

802.11a Power Spectral Density- Ant 1

Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



Channel 52 (5260MHz)



Channel 60 (5300MHz)



Channel 64 (5320MHz)



Channel 100 (5500MHz)

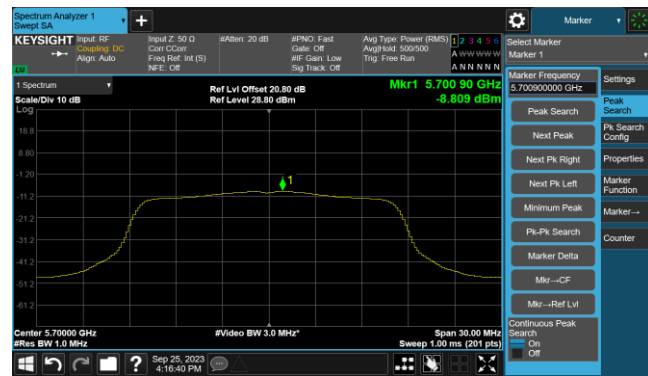


Channel 116 (5580MHz)



802.11a Power Spectral Density- Ant 1

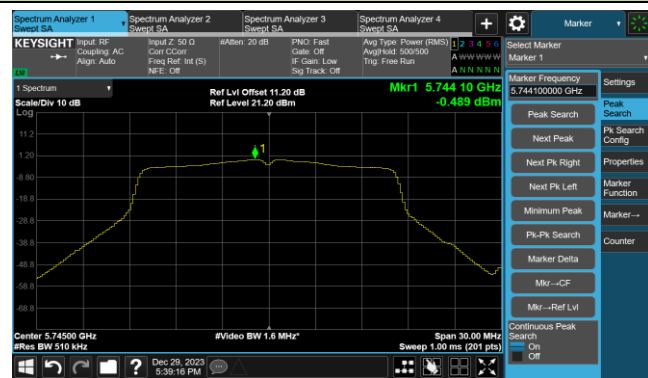
Channel 140 (5700MHz)



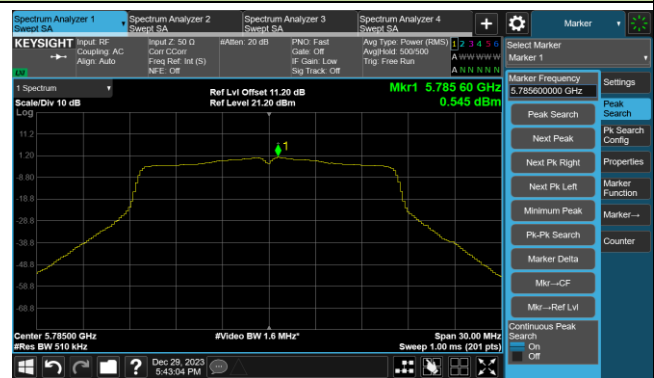
Channel 144(5720MHz)



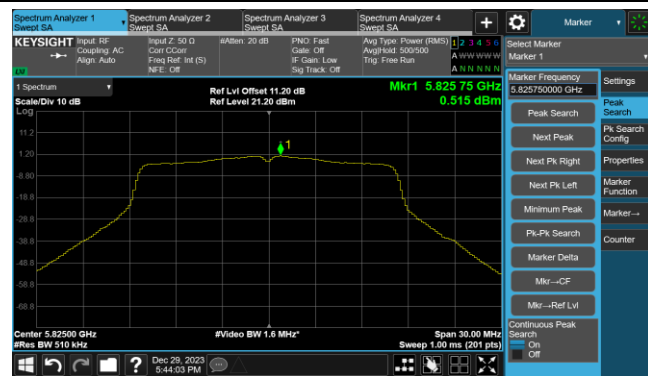
Channel 149 (5745MHz)



Channel 157 (5785MHz)

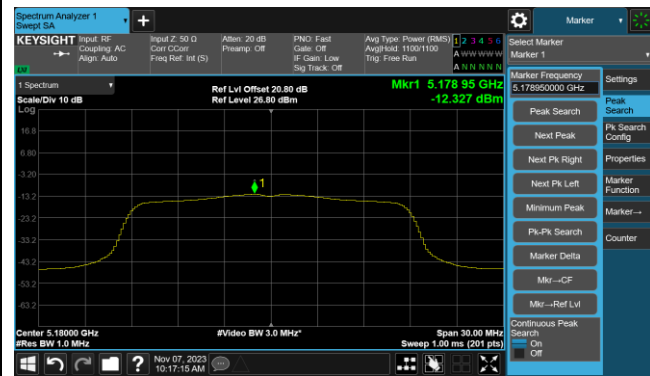


Channel 165 (5825MHz)



802.11ac-VHT20 Power Spectral Density- Ant 1

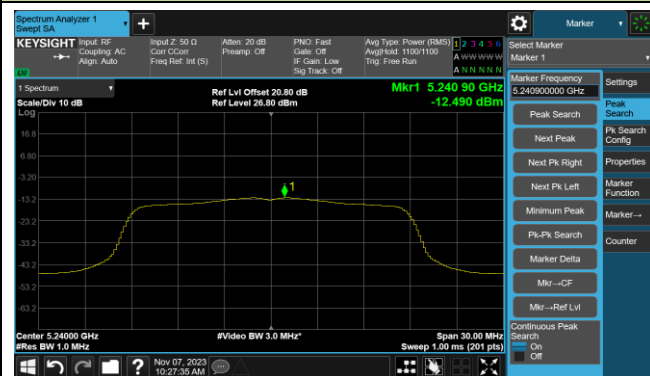
Channel 36 (5180MHz)



Channel 44 (5220MHz)



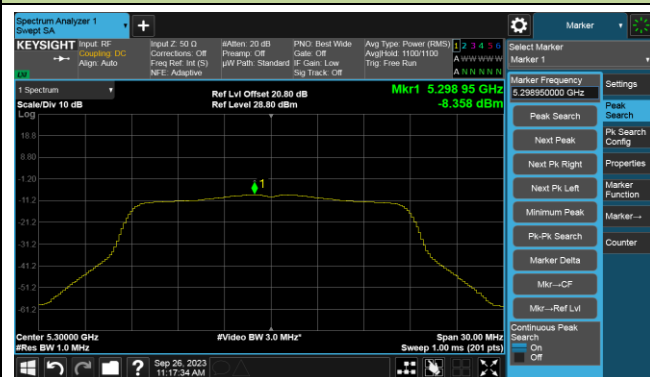
Channel 48 (5240MHz)



Channel 52 (5260MHz)



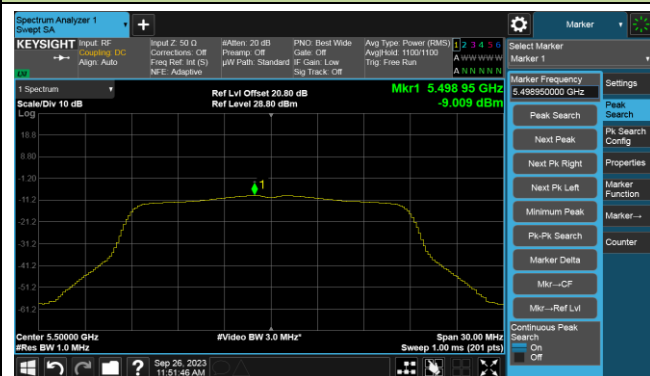
Channel 60 (5300MHz)



