Appendix B for 5.8GWIFI Test Data

Product Name: Notebook computer

Test Model: SN140MIAU

Environmental Conditions

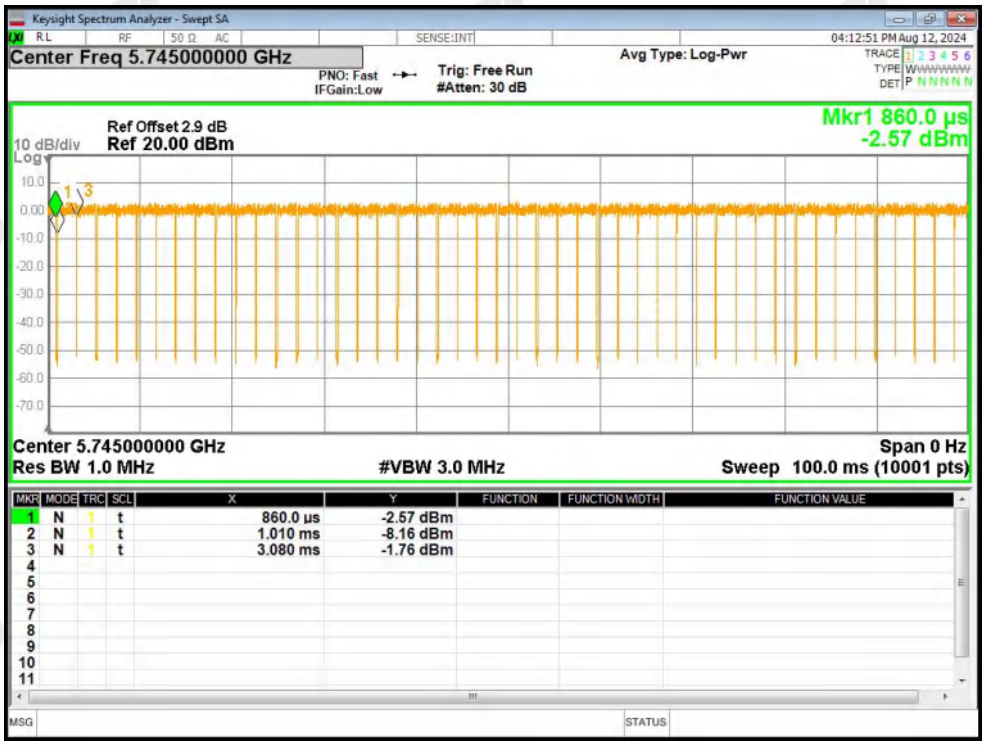
Temperature:	23.8℃
Relative Humidity:	52%
ATM Pressure:	101.0 kPa
Test Engineer:	Leon Li
Supervised by:	Baret Wu

Duty Cycle

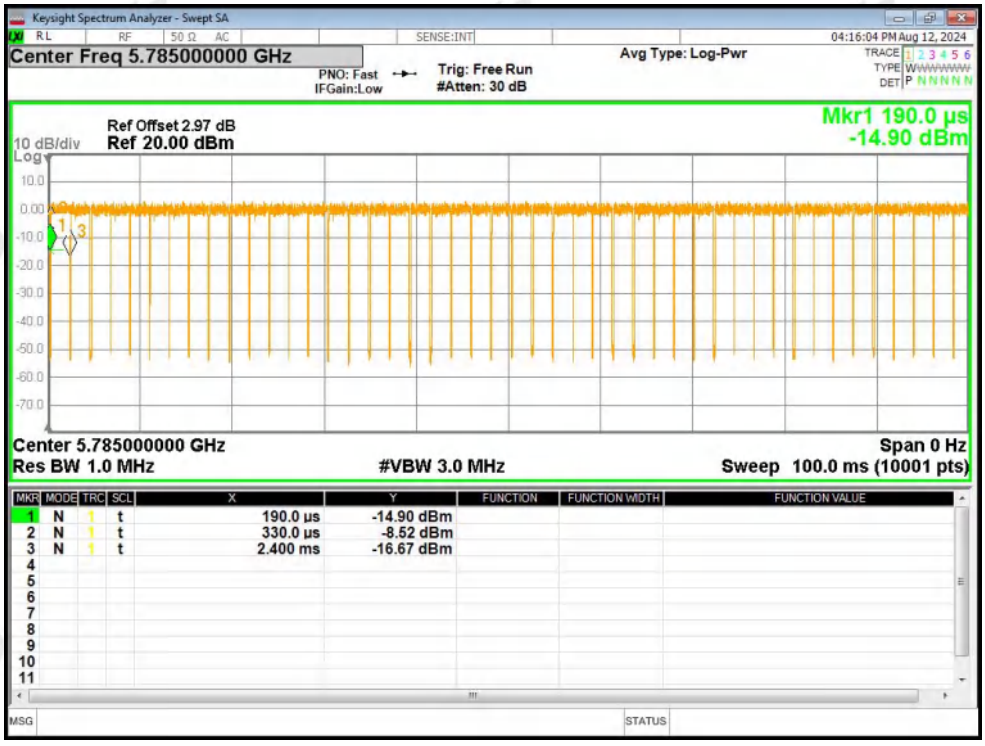
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5745	Ant1	93.24	0.3	0.48
NVNT	a	5785	Ant1	93.67	0.28	0.48
NVNT	a	5825	Ant1	92.38	0.34	0.49
NVNT	n20	5745	Ant1	93.2	0.31	0.52
NVNT	n20	5785	Ant1	94.12	0.26	0.52
NVNT	n20	5825	Ant1	95.54	0.2	0.52
NVNT	n40	5755	Ant1	92.16	0.35	1.06
NVNT	n40	5795	Ant1	89.62	0.48	1.05
NVNT	ac20	5745	Ant1	94.15	0.26	0.52
NVNT	ac20	5785	Ant1	97.98	0.09	0.52
NVNT	ac20	5825	Ant1	95.07	0.22	0.52
NVNT	ac40	5755	Ant1	84.68	0.72	1.06
NVNT	ac40	5795	Ant1	94.06	0.27	1.05
NVNT	ac80	5775	Ant1	90.2	0.45	2.17

Test Graphs

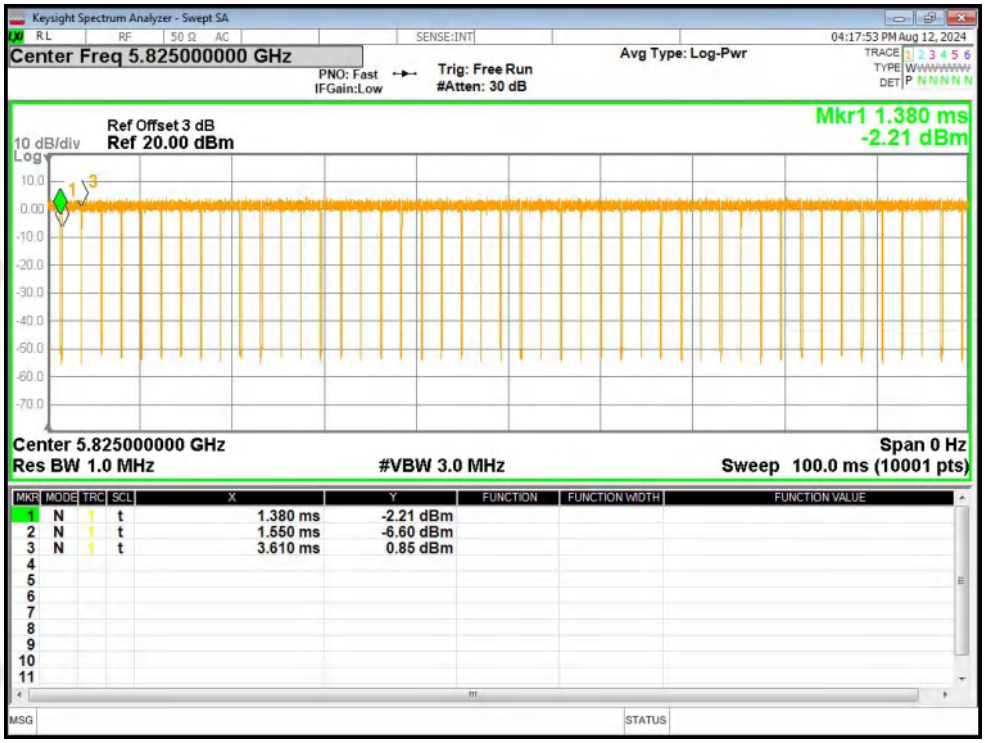
Duty Cycle NVNT a 5745MHz Ant1



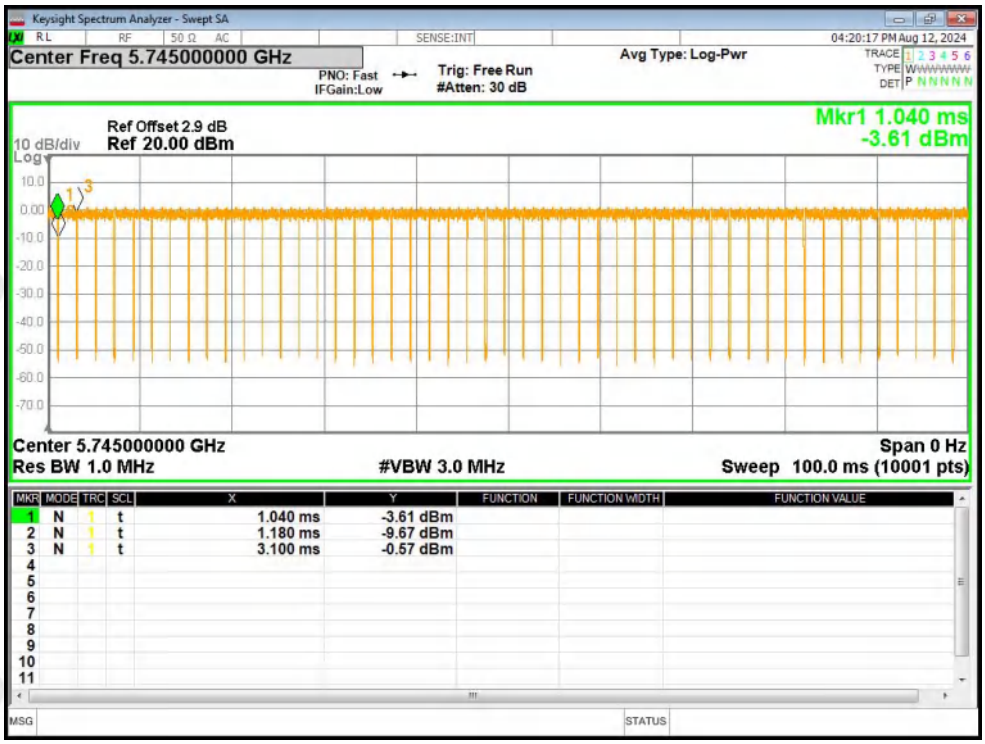
Duty Cycle NVNT a 5785MHz Ant1



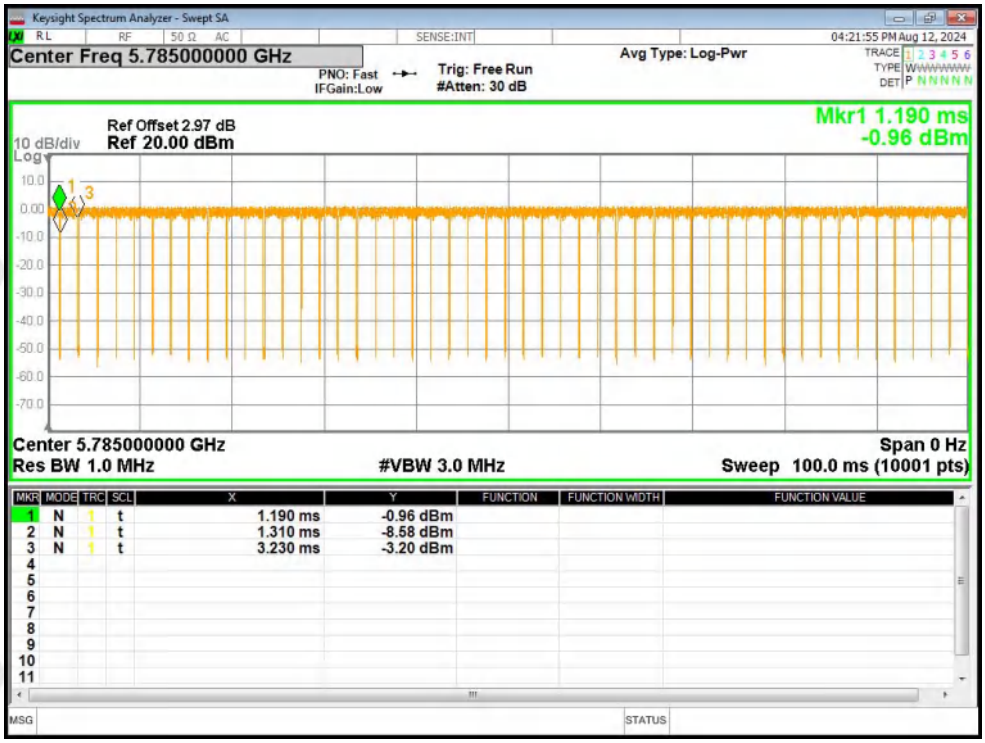
Duty Cycle NVNT a 5825MHz Ant1



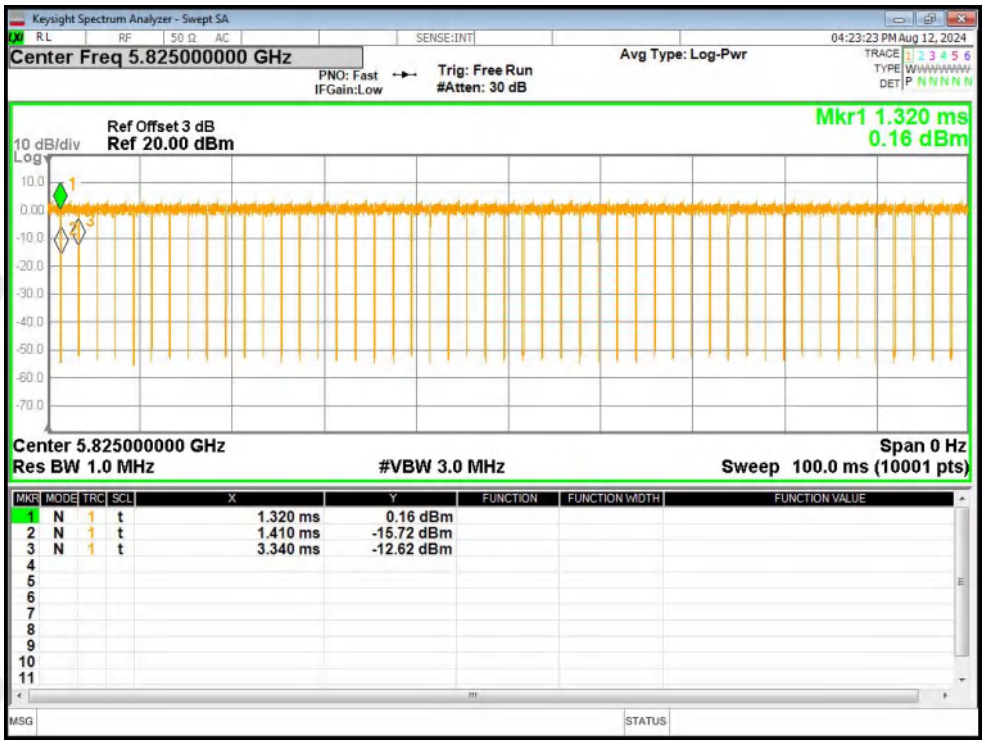
Duty Cycle NVNT n20 5745MHz Ant1



Duty Cycle NVNT n20 5785MHz Ant1



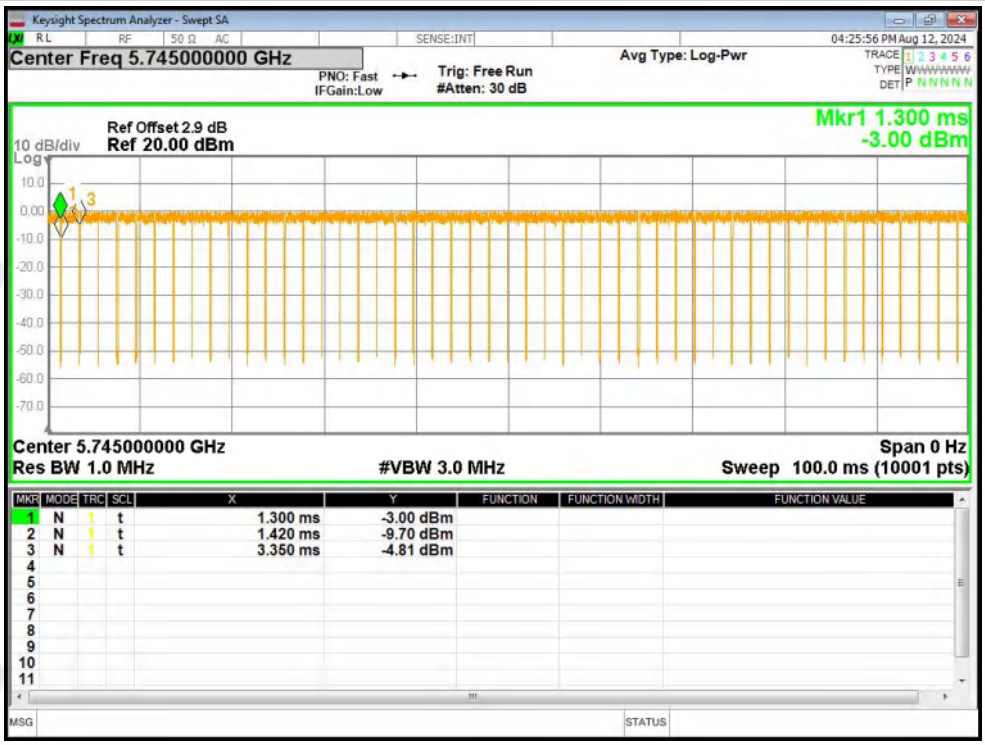
Duty Cycle NVNT n20 5825MHz Ant1



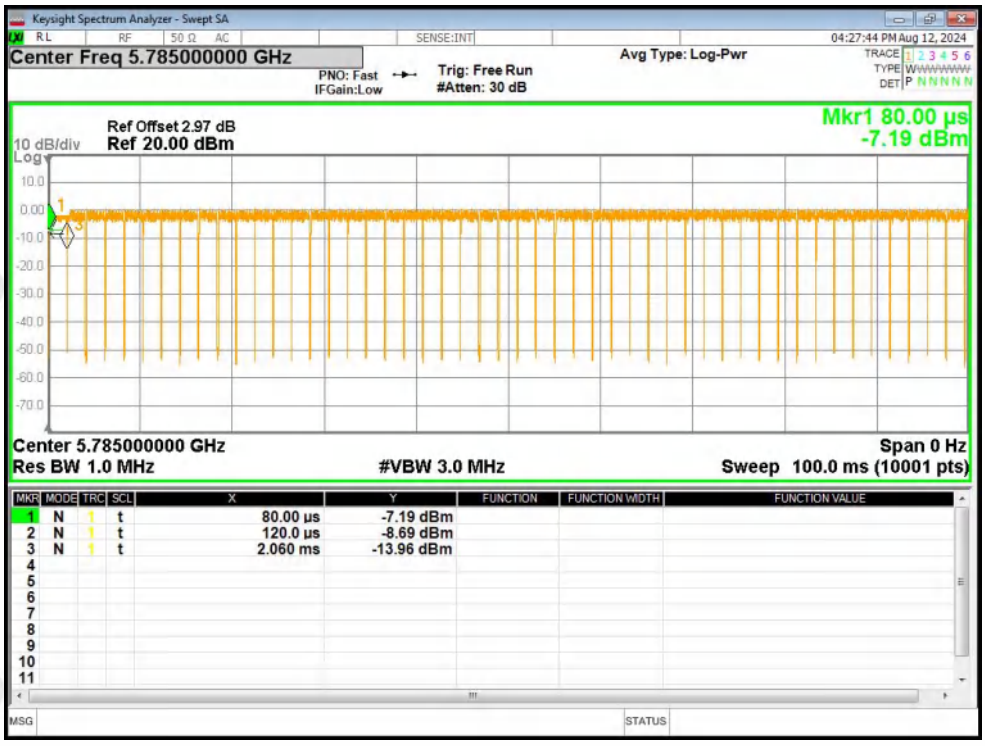
Duty Cycle NVNT n40 5755MHz Ant1

Duty Cycle NVNT n40 5795MHz Ant1

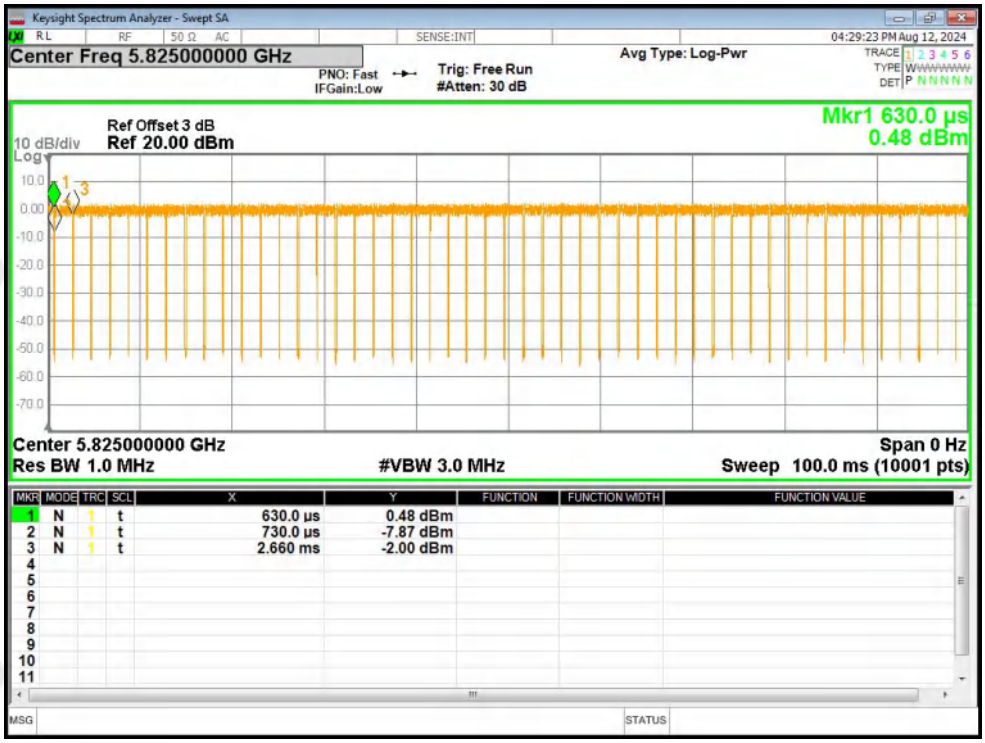
Duty Cycle NVNT ac20 5745MHz Ant1



Duty Cycle NVNT ac20 5785MHz Ant1

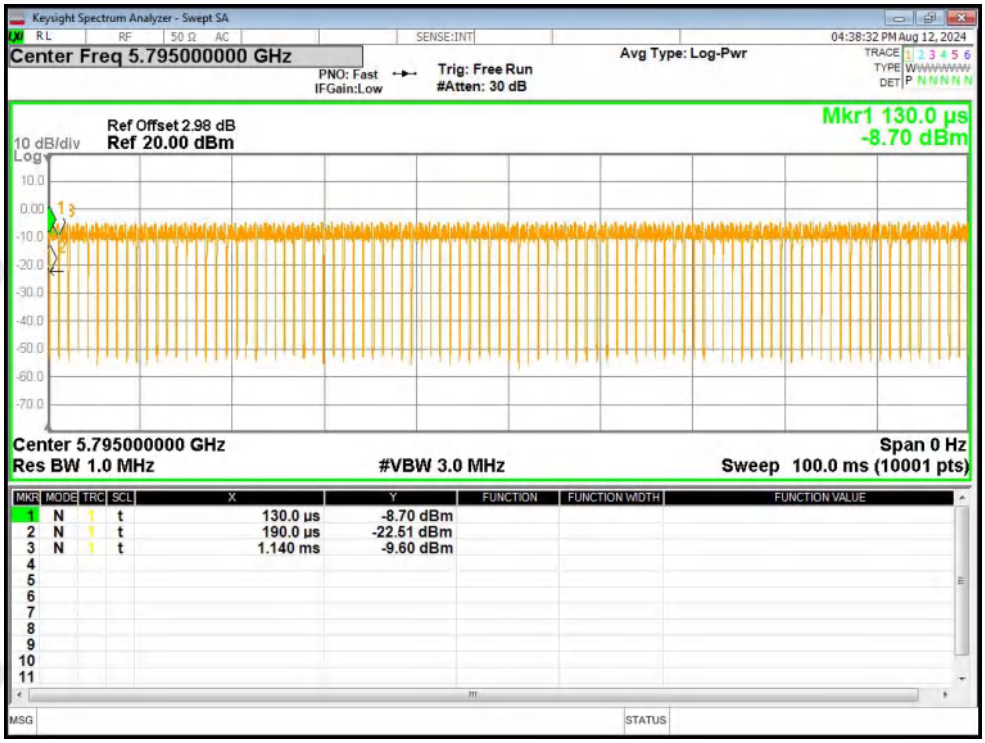


Duty Cycle NVNT ac20 5825MHz Ant1



Duty Cycle NVNT ac40 5755MHz Ant1

Duty Cycle NVNT ac40 5795MHz Ant1



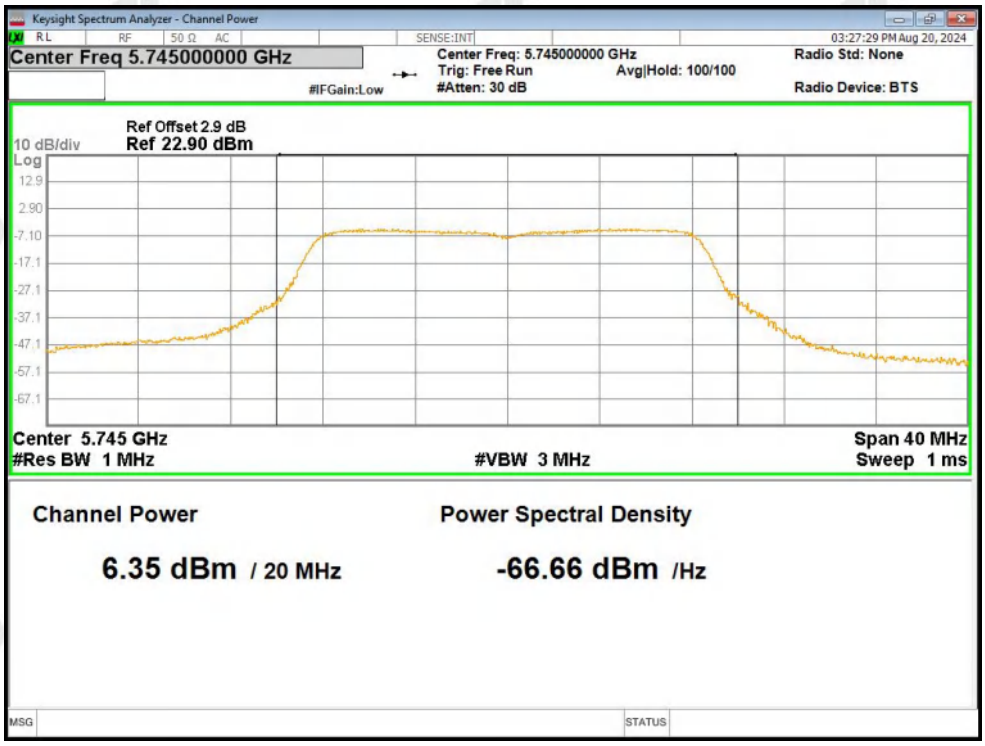
Duty Cycle NVNT ac80 5775MHz Ant1

Maximum Conducted Output Power

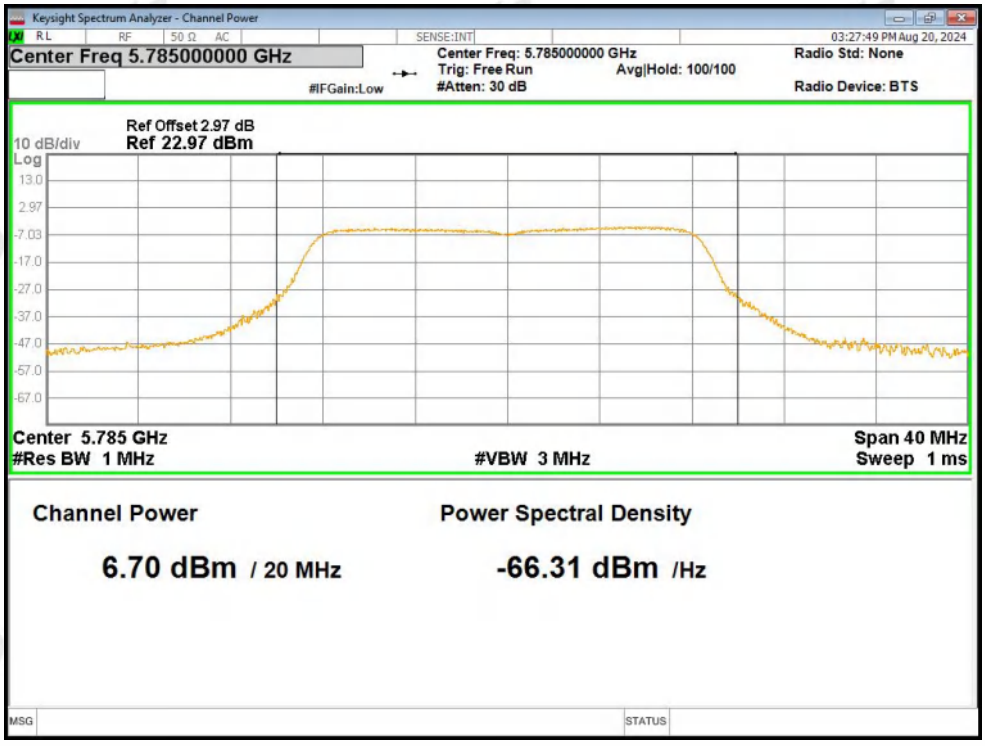
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	6.35	0.3	6.65	30	Pass
NVNT	a	5785	Ant1	6.7	0.28	6.98	30	Pass
NVNT	a	5825	Ant1	5.48	0.34	5.82	30	Pass
NVNT	n20	5745	Ant1	5.35	0.31	5.66	30	Pass
NVNT	n20	5785	Ant1	5.68	0.26	5.94	30	Pass
NVNT	n20	5825	Ant1	6.09	0.2	6.29	30	Pass
NVNT	n40	5755	Ant1	3	0.35	3.35	30	Pass
NVNT	n40	5795	Ant1	3.51	0.48	3.99	30	Pass
NVNT	ac20	5745	Ant1	3.95	0.26	4.21	30	Pass
NVNT	ac20	5785	Ant1	4.31	0.09	4.4	30	Pass
NVNT	ac20	5825	Ant1	4.62	0.22	4.84	30	Pass
NVNT	ac40	5755	Ant1	2.21	0.72	2.93	30	Pass
NVNT	ac40	5795	Ant1	2.57	0.27	2.84	30	Pass
NVNT	ac80	5775	Ant1	1.66	0.45	2.11	30	Pass

