Appendix D

RF Test Data for 5.2GWIFI(Conducted Measurement)

Product Name: Legends Pinball

Test Model: HA9920

Environmental Conditions

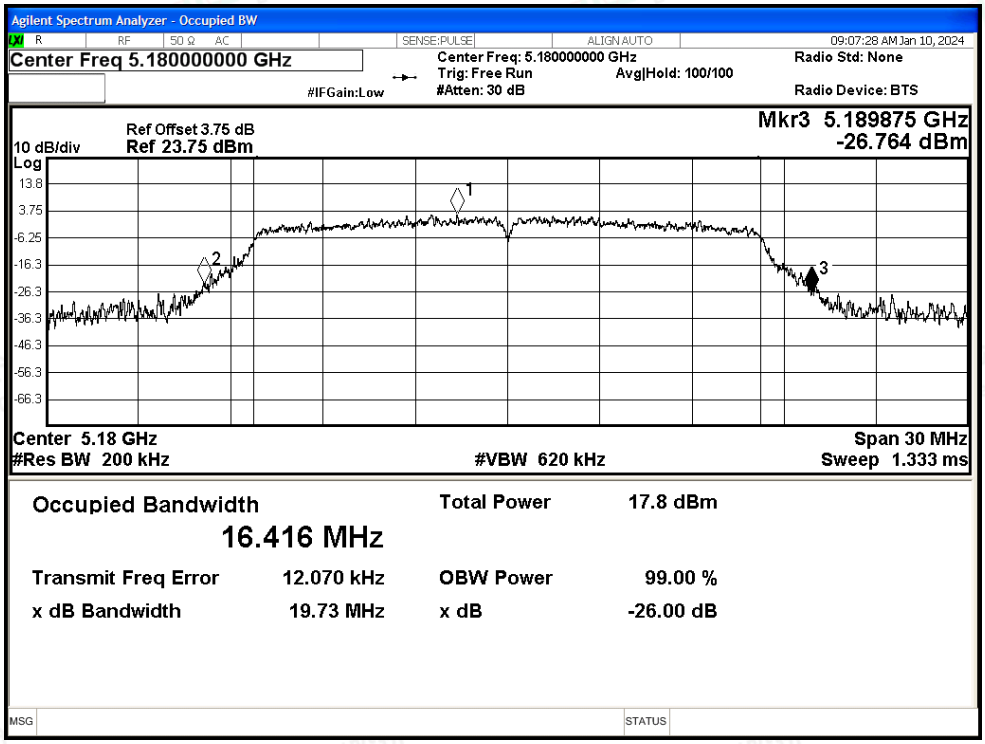
Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Eason Zhou
Supervised by:	Nick Peng

D.1 -26dB Bandwidth

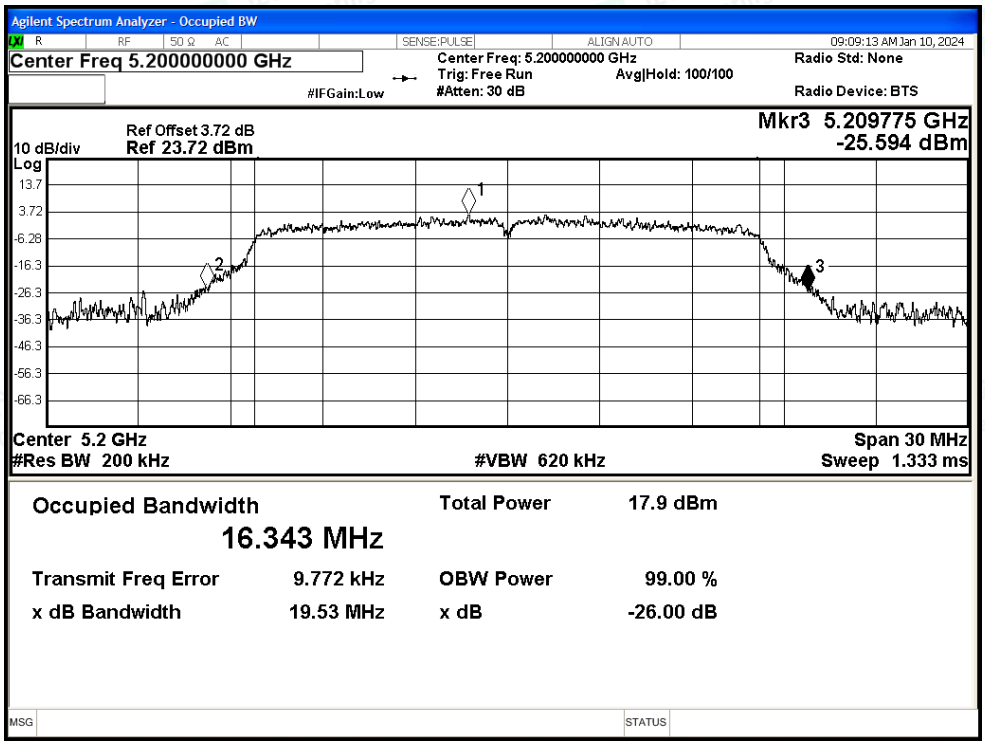
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	19.727	---	Pass
NVNT	a	5200	Ant1	19.531	---	Pass
NVNT	a	5240	Ant1	19.905	---	Pass
NVNT	n20	5180	Ant1	20.067	---	Pass
NVNT	n20	5200	Ant1	19.978	---	Pass
NVNT	n20	5240	Ant1	23.015	---	Pass
NVNT	n40	5190	Ant1	40.246	---	Pass
NVNT	n40	5230	Ant1	42.322	---	Pass
NVNT	ac20	5180	Ant1	19.93	---	Pass
NVNT	ac20	5200	Ant1	19.763	---	Pass
NVNT	ac20	5240	Ant1	24.019	---	Pass
NVNT	ac40	5190	Ant1	39.953	---	Pass
NVNT	ac40	5230	Ant1	42.729	---	Pass
NVNT	ac80	5210	Ant1	79.709	---	Pass

Test Graphs

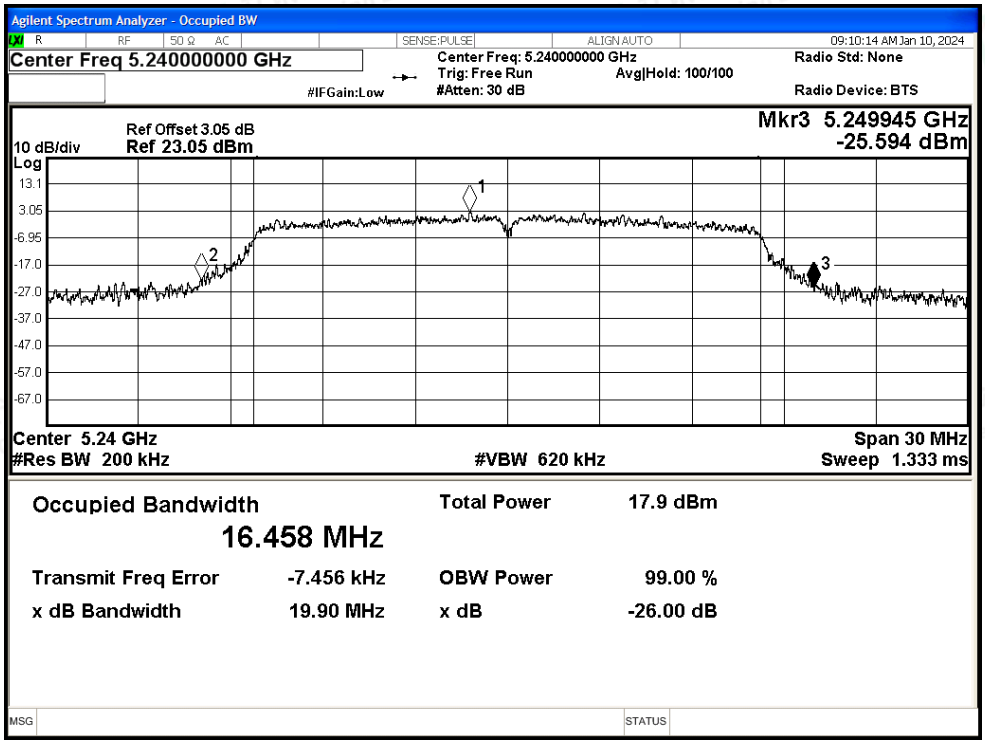
-26dB Bandwidth NVNT a 5180MHz Ant1



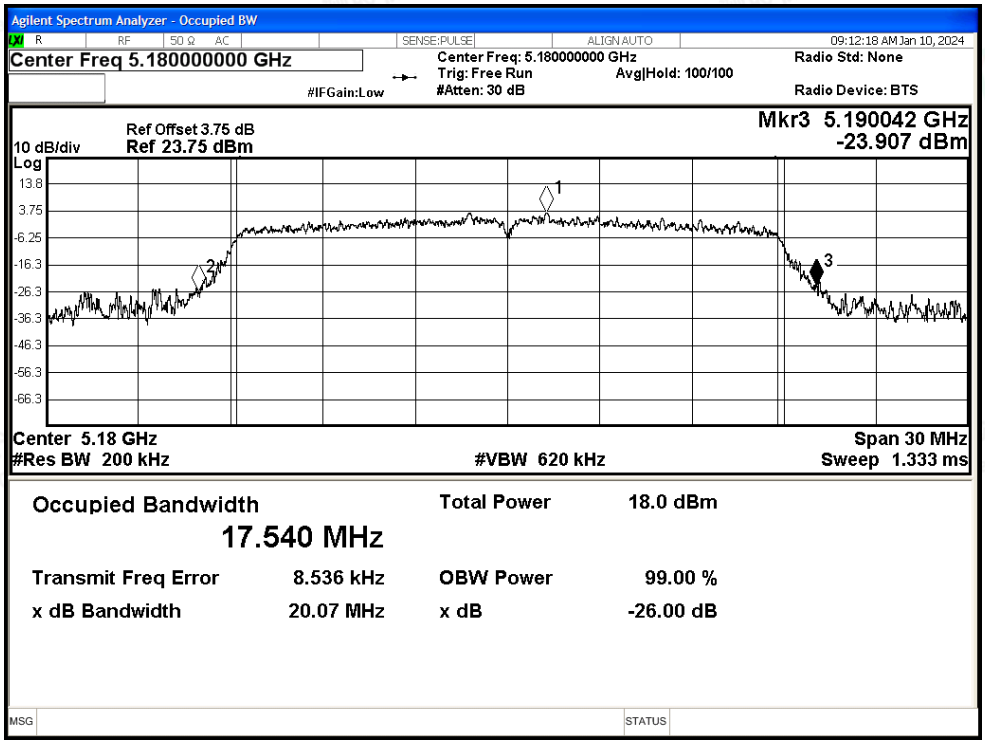
-26dB Bandwidth NVNT a 5200MHz Ant1



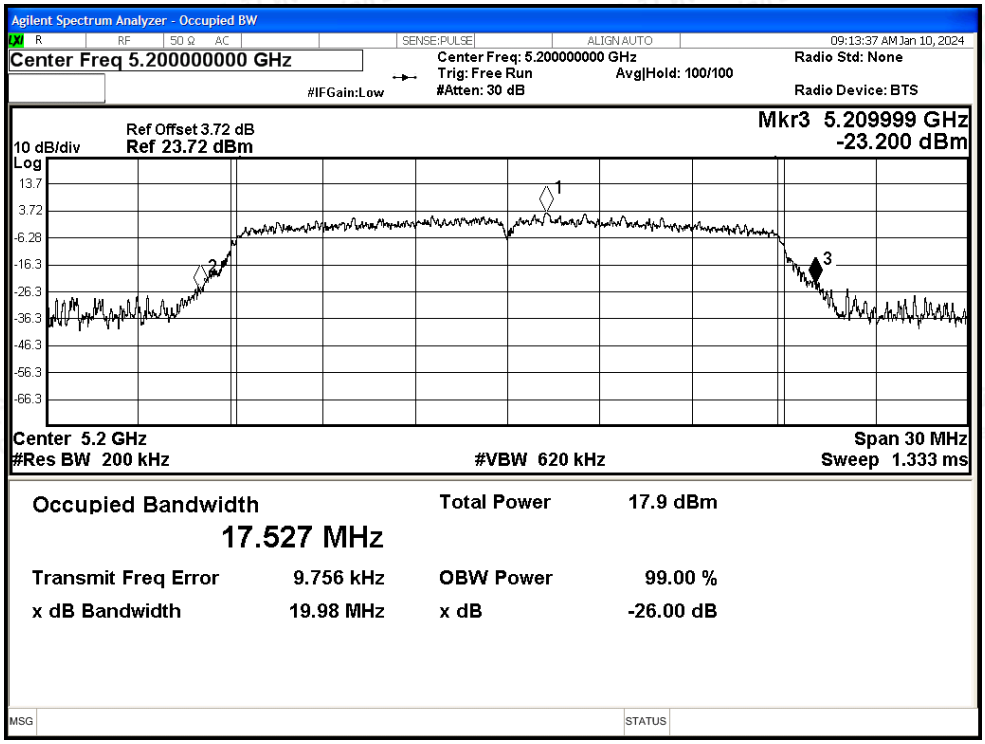
-26dB Bandwidth NVNT a 5240MHz Ant1



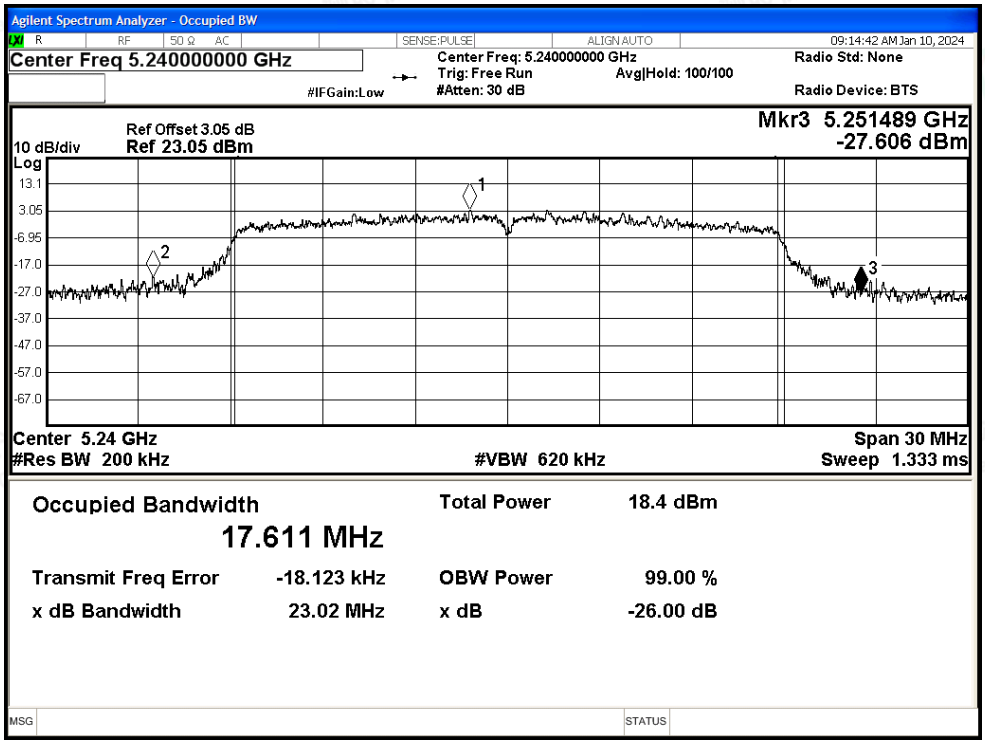
-26dB Bandwidth NVNT n20 5180MHz Ant1



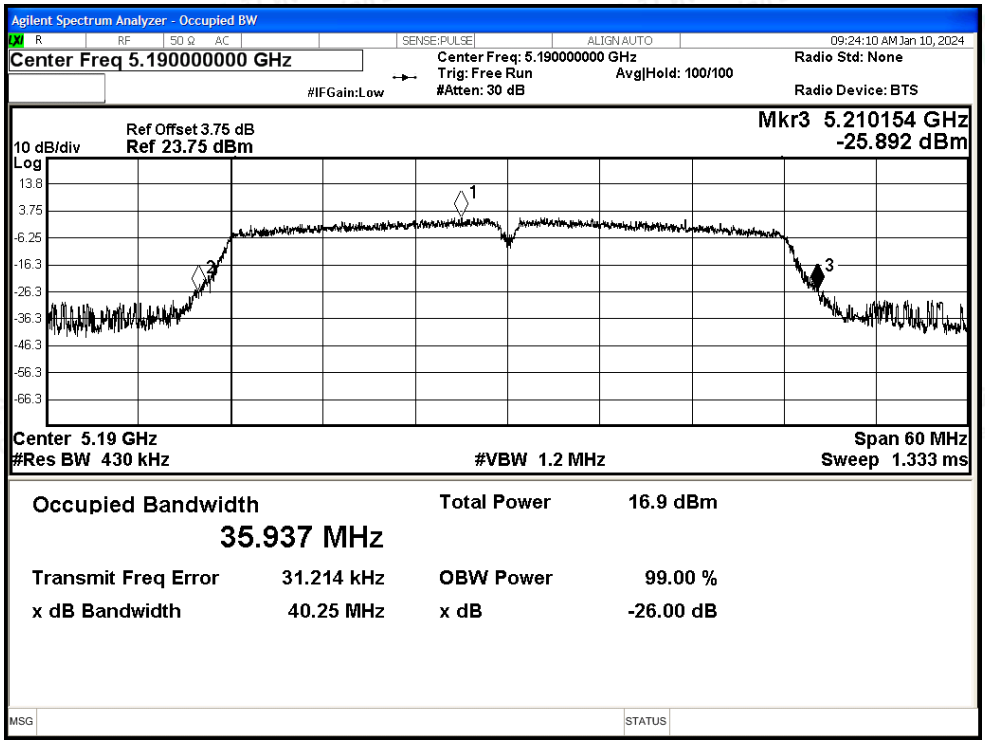
-26dB Bandwidth NVNT n20 5200MHz Ant1



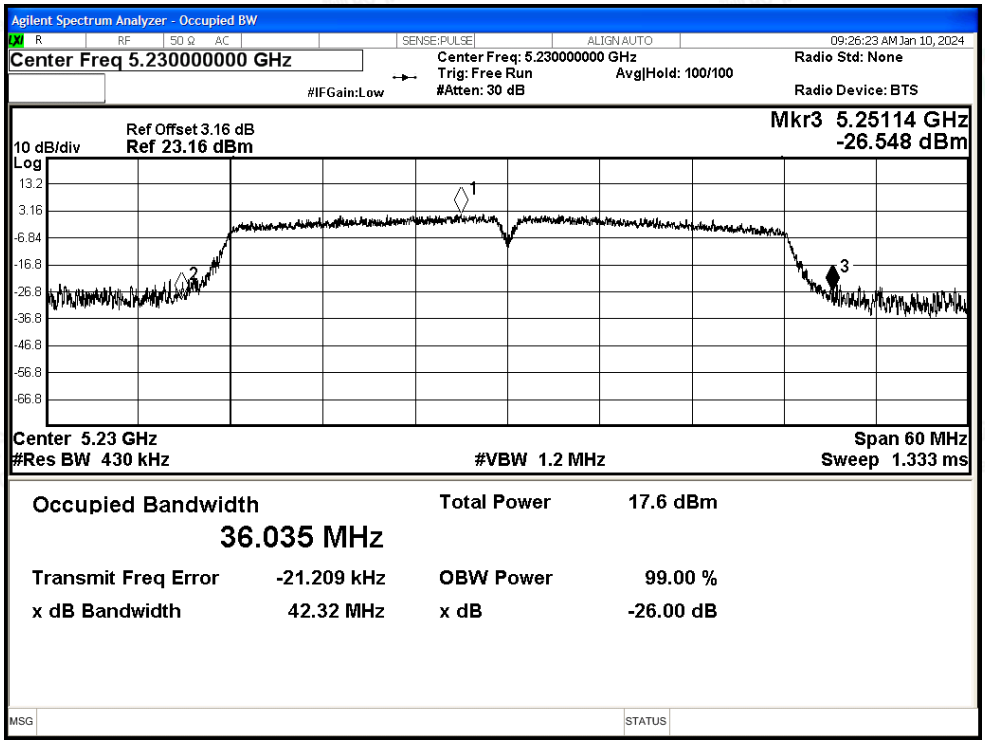
-26dB Bandwidth NVNT n20 5240MHz Ant1



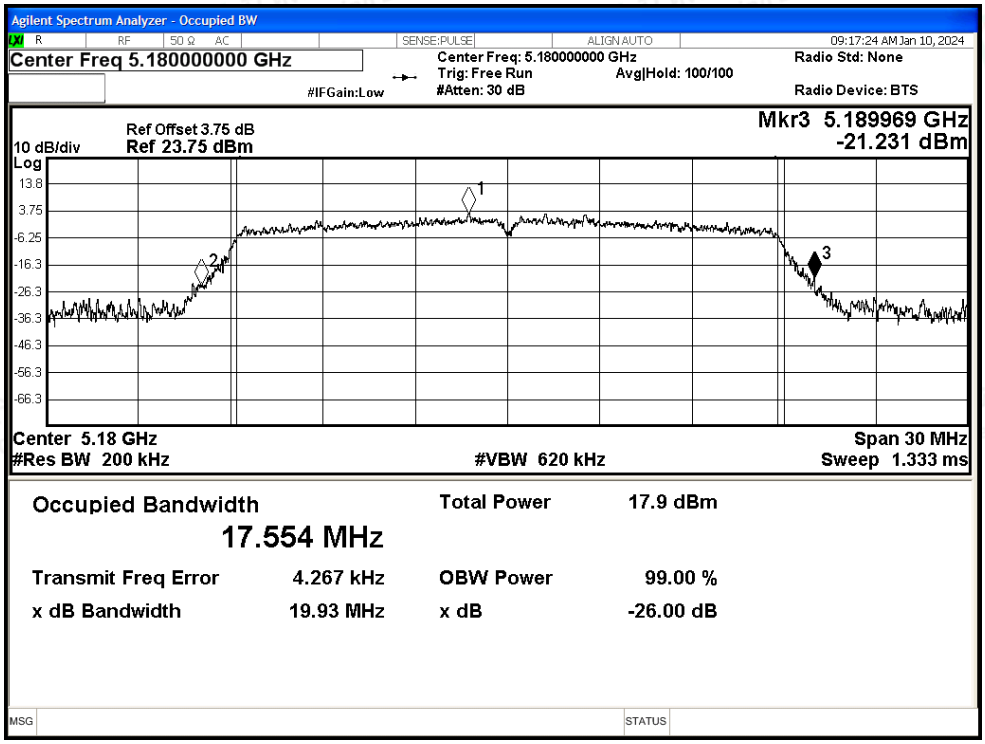
-26dB Bandwidth NVNT n40 5190MHz Ant1



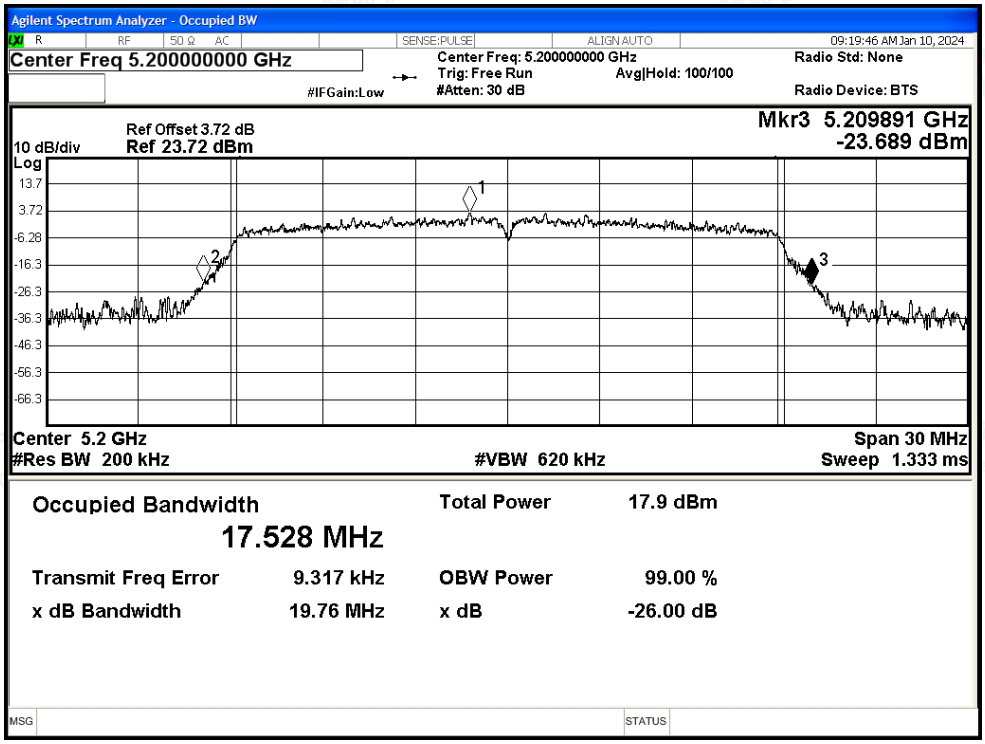
-26dB Bandwidth NVNT n40 5230MHz Ant1



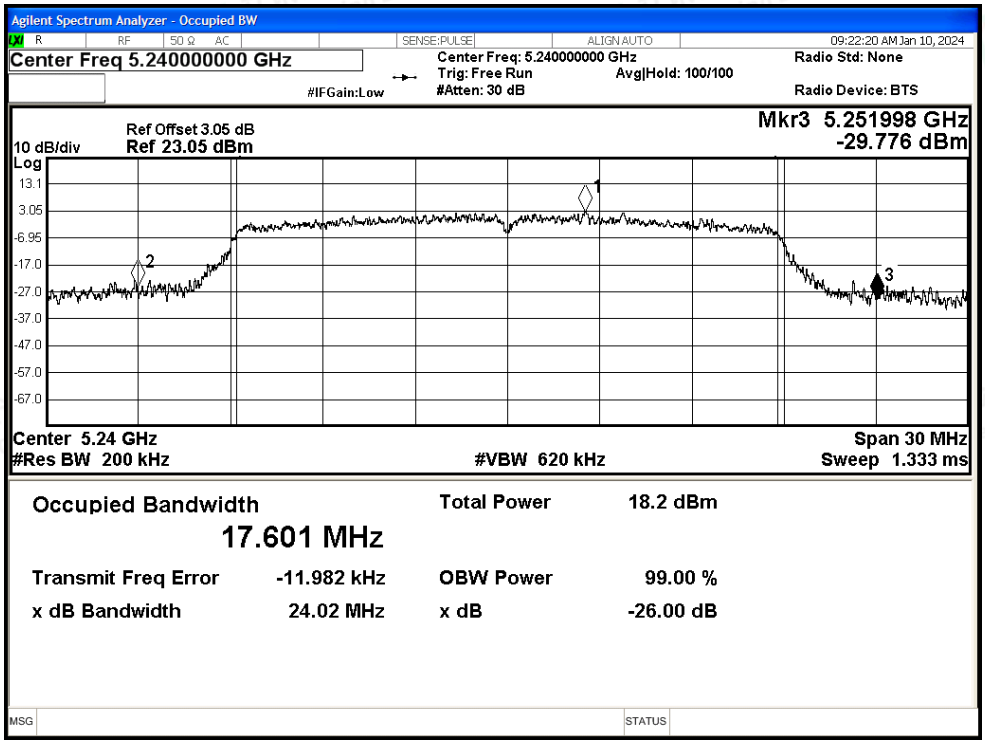
-26dB Bandwidth NVNT ac20 5180MHz Ant1



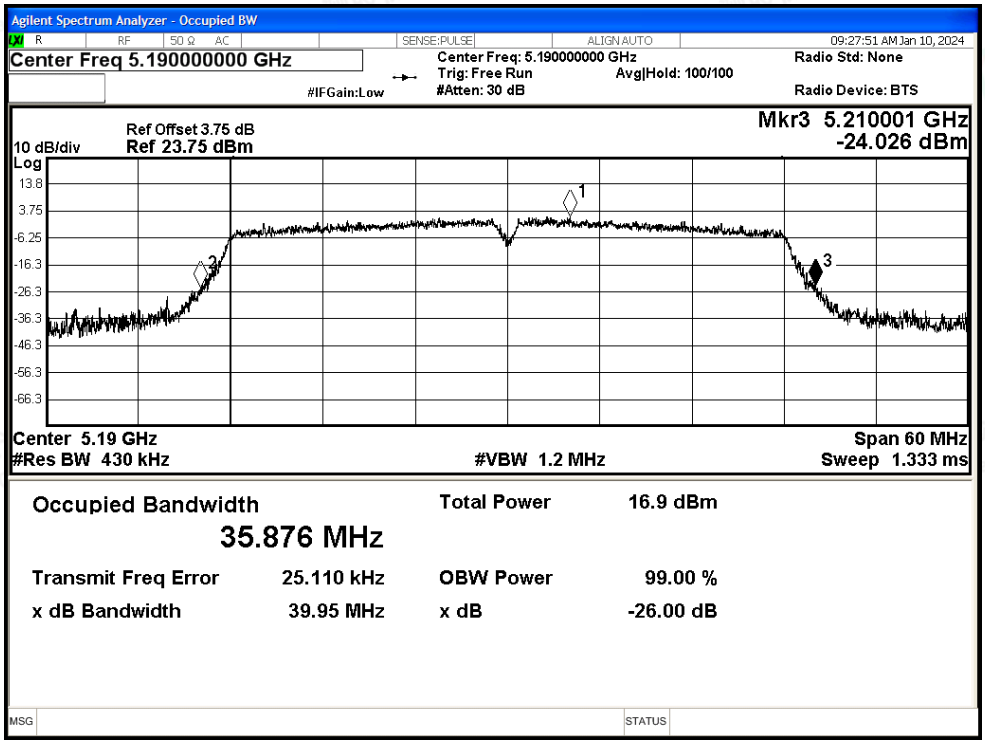
-26dB Bandwidth NVNT ac20 5200MHz Ant1



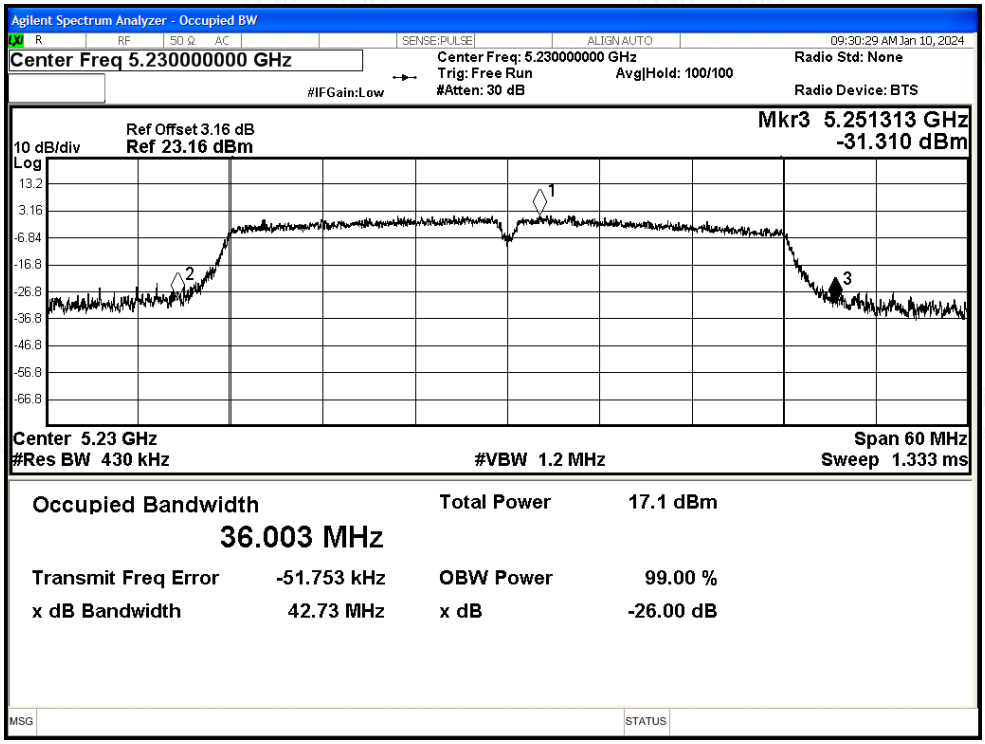
-26dB Bandwidth NVNT ac20 5240MHz Ant1



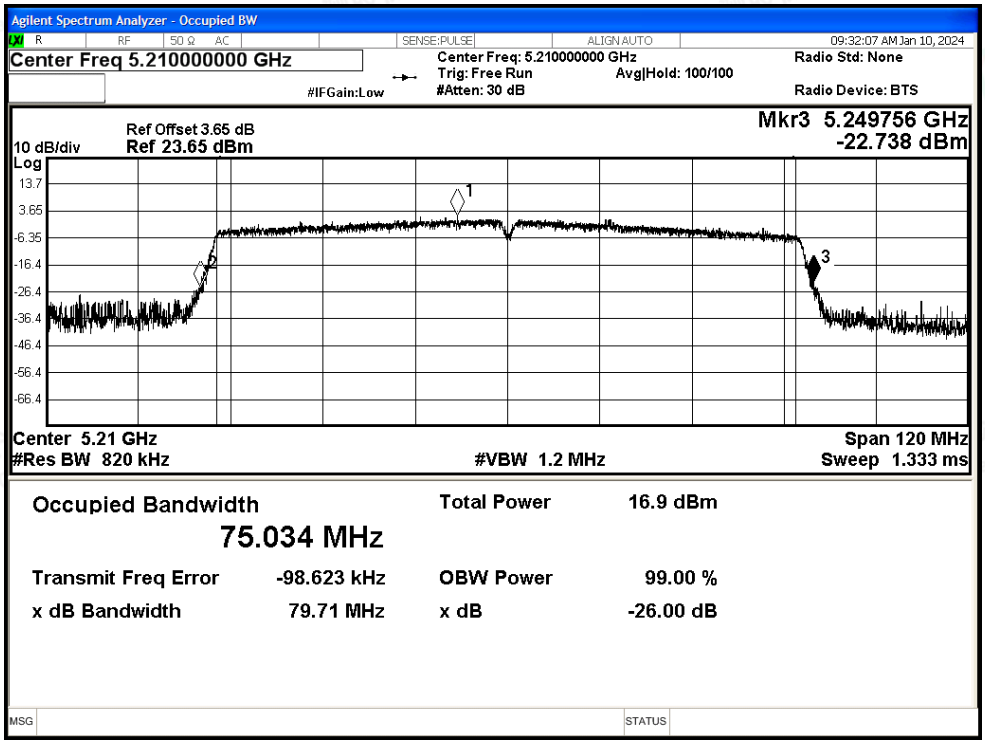
-26dB Bandwidth NVNT ac40 5190MHz Ant1



-26dB Bandwidth NVNT ac40 5230MHz Ant1



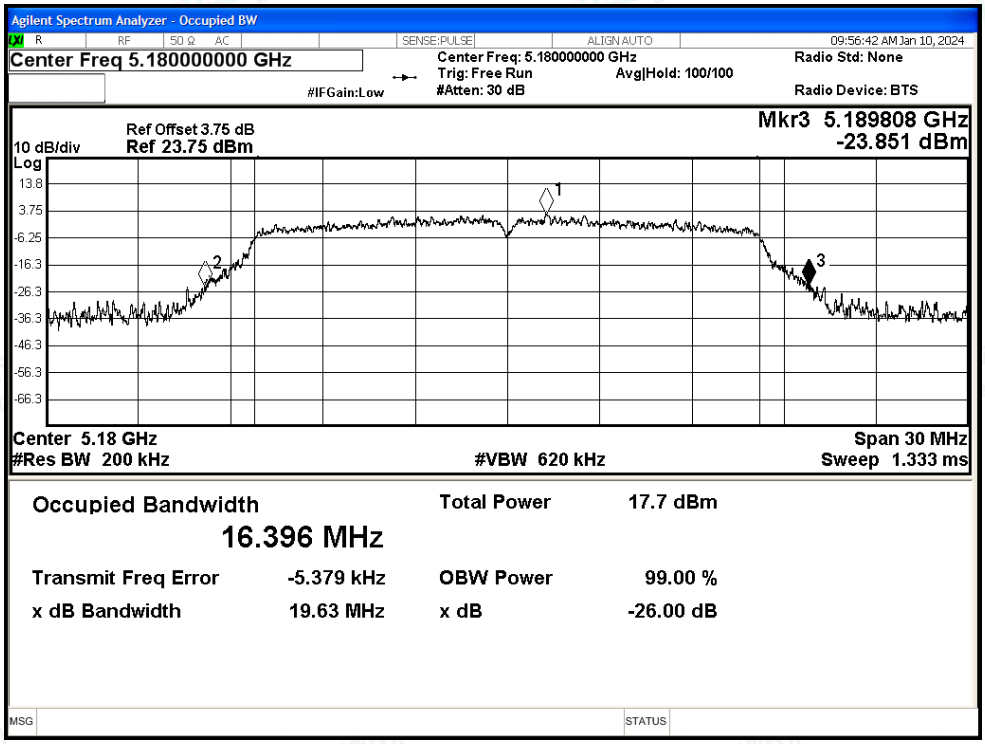
-26dB Bandwidth NVNT ac80 5210MHz Ant1



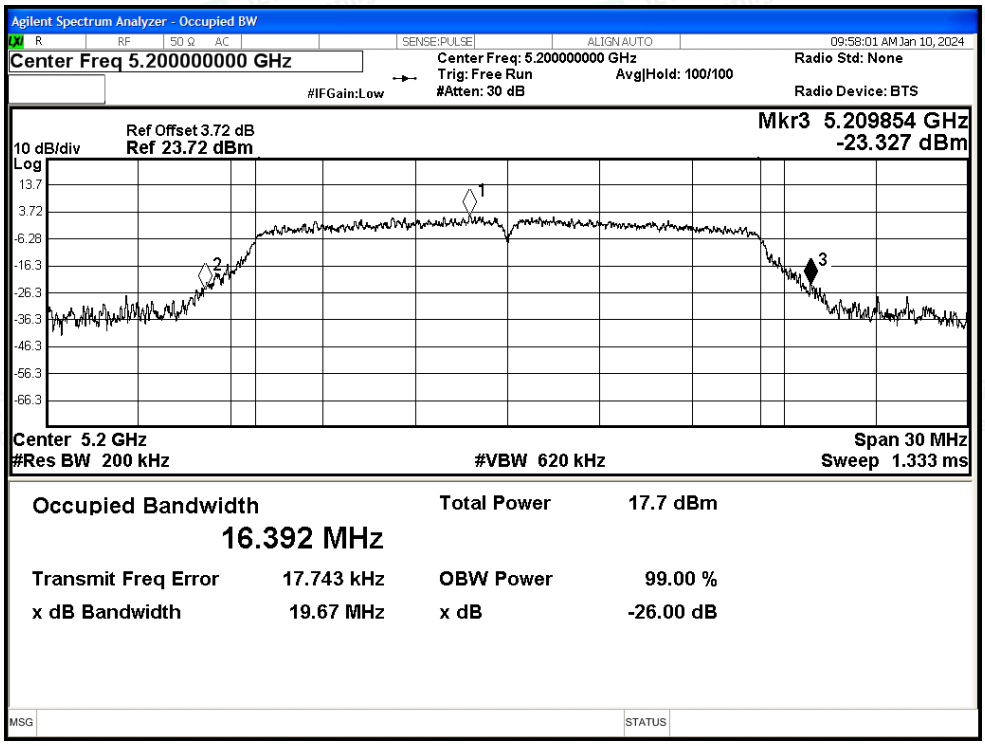
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant2	19.626	---	Pass
NVNT	a	5200	Ant2	19.672	---	Pass
NVNT	a	5240	Ant2	20.686	---	Pass
NVNT	n20	5180	Ant2	20.012	---	Pass
NVNT	n20	5200	Ant2	20.093	---	Pass
NVNT	n20	5240	Ant2	21.285	---	Pass
NVNT	n40	5190	Ant2	40.13	---	Pass
NVNT	n40	5230	Ant2	42.276	---	Pass
NVNT	ac20	5180	Ant2	20.315	---	Pass
NVNT	ac20	5200	Ant2	20.092	---	Pass
NVNT	ac20	5240	Ant2	20.505	---	Pass
NVNT	ac40	5190	Ant2	40.083	---	Pass
NVNT	ac40	5230	Ant2	40.687	---	Pass
NVNT	ac80	5210	Ant2	80.127	---	Pass

