

802.11n(HT20) 5240MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.32	50.23	11.72	15.08	32.98	44.05	68.2	-24.15	Vertical
15540.73	51.35	12.12	17.88	34.67	46.68	74	-27.32	Vertical
10360.46	52.92	9.63	14.84	32.78	44.61	68.2	-23.59	Horizontal
15540.15	53.24	8.6	17.99	34.75	45.08	74	-28.92	Horizontal

802.11ac(HT20) 5180MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.69	50.84	11.63	14.87	33.08	44.26	68.2	-23.94	Vertical
15540.83	51.56	12.37	17.66	34.95	46.64	74	-27.36	Vertical
10360.11	52.96	9.88	14.77	33.05	44.56	68.2	-23.64	Horizontal
15540.74	53.14	8.6	18.14	34.72	45.16	74	-28.84	Horizontal

802.11ac(HT20) 5200MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.12	50.07	11.52	14.86	32.86	43.59	68.2	-24.61	Vertical
15540.73	51.5	12.13	17.81	34.8	46.64	74	-27.36	Vertical
10360.04	52.9	9.67	15.12	33.09	44.6	68.2	-23.6	Horizontal
15540.80	52.16	8.8	18.03	34.96	44.03	74	-29.97	Horizontal

802.11ac(HT20) 5240MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.62	50.64	11.42	14.92	33.01	43.97	68.2	-24.23	Vertical
15540.86	51.11	12.19	18.09	34.67	46.72	74	-27.28	Vertical
10360.70	52.67	9.51	15.08	32.97	44.29	68.2	-23.91	Horizontal
15540.13	52.01	8.53	17.81	34.59	43.76	74	-30.24	Horizontal

802.11n(HT40) 5190MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.77	50.03	11.52	15	32.75	43.8	68.2	-24.4	Vertical
15540.62	51.06	11.97	17.84	34.91	45.96	74	-28.04	Vertical
10360.65	52.36	9.62	14.65	32.68	43.95	68.2	-24.25	Horizontal
15540.98	52.23	8.56	18.15	34.88	44.06	74	-29.94	Horizontal

802.11n(HT40) 5230MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.38	50.09	11.36	14.78	33.08	43.15	68.2	-25.05	Vertical
15540.58	51	12.03	18.06	34.9	46.19	74	-27.81	Vertical
10360.11	52.48	9.61	15.09	32.73	44.45	68.2	-23.75	Horizontal
15540.61	53.09	8.57	18.08	34.94	44.8	74	-29.2	Horizontal

802.11ac(HT40) 5190MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.08	50.38	11.52	15.04	33.1	43.84	68.2	-24.36	Vertical
15540.22	51.27	12.09	17.89	34.82	46.81	74	-27.19	Vertical
10360.38	52.97	9.71	14.65	32.82	43.55	68.2	-24.65	Horizontal
15540.38	52.08	8.73	17.71	34.74	44.95	74	-29.05	Horizontal

802.11ac(HT40) 5230MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.88	50.56	11.73	14.77	32.92	44.14	68.2	-24.06	Vertical
15540.08	51.77	12.29	17.99	34.78	47.27	74	-26.73	Vertical
10360.84	52.69	9.83	15.08	33.15	44.45	68.2	-23.75	Horizontal
15540.44	52.77	8.76	17.67	34.68	44.52	74	-29.48	Horizontal

802.11ax(HT20) 5180MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.69	50	11.63	14.87	33.08	43.42	68.2	-24.78	Vertical
15540.83	51.33	12.37	17.66	34.95	46.41	74	-27.59	Vertical
10360.11	52.38	9.88	14.77	33.05	43.98	68.2	-24.22	Horizontal
15540.74	52.3	8.6	18.14	34.72	44.32	74	-29.68	Horizontal

802.11ax(HT20) 5200MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.12	50.62	11.52	14.86	32.86	44.14	68.2	-24.06	Vertical
15540.73	51.15	12.13	17.81	34.8	46.29	74	-27.71	Vertical
10360.04	52.93	9.67	15.12	33.09	44.63	68.2	-23.57	Horizontal
15540.80	53.17	8.8	18.03	34.96	45.04	74	-28.96	Horizontal

802.11axHT20) 5240MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.62	50.31	11.42	14.92	33.01	43.64	68.2	-24.56	Vertical
15540.86	51.11	12.19	18.09	34.67	46.72	74	-27.28	Vertical
10360.70	52.88	9.51	15.08	32.97	44.5	68.2	-23.7	Horizontal
15540.13	53.38	8.53	17.81	34.59	45.13	74	-28.87	Horizontal

802.11ax(HT40) 5190MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.08	50.11	11.52	15.04	33.1	43.57	68.2	-24.63	Vertical
15540.22	51.21	12.09	17.89	34.82	46.81	74	-27.19	Vertical
10360.38	52.74	9.71	14.65	32.82	43.55	68.2	-24.65	Horizontal
15540.38	52.02	8.73	17.71	34.74	44.95	74	-29.05	Horizontal

802.11ax(HT40) 5230MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.88	50.99	11.73	14.77	32.92	44.57	68.2	-23.63	Vertical
15540.08	51.55	12.29	17.99	34.78	47.05	74	-26.95	Vertical
10360.84	52.41	9.83	15.08	33.15	44.17	68.2	-24.03	Horizontal
15540.44	53.26	8.76	17.67	34.68	45.01	74	-28.99	Horizontal

Note:

1. Level = Read Level + Antenna Factor+ Cable loss- Preamp Factor.
2. The test trace is same as the ambient noise (the test frequency range: 18GHz~40GHz), therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

4.7 Frequency stability

Test Standard	15.407(g), RSS-Gen §6.11
Test limit	Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.
Test results:	Pass

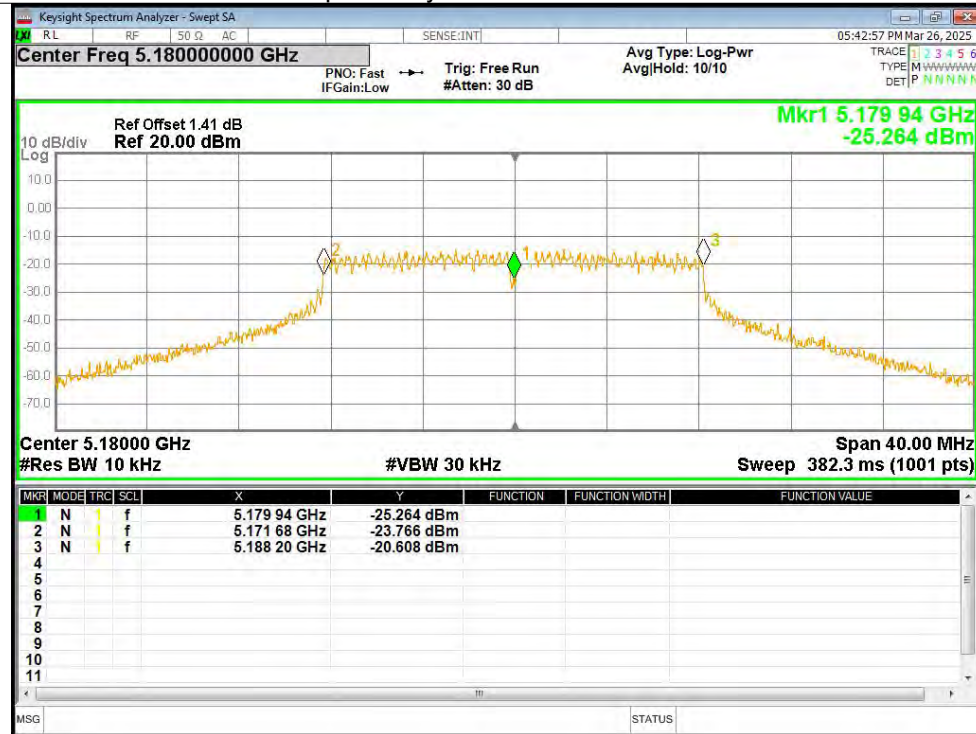
Measurement Data:

5.2GWIFI (5180-5240 MHz)

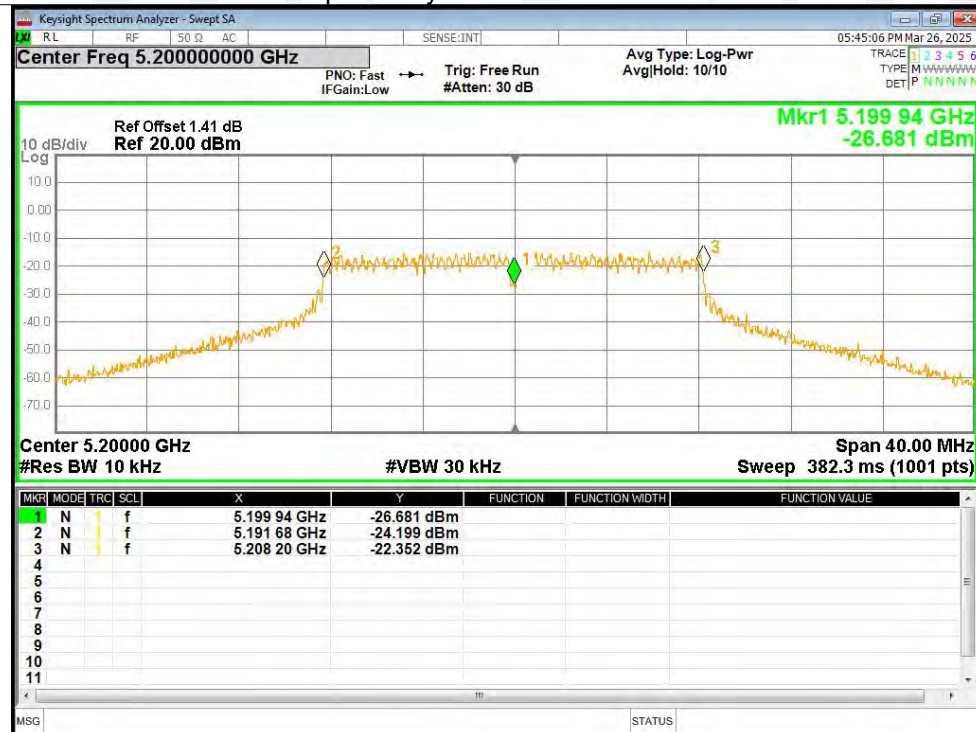
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	a	5180	Ant1	5179.94	-60000	-11.58	25	Pass
NVNT	a	5200	Ant1	5199.94	-60000	-11.54	25	Pass
NVNT	a	5240	Ant1	5239.94	-60000	-11.45	25	Pass
NVNT	n20	5180	Ant1	5179.96	-40000	-7.72	25	Pass
NVNT	n20	5200	Ant1	5199.96	-40000	-7.69	25	Pass
NVNT	n20	5240	Ant1	5239.94	-60000	-11.45	25	Pass
NVNT	n40	5190	Ant1	5189.96	-40000	-7.71	25	Pass
NVNT	n40	5230	Ant1	5229.92	-80000	-15.3	25	Pass
NVNT	ac20	5180	Ant1	5179.96	-40000	-7.72	25	Pass
NVNT	ac20	5200	Ant1	5199.96	-40000	-7.69	25	Pass
NVNT	ac20	5240	Ant1	5239.96	-40000	-7.63	25	Pass
NVNT	ac40	5190	Ant1	5189.92	-80000	-15.41	25	Pass
NVNT	ac40	5230	Ant1	5229.92	-80000	-15.3	25	Pass
NVNT	ax20	5180	Ant1	5179.96	-40000	-7.72	25	Pass
NVNT	ax20	5200	Ant1	5199.98	-20000	-3.85	25	Pass
NVNT	ax20	5240	Ant1	5239.92	-80000	-15.27	25	Pass
NVNT	ax40	5190	Ant1	5189.96	-40000	-7.71	25	Pass
NVNT	ax40	5230	Ant1	5229.96	-40000	-7.65	25	Pass