Test Graphs

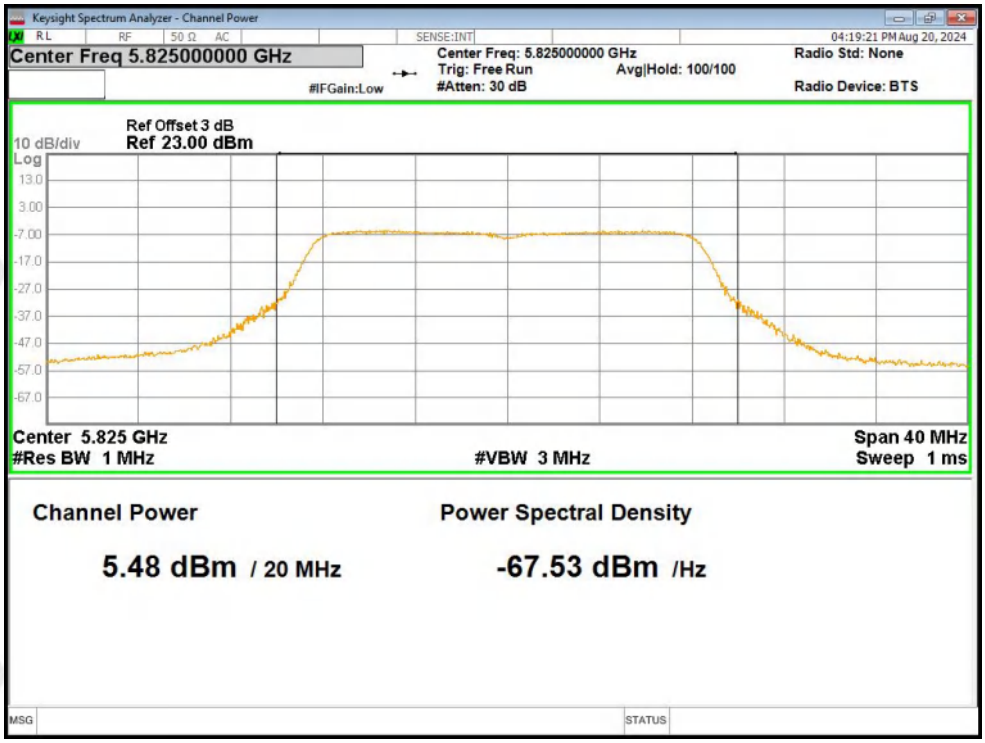
Power NVNT a 5745MHz Ant1



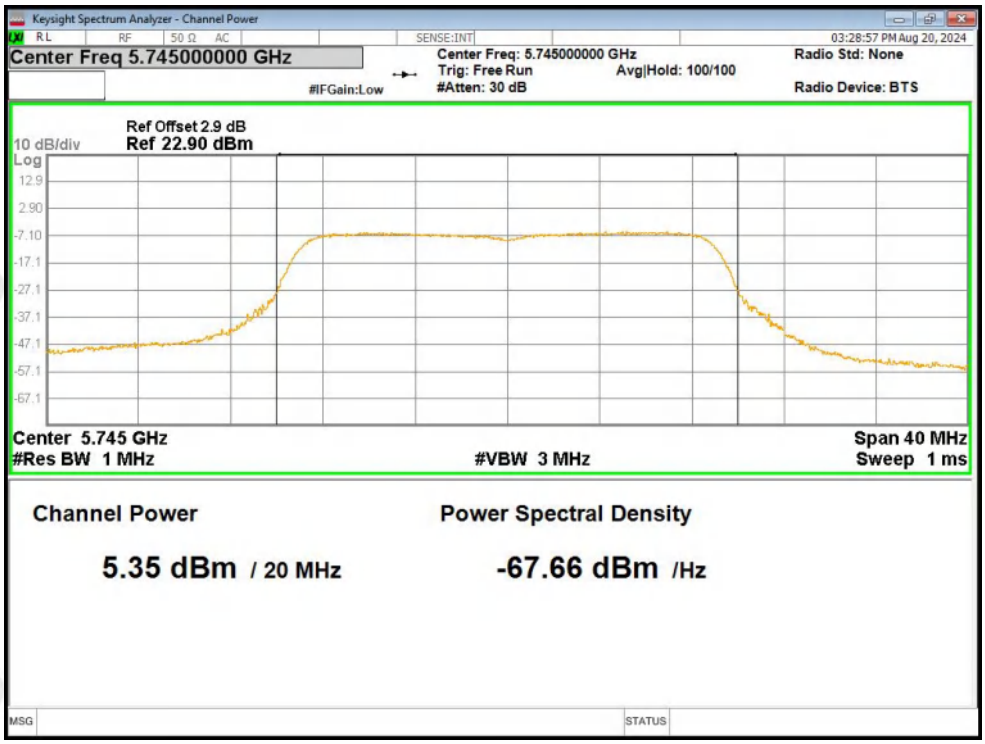
Power NVNT a 5785MHz Ant1



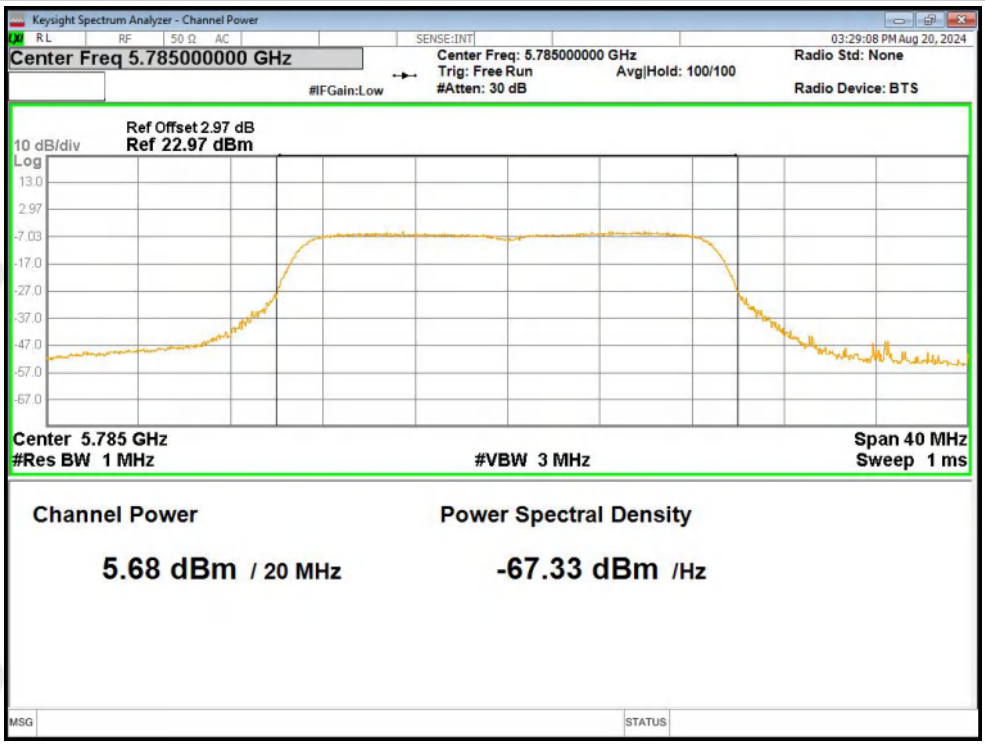
Power NVNT a 5825MHz Ant1



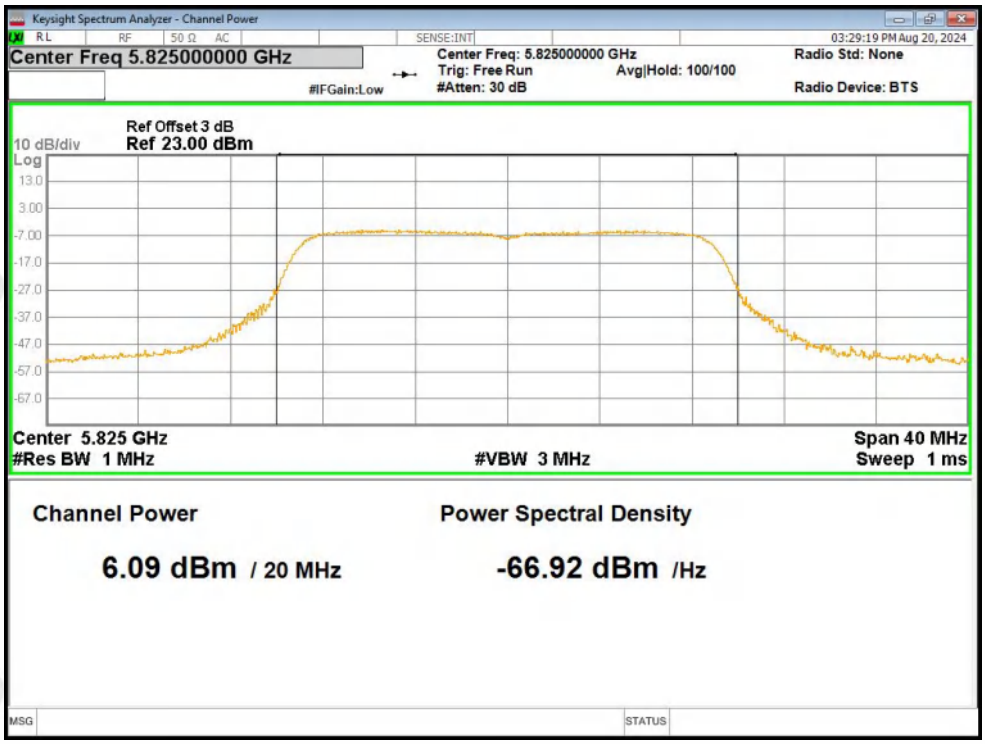
Power NVNT n20 5745MHz Ant1



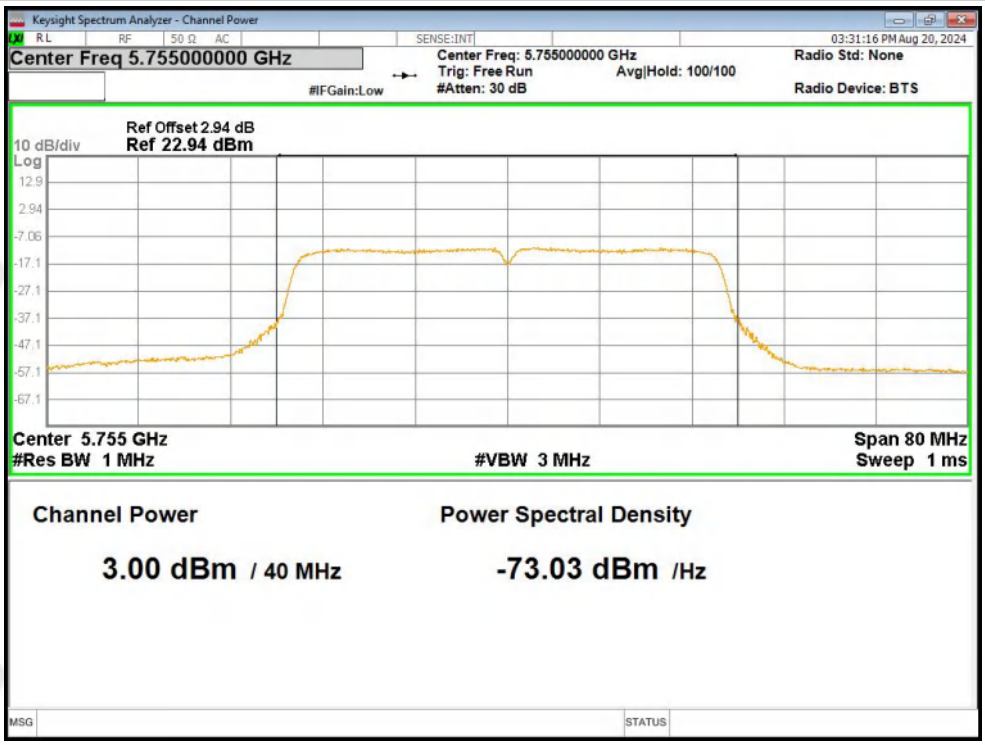
Power NVNT n20 5785MHz Ant1



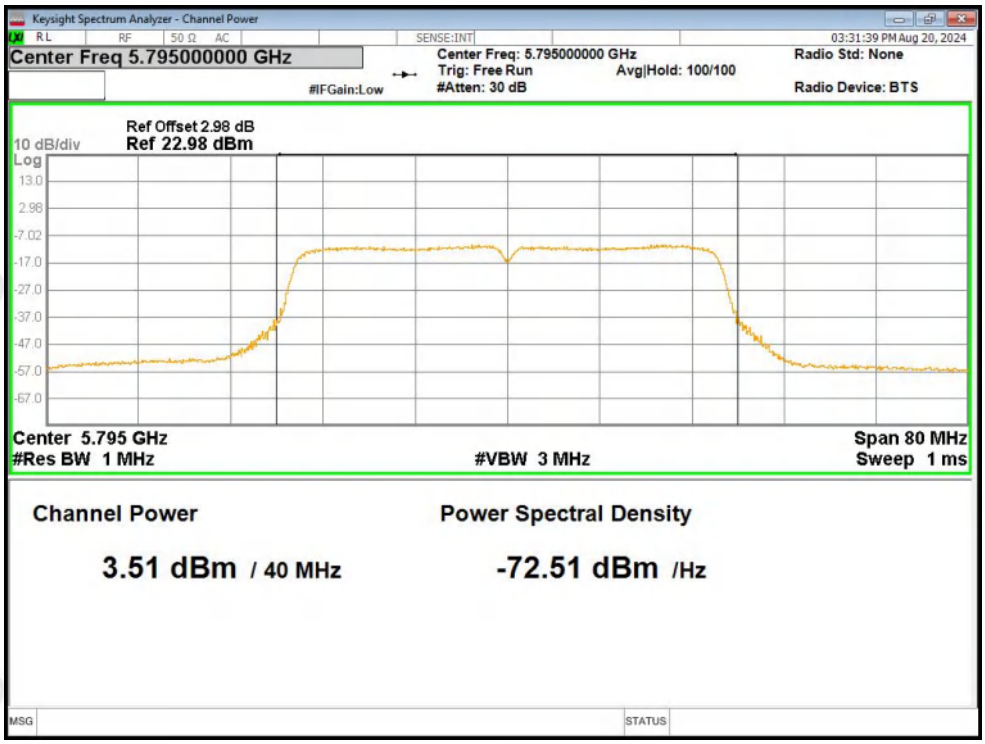
Power NVNT n20 5825MHz Ant1



Power NVNT n40 5755MHz Ant1

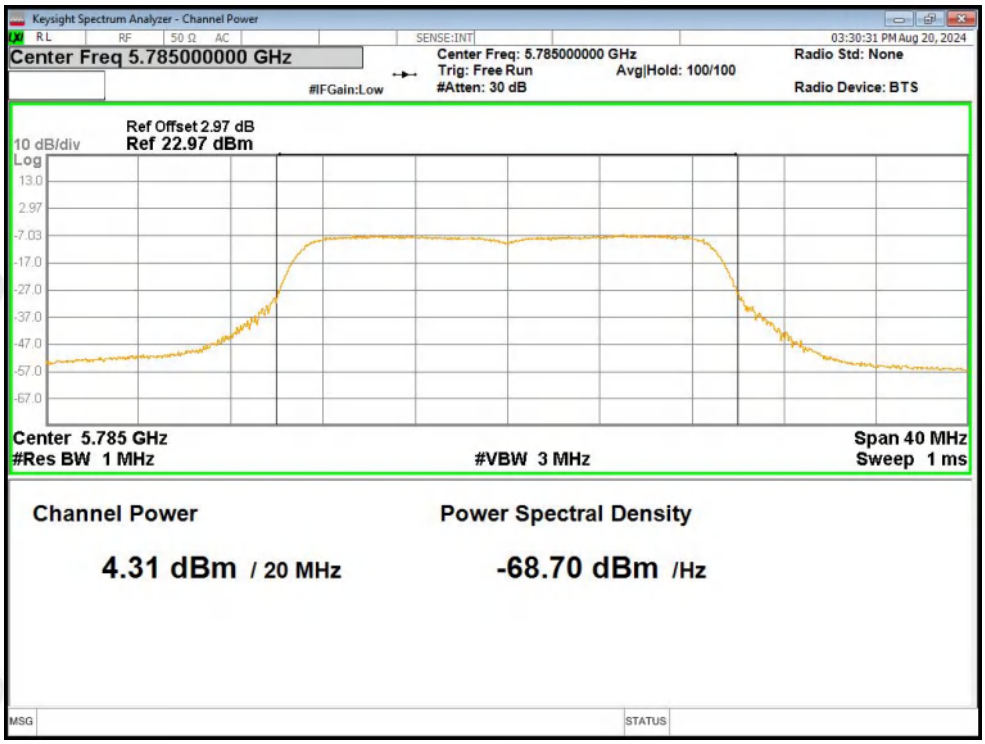


Power NVNT n40 5795MHz Ant1

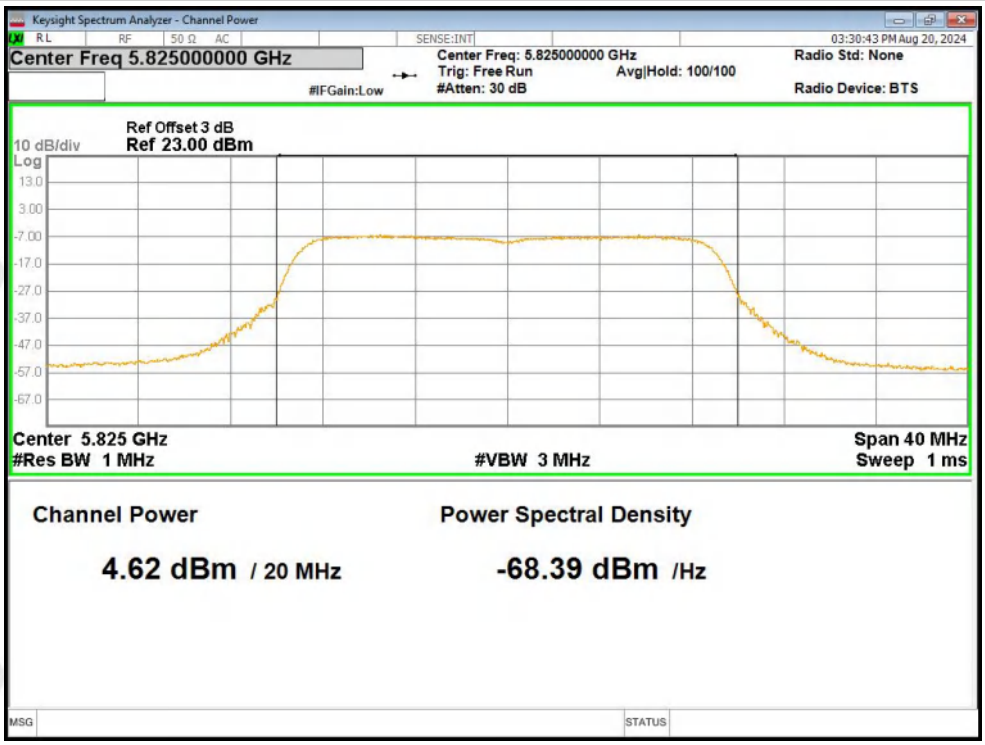


Power NVNT ac20 5745MHz Ant1

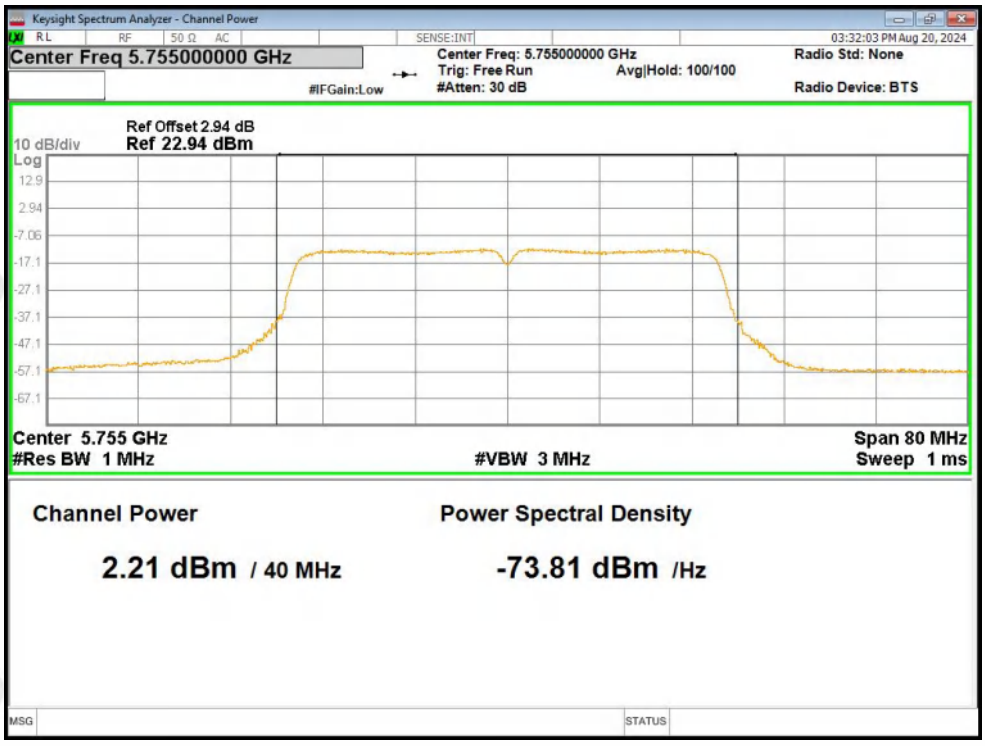
Power NVNT ac20 5785MHz Ant1



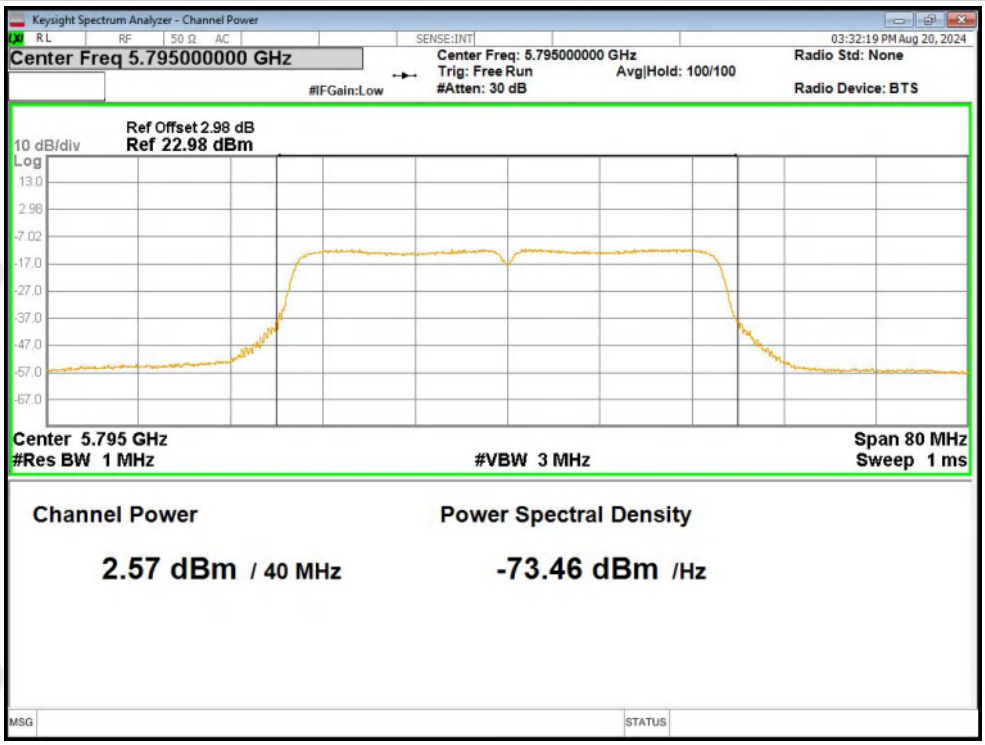
Power NVNT ac20 5825MHz Ant1



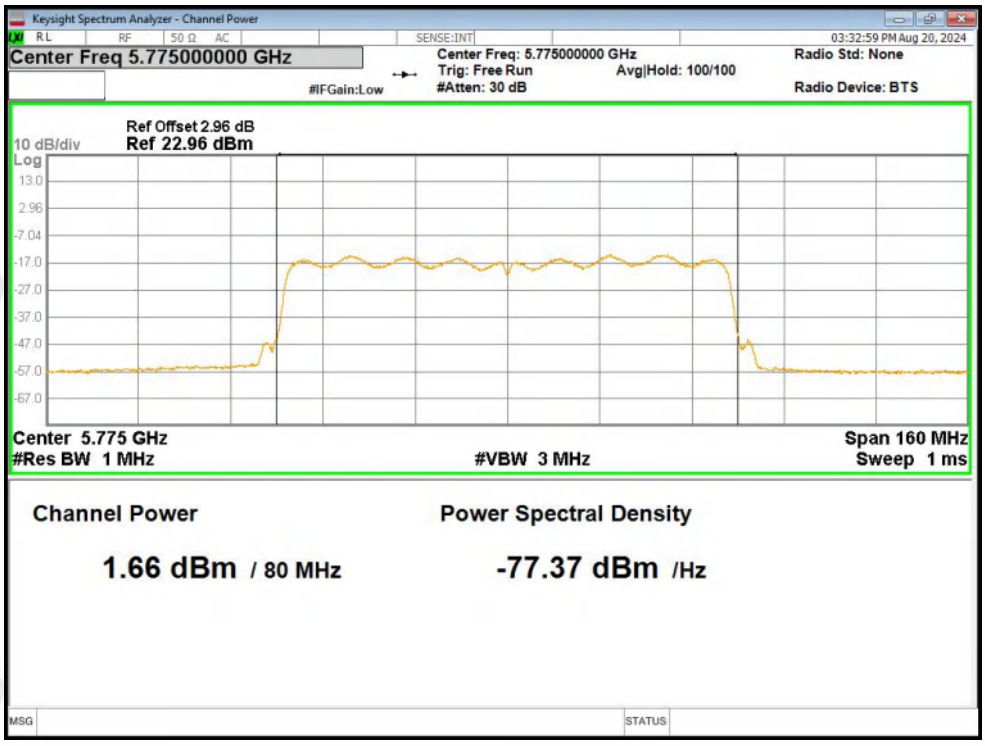
Power NVNT ac40 5755MHz Ant1



Power NVNT ac40 5795MHz Ant1



Power NVNT ac80 5775MHz Ant1

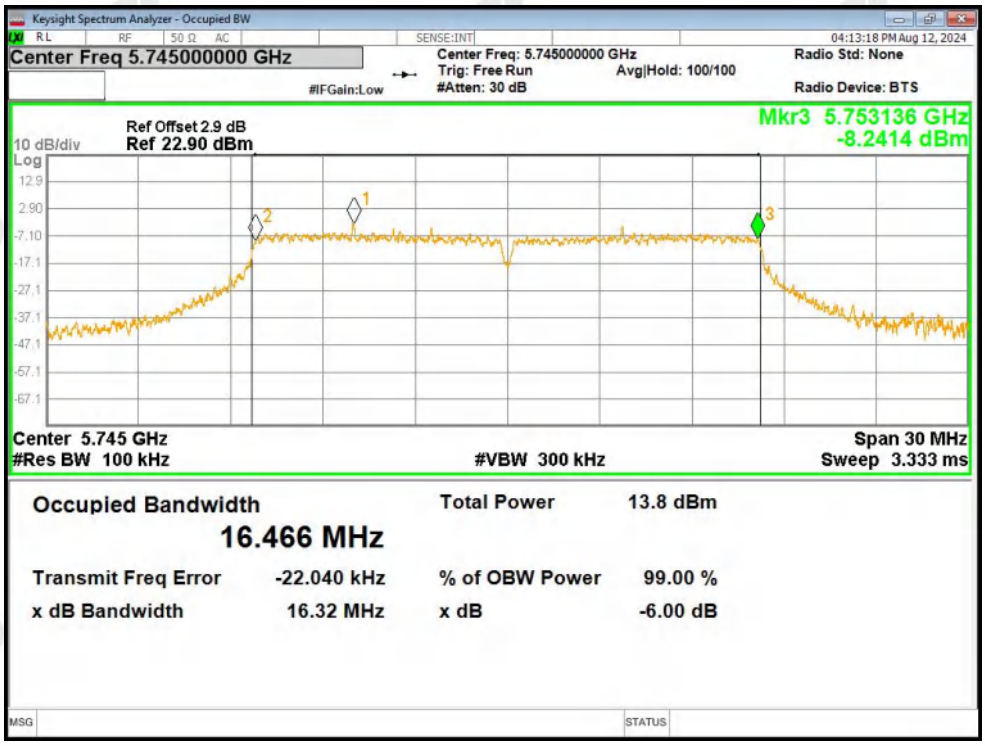


-6dB Bandwidth

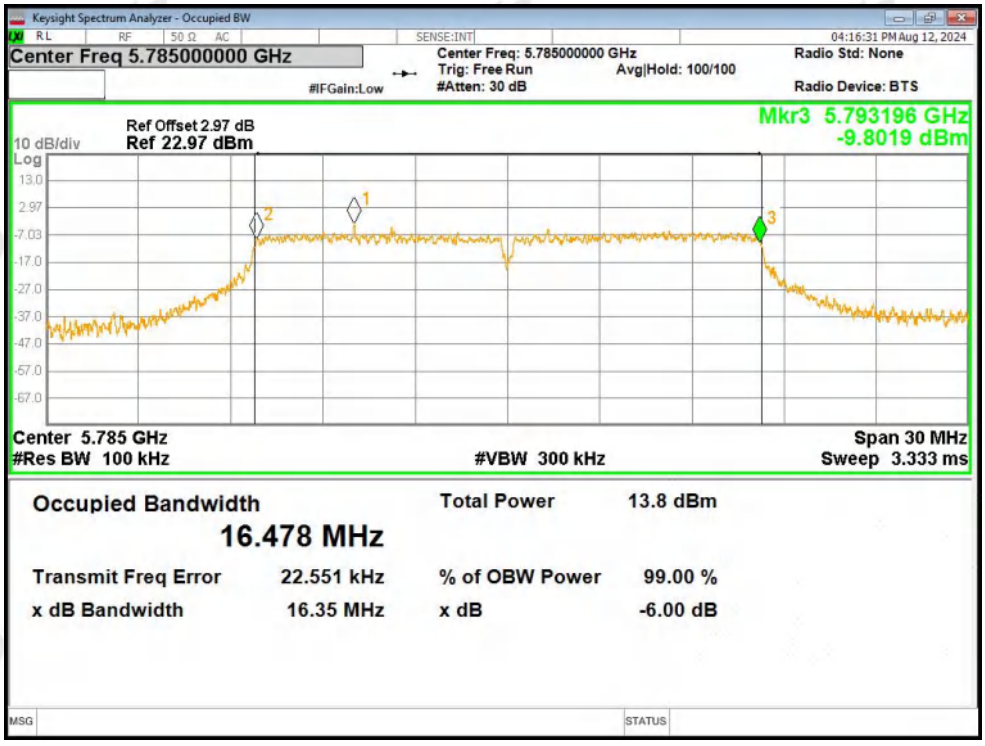
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant1	16.317	0.5	Pass
NVNT	a	5785	Ant1	16.347	0.5	Pass
NVNT	a	5825	Ant1	16.319	0.5	Pass
NVNT	n20	5745	Ant1	17.263	0.5	Pass
NVNT	n20	5785	Ant1	17.404	0.5	Pass
NVNT	n20	5825	Ant1	16.877	0.5	Pass
NVNT	n40	5755	Ant1	35.614	0.5	Pass
NVNT	n40	5795	Ant1	35.113	0.5	Pass
NVNT	ac20	5745	Ant1	17.071	0.5	Pass
NVNT	ac20	5785	Ant1	17.332	0.5	Pass
NVNT	ac20	5825	Ant1	17.295	0.5	Pass
NVNT	ac40	5755	Ant1	35.357	0.5	Pass
NVNT	ac40	5795	Ant1	34.265	0.5	Pass
NVNT	ac80	5775	Ant1	75.112	0.5	Pass

