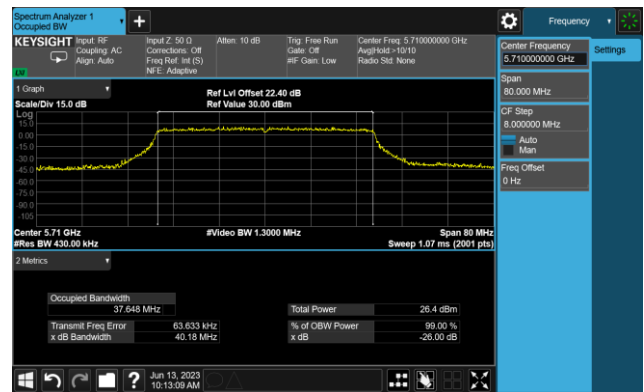


802.11ax-HE40 26dB Bandwidth

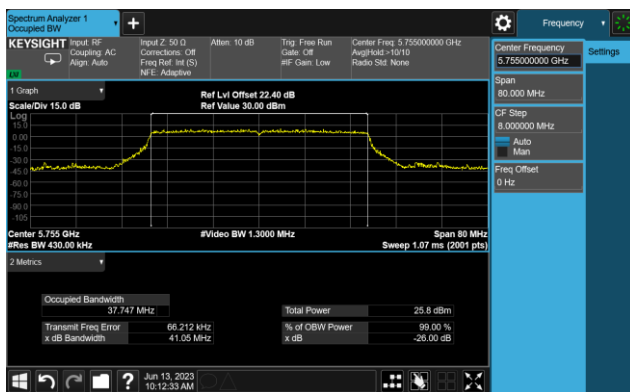
Channel 134 (5670MHz)



Channel 142(5710MHz)



Channel 151 (5755MHz)

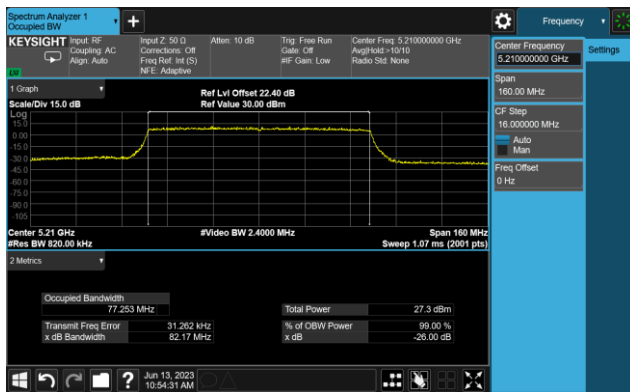


Channel 159 (5795MHz)



802.11ax-HE80 26dB Bandwidth

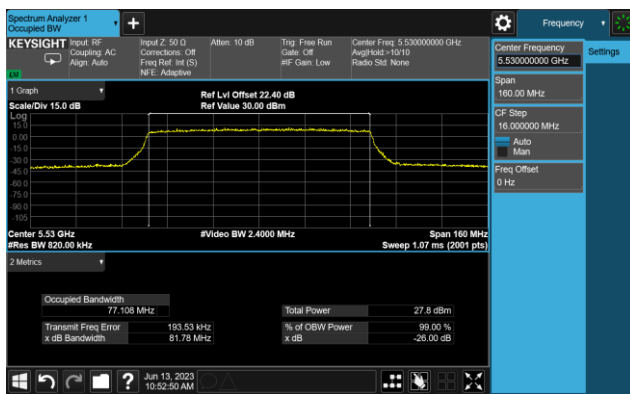
Channel 42 (5210MHz)



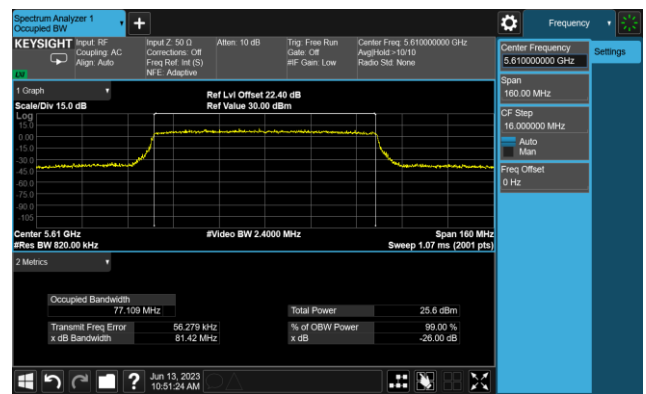
Channel 58 (5290MHz)



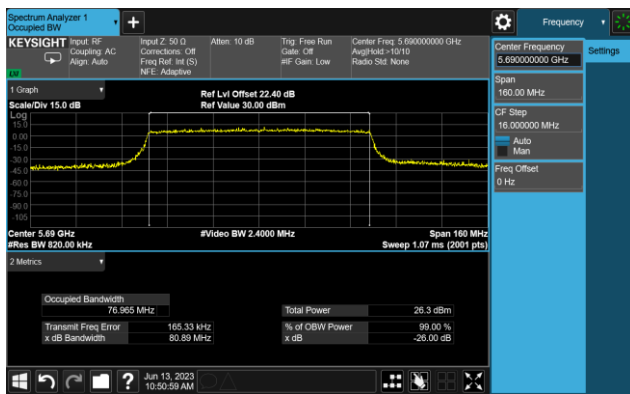
Channel 106 (5530MHz)



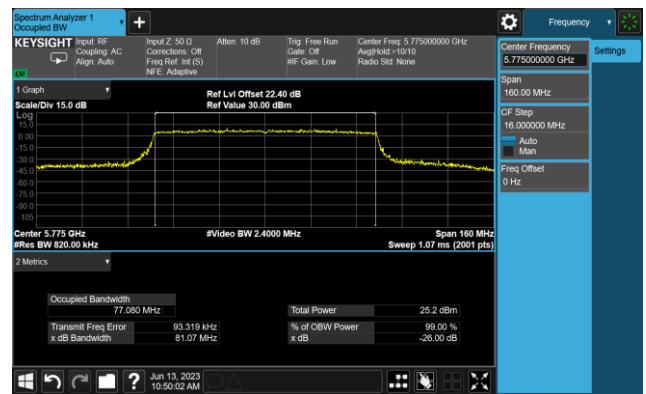
Channel 122 (5610MHz)



Channel 138 (5690MHz)



Channel 155 (5775MHz)

