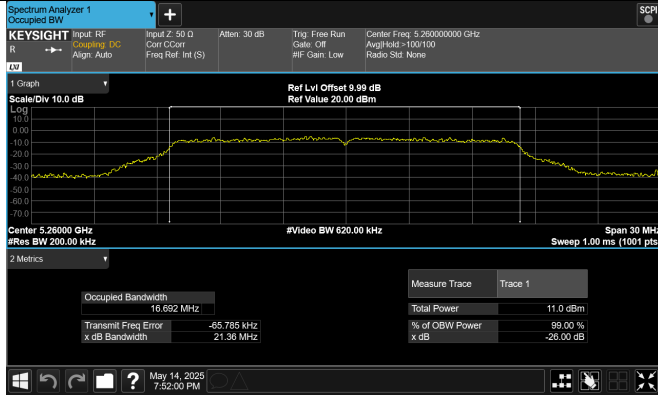
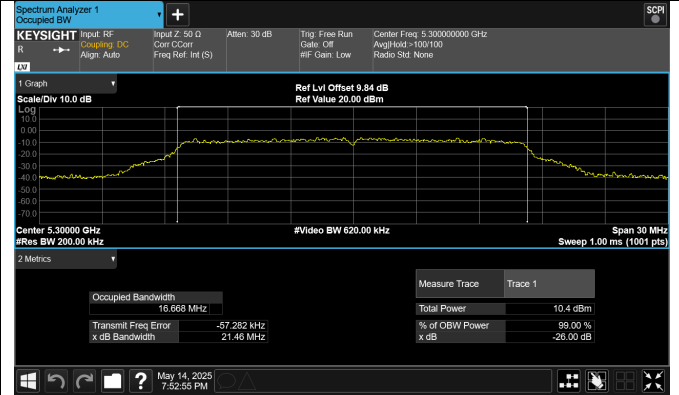


