

2. Maximum Conducted Output Power

2.1 Power

2.1.1 Test Result

Band	Channel	Frequency (MHz)	Total Power (dBm)	Limit (dBm)	Verdict
20MHz(IEEE 802.11a/n/ac/ax)-worst					
1	Low	5180	10.34	24	Pass
	High	5240	9.83	24	Pass
2	Low	5260	10.62	24	Pass
	High	5320	9.9	24	Pass
3	Low	5500	11.00	24	Pass
	High	5700	9.57	24	Pass
4	Low	5745	9.31	30	Pass
	High	5825	8.86	30	Pass
40MHz(IEEE 802.11n/ac/ax)-worst					
1	Low	5190	10.77	24	Pass
	High	5230	11.07	24	Pass
2	Low	5270	10.88	24	Pass
	High	5310	9.57	24	Pass
3	Low	5510	10.81	24	Pass
	High	5670	10.9	24	Pass
4	Low	5755	9.78	30	Pass
	High	5795	9.49	30	Pass
80MHz(IEEE 802.11ac/ax)-worst					
1	Low	5210	10.64	24	Pass
2	High	5290	9.07	24	Pass
3	Low	5530	11.05	24	Pass
4	High	5610	12.25	24	Pass
4	High	5775	9.18	30	Pass
160MHz(IEEE 802.11ax)-worst					
1	Low	5250	10.65	24	Pass
3	High	5570	10.68	24	Pass

AUX ATN2

Band	Channel	Frequency (MHz)	Total Power (dBm)	Limit (dBm)	Verdict
20MHz(IEEE 802.11a/n/ac/ax)-worst					
1	Low	5180	7.79	24	Pass

	High	5240	7.45	24	Pass
2	Low	5260	9.64	24	Pass
	High	5320	7.43	24	Pass
3	Low	5500	6.54	24	Pass
	High	5700	7.64	24	Pass
4	Low	5745	9.88	30	Pass
	High	5825	9.14	30	Pass
40MHz(IEEE 802.11n/ac/ax)-worst					
1	Low	5190	5.36	24	Pass
	High	5230	9.65	24	Pass
2	Low	5270	9.25	24	Pass
	High	5310	6.96	24	Pass
3	Low	5510	6.45	24	Pass
	High	5670	9.13	24	Pass
4	Low	5755	9.09	30	Pass
	High	5795	8.97	30	Pass
80MHz(IEEE 802.11ac/ax)-worst					
1	Low	5210	7.56	24	Pass
2	High	5290	6.91	24	Pass
3	Low	5530	6.36	24	Pass
	High	5610	9	24	Pass
4	High	5775	9.23	30	Pass
160MHz(IEEE 802.11ax)-worst					
1	Low	5250	8.68	24	Pass
3	High	5570	7.59	24	Pass

MiMO Mode

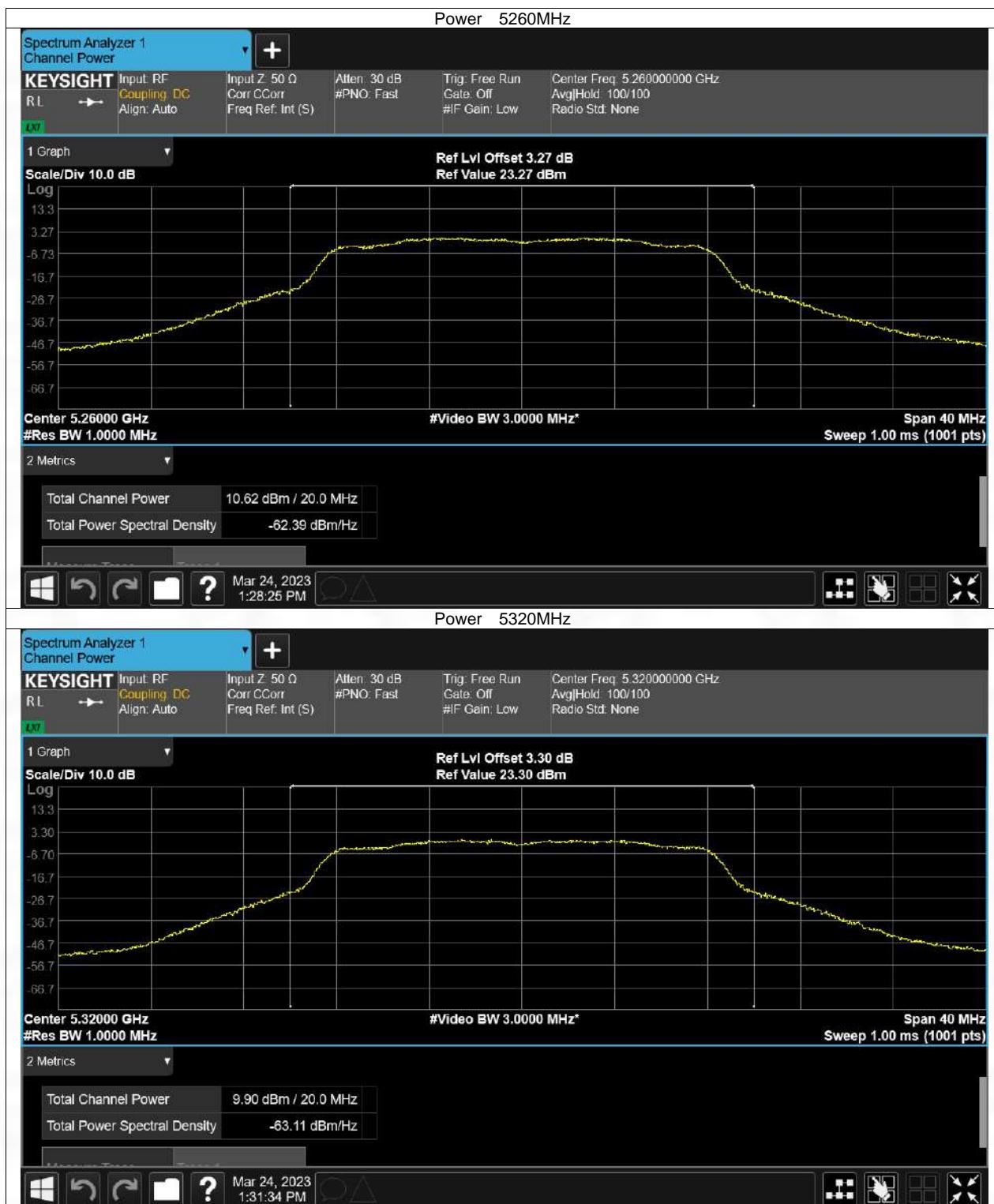
Band	Channel	Frequency (MHz)	Total Power (dBm)	Limit (dBm)	Verdict
20MHz(IEEE 802.11n/ac/ax)-worst					
1	Low	5180	12.26	24	Pass
	High	5240	11.81	24	Pass
2	Low	5260	13.17	24	Pass
	High	5320	11.85	24	Pass
3	Low	5500	12.33	24	Pass
	High	5700	11.72	24	Pass
4	Low	5745	12.61	30	Pass
	High	5825	12.01	30	Pass
40MHz(IEEE 802.11n/ac/ax)-worst					
1	Low	5190	11.87	24	Pass
	High	5230	13.43	24	Pass
2	Low	5270	13.15	24	Pass
	High	5310	11.47	24	Pass
3	Low	5510	12.17	24	Pass
	High	5670	13.11	24	Pass
4	Low	5755	12.46	30	Pass
	High	5795	12.25	30	Pass
80MHz(IEEE 802.11ac/ax)-worst					
1	Low	5210	12.38	24	Pass
2	High	5290	11.13	24	Pass
3	Low	5530	12.32	24	Pass
	High	5610	13.93	24	Pass
4	High	5775	12.22	30	Pass
160MHz(IEEE 802.11ax)-worst					
1	Low	5250	12.79	24	Pass
3	High	5570	12.41	24	Pass

