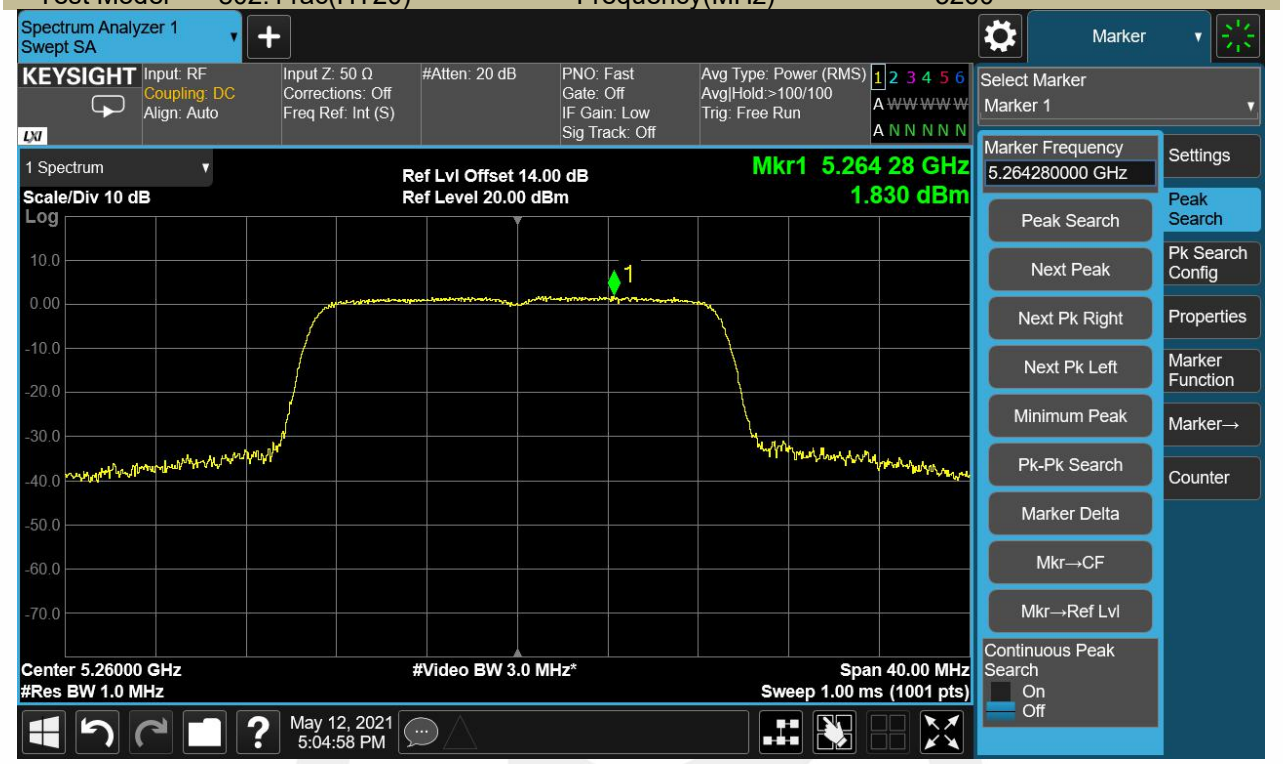
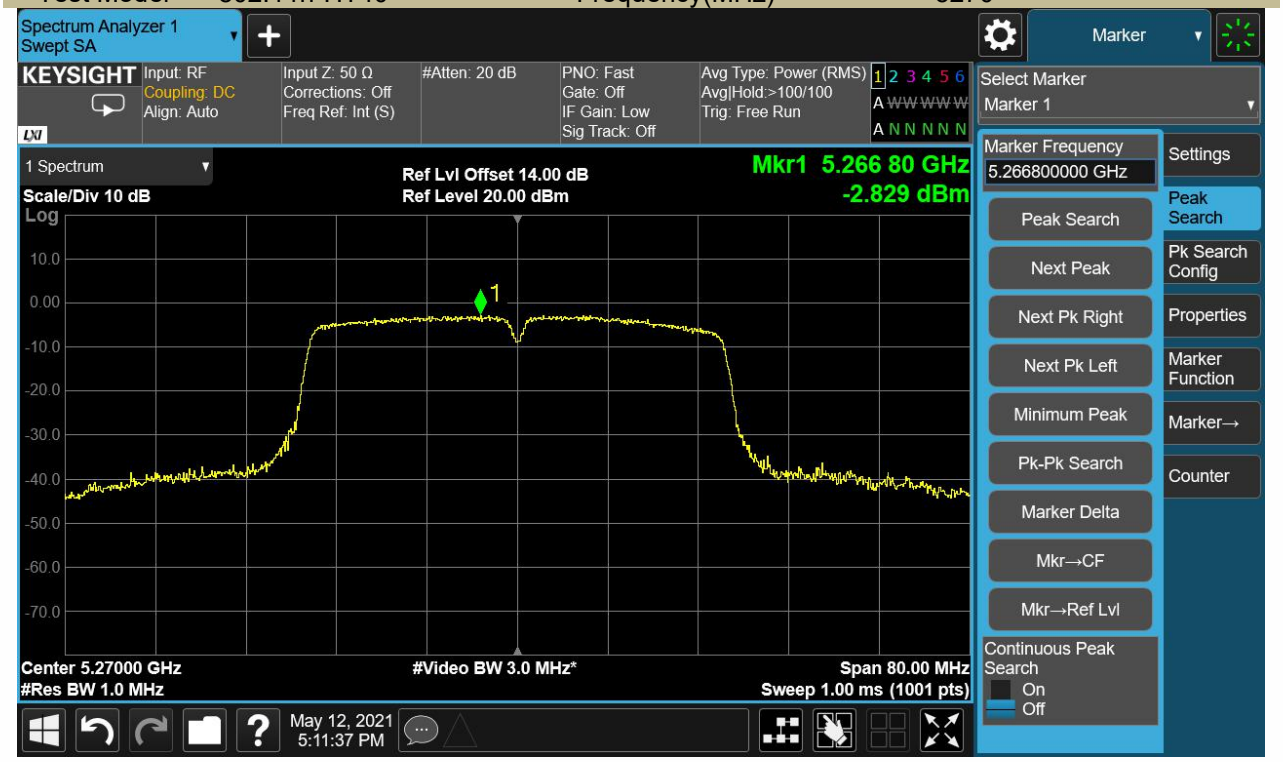
Power Spectral Density		U-NII – 2A	
Test Model	802.11ac(HT20)	Frequency(MHz)	5260



Power Spectral Density		U-NII – 2A	
Test Model	802.11ac(HT20)	Frequency(MHz)	5280

Power Spectral Density		U-NII – 2A	
Test Model	802.11ac(HT20)	Frequency(MHz)	5320

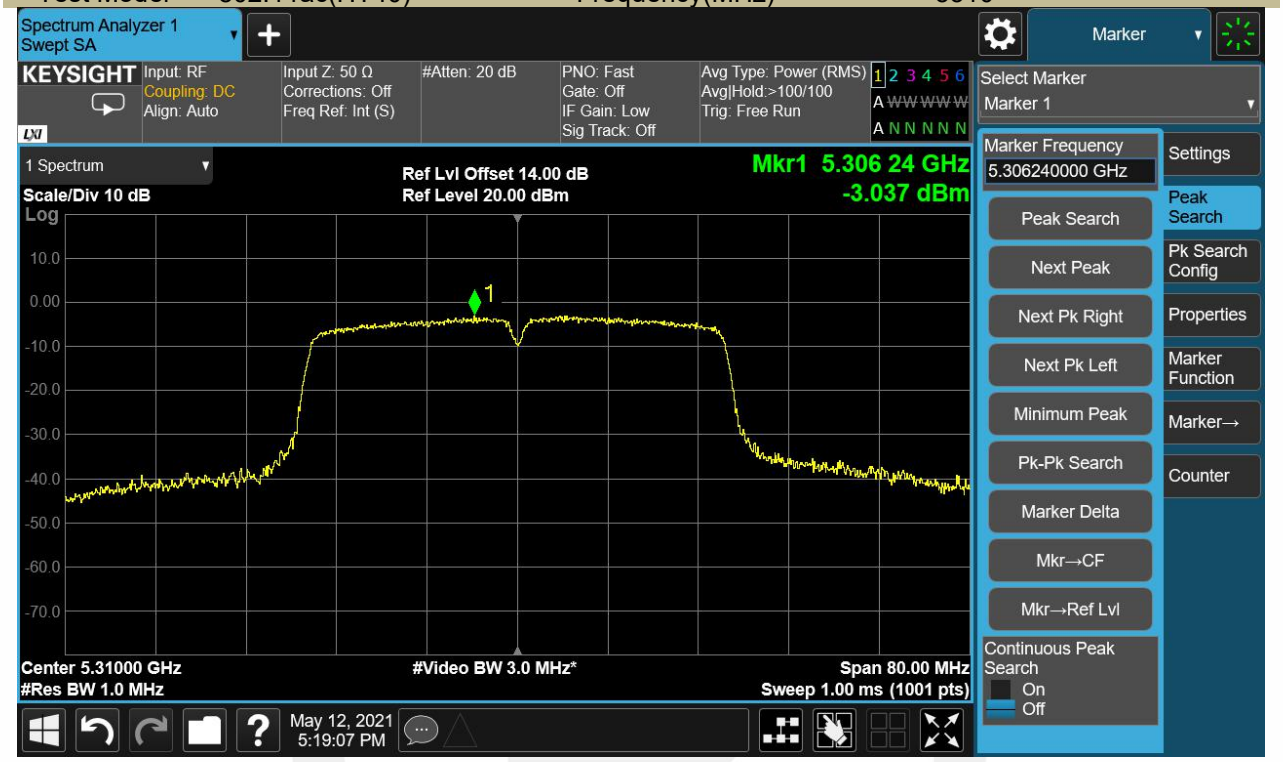
Power Spectral Density		U-NII – 2A	
Test Model	802.11n-HT40	Frequency(MHz)	5270



