

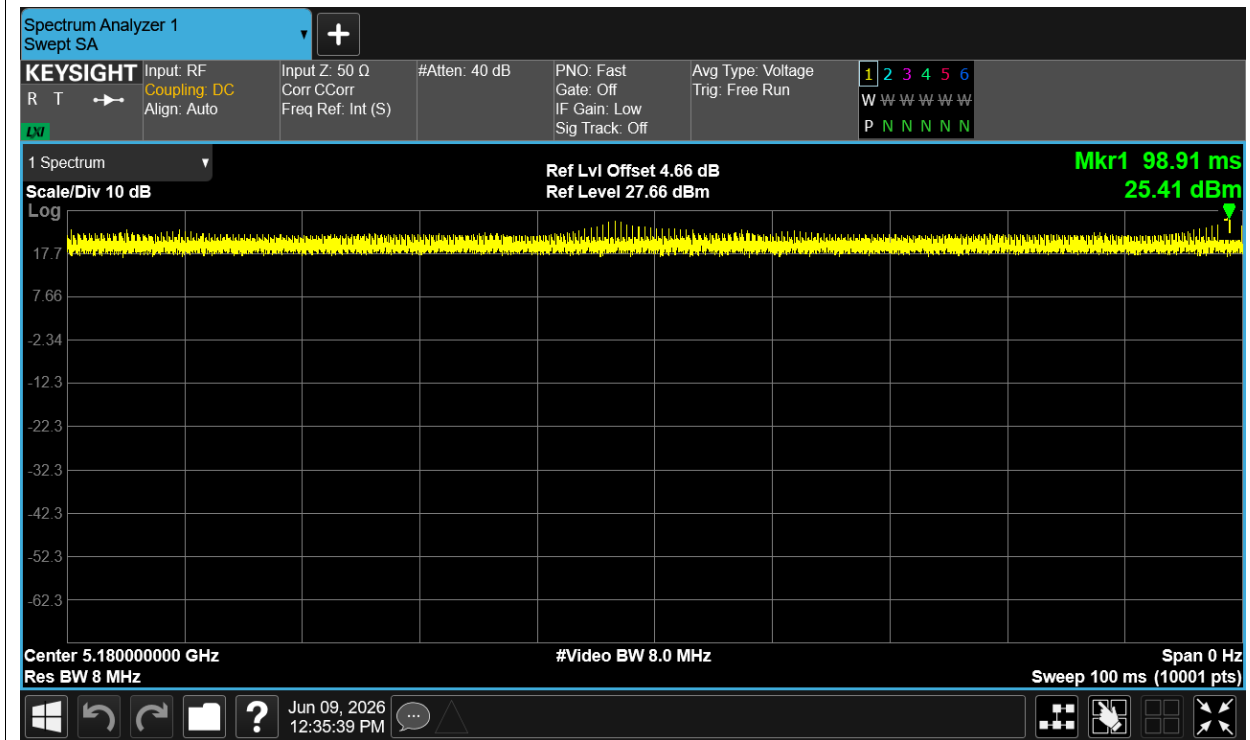
Test Data

Duty Cycle

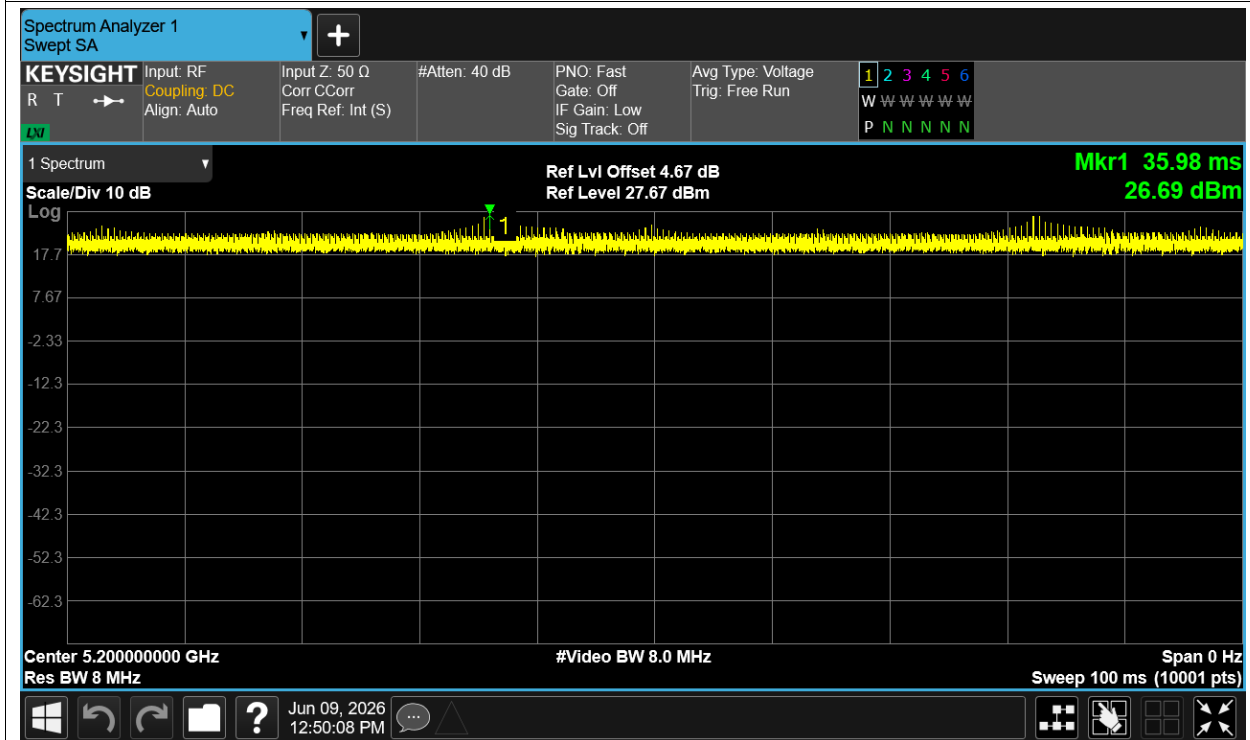
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5180	Ant1	100	0
NVNT	a	5200	Ant1	100	0
NVNT	a	5240	Ant1	100	0
NVNT	a	5180	Ant2	100	0
NVNT	a	5200	Ant2	100	0
NVNT	a	5240	Ant2	100	0
NVNT	ac20	5180	Sum	100	0
NVNT	ac20	5200	Sum	100	0
NVNT	ac20	5240	Sum	100	0
NVNT	ac40	5190	Sum	100	0
NVNT	ac40	5230	Sum	100	0
NVNT	ac80	5210	Sum	100	0
NVNT	n20	5180	Sum	100	0
NVNT	n20	5200	Sum	100	0
NVNT	n20	5240	Sum	100	0
NVNT	n40	5190	Sum	100	0
NVNT	n40	5230	Sum	100	0