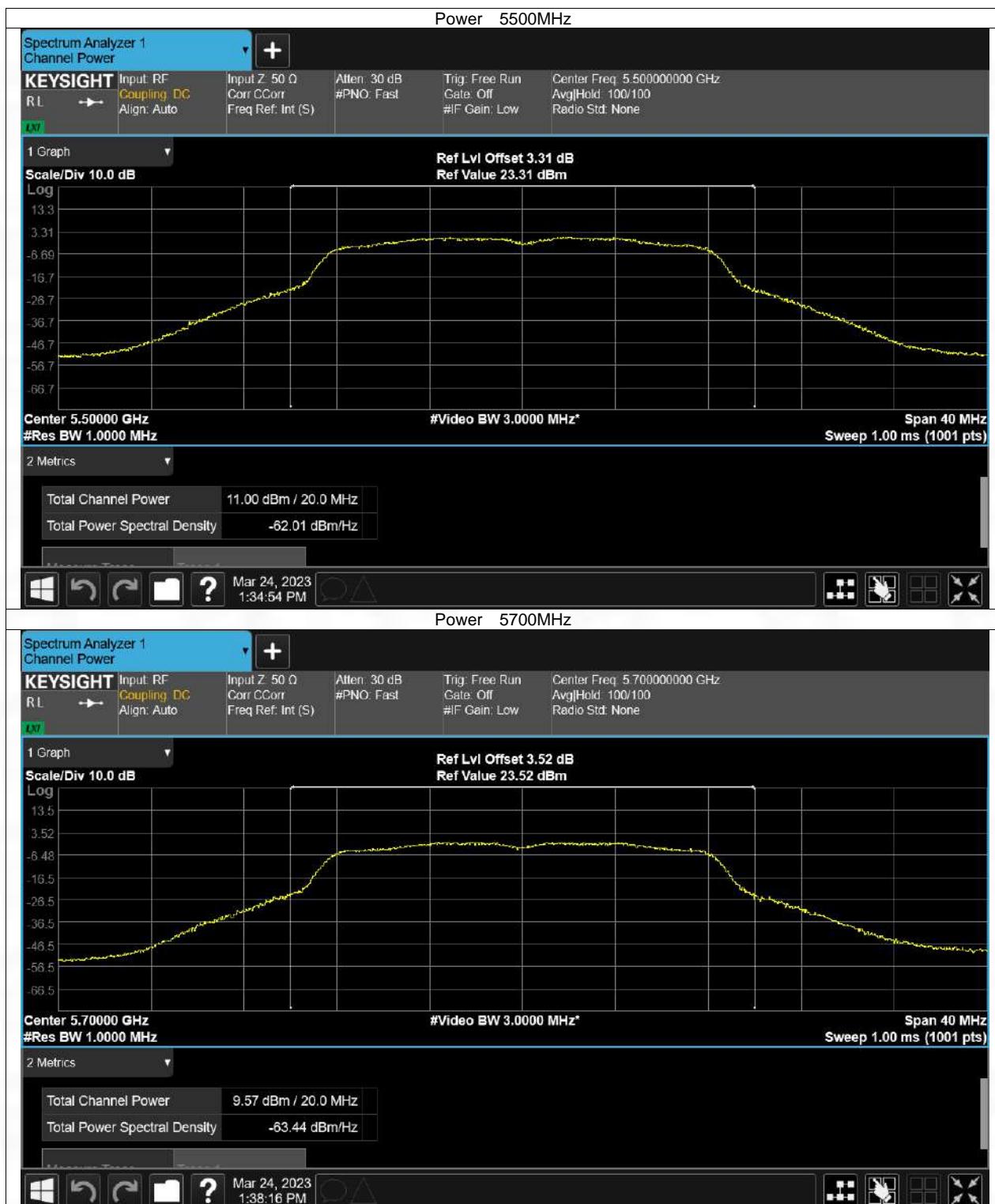
2.1.2 Test Graph

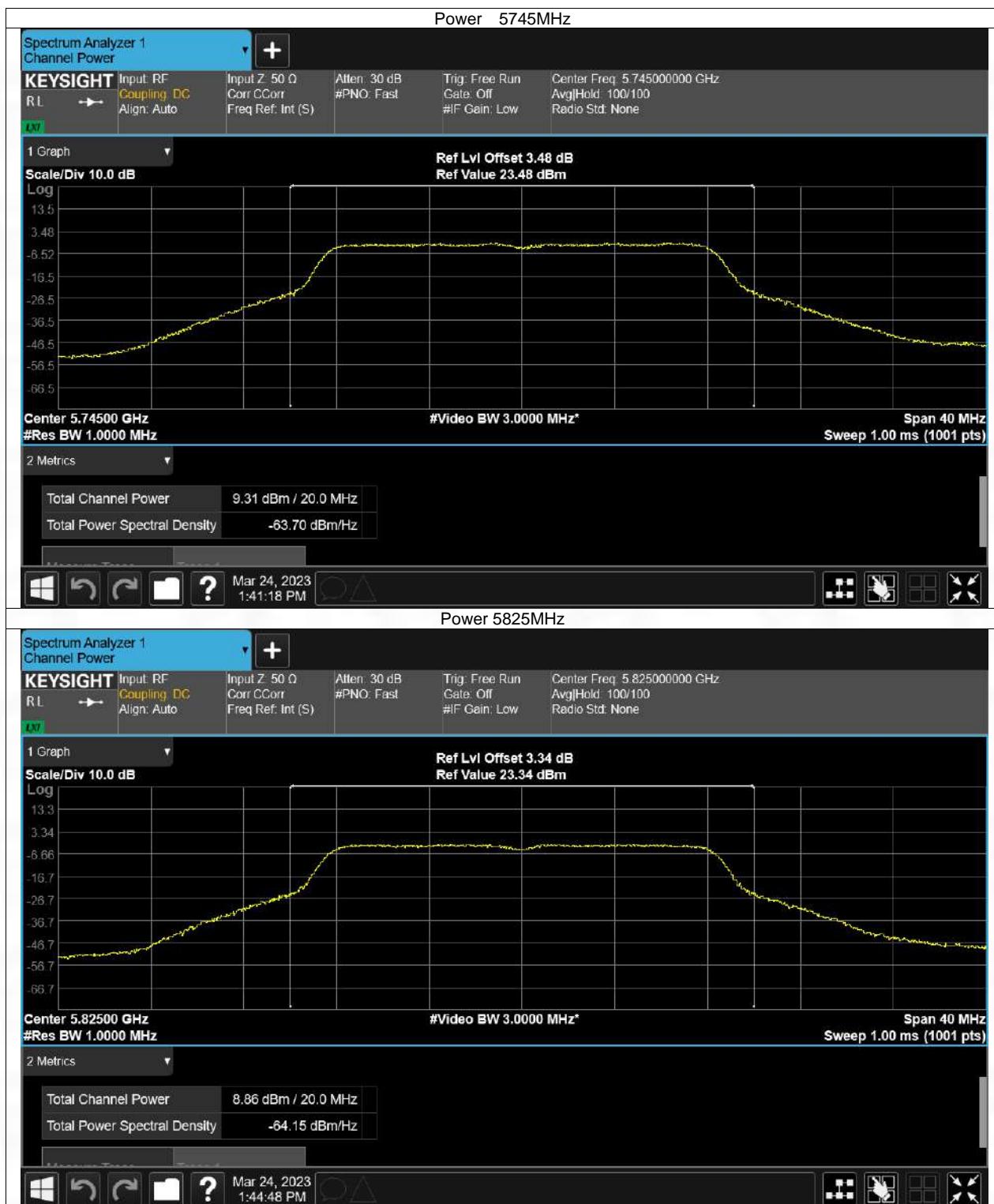
ANT1 20MHz(IEEE 802.11a/n/ac/ax)-worst

Test Graphs
Power 5180MHz



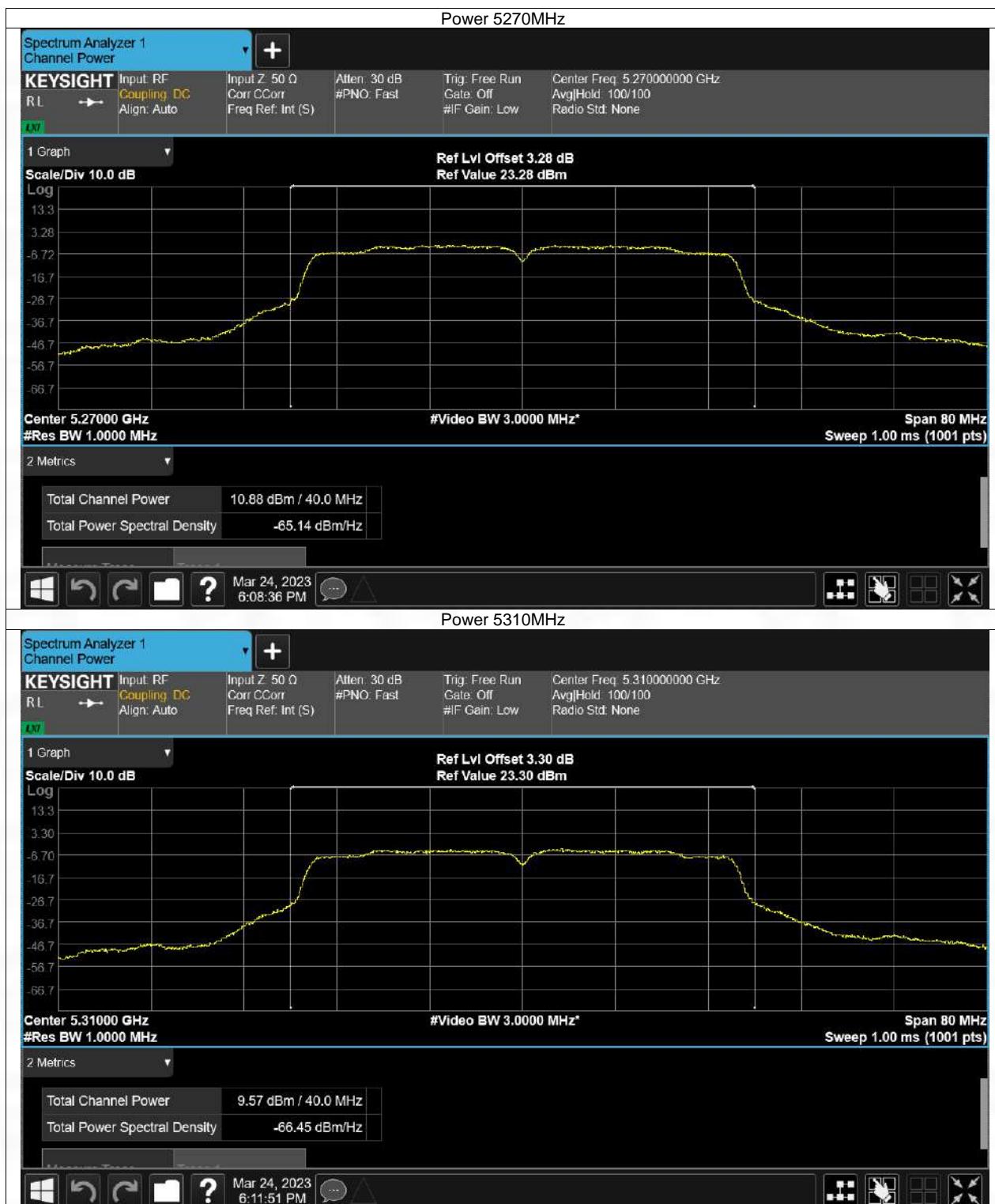


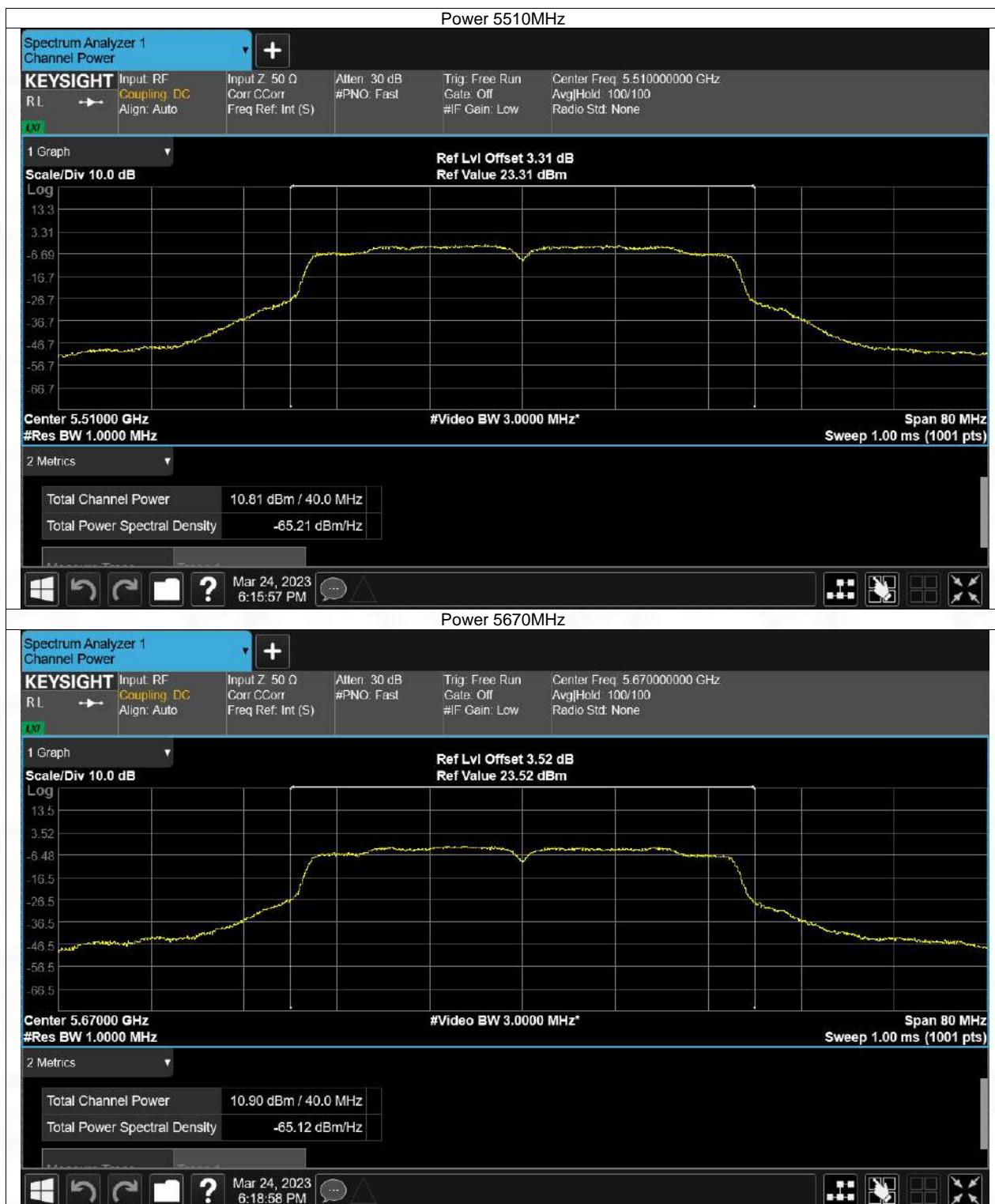




40MHz(IEEE 802.11n/ac/ax)-worst

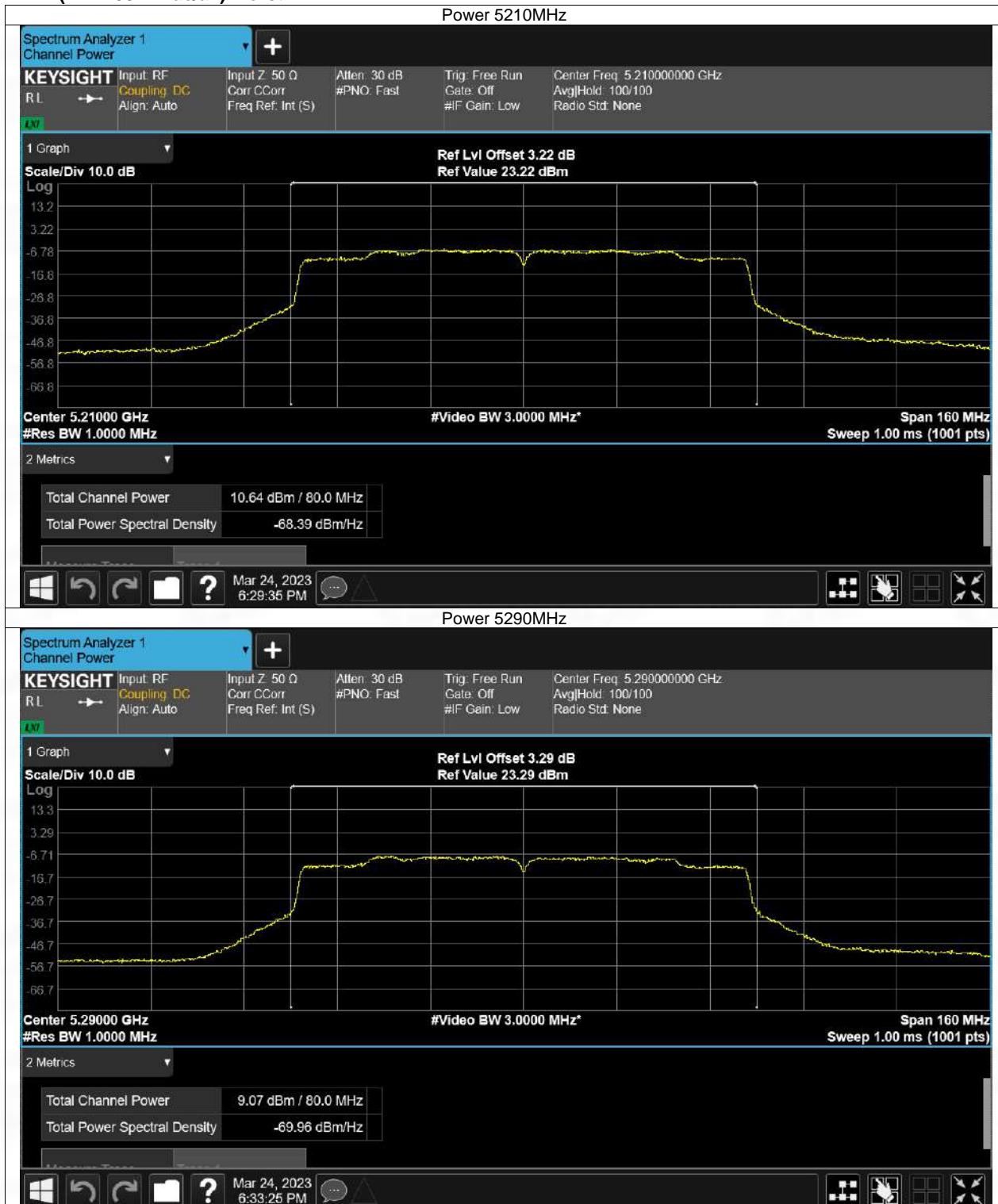




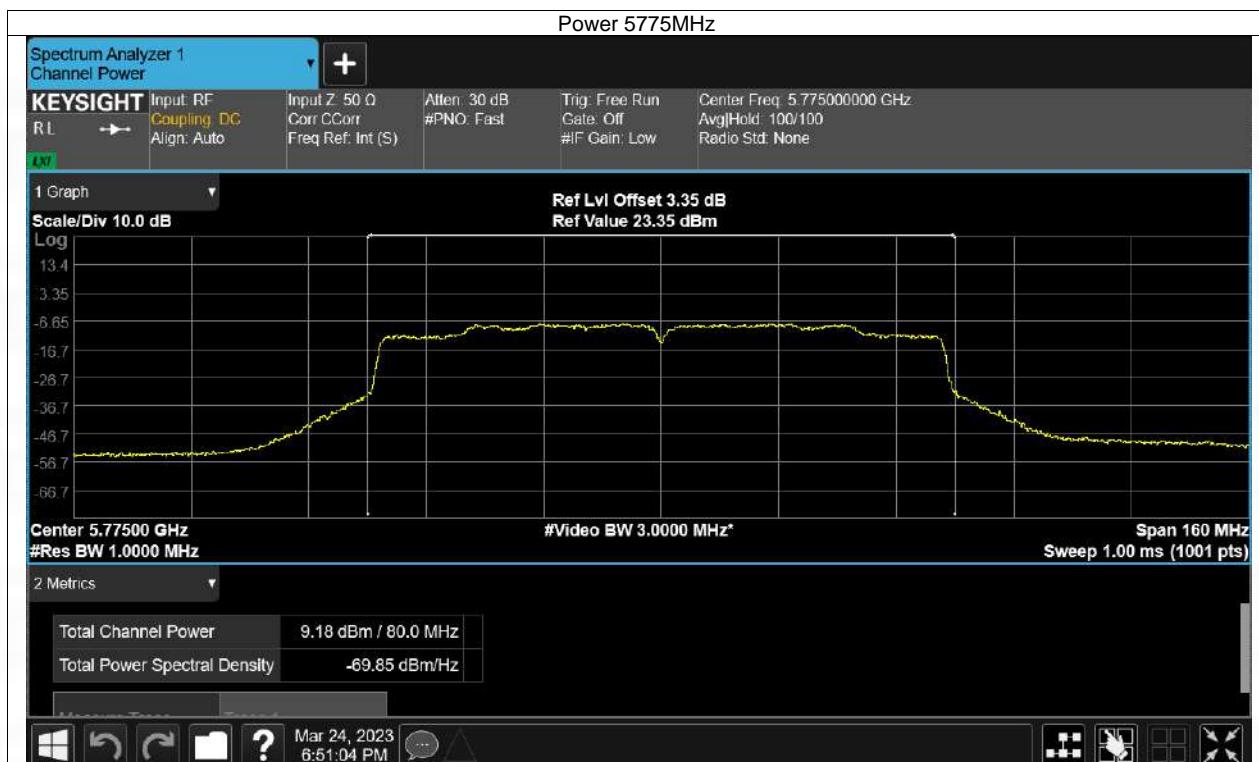




80MHz(IEEE 802.11ac/ax)-worst







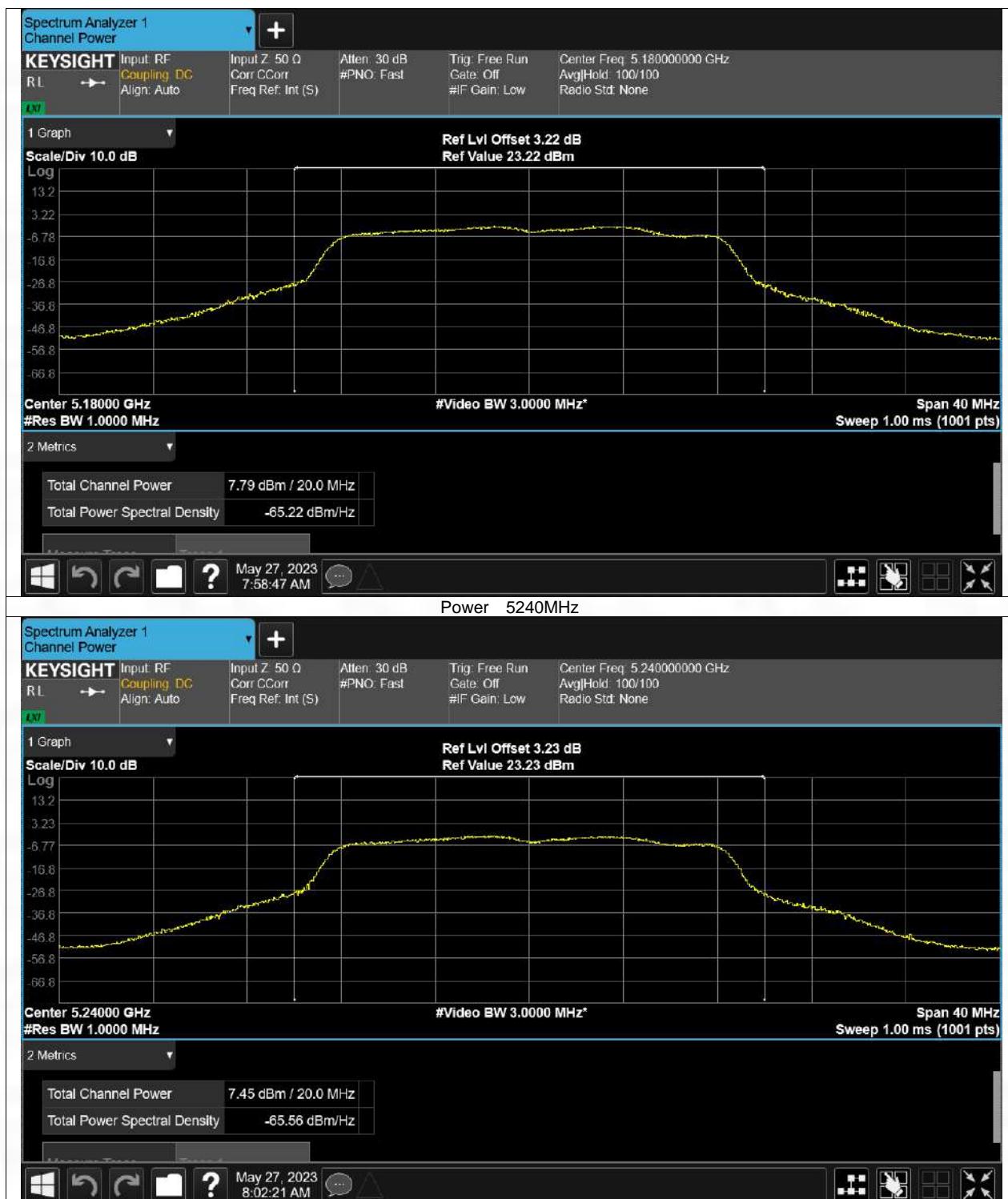
160MMHz(IEEE 802.11ax)-worst

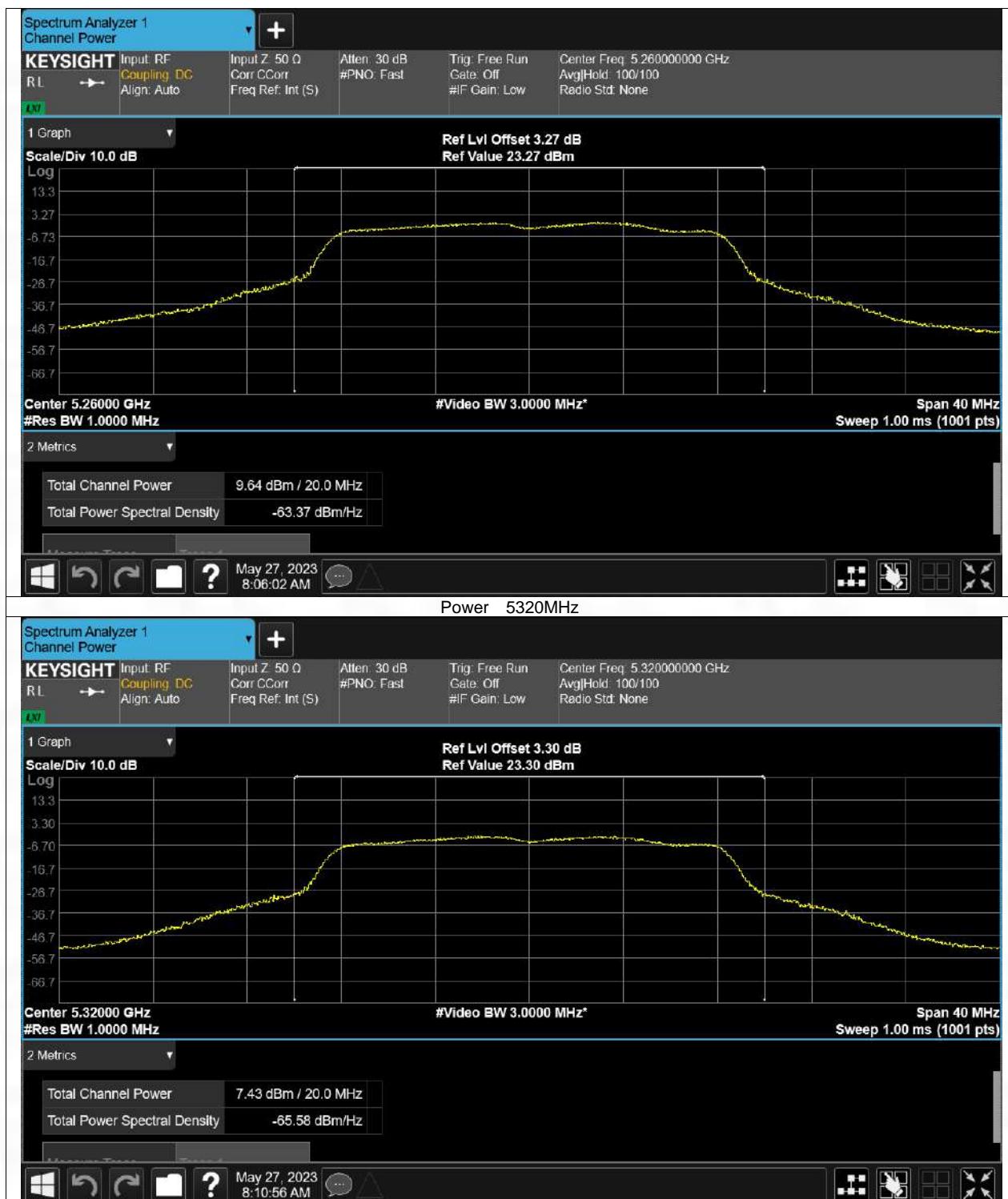
Power 5250MHz

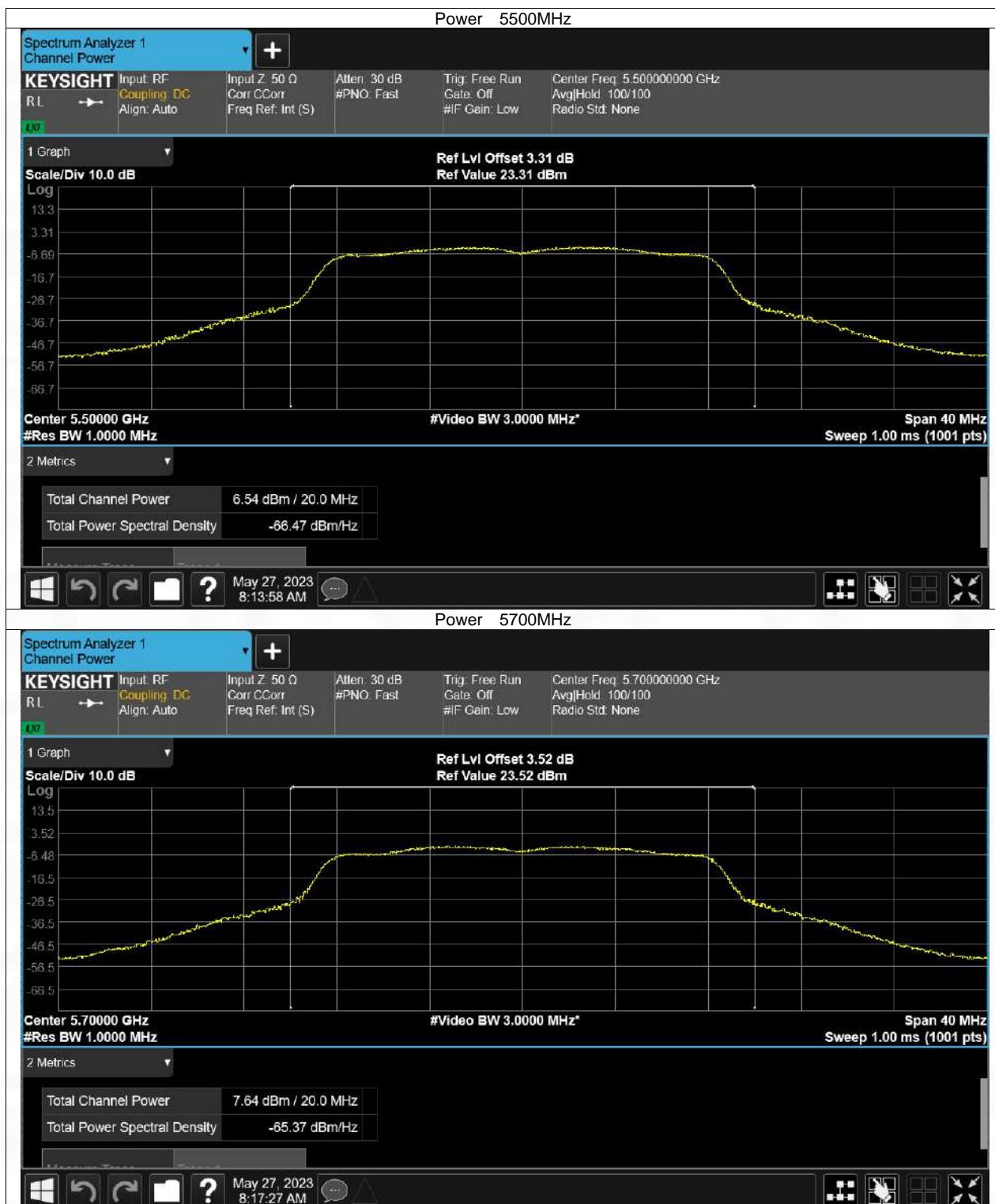


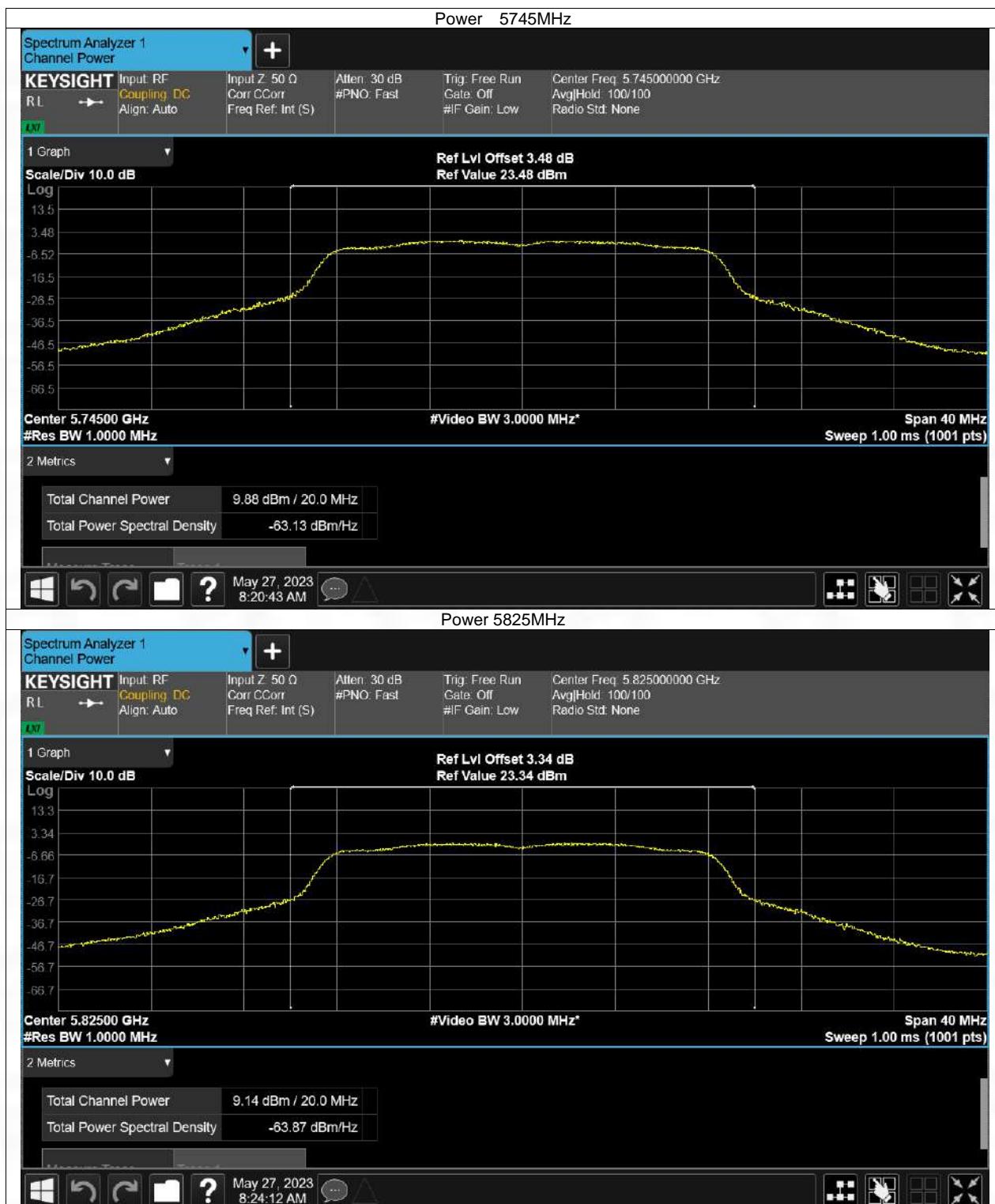
ANT2 20MHz(IEEE 802.11a/n/ac/ax)-worst

Test Graphs
Power 5180MHz



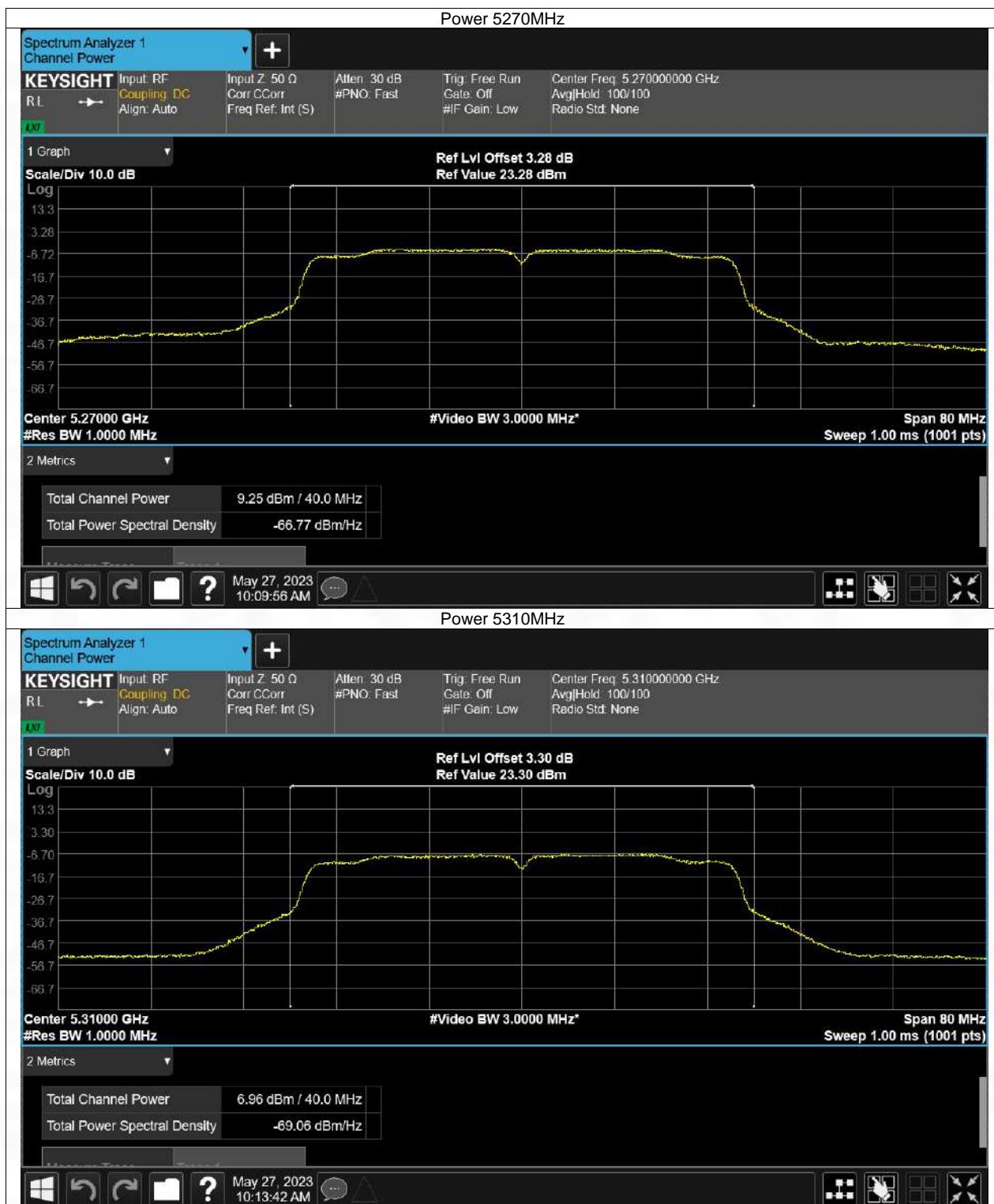




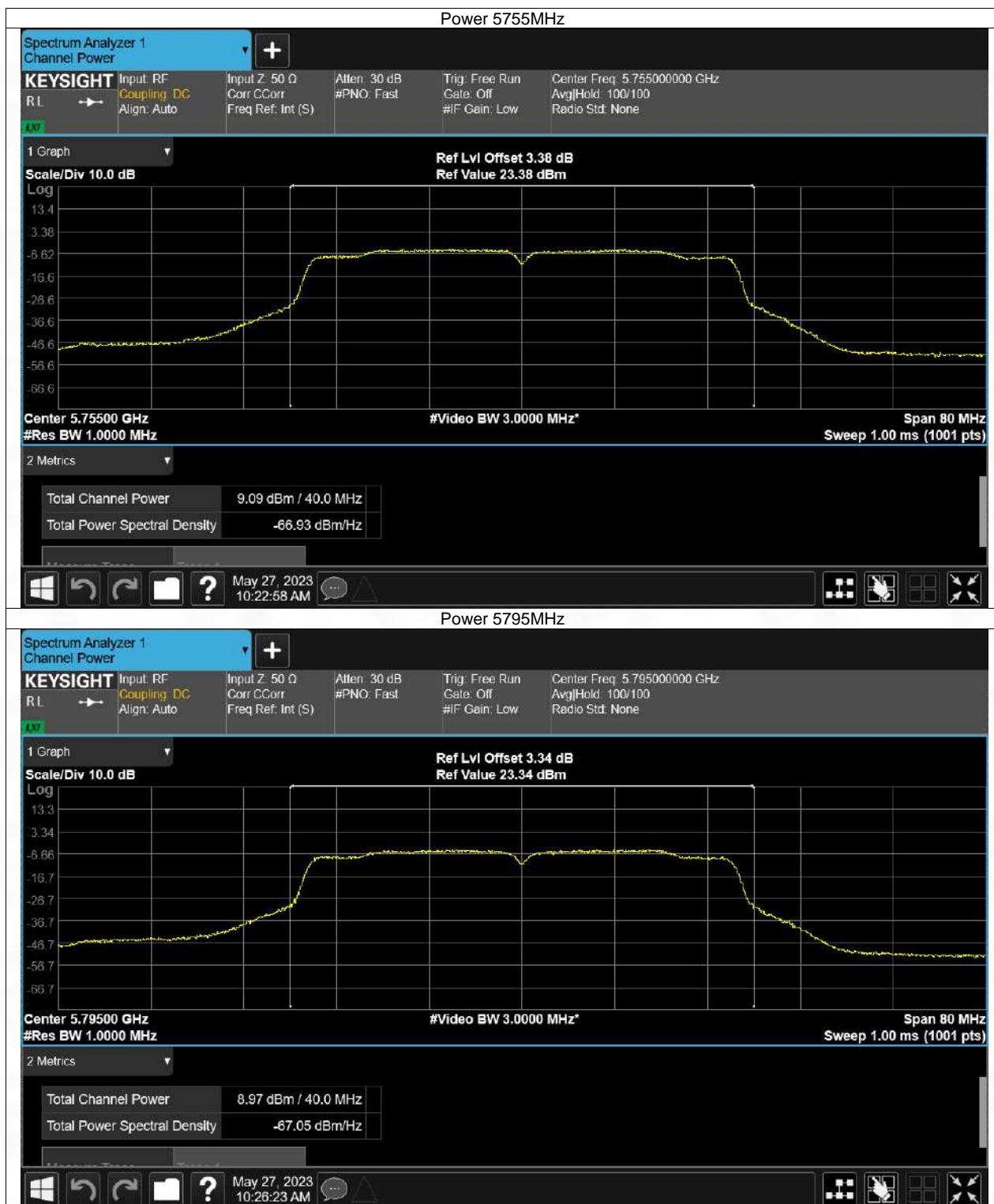


40MHz(IEEE 802.11n/ac/ax)-worst









80MHz(IEEE 802.11ac/ax)-worst





Power 5775MHz



3. Maximum Power Spectral Density

3.1 PSD

3.1.1 Test Result

MAIN ANT1

Band	Channel	Frequency (MHz)	Total PSD (dBm)	Limit (dBm)	Verdict
20MHz(IEEE 802.11a/n/ac/ax)-worst					
1	Low	5180	-2.25	11	Pass
	High	5240	-2.29	11	Pass
2	Low	5260	-9.45	11	Pass
	High	5320	-11.78	11	Pass
3	Low	5500	-7.92	11	Pass
	High	5700	-10.34	11	Pass
4	Low	5745	-14.97	30	Pass
	High	5825	-15.26	30	Pass
40MHz(IEEE 802.11n/ac/ax)-worst					
1	Low	5190	-11.85	11	Pass
	High	5230	-12.26	11	Pass
2	Low	5270	-12.92	11	Pass
	High	5310	-12.21	11	Pass
3	Low	5510	-12.62	11	Pass
	High	5670	-12.58	11	Pass
4	Low	5755	-13.99	30	Pass
	High	5795	-16.74	30	Pass
80MHz(IEEE 802.11ac/ax)-worst					
1	Low	5210	-13.99	11	Pass
2	High	5290	-14.55	11	Pass
3	Low	5530	-14.34	11	Pass
4	High	5610	-13.2	11	Pass
160MHz(IEEE 802.11ax)-worst					
1	Low	5250	-17.31	11	Pass