U-NII-2A Band 26dB Bandwidth

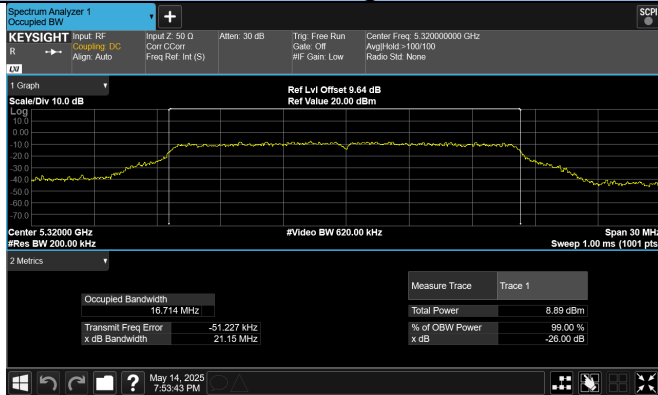
IEEE 802.11a Low Channel



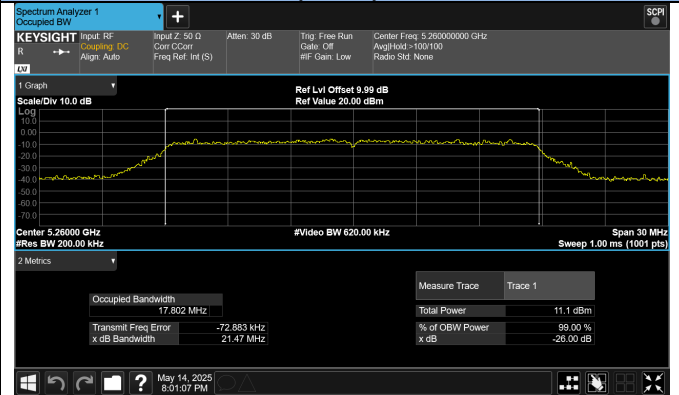
IEEE 802.11a Middle Channel



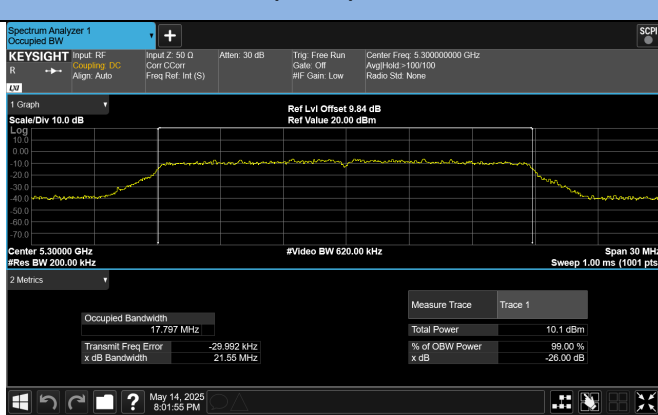
IEEE 802.11a High Channel



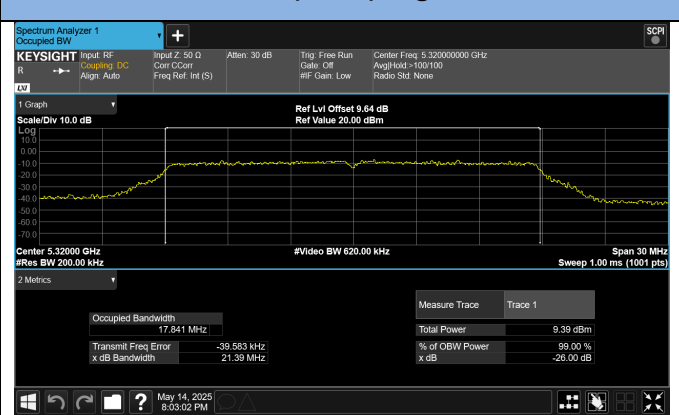
IEEE 802.11n(HT20) Low Channel



IEEE 802.11n(HT20) Middle Channel

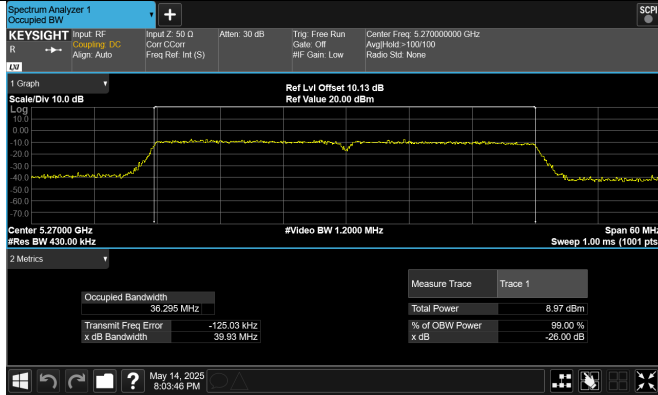


IEEE 802.11n(HT20) High Channel

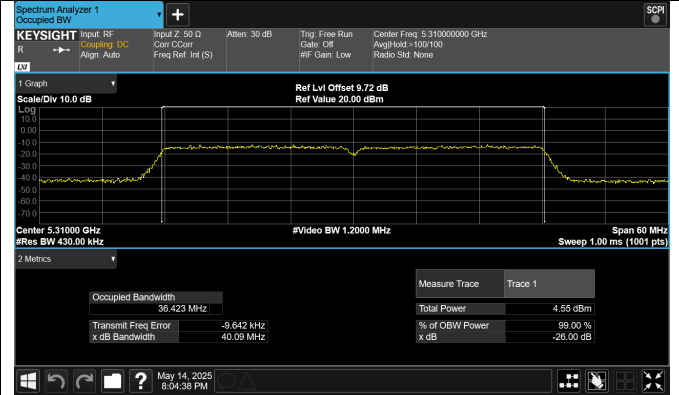


U-NII-2A Band 26dB Bandwidth

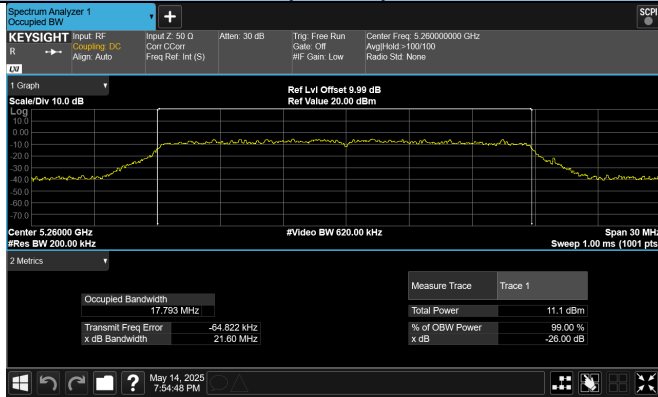
IEEE 802.11n(HT40) Low Channel



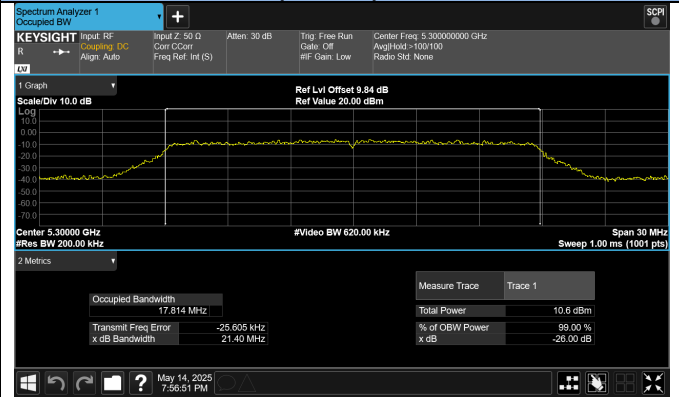
IEEE 802.11n(HT40) High Channel



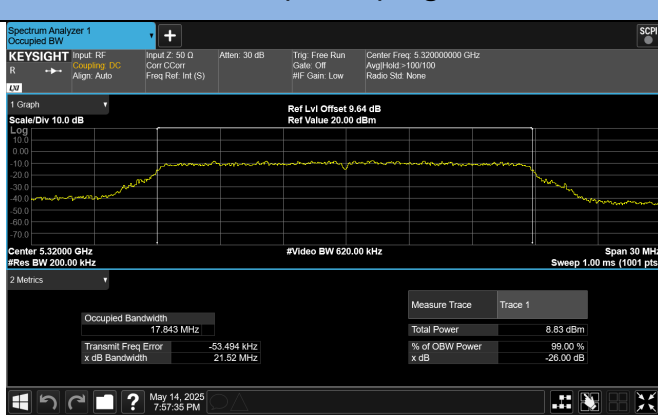
IEEE 802.11ac(VHT20) Low Channel



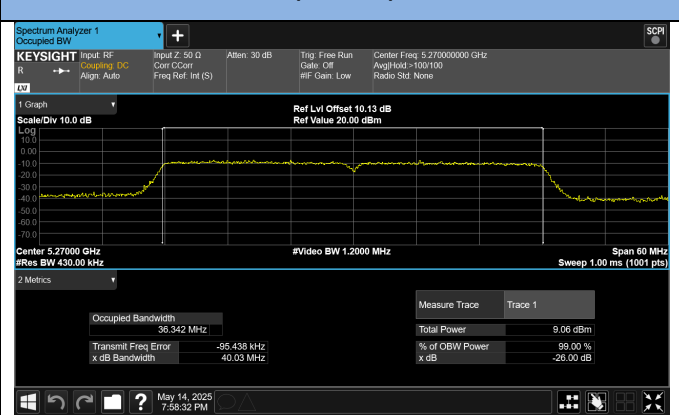
IEEE 802.11ac(VHT20) Middle Channel



IEEE 802.11ac(VHT20) High Channel

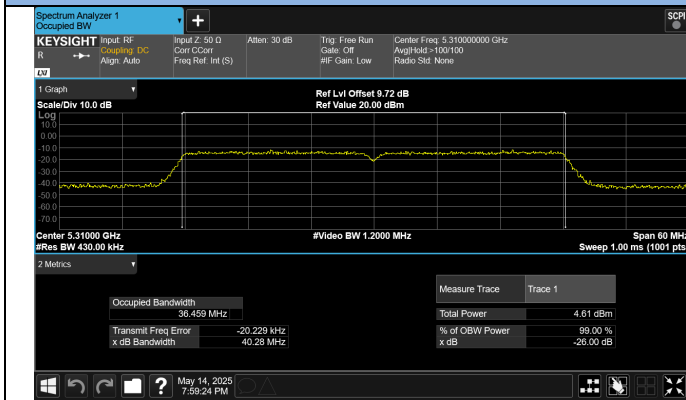


IEEE 802.11ac(VHT40) Low Channel

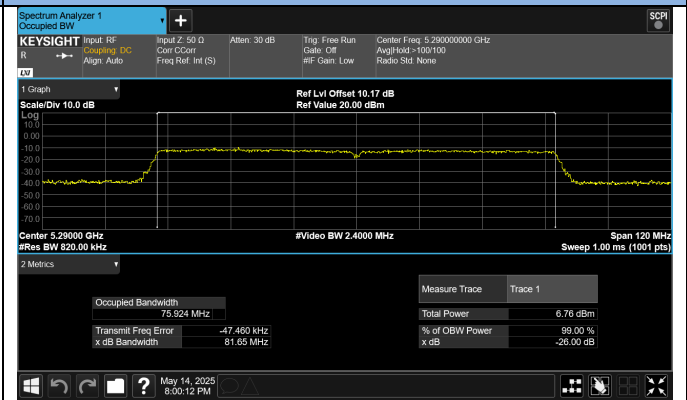


U-NII-2A Band 26dB Bandwidth

IEEE 802.11ac(VHT40) High Channel

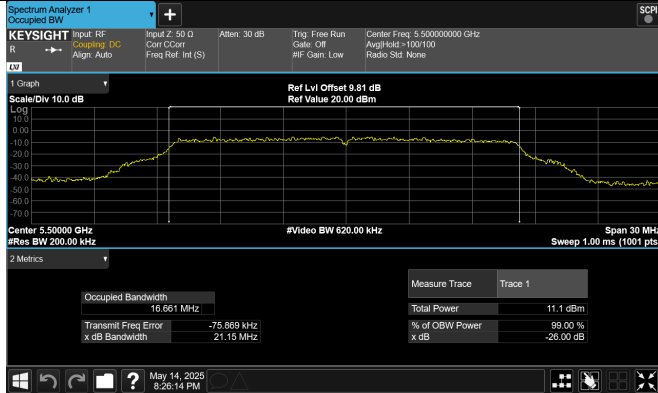


IEEE 802.11ac(VHT80)