Test Graphs

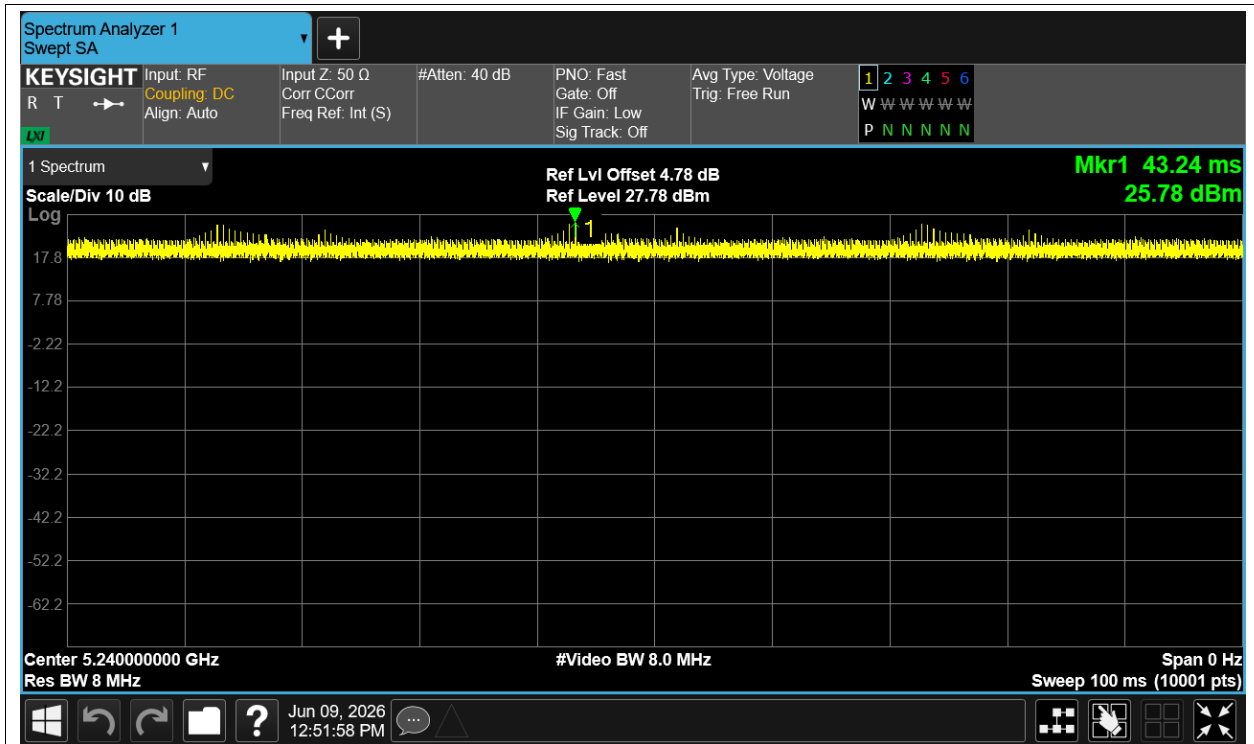
Duty Cycle NVNT a 5180MHz Ant1



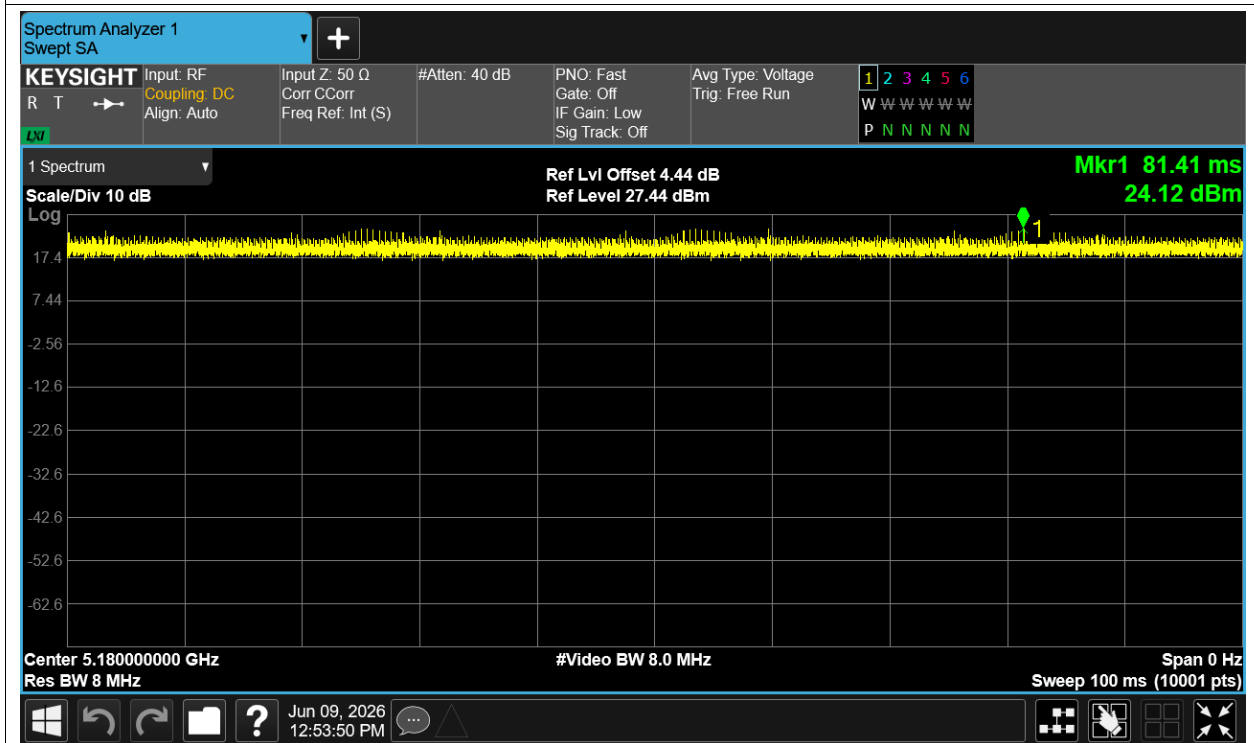
Duty Cycle NVNT a 5200MHz Ant1



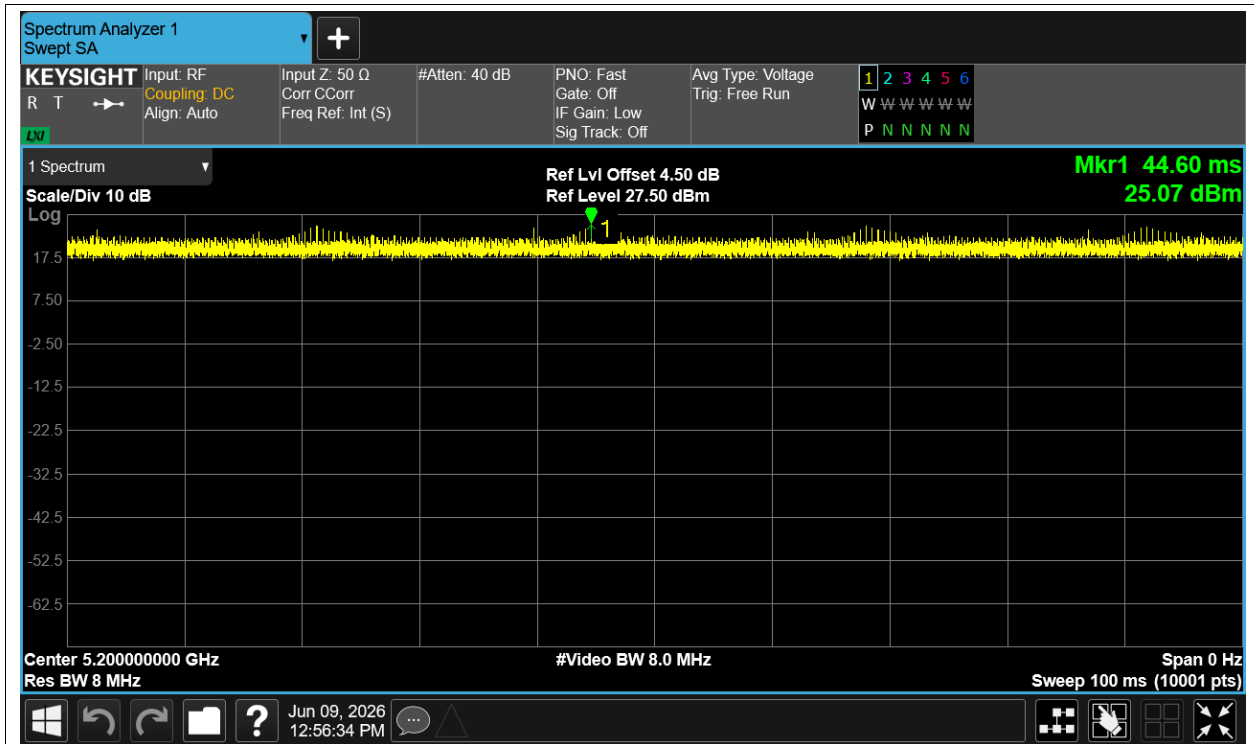
Duty Cycle NVNT a 5240MHz Ant1



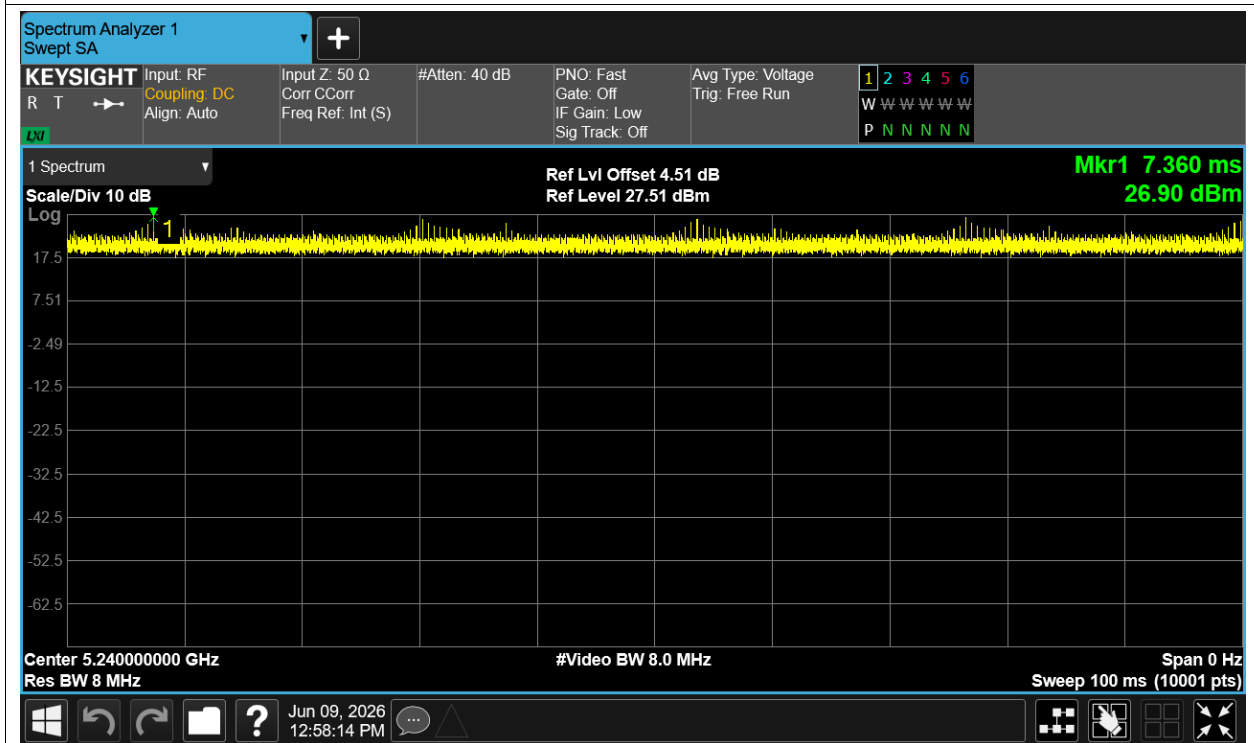
Duty Cycle NVNT a 5180MHz Ant2



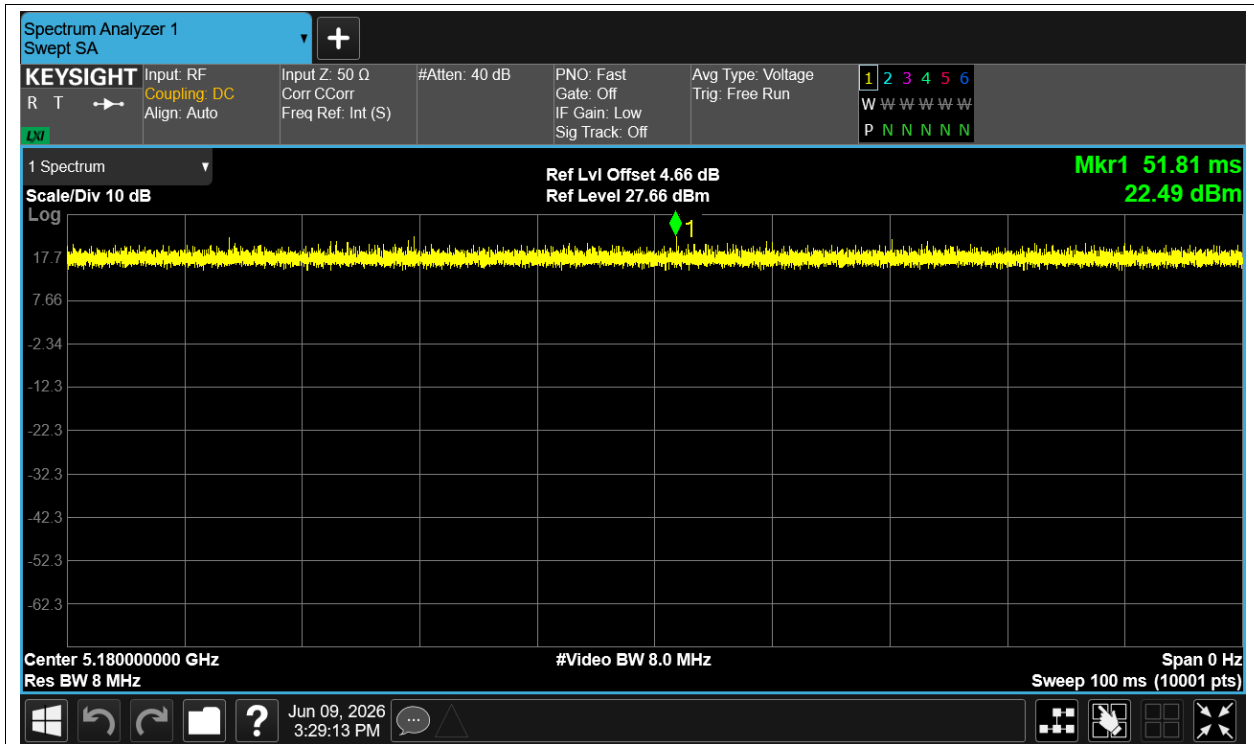
Duty Cycle NVNT a 5200MHz Ant2



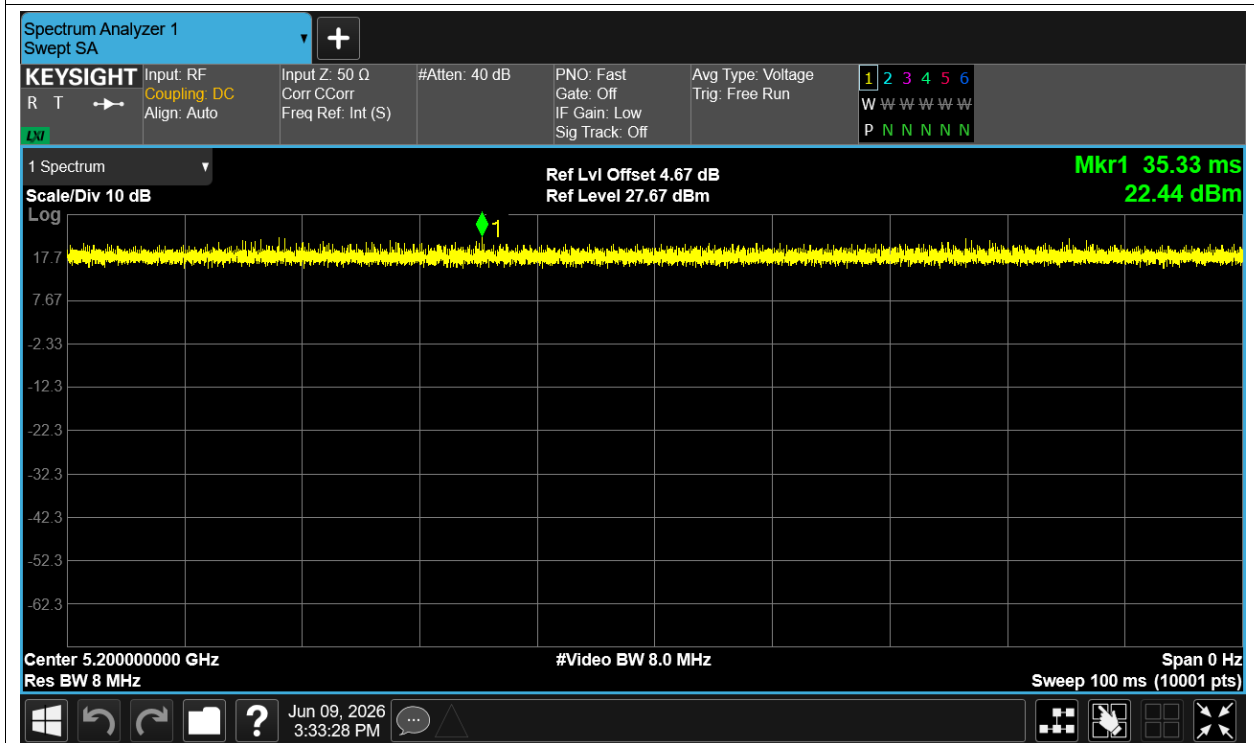
Duty Cycle NVNT a 5240MHz Ant2



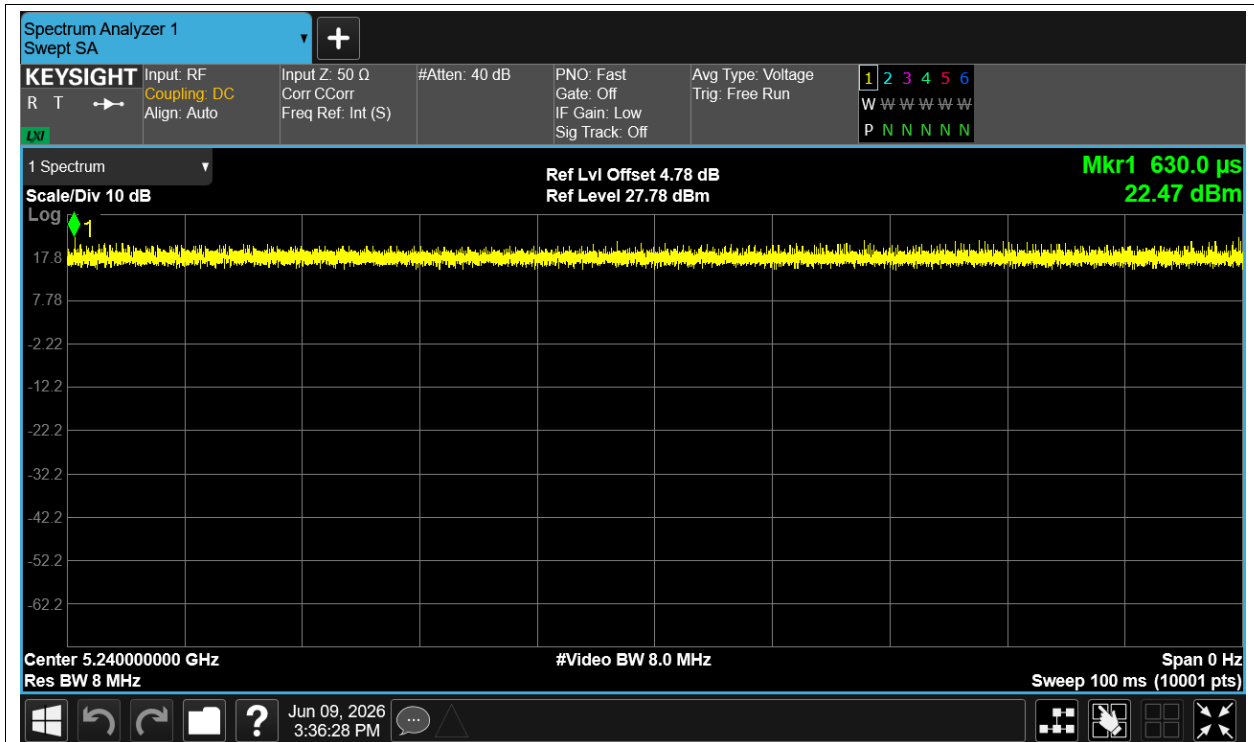
Duty Cycle NVNT ac20 5180MHz Sum



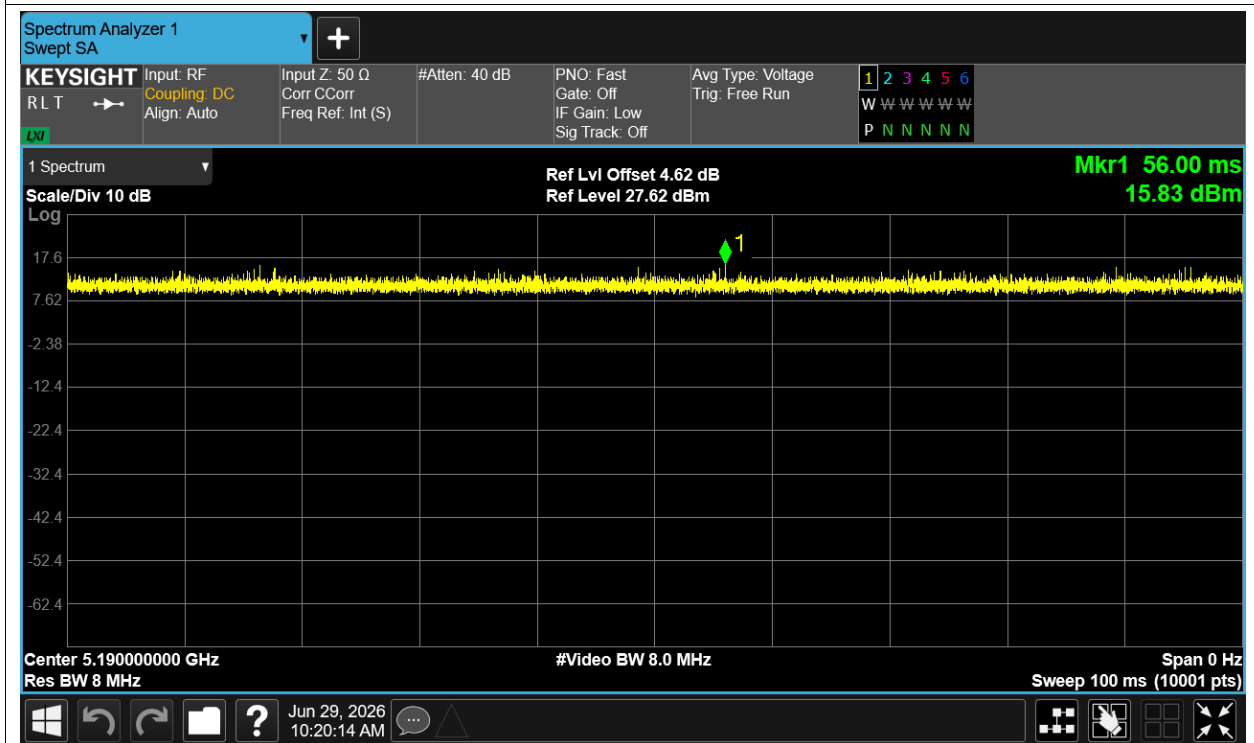
Duty Cycle NVNT ac20 5200MHz Sum



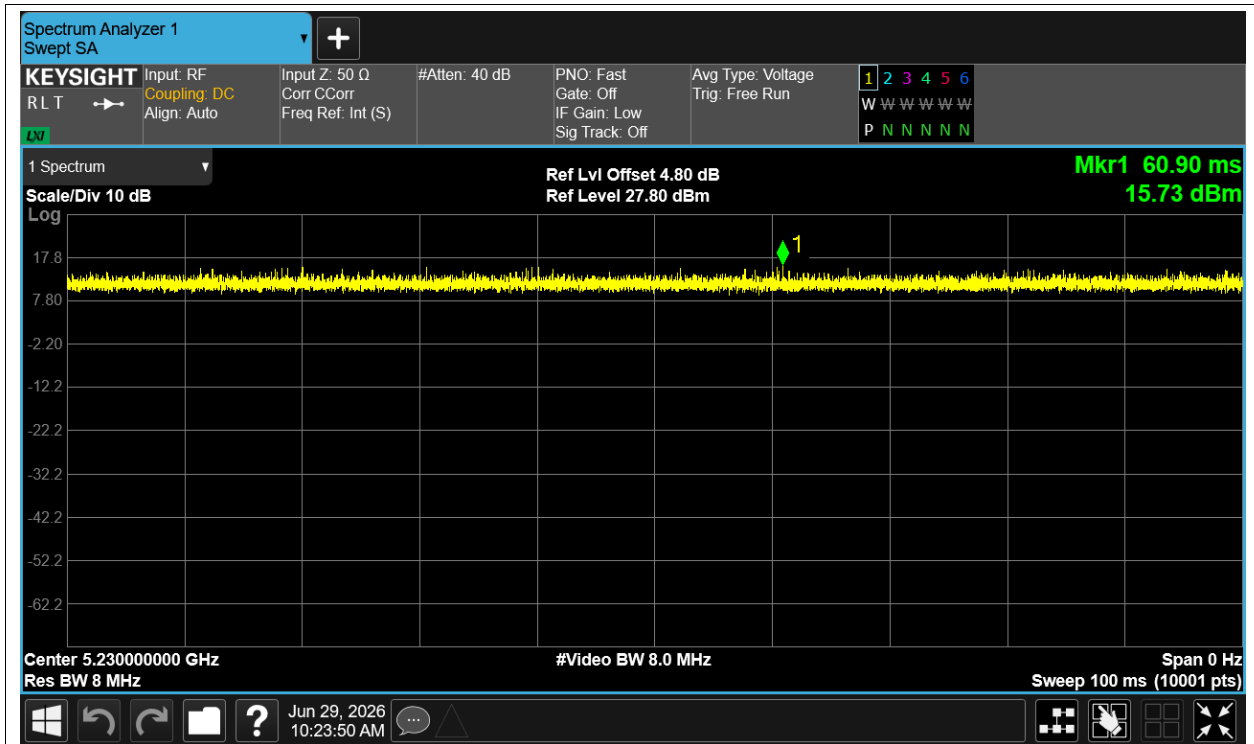
Duty Cycle NVNT ac20 5240MHz Sum



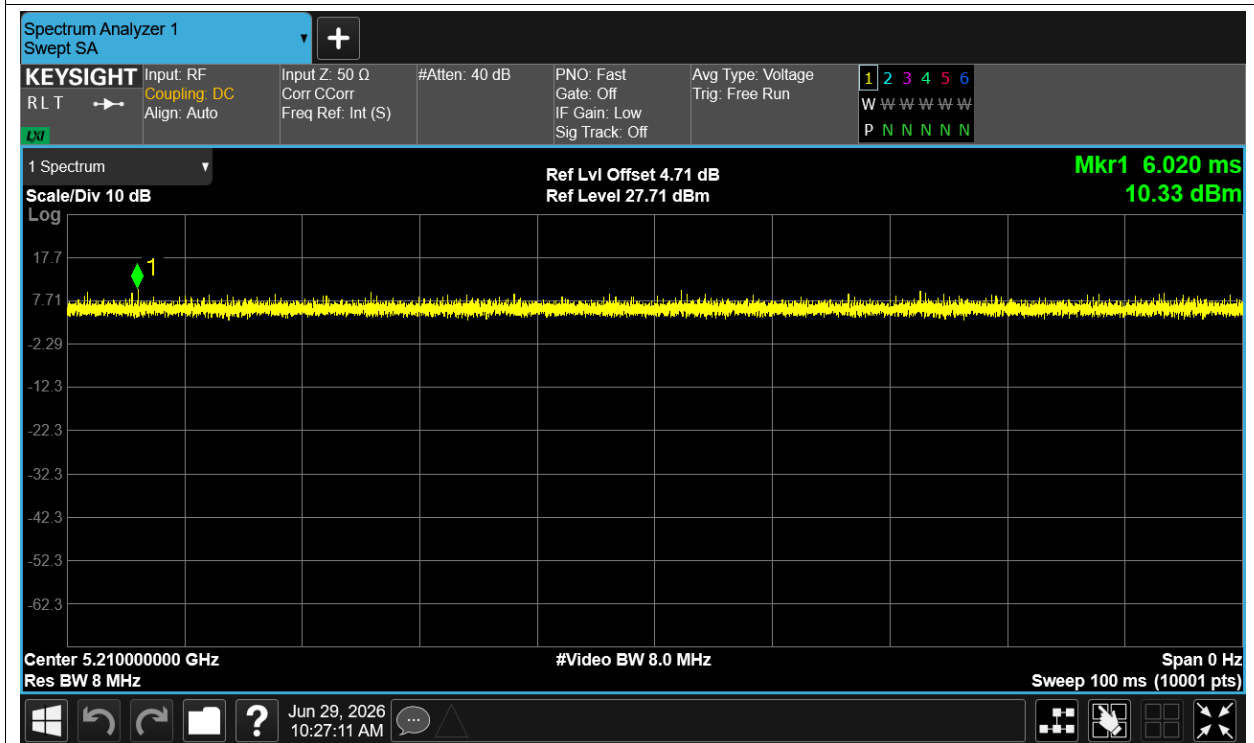
Duty Cycle NVNT ac40 5190MHz Sum



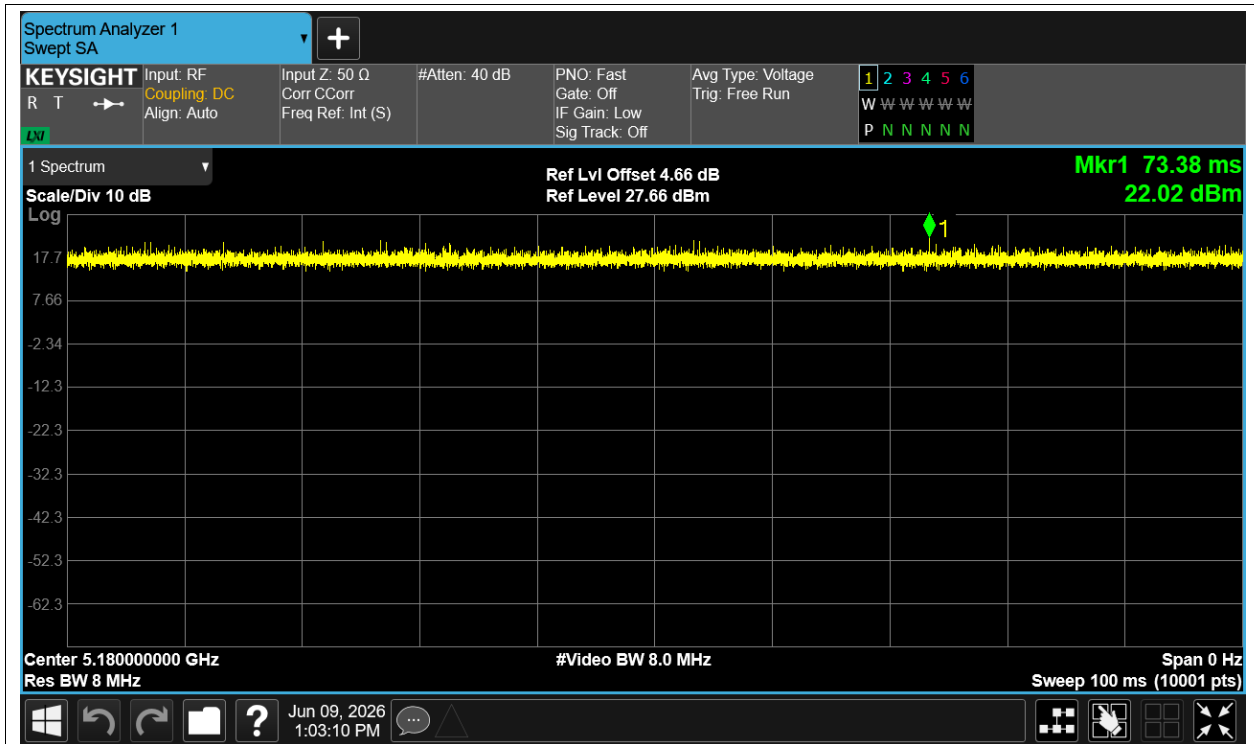
Duty Cycle NVNT ac40 5230MHz Sum



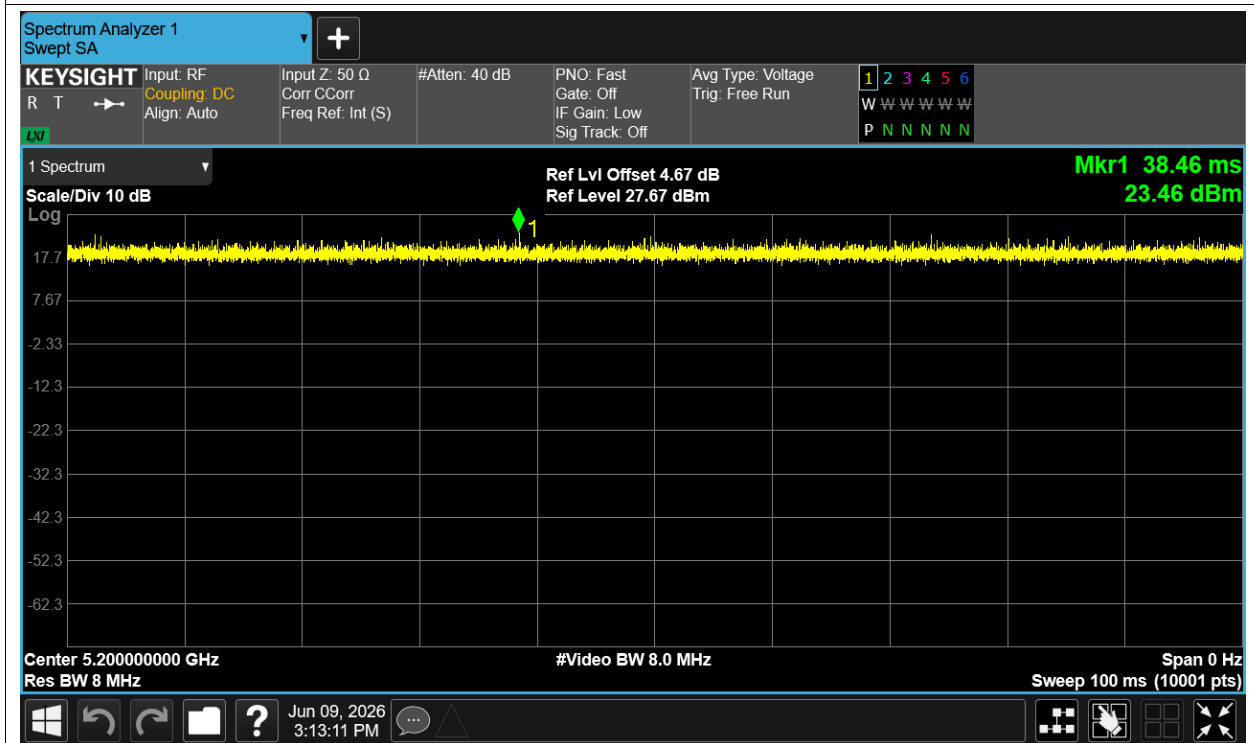
Duty Cycle NVNT ac80 5210MHz Sum



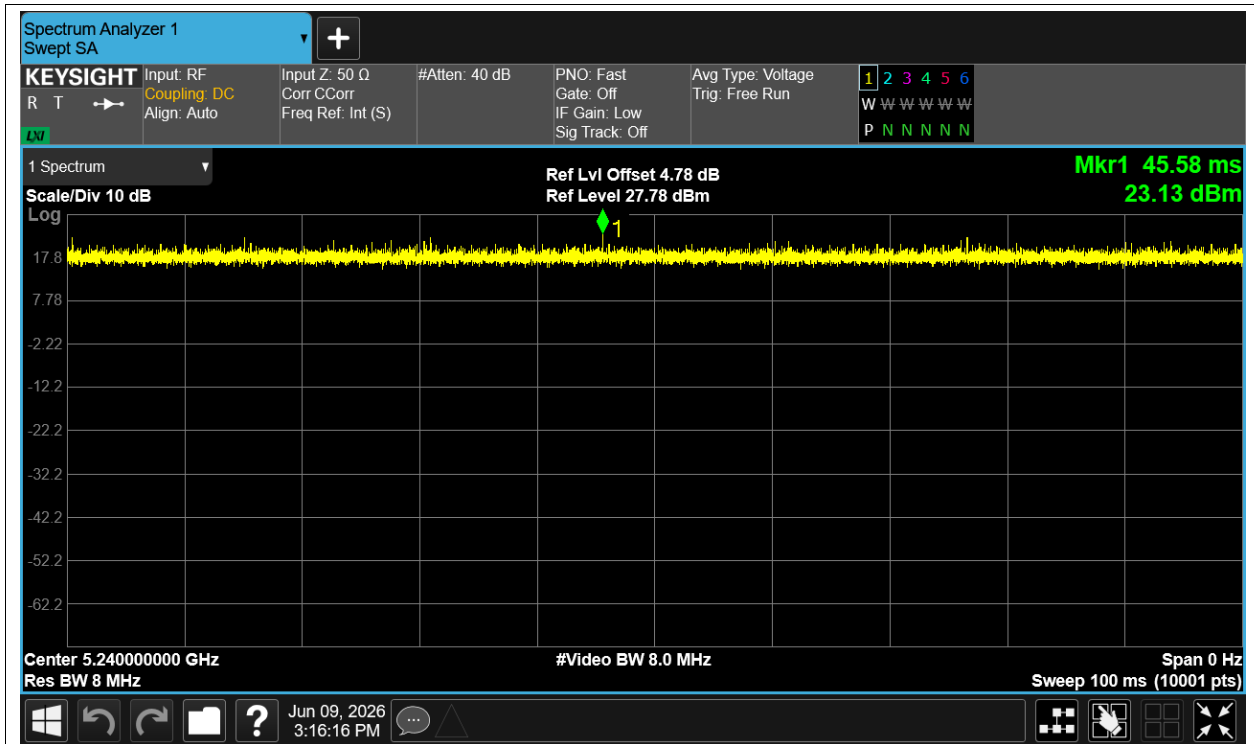
Duty Cycle NVNT n20 5180MHz Sum



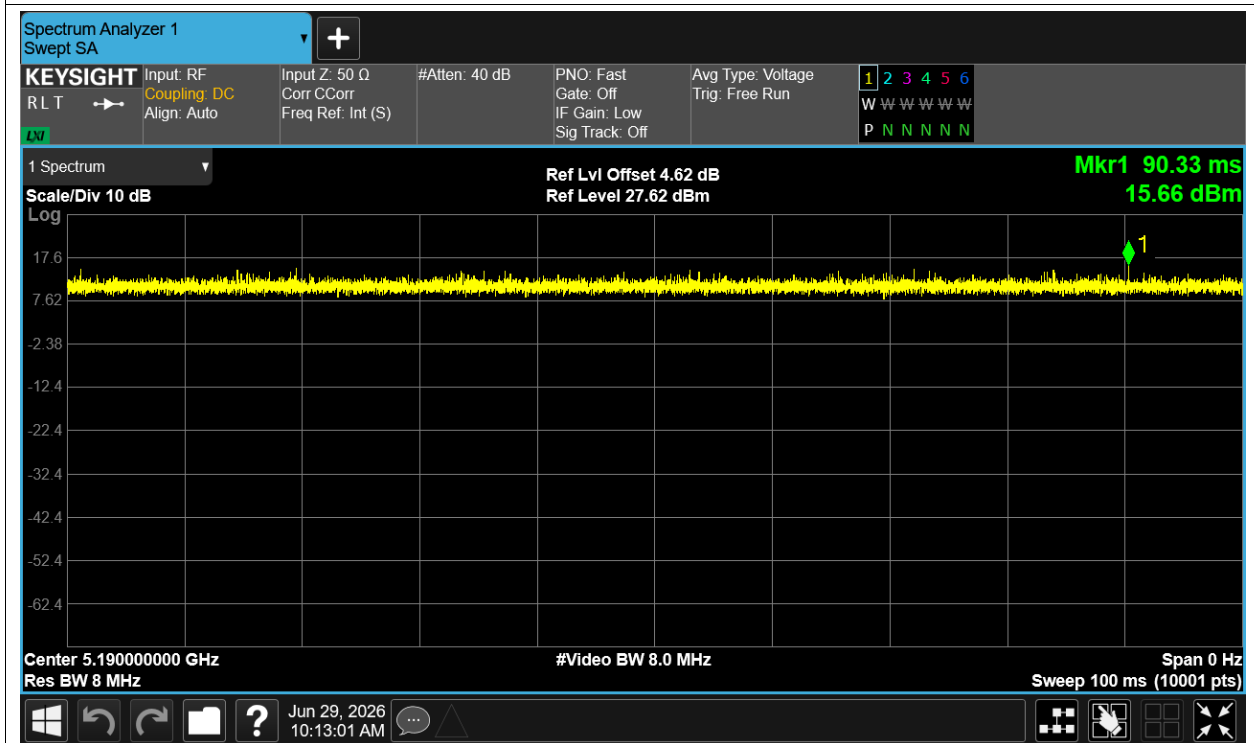
Duty Cycle NVNT n20 5200MHz Sum



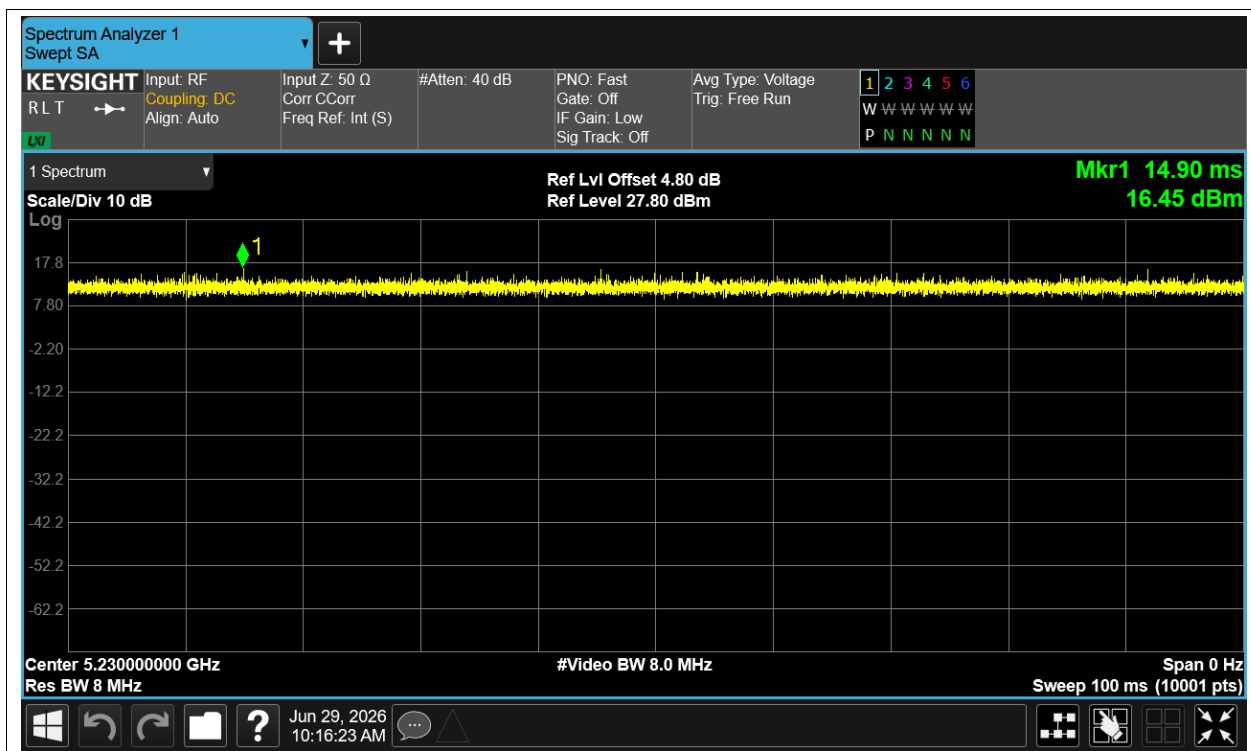
Duty Cycle NVNT n20 5240MHz Sum



Duty Cycle NVNT n40 5190MHz Sum



Duty Cycle NVNT n40 5230MHz Sum



Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	14.55	0	14.55	24	Pass
NVNT	a	5200	Ant1	15.88	0	15.88	24	Pass
NVNT	a	5240	Ant1	14.74	0	14.74	24	Pass
NVNT	a	5180	Ant2	15.62	0	15.62	24	Pass
NVNT	a	5200	Ant2	14.91	0	14.91	24	Pass
NVNT	a	5240	Ant2	16.43	0	16.43	24	Pass
NVNT	ac20	5180	Ant1	12.62	0	12.62	22.60	Pass
NVNT	ac20	5180	Ant2	13.72	0	13.72	22.60	Pass
NVNT	ac20	5180	Sum	16.215	0	16.215	22.60	Pass
NVNT	ac20	5200	Ant1	13.79	0	13.79	22.60	Pass
NVNT	ac20	5200	Ant2	13.03	0	13.03	22.60	Pass
NVNT	ac20	5200	Sum	16.437	0	16.437	22.60	Pass
NVNT	ac20	5240	Ant1	12.88	0	12.88	22.60	Pass
NVNT	ac20	5240	Ant2	14.73	0	14.73	22.60	Pass
NVNT	ac20	5240	Sum	16.913	0	16.913	22.60	Pass
NVNT	ac40	5190	Ant1	10.06	0	10.06	22.60	Pass
NVNT	ac40	5190	Ant2	9.62	0	9.62	22.60	Pass
NVNT	ac40	5190	Sum	12.856	0	12.856	22.60	Pass
NVNT	ac40	5230	Ant1	10.36	0	10.36	22.60	Pass
NVNT	ac40	5230	Ant2	10.22	0	10.22	22.60	Pass
NVNT	ac40	5230	Sum	13.301	0	13.301	22.60	Pass
NVNT	ac80	5210	Ant1	7.5	0	7.5	22.60	Pass
NVNT	ac80	5210	Ant2	7.83	0	7.83	22.60	Pass
NVNT	ac80	5210	Sum	10.678	0	10.678	22.60	Pass
NVNT	n20	5180	Ant1	12.94	0	12.94	22.60	Pass
NVNT	n20	5180	Ant2	14.17	0	14.17	22.60	Pass
NVNT	n20	5180	Sum	16.609	0	16.609	22.60	Pass
NVNT	n20	5200	Ant1	14.51	0	14.51	22.60	Pass
NVNT	n20	5200	Ant2	13.97	0	13.97	22.60	Pass
NVNT	n20	5200	Sum	17.259	0	17.259	22.60	Pass
NVNT	n20	5240	Ant1	13.16	0	13.16	22.60	Pass
NVNT	n20	5240	Ant2	14.45	0	14.45	22.60	Pass
NVNT	n20	5240	Sum	16.863	0	16.863	22.60	Pass
NVNT	n40	5190	Ant1	9.98	0	9.98	22.60	Pass
NVNT	n40	5190	Ant2	9.61	0	9.61	22.60	Pass
NVNT	n40	5190	Sum	12.809	0	12.809	22.60	Pass
NVNT	n40	5230	Ant1	10.59	0	10.59	22.60	Pass
NVNT	n40	5230	Ant2	10.33	0	10.33	22.60	Pass
NVNT	n40	5230	Sum	13.472	0	13.472	22.60	Pass

Note: The limits need reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

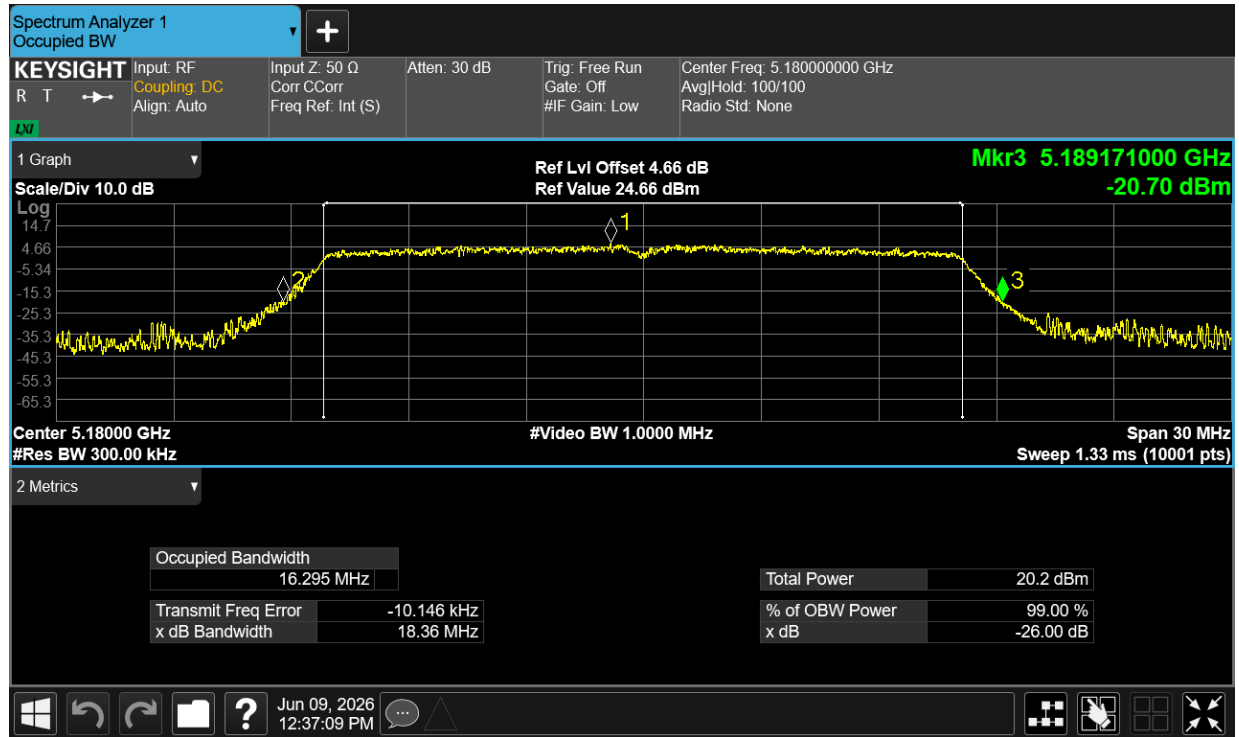
For MIMO mode: ant gain is $4.39+10*\log_{10}(2) = 4.39+3.01=7.4$ dBi, the limit is $24-(7.4-6) = 22.6$ dbm.

-26dB Bandwidth

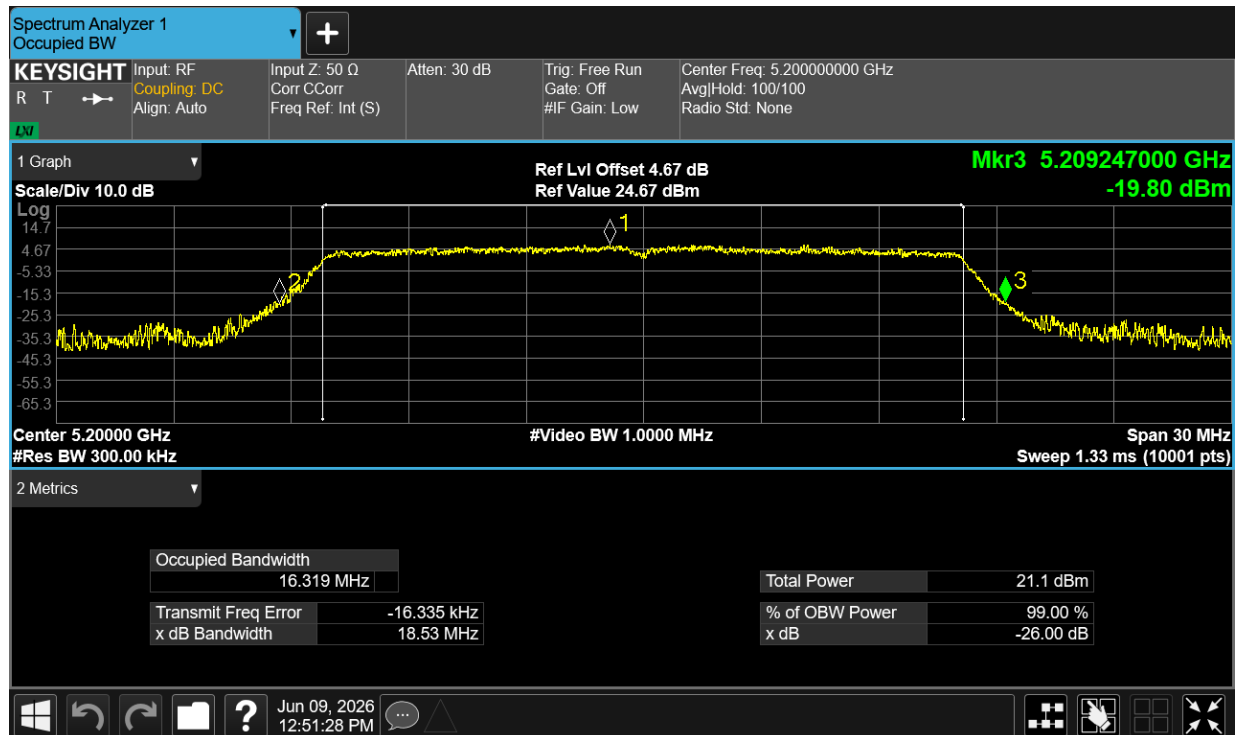
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	a	5180	Ant1	18.363
NVNT	a	5200	Ant1	18.526
NVNT	a	5240	Ant1	18.524
NVNT	a	5180	Ant2	18.633
NVNT	a	5200	Ant2	18.333
NVNT	a	5240	Ant2	18.295
NVNT	ac20	5180	Ant1	19.439
NVNT	ac20	5180	Ant2	19.435
NVNT	ac20	5200	Ant1	19.341
NVNT	ac20	5200	Ant2	19.404
NVNT	ac20	5240	Ant1	19.467
NVNT	ac20	5240	Ant2	19.353
NVNT	ac40	5190	Ant1	38.797
NVNT	ac40	5190	Ant2	38.889
NVNT	ac40	5230	Ant1	38.819
NVNT	ac40	5230	Ant2	38.912
NVNT	ac80	5210	Ant1	80.611
NVNT	ac80	5210	Ant2	79.692
NVNT	n20	5180	Ant1	19.32
NVNT	n20	5180	Ant2	19.374
NVNT	n20	5200	Ant1	19.384
NVNT	n20	5200	Ant2	19.306
NVNT	n20	5240	Ant1	19.376
NVNT	n20	5240	Ant2	19.439
NVNT	n40	5190	Ant1	38.787
NVNT	n40	5190	Ant2	38.85
NVNT	n40	5230	Ant1	38.71
NVNT	n40	5230	Ant2	38.812