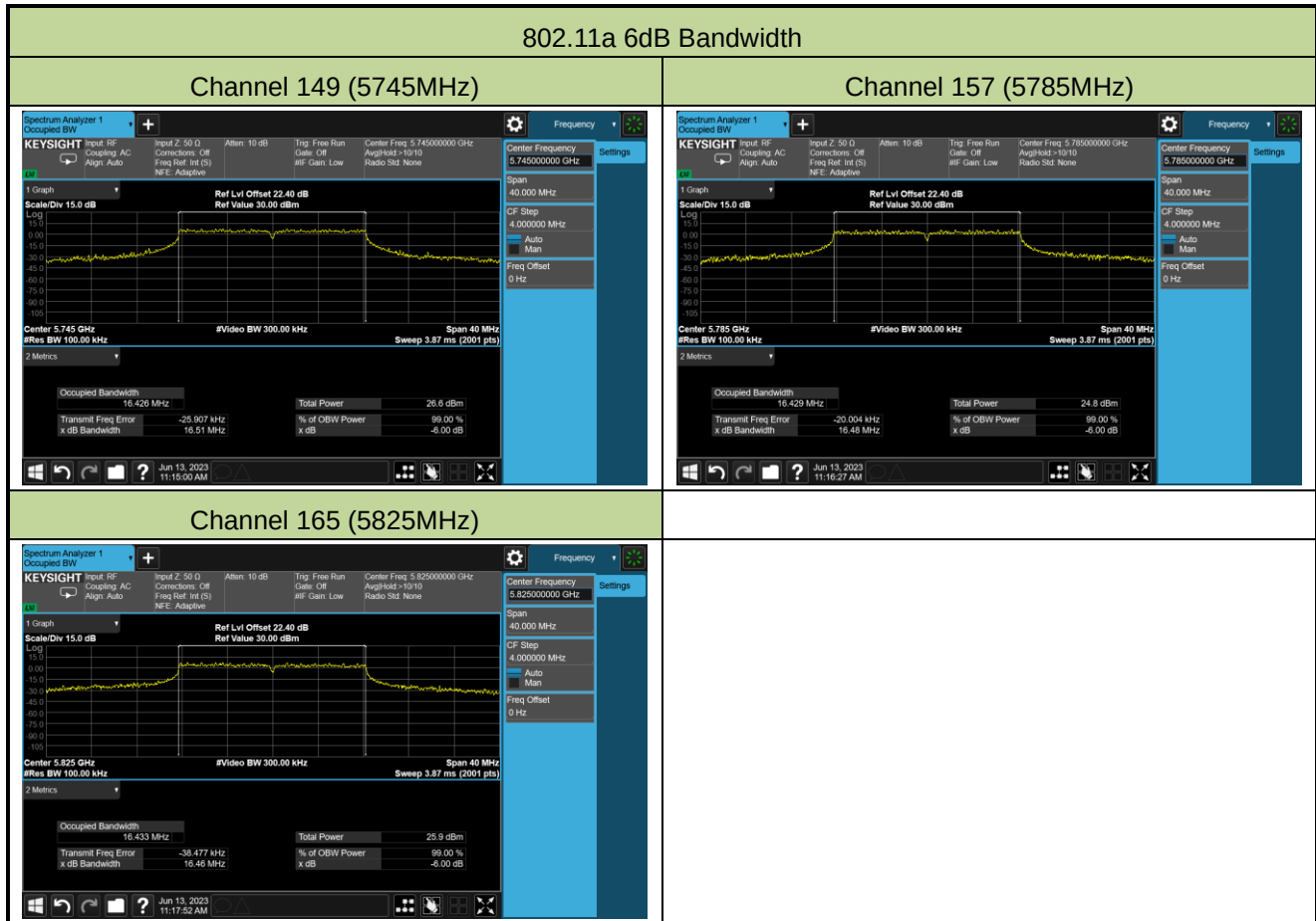


A.3 6dB Bandwidth Test Result

Test data of AP431:

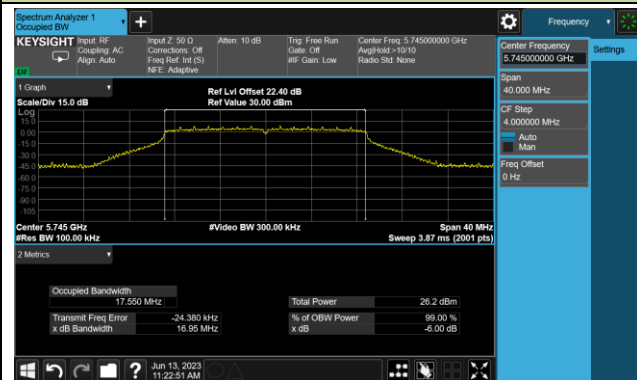
Test Site	WZ-SR5	Test Engineer	Luis Yang
Test Date	2023-06-13		

Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
11a	6Mbps	149	5745	16.51	≥0.5
11a	6Mbps	157	5785	16.48	≥0.5
11a	6Mbps	165	5825	16.46	≥0.5
11ac-VHT20	MCS0	149	5745	16.95	≥0.5
11ac-VHT20	MCS0	157	5785	16.57	≥0.5
11ac-VHT20	MCS0	165	5825	17.19	≥0.5
11ac-VHT40	MCS0	151	5755	36.36	≥0.5
11ac-VHT40	MCS0	159	5795	36.33	≥0.5
11ac-VHT80	MCS0	155	5775	73.72	≥0.5
11ax-HE20	MCS0	149	5745	18.26	≥0.5
11ax-HE20	MCS0	157	5785	17.72	≥0.5
11ax-HE20	MCS0	165	5825	17.94	≥0.5
11ax-HE40	MCS0	151	5755	36.79	≥0.5
11ax-HE40	MCS0	159	5795	36.66	≥0.5
11ax-HE80	MCS0	155	5775	76.29	≥0.5

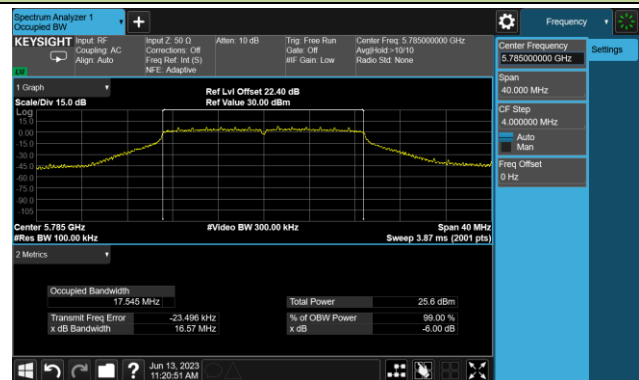


802.11ac-VHT20 6dB Bandwidth

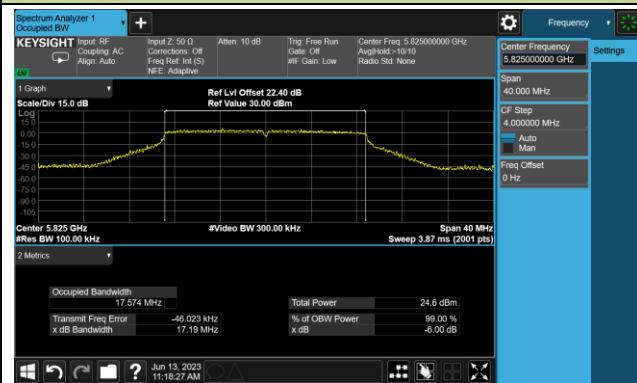
Channel 149 (5745MHz)



Channel 157 (5785MHz)

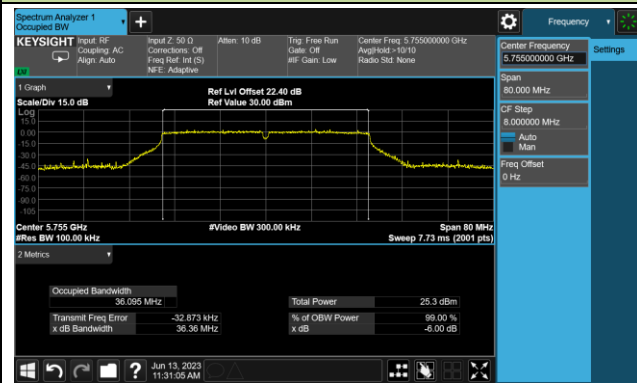


Channel 165 (5825MHz)