3	High	5570	-17.16	11	Pass

AUX ANT2

Band	Channel	Frequency (MHz)	Total PSD (dBm)	Limit (dBm)	Verdict
20MHz(IEEE 802.11a/n/ac/ax)-worst					
1	Low	5180	-3.94	11	Pass

	High	5240	-5.96	11	Pass
2	Low	5260	-3.75	11	Pass
	High	5320	-6.22	11	Pass
3	Low	5500	-5.79	11	Pass
	High	5700	-7.29	11	Pass
4	Low	5745	-6.49	30	Pass
	High	5825	-7.10	30	Pass
40MHz(IEEE 802.11n/ac/ax)-worst					
1	Low	5190	-14.04	11	Pass
	High	5230	-9.12	11	Pass
2	Low	5270	-9.9	11	Pass
	High	5310	-11.97	11	Pass
3	Low	5510	-12.81	11	Pass
	High	5670	-11.64	11	Pass
4	Low	5755	-13.19	30	Pass
	High	5795	-14.92	30	Pass
80MHz(IEEE 802.11ac/ax)-worst					
1	Low	5210	-15.46	11	Pass
2	High	5290	-15.09	11	Pass
3	Low	5530	-16.41	11	Pass
4	High	5610	-13.12	11	Pass
160MHz(IEEE 802.11ax)-worst					
1	Low	5250	-13.53	11	Pass
3	High	5570	-14.58	11	Pass

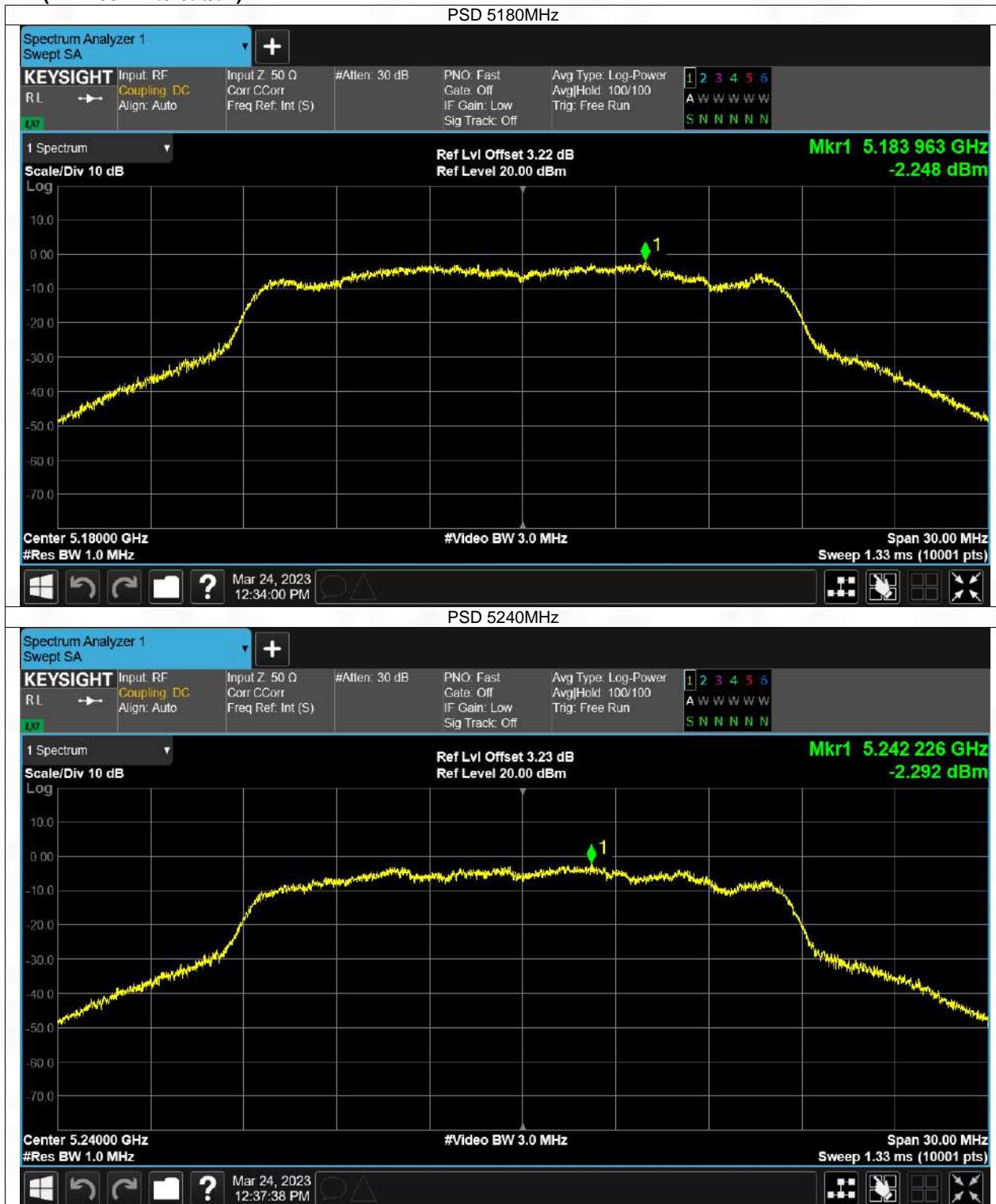
MIMO Mode

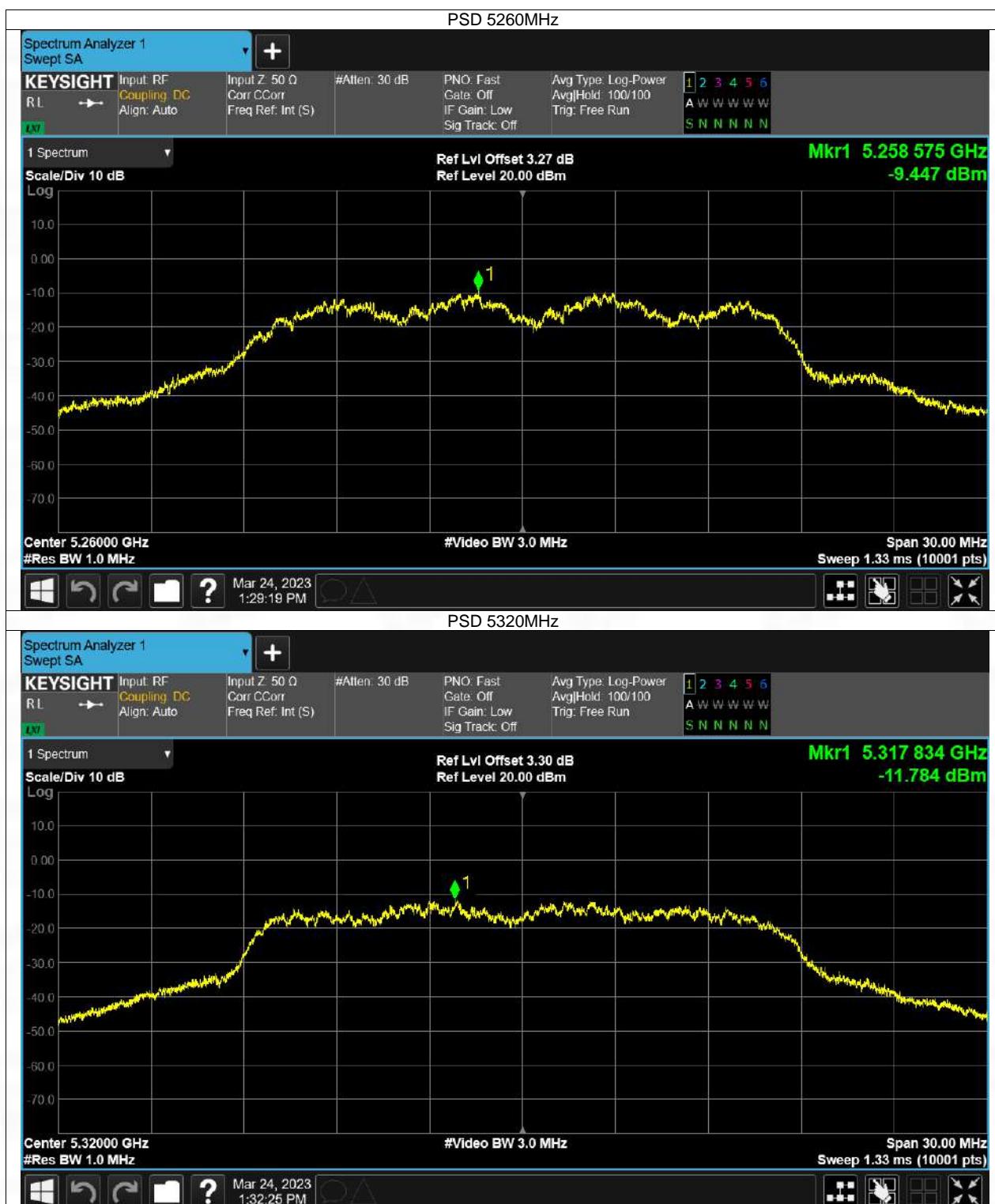
Band	Channel	Frequency (MHz)	Total PSD (dBm)	Limit (dBm)	Verdict
20MHz(IEEE 802.11n/ac/ax)-worst					
1	Low	5180	0.00	11	Pass
	High	5240	-0.74	11	Pass
2	Low	5260	-2.71	11	Pass
	High	5320	-5.15	11	Pass
3	Low	5500	-3.72	11	Pass
	High	5700	-5.54	11	Pass
4	Low	5745	-5.91	30	Pass
	High	5825	-6.48	30	Pass
40MHz(IEEE 802.11n/ac/ax)-worst					
1	Low	5190	-9.80	11	Pass
	High	5230	-7.40	11	Pass
2	Low	5270	-8.14	11	Pass
	High	5310	-9.08	11	Pass
3	Low	5510	-9.70	11	Pass
	High	5670	-9.07	11	Pass
4	Low	5755	-10.56	30	Pass
	High	5795	-12.73	30	Pass
80MHz(IEEE 802.11ac/ax)-worst					
1	Low	5210	-11.65	11	Pass
2	High	5290	-11.80	11	Pass
3	Low	5530	-12.24	11	Pass
	High	5610	-10.15	11	Pass
4	High	5775	-13.85	30	Pass
160MHz(IEEE 802.11ax)-worst					
1	Low	5250	-12.01	11	Pass
3	High	5570	-12.67	11	Pass