Test Graphs

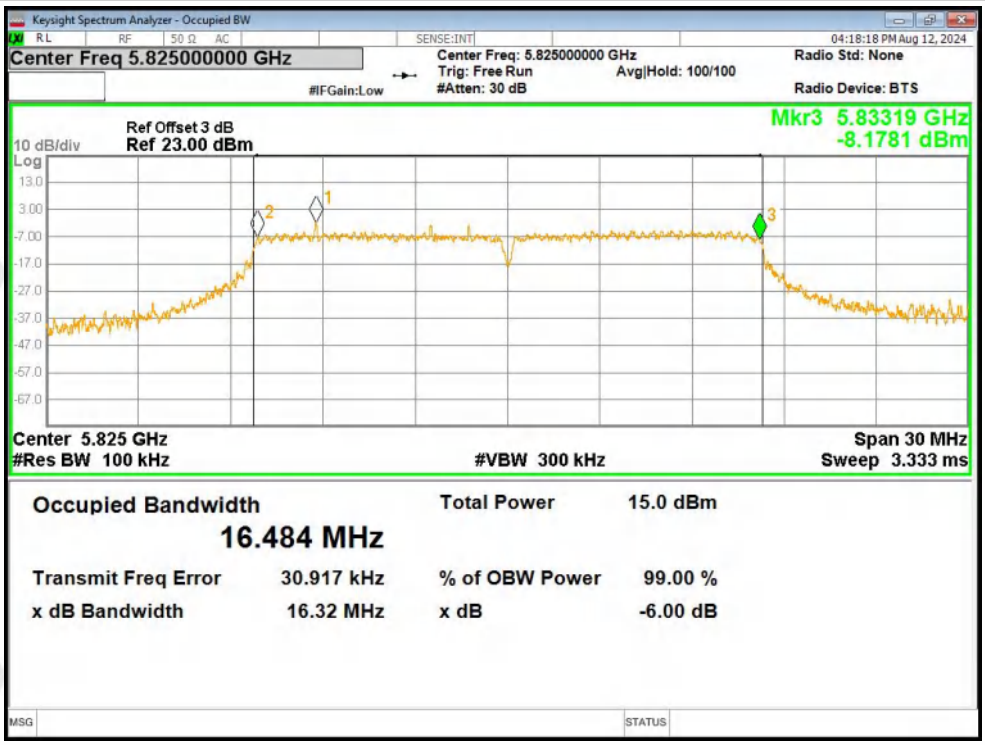
-6dB Bandwidth NVNT a 5745MHz Ant1



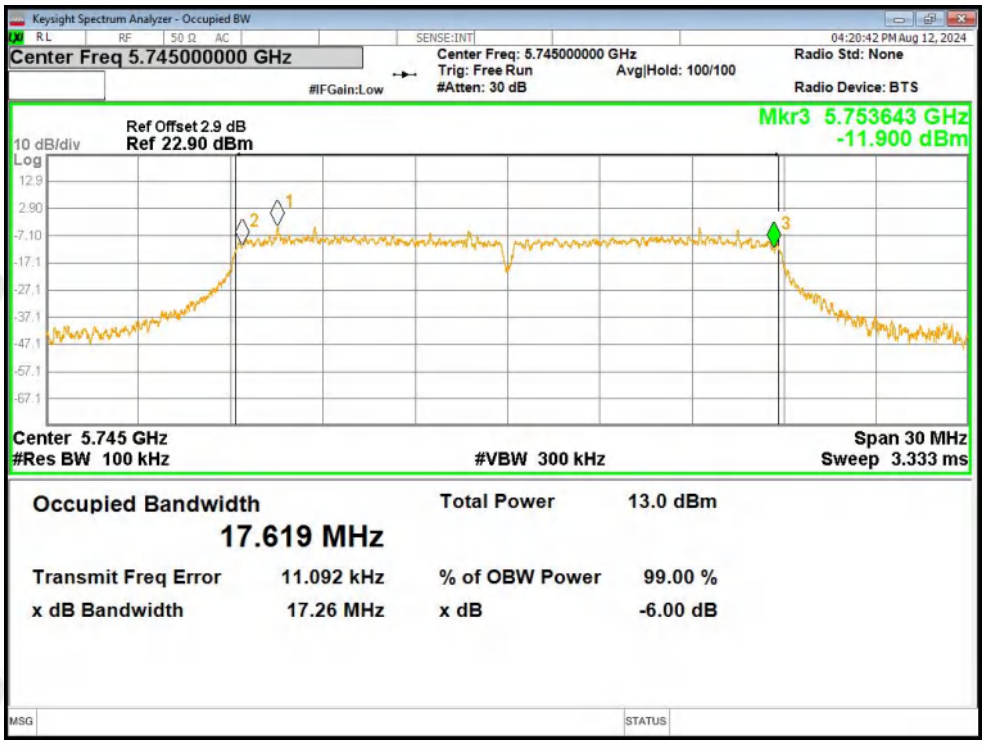
-6dB Bandwidth NVNT a 5785MHz Ant1



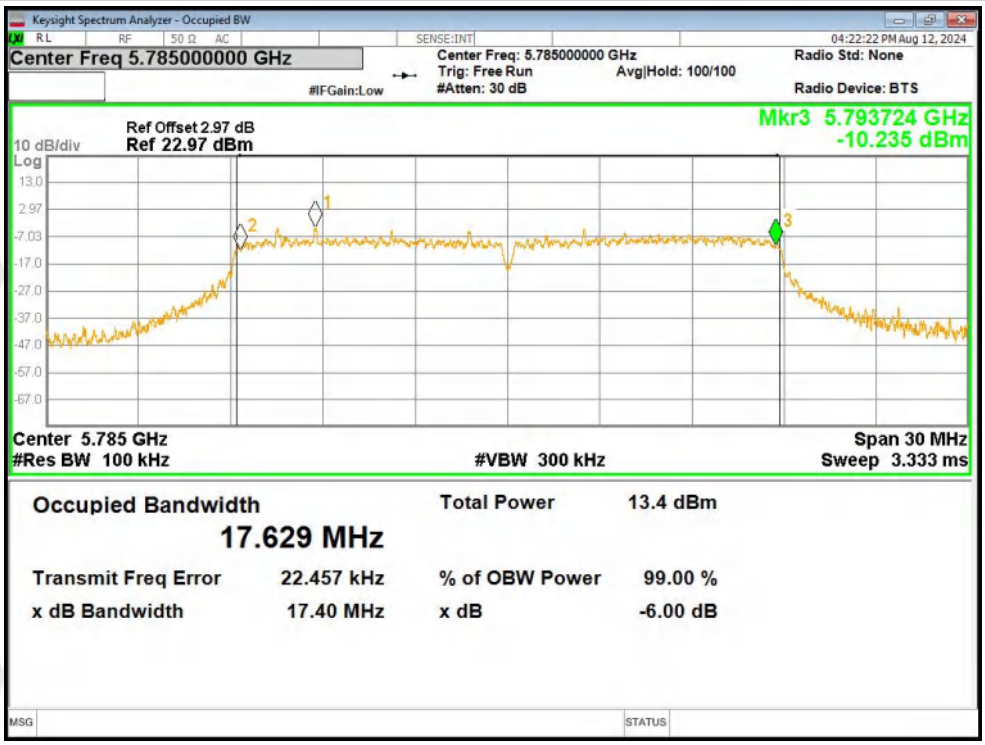
-6dB Bandwidth NVNT a 5825MHz Ant1



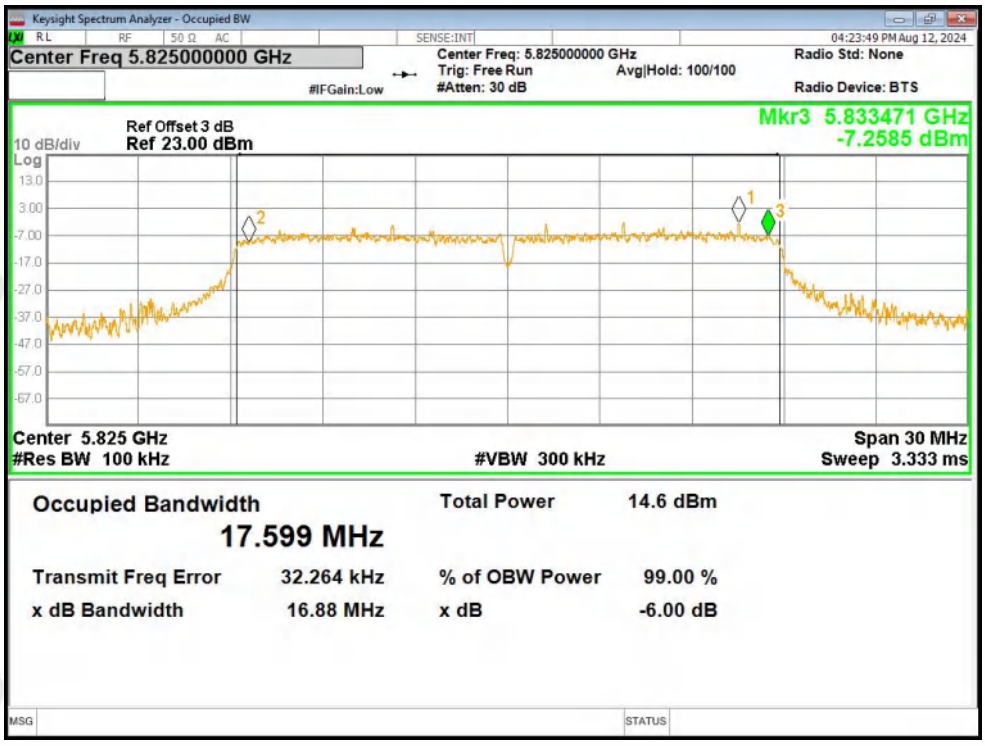
-6dB Bandwidth NVNT n20 5745MHz Ant1



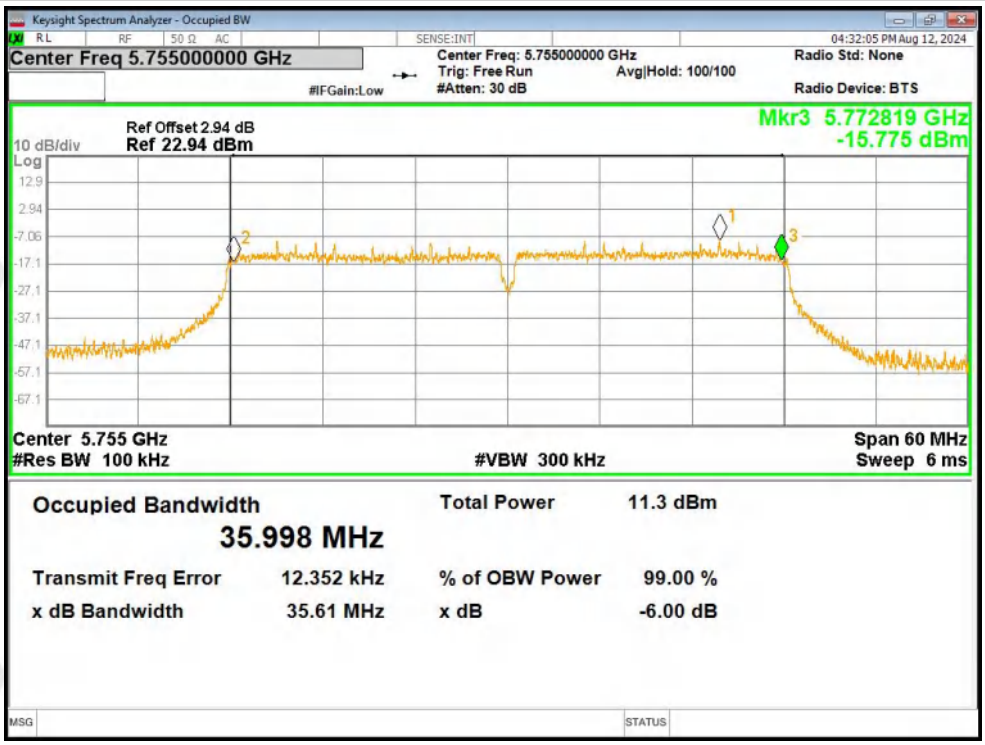
-6dB Bandwidth NVNT n20 5785MHz Ant1



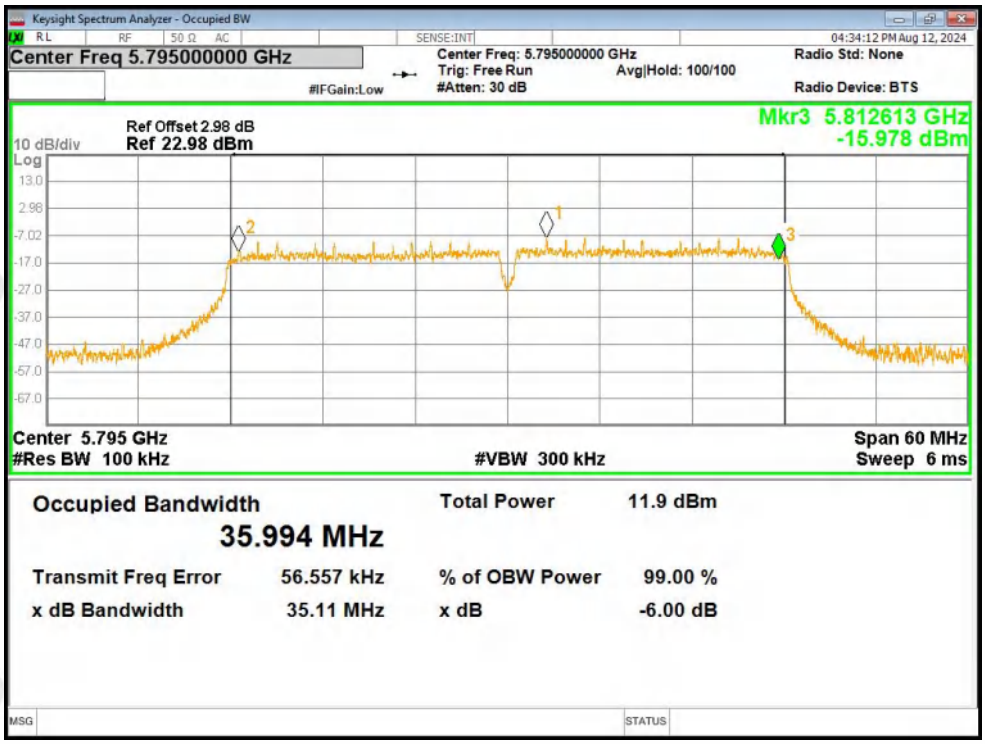
-6dB Bandwidth NVNT n20 5825MHz Ant1



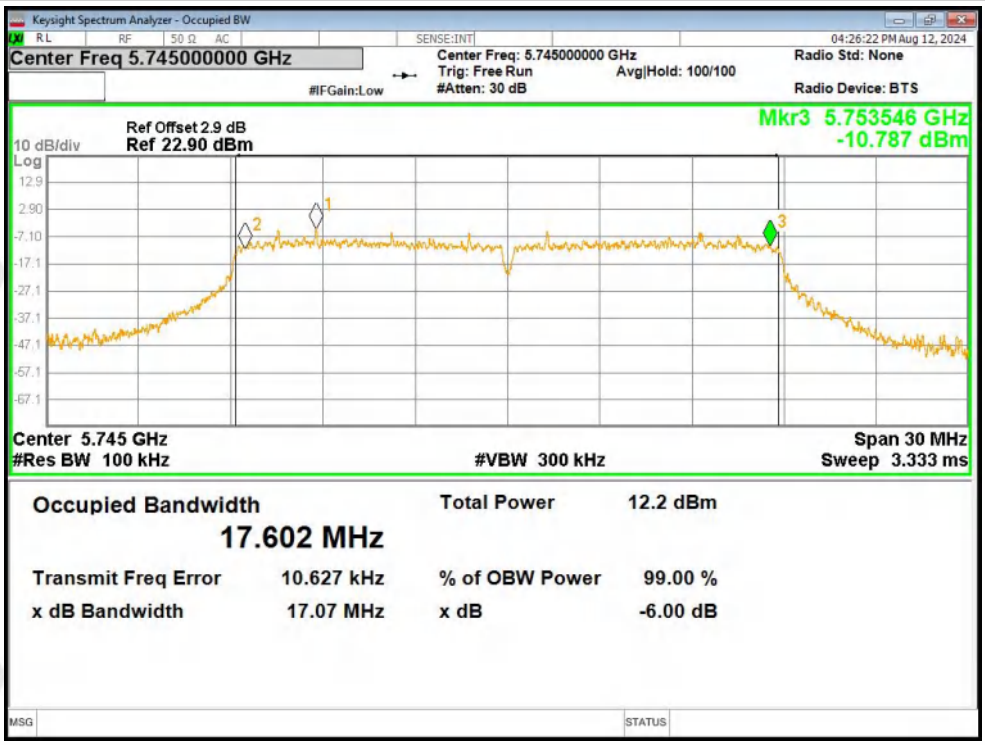
-6dB Bandwidth NVNT n40 5755MHz Ant1



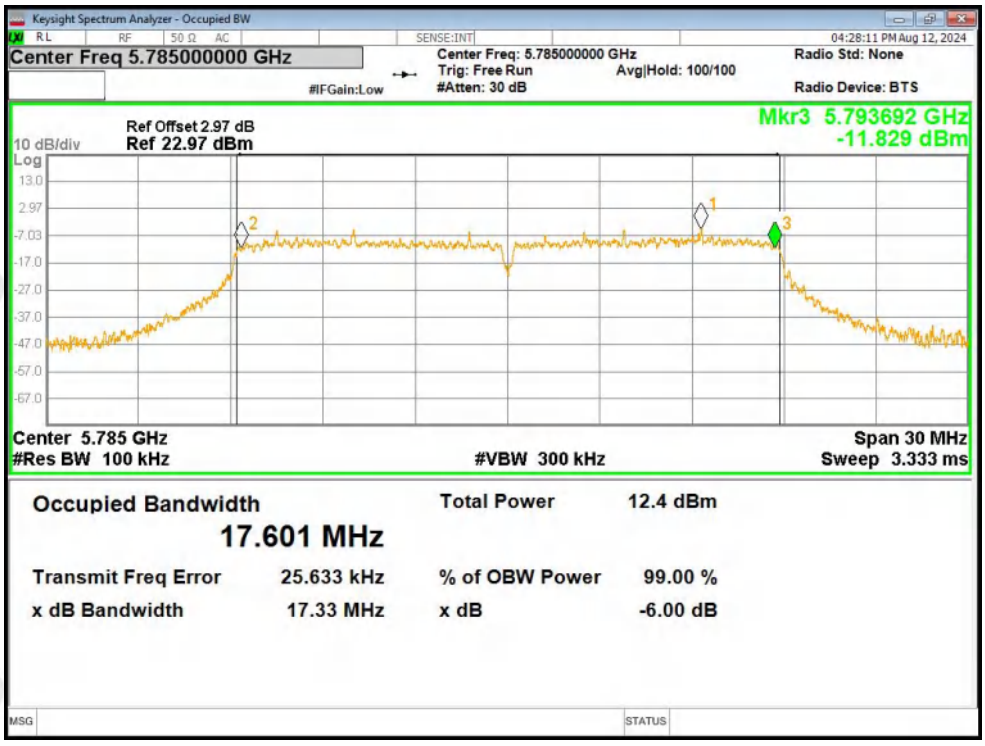
-6dB Bandwidth NVNT n40 5795MHz Ant1



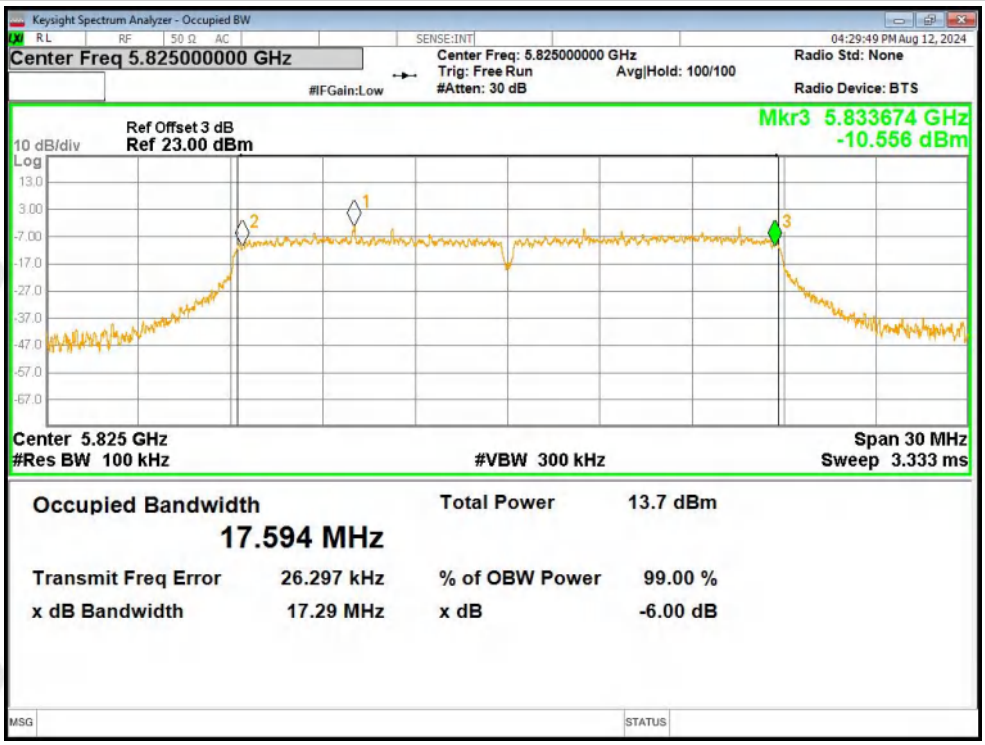
-6dB Bandwidth NVNT ac20 5745MHz Ant1



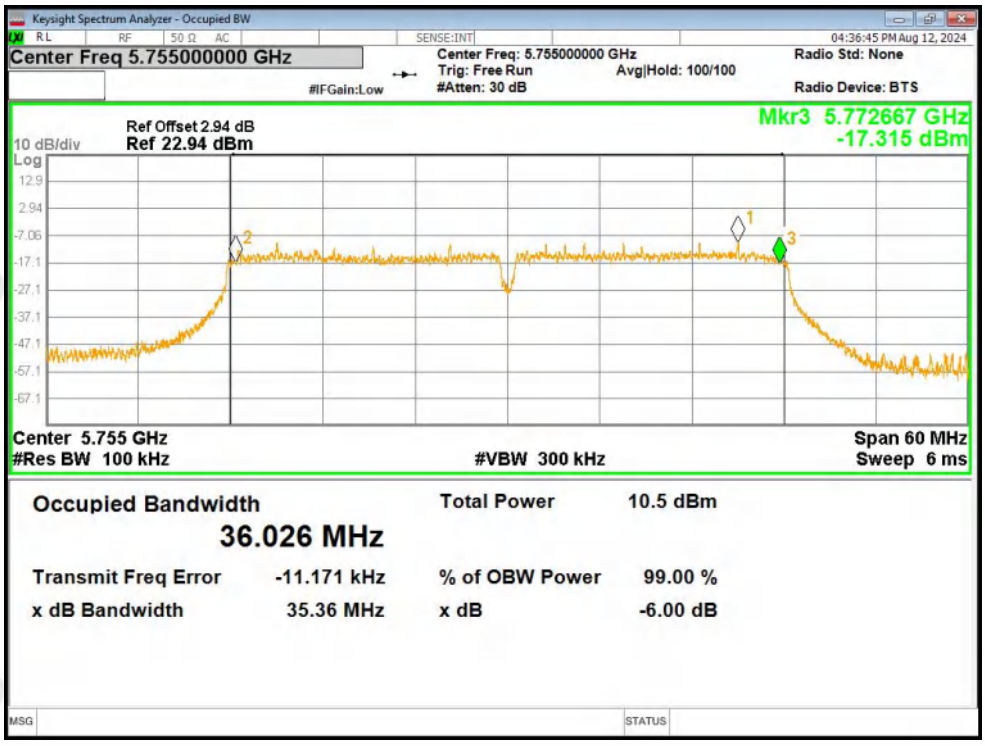
-6dB Bandwidth NVNT ac20 5785MHz Ant1



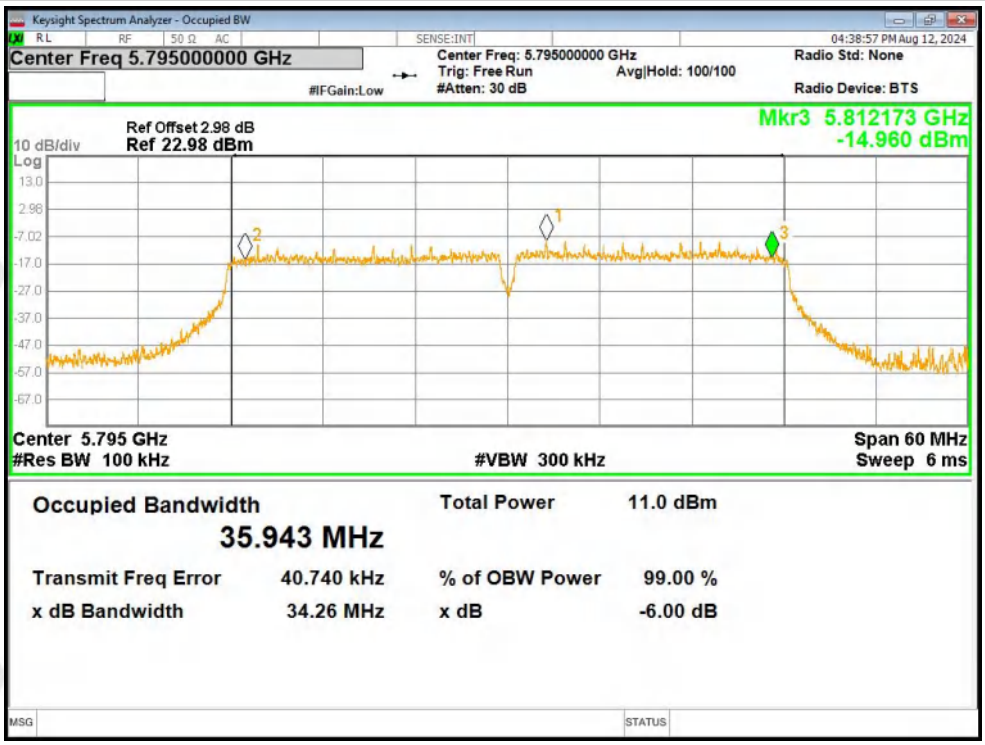
-6dB Bandwidth NVNT ac20 5825MHz Ant1



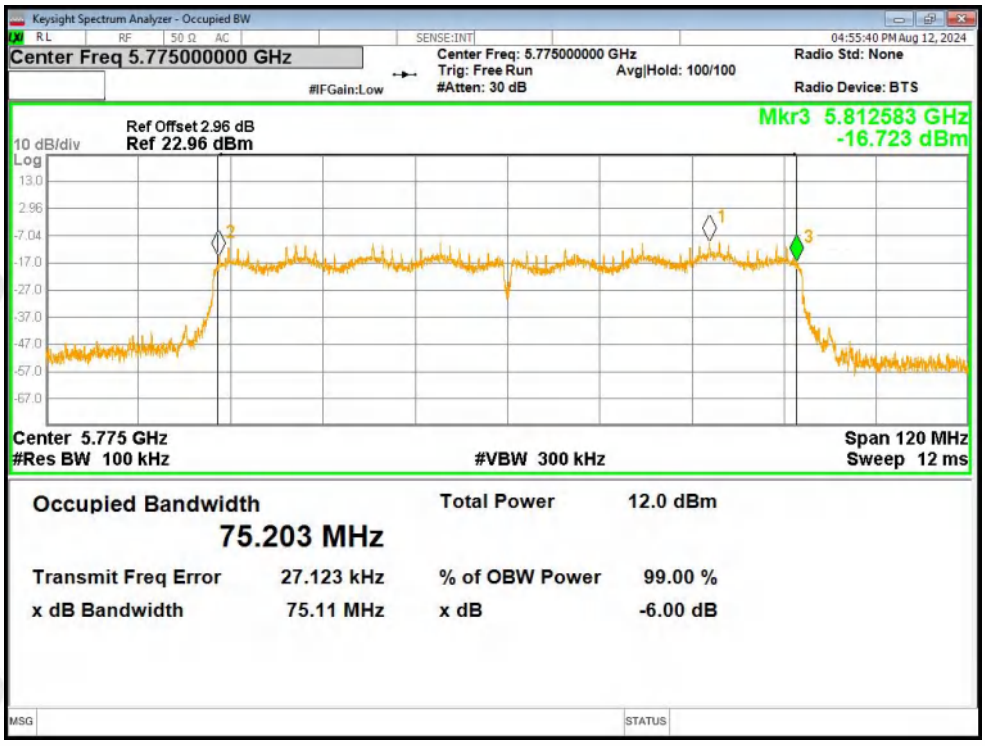
-6dB Bandwidth NVNT ac40 5755MHz Ant1



-6dB Bandwidth NVNT ac40 5795MHz Ant1



-6dB Bandwidth NVNT ac80 5775MHz Ant1

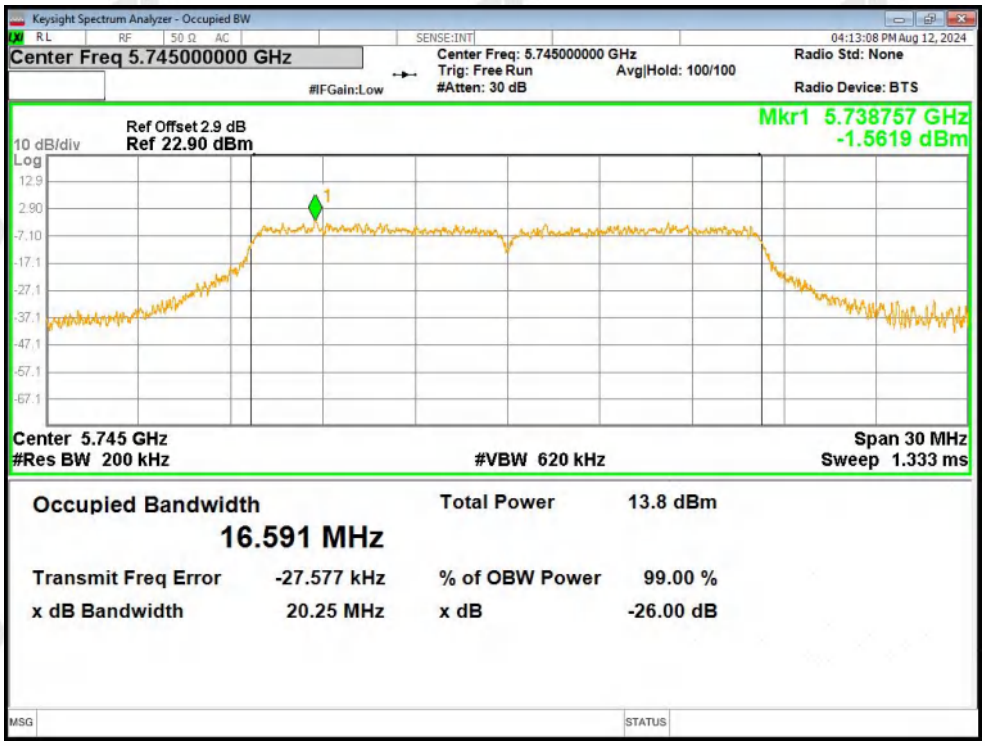


Occupied Channel Bandwidth

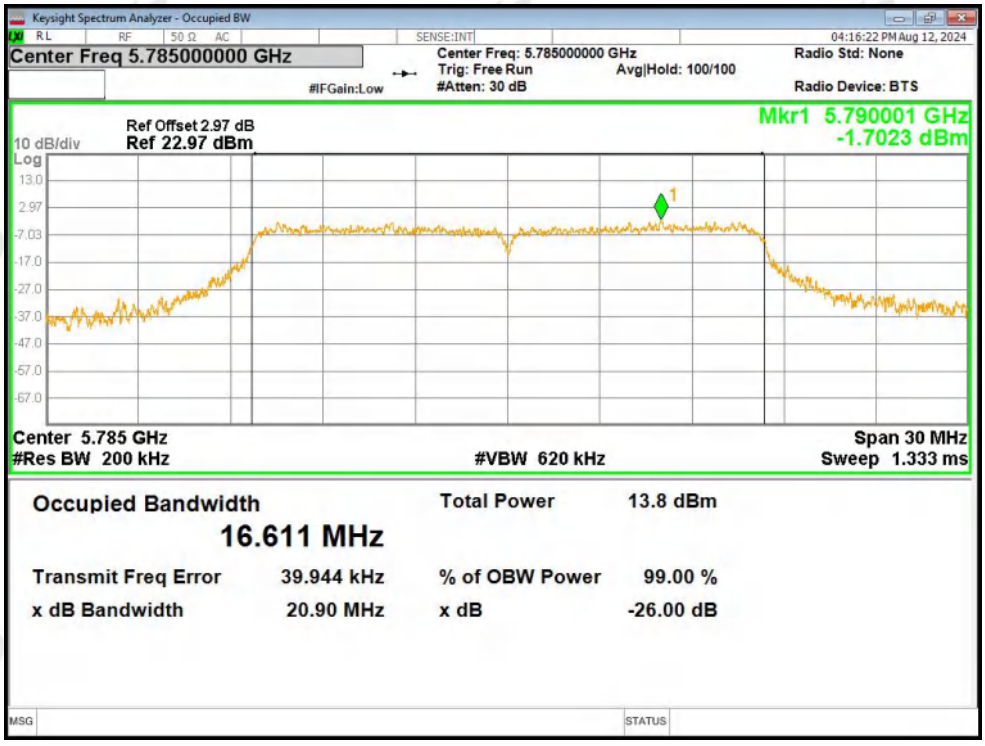
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5745	Ant1	16.591
NVNT	a	5785	Ant1	16.611
NVNT	a	5825	Ant1	16.682
NVNT	n20	5745	Ant1	17.672
NVNT	n20	5785	Ant1	17.707
NVNT	n20	5825	Ant1	17.651
NVNT	n40	5755	Ant1	36.144
NVNT	n40	5795	Ant1	36.184
NVNT	ac20	5745	Ant1	17.649
NVNT	ac20	5785	Ant1	17.632
NVNT	ac20	5825	Ant1	17.639
NVNT	ac40	5755	Ant1	36.212
NVNT	ac40	5795	Ant1	36.133
NVNT	ac80	5775	Ant1	75.361

