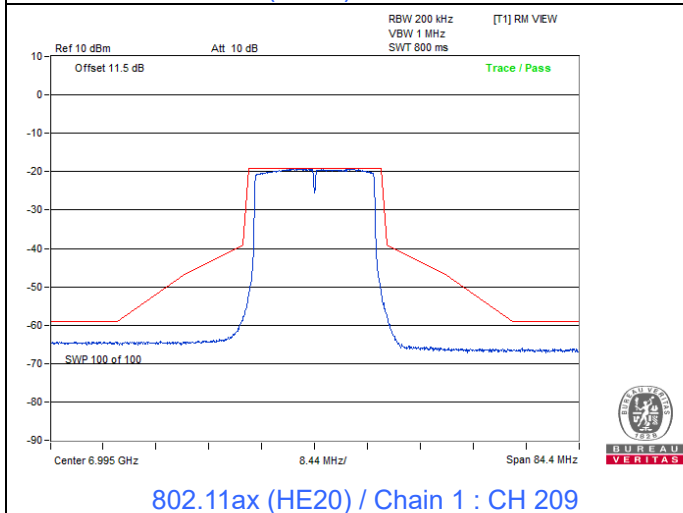
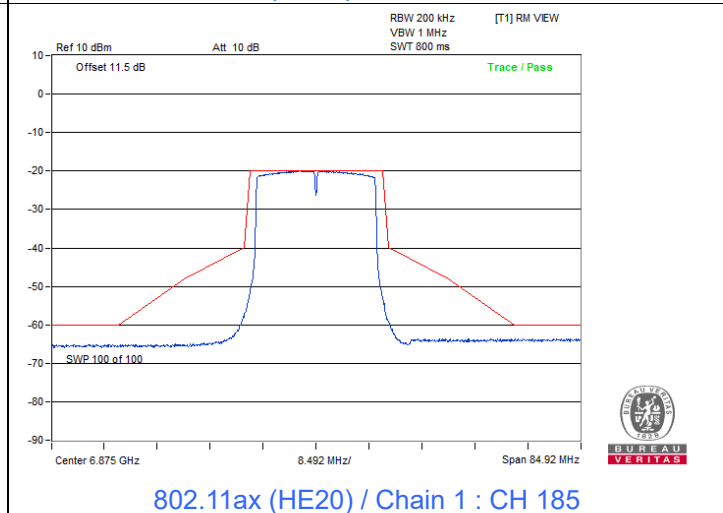
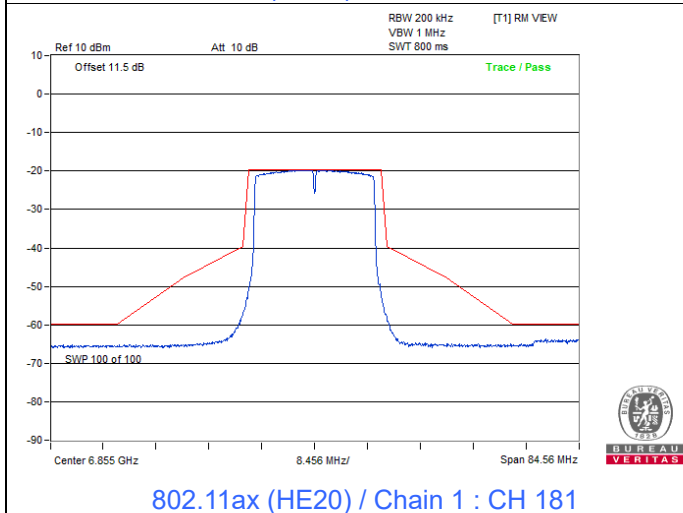
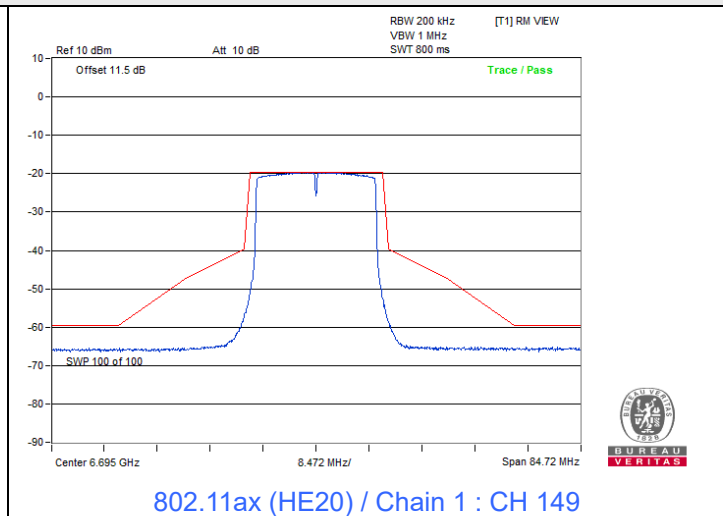
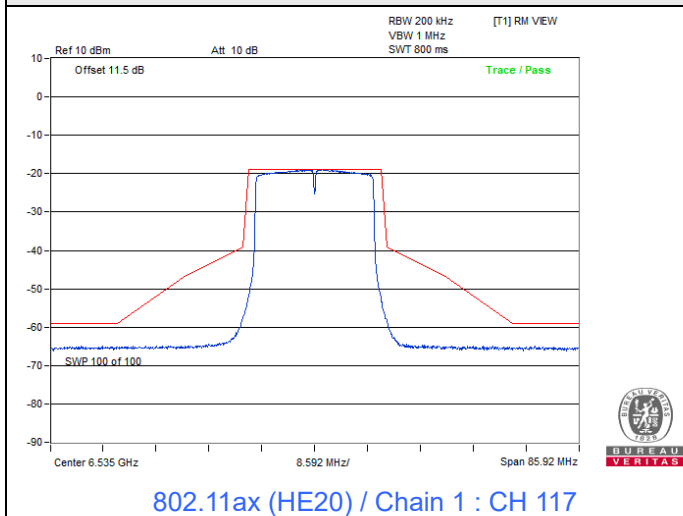


802.11ax (HE20) / Chain 1 : CH 105



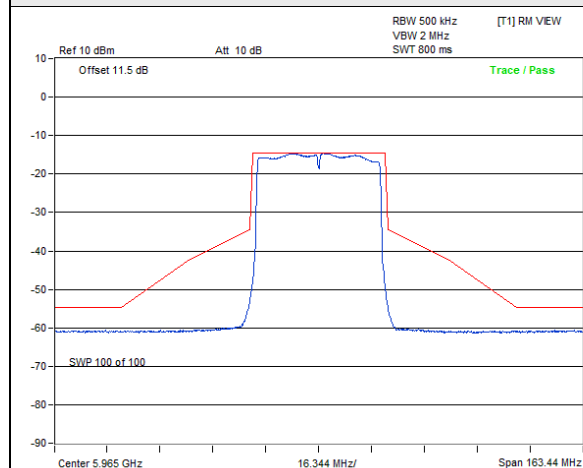
802.11ax (HE20) / Chain 1 : CH 113

Spectrum Plot

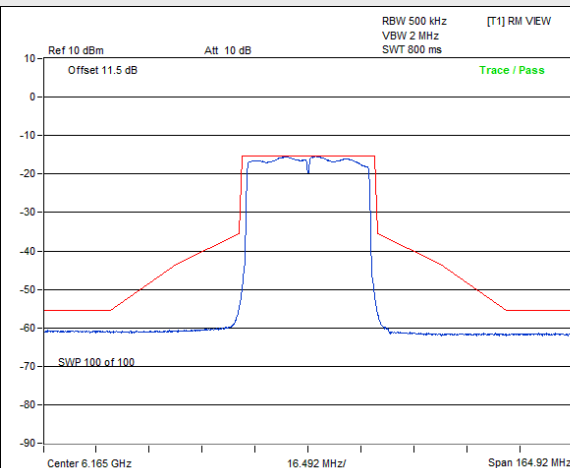


802.11ax (HE40)

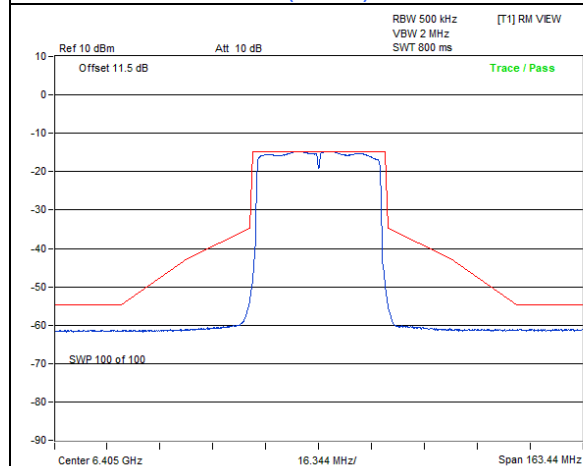
Spectrum Plot



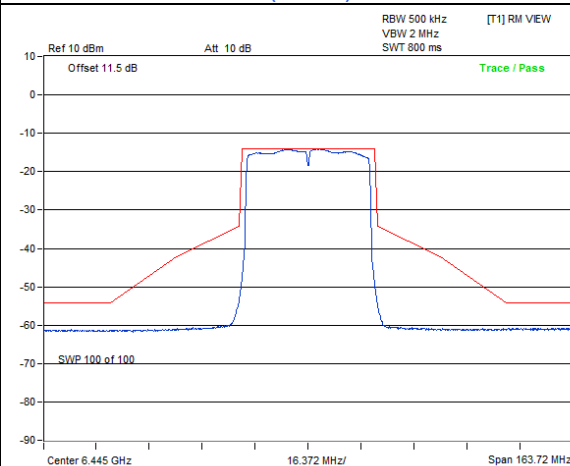
802.11ax (HE40) / Chain 0 : CH 3



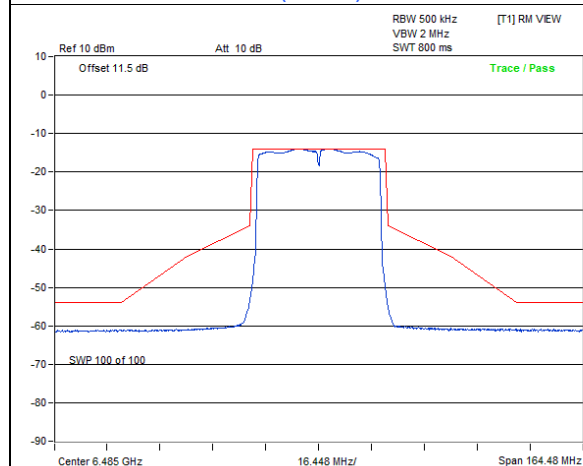
802.11ax (HE40) / Chain 0 : CH 43



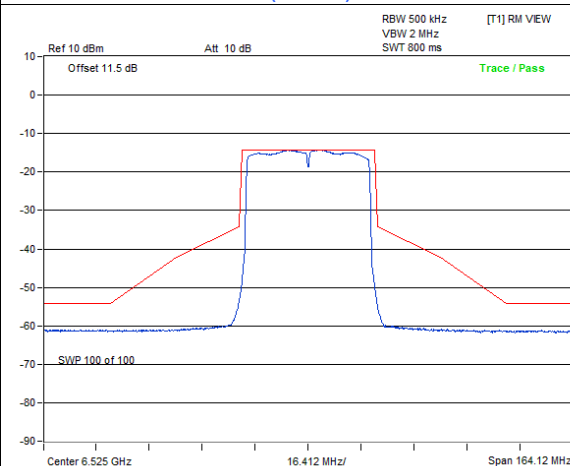
802.11ax (HE40) / Chain 0 : CH 91



802.11ax (HE40) / Chain 0 : CH 99

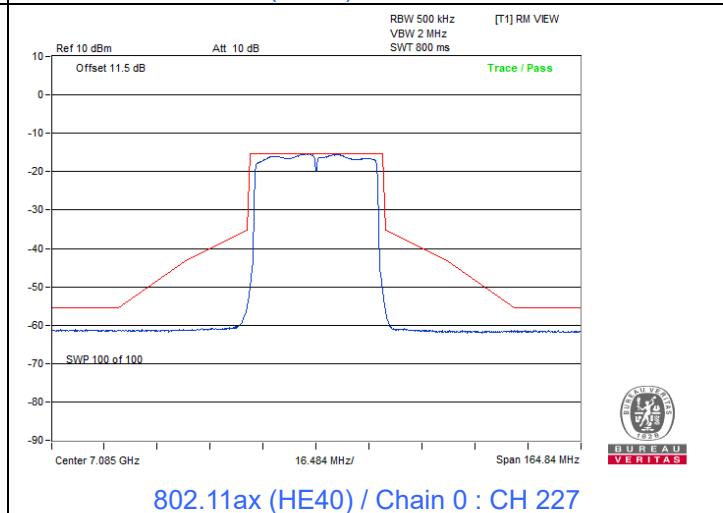
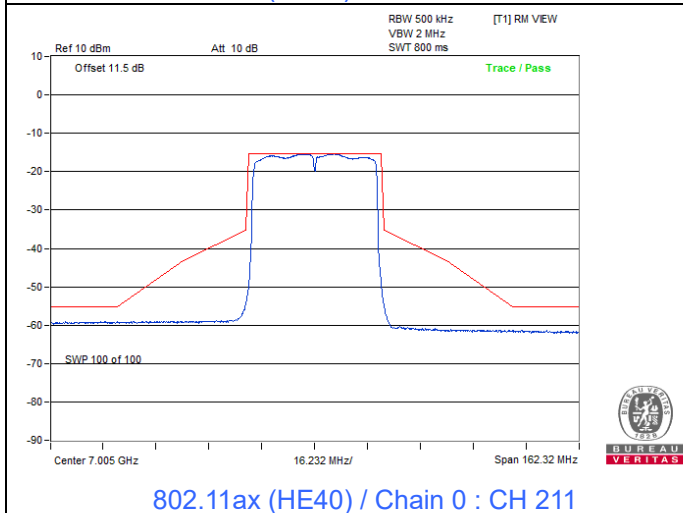
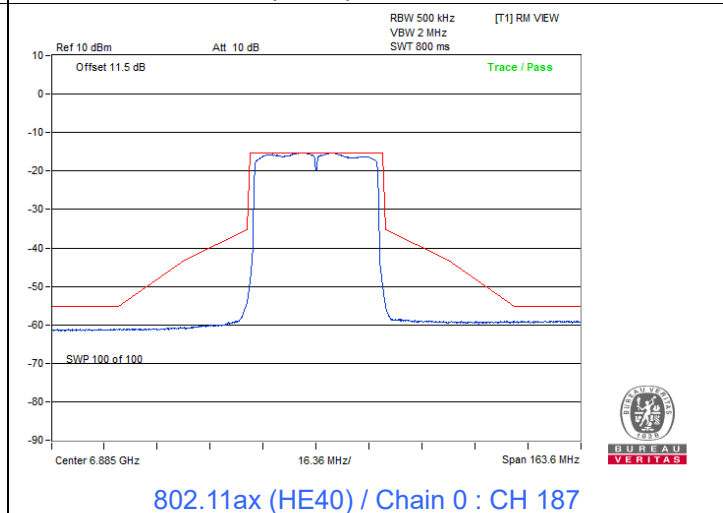
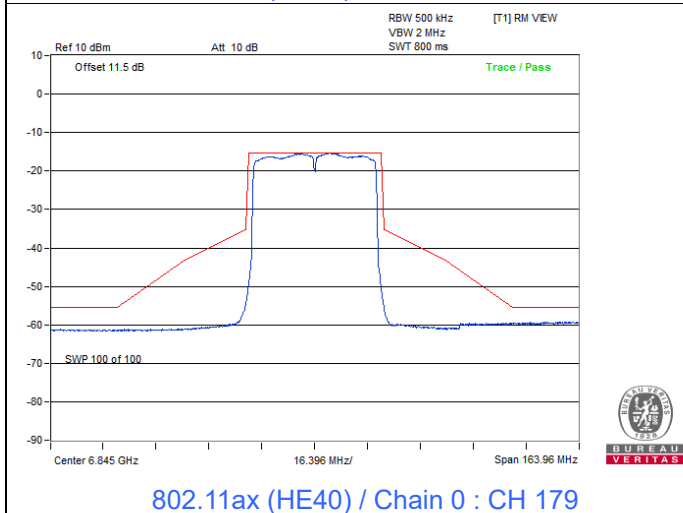
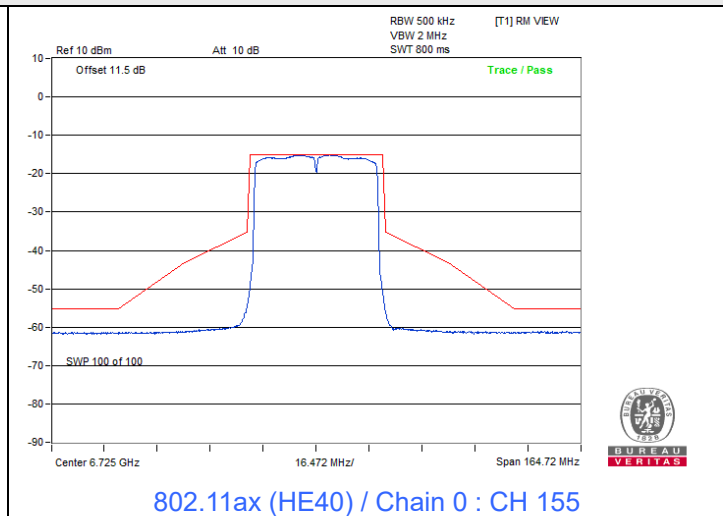
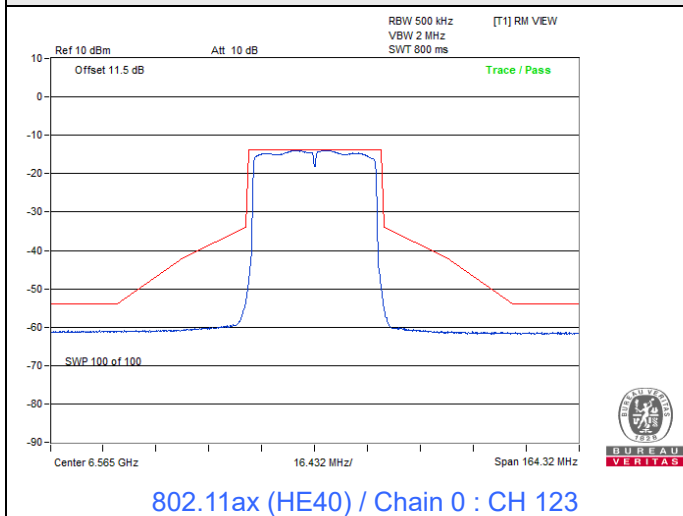


802.11ax (HE40) / Chain 0 : CH 107

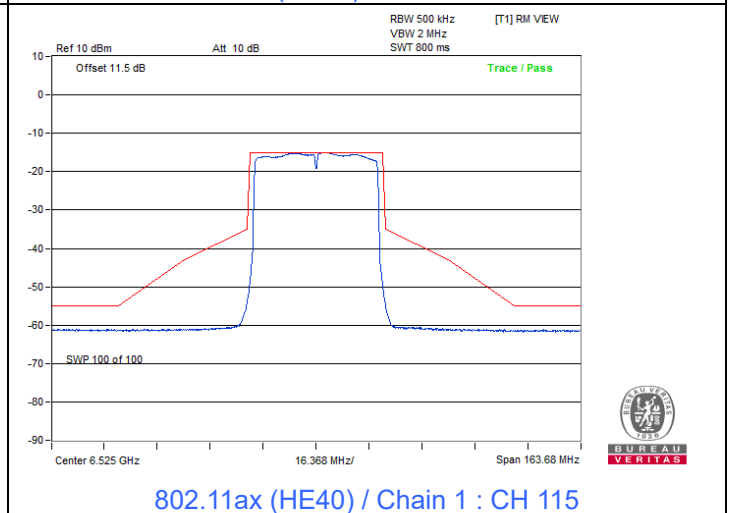
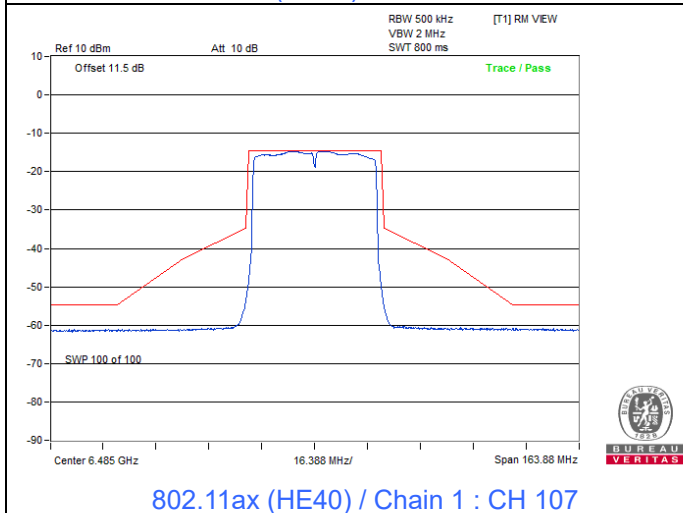
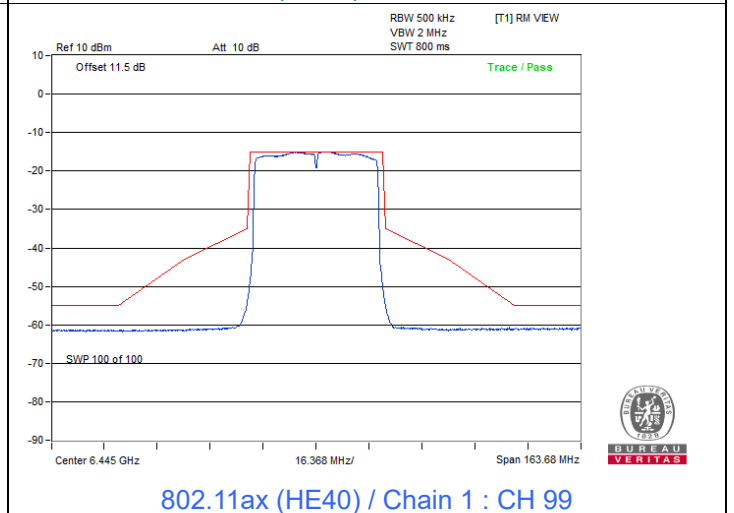
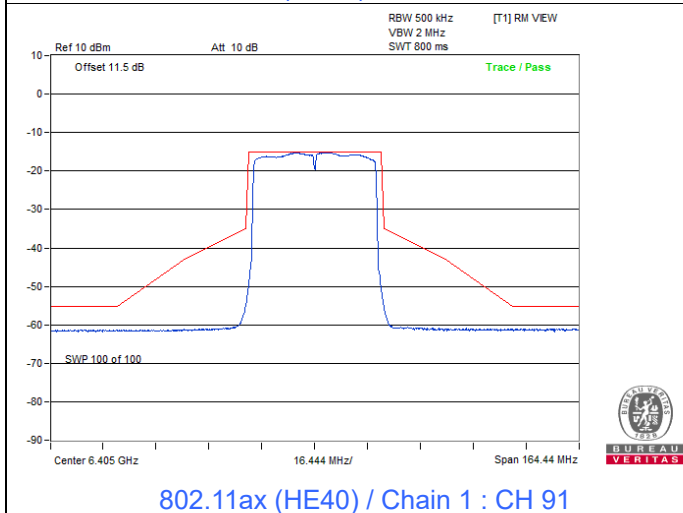
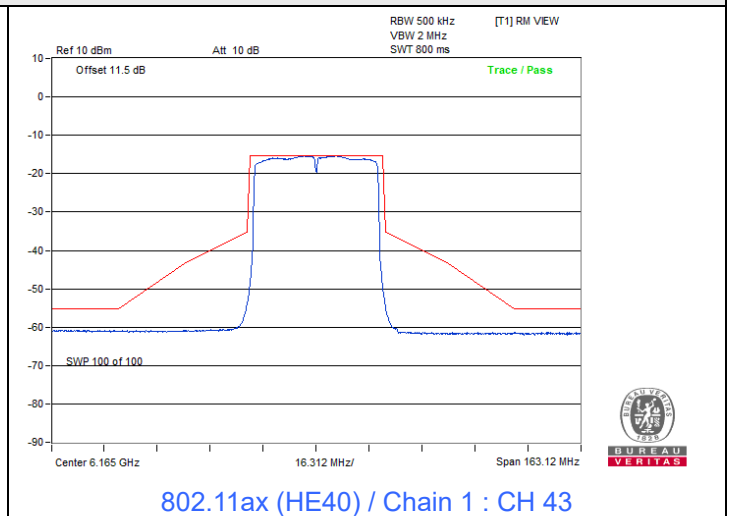
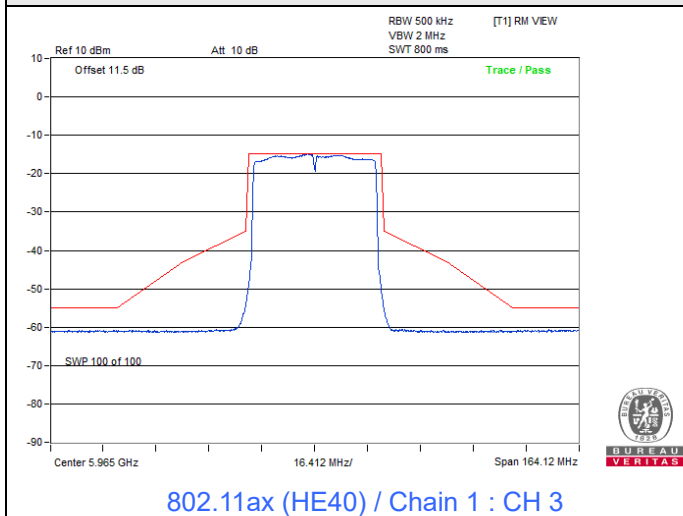