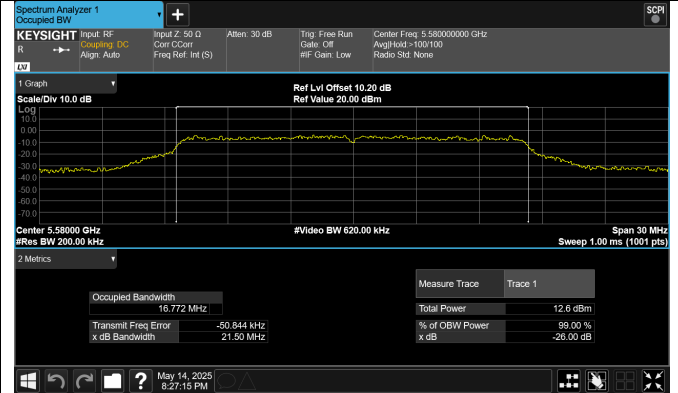


U-NII-2C Band 26dB Bandwidth

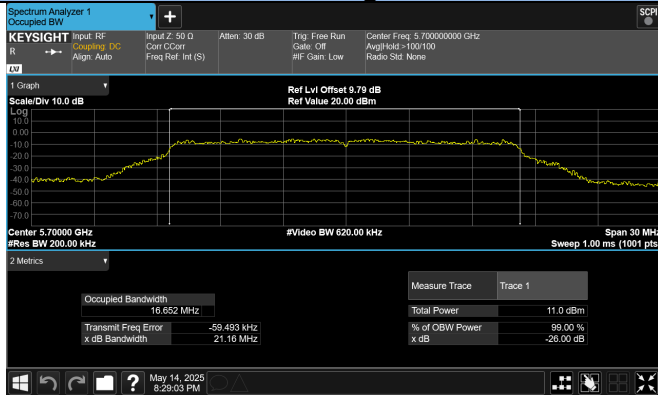
IEEE 802.11a Low Channel



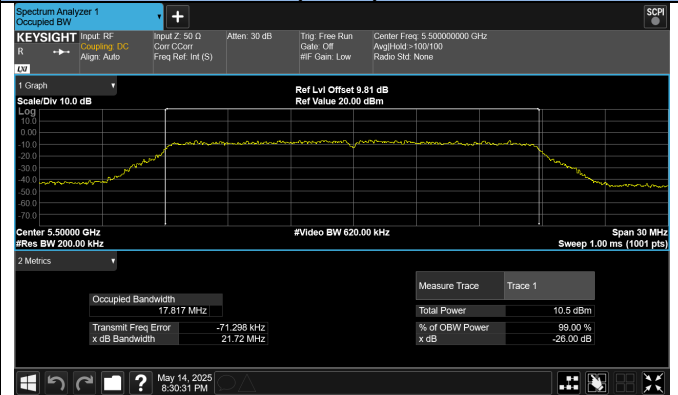
IEEE 802.11a Middle Channel



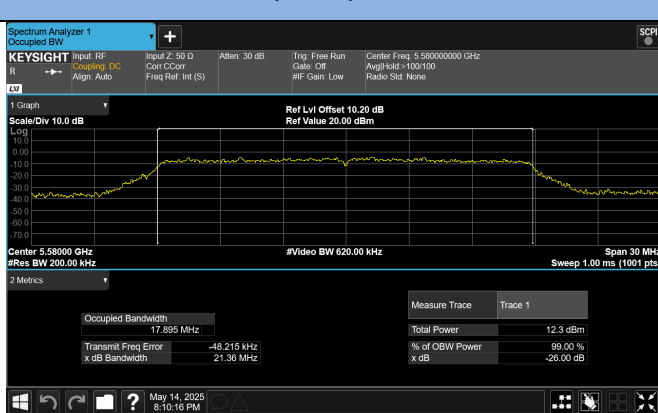
IEEE 802.11a High Channel



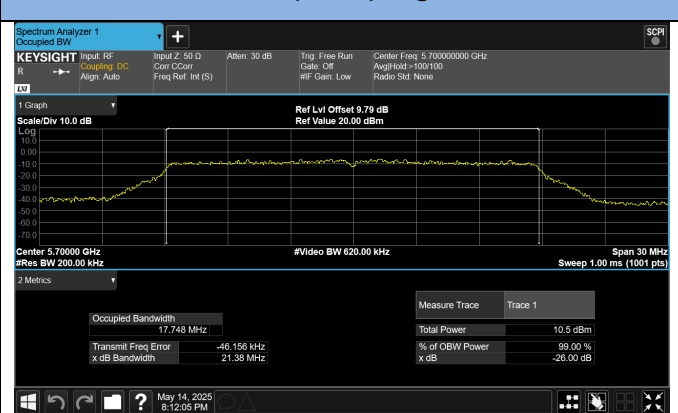
IEEE 802.11n(HT20) Low Channel



IEEE 802.11n(HT20) Middle Channel

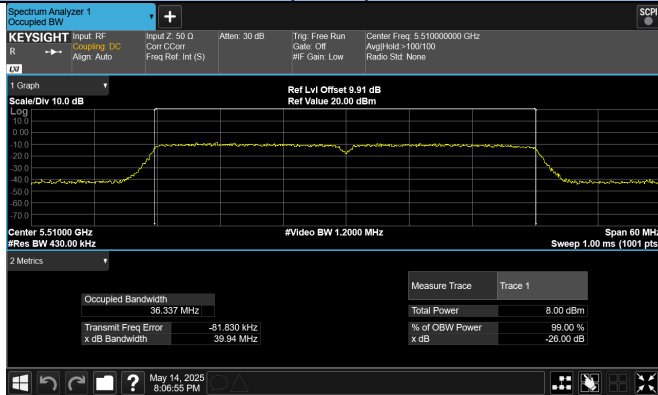


IEEE 802.11n(HT20) High Channel

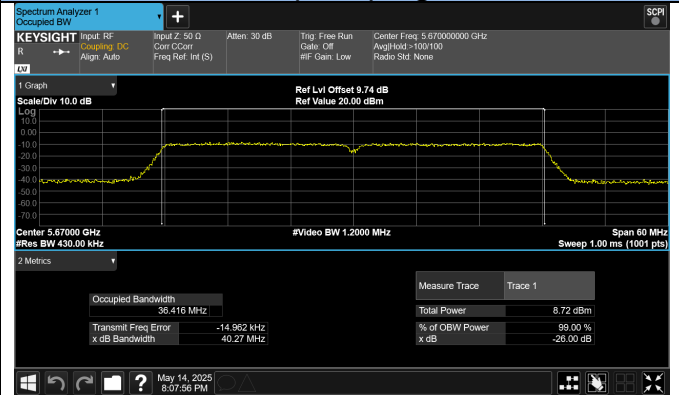


U-NII-2C Band 26dB Bandwidth

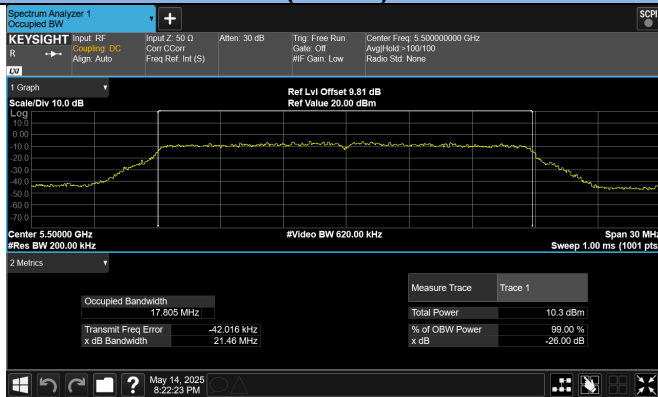
IEEE 802.11n(HT40) Low Channel



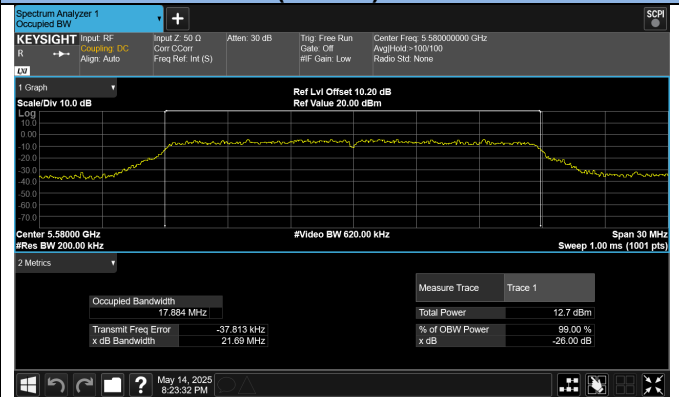
IEEE 802.11n(HT40) High Channel



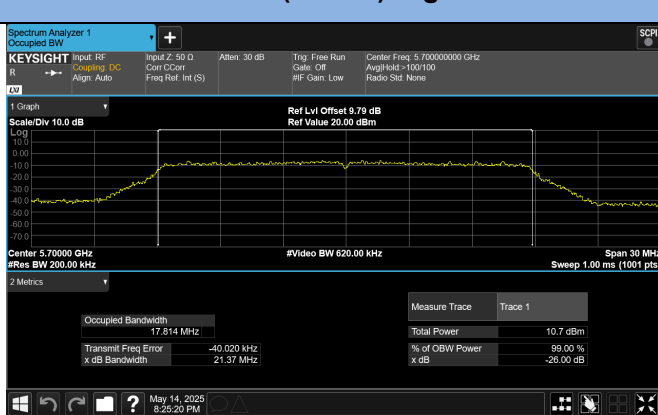
IEEE 802.11ac(VHT20) Low Channel



IEEE 802.11ac(VHT20) Middle Channel



IEEE 802.11ac(VHT20) High Channel

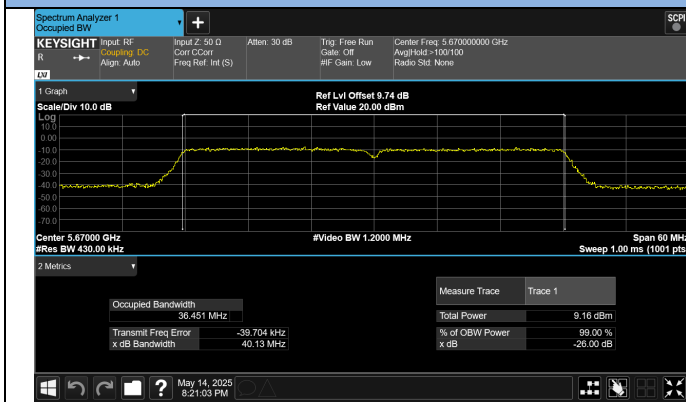


IEEE 802.11ac(VHT40) Low Channel

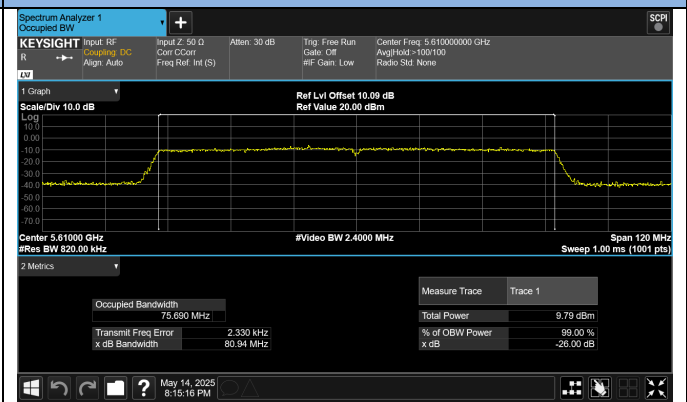


U-NII-2C Band 26dB Bandwidth

IEEE 802.11ac(VHT40) High Channel



IEEE 802.11ac(VHT80)

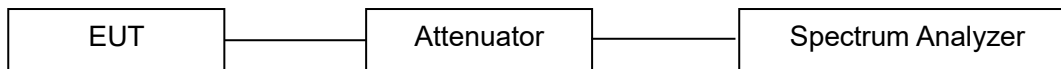


14.5 Power Spectral Density

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):

- Set analyzer center frequency to center frequency
- Set the RBW to: 1MHz
- Set the VBW to: 3MHz
- Detector = RMS
- Sweep time = auto couple
- Trace Average = 100 times
- 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. Allow trace to fully stabilize.