Test Graphs

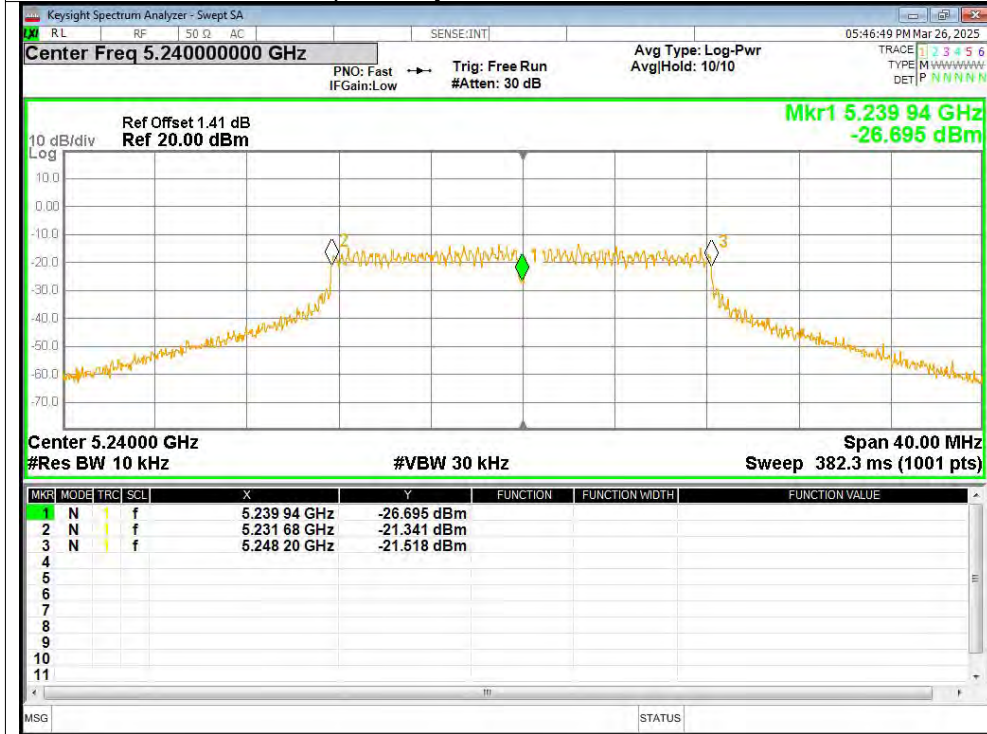
Freq. Stability NVNT a 5180MHz Ant1



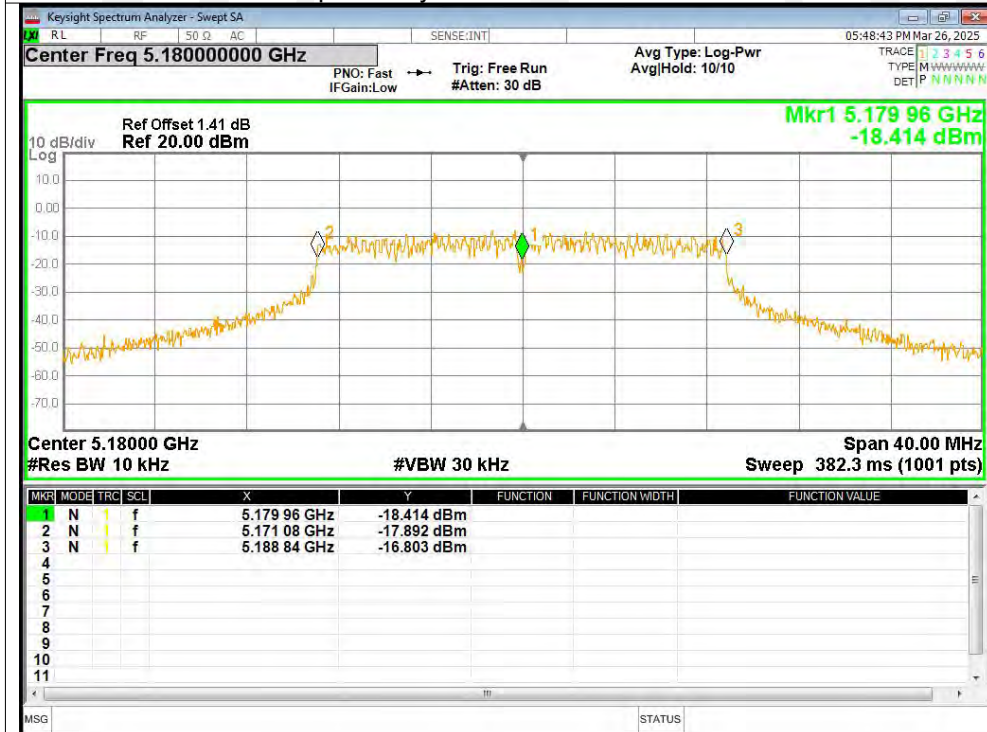
Freq. Stability NVNT a 5200MHz Ant1



Freq. Stability NVNT a 5240MHz Ant1



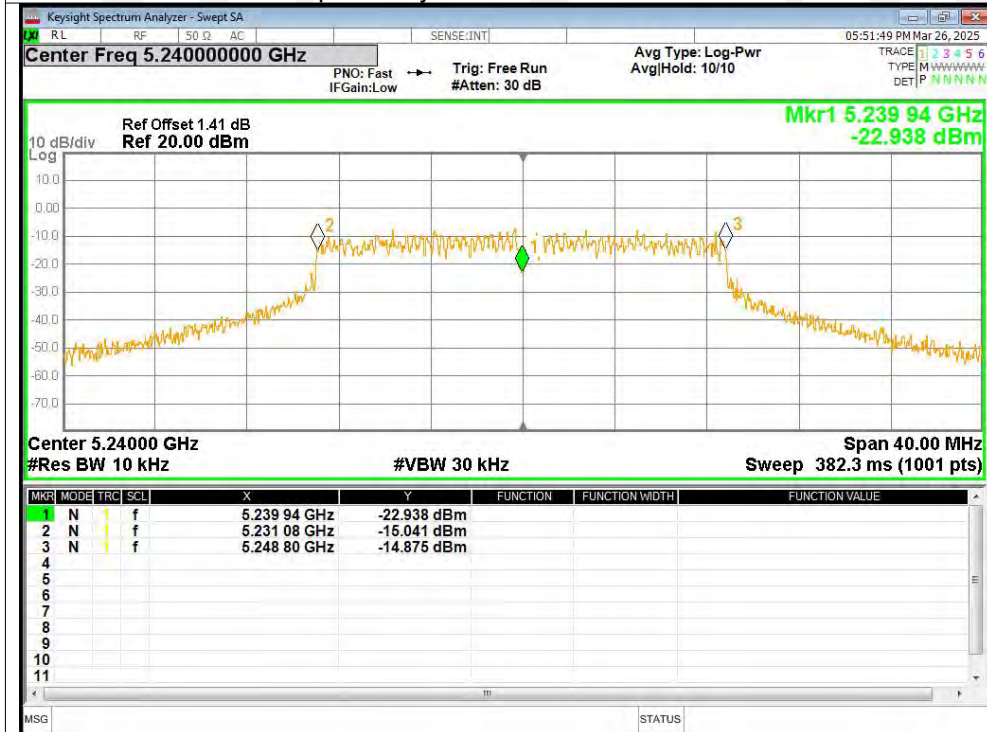
Freq. Stability NVNT n20 5180MHz Ant1



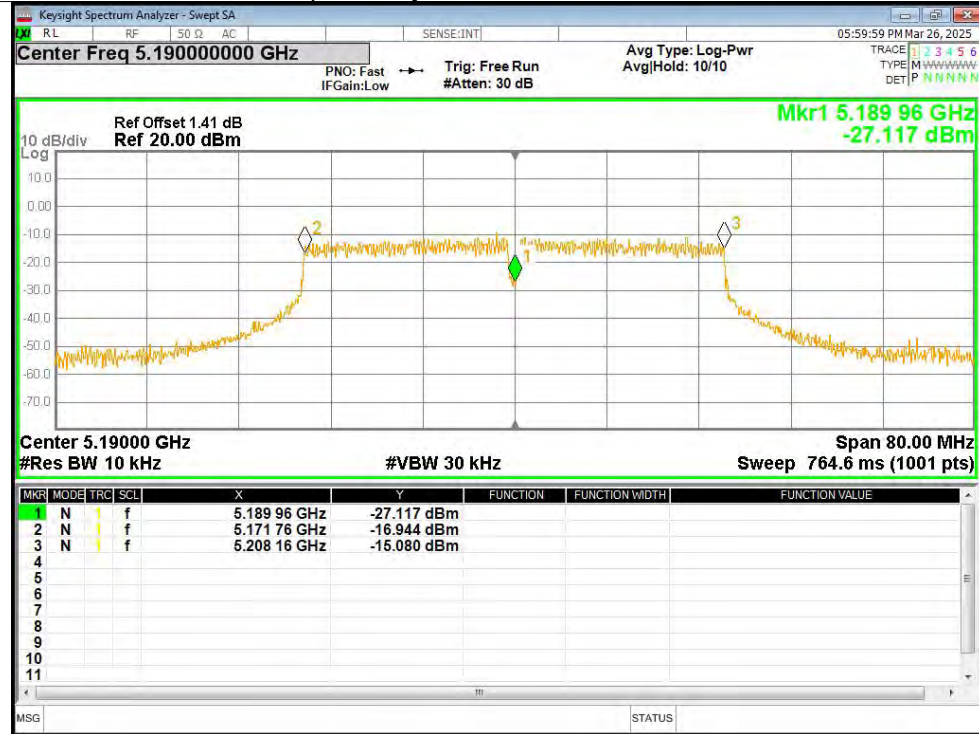
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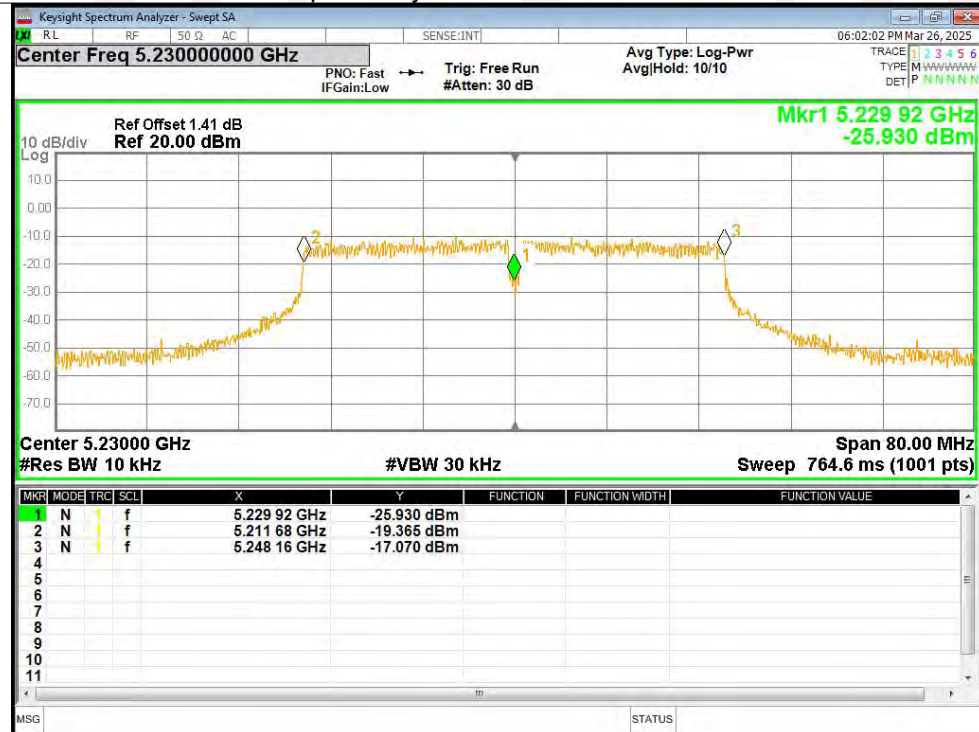
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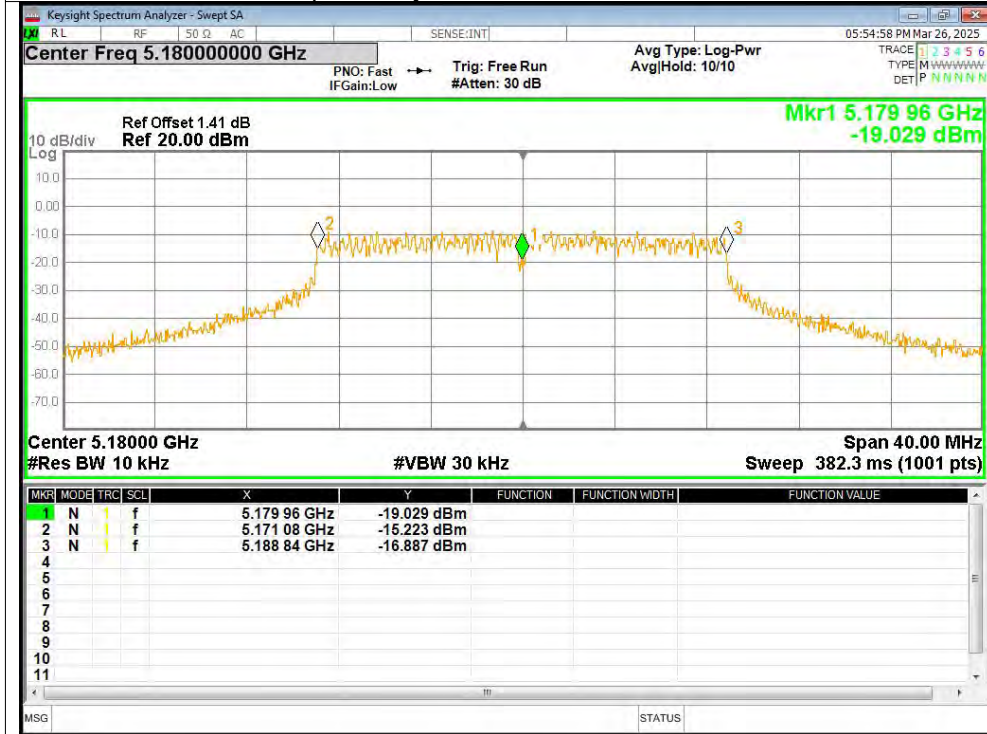
Freq. Stability NVNT n40 5190MHz Ant1



Freq. Stability NVNT n40 5230MHz Ant1



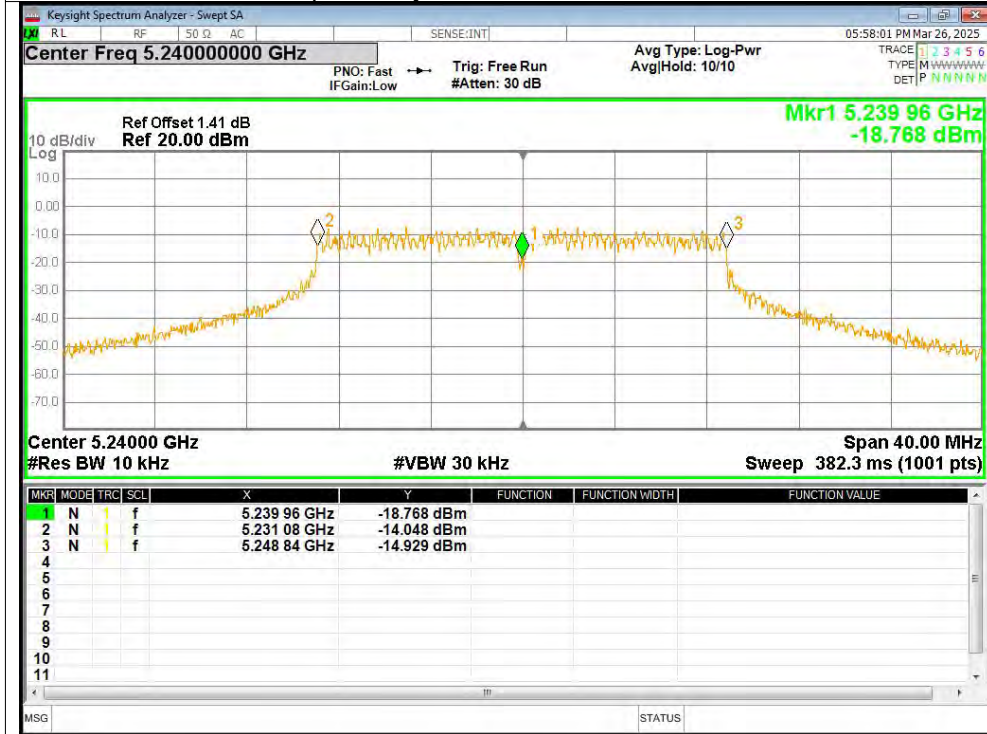
Freq. Stability NVNT ac20 5180MHz Ant1



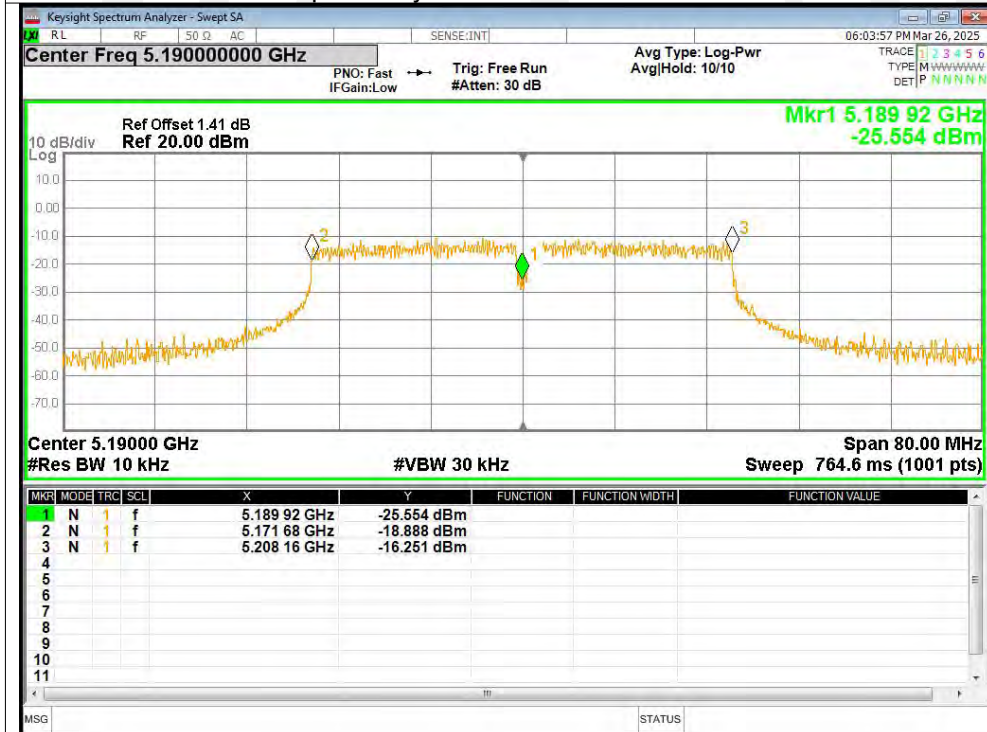
Freq. Stability NVNT ac20 5200MHz Ant1



Freq. Stability NVNT ac20 5240MHz Ant1



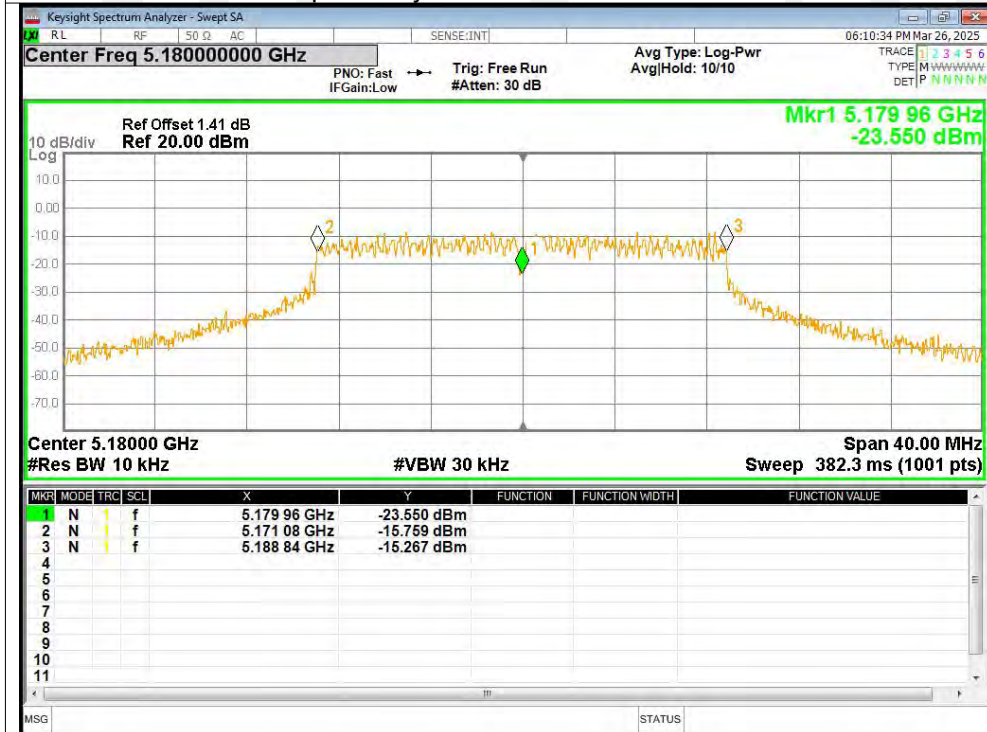
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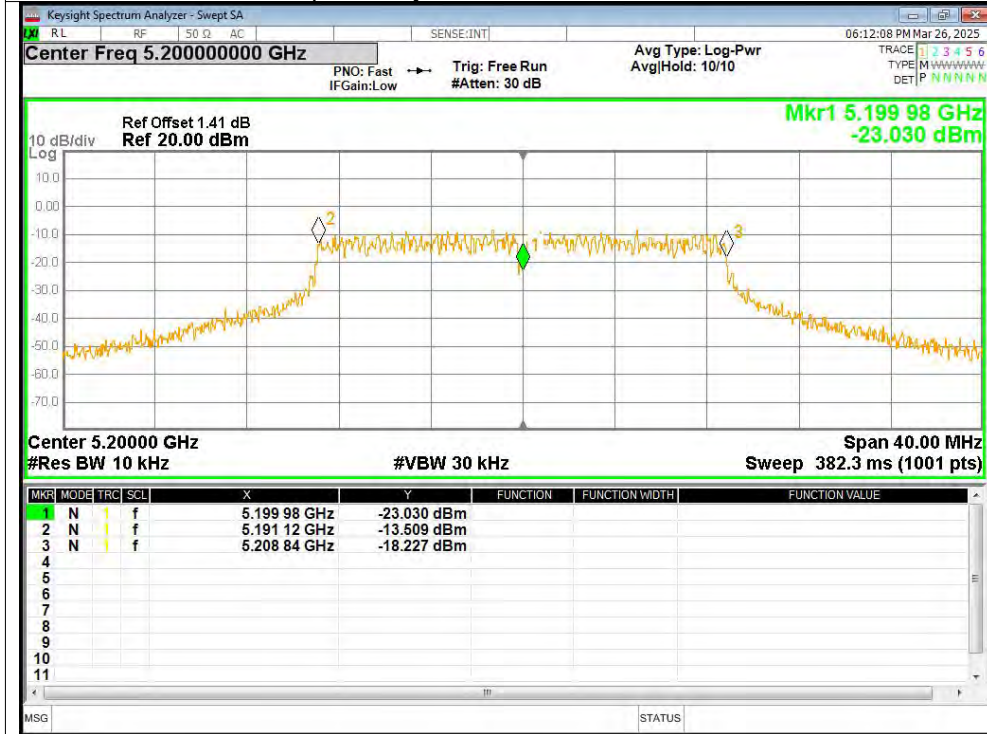
Freq. Stability NVNT ac40 5230MHz Ant1