Channel 64 (5320MHz)



Channel 100 (5500MHz)

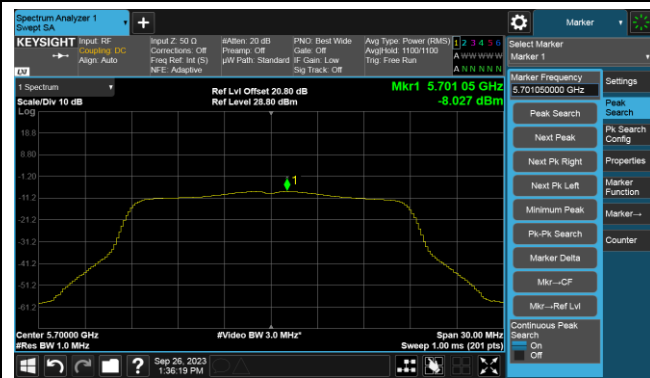


Channel 116 (5580MHz)



802.11ac-VHT20 Power Spectral Density- Ant 1

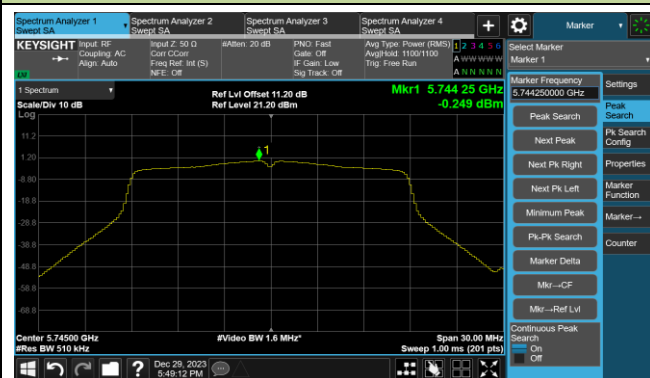
Channel 140 (5700MHz)



Channel 144(5720MHz)



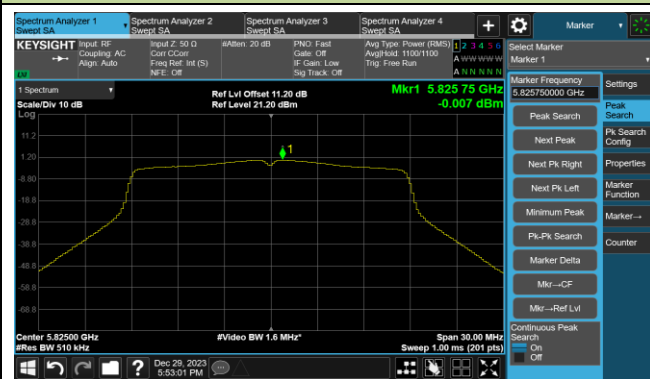
Channel 149 (5745MHz)



Channel 157 (5785MHz)

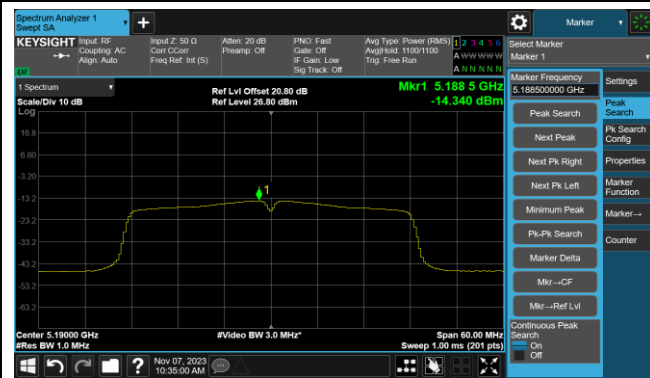


Channel 165 (5825MHz)

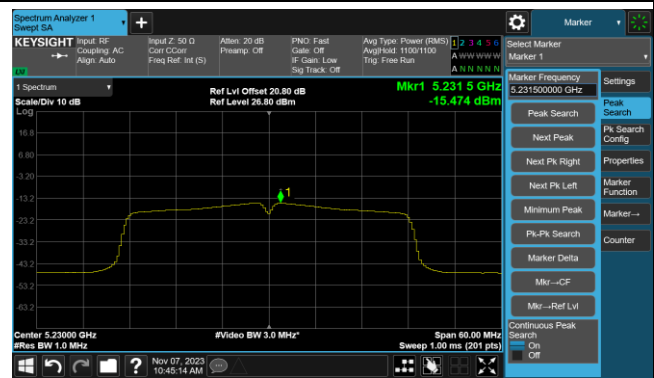


802.11ac-VHT40 Power Spectral Density- Ant 1

Channel 38 (5190MHz)



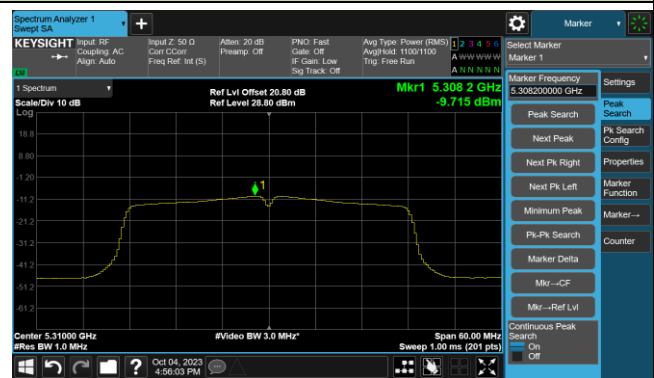
Channel 46 (5230MHz)



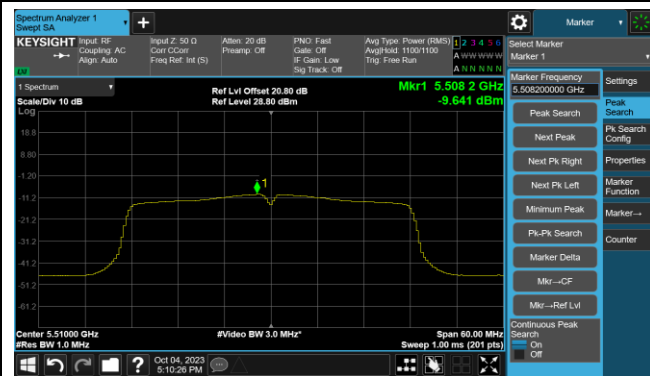
Channel 54 (5270MHz)



