Appendix C

RF Test Data for 5.8GWIFI(Conducted Measurement)

Product Name: Smart Pet Feeder

Test Model: ACF800D

Environmental Conditions

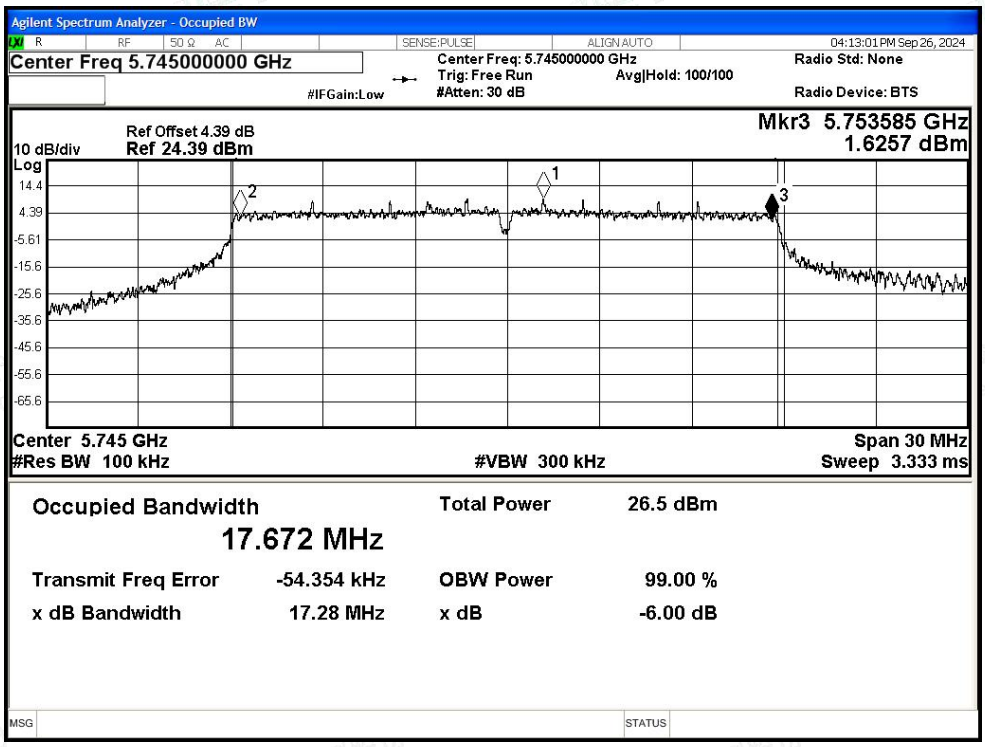
Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Jerry Chu
Supervised by:	Nick Peng

C.1 -6dB Bandwidth

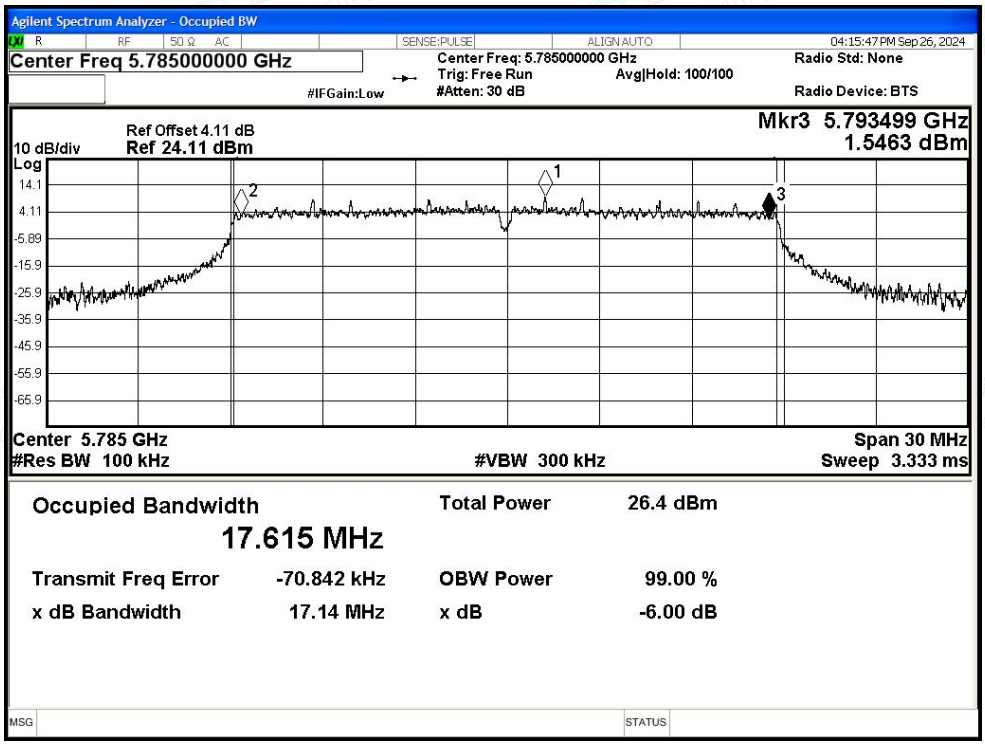
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	n20	5745	Ant1	17.279	>=0.5	Pass
NVNT	n20	5785	Ant1	17.14	>=0.5	Pass
NVNT	n20	5825	Ant1	15.939	>=0.5	Pass
NVNT	n40	5755	Ant1	33.833	>=0.5	Pass
NVNT	n40	5795	Ant1	35.129	>=0.5	Pass