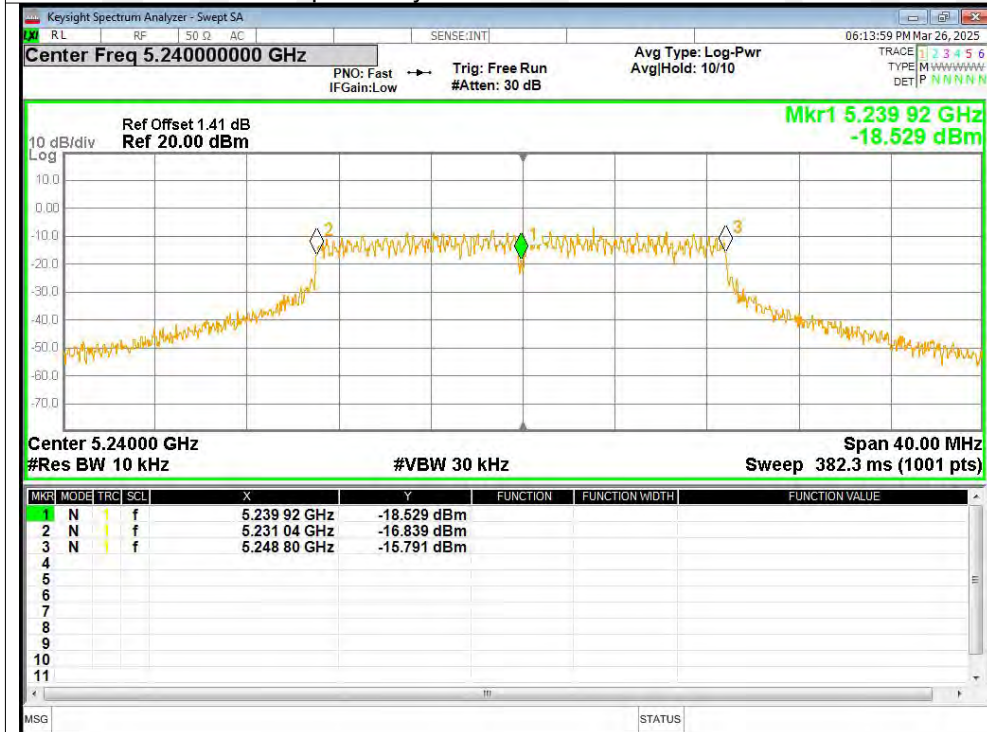
Freq. Stability NVNT ax20 5180MHz Ant1



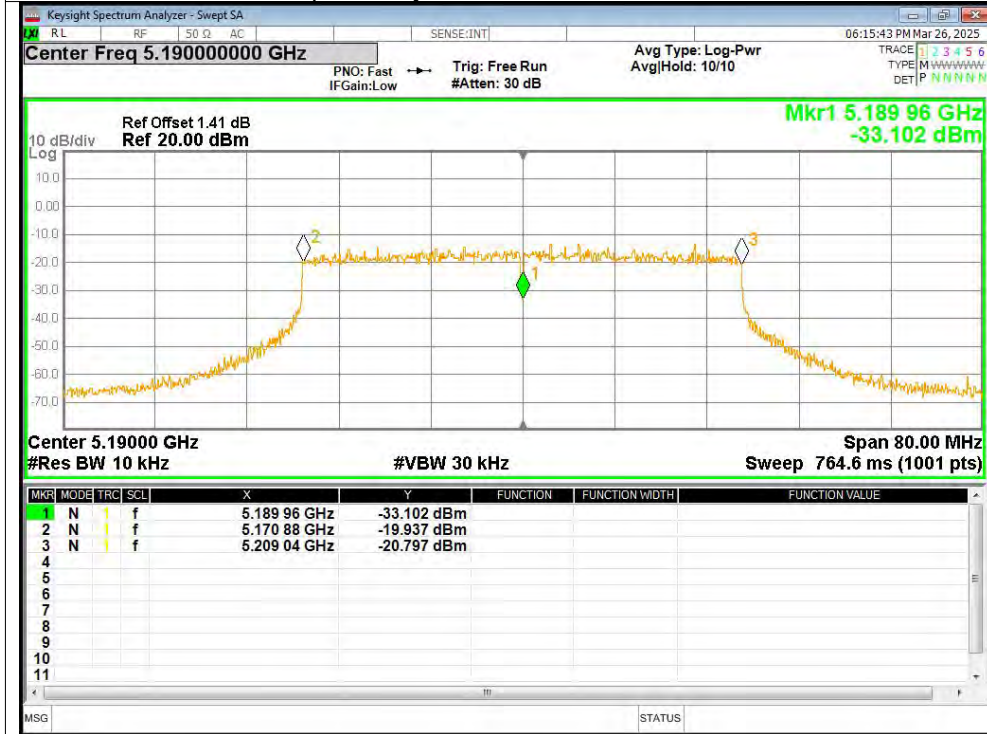
Freq. Stability NVNT ax20 5200MHz Ant1



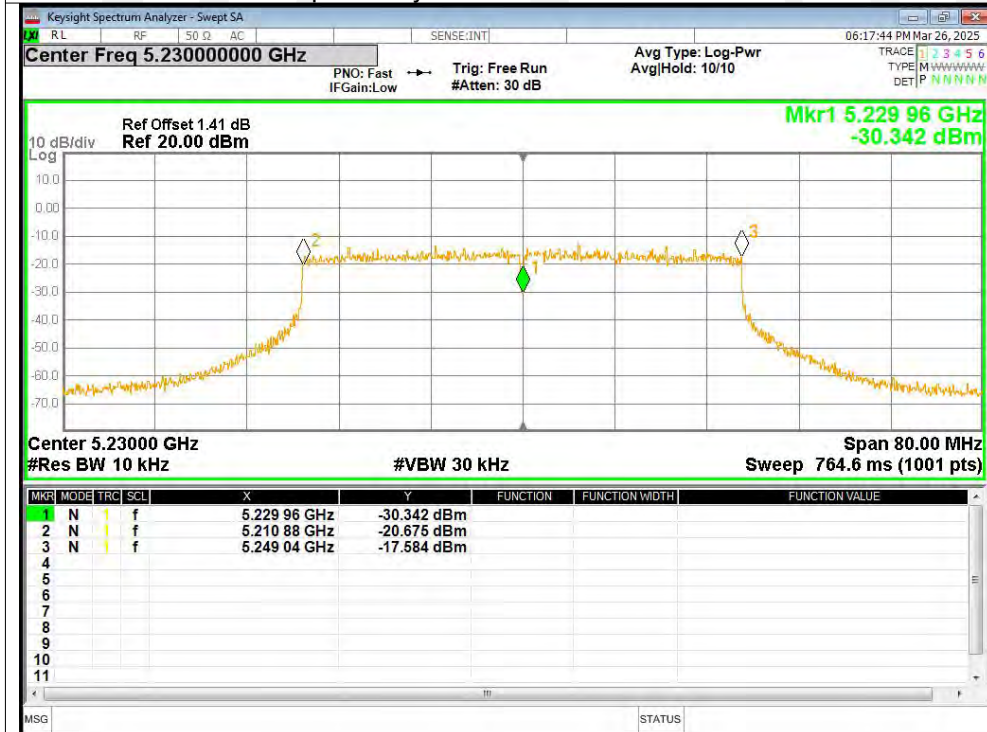
Freq. Stability NVNT ax20 5240MHz Ant1



Freq. Stability NVNT ax40 5190MHz Ant1



Freq. Stability NVNT ax40 5230MHz Ant1

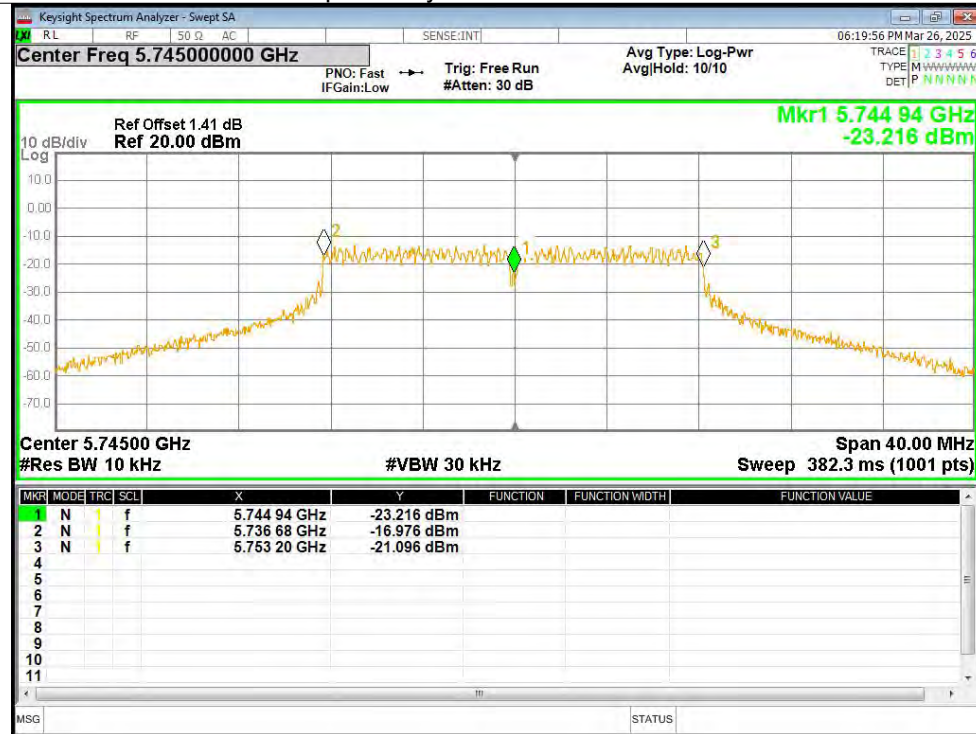


5.8GWIFI (5745MHz-5825 MHz)

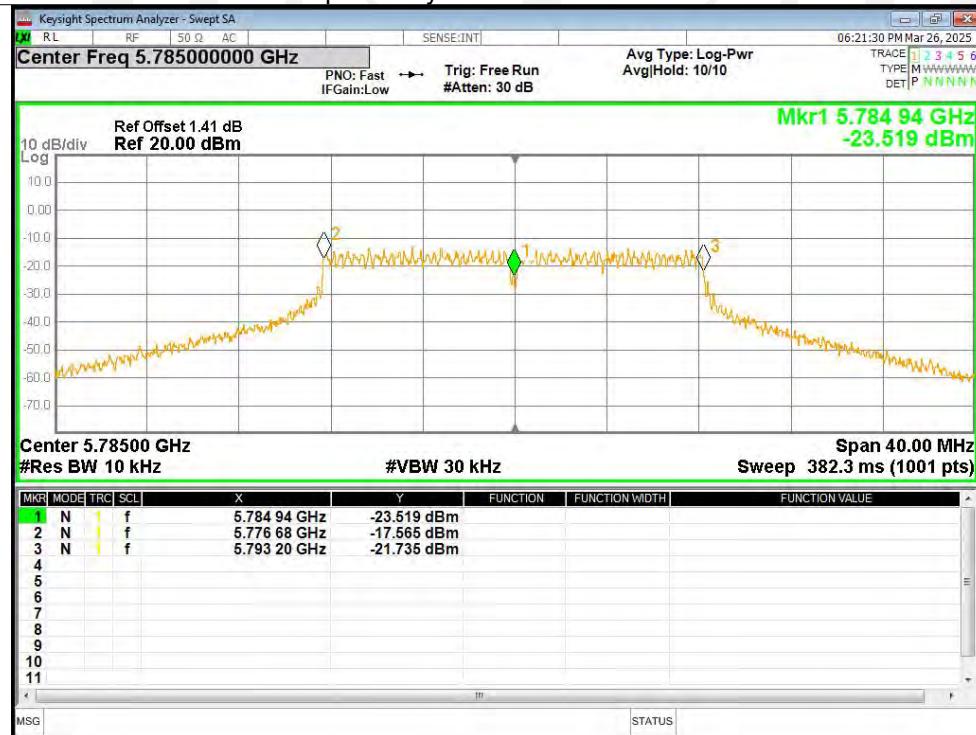
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	a	5745	Ant1	5744.94	-60000	-10.44	25	Pass
NVNT	a	5785	Ant1	5784.94	-60000	-10.37	25	Pass
NVNT	a	5825	Ant1	5824.94	-60000	-10.3	25	Pass
NVNT	n20	5745	Ant1	5744.96	-40000	-6.96	25	Pass
NVNT	n20	5785	Ant1	5784.94	-60000	-10.37	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	5794.96	-40000	-6.9	25	Pass
NVNT	ac20	5745	Ant1	5744.92	-80000	-13.93	25	Pass
NVNT	ac20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
NVNT	ac20	5825	Ant1	5824.94	-60000	-10.3	25	Pass
NVNT	ac40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
NVNT	ac40	5795	Ant1	5794.96	-40000	-6.9	25	Pass
NVNT	ax20	5745	Ant1	5744.96	-40000	-6.96	25	Pass
NVNT	ax20	5785	Ant1	5784.94	-60000	-10.37	25	Pass
NVNT	ax20	5825	Ant1	5824.98	-20000	-3.43	25	Pass
NVNT	ax40	5755	Ant1	5754.92	-80000	-13.9	25	Pass
NVNT	ax40	5795	Ant1	5794.92	-80000	-13.81	25	Pass

Test Graphs

Freq. Stability NVNT a 5745MHz Ant1



Freq. Stability NVNT a 5785MHz Ant1



Freq. Stability NVNT a 5825MHz Ant1



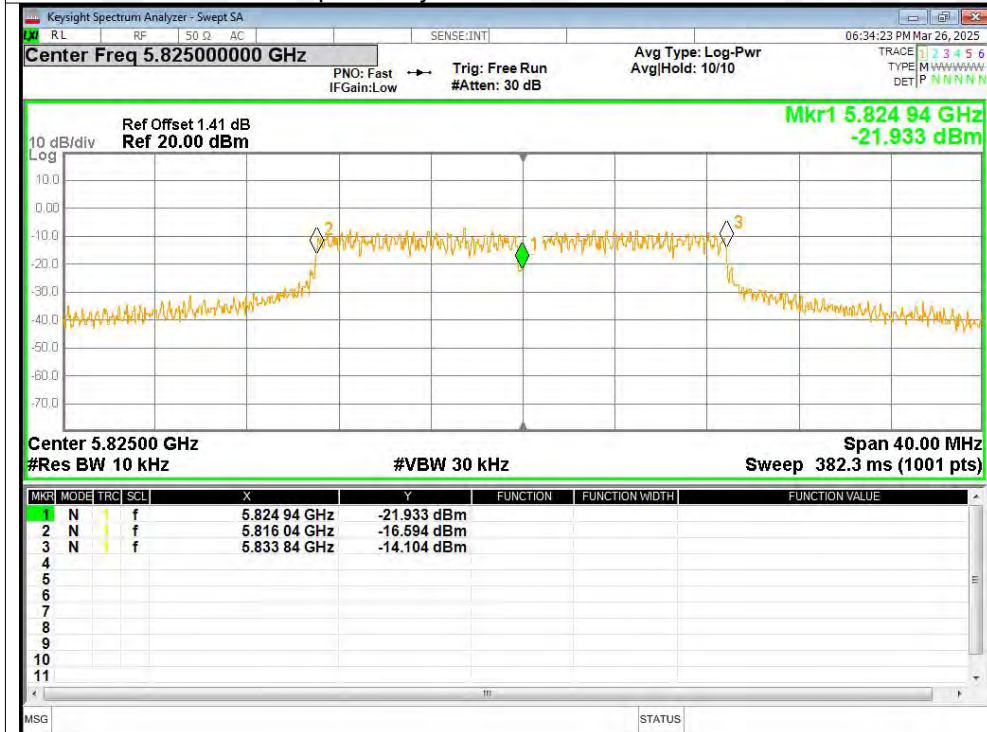
Freq. Stability NVNT n20 5745MHz Ant1



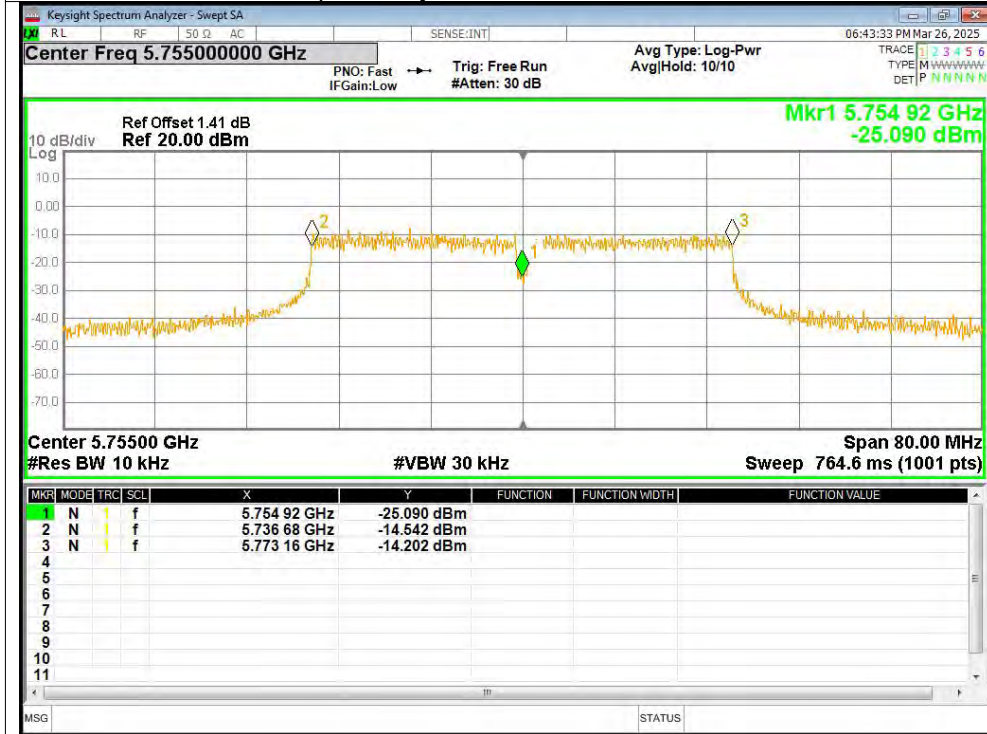
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Freq. Stability NVNT n20 5825MHz Ant1

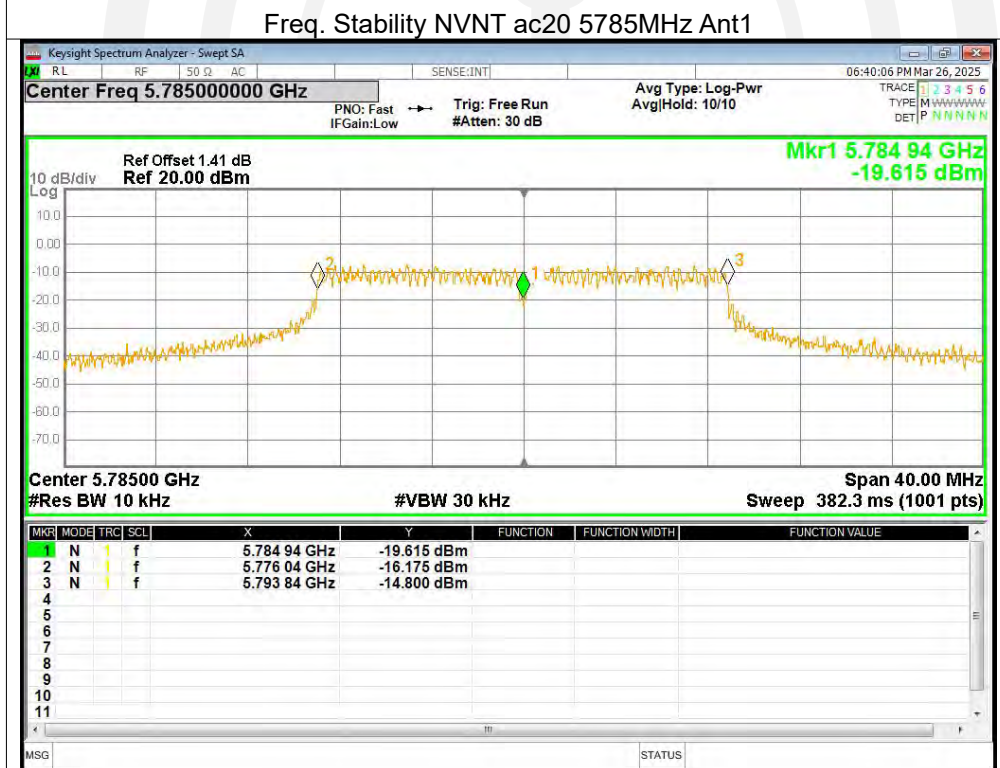
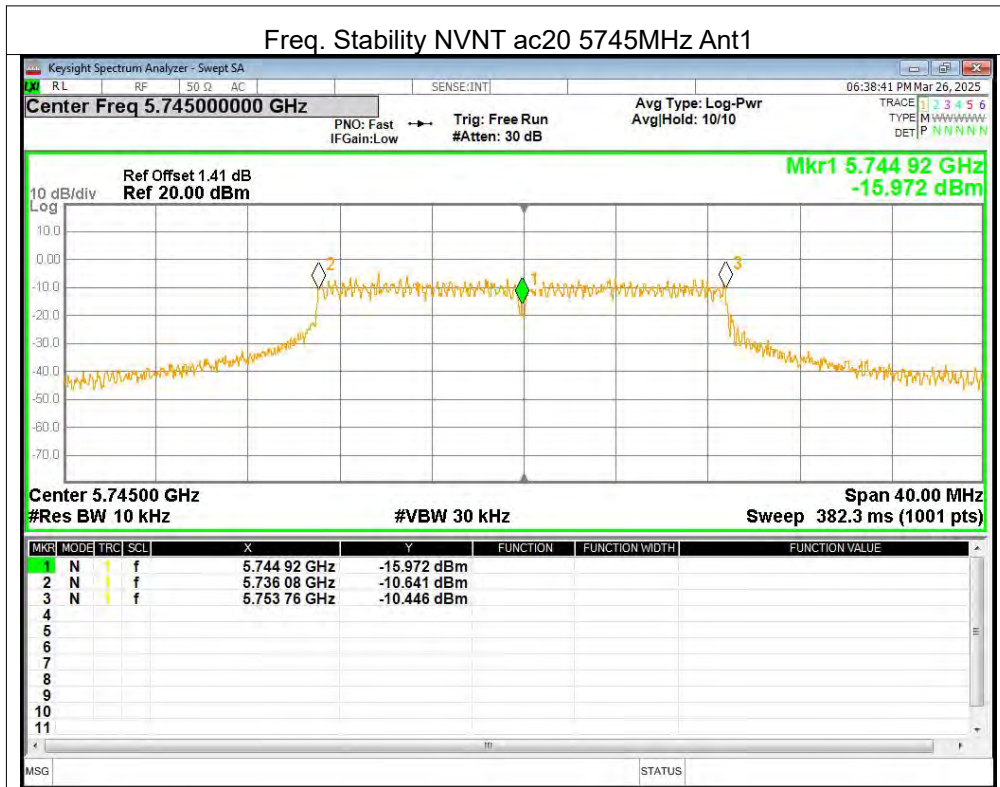