802.11ax (HE40) / Chain 0 : CH 115

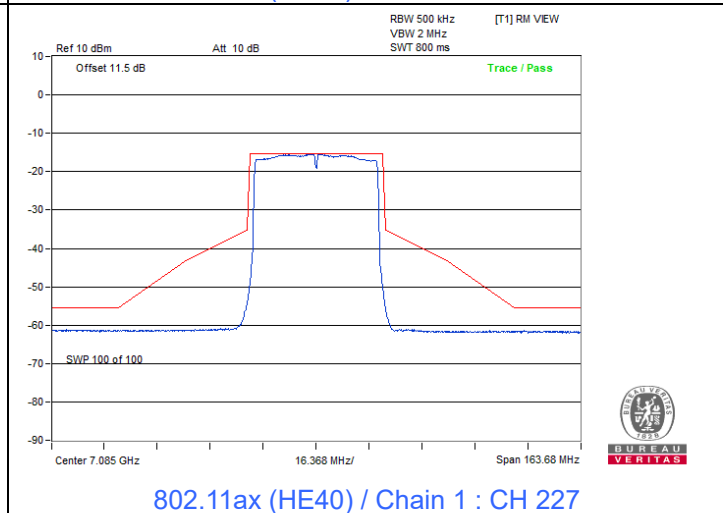
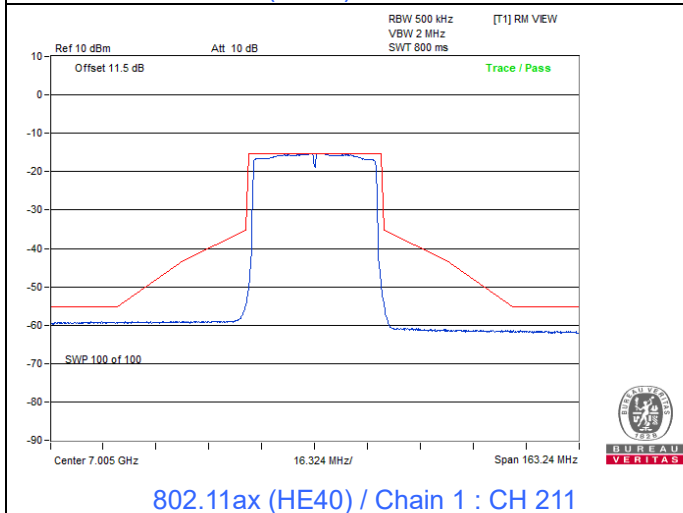
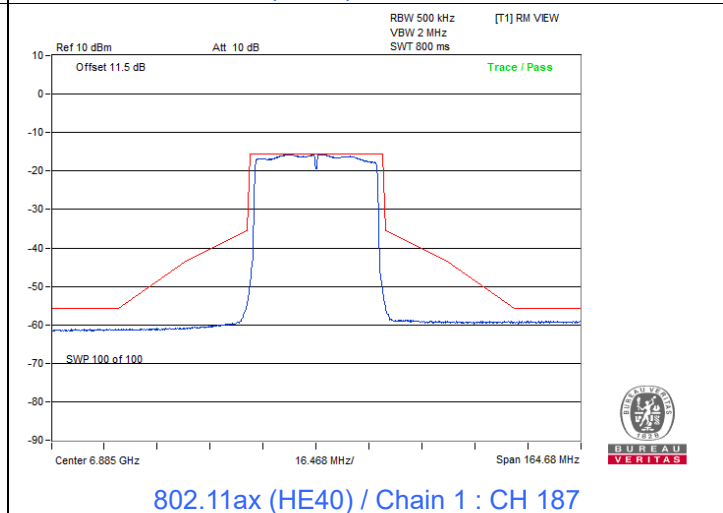
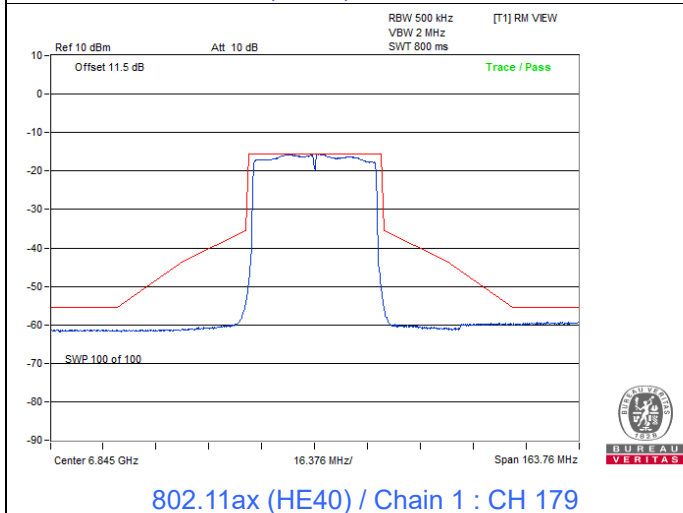
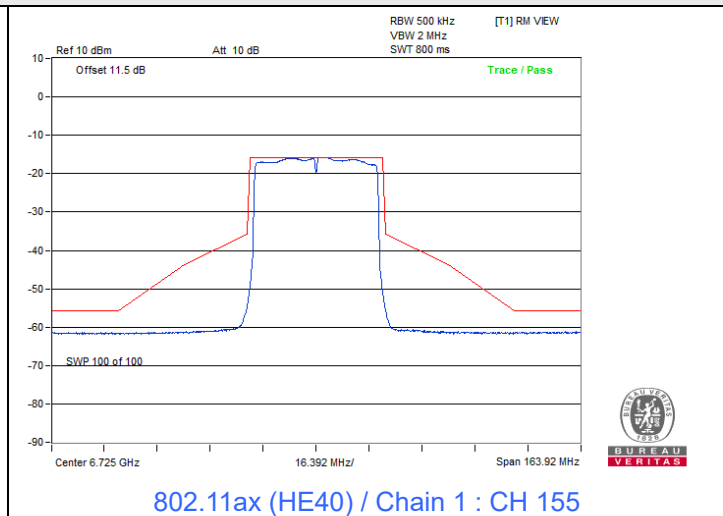
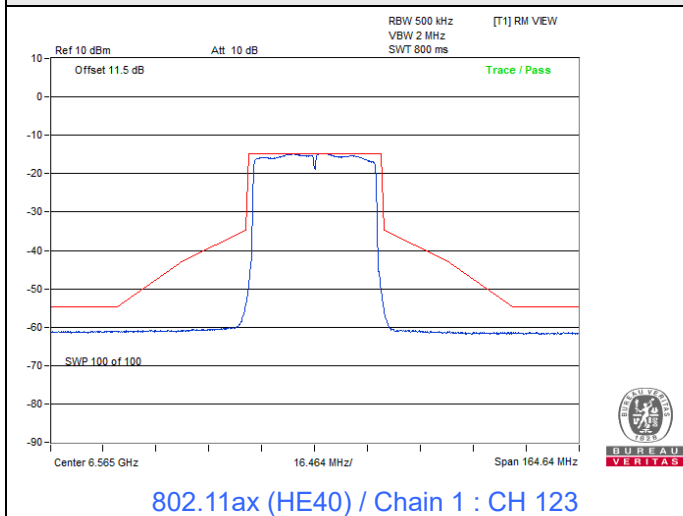
Spectrum Plot



Spectrum Plot

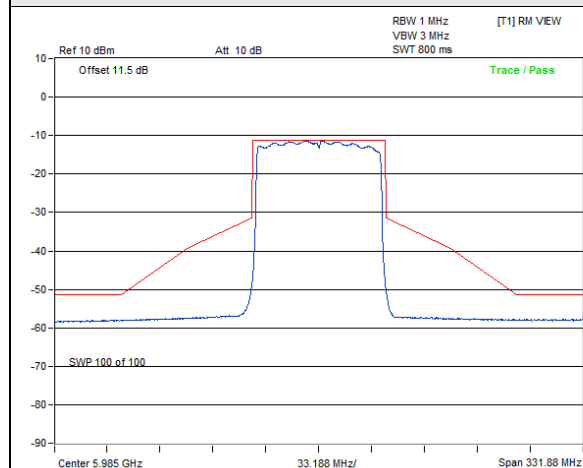


Spectrum Plot

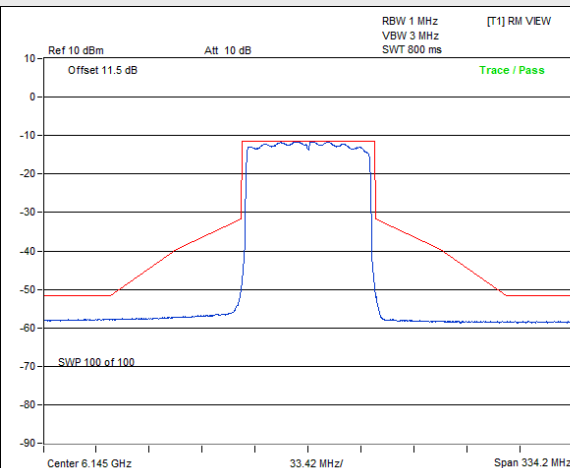


802.11ax (HE80)

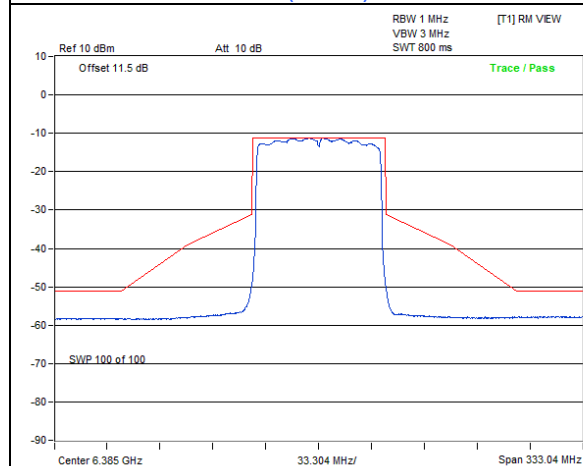
Spectrum Plot



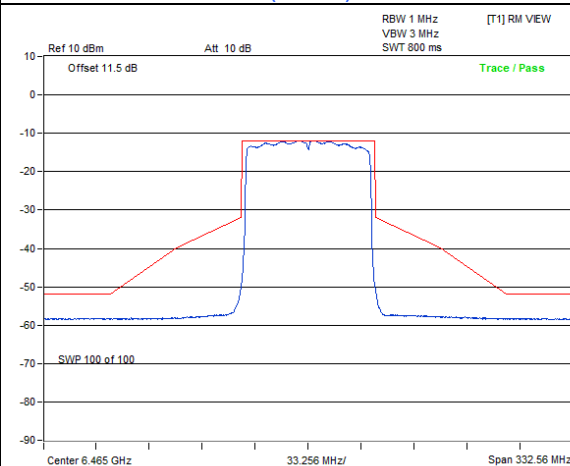
802.11ax (HE80) / Chain 0 : CH 7



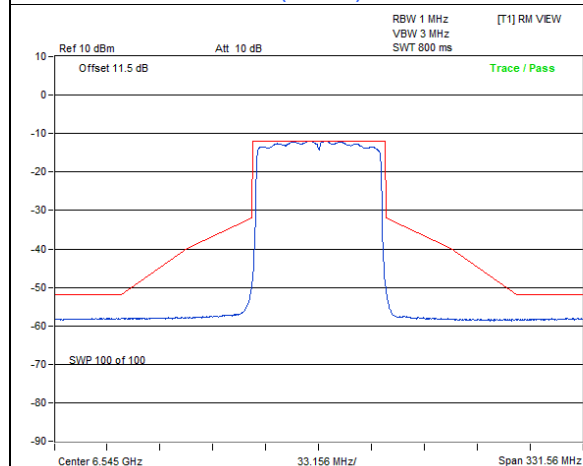
802.11ax (HE80) / Chain 0 : CH 39



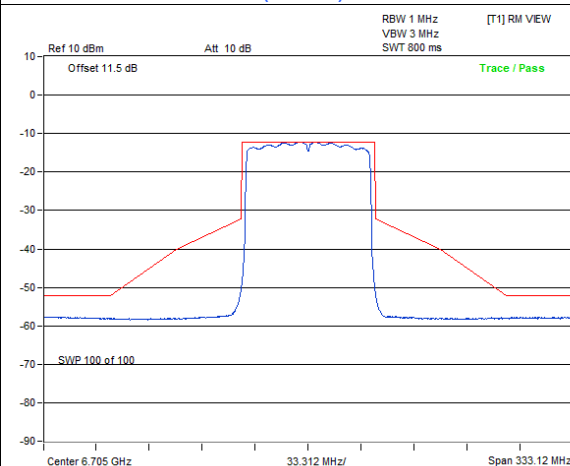
802.11ax (HE80) / Chain 0 : CH 87



802.11ax (HE80) / Chain 0 : CH 103

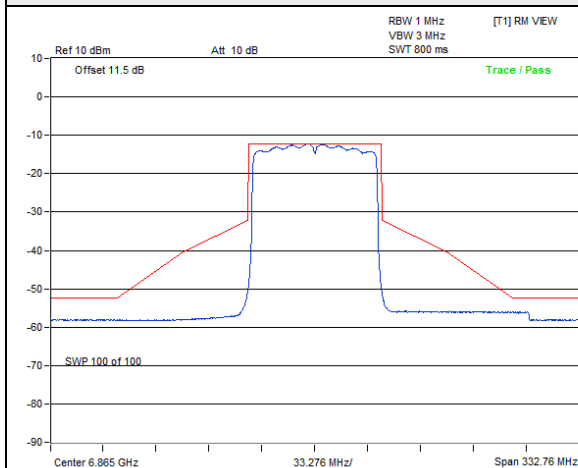


802.11ax (HE80) / Chain 0 : CH 119

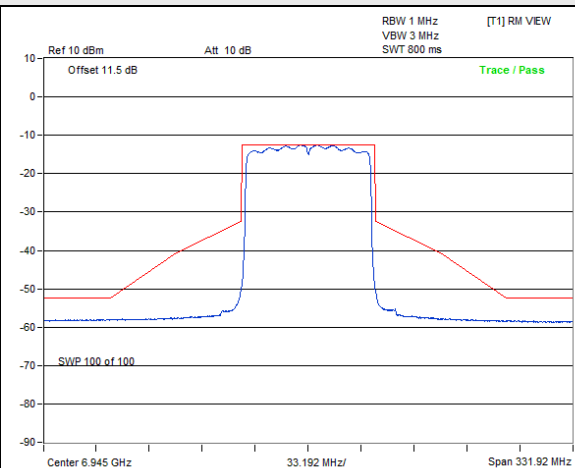


802.11ax (HE80) / Chain 0 : CH 151

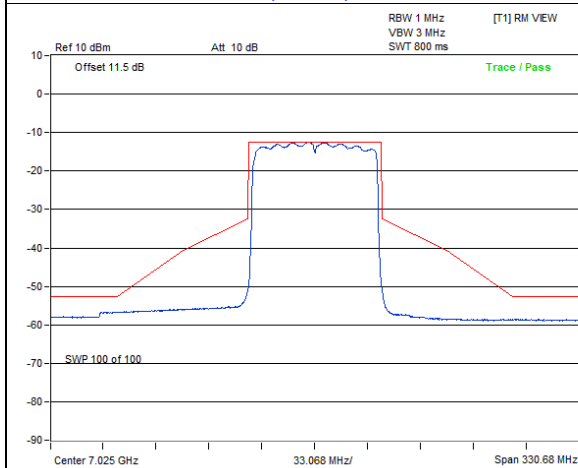
Spectrum Plot



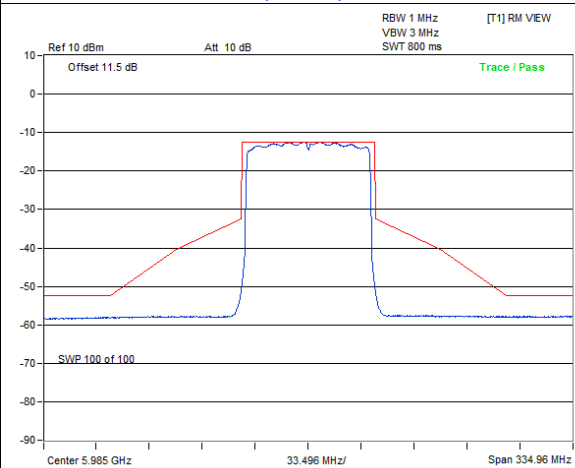
802.11ax (HE80) / Chain 0 : CH 183



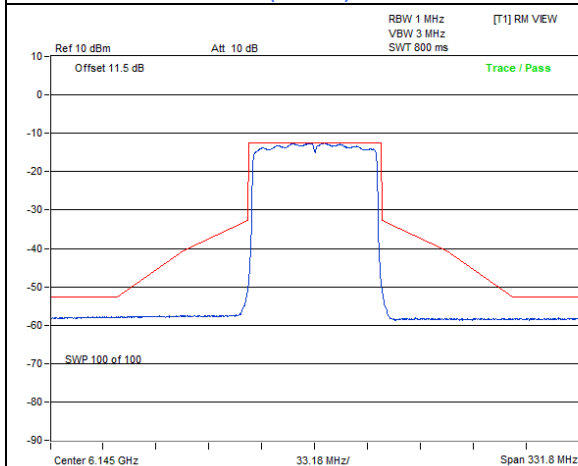
802.11ax (HE80) / Chain 0 : CH 199



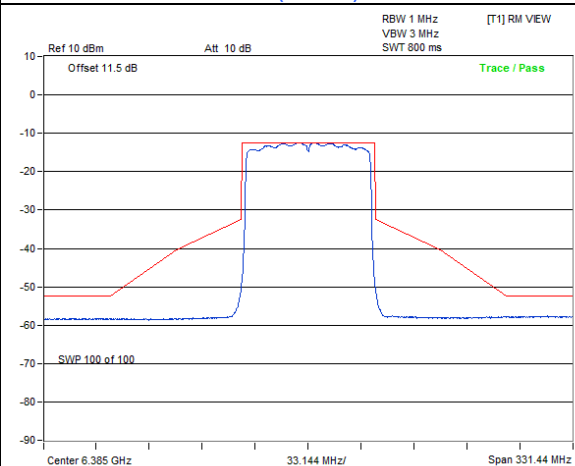
802.11ax (HE80) / Chain 0 : CH 215



802.11ax (HE80) / Chain 1 : CH 7

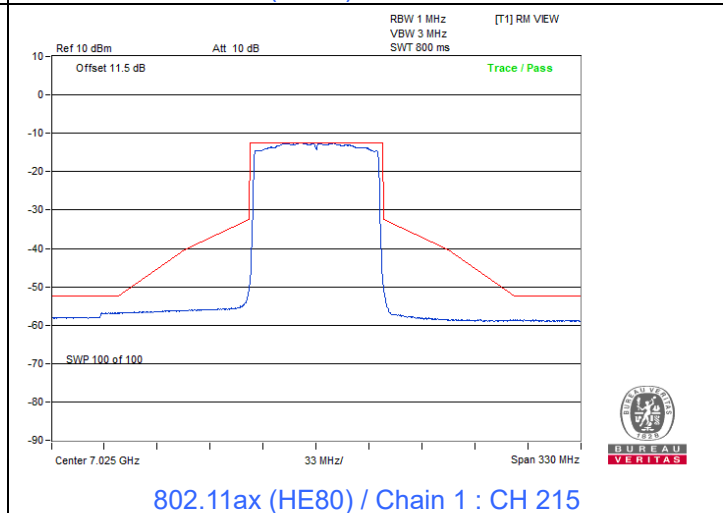
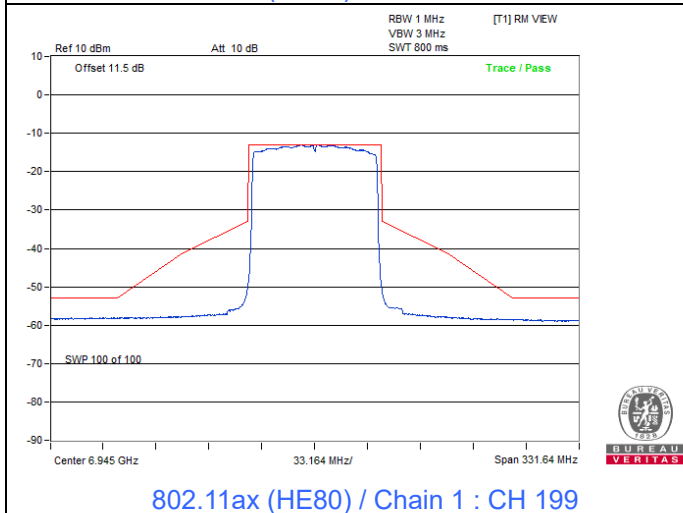
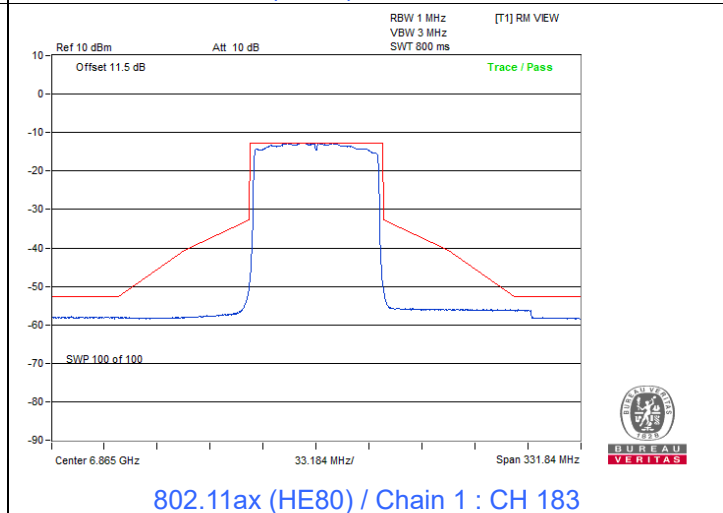
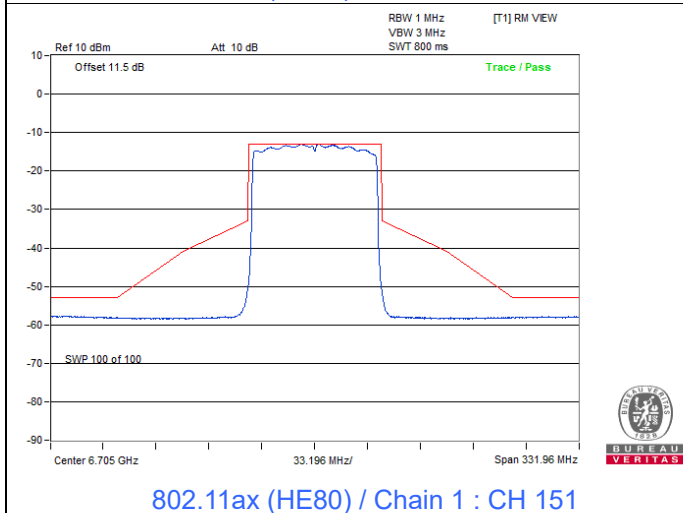
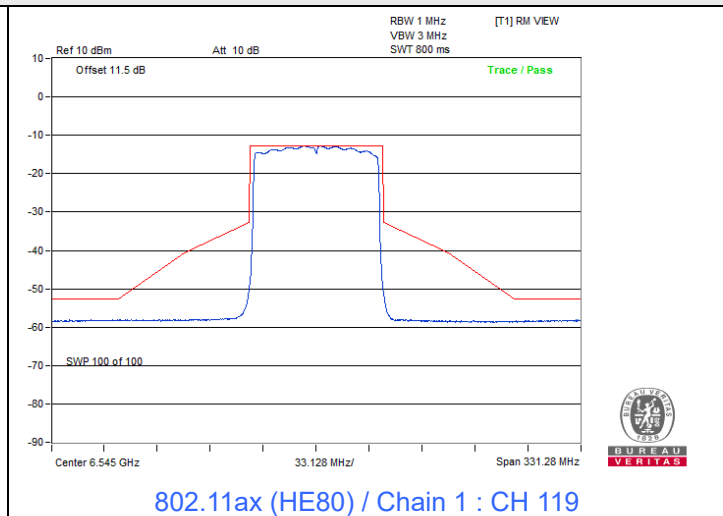
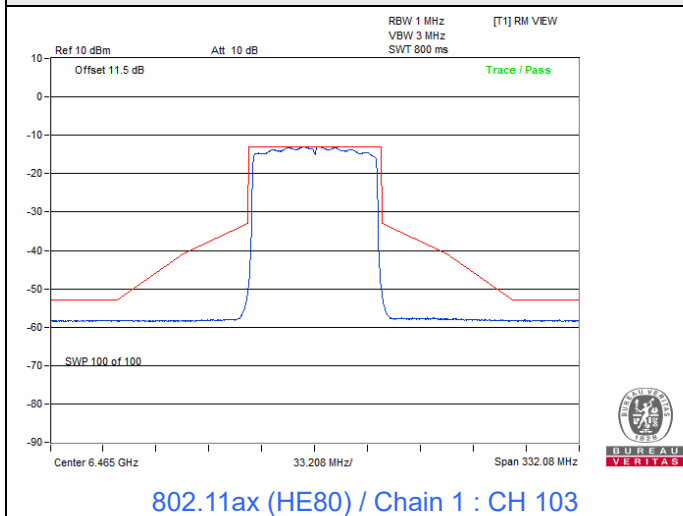


802.11ax (HE80) / Chain 1 : CH 39



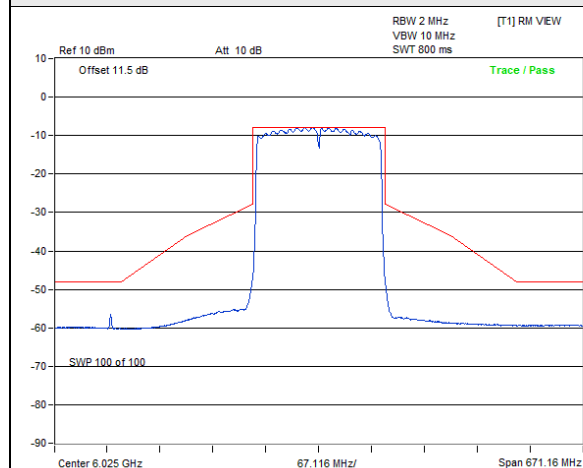
802.11ax (HE80) / Chain 1 : CH 87

Spectrum Plot

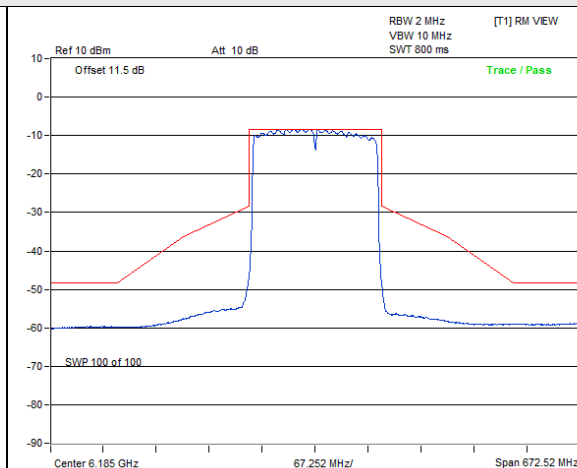


802.11ax (HE160)

