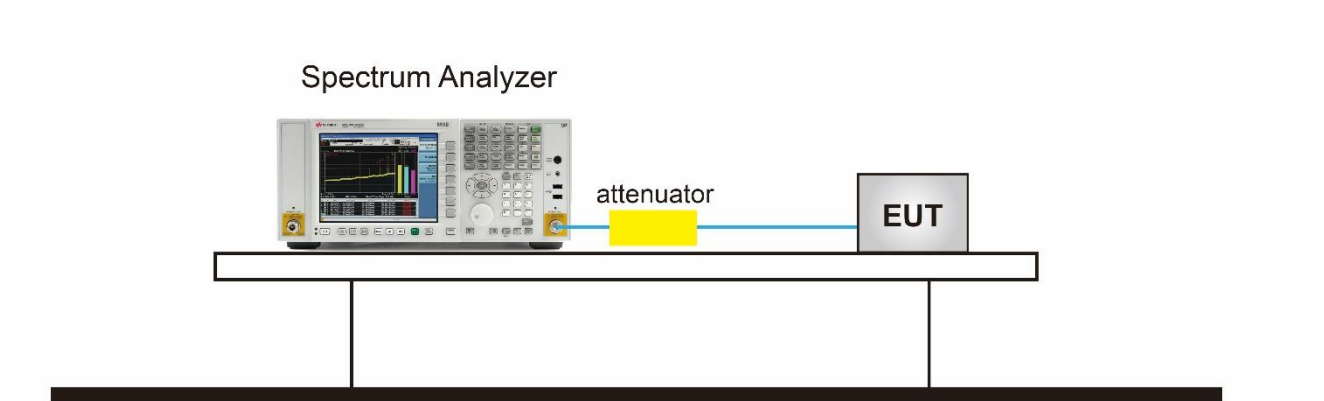


7.6.4. Test Setup



7.6.5.Test Result

Product	BE14000 Whole Home Mesh Wi-Fi 7 System	Test Engineer	Marvin
Test Site	SR6	Test Date	2025/1/17~2025/2/5
Mode	Power Spectral Density (U-NII- 1/-2a / -2c) CDD Mode (Ant0+Ant1+Ant2)		

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11a	6Mbps	36	5180	11.133	10.561	9.697	97.96%	15.364	≤ 16.61	Pass
11a	6Mbps	40	5200	11.709	11.795	10.478	97.96%	16.228	≤ 16.61	Pass
11a	6Mbps	48	5240	11.346	11.905	11.048	97.96%	16.309	≤ 16.61	Pass
11a	6Mbps	52	5260	4.117	5.887	4.909	97.96%	9.892	≤ 10.15	Pass
11a	6Mbps	60	5300	3.718	6.009	5.443	97.96%	10.022	≤ 10.15	Pass
11a	6Mbps	64	5320	3.675	5.202	5.233	97.96%	9.622	≤ 10.15	Pass
11a	6Mbps	100	5500	5.196	6.187	6.347	97.96%	10.800	≤ 10.85	Pass
11a	6Mbps	116	5580	6.178	6.148	5.457	97.96%	10.801	≤ 10.85	Pass
11a	6Mbps	140	5700	5.336	6.863	5.274	97.96%	10.750	≤ 10.85	Pass
11a	6Mbps	144	5720	4.786	6.767	4.625	97.96%	10.368	≤ 10.85	Pass
11ac-VHT20	MCS0	36	5180	11.119	10.982	10.235	98.67%	15.625	≤ 16.61	Pass
11ac-VHT20	MCS0	40	5200	12.019	12.202	10.755	98.67%	16.534	≤ 16.61	Pass
11ac-VHT20	MCS0	48	5240	11.175	11.735	10.813	98.67%	16.087	≤ 16.61	Pass
11ac-VHT20	MCS0	52	5260	3.831	5.779	4.563	98.67%	9.629	≤ 10.15	Pass
11ac-VHT20	MCS0	60	5300	3.616	5.870	5.177	98.67%	9.816	≤ 10.15	Pass
11ac-VHT20	MCS0	64	5320	3.470	5.336	5.532	98.67%	9.703	≤ 10.15	Pass
11ac-VHT20	MCS0	100	5500	4.980	5.794	5.965	98.67%	10.430	≤ 10.85	Pass
11ac-VHT20	MCS0	116	5580	5.983	6.076	5.286	98.67%	10.625	≤ 10.85	Pass
11ac-VHT20	MCS0	140	5700	5.232	6.713	5.317	98.67%	10.638	≤ 10.85	Pass
11ac-VHT20	MCS0	144	5720	4.948	7.179	4.927	98.67%	10.649	≤ 10.85	Pass

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11ac-VHT40	MCS0	38	5190	7.134	6.850	5.633	96.28%	11.522	≤ 16.61	Pass
11ac-VHT40	MCS0	46	5230	10.759	11.210	10.109	96.28%	15.652	≤ 16.61	Pass
11ac-VHT40	MCS0	54	5270	3.717	5.639	4.860	96.28%	9.745	≤ 10.15	Pass
11ac-VHT40	MCS0	62	5310	3.913	5.734	5.487	96.28%	10.052	≤ 10.15	Pass
11ac-VHT40	MCS0	102	5510	4.924	5.510	5.797	96.28%	10.361	≤ 10.15	Pass
11ac-VHT40	MCS0	110	5550	4.984	5.845	5.359	96.28%	10.346	≤ 10.85	Pass
11ac-VHT40	MCS0	134	5670	5.541	5.755	4.766	96.28%	10.310	≤ 10.85	Pass
11ac-VHT40	MCS0	142	5710	5.272	6.540	4.838	96.28%	10.547	≤ 10.85	Pass
11ac-VHT80	MCS0	42	5210	1.620	1.520	0.873	94.91%	6.348	≤ 16.61	Pass
11ac-VHT80	MCS0	58	5290	2.128	4.187	3.942	94.91%	8.509	≤ 10.15	Pass
11ac-VHT80	MCS0	106	5530	2.995	3.384	3.231	94.91%	8.204	≤ 10.85	Pass
11ac-VHT80	MCS0	122	5610	3.896	3.129	2.518	94.91%	8.216	≤ 10.85	Pass
11ac-VHT80	MCS0	138	5690	2.230	3.765	2.053	94.91%	7.751	≤ 10.85	Pass
11ac-VHT160	MCS0	50	5250	-0.243	0.593	0.192	92.48%	5.305	≤ 10.15	Pass
11ac-VHT160	MCS0	114	5570	-0.275	0.964	0.477	92.48%	5.529	≤ 10.85	Pass
11ax-HE20	MCS0	36	5180	10.339	10.112	8.926	98.50%	14.672	≤ 16.61	Pass
11ax-HE20	MCS0	40	5200	11.448	11.894	10.475	98.50%	16.149	≤ 16.61	Pass
11ax-HE20	MCS0	48	5240	11.431	12.252	11.120	98.50%	16.465	≤ 16.61	Pass
11ax-HE20	MCS0	52	5260	4.019	5.717	4.527	98.50%	9.651	≤ 10.15	Pass
11ax-HE20	MCS0	60	5300	3.854	5.787	5.433	98.50%	9.939	≤ 10.15	Pass
11ax-HE20	MCS0	64	5320	3.619	5.531	5.266	98.50%	9.721	≤ 10.15	Pass
11ax-HE20	MCS0	100	5500	5.236	6.063	5.872	98.50%	10.575	≤ 10.85	Pass
11ax-HE20	MCS0	116	5580	5.625	5.793	5.180	98.50%	10.377	≤ 10.85	Pass
11ax-HE20	MCS0	140	5700	4.966	6.618	4.922	98.50%	10.413	≤ 10.85	Pass
11ax-HE20	MCS0	144	5720	4.814	6.751	4.731	98.50%	10.374	≤ 10.85	Pass

