Appendix B for 5.8GWIFI Test Data

Product Name: PCBA

Test Model: Optimus-C-8000

Environmental Conditions

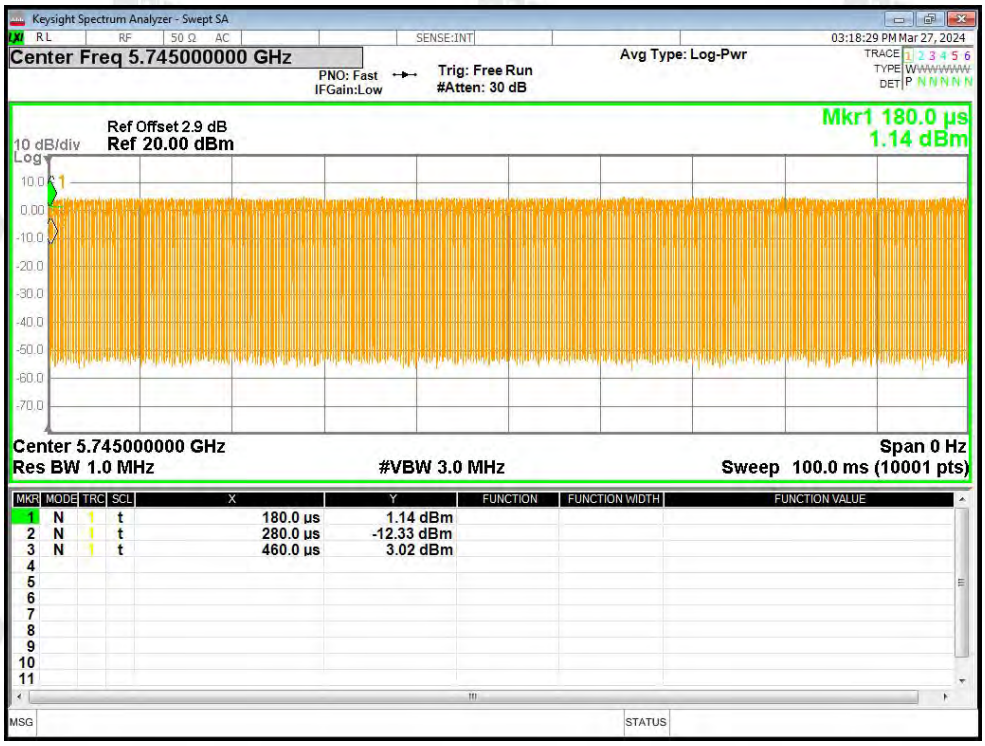
Temperature:	23.8℃
Relative Humidity:	52%
ATM Pressure:	101.0 kPa
Test Engineer:	Leon Li
Supervised by:	Baret Wu

B1. Duty Cycle

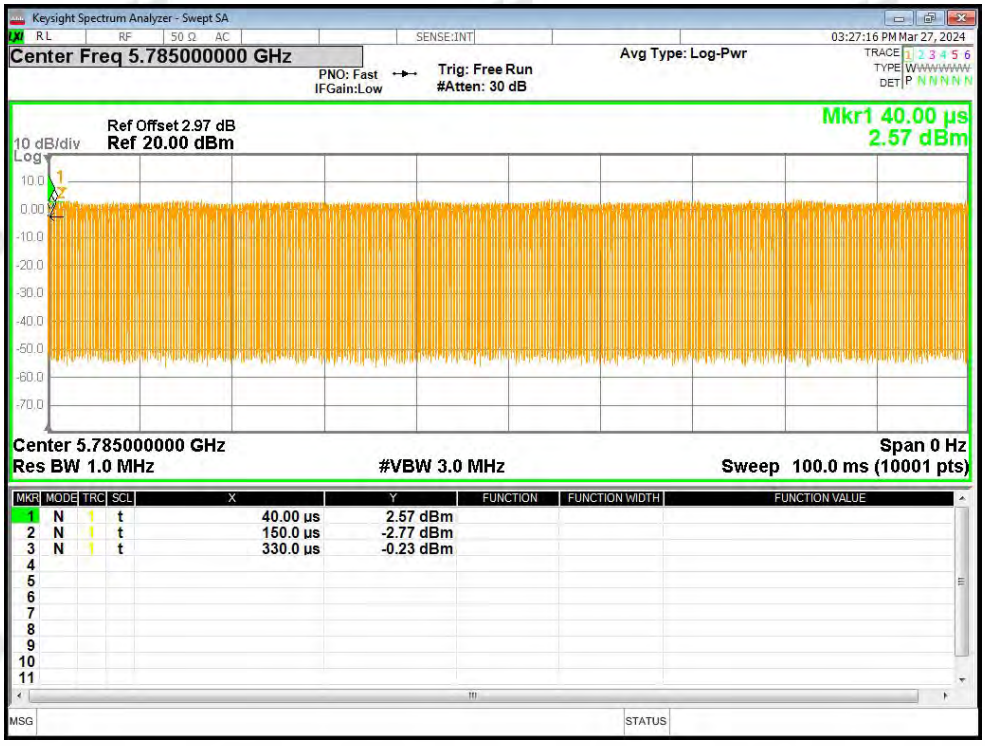
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5745	Ant1	64.29	1.92	5.56
NVNT	a	5785	Ant1	62.07	2.07	5.56
NVNT	a	5825	Ant1	64.29	1.92	5.56
NVNT	n20	5745	Ant1	69.7	1.57	4.35
NVNT	n20	5785	Ant1	69.7	1.57	4.35
NVNT	n20	5825	Ant1	69.7	1.57	4.35
NVNT	n40	5755	Ant1	56.52	2.48	7.69
NVNT	n40	5795	Ant1	52.17	2.83	8.33
NVNT	ac20	5745	Ant1	60	2.22	6.67
NVNT	ac20	5785	Ant1	57.69	2.39	6.67
NVNT	ac20	5825	Ant1	60	2.22	6.67
NVNT	ac40	5755	Ant1	75	1.25	16.67
NVNT	ac40	5795	Ant1	42.11	3.76	12.5
NVNT	ac80	5775	Ant1	23.53	6.28	25

