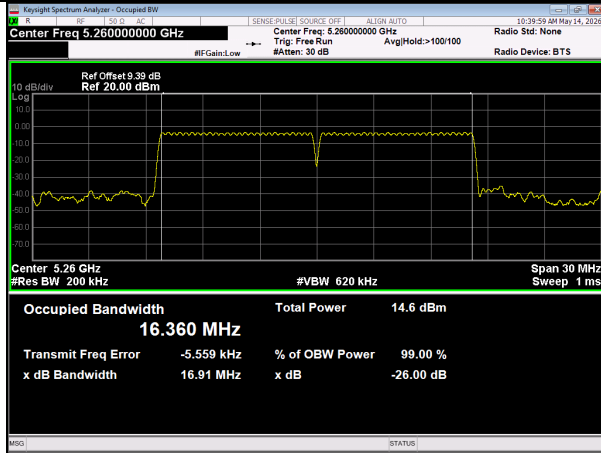
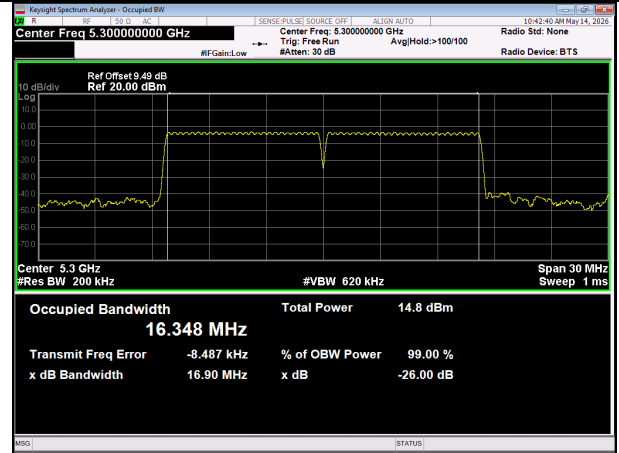


U-NII-2A Band 26dB Bandwidth

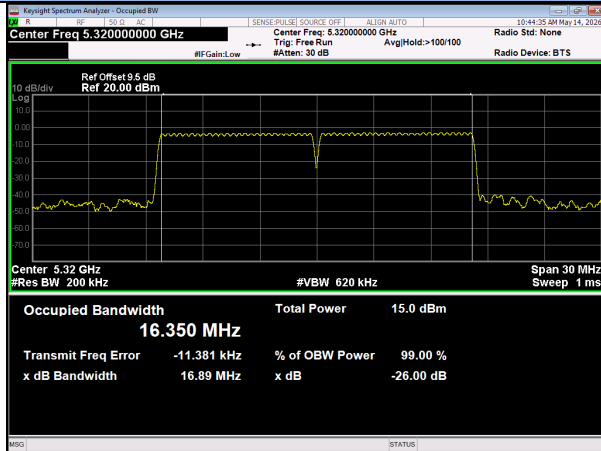
IEEE 802.11a Low Channel



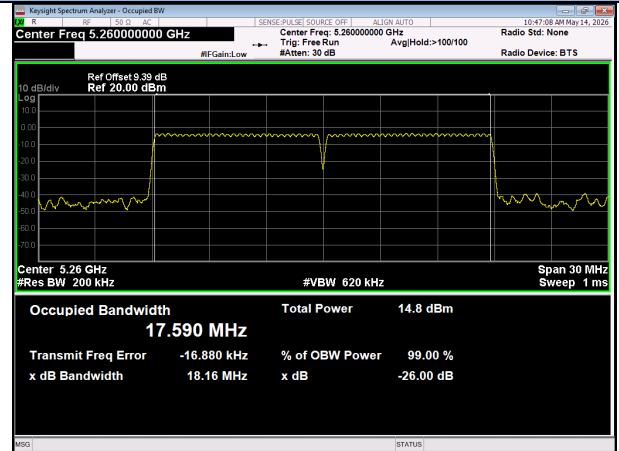
IEEE 802.11a Middle Channel



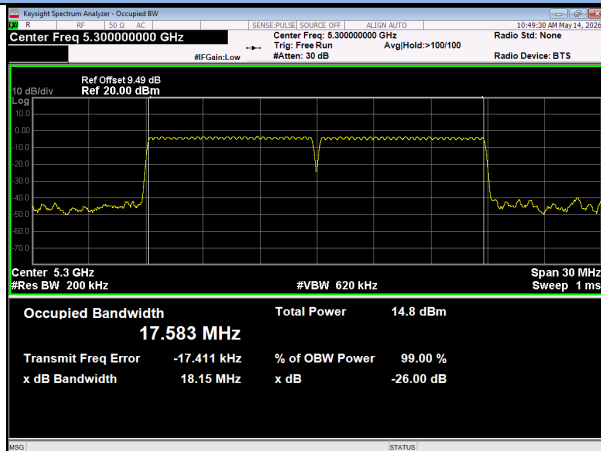
IEEE 802.11a High Channel



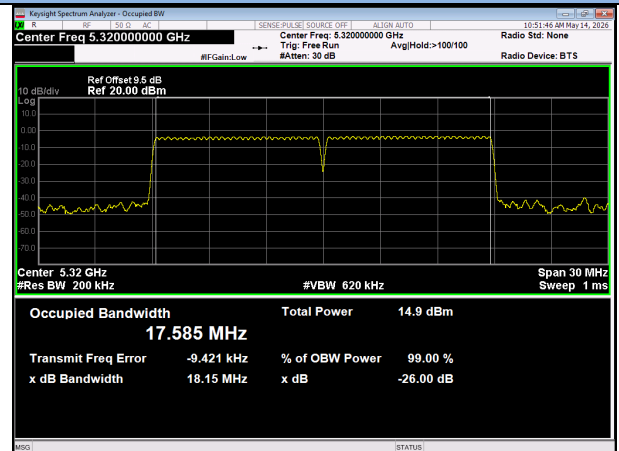
IEEE 802.11n(HT20) Low Channel



IEEE 802.11n(HT20) Middle Channel

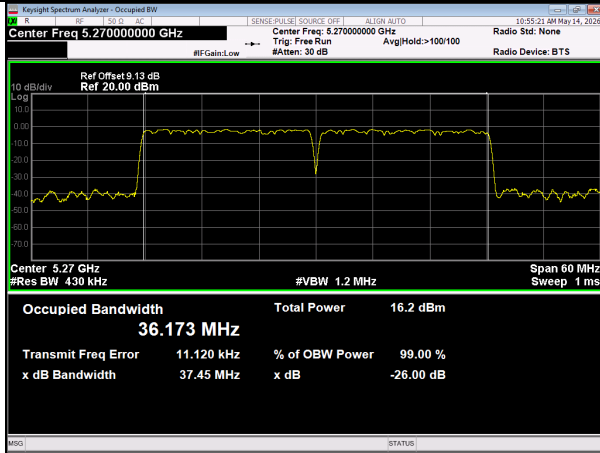


IEEE 802.11n(HT20) High Channel

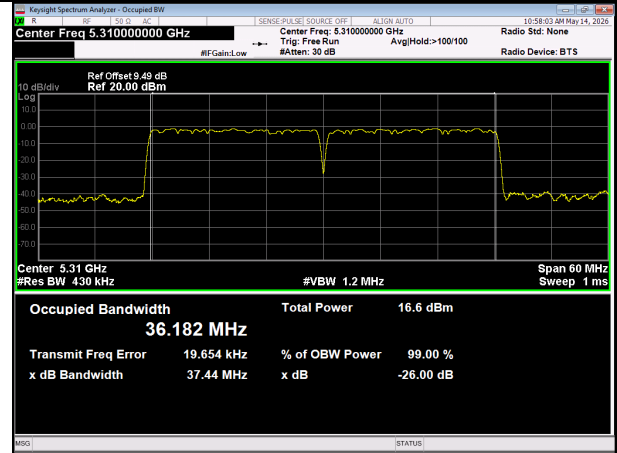


U-NII-2A Band 26dB Bandwidth

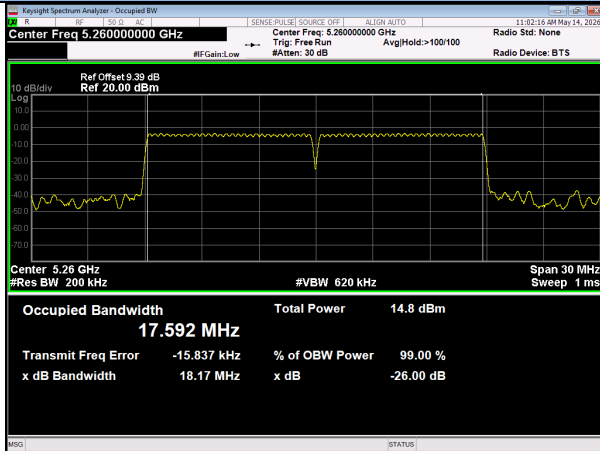
IEEE 802.11n(HT40) Low Channel



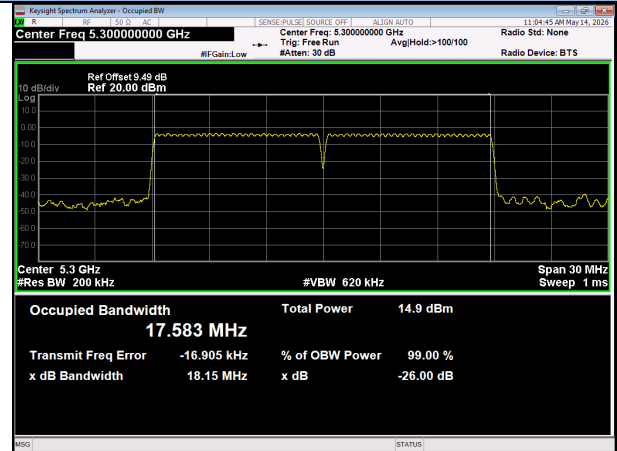
IEEE 802.11n(HT40) High Channel



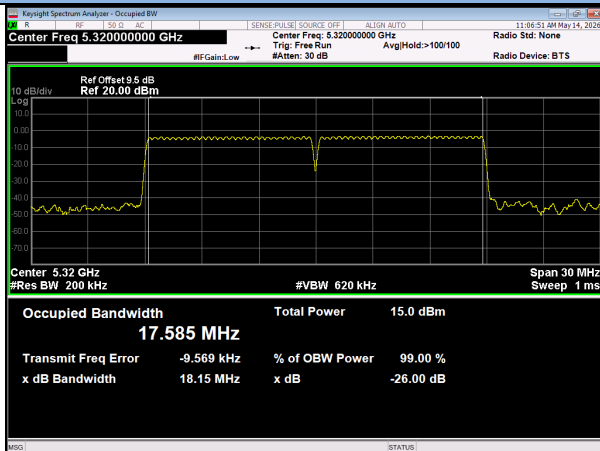
IEEE 802.11ac(VHT20) Low Channel



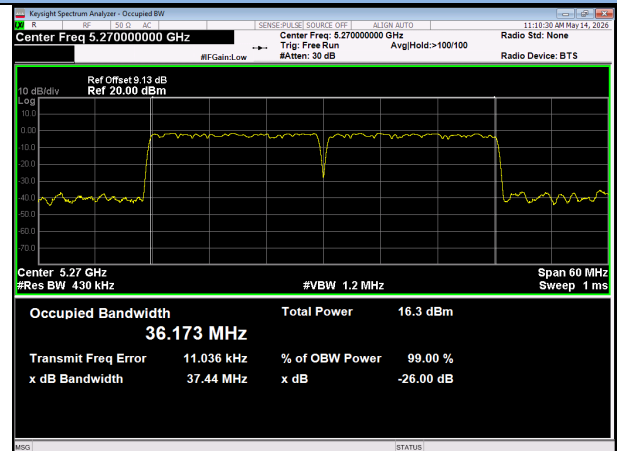
IEEE 802.11ac(VHT20) Middle Channel



IEEE 802.11ac(VHT20) High Channel

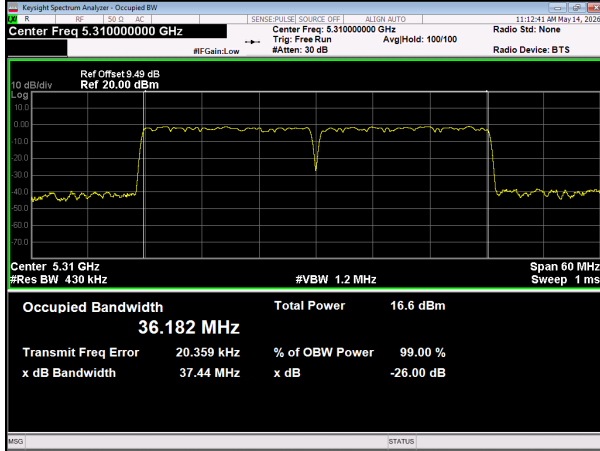


IEEE 802.11ac(VHT40) Low Channel

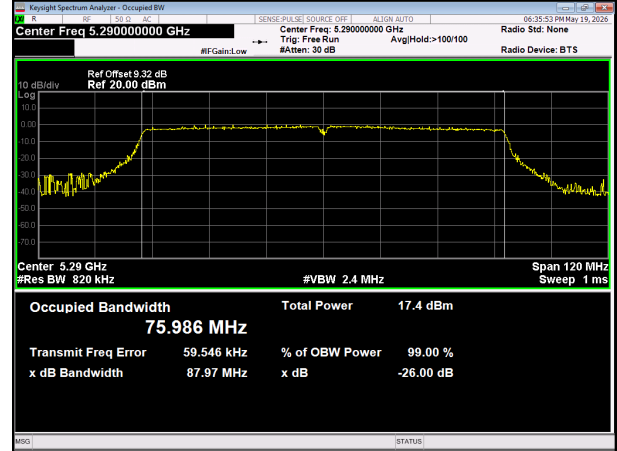


U-NII-2A Band 26dB Bandwidth

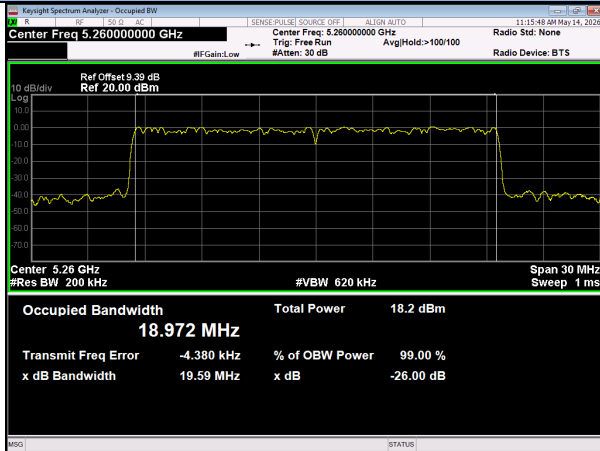
IEEE 802.11ac(VHT40) High Channel



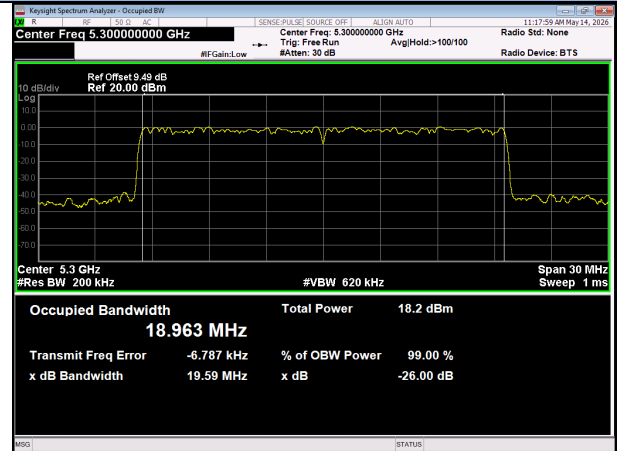
IEEE 802.11ac(VHT80)



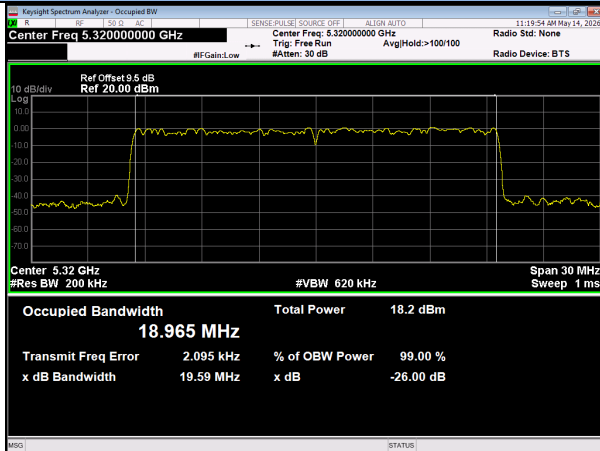
IEEE 802.11ax(HE20) Low Channel



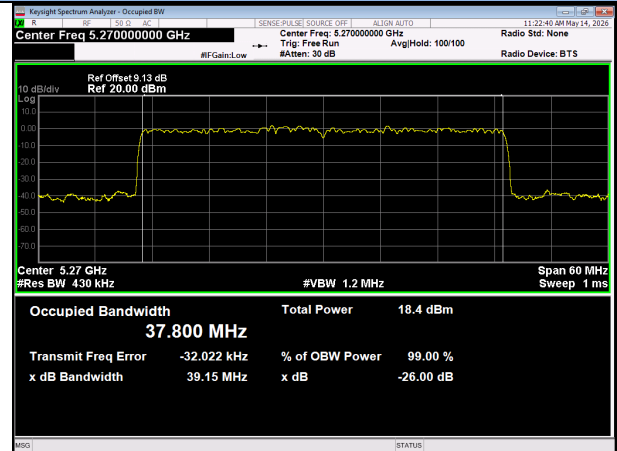
IEEE 802.11ax(HE20) Mid Channel



IEEE 802.11ax(HE20) High Channel

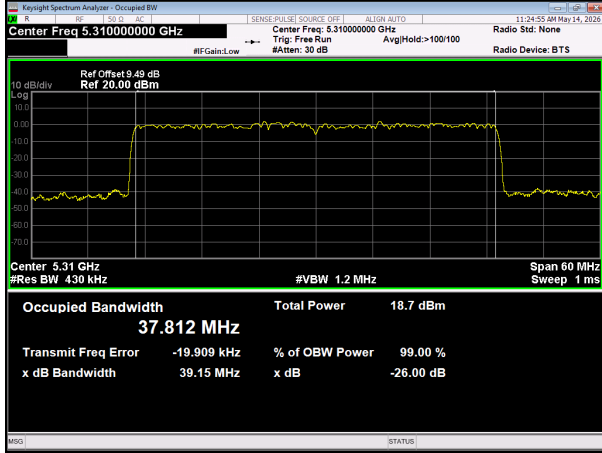


IEEE 802.11ax(HE40) Low Channel

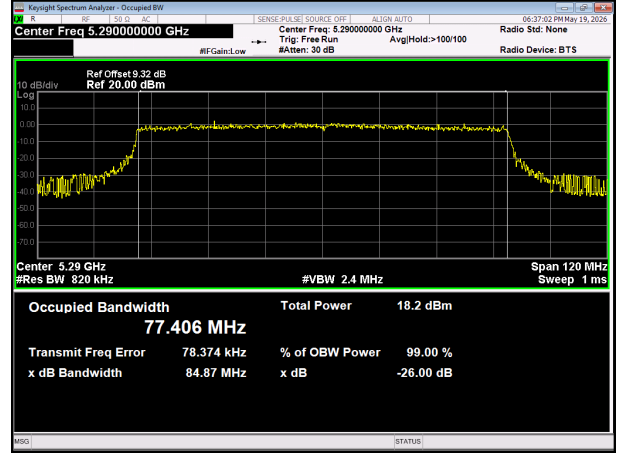


U-NII-2A Band 26dB Bandwidth

IEEE 802.11ax(HE40) High Channel

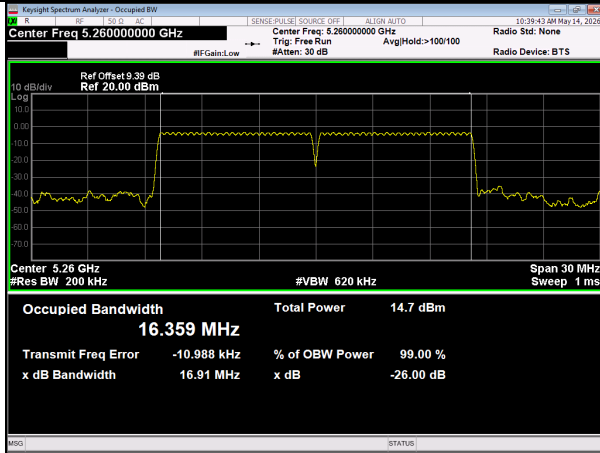


IEEE 802.11ax(HE80)