Test Graphs

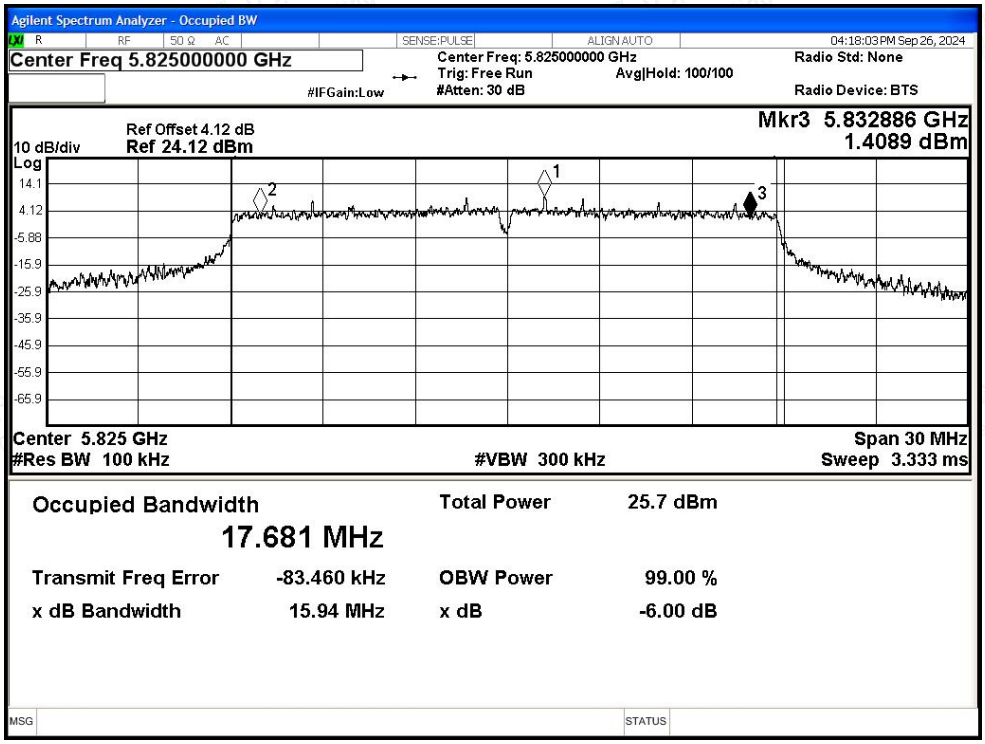
-6dB Bandwidth NVNT n20 5745MHz Ant1



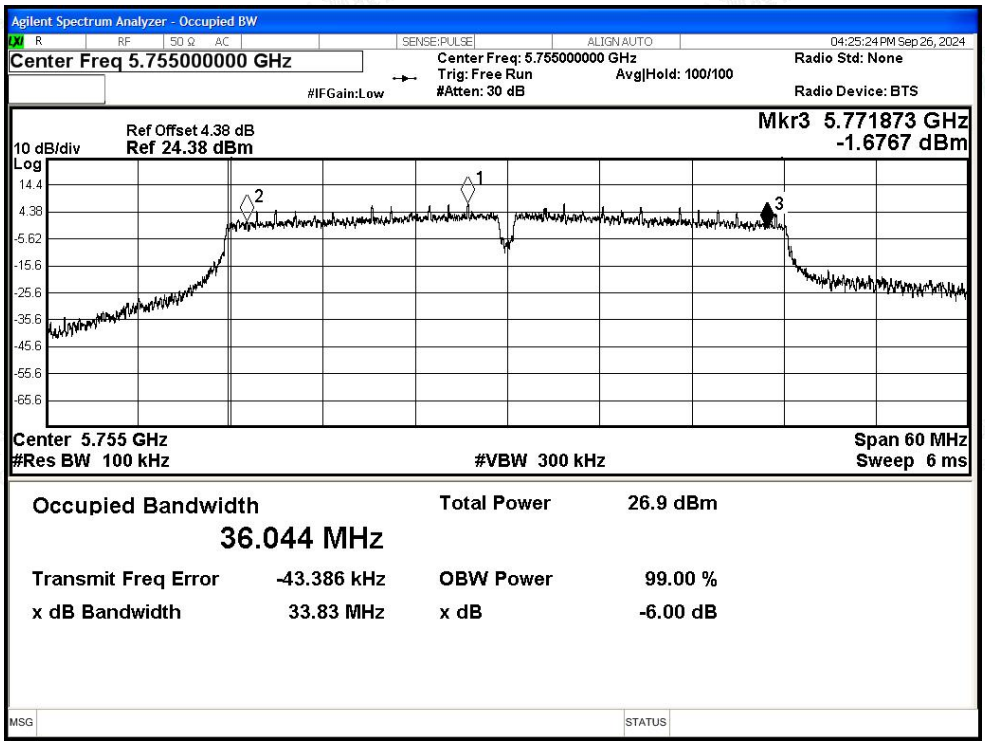
-6dB Bandwidth NVNT n20 5785MHz Ant1



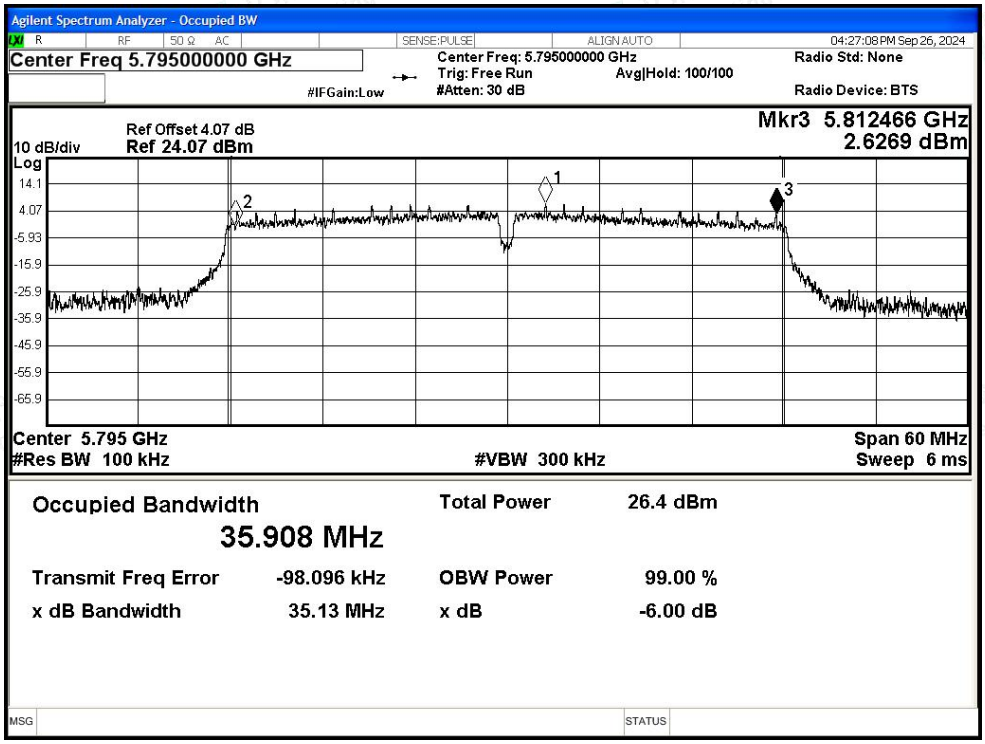
-6dB Bandwidth NVNT n20 5825MHz Ant1



-6dB Bandwidth NVNT n40 5755MHz Ant1



-6dB Bandwidth NVNT n40 5795MHz Ant1



C.2 Maximum Conducted Output Power

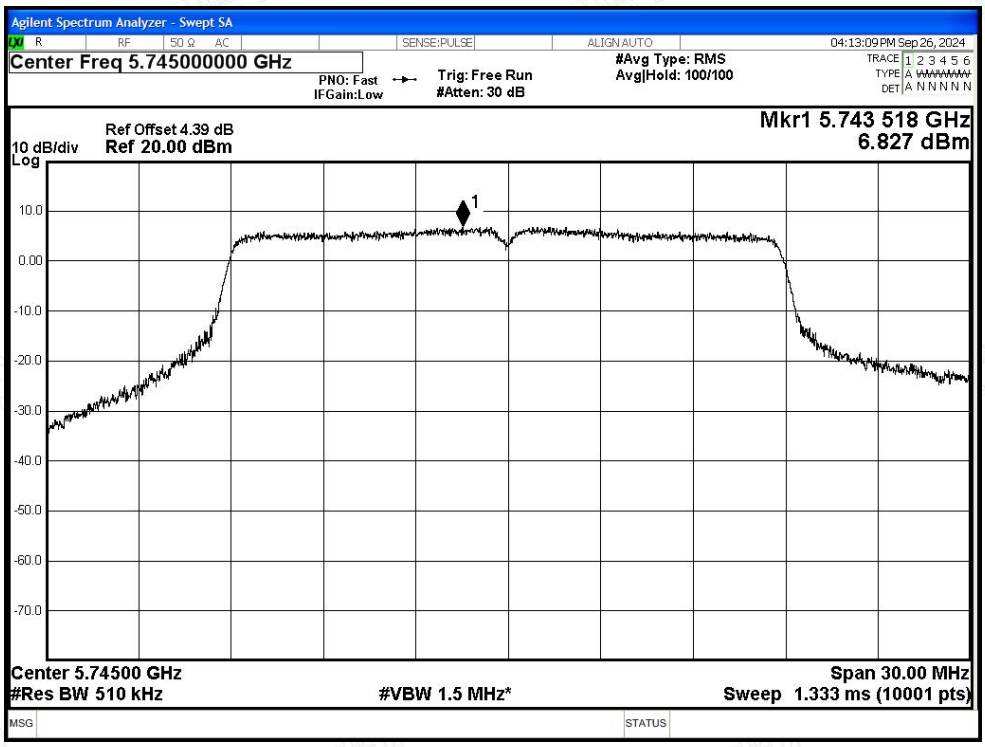
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	n20	5745	Ant1	20.43	0.18	20.61	30	Pass
NVNT	n20	5785	Ant1	20.4	0.18	20.58	30	Pass
NVNT	n20	5825	Ant1	19.6	0.18	19.78	30	Pass
NVNT	n40	5755	Ant1	20.36	0.35	20.71	30	Pass
NVNT	n40	5795	Ant1	19.86	0.36	20.22	30	Pass

C.3 Maximum Power Spectral Density Level

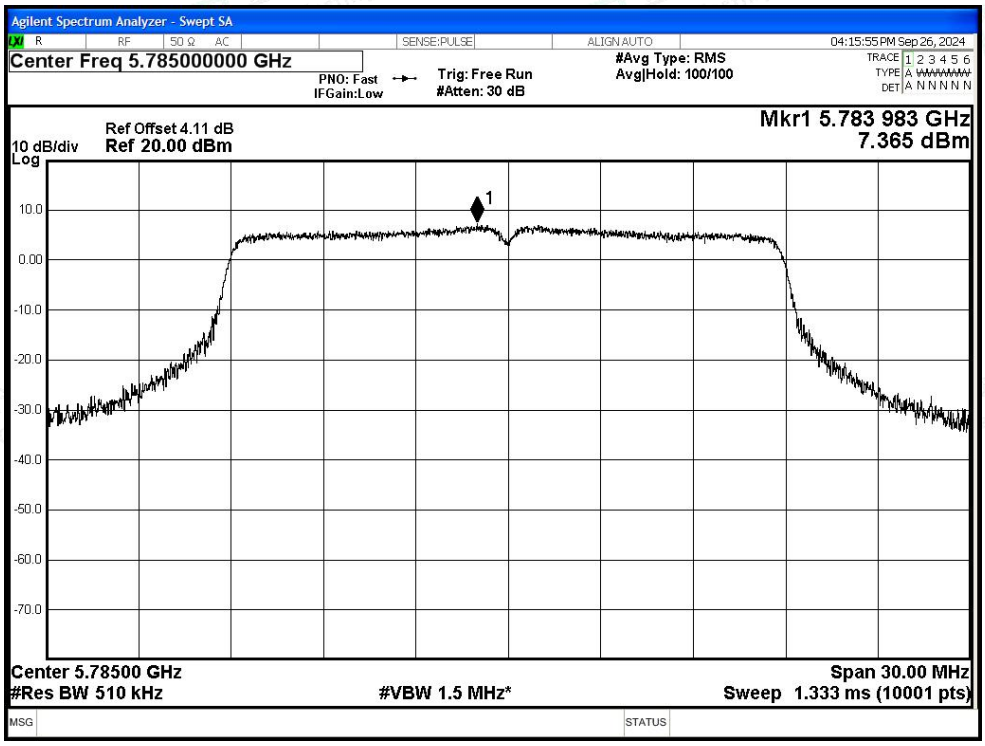
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	n20	5745	Ant1	6.83	0.18	7.01	30	Pass
NVNT	n20	5785	Ant1	7.37	0.18	7.55	30	Pass
NVNT	n20	5825	Ant1	6.05	0.18	6.23	30	Pass
NVNT	n40	5755	Ant1	4.46	0.35	4.81	30	Pass
NVNT	n40	5795	Ant1	4.45	0.36	4.81	30	Pass