Test Graphs

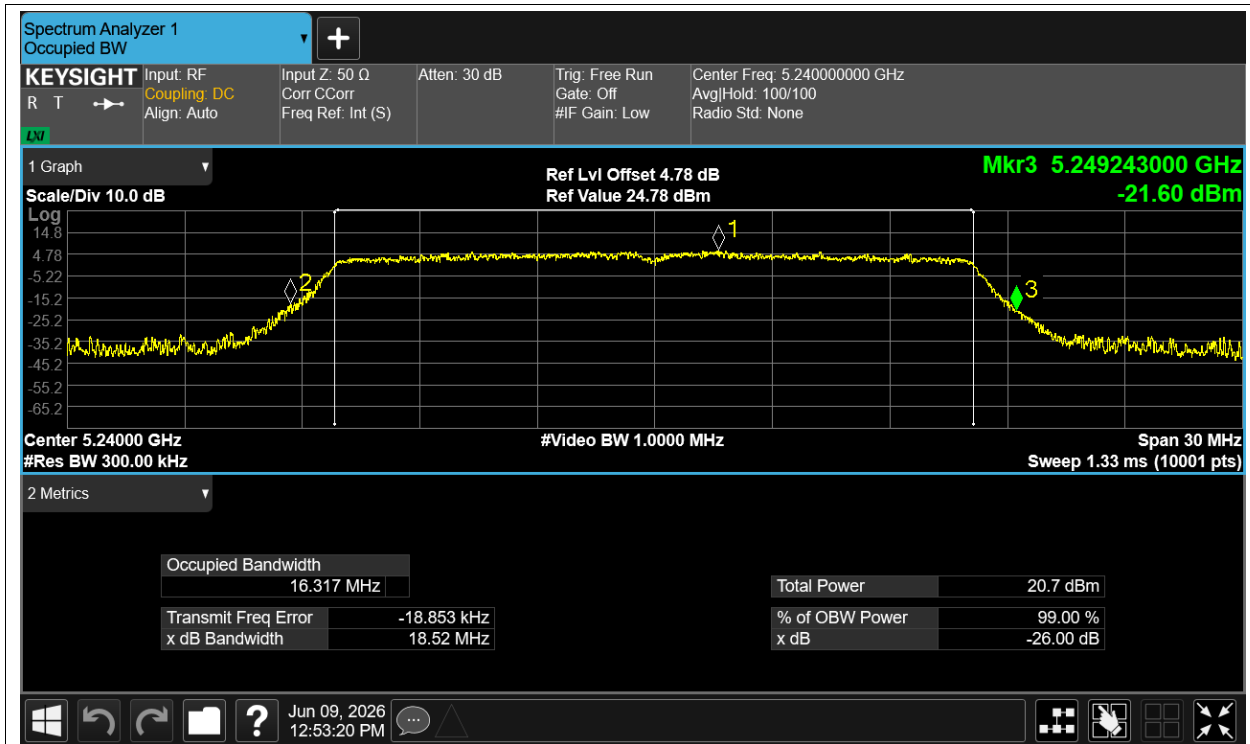
-26dB Bandwidth NVNT a 5180MHz Ant1



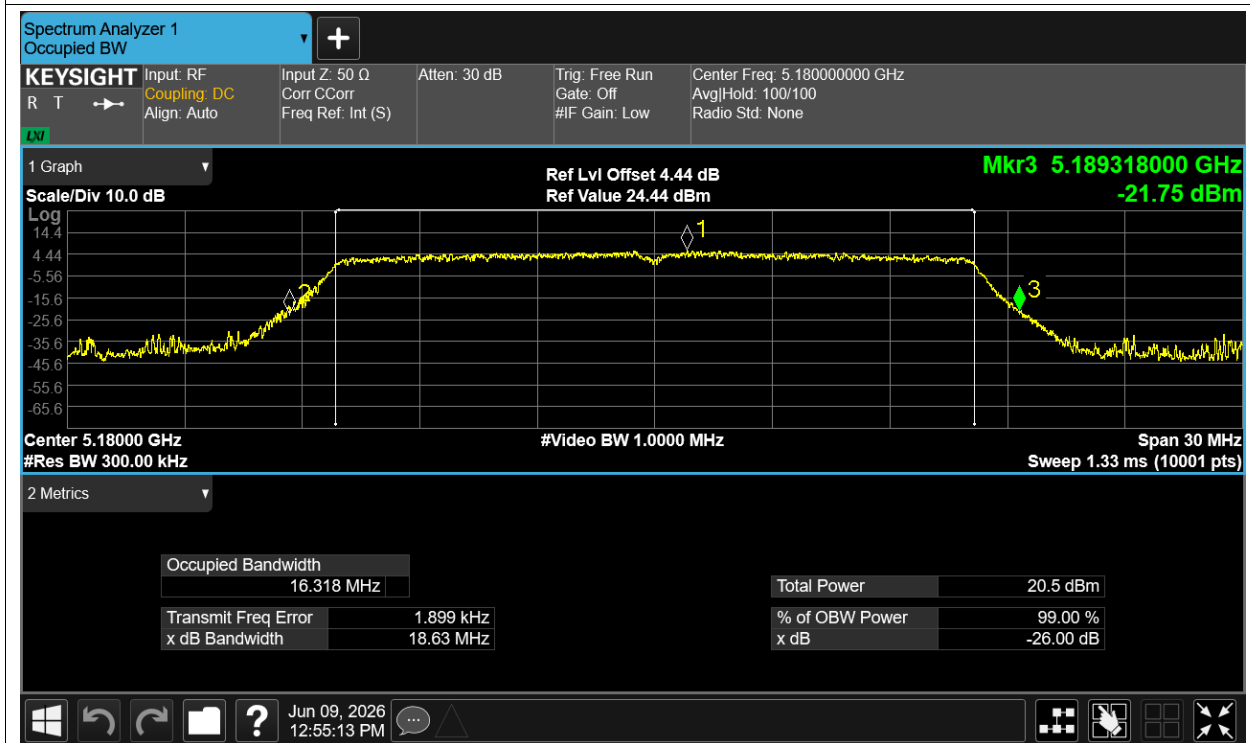
-26dB Bandwidth NVNT a 5200MHz Ant1



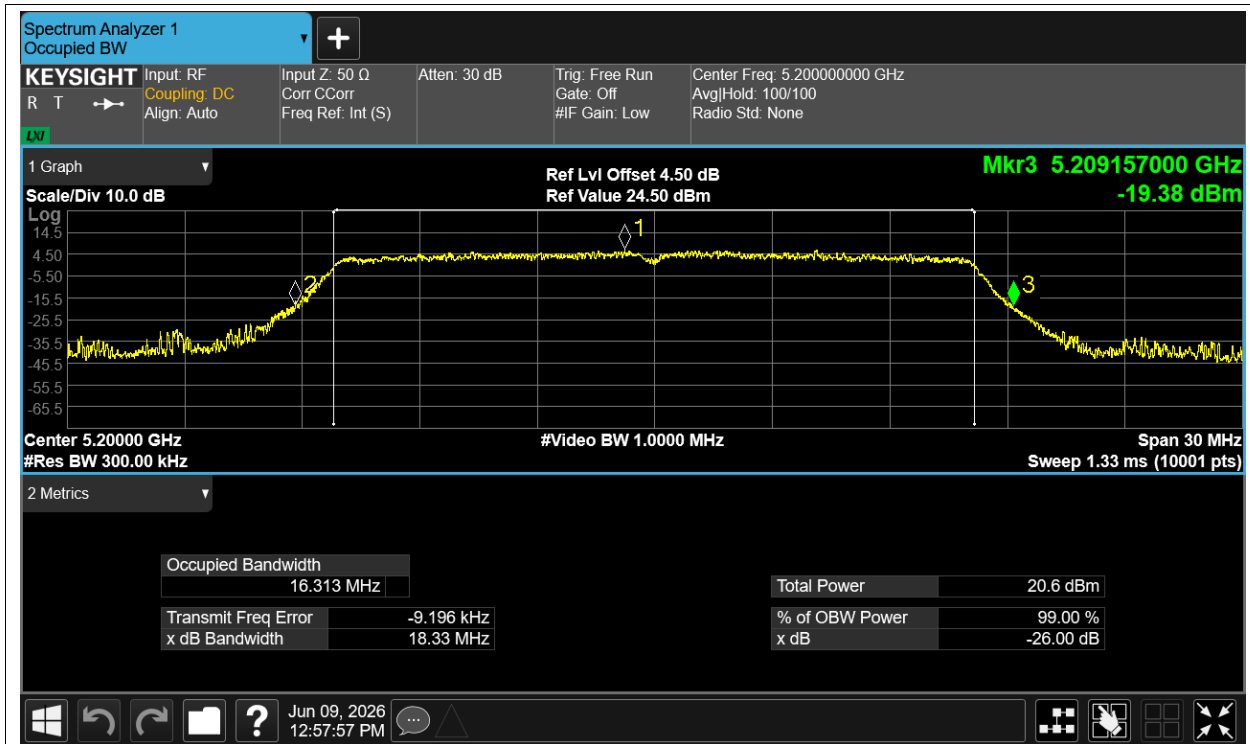
-26dB Bandwidth NVNT a 5240MHz Ant1



-26dB Bandwidth NVNT a 5180MHz Ant2



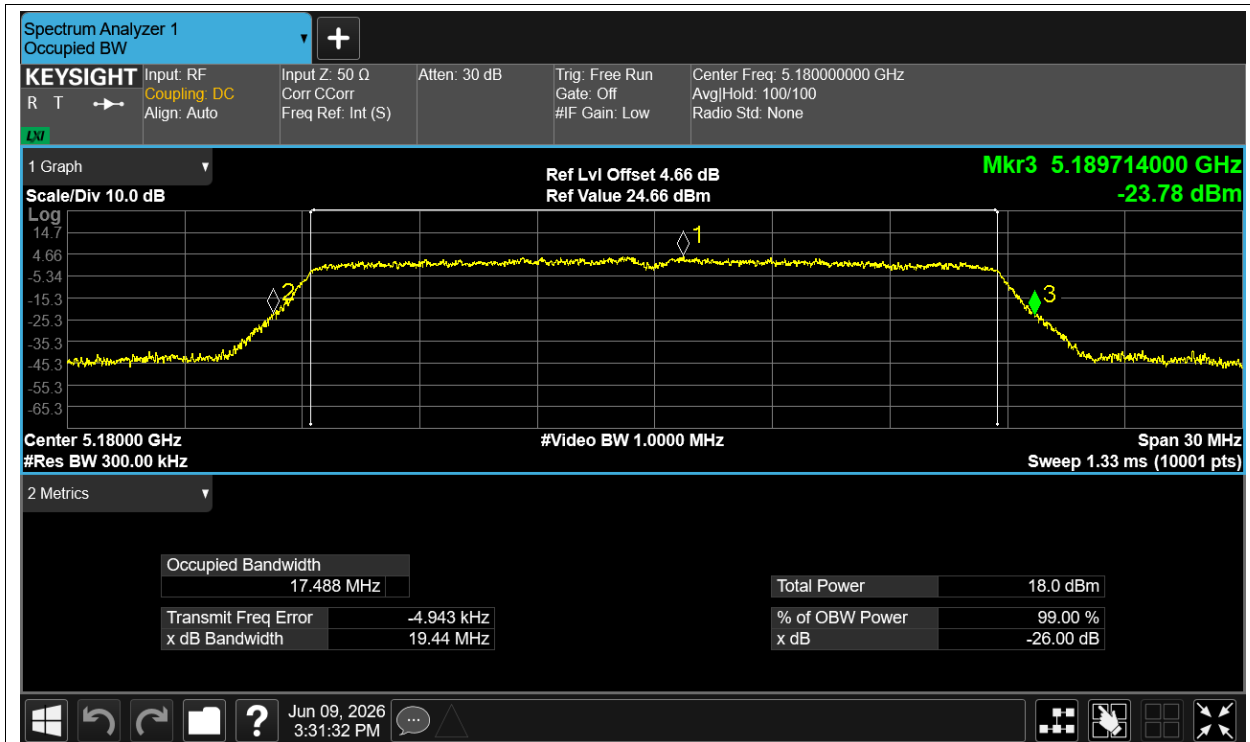
-26dB Bandwidth NVNT a 5200MHz Ant2



-26dB Bandwidth NVNT a 5240MHz Ant2



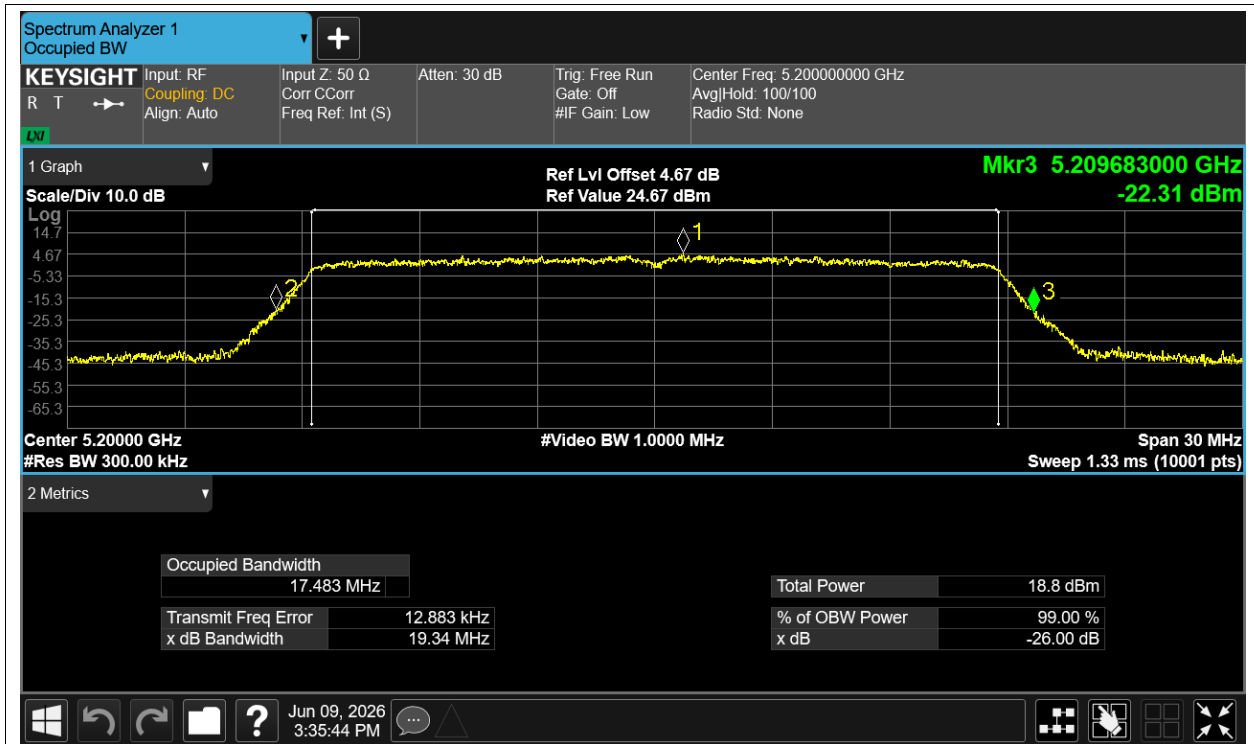
-26dB Bandwidth NVNT ac20 5180MHz Ant1



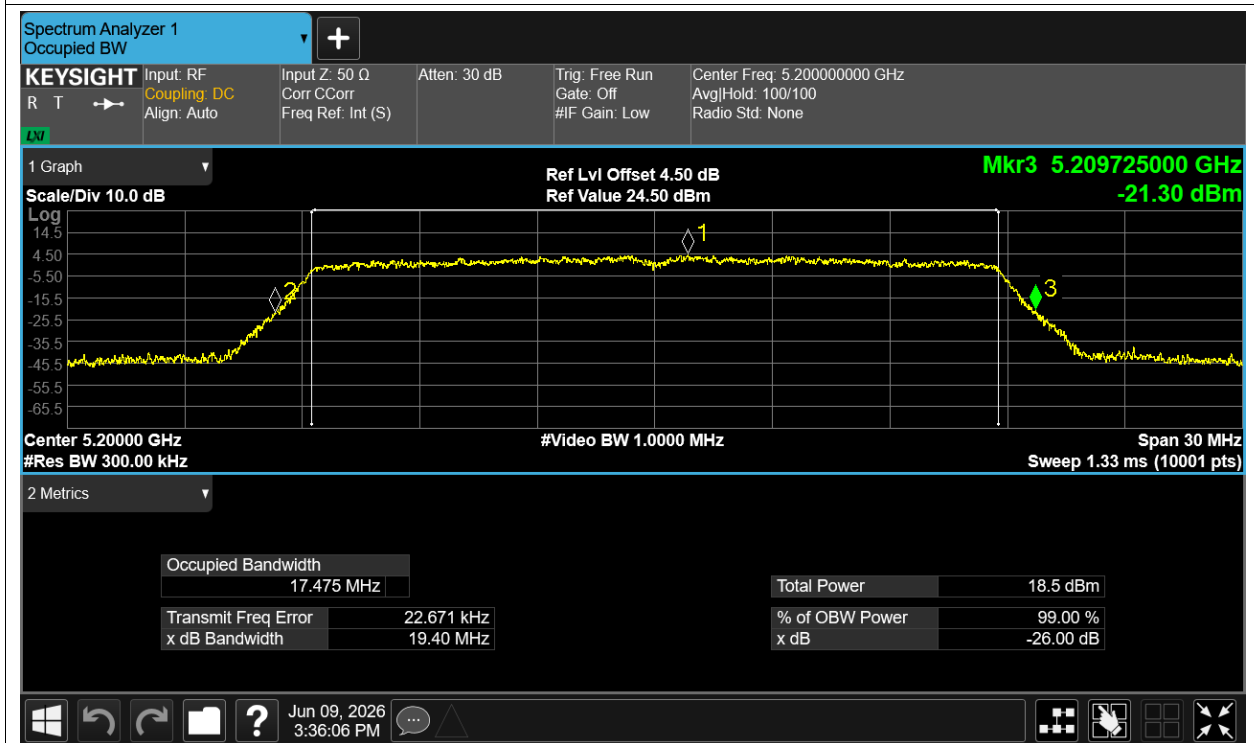
-26dB Bandwidth NVNT ac20 5180MHz Ant2



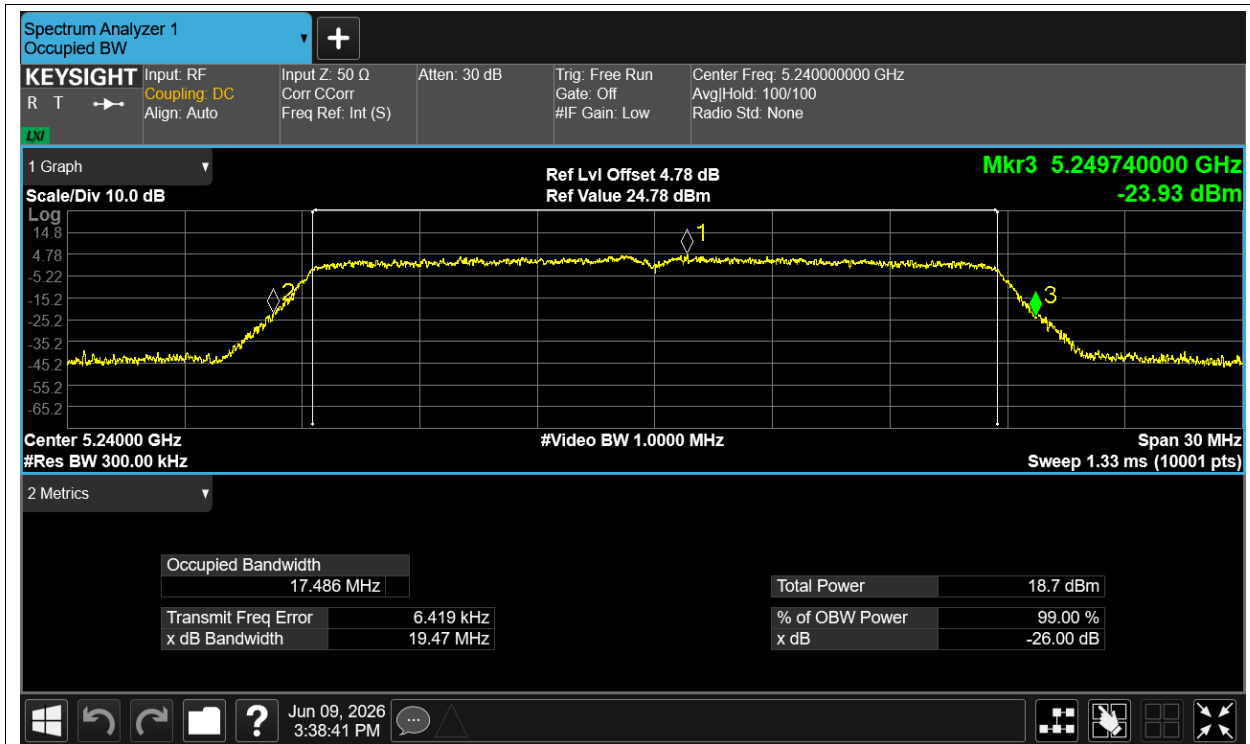
-26dB Bandwidth NVNT ac20 5200MHz Ant1



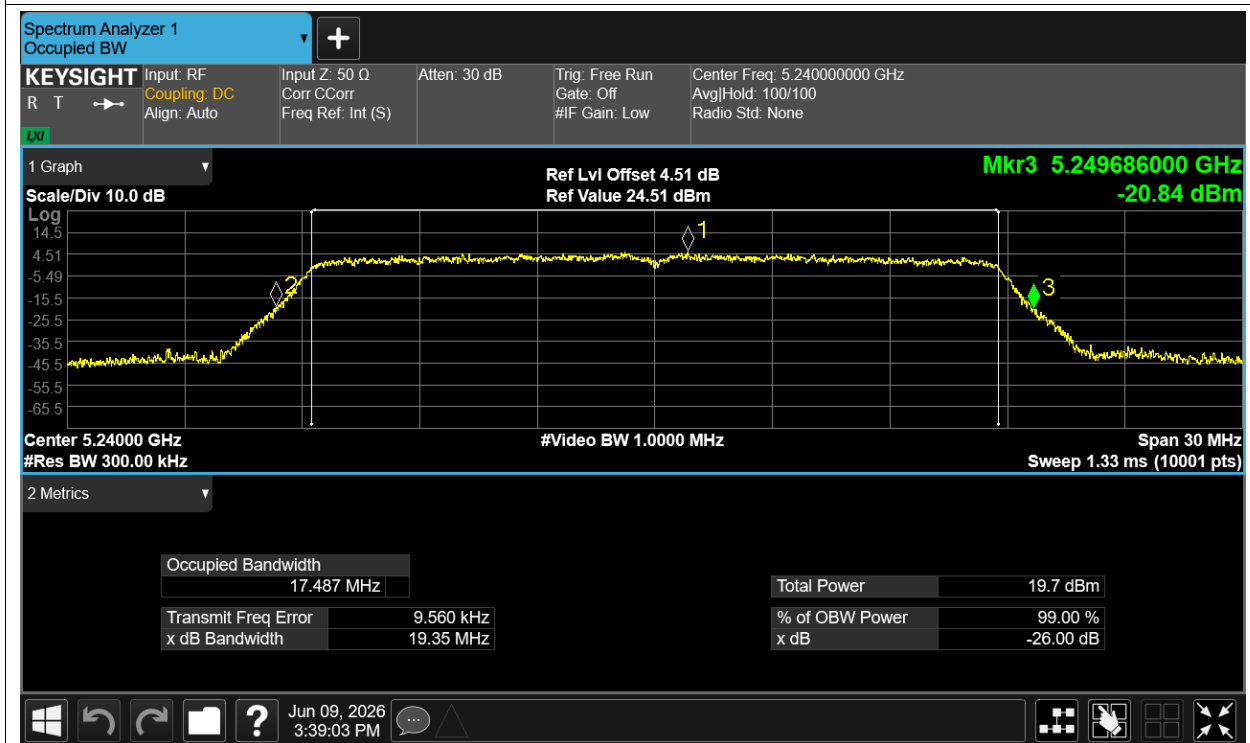
-26dB Bandwidth NVNT ac20 5200MHz Ant2



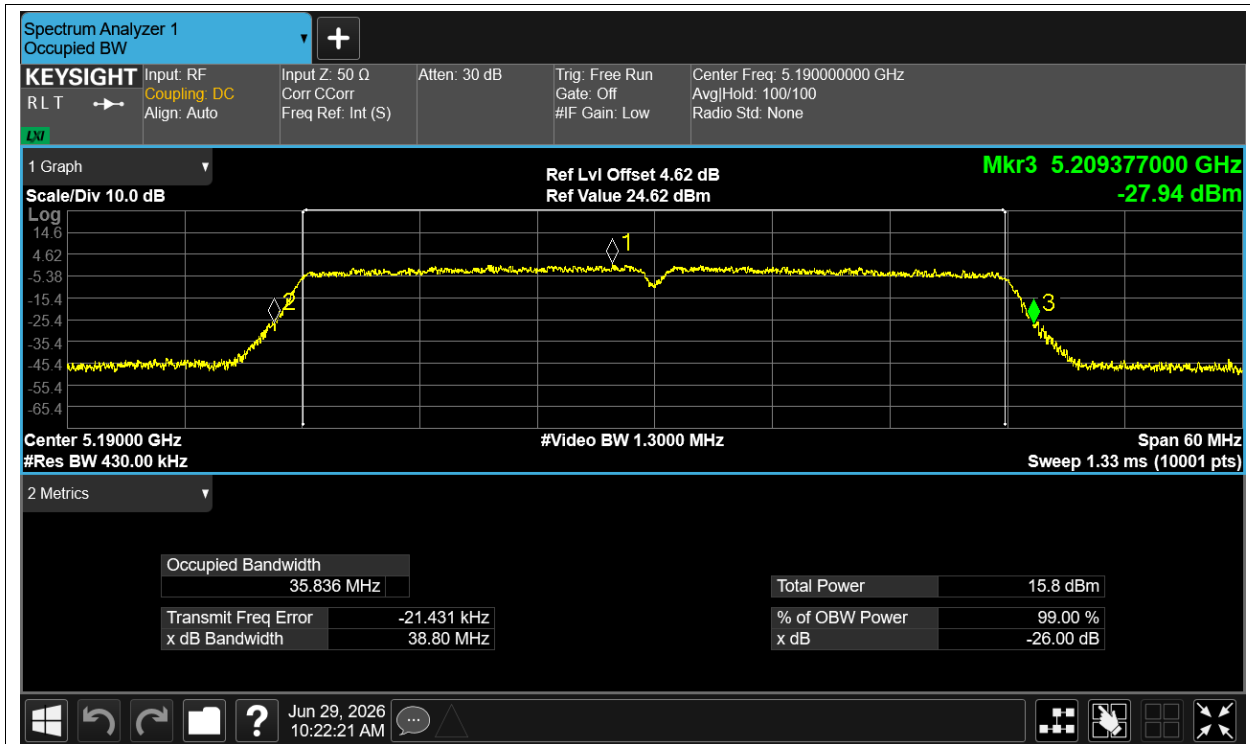
-26dB Bandwidth NVNT ac20 5240MHz Ant1



-26dB Bandwidth NVNT ac20 5240MHz Ant2



-26dB Bandwidth NVNT ac40 5190MHz Ant1



-26dB Bandwidth NVNT ac40 5190MHz Ant2



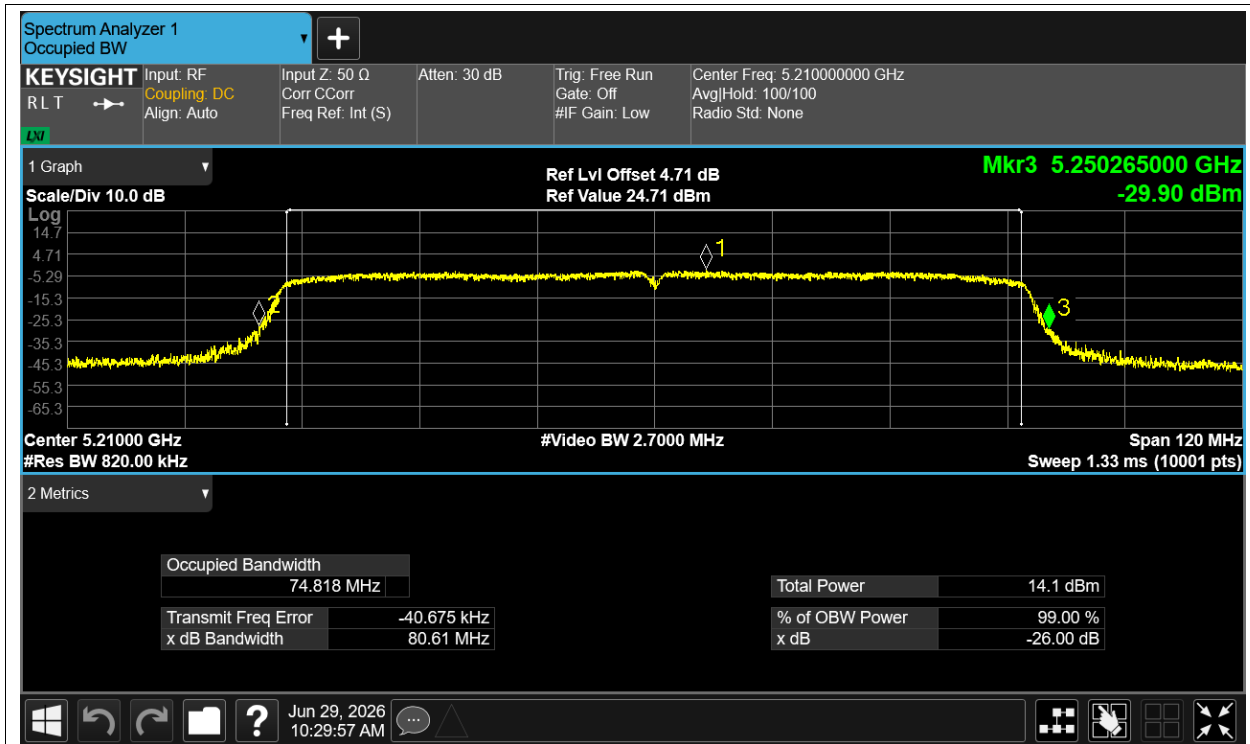
-26dB Bandwidth NVNT ac40 5230MHz Ant1



-26dB Bandwidth NVNT ac40 5230MHz Ant2



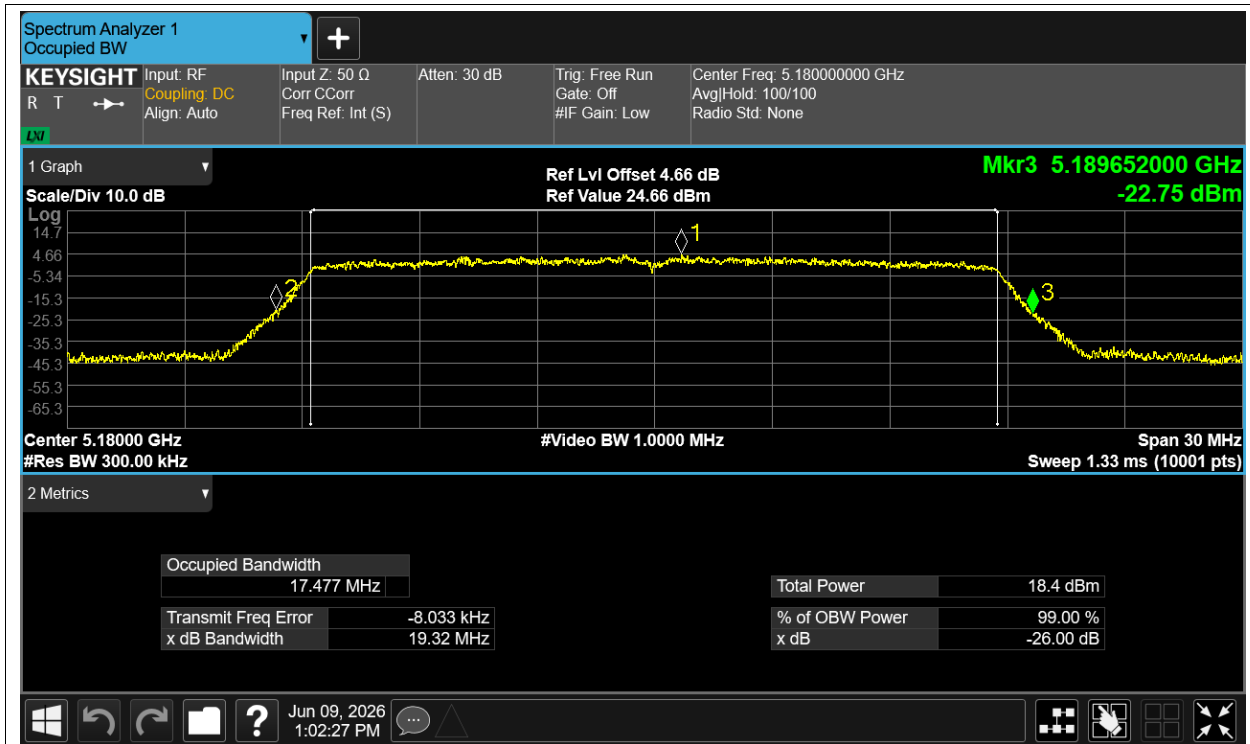
-26dB Bandwidth NVNT ac80 5210MHz Ant1



-26dB Bandwidth NVNT ac80 5210MHz Ant2



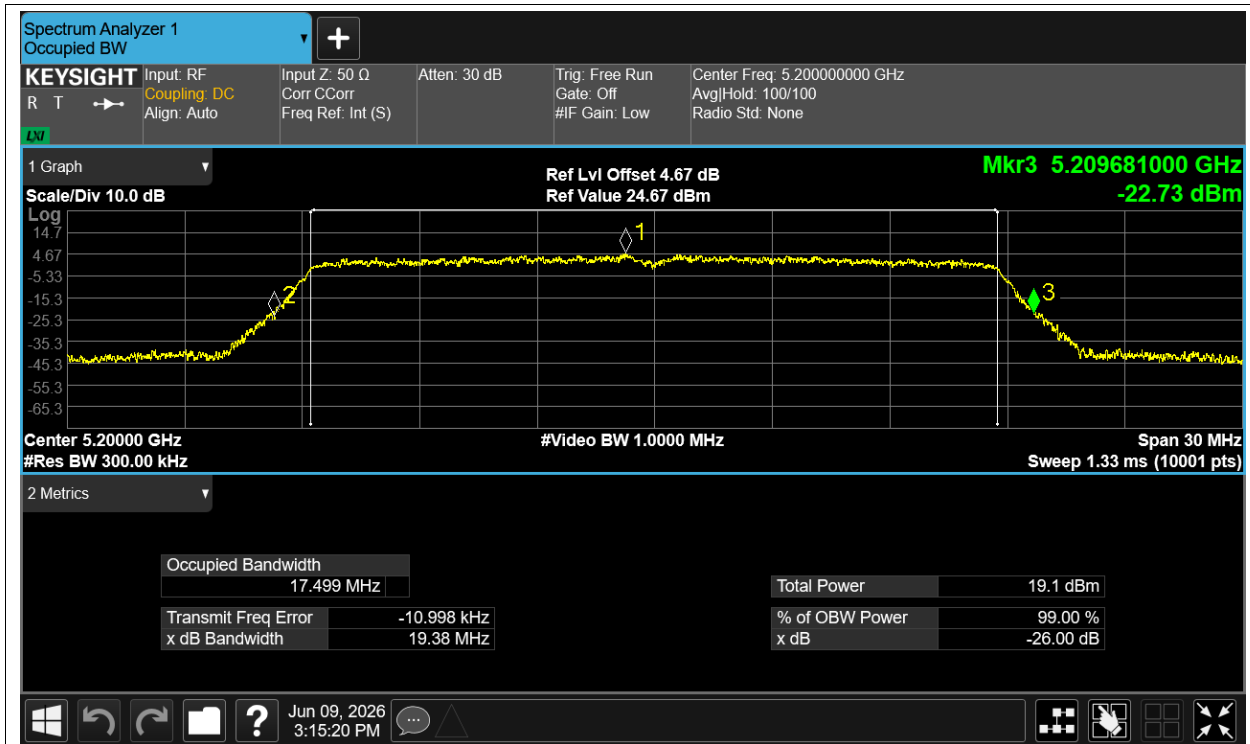
-26dB Bandwidth NVNT n20 5180MHz Ant1



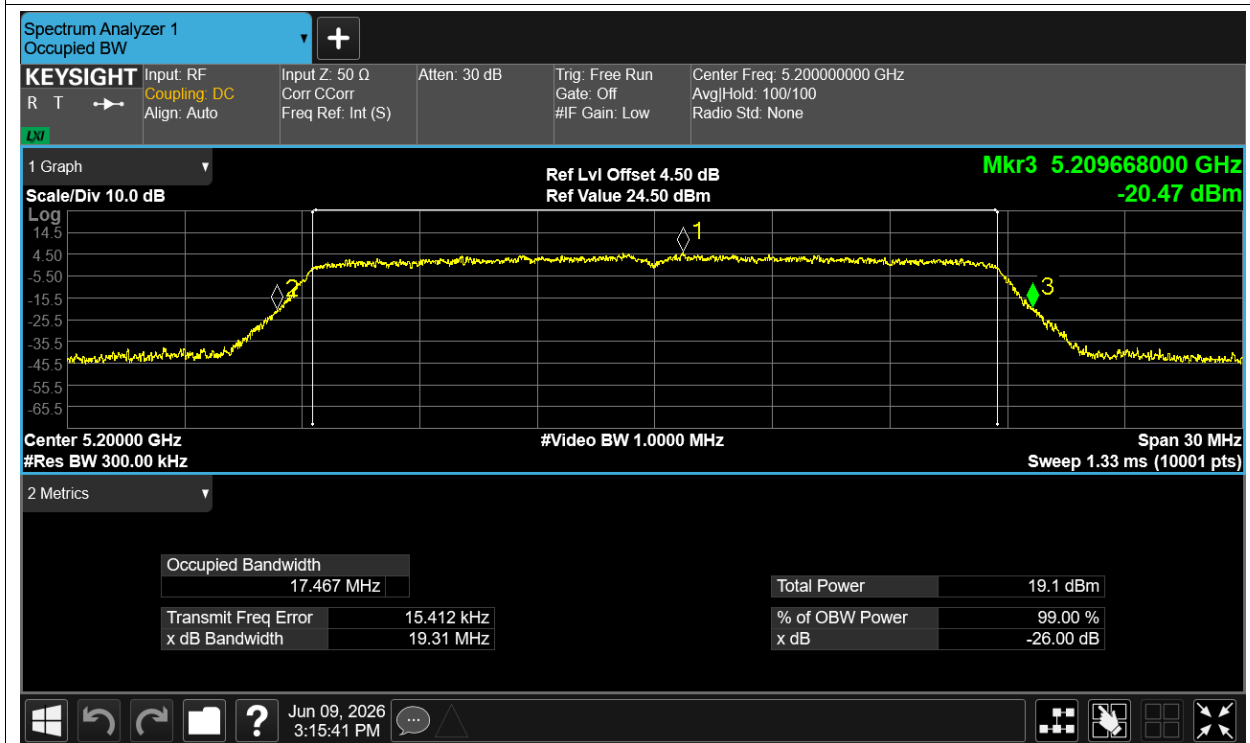
-26dB Bandwidth NVNT n20 5180MHz Ant2