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 (OFDM, Antenna Gain=2.6dBi)					
Channel: 5180	6	0.0590	-7.98	-7.92	11
Channel: 5200	6		-7.50	-7.44	11
Channel: 5240	6		-5.91	-5.85	11
IEEE 802.11n(HT20) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5180	MCS 8	0.0640	-8.74	-8.68	11
Channel: 5200	MCS 8		-8.31	-8.25	11
Channel: 5240	MCS 8		-5.72	-5.66	11
IEEE 802.11n(HT40) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5190	MCS 8	0.1320	-15.75	-15.62	11
Channel: 5230	MCS 8		-11.19	-11.06	11
IEEE 802.11ac(VHT20) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5180	MCS 8	0.0640	-8.11	-8.05	11
Channel: 5200	MCS 8		-8.65	-8.59	11
Channel: 5240	MCS 8		-5.91	-5.85	11
IEEE 802.11ac(VHT40) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5190	MCS 8	0.1320	-15.80	-15.67	11
Channel: 5230	MCS 8		-11.74	-11.61	11
IEEE 802.11ac(VHT80) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5210	MCS 8	0.2600	-16.89	-16.63	11
Note: Please refer to section 13 for duty cycle factor.					

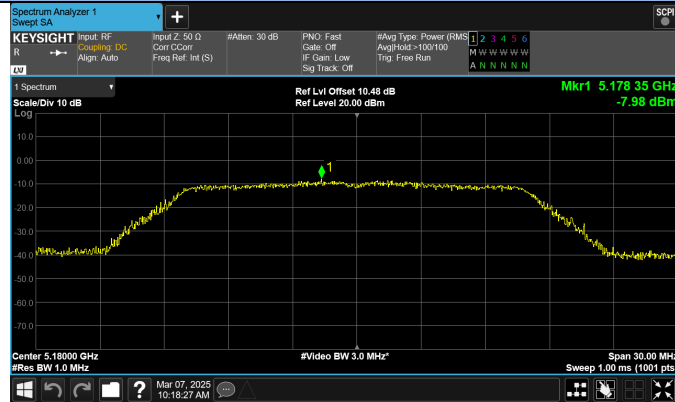
U-NII-2A					
Frequency MHz	Data Rate Mbps	Duty Cycle Factor (dB)	PSD dBm	Total PSD with duty cycle factor	Limit dBm/ MHz
IEEE 802.11a Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5260	6	0.0590	-4.63	-4.57	11
Channel: 5300	6		-2.88	-2.82	11
Channel: 5320	6		-3.18	-3.12	11
IEEE 802.11n(HT20)Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5260	MCS 8	0.0660	-5.13	-5.06	11
Channel: 5300	MCS 8		-3.53	-3.46	11
Channel: 5320	MCS 8		-4.08	-4.01	11
IEEE 802.11n(HT40) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5270	MCS 8	0.1220	-9.76	-9.64	11
Channel: 5310	MCS 8		-11.01	-10.89	11
IEEE 802.11ac(VHT20) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5260	MCS 8	0.0640	-5.25	-5.19	11
Channel: 5300	MCS 8		-3.11	-3.05	11
Channel: 5320	MCS 8		-3.58	-3.52	11
IEEE 802.11ac(VHT40) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5270	MCS 8	0.1220	-10.35	-10.23	11
Channel: 5310	MCS 8		-11.73	-11.61	11
IEEE 802.11ac(VHT80) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5290	MCS 8	0.2290	-14.25	-14.02	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 (OFDM, Antenna Gain=2.6dBi)					
Channel: 5500	6	0.0600	-2.76	-2.70	11
Channel: 5580	6		-0.55	-0.49	11
Channel: 5700	6		-1.03	-0.97	11
IEEE 802.11n(HT20) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5500	MCS 8	0.0640	-4.98	-4.92	11
Channel: 5580	MCS 8		-0.78	-0.72	11
Channel: 5700	MCS 8		-2.20	-2.14	11
IEEE 802.11n(HT40) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5510	MCS 8	0.1220	-12.72	-12.60	11
Channel: 5670	MCS 8		-10.45	-10.33	11
IEEE 802.11ac(VHT20) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5500	MCS 8	0.0640	-4.36	-4.30	11
Channel: 5580	MCS 8		-0.62	-0.56	11
Channel: 5700	MCS 8		-1.87	-1.81	11
IEEE 802.11ac(VHT40) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5510	MCS 8	0.1320	-10.01	-9.88	11
Channel: 5670	MCS 8		-8.20	-8.07	11
IEEE 802.11ac(VHT80) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5610	MCS 8	0.2600	-11.65	-11.39	11
Note: Please refer to section 13 for duty cycle factor.					

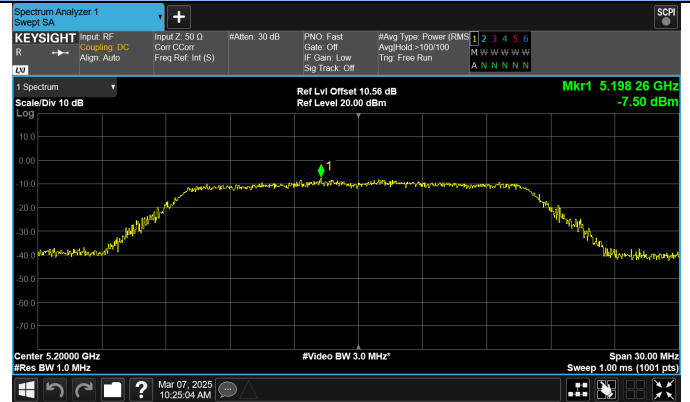
U-NII-3					
Frequency MHz	Data Rate Mbps	Duty Cycle Factor (dB)	PSD dBm/500KHz	Total PSD with duty cycle factor	Limit dBm/ 500KHz
IEEE 802.11a Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5745	6	0.0600	2.19	2.25	30
Channel: 5785	6		0.66	0.72	30
Channel: 5825	6		0.98	1.04	30
IEEE 802.11n(HT20) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5745	MCS 8	0.0640	-2.09	-2.03	30
Channel: 5785	MCS 8		-0.05	0.01	30
Channel: 5825	MCS 8		0.77	0.83	30
IEEE 802.11n(HT40) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5755	MCS 8	0.1220	-6.18	-6.06	30
Channel: 5795	MCS 8		-4.98	-4.86	30
IEEE 802.11n(HT20) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5745	MCS 8	0.0660	-1.70	-1.63	30
Channel: 5785	MCS 8		0.13	0.20	30
Channel: 5825	MCS 8		1.10	1.17	30
IEEE 802.11n(HT40) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5755	MCS 8	0.1290	-6.39	-6.26	30
Channel: 5795	MCS 8		-4.89	-4.76	30
IEEE 802.11n(HT40) Mode (OFDM, Antenna Gain=2.6dBi)					
Channel: 5755	MCS 8	0.2420	-11.34	-11.10	30
Note: Please refer to section 13 for duty cycle factor.					