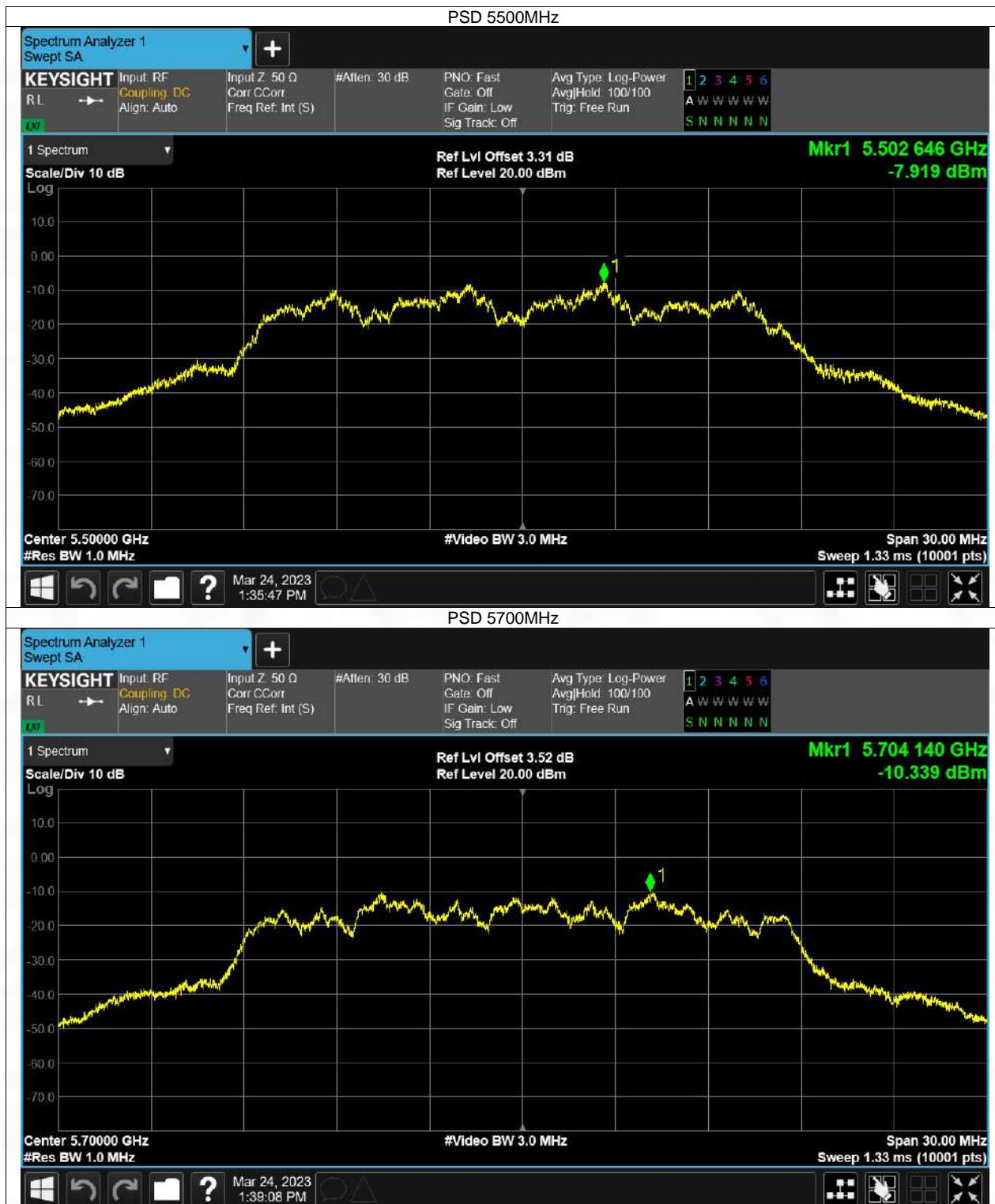
3.1.2 Test Graph

ANT1

20MHz(IEEE 802.11a/n/ac/ax)

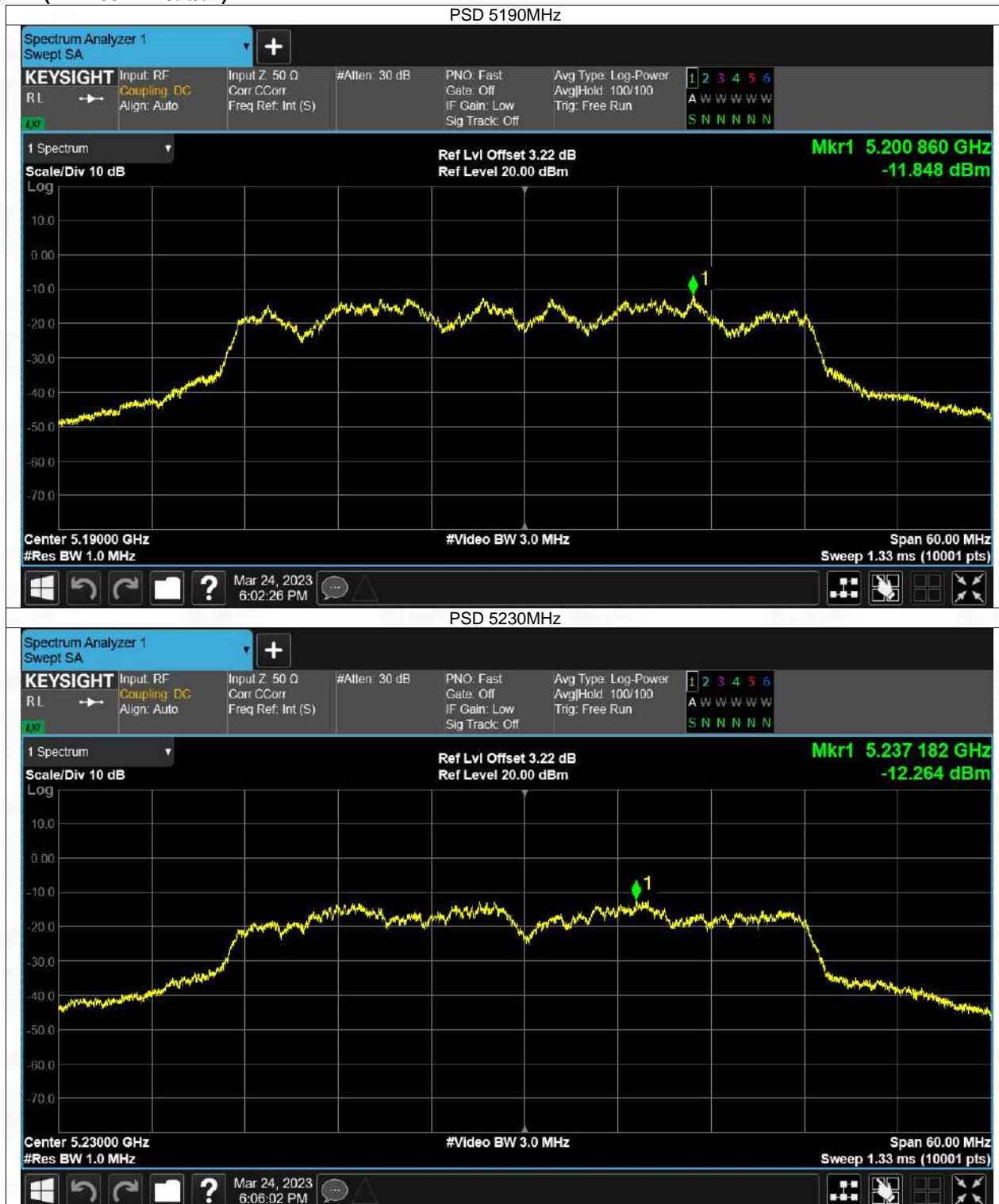


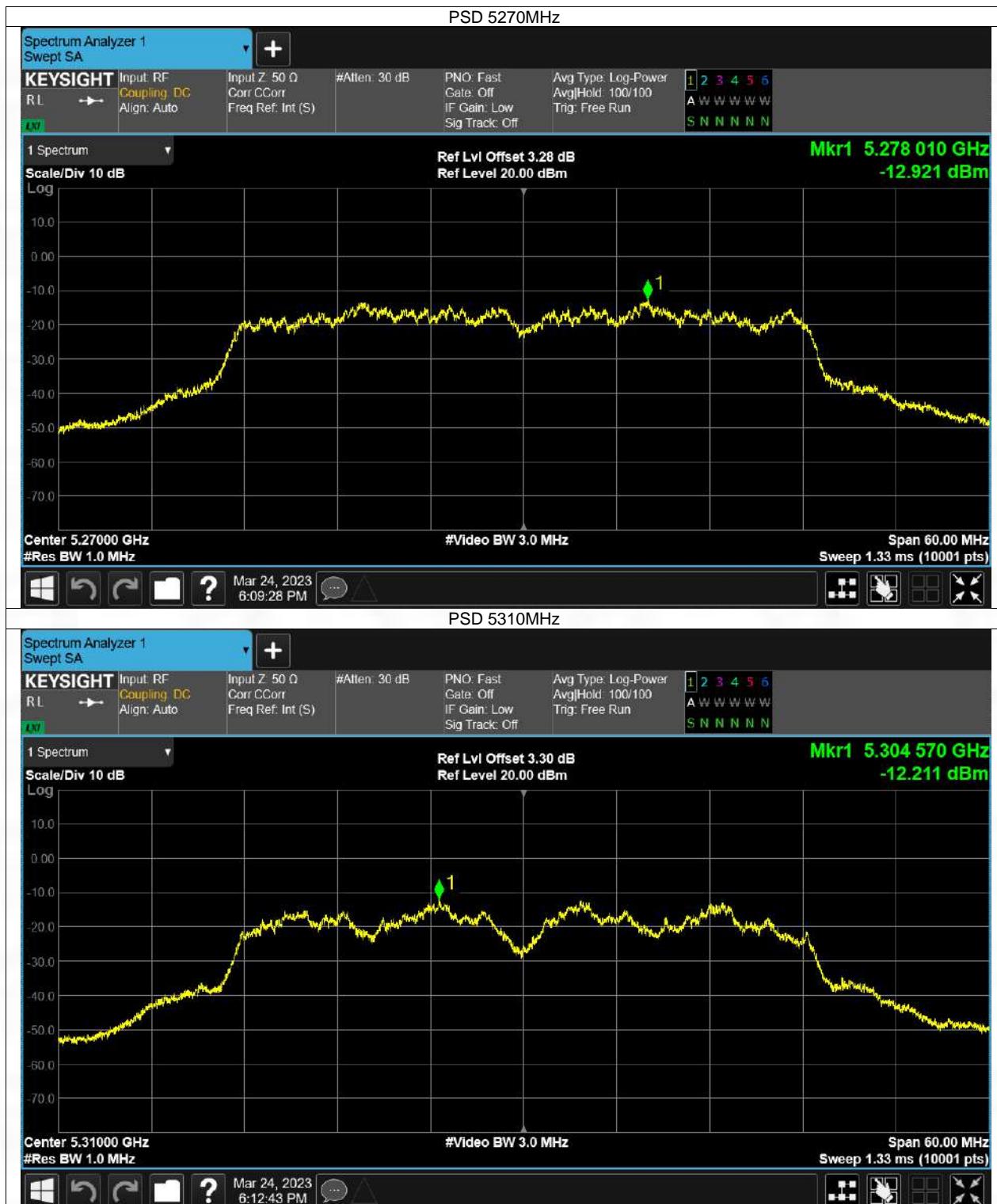


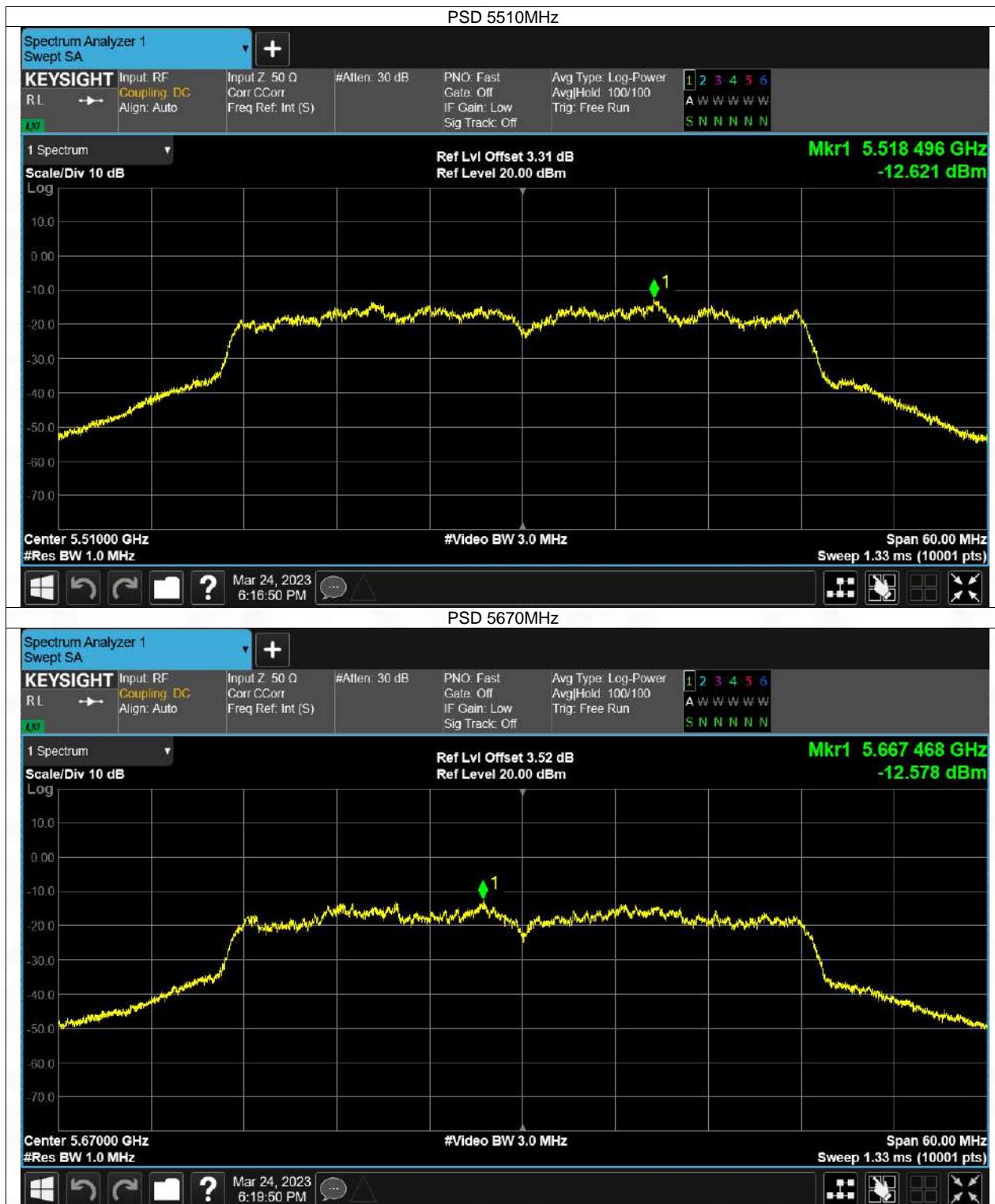




40MHz(IEEE 802.11n/ac/ax)



