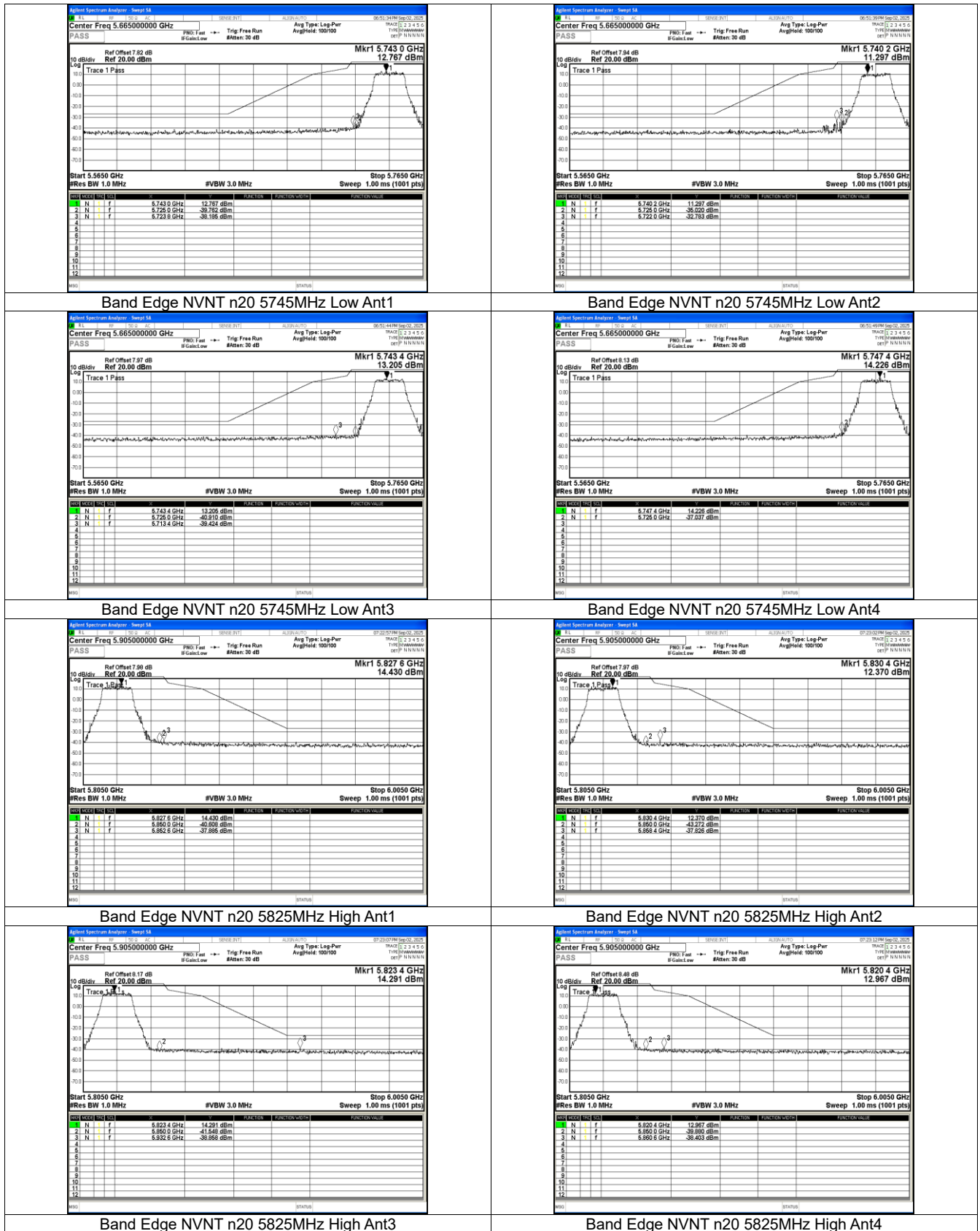
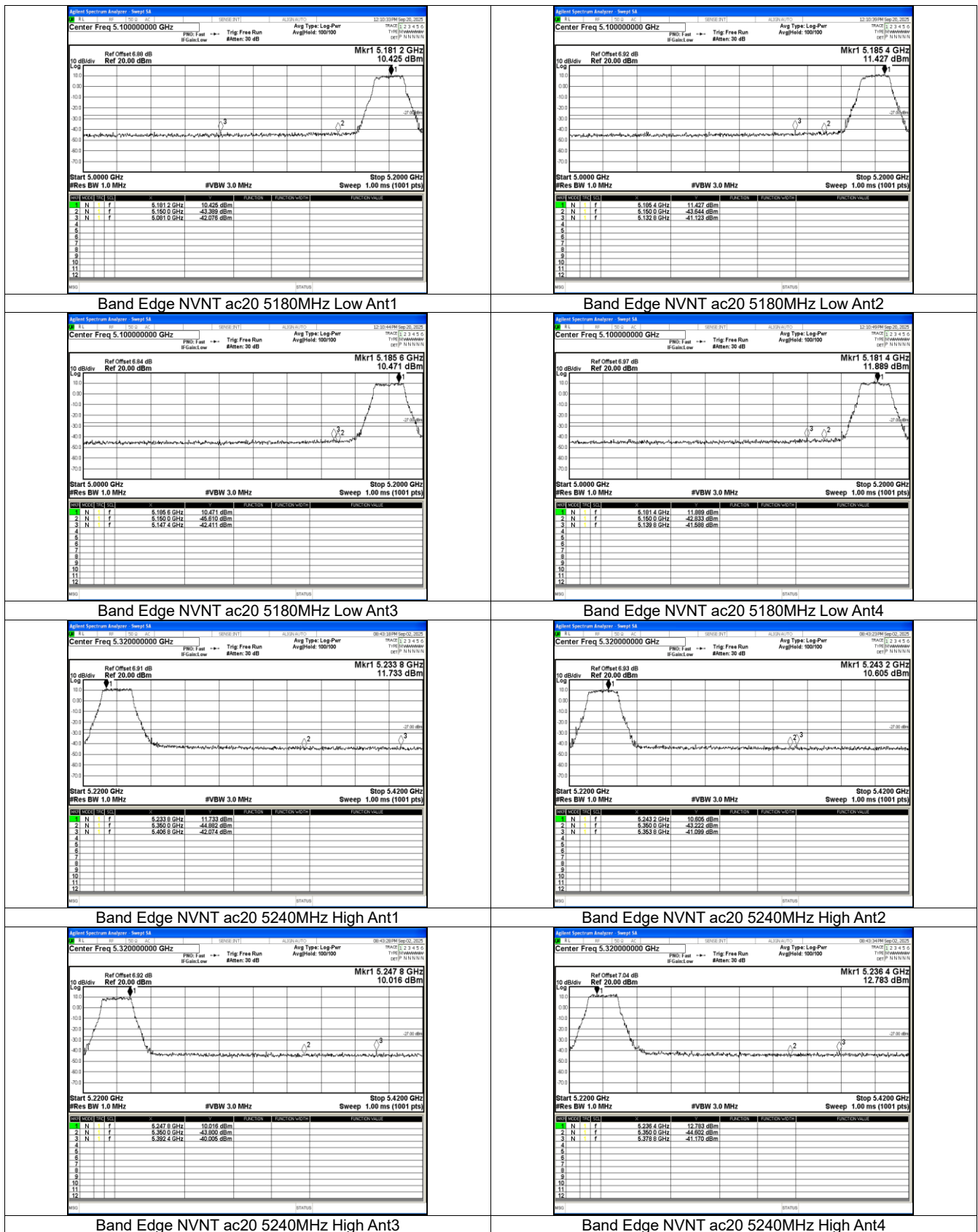