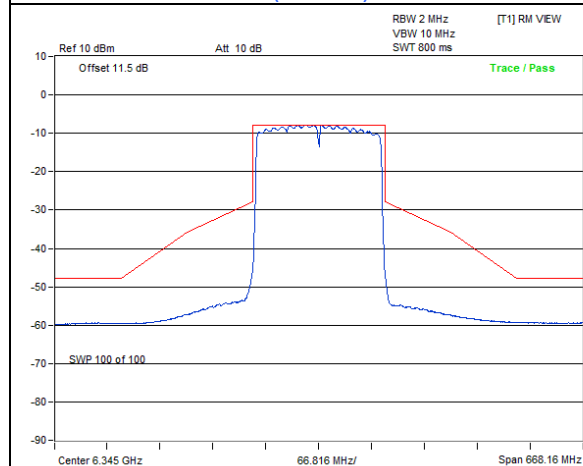
Spectrum Plot



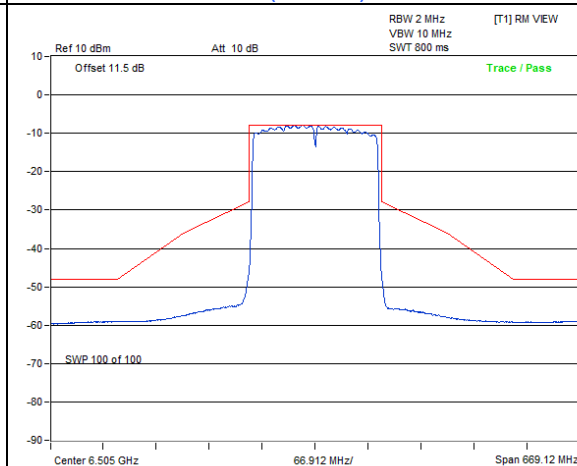
802.11ax (HE160) / Chain 0 : CH 15



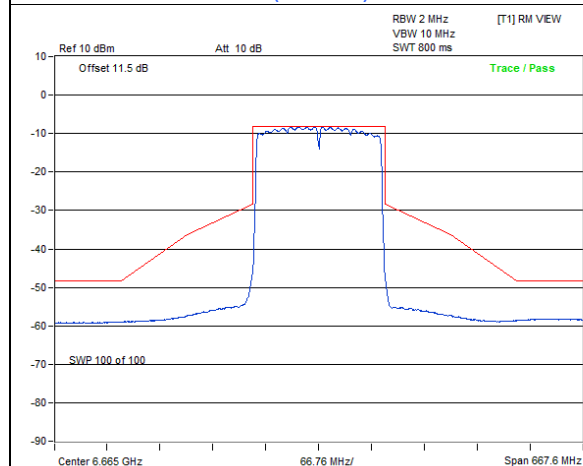
802.11ax (HE160) / Chain 0 : CH 47



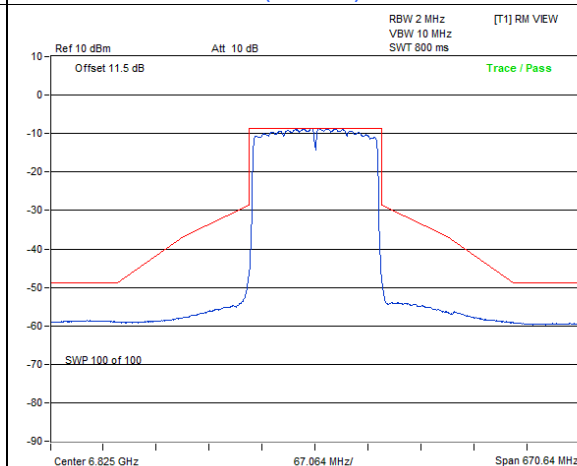
802.11ax (HE160) / Chain 0 : CH 79



802.11ax (HE160) / Chain 0 : CH 111

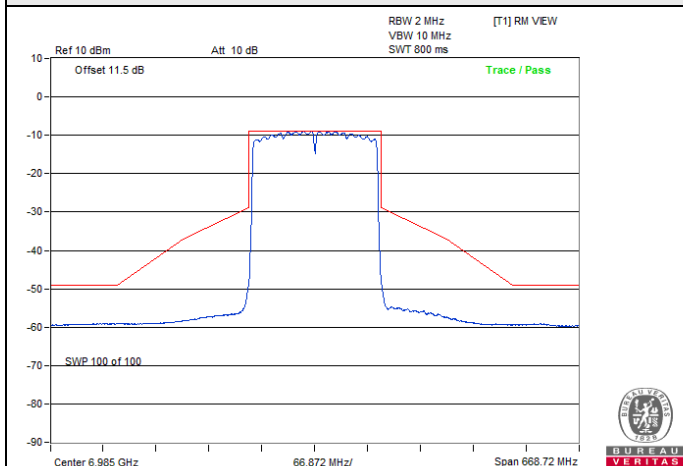


802.11ax (HE160) / Chain 0 : CH 143

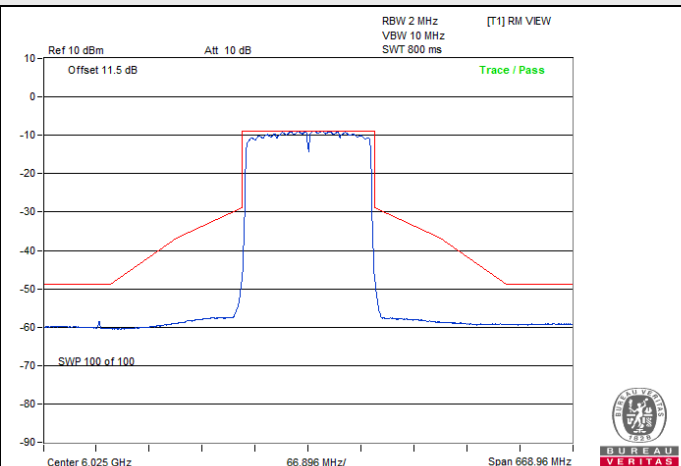


802.11ax (HE160) / Chain 0 : CH 175

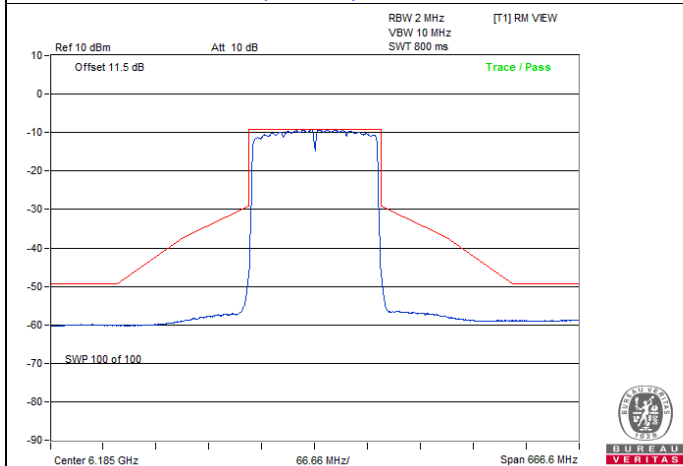
Spectrum Plot



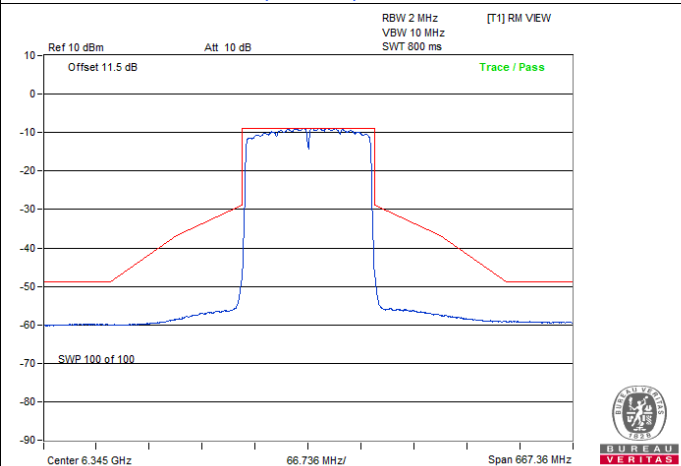
802.11ax (HE160) / Chain 0 : CH 207



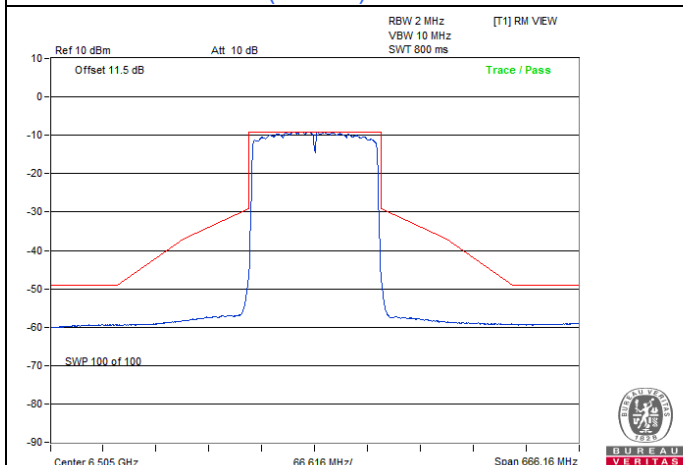
802.11ax (HE160) / Chain 1 : CH 15



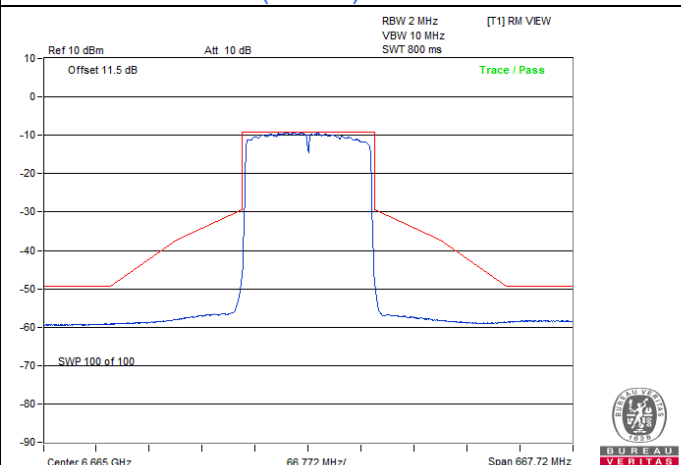
802.11ax (HE160) / Chain 1 : CH 47



802.11ax (HE160) / Chain 1 : CH 79

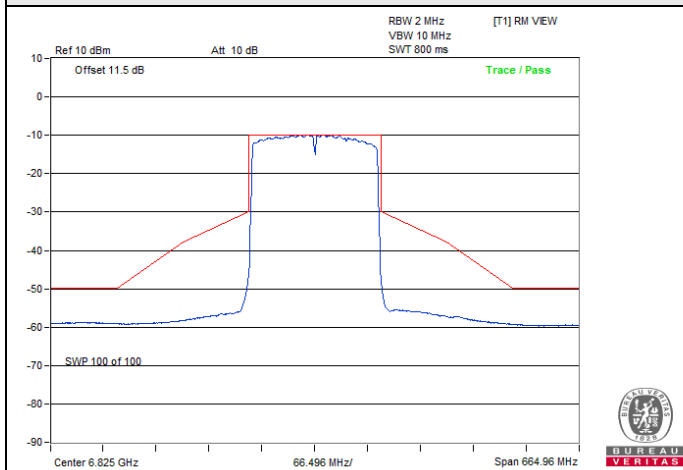


802.11ax (HE160) / Chain 1 : CH 111

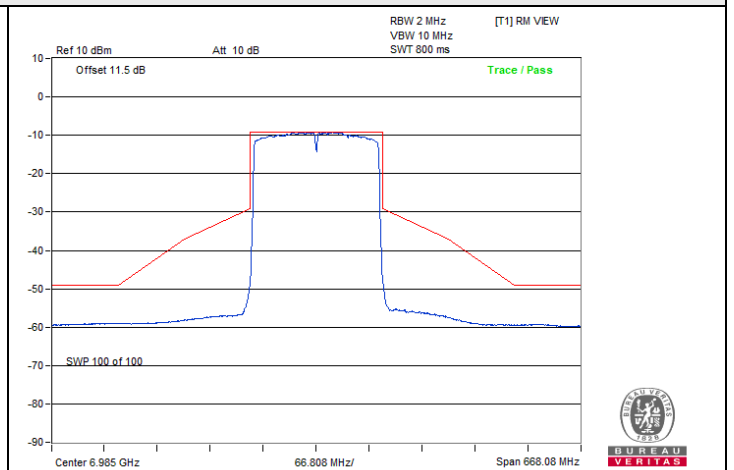


802.11ax (HE160) / Chain 1 : CH 143

Spectrum Plot



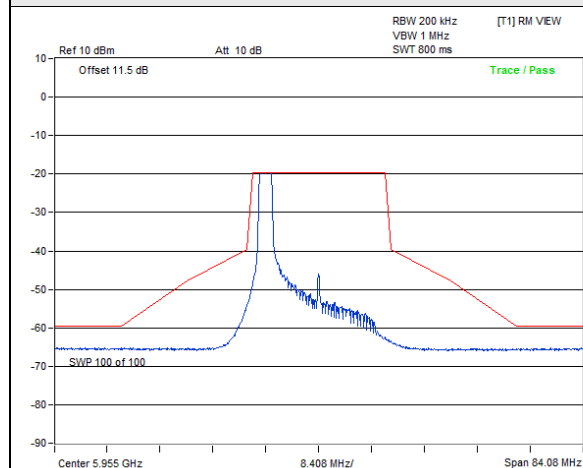
802.11ax (HE160) / Chain 1 : CH 175



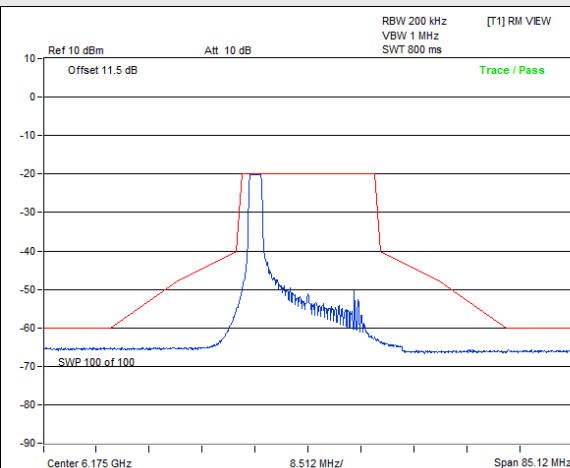
802.11ax (HE160) / Chain 1 : CH 207

802.11ax (HE20) 26-tone RU

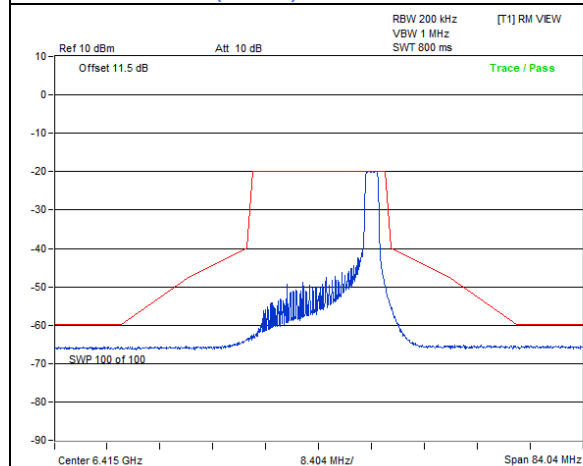
Spectrum Plot



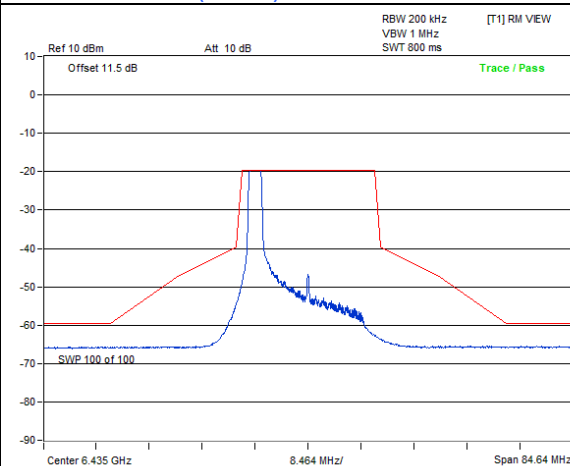
802.11ax (HE20) 26-tone RU / Chain 0 : CH 1



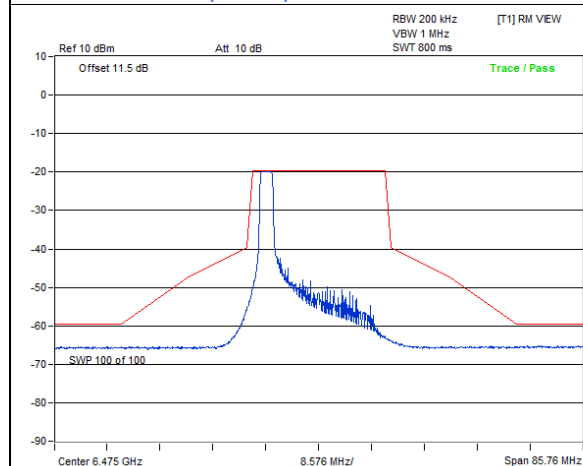
802.11ax (HE20) 26-tone RU / Chain 0 : CH 45



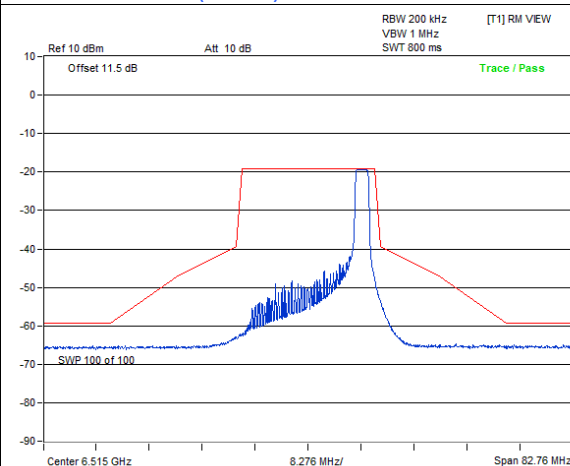
802.11ax (HE20) 26-tone RU / Chain 0 : CH 93



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

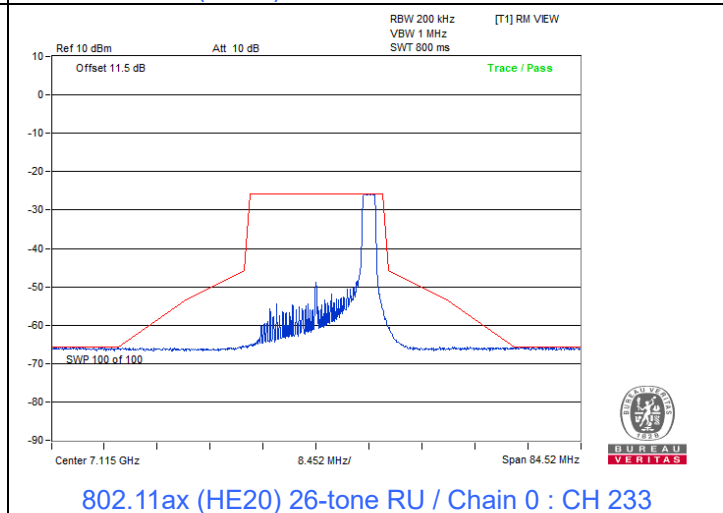
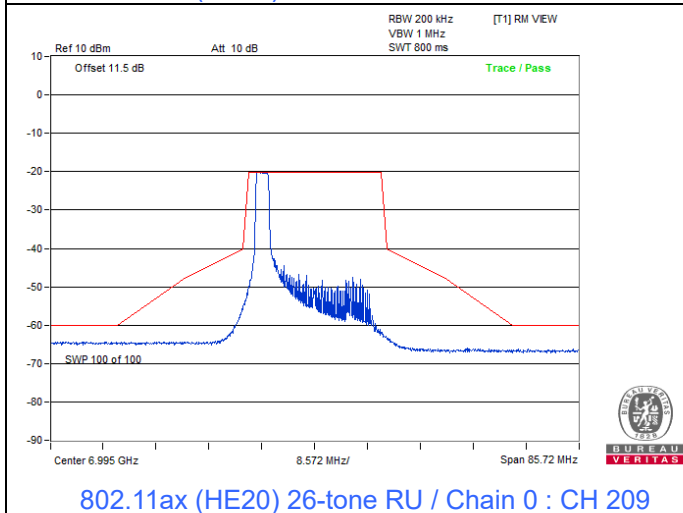
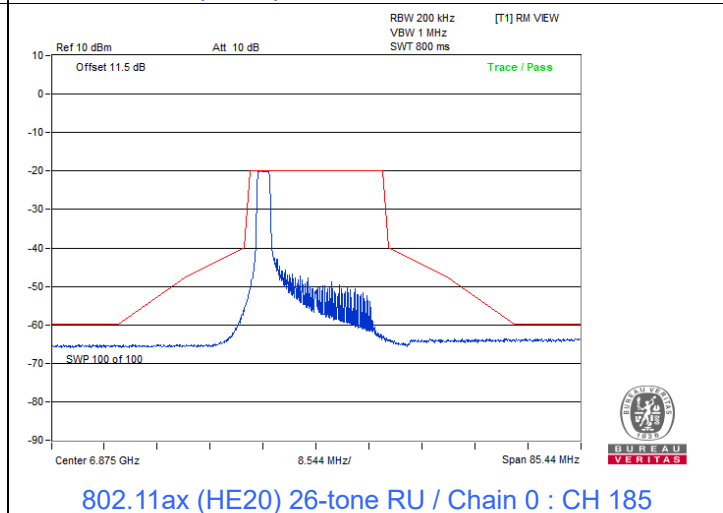
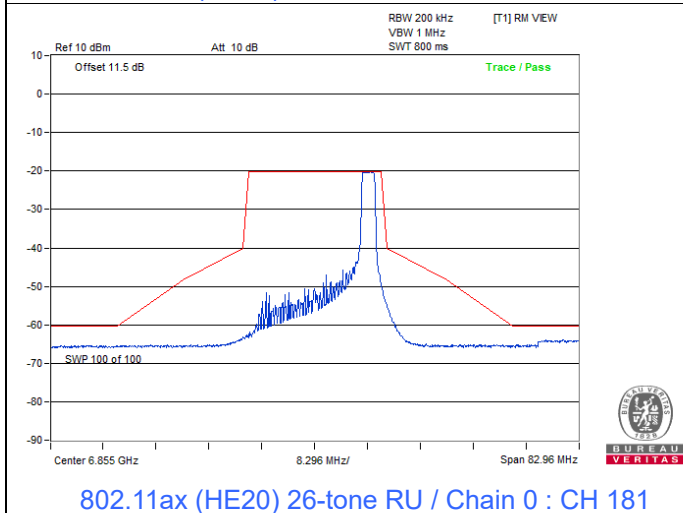
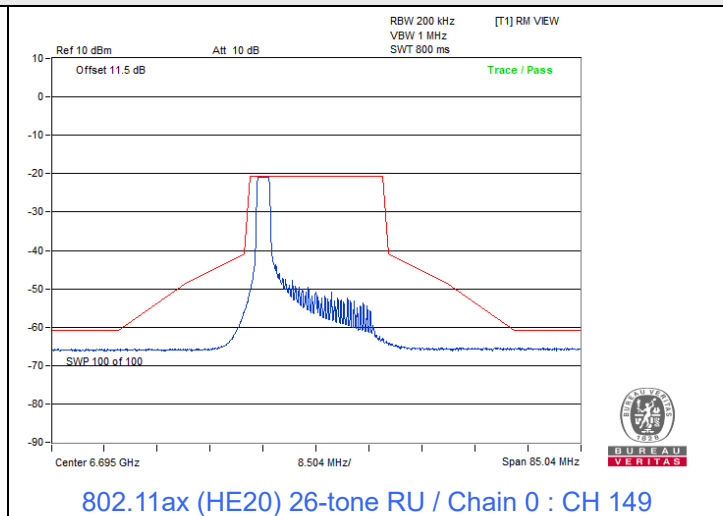
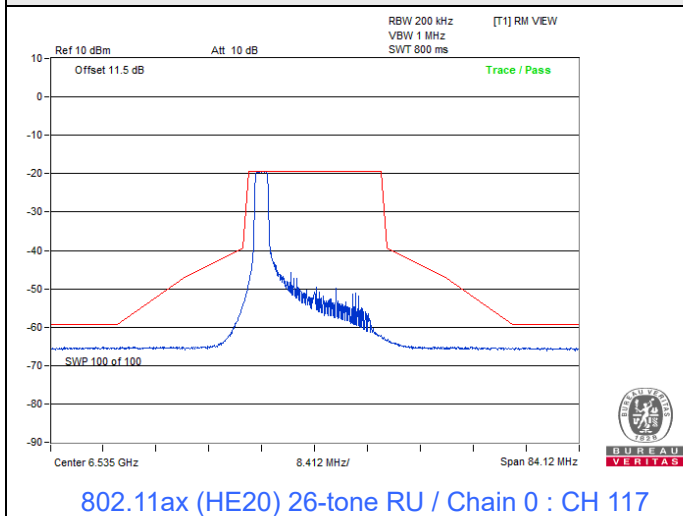


802.11ax (HE20) 26-tone RU / Chain 0 : CH 105

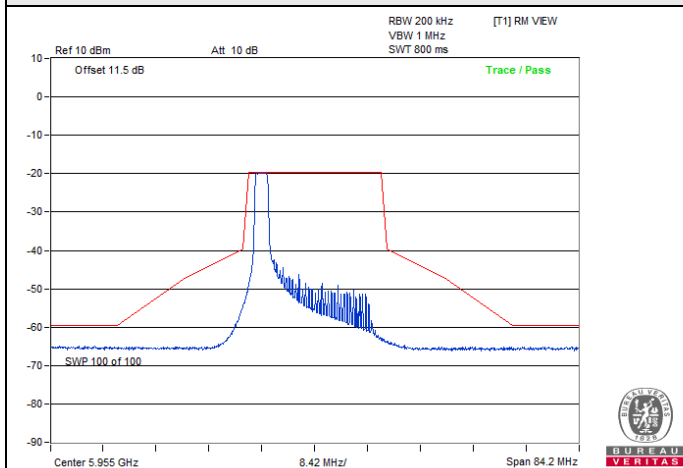


802.11ax (HE20) 26-tone RU / Chain 0 : CH 113

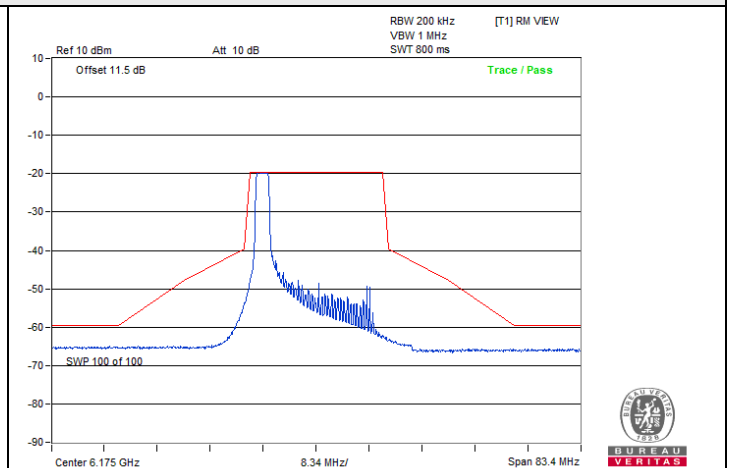
Spectrum Plot



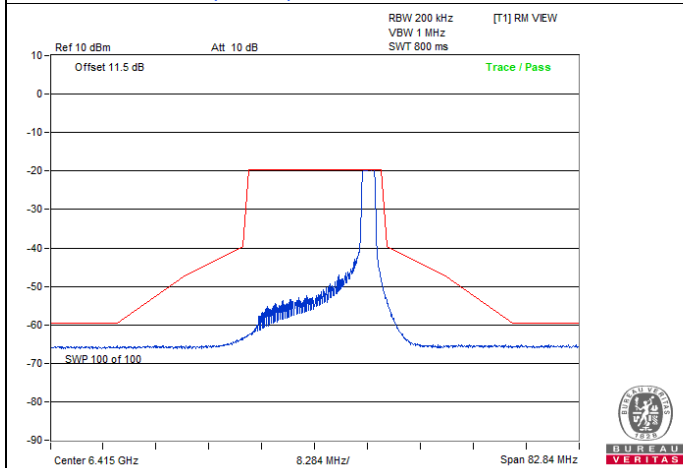
Spectrum Plot



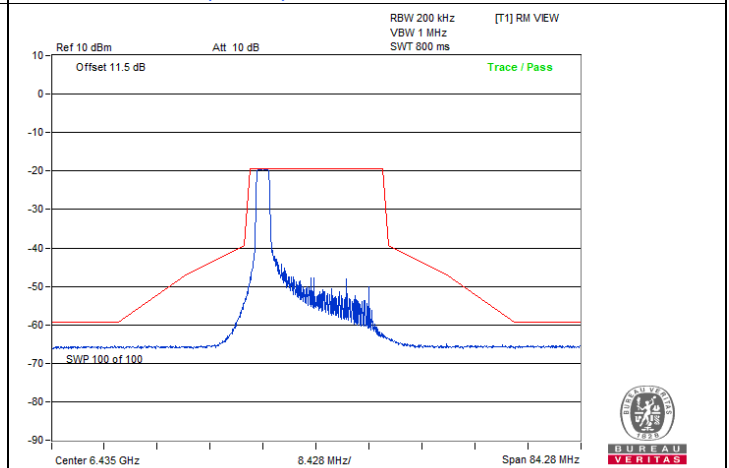
802.11ax (HE20) 26-tone RU / Chain 1 : CH 1