Test Graphs

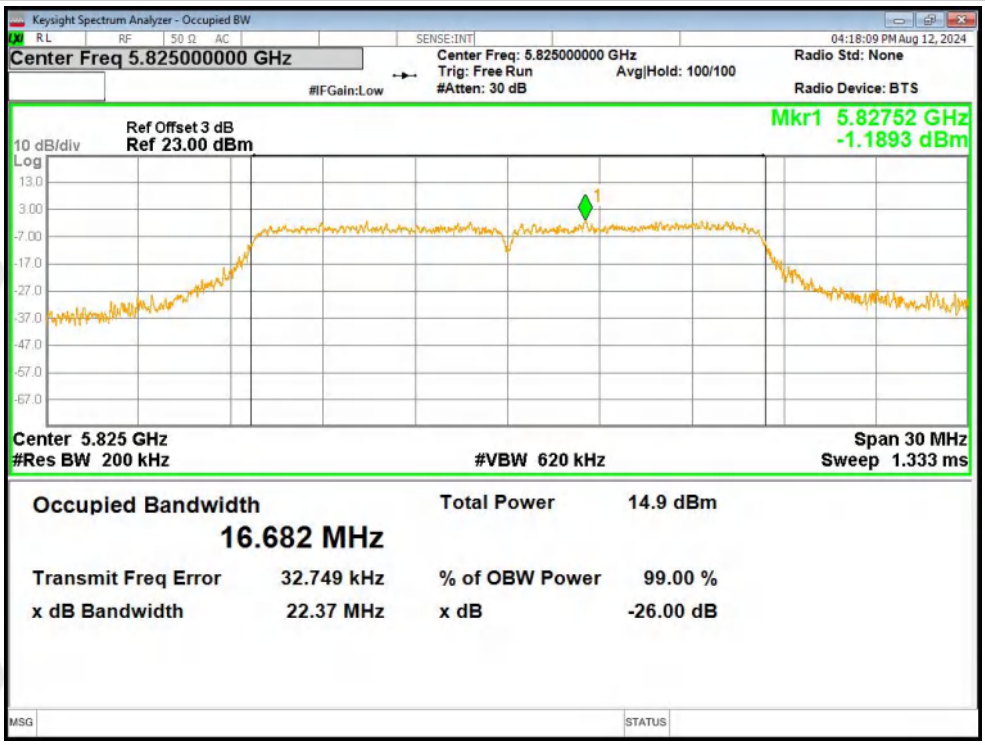
OBW NVNT a 5745MHz Ant1



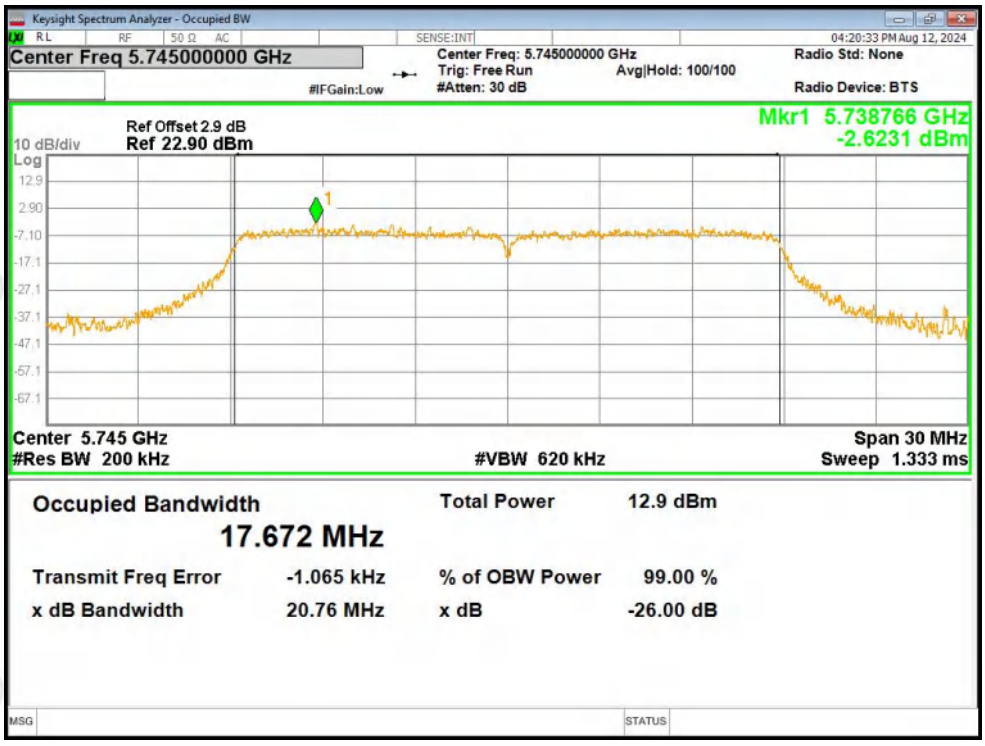
OBW NVNT a 5785MHz Ant1



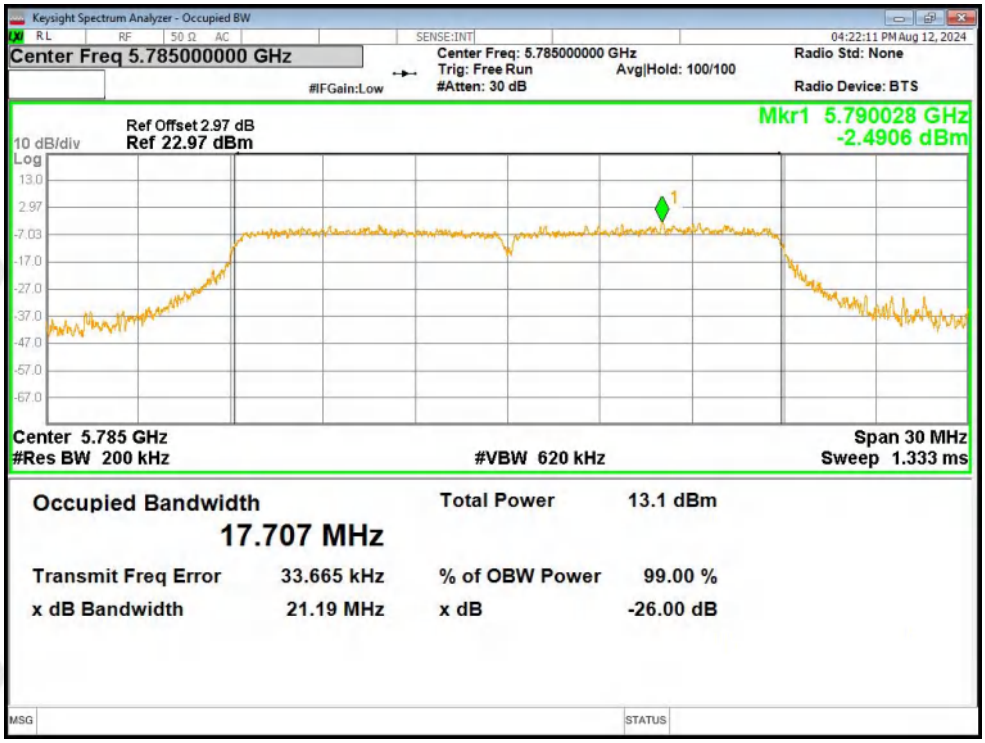
OBW NVNT a 5825MHz Ant1



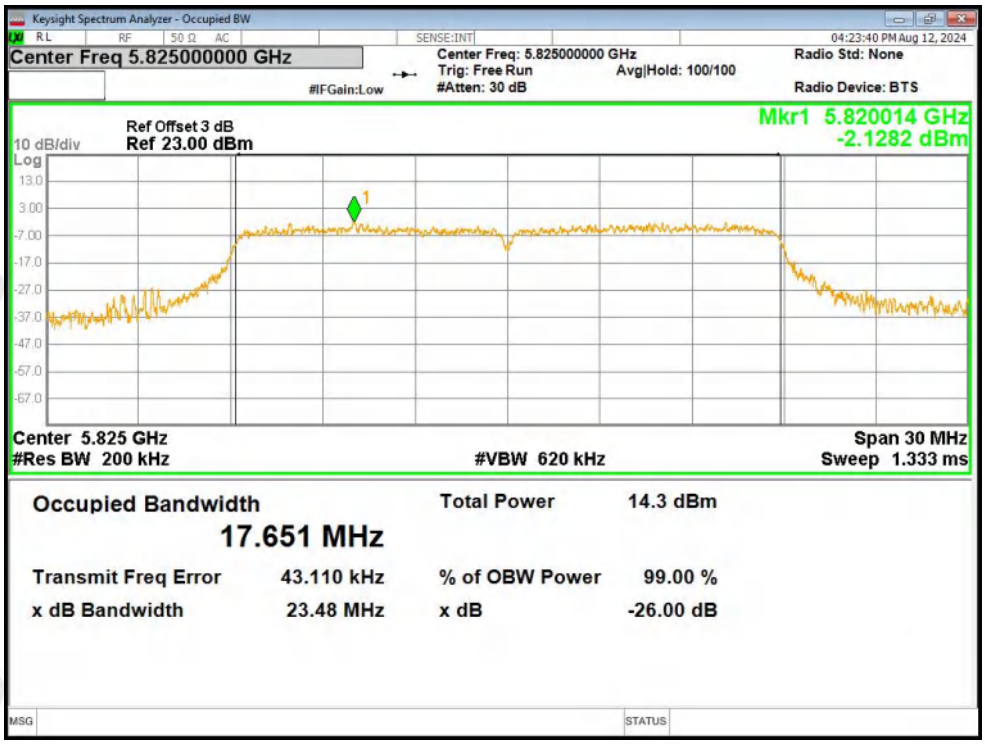
OBW NVNT n20 5745MHz Ant1



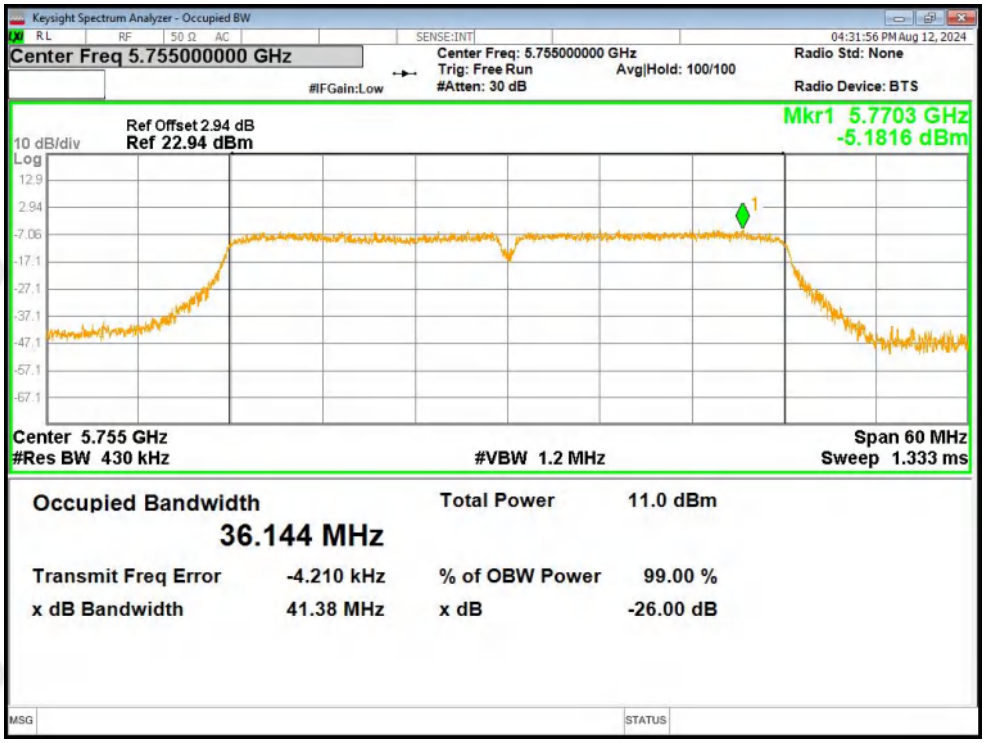
OBW NVNT n20 5785MHz Ant1



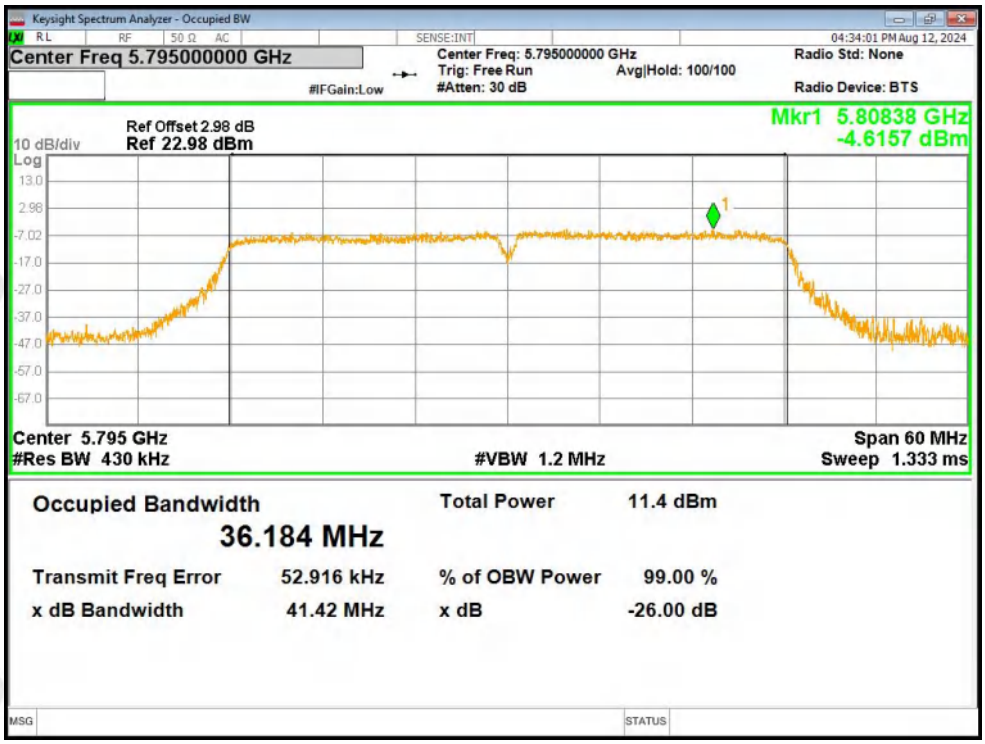
OBW NVNT n20 5825MHz Ant1



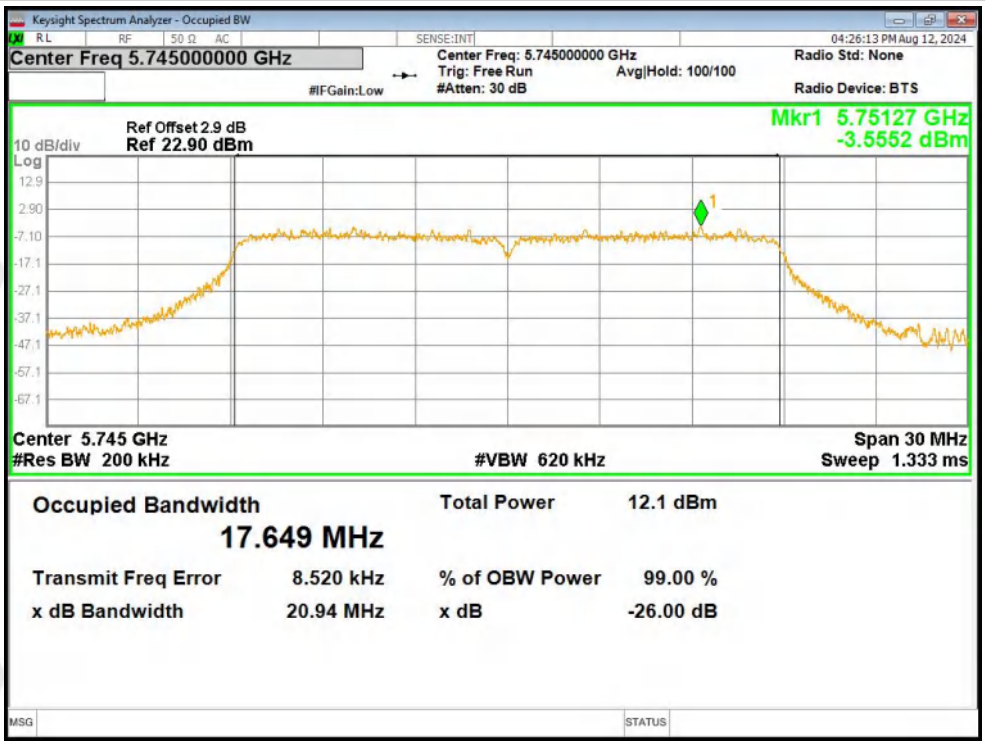
OBW NVNT n40 5755MHz Ant1



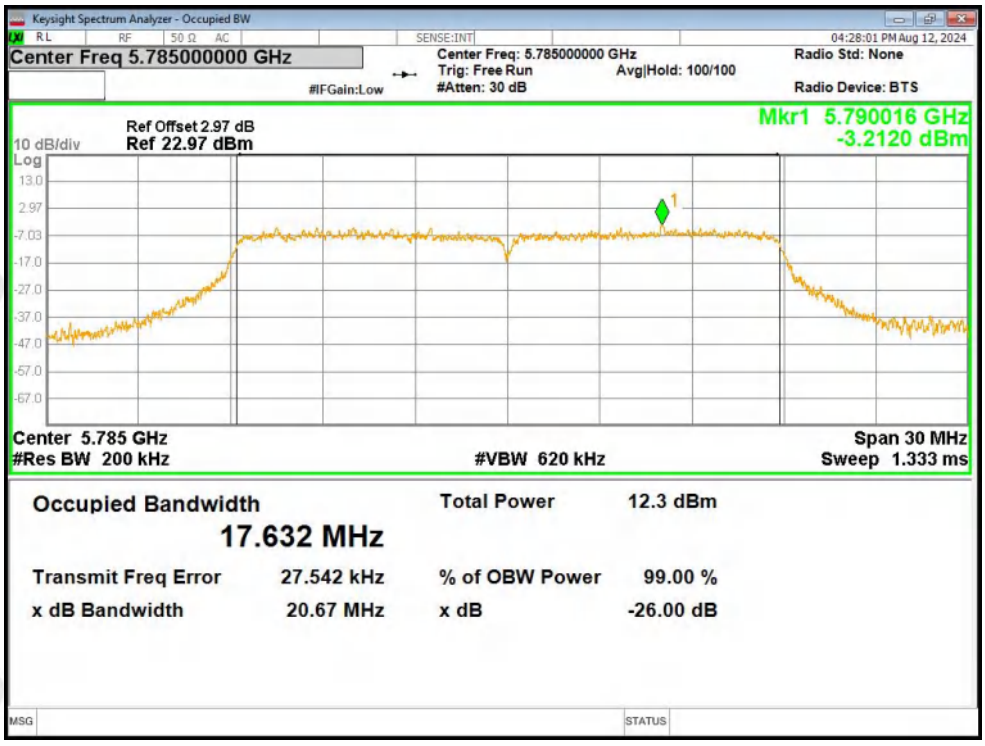
OBW NVNT n40 5795MHz Ant1



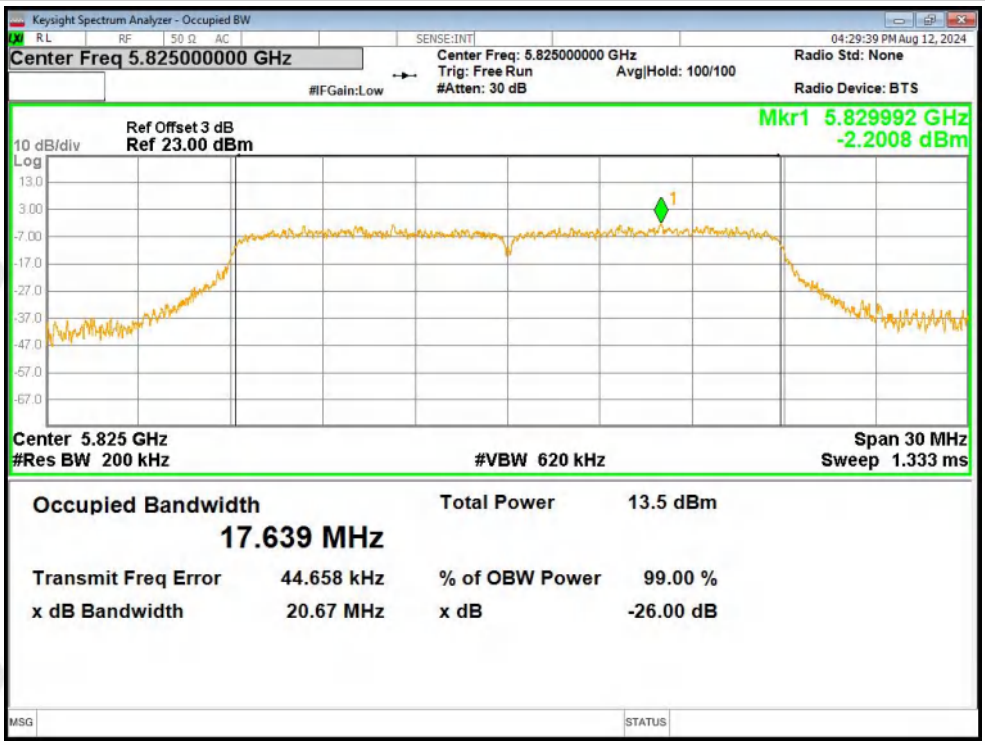
OBW NVNT ac20 5745MHz Ant1



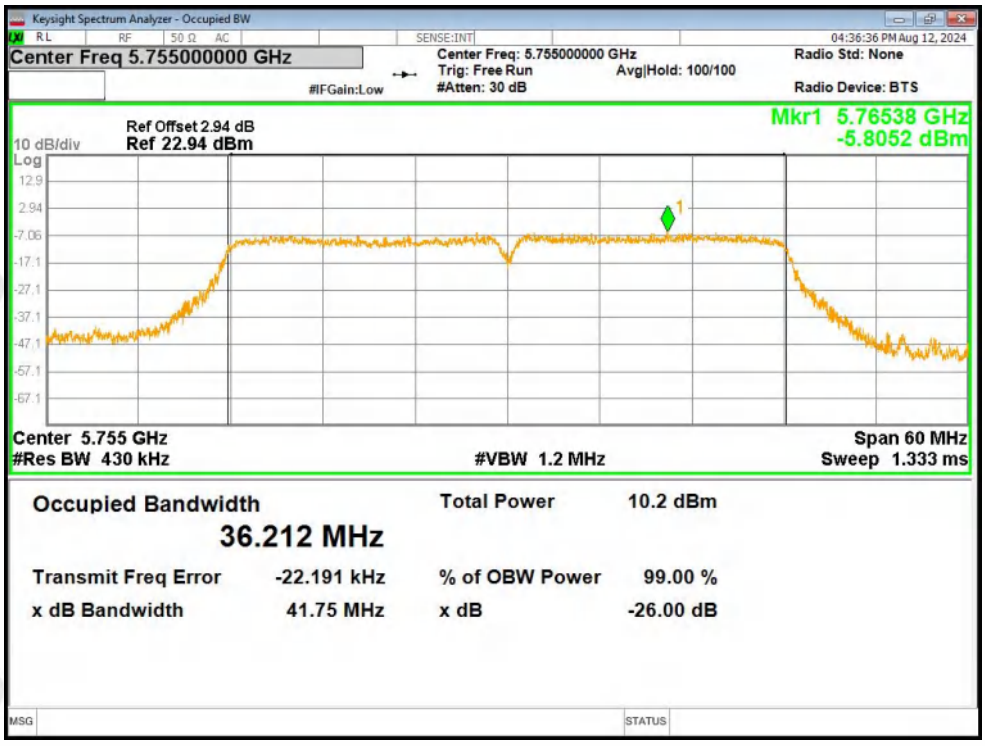
OBW NVNT ac20 5785MHz Ant1



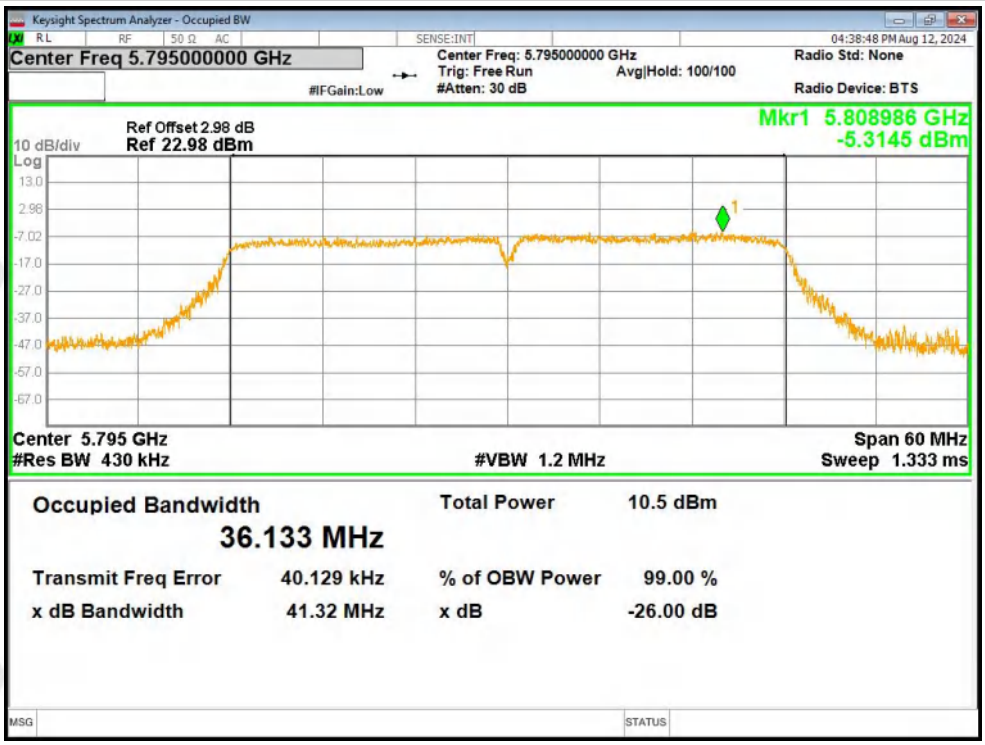
OBW NVNT ac20 5825MHz Ant1



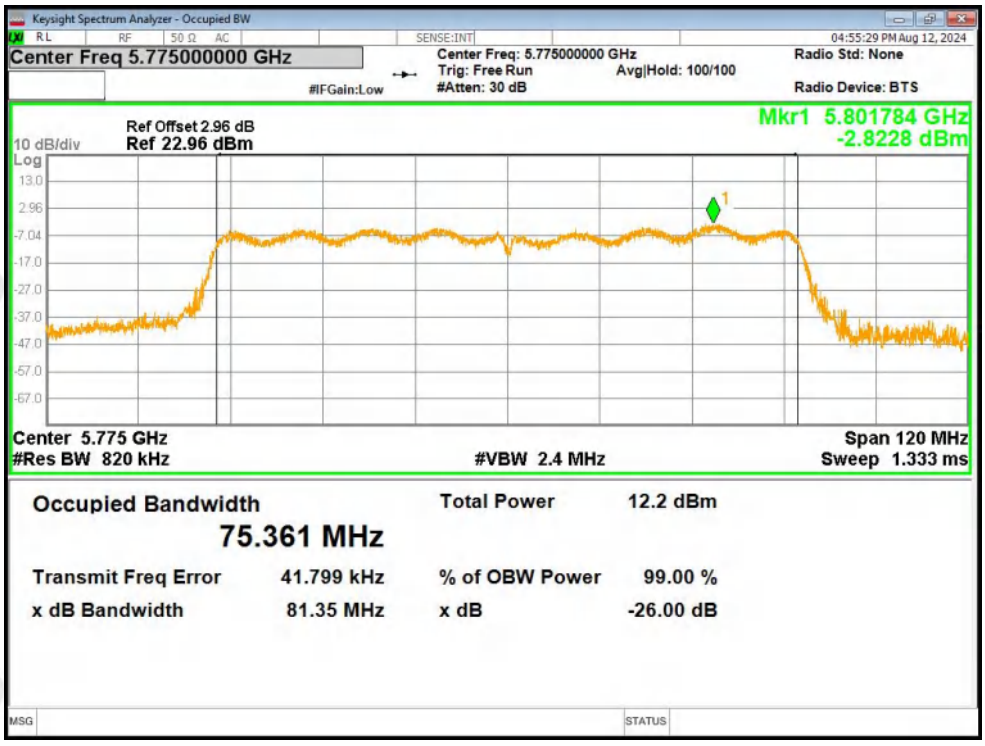
OBW NVNT ac40 5755MHz Ant1



OBW NVNT ac40 5795MHz Ant1



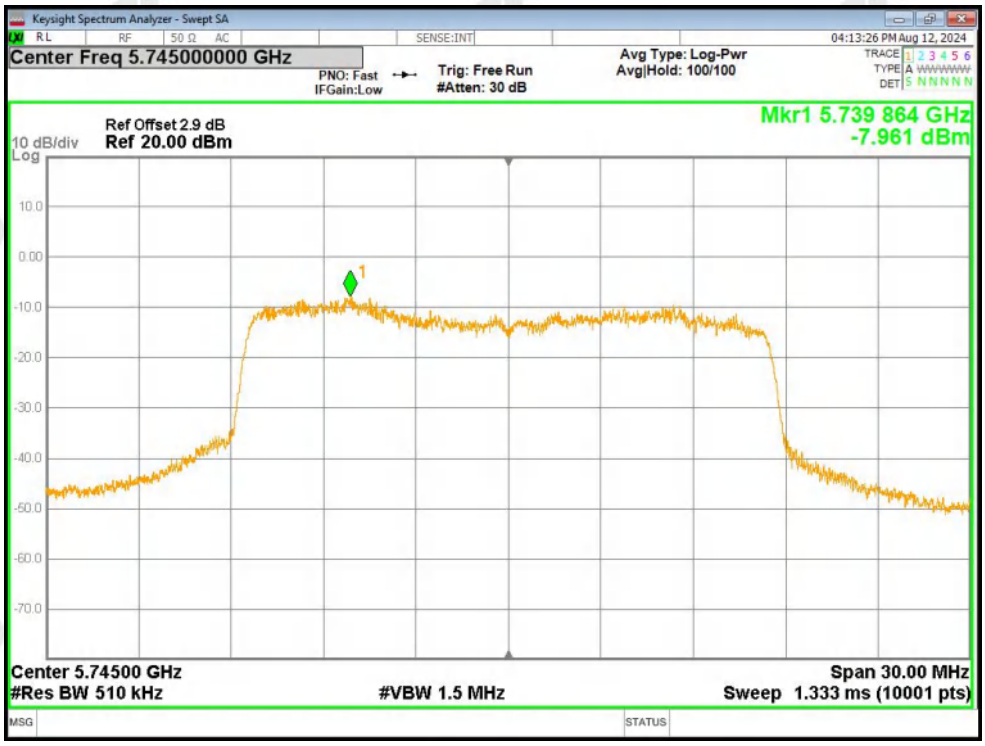
OBW NVNT ac80 5775MHz Ant1



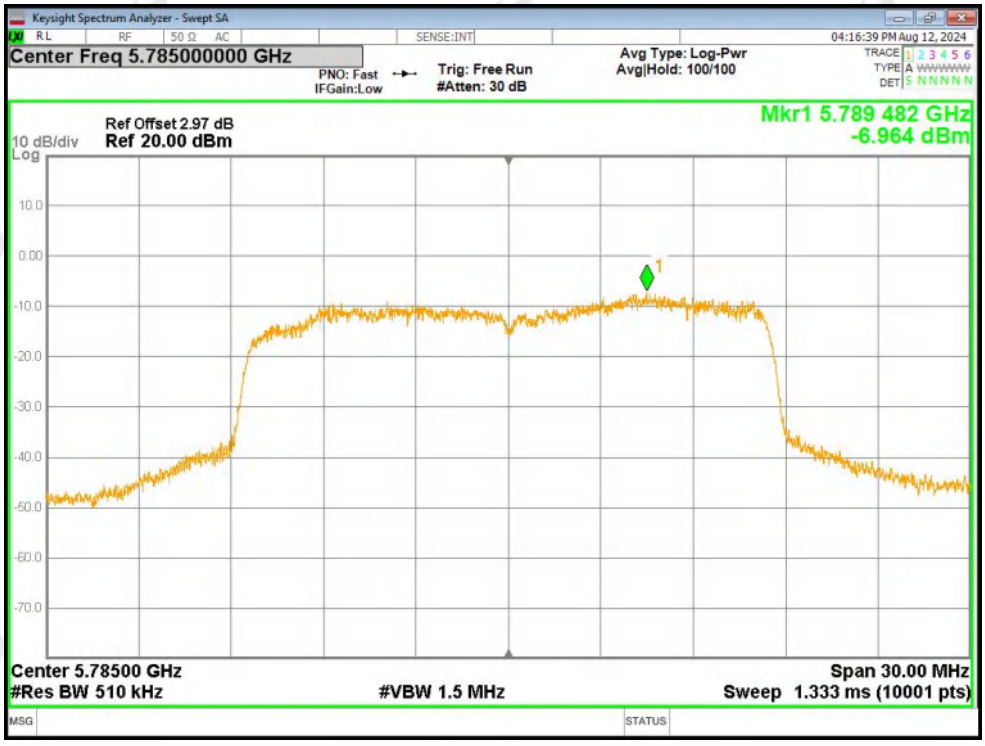
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	-7.96	0.3	-7.66	30	Pass
NVNT	a	5785	Ant1	-6.96	0.28	-6.68	30	Pass
NVNT	a	5825	Ant1	-7.17	0.34	-6.83	30	Pass
NVNT	n20	5745	Ant1	-9.92	0.31	-9.61	30	Pass
NVNT	n20	5785	Ant1	-8.81	0.26	-8.55	30	Pass
NVNT	n20	5825	Ant1	-7.26	0.2	-7.06	30	Pass
NVNT	n40	5755	Ant1	-17.05	0.35	-16.7	30	Pass
NVNT	n40	5795	Ant1	-14.21	0.48	-13.73	30	Pass
NVNT	ac20	5745	Ant1	-10.33	0.26	-10.07	30	Pass
NVNT	ac20	5785	Ant1	-9.64	0.09	-9.55	30	Pass
NVNT	ac20	5825	Ant1	-7.79	0.22	-7.57	30	Pass
NVNT	ac40	5755	Ant1	-16.52	0.72	-15.8	30	Pass
NVNT	ac40	5795	Ant1	-16.76	0.27	-16.49	30	Pass
NVNT	ac80	5775	Ant1	-20.72	0.45	-20.27	30	Pass

