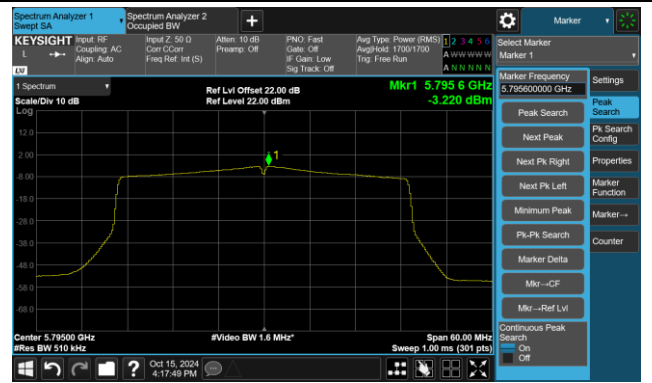


802.11ax-HE40 Power Spectral Density- Ant 1

Channel 151 (5755MHz)

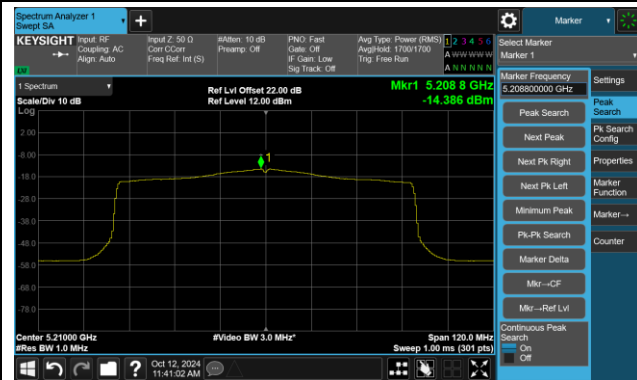


Channel 159 (5795MHz)



802.11ax-HE80 Power Spectral Density- Ant 1

Channel 42 (5210MHz)



Channel 58 (5290MHz)



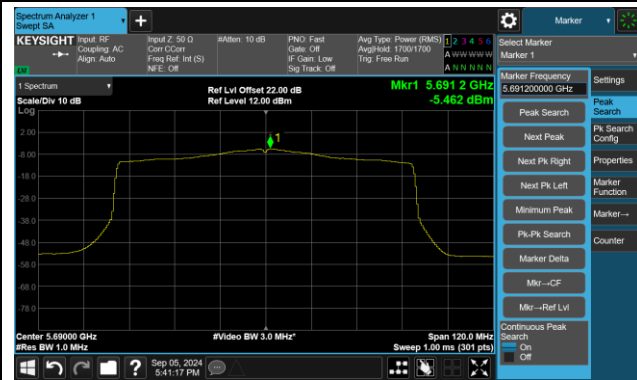
Channel 106 (5530MHz)



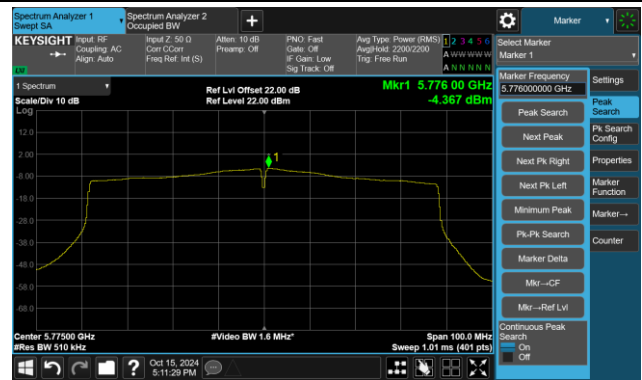
Channel 122 (5610MHz)



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	2024-12-10 ~ 2024-12-12		
Test Item	Power Spectral Density (UNII-Band 1 & UNII-2a & UNII-2c)		
EUT Model No.	LHG-5axD-XL-US		

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			
11a	6Mbps	36	5180	-21.104	-18.105	98.84	-16.340	≤ -7.01
11a	6Mbps	44	5220	-20.283	-20.035	98.84	-17.147	≤ -7.01
11a	6Mbps	48	5240	-19.427	-19.063	98.84	-16.231	≤ -7.01
11a	6Mbps	52	5260	-16.488	-15.898	98.84	-13.173	≤ -13.01
11a	6Mbps	60	5300	-16.289	-16.413	98.84	-13.340	≤ -13.01
11a	6Mbps	64	5320	-16.088	-16.704	98.84	-13.375	≤ -13.01
11a	6Mbps	100	5500	-17.032	-16.747	98.84	-13.877	≤ -13.01
11a	6Mbps	116	5580	-16.492	-15.952	98.84	-13.203	≤ -13.01
11a	6Mbps	140	5700	-15.551	-16.839	98.84	-13.137	≤ -13.01
11a	6Mbps	144	5720	-16.369	-17.436	98.84	-13.860	≤ -13.01
11ac-VHT20	MCS0	36	5180	-21.190	-18.332	99.58	-16.520	≤ -7.01
11ac-VHT20	MCS0	44	5220	-20.499	-21.025	99.58	-17.744	≤ -7.01
11ac-VHT20	MCS0	48	5240	-19.817	-19.519	99.58	-16.655	≤ -7.01
11ac-VHT20	MCS0	52	5260	-16.589	-16.166	99.58	-13.362	≤ -13.01
11ac-VHT20	MCS0	60	5300	-16.449	-16.389	99.58	-13.409	≤ -13.01
11ac-VHT20	MCS0	64	5320	-16.455	-16.763	99.58	-13.596	≤ -13.01
11ac-VHT20	MCS0	100	5500	-17.082	-16.749	99.58	-13.902	≤ -13.01
11ac-VHT20	MCS0	116	5580	-17.171	-16.245	99.58	-13.673	≤ -13.01
11ac-VHT20	MCS0	140	5700	-15.811	-17.026	99.58	-13.366	≤ -13.01
11ac-VHT20	MCS0	144	5720	-15.582	-16.726	99.58	-13.106	≤ -13.01
11ac-VHT40	MCS0	38	5190	-24.359	-21.327	99.59	-19.573	≤ -7.01
11ac-VHT40	MCS0	46	5230	-22.436	-22.032	99.59	-19.219	≤ -7.01
11ac-VHT40	MCS0	54	5270	-16.147	-16.095	99.59	-13.111	≤ -13.01
11ac-VHT40	MCS0	62	5310	-16.945	-17.063	99.59	-13.993	≤ -13.01
11ac-VHT40	MCS0	102	5510	-16.766	-16.858	99.59	-13.801	≤ -13.01
11ac-VHT40	MCS0	110	5550	-16.834	-16.688	99.59	-13.750	≤ -13.01
11ac-VHT40	MCS0	134	5670	-16.149	-16.802	99.59	-13.453	≤ -13.01
11ac-VHT40	MCS0	142	5710	-15.706	-16.833	99.59	-13.223	≤ -13.01