Test Graphs

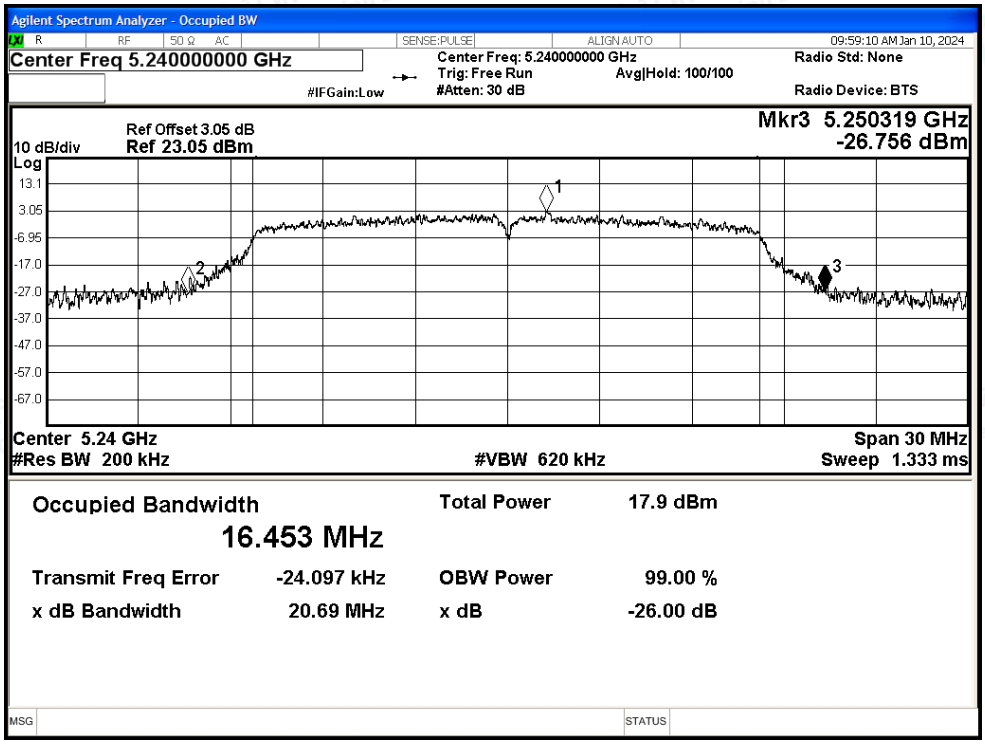
-26dB Bandwidth NVNT a 5180MHz Ant2



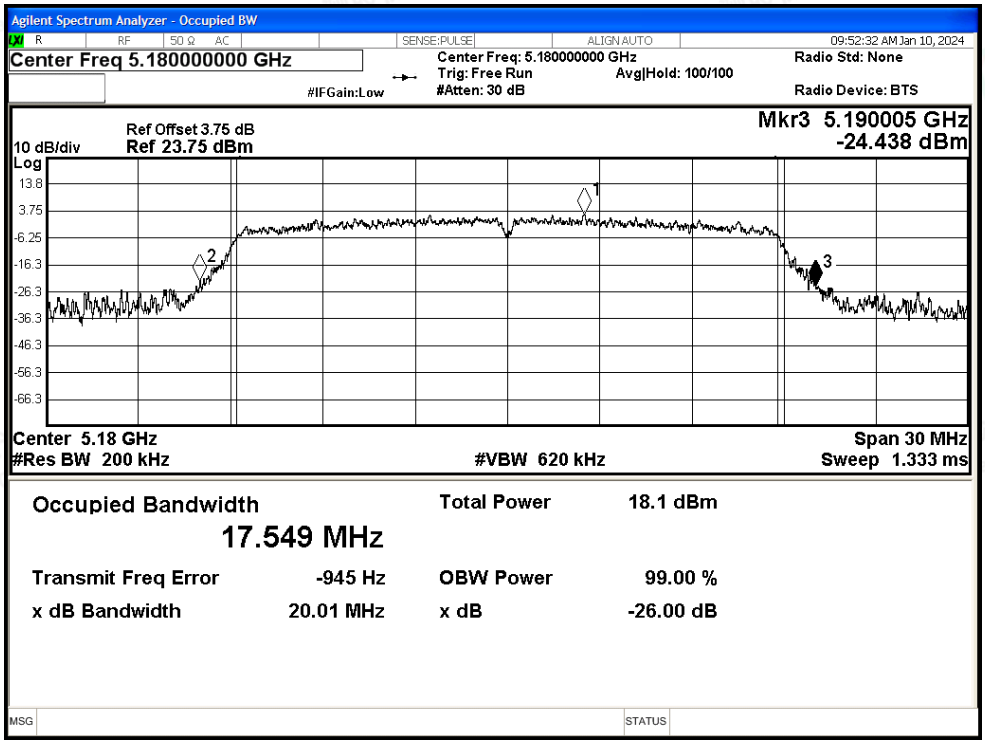
-26dB Bandwidth NVNT a 5200MHz Ant2



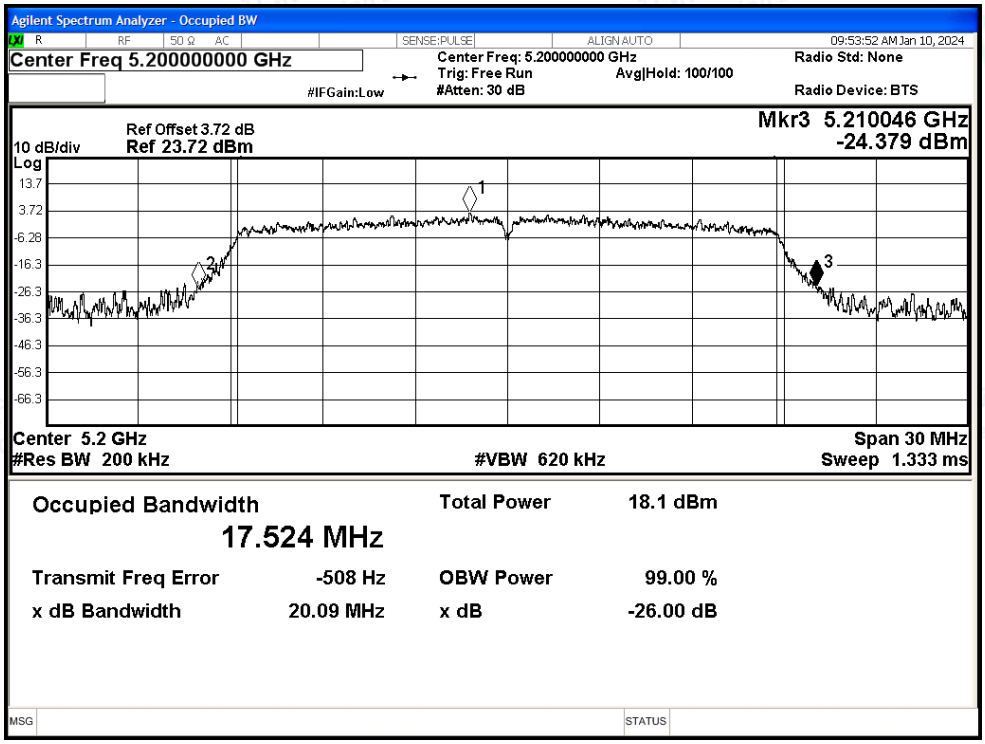
-26dB Bandwidth NVNT a 5240MHz Ant2



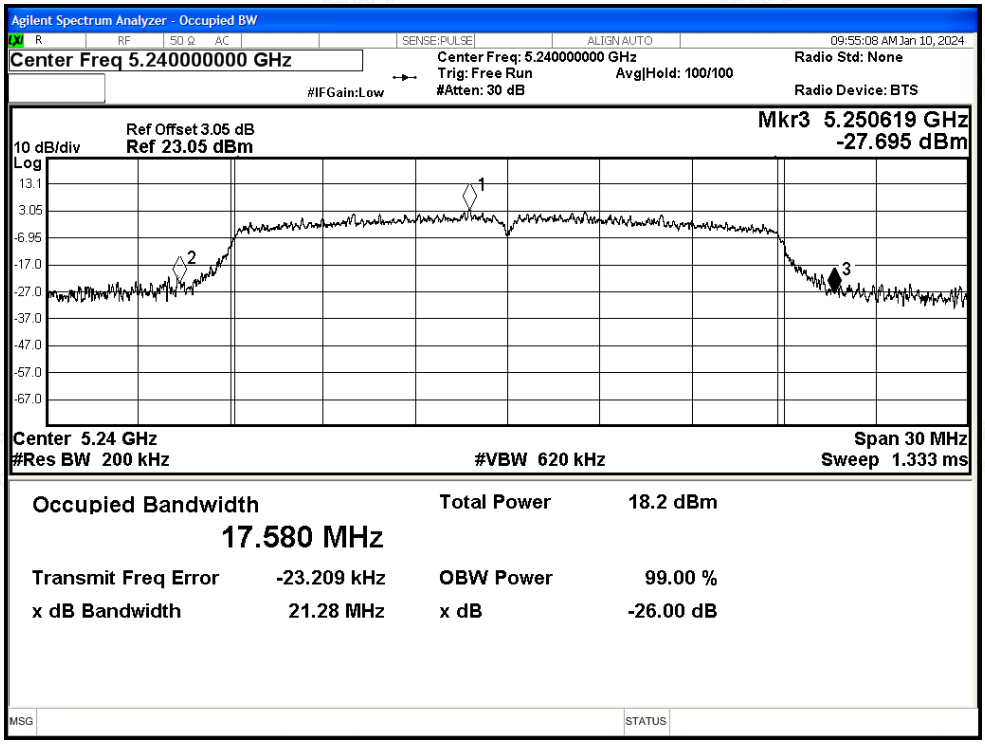
-26dB Bandwidth NVNT n20 5180MHz Ant2



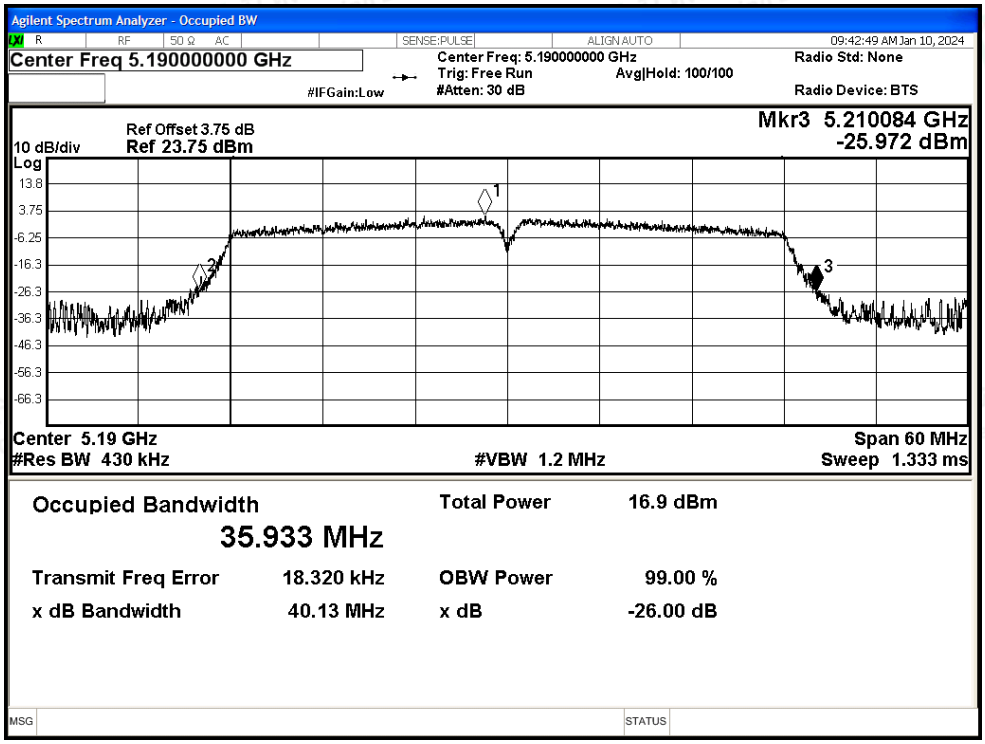
-26dB Bandwidth NVNT n20 5200MHz Ant2



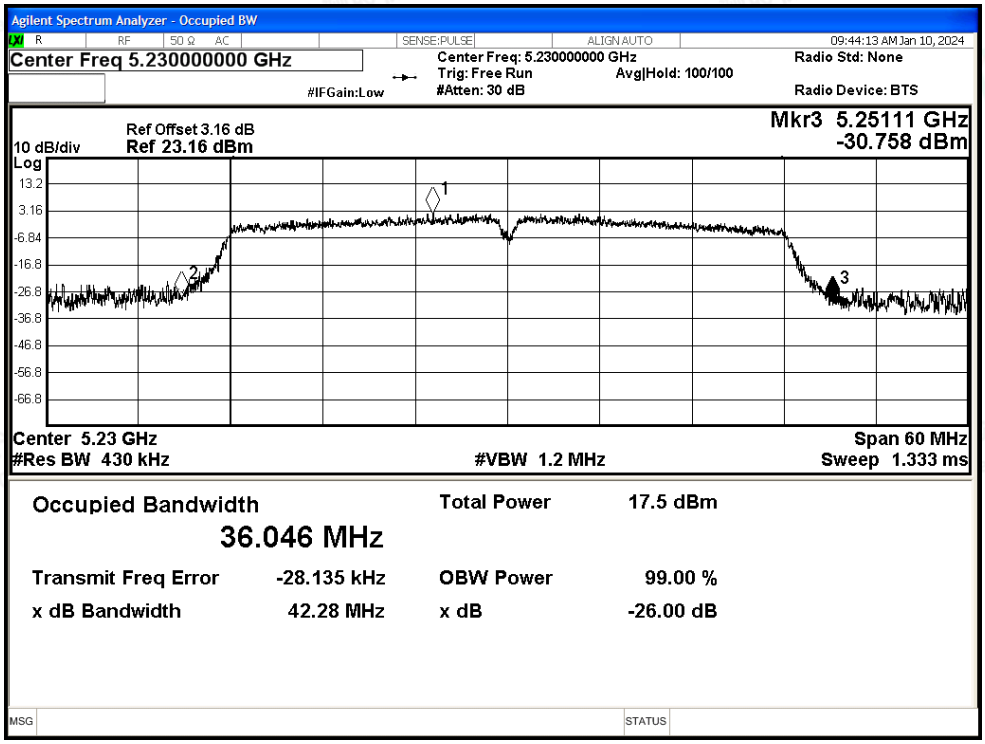
-26dB Bandwidth NVNT n20 5240MHz Ant2



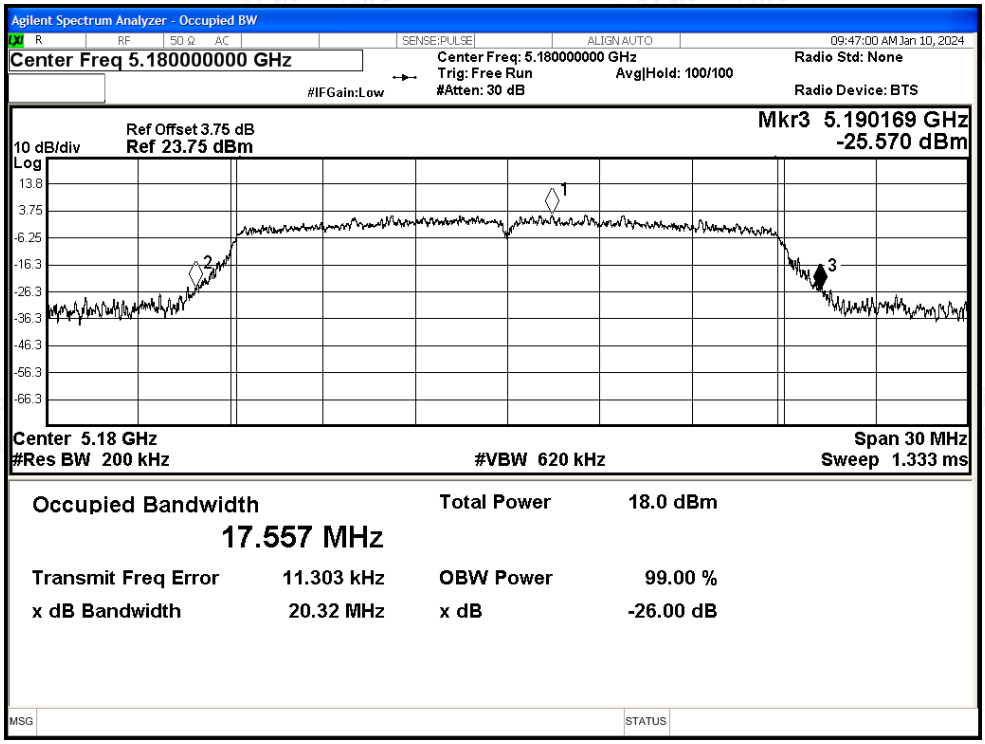
-26dB Bandwidth NVNT n40 5190MHz Ant2



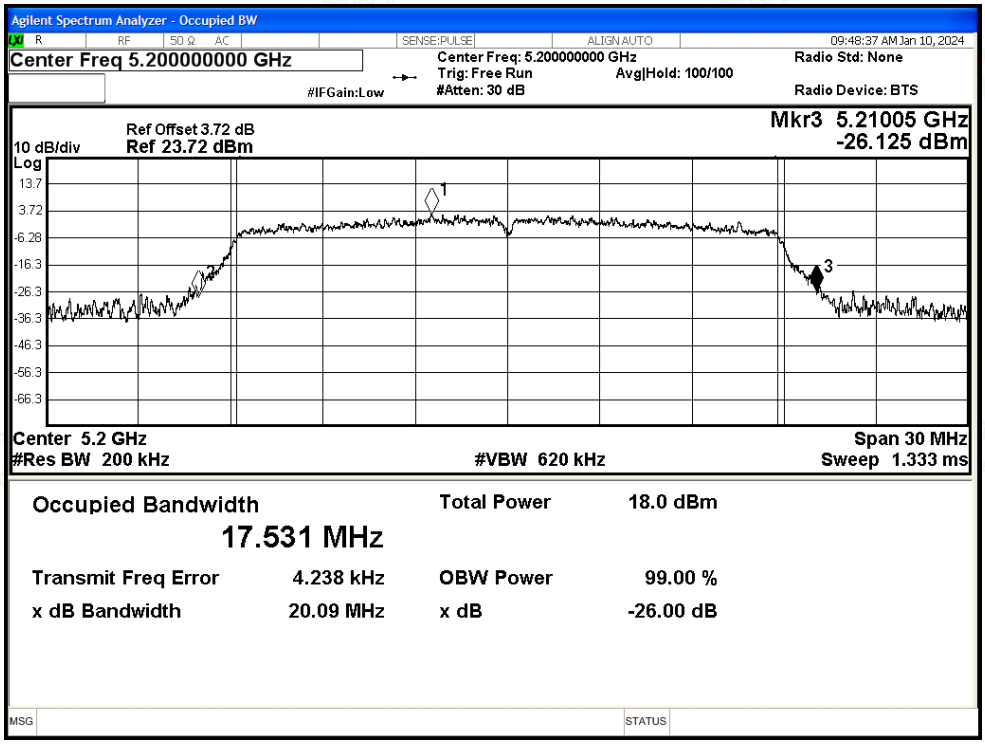
-26dB Bandwidth NVNT n40 5230MHz Ant2



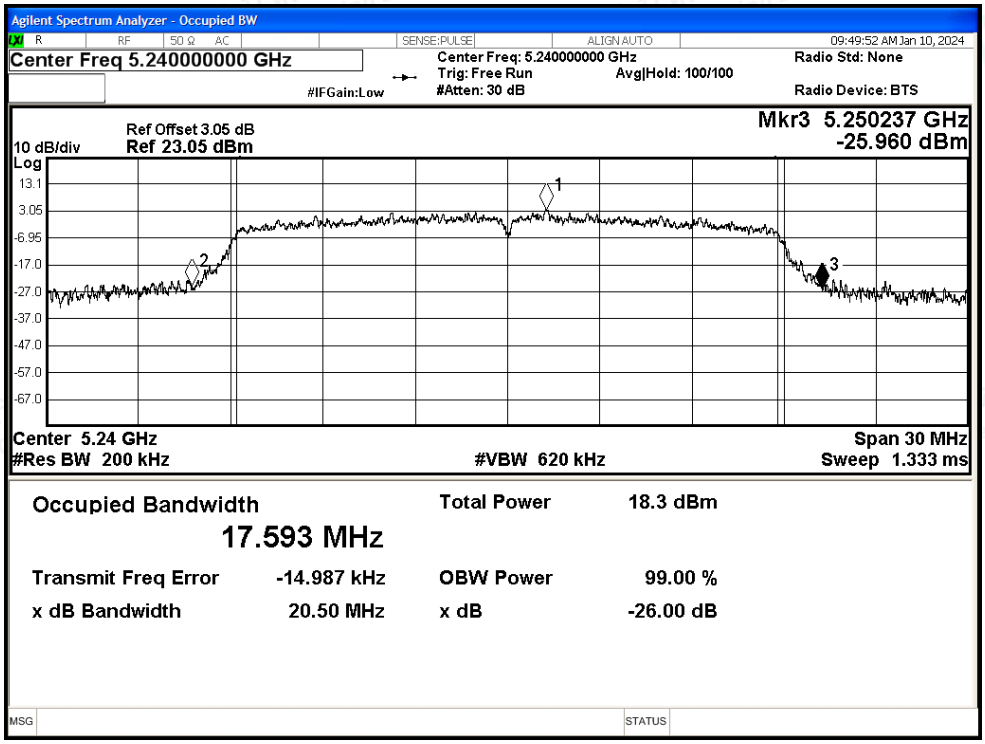
-26dB Bandwidth NVNT ac20 5180MHz Ant2



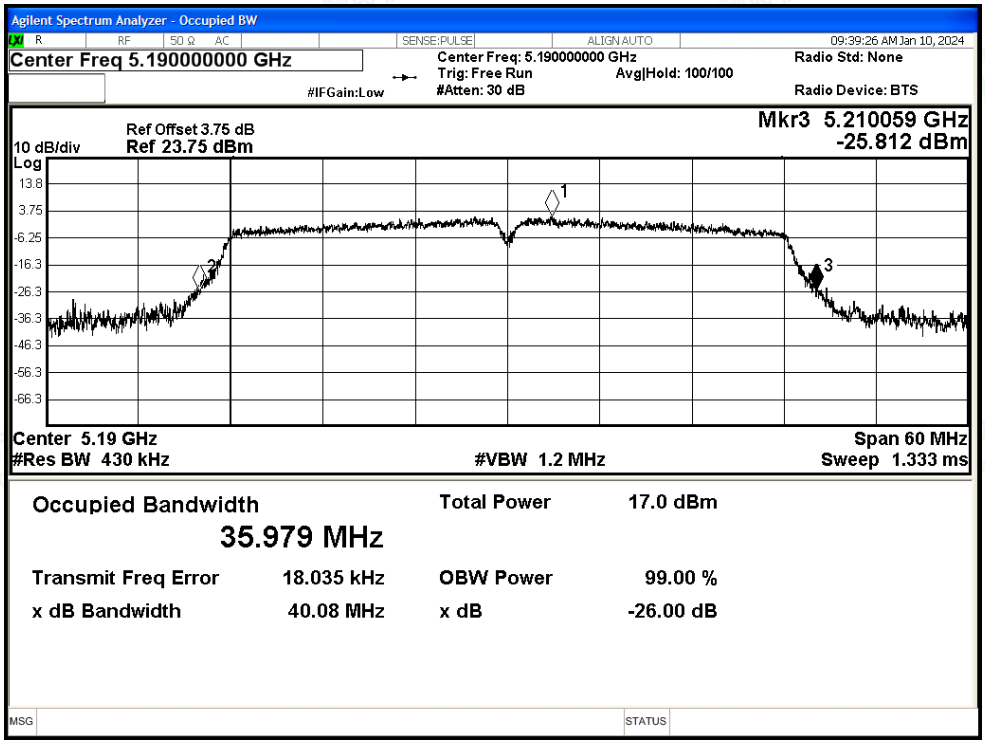
-26dB Bandwidth NVNT ac20 5200MHz Ant2



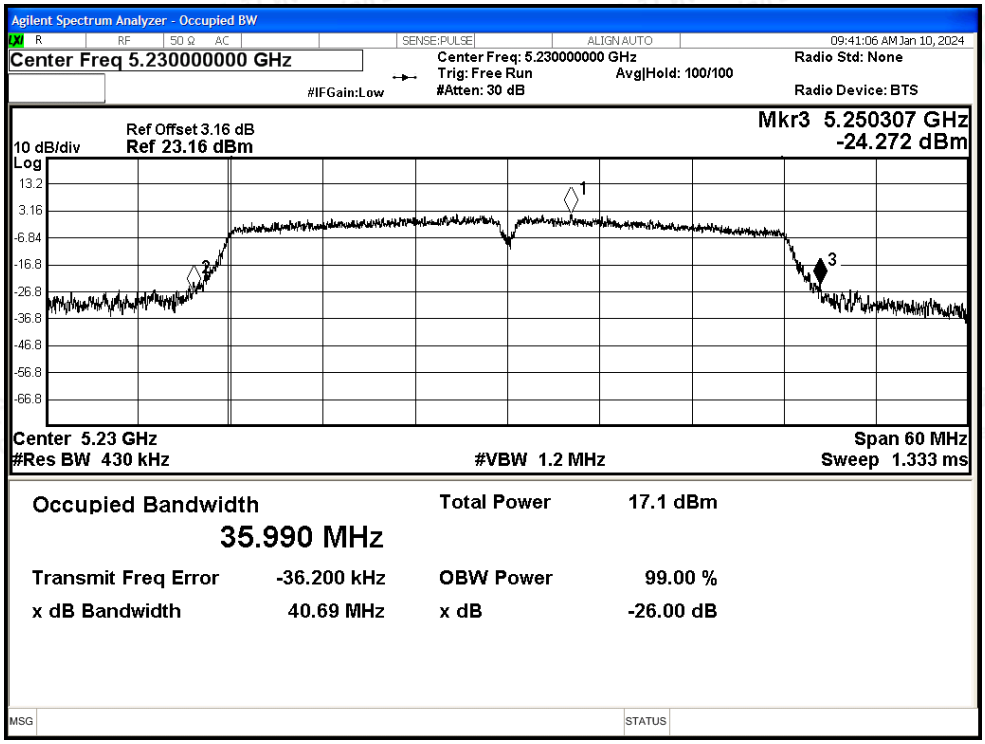
-26dB Bandwidth NVNT ac20 5240MHz Ant2



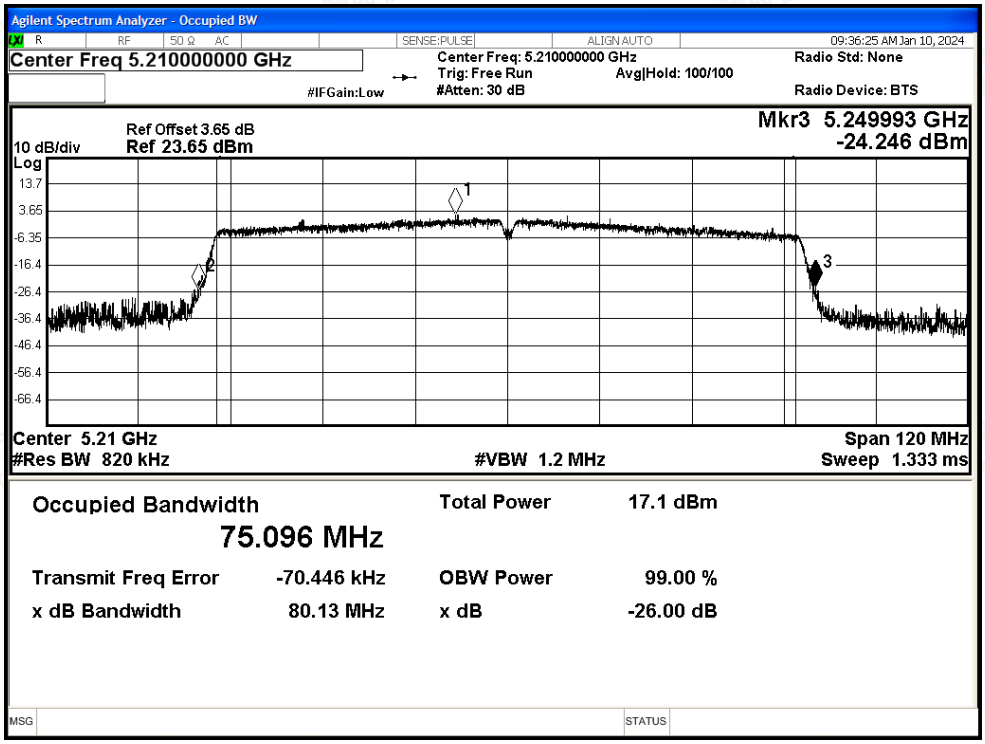
-26dB Bandwidth NVNT ac40 5190MHz Ant2



-26dB Bandwidth NVNT ac40 5230MHz Ant2



-26dB Bandwidth NVNT ac80 5210MHz Ant2

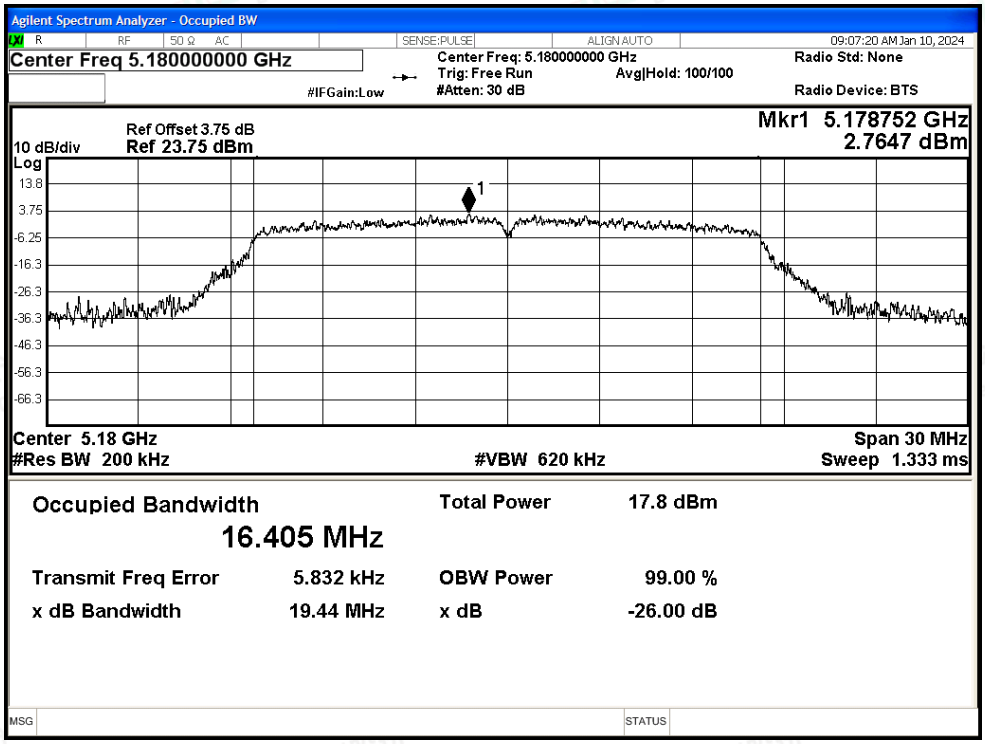


D.2 Occupied Channel Bandwidth

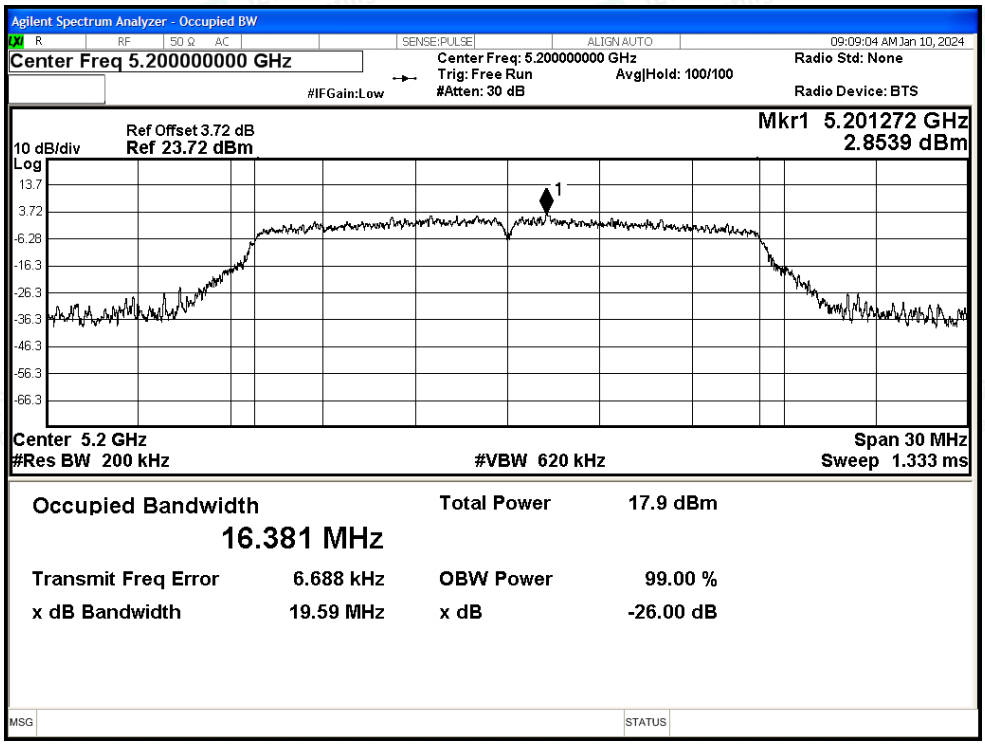
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.405
NVNT	a	5200	Ant1	16.381
NVNT	a	5240	Ant1	16.474
NVNT	n20	5180	Ant1	17.566
NVNT	n20	5200	Ant1	17.535
NVNT	n20	5240	Ant1	17.668
NVNT	n40	5190	Ant1	35.95
NVNT	n40	5230	Ant1	35.991
NVNT	ac20	5180	Ant1	17.545
NVNT	ac20	5200	Ant1	17.528
NVNT	ac20	5240	Ant1	17.616
NVNT	ac40	5190	Ant1	35.921
NVNT	ac40	5230	Ant1	36.018
NVNT	ac80	5210	Ant1	74.98