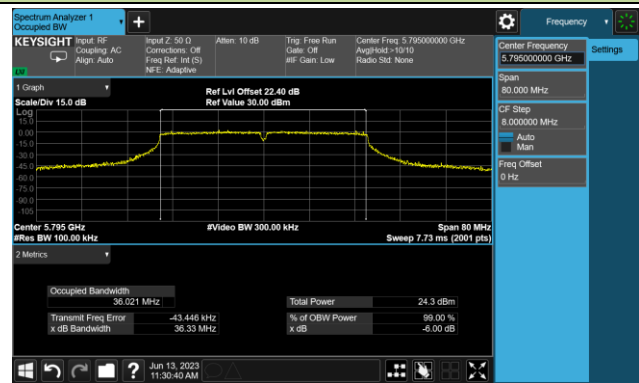


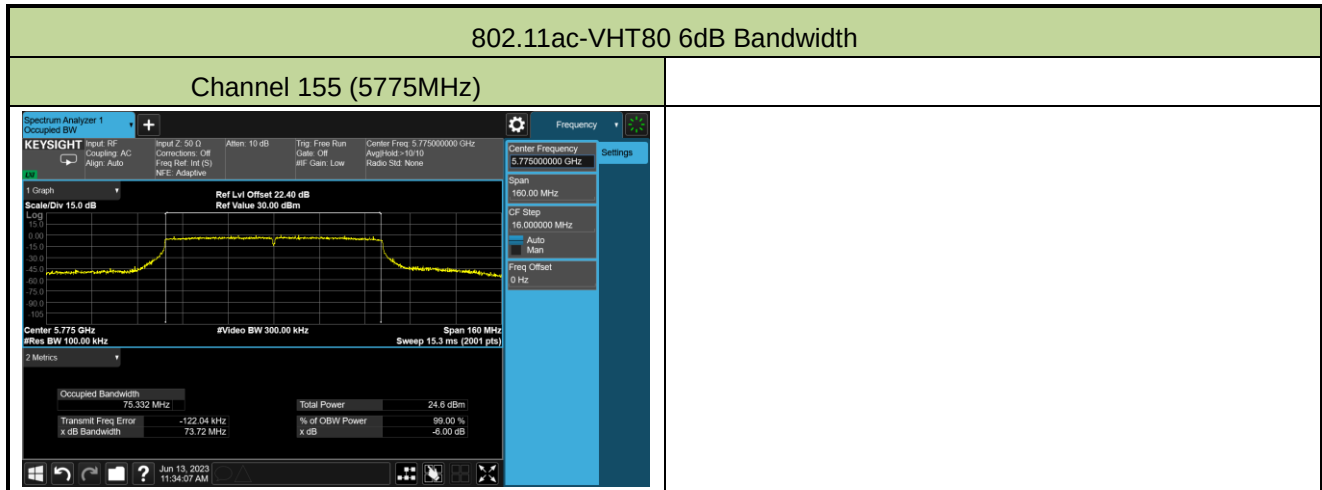
802.11ac-VHT40 6dB Bandwidth

Channel 151 (5755MHz)



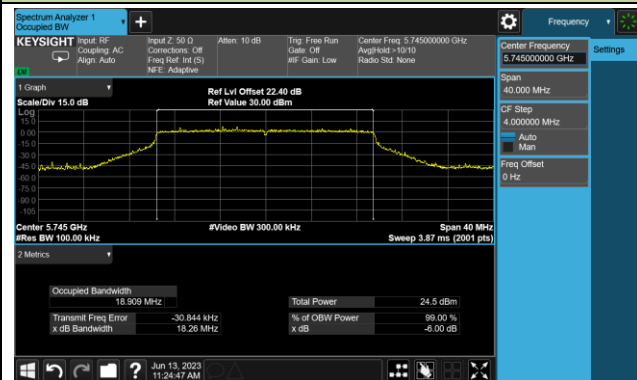
Channel 159 (5795MHz)



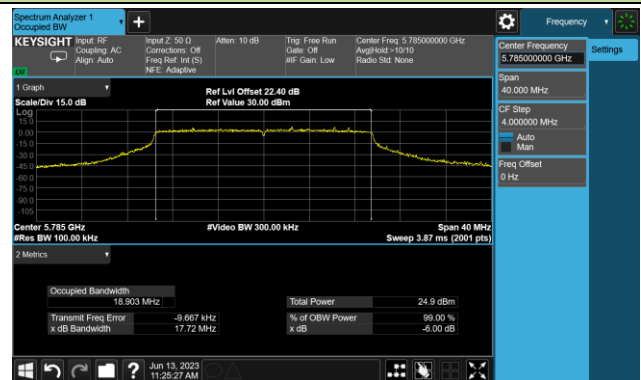


802.11ax-HE20 6dB Bandwidth

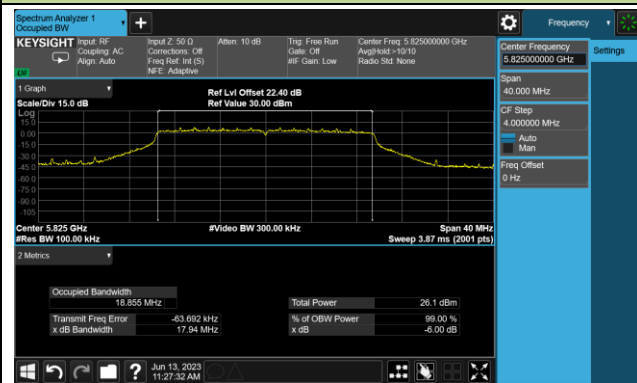
Channel 149 (5745MHz)



Channel 157 (5785MHz)

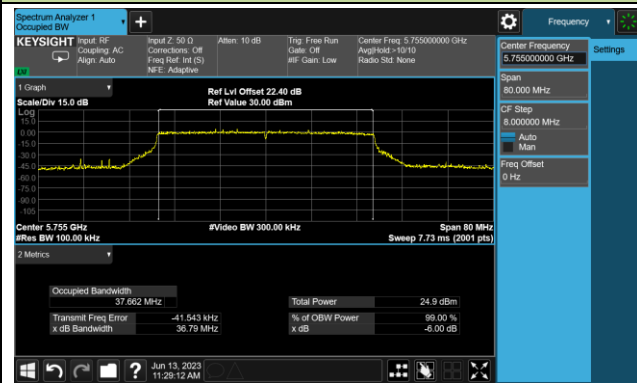


Channel 165 (5825MHz)

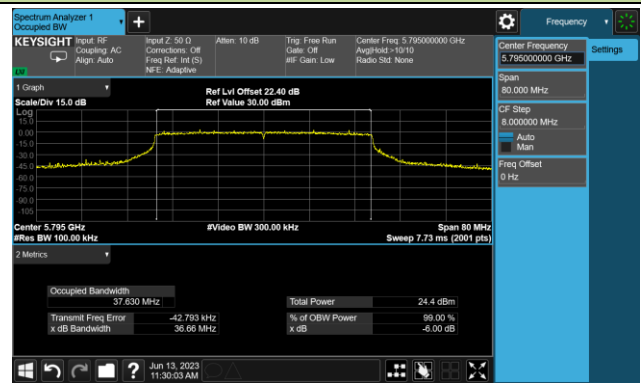


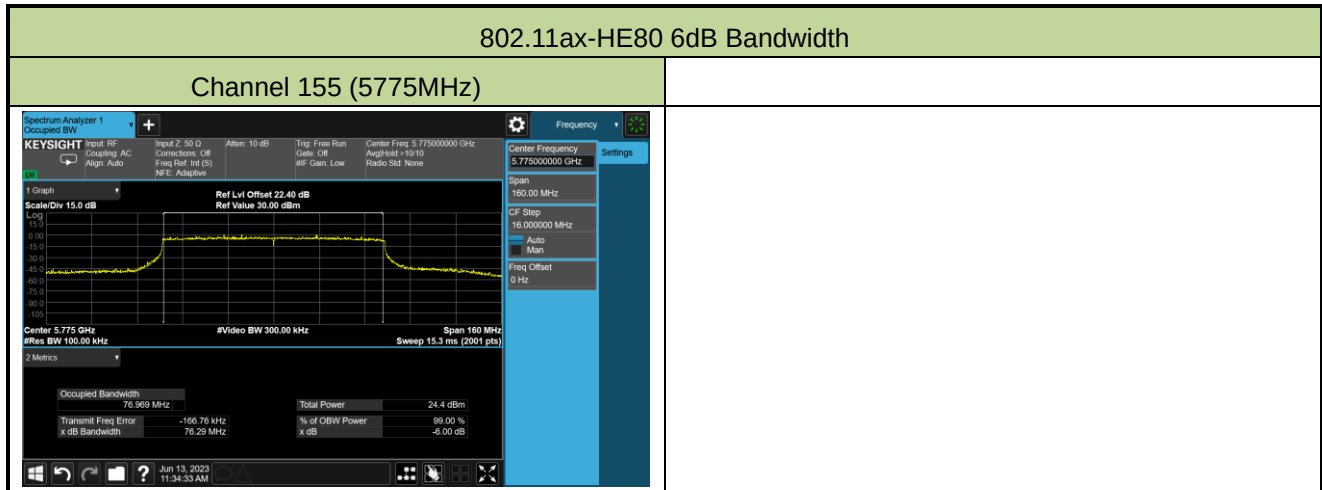
802.11ac-VHT40 6dB Bandwidth

Channel 151 (5755MHz)



Channel 159 (5795MHz)





A.4 Output Power Test Result

Test data of AP431:

Test Site	WZ-SR5	Test Engineer	Luis Yang
Test Date	2023-04-06~2023-06-12, 2023-06-29		

