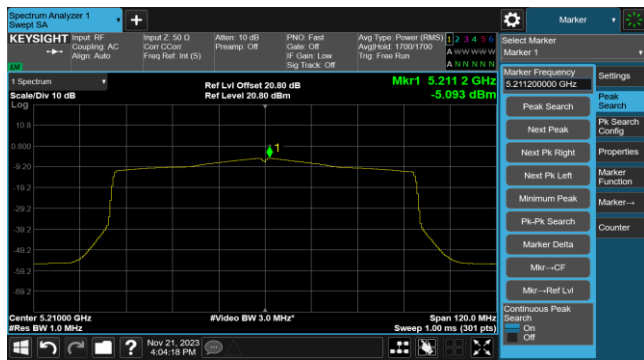


802.11ax-HE80 Power Spectral Density- Ant 1

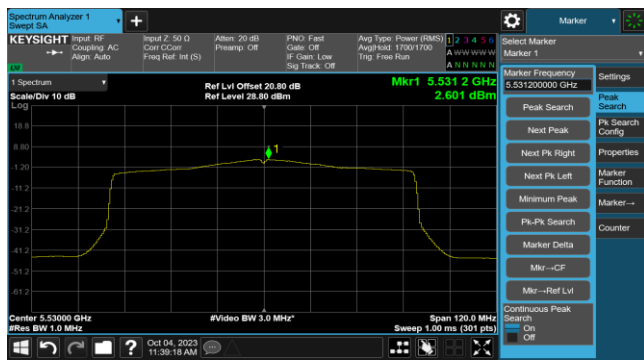
Channel 42 (5210MHz)



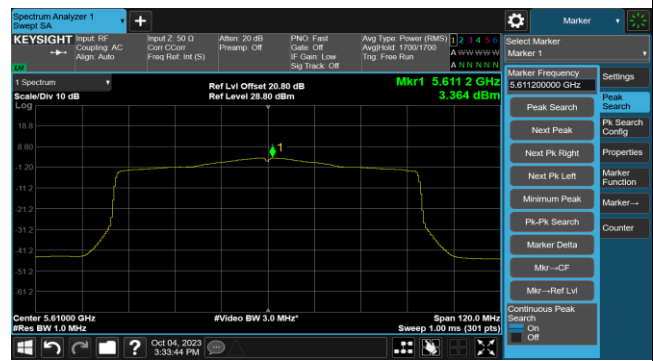
Channel 58 (5290MHz)



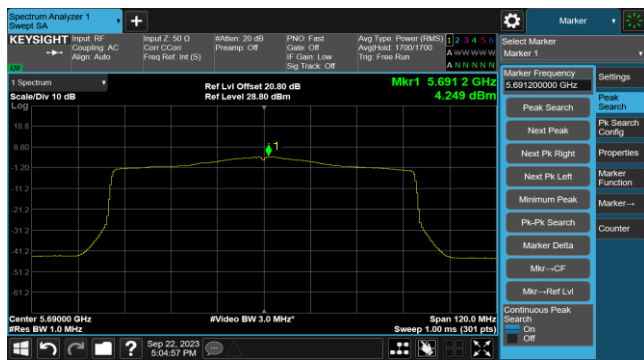
Channel 106 (5530MHz)



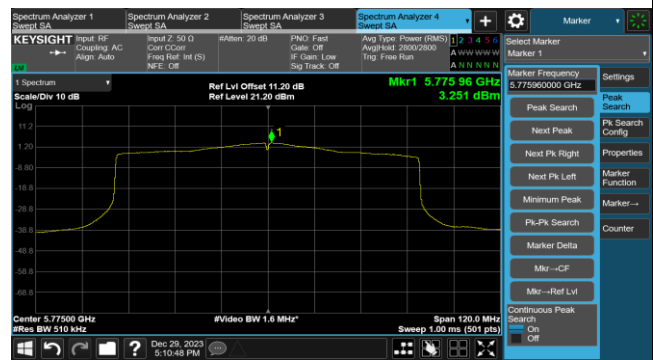
Channel 122 (5610MHz)



Channel 138 (5690MHz)

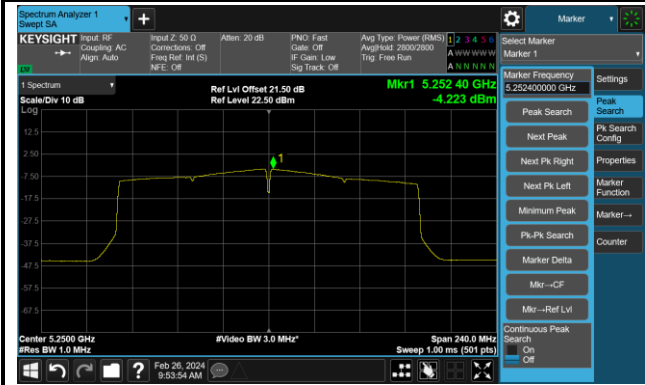


Channel 155 (5775MHz)

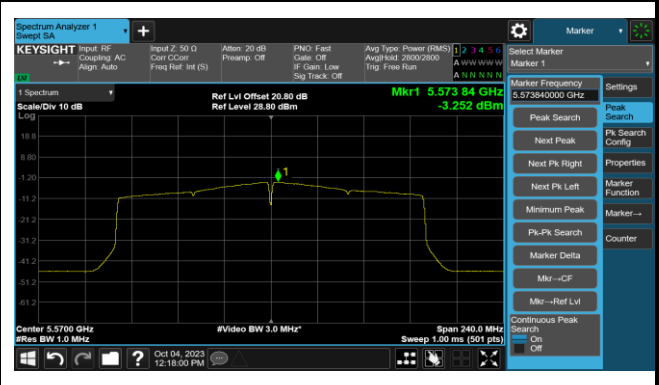


802.11ax-HE160 Power Spectral Density- Ant 1

Channel 50 (5250MHz)



Channel 114 (5570MHz)