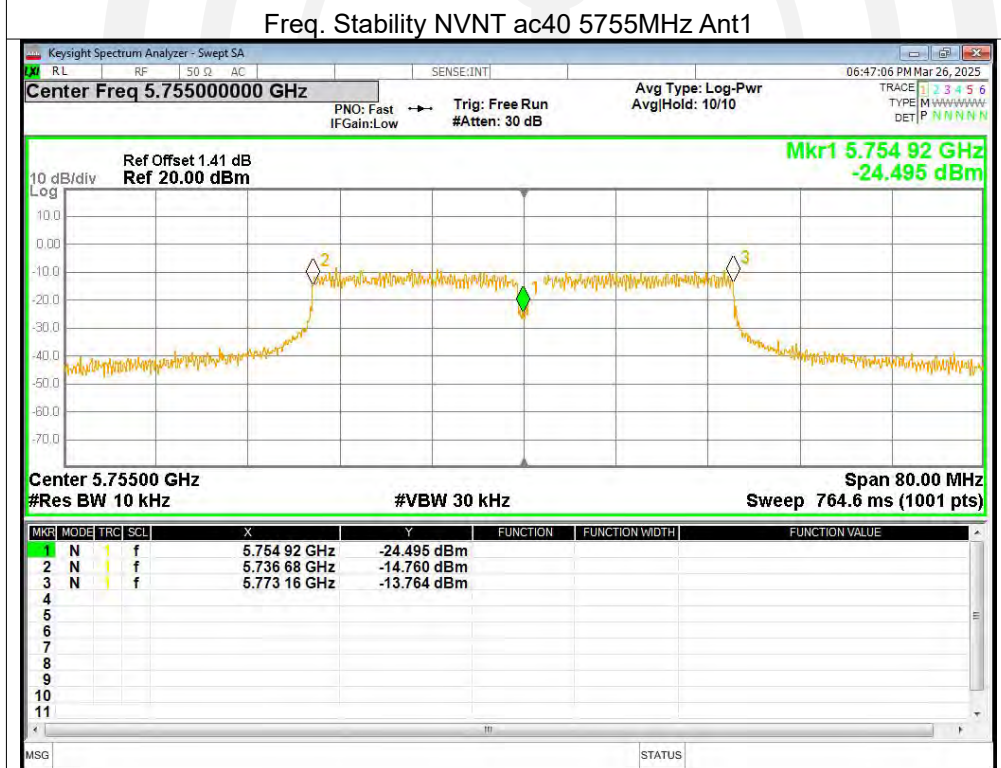
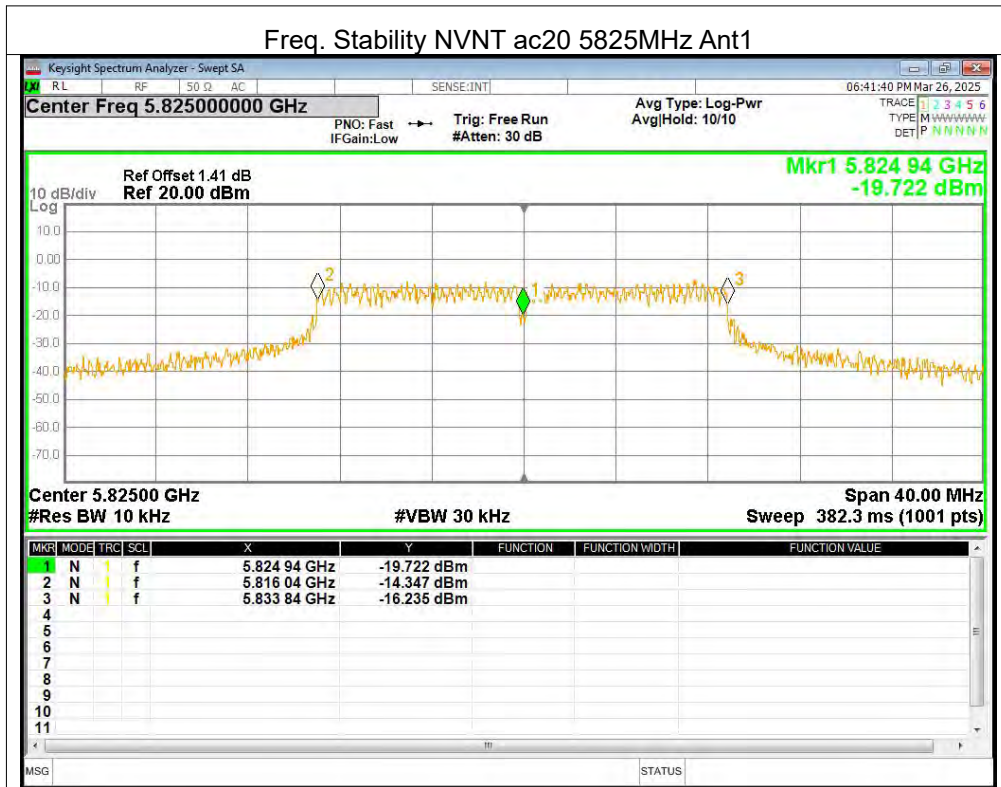
Freq. Stability NVNT n40 5755MHz Ant1

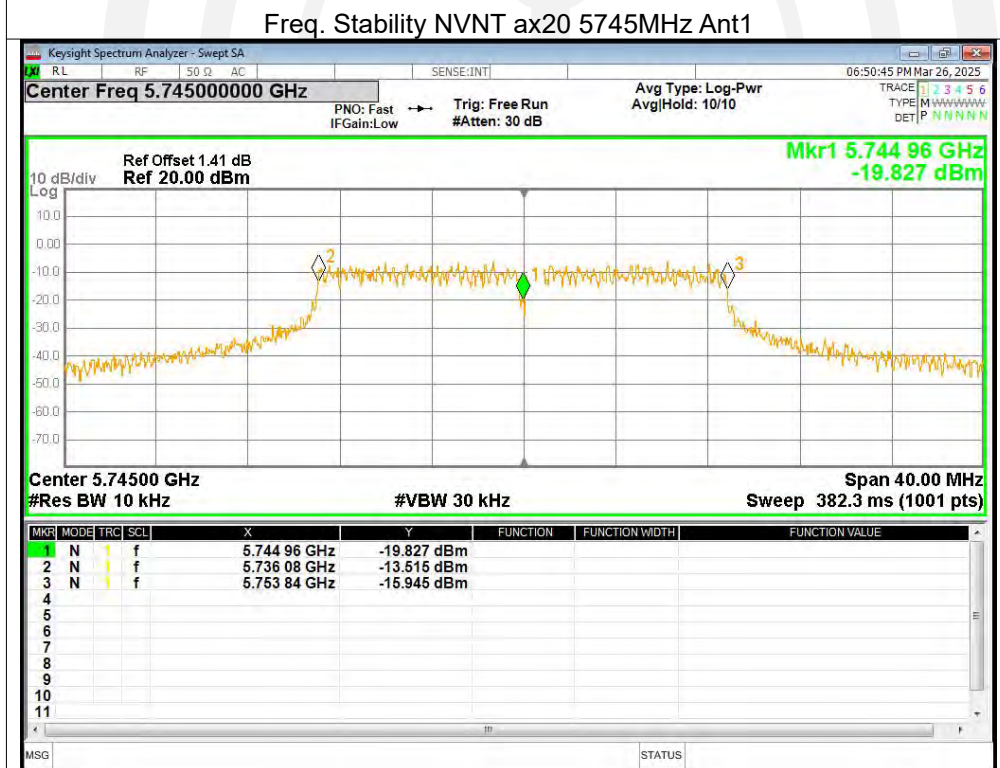
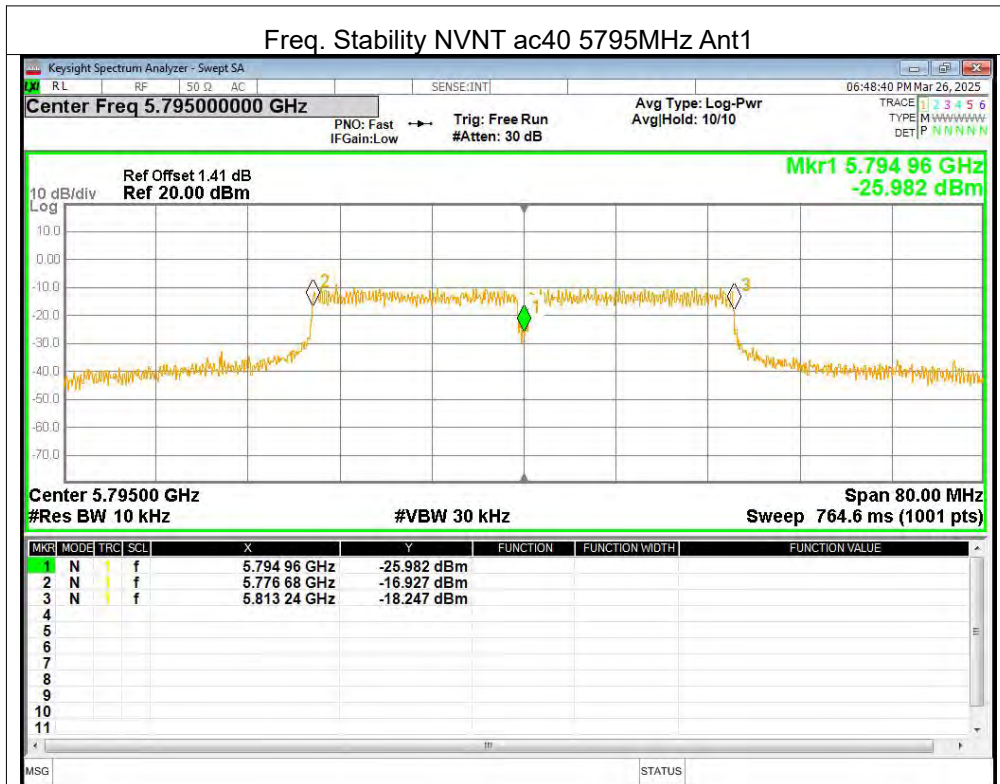


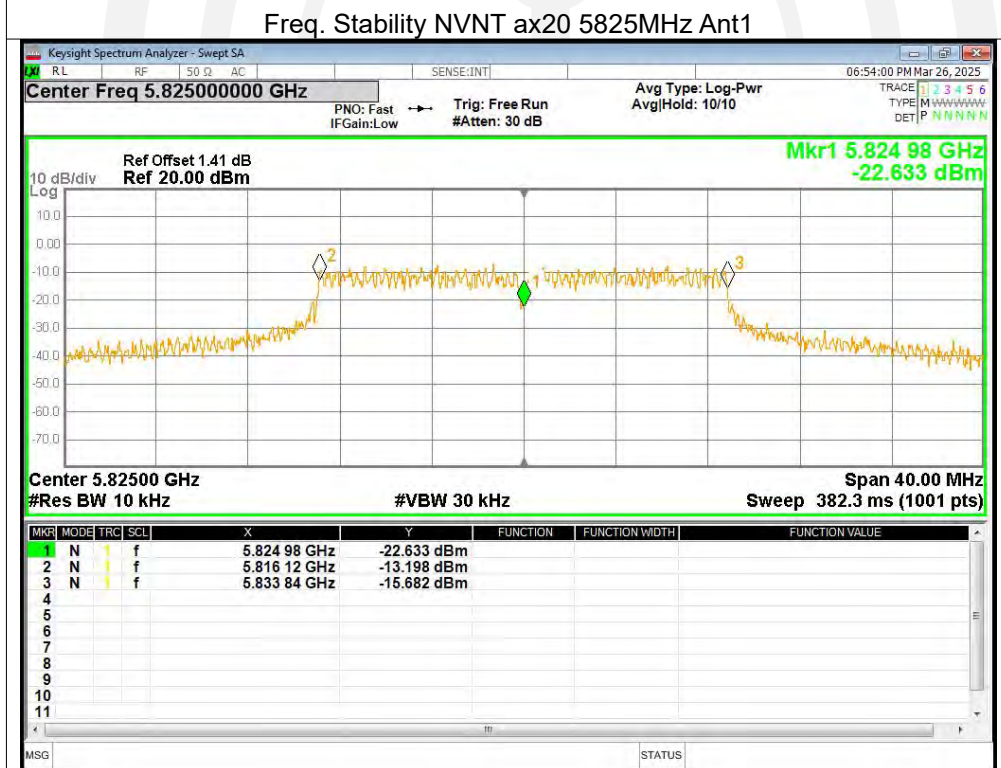
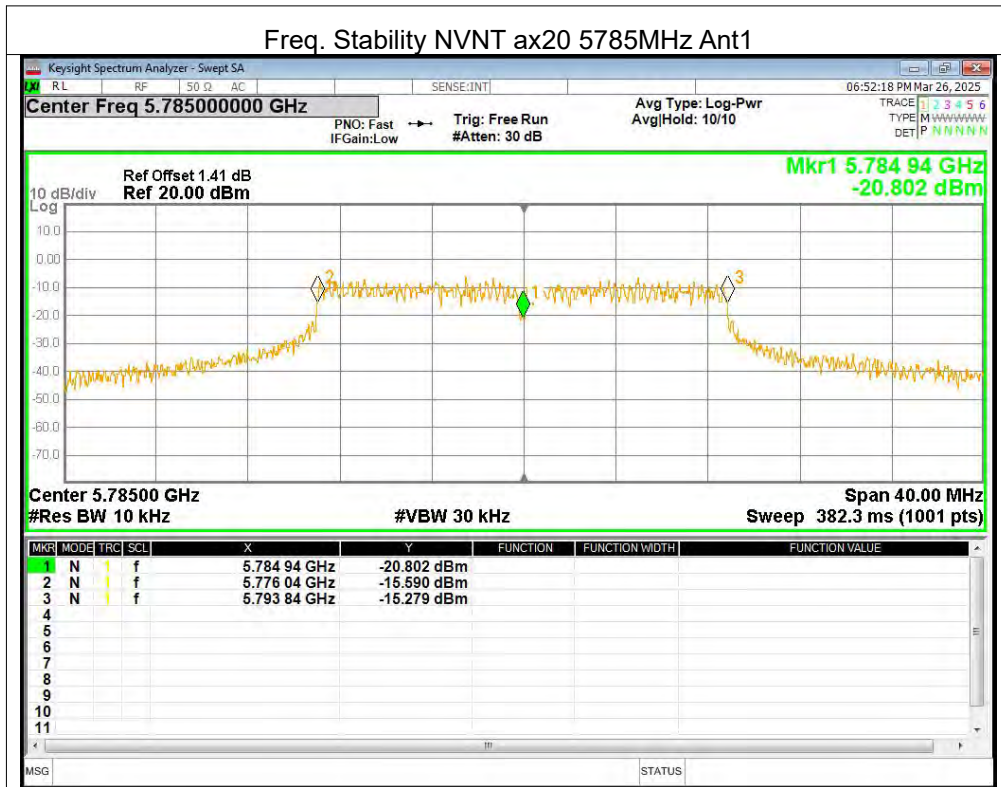
Freq. Stability NVNT n40 5795MHz Ant1











Freq. Stability NVNT ax40 5755MHz Ant1



Freq. Stability NVNT ax40 5795MHz Ant1



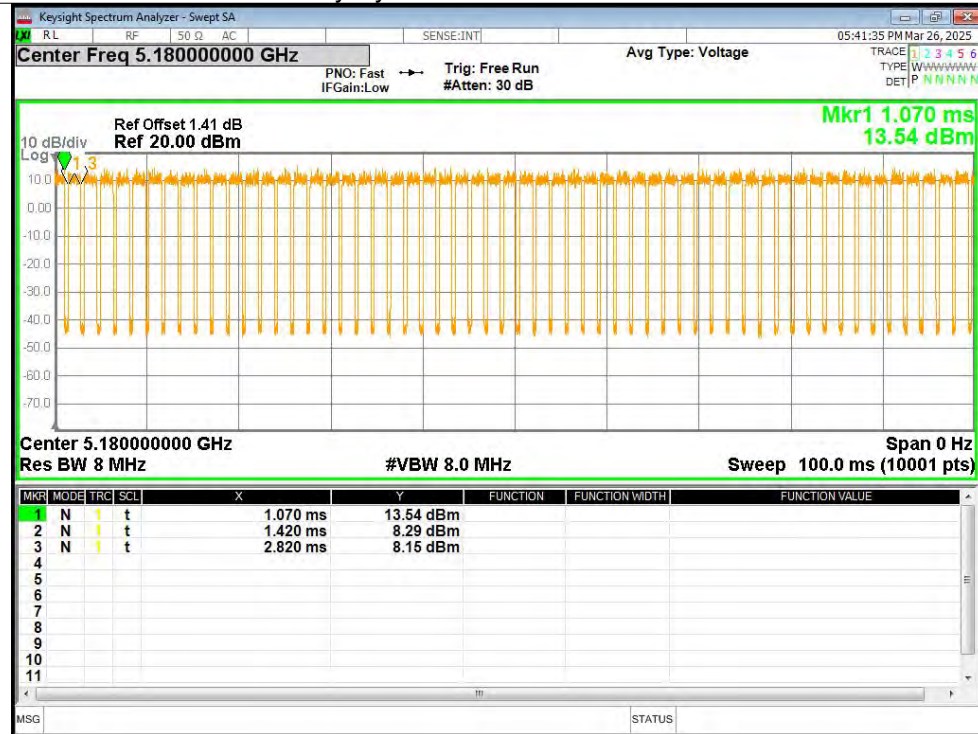
4.8 Duty Cycle

Mode	Frequency (MHz)	T _{on} ms	T _{total} ms	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
a	5180	1.40	1.75	80.00	0.97	0.71
a	5200	1.40	1.43	97.90	0.09	0.71
a	5240	1.40	1.50	93.33	0.30	0.71
n20	5180	0.16	0.38	42.11	3.76	6.25
n20	5200	0.16	0.38	42.11	3.76	6.25
n20	5240	0.16	0.38	42.11	3.76	6.25
n40	5190	0.52	0.88	59.09	2.28	1.92
n40	5230	0.53	0.63	84.13	0.75	1.89
ac20	5180	0.18	0.40	45.00	3.47	5.56
ac20	5200	0.17	0.53	32.08	4.94	5.88
ac20	5240	0.18	0.53	33.96	4.69	5.56
ac40	5190	0.53	0.89	59.55	2.25	1.89
ac40	5230	0.53	0.89	59.55	2.25	1.89
ax20	5180	0.16	0.38	42.11	3.76	6.25
ax20	5200	0.16	0.38	42.11	3.76	6.25
ax20	5240	0.17	0.39	43.59	3.61	5.88
ax40	5190	0.29	0.39	74.36	1.29	3.45
ax40	5230	0.29	0.39	74.36	1.29	3.45
a	5745	1.40	1.43	97.90	0.09	0.71
a	5785	1.39	1.43	97.20	0.12	0.72
a	5825	1.39	1.50	92.67	0.33	0.72
n20	5745	0.16	0.47	34.04	4.68	6.25
n20	5785	0.17	0.38	44.74	3.49	5.88
n20	5825	0.17	0.38	44.74	3.49	5.88
n40	5755	0.52	0.55	94.55	0.24	1.92
n40	5795	0.53	0.56	94.64	0.24	1.89
ac20	5745	0.18	0.21	85.71	0.67	5.56
ac20	5785	0.18	0.21	85.71	0.67	5.56
ac20	5825	0.18	0.40	45.00	3.47	5.56
ac40	5755	0.53	0.57	92.98	0.32	1.89
ac40	5795	0.52	0.56	92.86	0.32	1.92
ax20	5745	0.16	0.38	42.11	3.76	6.25
ax20	5785	0.17	0.38	44.74	3.49	5.88
ax20	5825	0.17	0.39	43.59	3.61	5.88
ax40	5755	0.29	0.32	90.63	0.43	3.45
ax40	5795	0.01	0.08	12.50	9.03	100.00

