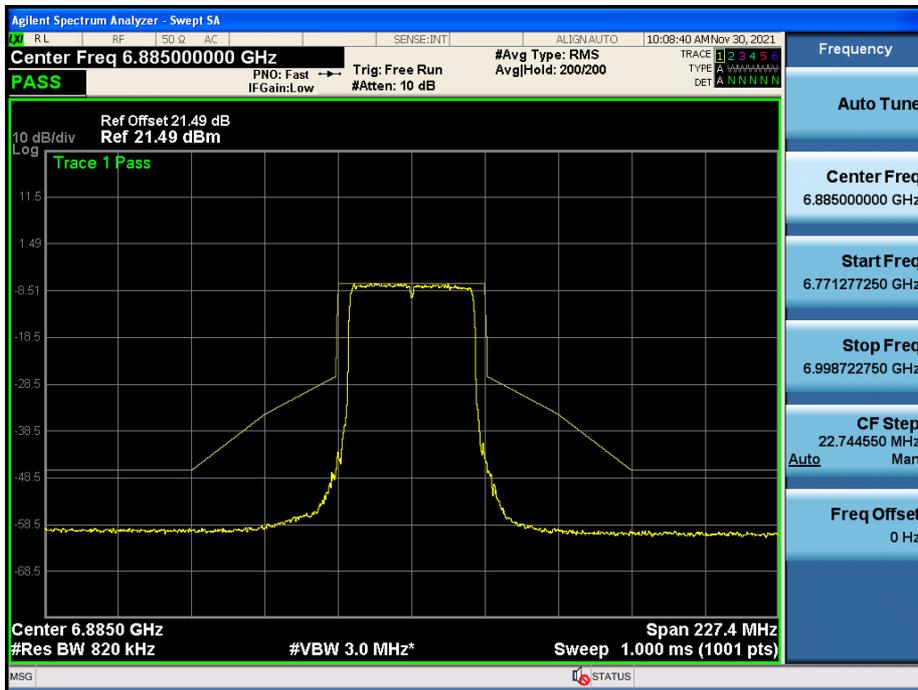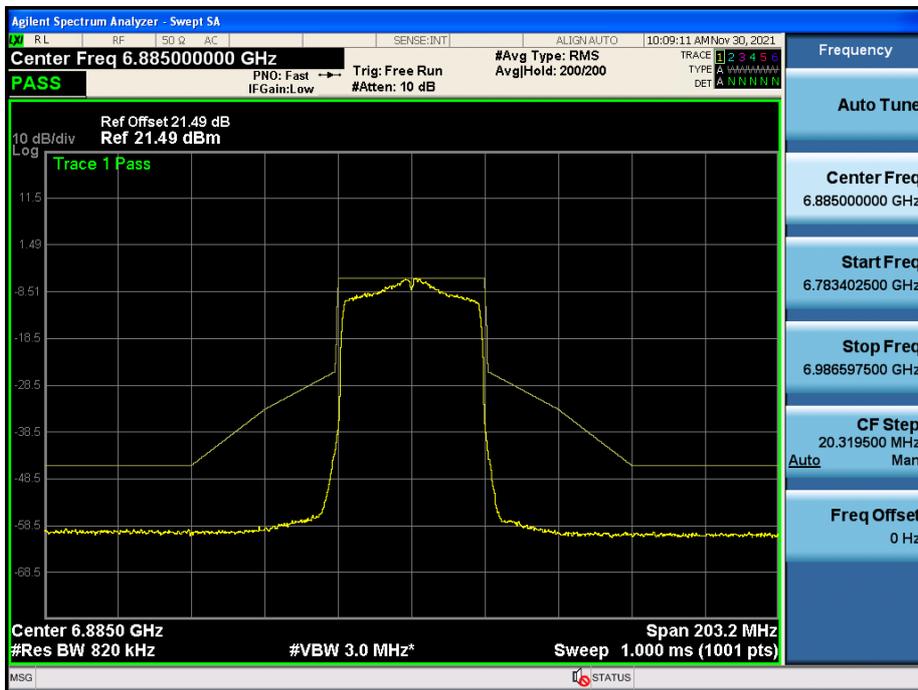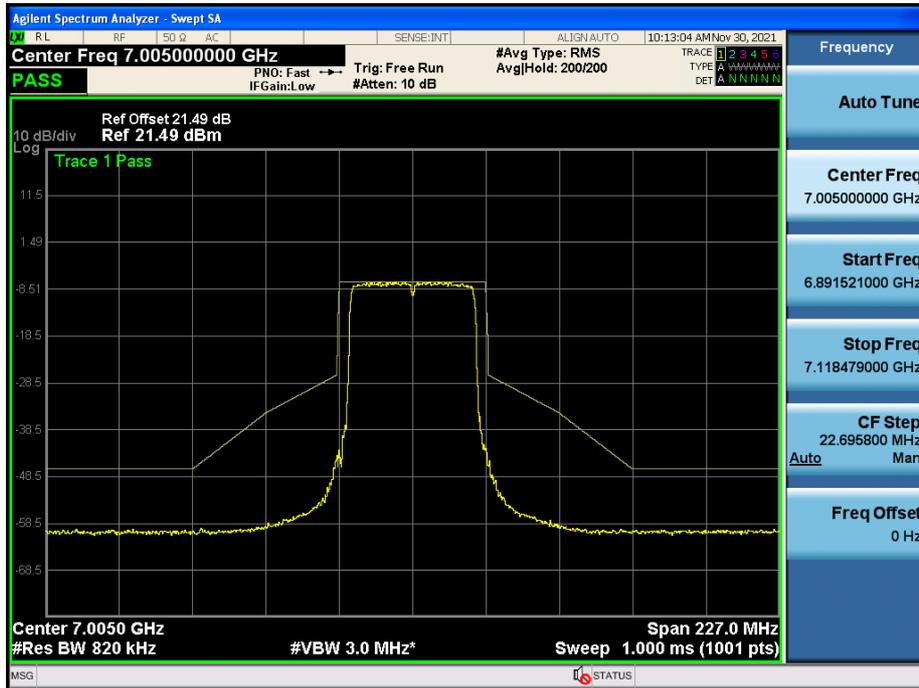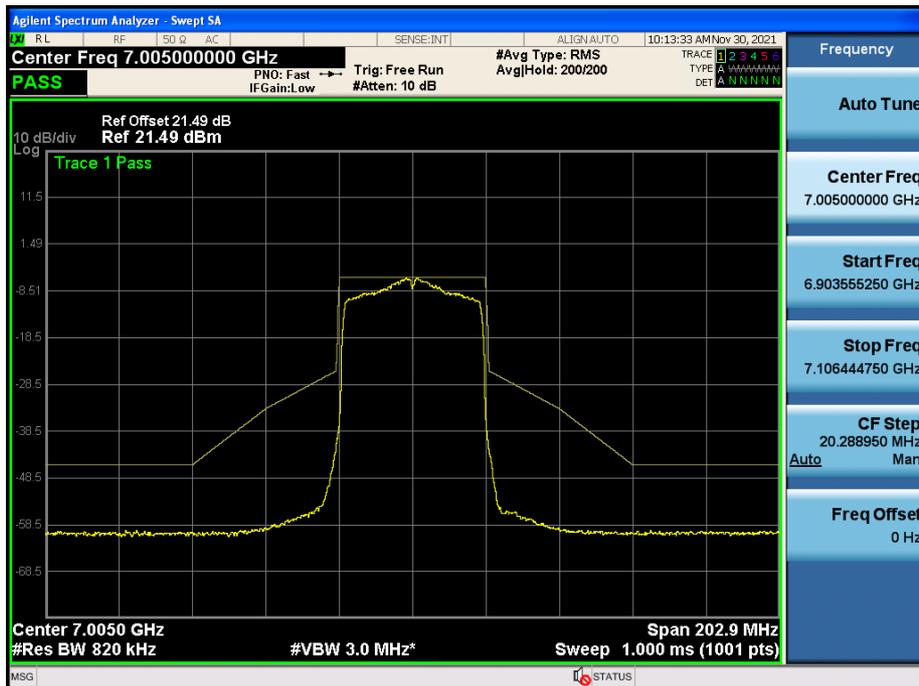802.11ax HE40 Ch.187(6885 MHz) 484 Tones 65 RU

802.11ax HE40 Ch.187(6885 MHz) SU

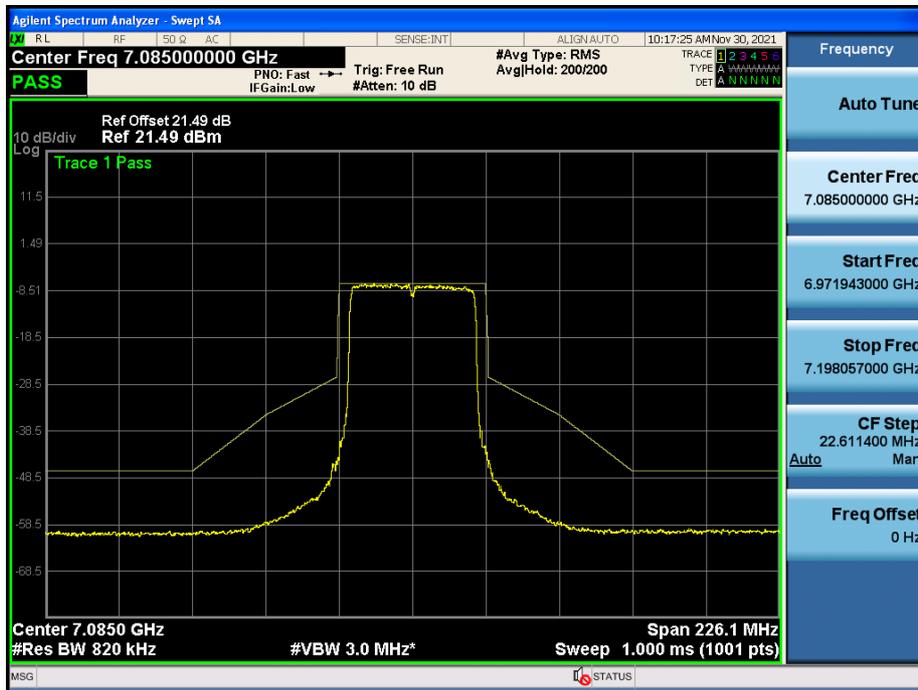802.11ax HE40 Ch.211(7005 MHz) 484 Tones 65 RU

802.11ax HE40 Ch.211(7005 MHz) SU

802.11ax HE40 Ch.227(7085 MHz) 484 Tones 65 RU

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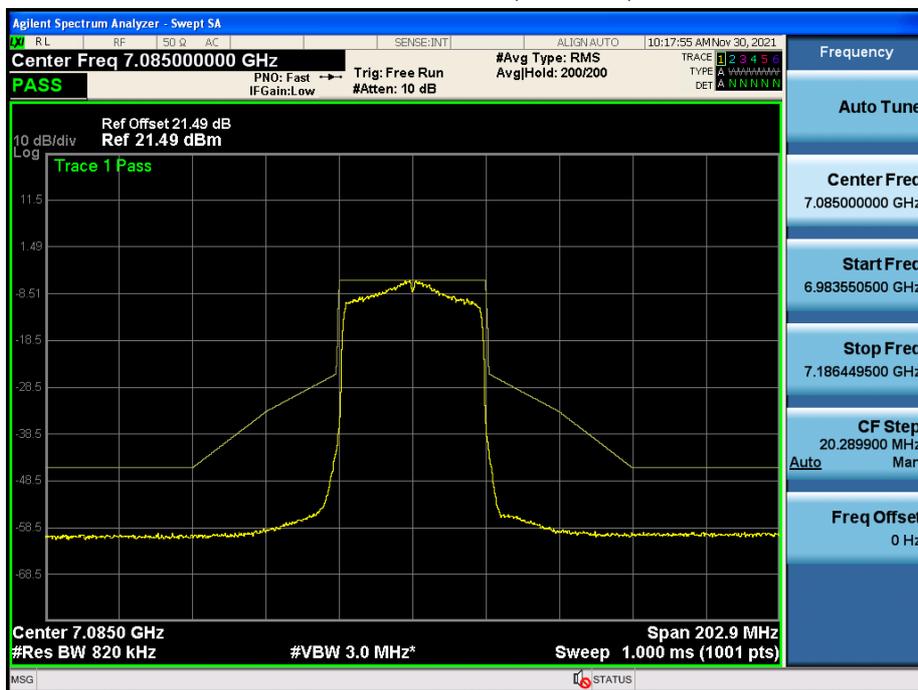
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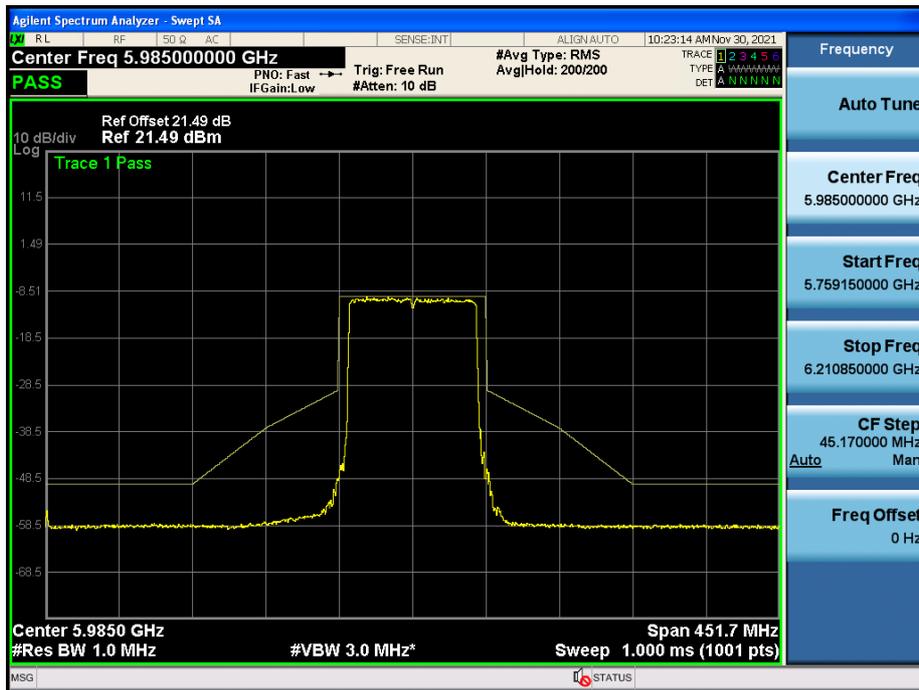
802.11ax HE80 Ch.7(5985 MHz) SU