Test Mode	Data Rate/ MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11ax-HE40	MCS0	38	5190	5.696	5.923	5.245	96.14%	10.573	≤ 16.61	Pass
11ax-HE40	MCS0	46	5230	10.108	10.676	10.152	96.14%	15.262	≤ 16.61	Pass
11ax-HE40	MCS0	54	5270	3.622	5.889	4.748	96.14%	9.793	≤ 10.15	Pass
11ax-HE40	MCS0	62	5310	3.725	5.992	5.490	96.14%	10.115	≤ 10.15	Pass
11ax-HE40	MCS0	102	5510	5.577	5.739	5.334	96.14%	10.495	≤ 10.15	Pass
11ax-HE40	MCS0	110	5550	4.713	5.931	5.138	96.14%	10.233	≤ 10.85	Pass
11ax-HE40	MCS0	134	5670	5.866	6.368	4.918	96.14%	10.700	≤ 10.85	Pass
11ax-HE40	MCS0	142	5710	5.443	6.749	5.100	96.14%	10.766	≤ 10.85	Pass
11ax-HE80	MCS0	42	5210	1.547	1.432	0.534	93.97%	6.235	≤ 16.61	Pass
11ax-HE80	MCS0	58	5290	2.105	4.084	3.509	93.97%	8.351	≤ 10.15	Pass
11ax-HE80	MCS0	106	5530	3.125	3.342	3.745	93.97%	8.453	≤ 10.85	Pass
11ax-HE80	MCS0	122	5610	3.830	3.065	2.244	93.97%	8.136	≤ 10.85	Pass
11ax-HE80	MCS0	122	5690	3.283	4.192	2.377	93.97%	8.388	≤ 10.85	Pass
11ax-HE160	MCS0	50	5250	-0.634	0.313	-0.031	89.55%	5.151	≤ 10.15	Pass
11ax-HE160	MCS0	114	5570	-0.594	0.265	0.034	89.55%	5.167	≤ 10.85	Pass
11be-EHT20	MCS0	36	5180	10.242	10.104	9.387	98.01%	14.785	≤ 16.61	Pass
11be-EHT20	MCS0	40	5200	11.563	12.195	11.121	98.01%	16.507	≤ 16.61	Pass
11be-EHT20	MCS0	48	5240	11.733	12.155	11.293	98.01%	16.600	≤ 16.61	Pass
11be-EHT20	MCS0	52	5260	4.075	5.788	4.743	98.01%	9.785	≤ 10.15	Pass
11be-EHT20	MCS0	60	5300	3.650	5.829	5.180	98.01%	9.837	≤ 10.15	Pass
11be-EHT20	MCS0	64	5320	3.809	5.114	5.267	98.01%	9.636	≤ 10.15	Pass
11be-EHT20	MCS0	100	5500	5.480	6.077	6.129	98.01%	10.764	≤ 10.85	Pass
11be-EHT20	MCS0	116	5580	5.791	5.570	5.033	98.01%	10.335	≤ 10.85	Pass
11be-EHT20	MCS0	140	5700	5.359	6.391	4.651	98.01%	10.385	≤ 10.85	Pass
11be-EHT20	MCS0	144	5720	4.839	6.839	4.779	98.01%	10.454	≤ 10.85	Pass

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11be-EHT40	MCS0	38	5190	6.133	5.933	5.153	96.66%	10.678	≤ 16.61	Pass
11be-EHT40	MCS0	46	5230	10.238	10.959	9.991	96.66%	15.334	≤ 16.61	Pass
11be-EHT40	MCS0	54	5270	3.621	5.456	5.054	96.66%	9.698	≤ 10.15	Pass
11be-EHT40	MCS0	62	5310	3.308	5.441	4.956	96.66%	9.579	≤ 10.15	Pass
11be-EHT40	MCS0	102	5510	4.676	5.759	5.515	96.66%	10.259	≤ 10.15	Pass
11be-EHT40	MCS0	110	5550	5.062	6.367	5.916	96.66%	10.733	≤ 10.85	Pass
11be-EHT40	MCS0	134	5670	5.431	6.043	4.822	96.66%	10.379	≤ 10.85	Pass
11be-EHT40	MCS0	142	5710	5.471	6.859	4.907	96.66%	10.744	≤ 10.85	Pass
11be-EHT80	MCS0	42	5210	1.554	1.359	0.869	93.93%	6.313	≤ 16.61	Pass
11be-EHT80	MCS0	58	5290	2.235	3.948	3.578	93.93%	8.357	≤ 10.15	Pass
11be-EHT80	MCS0	106	5530	2.934	3.167	3.860	93.93%	8.381	≤ 10.85	Pass
11be-EHT80	MCS0	122	5610	3.958	3.297	3.078	93.93%	8.504	≤ 10.85	Pass
11be-EHT80	MCS0	138	5690	2.674	3.893	2.217	93.93%	8.030	≤ 10.85	Pass
11be-EHT160	MCS0	50	5250	-0.483	0.178	-0.296	90.85%	4.997	≤ 10.15	Pass
11be-EHT160	MCS0	114	5570	-0.007	0.670	0.189	90.85%	5.481	≤ 10.85	Pass

Note 1: Total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)}\} + 10 \cdot \log (1/\text{Duty Cycle})(\text{dBm/MHz})$.

Note 2:

For 5150 - 5250MHz Band: PSD Limit (dBm/MHz) = 17 - (6.39 - 6) = 16.61dBm/MHz.

For 5250 - 5350MHz Band: PSD Limit (dBm/MHz) = 11 - (6.85 - 6) = 10.15dBm/MHz.

For 5470 - 5725MHz Band: PSD Limit (dBm/MHz) = 11 - (6.15 - 6) = 10.85dBm/MHz.

Product	BE14000 Whole Home Mesh Wi-Fi 7 System	Test Engineer	Marvin
Test Site	SR6	Test Date	2025/1/17~2025/2/5
Test Item	Power Spectral Density (U-NII-3) CDD Mode (Ant0+Ant1+Ant2)		

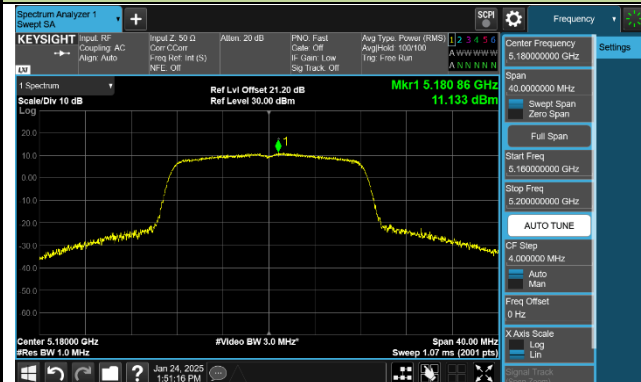
Test Mode	Data Rate/MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/510KHz)	Ant 1 PSD (dBm/510KHz)	Ant 2 PSD (dBm/510KHz)	Duty Cycle (%)	Total PSD(dBm/510kHz)	Limit (dBm/500kHz)	Result
11a	6Mbps	149	5745	9.552	10.853	9.206	97.96%	14.791	≤ 30.00	Pass
11a	6Mbps	157	5785	9.924	9.322	9.988	97.96%	14.616	≤ 30.00	Pass
11a	6Mbps	165	5825	9.429	10.278	9.598	97.96%	14.645	≤ 30.00	Pass
11ac-VHT20	MCS0	149	5745	9.842	10.797	9.161	98.67%	14.815	≤ 30.00	Pass
11ac-VHT20	MCS0	157	5785	9.959	9.756	10.159	98.67%	14.791	≤ 30.00	Pass
11ac-VHT20	MCS0	165	5825	9.375	10.190	9.532	98.67%	14.543	≤ 30.00	Pass
11ac-VHT40	MCS0	151	5755	7.155	8.463	7.085	96.28%	12.551	≤ 30.00	Pass
11ac-VHT40	MCS0	159	5795	7.506	6.474	7.713	96.28%	12.200	≤ 30.00	Pass
11ac-VHT80	MCS0	155	5775	4.594	4.855	4.809	94.91%	9.752	≤ 30.00	Pass
11ax-HE20	MCS0	149	5745	9.281	10.623	9.286	98.50%	14.614	≤ 30.00	Pass
11ax-HE20	MCS0	157	5785	10.198	9.054	9.936	98.50%	14.593	≤ 30.00	Pass
11ax-HE20	MCS0	165	5825	9.048	9.548	9.281	98.50%	14.134	≤ 30.00	Pass
11ax-HE40	MCS0	151	5755	7.821	8.675	7.216	96.14%	12.888	≤ 30.00	Pass
11ax-HE40	MCS0	159	5795	7.903	6.780	7.275	96.14%	12.286	≤ 30.00	Pass
11ax-HE80	MCS0	155	5775	4.490	4.517	4.385	93.97%	9.506	≤ 30.00	Pass
11be-EHT20	MCS0	149	5745	9.833	10.832	9.902	98.01%	15.072	≤ 30.00	Pass
11be-EHT20	MCS0	157	5785	9.990	9.569	10.113	98.01%	14.755	≤ 30.00	Pass
11be-EHT20	MCS0	165	5825	9.203	9.612	9.214	98.01%	14.206	≤ 30.00	Pass
11be-EHT40	MCS0	151	5755	7.480	8.732	7.321	96.66%	12.810	≤ 30.00	Pass
11be-EHT40	MCS0	159	5795	8.412	7.002	7.934	96.66%	12.740	≤ 30.00	Pass
11be-EHT80	MCS0	155	5775	4.235	5.139	4.479	93.93%	9.678	≤ 30.00	Pass

Note 1: The total PSD (dBm/510kHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)}\}$ (dBm/510kHz) + $10 \cdot \log (1/\text{Duty Cycle})$.