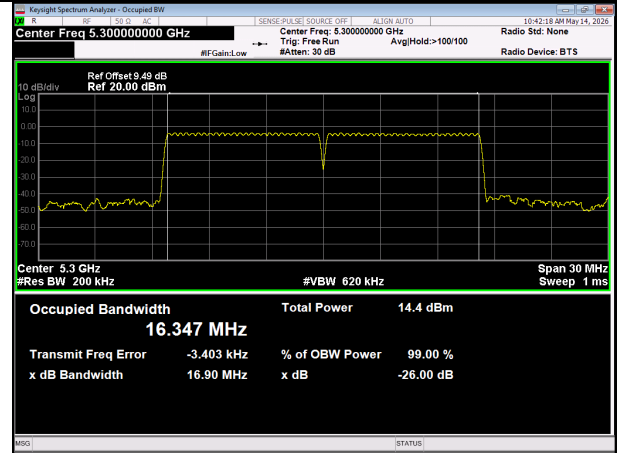


U-NII-2A Band 99% Bandwidth

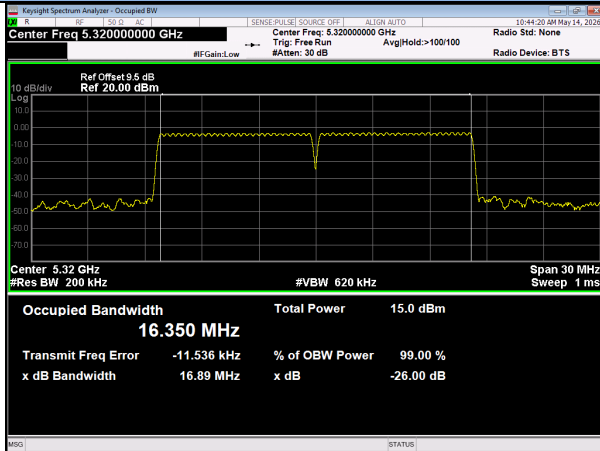
IEEE 802.11a Low Channel



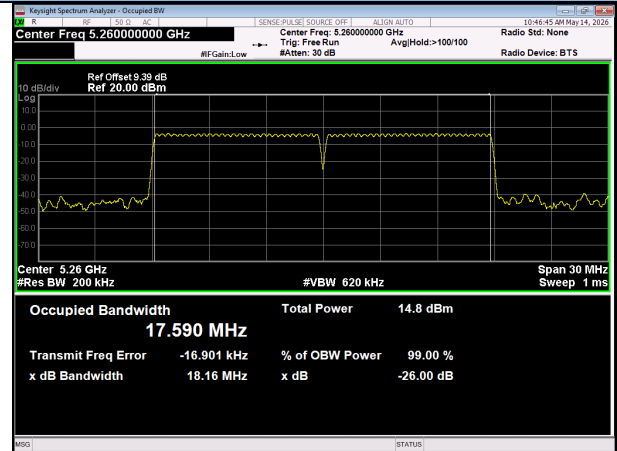
IEEE 802.11a Middle Channel



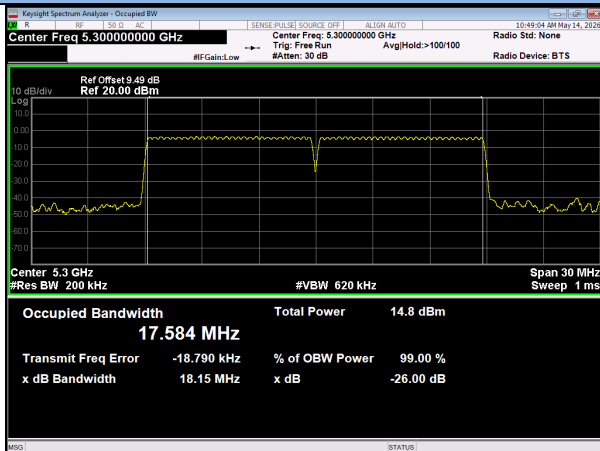
IEEE 802.11a High Channel



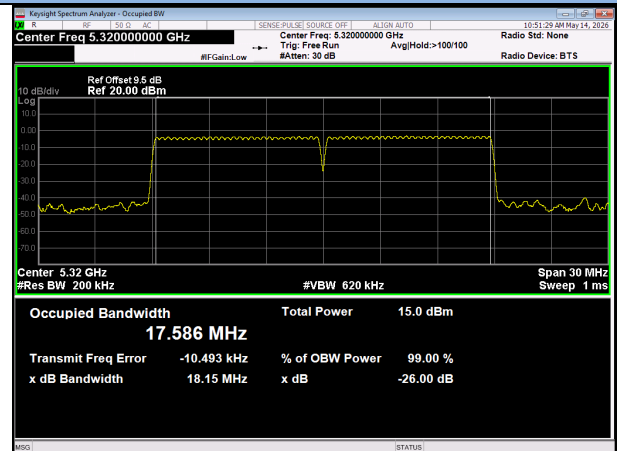
IEEE 802.11n(HT20) Low Channel



IEEE 802.11n(HT20) Middle Channel

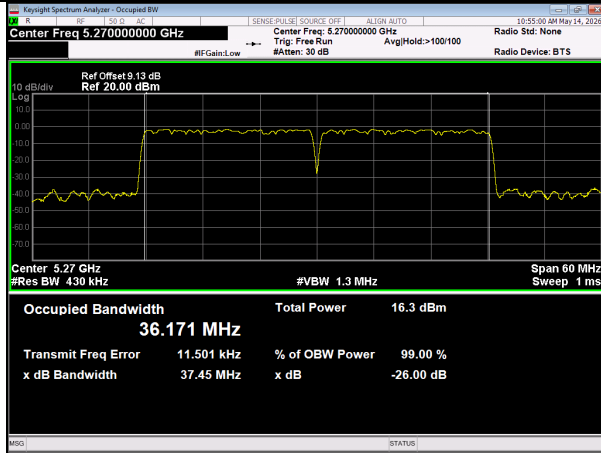


IEEE 802.11n(HT20) High Channel

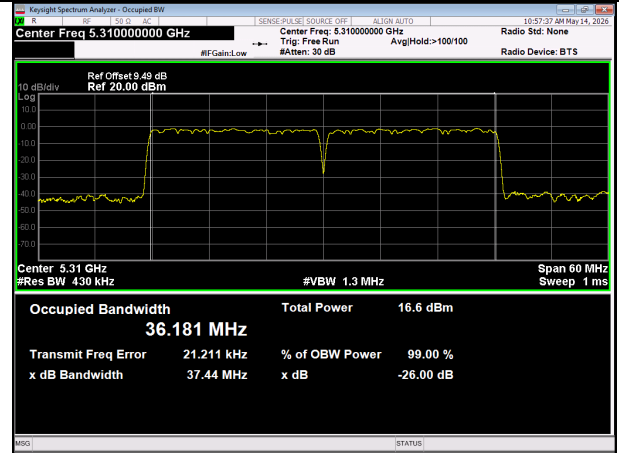


U-NII-2A Band 99% Bandwidth

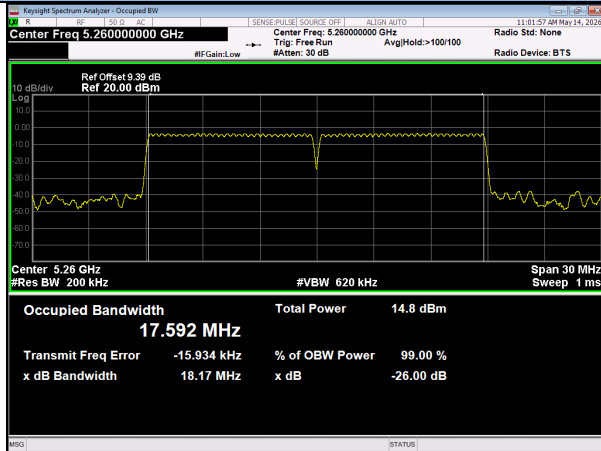
IEEE 802.11n(HT40) Low Channel



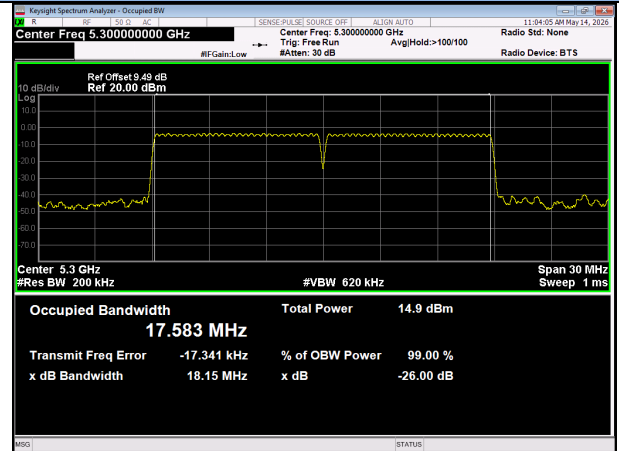
IEEE 802.11n(HT40) High Channel



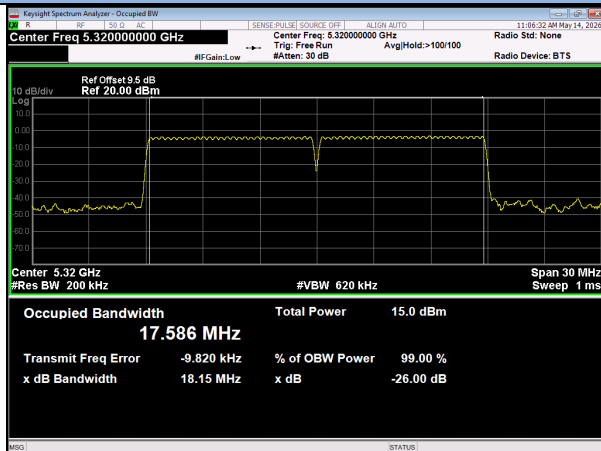
IEEE 802.11ac(VHT20) Low Channel



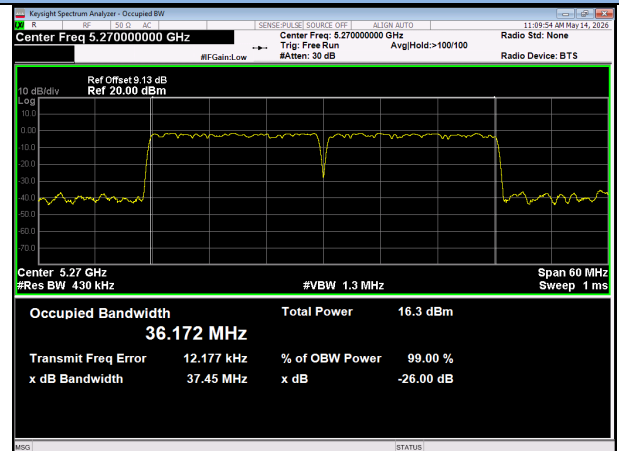
IEEE 802.11ac(VHT20) Middle Channel



IEEE 802.11ac(VHT20) High Channel

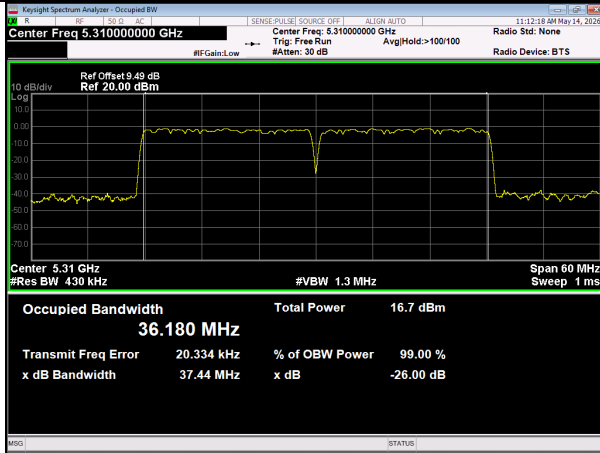


IEEE 802.11ac(VHT40) Low Channel

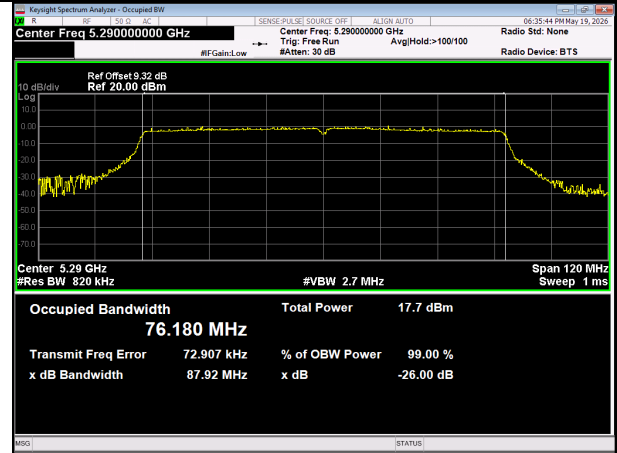


U-NII-2A Band 99% Bandwidth

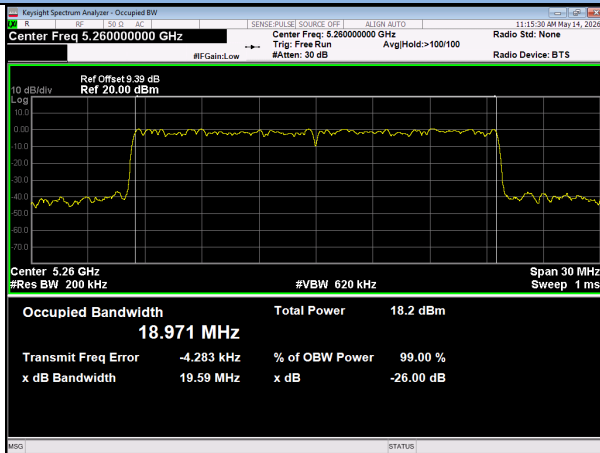
IEEE 802.11ac(VHT40) High Channel



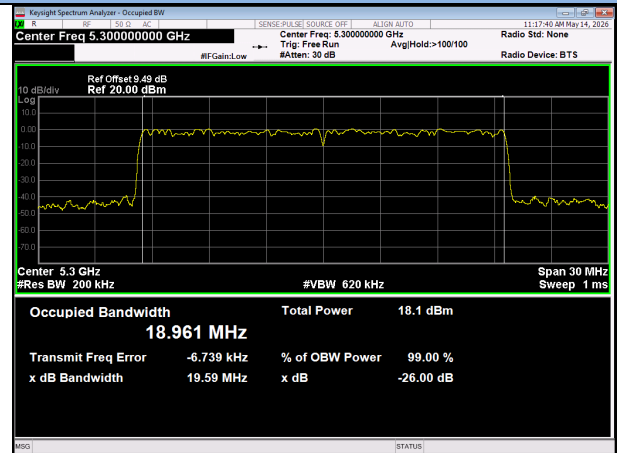
IEEE 802.11ac(VHT80)



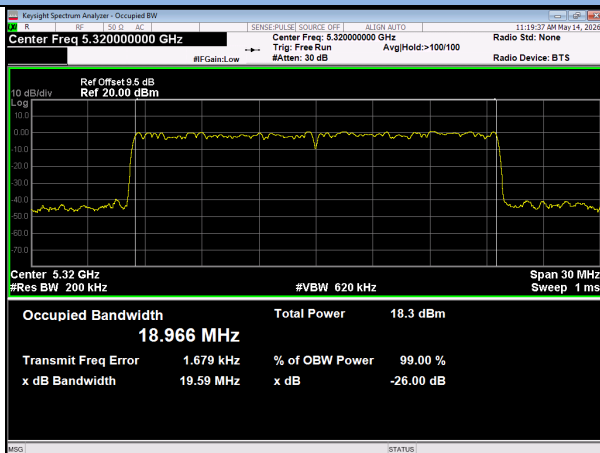
IEEE 802.11ax(HE20) Low Channel



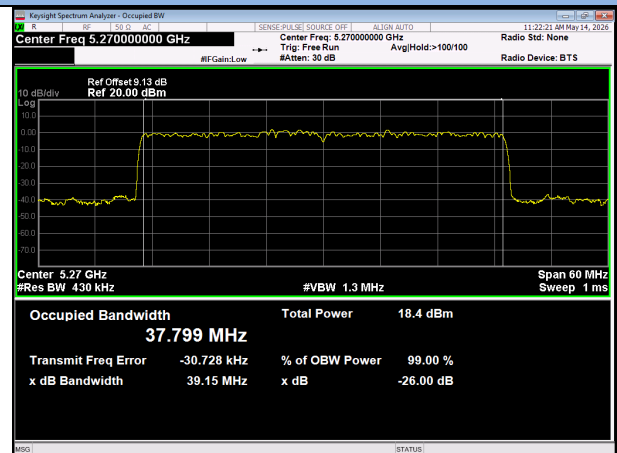
IEEE 802.11ax(HE20) Mid Channel



IEEE 802.11ax(HE20) High Channel

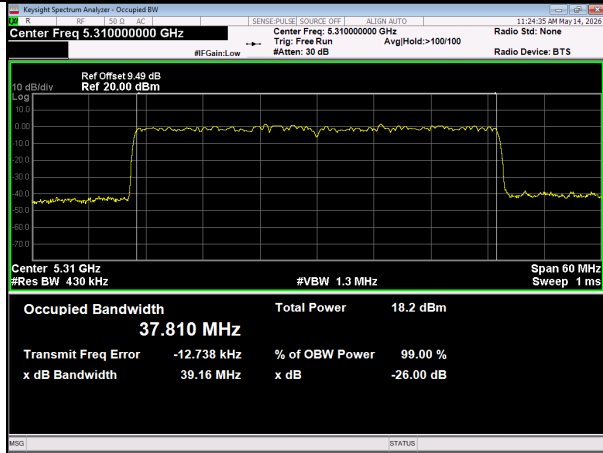


IEEE 802.11ax(HE40) Low Channel

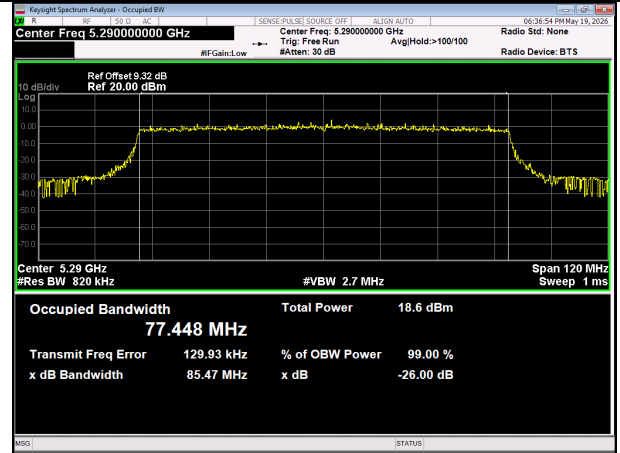


U-NII-2A Band 99% Bandwidth

IEEE 802.11ax(HE40) High Channel

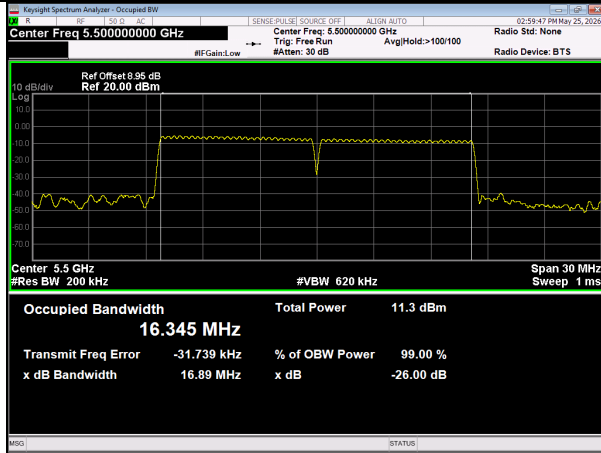


IEEE 802.11ax(HE80)

