

FCC Appendix RF Test Data for 5.8G WIFI

FCC ID : 2AYD7-EB2

Company : igloocompany Pte Ltd.

EUT : Bridge 2

Model Number : EB2

Report No. : CTA26070103003

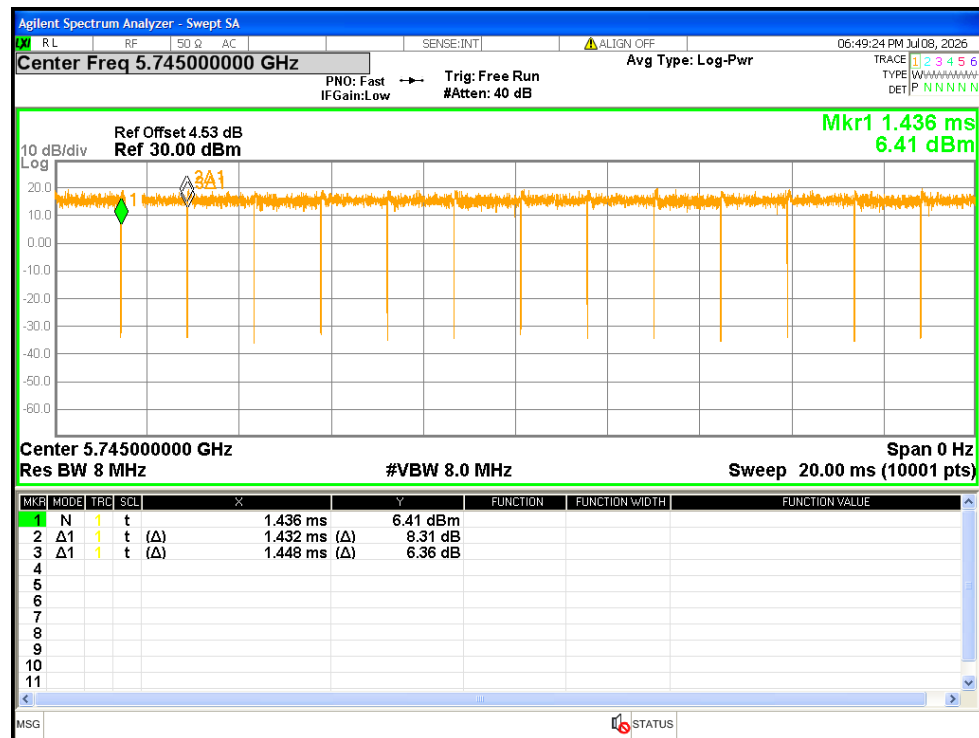
Reviewed By : Eric Wang

Duty Cycle

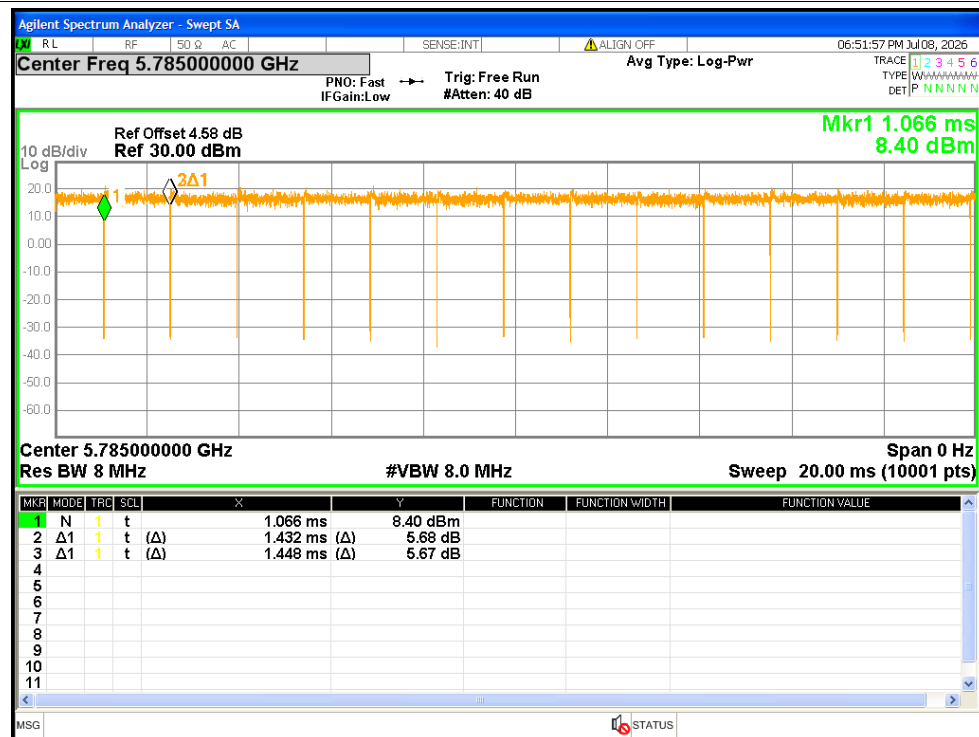
Condition	Mode	Frequency (MHz)	On Time (ms)	Period (ms)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)	Max Variation (%)
NVNT	a	5745	1.432	1.448	98.9	0.05	0.7	0.21
NVNT	a	5785	1.432	1.448	98.9	0.05	0.7	0.22
NVNT	a	5825	1.432	1.448	98.9	0.05	0.7	0.23
NVNT	n20	5745	1.34	1.354	98.97	0.04	0.75	0.17
NVNT	n20	5785	1.34	1.356	98.82	0.05	0.75	0.21
NVNT	n20	5825	1.34	1.356	98.82	0.05	0.75	0.14
NVNT	ac20	5745	1.348	1.362	98.97	0.04	0.74	0.21
NVNT	ac20	5785	1.348	1.364	98.83	0.05	0.74	0.19
NVNT	ac20	5825	1.348	1.362	98.97	0.04	0.74	0.17
NVNT	ax20	5745	1.044	1.06	98.49	0.07	0.96	0.16
NVNT	ax20	5785	1.044	1.06	98.49	0.07	0.96	0.17
NVNT	ax20	5825	1.046	1.06	98.68	0.06	0.96	0.17

