TEST REPORT

CERTIFICATE OF CONFORMITY

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

Report No.: RFBBQZ-WTW-P24110232-3

FCC ID: PY324300631

Product: BE6500 USB3.0 Wireless Adapter
BE5000 USB3.0 Wireless Adapter

Brand: NETGEAR

Model No.: A9000

Series Model: A8500

Received Date: 2025/2/3

Test Date: 2025/3/24 ~ 2025/4/29

Issued Date: 2025/5/22

Applicant and Manufacturer: NETGEAR, INC.

Address: 350 East Plumeria Drive San Jose CA 95134, USA

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

Test Location: No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, Taiwan

FCC Registration / Designation Number: 788550 / TW0003

Approved by: Jeremy Lin , **Date:** **2025/5/22**

Jeremy Lin / Project Engineer

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Prepared by : Pettie Chen / Senior Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBBQZ-WTW-P24110232-3	Original release.	2025/5/22

1 Certificate

Product:	BE6500 USB3.0 Wireless Adapter BE5000 USB3.0 Wireless Adapter
Brand:	NETGEAR
Test Model:	A9000
Series Model:	A8500
Sample Status:	Engineering sample
Applicant and Manufacturer:	NETGEAR, INC.
Test Date:	2025/3/24 ~ 2025/4/29
Standard:	47 CFR FCC Part 15, Subpart E (Section 15.407)
Measurement procedure:	ANSI C63.10-2013 KDB 987594 D02 U-NII 6 GHz EMC Measurement v03 KDB 789033 D02 General UNII Test Procedure New Rules v02r01 KDB 662911 D01 Multiple Transmitter Output v02r01

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

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
Clause	Test Item	Result	Remark
15.407(a)(8)	Maximum RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(8)	Maximum Power Spectral Density	Pass	Meet the requirement of limit.
15.407(a)(11)	Emission Bandwidth	Pass	Meet the requirement of limit.
---	Occupied Bandwidth	-	Reference only.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -18.60 dB at 0.16600 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -3.6 dB at 42.65 MHz
15.407(b)(6) 15.407(b)(10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.1 dB at 7125.00 MHz
15.407(b)(7)	In-Band Emission Mask	Pass	Meet the requirement of limit.
15.407(d)(6)	Contention-based Protocol	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is IPEX not a standard connector.

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

2.1 Measurement Uncertainty

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

Measurement	Specification	Expanded Uncertainty (k=2) (±)
Maximum RF Output Power	1 GHz ~ 18 GHz	2.29 dB
Maximum Power Spectral Density	1 GHz ~ 18 GHz	2.29 dB
Occupied Bandwidth	-	72 Hz
AC Power Conducted Emissions	9 kHz ~ 30 MHz	2.90 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.59 dB
	30 MHz ~ 1 GHz	3.64 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	2.29 dB
	18 GHz ~ 40 GHz	2.29 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	BE6500 USB3.0 Wireless Adapter BE5000 USB3.0 Wireless Adapter
Brand	NETGEAR
Test Model	A9000
Series Model	A8500
Status of EUT	Engineering sample
Power Supply Rating	5Vdc
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 4096QAM for OFDMA in 11ax/be mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	Up to 2882 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), 802.11be (EHT20): 59 802.11ax (HE40), 802.11be (EHT40): 29 802.11ax (HE80), 802.11be (EHT80): 14 802.11ax (HE160), 802.11be (EHT160): 7
Output Power	Nss 1: 5.955 GHz ~ 6.415 GHz : EIRP: 38.282 mW (15.83 dBm) 6.435 GHz ~ 6.525 GHz : EIRP: 39.174 mW (15.93 dBm) 6.535 GHz ~ 6.865 GHz : EIRP: 38.107 mW (15.81 dBm) 6.875 GHz ~ 7.115 GHz : EIRP: 38.282 mW (15.83 dBm) Nss 2: 5.955 GHz ~ 6.415 GHz : EIRP: 38.282 mW (15.83 dBm) 6.435 GHz ~ 6.525 GHz : EIRP: 39.719 mW (15.99 dBm) 6.535 GHz ~ 6.865 GHz : EIRP: 38.282 mW (15.83 dBm) 6.875 GHz ~ 7.115 GHz : EIRP: 38.371 mW (15.84 dBm)
Equipment Class	6XD: 15E 6 GHz Low-power Indoor client

Note:

1. All models are listed as below.

Model name	Product name	Difference description
A9000	BE6500 USB3.0 Wireless Adapter	6GHz: 20/40/80/160MHz - 4096 QAM 2882 Mbps 5GHz: 20/40/80/160MHz - 4096 QAM 2882 Mbps 2.4GHz: 20/40MHz - 4096 QAM 688 Mbps
A8500	BE5000 USB3.0 Wireless Adapter	6GHz: 20/40/80/160MHz - 4096 QAM 2882 Mbps 5GHz: 20/40/80MHz - 4096 QAM 1441 Mbps 2.4GHz: 20/40MHz - 4096 QAM 688 Mbps

*Model: A9000 was chosen for the final tests.

2. The EUT uses following accessories.

Item	Brand	Model	Specification
Dock	Nienyi	107-1059401	Line length: 0.83 m

3. WLAN 2.4GHz, WLAN 5GHz & WLAN 6GHz technology cannot transmit at the same time.
4. 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.	Antenna Net Gain (dBi)	Frequency range (MHz)	Antenna Type	Connector Type
1	3.22	5955 ~ 6415	Dipole	IPEX
	4.45	6435 ~ 6525	Dipole	IPEX
	5.25	6535 ~ 6865	Dipole	IPEX
	5.46	6875 ~ 7115	Dipole	IPEX
2	4.66	5955 ~ 6415	Dipole	IPEX
	4.69	6435 ~ 6525	Dipole	IPEX
	4.75	6535 ~ 6865	Dipole	IPEX
	4.66	6875 ~ 7115	Dipole	IPEX

* 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 (NSS 1)	2RX
802.11ax (HE20)	2TX (NSS 1 / NSS 2)	2RX
802.11ax (HE40)	2TX (NSS 1 / NSS 2)	2RX
802.11ax (HE80)	2TX (NSS 1 / NSS 2)	2RX
802.11ax (HE160)	2TX (NSS 1 / NSS 2)	2RX
802.11be (EHT20)	2TX (NSS 1 / NSS 2)	2RX
802.11be (EHT40)	2TX (NSS 1 / NSS 2)	2RX
802.11be (EHT80)	2TX (NSS 1 / NSS 2)	2RX
802.11be (EHT160)	2TX (NSS 1 / NSS 2)	2RX
Note: The modulation and bandwidth of 802.11ax and 802.11be modes are similar at 20MHz (40MHz, 80MHz,160MHz). Therefore, the investigated worst case is the representative mode in test report.		

3.3 Channel List

U-NII-5:

24 channels are provided for 802.11a, 802.11ax (HE20), 802.11be (EHT20):

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), 802.11be (EHT40):

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), 802.11be (EHT80):

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), 802.11be (EHT160):

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), 802.11be (EHT20):

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), 802.11be (EHT40):

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

1 channel is provided for 802.11ax (HE80), 802.11be (EHT80):

Channel	Frequency
103	6465 MHz

1 channel is provided for 802.11ax (HE160), 802.11be (EHT160):

Channel	Frequency
*111	6505 MHz

U-NII-7:

17 channels are provided for 802.11a, 802.11ax (HE20), 802.11be (EHT20):

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), 802.11be (EHT40):

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), 802.11be (EHT80):

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), 802.11be (EHT160):

Channel	Frequency	Channel	Frequency
143	6665 MHz	*175	6825 MHz

U-NII-8:

13 channels are provided for 802.11a, 802.11ax (HE20), 802.11be (EHT20):

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), 802.11be (EHT40):

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), 802.11be (EHT80):

Channel	Frequency	Channel	Frequency
199	6945 MHz	215	7025 MHz

1 channel is provided for 802.11ax (HE160), 802.11be (EHT160):

Channel	Frequency
207	6985 MHz

Note: * mean these are straddle channels.

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. For Unwanted Emission (below 1GHz) items: with dock and without dock. Pre-scan these modes and find the worst case as a representative test condition. 2. EUT can be used in the following ways: X-axis/ Y-axis/ Z-axis and the antenna can be placed at 0/90/160 degrees. Pre-scan these ways and find the worst case as a representative test condition. 3. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
Worst Case:	1. Worst Condition: with Dock 2. Worst Condition: Z-axis / Antenna at 160 degrees

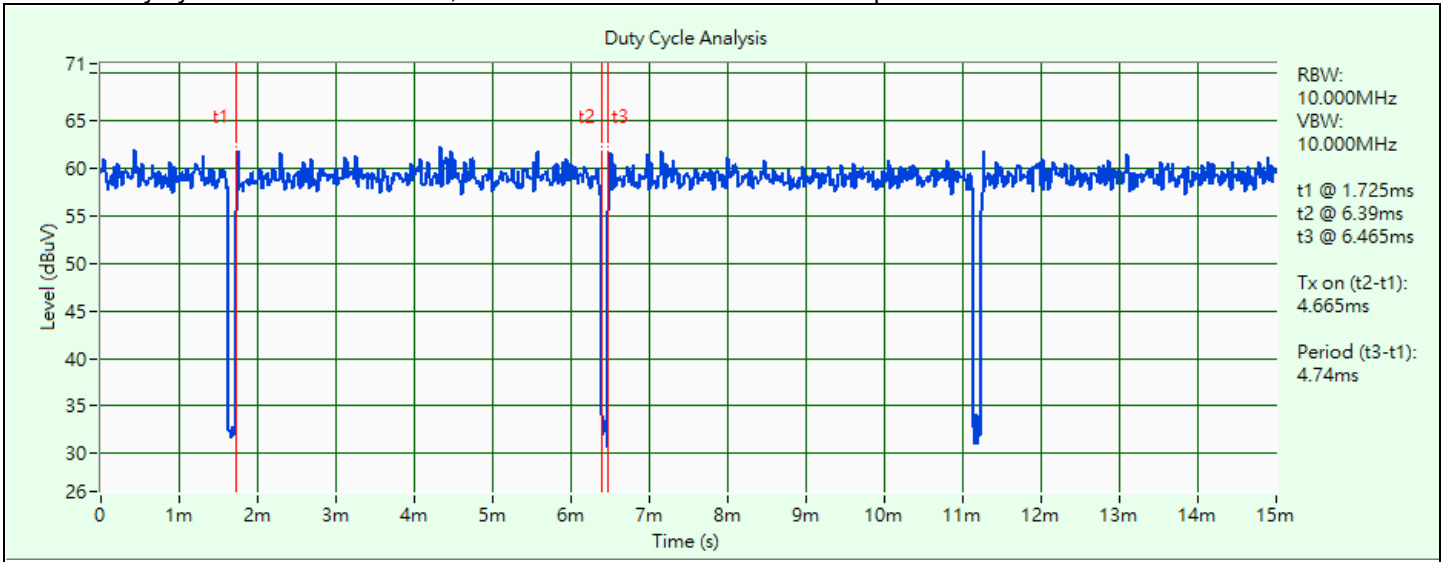
Following channel(s) was (were) selected for the final test as listed below:

Test Item	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
Maximum RF Output Power	802.11a	CDD	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	6Mb/s
	802.11be (EHT20)	2T1S/2T2S	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
	802.11be (EHT40)	2T1S/2T2S	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
	802.11be (EHT80)	2T1S/2T2S	7, 39, 87, 103, 119, 151, 183, 199, 215	BPSK	MCS0
	802.11be (EHT160)	2T1S/2T2S	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
Maximum Power Spectral Density	802.11a	CDD	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	6Mb/s
	802.11be (EHT20)	2T1S/2T2S	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
	802.11be (EHT40)	2T1S/2T2S	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
	802.11be (EHT80)	2T1S/2T2S	7, 39, 87, 103, 119, 151, 183, 199, 215	BPSK	MCS0
	802.11be (EHT160)	2T1S/2T2S	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
Emission Bandwidth	802.11a	CDD	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	6Mb/s
	802.11be (EHT20)	2T1S/2T2S	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
	802.11be (EHT40)	2T1S/2T2S	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
	802.11be (EHT80)	2T1S/2T2S	7, 39, 87, 103, 119, 151, 183, 199, 215	BPSK	MCS0
	802.11be (EHT160)	2T1S/2T2S	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
In-Band Emission Mask	802.11a	CDD	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	6Mb/s
	802.11be (EHT20)	2T1S/2T2S	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
	802.11be (EHT40)	2T1S/2T2S	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
	802.11be (EHT80)	2T1S/2T2S	7, 39, 87, 103, 119, 151, 183, 199, 215	BPSK	MCS0
	802.11be (EHT160)	2T1S/2T2S	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0

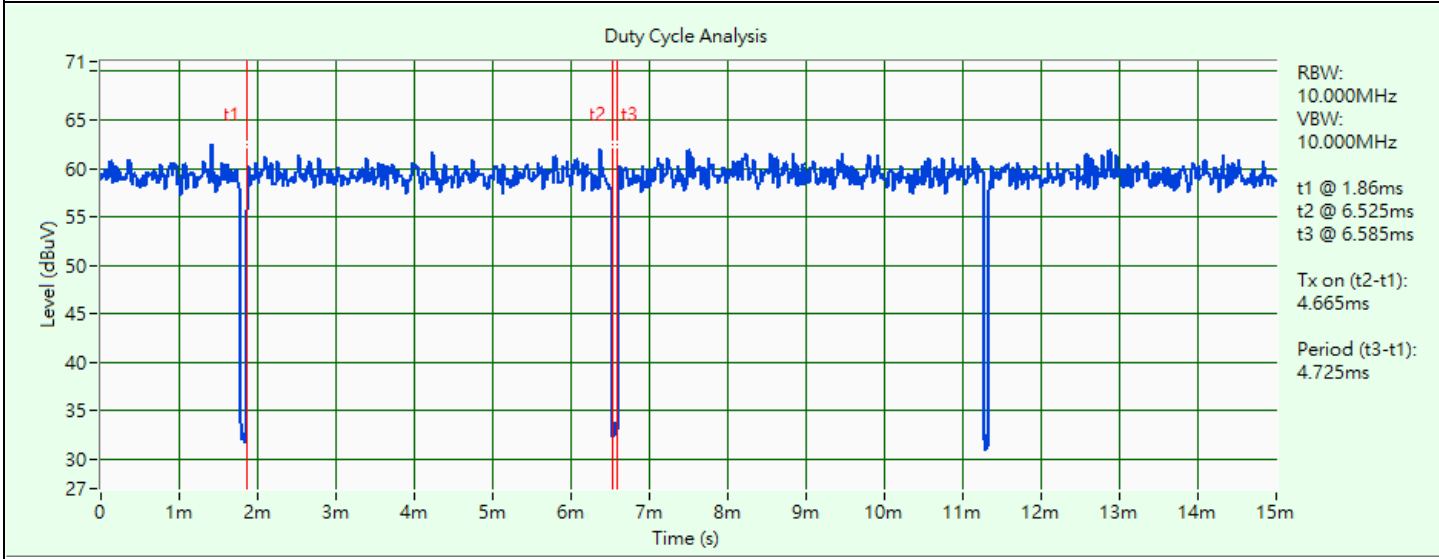
Test Item	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter
Occupied Bandwidth	802.11a	CDD	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	6Mb/s
	802.11be (EHT20)	2T1S/2T2S	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
	802.11be (EHT40)	2T1S/2T2S	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
	802.11be (EHT80)	2T1S/2T2S	7, 39, 87, 103, 119, 151, 183, 199, 215	BPSK	MCS0
	802.11be (EHT160)	2T1S/2T2S	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0
Contention-based Protocol	802.11be (EHT20)	2T1S/2T2S	45, 105, 149, 209	BPSK	MCS0
	802.11be (EHT160)	2T1S/2T2S	47, 111, 143, 207	BPSK	MCS0
AC Power Conducted Emissions	802.11be (EHT160)	2T2S	111	BPSK	MCS0
Unwanted Emissions below 1 GHz	802.11be (EHT160)	2T2S	111	BPSK	MCS0
Unwanted Emissions above 1 GHz	802.11a	CDD	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	6Mb/s
	802.11be (EHT20)	2T1S/2T2S	1, 45, 93, 97, 105, 113, 117, 149, 181, 185, 209, 233	BPSK	MCS0
	802.11be (EHT40)	2T1S/2T2S	3, 43, 91, 99, 107, 115, 123, 155, 179, 187, 211, 227	BPSK	MCS0
	802.11be (EHT80)	2T1S/2T2S	7, 39, 87, 103, 119, 151, 183, 199, 215	BPSK	MCS0
	802.11be (EHT160)	2T1S/2T2S	15, 47, 79, 111, 143, 175, 207	BPSK	MCS0

3.5 Duty Cycle of Test Signal

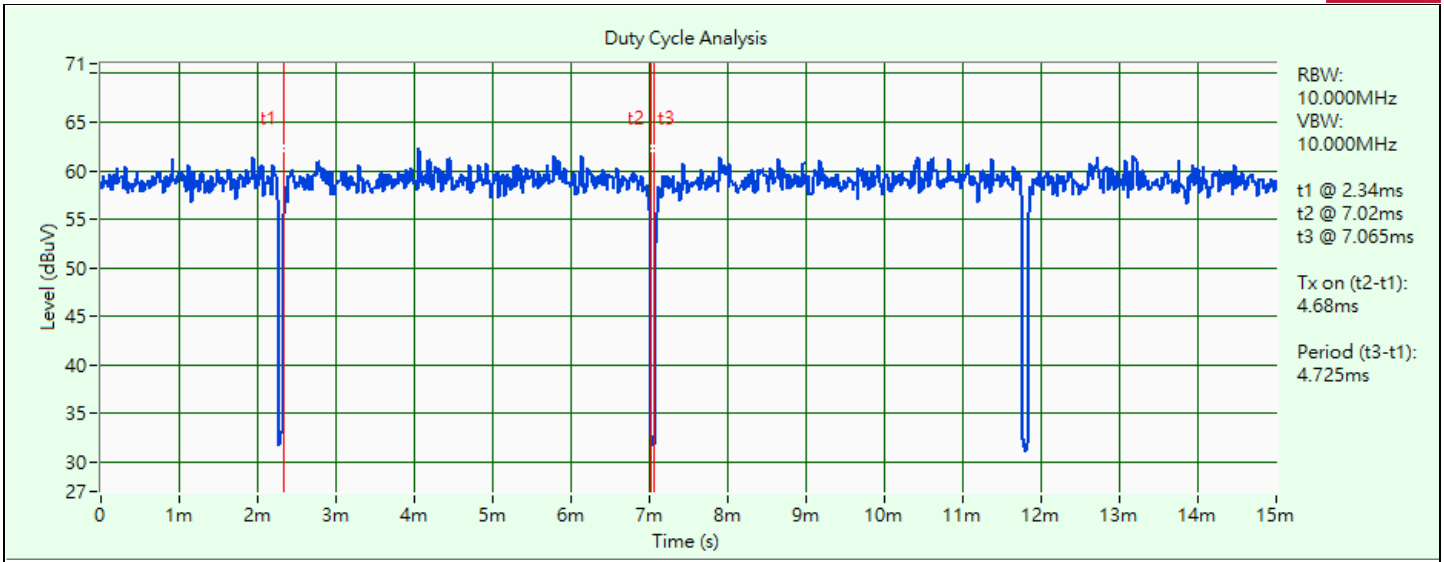
802.11a: Duty cycle = 4.665 ms / 4.74 ms x 100% = 98.4%
802.11be (EHT20): Duty cycle = 4.665 ms / 4.725 ms x 100% = 98.7%
802.11be (EHT40): Duty cycle = 4.68 ms / 4.725 ms x 100% = 99.0%
802.11be (EHT80): Duty cycle = 4.47 ms / 4.53 ms x 100% = 98.7%
802.11be (EHT160): Duty cycle = 4.77 ms / 4.83 ms x 100% = 98.8%
* NSS 2 duty cycle is similar to NSS 1, so NSS 1 data is included in the report.



802.11a



802.11be (EHT20)



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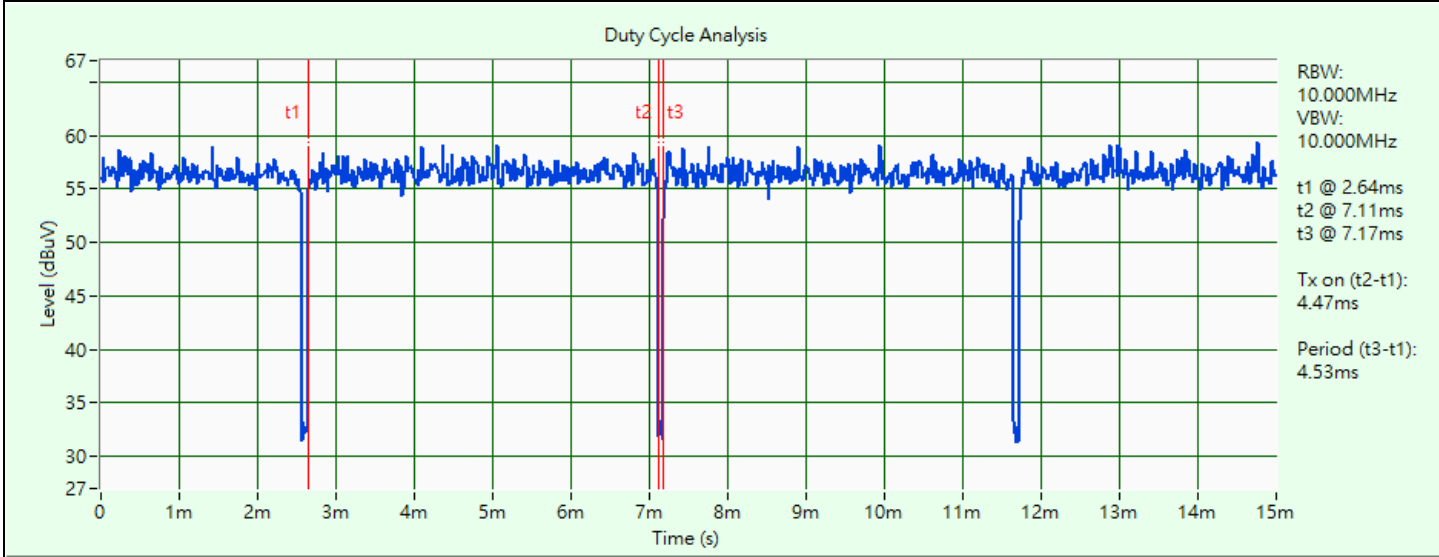
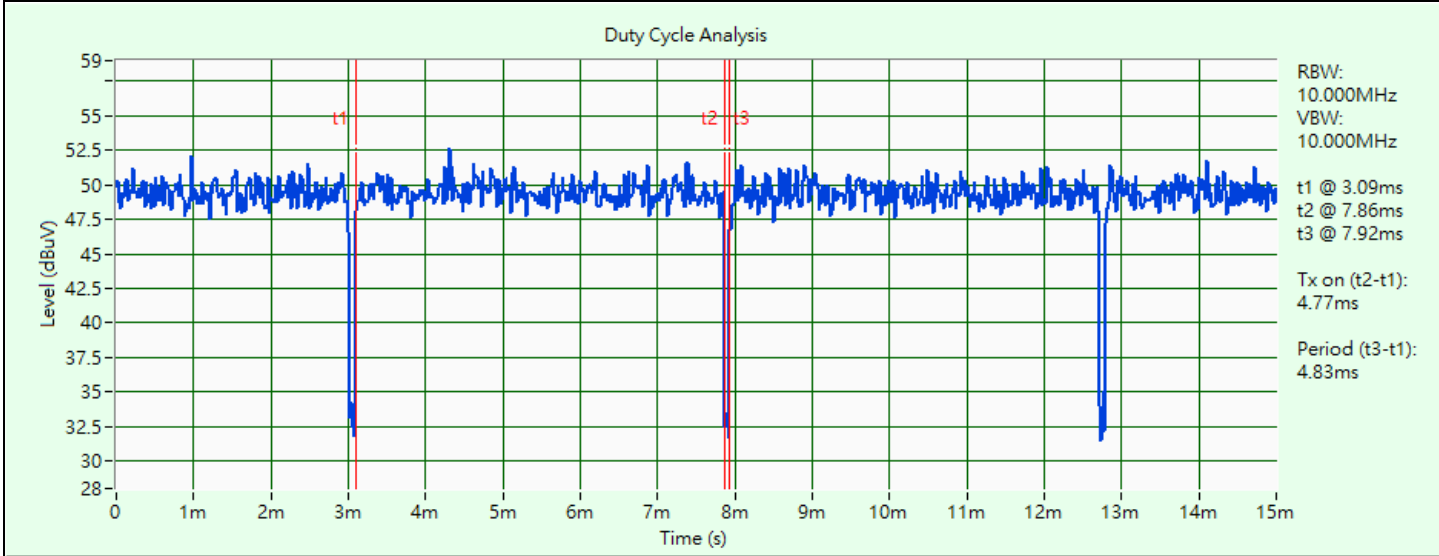


802.11be (EHT80)

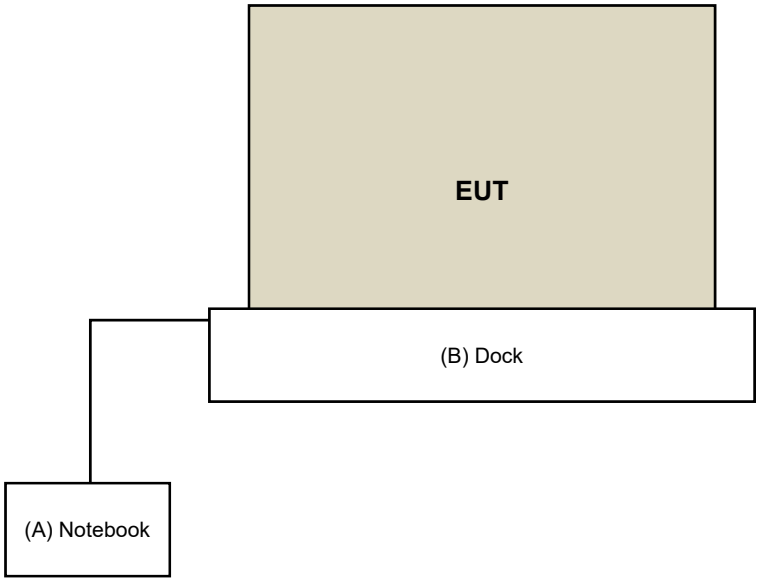


802.11be (EHT160)

3.6 Test Program Used and Operation Descriptions

Controlling software MT7925 QA 0.0.2.104 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	Laptop	DELL	E5430	2RL3YW1	N/A	Provided by Lab
B	Dock	Nienyi	107-1059401	N/A	N/A	Supplied by applicant

4 Test Instruments

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

4.1 Maximum RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
EMI Test Receiver R&S	ESR3	102782	2024/12/10	2025/12/9
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-408	2024/11/10	2025/11/9
Preamplifier Keysight	83017A	MY53270295	2024/5/1	2025/4/30
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03(250724)	2024/5/1	2025/4/30
		MY 13380+295012/04	2024/5/1	2025/4/30
Signal & Spectrum Analyzer R&S	FSV3044	101105	2025/2/25	2026/2/24
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2025/4/26

4.2 Maximum Power Spectral Density

Refer to section 4.1 to get the tested date and information of the instruments.

4.3 Emission Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Signal & Spectrum Analyzer R&S	FSV3044	101504	2024/6/18	2025/6/17
Software BV	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2025/4/26

4.4 In-Band Emission Mask

Refer to section 4.3 to get the tested date and information of the instruments.

4.5 Occupied Bandwidth

Refer to section 4.3 to get the tested date and information of the instruments.

4.6 Contention-based Protocol

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

Notes:

1. The test was performed in Adaptivity room.
2. Tested Date: 2025/4/14

4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance	E1-011279	04	2024/11/28	2025/11/27
	E1-011280	05	2024/11/28	2025/11/27
	E1-011311	09	2024/11/28	2025/11/27
DC-LISN Schwarzbeck	NNBM 8126G	8126G-069	2024/11/5	2025/11/4
EMI Test Receiver R&S	ESCI	100613	2024/11/25	2025/11/24
Fixed Attenuator Mini-Circuits	HAT-10+	PAD-COND1-01	2025/1/5	2026/1/4
LISN R&S	ENV216	101826	2025/3/24	2026/3/23
	ESH3-Z5	100311	2024/9/5	2025/9/4
RF Coaxial Cable Woken	5D-FB	Cable-cond1-01	2025/1/5	2026/1/4
Software BVADT	BVADT_Cond_ V7.4.1.0	N/A	N/A	N/A
V-LISN Schwarzbeck	NNBL 8226-2	8226-142	2024/8/28	2025/8/27

Notes:

1. The test was performed in HY - Conduction 1.
2. Tested Date: 2025/4/29

4.8 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-155	2024/10/14	2025/10/13
EMI Test Receiver R&S	ESR3	102782	2024/12/10	2025/12/9
Loop Antenna TESEQ	HLA 6121	45745	2024/8/21	2025/8/20
Preamplifier Agilent	8447D	2944A10631	2025/4/27	2026/4/26
RF Coaxial Cable Woken	8D-FB	Cable-CH4-01	2024/7/6	2025/7/5
Signal & Spectrum Analyzer R&S	FSV3044	101105	2025/2/25	2026/2/24
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2025/4/29

4.9 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	5	N/A	N/A
EMI Test Receiver R&S	ESR3	102782	2024/12/10	2025/12/9
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-408	2024/11/10	2025/11/9
	BBHA 9170	9170-480	2024/11/10	2025/11/9
		BBHA9170241	2024/10/18	2025/10/17
		BBHA9170243	2024/11/10	2025/11/9
Preamplifier EMCI	EMC 184045	980116	2024/9/24	2025/9/23
Preamplifier Keysight	83017A	MY53270295	2024/5/1	2025/4/30
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2024/7/6	2025/7/5
	EMC102-KM-KM-3000	150929	2024/7/6	2025/7/5
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03(250724)	2024/5/1	2025/4/30
		MY 13380+295012/04	2024/5/1	2025/4/30
Signal & Spectrum Analyzer R&S	FSV3044	101105	2025/2/25	2026/2/24
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2025/3/24 ~ 2025/4/1

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

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)

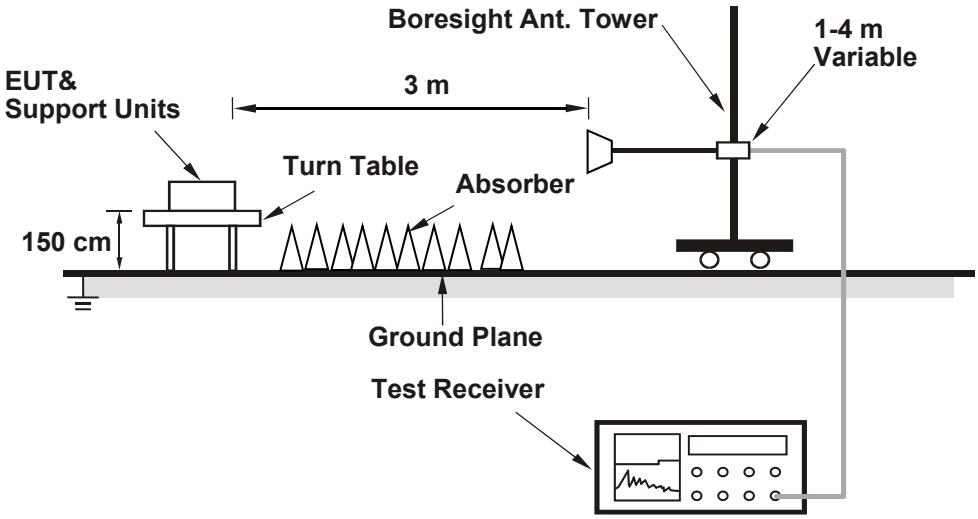
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3}$$ μV/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

a. 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.

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. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP level.

e. Follow ANSI C63.10 section 12.7.3, EIRP Value (dBm) = Field Strength Value (dBuV / m) + Correction Factor @ 3 m.

f. Correction Factor (dB) @ 3 m = 20log(D) – 104.77 = -95.23 dB; where D is the measurement distance @3 m.

Spectrum analyzer setting as below:
Method SA-1

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.

b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS

c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)

d. Sweep time = auto, trigger set to “free run”.

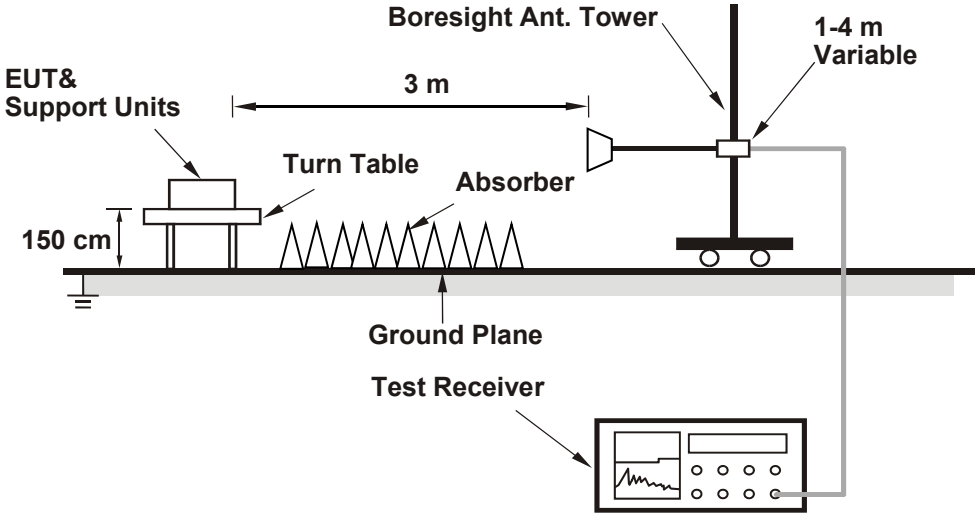
e. Trace average at least 100 traces in power averaging mode.

f. Record the max value

Note: When measuring power, use compute power by integrating the spectrum across the 26 dB EBW or 99% OBW of the signal using the instrument’s band power measurement function, with band limits set equal to the EBW or OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 26 dB EBW or 99% OBW of the spectrum.

6.2 Maximum Power Spectral Density

6.2.1 Test Setup



6.2.2 Test Procedure

a. 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.

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. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP level.

e. Follow ANSI C63.10 section 12.7.3, EIRP Value (dBm) = Field Strength Value (dBuV/m) + Correction Factor @ 3 m.

f. Correction Factor (dB) @ 3 m = 20log(D) – 104.77; where D is the measurement distance @3 m = -95.23 dB

Spectrum analyzer setting as below:
Method SA-1

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.

b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS

c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)

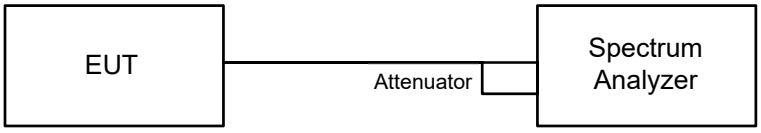
d. Sweep time = auto, trigger set to “free run”.

e. Trace average at least 100 traces in power averaging mode.

f. Record the max value

6.3 Emission Bandwidth

6.3.1 Test Setup

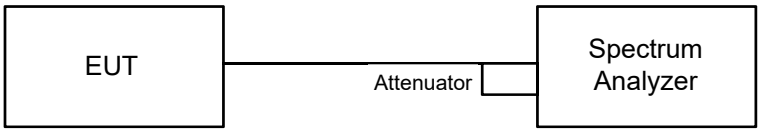


6.3.2 Test Procedure

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

6.4 In-Band Emission Mask

6.4.1 Test Setup

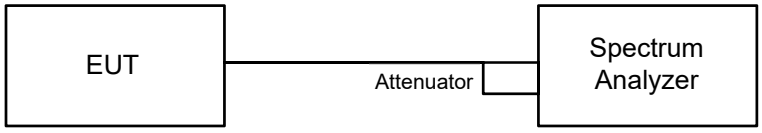


6.4.2 Test Procedure

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 12.4.1 of ANSI C63.10-2013. (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 ≥ [3 X RBW].
   d) Number of points in sweep ≥ [2 X span / 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.
d. 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.
e. Adjust the span to encompass the entire mask as necessary and clear trace.
f. Trace average at least 100 traces in power averaging (rms) mode.
g. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask

6.5 Occupied Bandwidth

6.5.1 Test Setup

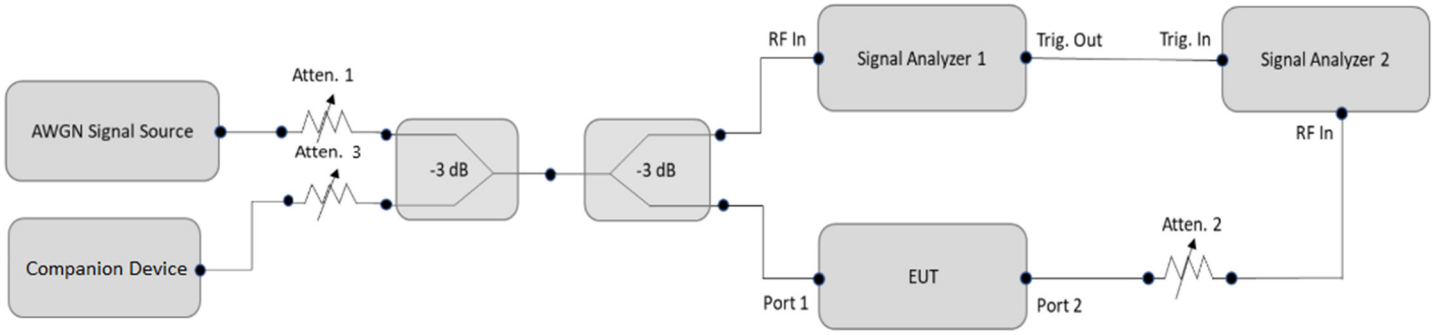


6.5.2 Test Procedure

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

6.6 Contention-based Protocol

6.6.1 Test Setup



6.6.2 Test Procedure

a. 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.

b. 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).

c. Determine number of times detection threshold test as following table,

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

d. 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.

e. 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.

f. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.