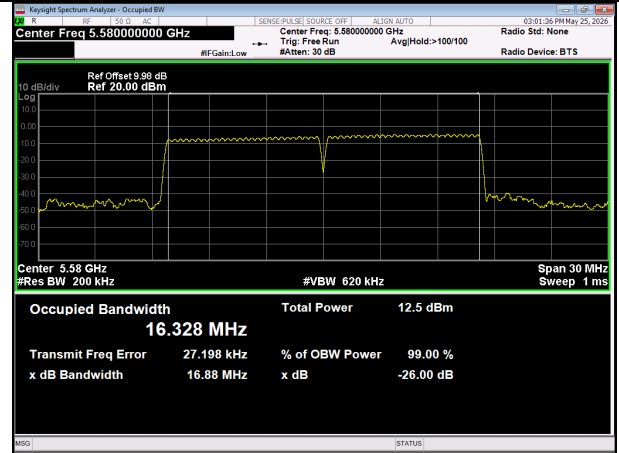


U-NII-2C Band 26dB Bandwidth

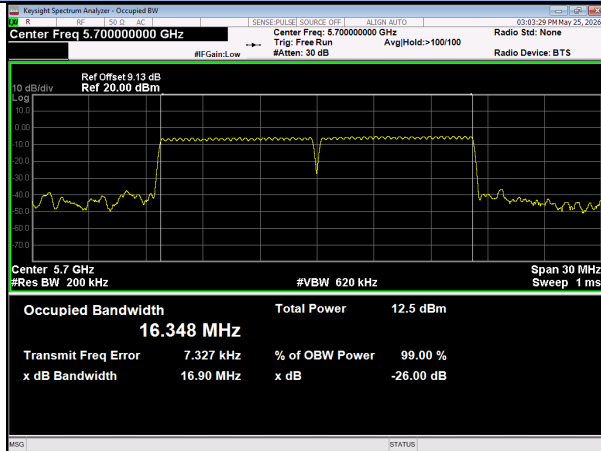
IEEE 802.11a Low Channel



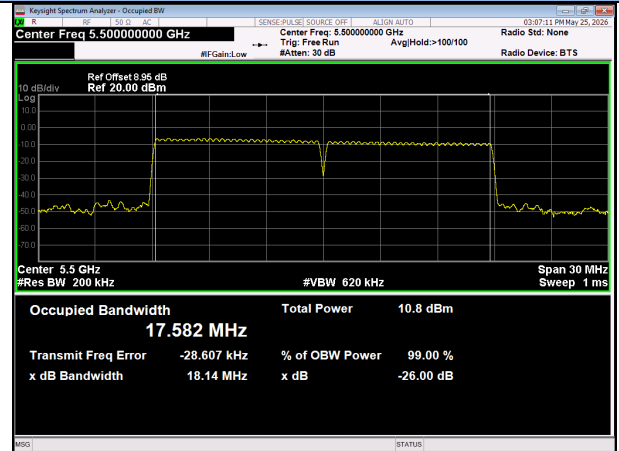
IEEE 802.11a Middle Channel



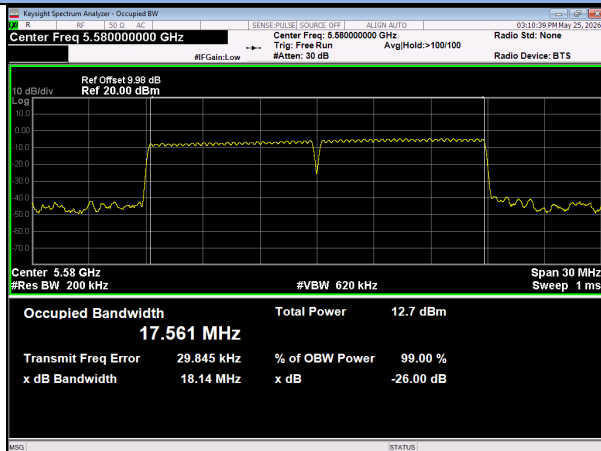
IEEE 802.11a High Channel



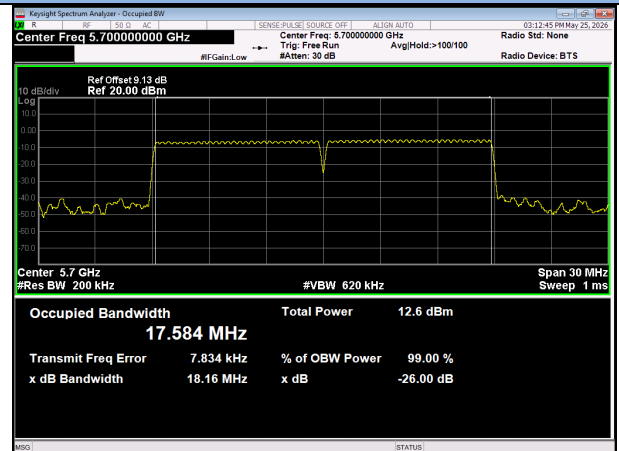
IEEE 802.11n(HT20) Low Channel



IEEE 802.11n(HT20) Middle Channel

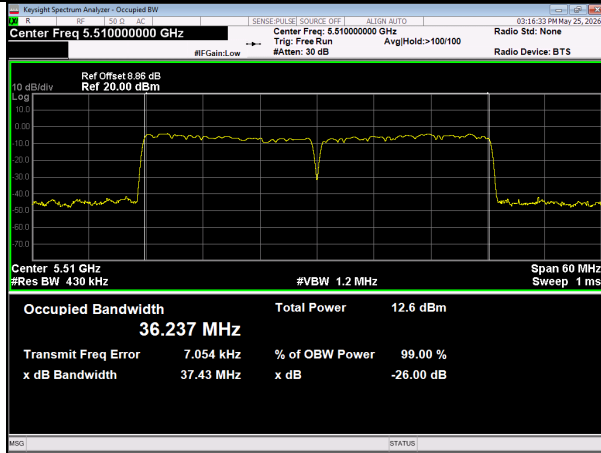


IEEE 802.11n(HT20) High Channel

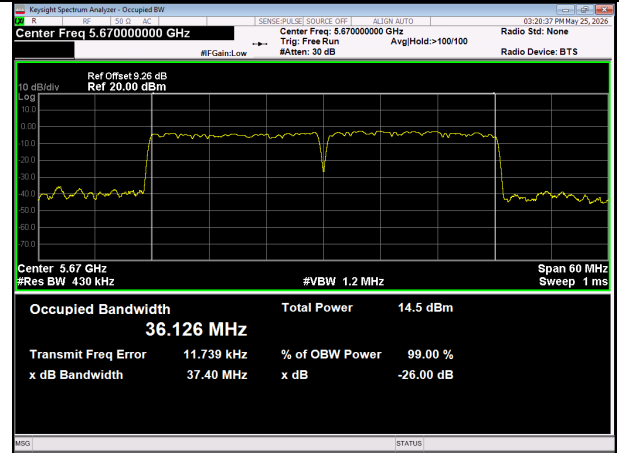


U-NII-2C Band 26dB Bandwidth

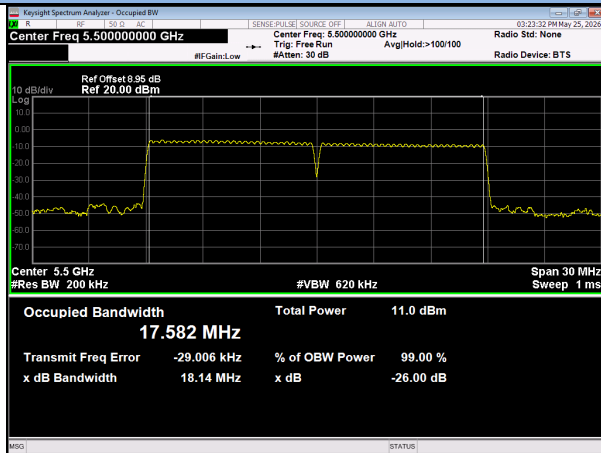
IEEE 802.11n(HT40) Low Channel



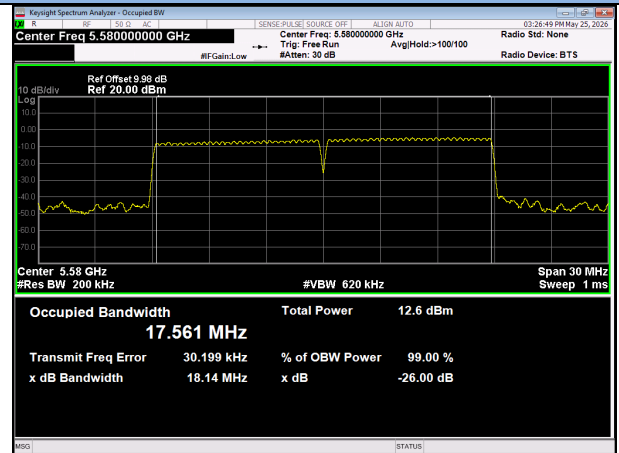
IEEE 802.11n(HT40) High Channel



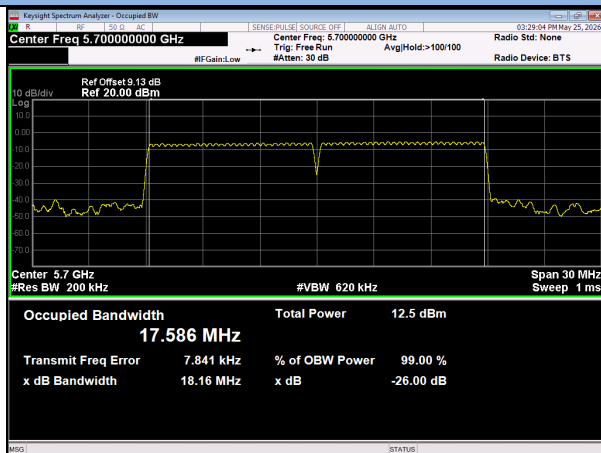
IEEE 802.11ac(VHT20) Low Channel



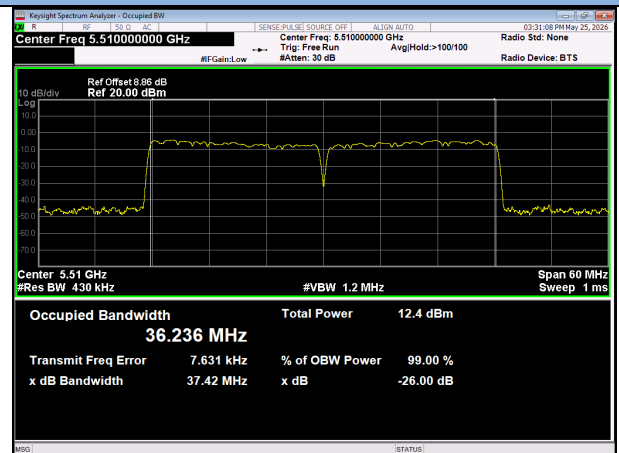
IEEE 802.11ac(VHT20) Middle Channel



IEEE 802.11ac(VHT20) High Channel

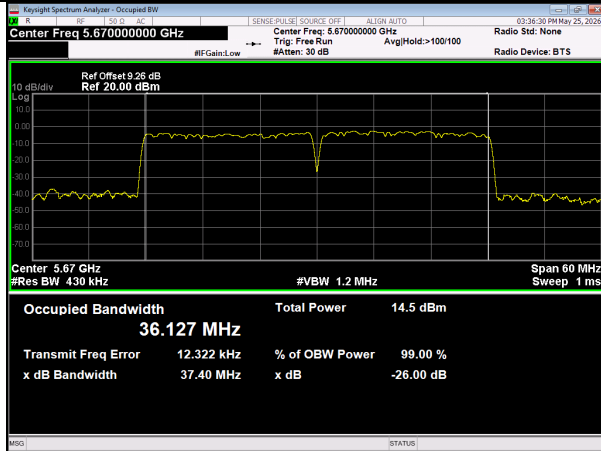


IEEE 802.11ac(VHT40) Low Channel

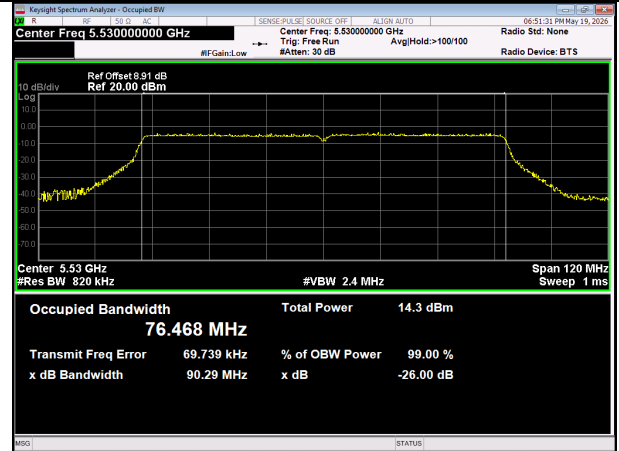


U-NII-2C Band 26dB Bandwidth

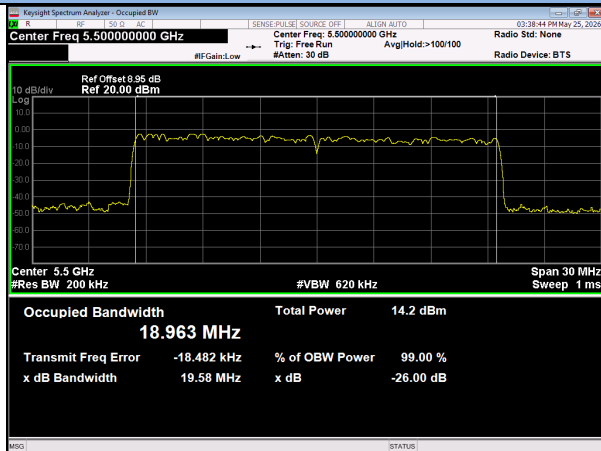
IEEE 802.11ac(VHT40) High Channel



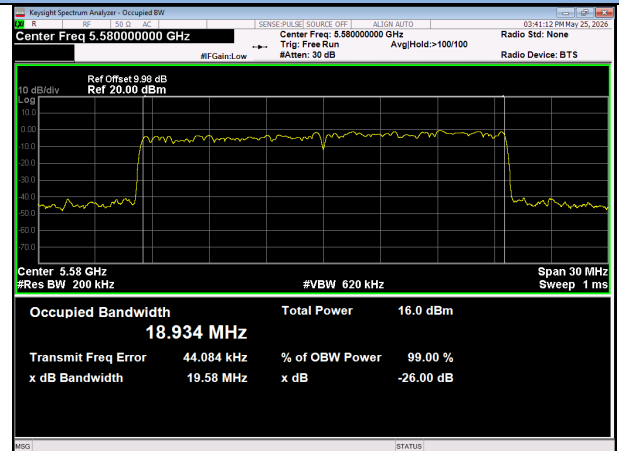
IEEE 802.11ac(VHT80)