Test Graphs

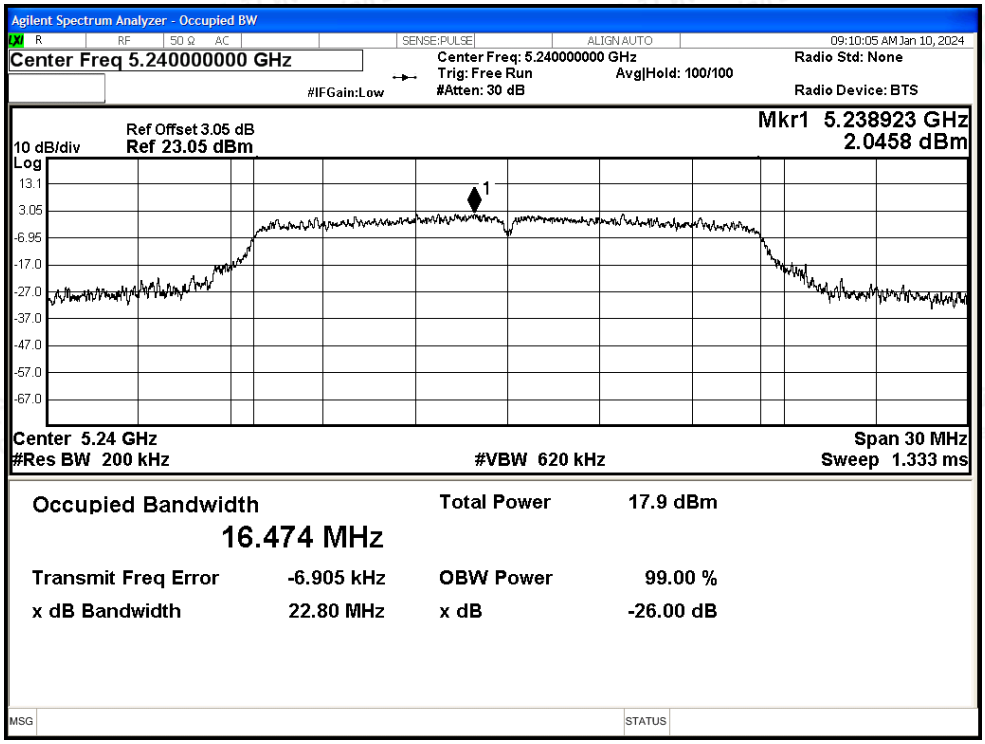
OBW NVNT a 5180MHz Ant1



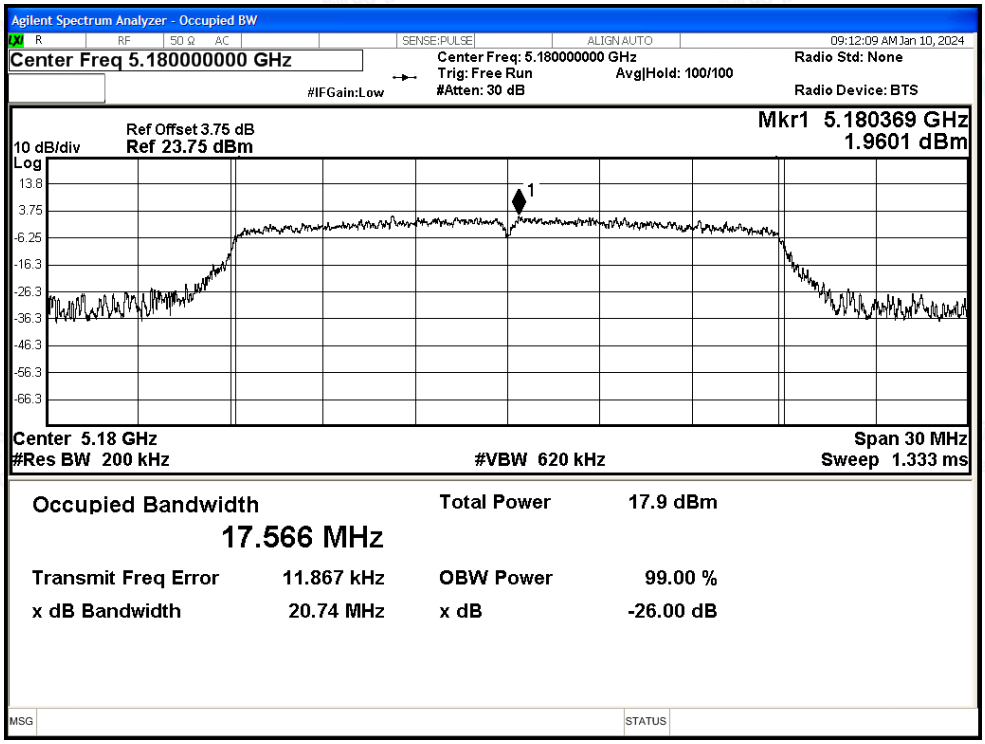
OBW NVNT a 5200MHz Ant1



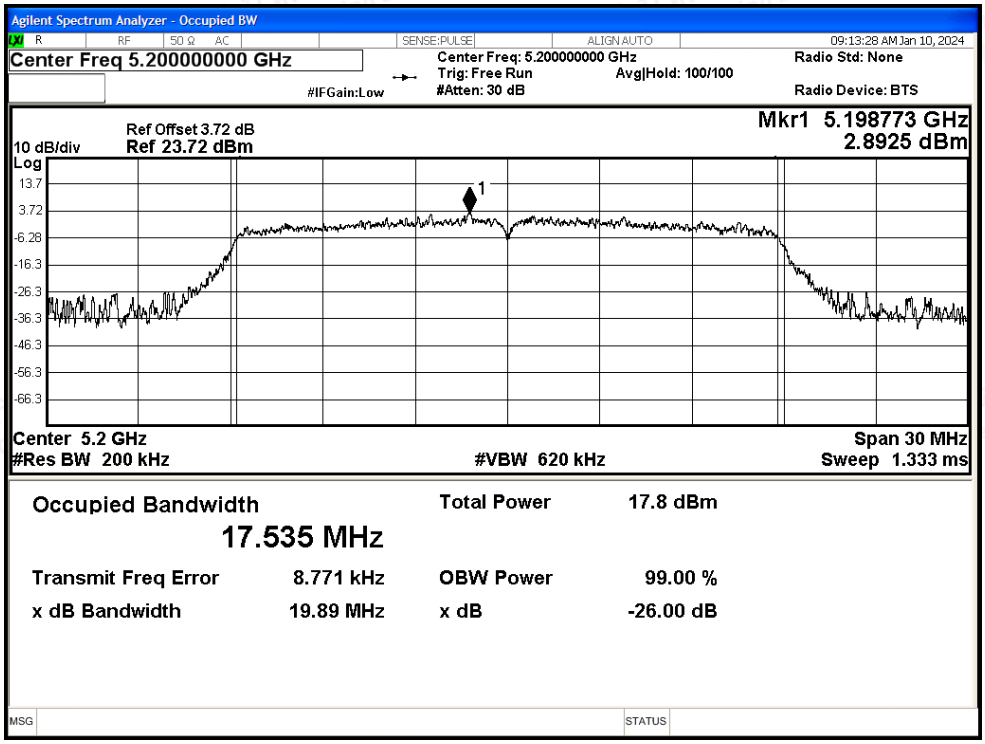
OBW NVNT a 5240MHz Ant1



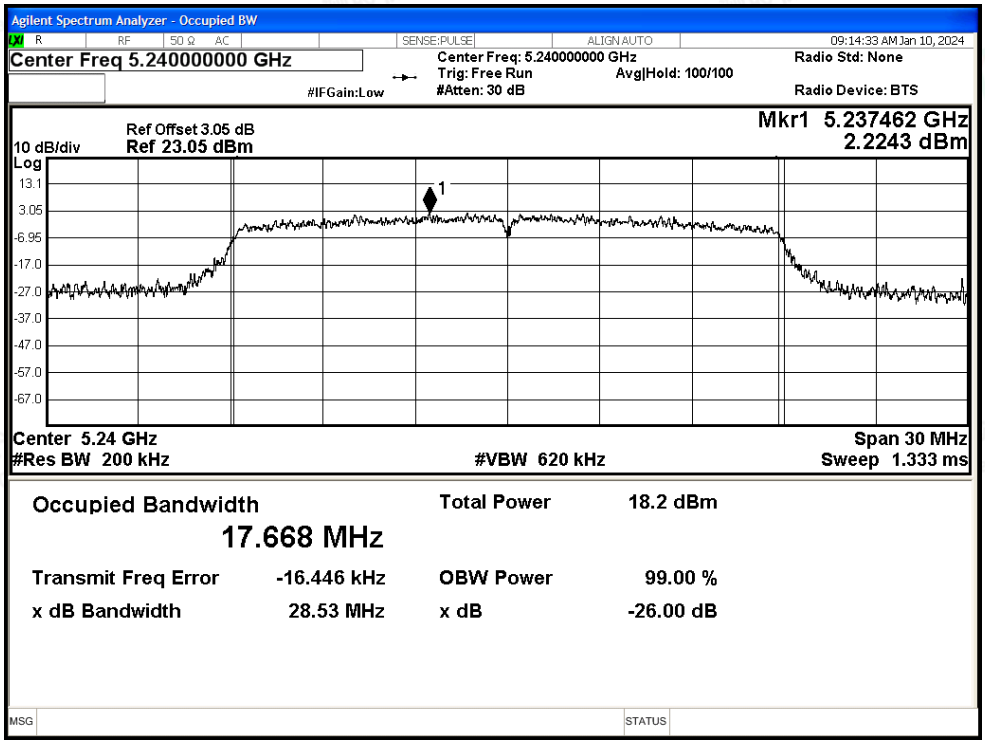
OBW NVNT n20 5180MHz Ant1



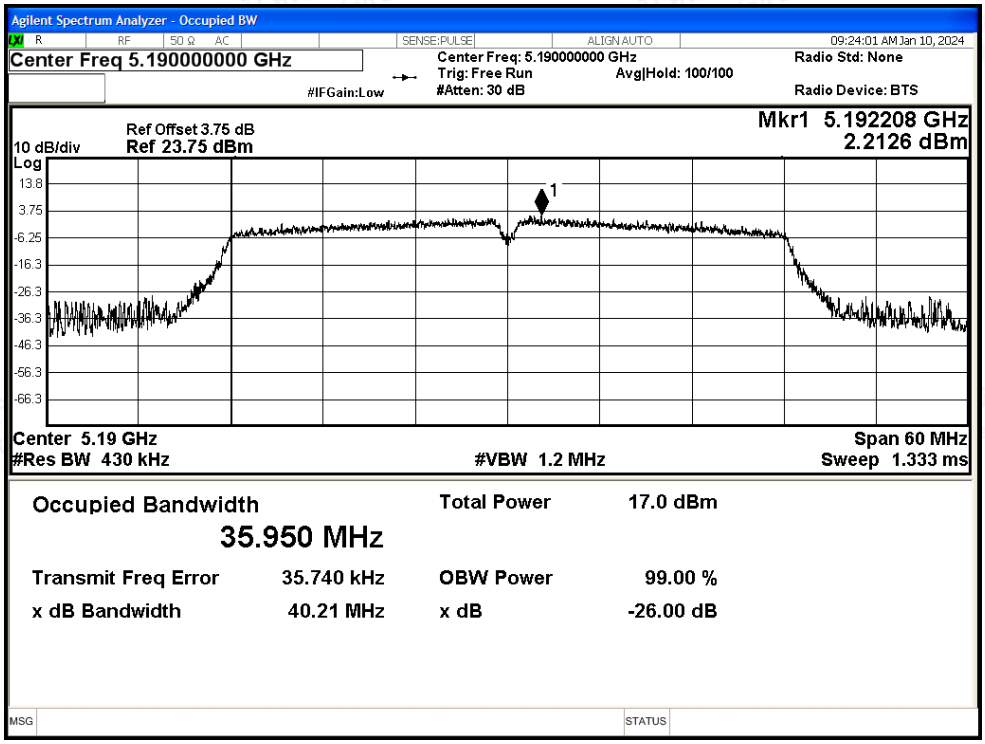
OBW NVNT n20 5200MHz Ant1



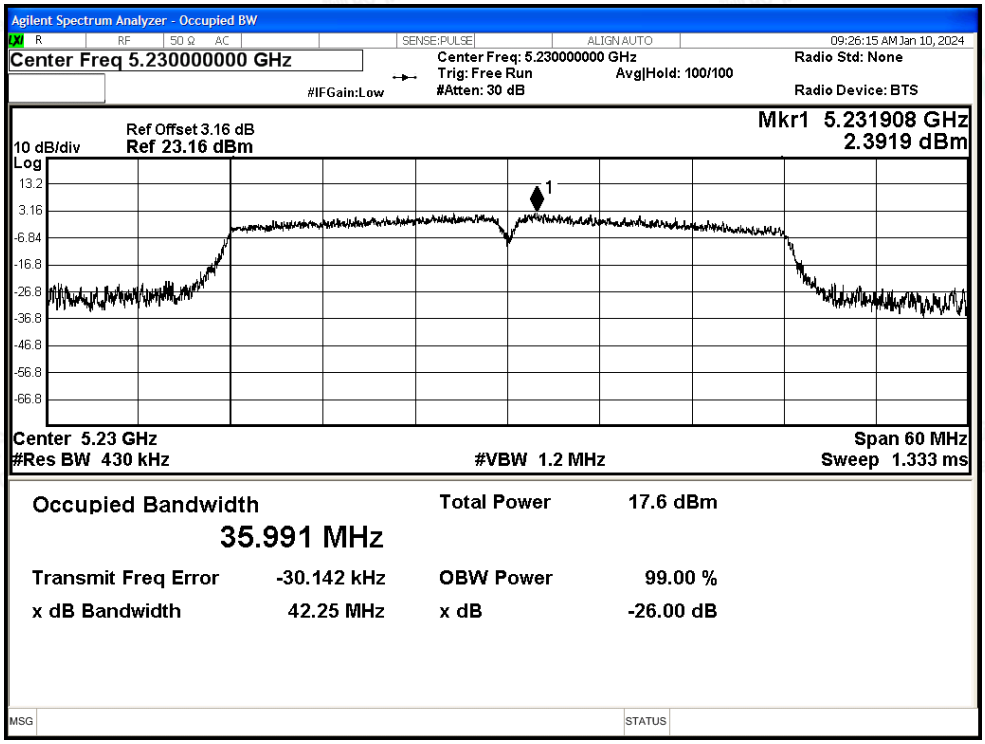
OBW NVNT n20 5240MHz Ant1



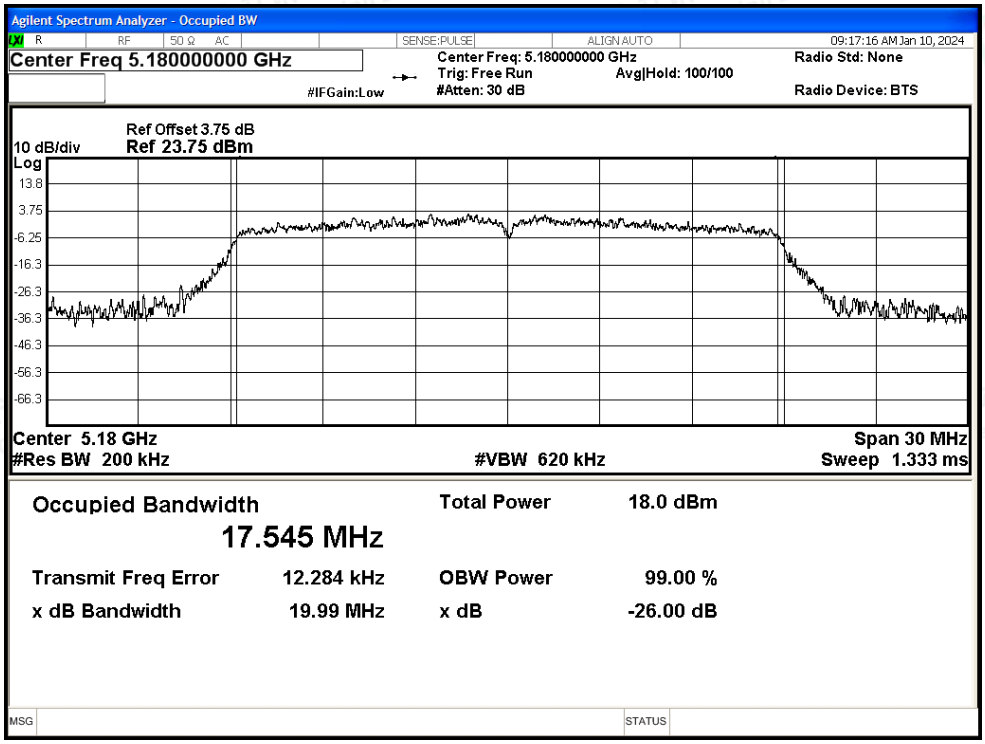
OBW NVNT n40 5190MHz Ant1



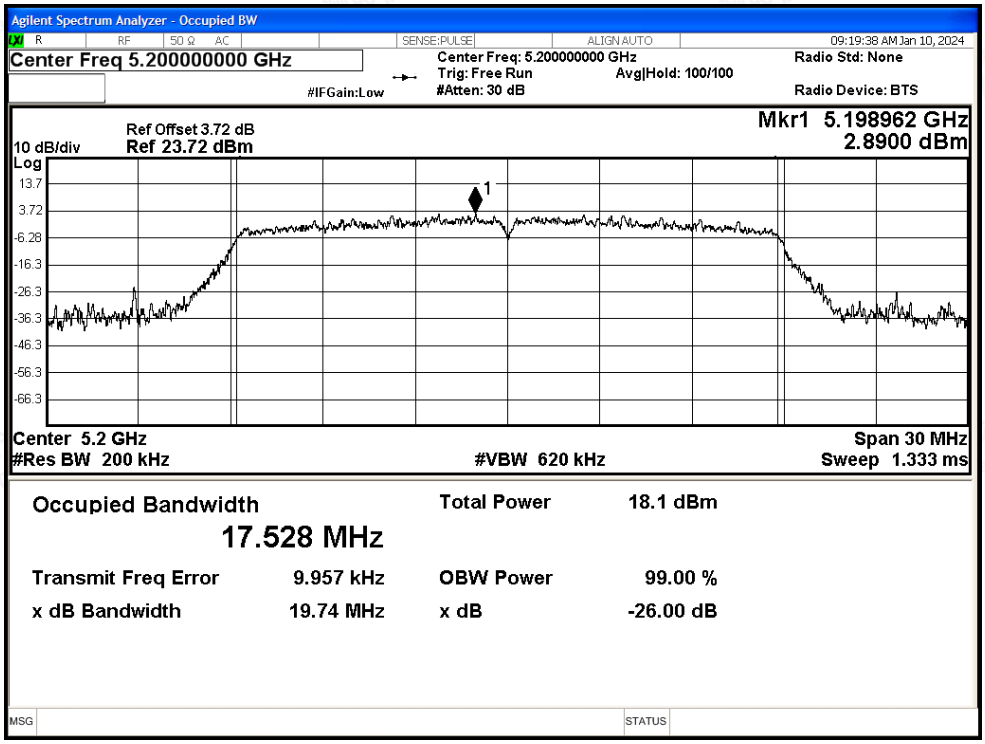
OBW NVNT n40 5230MHz Ant1



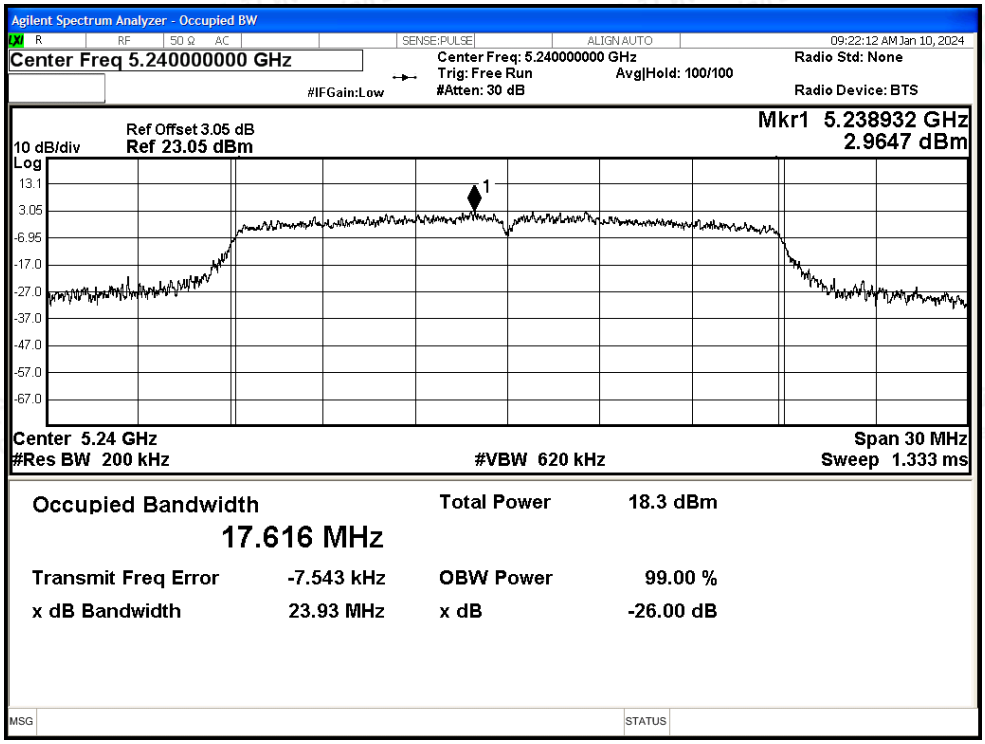
OBW NVNT ac20 5180MHz Ant1



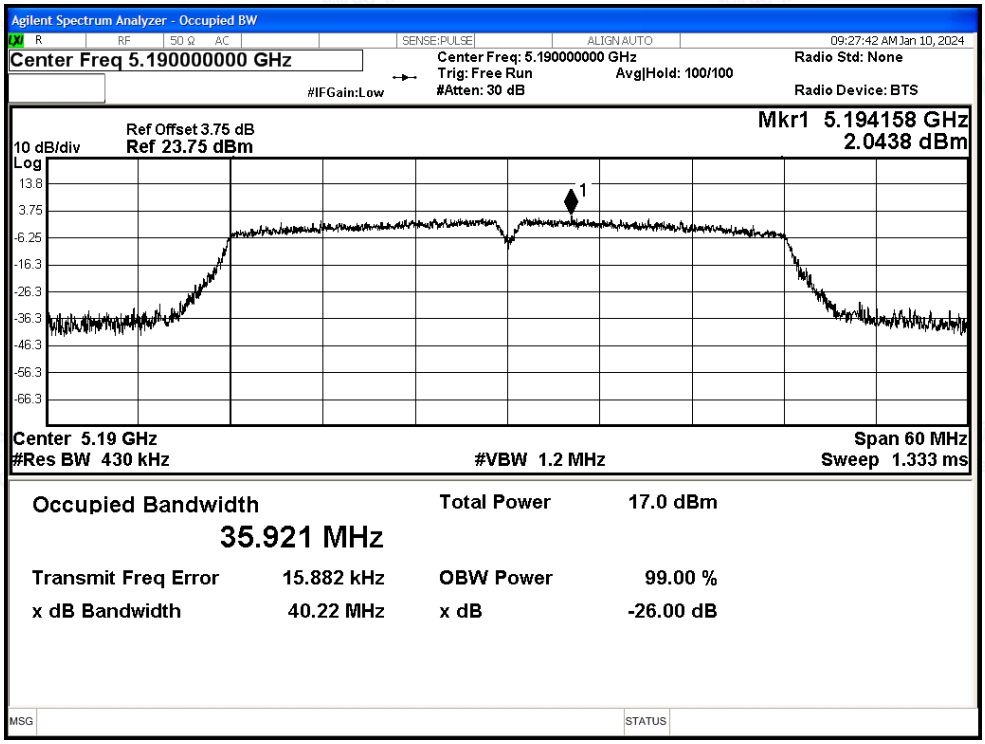
OBW NVNT ac20 5200MHz Ant1



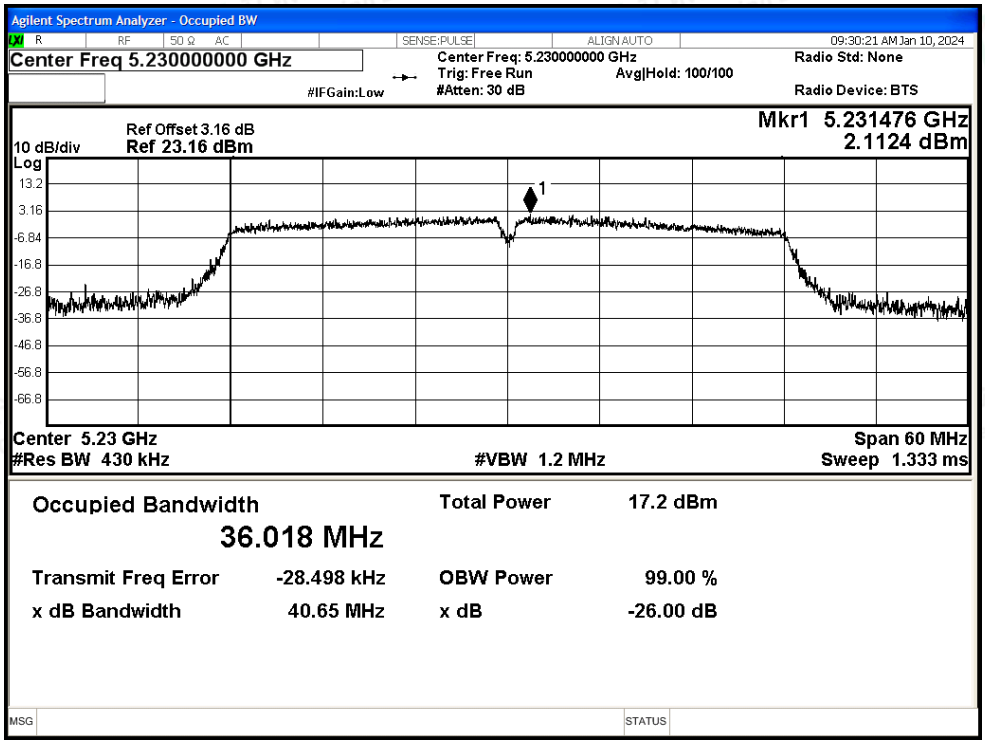
OBW NVNT ac20 5240MHz Ant1



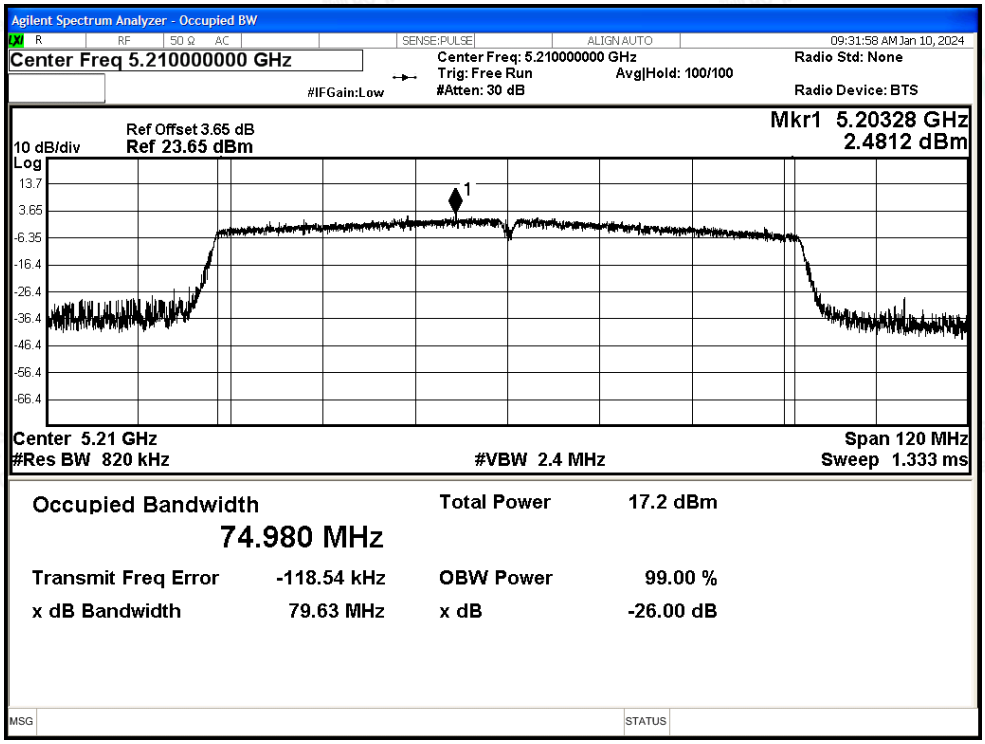
OBW NVNT ac40 5190MHz Ant1



OBW NVNT ac40 5230MHz Ant1



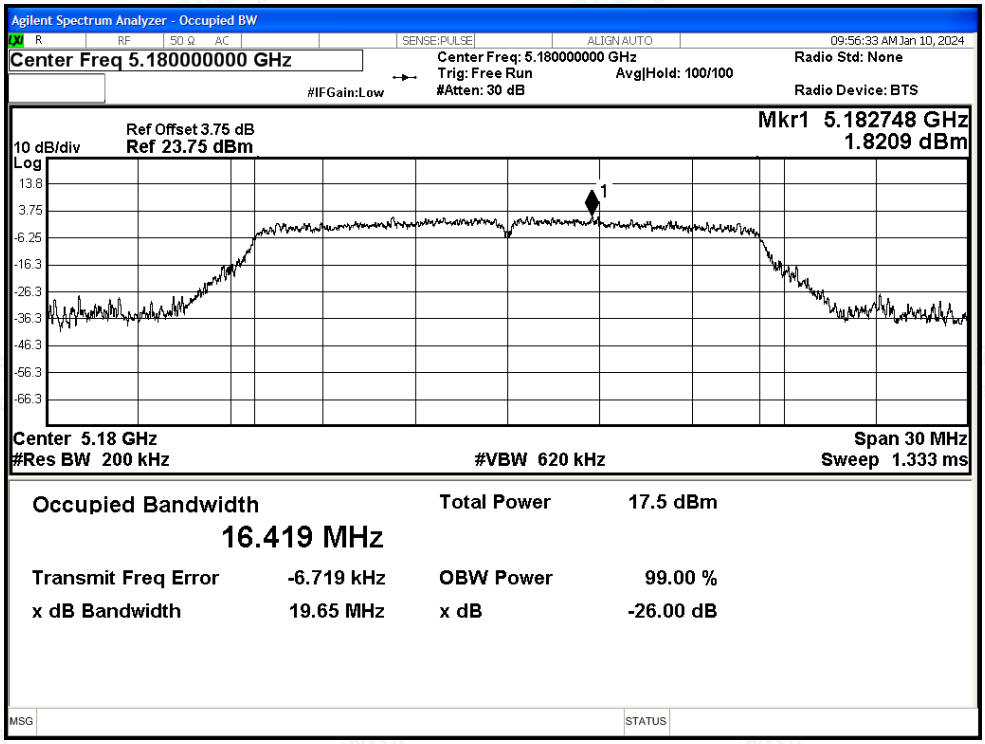
OBW NVNT ac80 5210MHz Ant1



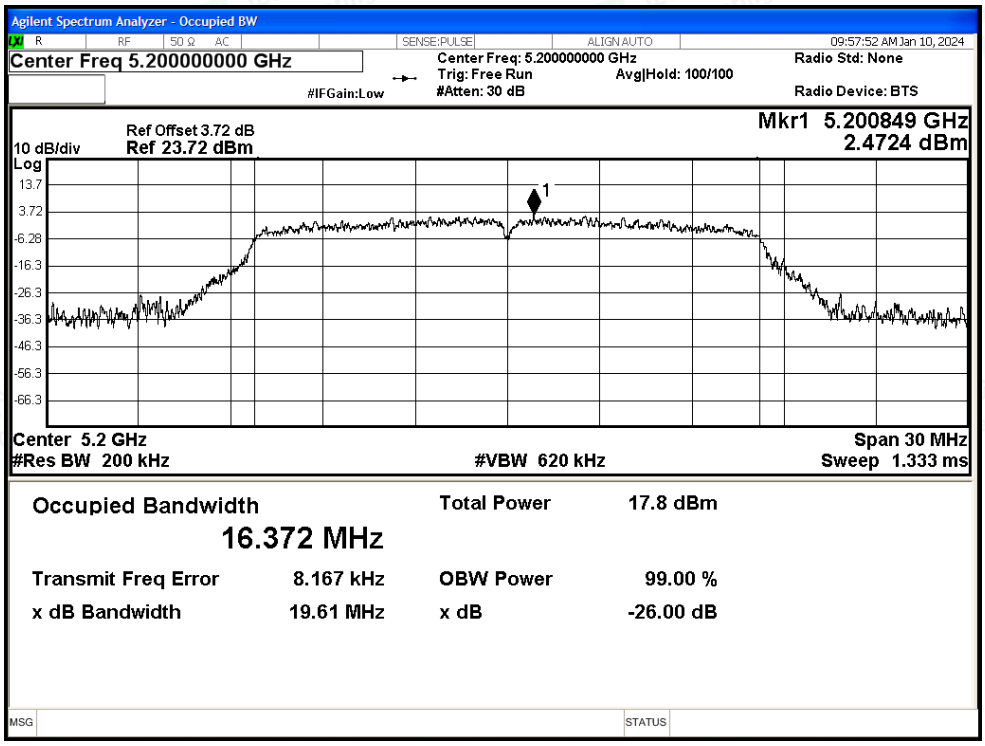
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant2	16.419
NVNT	a	5200	Ant2	16.372
NVNT	a	5240	Ant2	16.468
NVNT	n20	5180	Ant2	17.552
NVNT	n20	5200	Ant2	17.545
NVNT	n20	5240	Ant2	17.6
NVNT	n40	5190	Ant2	35.959
NVNT	n40	5230	Ant2	36.019
NVNT	ac20	5180	Ant2	17.558
NVNT	ac20	5200	Ant2	17.553
NVNT	ac20	5240	Ant2	17.614
NVNT	ac40	5190	Ant2	35.933
NVNT	ac40	5230	Ant2	35.985
NVNT	ac80	5210	Ant2	75.025

Test Graphs

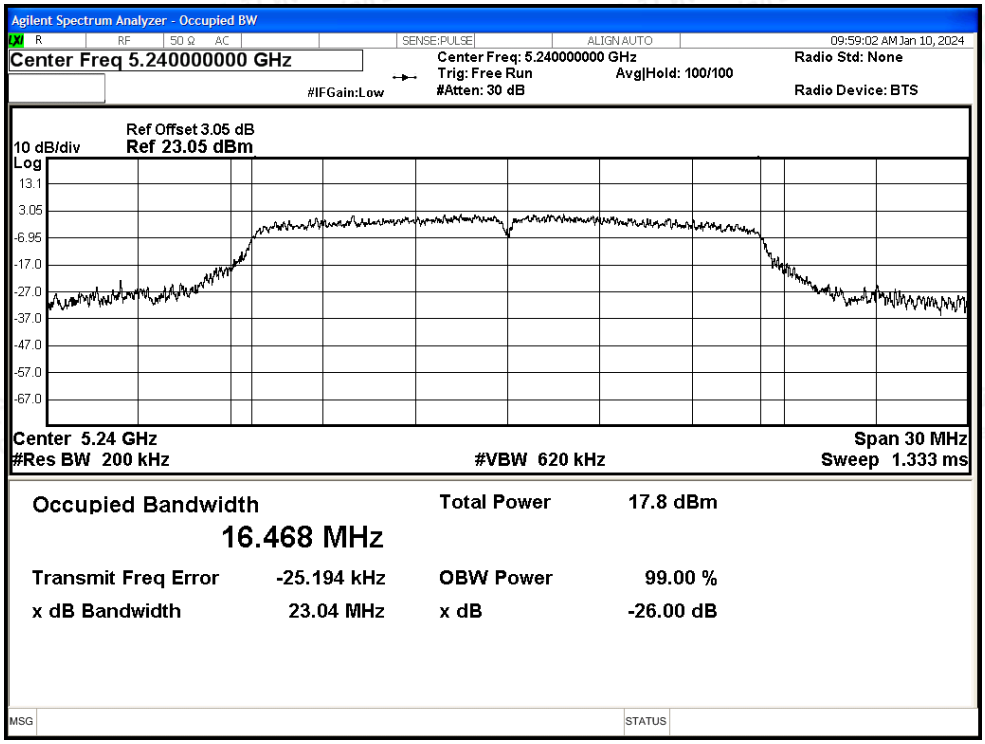
OBW NVNT a 5180MHz Ant2



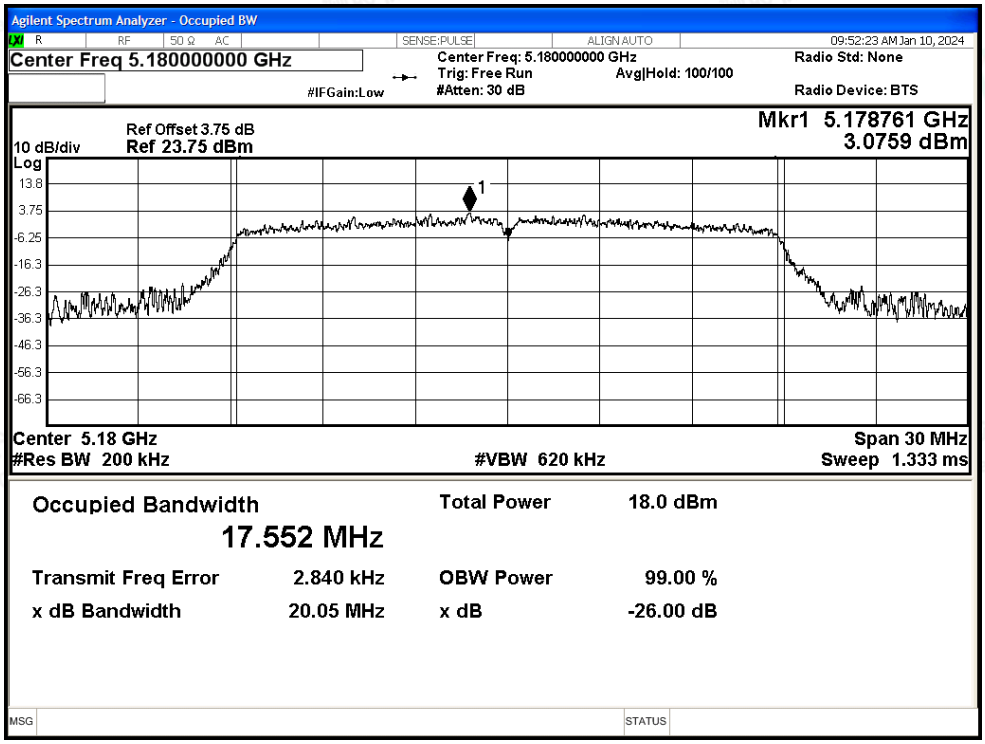
OBW NVNT a 5200MHz Ant2



OBW NVNT a 5240MHz Ant2



OBW NVNT n20 5180MHz Ant2



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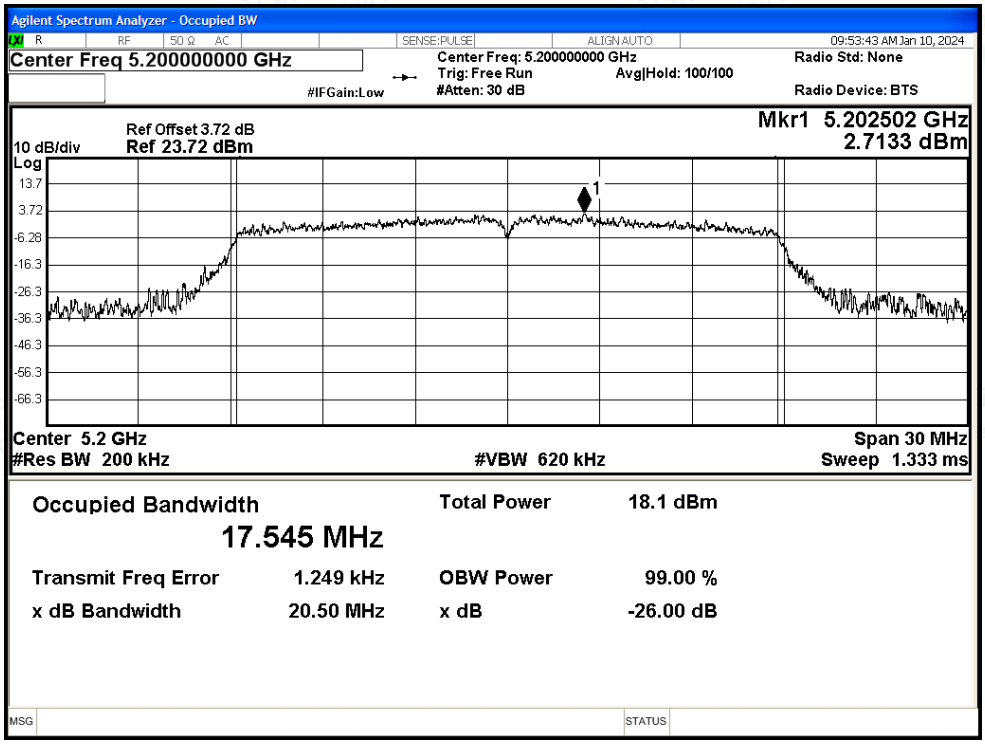
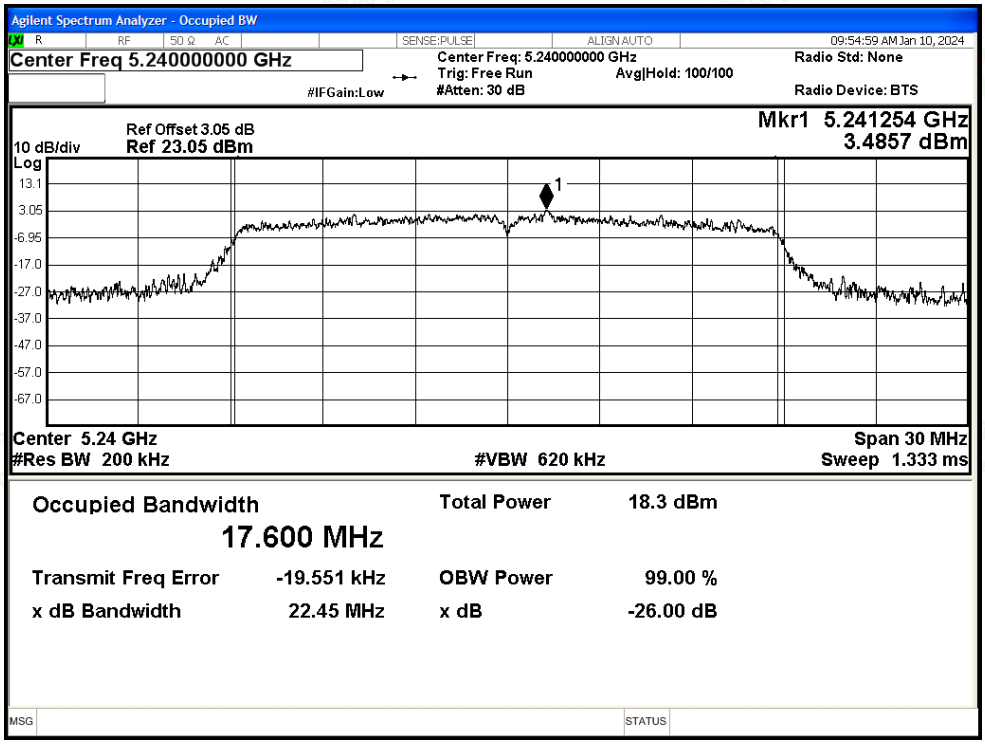
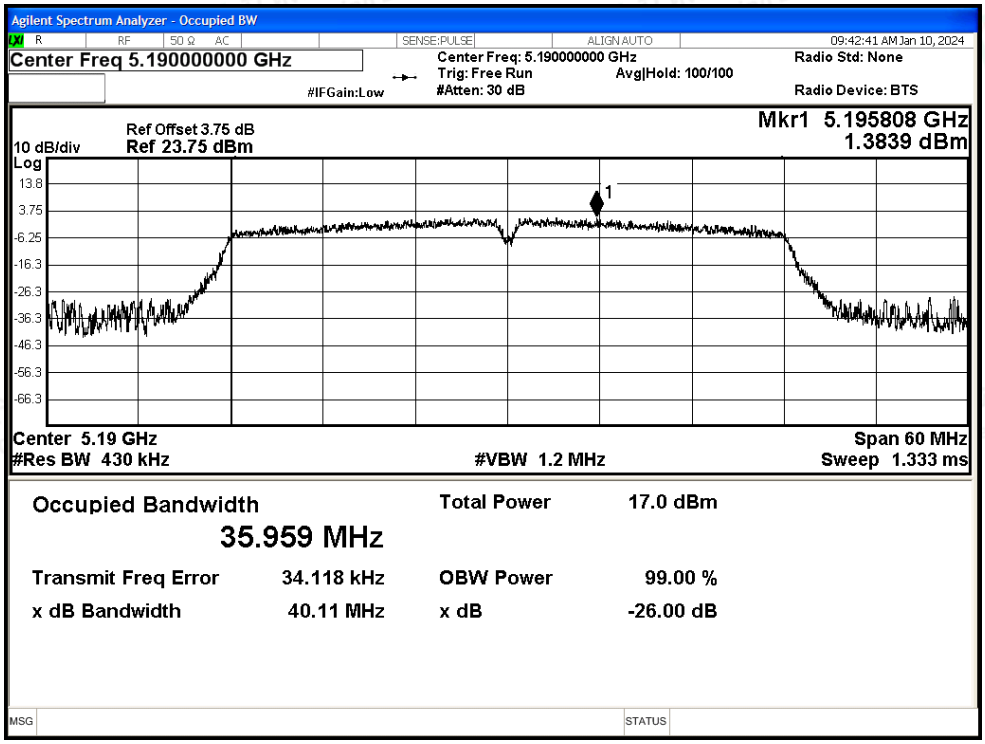