Test Graphs

Duty Cycle NVNT a 5745MHz Ant1

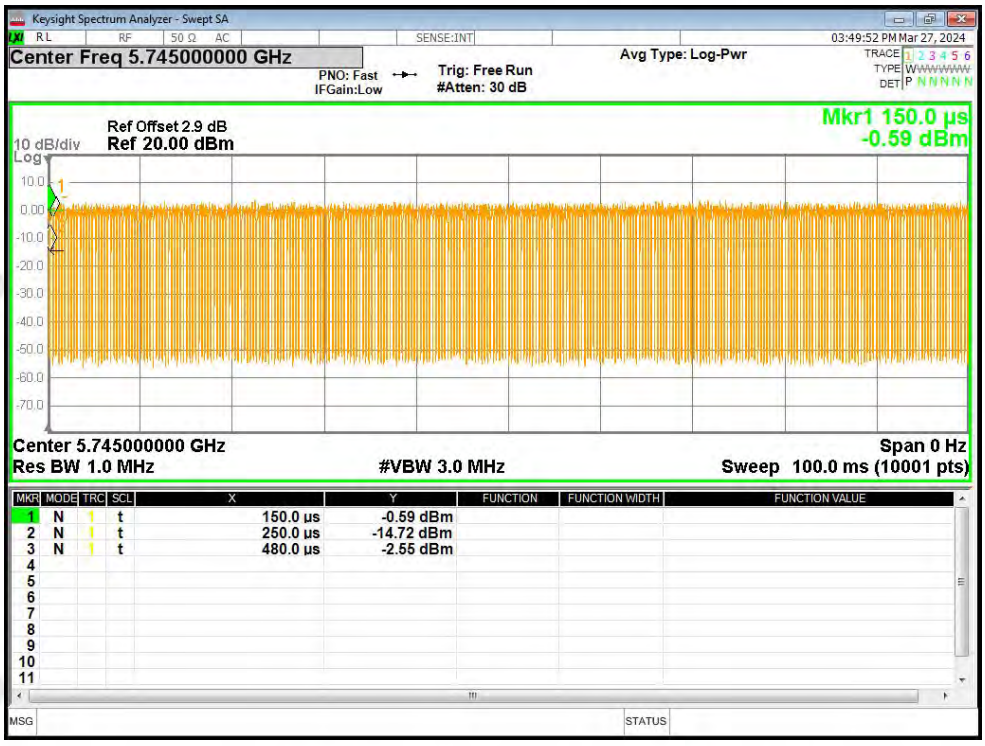


Duty Cycle NVNT a 5785MHz Ant1

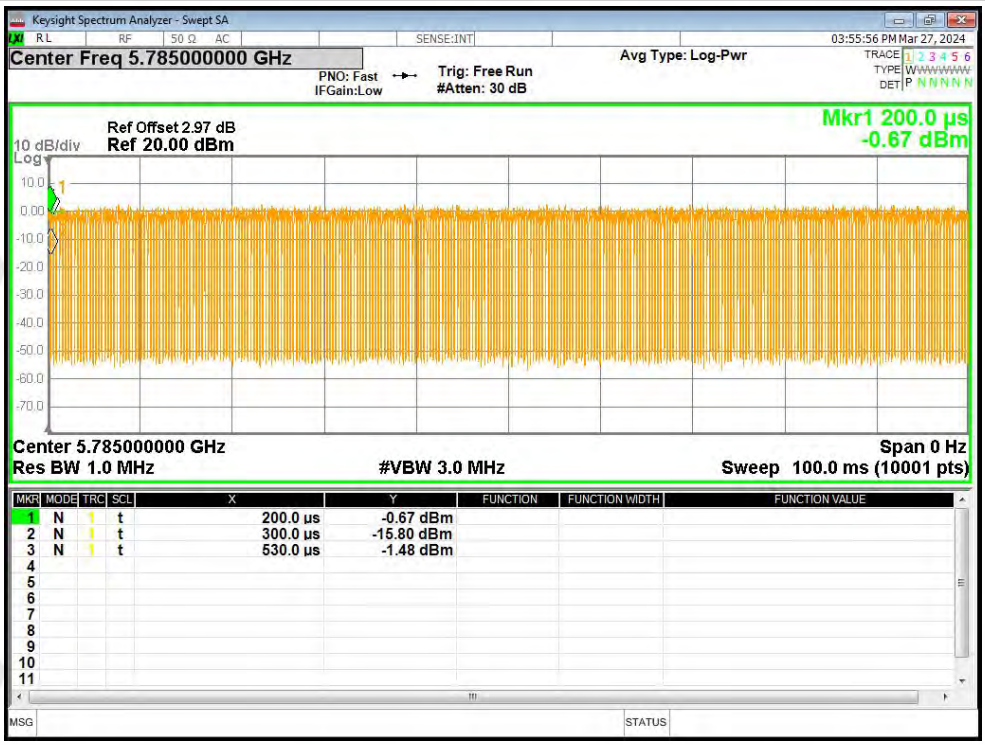


Duty Cycle NVNT a 5825MHz Ant1

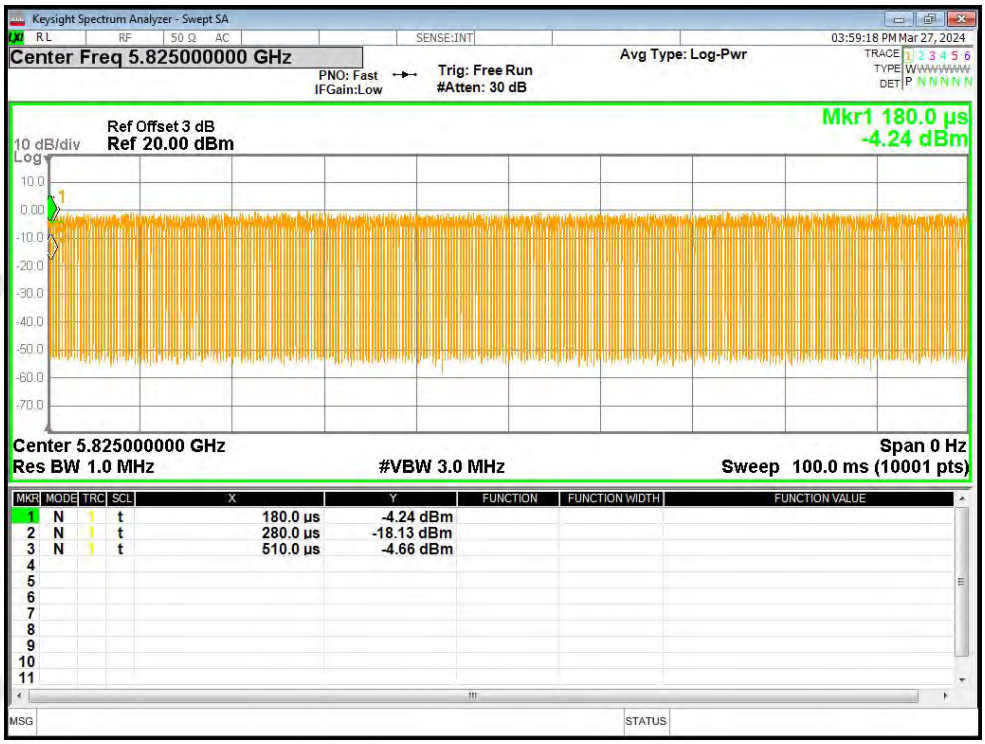
Duty Cycle NVNT n20 5745MHz Ant1



Duty Cycle NVNT n20 5785MHz Ant1

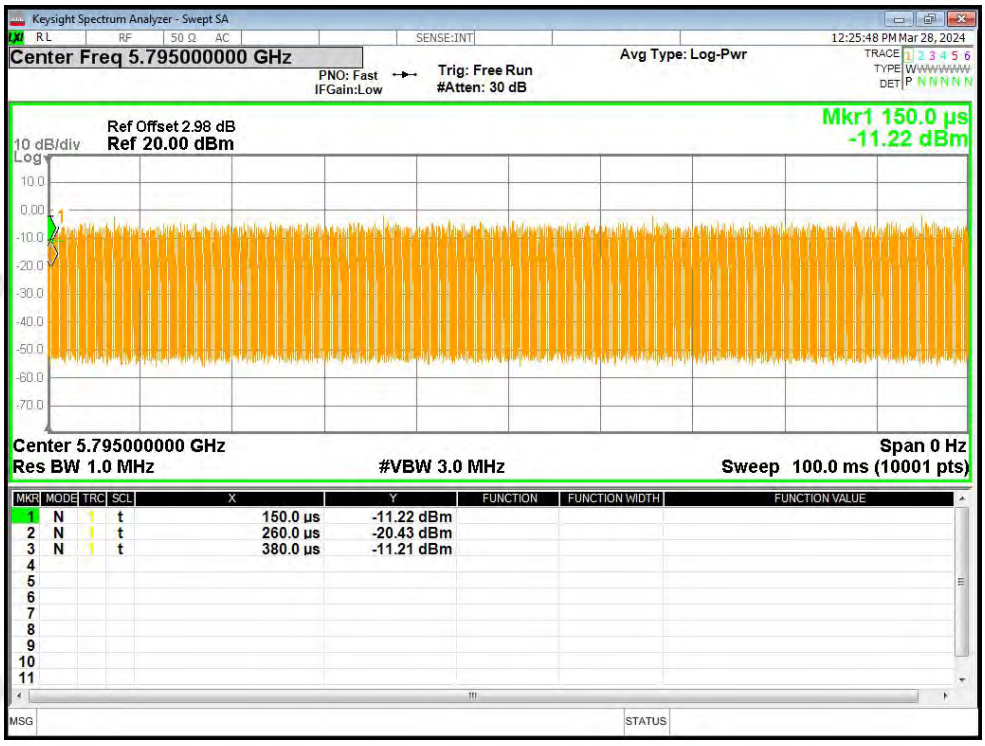


Duty Cycle NVNT n20 5825MHz Ant1



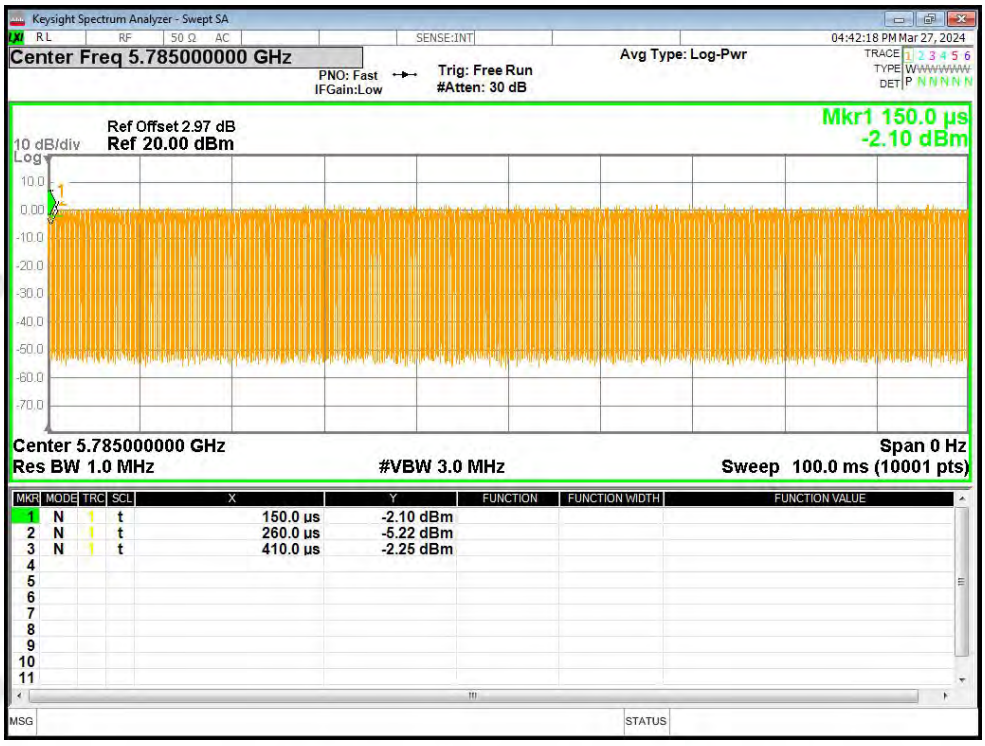
Duty Cycle NVNT n40 5755MHz Ant1

Duty Cycle NVNT n40 5795MHz Ant1

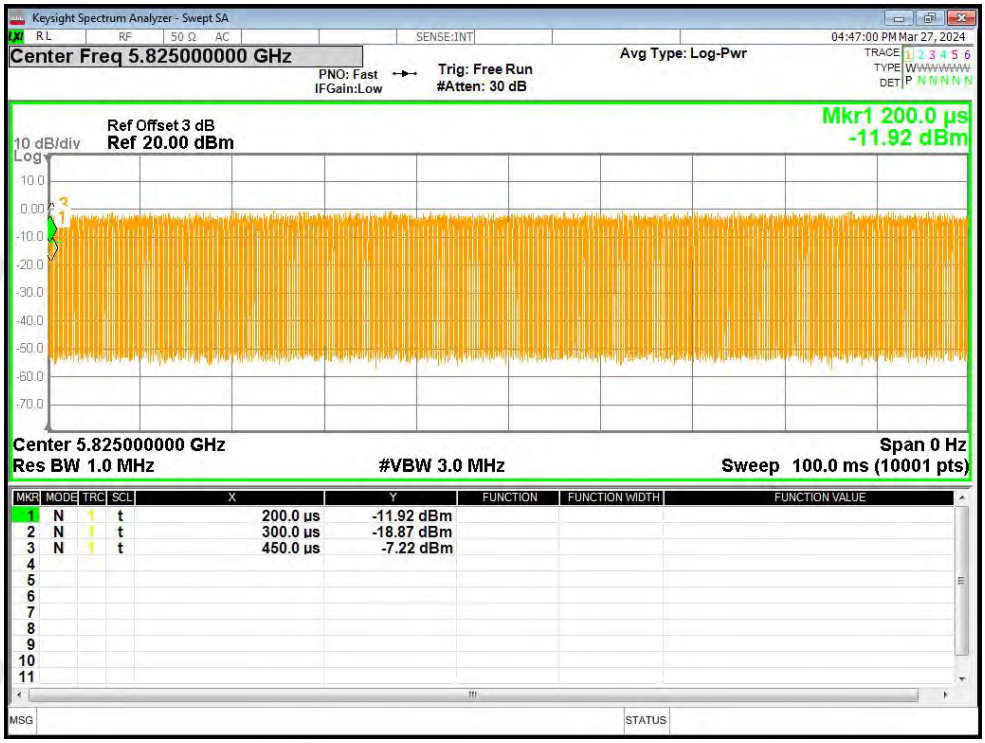