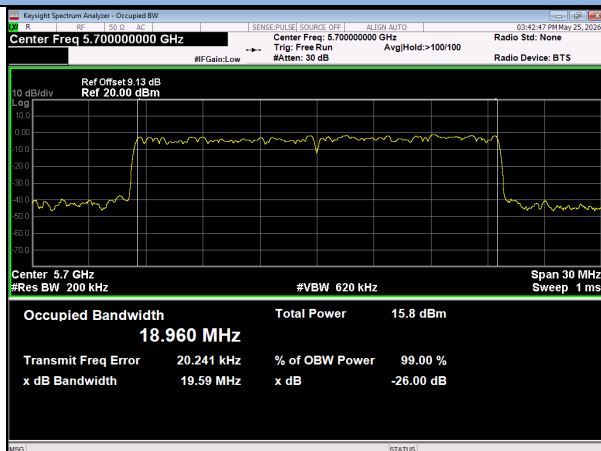
IEEE 802.11ax(HE20) Low Channel



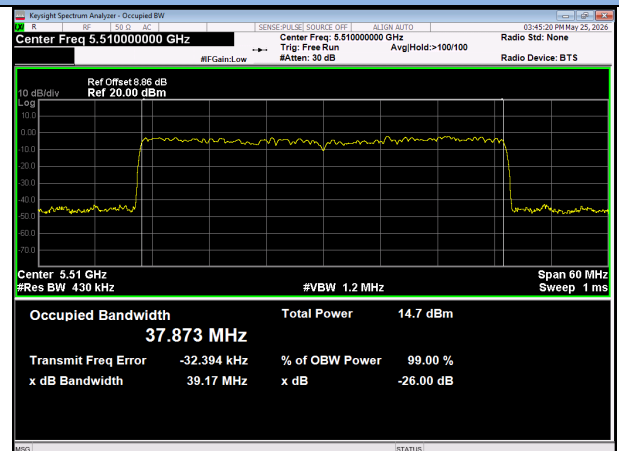
IEEE 802.11ax(HE20) Mid Channel



IEEE 802.11ax(HE20) High Channel

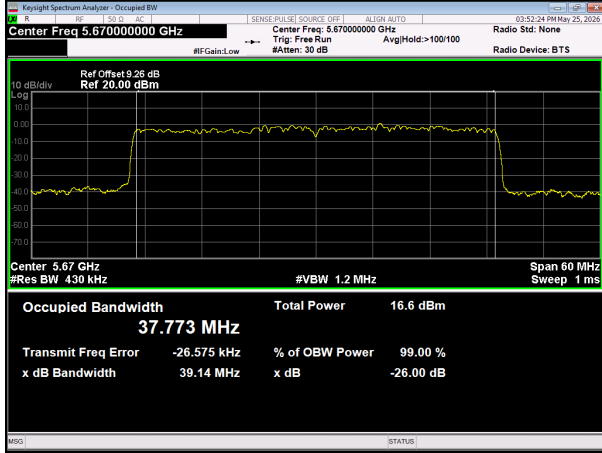


IEEE 802.11ax(HE40) Low Channel

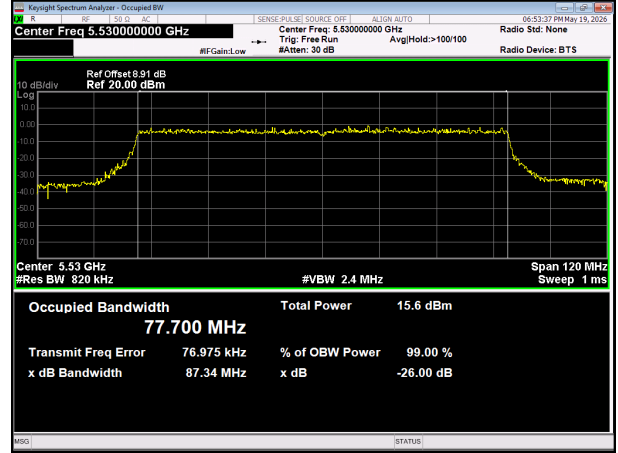


U-NII-2C Band 26dB Bandwidth

IEEE 802.11ax(HE40) High Channel

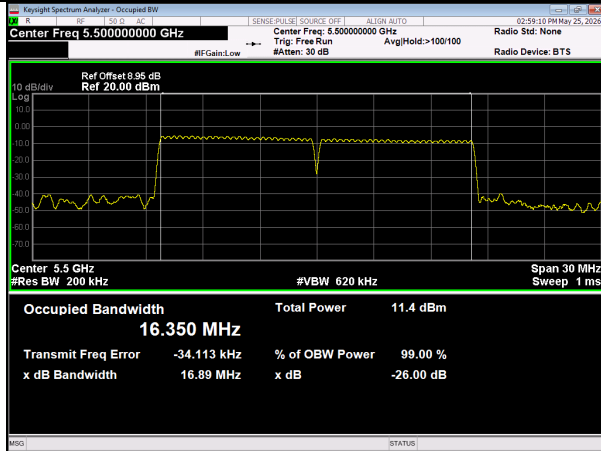


IEEE 802.11ax(HE80)