Test Graphs

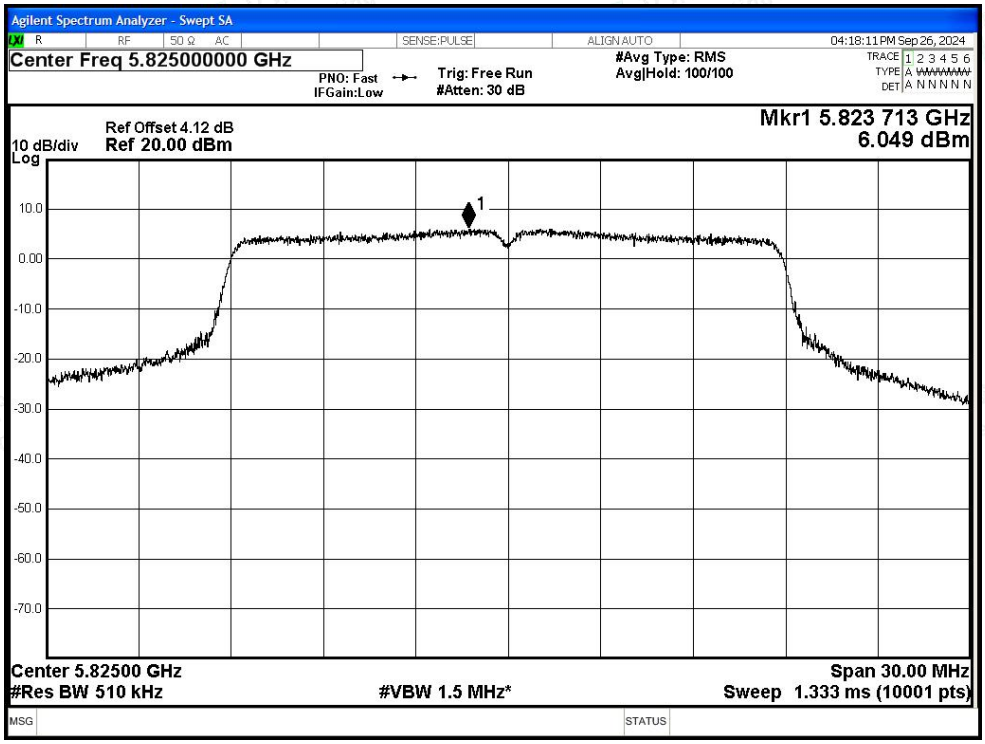
PSD NVNT n20 5745MHz Ant1



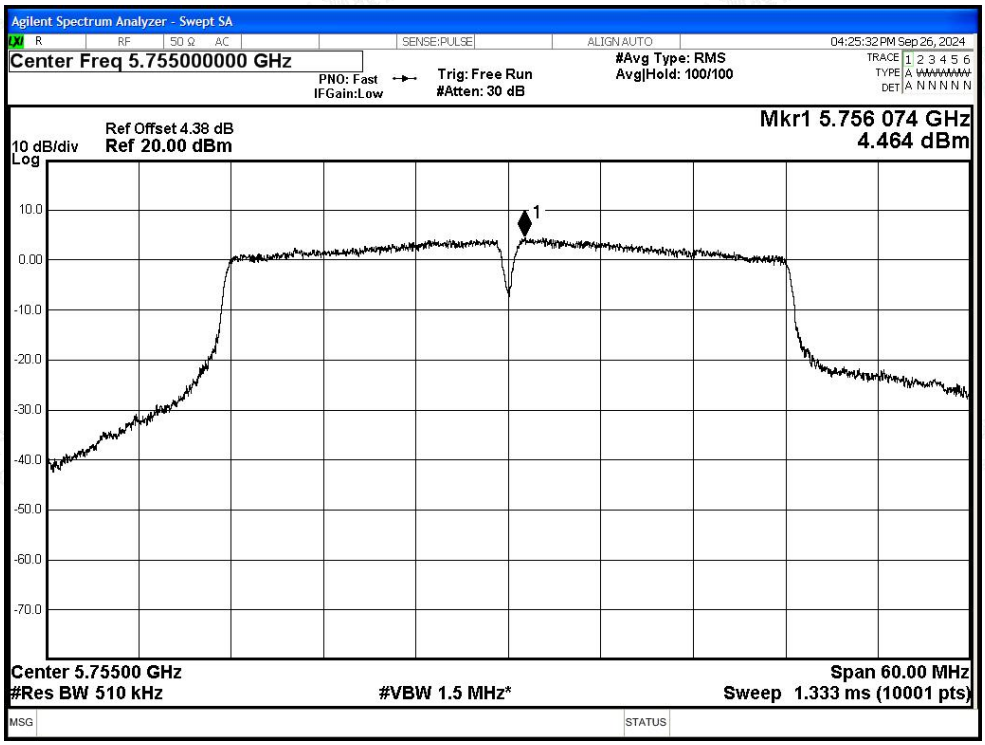
PSD NVNT n20 5785MHz Ant1



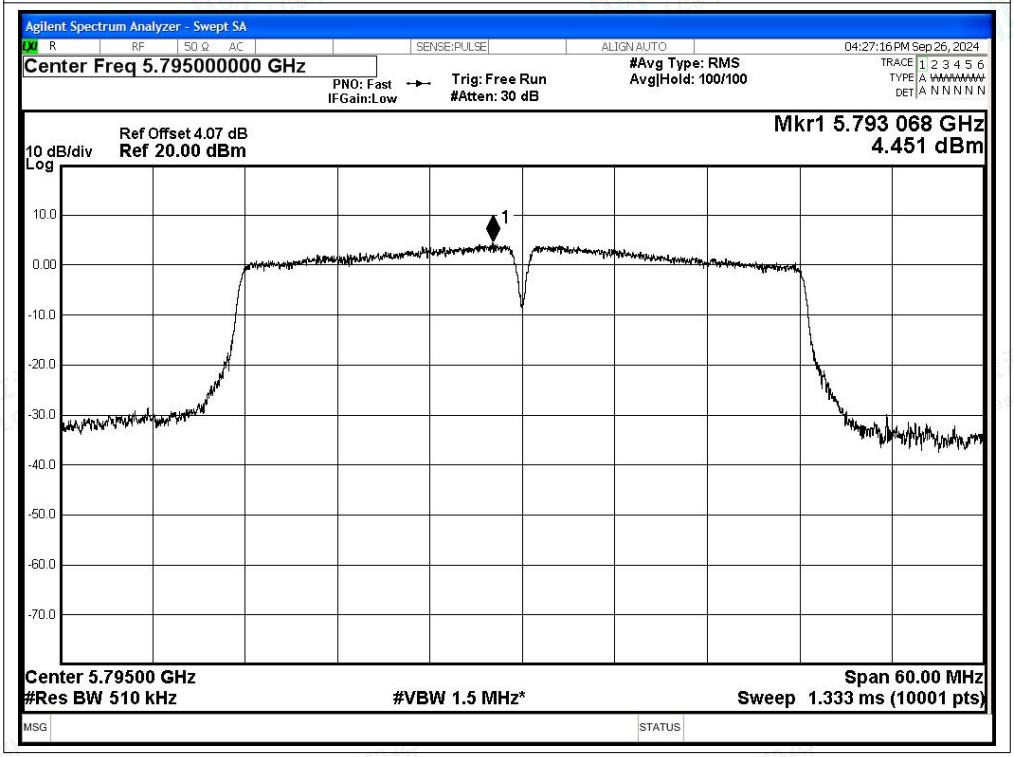
PSD NVNT n20 5825MHz Ant1



PSD NVNT n40 5755MHz Ant1



PSD NVNT n40 5795MHz Ant1

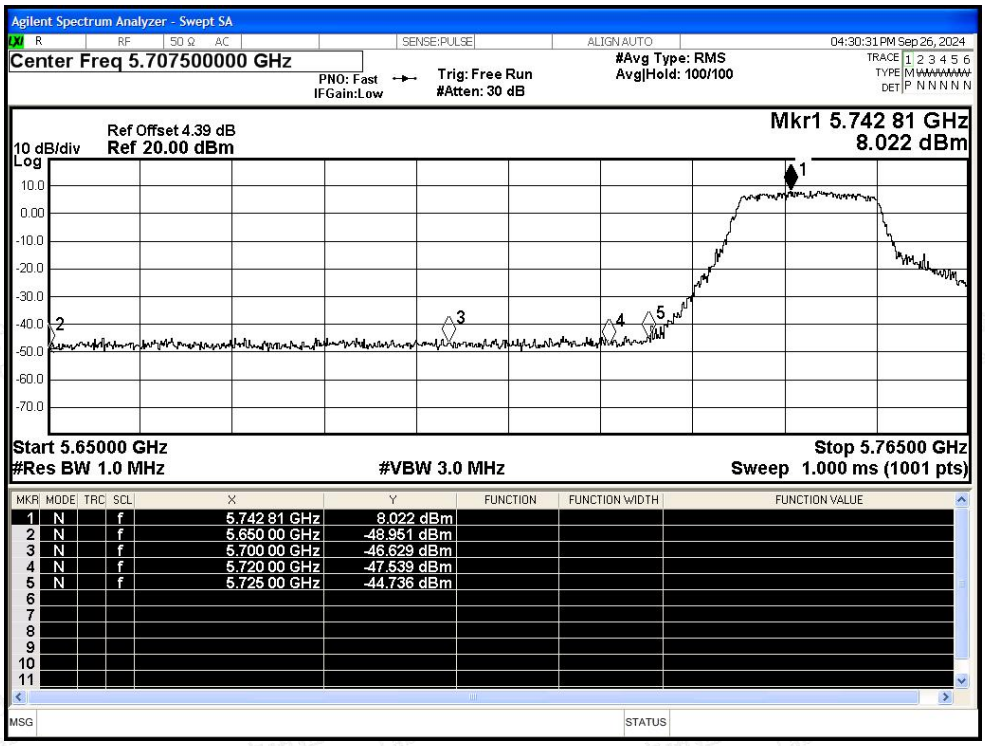


C.4 Restrict Band

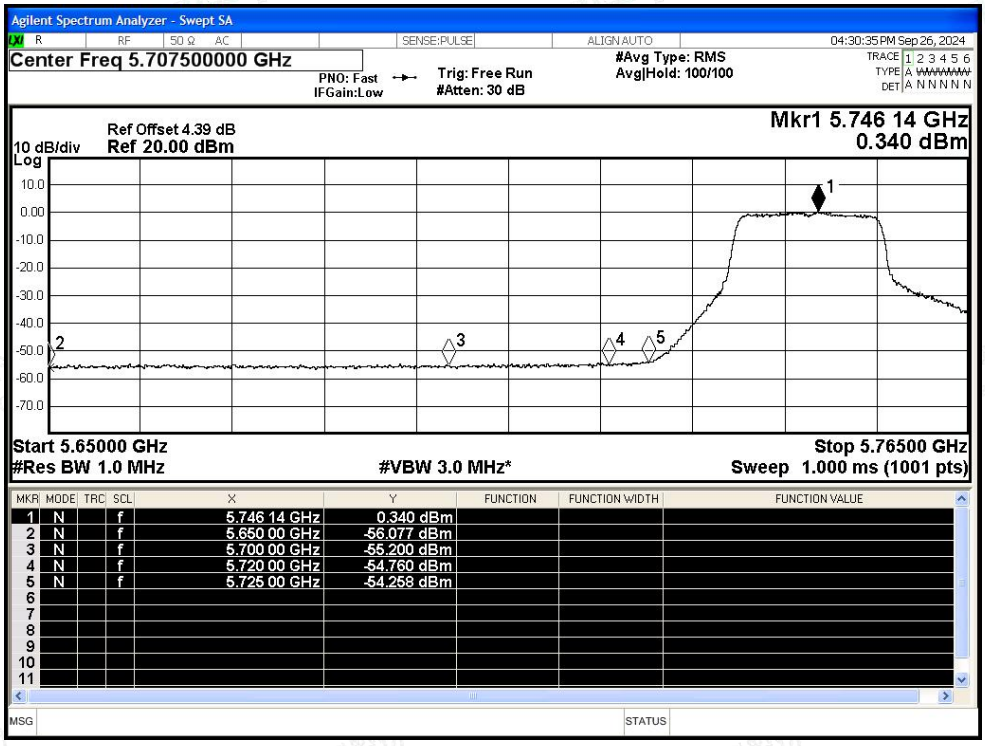
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	EIRP Power (dBm)	Detector	Limit (dBm)	Verdict
NVNT	n20	5745	Ant1	5650	-48.95	3.12	-	-45.83	Peak	-27	Pass
NVNT	n20	5745	Ant1	5650	-56.08	3.12	0.18	-52.78	Average	-27	Pass
NVNT	n20	5745	Ant1	5700	-46.63	3.12	-	-43.51	Peak	10	Pass
NVNT	n20	5745	Ant1	5700	-55.2	3.12	0.18	-51.9	Average	10	Pass
NVNT	n20	5745	Ant1	5720	-47.54	3.12	-	-44.42	Peak	15.6	Pass
NVNT	n20	5745	Ant1	5720	-54.76	3.12	0.18	-51.46	Average	15.6	Pass
NVNT	n20	5745	Ant1	5725	-44.74	3.12	-	-41.62	Peak	27	Pass
NVNT	n20	5745	Ant1	5725	-54.26	3.12	0.18	-50.96	Average	27	Pass
NVNT	n20	5825	Ant1	5850	-47.51	3.12	-	-44.39	Peak	27	Pass
NVNT	n20	5825	Ant1	5850	-55.29	3.12	0.18	-51.99	Average	27	Pass
NVNT	n20	5825	Ant1	5855	-46.87	3.12	-	-43.75	Peak	15.6	Pass
NVNT	n20	5825	Ant1	5855	-55.81	3.12	0.18	-52.51	Average	15.6	Pass
NVNT	n20	5825	Ant1	5875	-48.5	3.12	-	-45.38	Peak	10	Pass