Test Graphs

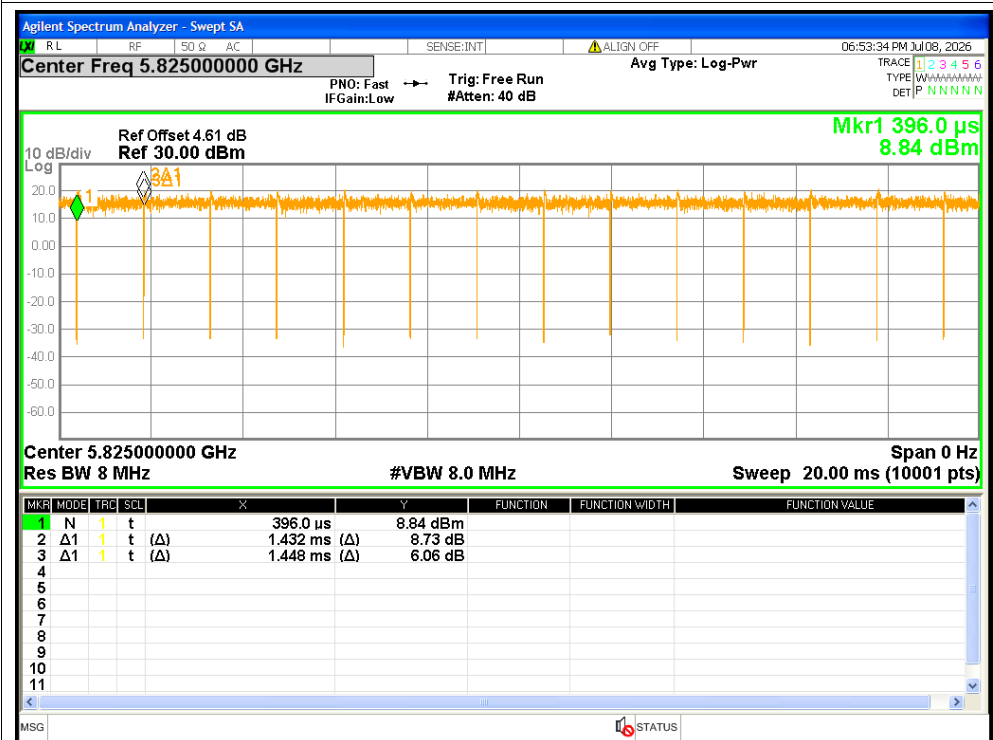
Duty Cycle NVNT a 5745MHz



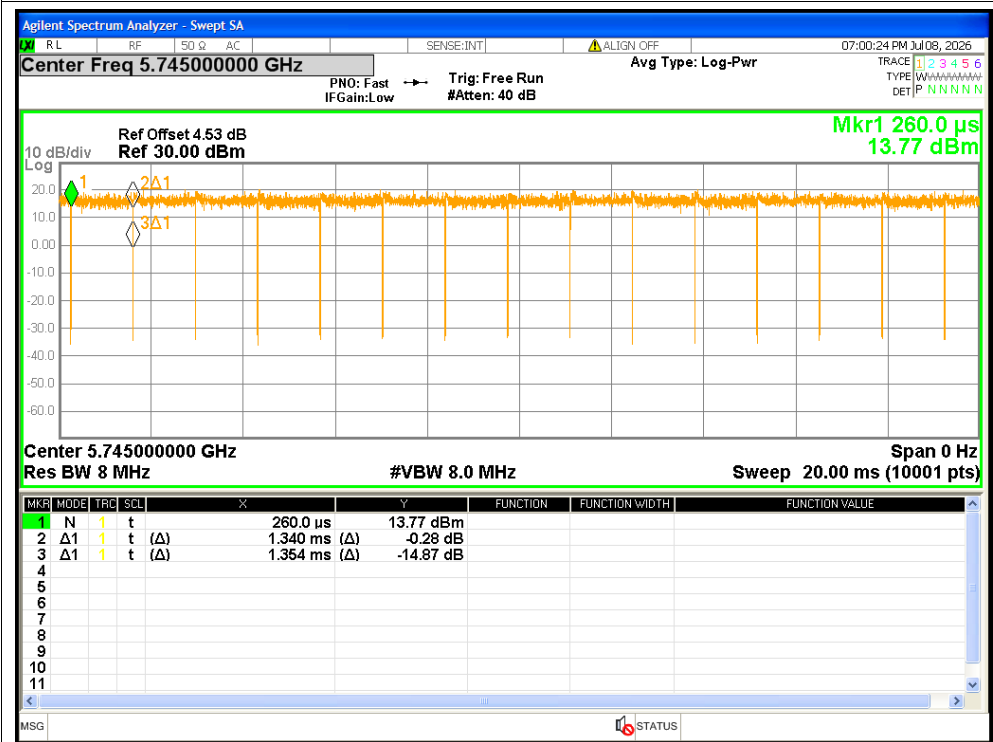
Duty Cycle NVNT a 5785MHz



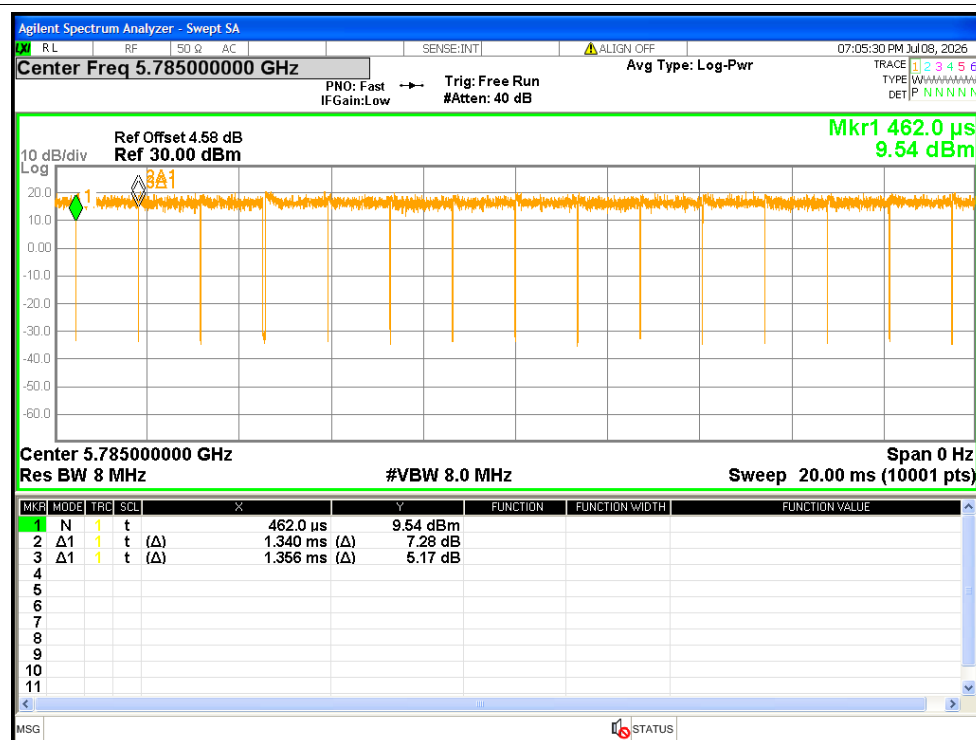
Duty Cycle NVNT a 5825MHz



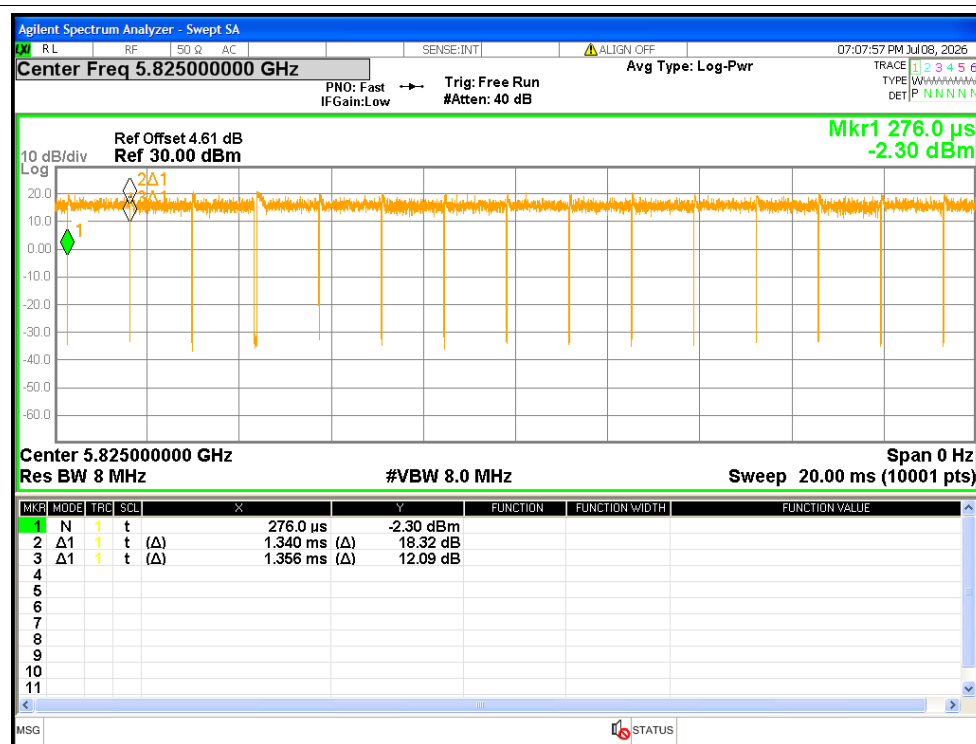
Duty Cycle NVNT n20 5745MHz



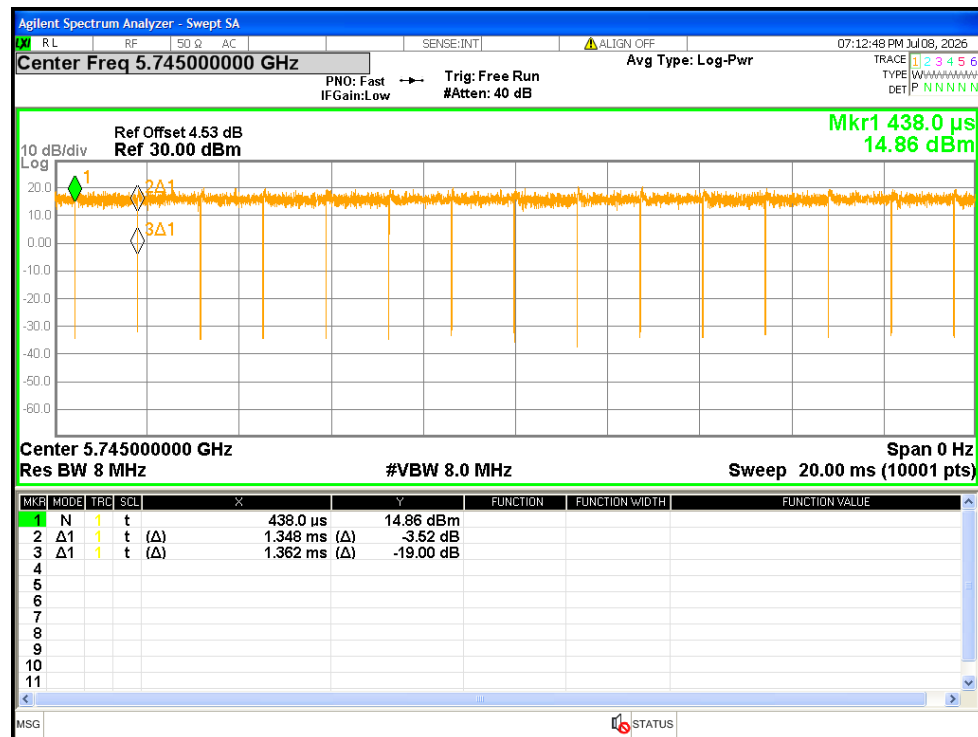
Duty Cycle NVNT n20 5785MHz



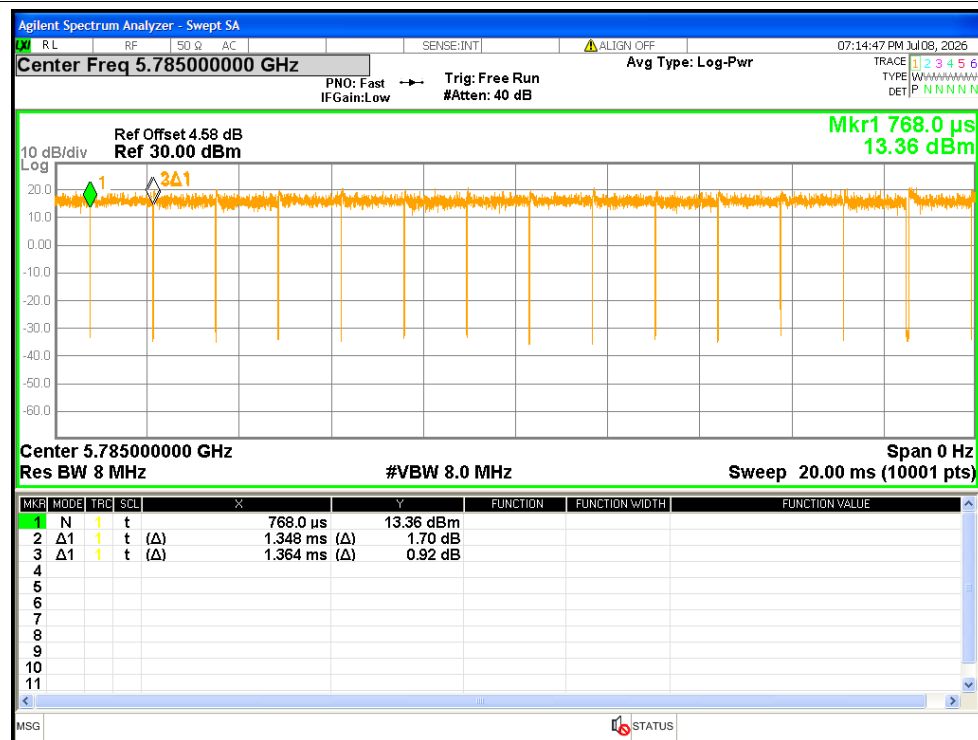
Duty Cycle NVNT n20 5825MHz



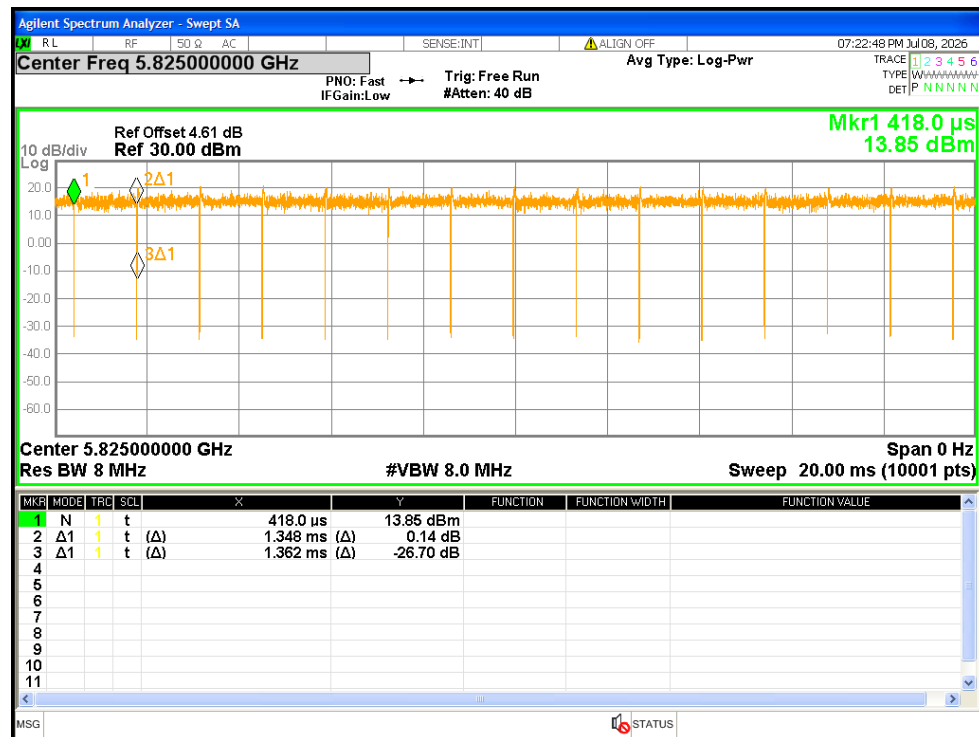
Duty Cycle NVNT ac20 5745MHz



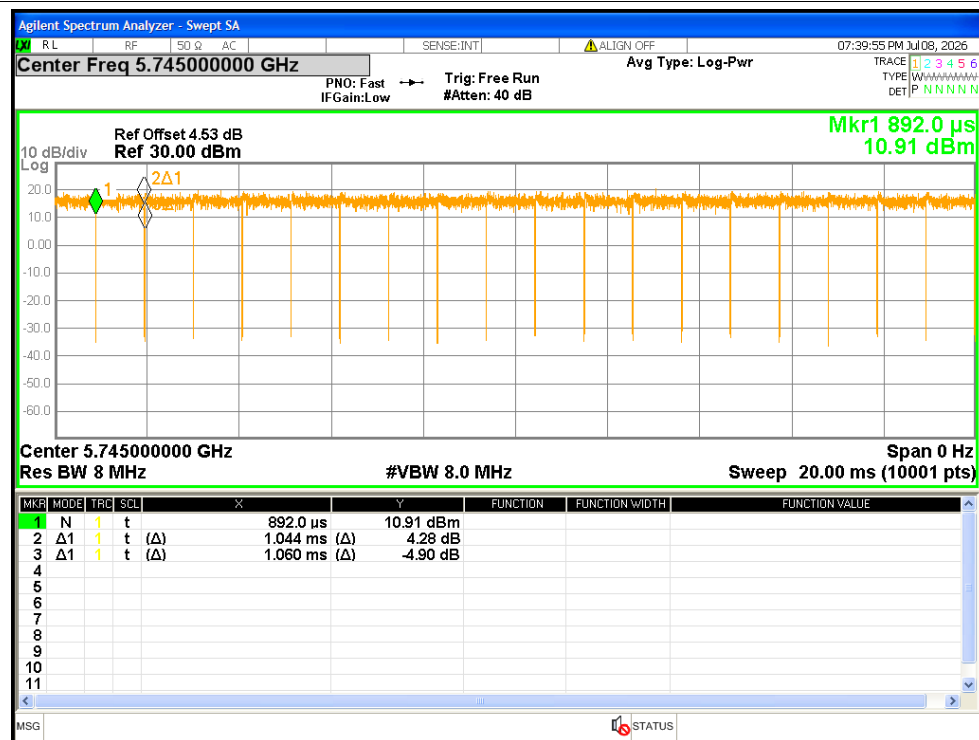
Duty Cycle NVNT ac20 5785MHz



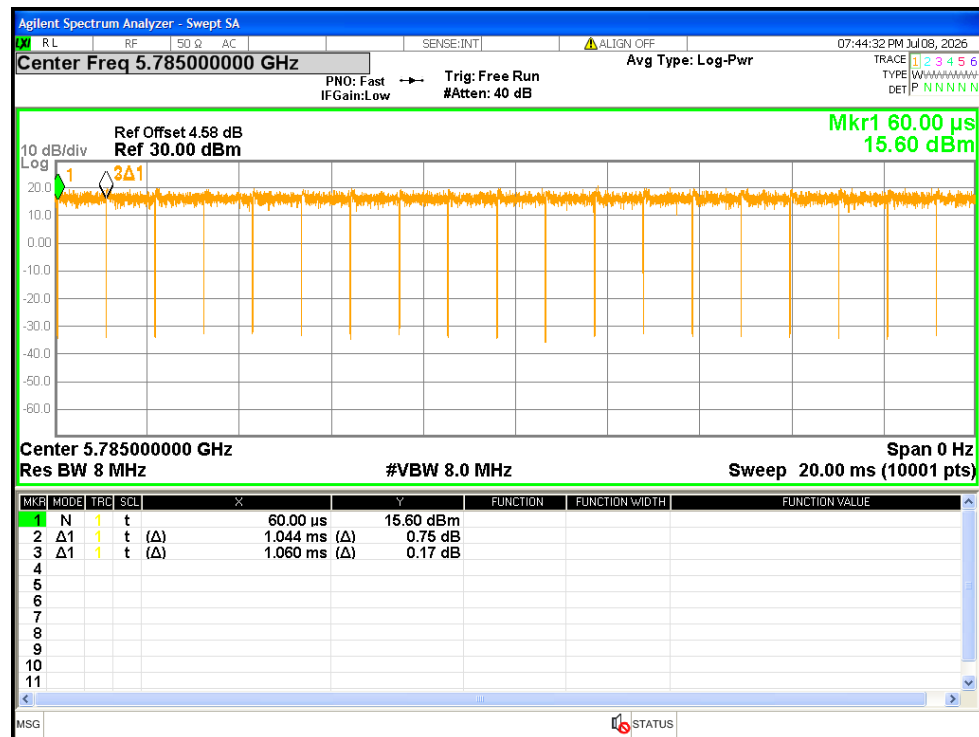
Duty Cycle NVNT ac20 5825MHz



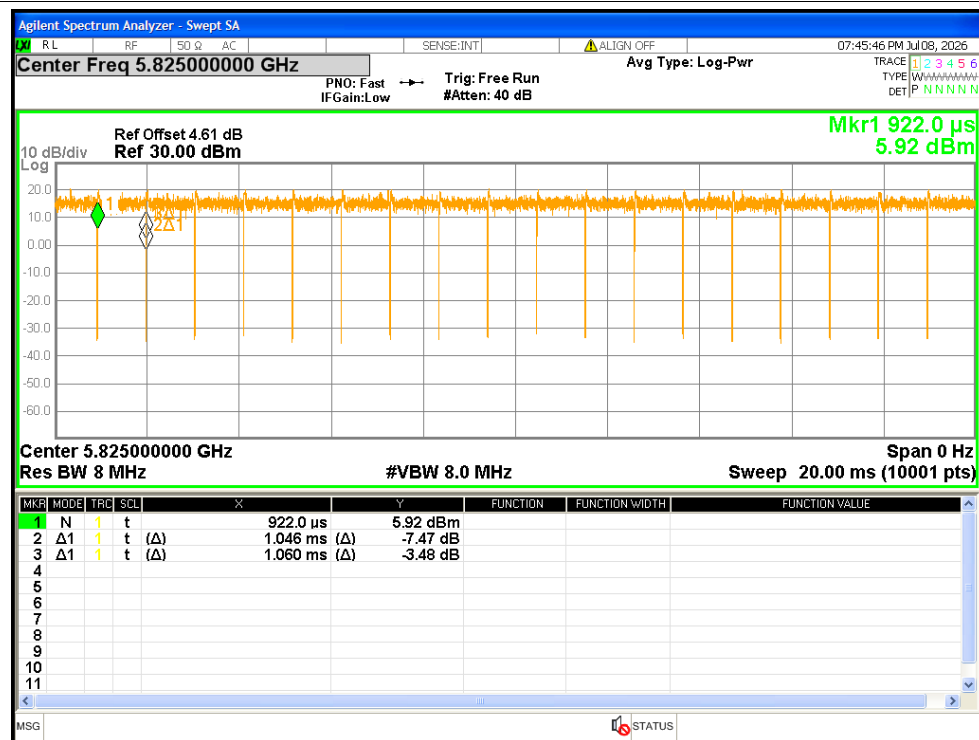
Duty Cycle NVNT ax20 5745MHz



Duty Cycle NVNT ax20 5785MHz



Duty Cycle NVNT ax20 5825MHz



Maximum Output Power

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	13.5	0.05	13.55	<=30	Pass
NVNT	a	5785	14.21	0.05	14.26	<=30	Pass
NVNT	a	5825	13.33	0.05	13.38	<=30	Pass
NVNT	n20	5745	14.08	0.04	14.12	<=30	Pass
NVNT	n20	5785	14.44	0.05	14.49	<=30	Pass
NVNT	n20	5825	13.57	0.05	13.62	<=30	Pass
NVNT	ac20	5745	13.93	0.04	13.97	<=30	Pass
NVNT	ac20	5785	14.1	0.05	14.15	<=30	Pass
NVNT	ac20	5825	13.14	0.04	13.18	<=30	Pass
NVNT	ax20	5745	14.16	0.07	14.23	<=30	Pass
NVNT	ax20	5785	14.32	0.07	14.39	<=30	Pass
NVNT	ax20	5825	13.29	0.06	13.35	<=30	Pass

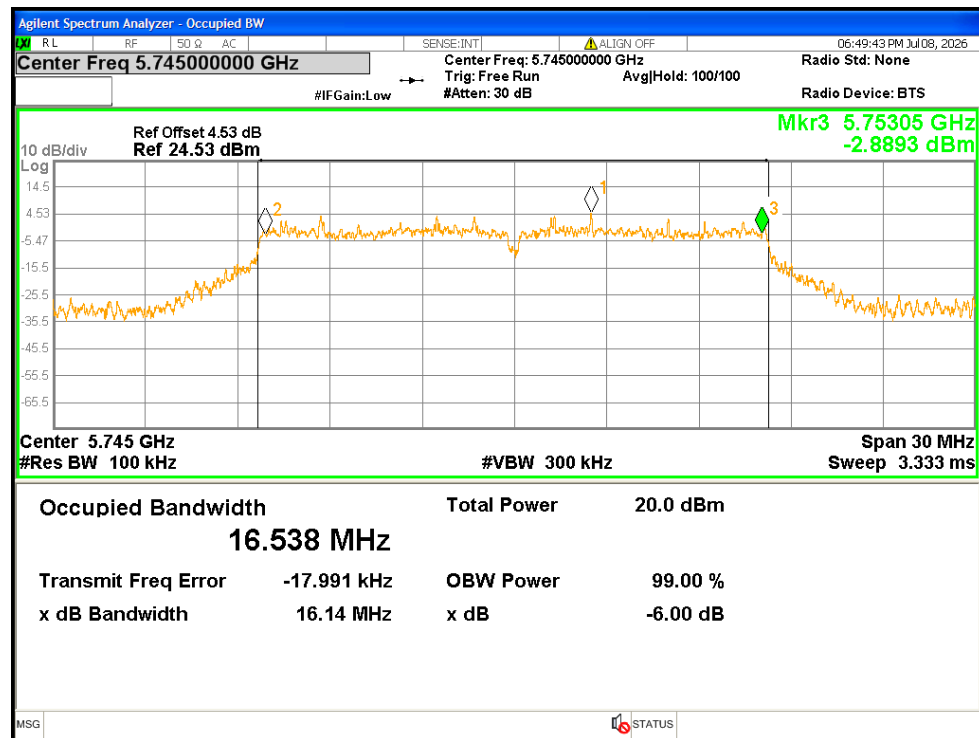
Total Power (dBm)= Conducted Power (dBm)+ Duty Factor (dB)