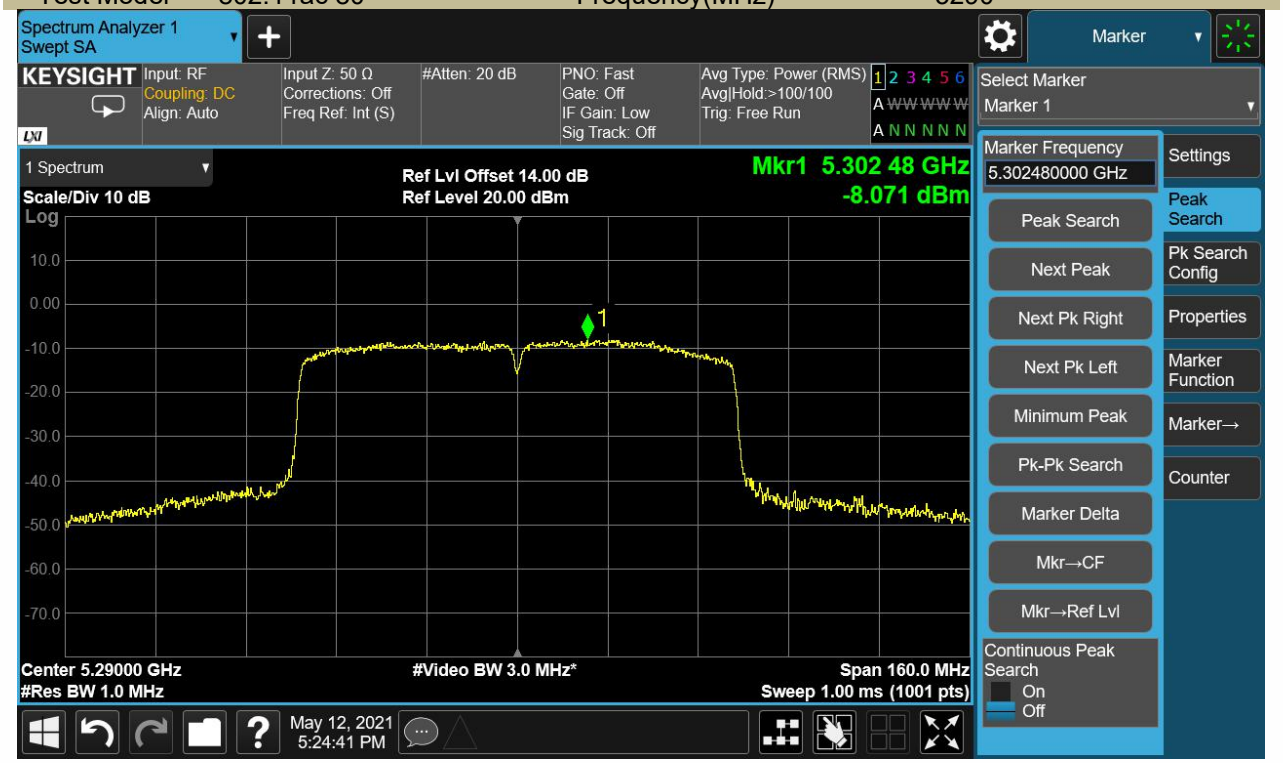
Power Spectral Density		U-NII – 2A	
Test Model	802.11n-HT40	Frequency(MHz)	5310

Power Spectral Density		U-NII – 2A	
Test Model	802.11ac(HT40)	Frequency(MHz)	5270

Power Spectral Density		U-NII – 2A	
Test Model	802.11ac(HT40)	Frequency(MHz)	5310



Power Spectral Density		U-NII – 2A	
Test Model	802.11ac 80	Frequency(MHz)	5290



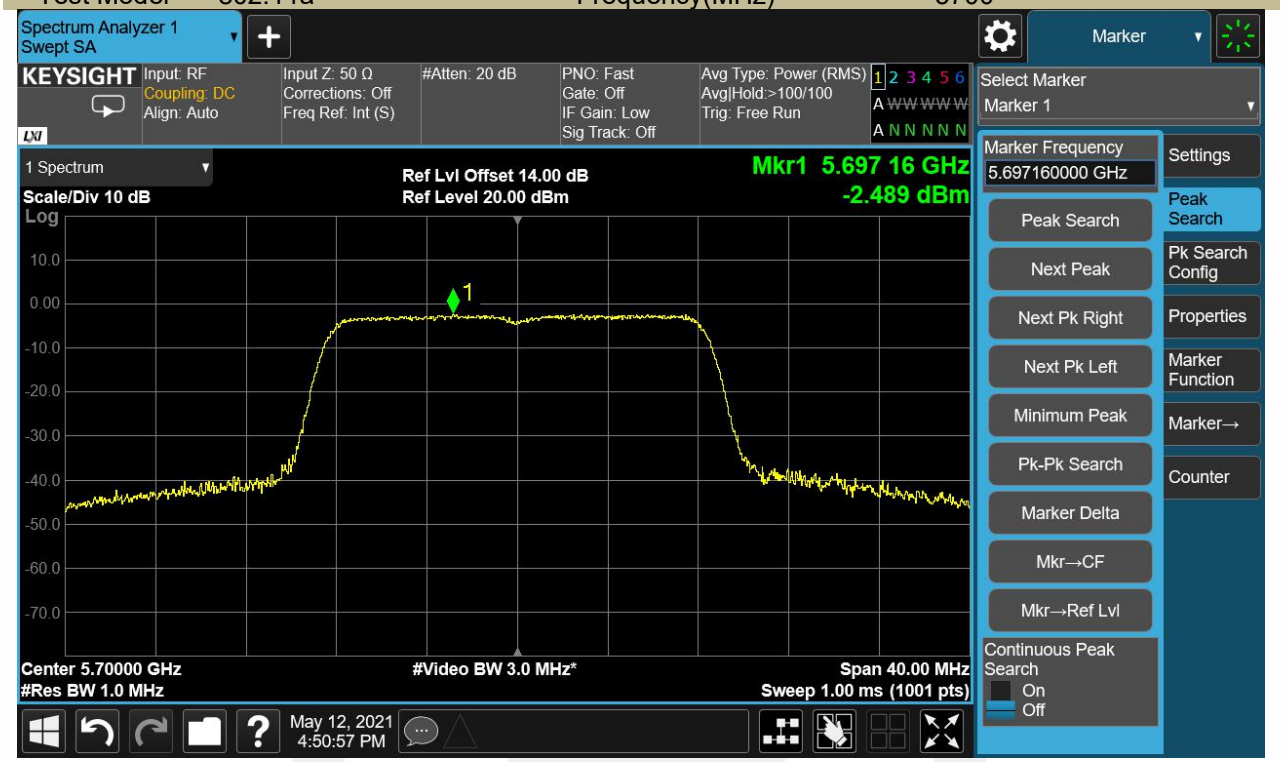
5470-5725MHz

Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a	5500	-1.20	11
	5580	-0.56	11
	5700	-2.48	11
802.11n-HT20	5500	-0.90	11
	5580	-0.95	11
	5700	-2.21	11
802.11ac(HT20)	5500	-1.51	11
	5580	-0.48	11
	5700	-1.97	11
802.11n-HT40	5510	-4.41	11
	5670	-6.13	11
802.11ac(HT40)	5510	-4.87	11
	5670	-6.66	11
802.11ac(HT80)	5530	-7.96	11

Power Spectral Density		U-NII – 2C	
Test Model	802.11a	Frequency(MHz)	5500

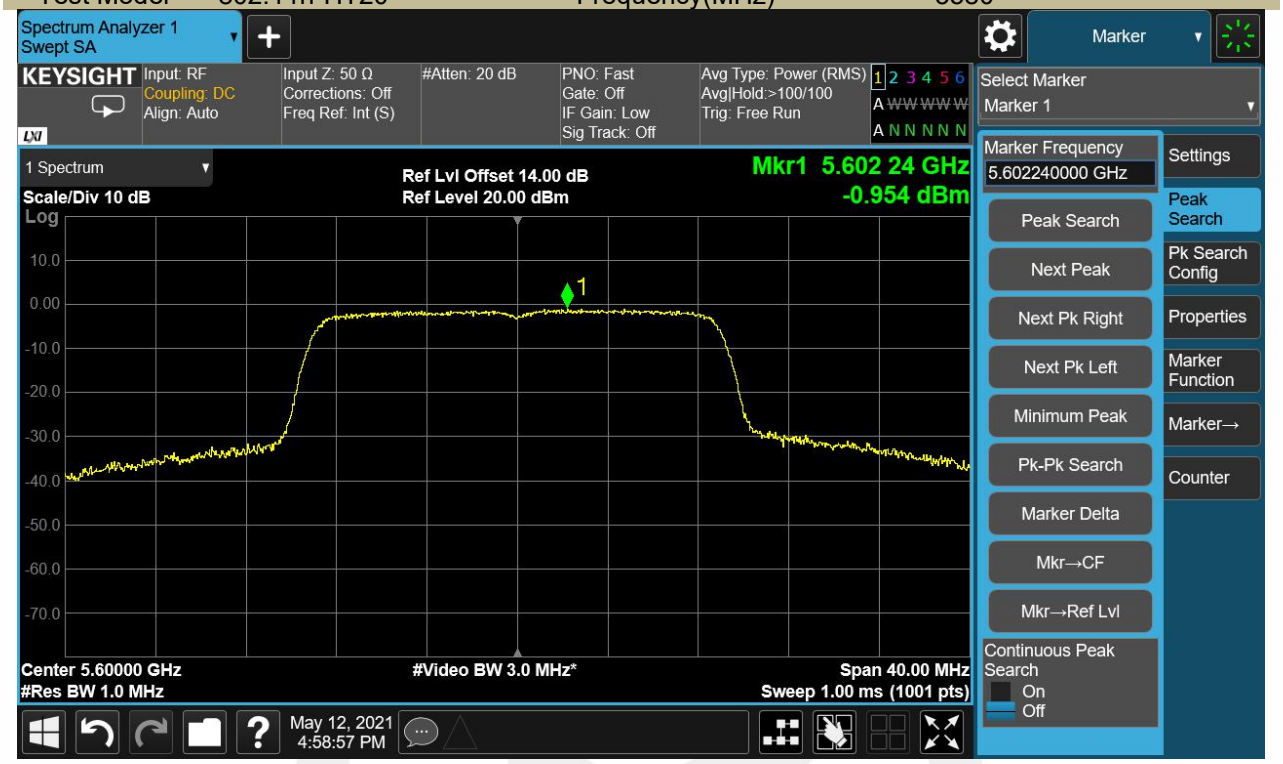
Power Spectral Density		U-NII – 2C	
Test Model	802.11a	Frequency(MHz)	5580