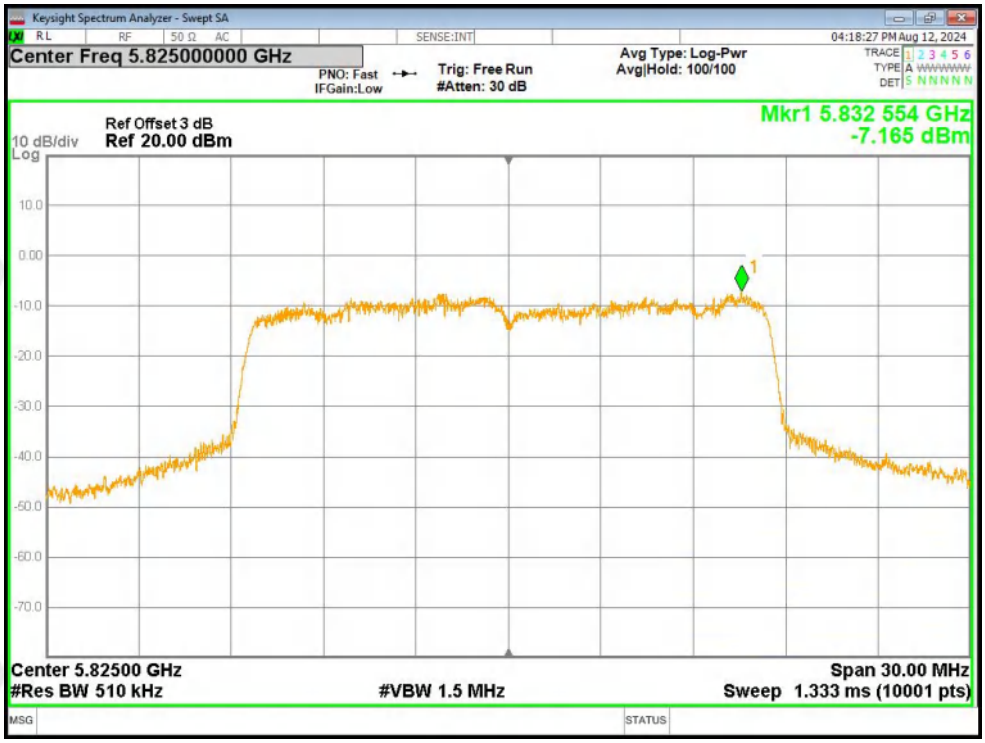
Test Graphs
PSD NVNT a 5745MHz Ant1



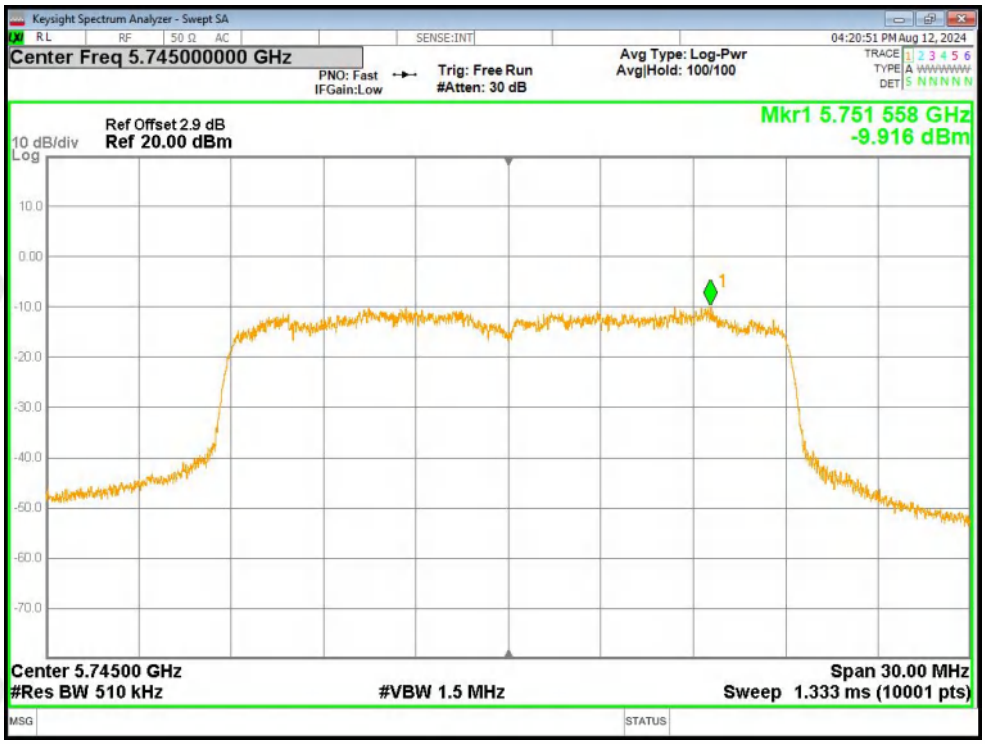
PSD NVNT a 5785MHz Ant1



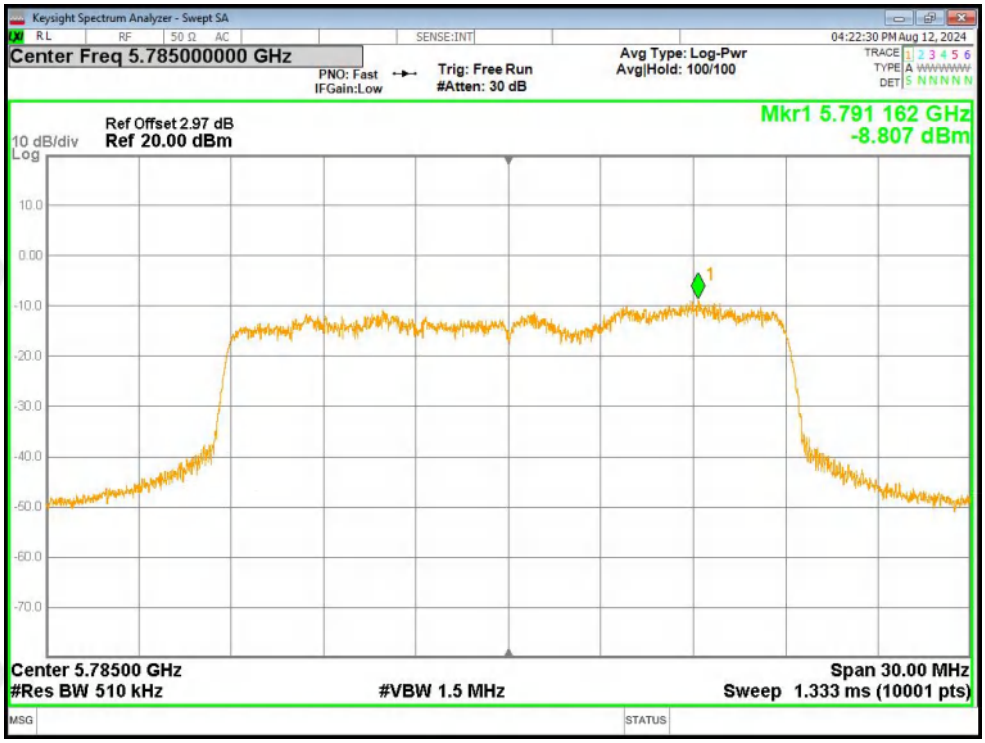
PSD NVNT a 5825MHz Ant1



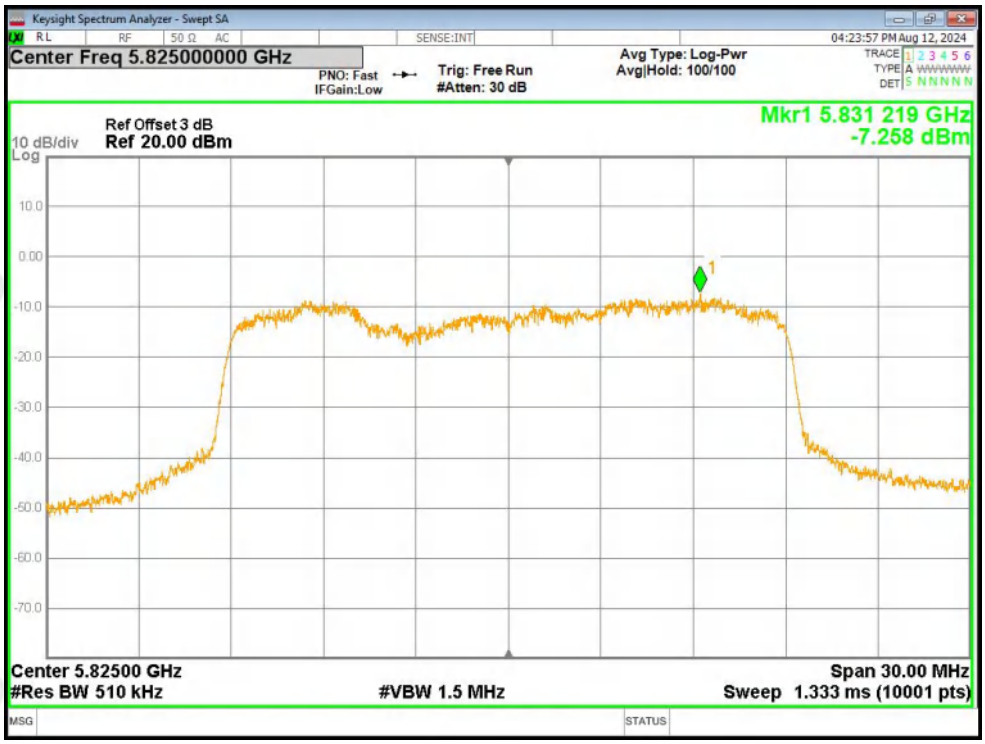
PSD NVNT n20 5745MHz Ant1



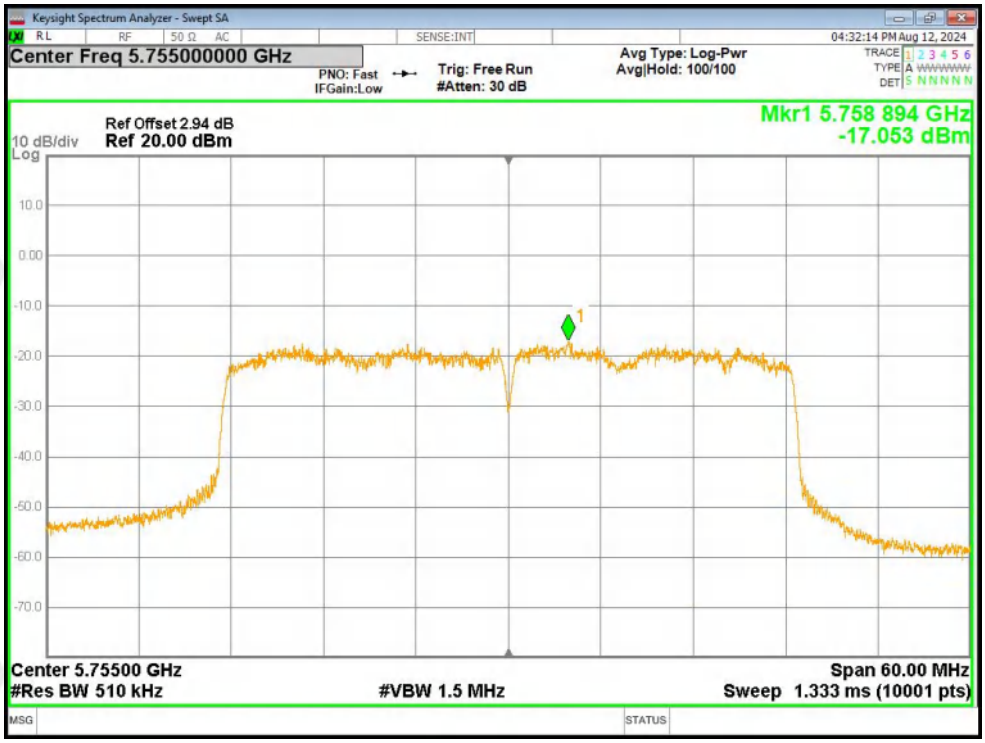
PSD NVNT n20 5785MHz Ant1



PSD NVNT n20 5825MHz Ant1

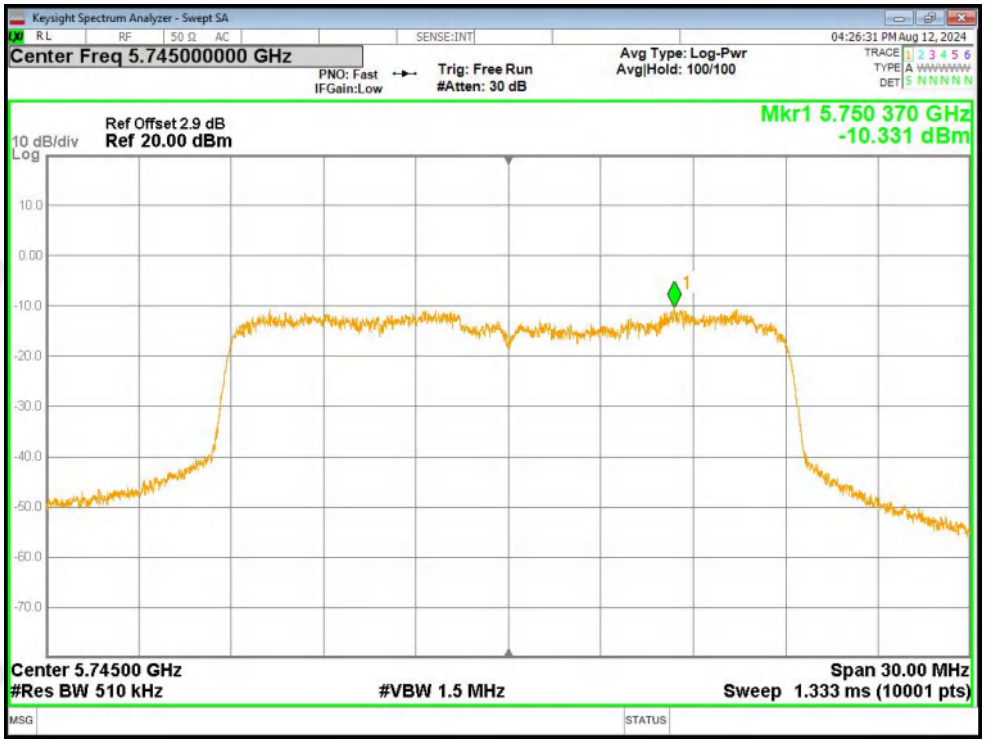


PSD NVNT n40 5755MHz Ant1

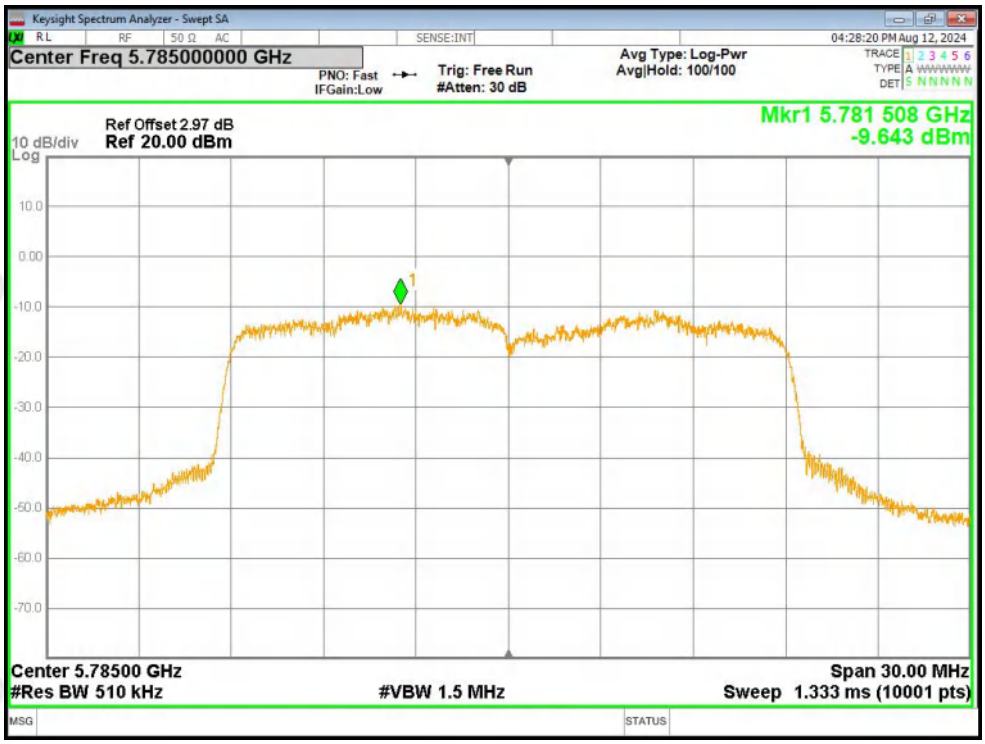


PSD NVNT n40 5795MHz Ant1

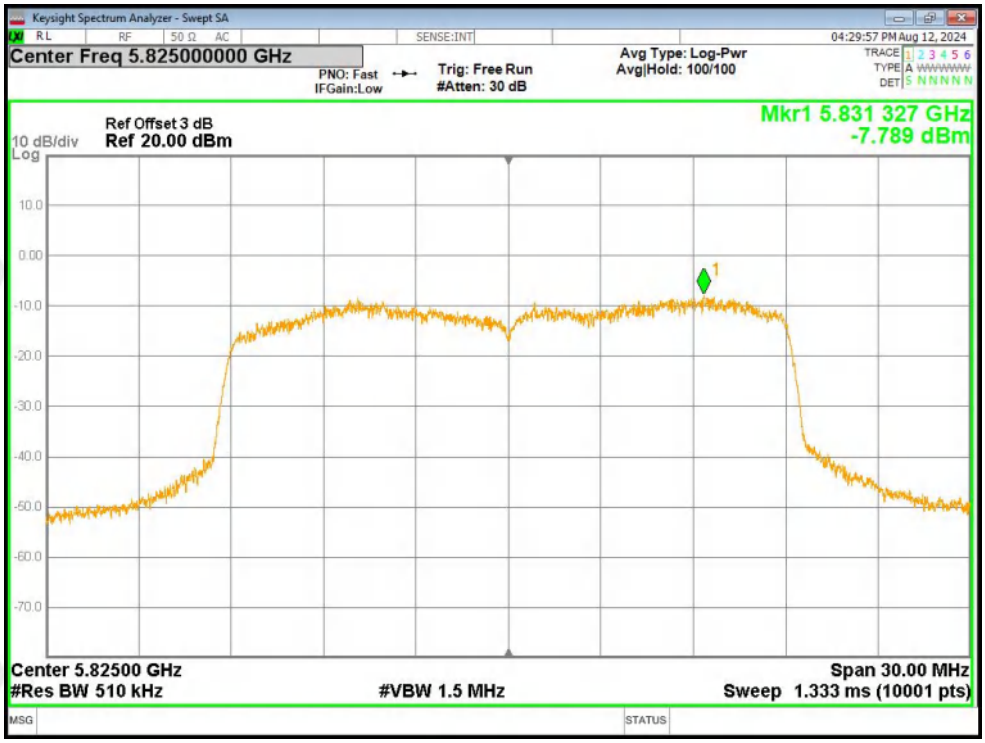
PSD NVNT ac20 5745MHz Ant1



PSD NVNT ac20 5785MHz Ant1

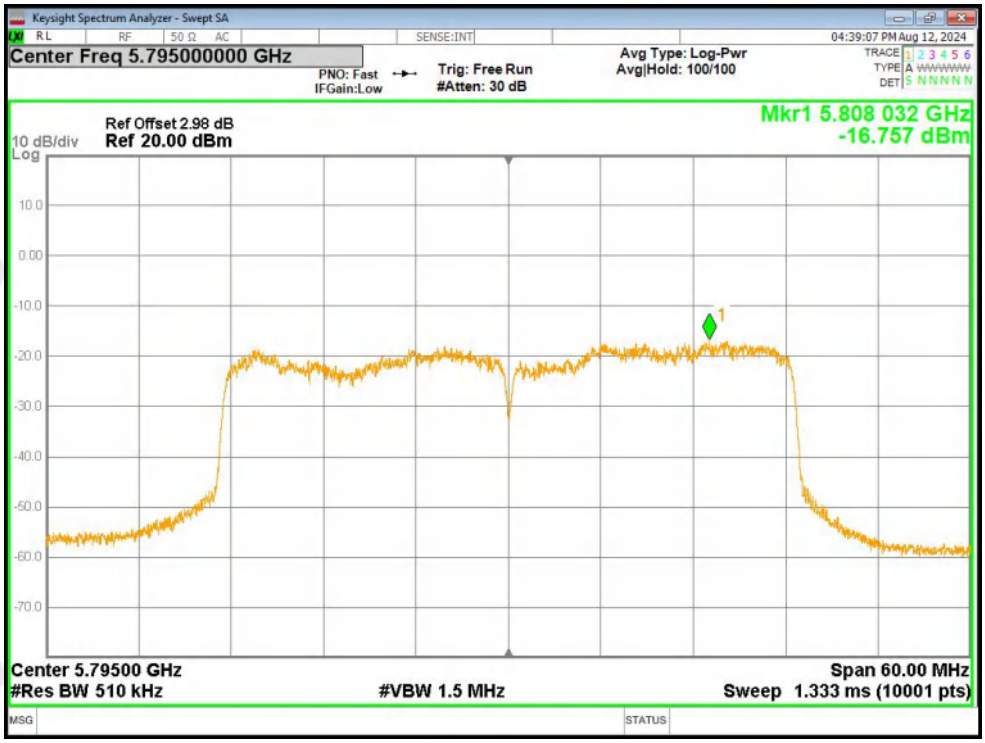


PSD NVNT ac20 5825MHz Ant1



PSD NVNT ac40 5755MHz Ant1

PSD NVNT ac40 5795MHz Ant1



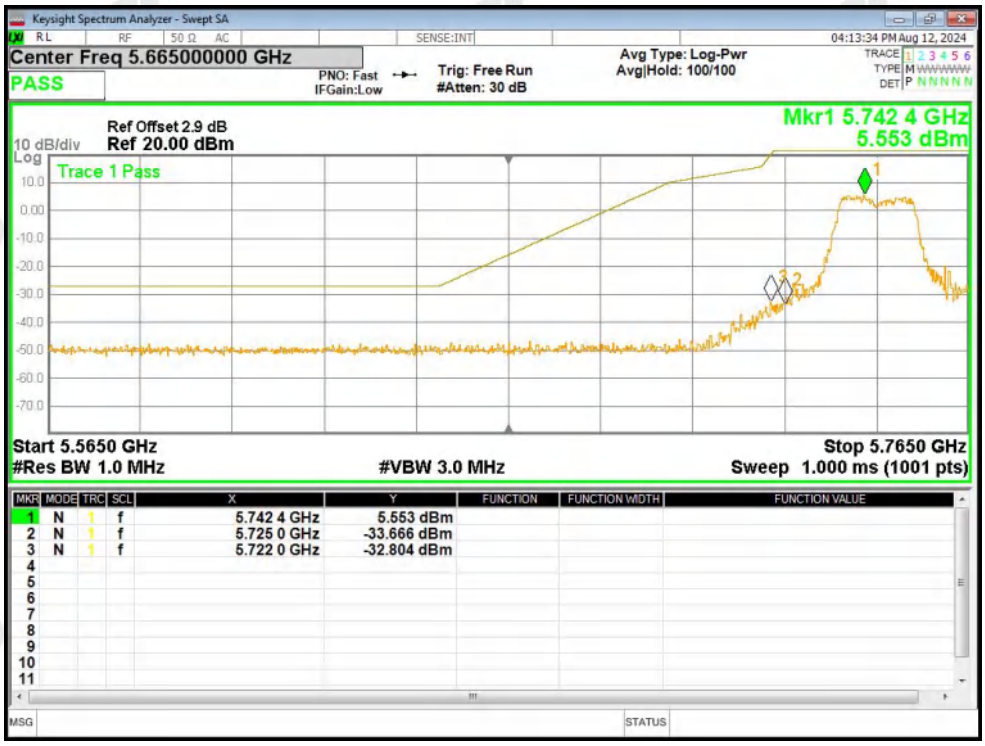
PSD NVNT ac80 5775MHz Ant1

Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	-32.8		Pass
NVNT	a	5825	Ant1	-34.31		Pass
NVNT	n20	5745	Ant1	-28.84		Pass
NVNT	n20	5825	Ant1	-33.13		Pass
NVNT	n40	5755	Ant1	-36.14		Pass
NVNT	n40	5795	Ant1	-45.55		Pass
NVNT	ac20	5745	Ant1	-34.52		Pass
NVNT	ac20	5825	Ant1	-35.99		Pass
NVNT	ac40	5755	Ant1	-37.82		Pass
NVNT	ac40	5795	Ant1	-45.44		Pass
NVNT	ac80	5775	Ant1	-38.08		Pass

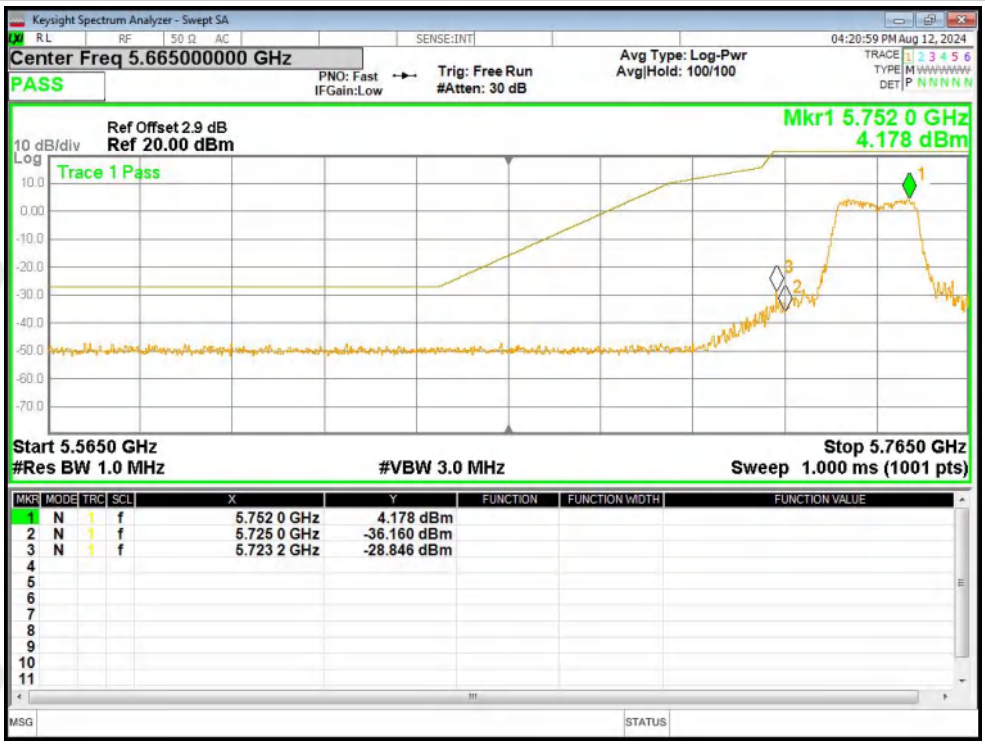
Test Graphs

Band Edge NVNT a 5745MHz Low Ant1