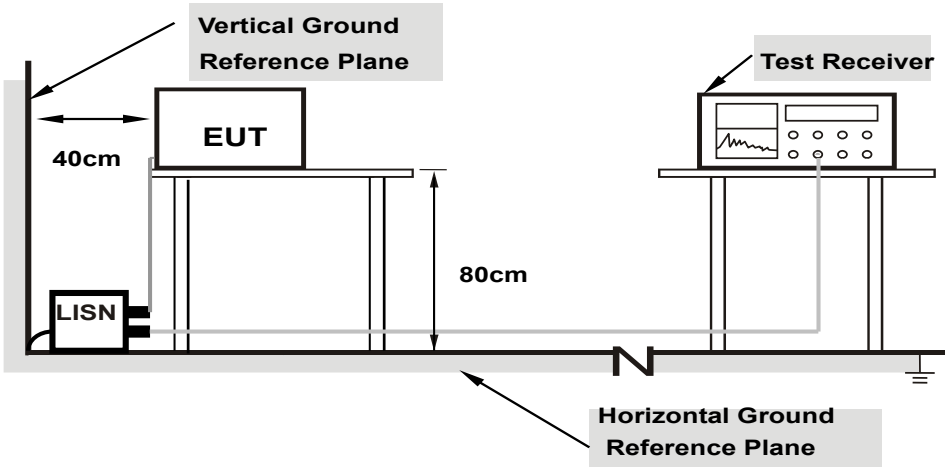
g. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.

h. (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.

i. 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

a. 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.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

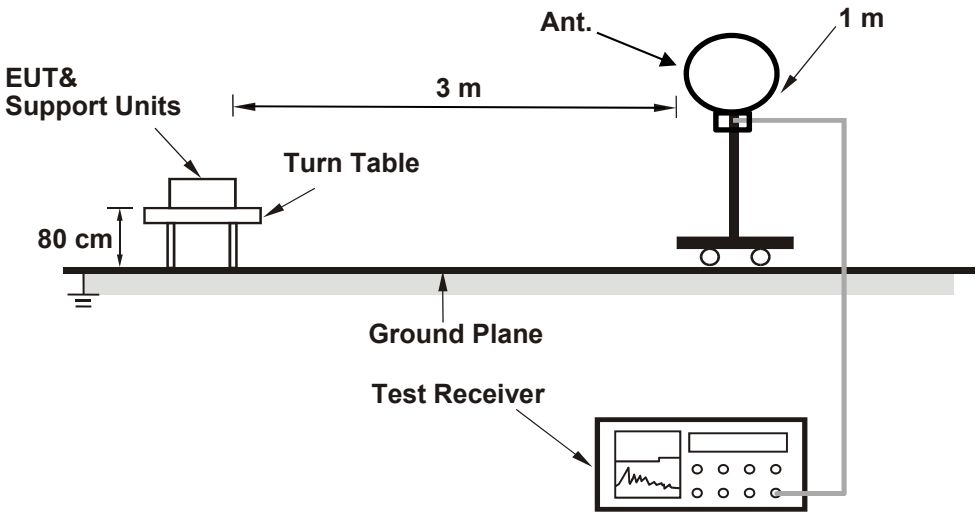
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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

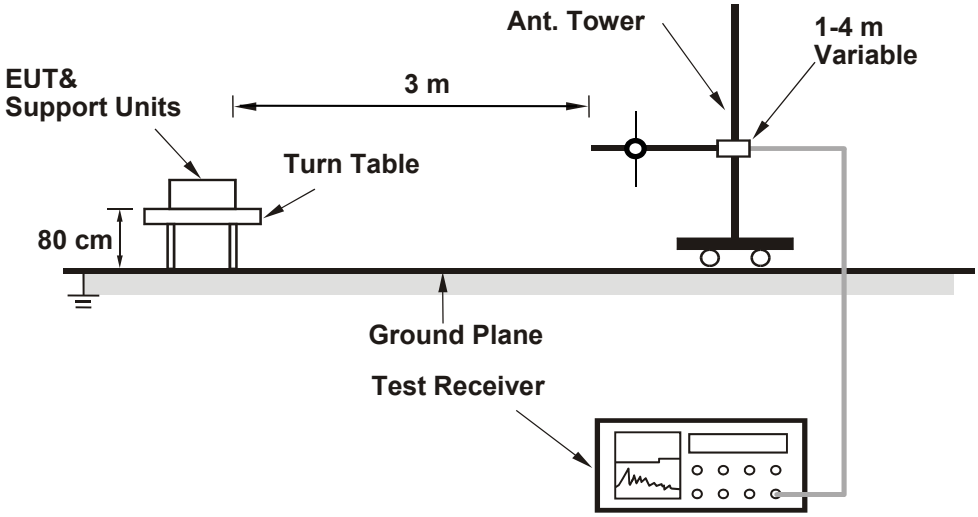
6.8 Unwanted Emissions below 1 GHz

6.8.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



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

6.8.2 Test Procedure

For Radiated emission below 30 MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode, except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

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

For Radiated emission above 30 MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

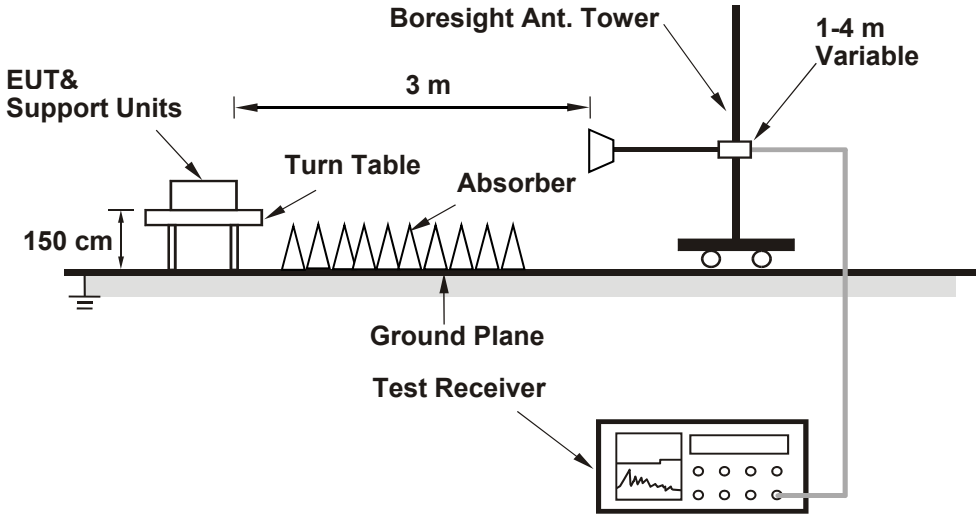
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2.
3. 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

a. 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.

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 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:

1. 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.
2. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10 Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1 GHz.
3. 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:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Tim Chen/ Matthew Yang

NSS1

802.11a

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
1	5955	105.57	-95.23	10.814	10.34	24	Pass
45	6175	105.62	-95.23	10.94	10.39	24	Pass
93	6415	105.60	-95.23	10.889	10.37	24	Pass
97	6435	105.60	-95.23	10.889	10.37	24	Pass
105	6475	105.53	-95.23	10.715	10.30	24	Pass
113	6515	105.64	-95.23	10.99	10.41	24	Pass
117	6535	105.58	-95.23	10.839	10.35	24	Pass
149	6695	105.56	-95.23	10.789	10.33	24	Pass
181	6855	105.59	-95.23	10.864	10.36	24	Pass
185	6875	105.57	-95.23	10.814	10.34	24	Pass
209	6995	105.26	-95.23	10.069	10.03	24	Pass
233	7115	105.30	-95.23	10.162	10.07	24	Pass

802.11be (EHT20)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
1	5955	105.82	-95.23	11.455	10.59	24	Pass
45	6175	105.78	-95.23	11.35	10.55	24	Pass
93	6415	105.70	-95.23	11.143	10.47	24	Pass
97	6435	105.74	-95.23	11.246	10.51	24	Pass
105	6475	105.70	-95.23	11.143	10.47	24	Pass
113	6515	105.38	-95.23	10.351	10.15	24	Pass
117	6535	105.37	-95.23	10.328	10.14	24	Pass
149	6695	105.31	-95.23	10.186	10.08	24	Pass
181	6855	105.35	-95.23	10.28	10.12	24	Pass
185	6875	105.31	-95.23	10.186	10.08	24	Pass
209	6995	105.28	-95.23	10.116	10.05	24	Pass
233	7115	105.47	-95.23	10.568	10.24	24	Pass

802.11be (EHT40)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
3	5965	107.78	-95.23	17.989	12.55	24	Pass
43	6165	107.80	-95.23	18.072	12.57	24	Pass
91	6405	107.75	-95.23	17.865	12.52	24	Pass
99	6445	107.76	-95.23	17.906	12.53	24	Pass
107	6485	107.73	-95.23	17.783	12.50	24	Pass
115	6525	107.56	-95.23	17.1	12.33	24	Pass
123	6565	107.50	-95.23	16.866	12.27	24	Pass
155	6725	107.50	-95.23	16.866	12.27	24	Pass
179	6845	107.47	-95.23	16.749	12.24	24	Pass
187	6885	107.49	-95.23	16.827	12.26	24	Pass
211	7005	107.30	-95.23	16.106	12.07	24	Pass
227	7085	107.46	-95.23	16.711	12.23	24	Pass

802.11be (EHT80)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
7	5985	111.03	-95.23	38.019	15.80	24	Pass
39	6145	110.86	-95.23	36.559	15.63	24	Pass
87	6385	111.06	-95.23	38.282	15.83	24	Pass
103	6465	110.86	-95.23	36.559	15.63	24	Pass
119	6545	110.79	-95.23	35.975	15.56	24	Pass
151	6705	111.01	-95.23	37.853	15.78	24	Pass
183	6865	110.83	-95.23	36.308	15.60	24	Pass
199	6945	110.68	-95.23	35.075	15.45	24	Pass
215	7025	110.89	-95.23	36.813	15.66	24	Pass

802.11be (EHT160)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
15	6025	110.97	-95.23	37.497	15.74	24	Pass
47	6185	110.99	-95.23	37.67	15.76	24	Pass
79	6345	110.91	-95.23	36.983	15.68	24	Pass
111	6505	111.16	-95.23	39.174	15.93	24	Pass
143	6665	111.01	-95.23	37.844	15.78	24	Pass
175	6825	111.04	-95.23	38.107	15.81	24	Pass
207	6985	111.06	-95.23	38.282	15.83	24	Pass

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802.11be (EHT20)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
1	5955	107.42	-95.23	16.558	12.19	24	Pass
45	6175	107.24	-95.23	15.885	12.01	24	Pass
93	6415	107.19	-95.23	15.704	11.96	24	Pass
97	6435	107.18	-95.23	15.668	11.95	24	Pass
105	6475	107.15	-95.23	15.56	11.92	24	Pass
113	6515	107.21	-95.23	15.776	11.98	24	Pass
117	6535	107.16	-95.23	15.596	11.93	24	Pass
149	6695	107.17	-95.23	15.631	11.94	24	Pass
181	6855	107.17	-95.23	15.631	11.94	24	Pass
185	6875	107.19	-95.23	15.704	11.96	24	Pass
209	6995	106.83	-95.23	14.454	11.60	24	Pass
233	7115	97.36	-95.23	1.633	2.13	24	Pass

802.11be (EHT40)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
3	5965	109.43	-95.23	26.303	14.20	24	Pass
43	6165	109.33	-95.23	25.704	14.10	24	Pass
91	6405	109.32	-95.23	25.645	14.09	24	Pass
99	6445	109.29	-95.23	25.468	14.06	24	Pass
107	6485	109.26	-95.23	25.293	14.03	24	Pass
115	6525	109.26	-95.23	25.293	14.03	24	Pass
123	6565	109.23	-95.23	25.119	14.00	24	Pass
155	6725	109.17	-95.23	24.774	13.94	24	Pass
179	6845	109.22	-95.23	25.061	13.99	24	Pass
187	6885	109.23	-95.23	25.119	14.00	24	Pass
211	7005	109.09	-95.23	24.322	13.86	24	Pass
227	7085	109.03	-95.23	23.988	13.80	24	Pass

802.11be (EHT80)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
7	5985	111.03	-95.23	38.019	15.80	24	Pass
39	6145	110.91	-95.23	36.983	15.68	24	Pass
87	6385	111.06	-95.23	38.282	15.83	24	Pass
103	6465	111.03	-95.23	38.019	15.80	24	Pass
119	6545	110.88	-95.23	36.728	15.65	24	Pass
151	6705	111.02	-95.23	37.931	15.79	24	Pass
183	6865	110.84	-95.23	36.392	15.61	24	Pass
199	6945	110.70	-95.23	35.237	15.47	24	Pass
215	7025	110.91	-95.23	36.983	15.68	24	Pass

802.11be (EHT160)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
15	6025	110.99	-95.23	37.67	15.76	24	Pass
47	6185	111.01	-95.23	37.844	15.78	24	Pass
79	6345	110.93	-95.23	37.154	15.70	24	Pass
111	6505	111.22	-95.23	39.719	15.99	24	Pass
143	6665	111.04	-95.23	38.107	15.81	24	Pass
175	6825	111.06	-95.23	38.282	15.83	24	Pass
207	6985	111.07	-95.23	38.371	15.84	24	Pass

7.2 Maximum Power Spectral Density

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Tim Chen/ Matthew Yang

NSS1

802.11a

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
1	5955	94.18	-95.23	-1.05	-1	Pass
45	6175	94.15	-95.23	-1.08	-1	Pass
93	6415	94.10	-95.23	-1.13	-1	Pass
97	6435	94.06	-95.23	-1.17	-1	Pass
105	6475	94.08	-95.23	-1.15	-1	Pass
113	6515	94.17	-95.23	-1.06	-1	Pass
117	6535	94.10	-95.23	-1.13	-1	Pass
149	6695	94.13	-95.23	-1.10	-1	Pass
181	6855	94.11	-95.23	-1.12	-1	Pass
185	6875	94.13	-95.23	-1.10	-1	Pass
209	6995	94.17	-95.23	-1.06	-1	Pass
233	7115	94.08	-95.23	-1.15	-1	Pass

802.11be (EHT20)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
1	5955	94.05	-95.23	-1.18	-1	Pass
45	6175	94.18	-95.23	-1.05	-1	Pass
93	6415	94.13	-95.23	-1.10	-1	Pass
97	6435	94.10	-95.23	-1.13	-1	Pass
105	6475	94.15	-95.23	-1.08	-1	Pass
113	6515	94.12	-95.23	-1.11	-1	Pass
117	6535	94.08	-95.23	-1.15	-1	Pass
149	6695	94.05	-95.23	-1.18	-1	Pass
181	6855	94.10	-95.23	-1.13	-1	Pass
185	6875	94.05	-95.23	-1.18	-1	Pass
209	6995	94.11	-95.23	-1.12	-1	Pass
233	7115	94.08	-95.23	-1.15	-1	Pass

802.11be (EHT40)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
3	5965	94.08	-95.23	-1.15	-1	Pass
43	6165	94.18	-95.23	-1.05	-1	Pass
91	6405	94.12	-95.23	-1.11	-1	Pass
99	6445	94.15	-95.23	-1.08	-1	Pass
107	6485	94.11	-95.23	-1.12	-1	Pass
115	6525	94.13	-95.23	-1.10	-1	Pass
123	6565	94.05	-95.23	-1.18	-1	Pass
155	6725	94.05	-95.23	-1.18	-1	Pass
179	6845	94.11	-95.23	-1.12	-1	Pass
187	6885	94.09	-95.23	-1.14	-1	Pass
211	7005	94.08	-95.23	-1.15	-1	Pass
227	7085	94.22	-95.23	-1.01	-1	Pass

802.11be (EHT80)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
7	5985	94.12	-95.23	-1.11	-1	Pass
39	6145	94.05	-95.23	-1.18	-1	Pass
87	6385	94.16	-95.23	-1.07	-1	Pass
103	6465	94.12	-95.23	-1.11	-1	Pass
119	6545	94.07	-95.23	-1.16	-1	Pass
151	6705	94.10	-95.23	-1.13	-1	Pass
183	6865	94.15	-95.23	-1.08	-1	Pass
199	6945	94.11	-95.23	-1.12	-1	Pass
215	7025	94.02	-95.23	-1.21	-1	Pass

802.11be (EHT160)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
15	6025	92.08	-95.23	-3.15	-1	Pass
47	6185	91.95	-95.23	-3.28	-1	Pass
79	6345	92.01	-95.23	-3.22	-1	Pass
111	6505	92.00	-95.23	-3.23	-1	Pass
143	6665	92.02	-95.23	-3.21	-1	Pass
175	6825	91.99	-95.23	-3.24	-1	Pass
207	6985	92.07	-95.23	-3.16	-1	Pass

NSS2

802.11be (EHT20)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
1	5955	94.12	-95.23	-1.11	-1	Pass
45	6175	94.19	-95.23	-1.04	-1	Pass
93	6415	94.14	-95.23	-1.09	-1	Pass
97	6435	94.12	-95.23	-1.11	-1	Pass
105	6475	94.18	-95.23	-1.05	-1	Pass
113	6515	94.14	-95.23	-1.09	-1	Pass
117	6535	94.10	-95.23	-1.13	-1	Pass
149	6695	94.06	-95.23	-1.17	-1	Pass
181	6855	94.11	-95.23	-1.12	-1	Pass
185	6875	94.09	-95.23	-1.14	-1	Pass
209	6995	94.15	-95.23	-1.08	-1	Pass
233	7115	84.95	-95.23	-10.28	-1	Pass

802.11be (EHT40)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
3	5965	94.13	-95.23	-1.10	-1	Pass
43	6165	94.22	-95.23	-1.01	-1	Pass
91	6405	94.13	-95.23	-1.10	-1	Pass
99	6445	94.19	-95.23	-1.04	-1	Pass
107	6485	94.15	-95.23	-1.08	-1	Pass
115	6525	94.14	-95.23	-1.09	-1	Pass
123	6565	94.10	-95.23	-1.13	-1	Pass
155	6725	94.10	-95.23	-1.13	-1	Pass
179	6845	94.12	-95.23	-1.11	-1	Pass
187	6885	94.12	-95.23	-1.11	-1	Pass
211	7005	94.11	-95.23	-1.12	-1	Pass
227	7085	94.22	-95.23	-1.01	-1	Pass

802.11be (EHT80)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
7	5985	94.13	-95.23	-1.10	-1	Pass
39	6145	94.07	-95.23	-1.16	-1	Pass
87	6385	94.21	-95.23	-1.02	-1	Pass
103	6465	94.14	-95.23	-1.09	-1	Pass
119	6545	94.09	-95.23	-1.14	-1	Pass
151	6705	94.14	-95.23	-1.09	-1	Pass
183	6865	94.17	-95.23	-1.06	-1	Pass
199	6945	94.13	-95.23	-1.10	-1	Pass
215	7025	94.05	-95.23	-1.18	-1	Pass

802.11be (EHT160)

Chan.	Chan. Freq. (MHz)	Field Strength (dBuV/m)	Correction Factor (dB)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
15	6025	92.10	-95.23	-3.13	-1	Pass
47	6185	91.97	-95.23	-3.26	-1	Pass
79	6345	92.01	-95.23	-3.22	-1	Pass
111	6505	92.04	-95.23	-3.19	-1	Pass
143	6665	92.06	-95.23	-3.17	-1	Pass
175	6825	92.00	-95.23	-3.23	-1	Pass
207	6985	92.08	-95.23	-3.15	-1	Pass

7.3 Emission Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Tim Chen/ Matthew Yang

NSS1

802.11a

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	18.28	18.38	320	Pass
45	6175	18.19	18.39	320	Pass
93	6415	18.38	18.41	320	Pass
97	6435	18.38	18.42	320	Pass
105	6475	18.40	18.45	320	Pass
113	6515	18.26	18.33	320	Pass
117	6535	18.31	18.43	320	Pass
149	6695	18.35	18.39	320	Pass
181	6855	18.32	18.47	320	Pass
185	6875	18.31	18.41	320	Pass
209	6995	18.30	18.42	320	Pass
233	7115	18.31	18.44	320	Pass

802.11be (EHT20)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	19.96	19.93	320	Pass
45	6175	20.11	20.04	320	Pass
93	6415	20.11	20.03	320	Pass
97	6435	20.13	19.98	320	Pass
105	6475	20.08	19.96	320	Pass
113	6515	20.09	20.01	320	Pass
117	6535	20.10	20.02	320	Pass
149	6695	20.07	20.02	320	Pass
181	6855	20.08	20.03	320	Pass
185	6875	20.10	20.04	320	Pass
209	6995	20.15	20.02	320	Pass
233	7115	20.11	20.01	320	Pass

802.11be (EHT40)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	5965	39.41	39.43	320	Pass
43	6165	39.71	39.73	320	Pass
91	6405	39.71	39.79	320	Pass
99	6445	39.74	39.69	320	Pass
107	6485	39.59	39.84	320	Pass
115	6525	39.66	39.85	320	Pass
123	6565	39.65	39.82	320	Pass
155	6725	39.63	39.79	320	Pass
179	6845	39.72	39.74	320	Pass
187	6885	39.67	39.79	320	Pass
211	7005	39.65	39.79	320	Pass
227	7085	39.81	39.73	320	Pass

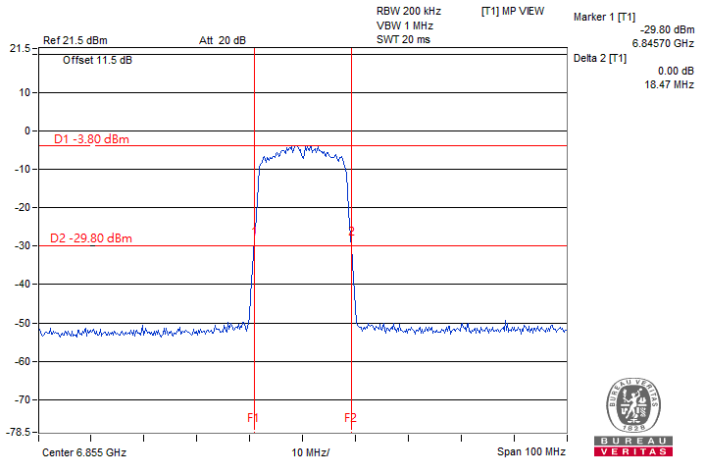
802.11be (EHT80)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
7	5985	80.42	80.41	320	Pass
39	6145	80.86	80.94	320	Pass
87	6385	80.87	80.90	320	Pass
103	6465	80.81	80.84	320	Pass
119	6545	80.80	80.87	320	Pass
151	6705	80.83	80.75	320	Pass
183	6865	80.83	80.84	320	Pass
199	6945	80.88	80.84	320	Pass
215	7025	80.89	80.88	320	Pass

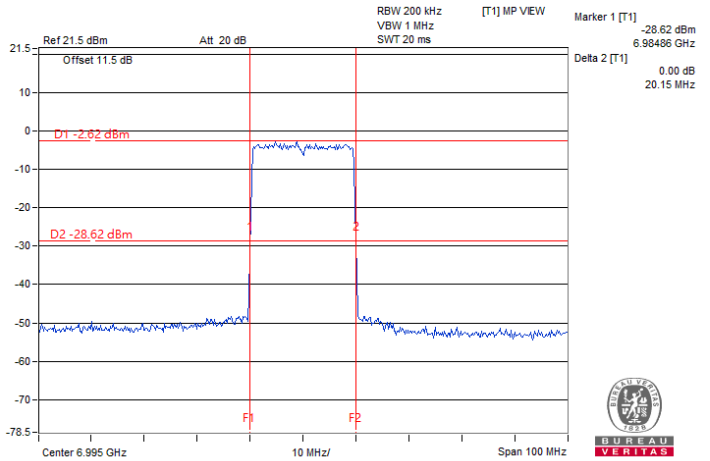
802.11be (EHT160)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
15	6025	162.39	162.39	320	Pass
47	6185	163.16	163.10	320	Pass
79	6345	163.12	163.06	320	Pass
111	6505	163.02	163.24	320	Pass
143	6665	162.97	163.03	320	Pass
175	6825	163.29	163.06	320	Pass
207	6985	162.96	163.00	320	Pass

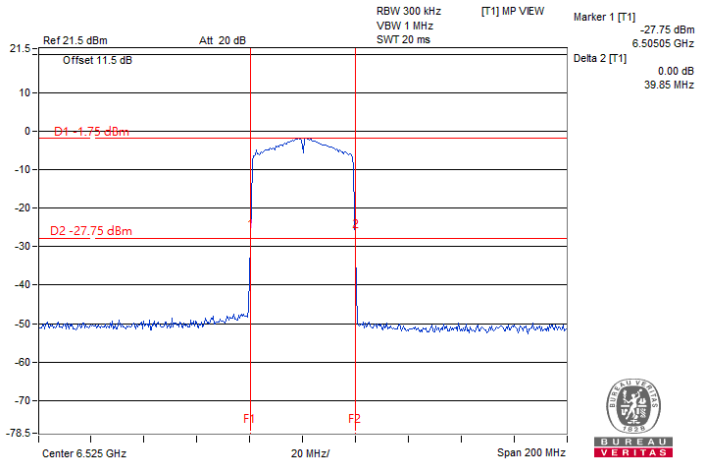
Spectrum Plot of Maximum Value



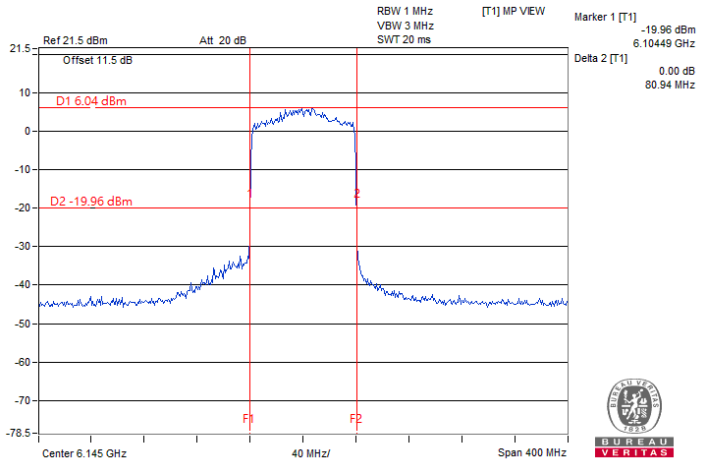
802.11a / Chain 1 : CH 181



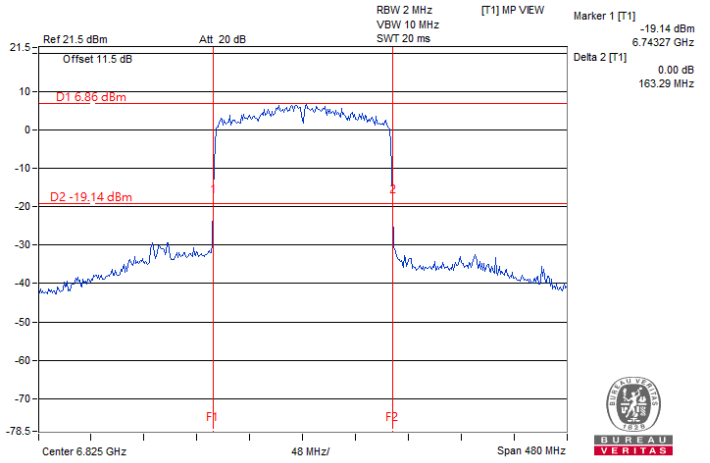
802.11be (EHT20) / Chain 0 : CH 209



802.11be (EHT40) / Chain 1 : CH 115



802.11be (EHT80) / Chain 1 : CH 39



802.11be (EHT160) / Chain 0 : CH 175

NSS2

802.11be (EHT20)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
1	5955	19.89	19.93	320	Pass
45	6175	20.00	19.89	320	Pass
93	6415	19.95	20.00	320	Pass
97	6435	19.98	20.04	320	Pass
105	6475	19.92	20.03	320	Pass
113	6515	19.80	20.04	320	Pass
117	6535	19.99	19.98	320	Pass
149	6695	19.94	19.97	320	Pass
181	6855	19.98	19.99	320	Pass
185	6875	20.00	20.05	320	Pass
209	6995	19.99	20.03	320	Pass
233	7115	19.96	19.99	320	Pass

802.11be (EHT40)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
3	5965	39.45	39.46	320	Pass
43	6165	39.68	39.78	320	Pass
91	6405	39.68	39.82	320	Pass
99	6445	39.70	39.80	320	Pass
107	6485	39.67	39.84	320	Pass
115	6525	39.68	39.74	320	Pass
123	6565	39.68	39.78	320	Pass
155	6725	39.68	39.80	320	Pass
179	6845	39.79	39.77	320	Pass
187	6885	39.69	39.77	320	Pass
211	7005	39.65	39.79	320	Pass
227	7085	39.67	39.73	320	Pass

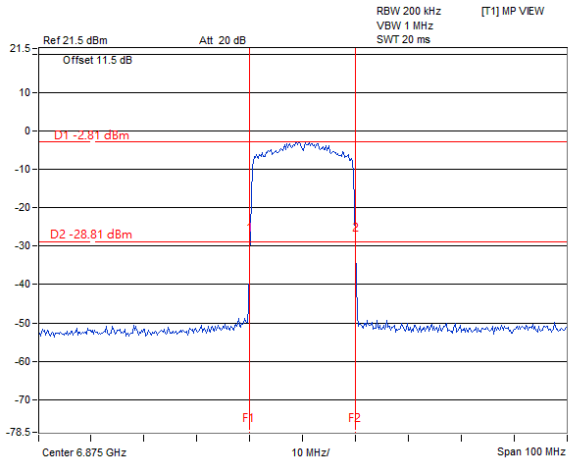
802.11be (EHT80)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
7	5985	80.45	80.42	320	Pass
39	6145	80.85	80.89	320	Pass
87	6385	80.97	80.90	320	Pass
103	6465	80.73	80.90	320	Pass
119	6545	80.81	80.89	320	Pass
151	6705	80.96	80.95	320	Pass
183	6865	80.92	80.90	320	Pass
199	6945	80.84	80.76	320	Pass
215	7025	80.88	80.90	320	Pass

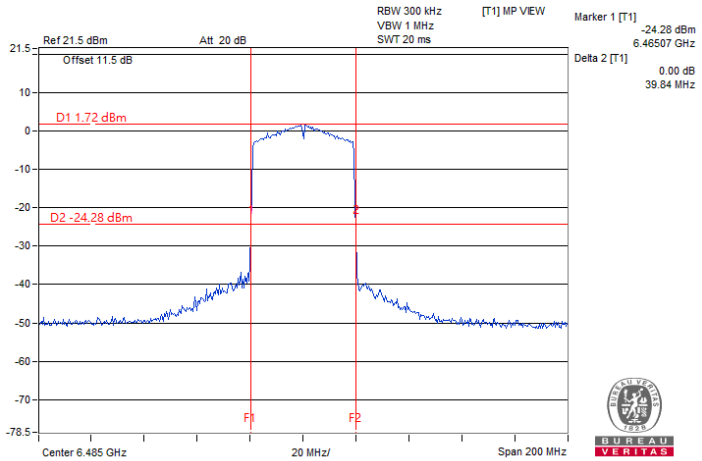
802.11be (EHT160)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)		Maximum Limit (MHz)	Test Result
		Chain 0	Chain 1		
15	6025	162.46	162.40	320	Pass
47	6185	163.05	162.94	320	Pass
79	6345	162.90	163.18	320	Pass
111	6505	162.91	163.15	320	Pass
143	6665	163.12	162.78	320	Pass
175	6825	163.16	163.09	320	Pass
207	6985	162.96	162.88	320	Pass