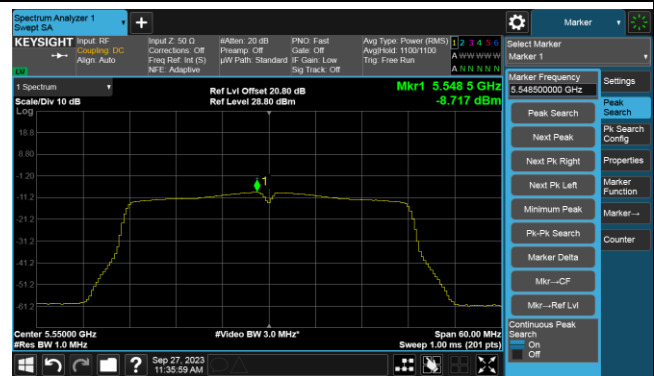
Channel 62 (5310MHz)



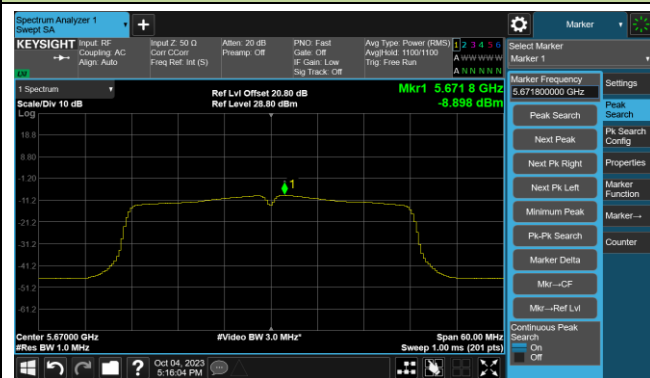
Channel 102 (5510MHz)



Channel 110 (5550MHz)



Channel 134 (5670MHz)

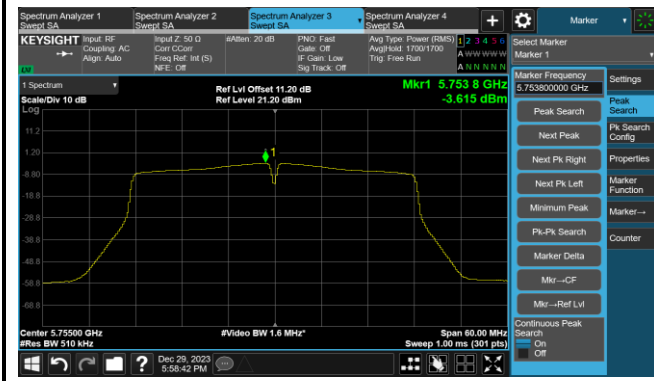


Channel 142 (5710MHz)

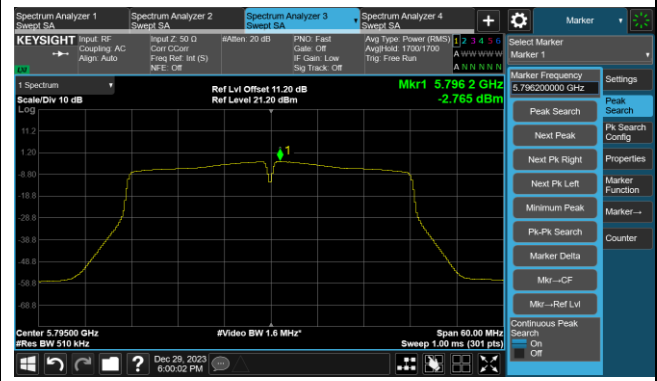


802.11ac-VHT40 Power Spectral Density- Ant 1

Channel 151 (5755MHz)

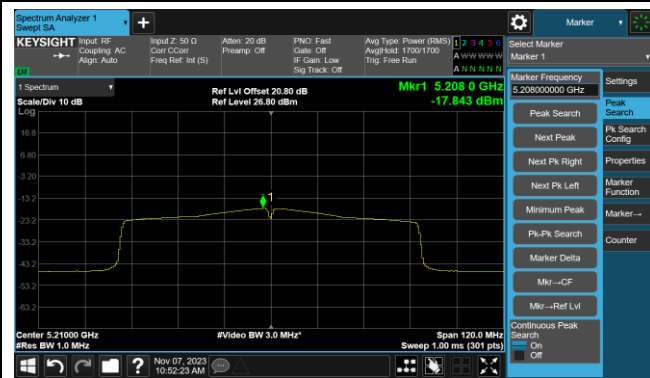


Channel 159 (5795MHz)

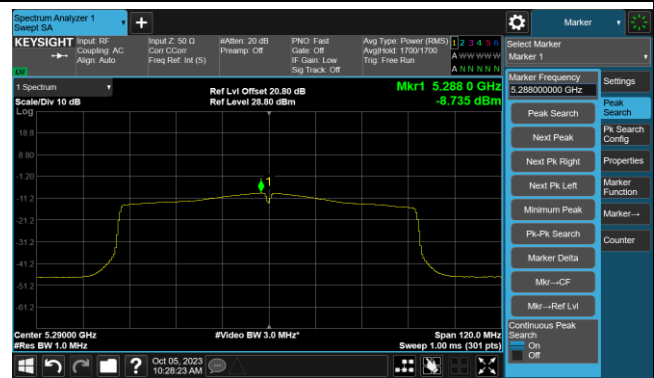


802.11ac-VHT80 Power Spectral Density- Ant 1

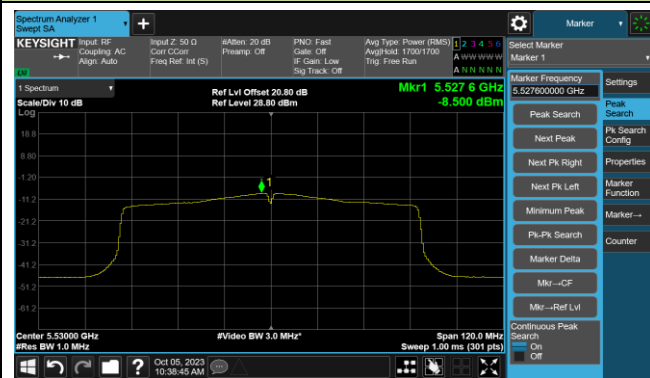
Channel 42 (5210MHz)



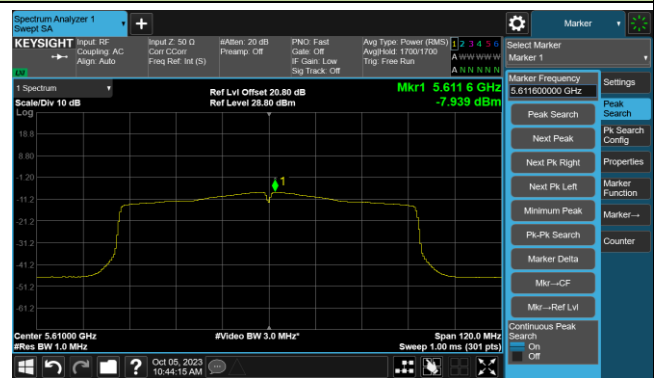
Channel 58 (5290MHz)



