

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)
Report No.: RFBARR-WTW-P23110067-1
FCC ID: RAS-MT7925B14L
Product: 2TX 11be (WiFi7) BW160 + BT/BLE Combo Card
Brand: MediaTek
Model No.: MT7925B14L
Received Date: 2023/11/6
Test Date: 2023/11/16 ~ 2024/1/19
Issued Date: 2024/2/23
Applicant: MediaTek Inc.
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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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FCC Registration / 723255 / TW2022
Designation Number:

Approved by: _____, **Date:** 2024/2/23
May Chen / Manager

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Prepared by : Phoenix Huang / Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBARR-WTW-P23110067-1	Original release.	2024/2/23

1 Certificate

Product: 2TX 11be (WiFi7) BW160 + BT/BLE Combo Card
Brand: MediaTek
Test Model: MT7925B14L
Sample Status: Engineering sample
Applicant: MediaTek Inc.
Test Date: 2023/11/16 ~ 2024/1/19
Standard: 47 CFR FCC Part 15, Subpart E (Section 15.407)
Measurement procedure: ANSI C63.10-2013
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)(2)	26 dB Bandwidth	-	For U-NII-2A U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	RF Output Power	Pass	Meet the requirement of limit.
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
---	Occupied Bandwidth	-	Reference only.
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.407(b)(9)	AC Power Conducted Emissions	Pass	Minimum passing margin is -10.93 dB at 0.16953 MHz
15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Minimum passing margin is -0.5 dB at 696.21 MHz
15.407(b) (1/10) 15.407(b) (2/10) 15.407(b) (3/10) 15.407(b) (4(i)/10)	Unwanted Emissions above 1 GHz	Pass	Minimum passing margin is -0.04 dB at 5466.81 MHz
15.203	Antenna Requirement	Pass	Antenna connector is i-pex(MHF) not a standard connector.

Notes:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. The "Dynamic Frequency Selection measurement" was recorded in DFS test report.

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) (±)
26 dB Bandwidth	-	1050.00 Hz
RF Output Power	-	1.1 dB
Power Spectral Density	-	1.3 dB
6 dB Bandwidth	-	1050.00 Hz
Occupied Bandwidth	-	1050.00 Hz
Frequency Stability	-	0.16 ppm
AC Power Conducted Emissions	150 kHz ~ 30 MHz	1.9 dB
Unwanted Emissions below 1 GHz	9 kHz ~ 30 MHz	3.1 dB
	30 MHz ~ 1 GHz	5.5 dB
Unwanted Emissions above 1 GHz	1 GHz ~ 18 GHz	5.1 dB
	18 GHz ~ 40 GHz	5.3 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	2TX 11be (WiFi7) BW160 + BT/BLE Combo Card
Brand	MediaTek
Test Model	MT7925B14L
Status of EUT	Engineering sample
Power Supply Rating	3.3 Vdc from host equipment
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode 1024QAM for OFDMA in 11ax mode 4096QAM for OFDMA in 11be mode
Modulation Technology	OFDM, OFDMA
Transfer Rate	802.11a: up to 54 Mbps 802.11n: up to 300 Mbps 802.11ac: up to 1733.3 Mbps 802.11ax: up to 2401.9 Mbps 802.11be: up to 1441.2 Mbps
Operating Frequency	5.18 GHz ~ 5.25 GHz 5.25 GHz ~ 5.32 GHz 5.5 GHz ~ 5.72 GHz 5.745 GHz ~ 5.825 GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20): 25 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 12 802.11ac (VHT80), 802.11ax (HE80): 6 802.11ac (VHT160), 802.11ax (HE160): 2 802.11be (EHT20): 9 802.11be (EHT40): 4 802.11be (EHT80): 2
Resource Unit (RU)	Single RU: 26-tone, 52-tone, 106-tone, 242-tone, 484-tone, 996-tone, 2 * 996-tone Multi-RU (Small RU): 52-tone + 26-tone, 106-tone + 26-tone Multi-RU (Large RU): 484-tone + 242-tone
Output Power	1TX: 5.18 GHz ~ 5.25 GHz: 149.624 mW (21.75 dBm) 5.26 GHz ~ 5.32 GHz: 157.036 mW (21.96 dBm) 5.5 GHz ~ 5.72 GHz: 184.927 mW (22.67 dBm) 5.745 GHz ~ 5.825 GHz: 277.332 mW (24.43 dBm) 2TX: 5.18 GHz ~ 5.25 GHz: 244.645 mW (23.89 dBm) 5.26 GHz ~ 5.32 GHz: 248.664 mW (23.96 dBm) 5.5 GHz ~ 5.72 GHz: 243.907 mW (23.87 dBm) 5.745 GHz ~ 5.825 GHz: 554.132 mW (27.44 dBm)
EUT Category	Client device

Note:

1. There are Bluetooth and WLAN (2.4 GHz & 5 GHz & 5.9 GHz & 6 GHz) technology used for the EUT.
2. Simultaneously transmission condition.

Condition	Technology	
1	WLAN (5 GHz) (2TX)	Bluetooth
2	WLAN (5.9 GHz) (2TX)	Bluetooth
3	WLAN (6 GHz) (2TX)	Bluetooth
4	WLAN (2.4 GHz) (1TX)	WLAN (5 GHz) (1TX)
5	WLAN (2.4 GHz) (1TX)	WLAN (5.9 GHz) (1TX)
6	WLAN (2.4 GHz) (1TX)	WLAN (6 GHz) (1TX)

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

3. The EUT support OFDMA and Partial RU mode, therefore partial RU combination were investigated and the worst case scenario was identified.
4. The EUT support MRU mode is listed as below.

BW	Small size		Large size
	52+26-tone MRU	106+26-tone MRU	484+242-tone MRU
20 MHz	v	v	-
40 MHz	v	v	-
80 MHz	v	v	v

5. 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 Set	RF Chain No.	Brand	Model	Antenna Net Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connector Type	Cable Length (mm)
1	Chain0	PSA	RFMTA340718EMLB302	3.18 4.92	2.4~2.4835 5.15~5.895	PIFA	i-pex(MHF)	200
	Chain1	PSA	RFMTA340718EMLB302	3.18 4.92	2.4~2.4835 5.15~5.895	PIFA	i-pex(MHF)	200
2	Chain0	PSA	RFMTA311020EMMB301	1.71 4.82 4.76 4.29 4.61 4.09	2.4~2.4835 5.15~5.895 5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)	200
	Chain1	PSA	RFMTA311020EMMB301	1.71 4.82 4.76 4.29 4.61 4.09	2.4~2.4835 5.15~5.895 5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)	200
3	Chain0	PSA	RFMTA421230IMMB701	-13.92 -13.91 -13.91 -14.46	5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)	300
	Chain1	PSA	RFMTA421230IMMB701	-13.92 -13.91 -13.91 -14.46	5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	PIFA	i-pex(MHF)	300

Note: Max. gain was selected for the final test.

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

2. The EUT incorporates a MIMO function:

5 GHz Band					
Modulation Mode	TX & RX Configuration		CDD Mode	Beamforming Mode	
802.11a	SIMO	1TX (Diversity)	2RX	Not Support	Not Support
802.11n (HT20)		1TX (Diversity)	2RX	Not Support	Not Support
802.11n (HT40)		1TX (Diversity)	2RX	Not Support	Not Support
802.11ac (VHT20)		1TX (Diversity)	2RX	Not Support	Not Support
802.11ac (VHT40)		1TX (Diversity)	2RX	Not Support	Not Support
802.11ac (VHT80)		1TX (Diversity)	2RX	Not Support	Not Support
802.11ac (VHT160)		1TX (Diversity)	2RX	Not Support	Not Support
802.11ax (HE20)		1TX (Diversity)	2RX	Not Support	Not Support
802.11ax (HE40)		1TX (Diversity)	2RX	Not Support	Not Support
802.11ax (HE80)		1TX (Diversity)	2RX	Not Support	Not Support
802.11ax (HE160)		1TX (Diversity)	2RX	Not Support	Not Support
802.11be (EHT20)		1TX (Diversity)	2RX	Not Support	Not Support
802.11be (EHT40)		1TX (Diversity)	2RX	Not Support	Not Support
802.11be (EHT80)		1TX (Diversity)	2RX	Not Support	Not Support
802.11ax (RU26/52/106/242/484/996/2x996)		1TX (Diversity)	2RX	Not Support	Not Support
802.11be (RU26/52/106/242/484/996/2x996 MRU52+26/106+26/484+242)		1TX (Diversity)	2RX	Not Support	Not Support
802.11a	MIMO	2TX	2RX	Support	Not Support
802.11n (HT20)		2TX	2RX	Support NSS2	Not Support
802.11n (HT40)		2TX	2RX	Support NSS2	Not Support
802.11ac (VHT20)		2TX	2RX	Support NSS2	Not Support
802.11ac (VHT40)		2TX	2RX	Support NSS2	Not Support
802.11ac (VHT80)		2TX	2RX	Support NSS2	Not Support
802.11ac (VHT160)		2TX	2RX	Support NSS2	Not Support
802.11ax (HE20)		2TX	2RX	Support NSS2	Not Support
802.11ax (HE40)		2TX	2RX	Support NSS2	Not Support
802.11ax (HE80)		2TX	2RX	Support NSS2	Not Support
802.11ax (HE160)		2TX	2RX	Support NSS2	Not Support
802.11be (EHT20)		2TX	2RX	Support NSS2	Not Support
802.11be (EHT40)		2TX	2RX	Support NSS2	Not Support
802.11be (EHT80)		2TX	2RX	Support NSS2	Not Support
802.11ax (RU26/52/106/242/484/996/2x996)		2TX	2RX	Support NSS2	Not Support
802.11be (RU26/52/106/242/484/996/2x996 MRU52+26/106+26/484+242)		2TX	2RX	Support NSS2	Not Support

Note: The modulation and bandwidth are similar for 802.11n mode for 20 MHz (40 MHz), 802.11ac mode for 20 MHz (40 MHz, 80 MHz, 160 MHz), 802.11ax mode for 20 MHz (40 MHz, 80 MHz, 160 MHz) and 802.11be mode for 20 MHz (40 MHz, 80 MHz) therefore the manufacturer will control the power for 802.11n/ac/ax mode is same as the 802.11be mode or more lower than it and investigated worst case to representative mode in test report.

3.3 Channel List

FOR 5180 ~ 5240 MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20), 802.11be (EHT20):

Channel	Frequency	Channel	Frequency
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40), 802.11be (EHT40):

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80), 802.11ax (HE80), 802.11be (EHT80):

Channel	Frequency
42	5210 MHz

FOR 5250 ~ 5320 MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

Channel	Frequency	Channel	Frequency
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency
58	5290 MHz

1 straddle channel is provided for 802.11ac (VHT160), 802.11ax (HE160):

Channel	Frequency
50	5250 MHz

FOR 5500 ~ 5720 MHz

12 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

Channel	Frequency	Channel	Frequency
100	5500 MHz	124	5620 MHz
104	5520 MHz	128	5640 MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz	144	5720 MHz

6 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40):

Channel	Frequency	Channel	Frequency
102	5510 MHz	126	5630 MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz	142	5710 MHz

3 channels are provided for 802.11ac (VHT80), 802.11ax (HE80):

Channel	Frequency	Channel	Frequency
106	5530 MHz	138	5690 MHz
122	5610 MHz		

1 channel is provided for 802.11ac (VHT160), 802.11ax (HE160):

Channel	Frequency
114	5570 MHz

FOR 5745 ~ 5825 MHz:

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20), 802.11be (EHT20):

Channel	Frequency	Channel	Frequency
149	5745 MHz	161	5805 MHz
153	5765 MHz	165	5825 MHz
157	5785 MHz		

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40), 802.11be (EHT40):

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

1 channel is provided for 802.11ac (VHT80), 802.11ax (HE80), 802.11be (EHT80):

Channel	Frequency
155	5775 MHz

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	- For 1Tx diversity configuration. Pre-scan in these chain 0 and chain 1 and find the worst case as a representative test condition. - The worst-case Partial RU modes across all supported bandwidth modes has been determined via pre-scan. - Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and data rates.
Worst Case:	- For 1Tx diversity configuration the worst chain is: Chain 0 - The worst case occurs in 20 MHz bandwidth (RU 26/52/106).

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

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter	RU/MRU Index
26 dB Bandwidth	A	802.11a	1TX / 2TX	52, 60, 64, 100, 116, 140, 144	BPSK	6Mb/s	NA
		802.11ax (HE20)	1S1T / 2S2T	52, 60, 64, 100, 116, 140, 144	BPSK	MCS0	NA
		802.11ax (HE40)	1S1T / 2S2T	54, 62, 102, 110, 134, 142	BPSK	MCS0	NA
		802.11ax (HE80)	1S1T / 2S2T	58, 106, 122, 138	BPSK	MCS0	NA
		802.11ax (HE160)	1S1T / 2S2T	50, 114	BPSK	MCS0	NA
		802.11ax (HE20) 26-tone RU	1S1T / 2S2T	64, 100, 140, 144	BPSK	MCS0	8, 0, 8, 8
		802.11ax (HE20) 52-tone RU	1S1T / 2S2T	64, 100, 140, 144	BPSK	MCS0	40, 37, 40, 40
		802.11ax (HE20) 106-tone RU	1S1T / 2S2T	64, 100, 140, 144	BPSK	MCS0	54, 53, 54, 54

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter	RU/MRU Index
RF Output Power	A	802.11a	1TX / 2TX	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s	NA
		802.11ac (VHT20)	1S1T / 2S2T	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0	NA
		802.11ac (VHT40)	1S1T / 2S2T	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0	NA
		802.11ac (VHT80)	1S1T / 2S2T	42, 58, 106, 122, 138, 155	BPSK	MCS0	NA
		802.11ac (VHT160)	1S1T / 2S2T	50, 114	BPSK	MCS0	NA
		802.11ax (HE20)	1S1T / 2S2T	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0	NA
		802.11ax (HE40)	1S1T / 2S2T	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0	NA
		802.11ax (HE80)	1S1T / 2S2T	42, 58, 106, 122, 138, 155	BPSK	MCS0	NA
		802.11ax (HE160)	1S1T / 2S2T	50, 114	BPSK	MCS0	NA
		802.11be (EHT20)	1S1T / 2S2T	36, 40, 48, 149, 157, 165	BPSK	MCS0	NA
		802.11be (EHT40)	1S1T / 2S2T	38, 46, 151, 159	BPSK	MCS0	NA
		802.11be (EHT80)	1S1T / 2S2T	42, 155	BPSK	MCS0	NA
		802.11ax (HE20) 26-tone RU	1S1T / 2S2T	36, 64, 100, 140, 144, 149, 165	BPSK	MCS0	0, 8, 0, 8, 8, 0, 8
		802.11ax (HE20) 52-tone RU	1S1T / 2S2T	36, 64, 100, 140, 144, 149, 165	BPSK	MCS0	37, 40, 37, 40, 40, 37, 40
		802.11ax (HE20) 106-tone RU	1S1T / 2S2T	36, 64, 100, 140, 144, 149, 165	BPSK	MCS0	53, 54, 53, 54, 54, 53, 54
		802.11be (EHT20) 26-tone RU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	0, 0, 8
		802.11be (EHT20) 52-tone RU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	37, 37, 40
		802.11be (EHT20) 106-tone RU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	53, 53, 54
		802.11be (EHT20) 52+26-tone MRU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	70, 70, 72
		802.11be (EHT20) 106+26-tone MRU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	82, 82, 83
		802.11be (EHT80) 484+242-tone MRU	1S1T / 2S2T	42, 155	BPSK	MCS0	93, 93

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter	RU/MRU Index
Power Spectral Density	A	802.11a	1TX / 2TX	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s	NA
		802.11ax (HE20)	1S1T / 2S2T	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0	NA
		802.11ax (HE40)	1S1T / 2S2T	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0	NA
		802.11ax (HE80)	1S1T / 2S2T	42, 58, 106, 122, 138, 155	BPSK	MCS0	NA
		802.11ax (HE160)	1S1T / 2S2T	50, 114	BPSK	MCS0	NA
		802.11be (EHT20)	1S1T / 2S2T	36, 40, 48, 149, 157, 165	BPSK	MCS0	NA
		802.11be (EHT40)	1S1T / 2S2T	38, 46, 151, 159	BPSK	MCS0	NA
		802.11be (EHT80)	1S1T / 2S2T	42, 155	BPSK	MCS0	NA
		802.11ax (HE20) 26-tone RU	1S1T / 2S2T	36, 64, 100, 140, 144, 149, 165	BPSK	MCS0	0, 8, 0, 8, 8, 0, 8
		802.11ax (HE20) 52-tone RU	1S1T / 2S2T	36, 64, 100, 140, 144, 149, 165	BPSK	MCS0	37, 40, 37, 40, 40, 37, 40
		802.11ax (HE20) 106-tone RU	1S1T / 2S2T	36, 64, 100, 140, 144, 149, 165	BPSK	MCS0	53, 54, 53, 54, 54, 53, 54
		802.11be (EHT20) 26-tone RU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	0, 0, 8
		802.11be (EHT20) 52-tone RU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	37, 37, 40
		802.11be (EHT20) 106-tone RU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	53, 53, 54
		802.11be (EHT20) 52+26-tone MRU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	70, 70, 72
		802.11be (EHT20) 106+26-tone MRU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	82, 82, 83
		802.11be (EHT80) 484+242-tone MRU	1S1T / 2S2T	42, 155	BPSK	MCS0	93, 93

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter	RU/MRU Index
6 dB Bandwidth	A	802.11a	1TX / 2TX	144, 149, 157, 165	BPSK	6Mb/s	NA
		802.11ax (HE20)	1S1T / 2S2T	144, 149, 157, 165	BPSK	MCS0	NA
		802.11ax (HE40)	1S1T / 2S2T	142, 151, 159	BPSK	MCS0	NA
		802.11ax (HE80)	1S1T / 2S2T	138, 155	BPSK	MCS0	NA
		802.11be (EHT20)	1S1T / 2S2T	149, 157, 165	BPSK	MCS0	NA
		802.11be (EHT40)	1S1T / 2S2T	151, 159	BPSK	MCS0	NA
		802.11be (EHT80)	1S1T / 2S2T	155	BPSK	MCS0	NA
		802.11ax (HE20) 26-tone RU	1S1T / 2S2T	144, 149, 165	BPSK	MCS0	8, 0, 8
		802.11ax (HE20) 52-tone RU	1S1T / 2S2T	144, 149, 165	BPSK	MCS0	40, 37, 40
		802.11ax (HE20) 106-tone RU	1S1T / 2S2T	144, 149, 165	BPSK	MCS0	54, 53, 54
		802.11be (EHT20) 26-tone RU	1S1T / 2S2T	149, 165	BPSK	MCS0	0, 8
		802.11be (EHT20) 52-tone RU	1S1T / 2S2T	149, 165	BPSK	MCS0	37, 40
		802.11be (EHT20) 106-tone RU	1S1T / 2S2T	149, 165	BPSK	MCS0	53, 54
		802.11be (EHT20) 52+26-tone MRU	1S1T / 2S2T	149, 165	BPSK	MCS0	70, 72
		802.11be (EHT20) 106+26-tone MRU	1S1T / 2S2T	149, 165	BPSK	MCS0	82 ,83
		802.11be (EHT80) 484+242-tone MRU	1S1T / 2S2T	155	BPSK	MCS0	93
Occupied Bandwidth	A	802.11a	1TX / 2TX	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s	NA
		802.11ax (HE20)	1S1T / 2S2T	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0	NA
		802.11ax (HE40)	1S1T / 2S2T	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0	NA
		802.11ax (HE80)	1S1T / 2S2T	42, 58, 106, 122, 138, 155	BPSK	MCS0	NA
		802.11ax (HE160)	1S1T / 2S2T	50, 114	BPSK	MCS0	NA
		802.11be (EHT20)	1S1T / 2S2T	36, 40, 48,149, 157, 165	BPSK	MCS0	NA
		802.11be (EHT40)	1S1T / 2S2T	38, 46, 151, 159	BPSK	MCS0	NA
		802.11be (EHT80)	1S1T / 2S2T	42, 155	BPSK	MCS0	NA
		802.11ax (HE20) 26-tone RU	1S1T / 2S2T	36, 64, 100, 140, 144, 149, 165	BPSK	MCS0	0, 8, 0, 8, 8, 0, 8
		802.11ax (HE20) 52-tone RU	1S1T / 2S2T	36, 64, 100, 140, 144, 149, 165	BPSK	MCS0	37, 40, 37, 40, 40, 37, 40
		802.11ax (HE20) 106-tone RU	1S1T / 2S2T	36, 64, 100, 140, 144, 149, 165	BPSK	MCS0	53, 54, 53, 54, 54, 53, 54

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter	RU/MRU Index
Occupied Bandwidth	A	802.11be (EHT20) 26-tone RU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	0, 0, 8
		802.11be (EHT20) 52-tone RU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	37, 37, 40
		802.11be (EHT20) 106-tone RU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	53, 53, 54
		802.11be (EHT20) 52+26-tone MRU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	70, 70, 72
		802.11be (EHT20) 106+26-tone MRU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	82, 82, 83
		802.11be (EHT80) 484+242-tone MRU	1S1T / 2S2T	42, 155	BPSK	MCS0	93, 93
Frequency Stability	A	802.11a	-	36	unmodulated	-	NA
AC Power Conducted Emissions	C	802.11be (EHT20)	1S1T	165	BPSK	MCS0	NA
			2S2T	165	BPSK	MCS0	NA
Unwanted Emissions below 1 GHz	A, B	802.11be (EHT20)	1S1T	165	BPSK	MCS0	NA
			2S2T	165	BPSK	MCS0	NA
Unwanted Emissions above 1 GHz	A, B	802.11a	1TX / 2TX	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	6Mb/s	NA
		802.11ax (HE20)	1S1T / 2S2T	36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165	BPSK	MCS0	NA
		802.11ax (HE40)	1S1T / 2S2T	38, 46, 54, 62, 102, 110, 134, 142, 151, 159	BPSK	MCS0	NA
		802.11ax (HE80)	1S1T / 2S2T	42, 58, 106, 122, 138, 155	BPSK	MCS0	NA
		802.11ax (HE160)	1S1T / 2S2T	50, 114	BPSK	MCS0	NA
		802.11be (EHT20)	1S1T / 2S2T	36, 40, 48, 149, 157, 165	BPSK	MCS0	NA
		802.11be (EHT40)	1S1T / 2S2T	38, 46, 151, 159	BPSK	MCS0	NA
		802.11be (EHT80)	1S1T / 2S2T	42, 155	BPSK	MCS0	NA
		802.11ax (HE20) 26-tone RU	1S1T / 2S2T	36, 64, 100, 140, 144, 149, 165	BPSK	MCS0	0, 8, 0, 8, 8, 0, 8
		802.11ax (HE20) 52-tone RU	1S1T / 2S2T	36, 64, 100, 140, 144, 149, 165	BPSK	MCS0	37, 40, 37, 40, 40, 37, 40
		802.11ax (HE20) 106-tone RU	1S1T / 2S2T	36, 64, 100, 140, 144, 149, 165	BPSK	MCS0	53, 54, 53, 54, 54, 53, 54

Test Item	EUT Configure Mode	Mode	Signal Mode	Tested Channel	Modulation	Data Rate Parameter	RU/MRU Index
Unwanted Emissions above 1 GHz	A, B	802.11be (EHT20) 26-tone RU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	0, 0, 8
		802.11be (EHT20) 52-tone RU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	37, 37, 40
		802.11be (EHT20) 106-tone RU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	53, 53, 54
		802.11be (EHT20) 52+26-tone MRU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	70, 70, 72
		802.11be (EHT20) 106+26-tone MRU	1S1T / 2S2T	36, 149, 165	BPSK	MCS0	82, 82 ,83
		802.11be (EHT80) 484+242-tone MRU	1S1T / 2S2T	42, 155	BPSK	MCS0	93, 93
EUT Configure Mode:	A	EUT only (remove 50 ohm terminator and Connect to the appropriate equipment)					
	B	EUT with 50 ohm terminator					
	C	EUT with antenna					
Note: Channel puncturing mechanism is not supported.							

3.5 Duty Cycle of Test Signal

802.11a 1TX: Duty cycle = 2.014 ms / 3.287 ms x 100% = 61.3%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 2.13$ dB

802.11ac (VHT20) 1S1T:

Duty cycle = 5.168 ms / 6.464 ms x 100% = 80.0%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.97$ dB

802.11ac (VHT40) 1S1T:

Duty cycle = 4.972 ms / 6.298 ms x 100% = 78.9%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.03$ dB

802.11ac (VHT80) 1S1T:

Duty cycle = 2.32 ms / 2.985 ms x 100% = 77.7%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.09$ dB

802.11ac (VHT160) 1S1T:

Duty cycle = 2.14 ms / 2.645 ms x 100% = 80.9%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.92$ dB

802.11ax (HE20) 1S1T:

Duty cycle = 3.933 ms / 5.213 ms x 100% = 75.4%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.22$ dB

802.11ax (HE40) 1S1T:

Duty cycle = 3.925 ms / 5.213 ms x 100% = 75.3%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.23$ dB

802.11ax (HE80) 1S1T:

Duty cycle = 1.93 ms / 2.605 ms x 100% = 74.1%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.30$ dB

802.11ax (HE160) 1S1T:

Duty cycle = 1.77 ms / 2.26 ms x 100% = 78.3%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.06$ dB

802.11be (EHT20) 1S1T:

Duty cycle = 4.611 ms / 5.929 ms x 100% = 77.8%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.09$ dB

802.11be (EHT40) 1S1T:

Duty cycle = 4.655 ms / 5.936 ms x 100% = 78.4%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.06$ dB

802.11be (EHT80) 1S1T:

Duty cycle = 2.24 ms / 2.935 ms x 100% = 76.3%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.17$ dB

802.11ax (HE20) 26-tone RU 1S1T:

Duty cycle = 1.602 ms / 1.73 ms x 100% = 92.6%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.33$ dB

802.11ax (HE20) 52-tone RU 1S1T:

Duty cycle = 1.602 ms / 1.73 ms x 100% = 92.6%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.33$ dB

802.11ax (HE20) 106-tone RU 1S1T:

Duty cycle = 1.602 ms / 1.73 ms x 100% = 92.6%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.33$ dB

802.11be (EHT20) 26-tone RU 1S1T:

Duty cycle = 1.606 ms / 1.73 ms x 100% = 92.8%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.32$ dB

802.11be (EHT20) 52-tone RU 1S1T:

Duty cycle = 1.606 ms / 1.73 ms x 100% = 92.8%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.32$ dB

802.11be (EHT20) 106-tone RU 1S1T:

Duty cycle = 1.606 ms / 1.73 ms x 100% = 92.8%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.32$ dB

802.11be (EHT20) 52+26-tone MRU 1S1T:

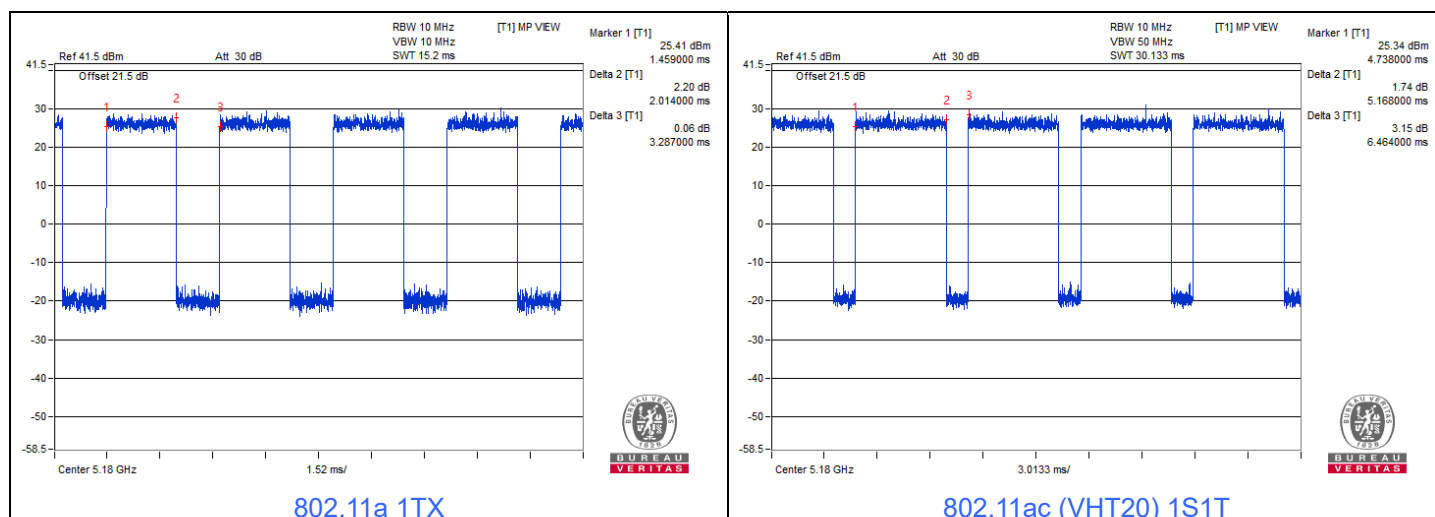
Duty cycle = 1.493 ms / 1.602 ms x 100% = 93.2%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.31$ dB

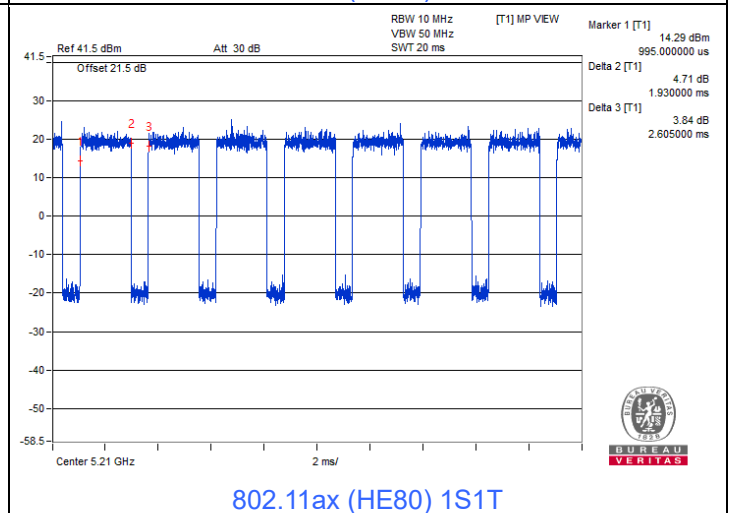
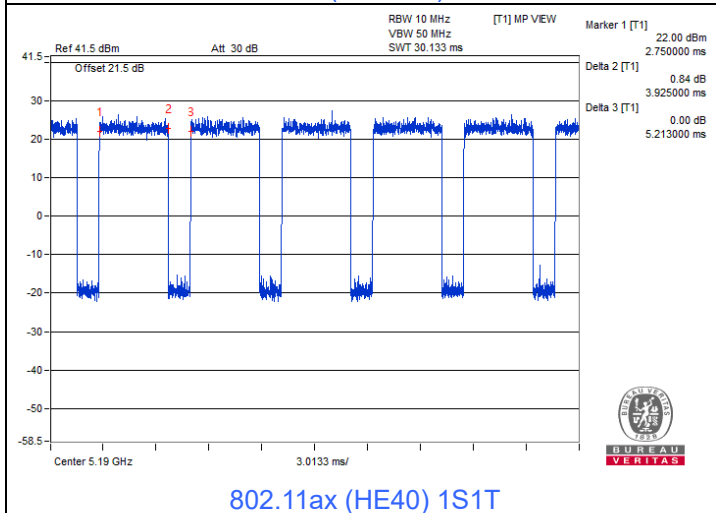
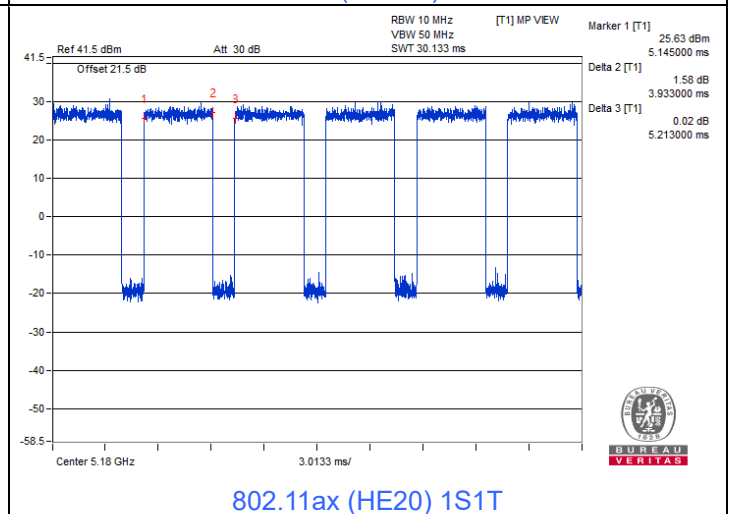
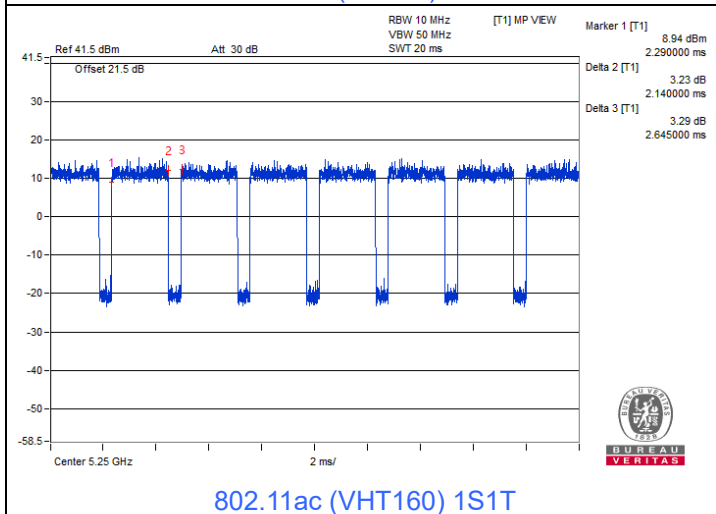
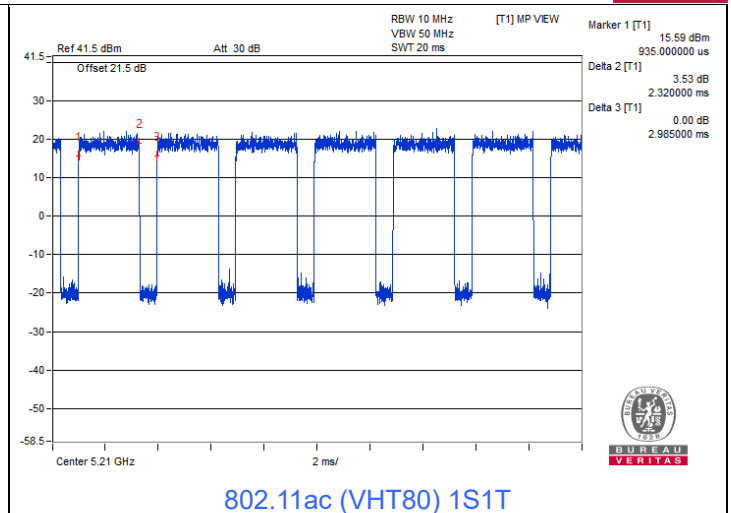
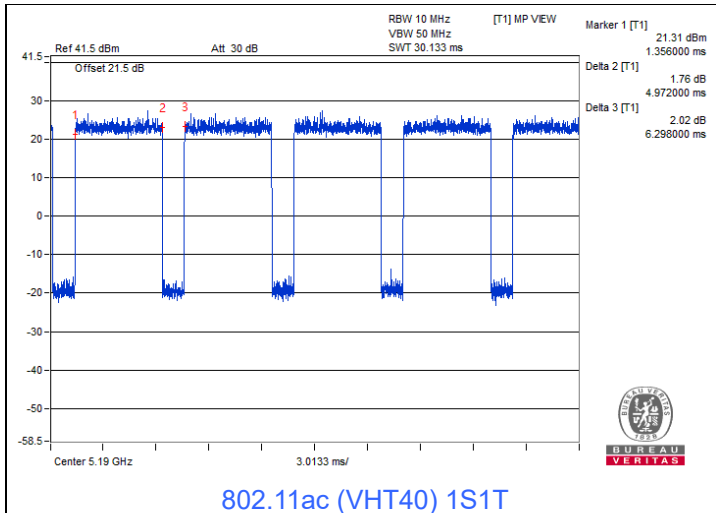
802.11be (EHT20) 106+26-tone MRU 1S1T:

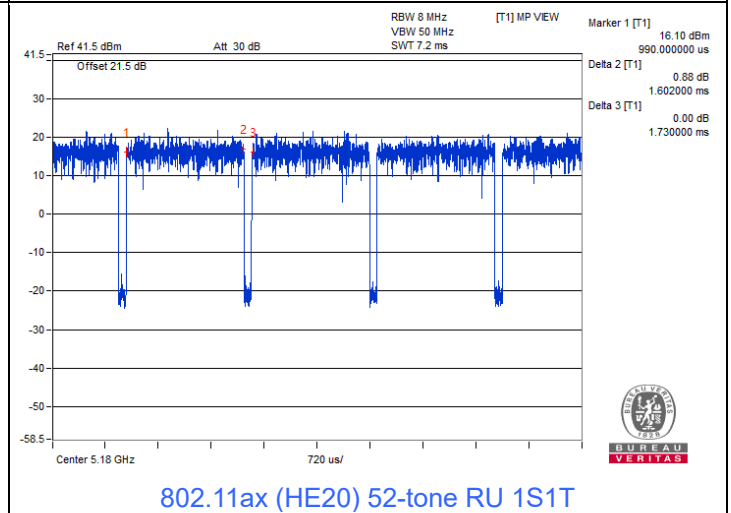
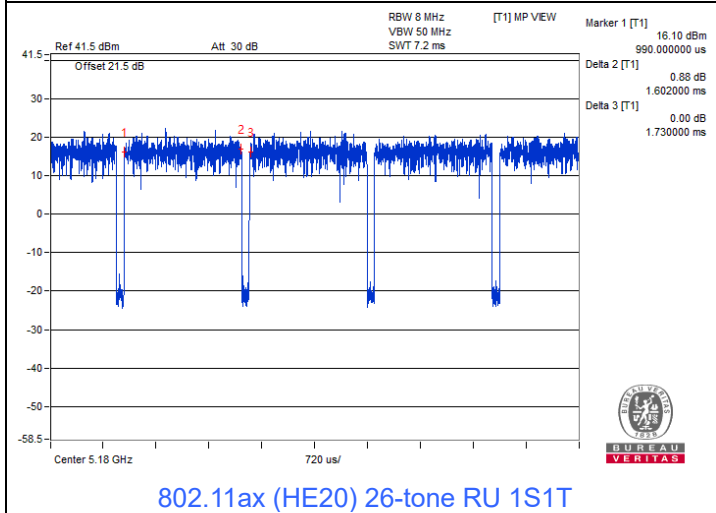
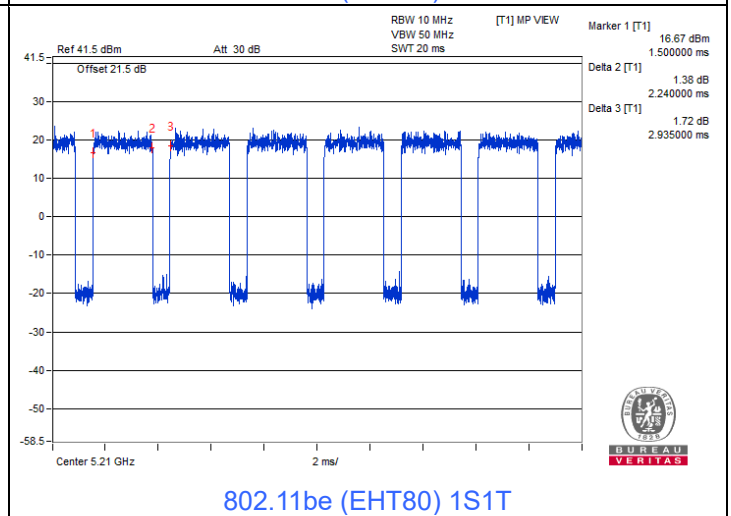
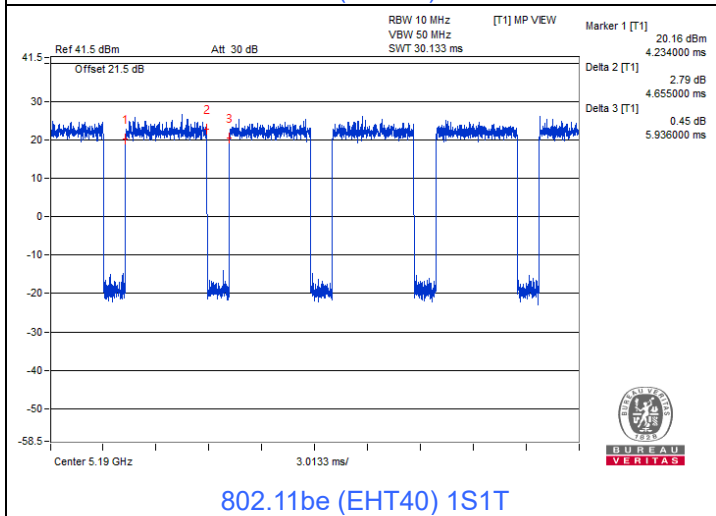
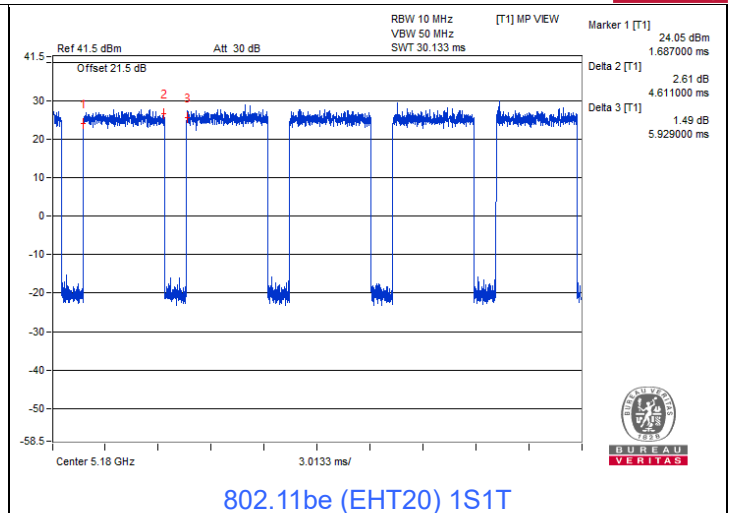
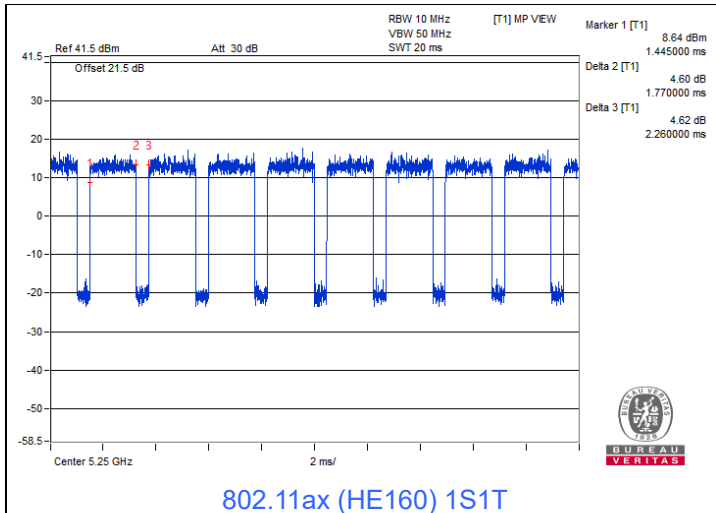
Duty cycle = 1.659 ms / 1.771 ms x 100% = 93.7%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.28$ dB

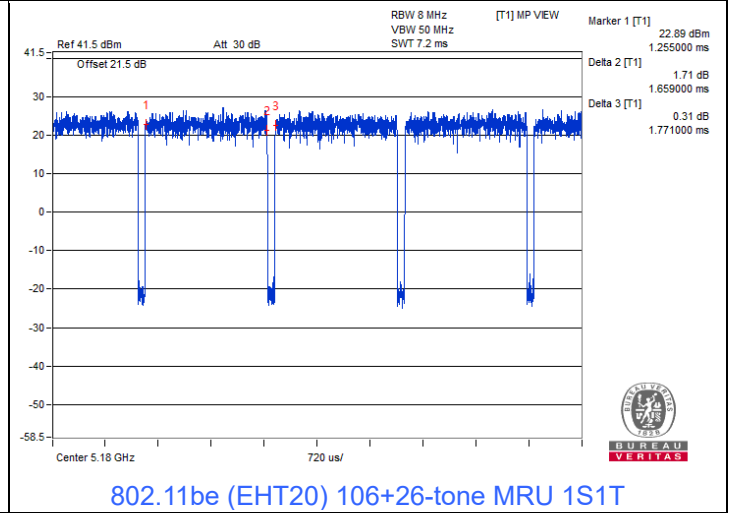
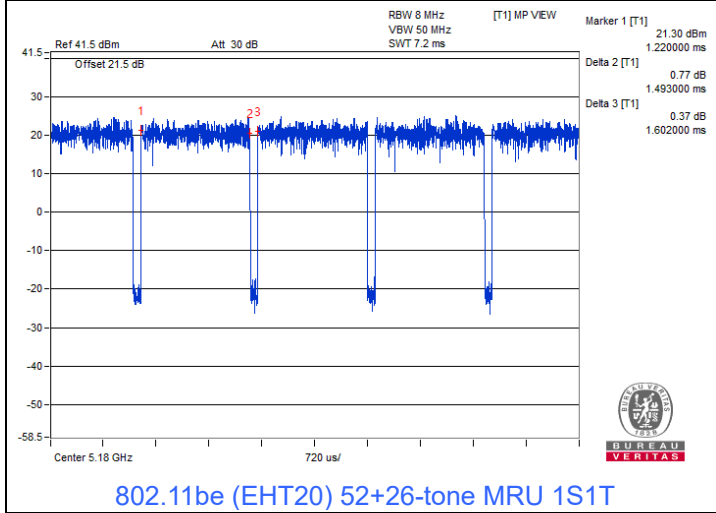
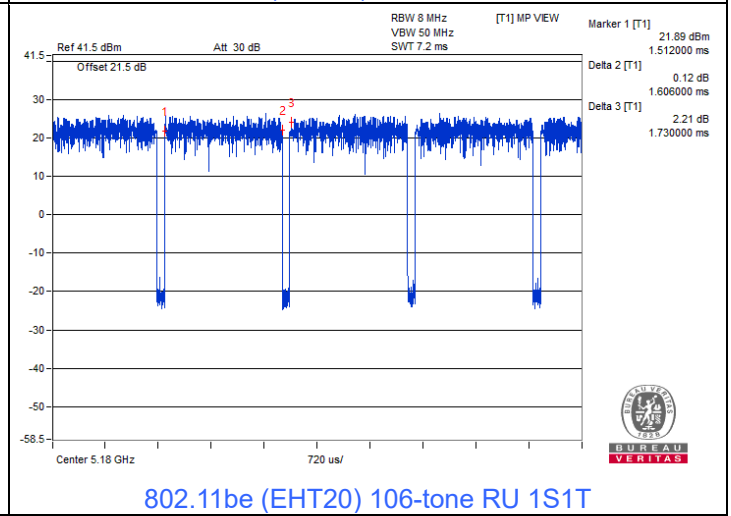
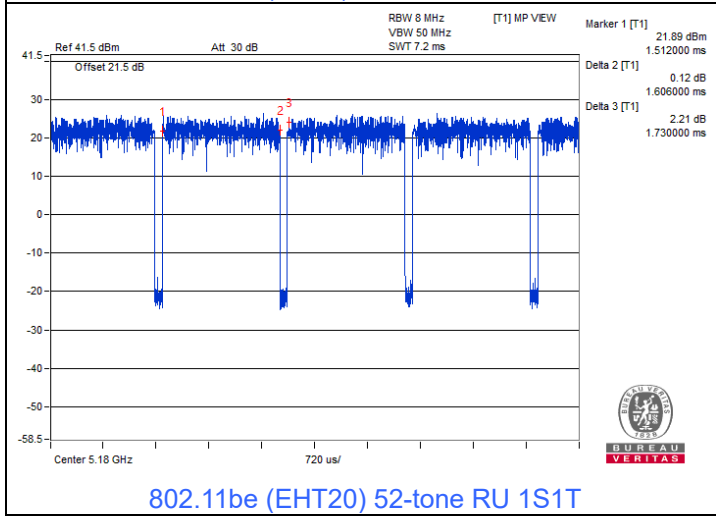
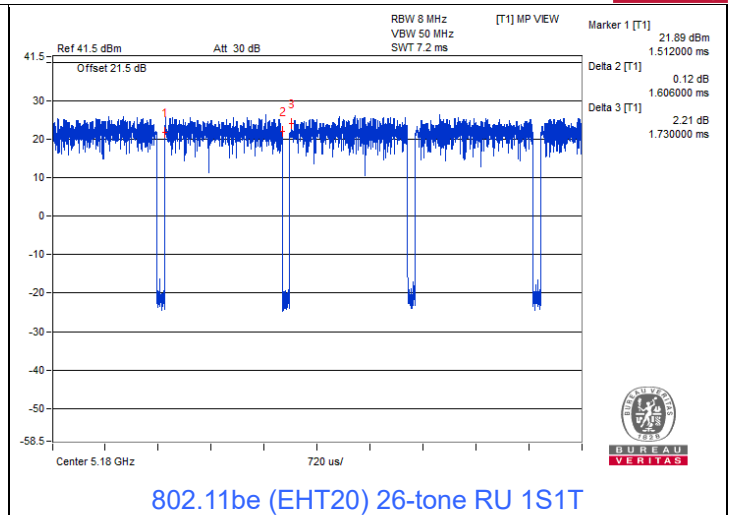
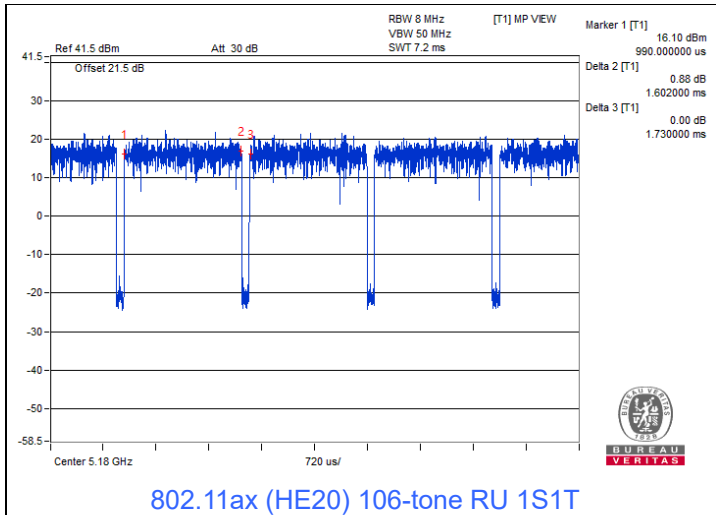
802.11be (EHT80) 484+242-tone MRU 1S1T:

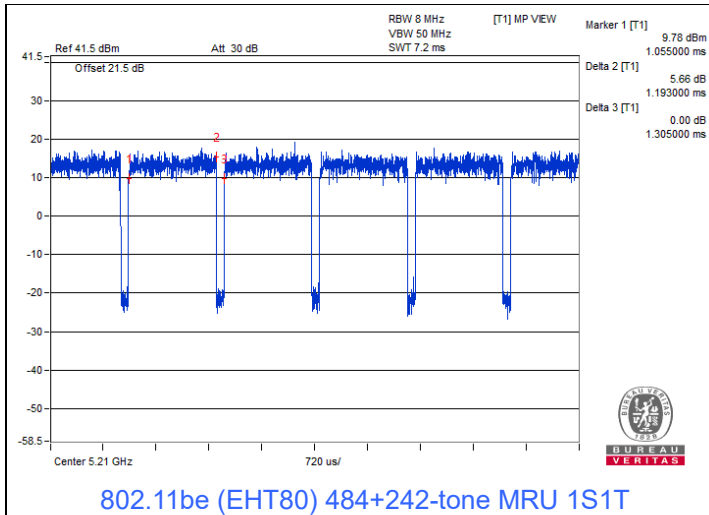
Duty cycle = 1.193 ms / 1.305 ms x 100% = 91.4%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.39$ dB











802.11a 2TX:

Duty cycle = 2.01 ms / 3.276 ms x 100% = 61.4%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 2.12 \text{ dB}$

802.11ac (VHT20) 2S2T:

Duty cycle = 2.607 ms / 3.872 ms x 100% = 67.3%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.72 \text{ dB}$

802.11ac (VHT40) 2S2T:

Duty cycle = 2.524 ms / 3.804 ms x 100% = 66.4%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.78 \text{ dB}$

802.11ac (VHT80) 2S2T:

Duty cycle = 1.183 ms / 1.854 ms x 100% = 63.8%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.95 \text{ dB}$

802.11ac (VHT160) 2S2T:

Duty cycle = 1.092 ms / 1.581 ms x 100% = 69.1%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.61 \text{ dB}$

802.11ax (HE20) 2S2T:

Duty cycle = 2.018 ms / 3.298 ms x 100% = 61.2%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 2.13 \text{ dB}$

802.11ax (HE40) 2S2T:

Duty cycle = 1.999 ms / 3.303 ms x 100% = 60.5%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 2.18 \text{ dB}$

802.11ax (HE80) 2S2T:

Duty cycle = 1.006 ms / 1.675 ms x 100% = 60.1%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 2.21 \text{ dB}$

802.11ax (HE160) 2S2T:

Duty cycle = 0.93 ms / 1.426 ms x 100% = 65.2%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.86 \text{ dB}$

802.11be (EHT20) 2S2T:

Duty cycle = 2.371 ms / 3.633 ms x 100% = 65.3%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.85 \text{ dB}$

802.11be (EHT40) 2S2T:

Duty cycle = 2.364 ms / 3.652 ms x 100% = 64.7%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.89 \text{ dB}$

802.11be (EHT80) 2S2T:

Duty cycle = 1.183 ms / 1.842 ms x 100% = 64.2%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 1.92 \text{ dB}$

802.11ax (HE20) 26-tone RU 2S2T:

Duty cycle = 0.839 ms / 0.962 ms x 100% = 87.2%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.59 \text{ dB}$

802.11ax (HE20) 52-tone RU 2S2T:

Duty cycle = 0.839 ms / 0.962 ms x 100% = 87.2%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.59 \text{ dB}$

802.11ax (HE20) 106-tone RU 2S2T:

Duty cycle = 0.839 ms / 0.962 ms x 100% = 87.2%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.59 \text{ dB}$

802.11be (EHT20) 26-tone RU 2S2T:

Duty cycle = 0.853 ms / 0.966 ms x 100% = 88.3%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.54 \text{ dB}$

802.11be (EHT20) 52-tone RU 2S2T:

Duty cycle = 0.853 ms / 0.966 ms x 100% = 88.3%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.54 \text{ dB}$

802.11be (EHT20) 106-tone RU 2S2T:

Duty cycle = 0.853 ms / 0.966 ms x 100% = 88.3%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.54 \text{ dB}$

802.11be (EHT20) 52+26-tone MRU 2S2T:

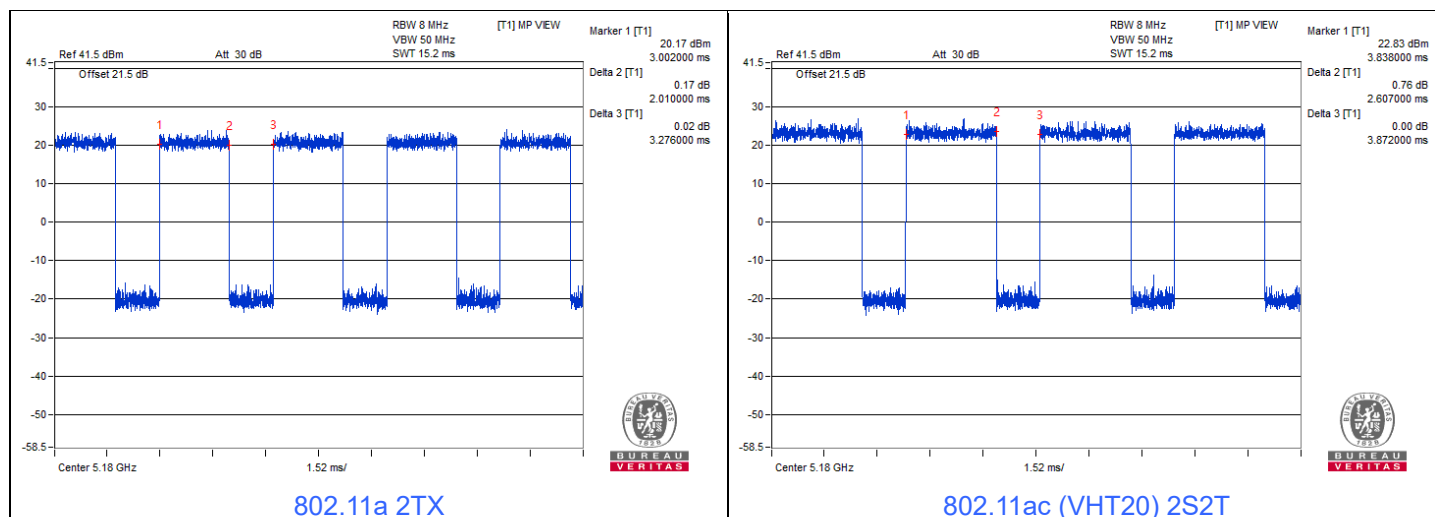
Duty cycle = 0.803 ms / 0.922 ms x 100% = 87.1%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.60 \text{ dB}$