Test Site	SIP-TR1	Test Engineer	Ryan Wang
Test Date	2023-09-25~2024-02-26		
Test Configuration	L23UGSR-5HaxD2HaxD-US + Sector Antenna		
Test Item	Power Spectral Density (UNII-Band 1 & UNII-2a & UNII-2c)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	AVPSD	(dBm/ MHz)	Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit
				Ant 0	Ant 1			(dBm/MHz)
11a	6Mbps	36	5180	-11.92	-11.93	98.80	-8.92	≤ 0.99
11a	6Mbps	44	5220	-11.86	-12.02	98.80	-8.93	≤ 0.99
11a	6Mbps	48	5240	-11.71	-12.05	98.80	-8.87	≤ 0.99
11a	6Mbps	52	5260	-8.29	-8.51	98.80	-5.39	≤ -5.01
11a	6Mbps	60	5300	-8.22	-8.55	98.80	-5.37	≤ -5.01
11a	6Mbps	64	5320	-8.19	-8.47	98.80	-5.32	≤ -5.01
11a	6Mbps	100	5500	-8.14	-8.36	98.80	-5.24	≤ -5.01
11a	6Mbps	116	5580	-8.32	-8.05	98.80	-5.17	≤ -5.01
11a	6Mbps	140	5700	-8.84	-8.81	98.80	-5.81	≤ -5.01
11a	6Mbps	144	5720	-8.19	-8.43	98.80	-5.30	≤ -5.01
11ac-VHT20	MCS0	36	5180	-12.16	-12.33	99.62	-9.23	≤ 0.99
11ac-VHT20	MCS0	44	5220	-12.17	-12.21	99.62	-9.18	≤ 0.99
11ac-VHT20	MCS0	48	5240	-12.09	-12.49	99.62	-9.27	≤ 0.99
11ac-VHT20	MCS0	52	5260	-8.36	-8.37	99.62	-5.36	≤ -5.01
11ac-VHT20	MCS0	60	5300	-8.16	-8.36	99.62	-5.25	≤ -5.01
11ac-VHT20	MCS0	64	5320	-8.27	-8.43	99.62	-5.34	≤ -5.01
11ac-VHT20	MCS0	100	5500	-9.04	-9.01	99.62	-6.01	≤ -5.01
11ac-VHT20	MCS0	116	5580	-8.91	-8.12	99.62	-5.49	≤ -5.01
11ac-VHT20	MCS0	140	5700	-8.41	-8.03	99.62	-5.20	≤ -5.01
11ac-VHT20	MCS0	144	5720	-8.42	-8.36	99.62	-5.38	≤ -5.01
11ac-VHT40	MCS0	38	5190	-14.18	-14.34	98.97	-11.25	≤ 0.99
11ac-VHT40	MCS0	46	5230	-14.92	-15.47	98.97	-12.18	≤ 0.99
11ac-VHT40	MCS0	54	5270	-8.23	-9.33	98.97	-5.74	≤ -5.01
11ac-VHT40	MCS0	62	5310	-8.68	-9.72	98.97	-6.16	≤ -5.01
11ac-VHT40	MCS0	102	5510	-8.62	-9.64	98.97	-6.09	≤ -5.01
11ac-VHT40	MCS0	110	5550	-8.09	-8.72	98.97	-5.38	≤ -5.01
11ac-VHT40	MCS0	134	5670	-9.05	-8.90	98.97	-5.96	≤ -5.01
11ac-VHT40	MCS0	142	5710	-8.06	-8.91	98.97	-5.45	≤ -5.01

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	AVPSD	(dBm/ MHz)	Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit (dBm/MHz)
				Ant 0	Ant 1			
11ac-VHT80	MCS0	42	5210	-17.26	-17.84	99.06	-14.53	≤ 0.99
11ac-VHT80	MCS0	58	5290	-8.87	-8.74	99.06	-5.79	≤ -5.01
11ac-VHT80	MCS0	106	5530	-8.23	-8.50	99.06	-5.35	≤ -5.01
11ac-VHT80	MCS0	122	5610	-8.81	-7.94	99.06	-5.34	≤ -5.01
11ac-VHT80	MCS0	138	5690	-9.56	-8.32	99.06	-5.88	≤ -5.01
11ac-VHT160	MCS0	50	5250	-16.74	-17.13	99.47	-13.92	≤ -5.01
11ac-VHT160	MCS0	114	5570	-11.57	-13.54	99.47	-9.43	≤ -5.01
11ax-HE20	MCS0	36	5180	-12.51	-12.99	99.62	-9.73	≤ 0.99
11ax-HE20	MCS0	44	5220	-12.50	-12.83	99.62	-9.65	≤ 0.99
11ax-HE20	MCS0	48	5240	-12.43	-12.51	99.62	-9.46	≤ 0.99
11ax-HE20	MCS0	52	5260	-8.21	-8.32	99.62	-5.25	≤ -5.01
11ax-HE20	MCS0	60	5300	-8.91	-9.05	99.62	-5.97	≤ -5.01
11ax-HE20	MCS0	64	5320	-8.03	-8.58	99.62	-5.29	≤ -5.01
11ax-HE20	MCS0	100	5500	-8.54	-8.10	99.62	-5.30	≤ -5.01
11ax-HE20	MCS0	116	5580	-8.94	-8.53	99.62	-5.72	≤ -5.01
11ax-HE20	MCS0	140	5700	-9.26	-8.79	99.62	-6.01	≤ -5.01
11ax-HE20	MCS0	144	5720	-8.69	-8.92	99.62	-5.79	≤ -5.01
11ax-HE40	MCS0	38	5190	-14.30	-14.32	98.94	-11.30	≤ 0.99
11ax-HE40	MCS0	46	5230	-13.94	-14.53	98.94	-11.22	≤ 0.99
11ax-HE40	MCS0	54	5270	-9.57	-8.84	98.94	-6.18	≤ -5.01
11ax-HE40	MCS0	62	5310	-8.24	-8.59	98.94	-5.40	≤ -5.01
11ax-HE40	MCS0	102	5510	-9.02	-8.89	98.94	-5.95	≤ -5.01
11ax-HE40	MCS0	110	5550	-8.24	-8.12	98.94	-5.17	≤ -5.01
11ax-HE40	MCS0	134	5670	-9.48	-8.09	98.94	-5.72	≤ -5.01
11ax-HE40	MCS0	142	5710	-9.97	-9.99	98.94	-6.97	≤ -5.01
11ax-HE80	MCS0	42	5210	-17.02	-17.70	99.20	-14.33	≤ 0.99
11ax-HE80	MCS0	58	5290	-8.40	-9.01	99.20	-5.68	≤ -5.01
11ax-HE80	MCS0	106	5530	-8.33	-8.55	99.20	-5.43	≤ -5.01
11ax-HE80	MCS0	122	5610	-8.81	-8.96	99.20	-5.87	≤ -5.01
11ax-HE80	MCS0	138	5690	-9.53	-7.66	99.20	-5.49	≤ -5.01
11ax-HE160	MCS0	50	5250	-16.97	-17.17	99.19	-14.06	≤ -5.01
11ax-HE160	MCS0	114	5570	-10.54	-10.67	99.19	-7.60	≤ -5.01

Note 1: When EUT duty cycle ≥ 98%, the total PSD (dBm/MHz) = $10^{\text{Ant 0 AVGPSD}/10} + 10^{\text{Ant 1 AVGPSD}/10}$.

Note 2:

For 5125 - 5250MHz Band: PSD Limit (dBm/MHz) = 17 - (22.01 - 6) = 0.99dBm/MHz

For 5250 - 5350MHz Band: Average Power Limit (dBm) = $11 - (22.01 - 6) = -5.01\text{dBm/MHz}$.

For 5470 - 5725MHz Band: Average Power Limit (dBm) = $11 - (22.01 - 6) = -5.01\text{dBm/MHz}$.