802.11ax HE80 Ch.39(6145 MHz) 996 Tones 67 RU

802.11ax HE80 Ch.39(6145 MHz) SU

802.11ax HE80 Ch.87(6385 MHz) 996 Tones 67 RU

802.11ax HE80 Ch.87(6385 MHz) SU
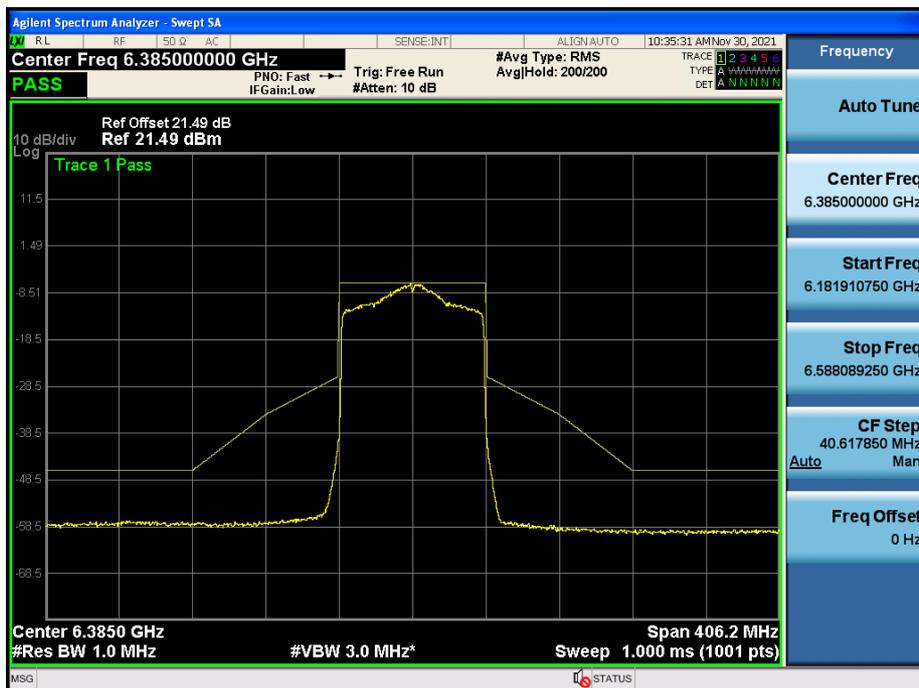
802.11ax HE80 Ch.103(6465 MHz) 996 Tones 67 RU
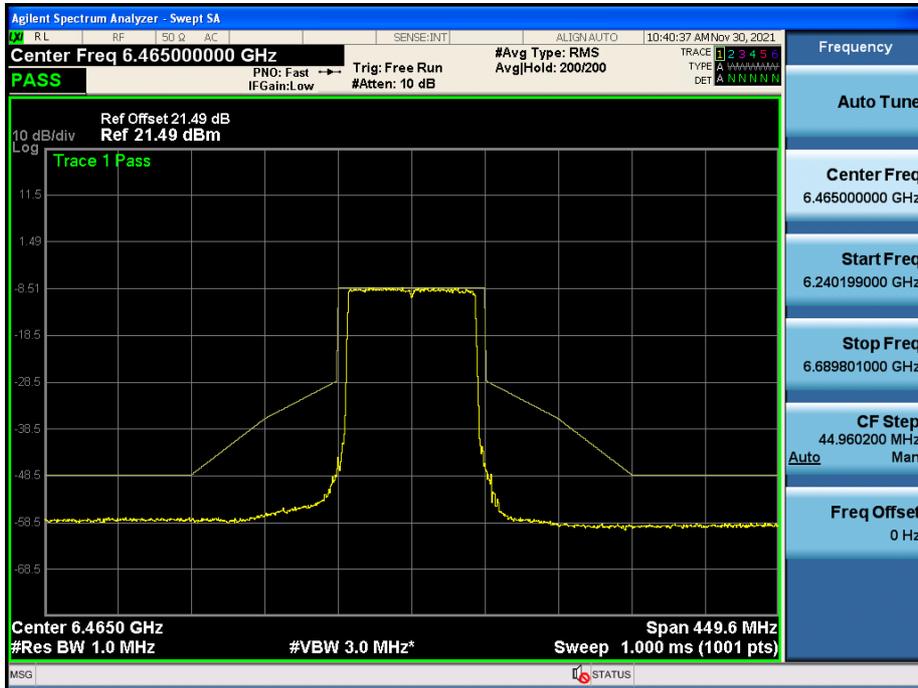
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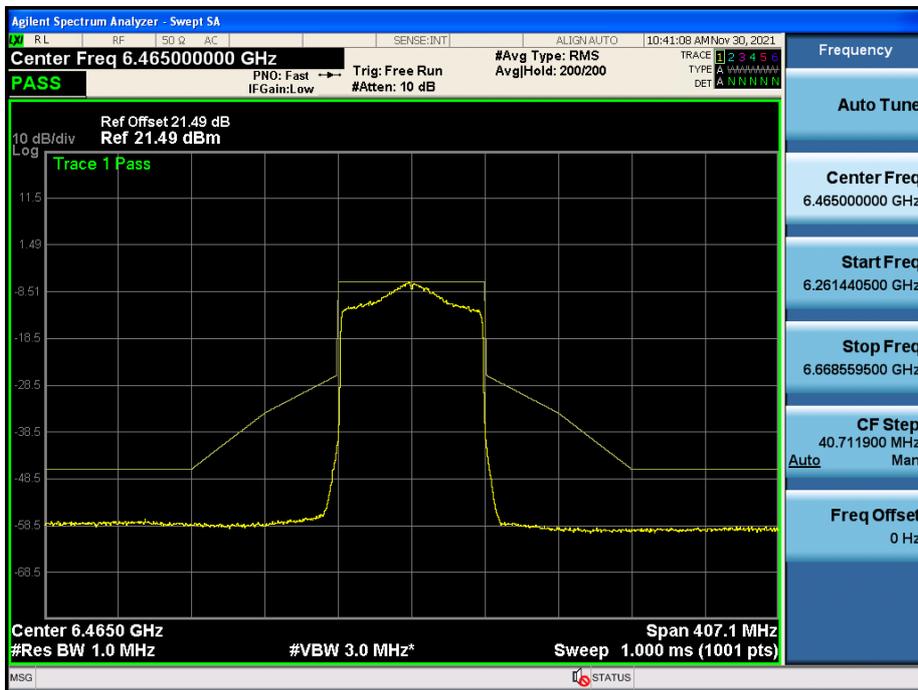
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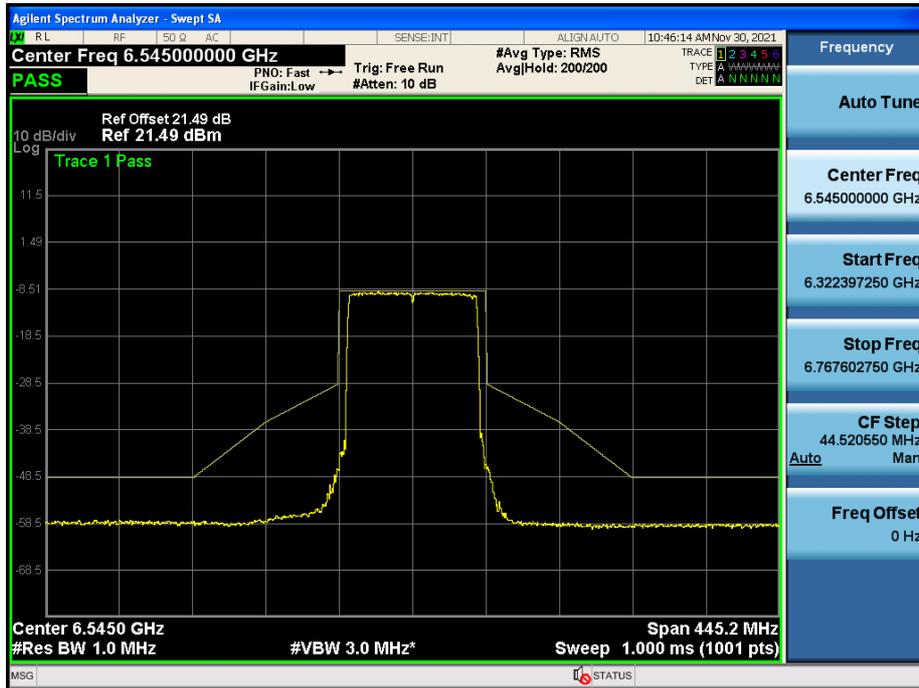
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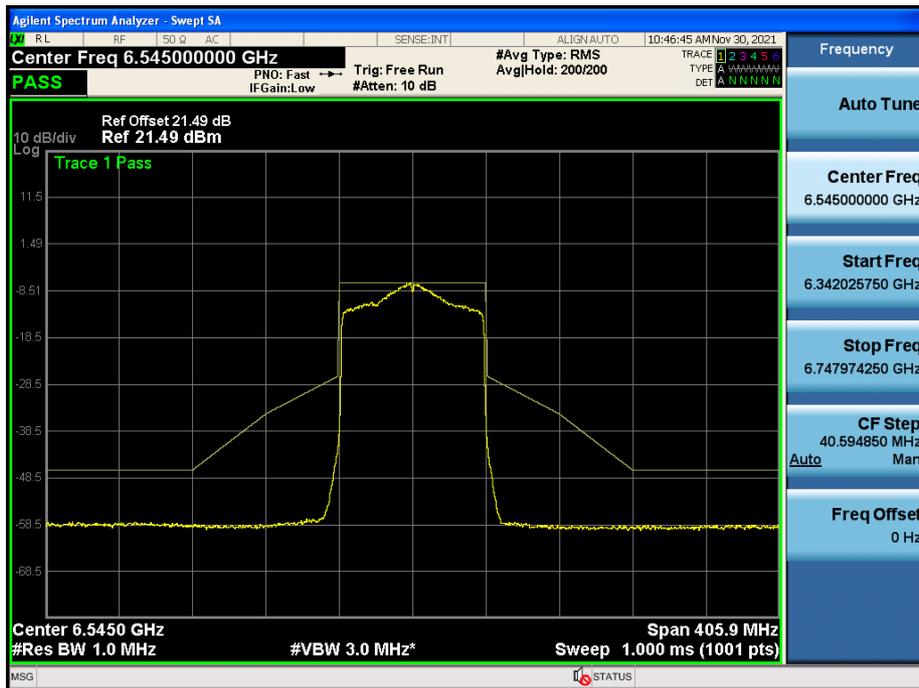
802.11ax HE80 Ch.151(6705 MHz) 996 Tones 67 RU
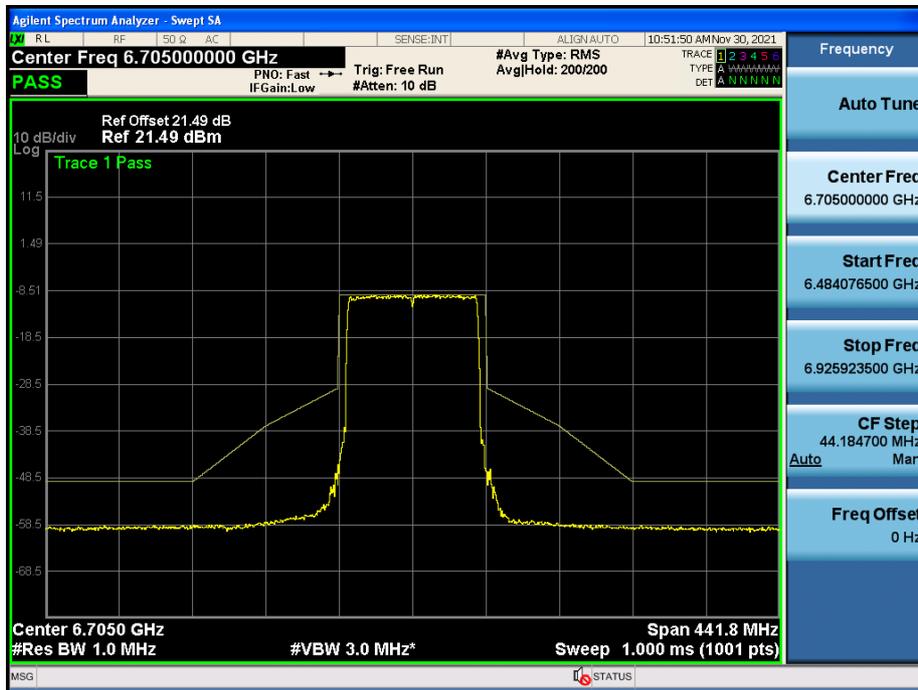
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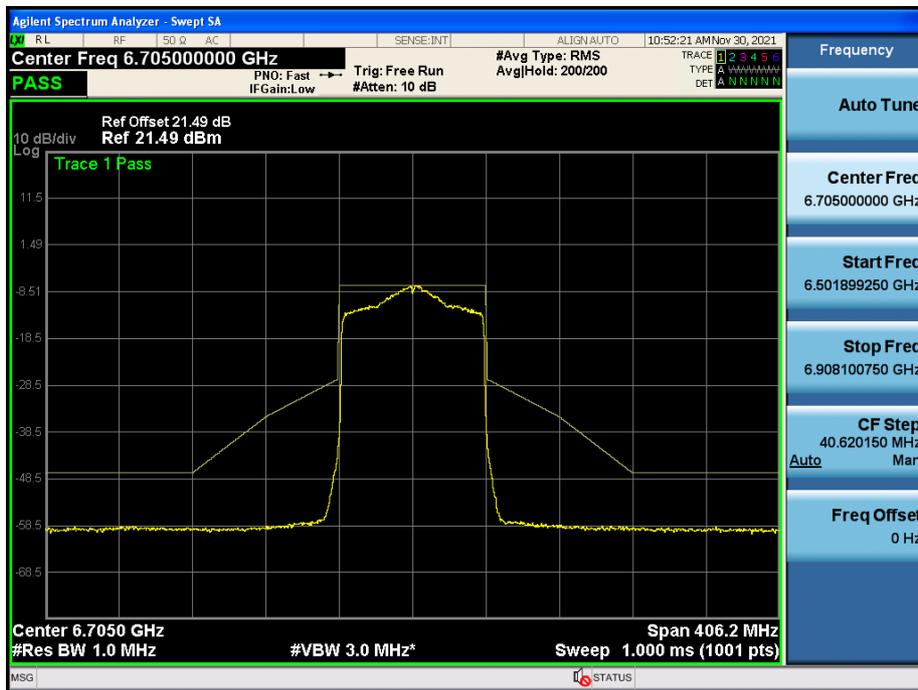
802.11ax HE80 Ch.183(6865 MHz) 996 Tones 67 RU
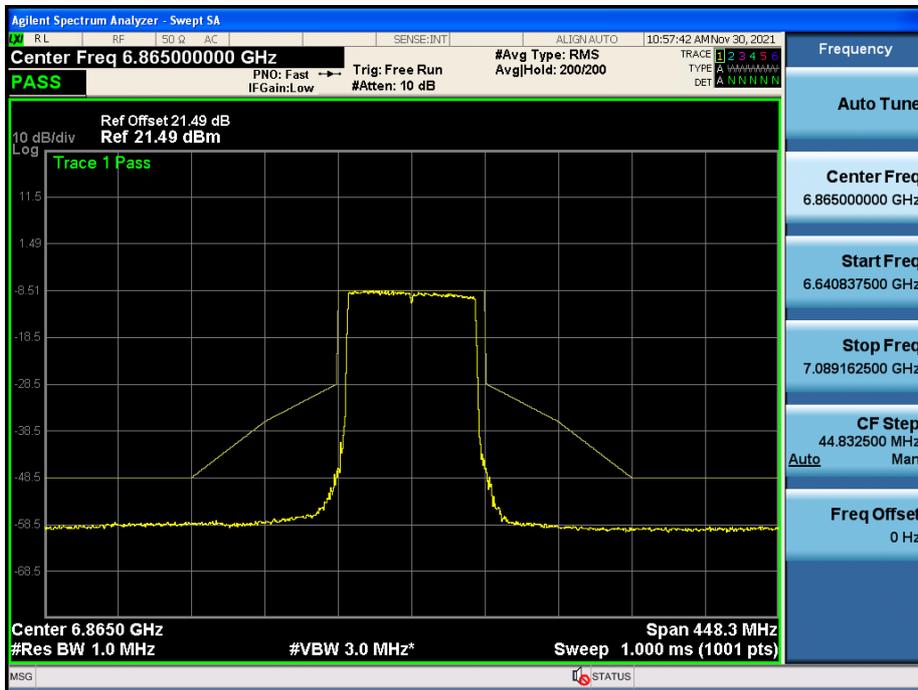
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802.11ax HE80 Ch.199(6945 MHz) 996 Tones 67 RU
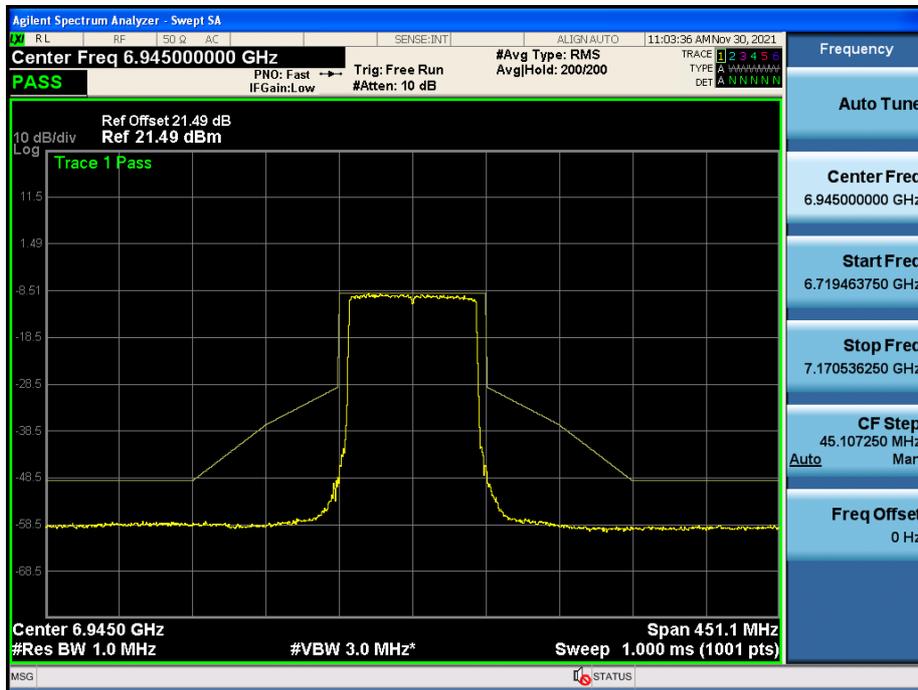
802.11ax HE80 Ch.199(6945 MHz) SU