Duty Cycle NVNT ac20 5745MHz Ant1

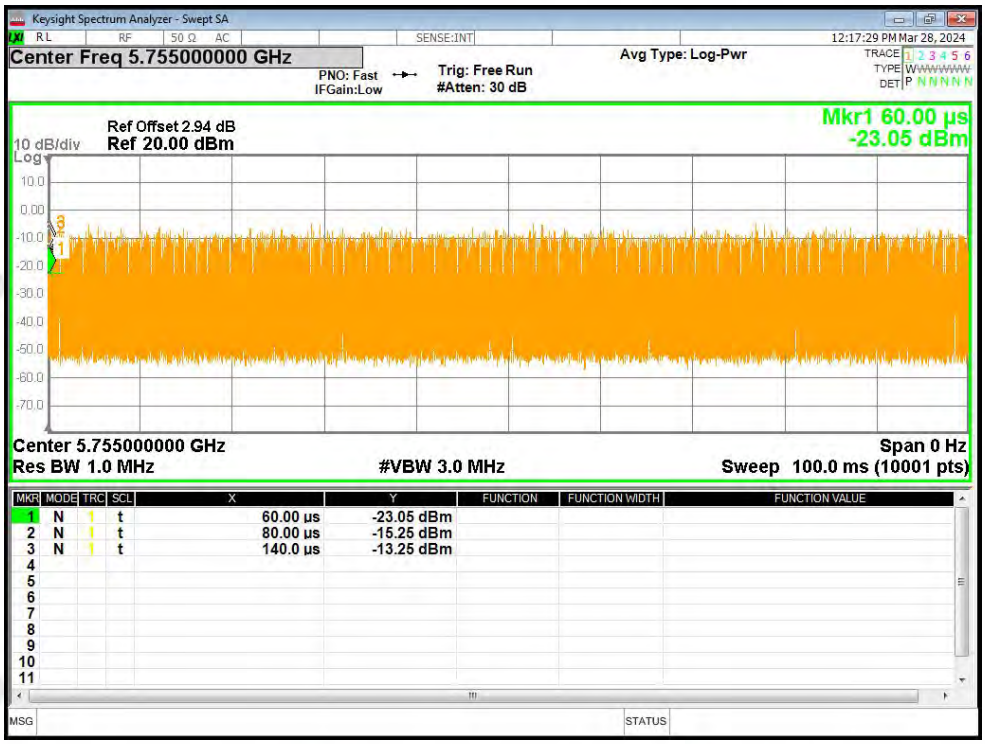
Duty Cycle NVNT ac20 5785MHz Ant1



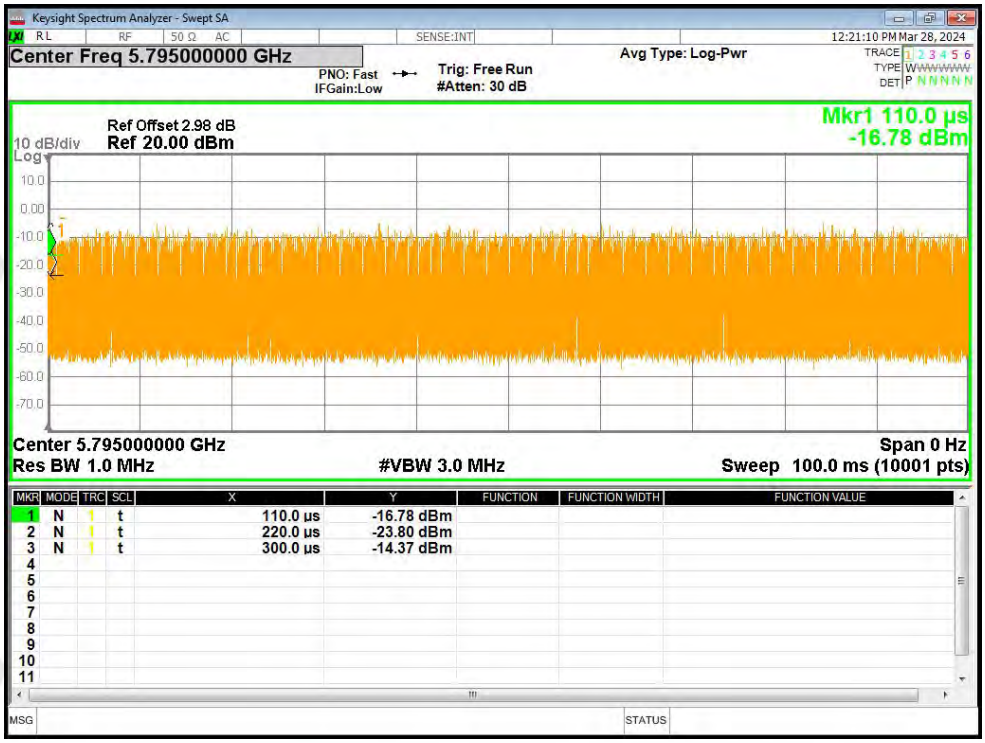
Duty Cycle NVNT ac20 5825MHz Ant1



Duty Cycle NVNT ac40 5755MHz Ant1



Duty Cycle NVNT ac40 5795MHz Ant1



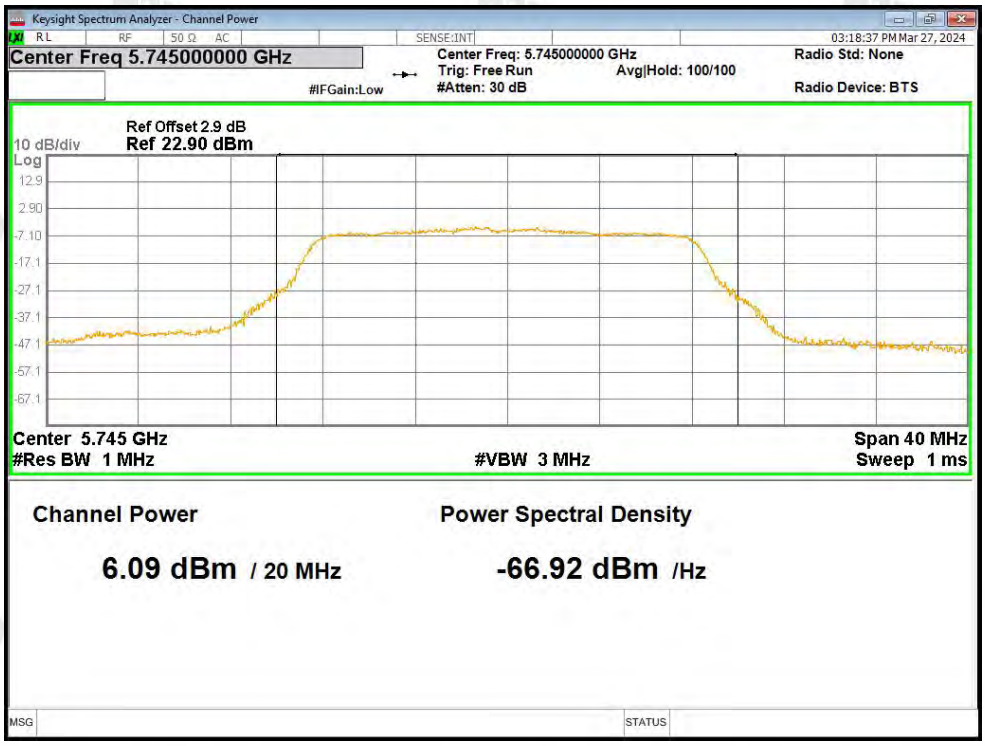
Duty Cycle NVNT ac80 5775MHz Ant1

B2. Maximum Conducted Output Power

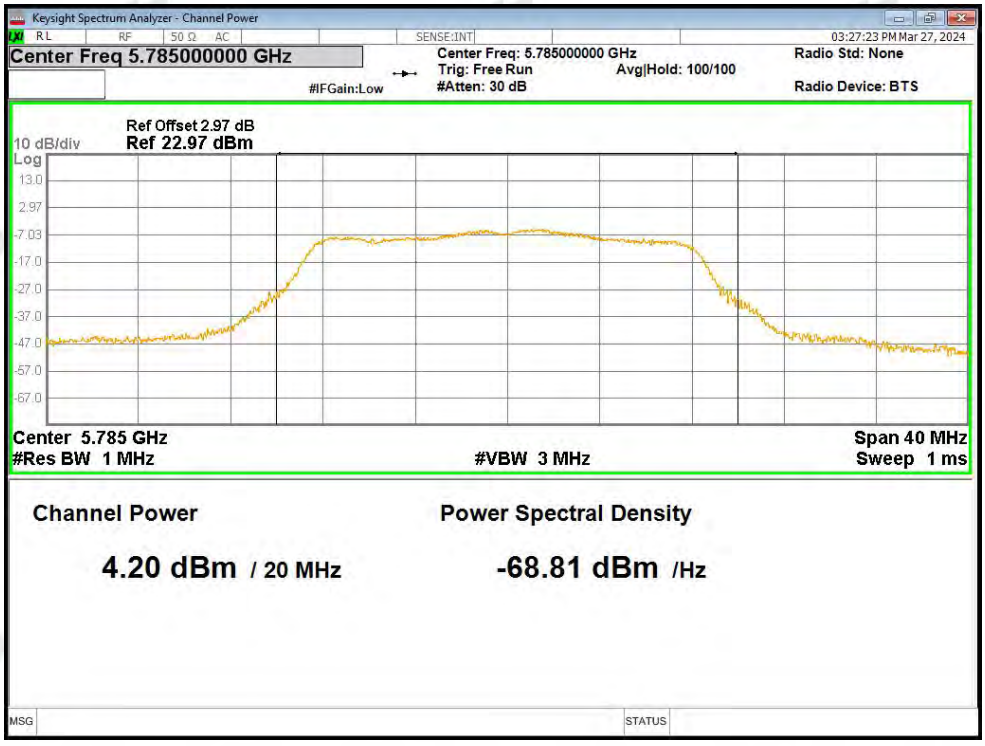
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	6.09	1.92	8.01	30	Pass
NVNT	a	5785	Ant1	4.2	2.07	6.27	30	Pass
NVNT	a	5825	Ant1	1.9	1.92	3.82	30	Pass
NVNT	n20	5745	Ant1	3.93	1.57	5.5	30	Pass
NVNT	n20	5785	Ant1	2.86	1.57	4.43	30	Pass
NVNT	n20	5825	Ant1	0.51	1.57	2.08	30	Pass
NVNT	n40	5755	Ant1	1.58	2.48	4.06	30	Pass
NVNT	n40	5795	Ant1	1.52	2.83	4.35	30	Pass
NVNT	ac20	5745	Ant1	3.02	2.22	5.24	30	Pass
NVNT	ac20	5785	Ant1	2.06	2.39	4.45	30	Pass
NVNT	ac20	5825	Ant1	-0.35	2.22	1.87	30	Pass
NVNT	ac40	5755	Ant1	-2.15	1.25	-0.9	30	Pass
NVNT	ac40	5795	Ant1	-2.19	3.76	1.57	30	Pass
NVNT	ac80	5775	Ant1	-2.77	6.28	3.51	30	Pass