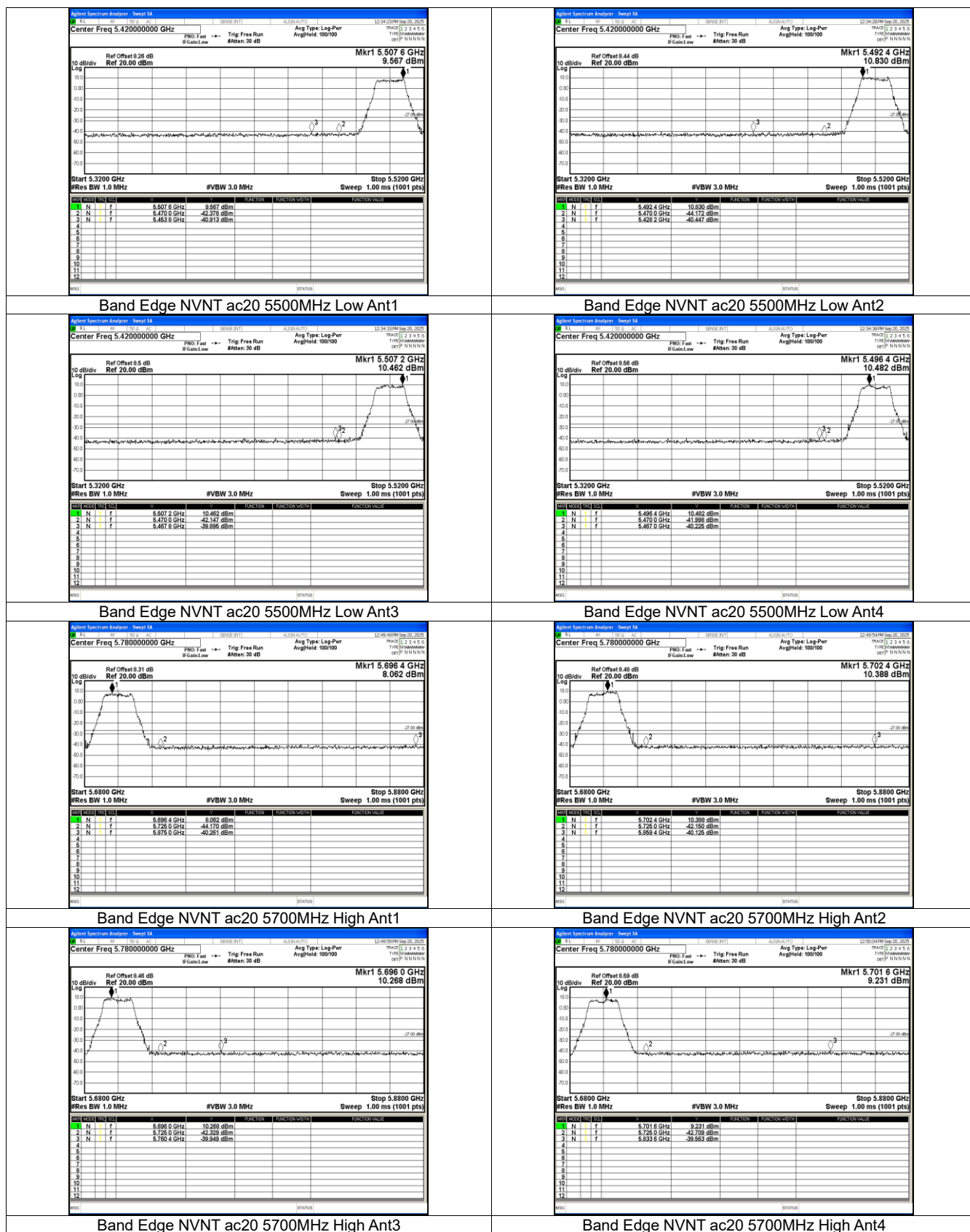
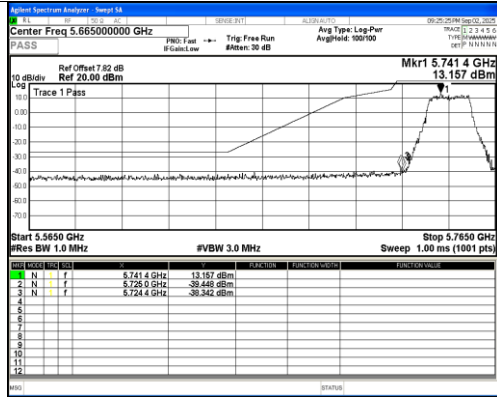