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	-26.116	-25.720	98.90	-22.903	≤ -7.01
11ac-VHT80	MCS0	58	5290	-16.399	-16.559	98.90	-13.468	≤ -13.01
11ac-VHT80	MCS0	106	5530	-16.321	-16.375	98.90	-13.338	≤ -13.01
11ac-VHT80	MCS0	122	5610	-16.645	-17.033	98.90	-13.824	≤ -13.01
11ac-VHT80	MCS0	138	5690	-15.897	-17.311	98.90	-13.536	≤ -13.01
11ac-VHT160	MCS0	50	5250	-18.813	-19.136	99.43	-15.961	≤ -13.01
11ac-VHT160	MCS0	114	5570	-18.108	-18.696	99.43	-15.382	≤ -13.01
11ax-HE20	MCS0	36	5180	-21.439	-18.673	99.58	-16.829	≤ -7.01
11ax-HE20	MCS0	44	5220	-20.748	-20.726	99.58	-17.727	≤ -7.01
11ax-HE20	MCS0	48	5240	-20.995	-20.574	99.58	-17.769	≤ -7.01
11ax-HE20	MCS0	52	5260	-16.639	-16.369	99.58	-13.492	≤ -13.01
11ax-HE20	MCS0	60	5300	-16.317	-16.407	99.58	-13.351	≤ -13.01
11ax-HE20	MCS0	64	5320	-16.226	-16.698	99.58	-13.445	≤ -13.01
11ax-HE20	MCS0	100	5500	-16.671	-16.411	99.58	-13.529	≤ -13.01
11ax-HE20	MCS0	116	5580	-17.218	-16.433	99.58	-13.797	≤ -13.01
11ax-HE20	MCS0	140	5700	-16.196	-17.161	99.58	-13.641	≤ -13.01
11ax-HE20	MCS0	144	5720	-15.878	-16.944	99.58	-13.368	≤ -13.01
11ax-HE40	MCS0	38	5190	-24.601	-21.659	98.76	-19.875	≤ -7.01
11ax-HE40	MCS0	46	5230	-23.596	-23.367	98.76	-20.470	≤ -7.01
11ax-HE40	MCS0	54	5270	-16.310	-16.342	98.76	-13.316	≤ -13.01
11ax-HE40	MCS0	62	5310	-16.138	-16.762	98.76	-13.429	≤ -13.01
11ax-HE40	MCS0	102	5510	-15.634	-17.014	98.76	-13.259	≤ -13.01
11ax-HE40	MCS0	110	5550	-16.185	-16.302	98.76	-13.233	≤ -13.01
11ax-HE40	MCS0	134	5670	-16.220	-17.236	98.76	-13.688	≤ -13.01
11ax-HE40	MCS0	142	5710	-15.878	-17.179	98.76	-13.470	≤ -13.01
11ax-HE80	MCS0	42	5210	-25.781	-25.660	98.88	-22.710	≤ -7.01
11ax-HE80	MCS0	58	5290	-16.124	-16.477	98.88	-13.287	≤ -13.01
11ax-HE80	MCS0	106	5530	-15.805	-16.454	98.88	-13.107	≤ -13.01
11ax-HE80	MCS0	122	5610	-16.377	-16.718	98.88	-13.534	≤ -13.01
11ax-HE80	MCS0	138	5690	-15.815	-16.814	98.88	-13.276	≤ -13.01
11ax-HE160	MCS0	50	5250	-18.831	-19.305	99.58	-16.051	≤ -13.01
11ax-HE160	MCS0	114	5570	-19.515	-19.527	99.58	-16.511	≤ -13.01

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

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

Note 2:

For 5125 - 5250MHz Band: PSD Limit (dBm/MHz) = $17 - (30.01 - 6) = -7.01\text{dBm/MHz}$

For 5250 - 5350MHz Band: PSD Limit (dBm/MHz) = $11 - (30.01 - 6) = -13.01\text{dBm/MHz}$.

For 5470 - 5725MHz Band: PSD Limit (dBm/MHz) = $11 - (30.01 - 6) = -13.01\text{dBm/MHz}$.

Test Site	SIP-TR1	Test Engineer	Ryan Wang
Test Date	2024-12-10 ~ 2024-12-12		
Test Item	Power Spectral Density (UNII-Band 3)		
EUT Model No.	LHG-5axD-XL-US		

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	-7.251	-7.442	98.84	-4.335	≤ 5.99
11a	6Mbps	157	5785	-7.737	-7.685	98.84	-4.701	≤ 5.99
11a	6Mbps	165	5825	-7.920	-7.288	98.84	-4.582	≤ 5.99
11ac-VHT20	MCS0	149	5745	-7.686	-8.013	99.58	-4.836	≤ 5.99
11ac-VHT20	MCS0	157	5785	-8.139	-8.197	99.58	-5.158	≤ 5.99
11ac-VHT20	MCS0	165	5825	-8.080	-8.044	99.58	-5.052	≤ 5.99
11ac-VHT40	MCS0	151	5755	-10.100	-10.079	99.59	-7.079	≤ 5.99
11ac-VHT40	MCS0	159	5795	-10.369	-10.373	99.59	-7.361	≤ 5.99
11ac-VHT80	MCS0	155	5775	-13.112	-13.111	98.90	-10.101	≤ 5.99
11ax-HE20	MCS0	149	5745	-8.679	-9.069	99.58	-5.859	≤ 5.99
11ax-HE20	MCS0	157	5785	-8.096	-8.130	99.58	-5.103	≤ 5.99
11ax-HE20	MCS0	165	5825	-8.092	-8.257	99.58	-5.163	≤ 5.99
11ax-HE40	MCS0	151	5755	-10.617	-10.491	98.76	-7.543	≤ 5.99
11ax-HE40	MCS0	159	5795	-10.759	-10.764	98.76	-7.751	≤ 5.99
11ax-HE80	MCS0	155	5775	-13.199	-13.224	98.88	-10.201	≤ 5.99