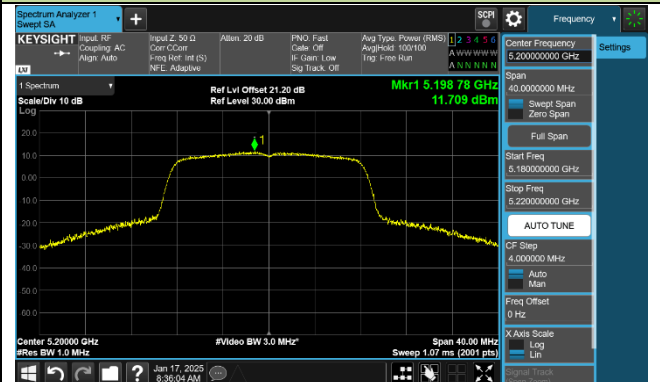
Note 2: PSD Limit (dBm/500kHz) = 30(dBm/500kHz).

802.11a Power Spectral Density - Ant 0

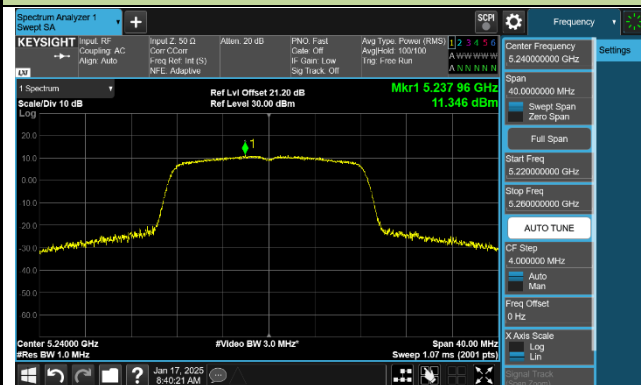
Channel 36 (5180MHz)



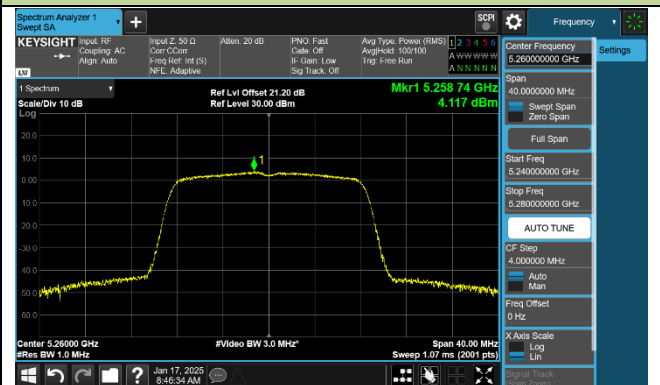
Channel 40 (5200MHz)



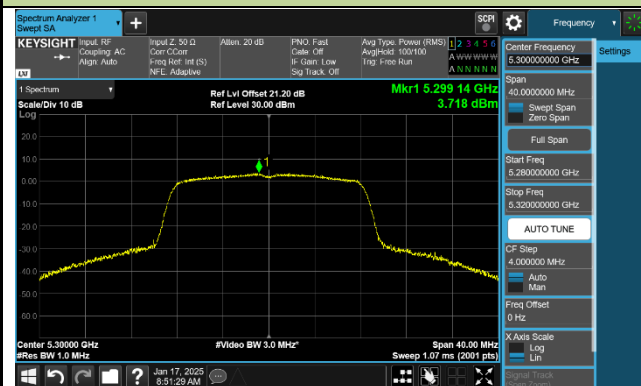
Channel 48 (5240MHz)



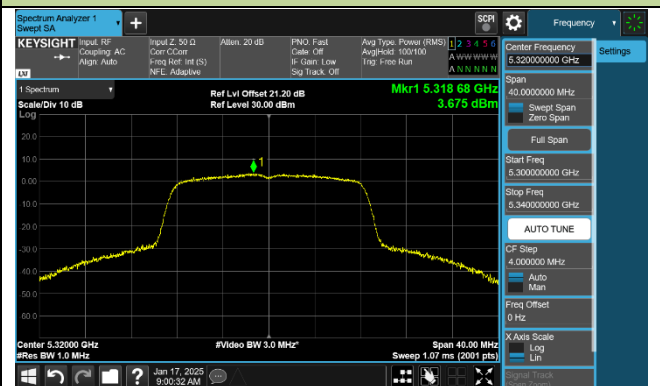
Channel 52 (5260MHz)



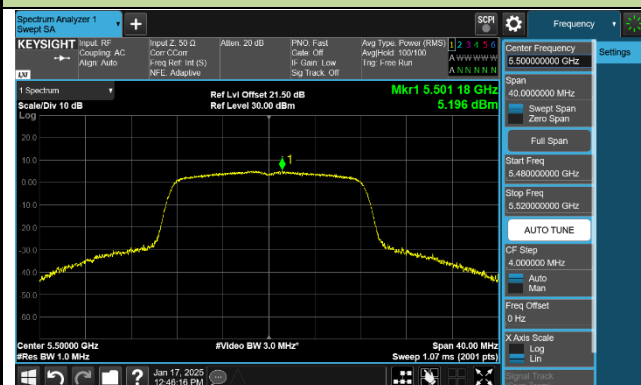
Channel 60 (5300MHz)



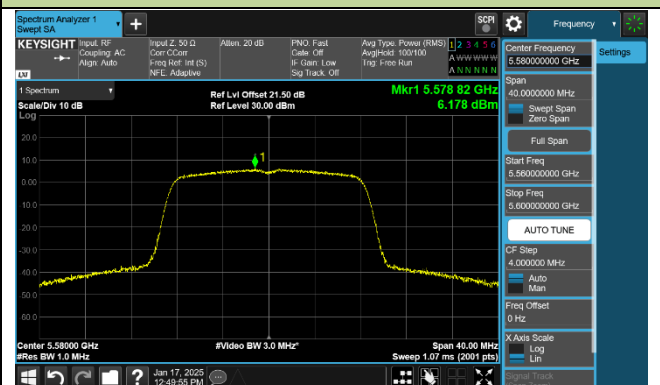
Channel 64 (5320MHz)