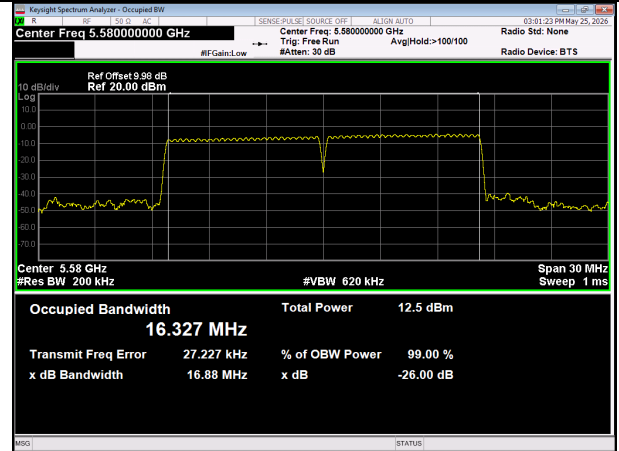


U-NII-2C Band 99% Bandwidth

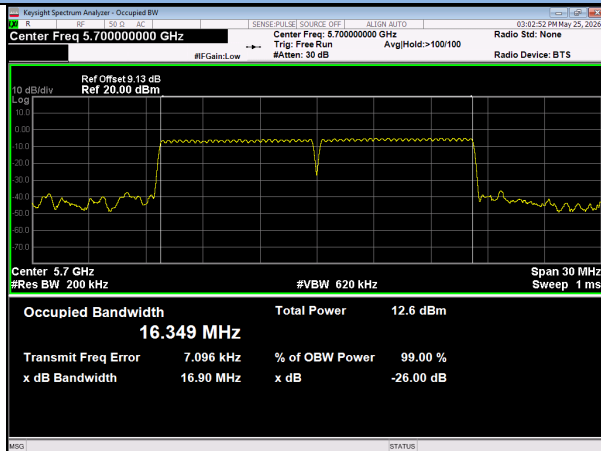
IEEE 802.11a Low Channel



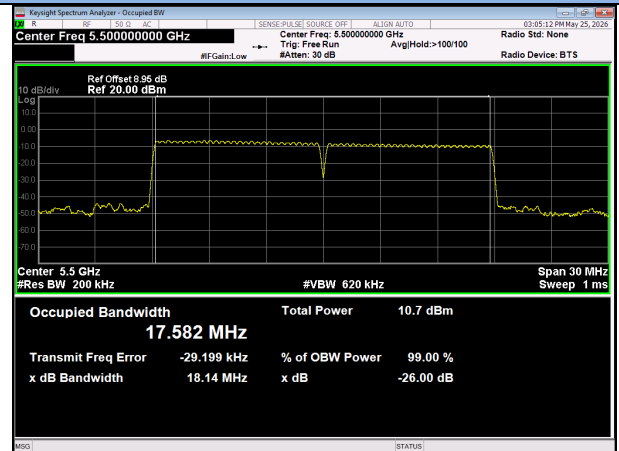
IEEE 802.11a Middle Channel



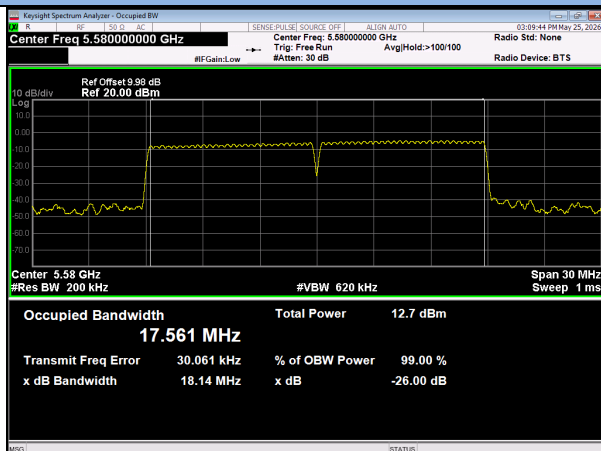
IEEE 802.11a High Channel



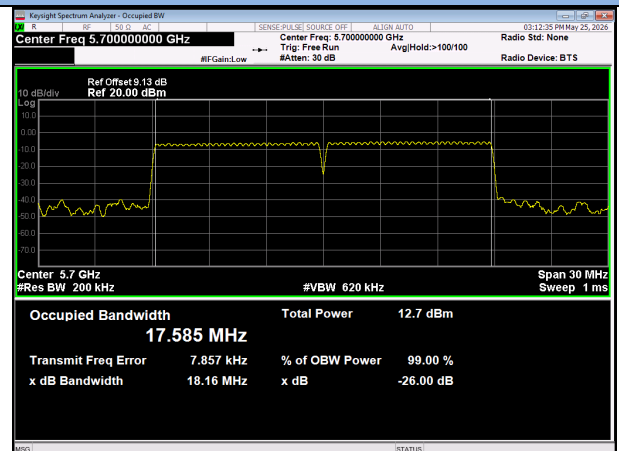
IEEE 802.11n(HT20) Low Channel



IEEE 802.11n(HT20) Middle Channel

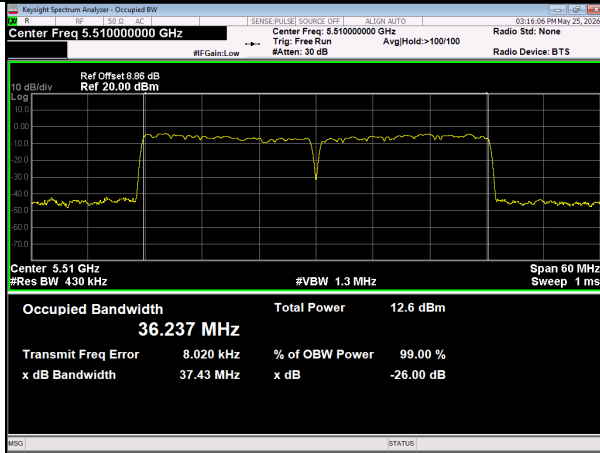


IEEE 802.11n(HT20) High Channel

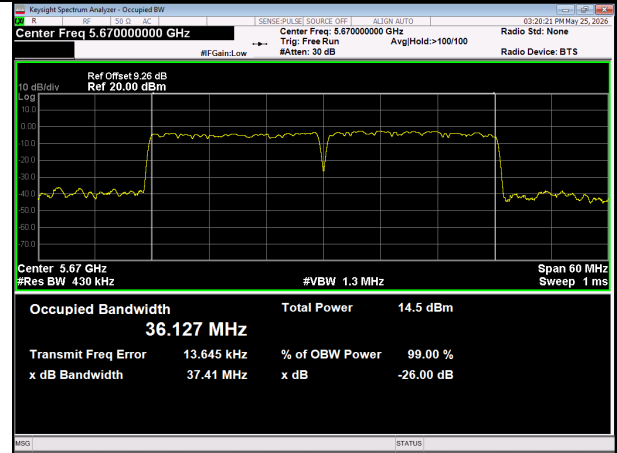


U-NII-2C Band 99% Bandwidth

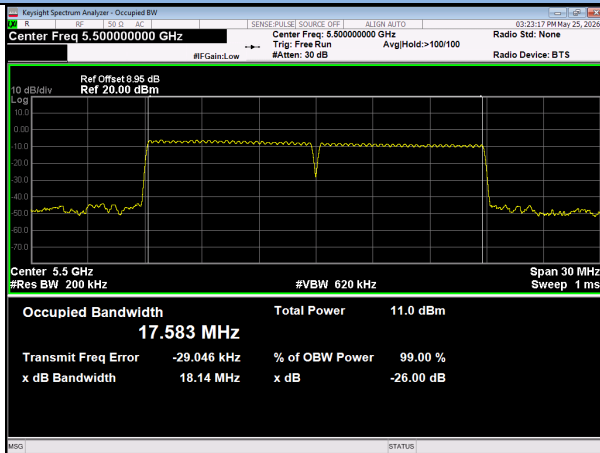
IEEE 802.11n(HT40) Low Channel



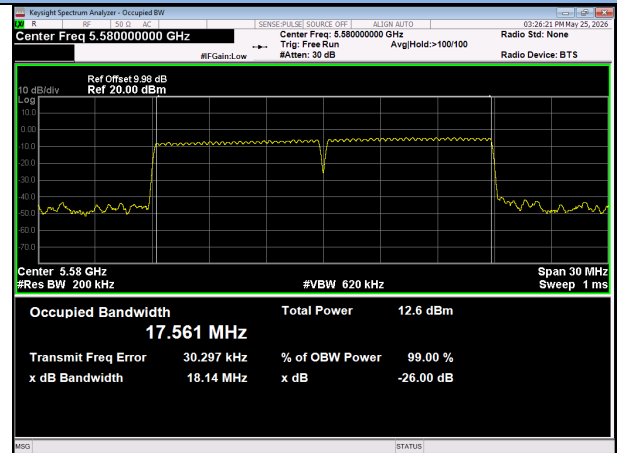
IEEE 802.11n(HT40) High Channel



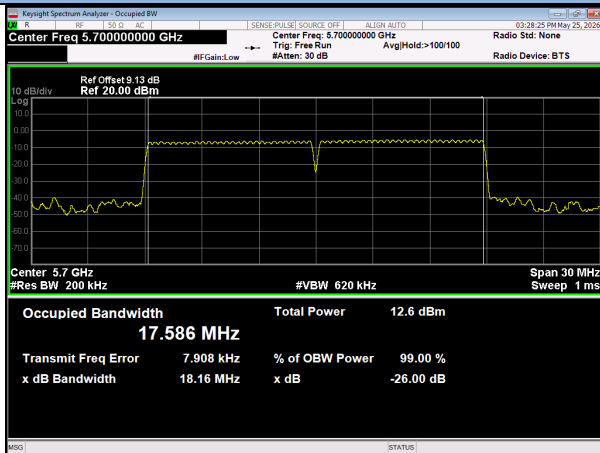
IEEE 802.11ac(VHT20) Low Channel



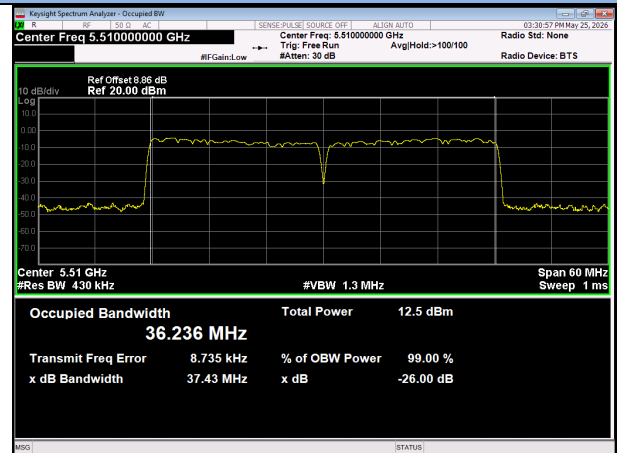
IEEE 802.11ac(VHT20) Middle Channel



IEEE 802.11ac(VHT20) High Channel

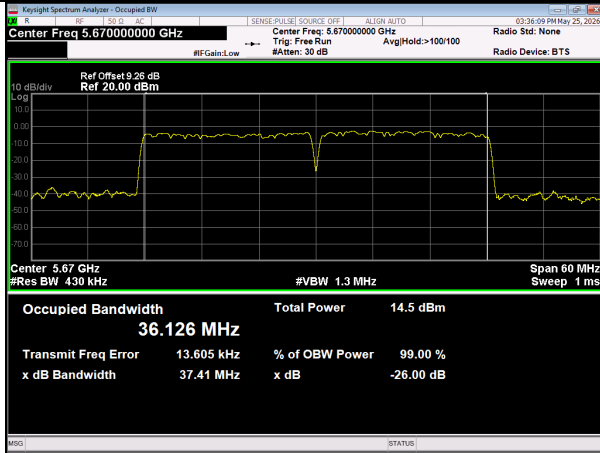


IEEE 802.11ac(VHT40) Low Channel

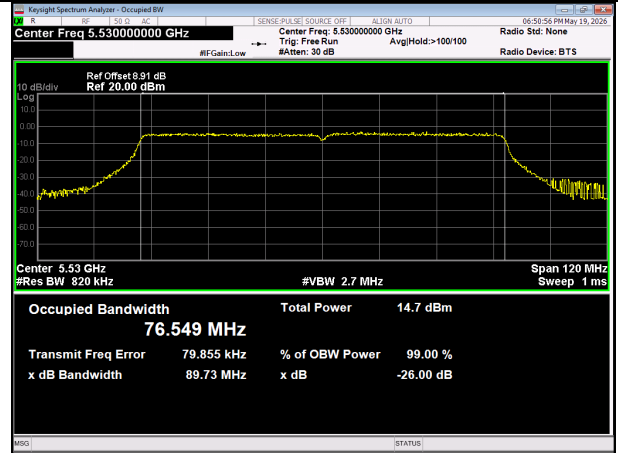


U-NII-2C Band 99% Bandwidth

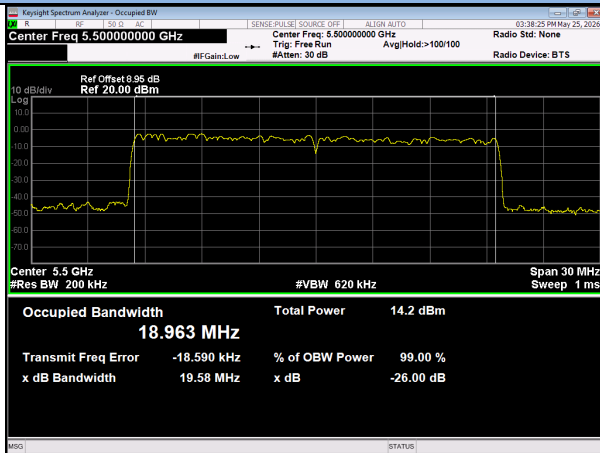
IEEE 802.11ac(VHT40) High Channel



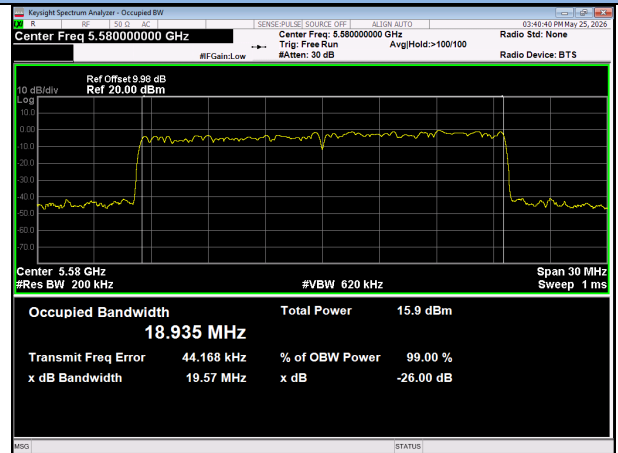
IEEE 802.11ac(VHT80) High Channel



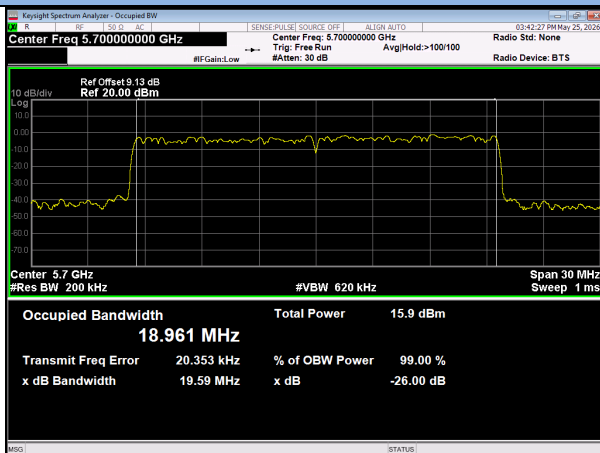
IEEE 802.11ax(HE20) Low Channel



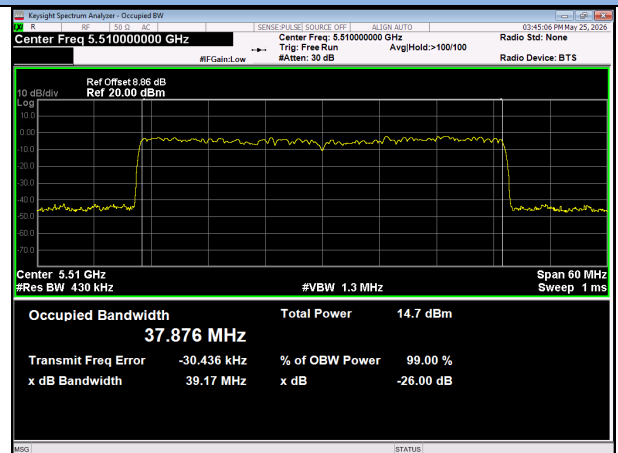
IEEE 802.11ax(HE20) Mid Channel



IEEE 802.11ax(HE20) High Channel

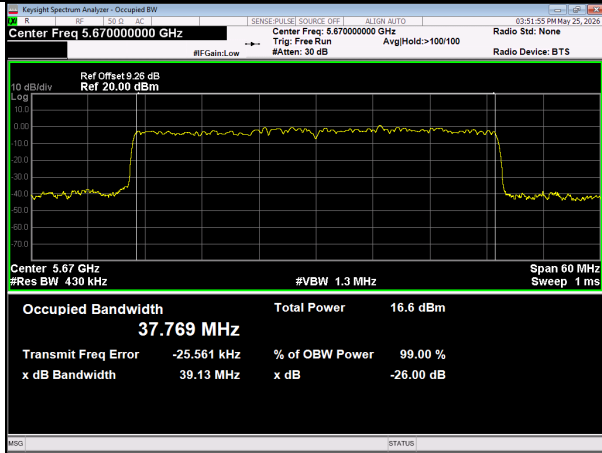


IEEE 802.11ax(HE40) Low Channel

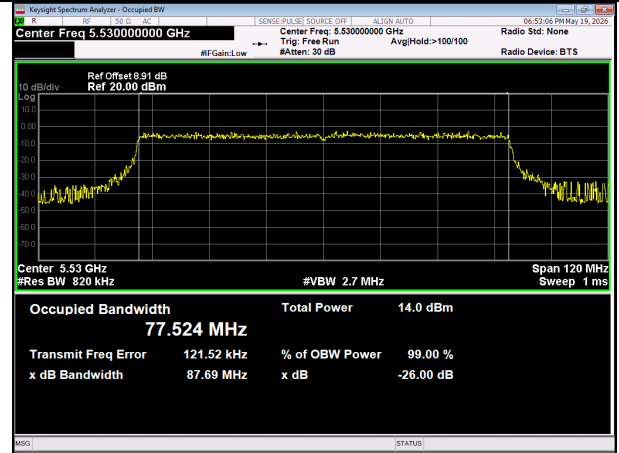


U-NII-2C Band 99% Bandwidth

IEEE 802.11ax(HE40) High Channel



IEEE 802.11ax(HE80)

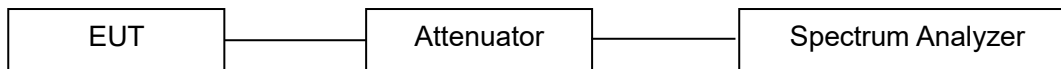


14.5 Power Spectral Density

LIMITS

Operation Band		Limit
☒ 5180~5240MHz	☐ Outdoor access point	17 dBm/MHz
	☐ Indoor access point	17 dBm/MHz
	☐ Fixed point-to-point access points	17 dBm/MHz
	☒ Client devices	11 dBm/MHz
☒ 5260~5320MHz	-	11 dBm/MHz
☒ 5500~5700MHz	-	11 dBm/MHz
☒ 5745~5825MHz	-	30 dBm/500kHz

BLOCK DIAGRAM OF TEST SETUP



TEST PROCEDURES

The antenna port of the EUT was connected to the input of a spectrum analyzer.

Analyzer was set as below according to FCC KDB789033 (v02r01) and ANSI C63.10:

- Measure the duty cycle D of the transmitter output signal
- Set analyzer center frequency to center frequency
- Set span to encompass the entire 99% OBW of the signal
- Set the RBW to: 1MHz
- Set the VBW $\geq$ 3MHz
- Set number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$
- Sweep time = auto couple
- Detector = RMS
- Sweep type = Free run

- j. Trace Average = 100 times
- k. Use the peak search function on the instrument to find the peak of the spectrum
- l. Add $[10 \log (1 / D)]$ to the measured peak value to compute the peak power spectral density
- m. Record the test result

If measured bandwidth of Maximum PSD is specified in 500kHz, add $10\log(500\text{kHz}/\text{RBW})$ to the measured result, whereas RBW (<500kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

TEST RESULTS

PASS

Please refer to the following test plots.

U-NII-1					
Frequency MHz	Data Rate Mbps	Duty Cycle Factor (dB)	PSD dBm	Total PSD with duty cycle factor	Limit dBm/ MHz
IEEE 802.11a Mode (Antenna Gain= -1.35dBi)					
Channel: 5180	6	0	3.495	3.495	11
Channel: 5200	6		3.226	3.226	11
Channel: 5240	6		3.900	3.900	11
IEEE 802.11n(HT20) Mode (Antenna Gain= -1.35dBi)					
Channel: 5180	MCS 0	0	2.914	2.914	11
Channel: 5200	MCS 0		2.469	2.469	11
Channel: 5240	MCS 0		3.439	3.439	11
IEEE 802.11n(HT40) Mode (Antenna Gain= -1.35dBi)					
Channel: 5190	MCS 0	0	0.314	0.314	11
Channel: 5230	MCS 0		0.566	0.566	11
IEEE 802.11ac(VHT20) Mode (Antenna Gain= -1.35dBi)					
Channel: 5180	MCS 0	0	2.954	2.954	11
Channel: 5200	MCS 0		2.515	2.515	11
Channel: 5240	MCS 0		3.414	3.414	11
IEEE 802.11ac(VHT40) Mode (Antenna Gain= -1.35dBi)					
Channel: 5190	MCS 0	0	0.055	0.055	11
Channel: 5230	MCS 0		0.505	0.505	11
IEEE 802.11ac(VHT80) Mode (Antenna Gain= -1.35dBi)					
Channel: 5210	MCS 0	0.33	-8.661	-8.331	11
IEEE 802.11ax(HE20) Mode (Antenna Gain= -1.35dBi)					
Channel: 5180	MCS 0	0	2.651	2.651	11
Channel: 5200	MCS 0		2.499	2.499	11
Channel: 5240	MCS 0		3.115	3.115	11
IEEE 802.11ax(HE40) Mode (Antenna Gain= -1.35dBi)					
Channel: 5190	MCS 0	0	0.155	0.155	11
Channel: 5230	MCS 0		0.407	0.407	11
IEEE 802.11ax(HE80) Mode (Antenna Gain= -1.35dBi)					
Channel: 5210	MCS 0	2.05	-8.868	-6.818	11
Note: Please refer to section 13 for duty cycle factor.					

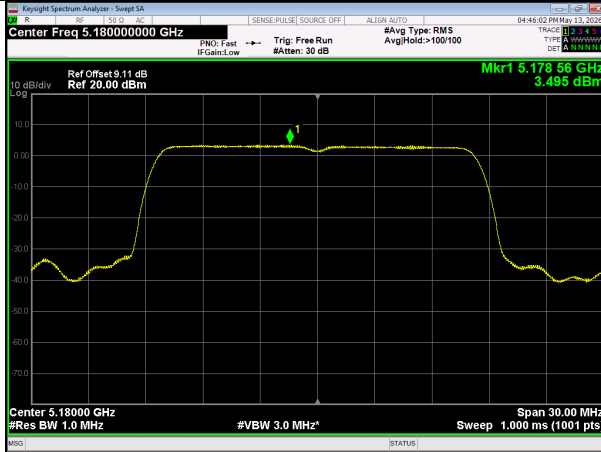
U-NII-2A					
Frequency MHz	Data Rate Mbps	Duty Cycle Factor (dB)	PSD dBm	Total PSD with duty cycle factor	Limit dBm/ MHz
IEEE 802.11a Mode (Antenna Gain= -1.35dBi)					
Channel: 5260	6	0	1.283	1.283	11
Channel: 5300	6		1.849	1.849	11
Channel: 5320	6		2.192	2.192	11
IEEE 802.11n(HT20) Mode (Antenna Gain= -1.35dBi)					
Channel: 5260	MCS 0	0	1.397	1.397	11
Channel: 5300	MCS 0		1.520	1.520	11
Channel: 5320	MCS 0		1.597	1.597	11
IEEE 802.11n(HT40) Mode (Antenna Gain= -1.35dBi)					
Channel: 5270	MCS 0	0	-1.758	-1.758	11
Channel: 5310	MCS 0		-1.514	-1.514	11
IEEE 802.11ac(VHT20) Mode (Antenna Gain= -1.35dBi)					
Channel: 5260	MCS 0	0	1.584	1.584	11
Channel: 5300	MCS 0		1.575	1.575	11
Channel: 5320	MCS 0		1.764	1.764	11
IEEE 802.11ac(VHT40) Mode (Antenna Gain= -1.35dBi)					
Channel: 5270	MCS 0	0	-1.721	-1.721	11
Channel: 5310	MCS 0		-1.409	-1.409	11
IEEE 802.11ac(VHT80) Mode (Antenna Gain= -1.35dBi)					
Channel: 5290	MCS 0	0.21	-7.303	-7.093	11
IEEE 802.11ax(HE20) Mode (Antenna Gain= -1.35dBi)					
Channel: 5260	MCS 0	0	1.270	1.270	11
Channel: 5300	MCS 0		1.172	1.172	11
Channel: 5320	MCS 0		1.504	1.504	11
IEEE 802.11ax(HE40) Mode (Antenna Gain= -1.35dBi)					
Channel: 5270	MCS 0	0	-1.975	-1.975	11
Channel: 5310	MCS 0		-1.734	-1.734	11
IEEE 802.11ax(HE80) Mode (Antenna Gain= -1.35dBi)					
Channel: 5290	MCS 0	1.31	-8.794	-7.484	11
Note: Please refer to section 13 for duty cycle factor.					

U-NII-2C					
Frequency MHz	Data Rate Mbps	Duty Cycle Factor (dB)	PSD dBm	Total PSD with duty cycle factor	Limit dBm/ MHz
IEEE 802.11a Mode (Antenna Gain= -1.35dBi)					
Channel: 5500	6	0	-0.825	-0.825	11
Channel: 5580	6		0.515	0.515	11
Channel: 5700	6		-0.149	-0.149	11
IEEE 802.11n(HT20) Mode (Antenna Gain= -1.35dBi)					
Channel: 5500	MCS 0	0	-1.328	-1.328	11
Channel: 5580	MCS 0		0.332	0.332	11
Channel: 5700	MCS 0		-0.372	-0.372	11
IEEE 802.11n(HT40) Mode (Antenna Gain= -1.35dBi)					
Channel: 5510	MCS 0	0	-4.589	-4.589	11
Channel: 5670	MCS 0		-2.903	-2.903	11
IEEE 802.11ac(VHT20) Mode (Antenna Gain= -1.35dBi)					
Channel: 5500	MCS 0	0	-1.401	-1.401	11
Channel: 5580	MCS 0		0.078	0.078	11
Channel: 5700	MCS 0		-0.643	-0.643	11
IEEE 802.11ac(VHT40) Mode (Antenna Gain= -1.35dBi)					
Channel: 5510	MCS 0	0	-4.633	-4.633	11
Channel: 5670	MCS 0		-2.850	-2.850	11
IEEE 802.11ac(VHT80) Mode (Antenna Gain= -1.35dBi)					
Channel: 5610	MCS 0	0.31	-11.795	-11.485	11
IEEE 802.11ax(HE20) Mode (Antenna Gain= -1.35dBi)					
Channel: 5500	MCS 0	0	-1.429	-1.429	11
Channel: 5580	MCS 0		0.508	0.508	11
Channel: 5700	MCS 0		-0.436	-0.436	11
IEEE 802.11ax(HE40) Mode (Antenna Gain= -1.35dBi)					
Channel: 5510	MCS 0	0	-4.621	-4.621	11
Channel: 5670	MCS 0		-3.074	-3.074	11
IEEE 802.11ax(HE80) Mode (Antenna Gain= -1.35dBi)					
Channel: 5610	MCS 0	1.66	-14.078	-12.418	11
Note: Please refer to section 13 for duty cycle factor.					

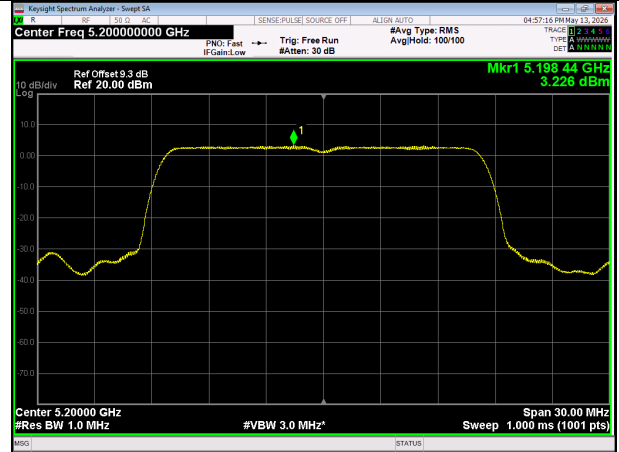
U-NII-3					
Frequency MHz	Data Rate Mbps	Duty Cycle Factor (dB)	PSD dBm	Total PSD with duty cycle factor	Limit dBm/ 500kHz
IEEE 802.11a Mode (Antenna Gain= -1.35dBi)					
Channel: 5745	6	0	-0.040	-0.040	30
Channel: 5785	6		-1.363	-1.363	30
Channel: 5825	6		-1.248	-1.248	30
IEEE 802.11n(HT20) Mode (Antenna Gain= -1.35dBi)					
Channel: 5745	MCS 0	0	-0.713	-0.713	30
Channel: 5785	MCS 0		-1.625	-1.625	30
Channel: 5825	MCS 0		-1.347	-1.347	30
IEEE 802.11n(HT40) Mode (Antenna Gain= -1.35dBi)					
Channel: 5755	MCS 0	0	-3.465	-3.465	30
Channel: 5795	MCS 0		-4.007	-4.007	30
IEEE 802.11ac(VHT20) Mode (Antenna Gain= -1.35dBi)					
Channel: 5745	MCS 0	0	-0.092	-0.092	30
Channel: 5785	MCS 0		-1.145	-1.145	30
Channel: 5825	MCS 0		-0.827	-0.827	30
IEEE 802.11ac(VHT40) Mode (Antenna Gain= -1.35dBi)					
Channel: 5755	MCS 0	0	-3.052	-3.052	30
Channel: 5795	MCS 0		-4.148	-4.148	30
IEEE 802.11ac(VHT80) Mode (Antenna Gain= -1.35dBi)					
Channel: 5755	MCS 0	0.24	-6.913	-6.673	30
IEEE 802.11ax(HE20) Mode (Antenna Gain= -1.35dBi)					
Channel: 5745	MCS 0	0	-0.434	-0.434	30
Channel: 5785	MCS 0		-1.494	-1.494	30
Channel: 5825	MCS 0		-1.091	-1.091	30
IEEE 802.11ax(HE40) Mode (Antenna Gain= -1.35dBi)					
Channel: 5755	MCS 0	0	-3.173	-3.173	30
Channel: 5795	MCS 0		-4.107	-4.107	30
IEEE 802.11ax(HE80) Mode (Antenna Gain= -1.35dBi)					
Channel: 5755	MCS 0	1.07	-7.976	-6.906	30
Note: Please refer to section 13 for duty cycle factor.					