Test Mode	Data Rate MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total Average Power (dBm)	Average Power Limit (dBm)
				Ant 0	Ant 1		
11a	6Mbps	36	5180	18.32	18.05	21.20	≤ 30.00
11a	6Mbps	44	5220	18.23	18.41	21.33	≤ 30.00
11a	6Mbps	48	5240	17.95	18.02	21.00	≤ 30.00
11a	6Mbps	52	5260	17.15	17.35	20.26	≤ 23.98
11a	6Mbps	60	5300	17.05	17.39	20.23	≤ 23.88
11a	6Mbps	64	5320	17.25	17.05	20.16	≤ 23.90
11a	6Mbps	100	5500	17.82	17.89	20.87	≤ 23.98
11a	6Mbps	116	5580	18.29	17.85	21.09	≤ 23.98
11a	6Mbps	140	5700	18.10	17.56	20.85	≤ 23.98
11a	6Mbps	144	5720	18.15	17.21	20.72	≤ 22.67
11a	6Mbps	149	5745	18.12	18.05	21.10	≤ 30.00
11a	6Mbps	157	5785	17.75	18.26	21.02	≤ 30.00
11a	6Mbps	165	5825	18.46	16.82	20.73	≤ 30.00
11ac-VHT20	MCS0	36	5180	18.15	18.45	21.31	≤ 30.00
11ac-VHT20	MCS0	44	5220	17.99	18.31	21.16	≤ 30.00
11ac-VHT20	MCS0	48	5240	18.23	18.35	21.30	≤ 30.00
11ac-VHT20	MCS0	52	5260	18.26	18.05	21.17	≤ 23.98
11ac-VHT20	MCS0	60	5300	18.29	18.08	21.20	≤ 23.98
11ac-VHT20	MCS0	64	5320	18.12	17.96	21.05	≤ 23.98
11ac-VHT20	MCS0	100	5500	18.03	17.63	20.84	≤ 23.98
11ac-VHT20	MCS0	116	5580	18.20	17.67	20.95	≤ 23.98
11ac-VHT20	MCS0	140	5700	18.49	17.96	21.24	≤ 23.98
11ac-VHT20	MCS0	144	5720	18.06	17.52	20.81	≤ 22.94
11ac-VHT20	MCS0	149	5745	18.11	17.76	20.95	≤ 30.00
11ac-VHT20	MCS0	157	5785	17.47	18.18	20.85	≤ 30.00
11ac-VHT20	MCS0	165	5825	18.47	16.56	20.63	≤ 30.00

Test Mode	Data Rate MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total Average Power (dBm)	Average Power Limit (dBm)
				Ant 0	Ant 1		
11ac-VHT40	MCS0	38	5190	18.25	18.47	21.37	≤ 30.00
11ac-VHT40	MCS0	46	5230	18.18	18.19	21.20	≤ 30.00
11ac-VHT40	MCS0	54	5270	18.13	18.21	21.18	≤ 23.98
11ac-VHT40	MCS0	62	5310	18.47	18.49	21.49	≤ 23.98
11ac-VHT40	MCS0	102	5510	18.13	17.63	20.90	≤ 23.98
11ac-VHT40	MCS0	110	5550	18.42	17.56	21.02	≤ 23.98
11ac-VHT40	MCS0	134	5670	18.03	17.78	20.92	≤ 23.98
11ac-VHT40	MCS0	142	5710	18.01	17.60	20.82	≤ 23.98
11ac-VHT40	MCS0	151	5755	18.40	18.20	21.31	≤ 30.00
11ac-VHT40	MCS0	159	5795	17.46	18.23	20.87	≤ 30.00
11ac-VHT80	MCS0	42	5210	18.42	18.36	21.40	≤ 30.00
11ac-VHT80	MCS0	58	5290	18.09	18.25	21.18	≤ 23.98
11ac-VHT80	MCS0	106	5530	18.10	16.78	20.50	≤ 23.98
11ac-VHT80	MCS0	122	5610	18.02	17.90	20.97	≤ 23.98
11ac-VHT80	MCS0	138	5690	18.16	16.96	20.61	≤ 23.98
11ac-VHT80	MCS0	155	5775	18.10	18.30	21.21	≤ 30.00
11ax-HE20	MCS0	36	5180	18.02	18.23	21.14	≤ 30.00
11ax-HE20	MCS0	44	5220	18.39	18.47	21.44	≤ 30.00
11ax-HE20	MCS0	48	5240	18.13	18.32	21.24	≤ 30.00
11ax-HE20	MCS0	52	5260	18.06	18.16	21.12	≤ 23.98
11ax-HE20	MCS0	60	5300	18.43	18.47	21.46	≤ 23.98
11ax-HE20	MCS0	64	5320	17.99	17.82	20.92	≤ 23.98
11ax-HE20	MCS0	100	5500	18.39	18.03	21.22	≤ 23.98
11ax-HE20	MCS0	116	5580	18.13	17.73	20.94	≤ 23.98
11ax-HE20	MCS0	140	5700	18.43	18.12	21.29	≤ 23.98
11ax-HE20	MCS0	144	5720	18.46	17.66	21.09	≤ 22.98
11ax-HE20	MCS0	149	5745	18.30	17.83	21.08	≤ 30.00
11ax-HE20	MCS0	157	5785	17.71	18.45	21.11	≤ 30.00
11ax-HE20	MCS0	165	5825	18.20	16.02	20.26	≤ 30.00

Test Mode	Data Rate MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total Average Power (dBm)	Average Power Limit (dBm)
				Ant 0	Ant 1		
11ax-HE40	MCS0	38	5190	17.77	18.01	20.90	≤ 30.00
11ax-HE40	MCS0	46	5230	18.30	18.43	21.38	≤ 30.00
11ax-HE40	MCS0	54	5270	18.02	18.15	21.10	≤ 23.98
11ax-HE40	MCS0	62	5310	18.38	18.31	21.36	≤ 23.98
11ax-HE40	MCS0	102	5510	18.39	17.63	21.04	≤ 23.98
11ax-HE40	MCS0	110	5550	18.09	17.18	20.67	≤ 23.98
11ax-HE40	MCS0	134	5670	18.06	17.97	21.03	≤ 23.98
11ax-HE40	MCS0	142	5710	18.47	17.55	21.04	≤ 23.98
11ax-HE40	MCS0	151	5755	18.09	17.80	20.96	≤ 30.00
11ax-HE40	MCS0	159	5795	17.05	18.18	20.66	≤ 30.00
11ax-HE80	MCS0	42	5210	18.25	18.46	21.37	≤ 30.00
11ax-HE80	MCS0	58	5290	18.17	18.20	21.20	≤ 23.98
11ax-HE80	MCS0	106	5530	18.08	17.50	20.81	≤ 23.98
11ax-HE80	MCS0	122	5610	17.78	18.25	21.03	≤ 23.98
11ax-HE80	MCS0	138	5690	18.41	17.38	20.94	≤ 23.98
11ax-HE80	MCS0	155	5775	17.88	18.18	21.04	≤ 30.00

Note 1: Total Average Power (dBm) = $10 \cdot \log \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)}\}$.

Note 2: For Band-Crossing channel, Average Power Limit = 23.98dBm or $11 + 10 \cdot \log_{10} \text{EBW}_{2C}$ which is less.

Spot Check Test Data of AP411:

Test Site	WZ-SR5	Test Engineer	Luis Yang
Test Date	2023-06-20		

Test Mode	Data Rate MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total Average Power (dBm)	Average Power Limit (dBm)
				Ant 0	Ant 1		
11ac-VHT40	MCS0	36	5180	17.55	17.63	20.60	≤ 30.00
11ac-VHT80	MCS0	44	5220	17.02	17.34	20.19	≤ 30.00
11ax-HE20	MCS0	48	5240	17.74	18.06	20.91	≤ 30.00

Note: Total Average Power (dBm) = $10 \cdot \log \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)}\}$.