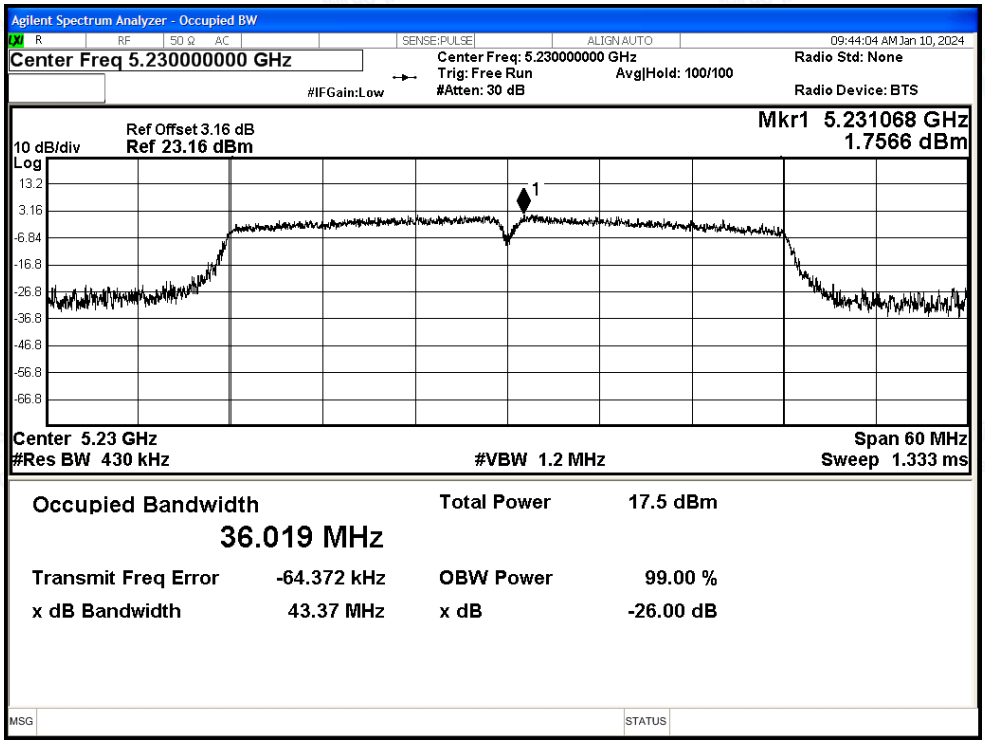
OBW NVNT n20 5240MHz Ant2



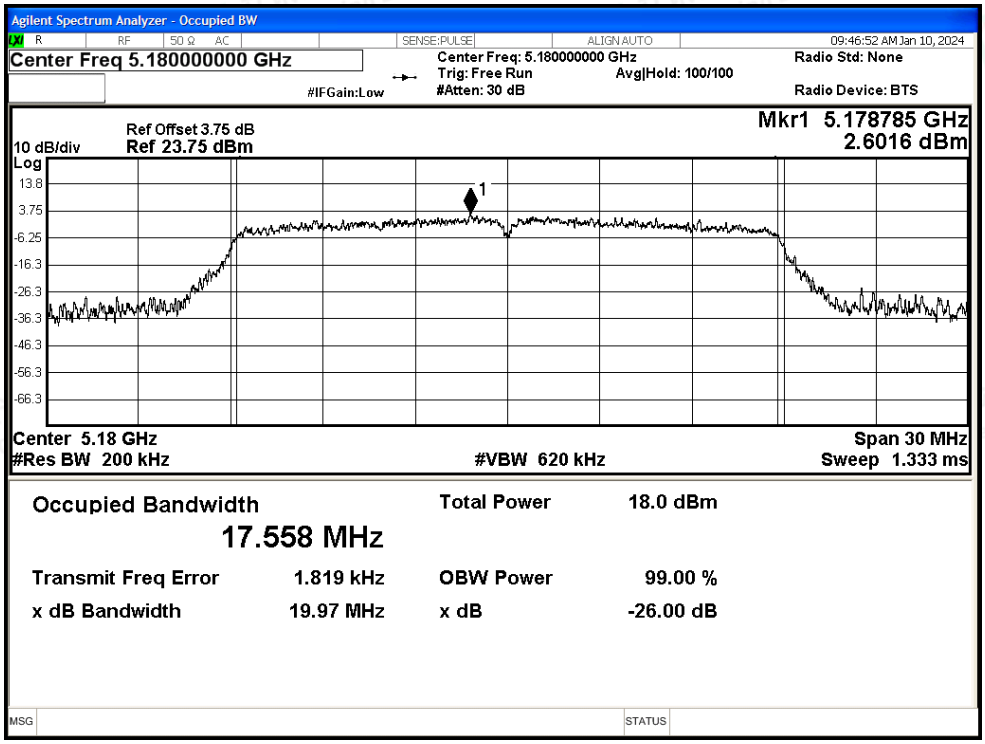
OBW NVNT n40 5190MHz Ant2



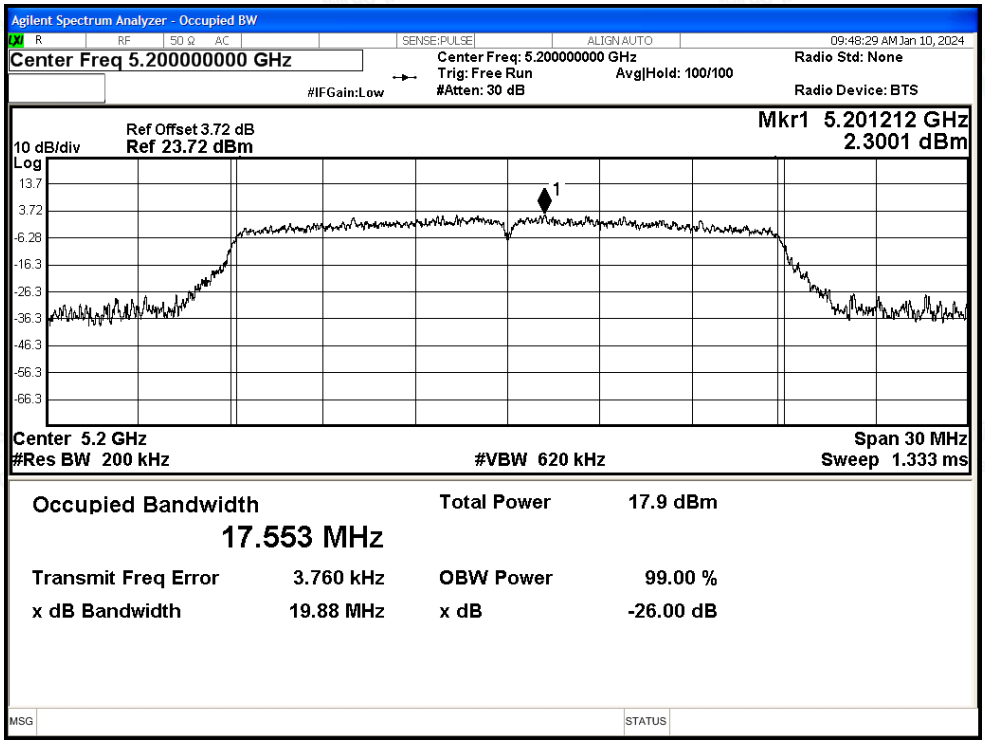
OBW NVNT n40 5230MHz Ant2



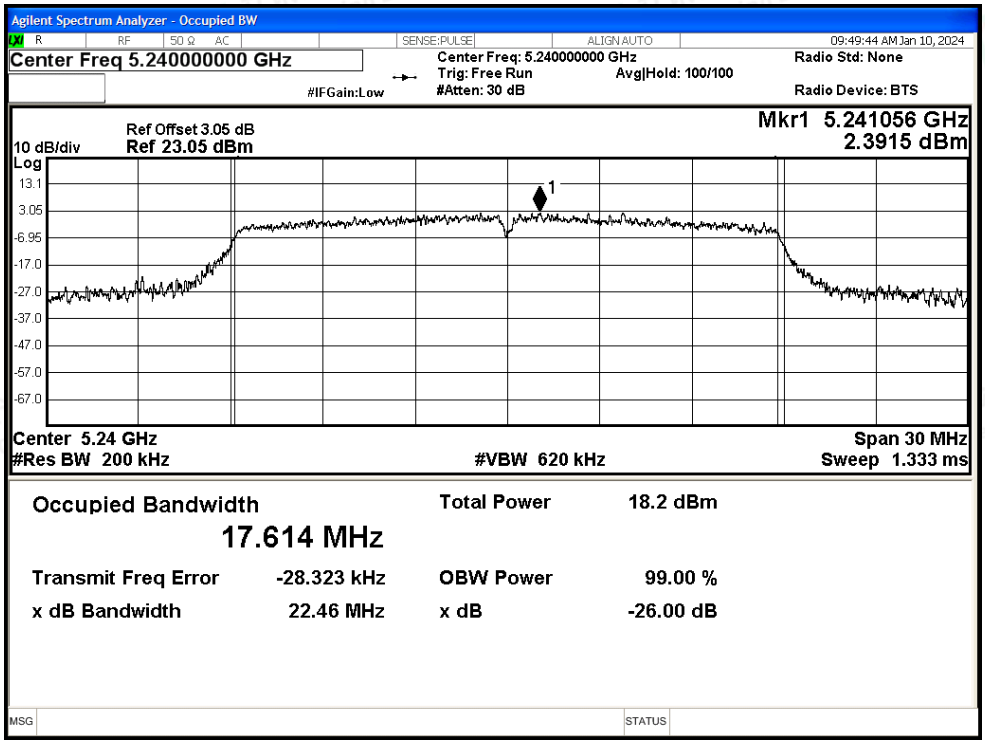
OBW NVNT ac20 5180MHz Ant2



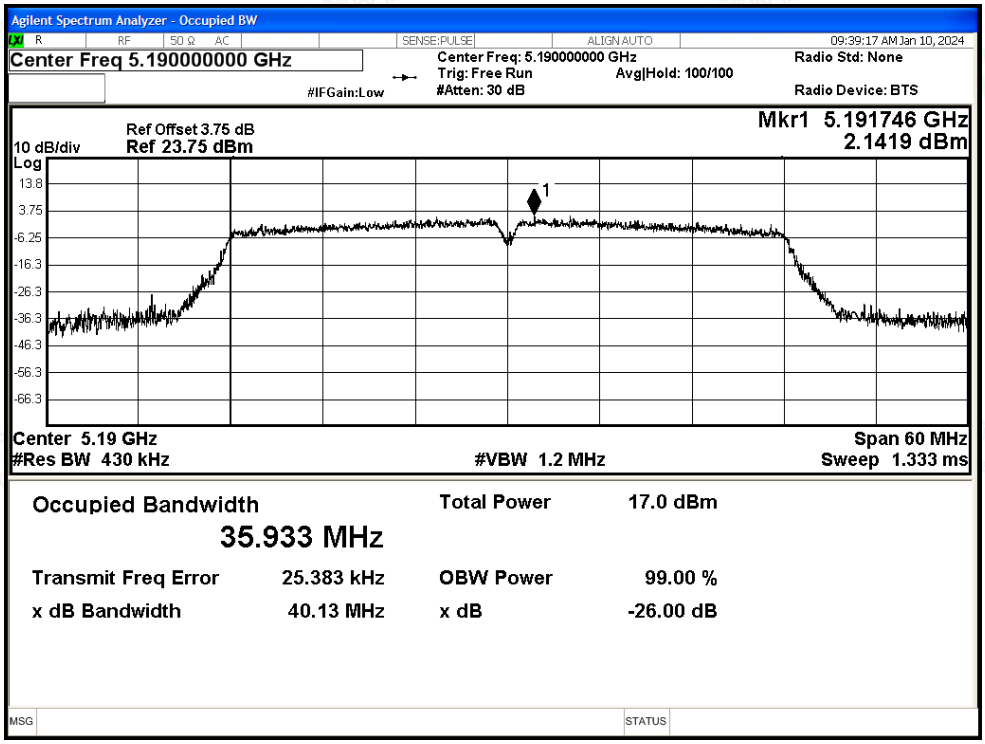
OBW NVNT ac20 5200MHz Ant2



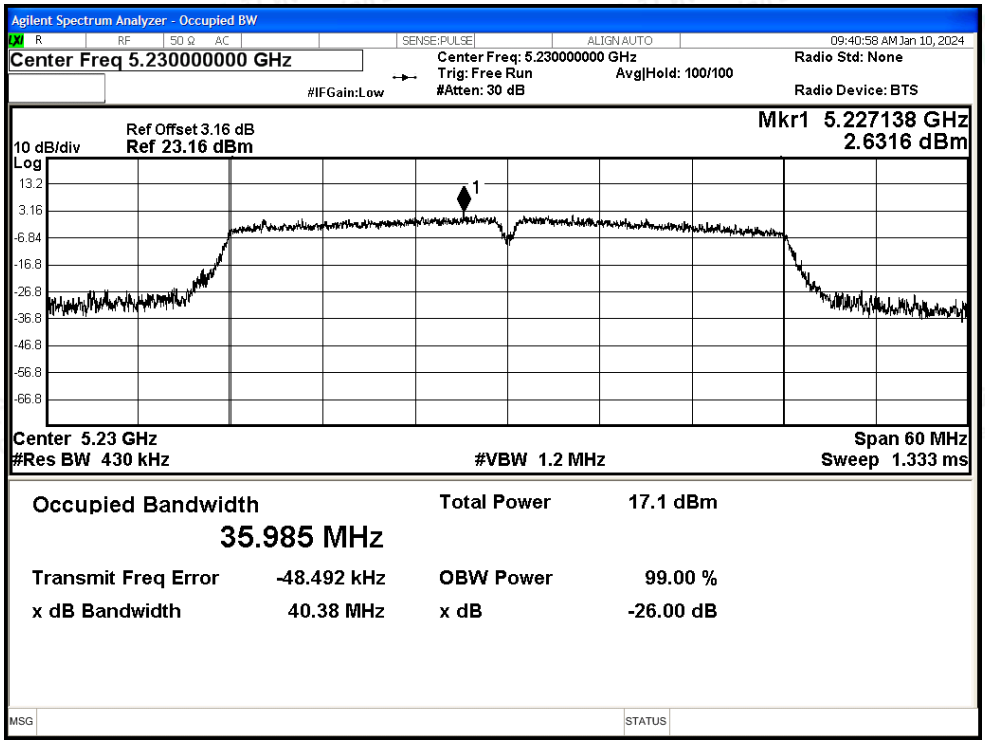
OBW NVNT ac20 5240MHz Ant2



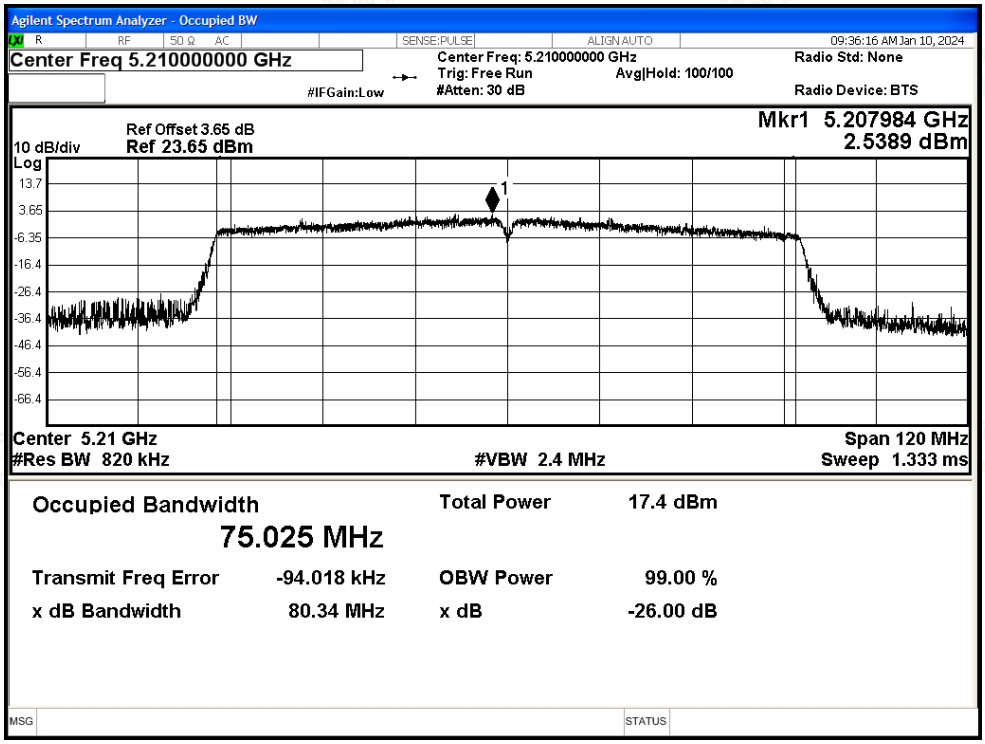
OBW NVNT ac40 5190MHz Ant2



OBW NVNT ac40 5230MHz Ant2



OBW NVNT ac80 5210MHz Ant2



D.3 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	12.16	0.13	12.29	24	Pass
NVNT	a	5200	Ant1	12.24	0.13	12.37	24	Pass
NVNT	a	5240	Ant1	12.24	0.13	12.37	24	Pass
NVNT	n20	5180	Ant1	12.27	0.15	12.42	24	Pass
NVNT	n20	5200	Ant1	12.21	0.15	12.36	24	Pass
NVNT	n20	5240	Ant1	12.5	0.15	12.65	24	Pass
NVNT	n40	5190	Ant1	11.15	0.29	11.44	24	Pass
NVNT	n40	5230	Ant1	11.56	0.29	11.85	24	Pass
NVNT	ac20	5180	Ant1	12.17	0.14	12.31	24	Pass
NVNT	ac20	5200	Ant1	12.3	0.14	12.44	24	Pass
NVNT	ac20	5240	Ant1	12.59	0.14	12.73	24	Pass
NVNT	ac40	5190	Ant1	11.1	0.28	11.38	24	Pass
NVNT	ac40	5230	Ant1	11.19	0.28	11.47	24	Pass
NVNT	ac80	5210	Ant1	10.08	0.55	10.63	24	Pass

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant2	11.99	0.13	12.12	24	Pass
NVNT	a	5200	Ant2	12.04	0.13	12.17	24	Pass
NVNT	a	5240	Ant2	12.14	0.14	12.28	24	Pass
NVNT	n20	5180	Ant2	12.38	0.15	12.53	24	Pass
NVNT	n20	5200	Ant2	12.48	0.15	12.63	24	Pass
NVNT	n20	5240	Ant2	12.5	0.15	12.65	24	Pass
NVNT	n40	5190	Ant2	11.06	0.28	11.34	24	Pass
NVNT	n40	5230	Ant2	11.65	0.29	11.94	24	Pass
NVNT	ac20	5180	Ant2	12.34	0.14	12.48	24	Pass
NVNT	ac20	5200	Ant2	12.28	0.14	12.42	24	Pass
NVNT	ac20	5240	Ant2	12.56	0.14	12.7	24	Pass
NVNT	ac40	5190	Ant2	11.21	0.28	11.49	24	Pass
NVNT	ac40	5230	Ant2	11.16	0.28	11.44	24	Pass
NVNT	ac80	5210	Ant2	10.2	0.55	10.75	24	Pass

MIMO

Condition	Mode	Frequency (MHz)	Total Power (dBm)			Limit (dBm)	Verdict
			Ant1	Ant2	Ant1+Ant2		
NVNT	n20	5180	12.42	12.53	15.49	24	Pass
NVNT	n20	5200	12.36	12.63	15.51	24	Pass
NVNT	n20	5240	12.65	12.65	15.66	24	Pass
NVNT	n40	5190	11.44	11.34	14.40	24	Pass
NVNT	n40	5230	11.85	11.94	14.91	24	Pass
NVNT	ac20	5180	12.31	12.48	15.41	24	Pass
NVNT	ac20	5200	12.44	12.42	15.44	24	Pass
NVNT	ac20	5240	12.73	12.7	15.73	24	Pass
NVNT	ac40	5190	11.38	11.49	14.45	24	Pass
NVNT	ac40	5230	11.47	11.44	14.47	24	Pass
NVNT	ac80	5210	10.63	10.75	13.70	24	Pass

D.4 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5180	Ant1	2.42	0.13	2.55	11	Pass
NVNT	a	5200	Ant1	2.65	0.13	2.78	11	Pass
NVNT	a	5240	Ant1	2.62	0.13	2.75	11	Pass
NVNT	n20	5180	Ant1	2.46	0.15	2.61	11	Pass
NVNT	n20	5200	Ant1	2.48	0.15	2.63	11	Pass
NVNT	n20	5240	Ant1	2.89	0.15	3.04	11	Pass
NVNT	n40	5190	Ant1	-1.73	0.29	-1.44	11	Pass
NVNT	n40	5230	Ant1	-0.71	0.29	-0.42	11	Pass
NVNT	ac20	5180	Ant1	2.41	0.14	2.55	11	Pass
NVNT	ac20	5200	Ant1	2.49	0.14	2.63	11	Pass
NVNT	ac20	5240	Ant1	2.77	0.14	2.91	11	Pass
NVNT	ac40	5190	Ant1	-1.85	0.28	-1.57	11	Pass
NVNT	ac40	5230	Ant1	-1.47	0.28	-1.19	11	Pass
NVNT	ac80	5210	Ant1	-4.98	0.55	-4.43	11	Pass

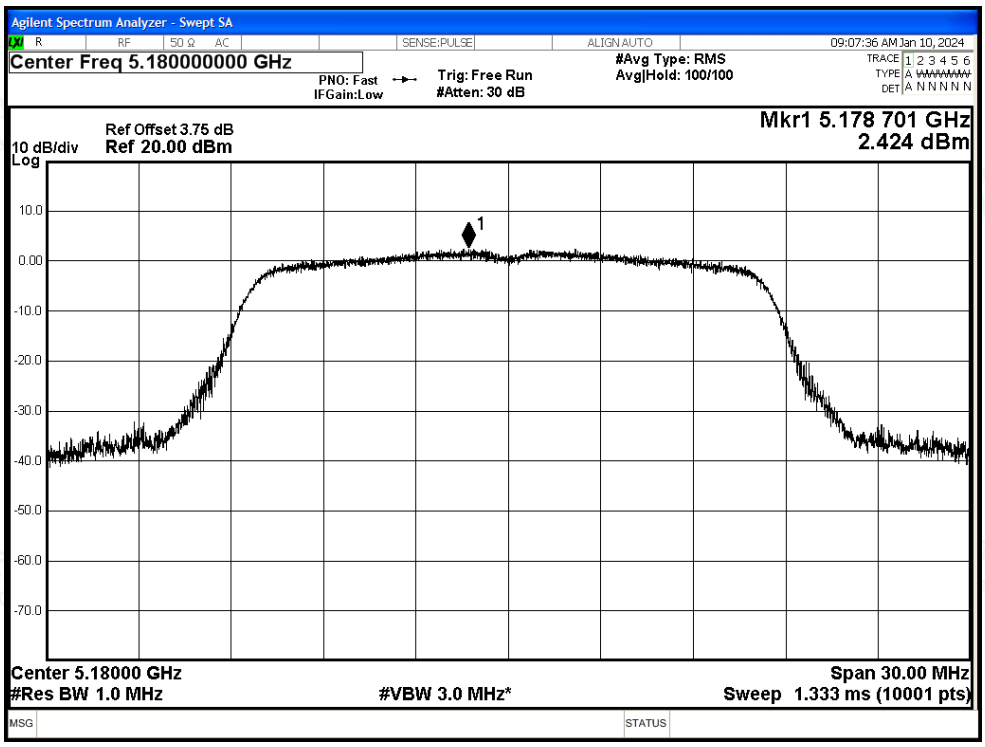
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5180	Ant2	2.49	0.13	2.62	11	Pass
NVNT	a	5200	Ant2	2.58	0.13	2.71	11	Pass
NVNT	a	5240	Ant2	2.65	0.14	2.79	11	Pass
NVNT	n20	5180	Ant2	2.46	0.15	2.61	11	Pass
NVNT	n20	5200	Ant2	2.61	0.15	2.76	11	Pass
NVNT	n20	5240	Ant2	2.76	0.15	2.91	11	Pass
NVNT	n40	5190	Ant2	-1.49	0.28	-1.21	11	Pass
NVNT	n40	5230	Ant2	-1.16	0.29	-0.87	11	Pass
NVNT	ac20	5180	Ant2	2.52	0.14	2.66	11	Pass
NVNT	ac20	5200	Ant2	2.62	0.14	2.76	11	Pass
NVNT	ac20	5240	Ant2	2.61	0.14	2.75	11	Pass
NVNT	ac40	5190	Ant2	-1.48	0.28	-1.2	11	Pass
NVNT	ac40	5230	Ant2	-1.25	0.28	-0.97	11	Pass
NVNT	ac80	5210	Ant2	-4.91	0.55	-4.36	11	Pass

MIMO

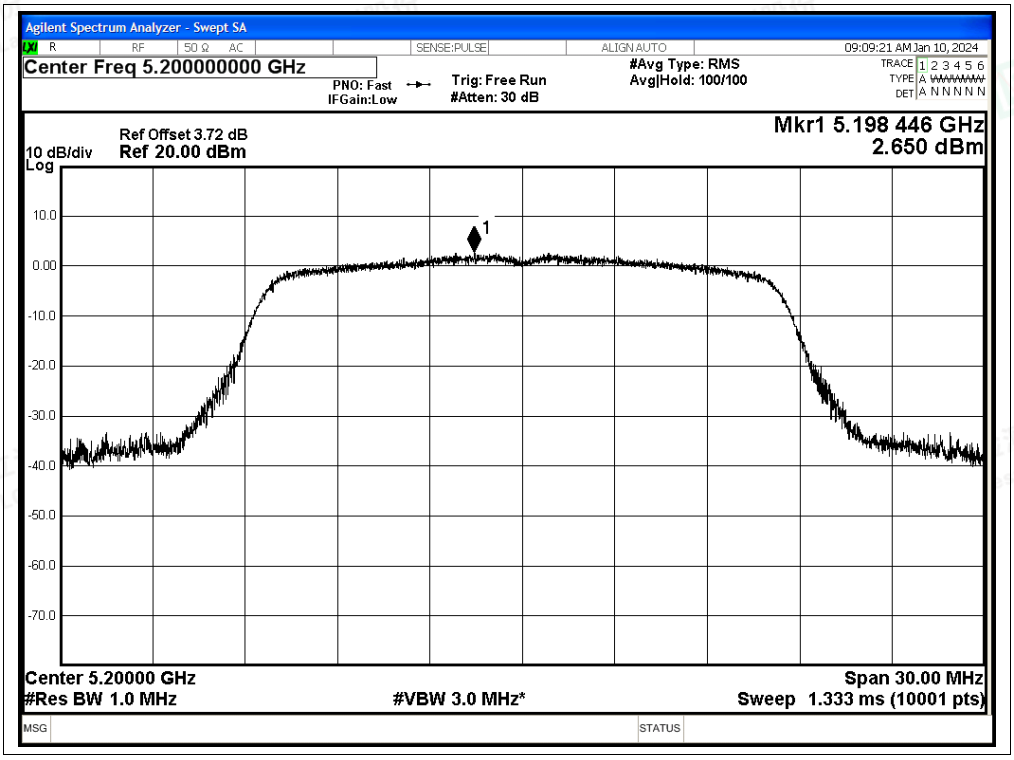
Condition	Mode	Frequency (MHz)	Total PSD (dBm/MHz)			Limit (dBm/MHz)	Verdict
			Ant1	Ant2	Ant1+Ant2		
NVNT	n20	5180	2.61	2.61	5.62	11	Pass
NVNT	n20	5200	2.63	2.76	5.71	11	Pass
NVNT	n20	5240	3.04	2.91	5.99	11	Pass
NVNT	n40	5190	-1.44	-1.21	1.69	11	Pass
NVNT	n40	5230	-0.42	-0.87	2.37	11	Pass
NVNT	ac20	5180	2.55	2.66	5.62	11	Pass
NVNT	ac20	5200	2.63	2.76	5.71	11	Pass
NVNT	ac20	5240	2.91	2.75	5.84	11	Pass
NVNT	ac40	5190	-1.57	-1.2	1.63	11	Pass
NVNT	ac40	5230	-1.19	-0.97	1.93	11	Pass
NVNT	ac80	5210	-4.43	-4.36	-1.38	11	Pass

Test Graphs

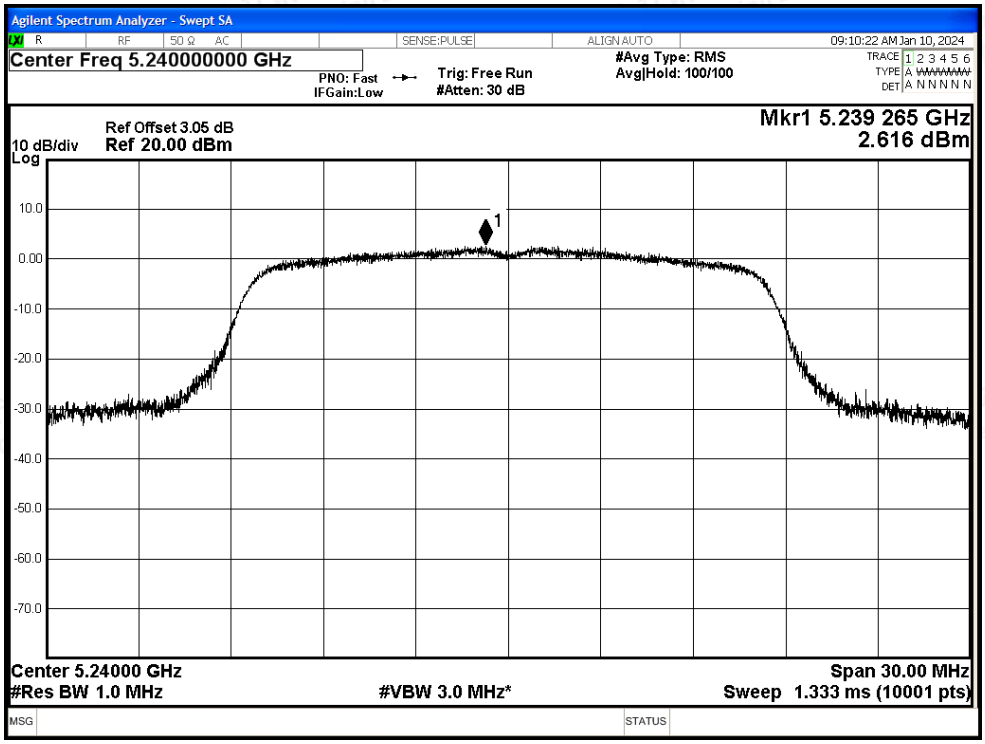
PSD NVNT a 5180MHz Ant1



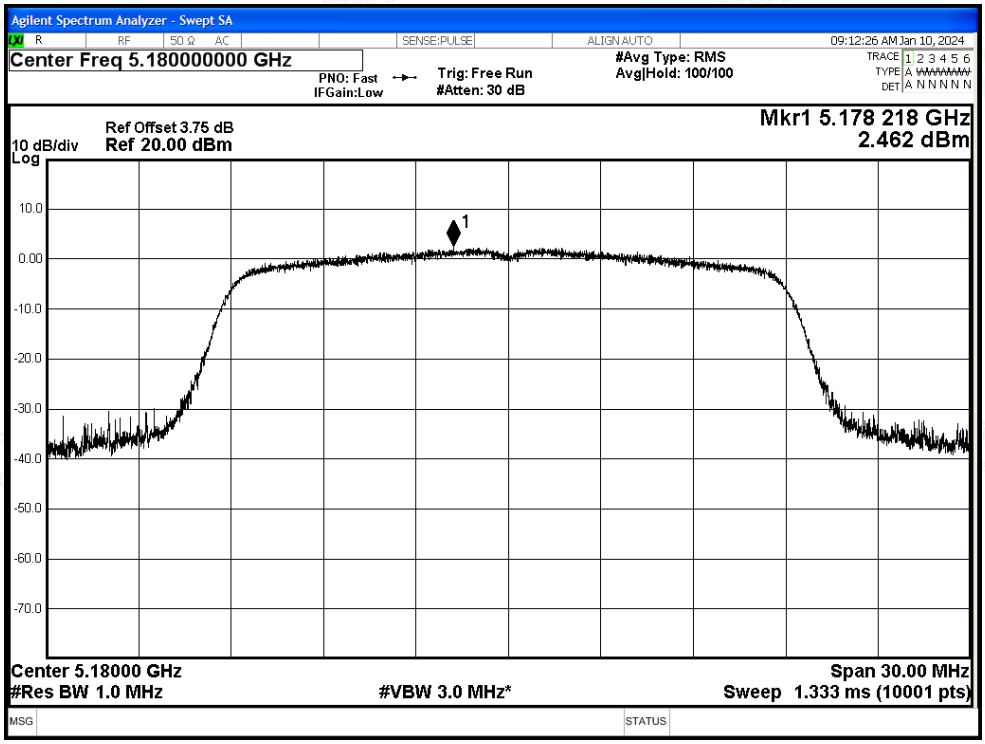
PSD NVNT a 5200MHz Ant1


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.200000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
09:09:21 AM Jan 10, 2024
Ref Offset 3.72 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 5.198 446 GHz
2.650 dBm
Center 5.20000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 30.00 MHz
Sweep 1.333 ms (10001 pts)