U-NII-1 Band

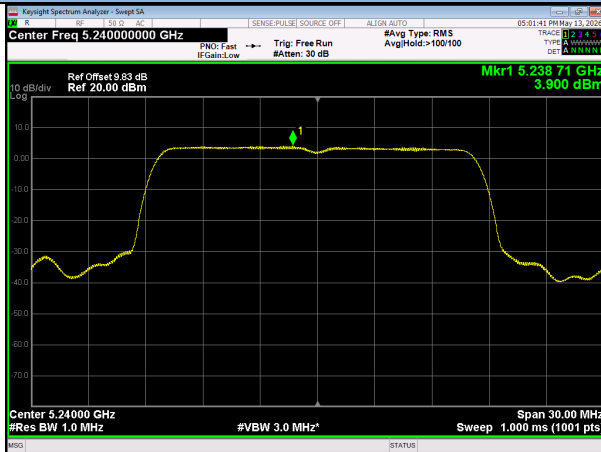
IEEE 802.11a Low Channel



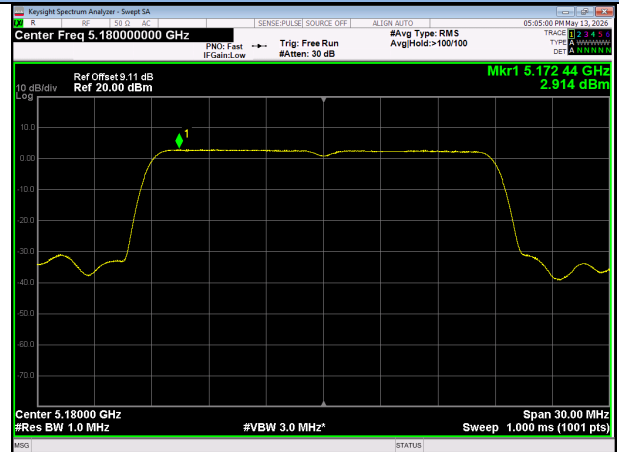
IEEE 802.11a Middle Channel



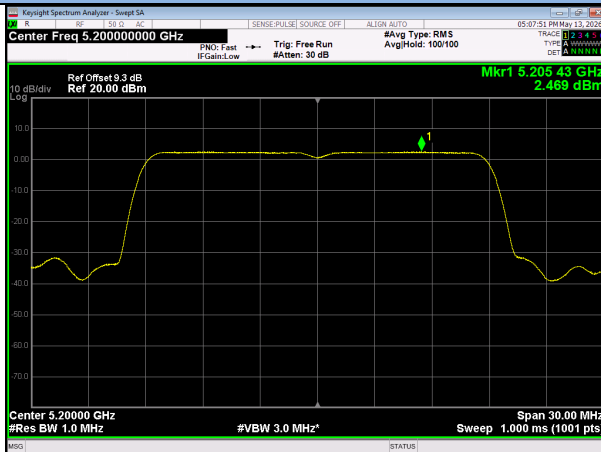
IEEE 802.11a High Channel



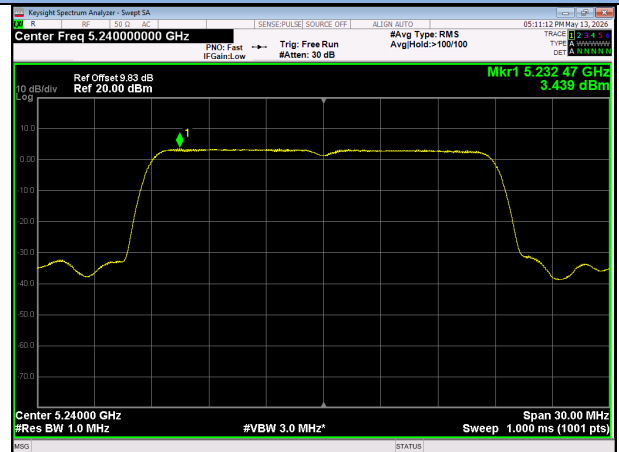
IEEE 802.11n(HT20) Low Channel



IEEE 802.11n(HT20) Middle Channel

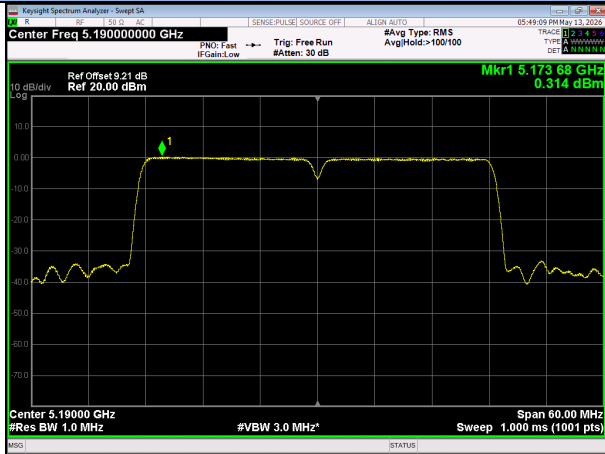


IEEE 802.11n(HT20) High Channel

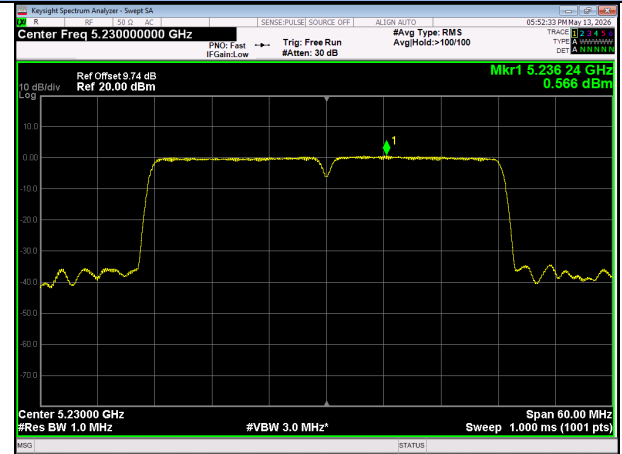


U-NII-1 Band

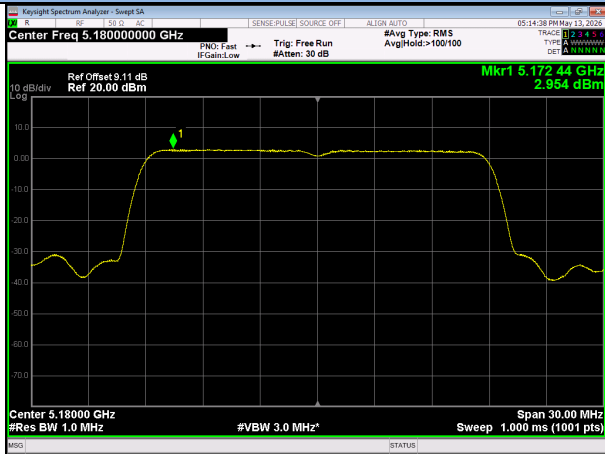
IEEE 802.11n(HT40) Low Channel



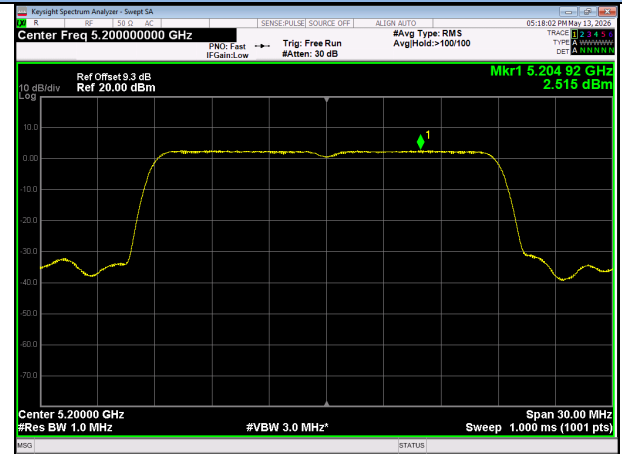
IEEE 802.11n(HT40) High Channel



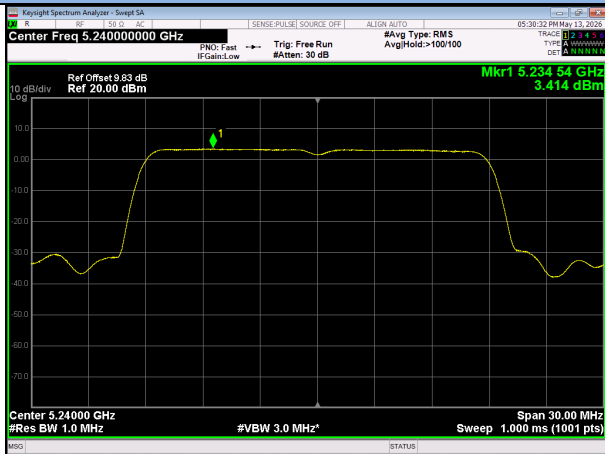
IEEE 802.11ac(VHT20) Low Channel



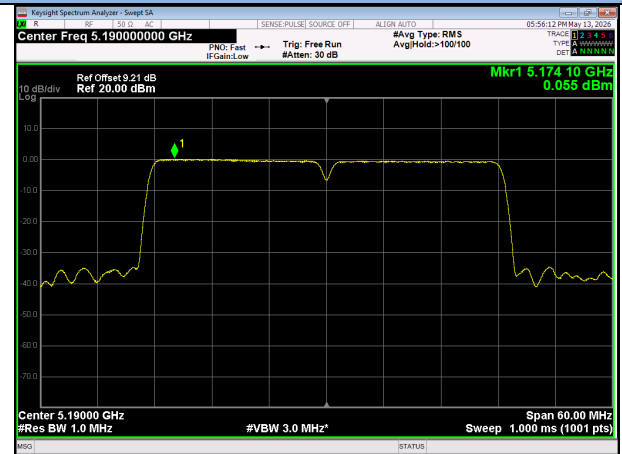
IEEE 802.11ac(VHT20) Middle Channel



IEEE 802.11ac(VHT20) High Channel

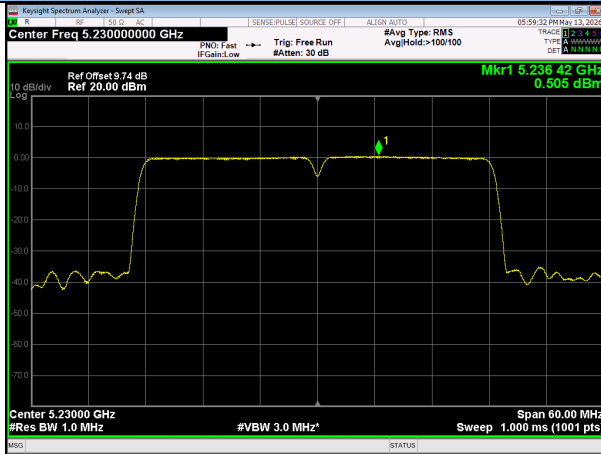


IEEE 802.11ac(VHT40) Low Channel

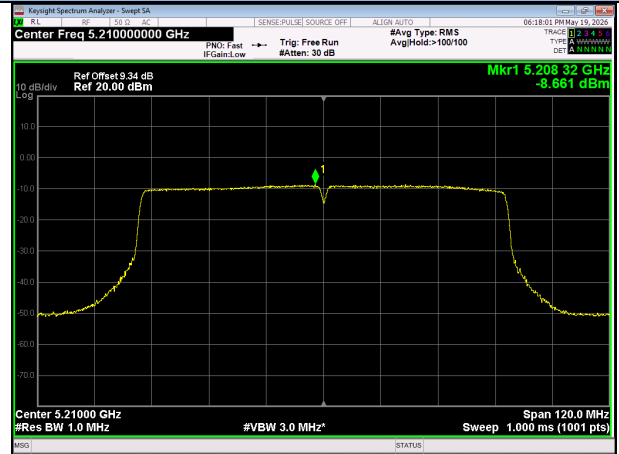


U-NII-1 Band

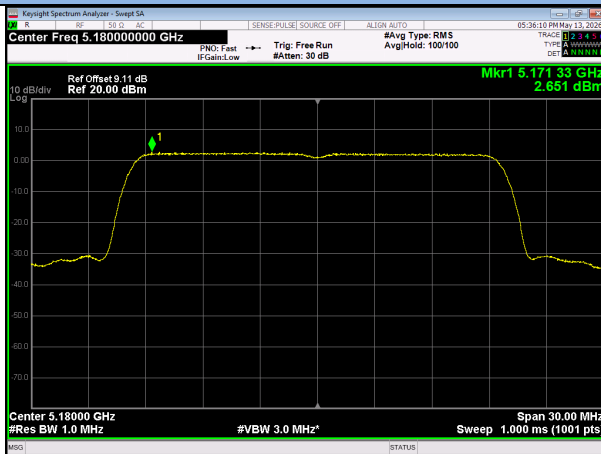
IEEE 802.11ac(VHT40) High Channel



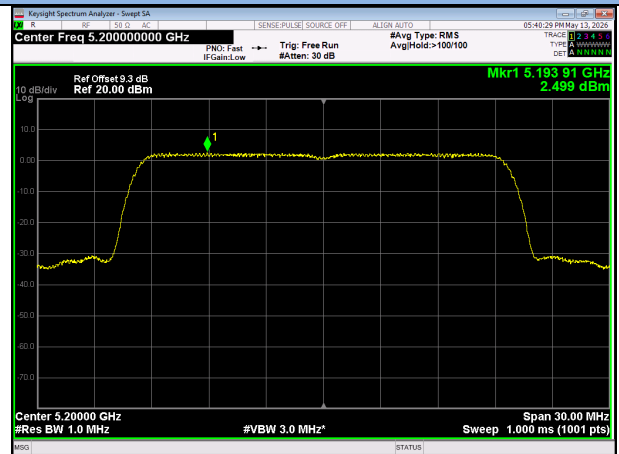
IEEE 802.11ac(VHT80)



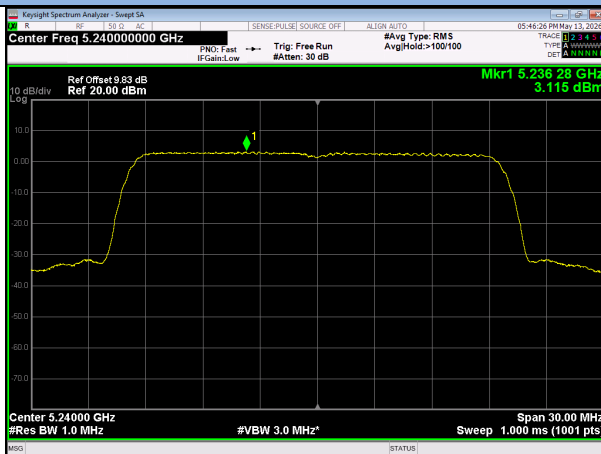
IEEE 802.11ax(HE20) Low Channel



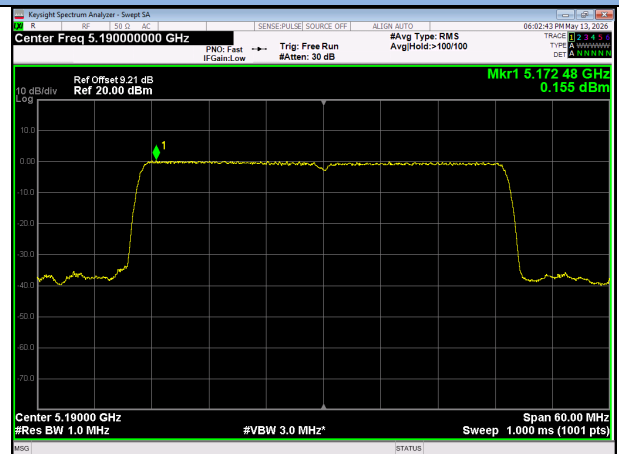
IEEE 802.11ax(HE20) Mid Channel



IEEE 802.11ax(HE20) High Channel

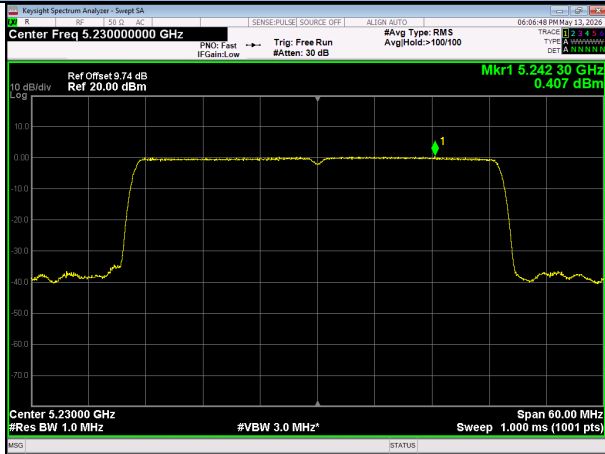


IEEE 802.11ax(HE40) Low Channel

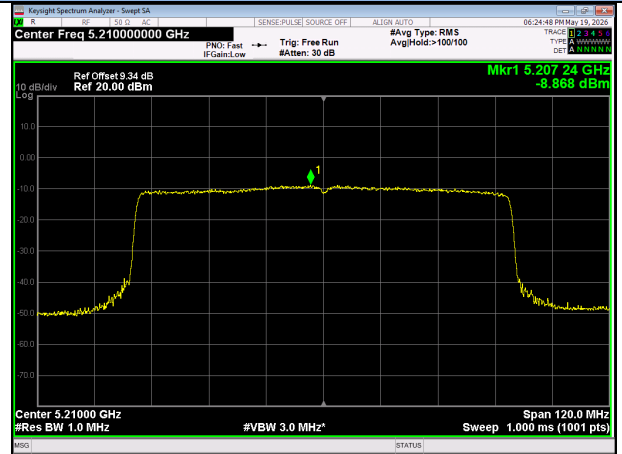


U-NII-1 Band

IEEE 802.11ax(HE40) High Channel

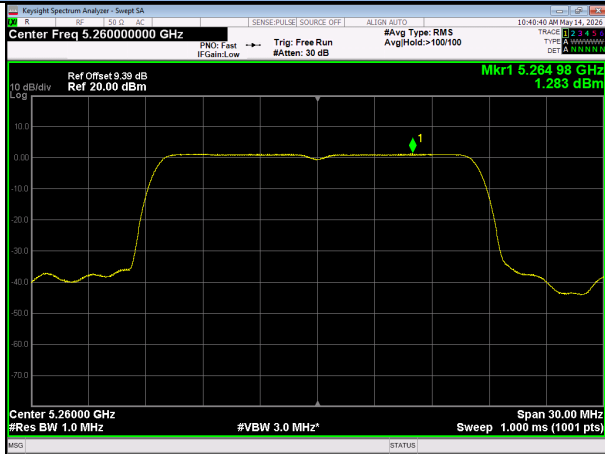


IEEE 802.11ax(HE80)