NVNT	n20	5825	Ant1	5875	-55.75	3.12	0.18	-52.45	Average	10	Pass
NVNT	n20	5825	Ant1	5925	-47.09	3.12	-	-43.97	Peak	-27	Pass
NVNT	n20	5825	Ant1	5925	-55.98	3.12	0.18	-52.68	Average	-27	Pass
NVNT	n40	5755	Ant1	5650	-49.58	3.12	-	-46.46	Peak	-27	Pass
NVNT	n40	5755	Ant1	5650	-56.55	3.12	0.35	-53.08	Average	-27	Pass
NVNT	n40	5755	Ant1	5700	-47.38	3.12	-	-44.26	Peak	10	Pass
NVNT	n40	5755	Ant1	5700	-55.35	3.12	0.35	-51.88	Average	10	Pass
NVNT	n40	5755	Ant1	5720	-46.09	3.12	-	-42.97	Peak	15.6	Pass
NVNT	n40	5755	Ant1	5720	-54.4	3.12	0.35	-50.93	Average	15.6	Pass
NVNT	n40	5755	Ant1	5725	-42.08	3.12	-	-38.96	Peak	27	Pass
NVNT	n40	5755	Ant1	5725	-50.43	3.12	0.35	-46.96	Average	27	Pass
NVNT	n40	5795	Ant1	5850	-47.61	3.12	-	-44.49	Peak	27	Pass
NVNT	n40	5795	Ant1	5850	-56	3.12	0.36	-52.52	Average	27	Pass
NVNT	n40	5795	Ant1	5855	-48.73	3.12	-	-45.61	Peak	15.6	Pass
NVNT	n40	5795	Ant1	5855	-56.9	3.12	0.36	-53.42	Average	15.6	Pass
NVNT	n40	5795	Ant1	5875	-47.98	3.12	-	-44.86	Peak	10	Pass
NVNT	n40	5795	Ant1	5875	-55.82	3.12	0.36	-52.34	Average	10	Pass
NVNT	n40	5795	Ant1	5925	-48.11	3.12	-	-44.99	Peak	-27	Pass
NVNT	n40	5795	Ant1	5925	-56.25	3.12	0.36	-52.77	Average	-27	Pass

Test Graphs

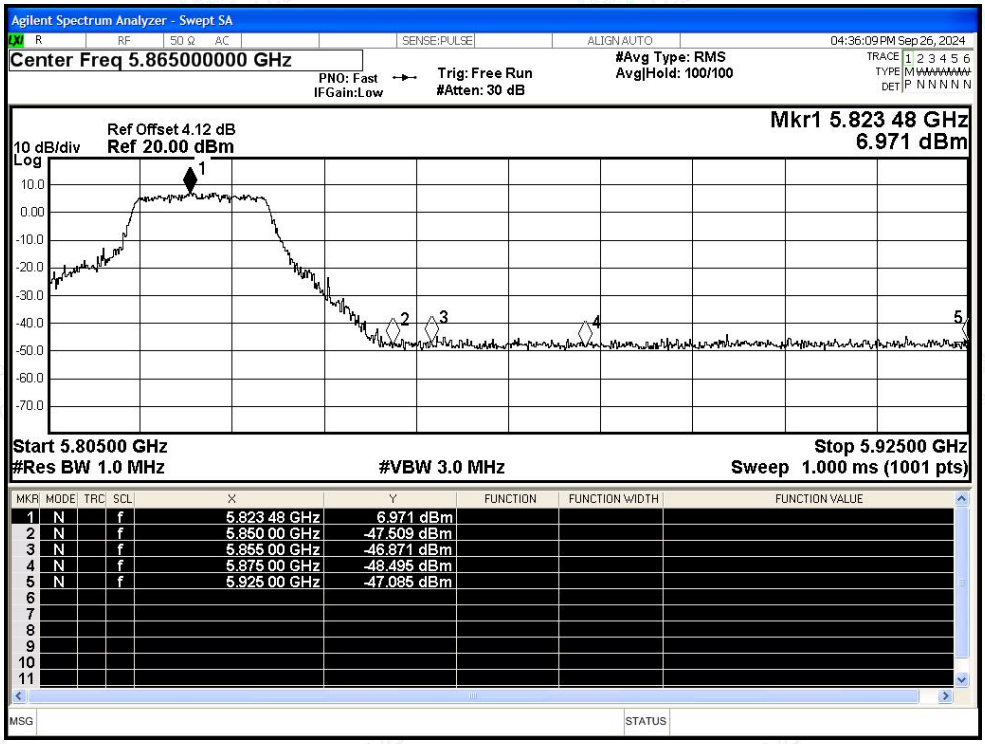
Restrict Band NVNT n20 5745MHz Ant1 Peak