Test Site	WZ-SR5	Test Engineer	Luis Yang
Test Date	2023-12-29		
Test Configuration	L23UGSR-5HaxD2HaxD-US + Sector Antenna		
Test Item	Power Spectral Density (UNII-Band 3)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	AVPSD	(dBm/ 510KHz)	Duty Cycle (%)	Total PSD (dBm/ 510KHz)	PSD Limit (dBm/ 500KHz)
				Ant 0	Ant 1			
11a	6Mbps	149	5745	0.61	-0.49	98.80	3.10	≤ 13.99
11a	6Mbps	157	5785	1.04	0.55	98.80	3.81	≤ 13.99
11a	6Mbps	165	5825	-0.74	0.52	98.80	2.94	≤ 13.99
11ac-VHT20	MCS0	149	5745	0.17	-0.25	99.62	2.98	≤ 13.99
11ac-VHT20	MCS0	157	5785	-0.37	-1.02	99.62	2.33	≤ 13.99
11ac-VHT20	MCS0	165	5825	-0.45	-0.01	99.62	2.79	≤ 13.99
11ac-VHT40	MCS0	151	5755	-2.34	-3.62	98.97	0.08	≤ 13.99
11ac-VHT40	MCS0	159	5795	-3.17	-2.77	98.97	0.05	≤ 13.99
11ac-VHT80	MCS0	155	5775	-6.15	-6.52	99.06	-3.32	≤ 13.99
11ax-HE20	MCS0	149	5745	0.62	0.08	99.62	3.37	≤ 13.99
11ax-HE20	MCS0	157	5785	0.26	-0.31	99.62	3.00	≤ 13.99
11ax-HE20	MCS0	165	5825	-0.27	0.47	99.62	3.13	≤ 13.99
11ax-HE40	MCS0	151	5755	-2.76	-3.77	98.94	-0.23	≤ 13.99
11ax-HE40	MCS0	159	5795	-3.02	-2.14	98.94	0.45	≤ 13.99
11ax-HE80	MCS0	155	5775	-5.81	-6.66	99.20	-3.20	≤ 13.99

Note 1:

When EUT duty cycle < 98%, the total PSD (dBm/510kHz) = $10 \cdot \log \{10^{(\text{Ant 0 AVGPSD}/10)} + 10^{(\text{Ant 1 AVGPSD}/10)}\} + 10 \cdot \log (1/\text{Duty cycle})$.

When EUT duty cycle ≥ 98%, the total PSD (dBm/510kHz) = $10 \cdot \log \{10^{(\text{Ant 0 AVGPSD}/10)} + 10^{(\text{Ant 1 AVGPSD}/10)}\}$.

Note 2: PSD Limit (dBm/500KHz) = 30 - (22.01 - 6) = 13.99 dBm/500KHz.

802.11a Power Spectral Density- Ant 0

Channel 36 (5180MHz)



Channel 44 (5220MHz)



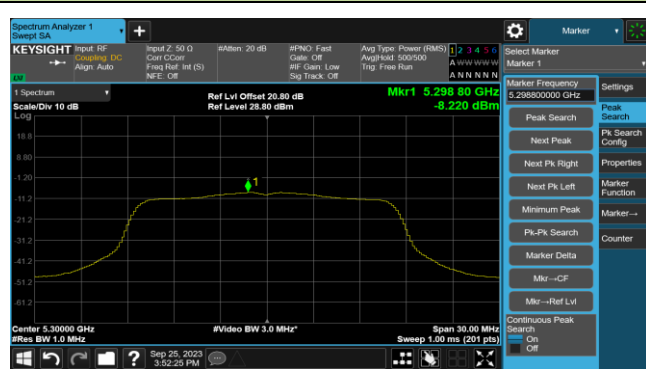
Channel 48 (5240MHz)



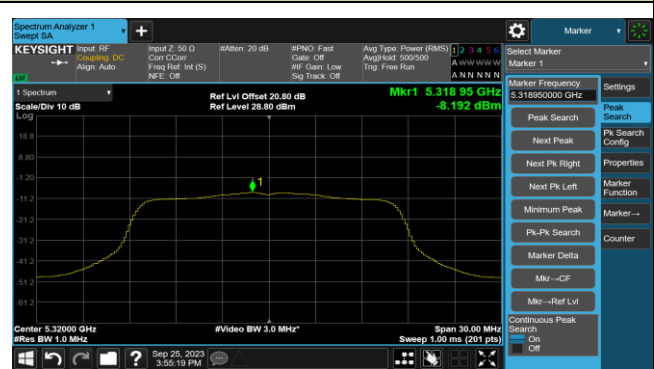
Channel 52 (5260MHz)



Channel 60 (5300MHz)



Channel 64 (5320MHz)



Channel 100 (5500MHz)



Channel 116 (5580MHz)



802.11a Power Spectral Density- Ant 0

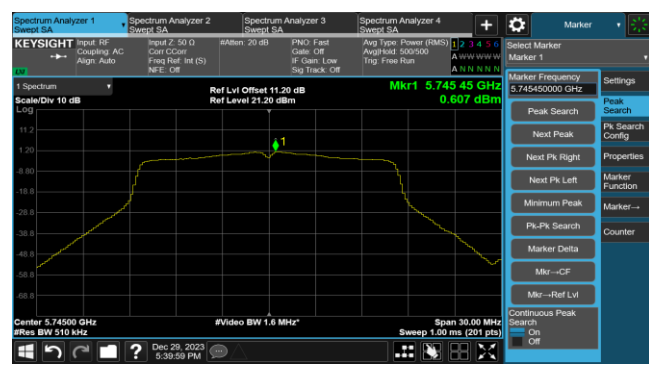
Channel 140 (5700MHz)



Channel 144(5720MHz)



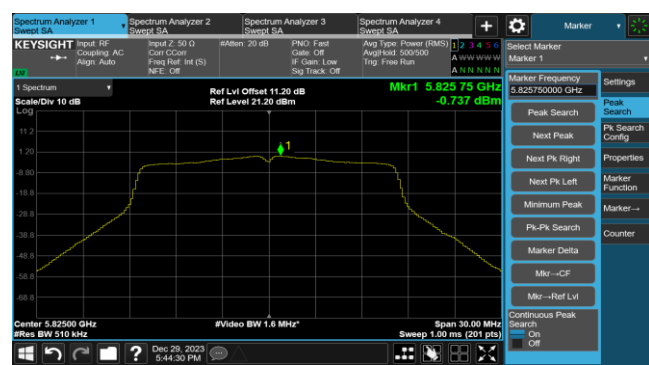
Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)



802.11ac-VHT20 Power Spectral Density- Ant 0

Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



Channel 52 (5260MHz)



Channel 60 (5300MHz)