Test Graphs

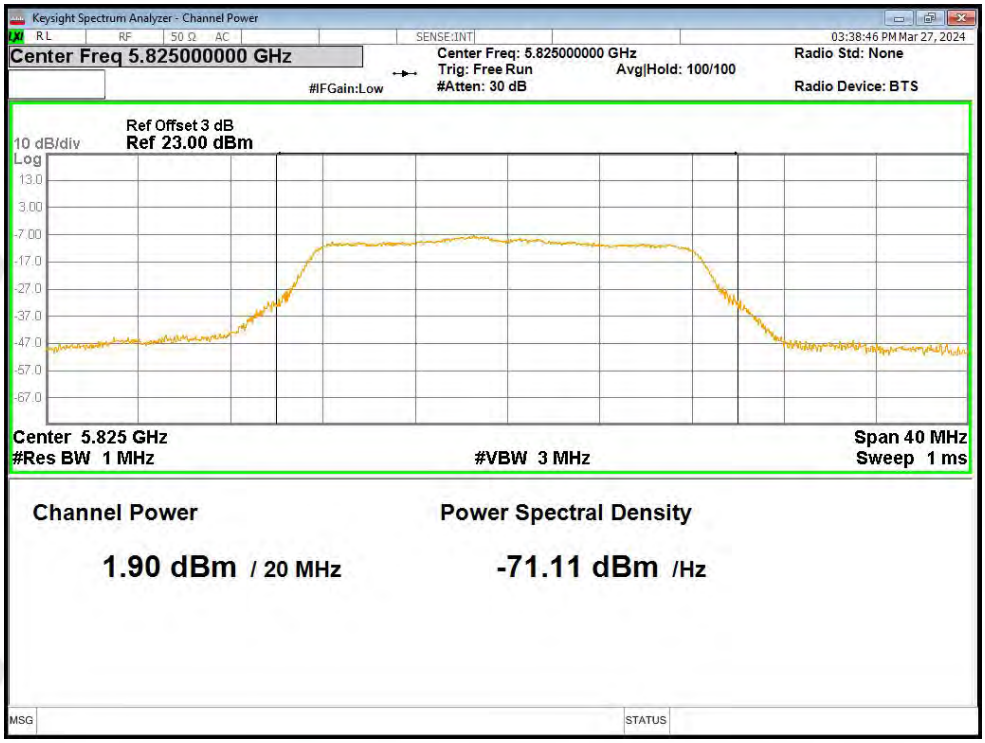
Power NVNT a 5745MHz Ant1



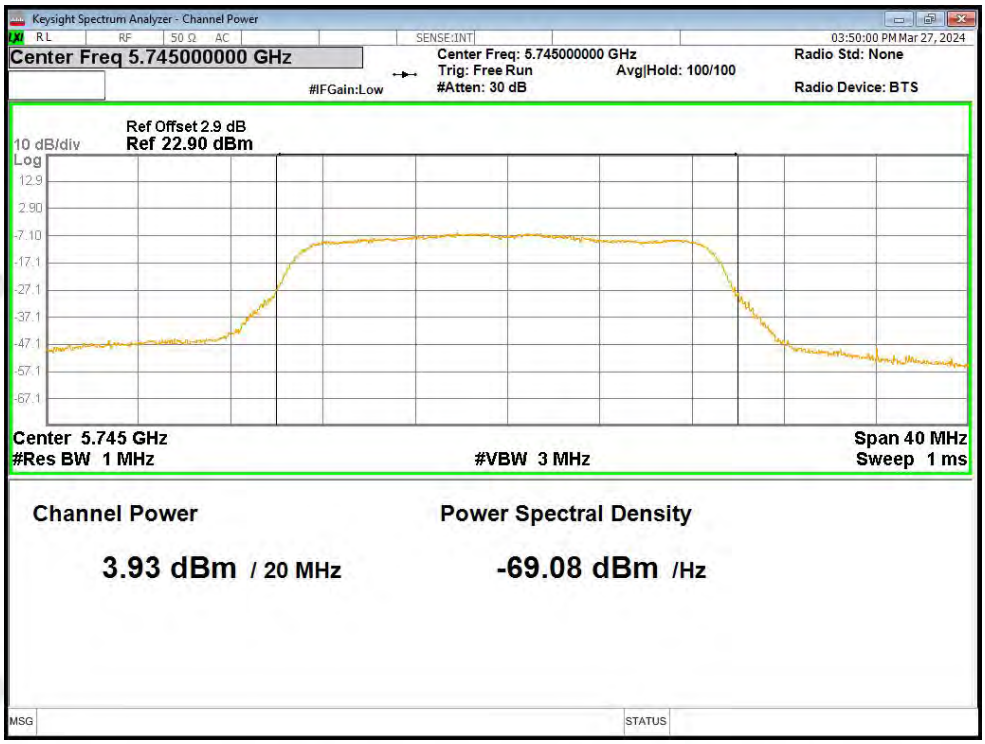
Power NVNT a 5785MHz Ant1



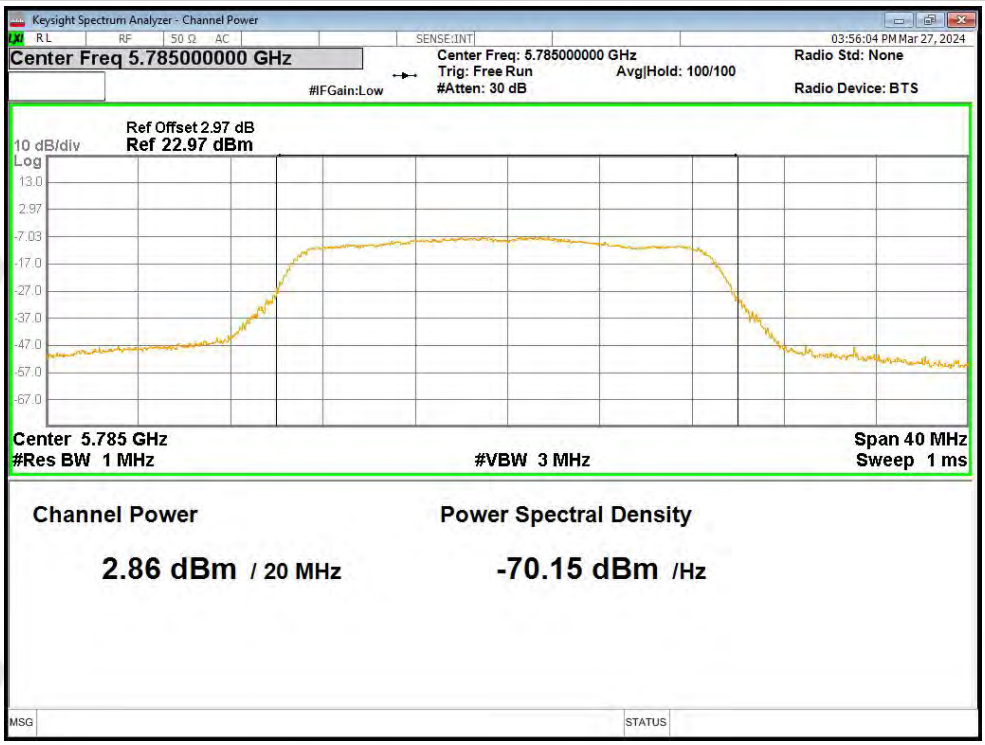
Power NVNT a 5825MHz Ant1



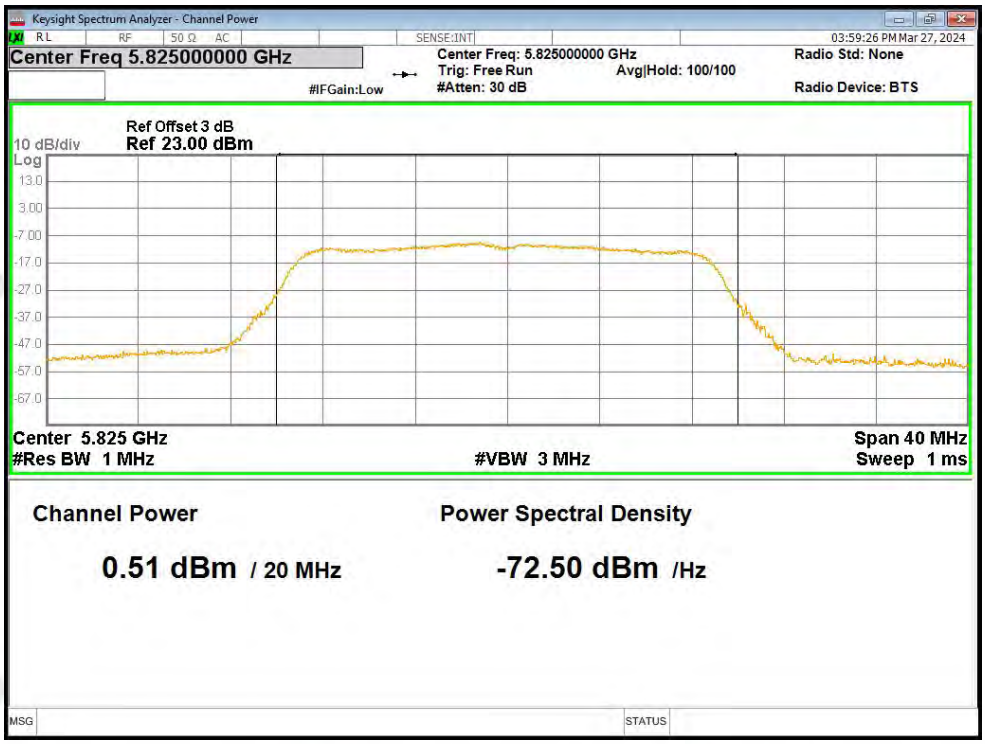
Power NVNT n20 5745MHz Ant1



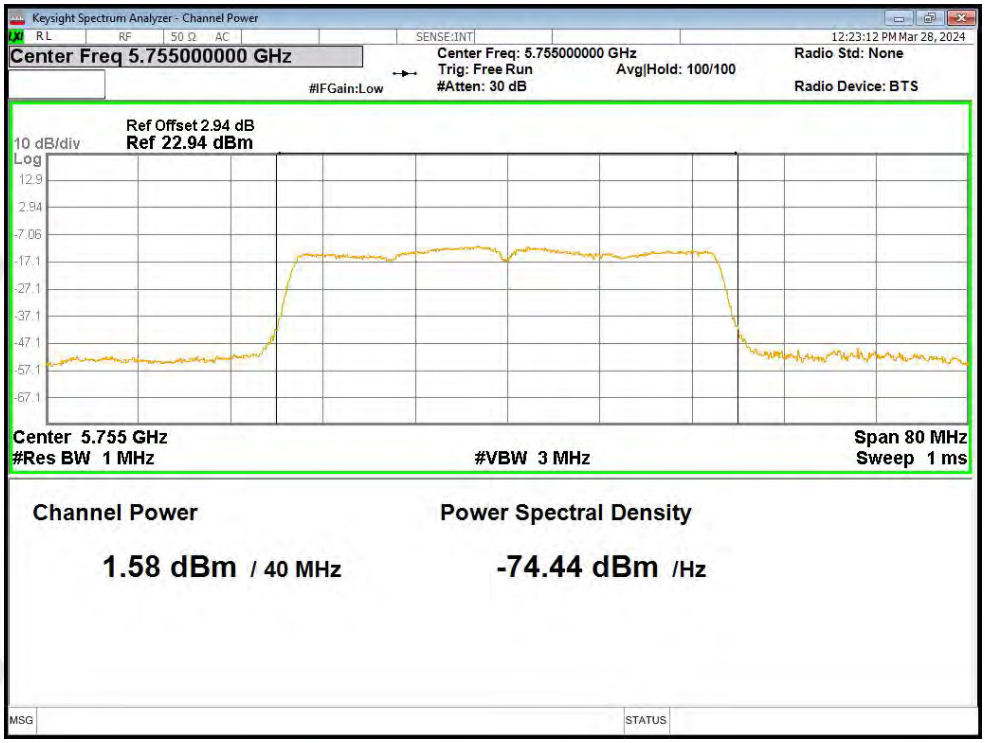
Power NVNT n20 5785MHz Ant1



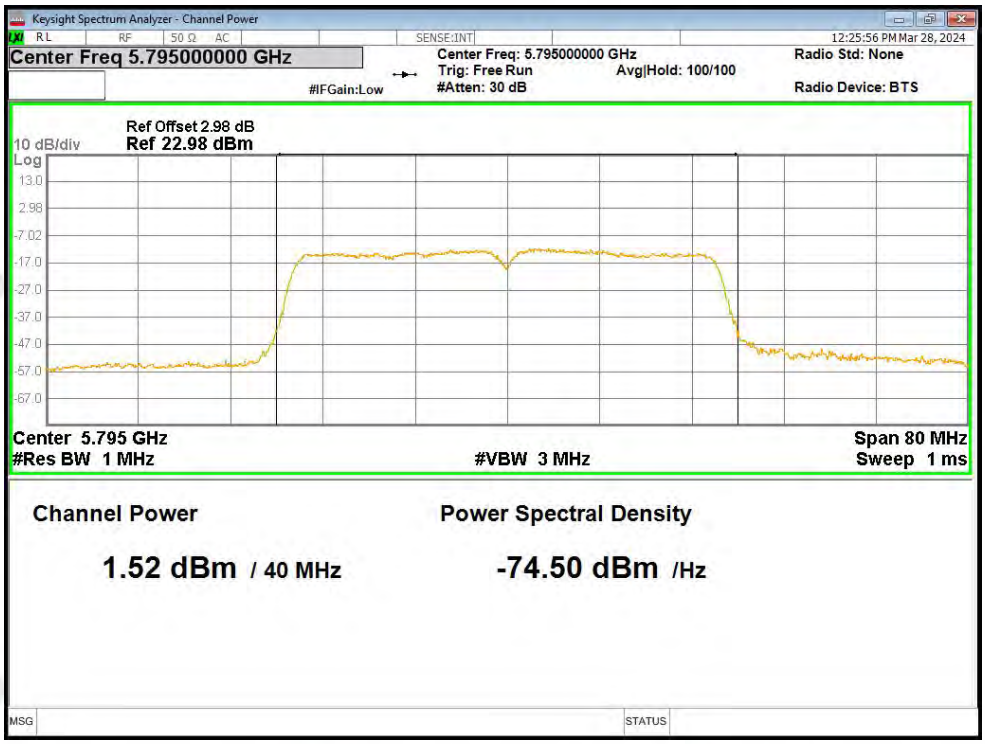
Power NVNT n20 5825MHz Ant1



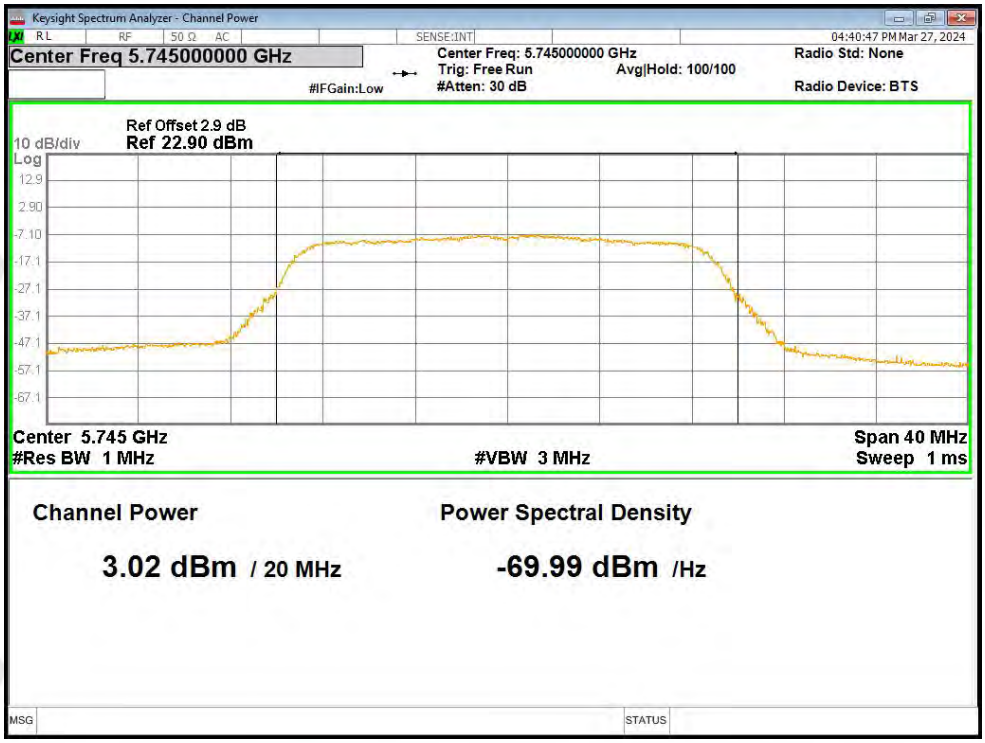
Power NVNT n40 5755MHz Ant1