Power Spectral Density	U-NII – 2C	
Test Model 802.11a	Frequency(MHz)	5700

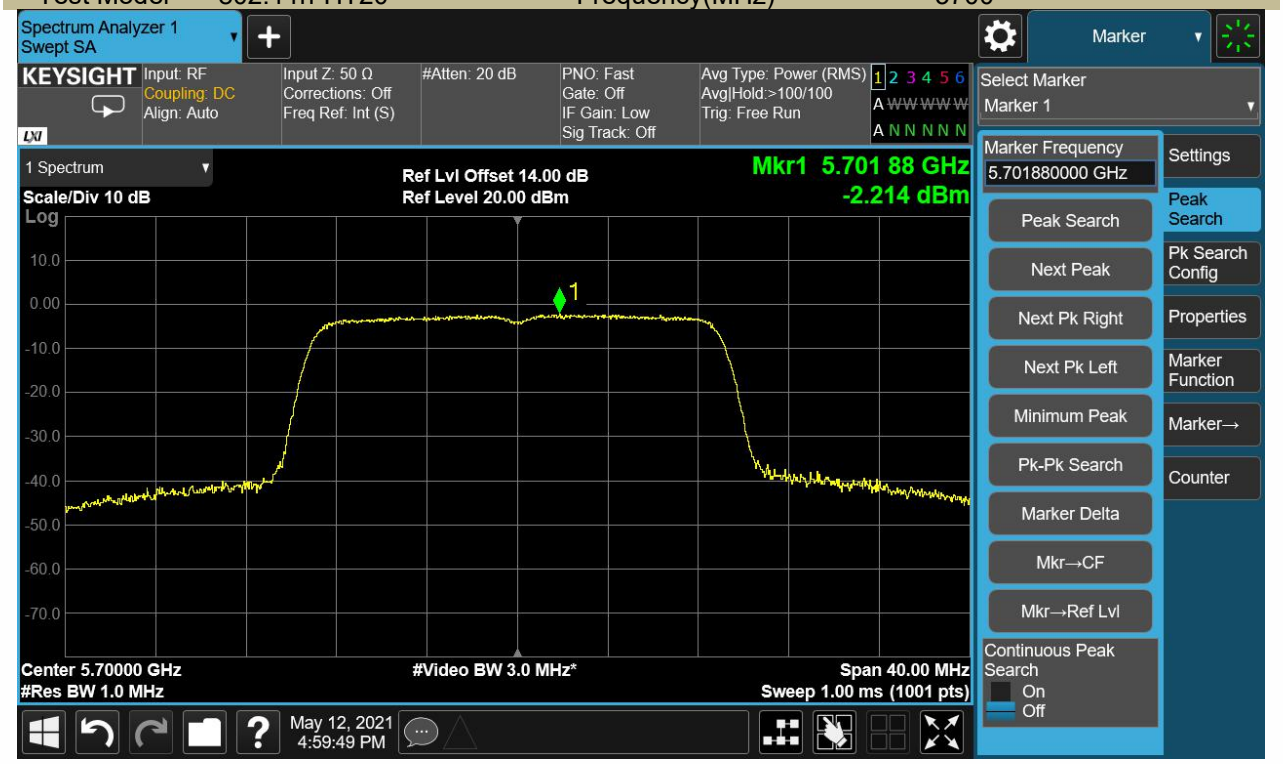


Power Spectral Density	U-NII – 2C	
Test Model 802.11n-HT20	Frequency(MHz)	5500

Power Spectral Density		U-NII – 2C	
Test Model	802.11n-HT20	Frequency(MHz)	5580

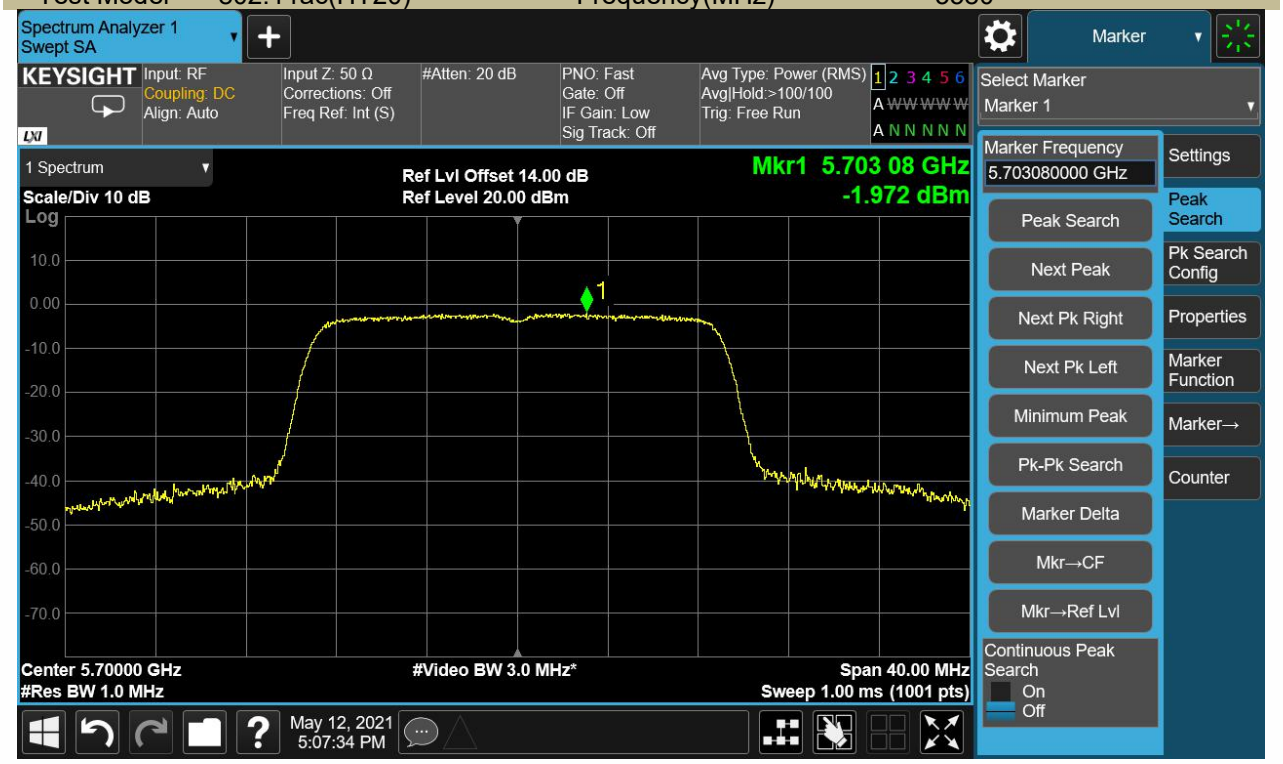


Power Spectral Density		U-NII – 2C	
Test Model	802.11n-HT20	Frequency(MHz)	5700

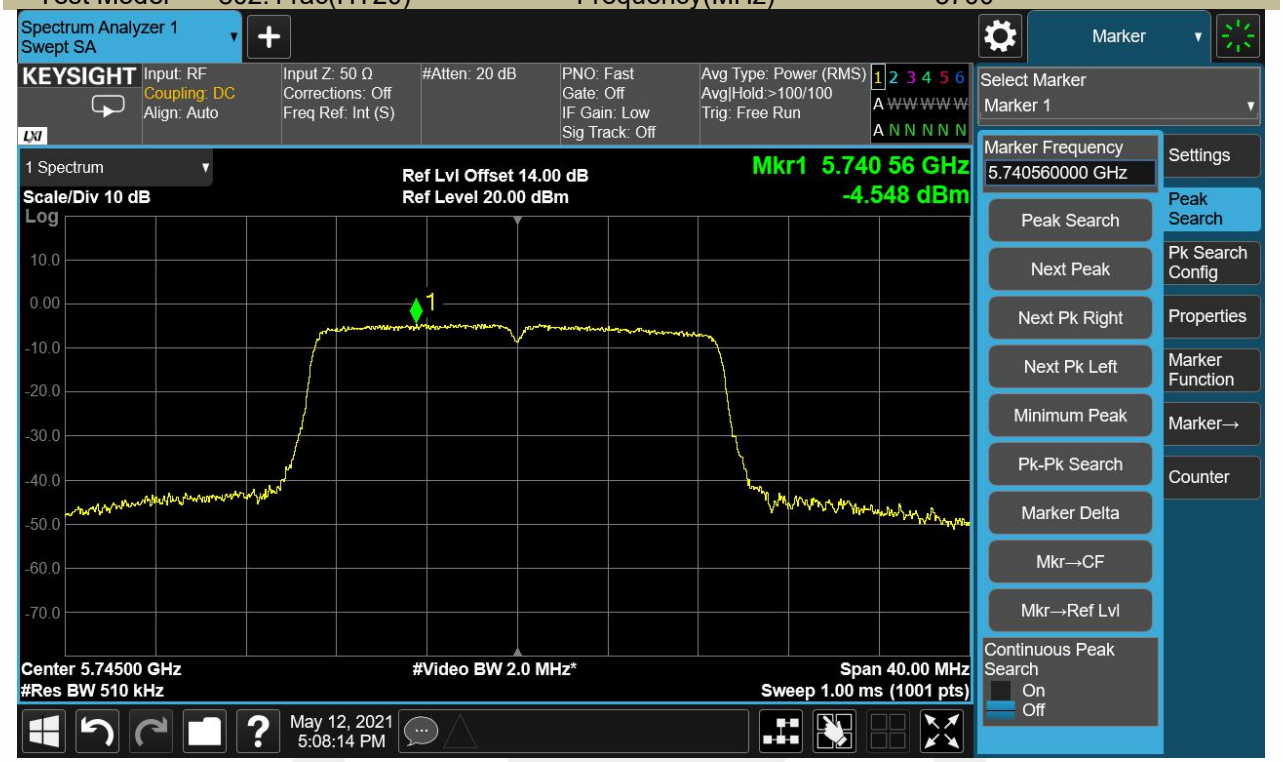


Power Spectral Density		U-NII – 2C	
Test Model	802.11ac(HT20)	Frequency(MHz)	5500

Power Spectral Density		U-NII – 2C	
Test Model	802.11ac(HT20)	Frequency(MHz)	5580