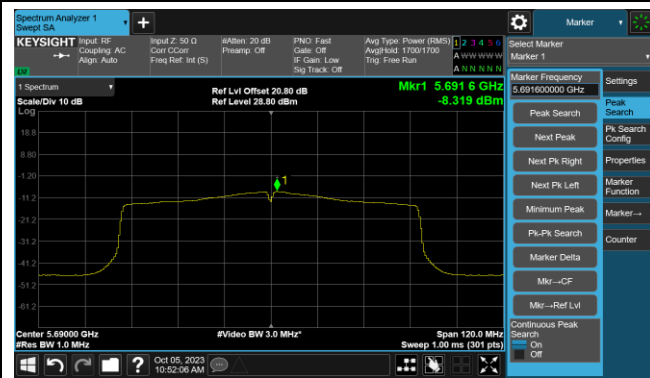
Channel 106 (5530MHz)



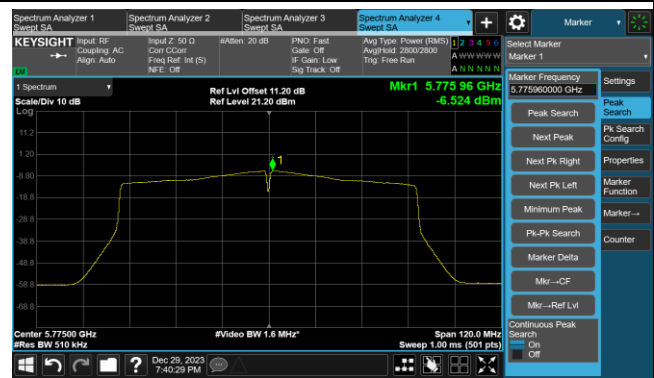
Channel 122 (5610MHz)



Channel 138 (5690MHz)



Channel 155 (5775MHz)

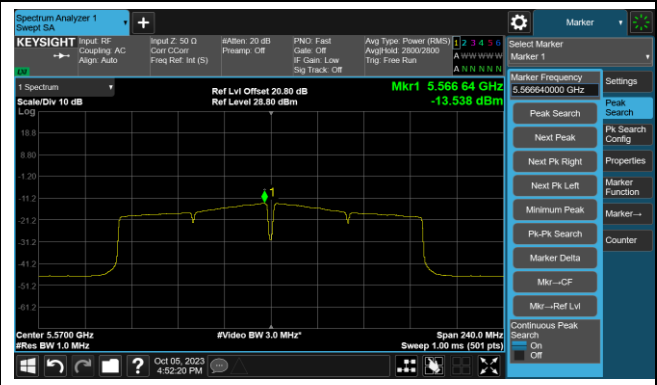


802.11ac-VHT160 Power Spectral Density- Ant 1

Channel 50 (5250MHz)

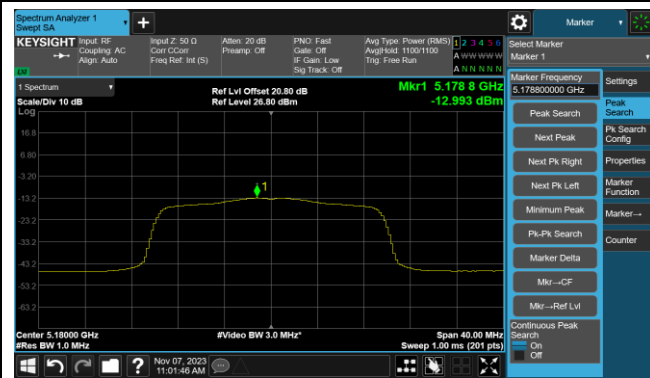


Channel 114 (5570MHz)

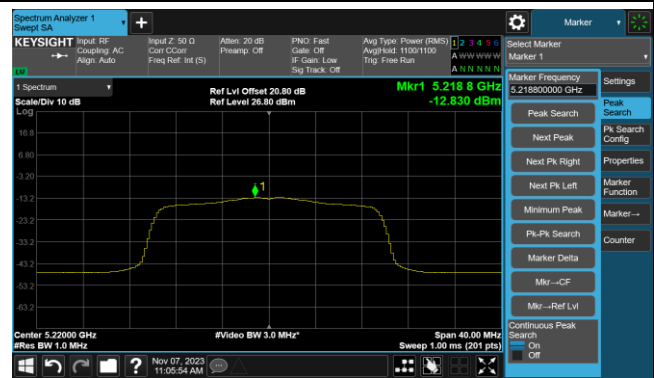


802.11ax-HE20 Power Spectral Density- Ant 1

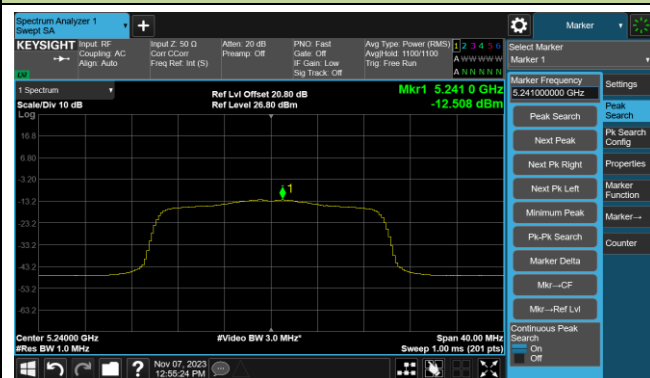
Channel 36 (5180MHz)



Channel 44 (5220MHz)



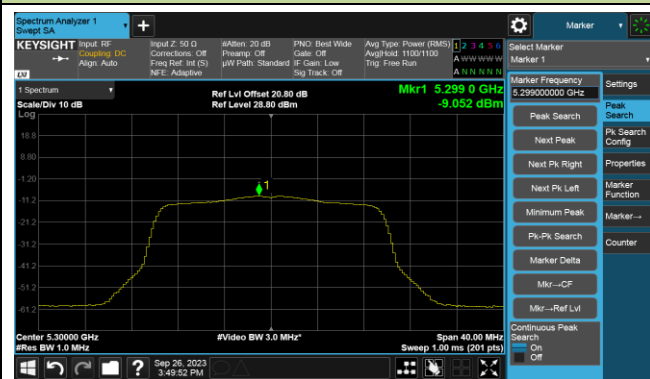
Channel 48 (5240MHz)



Channel 52 (5260MHz)



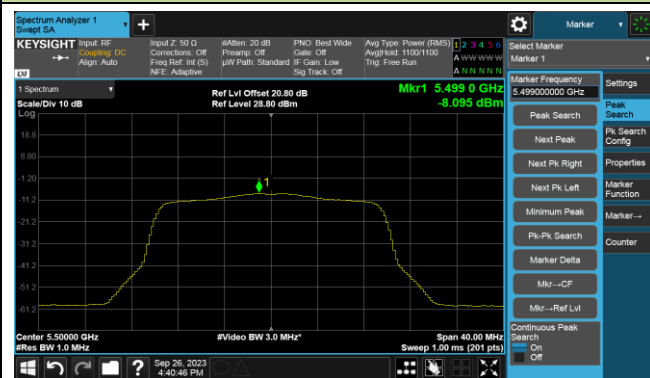
Channel 60 (5300MHz)



Channel 64 (5320MHz)



Channel 100 (5500MHz)