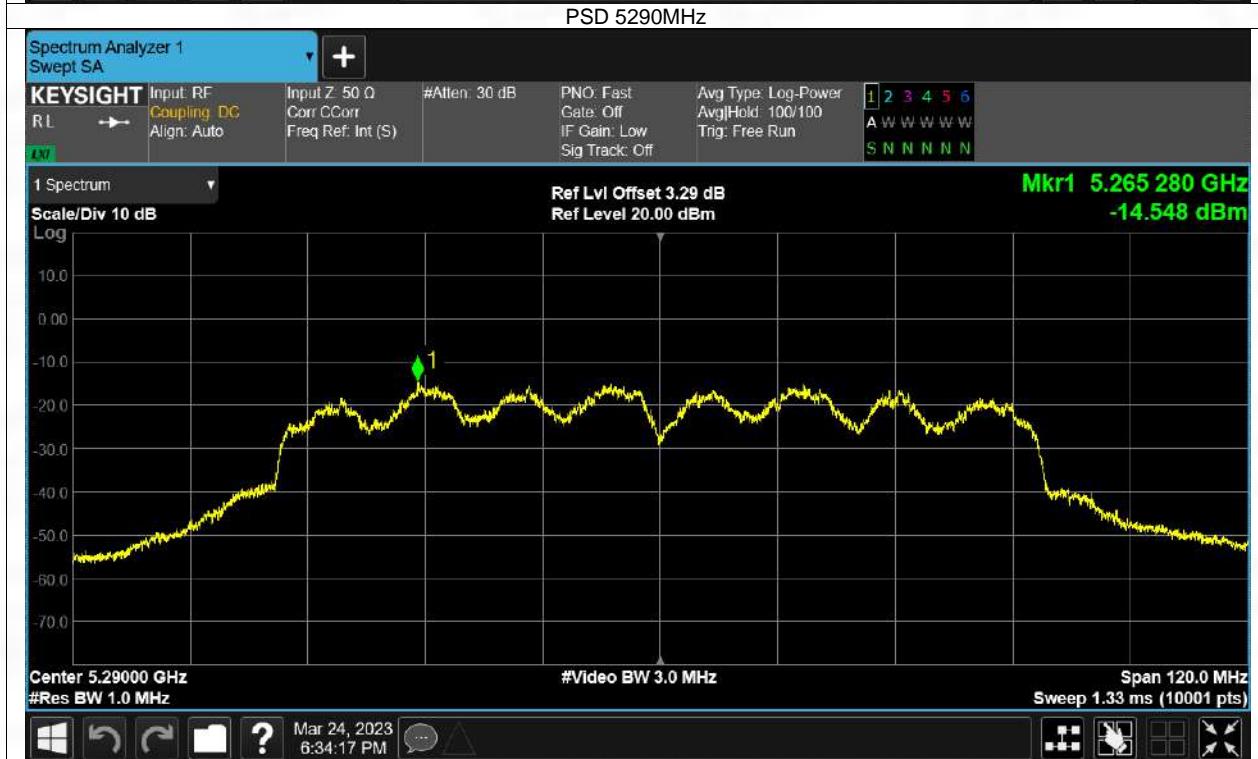


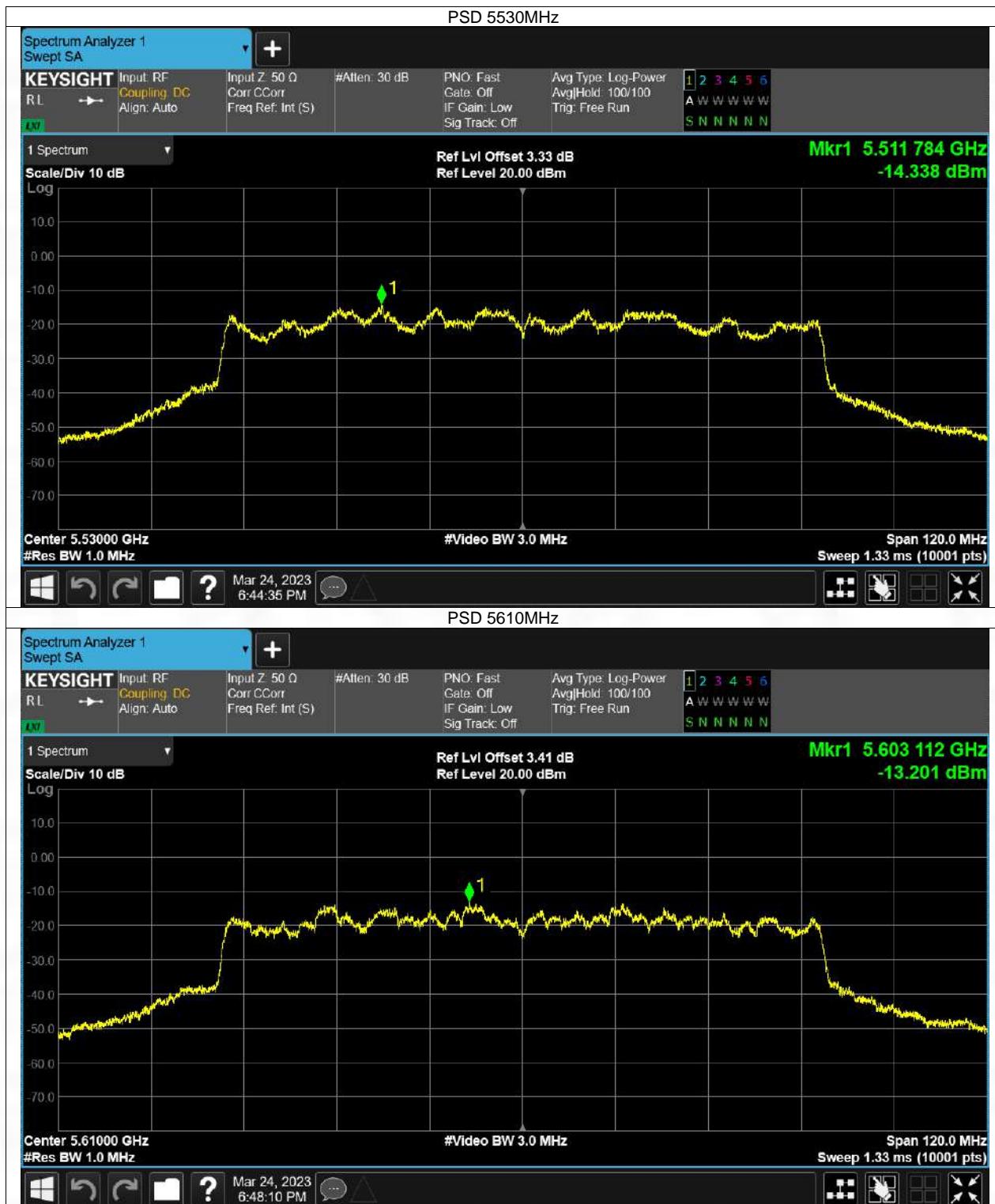


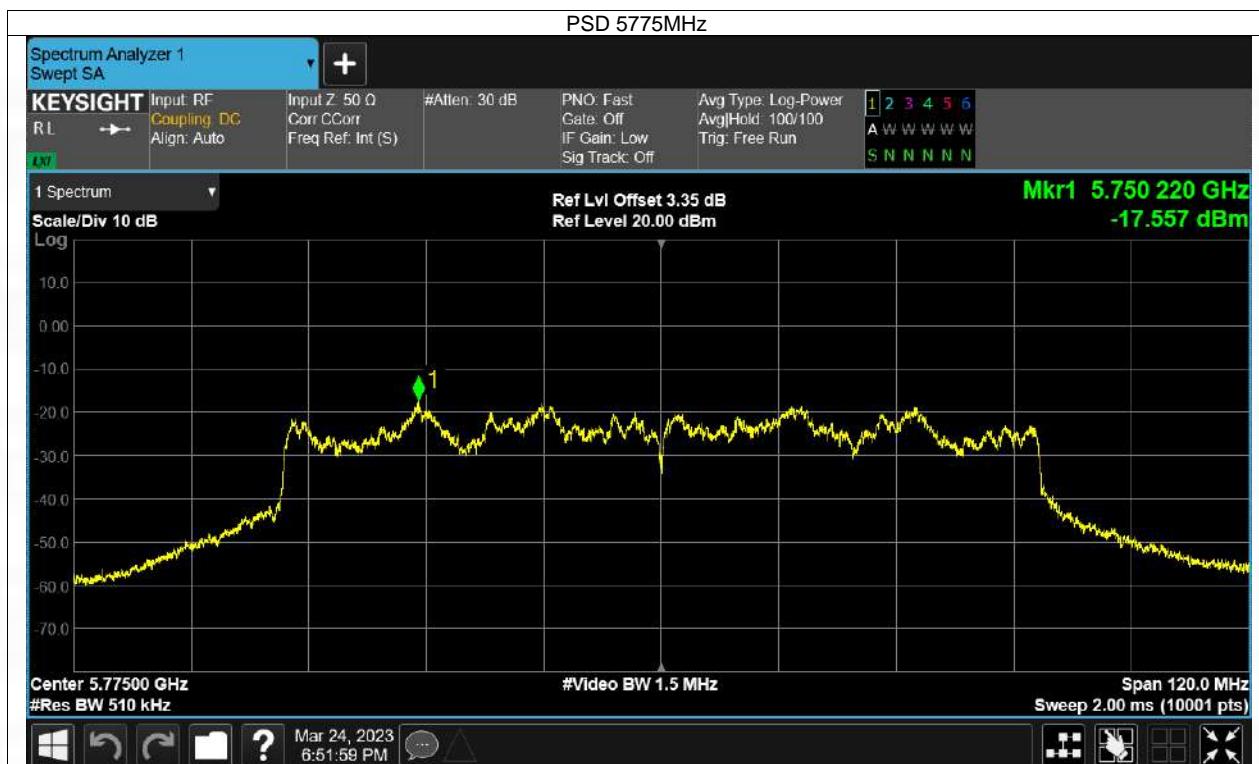


80MHz(IEEE 802.11ac/ax)

PSD 5210MHz





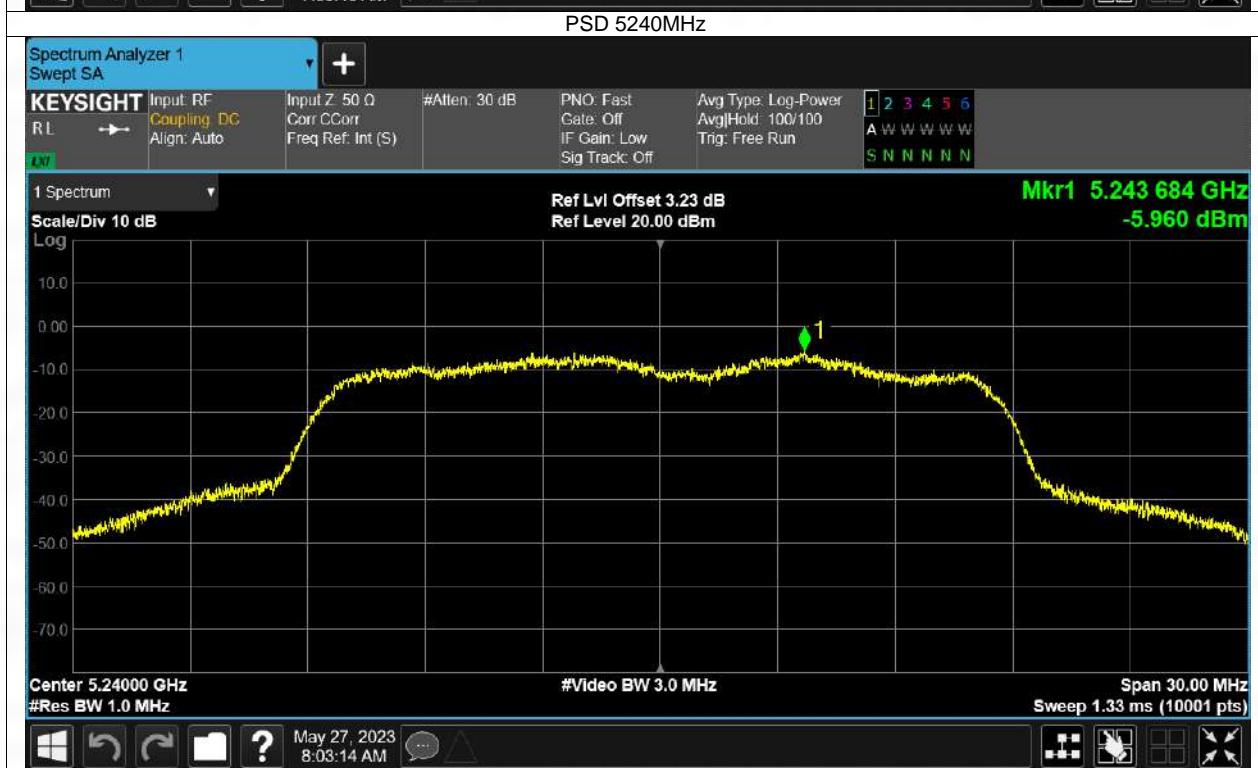


160MHz(IEEE 802.11ax)

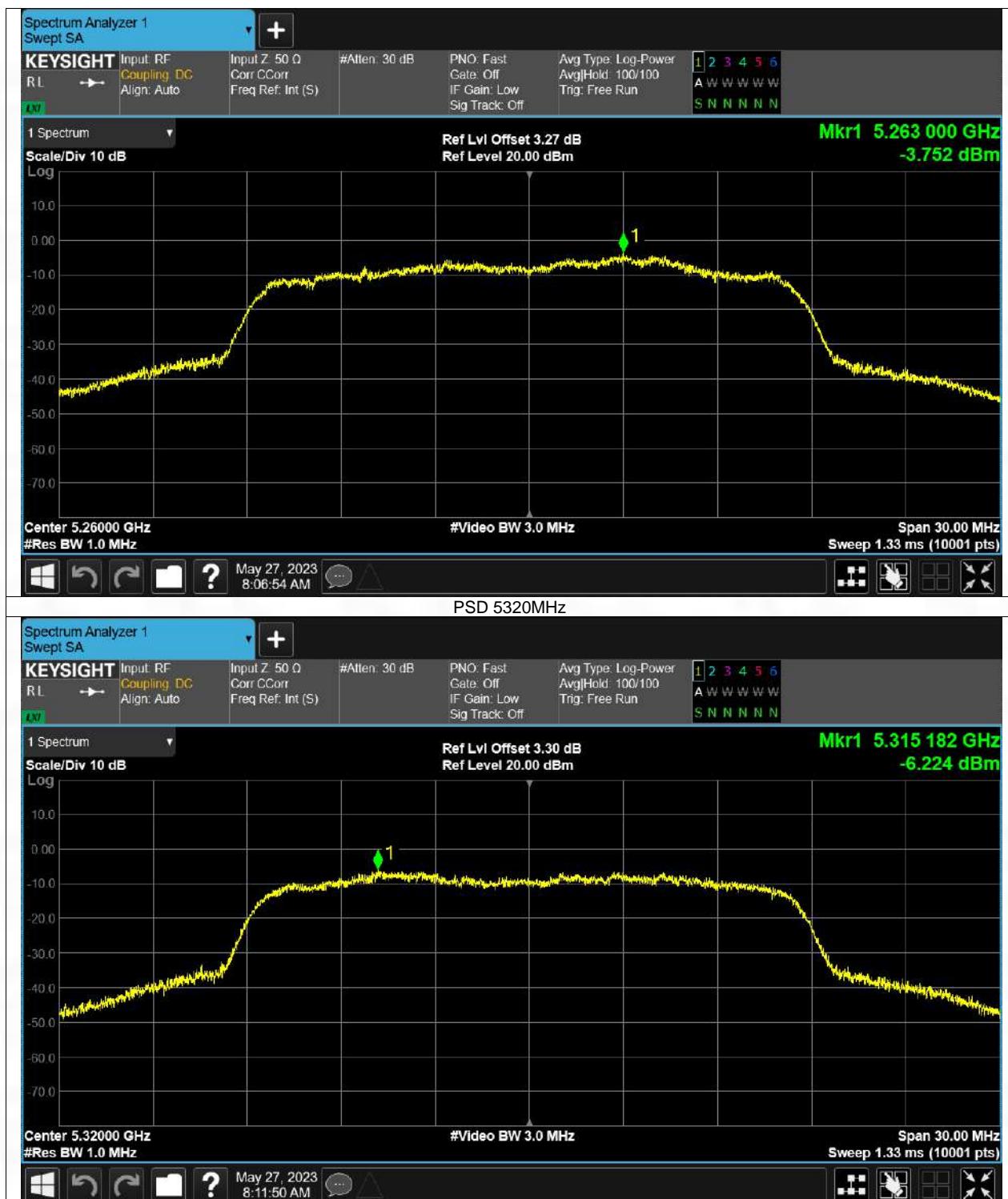


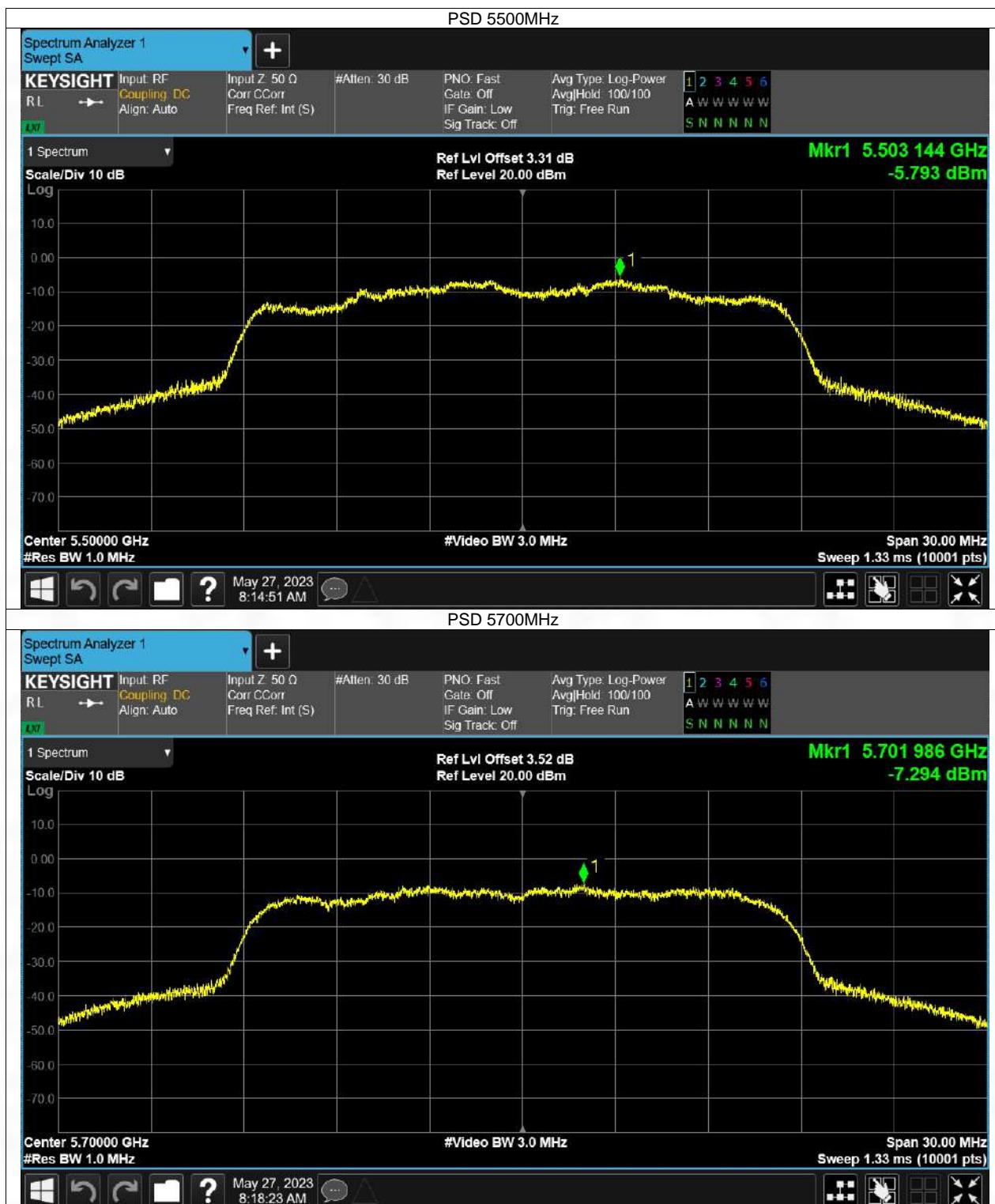
ANT2

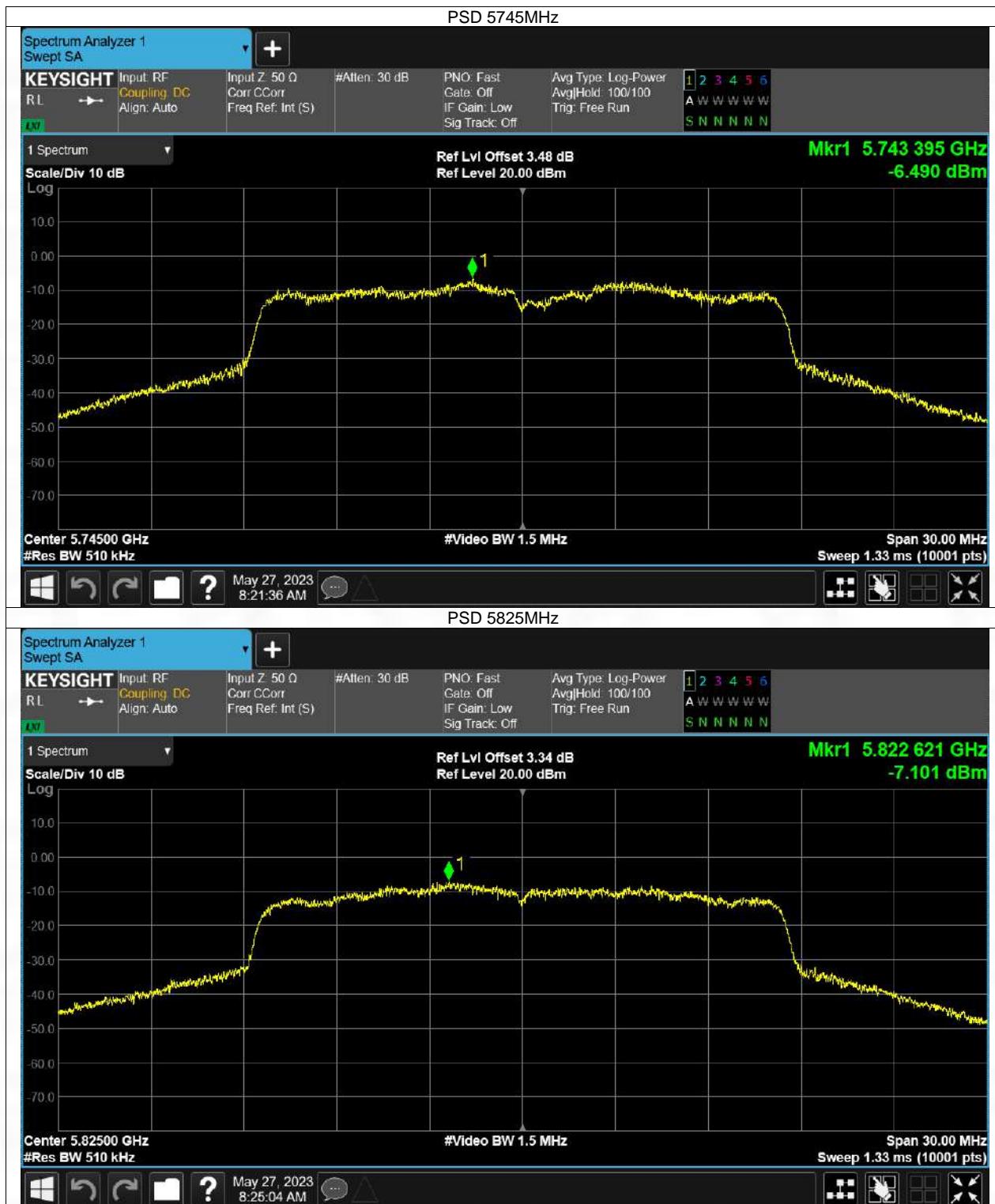
20MHz(IEEE 802.11a/n/ac/ax)