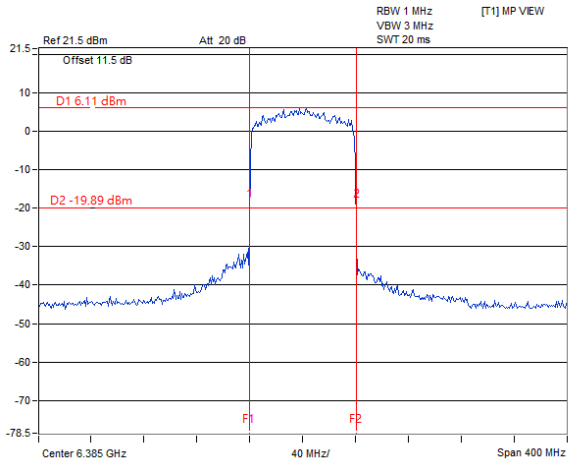
Spectrum Plot of Maximum Value



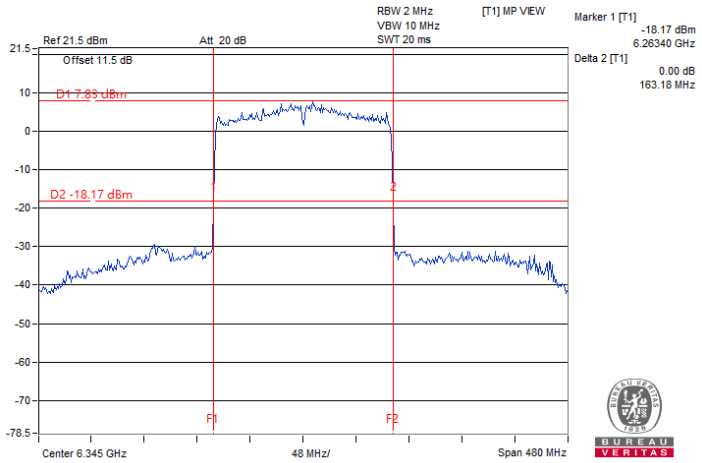
802.11be (EHT20) / Chain 1 : CH 185



802.11be (EHT40) / Chain 1 : CH 107



802.11be (EHT80) / Chain 0 : CH 87



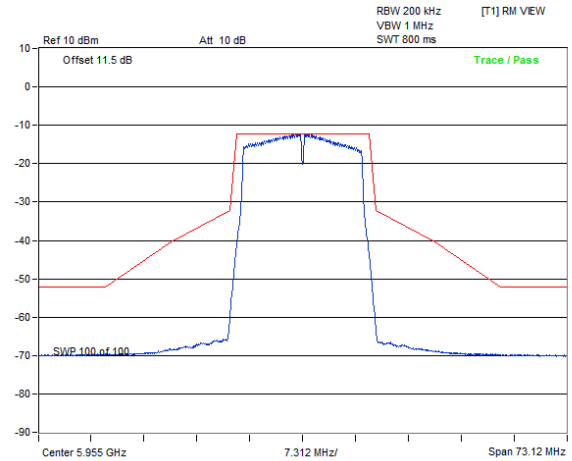
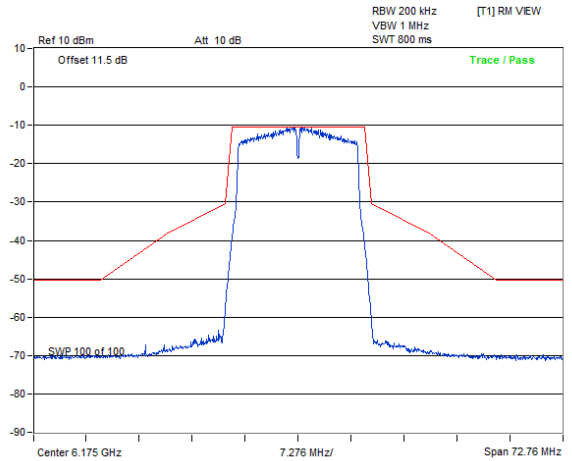
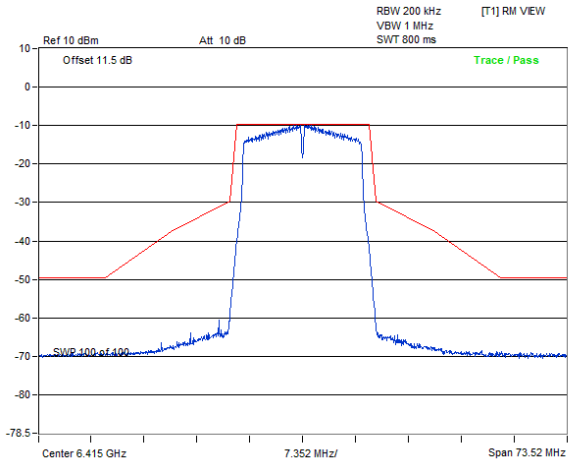
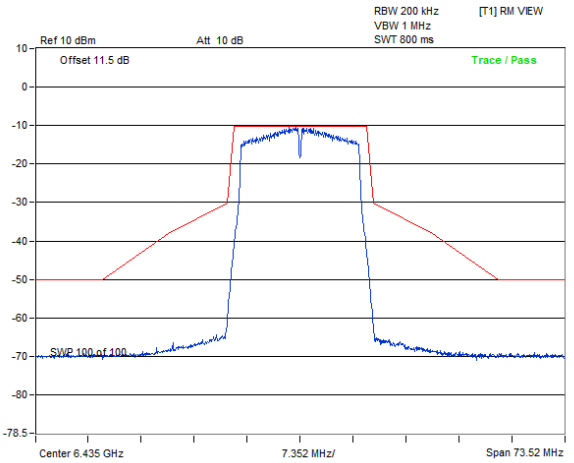
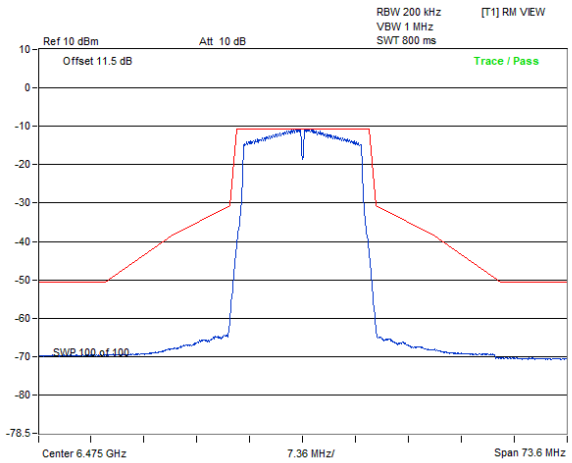
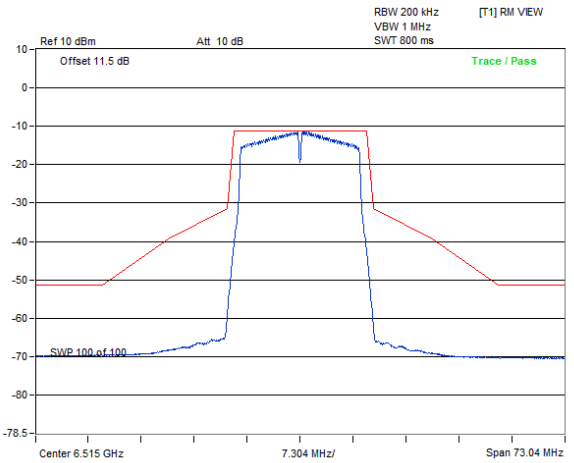
802.11be (EHT160) / Chain 1 : CH 79

7.4 In-Band Emission Mask

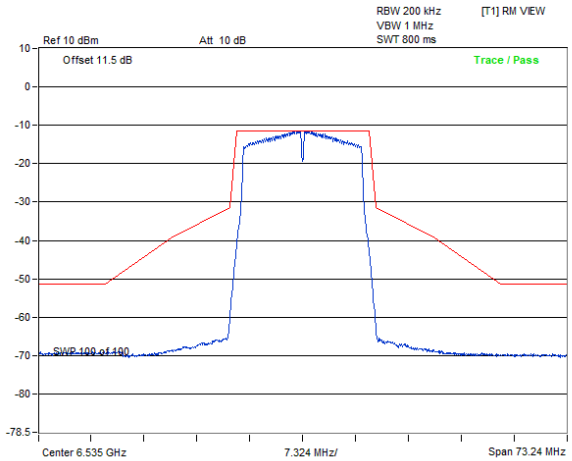
Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Tim Chen/ Matthew Yang

NSS1

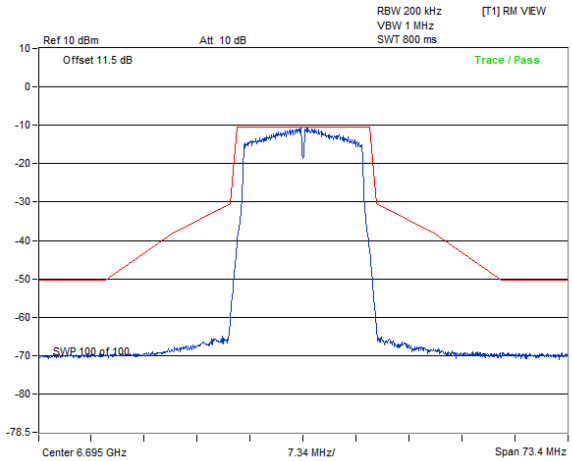
802.11a

Spectrum Plot	
 802.11a / Chain 0 : CH 1	 802.11a / Chain 0 : CH 45
 802.11a / Chain 0 : CH 93	 802.11a / Chain 0 : CH 97
 802.11a / Chain 0 : CH 105	 802.11a / Chain 0 : CH 113

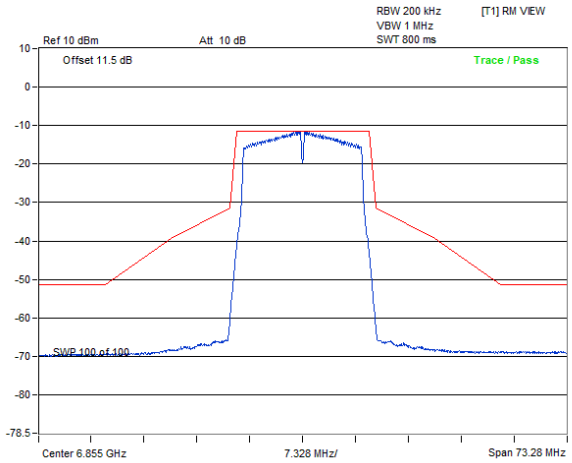
Spectrum Plot



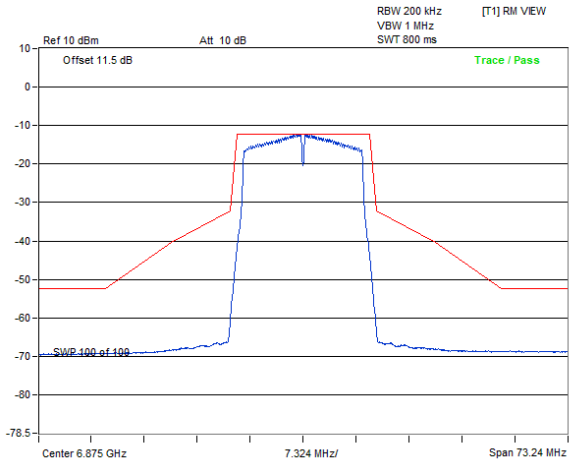
802.11a / Chain 0 : CH 117



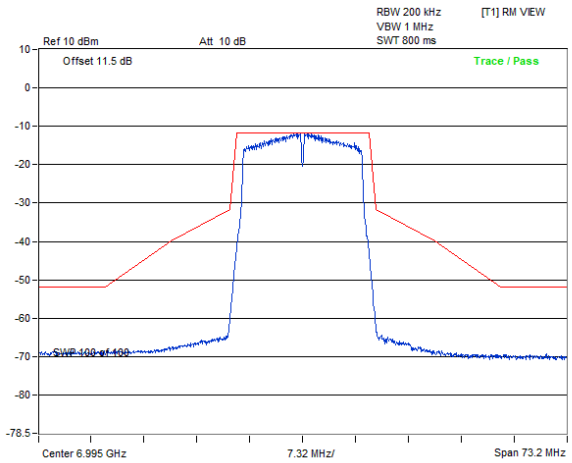
802.11a / Chain 0 : CH 149



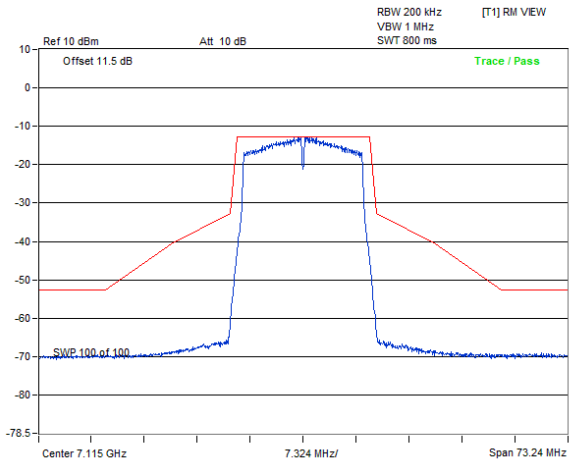
802.11a / Chain 0 : CH 181



802.11a / Chain 0 : CH 185

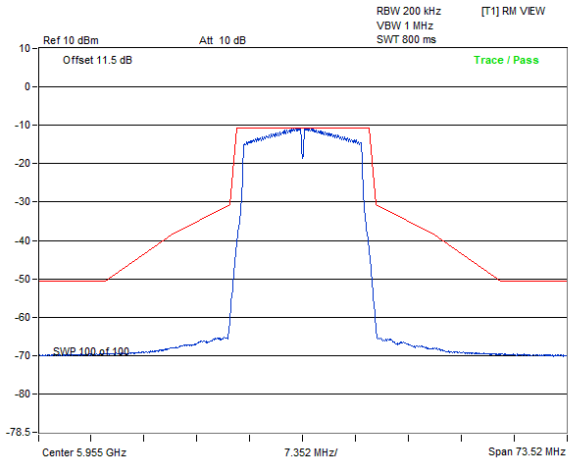


802.11a / Chain 0 : CH 209

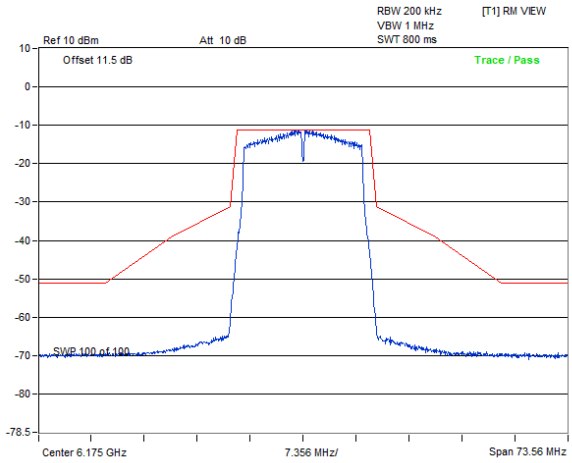


802.11a / Chain 0 : CH 233

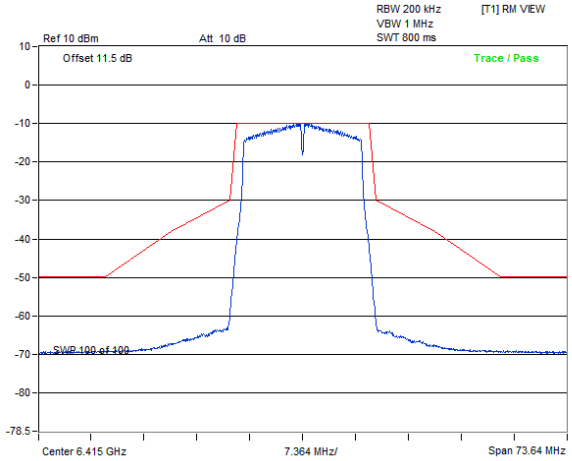
Spectrum Plot



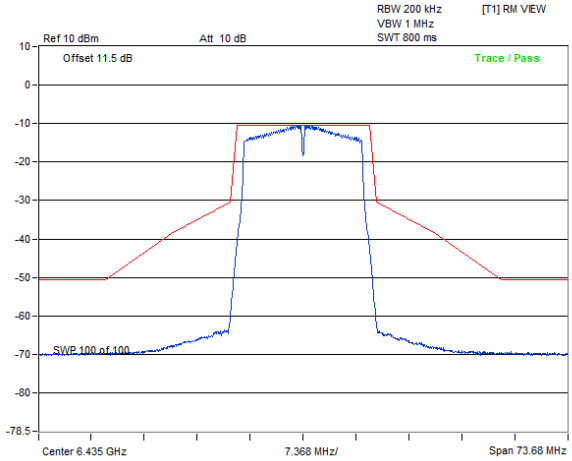
802.11a / Chain 1 : CH 1



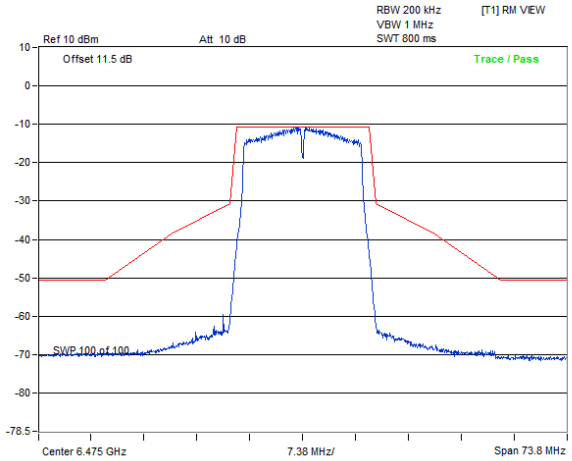
802.11a / Chain 1 : CH 45



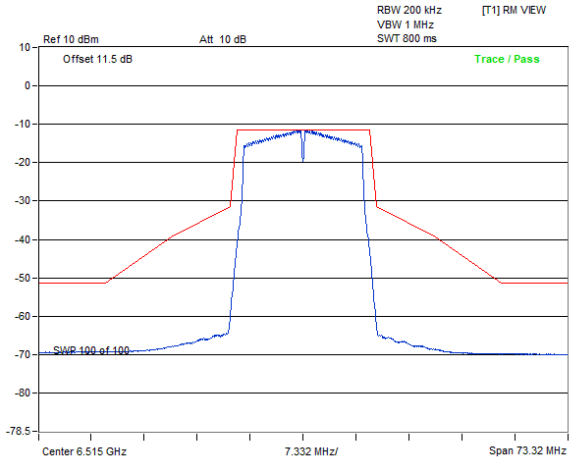
802.11a / Chain 1 : CH 93



802.11a / Chain 1 : CH 97

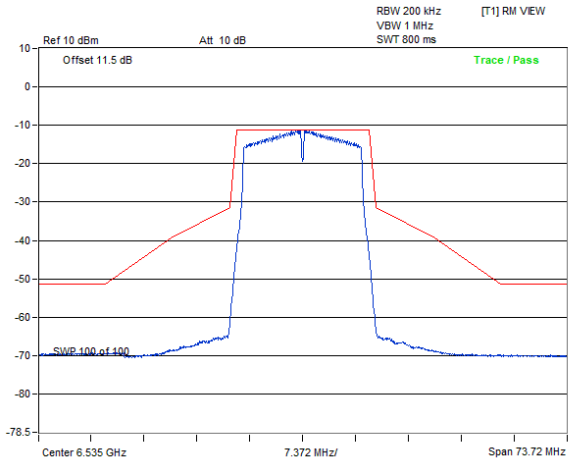


802.11a / Chain 1 : CH 105

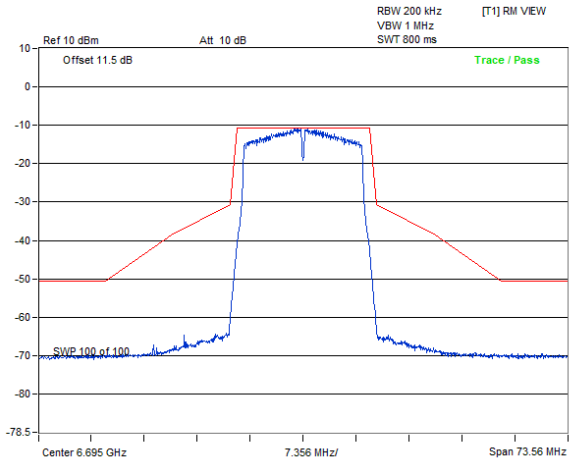


802.11a / Chain 1 : CH 113

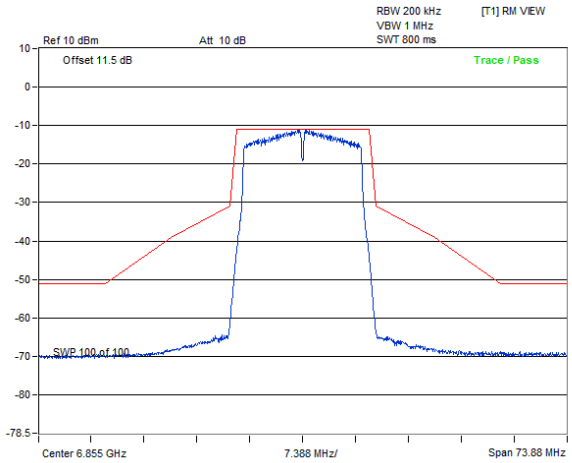
Spectrum Plot



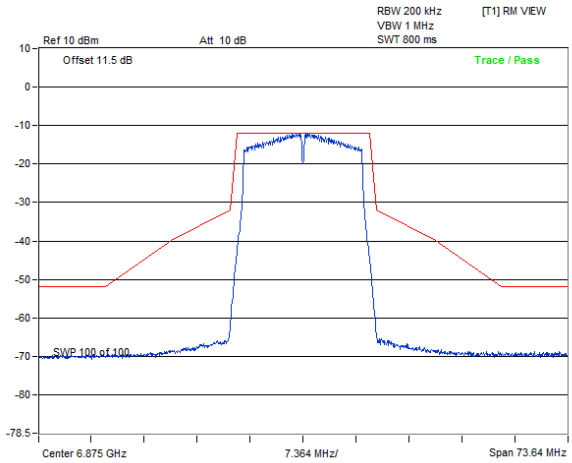
802.11a / Chain 1 : CH 117



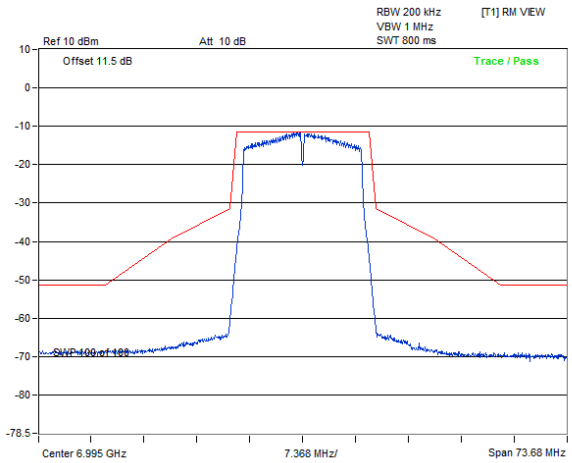
802.11a / Chain 1 : CH 149



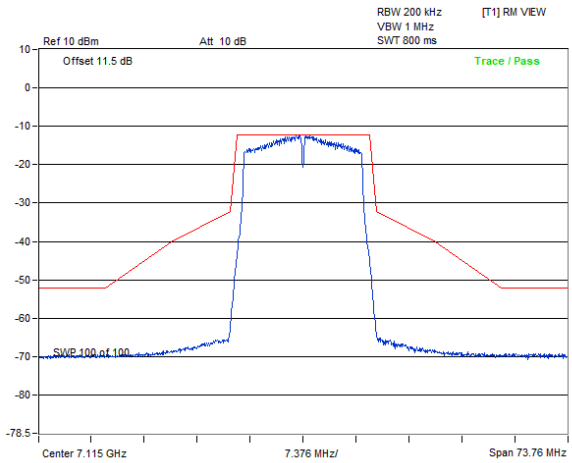
802.11a / Chain 1 : CH 181



802.11a / Chain 1 : CH 185



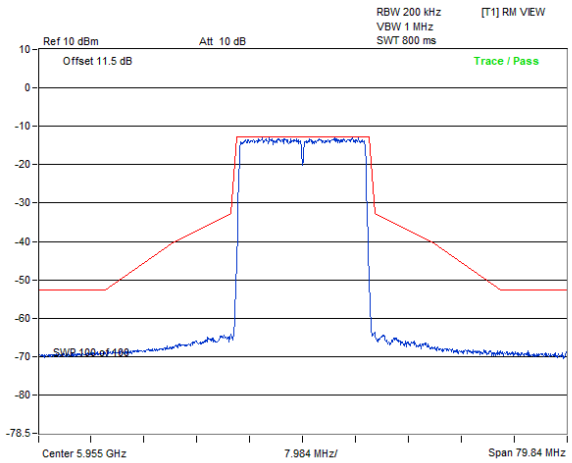
802.11a / Chain 1 : CH 209



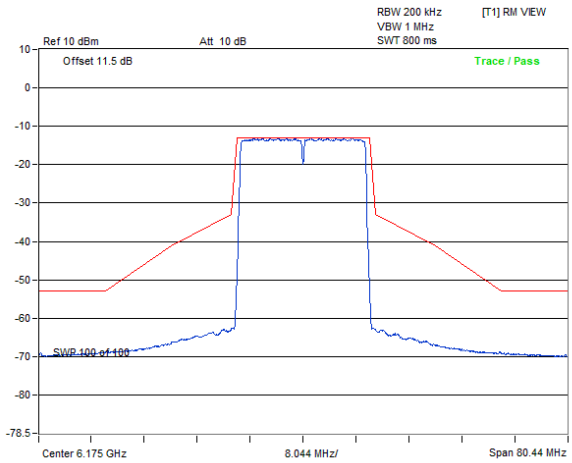
802.11a / Chain 1 : CH 233

802.11be (EHT20)