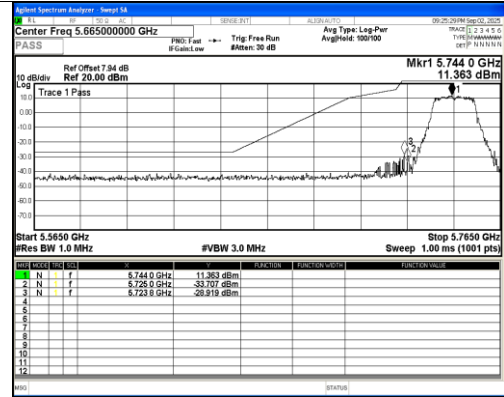




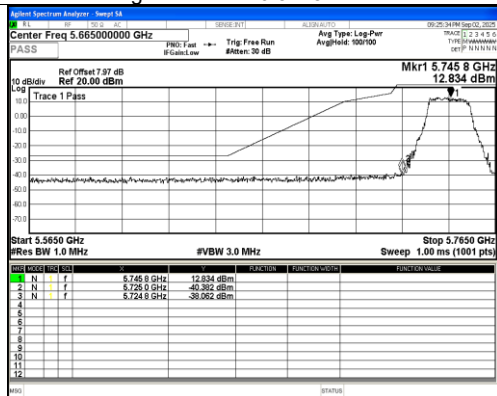




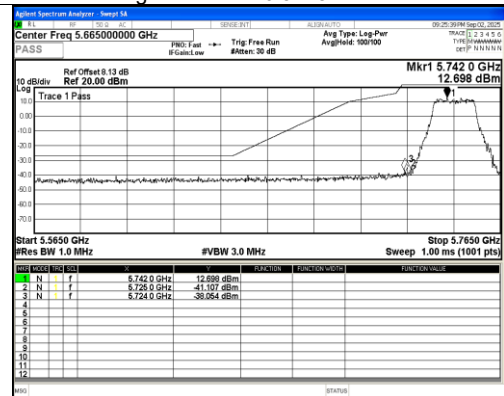
Band Edge NVNT ac20 5745MHz Low Ant1



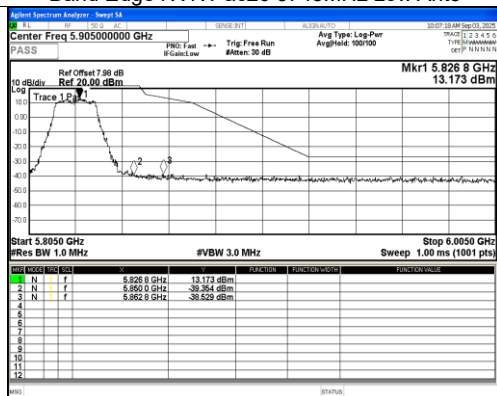
Band Edge NVNT ac20 5745MHz Low Ant2



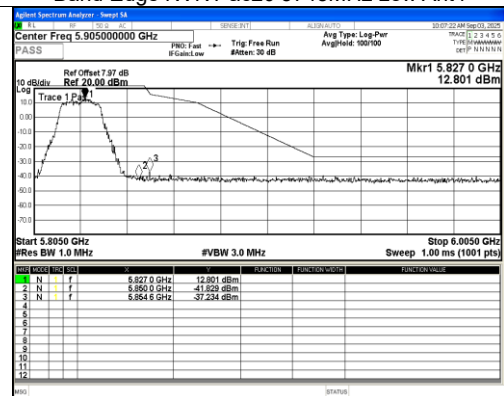
Band Edge NVNT ac20 5745MHz Low Ant3



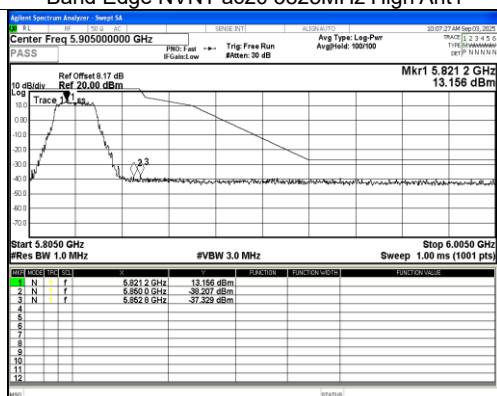
Band Edge NVNT ac20 5745MHz Low Ant4



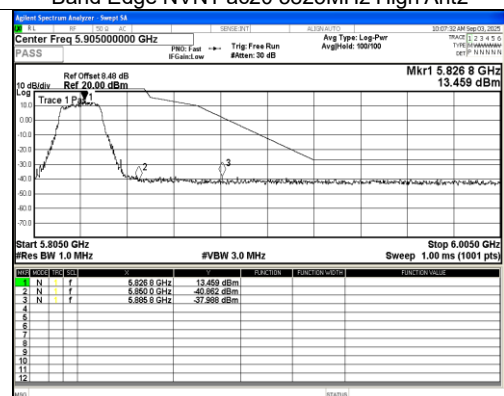
Band Edge NVNT ac20 5825MHz High Ant1



Band Edge NVNT ac20 5825MHz High Ant2



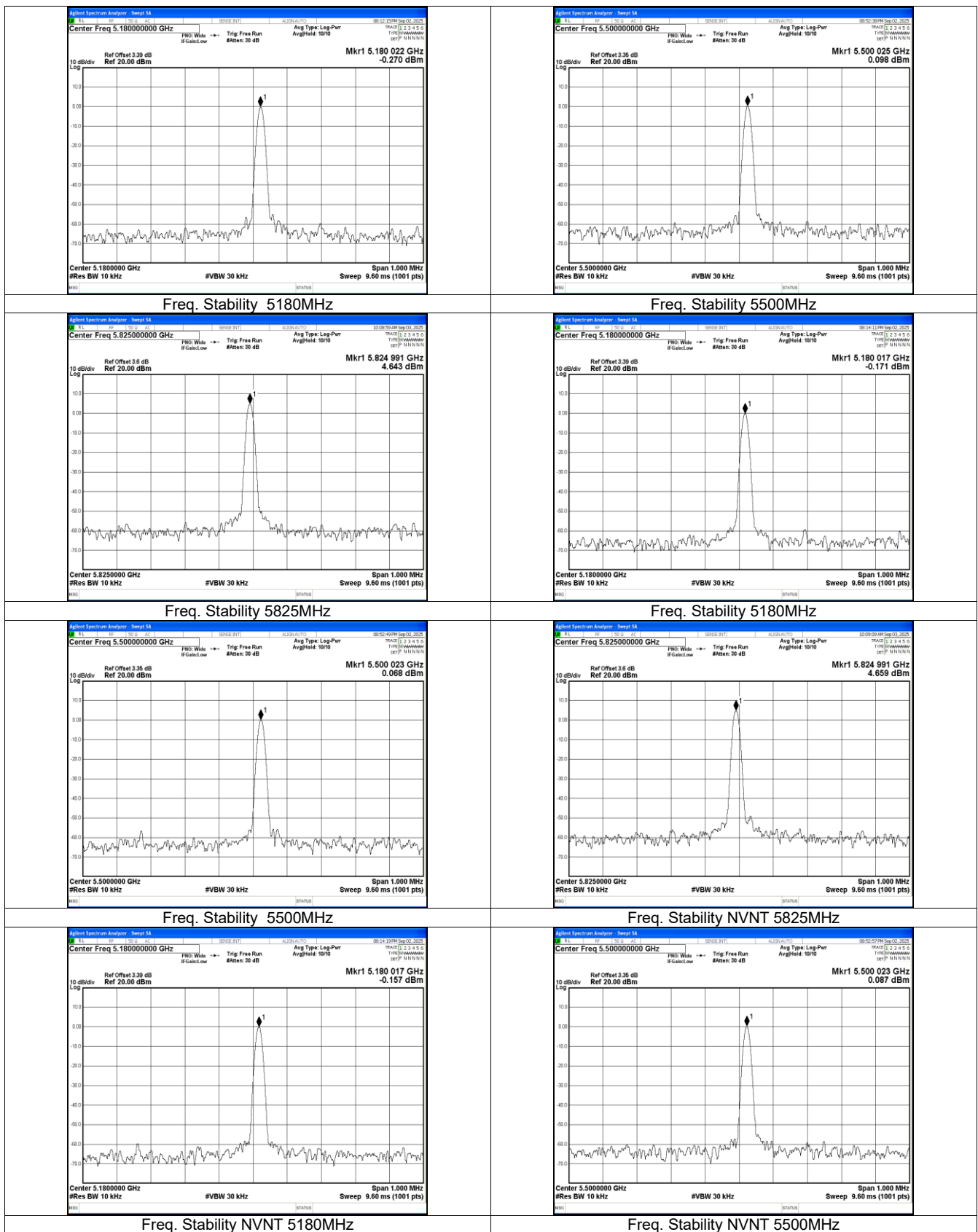
Band Edge NVNT ac20 5825MHz High Ant3

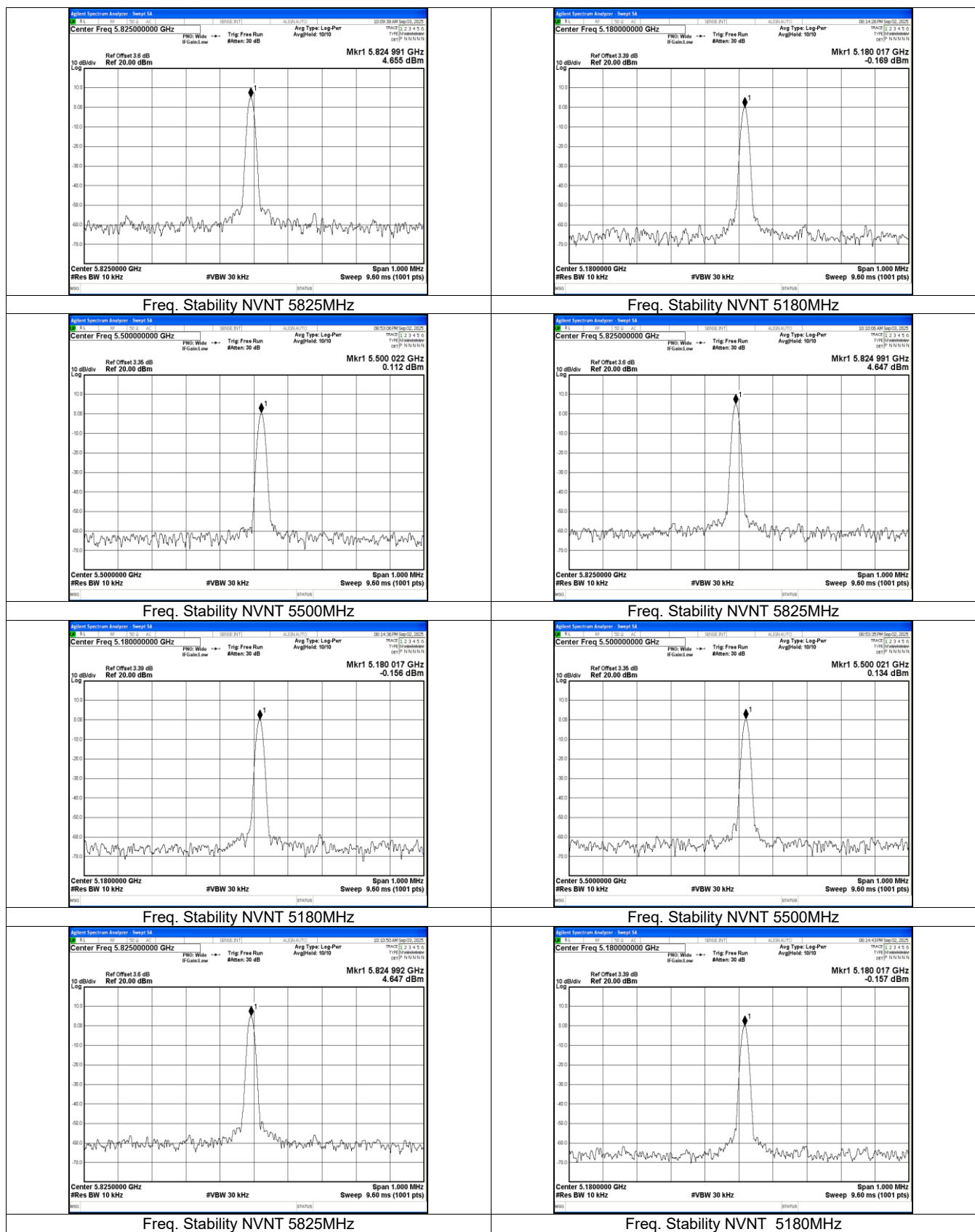


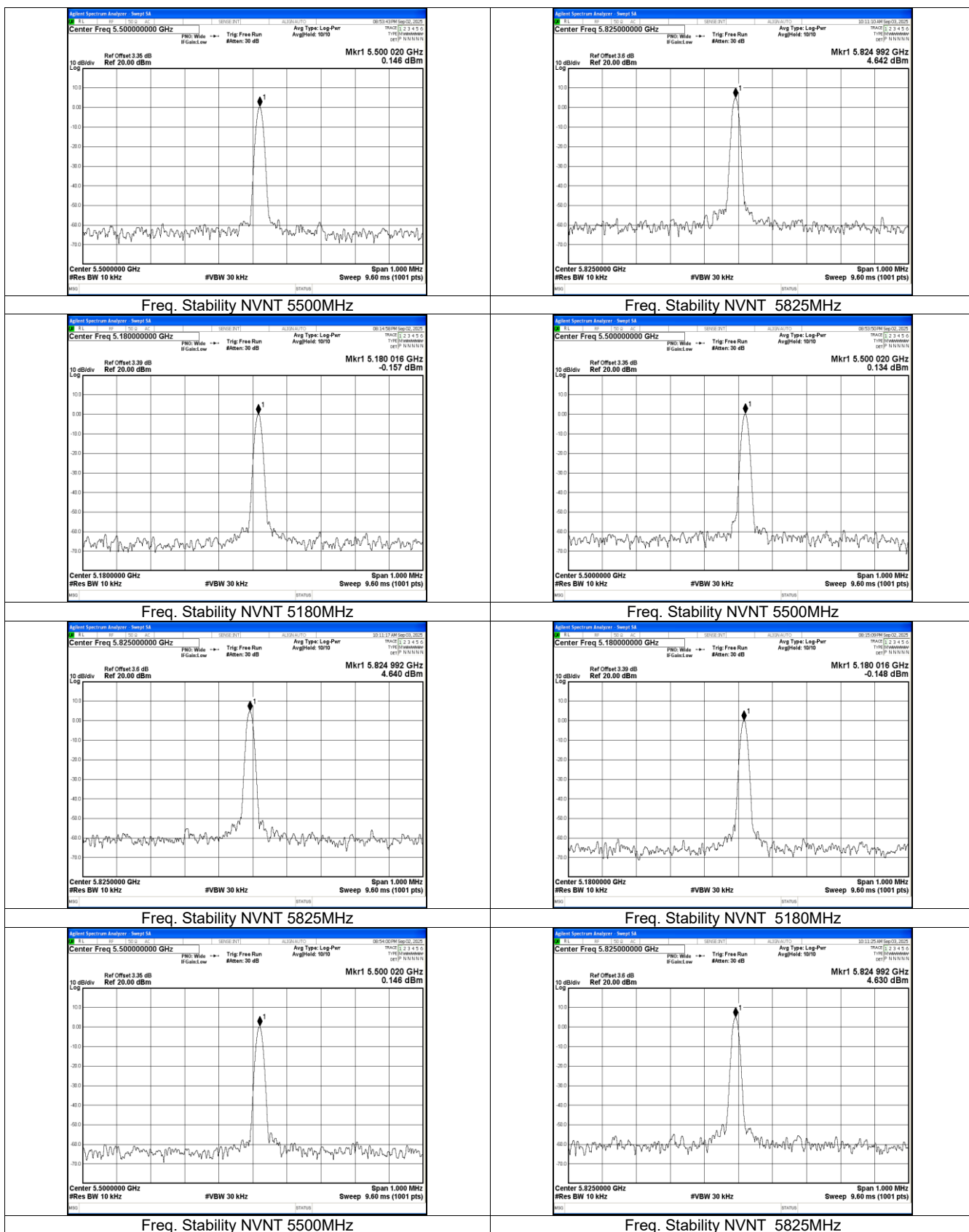