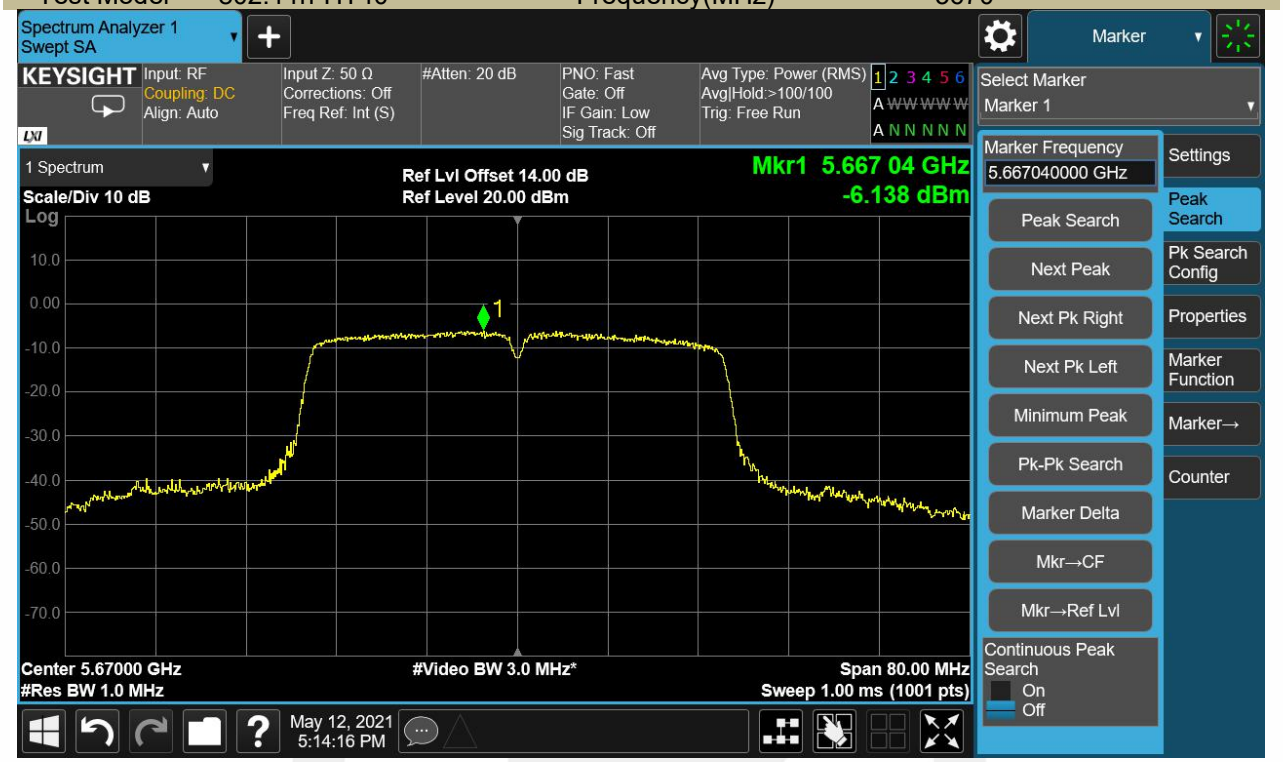


Power Spectral Density		U-NII – 2C	
Test Model	802.11ac(HT20)	Frequency(MHz)	5700



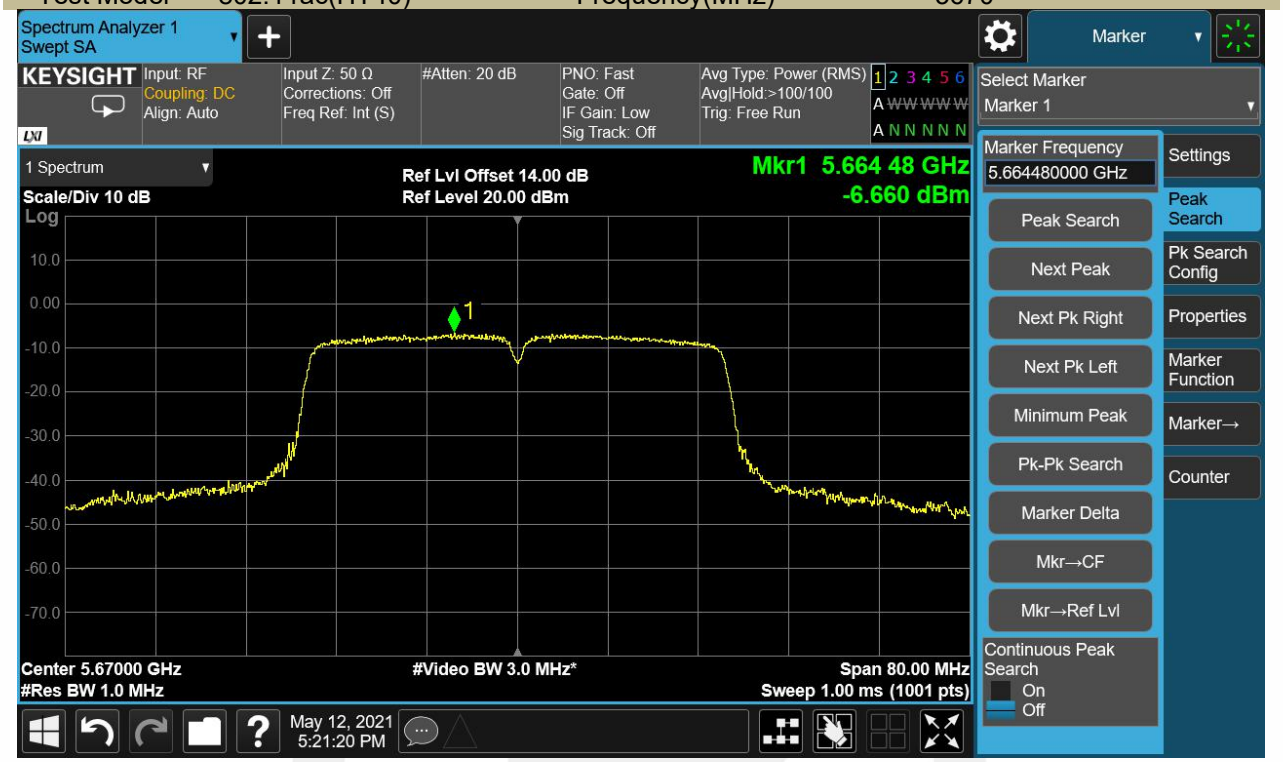
Power Spectral Density		U-NII – 2C	
Test Model	802.11n-HT40	Frequency(MHz)	5510

Power Spectral Density		U-NII – 2C	
Test Model	802.11n-HT40	Frequency(MHz)	5670



Power Spectral Density		U-NII – 2C	
Test Model	802.11ac(HT40)	Frequency(MHz)	5510

Power Spectral Density		U-NII – 2C	
Test Model	802.11ac(HT40)	Frequency(MHz)	5670