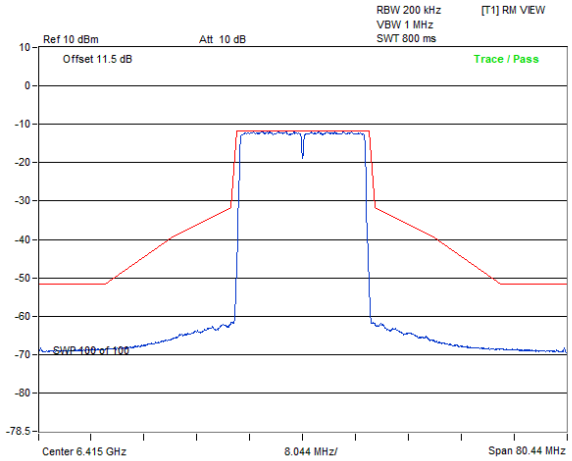
Spectrum Plot



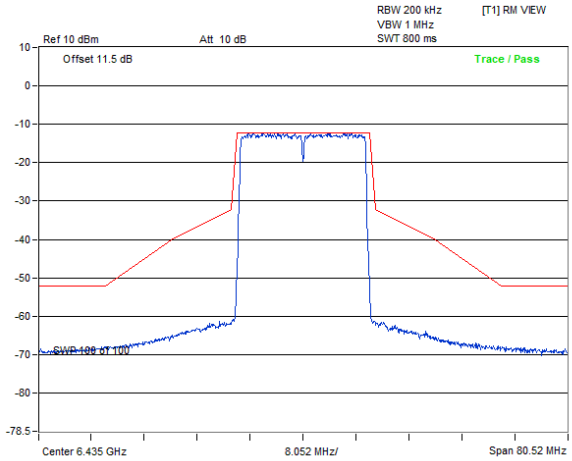
802.11be (EHT20) / Chain 0 : CH 1



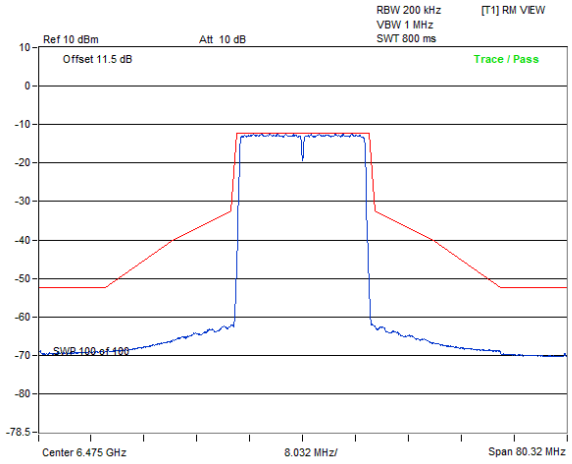
802.11be (EHT20) / Chain 0 : CH 45



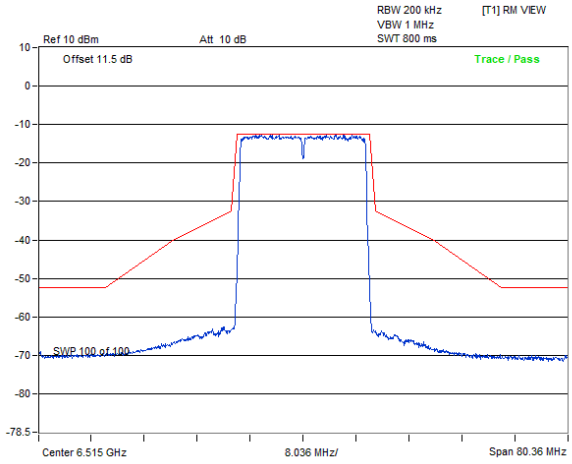
802.11be (EHT20) / Chain 0 : CH 93



802.11be (EHT20) / Chain 0 : CH 97

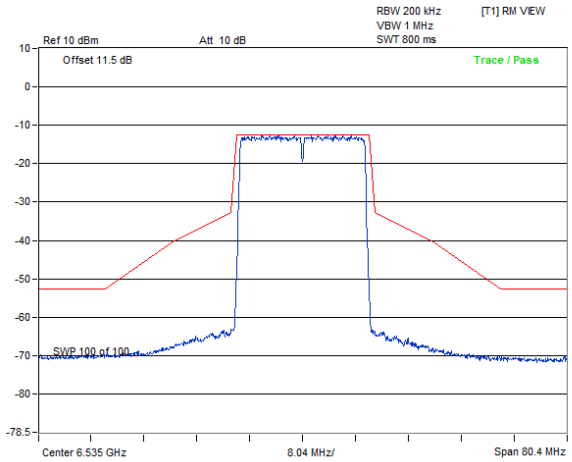


802.11be (EHT20) / Chain 0 : CH 105

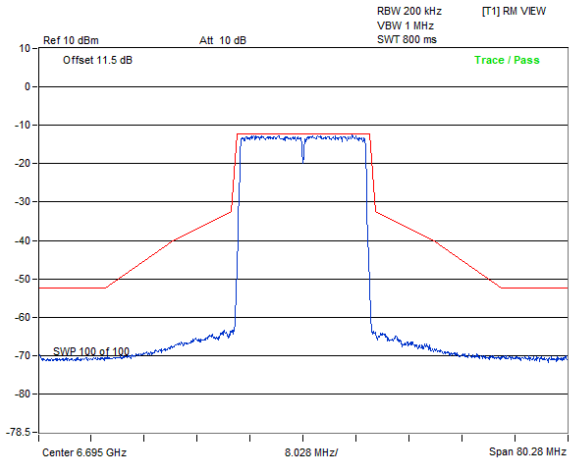


802.11be (EHT20) / Chain 0 : CH 113

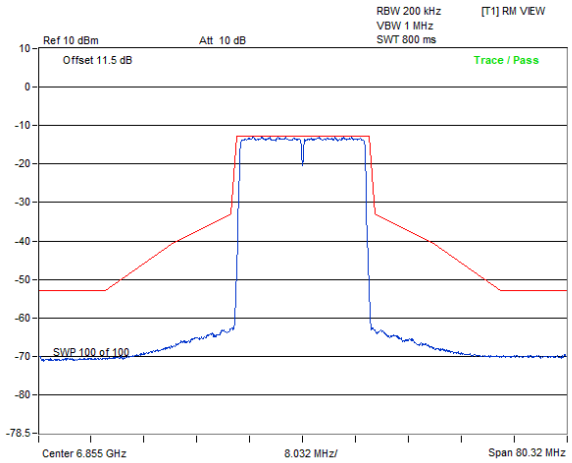
Spectrum Plot



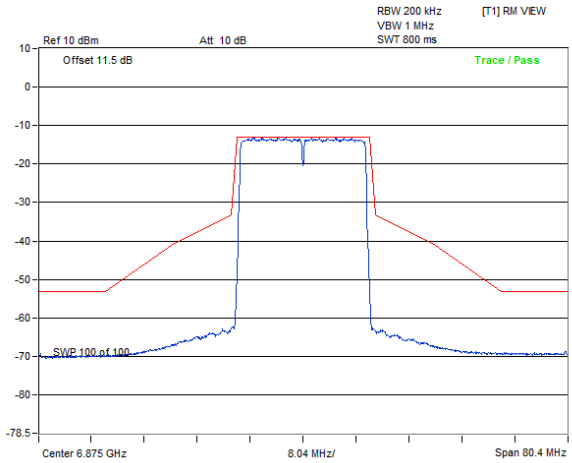
802.11be (EHT20) / Chain 0 : CH 117



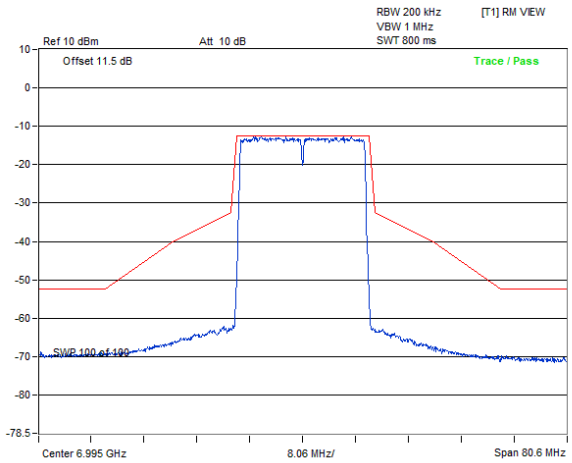
802.11be (EHT20) / Chain 0 : CH 149



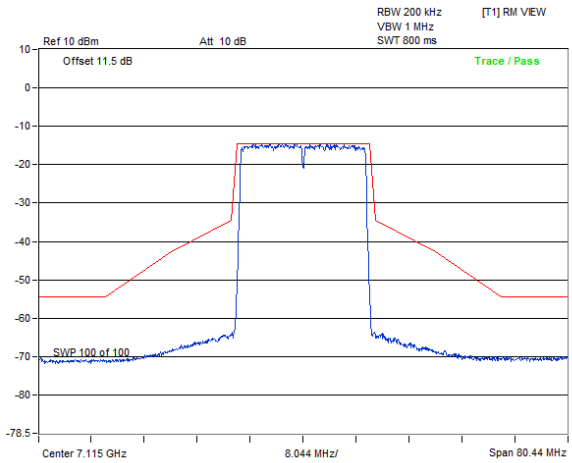
802.11be (EHT20) / Chain 0 : CH 181



802.11be (EHT20) / Chain 0 : CH 185

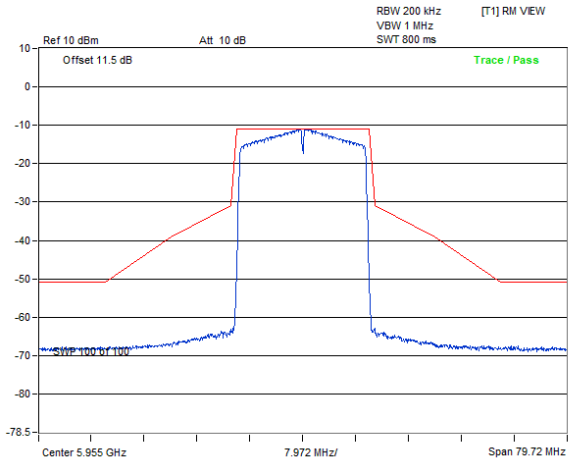


802.11be (EHT20) / Chain 0 : CH 209

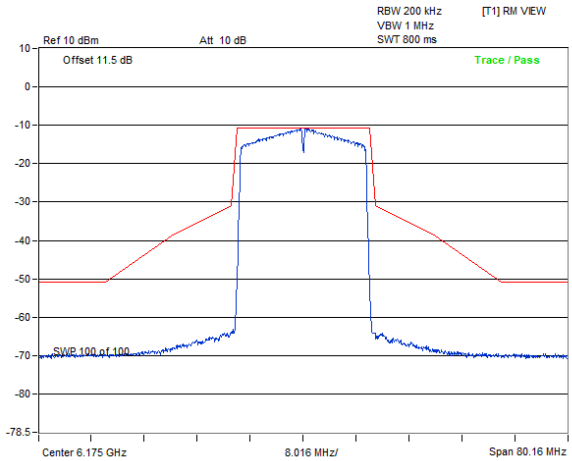


802.11be (EHT20) / Chain 0 : CH 233

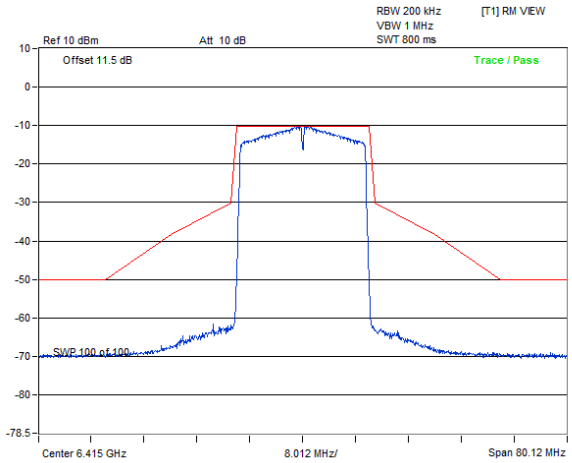
Spectrum Plot



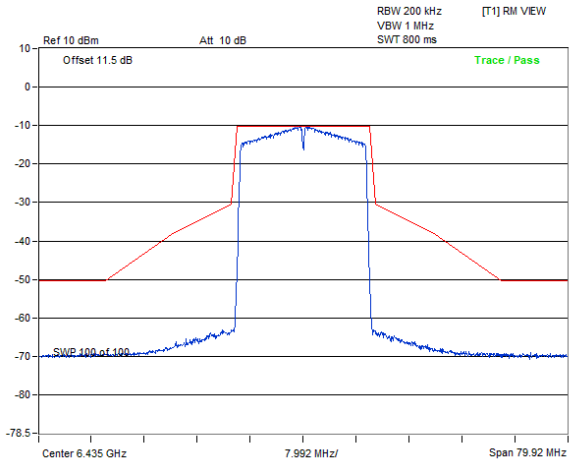
802.11be (EHT20) / Chain 1 : CH 1



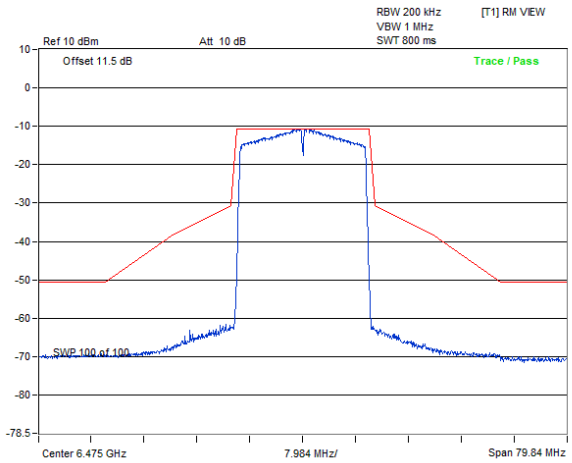
802.11be (EHT20) / Chain 1 : CH 45



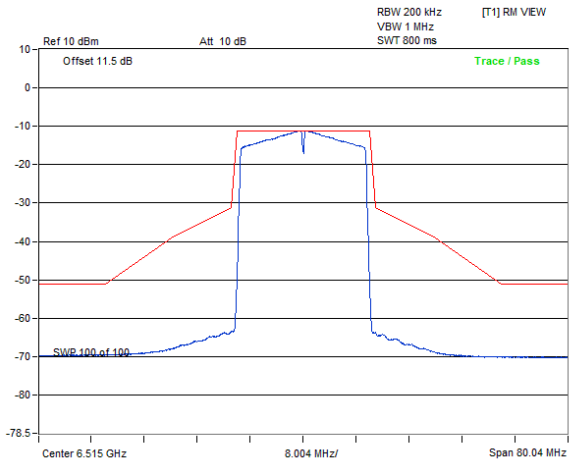
802.11be (EHT20) / Chain 1 : CH 93



802.11be (EHT20) / Chain 1 : CH 97

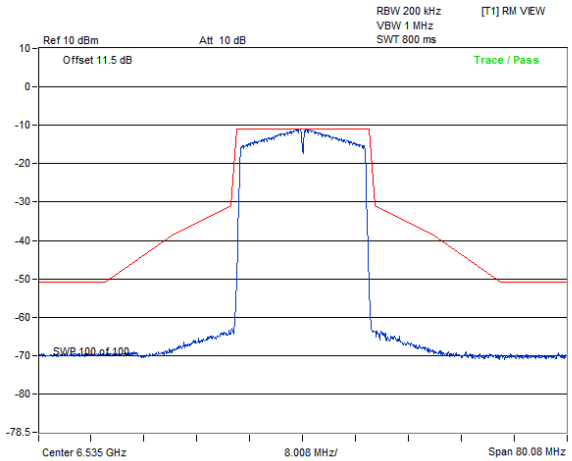


802.11be (EHT20) / Chain 1 : CH 105

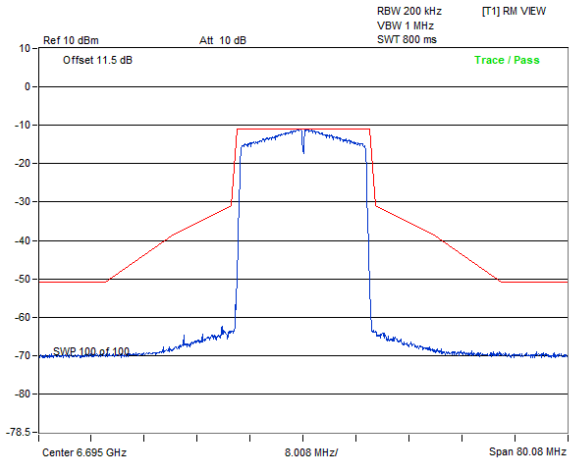


802.11be (EHT20) / Chain 1 : CH 113

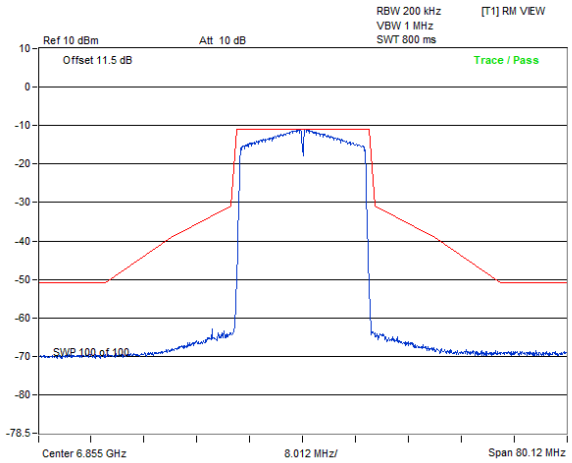
Spectrum Plot



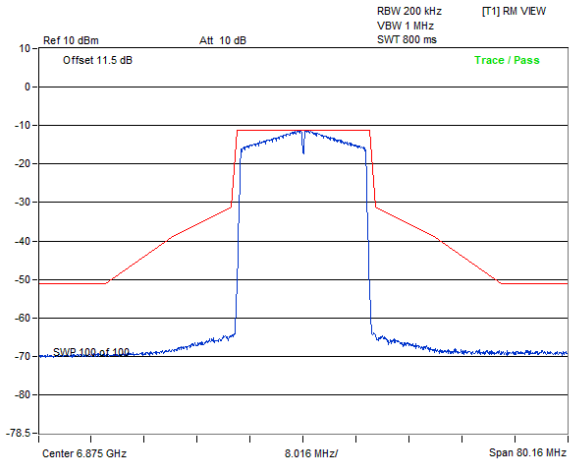
802.11be (EHT20) / Chain 1 : CH 117



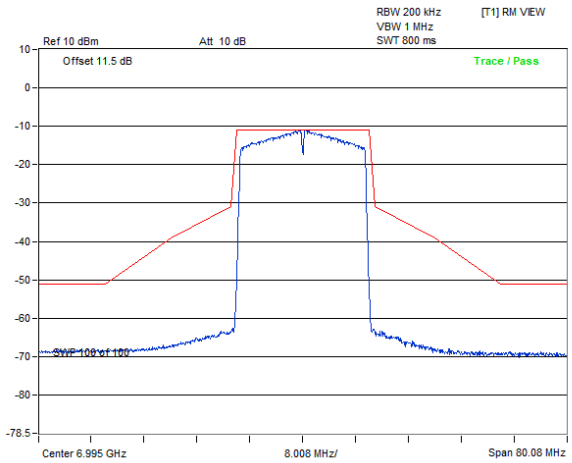
802.11be (EHT20) / Chain 1 : CH 149



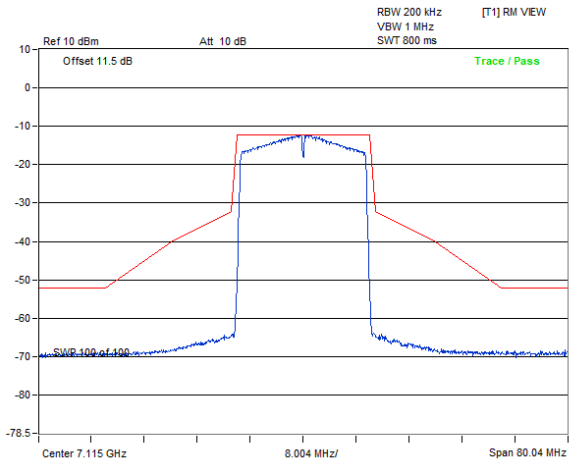
802.11be (EHT20) / Chain 1 : CH 181



802.11be (EHT20) / Chain 1 : CH 185



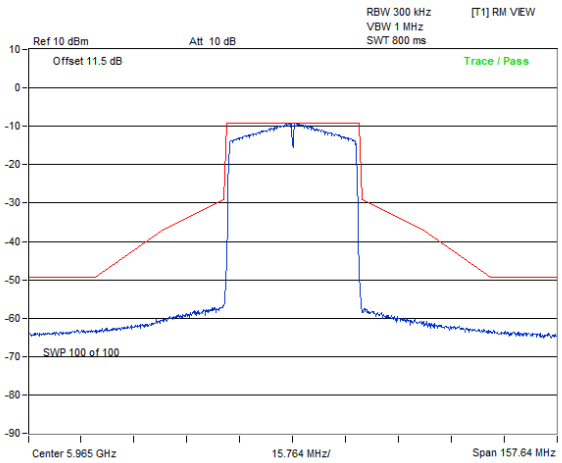
802.11be (EHT20) / Chain 1 : CH 209



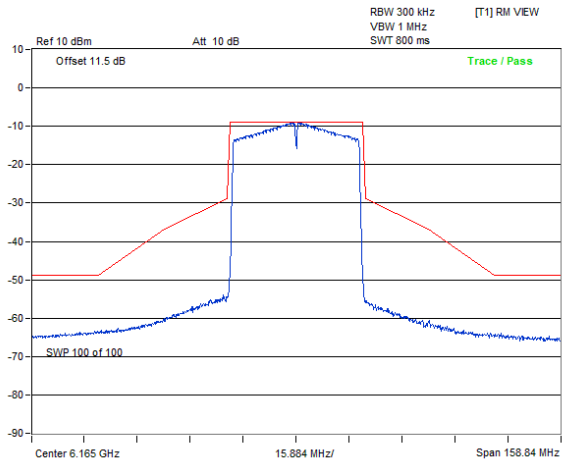
802.11be (EHT20) / Chain 1 : CH 233

802.11be (EHT40)

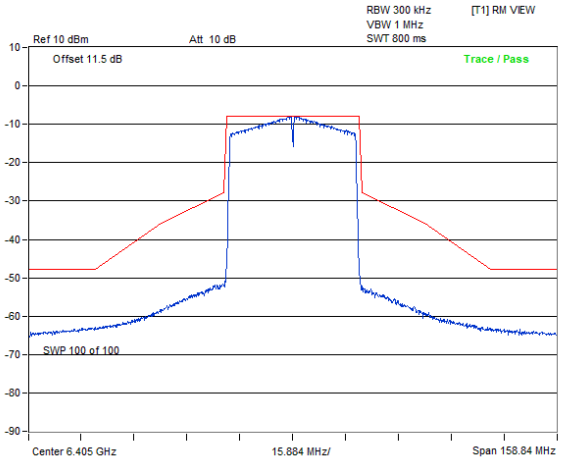
Spectrum Plot



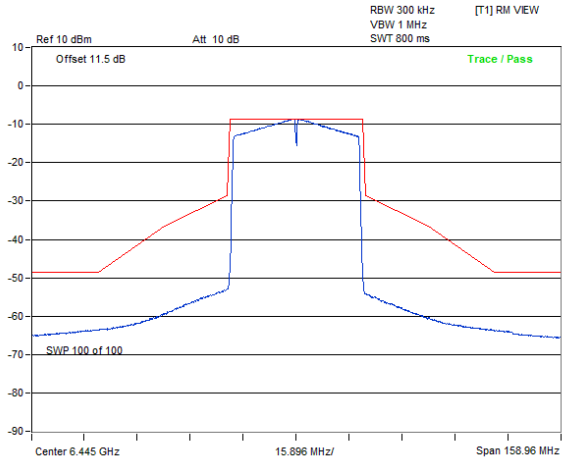
802.11be (EHT40) / Chain 0 : CH 3



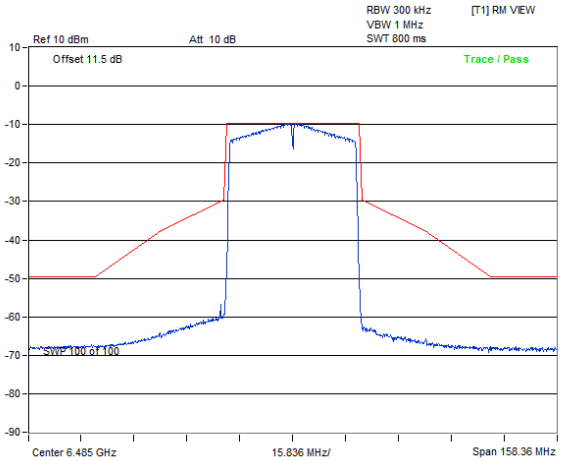
802.11be (EHT40) / Chain 0 : CH 43



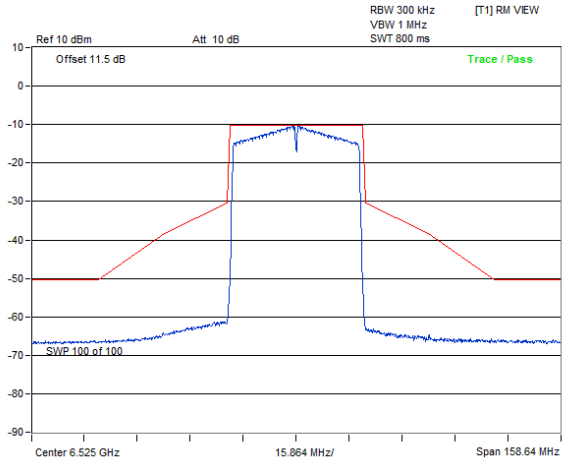
802.11be (EHT40) / Chain 0 : CH 91



802.11be (EHT40) / Chain 0 : CH 99

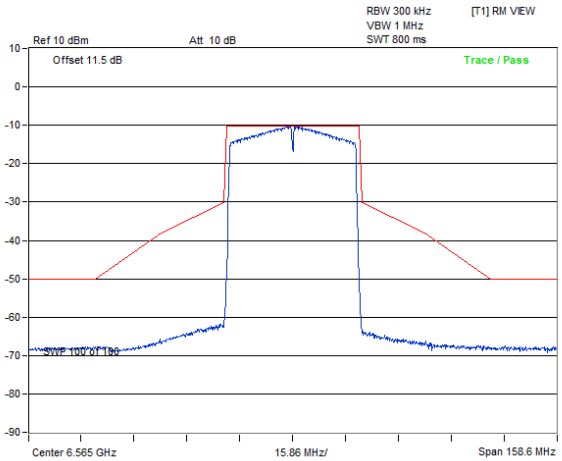


802.11be (EHT40) / Chain 0 : CH 107

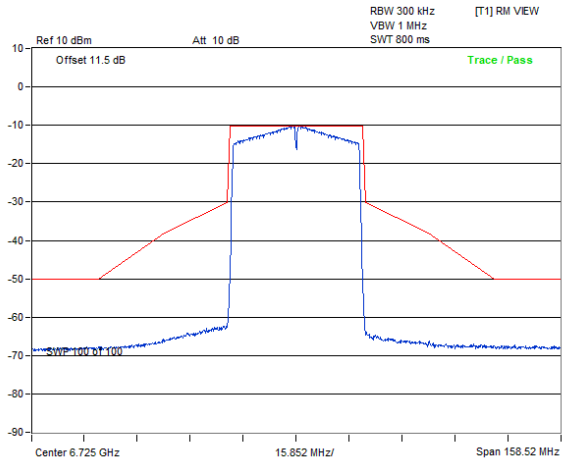


802.11be (EHT40) / Chain 0 : CH 115

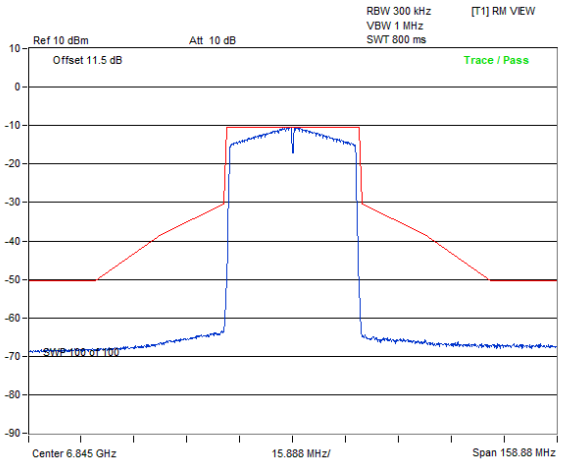
Spectrum Plot



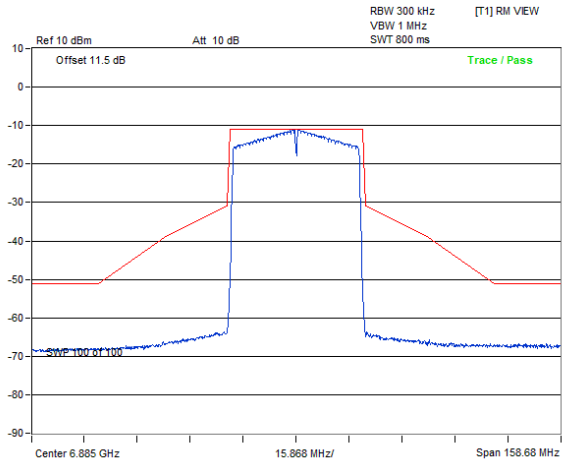
802.11be (EHT40) / Chain 0 : CH 123



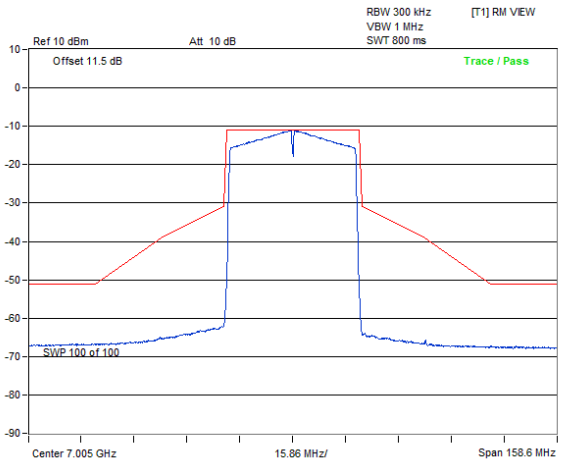
802.11be (EHT40) / Chain 0 : CH 155



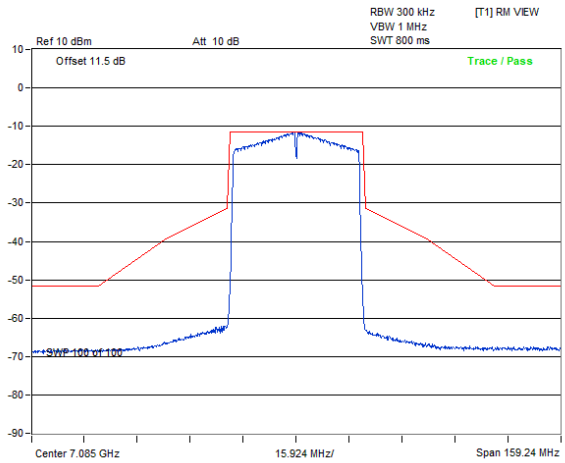
802.11be (EHT40) / Chain 0 : CH 179



802.11be (EHT40) / Chain 0 : CH 187

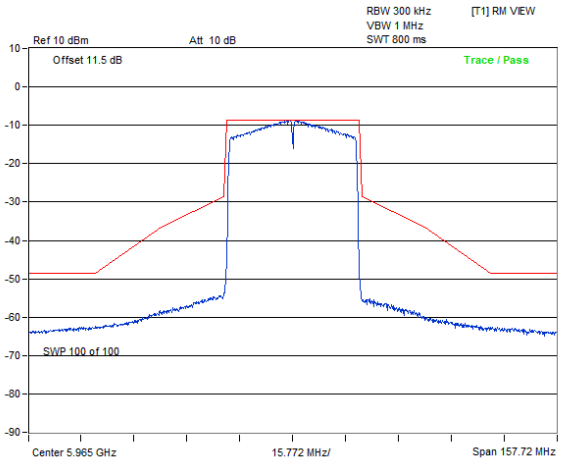


802.11be (EHT40) / Chain 0 : CH 211

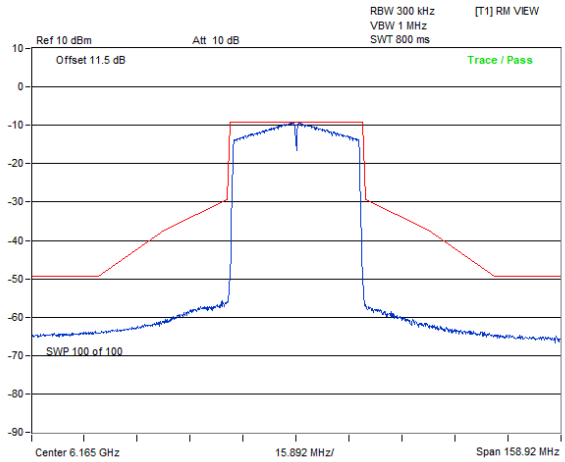


802.11be (EHT40) / Chain 0 : CH 227

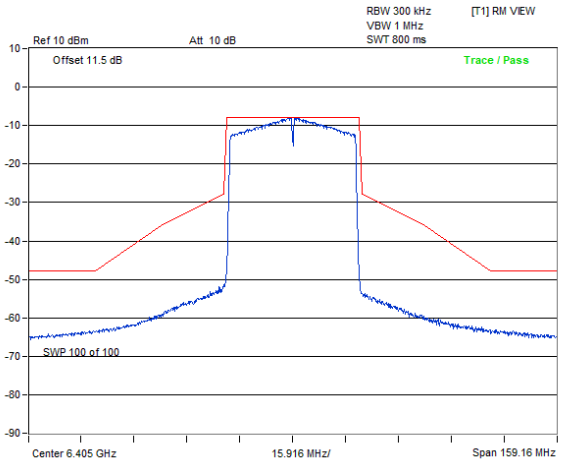
Spectrum Plot



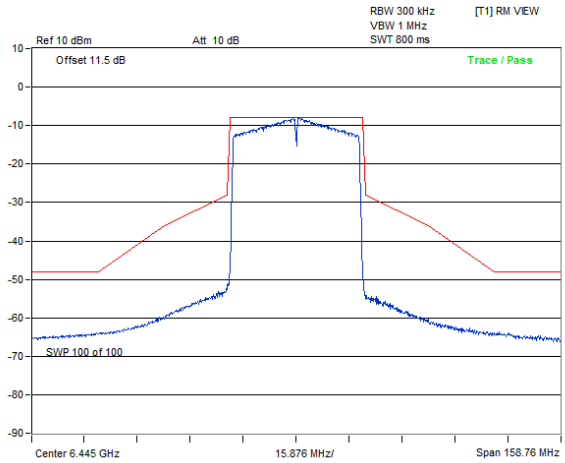
802.11be (EHT40) / Chain 1 : CH 3



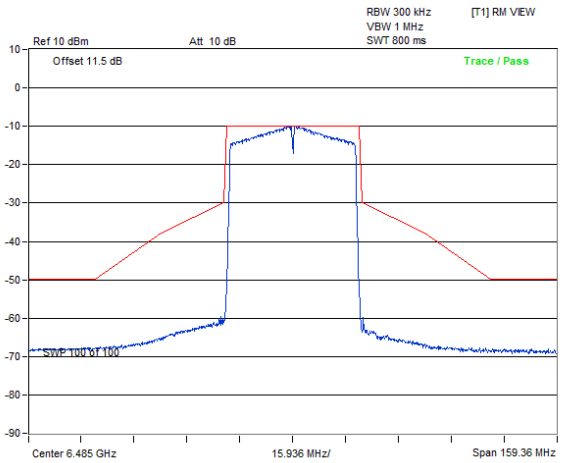
802.11be (EHT40) / Chain 1 : CH 43



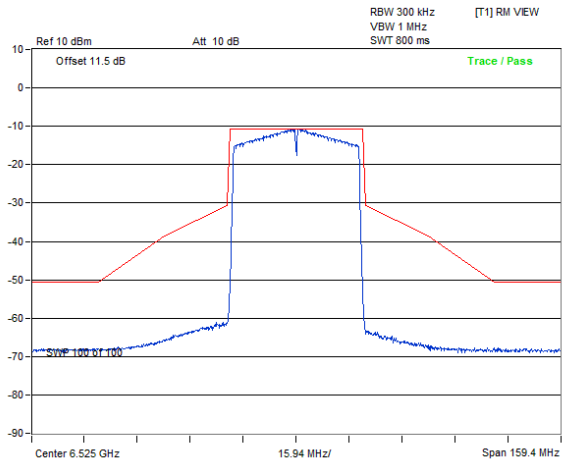
802.11be (EHT40) / Chain 1 : CH 91



802.11be (EHT40) / Chain 1 : CH 99

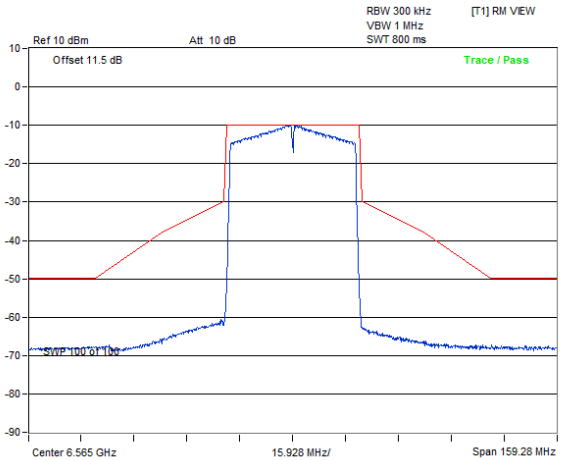


802.11be (EHT40) / Chain 1 : CH 107

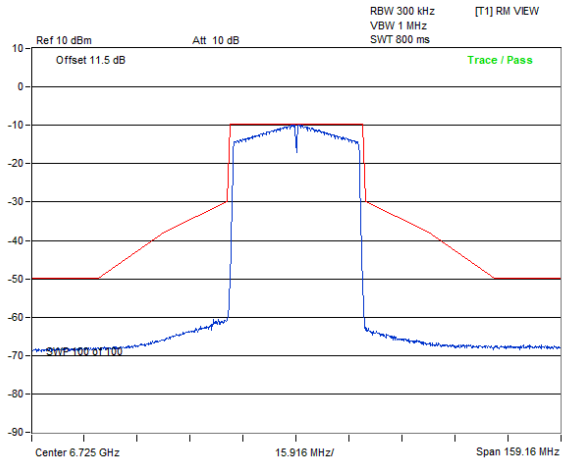


802.11be (EHT40) / Chain 1 : CH 115

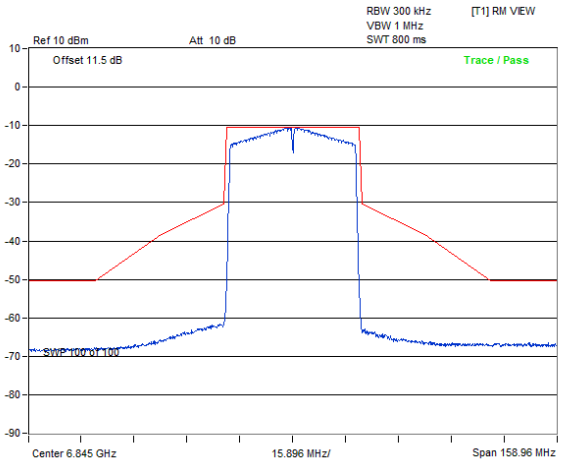
Spectrum Plot



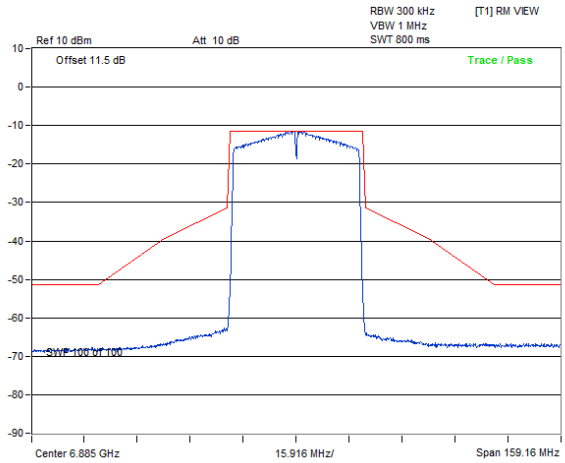
802.11be (EHT40) / Chain 1 : CH 123



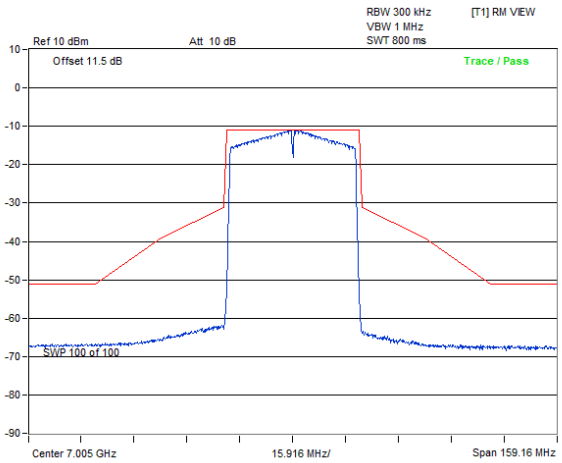
802.11be (EHT40) / Chain 1 : CH 155



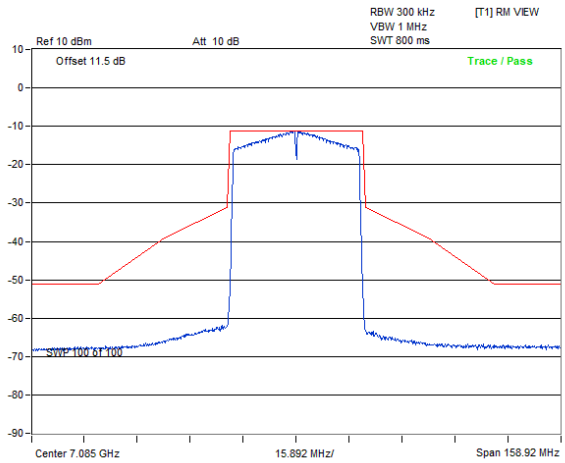
802.11be (EHT40) / Chain 1 : CH 179



802.11be (EHT40) / Chain 1 : CH 187



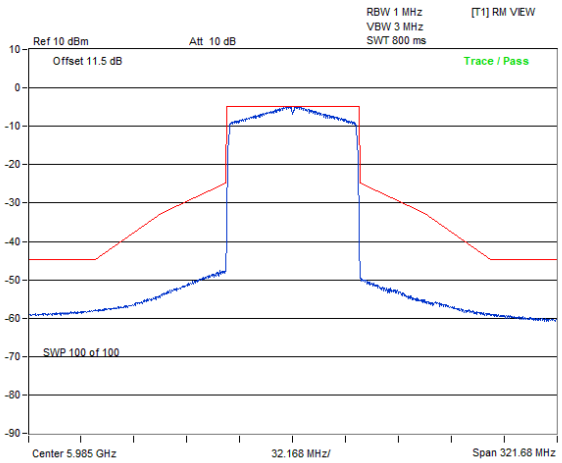
802.11be (EHT40) / Chain 1 : CH 211



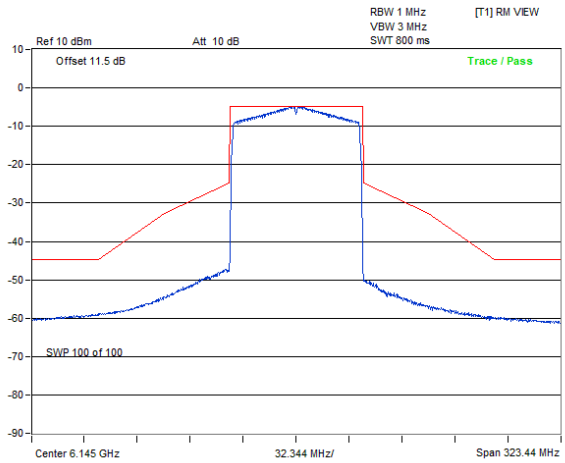
802.11be (EHT40) / Chain 1 : CH 227

802.11be (EHT80)