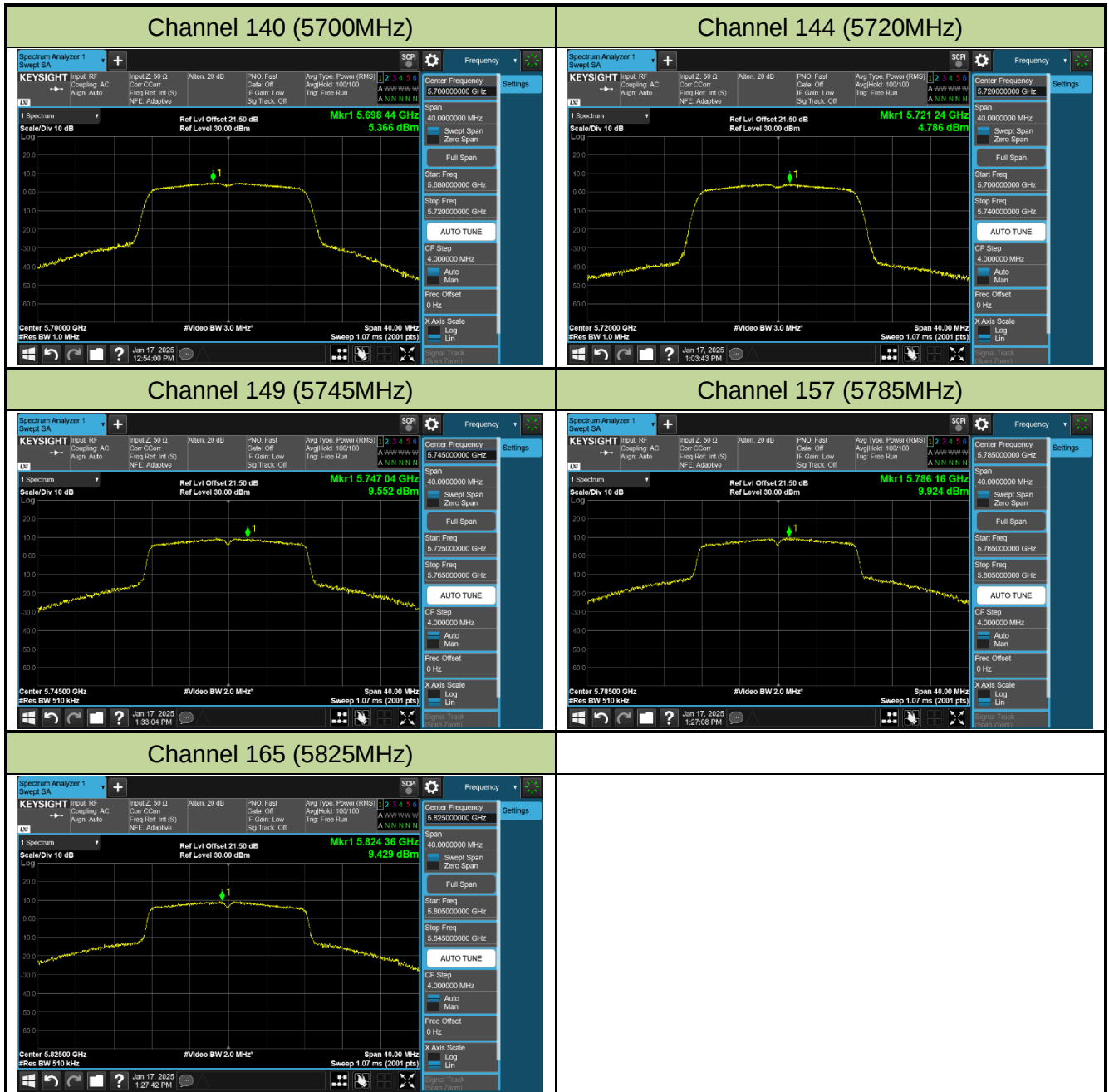


Channel 100 (5500MHz)



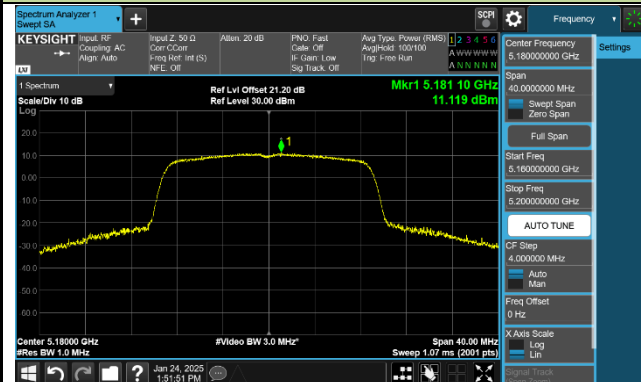
Channel 116 (5580MHz)



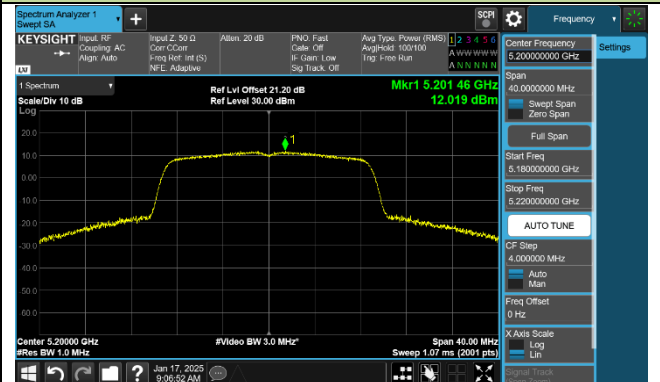


802.11ac-VHT20 Power Spectral Density - Ant 0

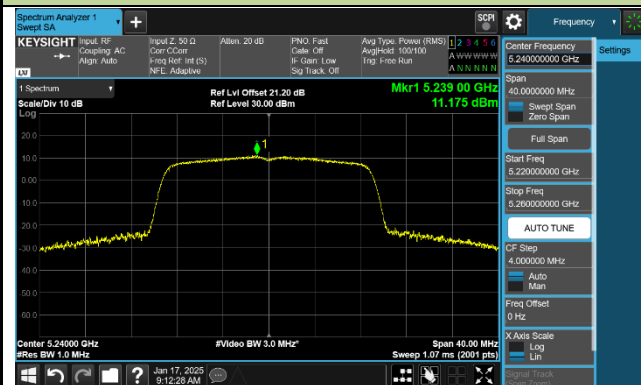
Channel 36 (5180MHz)



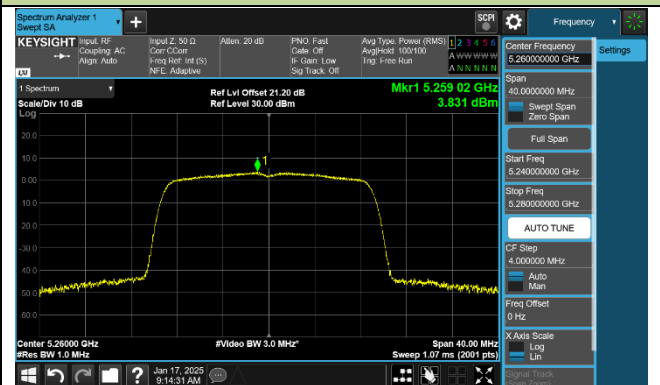
Channel 40 (5200MHz)



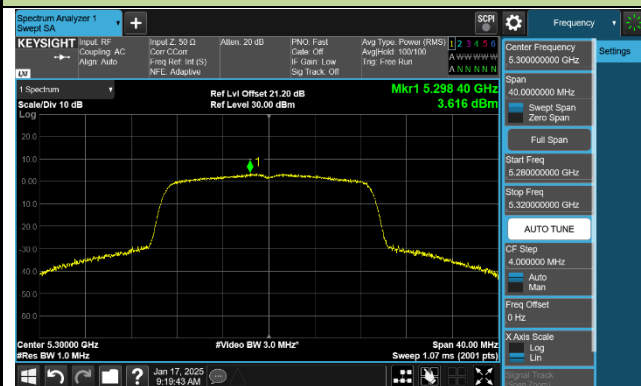
Channel 48 (5240MHz)



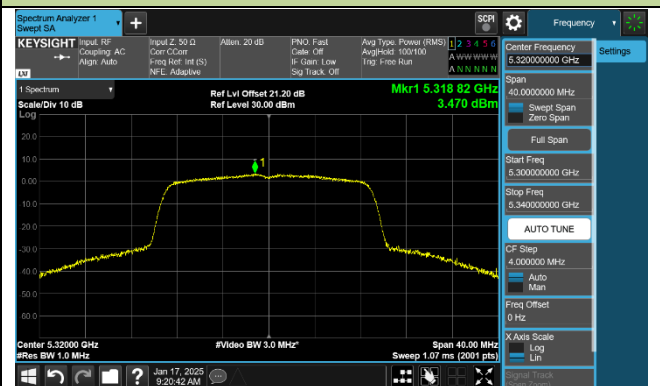
Channel 52 (5260MHz)



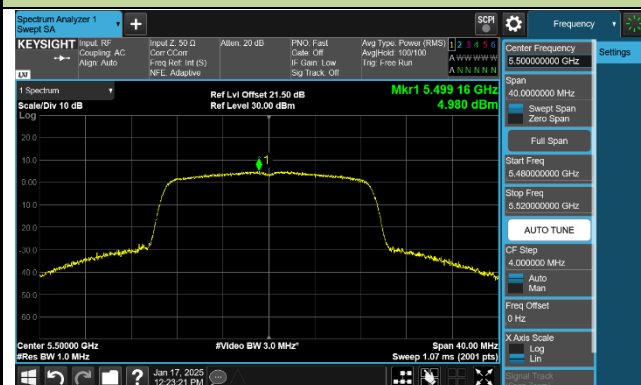
Channel 60 (5300MHz)