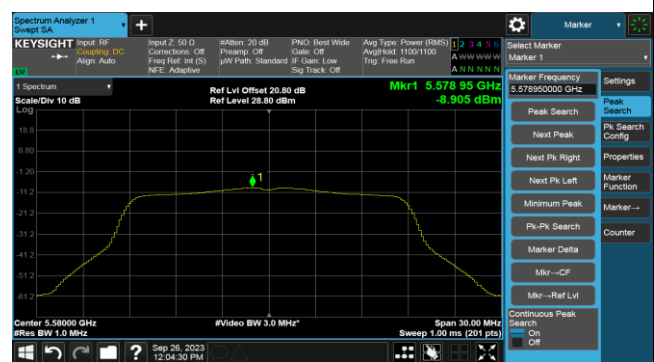
Channel 64 (5320MHz)



Channel 100 (5500MHz)

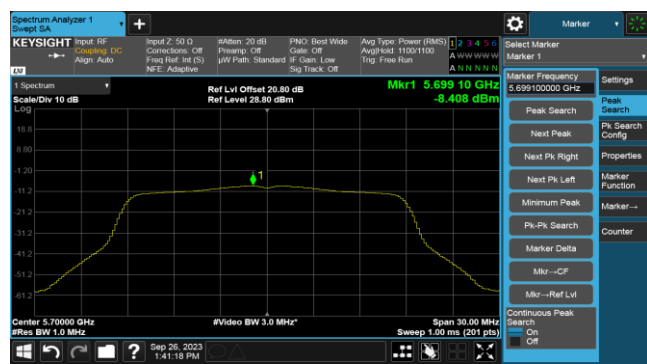


Channel 116 (5580MHz)



802.11ac-VHT20 Power Spectral Density- Ant 0

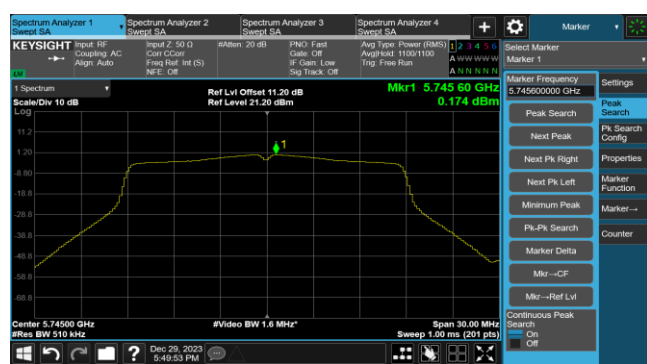
Channel 140 (5700MHz)



Channel 144(5720MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)

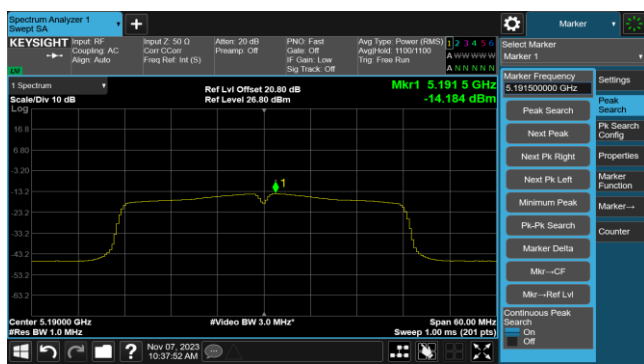


Channel 165 (5825MHz)

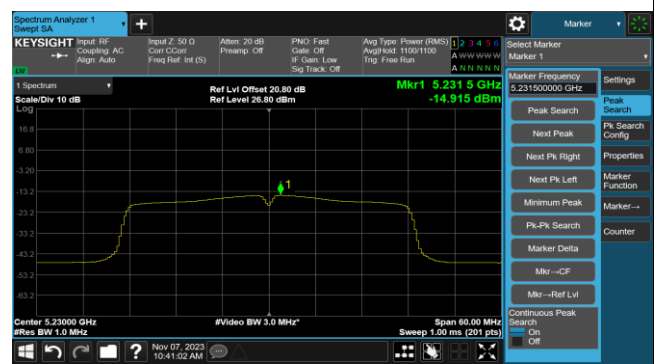


802.11ac-VHT40 Power Spectral Density- Ant 0

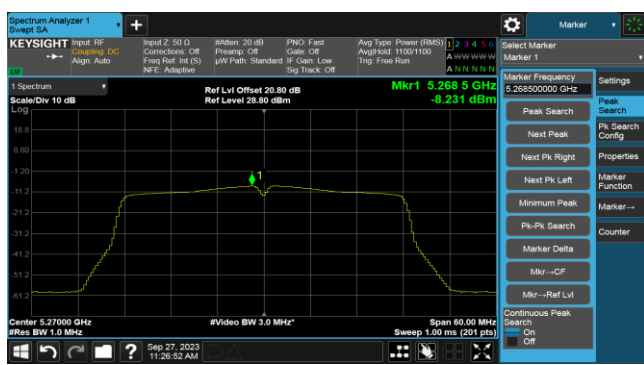
Channel 38 (5190MHz)



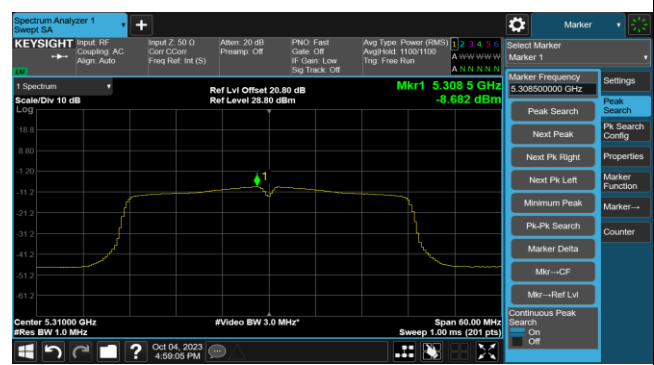
Channel 46 (5230MHz)



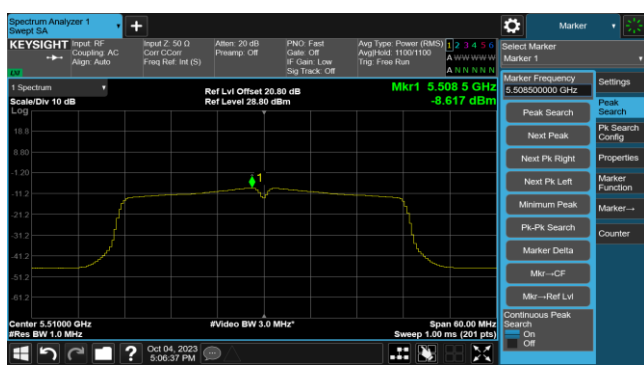
Channel 54 (5270MHz)



Channel 62 (5310MHz)



Channel 102 (5510MHz)