-6dB Bandwidth

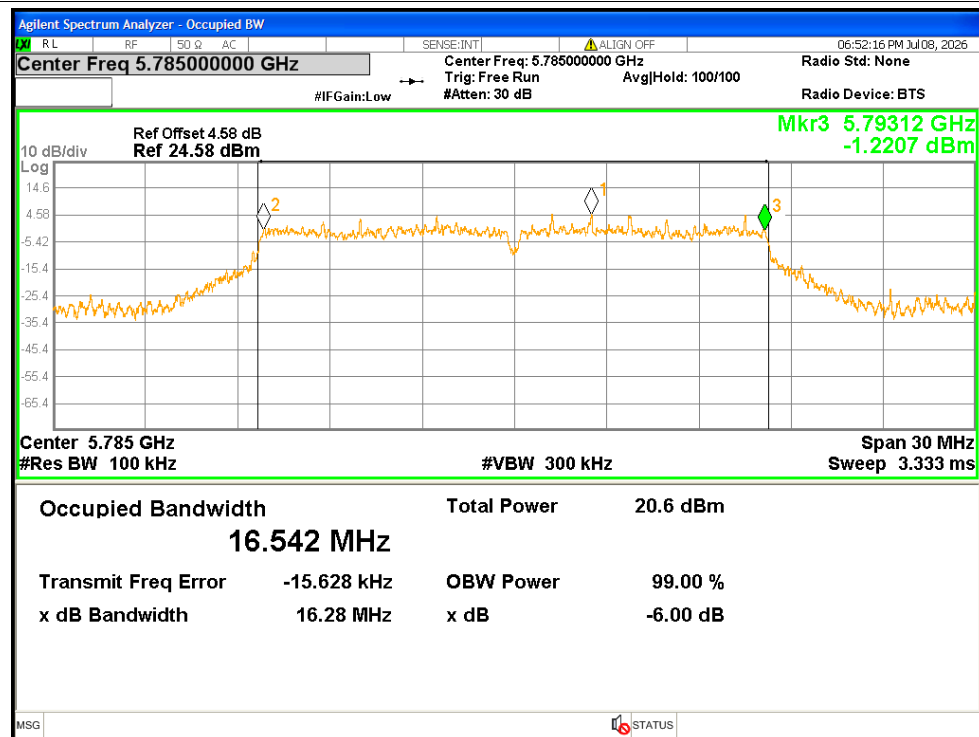
Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	16.14	≥ 0.5	Pass
NVNT	a	5785	16.28	≥ 0.5	Pass
NVNT	a	5825	15.72	≥ 0.5	Pass
NVNT	n20	5745	16.91	≥ 0.5	Pass
NVNT	n20	5785	16.54	≥ 0.5	Pass
NVNT	n20	5825	15.73	≥ 0.5	Pass
NVNT	ac20	5745	16.78	≥ 0.5	Pass
NVNT	ac20	5785	15.28	≥ 0.5	Pass
NVNT	ac20	5825	15.18	≥ 0.5	Pass
NVNT	ax20	5745	17.66	≥ 0.5	Pass
NVNT	ax20	5785	17.7	≥ 0.5	Pass
NVNT	ax20	5825	17.03	≥ 0.5	Pass