A.5 Power Spectral Density Test Result

Test data of AP431:

Test Site	WZ-SR5	Test Engineer	Luis Yang
Test Date	2023-04-06~2023-06-12, 2023-06-29		
Test Item	Power Spectral Density (UNII-Band 1 & UNII-2a & UNII-2c)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD (dBm/ MHz)		Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)
				Ant 0	Ant 1			
11a	6Mbps	36	5180	5.231	5.203	92.91	8.547	≤ 15.42
11a	6Mbps	44	5220	5.103	5.252	92.91	8.508	≤ 15.42
11a	6Mbps	48	5240	4.953	5.321	92.91	8.471	≤ 15.42
11a	6Mbps	52	5260	5.366	5.836	92.91	8.937	≤ 9.44
11a	6Mbps	60	5300	5.361	5.753	92.91	8.891	≤ 9.44
11a	6Mbps	64	5320	5.471	5.531	92.91	8.831	≤ 9.44
11a	6Mbps	100	5500	6.017	6.131	92.91	9.404	≤ 9.68
11a	6Mbps	116	5580	6.345	6.151	92.91	9.579	≤ 9.68
11a	6Mbps	140	5700	6.378	5.988	92.91	9.517	≤ 9.68
11a	6Mbps	144	5720	6.418	5.493	92.91	9.310	≤ 9.68
11ac-VHT20	MCS0	36	5180	5.528	5.679	94.93	8.840	≤ 15.42
11ac-VHT20	MCS0	44	5220	5.252	5.311	94.93	8.518	≤ 15.42
11ac-VHT20	MCS0	48	5240	5.491	5.642	94.93	8.803	≤ 15.42
11ac-VHT20	MCS0	52	5260	5.459	5.973	94.93	8.960	≤ 9.44
11ac-VHT20	MCS0	60	5300	5.520	5.651	94.93	8.822	≤ 9.44
11ac-VHT20	MCS0	64	5320	5.905	5.375	94.93	8.884	≤ 9.44
11ac-VHT20	MCS0	100	5500	5.459	5.043	94.93	8.492	≤ 9.68
11ac-VHT20	MCS0	116	5580	5.688	5.322	94.93	8.745	≤ 9.68
11ac-VHT20	MCS0	140	5700	6.129	6.130	94.93	9.366	≤ 9.68
11ac-VHT20	MCS0	144	5720	5.819	4.920	94.93	8.629	≤ 9.68
11ac-VHT40	MCS0	38	5190	3.023	2.234	93.30	5.958	≤ 15.42
11ac-VHT40	MCS0	46	5230	2.869	2.679	93.30	6.087	≤ 15.42
11ac-VHT40	MCS0	54	5270	3.705	3.451	93.30	6.891	≤ 9.44
11ac-VHT40	MCS0	62	5310	4.135	3.574	93.30	7.175	≤ 9.44
11ac-VHT40	MCS0	102	5510	3.198	3.341	93.30	6.582	≤ 9.68
11ac-VHT40	MCS0	110	5550	3.509	3.144	93.30	6.642	≤ 9.68
11ac-VHT40	MCS0	134	5670	3.020	3.575	93.30	6.618	≤ 9.68
11ac-VHT40	MCS0	142	5710	3.793	3.551	93.30	6.985	≤ 9.68

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	PSD (dBm/ MHz)		Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)
				Ant 0	Ant 1			
11ac-VHT80	MCS0	42	5210	-0.160	-0.832	91.69	2.904	≤ 15.42
11ac-VHT80	MCS0	58	5290	0.773	0.315	91.69	3.937	≤ 9.44
11ac-VHT80	MCS0	106	5530	-0.009	-0.735	91.69	3.030	≤ 9.68
11ac-VHT80	MCS0	122	5610	-0.418	-0.558	91.69	2.900	≤ 9.68
11ac-VHT80	MCS0	138	5690	0.535	0.529	91.69	3.919	≤ 9.68
11ax-HE20	MCS0	36	5180	5.260	5.480	95.45	8.584	≤ 15.42
11ax-HE20	MCS0	44	5220	5.446	5.674	95.45	8.774	≤ 15.42
11ax-HE20	MCS0	48	5240	5.254	5.433	95.45	8.557	≤ 15.42
11ax-HE20	MCS0	52	5260	5.293	5.633	95.45	8.679	≤ 9.44
11ax-HE20	MCS0	60	5300	5.958	5.998	95.45	9.191	≤ 9.44
11ax-HE20	MCS0	64	5320	5.304	5.014	95.45	8.374	≤ 9.44
11ax-HE20	MCS0	100	5500	5.856	5.575	95.45	8.930	≤ 9.68
11ax-HE20	MCS0	116	5580	5.501	5.068	95.45	8.502	≤ 9.68
11ax-HE20	MCS0	140	5700	5.773	5.161	95.45	8.690	≤ 9.68
11ax-HE20	MCS0	144	5720	5.945	5.052	95.45	8.734	≤ 9.68
11ax-HE40	MCS0	38	5190	2.490	1.627	95.44	5.293	≤ 15.42
11ax-HE40	MCS0	46	5230	2.781	2.672	95.44	5.940	≤ 15.42
11ax-HE40	MCS0	54	5270	3.298	2.704	95.44	6.224	≤ 9.44
11ax-HE40	MCS0	62	5310	3.201	3.018	95.44	6.323	≤ 9.44
11ax-HE40	MCS0	102	5510	3.076	3.113	95.44	6.308	≤ 9.68
11ax-HE40	MCS0	110	5550	2.776	2.604	95.44	5.904	≤ 9.68
11ax-HE40	MCS0	134	5670	2.537	2.970	95.44	5.972	≤ 9.68
11ax-HE40	MCS0	142	5710	3.647	3.646	95.44	6.859	≤ 9.68
11ax-HE80	MCS0	42	5210	-0.562	-1.010	93.79	2.509	≤ 15.42
11ax-HE80	MCS0	58	5290	0.457	-0.106	93.79	3.473	≤ 9.44
11ax-HE80	MCS0	106	5530	0.027	-0.622	93.79	3.003	≤ 9.68
11ax-HE80	MCS0	122	5610	-0.126	-0.934	93.79	2.777	≤ 9.68
11ax-HE80	MCS0	138	5690	0.219	0.705	93.79	3.758	≤ 9.68

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

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

Test Site	WZ-SR5	Test Engineer	Luis Yang
Test Date	2023-04-09~2023-06-12		
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	3.103	2.691	92.91	6.232	≤ 28.69
11a	6Mbps	157	5785	3.056	3.896	92.91	6.826	≤ 28.69
11a	6Mbps	165	5825	3.958	2.388	92.91	6.573	≤ 28.69
11ac-VHT20	MCS0	149	5745	2.921	2.434	94.93	5.921	≤ 28.69
11ac-VHT20	MCS0	157	5785	2.316	3.025	94.93	5.921	≤ 28.69
11ac-VHT20	MCS0	165	5825	3.256	1.392	94.93	5.660	≤ 28.69
11ac-VHT40	MCS0	151	5755	0.650	-0.389	93.30	3.473	≤ 28.69
11ac-VHT40	MCS0	159	5795	-0.185	0.037	93.30	3.239	≤ 28.69
11ac-VHT80	MCS0	155	5775	-3.508	-3.300	91.69	-0.016	≤ 28.69
11ax-HE20	MCS0	149	5745	3.330	2.565	95.45	6.177	≤ 28.69
11ax-HE20	MCS0	157	5785	2.596	3.419	95.45	6.240	≤ 28.69
11ax-HE20	MCS0	165	5825	3.036	0.973	95.45	5.338	≤ 28.69
11ax-HE40	MCS0	151	5755	0.117	-1.127	95.44	2.752	≤ 28.69
11ax-HE40	MCS0	159	5795	-0.748	-0.654	95.44	2.512	≤ 28.69
11ax-HE80	MCS0	155	5775	-3.640	-3.915	93.79	-0.487	≤ 28.69

Note: 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) = $10 \cdot \log \{10^{(\text{Ant 0 AVGPSD}/10)} + 10^{(\text{Ant 1 AVGPSD}/10)}\}$.