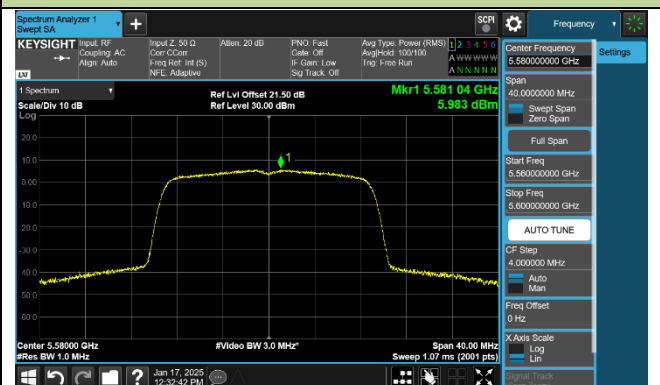
Channel 64 (5320MHz)

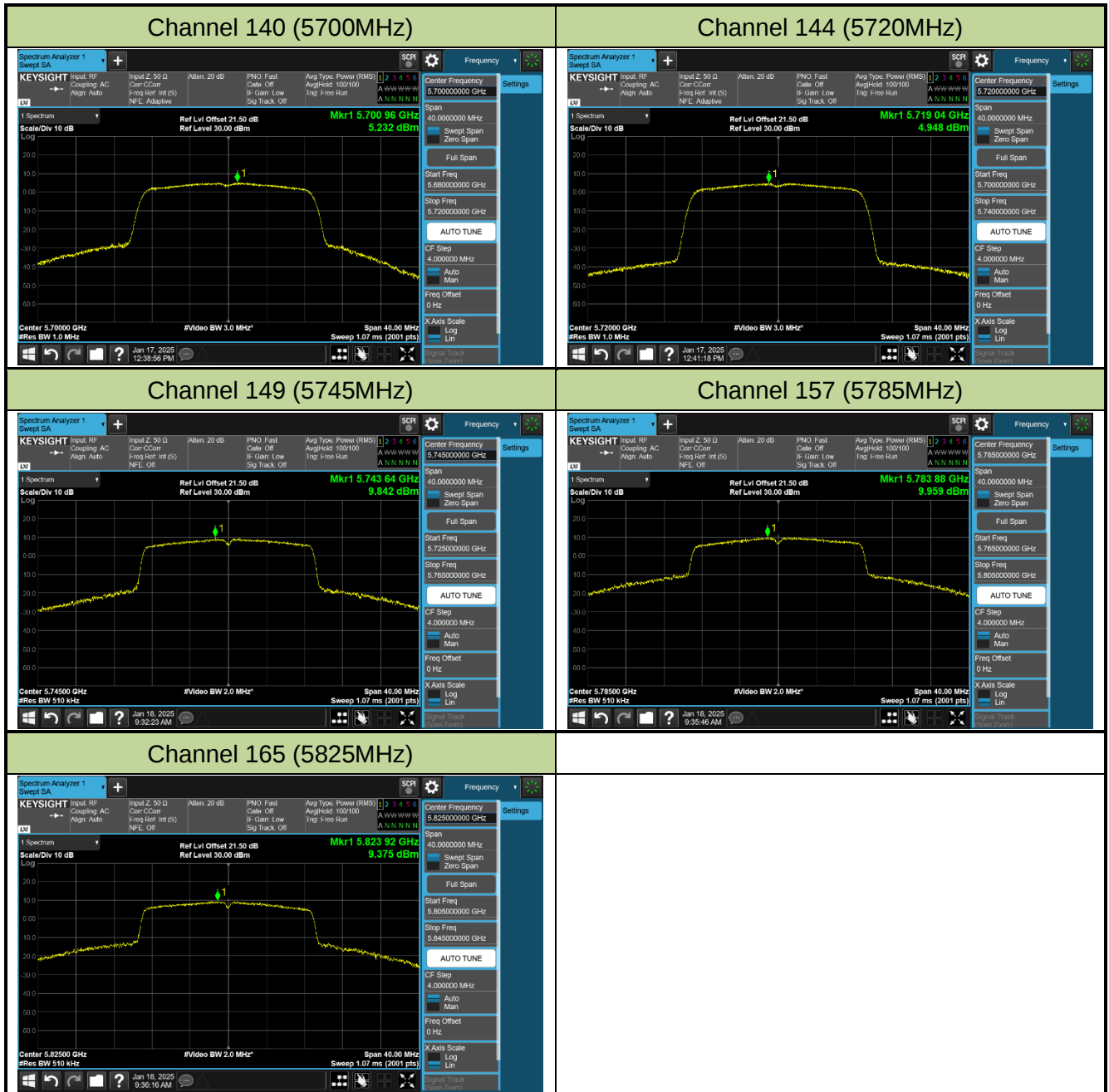


Channel 100 (5500MHz)



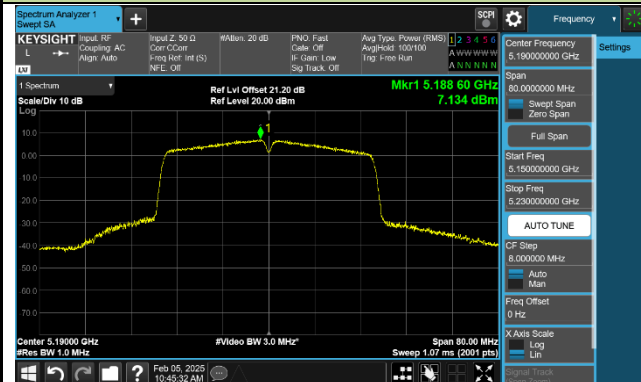
Channel 116 (5580MHz)



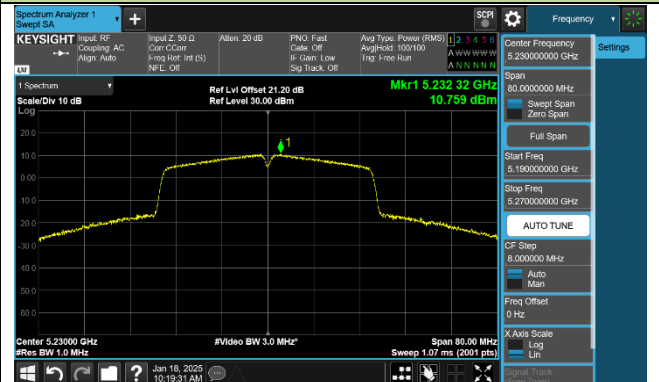


802.11ac-VHT40 Power Spectral Density - Ant 0

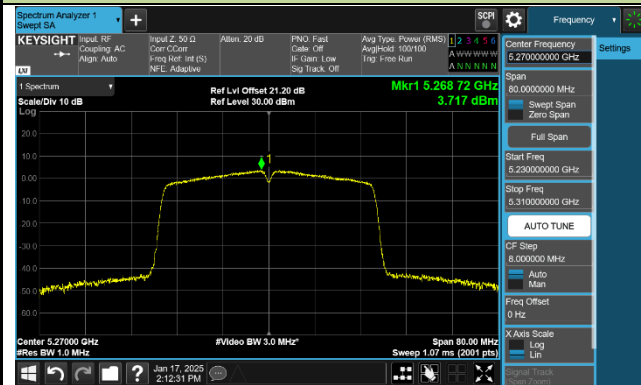
Channel 38 (5190MHz)



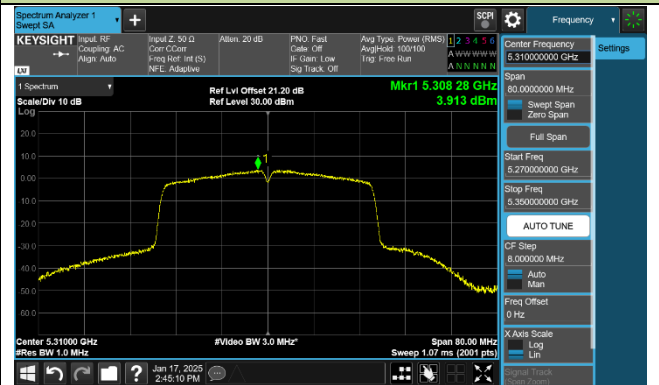
Channel 46 (5230MHz)