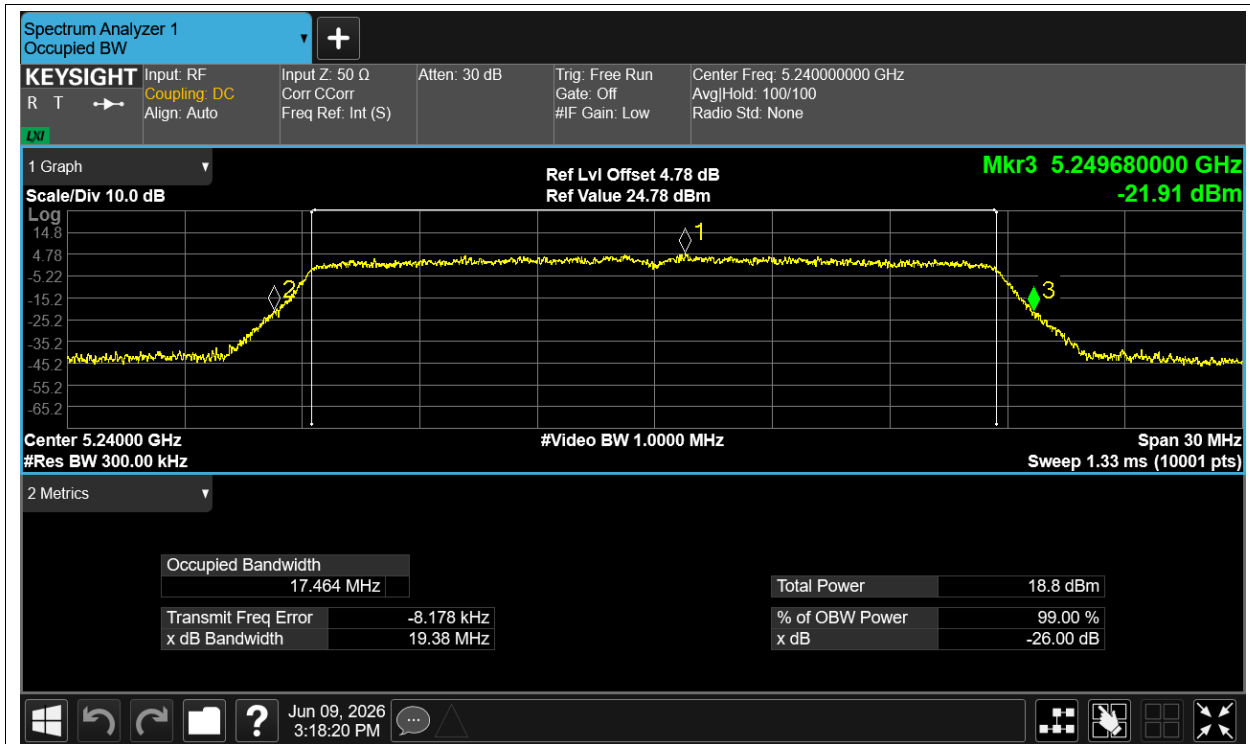
-26dB Bandwidth NVNT n20 5200MHz Ant1



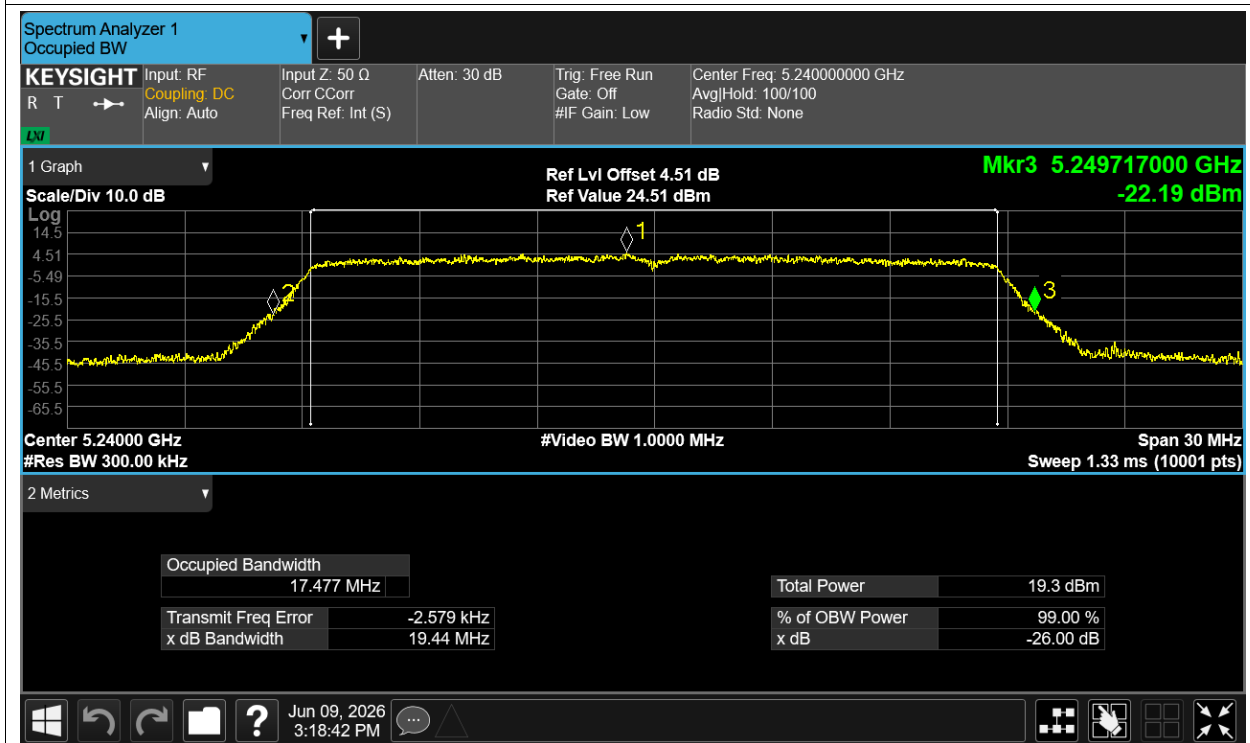
-26dB Bandwidth NVNT n20 5200MHz Ant2



-26dB Bandwidth NVNT n20 5240MHz Ant1



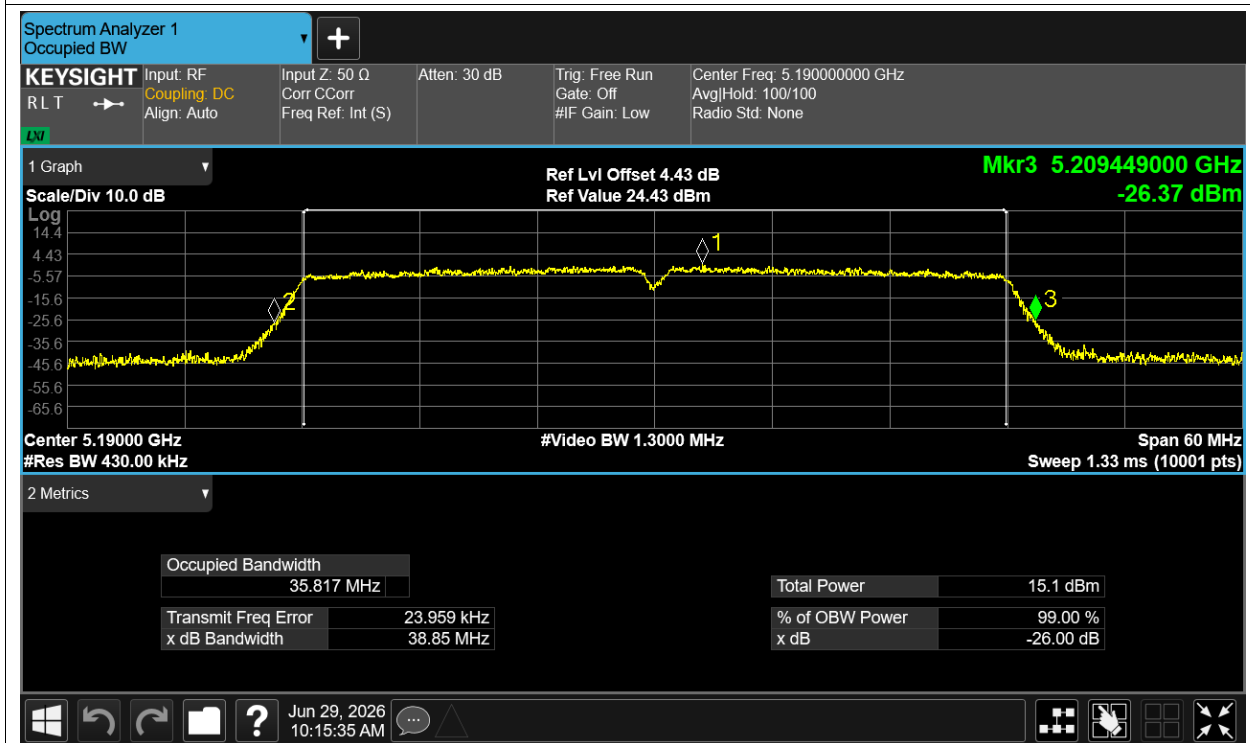
-26dB Bandwidth NVNT n20 5240MHz Ant2



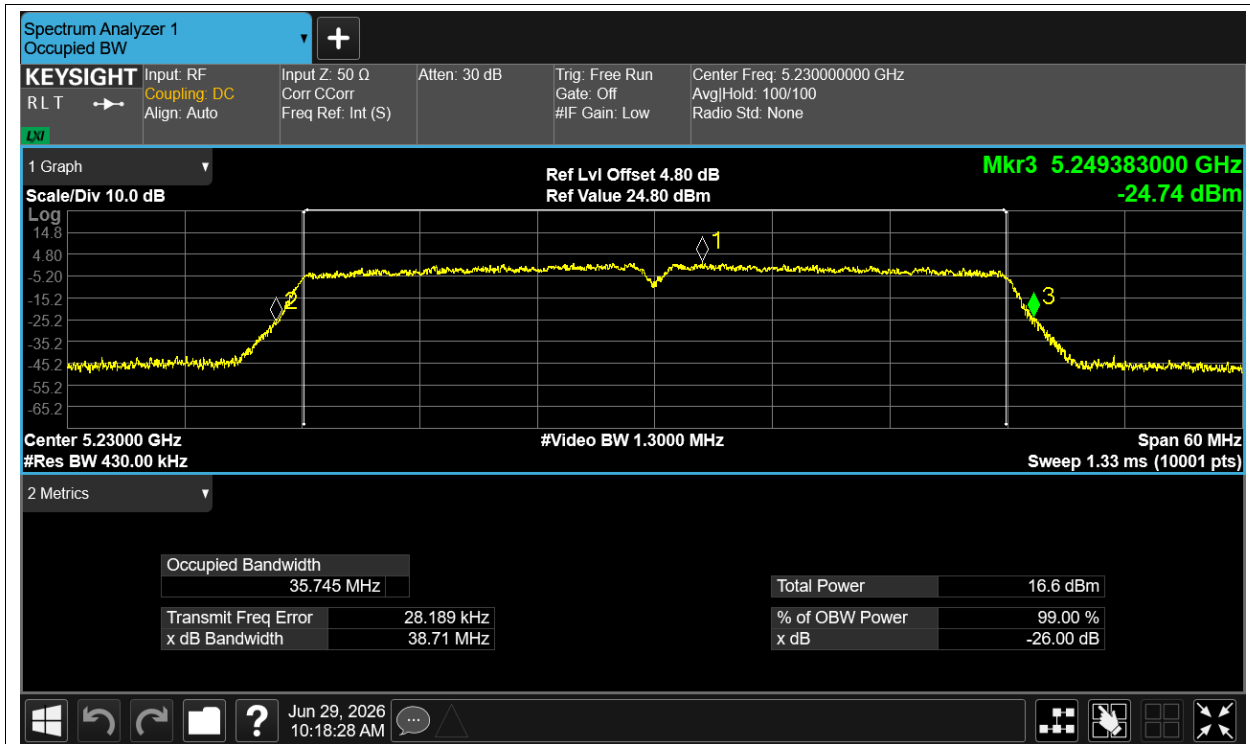
-26dB Bandwidth NVNT n40 5190MHz Ant1



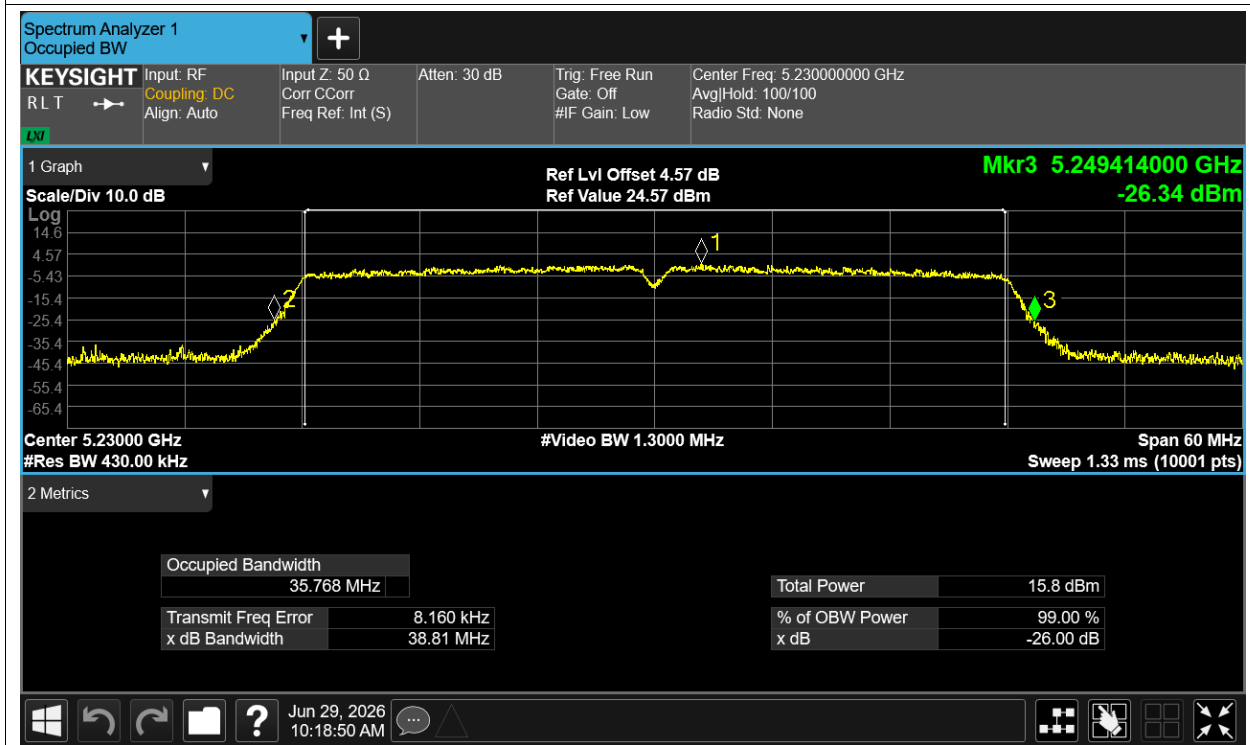
-26dB Bandwidth NVNT n40 5190MHz Ant2



-26dB Bandwidth NVNT n40 5230MHz Ant1



-26dB Bandwidth NVNT n40 5230MHz Ant2

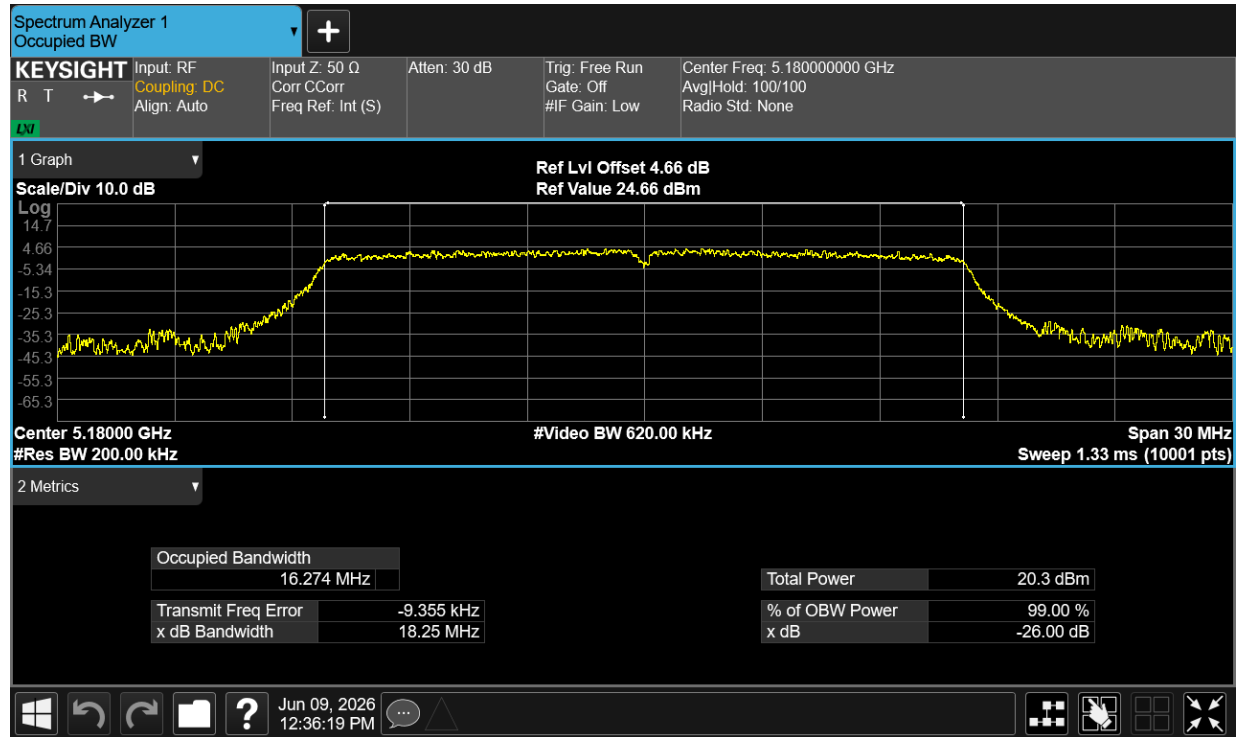


Occupied Channel Bandwidth

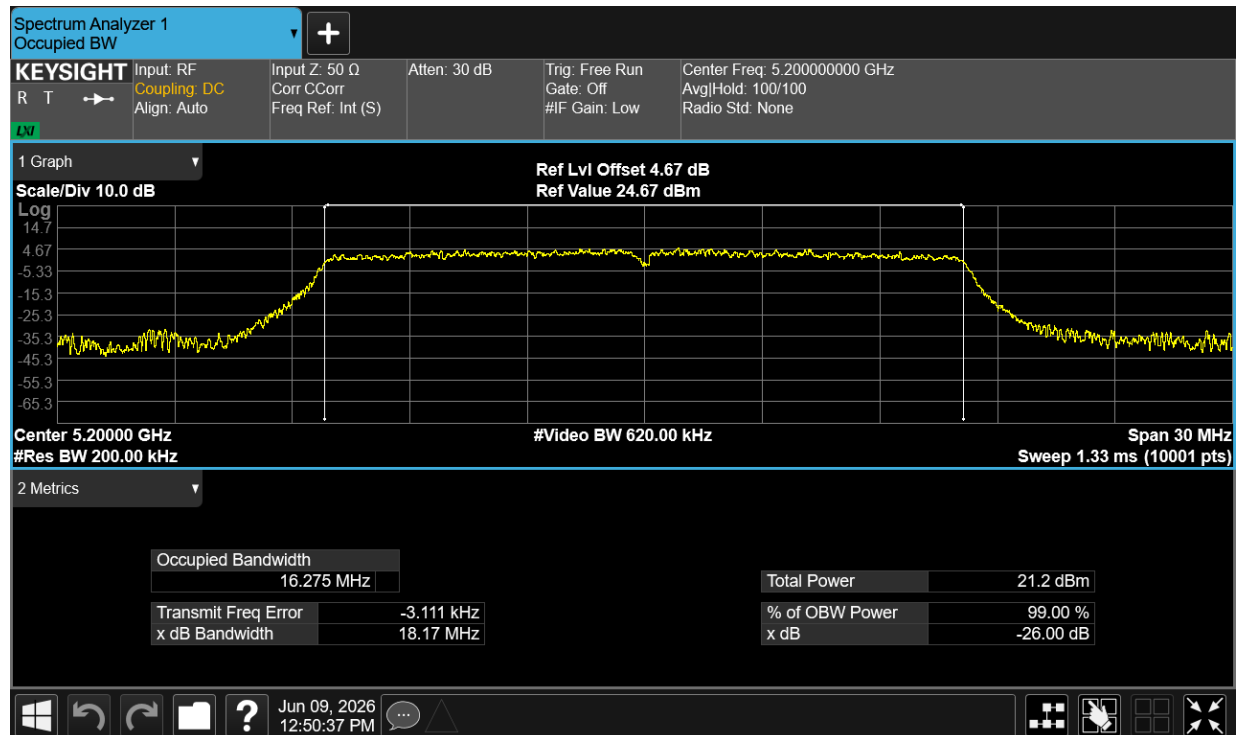
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.274
NVNT	a	5200	Ant1	16.275
NVNT	a	5240	Ant1	16.282
NVNT	a	5180	Ant2	16.28
NVNT	a	5200	Ant2	16.263
NVNT	a	5240	Ant2	16.268
NVNT	ac20	5180	Ant1	17.481
NVNT	ac20	5180	Ant2	17.483
NVNT	ac20	5200	Ant1	17.476
NVNT	ac20	5200	Ant2	17.462
NVNT	ac20	5240	Ant1	17.463
NVNT	ac20	5240	Ant2	17.474
NVNT	ac40	5190	Ant1	35.855
NVNT	ac40	5190	Ant2	35.826
NVNT	ac40	5230	Ant1	35.736
NVNT	ac40	5230	Ant2	35.78
NVNT	ac80	5210	Ant1	74.839
NVNT	ac80	5210	Ant2	74.501
NVNT	n20	5180	Ant1	17.472
NVNT	n20	5180	Ant2	17.475
NVNT	n20	5200	Ant1	17.488
NVNT	n20	5200	Ant2	17.463
NVNT	n20	5240	Ant1	17.459
NVNT	n20	5240	Ant2	17.479
NVNT	n40	5190	Ant1	35.878
NVNT	n40	5190	Ant2	35.823
NVNT	n40	5230	Ant1	35.768
NVNT	n40	5230	Ant2	35.769