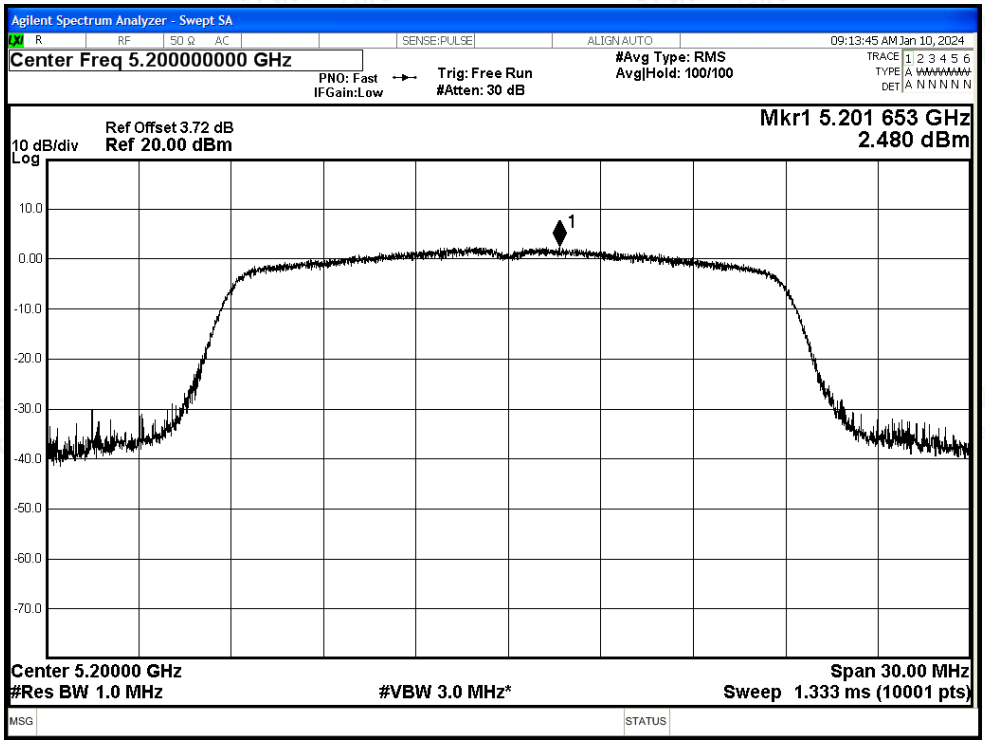
PSD NVNT a 5240MHz Ant1



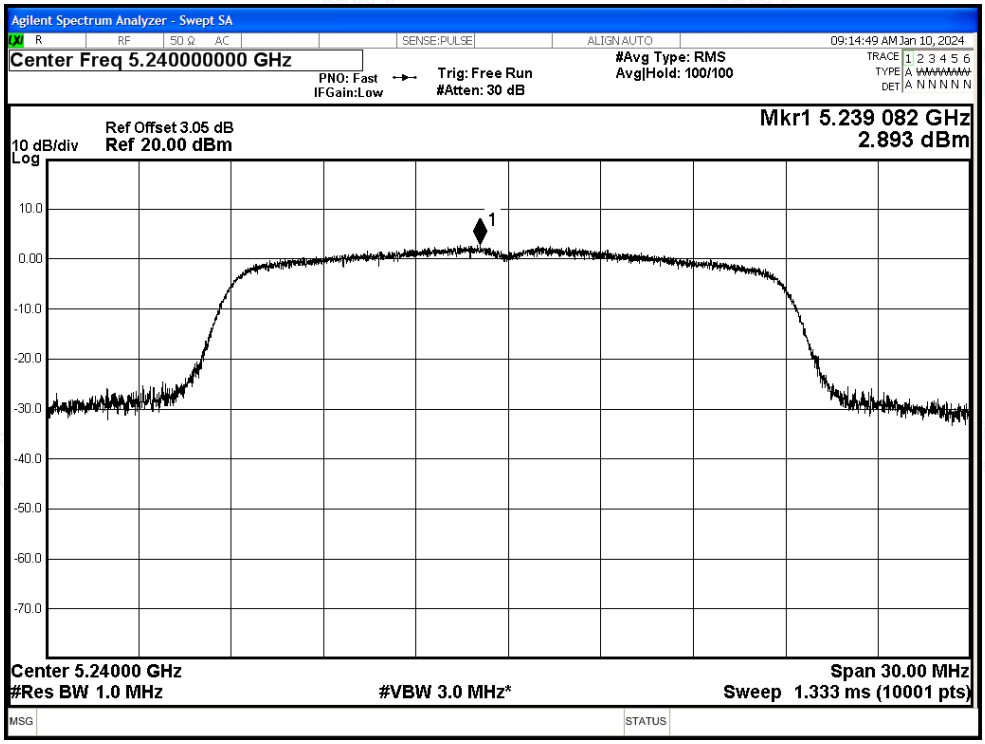
PSD NVNT n20 5180MHz Ant1



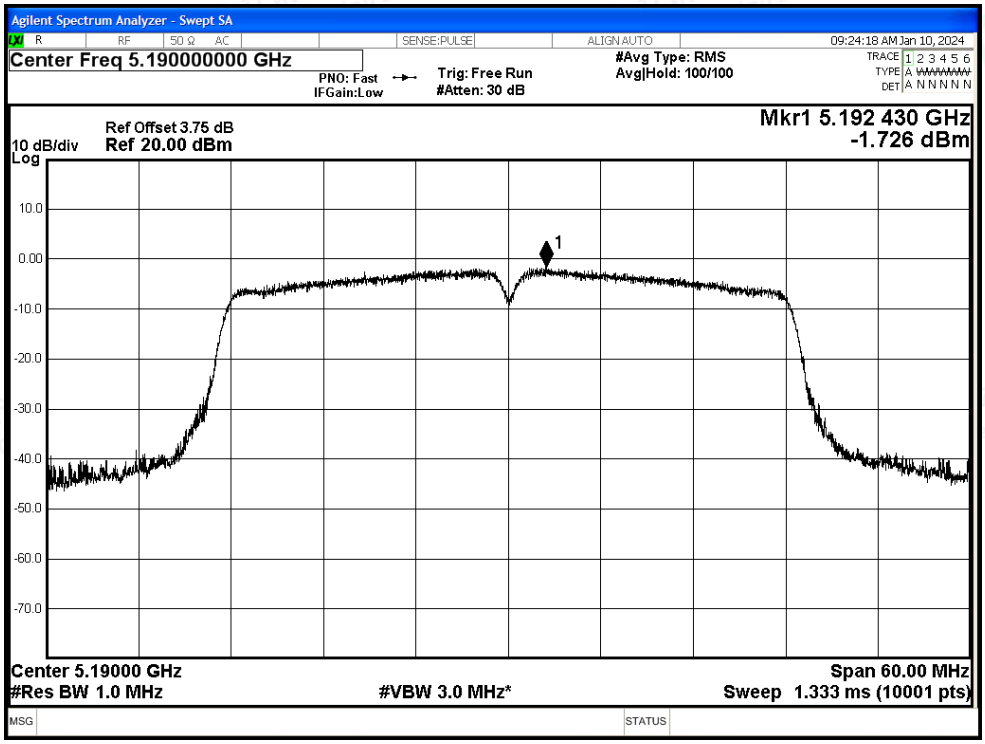
PSD NVNT n20 5200MHz Ant1



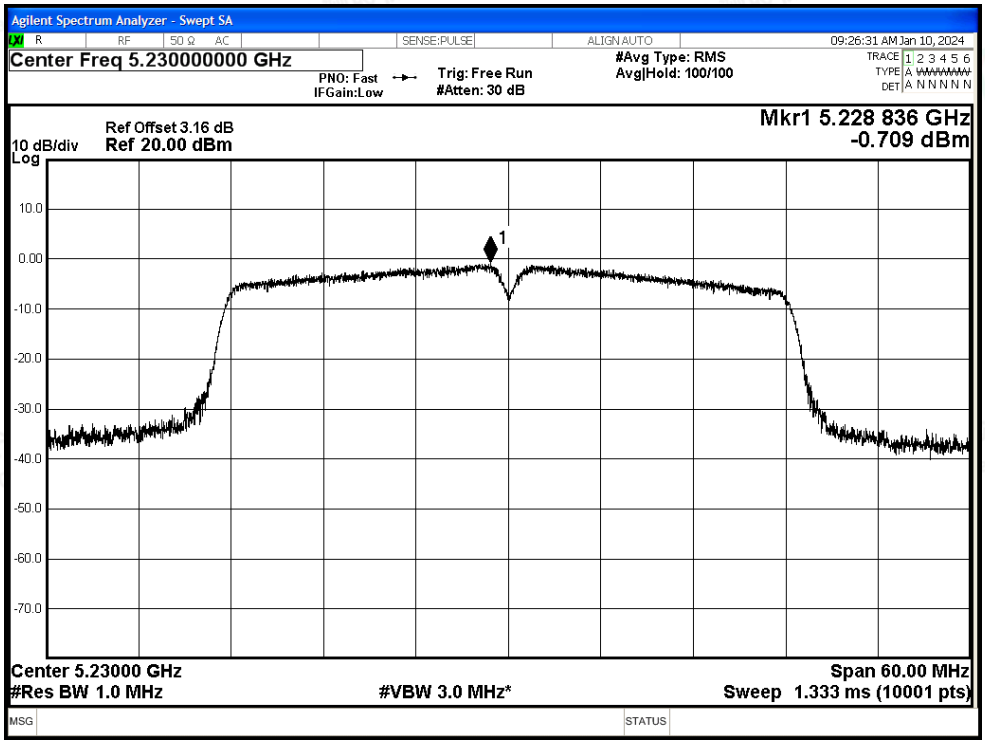
PSD NVNT n20 5240MHz Ant1



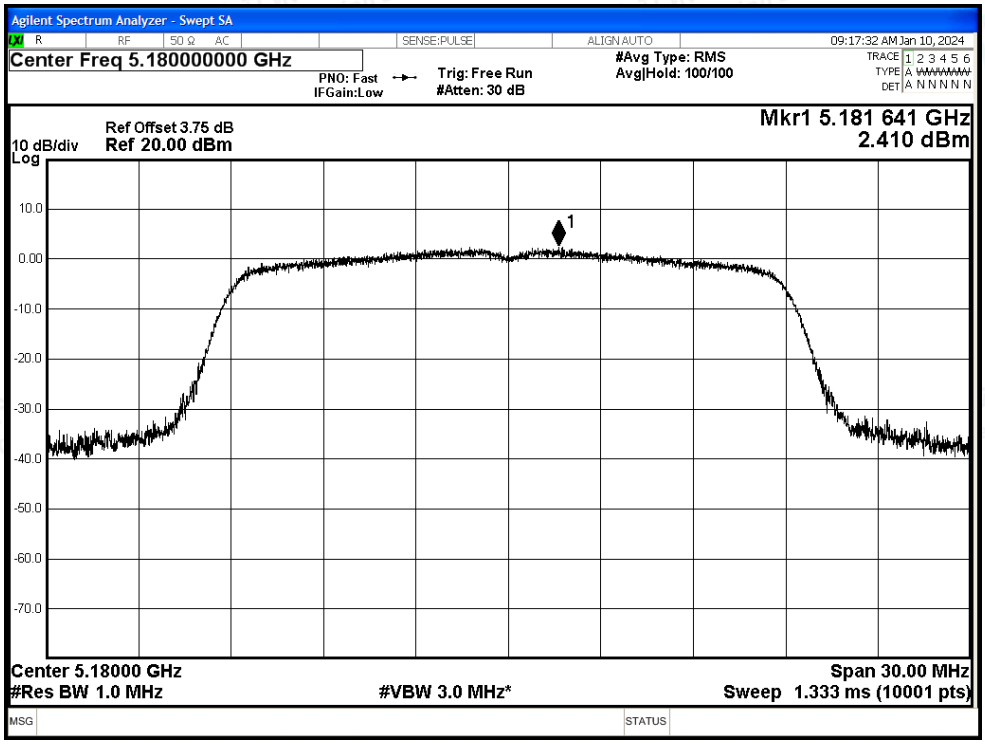
PSD NVNT n40 5190MHz Ant1



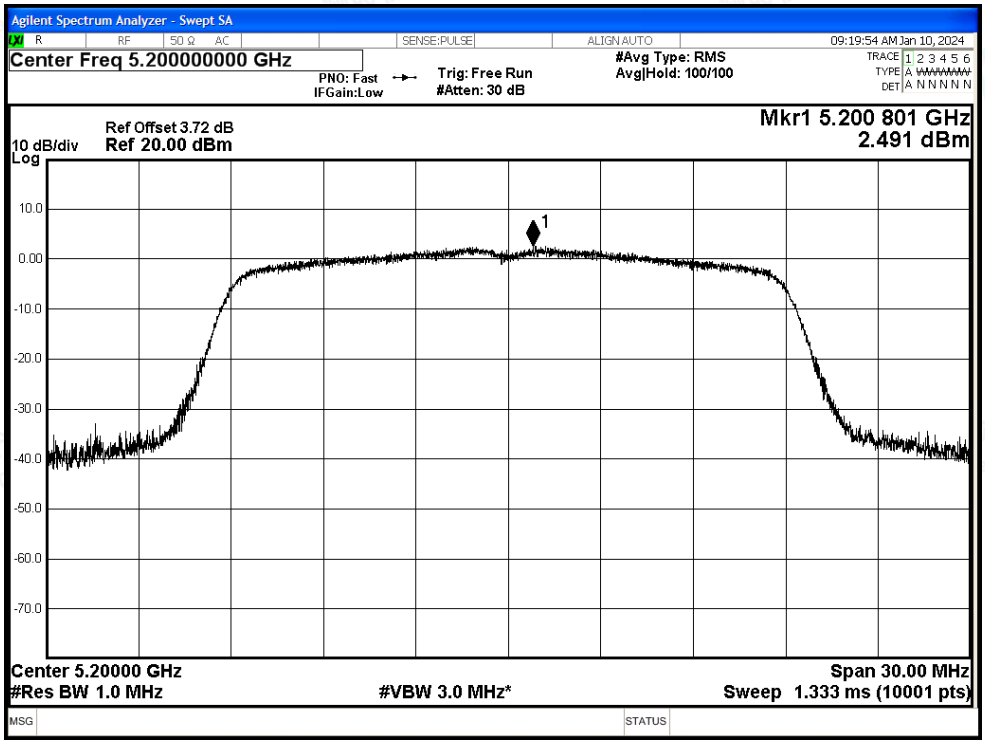
PSD NVNT n40 5230MHz Ant1



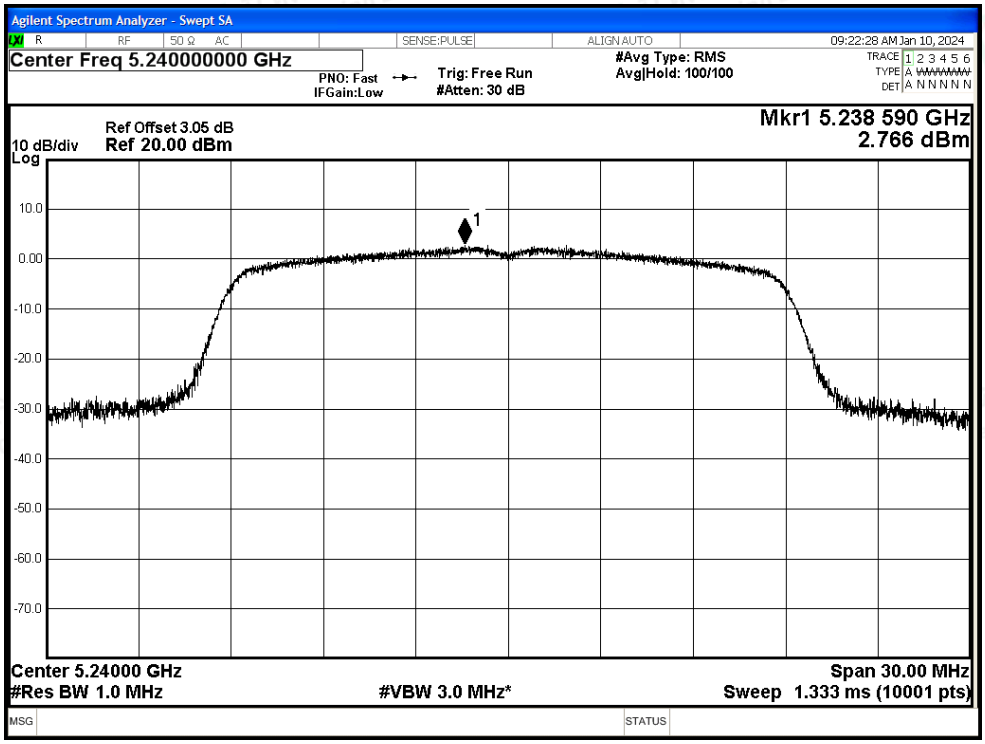
PSD NVNT ac20 5180MHz Ant1



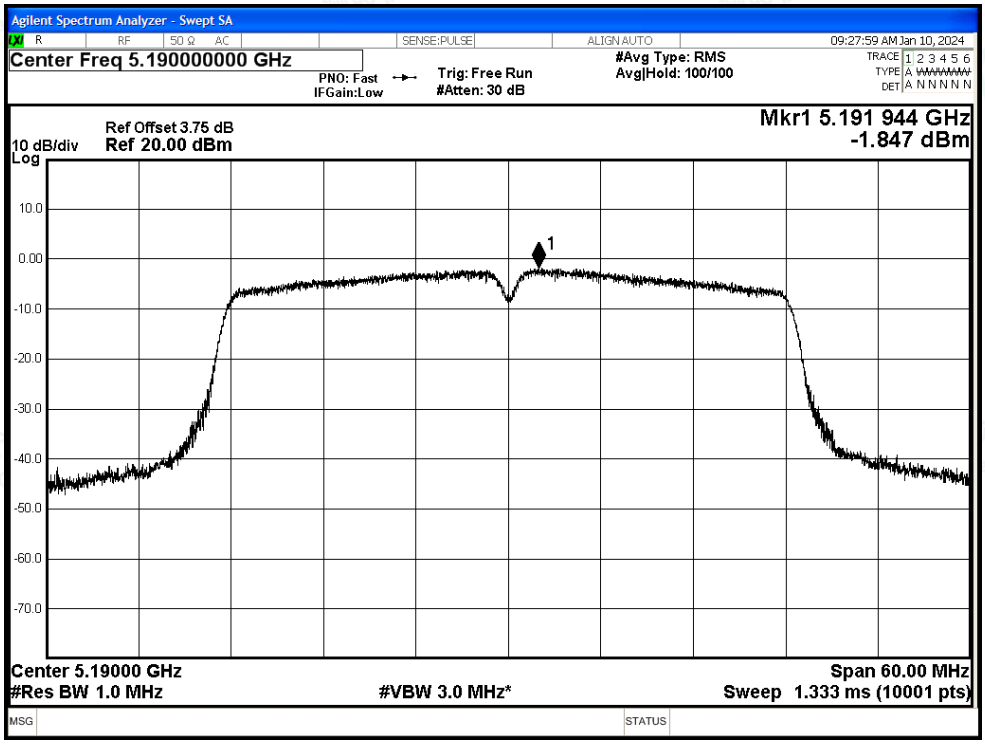
PSD NVNT ac20 5200MHz Ant1



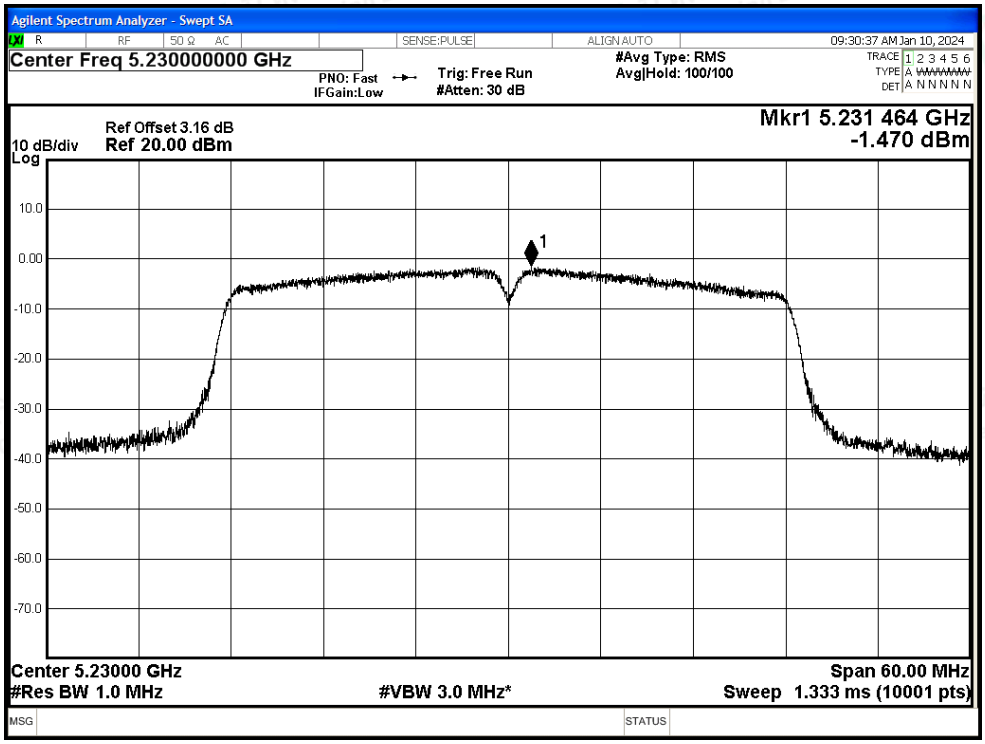
PSD NVNT ac20 5240MHz Ant1



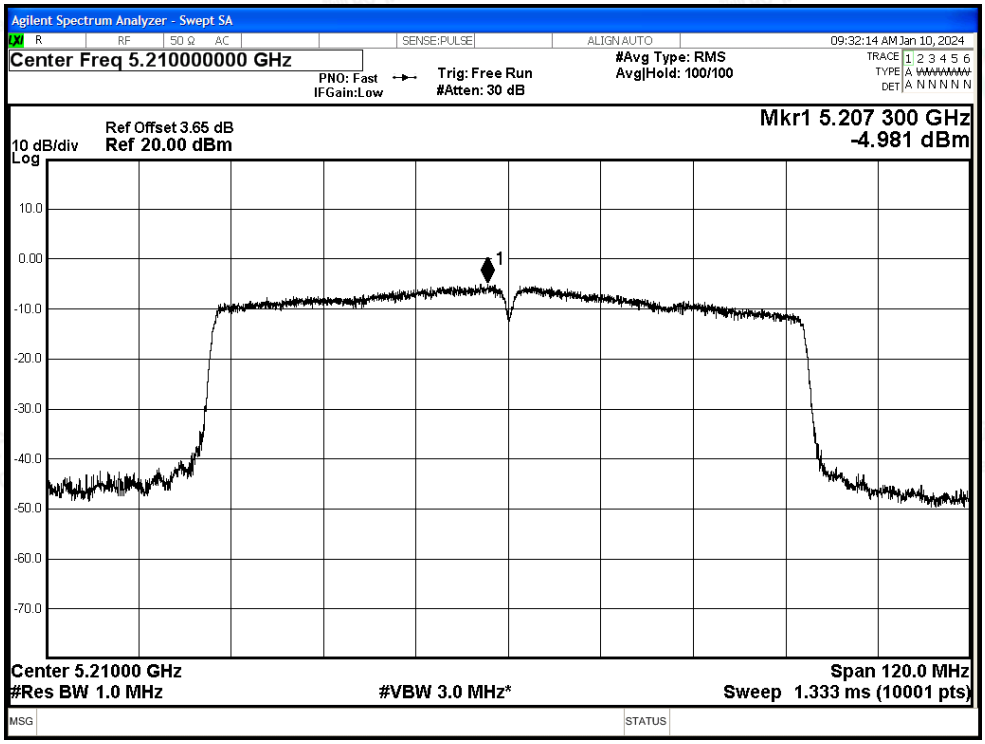
PSD NVNT ac40 5190MHz Ant1



PSD NVNT ac40 5230MHz Ant1

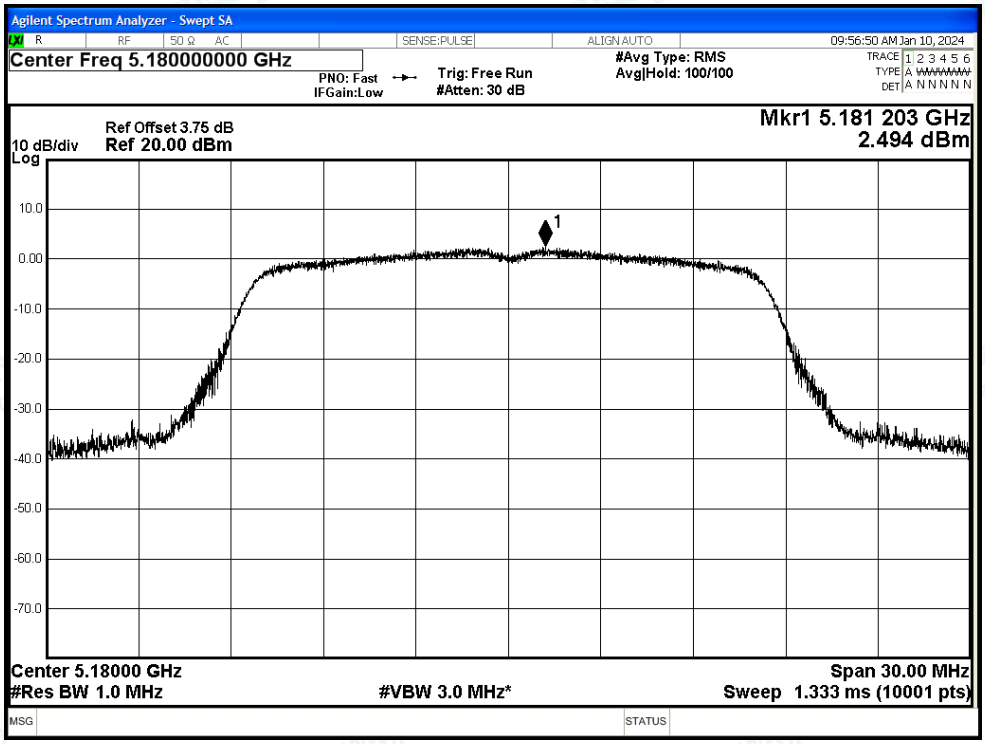


PSD NVNT ac80 5210MHz Ant1

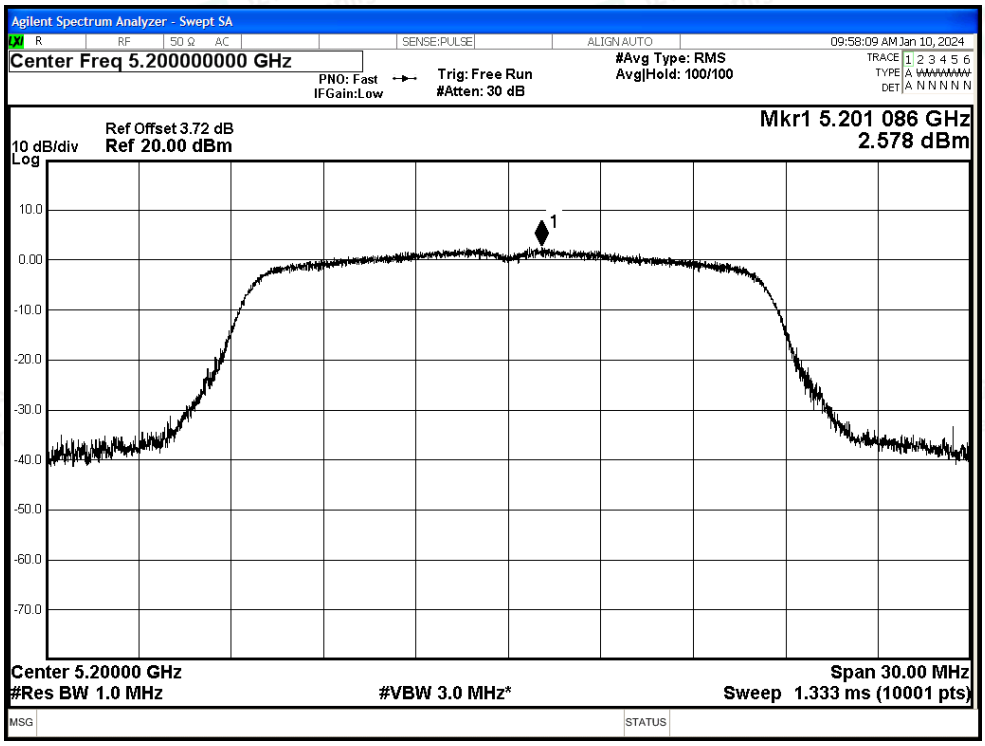


Test Graphs

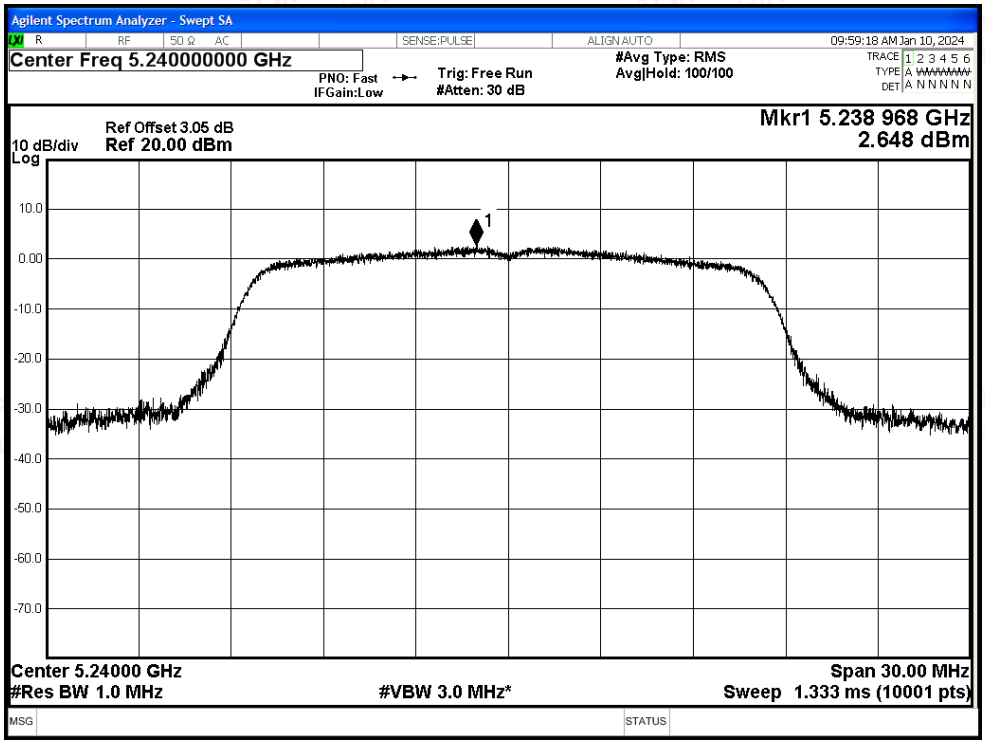
PSD NVNT a 5180MHz Ant2



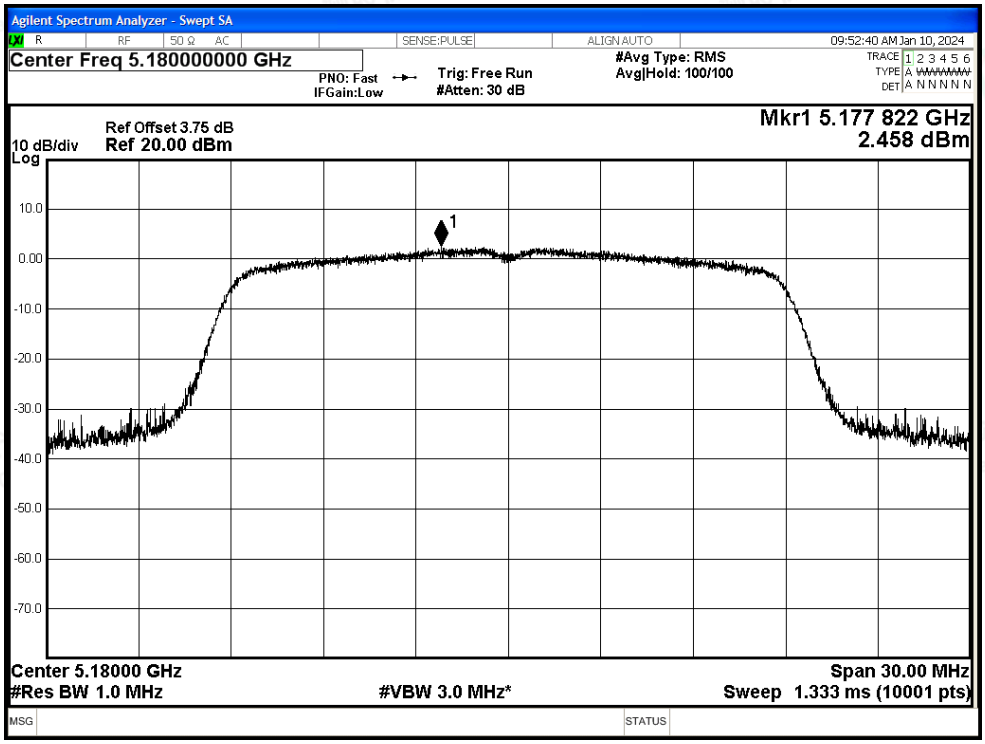
PSD NVNT a 5200MHz Ant2



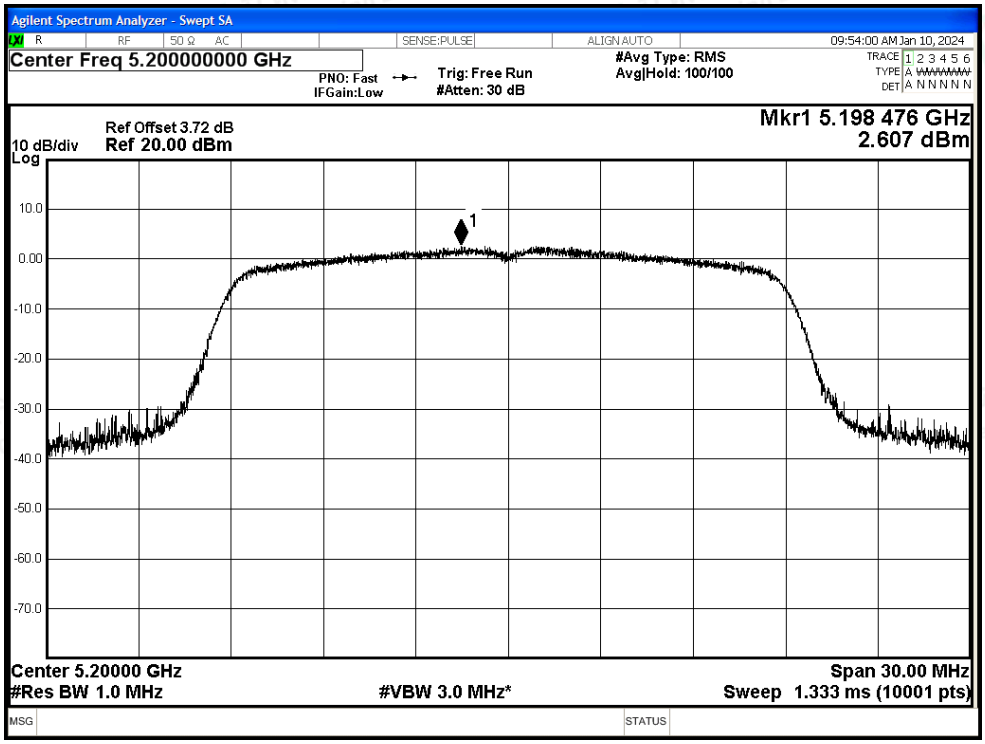
PSD NVNT a 5240MHz Ant2



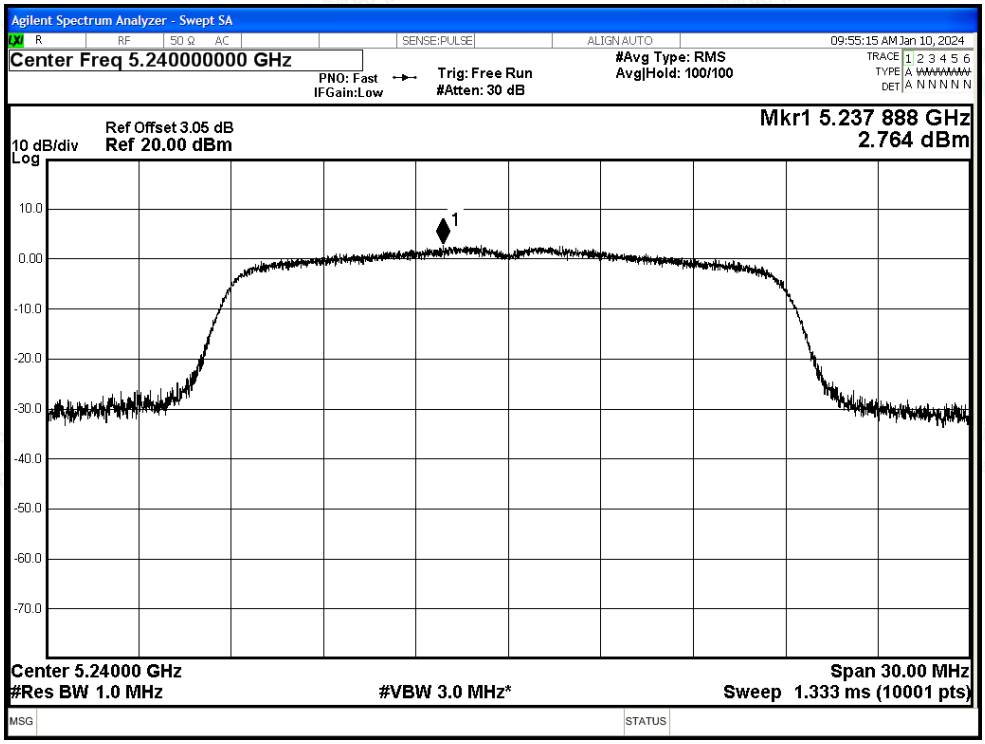
PSD NVNT n20 5180MHz Ant2



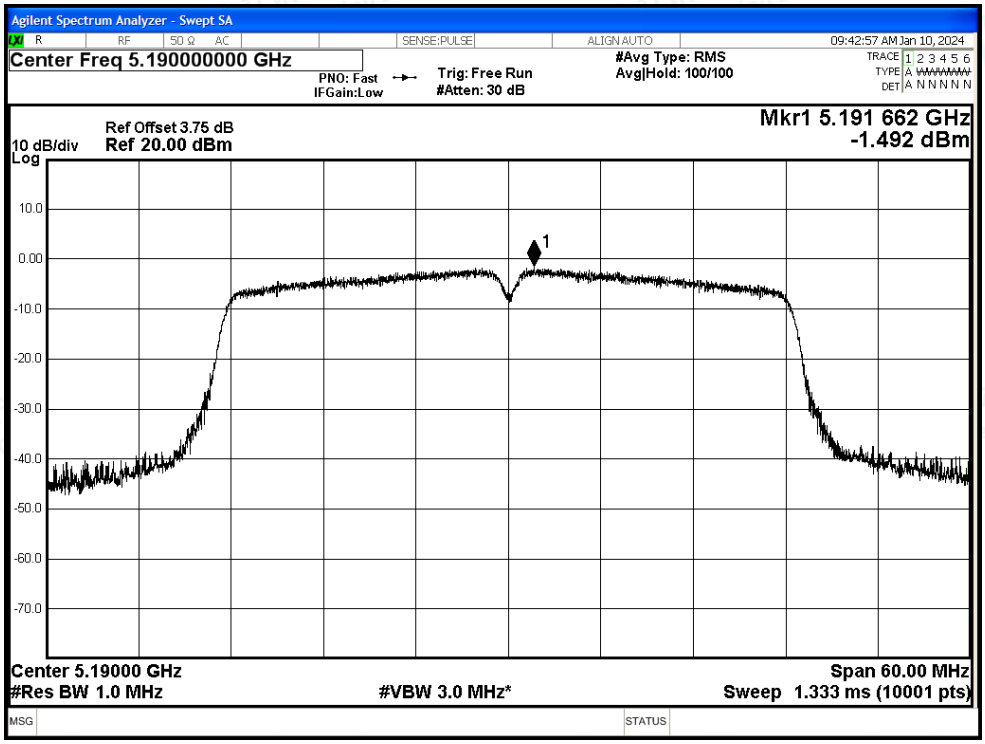
PSD NVNT n20 5200MHz Ant2



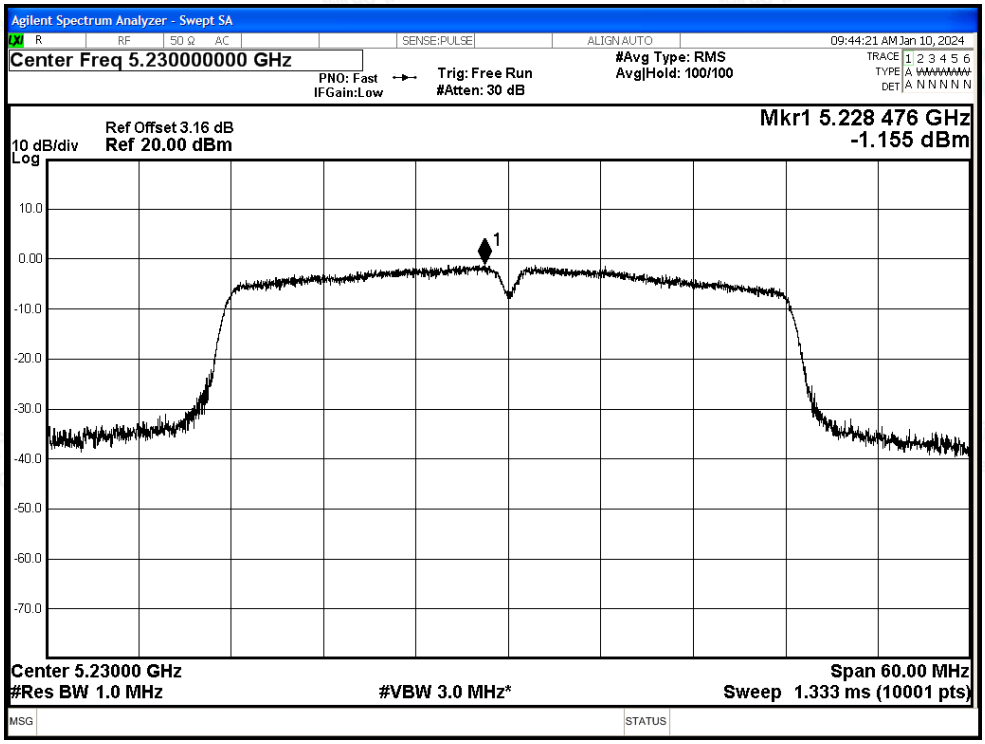
PSD NVNT n20 5240MHz Ant2



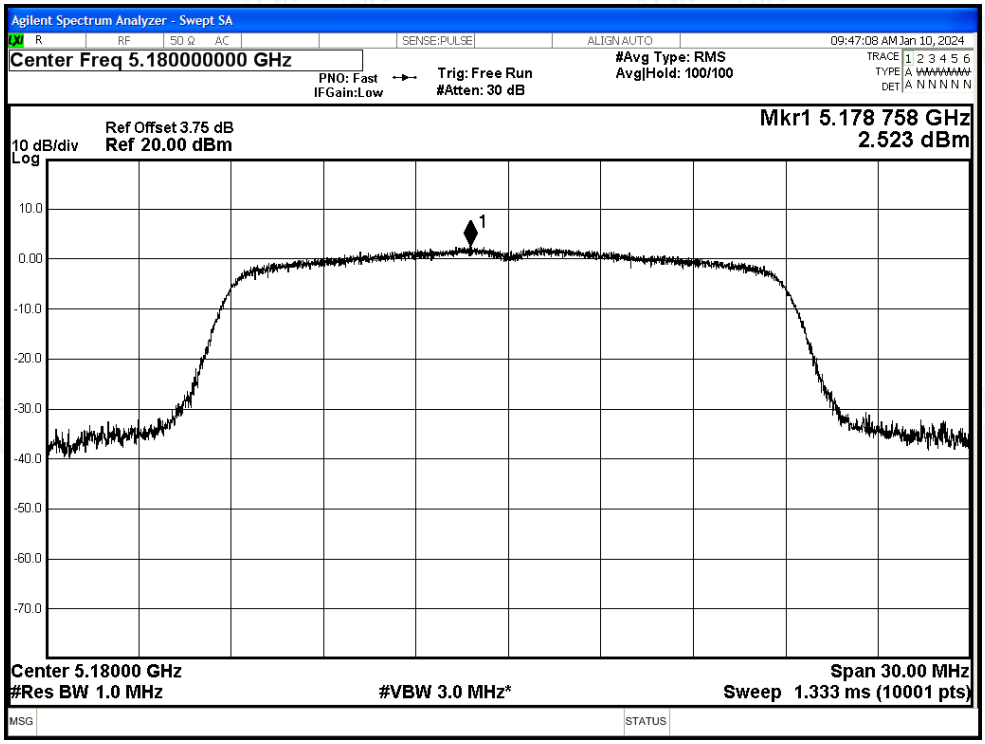
PSD NVNT n40 5190MHz Ant2



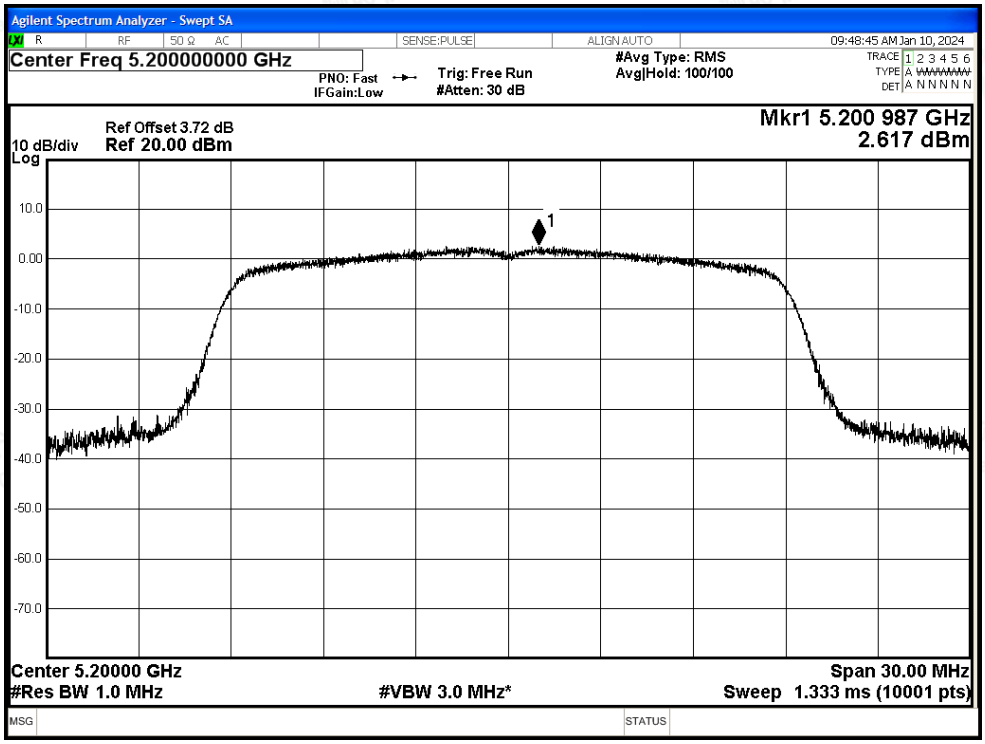
PSD NVNT n40 5230MHz Ant2



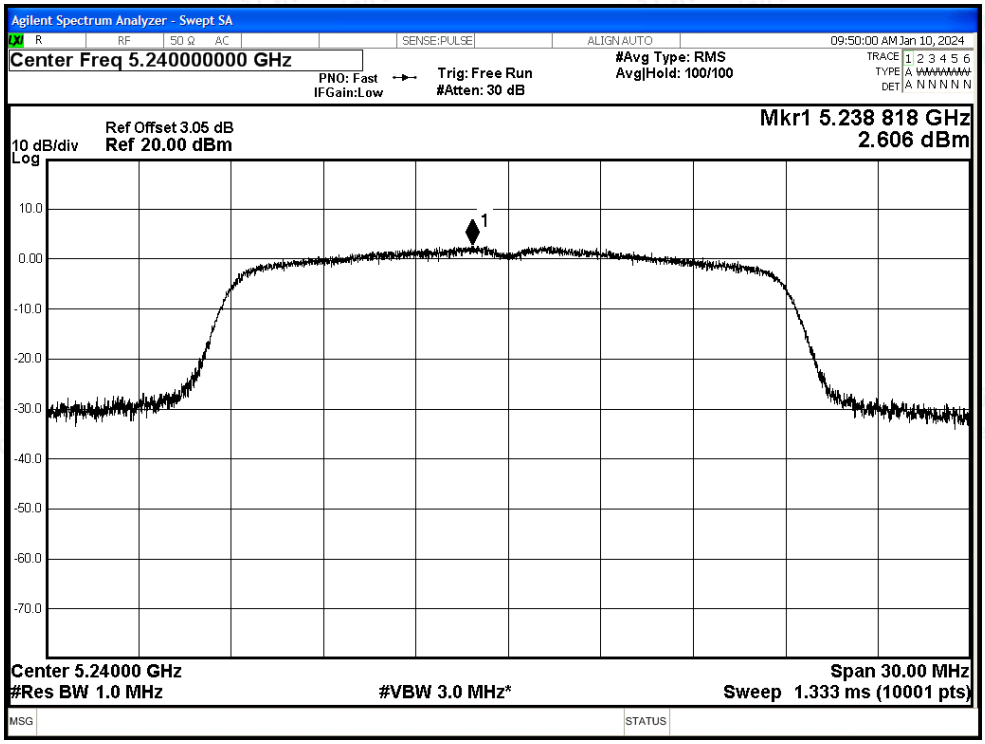
PSD NVNT ac20 5180MHz Ant2



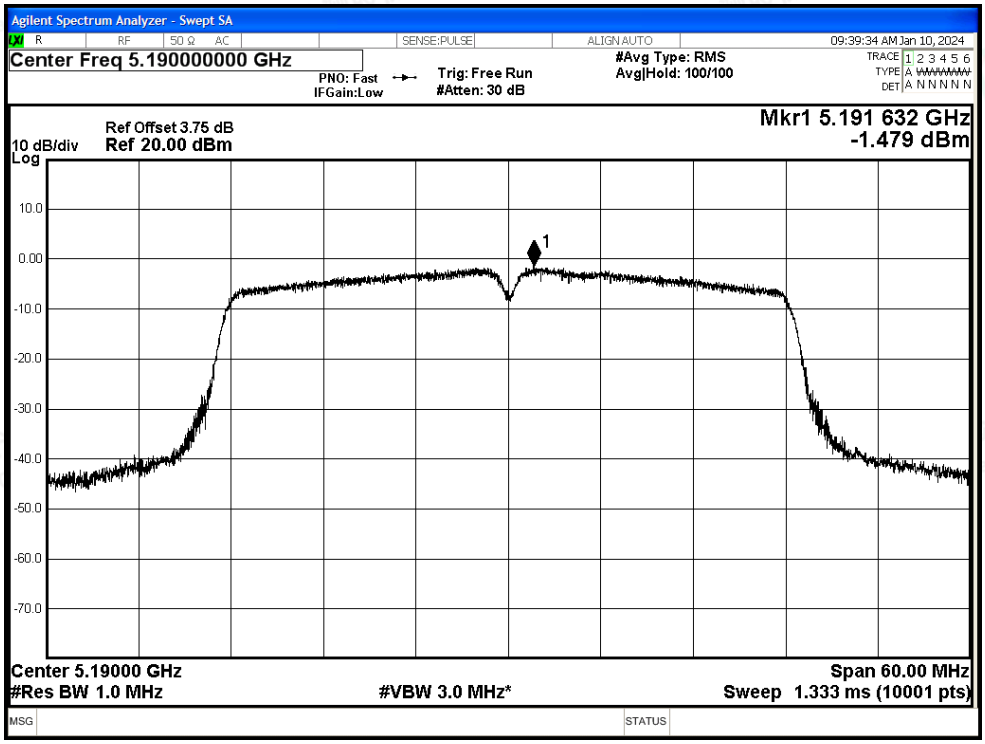
PSD NVNT ac20 5200MHz Ant2



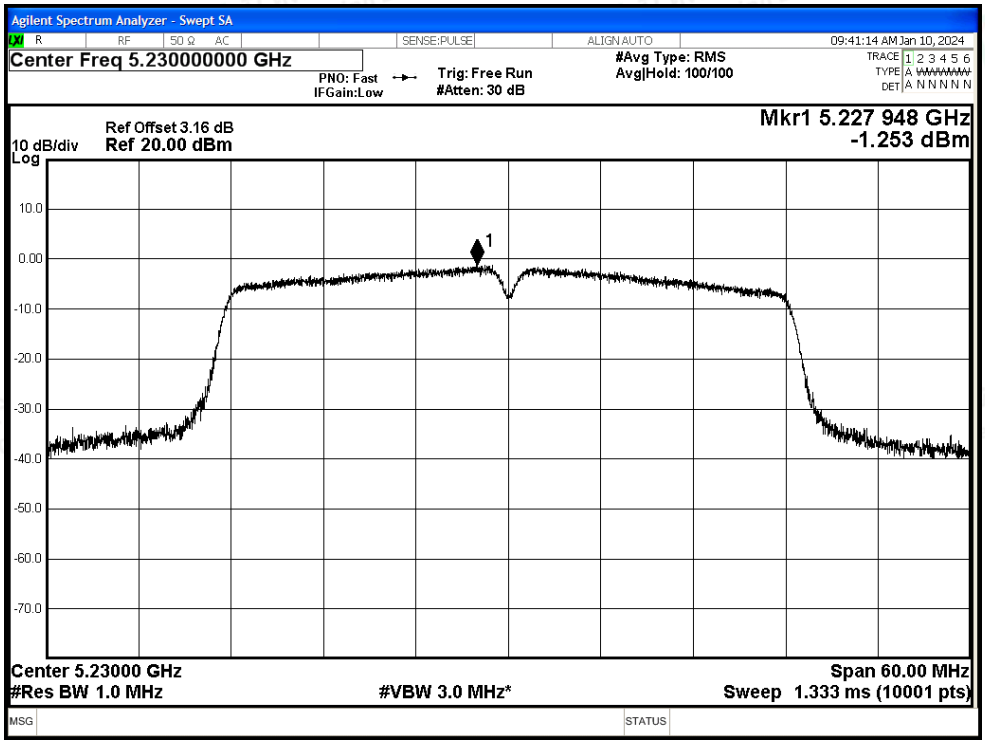
PSD NVNT ac20 5240MHz Ant2



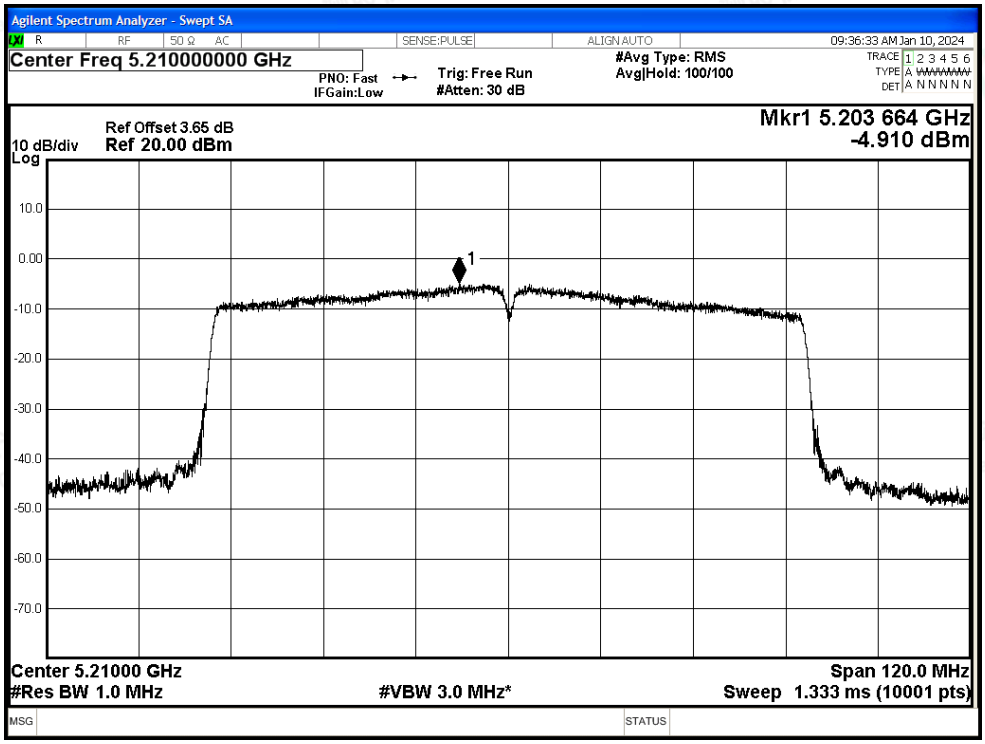
PSD NVNT ac40 5190MHz Ant2



PSD NVNT ac40 5230MHz Ant2



PSD NVNT ac80 5210MHz Ant2



D.5 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	a	5180	Ant1	4500	-49.05	2	-	48.18	Peak	68.2	Pass
NVNT	a	5180	Ant1	4500	-57.93	2	0.13	39.43	Average	54	Pass
NVNT	a	5180	Ant1	5149.6	-38.93	2	-	58.3	Peak	68.2	Pass
NVNT	a	5180	Ant1	5148.9	-50.46	2	0.13	46.9	Average	54	Pass
NVNT	a	5180	Ant1	5150	-37.61	2	-	59.62	Peak	68.2	Pass
NVNT	a	5180	Ant1	5150	-49.61	2	0.13	47.75	Average	54	Pass
NVNT	a	5240	Ant1	5350	-48.99	2	-	48.24	Peak	68.2	Pass
NVNT	a	5240	Ant1	5350	-56.83	2	0.13	40.53	Average	54	Pass
NVNT	a	5240	Ant1	5409.84	-45.29	2	-	51.94	Peak	68.2	Pass
NVNT	a	5240	Ant1	5351.76	-55.59	2	0.13	41.77	Average	54	Pass
NVNT	a	5240	Ant1	5460	-48.3	2	-	48.93	Peak	68.2	Pass
NVNT	a	5240	Ant1	5460	-58.4	2	0.13	38.96	Average	54	Pass
NVNT	n20	5180	Ant1	4500	-50.64	2	-	46.59	Peak	68.2	Pass
NVNT	n20	5180	Ant1	4500	-58.48	2	0.15	38.9	Average	54	Pass
NVNT	n20	5180	Ant1	5146.1	-37.04	2	-	60.19	Peak	68.2	Pass
NVNT	n20	5180	Ant1	5149.6	-48.77	2	0.15	48.61	Average	54	Pass
NVNT	n20	5180	Ant1	5150	-40.1	2	-	57.13	Peak	68.2	Pass
NVNT	n20	5180	Ant1	5150	-49.7	2	0.15	47.68	Average	54	Pass
NVNT	n20	5240	Ant1	5350	-49.06	2	-	48.17	Peak	68.2	Pass
NVNT	n20	5240	Ant1	5350	-56.13	2	0.15	41.25	Average	54	Pass
NVNT	n20	5240	Ant1	5413.2	-45.64	2	-	51.59	Peak	68.2	Pass
NVNT	n20	5240	Ant1	5353.44	-56.02	2	0.15	41.36	Average	54	Pass
NVNT	n20	5240	Ant1	5460	-49.64	2	-	47.59	Peak	68.2	Pass
NVNT	n20	5240	Ant1	5460	-57.95	2	0.15	39.43	Average	54	Pass
NVNT	n40	5190	Ant1	4500	-51.44	2	-	45.79	Peak	68.2	Pass
NVNT	n40	5190	Ant1	4500	-57.9	2	0.29	39.62	Average	54	Pass
NVNT	n40	5190	Ant1	5148.24	-33.35	2	-	63.88	Peak	68.2	Pass
NVNT	n40	5190	Ant1	5149.7	-48.9	2	0.29	48.62	Average	54	Pass
NVNT	n40	5190	Ant1	5150	-36.25	2	-	60.98	Peak	68.2	Pass
NVNT	n40	5190	Ant1	5150	-48.9	2	0.29	48.62	Average	54	Pass
NVNT	n40	5230	Ant1	5350	-48.24	2	-	48.99	Peak	68.2	Pass
NVNT	n40	5230	Ant1	5350	-56.56	2	0.29	40.96	Average	54	Pass
NVNT	n40	5230	Ant1	5398.71	-46.3	2	-	50.93	Peak	68.2	Pass
NVNT	n40	5230	Ant1	5352.81	-56.02	2	0.29	41.5	Average	54	Pass
NVNT	n40	5230	Ant1	5460	-49.44	2	-	47.79	Peak	68.2	Pass
NVNT	n40	5230	Ant1	5460	-57.82	2	0.29	39.7	Average	54	Pass

NVNT	ac20	5180	Ant1	4500	-50.73	2	-	46.5	Peak	68.2	Pass
NVNT	ac20	5180	Ant1	4500	-58.29	2	0.14	39.08	Average	54	Pass
NVNT	ac20	5180	Ant1	5148.2	-35.99	2	-	61.24	Peak	68.2	Pass
NVNT	ac20	5180	Ant1	5149.6	-49.38	2	0.14	47.99	Average	54	Pass
NVNT	ac20	5180	Ant1	5150	-37.78	2	-	59.45	Peak	68.2	Pass
NVNT	ac20	5180	Ant1	5150	-48	2	0.14	49.37	Average	54	Pass
NVNT	ac20	5240	Ant1	5350	-49.4	2	-	47.83	Peak	68.2	Pass
NVNT	ac20	5240	Ant1	5350	-56.28	2	0.14	41.09	Average	54	Pass
NVNT	ac20	5240	Ant1	5408.64	-45.66	2	-	51.57	Peak	68.2	Pass
NVNT	ac20	5240	Ant1	5350.32	-55.99	2	0.14	41.38	Average	54	Pass
NVNT	ac20	5240	Ant1	5460	-49.49	2	-	47.74	Peak	68.2	Pass
NVNT	ac20	5240	Ant1	5460	-57.62	2	0.14	39.75	Average	54	Pass
NVNT	ac40	5190	Ant1	4500	-49.99	2	-	47.24	Peak	68.2	Pass
NVNT	ac40	5190	Ant1	4500	-58.43	2	0.28	39.08	Average	54	Pass
NVNT	ac40	5190	Ant1	5149.7	-33.97	2	-	63.26	Peak	68.2	Pass
NVNT	ac40	5190	Ant1	5149.7	-47.12	2	0.28	50.39	Average	54	Pass
NVNT	ac40	5190	Ant1	5150	-33.97	2	-	63.26	Peak	68.2	Pass
NVNT	ac40	5190	Ant1	5150	-47.12	2	0.28	50.39	Average	54	Pass
NVNT	ac40	5230	Ant1	5350	-49.58	2	-	47.65	Peak	68.2	Pass
NVNT	ac40	5230	Ant1	5350	-57.06	2	0.28	40.45	Average	54	Pass
NVNT	ac40	5230	Ant1	5367.66	-46.36	2	-	50.87	Peak	68.2	Pass
NVNT	ac40	5230	Ant1	5350.38	-56.17	2	0.28	41.34	Average	54	Pass
NVNT	ac40	5230	Ant1	5460	-47.29	2	-	49.94	Peak	68.2	Pass
NVNT	ac40	5230	Ant1	5460	-57.27	2	0.28	40.24	Average	54	Pass
NVNT	ac80	5210	Ant1	5350	-46.65	2	-	50.58	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	5350	-56.61	2	0.55	41.17	Average	54	Pass
NVNT	ac80	5210	Ant1	5403.24	-46.39	2	-	50.84	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	5353.08	-55.51	2	0.55	42.27	Average	54	Pass
NVNT	ac80	5210	Ant1	5460	-50.24	2	-	46.99	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	5460	-57.19	2	0.55	40.59	Average	54	Pass
NVNT	ac80	5210	Ant1	4500	-49.89	2	-	47.34	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	4500	-58.3	2	0.55	39.48	Average	54	Pass
NVNT	ac80	5210	Ant1	5147.01	-32	2	-	65.23	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	5147.8	-45.97	2	0.55	51.81	Average	54	Pass
NVNT	ac80	5210	Ant1	5150	-37.27	2	-	59.96	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	5150	-45.47	2	0.55	52.31	Average	54	Pass