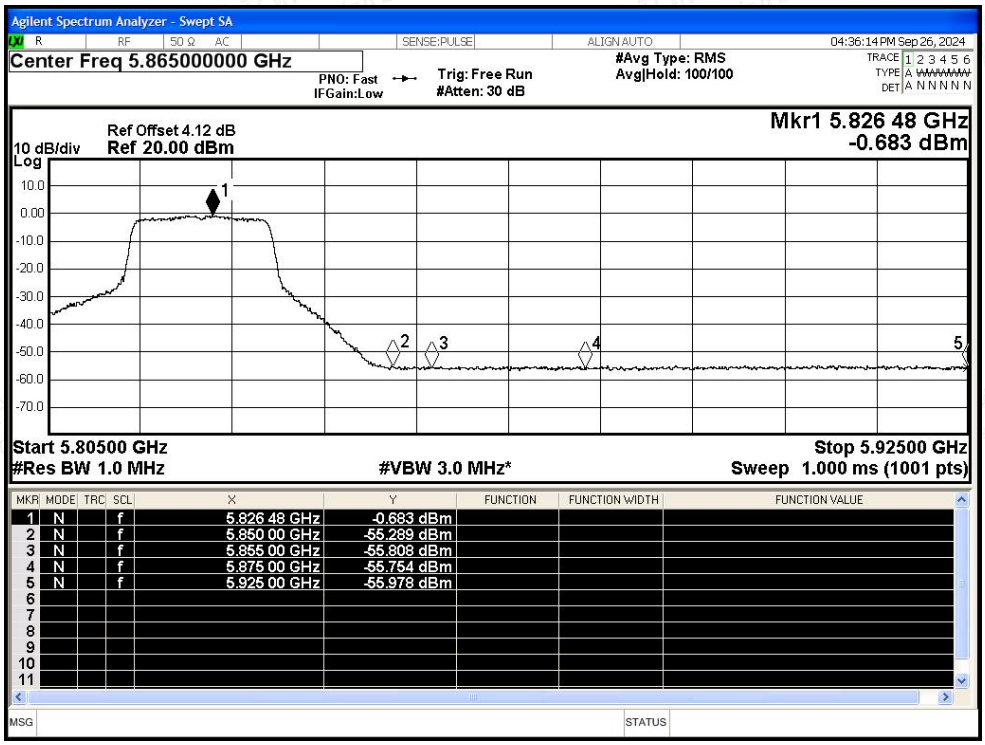
Restrict Band NVNT n20 5745MHz Ant1 Average



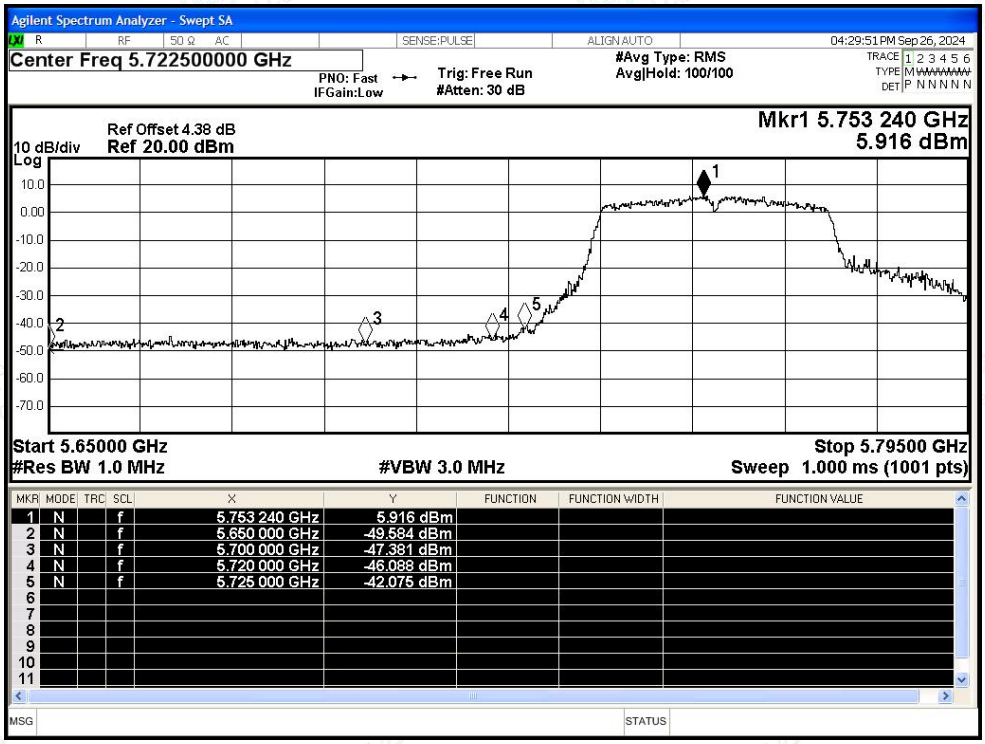
Restrict Band NVNT n20 5825MHz Ant1 Peak



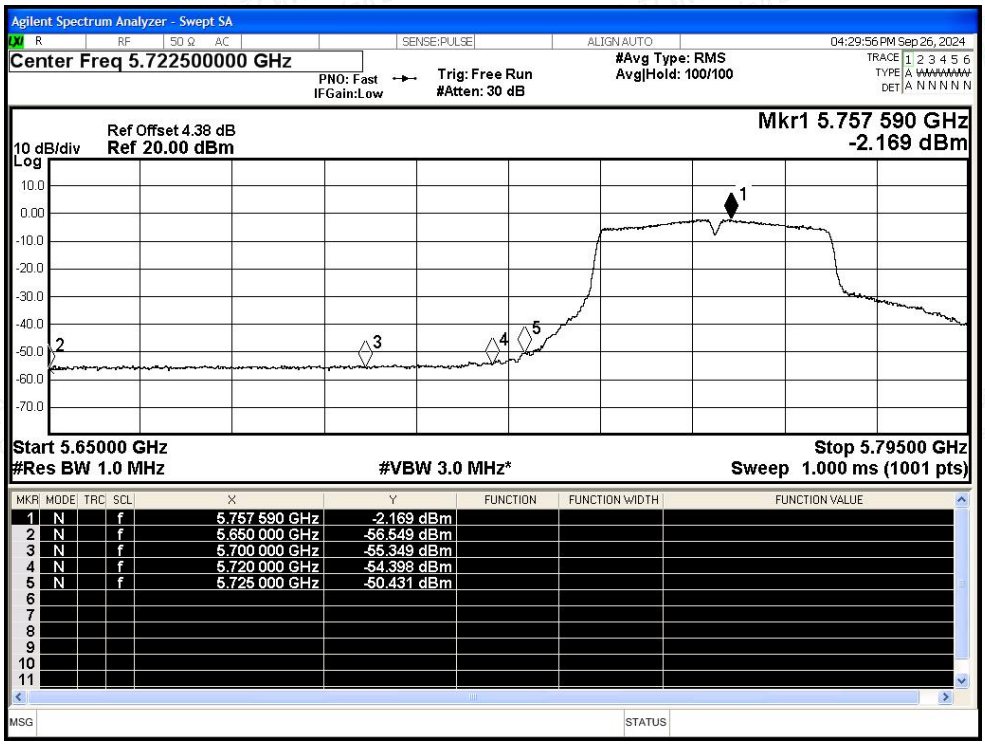
Restrict Band NVNT n20 5825MHz Ant1 Average