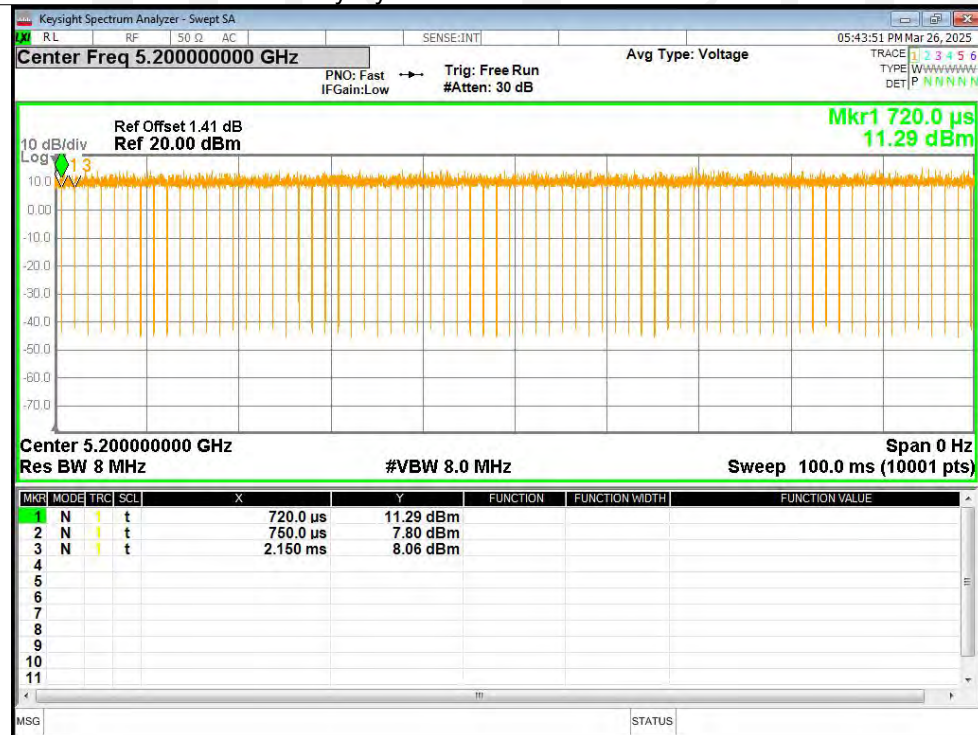
Note: 1. Duty Cycle = T_{on} / T_{total} , 2. Correction Factor = $10 \log (1 / \text{Duty Cycle})$, 3. $1/T = 1/T_{on}$