Test Graphs

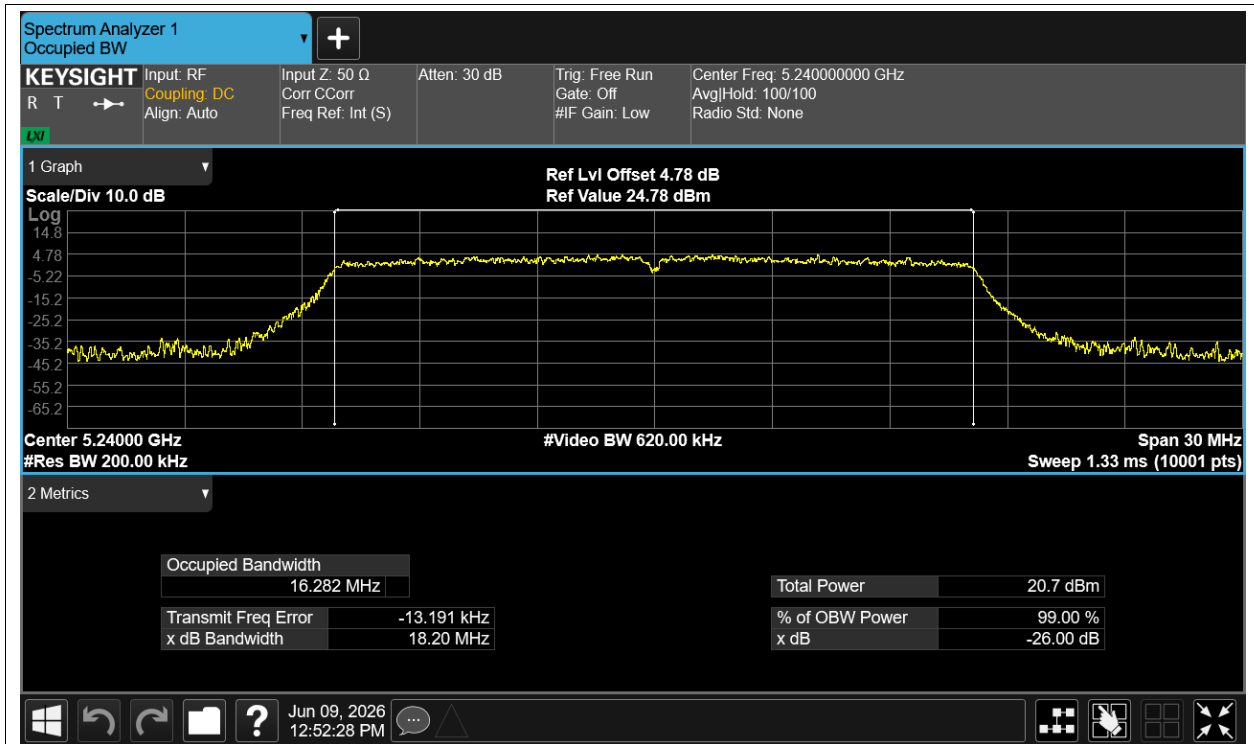
OBW NVNT a 5180MHz Ant1



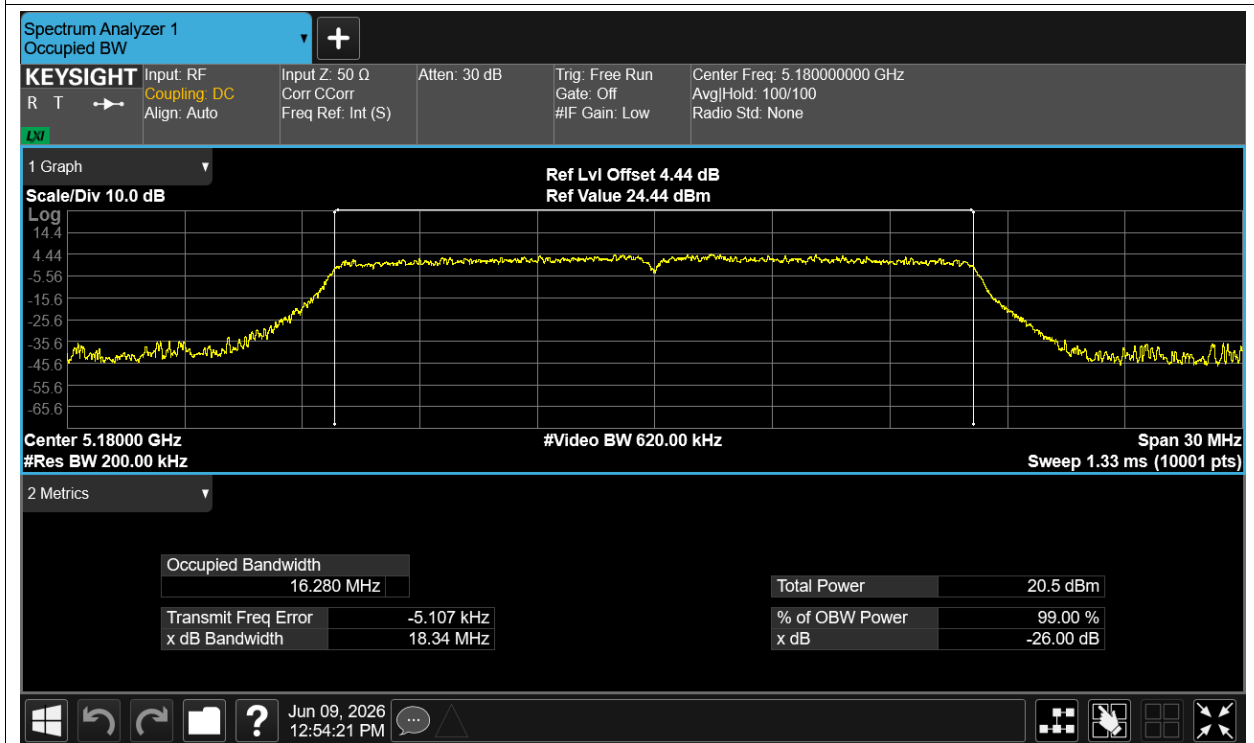
OBW NVNT a 5200MHz Ant1



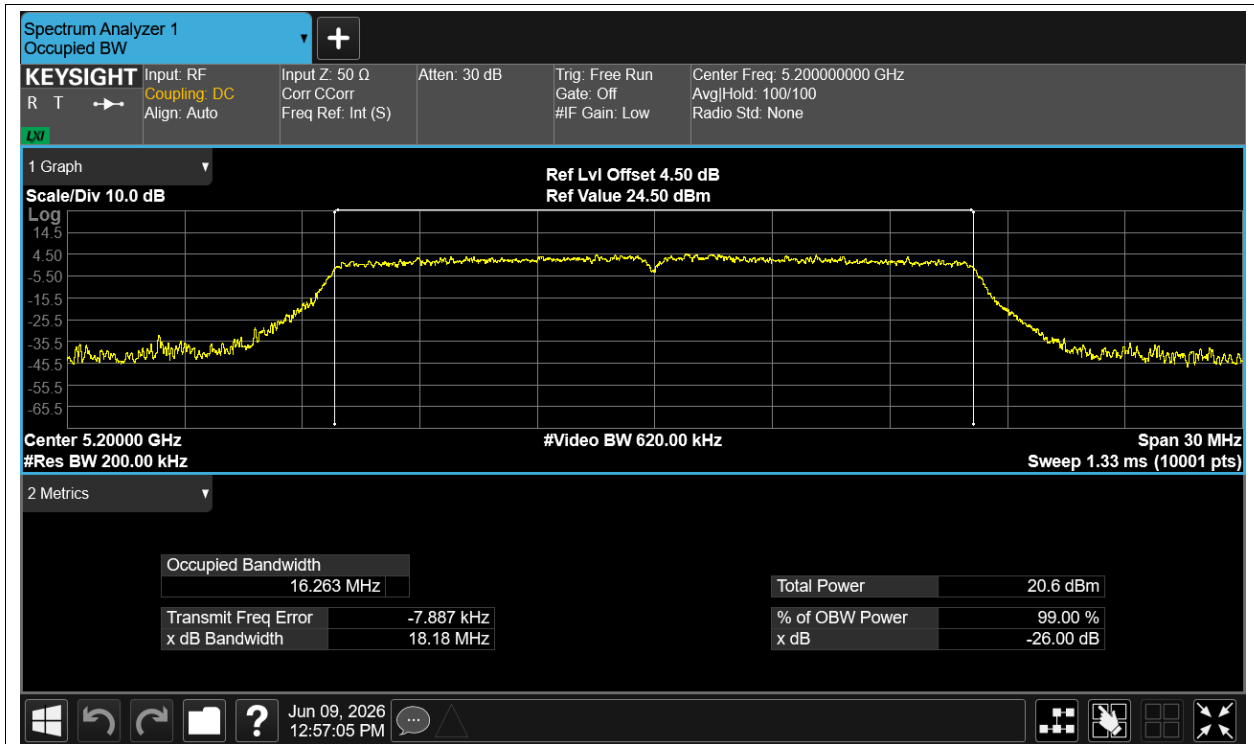
OBW NVNT a 5240MHz Ant1



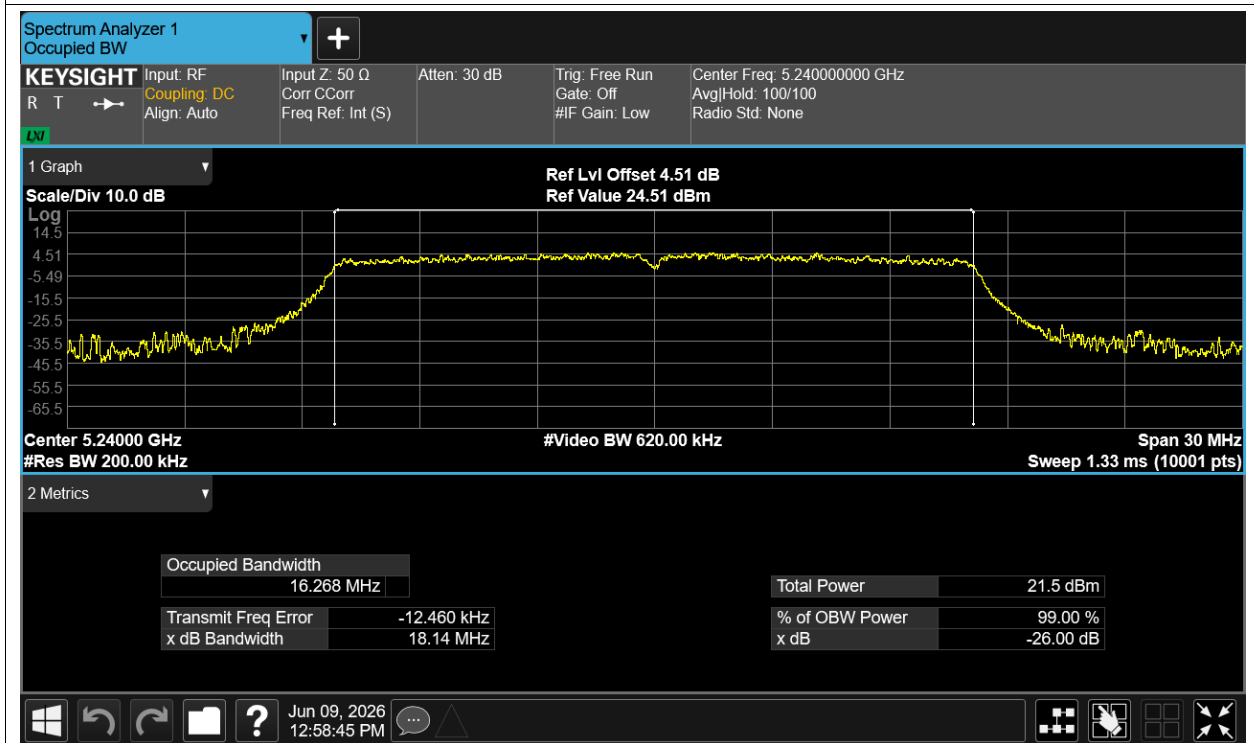
OBW NVNT a 5180MHz Ant2



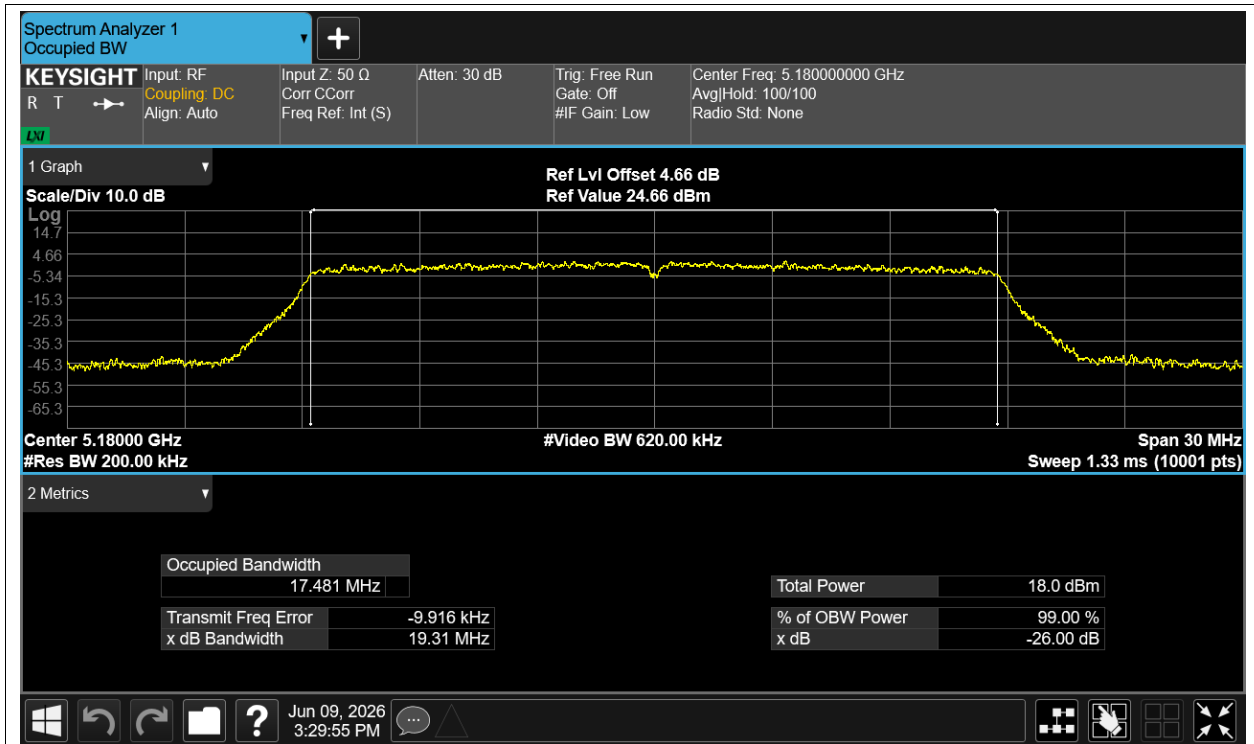
OBW NVNT a 5200MHz Ant2



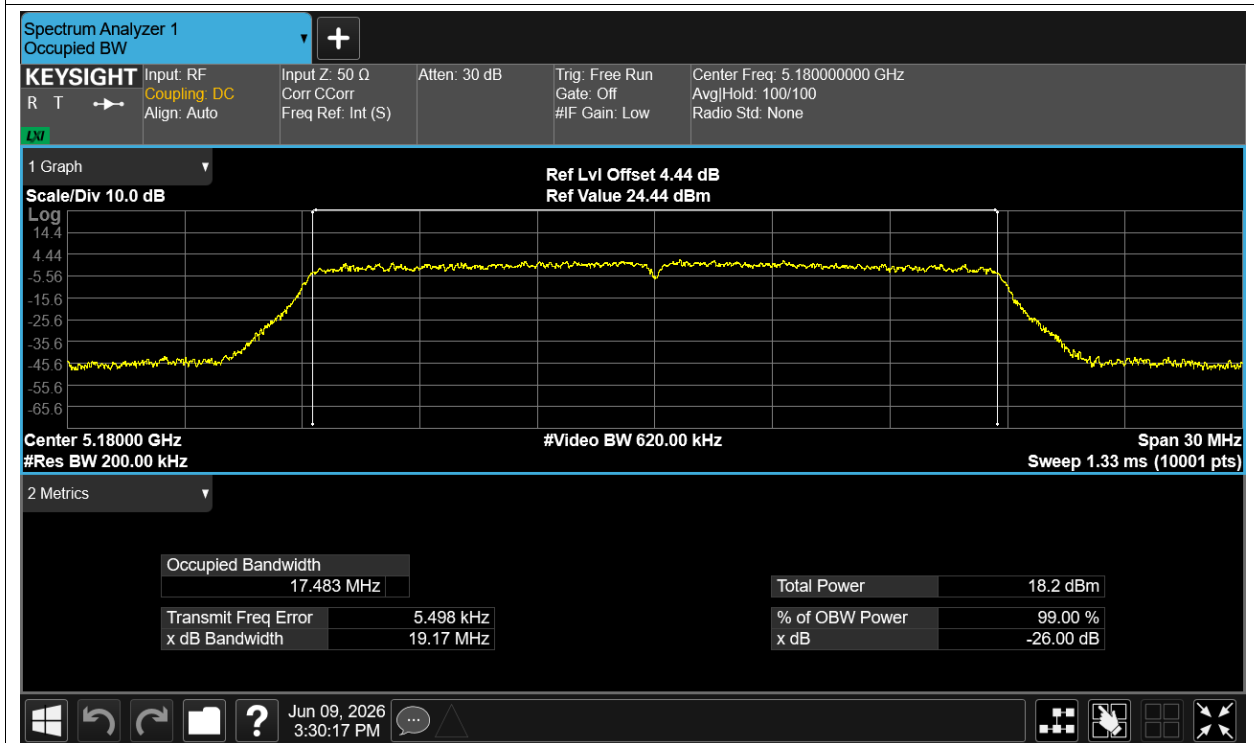
OBW NVNT a 5240MHz Ant2



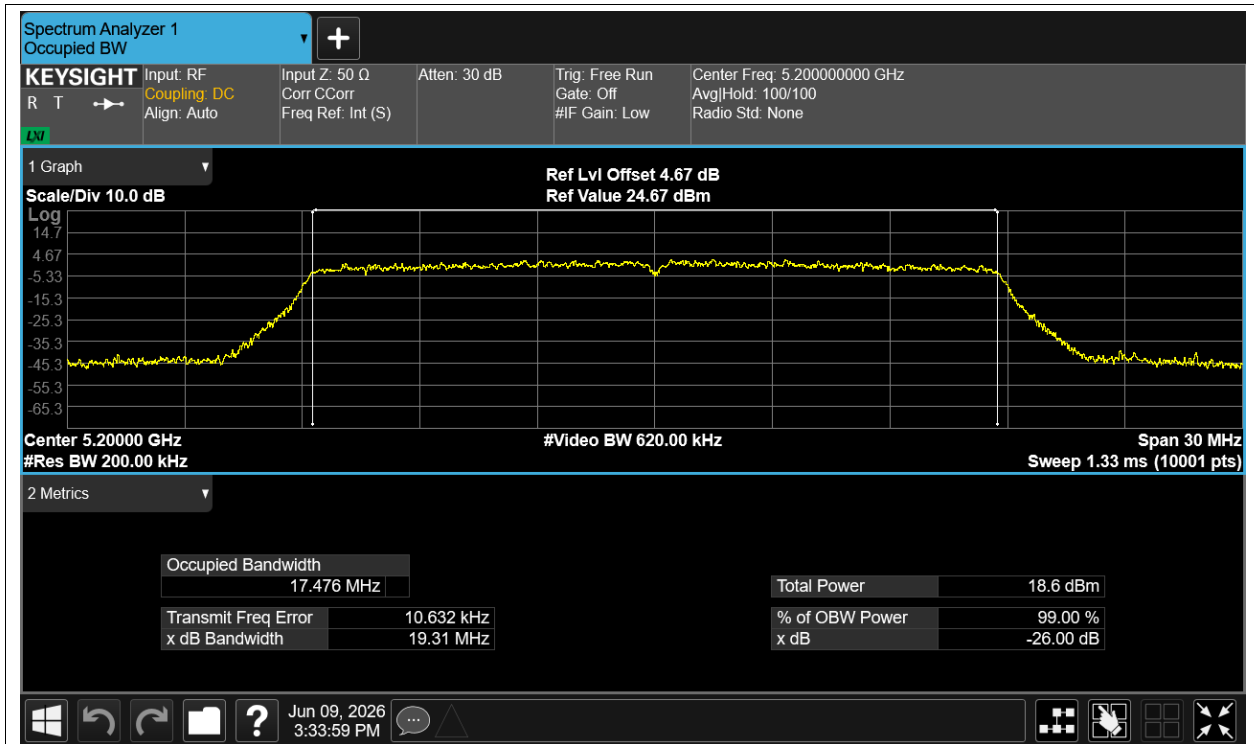
OBW NVNT ac20 5180MHz Ant1



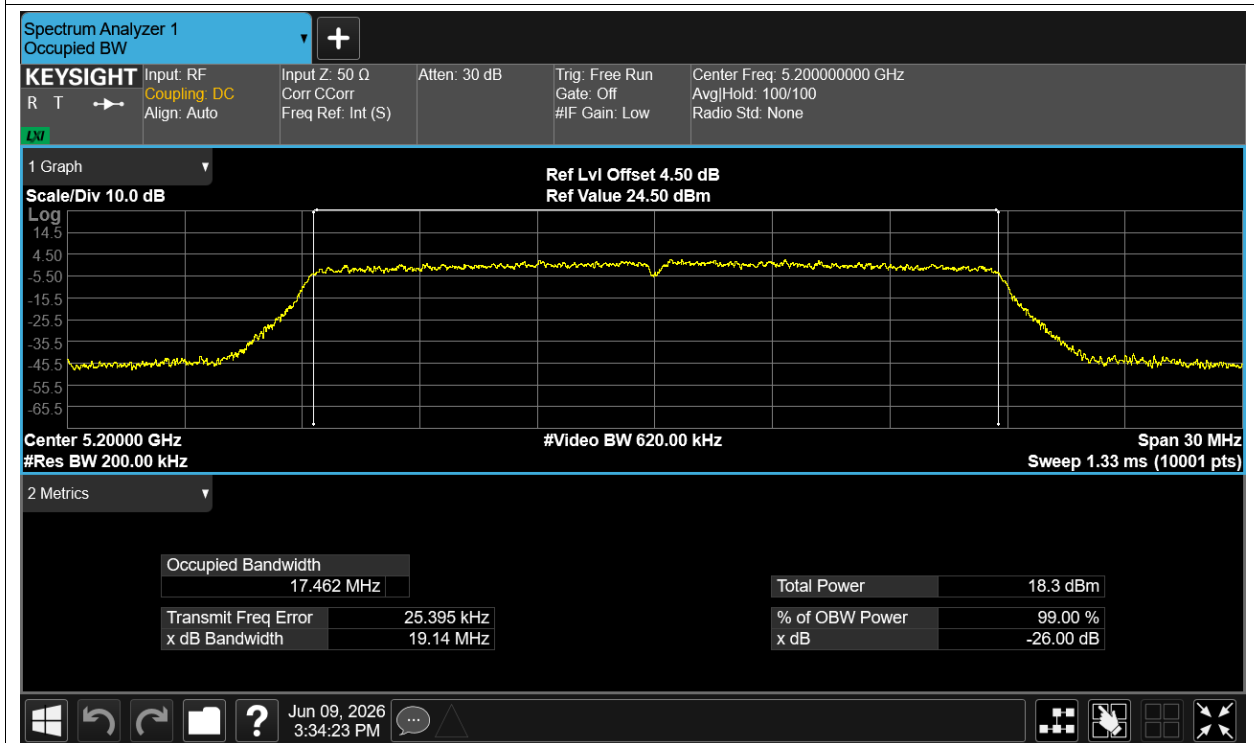
OBW NVNT ac20 5180MHz Ant2



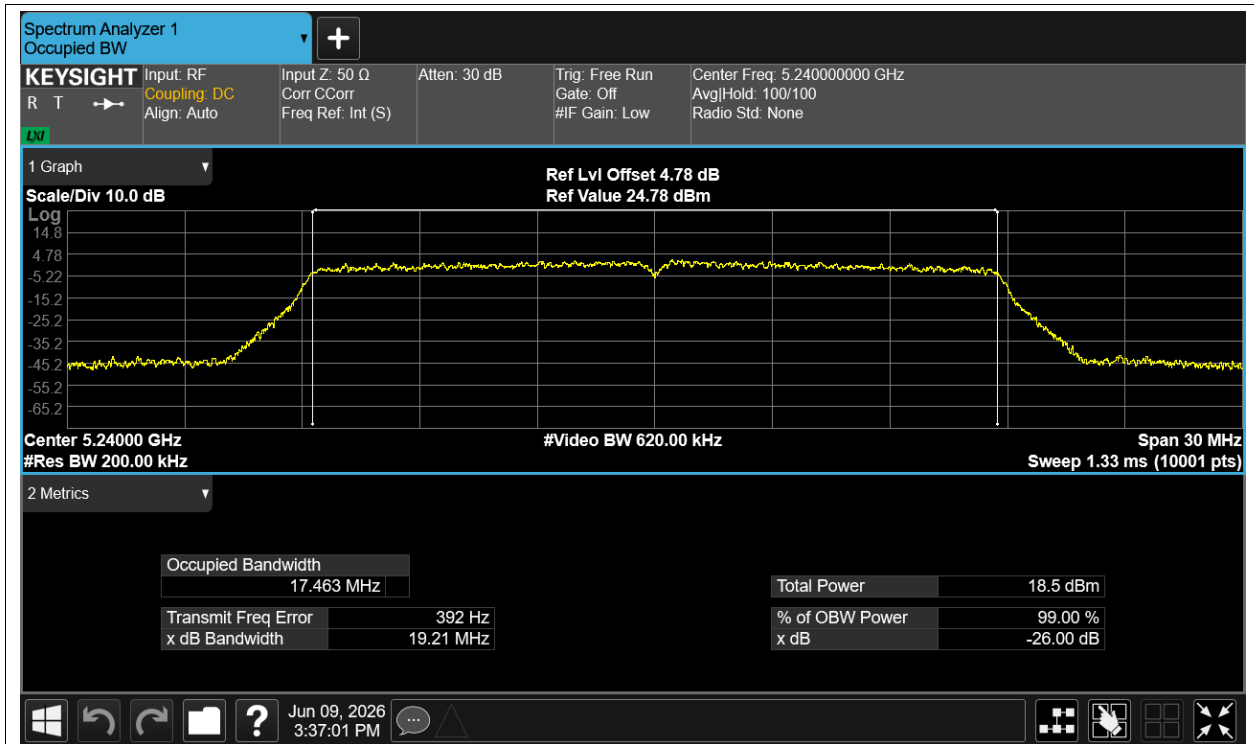
OBW NVNT ac20 5200MHz Ant1



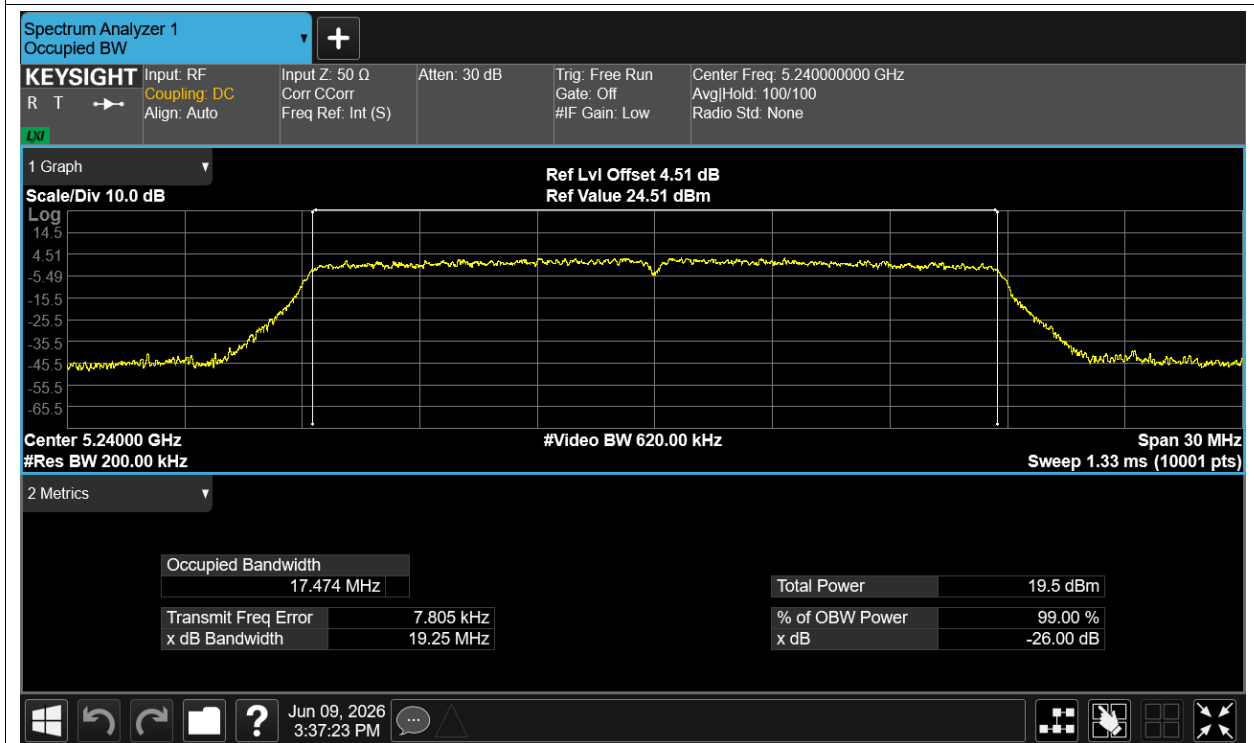
OBW NVNT ac20 5200MHz Ant2



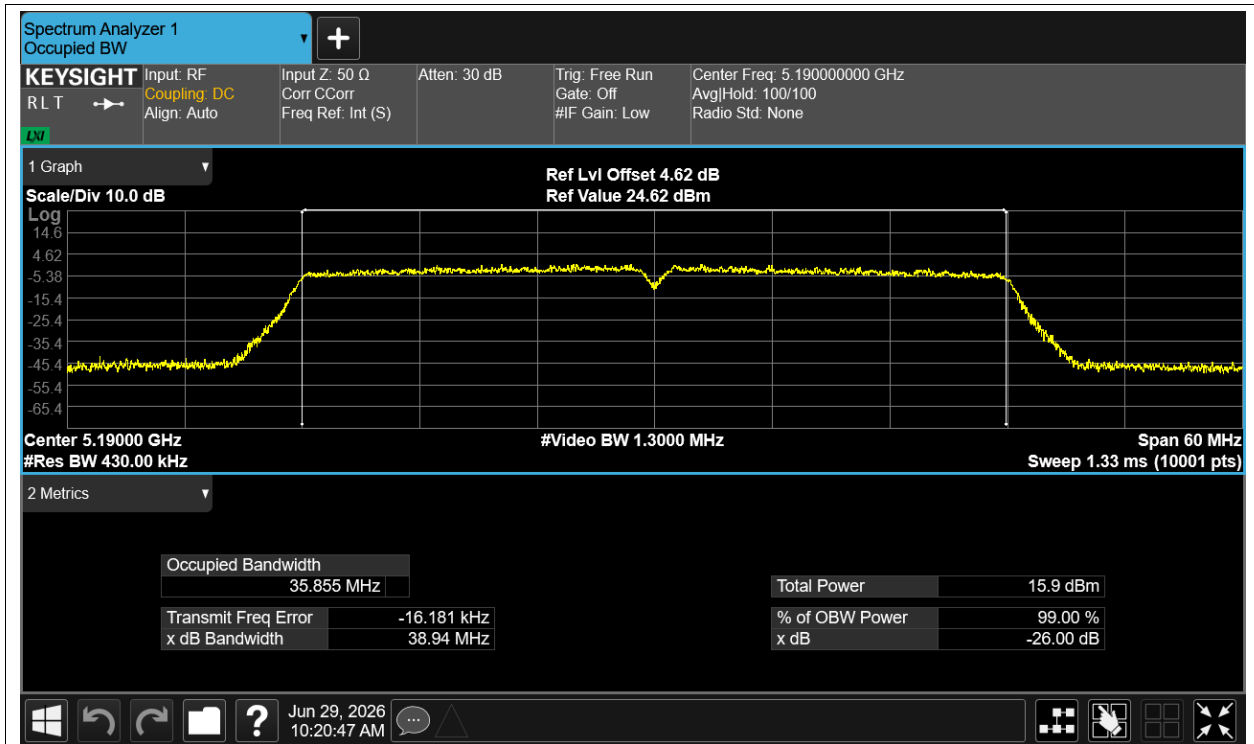
OBW NVNT ac20 5240MHz Ant1



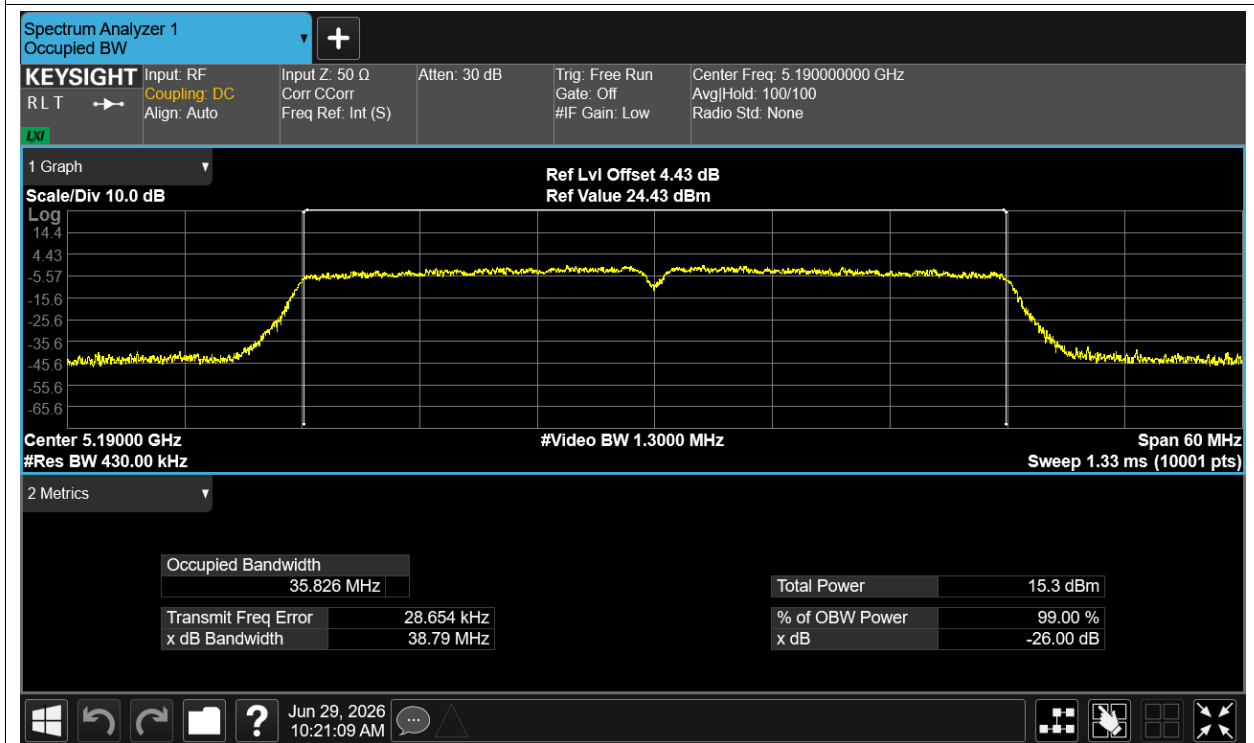
OBW NVNT ac20 5240MHz Ant2



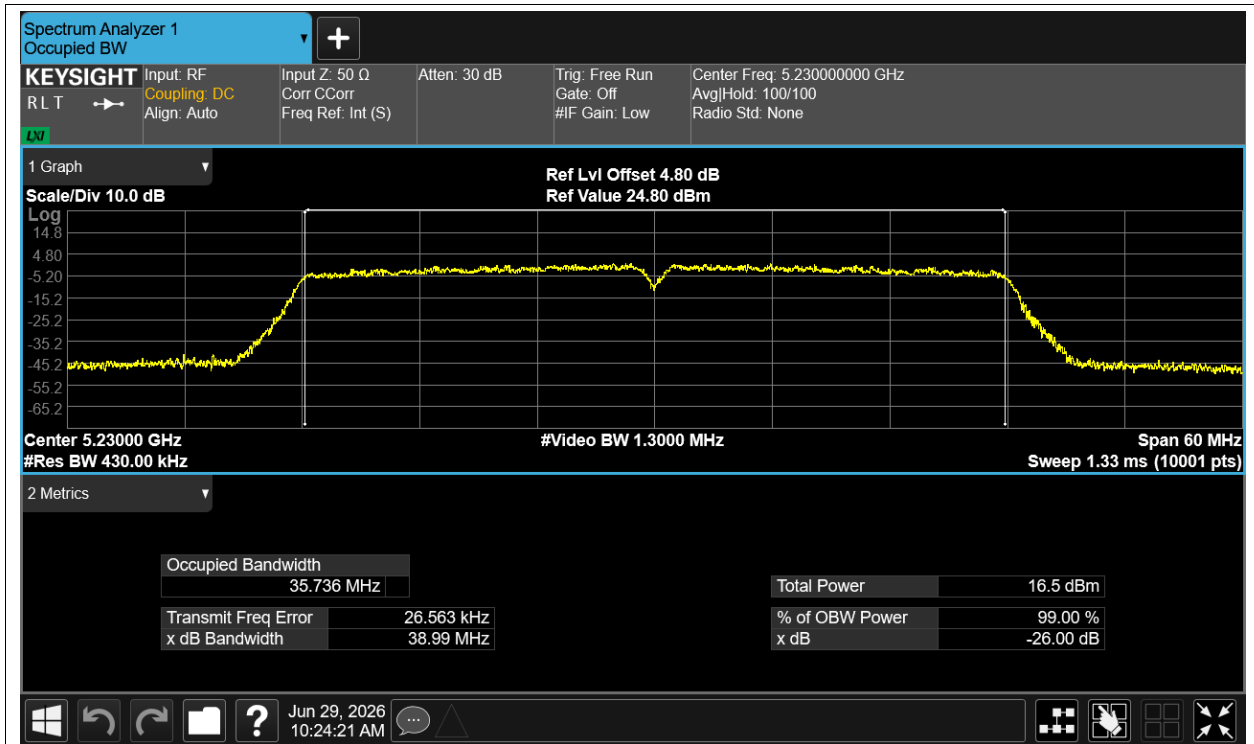
OBW NVNT ac40 5190MHz Ant1



OBW NVNT ac40 5190MHz Ant2



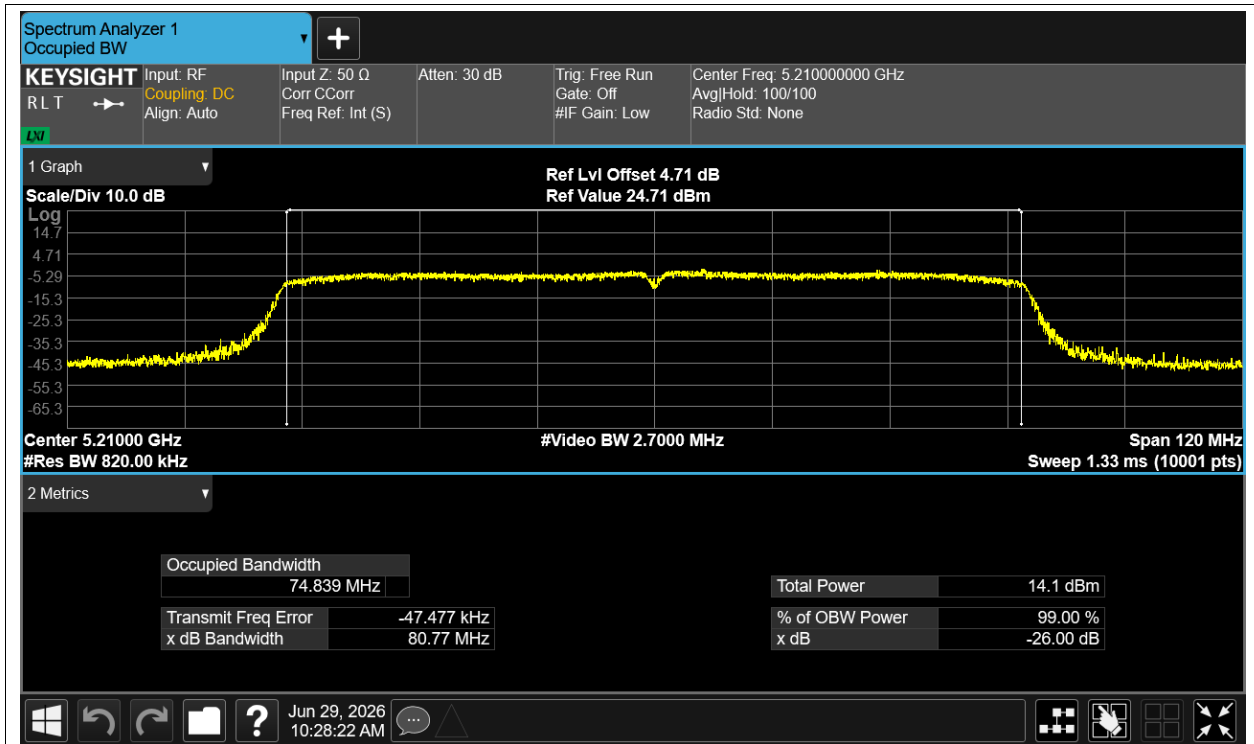
OBW NVNT ac40 5230MHz Ant1



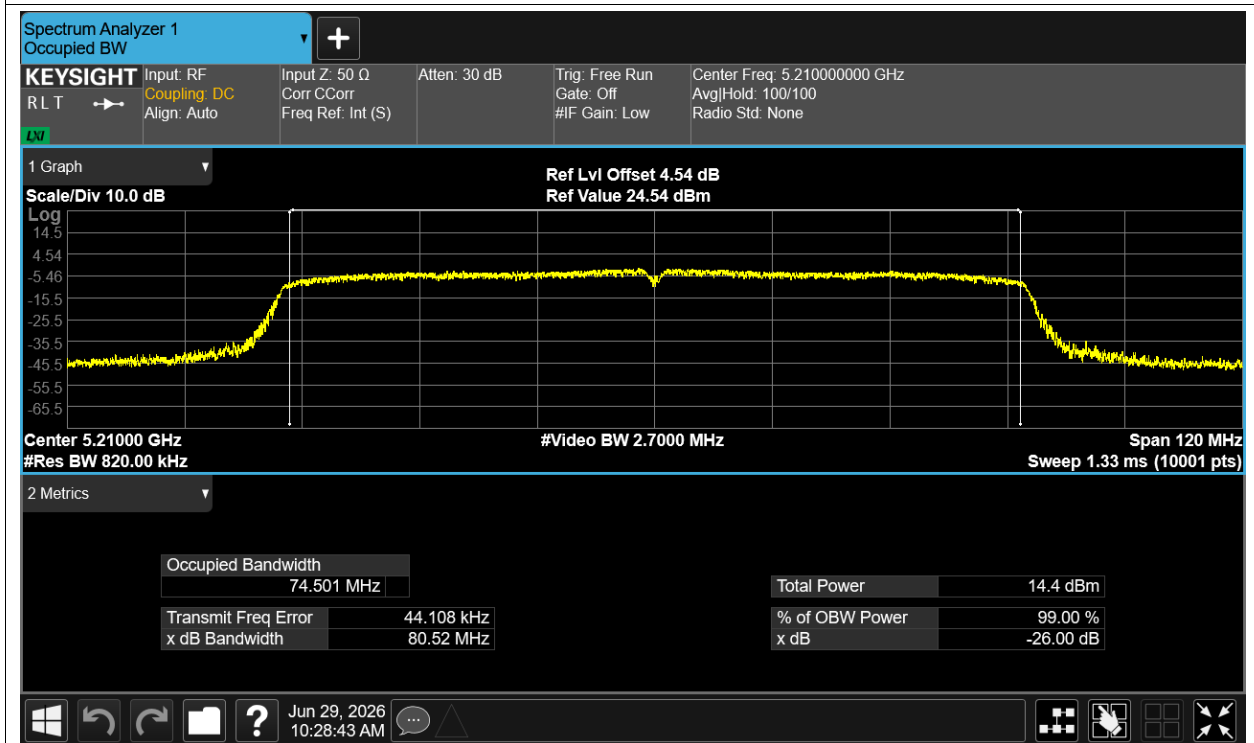
OBW NVNT ac40 5230MHz Ant2



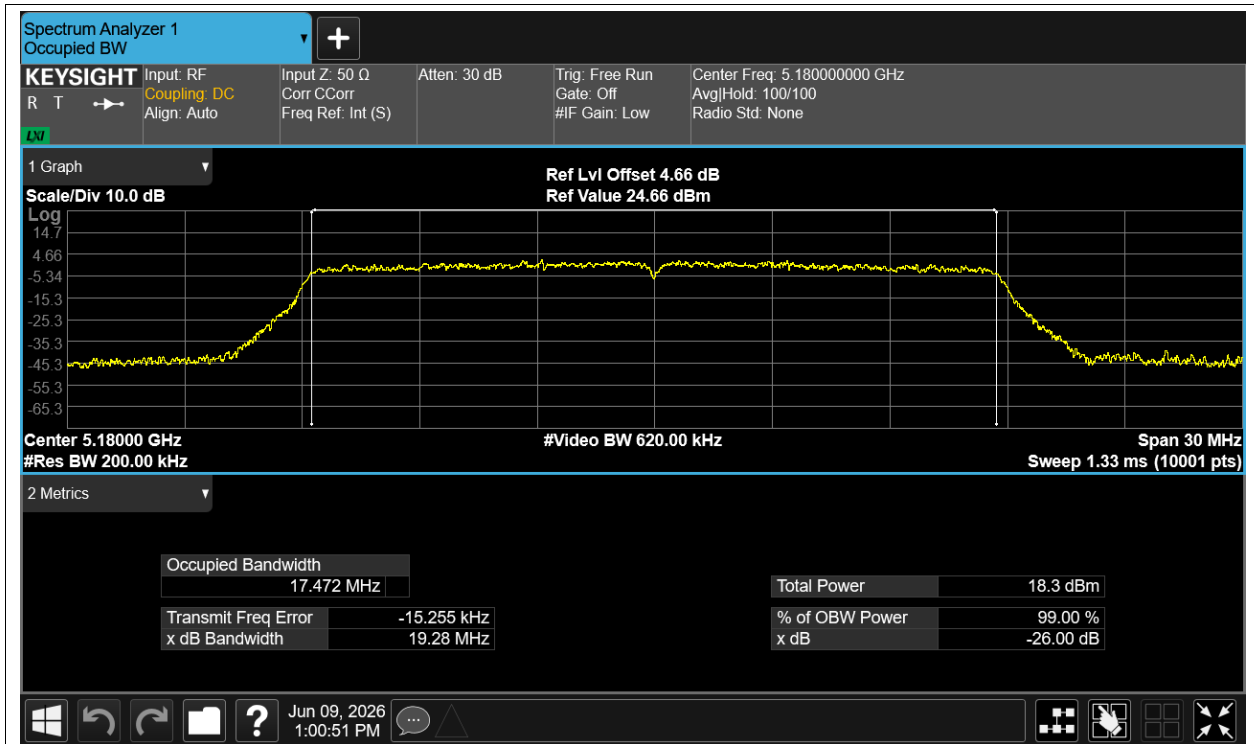
OBW NVNT ac80 5210MHz Ant1



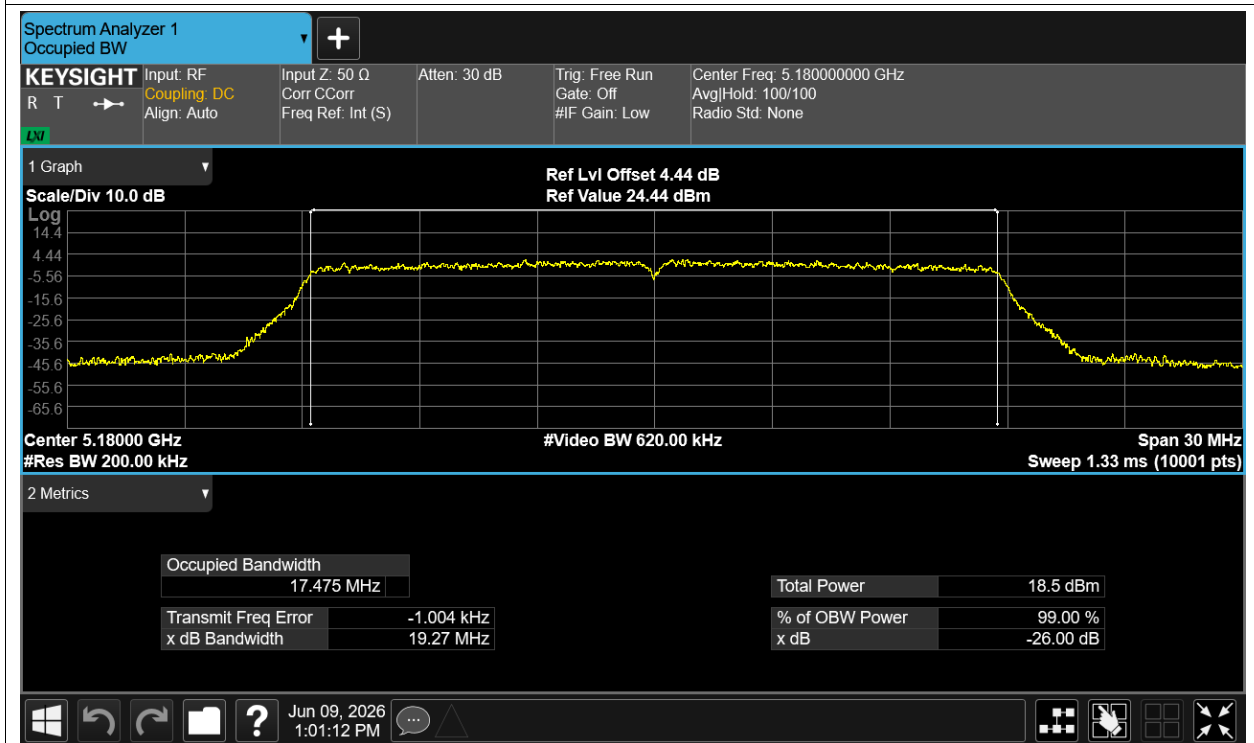
OBW NVNT ac80 5210MHz Ant2



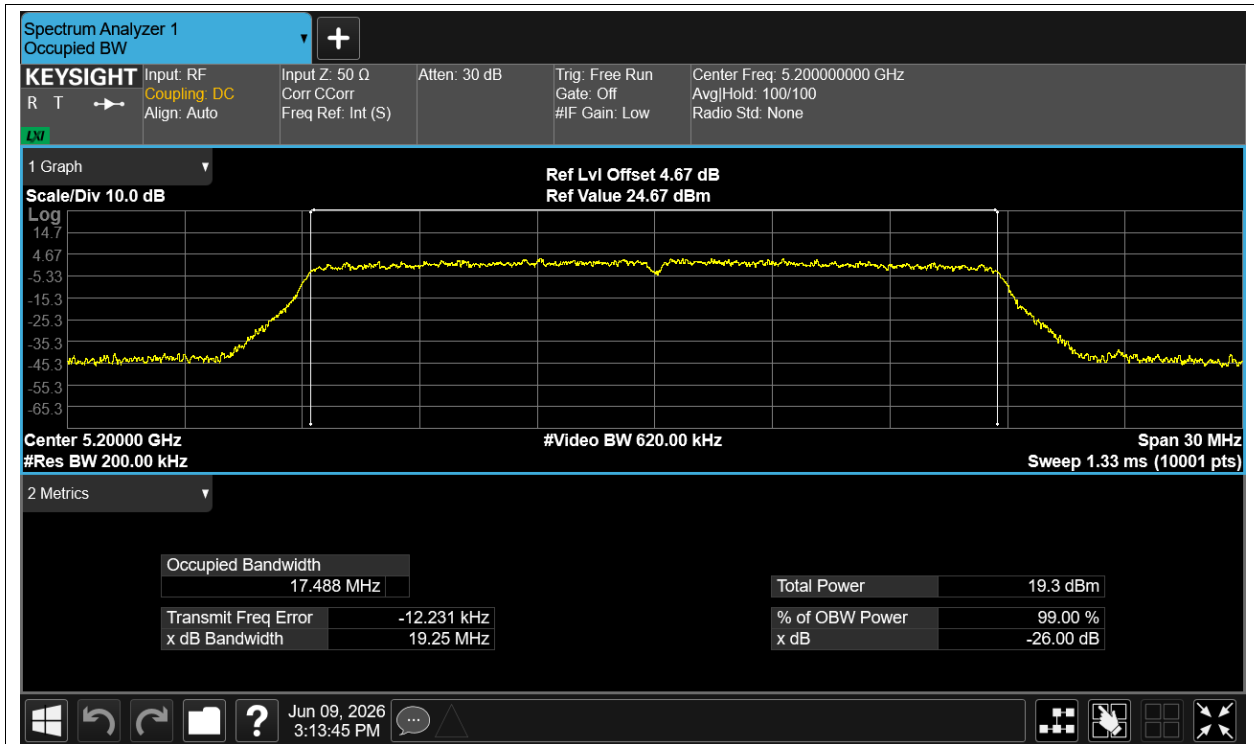
OBW NVNT n20 5180MHz Ant1



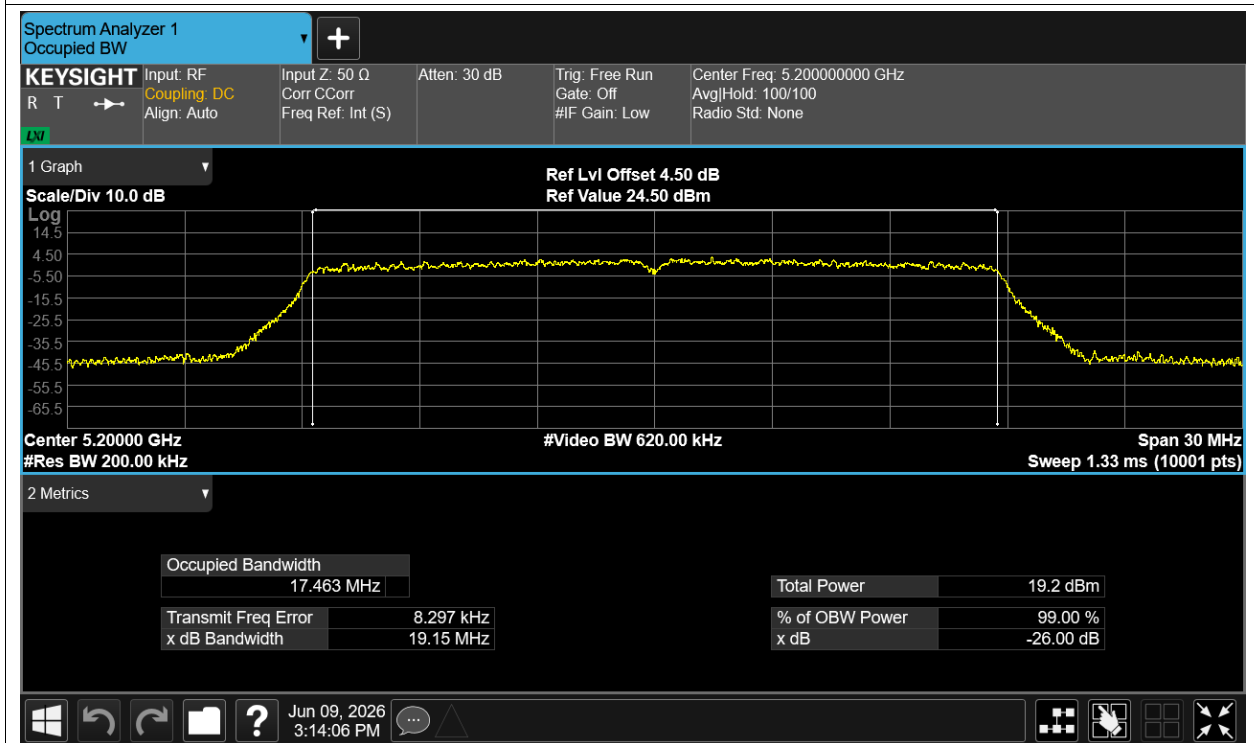
OBW NVNT n20 5180MHz Ant2



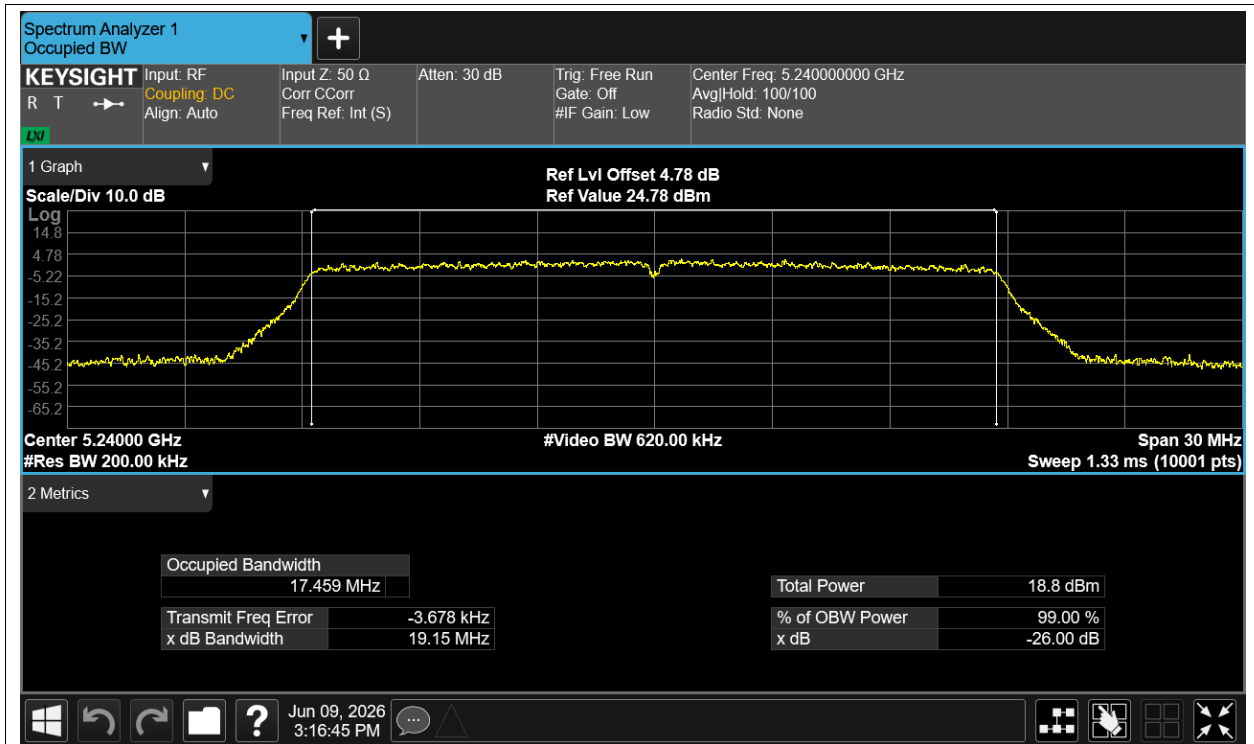
OBW NVNT n20 5200MHz Ant1



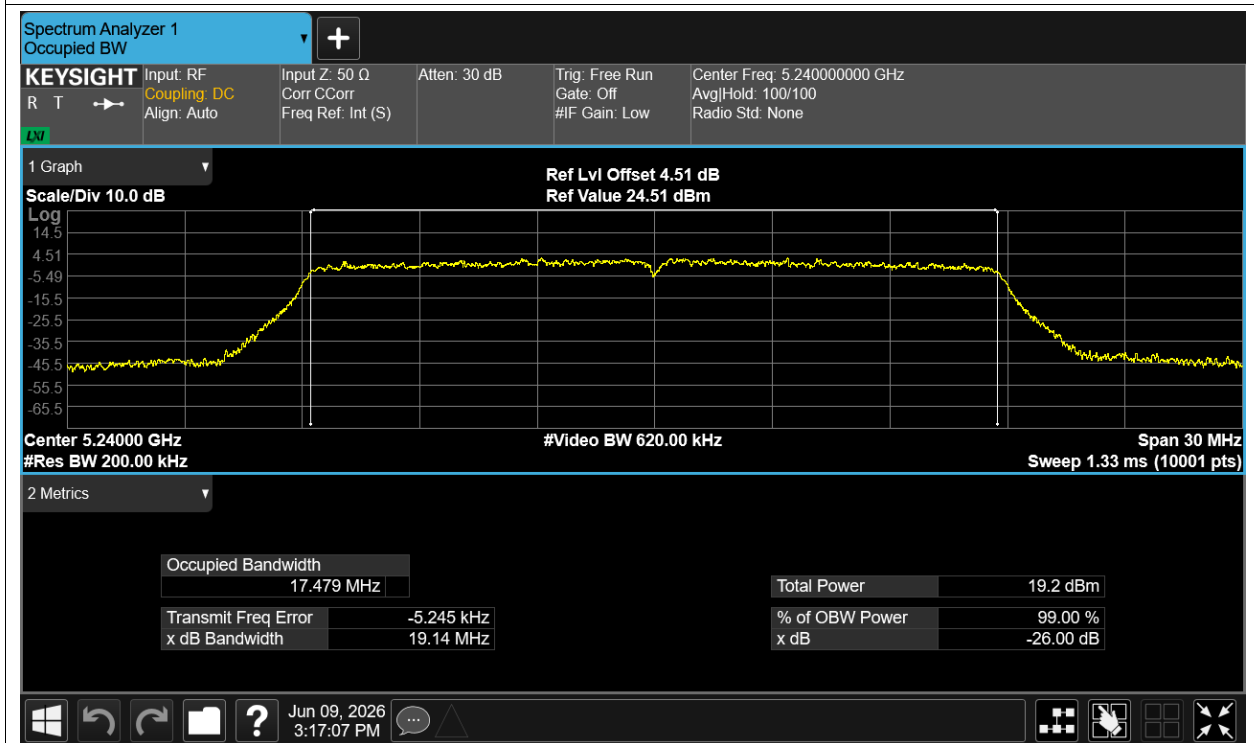
OBW NVNT n20 5200MHz Ant2



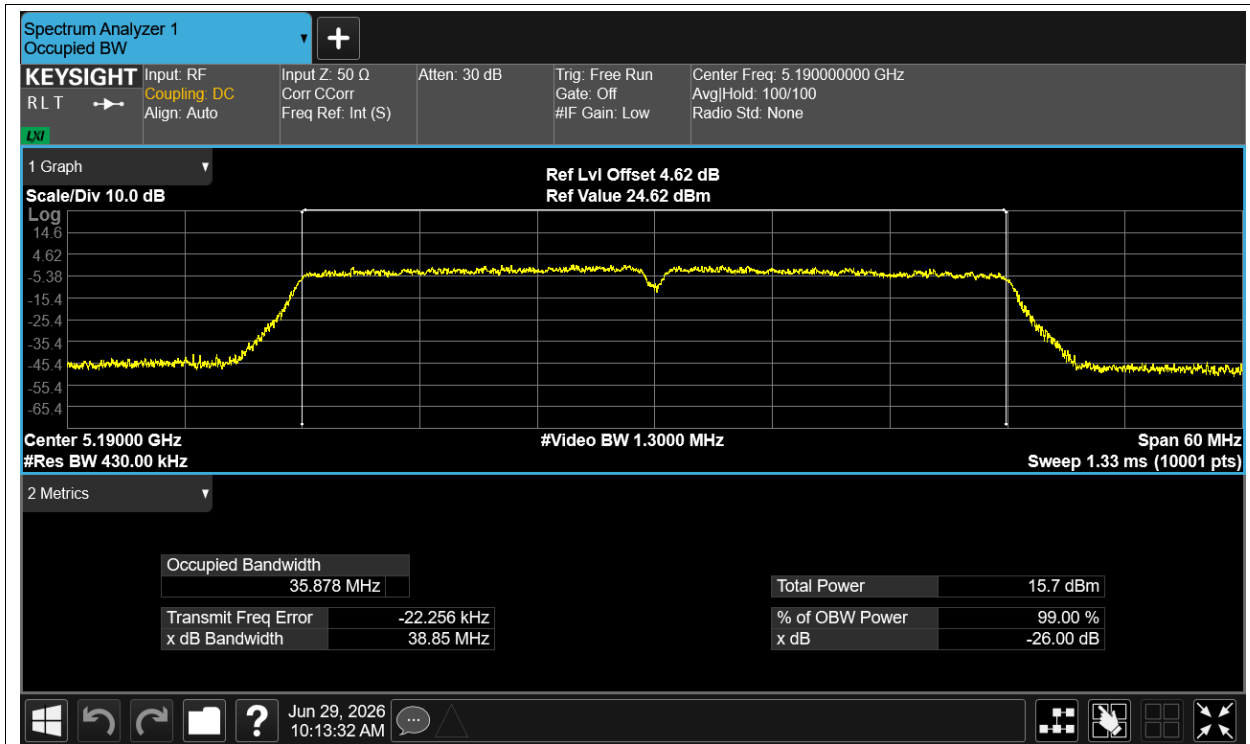
OBW NVNT n20 5240MHz Ant1



OBW NVNT n20 5240MHz Ant2



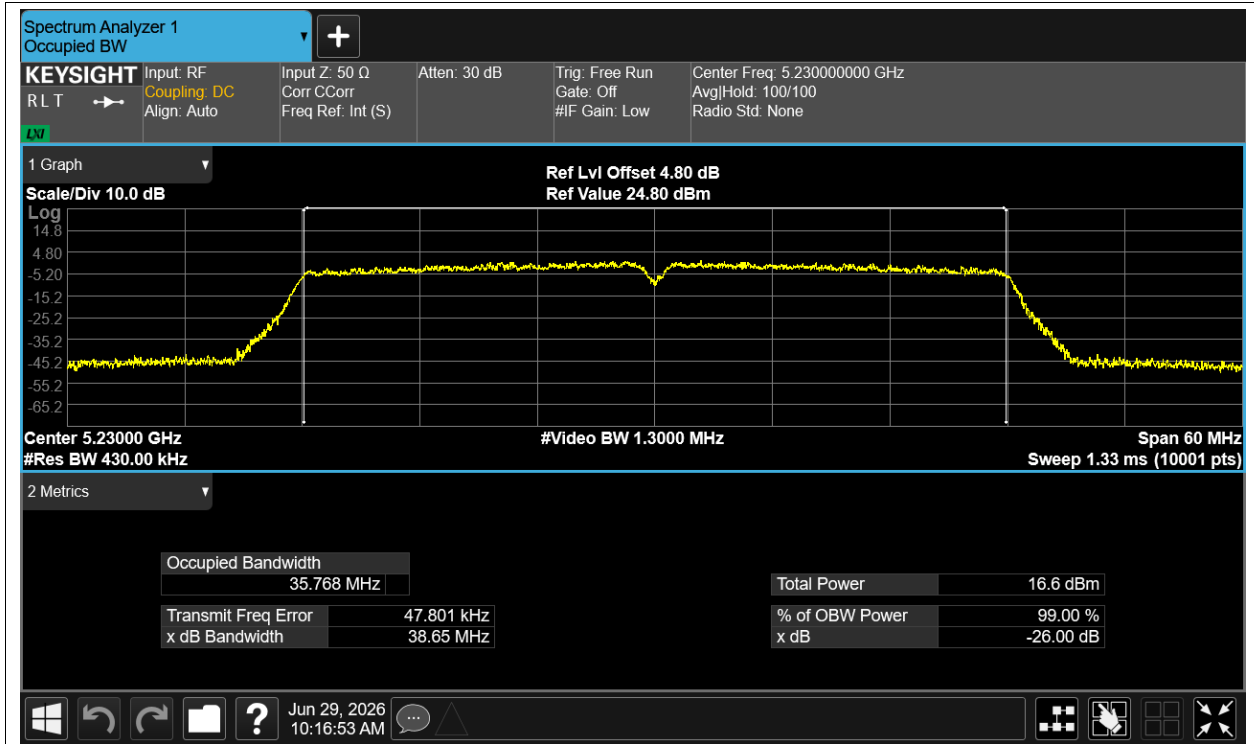
OBW NVNT n40 5190MHz Ant1



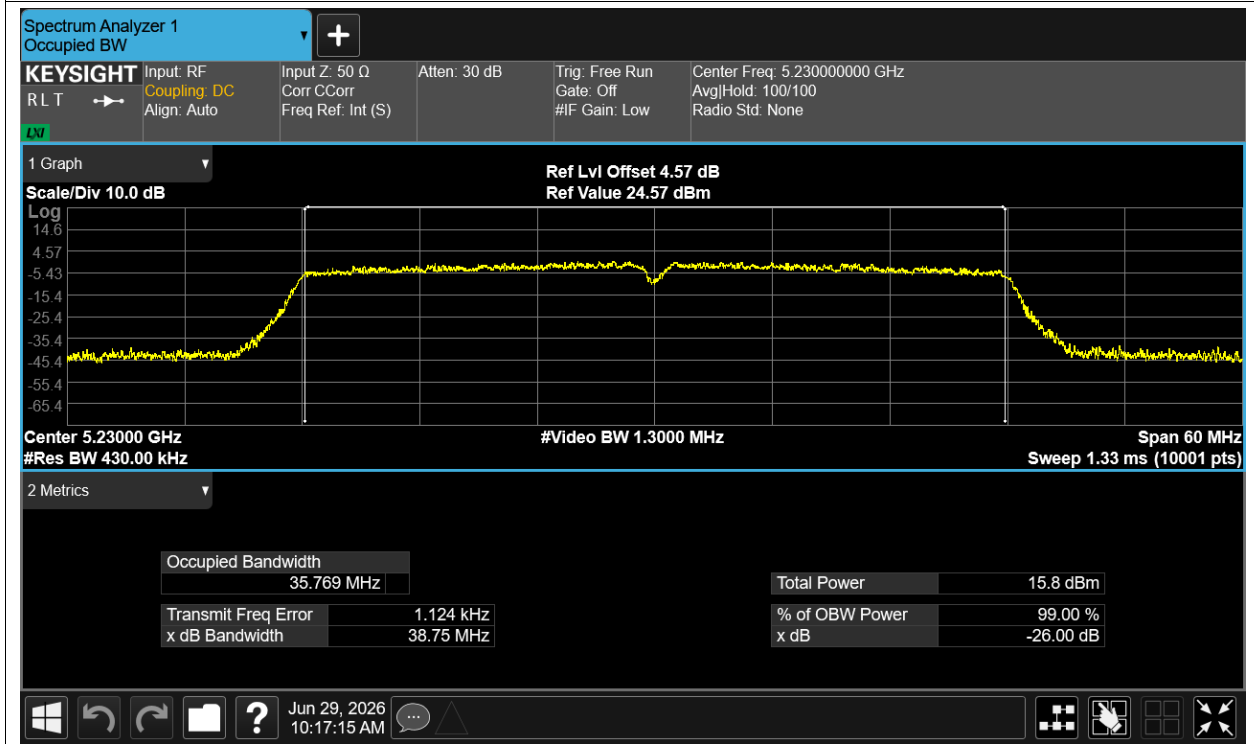
OBW NVNT n40 5190MHz Ant2



OBW NVNT n40 5230MHz Ant1



OBW NVNT n40 5230MHz Ant2

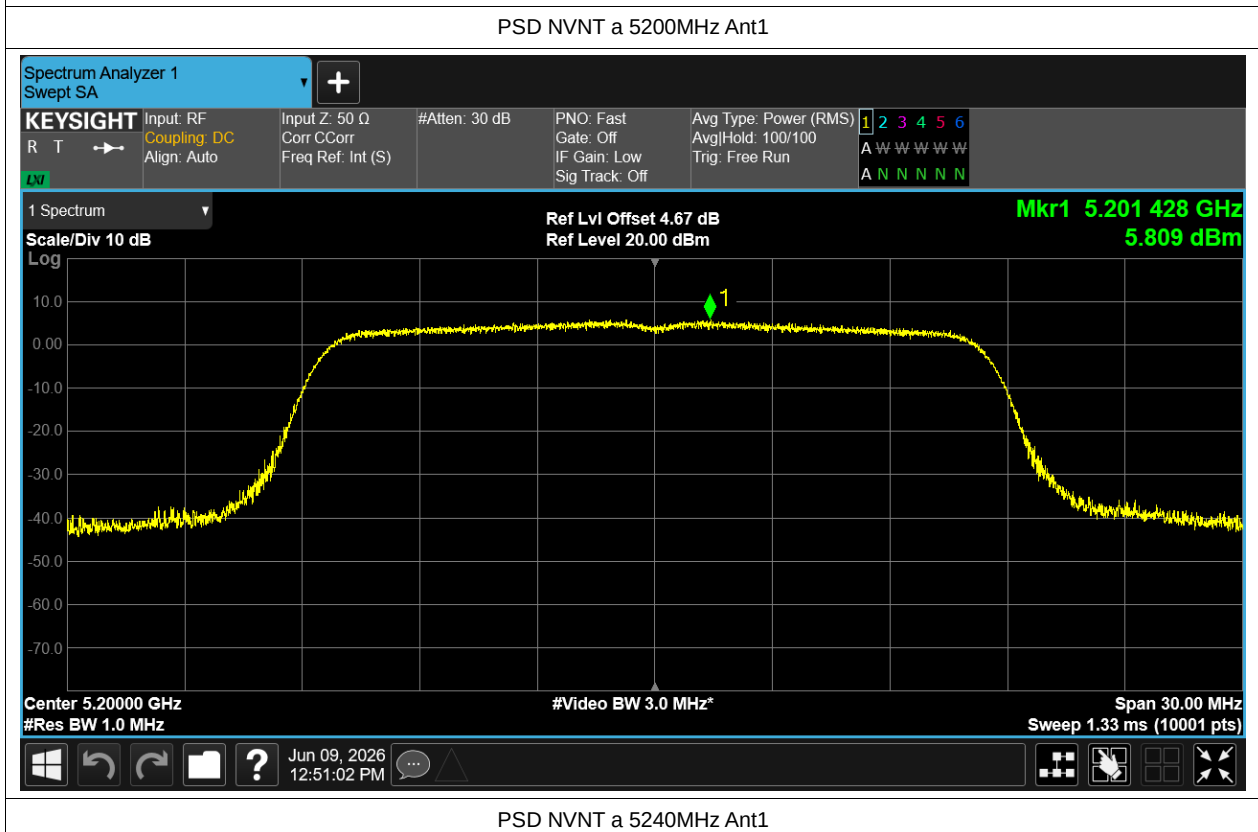
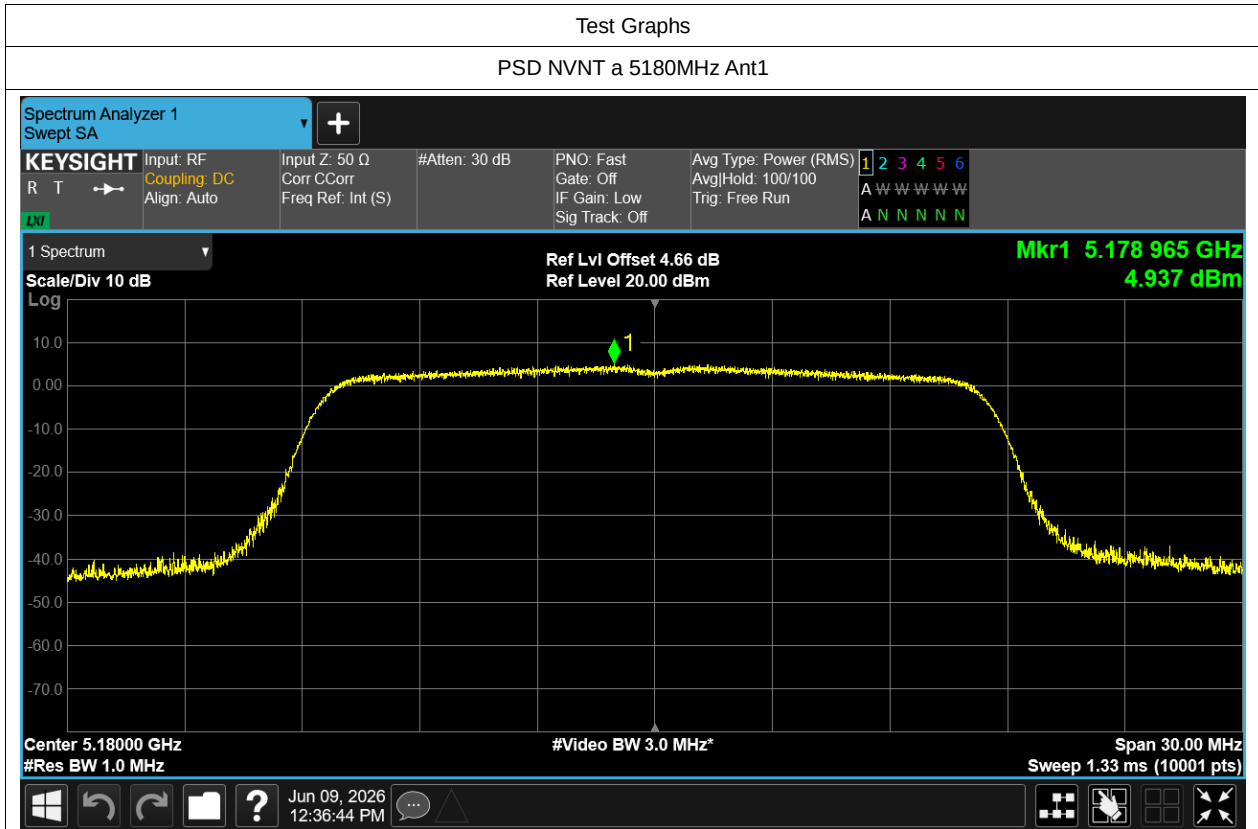


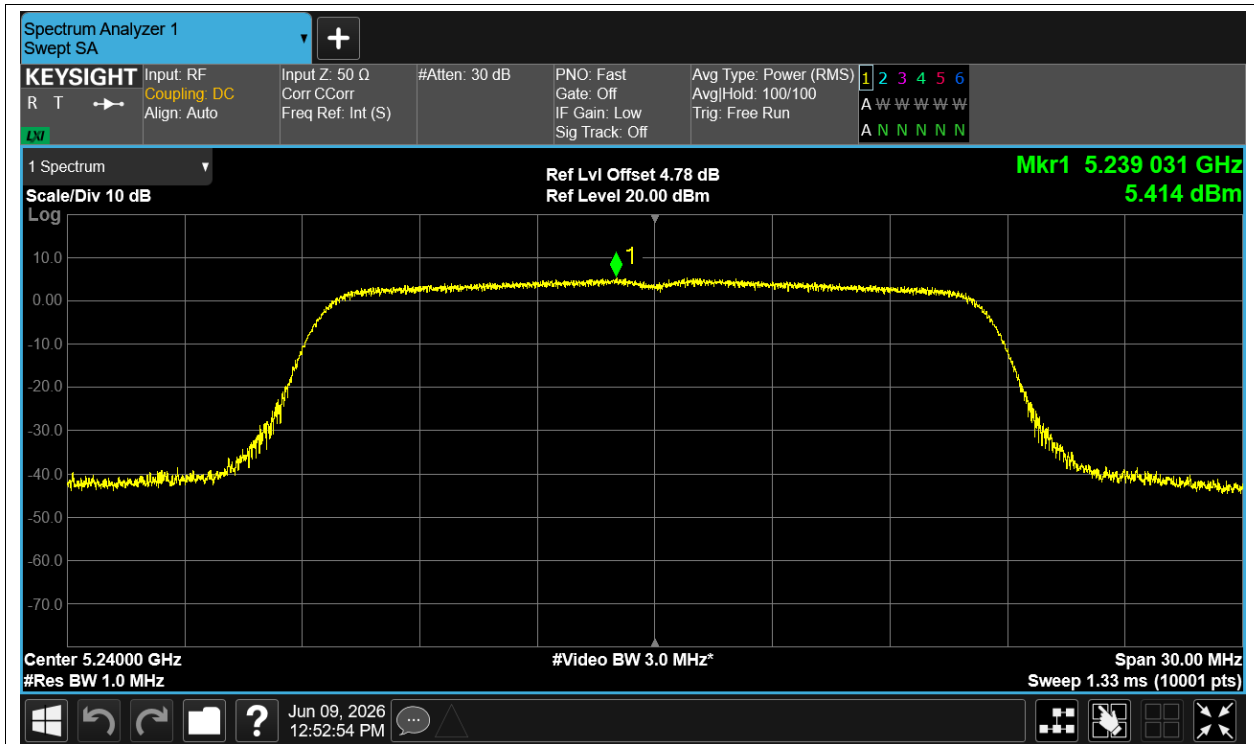