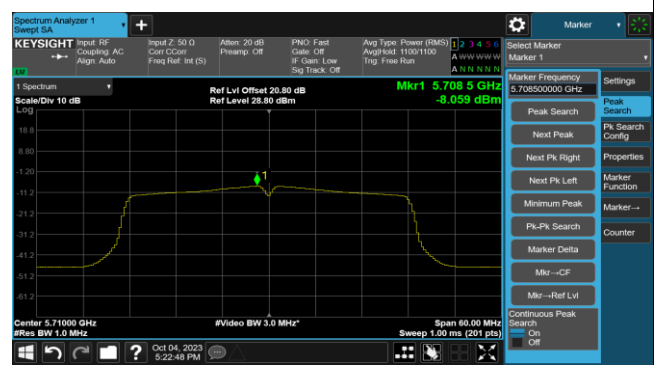
Channel 110 (5550MHz)

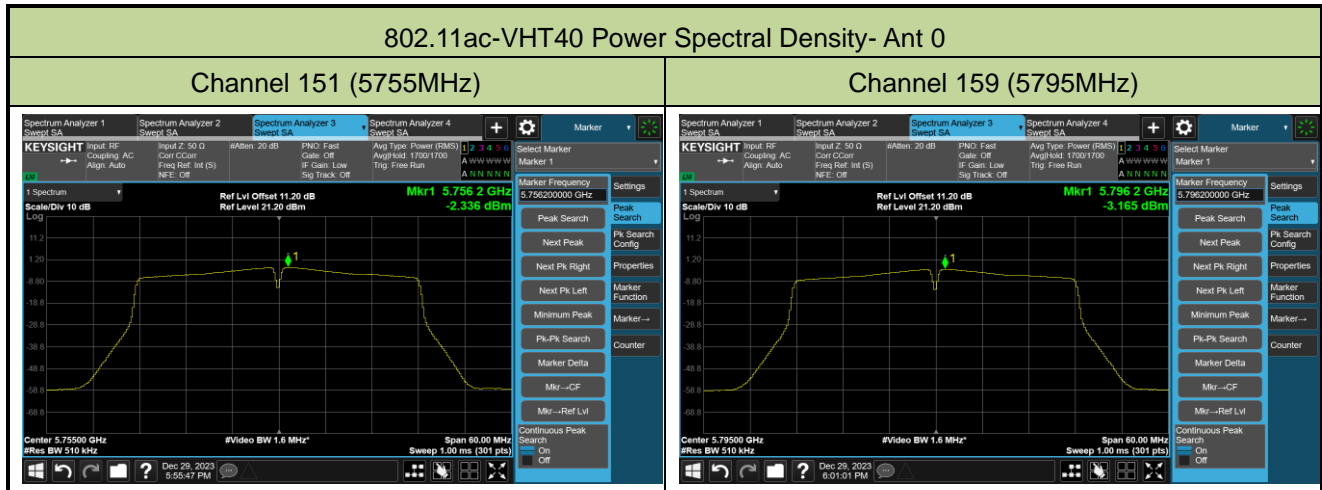


Channel 134 (5670MHz)



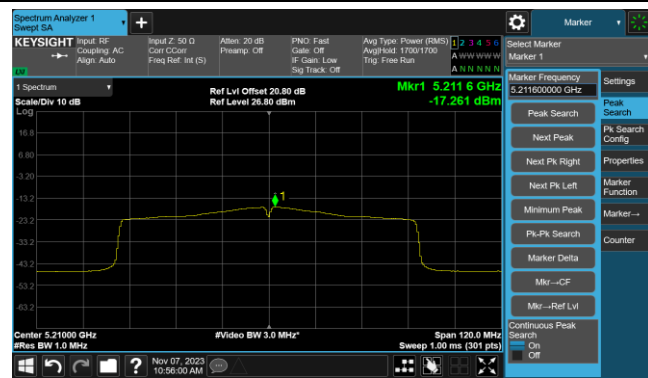
Channel 142(5710MHz)



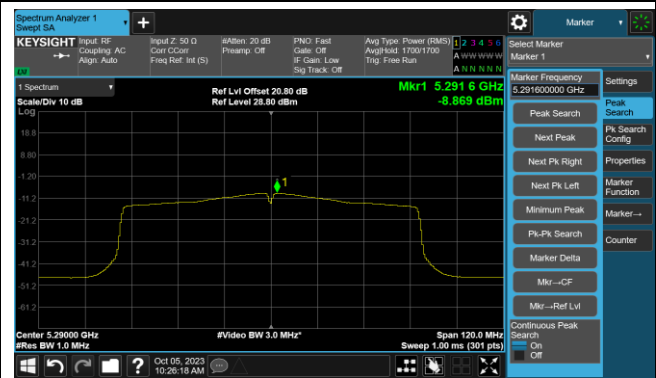


802.11ac-VHT80 Power Spectral Density- Ant 0

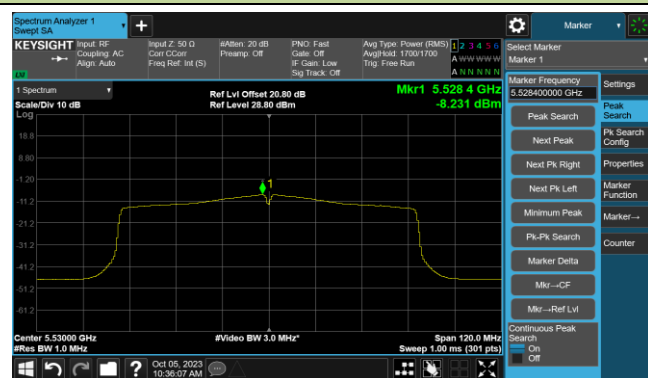
Channel 42 (5210MHz)



Channel 58 (5290MHz)



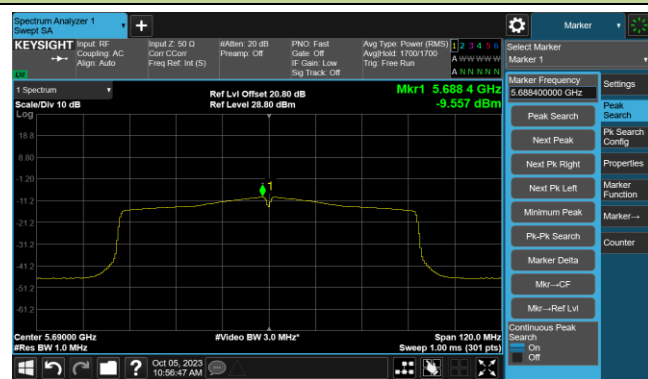
Channel 106 (5530MHz)



