Appendix D

RF Test Data for 5.2GWIFI(Conducted Measurement)

Product Name: Smart Diagnostic System

Test Model: P720

Environmental Conditions

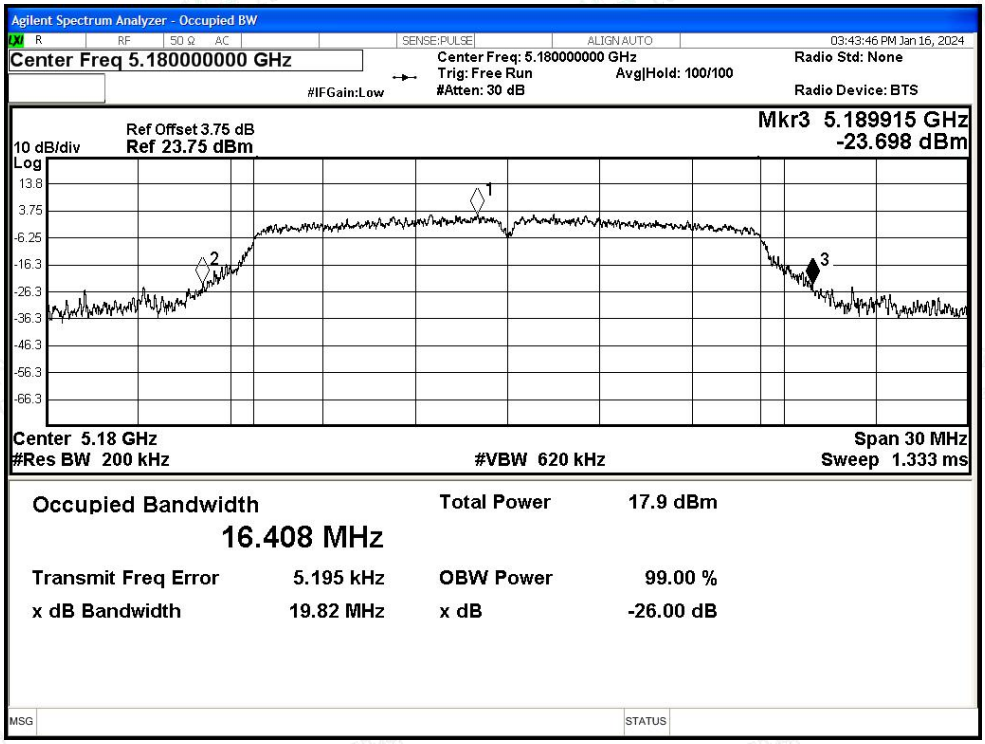
Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Eason Zhou
Supervised by:	Nick Peng

D.1 -26dB Bandwidth

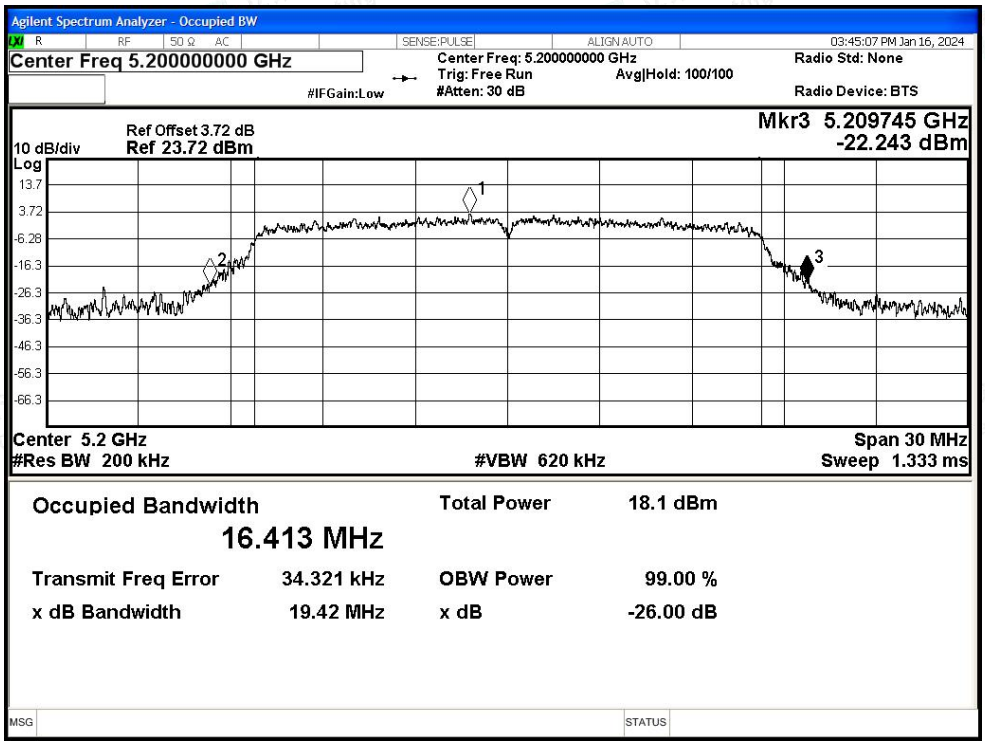
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	19.82	---	Pass
NVNT	a	5200	Ant1	19.422	---	Pass
NVNT	a	5240	Ant1	20.394	---	Pass
NVNT	n20	5180	Ant1	19.93	---	Pass
NVNT	n20	5200	Ant1	20.156	---	Pass
NVNT	n20	5240	Ant1	22.583	---	Pass
NVNT	n40	5190	Ant1	40.41	---	Pass
NVNT	n40	5230	Ant1	42.185	---	Pass
NVNT	ac20	5180	Ant1	19.903	---	Pass
NVNT	ac20	5200	Ant1	19.965	---	Pass
NVNT	ac20	5240	Ant1	24.369	---	Pass
NVNT	ac40	5190	Ant1	40.416	---	Pass
NVNT	ac40	5230	Ant1	40.514	---	Pass
NVNT	ac80	5210	Ant1	80.138	---	Pass