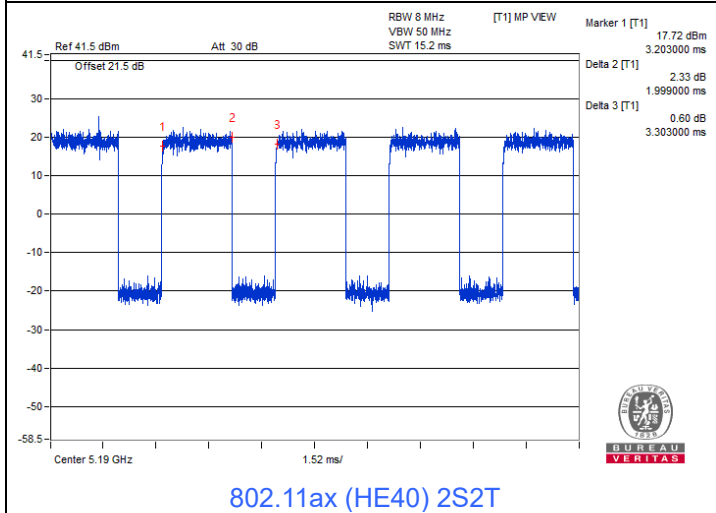
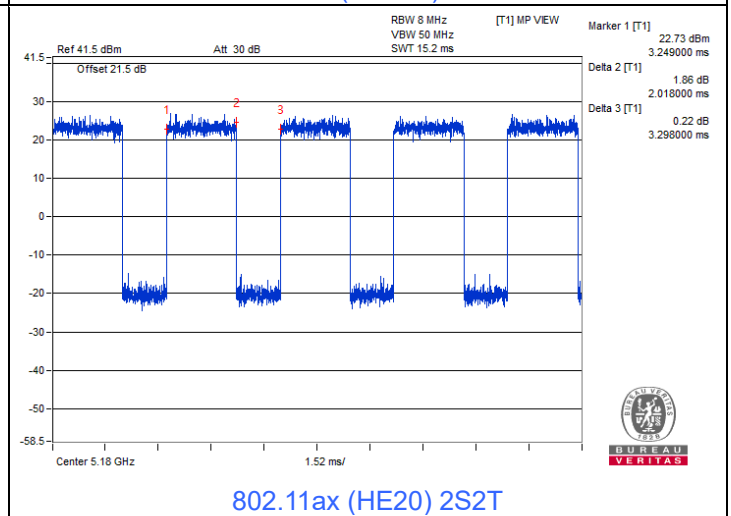
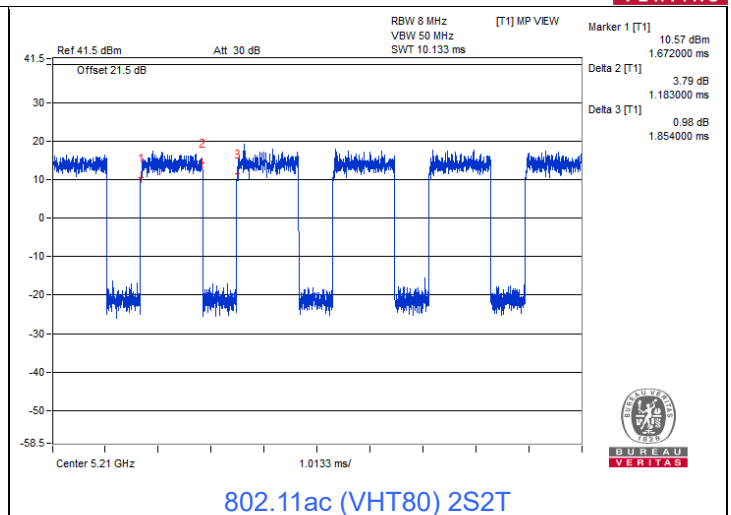
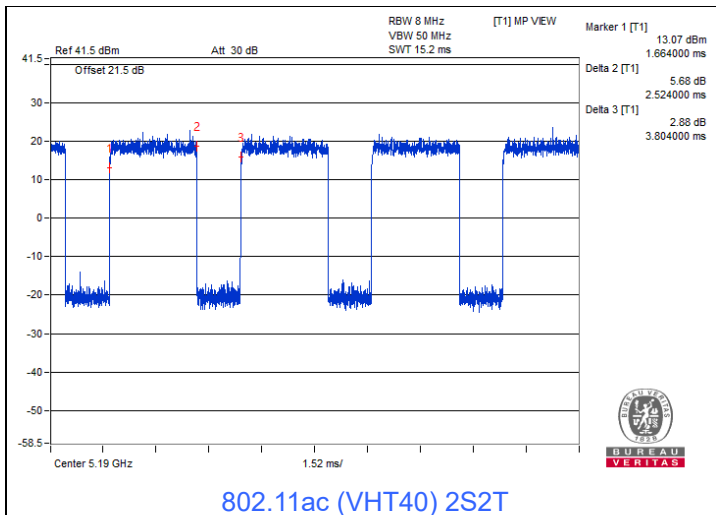
802.11be (EHT20) 106+26-tone MRU 2S2T:

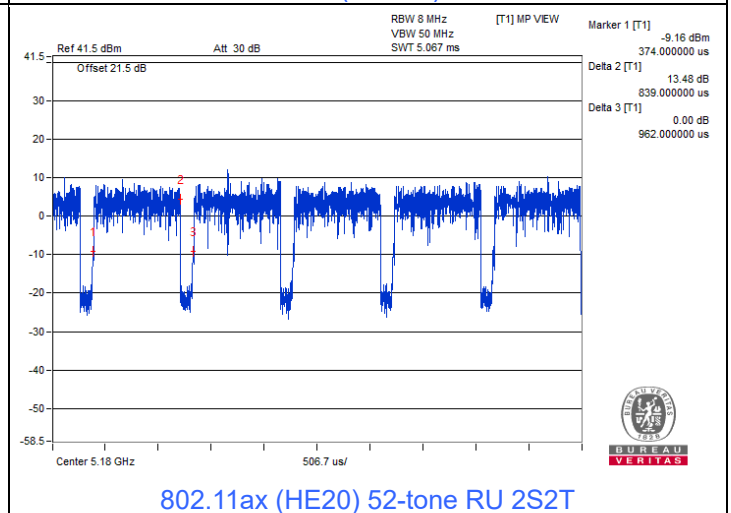
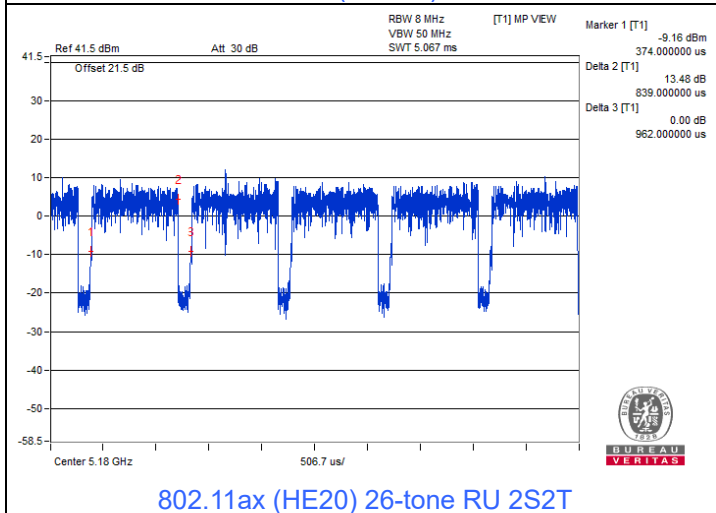
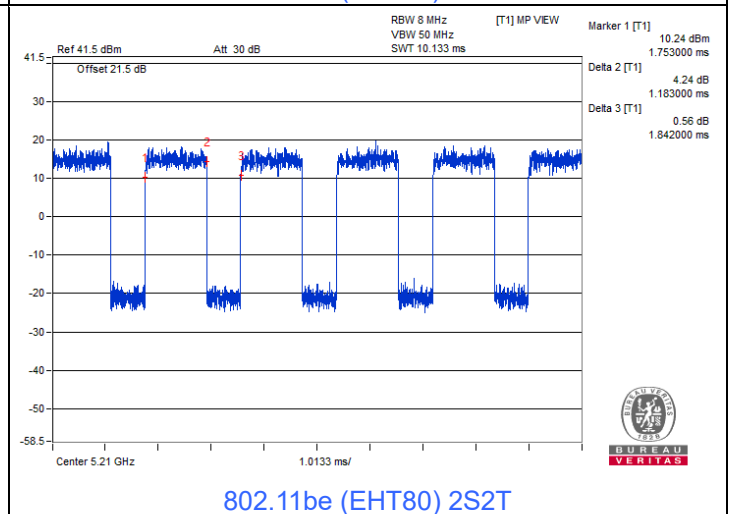
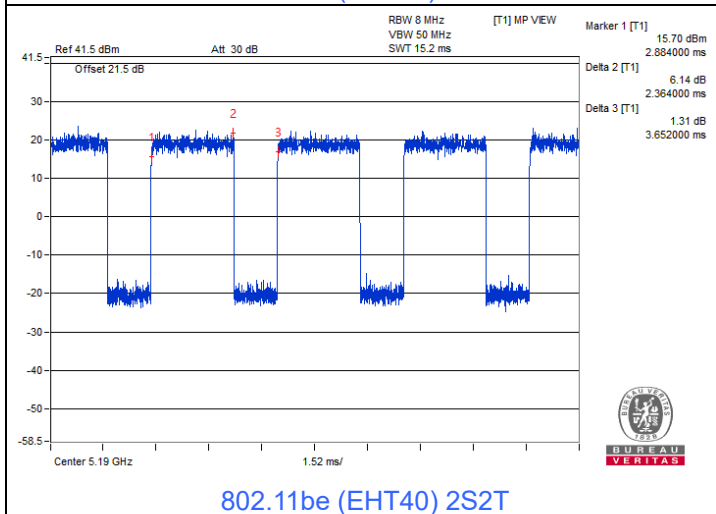
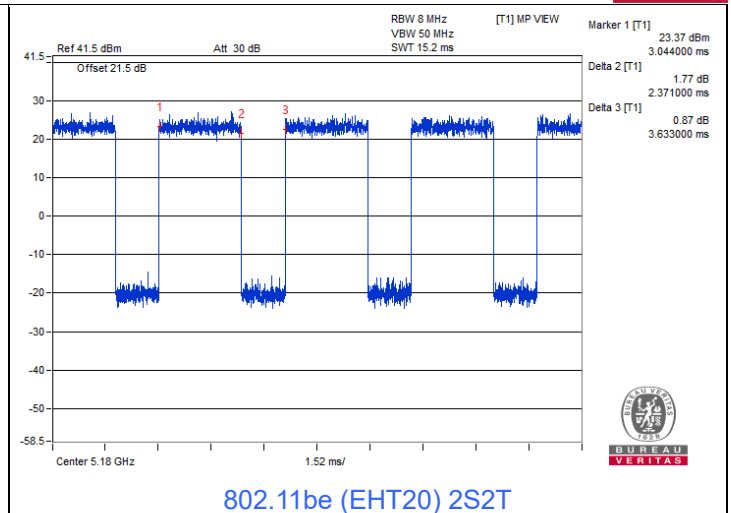
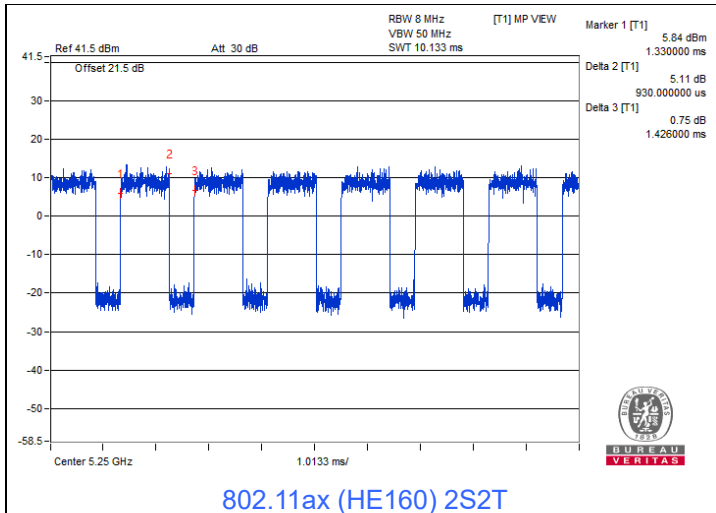
Duty cycle = 0.882 ms / 0.989 ms x 100% = 89.2%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.50 \text{ dB}$

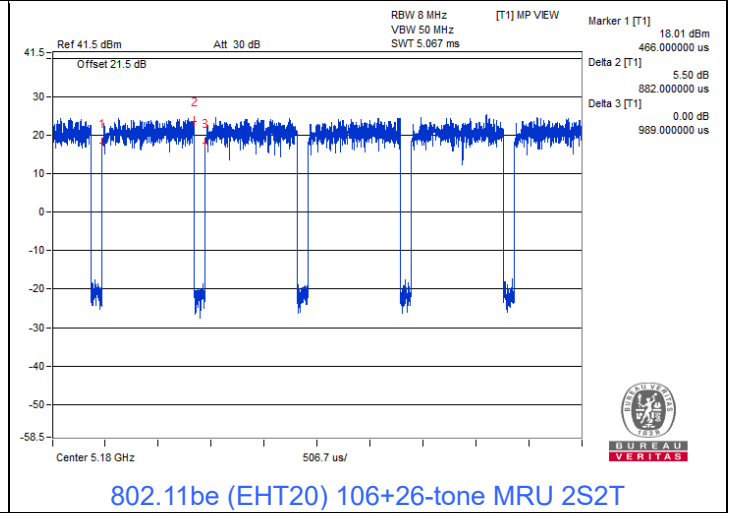
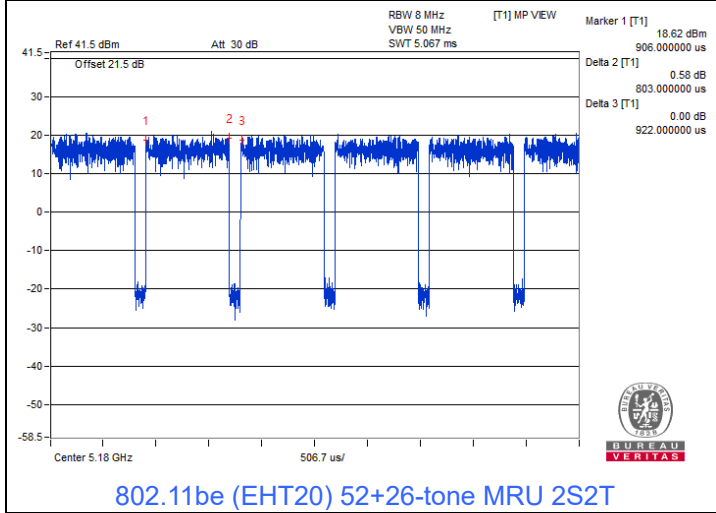
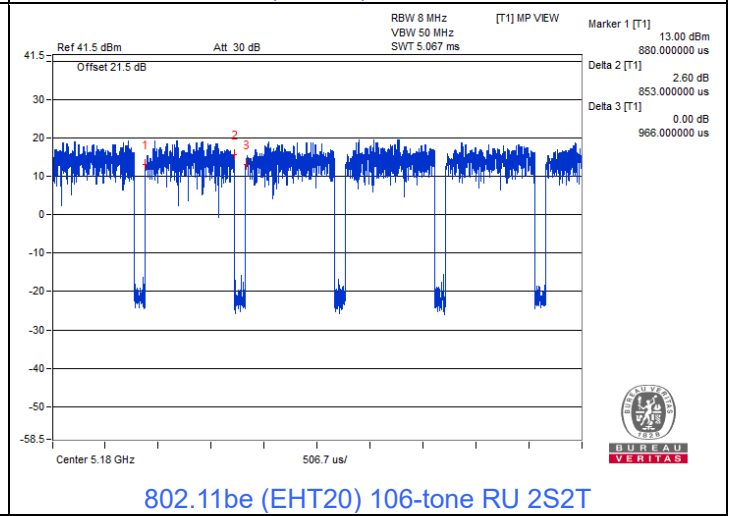
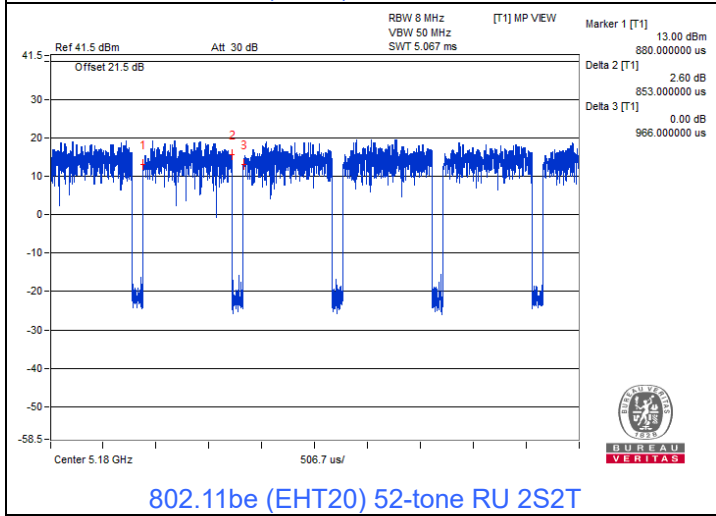
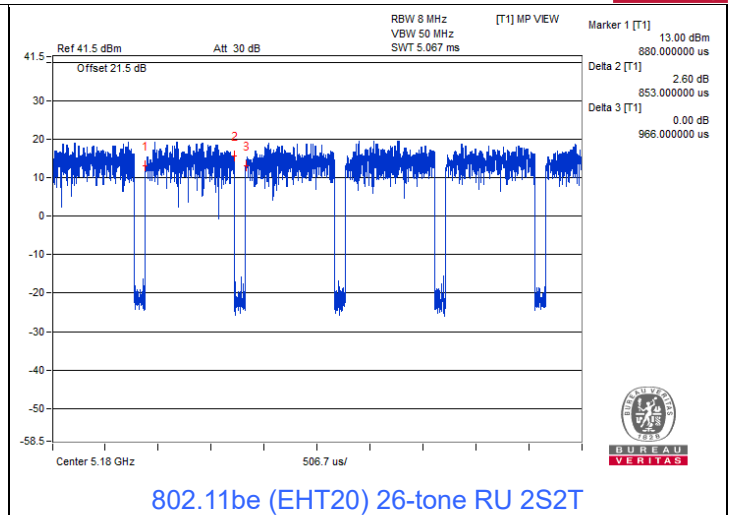
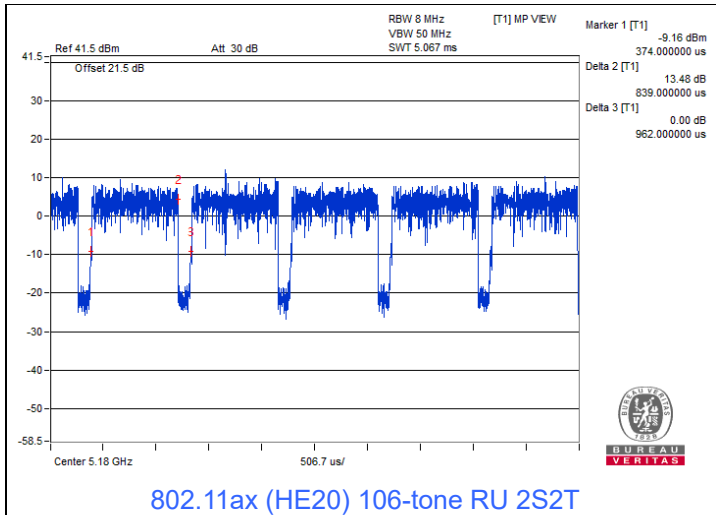
802.11be (EHT80) 484+242-tone MRU 2S2T:

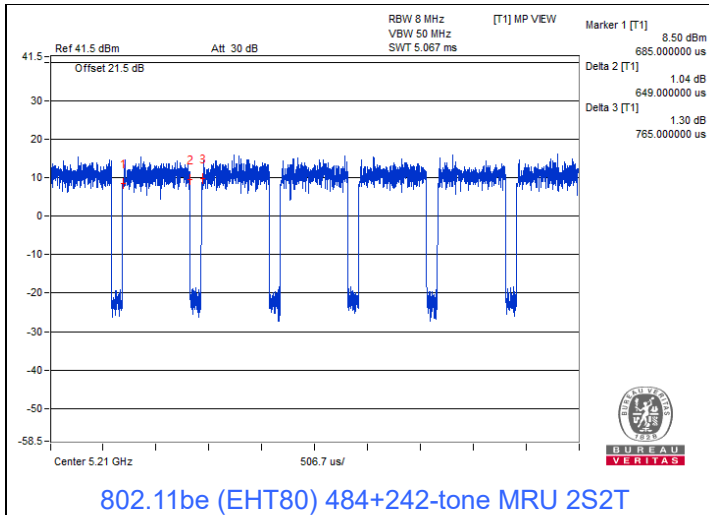
Duty cycle = 0.649 ms / 0.765 ms x 100% = 84.8%, duty factor = $10 \cdot \log(1/\text{Duty cycle}) = 0.71 \text{ dB}$









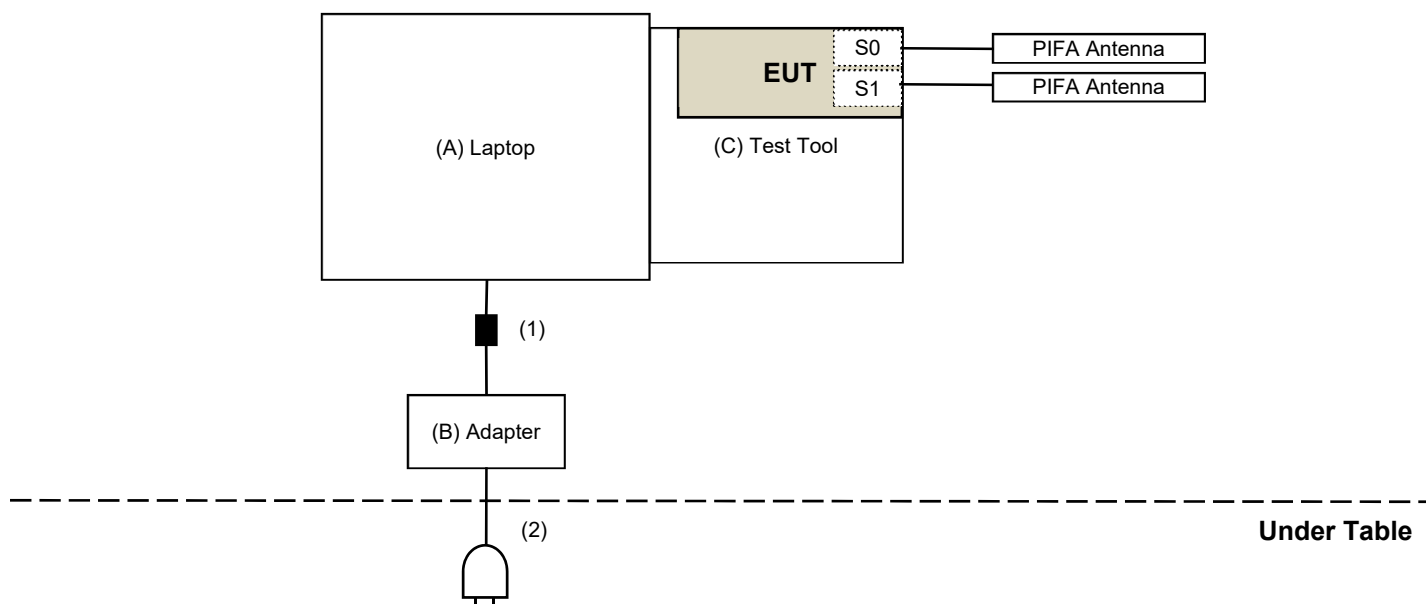


3.6 Test Program Used and Operation Descriptions

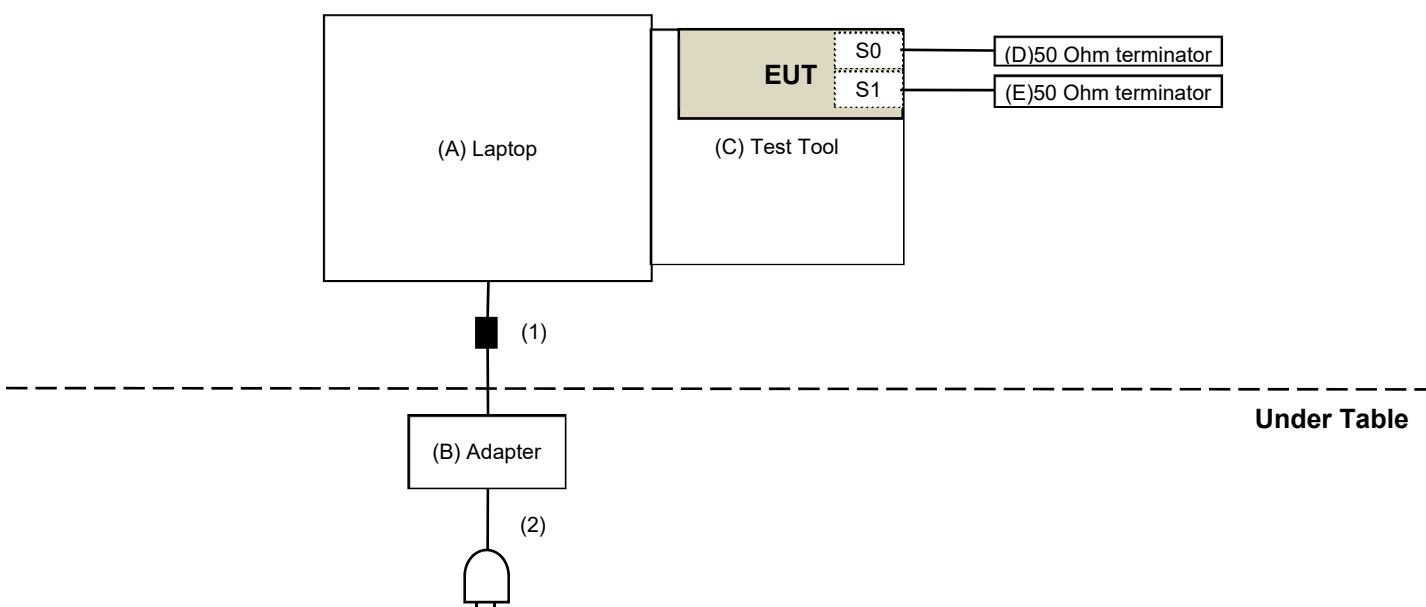
Controlling software (QAtool_V16 (0.0.2.104)) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.7 Connection Diagram of EUT and Peripheral Devices

For AC Power Conducted Emission test



For Unwanted Emission test



3.8 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Laptop	DELL	E5430	HYV4VY1	DoC	Provided by Lab
B	Adapter	DELL	LLA65NS2-01	N/A	N/A	Provided by Lab
C	Test Tool	Mediatek	MTK1849	N/A	N/A	Supplied by applicant
D	50 Ohm terminator	WOKEN	WTER-18S2	N/A	N/A	Provided by Lab
E	50 Ohm terminator	WOKEN	WTER-18S2	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	DC Cable	1	1.8	No	1	Provided by Lab
2	AC Cable	1	1	No	0	Provided by Lab

4 Test Instruments

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

4.1 26 dB Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
MXA Signal Analyzer Keysight	N9020B	MY60112409	2023/2/18	2024/2/17
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/12/21 ~ 2024/1/19

4.2 RF Output Power

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
MXA Signal Analyzer Keysight	N9020B	MY60112409	2023/2/18	2024/2/17
Power Meter Anritsu	ML2495A	1529002	2023/6/17	2024/6/16
Pulse Power Sensor Anritsu	MA2411B	1726434	2023/6/19	2024/6/18
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/12/21 ~ 2024/1/19

4.3 Power Spectral Density

Refer to section 4.1 to get information of the instruments.

4.4 6 dB Bandwidth

Refer to section 4.1 to get information of the instruments.

4.5 Occupied Bandwidth

Refer to section 4.1 to get information of the instruments.

4.6 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
DC Power Supply Topward	6603D	795558	N/A	N/A
MXA Signal Analyzer Keysight	N9020B	MY60112409	2023/2/18	2024/2/17
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	2023/12/20	2024/12/19
True RMS Clamp Meter FLUKE	325	31130711WS	2023/6/8	2024/6/7

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/12/21 ~ 2024/1/5

4.7 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance Telegartner	50 ohm	3	2023/10/20	2024/10/19
EMI Test Receiver R&S	ESCS 30	847124/029	2023/10/18	2024/10/17
Fixed Attenuator STI	STI02-2200-10	005	2023/7/1	2024/6/30
LISN R&S	ESH3-Z5	835239/001	2023/4/6	2024/4/5
		848773/004	2023/10/13	2024/10/12
RF Coaxial Cable JYEBAO	5D-FB	COCCAB-001	2023/7/1	2024/6/30
Software BVADT	BVADT_Cond_V7.3.7.4	N/A	N/A	N/A

Notes:

1. The test was performed in Conduction 1
2. Tested Date: 2024/1/15

4.8 Unwanted Emissions below 1 GHz

Mode A

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
MXA Signal Analyzer Keysight	N9020B	MY60112409	2023/2/18	2024/2/17
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/11/22 ~ 2024/1/17

Mode B

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-406	2023/10/13	2024/10/12
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Fixed Attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-03	2023/12/12	2024/12/11
Loop Antenna Electro-Metrics	EM-6879	264	2023/2/21	2024/2/20
MXA Signal Analyzer Keysight	N9020B	MY60112408	2023/3/6	2024/3/5
MXE EMI Receiver Keysight	N9038A	MY59050100	2023/6/13	2024/6/12
Preamplifier EMCI	EMC330N	980701	2023/2/18	2024/2/17
	EMC001340	980142	2023/5/8	2024/5/7
RF Coaxial Cable JYBAO	5D-FB	LOOPCAB-001	2023/12/12	2024/12/11
		LOOPCAB-002	2023/12/12	2024/12/11
RF Coaxial Cable PEWC	8D	966-4-1	2023/2/18	2024/2/17
		966-4-2	2023/2/18	2024/2/17
		966-4-3	2023/2/18	2024/2/17
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2024/1/15

4.9 Unwanted Emissions above 1 GHz

Mode A

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
MXA Signal Analyzer Keysight	N9020B	MY60112409	2023/2/18	2024/2/17
Software	ADT_RF Test Software V7.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room 2.
2. Tested Date: 2023/11/16 ~ 2024/1/2

Mode B

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-783	2023/11/12	2024/11/11
	BBHA 9170	9170-739	2023/11/12	2024/11/11
MXA Signal Analyzer Keysight	N9020B	MY60112408	2023/3/6	2024/3/5
Preamplifier EMCI	EMC12630SE	980688	2023/10/3	2024/10/2
	EMC184045SE	980387	2023/8/9	2024/8/8
RF Coaxial Cable EMCI	EMC-KM-KM-4000	200214	2023/2/20	2024/2/19
	EMC102-KM-KM-1200	160924	2023/8/9	2024/8/8
	EMC104-SM-SM-1200	160922	2023/8/9	2024/8/8
	EMC104-SM-SM-2000	180502	2023/3/27	2024/3/26
	EMC104-SM-SM-6000	210704	2023/11/2	2024/11/1
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in 966 Chamber No. 4.
2. Tested Date: 2024/1/12 ~ 2024/1/18

5 Limits of Test Items

5.1 26 dB Bandwidth

The results are for reference only.

5.2 RF Output Power

Operation Band	EUT Category	Limit
U-NII-1	Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
	Fixed point-to-point Access Point	1 Watt (30 dBm)
	Indoor Access Point	1 Watt (30 dBm)
	Mobile and Portable client device	250mW (24 dBm)

Operation Band	Limit
U-NII-2A	250 mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	250 mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	1 Watt (30 dBm)

*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 D01 Multiple Transmitter Output Method of conducted output power measurement on IEEE 802.11 devices,

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

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

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

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

5.3 Power Spectral Density

Operation Band	EUT Category	Limit
U-NII-1	Outdoor Access Point	17 dBm/MHz
	Fixed point-to-point Access Point	
	Indoor Access Point	
	Mobile and Portable client device	11 dBm/MHz

Operation Band	Limit
U-NII-2A	11 dBm/MHz
U-NII-2C	11 dBm/MHz
U-NII-3	30 dBm/500 kHz

5.4 6 dB Bandwidth

Within the 5.725-5.850 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

5.5 Occupied Bandwidth

The results are for reference only.

5.6 Frequency Stability

The frequency of the carrier signal shall be maintained within band of operation.

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

Applicable To	Limit	
789033 D02 General UNII Test Procedure New Rules v02r01	Field Strength at 3 m	
	PK: 74 (dBμV/m)	AV: 54 (dBμV/m)

For transmitters operating in the 5.15-5.25 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)

For transmitters operating in the 5.25-5.35 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(2)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)

For transmitters operating in the 5.47-5.725 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(3)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)

For transmitters operating in the 5.725-5.850 GHz band:

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(4)(i)	PK: -27 (dBm/MHz) ^{*1}	PK: 68.2 (dBμV/m) ^{*1}
	PK: 10 (dBm/MHz) ^{*2}	PK: 105.2 (dBμV/m) ^{*2}
	PK: 15.6 (dBm/MHz) ^{*3}	PK: 110.8 (dBμV/m) ^{*3}
	PK: 27 (dBm/MHz) ^{*4}	PK: 122.2 (dBμV/m) ^{*4}

^{*1} beyond 75 MHz or more above of the band edge.

^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

^{*4} from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

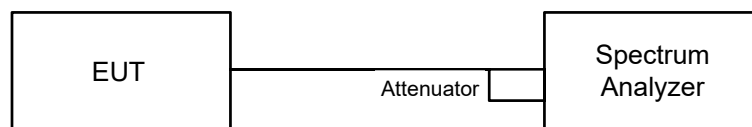
Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

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

6 Test Arrangements

6.1 26 dB Bandwidth

6.1.1 Test Setup

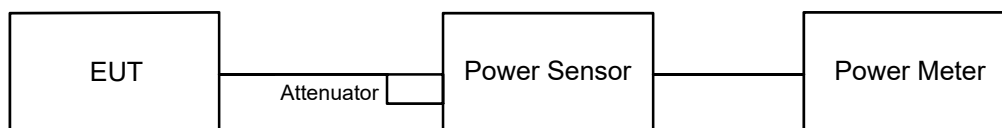


6.1.2 Test Procedure

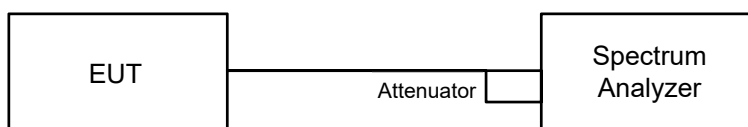
- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement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

6.2 RF Output Power

6.2.1 Test Setup



For channel straddling:



6.2.2 Test Procedure

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst and set the detector to average. Duty factor is not added to measured value.

For channel straddling:

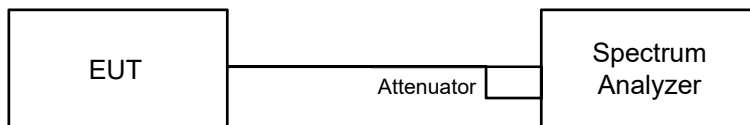
Method SA-2

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
- Sweep points ≥ $[2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.) Sweep time = auto, trigger set to “free run”.
- Trace average at least 100 traces in power averaging mode.
- Use the peak search function on the instrument to find the peak of the spectrum and record its value.
- Record the max value and add 10 log (1/duty cycle).

Note: When measuring straddle channel 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.

6.3 Power Spectral Density

6.3.1 Test Setup



6.3.2 Test Procedure

For specified measurement bandwidth 1 MHz:

Method SA-2

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz, Set VBW $\geq$ 3 MHz, Detector = RMS
- Sweep points $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Use the peak search function on the instrument to find the peak of the spectrum and record its value.
- Record the max value and add 10 log (1/duty cycle).

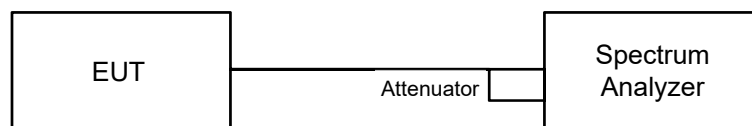
For specified measurement bandwidth 500 kHz:

Method SA-2

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz, Set VBW $\geq$ 1 MHz, Detector = RMS
- Scale the observed power level to an equivalent value in 500 kHz by adjusting (increasing) the measured power by a bandwidth correction factor (BWCF) where $\text{BWCF} = 10\log(500 \text{ kHz}/300 \text{ kHz})$
- Sweep points $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Use the peak search function on the instrument to find the peak of the spectrum and record its value.
- Record the max value and add 10 log (1/duty cycle).

6.4 6 dB Bandwidth

6.4.1 Test Setup

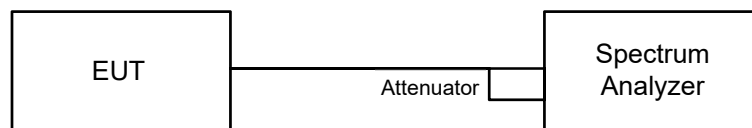


6.4.2 Test Procedure

- Set resolution bandwidth (RBW) = 100 kHz.
- Set the video bandwidth (VBW) $\geq 3 \times \text{RBW}$, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.5 Occupied Bandwidth

6.5.1 Test Setup

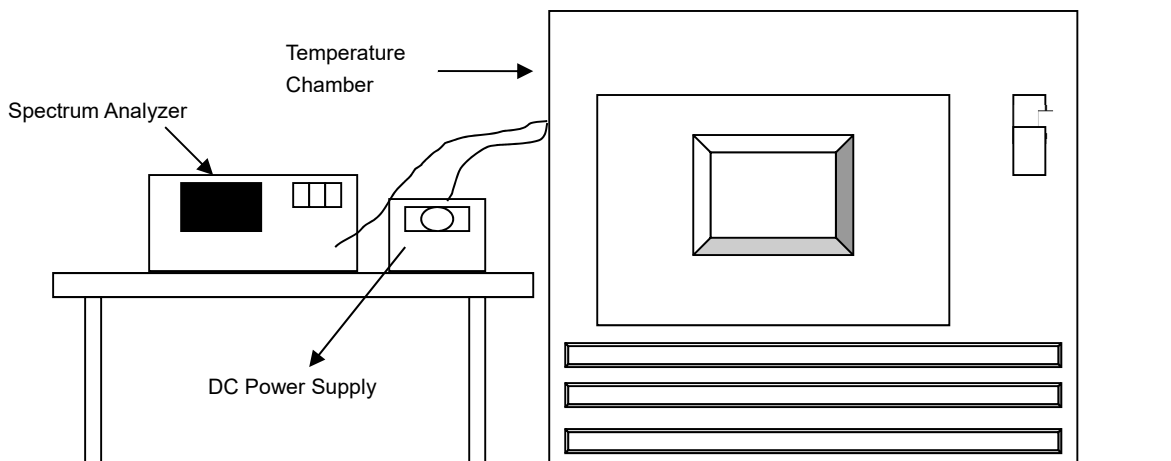


6.5.2 Test Procedure

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 Frequency Stability

6.6.1 Test Setup

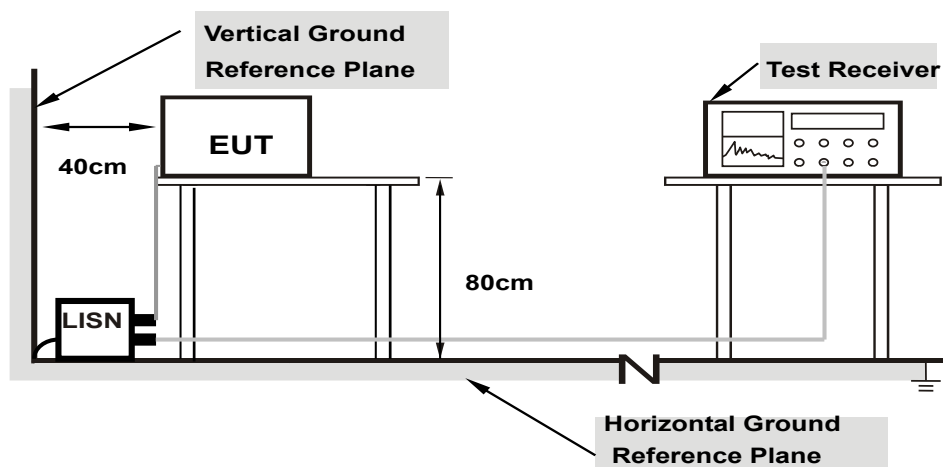


6.6.2 Test Procedure

- The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 Minutes.
- Repeat step (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed.
- The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 Minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

6.7 AC Power Conducted Emissions

6.7.1 Test Setup



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

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

6.7.2 Test Procedure

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

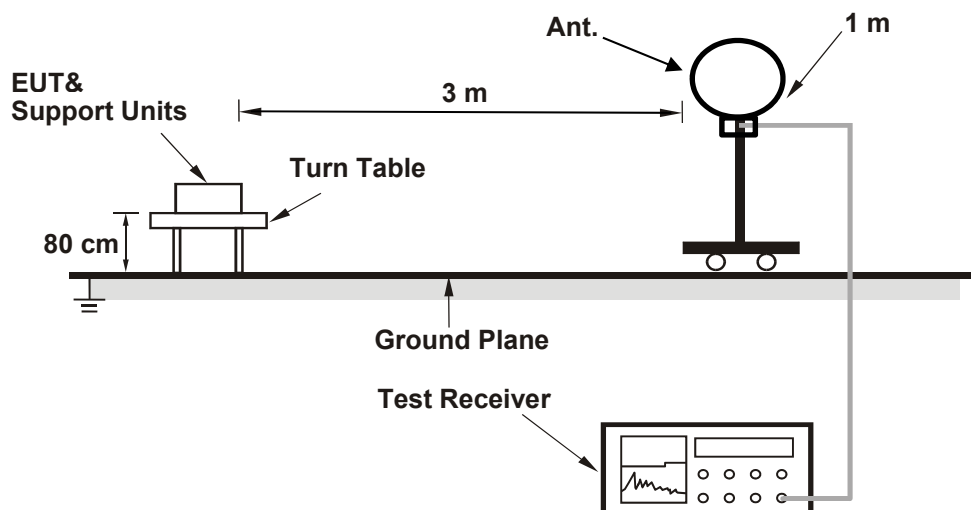
Note: The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz-30 MHz.

6.8 Unwanted Emissions below 1 GHz

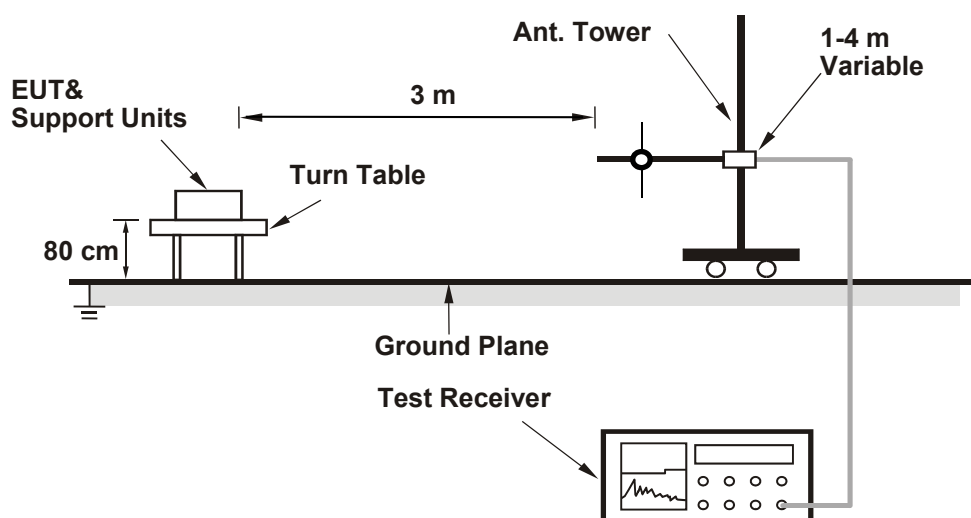
6.8.1 Test Setup

For Radiated Configuration:

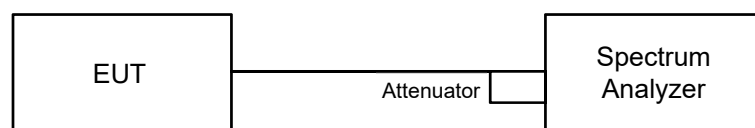
For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



For Conducted Configuration:



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

6.8.2 Test Procedure

Radiated versus Conducted Measurement.

The unwanted emission limits in both the restricted and non-restricted bands are based on antenna-port conducted measurements in conjunction with cabinet emissions tests are permitted to demonstrate compliance.

The following steps was performed:

- a. Cabinet emissions measurements. Radiated measurement was performed to ensure that cabinet emissions are below the emission limits. For the cabinet-emission measurements the antenna was replaced by a termination matching the nominal impedance of the antenna.
- b. Conducted tests was performed using equipment that matches the nominal impedance of the antenna assembly used with the EUT.
- c. EIRP calculation. A value representative of an upper bound on out-of-band antenna gain (in dBi) shall be added to the measured antenna-port conducted emission power to compute EIRP within the specified measurement bandwidth. (For emissions in the restricted bands, additional calculations are required to convert EIRP to field strength at the specified distance.) The upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands or 2 dBi, whichever is greater.
- d. EIRP adjustments for multiple outputs. (Follow the procedures specified in FCC KDB Publication 662911)
- e. For all of Radiation emission test

For Radiated emission below 30 MHz

- e-1.1. 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.
- e-1.2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- e-1.3. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- e-1.4. 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-1.5. 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

- e-2.1. 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.
- e-2.2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- e-2.3. 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.
- e-2.4. 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-2.5. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Notes:

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

Radiated versus Conducted Measurement

For Radiated measurement:

The level of unwanted emissions was measured when radiated by the cabinet or structure of the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation).

For Conducted measurement:

The level of unwanted emissions was measured as their power in a specified load (conducted spurious emissions).

Conducted Unwanted Emission Convert Formula

- a. Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8
d = measurement distance in 3 meters.
- b. EIRP Level (dBm) = Raw Value(dBm) + Correction Factor(dB)
- c. Correction Factor is directional gain, and the composite gain will be used when signal support the correlated signal
For the out of band spurious the gain for the specific band may have been used rather than the highest gain across all bands.
For the band edge the gain for the specific band may have been used.

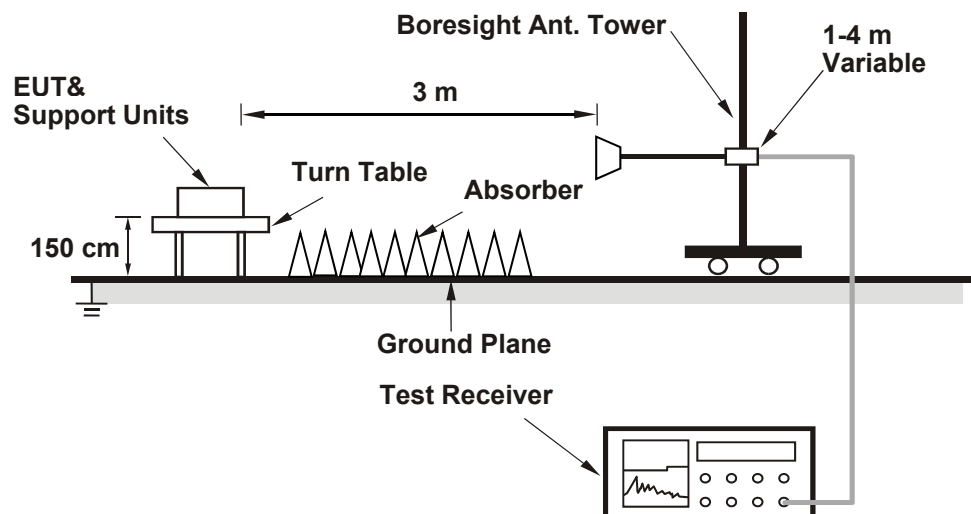
Notes:

1. In restricted bands below 1000 MHz, add upper bound on ground plane reflection:
For frequencies between 30 MHz and 1000 MHz, add 4.7 dB.
2. The conducted emission test was considered some factor to compute test result.

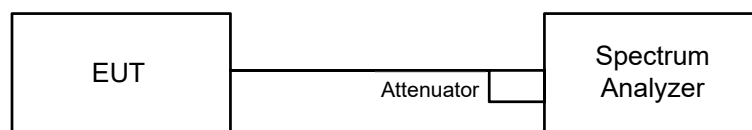
6.9 Unwanted Emissions above 1 GHz

6.9.1 Test Setup

For Radiated Configuration:



For Conducted Configuration:



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

6.9.2 Test Procedure

Radiated versus Conducted Measurement.

The unwanted emission limits in both the restricted and non-restricted bands are based on antenna-port conducted measurements in conjunction with cabinet emissions tests are permitted to demonstrate compliance.

The following steps was performed:

- Cabinet emissions measurements. Radiated measurement was performed to ensure that cabinet emissions are below the emission limits. For the cabinet-emission measurements the antenna was replaced by a termination matching the nominal impedance of the antenna.
- Conducted tests was performed using equipment that matches the nominal impedance of the antenna assembly used with the EUT.
- EIRP calculation. A value representative of an upper bound on out-of-band antenna gain (in dBi) shall be added to the measured antenna-port conducted emission power to compute EIRP within the specified measurement bandwidth. (For emissions in the restricted bands, additional calculations are required to convert EIRP to field strength at the specified distance.) The upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands or 2 dBi, whichever is greater.
- EIRP adjustments for multiple outputs. (Follow the procedures specified in FCC KDB Publication 662911)
- For all of Radiation emission test
 - The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
 - The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

- e-3. 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.
- e-4. 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-5. 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 $\geq 1/T$ (Duty cycle < 98%) or 10 Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1 GHz.
3. All modes of operation were investigated and the worst-case emissions are reported.

Radiated versus Conducted Measurement
<u>For Radiated measurement:</u> The level of unwanted emissions was measured when radiated by the cabinet or structure of the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation). <u>For Conducted measurement:</u> The level of unwanted emissions was measured as their power in a specified load (conducted spurious emissions). <u>For Verified radiated measurement:</u> The level of unwanted emissions was measured when radiated by the cabinet or structure of the equipment with the antenna connector(s) terminated by a specified load (cabinet radiation).
Conducted Unwanted Emission Convert Formula
a. Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8 d = measurement distance in 3 meters. b. EIRP Level (dBm) = Raw Value(dBm) + Correction Factor(dB). c. Correction Factor is directional gain, and the composite gain will be used when signal support the correlated signal For the out of band spurious the gain for the specific band may have been used rather than the highest gain across all bands. For the band edge the gain for the specific band may have been used. Note: The conducted emission test was considered some factor to compute test result.

7 Test Results of Test Item

7.1 26 dB Bandwidth

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Willy Lin
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802.11a 1TX

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
52	5260	21.86
60	5300	26.04
64	5320	24.84
100	5500	22.44
116	5580	19.33
140	5700	22.99
144 (U-NII-2C)	5720	14.07
144 (U-NII-3)	5720	4.15

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
52	5260	21.86	24.39 > 24
60	5300	26.04	25.15 > 24
64	5320	24.84	24.95 > 24
100	5500	22.44	24.51 > 24
116	5580	19.33	23.86 < 24
140	5700	22.99	24.61 > 24
144 (U-NII-2C)	5720	14.07	22.48 < 24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE20) 1S1T

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
52	5260	23.12
60	5300	19.73
64	5320	19.82
100	5500	20.27
116	5580	27.45
140	5700	19.91
144 (U-NII-2C)	5720	14.74
144 (U-NII-3)	5720	4.99

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
52	5260	23.12	24.63 > 24
60	5300	19.73	23.95 < 24
64	5320	19.82	23.97 < 24
100	5500	20.27	24.06 > 24
116	5580	27.45	25.38 > 24
140	5700	19.91	23.99 < 24
144 (U-NII-2C)	5720	14.74	22.68 < 24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE40) 1S1T

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
54	5270	39.63
62	5310	39.61
102	5510	39.58
110	5550	54.76
134	5670	39.63
142 (U-NII-2C)	5710	35.22
142 (U-NII-3)	5710	13.01

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
54	5270	39.63	26.98 > 24
62	5310	39.61	26.97 > 24
102	5510	39.58	26.97 > 24
110	5550	54.76	28.38 > 24
134	5670	39.63	26.98 > 24
142 (U-NII-2C)	5710	35.22	26.46 > 24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE80) 1S1T

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
58	5290	107.89
106	5530	91.06
122	5610	112.59
138 (U-NII-2C)	5690	92.64
138 (U-NII-3)	5690	17.88

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
58	5290	107.89	31.32 > 24
106	5530	91.06	30.59 > 24
122	5610	112.59	31.51 > 24
138 (U-NII-2C)	5690	92.64	30.66 > 24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE160) 1S1T

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
50 (U-NII-1)	5250	81.7
50 (U-NII-2A)	5250	84.15
114	5570	163.28

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
50 (U-NII-2A)	5250	84.15	30.25 > 24
114	5570	163.28	33.12 > 24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE20) 26-tone RU 1S1T

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
64	5320	19.53
100	5500	19.32
140	5700	19.67
144 (U-NII-2C)	5720	13.88
144 (U-NII-3)	5720	5.7

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
64	5320	19.53	23.9 < 24
100	5500	19.32	23.86 < 24
140	5700	19.67	23.93 < 24
144 (U-NII-2C)	5720	13.88	22.42 < 24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE20) 52-tone RU 1S1T

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
64	5320	19.66
100	5500	19.77
140	5700	20.15
144 (U-NII-2C)	5720	14.02
144 (U-NII-3)	5720	5.65

Determined Output Power Limit				
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)	
64	5320	19.66	23.93	< 24
100	5500	19.77	23.96	< 24
140	5700	20.15	24.04	> 24
144 (U-NII-2C)	5720	14.02	22.46	< 24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

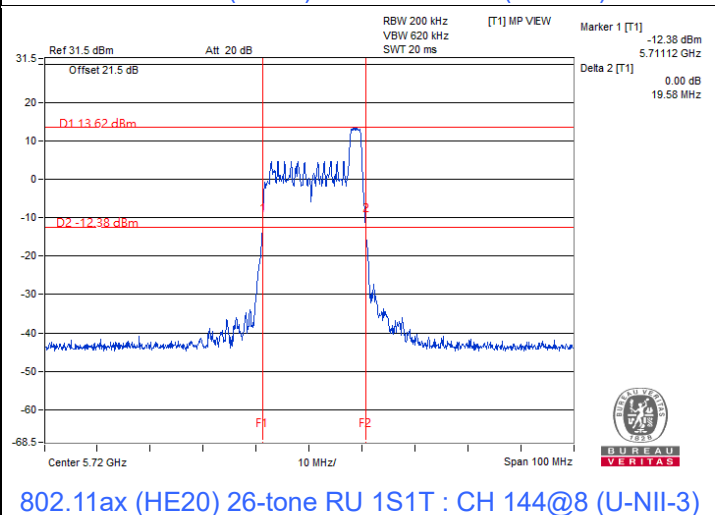
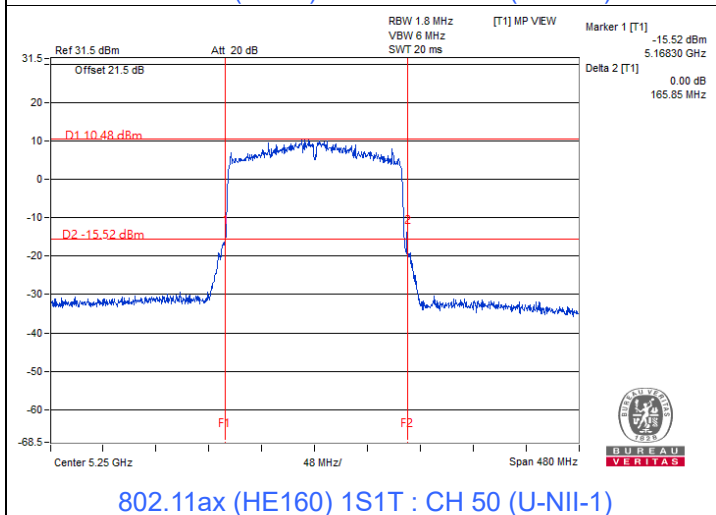
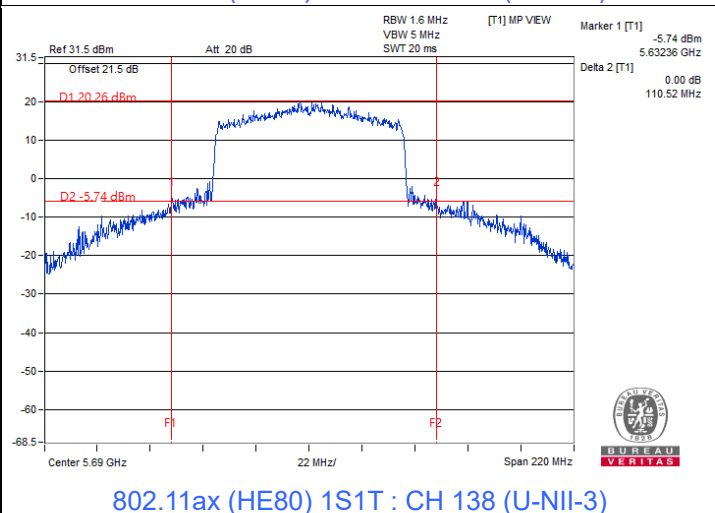
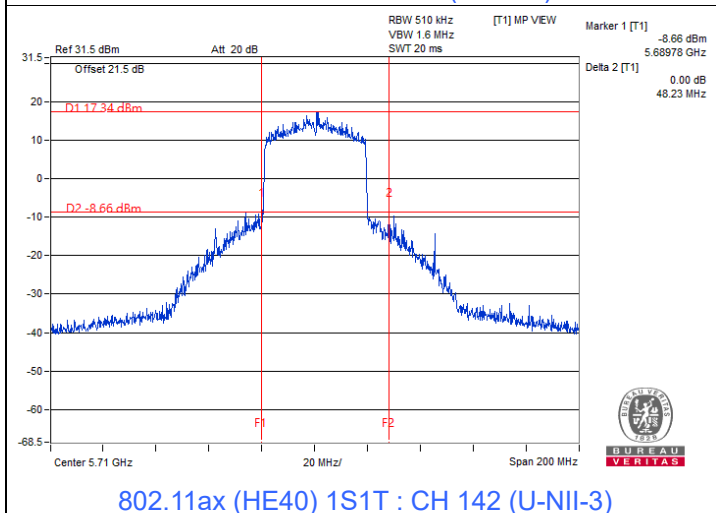
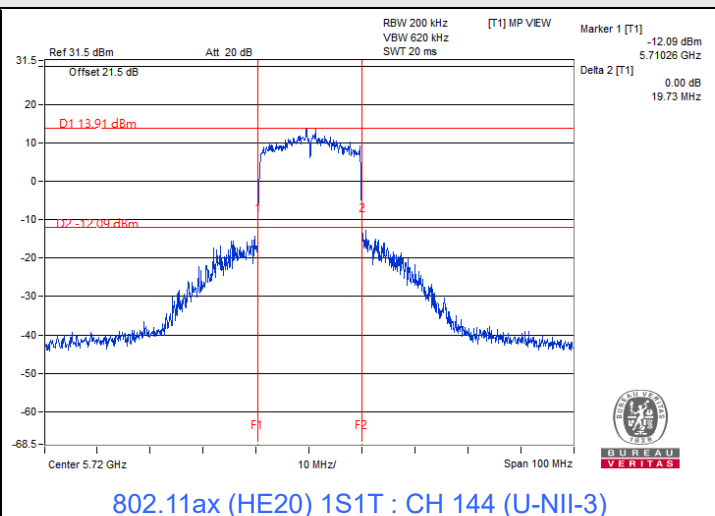
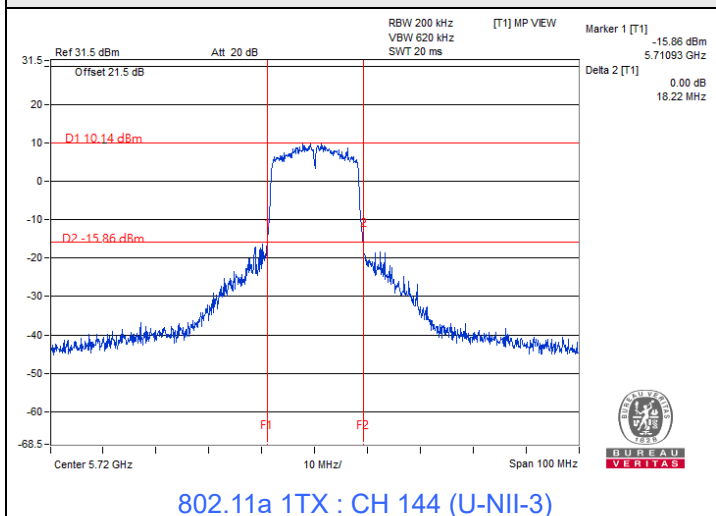
802.11ax (HE20) 106-tone RU 1S1T