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Duty Factor (dB)	Max PSD (dBm/MHz)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5180	Ant1	0	4.937	4.937	11	Pass
NVNT	a	5200	Ant1	0	5.809	5.809	11	Pass
NVNT	a	5240	Ant1	0	5.414	5.414	11	Pass
NVNT	a	5180	Ant2	0	5.347	5.347	11	Pass
NVNT	a	5200	Ant2	0	5.208	5.208	11	Pass
NVNT	a	5240	Ant2	0	6.443	6.443	11	Pass
NVNT	ac20	5180	Ant1	0	2.579	2.579	9.6	Pass
NVNT	ac20	5180	Ant2	0	2.935	2.935	9.6	Pass
NVNT	ac20	5180	Sum	0	5.771	5.771	9.6	Pass
NVNT	ac20	5200	Ant1	0	3.305	3.305	9.6	Pass
NVNT	ac20	5200	Ant2	0	2.884	2.884	9.6	Pass
NVNT	ac20	5200	Sum	0	6.11	6.11	9.6	Pass
NVNT	ac20	5240	Ant1	0	3.504	3.504	9.6	Pass
NVNT	ac20	5240	Ant2	0	4.392	4.392	9.6	Pass
NVNT	ac20	5240	Sum	0	6.981	6.981	9.6	Pass
NVNT	ac40	5190	Ant1	0	-2.624	-2.624	9.6	Pass
NVNT	ac40	5190	Ant2	0	-3.451	-3.451	9.6	Pass
NVNT	ac40	5190	Sum	0	-0.008	-0.008	9.6	Pass
NVNT	ac40	5230	Ant1	0	-1.641	-1.641	9.6	Pass
NVNT	ac40	5230	Ant2	0	-2.677	-2.677	9.6	Pass
NVNT	ac40	5230	Sum	0	0.882	0.882	9.6	Pass
NVNT	ac80	5210	Ant1	0	-8.604	-8.604	9.6	Pass
NVNT	ac80	5210	Ant2	0	-7.64	-7.64	9.6	Pass
NVNT	ac80	5210	Sum	0	-5.085	-5.085	9.6	Pass
NVNT	n20	5180	Ant1	0	2.975	2.975	9.6	Pass
NVNT	n20	5180	Ant2	0	3.243	3.243	9.6	Pass
NVNT	n20	5180	Sum	0	6.121	6.121	9.6	Pass
NVNT	n20	5200	Ant1	0	3.434	3.434	9.6	Pass
NVNT	n20	5200	Ant2	0	3.9	3.9	9.6	Pass
NVNT	n20	5200	Sum	0	6.684	6.684	9.6	Pass
NVNT	n20	5240	Ant1	0	3.513	3.513	9.6	Pass
NVNT	n20	5240	Ant2	0	4.283	4.283	9.6	Pass
NVNT	n20	5240	Sum	0	6.925	6.925	9.6	Pass
NVNT	n40	5190	Ant1	0	-2.876	-2.876	9.6	Pass
NVNT	n40	5190	Ant2	0	-3.187	-3.187	9.6	Pass
NVNT	n40	5190	Sum	0	-0.018	-0.018	9.6	Pass
NVNT	n40	5230	Ant1	0	-1.941	-1.941	9.6	Pass
NVNT	n40	5230	Ant2	0	-2.48	-2.48	9.6	Pass
NVNT	n40	5230	Sum	0	0.808	0.808	9.6	Pass

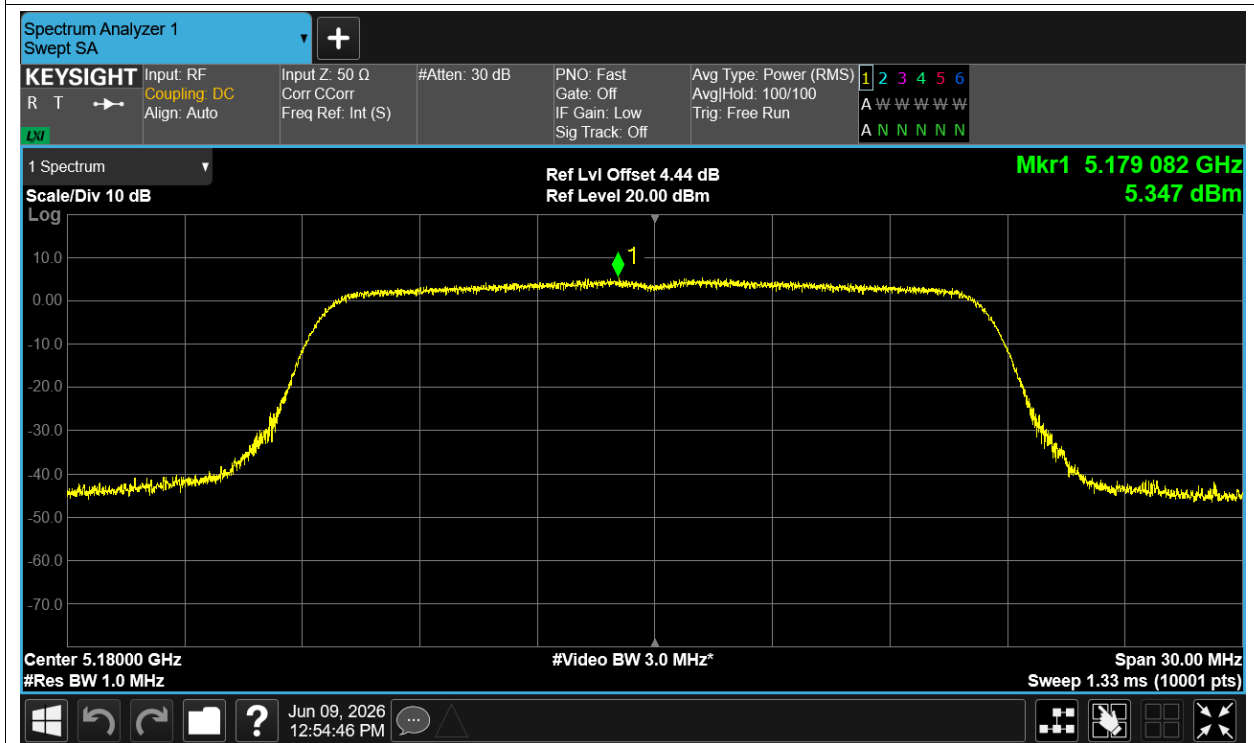
Note: The limits need reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For MIMO mode: ant gain is $4.39 + 10 \cdot \log_{10}(2) = 4.39 + 3.01 = 7.4$ dBi, the limit is $11 - (7.4 - 6) = 9.6$ dbm.