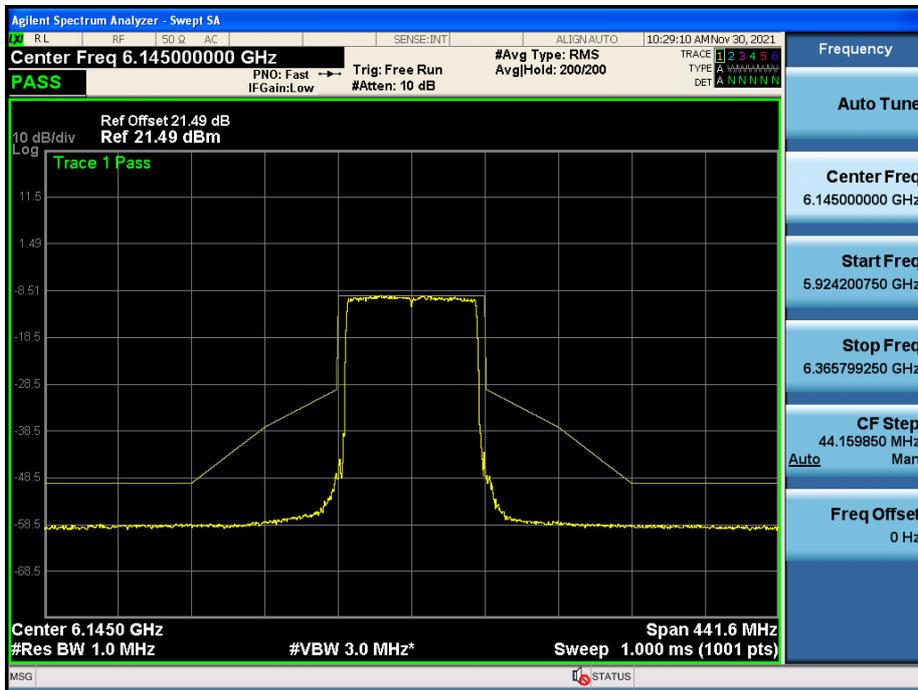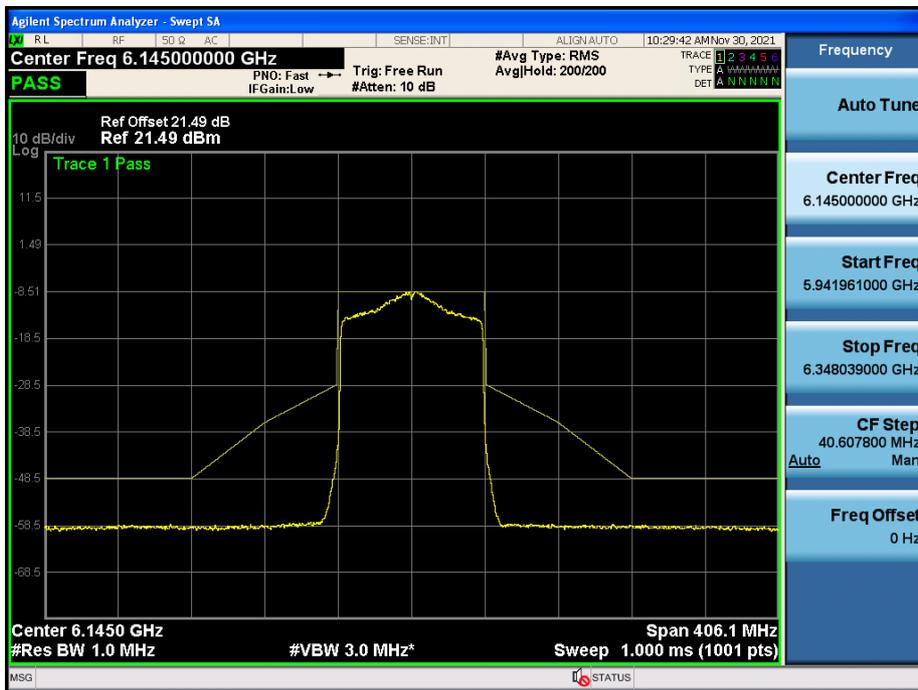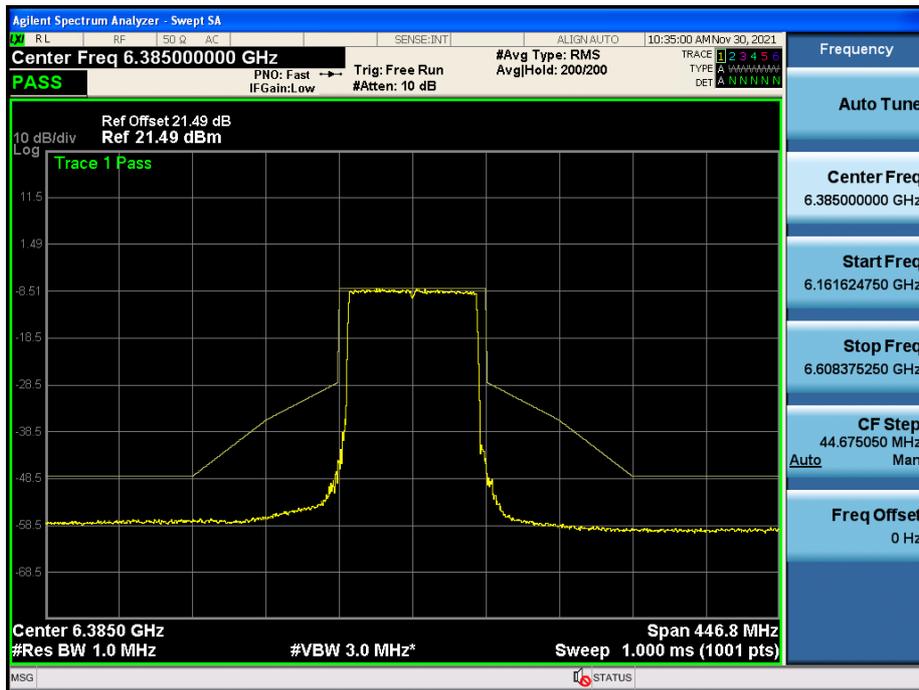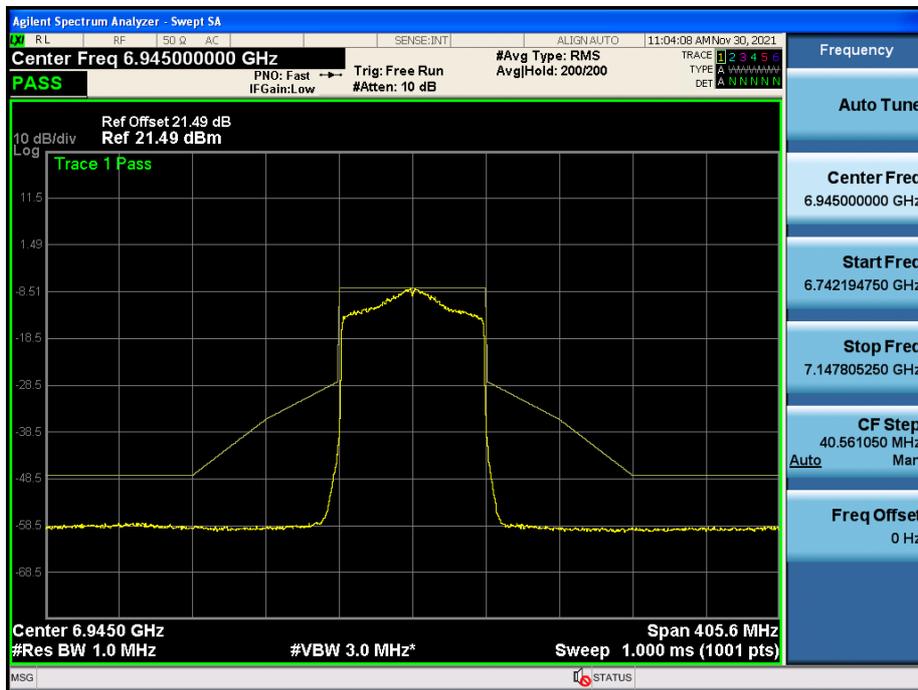802.11ax HE80 Ch.215(7025 MHz) 996 Tones 67 RU
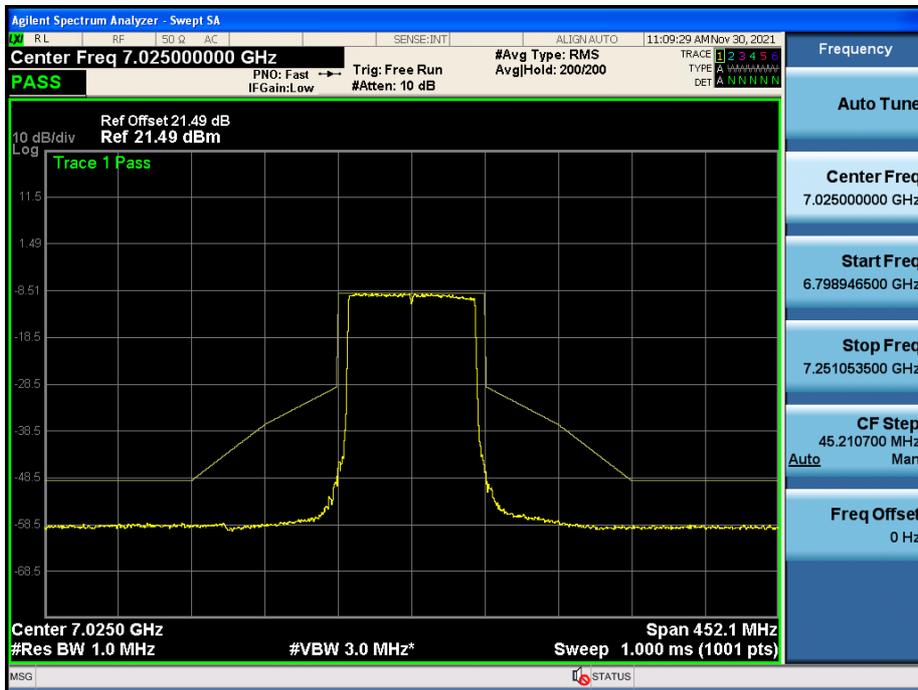
802.11ax HE80 Ch.215(7025 MHz) SU
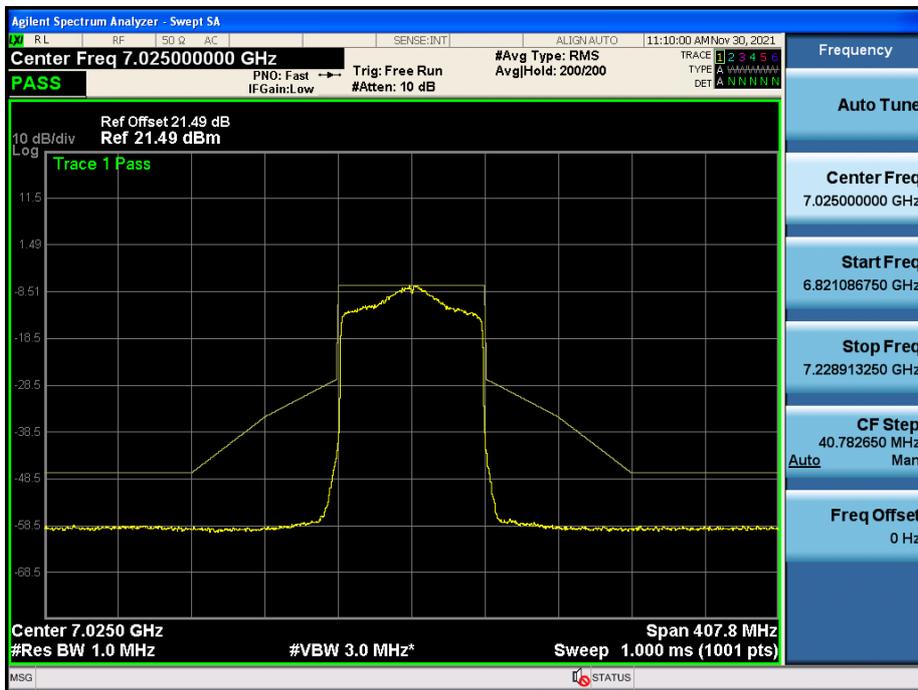
802.11ax HE160, 80_L Ch.15(6025 MHz) 996 Tones 67 RU

802.11ax HE160, 80_L Ch.47(6185 MHz) 996 Tones 67 RU
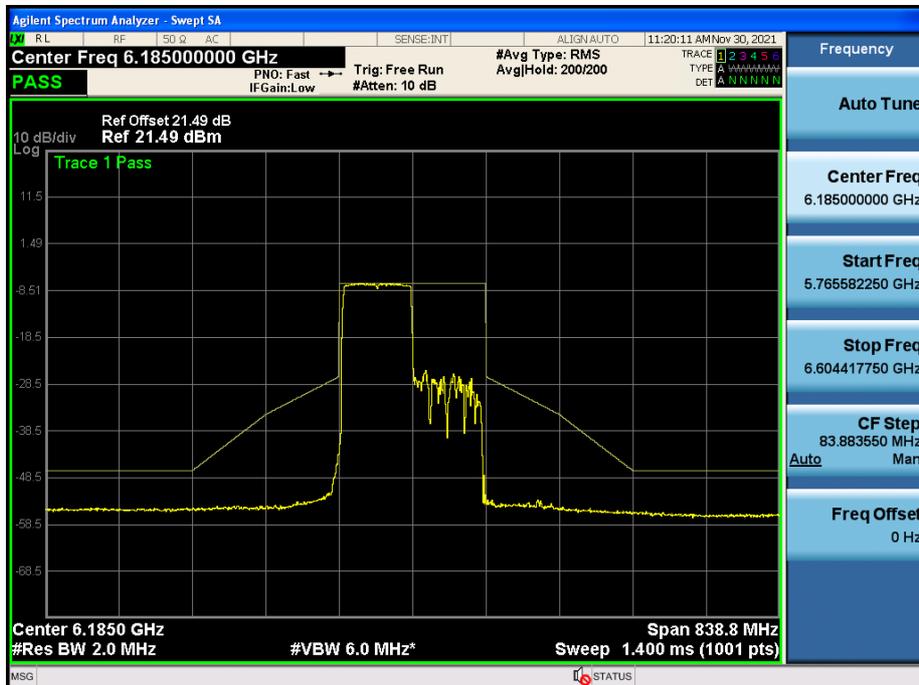
802.11ax HE160, 80_L Ch.79(6345 MHz) 996 Tones 67 RU