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
64	5320	21.66
100	5500	24.42
140	5700	19.88
144 (U-NII-2C)	5720	14.19
144 (U-NII-3)	5720	5.71

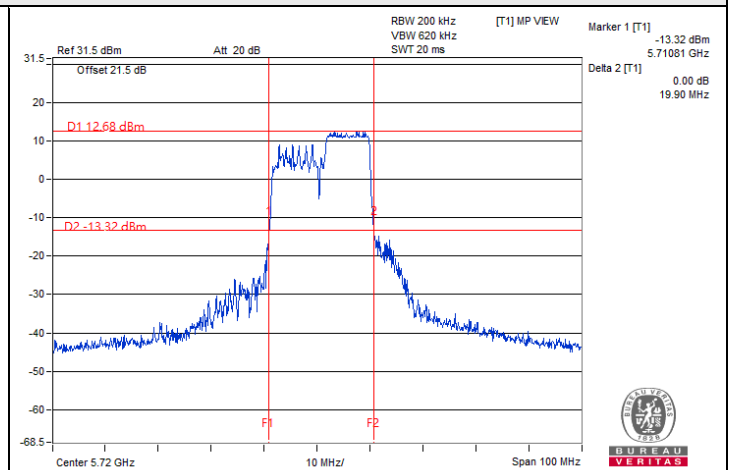
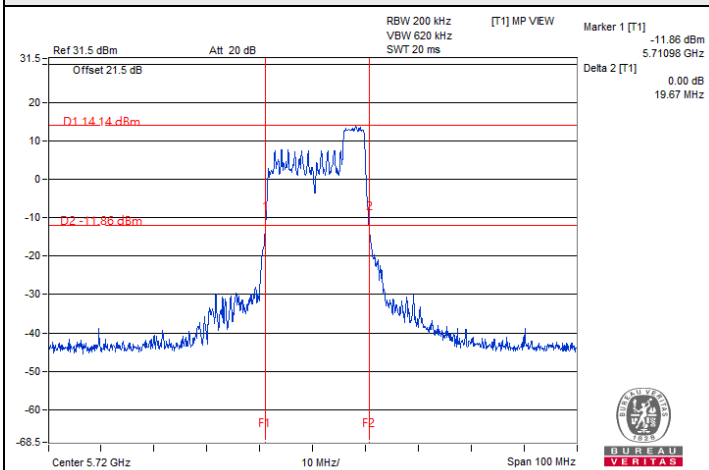
Determined Output Power Limit				
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)	
64	5320	21.66	24.35	> 24
100	5500	24.42	24.87	> 24
140	5700	19.88	23.98	< 24
144 (U-NII-2C)	5720	14.19	22.51	< 24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

Spectrum Plot of Minimum Value



Spectrum Plot of Minimum Value



802.11ax (HE20) 52-tone RU 1S1T : CH 144@40 (U-NII-3) 802.11ax (HE20) 106-tone RU 1S1T : CH 144@54 (U-NII-3)

Notes:

1. For U-NII-2C straddle channel = 5725 MHz - Marker 1
2. For U-NII-3 straddle channel = Marker 1 + Delta 2 - 5725 MHz
3. For U-NII-1 straddle channel = 5250 MHz - Marker 1
4. For U-NII-2A straddle channel = Marker 1 + Delta 2 - 5250 MHz

802.11a 2TX

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	18.09	18.03
60	5300	22.45	22.46
64	5320	21.85	19.78
100	5500	18.50	21.82
116	5580	18.12	17.91
140	5700	19.31	18.73
144 (U-NII-2C)	5720	13.84	13.69
144 (U-NII-3)	5720	4.34	4.27

Determined Output Power Limit					
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)		
52	5260	18.03	23.55	<	24
60	5300	22.45	24.51	>	24
64	5320	19.78	23.96	<	24
100	5500	18.50	23.67	<	24
116	5580	17.91	23.53	<	24
140	5700	18.73	23.72	<	24
144 (U-NII-2C)	5720	13.69	22.36	<	24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE20) 2S2T

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	19.70	19.84
60	5300	19.78	19.68
64	5320	19.84	19.79
100	5500	23.96	19.86
116	5580	19.75	19.97
140	5700	19.72	19.76
144 (U-NII-2C)	5720	14.60	14.50
144 (U-NII-3)	5720	5.19	5.18

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
52	5260	19.70	23.94 < 24
60	5300	19.68	23.94 < 24
64	5320	19.79	23.96 < 24
100	5500	19.86	23.97 < 24
116	5580	19.75	23.95 < 24
140	5700	19.72	23.94 < 24
144 (U-NII-2C)	5720	14.50	22.61 < 24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE40) 2S2T

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	44.07	39.47
62	5310	39.61	39.74
102	5510	40.40	40.10
110	5550	39.54	39.68
134	5670	39.56	43.12
142 (U-NII-2C)	5710	34.55	34.51
142 (U-NII-3)	5710	5.09	5.24

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
54	5270	39.47	26.96 > 24
62	5310	39.61	26.97 > 24
102	5510	40.10	27.03 > 24
110	5550	39.54	26.97 > 24
134	5670	39.56	26.97 > 24
142 (U-NII-2C)	5710	34.51	26.37 > 24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE80) 2S2T

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	97.29	101.18
106	5530	99.99	98.81
122	5610	79.99	80.49
138 (U-NII-2C)	5690	76.82	76.61
138 (U-NII-3)	5690	5.31	5.25

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
58	5290	97.29	30.88 > 24
106	5530	98.81	30.94 > 24
122	5610	79.99	30.03 > 24
138 (U-NII-2C)	5690	76.61	29.84 > 24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE160) 2S2T

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
50 (U-NII-1)	5250	81.03	81.45
50 (U-NII-2A)	5250	81.36	81.85
114	5570	163.09	163.11

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
50 (U-NII-2A)	5250	81.36	30.1 > 24
114	5570	163.09	33.12 > 24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE20) 26-tone RU 2S2T

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
64	5320	19.46	19.31
100	5500	19.64	19.31
140	5700	19.49	19.27
144 (U-NII-2C)	5720	13.89	13.78
144 (U-NII-3)	5720	5.58	5.57

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
64	5320	19.31	23.85 < 24
100	5500	19.31	23.85 < 24
140	5700	19.27	23.84 < 24
144 (U-NII-2C)	5720	13.78	22.39 < 24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

802.11ax (HE20) 52-tone RU 2S2T

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
64	5320	19.56	19.55
100	5500	19.62	19.30
140	5700	19.64	19.54
144 (U-NII-2C)	5720	13.98	13.95
144 (U-NII-3)	5720	5.70	5.63

Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
64	5320	19.55	23.91 < 24
100	5500	19.30	23.85 < 24
140	5700	19.54	23.9 < 24
144 (U-NII-2C)	5720	13.95	22.44 < 24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

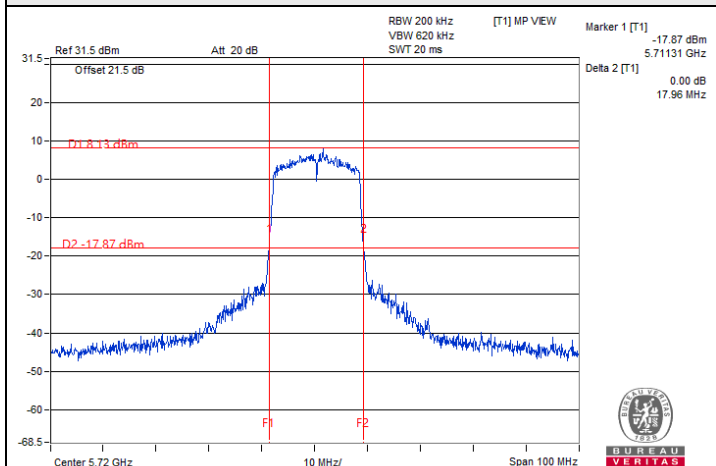
802.11ax (HE20) 106-tone RU 2S2T

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	
		Chain 0	Chain 1
64	5320	21.23	21.65
100	5500	19.97	19.62
140	5700	22.33	21.15
144 (U-NII-2C)	5720	14.19	14.04
144 (U-NII-3)	5720	5.67	5.70

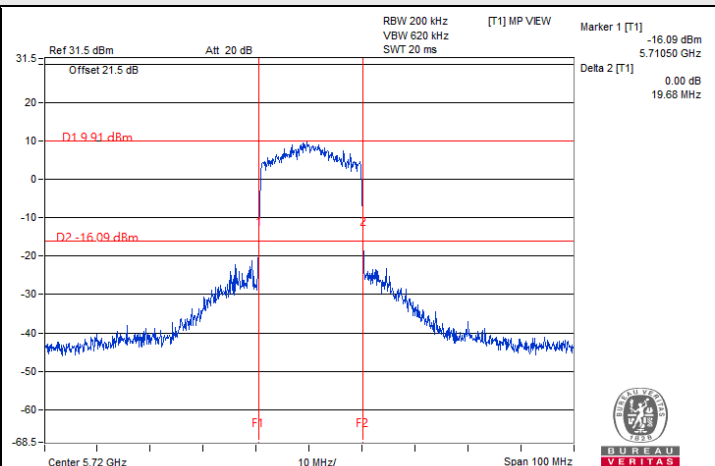
Determined Output Power Limit			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Power Limit (dBm)
64	5320	21.23	24.26 > 24
100	5500	19.62	23.92 < 24
140	5700	21.15	24.25 > 24
144 (U-NII-2C)	5720	14.04	22.47 < 24

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth.

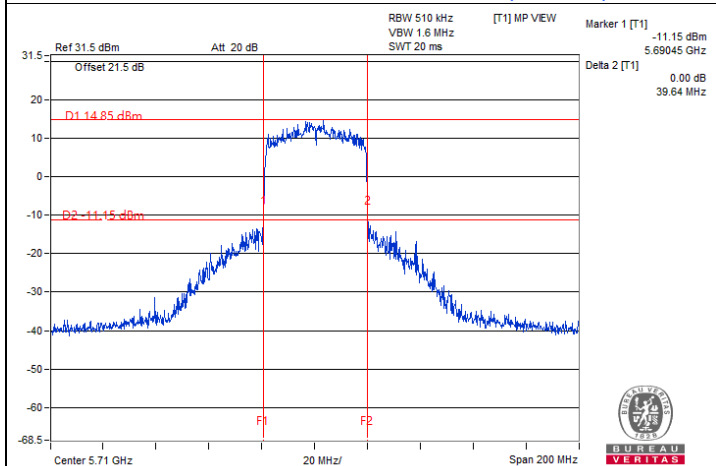
Spectrum Plot of Minimum Value



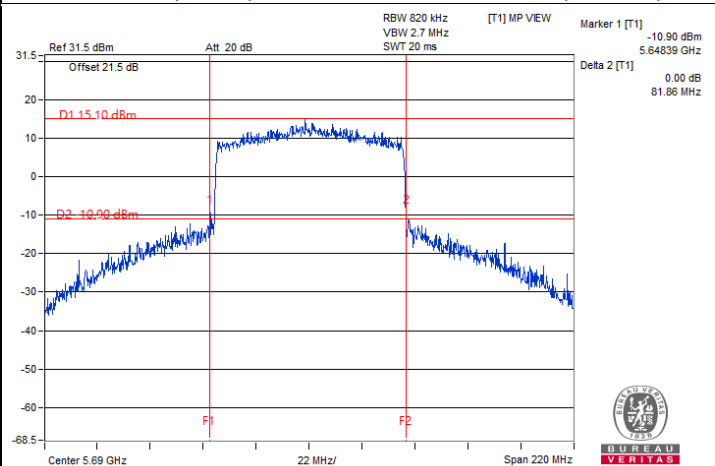
802.11a 2TX / Chain 1 : CH 144 (U-NII-3)



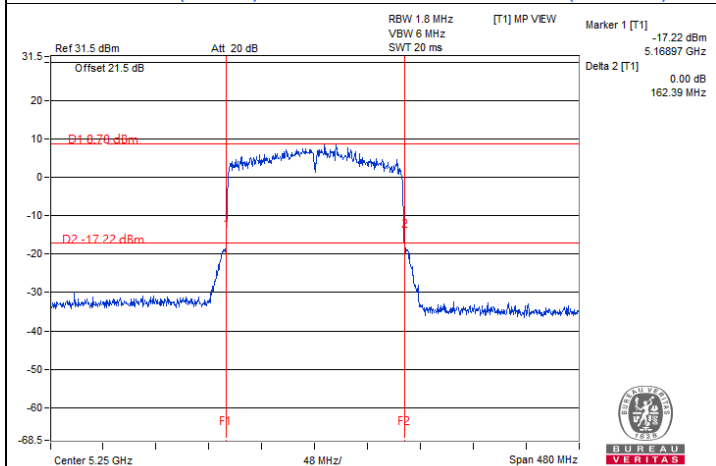
802.11ax (HE20) 2S2T / Chain 1 : CH 144 (U-NII-3)



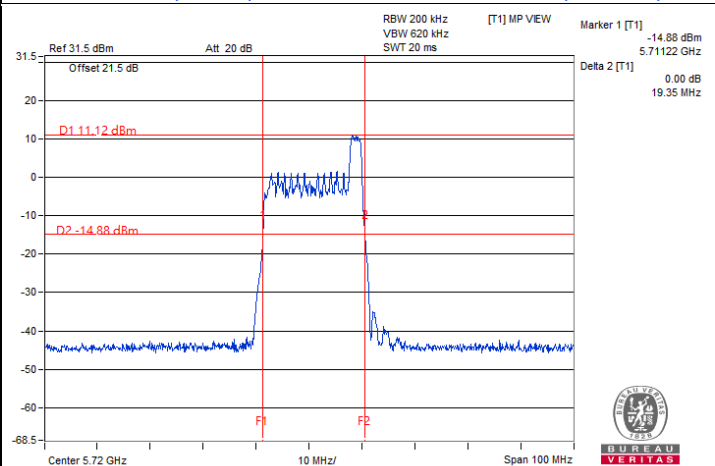
802.11ax (HE40) 2S2T / Chain 0 : CH 142 (U-NII-3)



802.11ax (HE80) 2S2T / Chain 1 : CH 138 (U-NII-3)

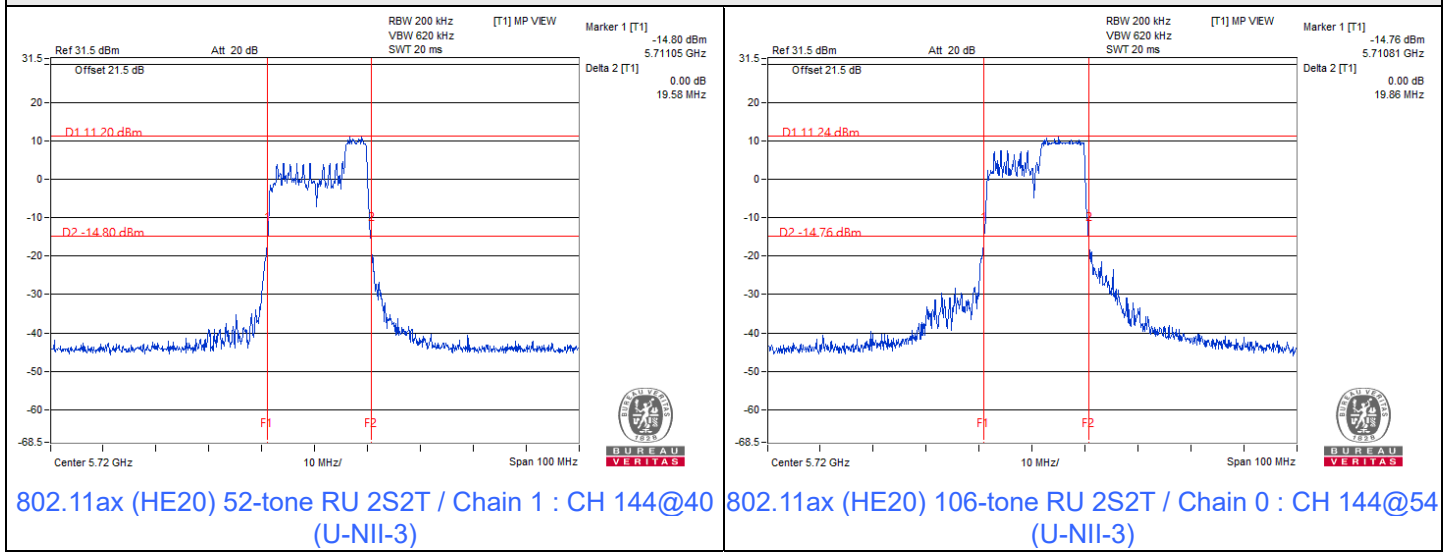


802.11ax (HE160) 2S2T / Chain 0 : CH 50 (U-NII-1)



802.11ax (HE20) 26-tone RU 2S2T / Chain 1 : CH 144@8 (U-NII-3)

Spectrum Plot of Minimum Value



Notes:

1. For U-NII-2C straddle channel = 5725 MHz - Marker 1
2. For U-NII-3 straddle channel = Marker 1 + Delta 2 - 5725 MHz
3. For U-NII-1 straddle channel = 5250 MHz - Marker 1
4. For U-NII-2A straddle channel = Marker 1 + Delta 2 - 5250 MHz

7.2 RF Output Power

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Willy Lin
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802.11a 1TX

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	130.317	21.15	24	Pass
40	5200	146.218	21.65	24	Pass
48	5240	144.877	21.61	24	Pass
52	5260	149.624	21.75	24	Pass
60	5300	142.561	21.54	24	Pass
64	5320	142.233	21.53	24	Pass
100	5500	113.24	20.54	24	Pass
116	5580	142.889	21.55	23.86	Pass
140	5700	114.288	20.58	24	Pass
*144 (U-NII-2C)	5720	154.789	21.90	22.48	Pass
*144 (U-NII-3)	5720	18.999	12.79	30	Pass
149	5745	269.774	24.31	30	Pass
157	5785	270.396	24.32	30	Pass
165	5825	271.019	24.33	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT20) 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	114.815	20.60	24	Pass
40	5200	139.959	21.46	24	Pass
48	5240	141.906	21.52	24	Pass
52	5260	144.212	21.59	24	Pass
60	5300	141.906	21.52	23.95	Pass
64	5320	106.905	20.29	23.97	Pass
100	5500	92.257	19.65	24	Pass
116	5580	146.893	21.67	24	Pass
140	5700	82.794	19.18	23.99	Pass
*144 (U-NII-2C)	5720	144.937	21.61	22.68	Pass
*144 (U-NII-3)	5720	26.435	14.22	30	Pass
149	5745	254.097	24.05	30	Pass
157	5785	262.422	24.19	30	Pass
165	5825	261.818	24.18	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT40) 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
38	5190	90.365	19.56	24	Pass
46	5230	128.529	21.09	24	Pass
54	5270	152.757	21.84	24	Pass
62	5310	83.56	19.22	24	Pass
102	5510	75.683	18.79	24	Pass
110	5550	179.061	22.53	24	Pass
134	5670	117.22	20.69	24	Pass
*142 (U-NII-2C)	5710	154.409	21.89	24	Pass
*142 (U-NII-3)	5710	8.029	9.05	30	Pass
151	5755	257.632	24.11	30	Pass
159	5795	258.226	24.12	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT80) 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
42	5210	70.469	18.48	24	Pass
58	5290	70.958	18.51	24	Pass
106	5530	84.14	19.25	24	Pass
122	5610	145.546	21.63	24	Pass
*138 (U-NII-2C)	5690	159.756	22.03	24	Pass
*138 (U-NII-3)	5690	3.815	5.81	30	Pass
155	5775	149.279	21.74	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT160) 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
*50 (U-NII-1)	5250	28.841	14.60	24	Pass
*50 (U-NII-2A)	5250	25.883	14.13	24	Pass
114	5570	54.2	17.34	24	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	117.49	20.70	24	Pass
40	5200	144.877	21.61	24	Pass
48	5240	145.881	21.64	24	Pass
52	5260	148.936	21.73	24	Pass
60	5300	146.218	21.65	23.95	Pass
64	5320	109.901	20.41	23.97	Pass
100	5500	94.624	19.76	24	Pass
116	5580	150.661	21.78	24	Pass
140	5700	85.31	19.31	23.99	Pass
*144 (U-NII-2C)	5720	119.224	20.76	22.68	Pass
*144 (U-NII-3)	5720	27.502	14.39	30	Pass
149	5745	263.027	24.20	30	Pass
157	5785	268.534	24.29	30	Pass
165	5825	268.534	24.29	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40) 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
38	5190	92.47	19.66	24	Pass
46	5230	131.826	21.20	24	Pass
54	5270	157.036	21.96	24	Pass
62	5310	85.704	19.33	24	Pass
102	5510	77.983	18.92	24	Pass
110	5550	184.927	22.67	24	Pass
134	5670	120.504	20.81	24	Pass
*142 (U-NII-2C)	5710	163.023	22.12	24	Pass
*142 (U-NII-3)	5710	11.488	10.60	30	Pass
151	5755	264.241	24.22	30	Pass
159	5795	263.633	24.21	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE80) 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
42	5210	72.444	18.60	24	Pass
58	5290	72.946	18.63	24	Pass
106	5530	86.099	19.35	24	Pass
122	5610	149.968	21.76	24	Pass
*138 (U-NII-2C)	5690	154.259	21.88	24	Pass
*138 (U-NII-3)	5690	6.796	8.32	30	Pass
155	5775	153.109	21.85	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE160) 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
*50 (U-NII-1)	5250	23.342	13.68	24	Pass
*50 (U-NII-2A)	5250	24.839	13.95	24	Pass
114	5570	55.335	17.43	24	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT20) 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	121.339	20.84	24	Pass
40	5200	148.594	21.72	24	Pass
48	5240	149.624	21.75	24	Pass
149	5745	270.396	24.32	30	Pass
157	5785	276.694	24.42	30	Pass
165	5825	277.332	24.43	30	Pass

Notes:

- For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT40) 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
38	5190	95.719	19.81	24	Pass
46	5230	136.144	21.34	24	Pass
151	5755	271.644	24.34	30	Pass
159	5795	272.27	24.35	30	Pass

Notes:

- For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT80) 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
42	5210	74.302	18.71	24	Pass
155	5775	157.036	21.96	30	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) 26-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	31.696	15.01	24	Pass
64	5320	33.037	15.19	23.9	Pass
100	5500	34.198	15.34	23.86	Pass
140	5700	33.037	15.19	23.93	Pass
*144 (U-NII-2C)	5720	0.5363	-2.71	22.42	Pass
*144 (U-NII-3)	5720	33.526	15.25	30	Pass
149	5745	247.172	23.93	30	Pass
165	5825	266.073	24.25	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
2. For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) 52-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	63.387	18.02	24	Pass
64	5320	68.707	18.37	23.93	Pass
100	5500	69.024	18.39	23.96	Pass
140	5700	66.834	18.25	24	Pass
*144 (U-NII-2C)	5720	1.278	1.07	22.46	Pass
*144 (U-NII-3)	5720	65.976	18.19	30	Pass
149	5745	254.097	24.05	30	Pass
165	5825	257.04	24.10	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) 106-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	122.18	20.87	24	Pass
64	5320	132.13	21.21	24	Pass
100	5500	132.434	21.22	24	Pass
140	5700	99.083	19.96	23.98	Pass
*144 (U-NII-2C)	5720	39.572	15.97	22.51	Pass
*144 (U-NII-3)	5720	53.875	17.31	30	Pass
149	5745	247.742	23.94	30	Pass
165	5825	251.189	24.00	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT20) 26-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	33.266	15.22	24	Pass
149	5745	257.04	24.10	30	Pass
165	5825	275.423	24.40	30	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT20) 52-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	65.766	18.18	24	Pass
149	5745	262.422	24.19	30	Pass
165	5825	266.686	24.26	30	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT20) 106-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	127.644	21.06	24	Pass
149	5745	257.632	24.11	30	Pass
165	5825	258.821	24.13	30	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT20) 52+26-tone MRU 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	87.7	19.43	24	Pass
149	5745	266.073	24.25	30	Pass
165	5825	264.85	24.23	30	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT20) 106+26-tone MRU 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
36	5180	116.95	20.68	24	Pass
149	5745	264.241	24.22	30	Pass
165	5825	267.917	24.28	30	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

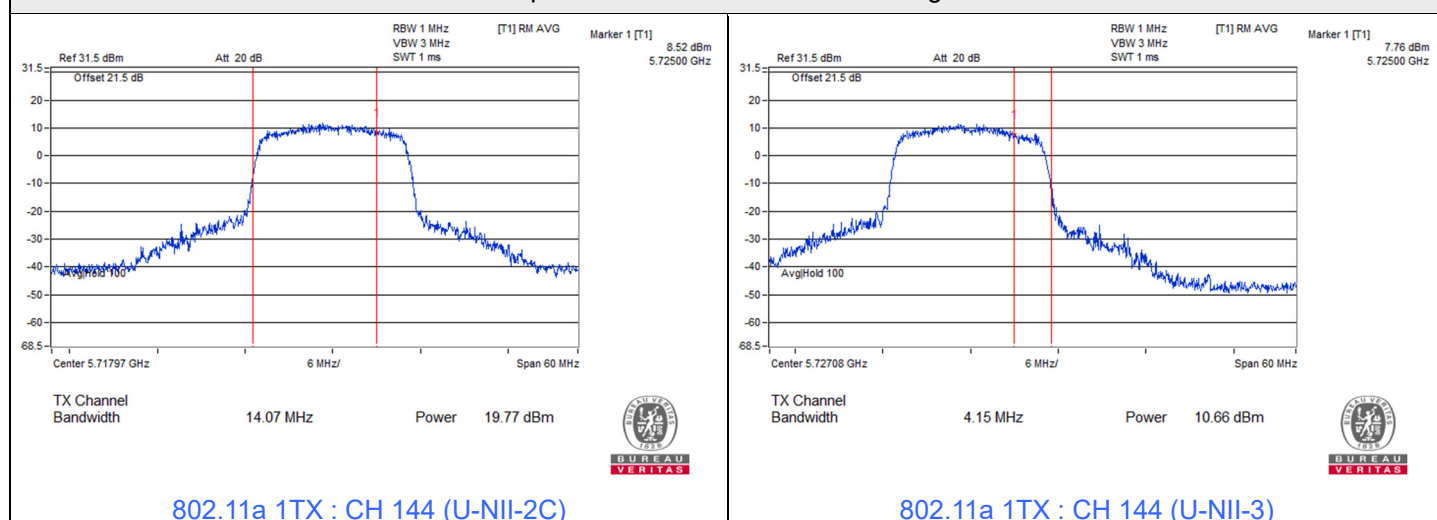
802.11be (EHT80) 484+242-tone MRU 1S1T

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Power Limit (dBm)	Test Result
42	5210	38.107	15.81	24	Pass
155	5775	74.131	18.70	30	Pass

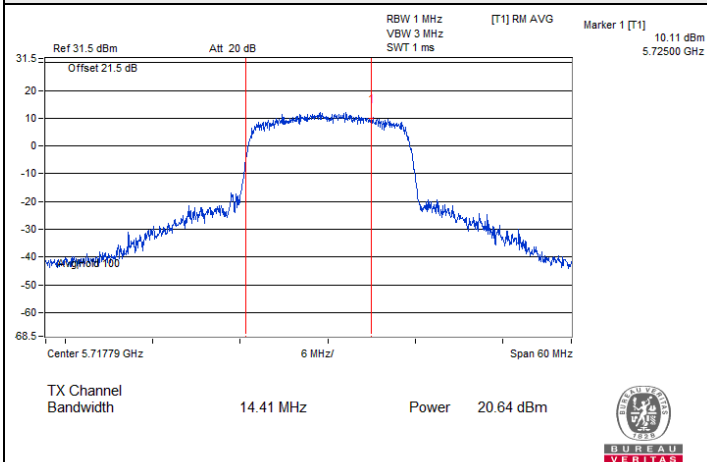
Notes:

1. For U-NII-1, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

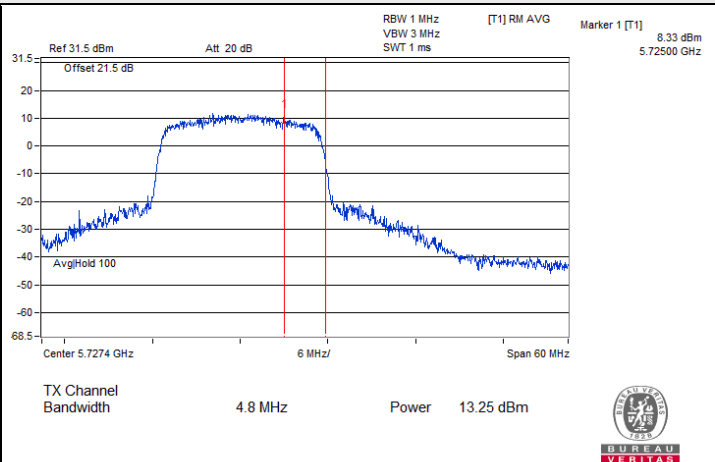
Spectrum Plot for channel straddling



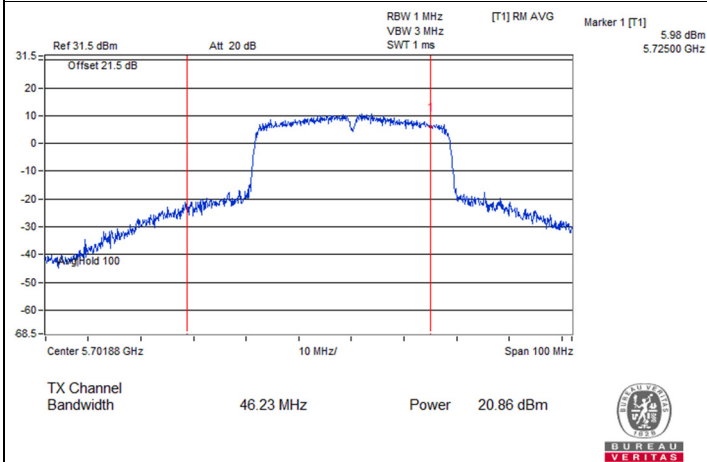
Spectrum Plot for channel straddling



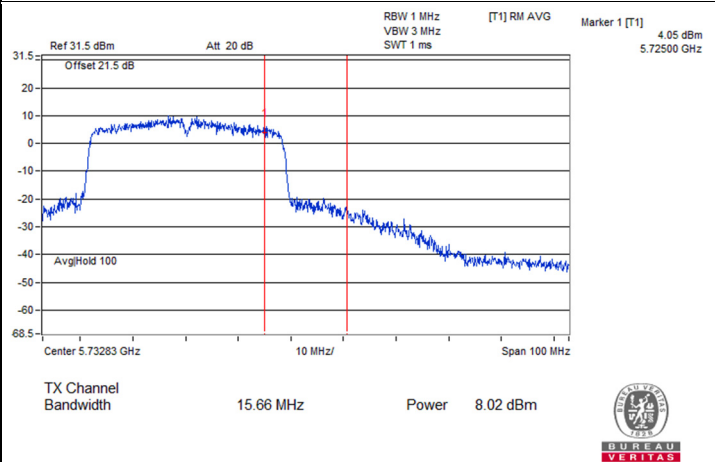
802.11ac (VHT20) 1S1T : CH 144 (U-NII-2C)



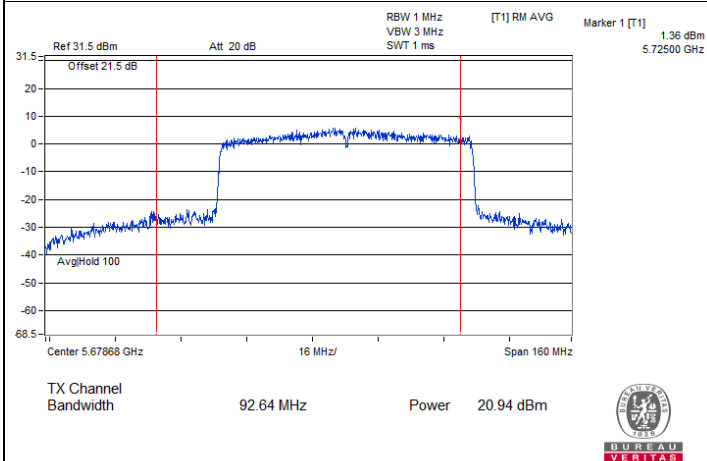
802.11ac (VHT20) 1S1T : CH 144 (U-NII-3)



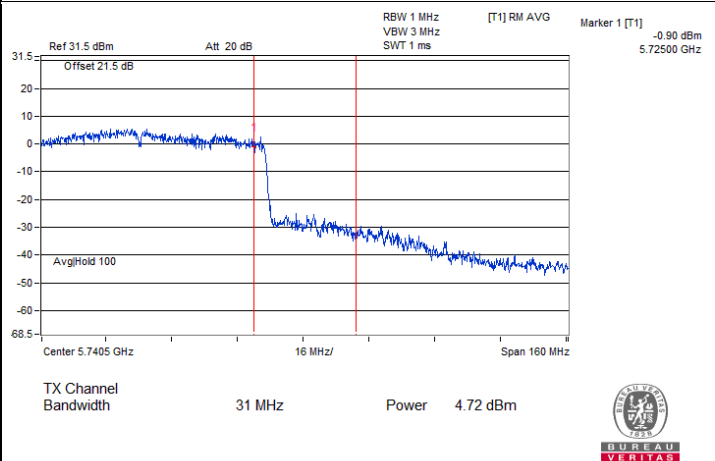
802.11ac (VHT40) 1S1T : CH 142 (U-NII-2C)



802.11ac (VHT40) 1S1T : CH 142 (U-NII-3)

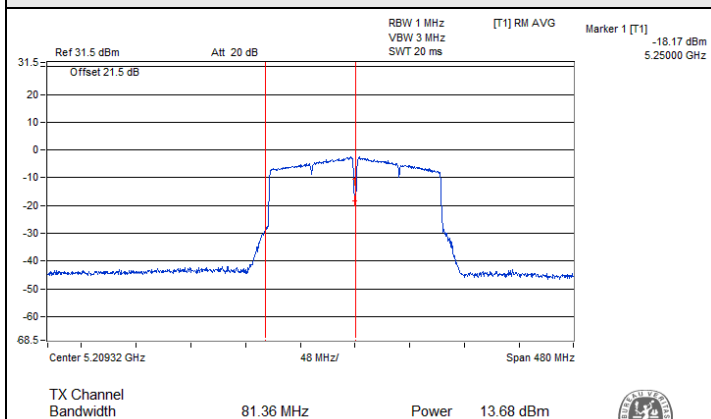


802.11ac (VHT80) 1S1T : CH 138 (U-NII-2C)

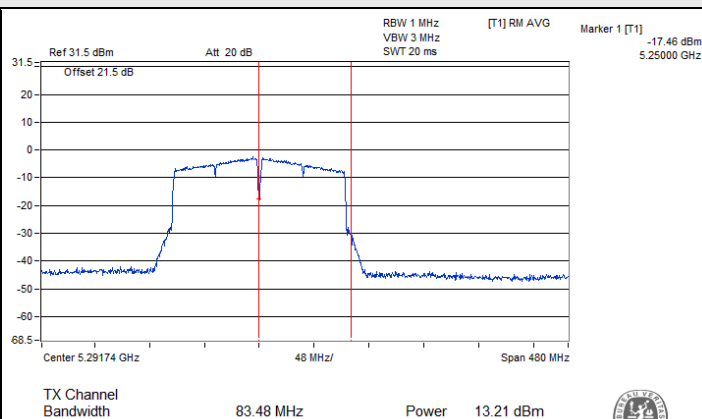


802.11ac (VHT80) 1S1T : CH 138 (U-NII-3)

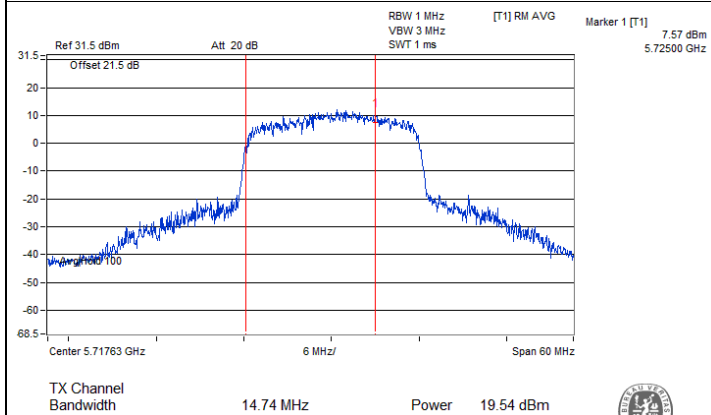
Spectrum Plot for channel straddling



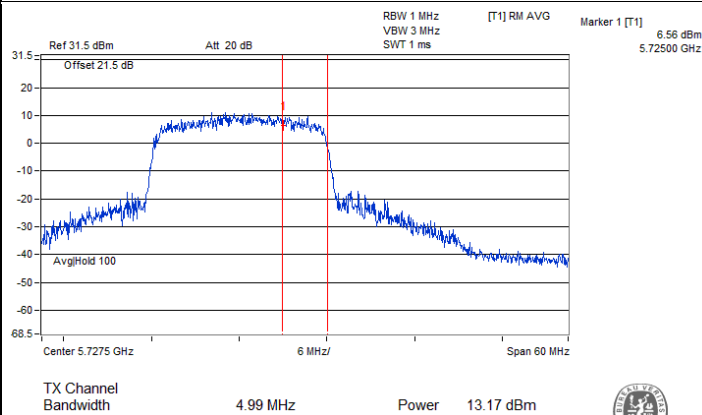
802.11ac (VHT160) 1S1T : CH 50 (U-NII-1)



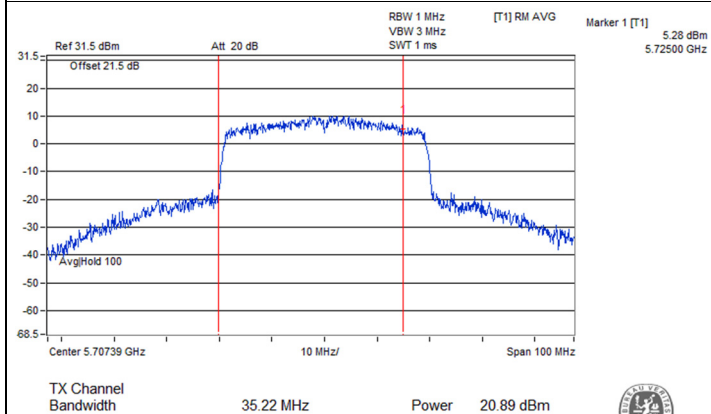
802.11ac (VHT160) 1S1T : CH 50 (U-NII-2A)



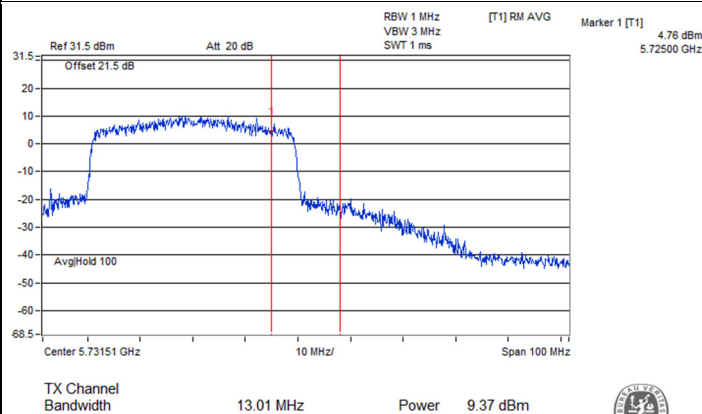
802.11ax (HE20) 1S1T : CH 144 (U-NII-2C)



802.11ax (HE20) 1S1T : CH 144 (U-NII-3)

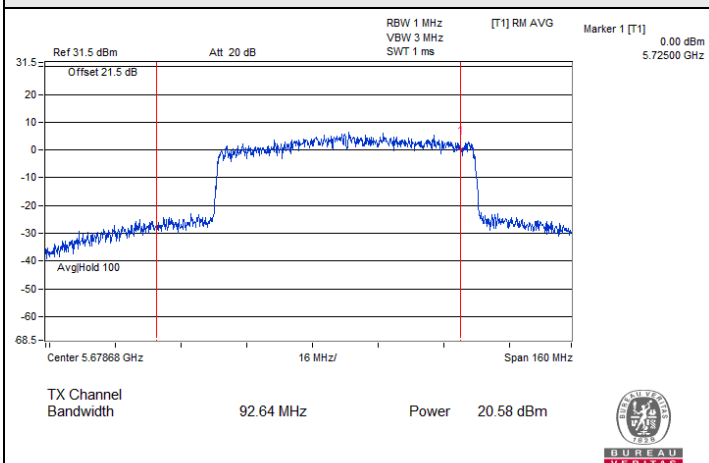


802.11ax (HE40) 1S1T : CH 142 (U-NII-2C)

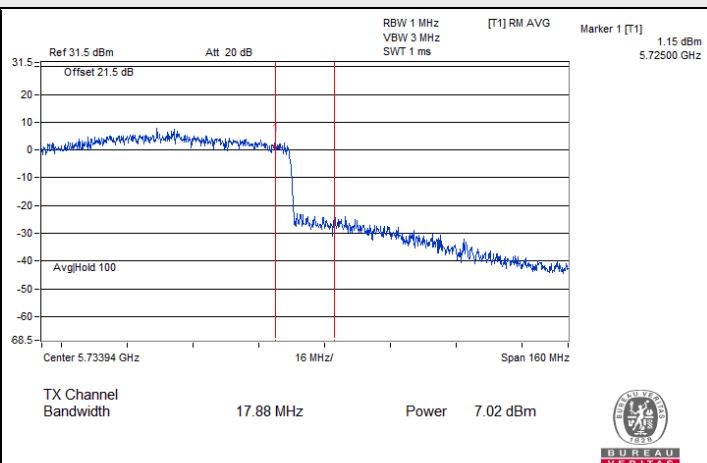


802.11ax (HE40) 1S1T : CH 142 (U-NII-3)

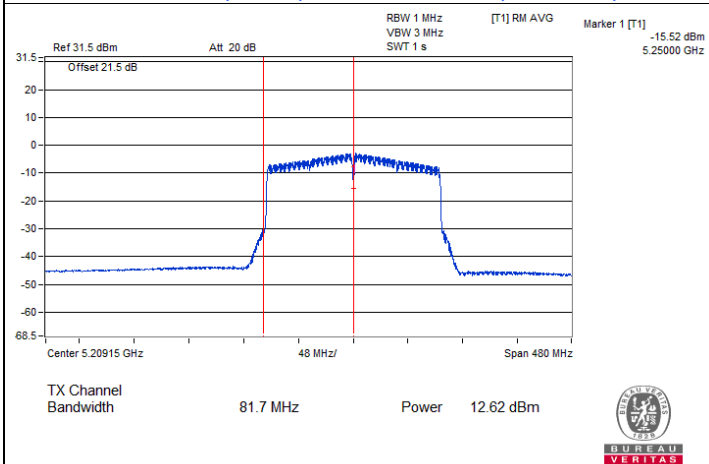
Spectrum Plot for channel straddling



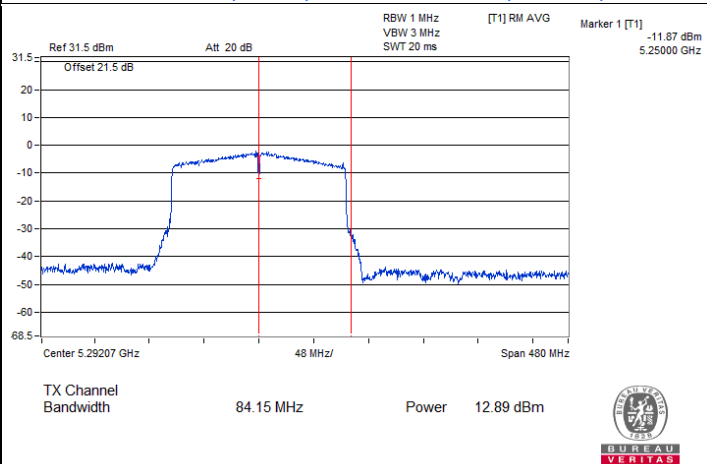
802.11ax (HE80) 1S1T : CH 138 (U-NII-2C)



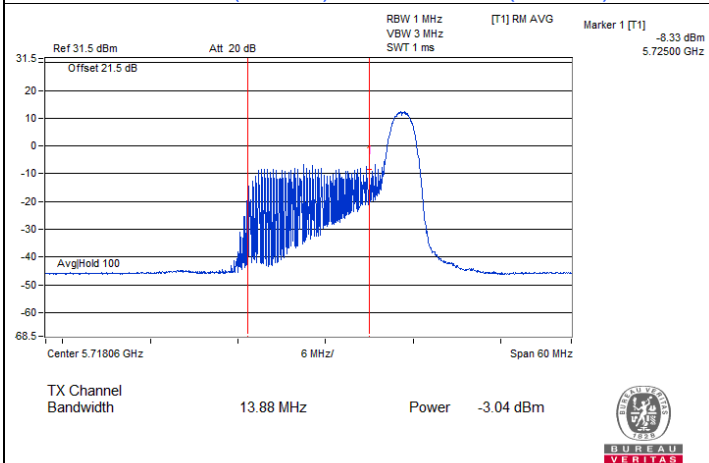
802.11ax (HE80) 1S1T : CH 138 (U-NII-3)



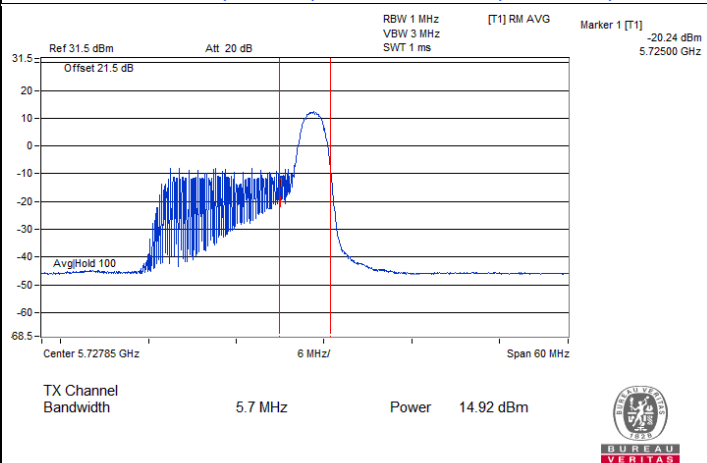
802.11ax (HE160) 1S1T : CH 50 (U-NII-1)



802.11ax (HE160) 1S1T : CH 50 (U-NII-2A)

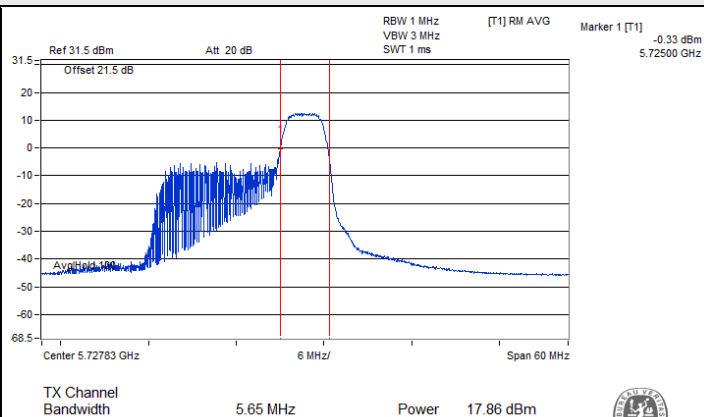
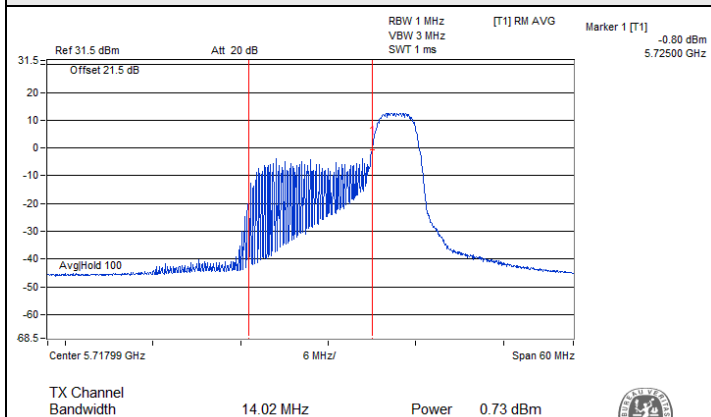


802.11ax (HE20) 26-tone RU 1S1T : CH 144@8 (U-NII-2C)



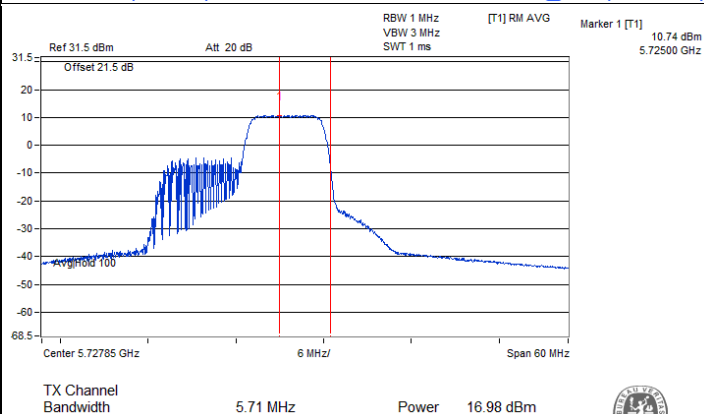
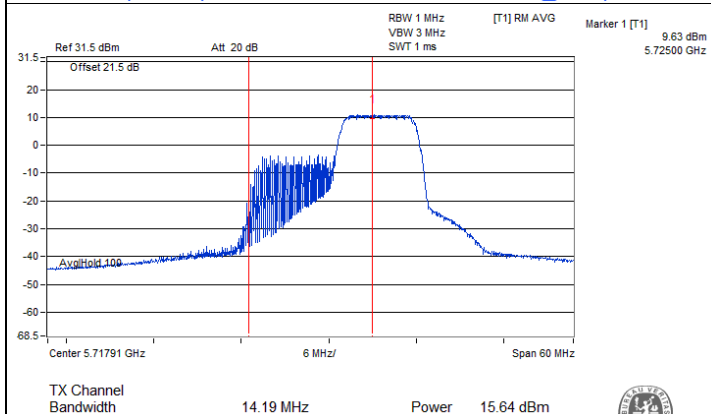
802.11ax (HE20) 26-tone RU 1S1T : CH 144@8 (U-NII-3)

Spectrum Plot for channel straddling



802.11ax (HE20) 52-tone RU 1S1T : CH 144@40 (U-NII-2C)

802.11ax (HE20) 52-tone RU 1S1T : CH 144@40 (U-NII-3)



802.11ax (HE20) 106-tone RU 1S1T : CH 144@54 (U-NII-2C)

802.11ax (HE20) 106-tone RU 1S1T : CH 144@54 (U-NII-3)

802.11a 2TX

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	18.67	17.97	136.282	21.34	24	Pass
40	5200	18.59	18.15	137.59	21.39	24	Pass
48	5240	18.60	18.31	140.208	21.47	24	Pass
52	5260	18.34	18.01	131.475	21.19	23.55	Pass
60	5300	18.40	18.17	134.798	21.30	24	Pass
64	5320	18.49	18.15	135.945	21.33	23.96	Pass
100	5500	18.31	18.19	133.682	21.26	23.67	Pass
116	5580	18.15	18.20	131.382	21.19	23.53	Pass
140	5700	17.91	18.13	126.815	21.03	23.72	Pass
*144 (U-NII-2C)	5720	16.39	17.03	153.234	21.85	22.36	Pass
*144 (U-NII-3)	5720	10.01	10.06	32.861	15.17	30	Pass
149	5745	24.17	24.44	539.187	27.32	30	Pass
157	5785	24.14	24.23	524.268	27.20	30	Pass
165	5825	24.20	24.33	534.046	27.28	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- Directional gain is the maximum gain of antennas.
- For U-NII-1, the maximum gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the maximum gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the maximum gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the maximum gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT20) 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	19.42	19.49	176.418	22.47	24	Pass
40	5200	19.46	19.52	177.844	22.50	24	Pass
48	5240	19.54	19.48	178.665	22.52	24	Pass
52	5260	19.59	19.67	183.674	22.64	23.94	Pass
60	5300	19.51	19.55	179.488	22.54	23.94	Pass
64	5320	19.62	19.57	182.195	22.61	23.96	Pass
100	5500	19.72	19.70	187.082	22.72	23.97	Pass
116	5580	19.71	19.81	189.26	22.77	23.95	Pass
140	5700	19.60	19.68	184.098	22.65	23.94	Pass
*144 (U-NII-2C)	5720	17.14	17.40	158.496	22.00	22.61	Pass
*144 (U-NII-3)	5720	10.67	10.03	32.285	15.09	30	Pass
149	5745	24.10	24.12	515.266	27.12	30	Pass
157	5785	24.06	24.19	517.105	27.14	30	Pass
165	5825	24.11	24.22	521.873	27.18	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT40) 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
38	5190	18.63	18.70	147.077	21.68	24	Pass
46	5230	20.61	20.61	230.16	23.62	24	Pass
54	5270	20.62	20.79	235.295	23.72	24	Pass
62	5310	18.53	18.54	142.735	21.55	24	Pass
102	5510	19.20	19.21	166.544	22.22	24	Pass
110	5550	20.52	20.70	230.21	23.62	24	Pass
134	5670	20.51	20.76	231.585	23.65	24	Pass
*142 (U-NII-2C)	5710	18.22	17.84	191.689	22.83	24	Pass
*142 (U-NII-3)	5710	7.68	7.53	17.368	12.40	30	Pass
151	5755	23.73	23.74	472.64	26.75	30	Pass
159	5795	24.05	24.11	511.729	27.09	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT80) 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
42	5210	17.03	17.10	101.752	20.08	24	Pass
58	5290	17.23	17.37	107.42	20.31	24	Pass
106	5530	18.02	18.06	127.36	21.05	24	Pass
122	5610	20.52	20.71	230.48	23.63	24	Pass
*138 (U-NII-2C)	5690	17.98	18.99	222.63	23.48	24	Pass
*138 (U-NII-3)	5690	4.74	2.76	7.627	8.82	30	Pass
155	5775	21.18	21.21	263.35	24.21	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ac (VHT160) 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
*50 (U-NII-1)	5250	10.10	10.44	30.837	14.89	24	Pass
*50 (U-NII-2A)	5250	10.39	10.21	31.034	14.92	24	Pass
114	5570	16.57	16.42	89.247	19.51	24	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
2. For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	19.52	19.63	181.37	22.59	24	Pass
40	5200	19.57	19.73	184.546	22.66	24	Pass
48	5240	19.66	19.67	185.153	22.68	24	Pass
52	5260	19.81	19.89	193.218	22.86	23.94	Pass
60	5300	19.77	19.80	190.341	22.80	23.94	Pass
64	5320	19.83	19.79	191.441	22.82	23.96	Pass
100	5500	19.95	19.94	197.483	22.96	23.97	Pass
116	5580	19.91	20.08	199.808	23.01	23.95	Pass
140	5700	19.81	19.90	193.443	22.87	23.94	Pass
*144 (U-NII-2C)	5720	13.81	15.42	96.223	19.83	22.61	Pass
*144 (U-NII-3)	5720	8.15	7.47	19.801	12.97	30	Pass
149	5745	24.23	24.26	531.536	27.26	30	Pass
157	5785	24.21	24.36	536.531	27.30	30	Pass
165	5825	24.23	24.40	540.273	27.33	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
2. For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE40) 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
38	5190	18.76	18.81	151.195	21.80	24	Pass
46	5230	20.72	20.78	237.706	23.76	24	Pass
54	5270	20.86	21.03	248.664	23.96	24	Pass
62	5310	18.76	18.81	151.195	21.80	24	Pass
102	5510	19.42	19.45	175.603	22.45	24	Pass
110	5550	20.74	20.94	242.742	23.85	24	Pass
134	5670	20.73	20.99	243.907	23.87	24	Pass
*142 (U-NII-2C)	5710	17.56	17.98	197.985	22.97	24	Pass
*142 (U-NII-3)	5710	8.44	8.52	23.289	13.67	30	Pass
151	5755	23.83	23.85	484.207	26.85	30	Pass
159	5795	24.19	24.22	526.663	27.22	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE80) 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
42	5210	17.16	17.22	104.723	20.20	24	Pass
58	5290	17.36	17.48	110.426	20.43	24	Pass
106	5530	18.12	18.17	130.478	21.16	24	Pass
122	5610	20.63	20.82	236.393	23.74	24	Pass
*138 (U-NII-2C)	5690	18.26	18.34	225.147	23.52	24	Pass
*138 (U-NII-3)	5690	5.50	4.30	10.389	10.17	30	Pass
155	5775	21.33	21.32	271.35	24.34	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE160) 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
*50 (U-NII-1)	5250	10.32	10.38	33.241	15.22	24	Pass
*50 (U-NII-2A)	5250	10.12	10.16	31.672	15.01	24	Pass
114	5570	16.68	16.54	91.64	19.62	24	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT20) 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	19.63	19.77	186.675	22.71	24	Pass
40	5200	19.70	19.85	189.931	22.79	24	Pass
48	5240	19.77	19.82	190.782	22.81	24	Pass
149	5745	24.35	24.42	548.964	27.40	30	Pass
157	5785	24.36	24.48	553.441	27.43	30	Pass
165	5825	24.34	24.51	554.132	27.44	30	Pass

Notes:

- For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT40) 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
38	5190	18.87	18.92	155.073	21.91	24	Pass
46	5230	20.85	20.90	244.645	23.89	24	Pass
151	5755	23.95	23.96	497.199	26.97	30	Pass
159	5795	24.30	24.32	539.549	27.32	30	Pass

Notes:

- For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT80) 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
42	5210	17.30	17.37	108.279	20.35	24	Pass
155	5775	21.44	21.43	278.311	24.45	30	Pass

Notes:

1. For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) 26-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	12.04	12.18	32.515	15.12	24	Pass
64	5320	12.02	11.73	30.816	14.89	23.85	Pass
100	5500	12.32	12.39	34.399	15.37	23.85	Pass
140	5700	12.02	11.85	31.233	14.95	23.84	Pass
*144 (U-NII-2C)	5720	-3.68	-4.01	0.9468	-0.24	22.39	Pass
*144 (U-NII-3)	5720	11.59	11.31	32.038	15.06	30	Pass
149	5745	24.15	24.07	515.286	27.12	30	Pass
165	5825	24.21	24.16	524.248	27.20	30	Pass

Notes:

1. * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
2. For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) 52-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	15.15	14.98	64.212	18.08	24	Pass
64	5320	15.08	15.07	64.347	18.09	23.91	Pass
100	5500	15.17	15.24	66.305	18.22	23.85	Pass
140	5700	14.98	14.90	62.38	17.95	23.9	Pass
*144 (U-NII-2C)	5720	-0.21	-0.71	2.0662	3.15	22.44	Pass
*144 (U-NII-3)	5720	14.48	14.03	61.168	17.87	30	Pass
149	5745	24.08	24.05	509.956	27.08	30	Pass
165	5825	24.18	24.23	526.668	27.22	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11ax (HE20) 106-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	17.98	18.01	126.047	21.01	24	Pass
64	5320	18.11	18.20	130.784	21.17	24	Pass
100	5500	18.28	18.22	133.672	21.26	23.92	Pass
140	5700	17.90	17.88	123.036	20.90	24	Pass
*144 (U-NII-2C)	5720	13.94	13.45	53.782	17.31	22.47	Pass
*144 (U-NII-3)	5720	15.13	14.72	71.355	18.53	30	Pass
149	5745	24.07	24.01	507.038	27.05	30	Pass
165	5825	24.14	24.23	524.268	27.20	30	Pass

Notes:

- * : Test was performed in accordance with measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test , the duty factor was included in the total power.
- For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
- For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT20) 26-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	12.25	12.36	34.007	15.32	24	Pass
149	5745	24.28	24.24	533.377	27.27	30	Pass
165	5825	24.32	24.36	543.294	27.35	30	Pass

Notes:

1. For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT20) 52-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	15.29	15.14	66.465	18.23	24	Pass
149	5745	24.19	24.21	526.055	27.21	30	Pass
165	5825	24.30	24.35	541.424	27.34	30	Pass

Notes:

1. For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT20) 106-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	18.14	18.13	130.176	21.15	24	Pass
149	5745	24.18	24.13	520.64	27.17	30	Pass
165	5825	24.27	24.34	538.945	27.32	30	Pass

Notes:

1. For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT20) 52+26-tone MRU 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	17.06	17.18	103.056	20.13	24	Pass
149	5745	24.10	24.17	518.256	27.15	30	Pass
165	5825	24.24	24.39	540.25	27.33	30	Pass

Notes:

1. For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

802.11be (EHT20) 106+26-tone MRU 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
36	5180	17.97	18.14	127.824	21.07	24	Pass
149	5745	24.16	24.04	514.128	27.11	30	Pass
165	5825	24.25	24.40	541.495	27.34	30	Pass

Notes:

1. For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

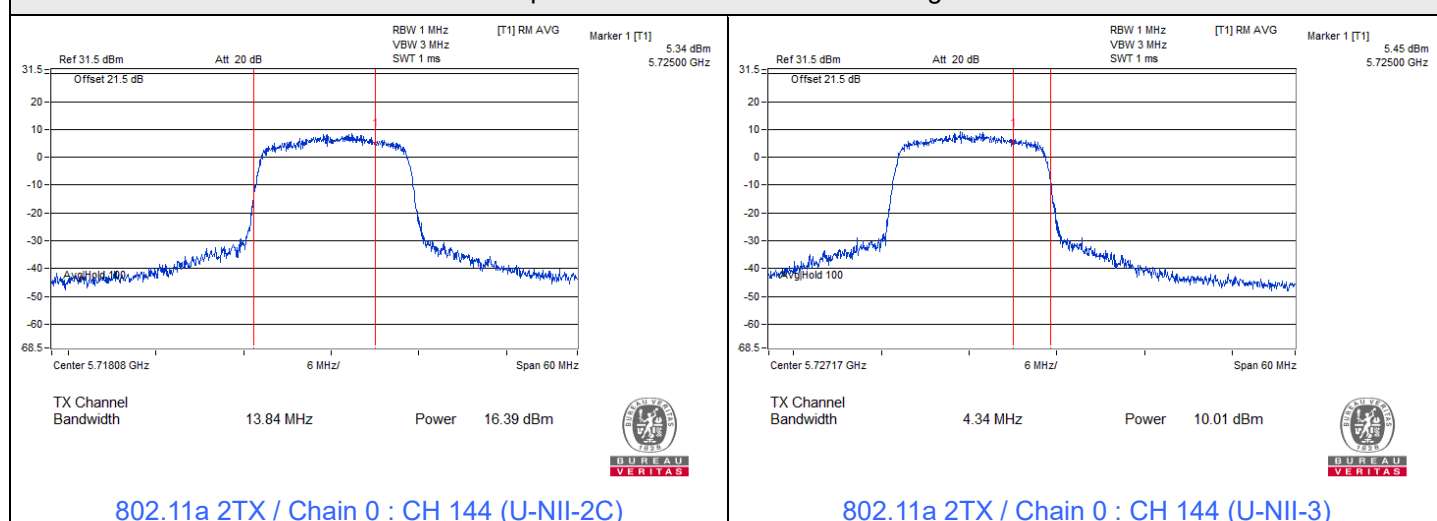
802.11be (EHT80) 484+242-tone MRU 2S2T

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Test Result
		Chain 0	Chain 1				
42	5210	14.31	14.33	54.079	17.33	24	Pass
155	5775	18.82	18.85	152.944	21.85	30	Pass

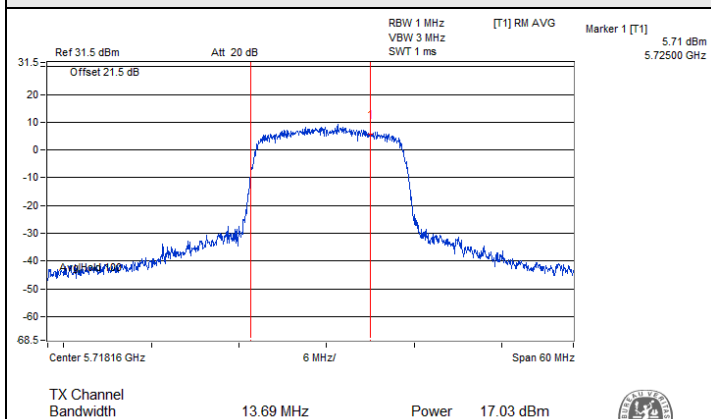
Notes:

1. For U-NII-1, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the output power limit shall not be reduced.

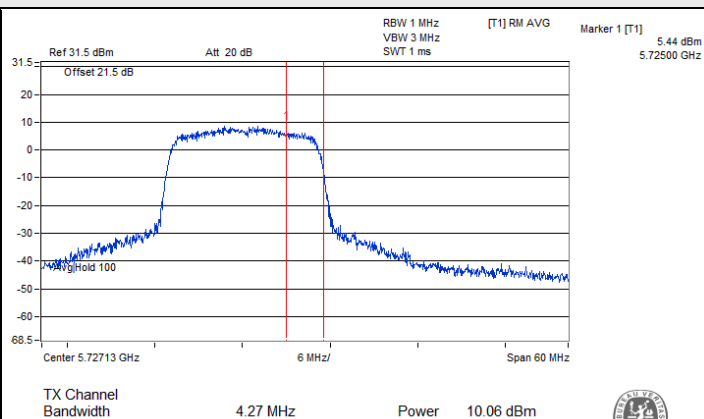
Spectrum Plot for channel straddling



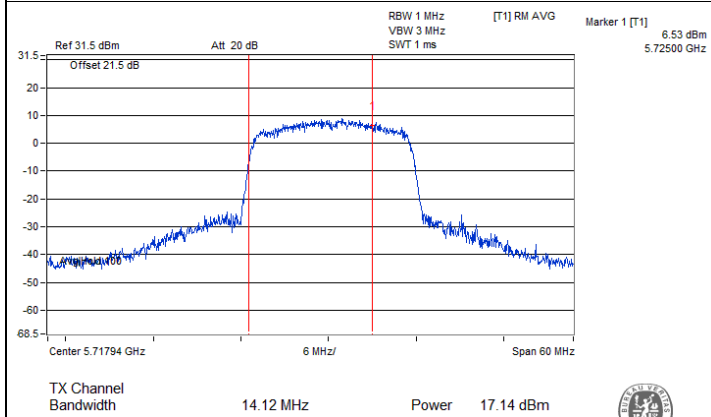
Spectrum Plot for channel straddling



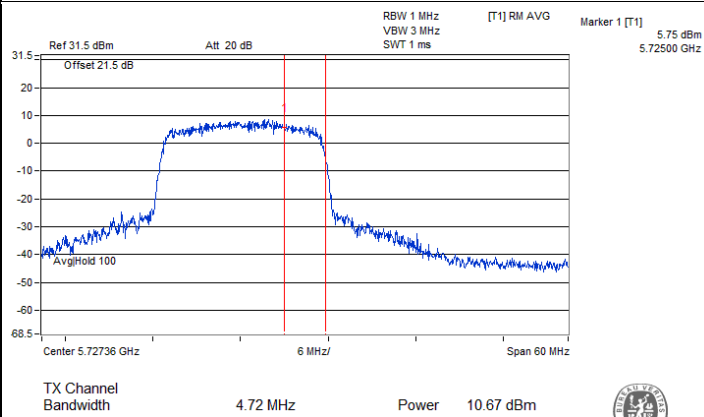
802.11a 2TX / Chain 1 : CH 144 (U-NII-2C)



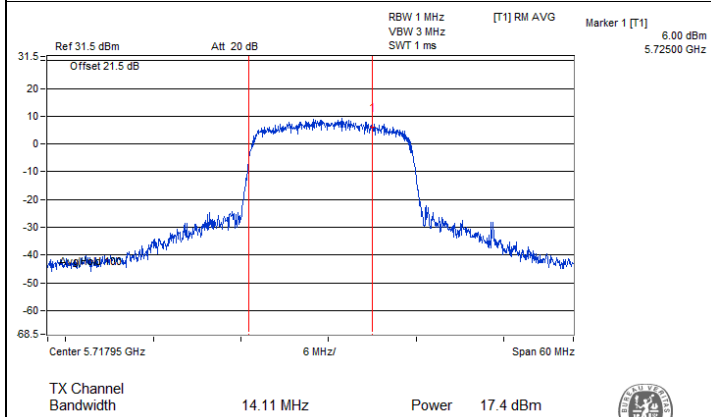
802.11a 2TX / Chain 1 : CH 144 (U-NII-3)



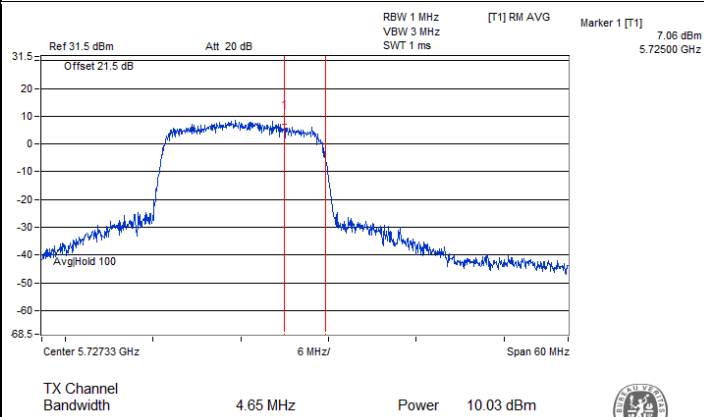
802.11ac (VHT20) 2S2T / Chain 0 : CH 144 (U-NII-2C)



802.11ac (VHT20) 2S2T / Chain 0 : CH 144 (U-NII-3)

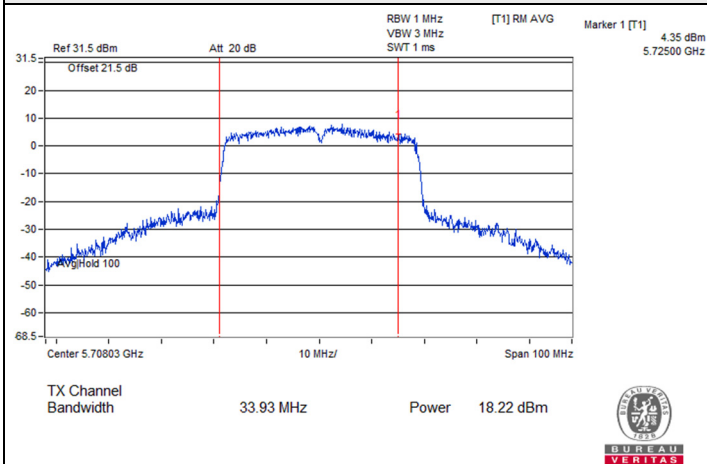


802.11ac (VHT20) 2S2T / Chain 1 : CH 144 (U-NII-2C)

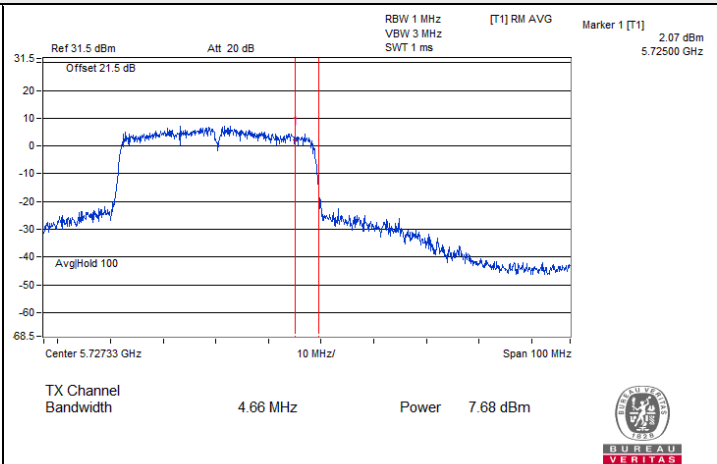


802.11ac (VHT20) 2S2T / Chain 1 : CH 144 (U-NII-3)

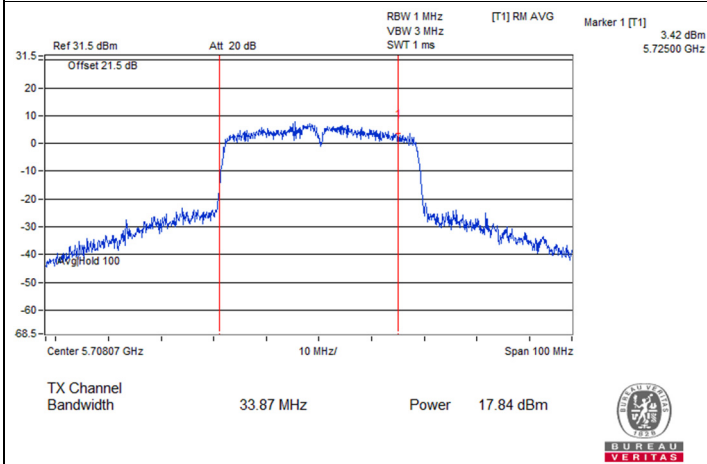
Spectrum Plot for channel straddling



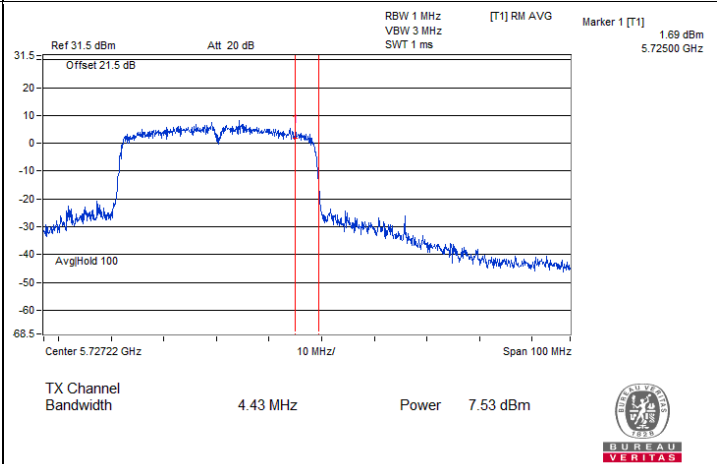
802.11ac (VHT40) 2S2T / Chain 0 : CH 142 (U-NII-2C)



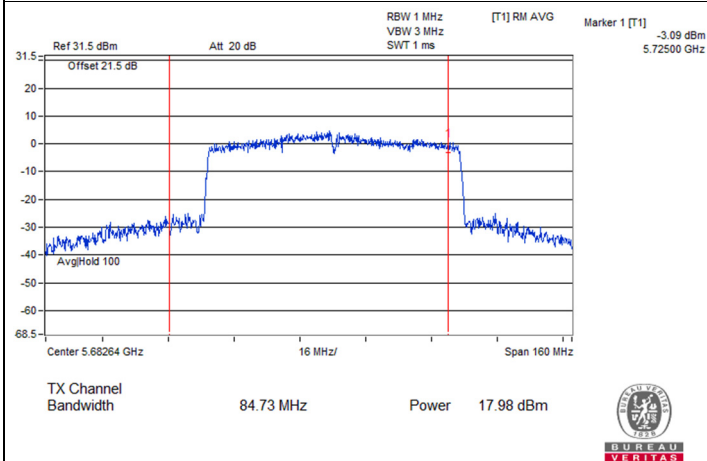
802.11ac (VHT40) 2S2T / Chain 0 : CH 142 (U-NII-3)



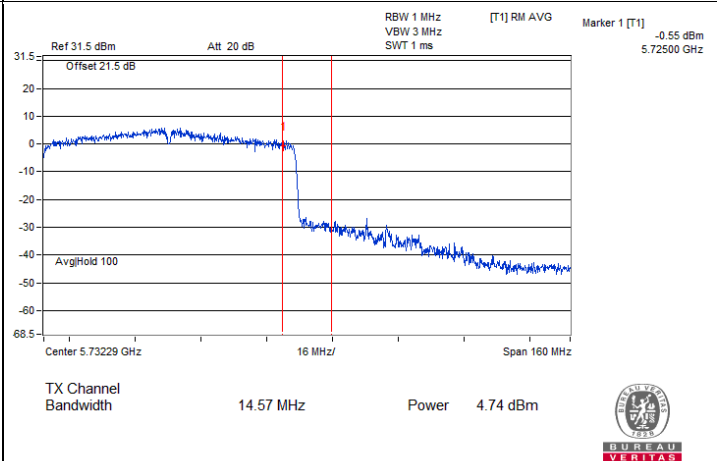
802.11ac (VHT40) 2S2T / Chain 1 : CH 142 (U-NII-2C)



802.11ac (VHT40) 2S2T / Chain 1 : CH 142 (U-NII-3)

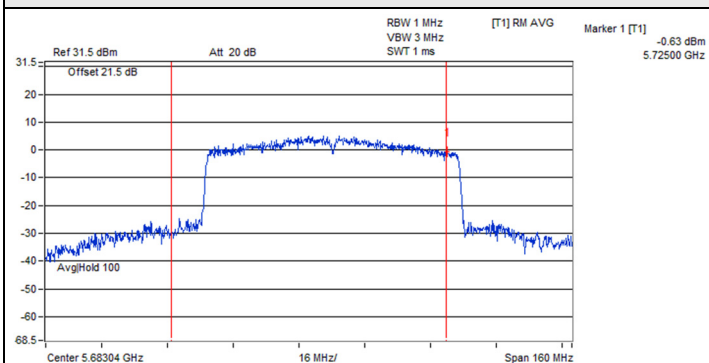


802.11ac (VHT80) 2S2T / Chain 0 : CH 138 (U-NII-2C)

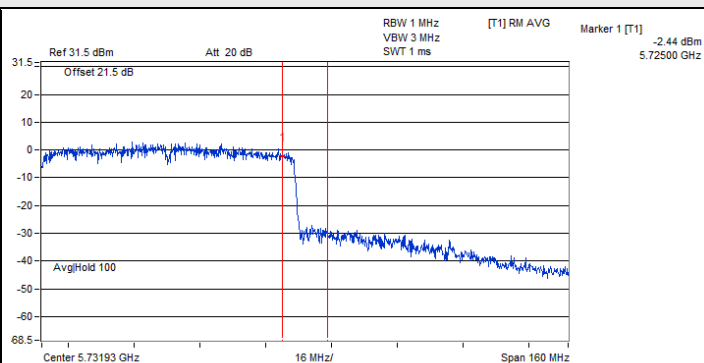


802.11ac (VHT80) 2S2T / Chain 0 : CH 138 (U-NII-3)

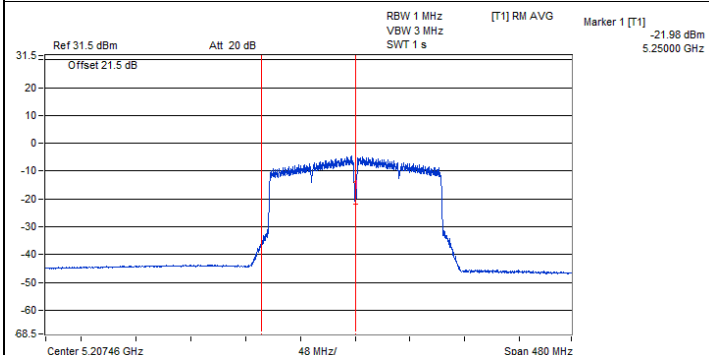
Spectrum Plot for channel straddling



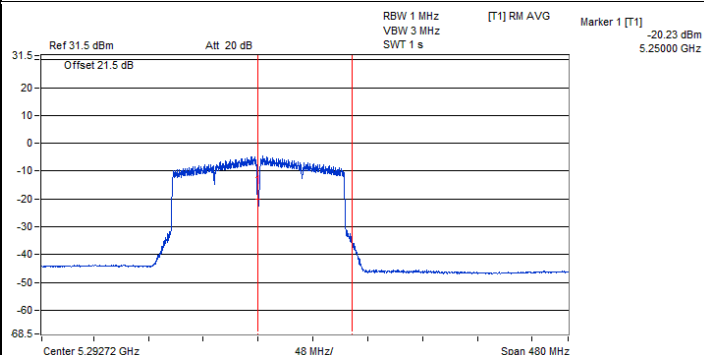
802.11ac (VHT80) 2S2T / Chain 1 : CH 138 (U-NII-2C)



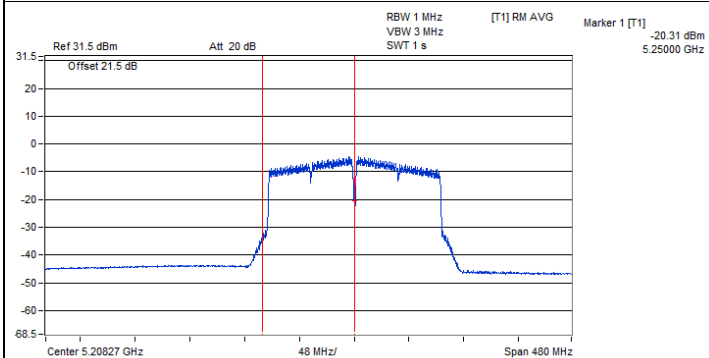
802.11ac (VHT80) 2S2T / Chain 1 : CH 138 (U-NII-3)



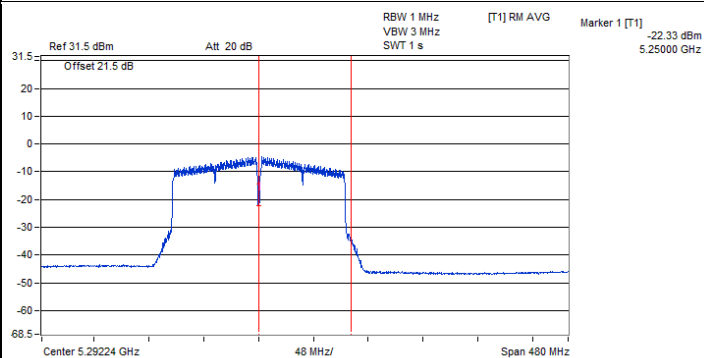
802.11ac (VHT160) 2S2T / Chain 0 : CH 50 (U-NII-1)



802.11ac (VHT160) 2S2T / Chain 0 : CH 50 (U-NII-2A)

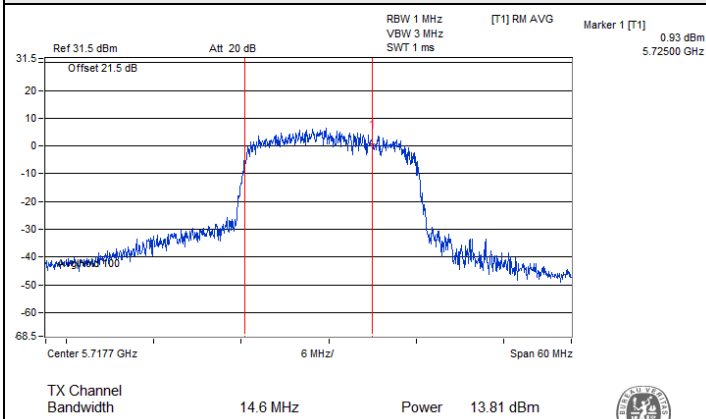


802.11ac (VHT160) 2S2T / Chain 1 : CH 50 (U-NII-1)

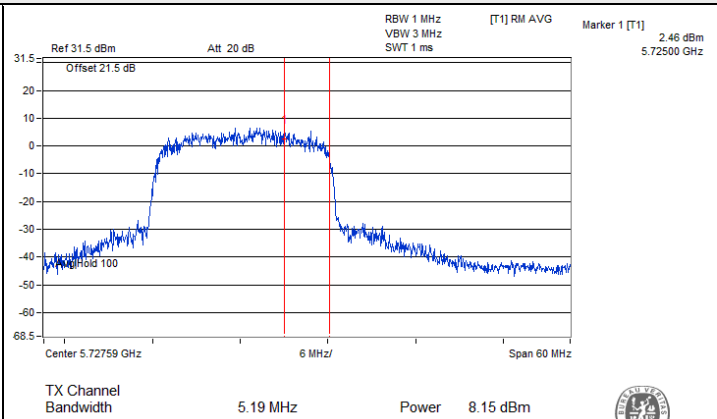


802.11ac (VHT160) 2S2T / Chain 1 : CH 50 (U-NII-2A)

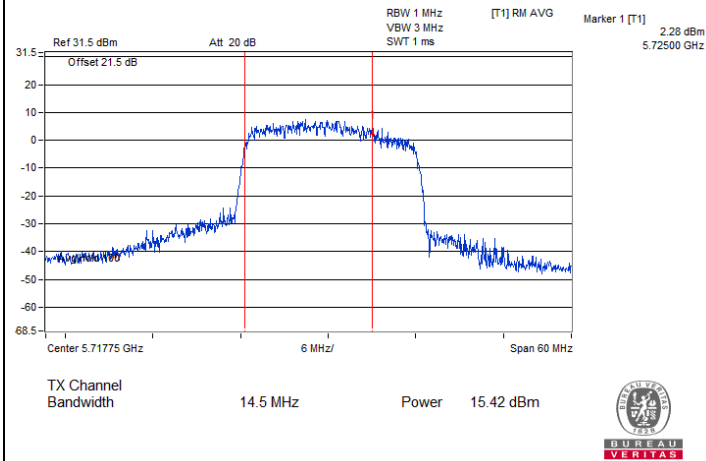
Spectrum Plot for channel straddling



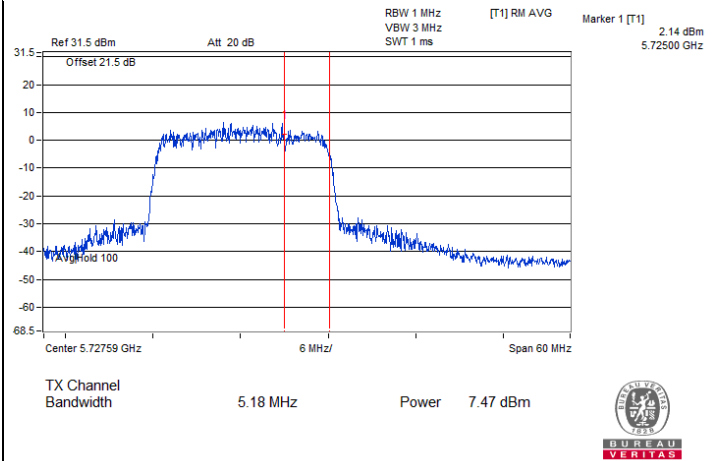
802.11ax (HE20) 2S2T / Chain 0 : CH 144 (U-NII-2C)



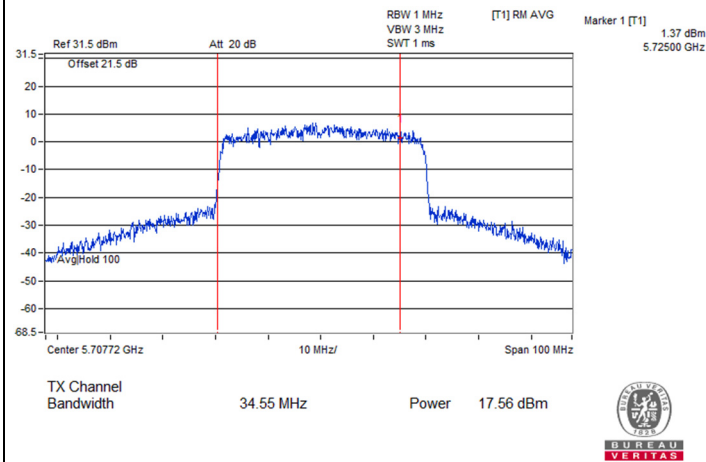
802.11ax (HE20) 2S2T / Chain 0 : CH 144 (U-NII-3)



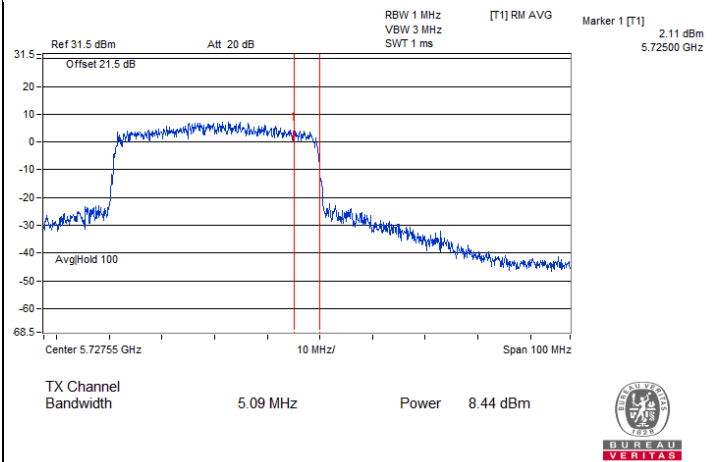
802.11ax (HE20) 2S2T / Chain 1 : CH 144 (U-NII-2C)



802.11ax (HE20) 2S2T / Chain 1 : CH 144 (U-NII-3)

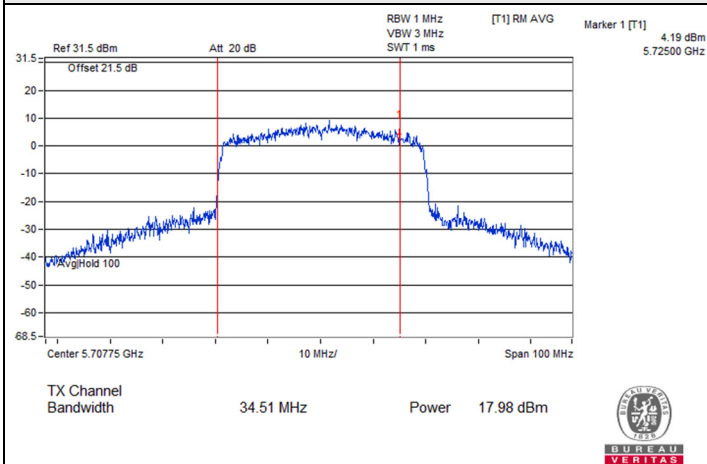


802.11ax (HE40) 2S2T / Chain 0 : CH 142 (U-NII-2C)

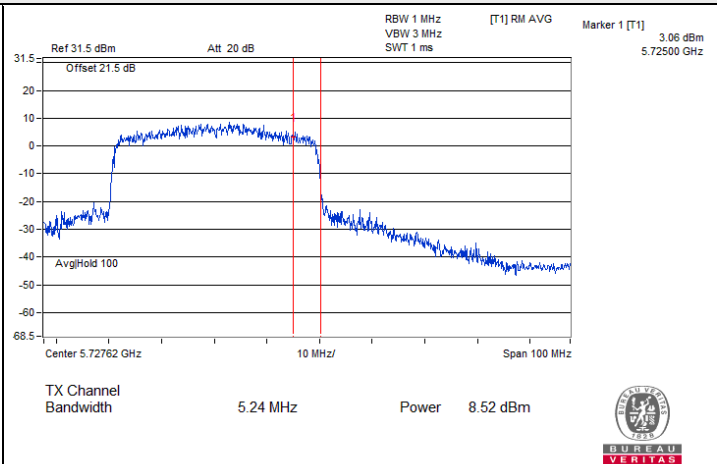


802.11ax (HE40) 2S2T / Chain 0 : CH 142 (U-NII-3)

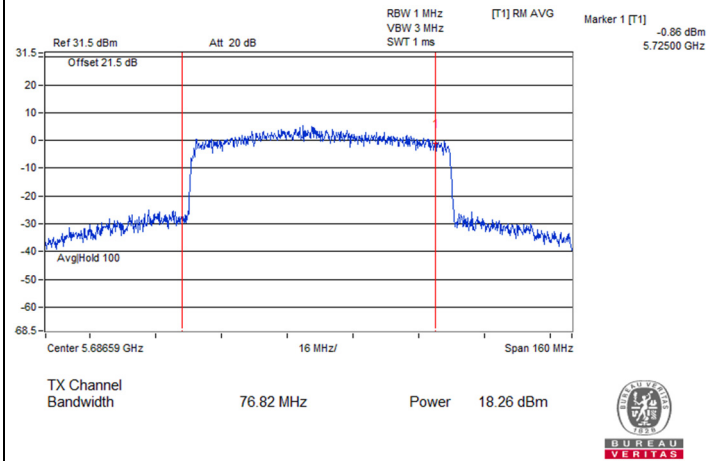
Spectrum Plot for channel straddling



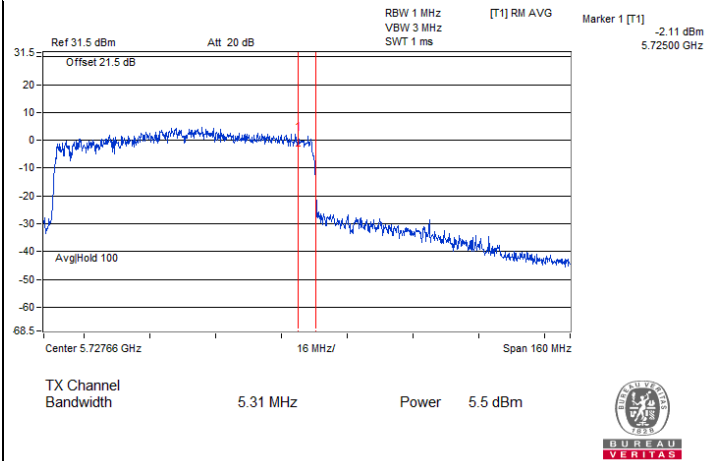
802.11ax (HE40) 2S2T / Chain 1 : CH 142 (U-NII-2C)



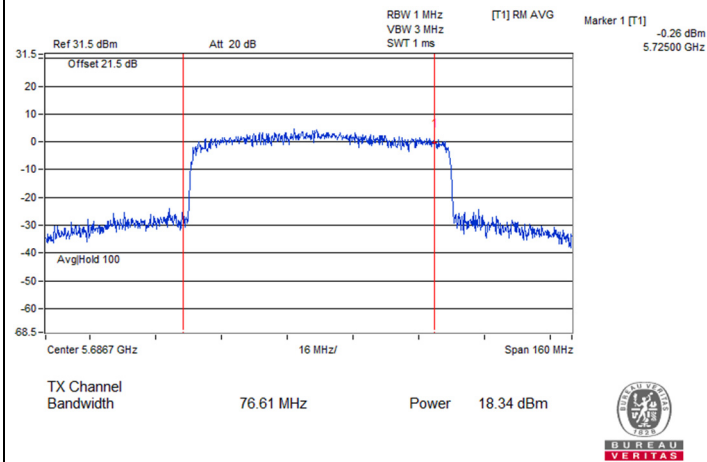
802.11ax (HE40) 2S2T / Chain 1 : CH 142 (U-NII-3)



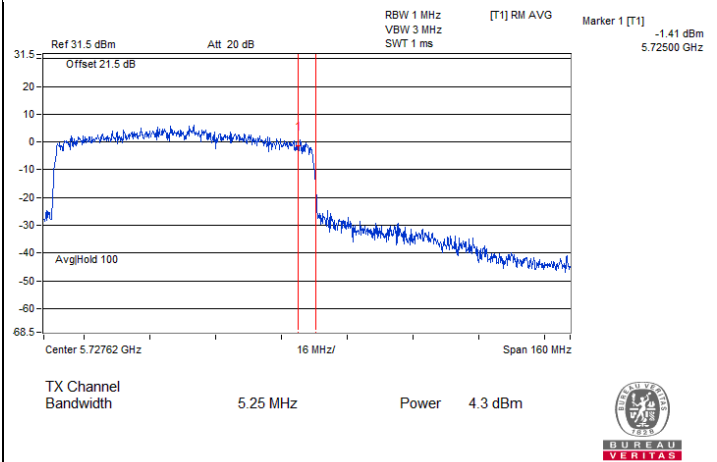
802.11ax (HE80) 2S2T / Chain 0 : CH 138 (U-NII-2C)



802.11ax (HE80) 2S2T / Chain 0 : CH 138 (U-NII-3)

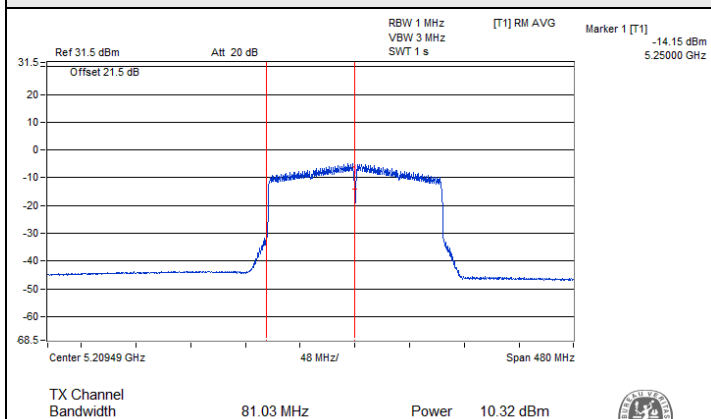


802.11ax (HE80) 2S2T / Chain 1 : CH 138 (U-NII-2C)

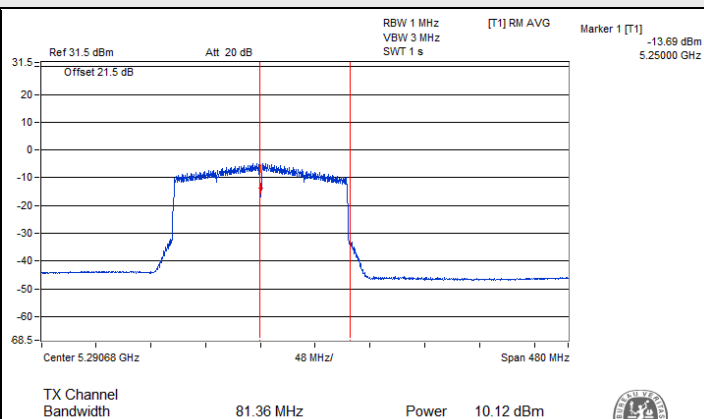


802.11ax (HE80) 2S2T / Chain 1 : CH 138 (U-NII-3)

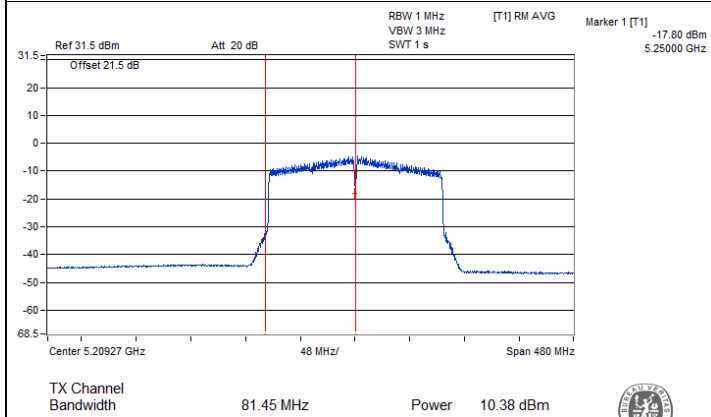
Spectrum Plot for channel straddling



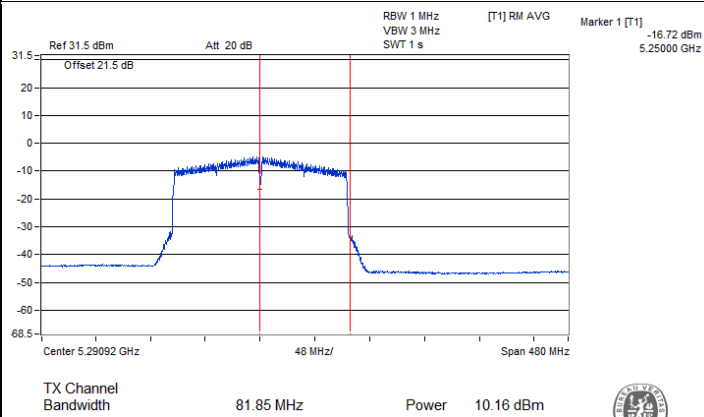
802.11ax (HE160) 2S2T / Chain 0 : CH 50 (U-NII-1)



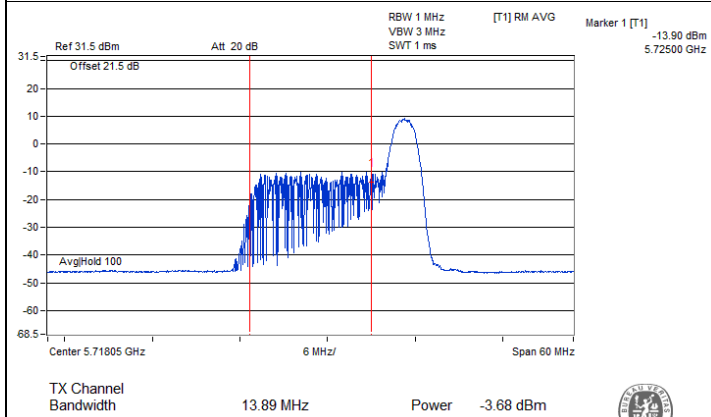
802.11ax (HE160) 2S2T / Chain 0 : CH 50 (U-NII-2A)



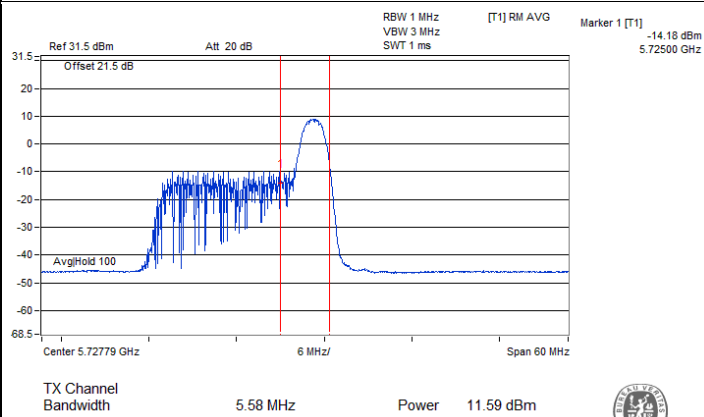
802.11ax (HE160) 2S2T / Chain 1 : CH 50 (U-NII-1)



802.11ax (HE160) 2S2T / Chain 1 : CH 50 (U-NII-2A)

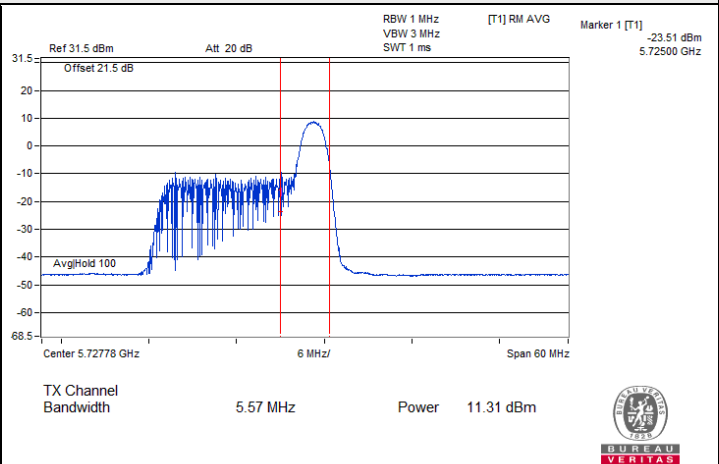
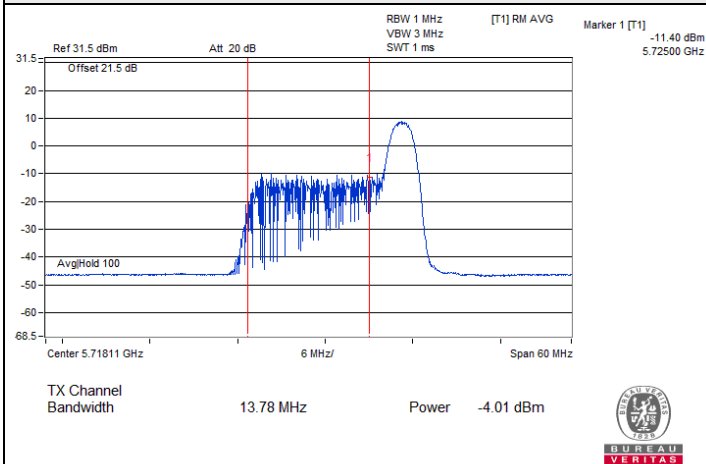


802.11ax (HE20) 26-tone RU 2S2T / Chain 0 : CH 144@8 (U-NII-2C)



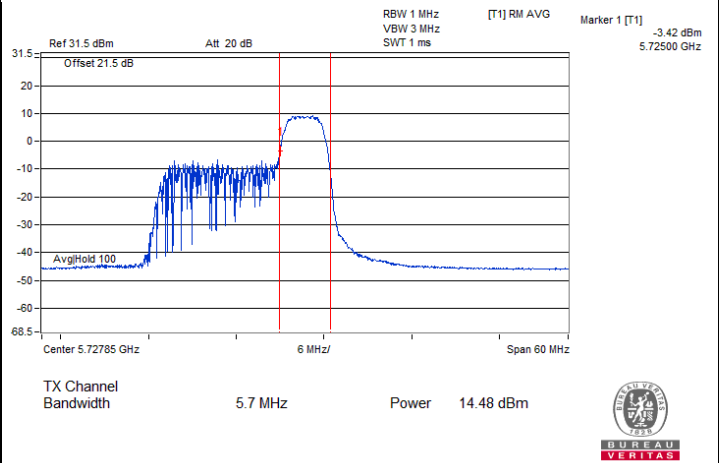
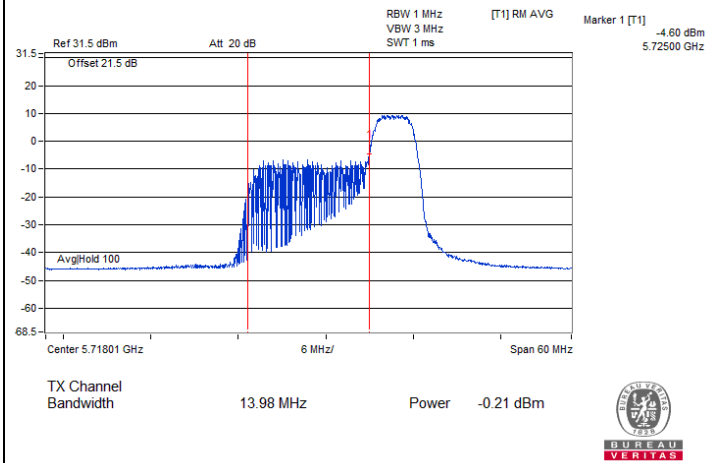
802.11ax (HE20) 26-tone RU 2S2T / Chain 0 : CH 144@8 (U-NII-3)

Spectrum Plot for channel straddling



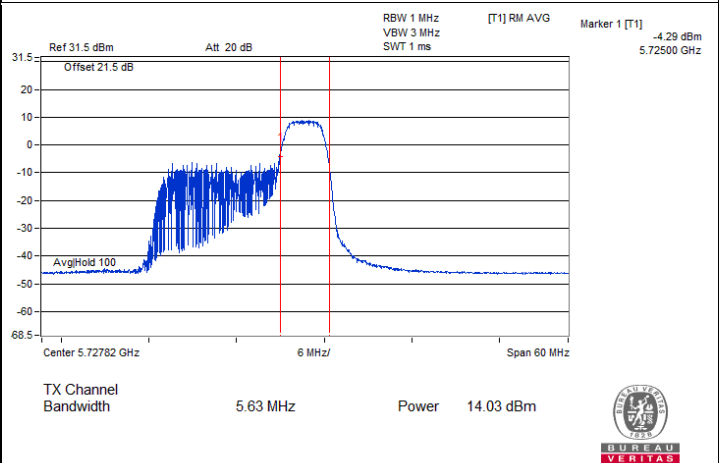
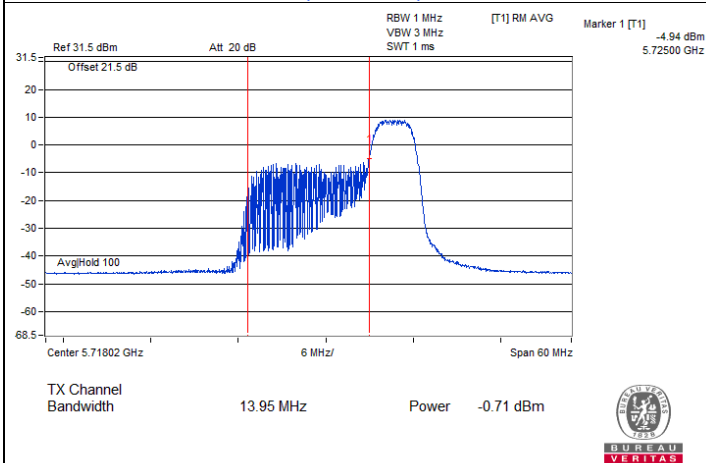
802.11ax (HE20) 26-tone RU 2S2T / Chain 1 : CH 144@8 (U-NII-2C)

802.11ax (HE20) 26-tone RU 2S2T / Chain 1 : CH 144@8 (U-NII-3)



802.11ax (HE20) 52-tone RU 2S2T / Chain 0 : CH 144@40 (U-NII-2C)

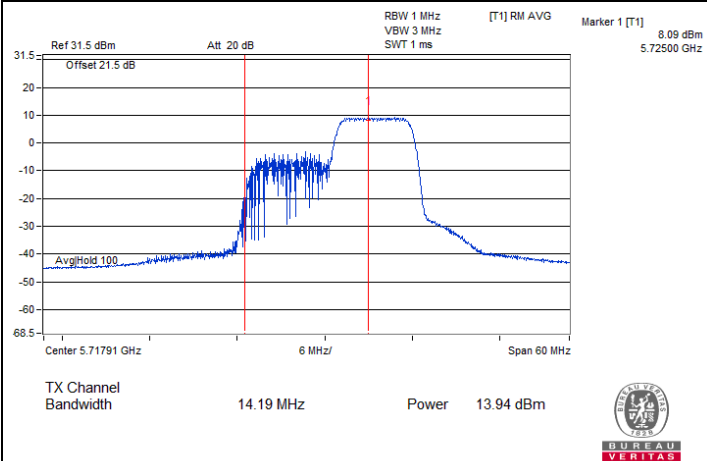
802.11ax (HE20) 52-tone RU 2S2T / Chain 0 : CH 144@40 (U-NII-3)



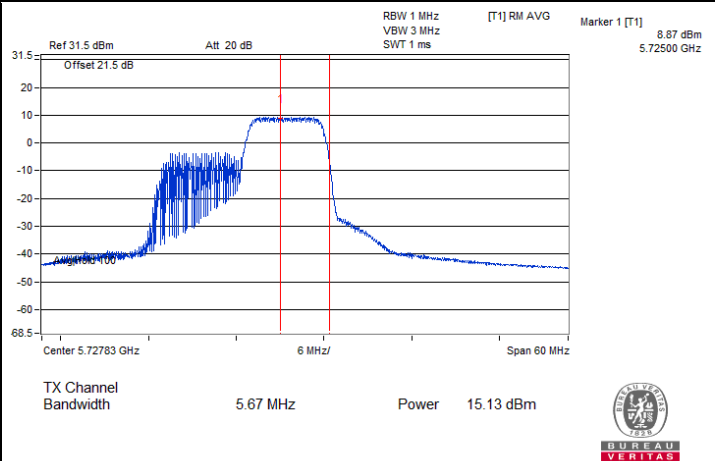
802.11ax (HE20) 52-tone RU 2S2T / Chain 1 : CH 144@40 (U-NII-2C)

802.11ax (HE20) 52-tone RU 2S2T / Chain 1 : CH 144@40 (U-NII-3)

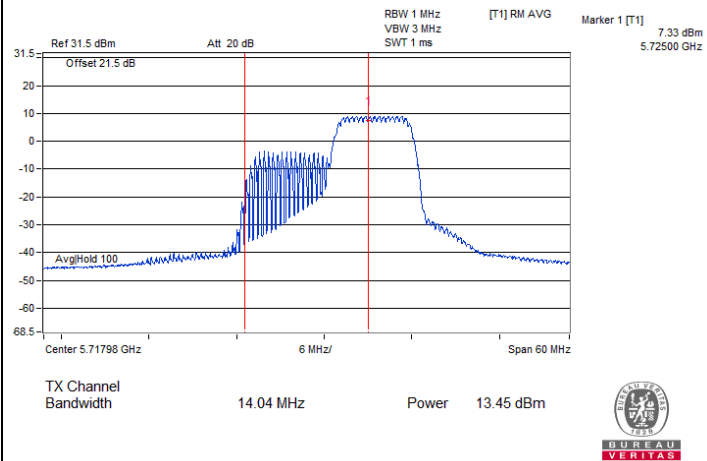
Spectrum Plot for channel straddling



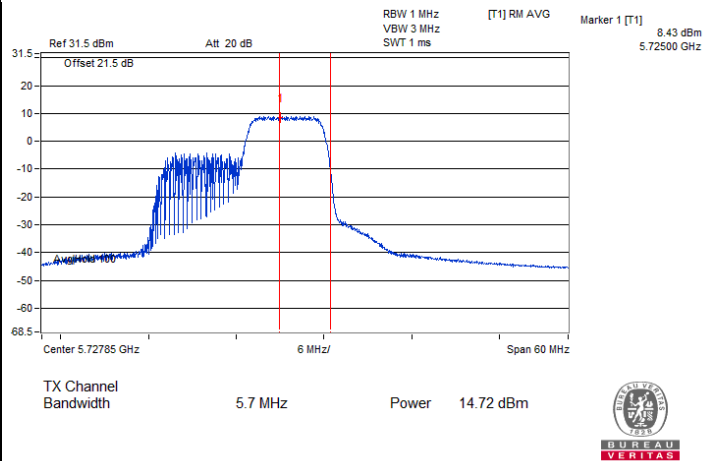
802.11ax (HE20) 106-tone RU 2S2T / Chain 0 : CH 144@54 (U-NII-2C)



802.11ax (HE20) 106-tone RU 2S2T / Chain 0 : CH 144@54 (U-NII-3)



802.11ax (HE20) 106-tone RU 2S2T / Chain 1 : CH 144@54 (U-NII-2C)



802.11ax (HE20) 106-tone RU 2S2T / Chain 1 : CH 144@54 (U-NII-3)

7.3 Power Spectral Density

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Willy Lin
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802.11a 1TX

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	8.81	2.13	10.94	11	Pass
40	5200	8.84	2.13	10.97	11	Pass
48	5240	8.81	2.13	10.94	11	Pass
52	5260	8.84	2.13	10.97	11	Pass
60	5300	8.82	2.13	10.95	11	Pass
64	5320	8.62	2.13	10.75	11	Pass
100	5500	8.64	2.13	10.77	11	Pass
116	5580	8.85	2.13	10.98	11	Pass
140	5700	8.55	2.13	10.68	11	Pass
144 (U-NII-2C)	5720	8.40	2.13	10.53	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	9.77	1.22	10.99	11	Pass
40	5200	9.70	1.22	10.92	11	Pass
48	5240	9.64	1.22	10.86	11	Pass
52	5260	9.60	1.22	10.82	11	Pass
60	5300	9.63	1.22	10.85	11	Pass
64	5320	9.59	1.22	10.81	11	Pass
100	5500	9.60	1.22	10.82	11	Pass
116	5580	9.51	1.22	10.73	11	Pass
140	5700	9.72	1.22	10.94	11	Pass
144 (U-NII-2C)	5720	9.54	1.22	10.76	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE40) 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
38	5190	6.75	1.23	7.98	11	Pass
46	5230	8.17	1.23	9.40	11	Pass
54	5270	7.74	1.23	8.97	11	Pass
62	5310	5.36	1.23	6.59	11	Pass
102	5510	5.39	1.23	6.62	11	Pass
110	5550	8.79	1.23	10.02	11	Pass
134	5670	7.58	1.23	8.81	11	Pass
142 (U-NII-2C)	5710	7.05	1.23	8.28	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE80) 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
42	5210	2.20	1.30	3.50	11	Pass
58	5290	2.44	1.30	3.74	11	Pass
106	5530	2.43	1.30	3.73	11	Pass
122	5610	5.53	1.30	6.83	11	Pass
138 (U-NII-2C)	5690	4.59	1.30	5.89	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE160) 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
50 (U-NII-1)	5250	-4.36	1.06	-3.30	11	Pass
50 (U-NII-2A)	5250	-4.58	1.06	-3.52	11	Pass
114	5570	-2.70	1.06	-1.64	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	9.54	1.09	10.63	11	Pass
40	5200	9.69	1.09	10.78	11	Pass
48	5240	9.82	1.09	10.91	11	Pass

Note: For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11be (EHT40) 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
38	5190	7.08	1.06	8.14	11	Pass
46	5230	8.16	1.06	9.22	11	Pass

Note: For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11be (EHT80) 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
42	5210	2.07	1.17	3.24	11	Pass

Note: For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 26-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	10.60	0.33	10.93	11	Pass
64	5320	10.58	0.33	10.91	11	Pass
100	5500	10.41	0.33	10.74	11	Pass
140	5700	10.66	0.33	10.99	11	Pass
144 (U-NII-2C)	5720	-12.65	0.33	-12.32	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 52-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	10.31	0.33	10.64	11	Pass
64	5320	10.64	0.33	10.97	11	Pass
100	5500	10.58	0.33	10.91	11	Pass
140	5700	10.64	0.33	10.97	11	Pass
144 (U-NII-2C)	5720	-6.30	0.33	-5.97	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 106-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	10.34	0.33	10.67	11	Pass
64	5320	10.56	0.33	10.89	11	Pass
100	5500	10.45	0.33	10.78	11	Pass
140	5700	10.55	0.33	10.88	11	Pass
144 (U-NII-2C)	5720	10.37	0.33	10.70	11	Pass

Notes:

1. For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 26-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	10.64	0.32	10.96	11	Pass

Note: For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 52-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	10.33	0.32	10.65	11	Pass

Note: For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 106-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	10.31	0.32	10.63	11	Pass

Note: For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 52+26-tone MRU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	10.55	0.31	10.86	11	Pass

Note: For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 106+26-tone MRU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
36	5180	10.66	0.28	10.94	11	Pass

Note: For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11be (EHT80) 484+242-tone MRU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
42	5210	-1.29	0.39	-0.90	11	Pass