Note 1:

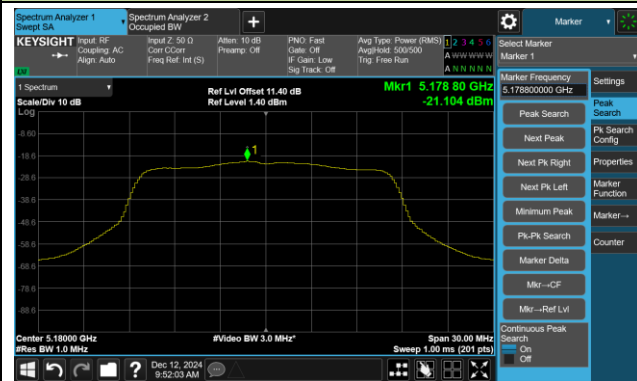
When EUT duty cycle < 98%, the total PSD (dBm/510kHz) = $10 \cdot \log \{10^{(\text{Ant 0 AVGPSD}/10)} + 10^{(\text{Ant 1 AVGPSD}/10)}\} + 10 \cdot \log (1/\text{Duty cycle})$.

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

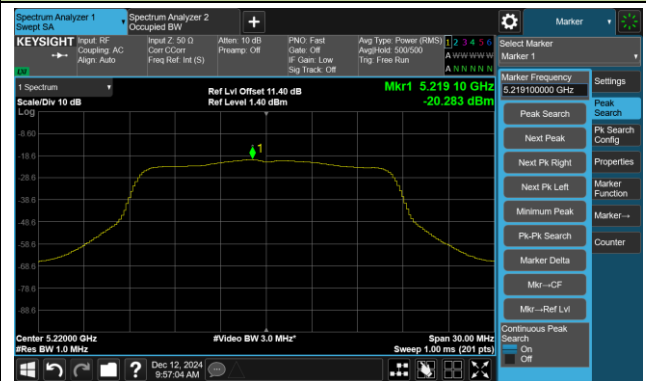
Note 2: PSD Limit (dBm/500kHz) = 30 - (30.01 - 6) = 5.99dBm/500kHz.

802.11a Power Spectral Density- Ant 0

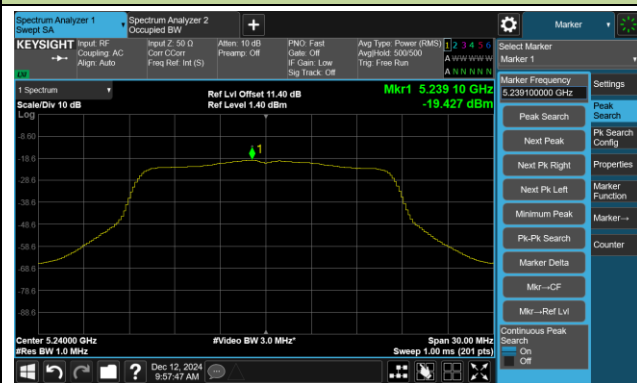
Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



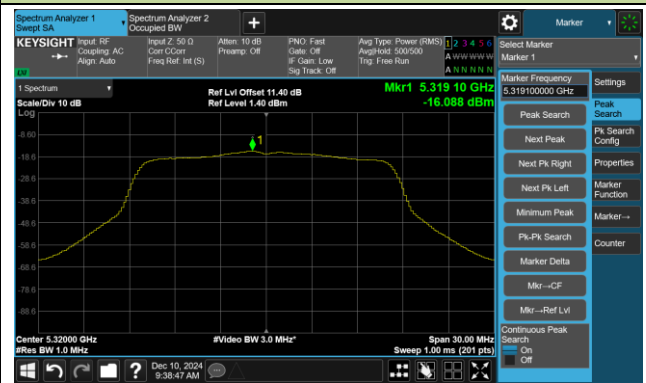
Channel 52 (5260MHz)



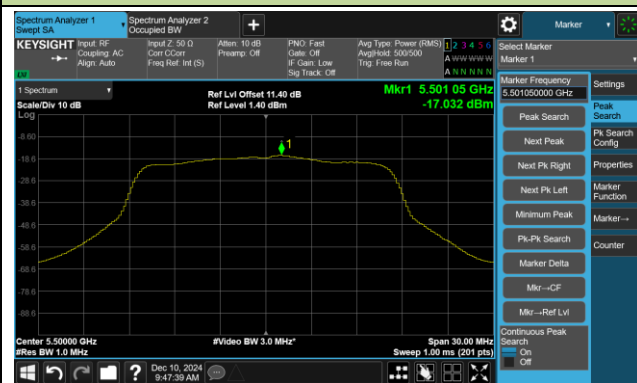
Channel 60 (5300MHz)



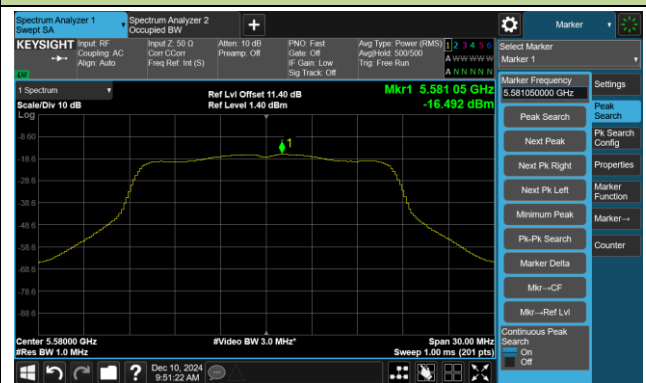
Channel 64 (5320MHz)



Channel 100 (5500MHz)



Channel 116 (5580MHz)



802.11a Power Spectral Density- Ant 0

Channel 140 (5700MHz)



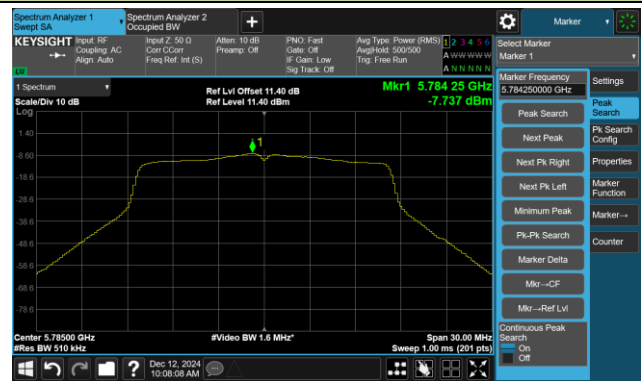
Channel 144(5720MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)