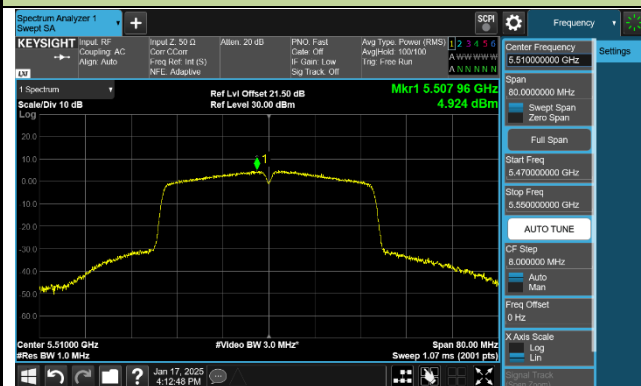
Channel 54 (5270MHz)



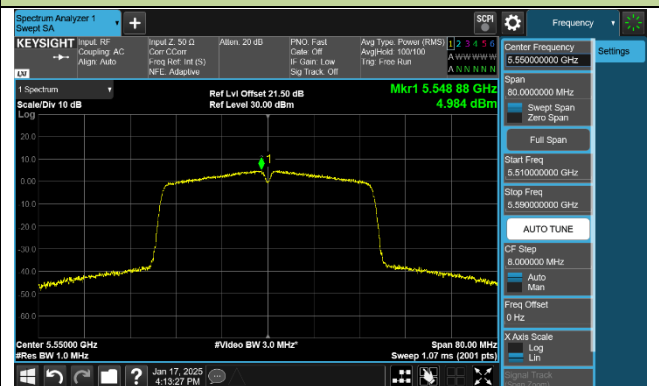
Channel 62 (5310MHz)



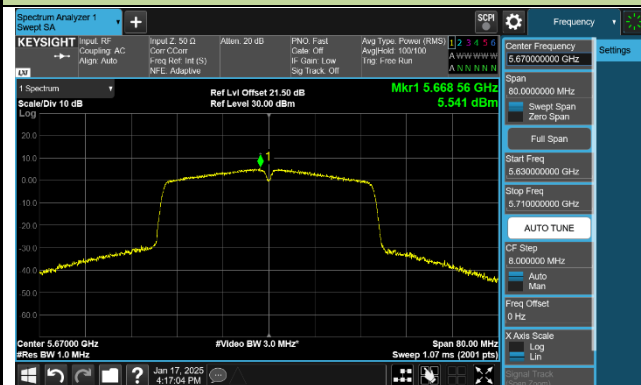
Channel 102 (5510MHz)



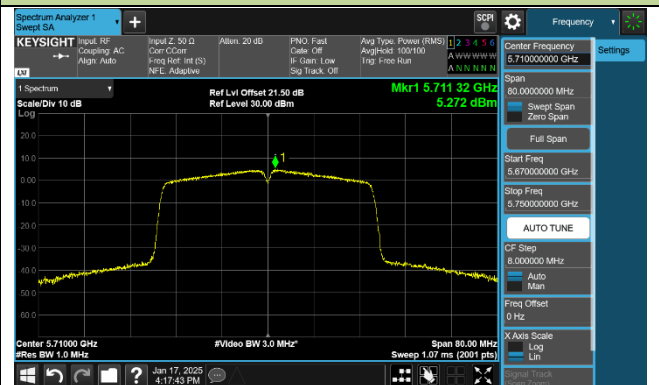
Channel 110 (5550MHz)

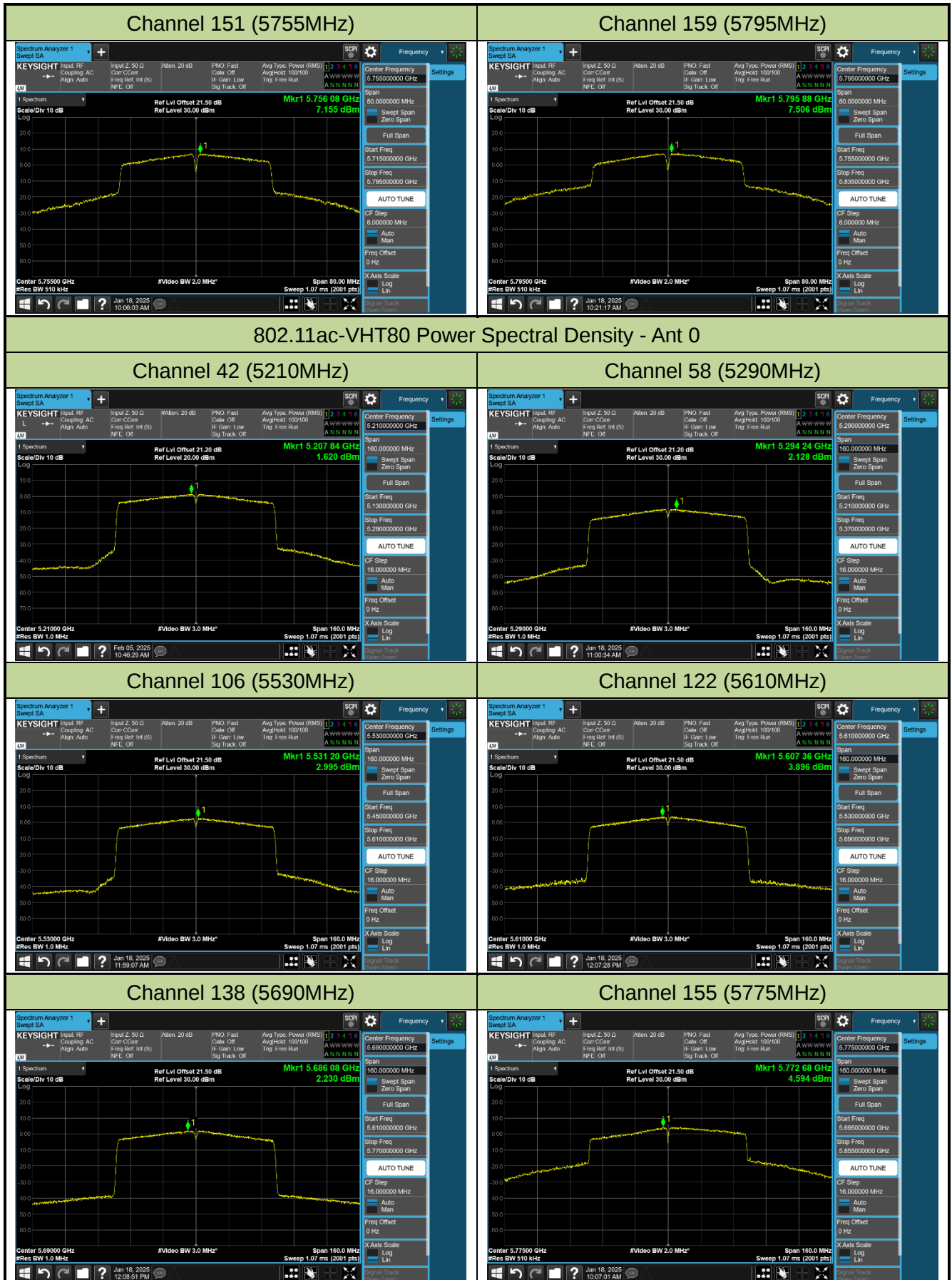


Channel 134 (5670MHz)



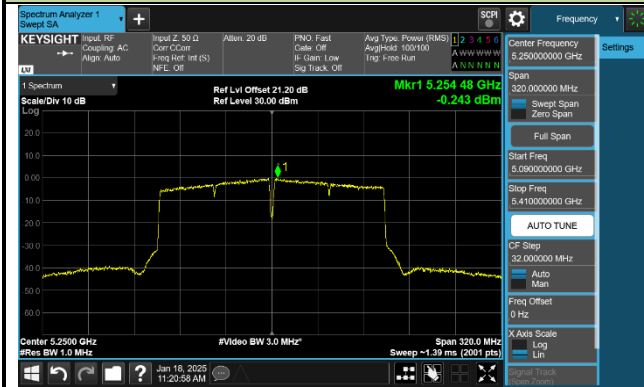
Channel 142 (5710MHz)