Note: For U-NII-1, the antenna gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11a 1TX

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
144 (U-NII-3)	5720	0.67	2.13	5.02	30	Pass
149	5745	7.48	2.13	11.83	30	Pass
157	5785	7.52	2.13	11.87	30	Pass
165	5825	7.9	2.13	12.25	30	Pass

Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
144 (U-NII-3)	5720	0.65	1.22	4.09	30	Pass
149	5745	8.69	1.22	12.13	30	Pass
157	5785	8.73	1.22	12.17	30	Pass
165	5825	8.54	1.22	11.98	30	Pass

Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE40) 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
142 (U-NII-3)	5710	-1.8	1.23	1.65	30	Pass
151	5755	4.38	1.23	7.83	30	Pass
159	5795	4.33	1.23	7.78	30	Pass

Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE80) 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
138 (U-NII-3)	5690	-4.88	1.3	-1.36	30	Pass
155	5775	-0.98	1.3	2.54	30	Pass

Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
149	5745	8.66	1.09	11.97	30	Pass
157	5785	8.5	1.09	11.81	30	Pass
165	5825	8.37	1.09	11.68	30	Pass

Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT40) 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
151	5755	4.55	1.06	7.83	30	Pass
159	5795	4.33	1.06	7.61	30	Pass

Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT80) 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
155	5775	-0.59	1.17	2.80	30	Pass

Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 26-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
144 (U-NII-3)	5720	5.41	0.33	7.96	30	Pass
149	5745	14.4	0.33	16.95	30	Pass
165	5825	14.08	0.33	16.63	30	Pass

Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 52-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
144 (U-NII-3)	5720	5.37	0.33	7.92	30	Pass
149	5745	11.41	0.33	13.96	30	Pass
165	5825	11.24	0.33	13.79	30	Pass

Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 106-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
144 (U-NII-3)	5720	5.2	0.33	7.75	30	Pass
149	5745	8.36	0.33	10.91	30	Pass
165	5825	8.11	0.33	10.66	30	Pass

Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 26-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
149	5745	14.73	0.32	17.27	30	Pass
165	5825	14.39	0.32	16.93	30	Pass

Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 52-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
149	5745	11.76	0.32	14.30	30	Pass
165	5825	11.48	0.32	14.02	30	Pass

Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 106-tone RU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
149	5745	8.4	0.32	10.94	30	Pass
165	5825	8.08	0.32	10.62	30	Pass

Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 52+26-tone MRU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
149	5745	9.69	0.31	12.22	30	Pass
165	5825	9.76	0.31	12.29	30	Pass

Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 106+26-tone MRU 1S1T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
149	5745	9.03	0.28	11.53	30	Pass
165	5825	8.85	0.28	11.35	30	Pass

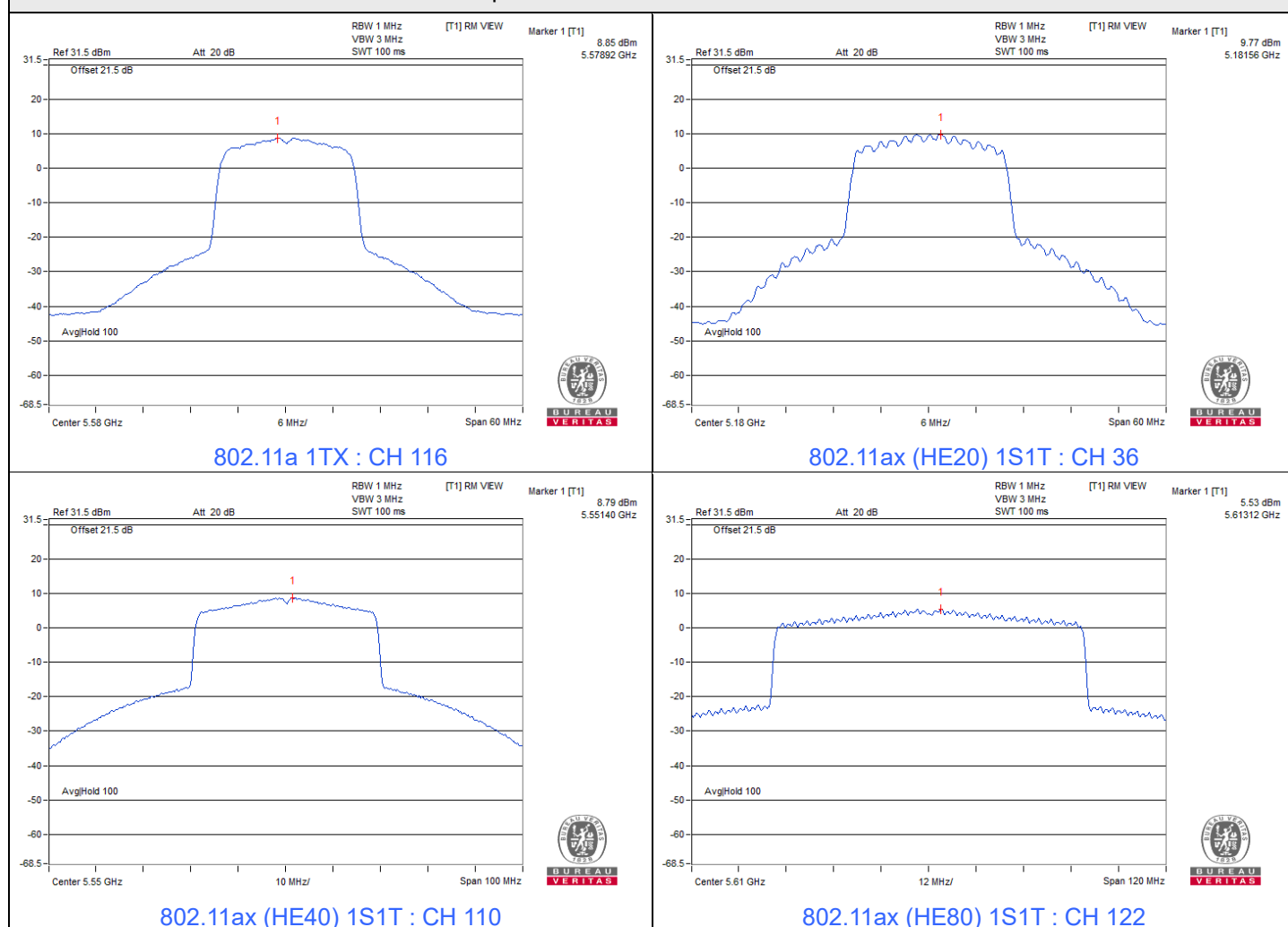
Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT80) 484+242-tone MRU 1S1T

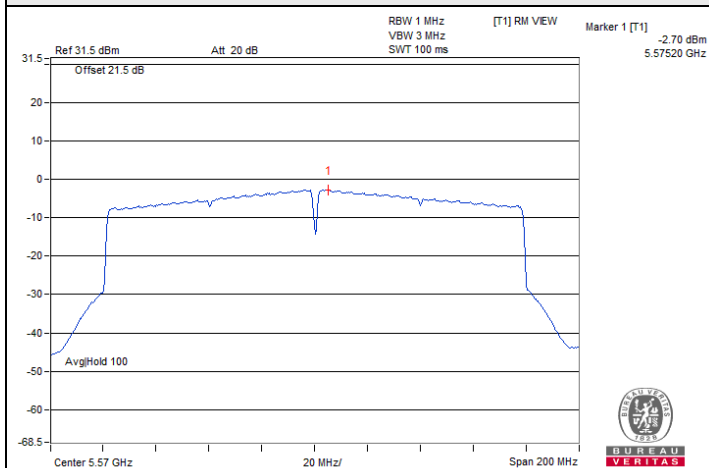
Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
155	5775	-3.7	0.39	-1.09	30	Pass

Note: For U-NII-3, the antenna gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

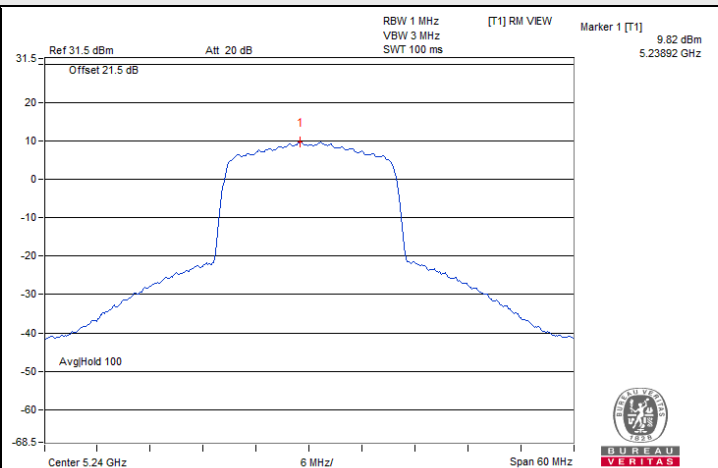
Spectrum Plot of Maximum Value



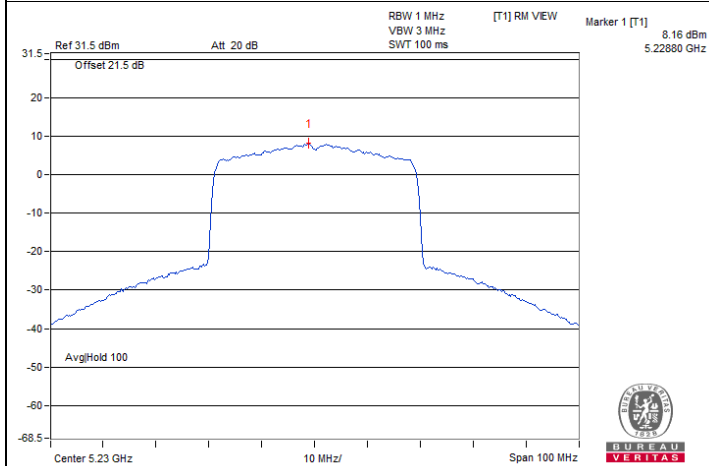
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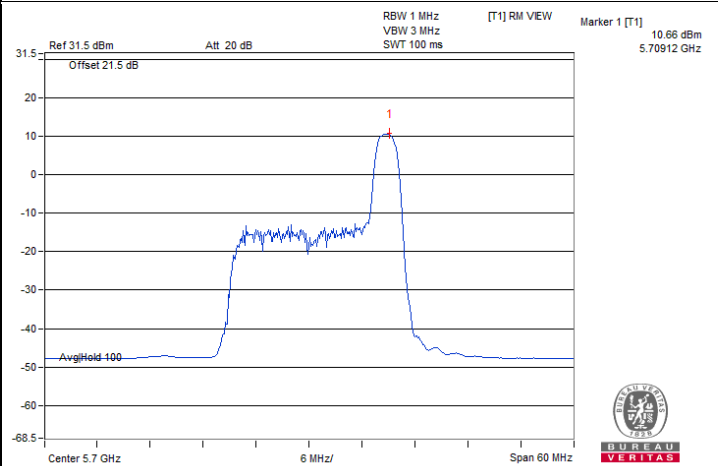
802.11ax (HE160) 1S1T : CH 114



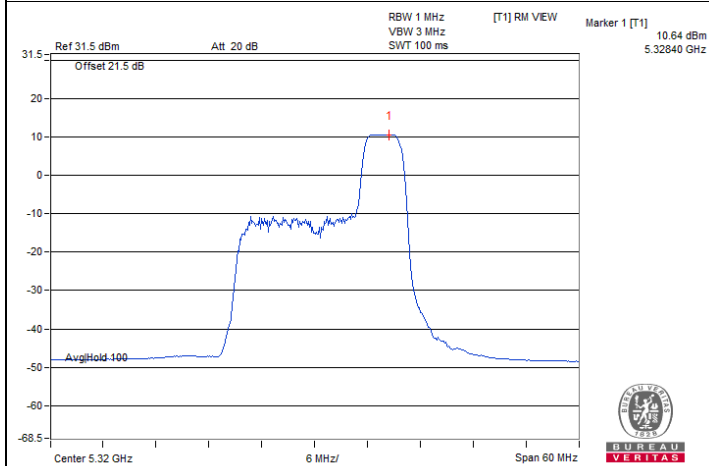
802.11be (EHT20) 1S1T : CH 48



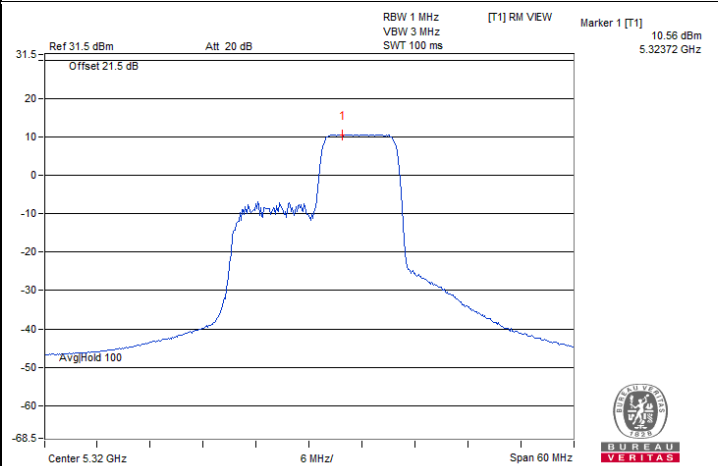
802.11be (EHT40) 1S1T : CH 46



802.11ax (HE20) 26-tone RU 1S1T : CH 140@8

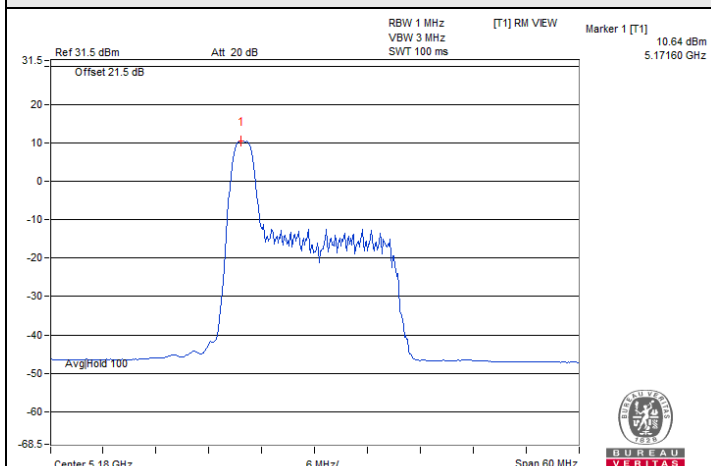


802.11ax (HE20) 52-tone RU 1S1T : CH 64@40

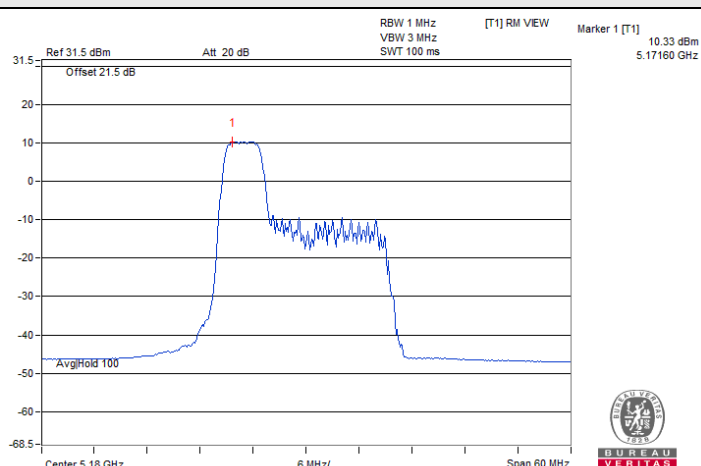


802.11ax (HE20) 106-tone RU 1S1T : CH 64@54

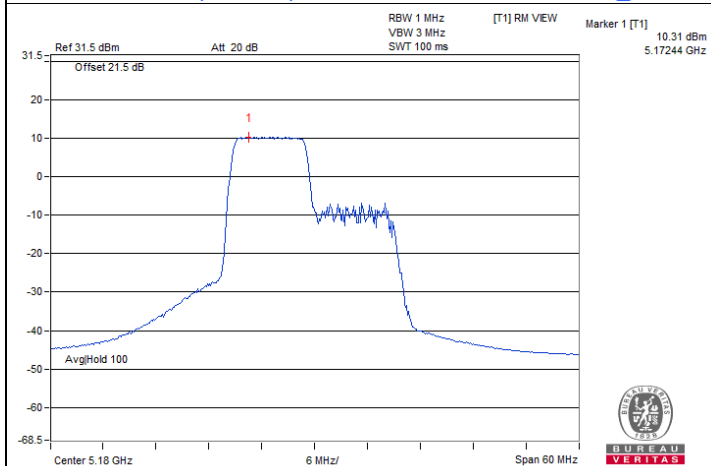
Spectrum Plot of Maximum Value



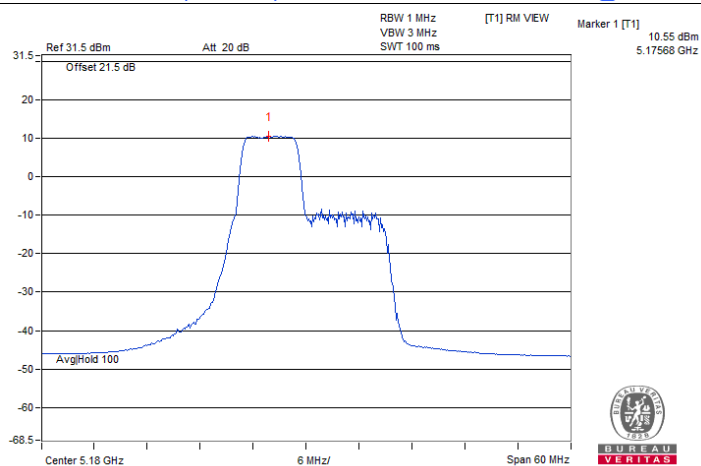
802.11be (EHT20) 26-tone RU 1S1T : CH 36@0



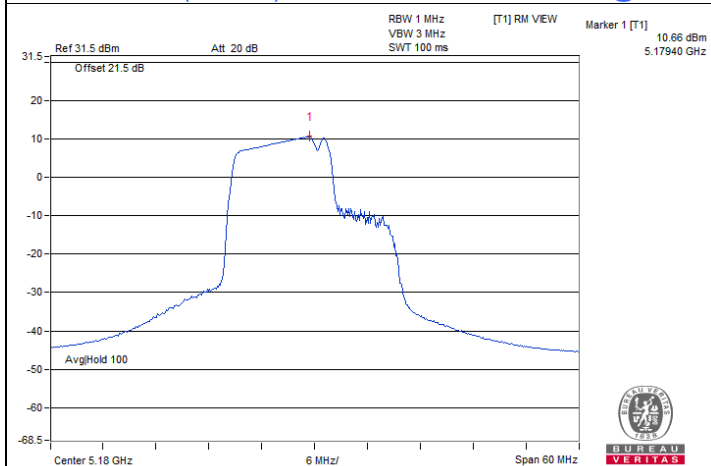
802.11be (EHT20) 52-tone RU 1S1T : CH 36@37



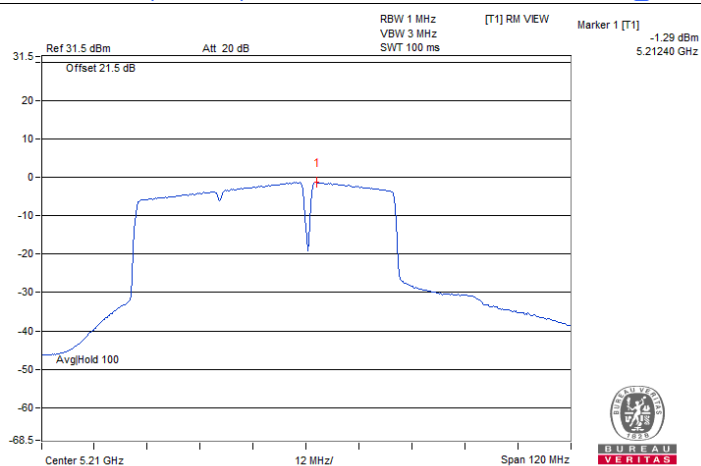
802.11be (EHT20) 106-tone RU 1S1T : CH 36@53



802.11be (EHT20) 52+26-tone MRU 1S1T : CH 36@70

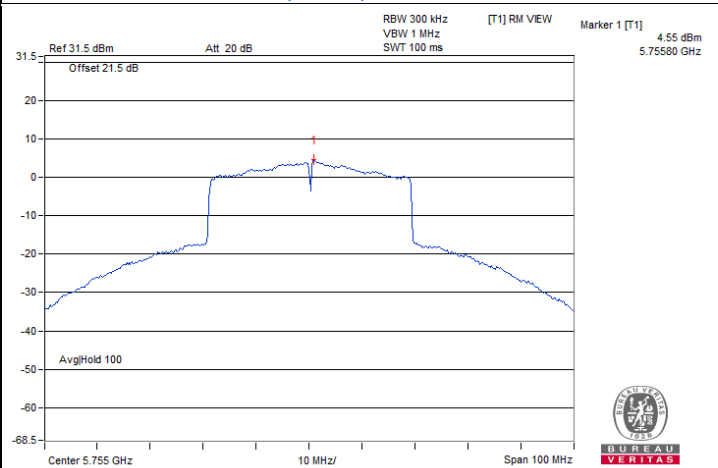
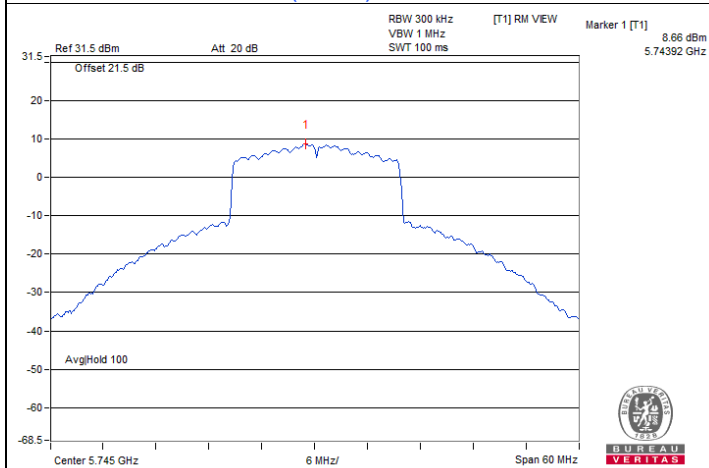
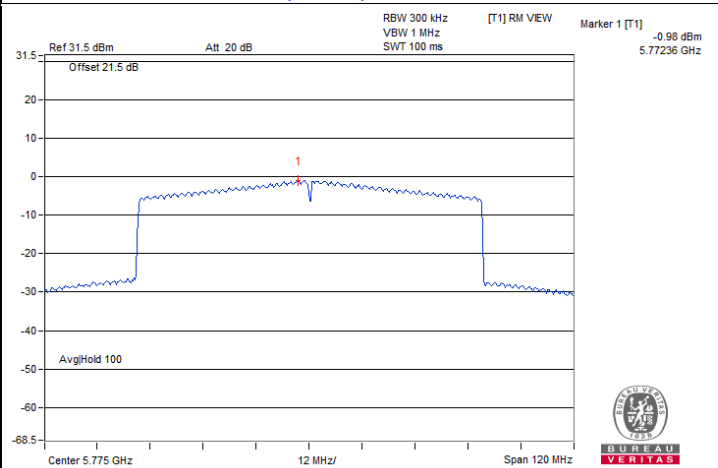
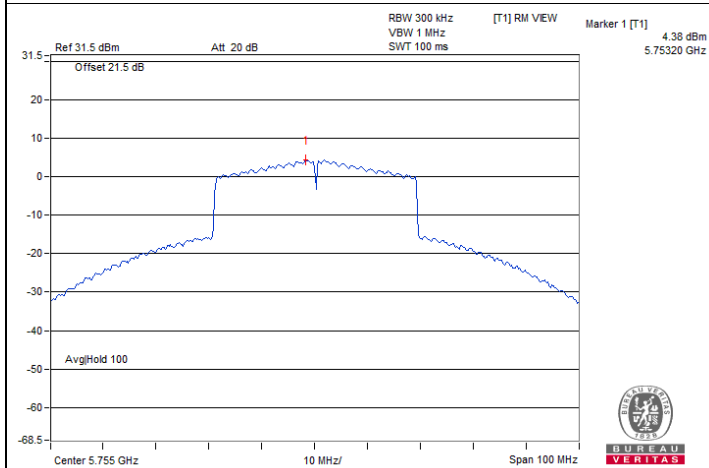
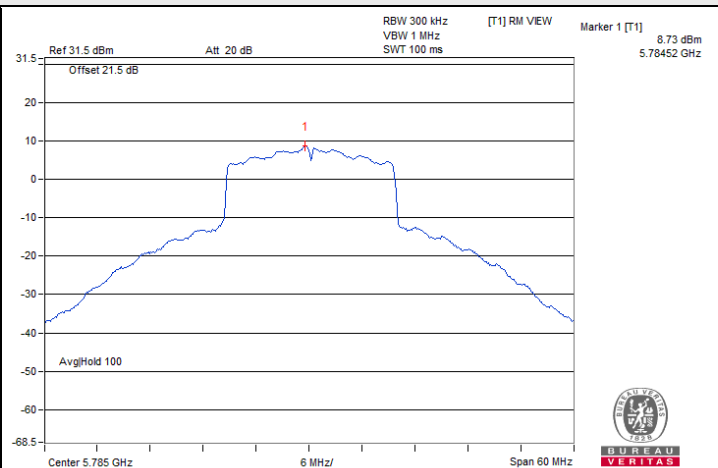
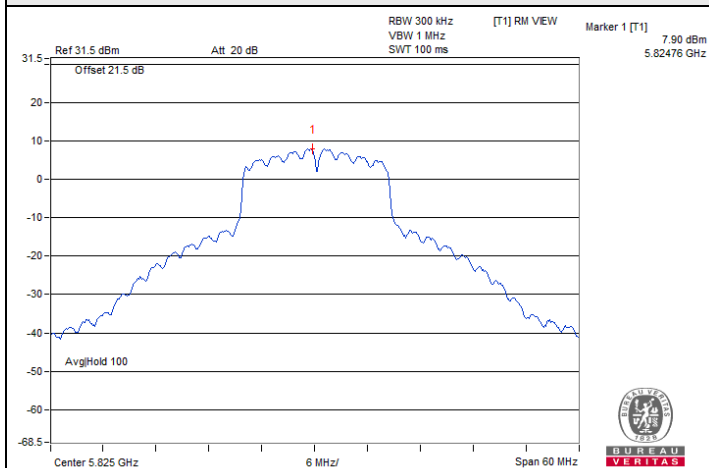


802.11be (EHT20) 106+26-tone MRU 1S1T : CH 36@82

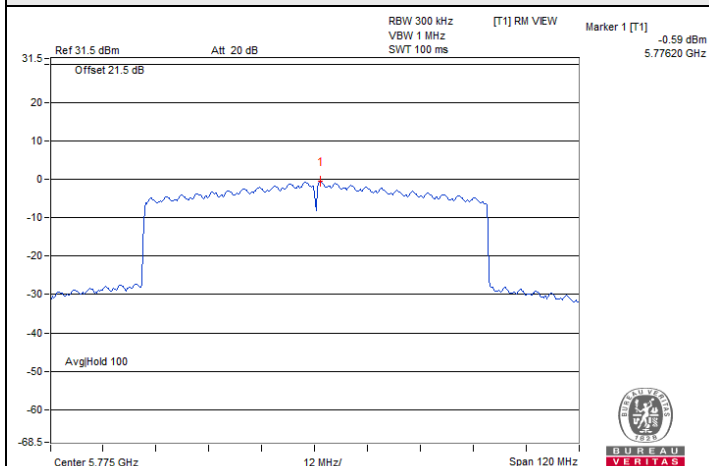


802.11be (EHT80) 484+242-tone MRU 1S1T : CH 42@93

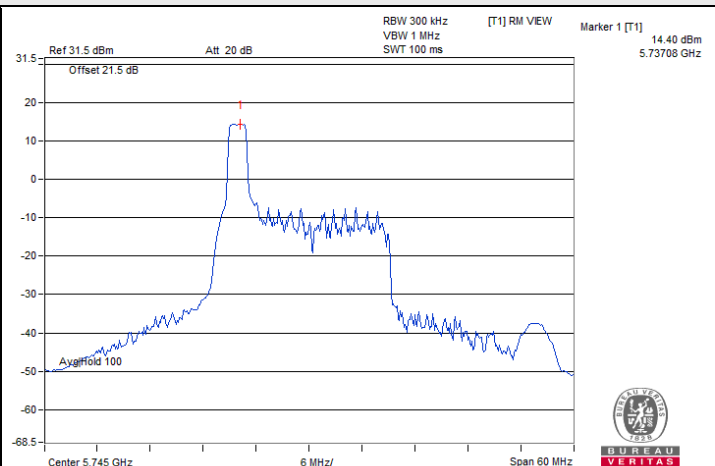
Spectrum Plot of Maximum Value



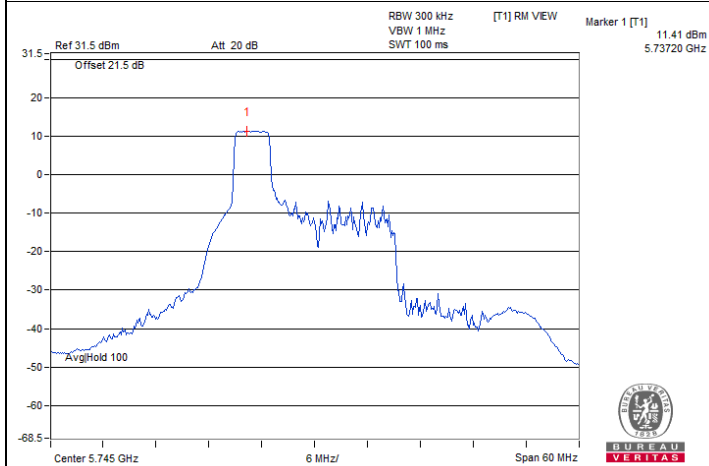
Spectrum Plot of Maximum Value



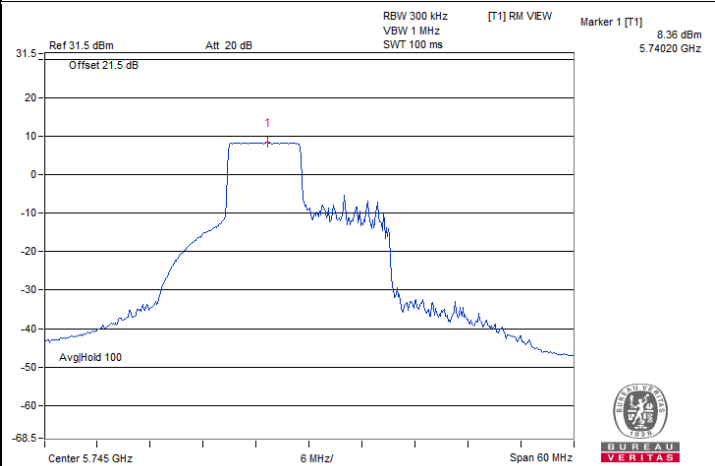
802.11be (EHT80) 1S1T : CH 155



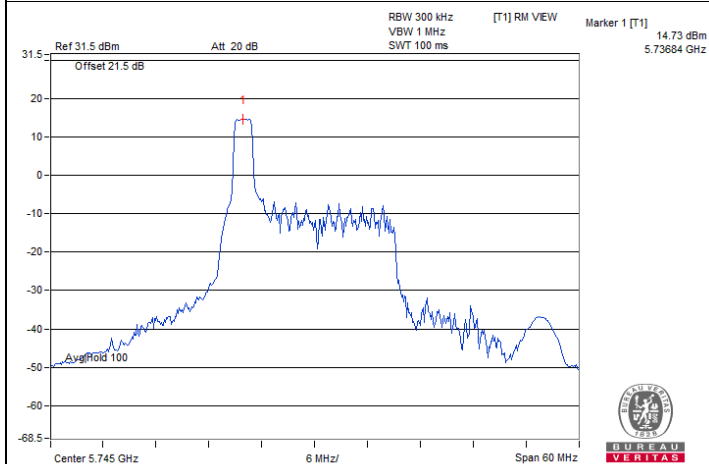
802.11ax (HE20) 26-tone RU 1S1T : CH 149@0



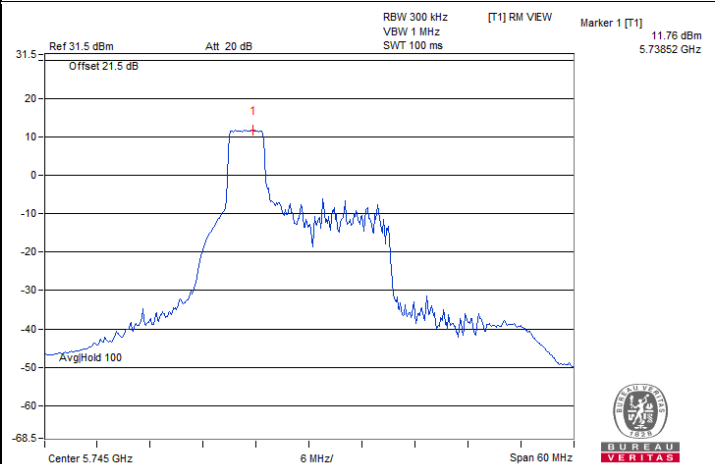
802.11ax (HE20) 52-tone RU 1S1T : CH 149@37



802.11ax (HE20) 106-tone RU 1S1T : CH 149@53

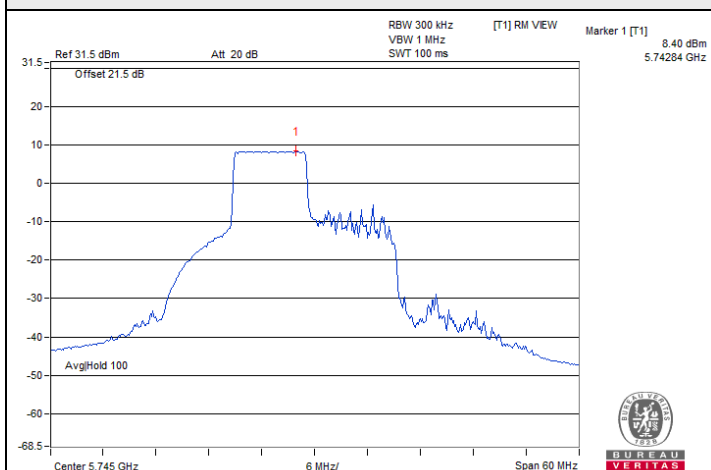


802.11be (EHT20) 26-tone RU 1S1T : CH 149@0

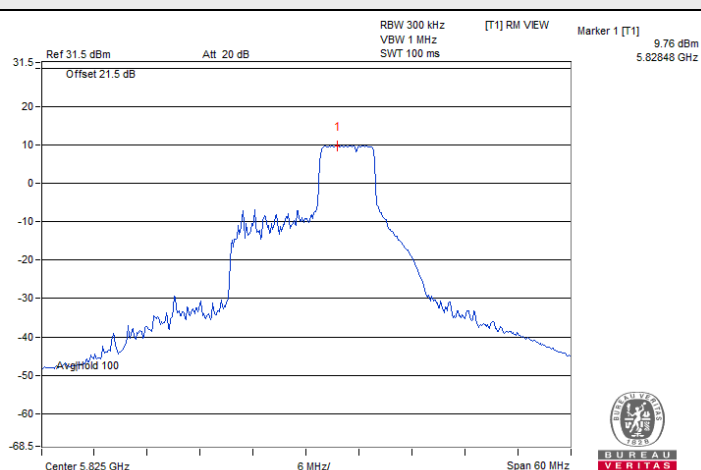


802.11be (EHT20) 52-tone RU 1S1T : CH 149@37

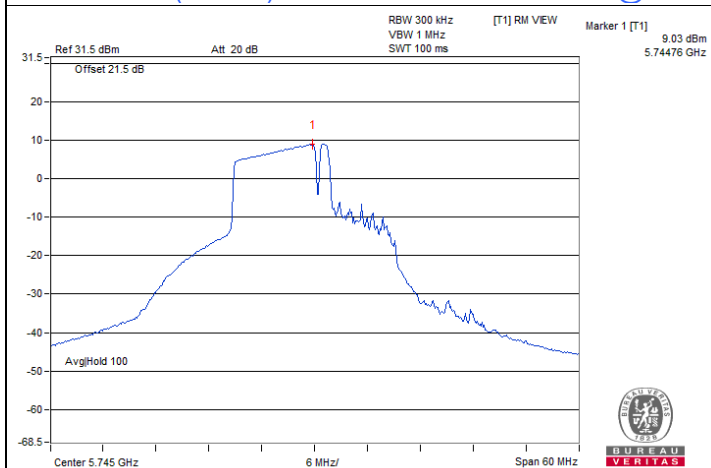
Spectrum Plot of Maximum Value



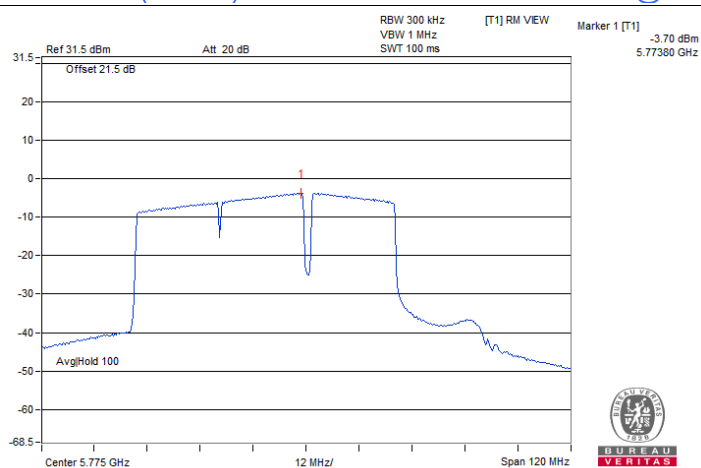
802.11be (EHT20) 106-tone RU 1S1T : CH 149@53



802.11be (EHT20) 52+26-tone MRU 1S1T : CH 165@72



802.11be (EHT20) 106+26-tone MRU 1S1T : CH 149@82



802.11be (EHT80) 484+242-tone MRU 1S1T : CH 155@93

802.11a 2TX

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
36	5180	3.69	3.28	2.12	8.62	9.07	Pass
40	5200	3.49	3.62	2.12	8.69	9.07	Pass
48	5240	3.69	3.38	2.12	8.67	9.07	Pass
52	5260	4.01	3.81	2.12	9.04	9.07	Pass
60	5300	3.80	3.60	2.12	8.83	9.07	Pass
64	5320	3.92	3.72	2.12	8.95	9.07	Pass
100	5500	3.65	3.83	2.12	8.87	9.07	Pass
116	5580	3.67	3.87	2.12	8.90	9.07	Pass
140	5700	3.69	3.71	2.12	8.83	9.07	Pass
144 (U-NII-2C)	5720	3.76	3.99	2.12	9.01	9.07	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements)
3. For U-NII-1, the directional gain is 7.93 dBi > 6dBi, so the power density limit shall be reduced to $11-(7.93-6) = 9.07$ dBm/MHz.
4. For U-NII-2A, the directional gain is 7.93 dBi > 6 dBi, so the power density limit shall be reduced to $11-(7.93-6) = 9.07$ dBm/MHz.
5. For U-NII-2C, the directional gain is 7.93 dBi > 6 dBi, so the power density limit shall be reduced to $11-(7.93-6) = 9.07$ dBm/MHz.

802.11ax (HE20) 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
36	5180	5.49	5.61	2.13	10.69	11	Pass
40	5200	5.66	5.85	2.13	10.90	11	Pass
48	5240	5.70	5.93	2.13	10.96	11	Pass
52	5260	5.41	5.89	2.13	10.80	11	Pass
60	5300	5.77	5.40	2.13	10.73	11	Pass
64	5320	5.49	5.84	2.13	10.81	11	Pass
100	5500	5.52	5.51	2.13	10.66	11	Pass
116	5580	5.26	5.80	2.13	10.68	11	Pass
140	5700	5.18	5.99	2.13	10.74	11	Pass
144 (U-NII-2C)	5720	5.05	5.80	2.13	10.58	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + $10 \log (2 \text{ of TX antenna elements/NSS } 2) = \text{gain of antenna element} + 0 \text{ dB}$
3. For U-NII-1, the directional gain is $4.92 \text{ dBi} < 6 \text{ dBi}$, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is $4.92 \text{ dBi} < 6 \text{ dBi}$, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is $4.92 \text{ dBi} < 6 \text{ dBi}$, so the power density limit shall not be reduced.

802.11ax (HE40) 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
38	5190	2.06	2.08	2.18	7.26	11	Pass
46	5230	4.20	3.82	2.18	9.20	11	Pass
54	5270	4.10	3.68	2.18	9.09	11	Pass
62	5310	1.57	1.86	2.18	6.91	11	Pass
102	5510	2.56	2.56	2.18	7.75	11	Pass
110	5550	4.22	3.60	2.18	9.11	11	Pass
134	5670	3.77	3.86	2.18	9.01	11	Pass
142 (U-NII-2C)	5710	4.48	4.18	2.18	9.52	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + $10 \log (2 \text{ of TX antenna elements/NSS } 2) = \text{gain of antenna element} + 0 \text{ dB}$
3. For U-NII-1, the directional gain is $4.92 \text{ dBi} < 6 \text{ dBi}$, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is $4.92 \text{ dBi} < 6 \text{ dBi}$, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is $4.92 \text{ dBi} < 6 \text{ dBi}$, so the power density limit shall not be reduced.

802.11ax (HE80) 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
42	5210	-2.87	-2.04	2.21	2.79	11	Pass
58	5290	-2.83	-2.36	2.21	2.63	11	Pass
106	5530	-1.66	-1.80	2.21	3.49	11	Pass
122	5610	1.32	1.56	2.21	6.66	11	Pass
138 (U-NII-2C)	5690	0.91	1.06	2.21	6.21	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-1, the directional gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE160) 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
50 (U-NII-1)	5250	-7.62	-6.79	1.86	-2.31	11	Pass
50 (U-NII-2A)	5250	-7.32	-7.11	1.86	-2.34	11	Pass
114	5570	-5.00	-5.72	1.86	-0.47	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-1, the directional gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
36	5180	5.96	6.10	1.85	10.89	11	Pass
40	5200	6.01	6.13	1.85	10.93	11	Pass
48	5240	6.09	6.11	1.85	10.96	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-1, the directional gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11be (EHT40) 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
38	5190	1.90	2.63	1.89	7.18	11	Pass
46	5230	4.17	4.05	1.89	9.01	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-1, the directional gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11be (EHT80) 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
42	5210	-2.74	-2.31	1.92	2.41	11	42

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-1, the directional gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 26-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
36	5180	7.16	7.37	0.59	10.87	11	Pass
64	5320	7.09	7.02	0.59	10.66	11	Pass
100	5500	7.35	7.34	0.59	10.95	11	Pass
140	5700	7.09	7.42	0.59	10.86	11	Pass
144 (U-NII-2C)	5720	-14.21	-14.34	0.59	-10.67	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-1, the directional gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 52-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
36	5180	7.14	7.13	0.59	10.74	11	Pass
64	5320	7.29	7.26	0.59	10.88	11	Pass
100	5500	7.29	7.14	0.59	10.82	11	Pass
140	5700	7.07	7.30	0.59	10.79	11	Pass
144 (U-NII-2C)	5720	-9.73	-10.10	0.59	-6.31	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-1, the directional gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 106-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
36	5180	6.90	7.02	0.59	10.56	11	Pass
64	5320	7.31	7.22	0.59	10.87	11	Pass
100	5500	7.17	7.10	0.59	10.74	11	Pass
140	5700	7.13	7.18	0.59	10.76	11	Pass
144 (U-NII-2C)	5720	7.29	6.92	0.59	10.71	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-1, the directional gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.
4. For U-NII-2A, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.
5. For U-NII-2C, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 26-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
36	5180	7.40	7.32	0.54	10.91	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-1, the directional gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 52-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
36	5180	7.06	7.26	0.54	10.71	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-1, the directional gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 106-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
36	5180	7.06	6.87	0.54	10.52	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-1, the directional gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 52+26-tone MRU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
36	5180	7.04	7.19	0.60	10.73	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-1, the directional gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 106+26-tone MRU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
36	5180	7.19	7.14	0.50	10.68	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-1, the directional gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11be (EHT80) 484+242-tone MRU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Max. PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1				
42	5210	-3.46	-3.35	0.71	0.32	11	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-1, the directional gain is 4.92 dBi < 6dBi, so the power density limit shall not be reduced.

802.11a 2TX

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (Db)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
144 (U-NII-3)	5720	-3.30	-2.55	0.1	2.12	4.44	28.07	Pass
149	5745	5.54	5.53	8.55	2.12	12.89	28.07	Pass
157	5785	6.22	5.47	8.87	2.12	13.21	28.07	Pass
165	5825	5.87	5.50	8.7	2.12	13.04	28.07	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements)
3. For U-NII-3, the directional gain is 7.93 dBi > 6 dBi, so the power density limit shall be reduced to 30-(7.93-6) = 28.07 dBm/500kHz.

802.11ax (HE20) 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (Db)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
144 (U-NII-3)	5720	-1.64	-1.43	1.48	2.13	5.83	30	Pass
149	5745	5.61	5.69	8.66	2.13	13.01	30	Pass
157	5785	5.79	5.38	8.6	2.13	12.95	30	Pass
165	5825	5.48	5.05	8.28	2.13	12.63	30	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE40) 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
142 (U-NII-3)	5710	-4.11	-4.03	-1.06	2.18	3.34	30	Pass
151	5755	2.12	2.20	5.17	2.18	9.57	30	Pass
159	5795	2.24	3.04	5.67	2.18	10.07	30	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE80) 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
138 (U-NII-3)	5690	-7.99	-7.53	-4.74	2.21	-0.31	30	Pass
155	5775	-3.67	-3.72	-0.68	2.21	3.75	30	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
149	5745	5.45	5.23	8.35	1.85	12.42	30	Pass
157	5785	5.94	5.43	8.7	1.85	12.77	30	Pass
165	5825	4.99	5.15	8.08	1.85	12.15	30	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT40) 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
151	5755	2.22	2.18	5.21	1.89	9.32	30	Pass
159	5795	2.54	2.33	5.45	1.89	9.56	30	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT80) 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
155	5775	-3.60	-3.67	-0.62	1.92	3.52	30	155

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 26-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
144 (U-NII-3)	5720	2.35	2.08	5.23	0.59	8.04	30	Pass
149	5745	14.13	14.06	17.11	0.59	19.92	30	Pass
165	5825	14.15	14.50	17.34	0.59	20.15	30	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 52-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
144 (U-NII-3)	5720	2.27	1.94	5.12	0.59	7.93	30	Pass
149	5745	11.02	11.12	14.08	0.59	16.89	30	Pass
165	5825	11.12	11.41	14.28	0.59	17.09	30	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11ax (HE20) 106-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
144 (U-NII-3)	5720	2.16	1.97	5.08	0.59	7.89	30	Pass
149	5745	8.14	8.10	11.13	0.59	13.94	30	Pass
165	5825	8.23	8.44	11.35	0.59	14.16	30	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 26-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
149	5745	14.09	14.19	17.15	0.54	19.91	30	Pass
165	5825	14.16	14.42	17.3	0.54	20.06	30	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 52-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
149	5745	11.03	11.15	14.1	0.54	16.86	30	Pass
165	5825	11.11	11.40	14.27	0.54	17.03	30	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 106-tone RU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
149	5745	8.04	7.99	11.03	0.54	13.79	30	Pass
165	5825	8.05	8.27	11.17	0.54	13.93	30	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 52+26-tone MRU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
149	5745	13.33	9.40	14.81	0.6	17.63	30	Pass
165	5825	9.44	9.48	12.47	0.6	15.29	30	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

802.11be (EHT20) 106+26-tone MRU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
149	5745	8.63	8.64	11.65	0.5	14.37	30	Pass
165	5825	8.74	8.86	11.81	0.5	14.53	30	Pass

Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

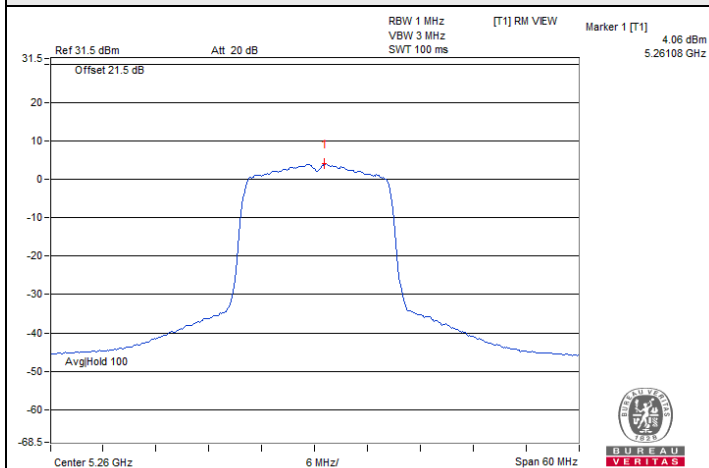
802.11be (EHT80) 484+242-tone MRU 2S2T

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/300kHz)		Total PSD w/o Duty Factor (dBm/300kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)	Test Result
		Chain 0	Chain 1					
155	5775	-3.95	-3.94	-0.93	0.71	2.00	30	Pass

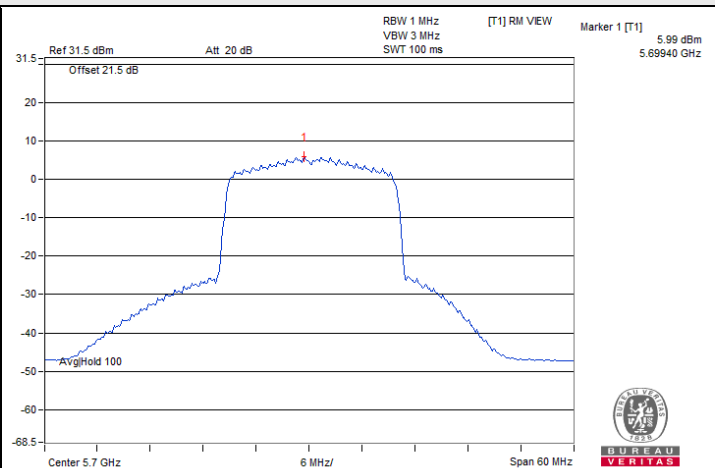
Notes:

1. Method E) 2) b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-3, the directional gain is 4.92 dBi < 6 dBi, so the power density limit shall not be reduced.