802.11ax HE160, 80_L Ch.111(6505 MHz) 996 Tones 67 RU

802.11ax HE160, 80_L Ch.143(6665 MHz) 996 Tones 67 RU
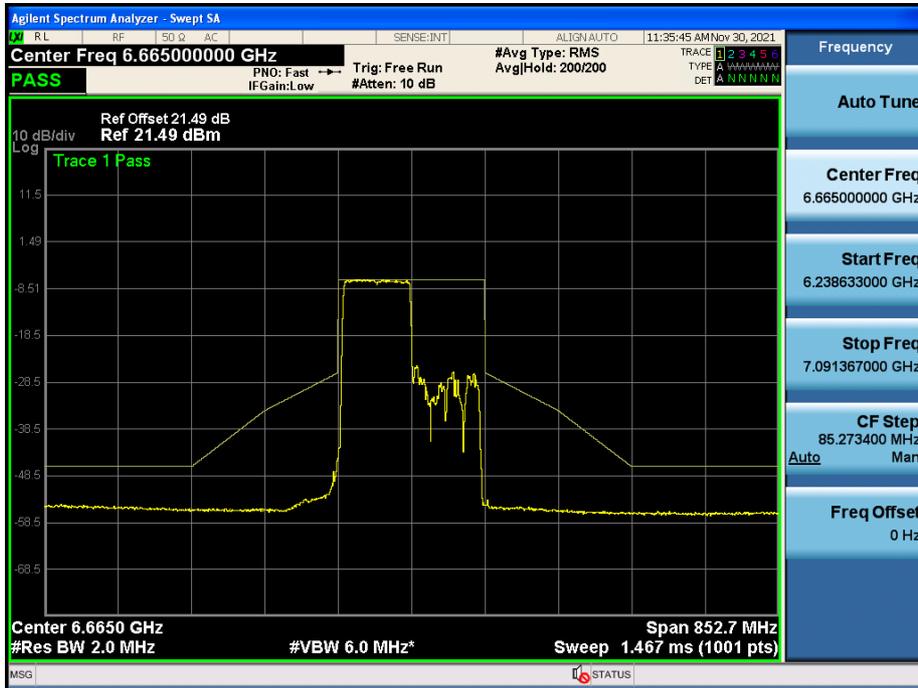
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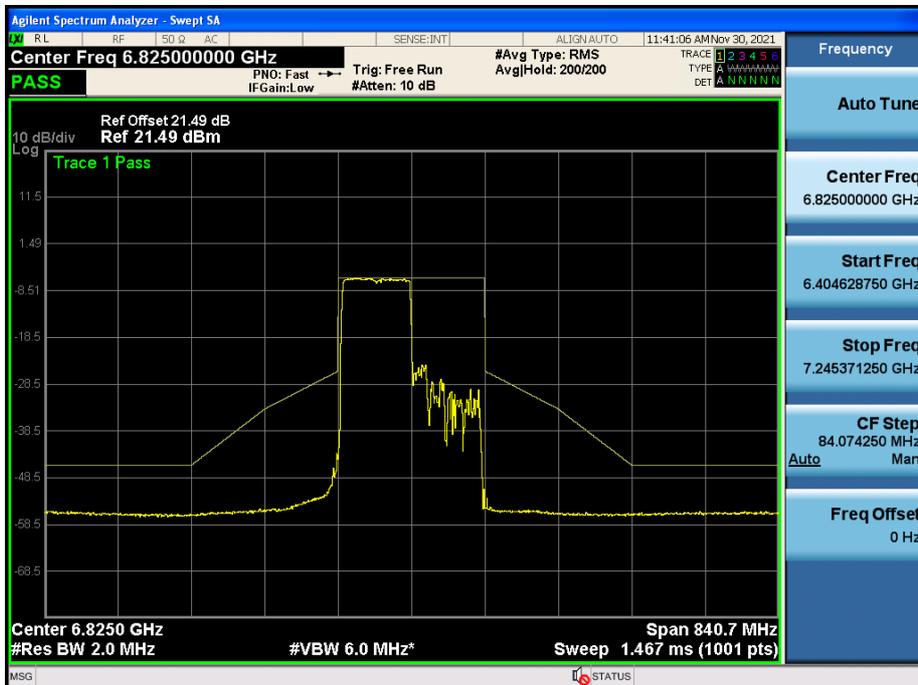
802.11ax HE160, 80_L Ch.207(6985 MHz) 996 Tones 67 RU
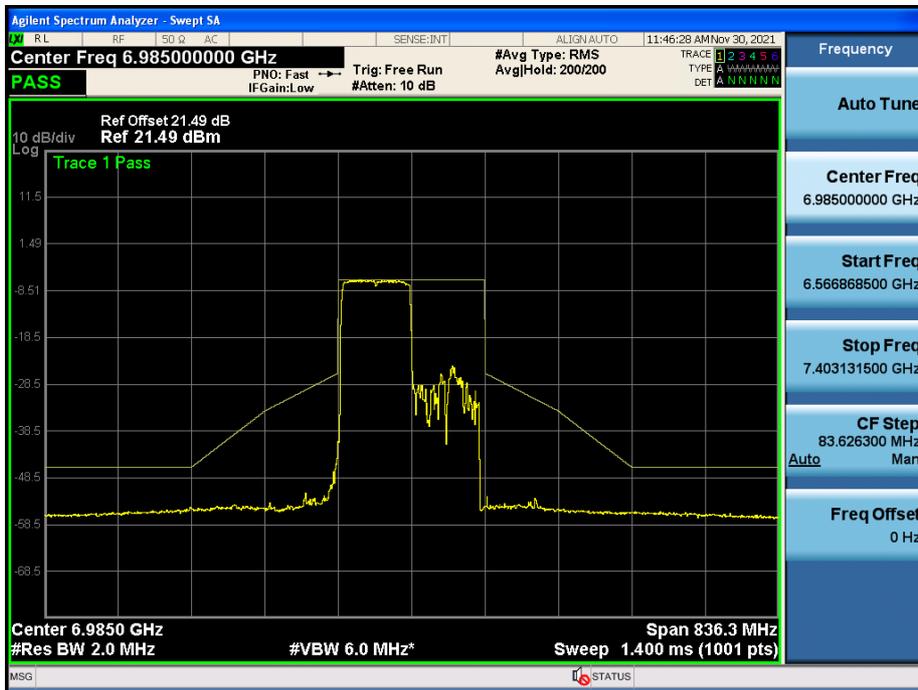
802.11ax HE160, 80_U Ch. 15(6025 MHz) 484 Tones 66 RU
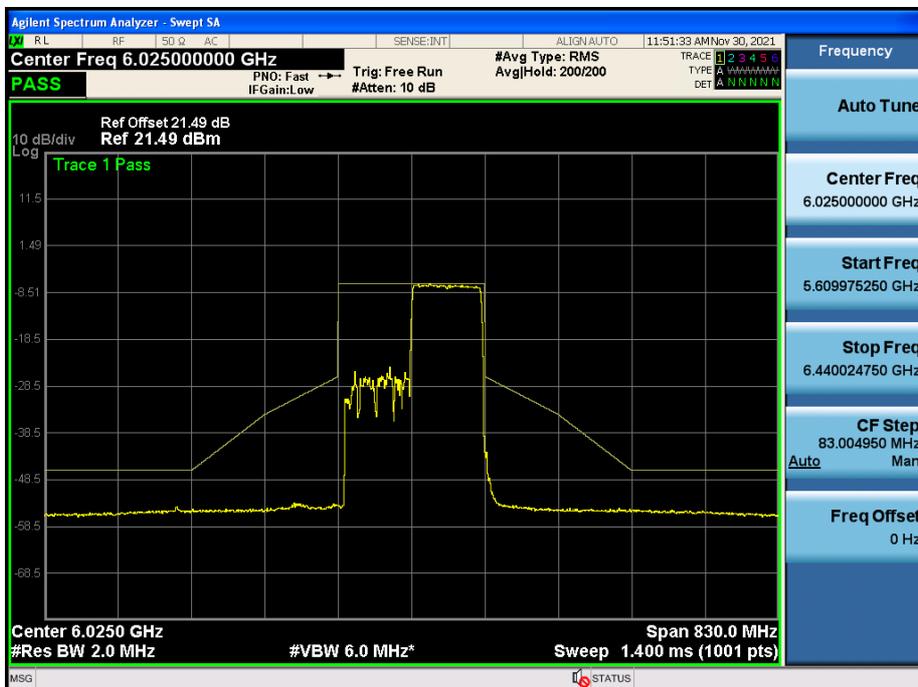
802.11ax HE160, 80_U Ch. 47(6185 MHz) 996 Tones 67 RU
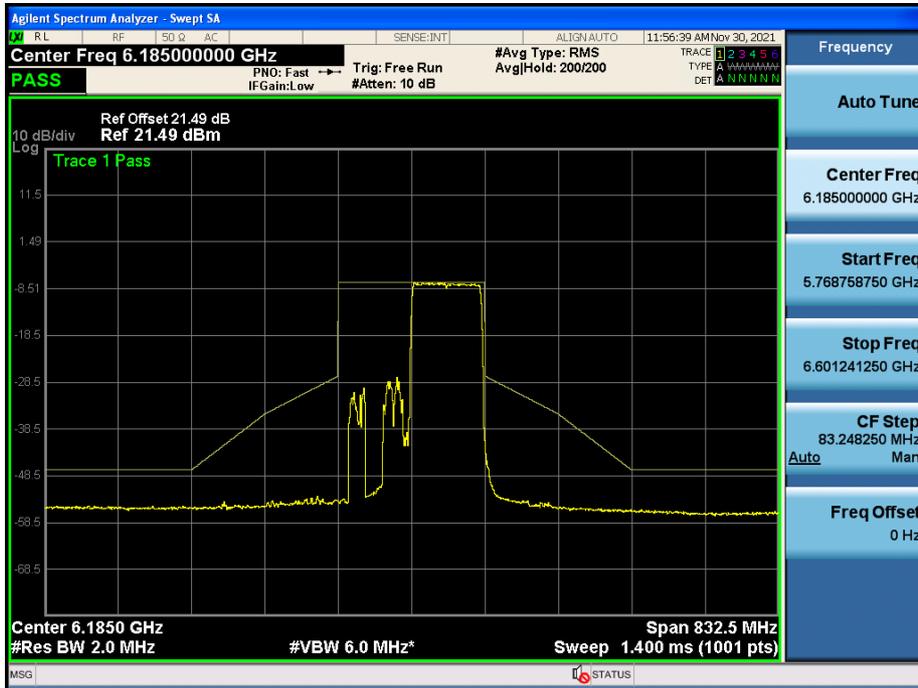
802.11ax HE160, 80_U Ch. 79(6345 MHz) 996 Tones 67 RU

802.11ax HE160, 80_U Ch. 111(6505 MHz) 996 Tones 67 RU
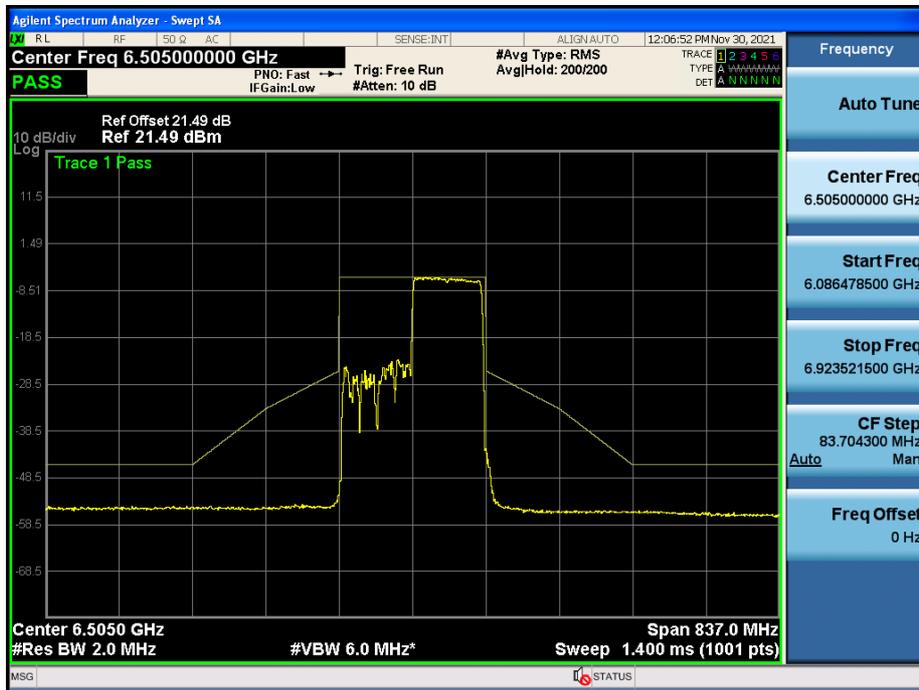
802.11ax HE160, 80_U Ch. 143(6665 MHz) 996 Tones 67 RU
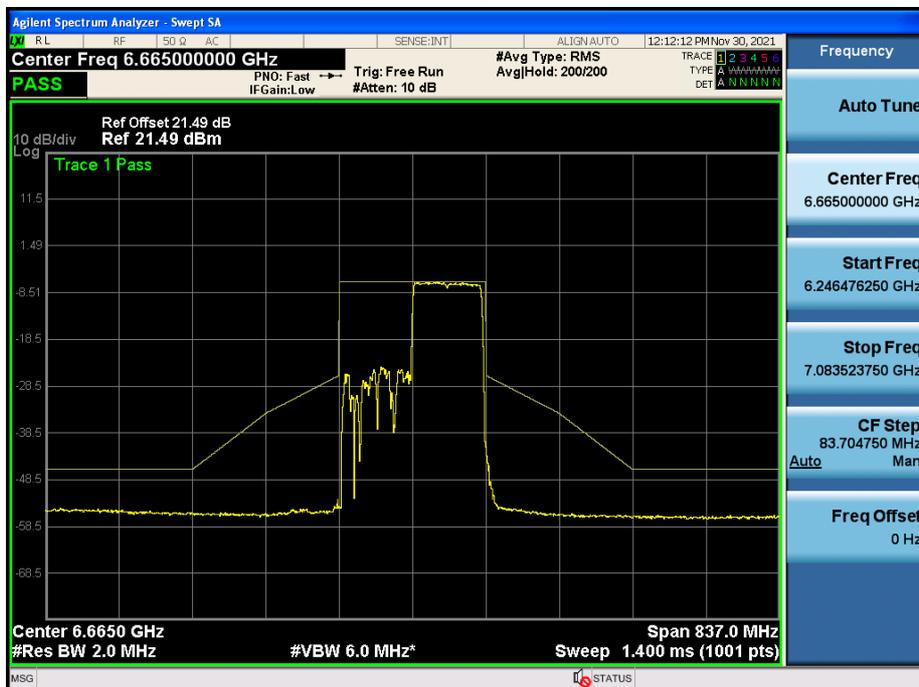
802.11ax HE160, 80_U Ch. 175(6825 MHz) 996 Tones 67 RU
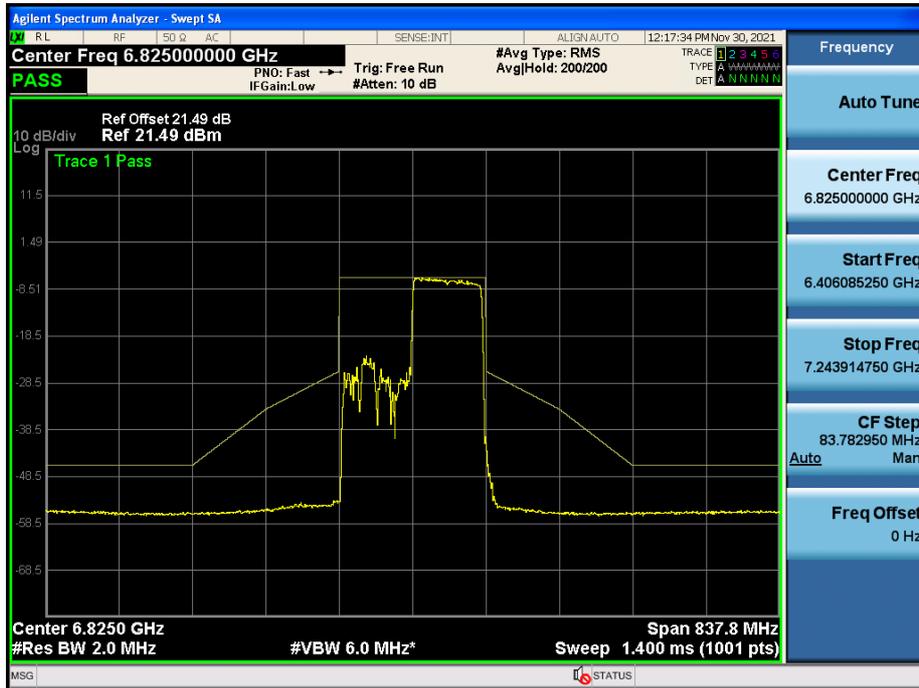
802.11ax HE160, 80_U Ch. 207(6985 MHz) 996 Tones 67 RU

Bandwidth 160M, SU Ch. 15(6025 MHz) SU
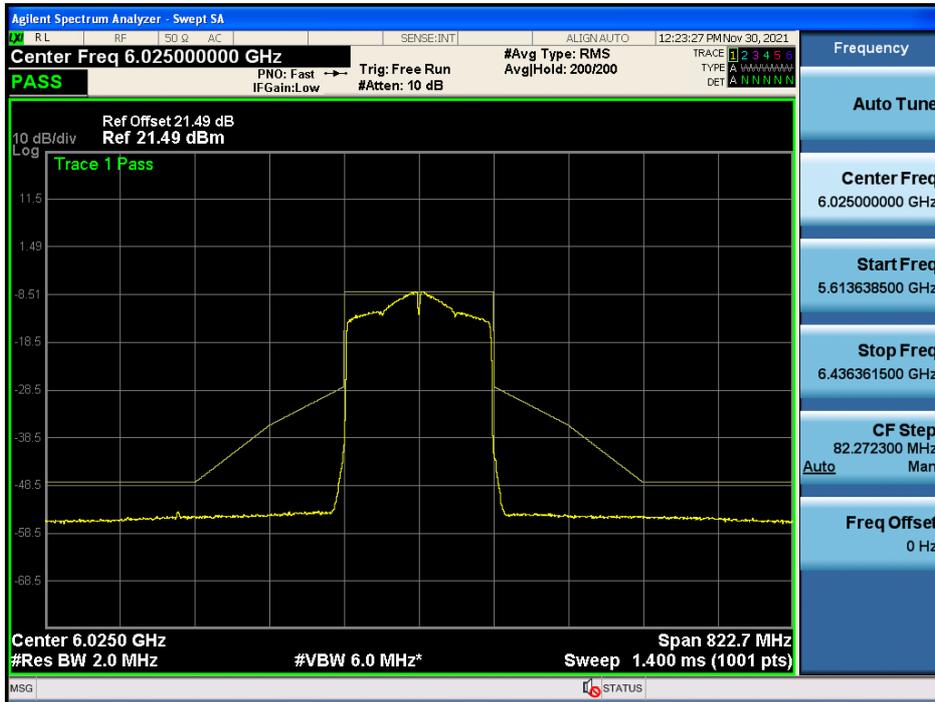
Bandwidth 160M, SU Ch. 47(6185 MHz) SU