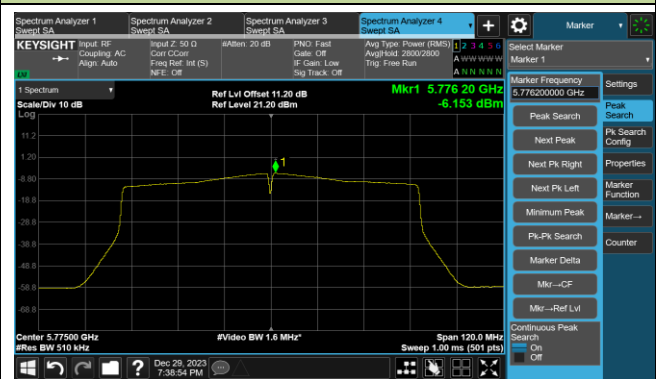
Channel 122 (5610MHz)

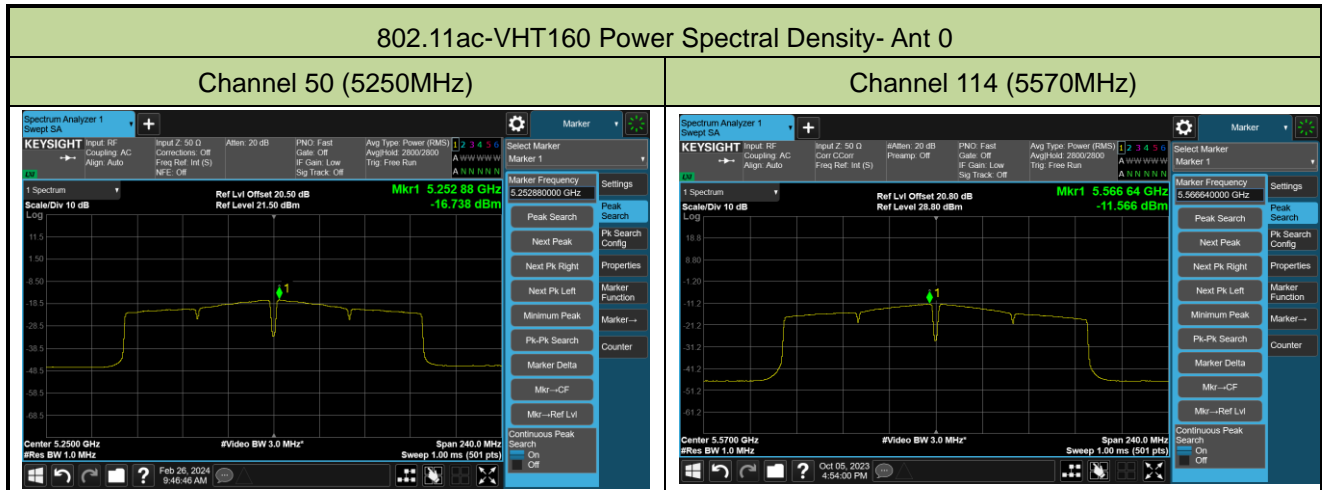


Channel 138 (5690MHz)



Channel 155 (5775MHz)





802.11ax-HE20 Power Spectral Density- Ant 0

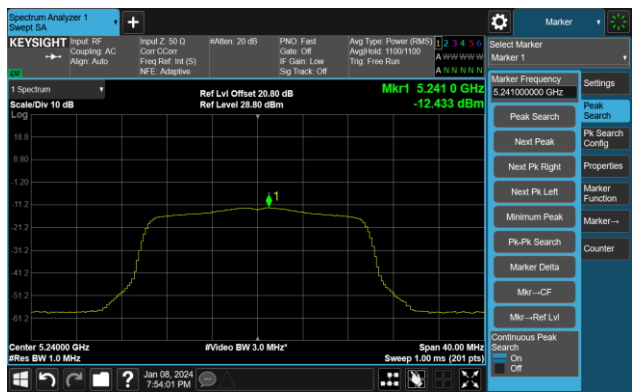
Channel 36 (5180MHz)



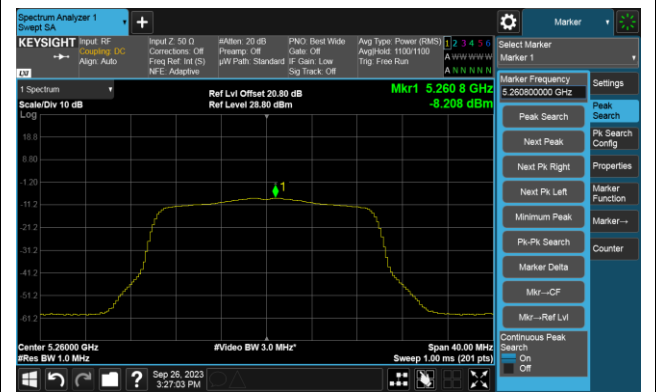
Channel 44 (5220MHz)



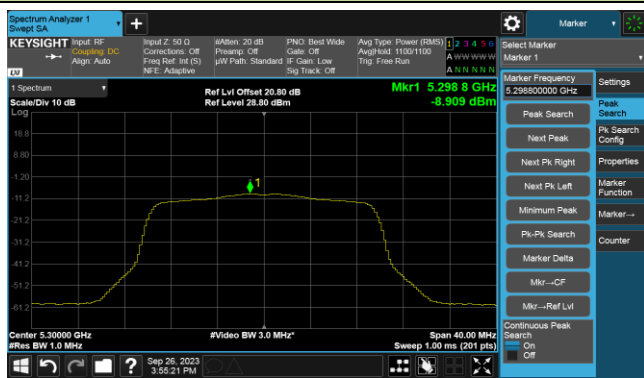
Channel 48 (5240MHz)



Channel 52 (5260MHz)



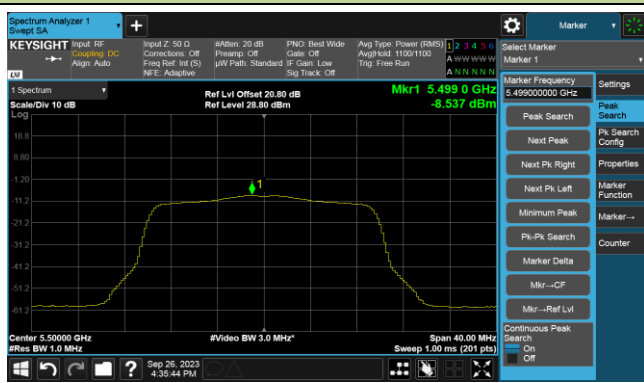
Channel 60 (5300MHz)



Channel 64 (5320MHz)



Channel 100 (5500MHz)

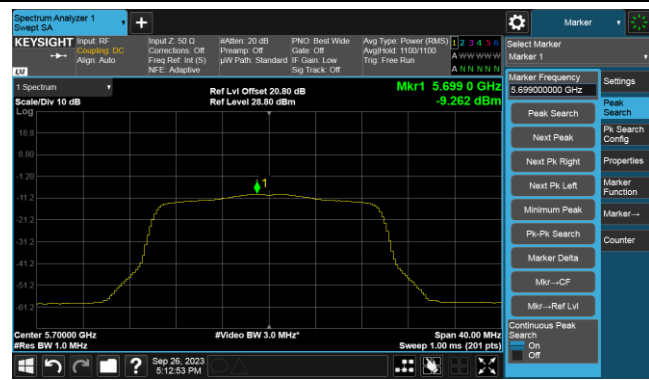


Channel 116 (5580MHz)