U-NII-1 Band

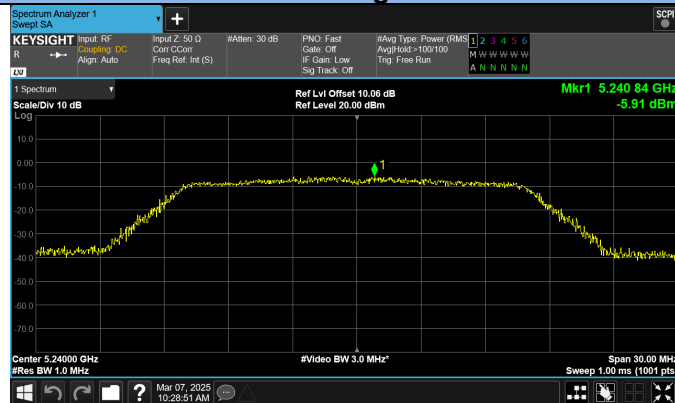
IEEE 802.11a Low Channel



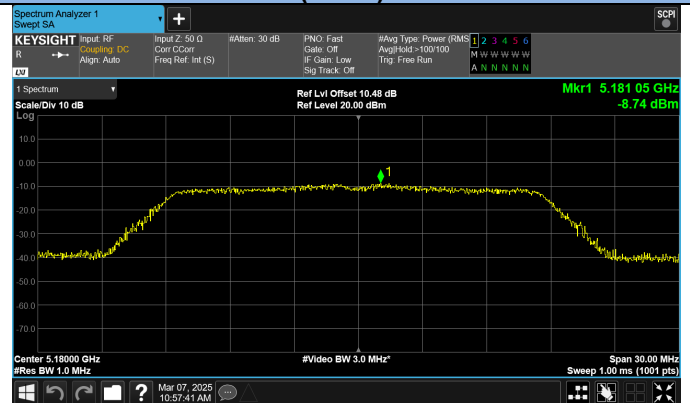
IEEE 802.11a Middle Channel



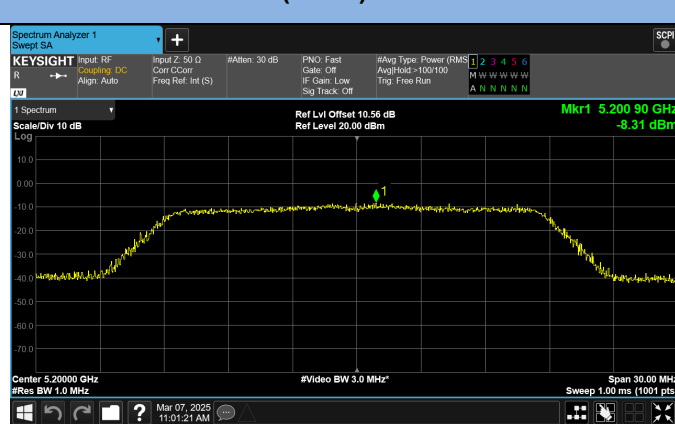
IEEE 802.11a High Channel



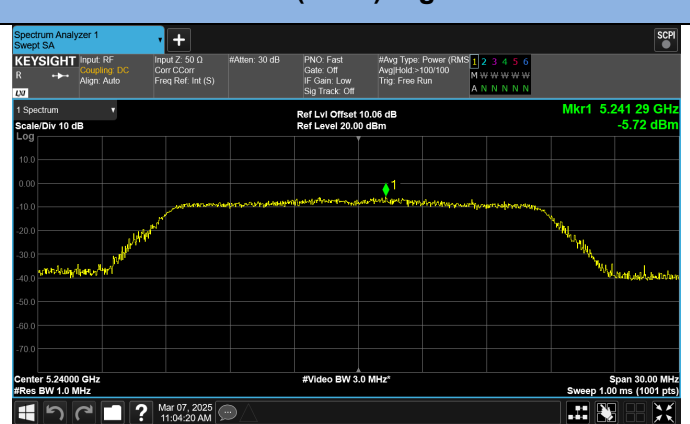
IEEE 802.11n(HT20) Low Channel



IEEE 802.11n(HT20) Middle Channel

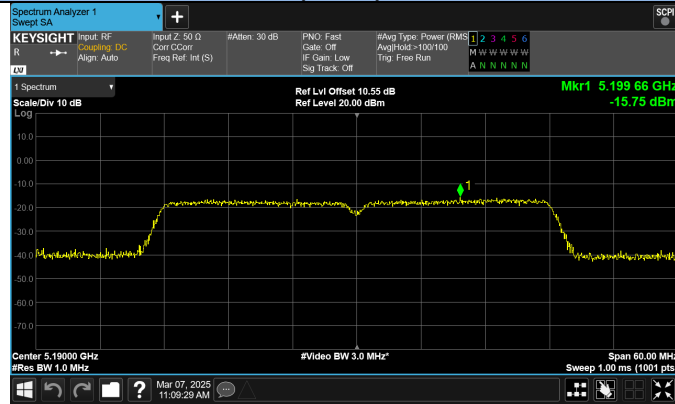


IEEE 802.11n(HT20) High Channel

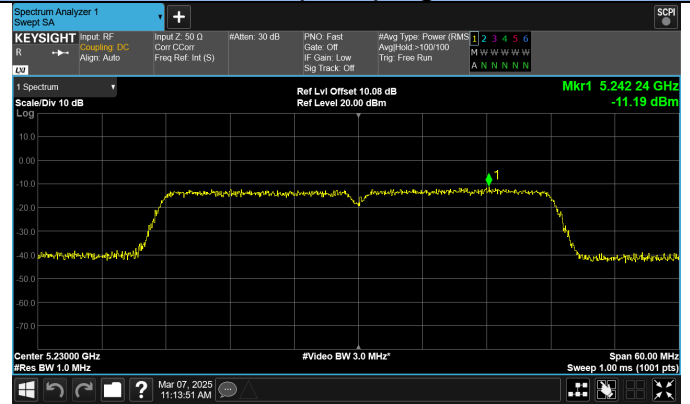


U-NII-1 Band

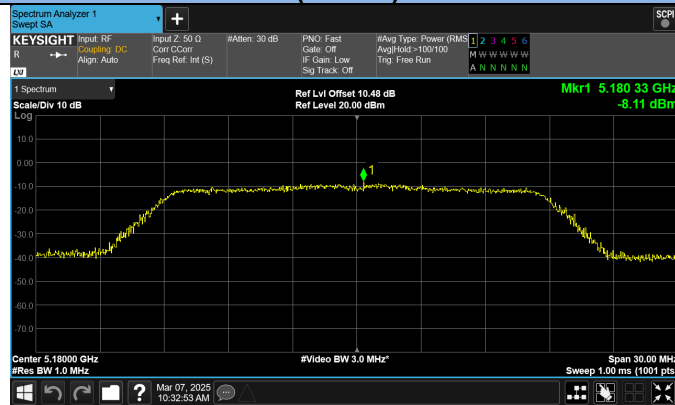
IEEE 802.11n(HT40) Low Channel



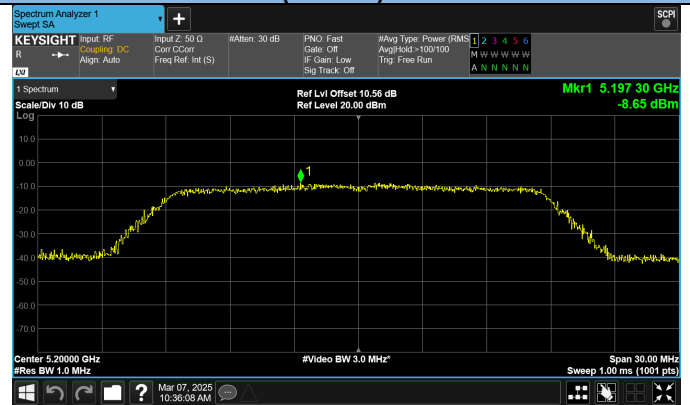
IEEE 802.11n(HT40) High Channel



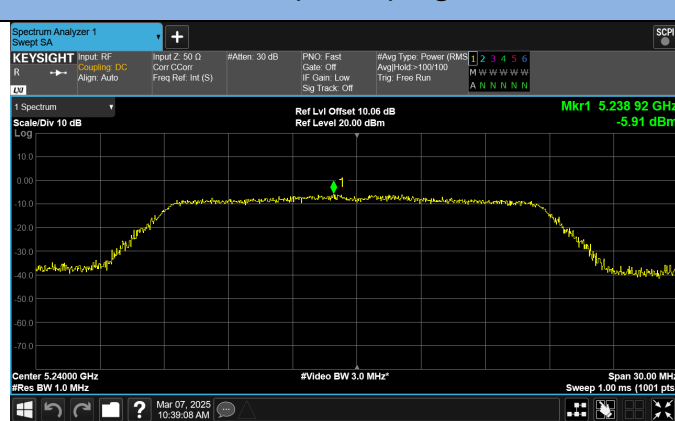
IEEE 802.11ac(VHT20) Low Channel



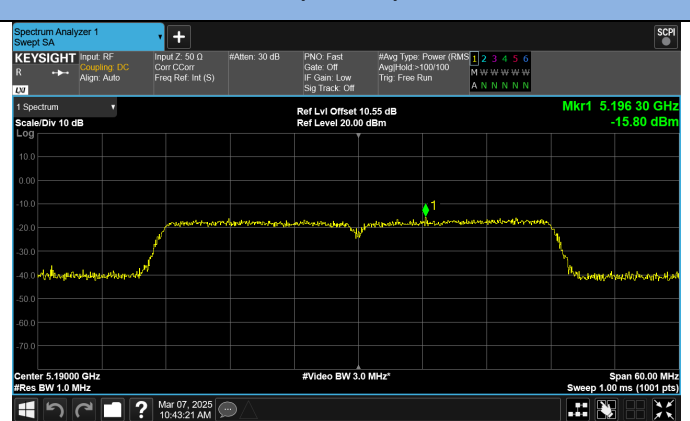
IEEE 802.11ac(VHT20) Middle Channel



IEEE 802.11ac(VHT20) High Channel

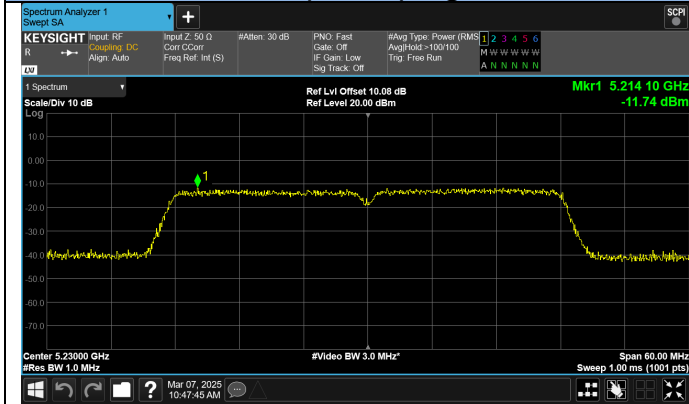


IEEE 802.11ac(VHT40) Low Channel

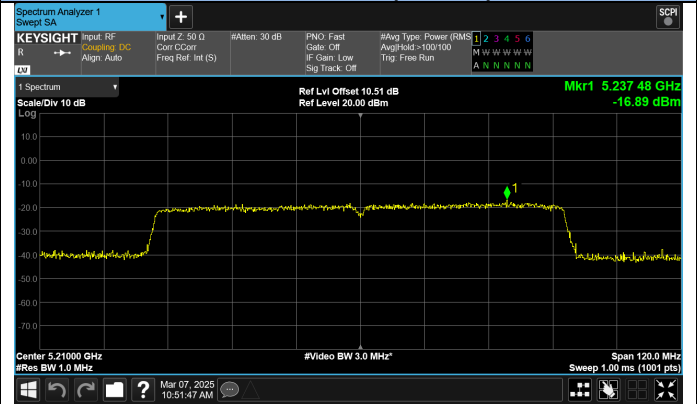


U-NII-1 Band

IEEE 802.11ac(VHT40) High Channel

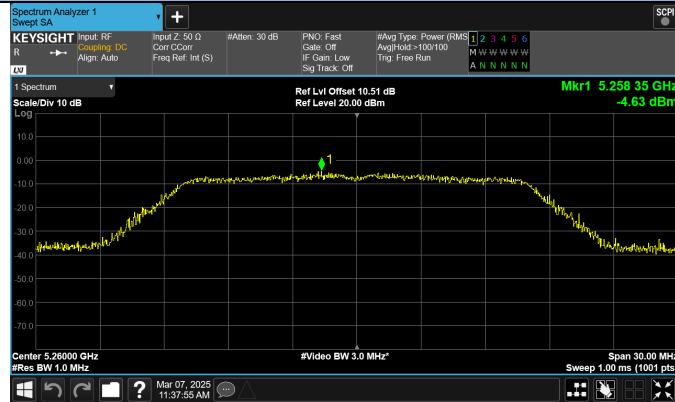


IEEE 802.11ac(VHT80)