Band Edge NVNT ac20 5825MHz High Ant4

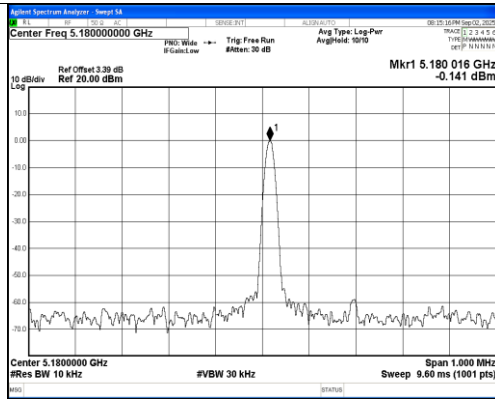
Frequency Stability

Mode	Frequency (MHz)	Voltage (V)	Temperature (°C)	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
CW	5180	110 Vac	0	5180.022	22000	4.25	25	Pass
	5500			5500.025	25000	4.55	25	Pass
	5825			5824.991	-9000	-1.55	25	Pass
	5180		10	5180.017	17000	3.28	25	Pass
	5500			5500.023	23000	4.18	25	Pass
	5825			5824.991	-9000	-1.55	25	Pass
	5180		20	5180.017	17000	3.28	25	Pass
	5500			5500.023	23000	4.18	25	Pass
	5825			5824.991	-9000	-1.55	25	Pass
	5180		30	5180.017	17000	3.28	25	Pass
	5500			5500.022	22000	4	25	Pass
	5825			5824.991	-9000	-1.55	25	Pass