Bandwidth 160M, SU Ch. 79(6345 MHz) SU
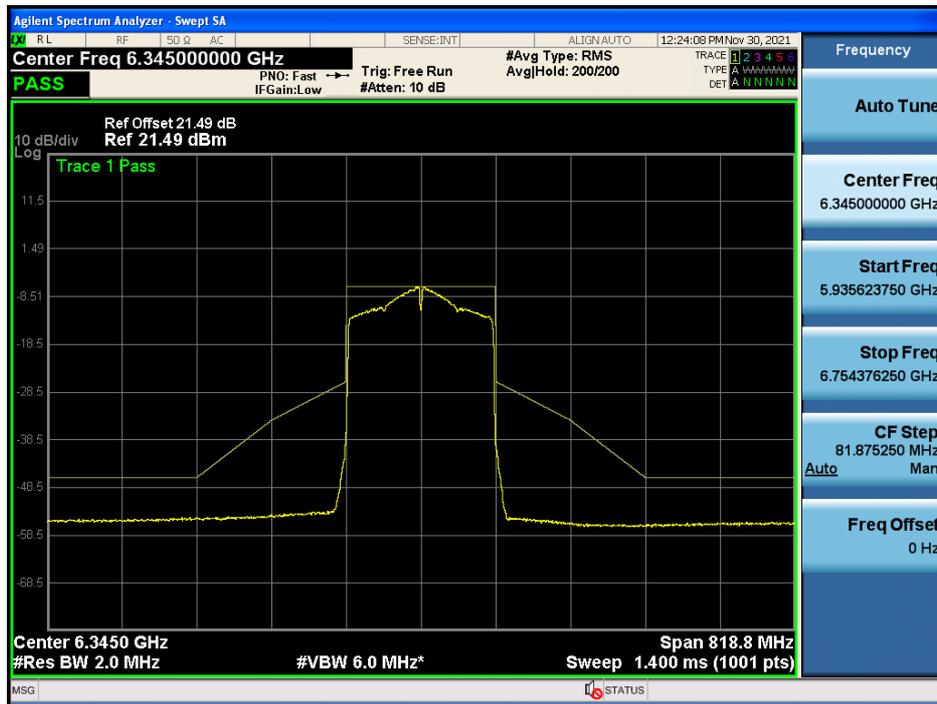
Bandwidth 160M, SU Ch. 111(6505 MHz) SU
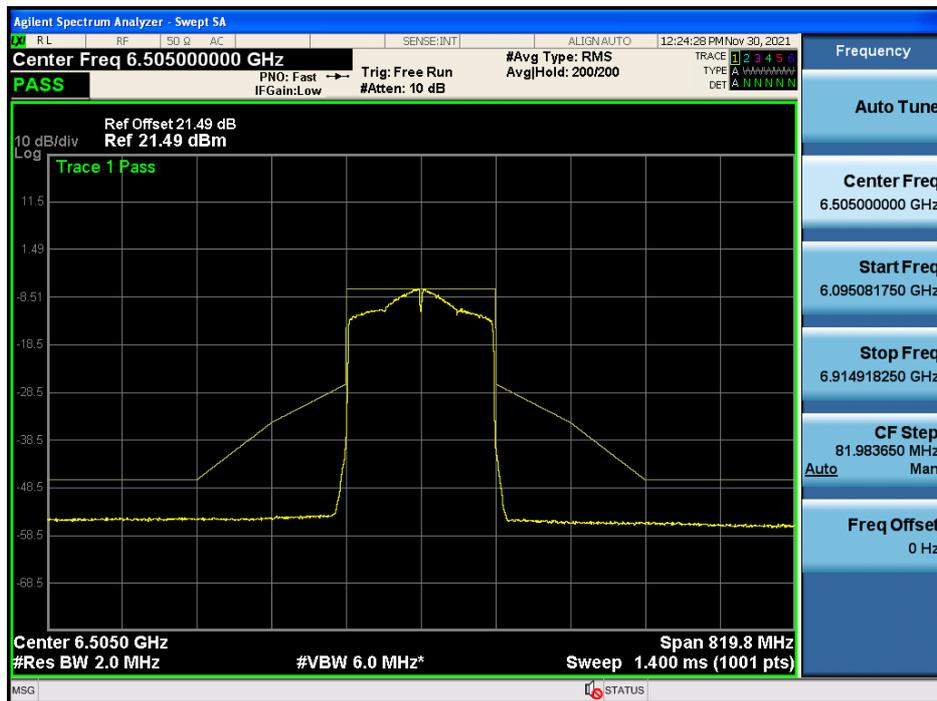
Bandwidth 160M, SU Ch. 143(6665 MHz) SU
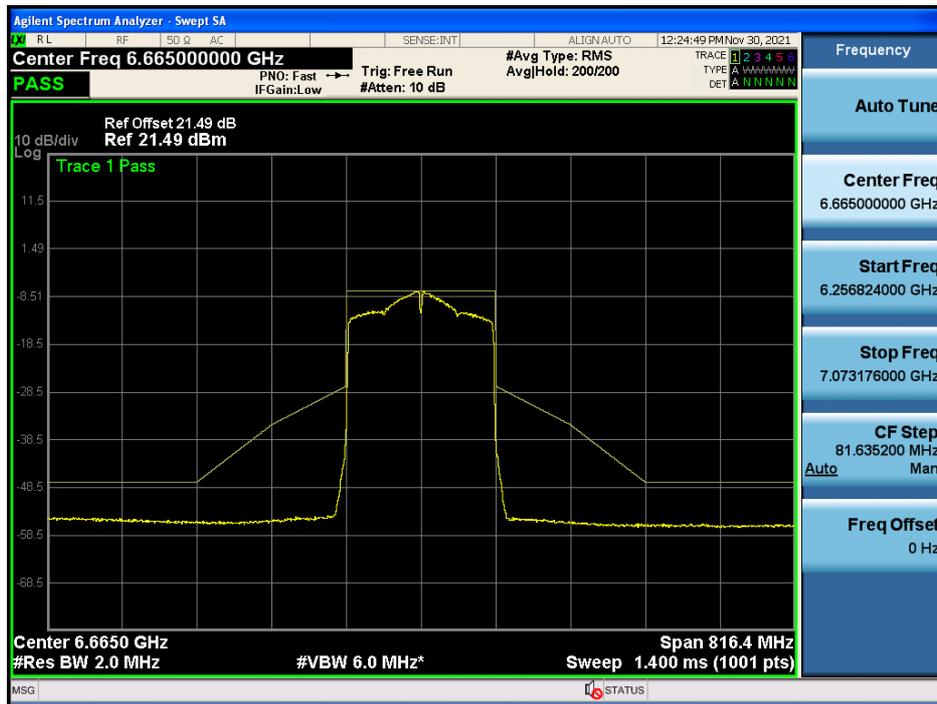
Bandwidth 160M, SU Ch. 175(6825 MHz) SU
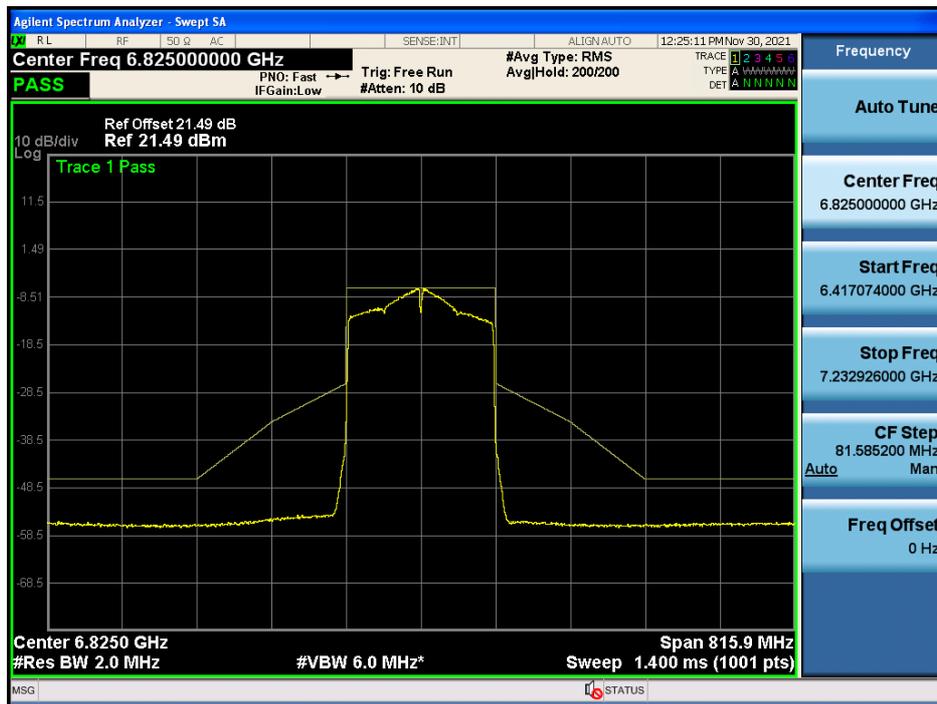
Bandwidth 160M, SU Ch. 207(6985 MHz) SU
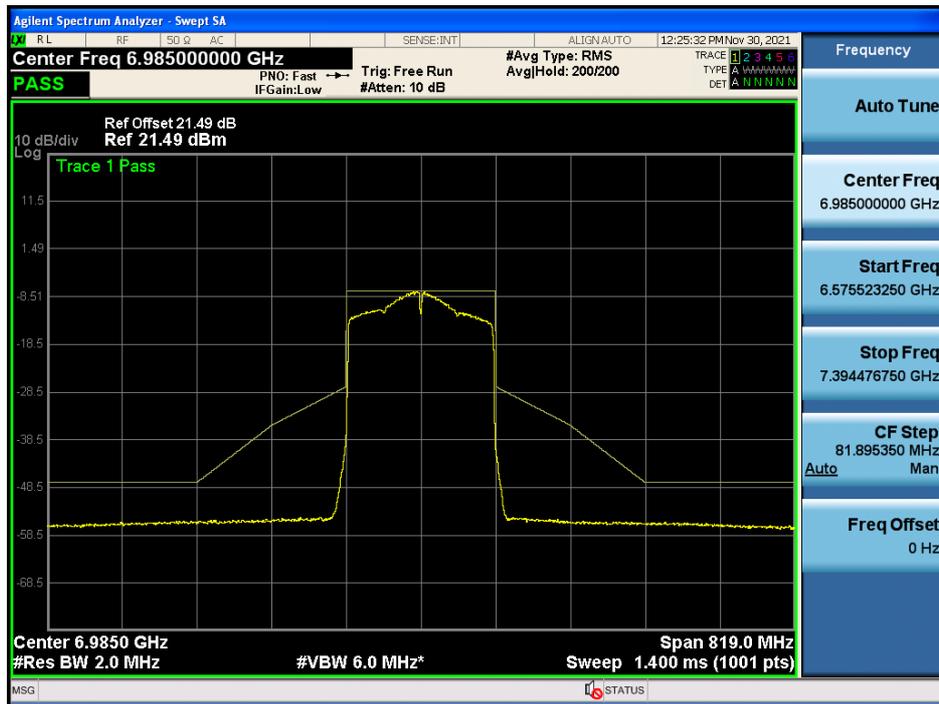
4. Power Spectral Density

Note:

1. In order to simplify the report, attached plots were only channel of highest EIRP PSD.

2. According to KDB 662911 D01 Multiple Transmitter Output v02r01 F) 2) f) (ii)

Directional gain =

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

Band	Ant 1 Gain (dBi)	Ant 2 Gain (dBi)	N_{ANT}/N_{SS}	Directional Gain (dBi)
UNII-5	-7.41	-9.37	2 / 2	-5.32
UNII-6	-7.41	-9.37	2 / 2	-5.32
UNII-7	-6.42	-6.43	2 / 2	-3.41
UNII-8	-8.80	-7.90	2 / 2	-5.33

4.1 Ant1

802.11a Ch.117(6535 MHz)
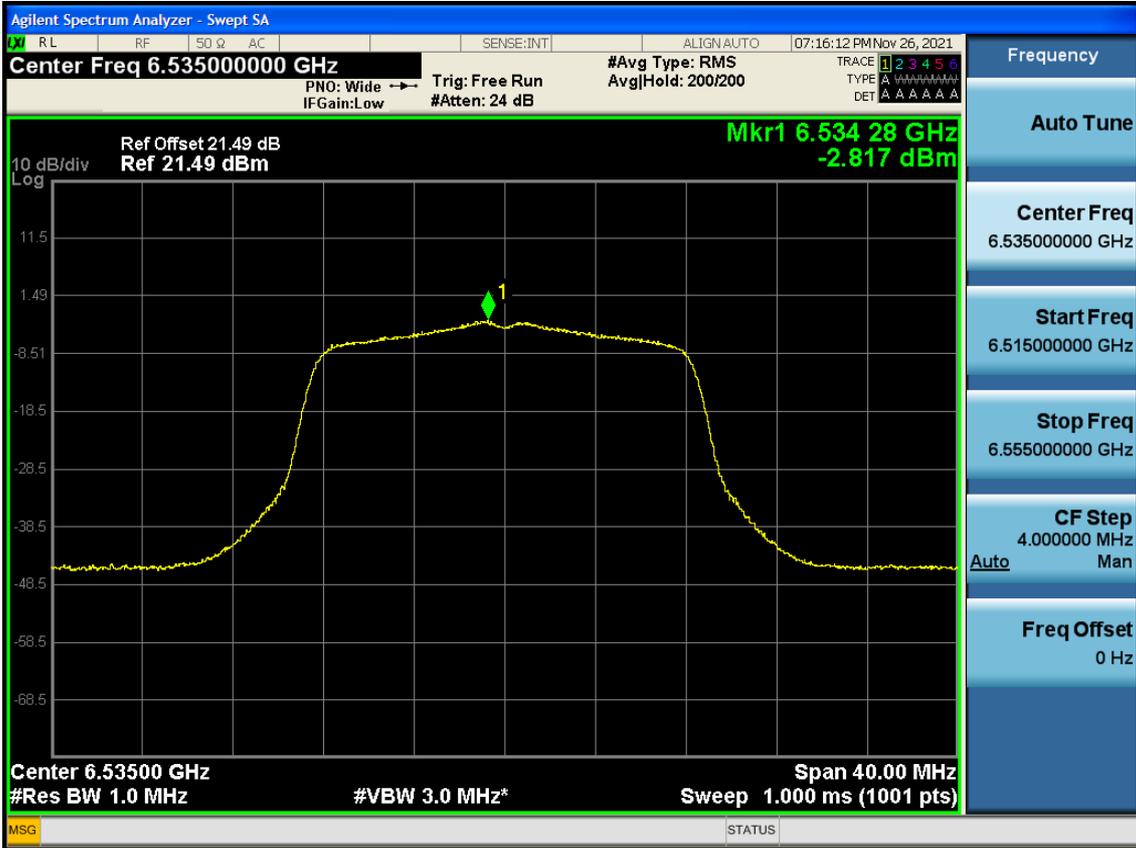
Measured Value (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
-2.817	0.28	-2.533	-6.420	-8.953	-1

Note:

Total PSD(dBm/MHz) = Measured Value(dBm/MHz) + Duty Cycle Factor(dB)

EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Peak Ant. Gain(dBi)

802.11ax HE20 Ch.117(6535 MHz) 26 Tones RU 38

Measured Value (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
-1.407	0.00	-1.407	-6.420	-7.827	-1

Note:

Total PSD(dBm/MHz) = Measured Value(dBm/MHz) + Duty Cycle Factor(dB)

EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Peak Ant. Gain(dBi)

802.11ax HE40 Ch.179(6845 MHz) RU 9

Measured Value (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
-1.522	0.00	-1.522	-6.420	-7.942	-1

Note:

Total PSD(dBm/MHz) = Measured Value(dBm/MHz) + Duty Cycle Factor(dB)

EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Peak Ant. Gain(dBi)

802.11ax HE80 Ch.151(6705 MHz) RU 0

Measured Value (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
-1.789	0.00	-1.789	-6.420	-8.209	-1

Note:

Total PSD(dBm/MHz) = Measured Value(dBm/MHz) + Duty Cycle Factor(dB)

EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Peak Ant. Gain(dBi)

Bandwidth 160M 80_L Ch.175(6825 MHz) RU 45

Measured Value (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
-1.859	0.00	-1.859	-6.420	-8.279	-1

Note:

Total PSD(dBm/MHz) = Measured Value(dBm/MHz) + Duty Cycle Factor(dB)

EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Peak Ant. Gain(dBi)

Bandwidth 160M 80_U Ch.143(6665 MHz) RU 53

Measured Value (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
-1.758	0.00	-1.758	-6.420	-8.178	-1

Note:

Total PSD(dBm/MHz) = Measured Value(dBm/MHz) + Duty Cycle Factor(dB)

EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Peak Ant. Gain(dBi)

Bandwidth 160M 80_SU Ch.175(6825 MHz) SU

Measured Value (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
-11.389	0.00	-11.389	-6.420	-17.809	-1

Note:

Total PSD(dBm/MHz) = Measured Value(dBm/MHz) + Duty Cycle Factor(dB)

EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Peak Ant. Gain(dBi)

4.2 Ant2

802.11a Ch.117(6535 MHz)

Measured Value (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
-2.460	0.280	-2.176	-6.430	-8.606	-1

Note:

Total PSD(dBm/MHz) = Measured Value(dBm/MHz) + Duty Cycle Factor(dB)

EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Peak Ant. Gain(dBi)

802.11ax HE20 Ch.117(6535 MHz) SU

Measured Value (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
-0.361	0.000	-0.361	-6.430	-6.791	-1

Note:

Total PSD(dBm/MHz) = Measured Value(dBm/MHz) + Duty Cycle Factor(dB)

EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Peak Ant. Gain(dBi)

802.11ax HE40 Ch.147(6685 MHz) RU 55

Measured Value (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
-1.149	0.000	-1.149	-6.430	-7.579	-1

Note:

Total PSD(dBm/MHz) = Measured Value(dBm/MHz) + Duty Cycle Factor(dB)

EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Peak Ant. Gain(dBi)

802.11ax HE80 Ch.151(6865 MHz) RU 57

Measured Value (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
-1.492	0.000	-1.492	-6.430	-7.922	-1

Note:

Total PSD(dBm/MHz) = Measured Value(dBm/MHz) + Duty Cycle Factor(dB)

EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Peak Ant. Gain(dBi)
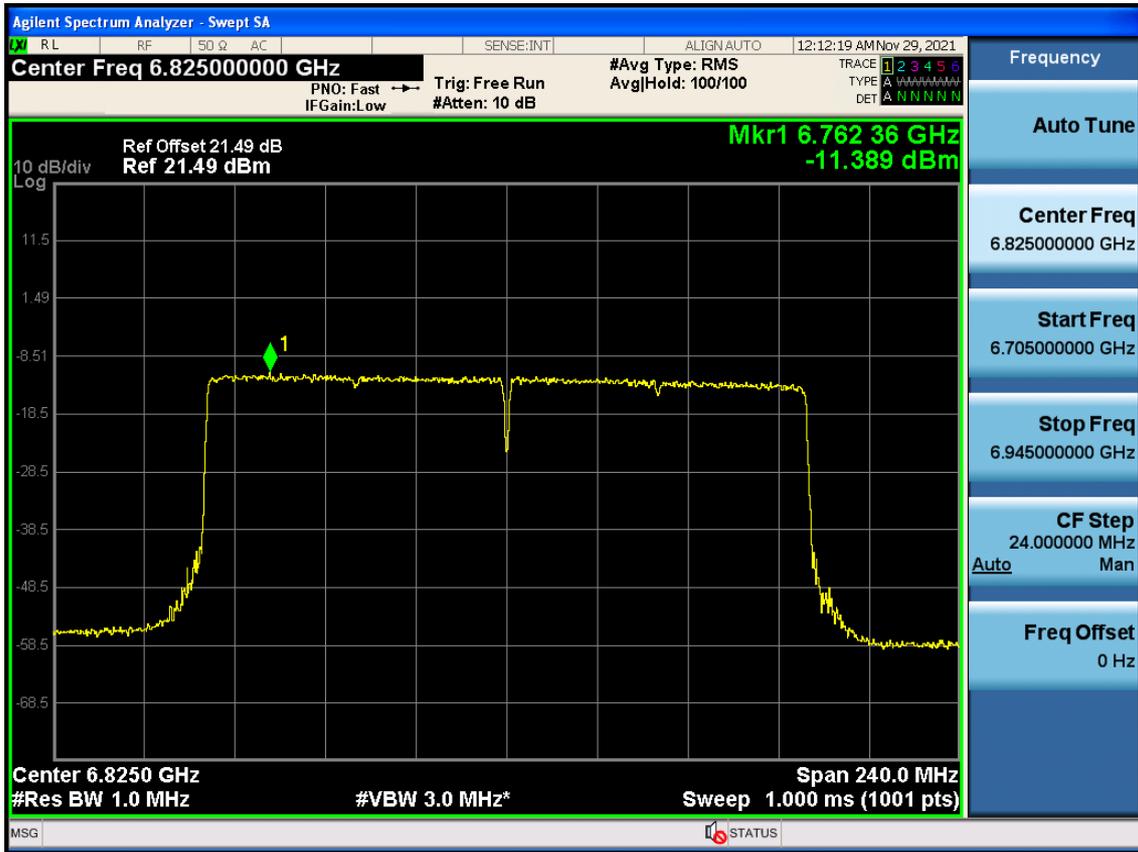
Bandwidth 160M 80_L Ch.143(6665 MHz) RU 53

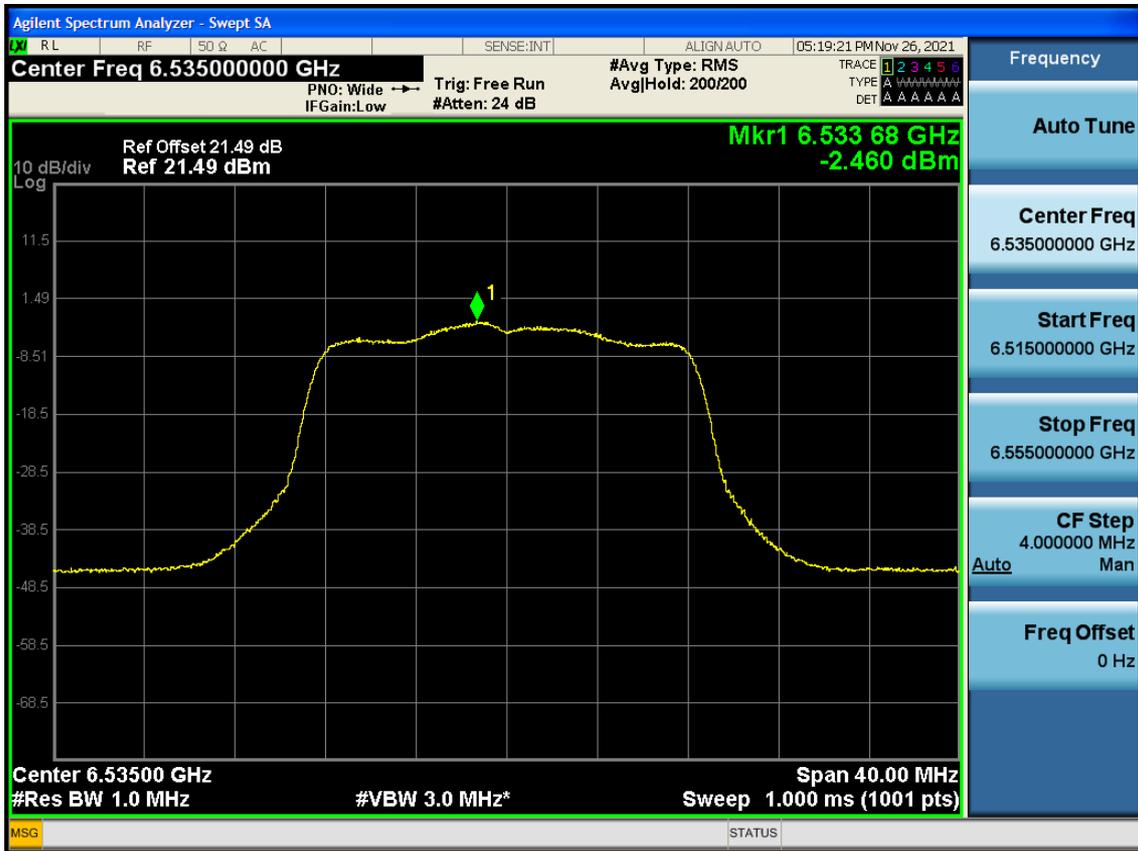| Measured Value (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
-1.271	0.000	-1.271	-6.430	-7.701	-1

Note:

Total PSD(dBm/MHz) = Measured Value(dBm/MHz) + Duty Cycle Factor(dB)

EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Peak Ant. Gain(dBi)
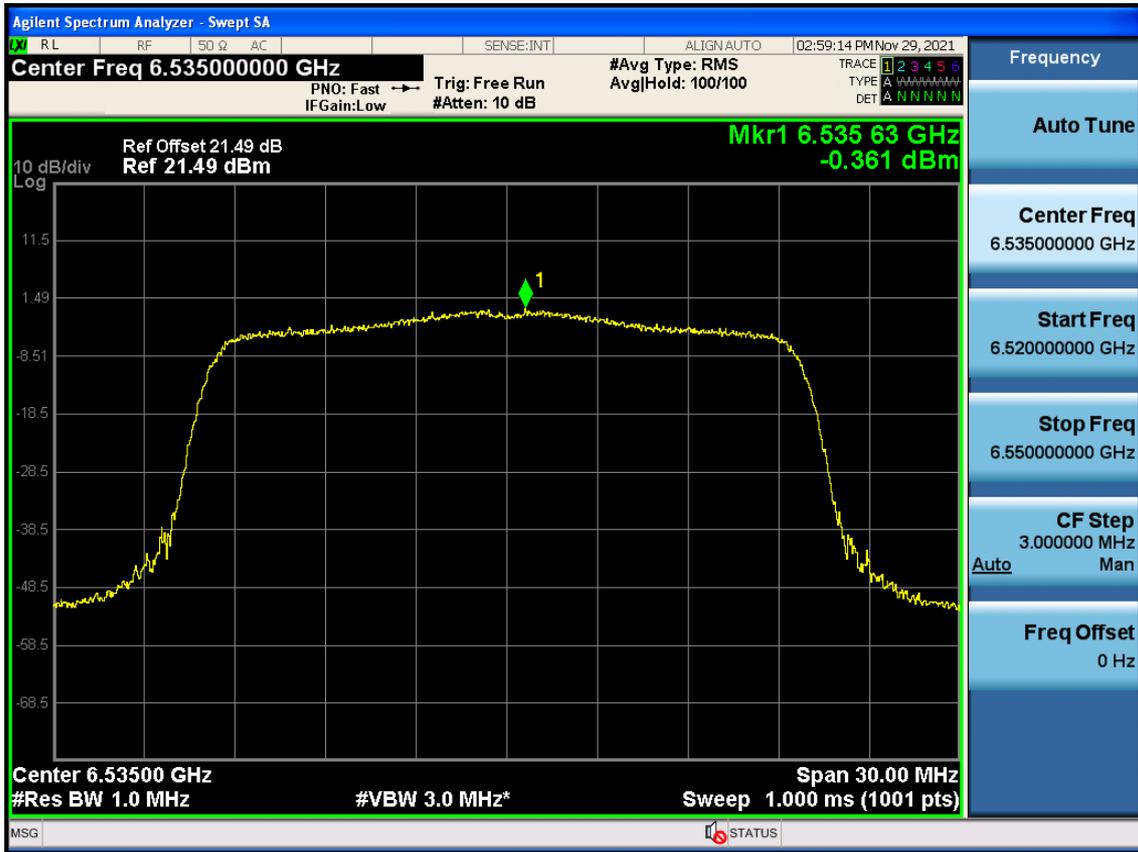
Bandwidth 160M 80_U Ch.143(6665 MHz) RU 53

Measured Value (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
-1.463	0.000	-1.463	-6.430	-7.893	-1

Note:

Total PSD(dBm/MHz) = Measured Value(dBm/MHz) + Duty Cycle Factor(dB)

EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Peak Ant. Gain(dBi)

Bandwidth 160M 80_SU Ch.143(6665 MHz) SU
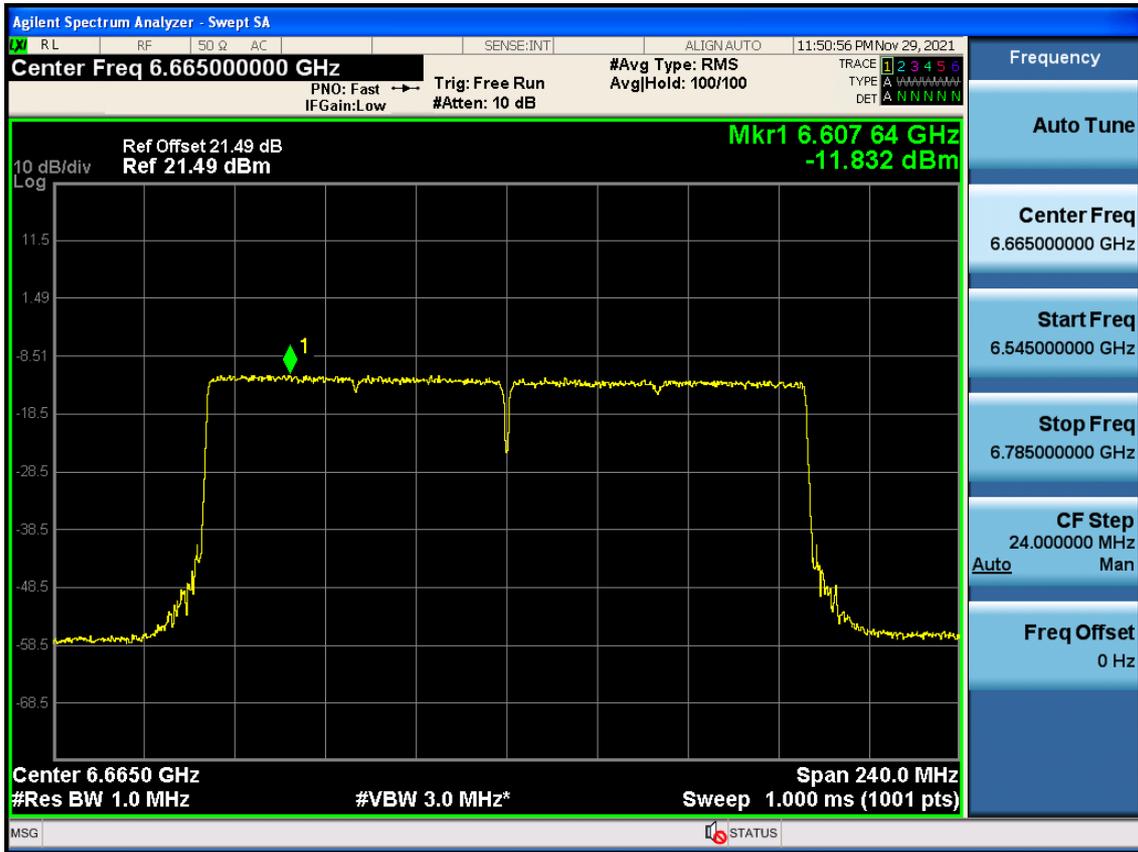
Measured Value (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
-11.832	0.000	-11.832	-6.430	-18.262	-1

Note:

Total PSD(dBm/MHz) = Measured Value(dBm/MHz) + Duty Cycle Factor(dB)

EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Peak Ant. Gain(dBi)

4.3 SUM (MIMO Ant 1 + MIMO Ant2)

802.11a(6Mbps) Ch105(6475 MHz)	
Ant1	Ant2

SUM PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)
0.659	0.00	0.659	-3.410	-2.751

Note:

SUM PSD(dBm/MHz) = (Ant 1 Measured Value + Ant 2 Measured Value) (dBm)
Total PSD (dBm/MHz) = SUM PSD(dBm) + Duty Cycle Factor (dB)
EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Directional Gain(dBi)

802.11ax HE20 Ch.117(6535 MHz) 106 SU	
Ant1	Ant2

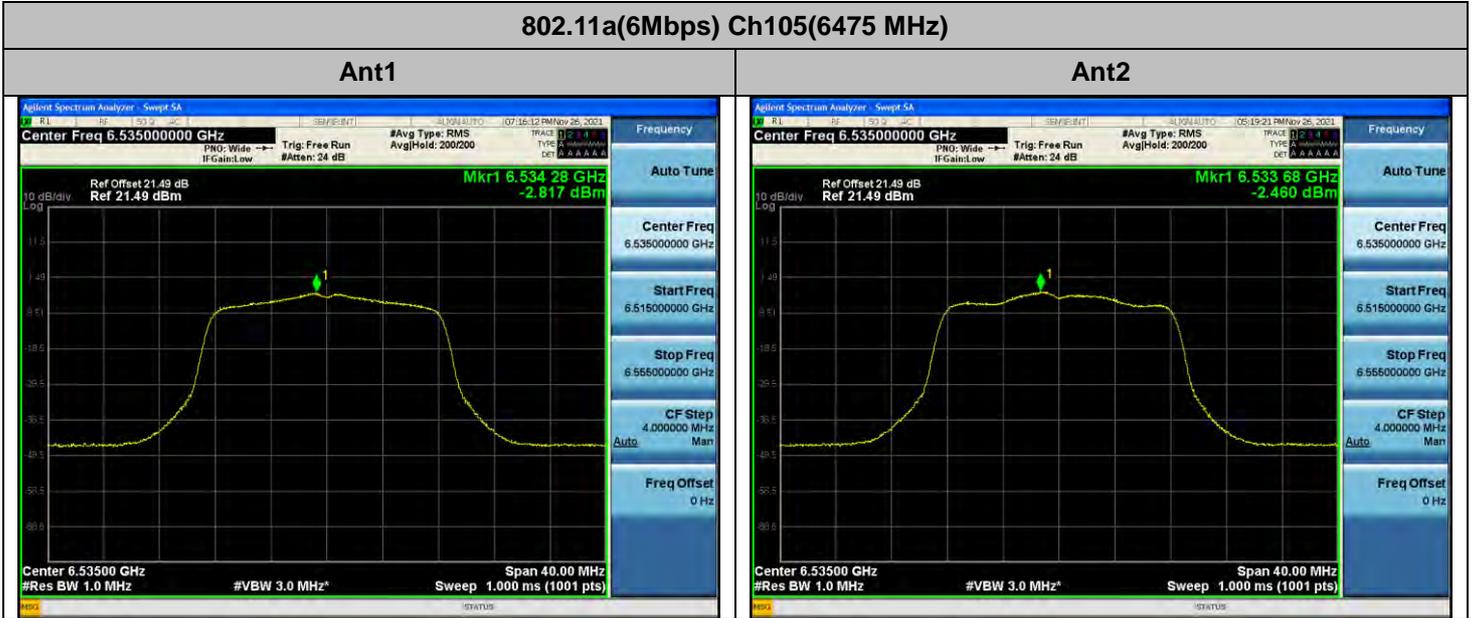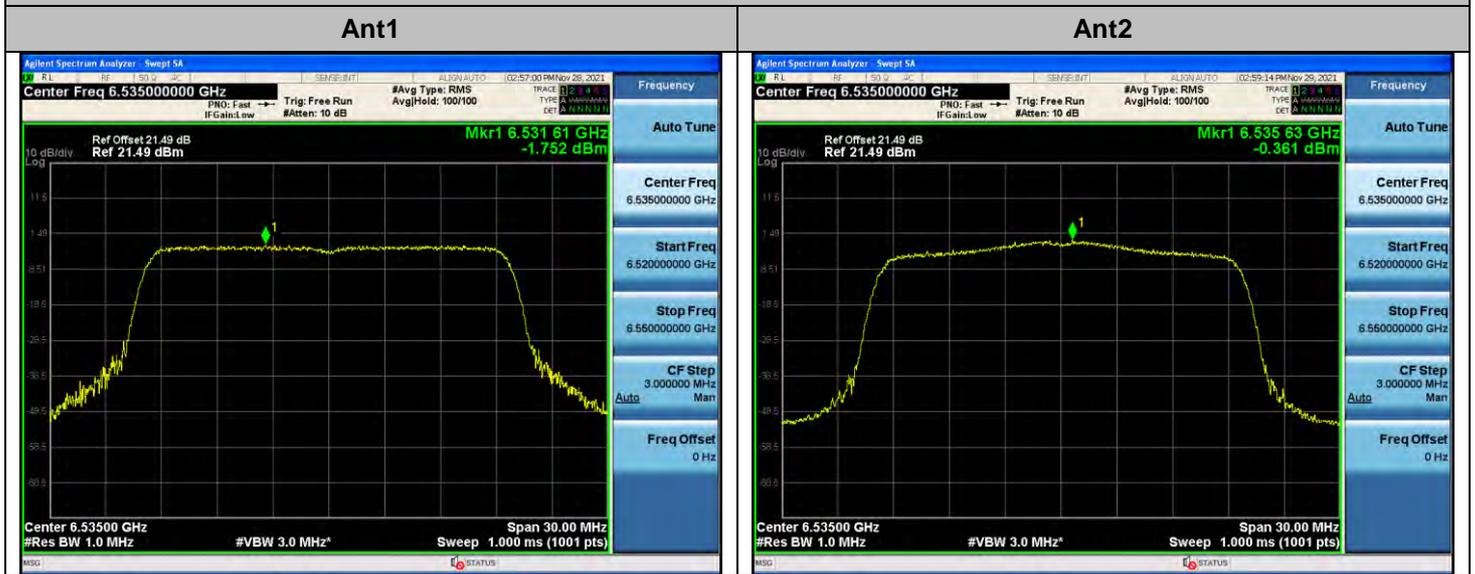| SUM PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)
2.009	0.00	2.009	-3.410	-1.401