Test Graphs

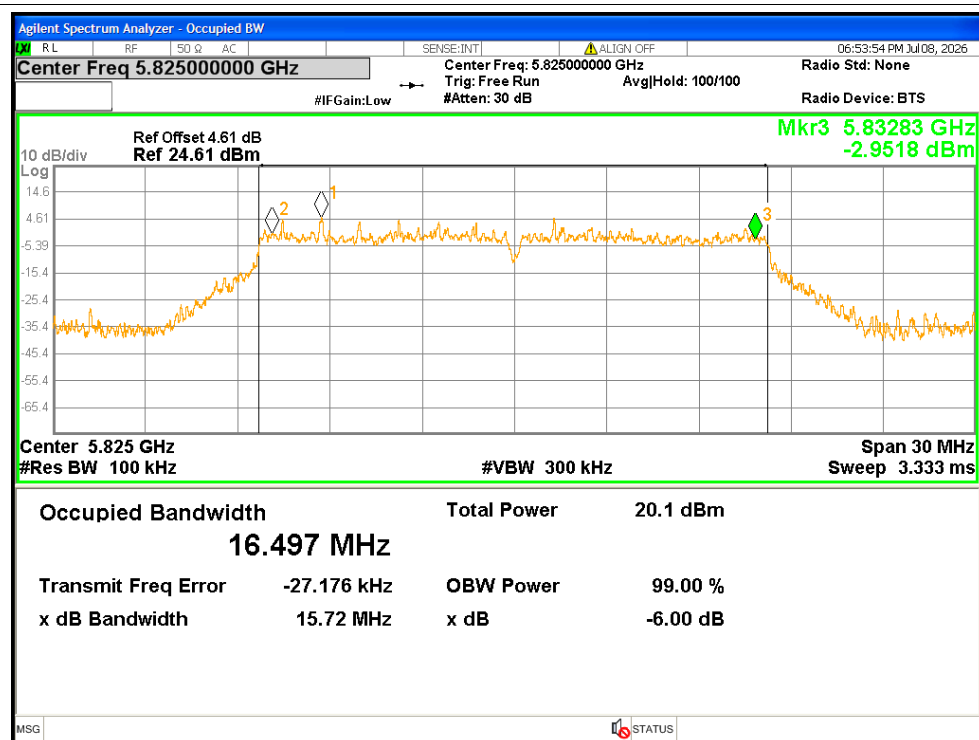
-6dB Bandwidth NVNT a 5745MHz



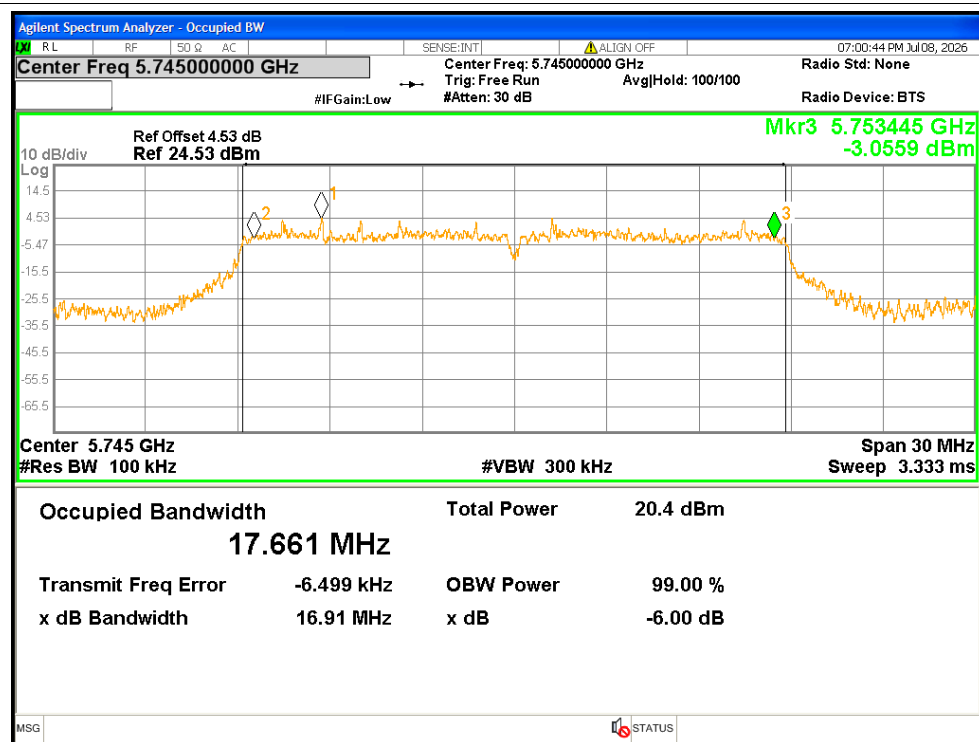
-6dB Bandwidth NVNT a 5785MHz



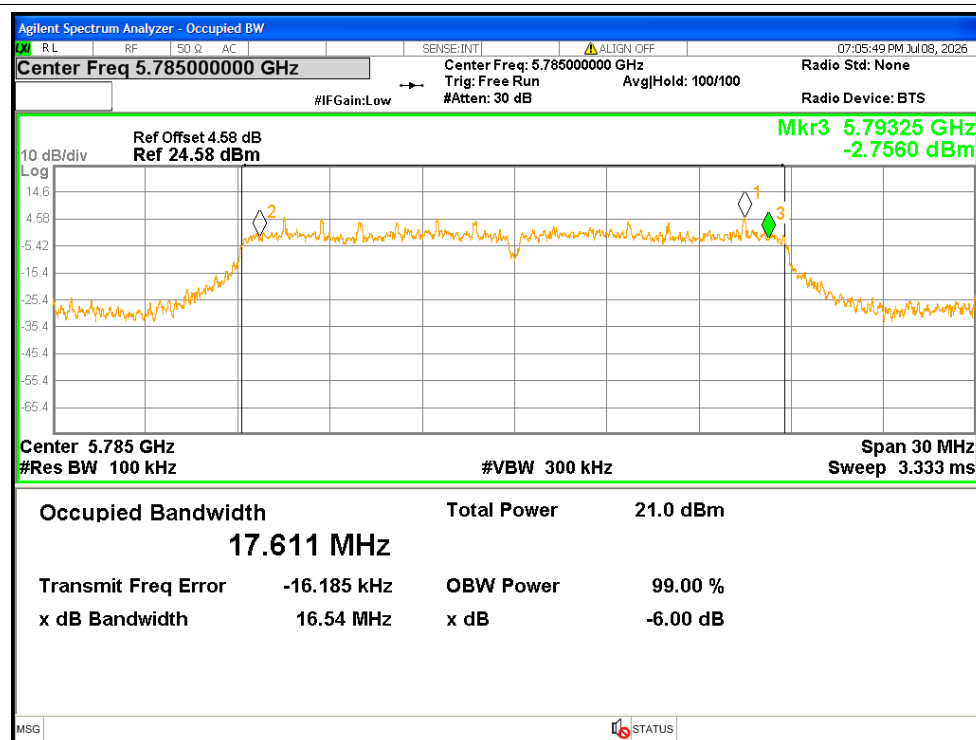
-6dB Bandwidth NVNT a 5825MHz



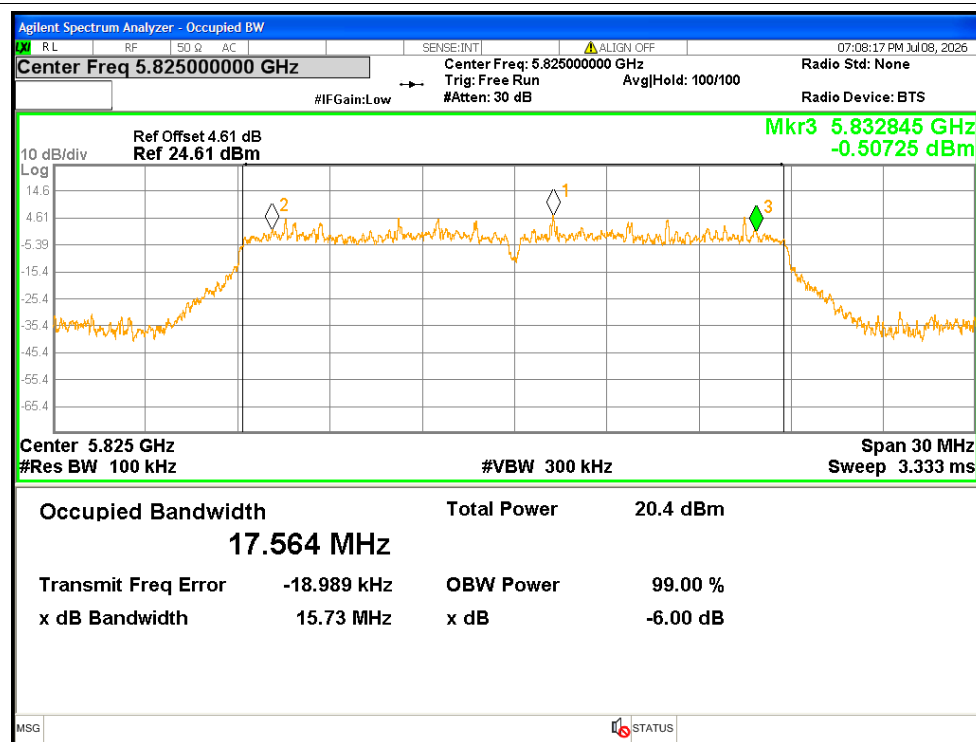
-6dB Bandwidth NVNT n20 5745MHz



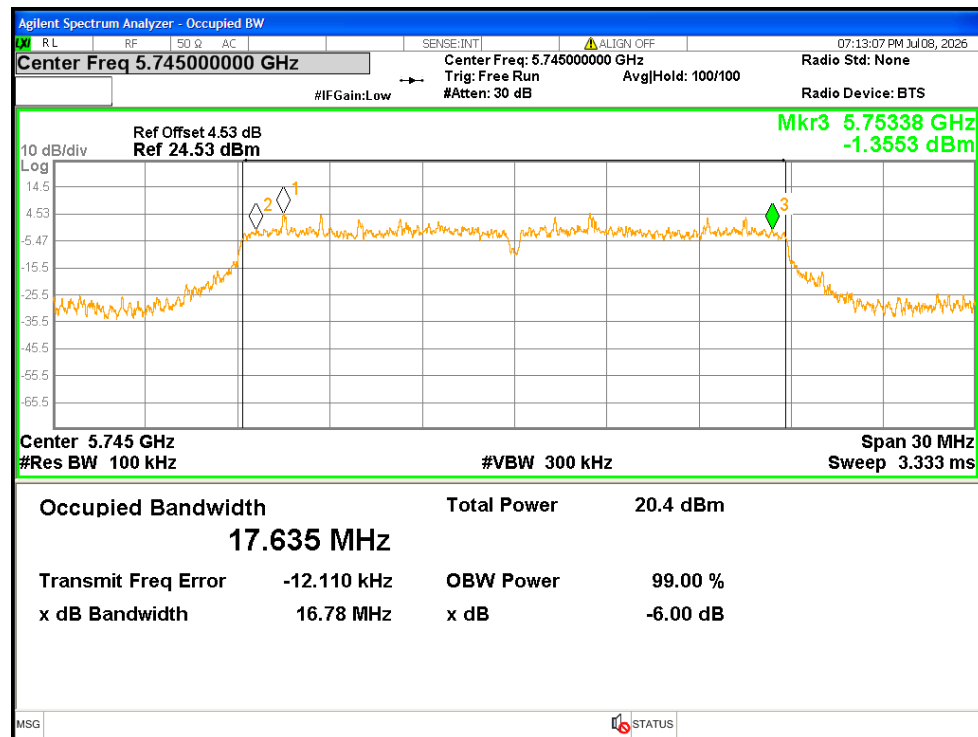
-6dB Bandwidth NVNT n20 5785MHz



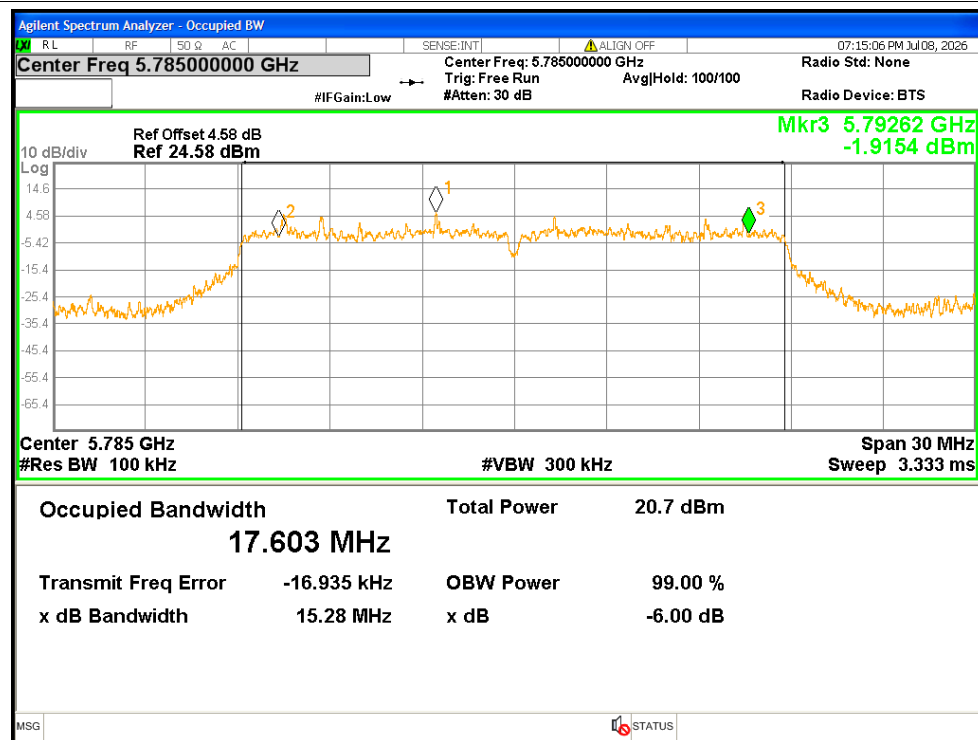
-6dB Bandwidth NVNT n20 5825MHz



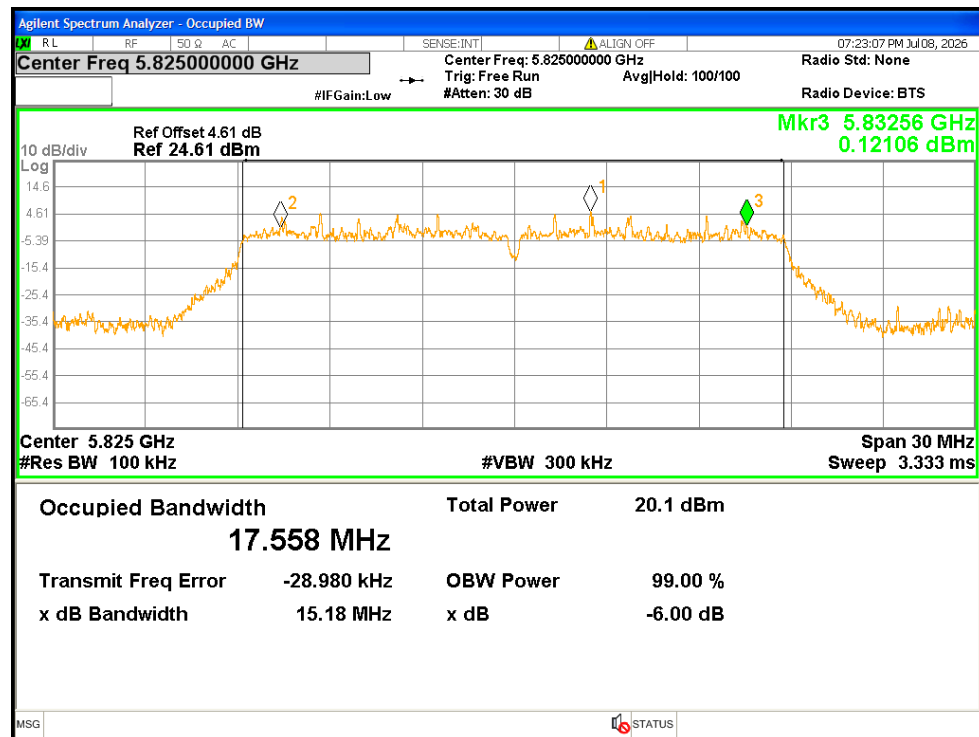
-6dB Bandwidth NVNT ac20 5745MHz



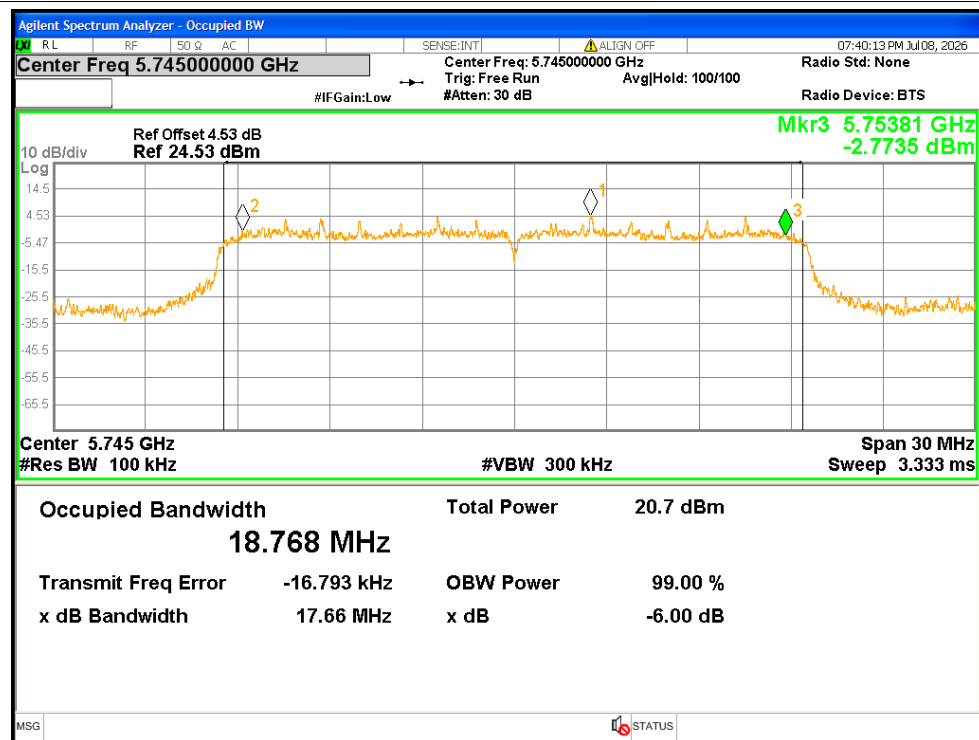
-6dB Bandwidth NVNT ac20 5785MHz



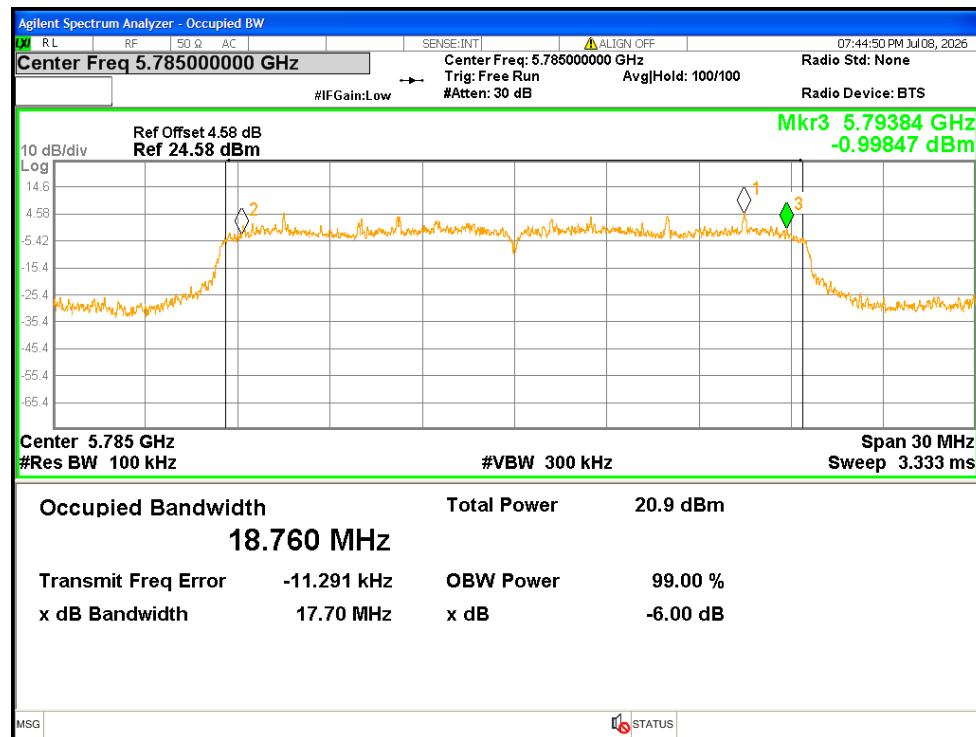
-6dB Bandwidth NVNT ac20 5825MHz



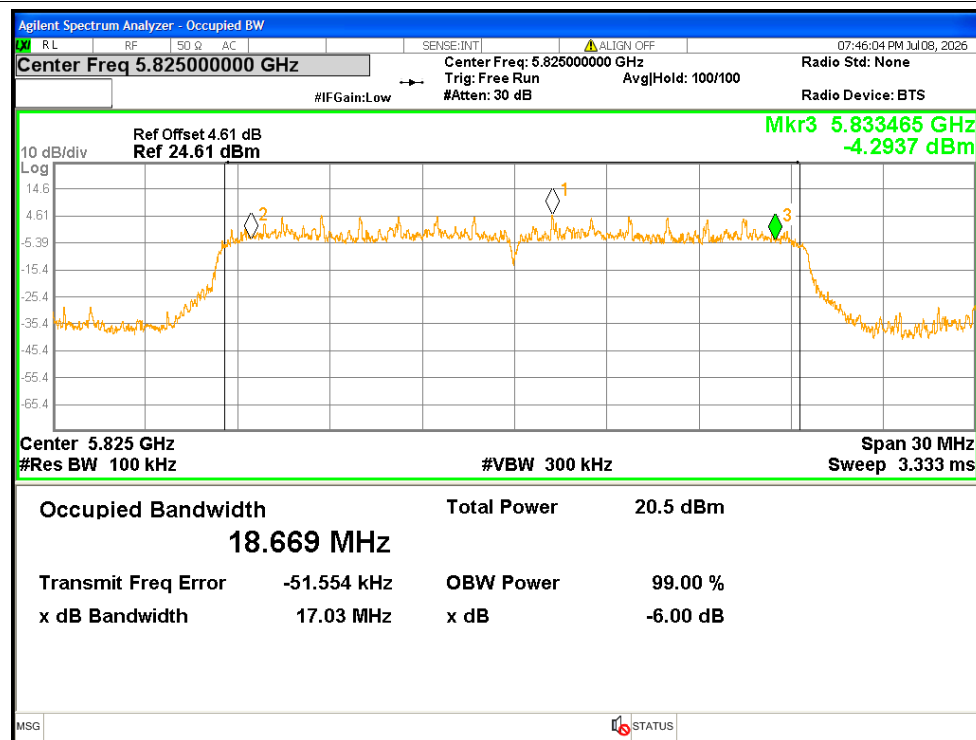
-6dB Bandwidth NVNT ax20 5745MHz



-6dB Bandwidth NVNT ax20 5785MHz



-6dB Bandwidth NVNT ax20 5825MHz

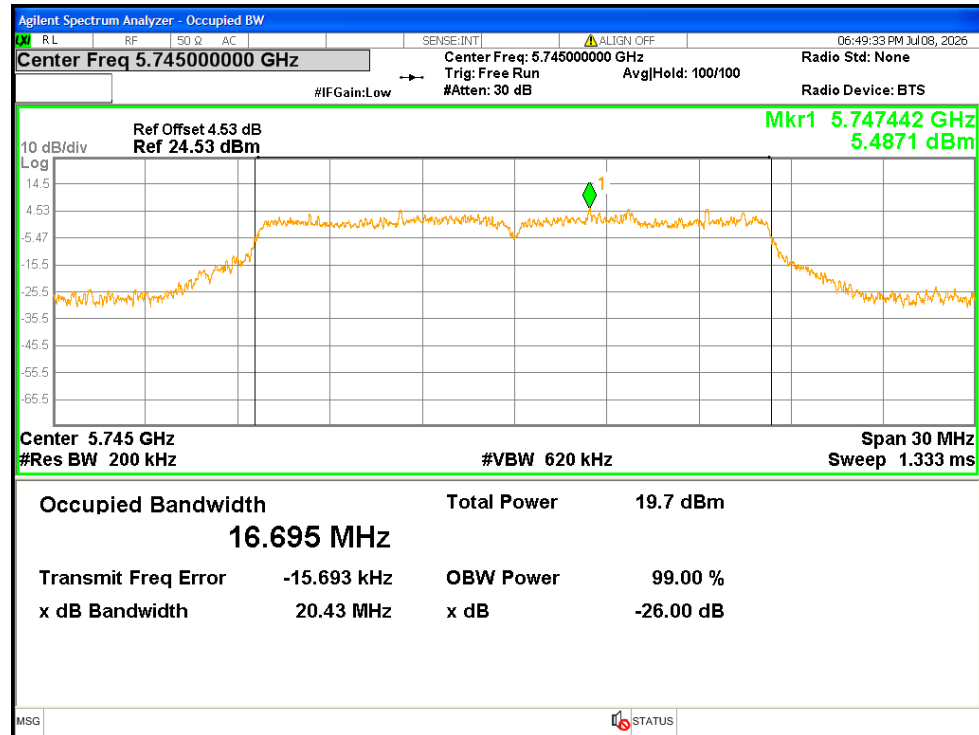


Occupied Channel Bandwidth

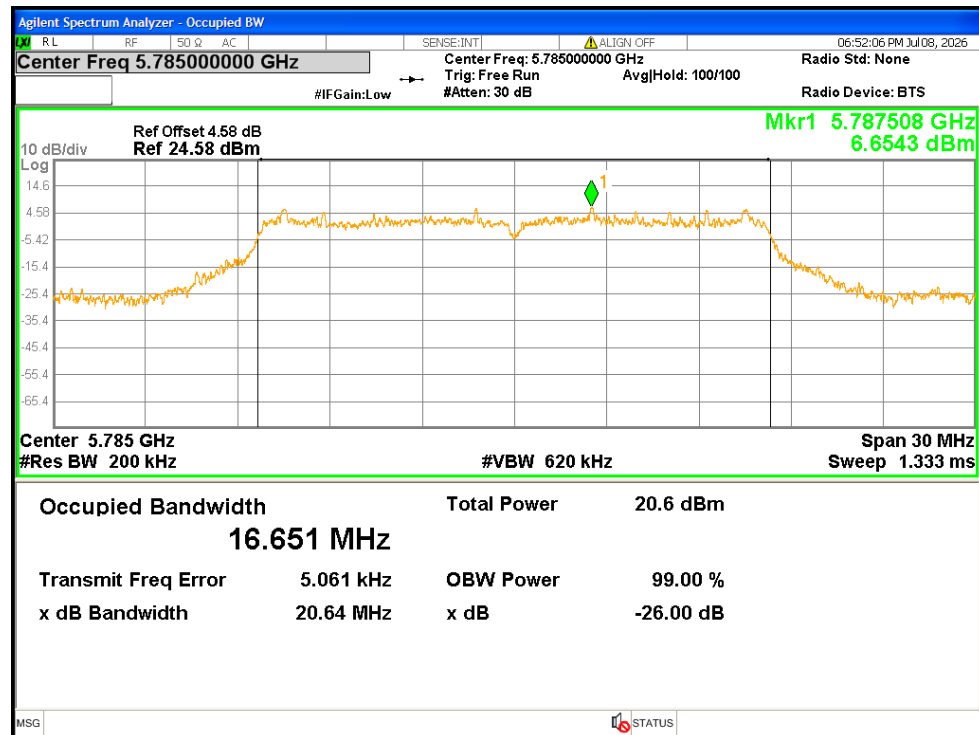
Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	a	5745	16.695
NVNT	a	5785	16.651
NVNT	a	5825	16.581
NVNT	n20	5745	17.701
NVNT	n20	5785	17.672
NVNT	n20	5825	17.546
NVNT	ac20	5745	17.684
NVNT	ac20	5785	17.655
NVNT	ac20	5825	17.577
NVNT	ax20	5745	18.805
NVNT	ax20	5785	18.787
NVNT	ax20	5825	18.692