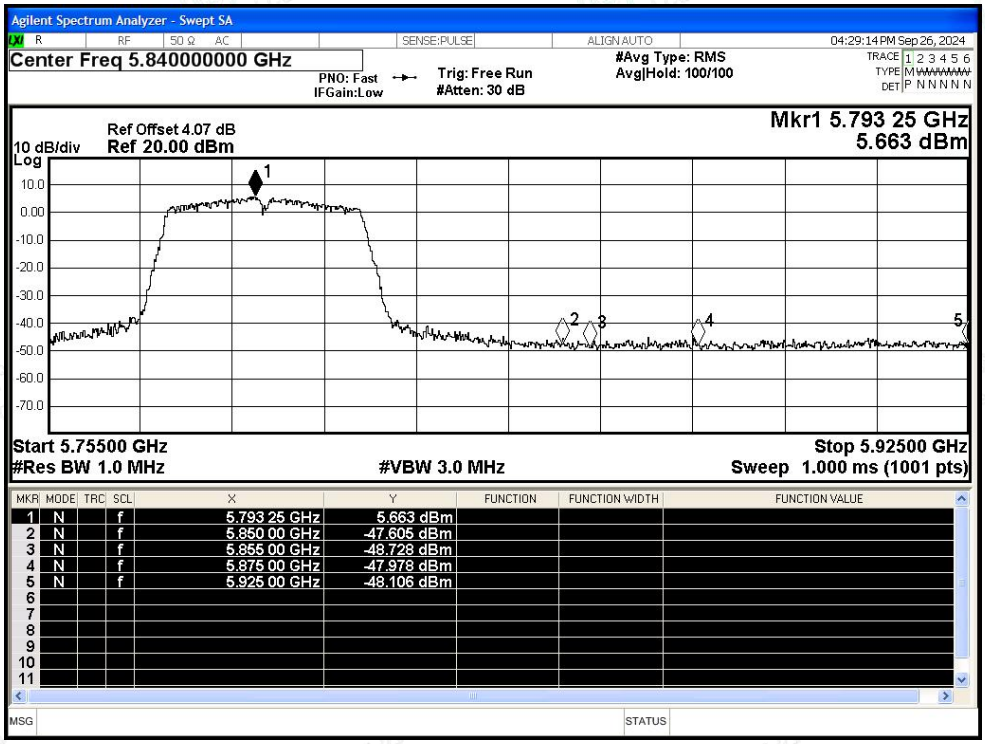
Restrict Band NVNT n40 5755MHz Ant1 Peak



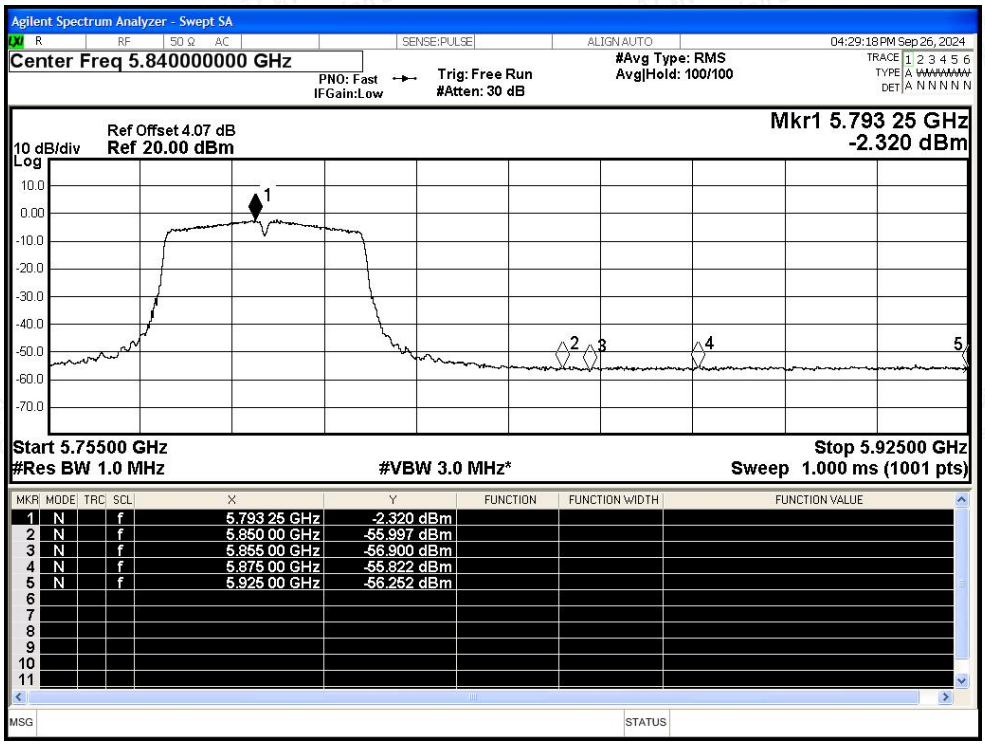
Restrict Band NVNT n40 5755MHz Ant1 Average



Restrict Band NVNT n40 5795MHz Ant1 Peak



Restrict Band NVNT n40 5795MHz Ant1 Average

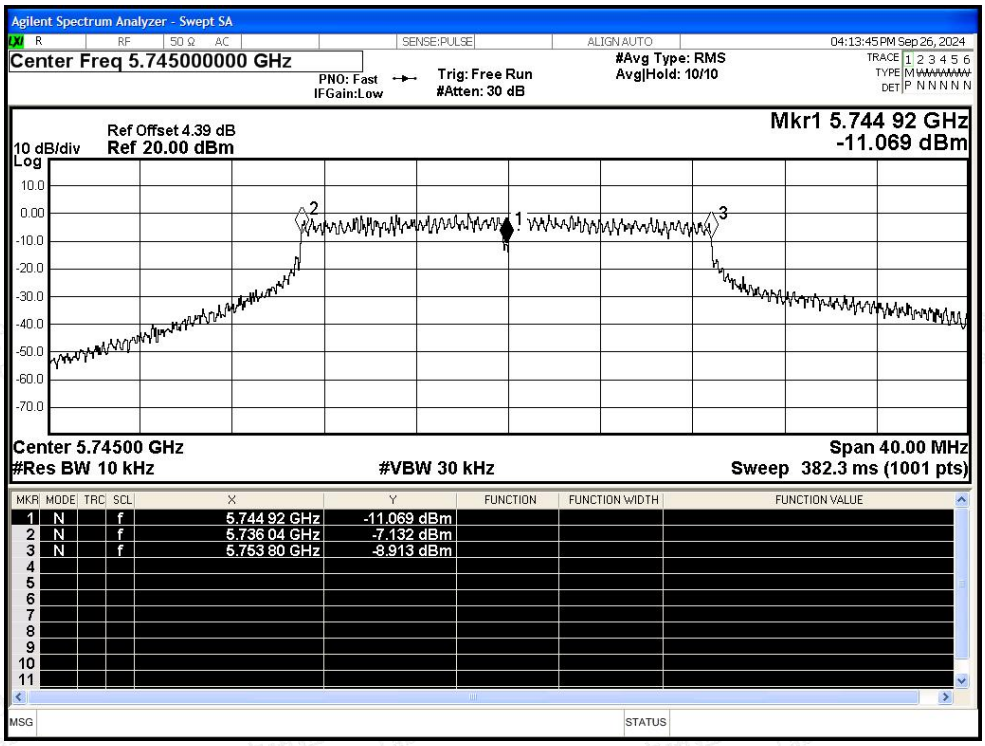


C.5 Frequency Stability

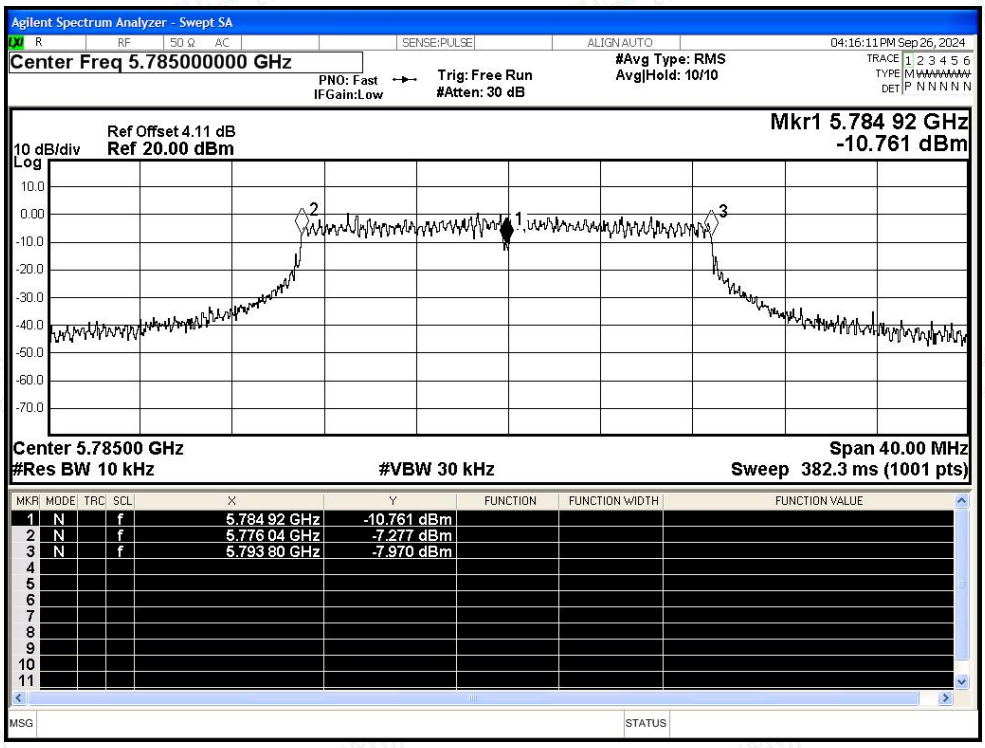
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	n20	5745	Ant1	5744.92	-80000	-13.93	25	Pass
NVNT	n20	5785	Ant1	5784.92	-80000	-13.83	25	Pass
NVNT	n20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
NVNT	n40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
NVNT	n40	5795	Ant1	5794.92	-80000	-13.81	25	Pass