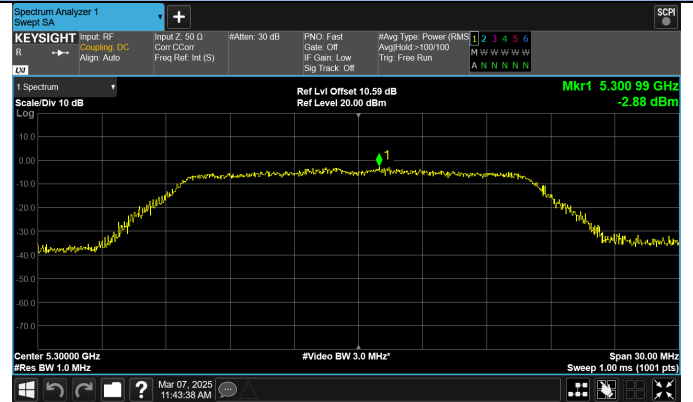


U-NII-2A Band

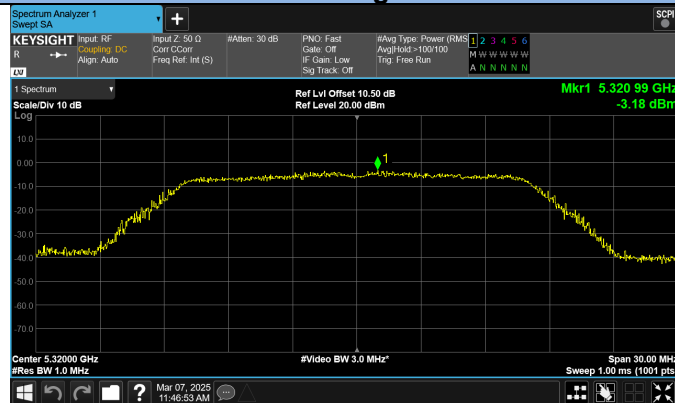
IEEE 802.11a Low Channel



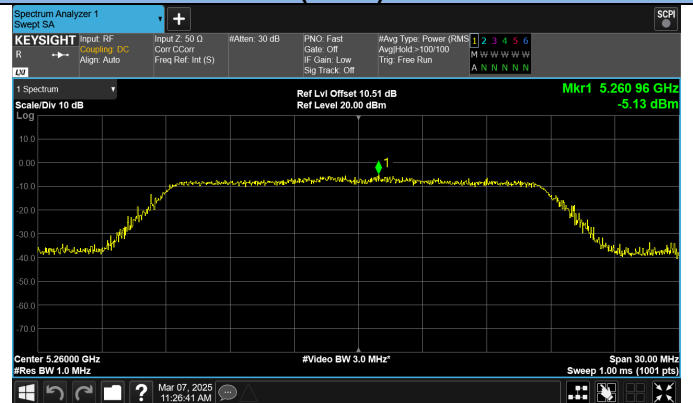
IEEE 802.11a Middle Channel



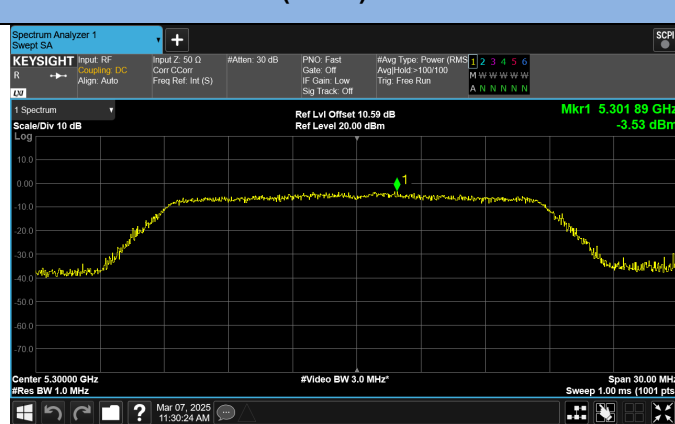
IEEE 802.11a High Channel



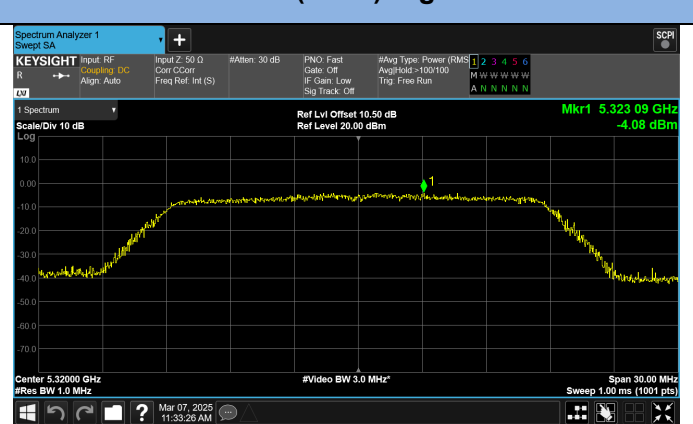
IEEE 802.11n(HT20) Low Channel



IEEE 802.11n(HT20) Middle Channel

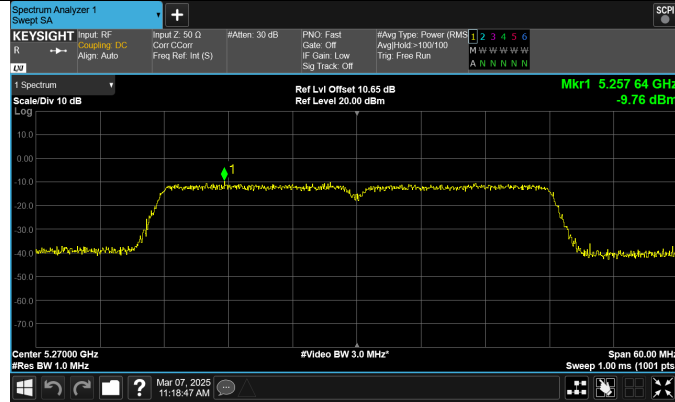


IEEE 802.11n(HT20) High Channel

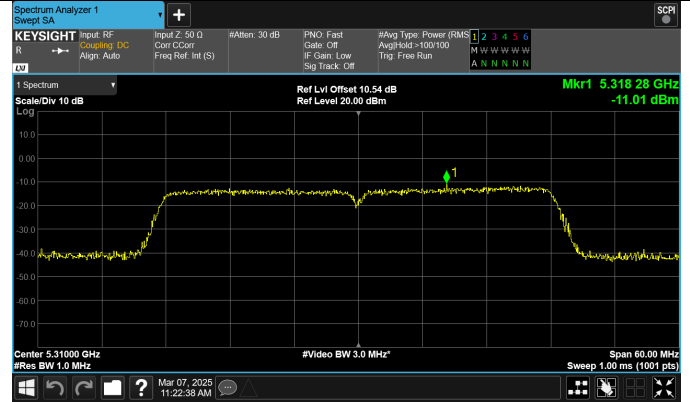


U-NII-2A Band

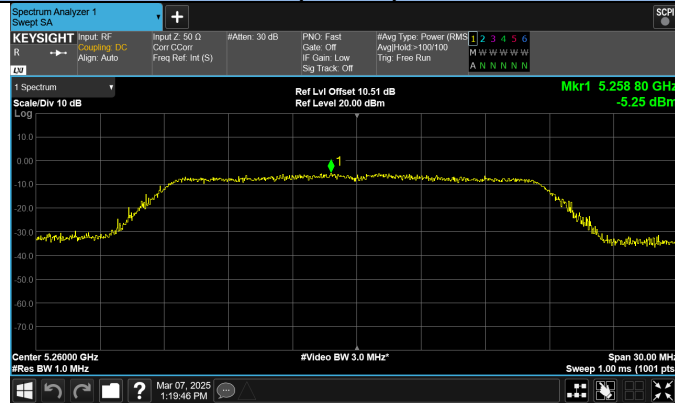