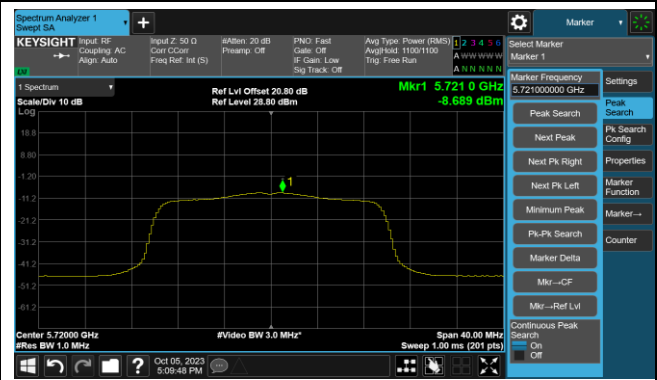


802.11ax-HE20 Power Spectral Density- Ant 0

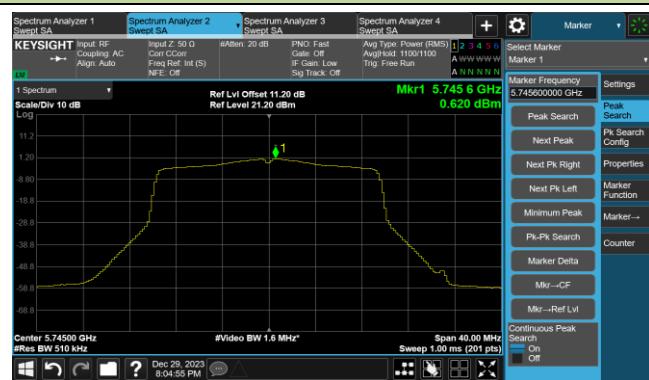
Channel 140 (5700MHz)



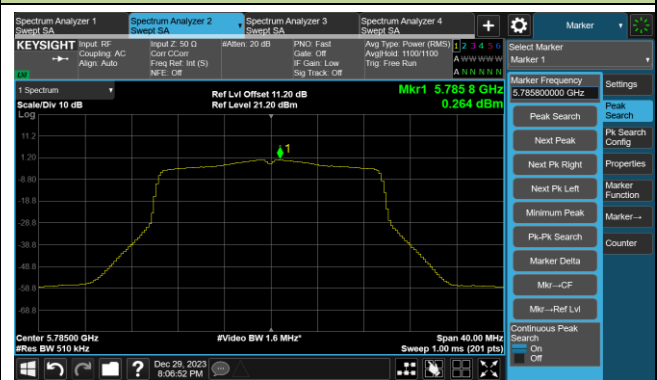
Channel 144(5720MHz)



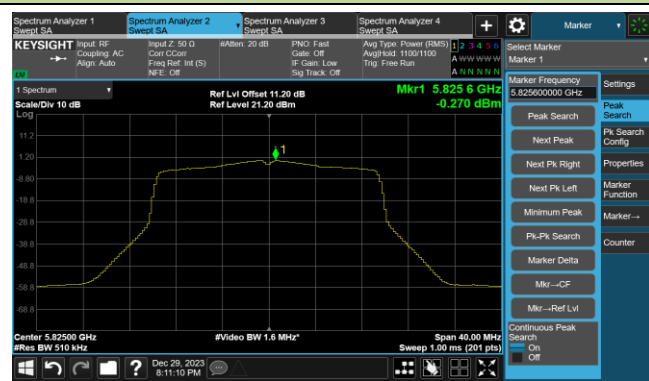
Channel 149 (5745MHz)



Channel 157 (5785MHz)

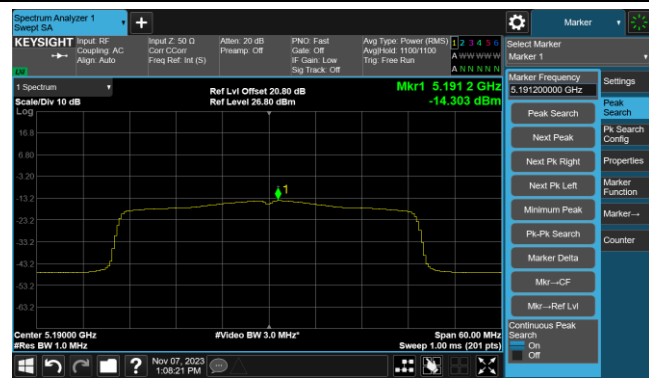


Channel 165 (5825MHz)



802.11ax-HE40 Power Spectral Density- Ant 0

Channel 38 (5190MHz)



Channel 46 (5230MHz)



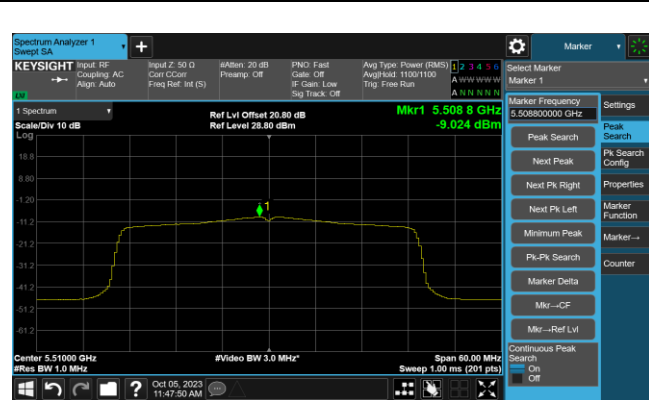
Channel 54 (5270MHz)



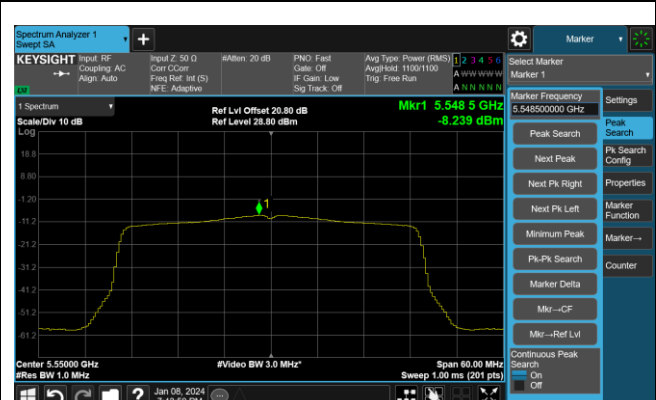
Channel 62 (5310MHz)



Channel 102 (5510MHz)