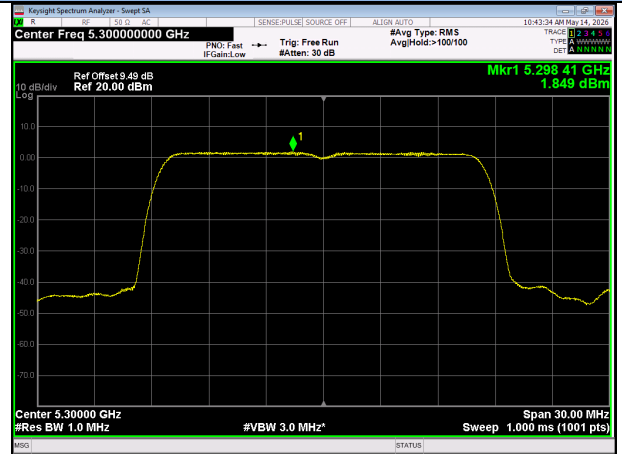


U-NII-2A Band

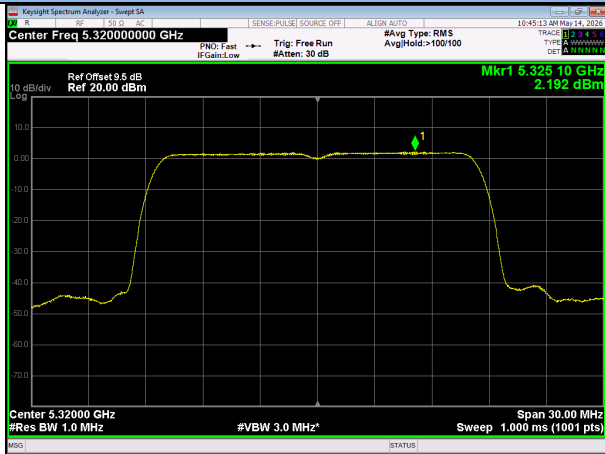
IEEE 802.11a Low Channel



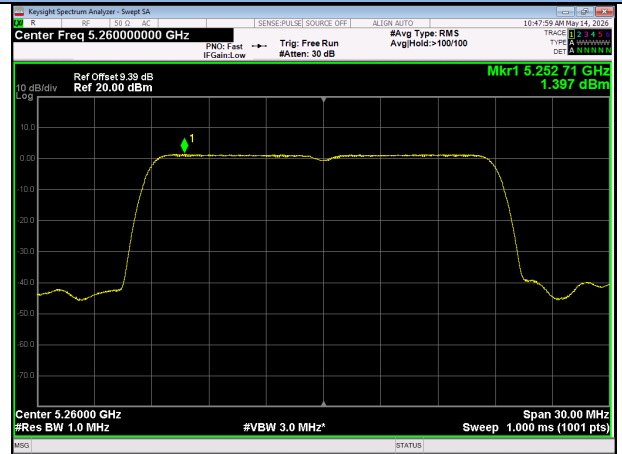
IEEE 802.11a Middle Channel



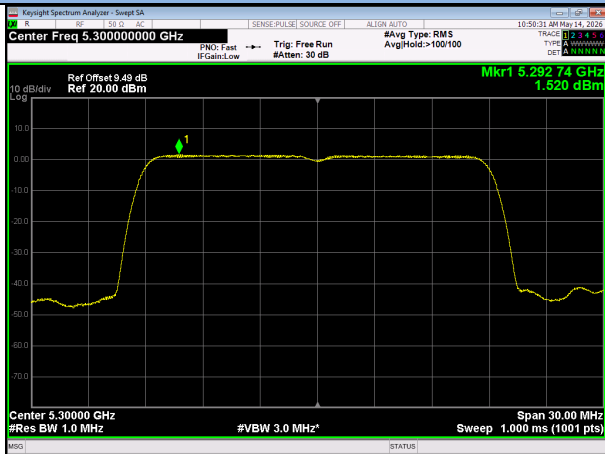
IEEE 802.11a High Channel



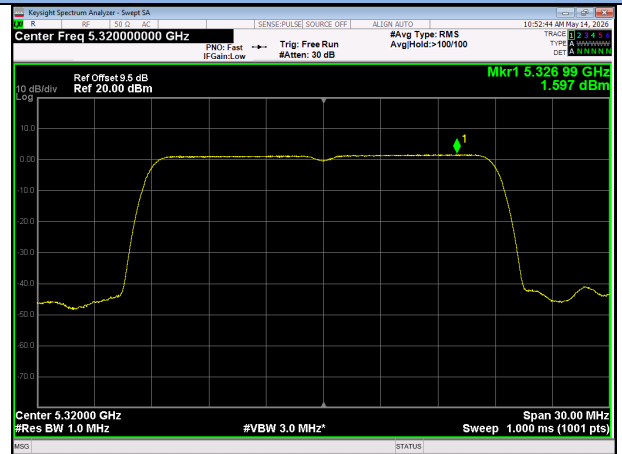
IEEE 802.11n(HT20) Low Channel



IEEE 802.11n(HT20) Middle Channel

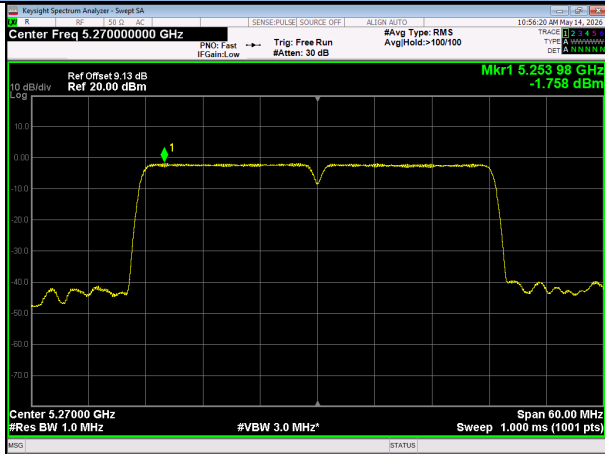


IEEE 802.11n(HT20) High Channel

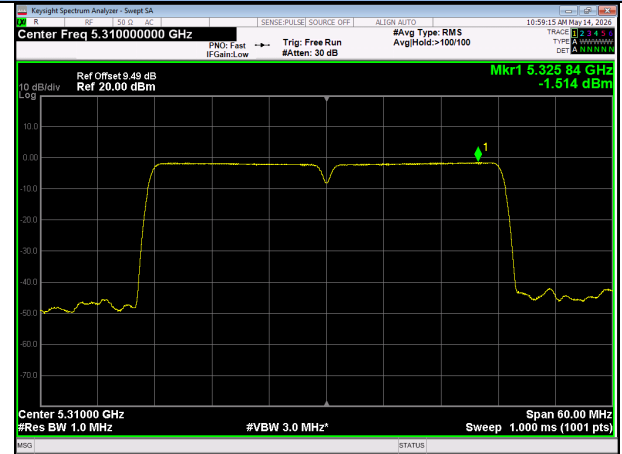


U-NII-2A Band

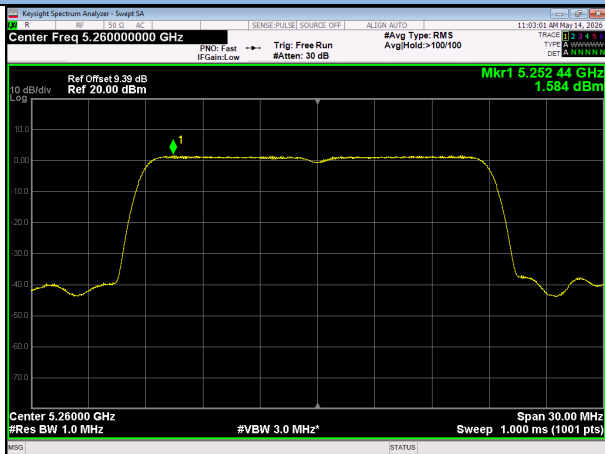
IEEE 802.11n(HT40) Low Channel



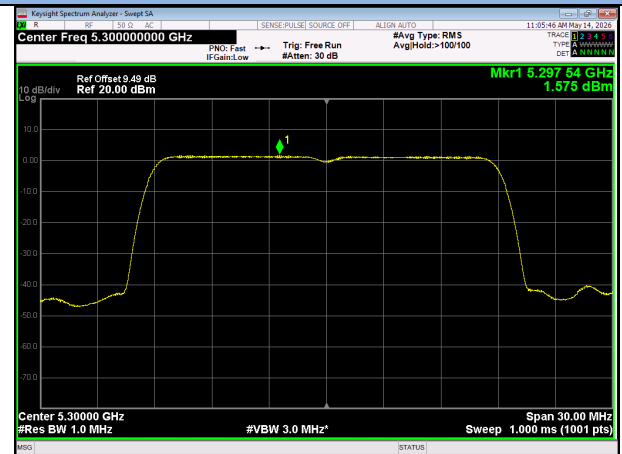
IEEE 802.11n(HT40) High Channel



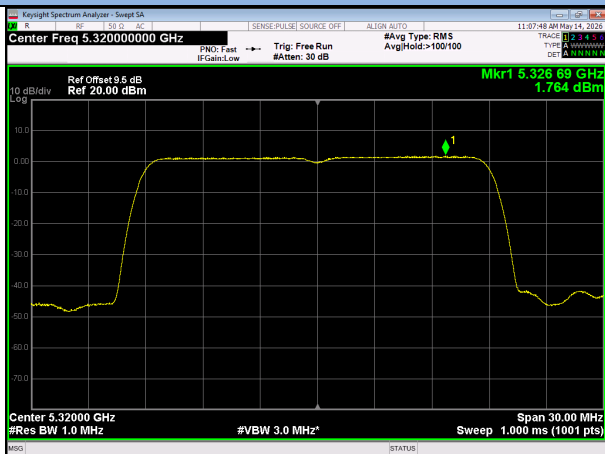
IEEE 802.11ac(VHT20) Low Channel



IEEE 802.11ac(VHT20) Middle Channel



IEEE 802.11ac(VHT20) High Channel

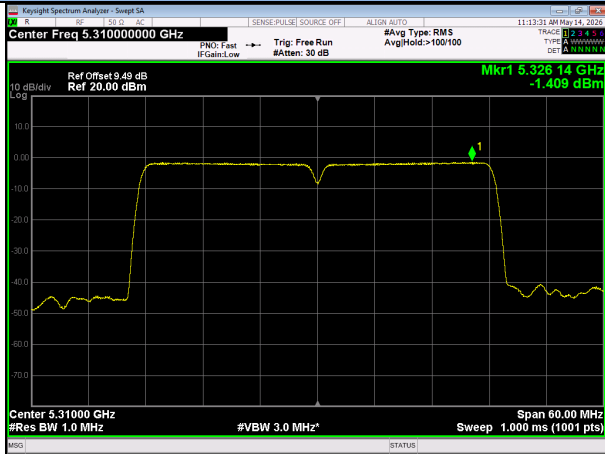


IEEE 802.11ac(VHT40) Low Channel

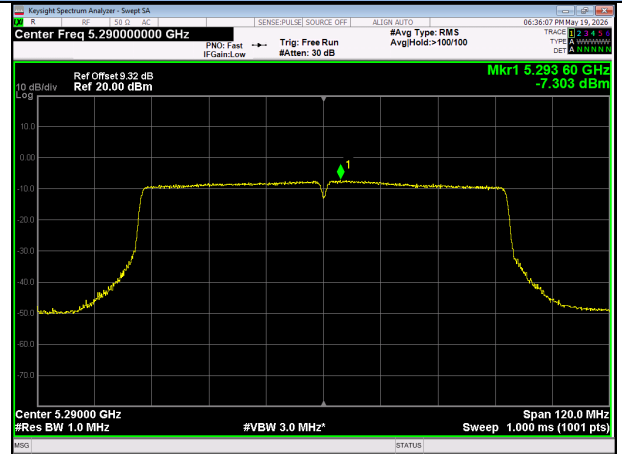


U-NII-2A Band

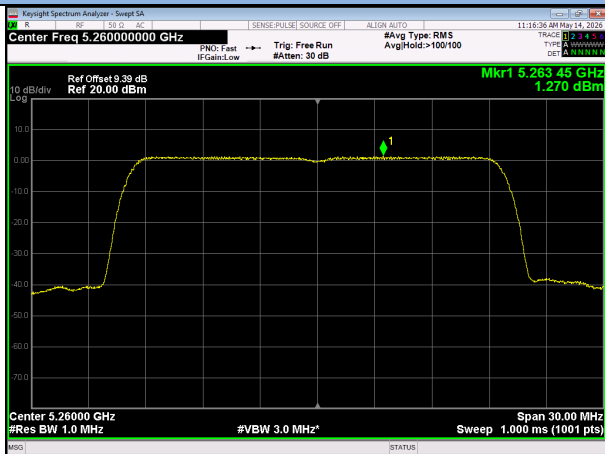
IEEE 802.11ac(VHT40) High Channel



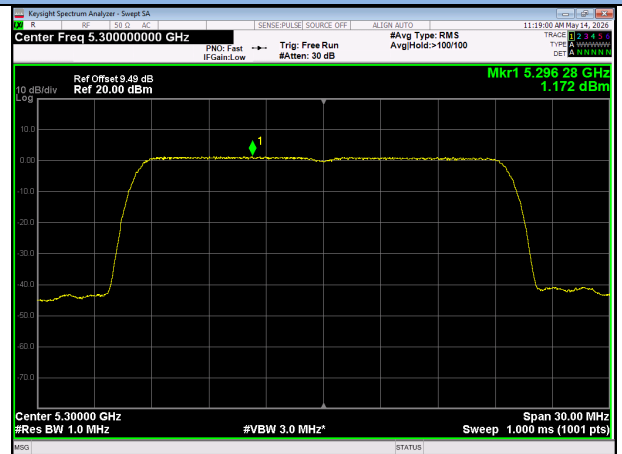
IEEE 802.11ac(VHT80)



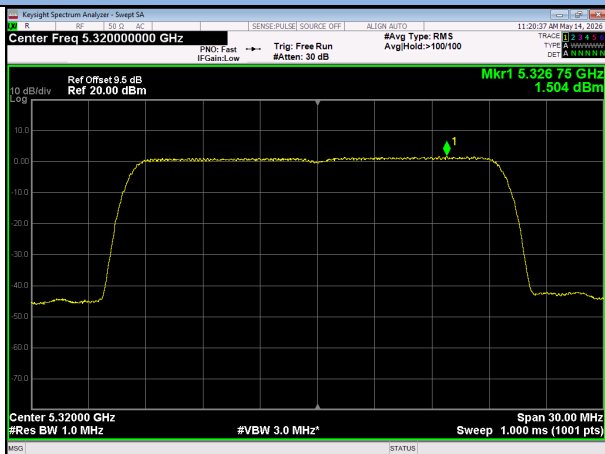
IEEE 802.11ax(HE20) Low Channel



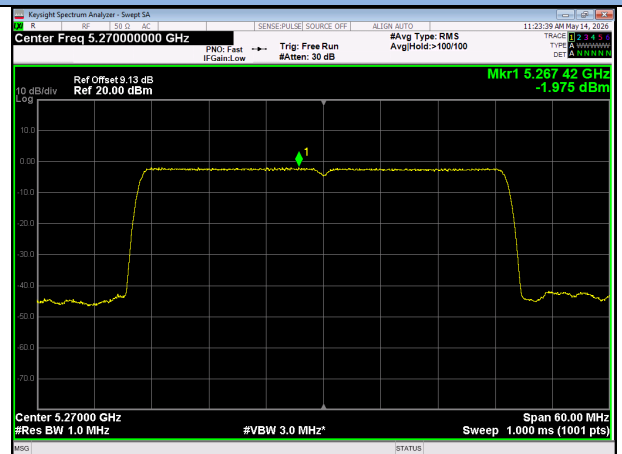
IEEE 802.11ax(HE20) Mid Channel



IEEE 802.11ax(HE20) High Channel

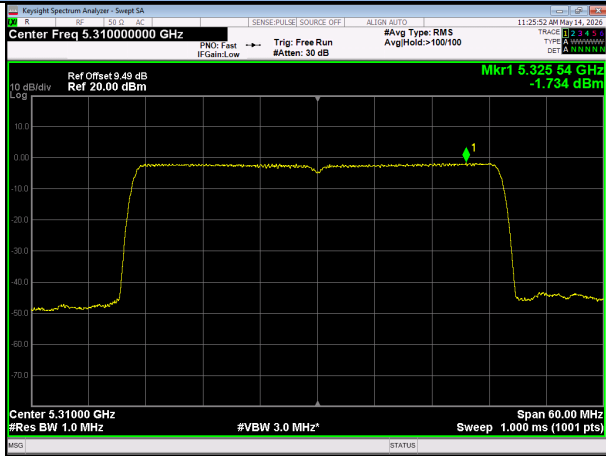


IEEE 802.11ax(HE40) Low Channel

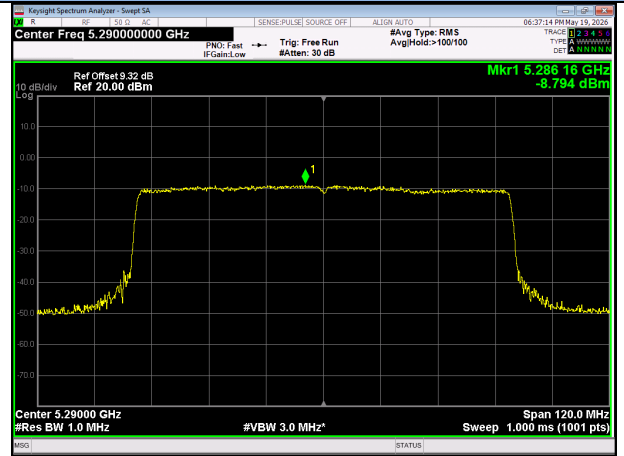


U-NII-2A Band

IEEE 802.11ax(HE40) High Channel

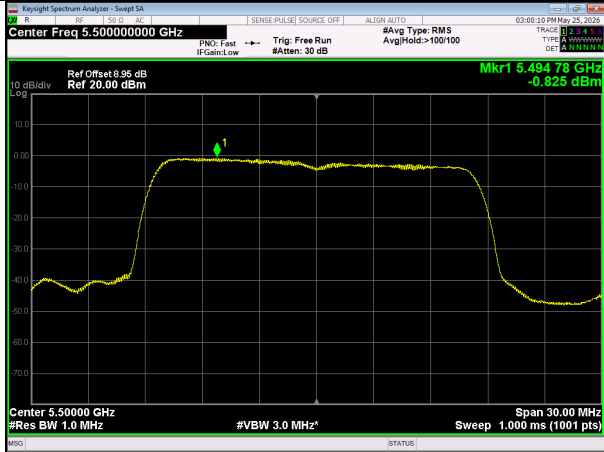


IEEE 802.11ax(HE80)