IEEE 802.11n(HT40) Low Channel



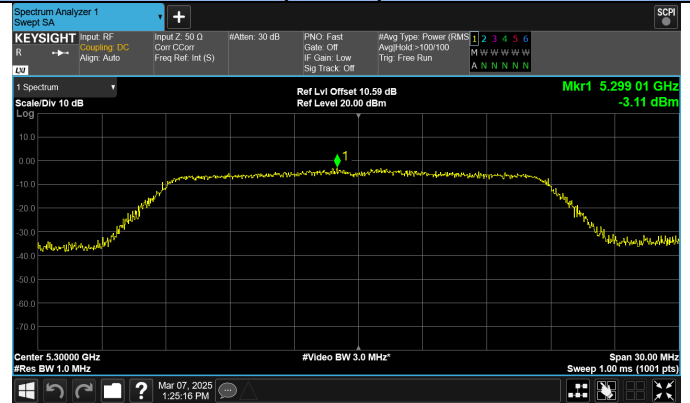
IEEE 802.11n(HT40) High Channel



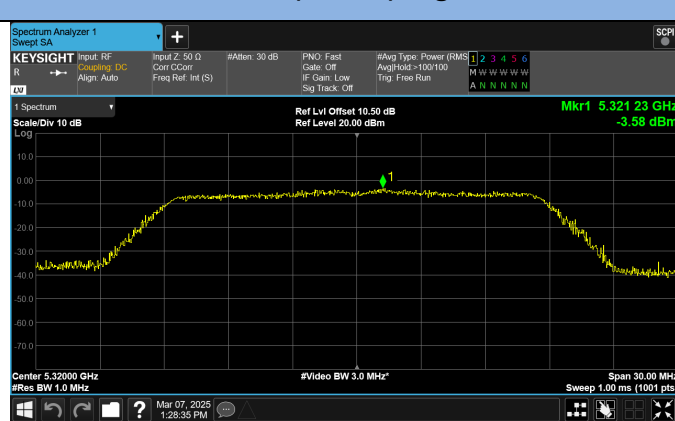
IEEE 802.11ac(VHT20) Low Channel



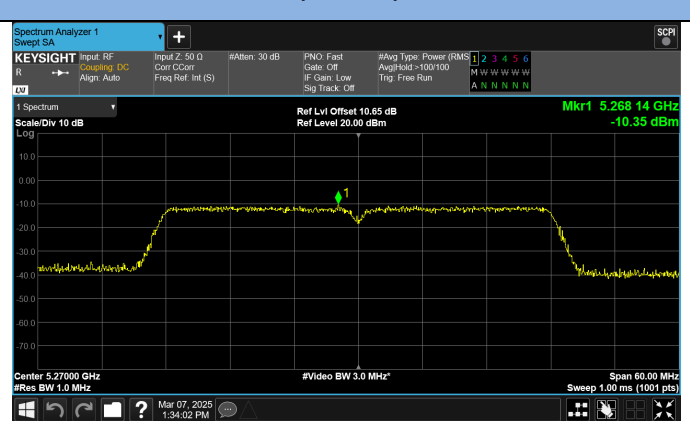
IEEE 802.11ac(VHT20) Middle Channel



IEEE 802.11ac(VHT20) High Channel

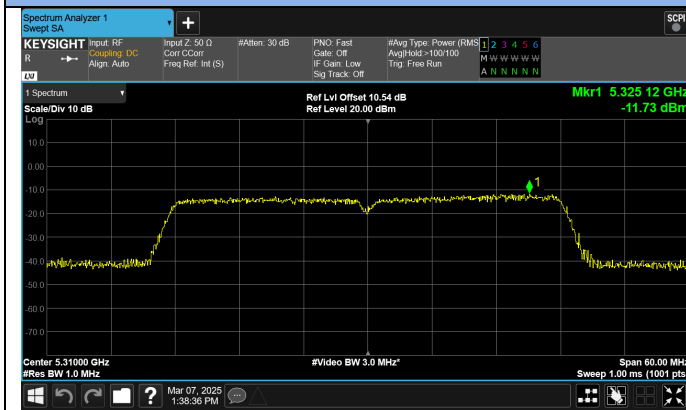


IEEE 802.11ac(VHT40) Low Channel

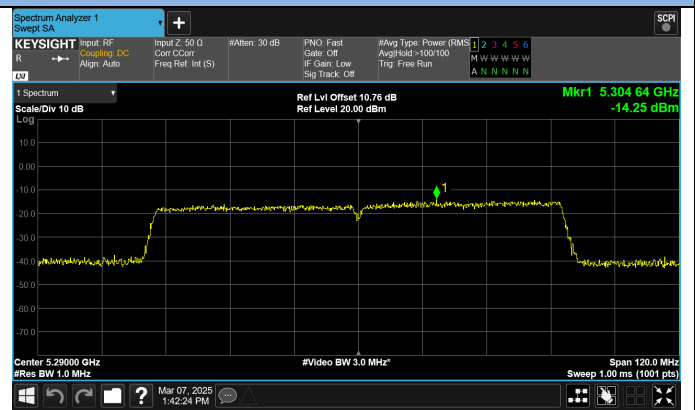


U-NII-2A Band

IEEE 802.11ac(VHT40) High Channel

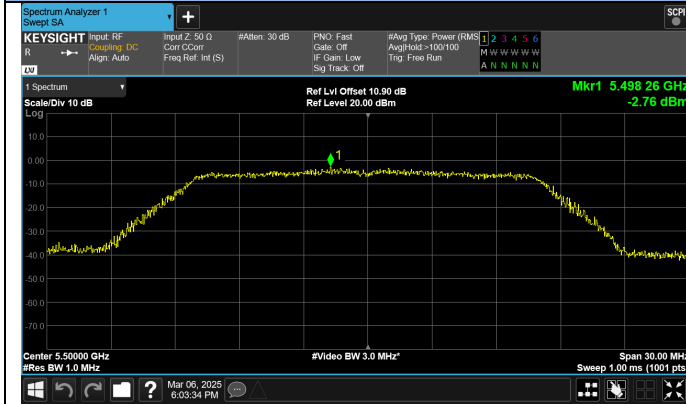


IEEE 802.11ac(VHT80)