Test Graphs

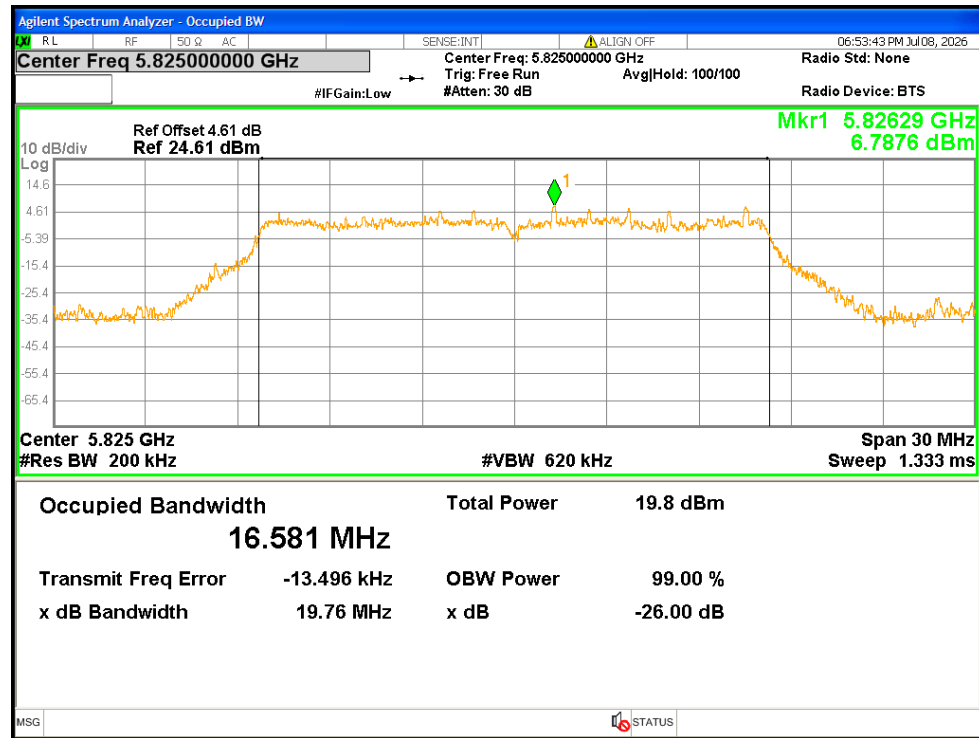
OBW NVNT a 5745MHz



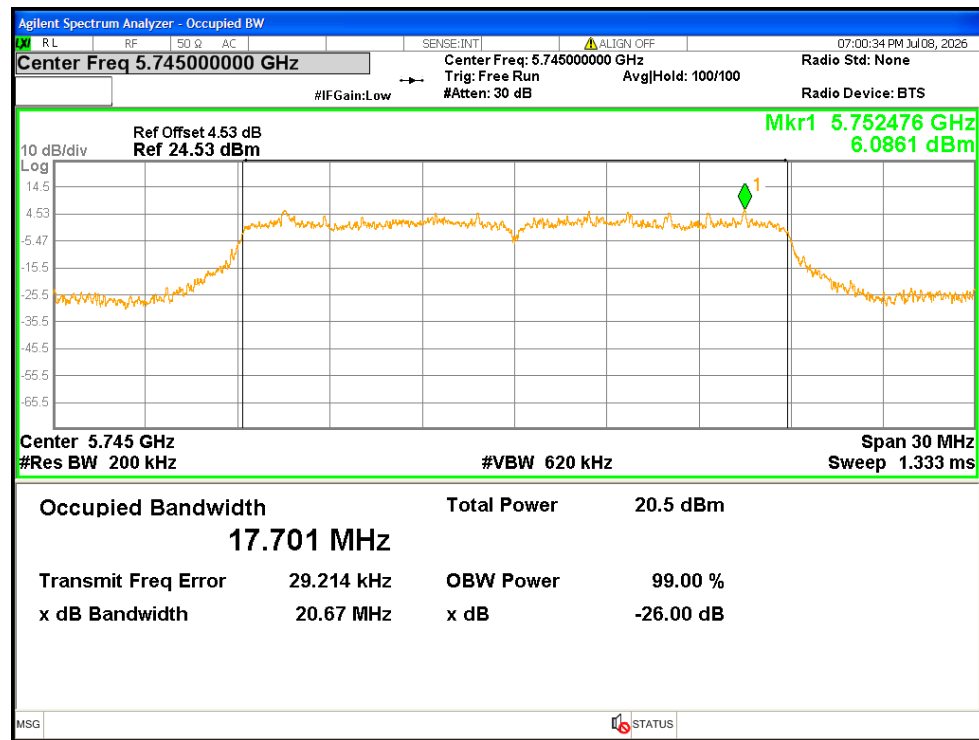
OBW NVNT a 5785MHz



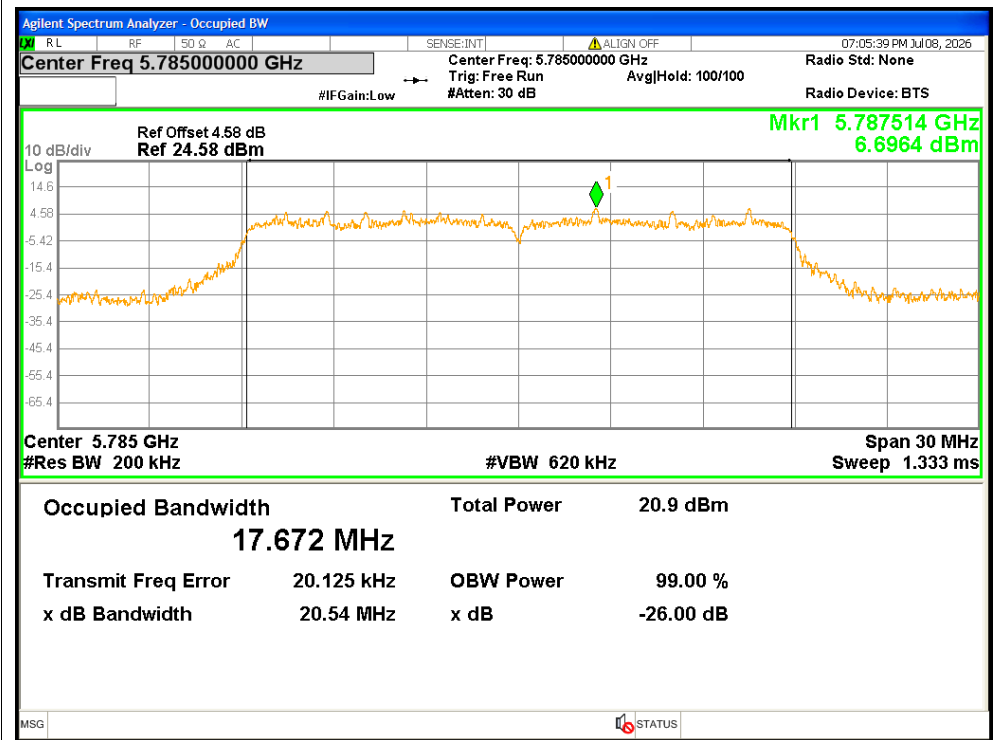
OBW NVNT a 5825MHz



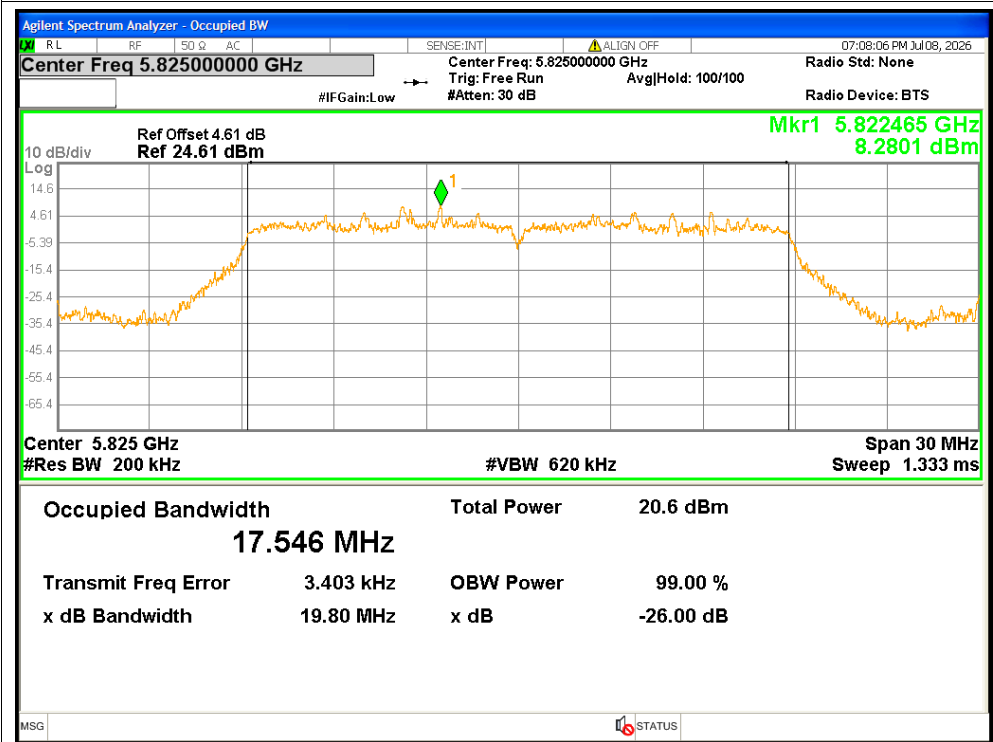
OBW NVNT n20 5745MHz



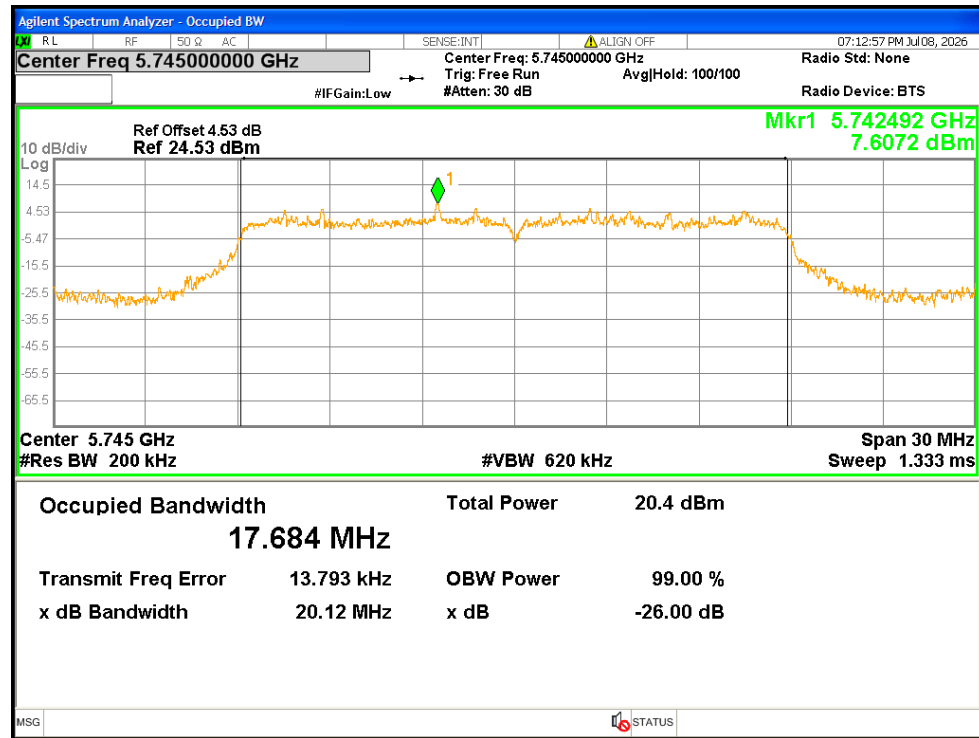
OBW NVNT n20 5785MHz



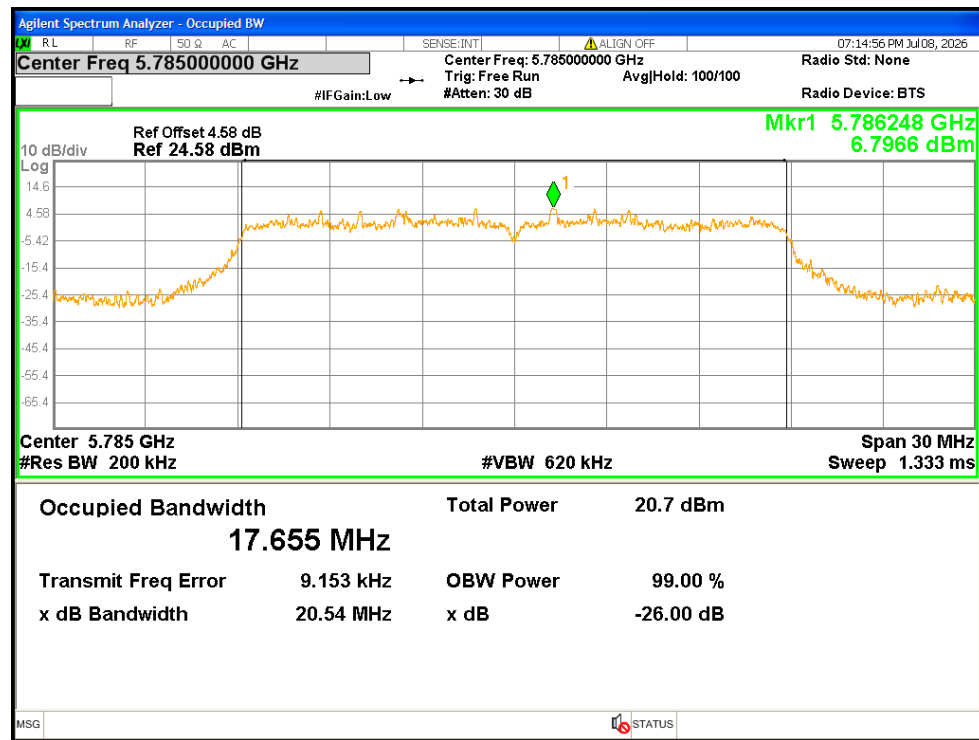
OBW NVNT n20 5825MHz



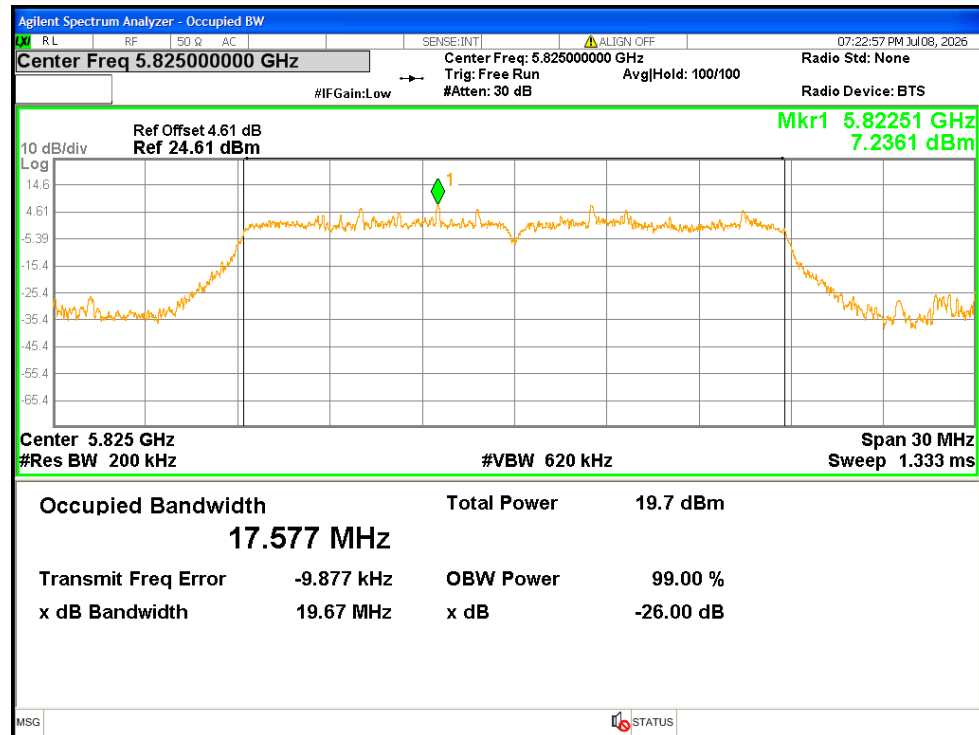
OBW NVNT ac20 5745MHz



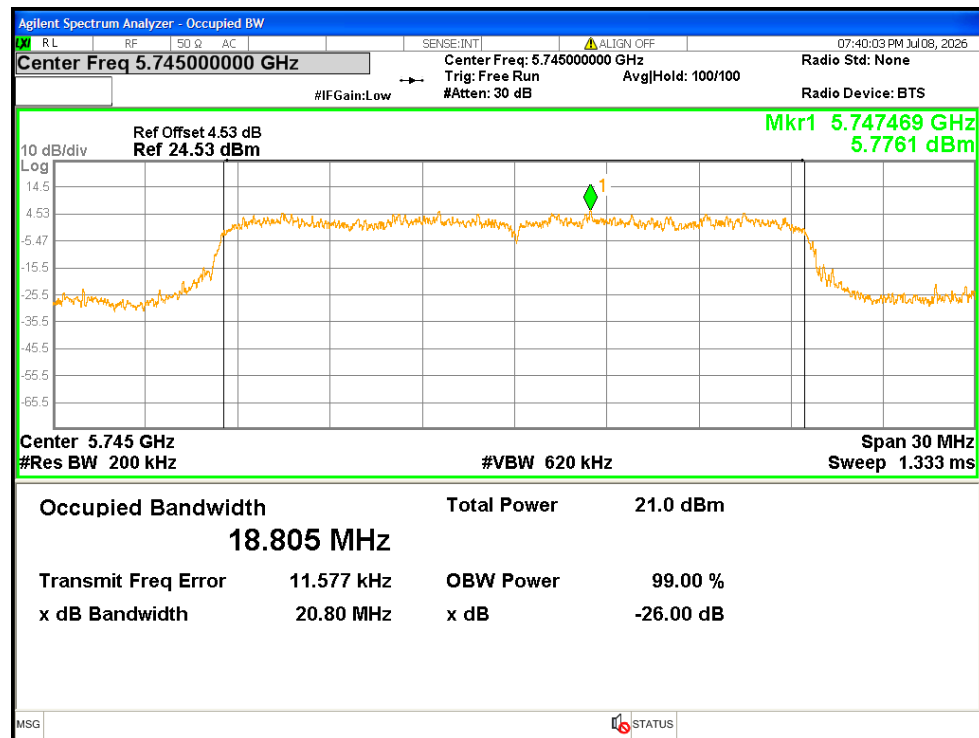
OBW NVNT ac20 5785MHz



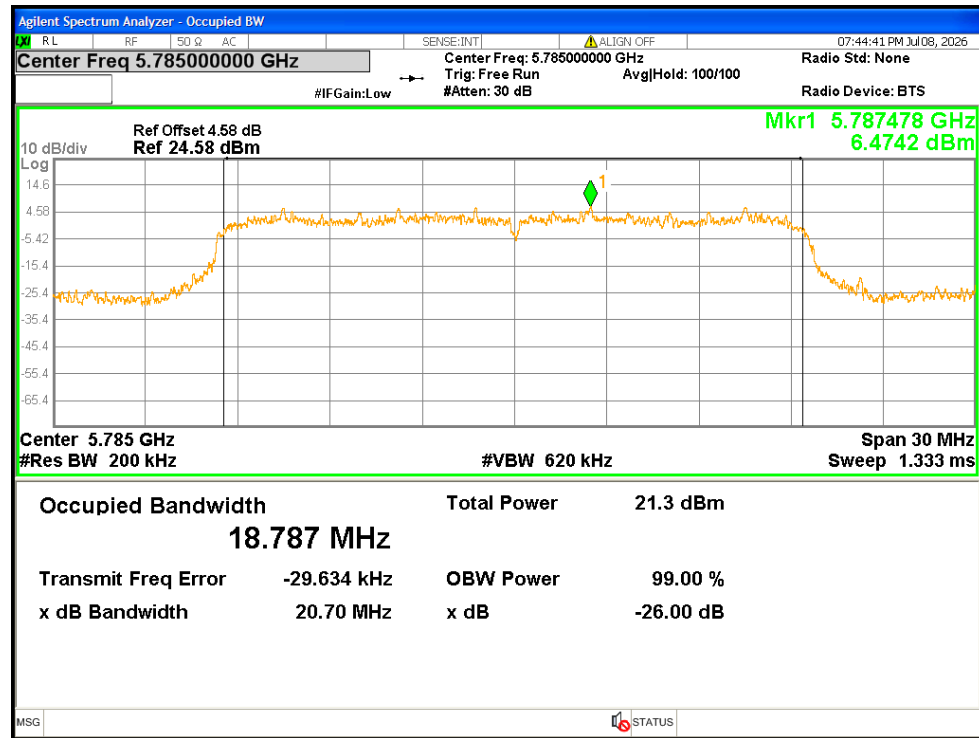
OBW NVNT ac20 5825MHz



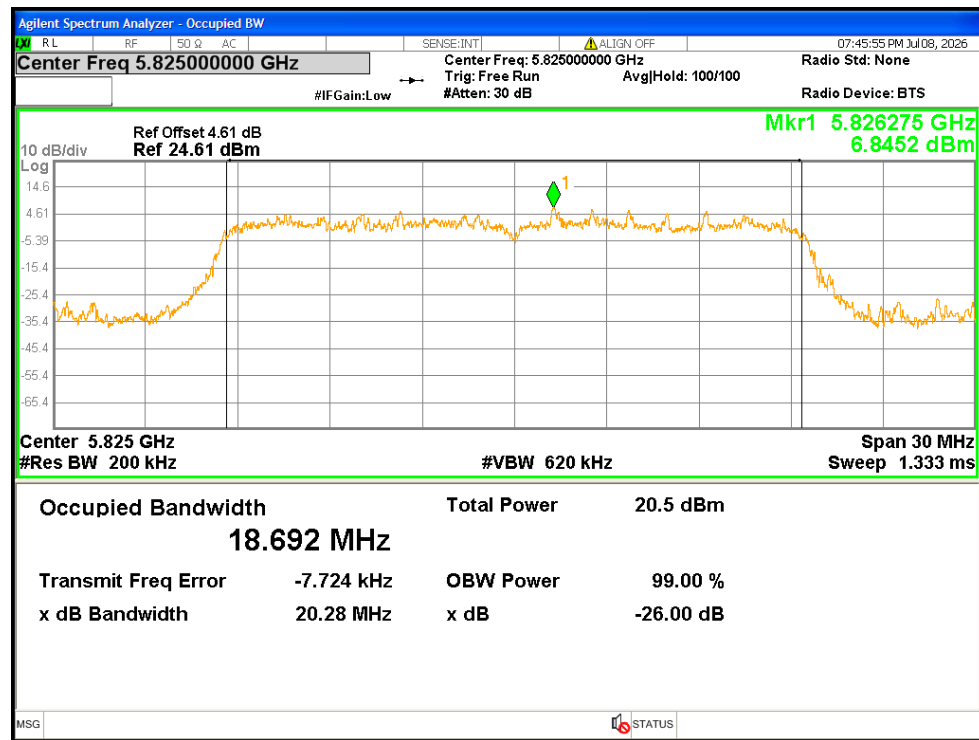
OBW NVNT ax20 5745MHz



OBW NVNT ax20 5785MHz



OBW NVNT ax20 5825MHz



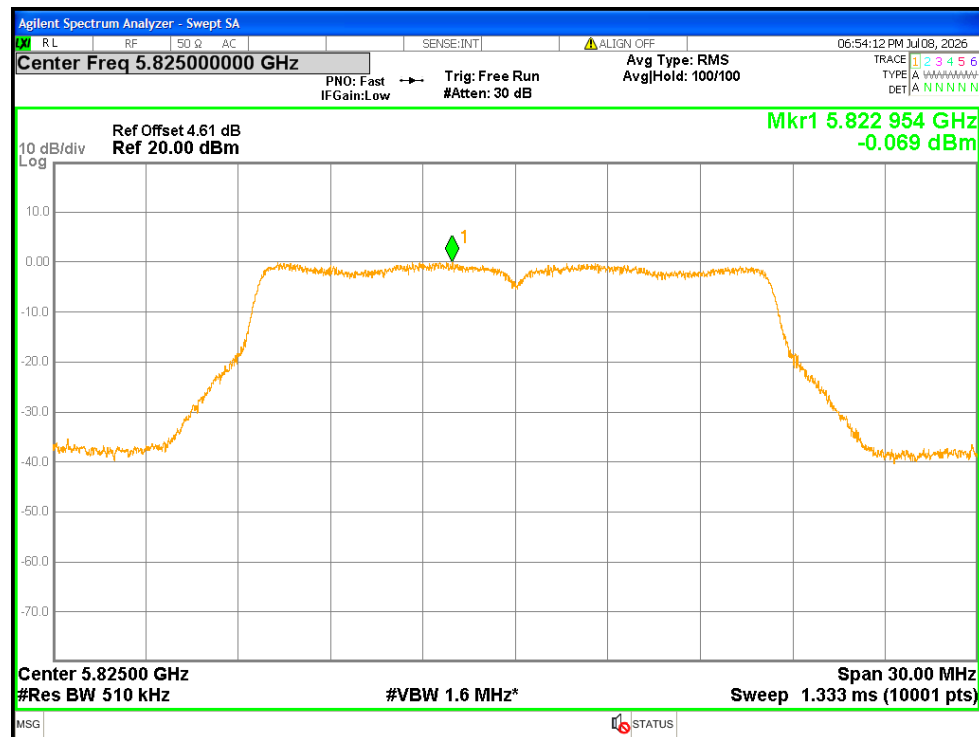