	5180		40	5180.017	17000	3.28	25	Pass
	5500			5500.021	21000	3.82	25	Pass
	5825			5824.992	-8000	-1.37	25	Pass
	5180		50	5180.017	17000	3.28	25	Pass
	5500			5500.02	20000	3.64	25	Pass
	5825			5824.992	-8000	-1.37	25	Pass
	5180	93.5 Vac	25	5180.016	16000	3.09	25	Pass
	5500			5500.02	20000	3.64	25	Pass
	5825			5824.992	-8000	-1.37	25	Pass
	5180	126.5 Vac	25	5180.016	16000	3.09	25	Pass
	5500			5500.02	20000	3.64	25	Pass
	5825			5824.992	-8000	-1.37	25	Pass

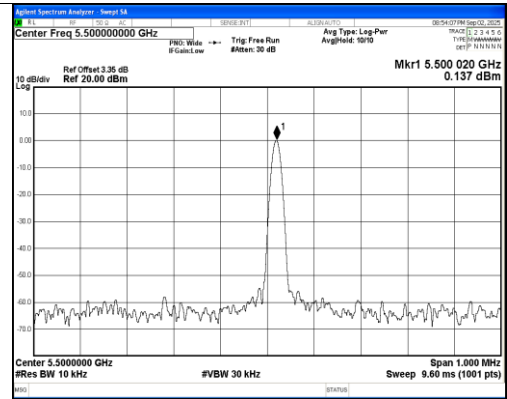




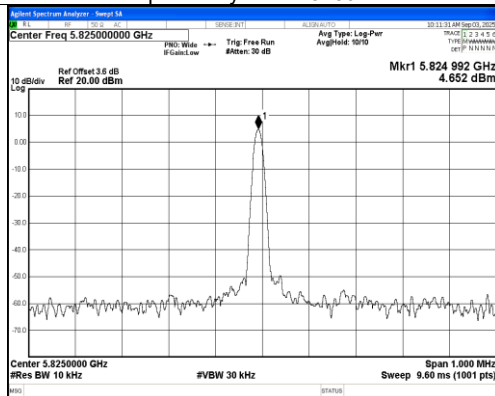




Freq. Stability NVNT 5180MHz



Freq. Stability NVNT 5500MHz



Freq. Stability NVNT 5825MHz

Maximum Power Spectral Density Level

For FCC:

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total Conducted PSD (dBm)	Limit Conducted(dBm)	Verdict
NVNT	n20	5180	Ant1	-0.18	0.45	0.27	11	Pass
NVNT	n20	5180	Ant2	-1.78	0.45	-1.33	11	Pass
NVNT	n20	5180	Ant3	-1.58	0.45	-1.13	11	Pass
NVNT	n20	5180	Ant4	-1.16	0.45	-0.71	11	Pass
NVNT	n20	5180	Sum	NaN	NaN	5.34	7.49	Pass
NVNT	n20	5200	Ant1	-0.18	0.13	-0.05	11	Pass
NVNT	n20	5200	Ant2	0.93	0.13	1.06	11	Pass
NVNT	n20	5200	Ant3	-1.77	0.13	-1.64	11	Pass
NVNT	n20	5200	Ant4	1.28	0.13	1.41	11	Pass
NVNT	n20	5200	Sum	NaN	NaN	6.36	7.49	Pass
NVNT	n20	5240	Ant1	-1.89	0.52	-1.37	11	Pass
NVNT	n20	5240	Ant2	-2.24	0.52	-1.72	11	Pass
NVNT	n20	5240	Ant3	-1.75	0.52	-1.23	11	Pass
NVNT	n20	5240	Ant4	-0.97	0.52	-0.44	11	Pass
NVNT	n20	5240	Sum	NaN	NaN	4.86	7.49	Pass
NVNT	n20	5500	Ant1	-4.81	0.45	-4.36	11	Pass
NVNT	n20	5500	Ant2	-4.11	0.45	-3.66	11	Pass
NVNT	n20	5500	Ant3	-4.04	0.45	-3.59	11	Pass
NVNT	n20	5500	Ant4	-4.54	0.45	-4.09	11	Pass
NVNT	n20	5500	Sum	NaN	NaN	2.1	6.07	Pass
NVNT	n20	5580	Ant1	-0.64	0.53	-0.11	11	Pass
NVNT	n20	5580	Ant2	-1.86	0.53	-1.33	11	Pass
NVNT	n20	5580	Ant3	-0.05	0.53	0.48	11	Pass
NVNT	n20	5580	Ant4	-0.52	0.53	0.01	11	Pass
NVNT	n20	5580	Sum	NaN	NaN	5.83	6.07	Pass
NVNT	n20	5700	Ant1	-5.01	0.53	-4.48	11	Pass
NVNT	n20	5700	Ant2	-4.35	0.53	-3.82	11	Pass
NVNT	n20	5700	Ant3	-3.44	0.53	-2.91	11	Pass
NVNT	n20	5700	Ant4	-4.88	0.53	-4.35	11	Pass
NVNT	n20	5700	Sum	NaN	NaN	2.17	6.07	Pass
NVNT	n20	5745	Ant1	-4.53	0.45	-4.08	30	Pass
NVNT	n20	5745	Ant2	-6.09	0.45	-5.64	30	Pass
NVNT	n20	5745	Ant3	-3.82	0.45	-3.37	30	Pass
NVNT	n20	5745	Ant4	-4.86	0.45	-4.41	30	Pass
NVNT	n20	5745	Sum	NaN	NaN	1.73	25.6	Pass
NVNT	n20	5785	Ant1	-4.55	0.59	-3.96	30	Pass
NVNT	n20	5785	Ant2	-5.32	0.59	-4.73	30	Pass
NVNT	n20	5785	Ant3	-3.45	0.59	-2.86	30	Pass
NVNT	n20	5785	Ant4	-5.15	0.59	-4.56	30	Pass
NVNT	n20	5785	Sum	NaN	NaN	2.07	25.6	Pass
NVNT	n20	5825	Ant1	-5	0.45	-4.55	30	Pass
NVNT	n20	5825	Ant2	-5.42	0.45	-4.97	30	Pass
NVNT	n20	5825	Ant3	-3.85	0.45	-3.4	30	Pass
NVNT	n20	5825	Ant4	-4.69	0.45	-4.24	30	Pass
NVNT	n20	5825	Sum	NaN	NaN	1.76	25.6	Pass
NVNT	ac20	5180	Ant1	-1.75	0.34	-1.41	11	Pass
NVNT	ac20	5180	Ant2	-0.76	0.34	-0.42	11	Pass
NVNT	ac20	5180	Ant3	-1.94	0.34	-1.6	11	Pass
NVNT	ac20	5180	Ant4	-0.06	0.34	0.28	11	Pass
NVNT	ac20	5180	Sum	NaN	NaN	5.3	7.49	Pass
NVNT	ac20	5200	Ant1	0.05	0.34	0.39	11	Pass
NVNT	ac20	5200	Ant2	-0.71	0.34	-0.37	11	Pass
NVNT	ac20	5200	Ant3	-1.16	0.34	-0.82	11	Pass
NVNT	ac20	5200	Ant4	1.15	0.34	1.49	11	Pass
NVNT	ac20	5200	Sum	NaN	NaN	6.28	7.49	Pass
NVNT	ac20	5240	Ant1	-0.37	0.29	-0.08	11	Pass
NVNT	ac20	5240	Ant2	-1.58	0.29	-1.29	11	Pass
NVNT	ac20	5240	Ant3	-2.33	0.29	-2.04	11	Pass
NVNT	ac20	5240	Ant4	0.33	0.29	0.62	11	Pass
NVNT	ac20	5240	Sum	NaN	NaN	5.44	7.49	Pass
NVNT	ac20	5500	Ant1	-4.91	0.29	-4.62	11	Pass
NVNT	ac20	5500	Ant2	-3.01	0.29	-2.72	11	Pass
NVNT	ac20	5500	Ant3	-3.47	0.29	-3.18	11	Pass
NVNT	ac20	5500	Ant4	-3.74	0.29	-3.45	11	Pass
NVNT	ac20	5500	Sum	NaN	NaN	2.58	6.07	Pass
NVNT	ac20	5580	Ant1	-0.45	0.05	-0.4	11	Pass
NVNT	ac20	5580	Ant2	-0.97	0.05	-0.92	11	Pass
NVNT	ac20	5580	Ant3	1.22	0.05	1.27	11	Pass
NVNT	ac20	5580	Ant4	-0.19	0.05	-0.14	11	Pass
NVNT	ac20	5580	Sum	NaN	NaN	6.05	6.07	Pass
NVNT	ac20	5700	Ant1	-5.89	0.34	-5.55	11	Pass