802.11a Power Spectral Density- Ant 0

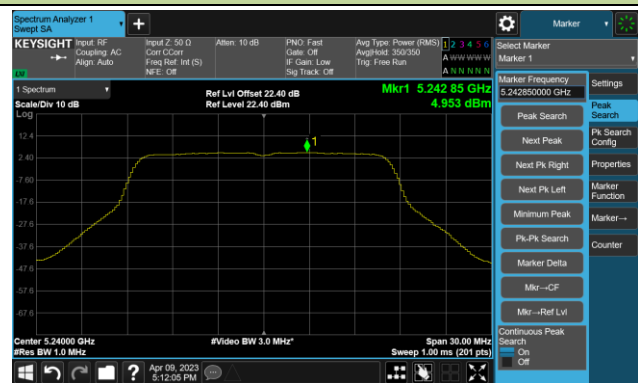
Channel 36 (5180MHz)



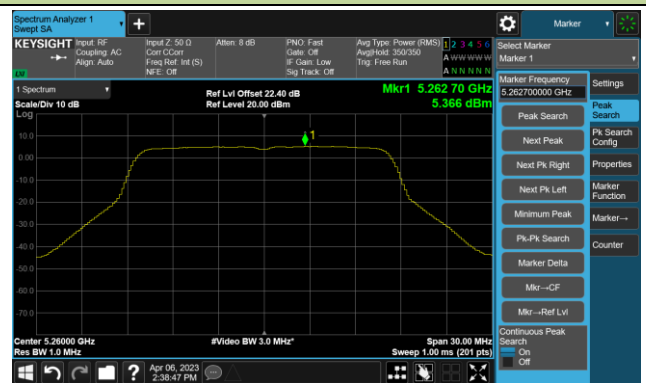
Channel 44 (5220MHz)



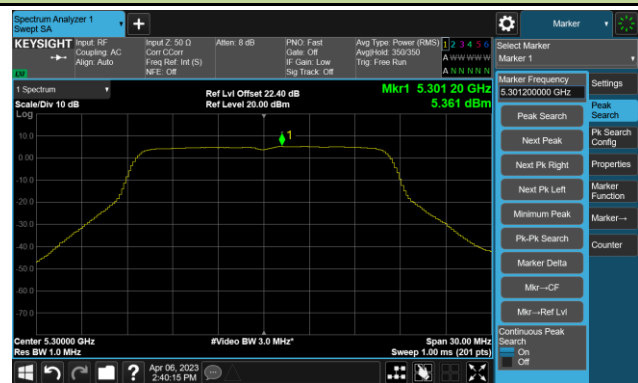
Channel 48 (5240MHz)



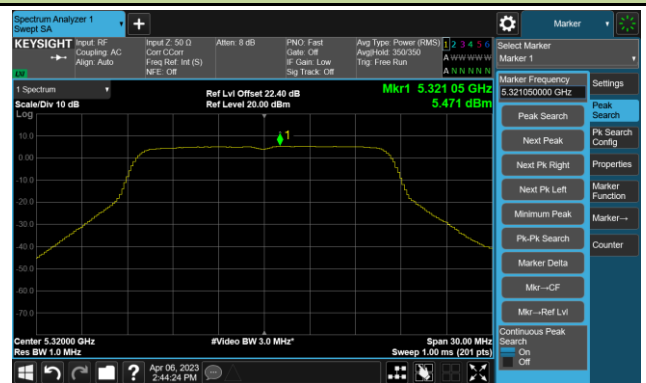
Channel 52 (5260MHz)



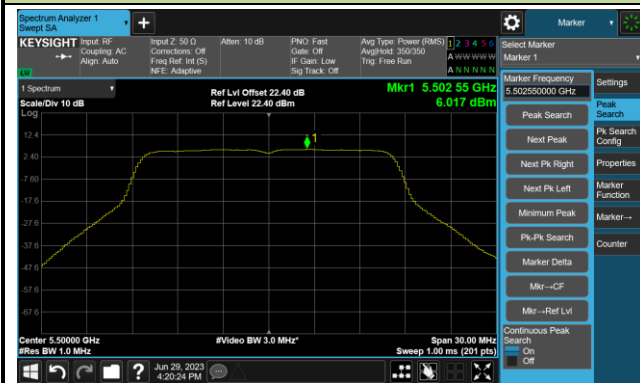
Channel 60 (5300MHz)



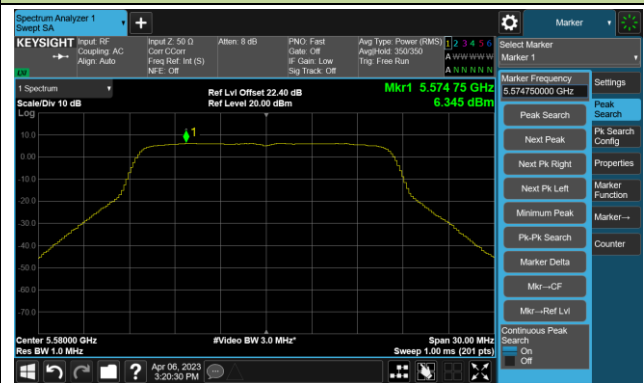
Channel 64 (5320MHz)



Channel 100 (5500MHz)



Channel 116 (5580MHz)



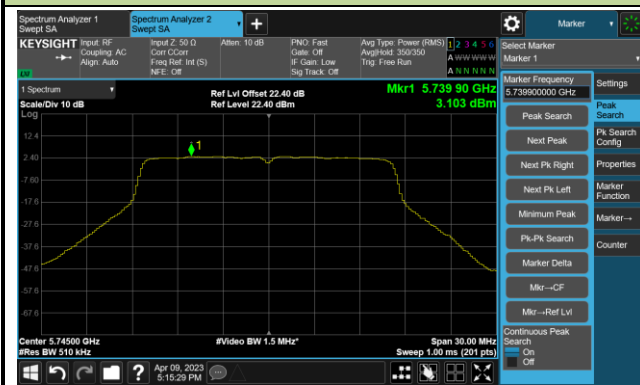
Channel 140 (5700MHz)



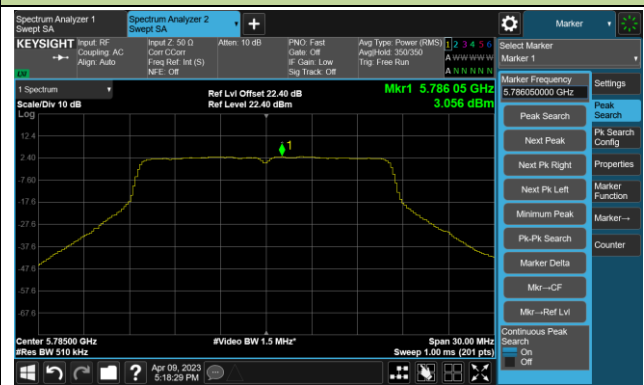
Channel 144(5720MHz)



Channel 149 (5745MHz)

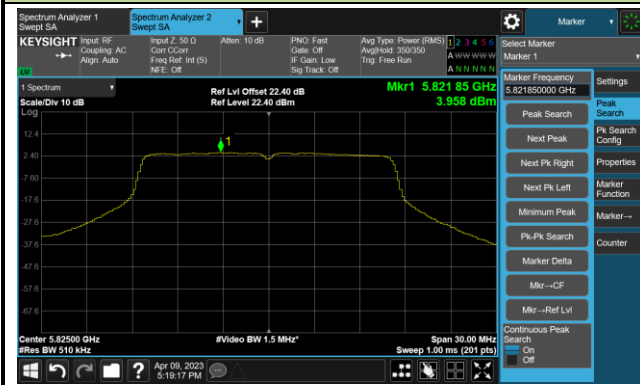


Channel 157 (5785MHz)



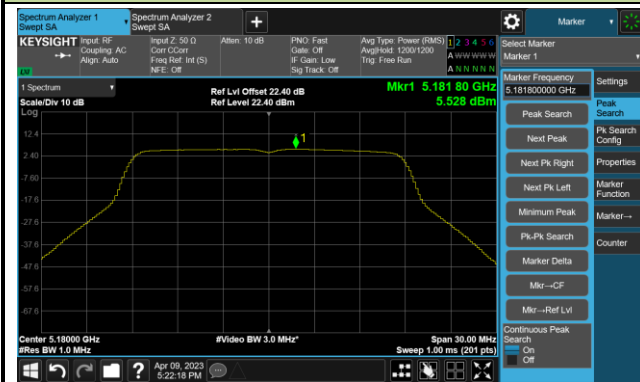
802.11a Power Spectral Density- Ant 0

Channel 165 (5825MHz)