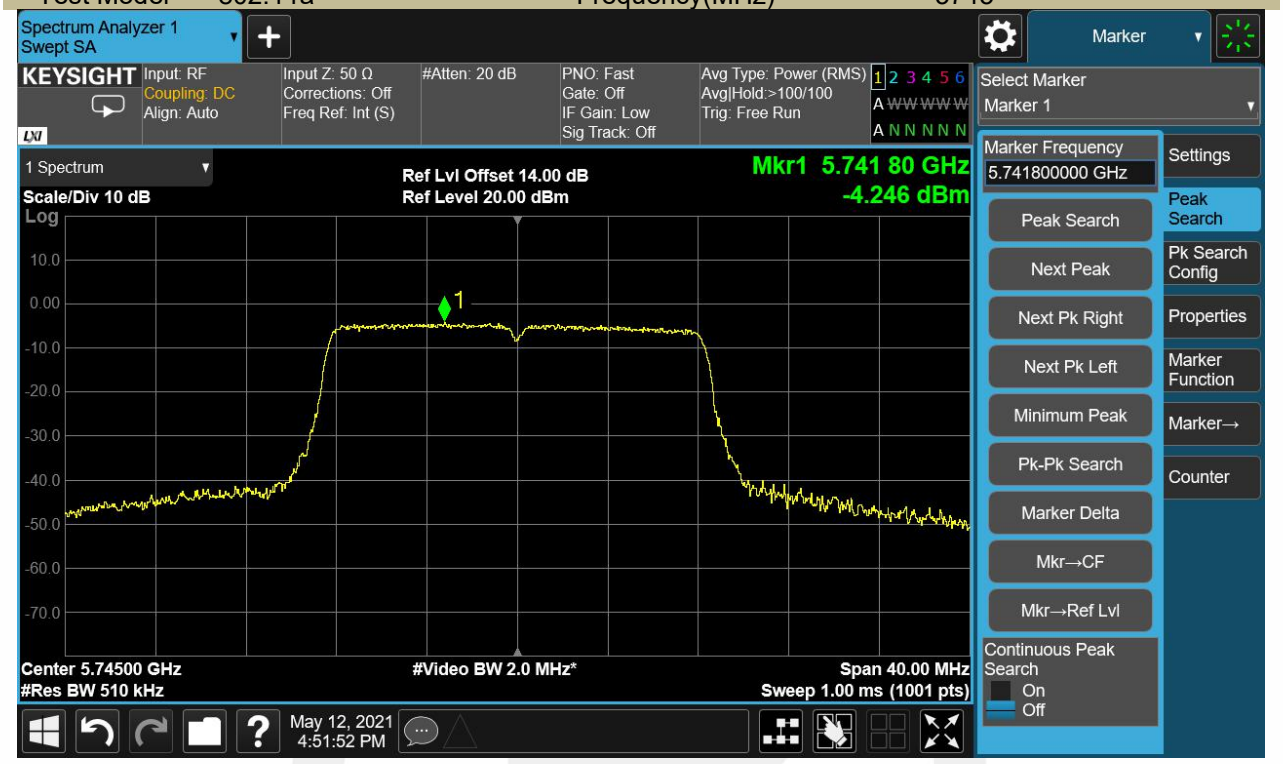


Power Spectral Density		U-NII – 2C	
Test Model	802.11ac 80	Frequency(MHz)	5530

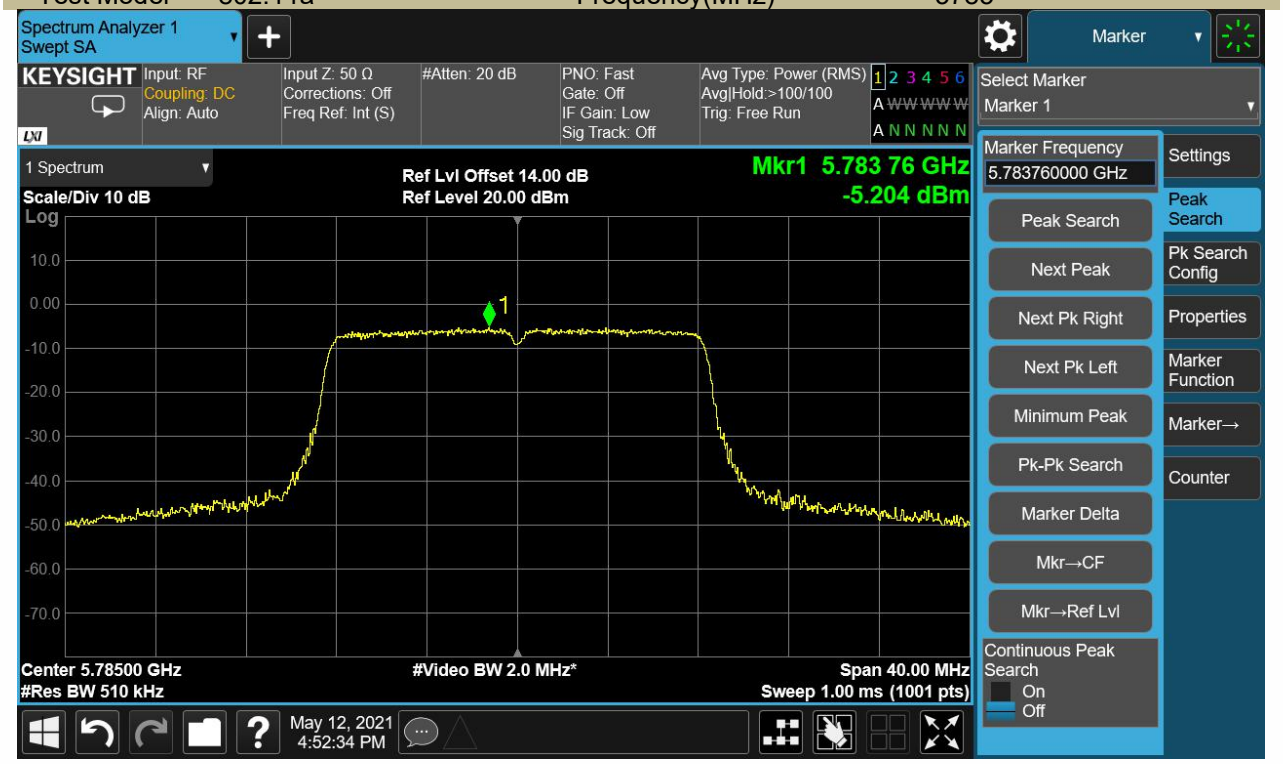
5725-5850MHz

Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a	5745	-4.24	30
	5785	-5.20	30
	5825	-3.97	30
802.11n-HT20	5745	-4.15	30
	5785	-5.57	30
	5825	-4.33	30
802.11ac(VHT20)	5745	-4.54	30
	5785	-5.91	30
	5825	-4.36	30
802.11n-HT40	5755	-8.25	30
	5795	-8.92	30
802.11ac(VHT40)	5755	-8.88	30
	5795	-8.36	30
802.11ac(VHT80)	5775	-13.35	30

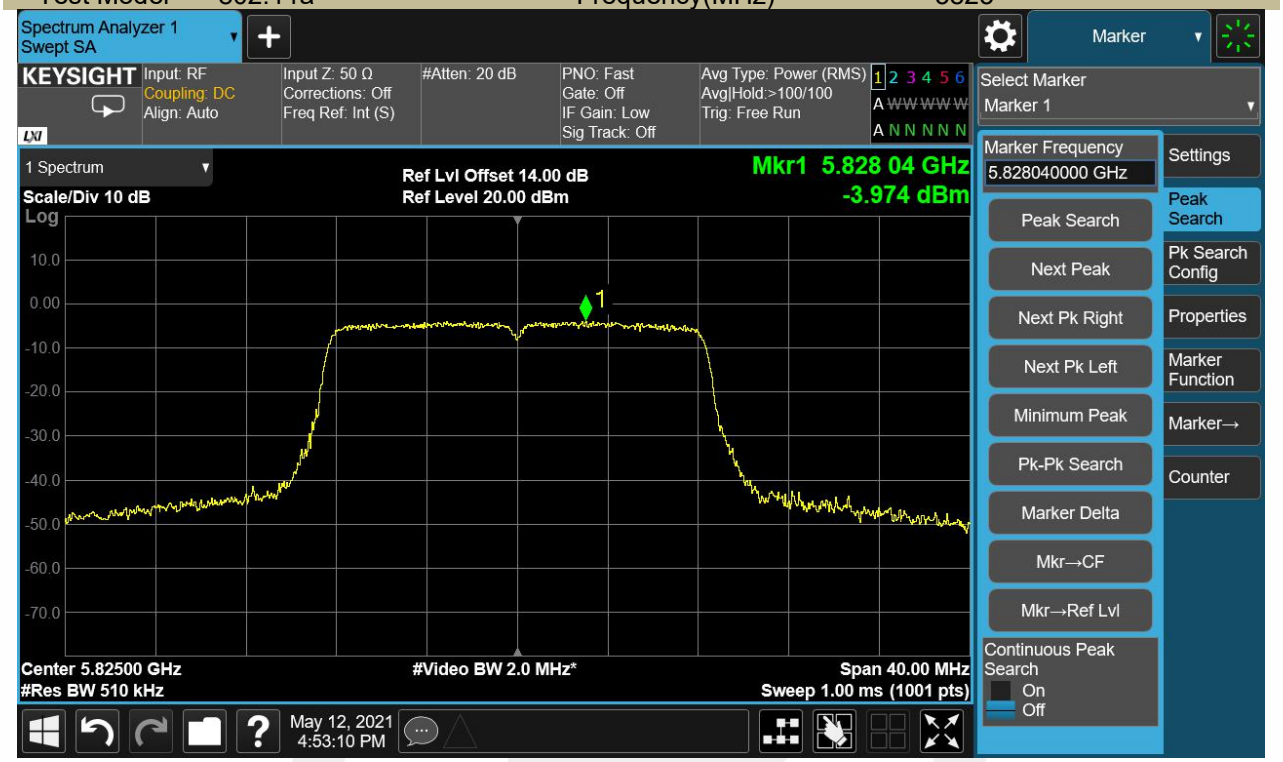
Power Spectral Density		U-NII - 3	
Test Model	802.11a	Frequency(MHz)	5745



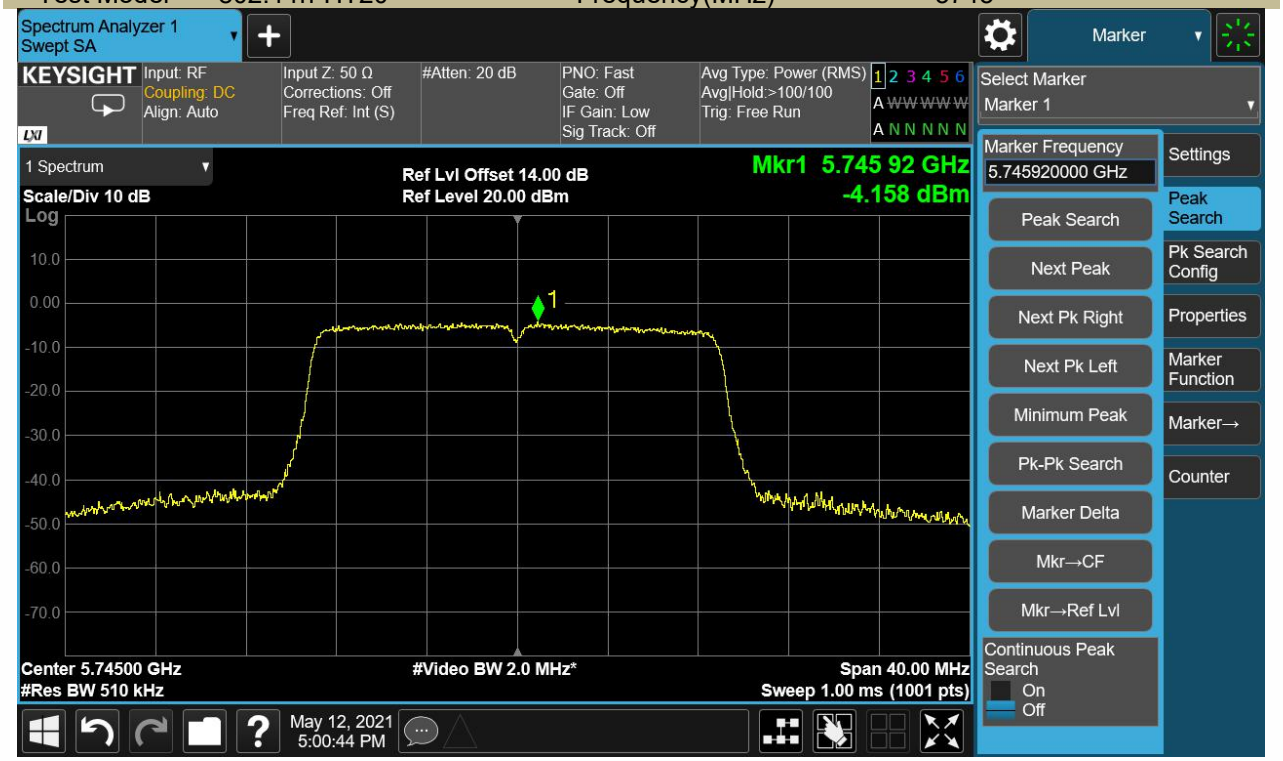
Power Spectral Density		U-NII - 3	
Test Model	802.11a	Frequency(MHz)	5785