NVNT	ac20	5700	Ant2	-3.69	0.34	-3.35	11	Pass
NVNT	ac20	5700	Ant3	-4.12	0.34	-3.78	11	Pass
NVNT	ac20	5700	Ant4	-5.13	0.34	-4.79	11	Pass
NVNT	ac20	5700	Sum	NaN	NaN	1.73	6.07	Pass
NVNT	ac20	5745	Ant1	-3.68	0.34	-3.34	30	Pass
NVNT	ac20	5745	Ant2	-3.68	0.34	-3.34	30	Pass
NVNT	ac20	5745	Ant3	-2.54	0.34	-2.2	30	Pass
NVNT	ac20	5745	Ant4	-3.79	0.34	-3.45	30	Pass
NVNT	ac20	5745	Sum	NaN	NaN	2.97	25.6	Pass
NVNT	ac20	5785	Ant1	-3.15	0.18	-2.97	30	Pass
NVNT	ac20	5785	Ant2	-3.28	0.18	-3.1	30	Pass
NVNT	ac20	5785	Ant3	-3.07	0.18	-2.89	30	Pass
NVNT	ac20	5785	Ant4	-2.57	0.18	-2.39	30	Pass
NVNT	ac20	5785	Sum	NaN	NaN	3.2	25.6	Pass
NVNT	ac20	5825	Ant1	-3.87	0.15	-3.72	30	Pass
NVNT	ac20	5825	Ant2	-3.93	0.15	-3.78	30	Pass
NVNT	ac20	5825	Ant3	-3.24	0.15	-3.09	30	Pass
NVNT	ac20	5825	Ant4	-3.81	0.15	-3.66	30	Pass
NVNT	ac20	5825	Sum	NaN	NaN	2.48	25.6	Pass

For ISED:

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total Conducted PSD (dBm)	Gain (dBi)	eirp PSD (dBm)	Limit Conducted (dBm)	Limit EIRP (dBm)	Verdict
NVNT	n20	5180	Ant1	-0.18	0.45	0.27	3.49	3.76	NaN	10	Pass
NVNT	n20	5180	Ant2	-1.78	0.45	-1.33	3.49	2.16	NaN	10	Pass
NVNT	n20	5180	Ant3	-1.58	0.45	-1.13	3.49	2.36	NaN	10	Pass
NVNT	n20	5180	Ant4	-1.16	0.45	-0.71	3.49	2.78	NaN	10	Pass
NVNT	n20	5180	Sum	NaN	NaN	5.34	NaN	8.83	NaN	10	Pass
NVNT	n20	5200	Ant1	-0.18	0.13	-0.05	3.49	3.44	NaN	10	Pass
NVNT	n20	5200	Ant2	0.93	0.13	1.06	3.49	4.55	NaN	10	Pass
NVNT	n20	5200	Ant3	-1.77	0.13	-1.64	3.49	1.85	NaN	10	Pass
NVNT	n20	5200	Ant4	1.28	0.13	1.41	3.49	4.9	NaN	10	Pass
NVNT	n20	5200	Sum	NaN	NaN	6.36	NaN	9.86	NaN	10	Pass
NVNT	n20	5240	Ant1	-1.89	0.52	-1.37	3.49	2.12	NaN	10	Pass
NVNT	n20	5240	Ant2	-2.24	0.52	-1.72	3.49	1.77	NaN	10	Pass
NVNT	n20	5240	Ant3	-1.75	0.52	-1.23	3.49	2.26	NaN	10	Pass
NVNT	n20	5240	Ant4	-0.97	0.52	-0.44	3.49	3.05	NaN	10	Pass
NVNT	n20	5240	Sum	NaN	NaN	4.86	NaN	8.34	NaN	10	Pass
NVNT	n20	5500	Ant1	-4.81	0.45	-4.36	4.91	0.55	11	NaN	Pass
NVNT	n20	5500	Ant2	-4.11	0.45	-3.66	4.91	1.25	11	NaN	Pass
NVNT	n20	5500	Ant3	-4.04	0.45	-3.59	4.91	1.32	11	NaN	Pass
NVNT	n20	5500	Ant4	-4.54	0.45	-4.09	4.91	0.82	11	NaN	Pass
NVNT	n20	5500	Sum	NaN	NaN	2.1	NaN	7.02	6.07	NaN	Pass
NVNT	n20	5580	Ant1	-0.64	0.53	-0.11	4.91	4.8	11	NaN	Pass
NVNT	n20	5580	Ant2	-1.86	0.53	-1.33	4.91	3.58	11	NaN	Pass
NVNT	n20	5580	Ant3	-0.05	0.53	0.48	4.91	5.39	11	NaN	Pass
NVNT	n20	5580	Ant4	-0.52	0.53	0.01	4.91	4.92	11	NaN	Pass
NVNT	n20	5580	Sum	NaN	NaN	5.83	NaN	10.74	6.07	NaN	Pass
NVNT	n20	5700	Ant1	-5.01	0.53	-4.48	4.91	0.43	11	NaN	Pass
NVNT	n20	5700	Ant2	-4.35	0.53	-3.82	4.91	1.09	11	NaN	Pass
NVNT	n20	5700	Ant3	-3.44	0.53	-2.91	4.91	2	11	NaN	Pass
NVNT	n20	5700	Ant4	-4.88	0.53	-4.35	4.91	0.56	11	NaN	Pass
NVNT	n20	5700	Sum	NaN	NaN	2.17	NaN	7.08	6.07	NaN	Pass
NVNT	n20	5745	Ant1	-4.53	0.45	-4.08	4.38	0.3	30	NaN	Pass
NVNT	n20	5745	Ant2	-6.09	0.45	-5.64	4.38	-1.26	30	NaN	Pass
NVNT	n20	5745	Ant3	-3.82	0.45	-3.37	4.38	1.01	30	NaN	Pass
NVNT	n20	5745	Ant4	-4.86	0.45	-4.41	4.38	-0.03	30	NaN	Pass
NVNT	n20	5745	Sum	NaN	NaN	1.73	NaN	6.11	25.6	NaN	Pass
NVNT	n20	5785	Ant1	-4.55	0.59	-3.96	4.38	0.42	30	NaN	Pass
NVNT	n20	5785	Ant2	-5.32	0.59	-4.73	4.38	-0.35	30	NaN	Pass
NVNT	n20	5785	Ant3	-3.45	0.59	-2.86	4.38	1.52	30	NaN	Pass
NVNT	n20	5785	Ant4	-5.15	0.59	-4.56	4.38	-0.18	30	NaN	Pass
NVNT	n20	5785	Sum	NaN	NaN	2.07	NaN	6.43	25.6	NaN	Pass
NVNT	n20	5825	Ant1	-5	0.45	-4.55	4.38	-0.17	30	NaN	Pass
NVNT	n20	5825	Ant2	-5.42	0.45	-4.97	4.38	-0.59	30	NaN	Pass
NVNT	n20	5825	Ant3	-3.85	0.45	-3.4	4.38	0.98	30	NaN	Pass
NVNT	n20	5825	Ant4	-4.69	0.45	-4.24	4.38	0.14	30	NaN	Pass
NVNT	n20	5825	Sum	NaN	NaN	1.76	NaN	6.15	25.6	NaN	Pass
NVNT	ac20	5180	Ant1	-1.75	0.34	-1.41	3.49	2.08	NaN	10	Pass
NVNT	ac20	5180	Ant2	-0.76	0.34	-0.42	3.49	3.08	NaN	10	Pass
NVNT	ac20	5180	Ant3	-1.94	0.34	-1.6	3.49	1.89	NaN	10	Pass
NVNT	ac20	5180	Ant4	-0.06	0.34	0.28	3.49	3.77	NaN	10	Pass
NVNT	ac20	5180	Sum	NaN	NaN	5.3	NaN	8.79	NaN	10	Pass
NVNT	ac20	5200	Ant1	0.05	0.34	0.39	3.49	3.88	NaN	10	Pass