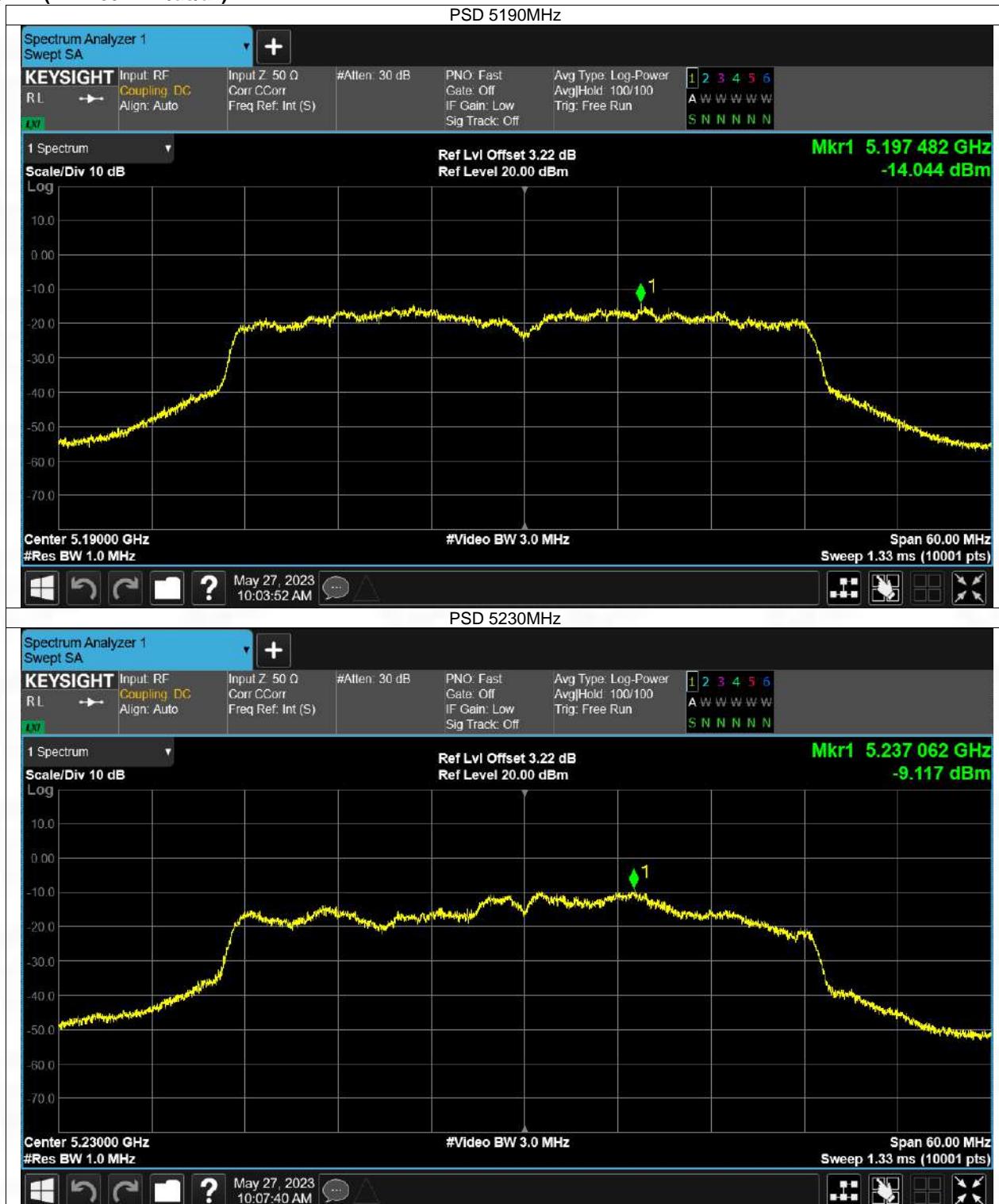
PSD 5260MHz



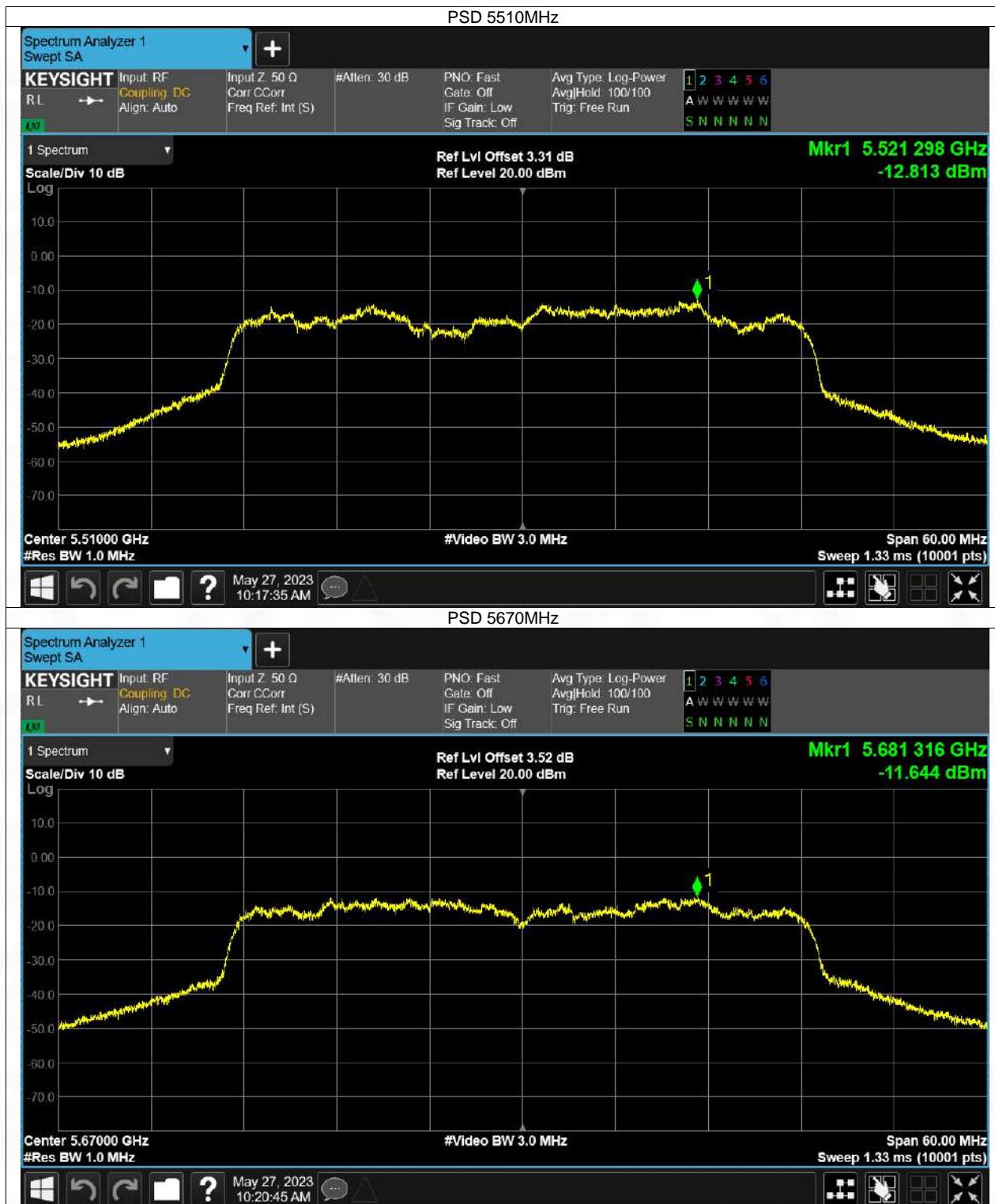


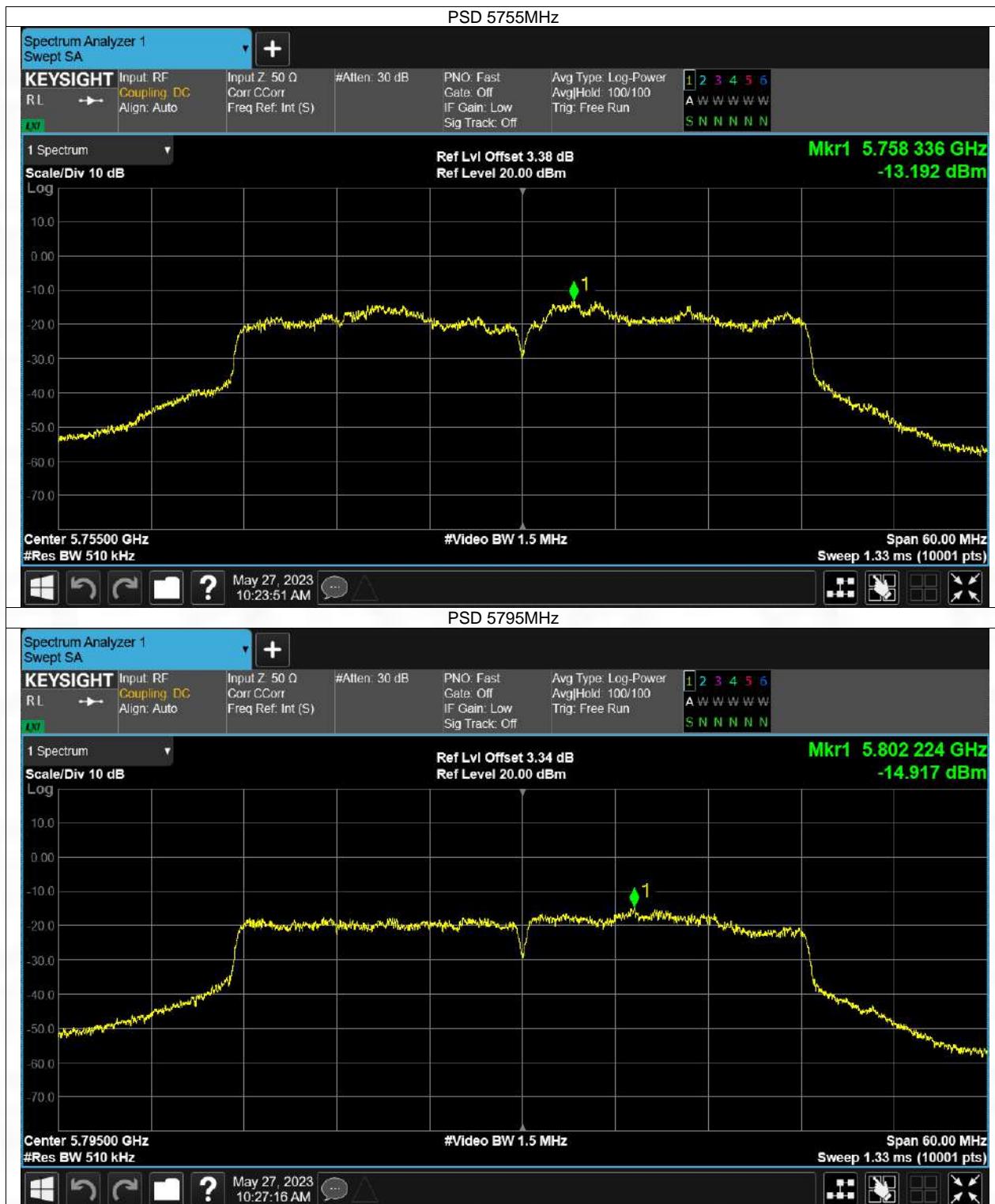


40MHz(IEEE 802.11n/ac/ax)









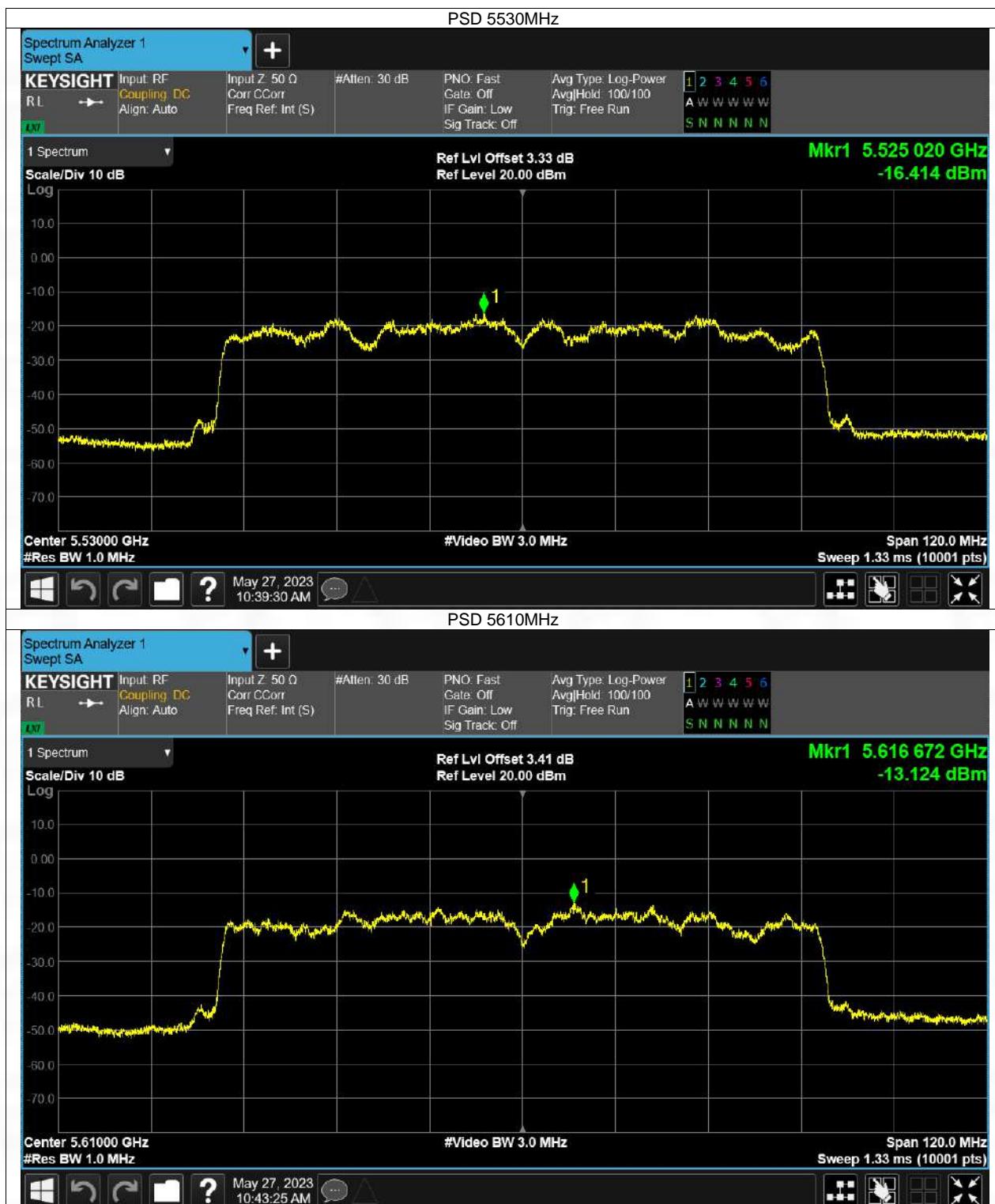
80MHz(IEEE 802.11ac/ax)