Note:

SUM PSD(dBm/MHz) = (Ant 1 Measured Value + Ant 2 Measured Value) (dBm)
Total PSD (dBm/MHz) = SUM PSD(dBm) + Duty Cycle Factor (dB)
EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Directional Gain(dBi)

802.11ax HE40 Ch.147(6685 MHz) 106 Tones RU 55

Ant1	Ant2

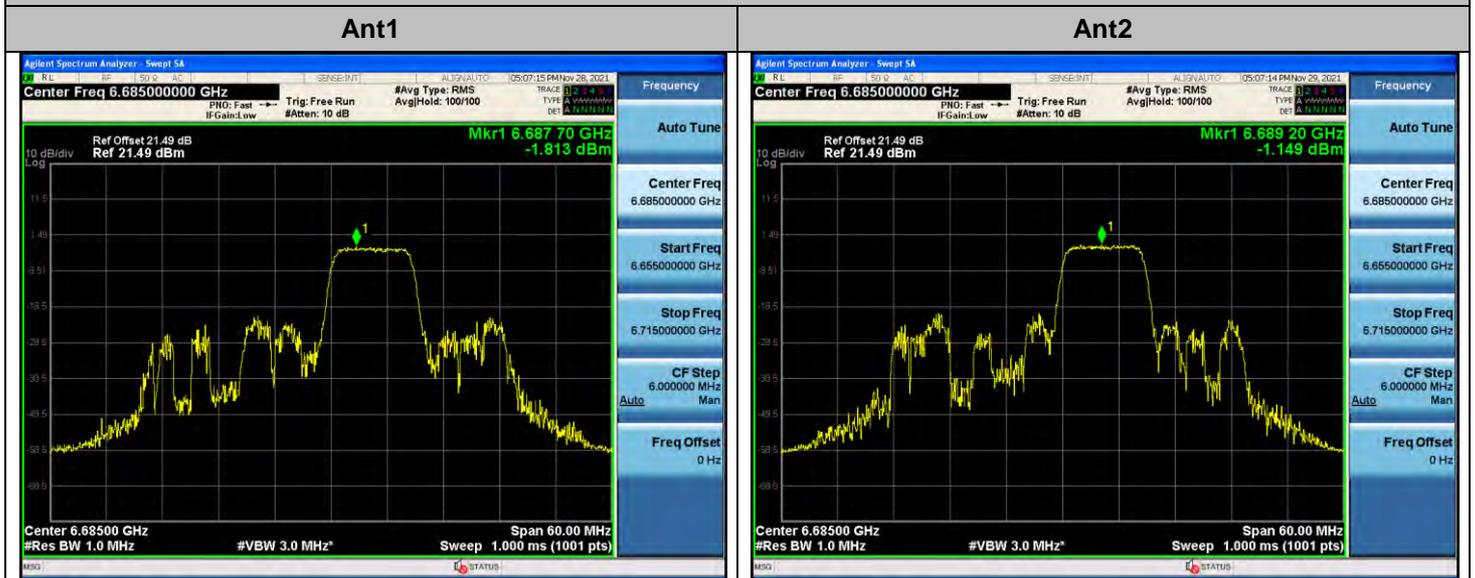| SUM PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)
1.542	0.00	1.542	-3.410	-1.868

Note:

SUM PSD(dBm/MHz) = (Ant 1 Measured Value + Ant 2 Measured Value) (dBm)
Total PSD (dBm/MHz) = SUM PSD(dBm) + Duty Cycle Factor (dB)
EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Directional Gain(dBi)
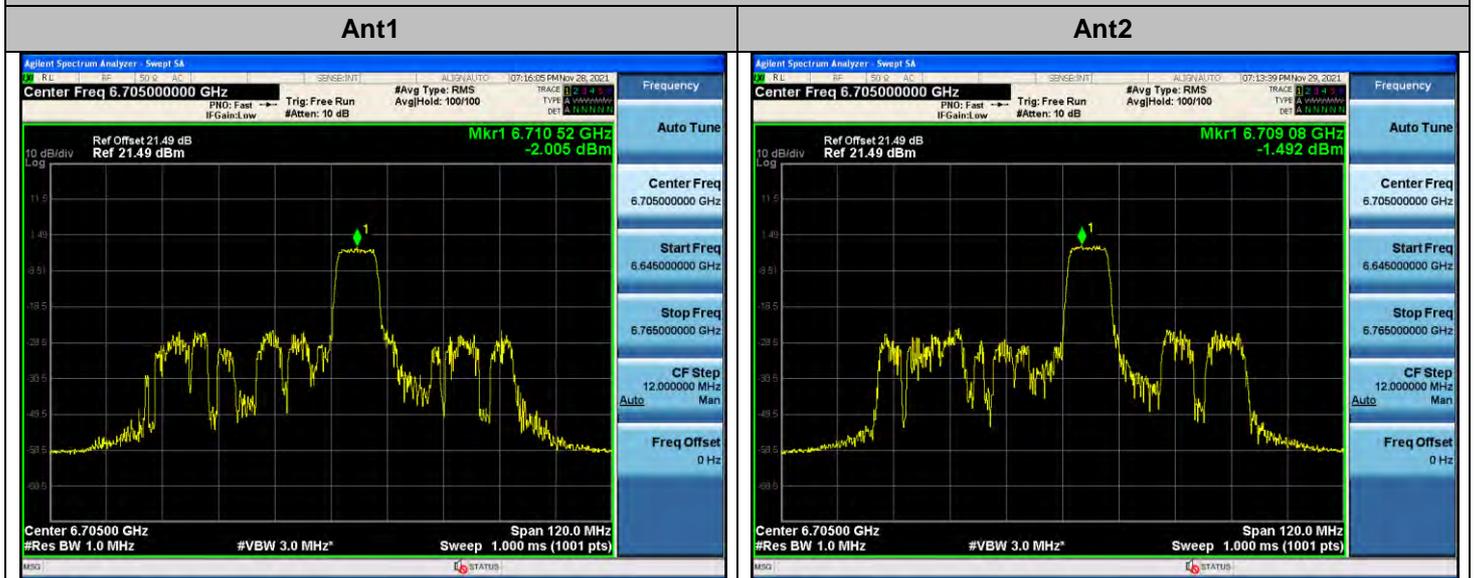
802.11ax HE80 Ch.151(6705 MHz) 106 Tones RU 57	
Ant1	Ant2

SUM PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)
1.269	0.00	1.269	-3.410	-2.141

Note:

SUM PSD(dBm/MHz) = (Ant 1 Measured Value + Ant 2 Measured Value) (dBm)
Total PSD (dBm/MHz) = SUM PSD(dBm) + Duty Cycle Factor (dB)
EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Directional Gain(dBi)

802.11ax HE160 80_L Ch.143(6665 MHz) 106 Tones RU 53	
Ant1	Ant2

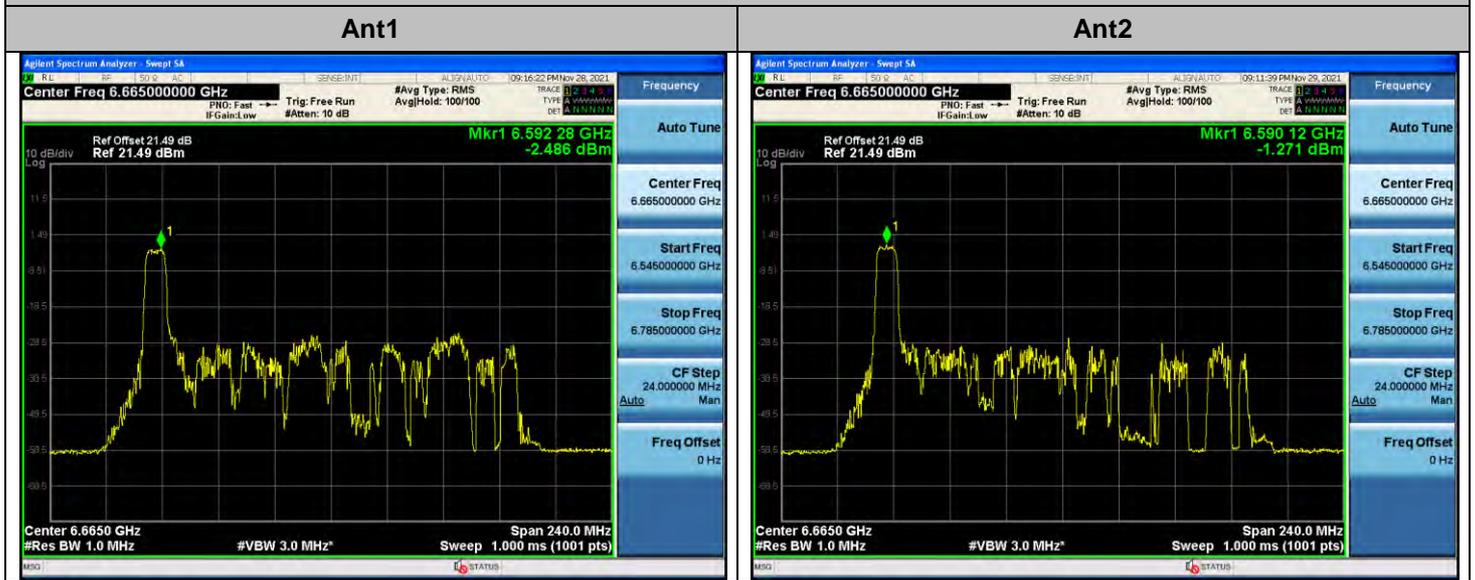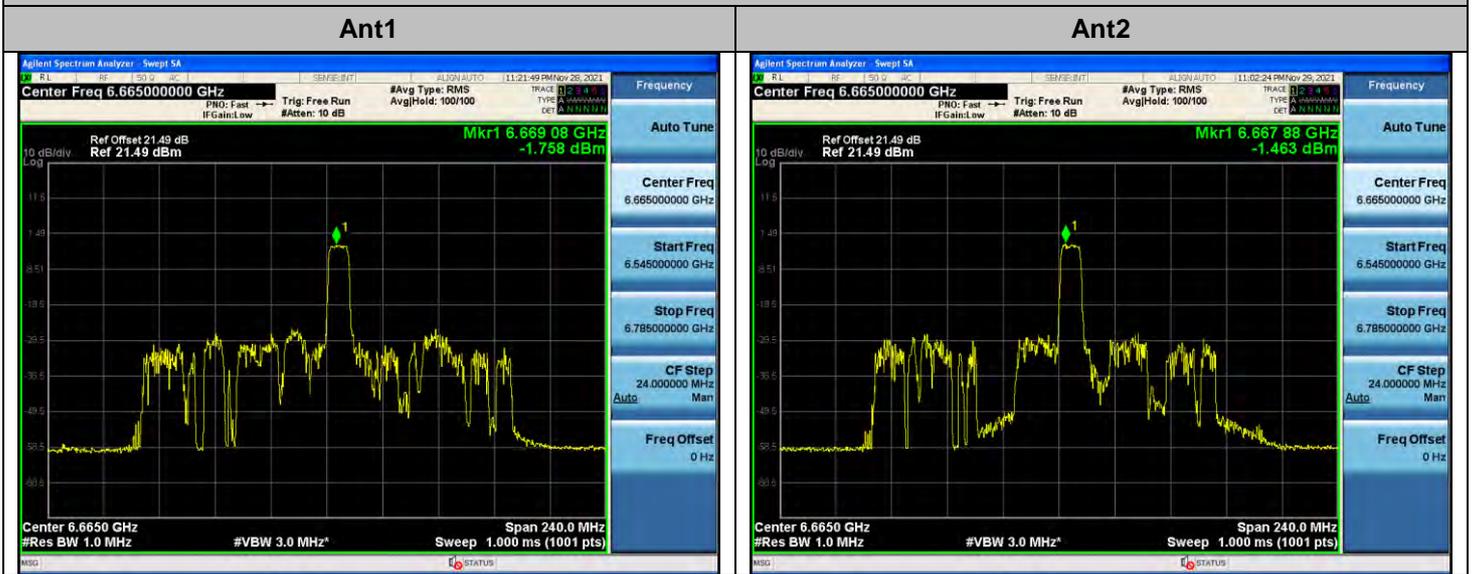| SUM PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)
1.174	0.00	1.174	-3.410	-2.236

Note:

SUM PSD(dBm/MHz) = (Ant 1 Measured Value + Ant 2 Measured Value) (dBm)
Total PSD (dBm/MHz) = SUM PSD(dBm) + Duty Cycle Factor (dB)
EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Directional Gain(dBi)

802.11ax HE160 80_U Ch.143(6665 MHz) 106 Tones RU 53	
Ant1	Ant2

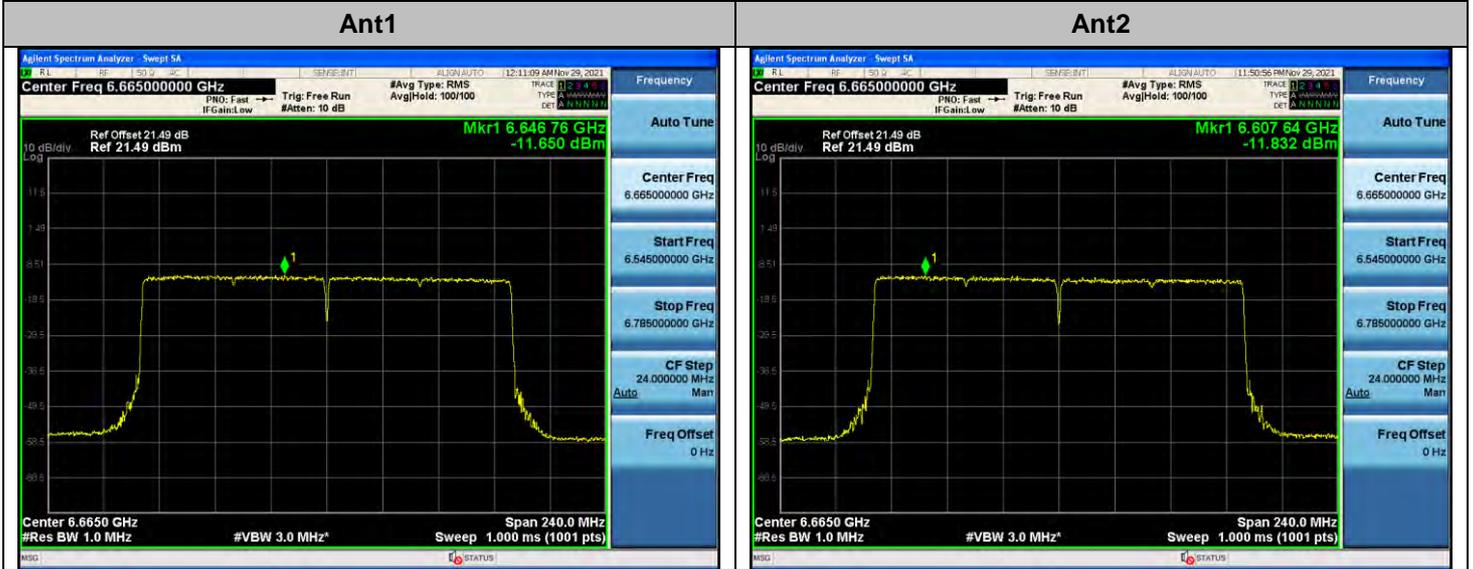| SUM PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)
1.402	0.00	1.402	-3.410	-2.008