Test Graphs

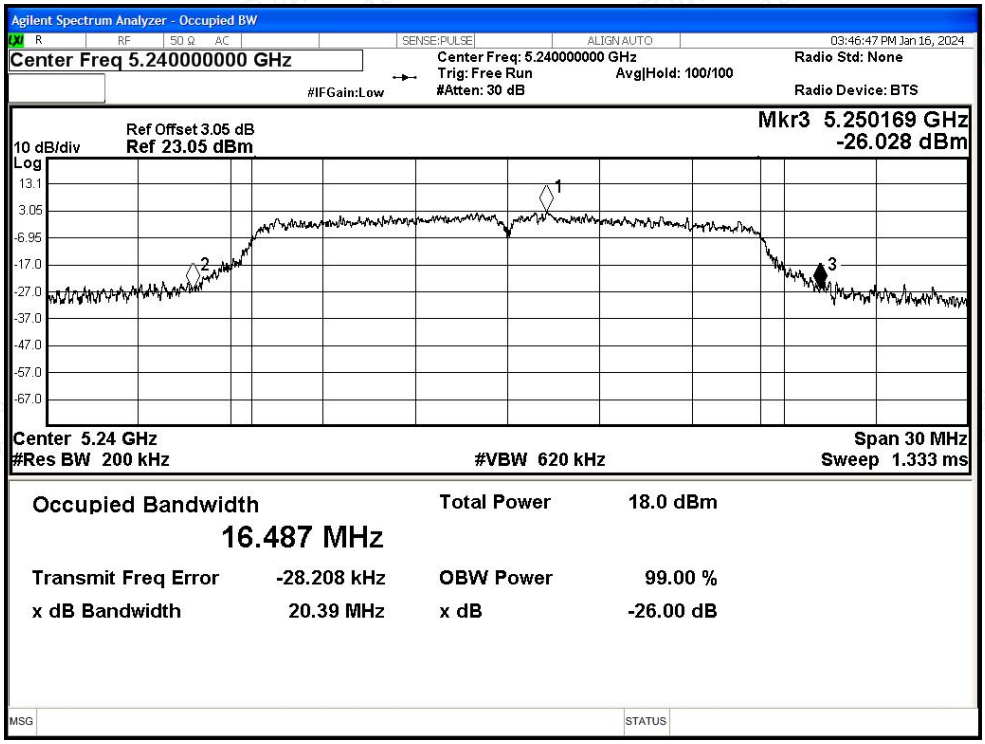
-26dB Bandwidth NVNT a 5180MHz Ant1



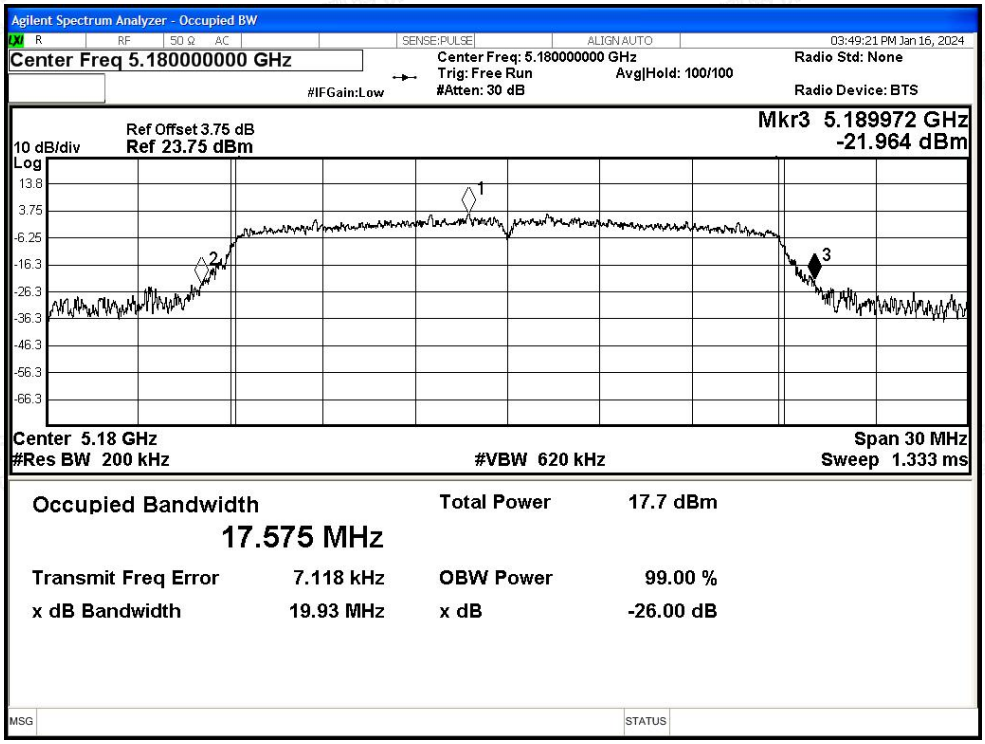
-26dB Bandwidth NVNT a 5200MHz Ant1



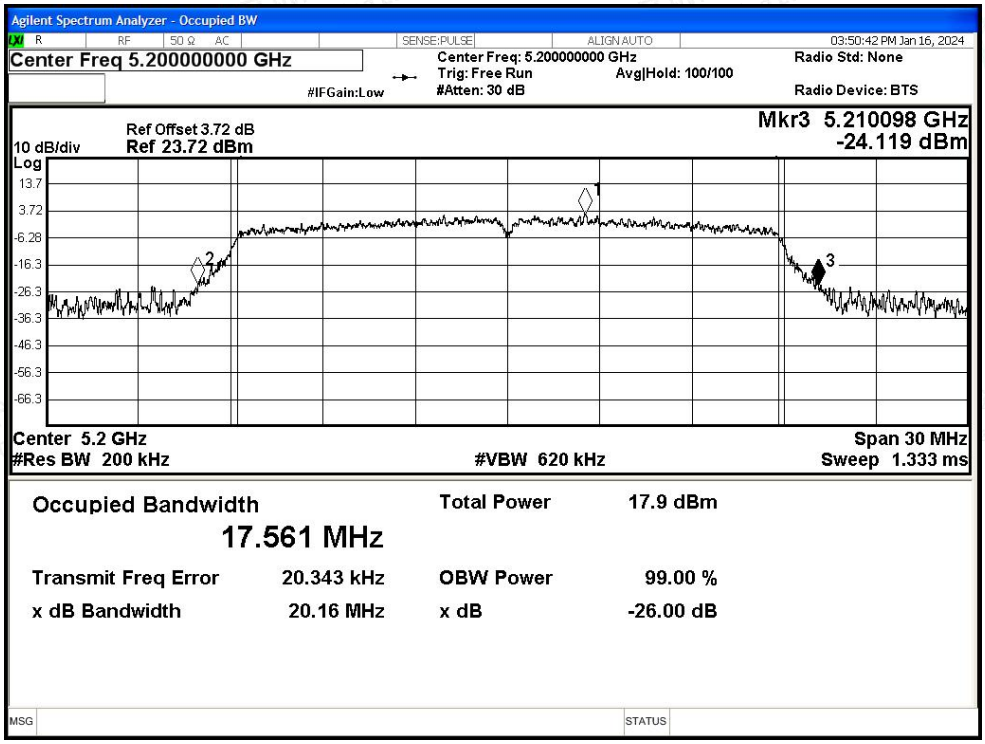
-26dB Bandwidth NVNT a 5240MHz Ant1



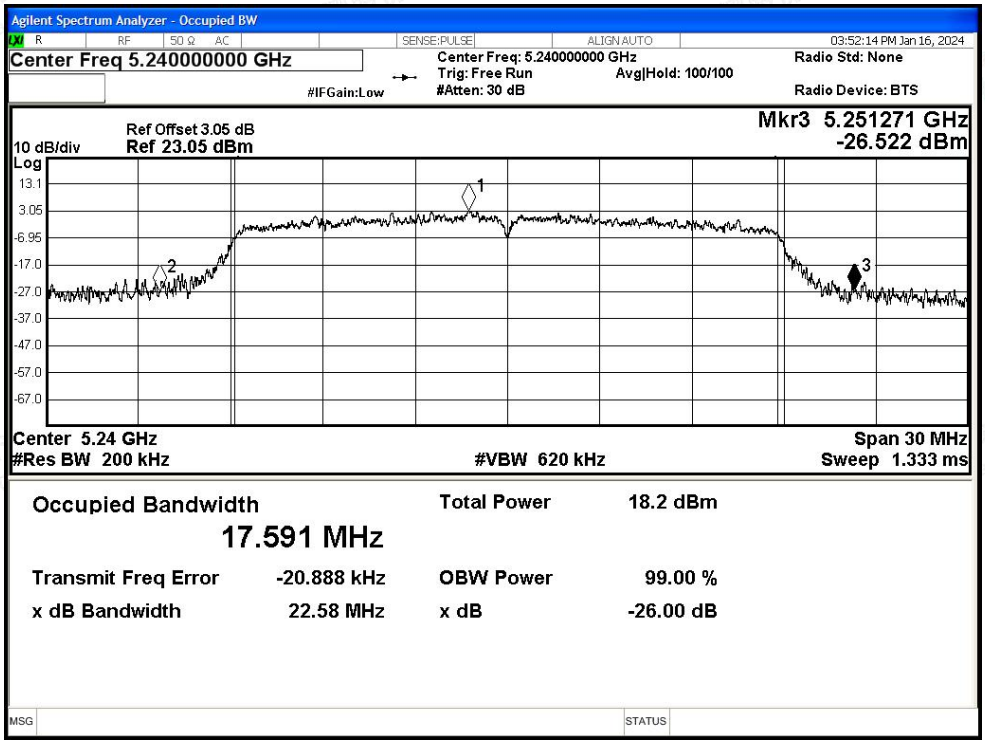
-26dB Bandwidth NVNT n20 5180MHz Ant1



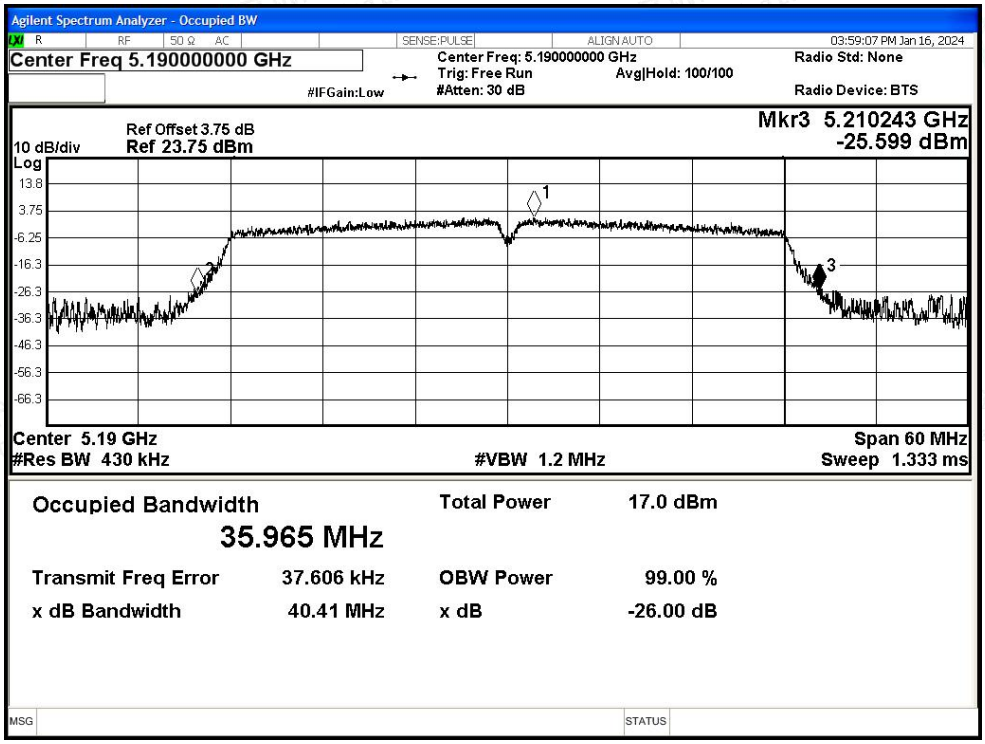
-26dB Bandwidth NVNT n20 5200MHz Ant1



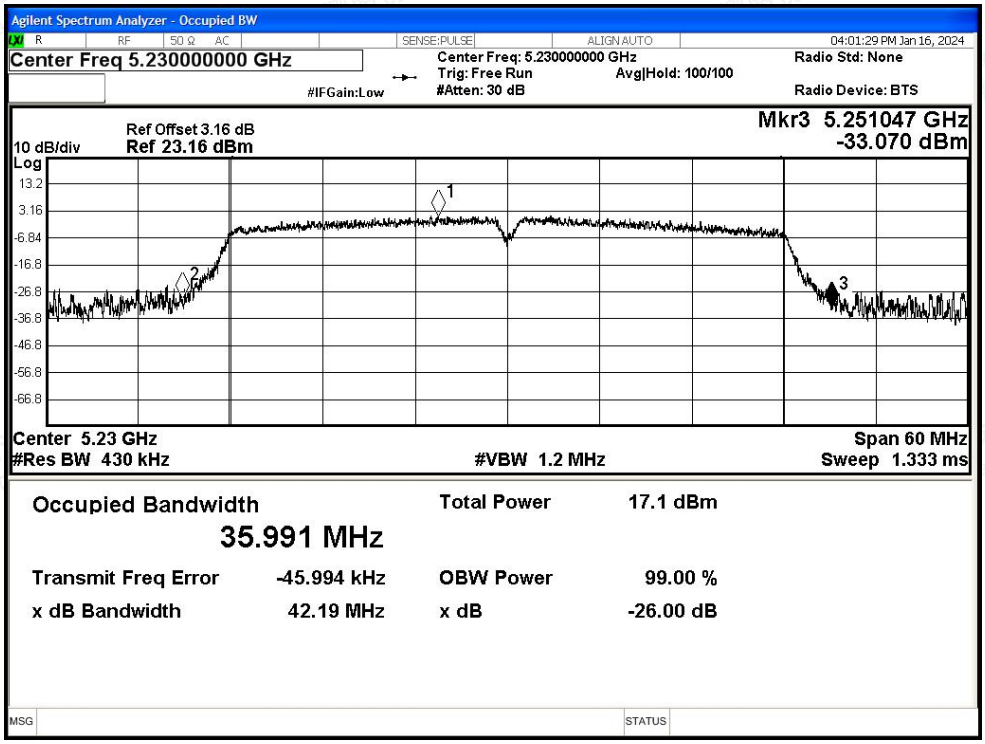
-26dB Bandwidth NVNT n20 5240MHz Ant1



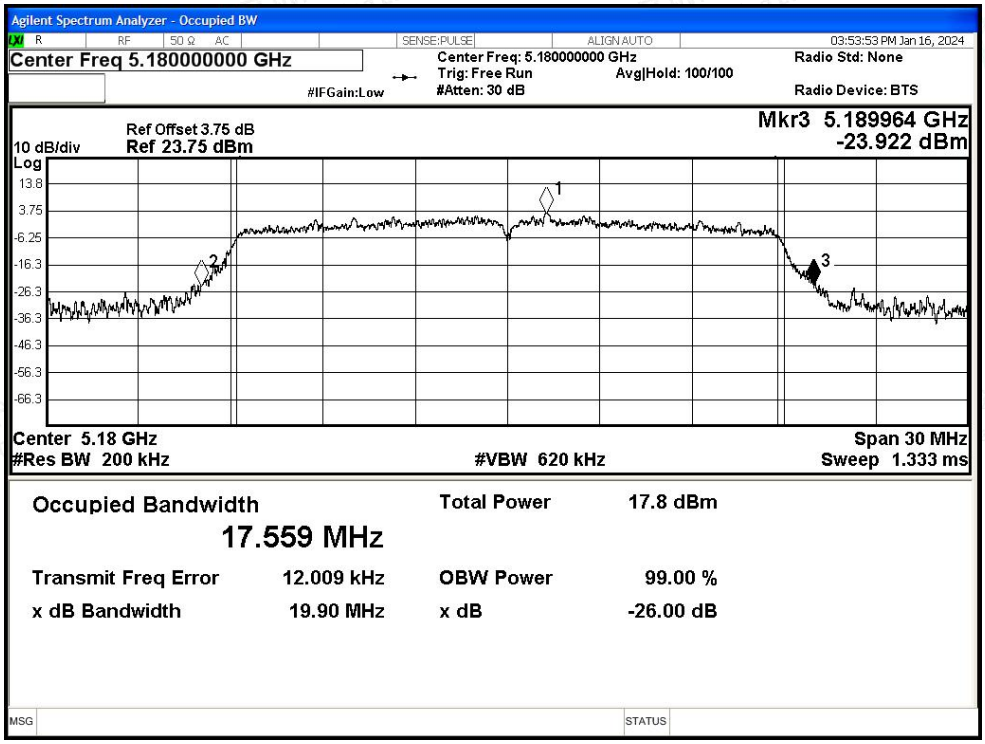
-26dB Bandwidth NVNT n40 5190MHz Ant1



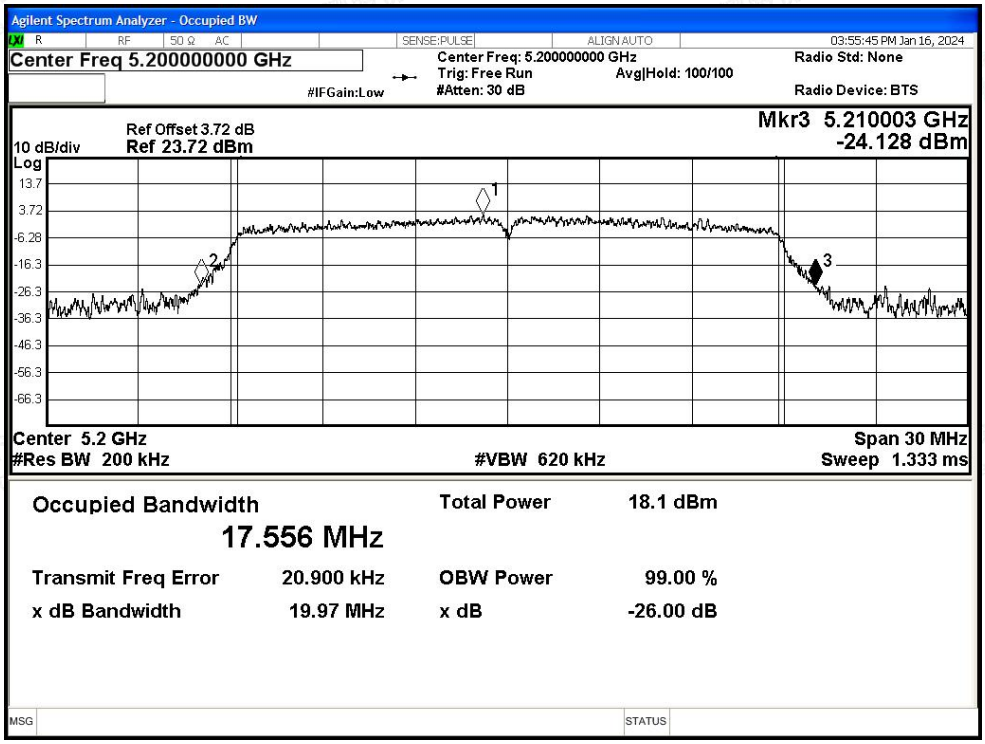
-26dB Bandwidth NVNT n40 5230MHz Ant1



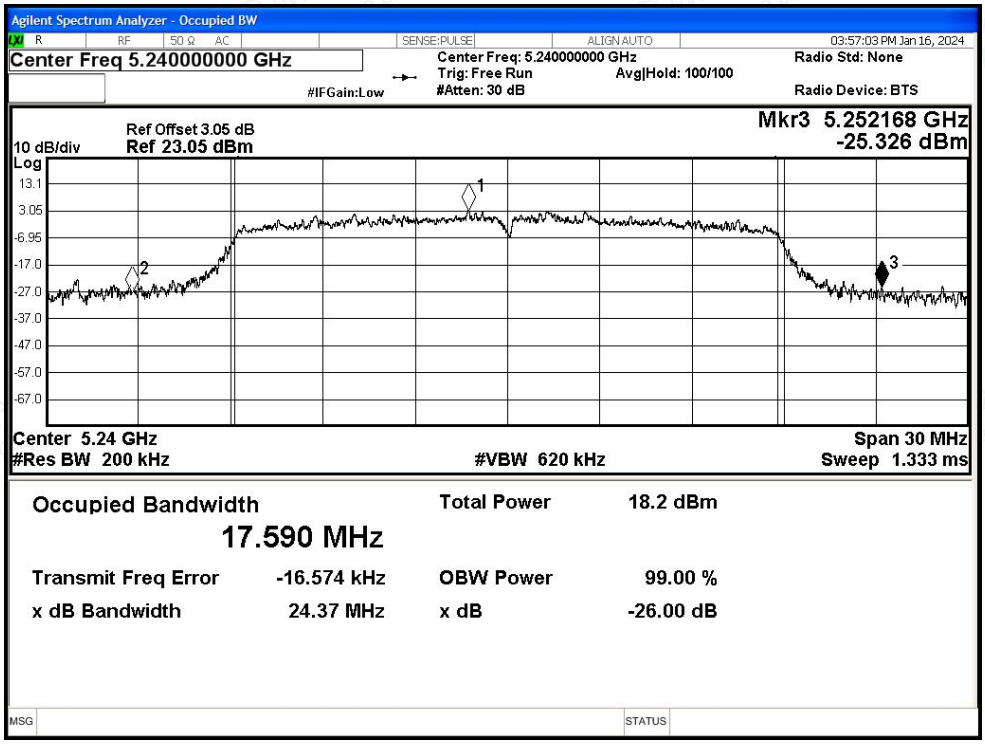
-26dB Bandwidth NVNT ac20 5180MHz Ant1



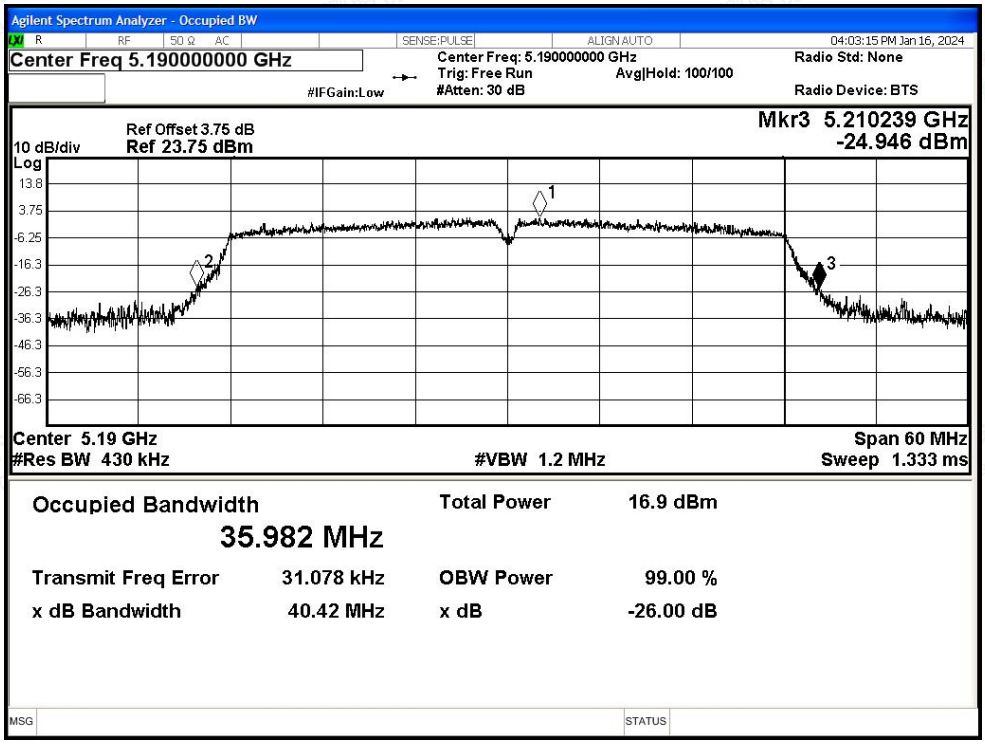
-26dB Bandwidth NVNT ac20 5200MHz Ant1



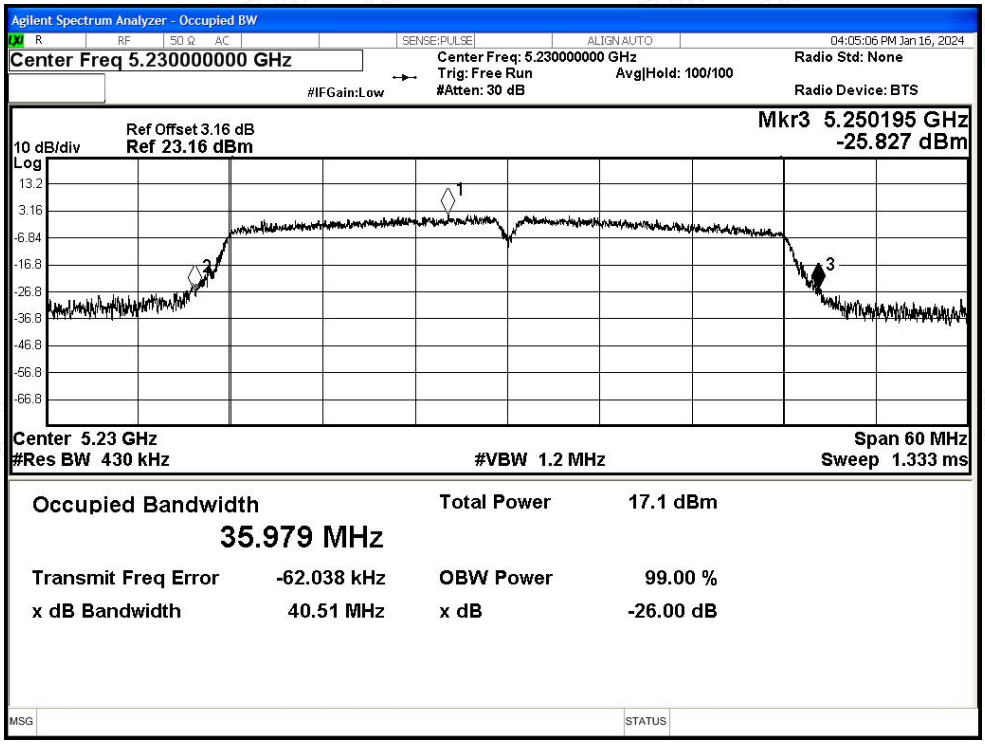
-26dB Bandwidth NVNT ac20 5240MHz Ant1



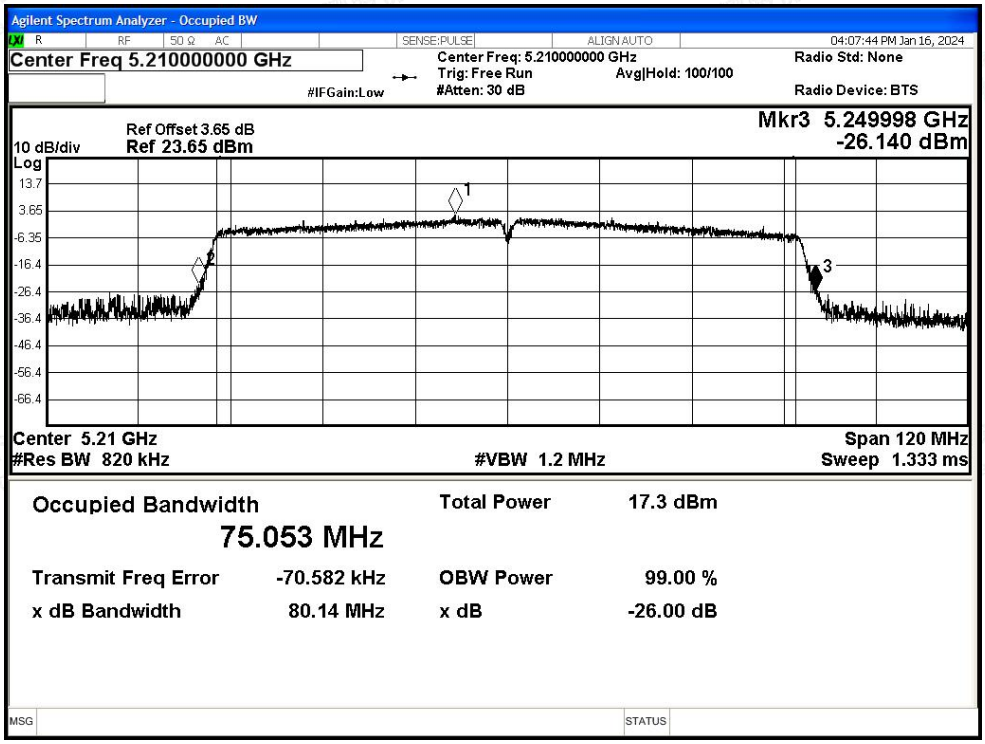
-26dB Bandwidth NVNT ac40 5190MHz Ant1



-26dB Bandwidth NVNT ac40 5230MHz Ant1



-26dB Bandwidth NVNT ac80 5210MHz Ant1



D.2 Maximum Conducted Output Power

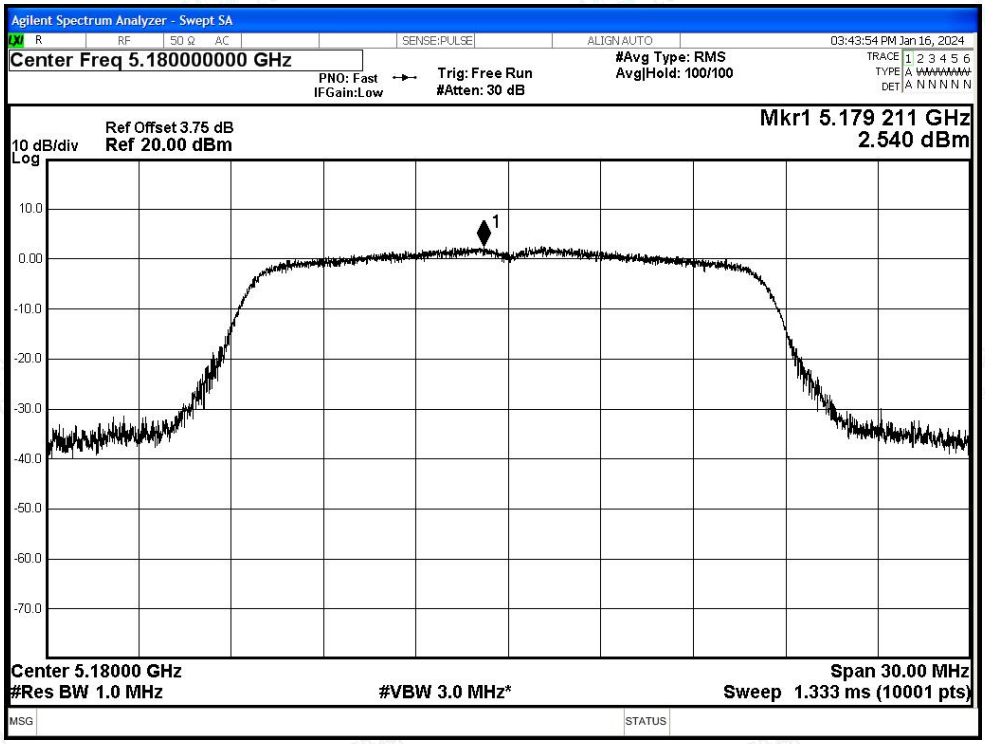
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	12.29	0.13	12.42	24	Pass
NVNT	a	5200	Ant1	12.53	0.13	12.66	24	Pass
NVNT	a	5240	Ant1	12.29	0.13	12.42	24	Pass
NVNT	n20	5180	Ant1	12.06	0.15	12.21	24	Pass
NVNT	n20	5200	Ant1	12.36	0.15	12.51	24	Pass
NVNT	n20	5240	Ant1	12.47	0.15	12.62	24	Pass
NVNT	n40	5190	Ant1	11.05	0.29	11.34	24	Pass
NVNT	n40	5230	Ant1	11.11	0.29	11.4	24	Pass
NVNT	ac20	5180	Ant1	12.1	0.15	12.25	24	Pass
NVNT	ac20	5200	Ant1	12.5	0.14	12.64	24	Pass
NVNT	ac20	5240	Ant1	12.31	0.15	12.46	24	Pass
NVNT	ac40	5190	Ant1	11	0.28	11.28	24	Pass
NVNT	ac40	5230	Ant1	11.17	0.28	11.45	24	Pass
NVNT	ac80	5210	Ant1	10.45	0.55	11	24	Pass

D.3 Maximum Power Spectral Density Level

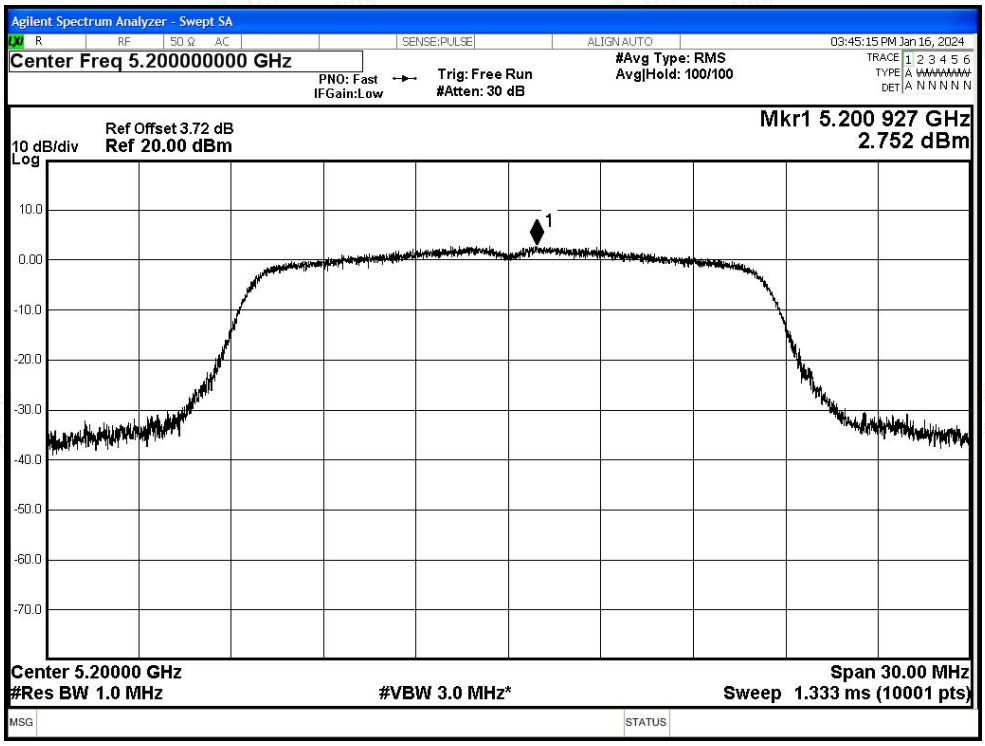
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5180	Ant1	2.54	0.13	2.67	11	Pass
NVNT	a	5200	Ant1	2.75	0.13	2.88	11	Pass
NVNT	a	5240	Ant1	2.97	0.13	3.1	11	Pass
NVNT	n20	5180	Ant1	2.21	0.15	2.36	11	Pass
NVNT	n20	5200	Ant1	2.61	0.15	2.76	11	Pass
NVNT	n20	5240	Ant1	2.92	0.15	3.07	11	Pass
NVNT	n40	5190	Ant1	-1.58	0.29	-1.29	11	Pass
NVNT	n40	5230	Ant1	-1.42	0.29	-1.13	11	Pass
NVNT	ac20	5180	Ant1	2.07	0.15	2.22	11	Pass
NVNT	ac20	5200	Ant1	2.95	0.14	3.09	11	Pass
NVNT	ac20	5240	Ant1	2.63	0.15	2.78	11	Pass
NVNT	ac40	5190	Ant1	-1.85	0.28	-1.57	11	Pass
NVNT	ac40	5230	Ant1	-1.45	0.28	-1.17	11	Pass
NVNT	ac80	5210	Ant1	-5.11	0.55	-4.56	11	Pass

Test Graphs

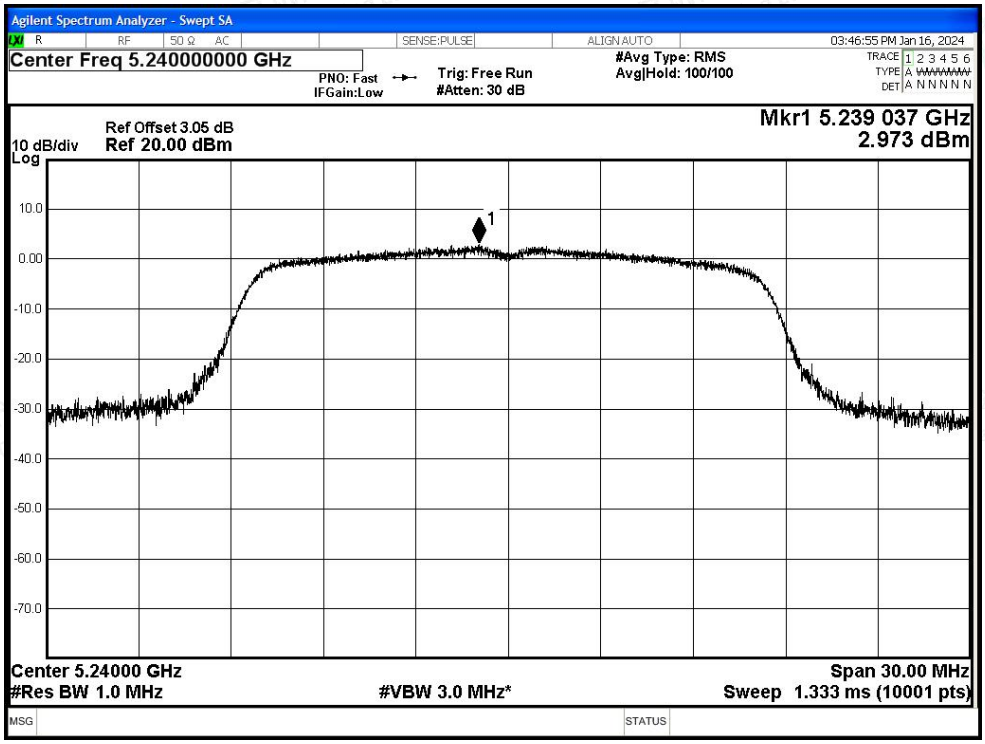
PSD NVNT a 5180MHz Ant1



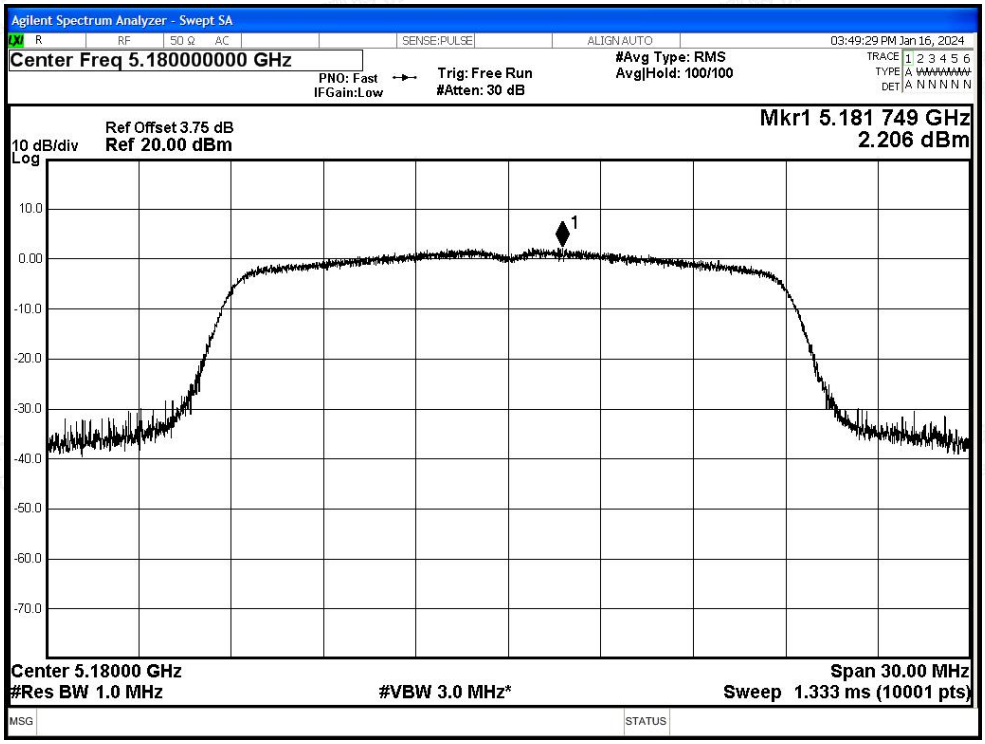
PSD NVNT a 5200MHz Ant1



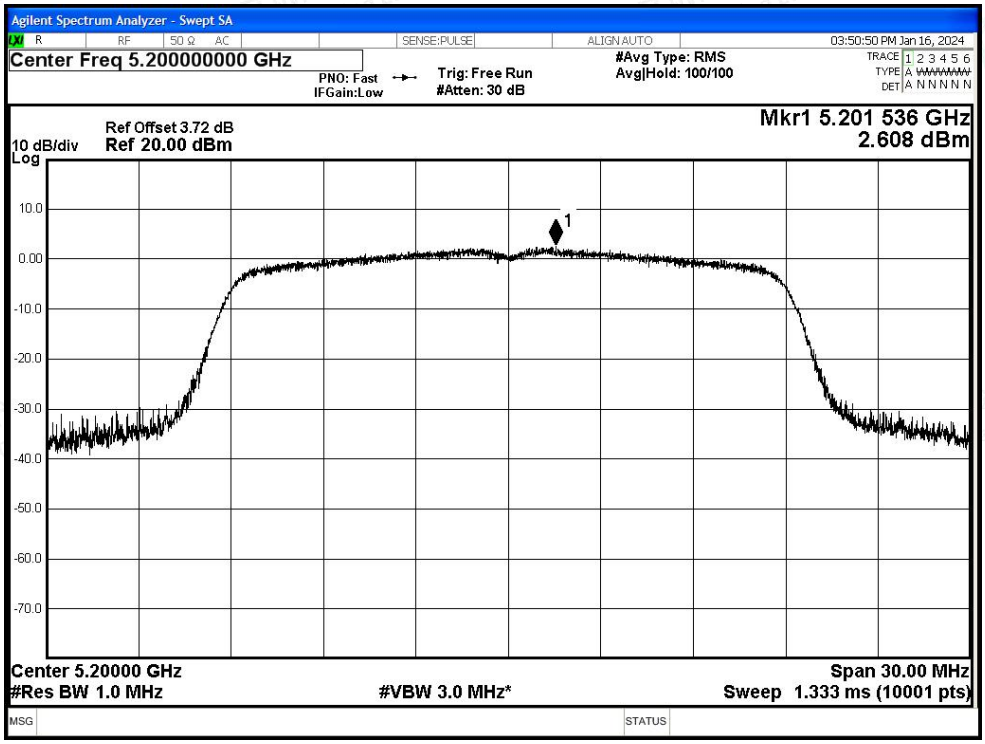
PSD NVNT a 5240MHz Ant1



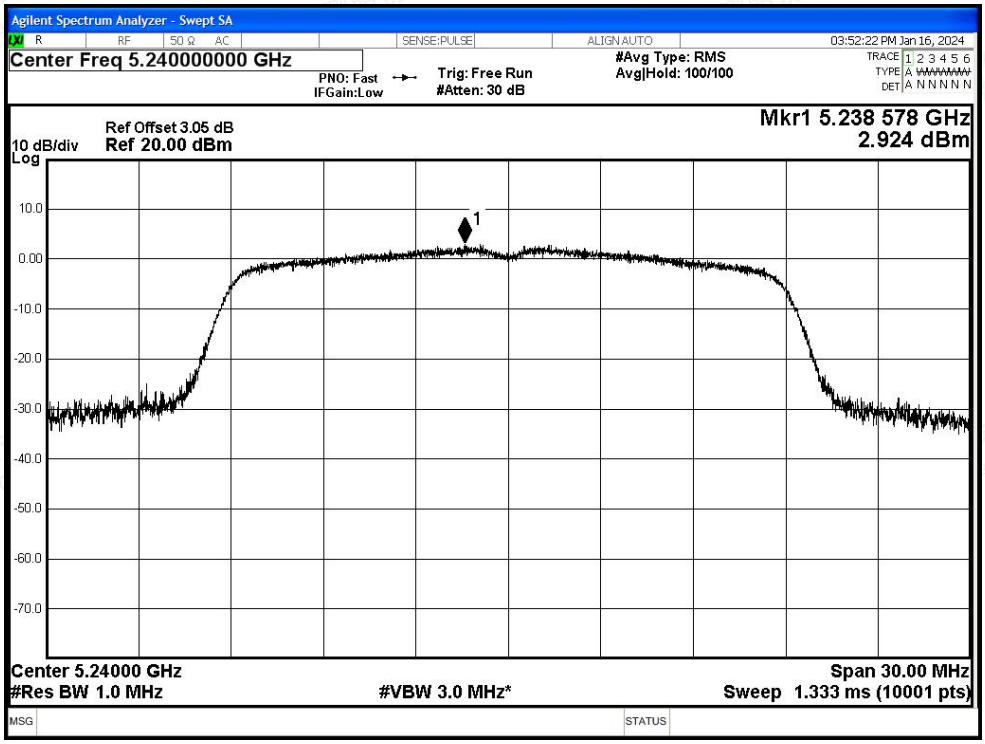
PSD NVNT n20 5180MHz Ant1



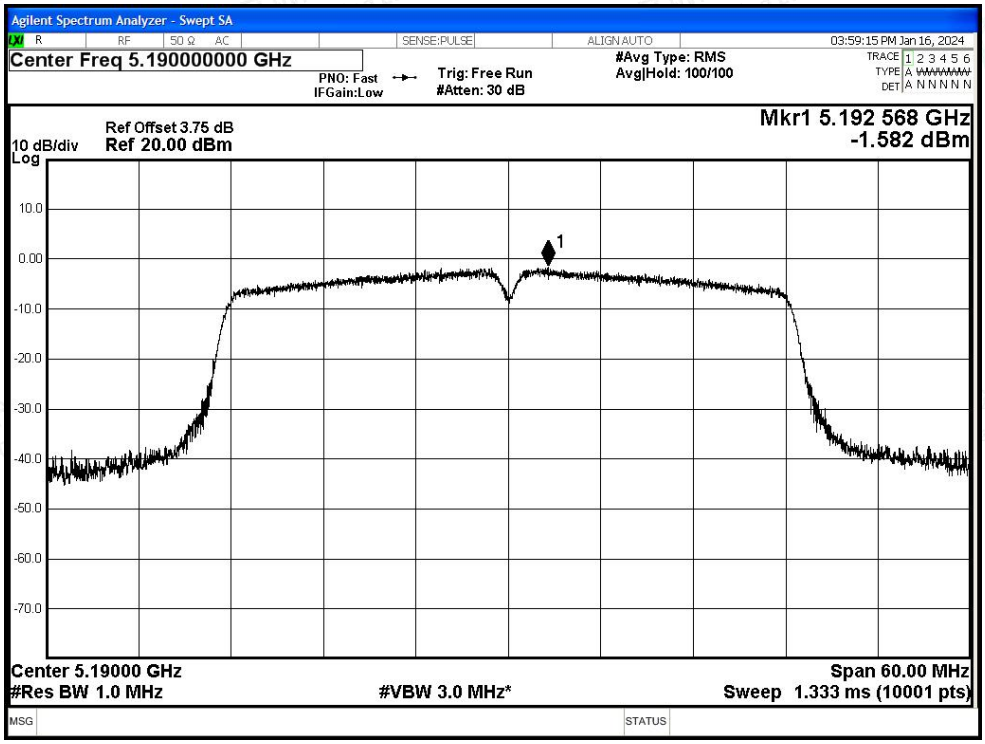
PSD NVNT n20 5200MHz Ant1



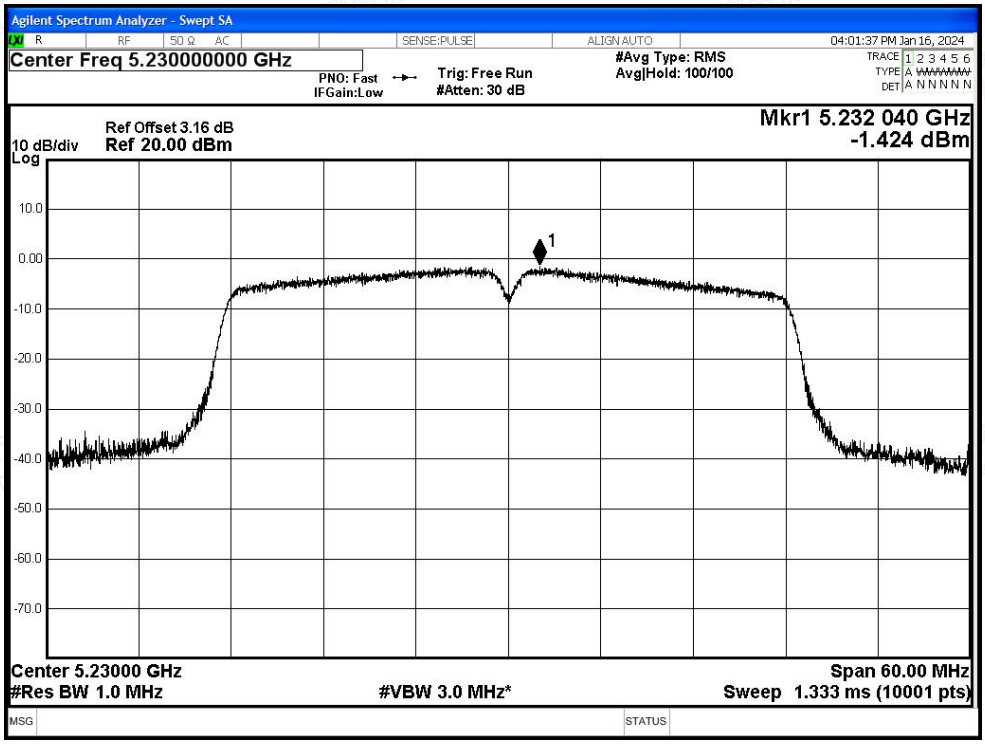
PSD NVNT n20 5240MHz Ant1



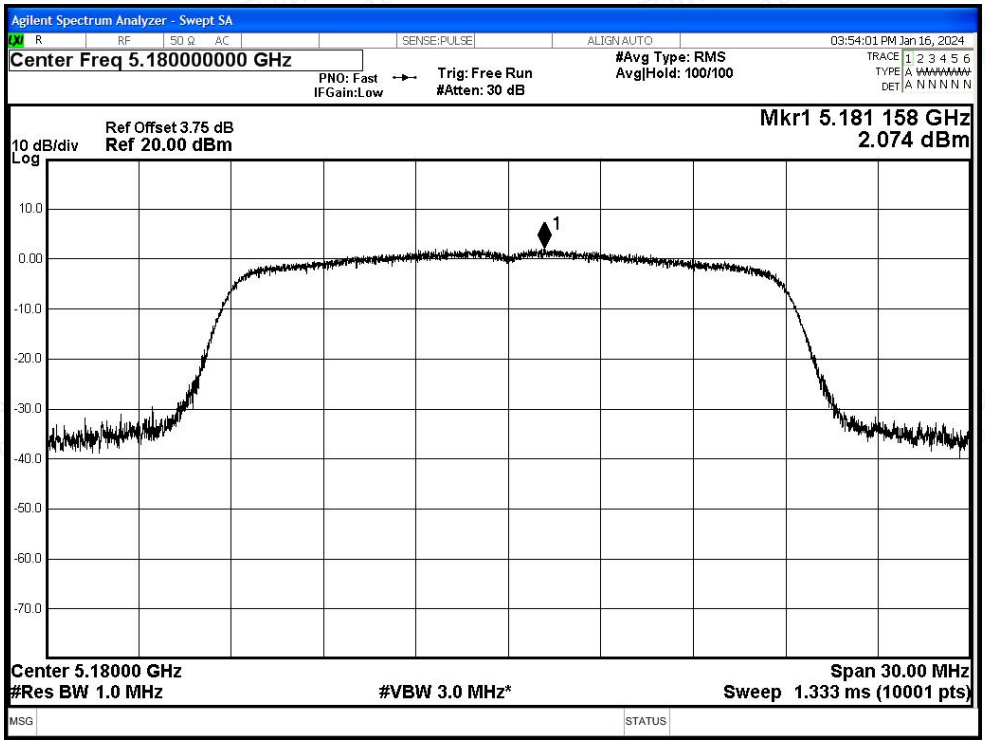
PSD NVNT n40 5190MHz Ant1



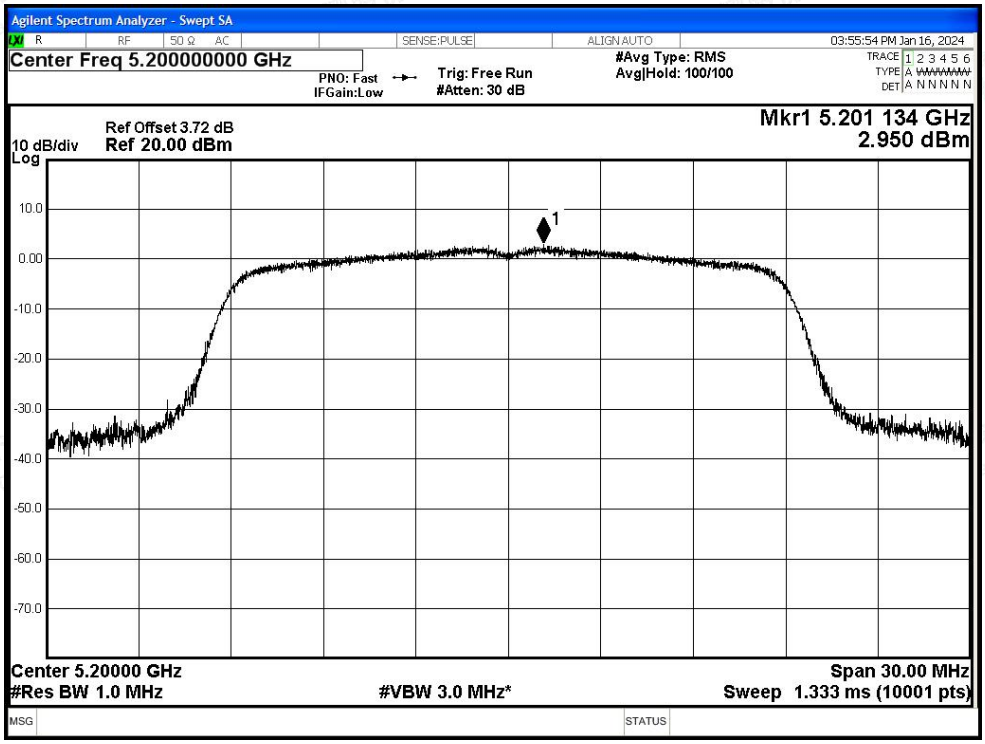
PSD NVNT n40 5230MHz Ant1



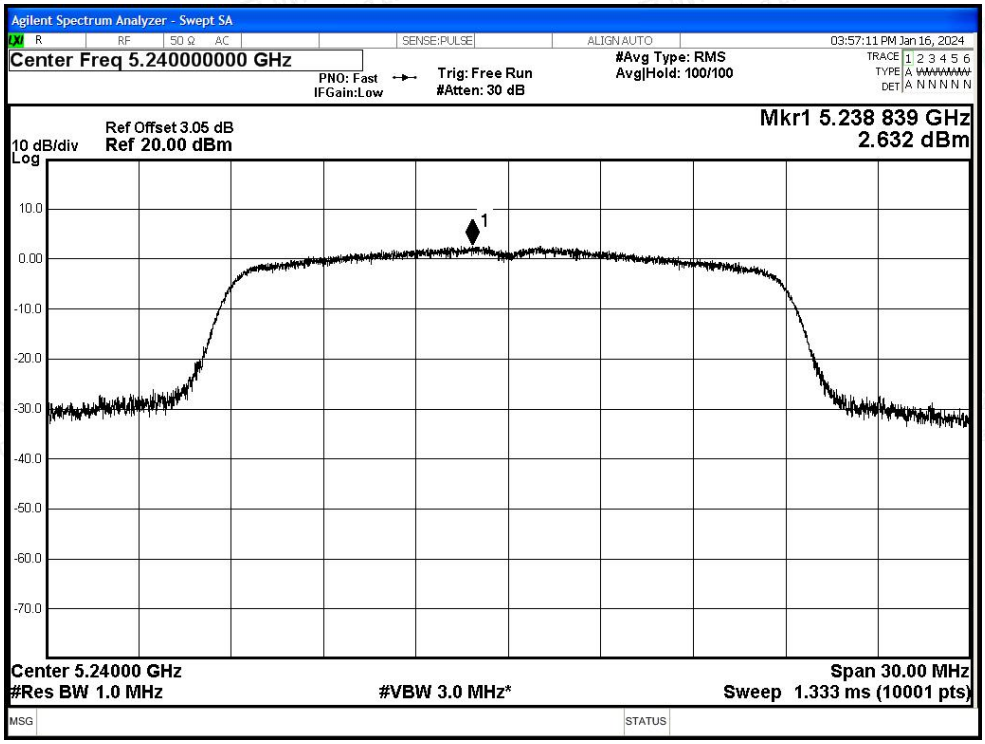
PSD NVNT ac20 5180MHz Ant1



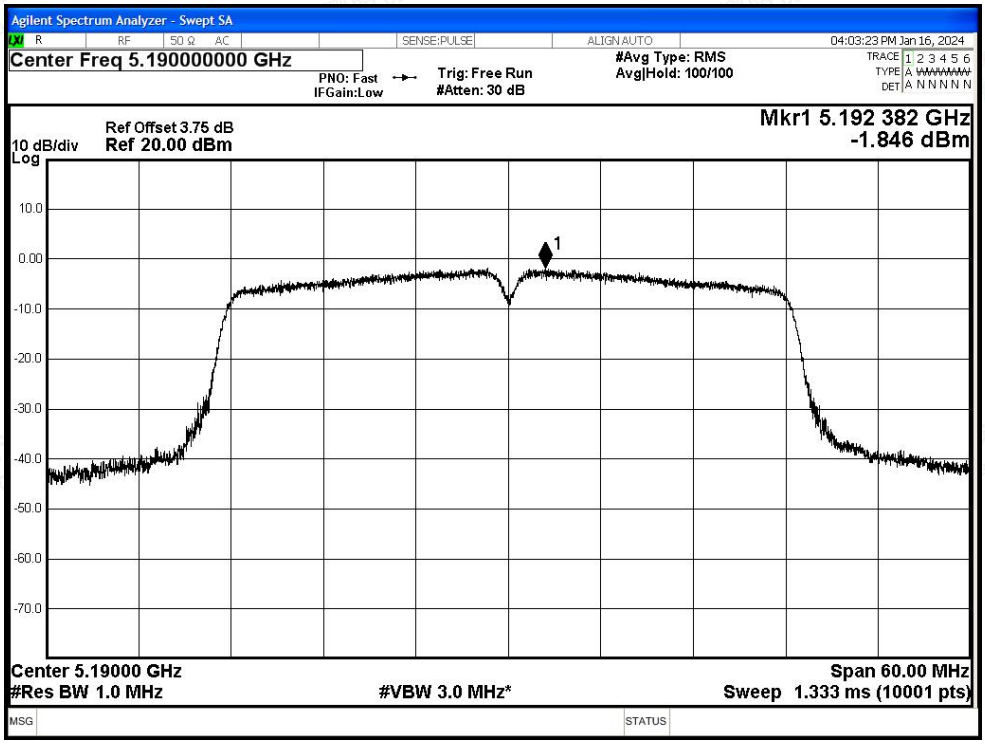
PSD NVNT ac20 5200MHz Ant1



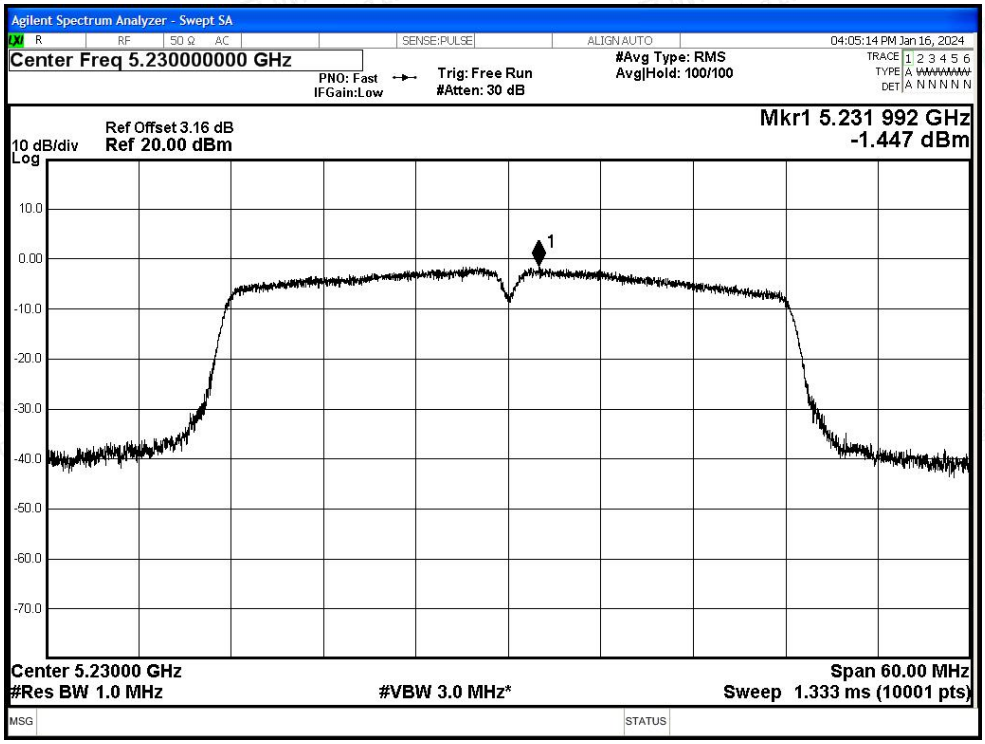
PSD NVNT ac20 5240MHz Ant1



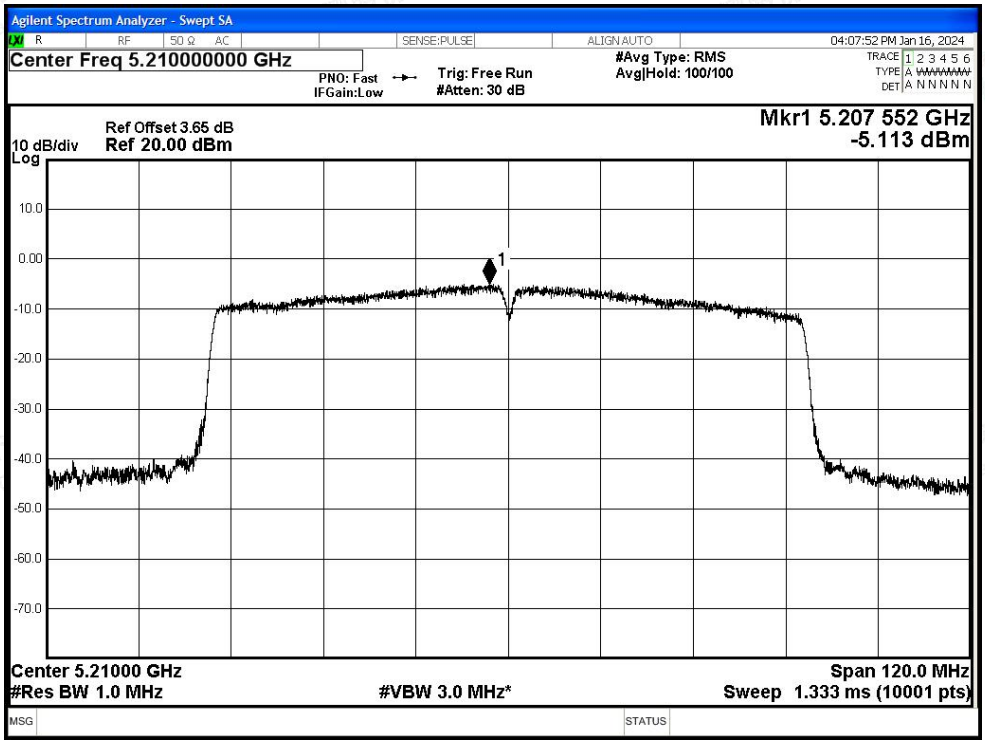
PSD NVNT ac40 5190MHz Ant1



PSD NVNT ac40 5230MHz Ant1



PSD NVNT ac80 5210MHz Ant1



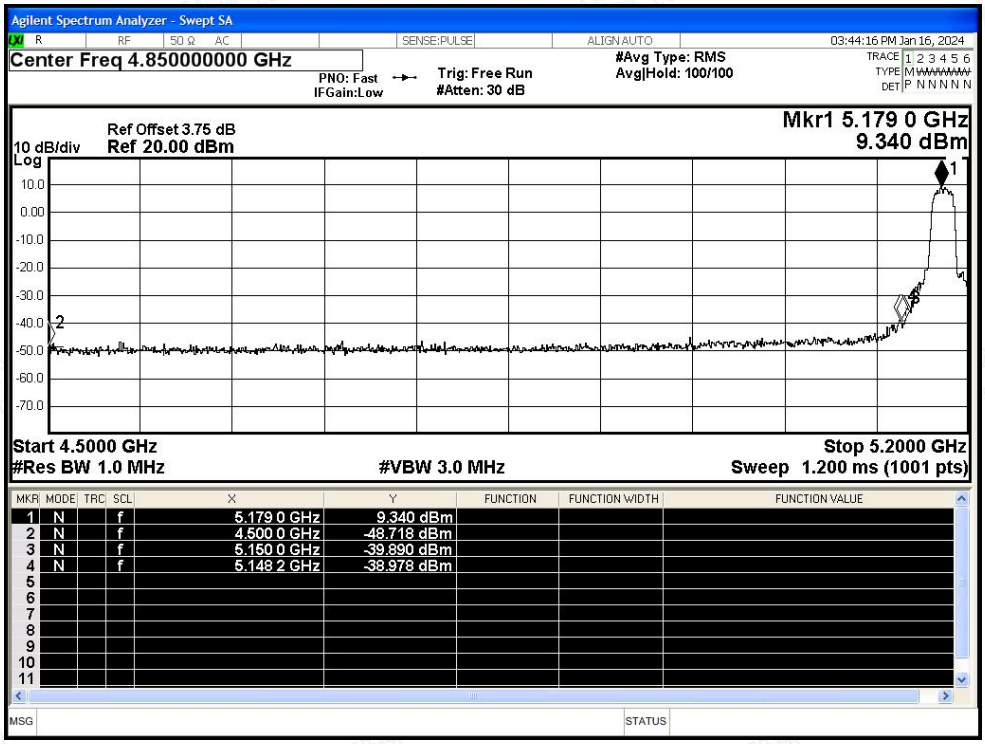
D.4 Restrict Band

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	-48.72	3.74	-	50.28	Peak	74	Pass
NVNT	a	5180	Ant1	4500	-58.35	3.74	0.13	40.65	Average	54	Pass
NVNT	a	5180	Ant1	5148.2	-38.98	3.74	-	60.02	Peak	74	Pass
NVNT	a	5180	Ant1	5148.9	-49.67	3.74	0.13	49.33	Average	54	Pass
NVNT	a	5180	Ant1	5150	-39.89	3.74	-	59.11	Peak	74	Pass
NVNT	a	5180	Ant1	5150	-49.06	3.74	0.13	49.94	Average	54	Pass
NVNT	a	5240	Ant1	5350	-47.74	3.74	-	51.26	Peak	74	Pass
NVNT	a	5240	Ant1	5350	-57.12	3.74	0.13	41.88	Average	54	Pass
NVNT	a	5240	Ant1	5365.44	-46.08	3.74	-	52.92	Peak	74	Pass
NVNT	a	5240	Ant1	5408.88	-56.5	3.74	0.13	42.50	Average	54	Pass
NVNT	a	5240	Ant1	5460	-49.48	3.74	-	49.52	Peak	74	Pass
NVNT	a	5240	Ant1	5460	-58.1	3.74	0.13	40.90	Average	54	Pass
NVNT	n20	5180	Ant1	4500	-49.97	3.74	-	49.03	Peak	74	Pass
NVNT	n20	5180	Ant1	4500	-58.27	3.74	0.15	40.73	Average	54	Pass
NVNT	n20	5180	Ant1	5147.5	-36.2	3.74	-	62.80	Peak	74	Pass
NVNT	n20	5180	Ant1	5149.6	-49.85	3.74	0.15	49.15	Average	54	Pass
NVNT	n20	5180	Ant1	5150	-34.49	3.74	-	64.51	Peak	74	Pass
NVNT	n20	5180	Ant1	5150	-49.6	3.74	0.15	49.40	Average	54	Pass
NVNT	n20	5240	Ant1	5350	-48.92	3.74	-	50.08	Peak	74	Pass
NVNT	n20	5240	Ant1	5350	-56.88	3.74	0.15	42.12	Average	54	Pass
NVNT	n20	5240	Ant1	5374.08	-46.4	3.74	-	52.60	Peak	74	Pass
NVNT	n20	5240	Ant1	5352.72	-56.1	3.74	0.15	42.90	Average	54	Pass
NVNT	n20	5240	Ant1	5460	-49.33	3.74	-	49.67	Peak	74	Pass
NVNT	n20	5240	Ant1	5460	-57.86	3.74	0.15	41.14	Average	54	Pass
NVNT	n40	5190	Ant1	4500	-49.49	3.74	-	49.51	Peak	74	Pass
NVNT	n40	5190	Ant1	4500	-58.28	3.74	0.29	40.72	Average	54	Pass
NVNT	n40	5190	Ant1	5149.7	-33.26	3.74	-	65.74	Peak	74	Pass
NVNT	n40	5190	Ant1	5149.7	-45.79	3.74	0.29	53.47	Average	54	Pass
NVNT	n40	5190	Ant1	5150	-33.26	3.74	-	65.74	Peak	74	Pass
NVNT	n40	5190	Ant1	5150	-45.79	3.74	0.29	53.47	Average	54	Pass
NVNT	n40	5230	Ant1	5350	-47.57	3.74	-	51.43	Peak	74	Pass
NVNT	n40	5230	Ant1	5350	-57.27	3.74	0.29	41.73	Average	54	Pass
NVNT	n40	5230	Ant1	5381.43	-46.77	3.74	-	52.23	Peak	74	Pass
NVNT	n40	5230	Ant1	5369.82	-56.28	3.74	0.29	42.72	Average	54	Pass
NVNT	n40	5230	Ant1	5460	-48.06	3.74	-	50.94	Peak	74	Pass
NVNT	n40	5230	Ant1	5460	-58.44	3.74	0.29	40.56	Average	54	Pass

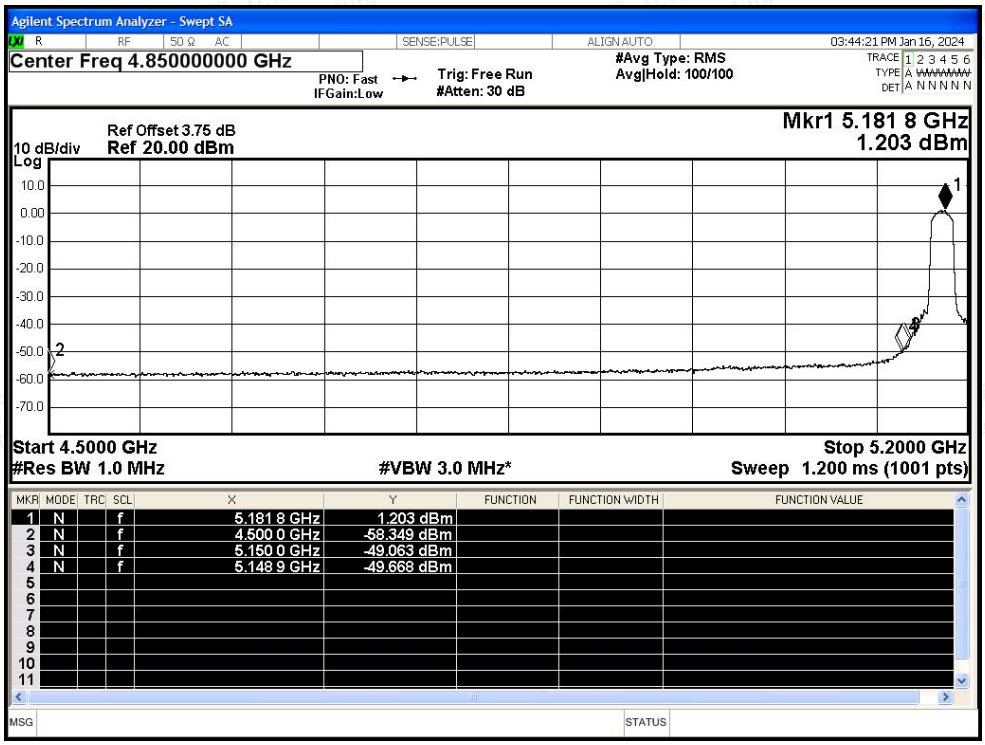
NVNT	ac20	5180	Ant1	4500	-50.07	3.74	-	48.93	Peak	74	Pass
NVNT	ac20	5180	Ant1	4500	-59.03	3.74	0.15	39.97	Average	54	Pass
NVNT	ac20	5180	Ant1	5148.9	-35.23	3.74	-	63.77	Peak	74	Pass
NVNT	ac20	5180	Ant1	5149.6	-48.74	3.74	0.15	50.26	Average	54	Pass
NVNT	ac20	5180	Ant1	5150	-37.3	3.74	-	61.70	Peak	74	Pass
NVNT	ac20	5180	Ant1	5150	-48.88	3.74	0.15	50.12	Average	54	Pass
NVNT	ac20	5240	Ant1	5350	-48.04	3.74	-	50.96	Peak	74	Pass
NVNT	ac20	5240	Ant1	5350	-56.56	3.74	0.15	42.44	Average	54	Pass
NVNT	ac20	5240	Ant1	5370.96	-46.12	3.74	-	52.88	Peak	74	Pass
NVNT	ac20	5240	Ant1	5355.12	-56.08	3.74	0.15	42.92	Average	54	Pass
NVNT	ac20	5240	Ant1	5460	-49.67	3.74	-	49.33	Peak	74	Pass
NVNT	ac20	5240	Ant1	5460	-57.75	3.74	0.15	41.25	Average	54	Pass
NVNT	ac40	5190	Ant1	4500	-49.81	3.74	-	49.19	Peak	74	Pass
NVNT	ac40	5190	Ant1	4500	-58.89	3.74	0.28	40.11	Average	54	Pass
NVNT	ac40	5190	Ant1	5149.7	-33.43	3.74	-	65.57	Peak	74	Pass
NVNT	ac40	5190	Ant1	5149.7	-45.6	3.74	0.28	53.40	Average	54	Pass
NVNT	ac40	5190	Ant1	5150	-33.43	3.74	-	65.57	Peak	74	Pass
NVNT	ac40	5190	Ant1	5150	-45.6	3.74	0.28	53.40	Average	54	Pass
NVNT	ac40	5230	Ant1	5350	-47.45	3.74	-	51.55	Peak	74	Pass
NVNT	ac40	5230	Ant1	5350	-56.93	3.74	0.28	42.07	Average	54	Pass
NVNT	ac40	5230	Ant1	5382.24	-46.68	3.74	-	52.32	Peak	74	Pass
NVNT	ac40	5230	Ant1	5366.58	-56.26	3.74	0.28	42.74	Average	54	Pass
NVNT	ac40	5230	Ant1	5460	-48.09	3.74	-	50.91	Peak	74	Pass
NVNT	ac40	5230	Ant1	5460	-58.14	3.74	0.28	40.86	Average	54	Pass
NVNT	ac80	5210	Ant1	5350	-48.71	3.74	-	50.29	Peak	74	Pass
NVNT	ac80	5210	Ant1	5350	-56.78	3.74	0.55	42.22	Average	54	Pass
NVNT	ac80	5210	Ant1	5454.39	-46.14	3.74	-	52.86	Peak	74	Pass
NVNT	ac80	5210	Ant1	5352.75	-56.1	3.74	0.55	42.90	Average	54	Pass
NVNT	ac80	5210	Ant1	5460	-48.81	3.74	-	50.19	Peak	74	Pass
NVNT	ac80	5210	Ant1	5460	-57.26	3.74	0.55	41.74	Average	54	Pass
NVNT	ac80	5210	Ant1	4500	-48.02	3.74	-	50.98	Peak	74	Pass
NVNT	ac80	5210	Ant1	4500	-58.4	3.74	0.55	40.60	Average	54	Pass
NVNT	ac80	5210	Ant1	5148.59	-36.68	3.74	-	62.32	Peak	74	Pass
NVNT	ac80	5210	Ant1	5148.59	-48.52	3.74	0.55	50.48	Average	54	Pass
NVNT	ac80	5210	Ant1	5150	-38	3.74	-	61.00	Peak	74	Pass
NVNT	ac80	5210	Ant1	5150	-47.82	3.74	0.55	51.18	Average	54	Pass

Test Graphs

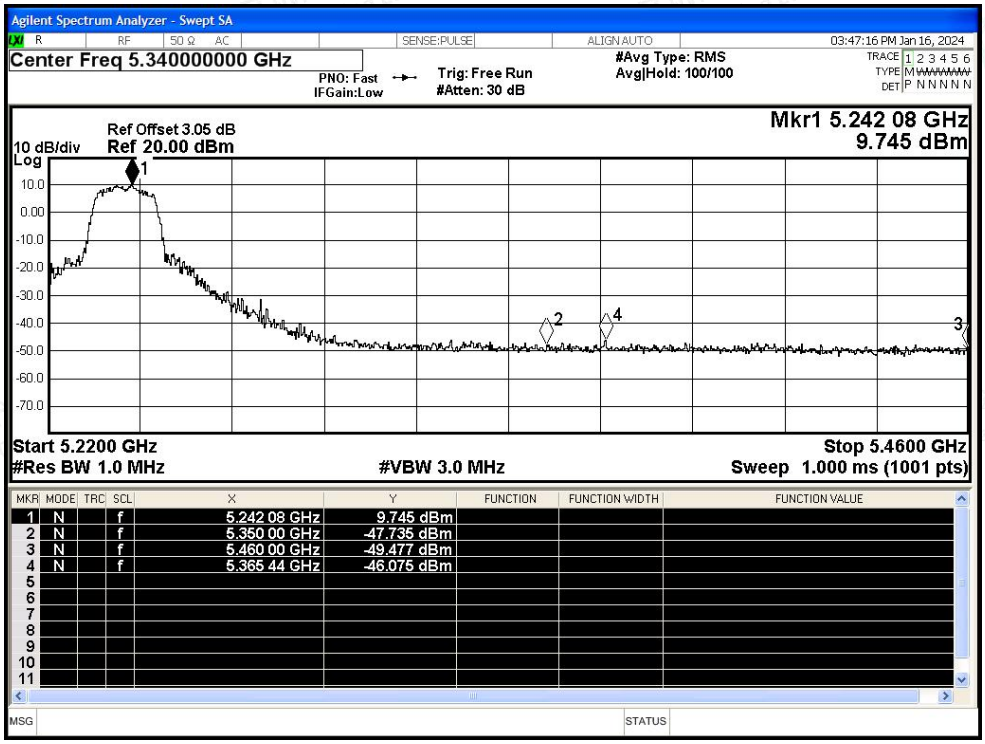
Restrict Band NVNT a 5180MHz Ant1 Peak



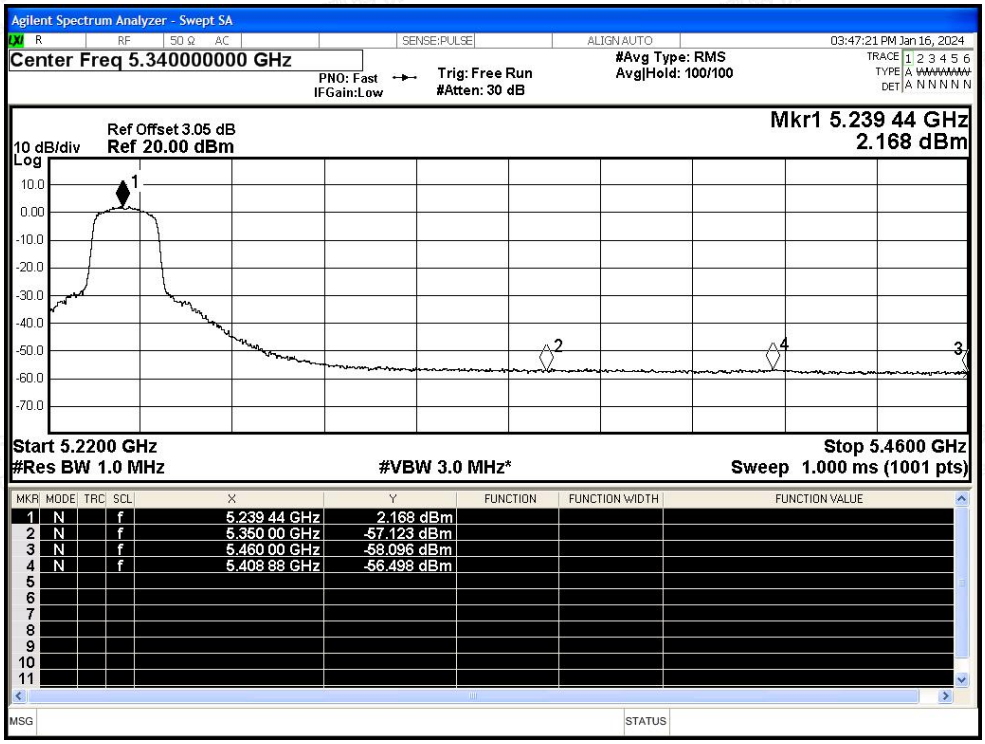
Restrict Band NVNT a 5180MHz Ant1 Average



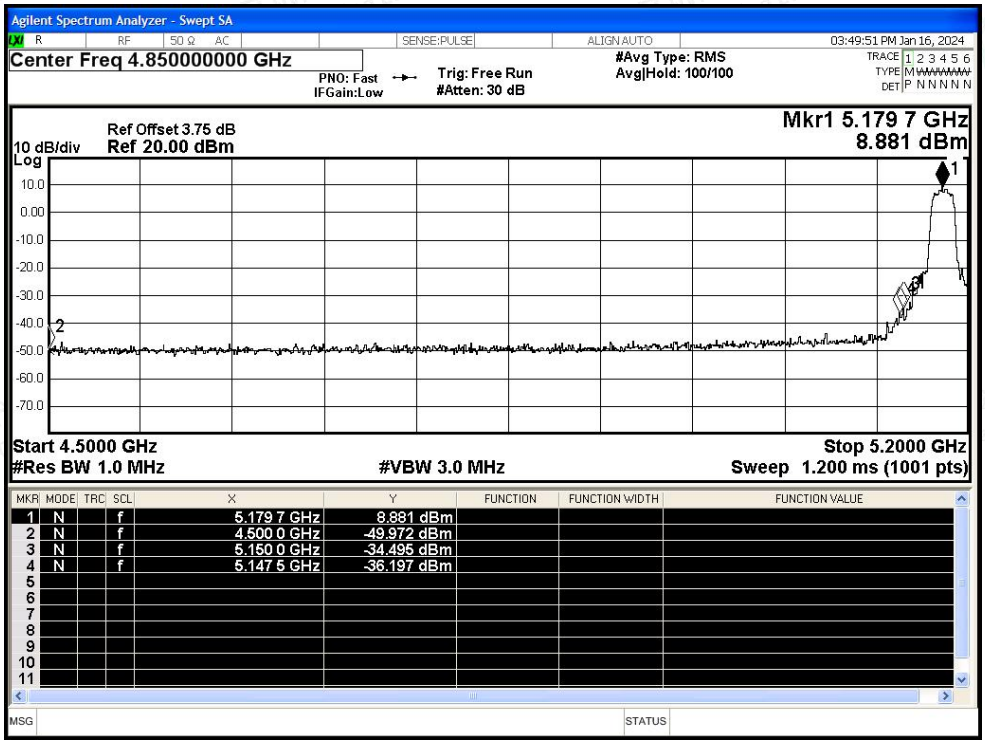
Restrict Band NVNT a 5240MHz Ant1 Peak



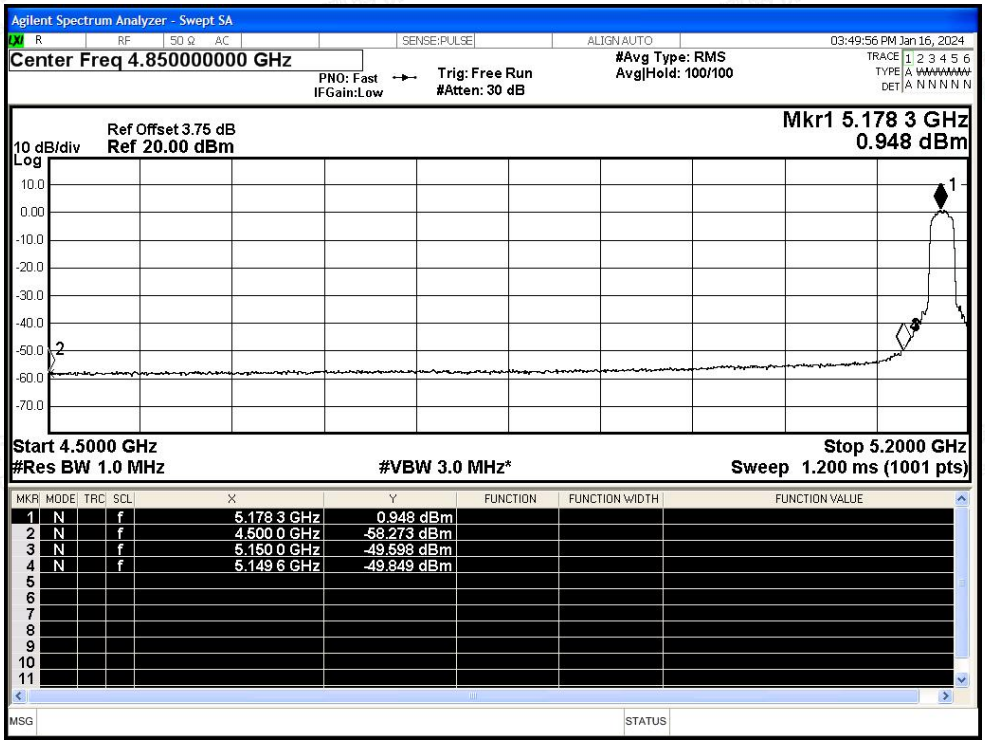
Restrict Band NVNT a 5240MHz Ant1 Average



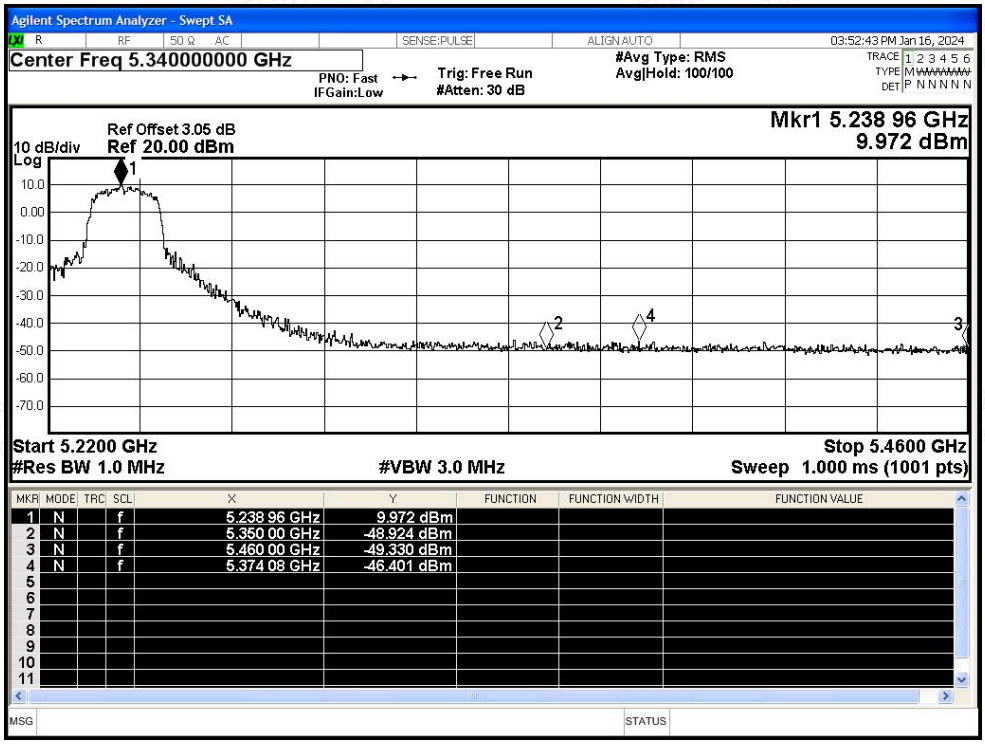
Restrict Band NVNT n20 5180MHz Ant1 Peak



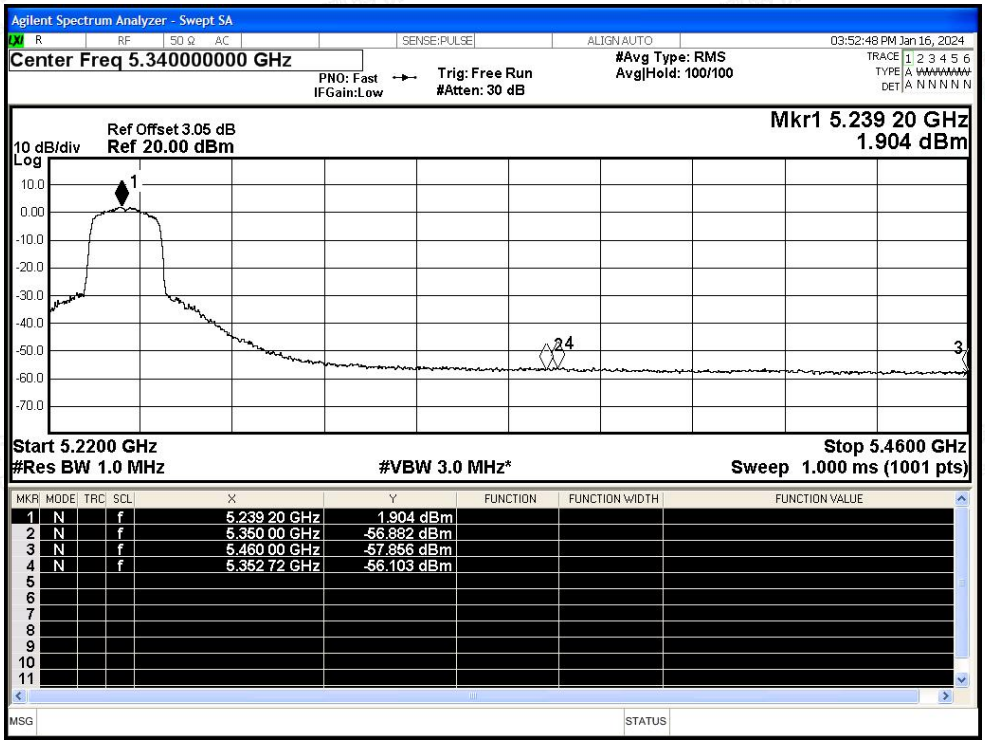
Restrict Band NVNT n20 5180MHz Ant1 Average



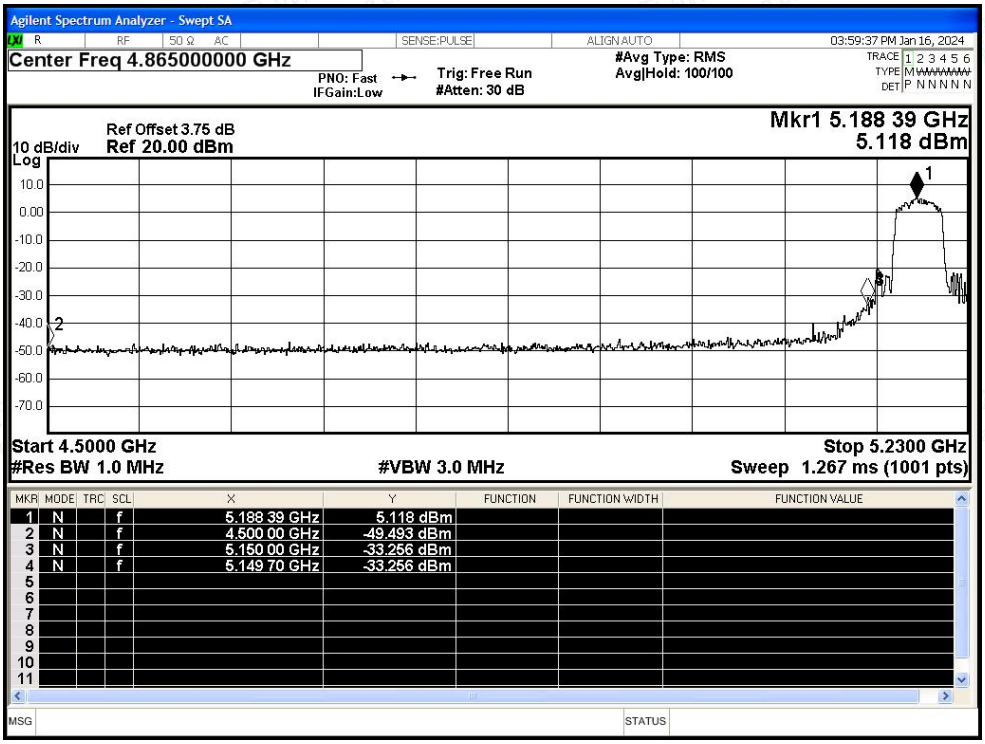
Restrict Band NVNT n20 5240MHz Ant1 Peak



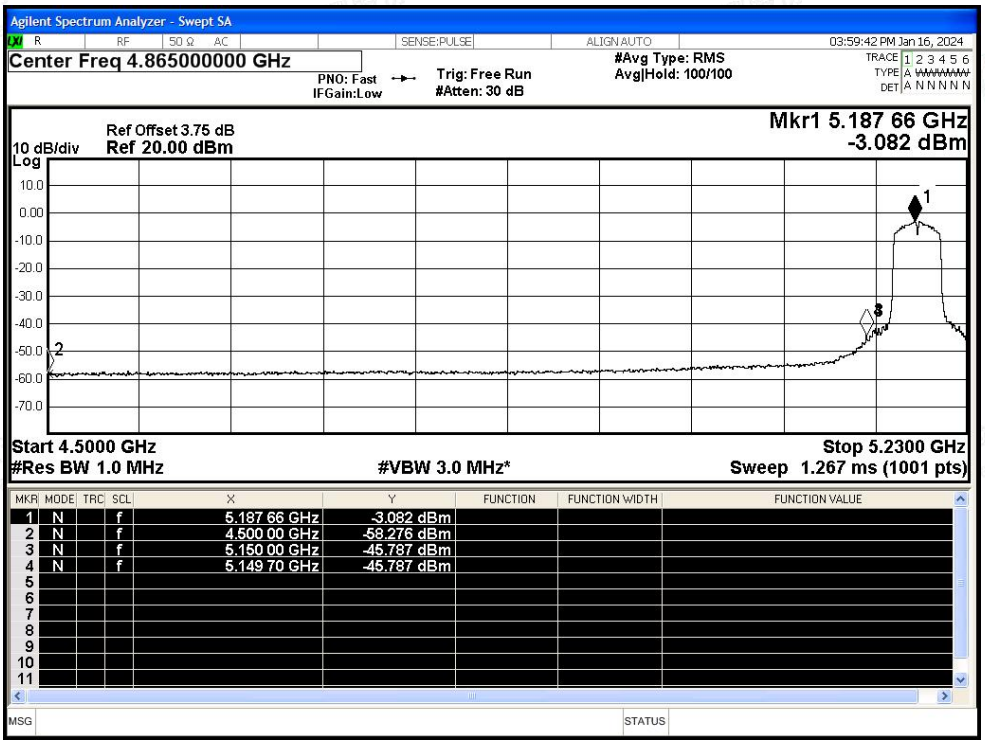
Restrict Band NVNT n20 5240MHz Ant1 Average



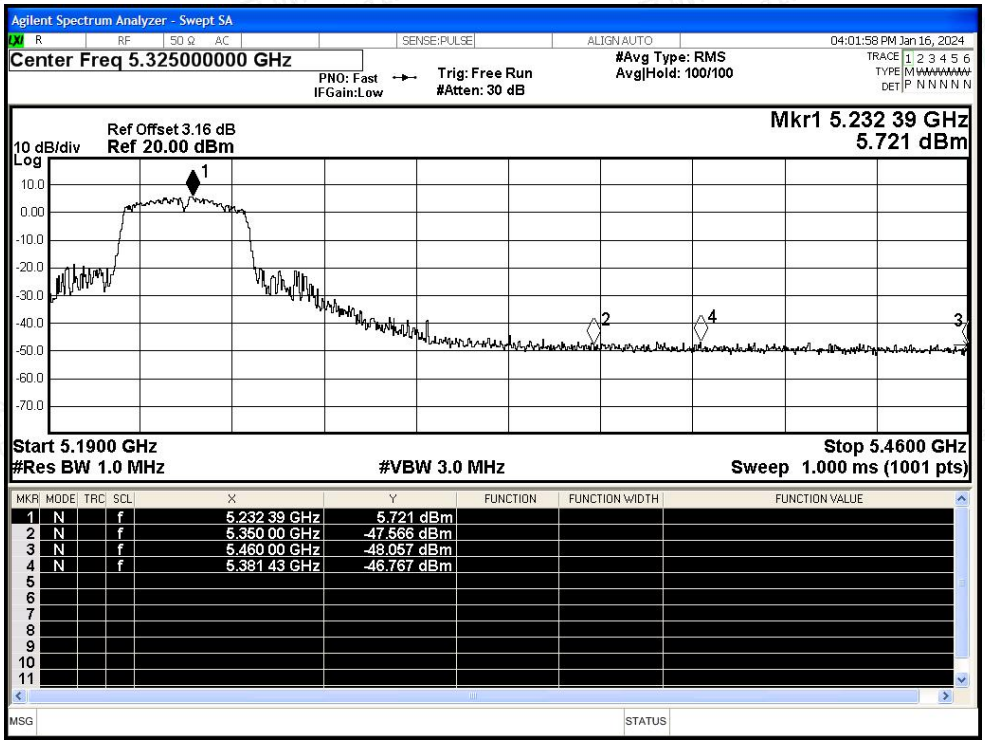
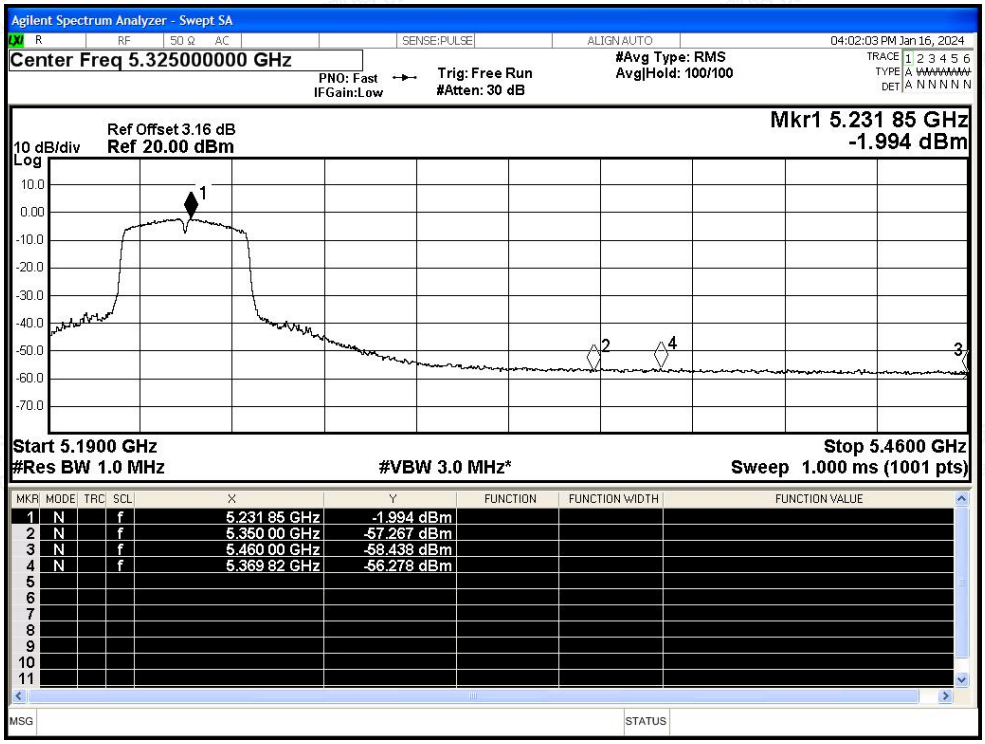
Restrict Band NVNT n40 5190MHz Ant1 Peak



Restrict Band NVNT n40 5190MHz Ant1 Average



Restrict Band NVNT n40 5230MHz Ant1 Peak



Restrict Band NVNT n40 5230MHz Ant1 Average