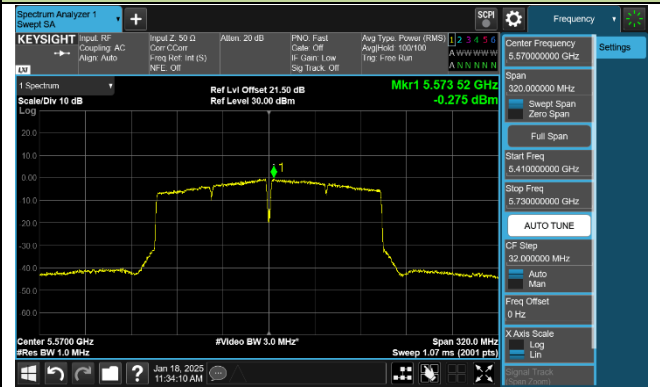


802.11ac-VHT160 Power Spectral Density - Ant 0

Channel 50 (5250MHz)

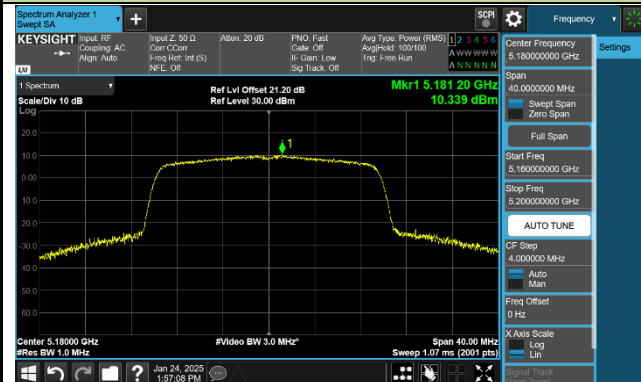


Channel 114 (5570MHz)

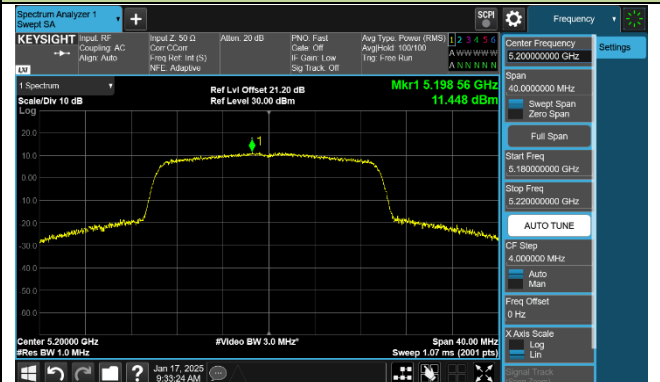


802.11ax-HE20 Power Spectral Density - Ant 0

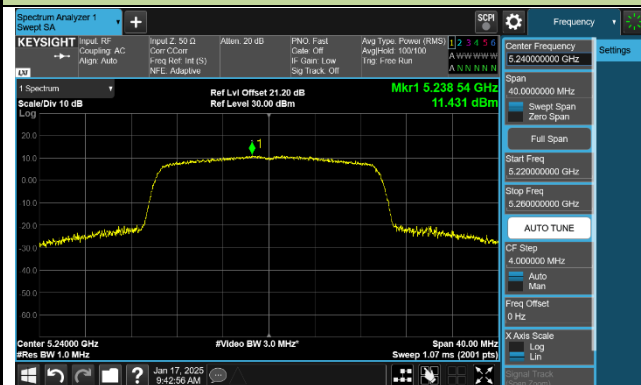
Channel 36 (5180MHz)



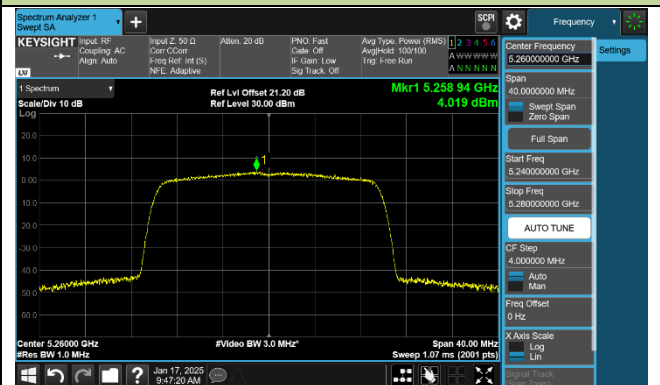
Channel 40 (5200MHz)



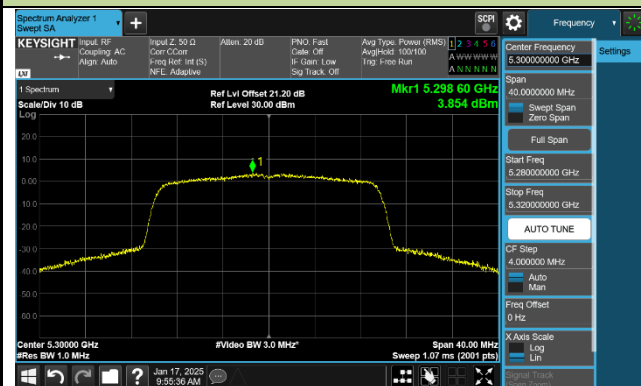
Channel 48 (5240MHz)



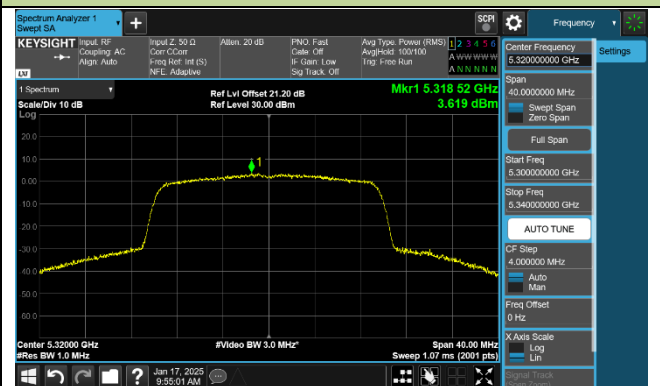
Channel 52 (5260MHz)



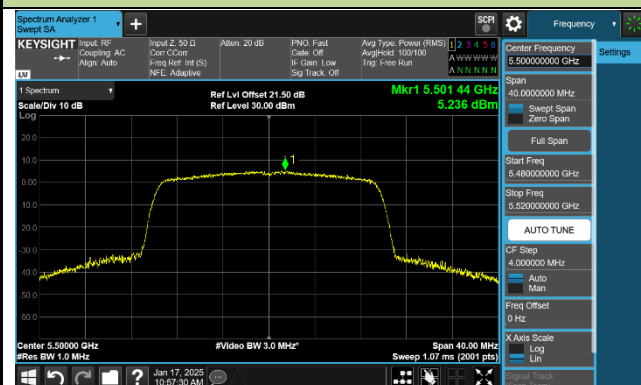
Channel 60 (5300MHz)



Channel 64 (5320MHz)