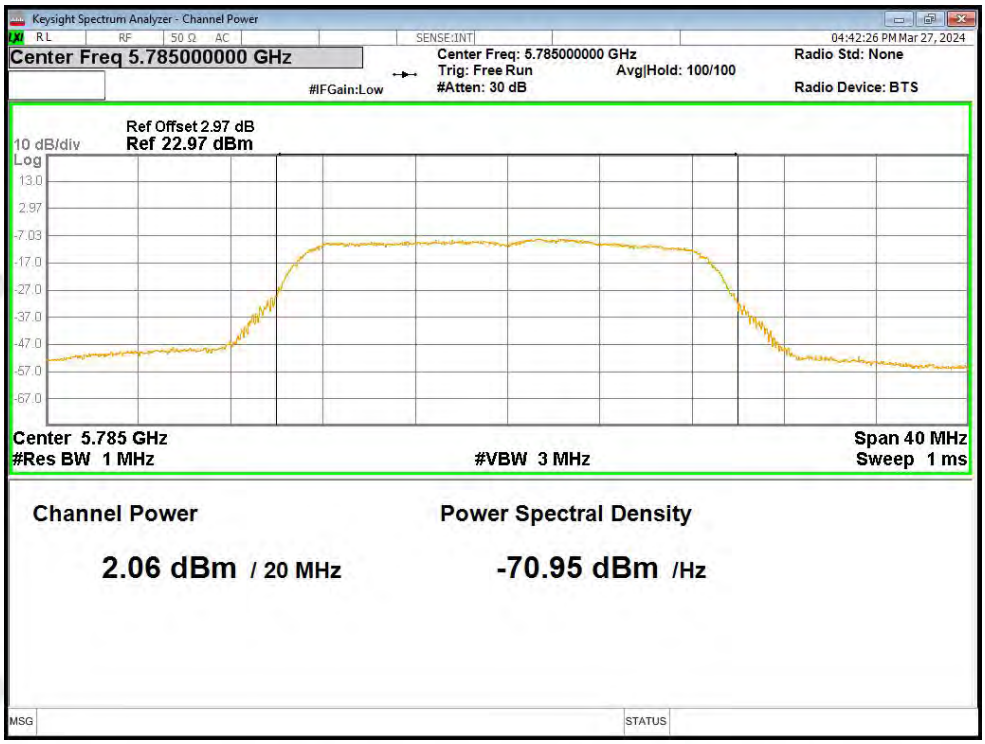
Power NVNT n40 5795MHz Ant1



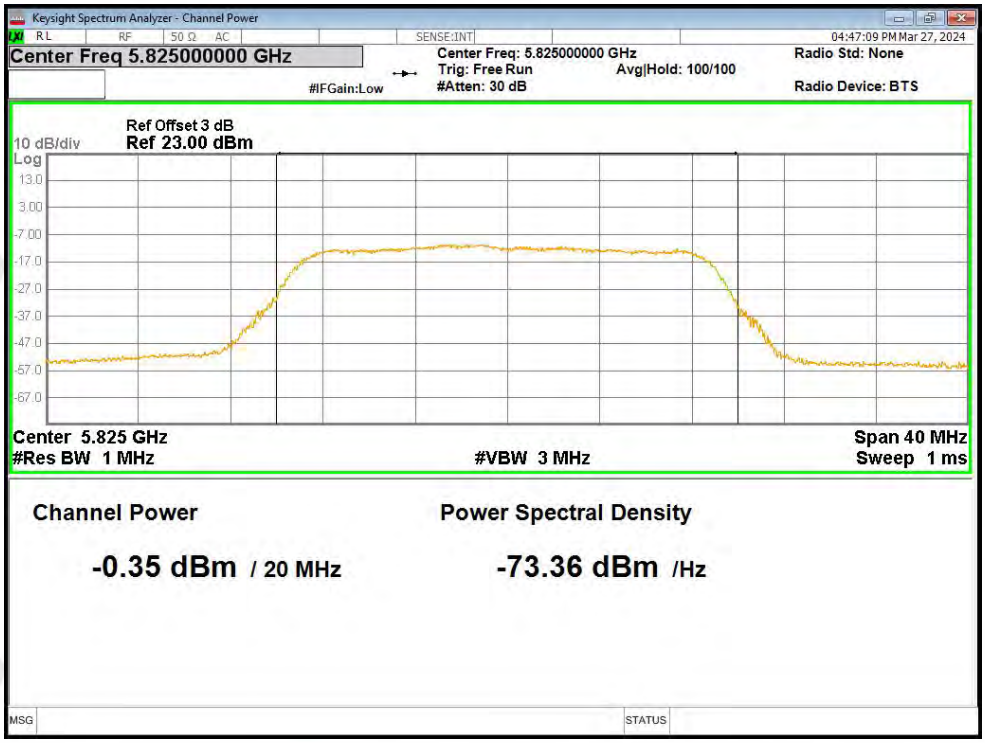
Power NVNT ac20 5745MHz Ant1



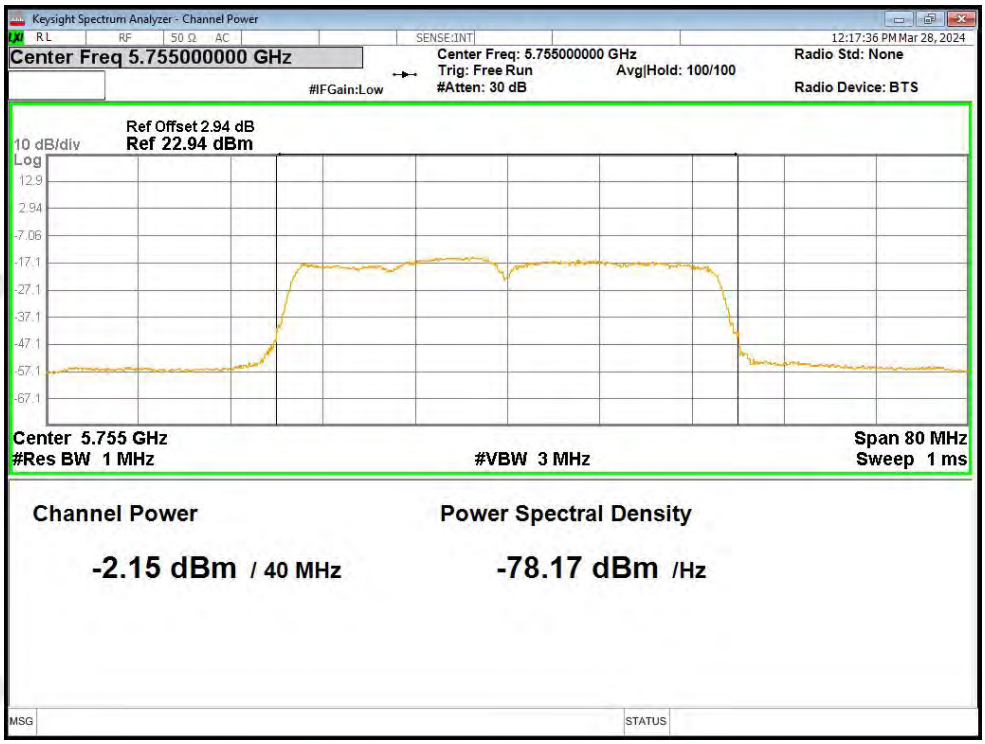
Power NVNT ac20 5785MHz Ant1



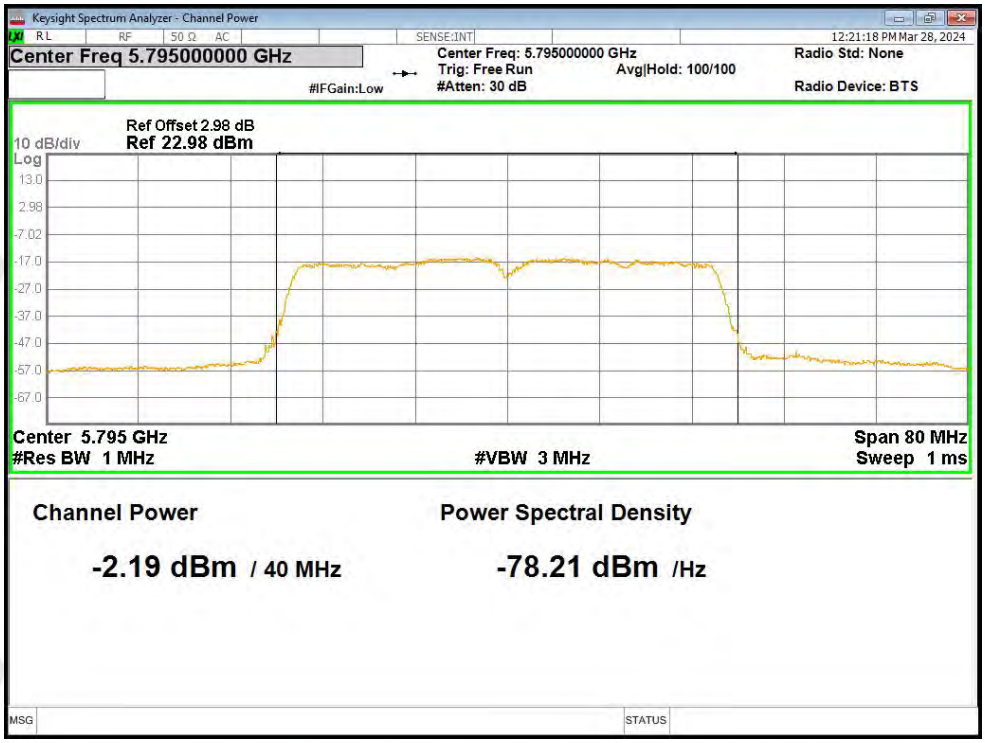
Power NVNT ac20 5825MHz Ant1



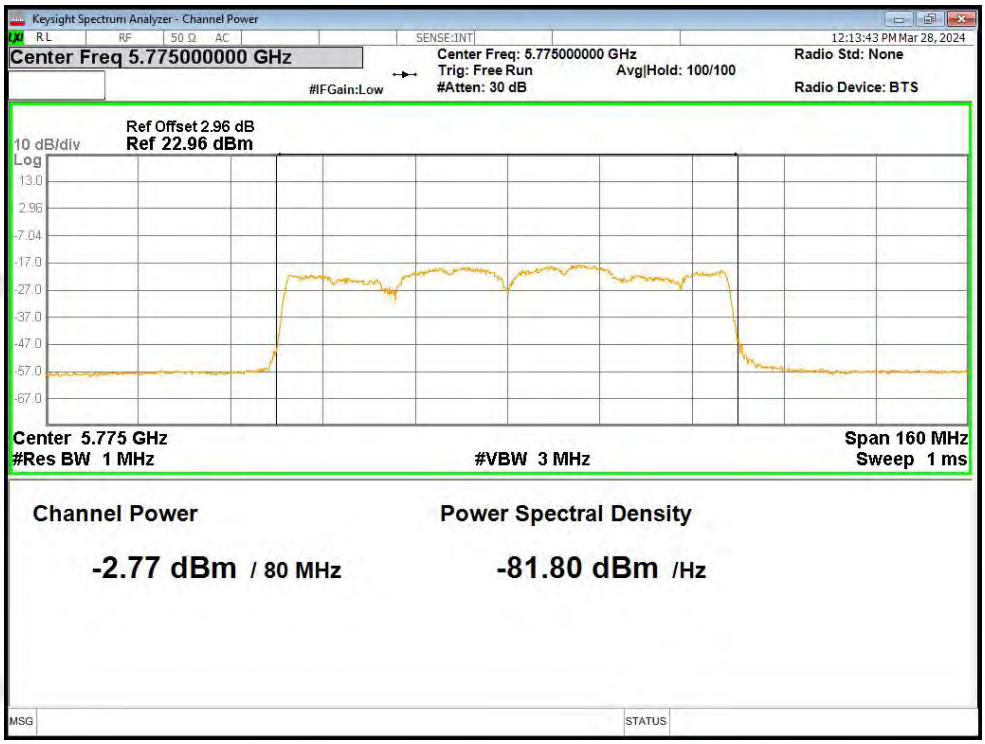
Power NVNT ac40 5755MHz Ant1



Power NVNT ac40 5795MHz Ant1



Power NVNT ac80 5775MHz Ant1

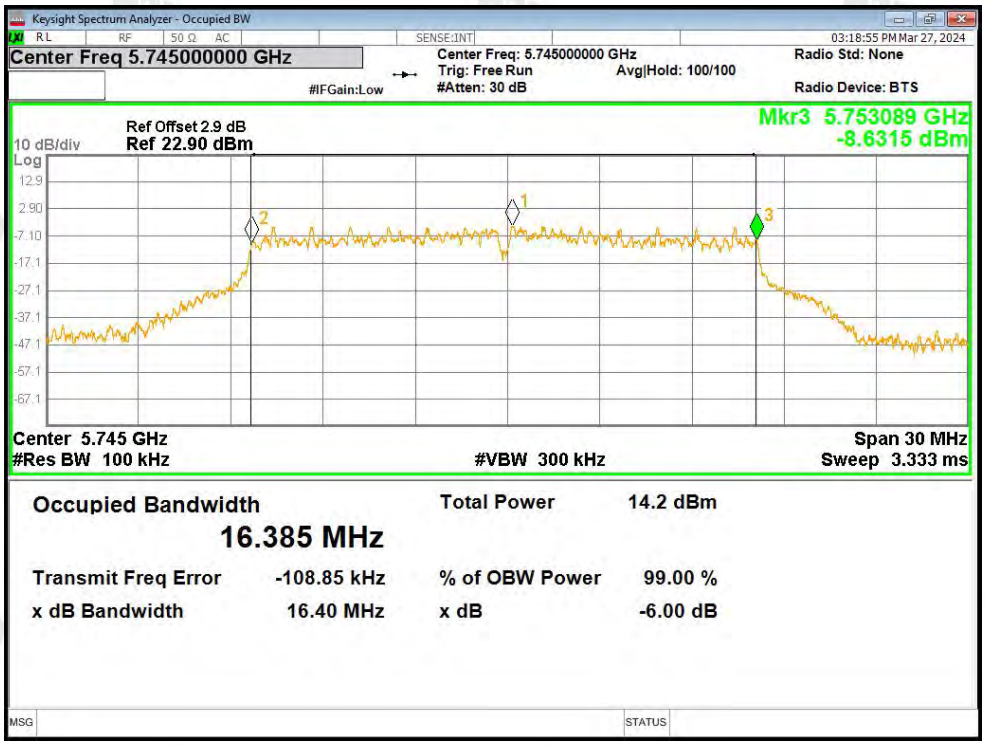


B3. -6dB Bandwidth

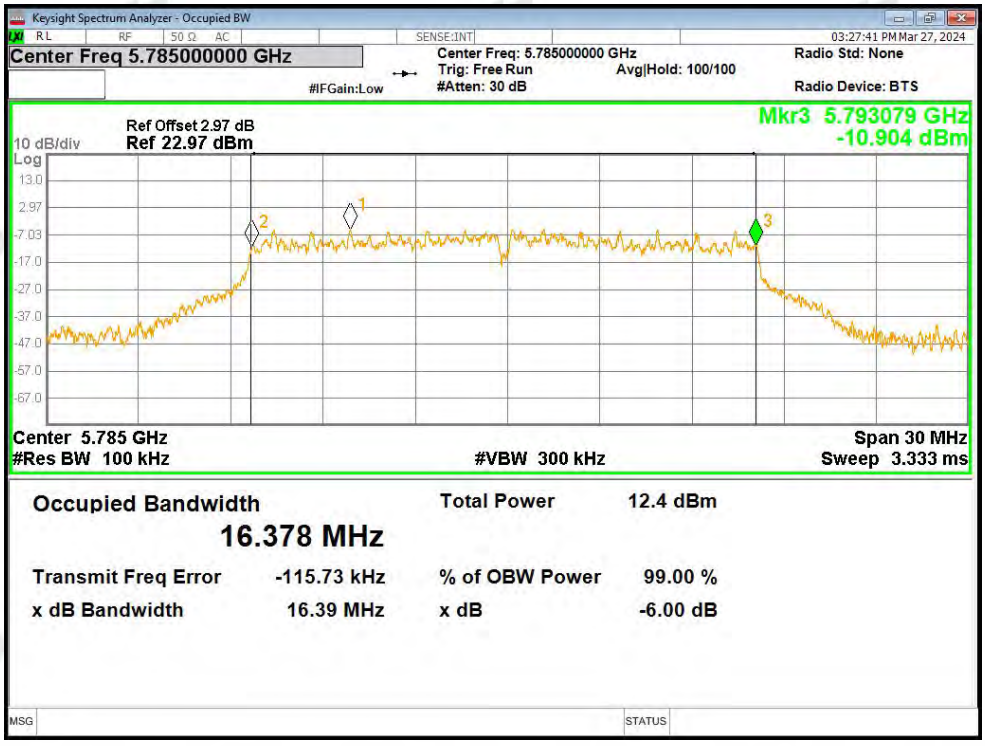
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant1	16.396	0.5	Pass
NVNT	a	5785	Ant1	16.389	0.5	Pass
NVNT	a	5825	Ant1	16.415	0.5	Pass
NVNT	n20	5745	Ant1	17.571	0.5	Pass
NVNT	n20	5785	Ant1	17.6	0.5	Pass
NVNT	n20	5825	Ant1	17.673	0.5	Pass
NVNT	n40	5755	Ant1	36.371	0.5	Pass
NVNT	n40	5795	Ant1	36.301	0.5	Pass
NVNT	ac20	5745	Ant1	17.214	0.5	Pass
NVNT	ac20	5785	Ant1	17.654	0.5	Pass
NVNT	ac20	5825	Ant1	17.553	0.5	Pass
NVNT	ac40	5755	Ant1	35.983	0.5	Pass
NVNT	ac40	5795	Ant1	36.242	0.5	Pass
NVNT	ac80	5775	Ant1	75.157	0.5	Pass