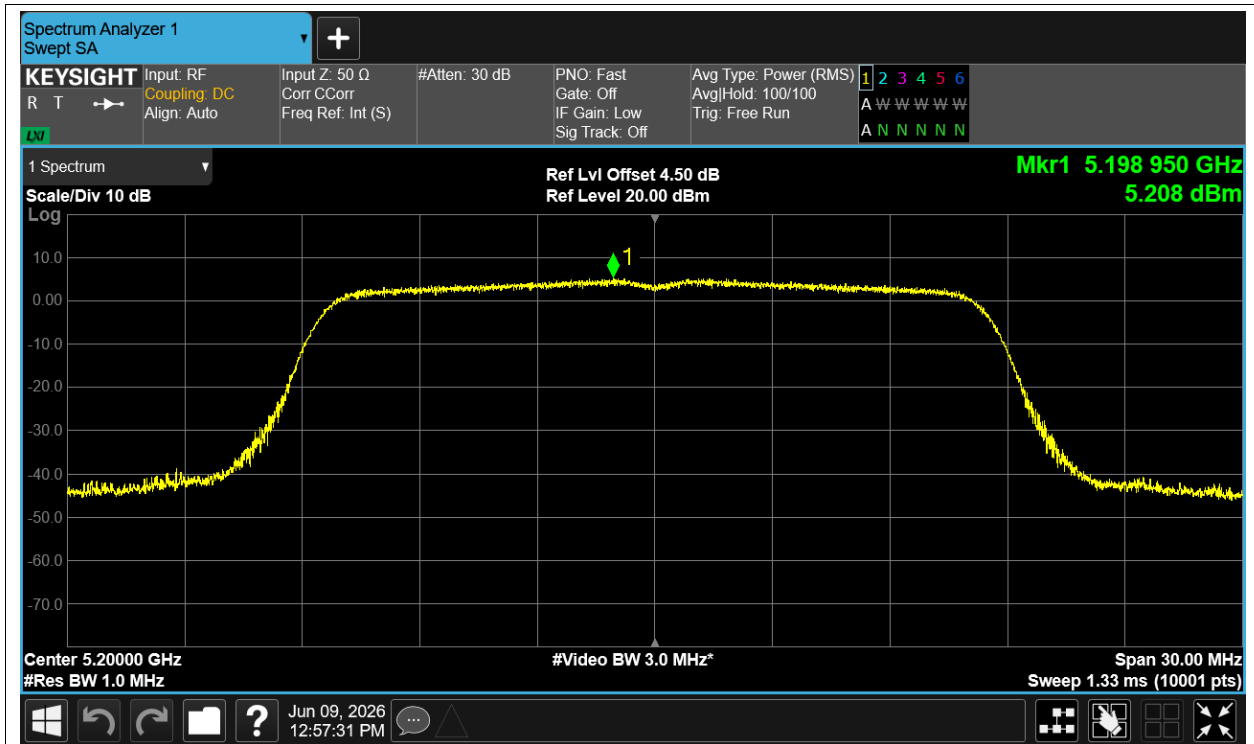




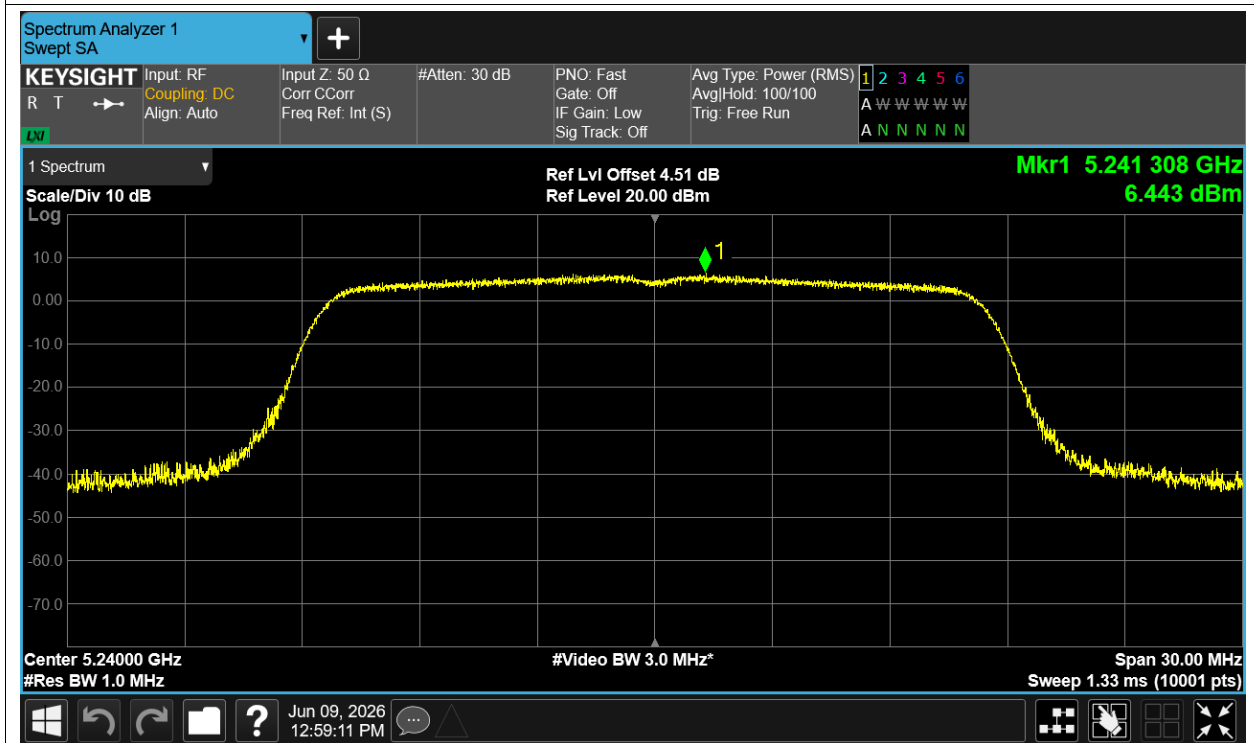
PSD NVNT a 5180MHz Ant2



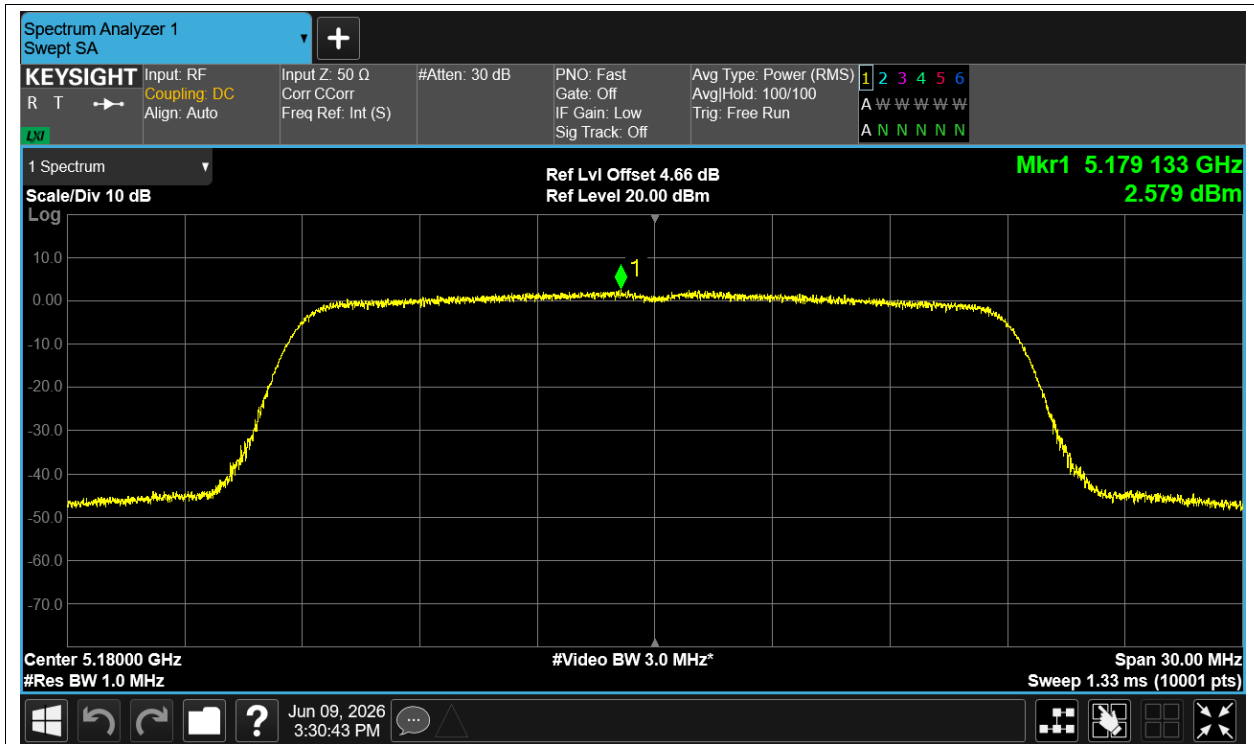
PSD NVNT a 5200MHz Ant2



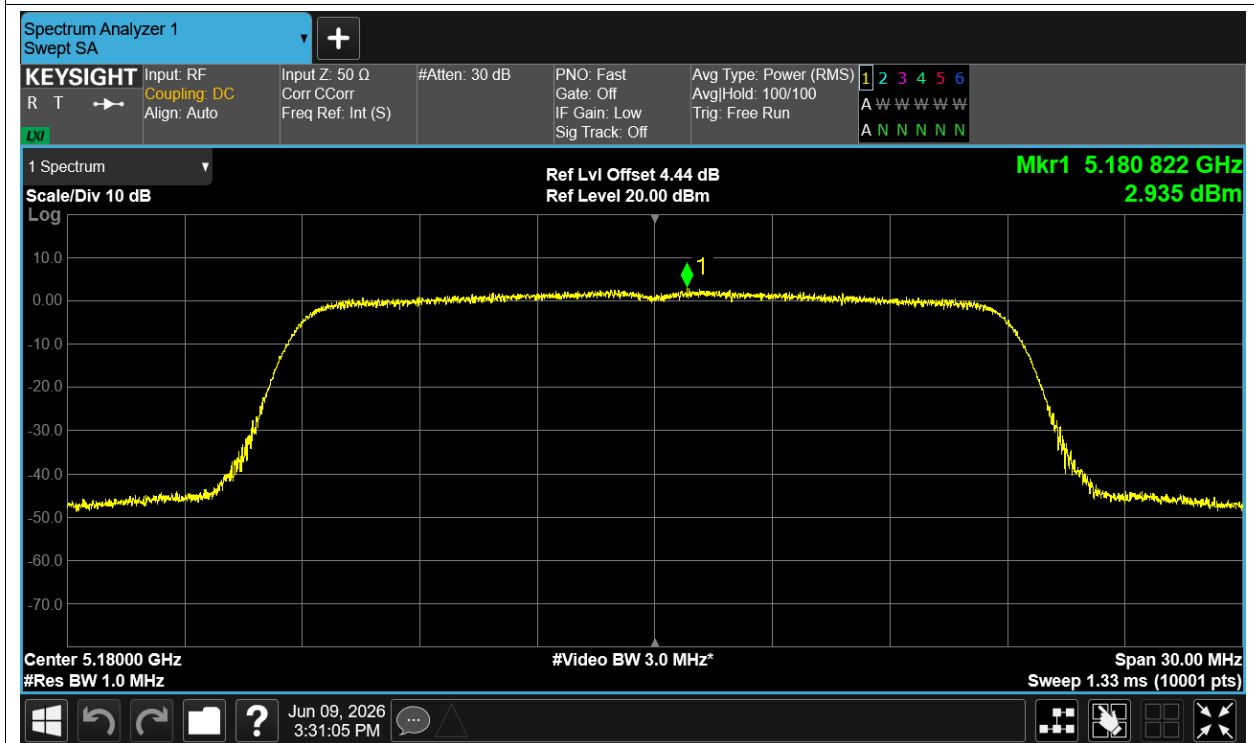
PSD NVNT a 5240MHz Ant2



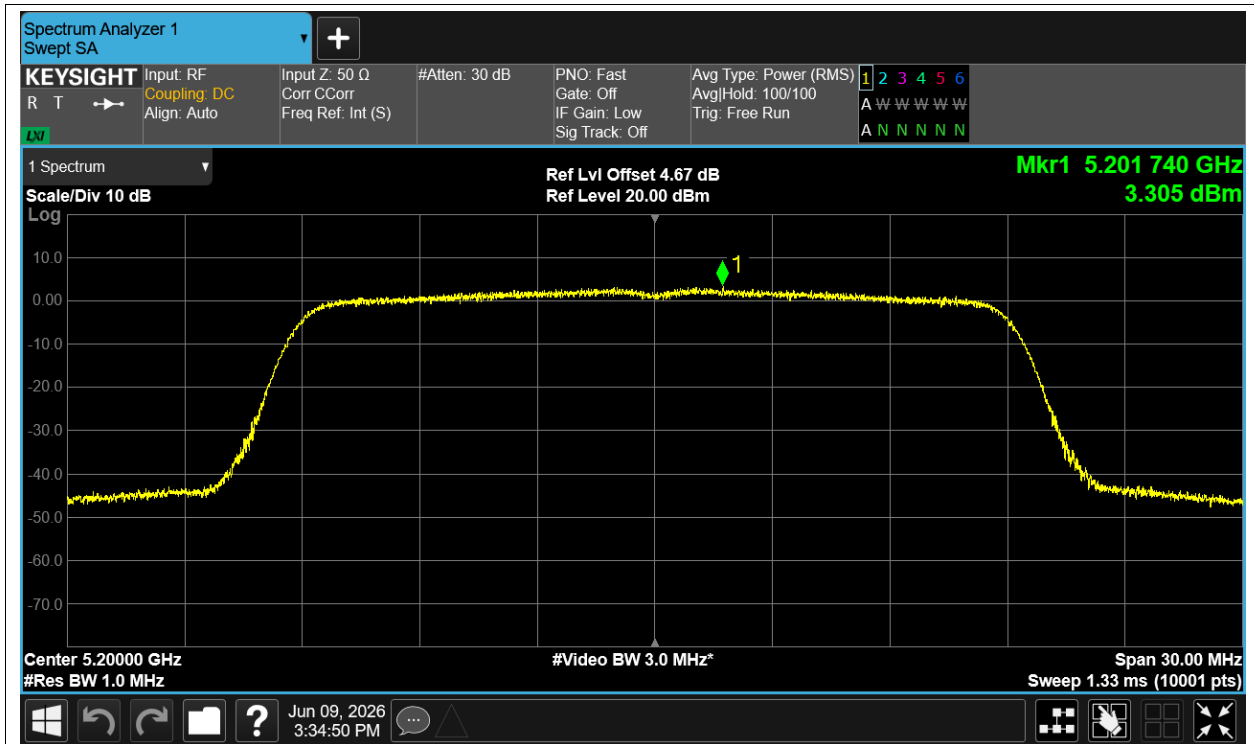
PSD NVNT ac20 5180MHz Ant1



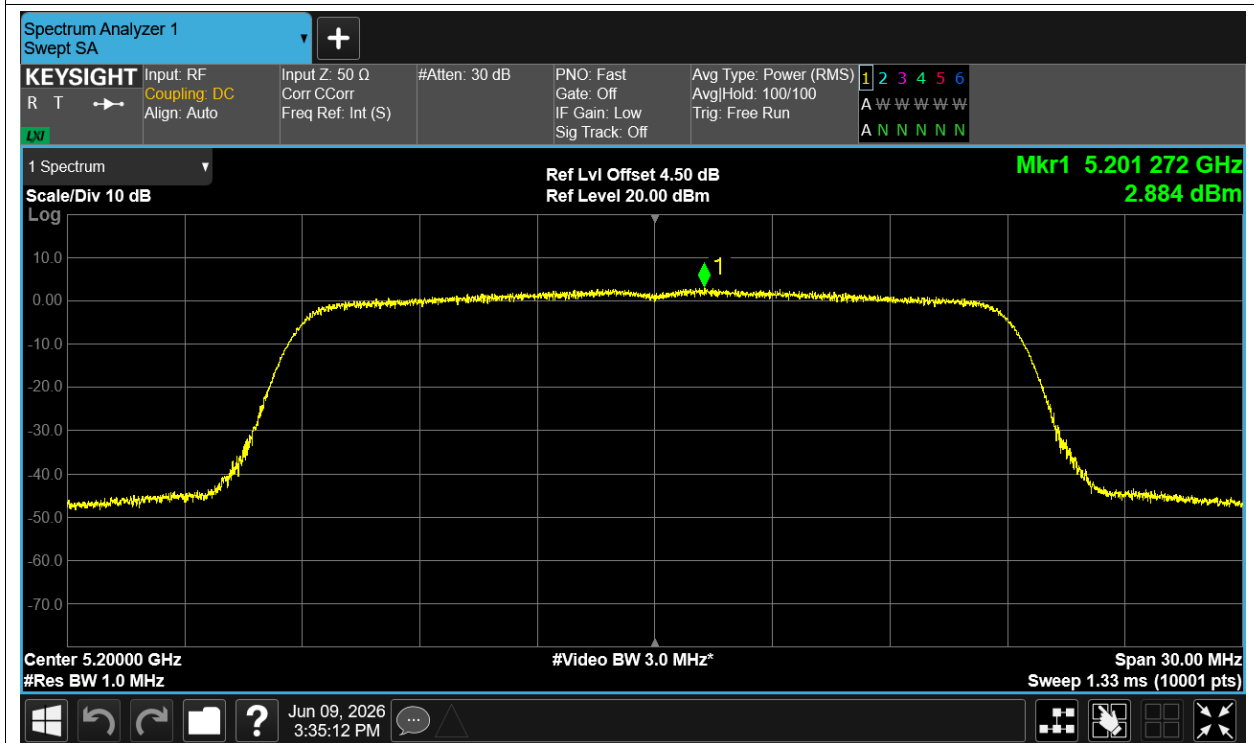
PSD NVNT ac20 5180MHz Ant2



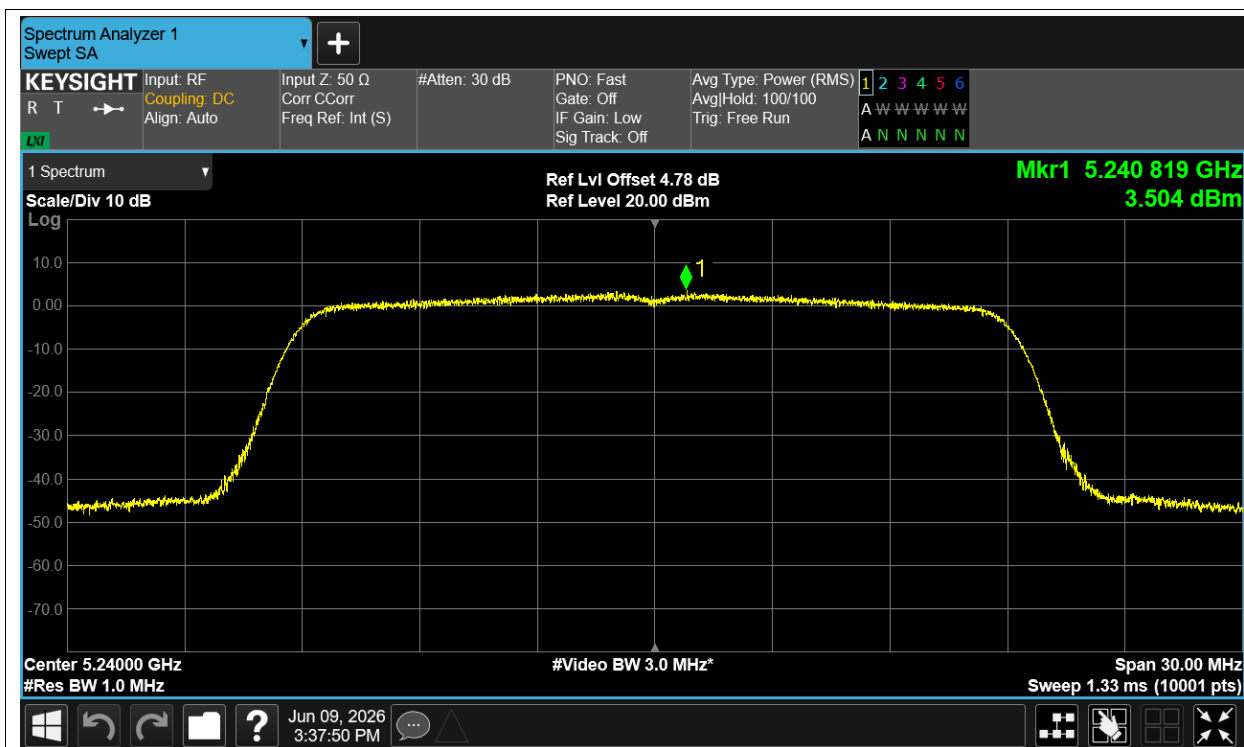
PSD NVNT ac20 5200MHz Ant1



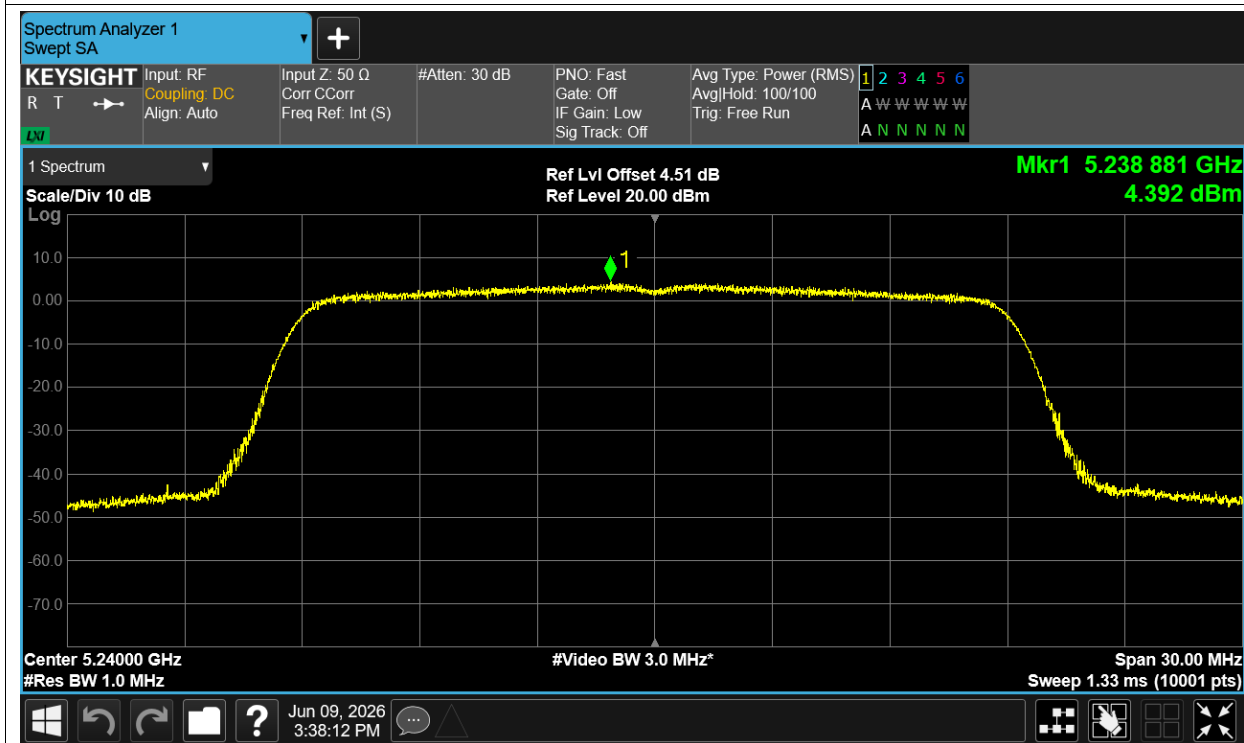
PSD NVNT ac20 5200MHz Ant2



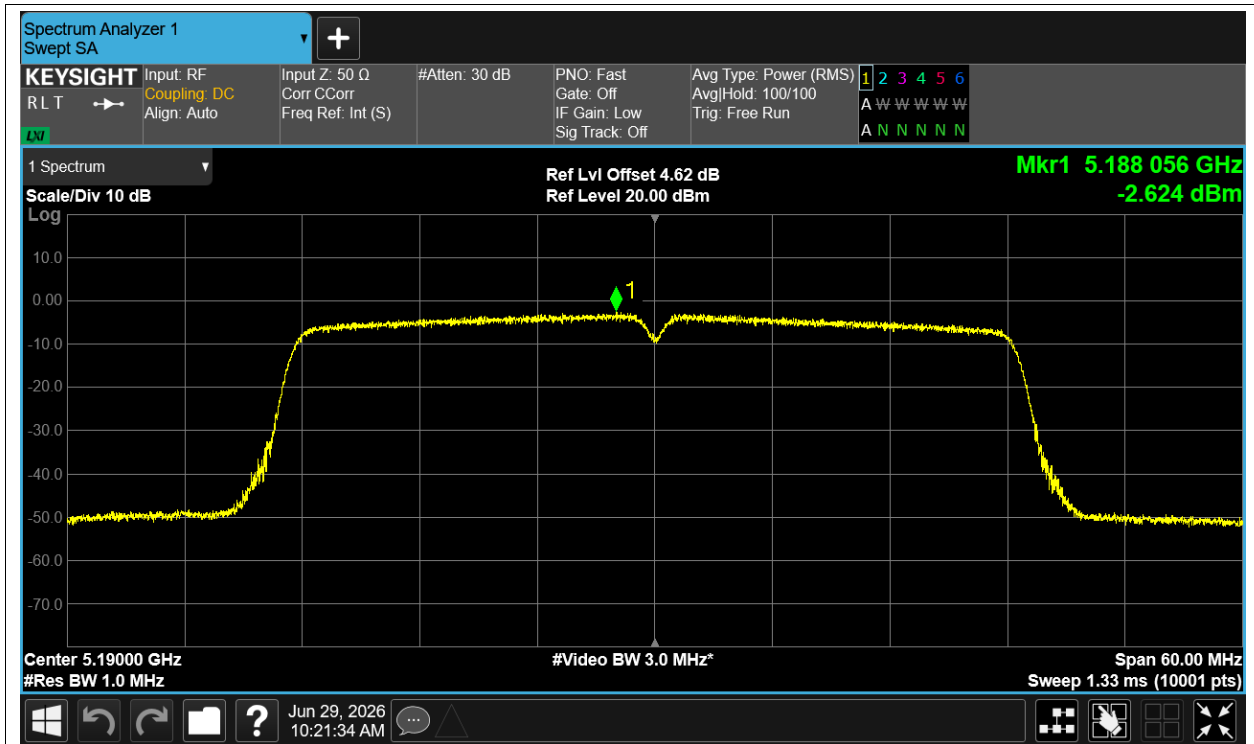
PSD NVNT ac20 5240MHz Ant1



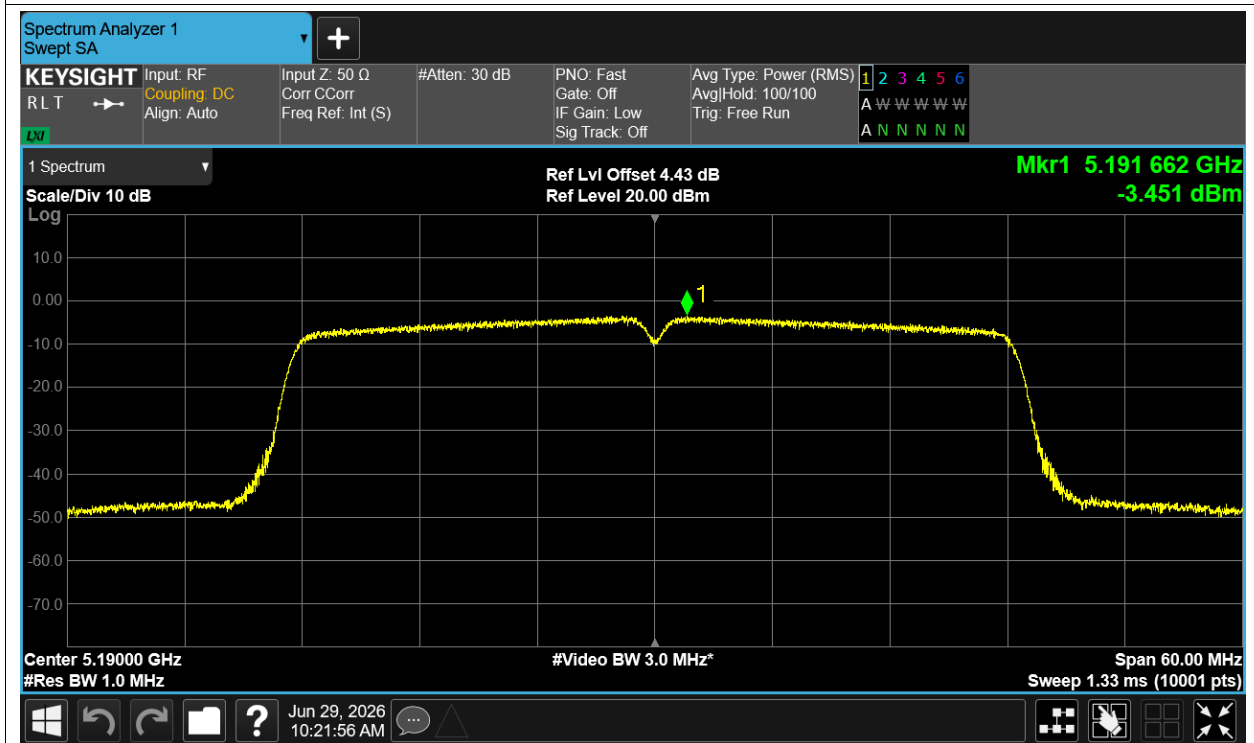
PSD NVNT ac20 5240MHz Ant2



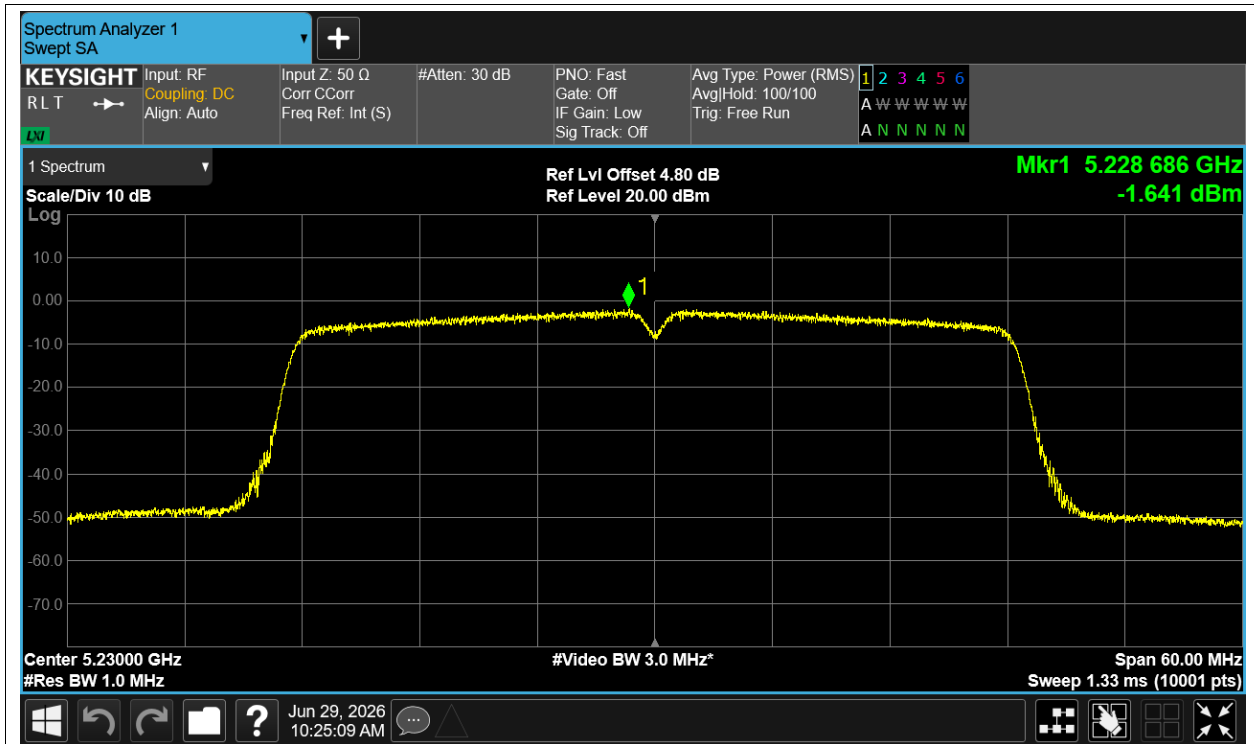
PSD NVNT ac40 5190MHz Ant1



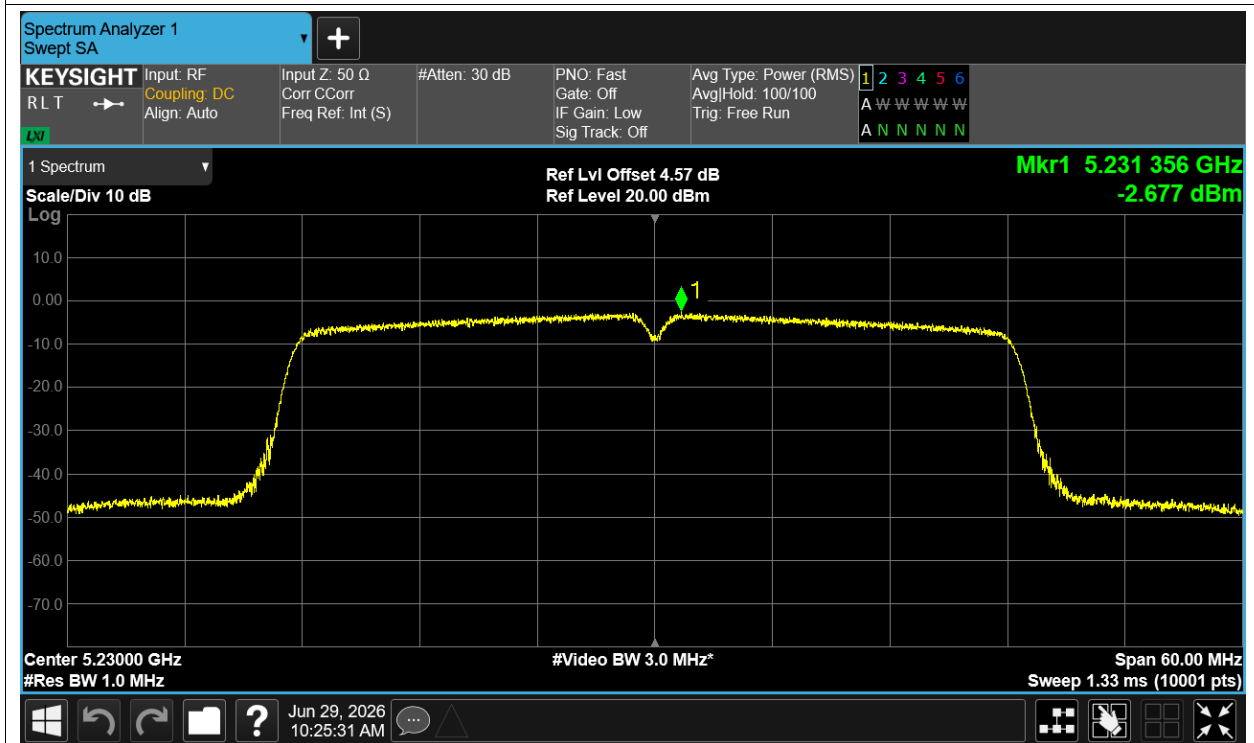
PSD NVNT ac40 5190MHz Ant2



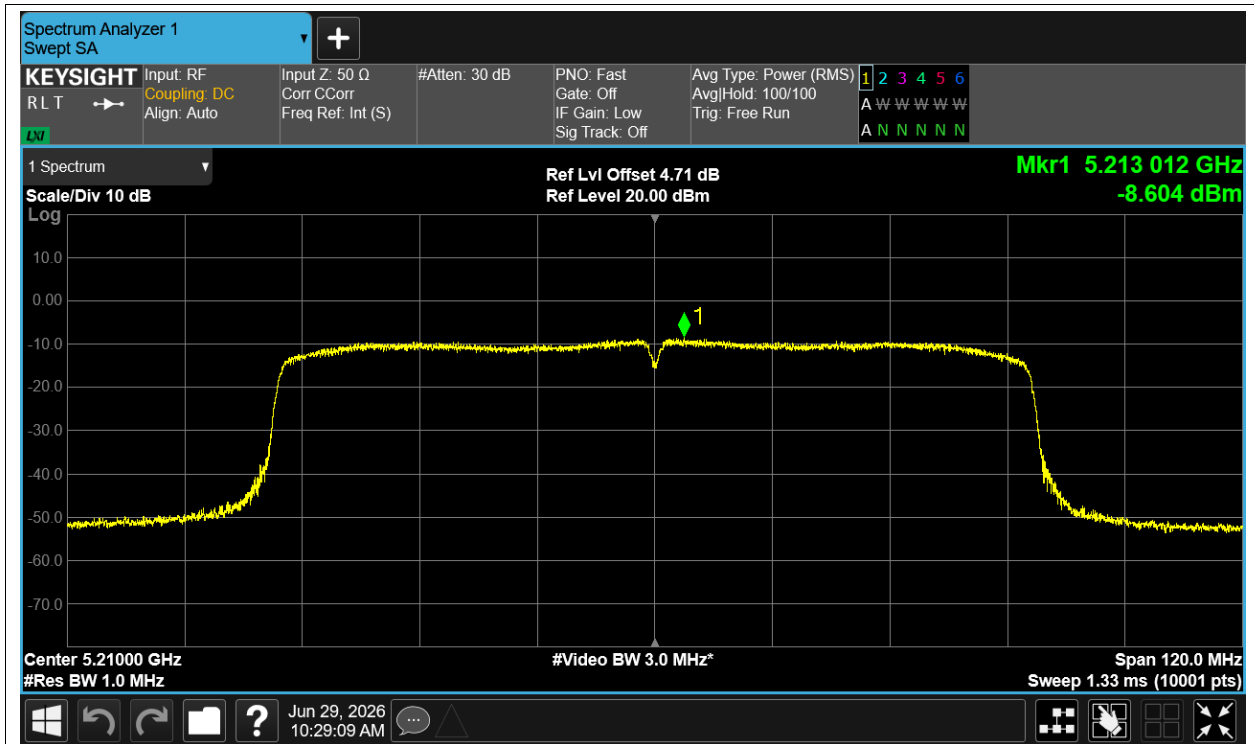