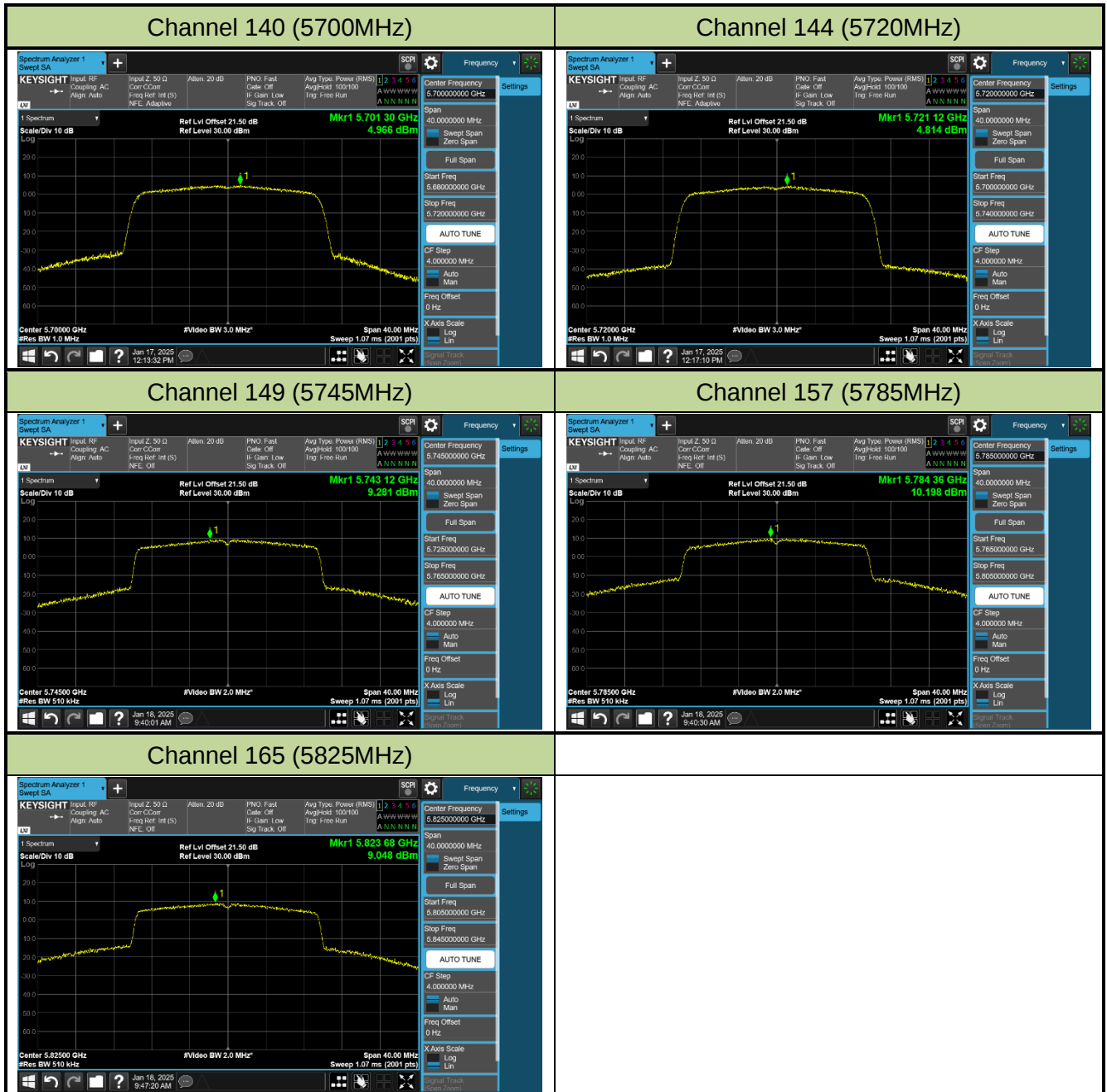


Channel 100 (5500MHz)



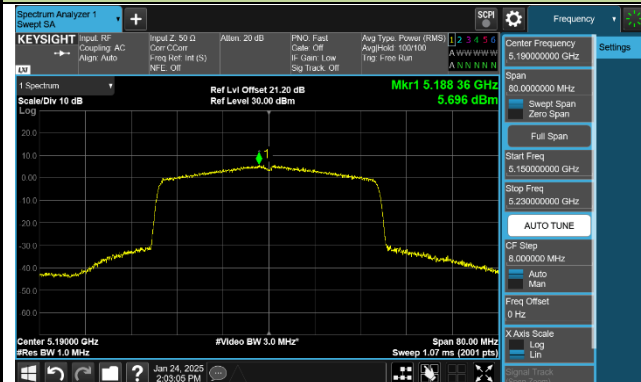
Channel 116 (5580MHz)



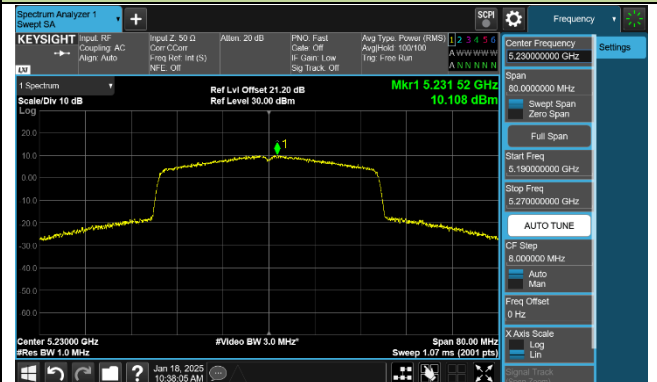


802.11ax-HE40 Power Spectral Density - Ant 0

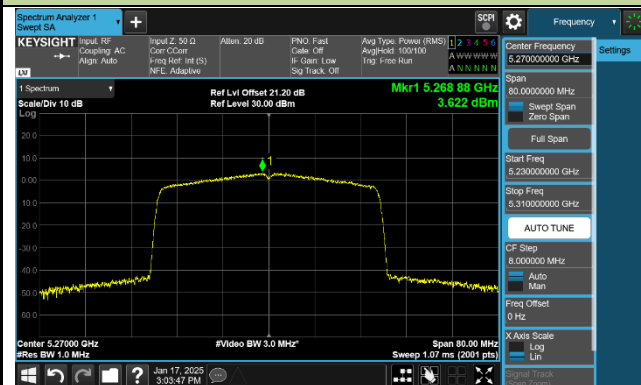
Channel 38 (5190MHz)



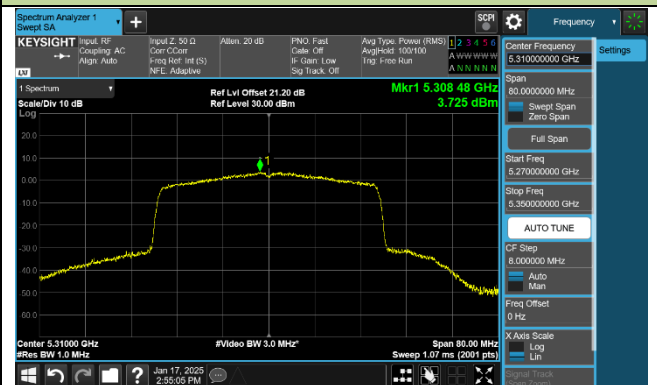
Channel 46 (5230MHz)



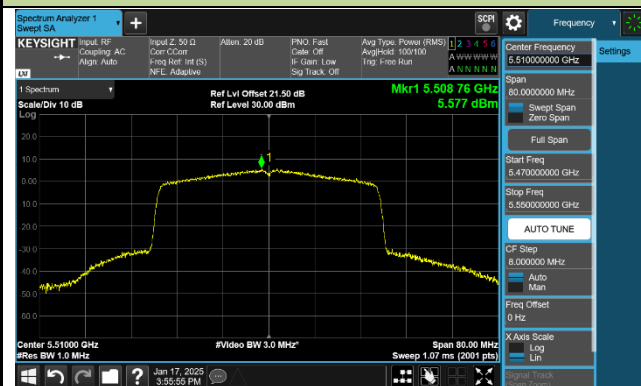
Channel 54 (5270MHz)



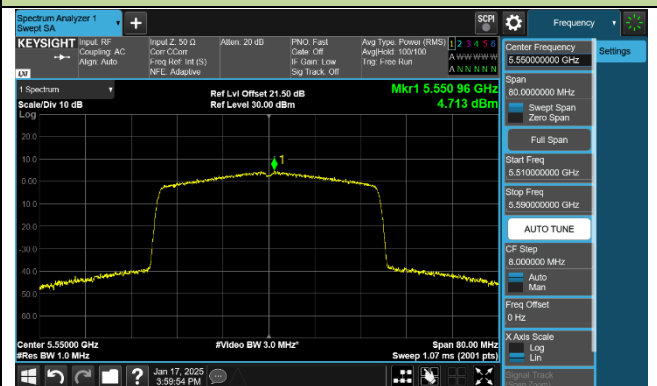
Channel 62 (5310MHz)



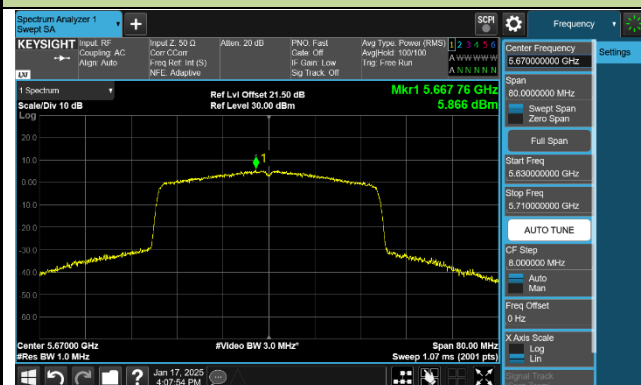
Channel 102 (5510MHz)



Channel 110 (5550MHz)



Channel 134 (5670MHz)



Channel 142 (5710MHz)