Note:

SUM PSD(dBm/MHz) = (Ant 1 Measured Value + Ant 2 Measured Value) (dBm)
Total PSD (dBm/MHz) = SUM PSD(dBm) + Duty Cycle Factor (dB)
EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Directional Gain(dBi)

802.11ax HE160 Ch.143(6665 MHz) SU	
Ant1	Ant2

SUM PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)	ANT Gain (dBi)	EIRP PSD (dBm/MHz)
0.659	0.00	0.659	-3.410	-2.751

Note:

SUM PSD(dBm/MHz) = (Ant 1 Measured Value + Ant 2 Measured Value) (dBm)
Total PSD (dBm/MHz) = SUM PSD(dBm) + Duty Cycle Factor (dB)
EIRP PSD(dBm/MHz) = Duty Factor(dB) + Measured Value (dBm/MHz) + Directional Gain(dBi)

5. Contention Based Protocol

<u>Note:</u>

1. In order to simplify the report, Only worst case for each band have been inserted.

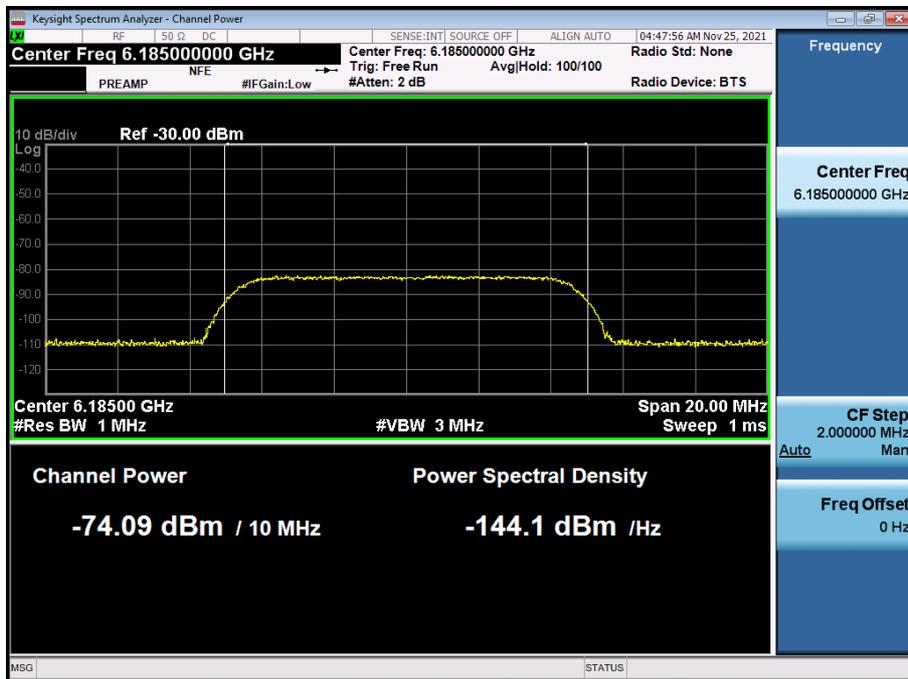2. The antenna gain is selected from the table.

Band	Ant Gain (dBi)		N_{ANT}/ N_{ss}	Directional Gain (dBi)
UNII 5	ANT1	-7.41	2 / 2	CDD : -5.32 SDM : -7.41
	ANT2	-9.37		
UNII 6	ANT1	-7.41	2 / 2	CDD : -5.32 SDM : -7.41
	ANT2	-9.37		
UNII 7	ANT1	-6.42	2 / 2	CDD : -3.41 SDM : -6.42
	ANT2	-6.43		
UNII 8	ANT1	-8.80	2 / 2	CDD : -5.33 SDM : -7.90
	ANT2	-7.90		

UNII 5

802.11ax HE160 Ch.47(6185 MHz) Incumbent signal
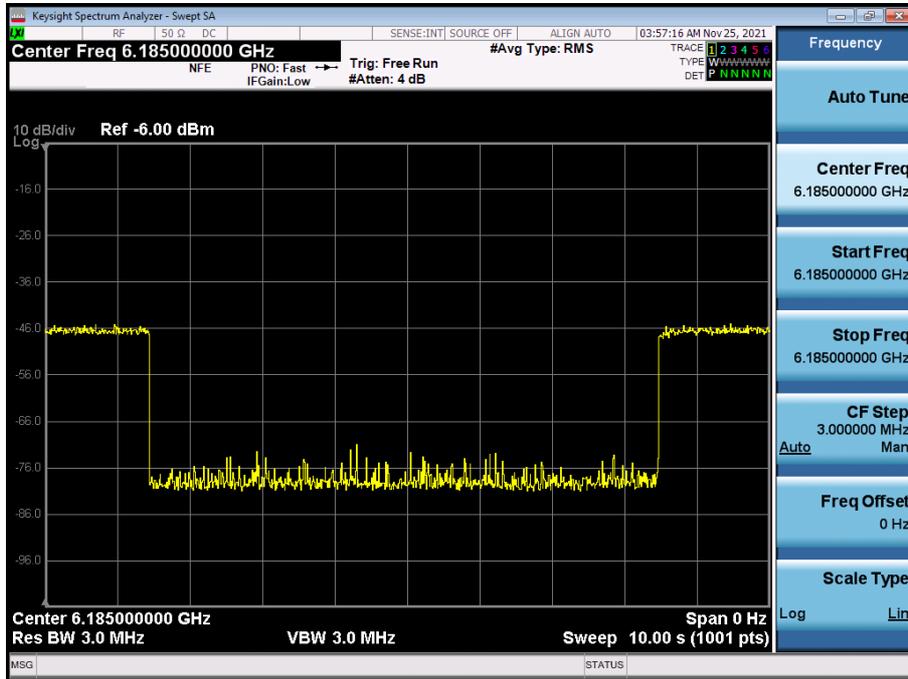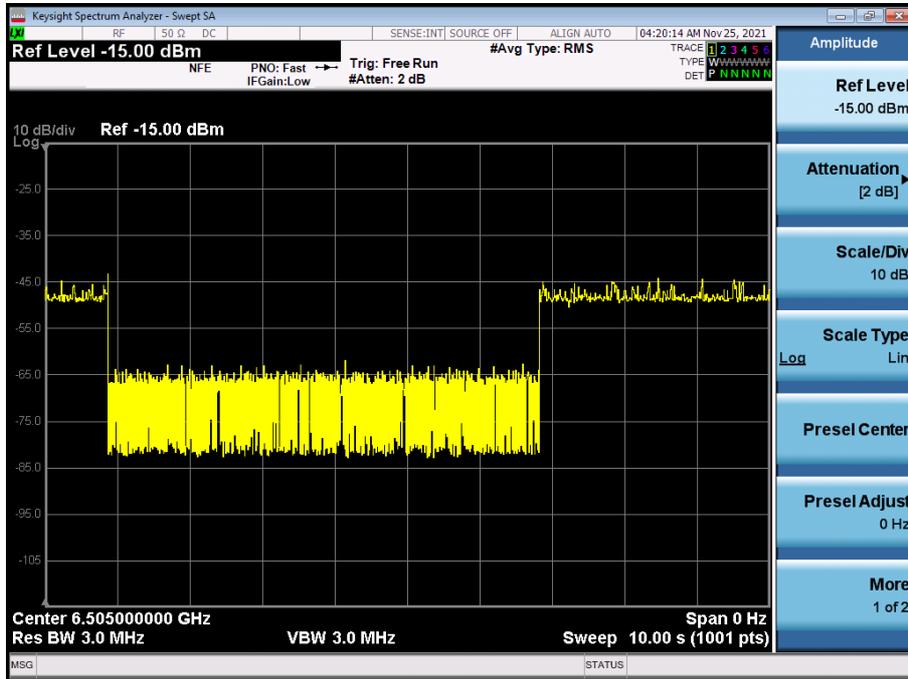

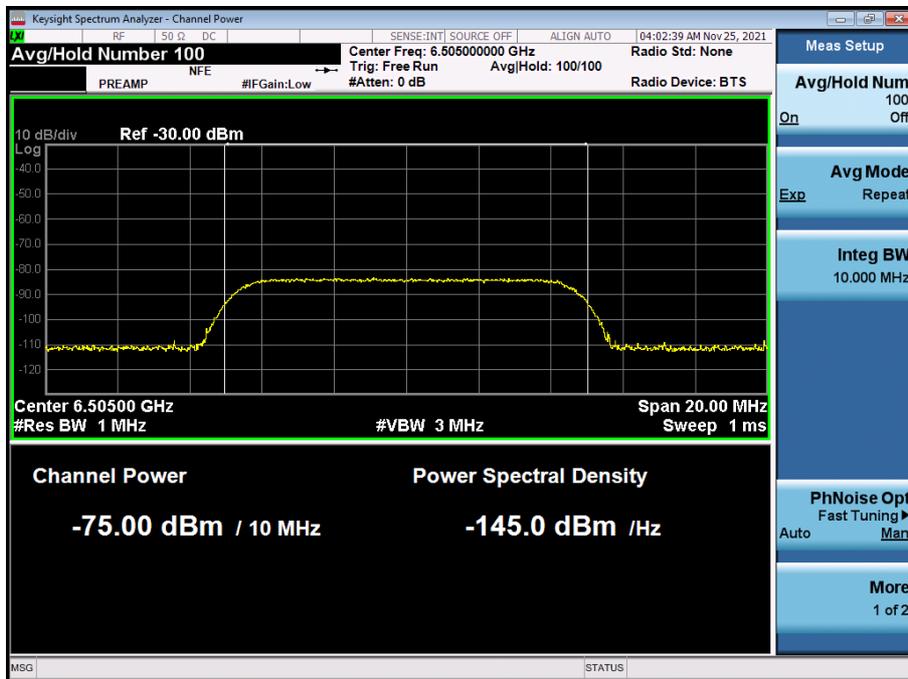### 802.11ax HE160 Ch.47(6185 MHz) Detection Level

UNII 6

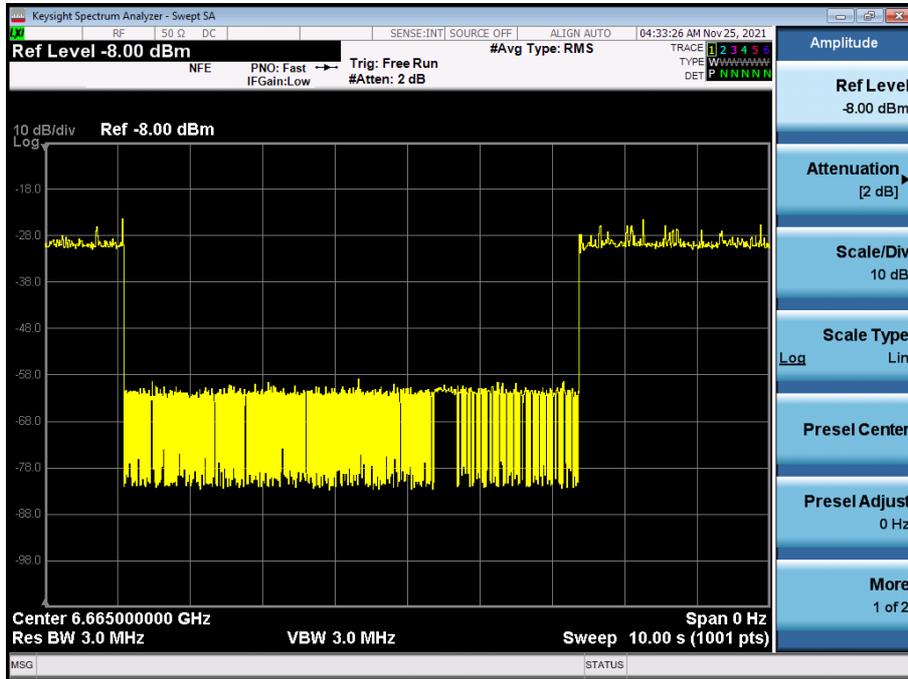802.11ax HE160 Ch.111(6505 MHz) Incumbent signal
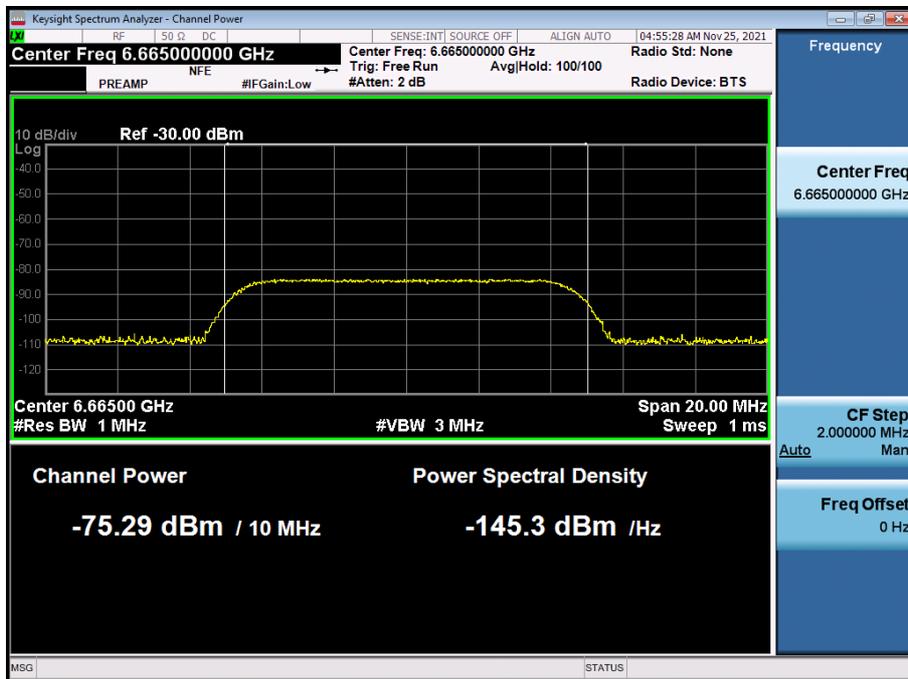

802.11ax HE160 Ch.111(6505 MHz) Detection Level

UNII 7

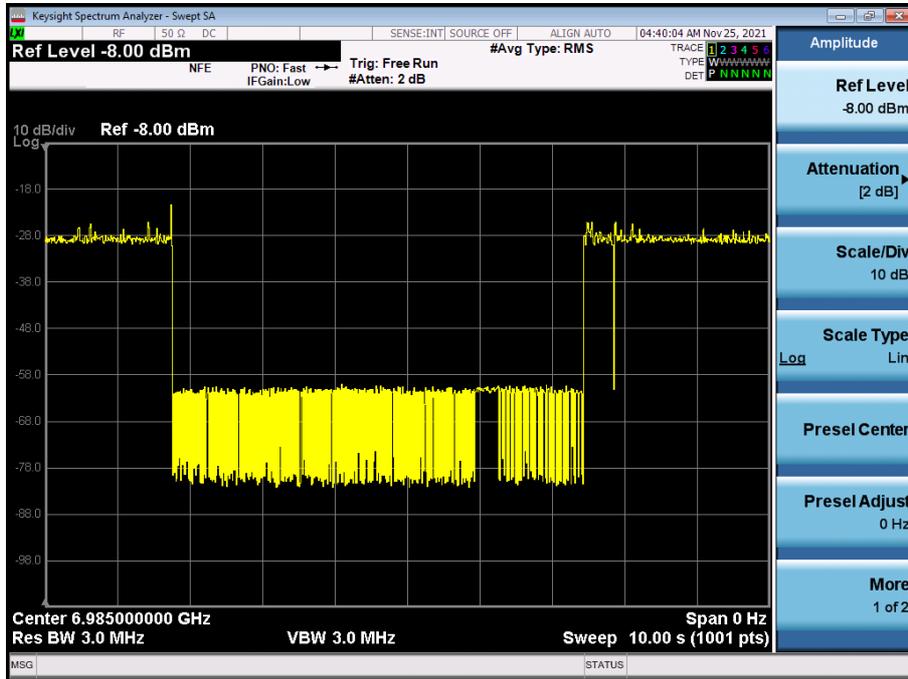802.11ax HE160 Ch.143(6665 MHz) Incumbent signal

802.11ax HE160 Ch.143(6665 MHz) Detection Level

UNII 8

802.11ax HE160 Ch.207(6985 MHz) Incumbent signal

802.11ax HE160 Ch.207(6985 MHz) Detection Level