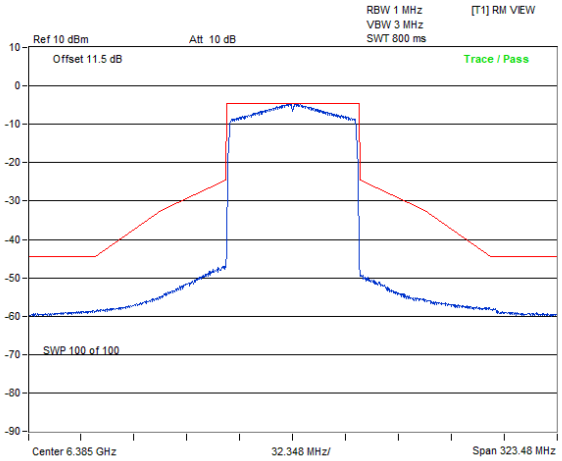
Spectrum Plot



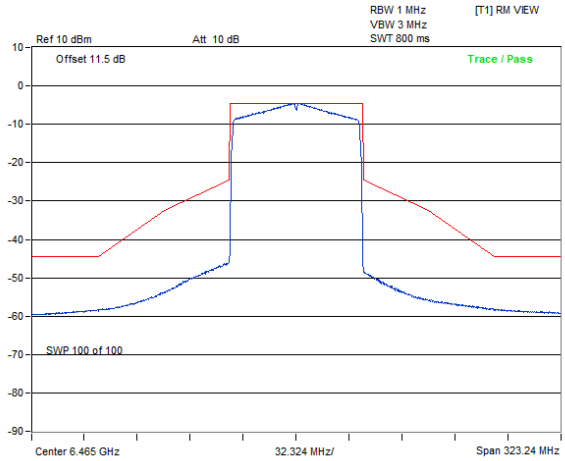
802.11be (EHT80) / Chain 0 : CH 7



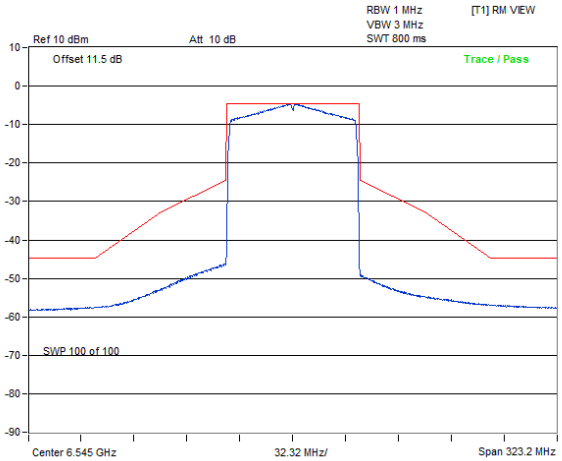
802.11be (EHT80) / Chain 0 : CH 39



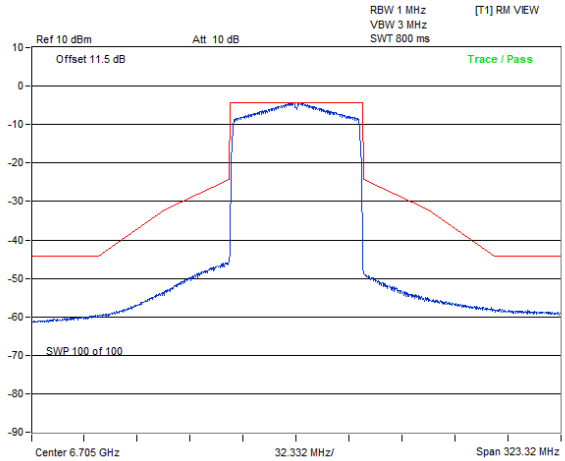
802.11be (EHT80) / Chain 0 : CH 87



802.11be (EHT80) / Chain 0 : CH 103

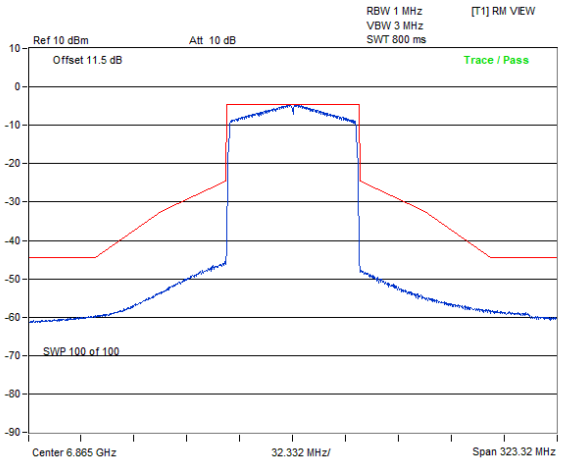


802.11be (EHT80) / Chain 0 : CH 119

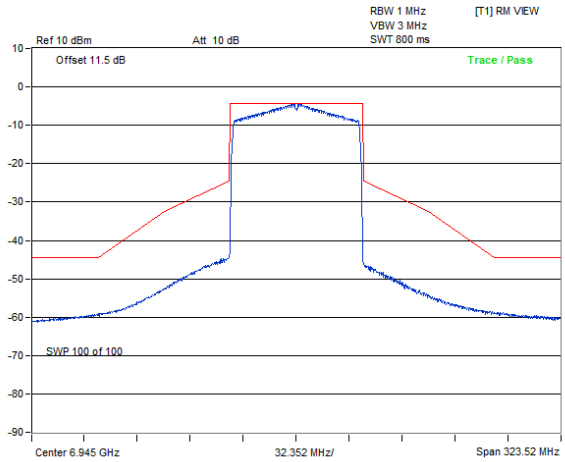


802.11be (EHT80) / Chain 0 : CH 151

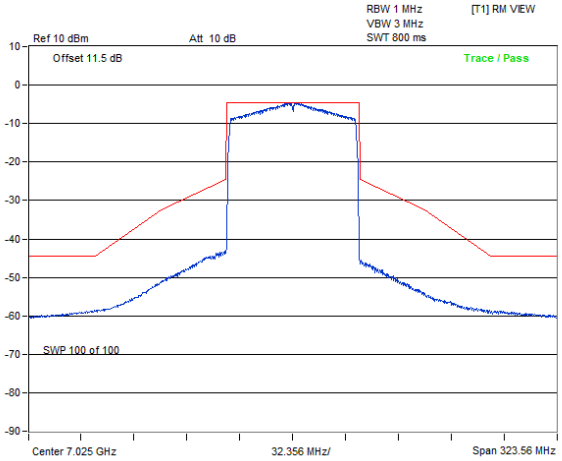
Spectrum Plot



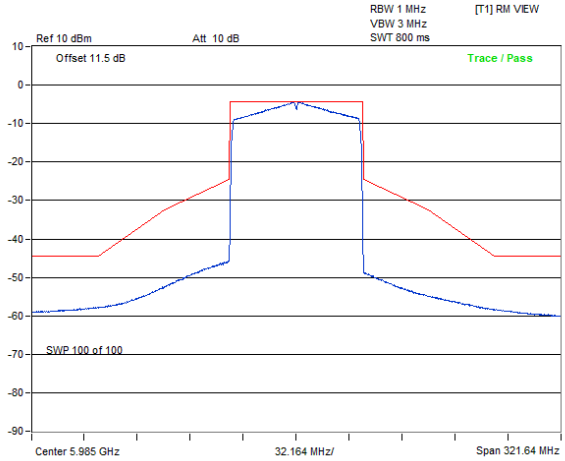
802.11be (EHT80) / Chain 0 : CH 183



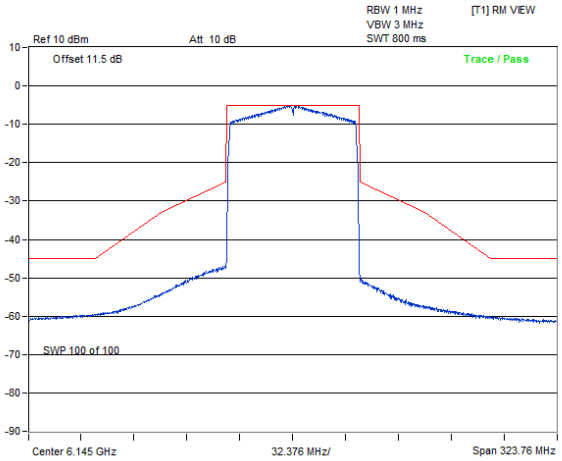
802.11be (EHT80) / Chain 0 : CH 199



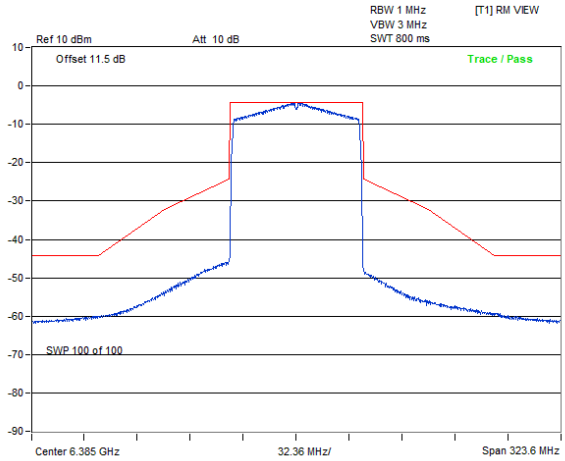
802.11be (EHT80) / Chain 0 : CH 215



802.11be (EHT80) / Chain 1 : CH 7

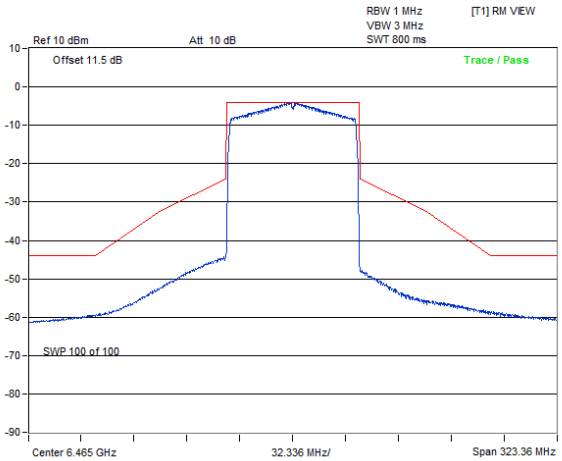


802.11be (EHT80) / Chain 1 : CH 39

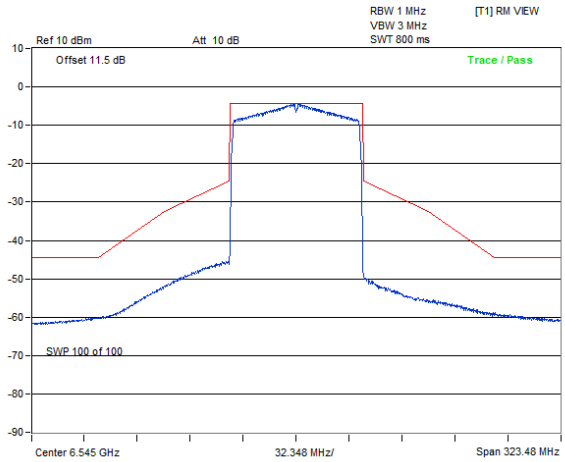


802.11be (EHT80) / Chain 1 : CH 87

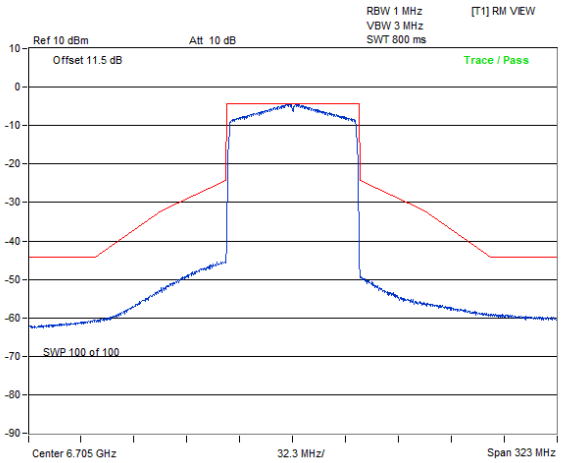
Spectrum Plot



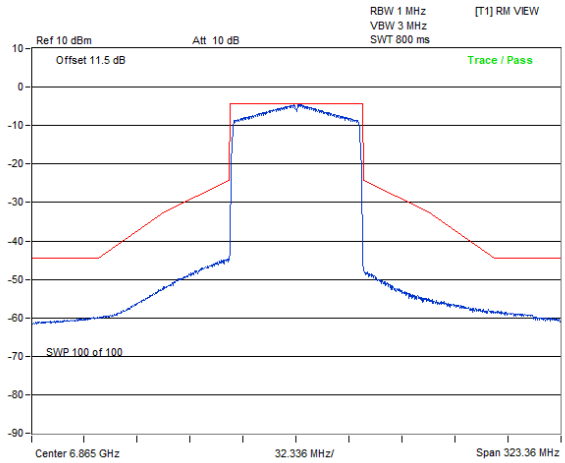
802.11be (EHT80) / Chain 1 : CH 103



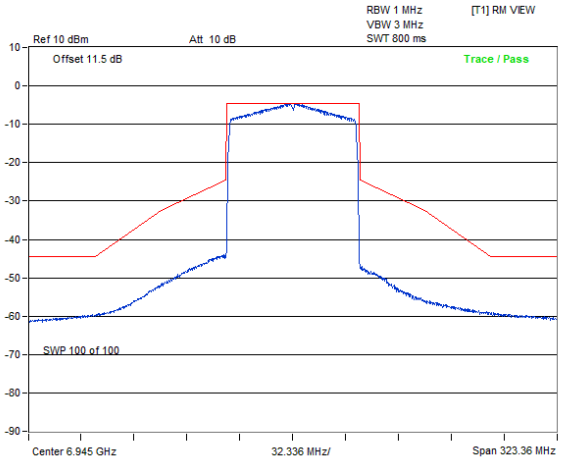
802.11be (EHT80) / Chain 1 : CH 119



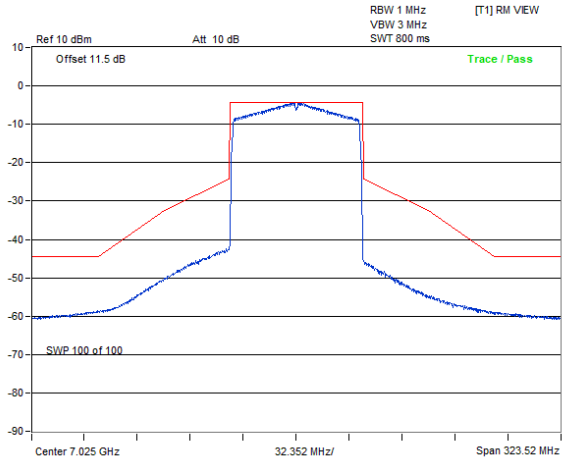
802.11be (EHT80) / Chain 1 : CH 151



802.11be (EHT80) / Chain 1 : CH 183



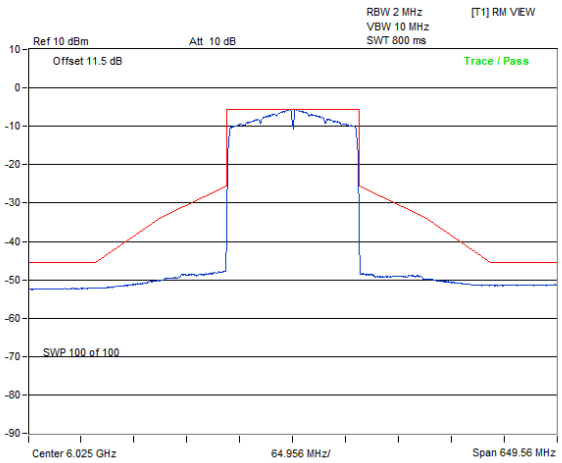
802.11be (EHT80) / Chain 1 : CH 199



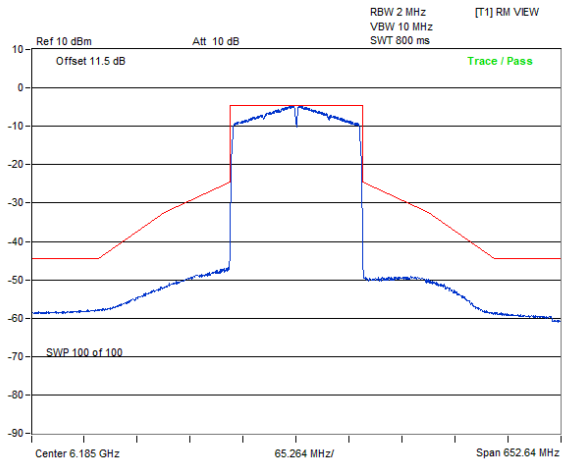
802.11be (EHT80) / Chain 1 : CH 215

802.11be (EHT160)

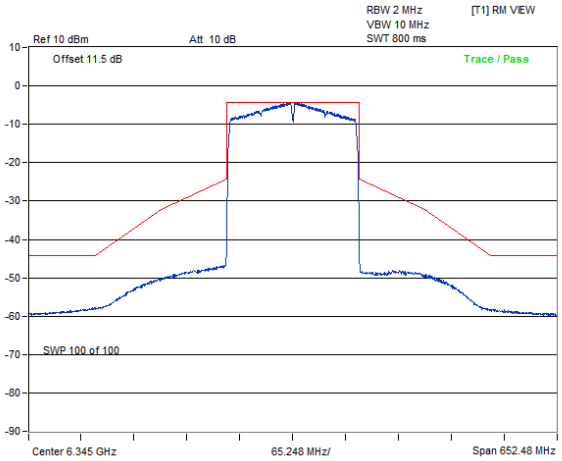
Spectrum Plot



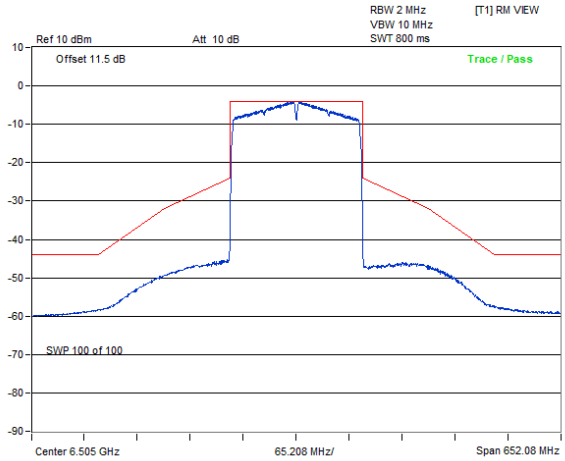
802.11be (EHT160) / Chain 0 : CH 15



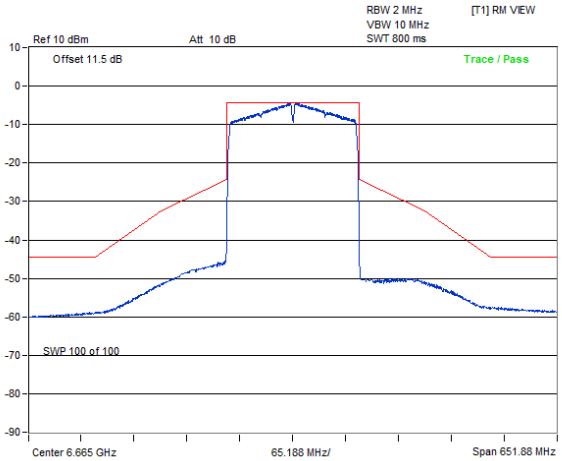
802.11be (EHT160) / Chain 0 : CH 47



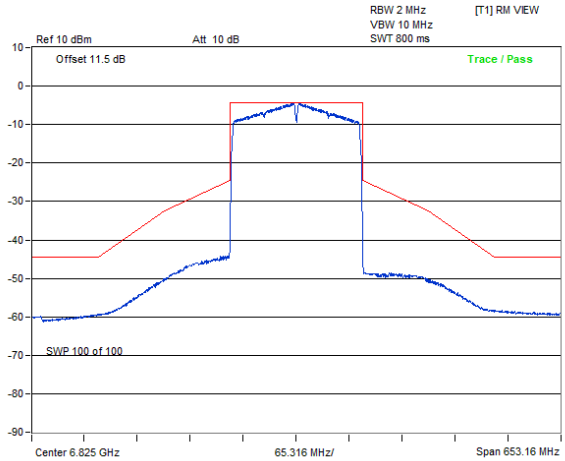
802.11be (EHT160) / Chain 0 : CH 79



802.11be (EHT160) / Chain 0 : CH 111

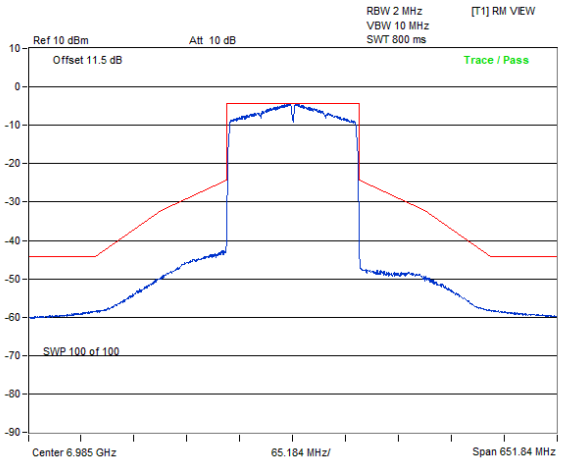


802.11be (EHT160) / Chain 0 : CH 143

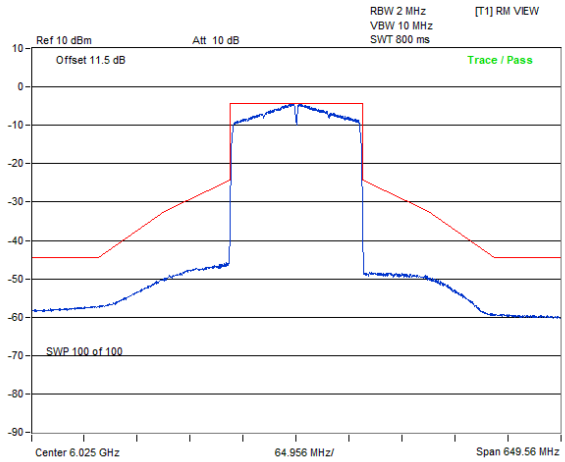


802.11be (EHT160) / Chain 0 : CH 175

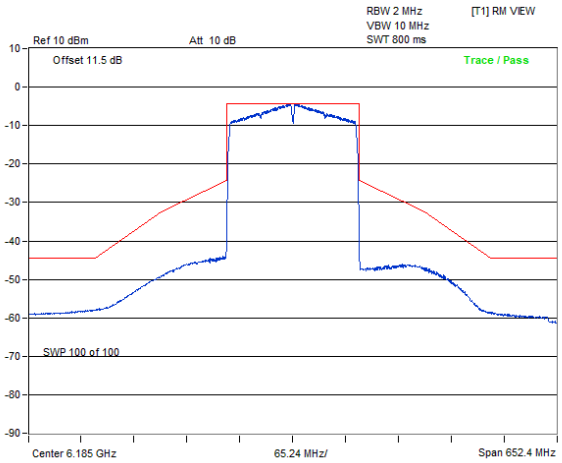
Spectrum Plot



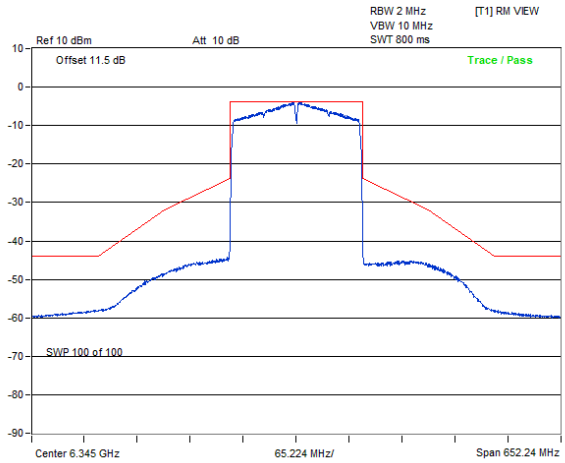
802.11be (EHT160) / Chain 0 : CH 207



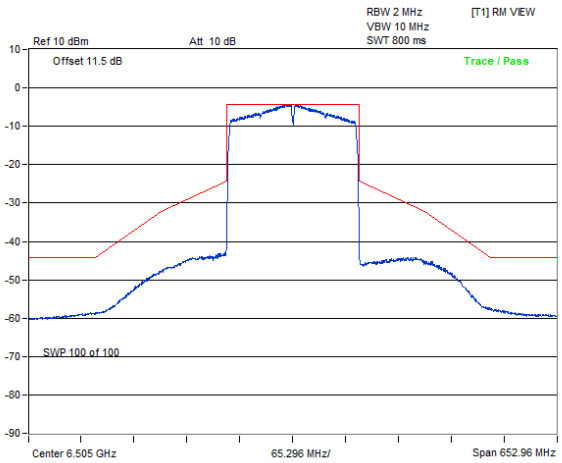
802.11be (EHT160) / Chain 1 : CH 15



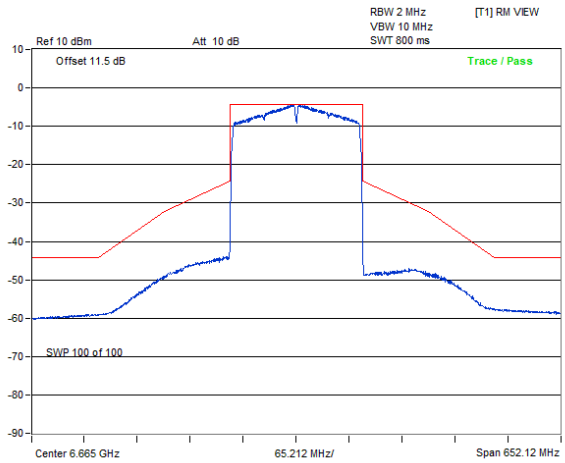
802.11be (EHT160) / Chain 1 : CH 47



802.11be (EHT160) / Chain 1 : CH 79

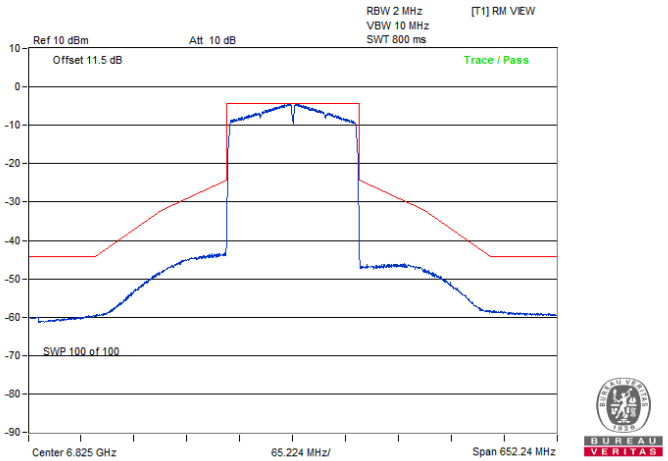


802.11be (EHT160) / Chain 1 : CH 111

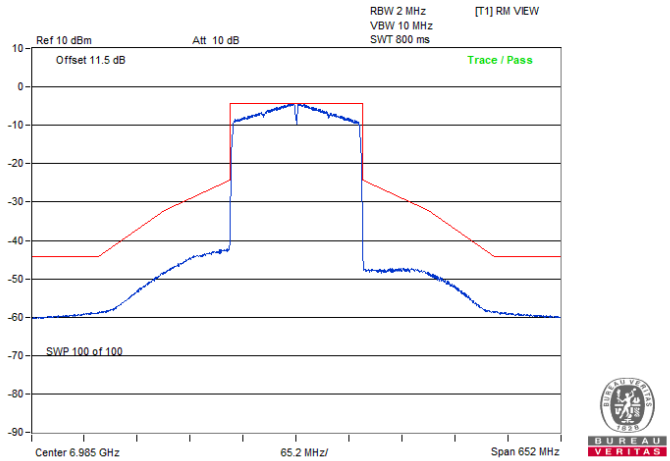


802.11be (EHT160) / Chain 1 : CH 143

Spectrum Plot



802.11be (EHT160) / Chain 1 : CH 175

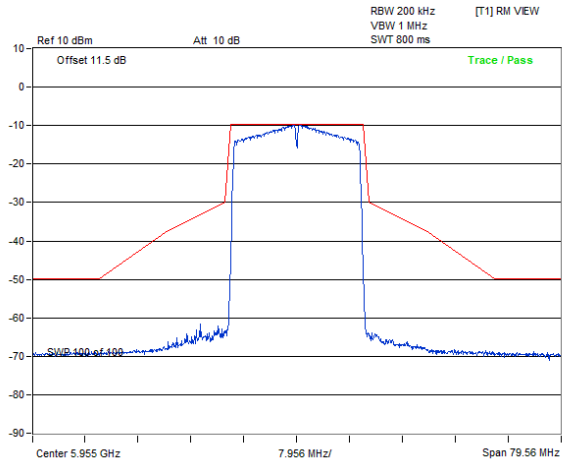


802.11be (EHT160) / Chain 1 : CH 207

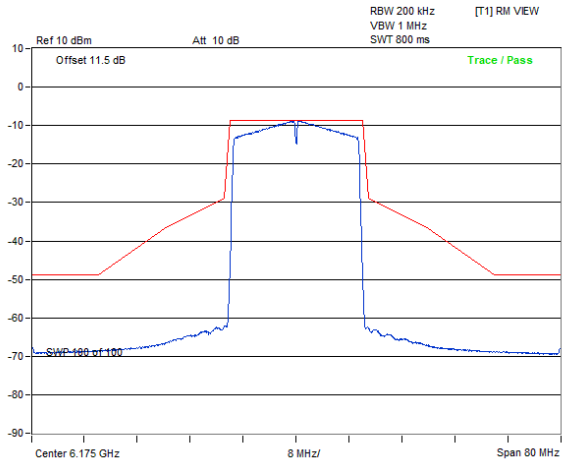
NSS2

802.11be (EHT20)