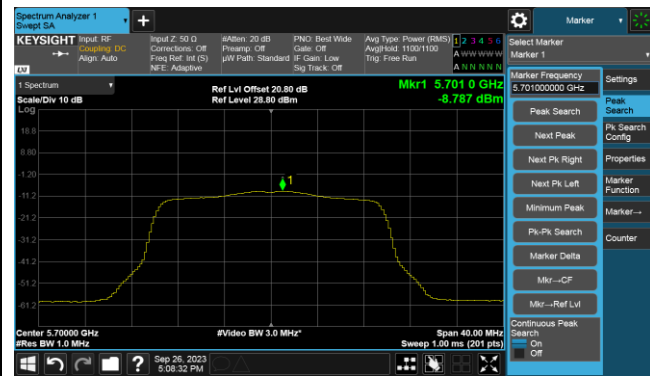


Channel 116 (5580MHz)



802.11ax-HE20 Power Spectral Density- Ant 1

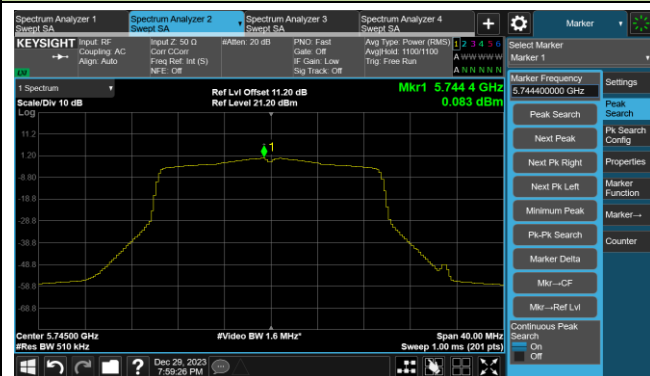
Channel 140 (5700MHz)



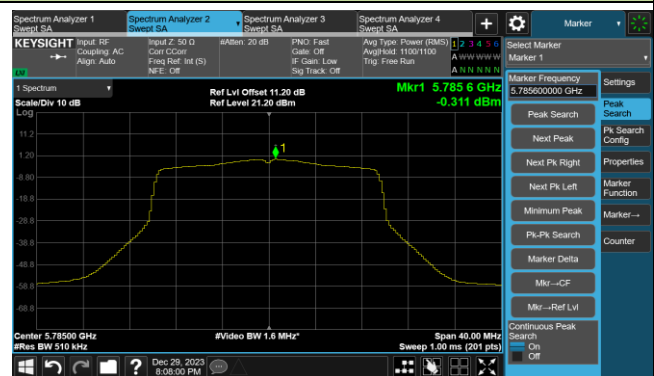
Channel 144(5720MHz)



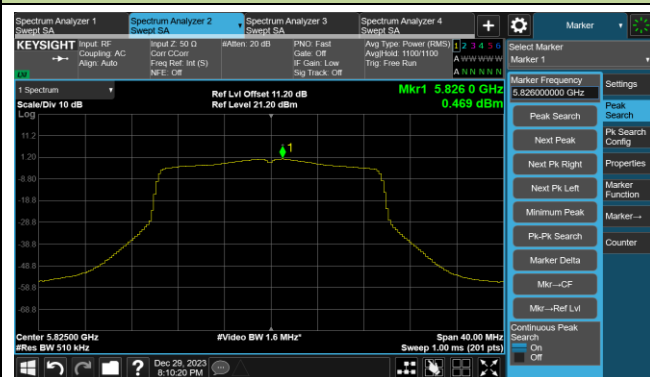
Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)



802.11ax-HE40 Power Spectral Density- Ant 1

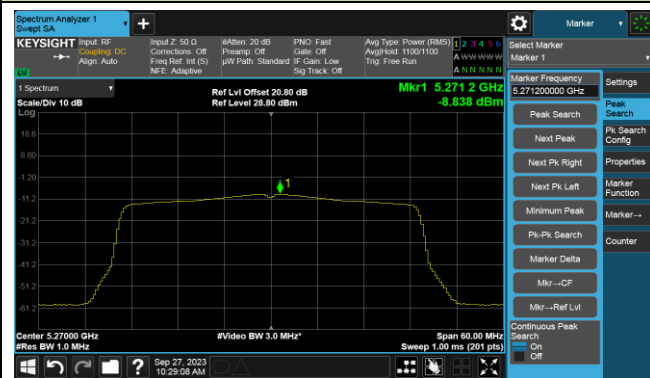
Channel 38 (5190MHz)



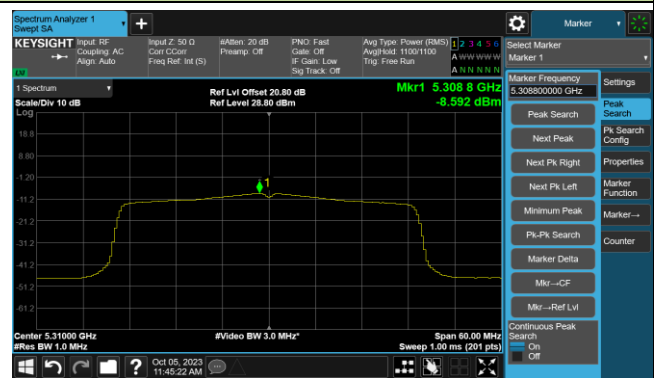
Channel 46 (5230MHz)



Channel 54 (5270MHz)



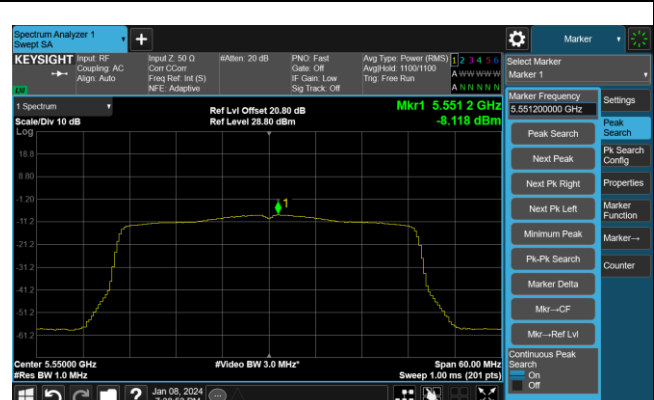
Channel 62 (5310MHz)



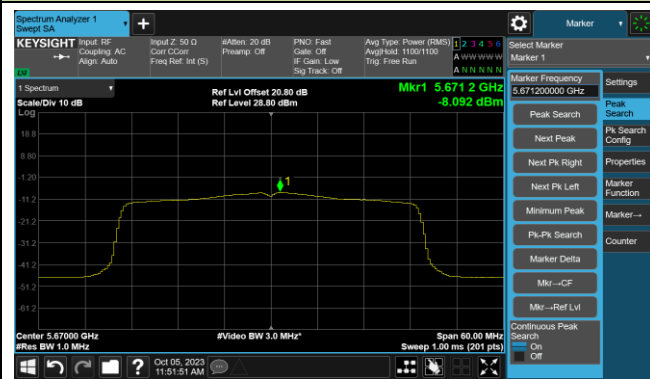
Channel 102 (5510MHz)



Channel 110 (5550MHz)