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/510kHz)	Duty Factor (dB)	RBW factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Verdict
NVNT	a	5745	0.449	0.05	0.09	0.409	<=30	Pass
NVNT	a	5785	0.991	0.05	0.09	0.951	<=30	Pass
NVNT	a	5825	-0.069	0.05	0.09	-0.109	<=30	Pass
NVNT	n20	5745	0.687	0.04	0.09	0.637	<=30	Pass
NVNT	n20	5785	0.921	0.05	0.09	0.881	<=30	Pass
NVNT	n20	5825	0.095	0.05	0.09	0.055	<=30	Pass
NVNT	ac20	5745	0.369	0.04	0.09	0.319	<=30	Pass
NVNT	ac20	5785	0.831	0.05	0.09	0.791	<=30	Pass
NVNT	ac20	5825	-0.176	0.04	0.09	-0.226	<=30	Pass
NVNT	ax20	5745	0.378	0.07	0.09	0.358	<=30	Pass
NVNT	ax20	5785	1.134	0.07	0.09	1.114	<=30	Pass
NVNT	ax20	5825	0.267	0.06	0.09	0.237	<=30	Pass

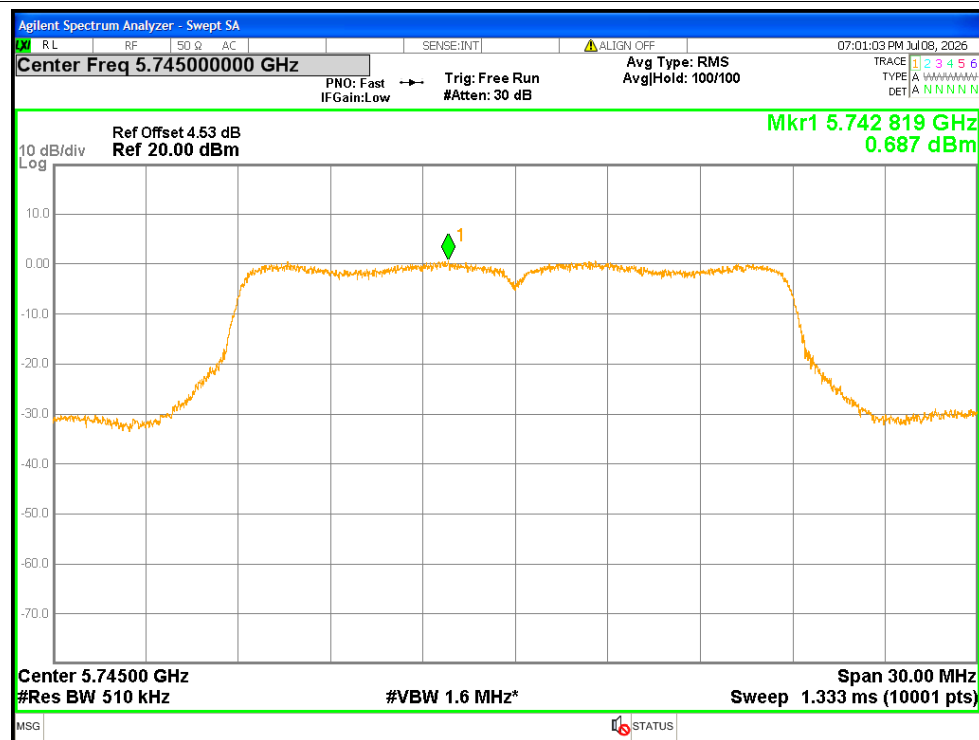
Total PSD (dBm/500kHz)= Conducted PSD (dBm/510kHz)- RBW Factor (dB)+Duty Factor (dB)