Test Graphs

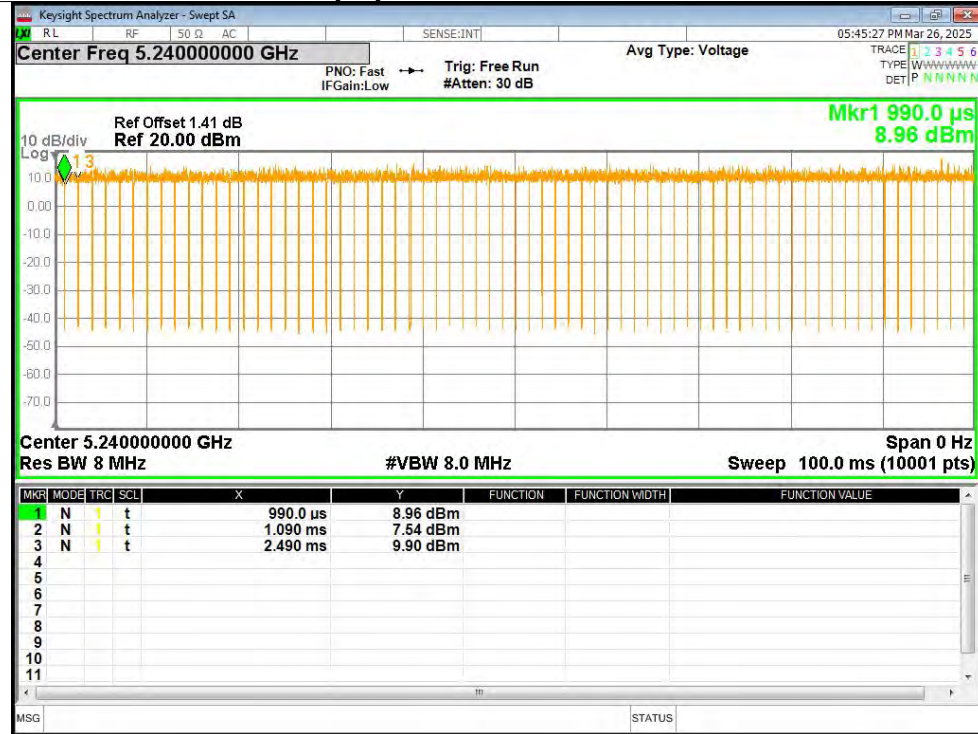
Duty Cycle NVNT a 5180MHz Ant1



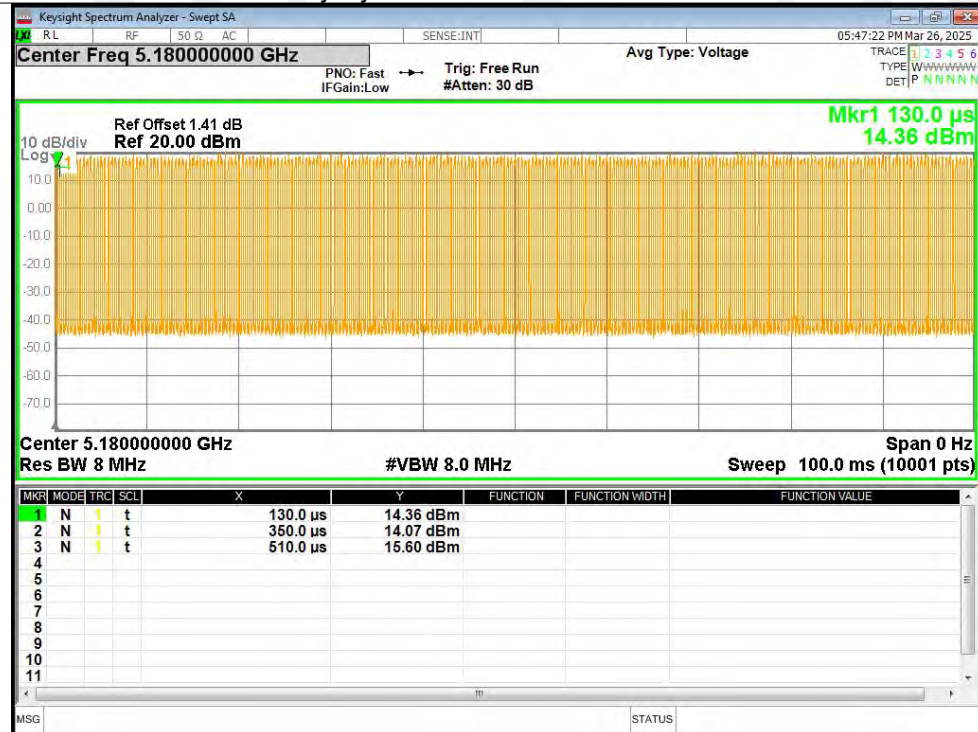
Duty Cycle NVNT a 5200MHz Ant1



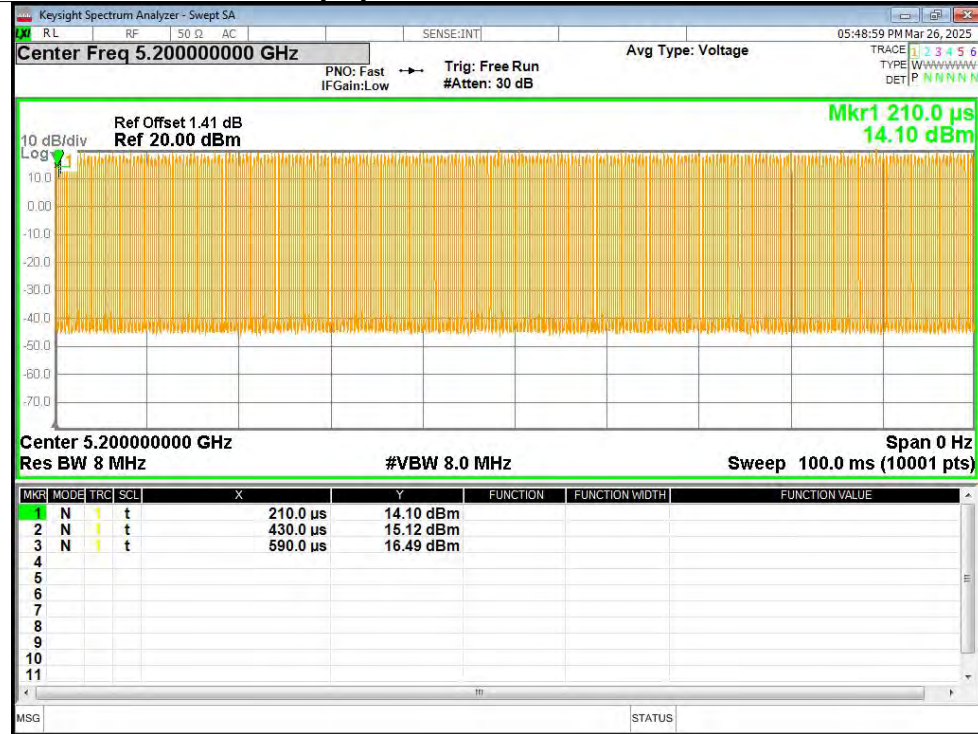
Duty Cycle NVNT a 5240MHz Ant1



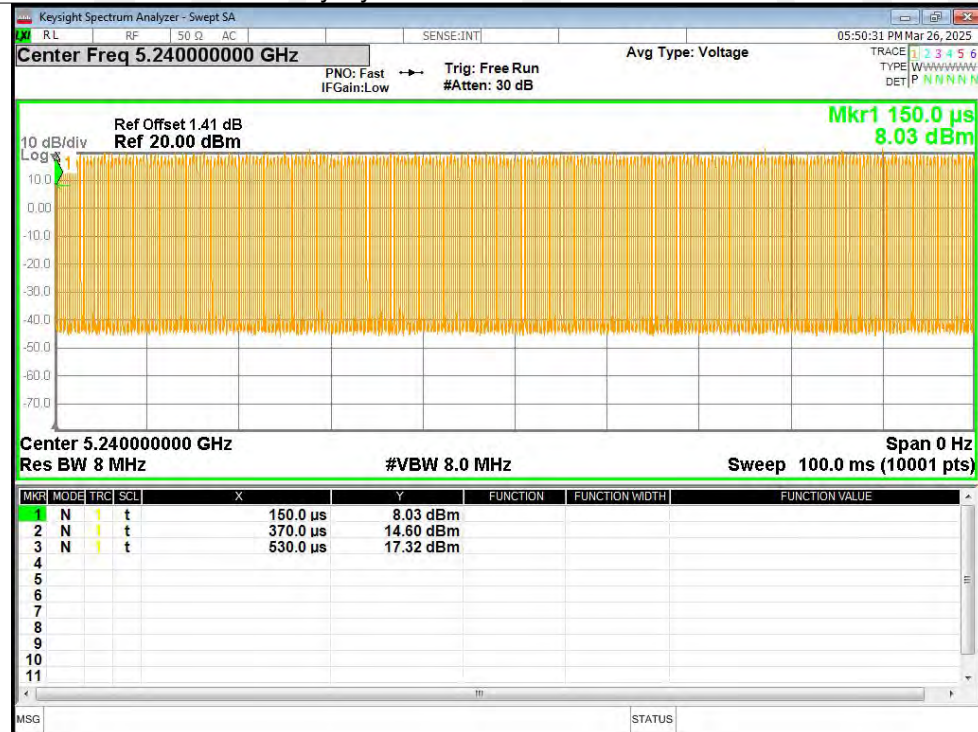
Duty Cycle NVNT n20 5180MHz Ant1



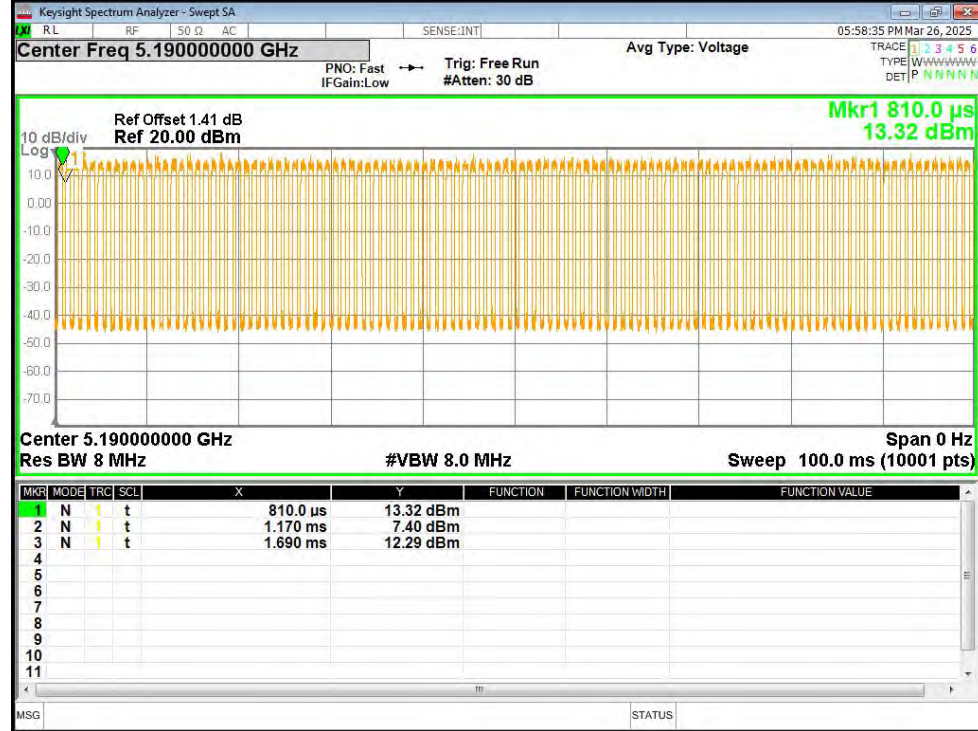
Duty Cycle NVNT n20 5200MHz Ant1



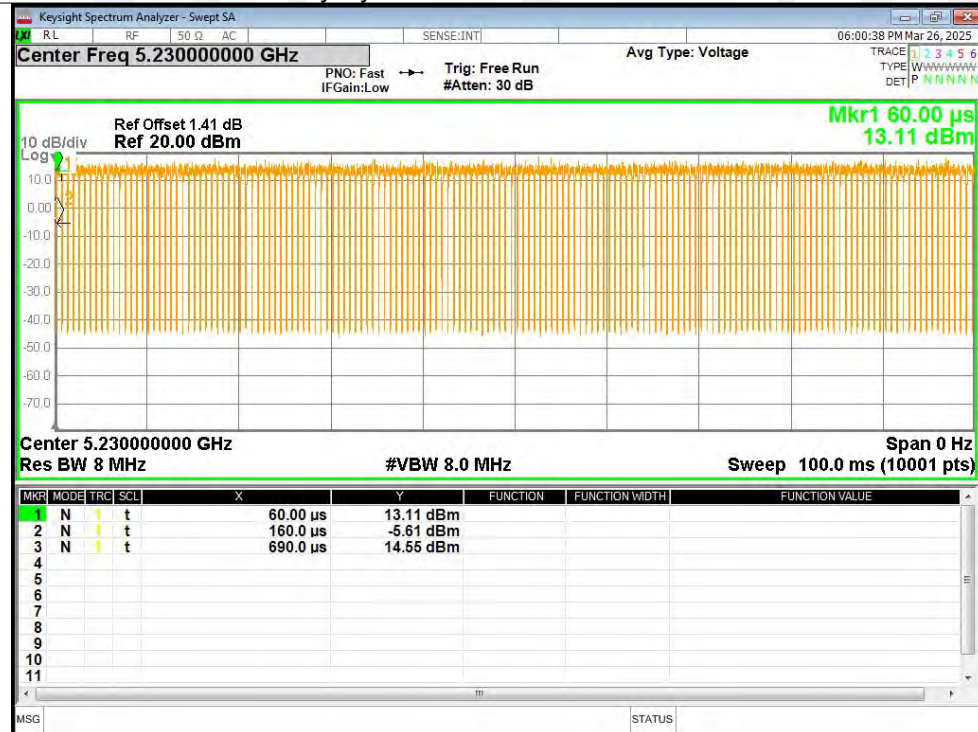
Duty Cycle NVNT n20 5240MHz Ant1



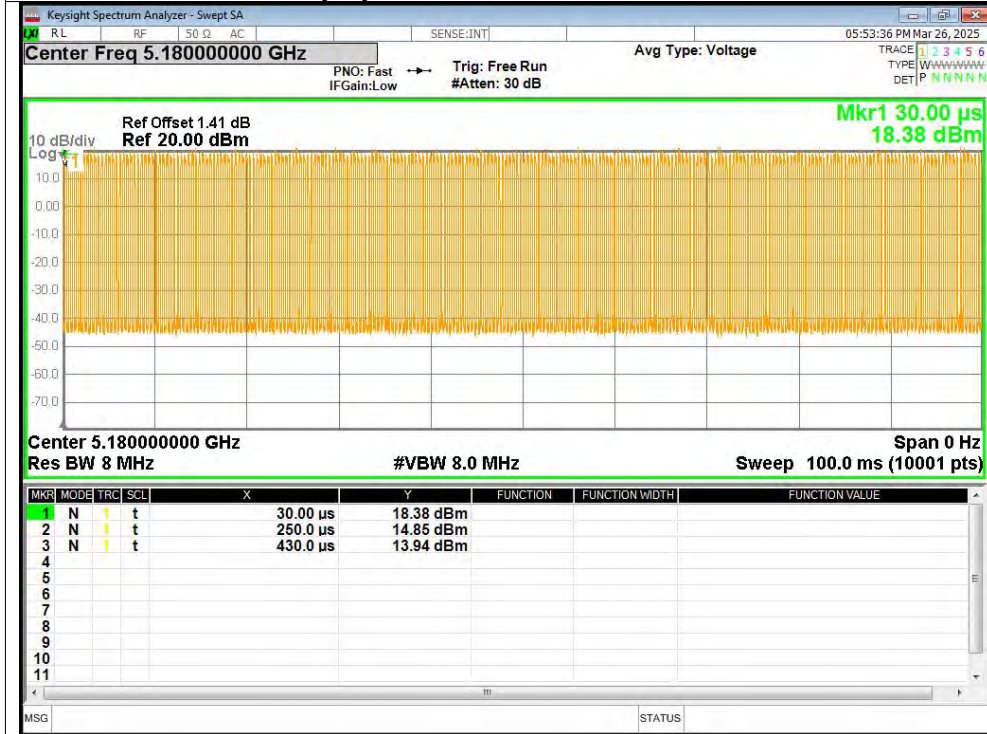
Duty Cycle NVNT n40 5190MHz Ant1



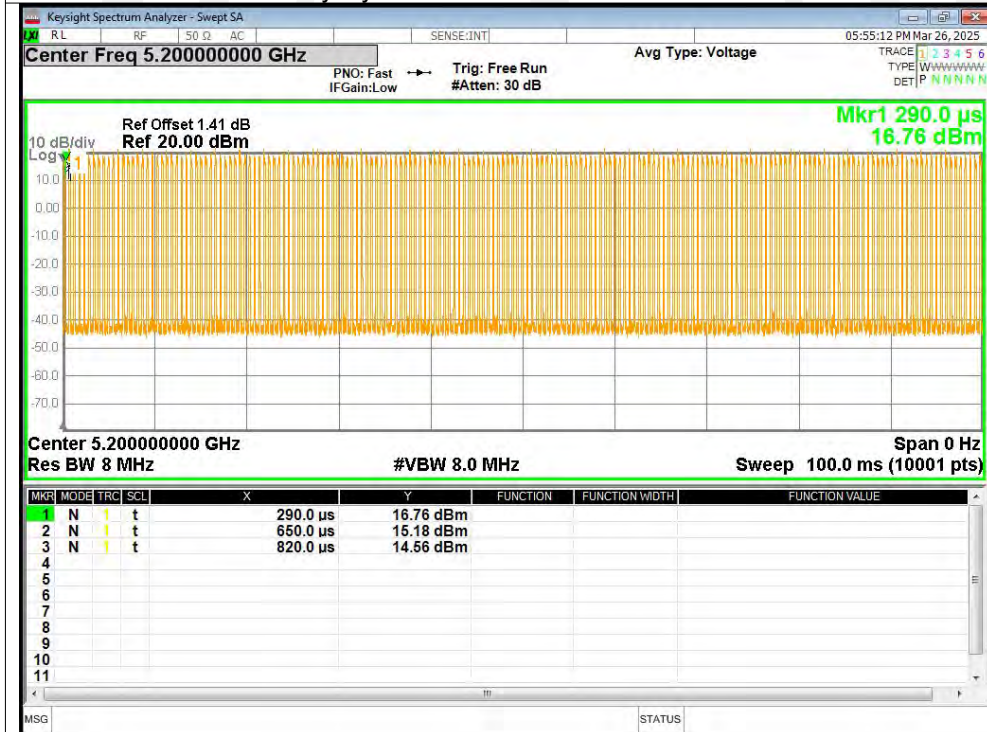
Duty Cycle NVNT n40 5230MHz Ant1



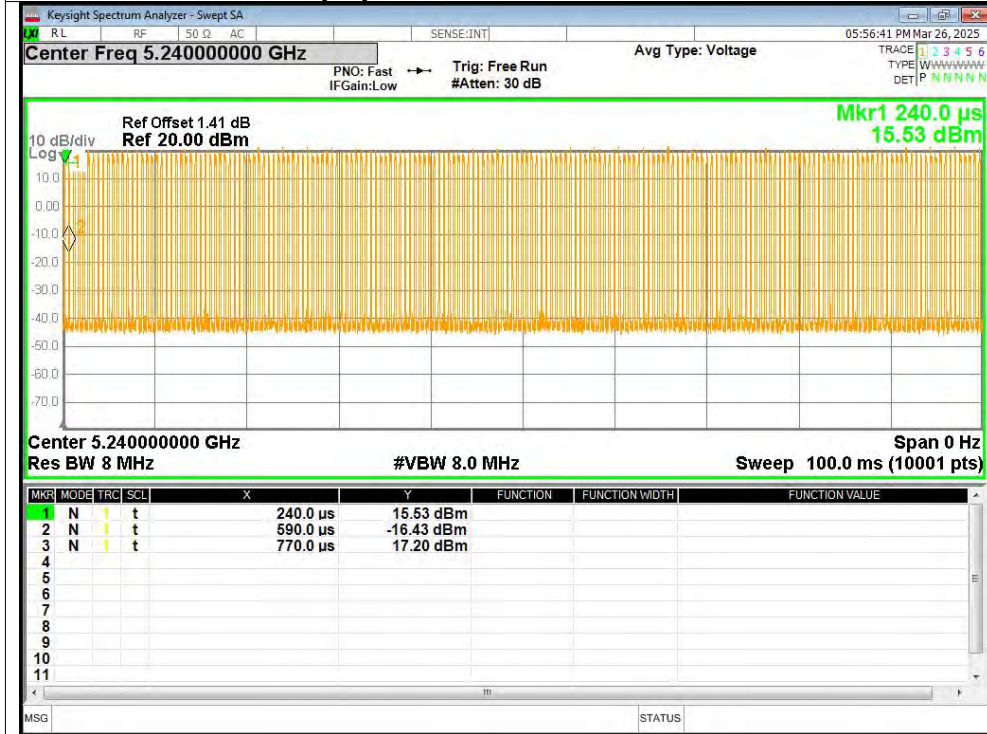
Duty Cycle NVNT ac20 5180MHz Ant1



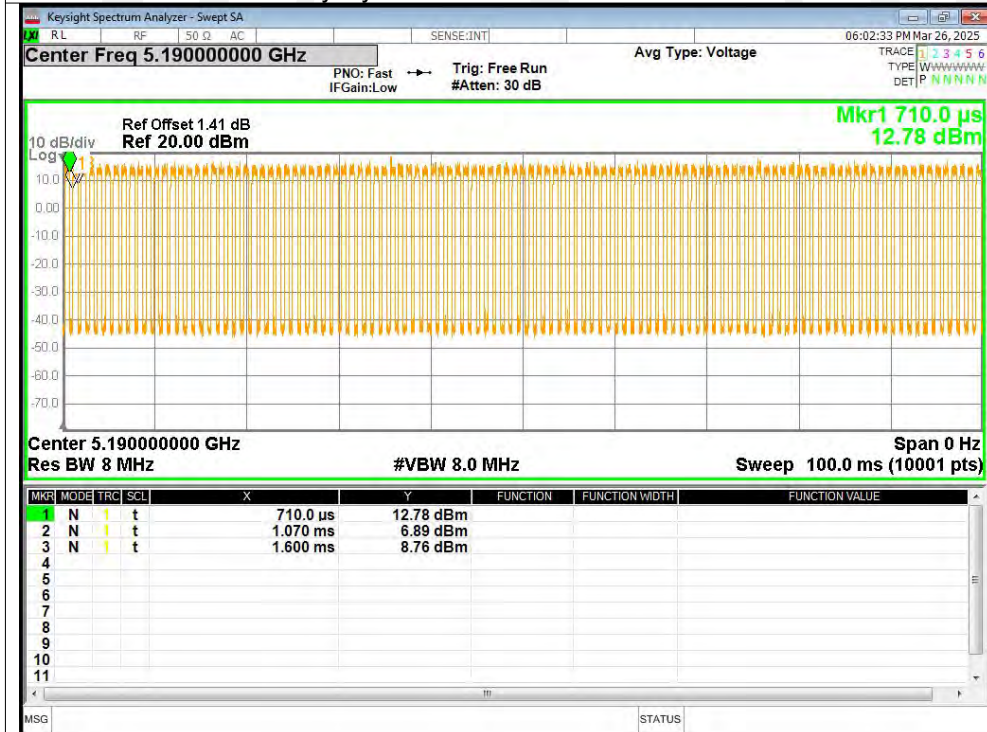
Duty Cycle NVNT ac20 5200MHz Ant1

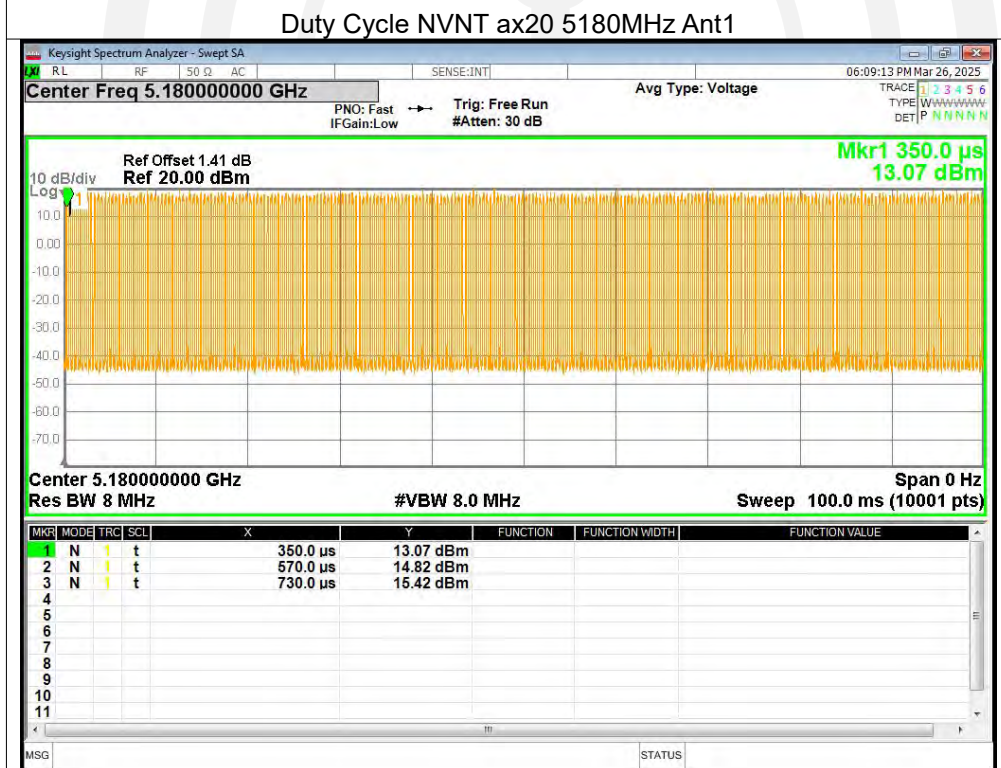
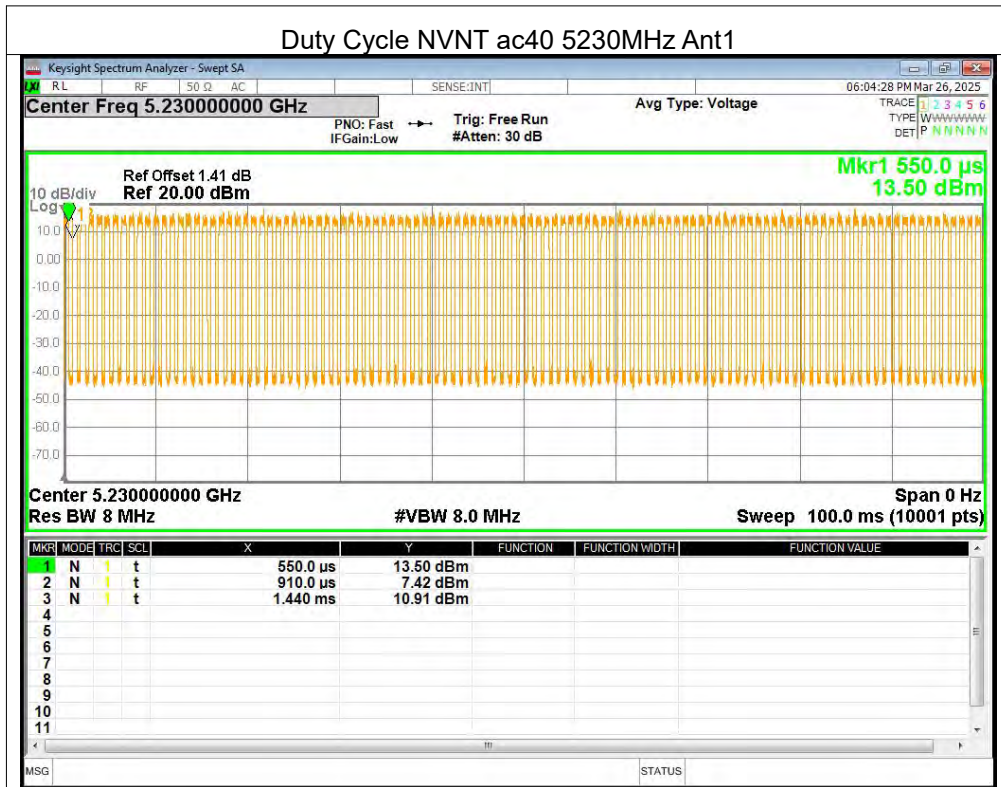