PSD NVNT ac40 5230MHz Ant1



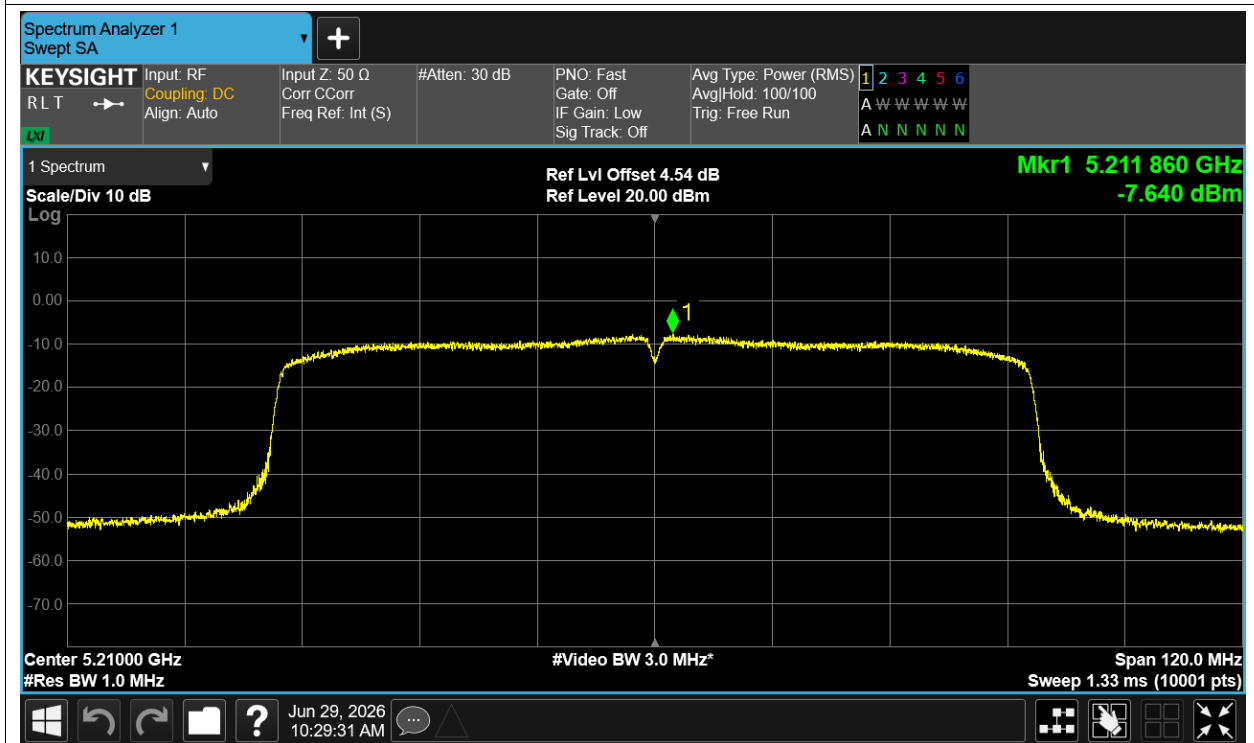
PSD NVNT ac40 5230MHz Ant2



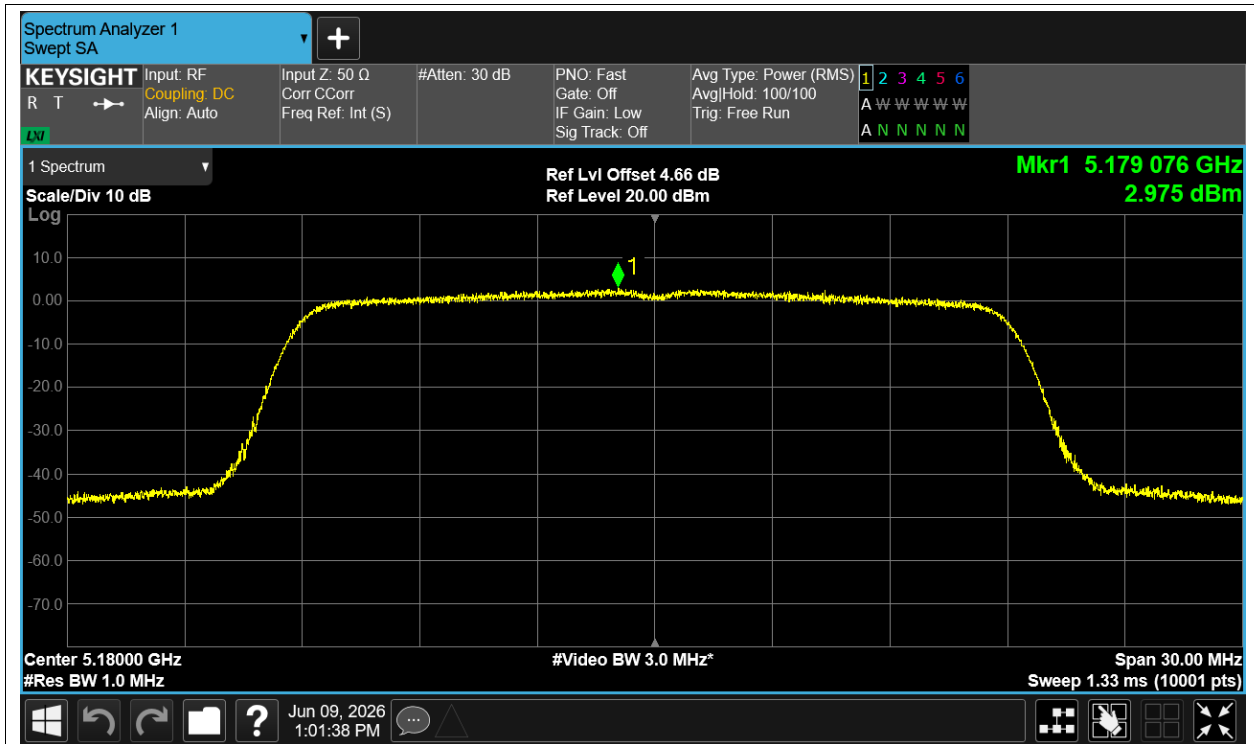
PSD NVNT ac80 5210MHz Ant1



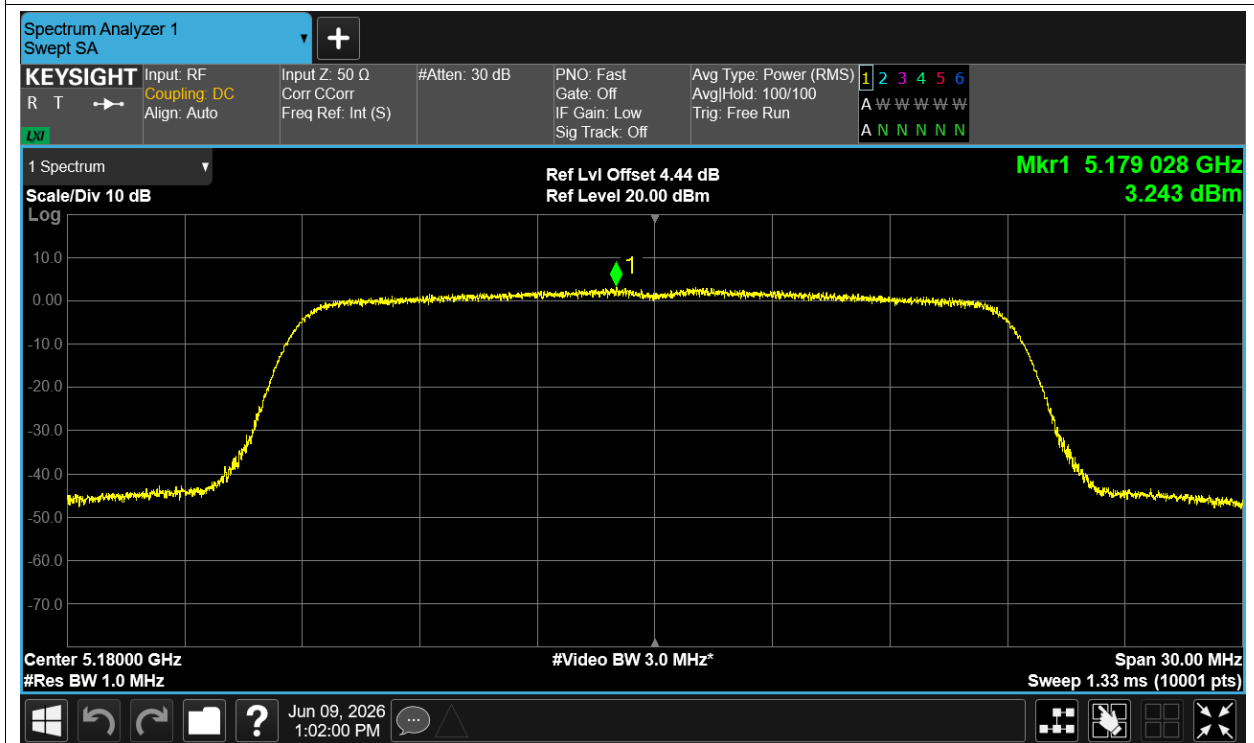
PSD NVNT ac80 5210MHz Ant2



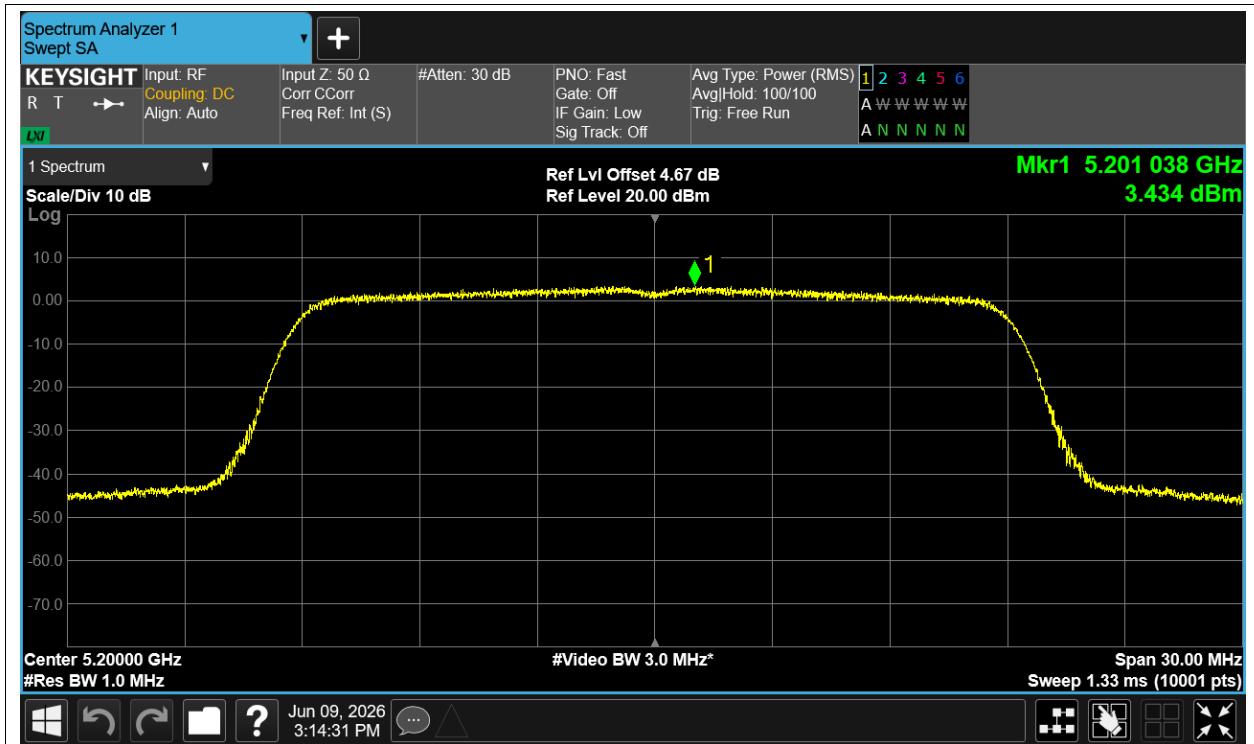
PSD NVNT n20 5180MHz Ant1



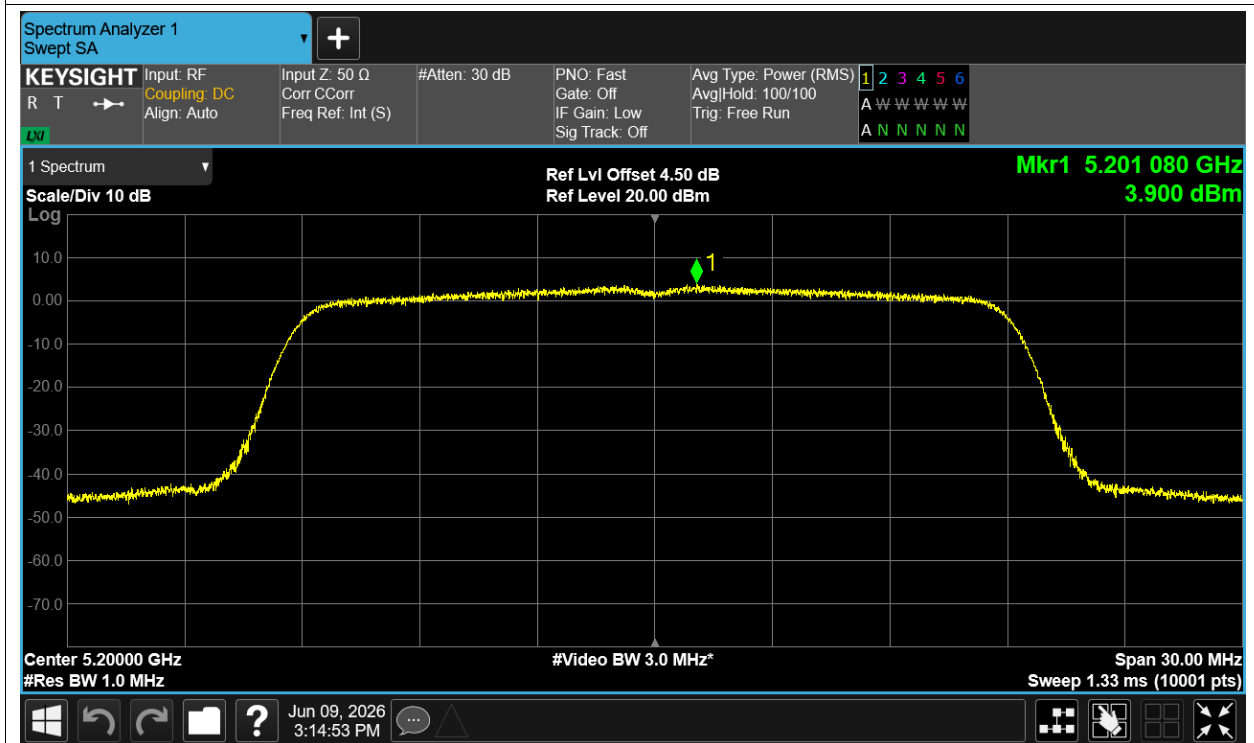
PSD NVNT n20 5180MHz Ant2



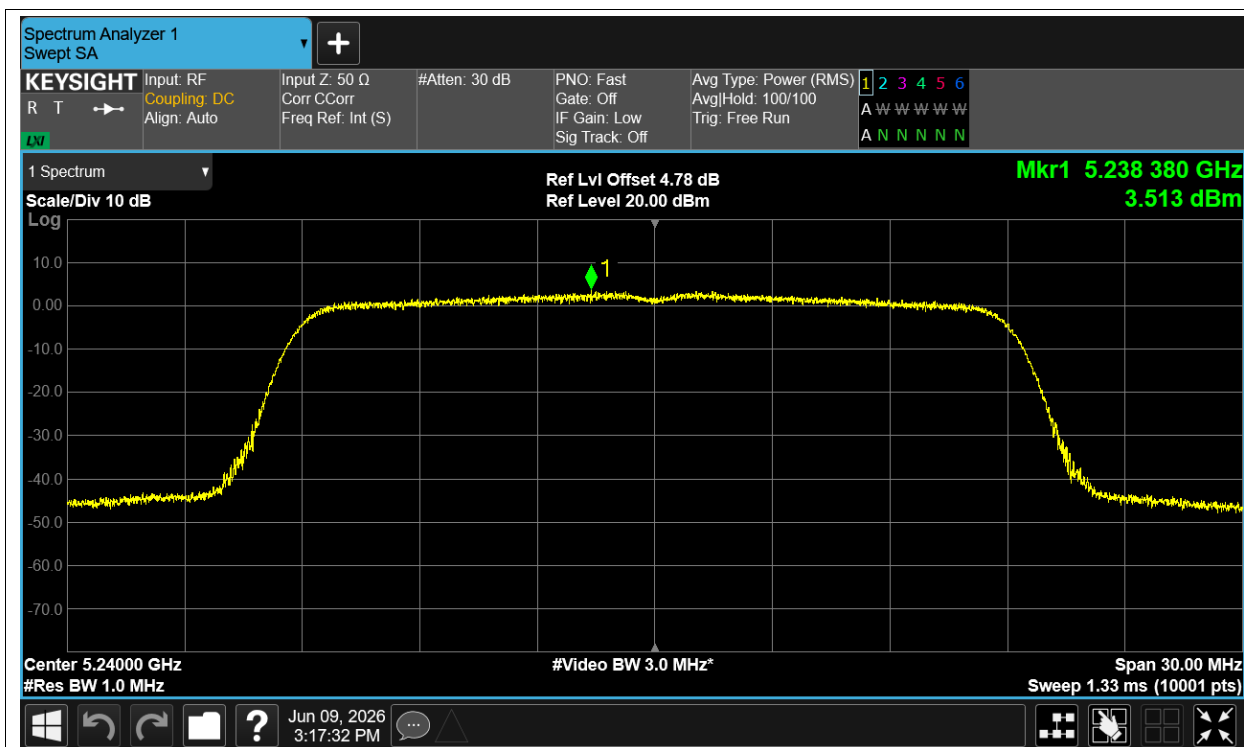
PSD NVNT n20 5200MHz Ant1



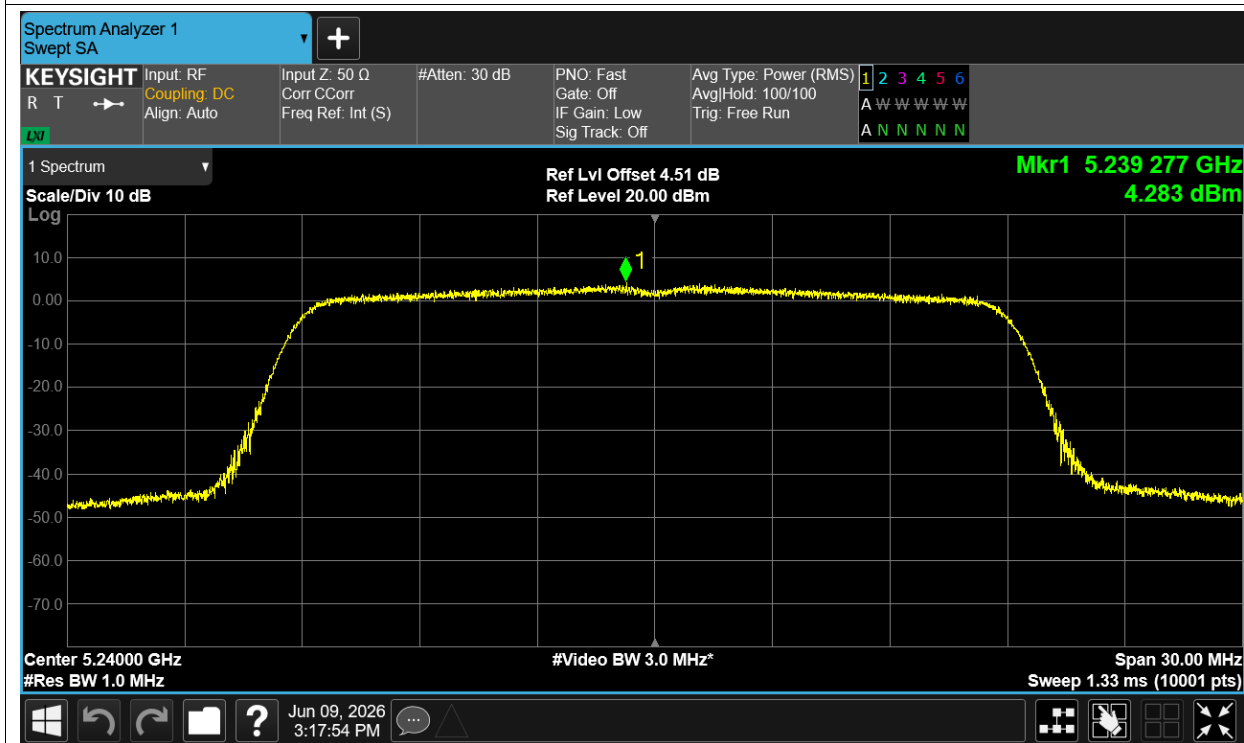
PSD NVNT n20 5200MHz Ant2



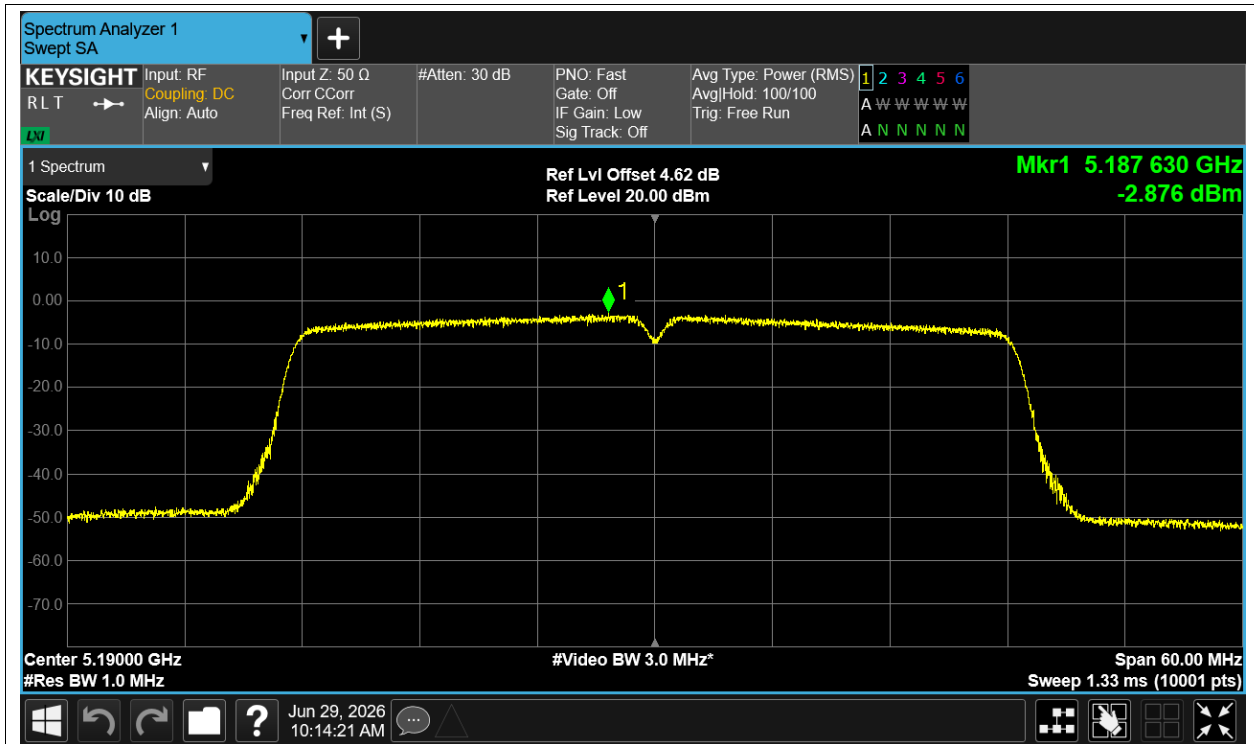
PSD NVNT n20 5240MHz Ant1



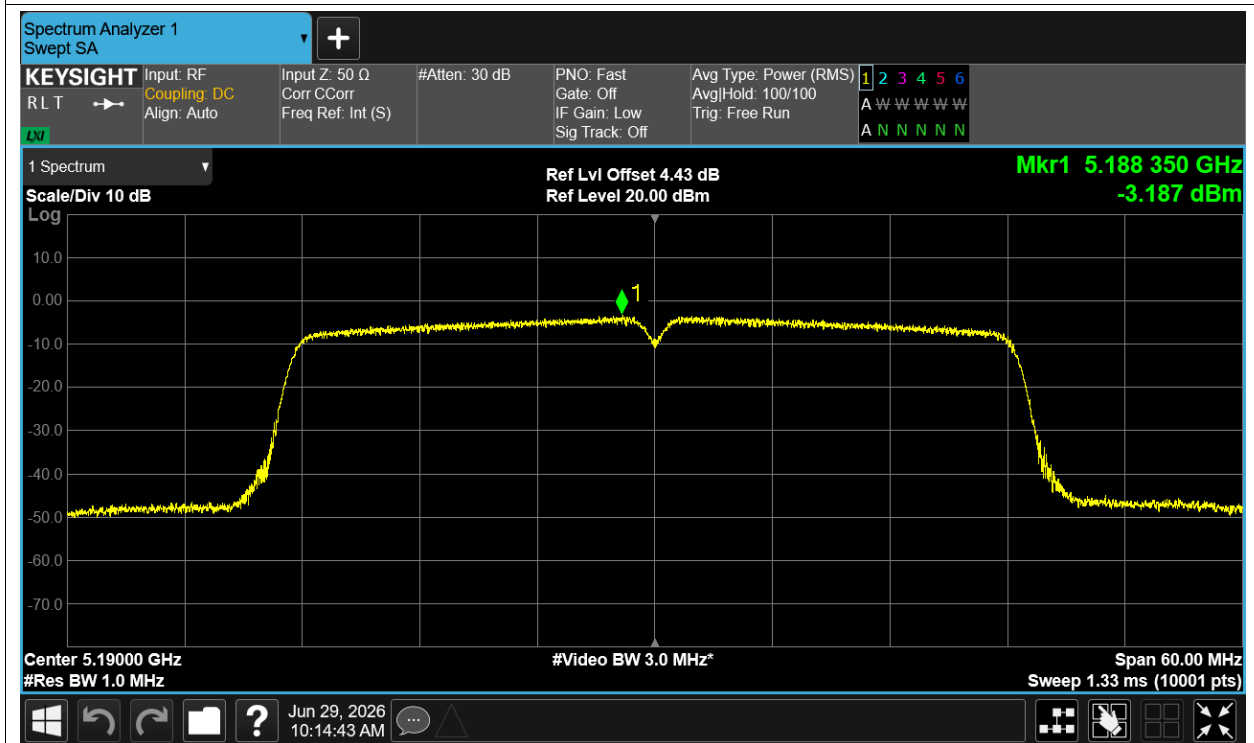
PSD NVNT n20 5240MHz Ant2



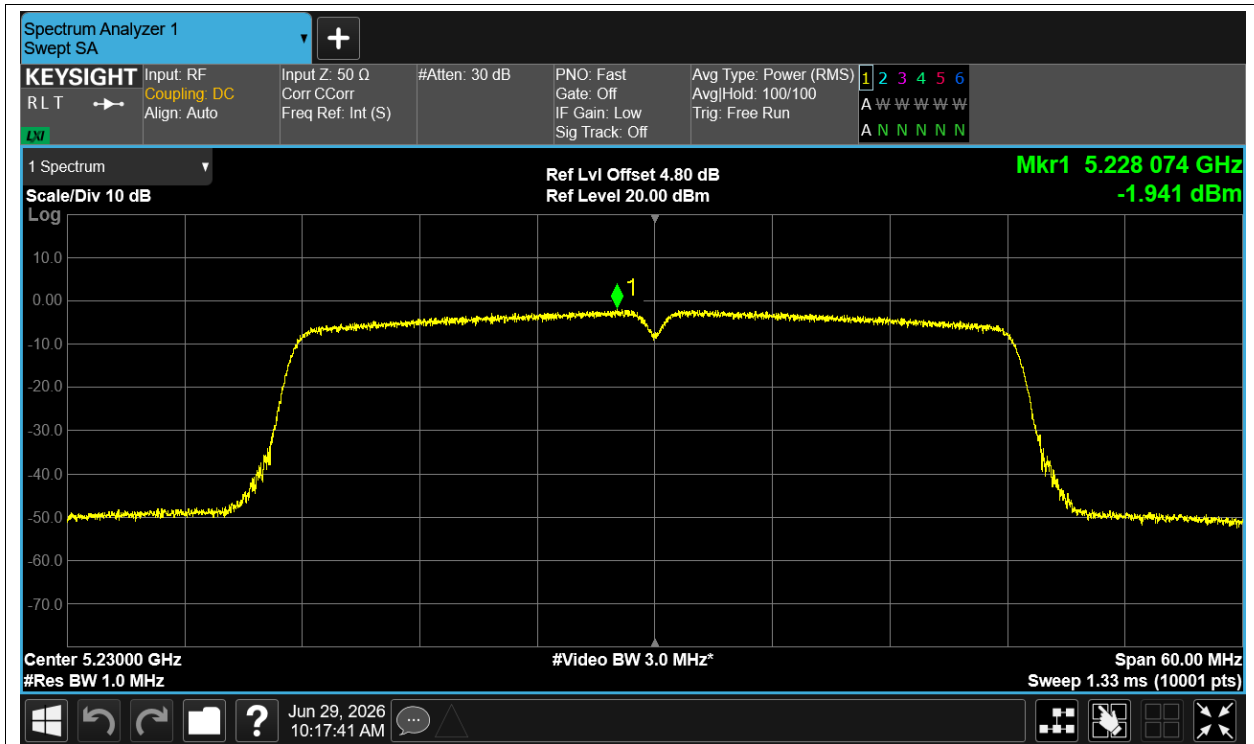
PSD NVNT n40 5190MHz Ant1



PSD NVNT n40 5190MHz Ant2



PSD NVNT n40 5230MHz Ant1



PSD NVNT n40 5230MHz Ant2