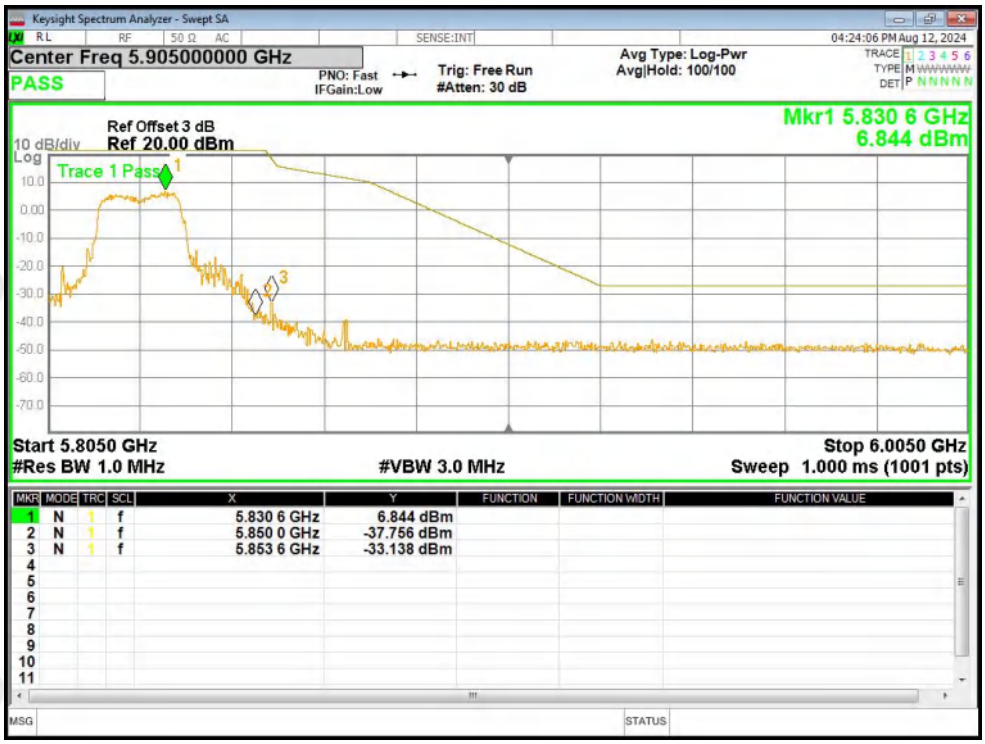


Band Edge NVNT a 5825MHz High Ant1

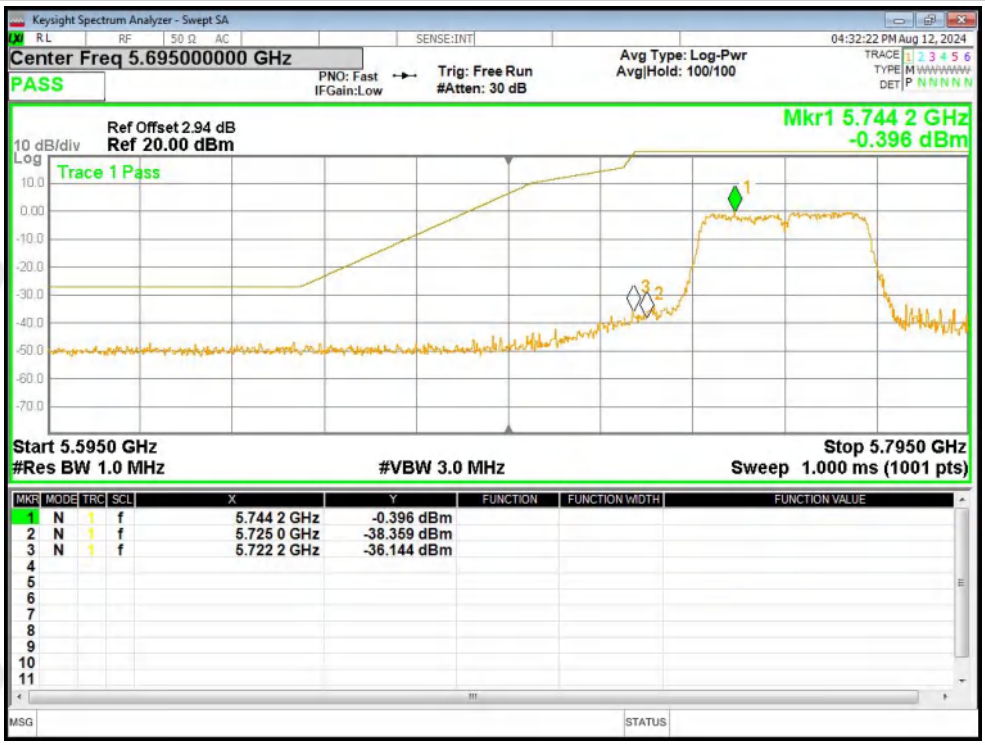
Band Edge NVNT n20 5745MHz Low Ant1



Band Edge NVNT n20 5825MHz High Ant1

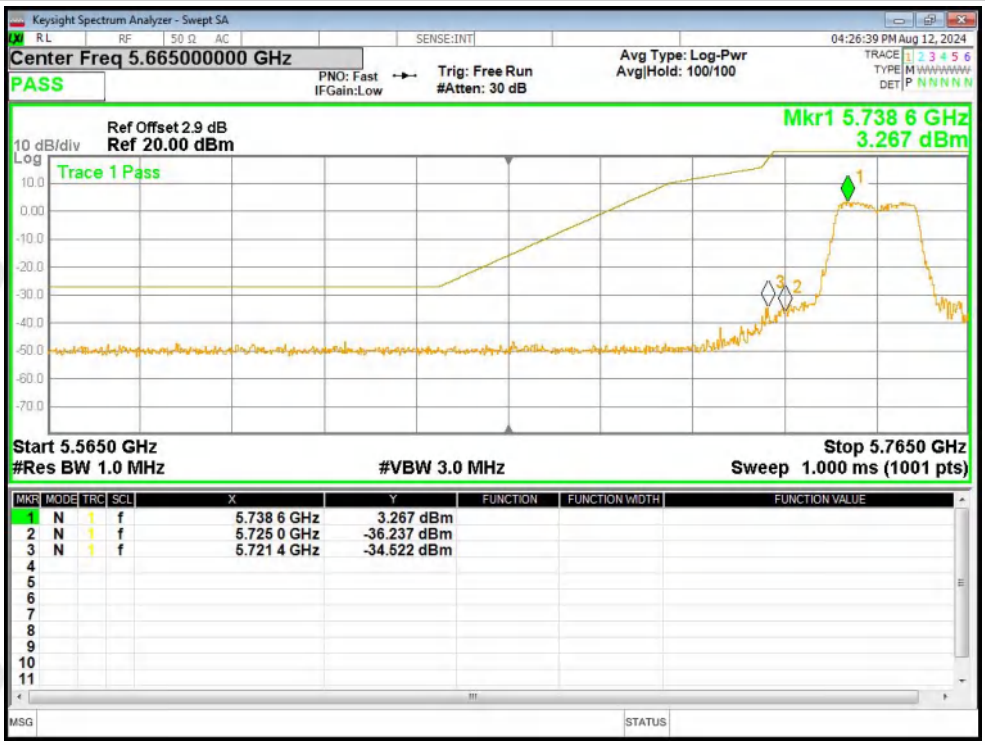


Band Edge NVNT n40 5755MHz Low Ant1



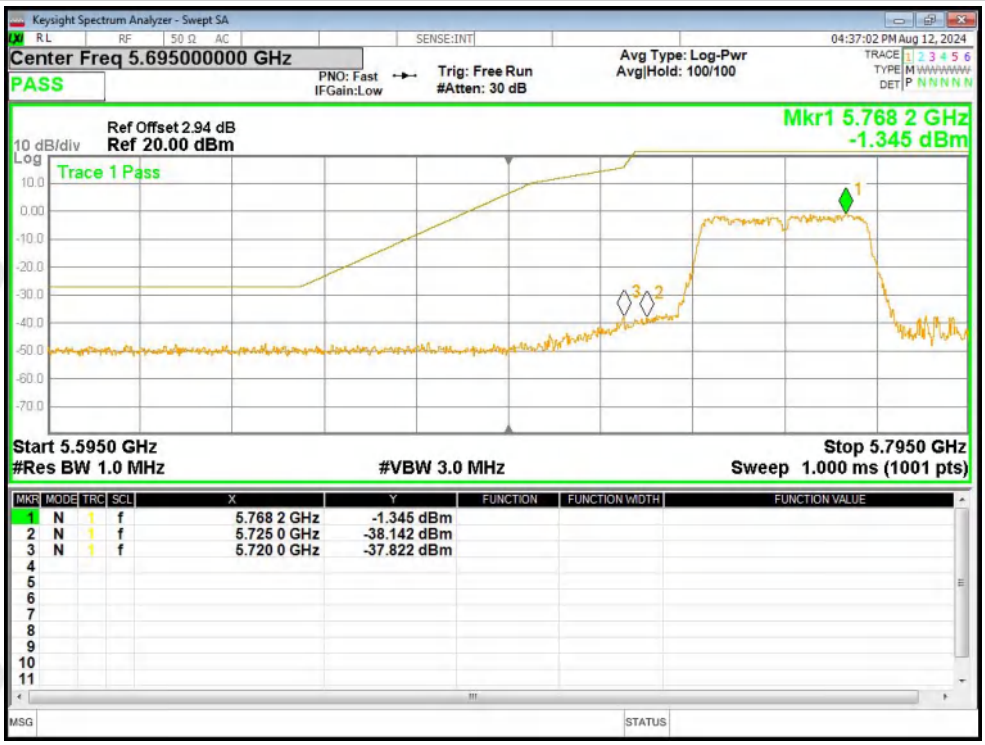
Band Edge NVNT n40 5795MHz High Ant1

Band Edge NVNT ac20 5745MHz Low Ant1



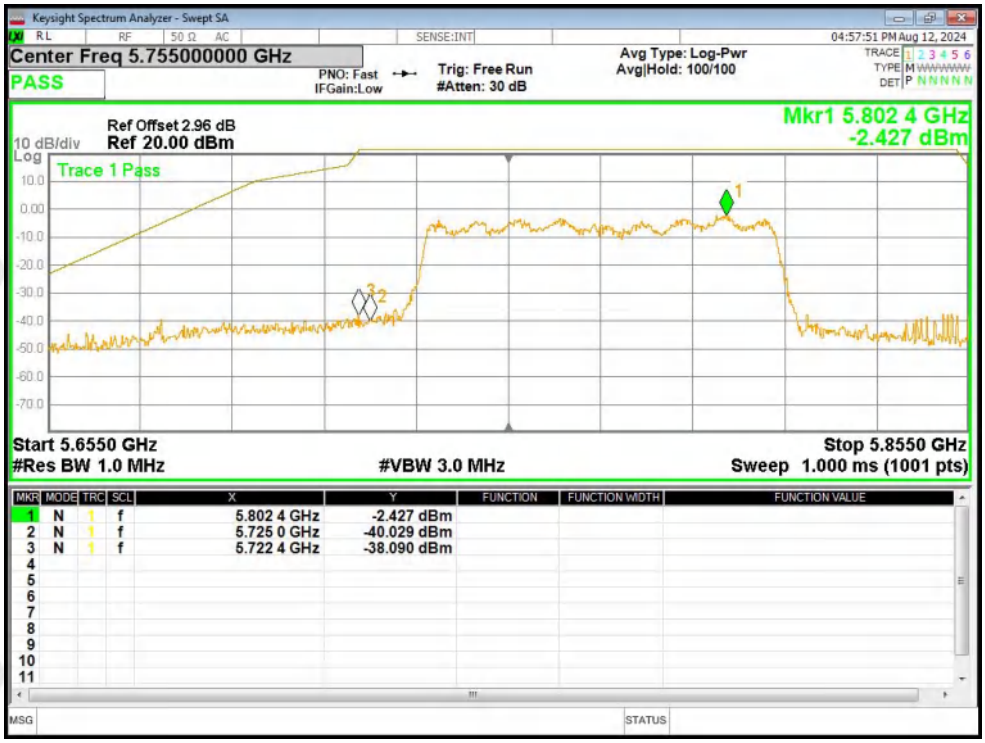
Band Edge NVNT ac20 5825MHz High Ant1

Band Edge NVNT ac40 5755MHz Low Ant1



Band Edge NVNT ac40 5795MHz High Ant1

Band Edge NVNT ac80 5775MHz Low Ant1

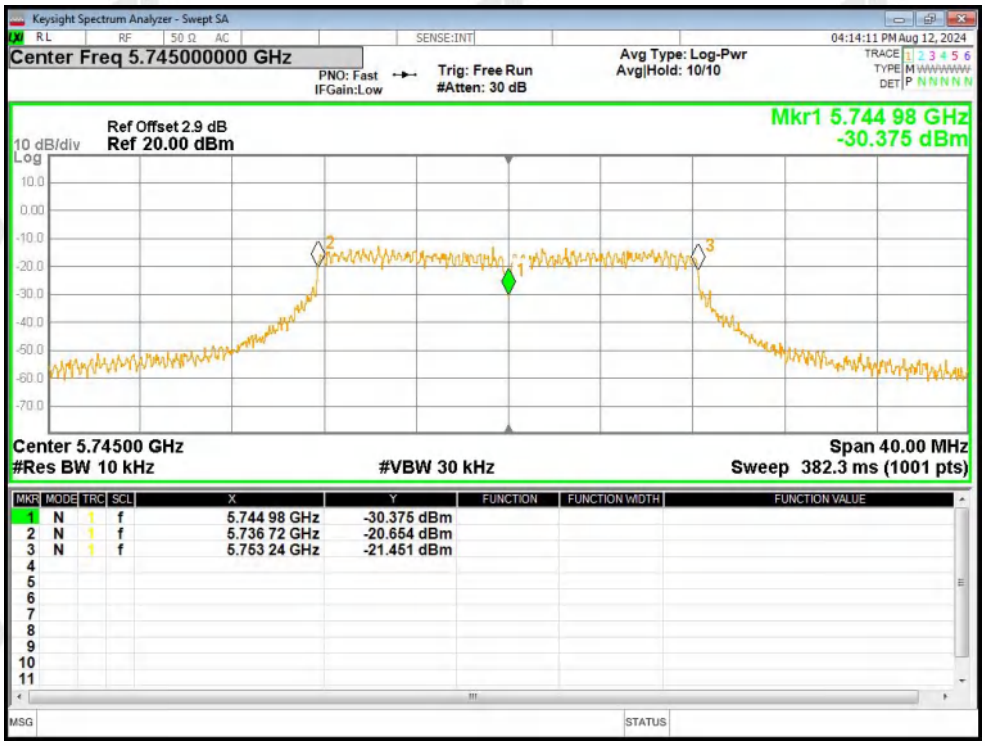


Frequency Stability

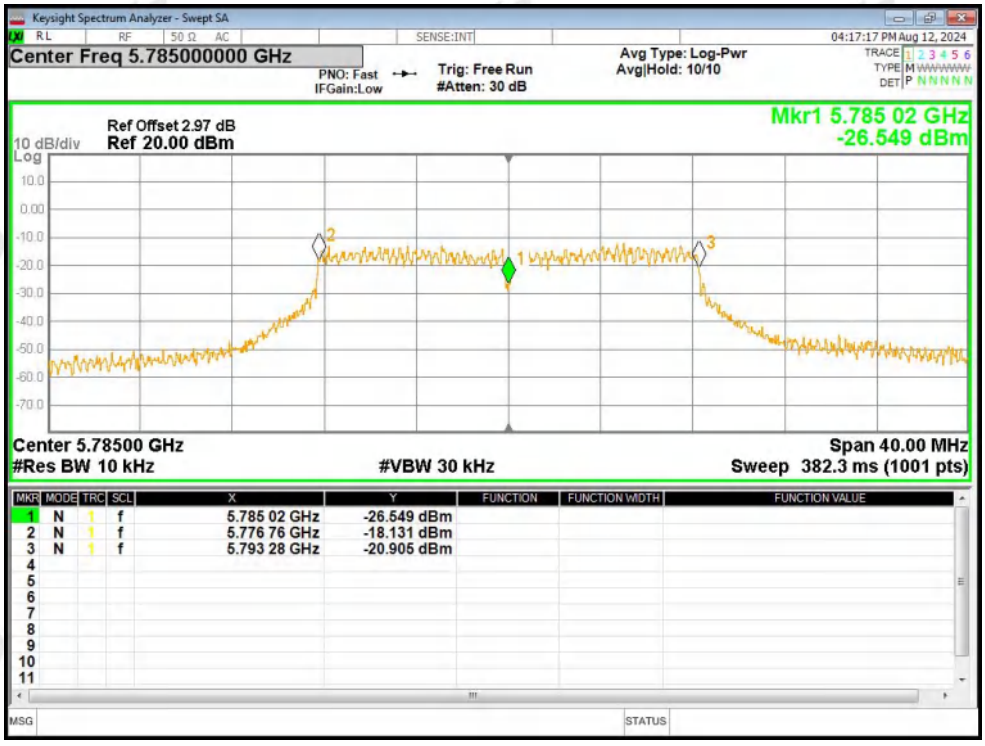
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	a	5745	Ant1	5744.98	-20000	-3.48	25	Pass
NVNT	a	5785	Ant1	5785.02	20000	3.46	25	Pass
NVNT	a	5825	Ant1	5825	0	0	25	Pass
NVNT	n20	5745	Ant1	5745	0	0	25	Pass
NVNT	n20	5785	Ant1	5785	0	0	25	Pass
NVNT	n20	5825	Ant1	5825.02	20000	3.43	25	Pass
NVNT	n40	5755	Ant1	5755	0	0	25	Pass
NVNT	n40	5795	Ant1	5795	0	0	25	Pass
NVNT	ac20	5745	Ant1	5745	0	0	25	Pass
NVNT	ac20	5785	Ant1	5785.02	20000	3.46	25	Pass
NVNT	ac20	5825	Ant1	5825.02	20000	3.43	25	Pass
NVNT	ac40	5755	Ant1	5755	0	0	25	Pass
NVNT	ac40	5795	Ant1	5795	0	0	25	Pass
NVNT	ac80	5775	Ant1	5775	0	0	25	Pass