RBW factor = $10 \log (510 \text{ KHz} / 500 \text{ KHz}) = 0.09 \text{ dB}$

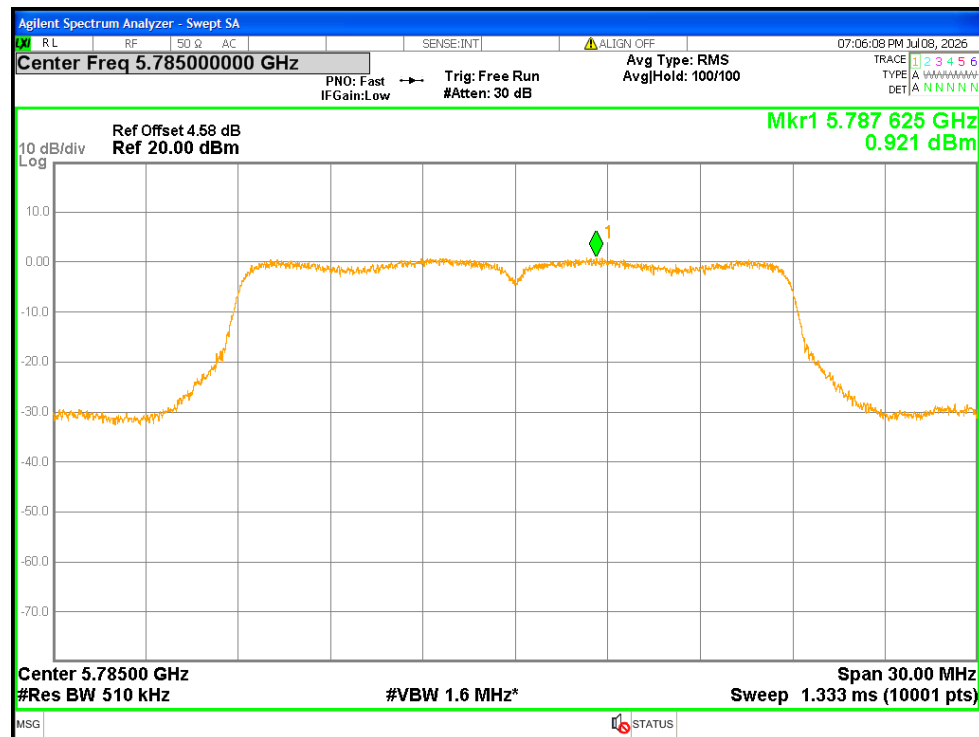
PSD NVNT a 5825MHz



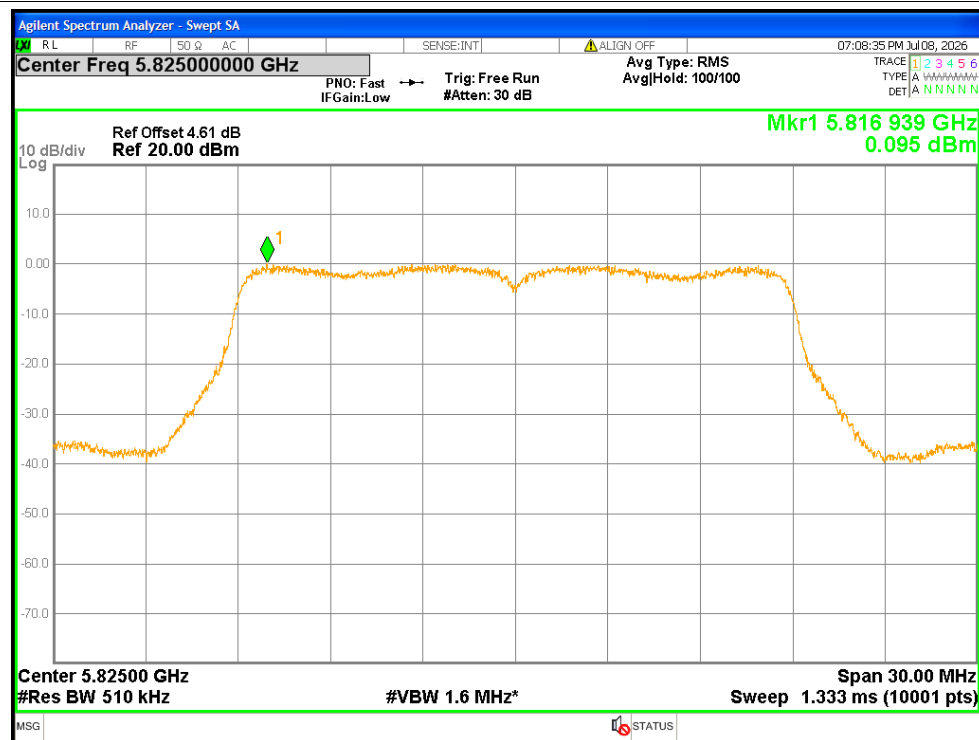
PSD NVNT n20 5745MHz



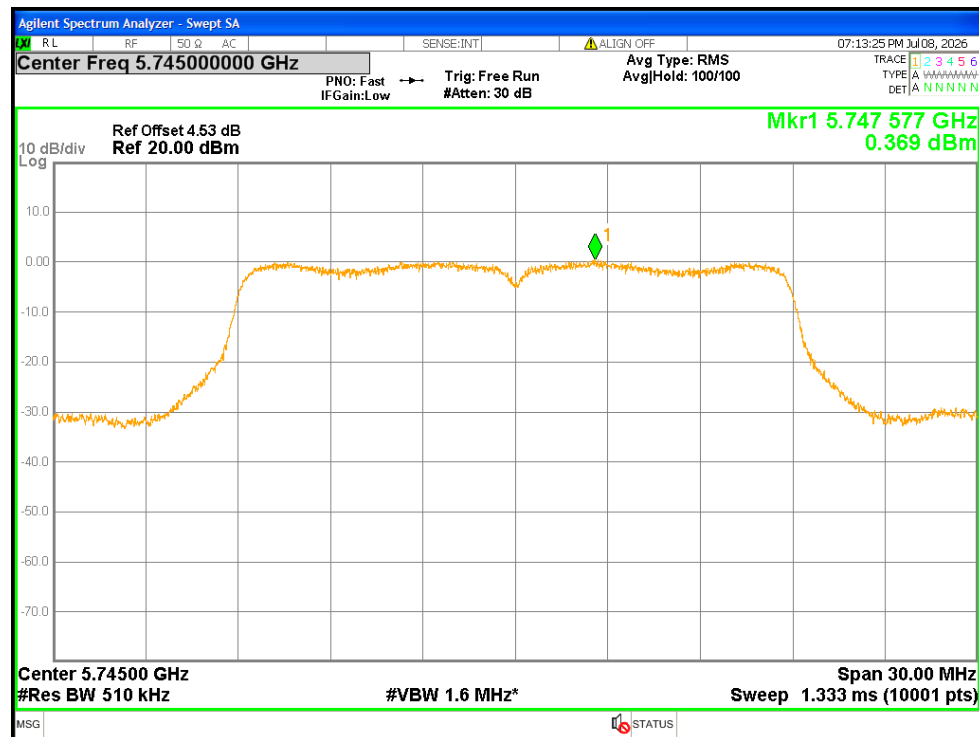
PSD NVNT n20 5785MHz



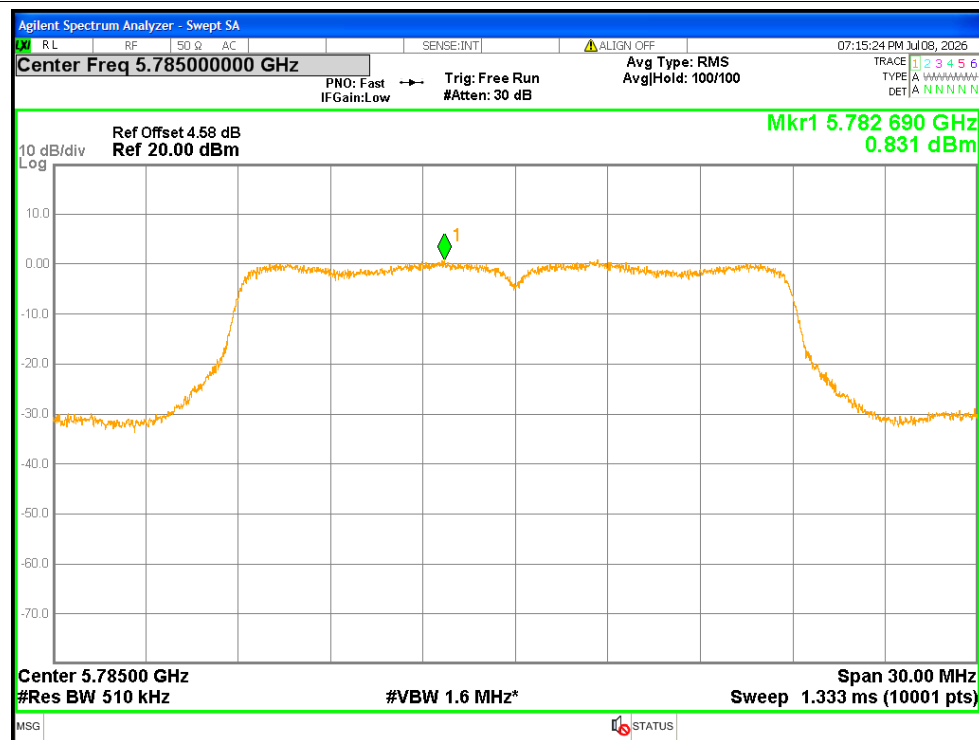
PSD NVNT n20 5825MHz



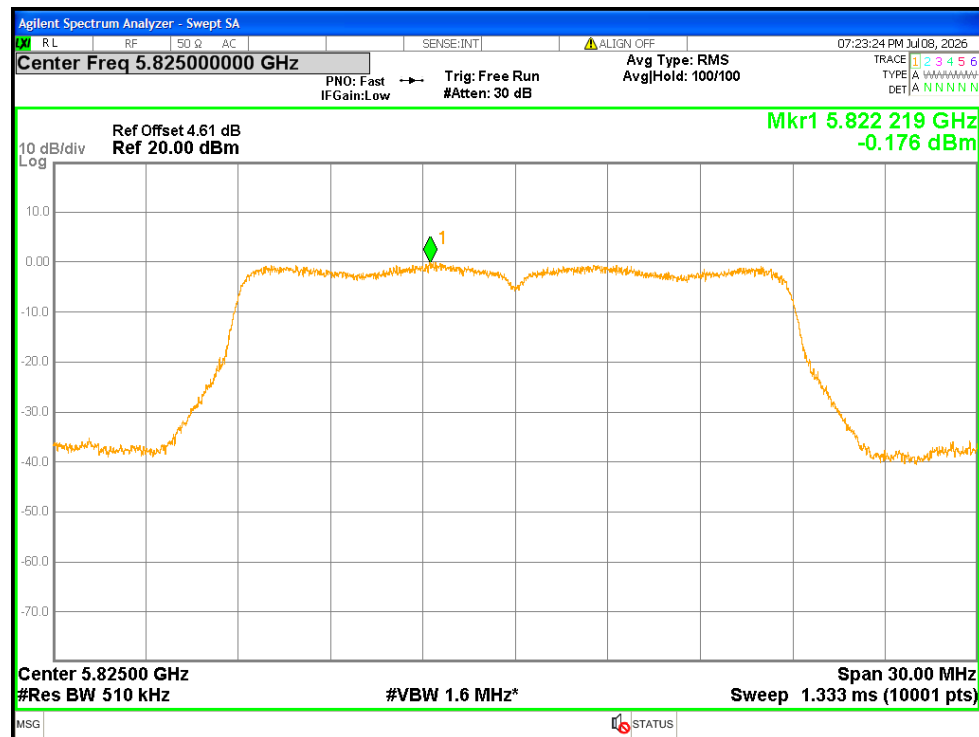
PSD NVNT ac20 5745MHz



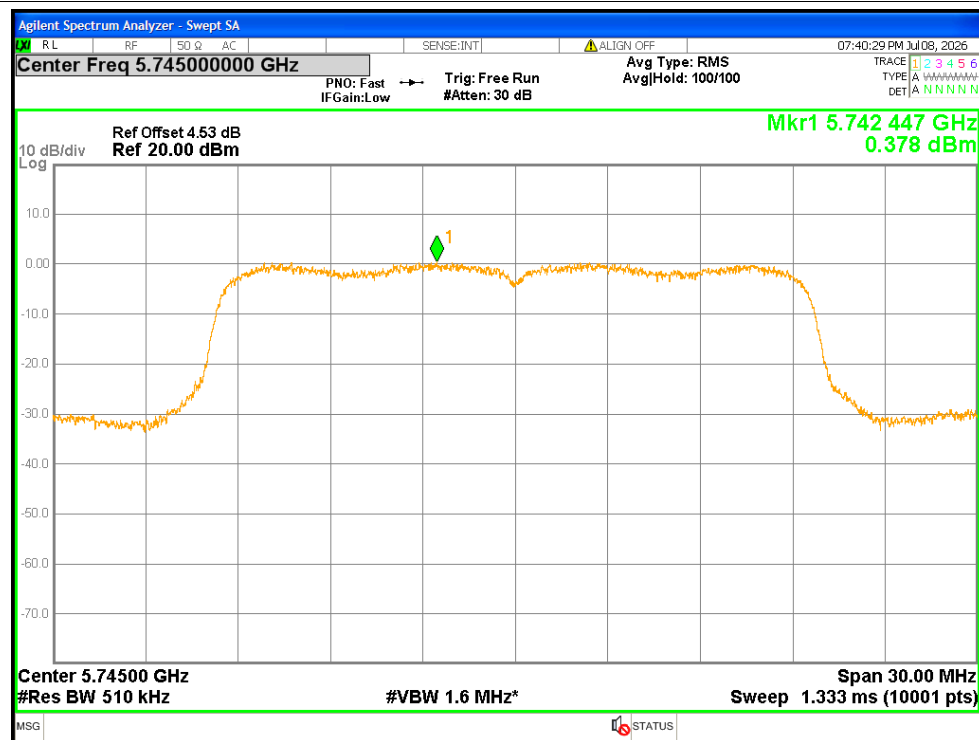
PSD NVNT ac20 5785MHz



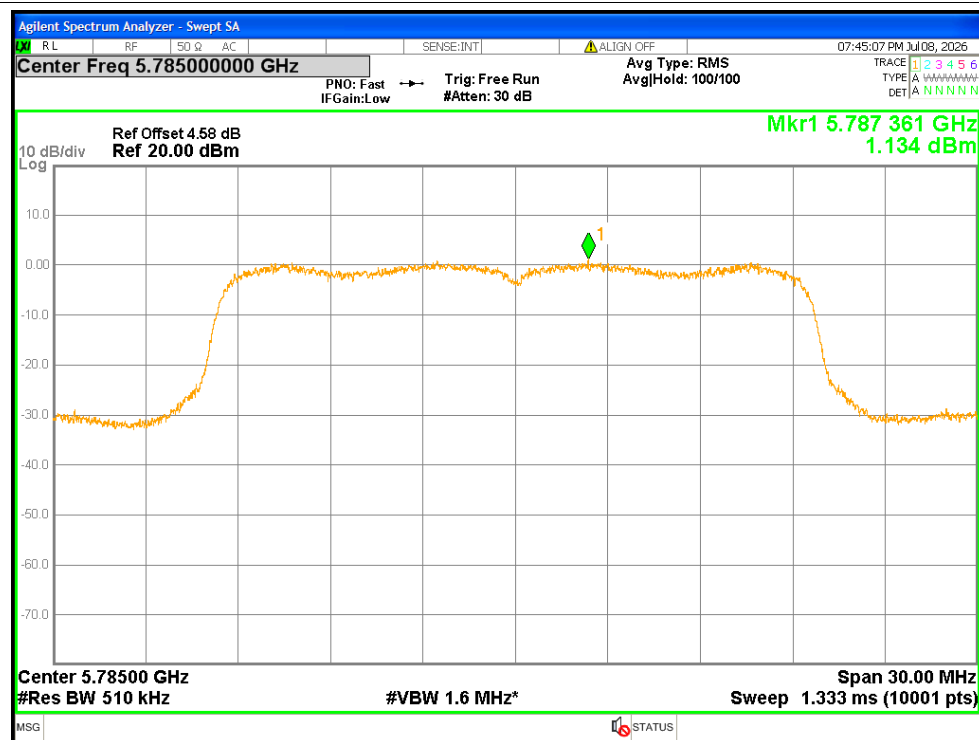
PSD NVNT ac20 5825MHz



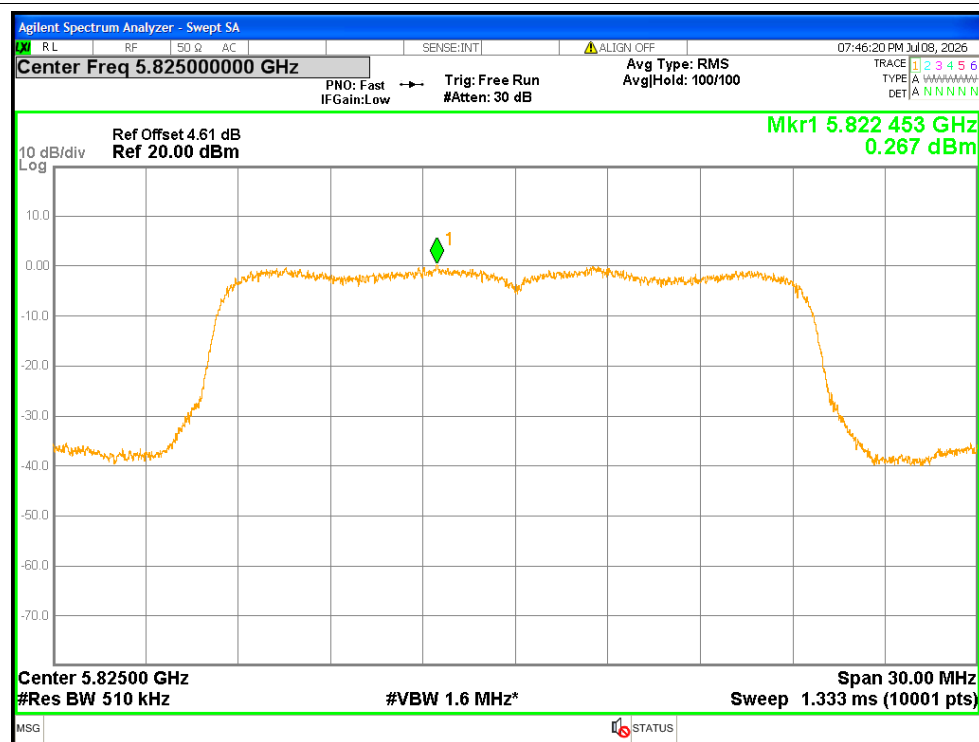
PSD NVNT ax20 5745MHz



PSD NVNT ax20 5785MHz



PSD NVNT ax20 5825MHz

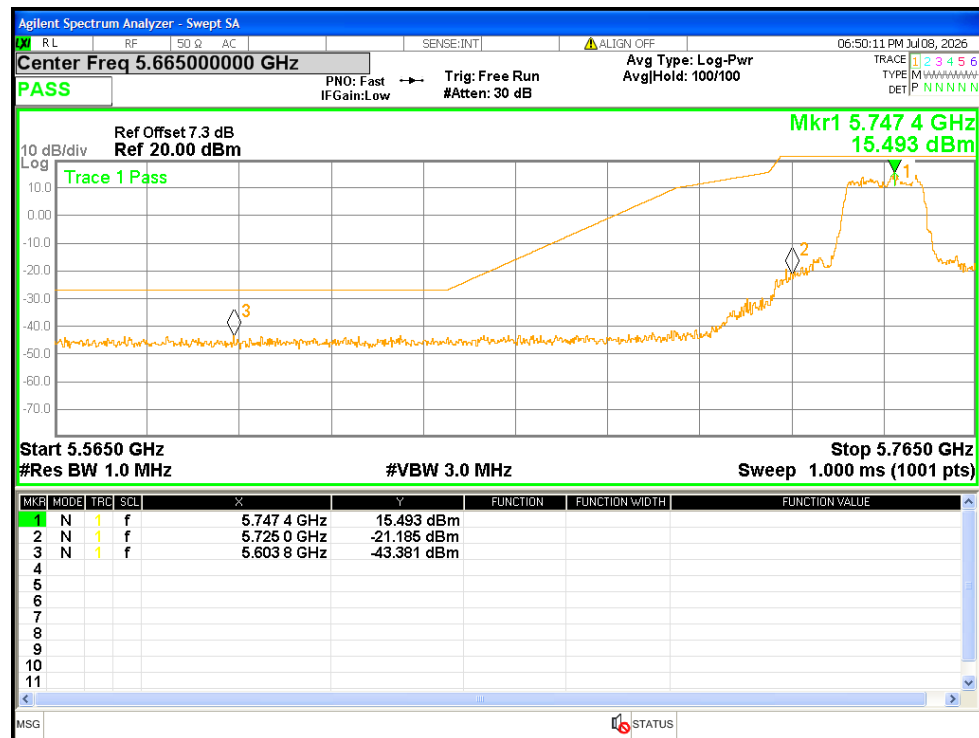


Band Edge

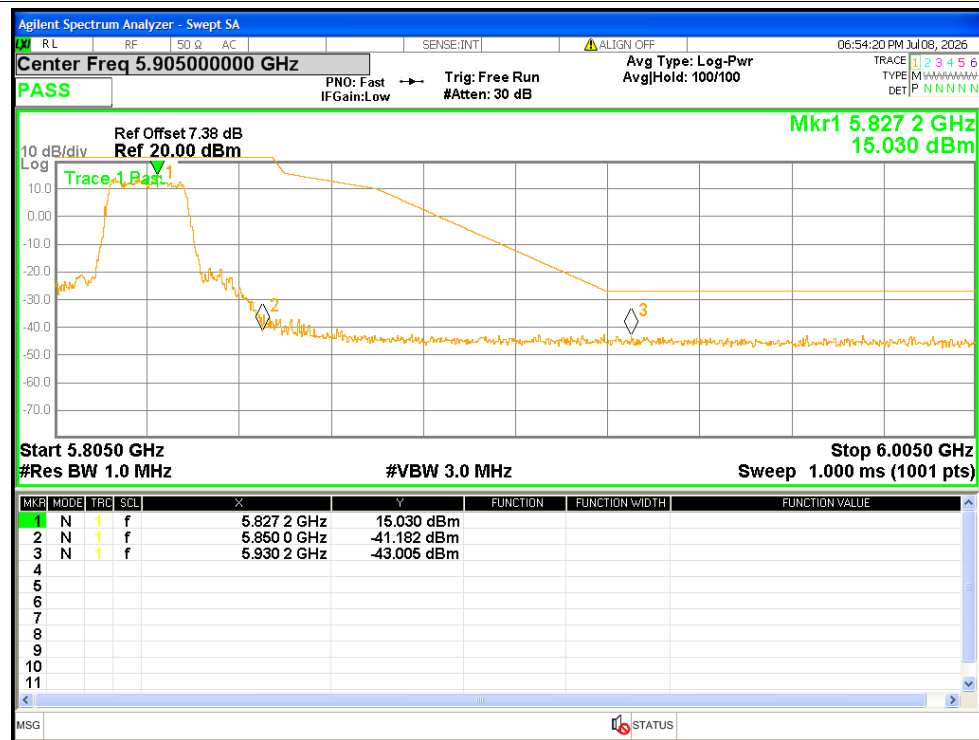