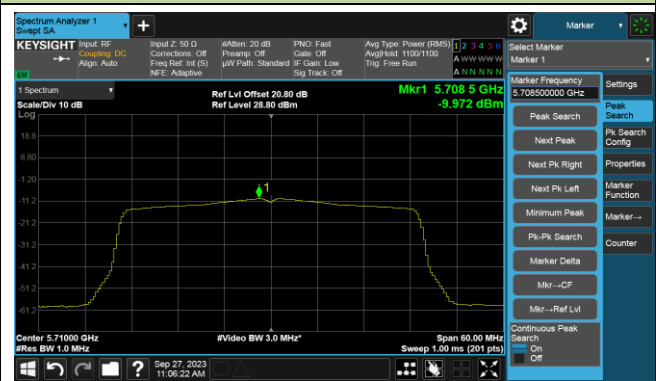
Channel 110 (5550MHz)

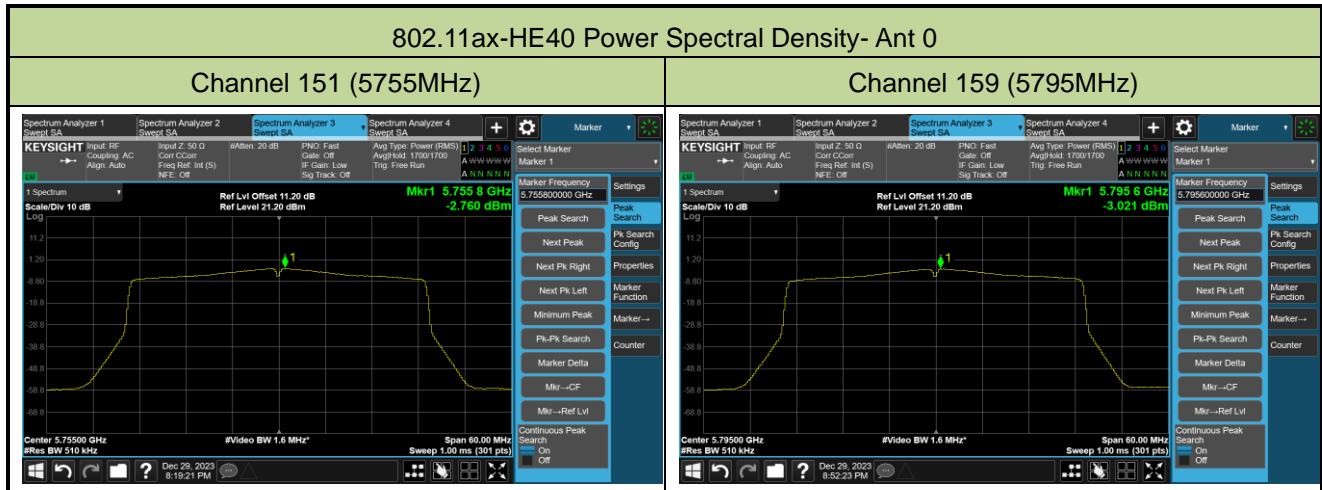


Channel 134 (5670MHz)



Channel 142(5710MHz)



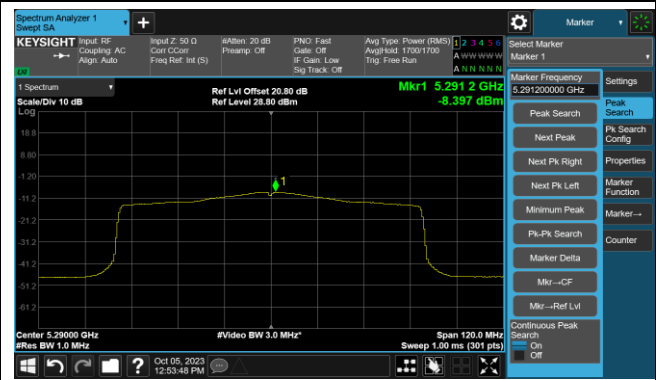


802.11ax-HE80 Power Spectral Density- Ant 0

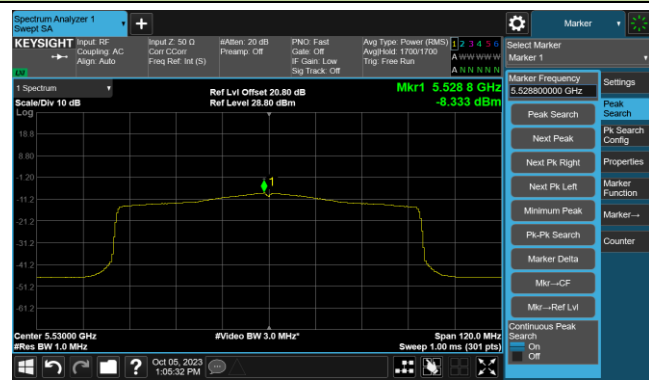
Channel 42 (5210MHz)



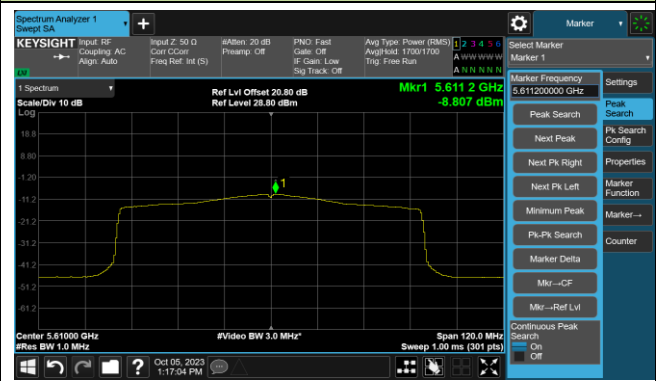
Channel 58 (5290MHz)



Channel 106 (5530MHz)



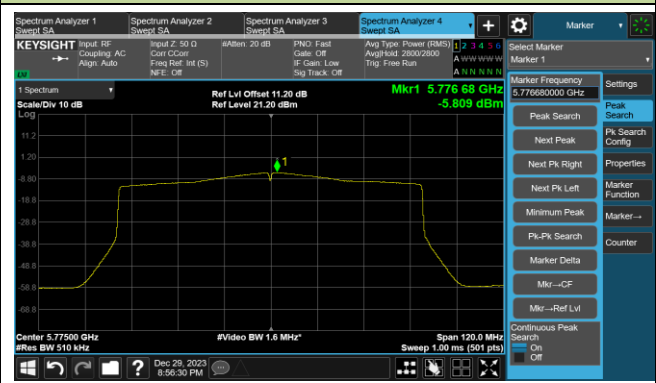
Channel 122 (5610MHz)



Channel 138 (5690MHz)



Channel 155 (5775MHz)



802.11ax-HE160 Power Spectral Density- Ant 0

Channel 50 (5250MHz)

Channel 114 (5570MHz)