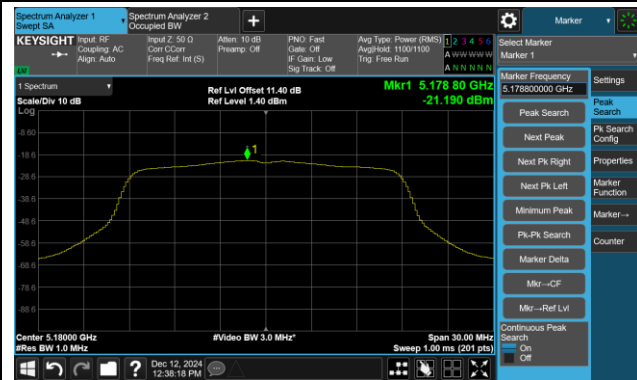


Channel 165 (5825MHz)



802.11ac-VHT20 Power Spectral Density- Ant 0

Channel 36 (5180MHz)



Channel 44 (5220MHz)



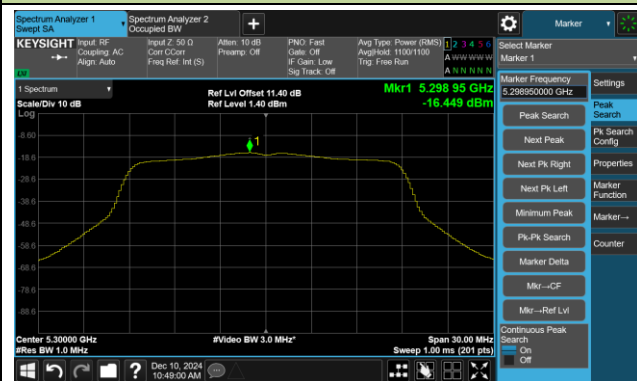
Channel 48 (5240MHz)



Channel 52 (5260MHz)



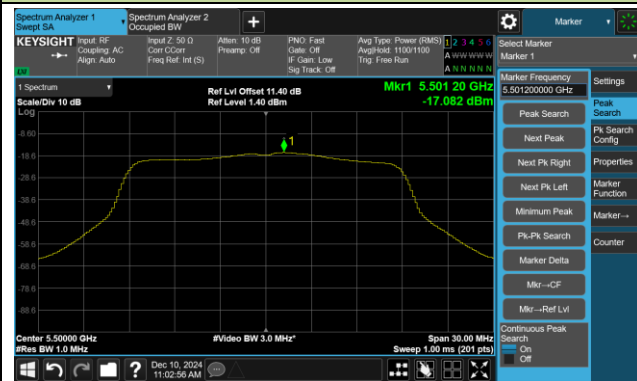
Channel 60 (5300MHz)



Channel 64 (5320MHz)



Channel 100 (5500MHz)



Channel 116 (5580MHz)

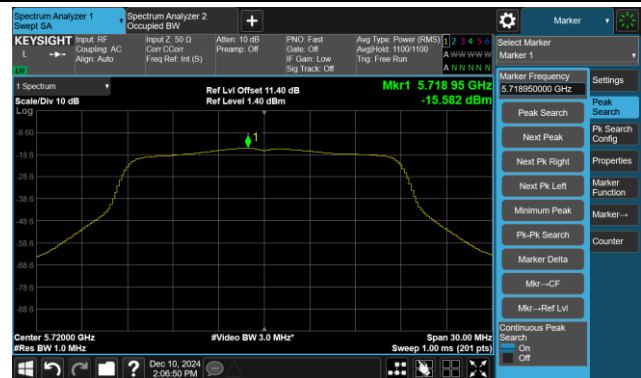


802.11ac-VHT20 Power Spectral Density- Ant 0

Channel 140 (5700MHz)



Channel 144(5720MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)

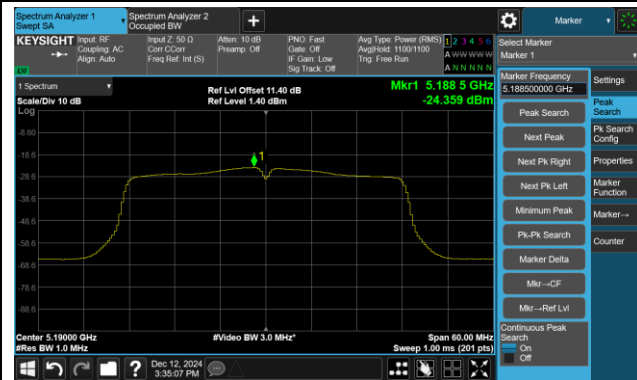


Channel 165 (5825MHz)

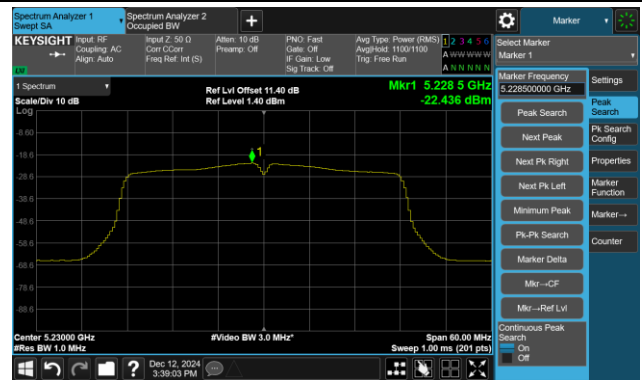


802.11ac-VHT40 Power Spectral Density- Ant 0

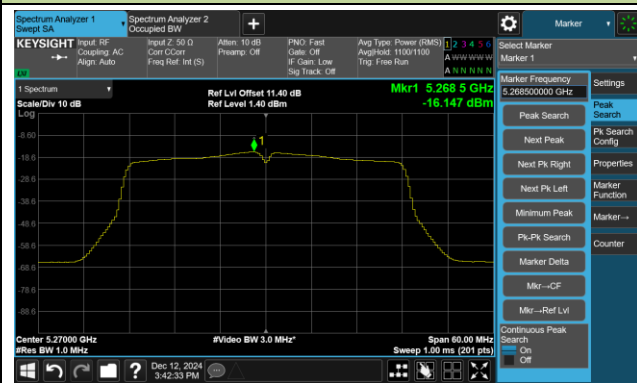
Channel 38 (5190MHz)