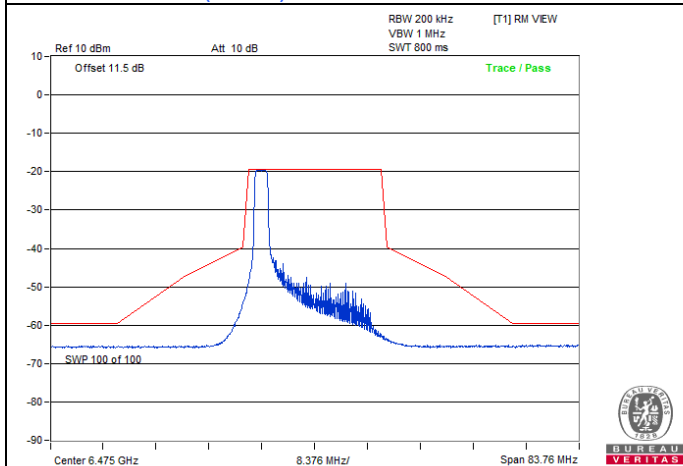
802.11ax (HE20) 26-tone RU / Chain 1 : CH 45



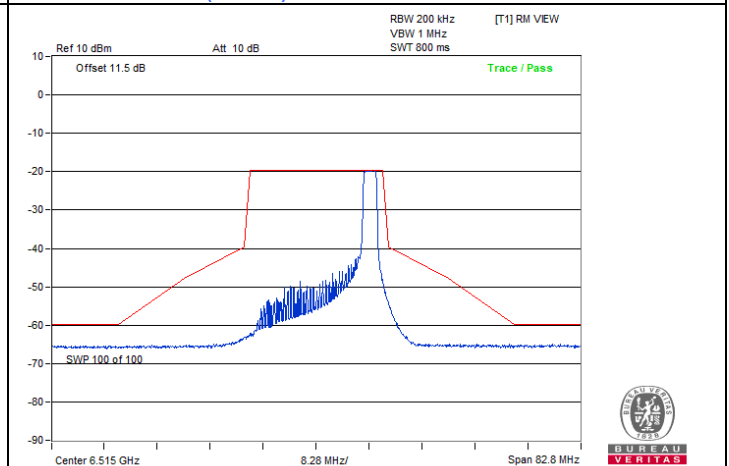
802.11ax (HE20) 26-tone RU / Chain 1 : CH 93



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

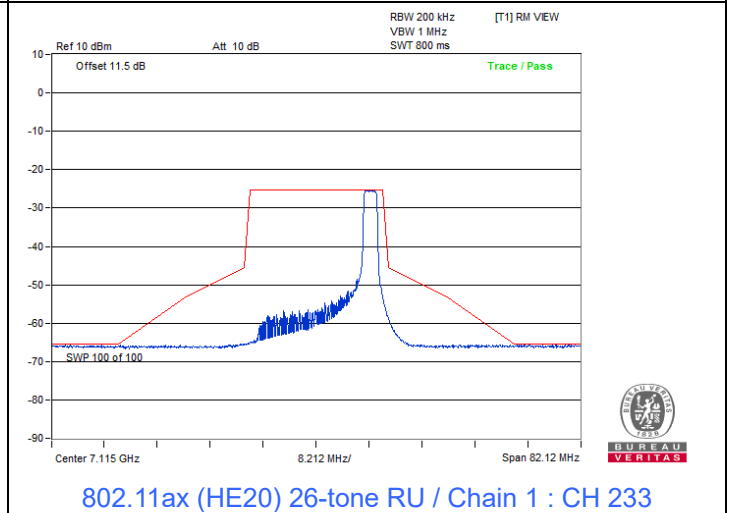
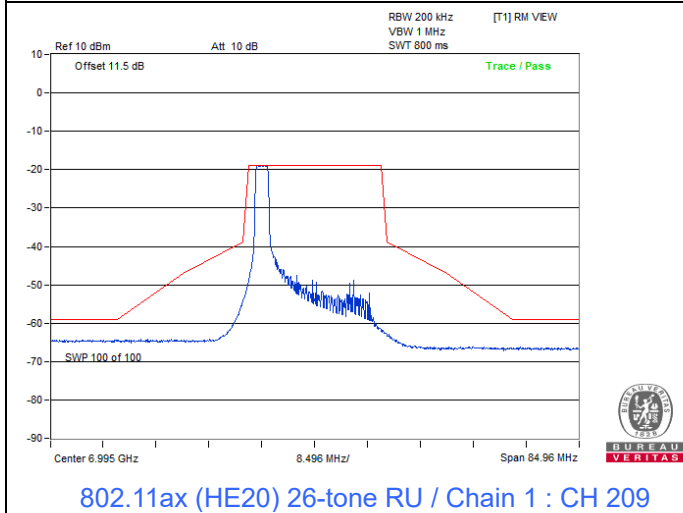
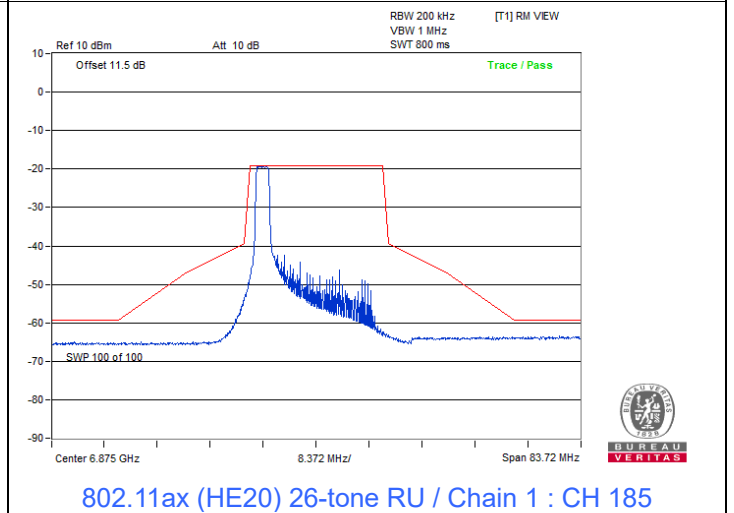
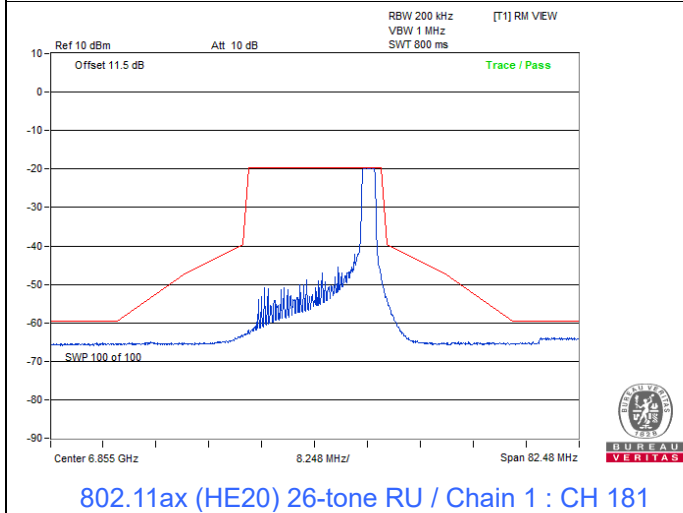
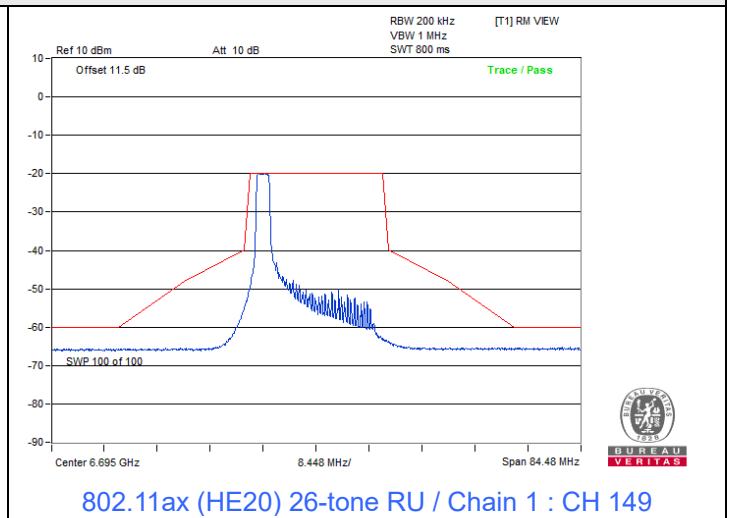
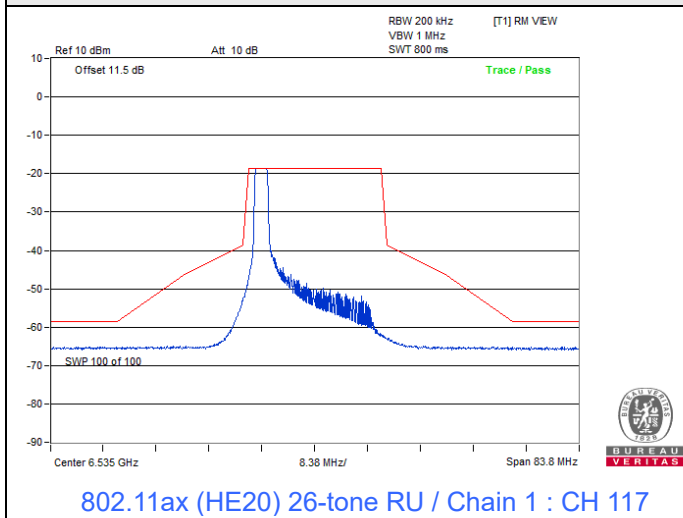


802.11ax (HE20) 26-tone RU / Chain 1 : CH 105



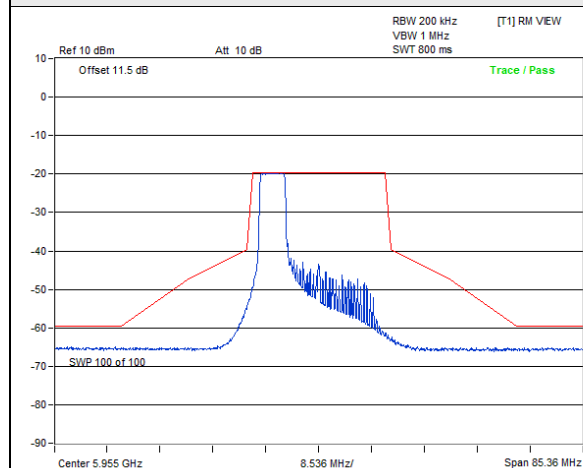
802.11ax (HE20) 26-tone RU / Chain 1 : CH 113

Spectrum Plot

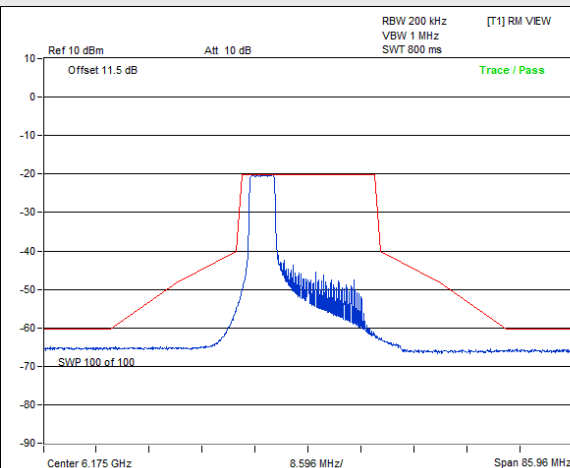


802.11ax (HE20) 52-tone RU

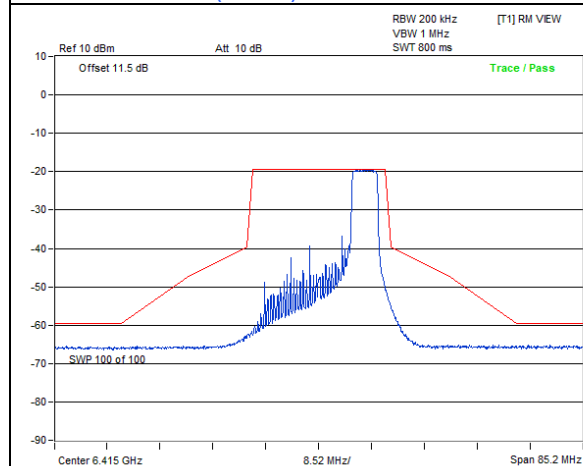
Spectrum Plot



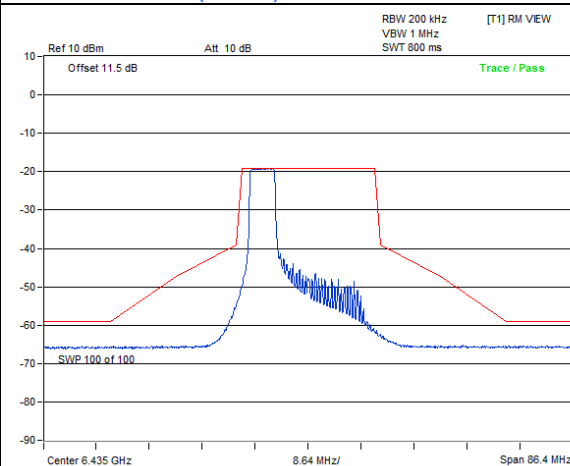
802.11ax (HE20) 52-tone RU / Chain 0 : CH 1



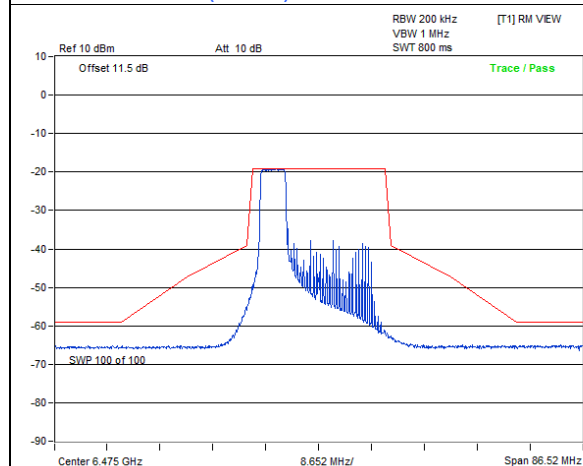
802.11ax (HE20) 52-tone RU / Chain 0 : CH 45



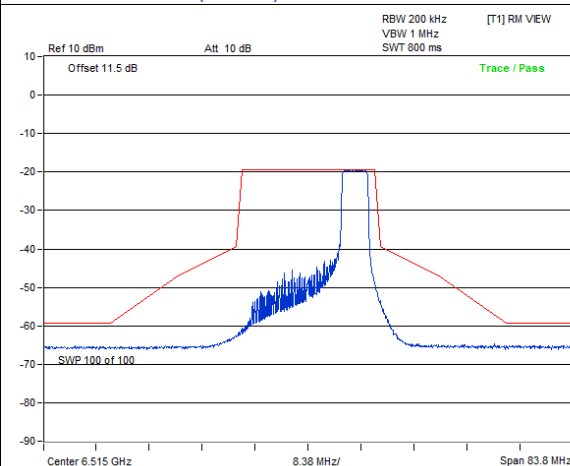
802.11ax (HE20) 52-tone RU / Chain 0 : CH 93



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

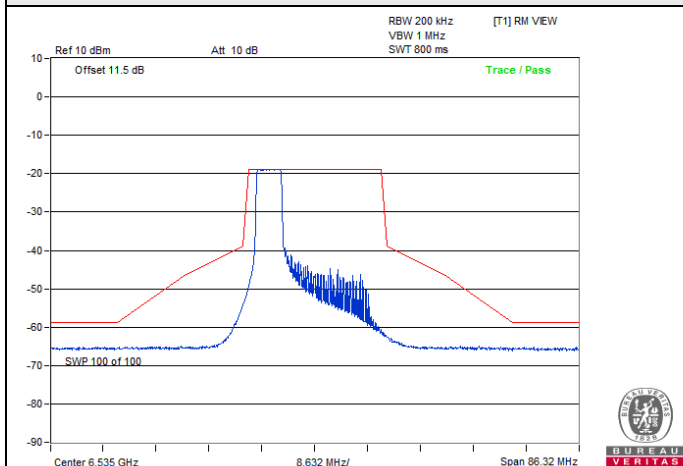


802.11ax (HE20) 52-tone RU / Chain 0 : CH 105

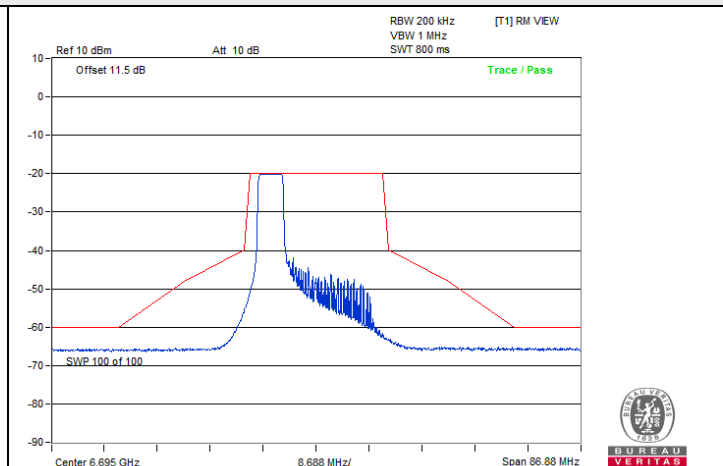


802.11ax (HE20) 52-tone RU / Chain 0 : CH 113

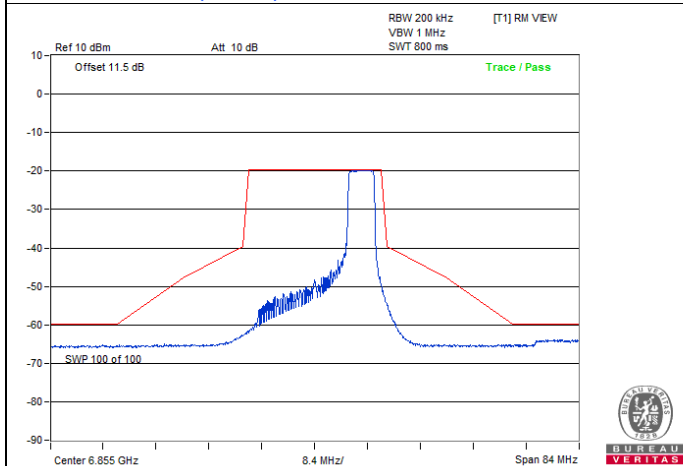
Spectrum Plot



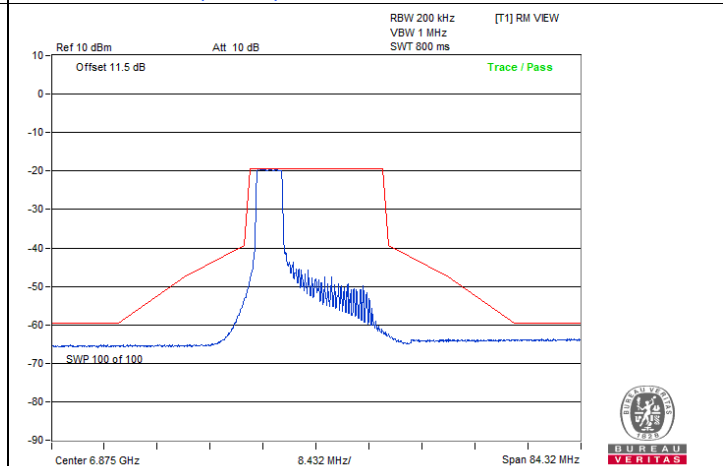
802.11ax (HE20) 52-tone RU / Chain 0 : CH 117



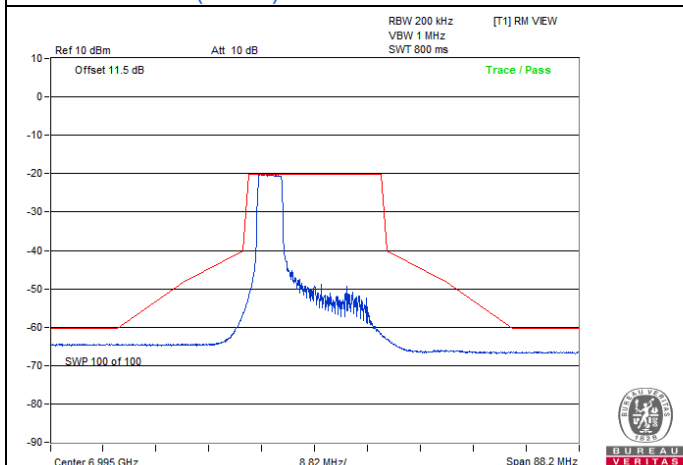
802.11ax (HE20) 52-tone RU / Chain 0 : CH 149



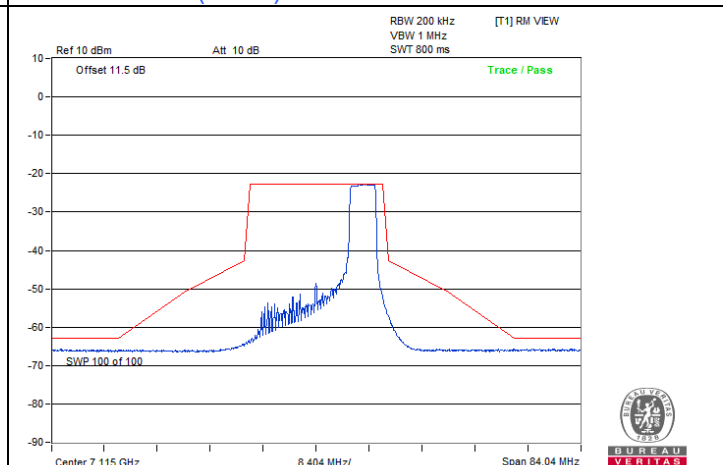
802.11ax (HE20) 52-tone RU / Chain 0 : CH 181



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

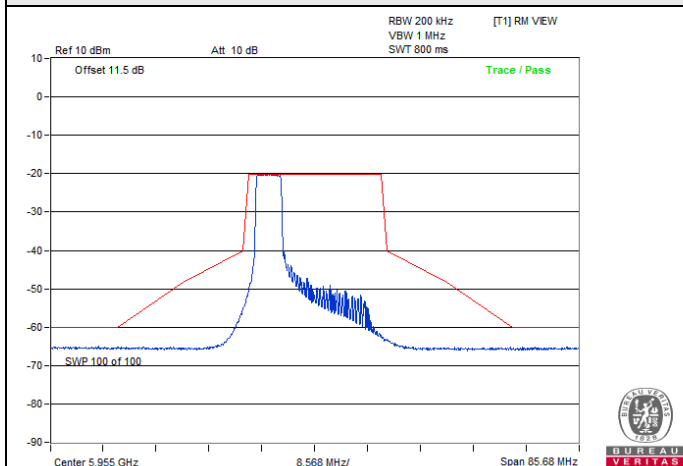


802.11ax (HE20) 52-tone RU / Chain 0 : CH 209

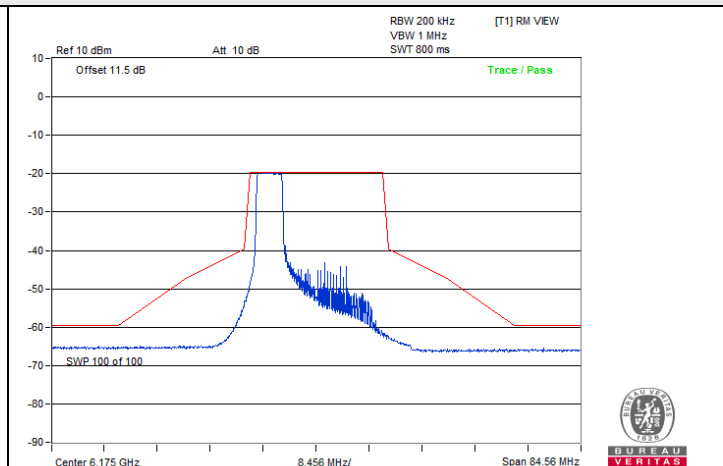


802.11ax (HE20) 52-tone RU / Chain 0 : CH 233

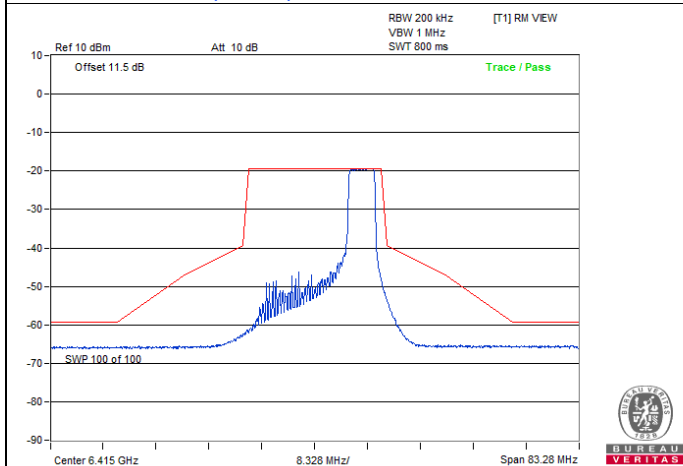
Spectrum Plot



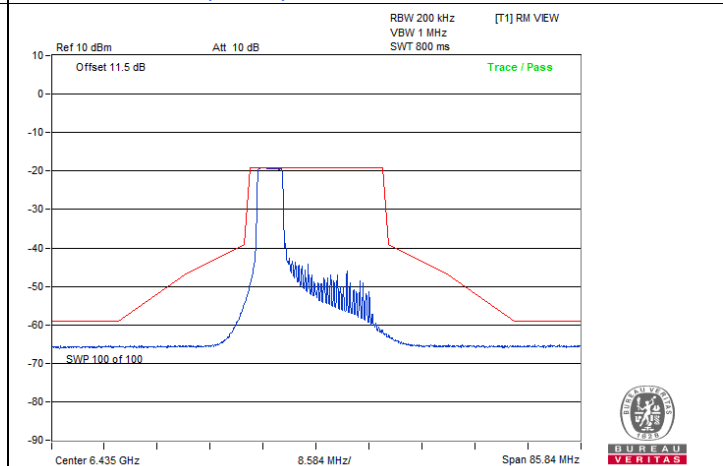
802.11ax (HE20) 52-tone RU / Chain 1 : CH 1