Test Graphs

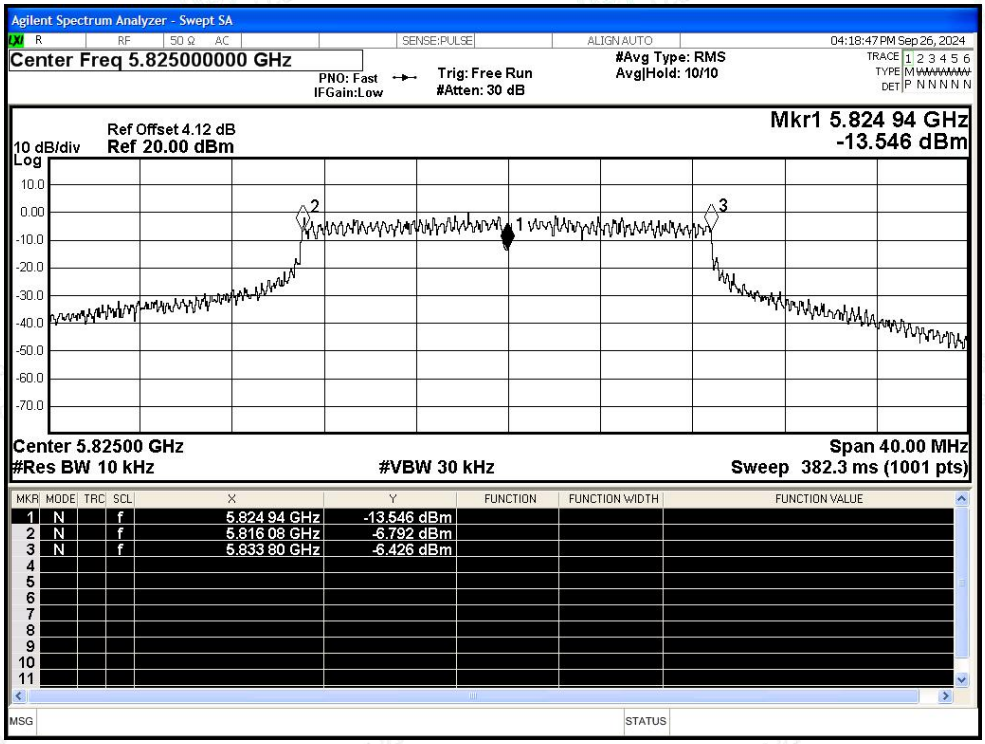
Freq. Stability NVNT n20 5745MHz Ant1



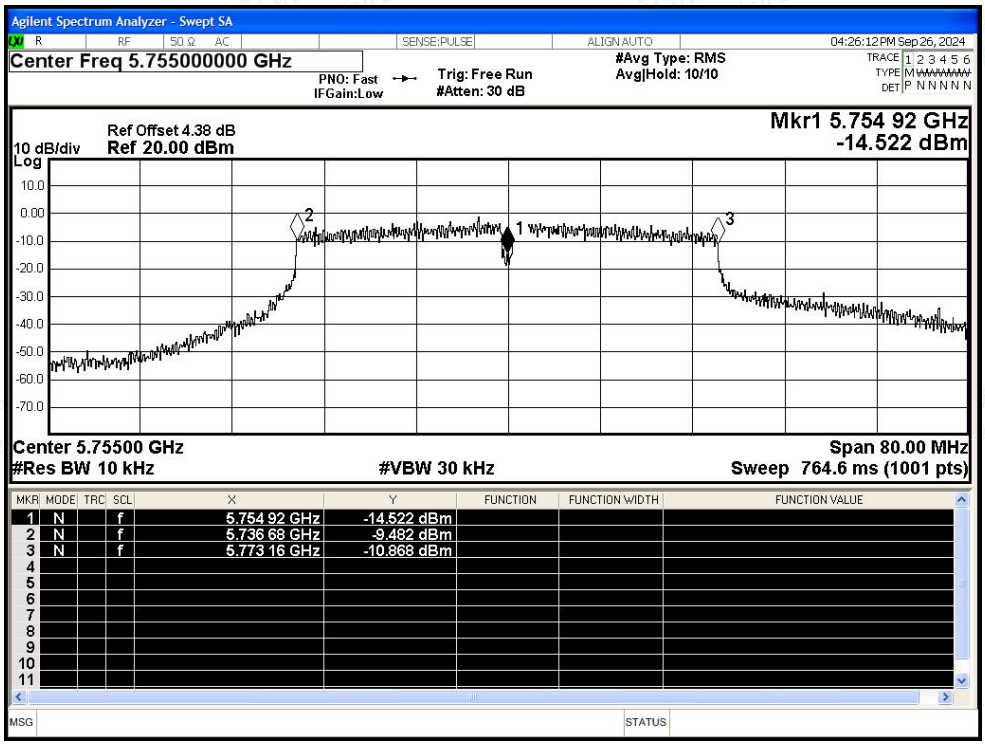
Freq. Stability NVNT n20 5785MHz Ant1



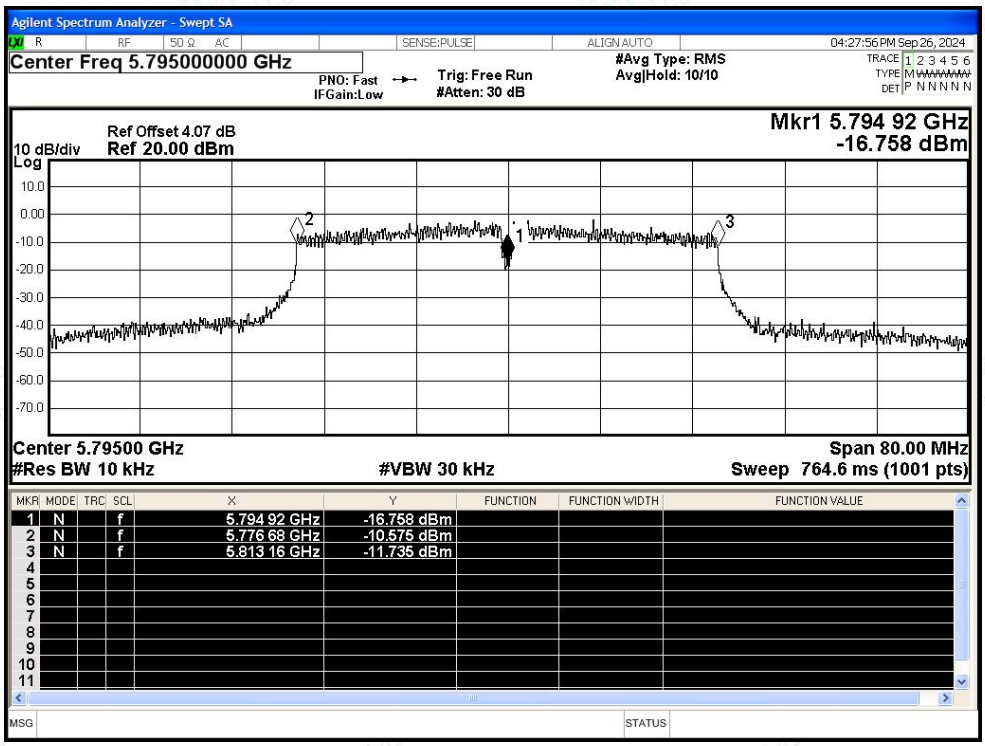
Freq. Stability NVNT n20 5825MHz Ant1



Freq. Stability NVNT n40 5755MHz Ant1



Freq. Stability NVNT n40 5795MHz Ant1

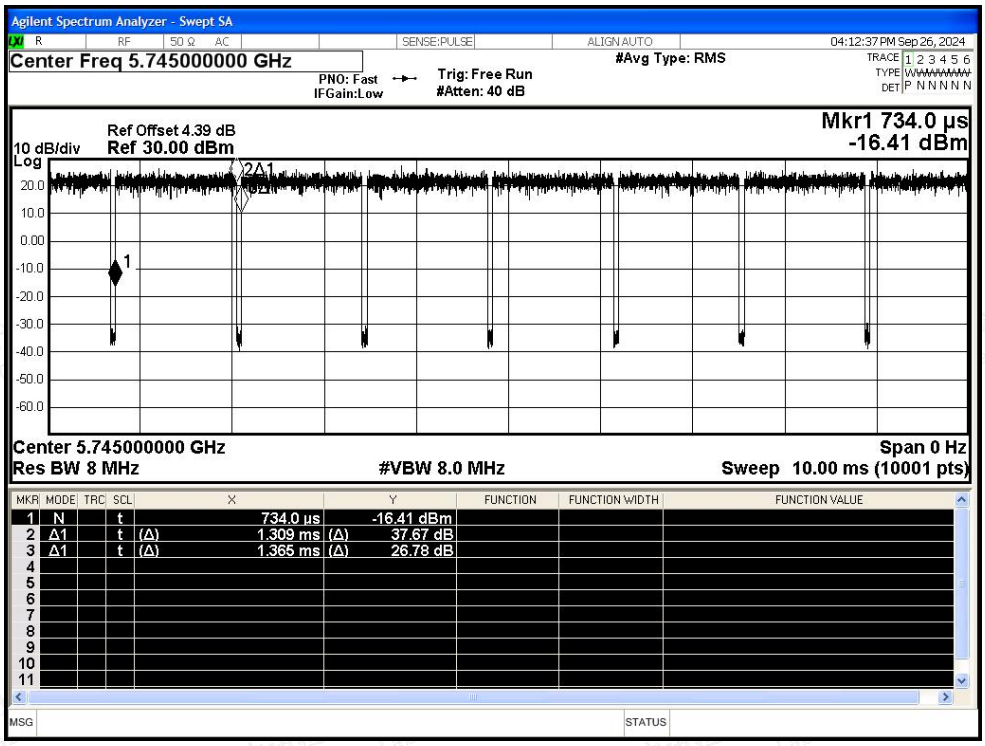


C.6 Duty Cycle

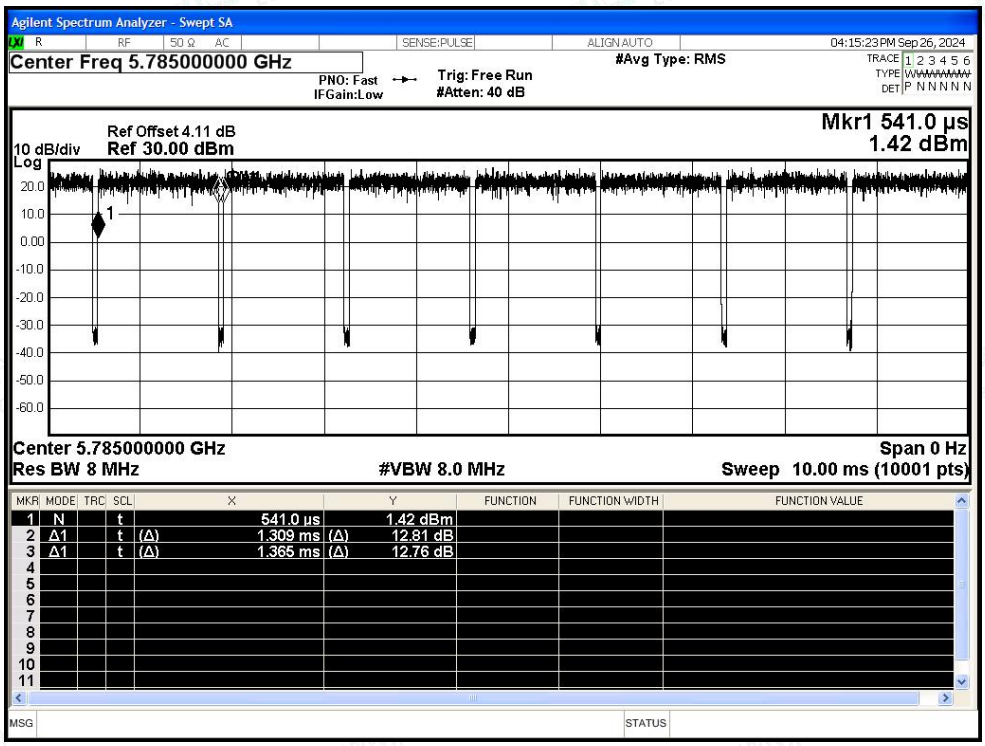