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	a	5180	Ant2	4500	-50.05	2	-	47.18	Peak	74	Pass
NVNT	a	5180	Ant2	4500	-58.26	2	0.13	39.1	Average	54	Pass
NVNT	a	5180	Ant2	5149.6	-38.7	2	-	58.53	Peak	74	Pass
NVNT	a	5180	Ant2	5147.5	-49.39	2	0.13	47.97	Average	54	Pass
NVNT	a	5180	Ant2	5150	-38.48	2	-	58.75	Peak	74	Pass
NVNT	a	5180	Ant2	5150	-50.06	2	0.13	47.3	Average	54	Pass
NVNT	a	5240	Ant2	5350	-47.8	2	-	49.43	Peak	74	Pass
NVNT	a	5240	Ant2	5350	-56.43	2	0.14	40.94	Average	54	Pass
NVNT	a	5240	Ant2	5360.88	-46.92	2	-	50.31	Peak	74	Pass
NVNT	a	5240	Ant2	5352	-56.08	2	0.14	41.29	Average	54	Pass
NVNT	a	5240	Ant2	5460	-50.53	2	-	46.7	Peak	74	Pass
NVNT	a	5240	Ant2	5460	-57.62	2	0.14	39.75	Average	54	Pass
NVNT	n20	5180	Ant2	4500	-51.45	2	-	45.78	Peak	74	Pass
NVNT	n20	5180	Ant2	4500	-58.69	2	0.15	38.69	Average	54	Pass
NVNT	n20	5180	Ant2	5149.6	-32.05	2	-	65.18	Peak	74	Pass
NVNT	n20	5180	Ant2	5149.6	-47.71	2	0.15	49.67	Average	54	Pass
NVNT	n20	5180	Ant2	5150	-33.33	2	-	63.9	Peak	74	Pass
NVNT	n20	5180	Ant2	5150	-48.22	2	0.15	49.16	Average	54	Pass
NVNT	n20	5240	Ant2	5350	-50.28	2	-	46.95	Peak	74	Pass
NVNT	n20	5240	Ant2	5350	-56.92	2	0.15	40.46	Average	54	Pass
NVNT	n20	5240	Ant2	5396.16	-46.36	2	-	50.87	Peak	74	Pass
NVNT	n20	5240	Ant2	5353.44	-56.09	2	0.15	41.29	Average	54	Pass
NVNT	n20	5240	Ant2	5460	-49.68	2	-	47.55	Peak	74	Pass
NVNT	n20	5240	Ant2	5460	-57.83	2	0.15	39.55	Average	54	Pass
NVNT	n40	5190	Ant2	4500	-50.27	2	-	46.96	Peak	74	Pass
NVNT	n40	5190	Ant2	4500	-57.77	2	0.28	39.74	Average	54	Pass
NVNT	n40	5190	Ant2	5148.97	-31.21	2	-	66.02	Peak	74	Pass
NVNT	n40	5190	Ant2	5149.7	-48.65	2	0.28	48.86	Average	54	Pass
NVNT	n40	5190	Ant2	5150	-33.82	2	-	63.41	Peak	74	Pass
NVNT	n40	5190	Ant2	5150	-48.65	2	0.28	48.86	Average	54	Pass
NVNT	n40	5230	Ant2	5350	-48.34	2	-	48.89	Peak	74	Pass
NVNT	n40	5230	Ant2	5350	-56.7	2	0.29	40.82	Average	54	Pass
NVNT	n40	5230	Ant2	5361.99	-46.26	2	-	50.97	Peak	74	Pass
NVNT	n40	5230	Ant2	5353.08	-56.05	2	0.29	41.47	Average	54	Pass
NVNT	n40	5230	Ant2	5460	-50.04	2	-	47.19	Peak	74	Pass
NVNT	n40	5230	Ant2	5460	-57.56	2	0.29	39.96	Average	54	Pass
NVNT	ac20	5180	Ant2	4500	-50.56	2	-	46.67	Peak	74	Pass
NVNT	ac20	5180	Ant2	4500	-58.24	2	0.14	39.13	Average	54	Pass

NVNT	ac20	5180	Ant2	5146.1	-37.85	2	-	59.38	Peak	74	Pass
NVNT	ac20	5180	Ant2	5149.6	-48.35	2	0.14	49.02	Average	54	Pass
NVNT	ac20	5180	Ant2	5150	-37.44	2	-	59.79	Peak	74	Pass
NVNT	ac20	5180	Ant2	5150	-48.92	2	0.14	48.45	Average	54	Pass
NVNT	ac20	5240	Ant2	5350	-48.31	2	-	48.92	Peak	74	Pass
NVNT	ac20	5240	Ant2	5350	-57.11	2	0.14	40.26	Average	54	Pass
NVNT	ac20	5240	Ant2	5383.92	-46.26	2	-	50.97	Peak	74	Pass
NVNT	ac20	5240	Ant2	5361.36	-56.12	2	0.14	41.25	Average	54	Pass
NVNT	ac20	5240	Ant2	5460	-49.55	2	-	47.68	Peak	74	Pass
NVNT	ac20	5240	Ant2	5460	-57.85	2	0.14	39.52	Average	54	Pass
NVNT	ac40	5190	Ant2	4500	-50.43	2	-	46.8	Peak	74	Pass
NVNT	ac40	5190	Ant2	4500	-58.22	2	0.28	39.29	Average	54	Pass
NVNT	ac40	5190	Ant2	5149.7	-32.98	2	-	64.25	Peak	74	Pass
NVNT	ac40	5190	Ant2	5148.97	-48.57	2	0.28	48.94	Average	54	Pass
NVNT	ac40	5190	Ant2	5150	-32.98	2	-	64.25	Peak	74	Pass
NVNT	ac40	5190	Ant2	5150	-48.94	2	0.28	48.57	Average	54	Pass
NVNT	ac40	5230	Ant2	5350	-47.48	2	-	49.75	Peak	74	Pass
NVNT	ac40	5230	Ant2	5350	-56.27	2	0.28	41.24	Average	54	Pass
NVNT	ac40	5230	Ant2	5410.05	-46.5	2	-	50.73	Peak	74	Pass
NVNT	ac40	5230	Ant2	5364.15	-56.19	2	0.28	41.32	Average	54	Pass
NVNT	ac40	5230	Ant2	5460	-49.17	2	-	48.06	Peak	74	Pass
NVNT	ac40	5230	Ant2	5460	-57.74	2	0.28	39.77	Average	54	Pass
NVNT	ac80	5210	Ant2	5350	-47.69	2	-	49.54	Peak	74	Pass
NVNT	ac80	5210	Ant2	5350	-56.11	2	0.55	41.67	Average	54	Pass
NVNT	ac80	5210	Ant2	5361.66	-45.51	2	-	51.72	Peak	74	Pass
NVNT	ac80	5210	Ant2	5353.41	-55.42	2	0.55	42.36	Average	54	Pass
NVNT	ac80	5210	Ant2	5460	-49.15	2	-	48.08	Peak	74	Pass
NVNT	ac80	5210	Ant2	5460	-57.97	2	0.55	39.81	Average	54	Pass
NVNT	ac80	5210	Ant2	4500	-50.66	2	-	46.57	Peak	74	Pass
NVNT	ac80	5210	Ant2	4500	-57.9	2	0.55	39.88	Average	54	Pass
NVNT	ac80	5210	Ant2	5147.8	-31.08	2	-	66.15	Peak	74	Pass
NVNT	ac80	5210	Ant2	5144.64	-45.34	2	0.55	52.44	Average	54	Pass
NVNT	ac80	5210	Ant2	5150	-31.1	2	-	66.13	Peak	74	Pass
NVNT	ac80	5210	Ant2	5150	-46.34	2	0.55	51.44	Average	54	Pass

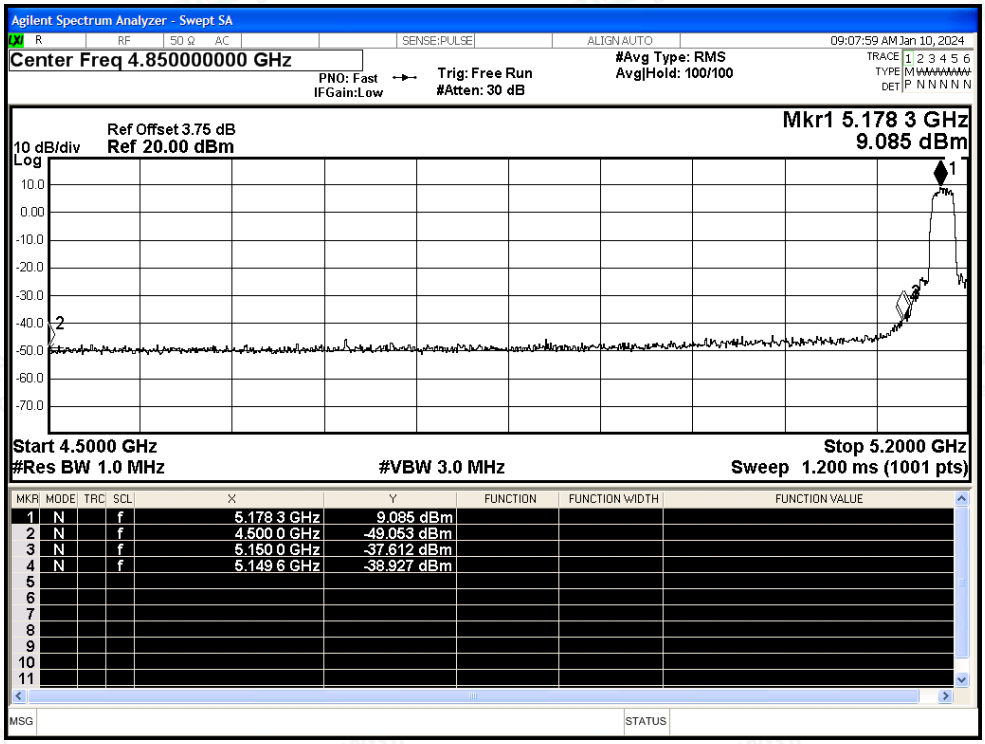
MIMO

Condition	Mode	Frequency (MHz)	ANT1 Power (dBm)	ANT2 Power (dBm)	Gain (dBi)	Total E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	n20	5180	-50.64	-51.45	5.01	52.25	Peak	74	Pass
NVNT	n20	5180	-58.48	-58.69	5.01	44.69	Average	54	Pass
NVNT	n20	5180	-37.04	-32.05	5.01	69.41	Peak	74	Pass
NVNT	n20	5180	-49.77	-50.71	5.01	53.06	Average	54	Pass
NVNT	n20	5180	-40.1	-33.33	5.01	67.77	Peak	74	Pass
NVNT	n20	5180	-50.7	-50.22	5.01	52.82	Average	54	Pass
NVNT	n20	5240	-49.06	-50.28	5.01	53.65	Peak	74	Pass
NVNT	n20	5240	-56.13	-56.92	5.01	46.77	Average	54	Pass
NVNT	n20	5240	-45.64	-46.36	5.01	57.29	Peak	74	Pass
NVNT	n20	5240	-56.02	-56.09	5.01	47.22	Average	54	Pass
NVNT	n20	5240	-49.64	-49.68	5.01	53.62	Peak	74	Pass
NVNT	n20	5240	-57.95	-57.83	5.01	45.39	Average	54	Pass
NVNT	n40	5190	-51.44	-50.27	5.01	52.46	Peak	74	Pass
NVNT	n40	5190	-57.9	-57.77	5.01	45.44	Average	54	Pass
NVNT	n40	5190	-33.35	-31.21	5.01	71.13	Peak	74	Pass
NVNT	n40	5190	-50.9	-51.65	5.01	52.02	Average	54	Pass
NVNT	n40	5190	-36.25	-33.82	5.01	68.41	Peak	74	Pass
NVNT	n40	5190	-51.9	-50.65	5.01	52.05	Average	54	Pass
NVNT	n40	5230	-48.24	-48.34	5.01	54.99	Peak	74	Pass
NVNT	n40	5230	-56.56	-56.7	5.01	46.65	Average	54	Pass
NVNT	n40	5230	-46.3	-46.26	5.01	57.00	Peak	74	Pass
NVNT	n40	5230	-56.02	-56.05	5.01	47.24	Average	54	Pass
NVNT	n40	5230	-49.44	-50.04	5.01	53.55	Peak	74	Pass
NVNT	n40	5230	-57.82	-57.56	5.01	45.59	Average	54	Pass
NVNT	ac20	5180	-50.73	-50.56	5.01	52.63	Peak	74	Pass
NVNT	ac20	5180	-58.29	-58.24	5.01	45.01	Average	54	Pass
NVNT	ac20	5180	-35.99	-37.85	5.01	66.46	Peak	74	Pass
NVNT	ac20	5180	-51.38	-50.35	5.01	52.44	Average	54	Pass
NVNT	ac20	5180	-37.78	-37.44	5.01	65.67	Peak	74	Pass
NVNT	ac20	5180	-51.00	-51.92	5.01	51.84	Average	54	Pass
NVNT	ac20	5240	-49.4	-48.31	5.01	54.46	Peak	74	Pass
NVNT	ac20	5240	-56.28	-57.11	5.01	46.60	Average	54	Pass
NVNT	ac20	5240	-45.66	-46.26	5.01	57.33	Peak	74	Pass
NVNT	ac20	5240	-55.99	-56.12	5.01	47.22	Average	54	Pass
NVNT	ac20	5240	-49.49	-49.55	5.01	53.76	Peak	74	Pass
NVNT	ac20	5240	-57.62	-57.85	5.01	45.54	Average	54	Pass

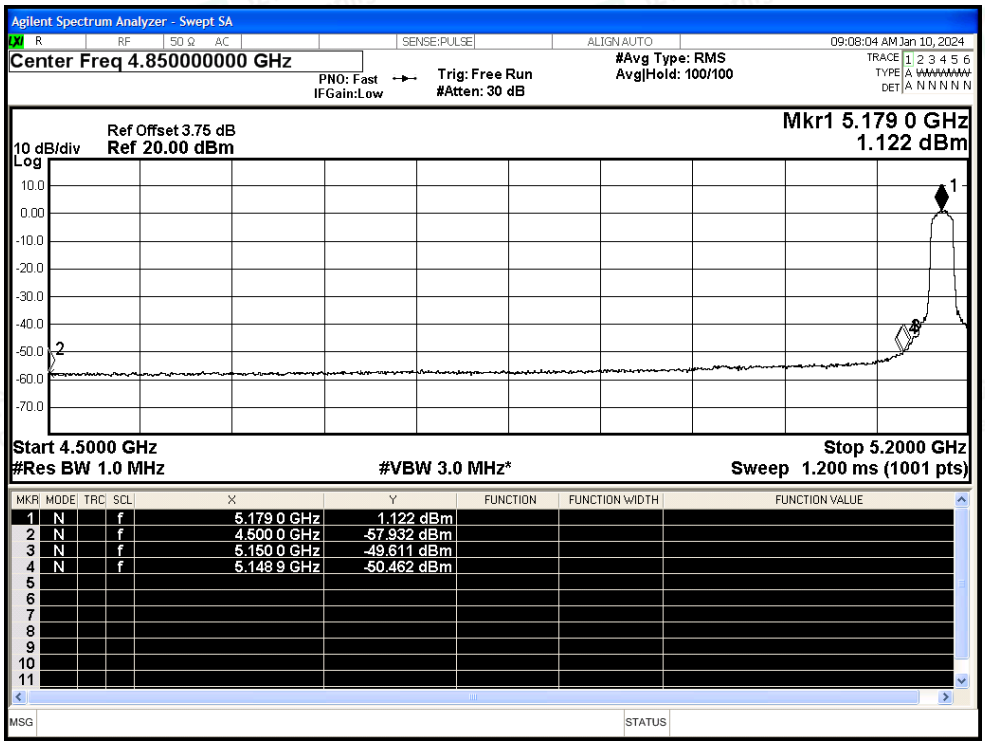
NVNT	ac40	5190	-49.99	-50.43	5.01	53.07	Peak	74	Pass
NVNT	ac40	5190	-58.43	-58.22	5.01	44.95	Average	54	Pass
NVNT	ac40	5190	-33.97	-32.98	5.01	69.83	Peak	74	Pass
NVNT	ac40	5190	-52.12	-51.57	5.01	51.44	Average	54	Pass
NVNT	ac40	5190	-33.97	-32.98	5.01	69.83	Peak	74	Pass
NVNT	ac40	5190	-52.12	-53.94	5.01	50.34	Average	54	Pass
NVNT	ac40	5230	-49.58	-47.48	5.01	54.87	Peak	74	Pass
NVNT	ac40	5230	-57.06	-56.27	5.01	46.63	Average	54	Pass
NVNT	ac40	5230	-46.36	-46.5	5.01	56.85	Peak	74	Pass
NVNT	ac40	5230	-56.17	-56.19	5.01	47.10	Average	54	Pass
NVNT	ac40	5230	-47.29	-49.17	5.01	55.15	Peak	74	Pass
NVNT	ac40	5230	-57.27	-57.74	5.01	45.78	Average	54	Pass
NVNT	ac80	5210	-46.65	-47.69	5.01	56.14	Peak	74	Pass
NVNT	ac80	5210	-56.61	-56.11	5.01	46.93	Average	54	Pass
NVNT	ac80	5210	-46.39	-45.51	5.01	57.35	Peak	74	Pass
NVNT	ac80	5210	-55.51	-55.42	5.01	47.81	Average	54	Pass
NVNT	ac80	5210	-50.24	-49.15	5.01	53.62	Peak	74	Pass
NVNT	ac80	5210	-57.19	-57.97	5.01	45.72	Average	54	Pass
NVNT	ac80	5210	-49.89	-50.66	5.01	53.02	Peak	74	Pass
NVNT	ac80	5210	-58.3	-57.9	5.01	45.18	Average	54	Pass
NVNT	ac80	5210	-32	-31.08	5.01	71.76	Peak	74	Pass
NVNT	ac80	5210	-49.97	-51.34	5.01	52.68	Average	54	Pass
NVNT	ac80	5210	-37.27	-31.1	5.01	70.11	Peak	74	Pass
NVNT	ac80	5210	-51.47	-52.34	5.01	51.39	Average	54	Pass

Test Graphs

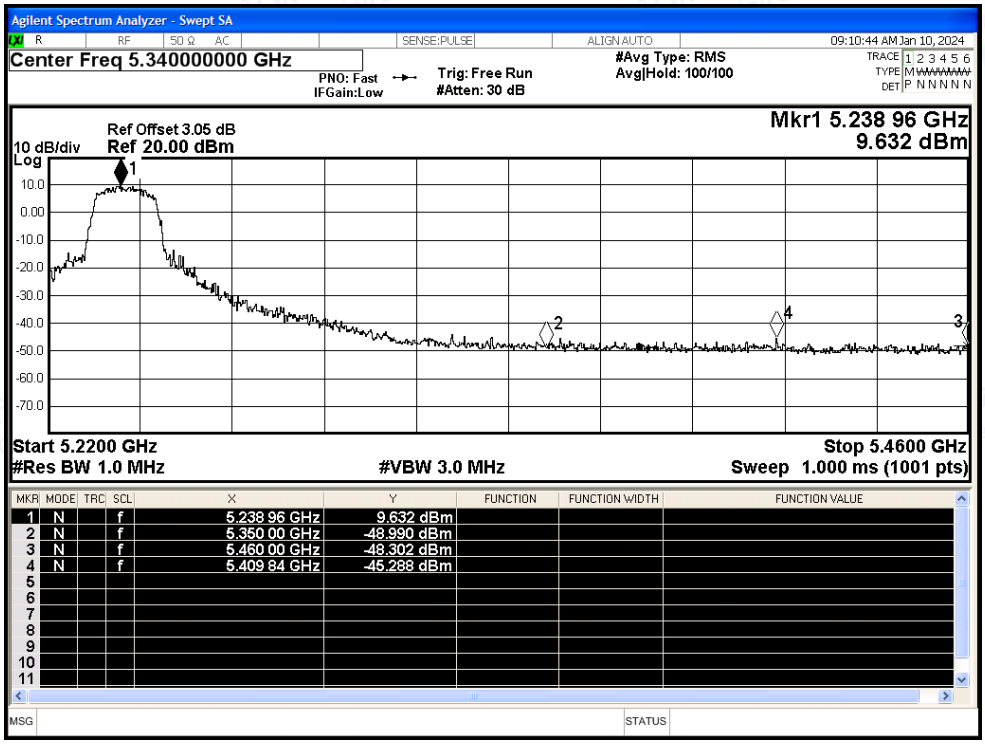
Restrict Band NVNT a 5180MHz Ant1 Peak



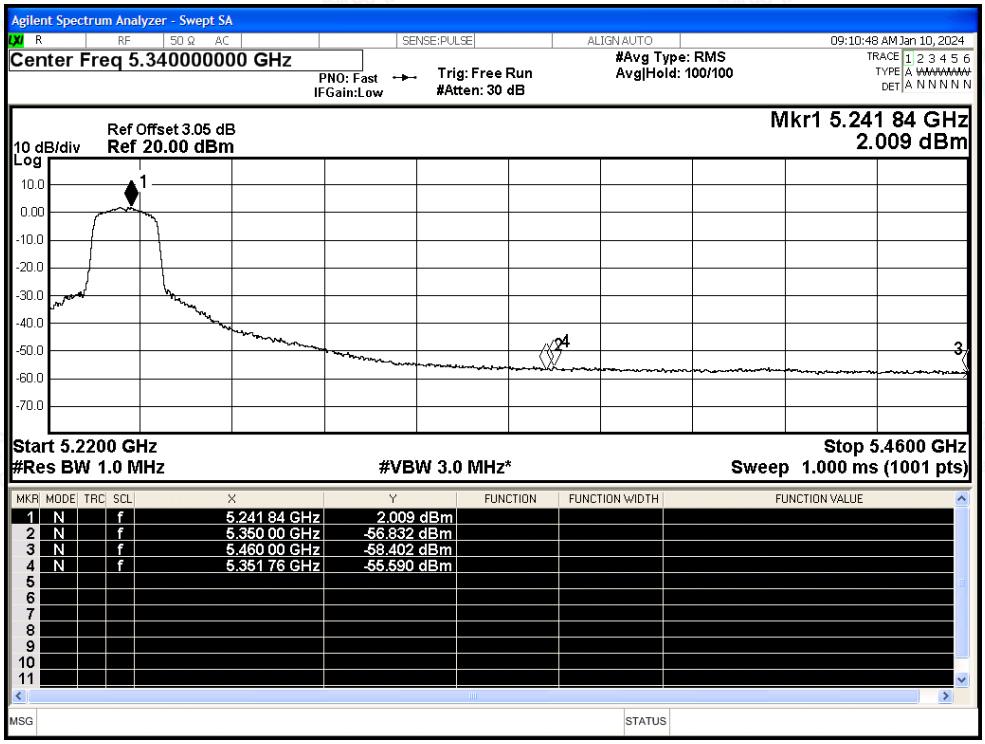
Restrict Band NVNT a 5180MHz Ant1 Average



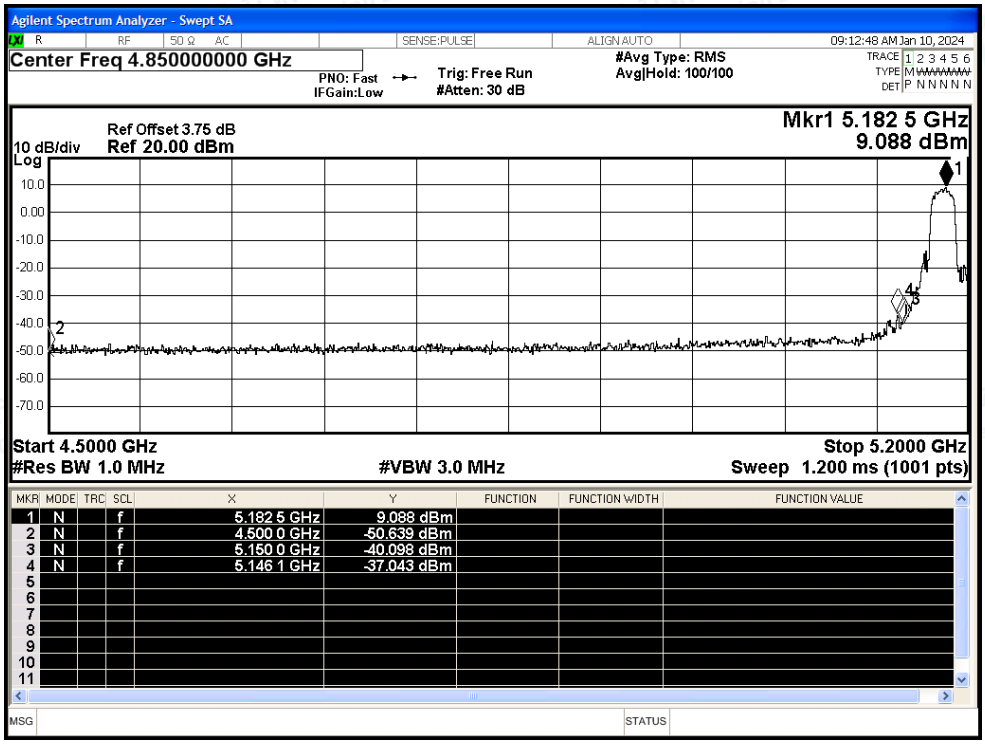
Restrict Band NVNT a 5240MHz Ant1 Peak



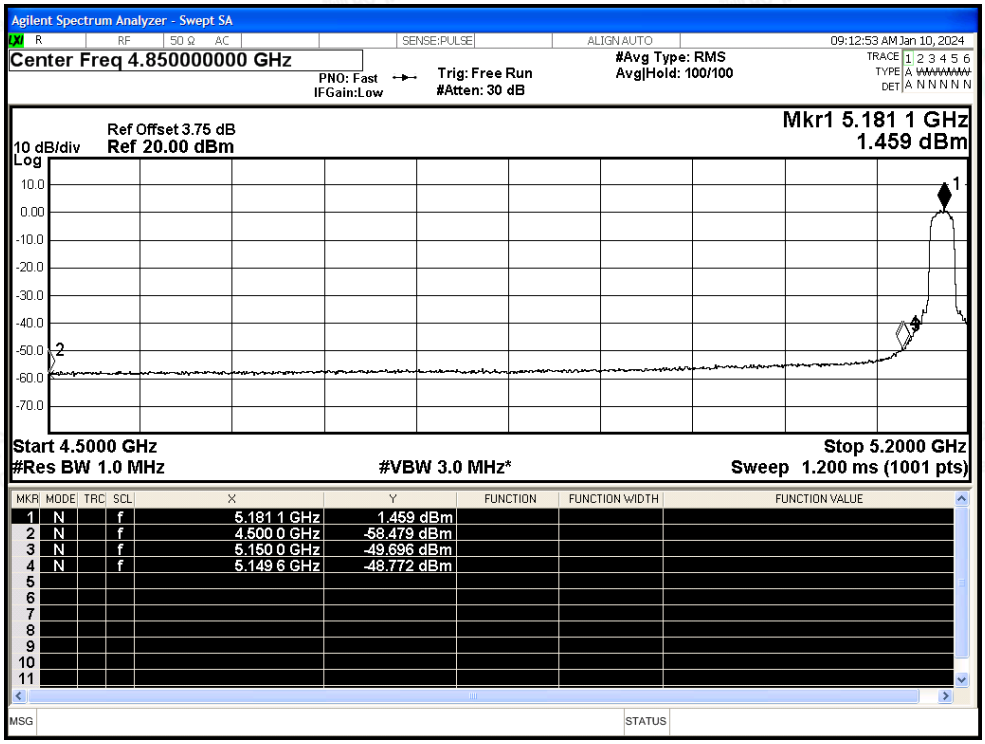
Restrict Band NVNT a 5240MHz Ant1 Average



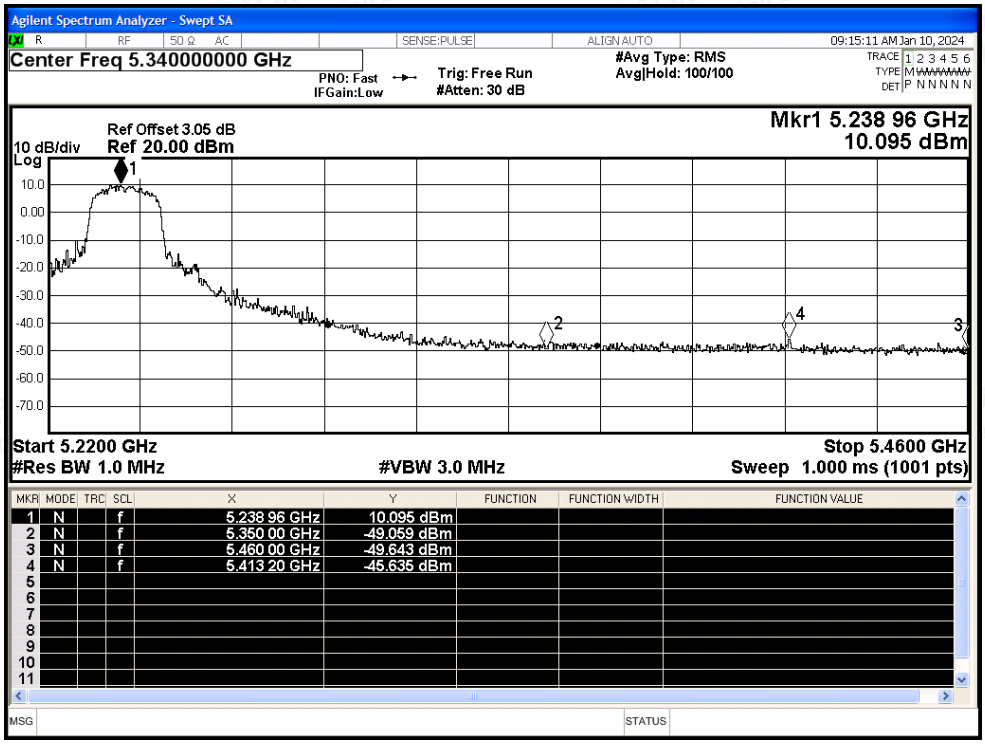
Restrict Band NVNT n20 5180MHz Ant1 Peak



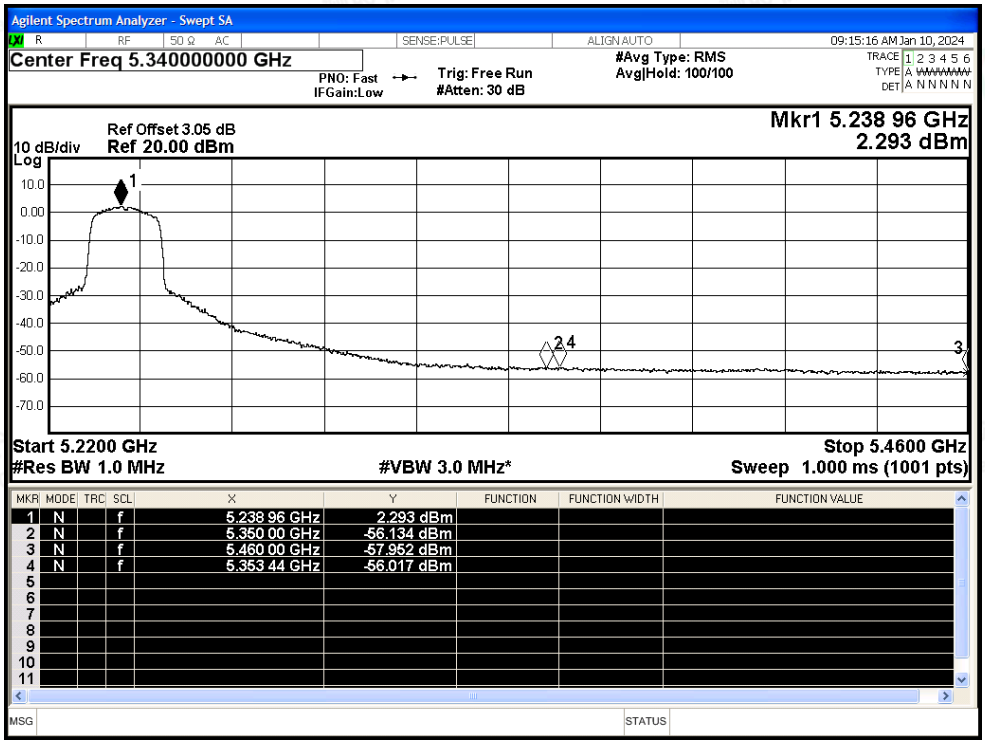
Restrict Band NVNT n20 5180MHz Ant1 Average



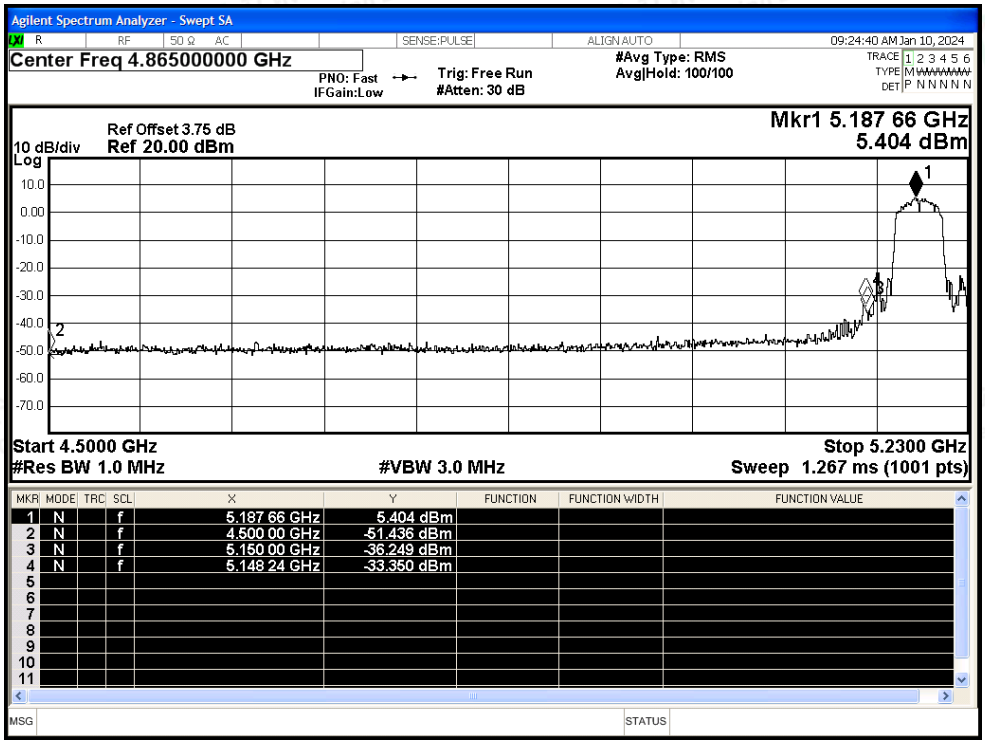
Restrict Band NVNT n20 5240MHz Ant1 Peak



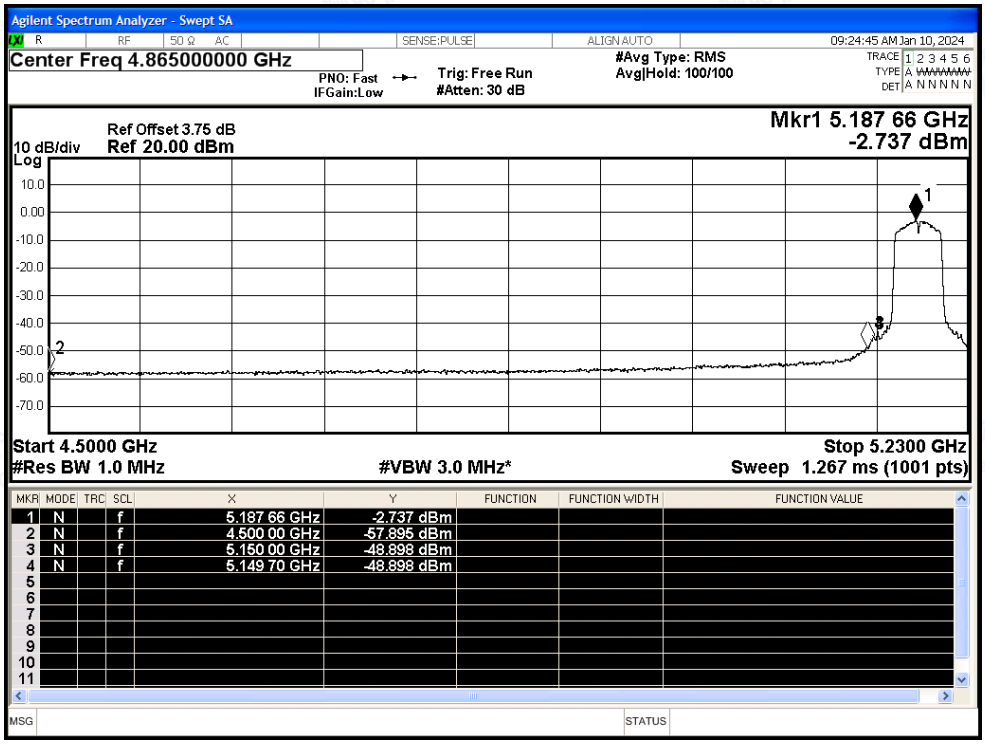
Restrict Band NVNT n20 5240MHz Ant1 Average



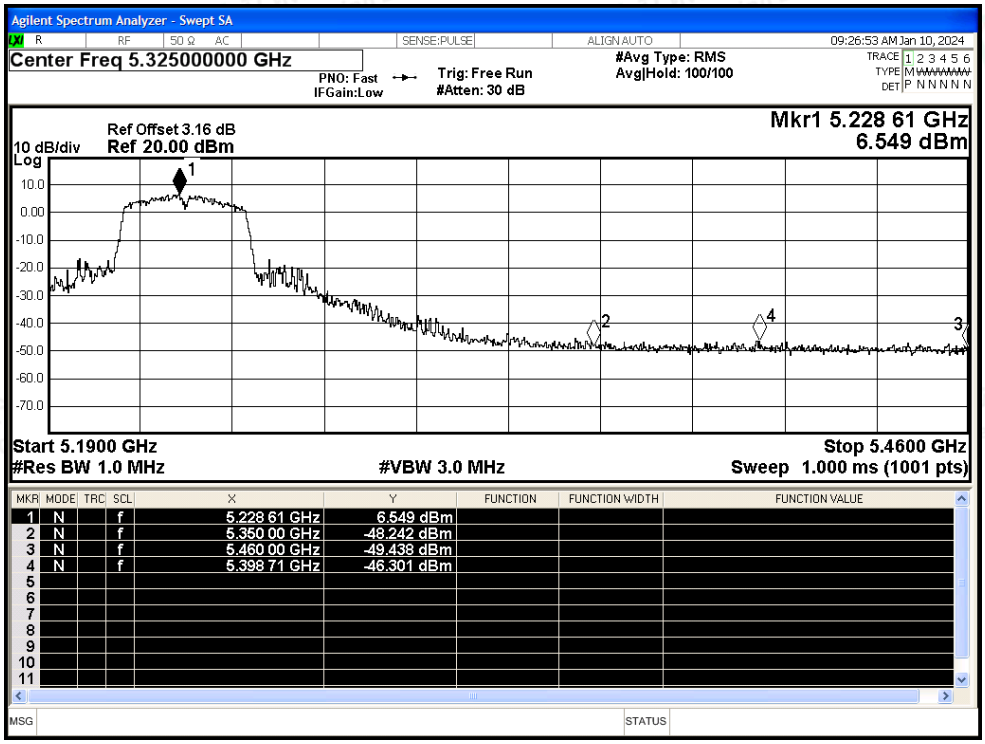
Restrict Band NVNT n40 5190MHz Ant1 Peak



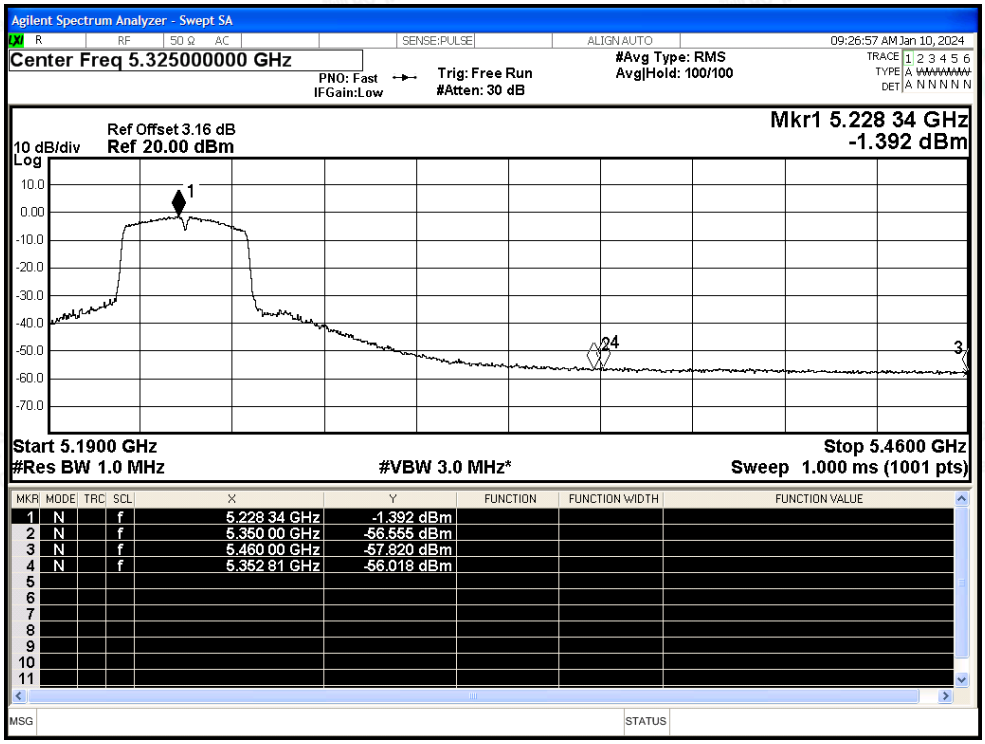
Restrict Band NVNT n40 5190MHz Ant1 Average