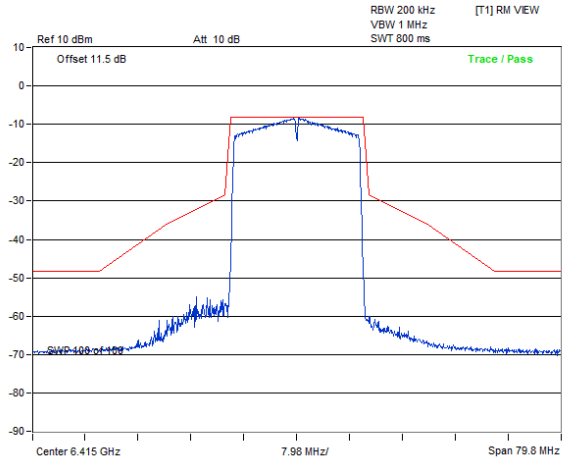
Spectrum Plot



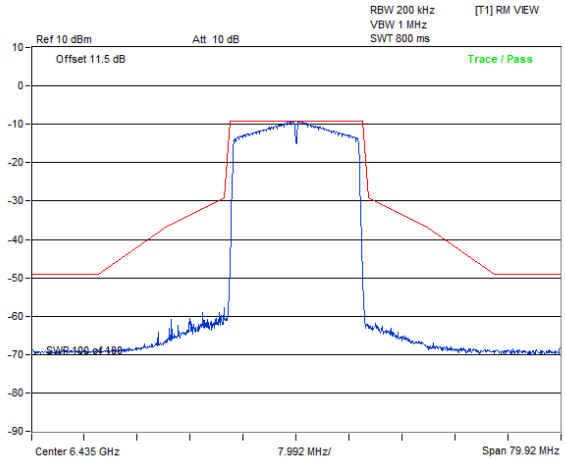
802.11be (EHT20) / Chain 0 : CH 1



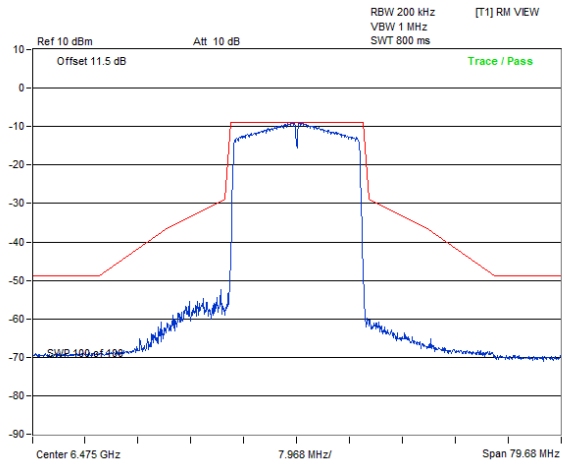
802.11be (EHT20) / Chain 0 : CH 45



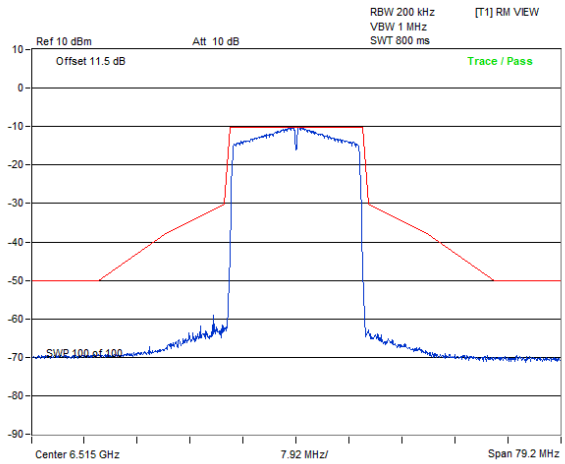
802.11be (EHT20) / Chain 0 : CH 93



802.11be (EHT20) / Chain 0 : CH 97

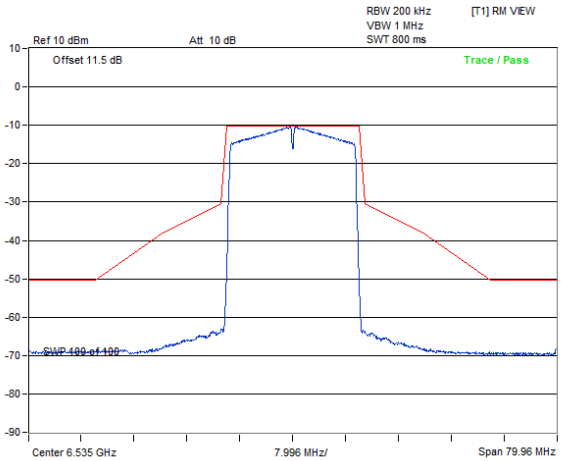


802.11be (EHT20) / Chain 0 : CH 105

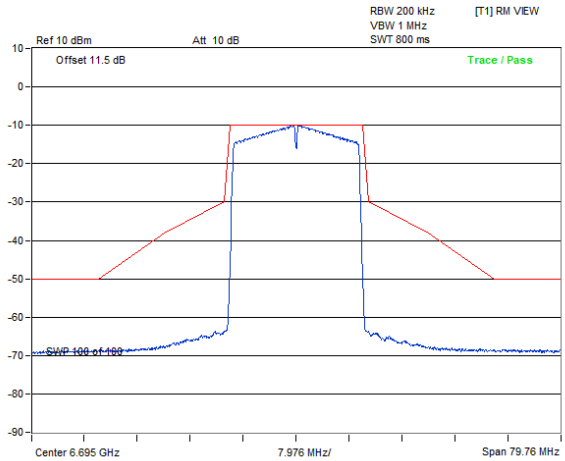


802.11be (EHT20) / Chain 0 : CH 113

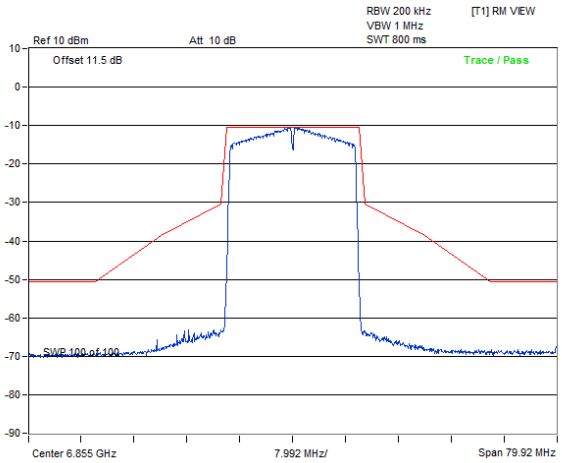
Spectrum Plot



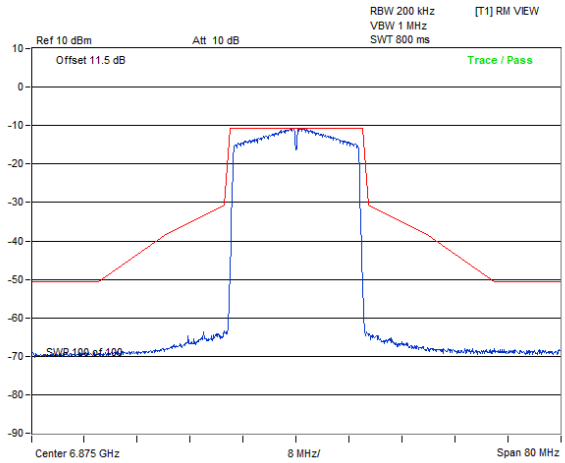
802.11be (EHT20) / Chain 0 : CH 117



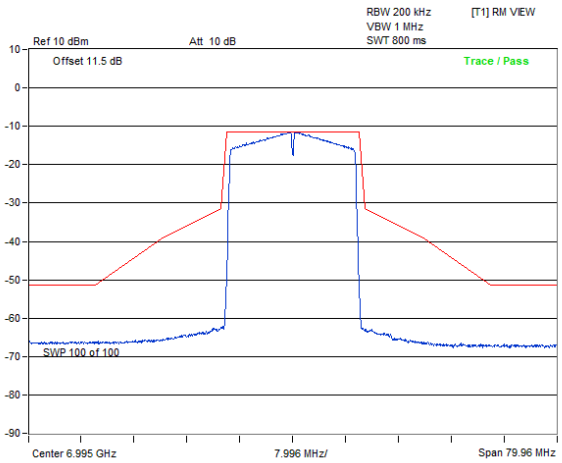
802.11be (EHT20) / Chain 0 : CH 149



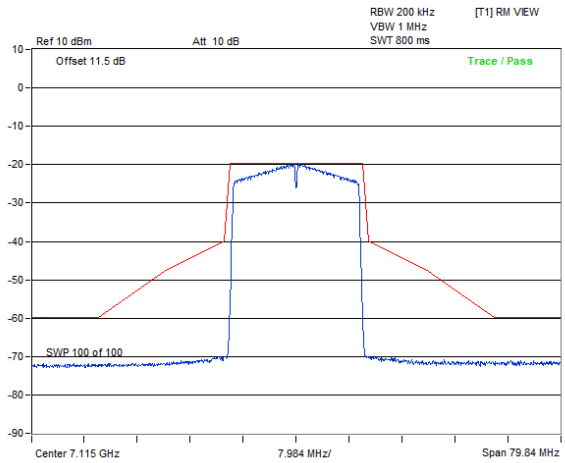
802.11be (EHT20) / Chain 0 : CH 181



802.11be (EHT20) / Chain 0 : CH 185

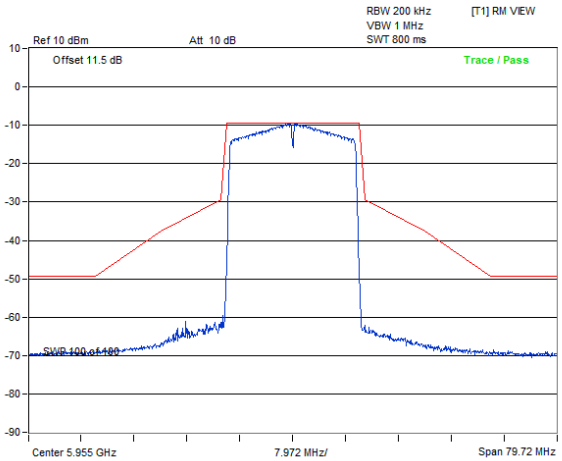


802.11be (EHT20) / Chain 0 : CH 209

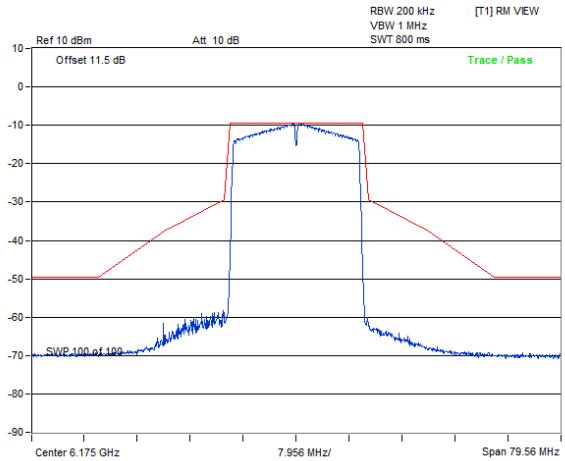


802.11be (EHT20) / Chain 0 : CH 233

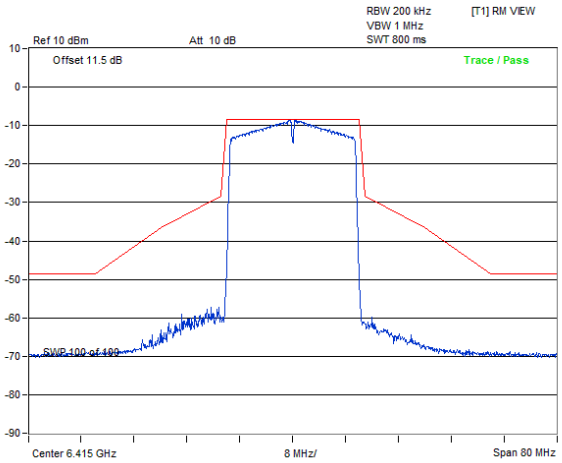
Spectrum Plot



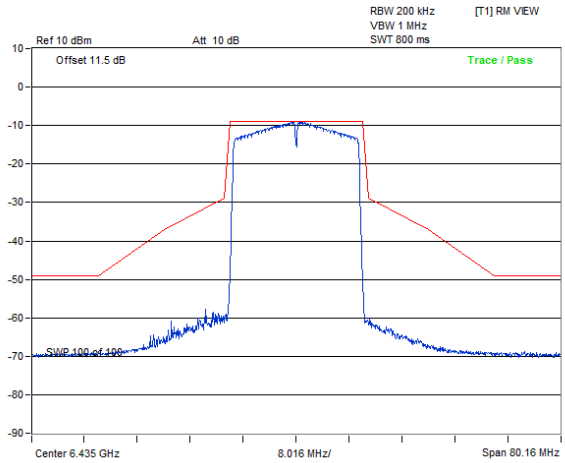
802.11be (EHT20) / Chain 1 : CH 1



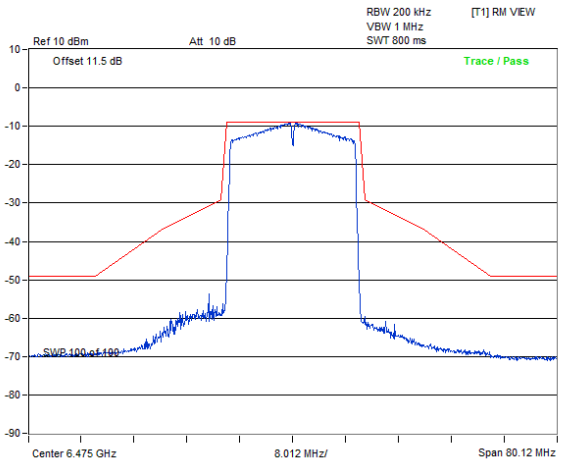
802.11be (EHT20) / Chain 1 : CH 45



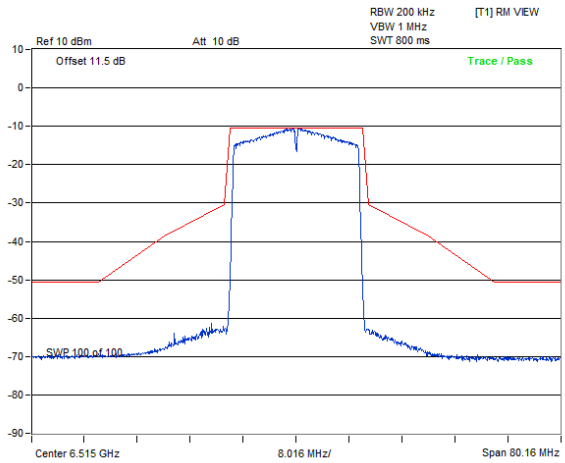
802.11be (EHT20) / Chain 1 : CH 93



802.11be (EHT20) / Chain 1 : CH 97

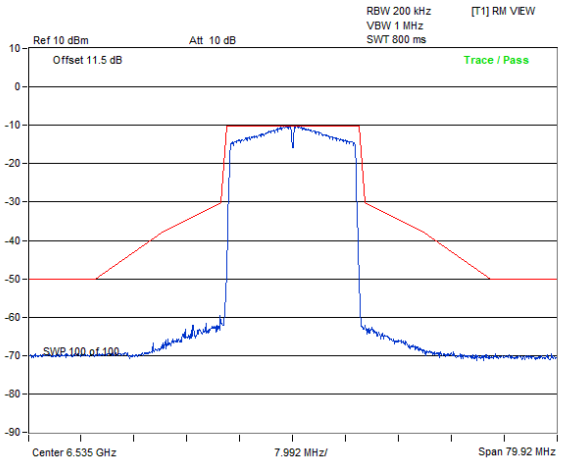


802.11be (EHT20) / Chain 1 : CH 105

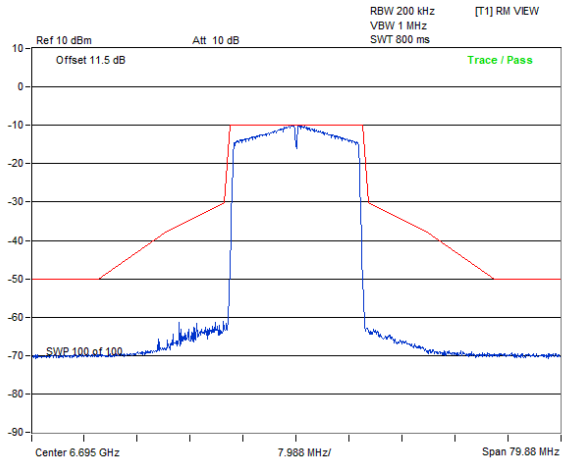


802.11be (EHT20) / Chain 1 : CH 113

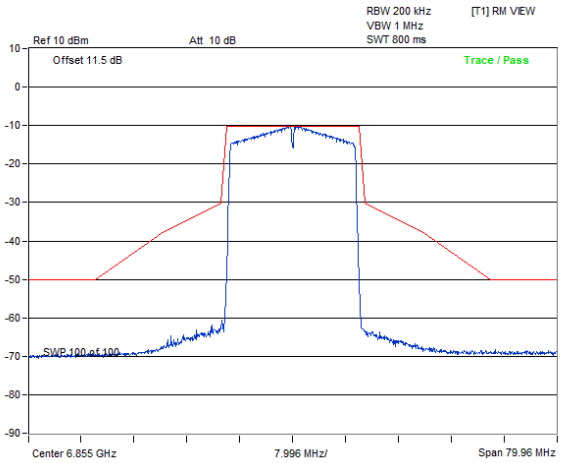
Spectrum Plot



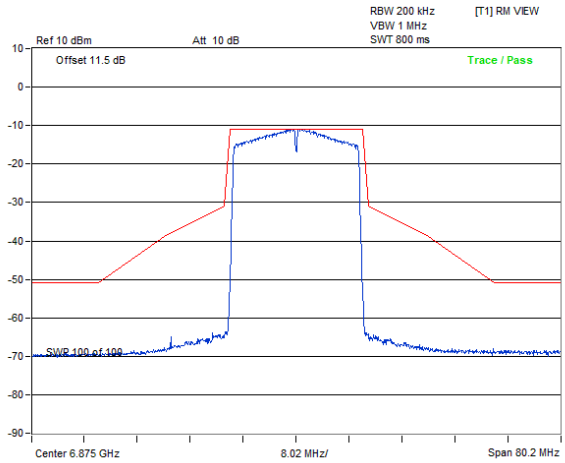
802.11be (EHT20) / Chain 1 : CH 117



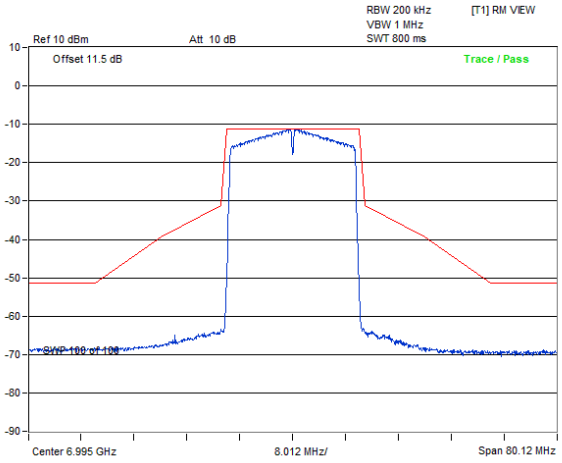
802.11be (EHT20) / Chain 1 : CH 149



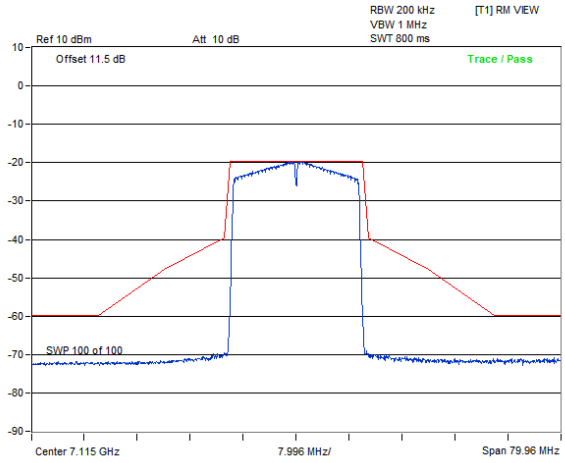
802.11be (EHT20) / Chain 1 : CH 181



802.11be (EHT20) / Chain 1 : CH 185



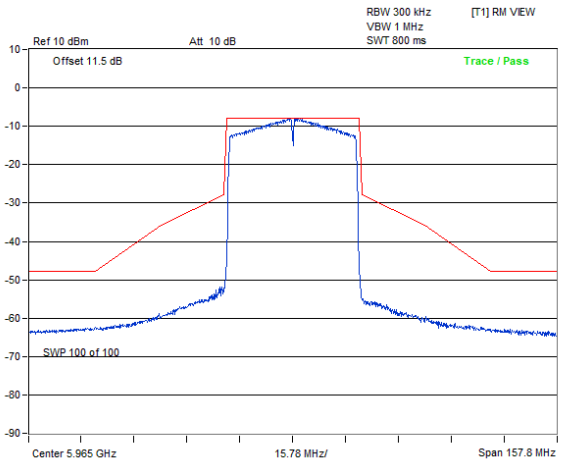
802.11be (EHT20) / Chain 1 : CH 209



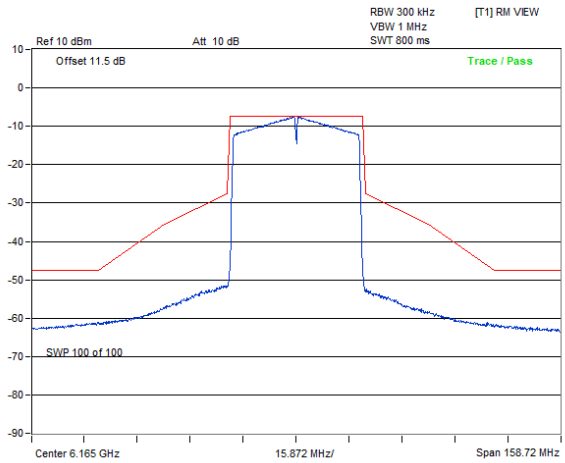
802.11be (EHT20) / Chain 1 : CH 233

802.11be (EHT40)

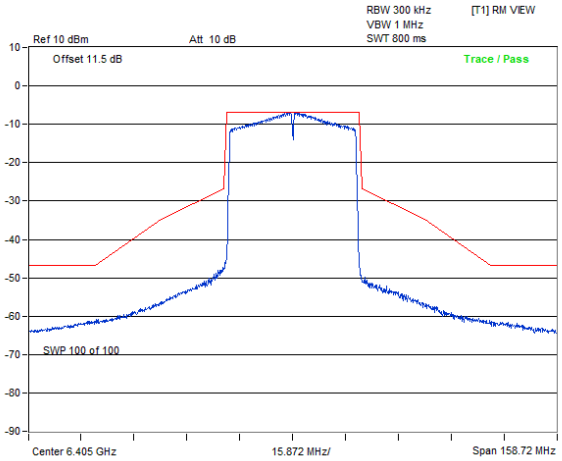
Spectrum Plot



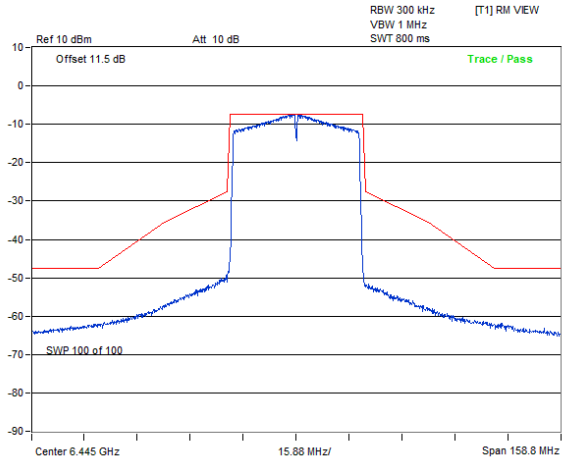
802.11be (EHT40) / Chain 0 : CH 3



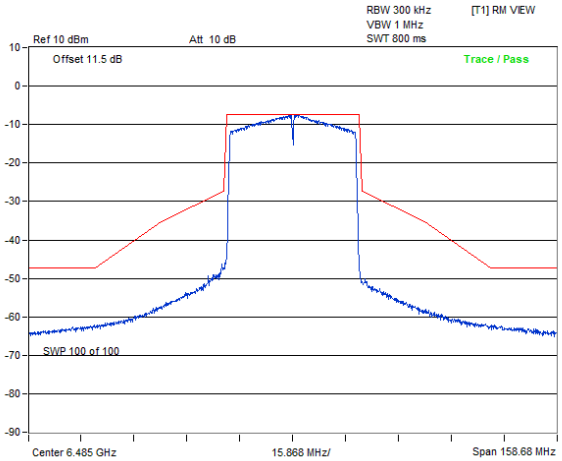
802.11be (EHT40) / Chain 0 : CH 43



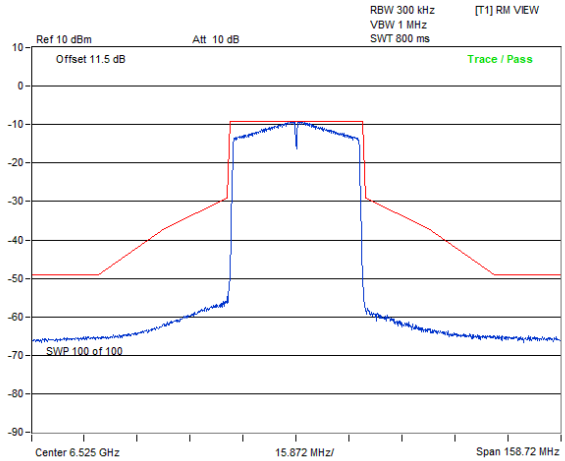
802.11be (EHT40) / Chain 0 : CH 91



802.11be (EHT40) / Chain 0 : CH 99

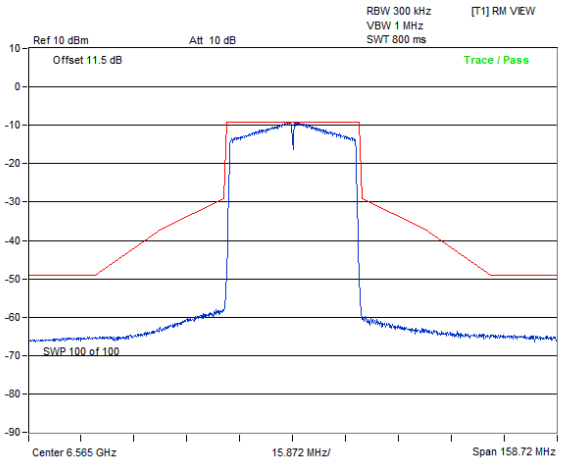


802.11be (EHT40) / Chain 0 : CH 107

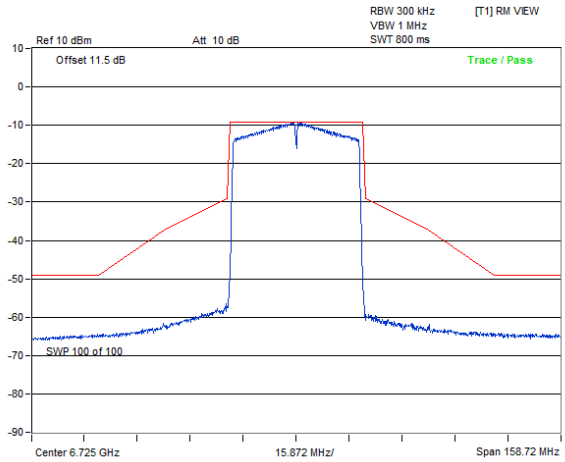


802.11be (EHT40) / Chain 0 : CH 115

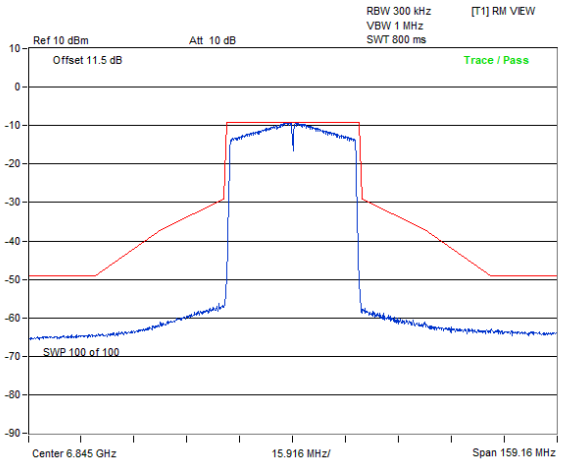
Spectrum Plot



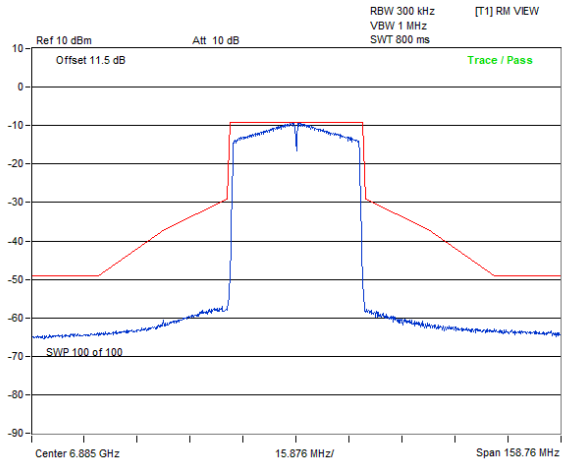
802.11be (EHT40) / Chain 0 : CH 123



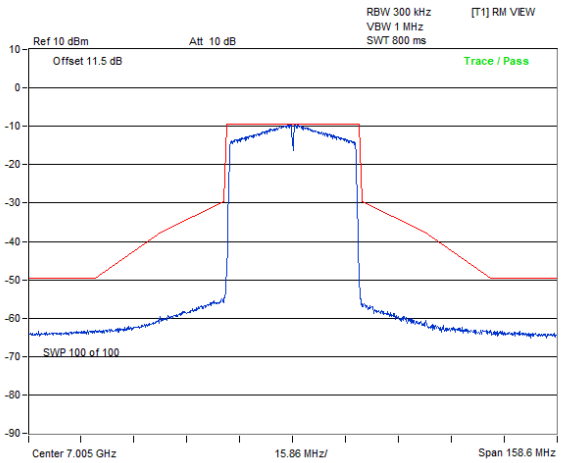
802.11be (EHT40) / Chain 0 : CH 155



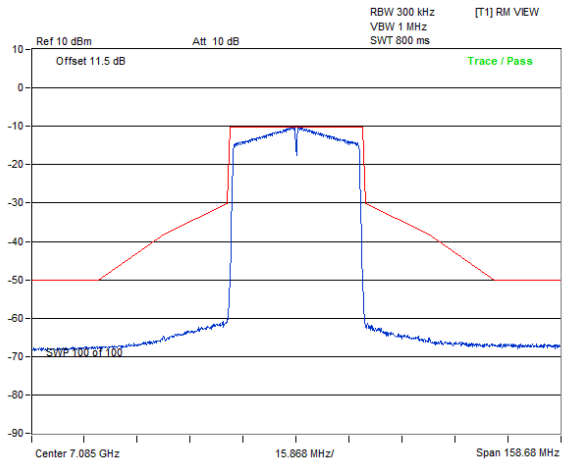
802.11be (EHT40) / Chain 0 : CH 179



802.11be (EHT40) / Chain 0 : CH 187

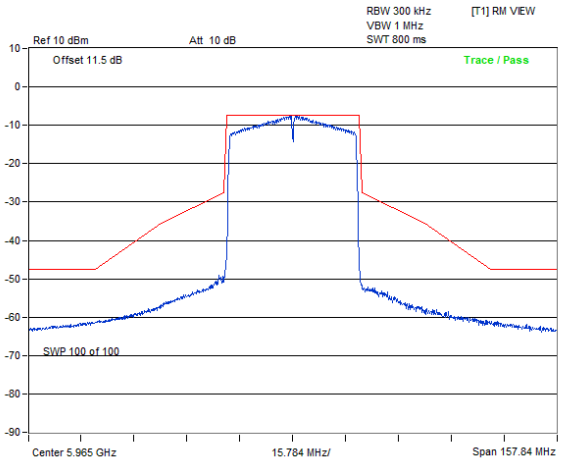


802.11be (EHT40) / Chain 0 : CH 211

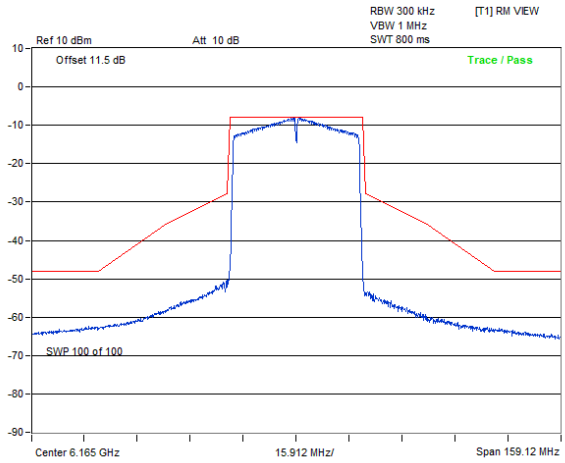


802.11be (EHT40) / Chain 0 : CH 227

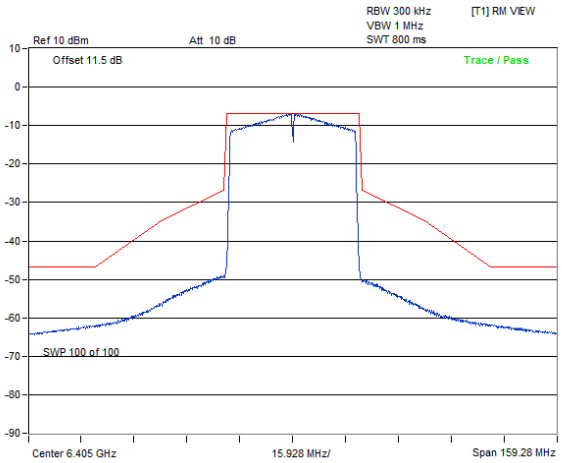
Spectrum Plot



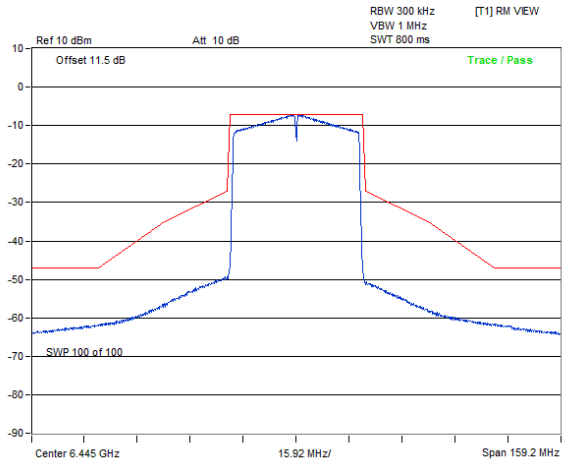
802.11be (EHT40) / Chain 1 : CH 3



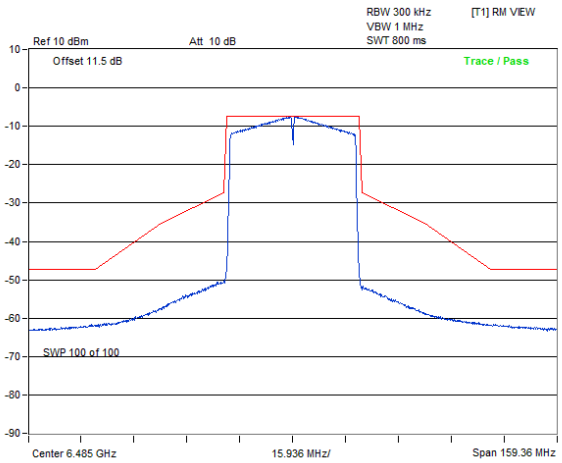
802.11be (EHT40) / Chain 1 : CH 43



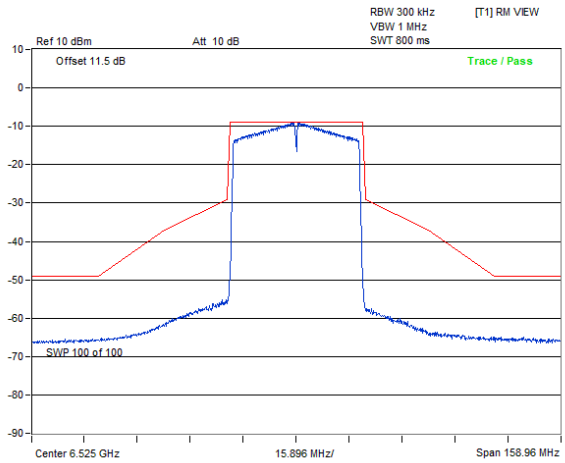
802.11be (EHT40) / Chain 1 : CH 91



802.11be (EHT40) / Chain 1 : CH 99

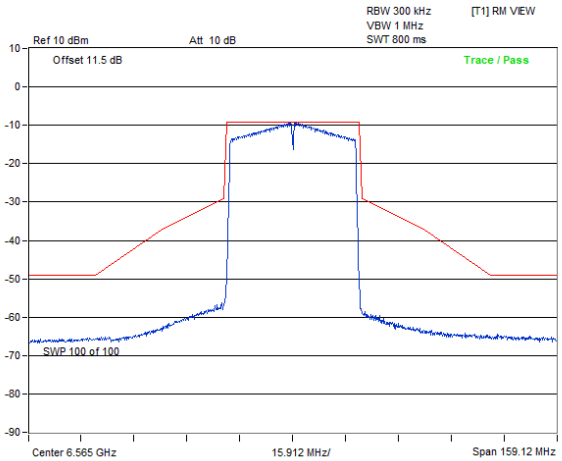


802.11be (EHT40) / Chain 1 : CH 107

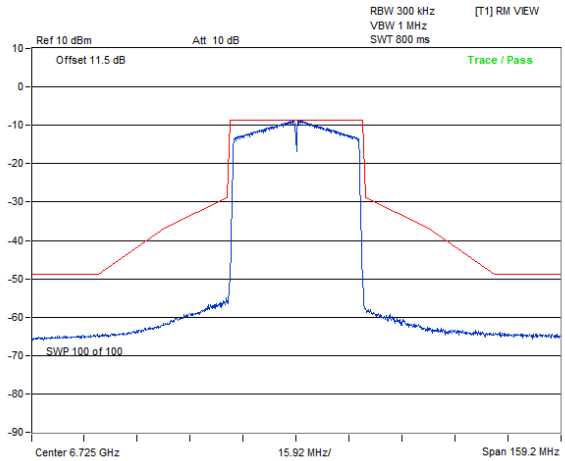


802.11be (EHT40) / Chain 1 : CH 115

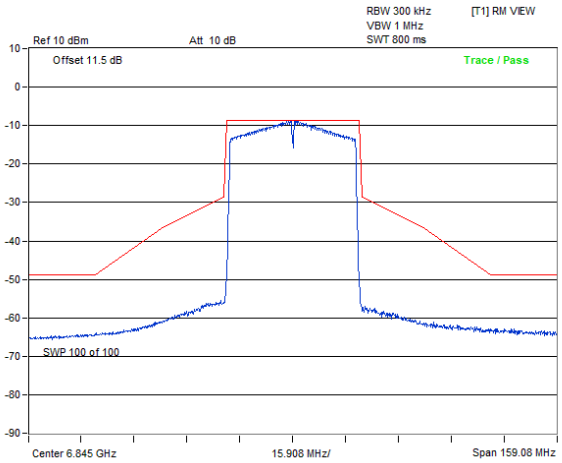
Spectrum Plot



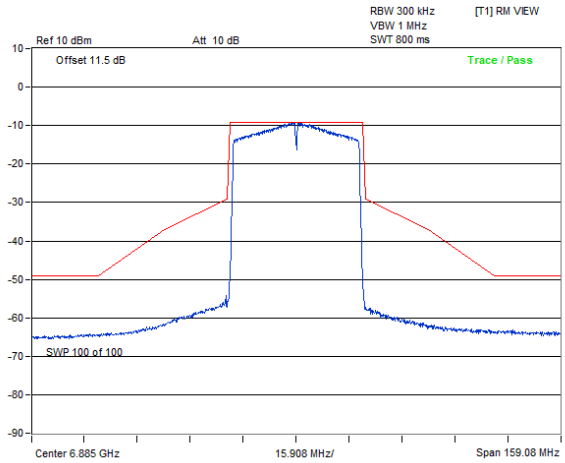
802.11be (EHT40) / Chain 1 : CH 123



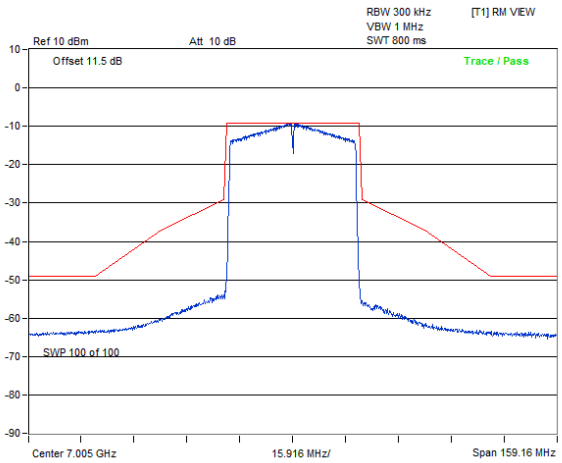
802.11be (EHT40) / Chain 1 : CH 155



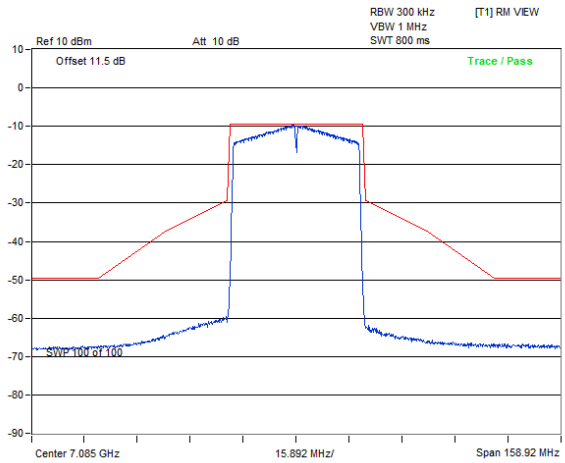
802.11be (EHT40) / Chain 1 : CH 179



802.11be (EHT40) / Chain 1 : CH 187



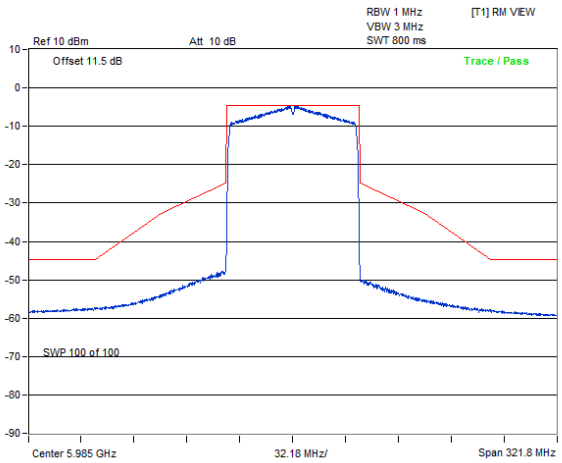
802.11be (EHT40) / Chain 1 : CH 211



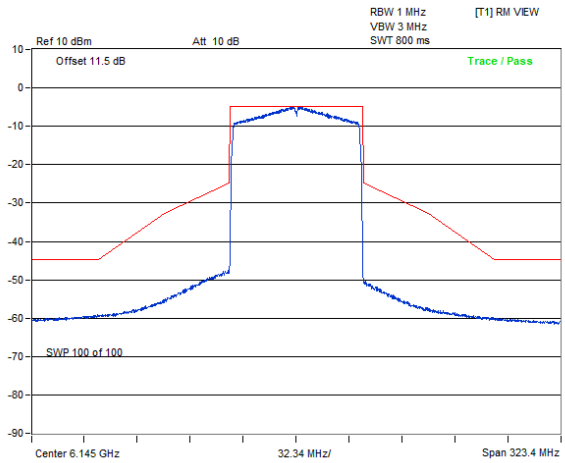
802.11be (EHT40) / Chain 1 : CH 227

802.11be (EHT80)