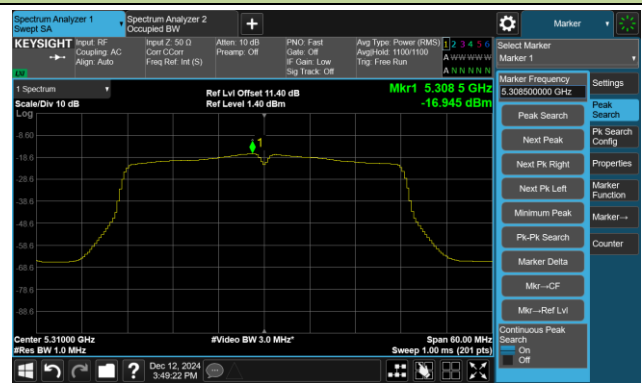
Channel 46 (5230MHz)



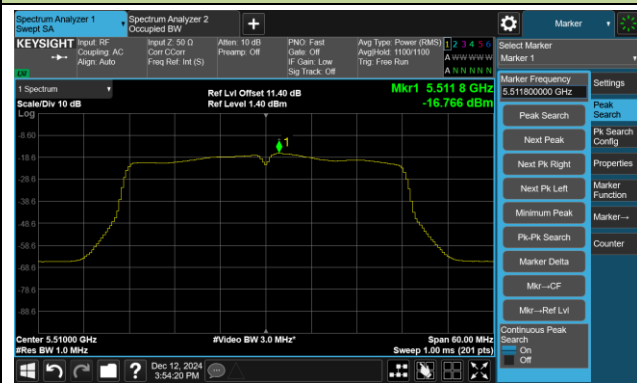
Channel 54 (5270MHz)



Channel 62 (5310MHz)



Channel 102 (5510MHz)



Channel 110 (5550MHz)



Channel 134 (5670MHz)



Channel 142(5710MHz)



802.11ac-VHT40 Power Spectral Density- Ant 0

Channel 151 (5755MHz)

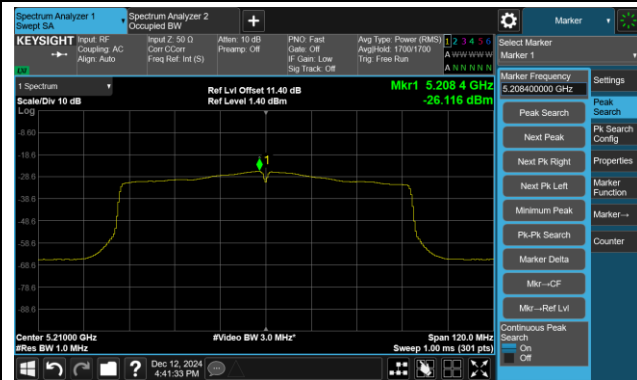


Channel 159 (5795MHz)



802.11ac-VHT80 Power Spectral Density- Ant 0

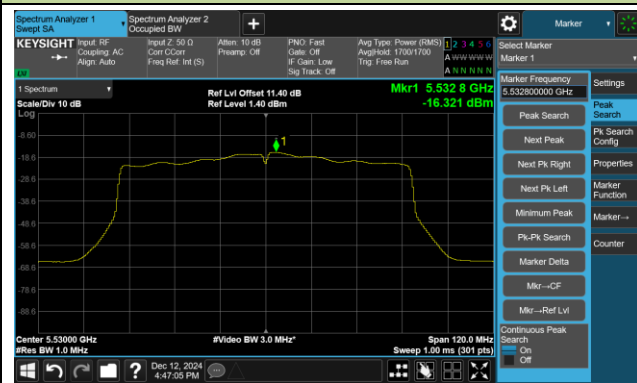
Channel 42 (5210MHz)



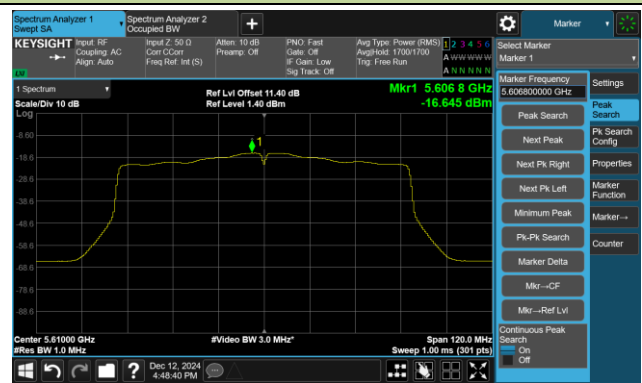
Channel 58 (5290MHz)



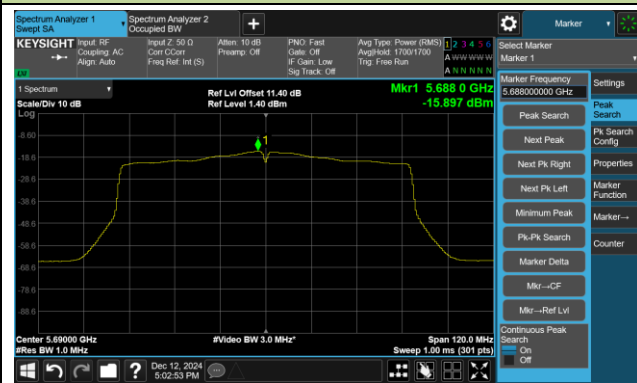
Channel 106 (5530MHz)



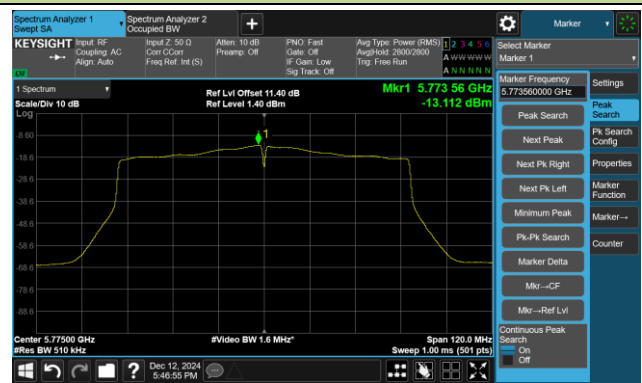
Channel 122 (5610MHz)