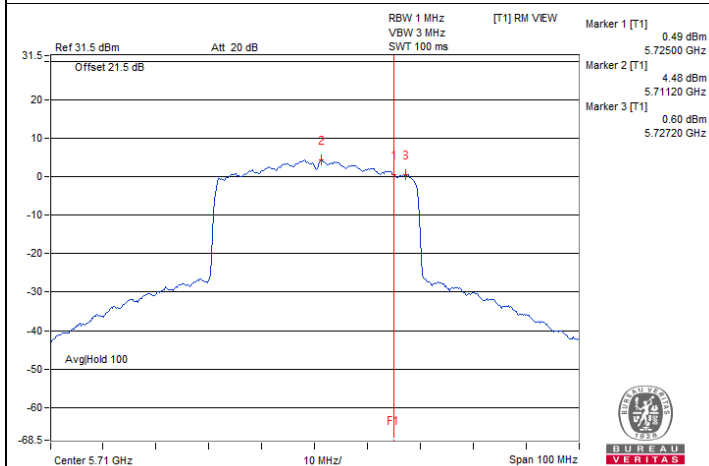
Spectrum Plot of Maximum Value



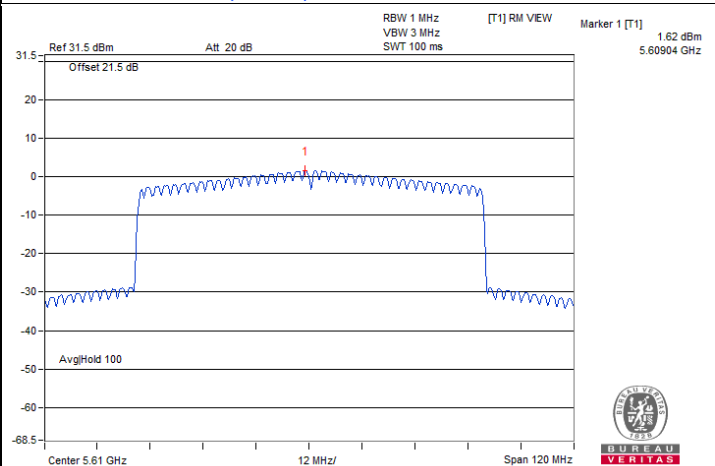
802.11a 2TX / Chain 0 : CH 52



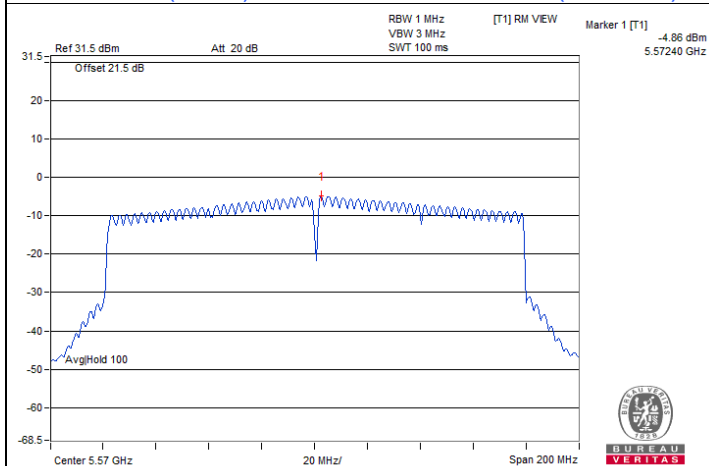
802.11ax (HE20) 2S2T / Chain 1 : CH 140



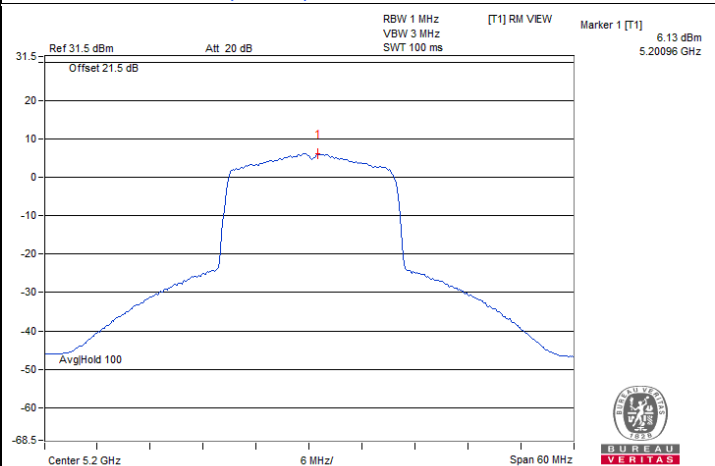
802.11ax (HE40) 2S2T / Chain 0 : CH 142 (U-NII-2C)



802.11ax (HE80) 2S2T / Chain 1 : CH 122

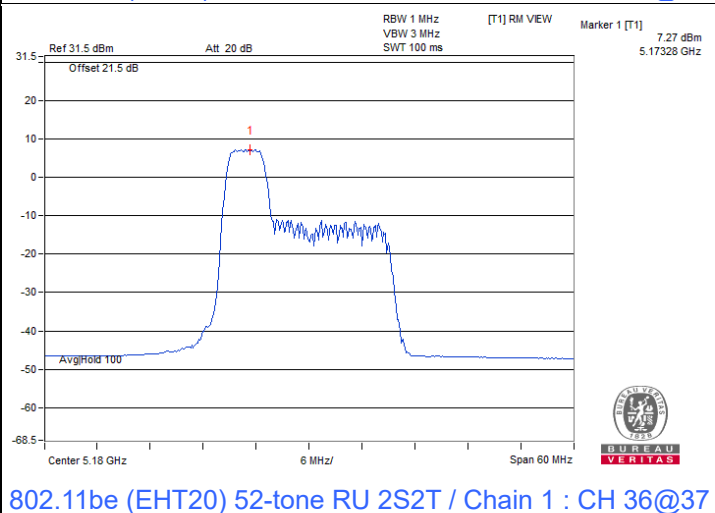
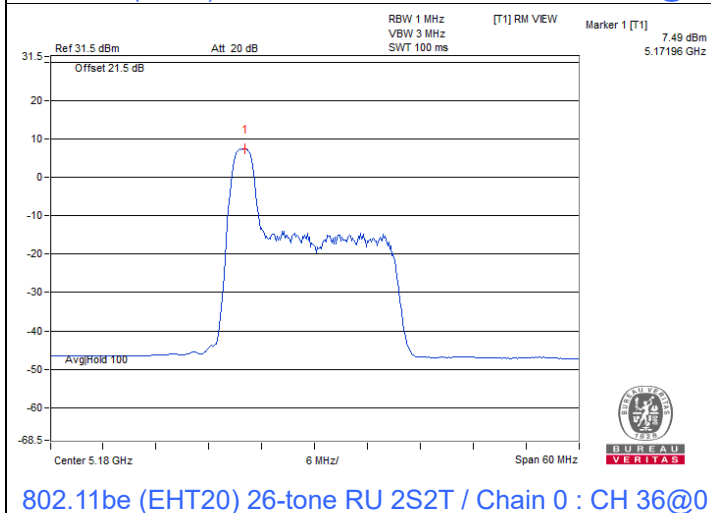
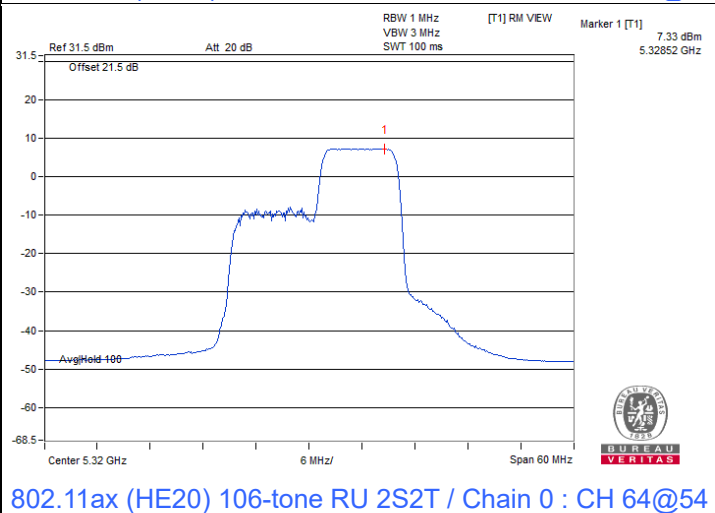
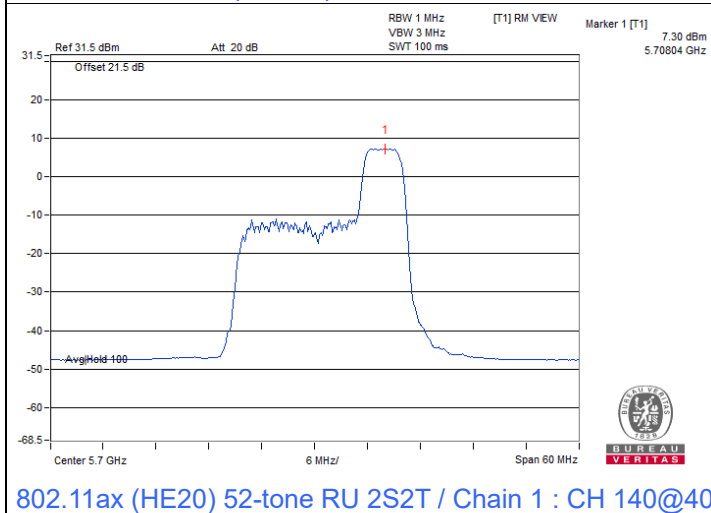
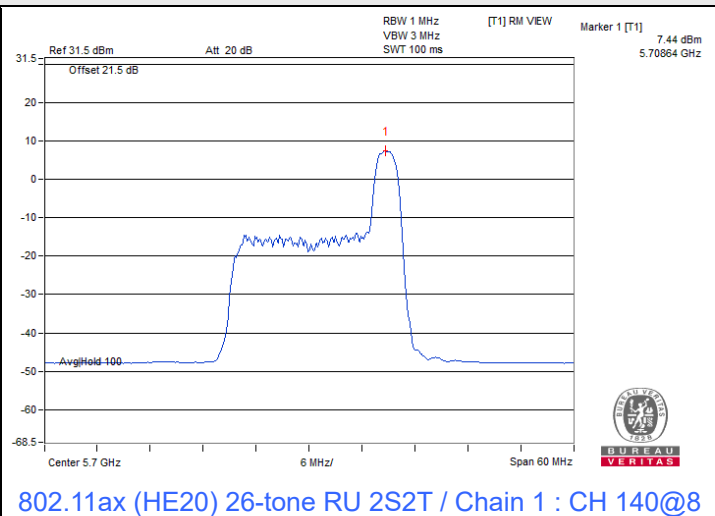
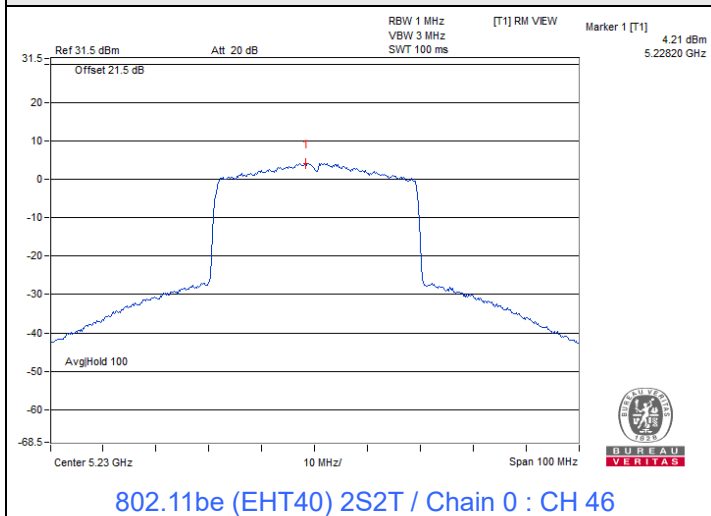


802.11ax (HE160) 2S2T / Chain 0 : CH 114

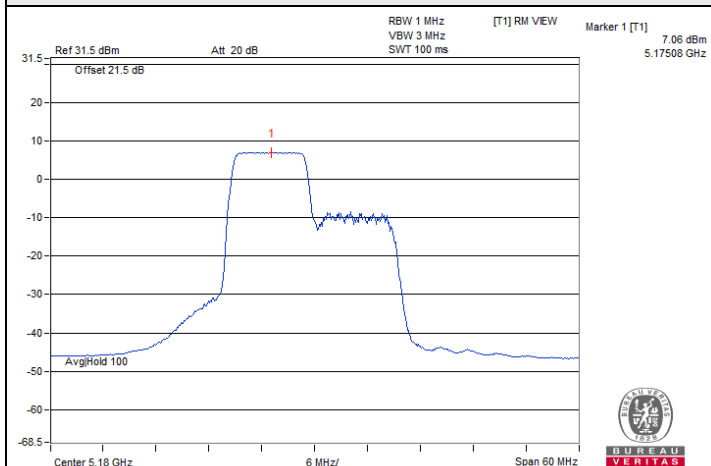


802.11be (EHT20) 2S2T / Chain 1 : CH 40

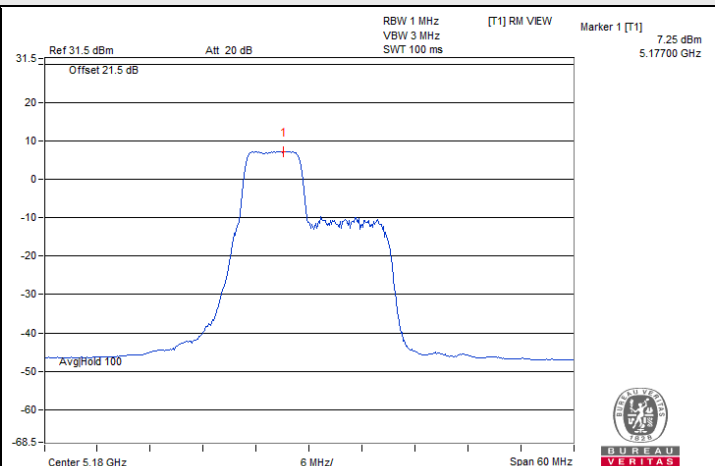
Spectrum Plot of Maximum Value



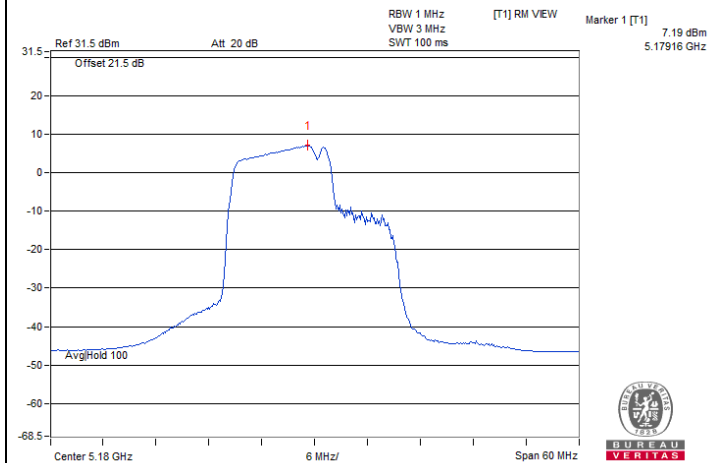
Spectrum Plot of Maximum Value



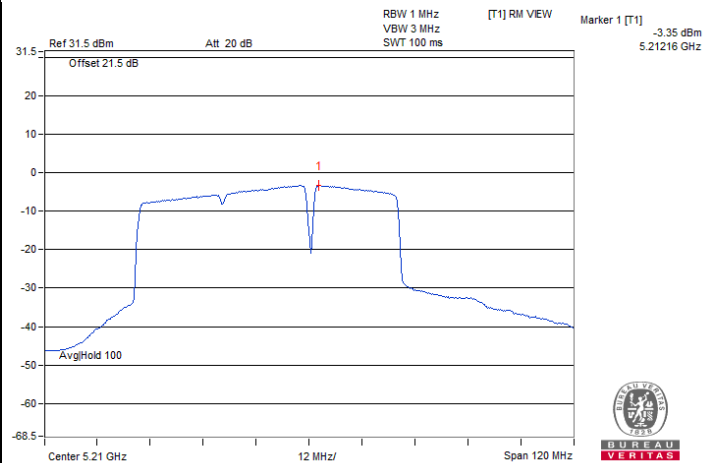
802.11be (EHT20) 106-tone RU 2S2T / Chain 0 : CH 36@53



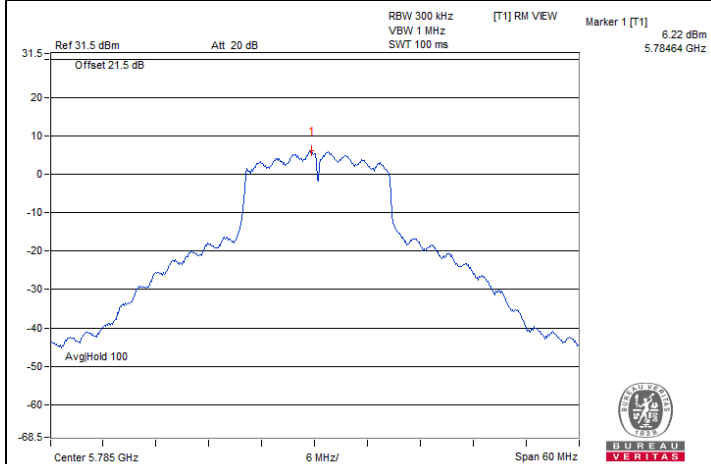
802.11be (EHT20) 52+26-tone MRU 2S2T / Chain 1 : CH 36@70



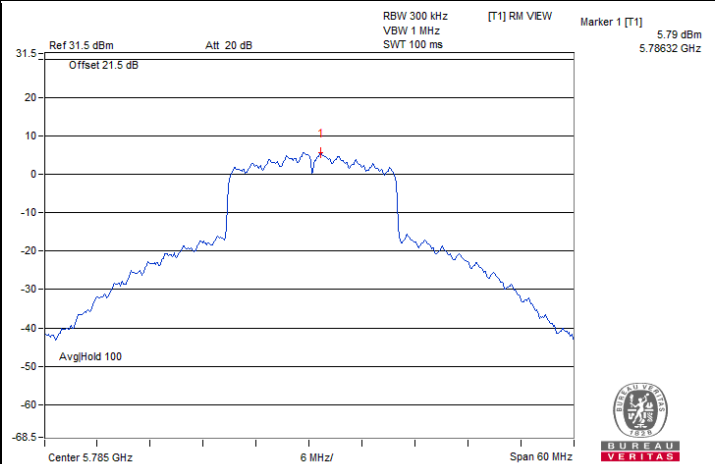
802.11be (EHT20) 106+26-tone MRU 2S2T / Chain 0 : CH 36@82



802.11be (EHT80) 484+242-tone MRU 2S2T / Chain 1 : CH 42@93

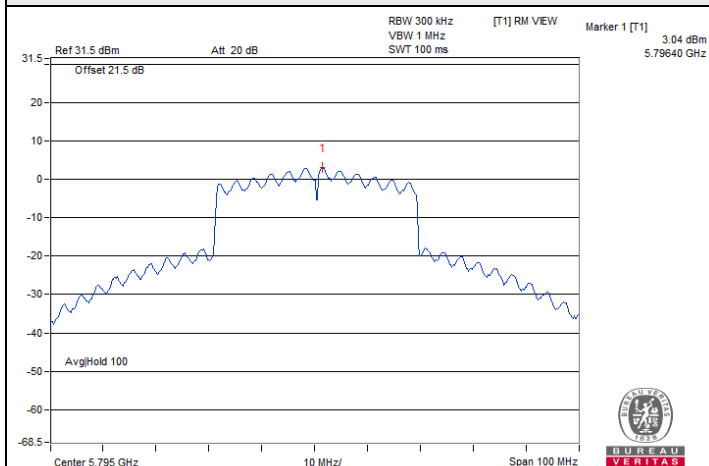


802.11a 2TX / Chain 0 : CH 157

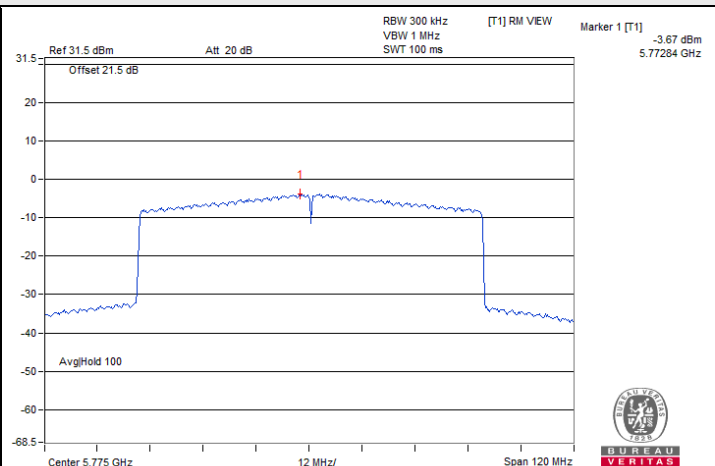


802.11ax (HE20) 2S2T / Chain 0 : CH 157

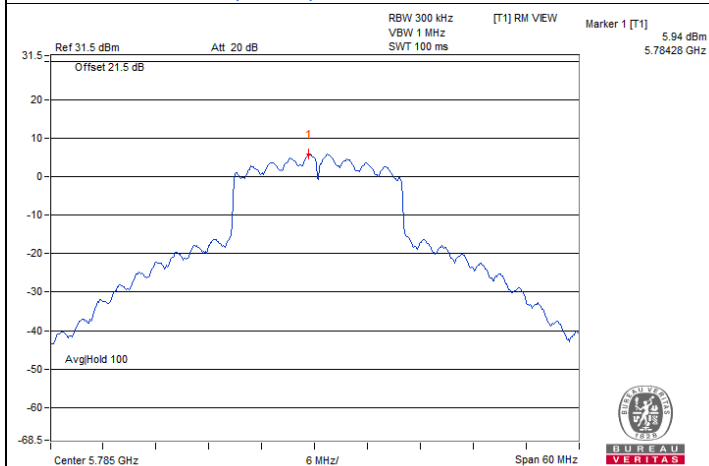
Spectrum Plot of Maximum Value



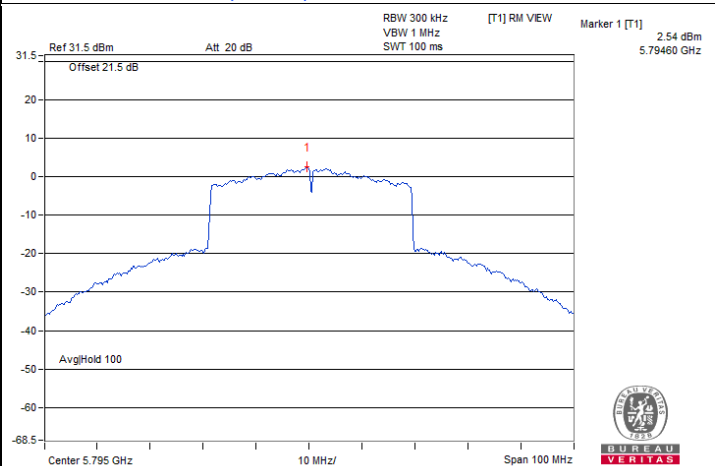
802.11ax (HE40) 2S2T / Chain 1 : CH 159



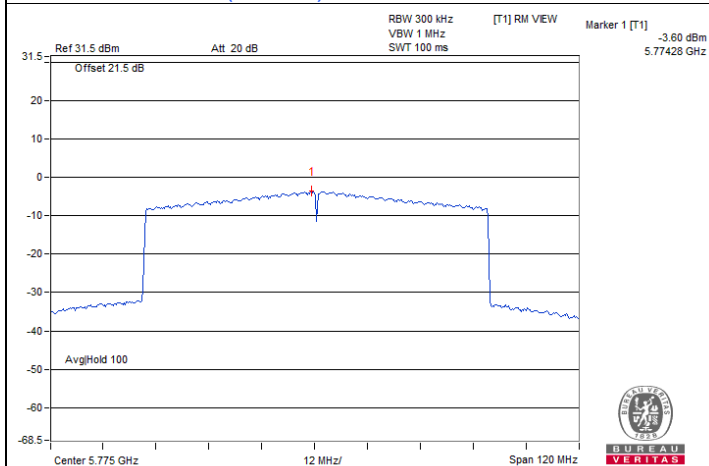
802.11ax (HE80) 2S2T / Chain 0 : CH 155



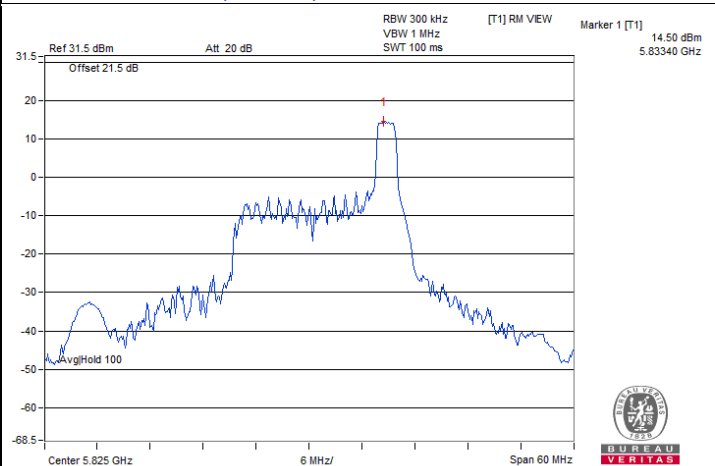
802.11be (EHT20) 2S2T / Chain 0 : CH 157



802.11be (EHT40) 2S2T / Chain 0 : CH 159

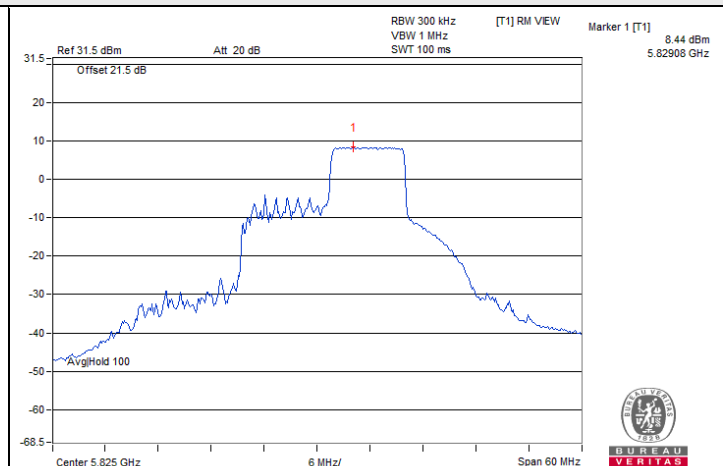
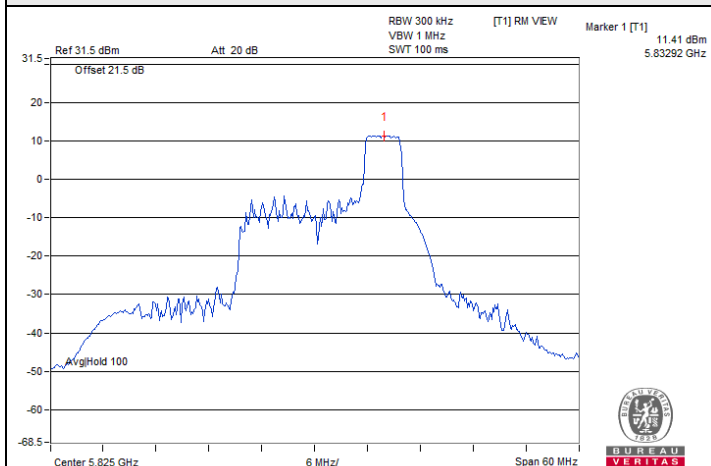


802.11be (EHT80) 2S2T / Chain 0 : CH 155

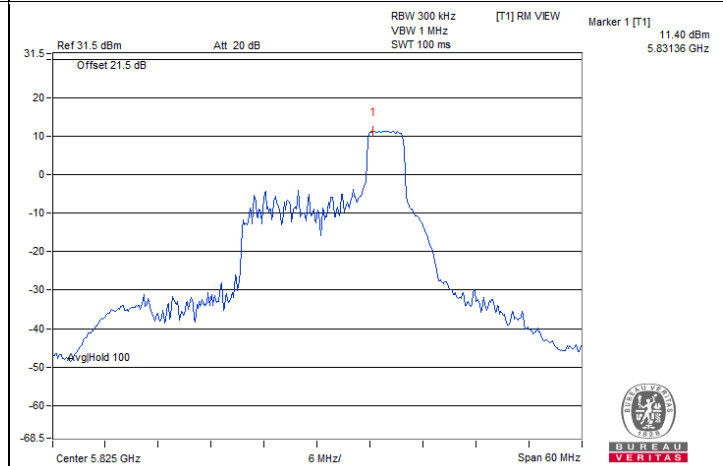
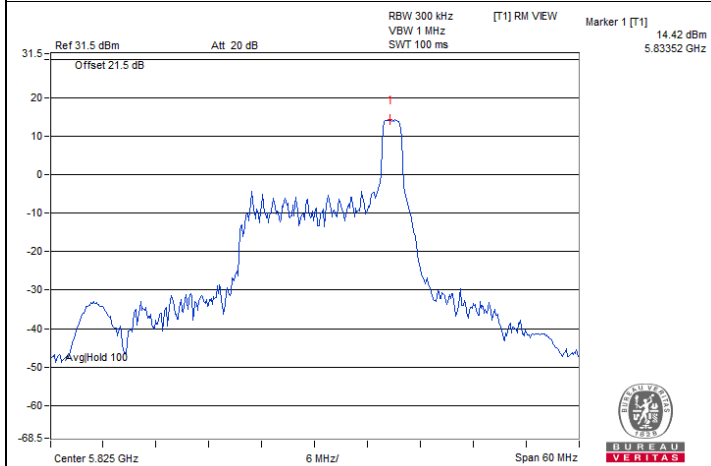


802.11ax (HE20) 26-tone RU 2S2T / Chain 1 : CH 165@8

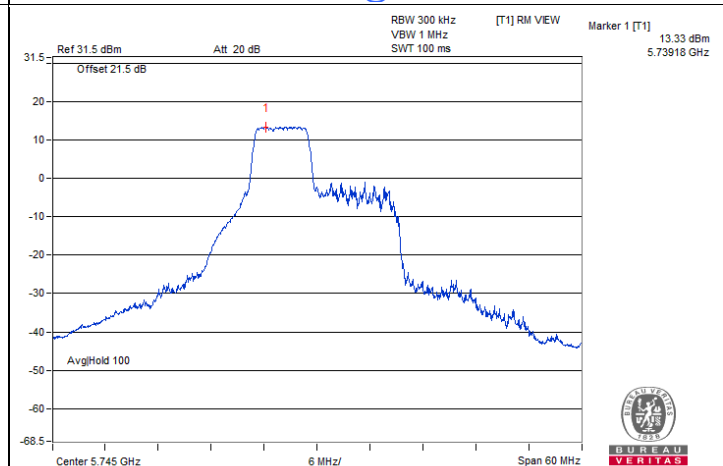
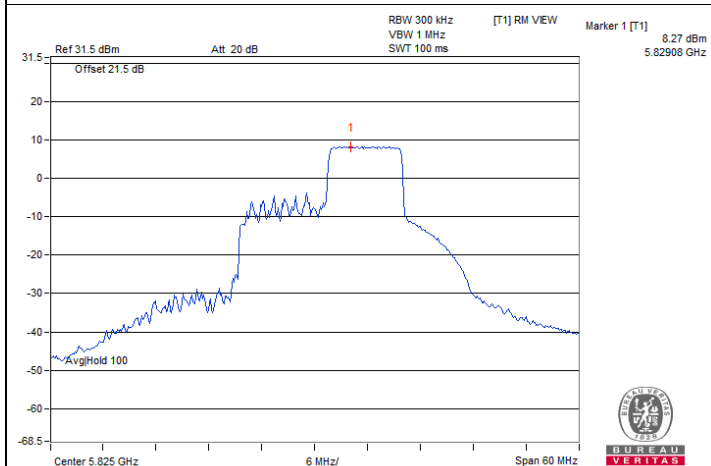
Spectrum Plot of Maximum Value



802.11ax (HE20) 52-tone RU 2S2T / Chain 1 : CH 165@40 802.11ax (HE20) 106-tone RU 2S2T / Chain 1 : CH 165@54

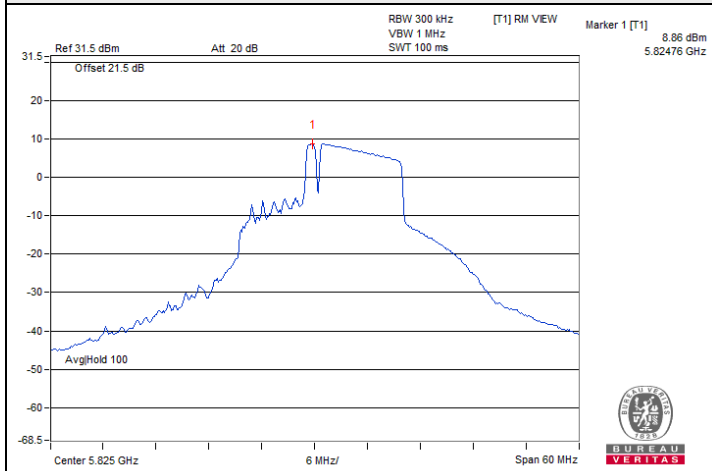


802.11be (EHT20) 26-tone RU 2S2T / Chain 1 : CH 165@8 802.11be (EHT20) 52-tone RU 2S2T / Chain 1 : CH 165@40

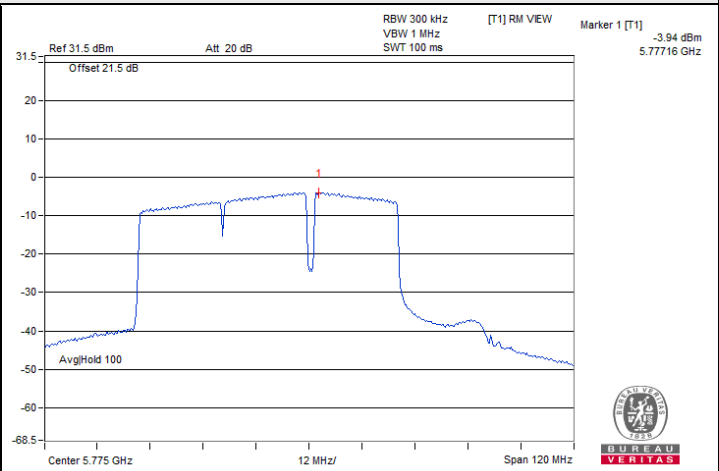


802.11be (EHT20) 106-tone RU 2S2T / Chain 1 : CH 165@54 802.11be (EHT20) 52+26-tone MRU 2S2T / Chain 0 : CH 149@70

Spectrum Plot of Maximum Value



802.11be (EHT20) 106+26-tone MRU 2S2T / Chain 1 : CH
165@83



802.11be (EHT80) 484+242-tone MRU 2S2T / Chain 1 : CH
155@93

7.4 6 dB Bandwidth

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Willy Lin
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802.11a 1TX

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
144 (U-NII-3)	5720	1.41	0.5	Pass
149	5745	14.78	0.5	Pass
157	5785	14.08	0.5	Pass
165	5825	14.41	0.5	Pass

802.11ax (HE20) 1S1T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
144 (U-NII-3)	5720	4.28	0.5	Pass
149	5745	14.99	0.5	Pass
157	5785	17.1	0.5	Pass
165	5825	18.24	0.5	Pass

802.11ax (HE40) 1S1T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
142 (U-NII-3)	5710	2.31	0.5	Pass
151	5755	31.47	0.5	Pass
159	5795	34.85	0.5	Pass

802.11ax (HE80) 1S1T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
138 (U-NII-3)	5690	2.56	0.5	Pass
155	5775	73.96	0.5	Pass

802.11be (EHT20) 1S1T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
149	5745	15.58	0.5	Pass
157	5785	16.58	0.5	Pass
165	5825	17.01	0.5	Pass

802.11be (EHT40) 1S1T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
151	5755	31.58	0.5	Pass
159	5795	28.91	0.5	Pass

802.11be (EHT80) 1S1T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
155	5775	64.98	0.5	Pass

802.11ax (HE20) 26-tone RU 1S1T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
144 (U-NII-3)	5720	4.85	0.5	Pass
149	5745	2.09	0.5	Pass
165	5825	2.12	0.5	Pass

802.11ax (HE20) 52-tone RU 1S1T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
144 (U-NII-3)	5720	4.83	0.5	Pass
149	5745	17.08	0.5	Pass
165	5825	17.02	0.5	Pass

802.11ax (HE20) 106-tone RU 1S1T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
144 (U-NII-3)	5720	4.87	0.5	Pass
149	5745	17.15	0.5	Pass
165	5825	17.15	0.5	Pass

802.11be (EHT20) 26-tone RU 1S1T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
149	5745	2.09	0.5	Pass
165	5825	2.12	0.5	Pass

802.11be (EHT20) 52-tone RU 1S1T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
149	5745	17.06	0.5	Pass
165	5825	17.04	0.5	Pass

802.11be (EHT20) 106-tone RU 1S1T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
149	5745	17.15	0.5	Pass
165	5825	17.14	0.5	Pass

802.11be (EHT20) 52+26-tone MRU 1S1T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
149	5745	15.14	0.5	Pass
165	5825	15.14	0.5	Pass

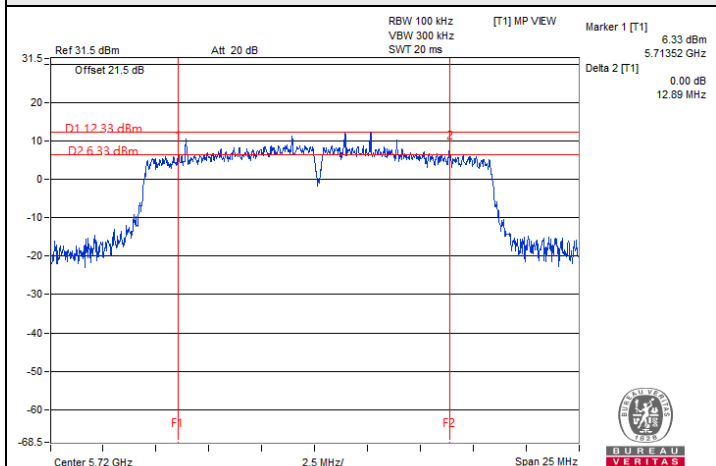
802.11be (EHT20) 106+26-tone MRU 1S1T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
149	5745	16.98	0.5	Pass
165	5825	16.99	0.5	Pass

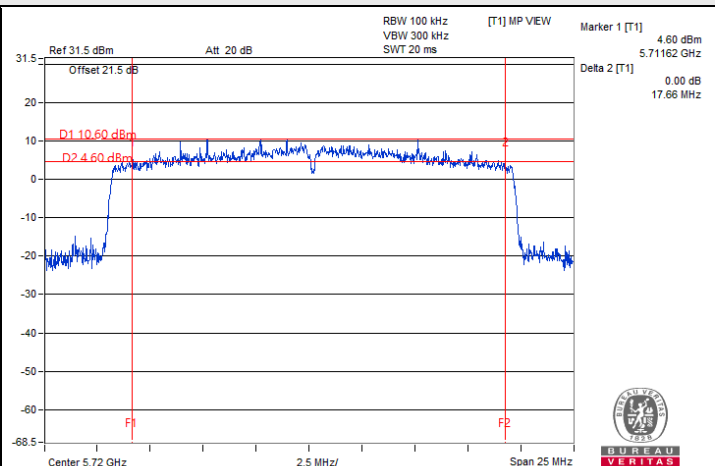
802.11be (EHT80) 484+242-tone MRU 1S1T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Test Result
155	5775	55.44	0.5	Pass

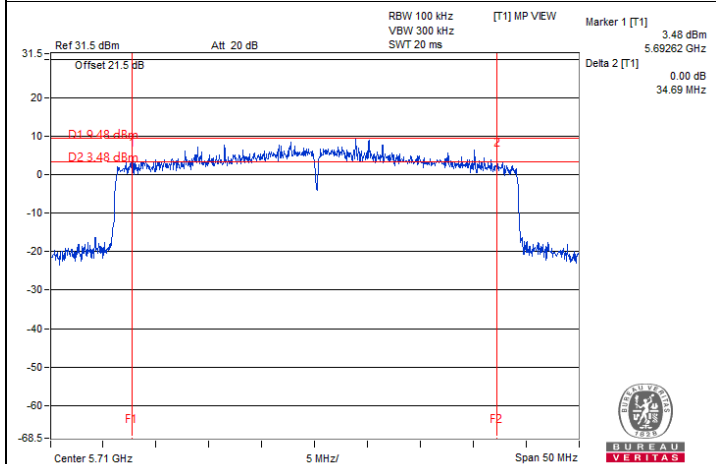
Spectrum Plot of Minimum Value



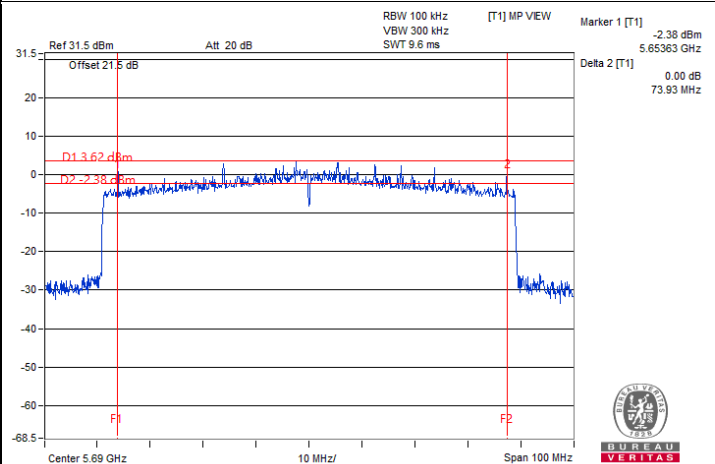
802.11a 1TX : CH 144 (U-NII-3)



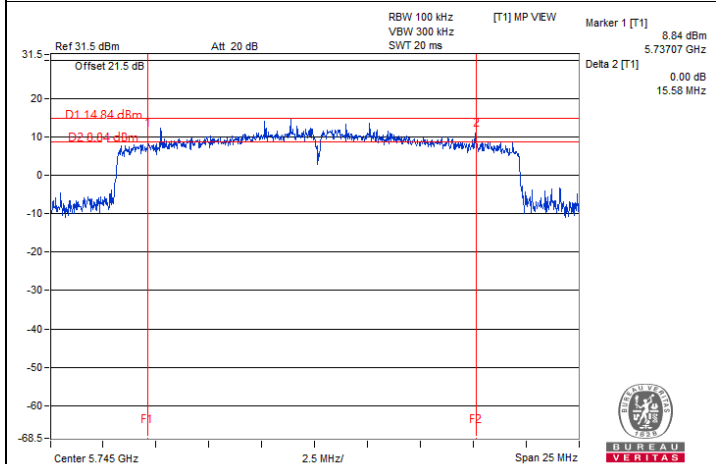
802.11ax (HE20) 1S1T : CH 144 (U-NII-3)



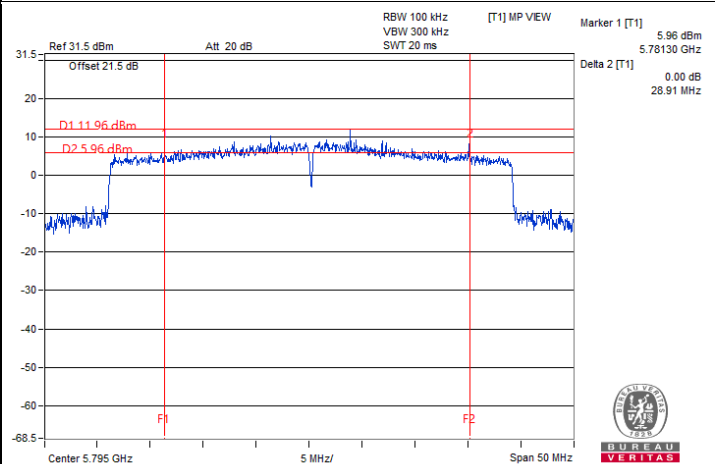
802.11ax (HE40) 1S1T : CH 142 (U-NII-3)



802.11ax (HE80) 1S1T : CH 138 (U-NII-3)

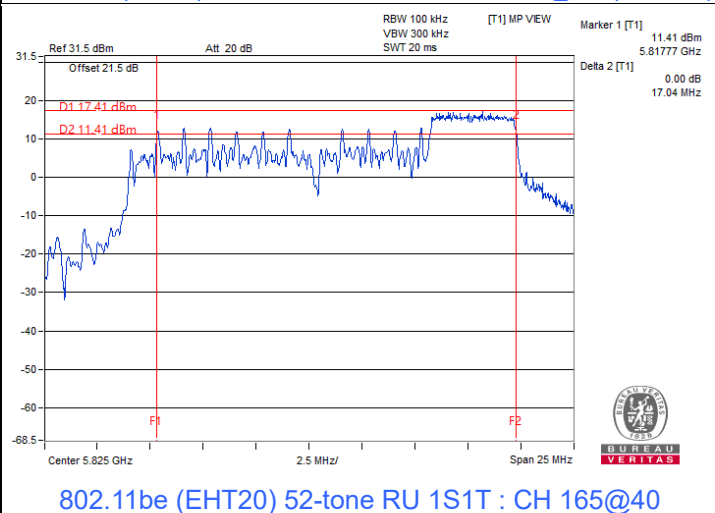
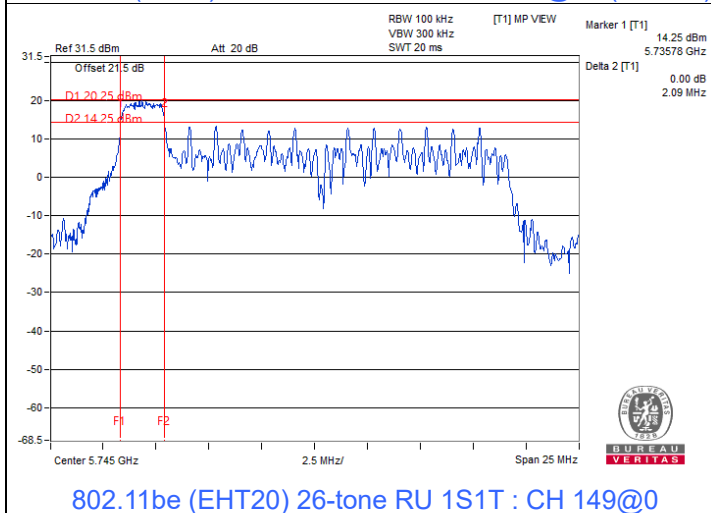
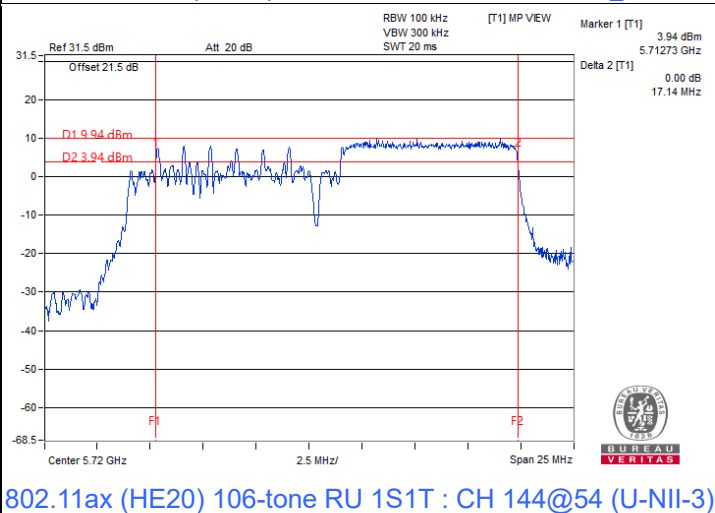
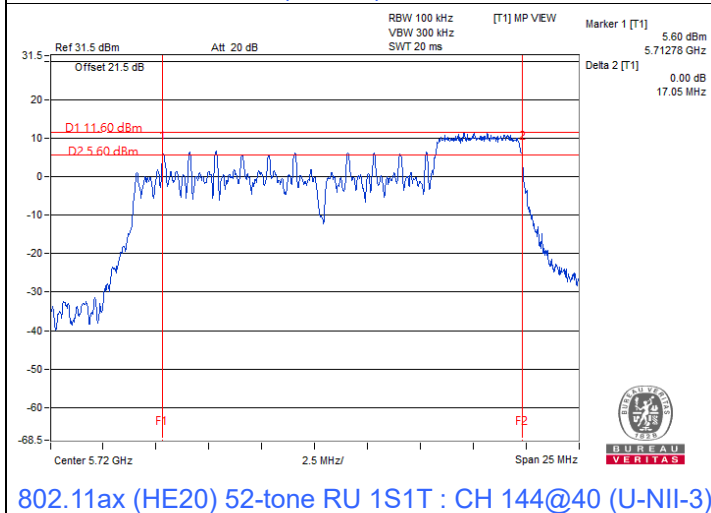
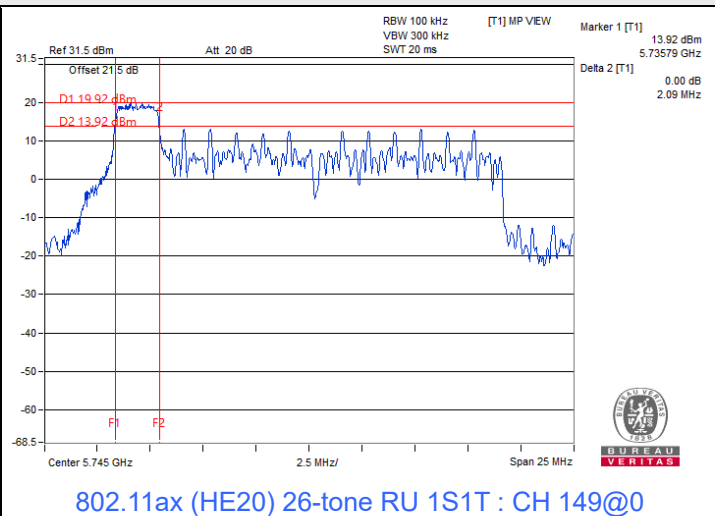
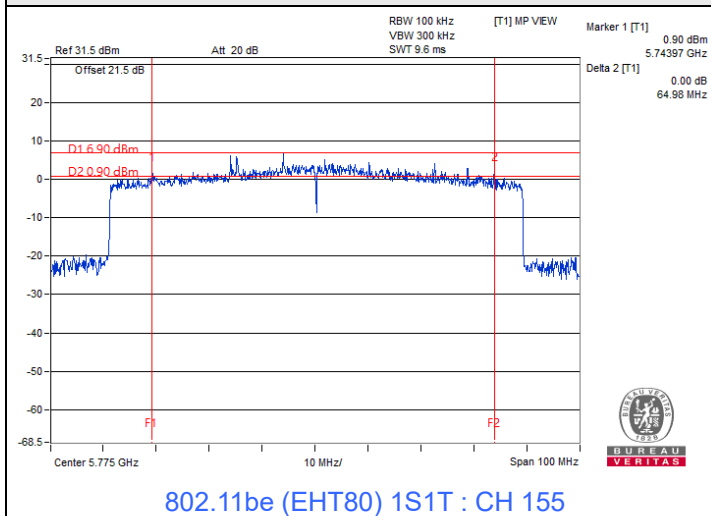


802.11be (EHT20) 1S1T : CH 149

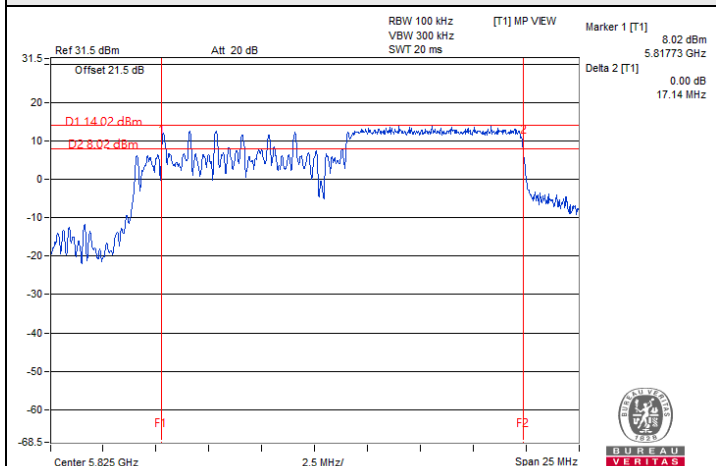


802.11be (EHT40) 1S1T : CH 159

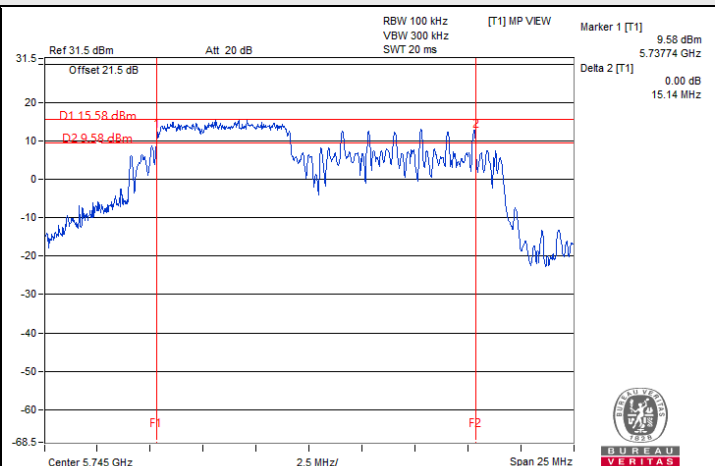
Spectrum Plot of Minimum Value



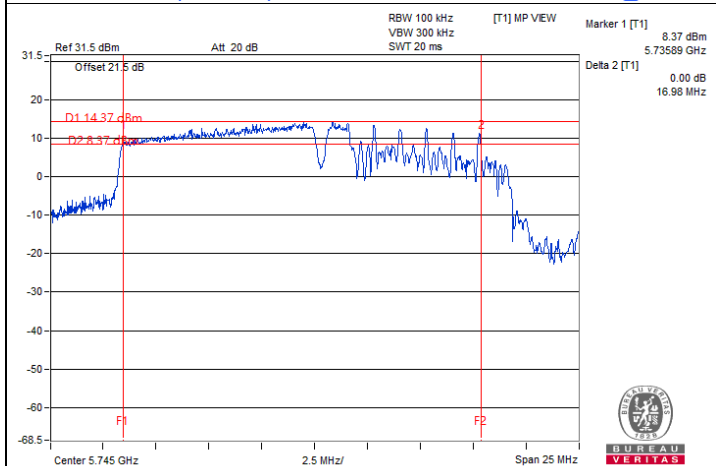
Spectrum Plot of Minimum Value



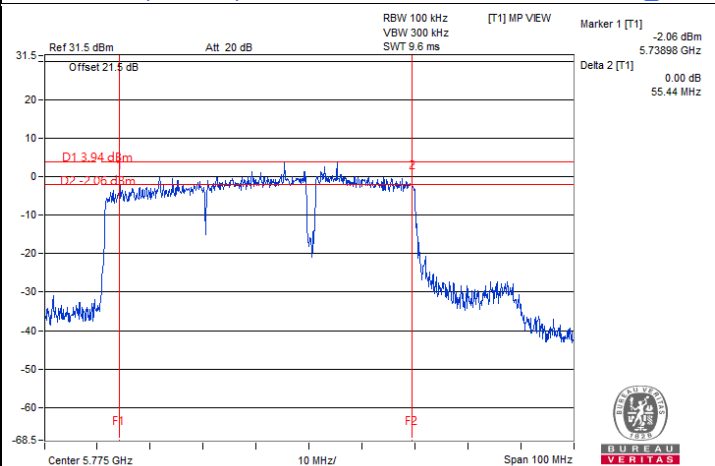
802.11be (EHT20) 106-tone RU 1S1T : CH 165@54



802.11be (EHT20) 52+26-tone MRU 1S1T : CH 149@70



802.11be (EHT20) 106+26-tone MRU 1S1T : CH 149@82



802.11be (EHT80) 484+242-tone MRU 1S1T : CH 155@93

Note: For U-NII-3 straddle channel = Marker 1 + Delta 2 - 5725 MHz

802.11a 2TX

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	2.83	2.86	0.5	Pass
149	5745	14.06	15.04	0.5	Pass
157	5785	13.78	15.12	0.5	Pass
165	5825	15.07	15.12	0.5	Pass

802.11ax (HE20) 2S2T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	2.85	2.76	0.5	Pass
149	5745	15.11	15.08	0.5	Pass
157	5785	17.55	15.47	0.5	Pass
165	5825	13.77	16.71	0.5	Pass

802.11ax (HE40) 2S2T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
142 (U-NII-3)	5710	3.16	2.82	0.5	Pass
151	5755	29.13	35.08	0.5	Pass
159	5795	30.22	36.05	0.5	Pass

802.11ax (HE80) 2S2T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
138 (U-NII-3)	5690	2.82	2.84	0.5	Pass
155	5775	75.07	62.52	0.5	Pass

802.11be (EHT20) 2S2T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
149	5745	15.90	13.97	0.5	Pass
157	5785	12.49	16.75	0.5	Pass
165	5825	15.02	17.07	0.5	Pass

802.11be (EHT40) 2S2T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
151	5755	31.12	35.11	0.5	Pass
159	5795	27.82	30.00	0.5	Pass

802.11be (EHT80) 2S2T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
155	5775	73.67	63.89	0.5	155

802.11ax (HE20) 26-tone RU 2S2T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	4.82	4.81	0.5	Pass
149	5745	2.11	2.11	0.5	Pass
165	5825	2.13	2.12	0.5	Pass

802.11ax (HE20) 52-tone RU 2S2T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	4.82	4.83	0.5	Pass
149	5745	17.08	17.06	0.5	Pass
165	5825	17.07	17.09	0.5	Pass

802.11ax (HE20) 106-tone RU 2S2T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
144 (U-NII-3)	5720	4.86	4.87	0.5	Pass
149	5745	17.13	17.15	0.5	Pass
165	5825	17.16	17.15	0.5	Pass

802.11be (EHT20) 26-tone RU 2S2T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
149	5745	2.10	2.13	0.5	Pass
165	5825	2.11	2.11	0.5	Pass

802.11be (EHT20) 52-tone RU 2S2T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
149	5745	17.07	17.07	0.5	Pass
165	5825	17.05	17.08	0.5	Pass

802.11be (EHT20) 106-tone RU 2S2T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
149	5745	17.15	17.15	0.5	Pass
165	5825	17.17	17.15	0.5	Pass

802.11be (EHT20) 52+26-tone MRU 2S2T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
149	5745	15.15	15.15	0.5	Pass
165	5825	15.14	15.14	0.5	Pass

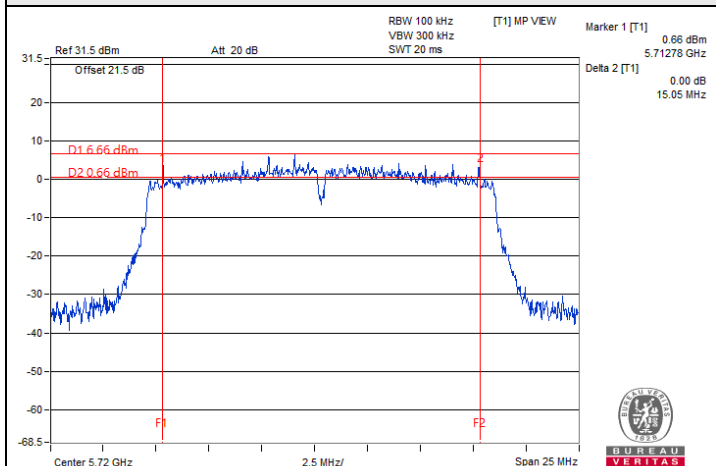
802.11be (EHT20) 106+26-tone MRU 2S2T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
149	5745	16.99	16.97	0.5	Pass
165	5825	17.01	16.97	0.5	Pass

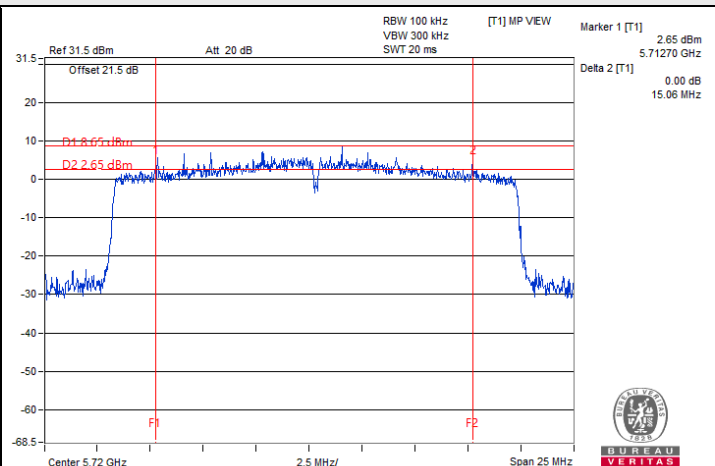
802.11be (EHT80) 484+242-tone MRU 2S2T

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Test Result
		Chain 0	Chain 1		
155	5775	48.17	56.99	0.5	Pass

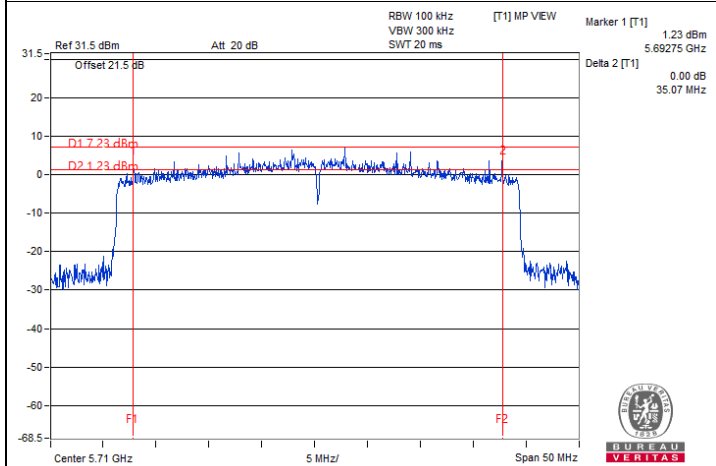
Spectrum Plot of Minimum Value



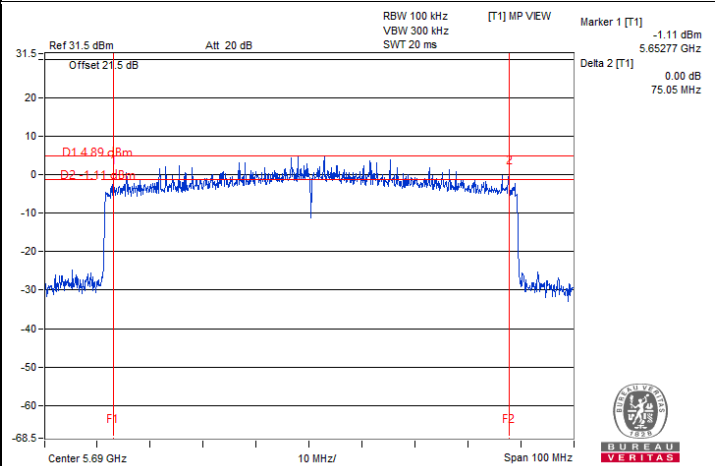
802.11a 2TX / Chain 0 : CH 144 (U-NII-3)



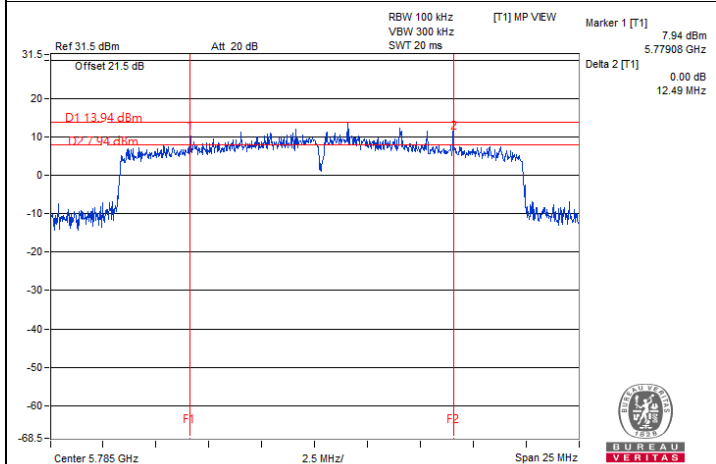
802.11ax (HE20) 2S2T / Chain 1 : CH 144 (U-NII-3)



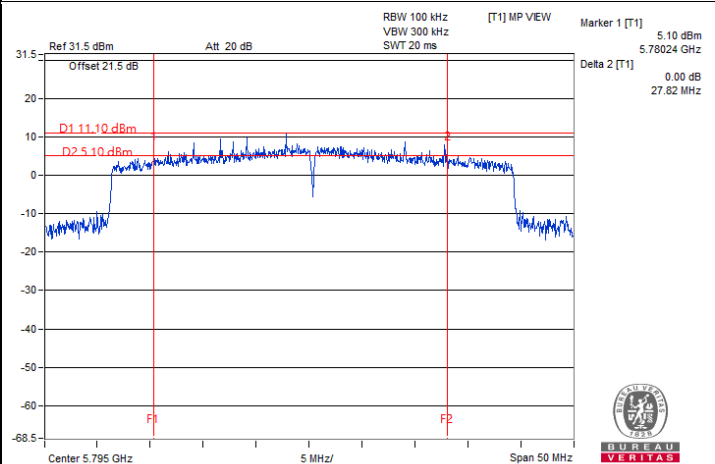
802.11ax (HE40) 2S2T / Chain 1 : CH 142 (U-NII-3)



802.11ax (HE80) 2S2T / Chain 0 : CH 138 (U-NII-3)