Duty Cycle NVNT ac20 5240MHz Ant1

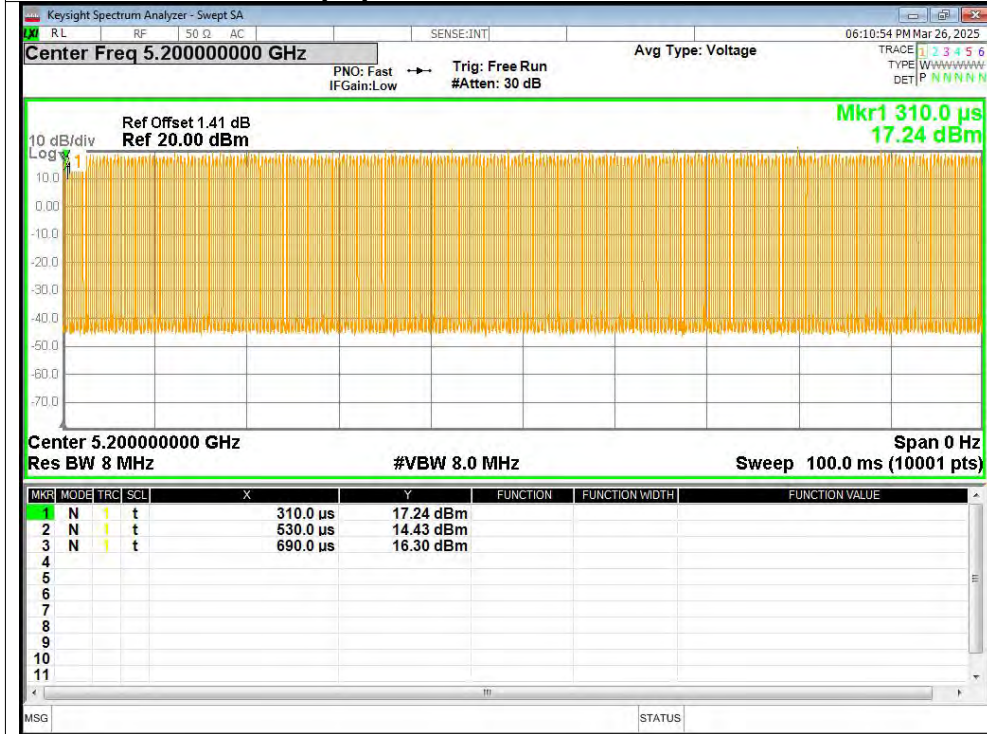


Duty Cycle NVNT ac40 5190MHz Ant1

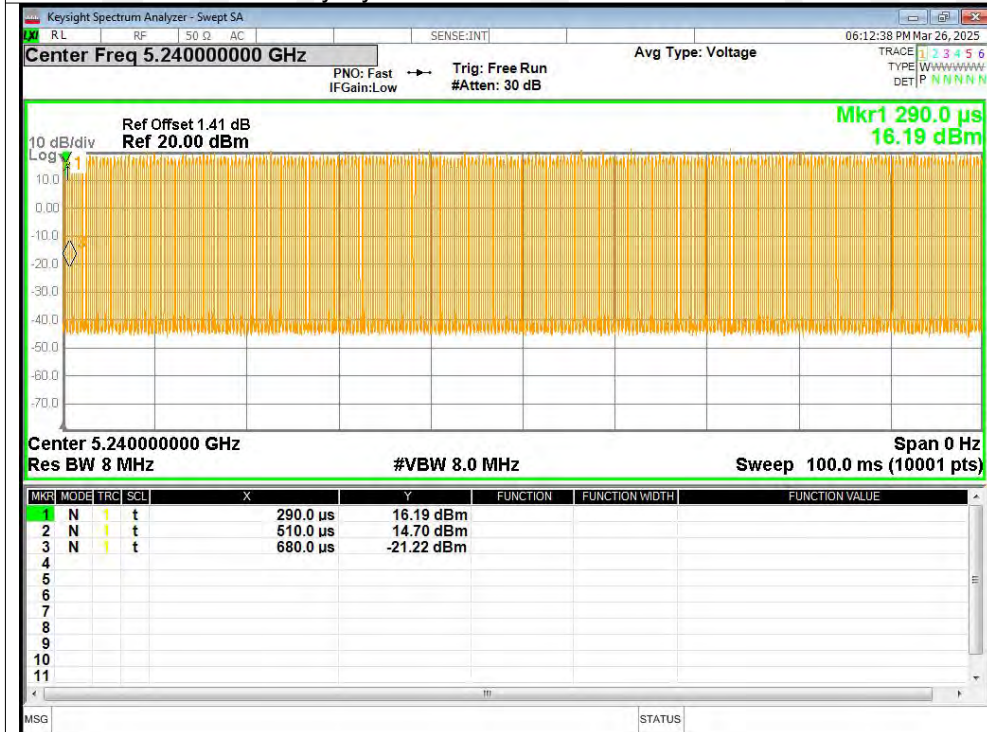




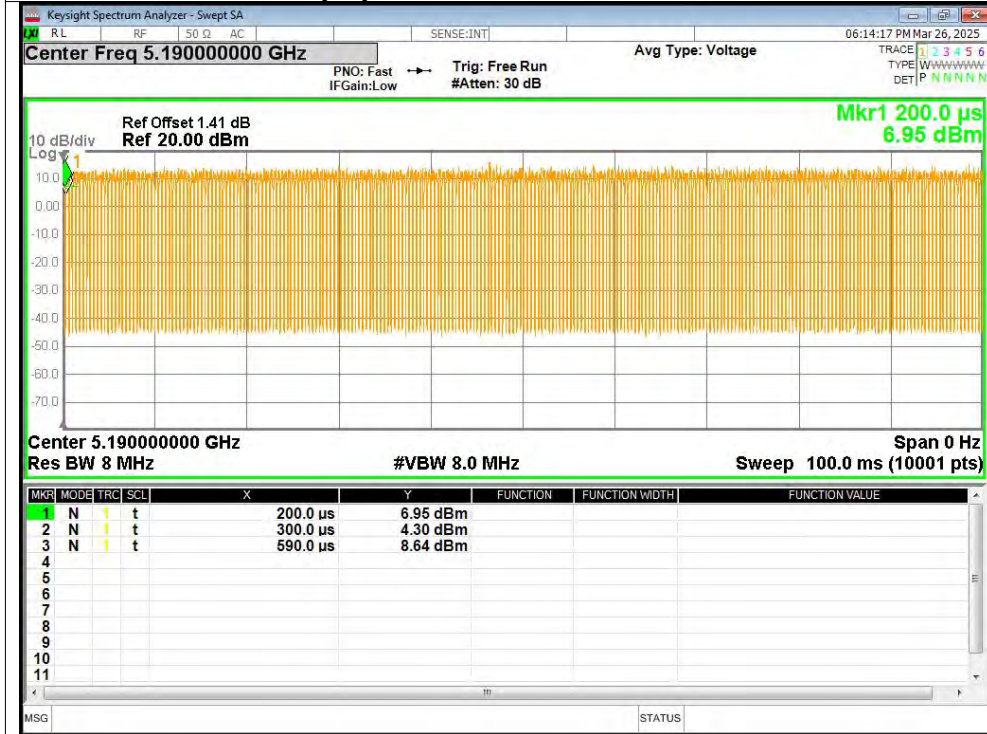
Duty Cycle NVNT ax20 5200MHz Ant1



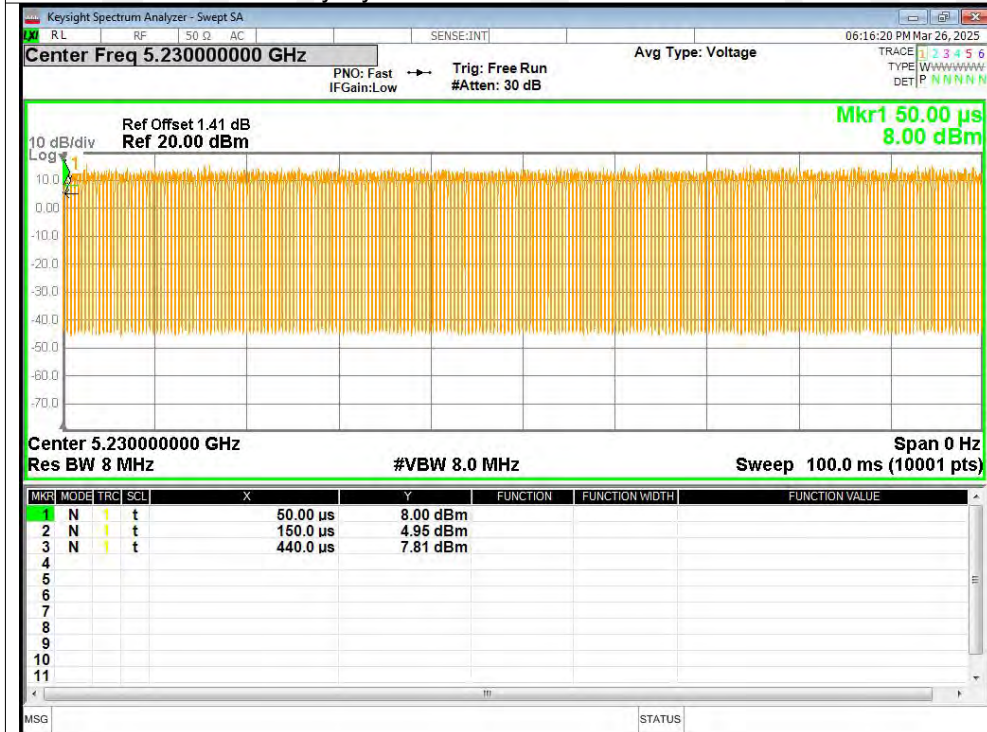
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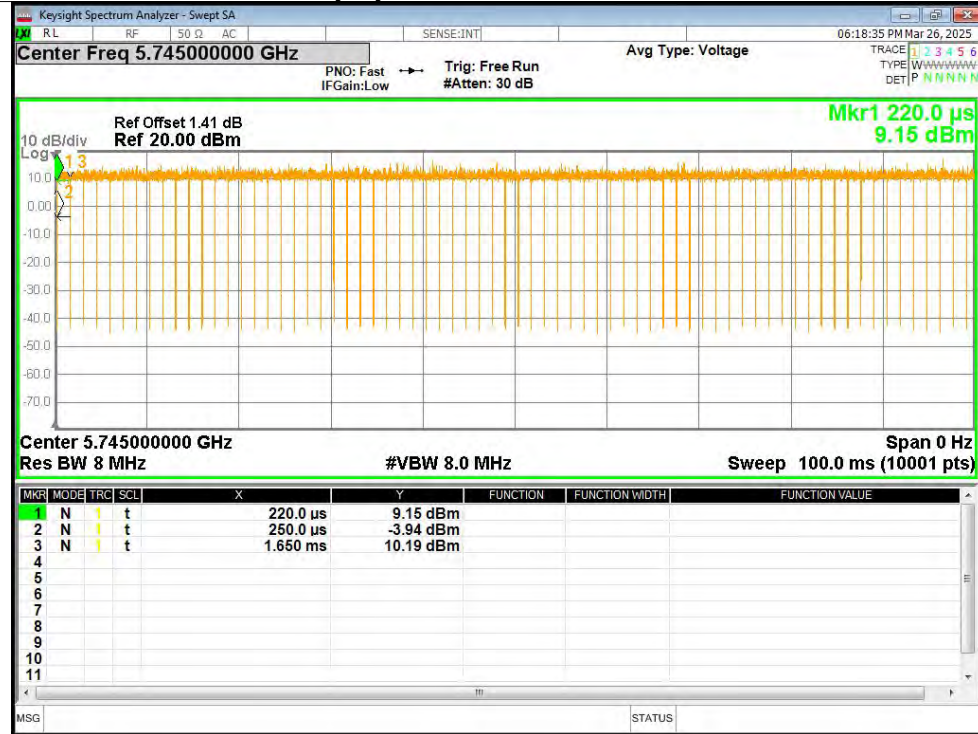
Duty Cycle NVNT ax40 5190MHz Ant1