Channel 134 (5670MHz)

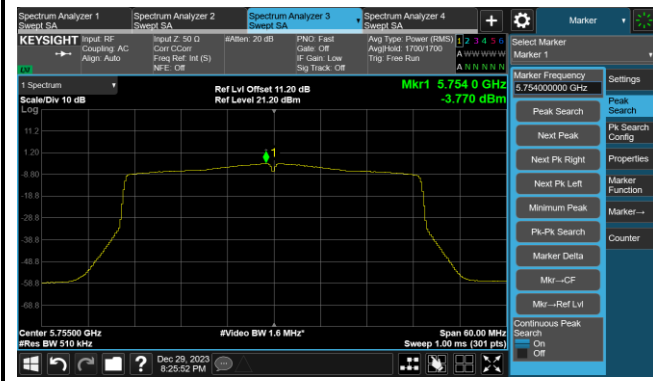


Channel 142(5710MHz)

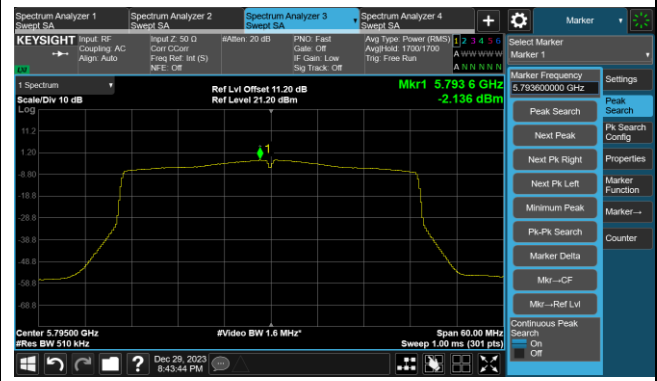


802.11ax-HE40 Power Spectral Density- Ant 1

Channel 151 (5755MHz)



Channel 159 (5795MHz)



802.11ax-HE80 Power Spectral Density- Ant 1

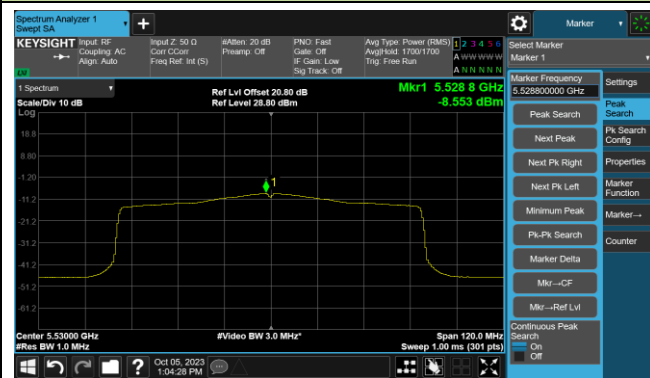
Channel 42 (5210MHz)



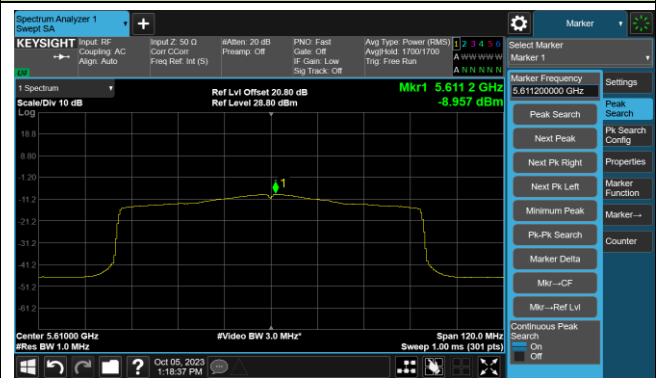
Channel 58 (5290MHz)



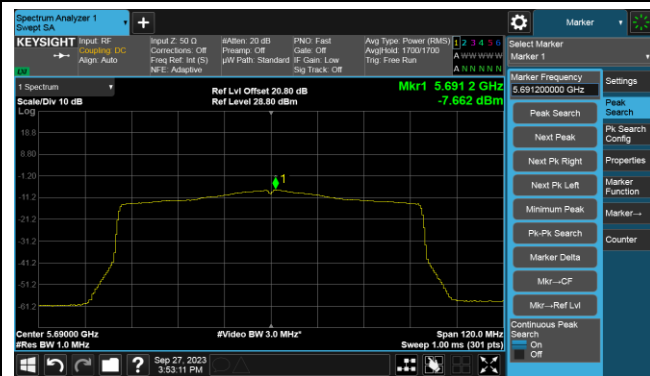
Channel 106 (5530MHz)



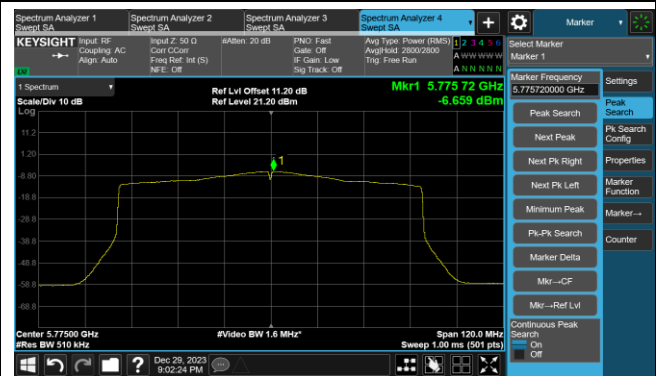
Channel 122 (5610MHz)



Channel 138 (5690MHz)



Channel 155 (5775MHz)

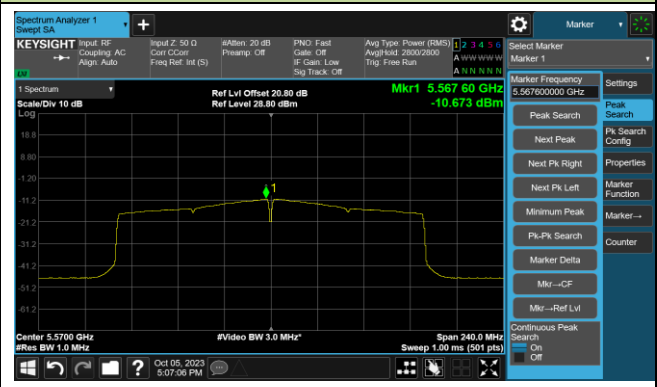


802.11ax-HE160 Power Spectral Density- Ant 1

Channel 50 (5250MHz)



Channel 114 (5570MHz)