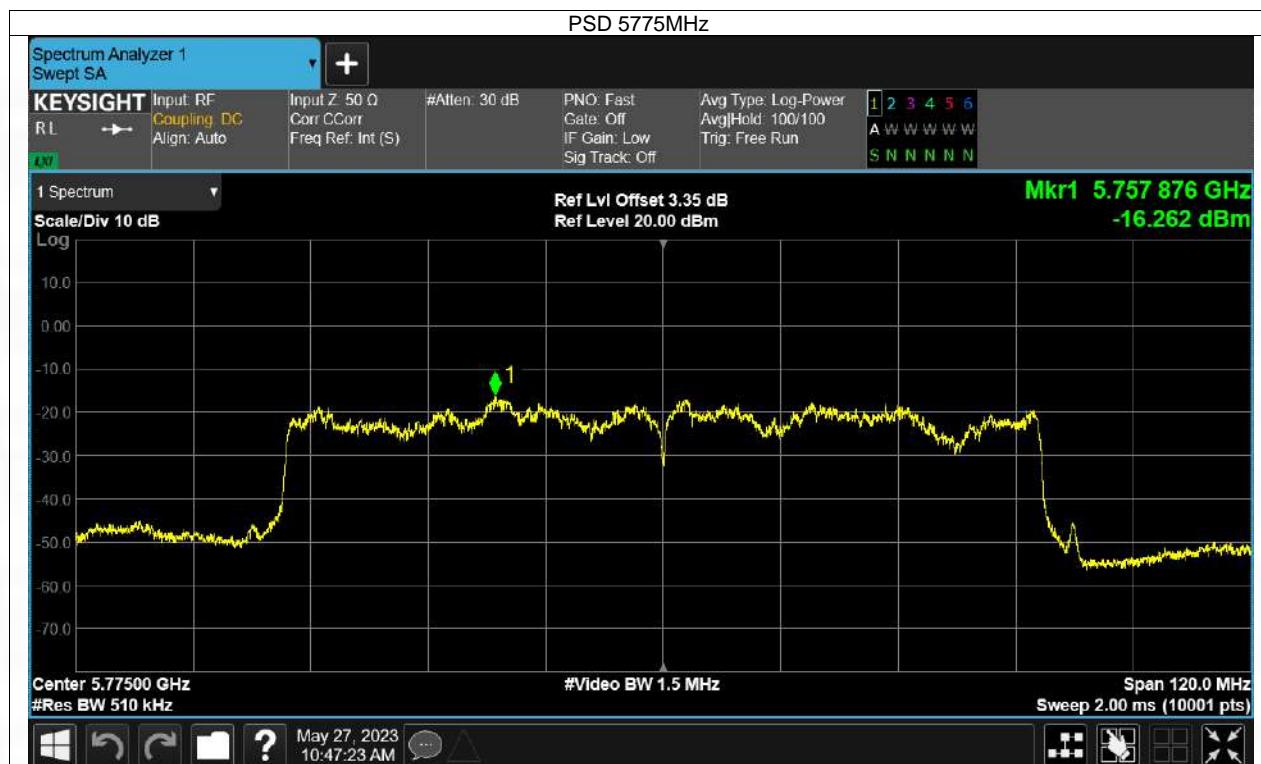
PSD 5210MHz



PSD 5290MHz







4. Frequency Stability

4.1 Ant1

4.1.1 Test Result

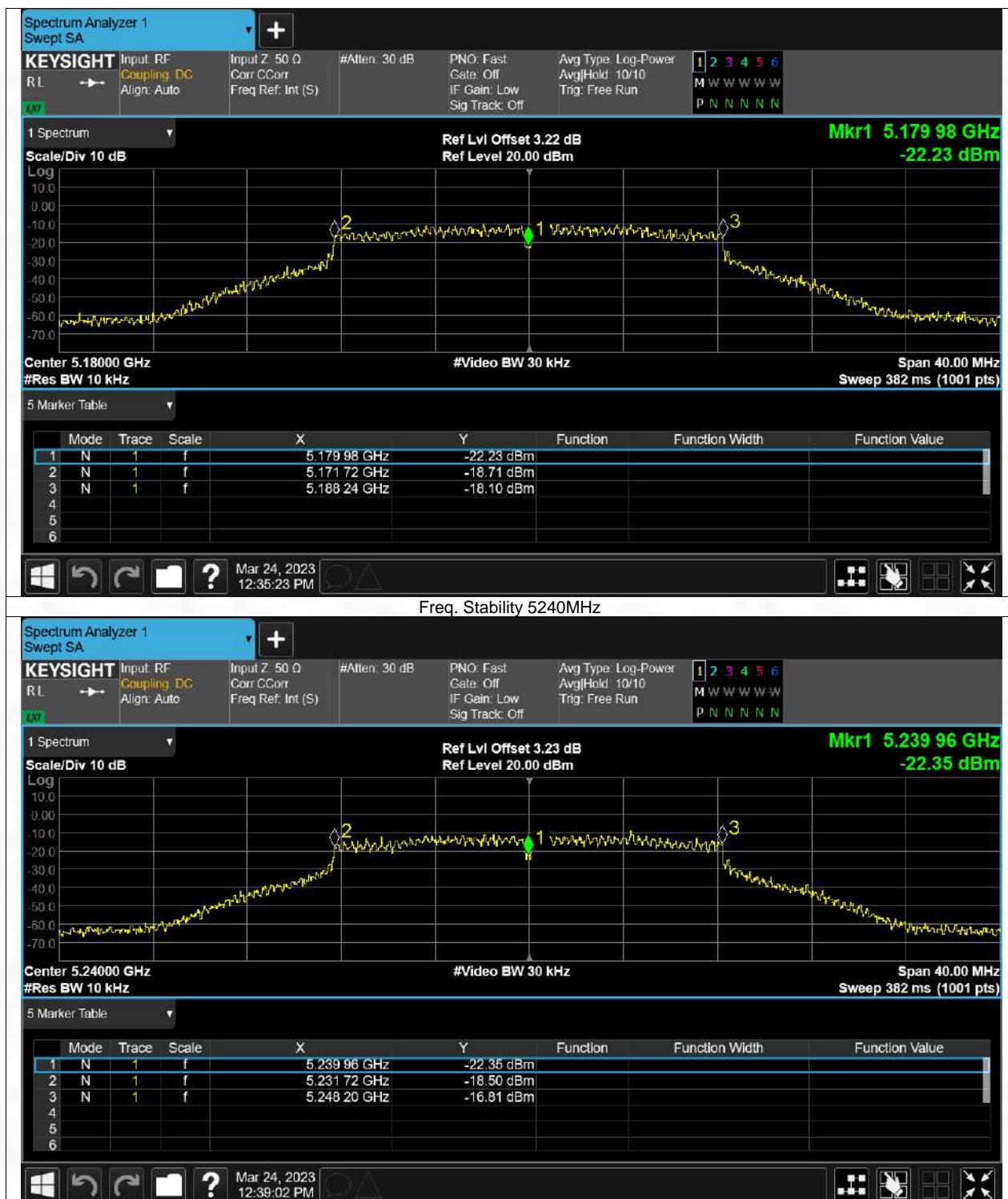
Band	Frequency (MHz)	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20MHz(IEEE 802.11a/n/ac/ax)						
1	5180	5179.98	-20000	-3.86	25	Pass
	5240	5239.96	-40000	-7.63	25	Pass
2	5260	5260	0	0	25	Pass
	5320	5320	0	0	25	Pass
3	5500	5499.98	-20000	-3.64	25	Pass
	5700	5700	0	0	25	Pass
4	5745	5745	0	0	25	Pass
	5825	5824.98	-20000	-3.43	25	Pass
400MHz(IEEE 802.11n/ac/ax)						
1	5190	5190	0	0	25	Pass
	5230	5229.96	-40000	-7.65	25	Pass
2	5270	5269.96	-40000	-7.59	25	Pass
	5310	5309.96	-40000	-7.53	25	Pass
3	5510	5509.96	-40000	-7.26	25	Pass
	5670	5669.96	-40000	-7.05	25	Pass
4	5755	5755	0	0	25	Pass
	5795	5795	0	0	25	Pass
80MHz(IEEE 802.11ac/ax)						
1	5210	5209.92	-80000	-15.36	25	Pass
2	5290	5289.92	-80000	-15.12	25	Pass
3	5530	5529.92	-80000	-14.47	25	Pass
	5610	5609.92	-80000	-14.26	25	Pass
4	5775	5774.92	-80000	-13.85	25	Pass
160MHz(IEEE 802.11ax)						
1	5250	5250	0	0	25	Pass
3	5570	5570	0	0	25	Pass

4.1.2 Test Graph

20MHz(IEEE 802.11a/n/ac/ax)

Band1

Freq. Stability 5180MHz



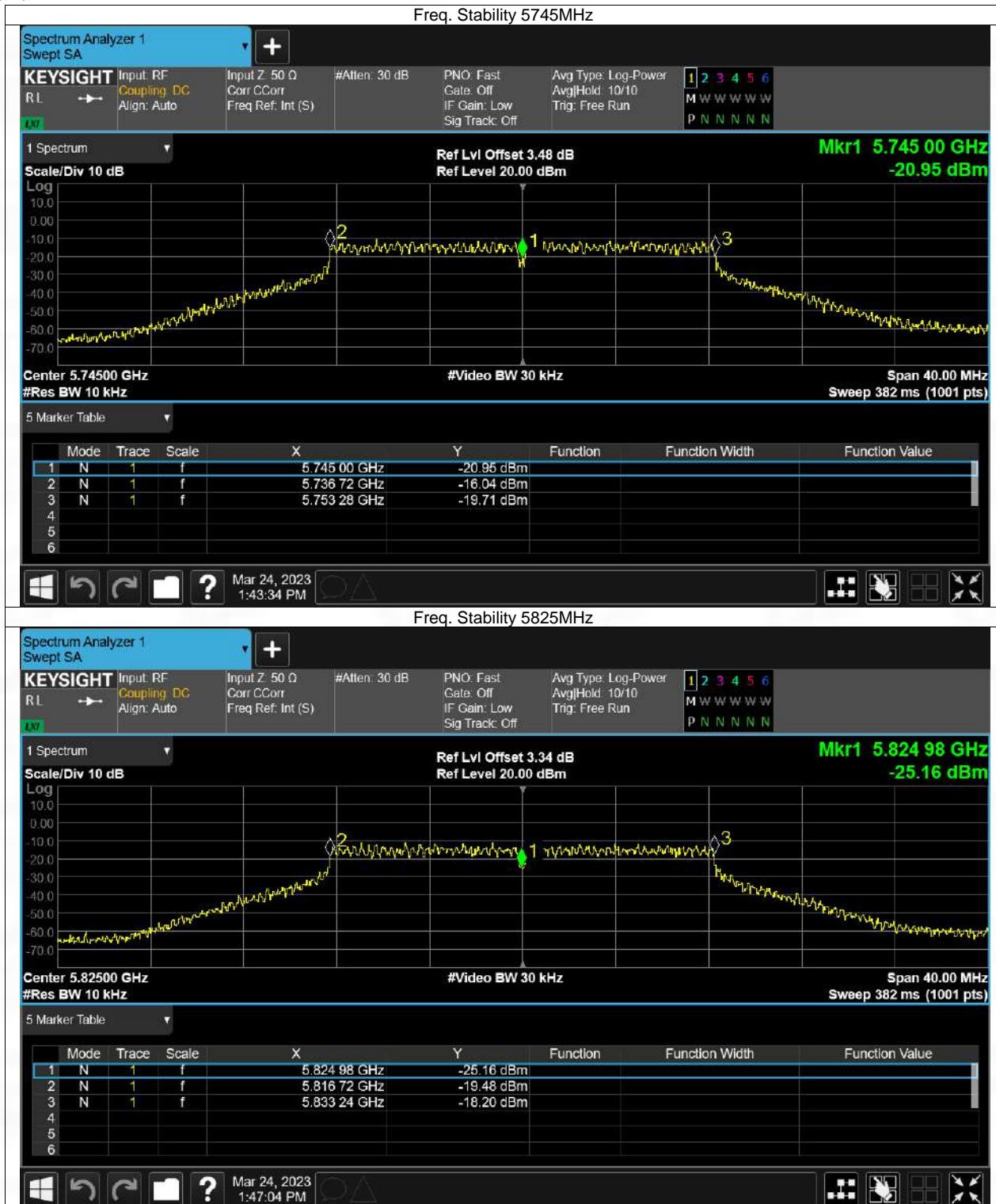
Band2



Band3

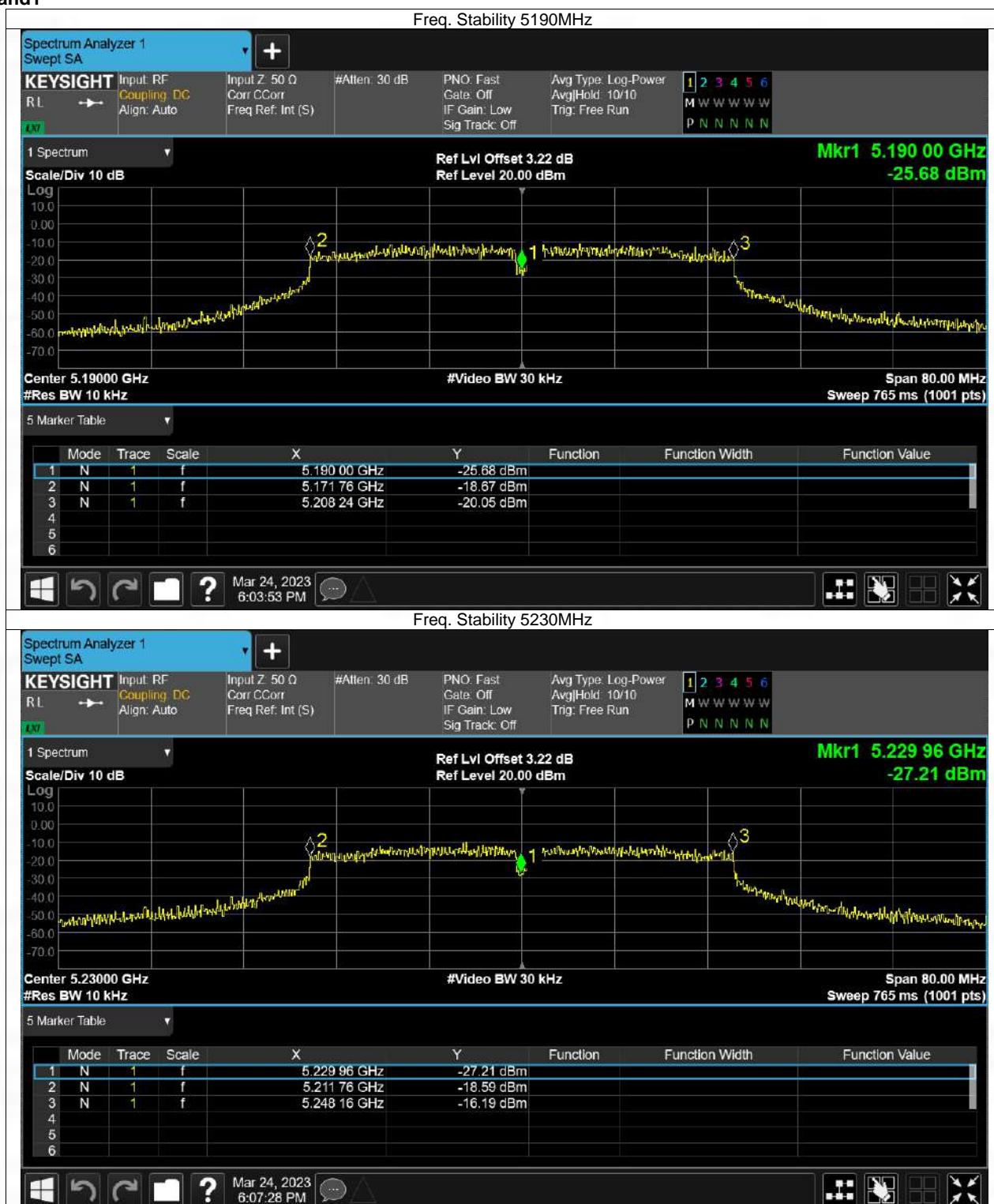


Band4

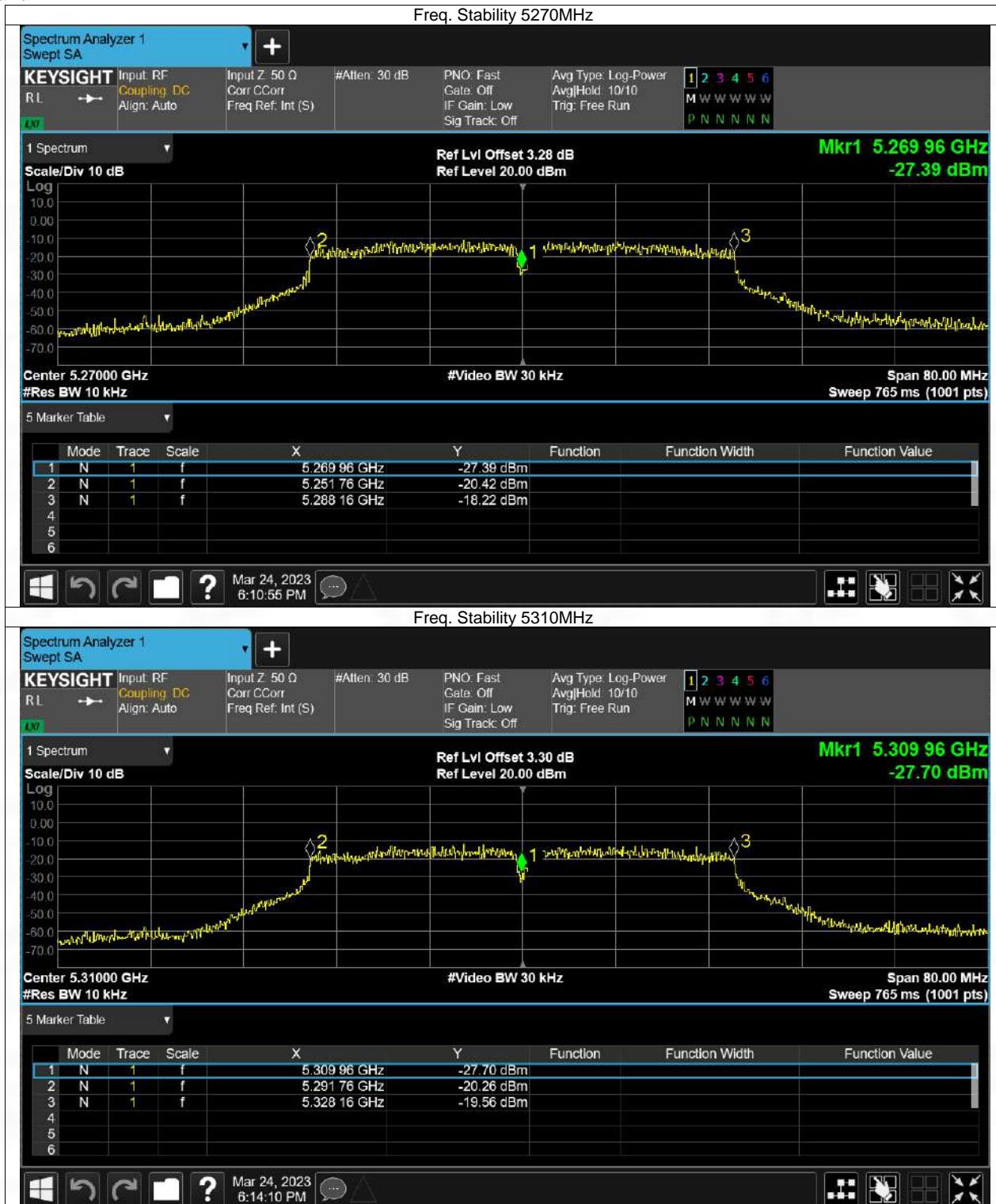


40MHz(IEEE 802.11n/ac/ax)