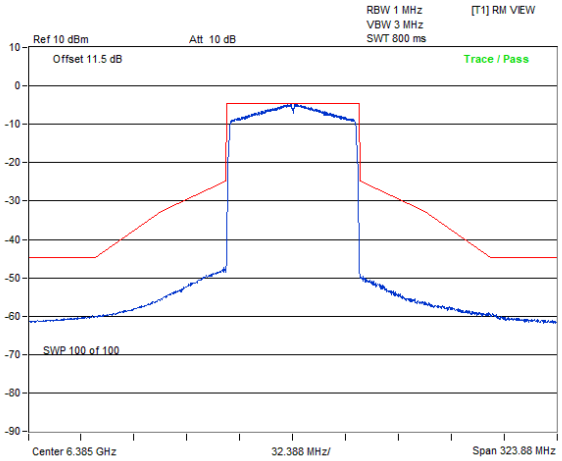
Spectrum Plot



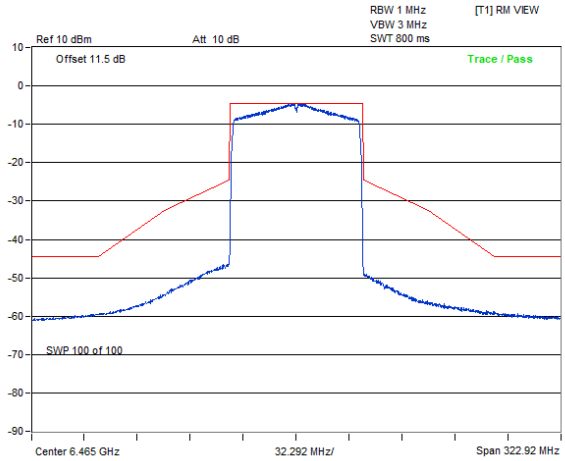
802.11be (EHT80) / Chain 0 : CH 7



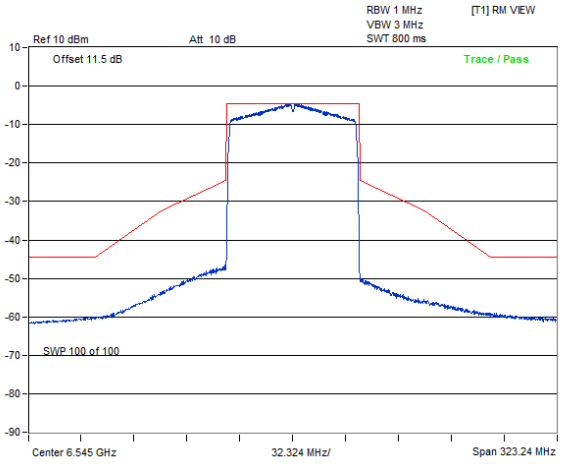
802.11be (EHT80) / Chain 0 : CH 39



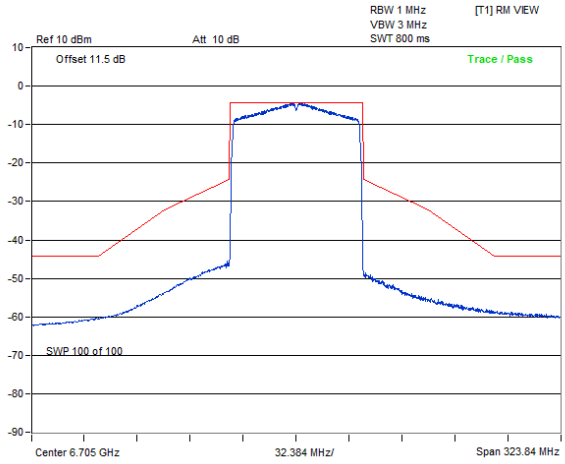
802.11be (EHT80) / Chain 0 : CH 87



802.11be (EHT80) / Chain 0 : CH 103

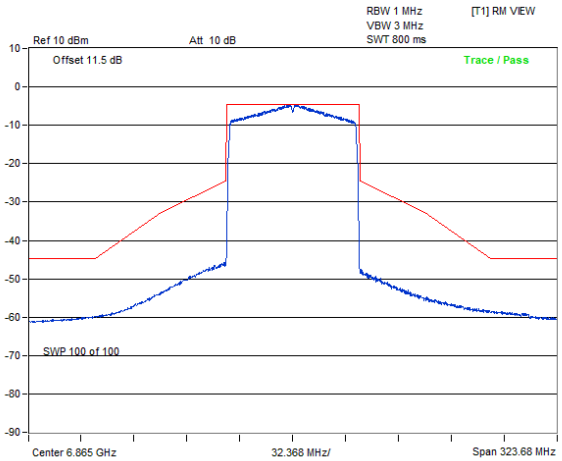


802.11be (EHT80) / Chain 0 : CH 119

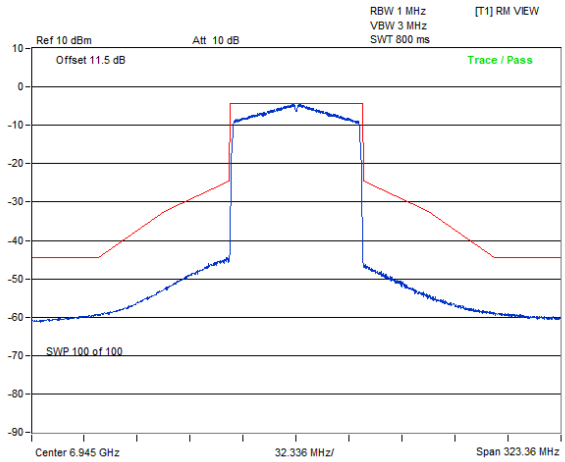


802.11be (EHT80) / Chain 0 : CH 151

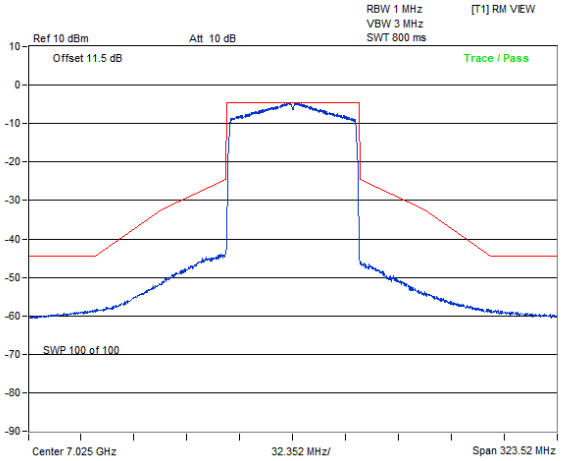
Spectrum Plot



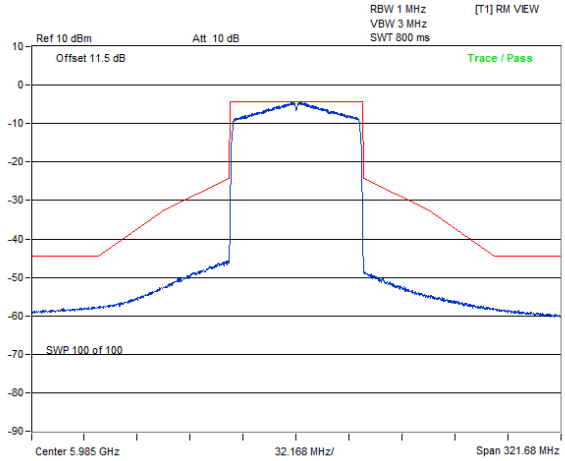
802.11be (EHT80) / Chain 0 : CH 183



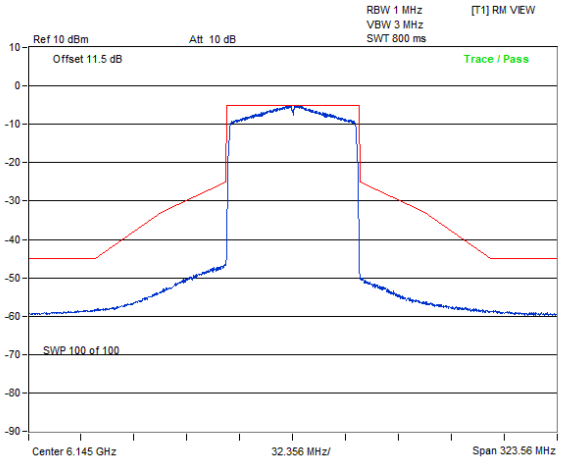
802.11be (EHT80) / Chain 0 : CH 199



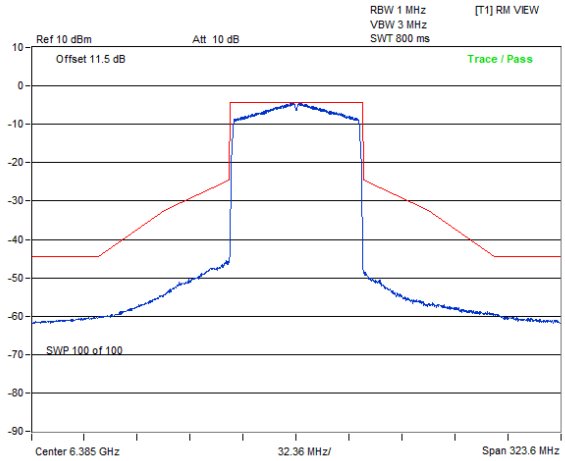
802.11be (EHT80) / Chain 0 : CH 215



802.11be (EHT80) / Chain 1 : CH 7

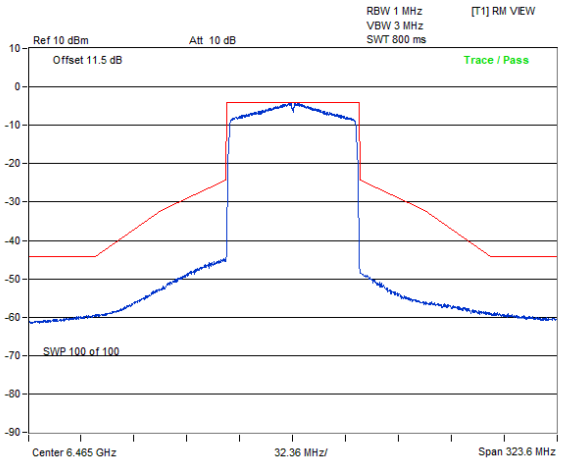


802.11be (EHT80) / Chain 1 : CH 39

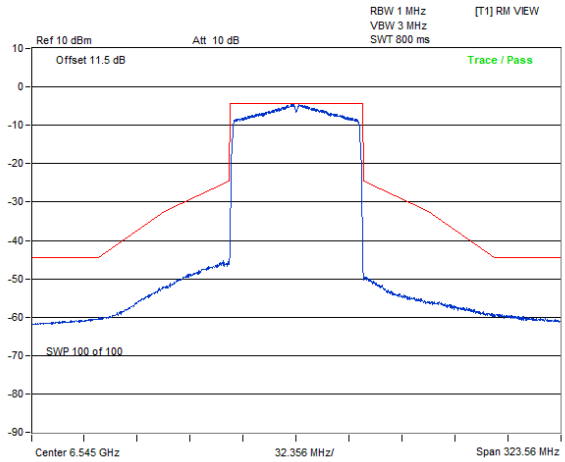


802.11be (EHT80) / Chain 1 : CH 87

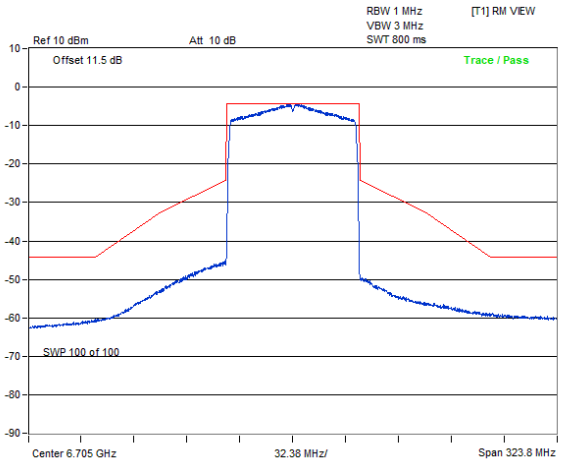
Spectrum Plot



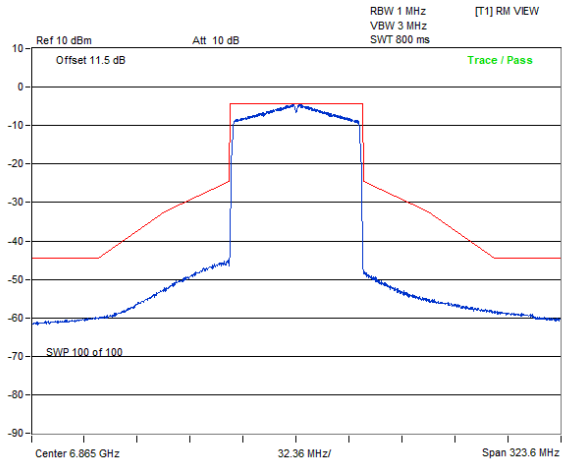
802.11be (EHT80) / Chain 1 : CH 103



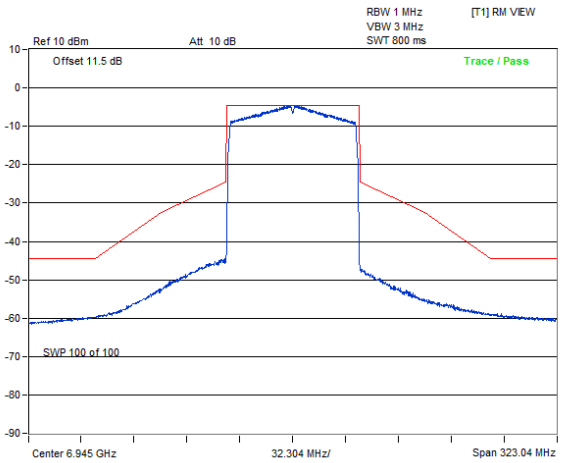
802.11be (EHT80) / Chain 1 : CH 119



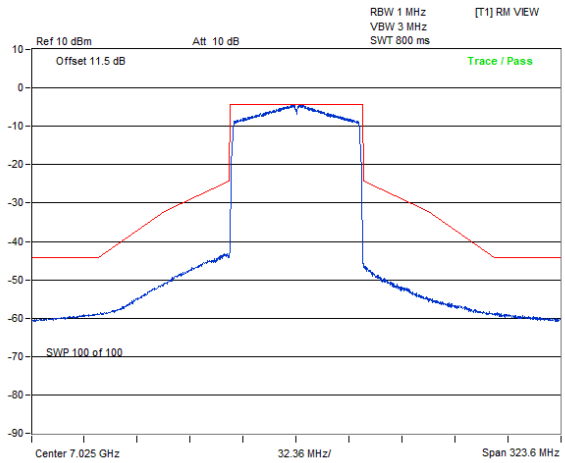
802.11be (EHT80) / Chain 1 : CH 151



802.11be (EHT80) / Chain 1 : CH 183



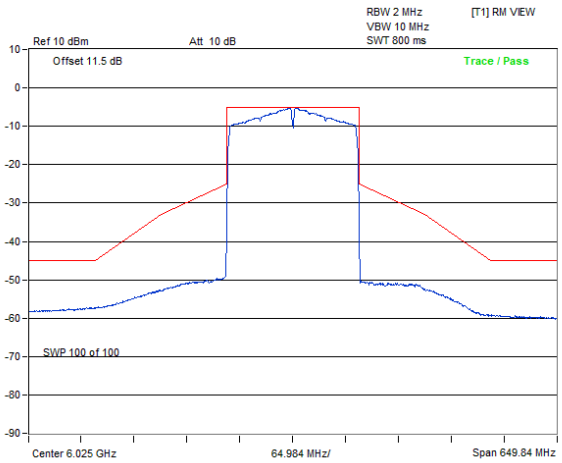
802.11be (EHT80) / Chain 1 : CH 199



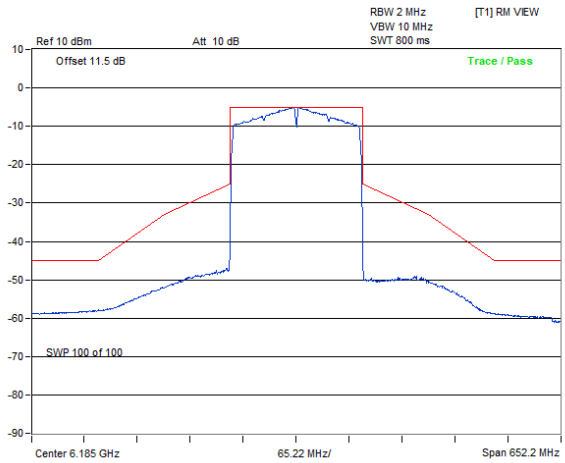
802.11be (EHT80) / Chain 1 : CH 215

802.11be (EHT160)

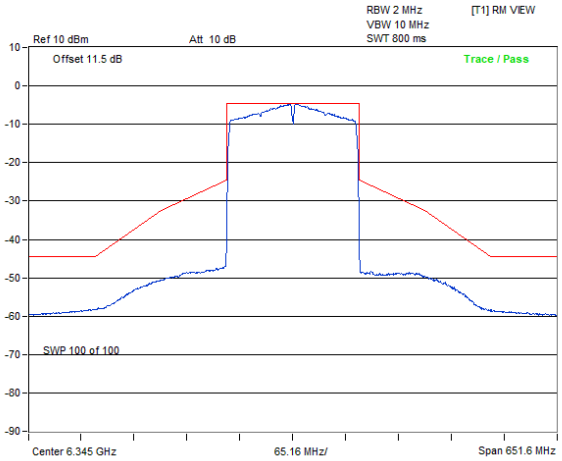
Spectrum Plot



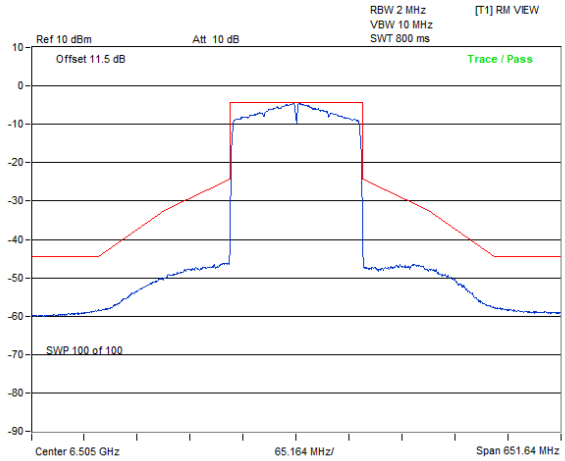
802.11be (EHT160) / Chain 0 : CH 15



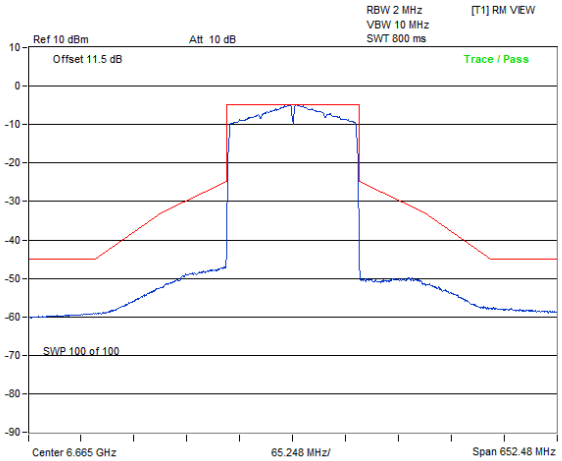
802.11be (EHT160) / Chain 0 : CH 47



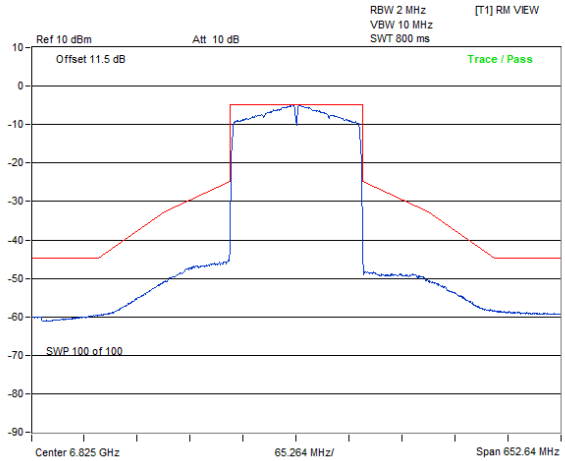
802.11be (EHT160) / Chain 0 : CH 79



802.11be (EHT160) / Chain 0 : CH 111

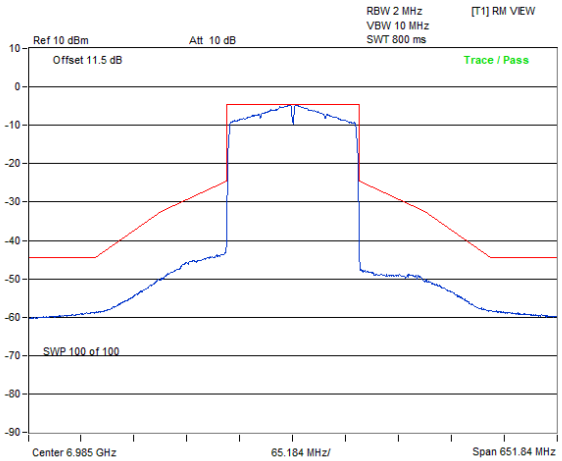


802.11be (EHT160) / Chain 0 : CH 143

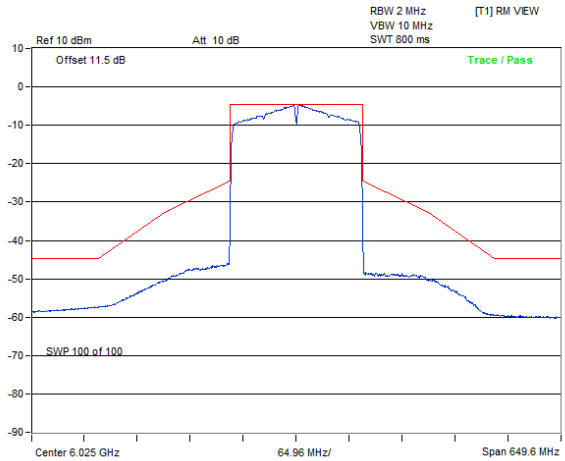


802.11be (EHT160) / Chain 0 : CH 175

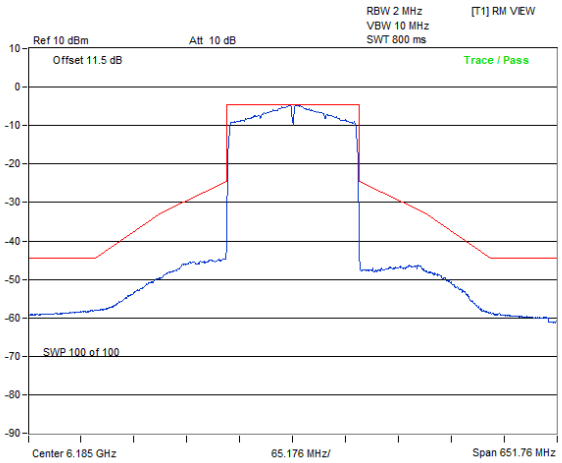
Spectrum Plot



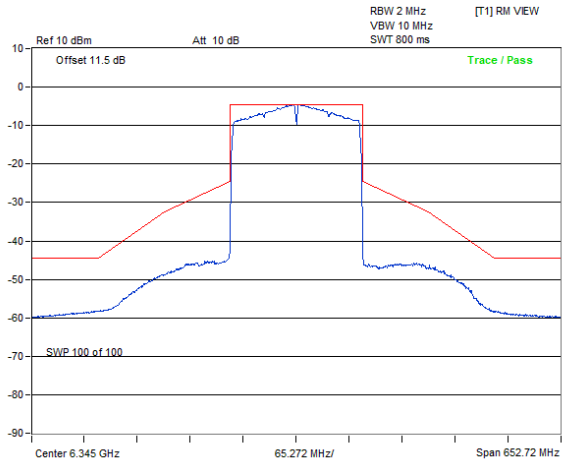
802.11be (EHT160) / Chain 0 : CH 207



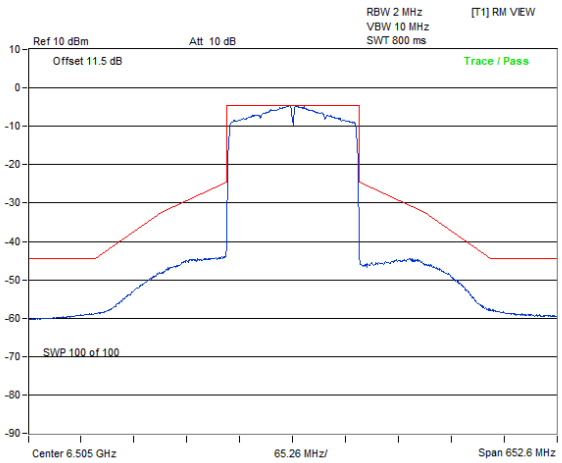
802.11be (EHT160) / Chain 1 : CH 15



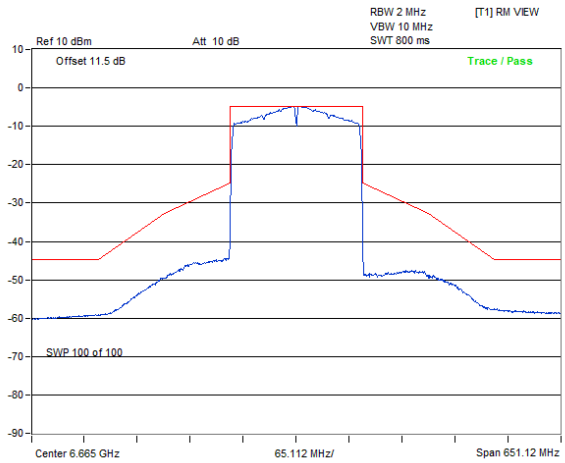
802.11be (EHT160) / Chain 1 : CH 47



802.11be (EHT160) / Chain 1 : CH 79

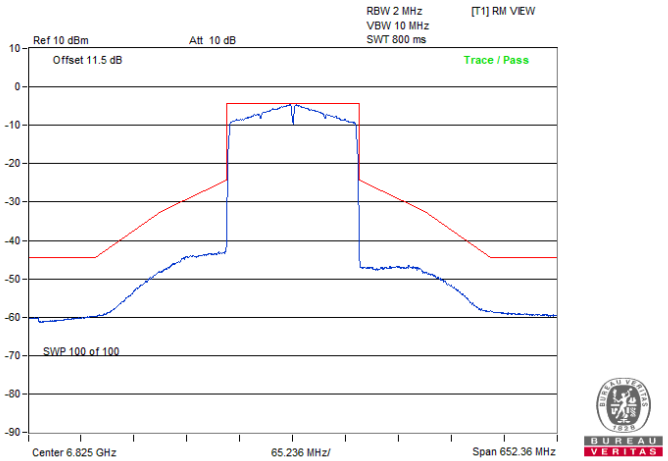


802.11be (EHT160) / Chain 1 : CH 111

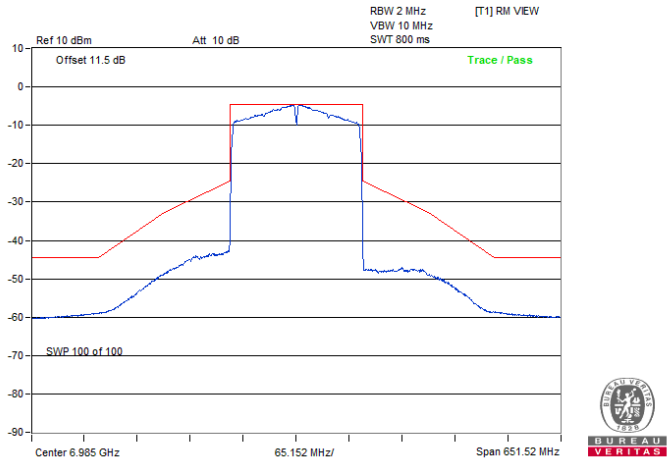


802.11be (EHT160) / Chain 1 : CH 143

Spectrum Plot



802.11be (EHT160) / Chain 1 : CH 175



802.11be (EHT160) / Chain 1 : CH 207

7.5 Occupied Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Tim Chen/ Matthew Yang

NSS1

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
1	5955	16.26	16.32
45	6175	16.32	16.32
93	6415	16.32	16.32
97	6435	16.32	16.32
105	6475	16.32	16.32
113	6515	16.32	16.32
117	6535	16.32	16.32
149	6695	16.32	16.32
181	6855	16.32	16.32
185	6875	16.32	16.32
209	6995	16.32	16.32
233	7115	16.32	16.32

802.11be (EHT20)

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

802.11be (EHT40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
3	5965	37.68	37.80
43	6165	37.68	37.68
91	6405	37.68	37.68
99	6445	37.68	37.68
107	6485	37.68	37.68
115	6525	37.68	37.68
123	6565	37.68	37.68
155	6725	37.68	37.68
179	6845	37.68	37.68
187	6885	37.68	37.68
211	7005	37.68	37.68
227	7085	37.68	37.68

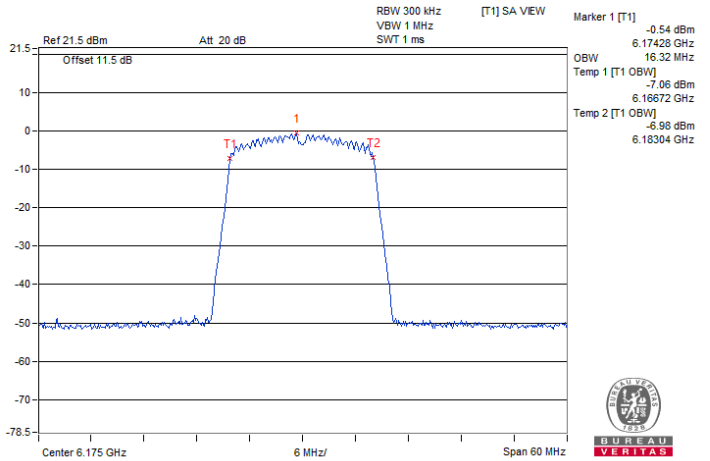
802.11be (EHT80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
7	5985	76.80	76.80
39	6145	77.28	76.80
87	6385	76.80	77.28
103	6465	76.80	76.80
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	76.32	76.80

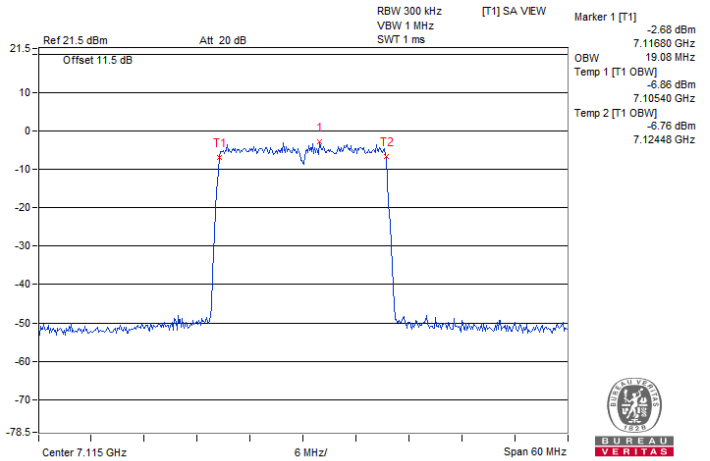
802.11be (EHT160)

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

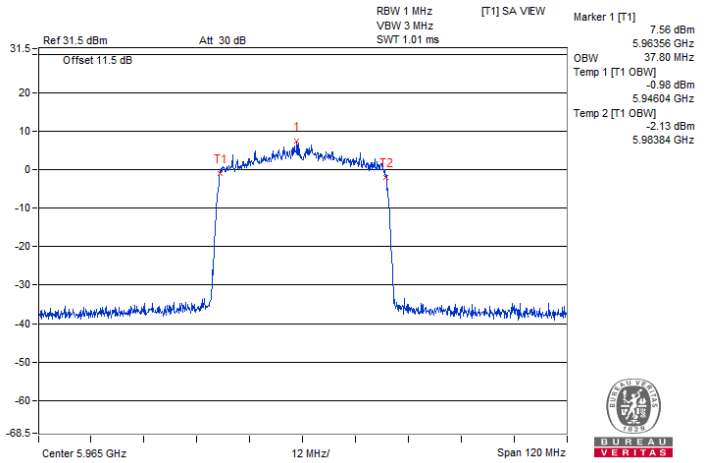
Spectrum Plot of Maximum Value



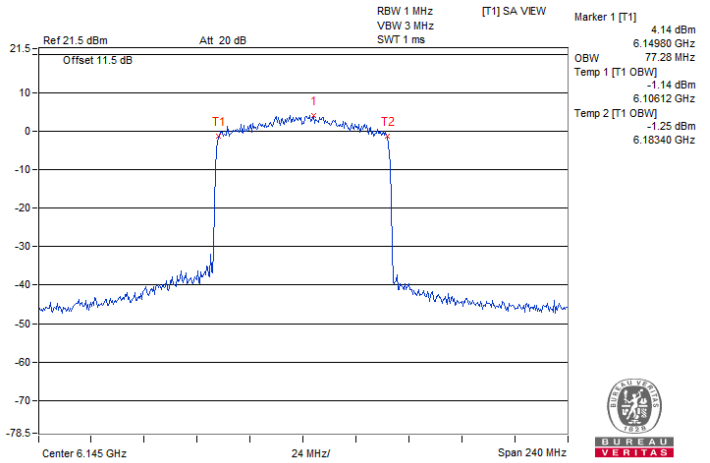
802.11a / Chain 0 : CH 45



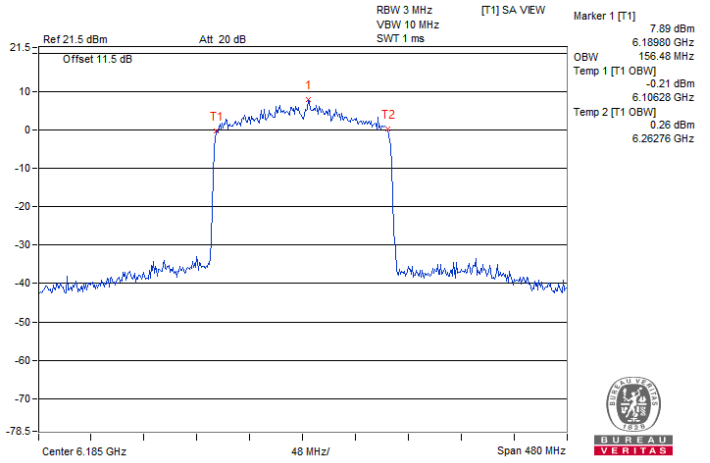
802.11be (EHT20) / Chain 0 : CH 233



802.11be (EHT40) / Chain 1 : CH 3



802.11be (EHT80) / Chain 0 : CH 39



802.11be (EHT160) / Chain 0 : CH 47

NSS2

802.11be (EHT20)

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

802.11be (EHT40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
3	5965	37.56	37.56
43	6165	37.68	37.68
91	6405	37.68	37.68
99	6445	37.68	37.68
107	6485	37.68	37.68
115	6525	37.68	37.68
123	6565	37.68	37.68
155	6725	37.68	37.68
179	6845	37.68	37.68
187	6885	37.68	37.68
211	7005	37.68	37.68
227	7085	37.68	37.68

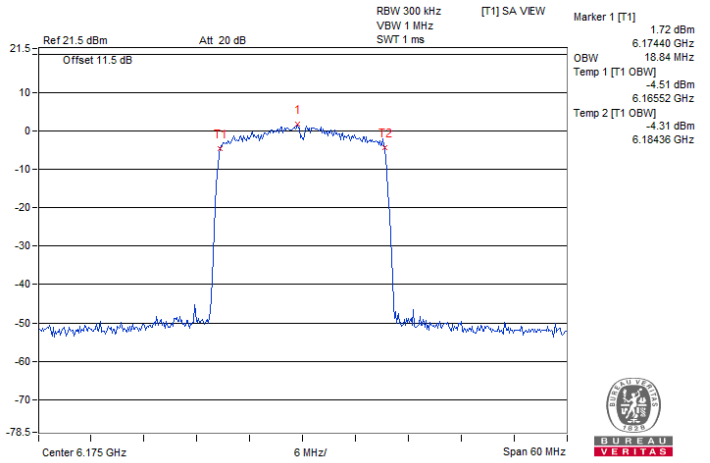
802.11be (EHT80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
7	5985	77.04	76.56
39	6145	77.28	76.80
87	6385	76.32	77.28
103	6465	77.28	77.28
119	6545	77.28	77.28
151	6705	77.28	77.28
183	6865	77.28	76.80
199	6945	76.80	77.28
215	7025	76.80	77.28

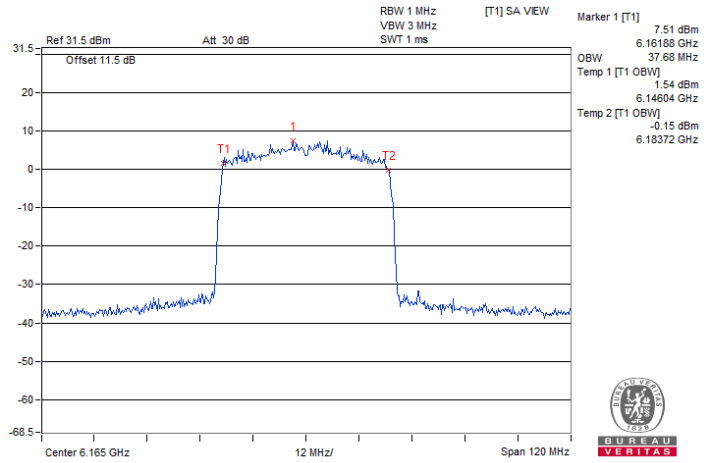
802.11be (EHT160)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
15	6025	155.52	156.00
47	6185	156.48	156.48
79	6345	156.48	156.48
111	6505	156.48	156.48
143	6665	155.52	156.48
175	6825	156.48	156.48
207	6985	156.48	156.48