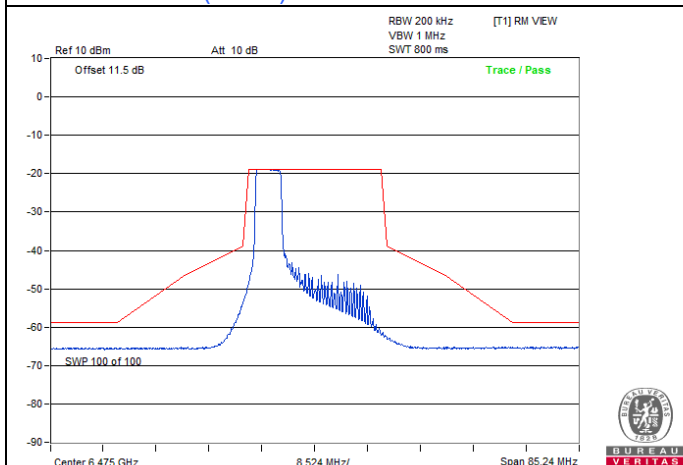
802.11ax (HE20) 52-tone RU / Chain 1 : CH 45



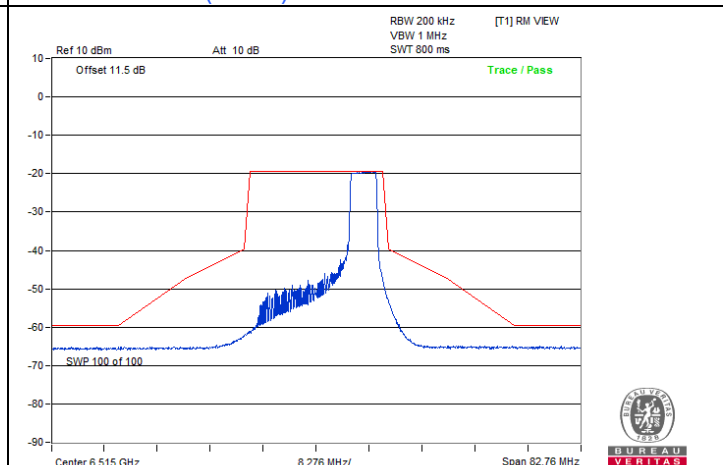
802.11ax (HE20) 52-tone RU / Chain 1 : CH 93



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

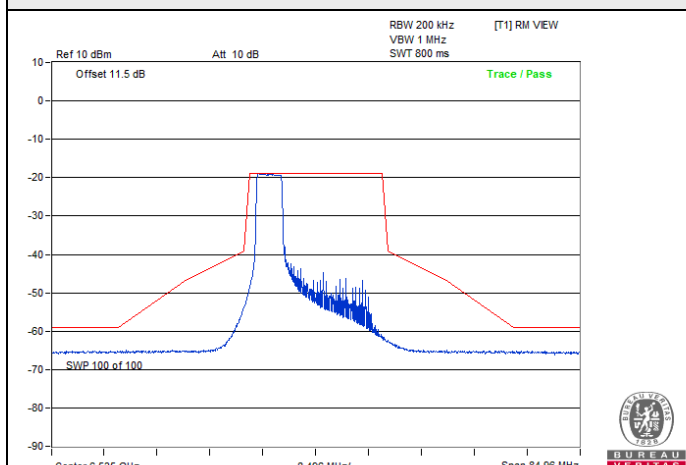


802.11ax (HE20) 52-tone RU / Chain 1 : CH 105

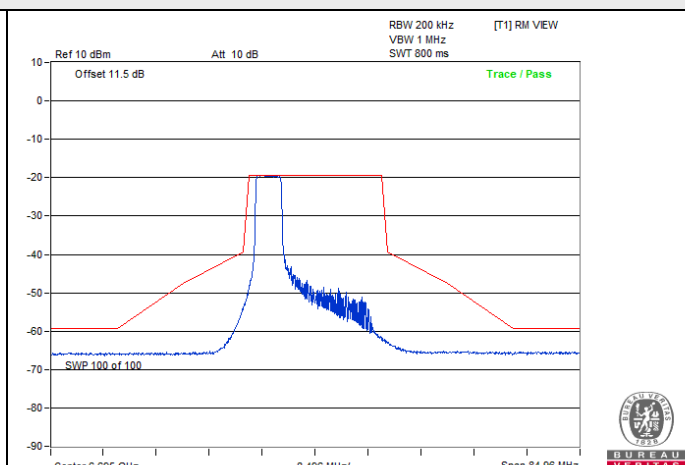


802.11ax (HE20) 52-tone RU / Chain 1 : CH 113

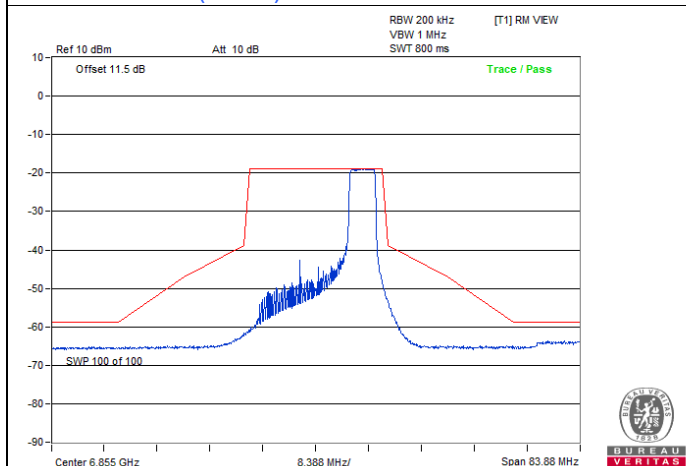
Spectrum Plot



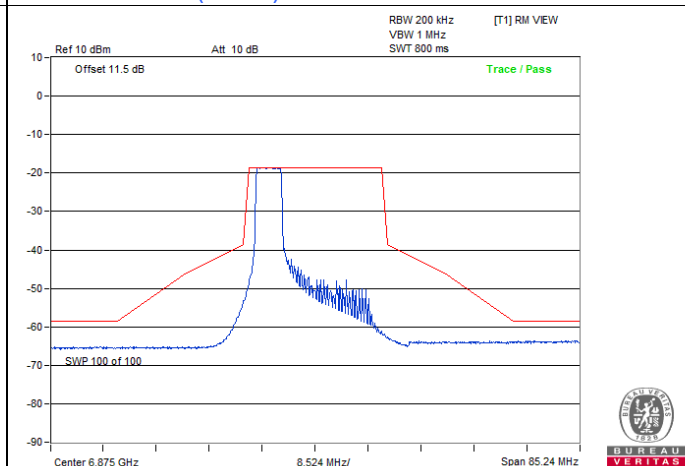
802.11ax (HE20) 52-tone RU / Chain 1 : CH 117



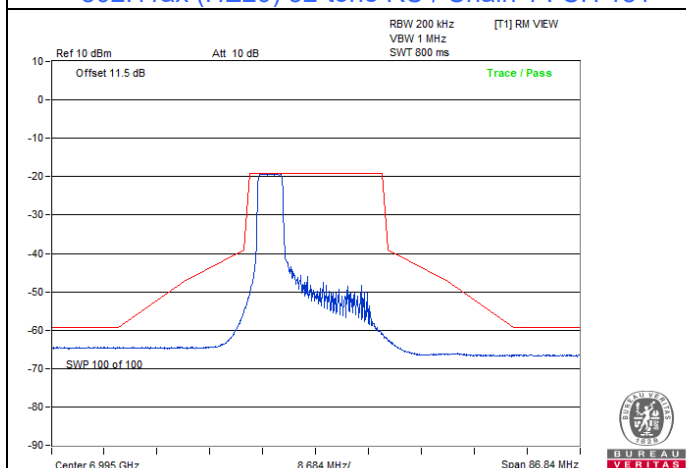
802.11ax (HE20) 52-tone RU / Chain 1 : CH 149



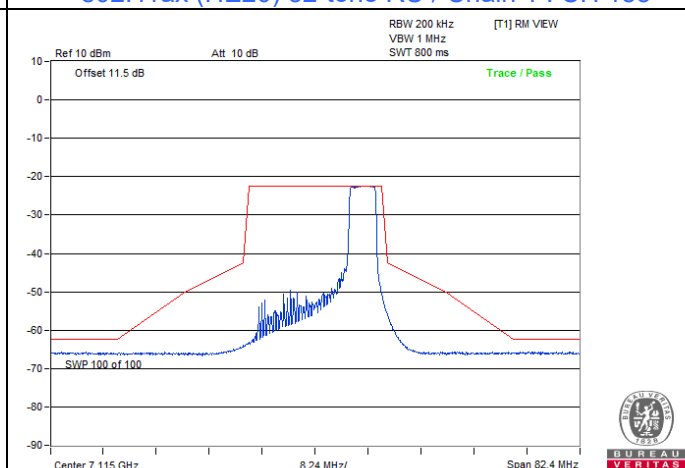
802.11ax (HE20) 52-tone RU / Chain 1 : CH 181



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



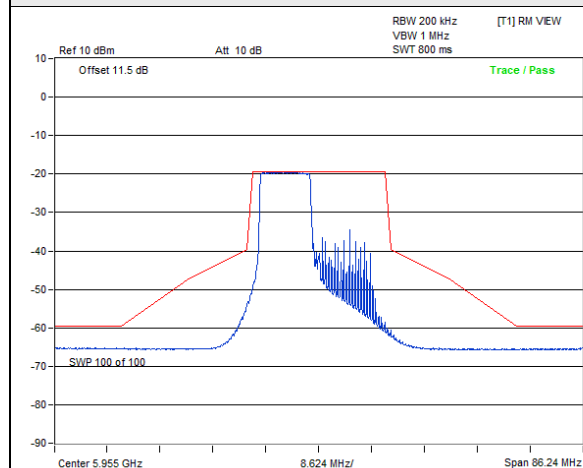
802.11ax (HE20) 52-tone RU / Chain 1 : CH 209



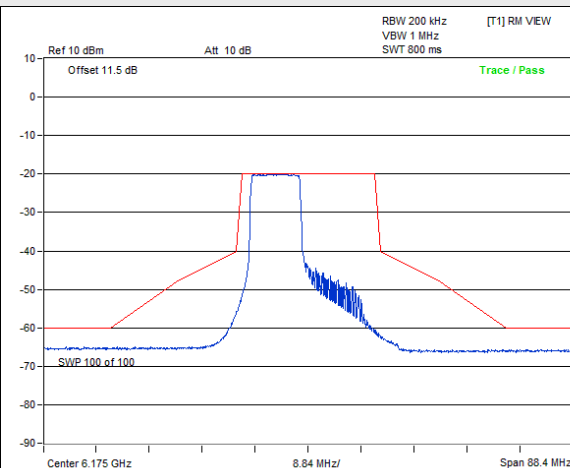
802.11ax (HE20) 52-tone RU / Chain 1 : CH 233

802.11ax (HE20) 106-tone RU

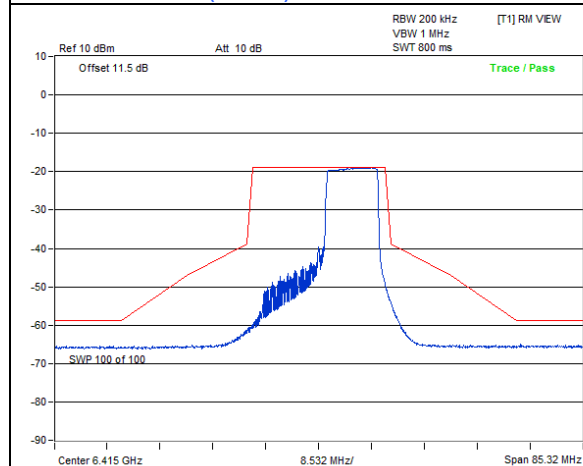
Spectrum Plot



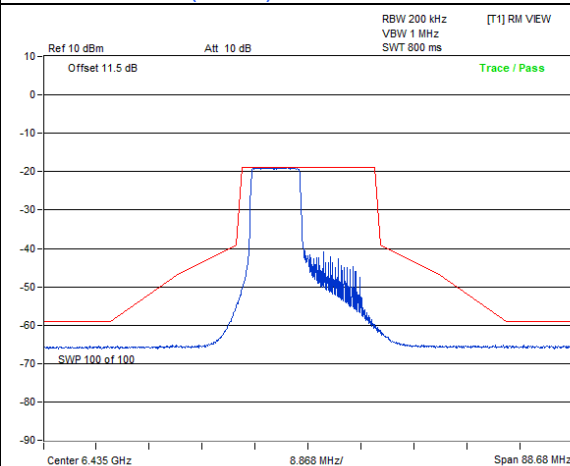
802.11ax (HE20) 106-tone RU / Chain 0 : CH 1



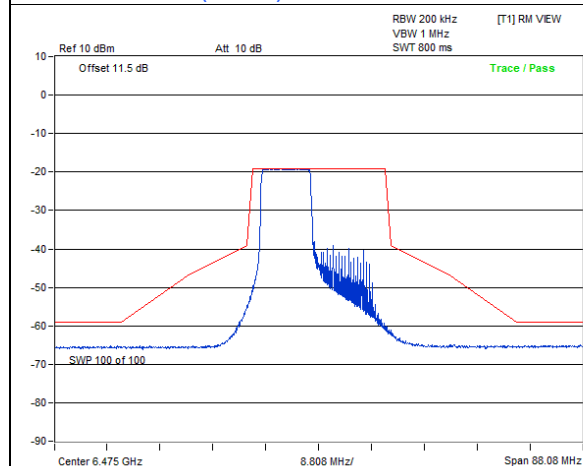
802.11ax (HE20) 106-tone RU / Chain 0 : CH 45



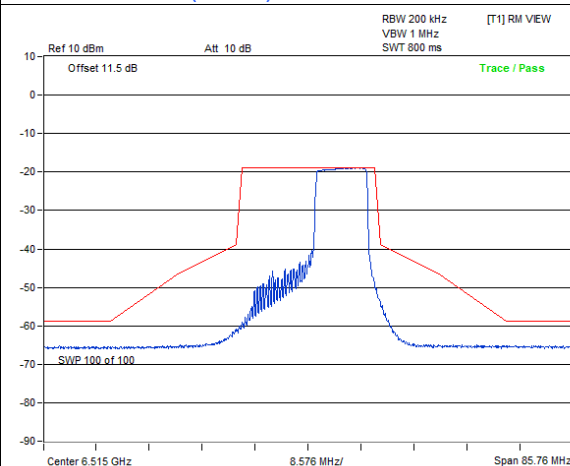
802.11ax (HE20) 106-tone RU / Chain 0 : CH 93



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

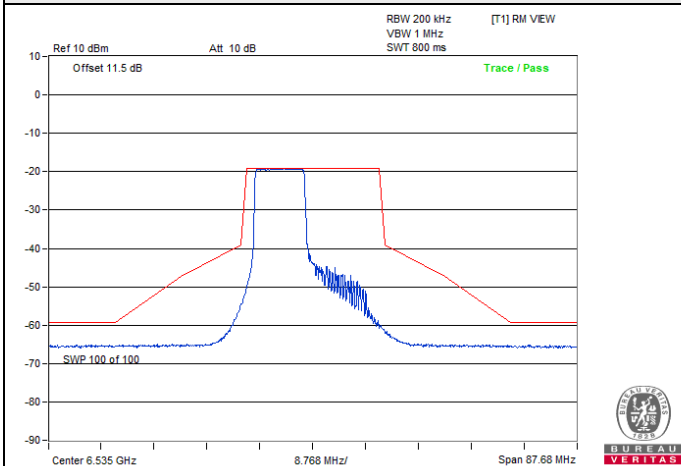


802.11ax (HE20) 106-tone RU / Chain 0 : CH 105

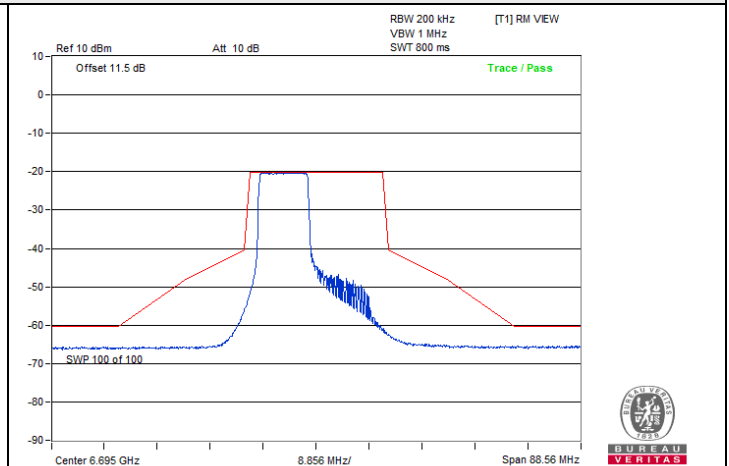


802.11ax (HE20) 106-tone RU / Chain 0 : CH 113

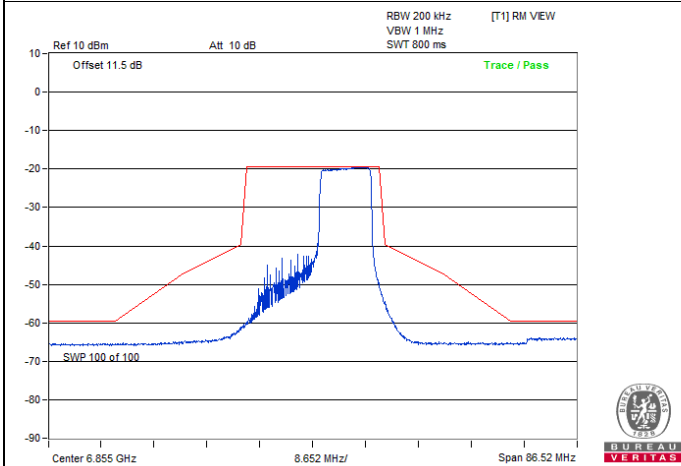
Spectrum Plot



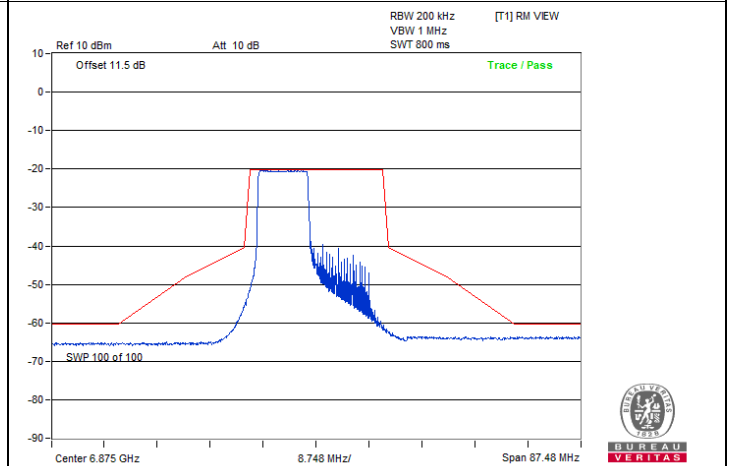
802.11ax (HE20) 106-tone RU / Chain 0 : CH 117



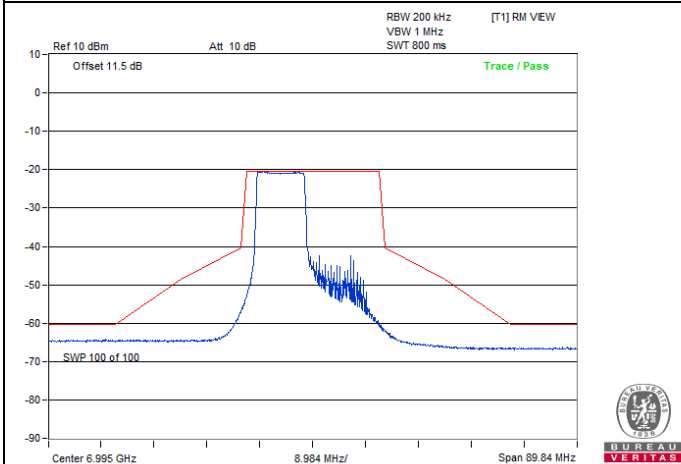
802.11ax (HE20) 106-tone RU / Chain 0 : CH 149



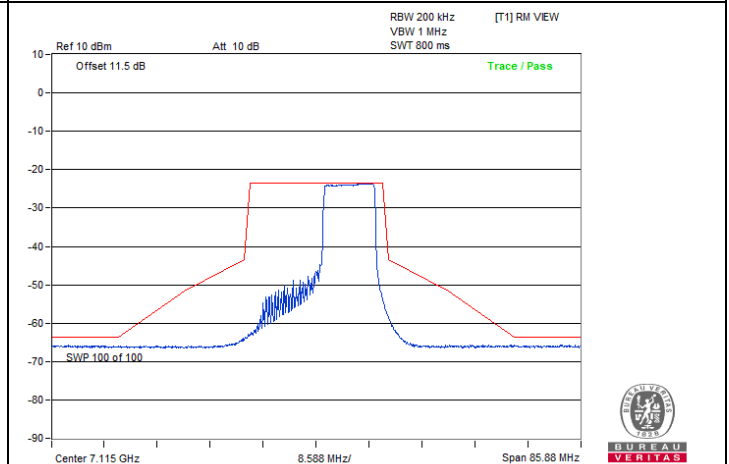
802.11ax (HE20) 106-tone RU / Chain 0 : CH 181



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

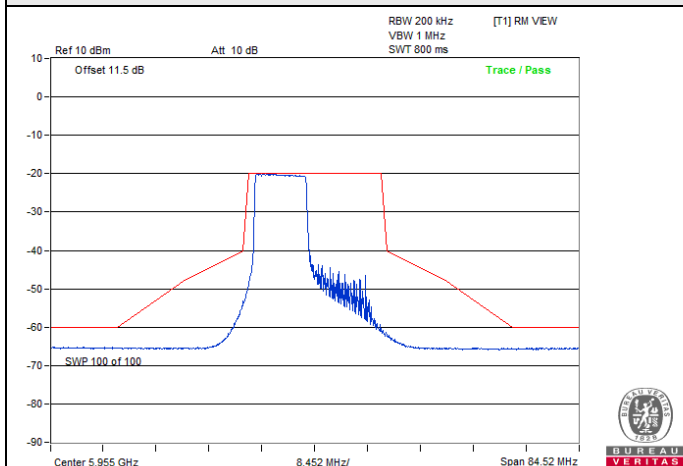


802.11ax (HE20) 106-tone RU / Chain 0 : CH 209

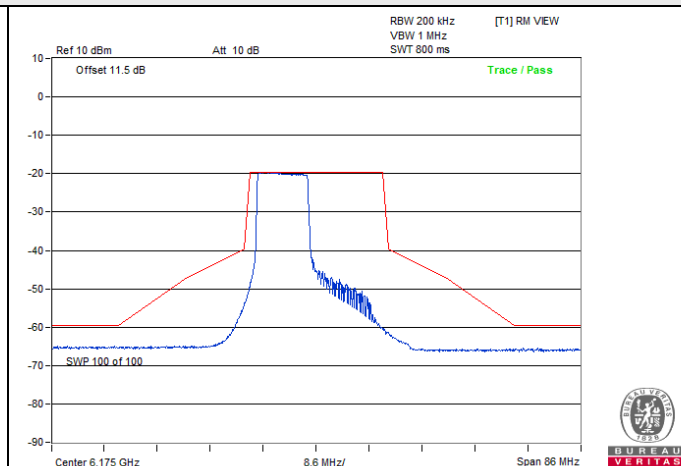


802.11ax (HE20) 106-tone RU / Chain 0 : CH 233

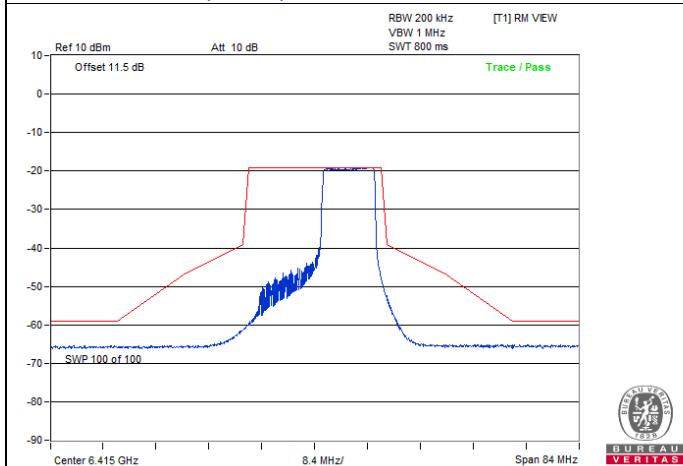
Spectrum Plot



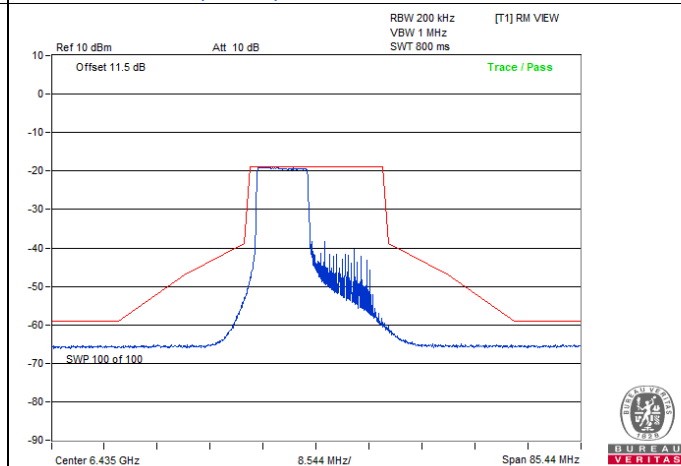
802.11ax (HE20) 106-tone RU / Chain 1 : CH 1