Channel 138 (5690MHz)

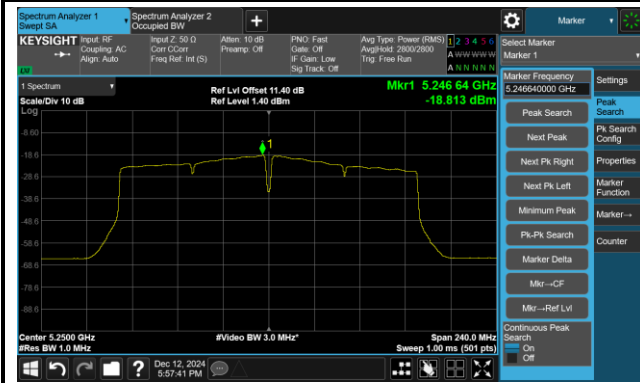


Channel 155 (5775MHz)



802.11ac-VHT160 Power Spectral Density- Ant 0

Channel 50 (5250MHz)

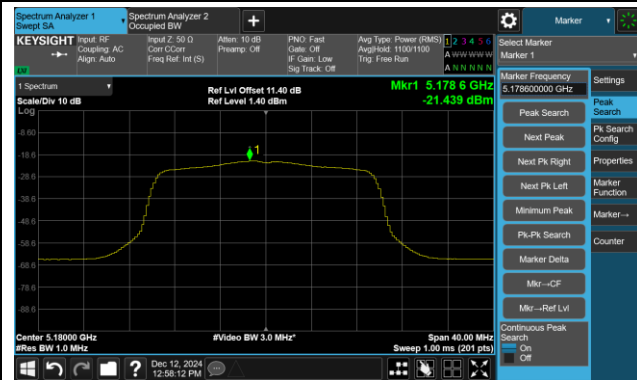


Channel 114 (5570MHz)

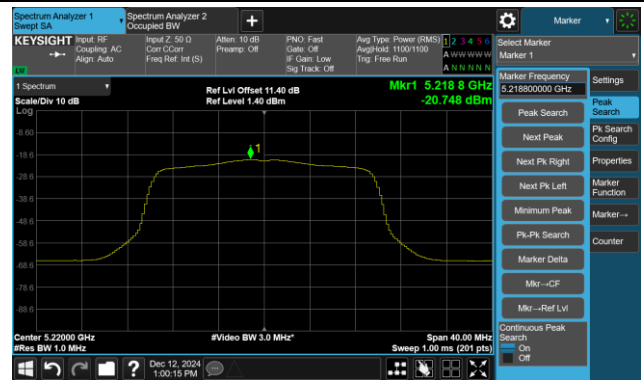


802.11ax-HE20 Power Spectral Density- Ant 0

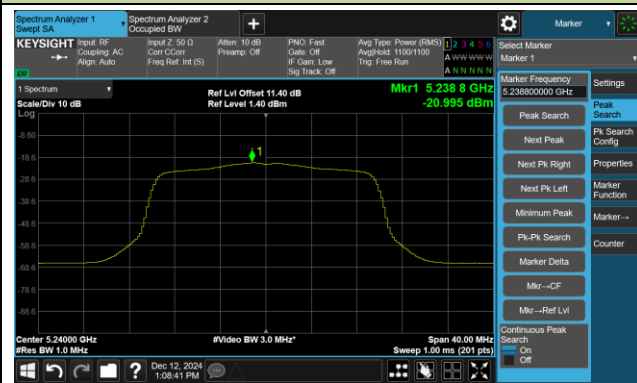
Channel 36 (5180MHz)



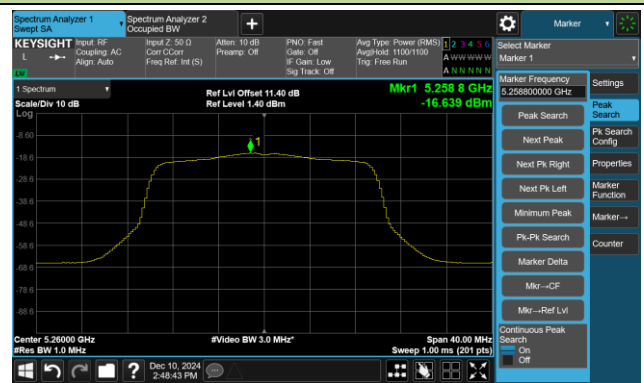
Channel 44 (5220MHz)



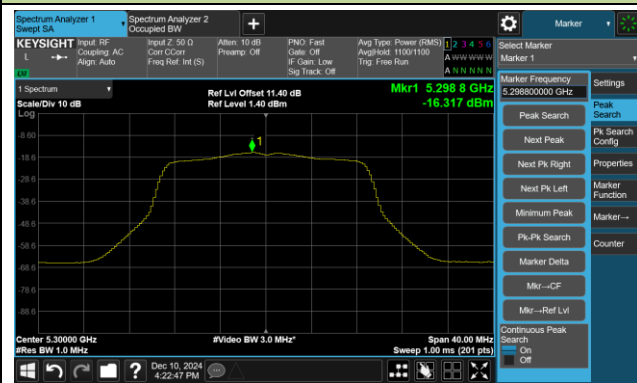
Channel 48 (5240MHz)



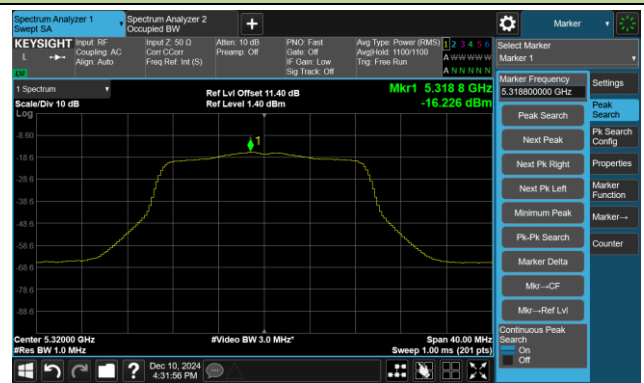
Channel 52 (5260MHz)