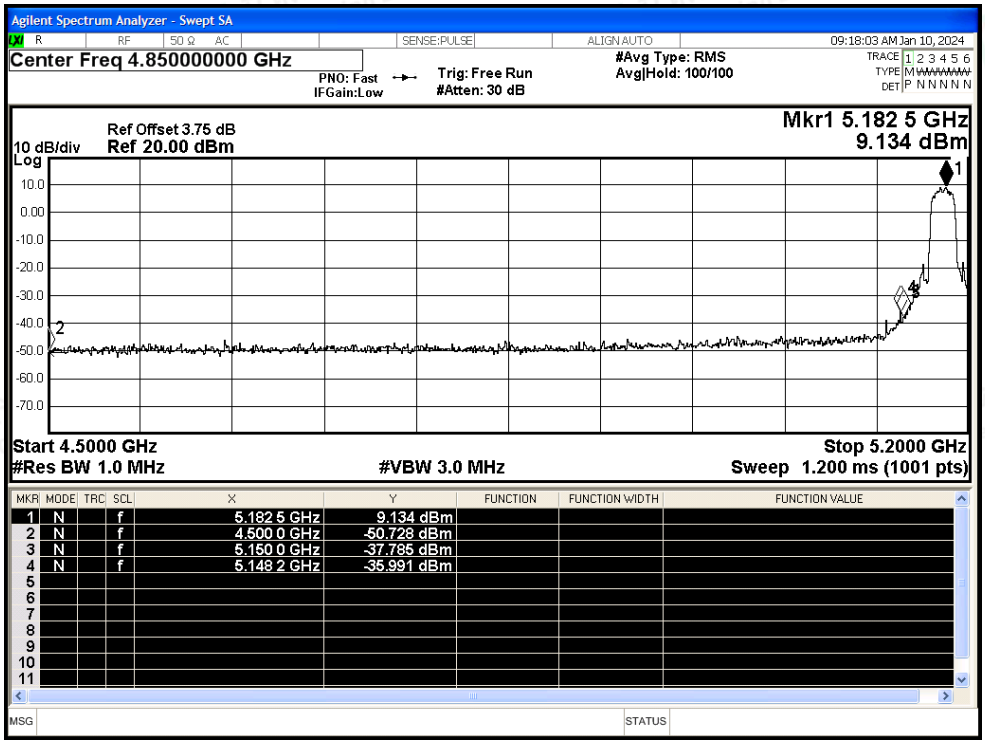
Restrict Band NVNT n40 5230MHz Ant1 Peak



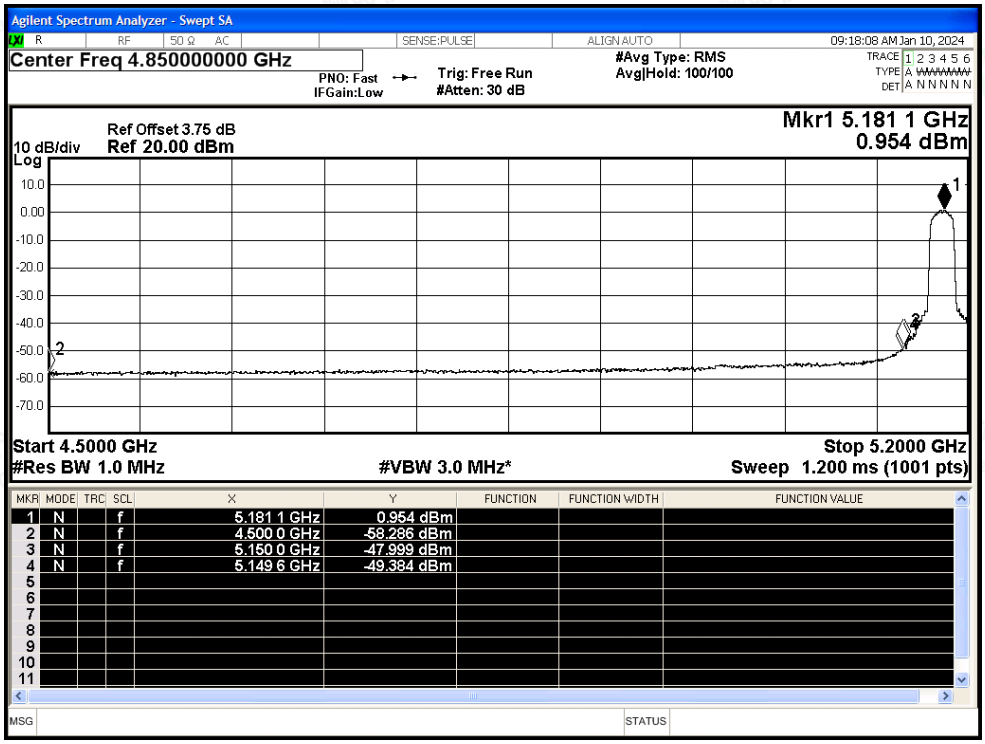
Restrict Band NVNT n40 5230MHz Ant1 Average



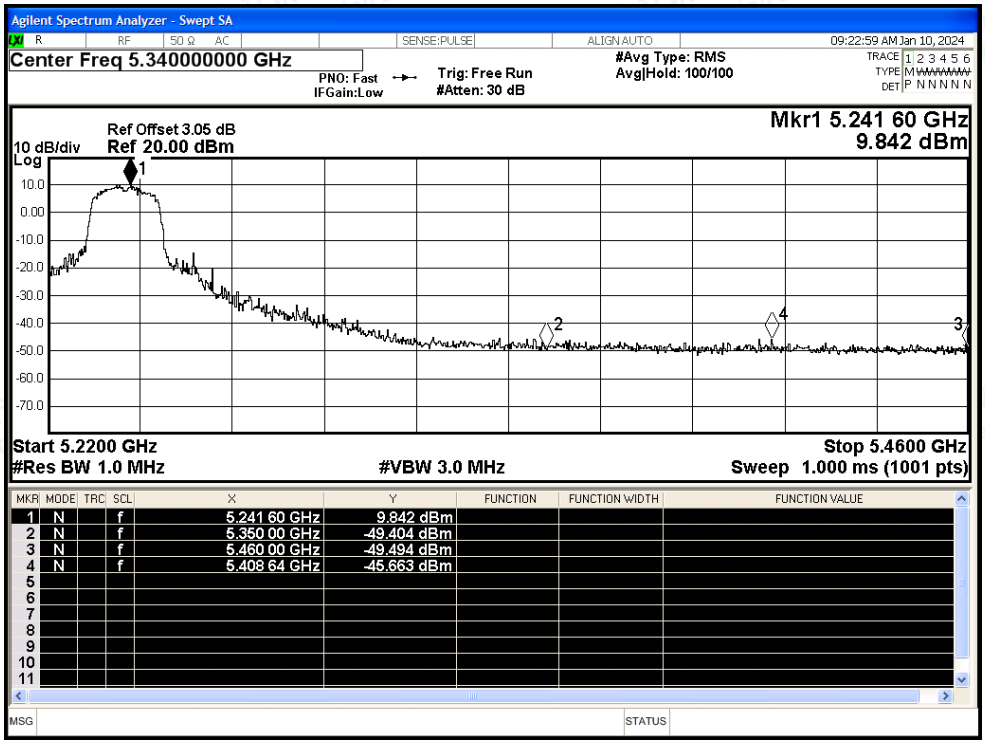
Restrict Band NVNT ac20 5180MHz Ant1 Peak



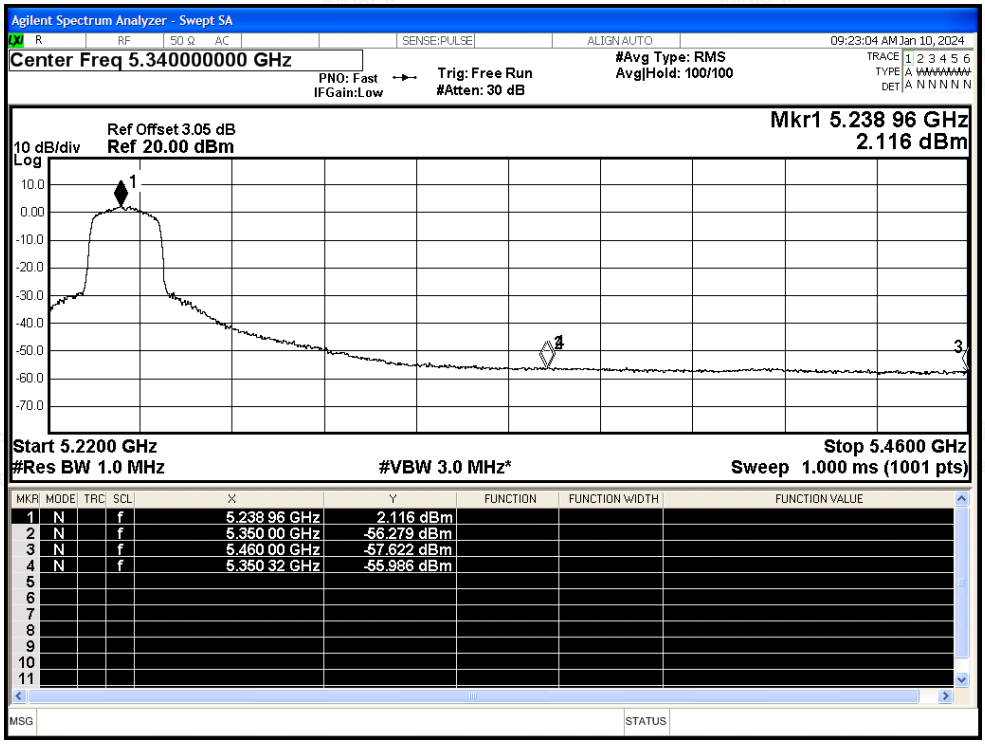
Restrict Band NVNT ac20 5180MHz Ant1 Average



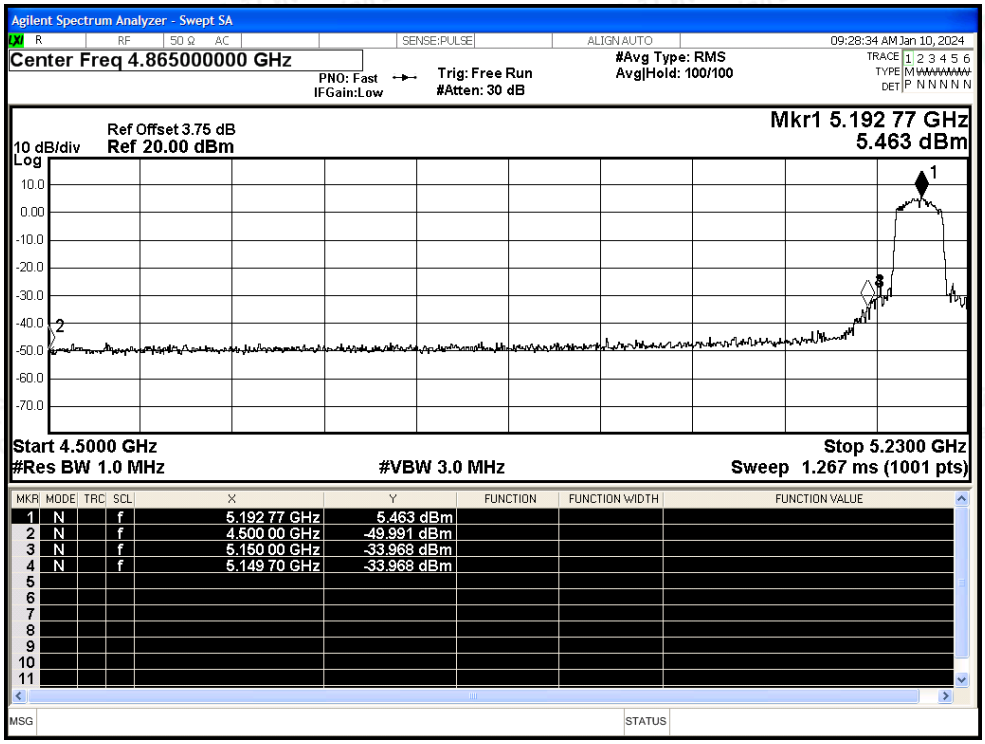
Restrict Band NVNT ac20 5240MHz Ant1 Peak



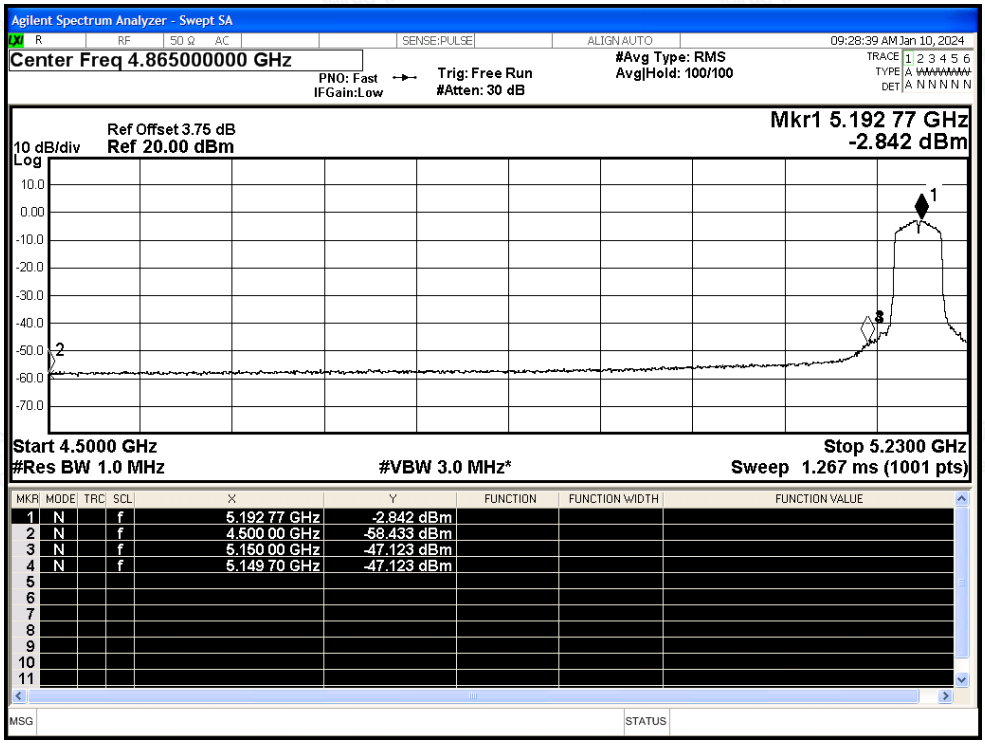
Restrict Band NVNT ac20 5240MHz Ant1 Average



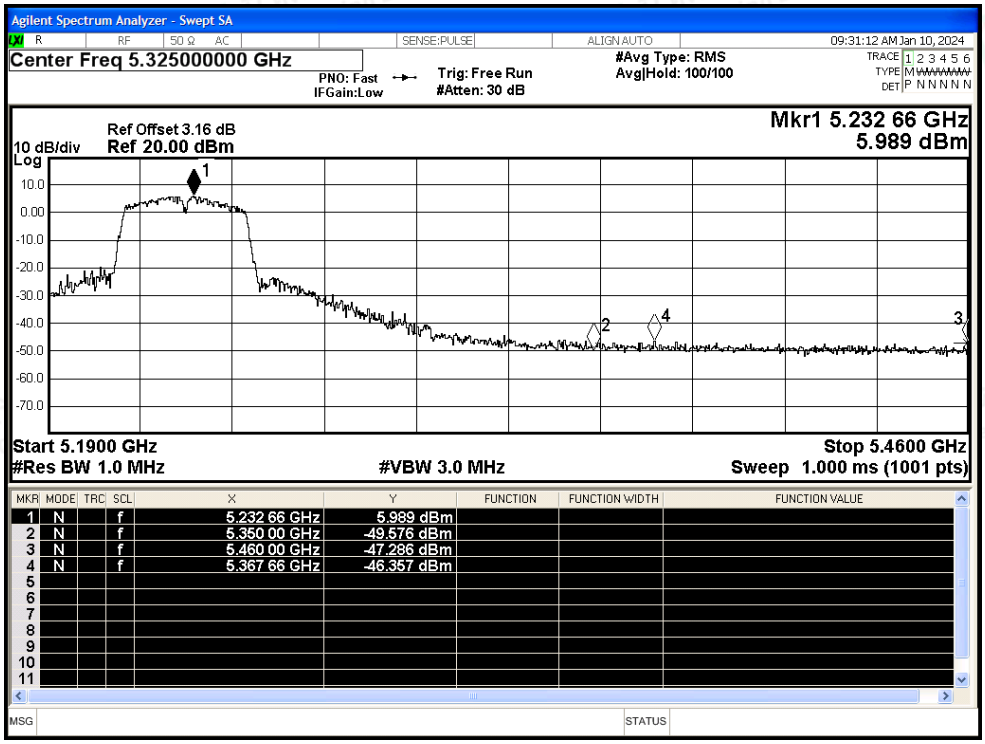
Restrict Band NVNT ac40 5190MHz Ant1 Peak



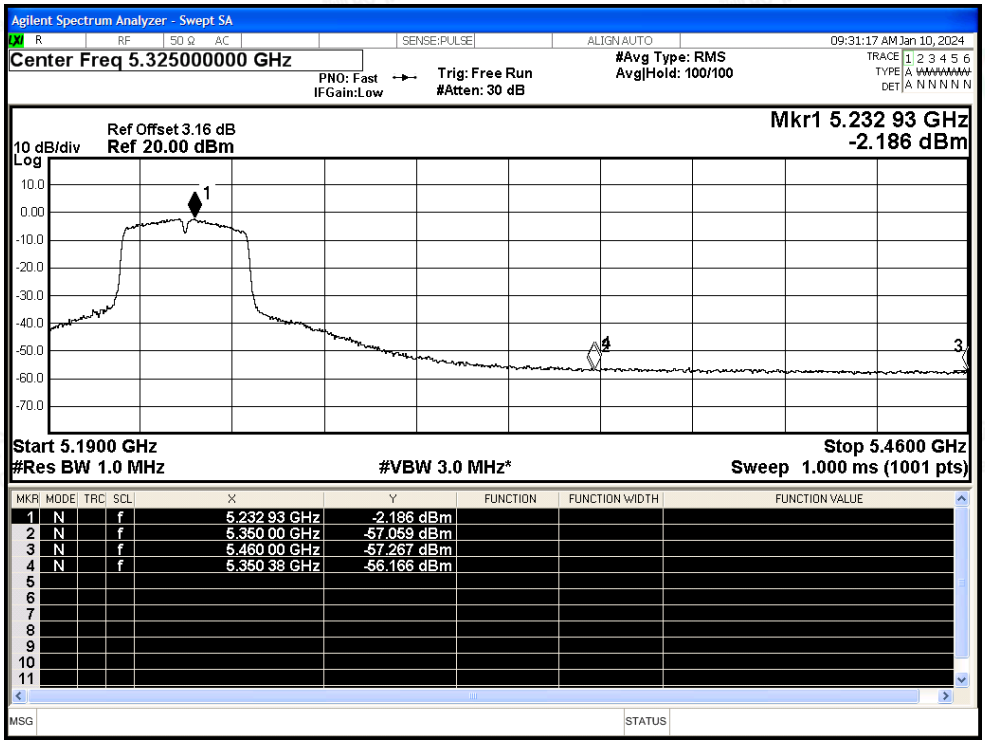
Restrict Band NVNT ac40 5190MHz Ant1 Average



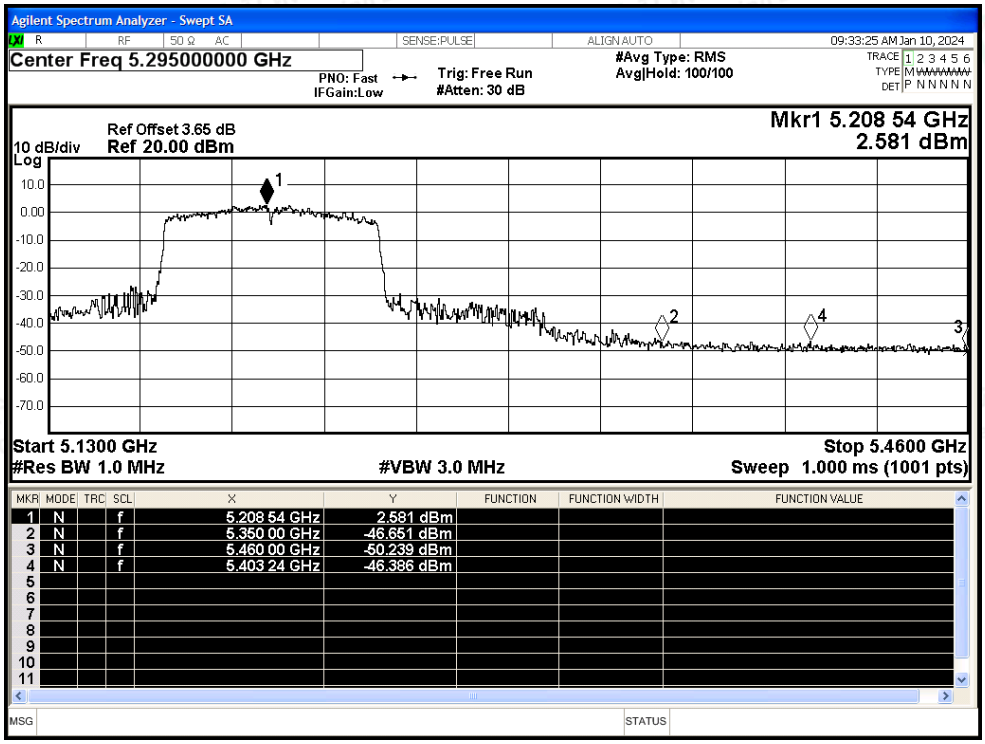
Restrict Band NVNT ac40 5230MHz Ant1 Peak



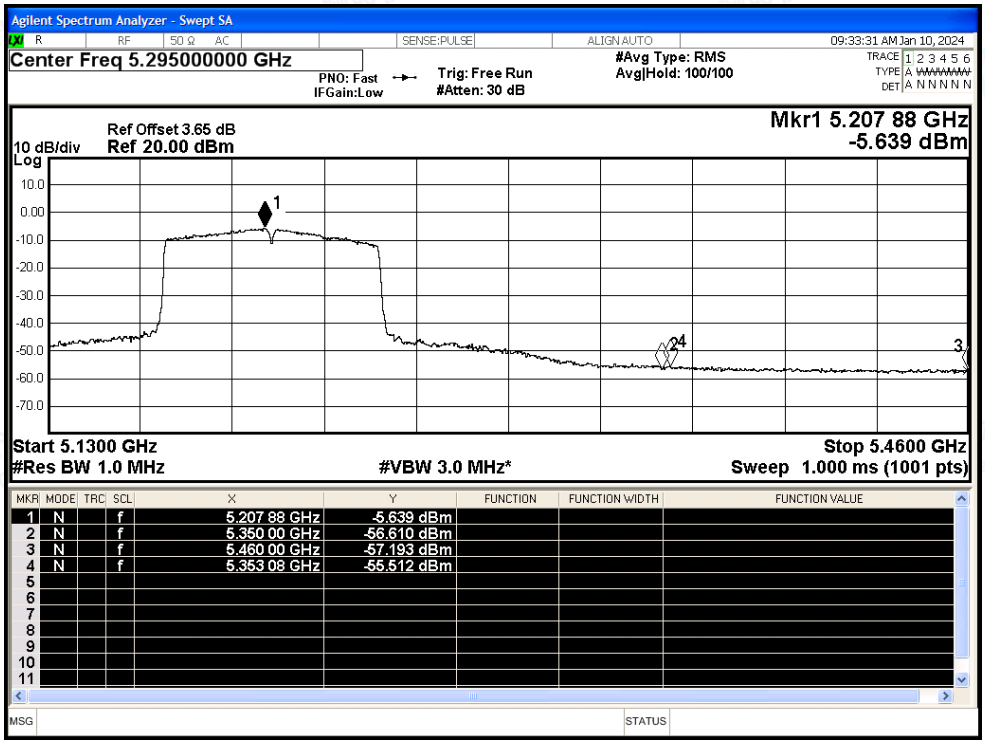
Restrict Band NVNT ac40 5230MHz Ant1 Average



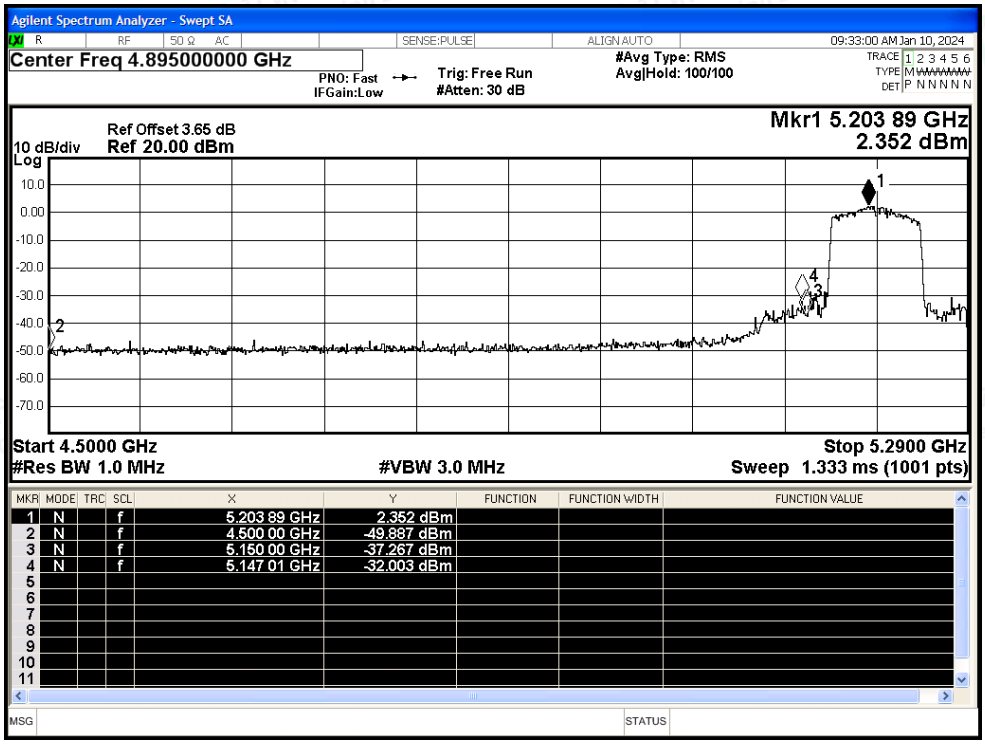
Restrict Band NVNT ac80 5210MHz Ant1 Peak



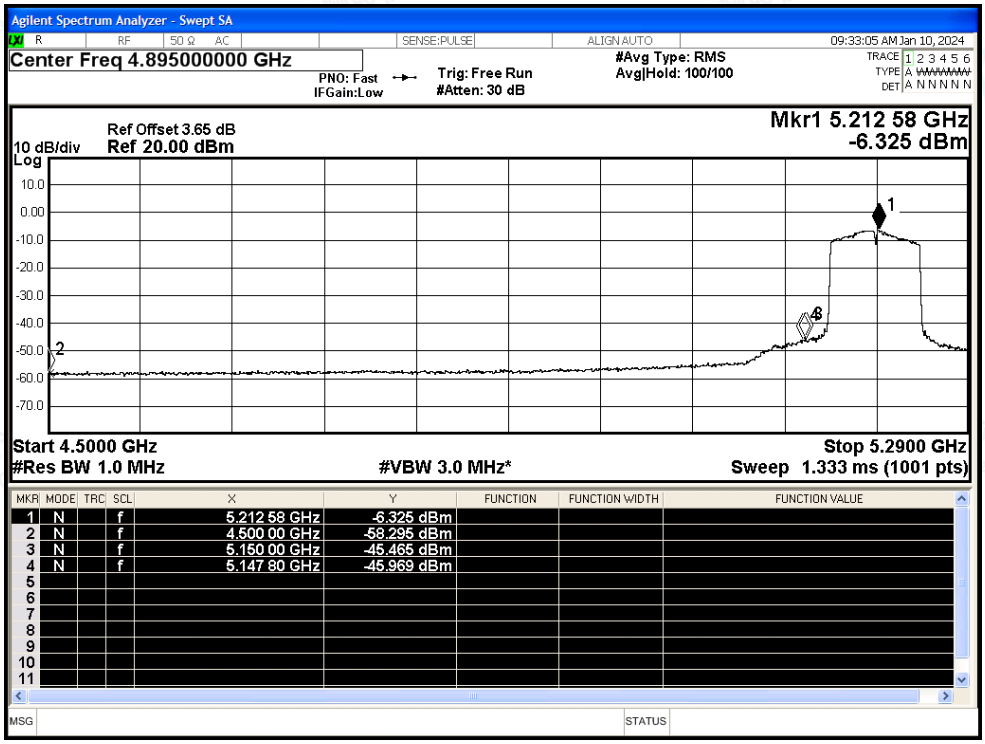
Restrict Band NVNT ac80 5210MHz Ant1 Average



Restrict Band NVNT ac80 5210MHz Ant1 Peak

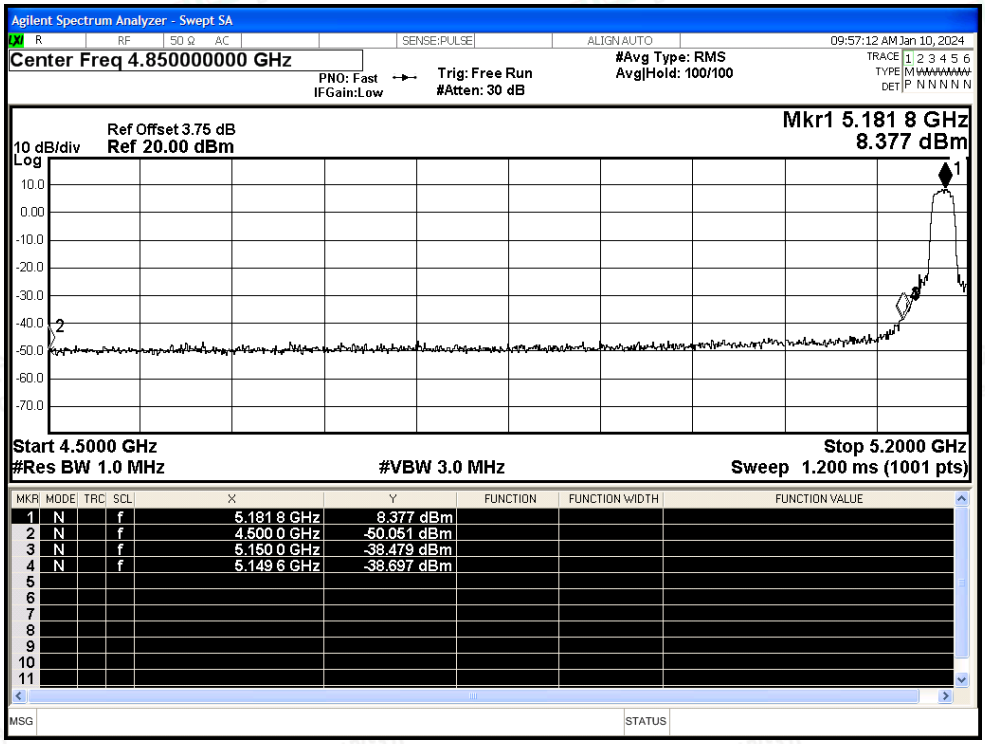


Restrict Band NVNT ac80 5210MHz Ant1 Average

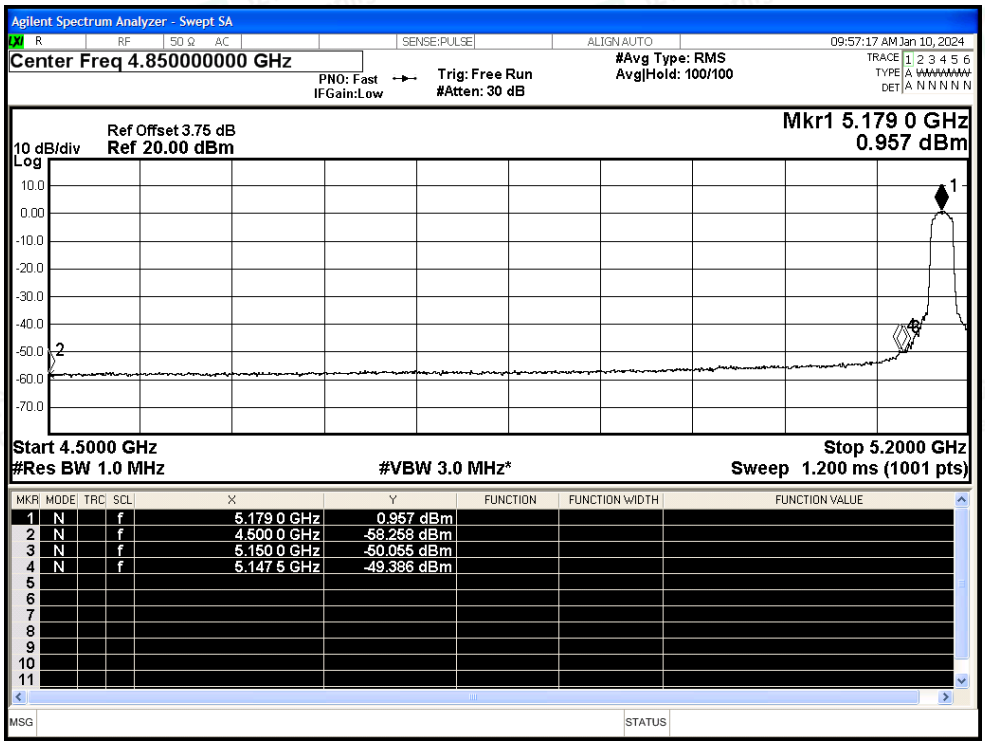


Test Graphs

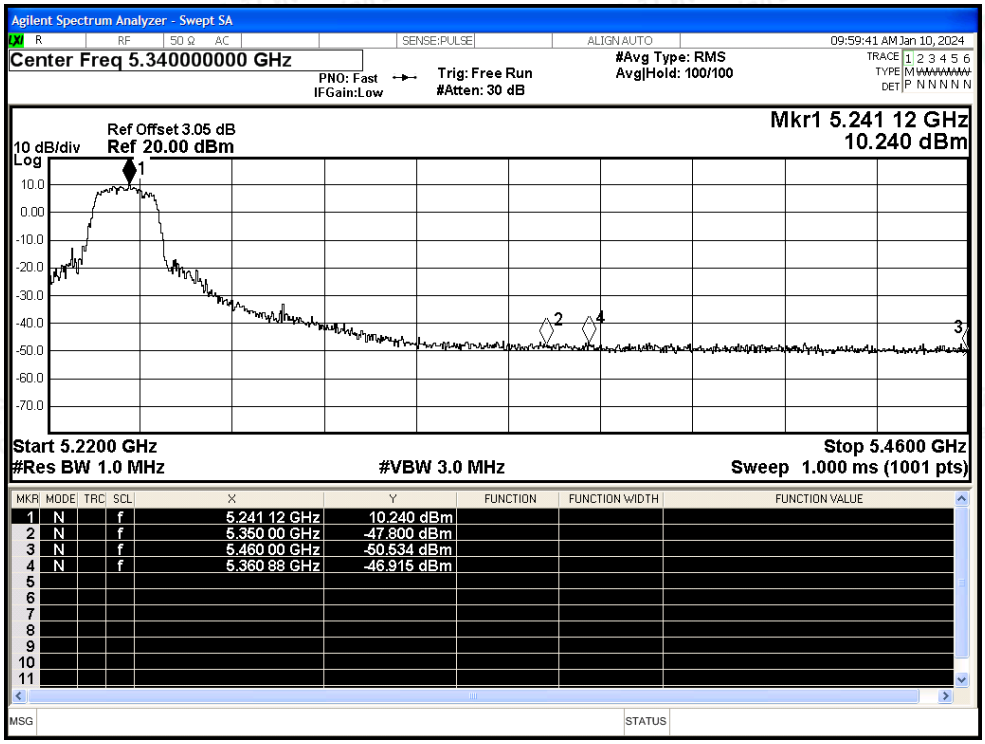
Restrict Band NVNT a 5180MHz Ant2 Peak



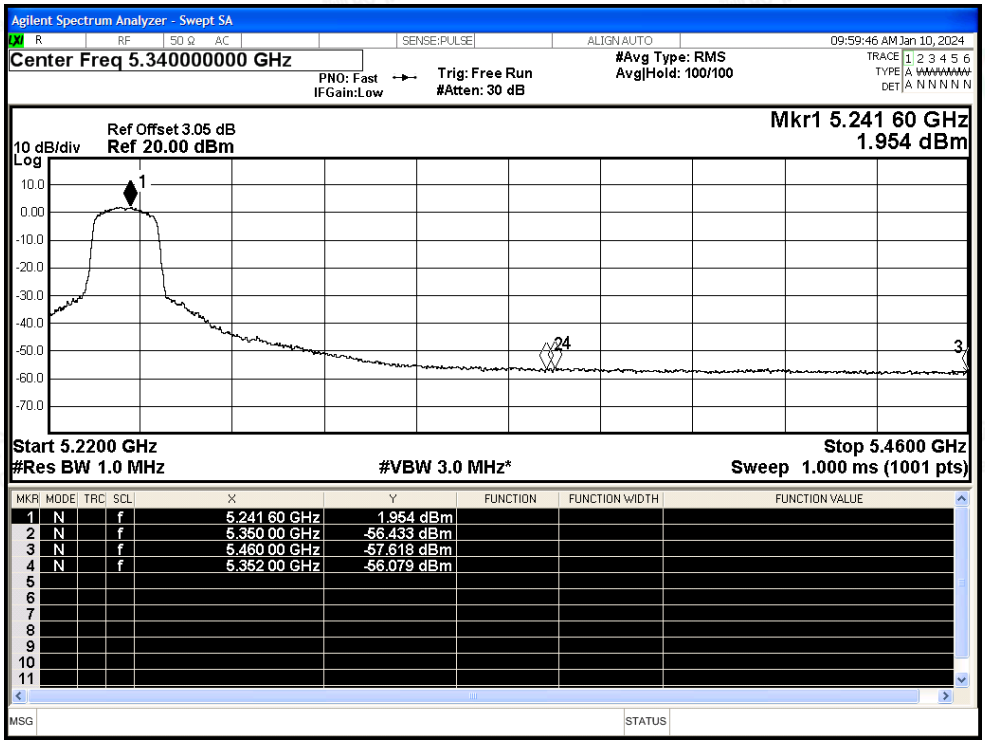
Restrict Band NVNT a 5180MHz Ant2 Average



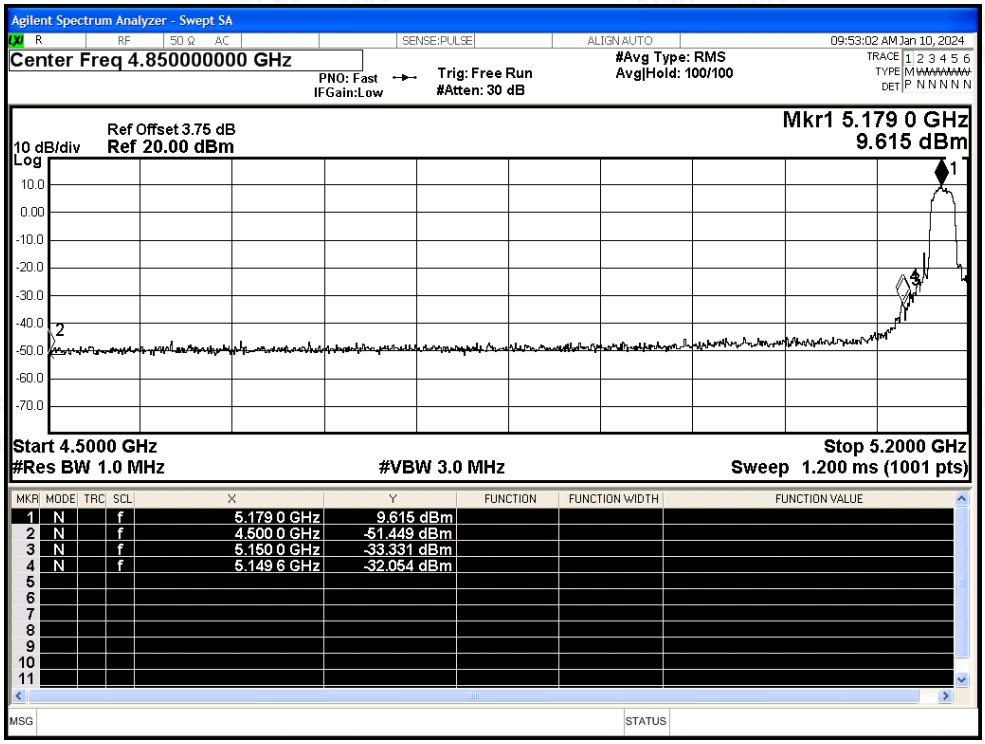
Restrict Band NVNT a 5240MHz Ant2 Peak



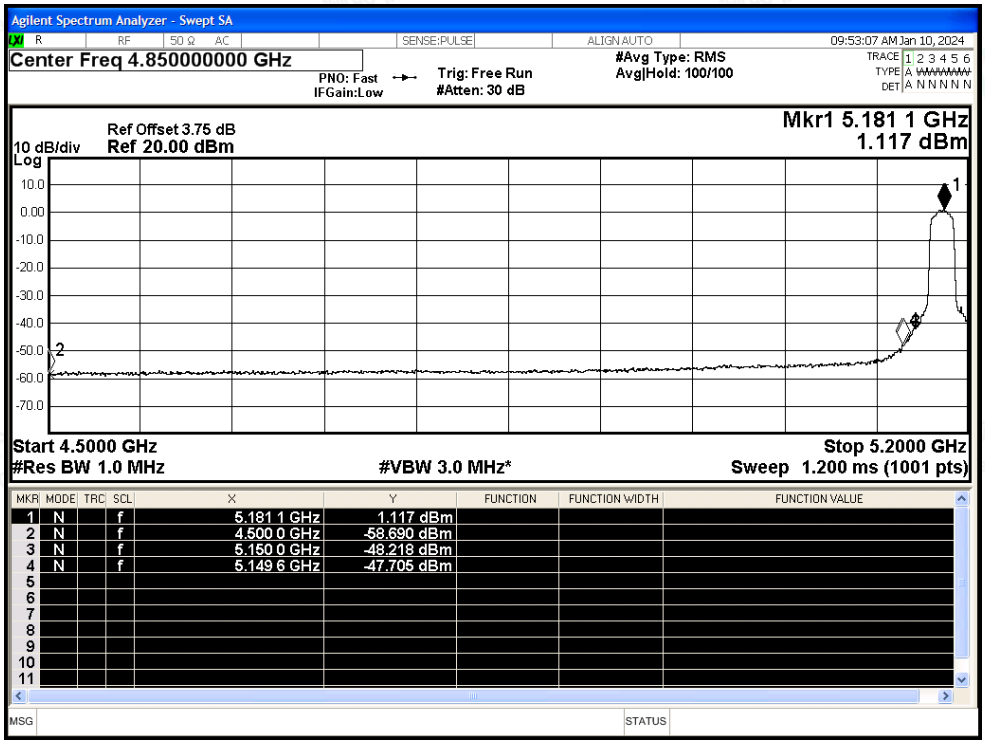
Restrict Band NVNT a 5240MHz Ant2 Average



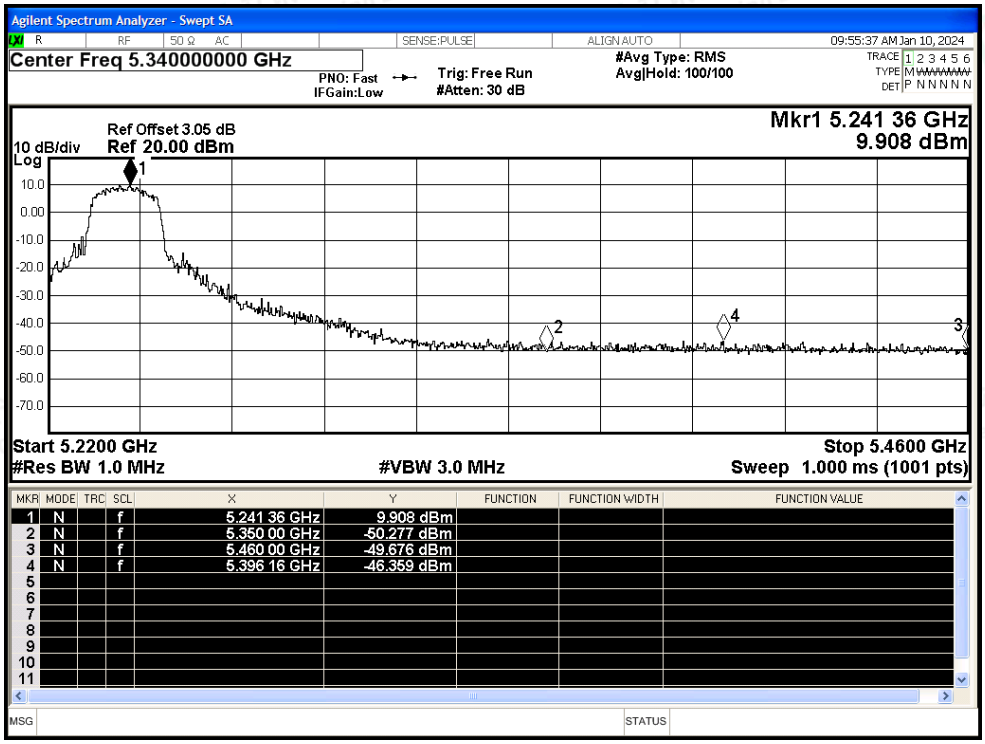
Restrict Band NVNT n20 5180MHz Ant2 Peak



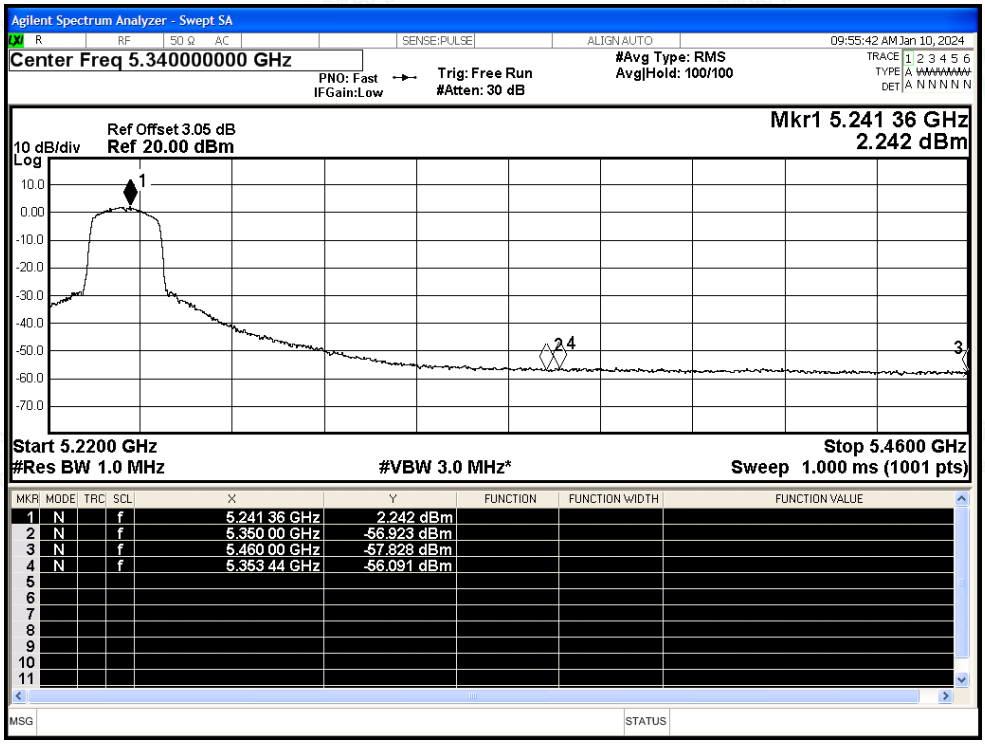
Restrict Band NVNT n20 5180MHz Ant2 Average



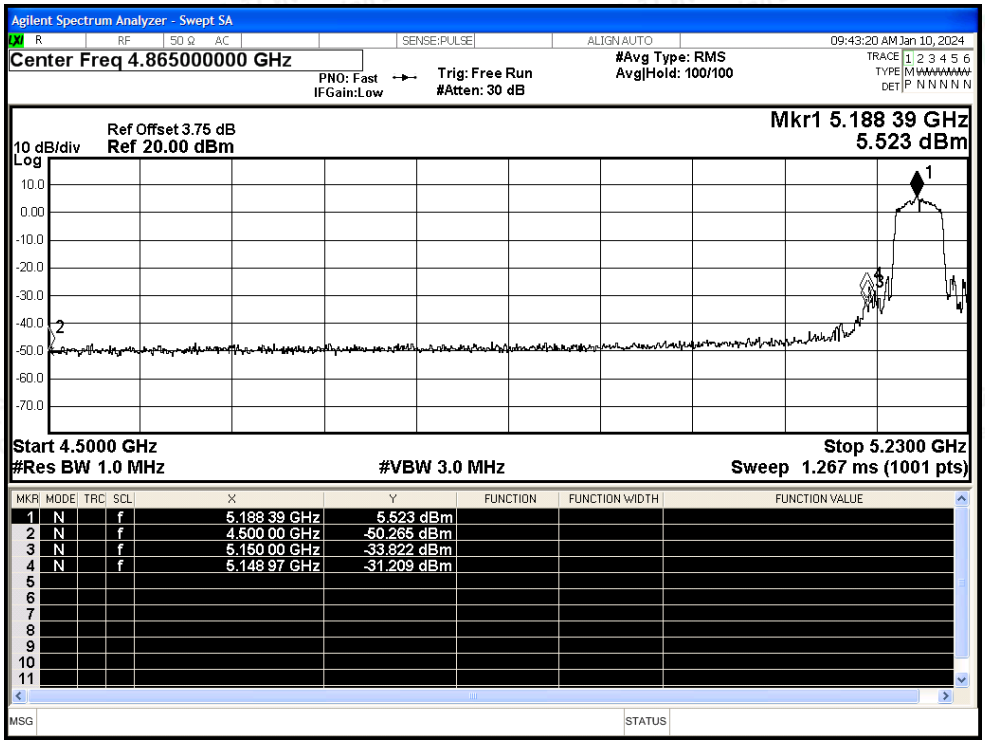
Restrict Band NVNT n20 5240MHz Ant2 Peak



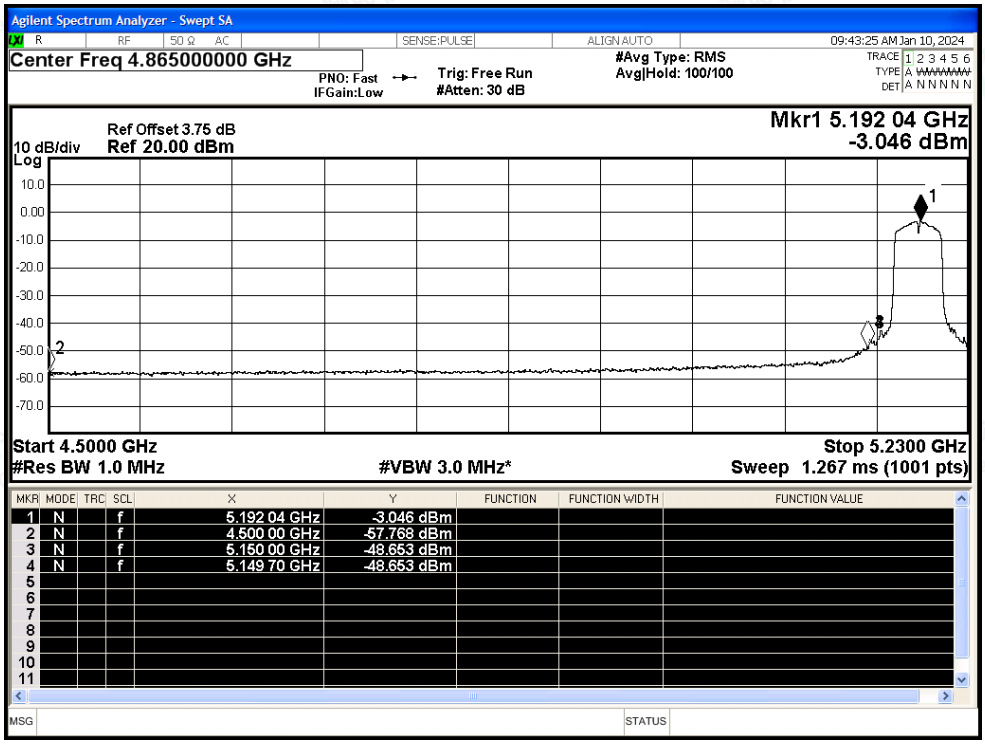
Restrict Band NVNT n20 5240MHz Ant2 Average



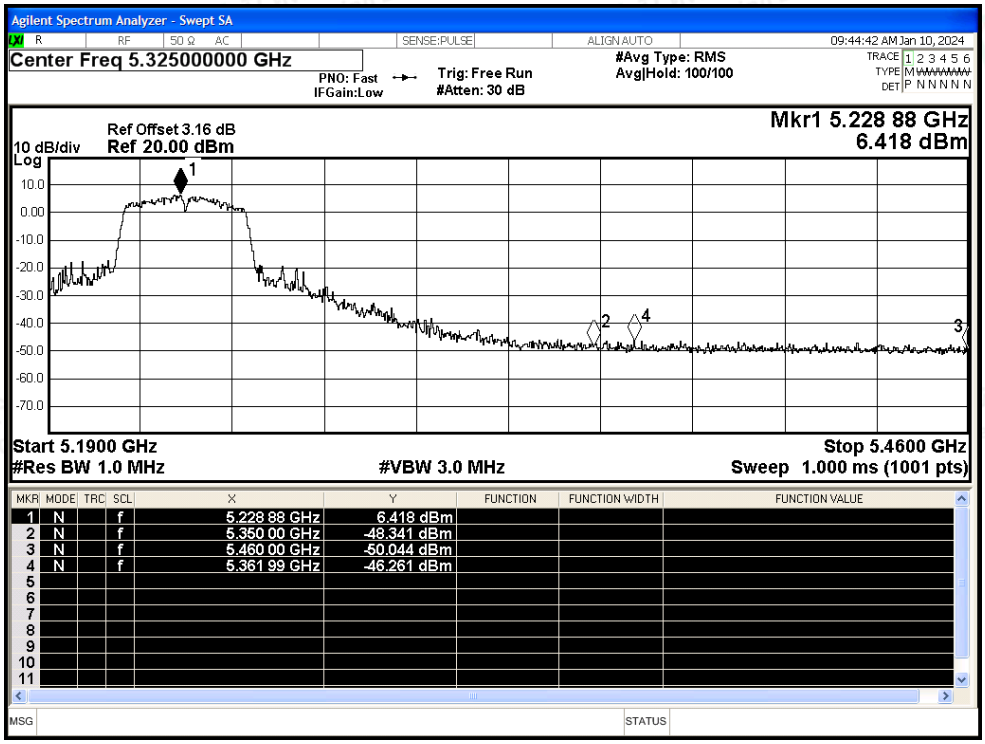
Restrict Band NVNT n40 5190MHz Ant2 Peak



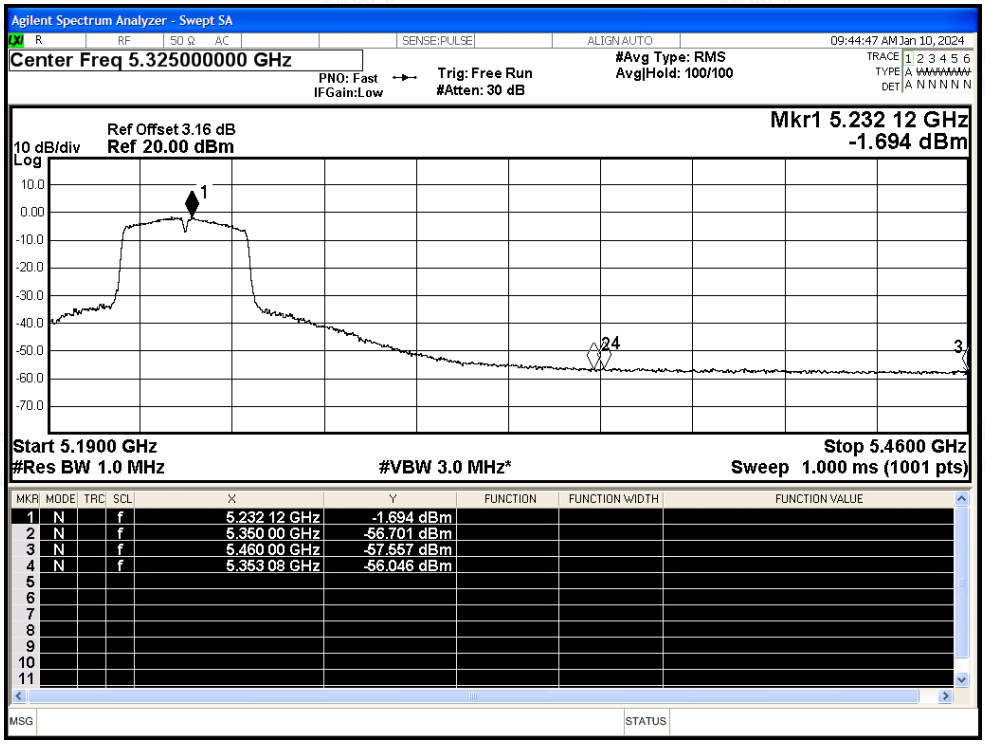
Restrict Band NVNT n40 5190MHz Ant2 Average



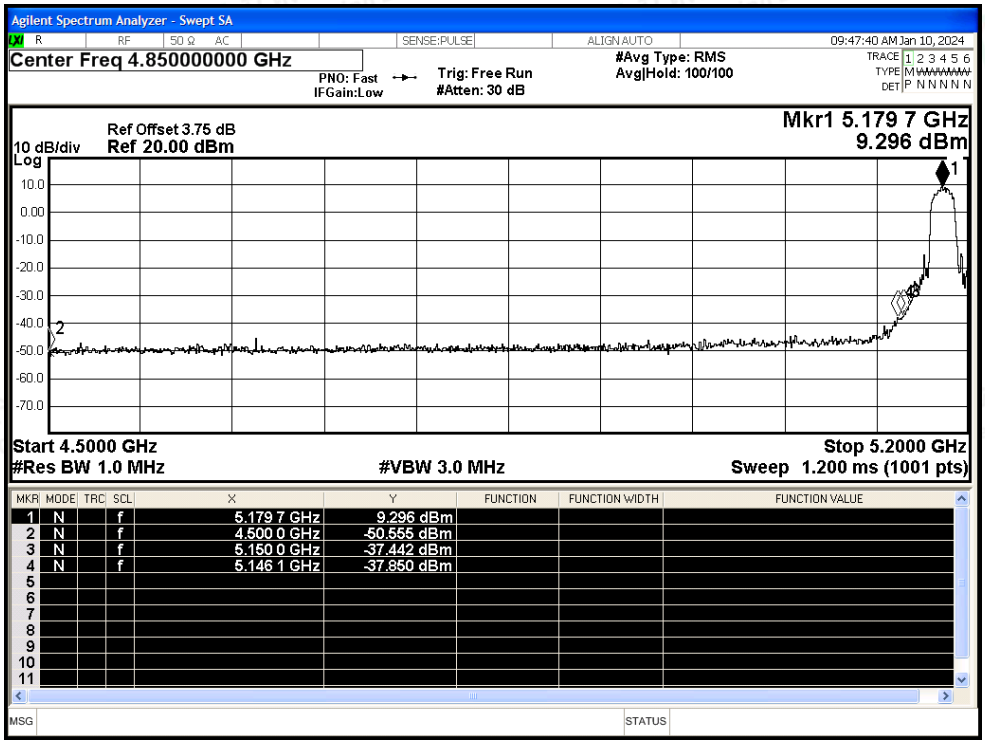
Restrict Band NVNT n40 5230MHz Ant2 Peak



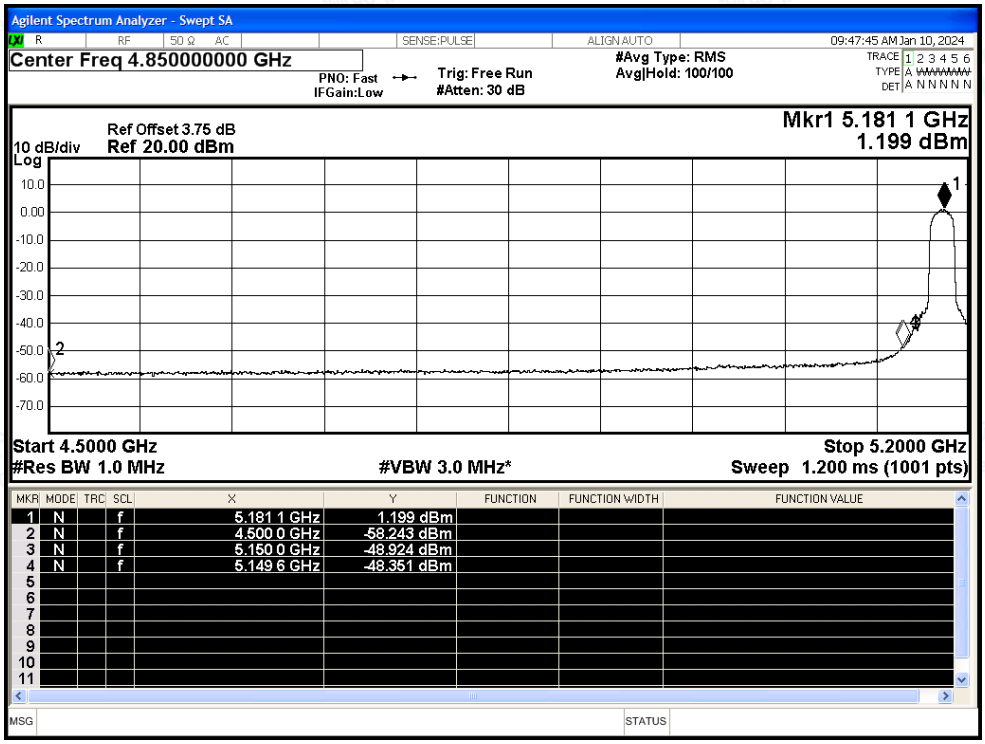
Restrict Band NVNT n40 5230MHz Ant2 Average



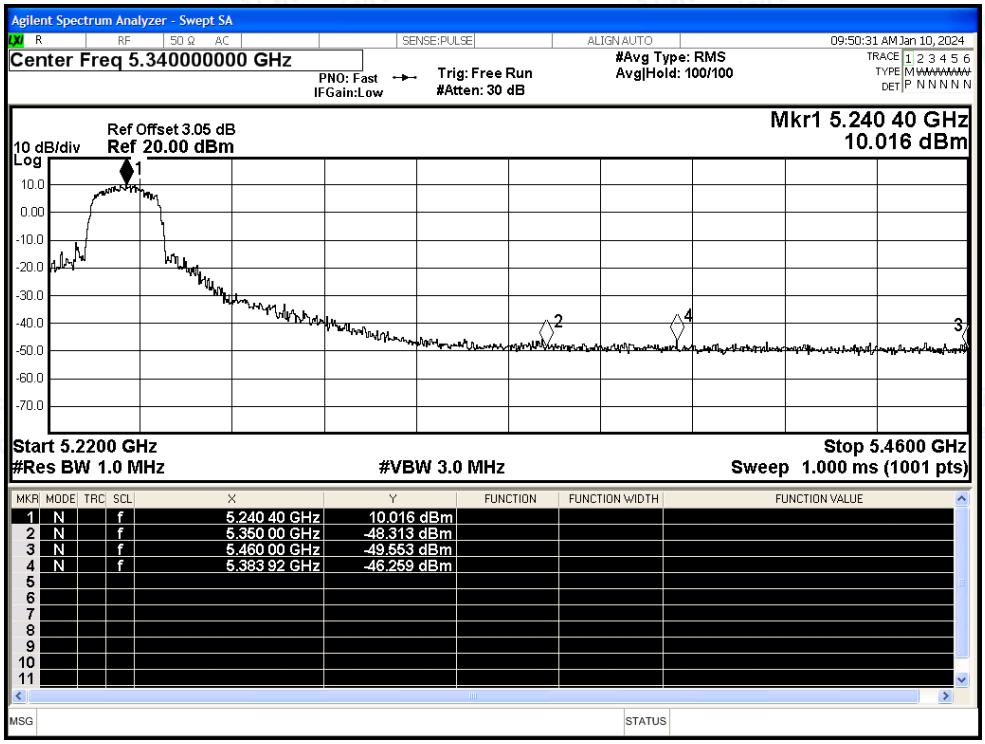
Restrict Band NVNT ac20 5180MHz Ant2 Peak



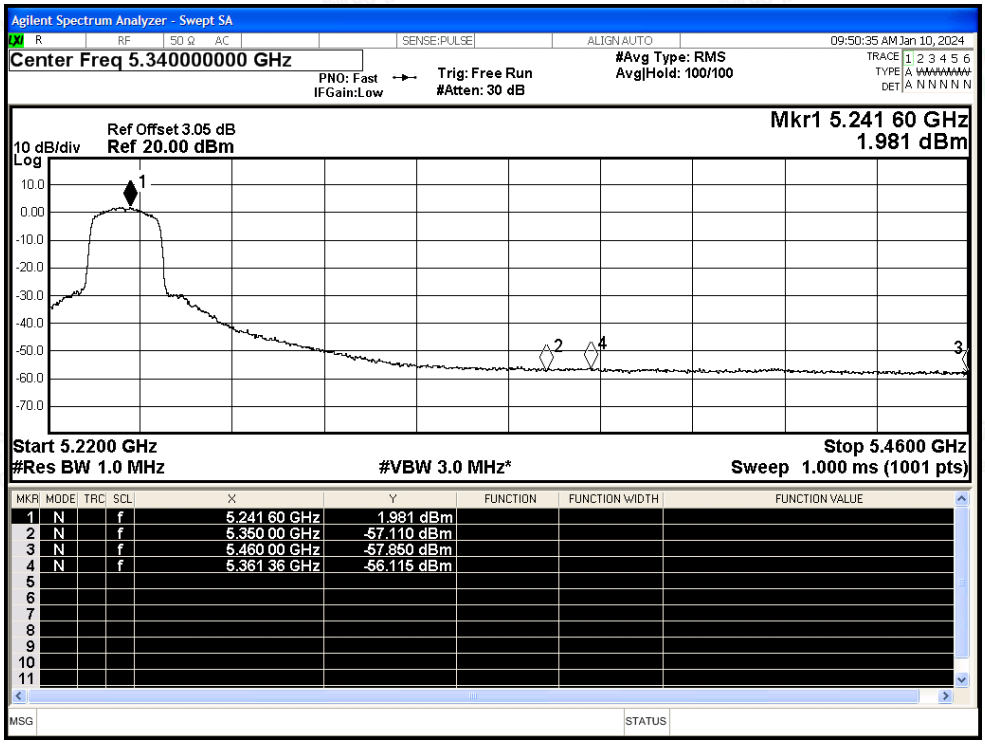
Restrict Band NVNT ac20 5180MHz Ant2 Average



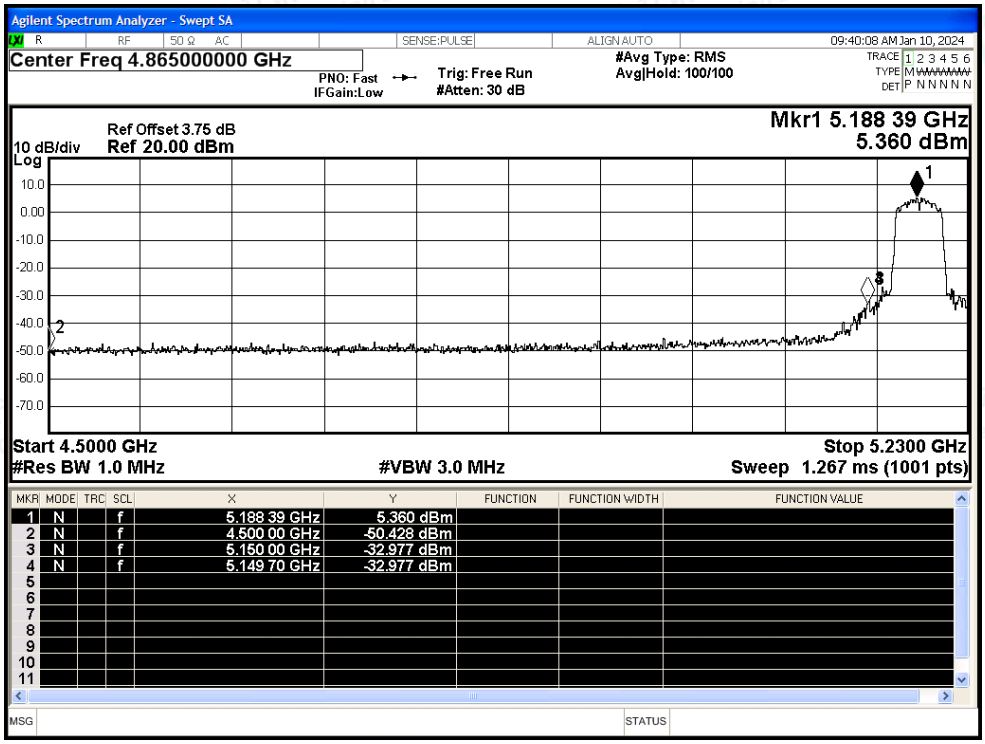
Restrict Band NVNT ac20 5240MHz Ant2 Peak



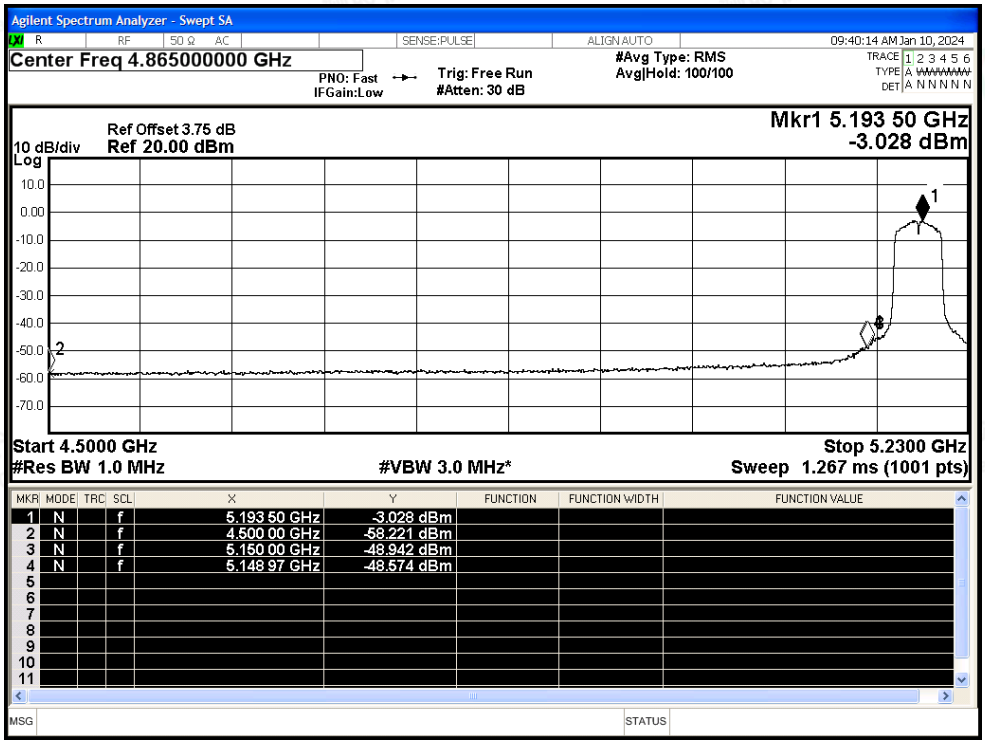
Restrict Band NVNT ac20 5240MHz Ant2 Average



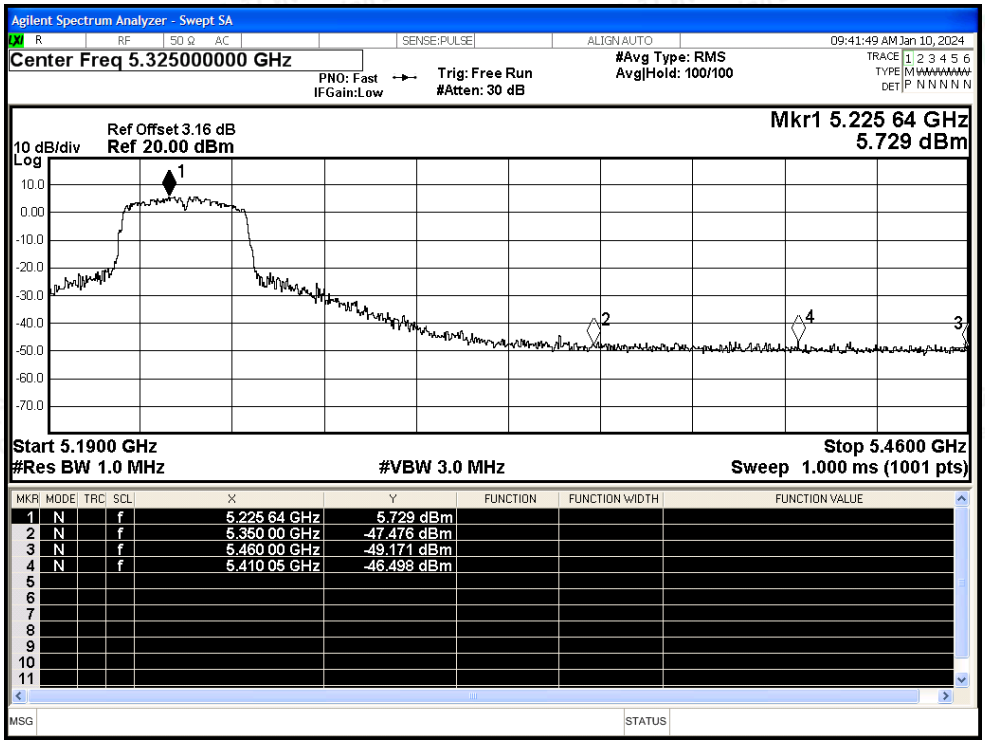
Restrict Band NVNT ac40 5190MHz Ant2 Peak



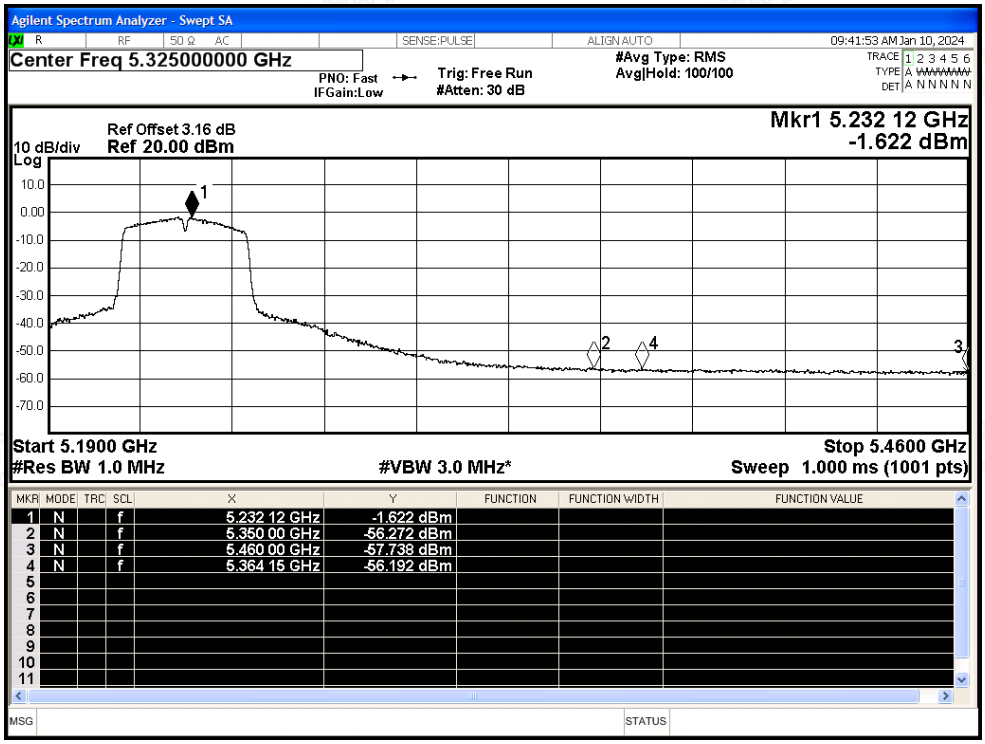
Restrict Band NVNT ac40 5190MHz Ant2 Average



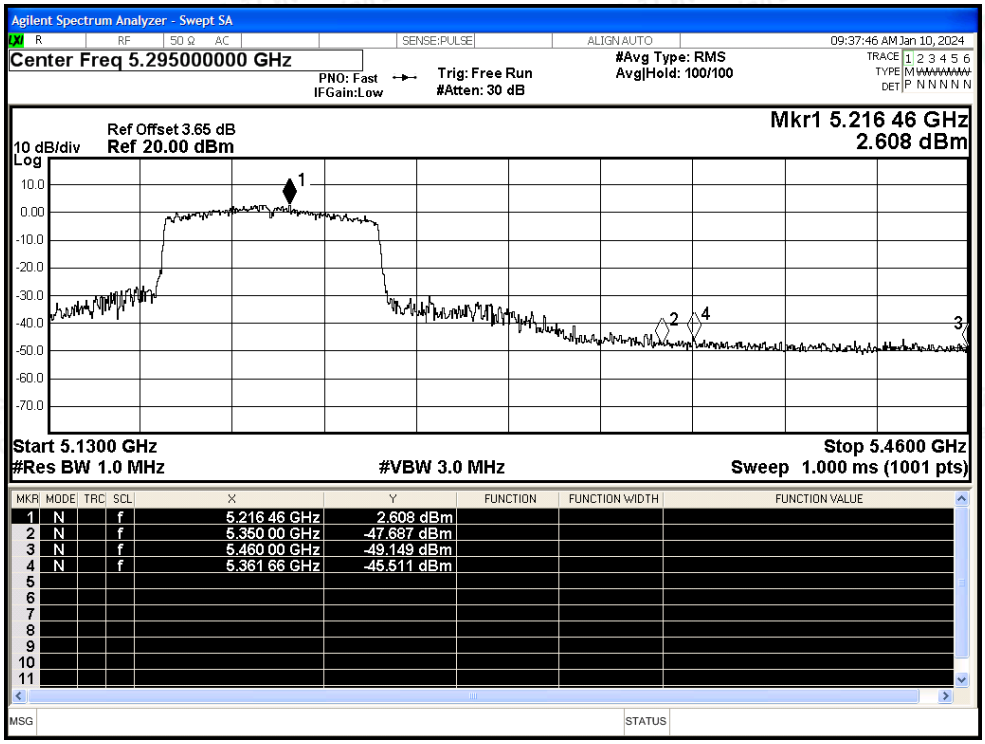
Restrict Band NVNT ac40 5230MHz Ant2 Peak



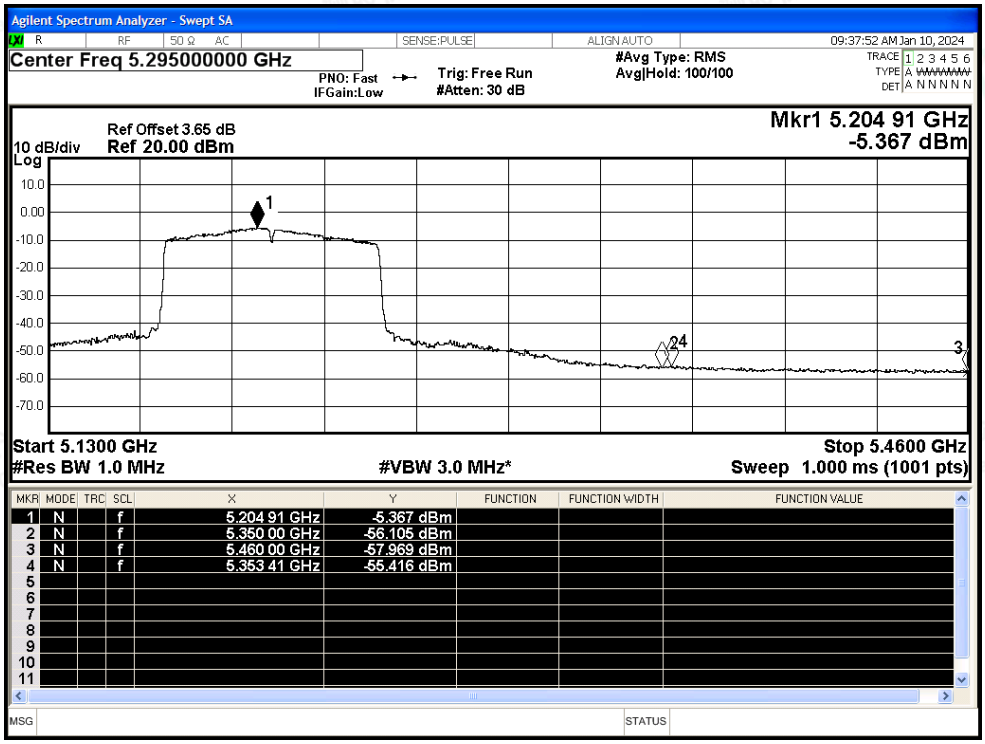
Restrict Band NVNT ac40 5230MHz Ant2 Average



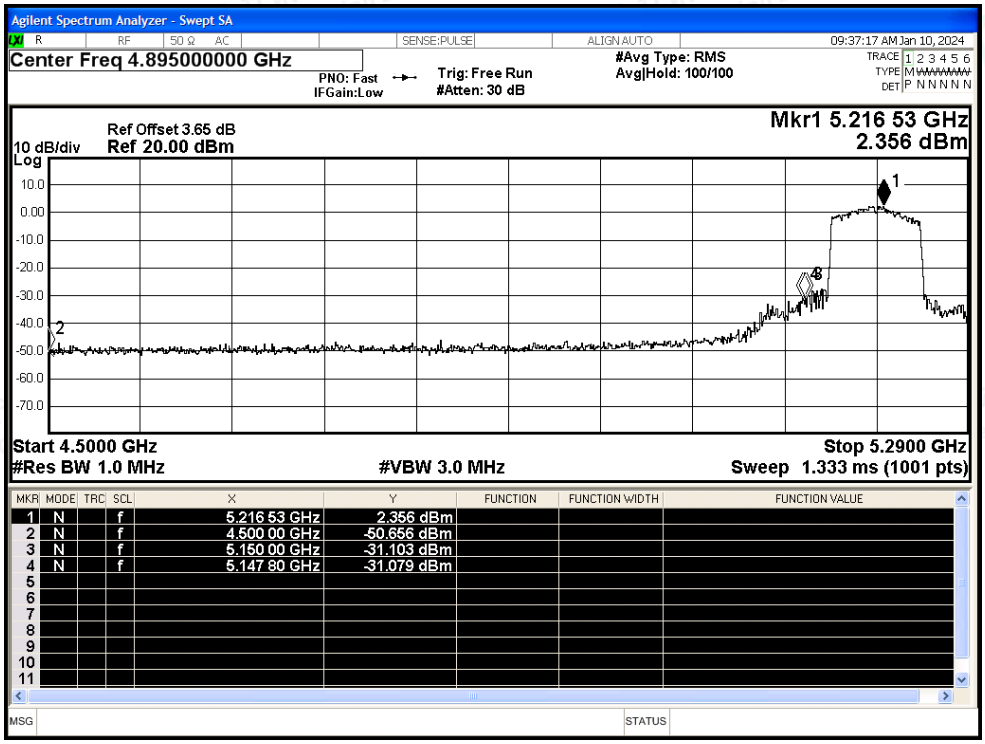
Restrict Band NVNT ac80 5210MHz Ant2 Peak



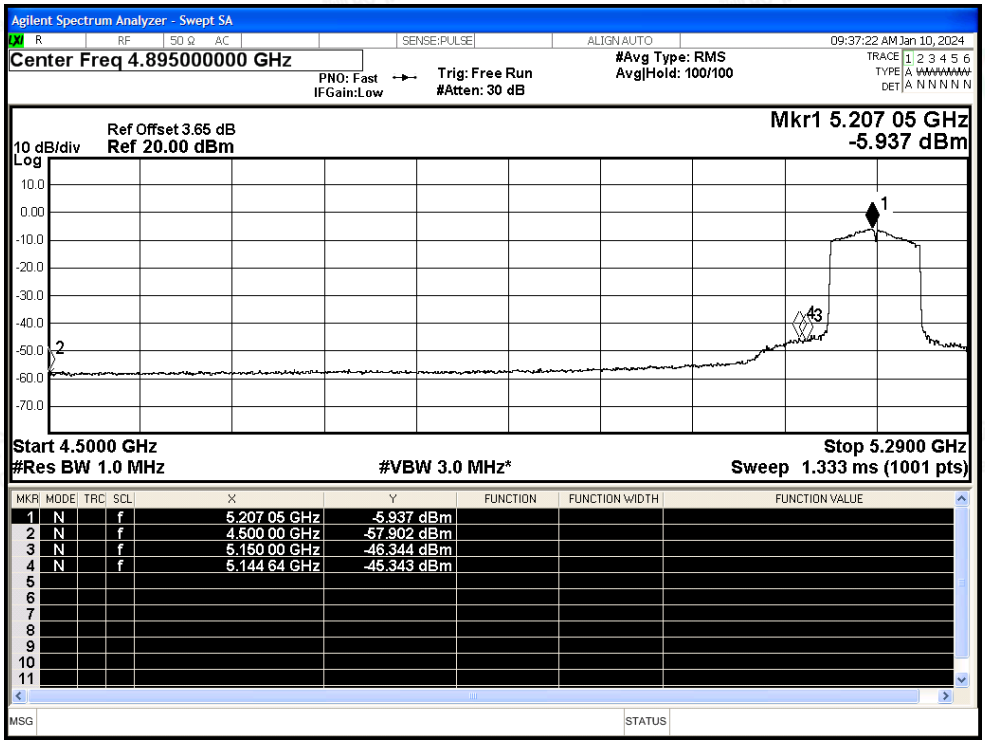
Restrict Band NVNT ac80 5210MHz Ant2 Average



Restrict Band NVNT ac80 5210MHz Ant2 Peak



Restrict Band NVNT ac80 5210MHz Ant2 Average



D.6 Frequency Stability

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	ac20	5180	Ant1	5179.98	-20000	-3.86	25	Pass
NVNT	ac20	5200	Ant1	5200	0	0	25	Pass
NVNT	ac20	5240	Ant1	5239.98	-20000	-3.82	25	Pass
NVNT	ac40	5190	Ant1	5190	0	0	25	Pass
NVNT	ac40	5230	Ant1	5229.96	-40000	-7.65	25	Pass
NVNT	ac80	5210	Ant1	5209.92	-80000	-15.36	25	Pass