NVNT	ac20	5200	Ant2	-0.71	0.34	-0.37	3.49	3.12	NaN	10	Pass
NVNT	ac20	5200	Ant3	-1.16	0.34	-0.82	3.49	2.67	NaN	10	Pass
NVNT	ac20	5200	Ant4	1.15	0.34	1.49	3.49	4.98	NaN	10	Pass
NVNT	ac20	5200	Sum	NaN	NaN	6.28	NaN	9.77	NaN	10	Pass
NVNT	ac20	5240	Ant1	-0.37	0.29	-0.08	3.49	3.41	NaN	10	Pass
NVNT	ac20	5240	Ant2	-1.58	0.29	-1.29	3.49	2.2	NaN	10	Pass
NVNT	ac20	5240	Ant3	-2.33	0.29	-2.04	3.49	1.45	NaN	10	Pass
NVNT	ac20	5240	Ant4	0.33	0.29	0.62	3.49	4.11	NaN	10	Pass
NVNT	ac20	5240	Sum	NaN	NaN	5.44	NaN	8.93	NaN	10	Pass
NVNT	ac20	5500	Ant1	-4.91	0.29	-4.62	4.91	0.29	11	NaN	Pass
NVNT	ac20	5500	Ant2	-3.01	0.29	-2.72	4.91	2.19	11	NaN	Pass
NVNT	ac20	5500	Ant3	-3.47	0.29	-3.18	4.91	1.73	11	NaN	Pass
NVNT	ac20	5500	Ant4	-3.74	0.29	-3.45	4.91	1.46	11	NaN	Pass
NVNT	ac20	5500	Sum	NaN	NaN	2.58	NaN	7.49	6.07	NaN	Pass
NVNT	ac20	5580	Ant1	-0.45	0.05	-0.4	4.91	4.51	11	NaN	Pass
NVNT	ac20	5580	Ant2	-0.97	0.05	-0.92	4.91	3.99	11	NaN	Pass
NVNT	ac20	5580	Ant3	1.22	0.05	1.27	4.91	6.18	11	NaN	Pass
NVNT	ac20	5580	Ant4	-0.19	0.05	-0.14	4.91	4.77	11	NaN	Pass
NVNT	ac20	5580	Sum	NaN	NaN	6.05	NaN	10.96	6.07	NaN	Pass
NVNT	ac20	5700	Ant1	-5.89	0.34	-5.55	4.91	-0.64	11	NaN	Pass
NVNT	ac20	5700	Ant2	-3.69	0.34	-3.35	4.91	1.56	11	NaN	Pass
NVNT	ac20	5700	Ant3	-4.12	0.34	-3.78	4.91	1.13	11	NaN	Pass
NVNT	ac20	5700	Ant4	-5.13	0.34	-4.79	4.91	0.12	11	NaN	Pass
NVNT	ac20	5700	Sum	NaN	NaN	1.73	NaN	6.65	6.07	NaN	Pass
NVNT	ac20	5745	Ant1	-3.68	0.34	-3.34	4.38	1.04	30	NaN	Pass
NVNT	ac20	5745	Ant2	-3.68	0.34	-3.34	4.38	1.04	30	NaN	Pass
NVNT	ac20	5745	Ant3	-2.54	0.34	-2.2	4.38	2.18	30	NaN	Pass
NVNT	ac20	5745	Ant4	-3.79	0.34	-3.45	4.38	0.93	30	NaN	Pass
NVNT	ac20	5745	Sum	NaN	NaN	2.97	NaN	7.35	25.6	NaN	Pass
NVNT	ac20	5785	Ant1	-3.15	0.18	-2.97	4.38	1.41	30	NaN	Pass
NVNT	ac20	5785	Ant2	-3.28	0.18	-3.1	4.38	1.29	30	NaN	Pass
NVNT	ac20	5785	Ant3	-3.07	0.18	-2.89	4.38	1.49	30	NaN	Pass
NVNT	ac20	5785	Ant4	-2.57	0.18	-2.39	4.38	1.99	30	NaN	Pass
NVNT	ac20	5785	Sum	NaN	NaN	3.2	NaN	7.57	25.6	NaN	Pass
NVNT	ac20	5825	Ant1	-3.87	0.15	-3.72	4.38	0.66	30	NaN	Pass
NVNT	ac20	5825	Ant2	-3.93	0.15	-3.78	4.38	0.6	30	NaN	Pass
NVNT	ac20	5825	Ant3	-3.24	0.15	-3.09	4.38	1.29	30	NaN	Pass
NVNT	ac20	5825	Ant4	-3.81	0.15	-3.66	4.38	0.72	30	NaN	Pass
NVNT	ac20	5825	Sum	NaN	NaN	2.48	NaN	6.85	25.6	NaN	Pass

Note:

Antenna gain(G) of 802.11 n/ac: 5150MHz to 5250MHz: 3.49 dBi, 5470MHz to 5725MHz: 4.91 dBi, 5725MHz to 5850MHz: 4.38 dBi (ANT1&2&3&4).

For power spectral density measurements, Nant=4, Nss = 1.

So the Directional gain=Gant + Aray Gain=Gant+10log(Nant / Nss) dBi = 3.49+10log(4/1) dBi = 9.51dBi in UNII-1, the Directional gain=Gant + Aray Gain=Gant+10log(Nant / Nss) dBi = 4.91+10log(4/1) dBi = 10.93dBi in UNII-2C, the Directional gain=Gant + Aray Gain=Gant+10log(Nant / Nss) dBi = 4.38+10log(4/1) dBi = 10.4dBi in UNII-3.

Then, the UNII-1 power spectral density limit is 11-(9.51-6)=7.49, UNII-2C power spectral density limit is 11-(10.93-6)=6.07, the UNII-3 power spectral density limit is 30-(10.4-6) = 25.6.