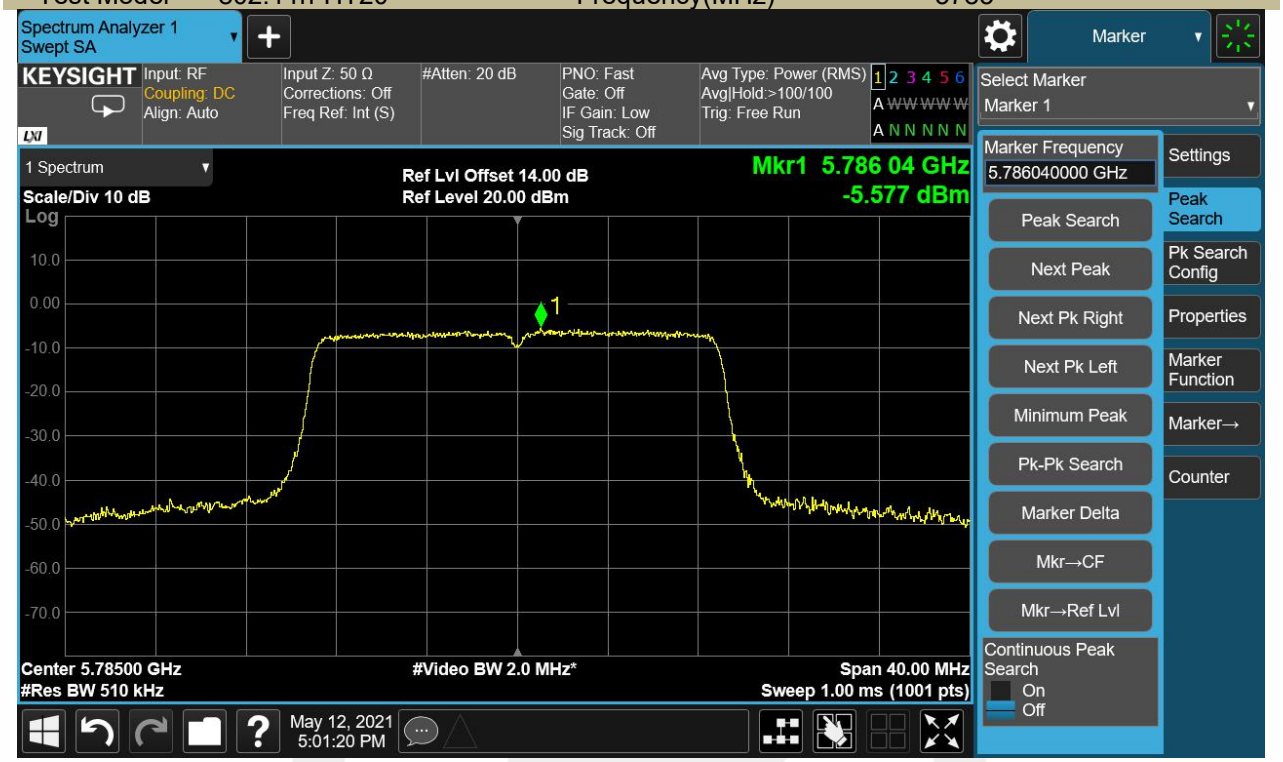
Power Spectral Density		U-NII - 3	
Test Model	802.11a	Frequency(MHz)	5825



Power Spectral Density		U-NII - 3	
Test Model	802.11n-HT20	Frequency(MHz)	5745

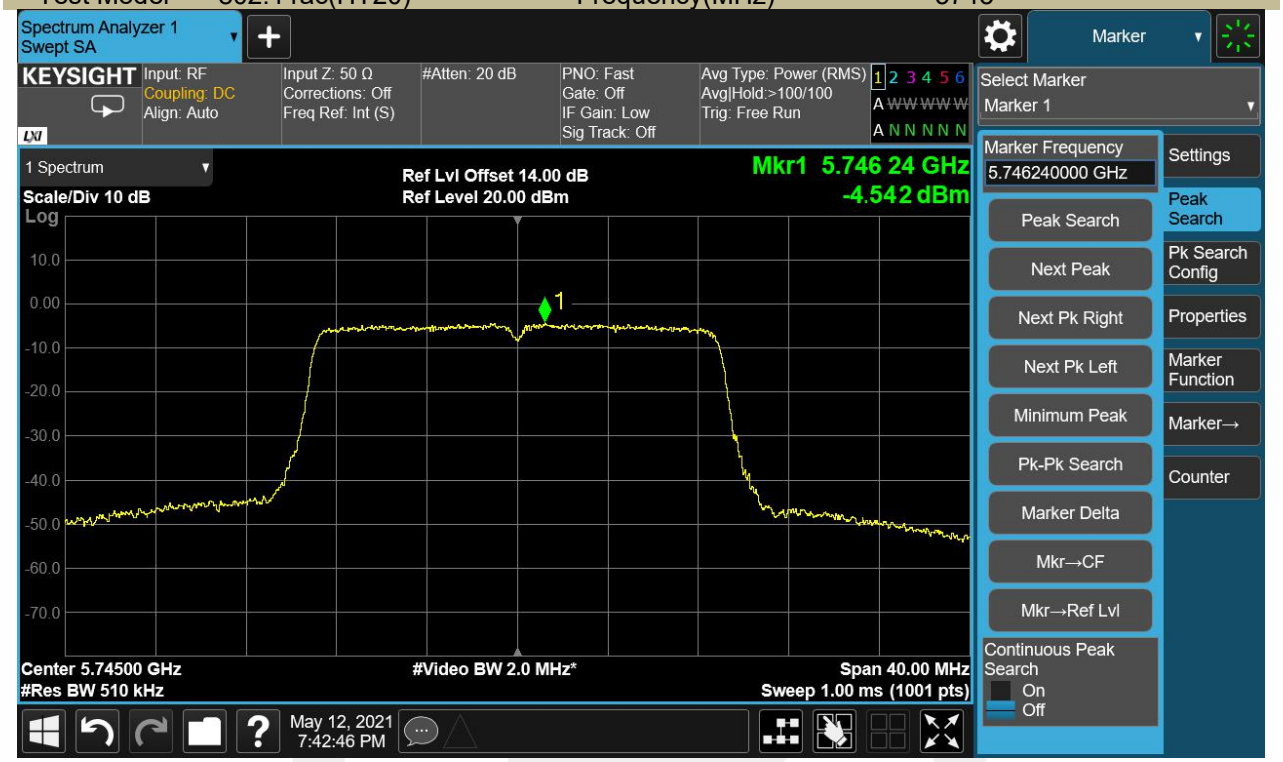


Power Spectral Density		U-NII - 3	
Test Model	802.11n-HT20	Frequency(MHz)	5785



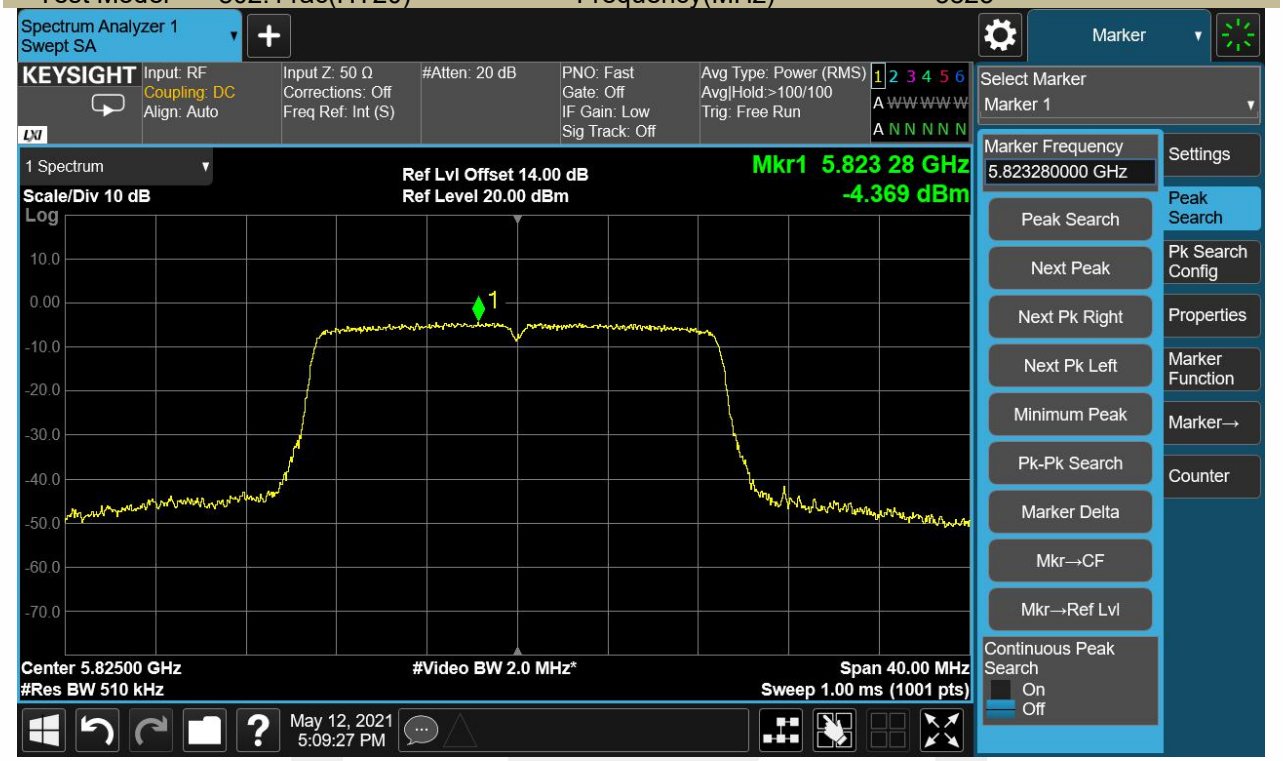
Power Spectral Density		U-NII - 3	
Test Model	802.11n-HT20	Frequency(MHz)	5825