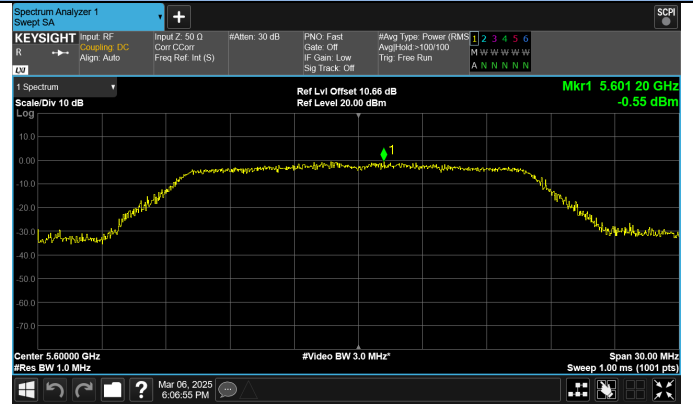


U-NII-2C Band

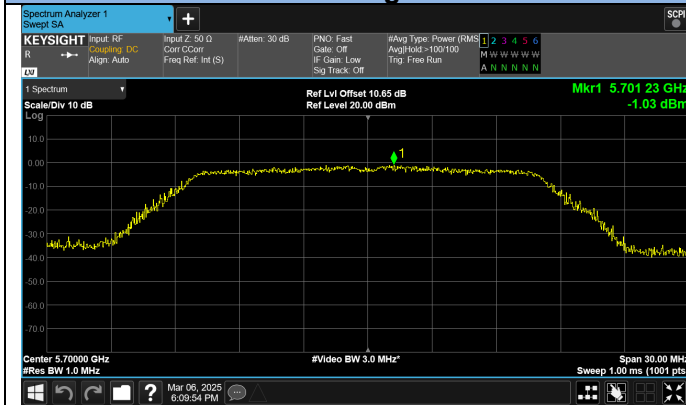
IEEE 802.11a Low Channel



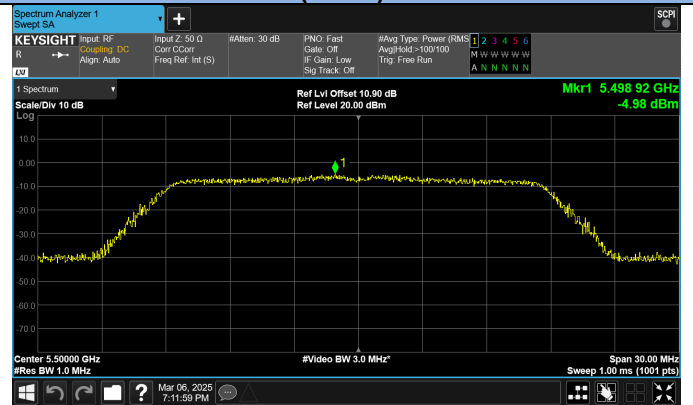
IEEE 802.11a Middle Channel



IEEE 802.11a High Channel



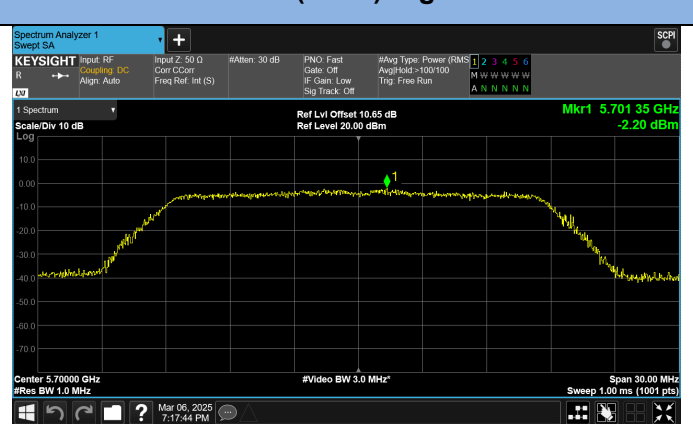
IEEE 802.11n(HT20) Low Channel



IEEE 802.11n(HT20) Middle Channel

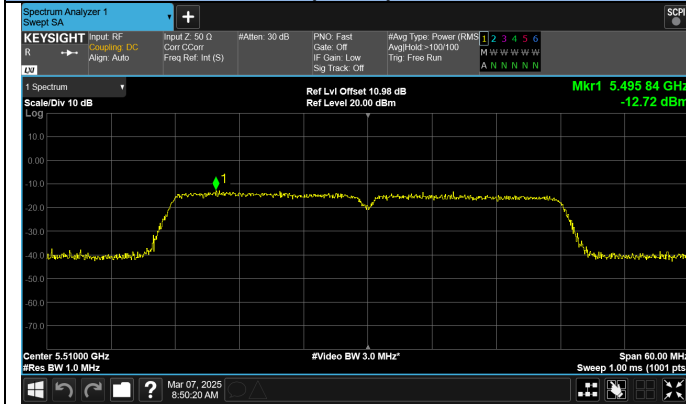


IEEE 802.11n(HT20) High Channel

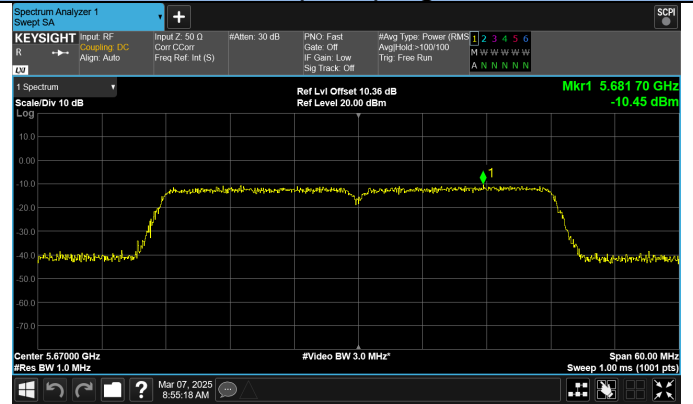


U-NII-2C Band

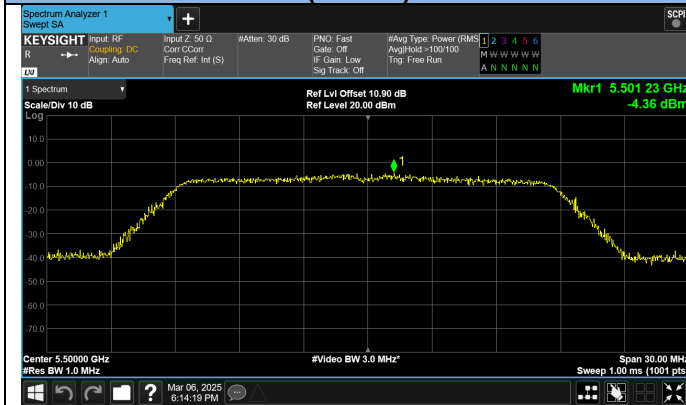
IEEE 802.11n(HT40) Low Channel



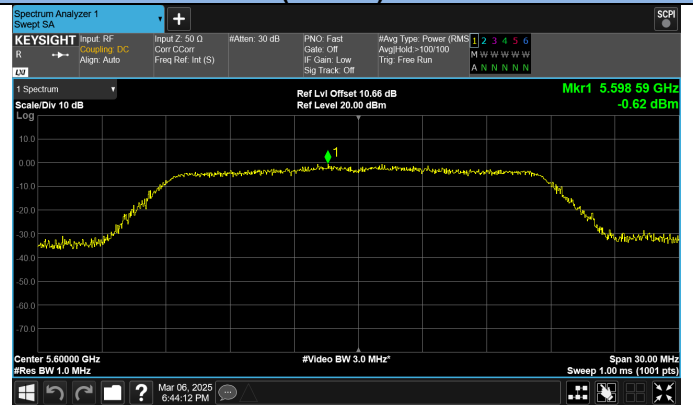
IEEE 802.11n(HT40) High Channel



IEEE 802.11ac(VHT20) Low Channel



IEEE 802.11ac(VHT20) Middle Channel



IEEE 802.11ac(VHT20) High Channel



IEEE 802.11ac(VHT40) Low Channel