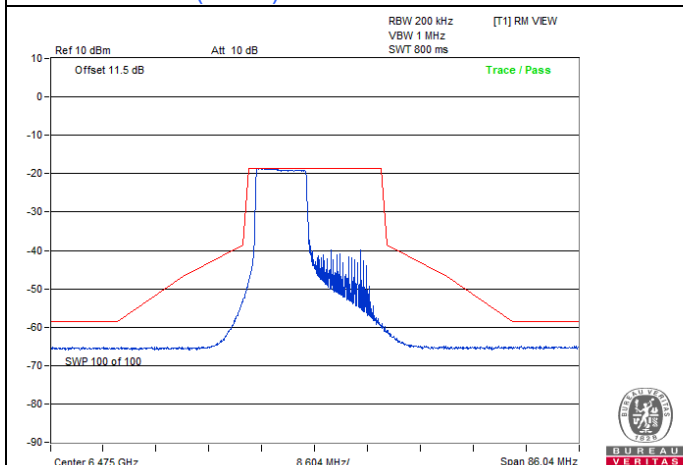
802.11ax (HE20) 106-tone RU / Chain 1 : CH 45



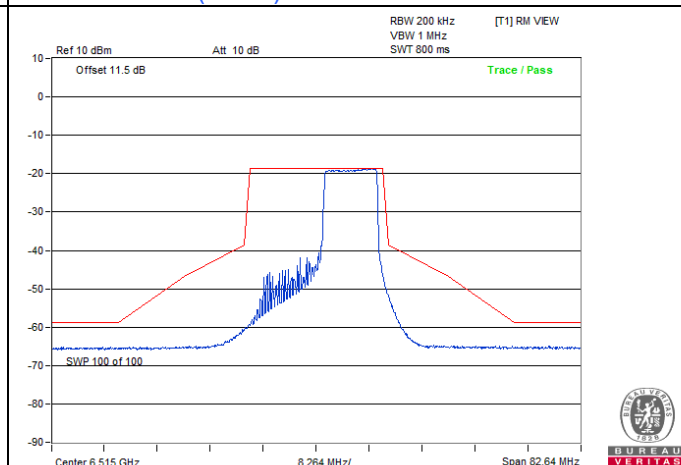
802.11ax (HE20) 106-tone RU / Chain 1 : CH 93



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

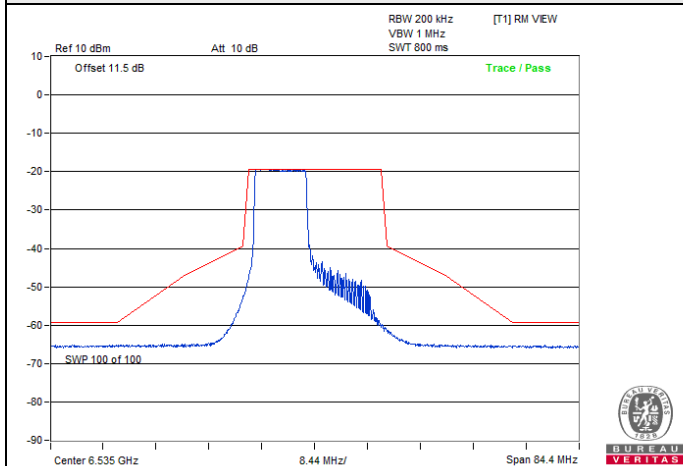


802.11ax (HE20) 106-tone RU / Chain 1 : CH 105

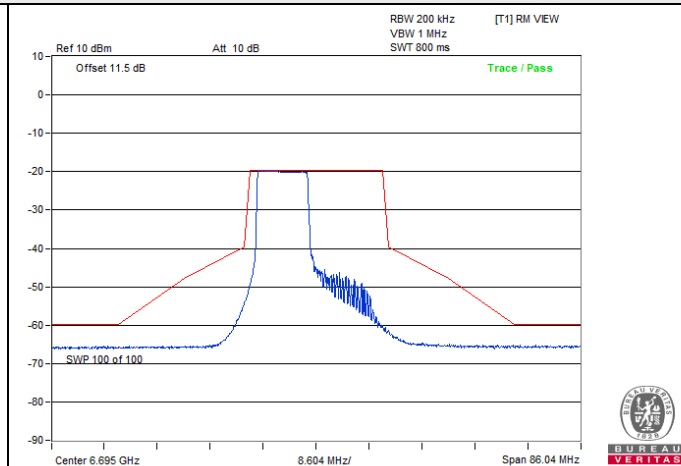


802.11ax (HE20) 106-tone RU / Chain 1 : CH 113

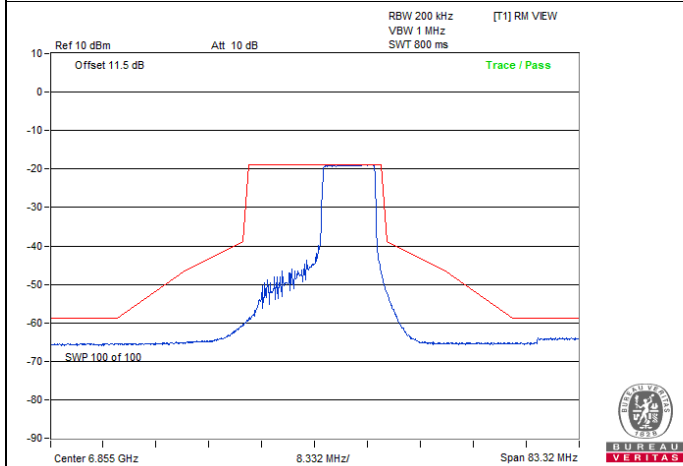
Spectrum Plot



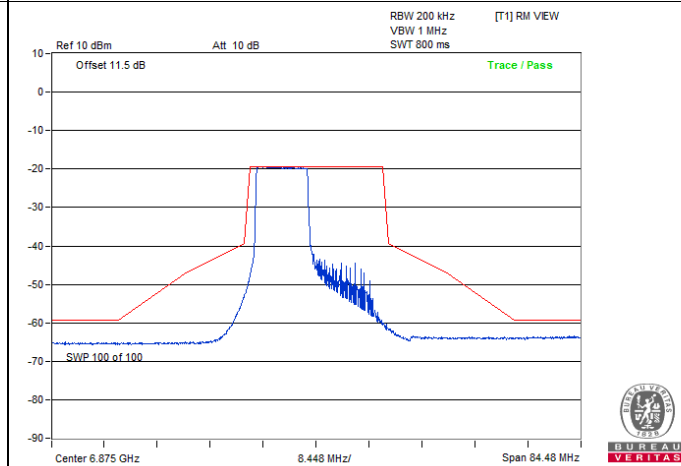
802.11ax (HE20) 106-tone RU / Chain 1 : CH 117



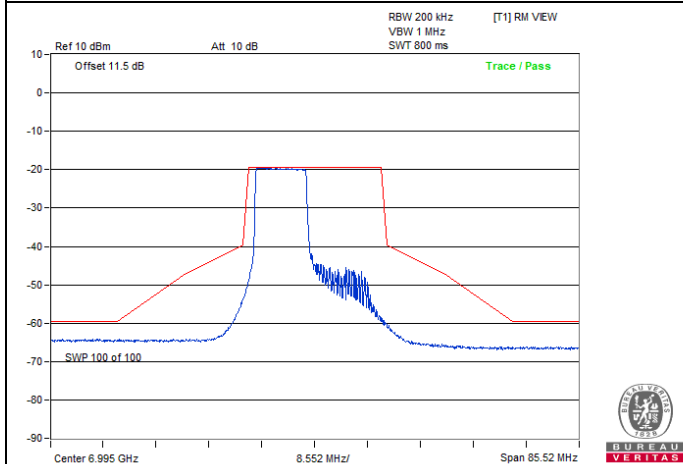
802.11ax (HE20) 106-tone RU / Chain 1 : CH 149



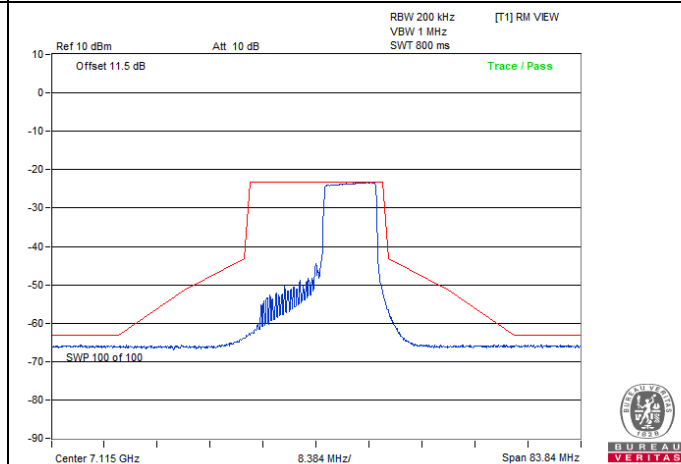
802.11ax (HE20) 106-tone RU / Chain 1 : CH 181



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



802.11ax (HE20) 106-tone RU / Chain 1 : CH 209



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

7.5 Occupied Bandwidth

Input Power:	3.9 Vdc (System)	Environmental Conditions:	25°C, 76% RH	Tested By:	Dalen Dai
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802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
1	5955	16.52	16.43
45	6175	16.56	16.44
93	6415	16.56	16.44
97	6435	16.56	16.44
105	6475	16.56	16.44
113	6515	16.56	16.44
117	6535	16.56	16.44
149	6695	16.56	16.44
181	6855	16.56	16.44
185	6875	16.56	16.44
209	6995	16.68	16.56
233	7115	16.56	16.44

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
1	5955	18.96	18.96
45	6175	18.96	18.96
93	6415	18.96	18.96
97	6435	18.96	18.96
105	6475	18.96	18.96
113	6515	18.96	18.96
117	6535	18.96	18.96
149	6695	18.96	18.96
181	6855	18.96	18.96
185	6875	18.96	18.96
209	6995	19.08	19.08
233	7115	18.96	18.96

802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
3	5965	38.09	37.92
43	6165	37.92	38.16
91	6405	38.16	37.92
99	6445	38.16	38.16
107	6485	38.16	38.16
115	6525	38.16	38.16
123	6565	38.16	38.16
155	6725	37.92	37.92
179	6845	37.68	38.16
187	6885	38.16	38.16
211	7005	37.92	37.92
227	7085	37.92	38.16

802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
7	5985	77.76	77.28
39	6145	77.28	77.28
87	6385	77.28	77.28
103	6465	77.28	77.28
119	6545	77.28	77.28
151	6705	77.28	77.28
183	6865	77.28	77.28
199	6945	77.28	77.28
215	7025	76.80	77.28

802.11ax (HE160)

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

802.11ax (HE20) 26-tone RU

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
1	5955	18.96	18.87
45	6175	18.96	18.72
93	6415	18.84	18.60
97	6435	18.96	19.08
105	6475	18.96	18.84
113	6515	18.70	18.60
117	6535	18.96	18.72
149	6695	19.08	18.84
181	6855	18.60	18.60
185	6875	19.08	18.84
209	6995	18.84	18.72
233	7115	18.84	18.48

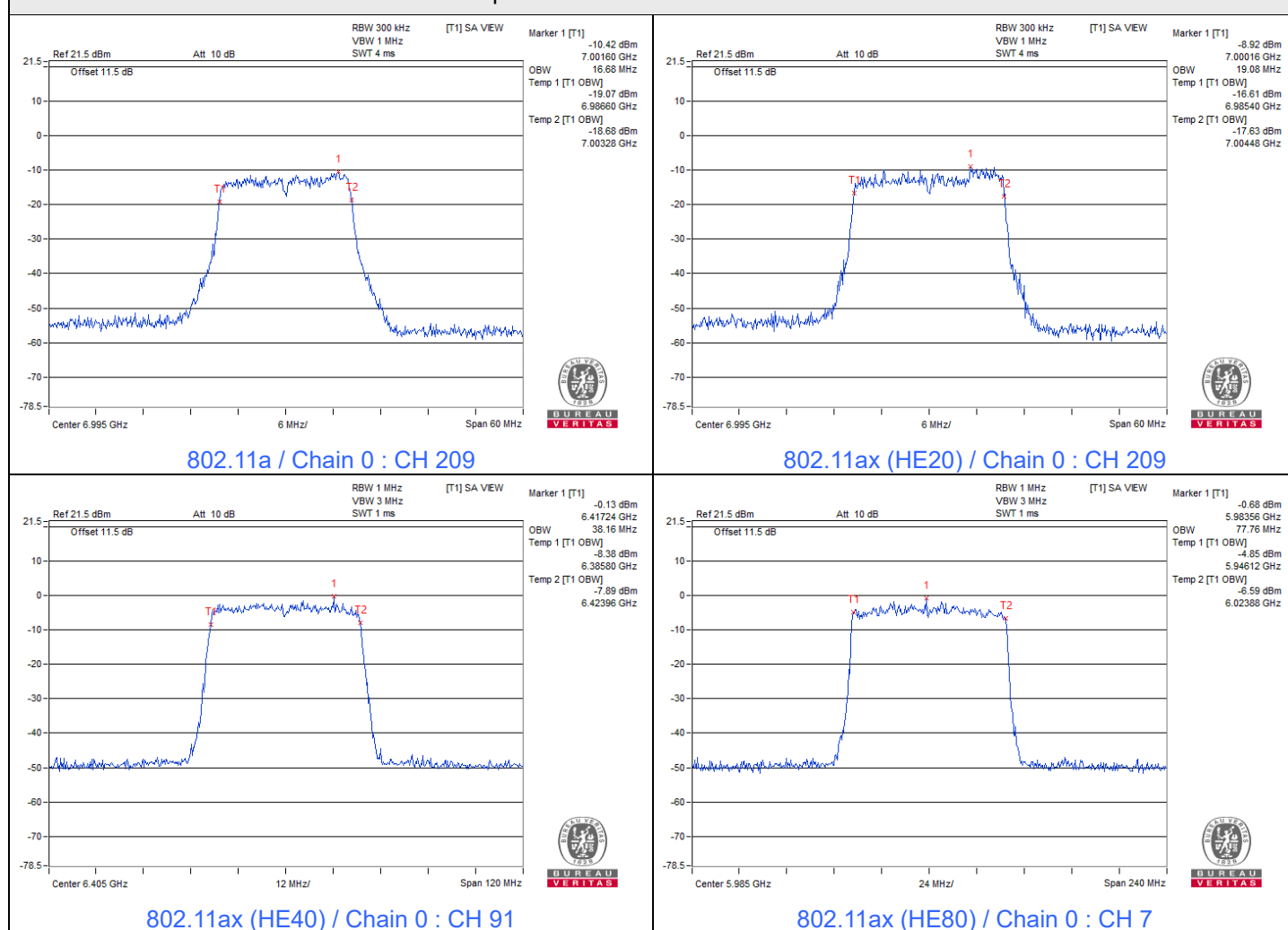
802.11ax (HE20) 52-tone RU

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
1	5955	18.60	18.60
45	6175	18.60	18.60
93	6415	18.48	18.48
97	6435	18.72	18.60
105	6475	18.60	18.48
113	6515	18.48	18.48
117	6535	18.60	18.48
149	6695	18.60	18.60
181	6855	18.48	18.48
185	6875	18.60	18.36
209	6995	18.72	18.60
233	7115	18.36	18.36

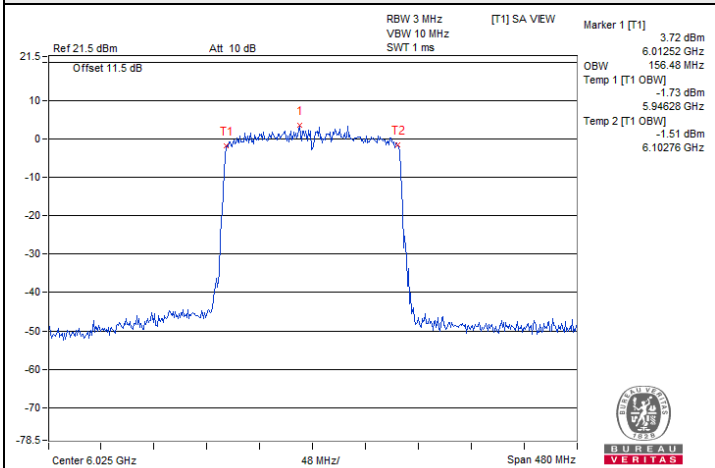
802.11ax (HE20) 106-tone RU

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
1	5955	18.36	18.24
45	6175	18.36	18.48
93	6415	18.36	18.24
97	6435	18.48	18.36
105	6475	18.48	18.36
113	6515	18.48	18.36
117	6535	18.48	18.36
149	6695	18.48	18.24
181	6855	18.48	18.24
185	6875	18.48	18.24
209	6995	18.36	18.36
233	7115	18.36	18.24

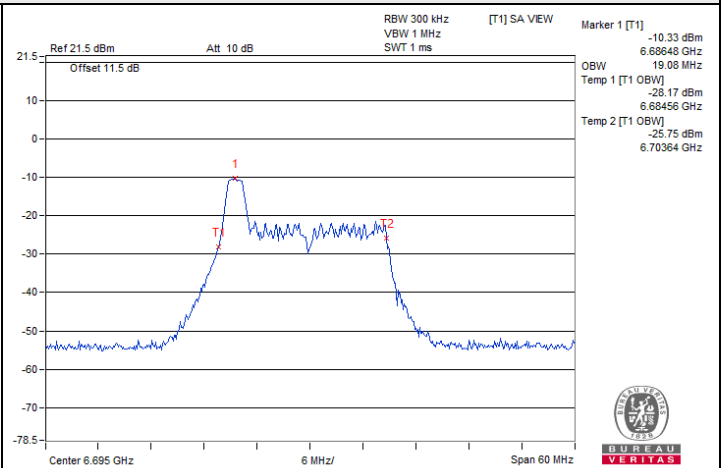
Spectrum Plot of Maximum Value



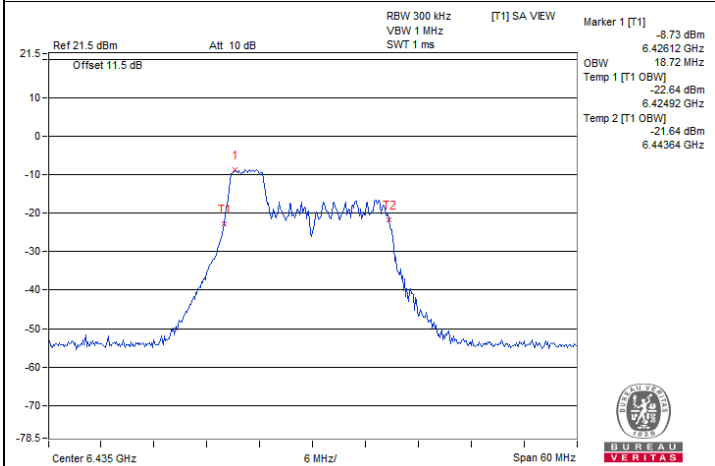
Spectrum Plot of Maximum Value



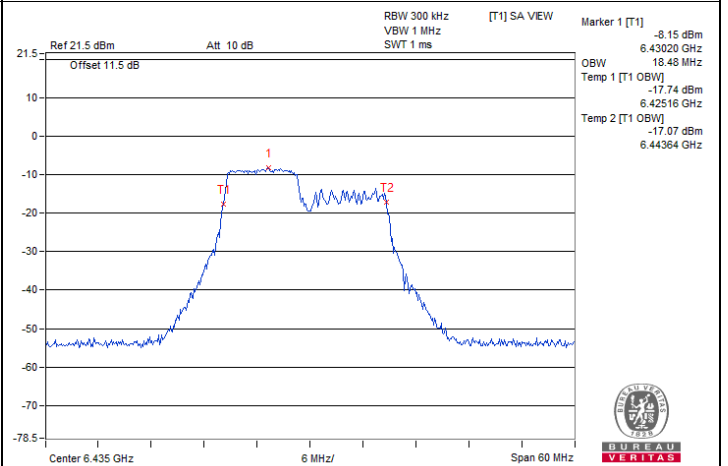
802.11ax (HE160) / Chain 0 : CH 15



802.11ax (HE20) 26-tone RU / Chain 0 : CH 149



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



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

7.6 Contention-based Protocol

Environmental Conditions:	25°C, 60% RH	Tested By:	Frankie Chang
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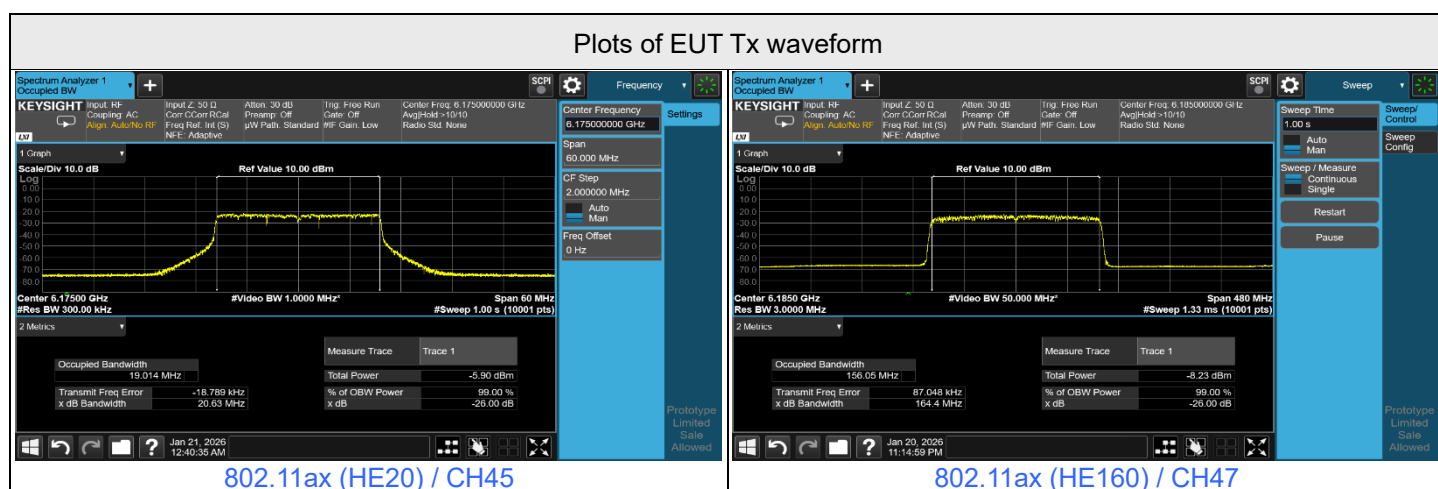
Companion Device Information			
Product	Brand	Model No.	Software/Firmware Version
Wireless Router	ASUS	GT-AXE11000	3.0.0.4.386_42489

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	-62	5.14	0	-67.14	-62	OFF
					-65	5.14	0	-70.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON
	160	47	6110	6110	-62	5.14	0	-67.14	-62	OFF
					-65	5.14	0	-70.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON
			6185	6185	-59	5.14	0	-64.14	-62	OFF
					-61	5.14	0	-66.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON
			6260	6260	-62	5.14	0	-67.14	-62	OFF
					-65	5.14	0	-70.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON

Notes:

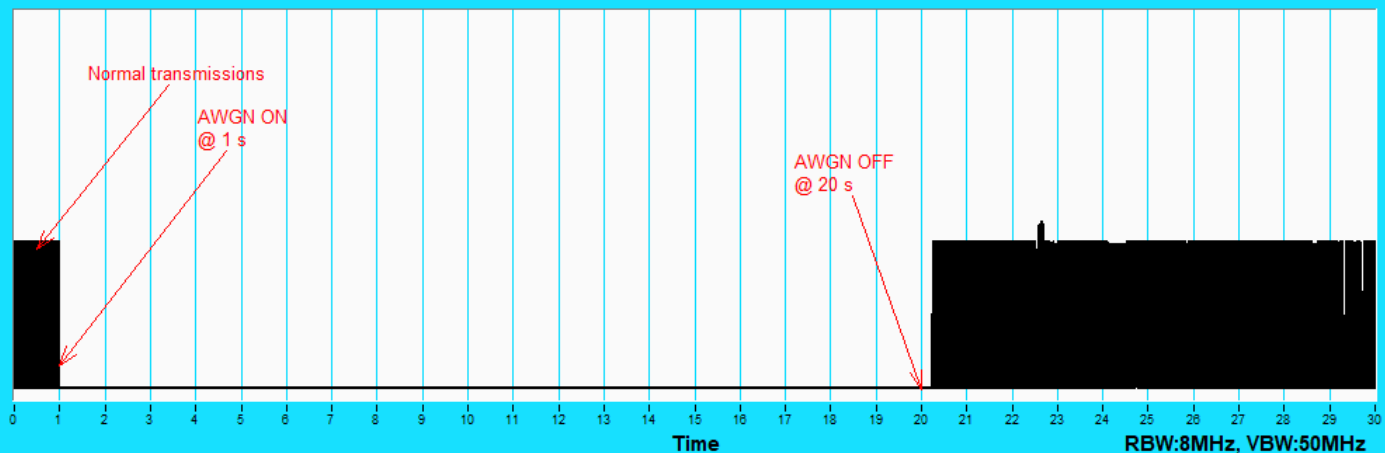
1. After investigation (consider antenna gain and path loss) , the one representative port (Chain 0) was measured and presented in the report.
2. Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
3. Antenna gain values include all the applicable path losses.
4. This device does not use the channel puncturing mechanism for incumbent avoidance, but instead employs the bandwidth reduction mechanism 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	x	v	v	v	v	v	v	v	v	90%	90%	Pass
	160	6110	v	v	v	v	x	v	v	v	v	v	90%	90%	Pass
		6185	v	v	v	x	v	v	v	v	v	v	90%	90%	Pass
		6260	v	v	v	v	v	v	x	v	v	v	90%	90%	Pass



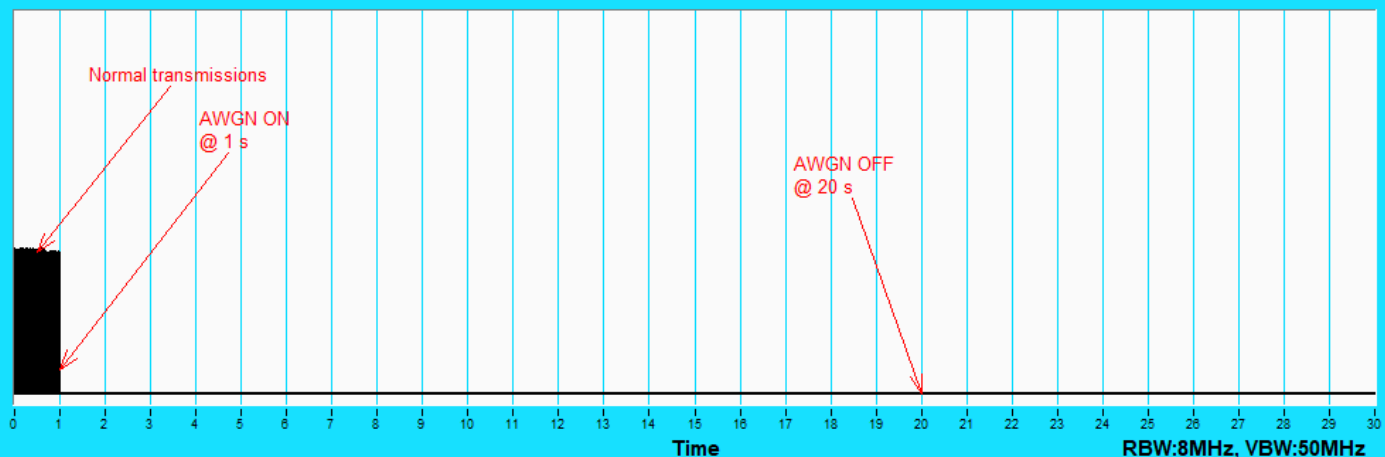
Plots of EUT ceased transmission in the time domain