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	n20	5745	Ant1	95.9	0.18	0.76
NVNT	n20	5785	Ant1	95.9	0.18	0.76
NVNT	n20	5825	Ant1	95.9	0.18	0.76
NVNT	n40	5755	Ant1	92.2	0.35	1.54
NVNT	n40	5795	Ant1	92.06	0.36	1.54

Test Graphs

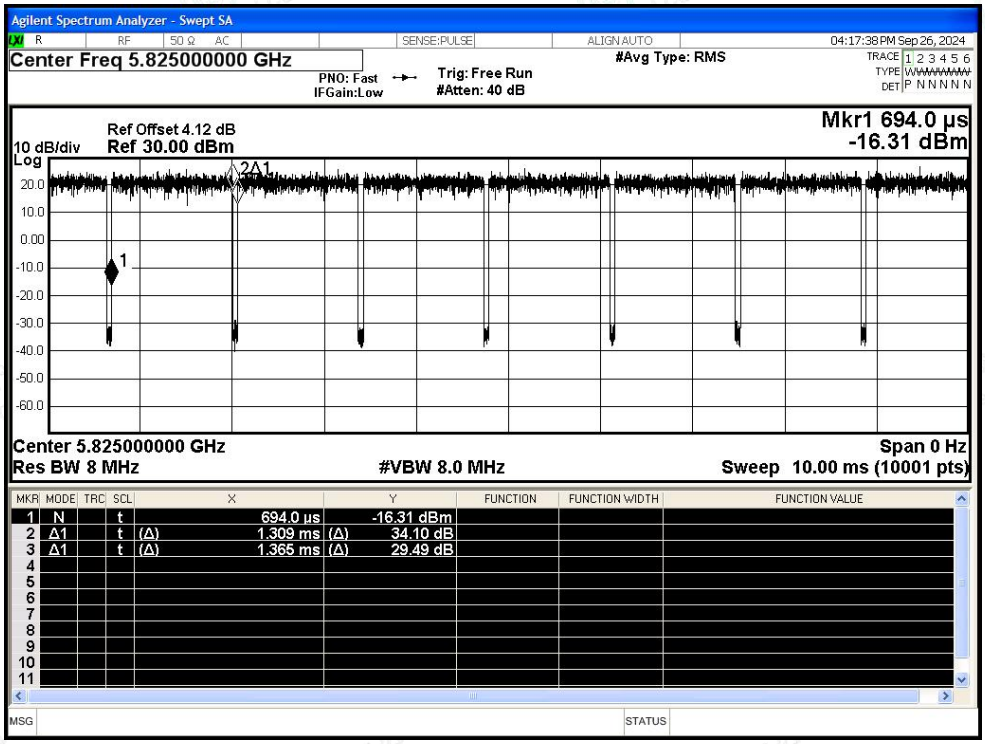
Duty Cycle NVNT n20 5745MHz Ant1



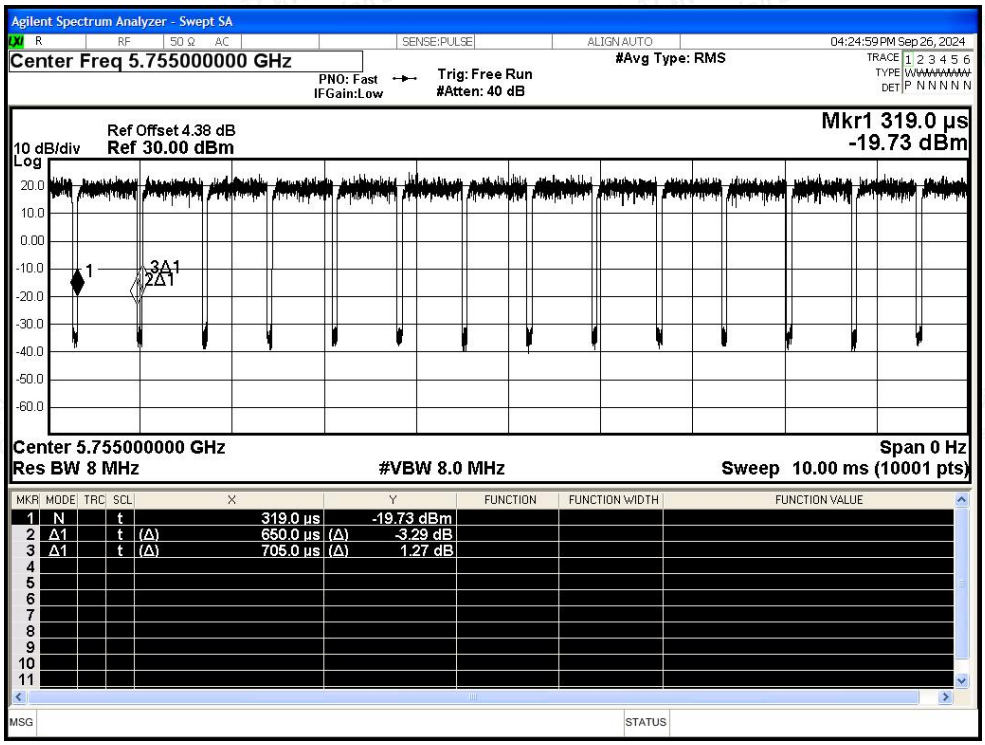
Duty Cycle NVNT n20 5785MHz Ant1



Duty Cycle NVNT n20 5825MHz Ant1



Duty Cycle NVNT n40 5755MHz Ant1



Duty Cycle NVNT n40 5795MHz Ant1