Condition	Mode	Frequency (MHz)	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	-43.38	-27	Pass
NVNT	a	5825	-43	-27	Pass
NVNT	n20	5745	-43.29	-27	Pass
NVNT	n20	5825	-42.25	-27	Pass
NVNT	ac20	5745	-43.59	-27	Pass
NVNT	ac20	5825	-42.82	-27	Pass
NVNT	ax20	5745	-43.29	-27	Pass
NVNT	ax20	5825	-42.76	-27	Pass

Test Graphs

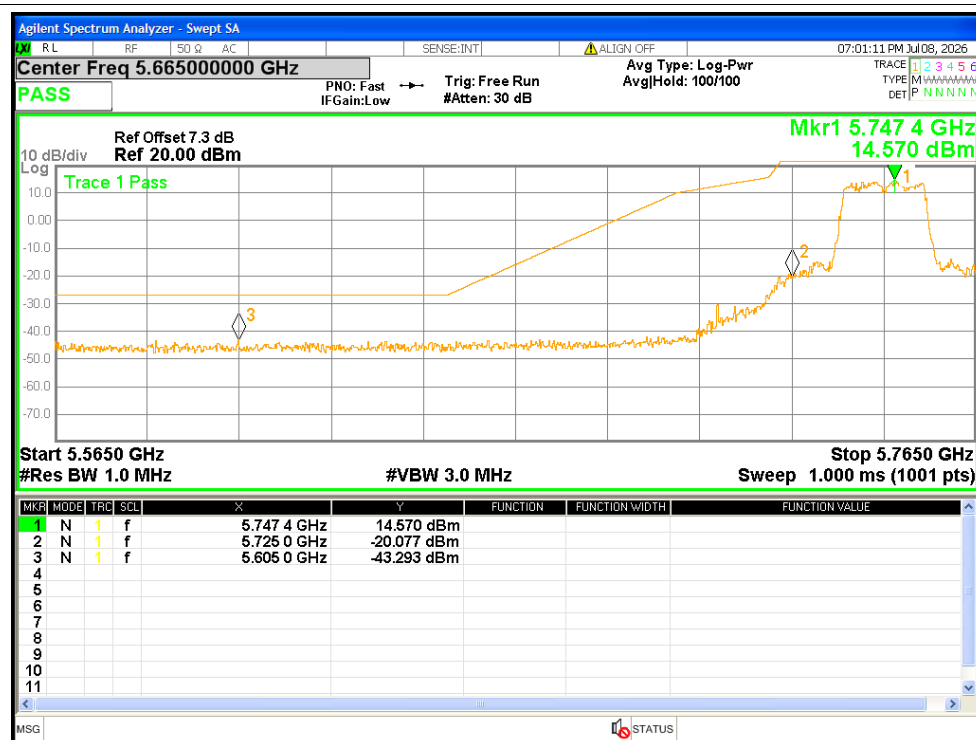
Band Edge NVNT a 5745MHz Low



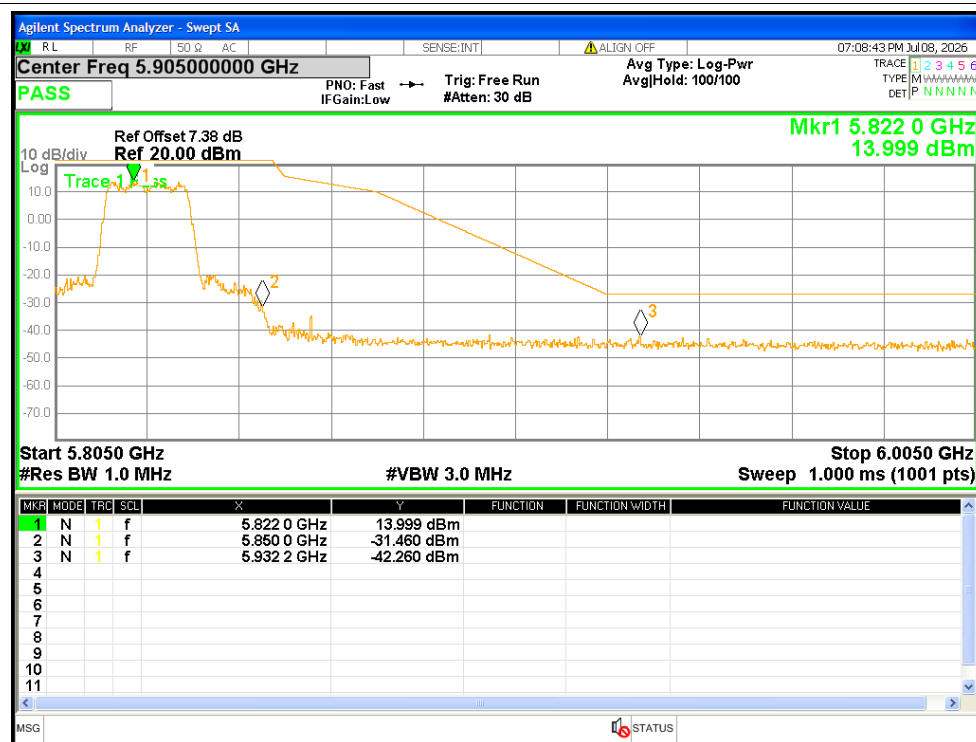
Band Edge NVNT a 5825MHz High



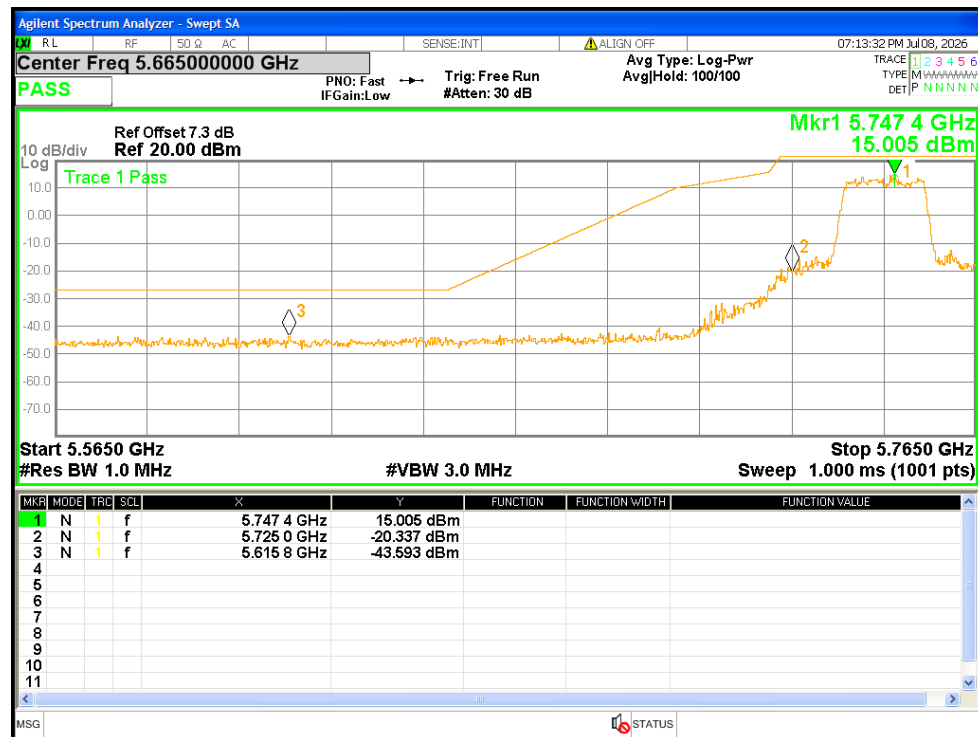
Band Edge NVNT n20 5745MHz Low



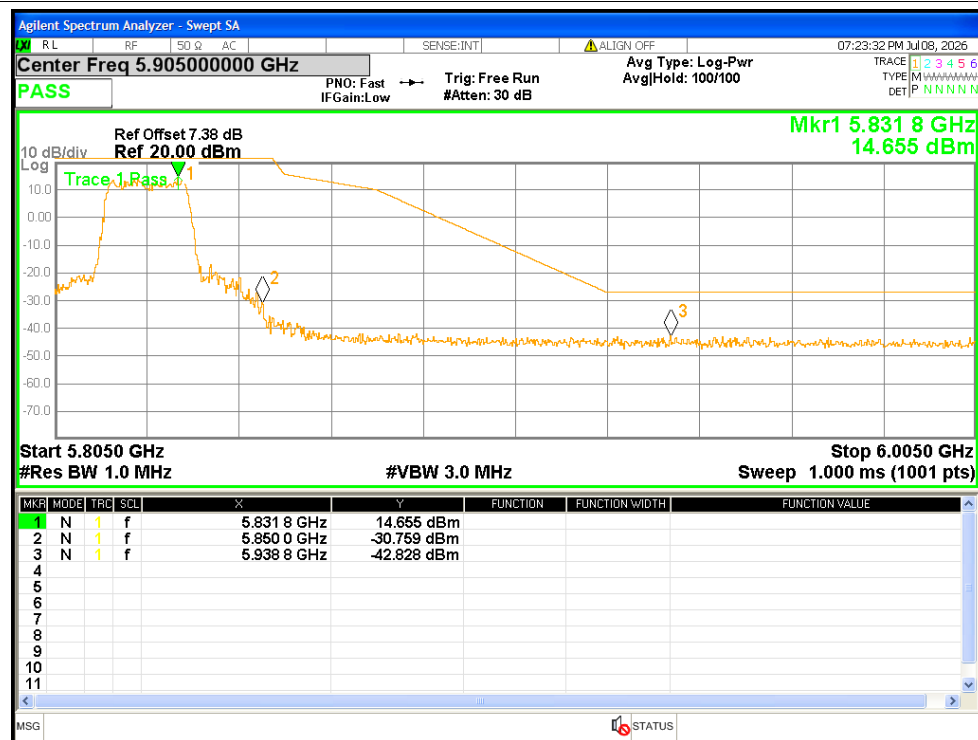
Band Edge NVNT n20 5825MHz High



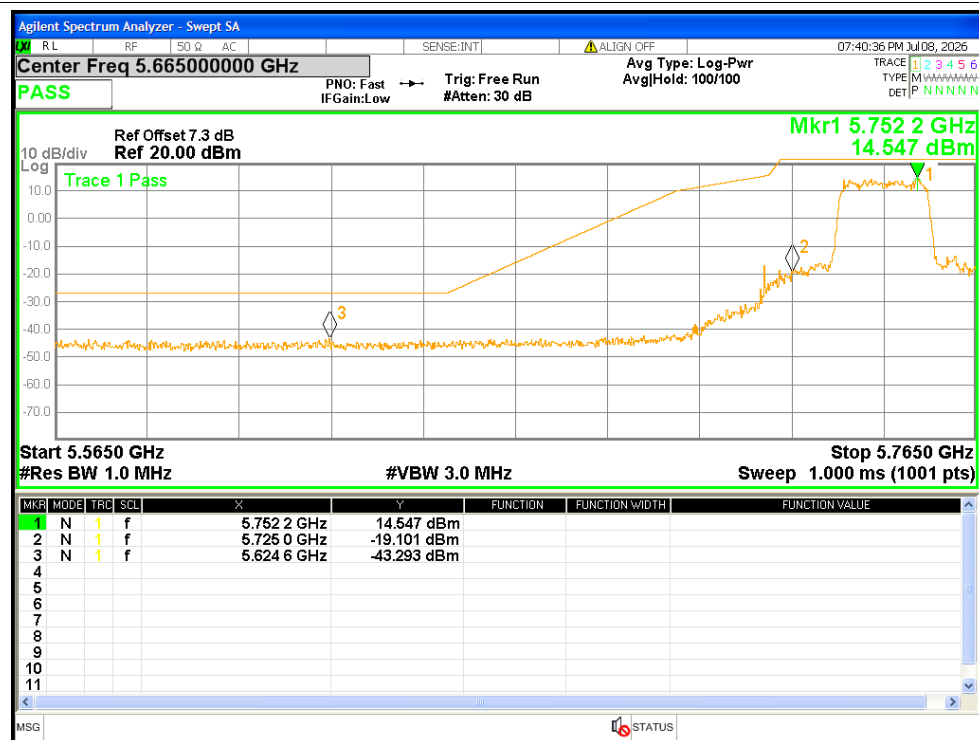
Band Edge NVNT ac20 5745MHz Low



Band Edge NVNT ac20 5825MHz High



Band Edge NVNT ax20 5745MHz Low



Band Edge NVNT ax20 5825MHz High