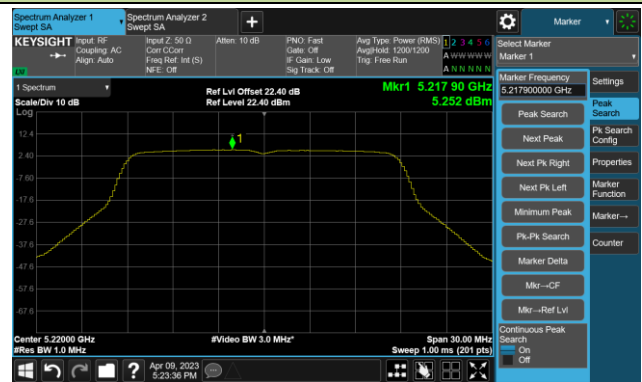


802.11ac-VHT20 Power Spectral Density- Ant 0

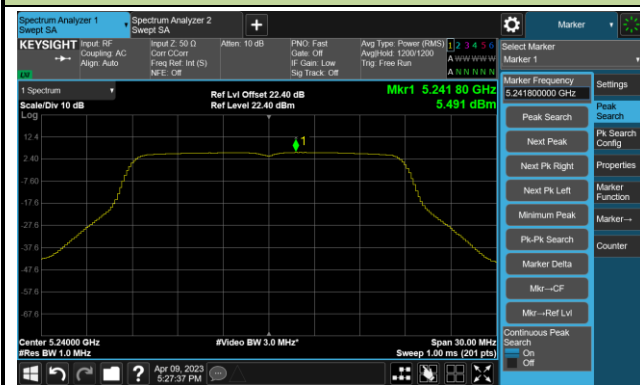
Channel 36 (5180MHz)



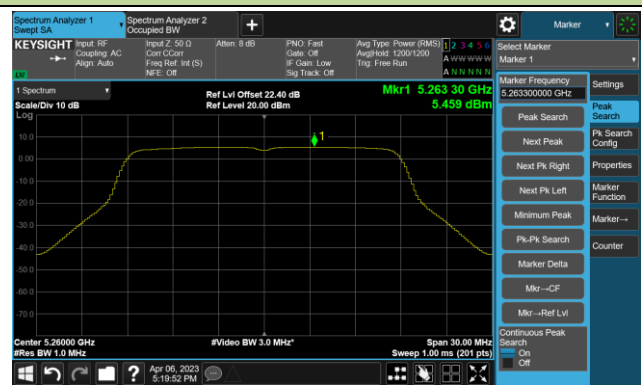
Channel 44 (5220MHz)



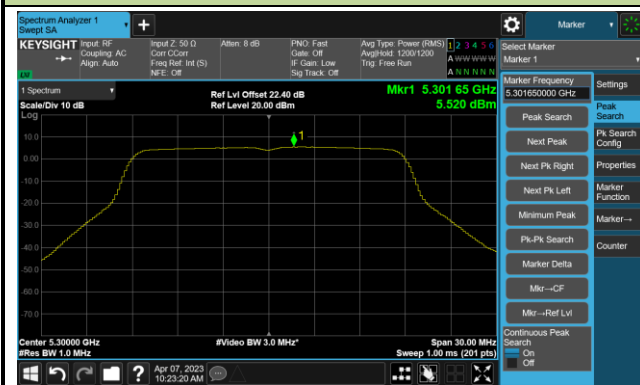
Channel 48 (5240MHz)



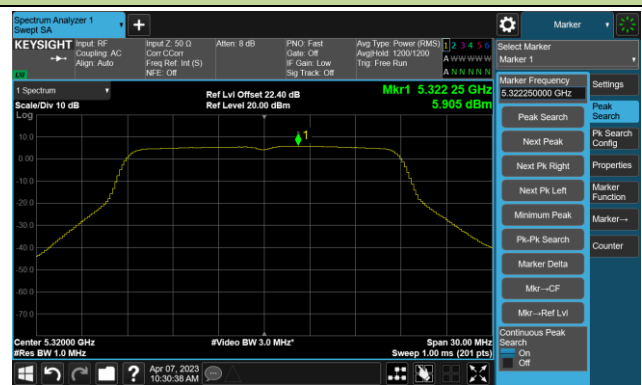
Channel 52 (5260MHz)



Channel 60 (5300MHz)



Channel 64 (5320MHz)

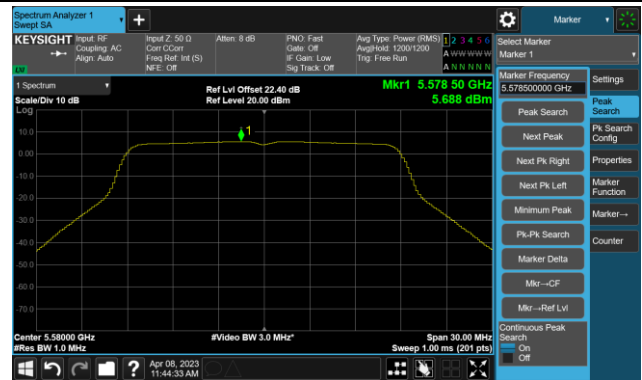


802.11ac-VHT20 Power Spectral Density- Ant 0

Channel 100 (5500MHz)



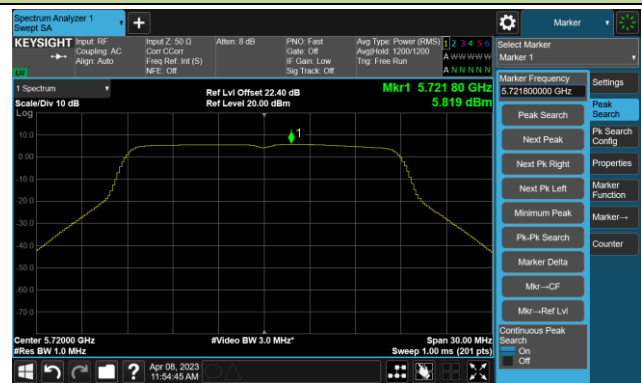
Channel 116 (5580MHz)



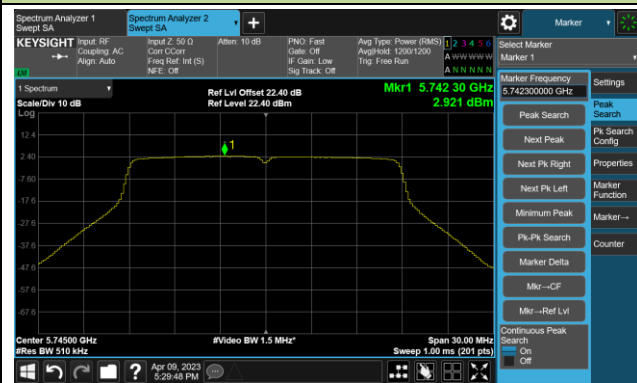
Channel 140 (5700MHz)



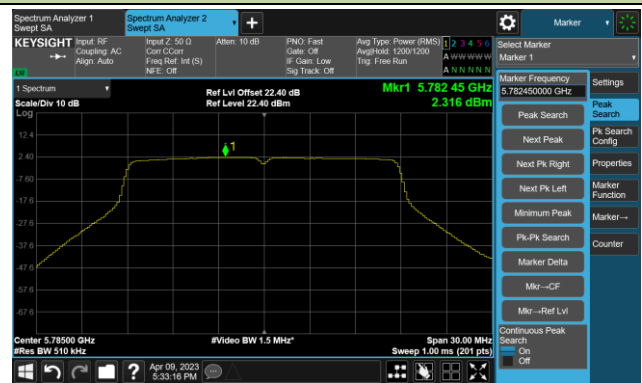
Channel 144(5720MHz)



Channel 149 (5745MHz)

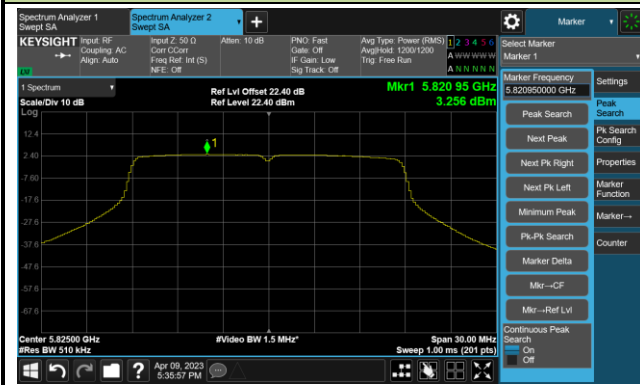


Channel 157 (5785MHz)