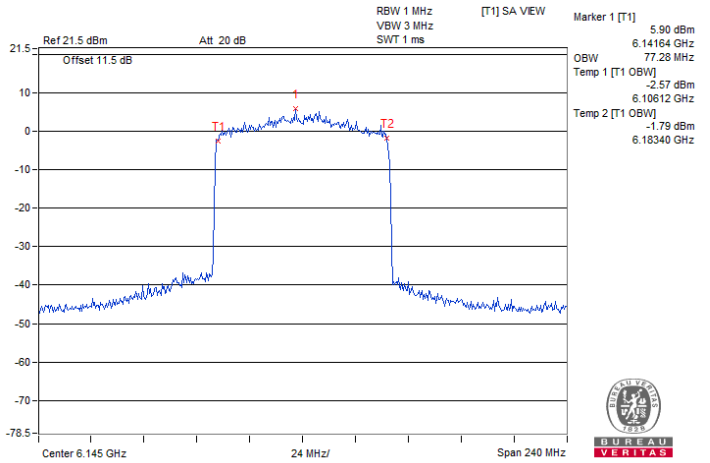
Spectrum Plot of Maximum Value



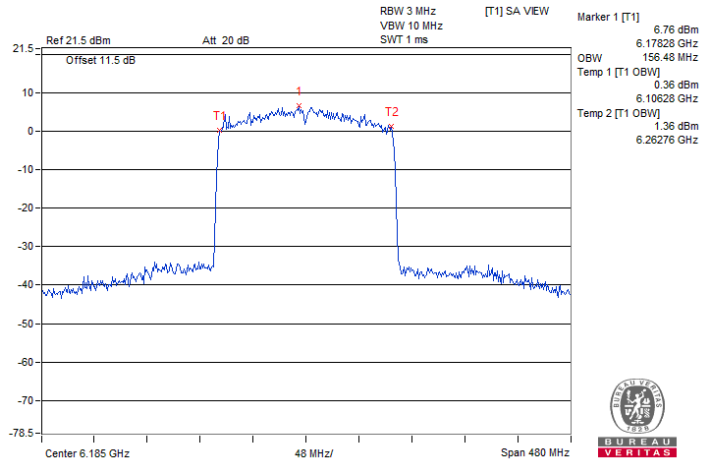
802.11be (EHT20) / Chain 0 : CH 45



802.11be (EHT40) / Chain 0 : CH 43



802.11be (EHT80) / Chain 0 : CH 39



802.11be (EHT160) / Chain 0 : CH 47

7.6 Contention-based Protocol

Environmental Conditions:	25°C, 60% RH	Tested By:	Frankie Chang

Companion Device Information			
Product	Brand	Model No.	Software/Firmware Version
Wireless Router	NETGEAR	RS700	V1.0.7.80_2.0.79

For U-NII-5

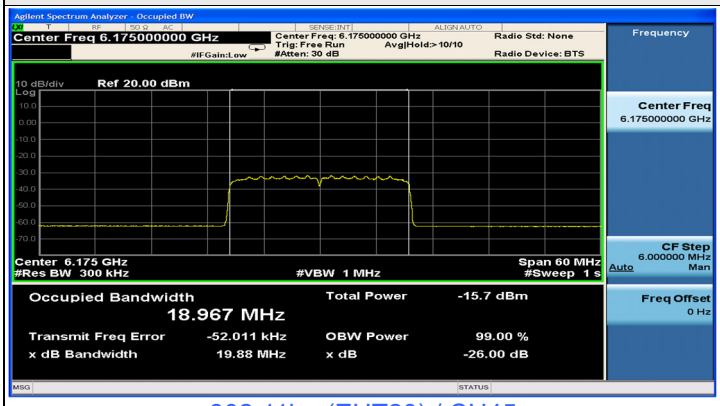
Contention Based Protocol Measurement										
Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB) (Note 3)	Adjusted Power (dBm)	Detection Limit	EUT TX Status
				Freq. (MHz)	Power (dBm)					
802.11be	20	45	6175	6175	-66	3.22	0	-69.22	-62	OFF
					-69	3.22	0	-72.22	-62	Minimal
					-78.78	3.22	0	-82	-62	ON
	160	47	6185	6110	-66	3.22	0	-69.22	-62	OFF
					-69	3.22	0	-72.22	-62	Minimal
					-78.78	3.22	0	-82	-62	ON
				6185	-65	3.22	0	-68.22	-62	OFF
					-69	3.22	0	-72.22	-62	Minimal
					-78.78	3.22	0	-82	-62	ON
				6260	-64	3.22	0	-67.22	-62	OFF
					-68	3.22	0	-71.22	-62	Minimal
					-78.78	3.22	0	-82	-62	ON

Notes:

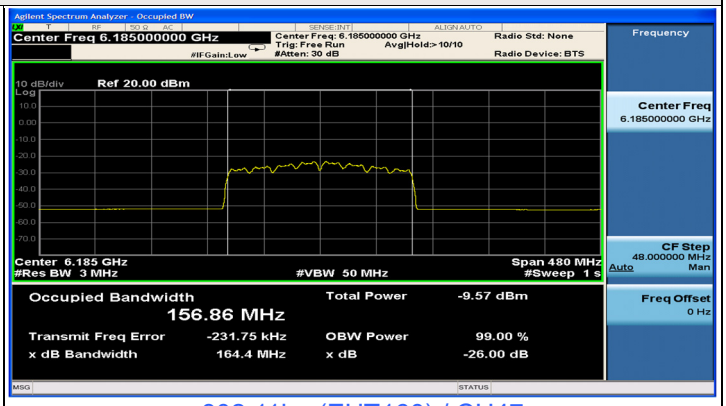
1. After investigation (consider antenna gain and path loss) , the one representative port (Chain 0) was measured and presented in the report.
2. Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
3. Antenna gain values include all the applicable path losses.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

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

Plots of EUT Tx waveform

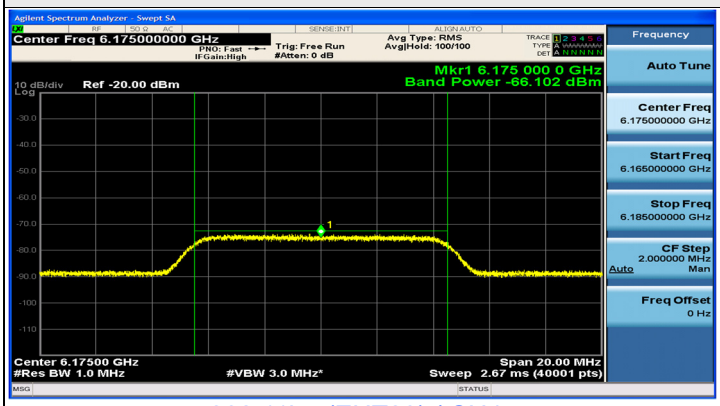


802.11be (EHT20) / CH45

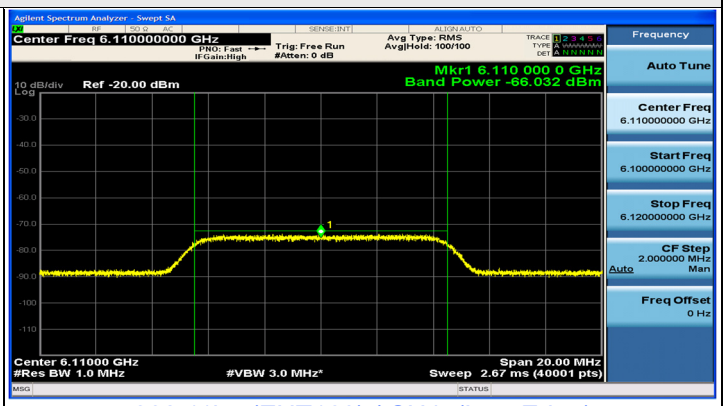


802.11be (EHT160) / CH47

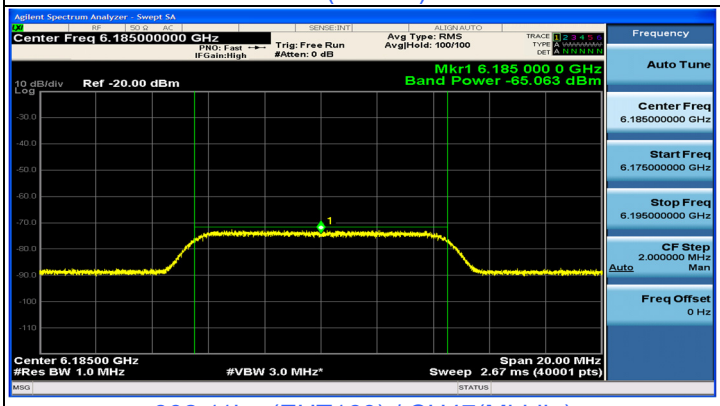
Plots of Injected signal (AWGN) level



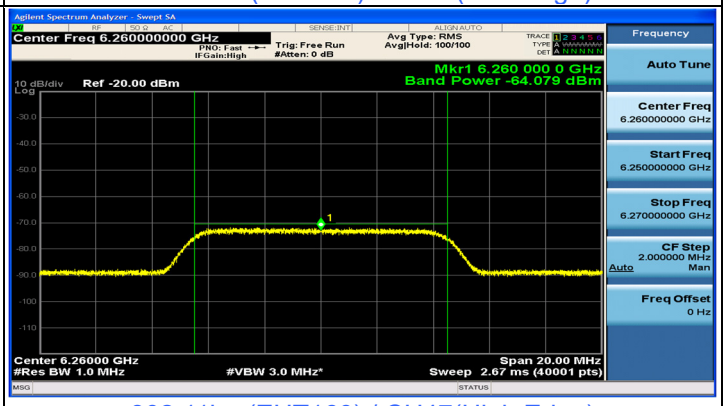
802.11be (EHT20) / CH45



802.11be (EHT160) / CH47(Low Edge)



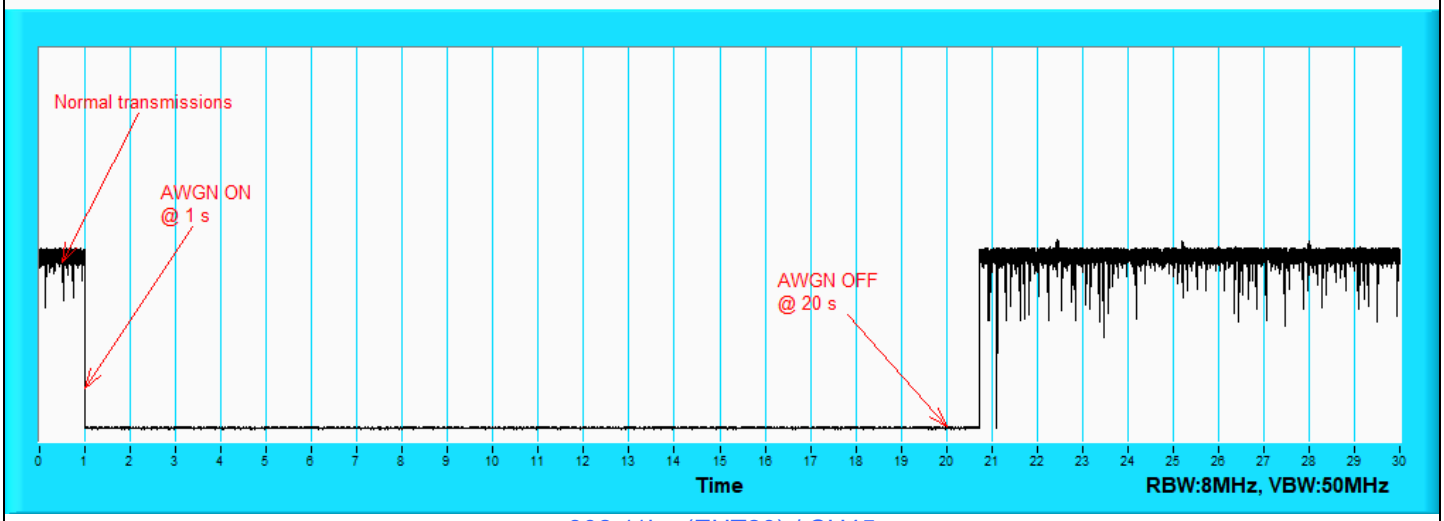
802.11be (EHT160) / CH47(Middle)



802.11be (EHT160) / CH47(High Edge)

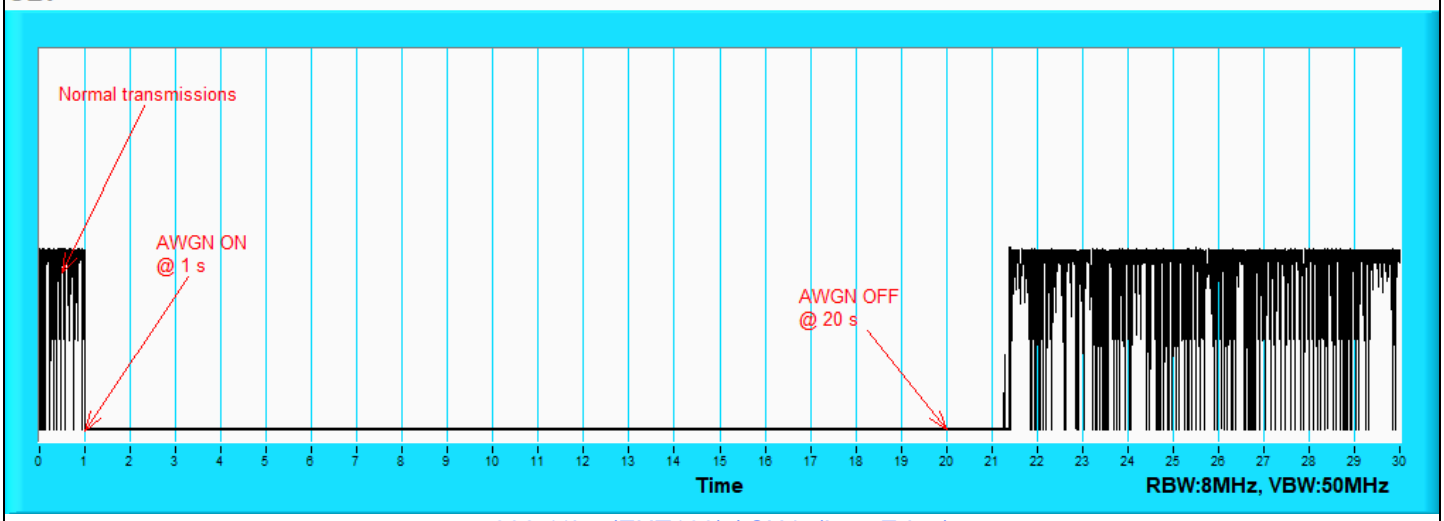
Plots of EUT ceased transmission in the time domain

CBP



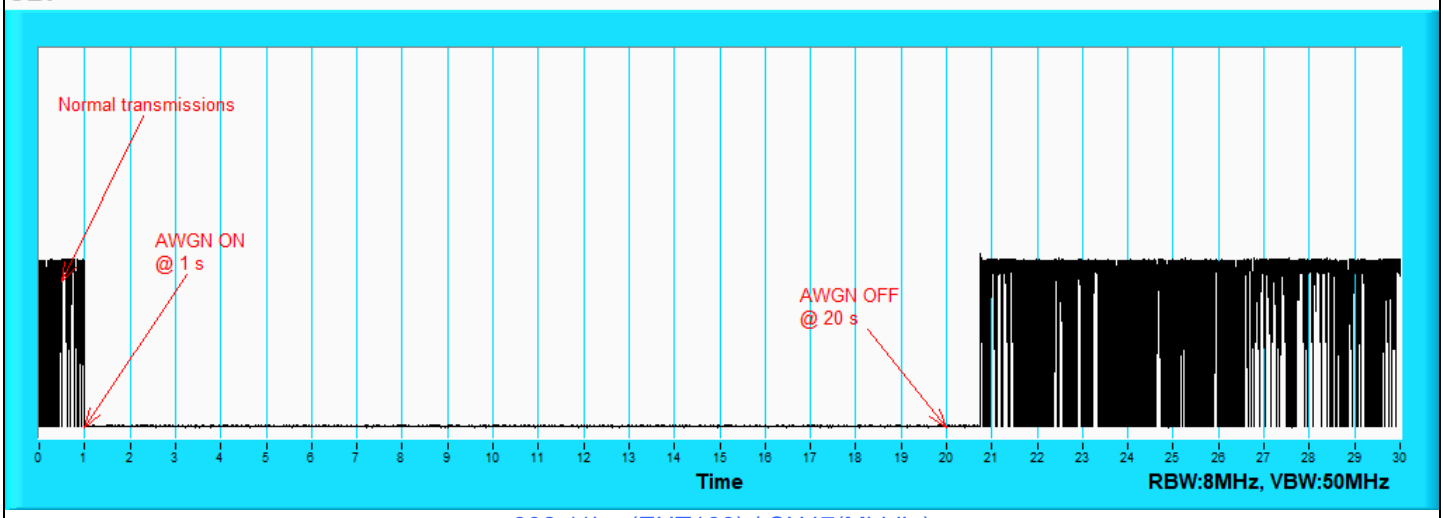
802.11be (EHT20) / CH45

CBP



802.11be (EHT160) / CH47(Low Edge)

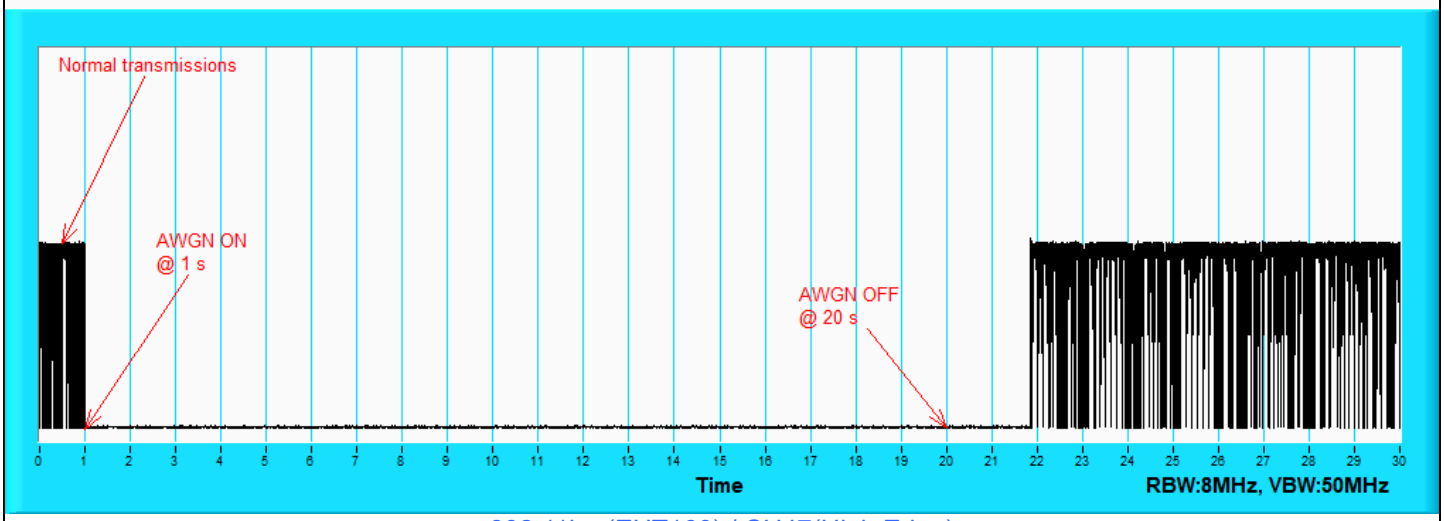
CBP



802.11be (EHT160) / CH47(Middle)

Plots of EUT ceased transmission in the time domain

CBP



802.11be (EHT160) / CH47(High Edge)

For U-NII-6

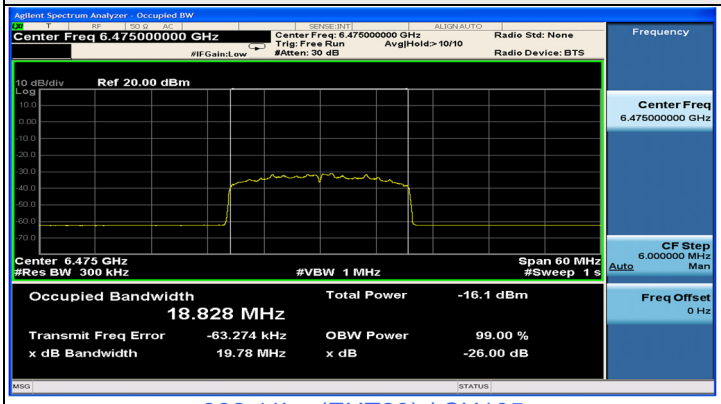
Contention Based Protocol Measurement										
Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB) (Note 3)	Adjusted Power (dBm)	Detection Limit	EUT TX Status
				Freq. (MHz)	Power (dBm)					
802.11be	20	105	6475	6475	-65	3.22	0	-68.22	-62	OFF
					-68	3.22	0	-71.22	-62	Minimal
					-78.78	3.22	0	-82	-62	ON
	160	111	6505	6430	-65	3.22	0	-68.22	-62	OFF
					-68	3.22	0	-71.22	-62	Minimal
					-78.78	3.22	0	-82	-62	ON
				6505	-63	3.22	0	-66.22	-62	OFF
					-65	3.22	0	-68.22	-62	Minimal
					-78.78	3.22	0	-82	-62	ON
				6580	-65	3.22	0	-68.22	-62	OFF
					-67	3.22	0	-70.22	-62	Minimal
					-78.78	3.22	0	-82	-62	ON

Notes:

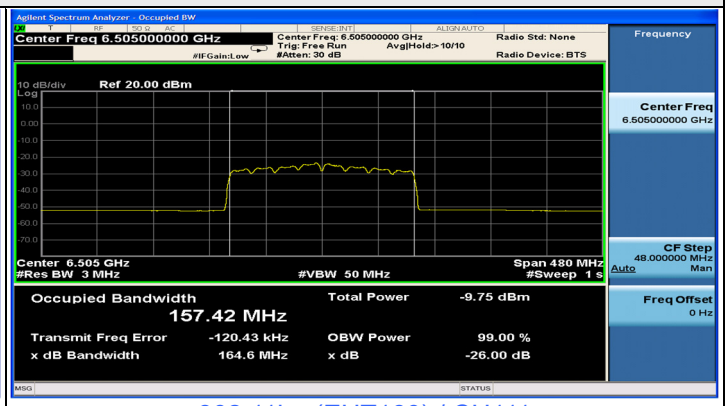
1. After investigation (consider antenna gain and path loss) , the one representative port (Chain 0) was measured and presented in the report.
2. Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
3. Antenna gain values include all the applicable path losses.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

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

Plots of EUT Tx waveform

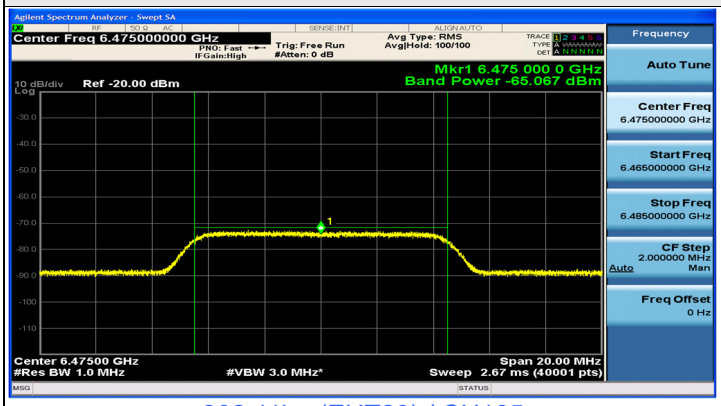


802.11be (EHT20) / CH105

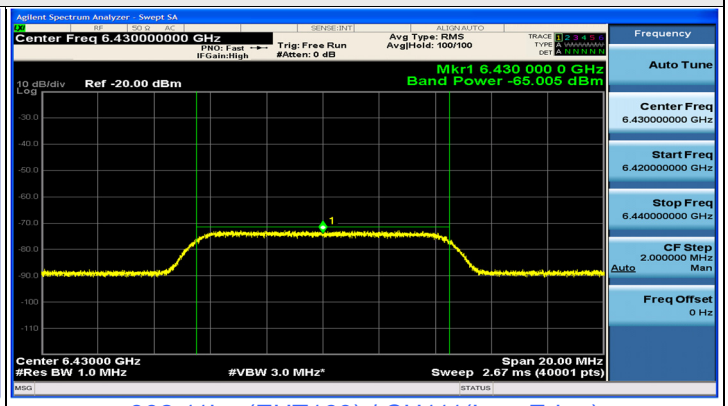


802.11be (EHT160) / CH111

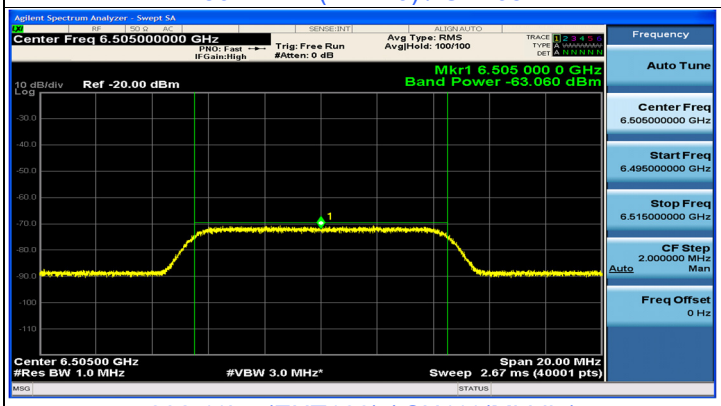
Plots of Injected signal (AWGN) level



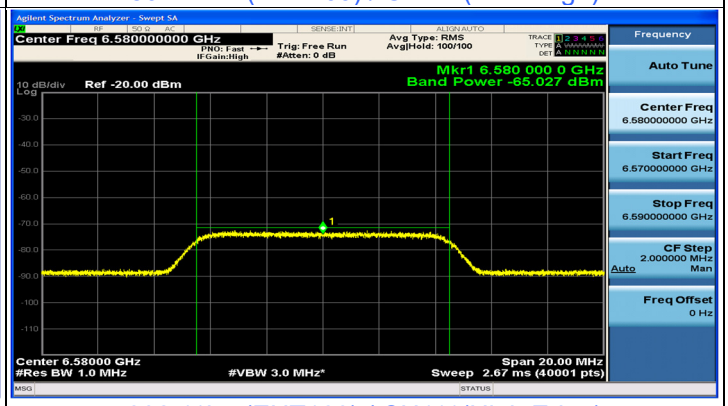
802.11be (EHT20) / CH105



802.11be (EHT160) / CH111(Low Edge)



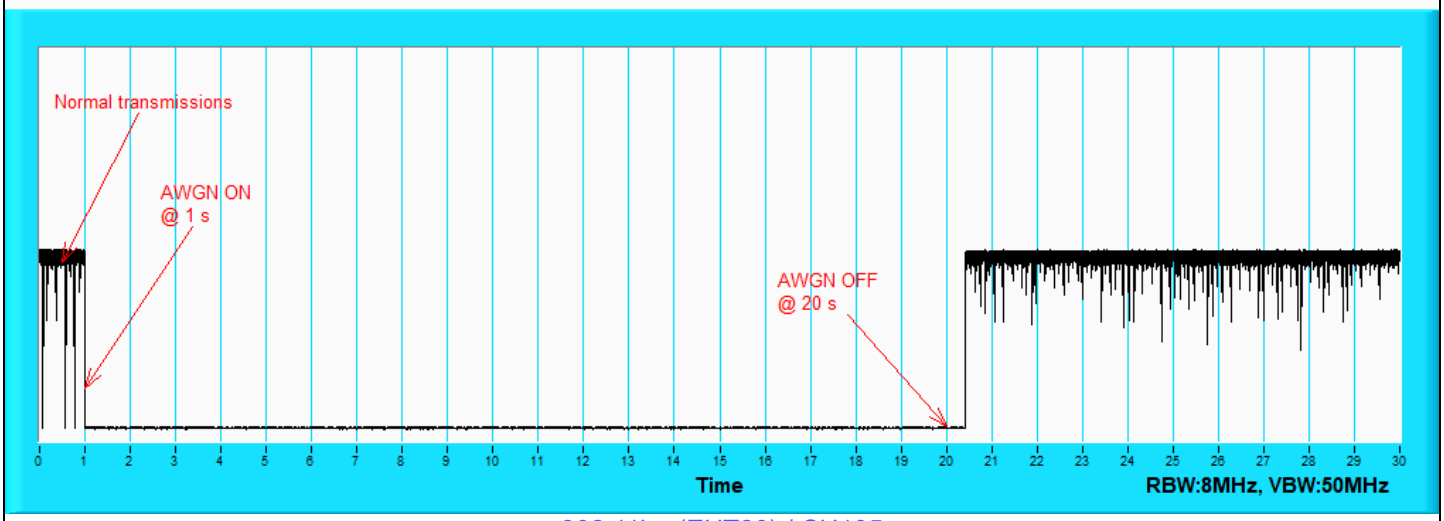
802.11be (EHT160) / CH111(Middle)



802.11be (EHT160) / CH111(High Edge)

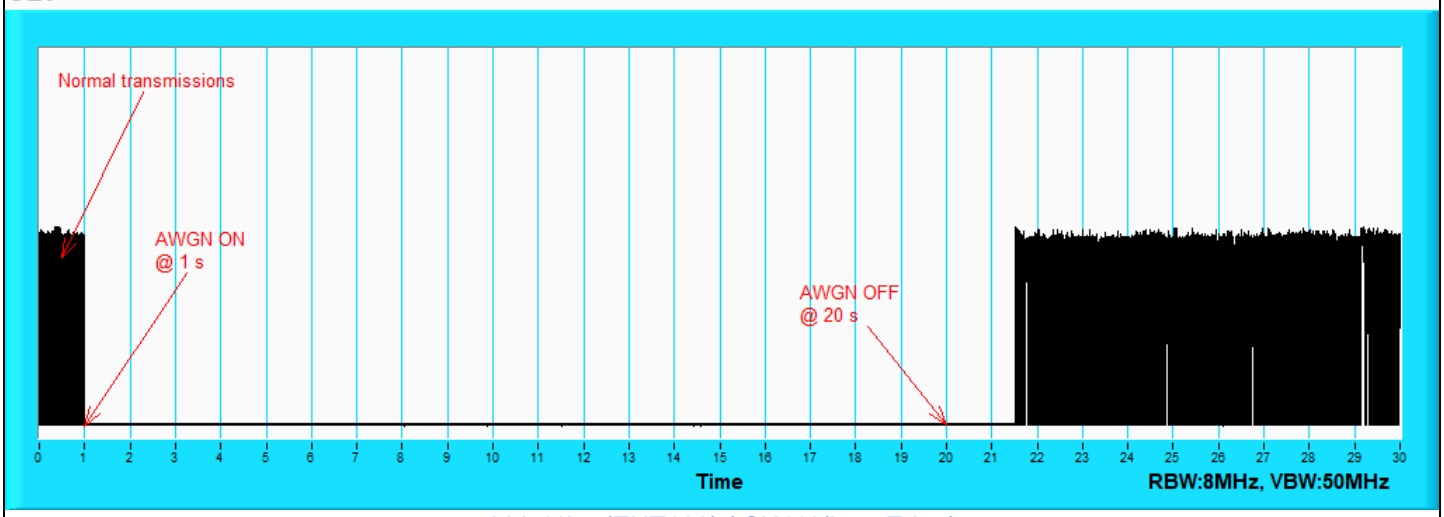
Plots of EUT ceased transmission in the time domain

CBP



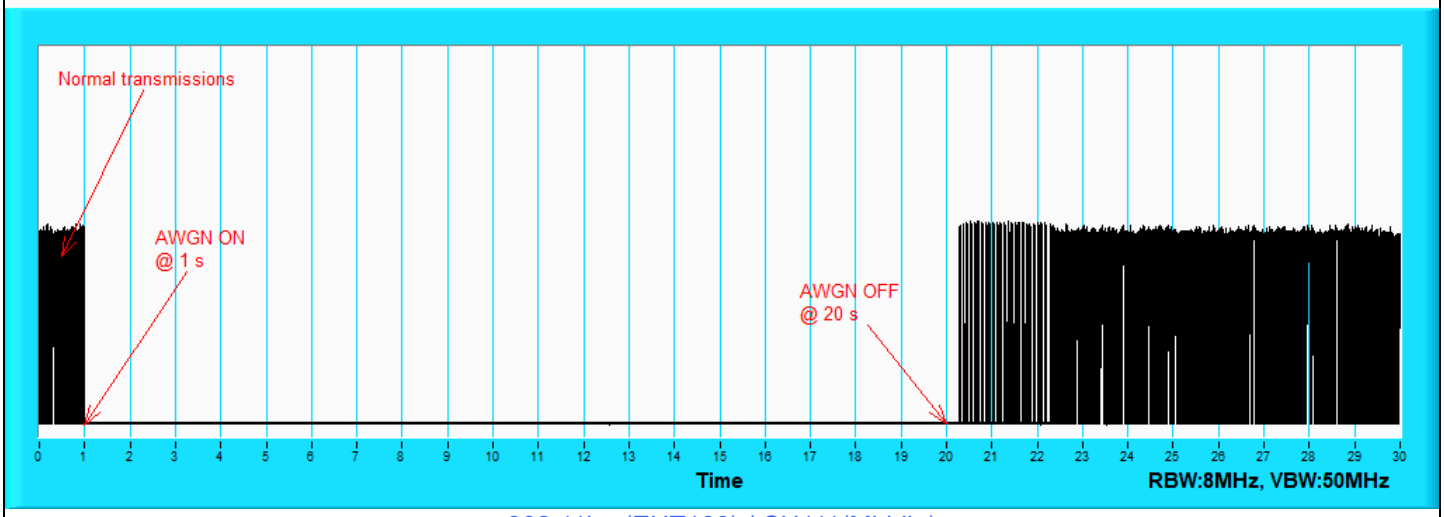
802.11be (EHT20) / CH105

CBP



802.11be (EHT160) / CH111(Low Edge)

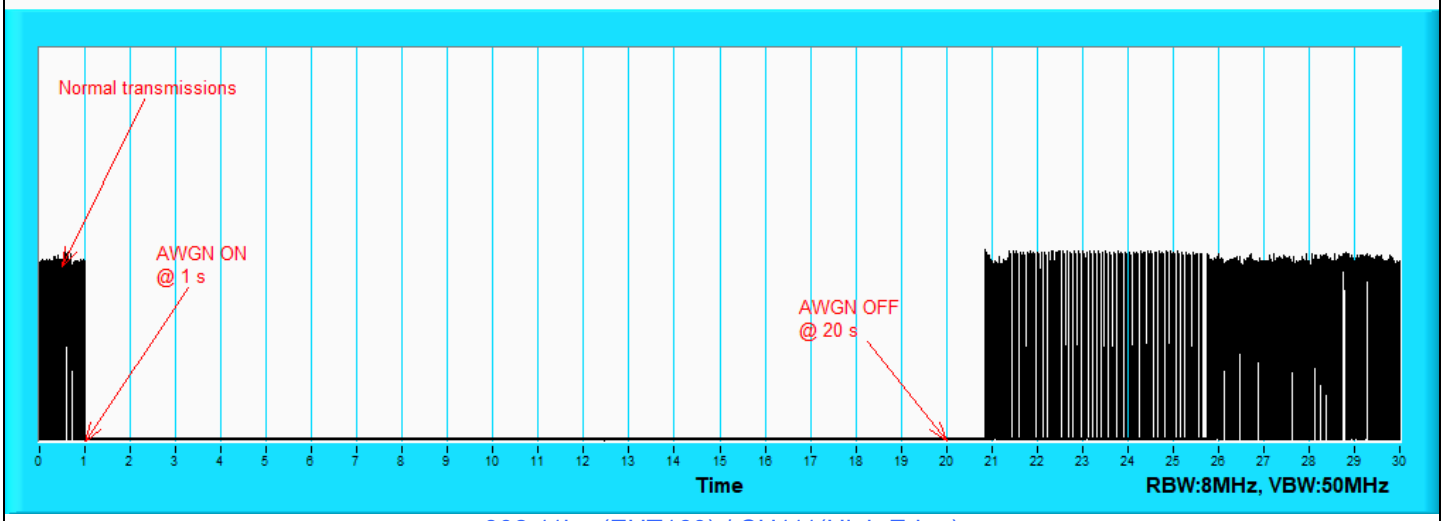
CBP



802.11be (EHT160) / CH111(Middle)

Plots of EUT ceased transmission in the time domain

CBP



802.11be (EHT160) / CH111(High Edge)

For U-NII-7

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)					
802.11be	20	149	6695	6695	-65	3.22	0	-68.22	-62	OFF
					-69	3.22	0	-72.22	-62	Minimal
					-78.78	3.22	0	-82	-62	ON
	160	143	6665	6590	-65	3.22	0	-68.22	-62	OFF
					-67	3.22	0	-70.22	-62	Minimal
					-78.78	3.22	0	-82	-62	ON
				6665	-62	3.22	0	-65.22	-62	OFF
					-65	3.22	0	-68.22	-62	Minimal
					-78.78	3.22	0	-82	-62	ON
				6740	-66	3.22	0	-69.22	-62	OFF
					-68	3.22	0	-71.22	-62	Minimal
					-78.78	3.22	0	-82	-62	ON

Notes:

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

Contention Based Protocol Detection Probability															
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11be	20	6695	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
	160	6590	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6665	v	v	v	v	v	v	v	v	x	v	90%	90%	Pass
		6740	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass