Appendix D

RF Test Data for 5.3GWIFI (Conducted Measurement)

Product Name: Wali Smart Pet Feeder With AI Camera

Test Model: P-LFP01

Environmental Conditions

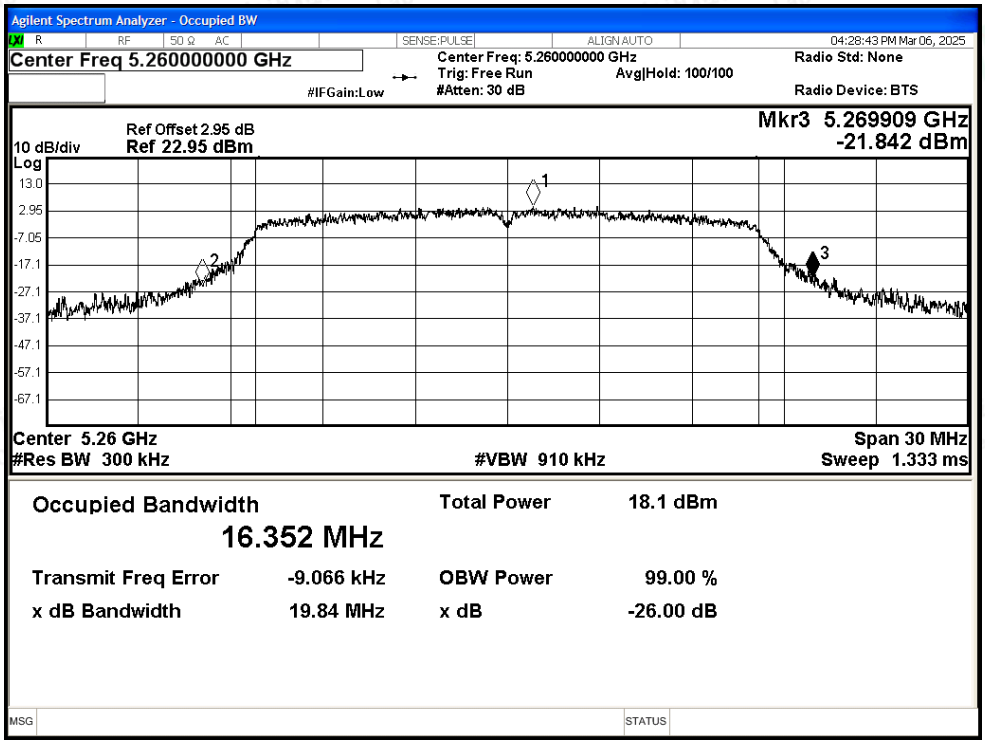
Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Paddi Chen
Supervised by:	Nick Peng

D.1 -26dB Bandwidth

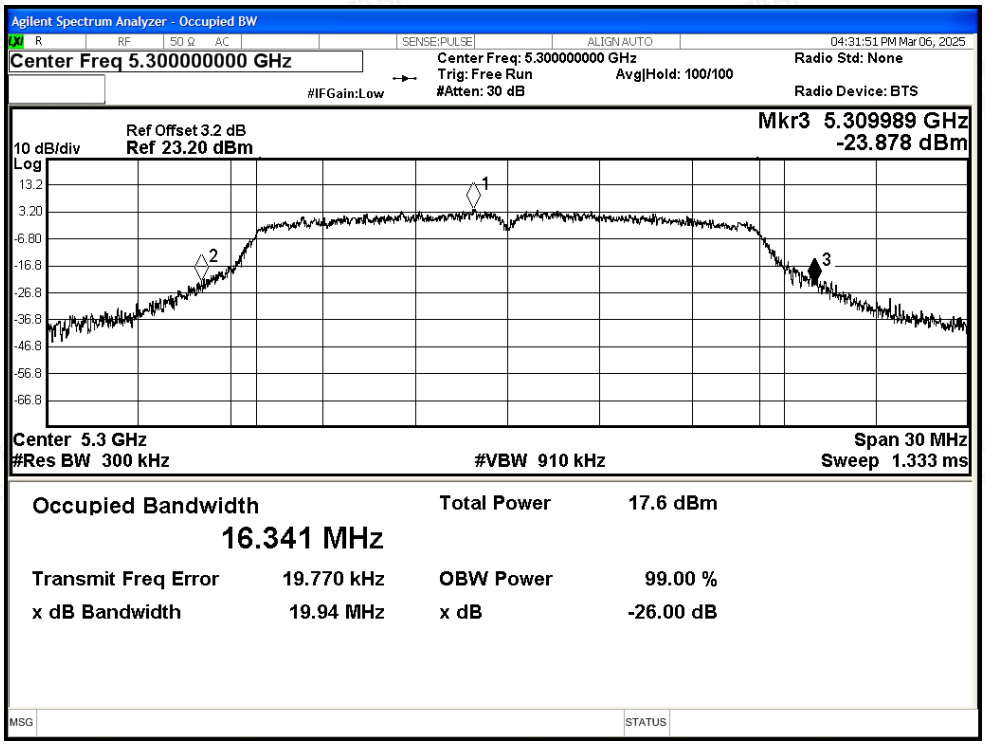
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5260	Ant1	19.836	---	Pass
NVNT	a	5300	Ant1	19.939	---	Pass
NVNT	a	5320	Ant1	20.029	---	Pass
NVNT	n20	5260	Ant1	21.092	---	Pass
NVNT	n20	5300	Ant1	21.032	---	Pass
NVNT	n20	5320	Ant1	21.032	---	Pass

Test Graphs

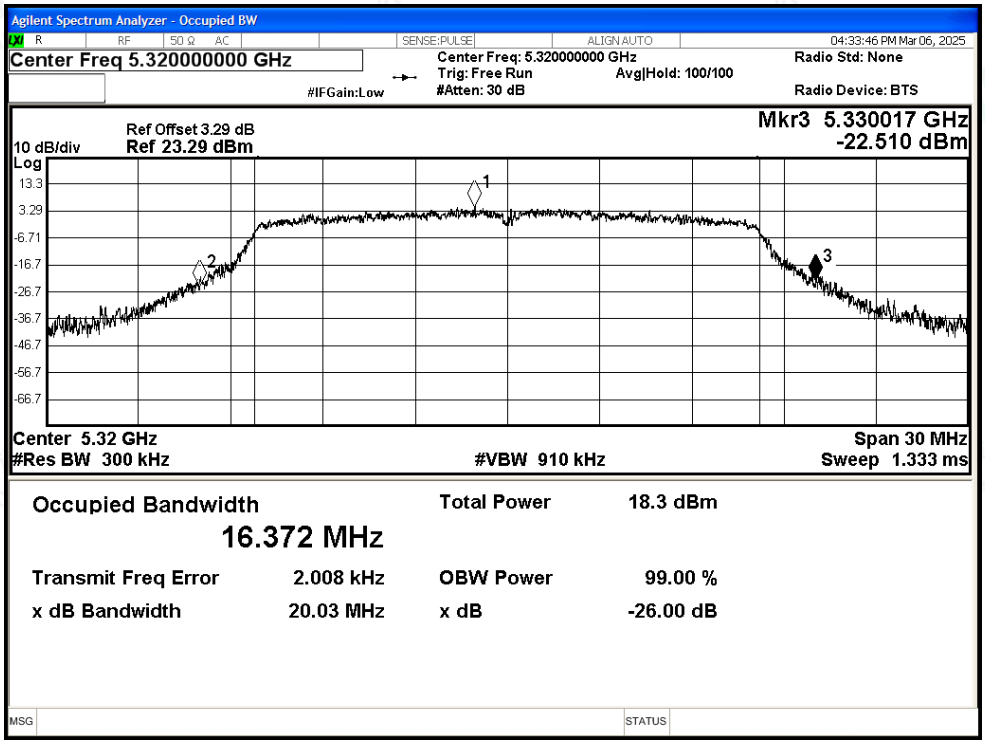
-26dB Bandwidth NVNT a 5260MHz Ant1



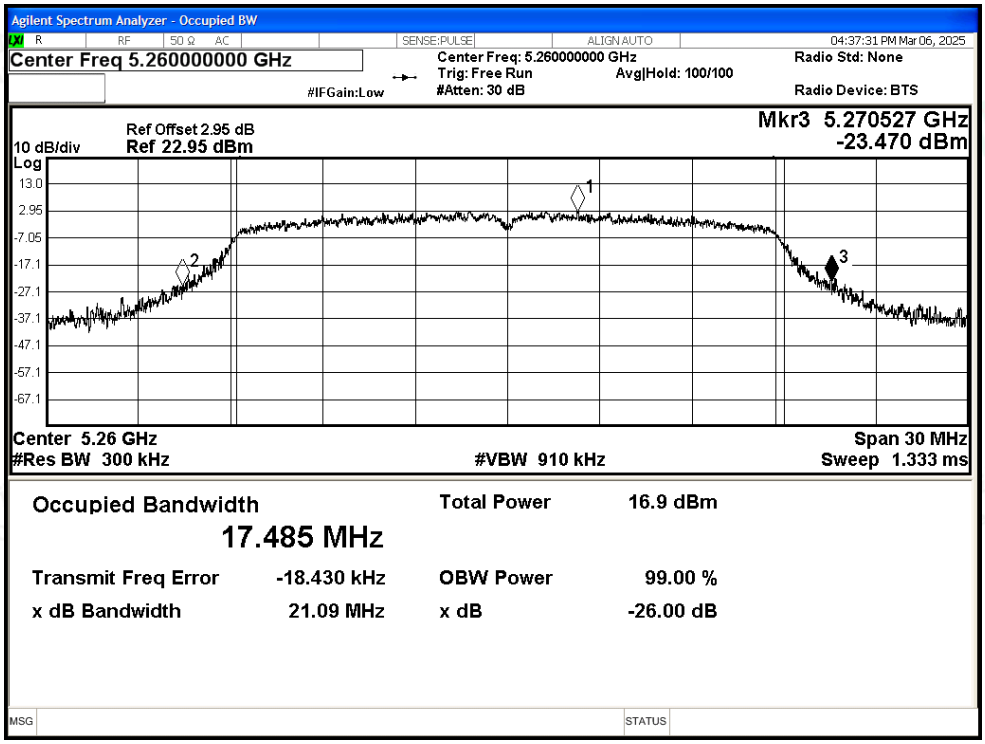
-26dB Bandwidth NVNT a 5300MHz Ant1



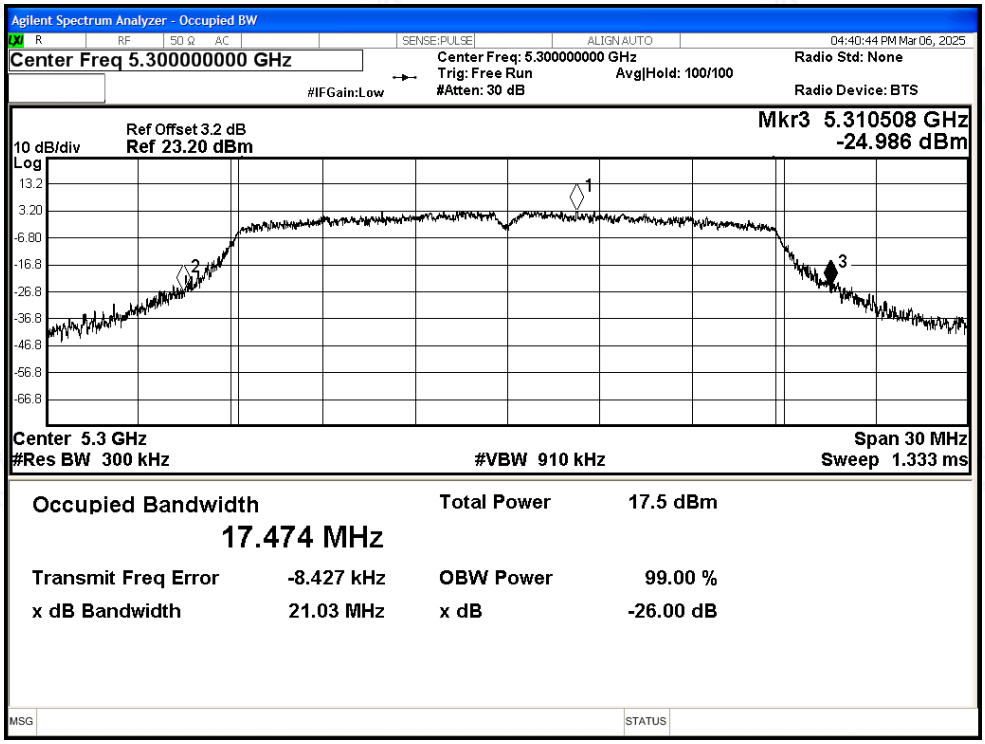
-26dB Bandwidth NVNT a 5320MHz Ant1



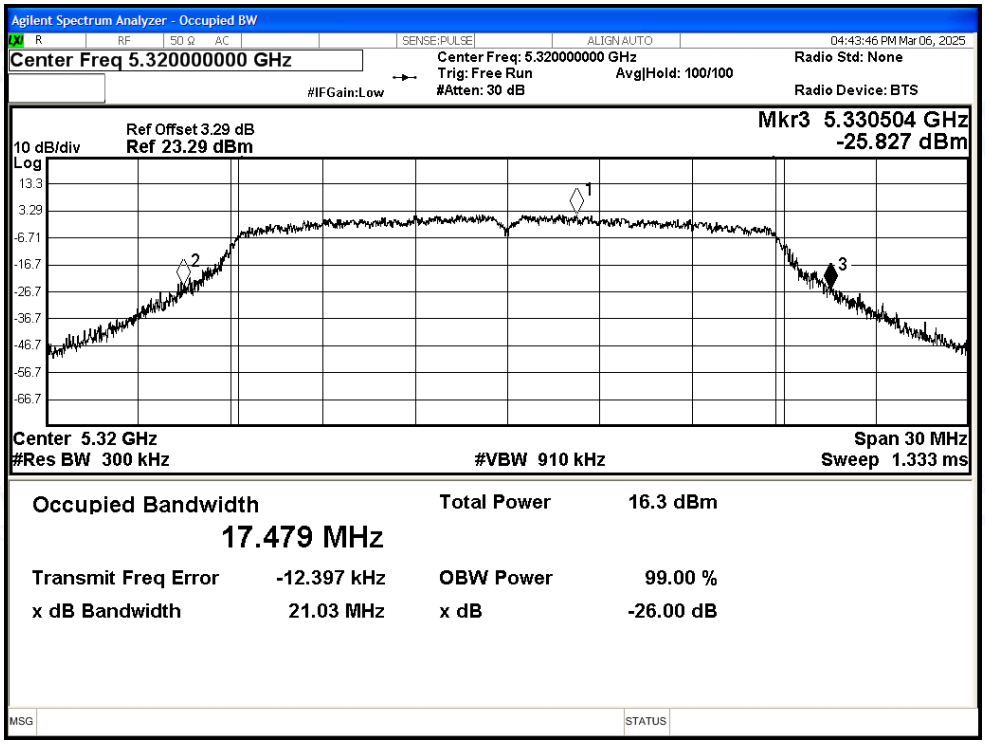
-26dB Bandwidth NVNT n20 5260MHz Ant1



-26dB Bandwidth NVNT n20 5300MHz Ant1



-26dB Bandwidth NVNT n20 5320MHz Ant1



D.2 Maximum Conducted Output Power

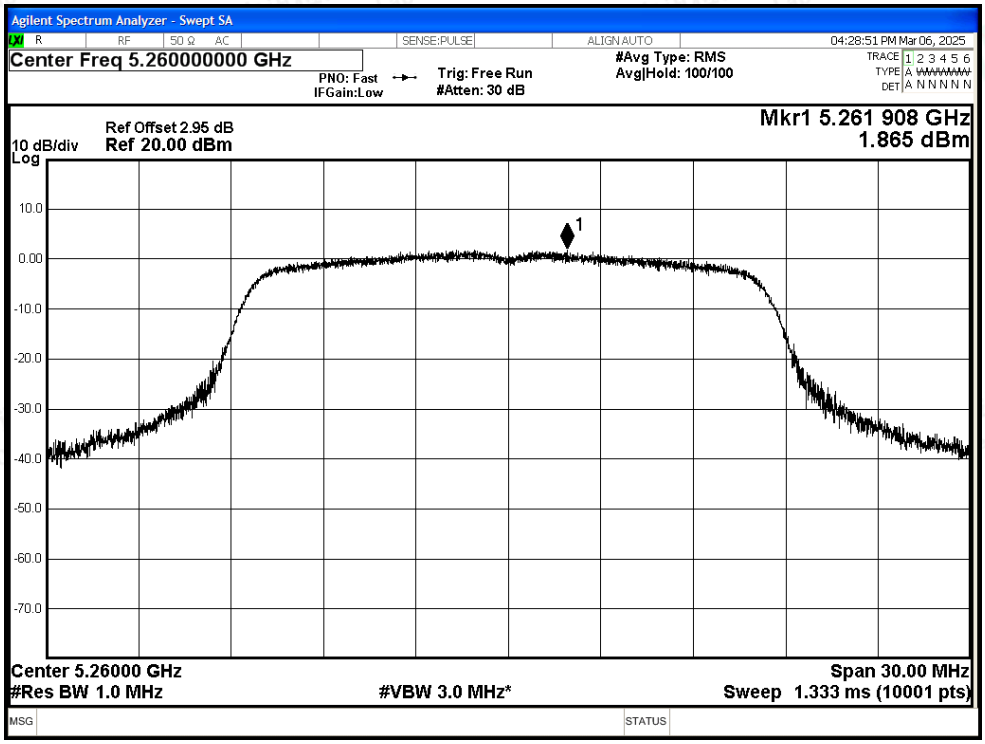
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	11.61	0.96	12.57	24	Pass
NVNT	a	5300	Ant1	11.68	0.96	12.64	24	Pass
NVNT	a	5320	Ant1	12.21	0.96	**13.17**	24	Pass
NVNT	n20	5260	Ant1	10.48	1.02	11.5	24	Pass
NVNT	n20	5300	Ant1	10.83	1.02	11.85	24	Pass
NVNT	n20	5320	Ant1	9.88	1.02	10.9	24	Pass

D.3 Maximum Power Spectral Density Level

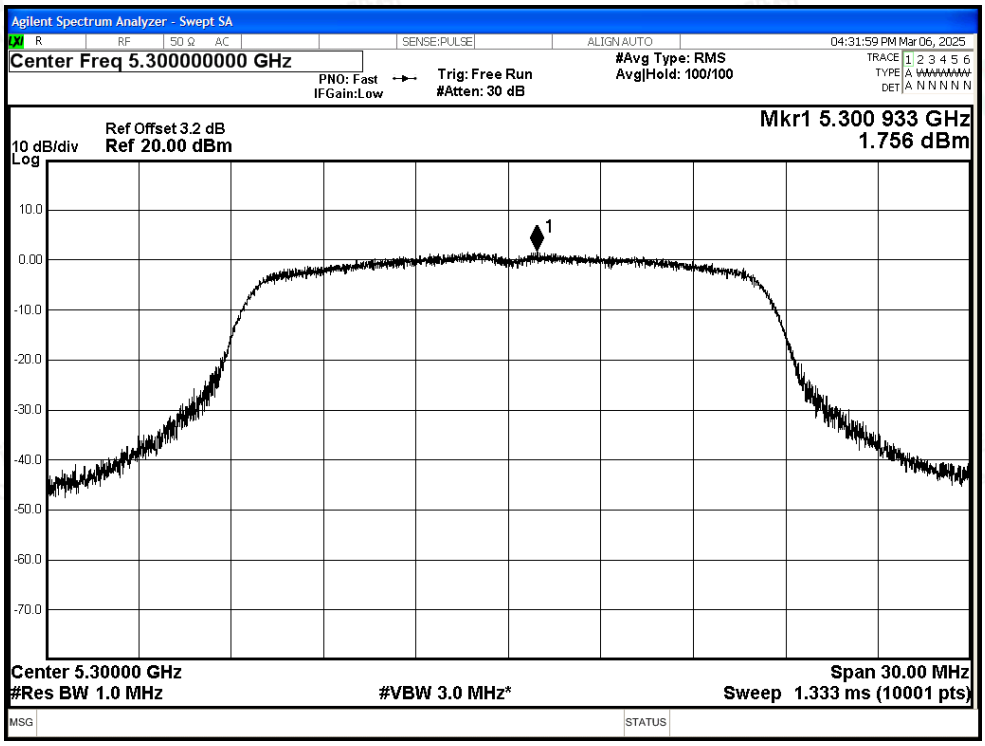
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5260	Ant1	1.87	0.96	2.83	11	Pass
NVNT	a	5300	Ant1	1.76	0.96	2.72	11	Pass
NVNT	a	5320	Ant1	2.5	0.96	3.46	11	Pass
NVNT	n20	5260	Ant1	0.56	1.02	1.58	11	Pass
NVNT	n20	5300	Ant1	1.62	1.02	2.64	11	Pass
NVNT	n20	5320	Ant1	0.41	1.02	1.43	11	Pass

Test Graphs

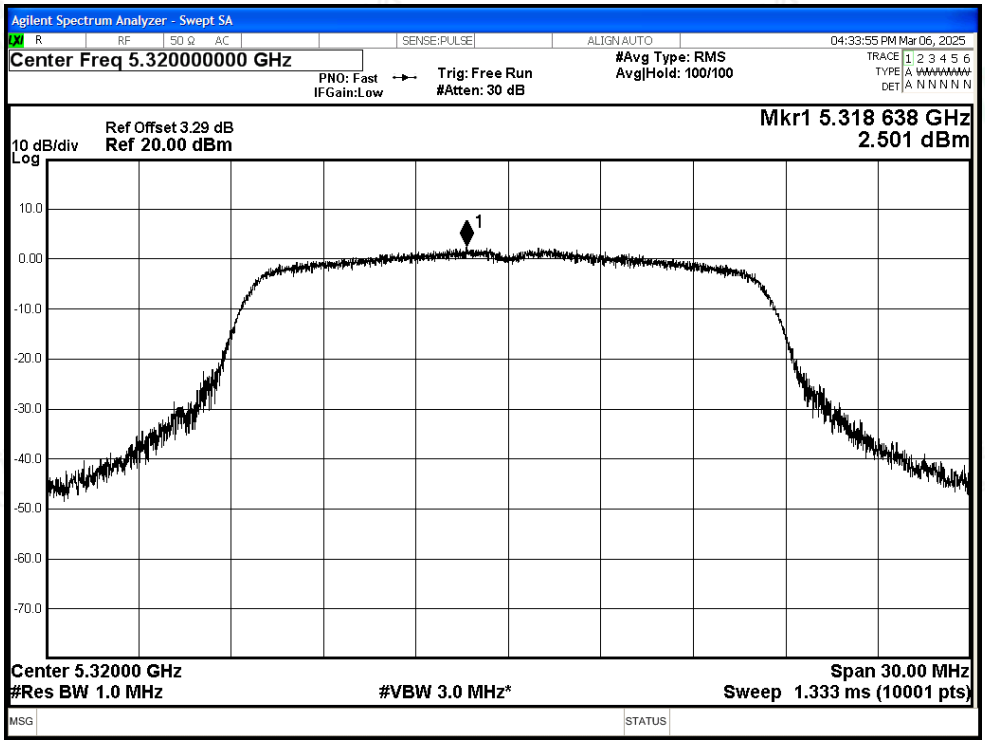
PSD NVNT a 5260MHz Ant1



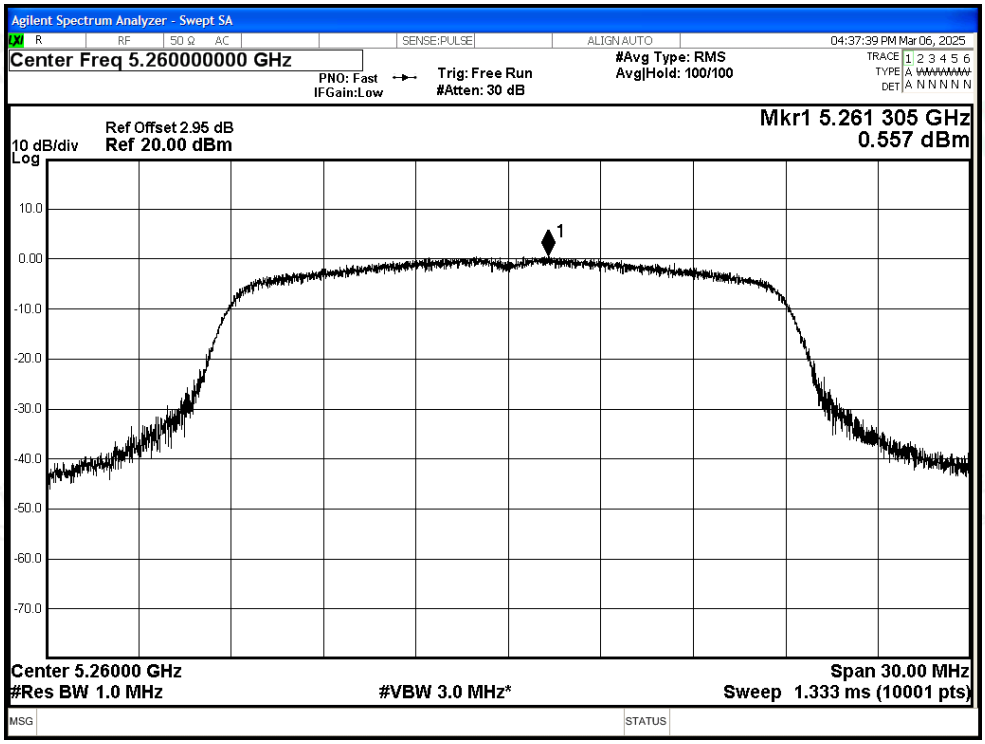
PSD NVNT a 5300MHz Ant1



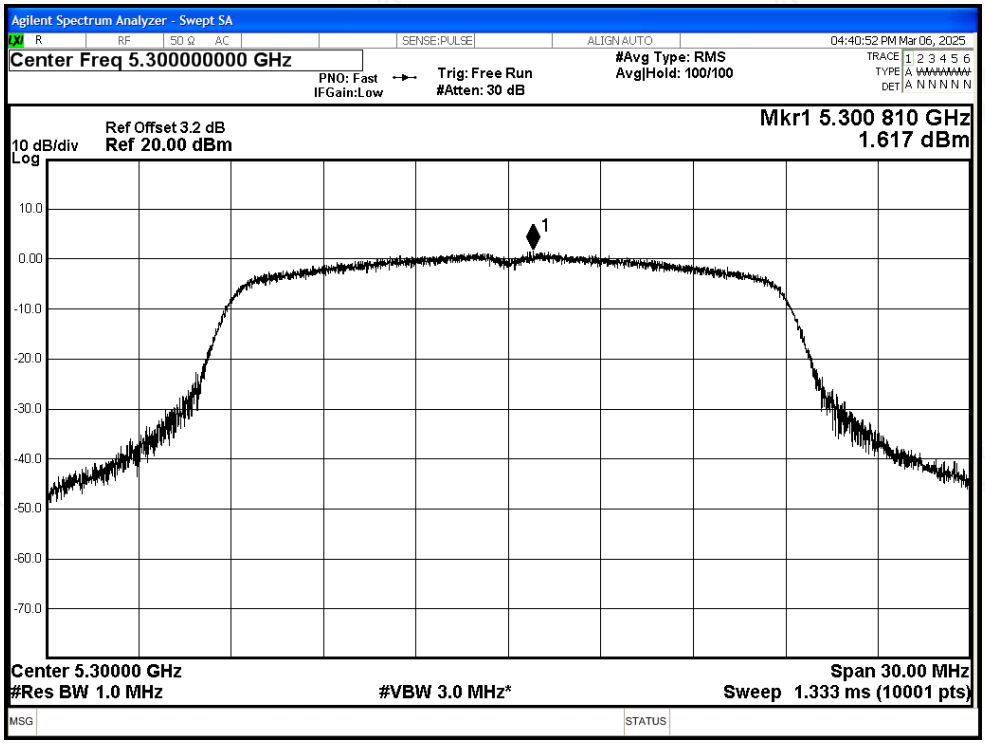
PSD NVNT a 5320MHz Ant1



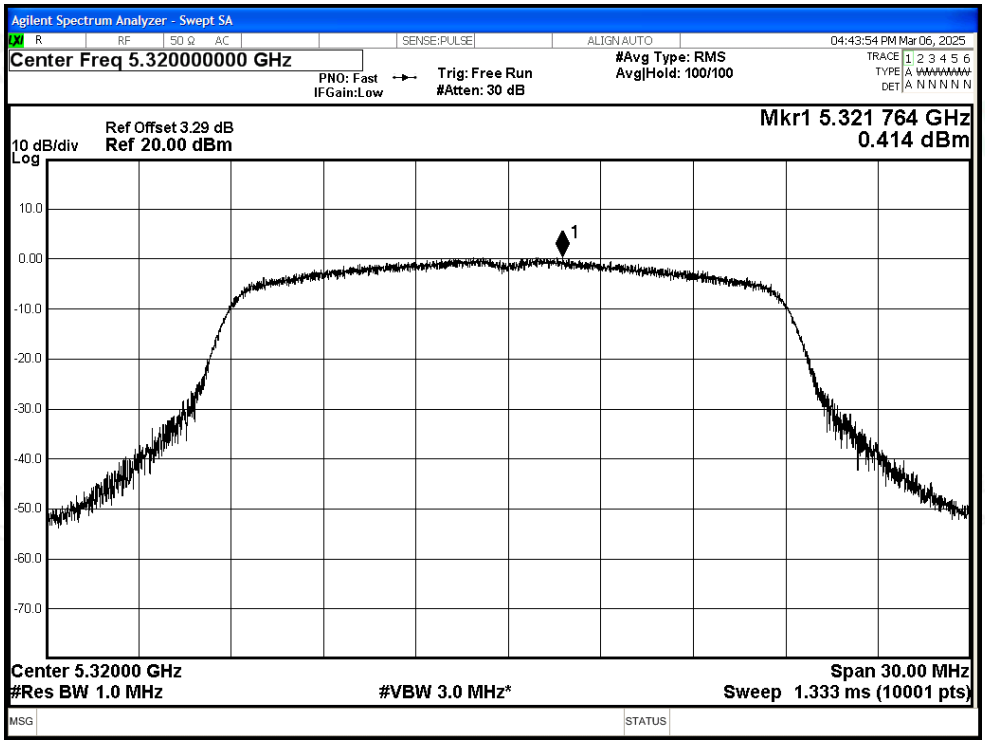
PSD NVNT n20 5260MHz Ant1



PSD NVNT n20 5300MHz Ant1



PSD NVNT n20 5320MHz Ant1

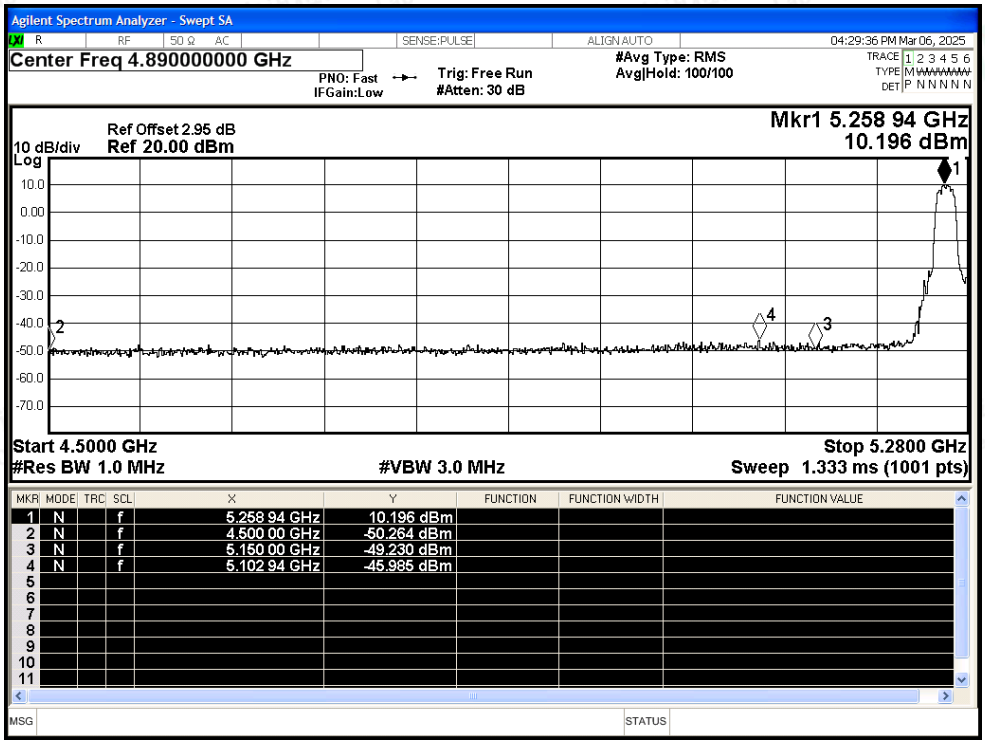


D.4 Restrict Band

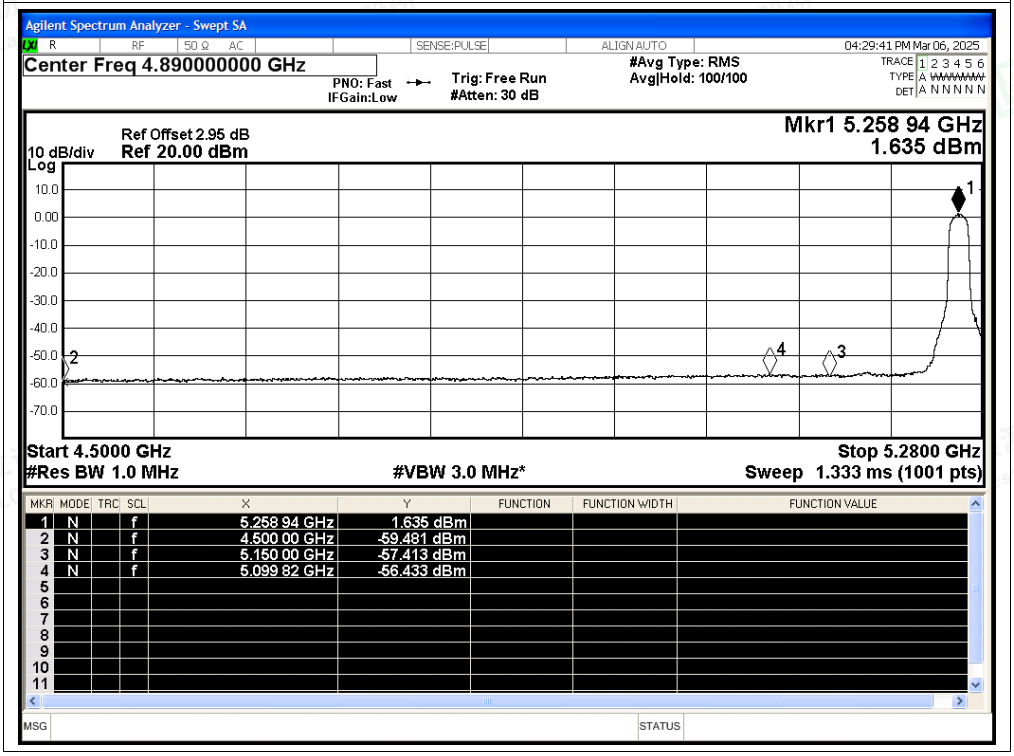
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	a	5260	Ant1	4500	-50.26	5.26	-	50.23	Peak	68.2	Pass
NVNT	a	5260	Ant1	4500	-59.48	5.26	0.96	41.97	Average	54	Pass
NVNT	a	5260	Ant1	5102.94	-45.99	5.26	-	54.5	Peak	68.2	Pass
NVNT	a	5260	Ant1	5099.82	-56.43	5.26	0.96	45.02	Average	54	Pass
NVNT	a	5260	Ant1	5150	-49.23	5.26	-	51.26	Peak	68.2	Pass
NVNT	a	5260	Ant1	5150	-57.41	5.26	0.96	44.04	Average	54	Pass
NVNT	a	5320	Ant1	5350	-48.62	5.26	-	51.87	Peak	68.2	Pass
NVNT	a	5320	Ant1	5350	-56.49	5.26	0.96	44.96	Average	54	Pass
NVNT	a	5320	Ant1	5365.6	-45.91	5.26	-	54.58	Peak	68.2	Pass
NVNT	a	5320	Ant1	5363.2	-55.64	5.26	0.96	45.81	Average	54	Pass
NVNT	a	5320	Ant1	5460	-49.32	5.26	-	51.17	Peak	68.2	Pass
NVNT	a	5320	Ant1	5460	-58.07	5.26	0.96	43.38	Average	54	Pass
NVNT	n20	5260	Ant1	4500	-49.84	5.26	-	50.65	Peak	68.2	Pass
NVNT	n20	5260	Ant1	4500	-59.29	5.26	1.02	42.22	Average	54	Pass
NVNT	n20	5260	Ant1	4999.2	-46.76	5.26	-	53.73	Peak	68.2	Pass
NVNT	n20	5260	Ant1	5089.68	-56.36	5.26	1.02	45.15	Average	54	Pass
NVNT	n20	5260	Ant1	5150	-48.67	5.26	-	51.82	Peak	68.2	Pass
NVNT	n20	5260	Ant1	5150	-57.25	5.26	1.02	44.26	Average	54	Pass
NVNT	n20	5320	Ant1	5350	-48.65	5.26	-	51.84	Peak	68.2	Pass
NVNT	n20	5320	Ant1	5350	-56.75	5.26	1.02	44.76	Average	54	Pass
NVNT	n20	5320	Ant1	5375	-45.5	5.26	-	54.99	Peak	68.2	Pass
NVNT	n20	5320	Ant1	5360.8	-55.79	5.26	1.02	45.72	Average	54	Pass
NVNT	n20	5320	Ant1	5460	-49.48	5.26	-	51.01	Peak	68.2	Pass
NVNT	n20	5320	Ant1	5460	-57.54	5.26	1.02	43.97	Average	54	Pass

Test Graphs

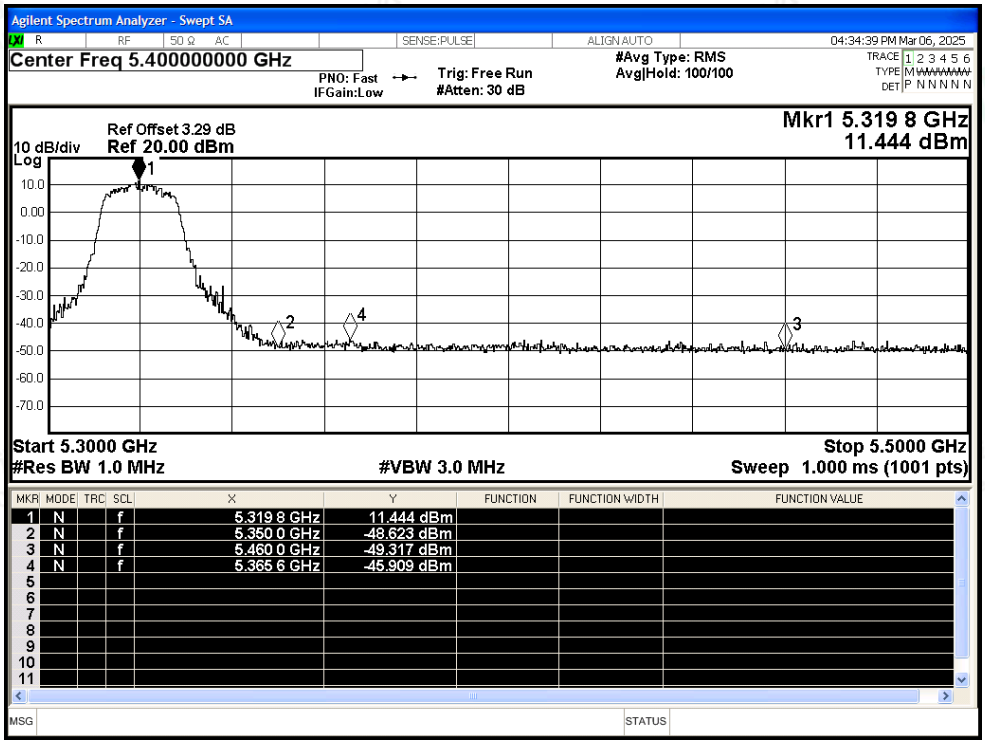
Restrict Band NVNT a 5260MHz Ant1 Peak



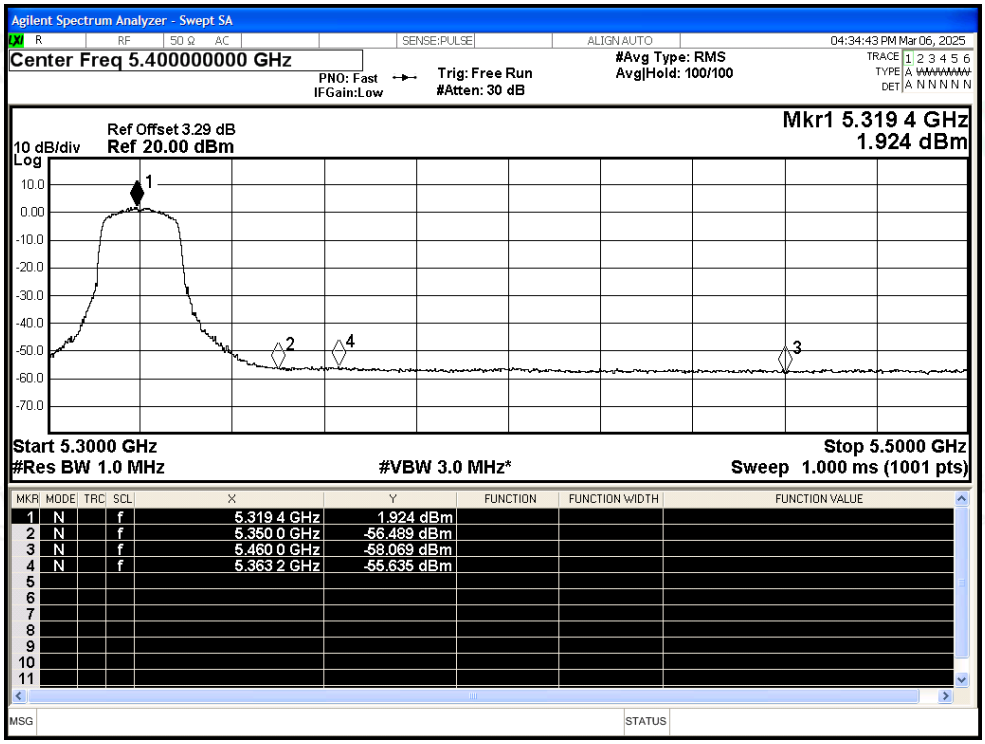
Restrict Band NVNT a 5260MHz Ant1 Average



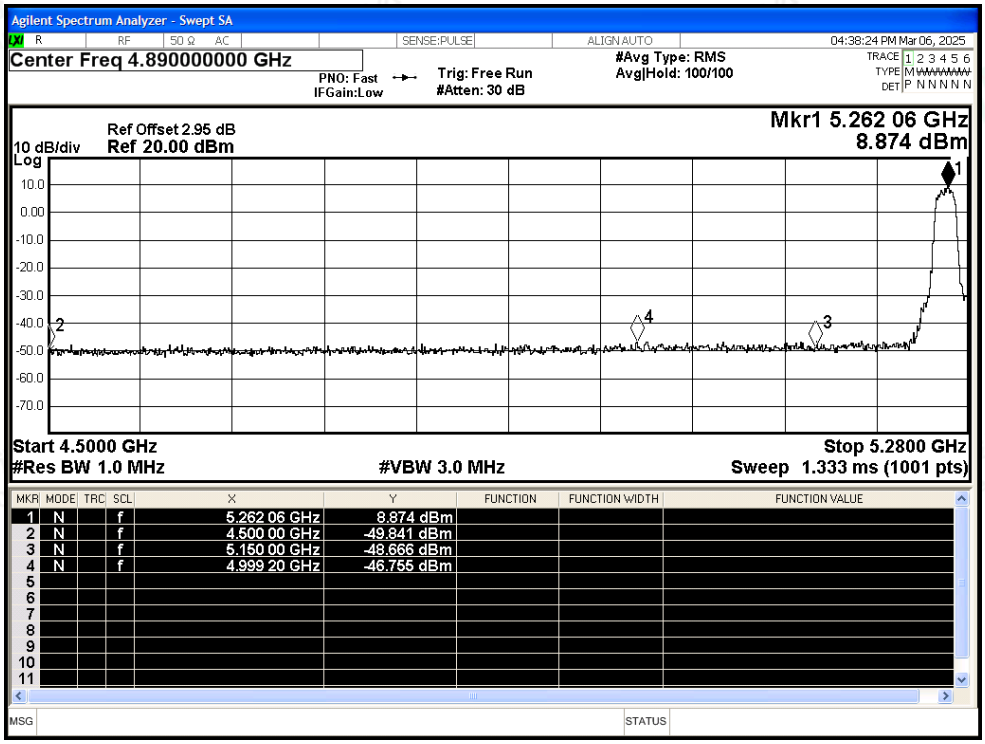
Restrict Band NVNT a 5320MHz Ant1 Peak



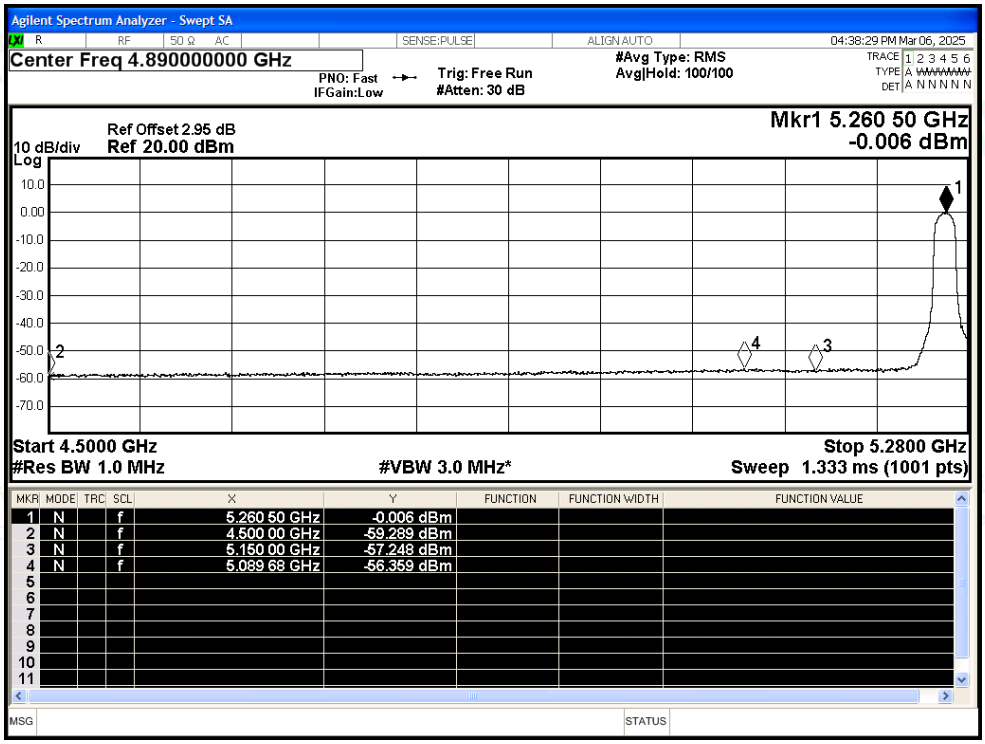
Restrict Band NVNT a 5320MHz Ant1 Average



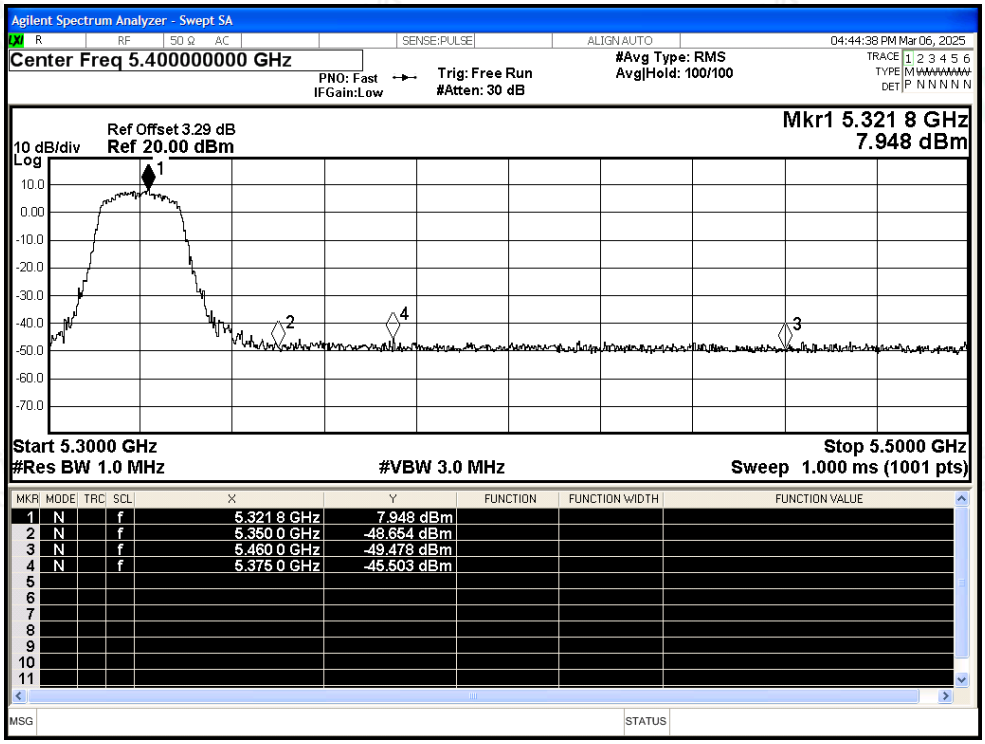
Restrict Band NVNT n20 5260MHz Ant1 Peak



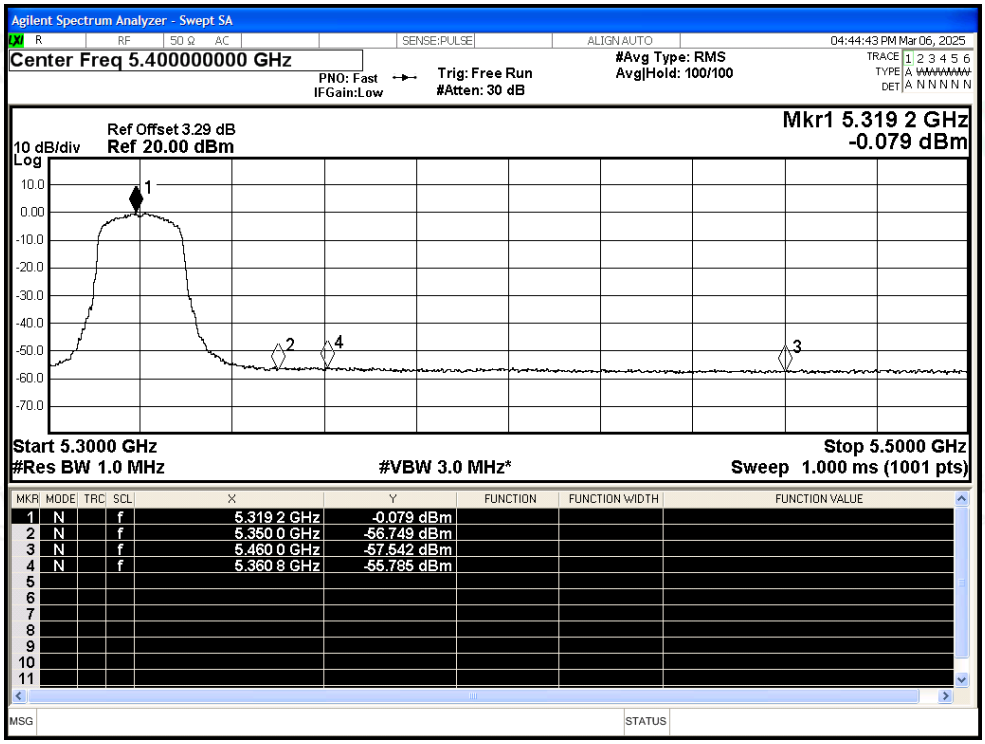
Restrict Band NVNT n20 5260MHz Ant1 Average



Restrict Band NVNT n20 5320MHz Ant1 Peak



Restrict Band NVNT n20 5320MHz Ant1 Average

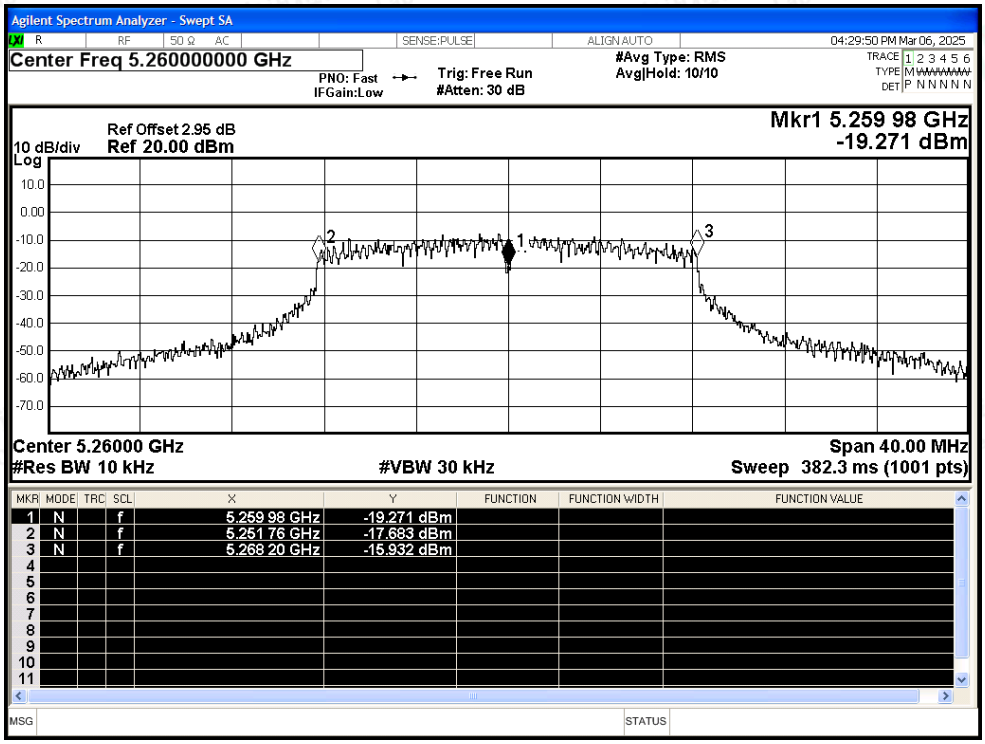


D.5 Frequency Stability

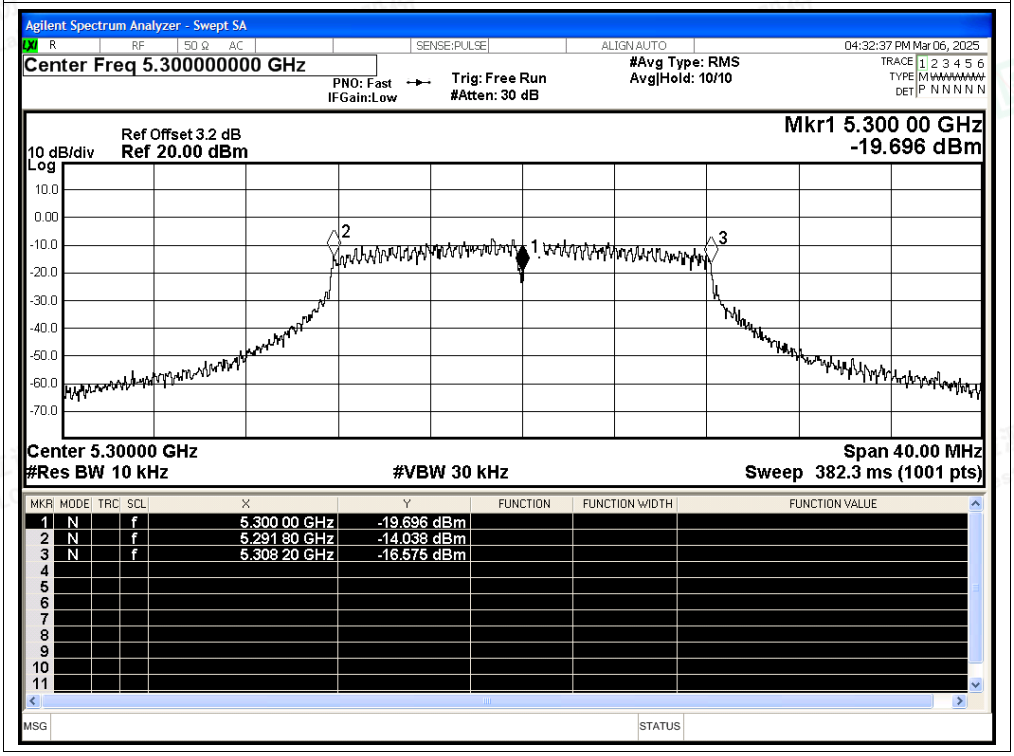
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	a	5260	Ant1	5259.98	-20000	-3.8	25	Pass
NVNT	a	5300	Ant1	5300	0	0	25	Pass
NVNT	a	5320	Ant1	5319.96	-40000	-7.52	25	Pass
NVNT	n20	5260	Ant1	5260	0	0	25	Pass
NVNT	n20	5300	Ant1	5299.96	-40000	-7.55	25	Pass
NVNT	n20	5320	Ant1	5319.96	-40000	-7.52	25	Pass

Test Graphs

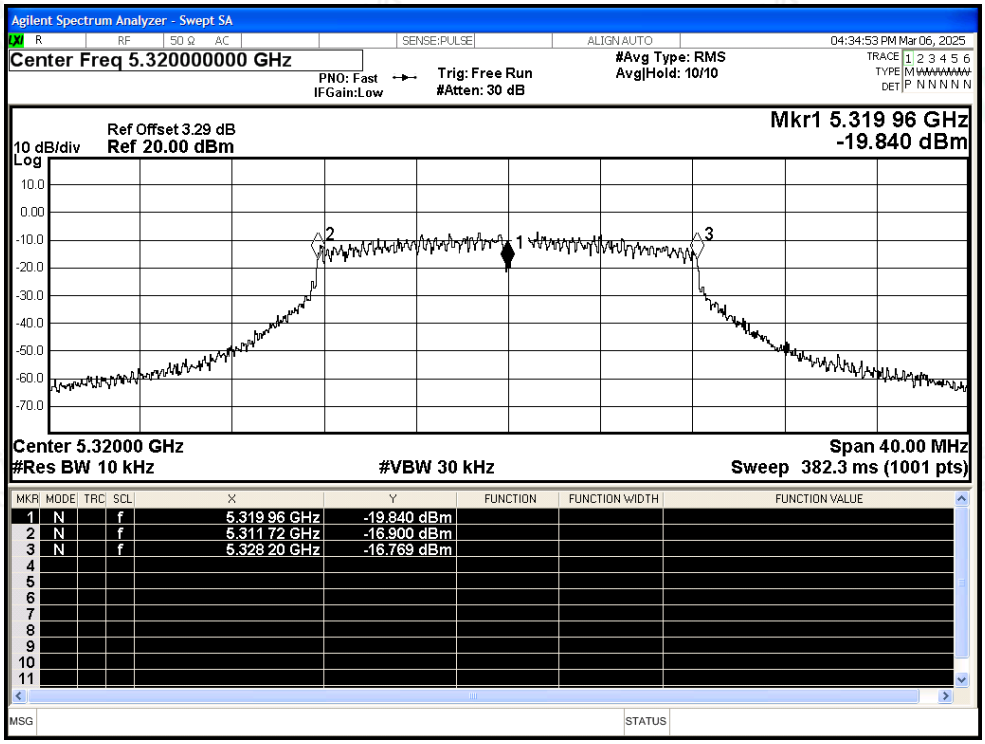
Freq. Stability NVNT a 5260MHz Ant1



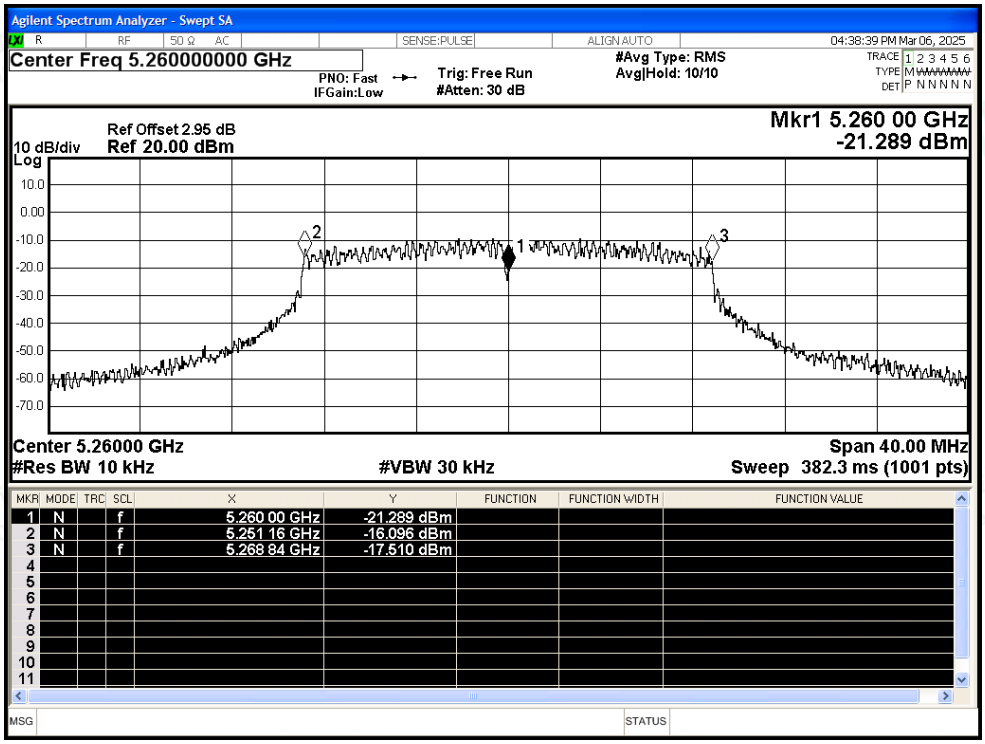
Freq. Stability NVNT a 5300MHz Ant1



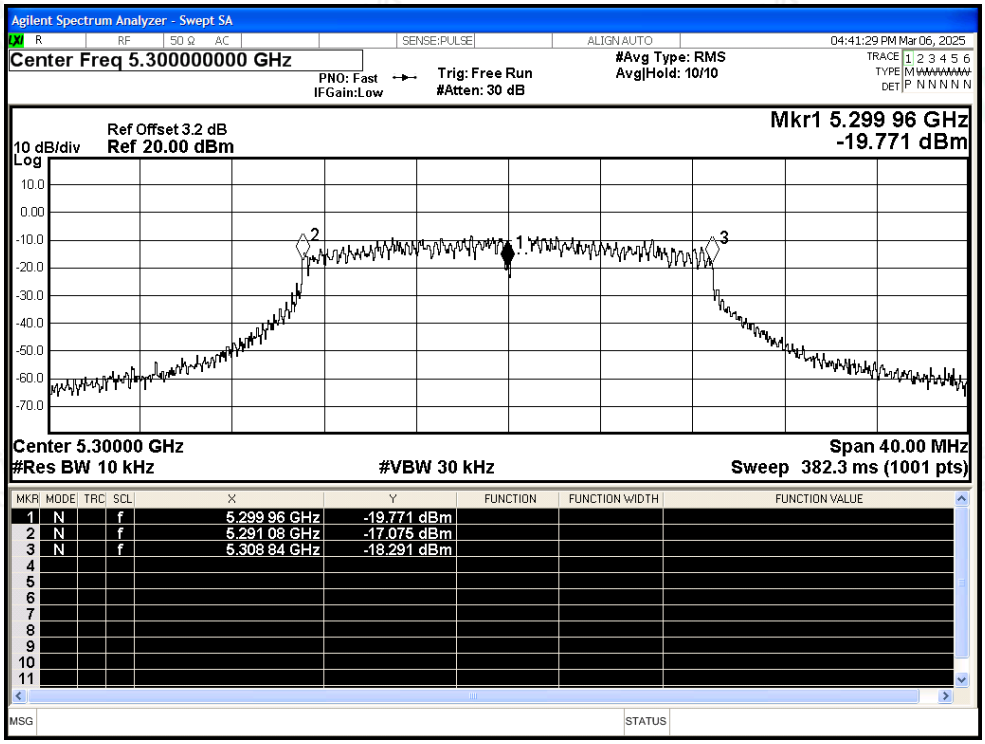
Freq. Stability NVNT a 5320MHz Ant1



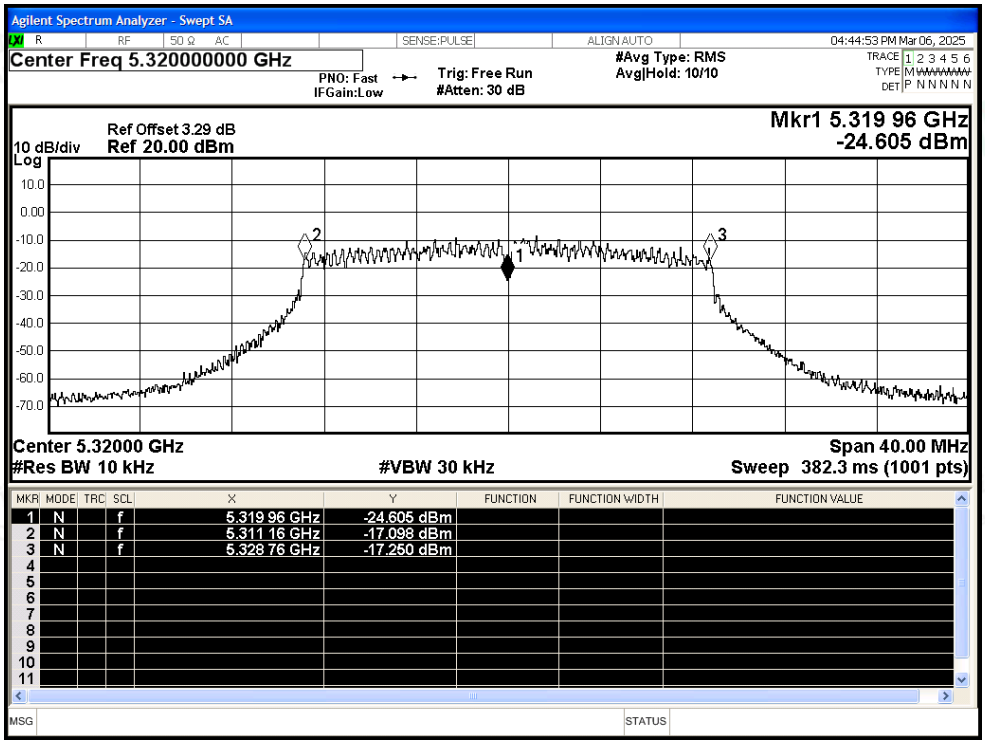
Freq. Stability NVNT n20 5260MHz Ant1



Freq. Stability NVNT n20 5300MHz Ant1



Freq. Stability NVNT n20 5320MHz Ant1

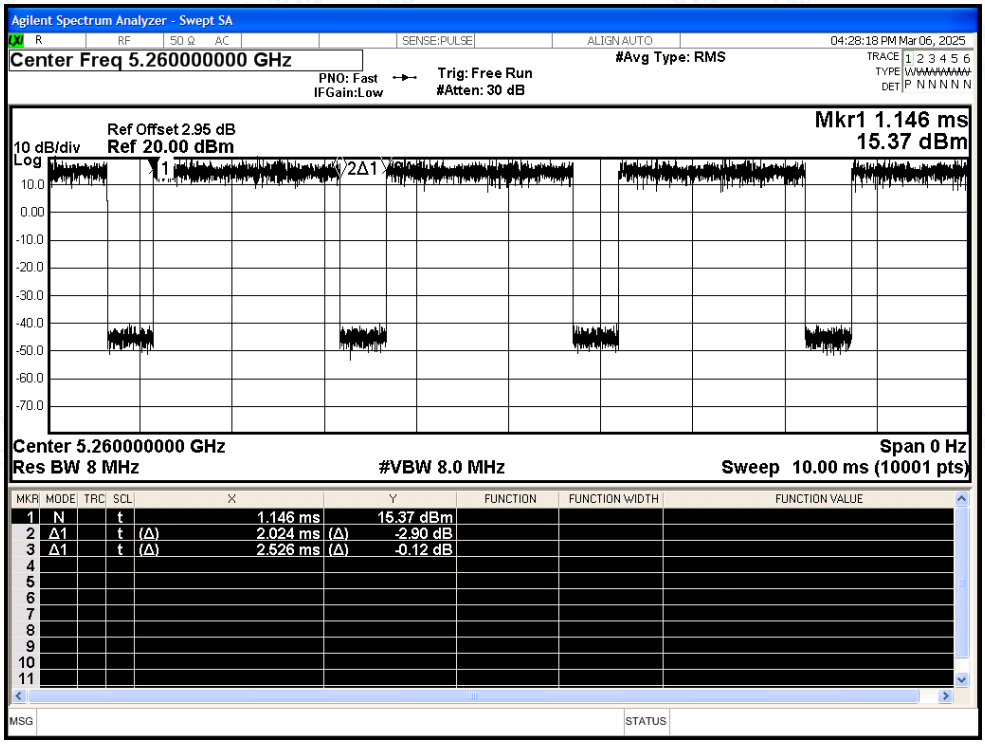


D.6 Duty Cycle

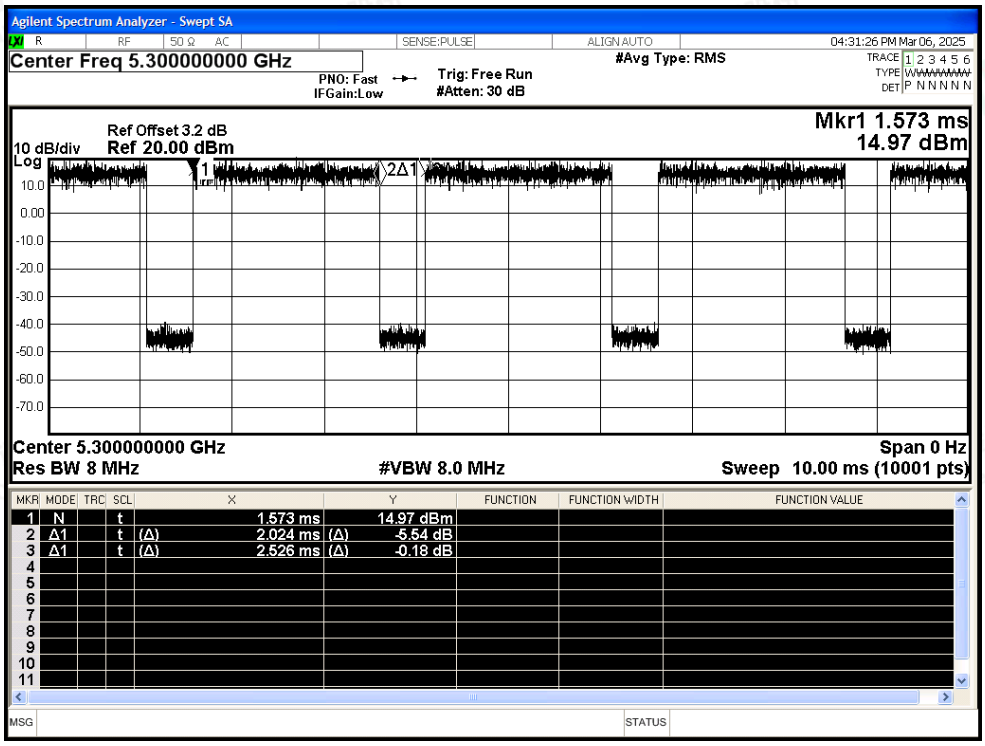
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5260	Ant1	80.13	0.96	0.49
NVNT	a	5300	Ant1	80.13	0.96	0.49
NVNT	a	5320	Ant1	80.17	0.96	0.49
NVNT	n20	5260	Ant1	79	1.02	0.53
NVNT	n20	5300	Ant1	79	1.02	0.53
NVNT	n20	5320	Ant1	79	1.02	0.53

Test Graphs

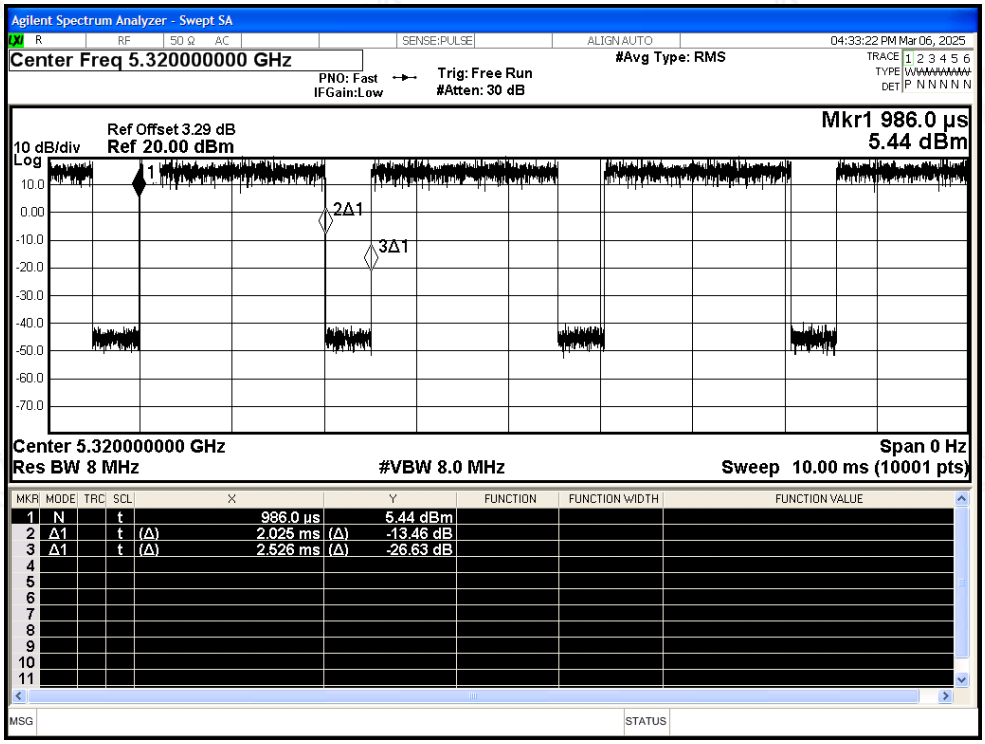
Duty Cycle NVNT a 5260MHz Ant1



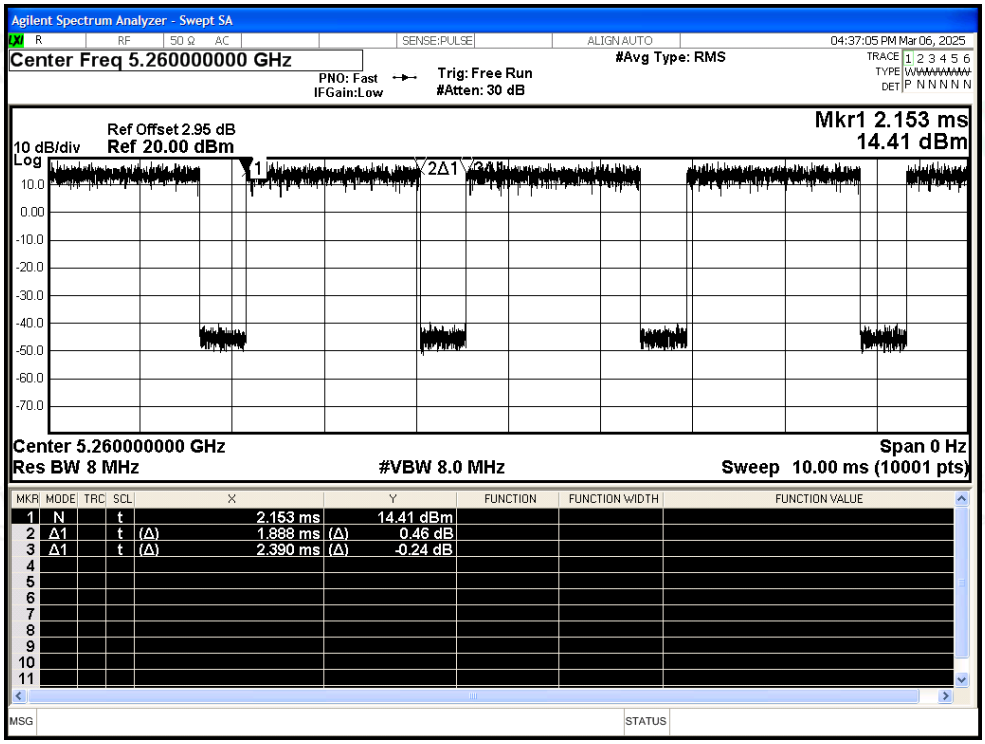
Duty Cycle NVNT a 5300MHz Ant1



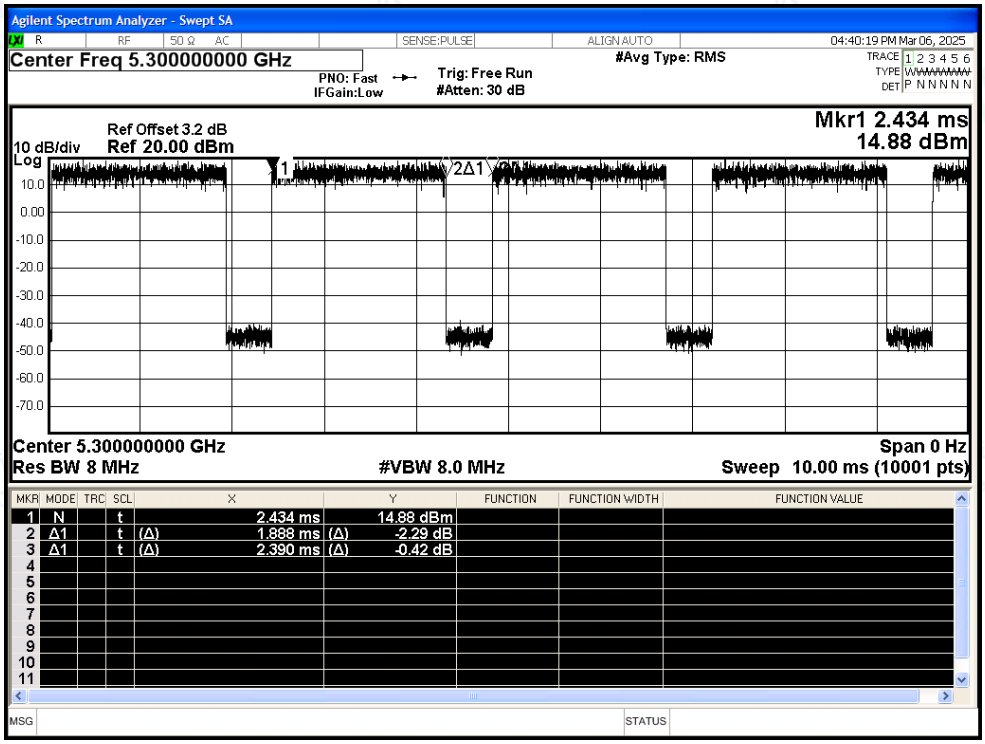
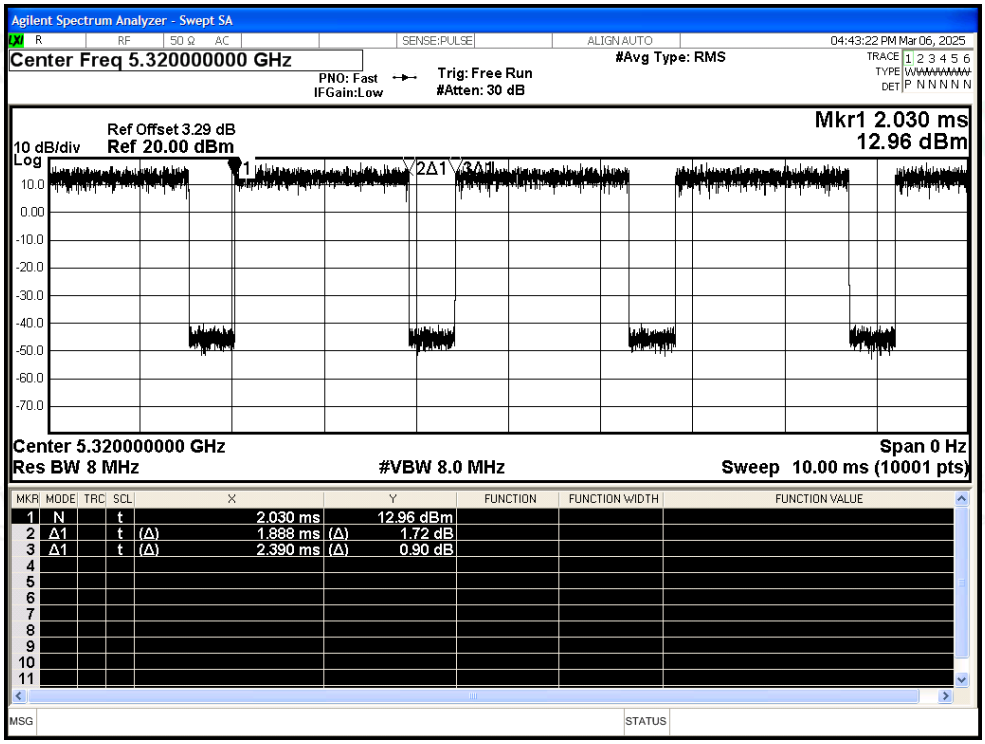
Duty Cycle NVNT a 5320MHz Ant1



Duty Cycle NVNT n20 5260MHz Ant1



Duty Cycle NVNT n20 5300MHz Ant1



Duty Cycle NVNT n20 5320MHz Ant1