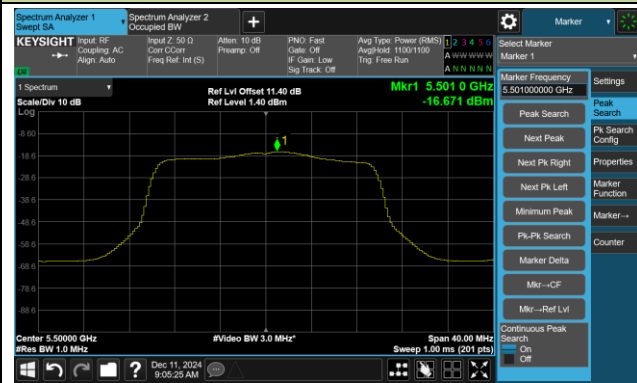
Channel 60 (5300MHz)



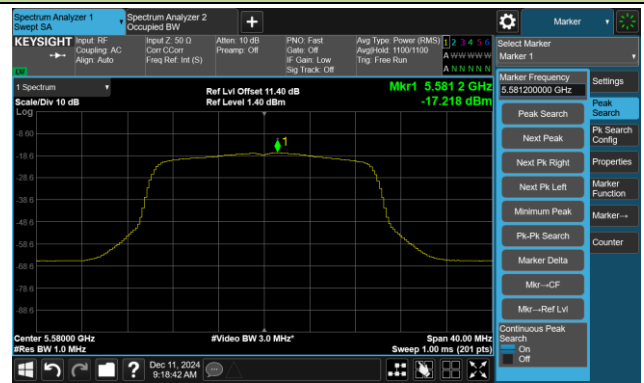
Channel 64 (5320MHz)



Channel 100 (5500MHz)

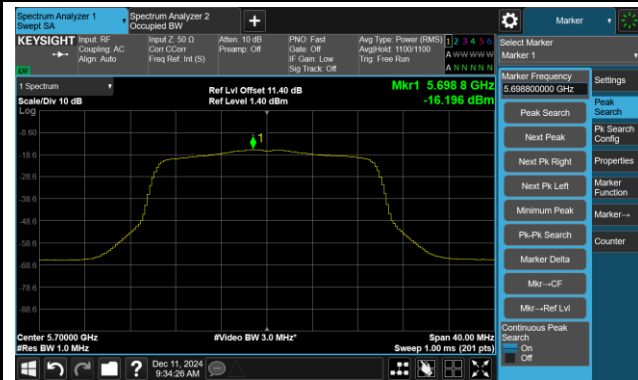


Channel 116 (5580MHz)

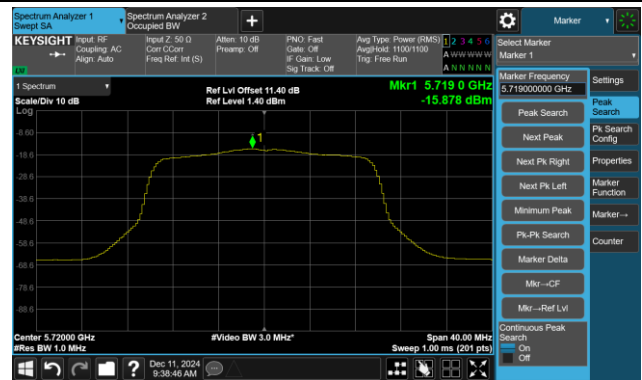


802.11ax-HE20 Power Spectral Density- Ant 0

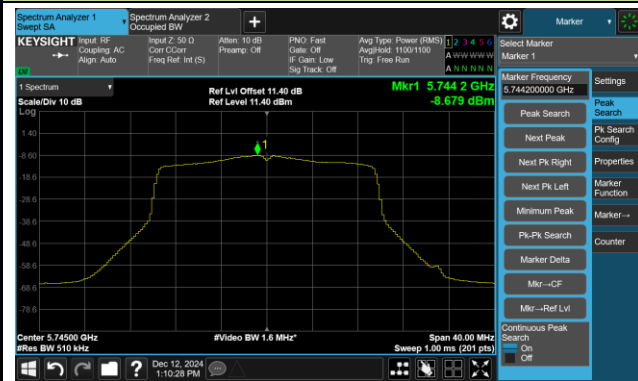
Channel 140 (5700MHz)



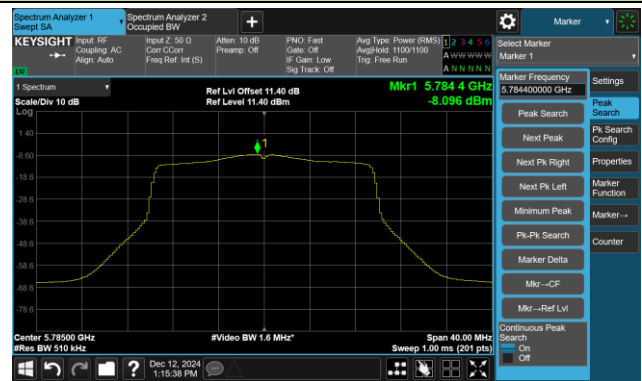
Channel 144(5720MHz)



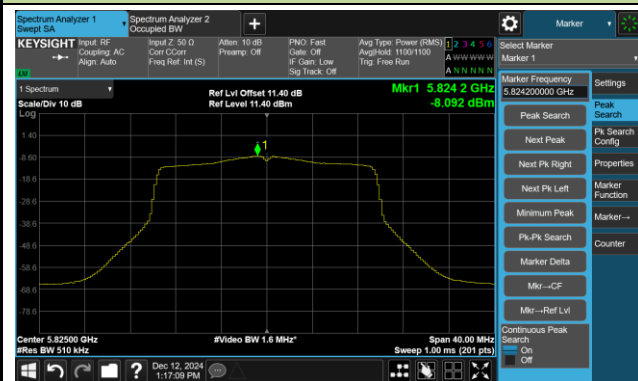
Channel 149 (5745MHz)



Channel 157 (5785MHz)

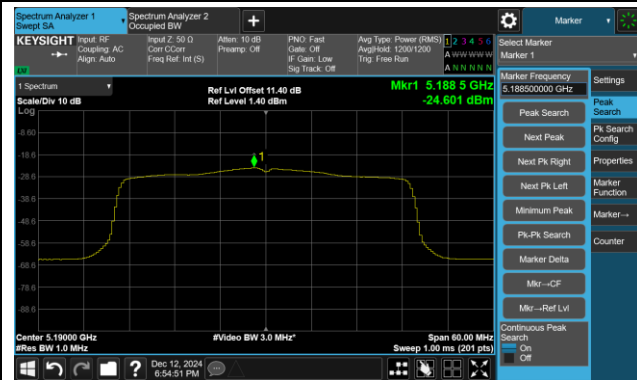


Channel 165 (5825MHz)