Power Spectral Density		U-NII - 3	
Test Model	802.11ac(HT20)	Frequency(MHz)	5745

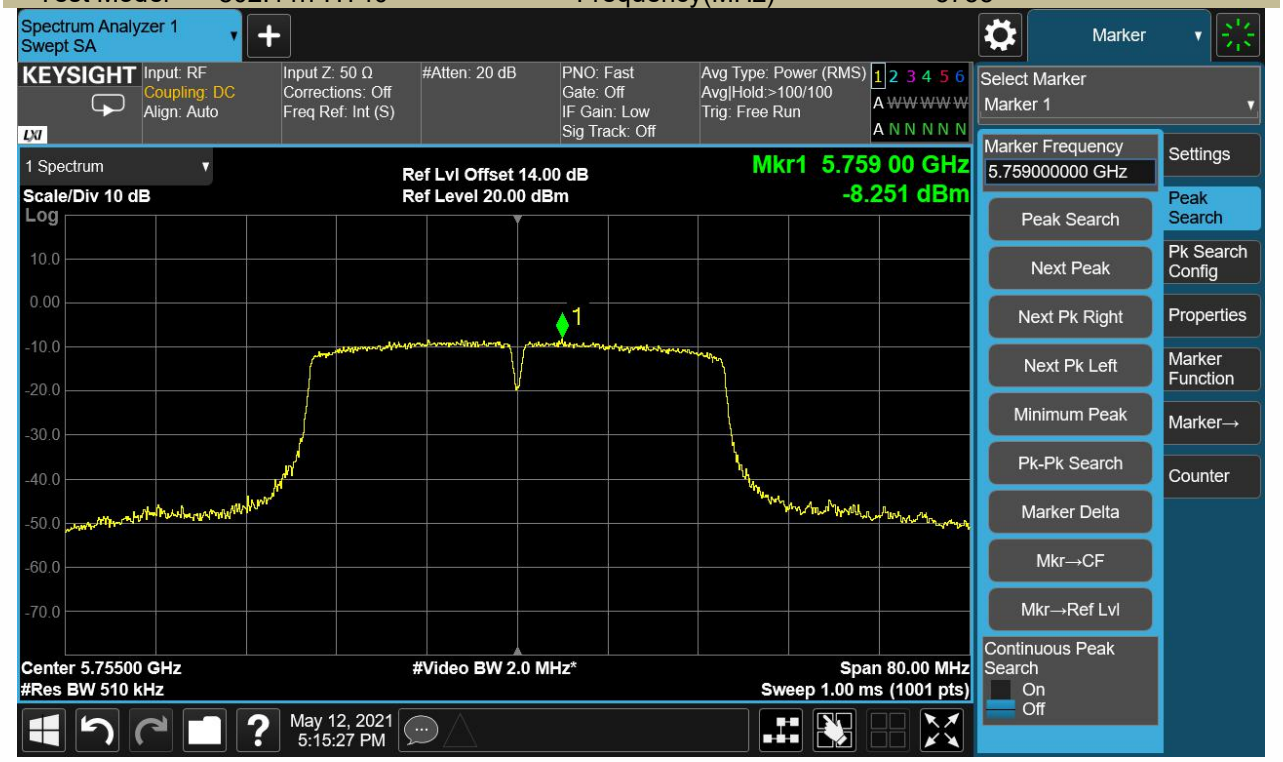


Power Spectral Density		U-NII - 3	
Test Model	802.11ac(HT20)	Frequency(MHz)	5785

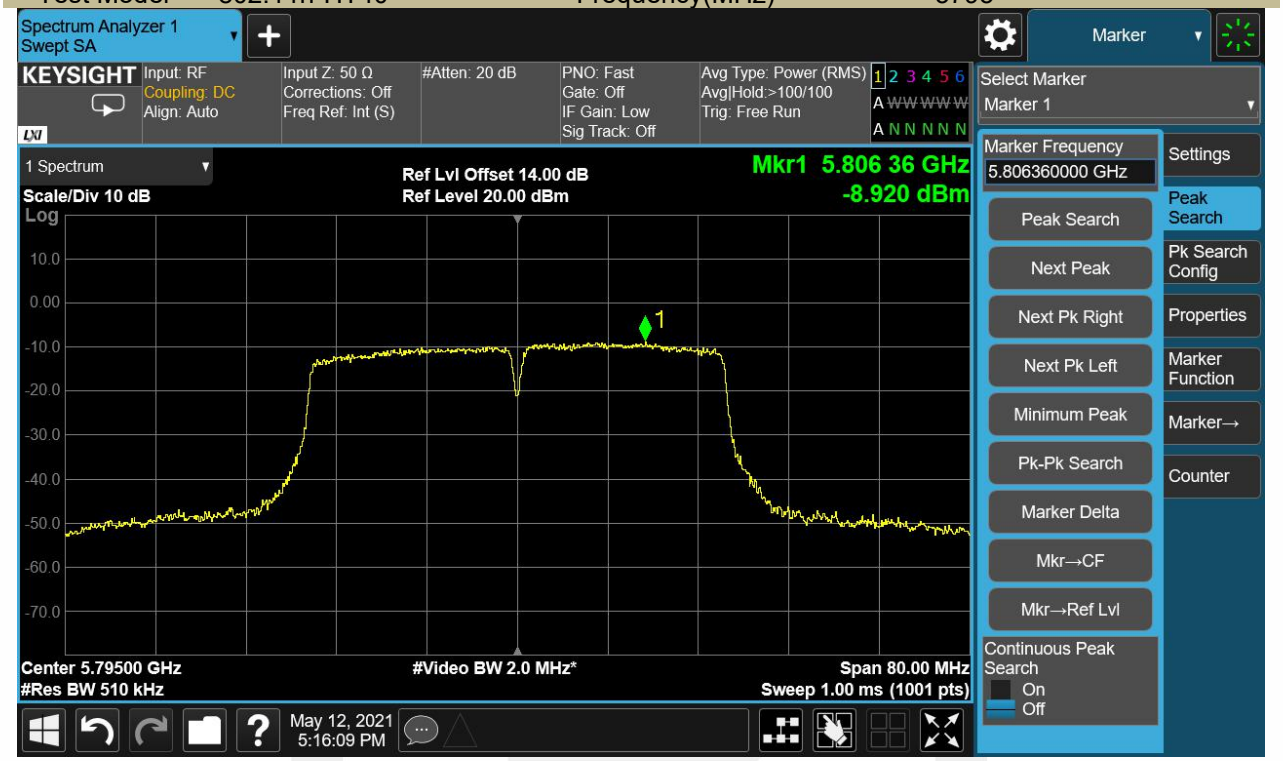
Power Spectral Density		U-NII - 3	
Test Model	802.11ac(HT20)	Frequency(MHz)	5825



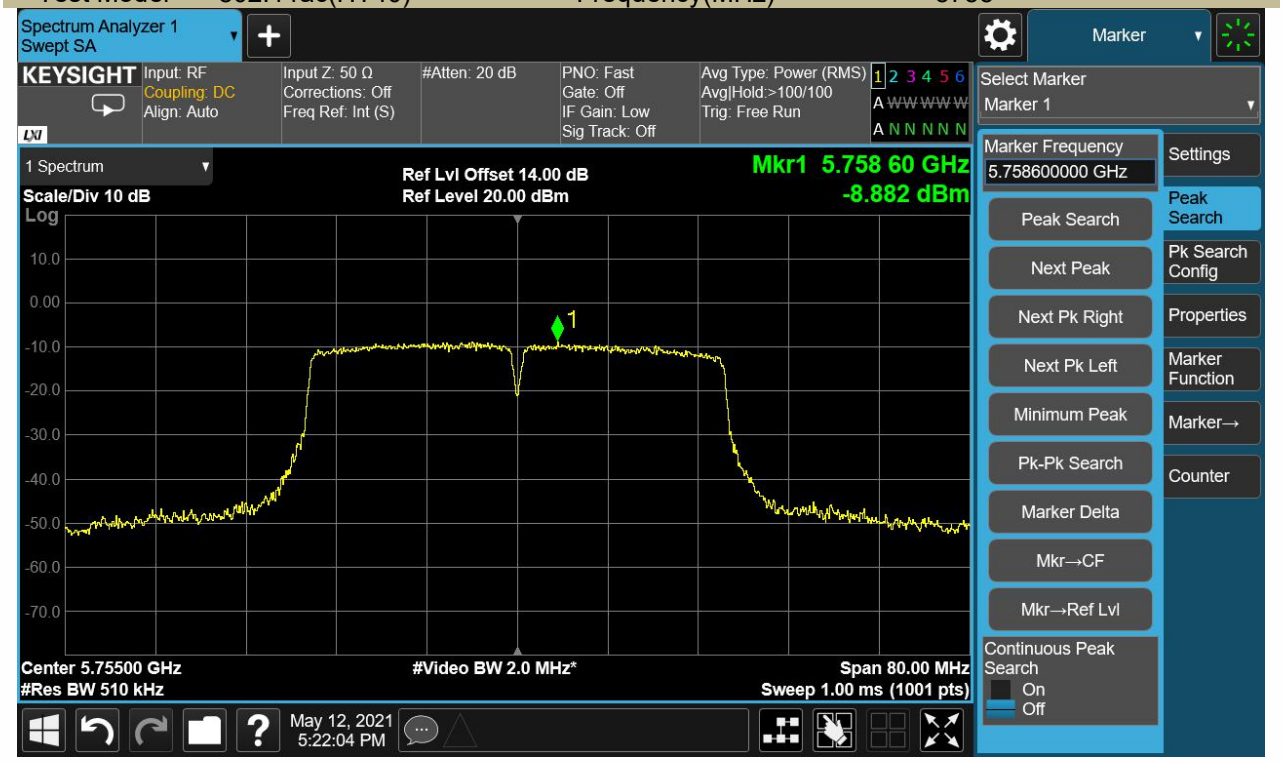
Power Spectral Density		U-NII - 3	
Test Model	802.11n-HT40	Frequency(MHz)	5755