Test Graphs

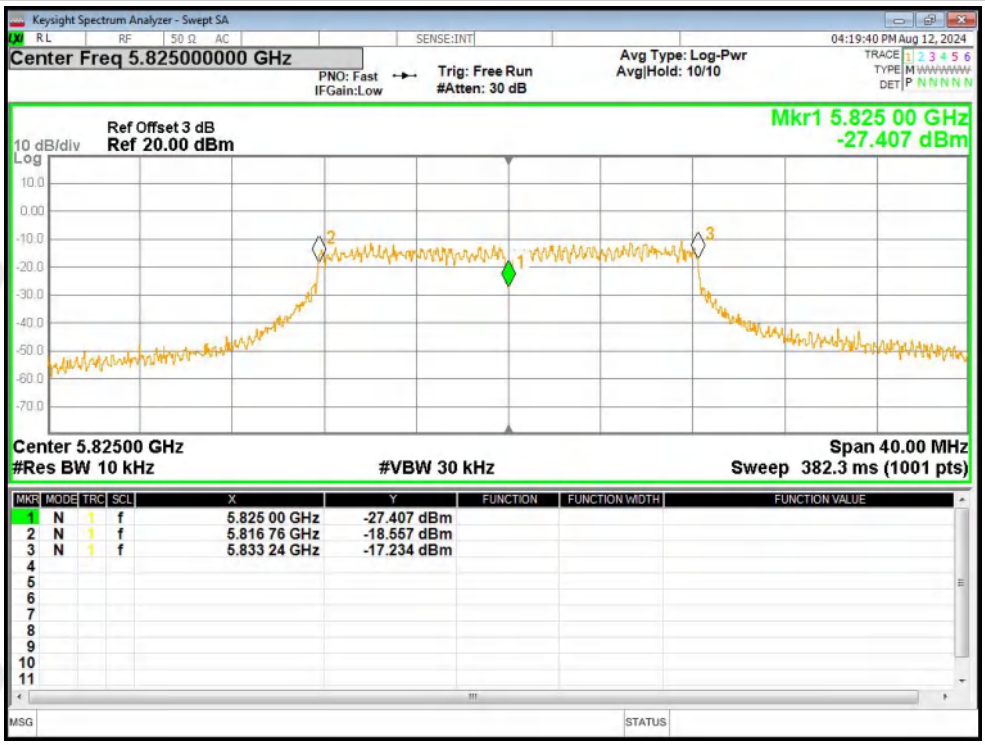
Freq. Stability NVNT a 5745MHz Ant1



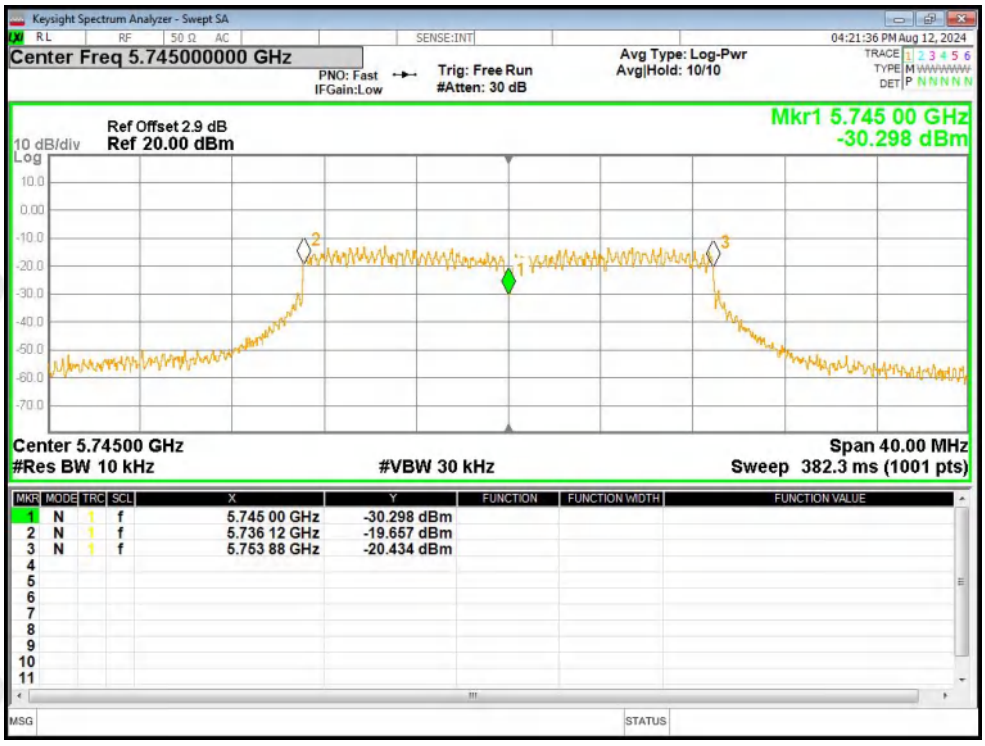
Freq. Stability NVNT a 5785MHz Ant1



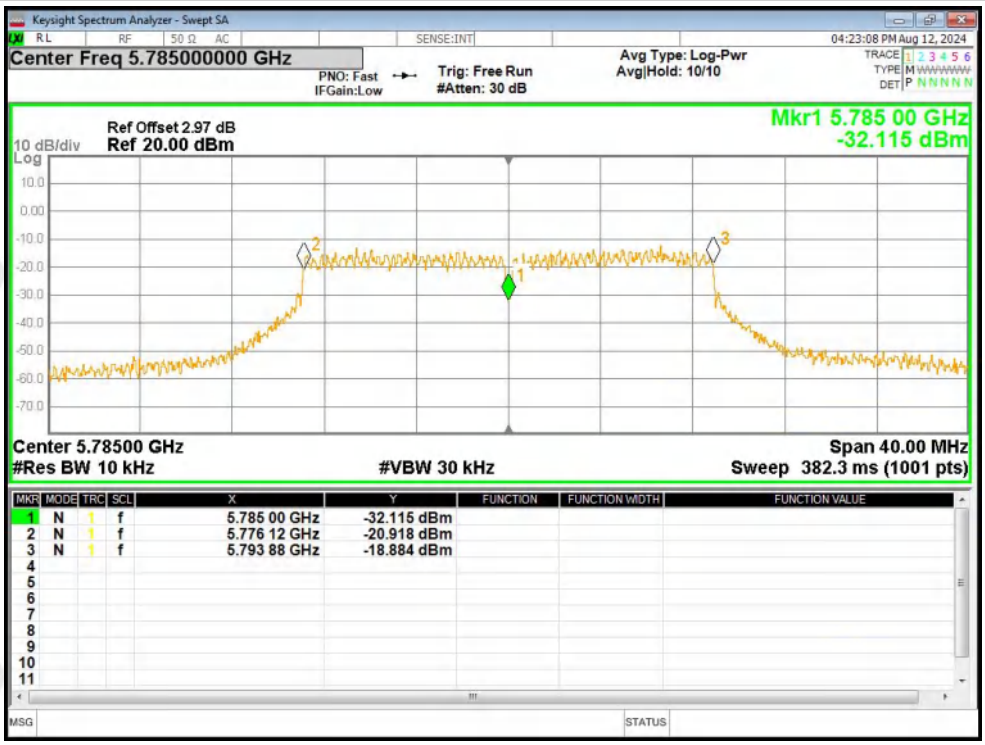
Freq. Stability NVNT a 5825MHz Ant1



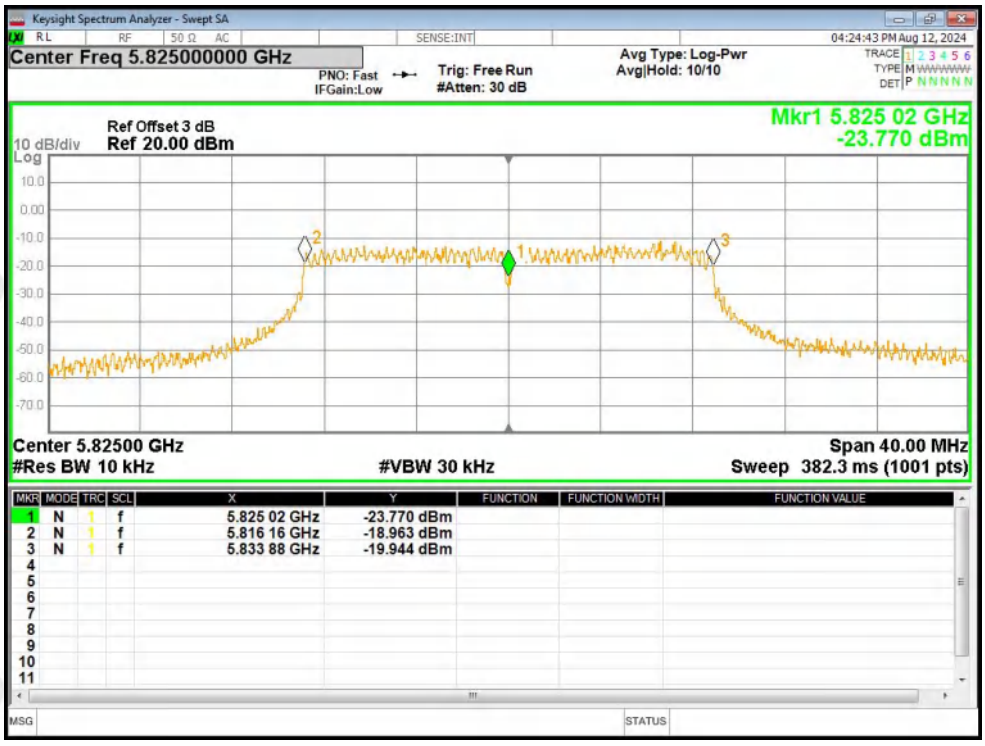
Freq. Stability NVNT n20 5745MHz Ant1



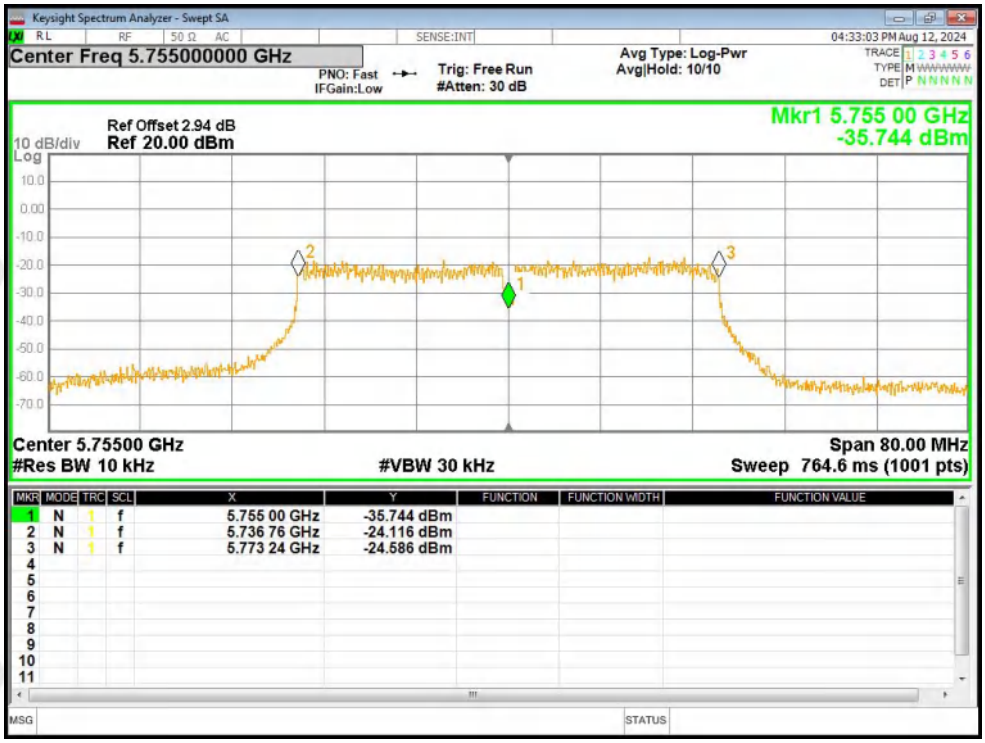
Freq. Stability NVNT n20 5785MHz Ant1



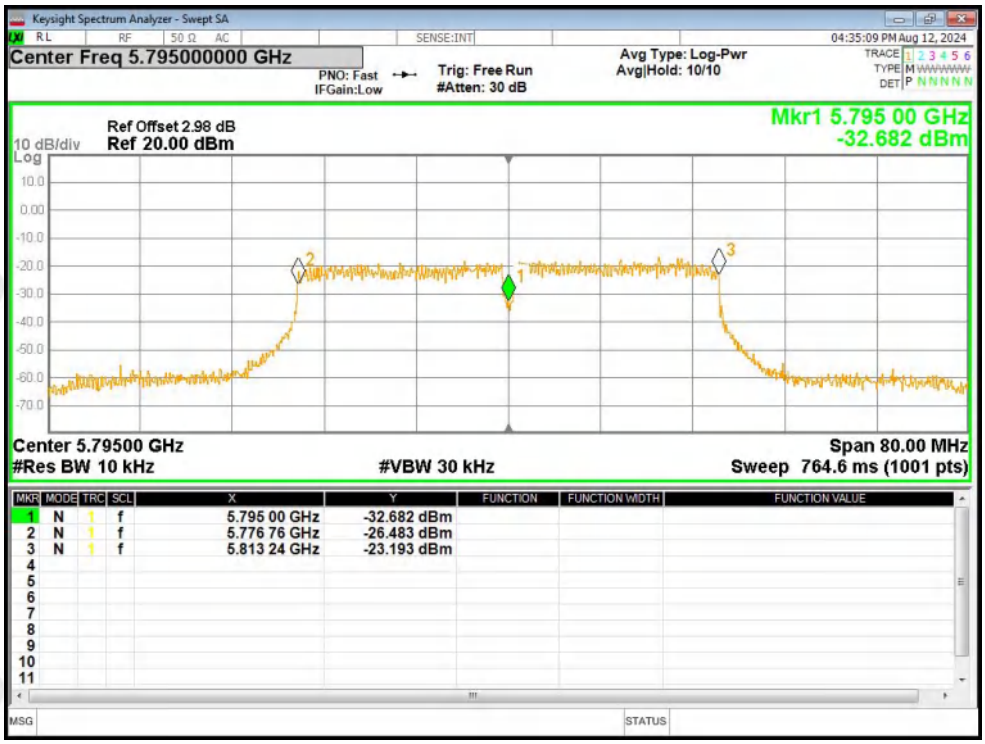
Freq. Stability NVNT n20 5825MHz Ant1



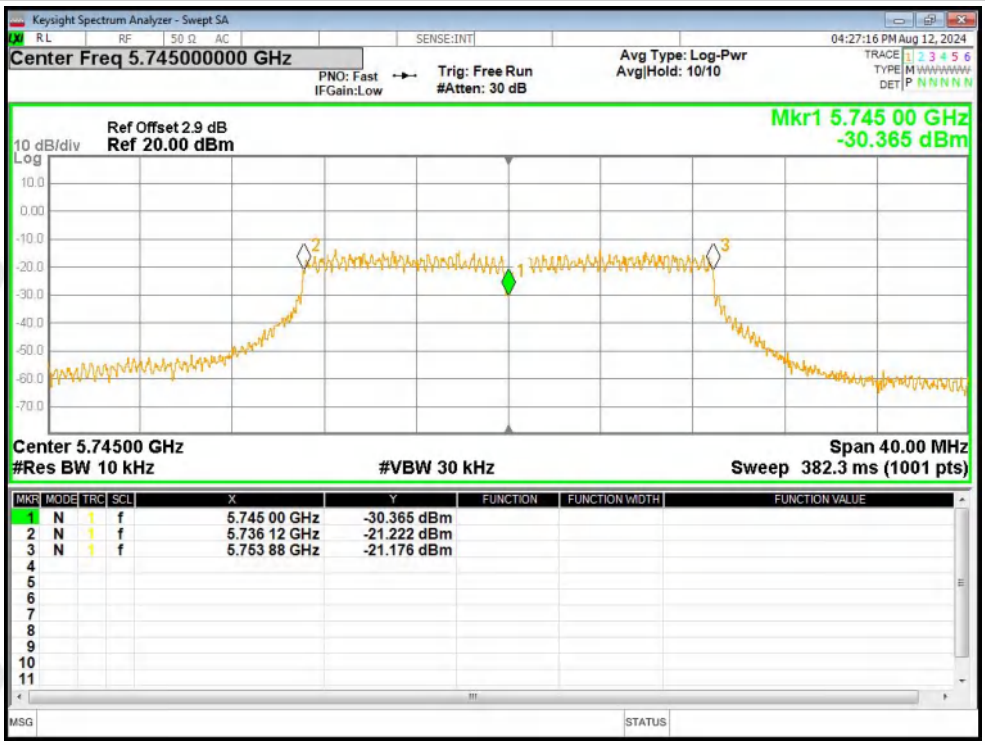
Freq. Stability NVNT n40 5755MHz Ant1



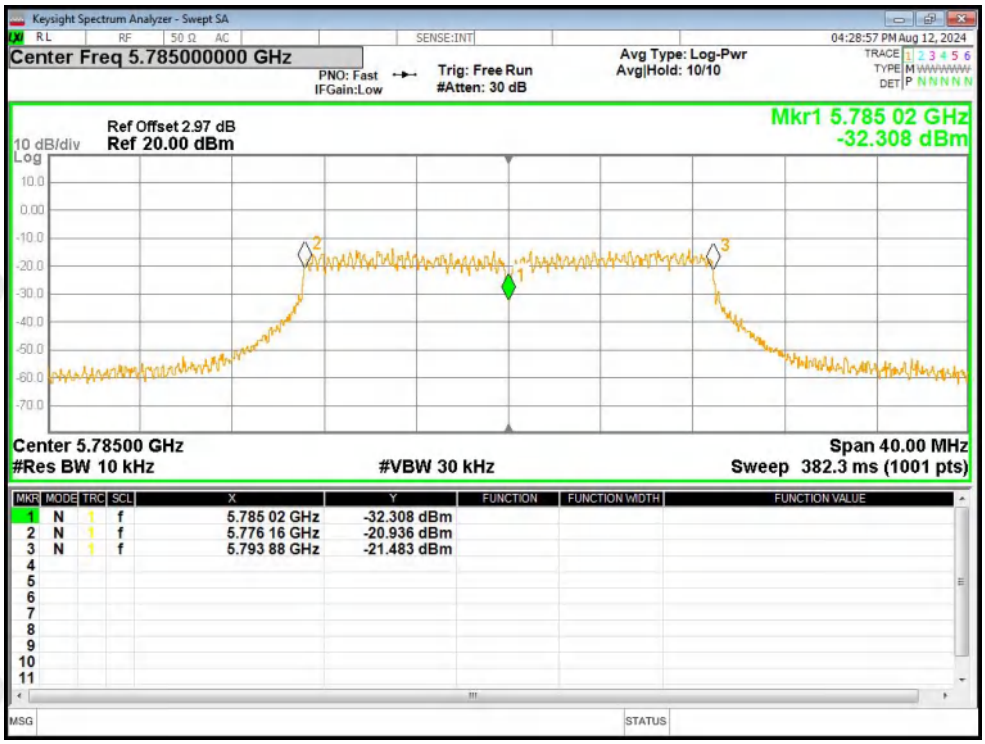
Freq. Stability NVNT n40 5795MHz Ant1



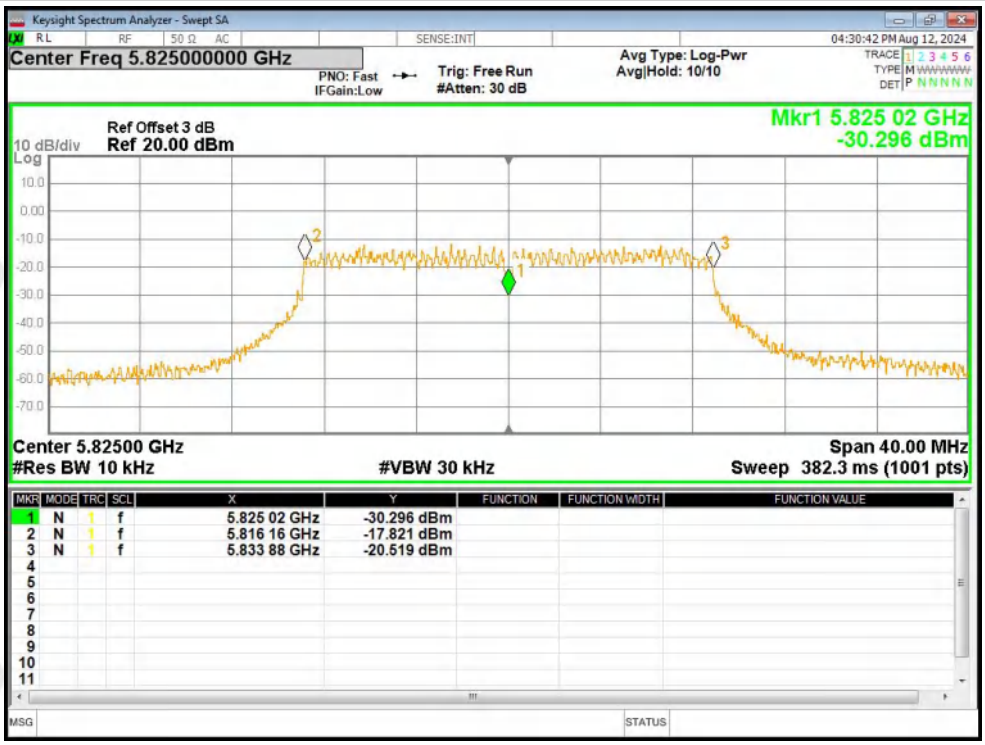
Freq. Stability NVNT ac20 5745MHz Ant1



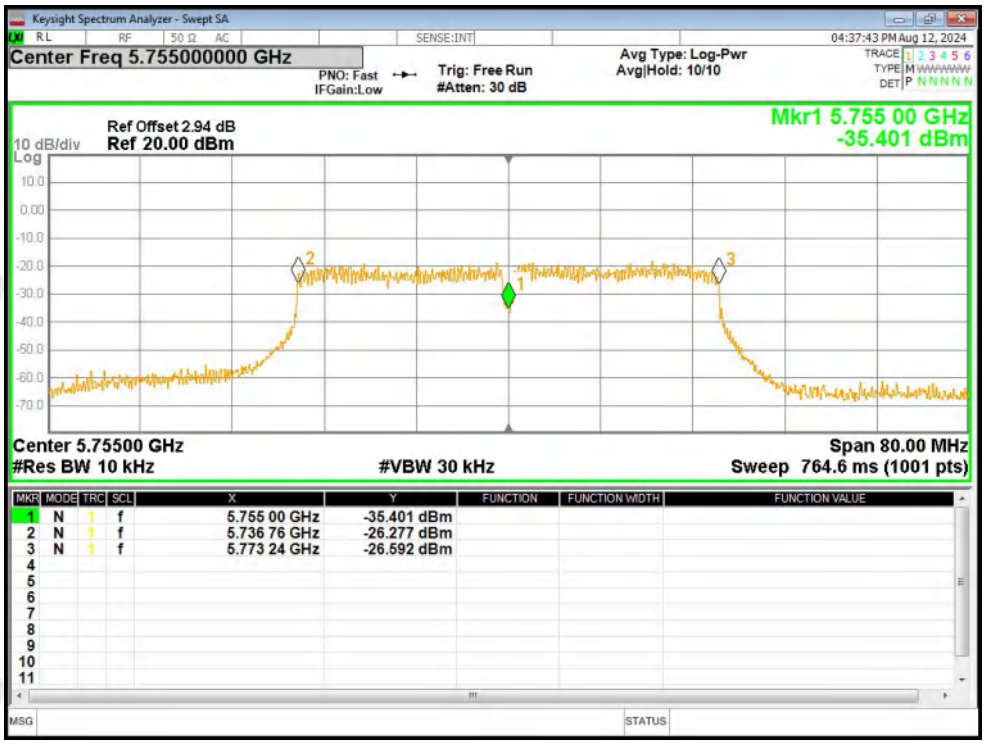
Freq. Stability NVNT ac20 5785MHz Ant1



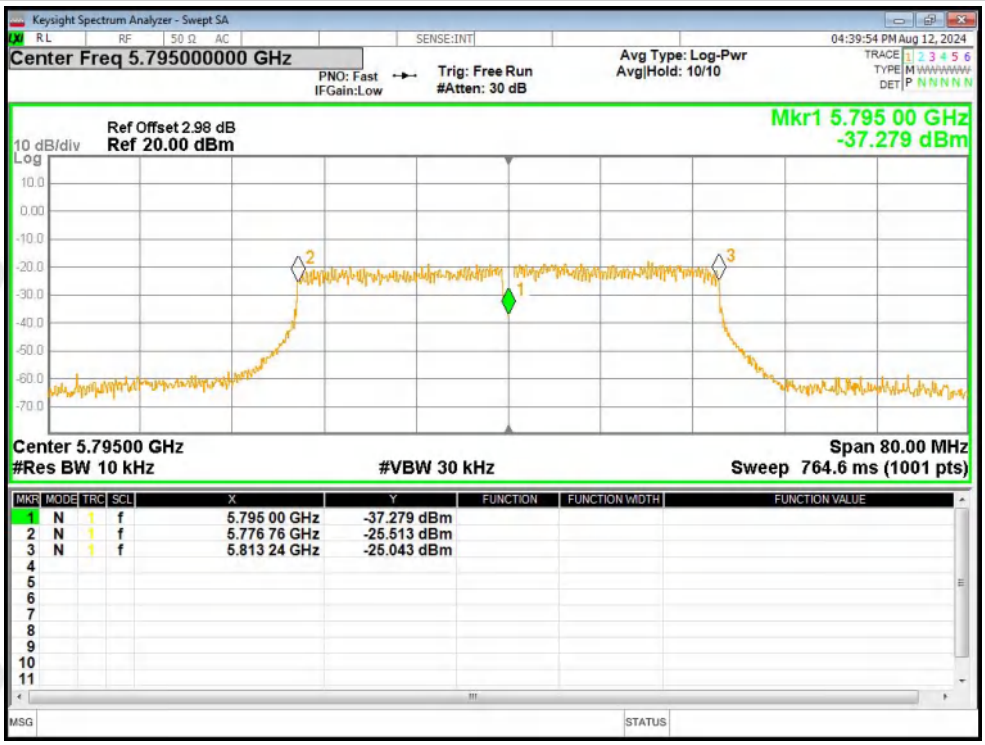
Freq. Stability NVNT ac20 5825MHz Ant1



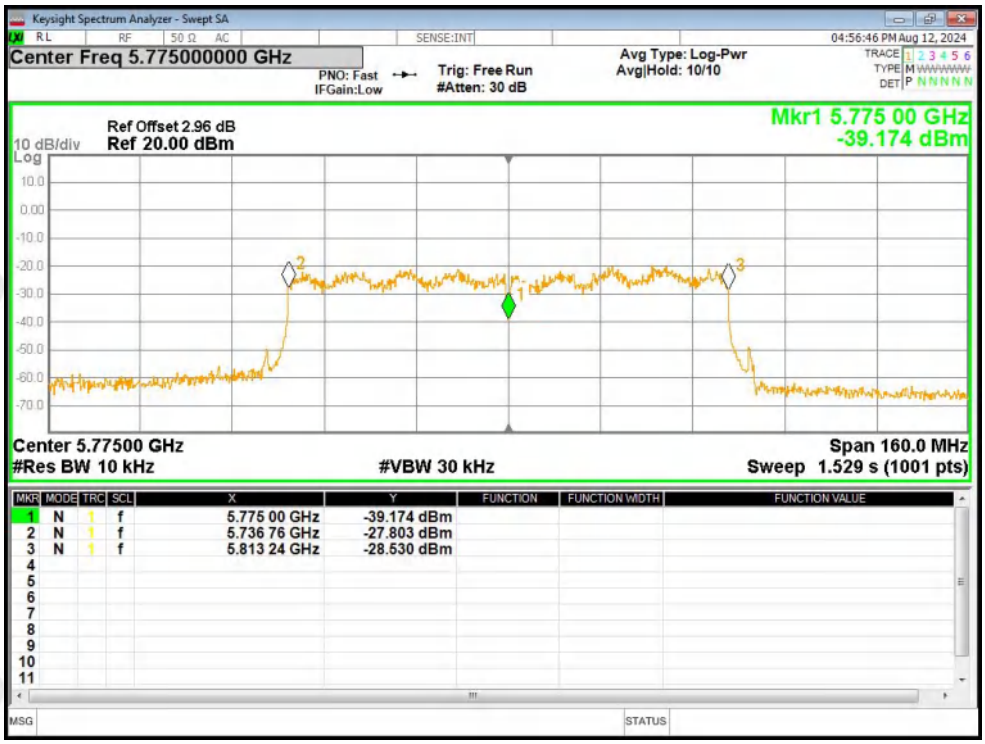
Freq. Stability NVNT ac40 5755MHz Ant1



Freq. Stability NVNT ac40 5795MHz Ant1



Freq. Stability NVNT ac80 5775MHz Ant1

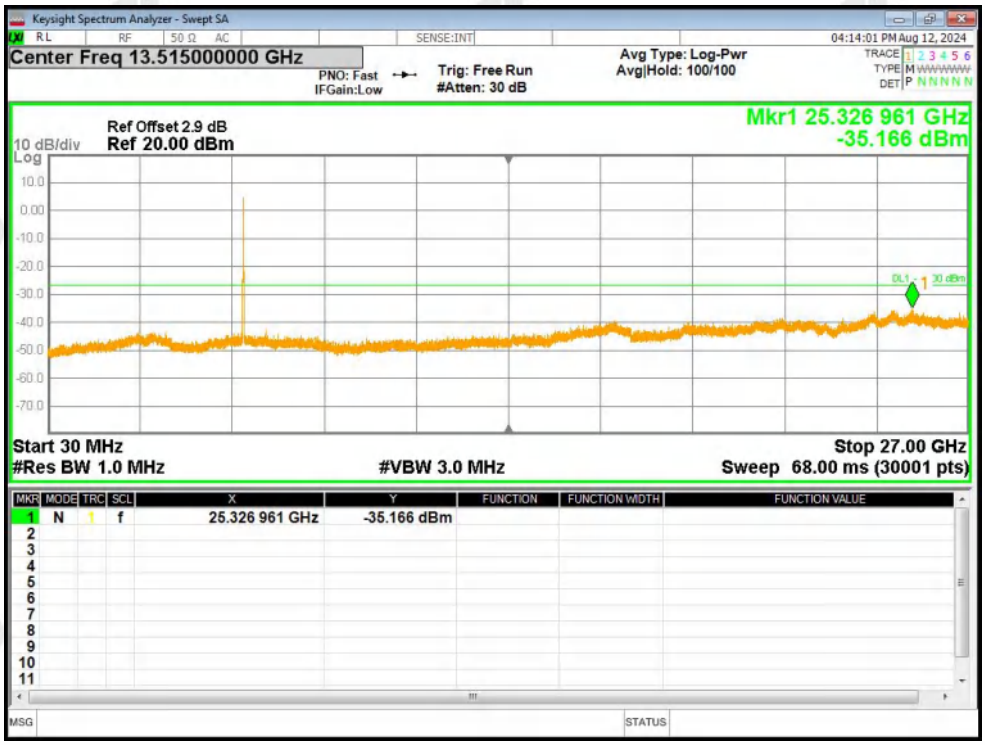


Conducted RF Spurious Emission

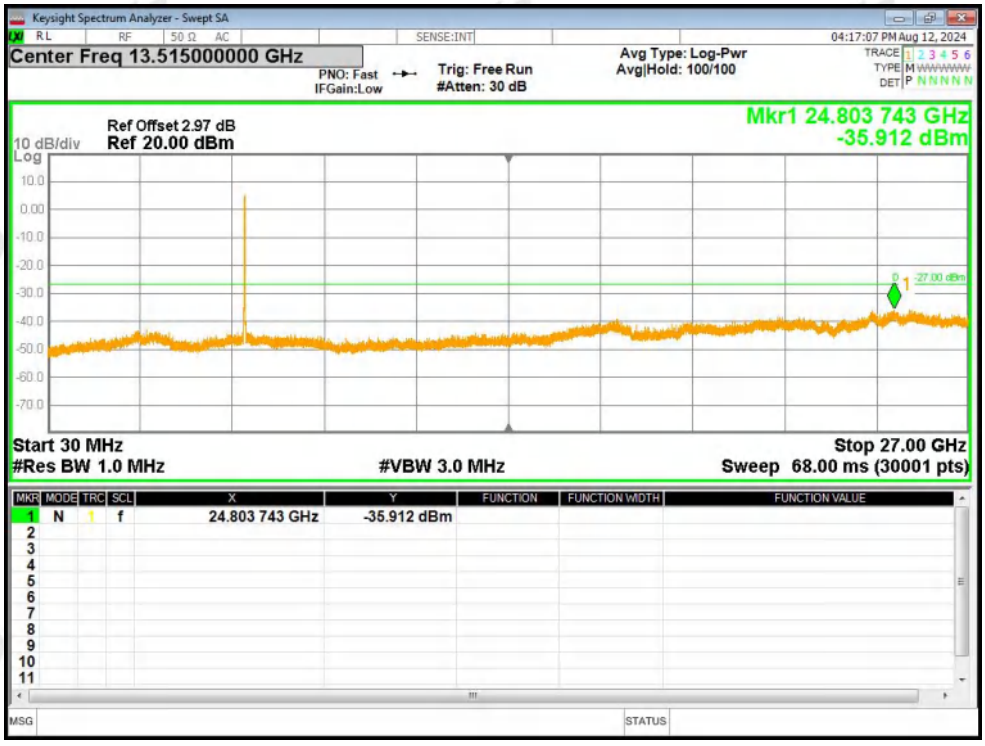
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5745	Ant1	-35.16	-27	Pass
NVNT	a	5785	Ant1	-35.91	-27	Pass
NVNT	a	5825	Ant1	-35.88	-27	Pass
NVNT	n20	5745	Ant1	-35.15	-27	Pass
NVNT	n20	5785	Ant1	-35.36	-27	Pass
NVNT	n20	5825	Ant1	-35.86	-27	Pass
NVNT	n40	5755	Ant1	-35.28	-27	Pass
NVNT	n40	5795	Ant1	-35.83	-27	Pass
NVNT	ac20	5745	Ant1	-35.77	-27	Pass
NVNT	ac20	5785	Ant1	-35.53	-27	Pass
NVNT	ac20	5825	Ant1	-35.59	-27	Pass
NVNT	ac40	5755	Ant1	-36.25	-27	Pass
NVNT	ac40	5795	Ant1	-35.34	-27	Pass
NVNT	ac80	5775	Ant1	-36.06	-27	Pass