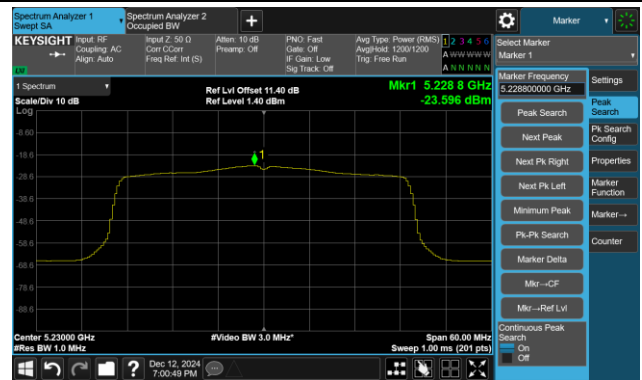


802.11ax-HE40 Power Spectral Density- Ant 0

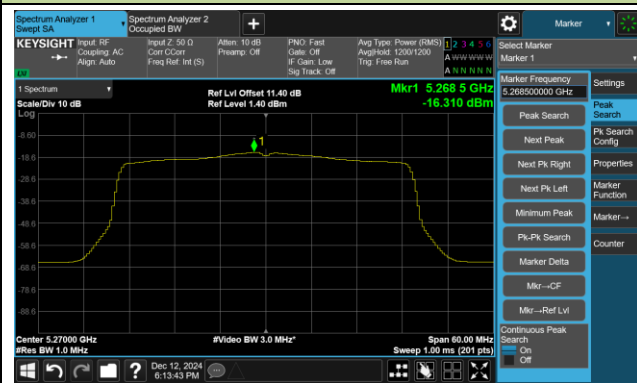
Channel 38 (5190MHz)



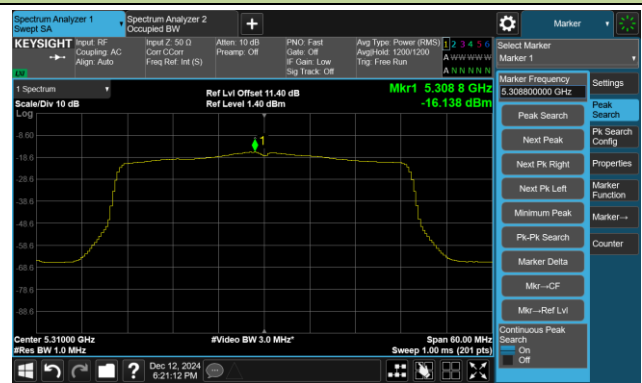
Channel 46 (5230MHz)



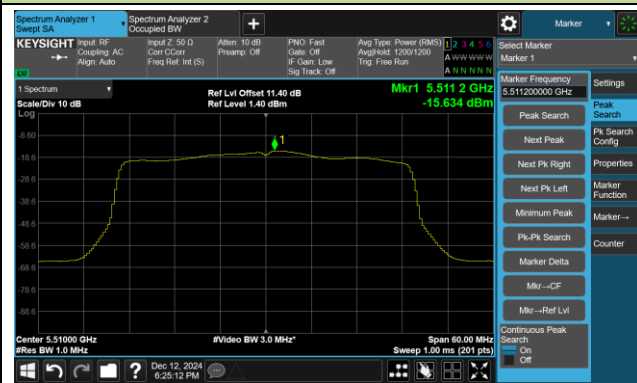
Channel 54 (5270MHz)



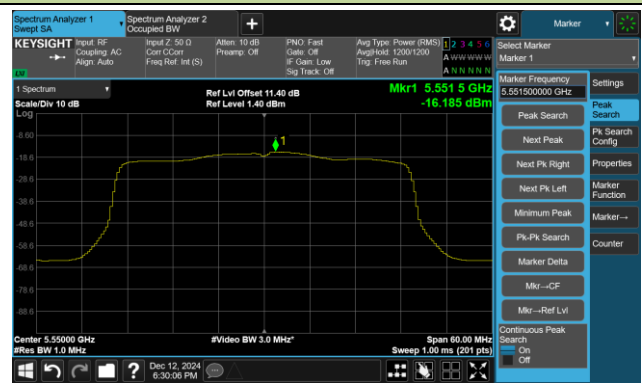
Channel 62 (5310MHz)



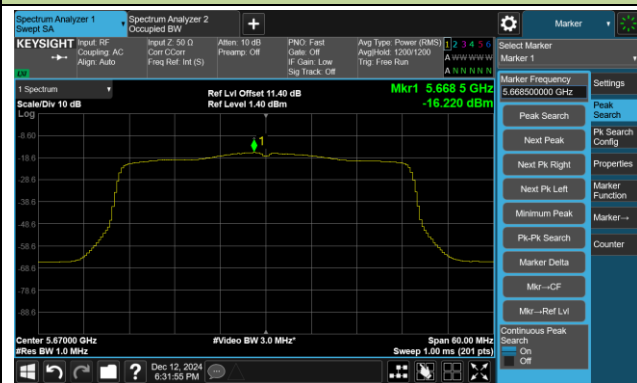
Channel 102 (5510MHz)



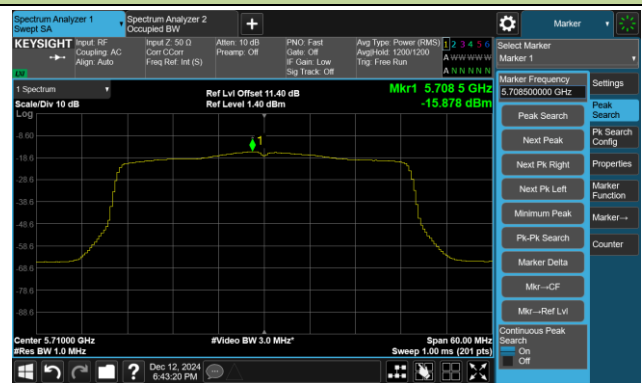
Channel 110 (5550MHz)



Channel 134 (5670MHz)



Channel 142(5710MHz)



802.11ax-HE40 Power Spectral Density- Ant 0

Channel 151 (5755MHz)



Channel 159 (5795MHz)