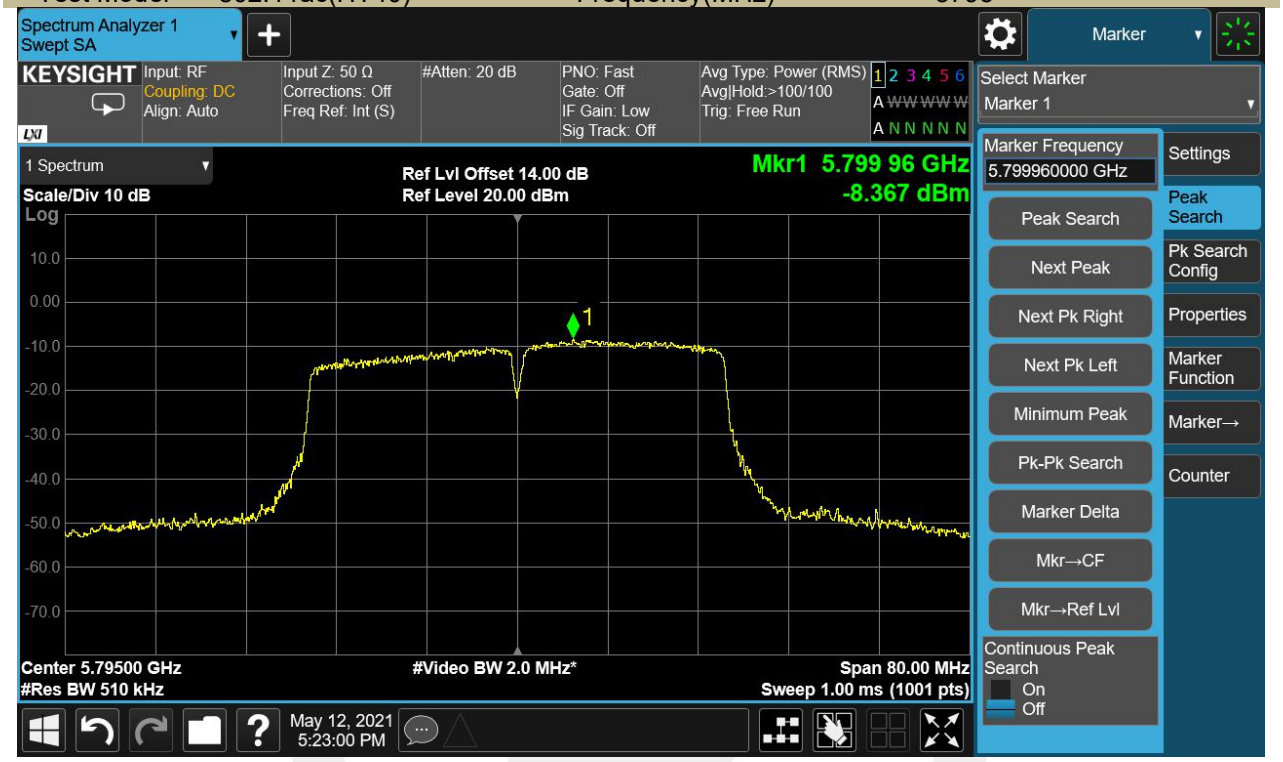
Power Spectral Density		U-NII - 3	
Test Model	802.11n-HT40	Frequency(MHz)	5795



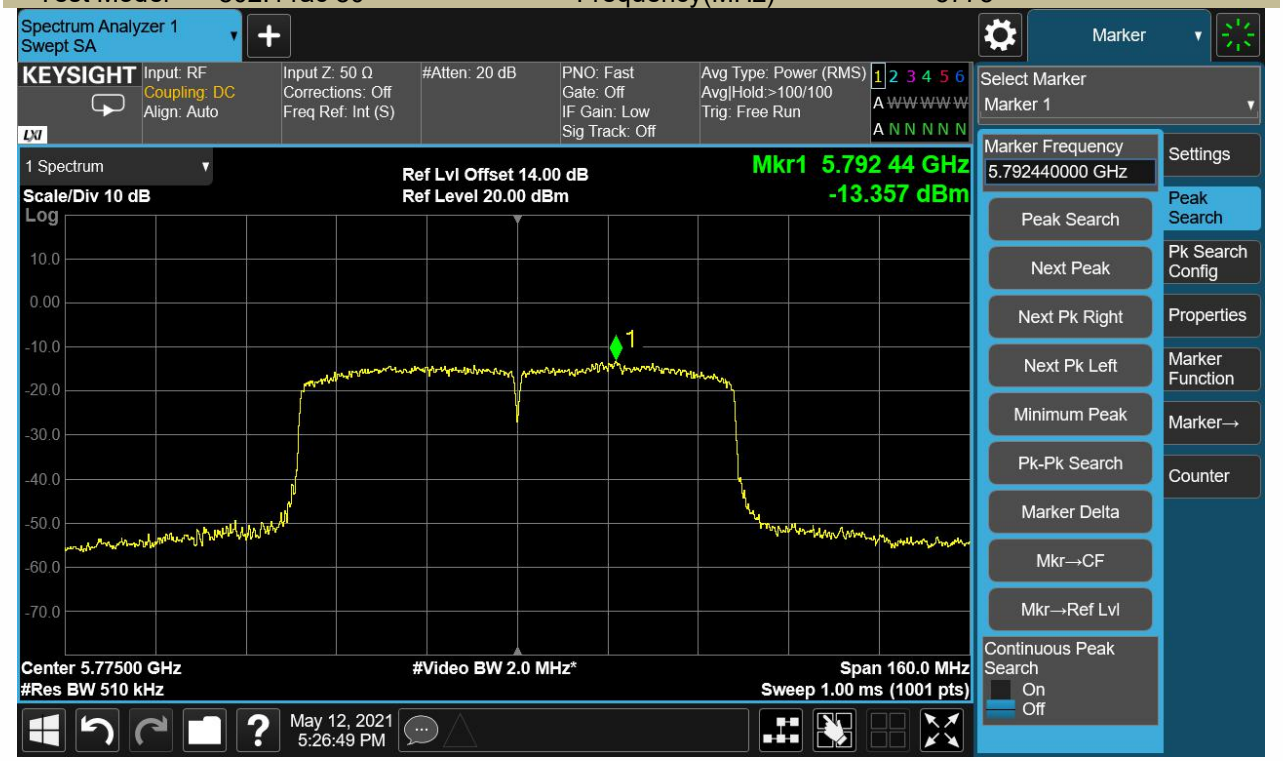
Power Spectral Density		U-NII - 3	
Test Model	802.11ac(HT40)	Frequency(MHz)	5755



Power Spectral Density		U-NII - 3	
Test Model	802.11ac(HT40)	Frequency(MHz)	5795



Power Spectral Density		U-NII - 3	
Test Model	802.11ac 80	Frequency(MHz)	5775



2T2R – Total

5150-5250MHz

Operating mode	Test Channel	Power Spectral Density dBm/MHz			Limit (dBm/MHz)
		Antenna 1	Antenna 2	Total	
802.11n-HT20	5180	1.15	1.03	4.10	10.60
	5200	2.49	0.84	4.75	10.60
	5240	3.41	1.55	5.59	10.60
802.11ac(VHT20)	5180	1.04	0.98	4.02	10.60
	5200	2.74	1.02	4.97	10.60
	5240	3.14	1.5	5.41	10.60
802.11n-HT40	5190	-2.12	-2.46	0.72	10.60
	5230	-0.51	-2.77	1.52	10.60
802.11ac(VHT40)	5190	-2.42	-2.89	0.36	10.60
	5230	-0.6	-2.87	1.42	10.60
802.11ac(VHT80)	5210	-5.78	-7.93	-3.71	10.60

5250-5350MHz

Operating mode	Test Channel	Power Spectral Density dBm/MHz			Limit (dBm/MHz)
		Antenna 1	Antenna 2	Total	
802.11n-HT20	5260	2.89	1.77	5.38	10.60
	5280	3.07	0.74	5.07	10.60
	5320	3.73	1.32	5.70	10.60
802.11ac(VHT20)	5260	2.84	1.83	5.37	10.60
	5280	3.39	2.87	6.15	10.60
	5320	4.49	1.03	6.11	10.60
802.11n-HT40	5270	-1.11	-2.82	1.13	10.60
	5310	-1.11	-3.14	1.00	10.60
802.11ac(VHT40)	5270	-0.64	-3.07	1.32	10.60
	5310	-0.12	-3.03	1.67	10.60
802.11ac(VHT80)	5290	-5.26	-8.07	-3.43	10.60

5470-5725MHz

Operating mode	Test Channel	Power Spectral Density dBm/MHz			Limit (dBm/MHz)
		Antenna 1	Antenna 2	Total	
802.11n-HT20	5500	-0.33	-0.9	2.40	10.60
	5580	-0.22	-0.95	2.44	10.60
	5700	-0.99	-2.21	1.45	10.60
802.11ac(VHT20)	5500	-0.07	-1.51	2.28	10.60
	5580	0.03	-0.48	2.79	10.60
	5700	-1.67	-1.97	1.19	10.60
802.11n-HT40	5510	-4.13	-4.41	-1.26	10.60
	5670	-4.12	-6.13	-2.00	10.60
802.11ac(VHT40)	5510	-4	-4.87	-1.40	10.60
	5670	-3.88	-6.66	-2.04	10.60
802.11ac(VHT80)	5530	-9.09	-7.96	-5.48	10.60

5725-5850MHz

Operating mode	Test Channel	Power Spectral Density dBm/MHz			Limit (dBm/MHz)
		Antenna 1	Antenna 2	Total	
802.11n-HT20	5745	-4.24	-4.15	-1.18	29.60
	5785	-5.73	-5.57	-2.64	29.60
	5825	-5.61	-4.33	-1.91	29.60
802.11ac(VHT20)	5745	-4.34	-4.54	-1.43	29.60
	5785	-5.6	-5.91	-2.74	29.60
	5825	-5.53	-4.36	-1.90	29.60
802.11n-HT40	5755	-8.02	-8.25	-5.12	29.60
	5795	-9.46	-8.92	-6.17	29.60
802.11ac(VHT40)	5755	-7.99	-8.88	-5.40	29.60
	5795	-9.79	-8.36	-6.01	29.60
802.11ac(VHT80)	5775	-13.4	-13.35	-10.36	29.60

8.4 FREQUENCY STABILITY

8.4.1 Applicable Standard

According to FCC Part 15.407(g)
ANSI C63.10 Section 6.8

8.4.2 Conformance Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

8.4.3 Test Configuration

Test according to clause 6.1 radio frequency test setup

8.4.4 Test Procedure

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
Set to the maximum power setting and enable the EUT transmit continuously
Set RBW = 10 kHz.
Set Span= Entire absence of modulation emissions band
Set the video bandwidth (VBW) =30 kHz. width
Set Detector = Peak.
Set Trace mode = max hold.
Set Sweep = auto couple.
Allow the trace to stabilize.
The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
Beginning at each temperature level specified in user manual , the frequency shall be measured within one minute after application of primary power to the transmitter and at intervals of no more than one minute thereafter until ten minutes have elapsed or until sufficient measurements are obtained to indicate clearly that the frequency has stabilized within the applicable tolerance, whichever time period is greater. During each test, the ambient temperature shall not be allowed to rise more than 10° centigrade above the respective beginning ambient temperature level
Measure and record the results in the test report.

8.4.5 Test Results