Test Site	WZ-SR5	Test Engineer	Ryan Wang
Test Date	2023-11-20 ~ 2024-02-26		
Test Configuration	L22UGS-5HaxD2HaxD-15S-US + Internal 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 (dBm/MHz)
				Ant 0	Ant 1			
11a	6Mbps	36	5180	-7.267	-7.410	98.80	-4.33	≤ 5.99
11a	6Mbps	44	5220	-7.784	-7.888	98.80	-4.83	≤ 5.99
11a	6Mbps	48	5240	-7.924	-7.917	98.80	-4.91	≤ 5.99
11a	6Mbps	52	5260	-4.217	-3.870	98.80	-1.03	≤ -0.01
11a	6Mbps	60	5300	-3.385	-2.943	98.80	-0.15	≤ -0.01
11a	6Mbps	64	5320	-4.468	-3.744	98.80	-1.08	≤ -0.01
11a	6Mbps	100	5500	-3.355	-3.003	98.80	-0.17	≤ -0.01
11a	6Mbps	116	5580	-3.001	-3.657	98.80	-0.31	≤ -0.01
11a	6Mbps	140	5700	-3.365	-3.005	98.80	-0.17	≤ -0.01
11a	6Mbps	144	5720	-4.164	-3.449	98.80	-0.78	≤ -0.01
11ac-VHT20	MCS0	36	5180	-7.979	-8.155	99.62	-5.06	≤ 5.99
11ac-VHT20	MCS0	44	5220	-8.394	-8.436	99.62	-5.40	≤ 5.99
11ac-VHT20	MCS0	48	5240	-7.499	-7.563	99.62	-4.52	≤ 5.99
11ac-VHT20	MCS0	52	5260	-3.937	-3.476	99.62	-0.69	≤ -0.01
11ac-VHT20	MCS0	60	5300	-3.901	-3.529	99.62	-0.70	≤ -0.01
11ac-VHT20	MCS0	64	5320	-4.050	-3.320	99.62	-0.66	≤ -0.01
11ac-VHT20	MCS0	100	5500	-4.033	-3.765	99.62	-0.89	≤ -0.01
11ac-VHT20	MCS0	116	5580	-3.688	-4.312	99.62	-0.98	≤ -0.01
11ac-VHT20	MCS0	140	5700	-4.112	-3.689	99.62	-0.89	≤ -0.01
11ac-VHT20	MCS0	144	5720	-4.105	-3.746	99.62	-0.91	≤ -0.01
11ac-VHT40	MCS0	38	5190	-9.701	-9.823	98.97	-6.75	≤ 5.99
11ac-VHT40	MCS0	46	5230	-10.059	-10.190	98.97	-7.11	≤ 5.99
11ac-VHT40	MCS0	54	5270	-4.079	-3.191	98.97	-0.60	≤ -0.01
11ac-VHT40	MCS0	62	5310	-4.012	-3.372	98.97	-0.67	≤ -0.01
11ac-VHT40	MCS0	102	5510	-4.093	-3.707	98.97	-0.89	≤ -0.01
11ac-VHT40	MCS0	110	5550	-3.825	-4.112	98.97	-0.96	≤ -0.01
11ac-VHT40	MCS0	134	5670	-4.089	-3.653	98.97	-0.86	≤ -0.01
11ac-VHT40	MCS0	142	5710	-3.995	-3.475	98.97	-0.72	≤ -0.01

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	-13.178	-13.446	99.06	-10.30	≤ 5.99
11ac-VHT80	MCS0	58	5290	-3.798	-3.092	99.06	-0.42	≤ -0.01
11ac-VHT80	MCS0	106	5530	-3.818	-3.269	99.06	-0.52	≤ -0.01
11ac-VHT80	MCS0	122	5610	-3.356	-3.800	99.06	-0.56	≤ -0.01
11ac-VHT80	MCS0	138	5690	-3.711	-3.742	99.06	-0.72	≤ -0.01
11ac-VHT160	MCS0	50	5250	-12.217	-12.248	99.47	-9.22	≤ -0.01
11ac-VHT160	MCS0	114	5570	-5.599	-5.762	99.47	-2.67	≤ -0.01
11ax-HE20	MCS0	36	5180	-7.967	-8.085	99.62	-5.02	≤ 5.99
11ax-HE20	MCS0	44	5220	-8.295	-8.477	99.62	-5.37	≤ 5.99
11ax-HE20	MCS0	48	5240	-8.578	-8.643	99.62	-5.60	≤ 5.99
11ax-HE20	MCS0	52	5260	-3.939	-3.500	99.62	-0.70	≤ -0.01
11ax-HE20	MCS0	60	5300	-3.806	-3.535	99.62	-0.66	≤ -0.01
11ax-HE20	MCS0	64	5320	-4.128	-3.277	99.62	-0.67	≤ -0.01
11ax-HE20	MCS0	100	5500	-4.094	-3.857	99.62	-0.96	≤ -0.01
11ax-HE20	MCS0	116	5580	-3.673	-4.367	99.62	-1.00	≤ -0.01
11ax-HE20	MCS0	140	5700	-4.063	-3.698	99.62	-0.87	≤ -0.01
11ax-HE20	MCS0	144	5720	-3.993	-3.546	99.62	-0.75	≤ -0.01
11ax-HE40	MCS0	38	5190	-9.801	-9.949	98.94	-6.86	≤ 5.99
11ax-HE40	MCS0	46	5230	-10.245	-10.234	98.94	-7.23	≤ 5.99
11ax-HE40	MCS0	54	5270	-4.523	-3.468	98.94	-0.95	≤ -0.01
11ax-HE40	MCS0	62	5310	-4.292	-3.745	98.94	-1.00	≤ -0.01
11ax-HE40	MCS0	102	5510	-3.493	-2.931	98.94	-0.19	≤ -0.01
11ax-HE40	MCS0	110	5550	-3.389	-3.194	98.94	-0.28	≤ -0.01
11ax-HE40	MCS0	134	5670	-3.545	-3.148	98.94	-0.33	≤ -0.01
11ax-HE40	MCS0	142	5710	-4.373	-3.884	98.94	-1.11	≤ -0.01
11ax-HE80	MCS0	42	5210	-13.177	-13.314	99.20	-10.23	≤ 5.99
11ax-HE80	MCS0	58	5290	-3.464	-2.866	99.20	-0.14	≤ -0.01
11ax-HE80	MCS0	106	5530	-3.937	-3.282	99.20	-0.59	≤ -0.01
11ax-HE80	MCS0	122	5610	-3.459	-3.790	99.20	-0.61	≤ -0.01
11ax-HE80	MCS0	138	5690	-3.754	-3.810	99.20	-0.77	≤ -0.01
11ax-HE160	MCS0	50	5250	-11.933	-12.271	99.19	-9.09	≤ -0.01
11ax-HE160	MCS0	114	5570	-5.538	-5.808	99.19	-2.66	≤ -0.01

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 $\geq 98\%$, 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) = $17 - (17.01 - 6) = 5.99\text{dBm/MHz}$

For 5250 - 5350MHz Band: Average Power Limit (dBm) = $11 - (17.01 - 6) = -0.01\text{dBm/MHz}$.

For 5470 - 5725MHz Band: Average Power Limit (dBm) = $11 - (17.01 - 6) = -0.01\text{dBm/MHz}$.