CBP



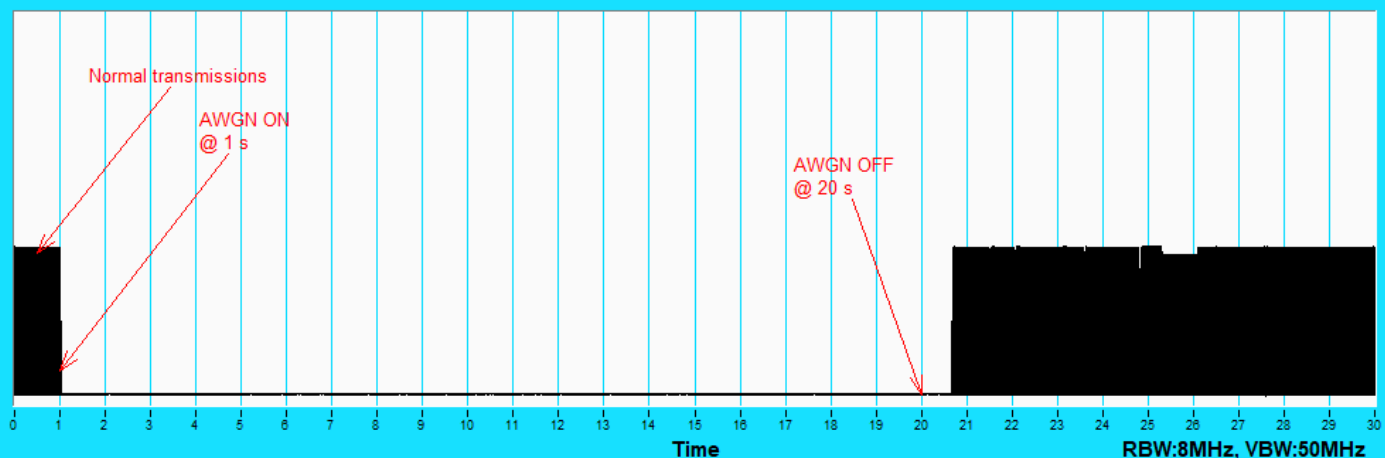
802.11ax (HE160) / CH47(Low Edge)

CBP



802.11ax (HE160) / CH47(Middle)

CBP



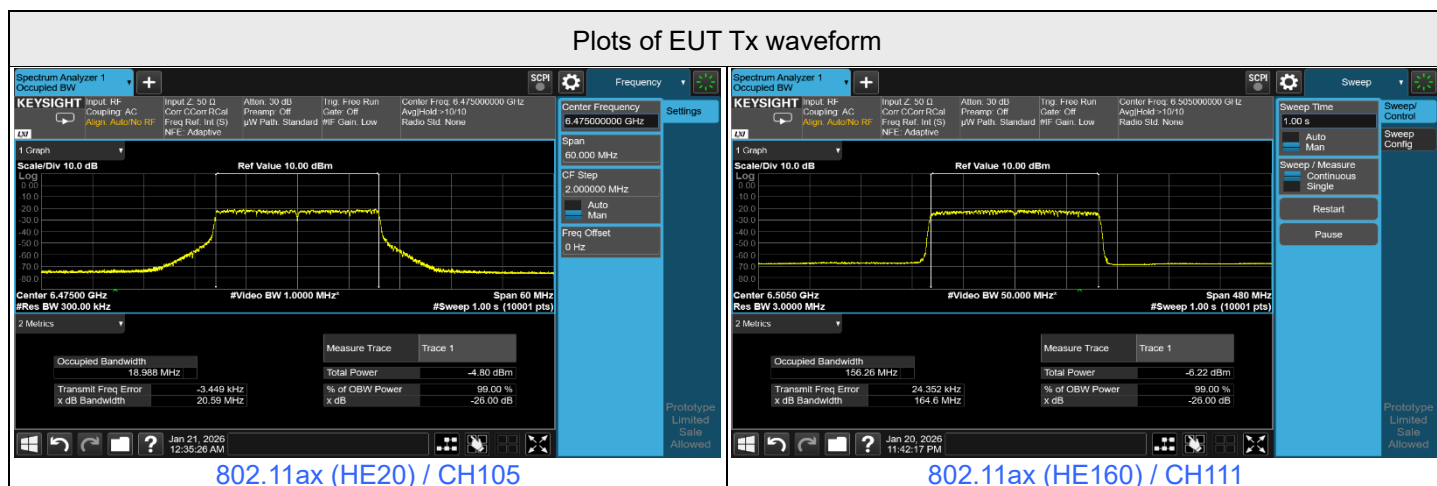
802.11ax (HE160) / CH47(High Edge)

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	-62	5.14	0	-67.14	-62	OFF
					-65	5.14	0	-70.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON
	160	111	6430	6430	-62	5.14	0	-67.14	-62	OFF
					-65	5.14	0	-70.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON
			6505	6505	-59	5.14	0	-64.14	-62	OFF
					-61	5.14	0	-66.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON
			6580	6580	-62	5.14	0	-67.14	-62	OFF
					-65	5.14	0	-70.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON

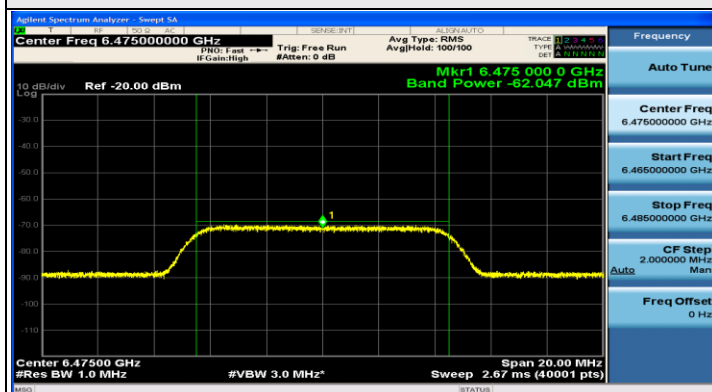
Notes:

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 mechanism for incumbent avoidance, but instead employs the bandwidth reduction mechanism to perform its function.

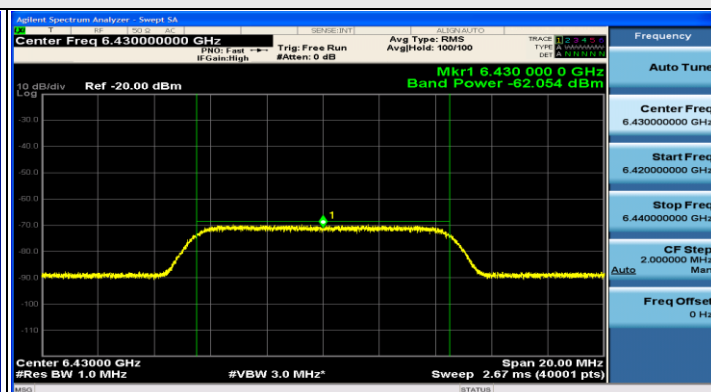
Contention Based Protocol Detection Probability															
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11ax	20	6475	v	v	v	v	v	v	v	x	v	v	90%	90%	Pass
	160	6430	v	v	v	v	v	x	v	v	v	v	90%	90%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



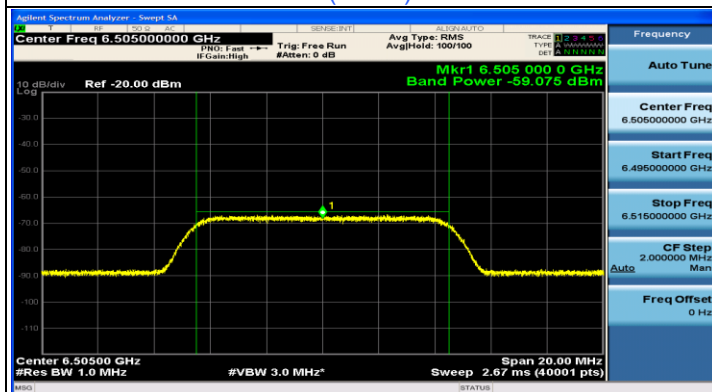
Plots of Injected signal (AWGN) level



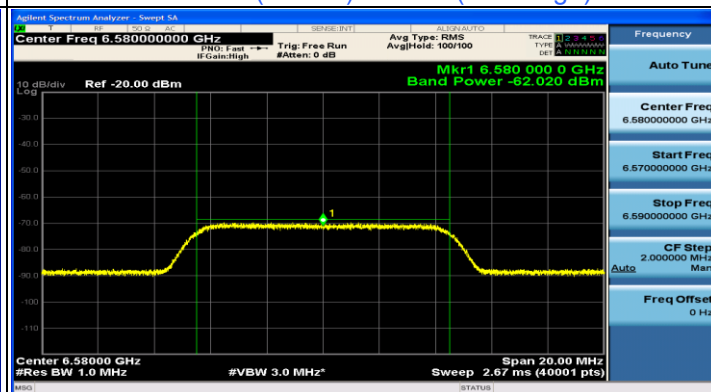
802.11ax (HE20) / CH105



802.11ax (HE160) / CH111(Low Edge)



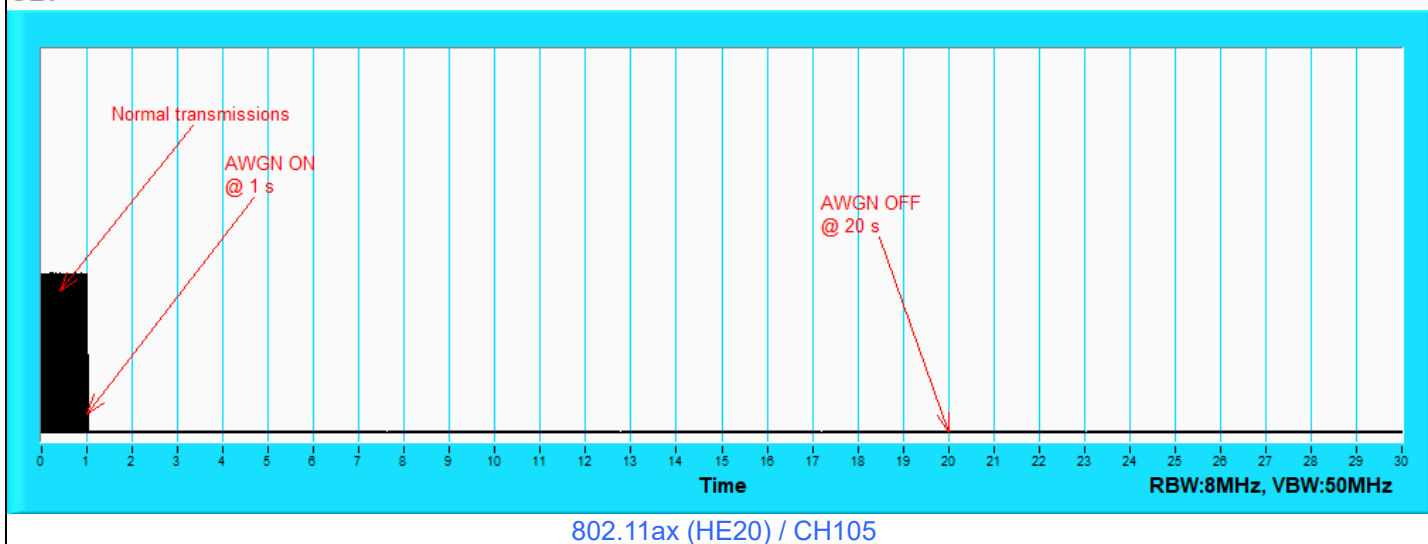
802.11ax (HE160) / CH111(Middle)



802.11ax (HE160) / CH111(High Edge)

Plots of EUT ceased transmission in the time domain

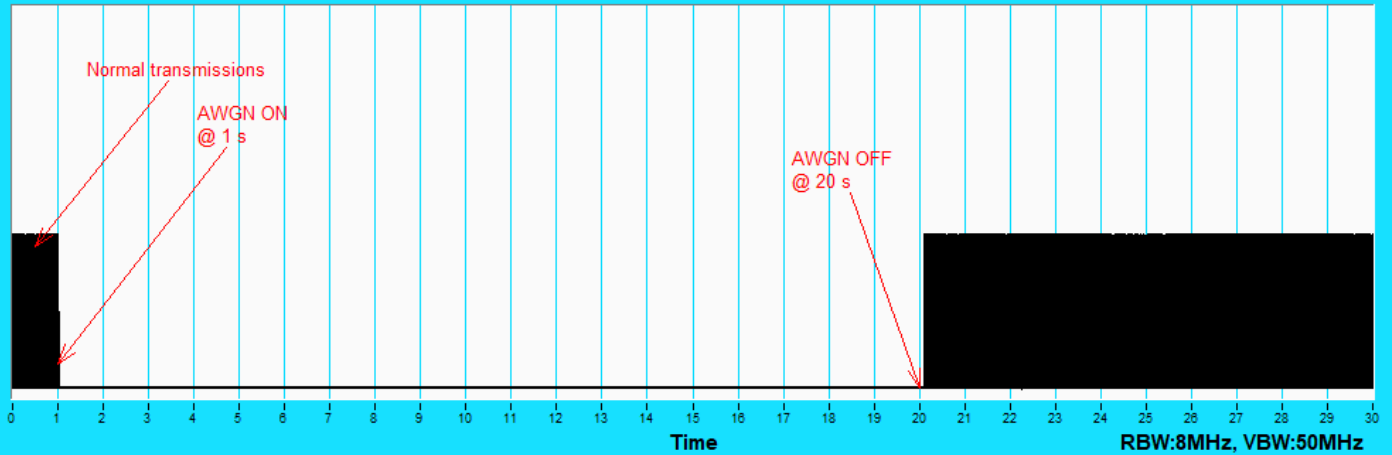
CBP



802.11ax (HE20) / CH105

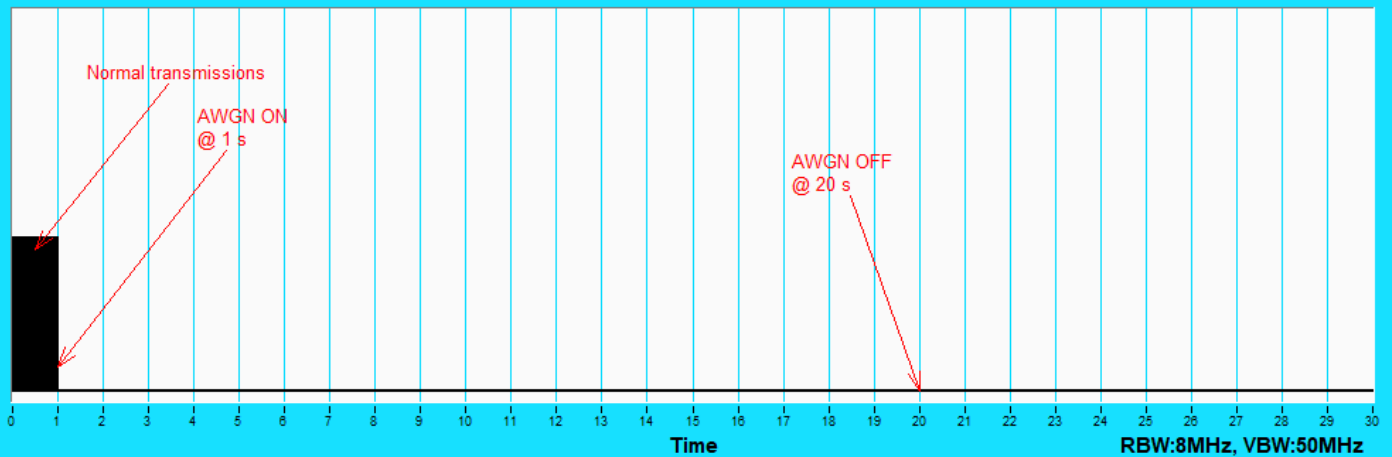
Plots of EUT ceased transmission in the time domain

CBP



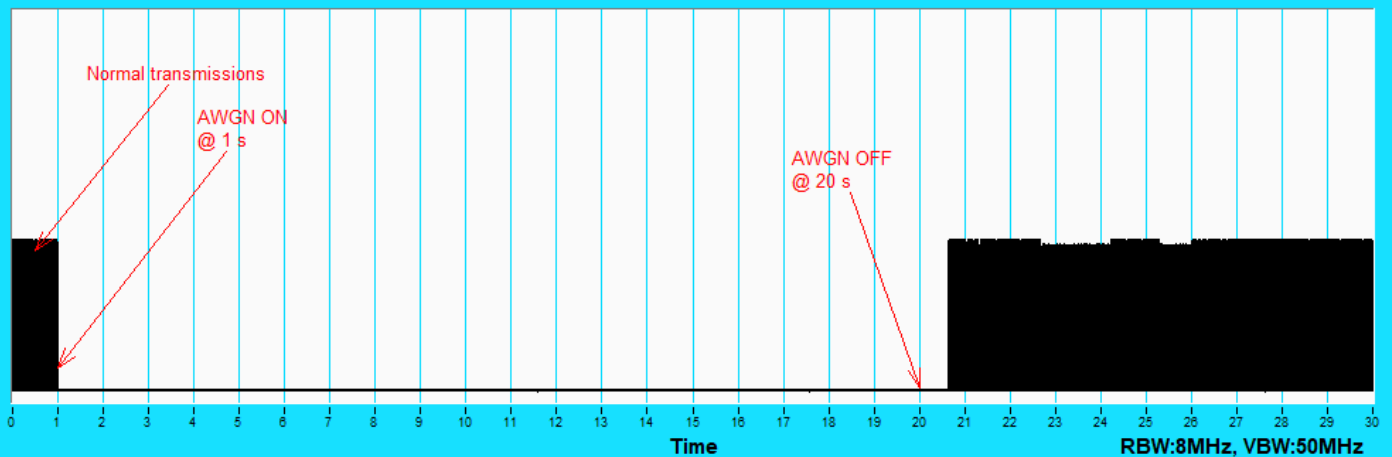
802.11ax (HE160) / CH111(Low Edge)

CBP



802.11ax (HE160) / CH111(Middle)

CBP



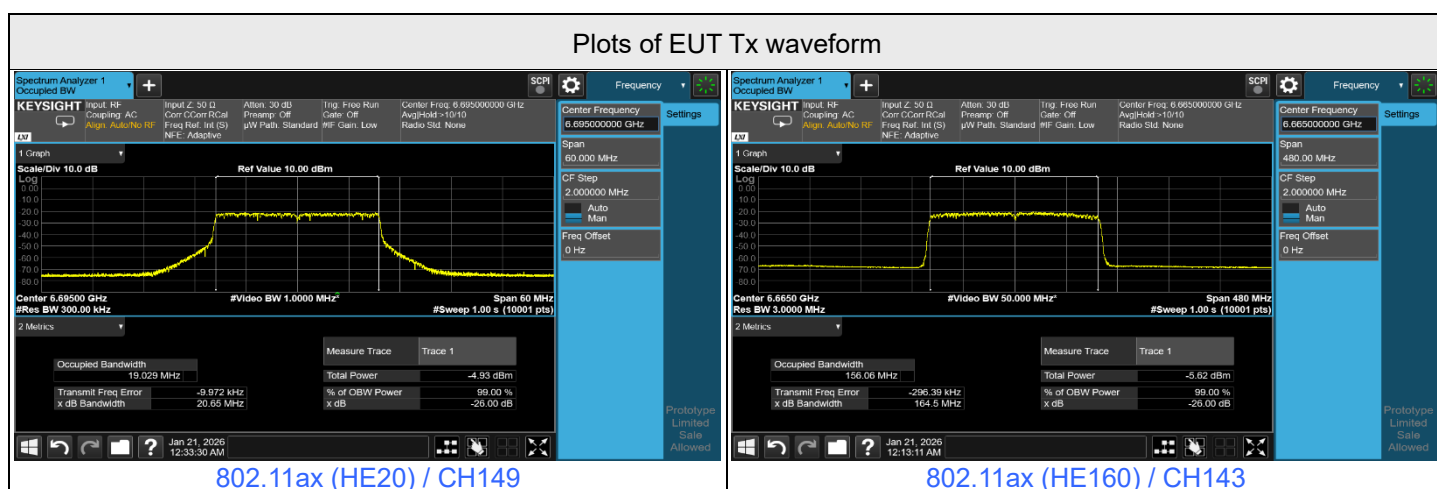
802.11ax (HE160) / CH111(High Edge)

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	149	6695	6695	-62	5.14	0	-67.14	-62	OFF
					-65	5.14	0	-70.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON
	160	143	6590	6590	-62	5.14	0	-67.14	-62	OFF
					-65	5.14	0	-70.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON
			6665	6665	-59	5.14	0	-64.14	-62	OFF
					-62	5.14	0	-67.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON
			6740	6740	-62	5.14	0	-67.14	-62	OFF
					-65	5.14	0	-70.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON

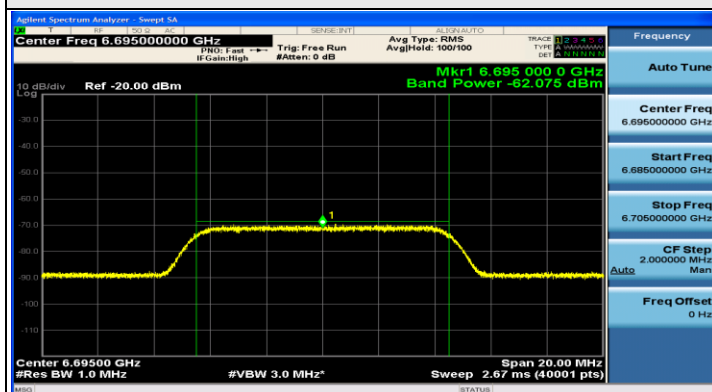
Notes:

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 mechanism for incumbent avoidance, but instead employs the bandwidth reduction mechanism to perform its function.

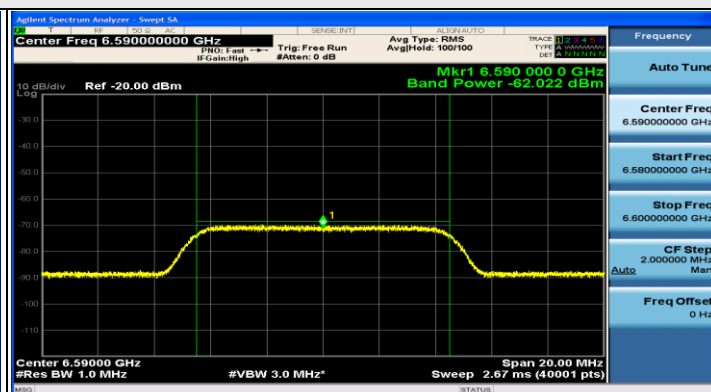
Contention Based Protocol Detection Probability															
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11ax	20	6695	V	V	V	X	V	V	V	V	V	V	90%	90%	Pass
	160	6590	V	V	V	V	V	V	X	V	V	V	90%	90%	Pass
		6665	V	V	V	V	V	X	V	V	V	V	90%	90%	Pass
		6740	V	V	V	V	V	V	V	X	V	V	90%	90%	Pass



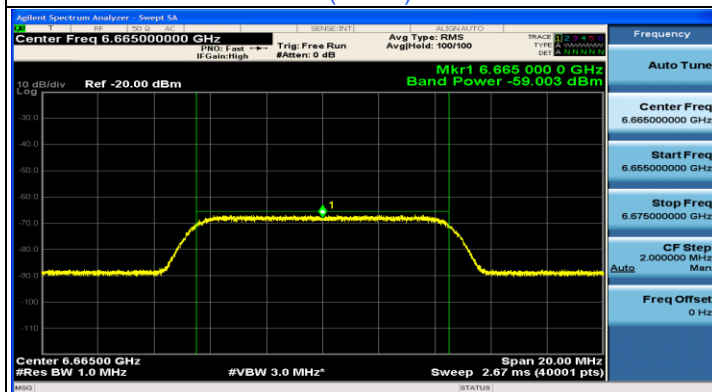
Plots of Injected signal (AWGN) level



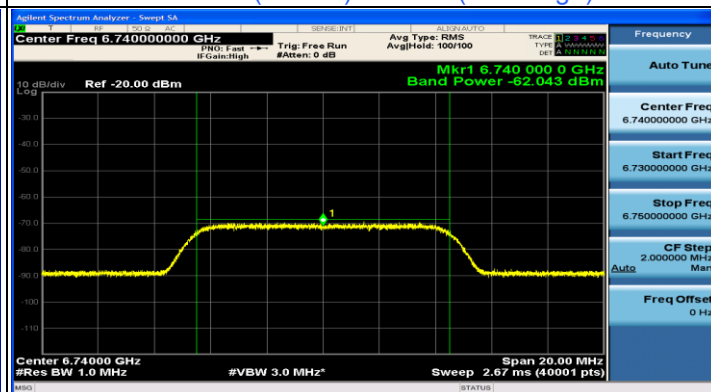
802.11ax (HE20) / CH149



802.11ax (HE160) / CH143(Low Edge)