802.11ac-VHT20 Power Spectral Density- Ant 0

Channel 165 (5825MHz)



802.11ac-VHT40 Power Spectral Density- Ant 0

Channel 38 (5190MHz)



Channel 46 (5230MHz)



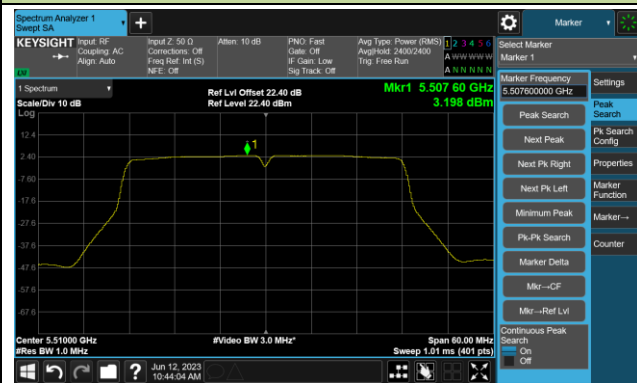
Channel 54 (5270MHz)



Channel 62 (5310MHz)



Channel 102 (5510MHz)

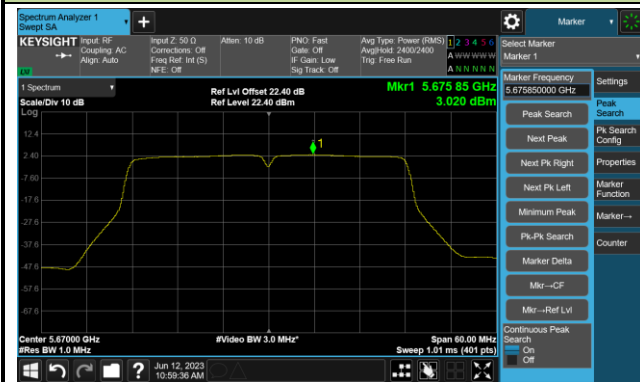


Channel 110 (5550MHz)



802.11ac-VHT40 Power Spectral Density- Ant 0

Channel 134 (5670MHz)



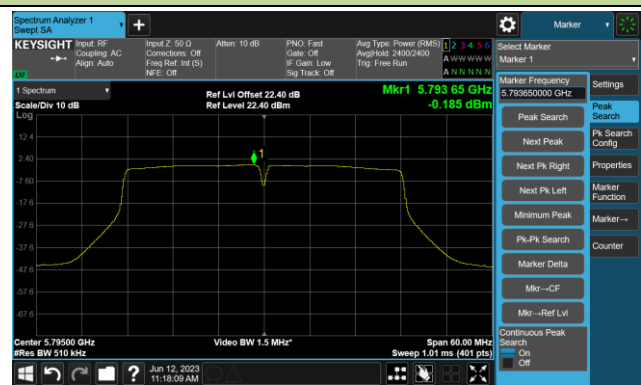
Channel 142(5710MHz)



Channel 151 (5755MHz)



Channel 159 (5795MHz)



802.11ac-VHT80 Power Spectral Density- Ant 0

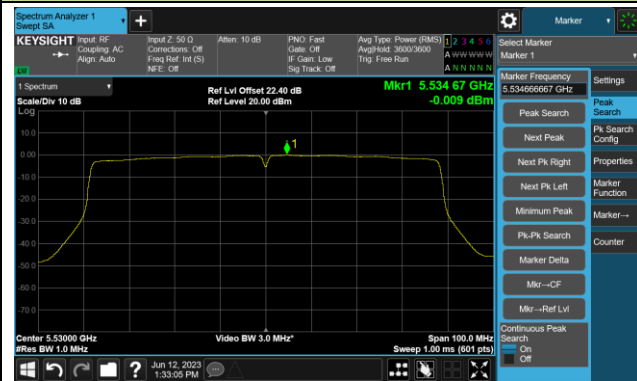
Channel 42 (5210MHz)



Channel 58 (5290MHz)



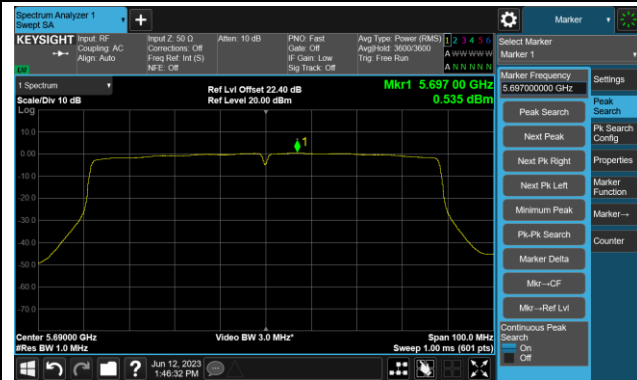
Channel 106 (5530MHz)



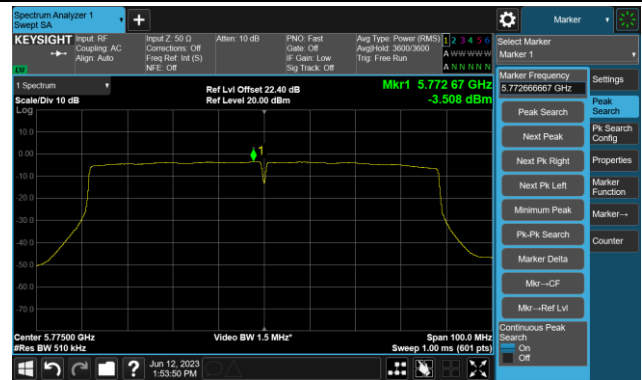
Channel 122 (5610MHz)



Channel 138 (5690MHz)

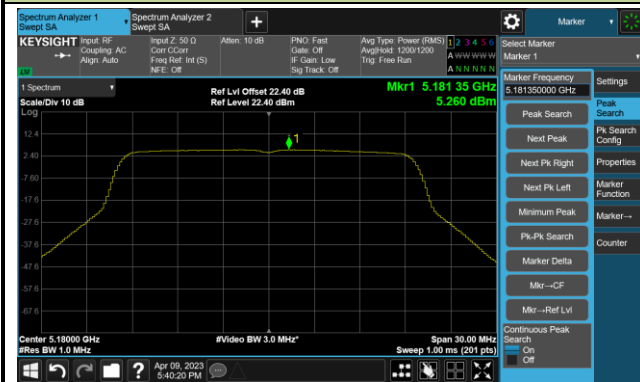


Channel 155 (5775MHz)

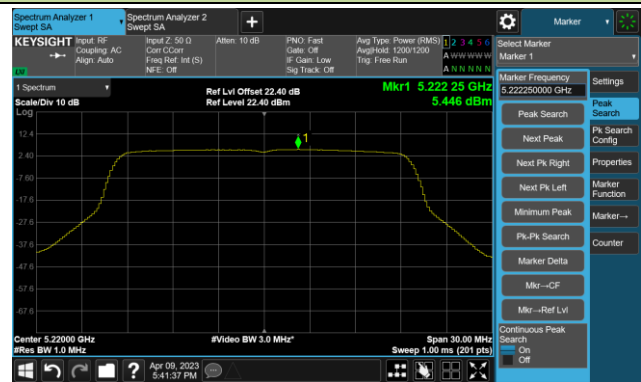


802.11ax-HE20 Power Spectral Density- Ant 0

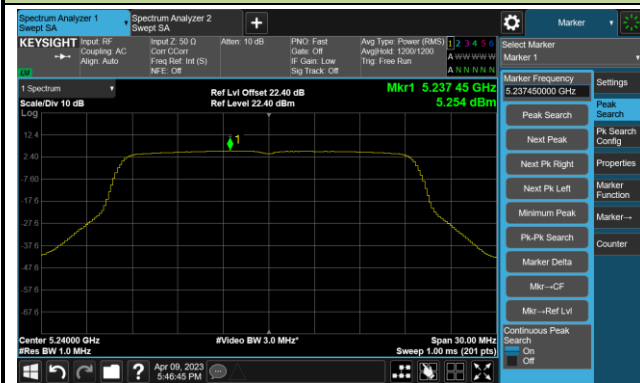
Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



Channel 52 (5260MHz)



Channel 60 (5300MHz)



Channel 64 (5320MHz)