Test Site	WZ-SR5	Test Engineer	Luis Yang
Test Date	2023-11-23		
Test Configuration	L22UGS-5HaxD2HaxD-15S-US + Internal 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	5.123	5.614	98.80	8.39	≤ 18.99
11a	6Mbps	157	5785	4.998	5.506	98.80	8.27	≤ 18.99
11a	6Mbps	165	5825	4.796	5.794	98.80	8.33	≤ 18.99
11ac-VHT20	MCS0	149	5745	4.567	4.922	99.62	7.76	≤ 18.99
11ac-VHT20	MCS0	157	5785	4.327	4.873	99.62	7.62	≤ 18.99
11ac-VHT20	MCS0	165	5825	4.182	5.171	99.62	7.71	≤ 18.99
11ac-VHT40	MCS0	151	5755	2.170	2.577	98.97	5.39	≤ 18.99
11ac-VHT40	MCS0	159	5795	2.049	2.668	98.97	5.38	≤ 18.99
11ac-VHT80	MCS0	155	5775	-0.709	-0.313	99.06	2.50	≤ 18.99
11ax-HE20	MCS0	149	5745	4.629	4.837	99.62	7.74	≤ 18.99
11ax-HE20	MCS0	157	5785	4.350	5.063	99.62	7.73	≤ 18.99
11ax-HE20	MCS0	165	5825	4.355	5.264	99.62	7.84	≤ 18.99
11ax-HE40	MCS0	151	5755	1.795	2.206	98.94	5.02	≤ 18.99
11ax-HE40	MCS0	159	5795	1.784	2.332	98.94	5.08	≤ 18.99
11ax-HE80	MCS0	155	5775	-0.837	-0.289	99.20	2.46	≤ 18.99

Note 1:

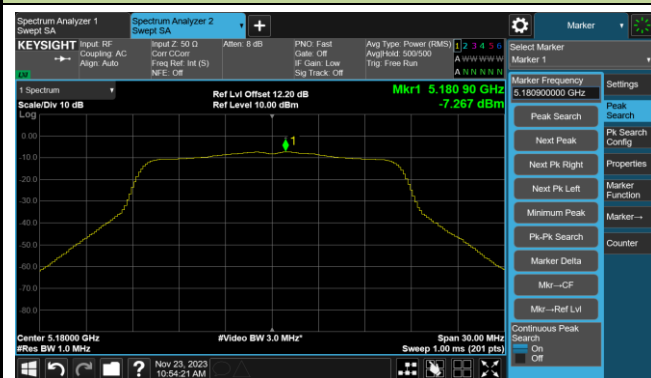
When EUT duty cycle < 98%, the total PSD (dBm/510kHz) = $10 \cdot \log \{10^{(\text{Ant 0 AVGPSD}/10)} + 10^{(\text{Ant 1 AVGPSD}/10)}\} + 10 \cdot \log (1/\text{Duty cycle})$.

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

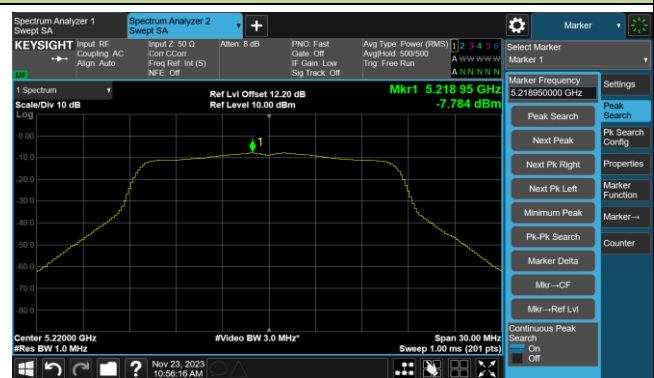
Note 2: PSD Limit (dBm/500KHz) = 30 - (17.01 - 6) = 18.99 dBm/500KHz.

802.11a Power Spectral Density- Ant 0

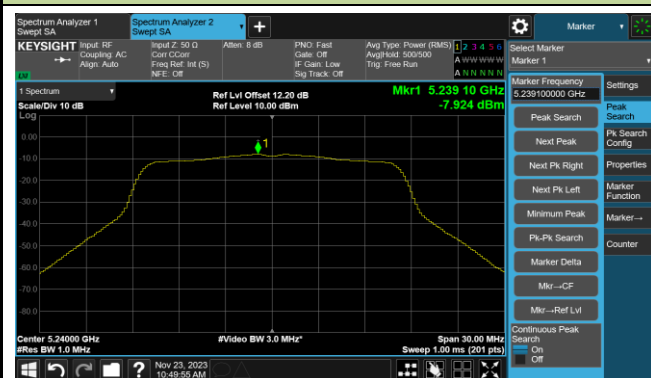
Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



Channel 52 (5260MHz)



Channel 60 (5300MHz)



Channel 64 (5320MHz)



Channel 100 (5500MHz)

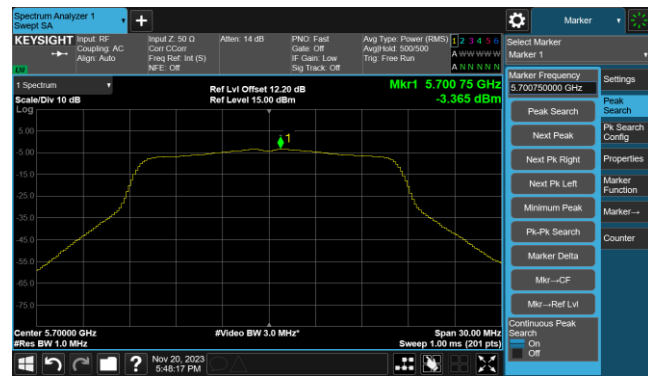


Channel 116 (5580MHz)

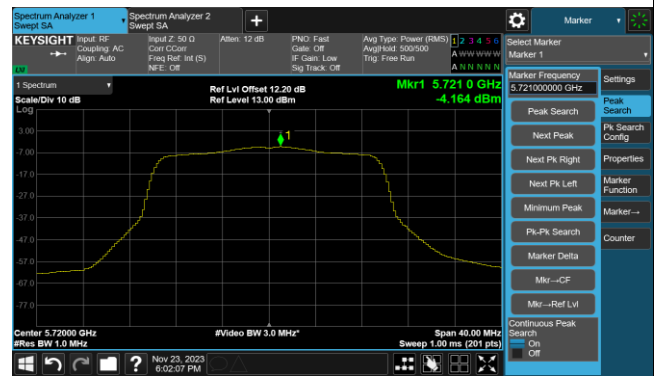


802.11a Power Spectral Density- Ant 0

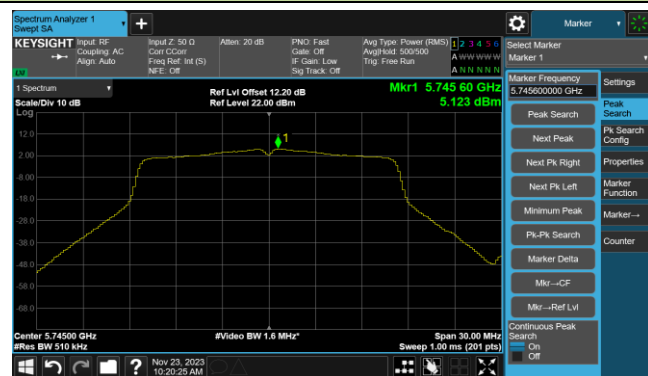
Channel 140 (5700MHz)



Channel 144(5720MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)