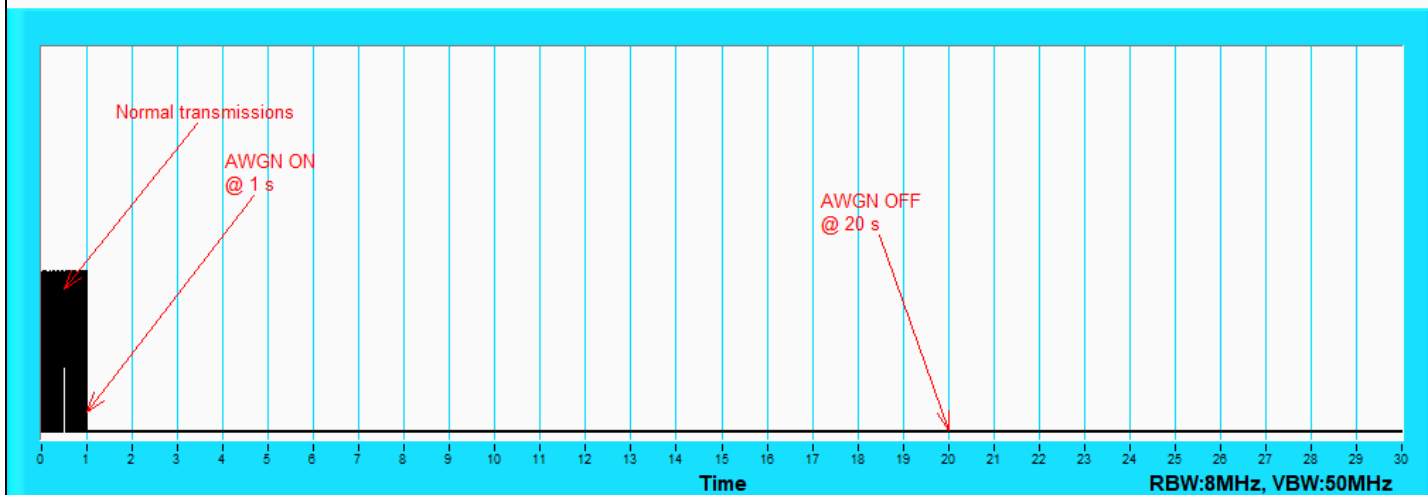
802.11ax (HE160) / CH143(Middle)



802.11ax (HE160) / CH143(High Edge)

Plots of EUT ceased transmission in the time domain

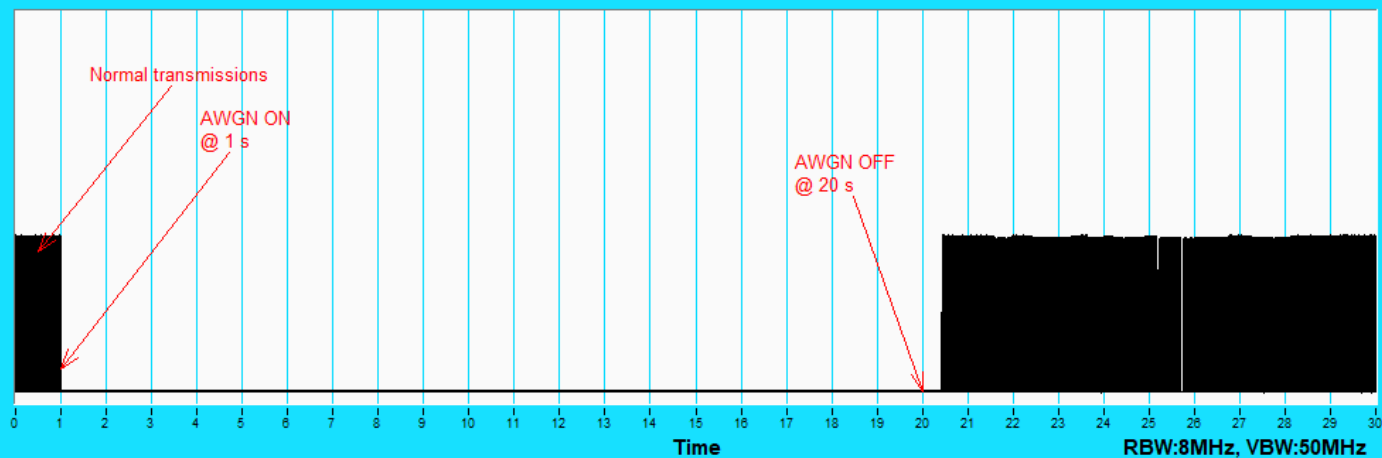
CBP



802.11ax (HE20) / CH149

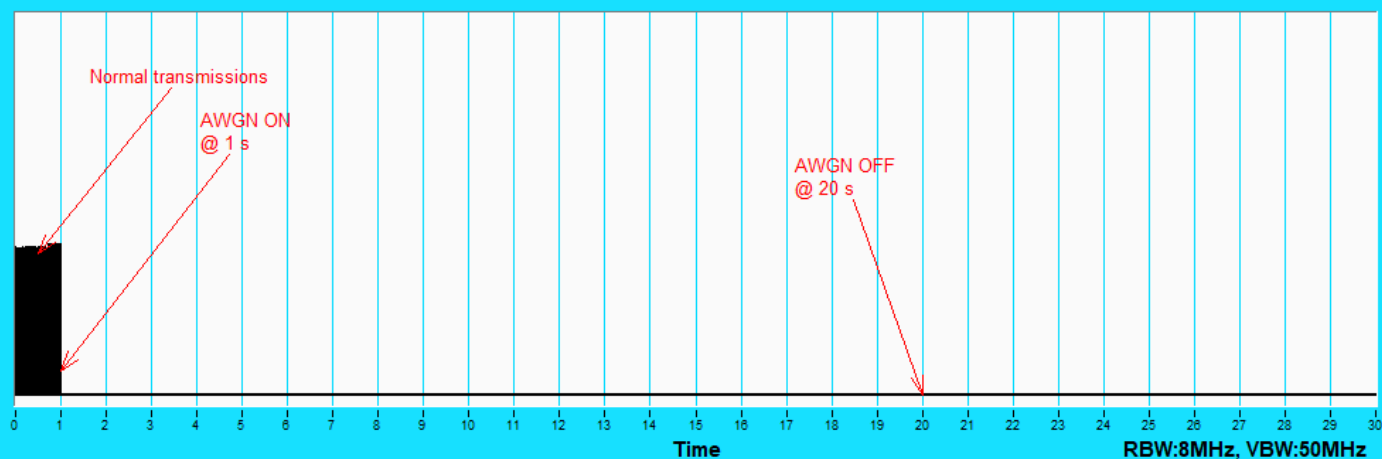
Plots of EUT ceased transmission in the time domain

CBP



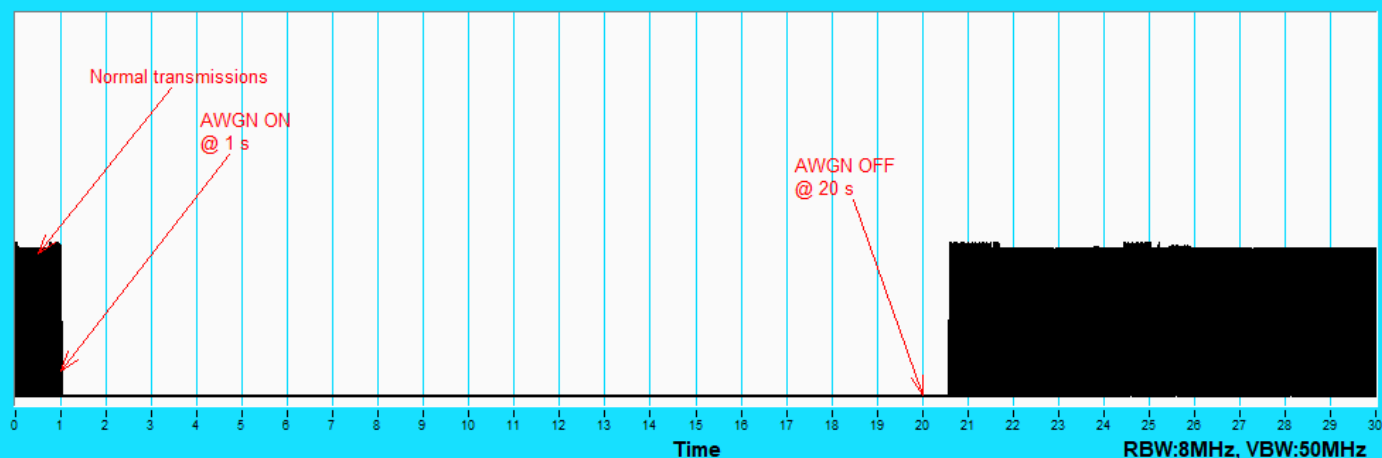
802.11ax (HE160) / CH143(Low Edge)

CBP



802.11ax (HE160) / CH143(Middle)

CBP



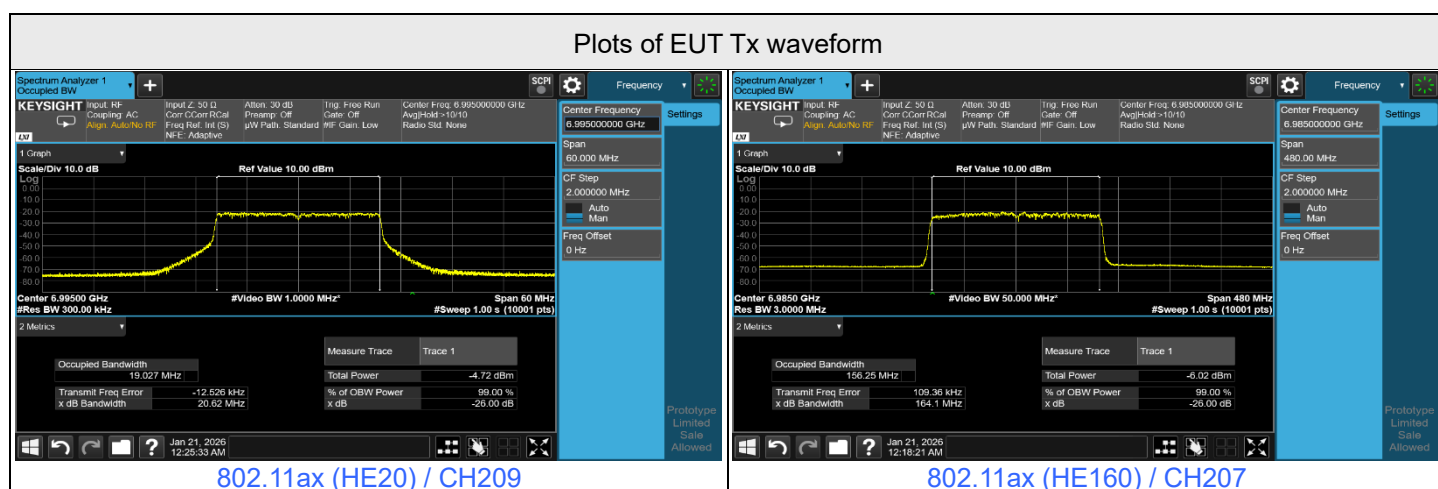
802.11ax (HE160) / CH143(High Edge)

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	209	6995	6995	-62	5.14	0	-67.14	-62	OFF
					-65	5.14	0	-70.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON
	160	207	6910	6910	-61	5.14	0	-66.14	-62	OFF
					-64	5.14	0	-69.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON
			6985	6985	-59	5.14	0	-64.14	-62	OFF
					-61	5.14	0	-66.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON
			7060	7060	-62	5.14	0	-67.14	-62	OFF
					-65	5.14	0	-70.14	-62	Minimal
					-76.86	5.14	0	-82	-62	ON

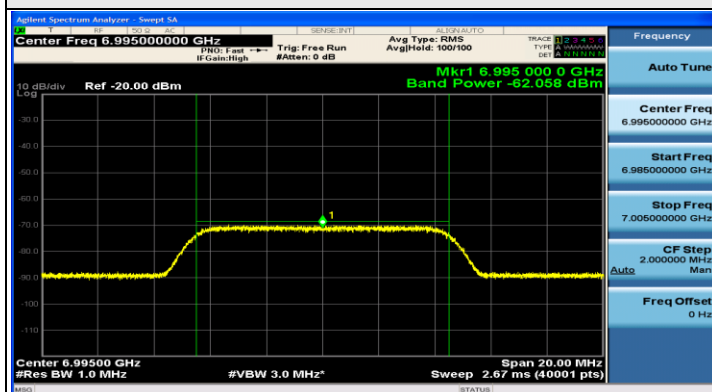
Notes:

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 mechanism for incumbent avoidance, but instead employs the bandwidth reduction mechanism to perform its function.

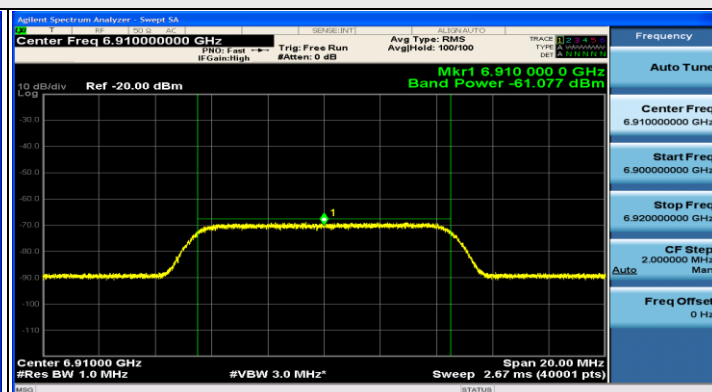
Contention Based Protocol Detection Probability															
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11ax	20	6995	v	v	v	v	v	v	v	v	v	x	90%	90%	Pass
	160	6910	v	v	v	v	v	v	x	v	v	v	90%	90%	Pass
		6985	v	v	v	x	v	v	v	v	v	v	90%	90%	Pass
		7060	v	v	v	v	v	v	v	x	v	v	90%	90%	Pass



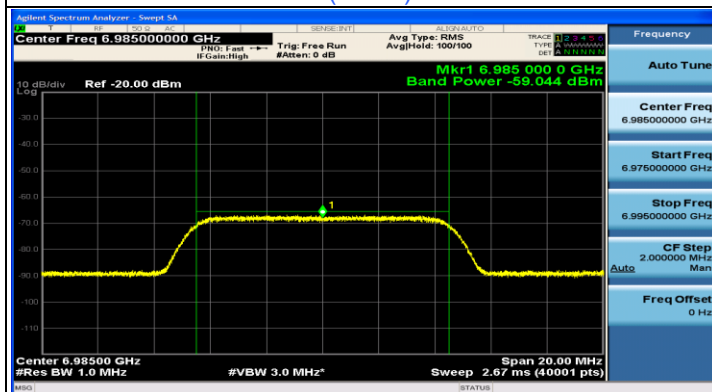
Plots of Injected signal (AWGN) level



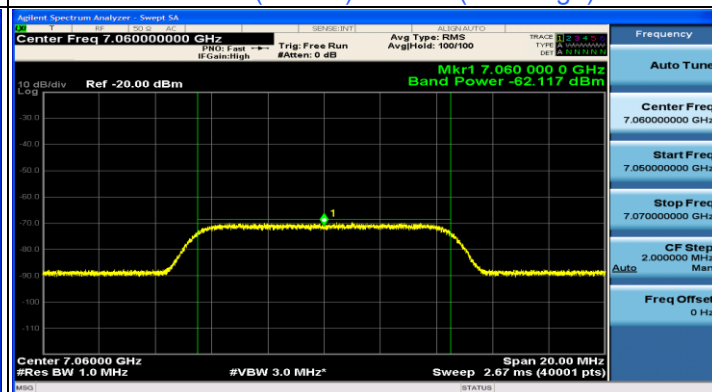
802.11ax (HE20) / CH209



802.11ax (HE160) / CH207(Low Edge)



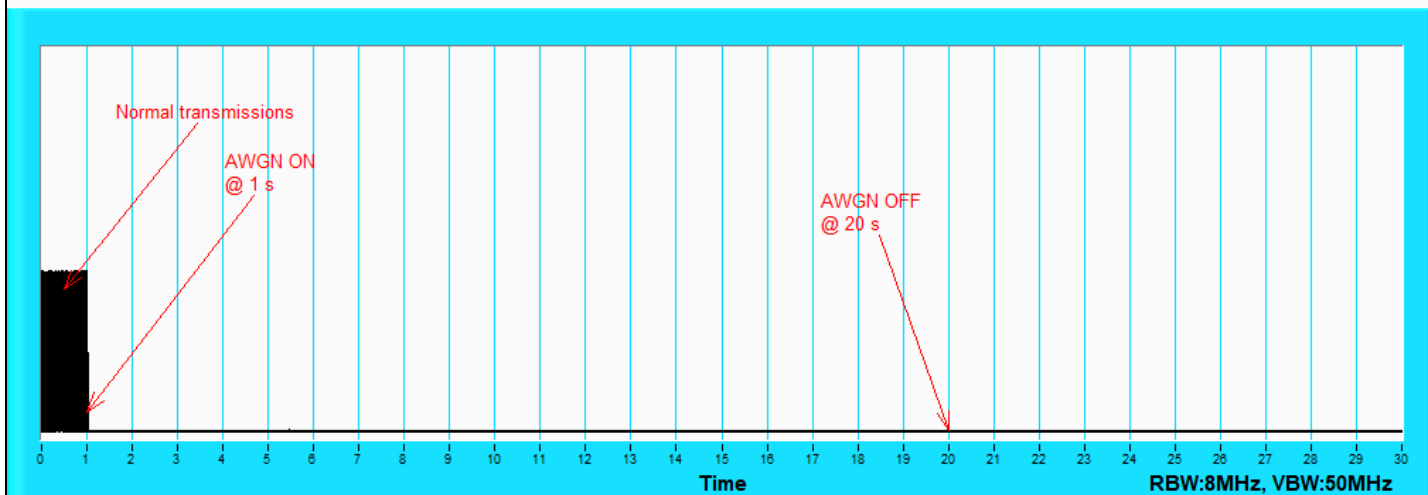
802.11ax (HE160) / CH207(Middle)



802.11ax (HE160) / CH207(High Edge)

Plots of EUT ceased transmission in the time domain

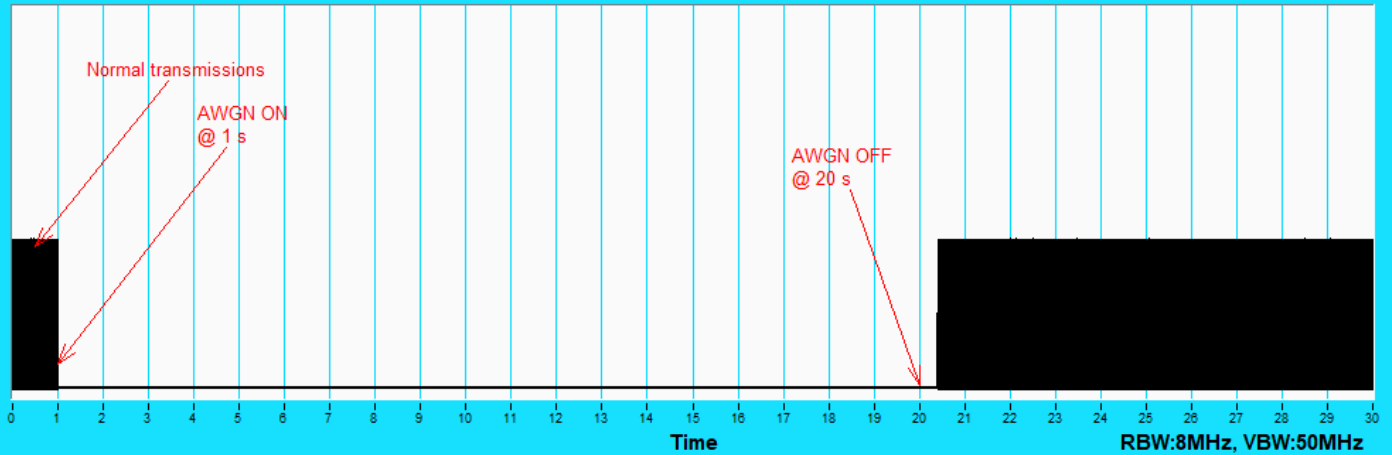
CBP



802.11ax (HE20) / CH209

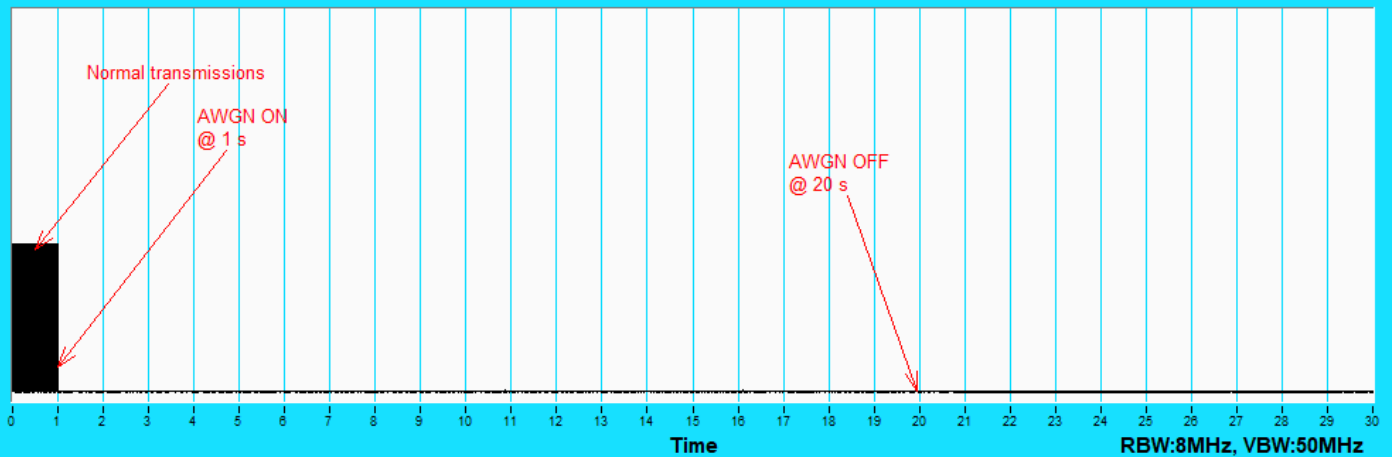
Plots of EUT ceased transmission in the time domain

CBP



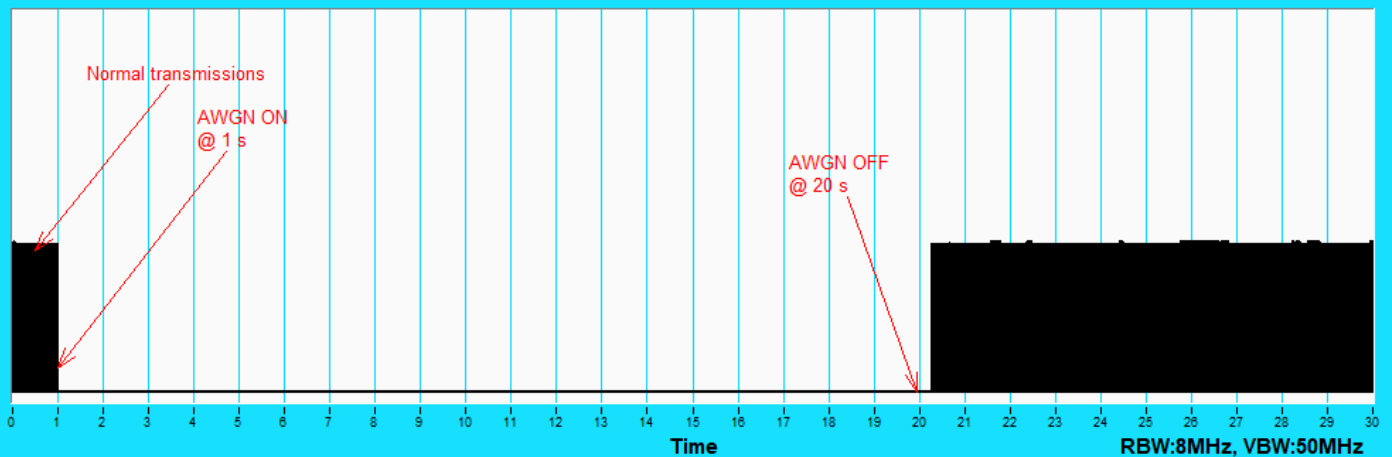
802.11ax (HE160) / CH207(Low Edge)

CBP



802.11ax (HE160) / CH207(Middle)

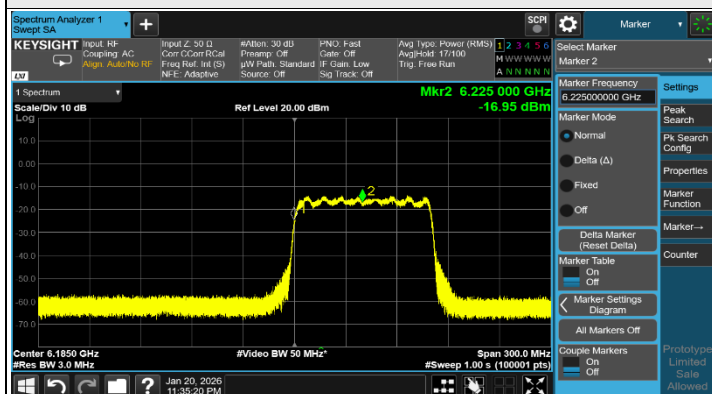
CBP



802.11ax (HE160) / CH207(High Edge)

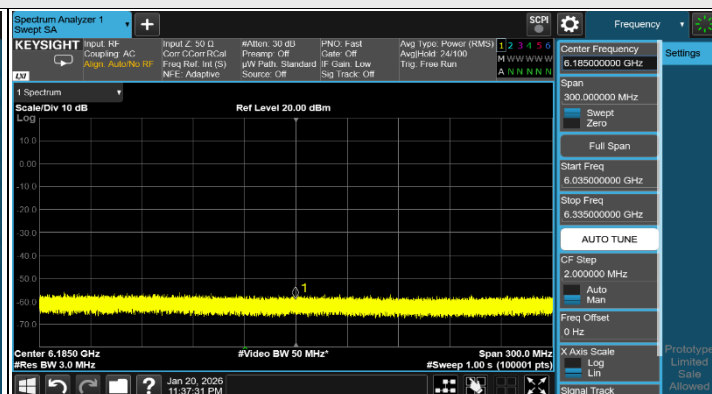
For Verify bandwidth reduction

Plots of EUT ceased transmission in the frequency domain



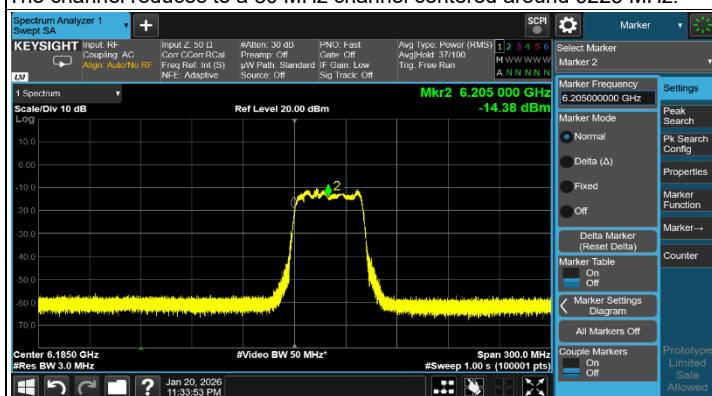
802.11ax (HE160) / CH47(Low Edge)

A 10 MHz AWGN signal (centered at 6110 MHz) is injected.
The channel reduces to a 80 MHz channel centered around 6225 MHz.



802.11ax (HE160) / CH47(Middle)

A 10 MHz AWGN signal (centered at 6185 MHz) is injected.
The channel completely ceases operation.



802.11ax (HE160) / CH47(High Edge)

A 10 MHz AWGN signal (centered at 6260 MHz) is injected.
The channel reduces to a 40 MHz channel centered around 6205 MHz.