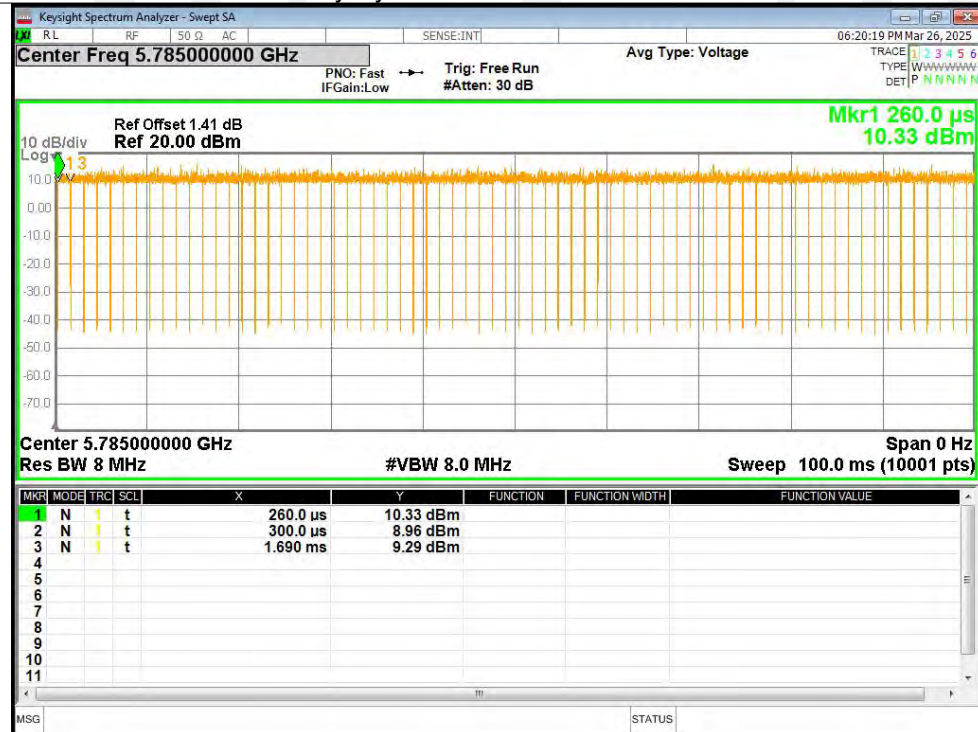
Duty Cycle NVNT ax40 5230MHz Ant1



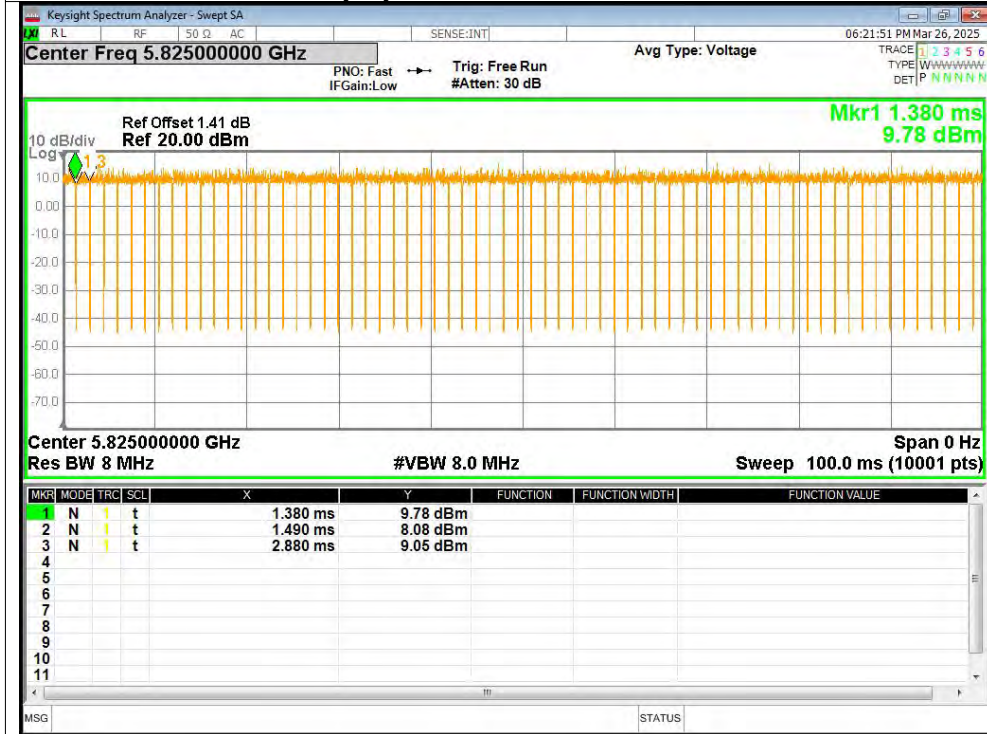
Duty Cycle NVNT a 5745MHz Ant1



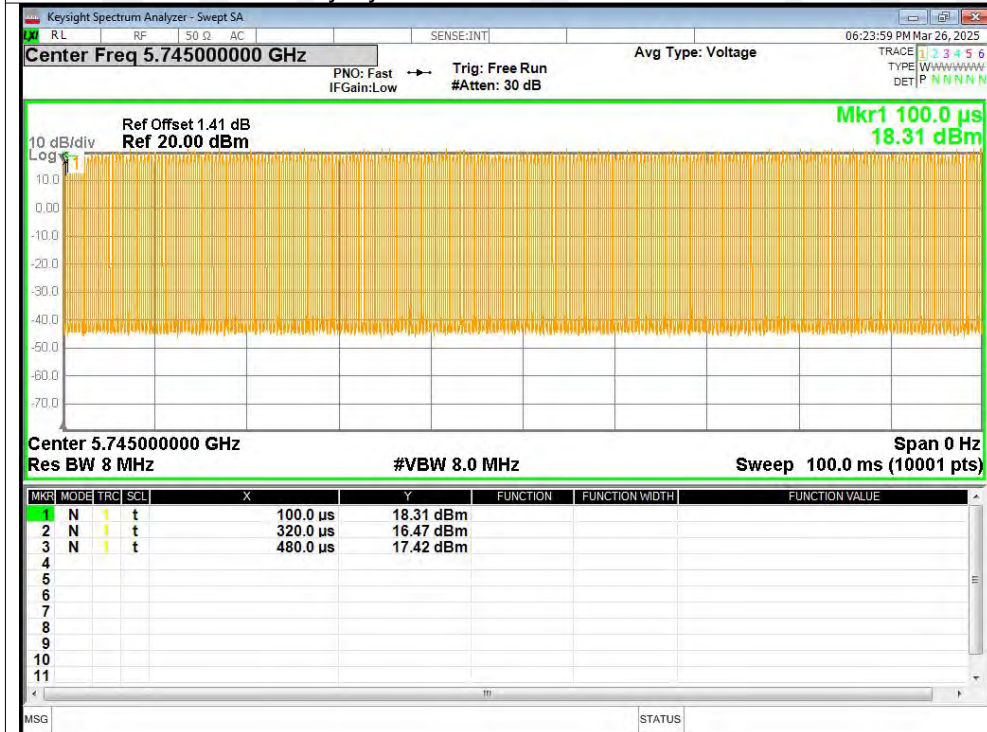
Duty Cycle NVNT a 5785MHz Ant1



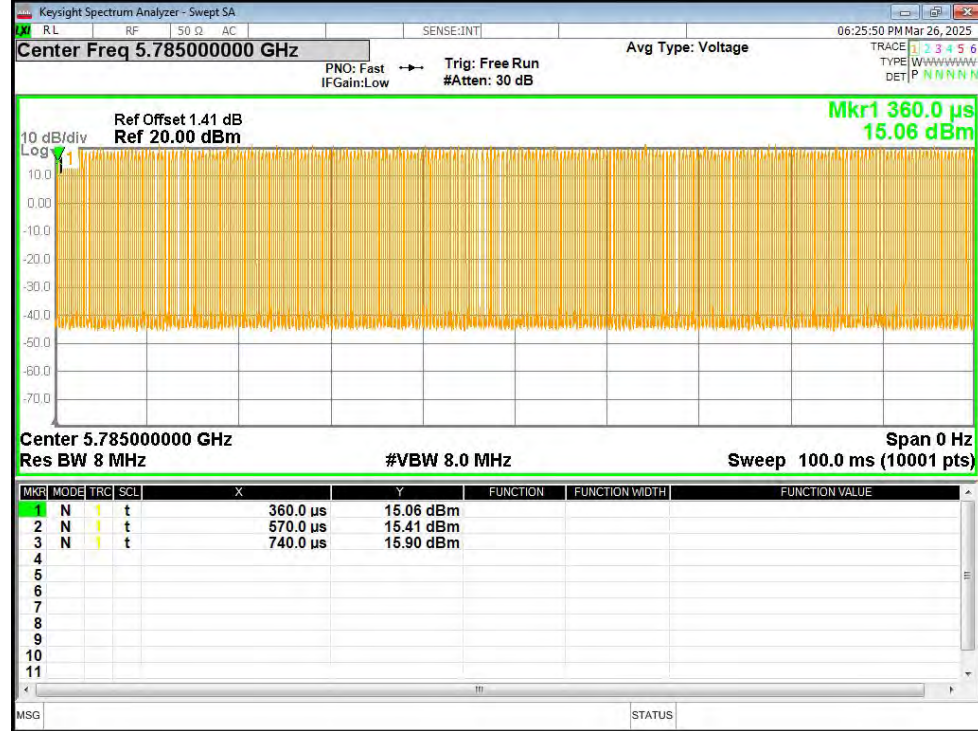
Duty Cycle NVNT a 5825MHz Ant1



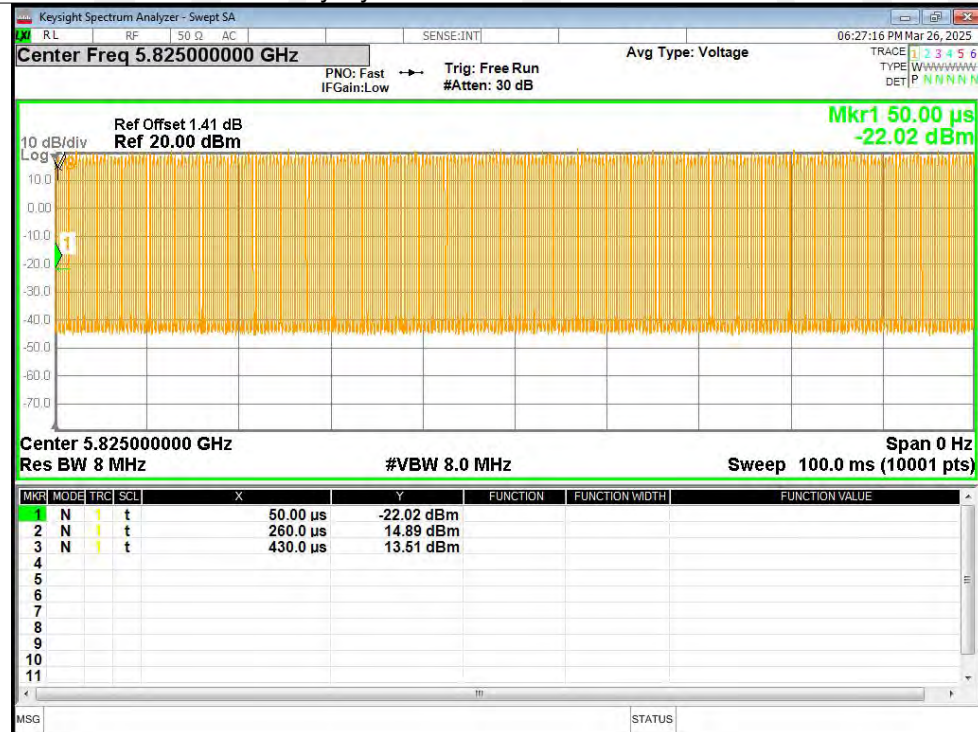
Duty Cycle NVNT n20 5745MHz Ant1



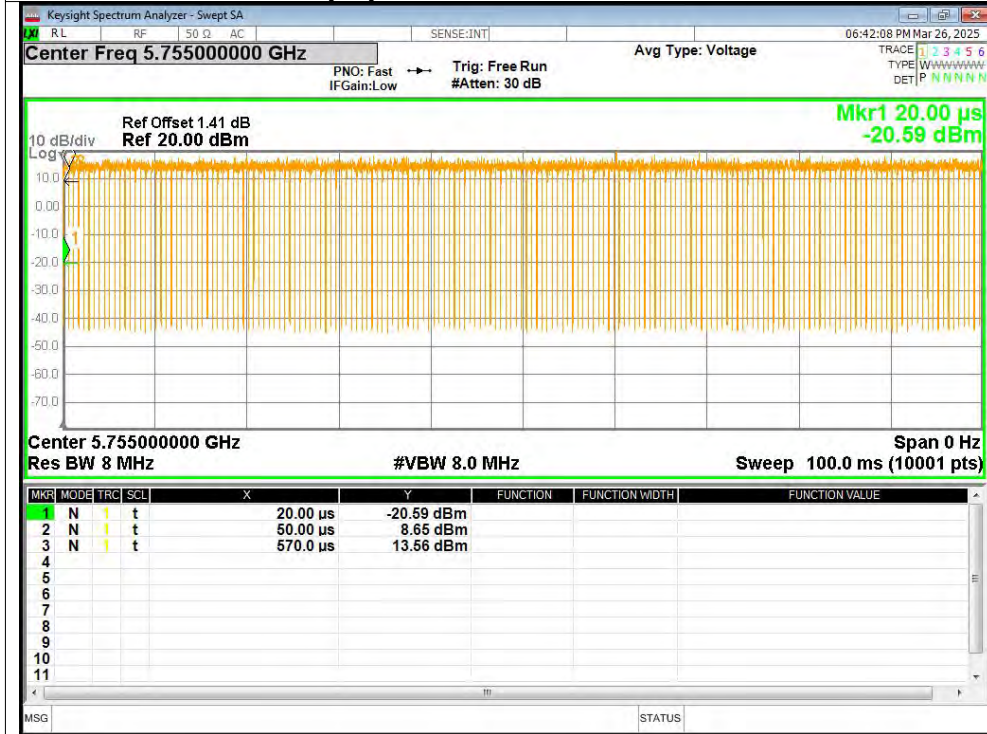
Duty Cycle NVNT n20 5785MHz Ant1



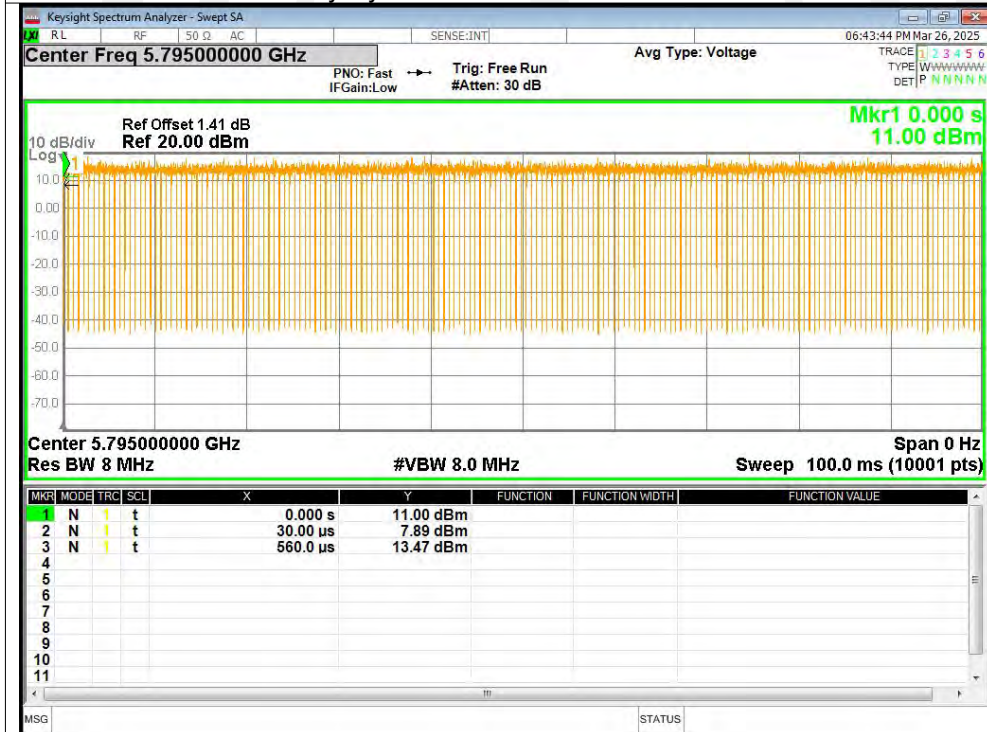
Duty Cycle NVNT n20 5825MHz Ant1

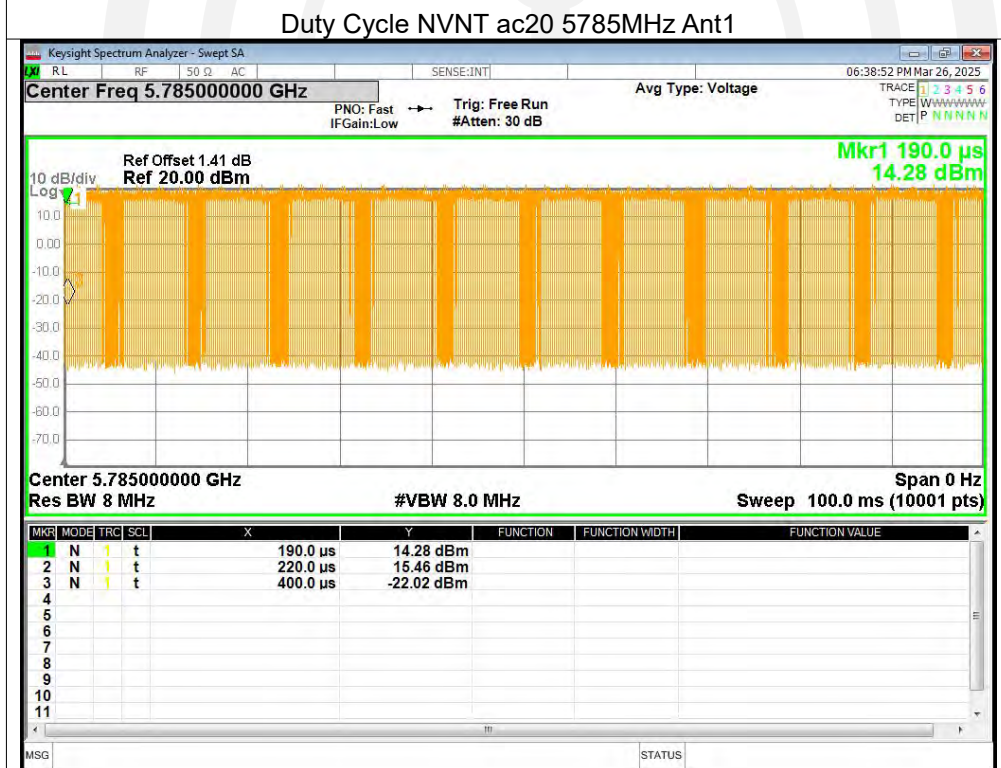
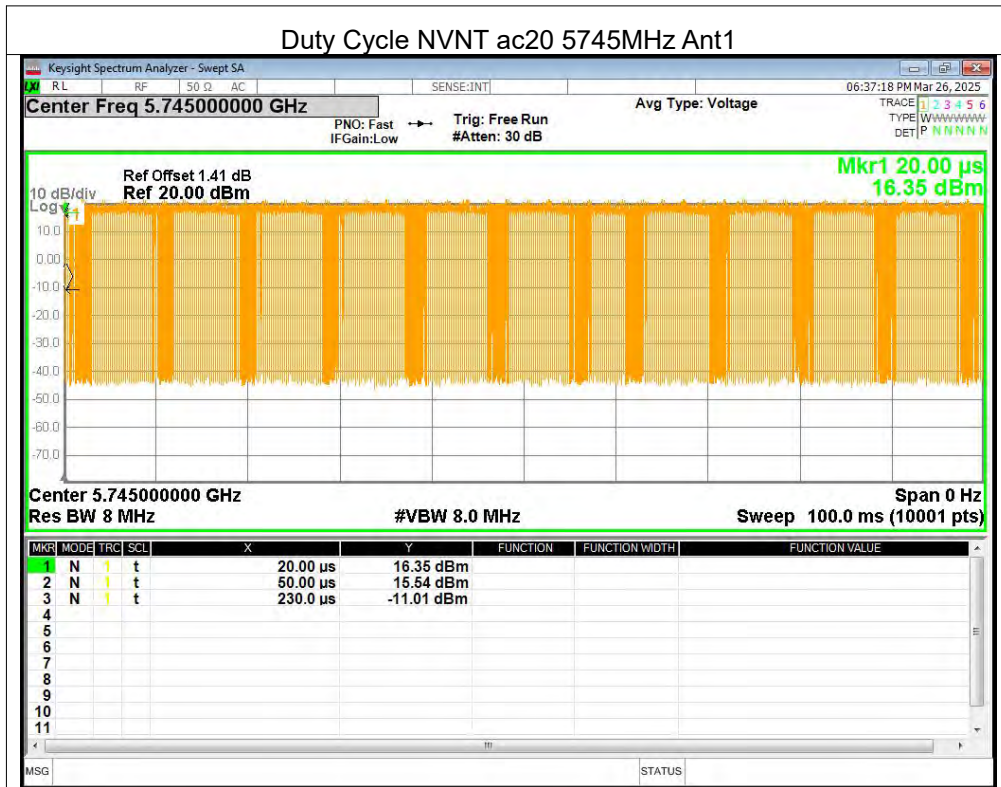


Duty Cycle NVNT n40 5755MHz Ant1

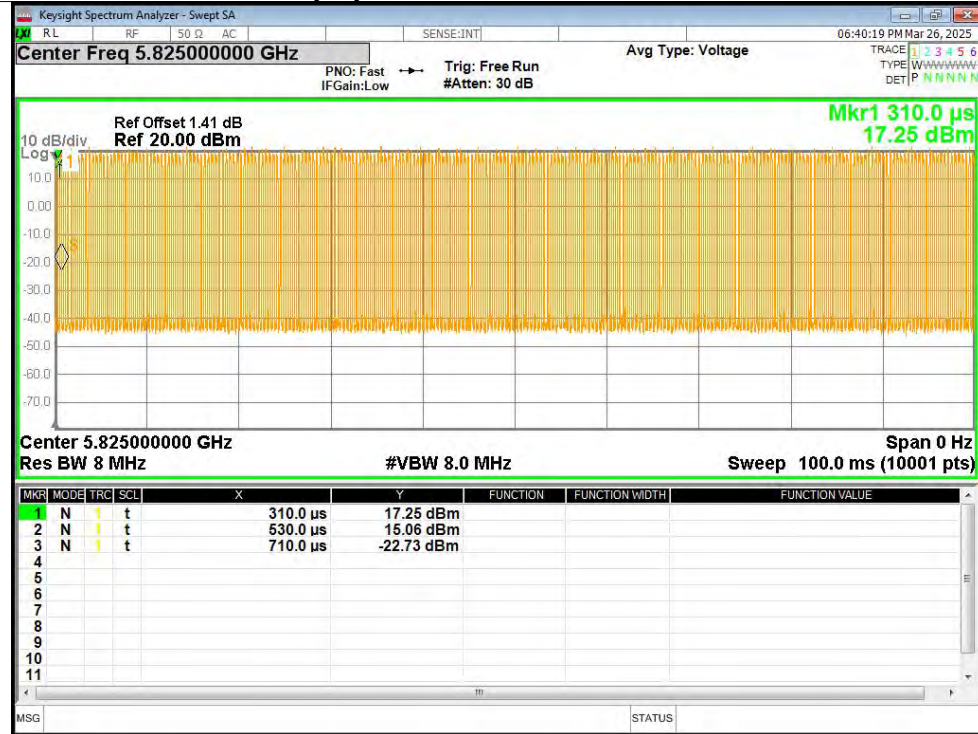


Duty Cycle NVNT n40 5795MHz Ant1

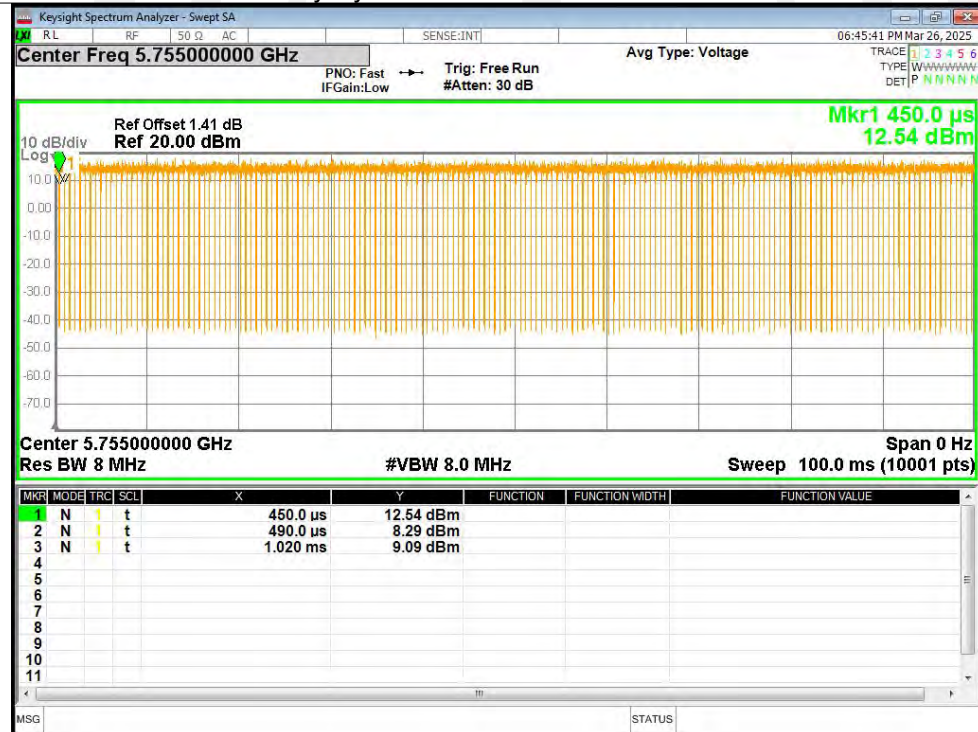




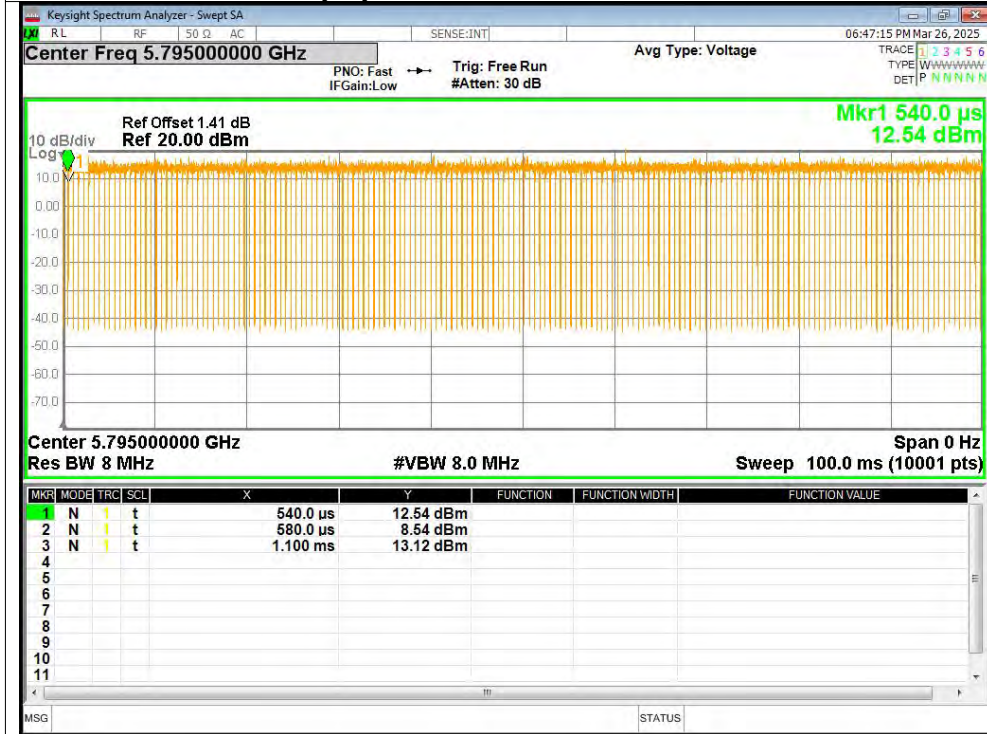
Duty Cycle NVNT ac20 5825MHz Ant1



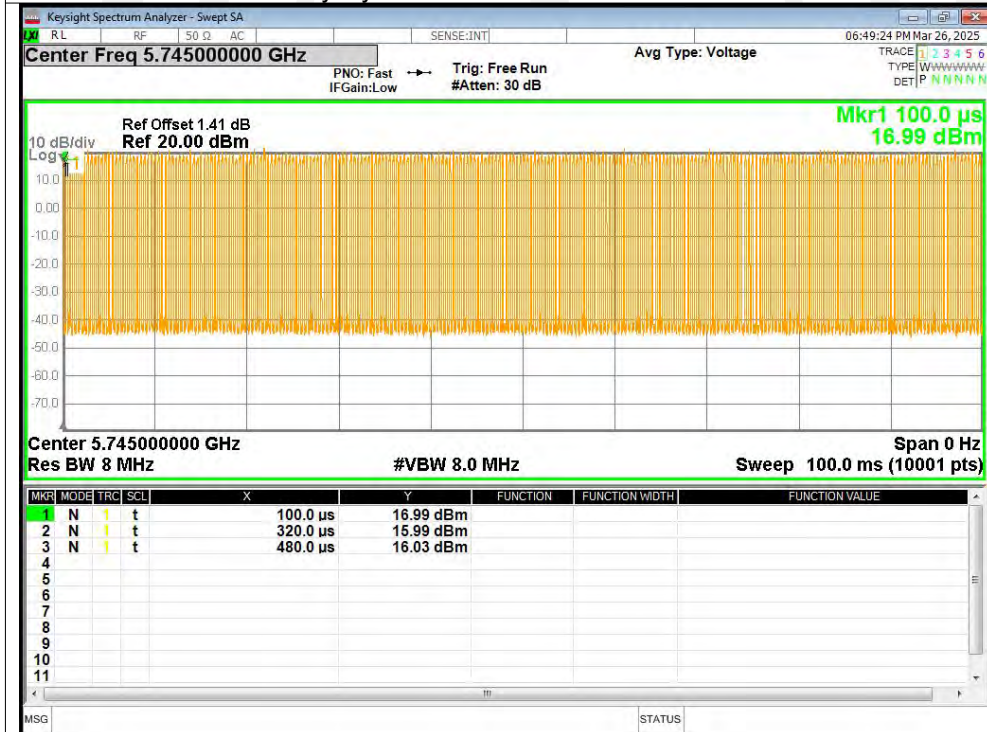
Duty Cycle NVNT ac40 5755MHz Ant1



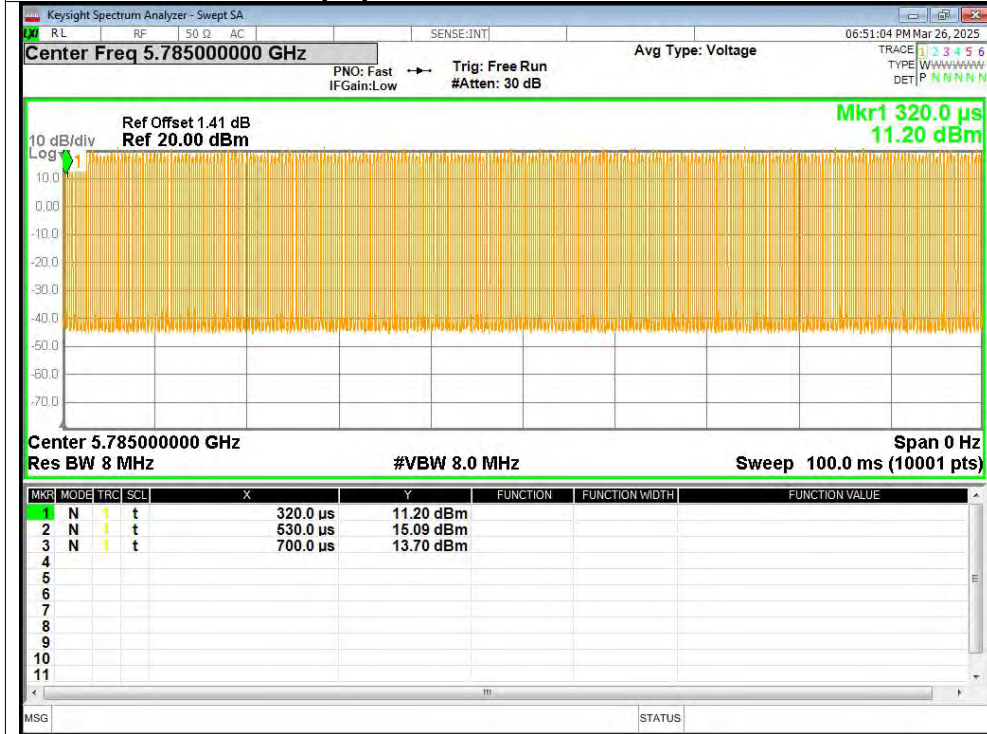
Duty Cycle NVNT ac40 5795MHz Ant1



Duty Cycle NVNT ax20 5745MHz Ant1



Duty Cycle NVNT ax20 5785MHz Ant1



Duty Cycle NVNT ax20 5825MHz Ant1