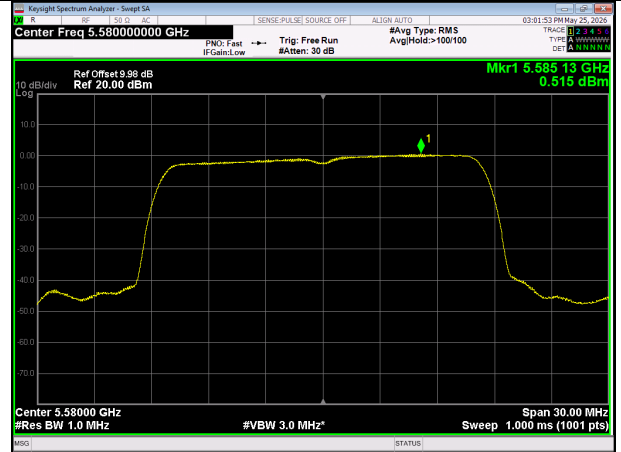


U-NII-2C Band

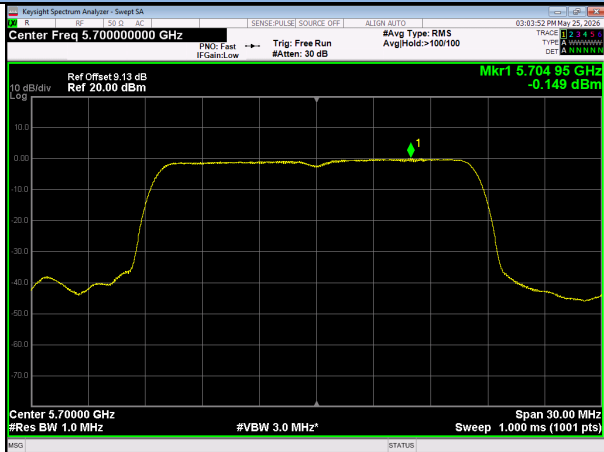
IEEE 802.11a Low Channel



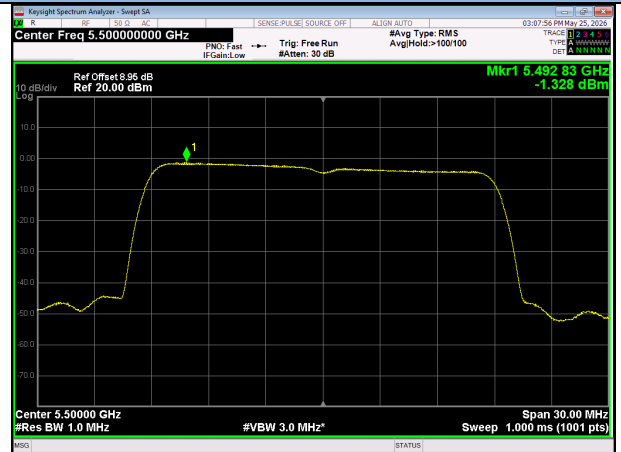
IEEE 802.11a Middle Channel



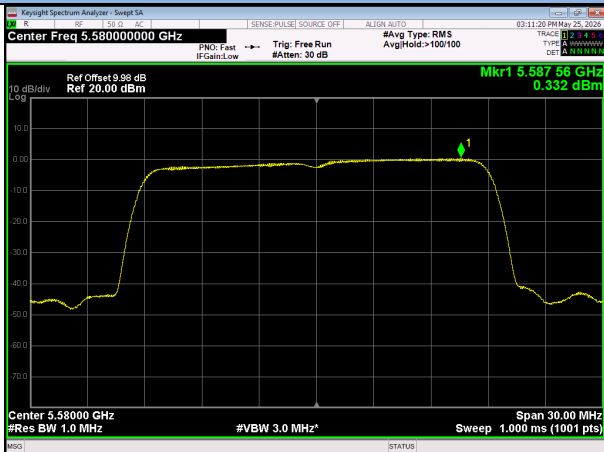
IEEE 802.11a High Channel



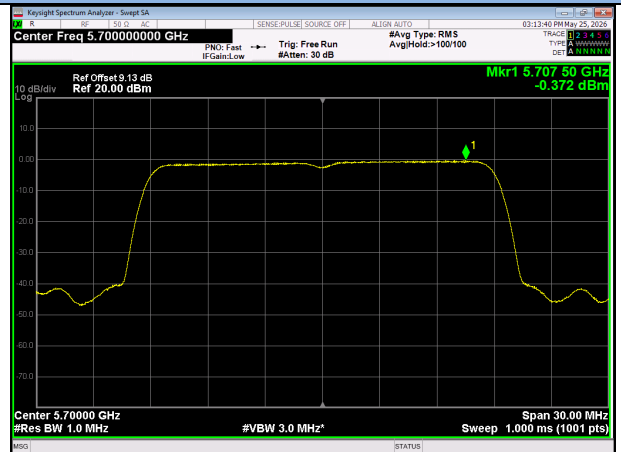
IEEE 802.11n(HT20) Low Channel



IEEE 802.11n(HT20) Middle Channel

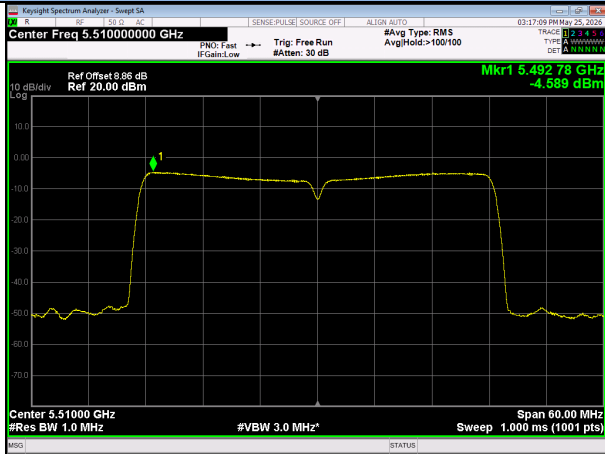


IEEE 802.11n(HT20) High Channel

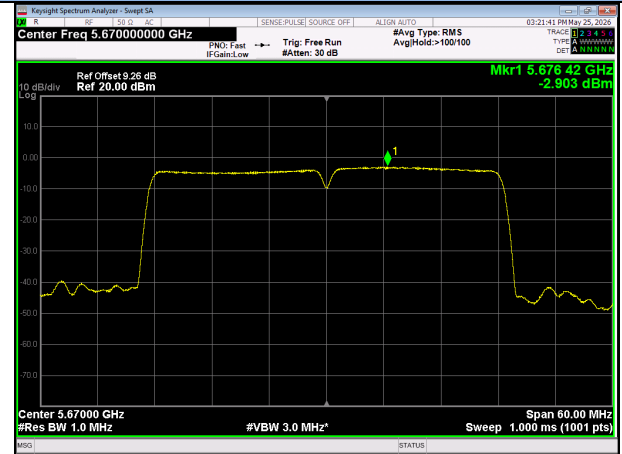


U-NII-2C Band

IEEE 802.11n(HT40) Low Channel



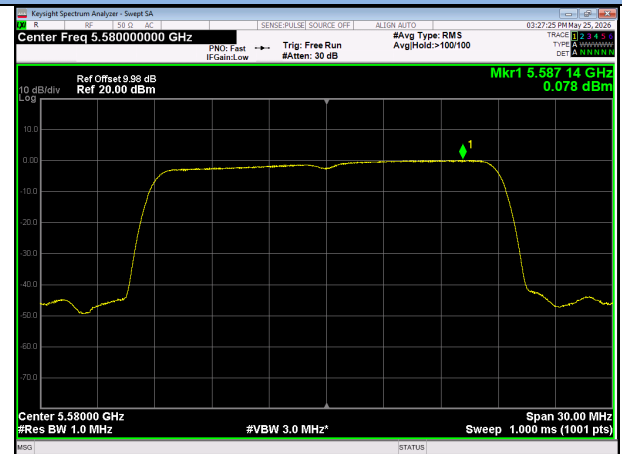
IEEE 802.11n(HT40) High Channel



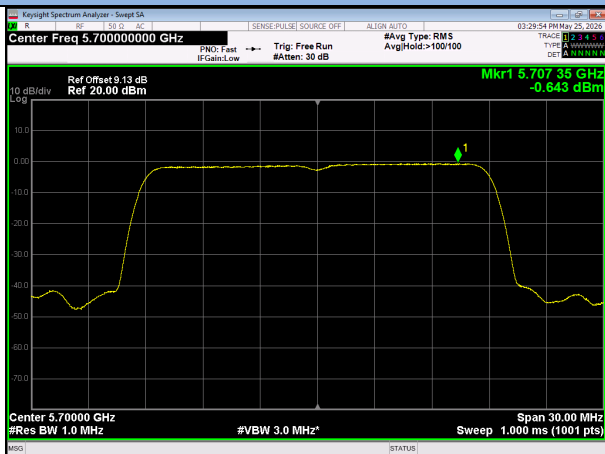
IEEE 802.11ac(VHT20) Low Channel



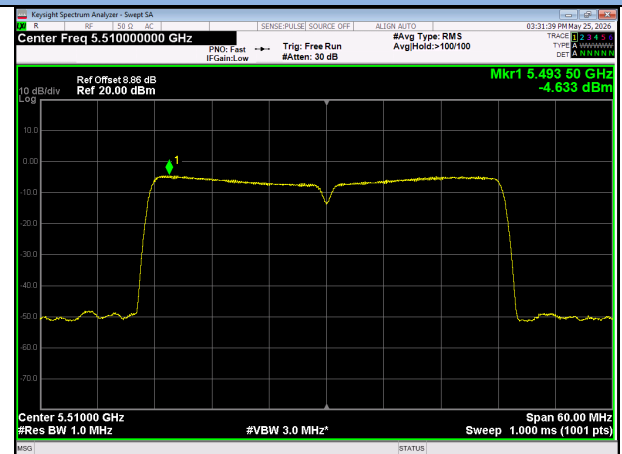
IEEE 802.11ac(VHT20) Middle Channel



IEEE 802.11ac(VHT20) High Channel

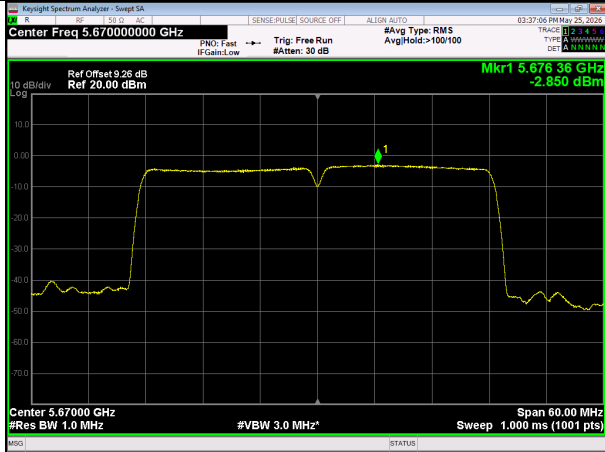


IEEE 802.11ac(VHT40) Low Channel

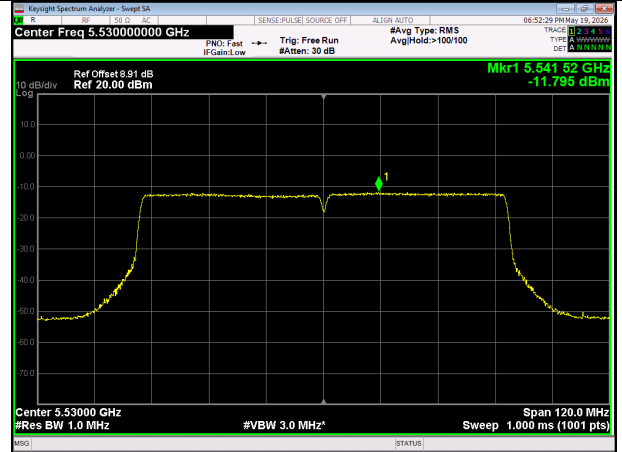


U-NII-2C Band

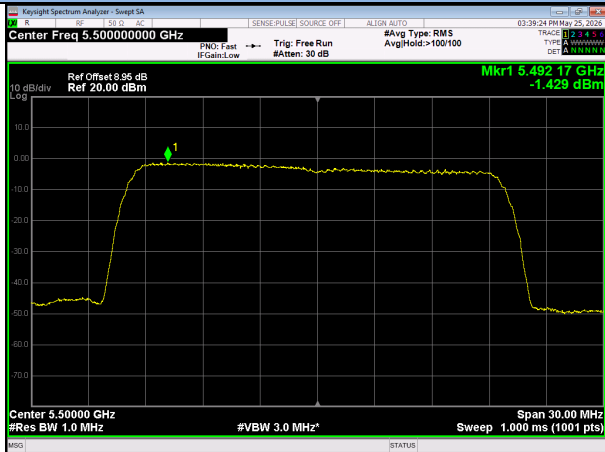
IEEE 802.11ac(VHT40) High Channel



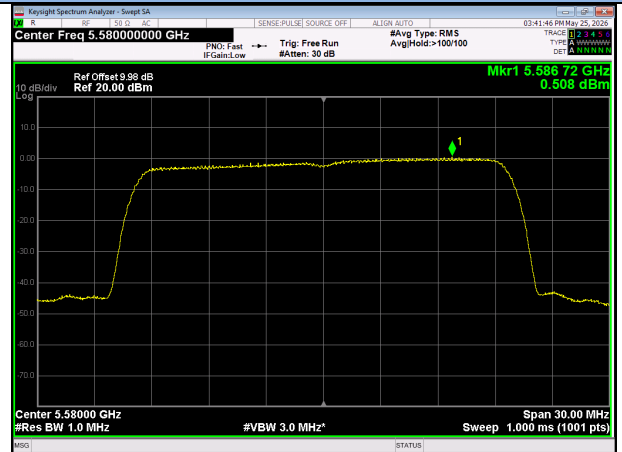
IEEE 802.11ac(VHT80)



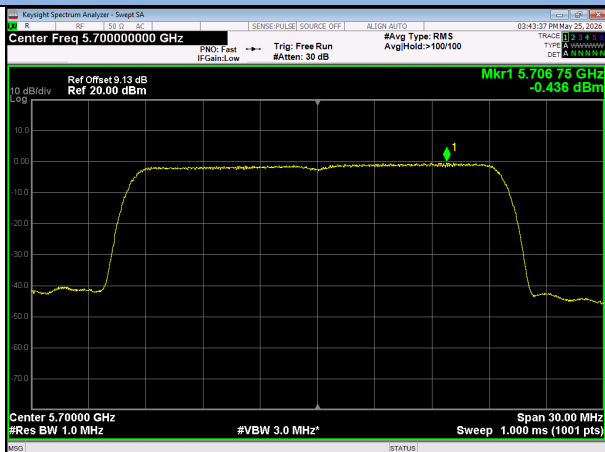
IEEE 802.11ax(HE20) Low Channel



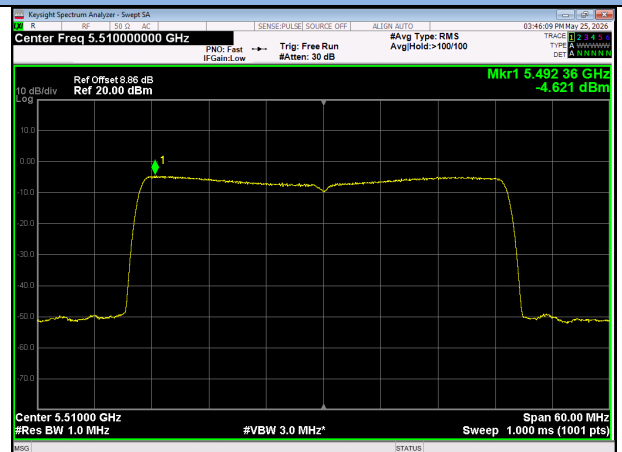
IEEE 802.11ax(HE20) Mid Channel



IEEE 802.11ax(HE20) High Channel

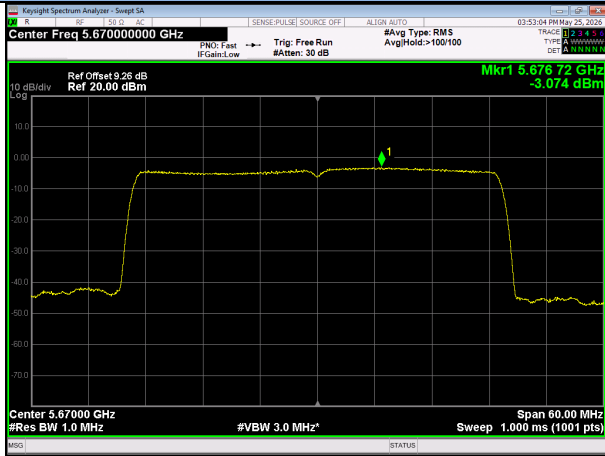


IEEE 802.11ax(HE40) Low Channel

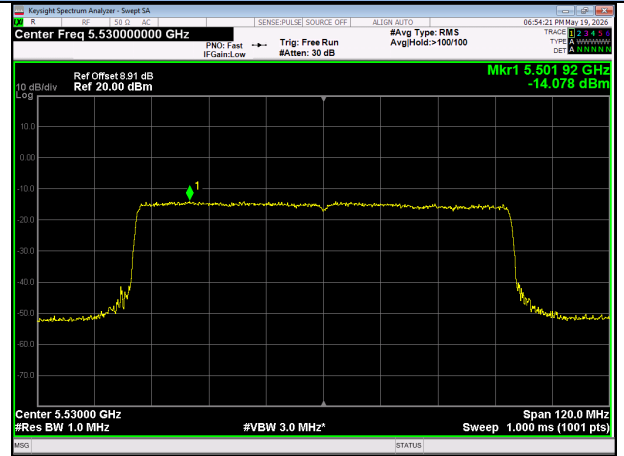


U-NII-2C Band

IEEE 802.11ax(HE40) High Channel

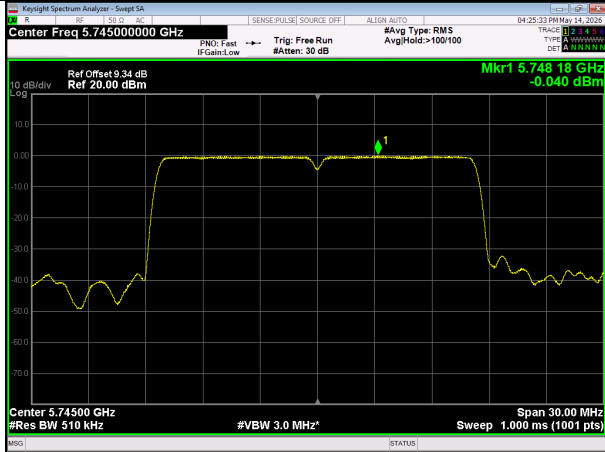


IEEE 802.11ax(HE80)

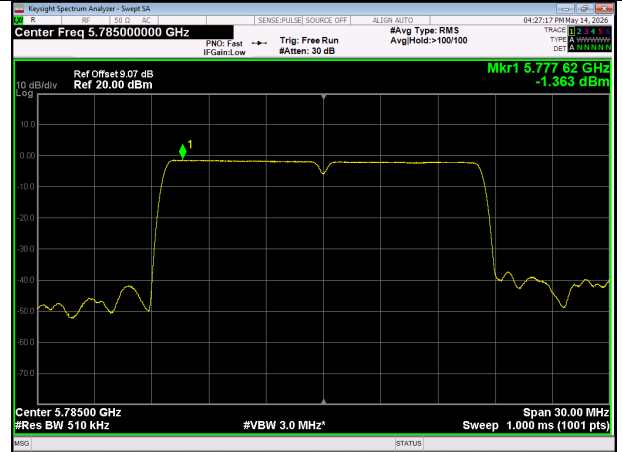


U-NII-3 Band

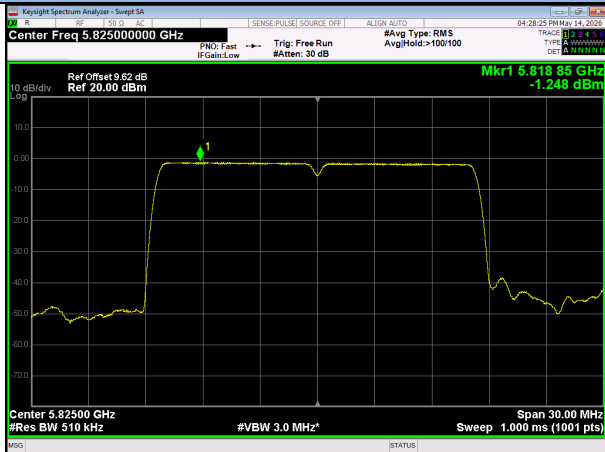
IEEE 802.11a Low Channel



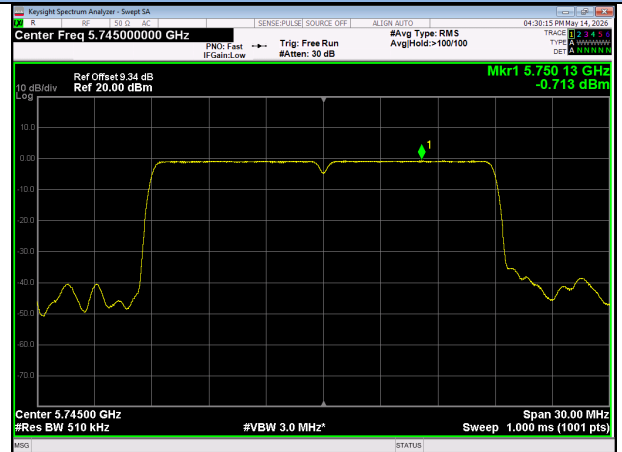
IEEE 802.11a Middle Channel



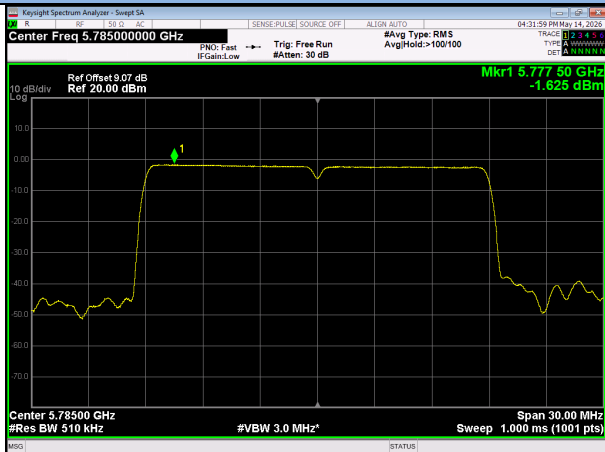
IEEE 802.11a High Channel



IEEE 802.11n(HT20) Low Channel



IEEE 802.11n(HT20) Middle Channel



IEEE 802.11n(HT20) High Channel