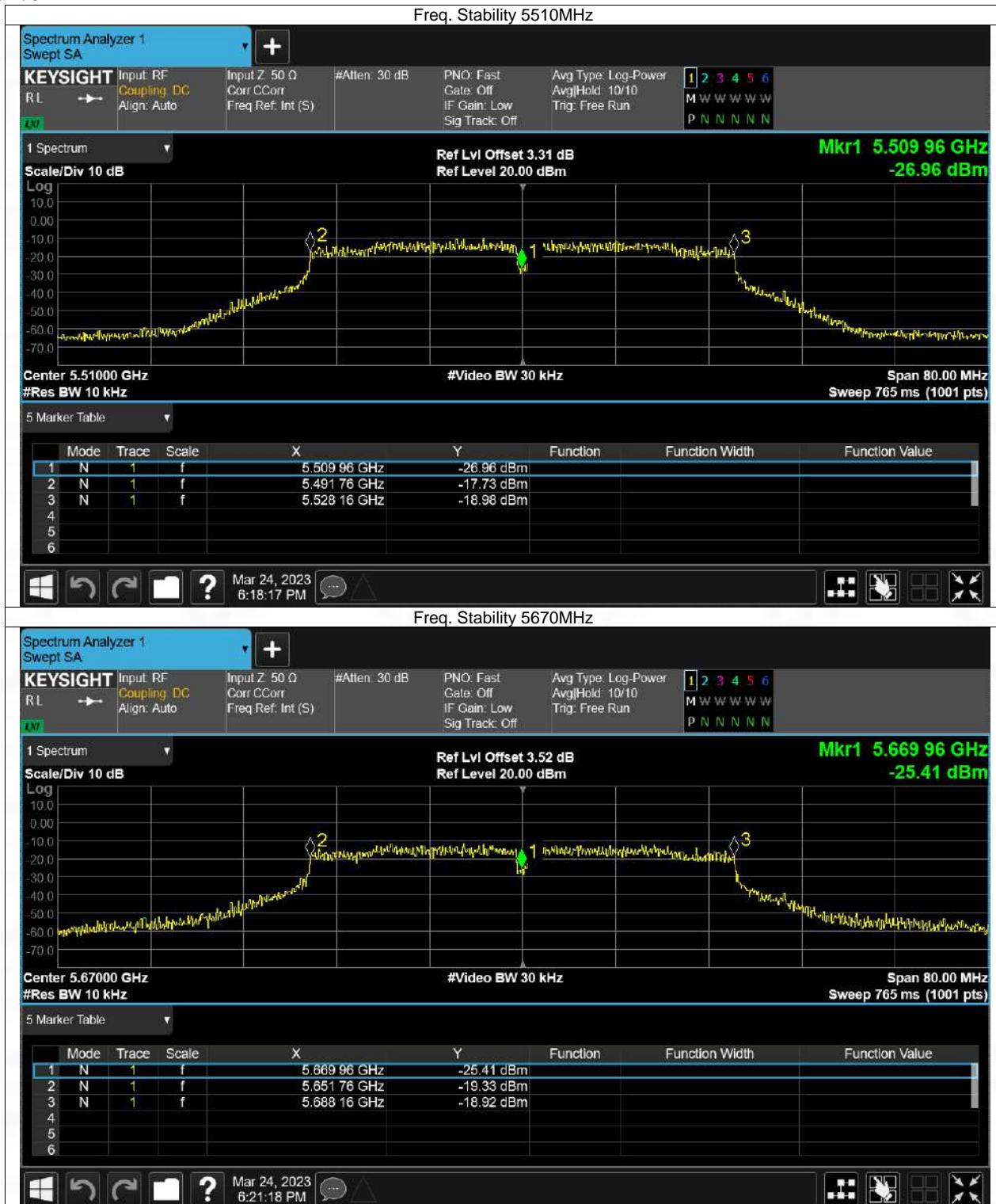
Band1



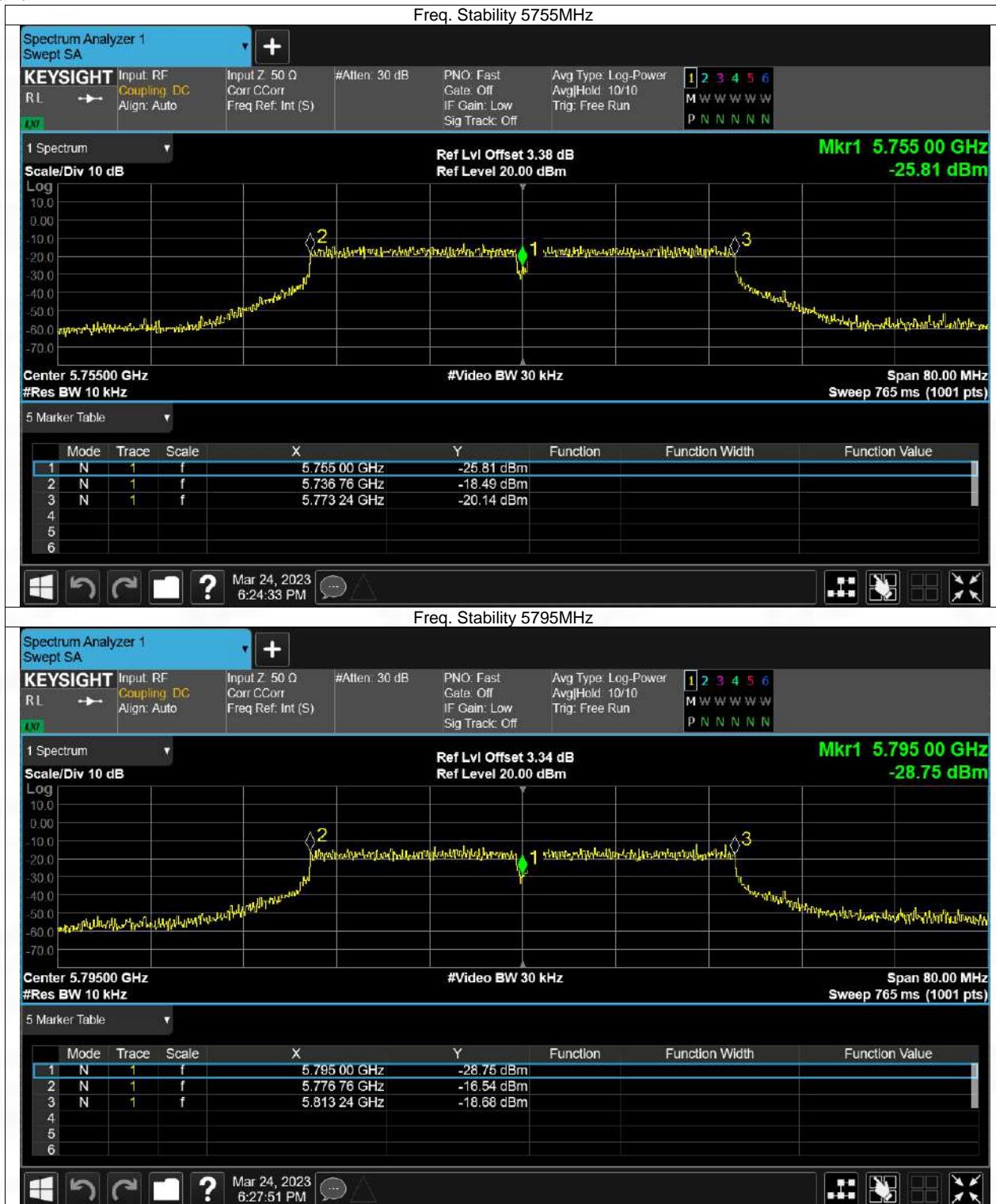
Band2



Band3

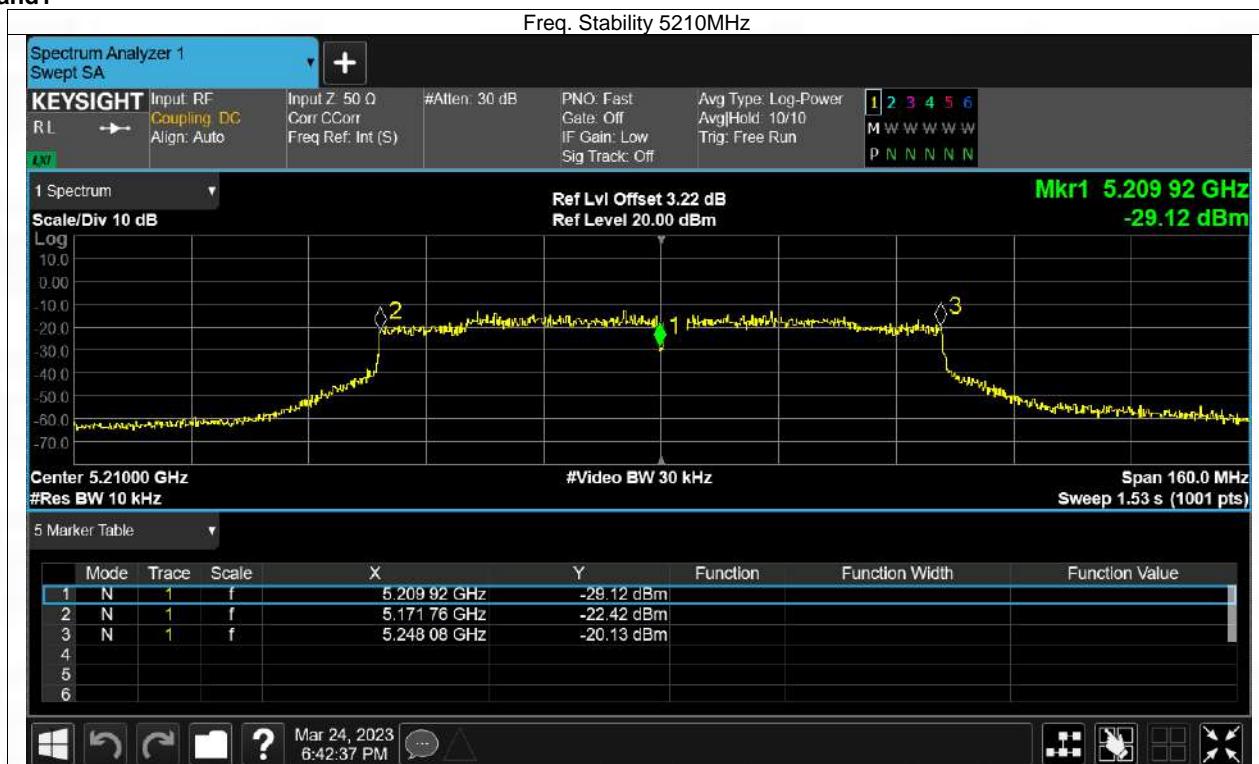


Band4

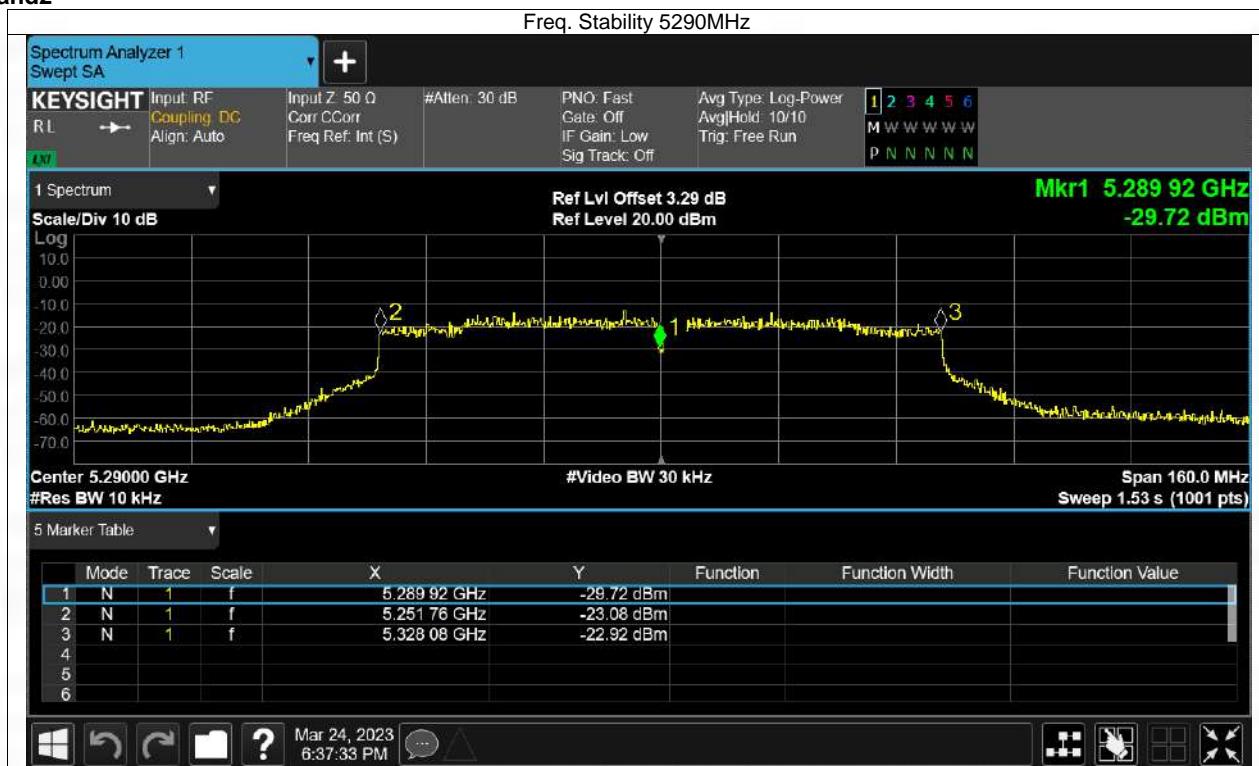


80MHz(IEEE 802.11ac/ax)

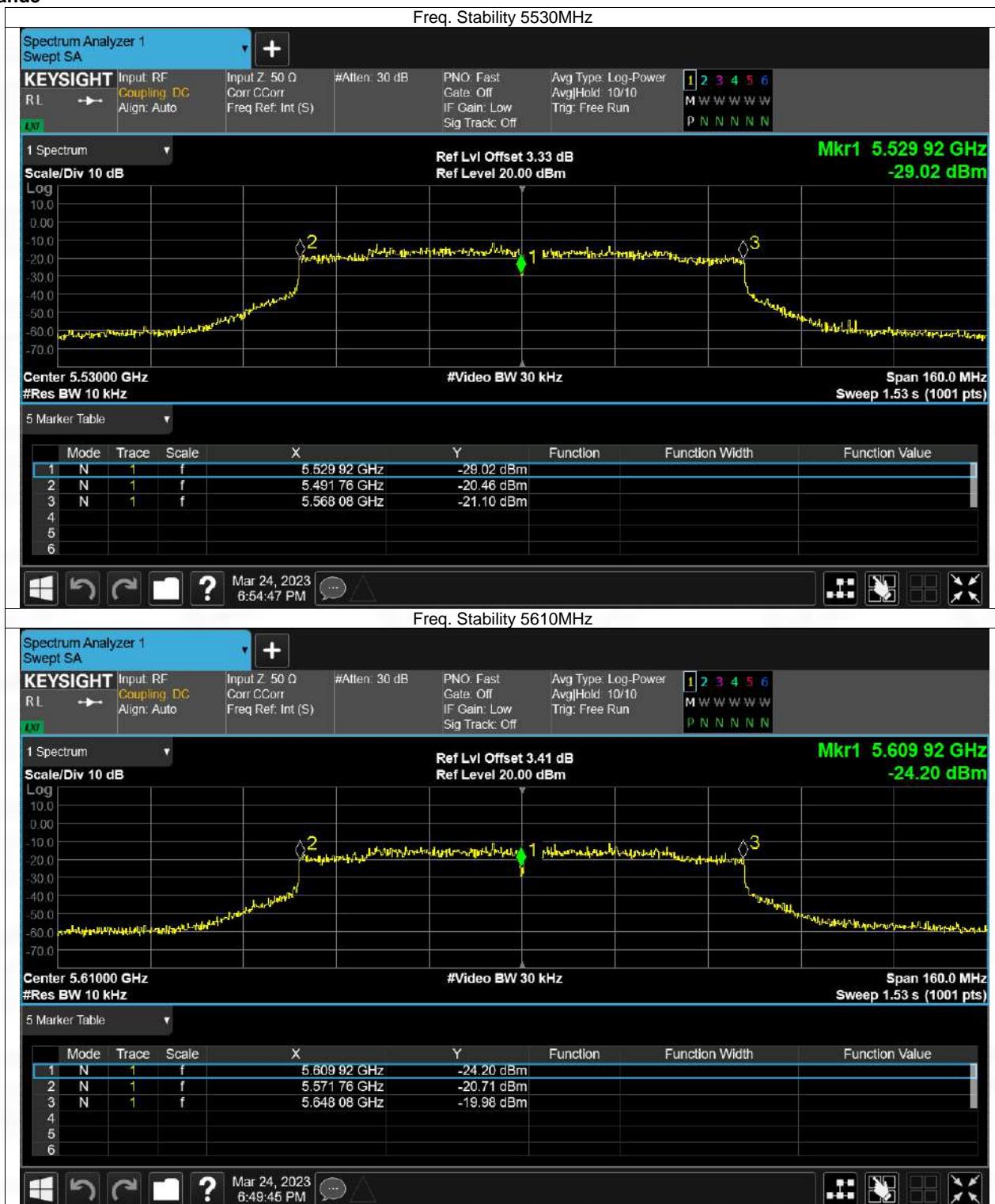
Band1



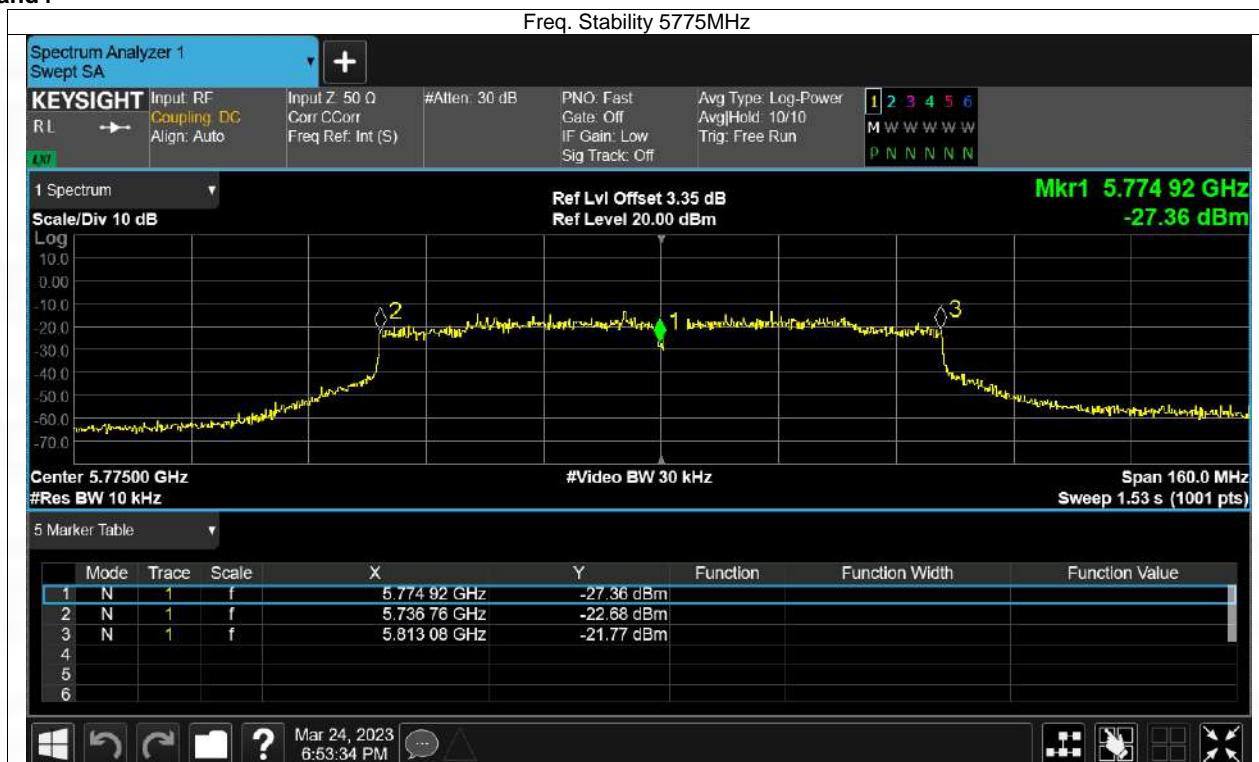
Band2



Band3

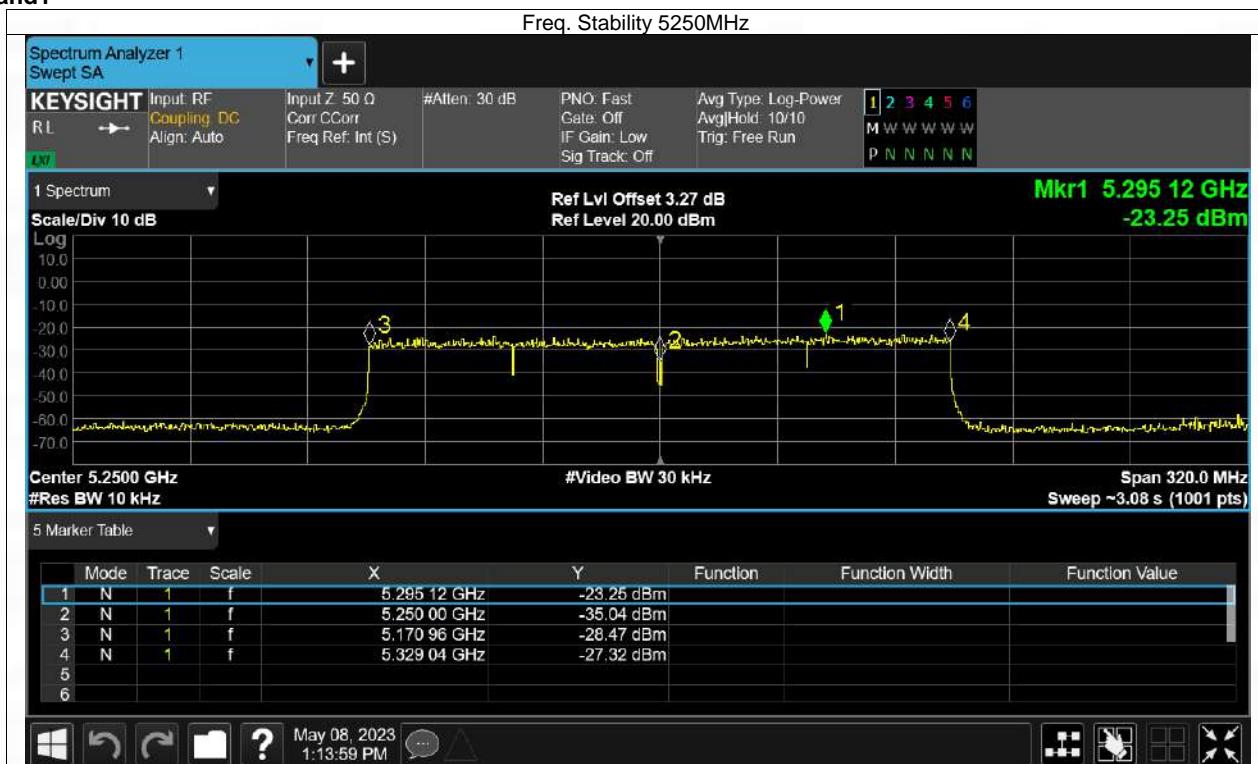


Band4

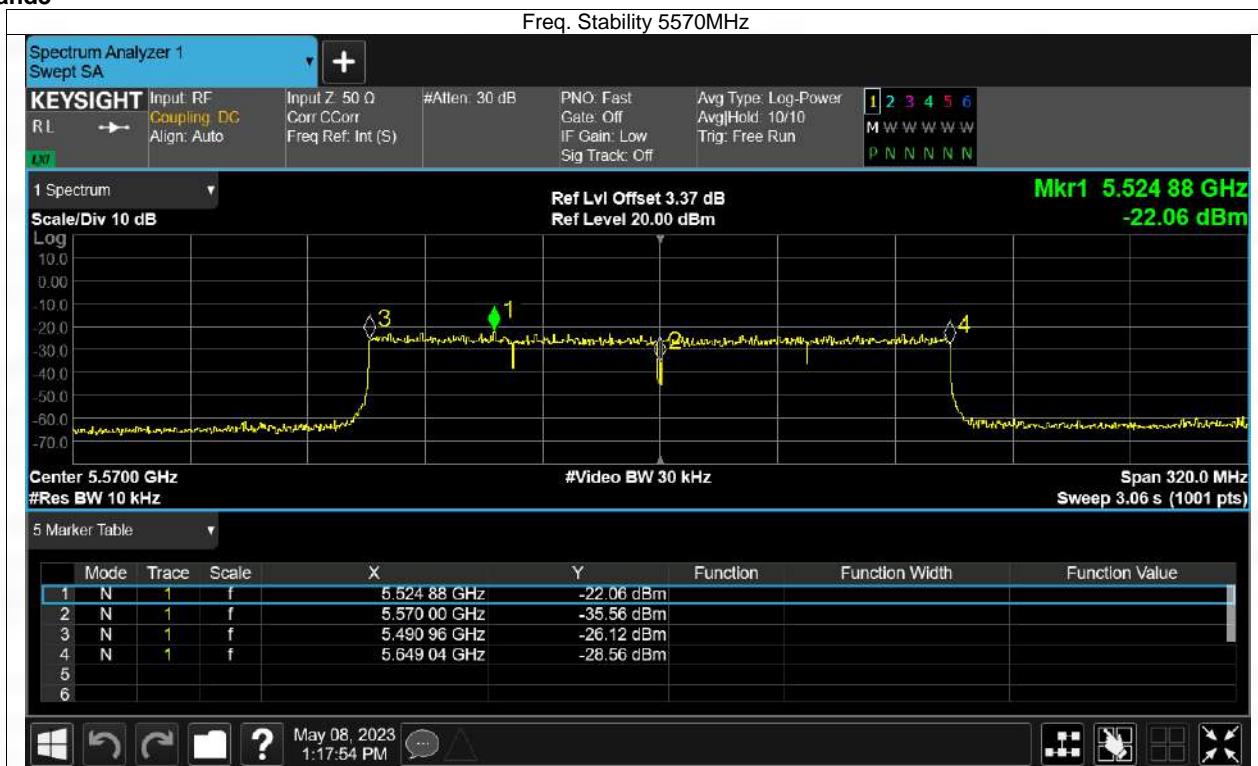


160MHz(IEEE 802.11ax)

Band1



Band3





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www.btf-lab.com

-- END OF REPORT --