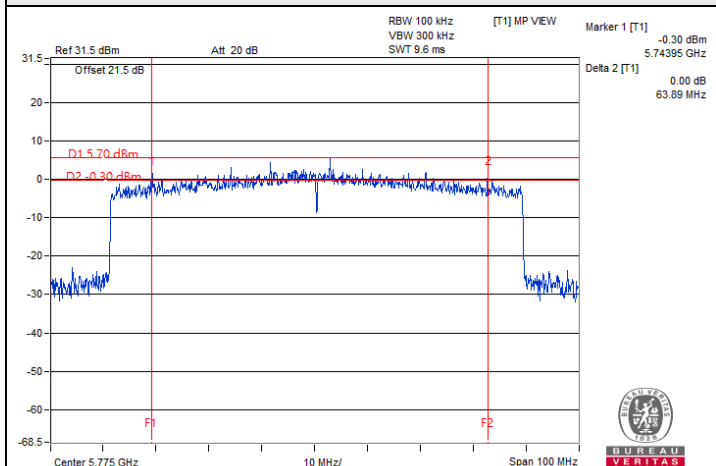


802.11be (EHT20) 2S2T / Chain 0 : CH 157

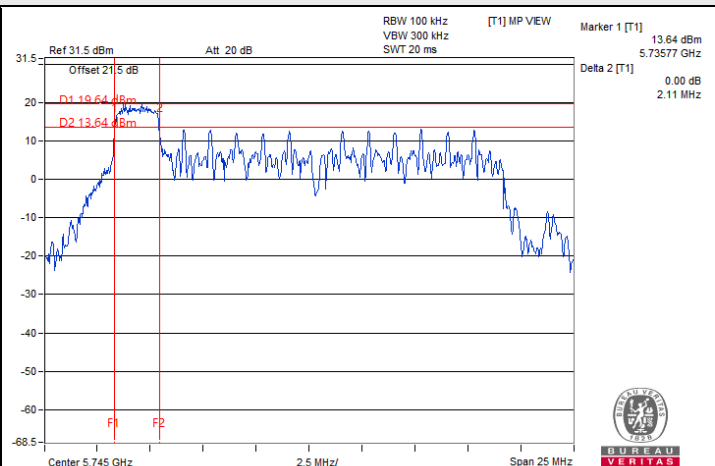


802.11be (EHT40) 2S2T / Chain 0 : CH 159

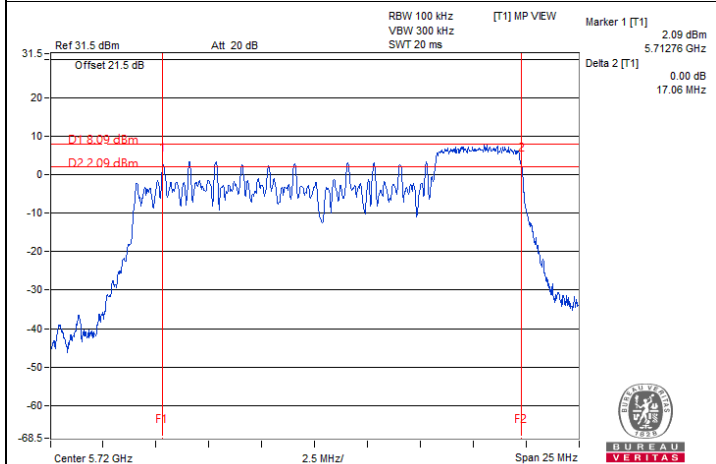
Spectrum Plot of Minimum Value



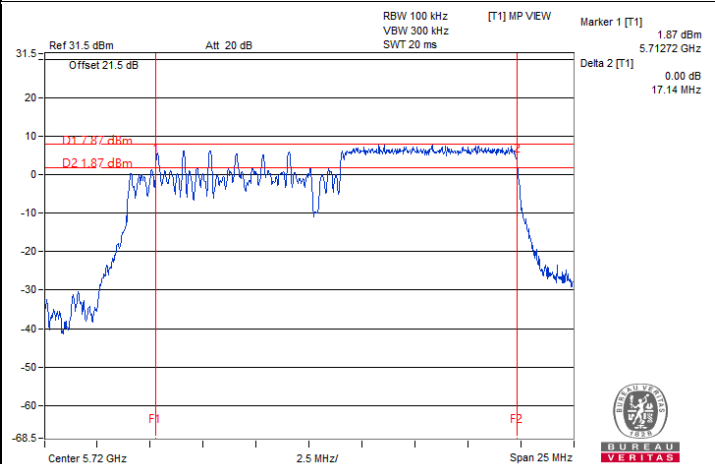
802.11be (EHT80) 2S2T / Chain 1 : CH 155



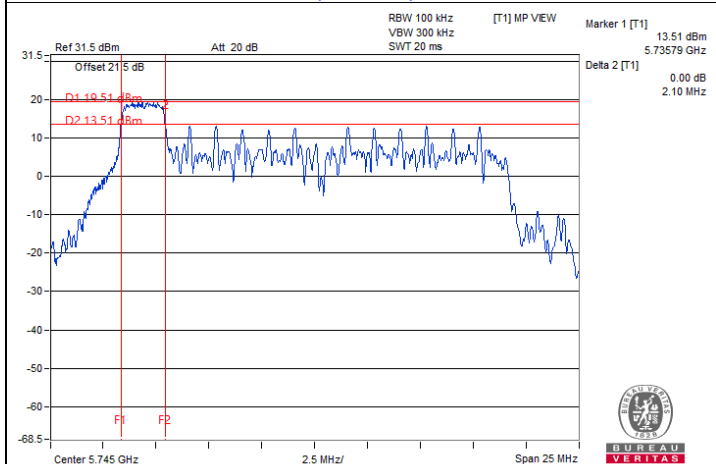
802.11ax (HE20) 26-tone RU 2S2T / Chain 0 : CH 149@0



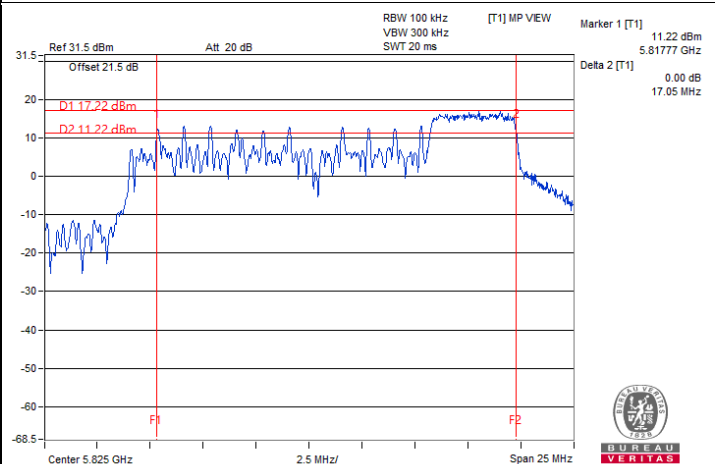
802.11ax (HE20) 52-tone RU 2S2T / Chain 0 : CH 144@40 (U-NII-3)



802.11ax (HE20) 106-tone RU 2S2T / Chain 0 : CH 144@54 (U-NII-3)

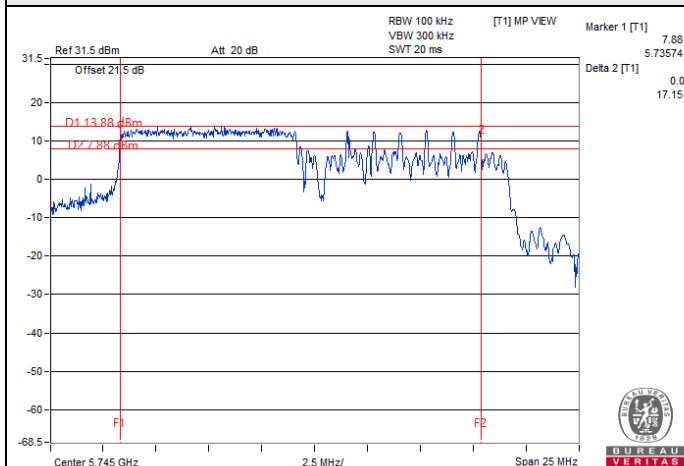


802.11be (EHT20) 26-tone RU 2S2T / Chain 0 : CH 149@0

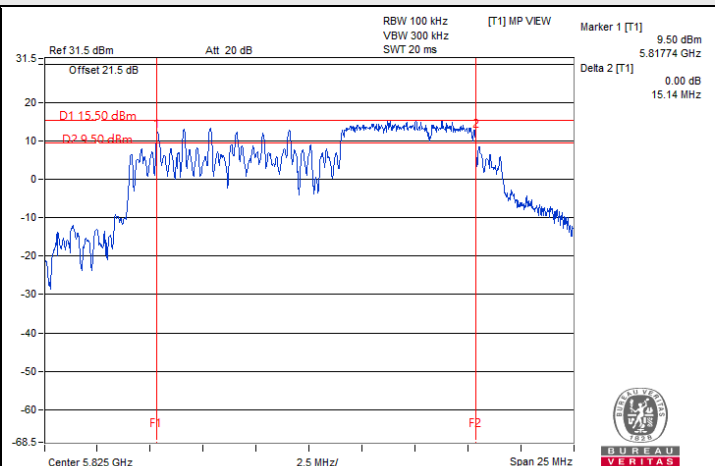


802.11be (EHT20) 52-tone RU 2S2T / Chain 0 : CH 165@40

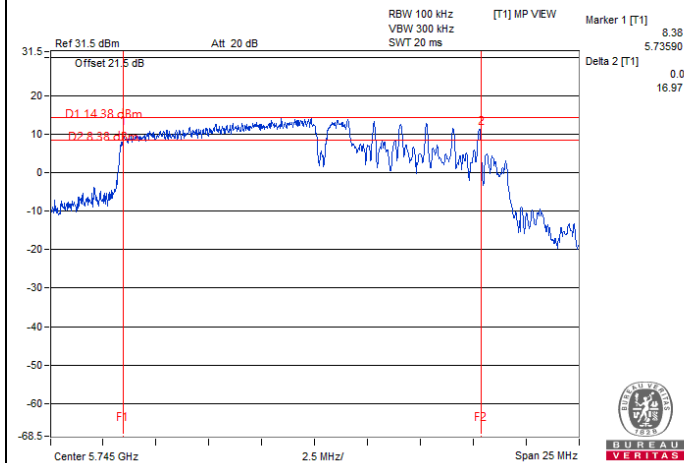
Spectrum Plot of Minimum Value



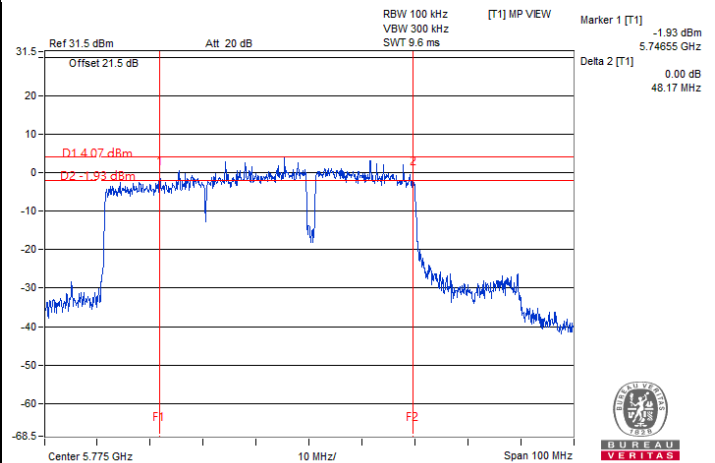
802.11be (EHT20) 106-tone RU 2S2T / Chain 0 : CH
149@53



802.11be (EHT20) 52+26-tone MRU 2S2T / Chain 0 : CH
165@72



802.11be (EHT20) 106+26-tone MRU 2S2T / Chain 1 : CH
149@82



802.11be (EHT80) 484+242-tone MRU 2S2T / Chain 0 : CH
155@93

Note: For U-NII-3 straddle channel = Marker 1 + Delta 2 - 5725 MHz

7.5 Occupied Bandwidth

Input Power:	3.3 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Willy Lin
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802.11a 1TX

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	16.38
40	5200	16.45
48	5240	16.53
52	5260	16.38
60	5300	16.38
64	5320	16.38
100	5500	16.26
116	5580	16.44
140	5700	16.38
144 (U-NII-2C)	5720	13.04
144 (U-NII-3)	5720	3.34
149	5745	17.64
157	5785	19.02
165	5825	19.26

802.11ax (HE20) 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.78
40	5200	18.78
48	5240	18.84
52	5260	18.84
60	5300	18.9
64	5320	18.78
100	5500	18.84
116	5580	18.9
140	5700	18.78
144 (U-NII-2C)	5720	14.24
144 (U-NII-3)	5720	4.6
149	5745	19.8
157	5785	19.98
165	5825	20.82

802.11ax (HE40) 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	37.56
46	5230	37.68
54	5270	37.68
62	5310	37.68
102	5510	37.68
110	5550	38.04
134	5670	37.56
142 (U-NII-2C)	5710	33.72
142 (U-NII-3)	5710	4.2
151	5755	40.2
159	5795	41.76

802.11ax (HE80) 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	77.04
58	5290	77.28
106	5530	77.28
122	5610	77.28
138 (U-NII-2C)	5690	73.16
138 (U-NII-3)	5690	3.4
155	5775	77.04

802.11ax (HE160) 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
50 (U-NII-1)	5250	77.76
50 (U-NII-2A)	5250	78.24
114	5570	155.52

802.11be (EHT20) 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.84
40	5200	18.78
48	5240	18.78
149	5745	19.62
157	5785	19.74
165	5825	20.16

802.11be (EHT40) 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	37.68
46	5230	37.8
151	5755	38.76
159	5795	39.12

802.11be (EHT80) 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	77.28
155	5775	77.04

802.11ax (HE20) 26-tone RU 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.18
64	5320	18.18
100	5500	18.18
140	5700	18.12
144 (U-NII-2C)	5720	13.16
144 (U-NII-3)	5720	5.02
149	5745	18.54
165	5825	18.42

802.11ax (HE20) 52-tone RU 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.06
64	5320	18.24
100	5500	18.06
140	5700	18.18
144 (U-NII-2C)	5720	13.22
144 (U-NII-3)	5720	4.96
149	5745	18.72
165	5825	18.36

802.11ax (HE20) 106-tone RU 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.12
64	5320	18.12
100	5500	18.12
140	5700	18.18
144 (U-NII-2C)	5720	13.28
144 (U-NII-3)	5720	4.9
149	5745	18.6
165	5825	18.42

802.11be (EHT20) 26-tone RU 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18
149	5745	18.54
165	5825	18.42

802.11be (EHT20) 52-tone RU 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.12
149	5745	18.48
165	5825	18.48

802.11be (EHT20) 106-tone RU 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.12
149	5745	18.84
165	5825	18.6

802.11be (EHT20) 52+26-tone MRU 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.16
149	5745	17.4
165	5825	17.46

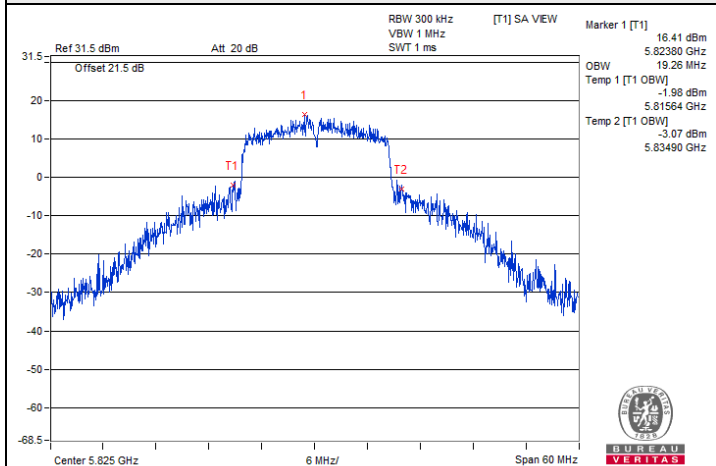
802.11be (EHT20) 106+26-tone MRU 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.58
149	5745	18.12
165	5825	18.12

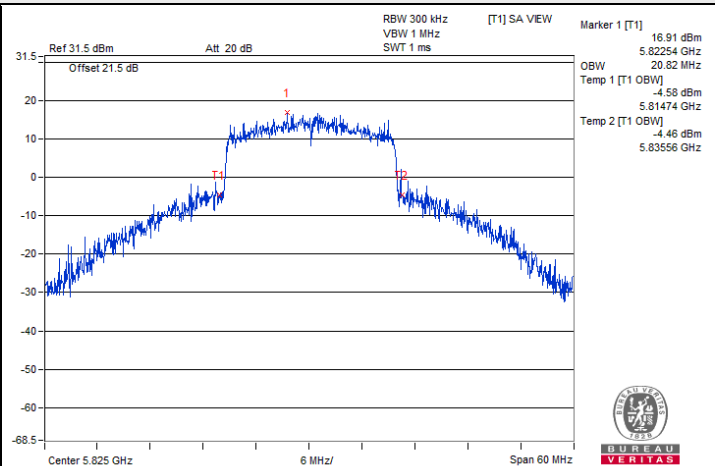
802.11be (EHT80) 484+242-tone MRU 1S1T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	58.56
155	5775	58.32

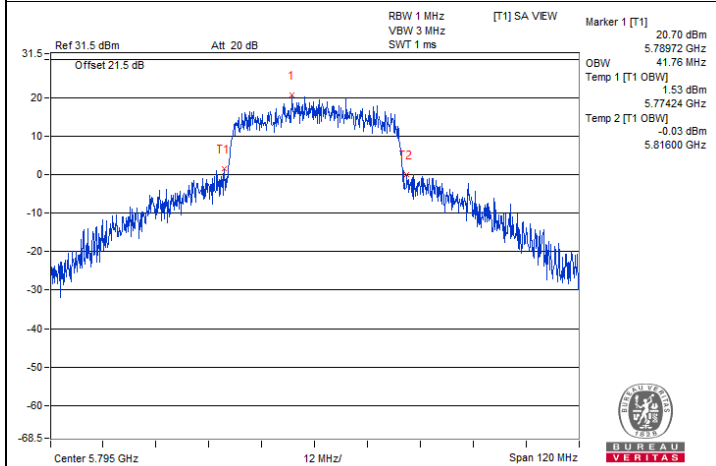
Spectrum Plot of Maximum Value



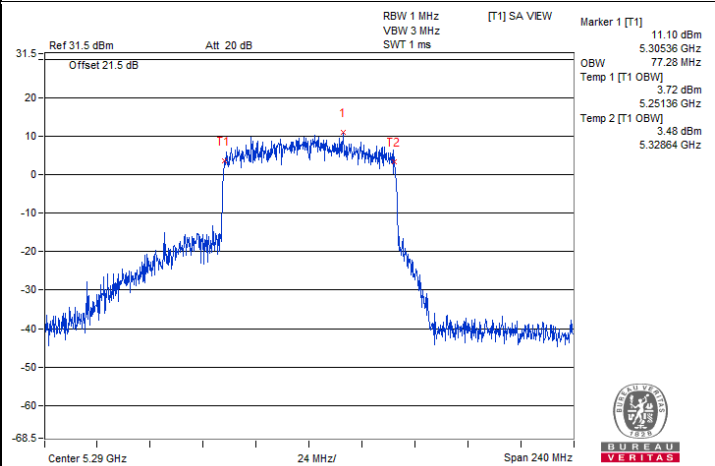
802.11a 1TX : CH 165



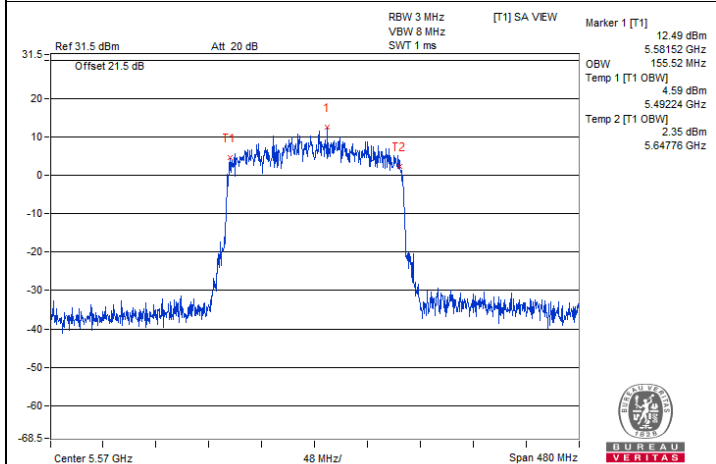
802.11ax (HE20) 1S1T : CH 165



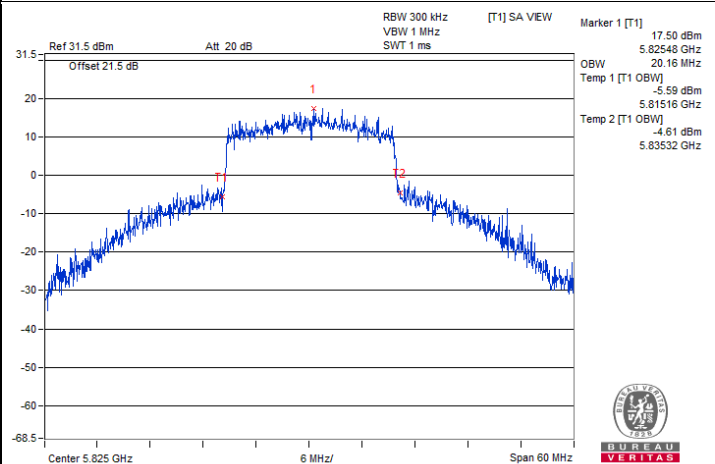
802.11ax (HE40) 1S1T : CH 159



802.11ax (HE80) 1S1T : CH 58

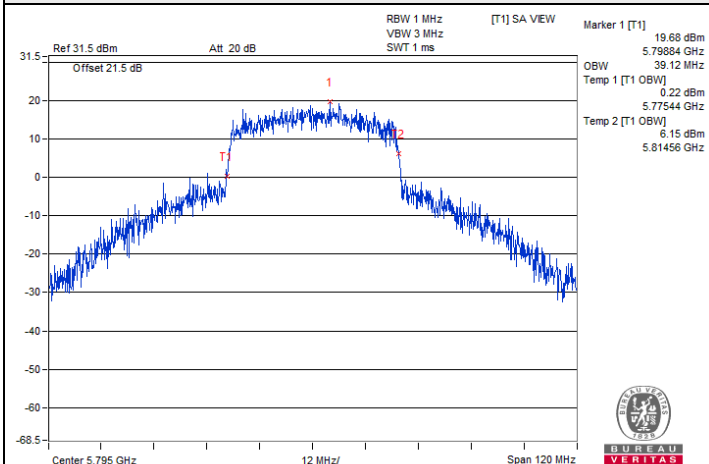


802.11ax (HE160) 1S1T : CH 114

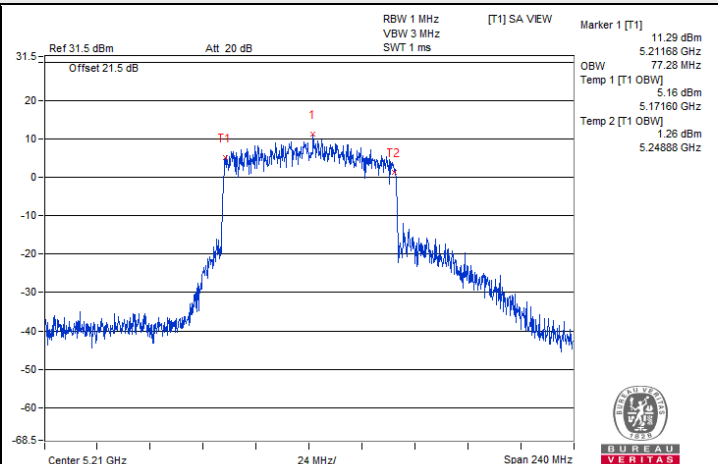


802.11be (EHT20) 1S1T : CH 165

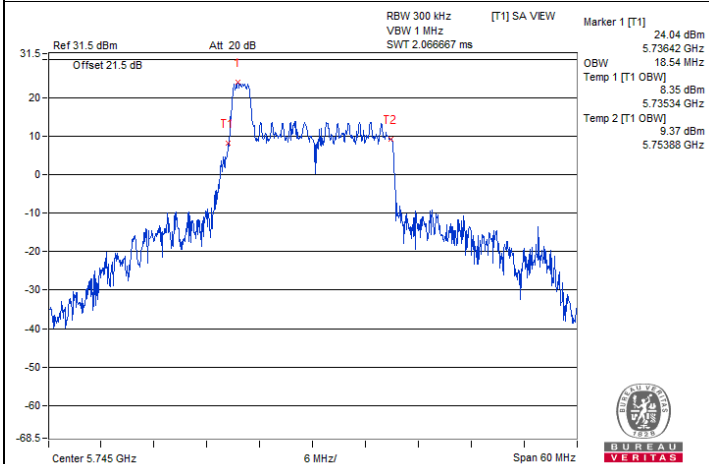
Spectrum Plot of Maximum Value



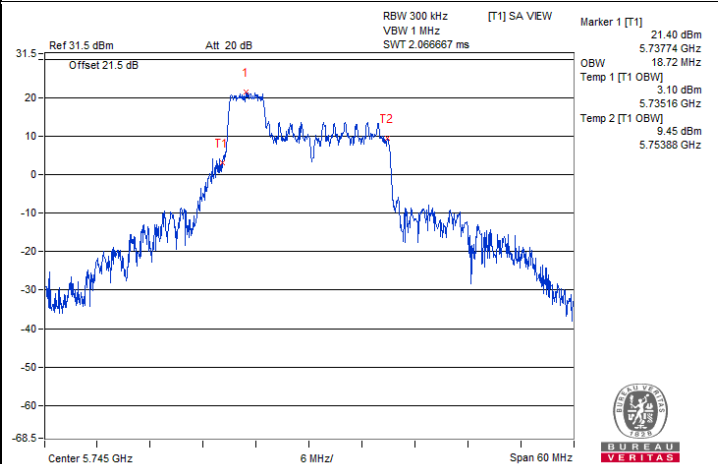
802.11be (EHT40) 1S1T : CH 159



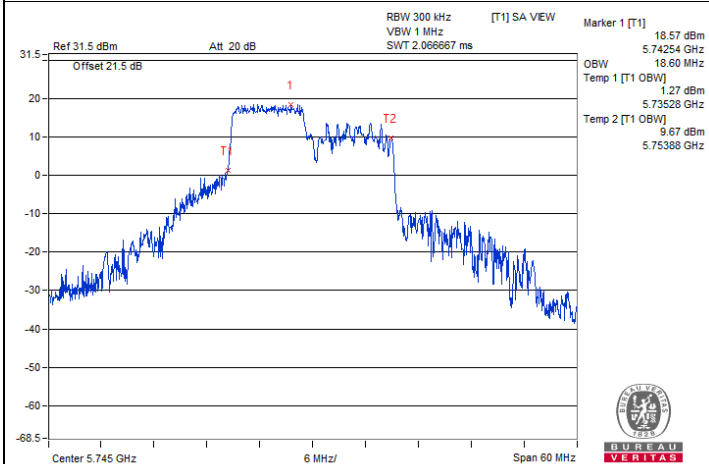
802.11be (EHT80) 1S1T : CH 42



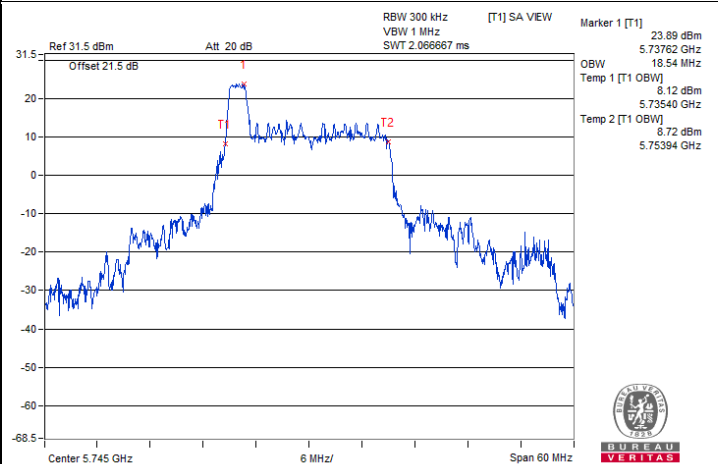
802.11ax (HE20) 26-tone RU 1S1T : CH 149@0



802.11ax (HE20) 52-tone RU 1S1T : CH 149@37

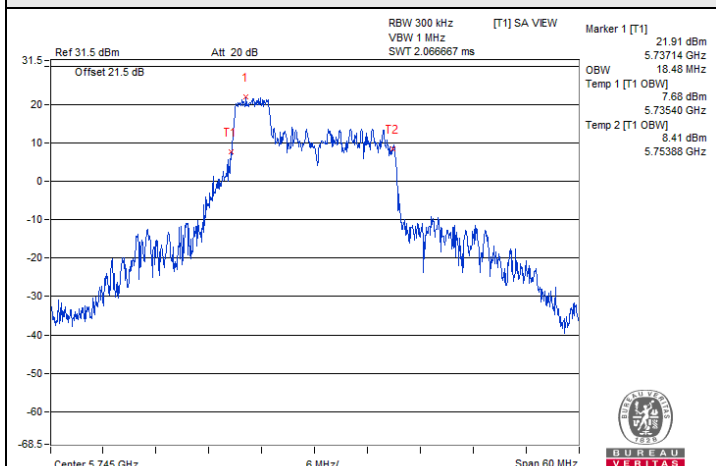


802.11ax (HE20) 106-tone RU 1S1T : CH 149@53

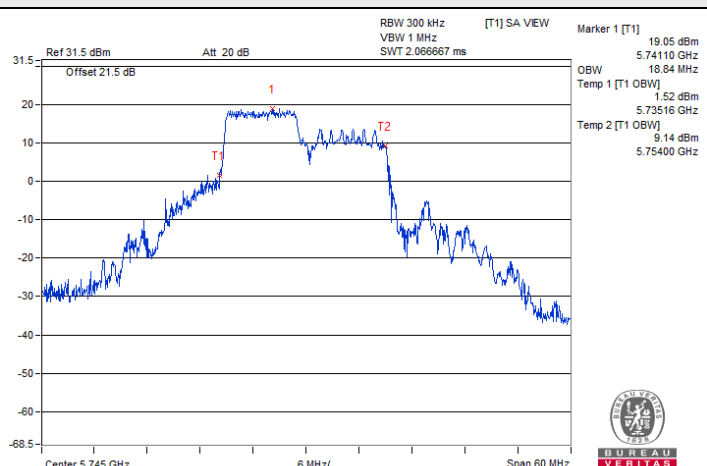


802.11be (EHT20) 26-tone RU 1S1T : CH 149@0

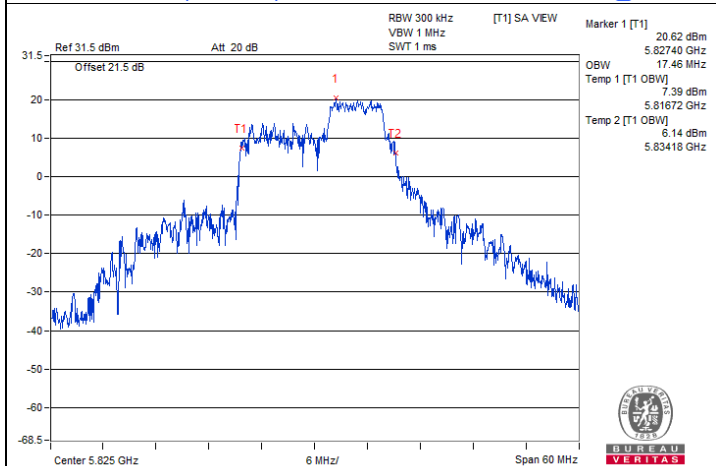
Spectrum Plot of Maximum Value



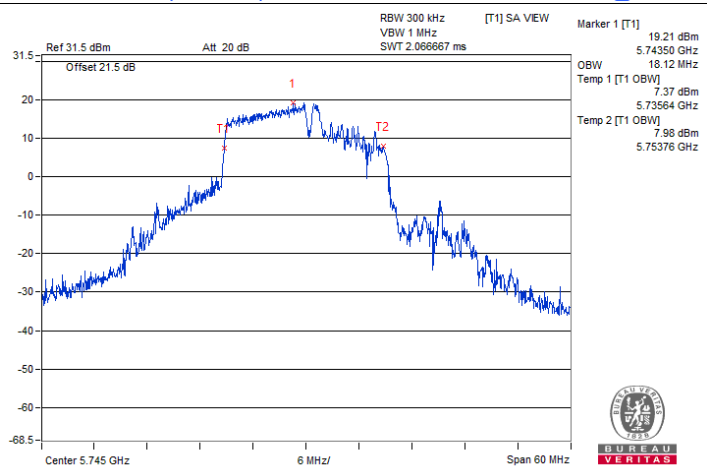
802.11be (EHT20) 52-tone RU 1S1T : CH 149@37



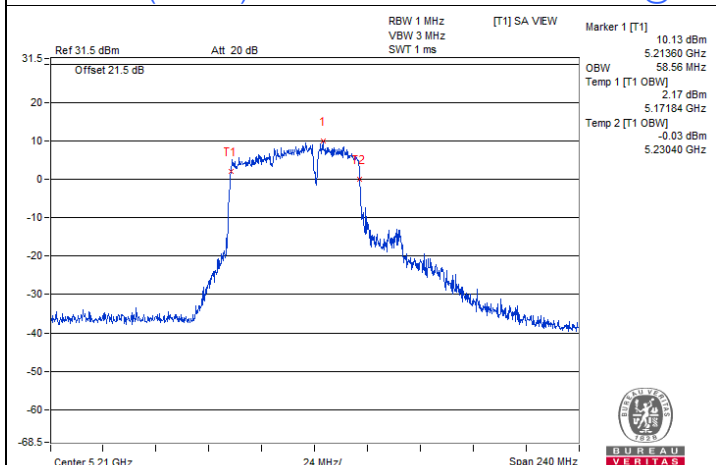
802.11be (EHT20) 106-tone RU 1S1T : CH 149@53



802.11be (EHT20) 52+26-tone MRU 1S1T : CH 165@72

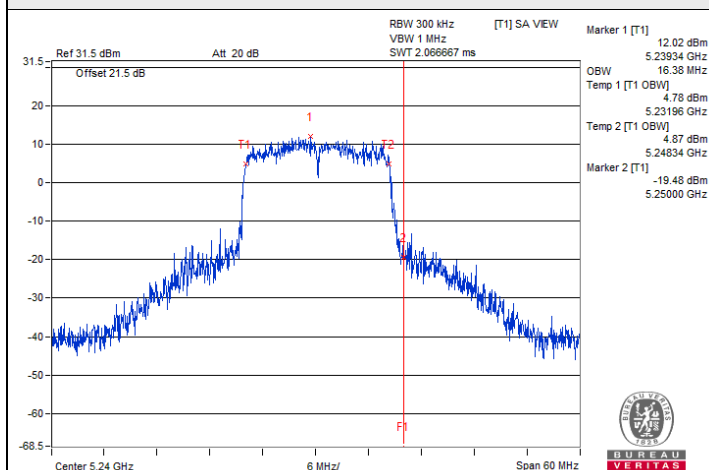


802.11be (EHT20) 106+26-tone MRU 1S1T : CH 149@82

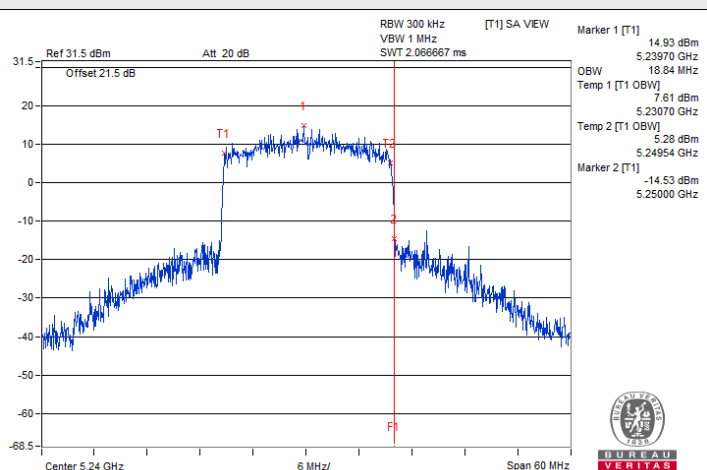


802.11be (EHT80) 484+242-tone MRU 1S1T : CH 42@93

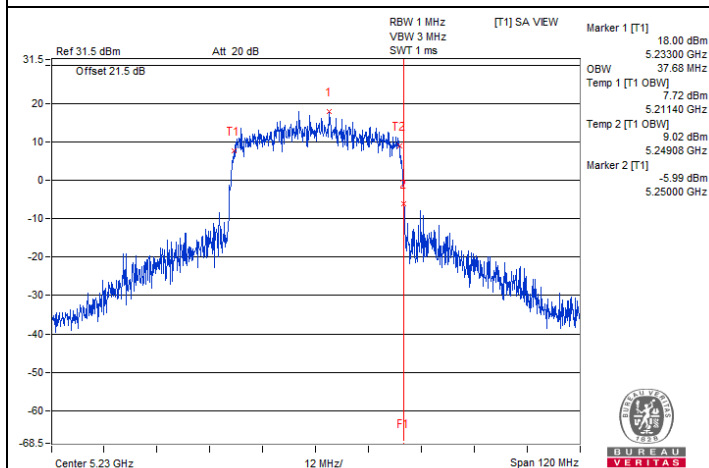
Spectrum Plot for nearby DFS band
(DFS is required, if 99% OCP straddle into U-NII-2A)



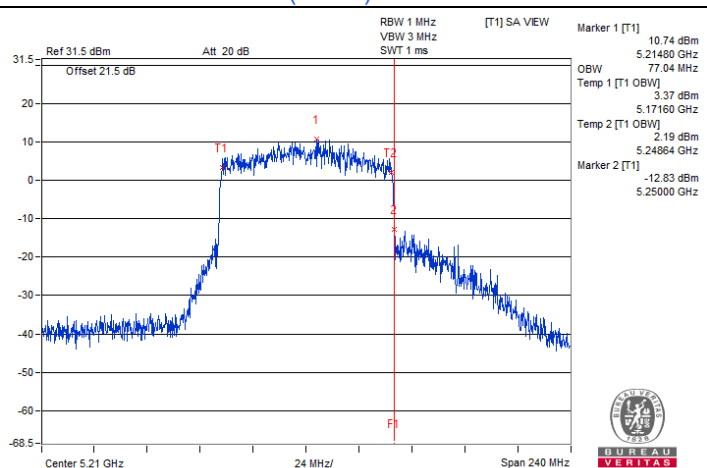
802.11a 1TX : CH 48



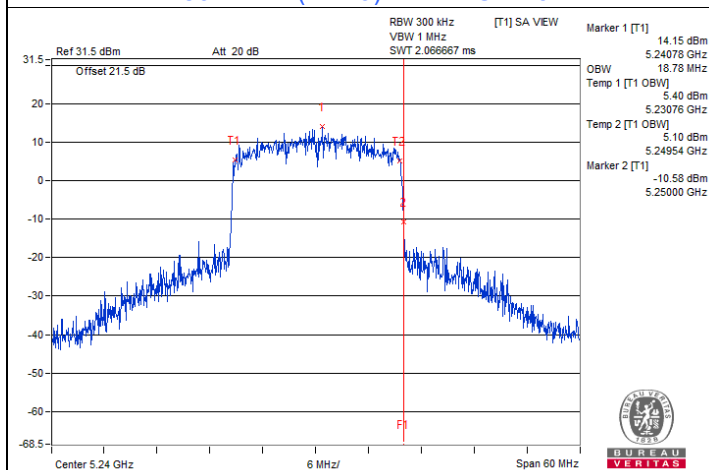
802.11ax (HE20) 1S1T : CH 48



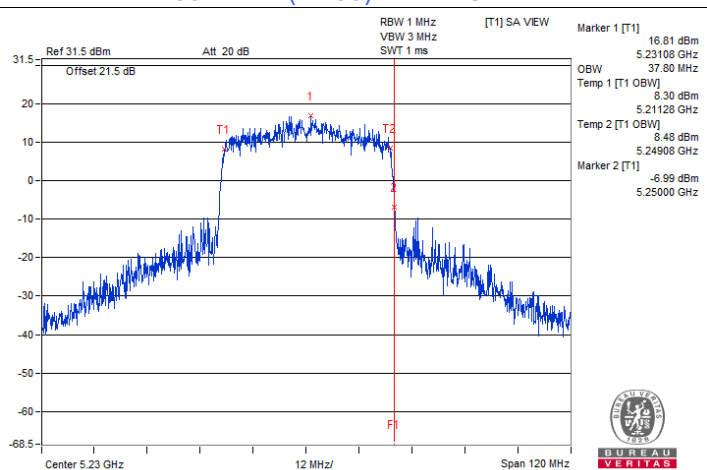
802.11ax (HE40) 1S1T : CH 46



802.11ax (HE80) 1S1T : CH 42

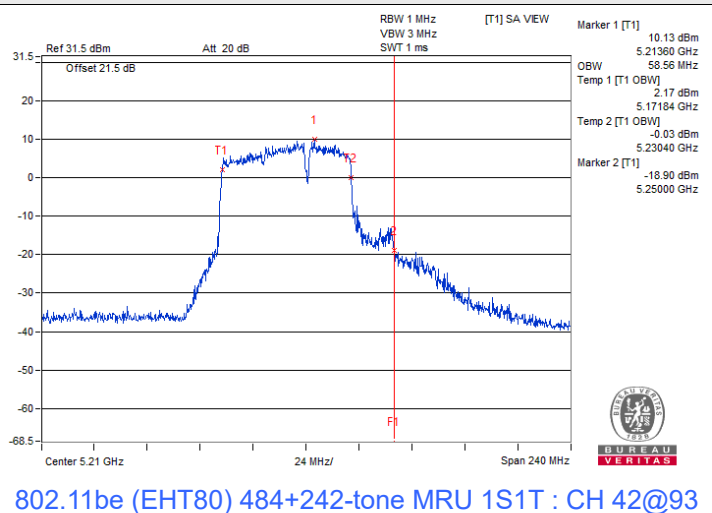
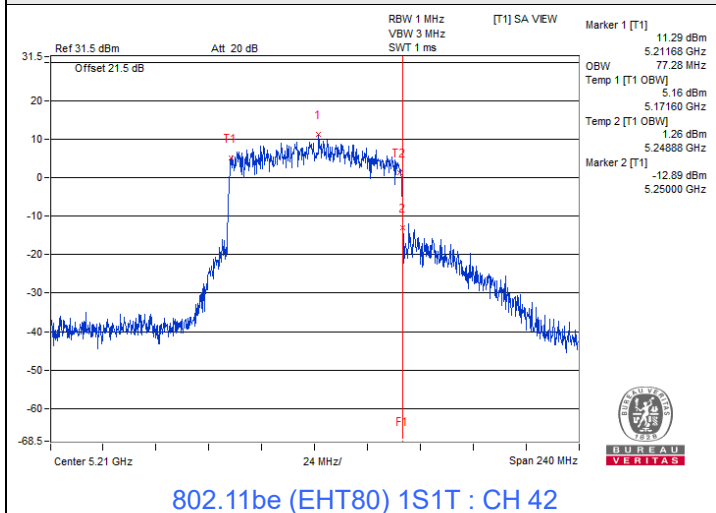


802.11be (EHT20) 1S1T : CH 48

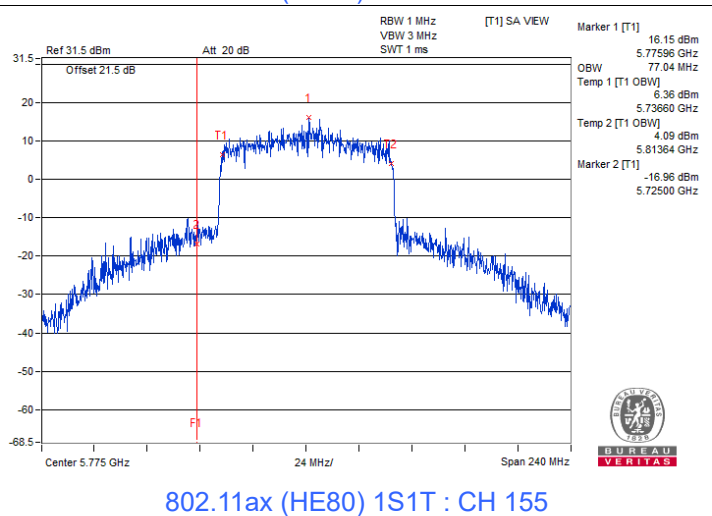
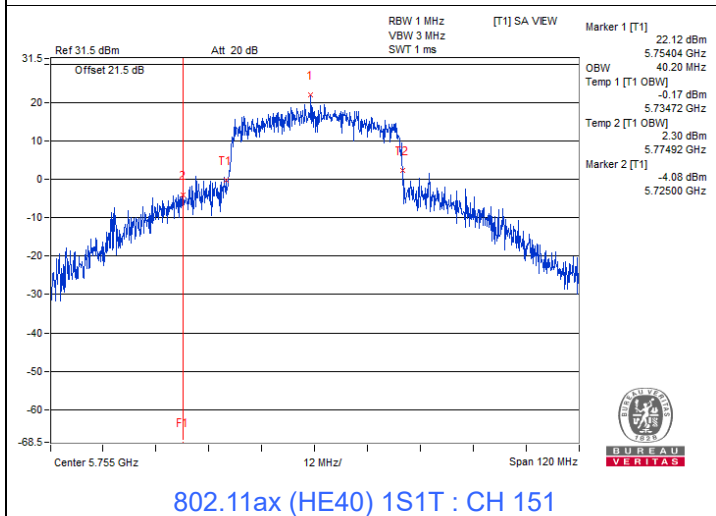
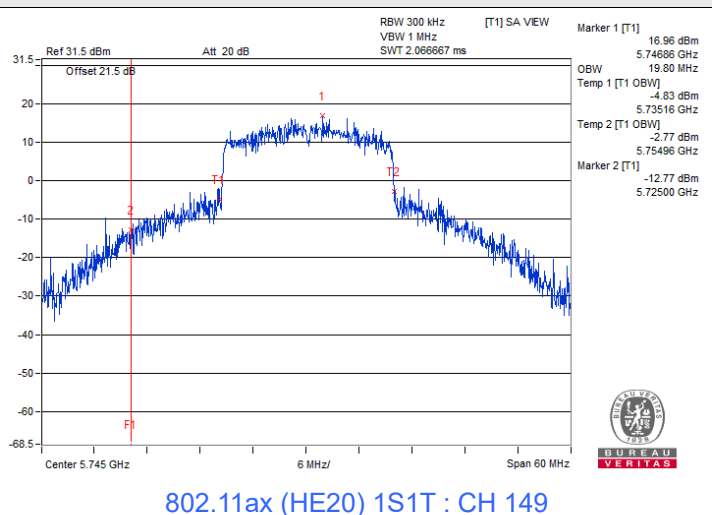
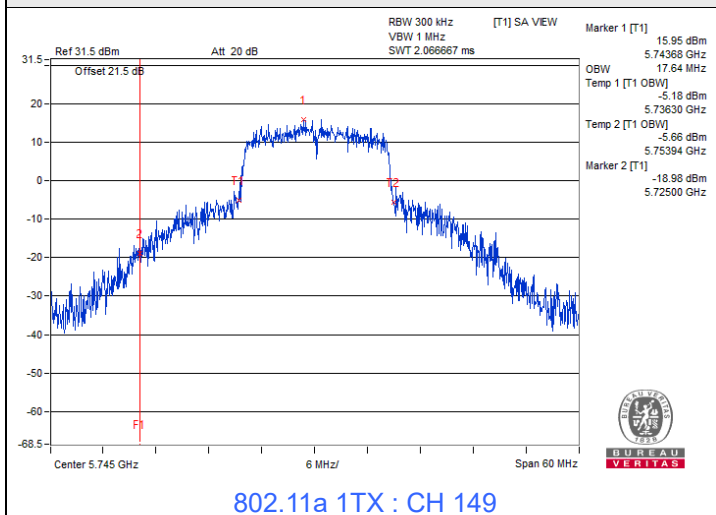


802.11be (EHT40) 1S1T : CH 46

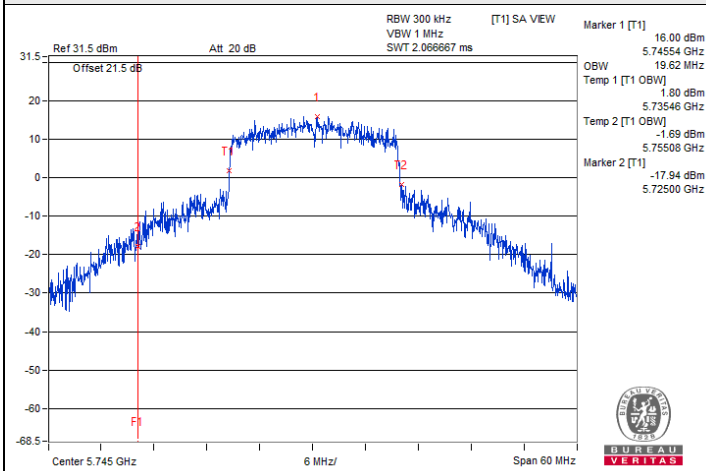
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2A)



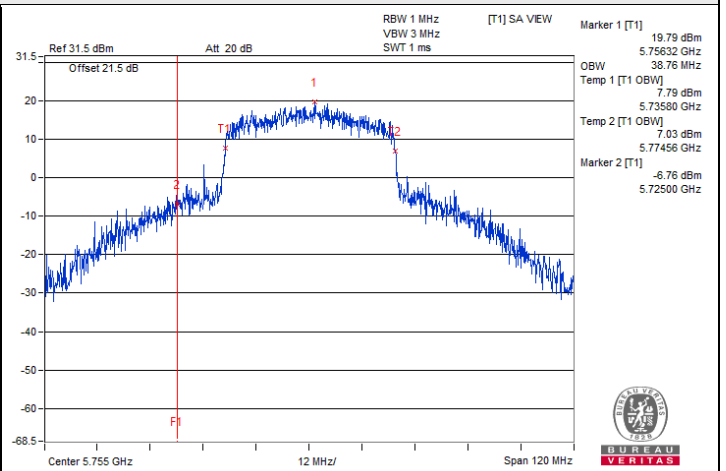
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2C)



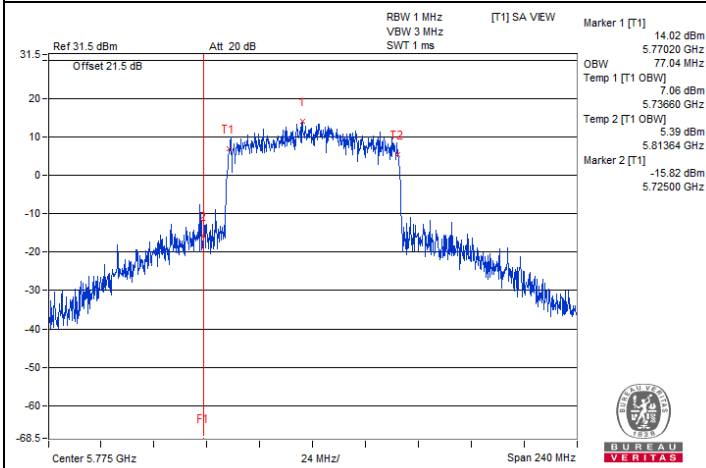
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2C)



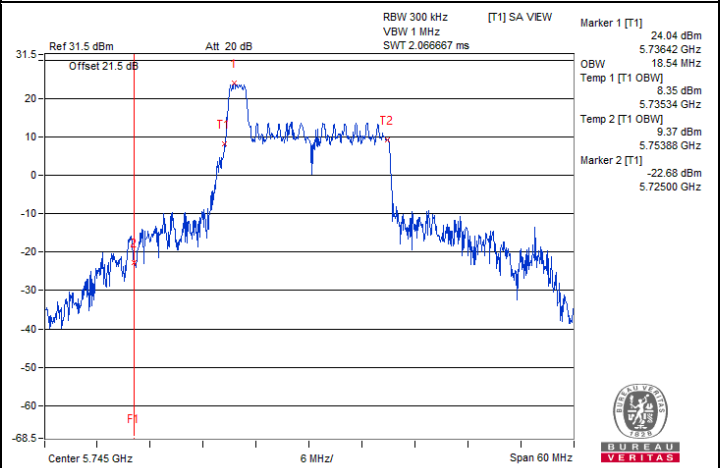
802.11be (EHT20) 1S1T : CH 149



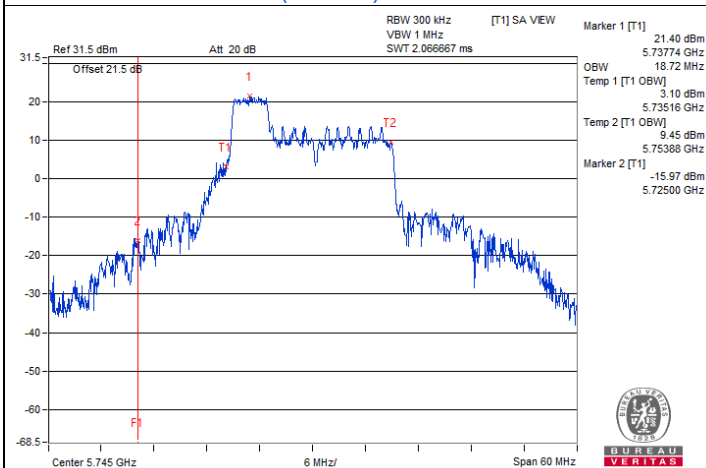
802.11be (EHT40) 1S1T : CH 151



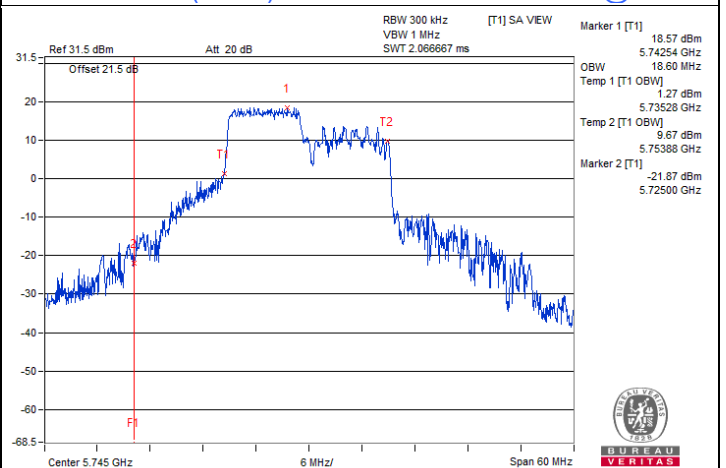
802.11be (EHT80) 1S1T : CH 155



802.11ax (HE20) 26-tone RU 1S1T : CH 149@0

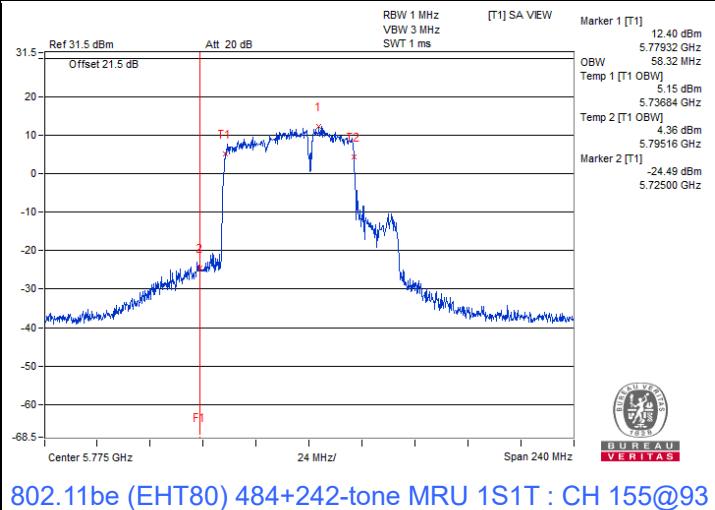
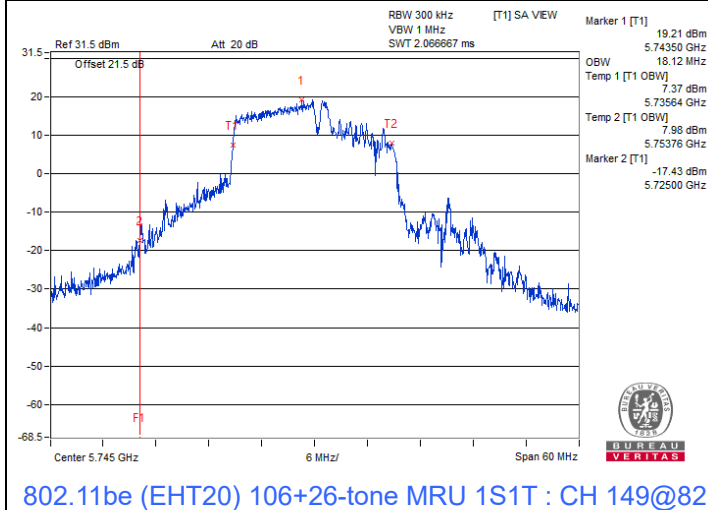
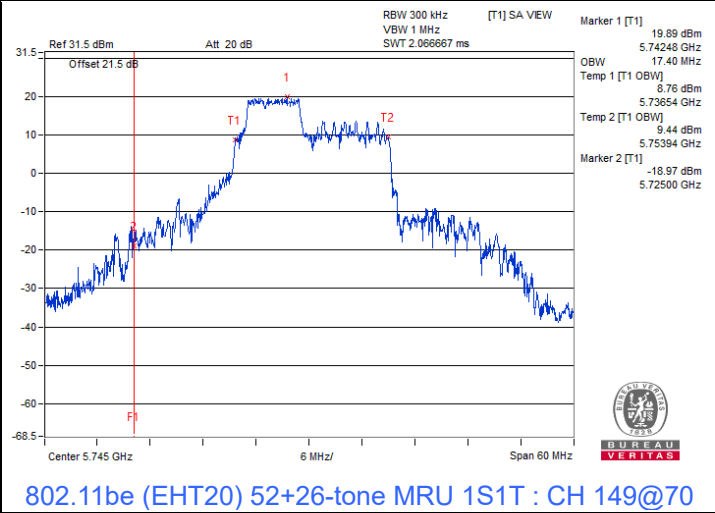
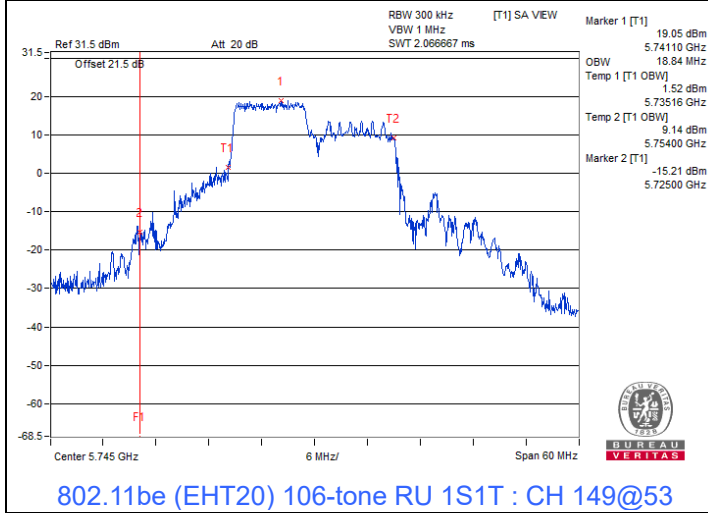
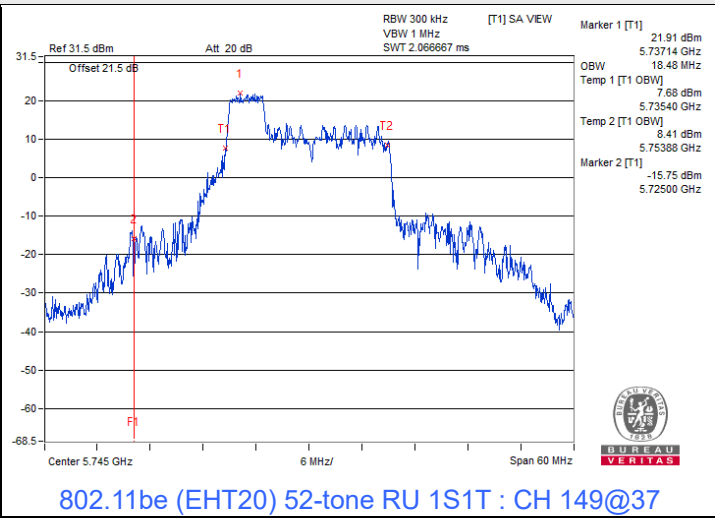
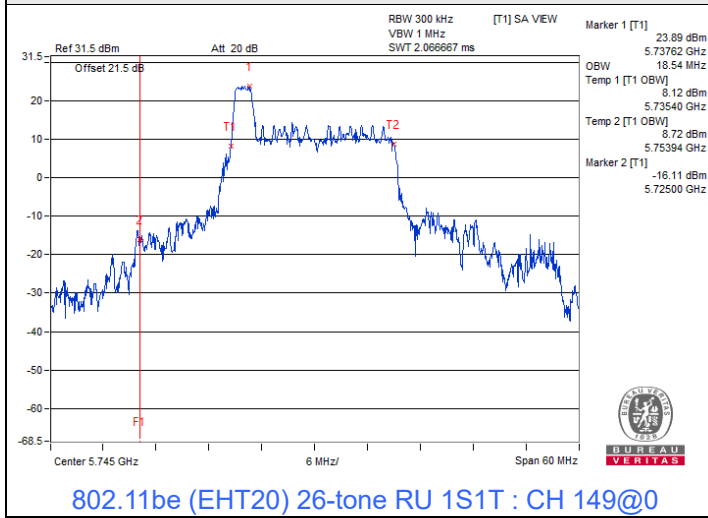