Test Graphs

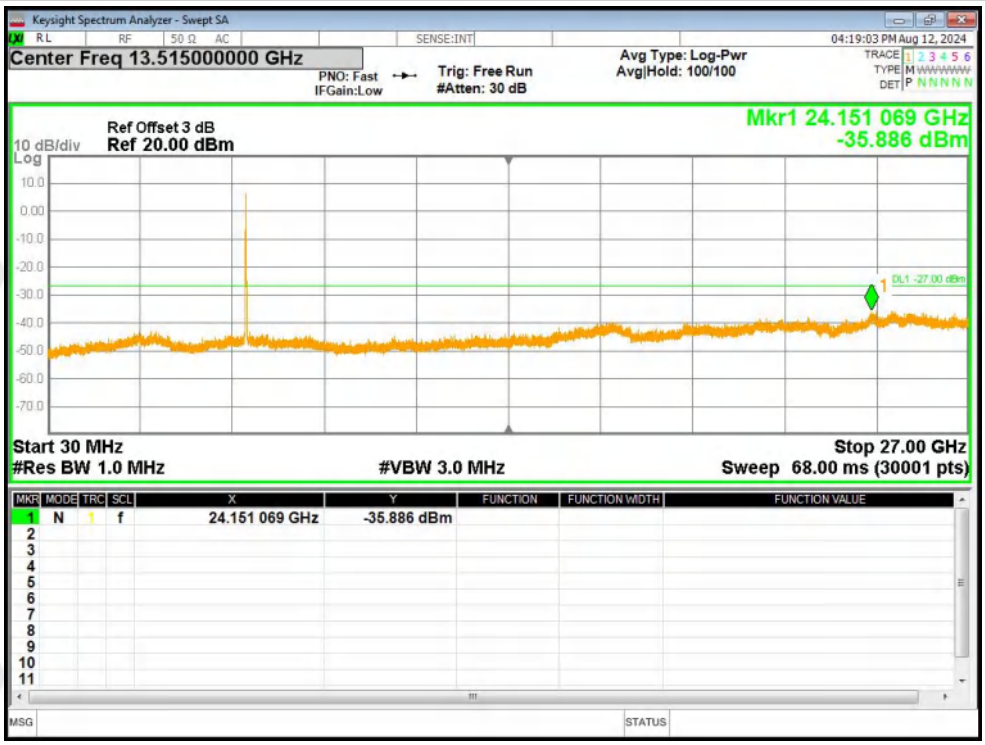
Tx. Spurious NVNT a 5745MHz Ant1 Emission



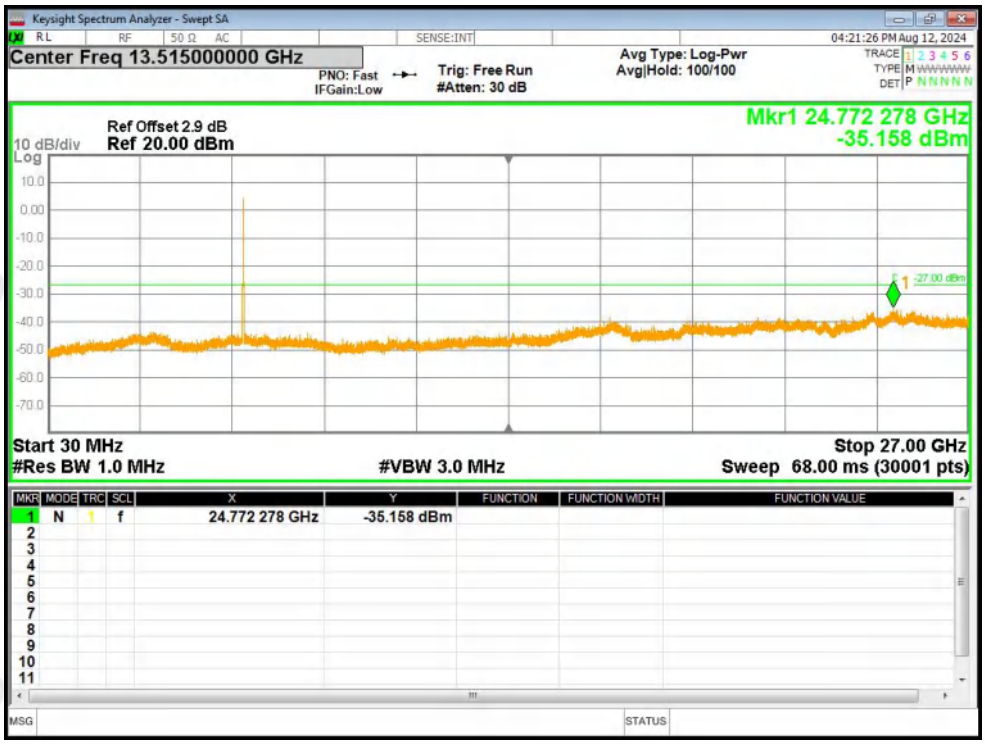
Tx. Spurious NVNT a 5785MHz Ant1 Emission



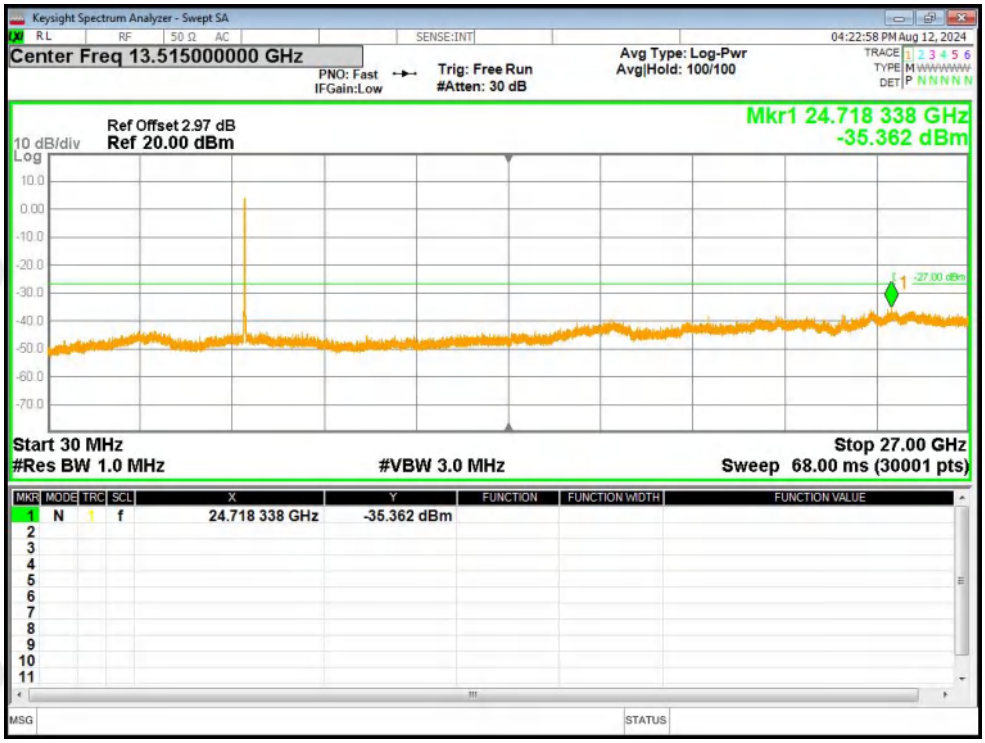
Tx. Spurious NVNT a 5825MHz Ant1 Emission



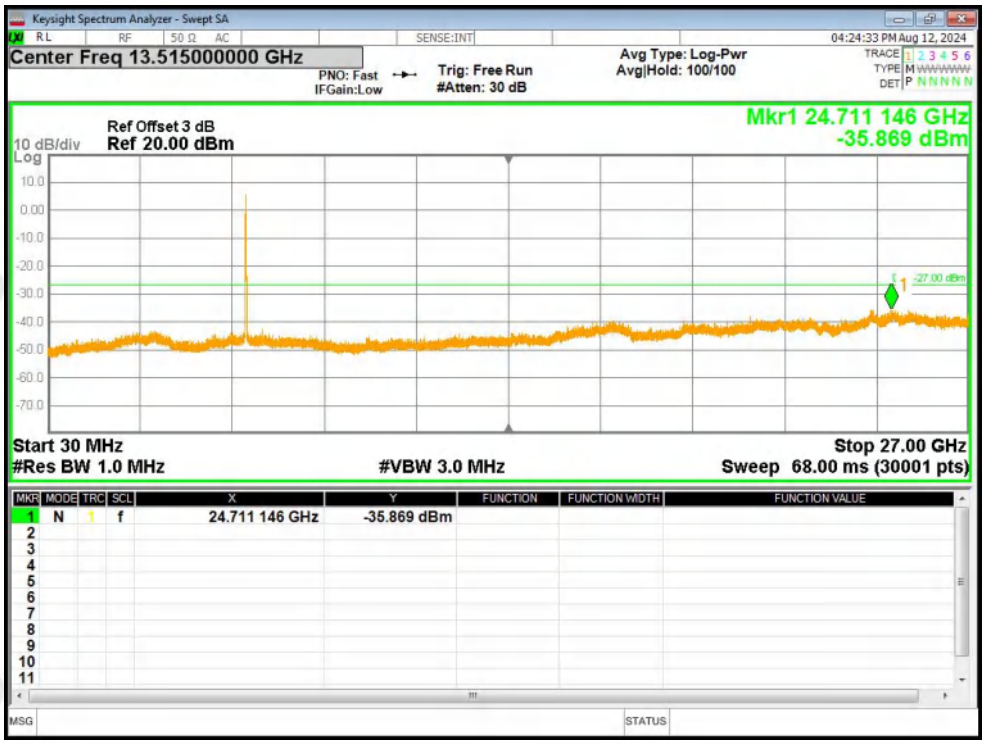
Tx. Spurious NVNT n20 5745MHz Ant1 Emission



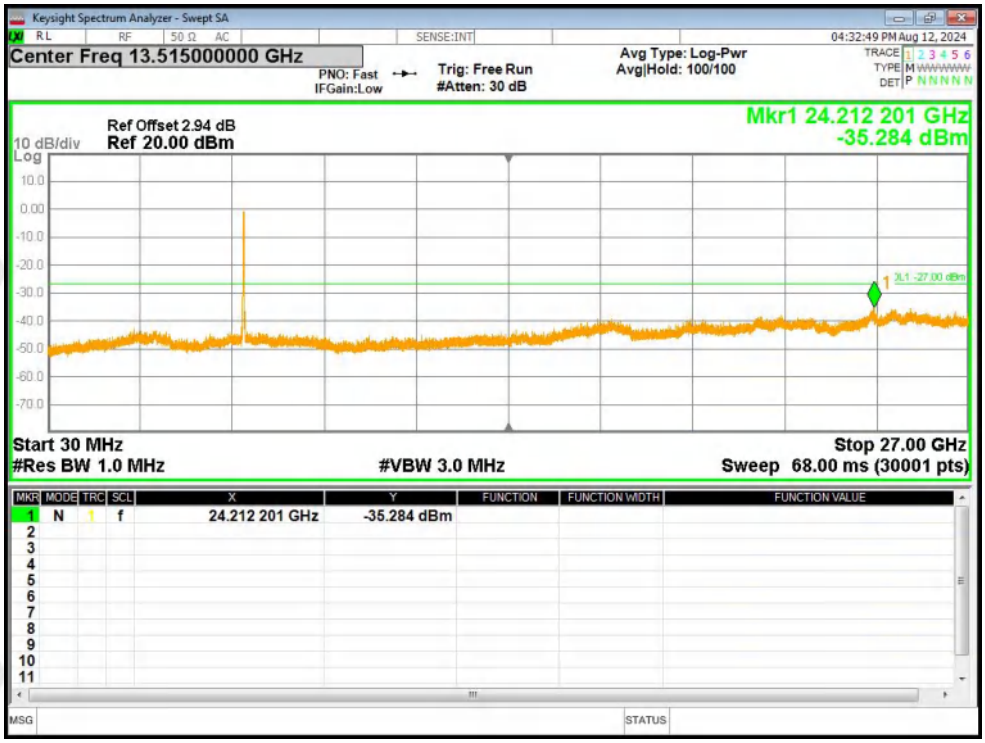
Tx. Spurious NVNT n20 5785MHz Ant1 Emission



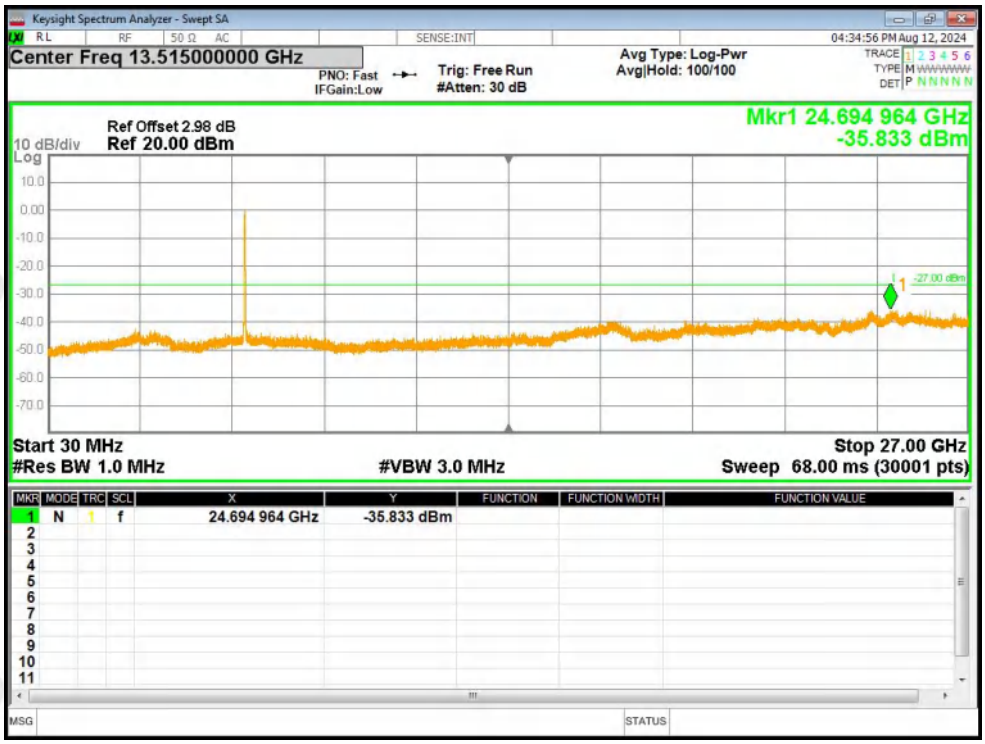
Tx. Spurious NVNT n20 5825MHz Ant1 Emission



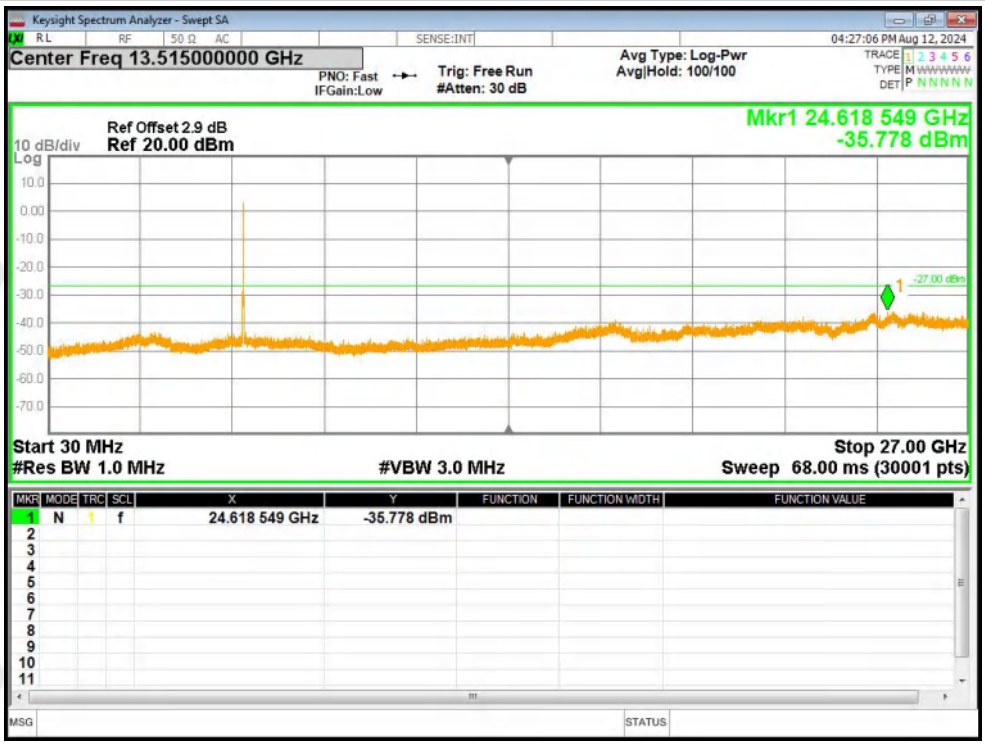
Tx. Spurious NVNT n40 5755MHz Ant1 Emission



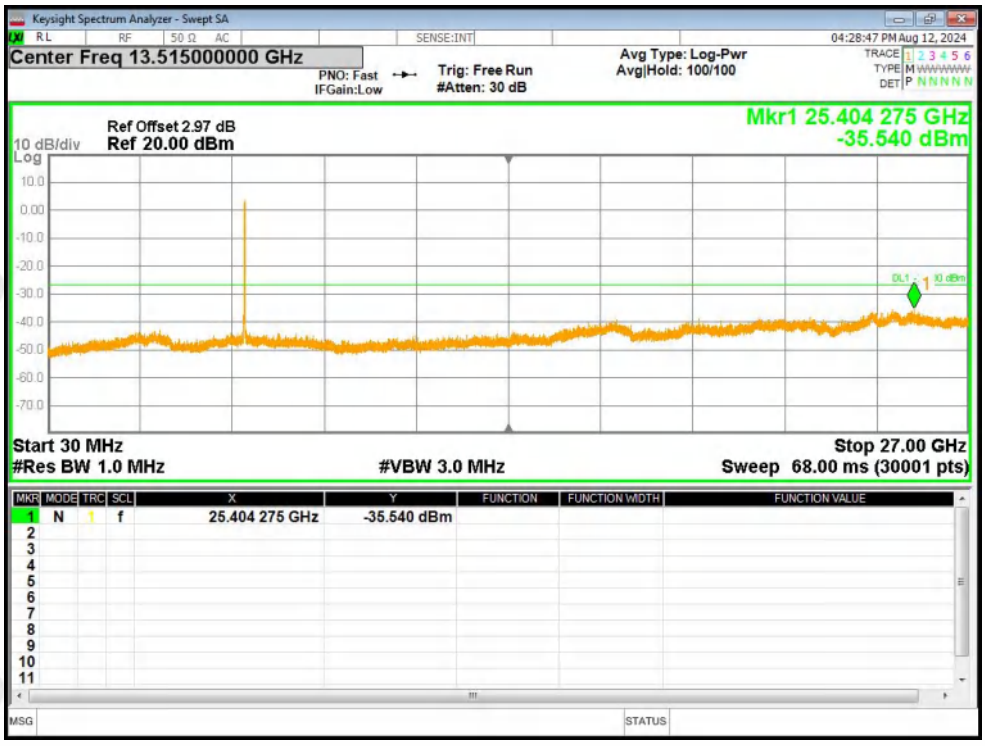
Tx. Spurious NVNT n40 5795MHz Ant1 Emission



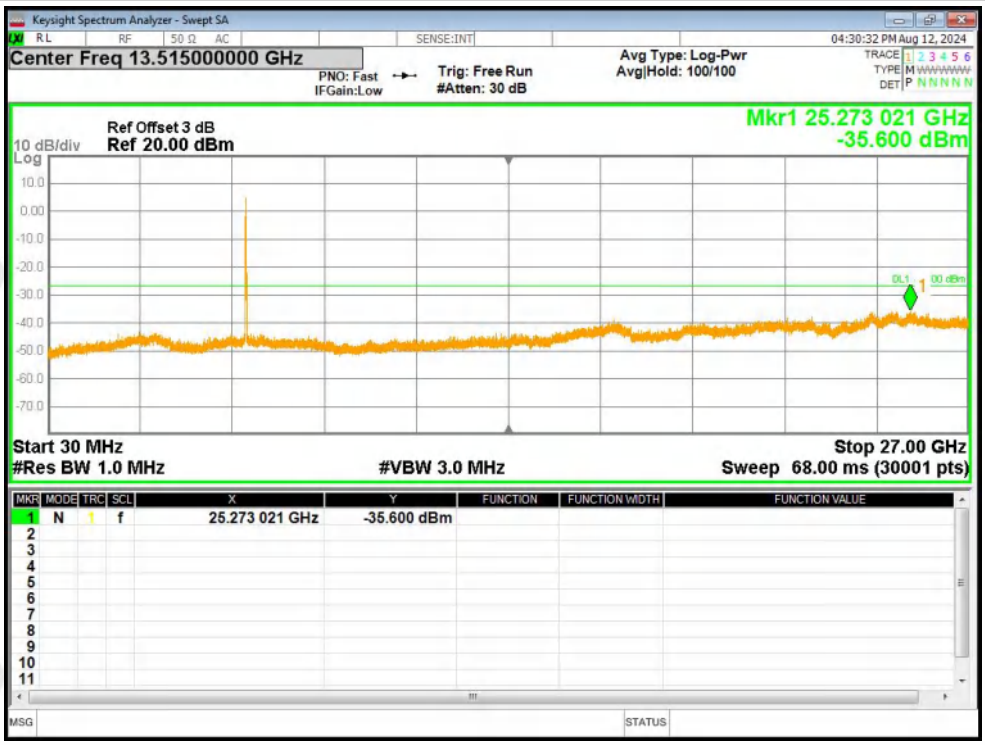
Tx. Spurious NVNT ac20 5745MHz Ant1 Emission



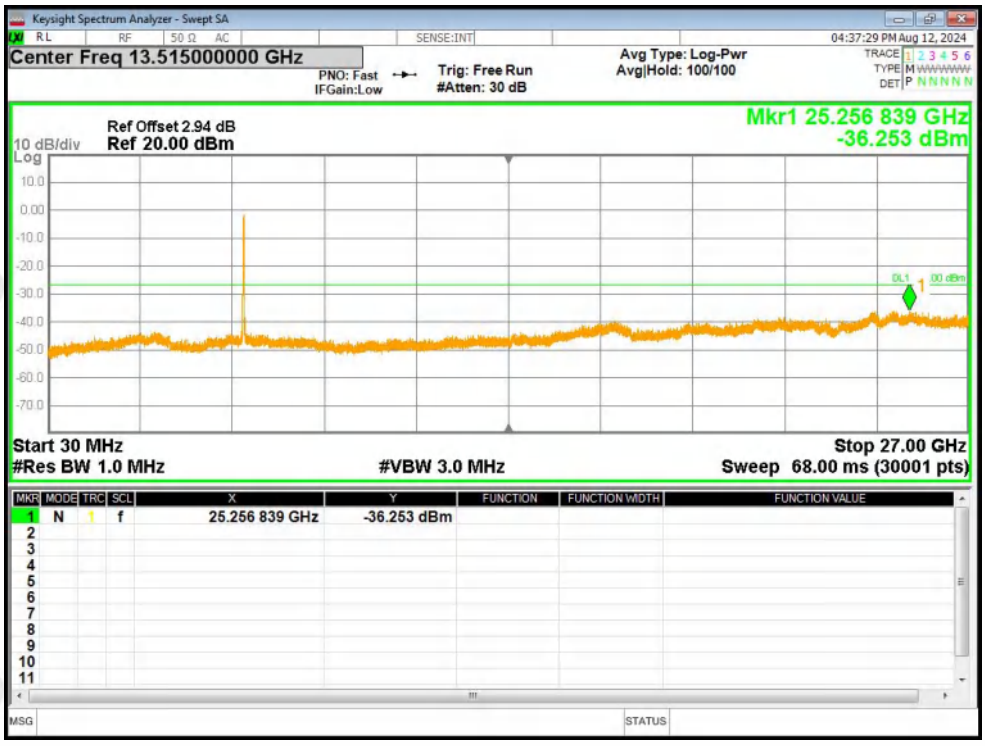
Tx. Spurious NVNT ac20 5785MHz Ant1 Emission

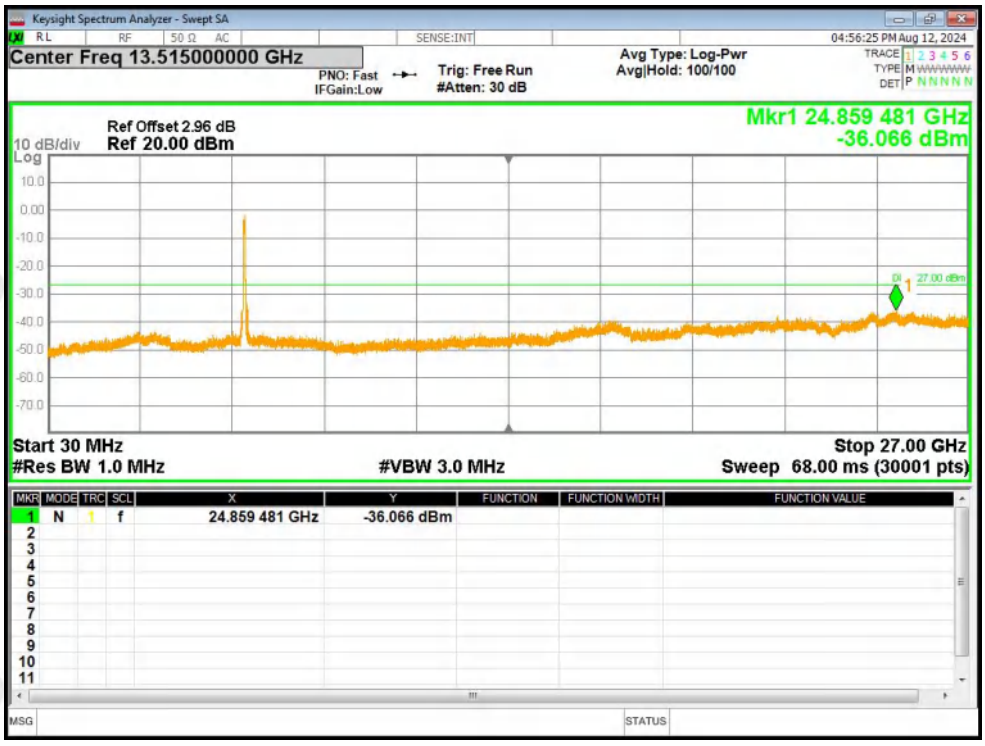


Tx. Spurious NVNT ac20 5825MHz Ant1 Emission



Tx. Spurious NVNT ac40 5755MHz Ant1 Emission



Tx. Spurious NVNT ac40 5795MHz Ant1 Emission

Tx. Spurious NVNT ac80 5775MHz Ant1 Emission