802.11ax (HE20) 52-tone RU 1S1T : CH 149@37



802.11ax (HE20) 106-tone RU 1S1T : CH 149@53

Spectrum Plot for nearby DFS band
(DFS is required, if 99% OCP straddle into U-NII-2C)



802.11a 2TX

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	16.32	16.38
40	5200	16.38	16.38
48	5240	16.26	16.32
52	5260	16.38	16.32
60	5300	16.44	16.32
64	5320	16.38	16.32
100	5500	16.32	16.32
116	5580	16.26	16.26
140	5700	16.38	16.38
144 (U-NII-2C)	5720	12.86	12.86
144 (U-NII-3)	5720	3.46	3.46
149	5745	17.22	16.98
157	5785	16.98	17.64
165	5825	17.28	17.58

802.11ax (HE20) 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	18.84	18.84
40	5200	18.78	18.84
48	5240	18.84	18.78
52	5260	18.78	18.84
60	5300	18.84	18.72
64	5320	18.84	18.84
100	5500	18.78	18.78
116	5580	18.84	18.84
140	5700	18.78	18.84
144 (U-NII-2C)	5720	14.06	14.06
144 (U-NII-3)	5720	4.72	4.66
149	5745	19.20	19.20
157	5785	19.20	19.20
165	5825	19.20	19.26

802.11ax (HE40) 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	37.68	37.68
46	5230	37.80	37.56
54	5270	37.44	37.68
62	5310	37.68	37.56
102	5510	37.68	37.68
110	5550	37.80	37.80
134	5670	37.80	37.68
142 (U-NII-2C)	5710	33.48	33.48
142 (U-NII-3)	5710	4.20	4.20
151	5755	39.00	38.76
159	5795	39.24	38.88

802.11ax (HE80) 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	77.04	77.04
58	5290	77.28	77.28
106	5530	76.80	77.28
122	5610	76.80	77.28
138 (U-NII-2C)	5690	73.16	73.40
138 (U-NII-3)	5690	3.64	3.64
155	5775	77.28	77.28

802.11ax (HE160) 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
50 (U-NII-1)	5250	78.24	77.76
50 (U-NII-2A)	5250	77.76	77.76
114	5570	155.04	155.52

802.11be (EHT20) 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	18.78	18.84
40	5200	18.78	18.78
48	5240	18.84	18.84
149	5745	19.26	19.20
157	5785	19.20	19.20
165	5825	19.14	19.38

802.11be (EHT40) 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	37.80	37.56
46	5230	37.80	37.68
151	5755	38.76	39.12
159	5795	39.00	38.88

802.11be (EHT80) 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	77.04	42
155	5775	77.04	155

802.11ax (HE20) 26-tone RU 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	18.06	18.18
64	5320	18.24	18.18
100	5500	18.18	18.18
140	5700	18.12	18.18
144 (U-NII-2C)	5720	13.16	13.16
144 (U-NII-3)	5720	5.02	5.02
149	5745	18.66	18.48
165	5825	18.72	18.84

802.11ax (HE20) 52-tone RU 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	18.12	18.06
64	5320	18.18	18.12
100	5500	18.24	18.12
140	5700	18.18	18.00
144 (U-NII-2C)	5720	13.22	13.22
144 (U-NII-3)	5720	4.90	4.90
149	5745	18.84	18.54
165	5825	18.90	19.02

802.11ax (HE20) 106-tone RU 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	18.12	18.12
64	5320	18.18	18.18
100	5500	18.18	18.12
140	5700	18.18	18.18
144 (U-NII-2C)	5720	13.28	13.10
144 (U-NII-3)	5720	4.90	4.90
149	5745	18.96	19.08
165	5825	19.68	19.68

802.11be (EHT20) 26-tone RU 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	18.18	18.24
149	5745	18.54	18.60
165	5825	18.66	18.54

802.11be (EHT20) 52-tone RU 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	18.18	18.18
149	5745	18.84	18.78
165	5825	18.84	19.14

802.11be (EHT20) 106-tone RU 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	18.18	18.12
149	5745	18.96	19.02
165	5825	19.56	19.68

802.11be (EHT20) 52+26-tone MRU 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	17.16	17.10
149	5745	17.40	17.40
165	5825	17.40	17.58

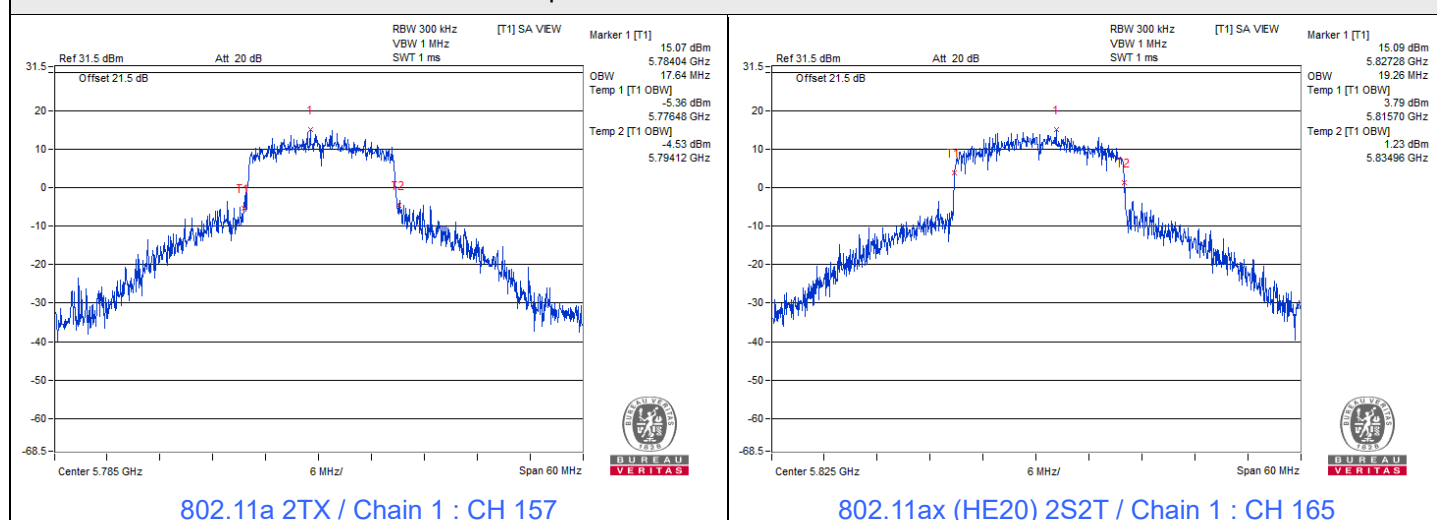
802.11be (EHT20) 106+26-tone MRU 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	17.76	17.82
149	5745	18.00	18.12
165	5825	18.24	18.60

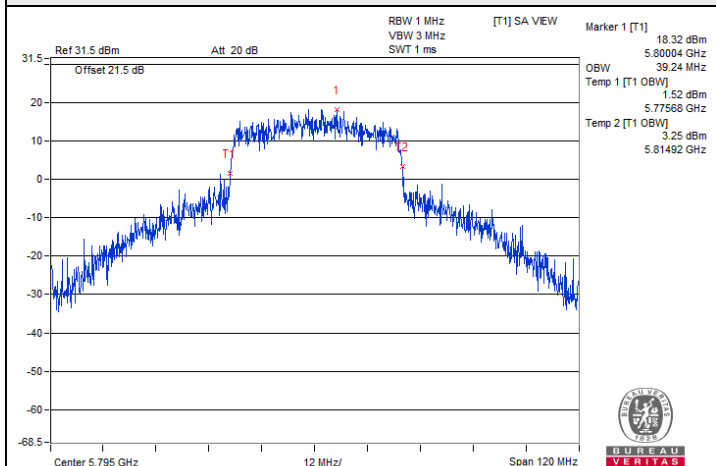
802.11be (EHT80) 484+242-tone MRU 2S2T

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	58.56	58.32
155	5775	58.32	58.08

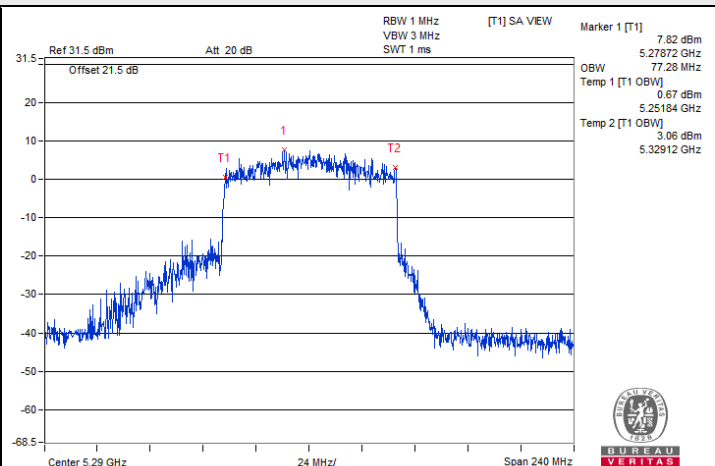
Spectrum Plot of Maximum Value



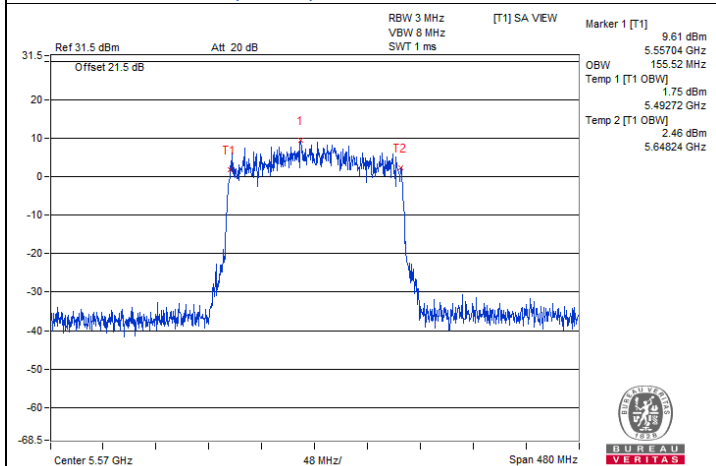
Spectrum Plot of Maximum Value



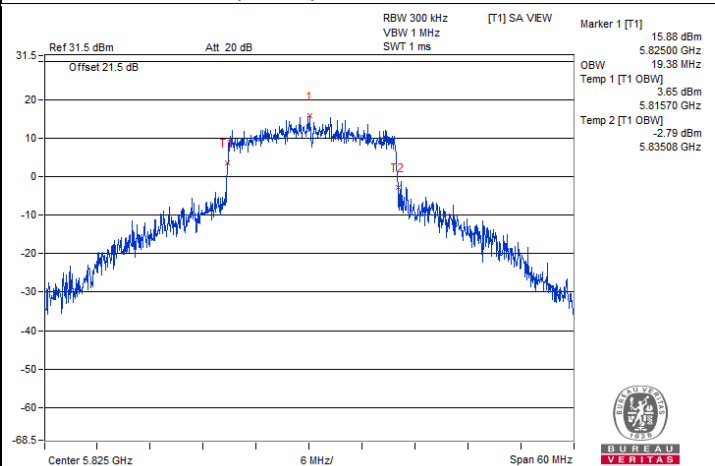
802.11ax (HE40) 2S2T / Chain 0 : CH 159



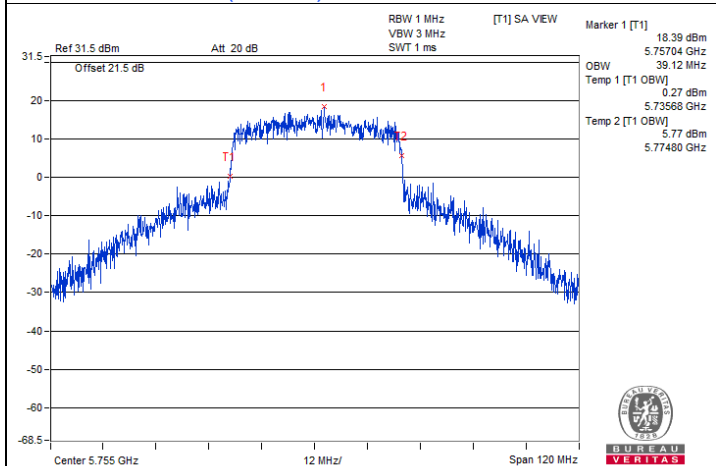
802.11ax (HE80) 2S2T / Chain 0 : CH 58



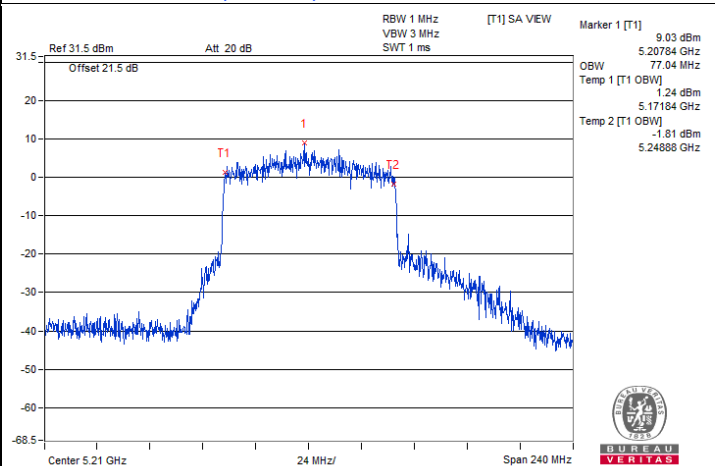
802.11ax (HE160) 2S2T / Chain 1 : CH 114



802.11be (EHT20) 2S2T / Chain 1 : CH 165

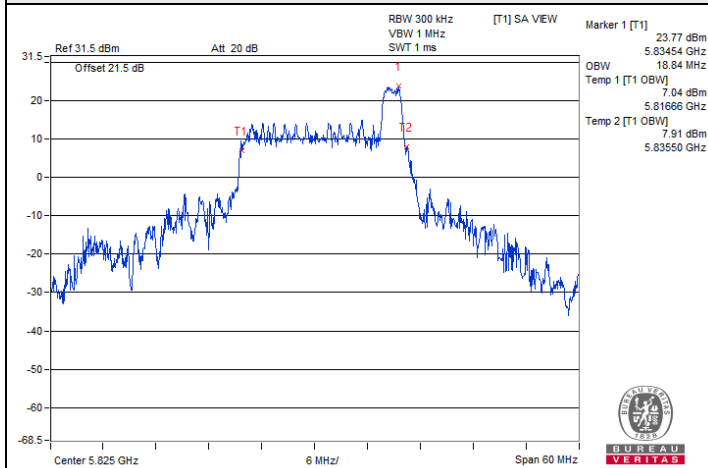


802.11be (EHT40) 2S2T / Chain 1 : CH 151

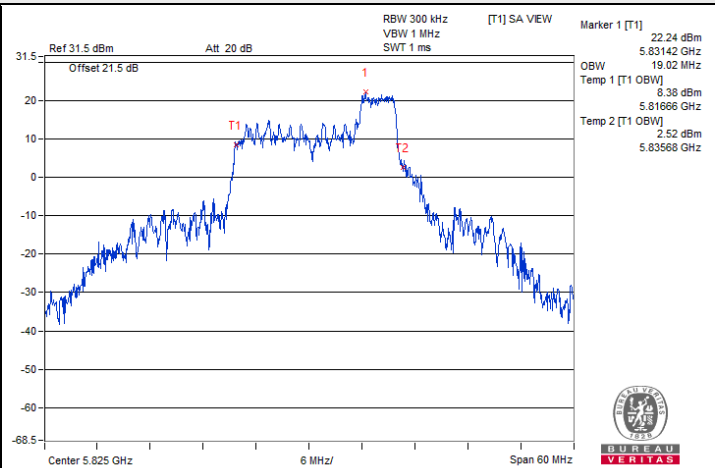


802.11be (EHT80) 2S2T / Chain 0 : CH 42

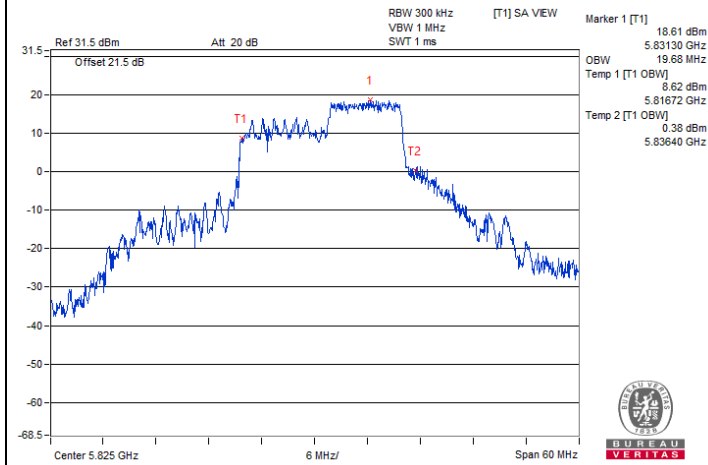
Spectrum Plot of Maximum Value



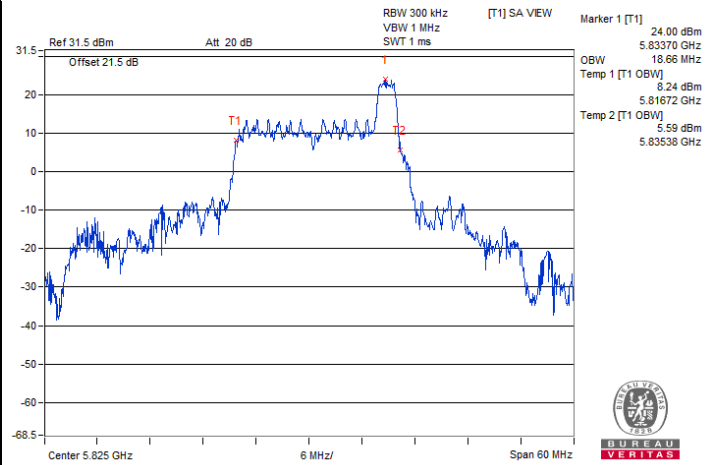
802.11ax (HE20) 26-tone RU 2S2T / Chain 1 : CH 165@8



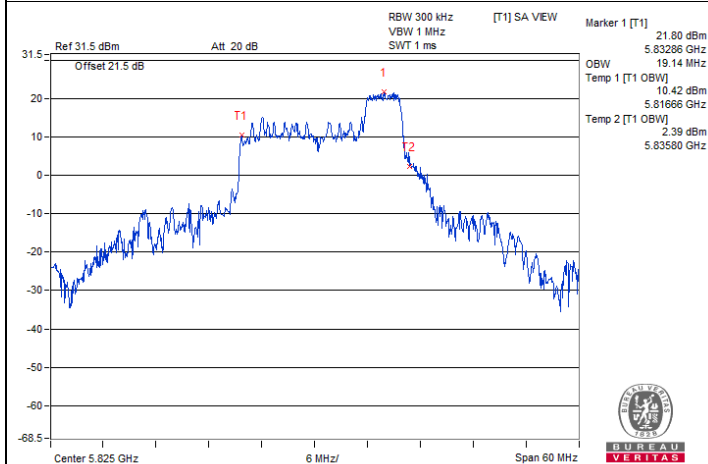
802.11ax (HE20) 52-tone RU 2S2T / Chain 1 : CH 165@40



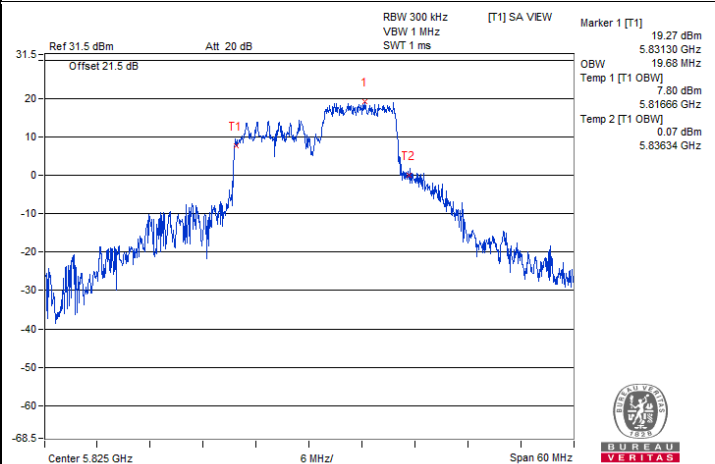
802.11ax (HE20) 106-tone RU 2S2T / Chain 0 : CH 165@54



802.11be (EHT20) 26-tone RU 2S2T / Chain 0 : CH 165@8

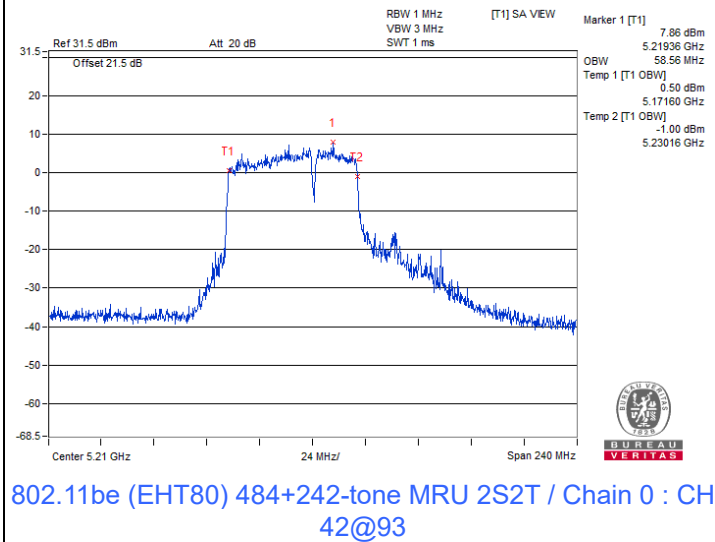
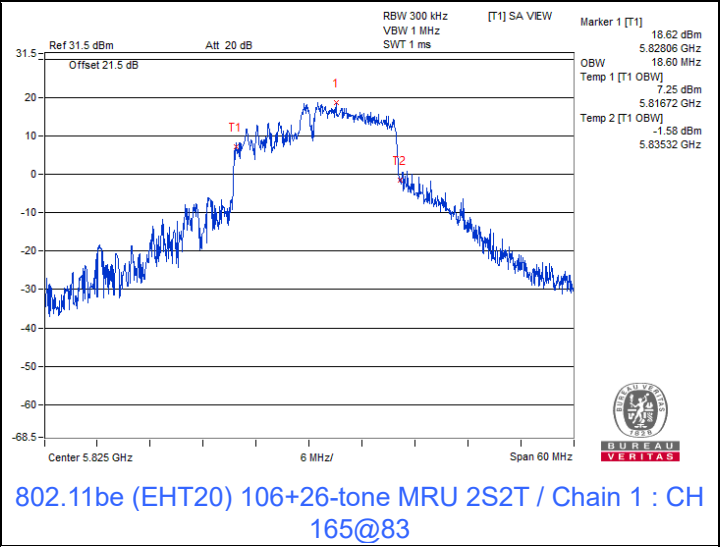
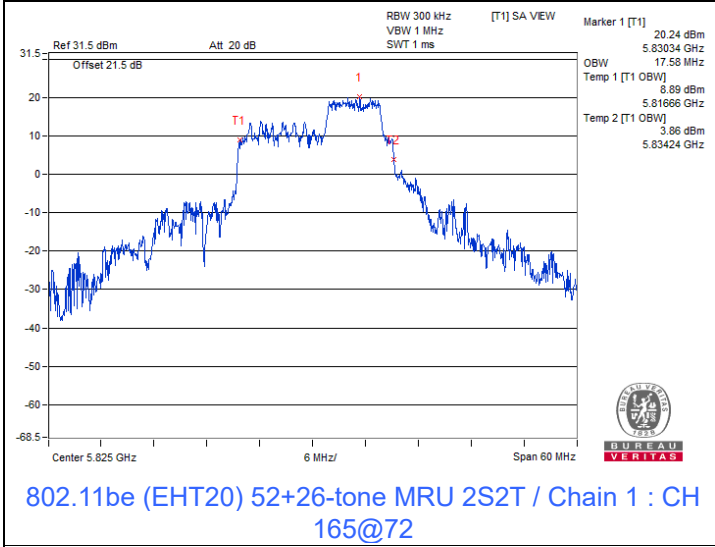


802.11be (EHT20) 52-tone RU 2S2T / Chain 1 : CH
165@40

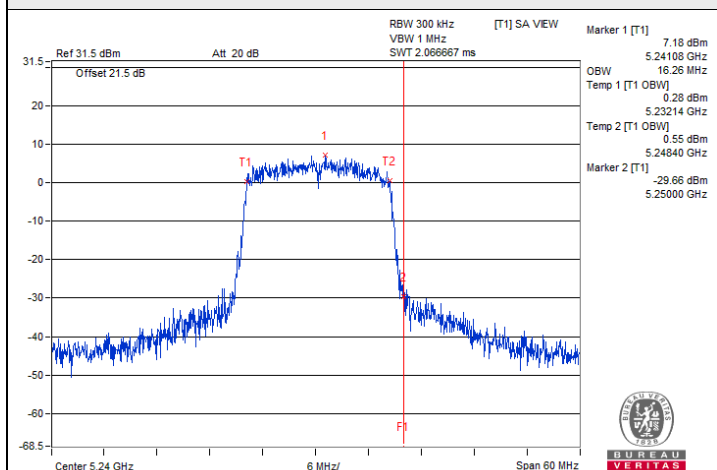


802.11be (EHT20) 106-tone RU 2S2T / Chain 1 : CH
165@54

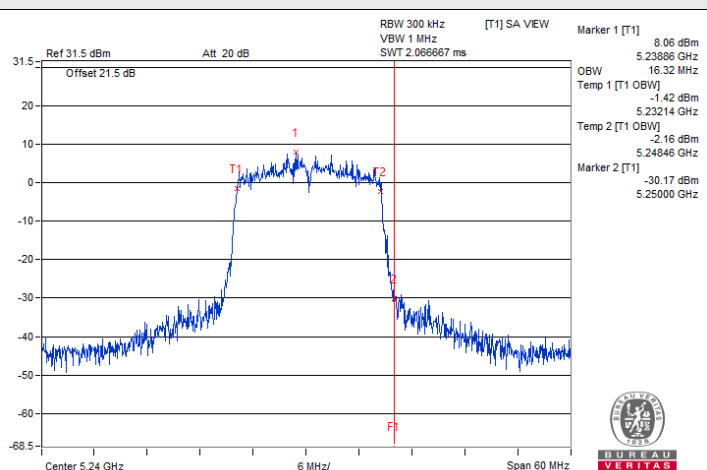
Spectrum Plot of Maximum Value



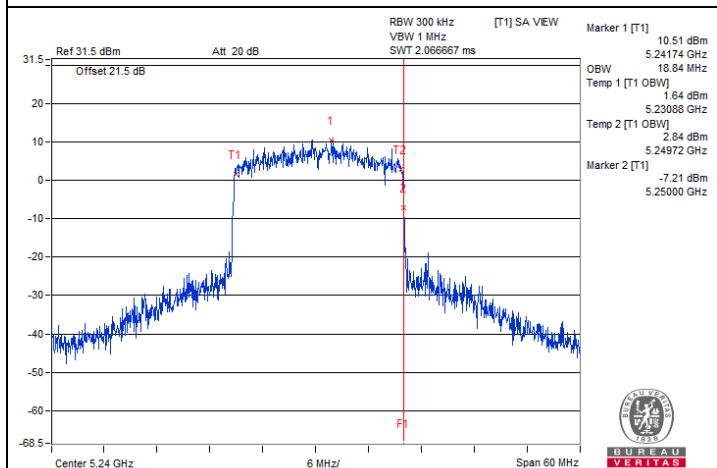
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2A)



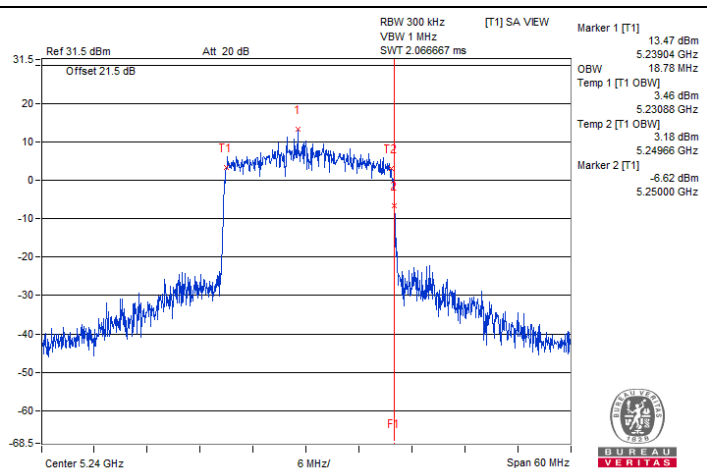
802.11a 2TX / Chain 0 : CH 48



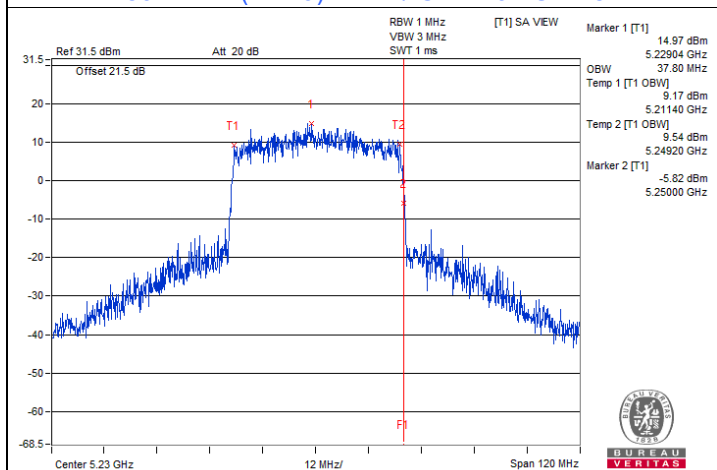
802.11a 2TX / Chain 1 : CH 48



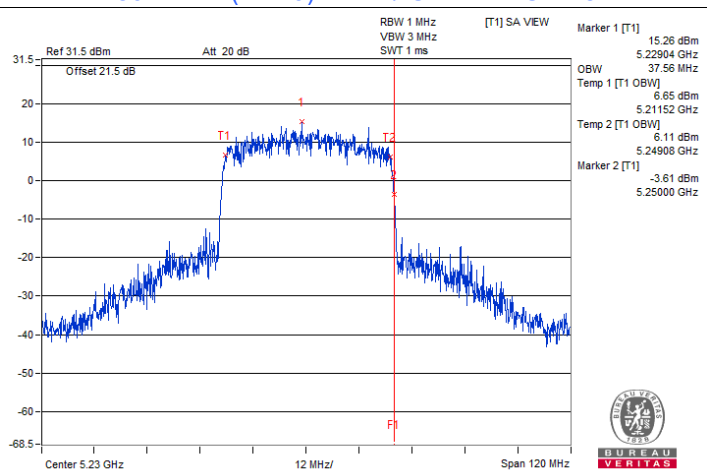
802.11ax (HE20) 2S2T / Chain 0 : CH 48



802.11ax (HE20) 2S2T / Chain 1 : CH 48

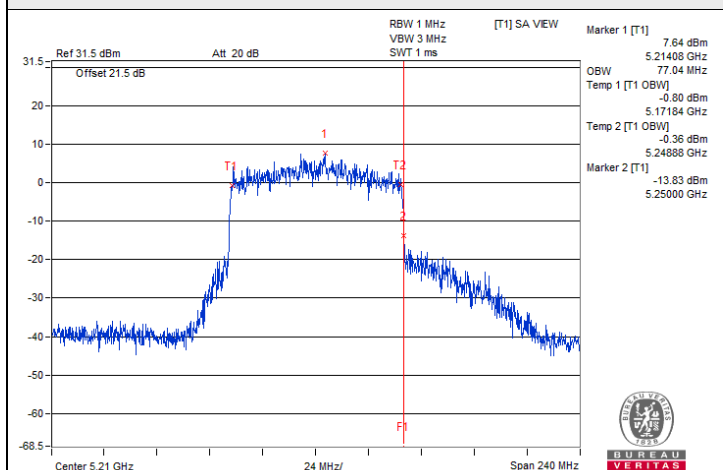


802.11ax (HE40) 2S2T / Chain 0 : CH 46

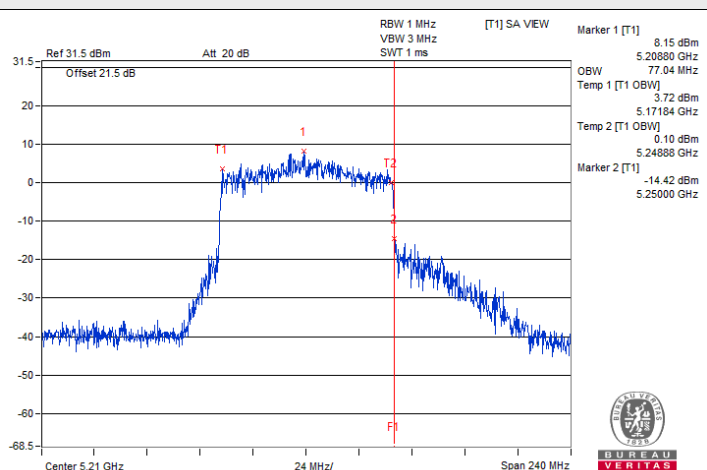


802.11ax (HE40) 2S2T / Chain 1 : CH 46

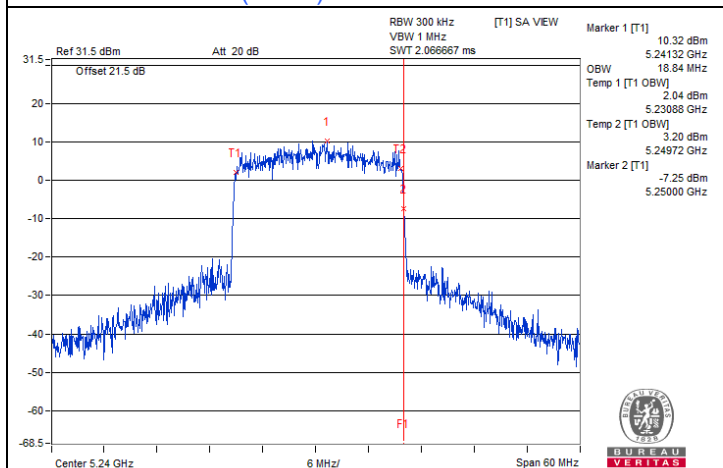
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2A)



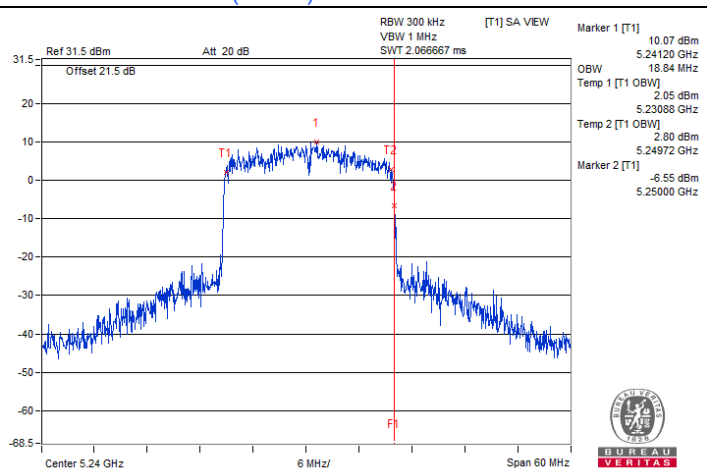
802.11ax (HE80) 2S2T / Chain 0 : CH 42



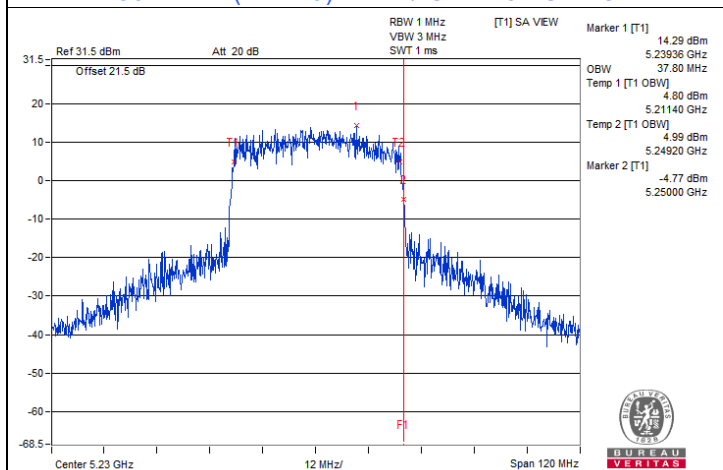
802.11ax (HE80) 2S2T / Chain 1 : CH 42



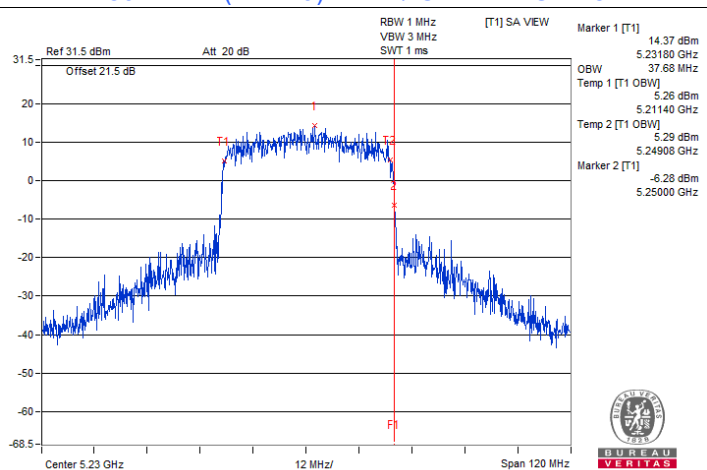
802.11be (EHT20) 2S2T / Chain 0 : CH 48



802.11be (EHT20) 2S2T / Chain 1 : CH 48

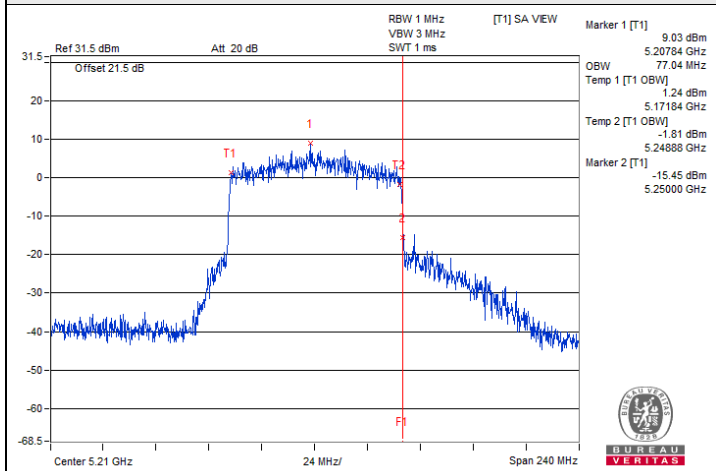


802.11be (EHT40) 2S2T / Chain 0 : CH 46

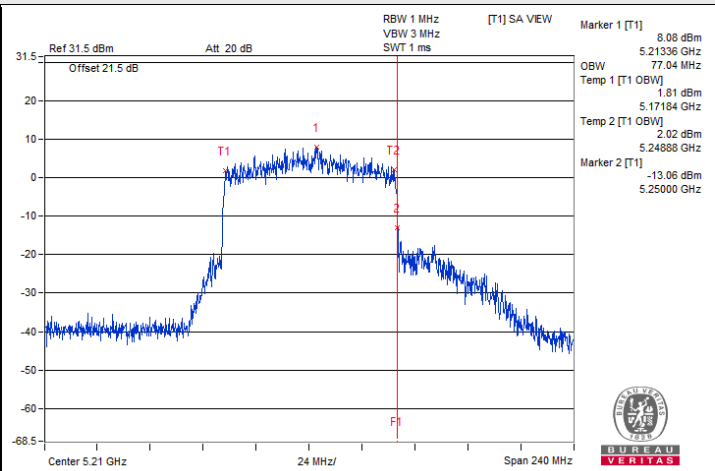


802.11be (EHT40) 2S2T / Chain 1 : CH 46

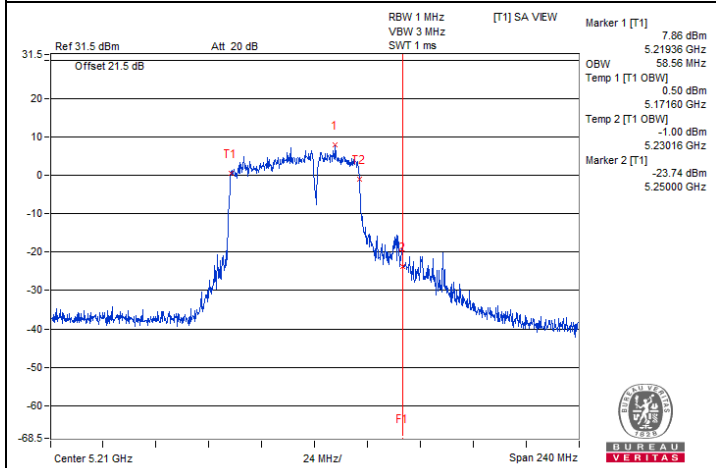
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2A)



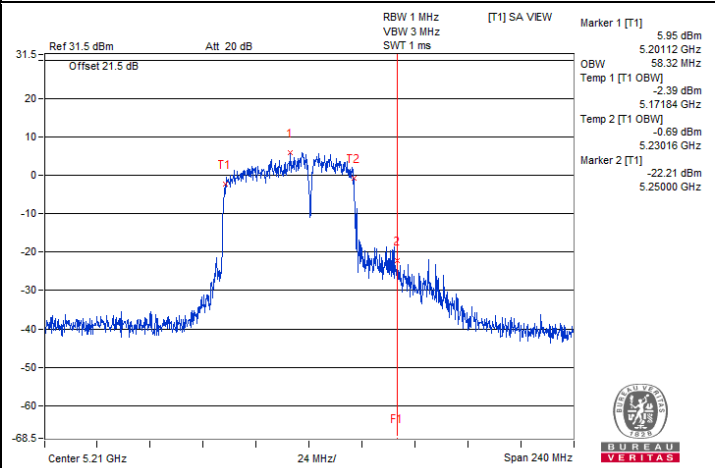
802.11be (EHT80) 2S2T / Chain 0 : CH 42



802.11be (EHT80) 2S2T / Chain 1 : CH 42

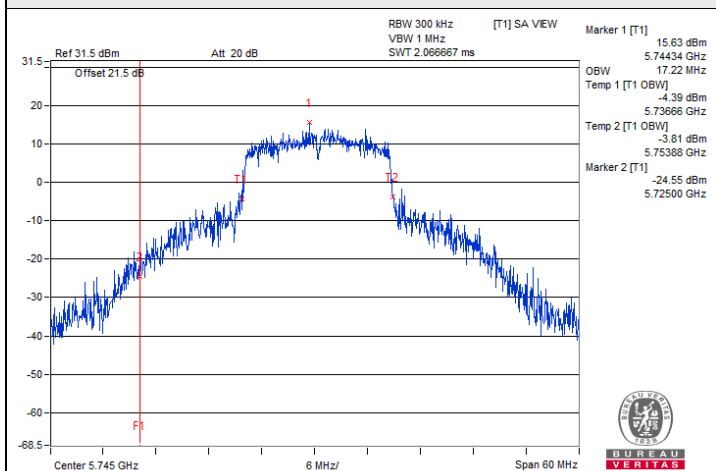


802.11be (EHT80) 484+242-tone MRU 2S2T / Chain 0 : CH 42@93

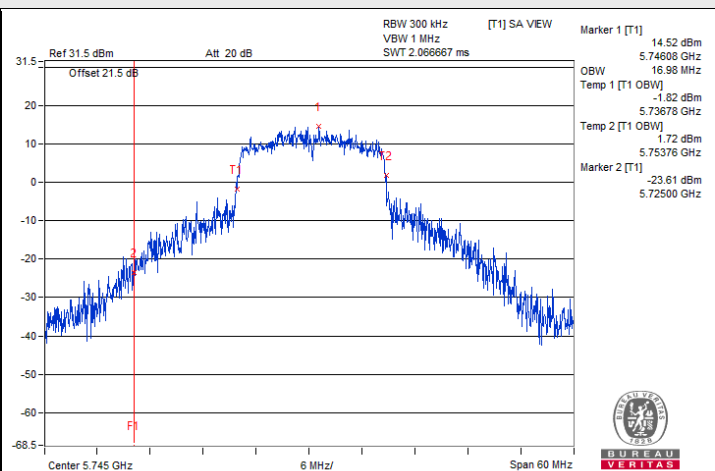


802.11be (EHT80) 484+242-tone MRU 2S2T / Chain 1 : CH 42@93

Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2C)

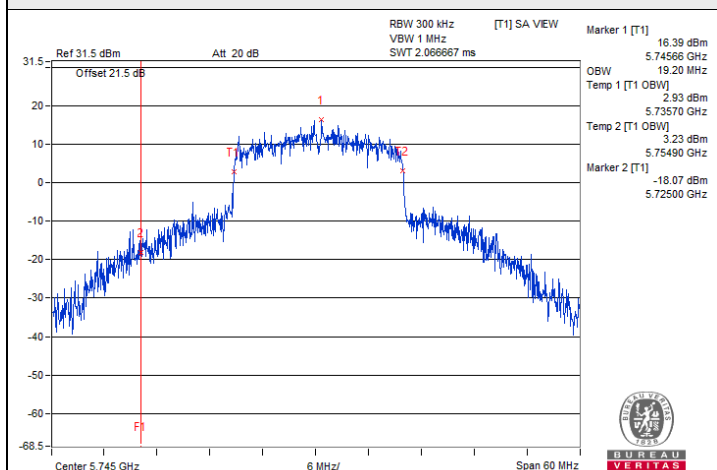


802.11a 2TX / Chain 0 : CH 149

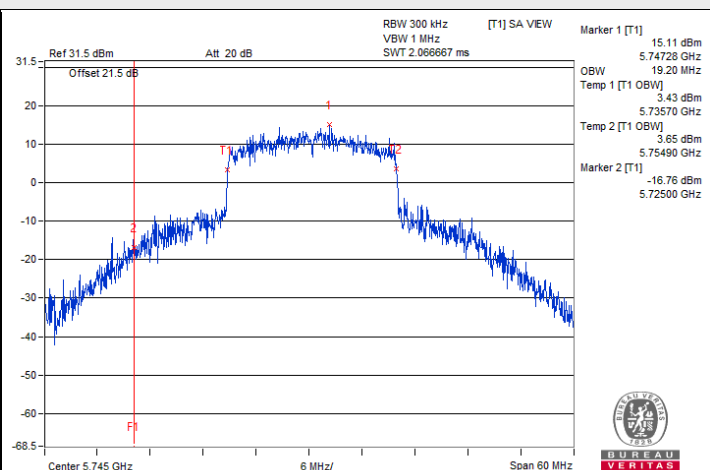


802.11a 2TX / Chain 1 : CH 149

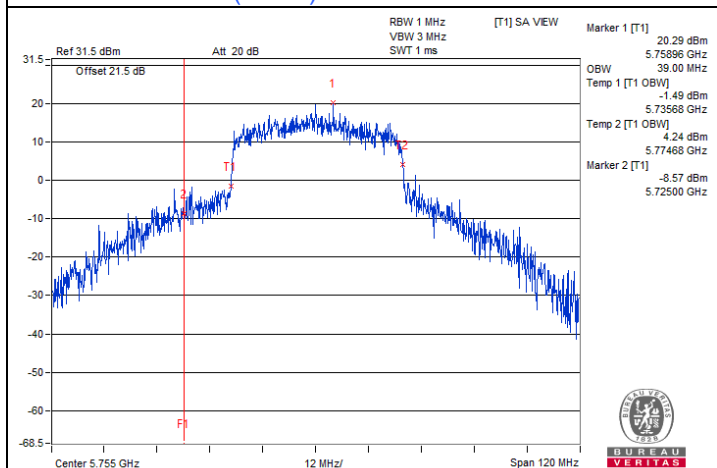
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2C)



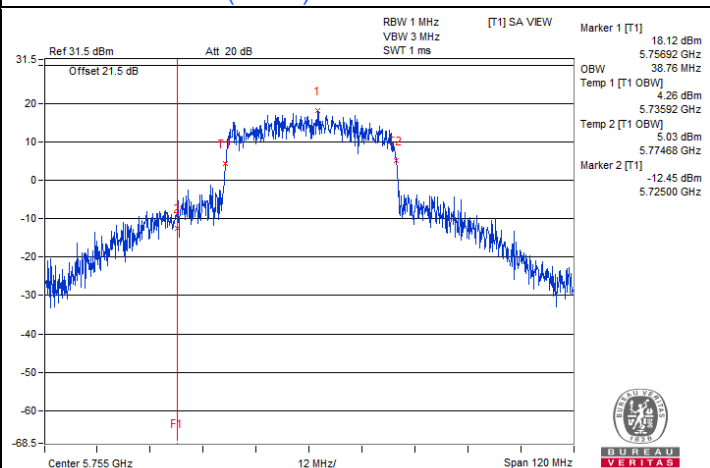
802.11ax (HE20) 2S2T / Chain 0 : CH 149



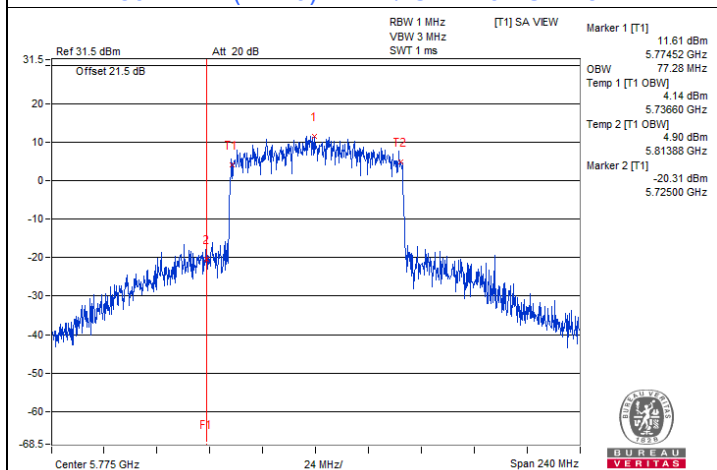
802.11ax (HE20) 2S2T / Chain 1 : CH 149



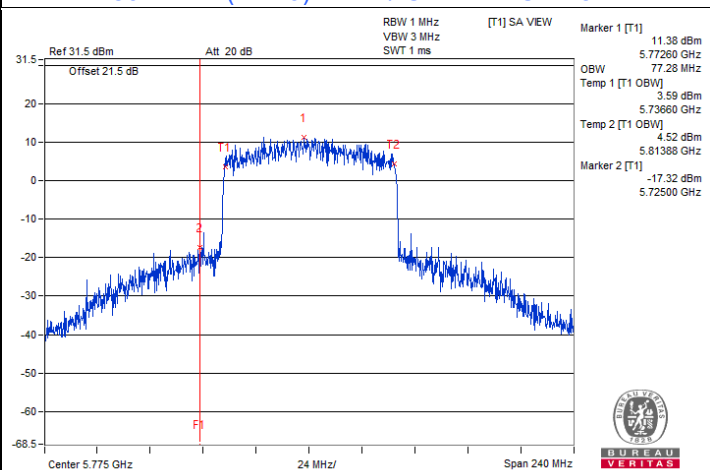
802.11ax (HE40) 2S2T / Chain 0 : CH 151



802.11ax (HE40) 2S2T / Chain 1 : CH 151

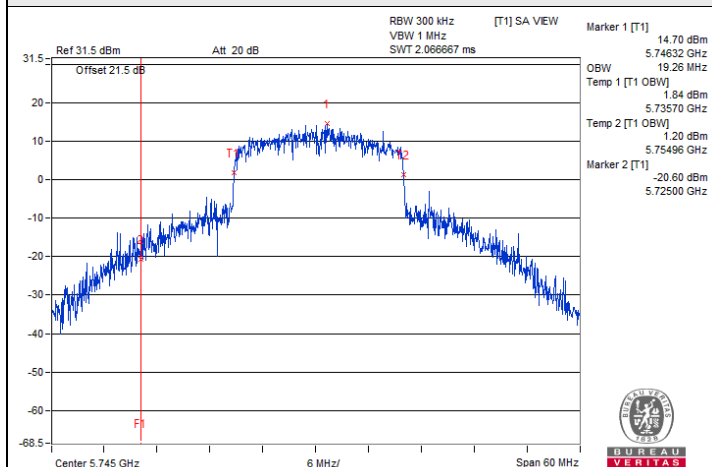


802.11ax (HE80) 2S2T / Chain 0 : CH 155

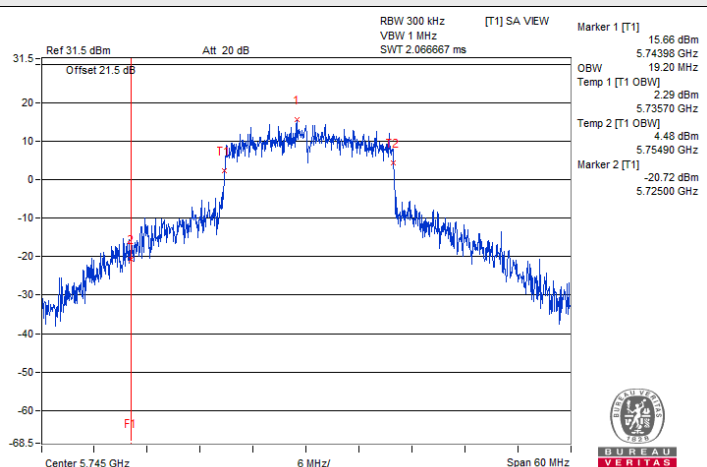


802.11ax (HE80) 2S2T / Chain 1 : CH 155

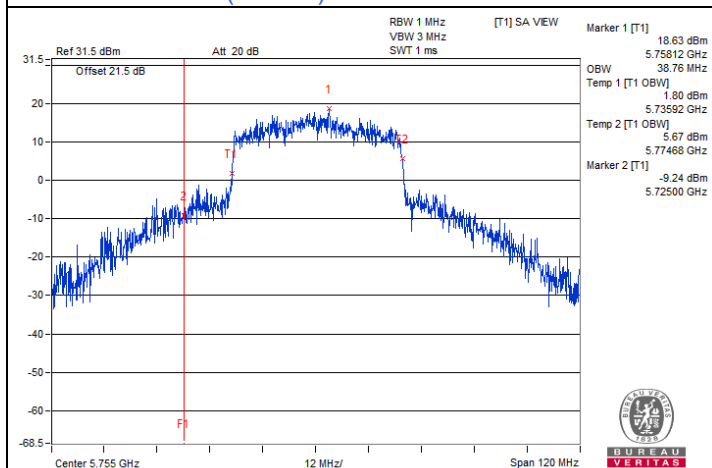
Spectrum Plot for nearby DFS band (DFS is required, if 99% OCP straddle into U-NII-2C)



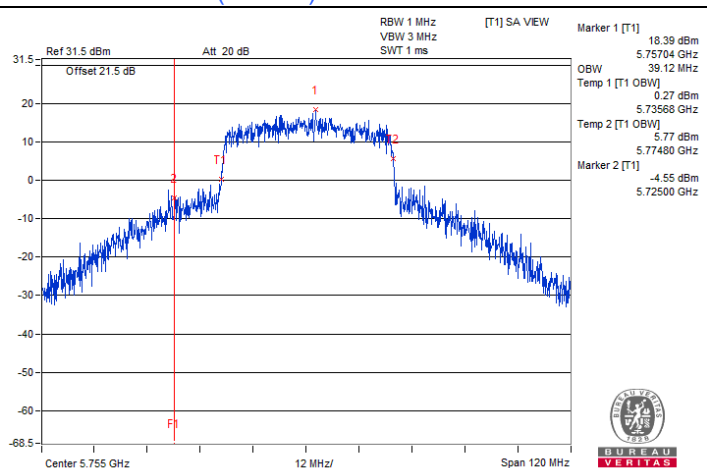
802.11be (EHT20) 2S2T / Chain 0 : CH 149



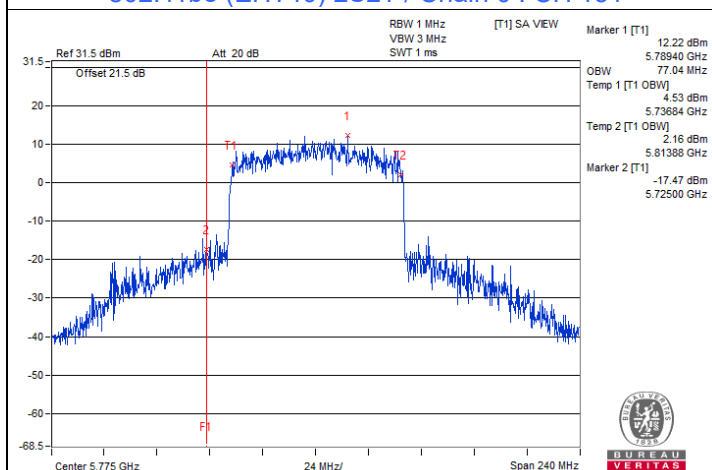
802.11be (EHT20) 2S2T / Chain 1 : CH 149



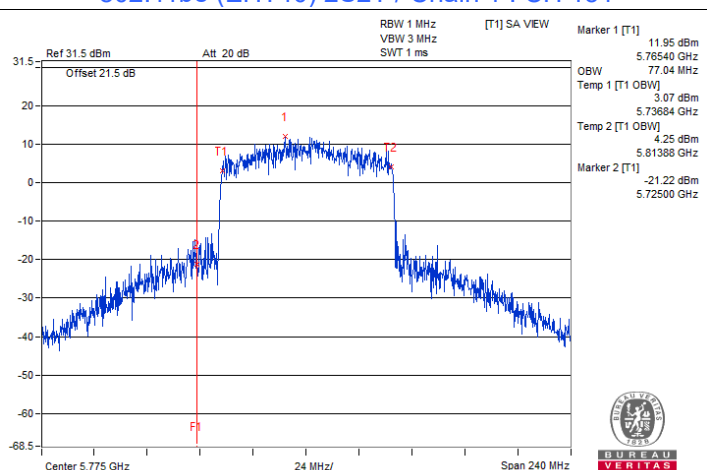
802.11be (EHT40) 2S2T / Chain 0 : CH 151



802.11be (EHT40) 2S2T / Chain 1 : CH 151



802.11be (EHT80) 2S2T / Chain 0 : CH 155



802.11be (EHT80) 2S2T / Chain 1 : CH 155