Test Graphs

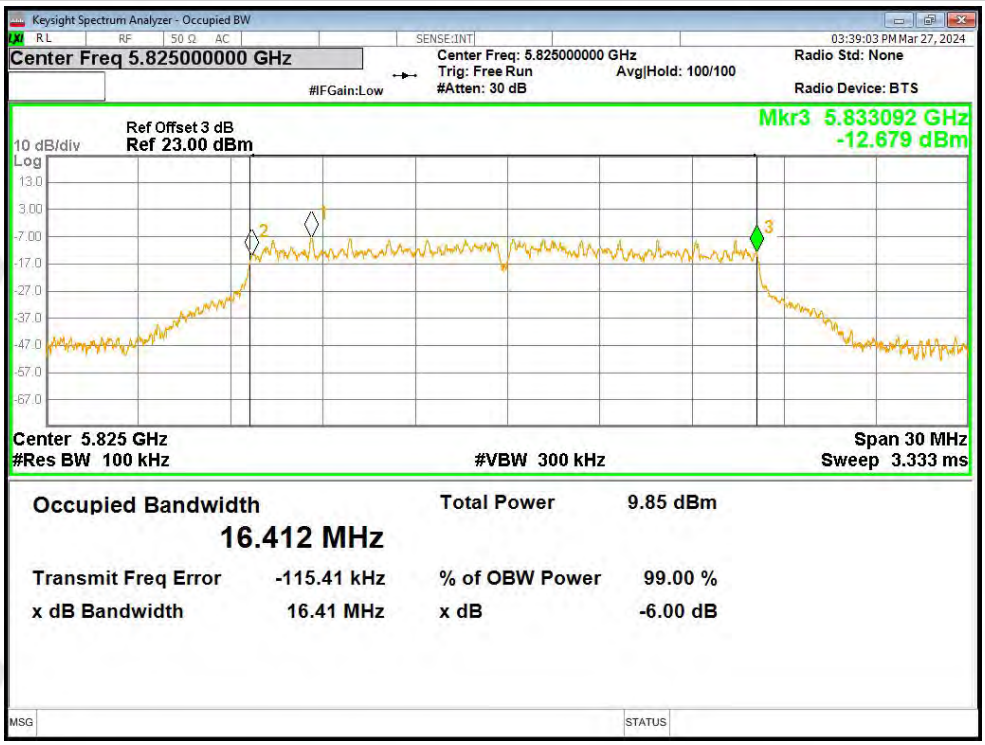
-6dB Bandwidth NVNT a 5745MHz Ant1



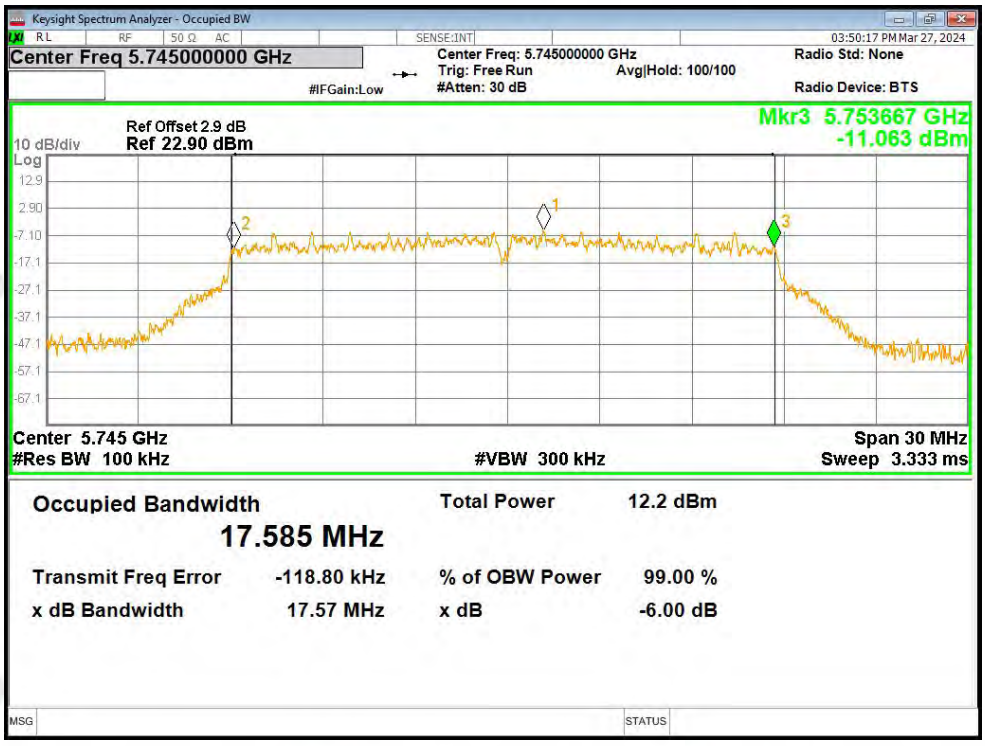
-6dB Bandwidth NVNT a 5785MHz Ant1



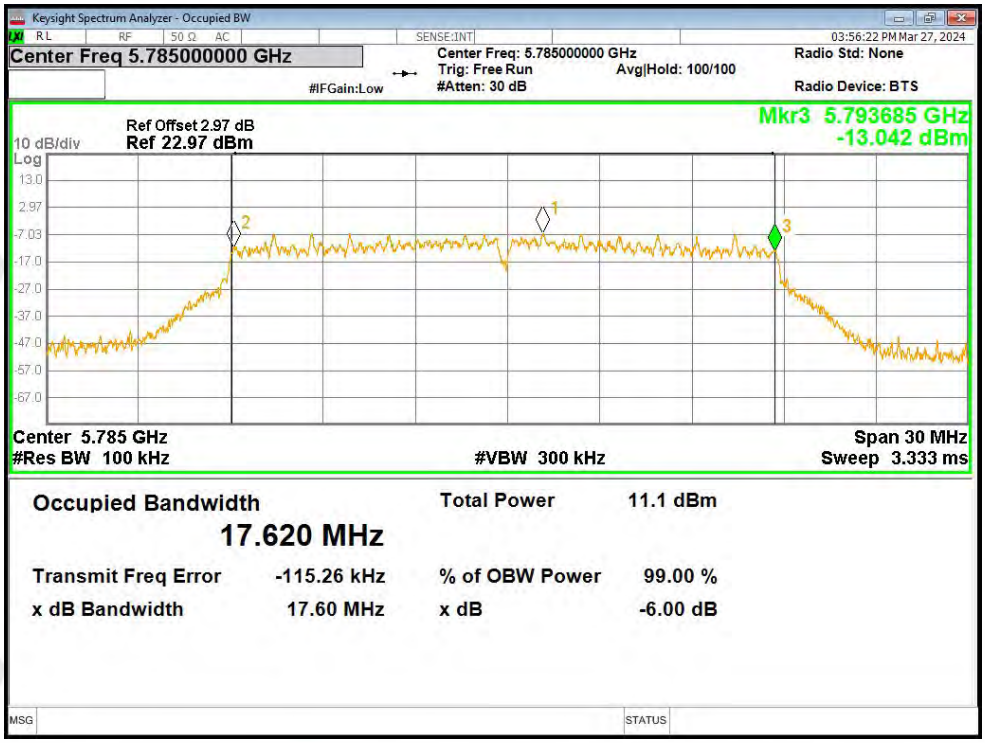
-6dB Bandwidth NVNT a 5825MHz Ant1



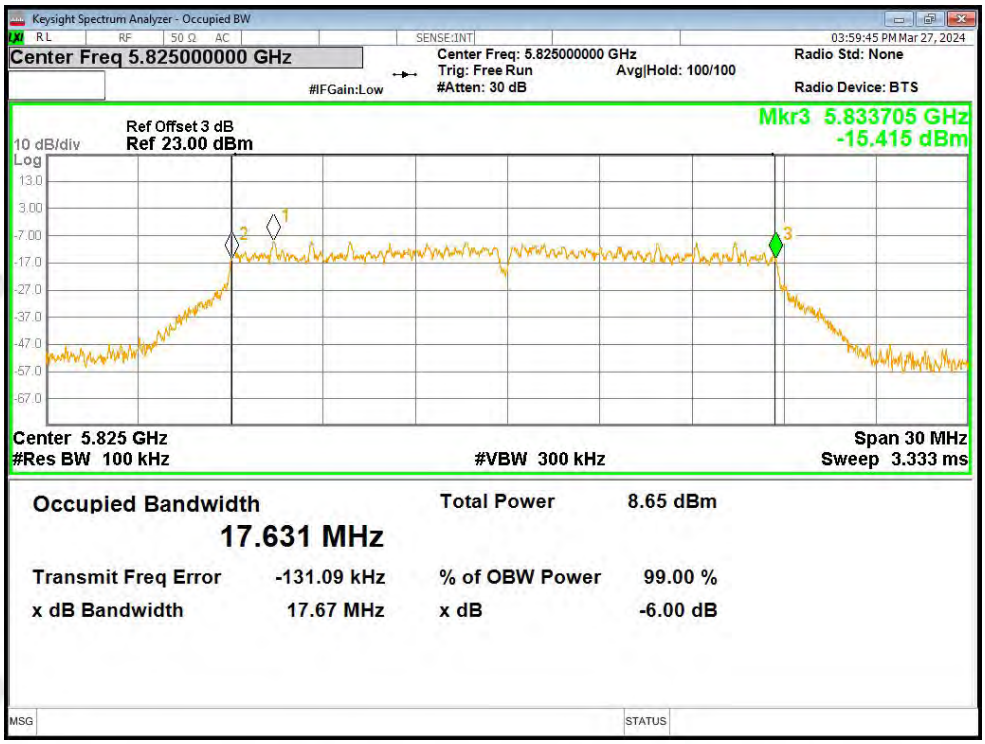
-6dB Bandwidth NVNT n20 5745MHz Ant1



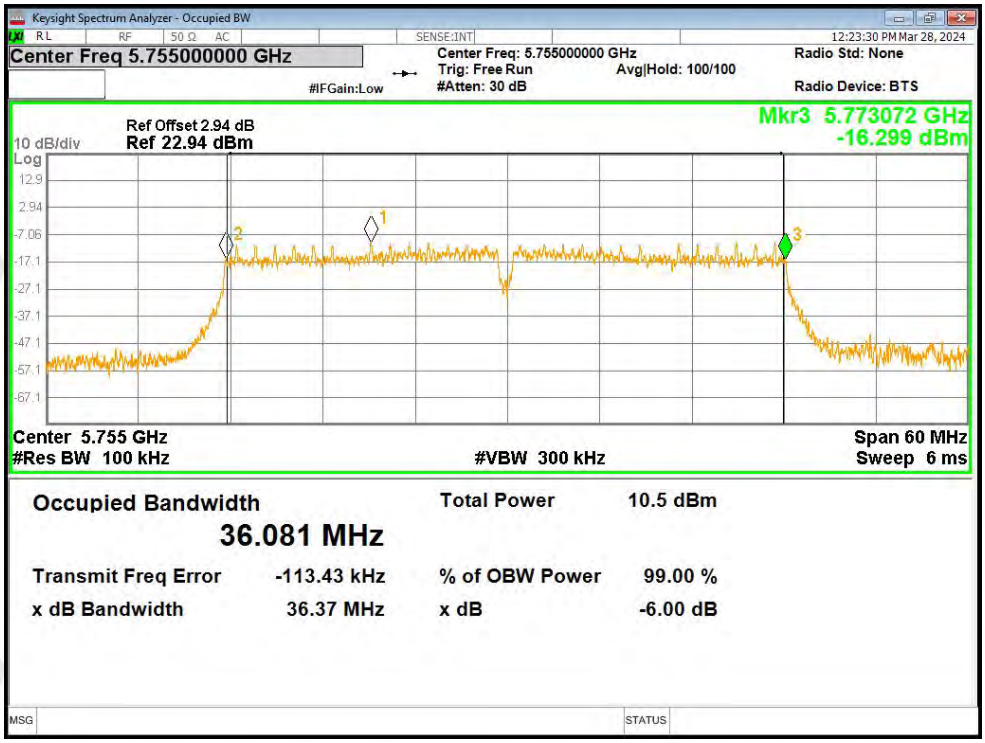
-6dB Bandwidth NVNT n20 5785MHz Ant1



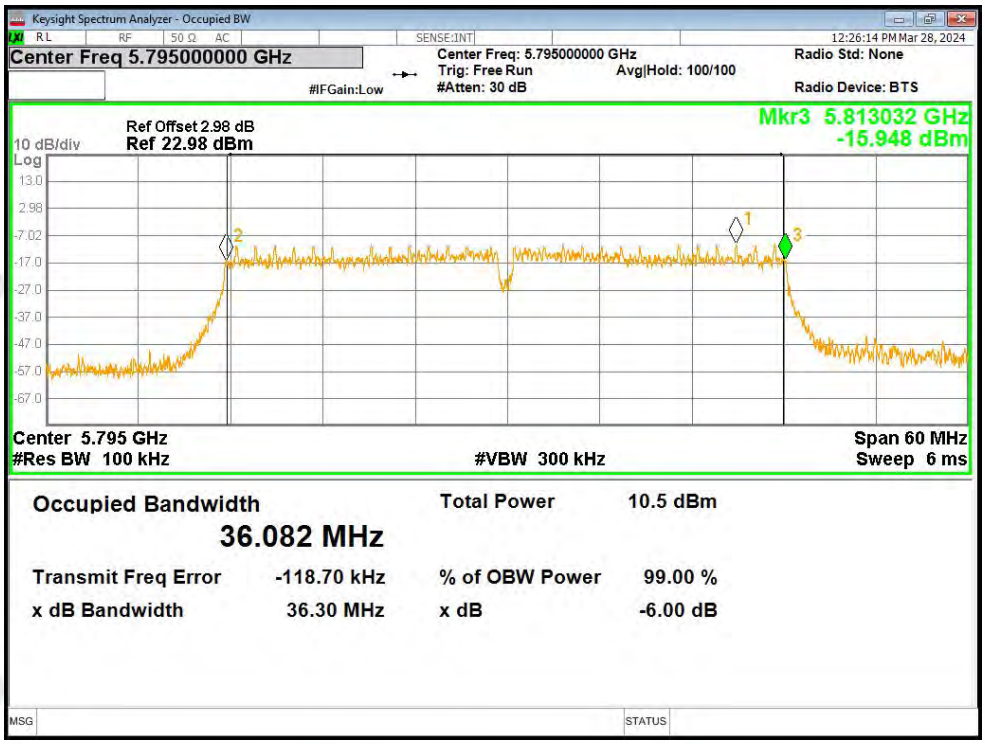
-6dB Bandwidth NVNT n20 5825MHz Ant1



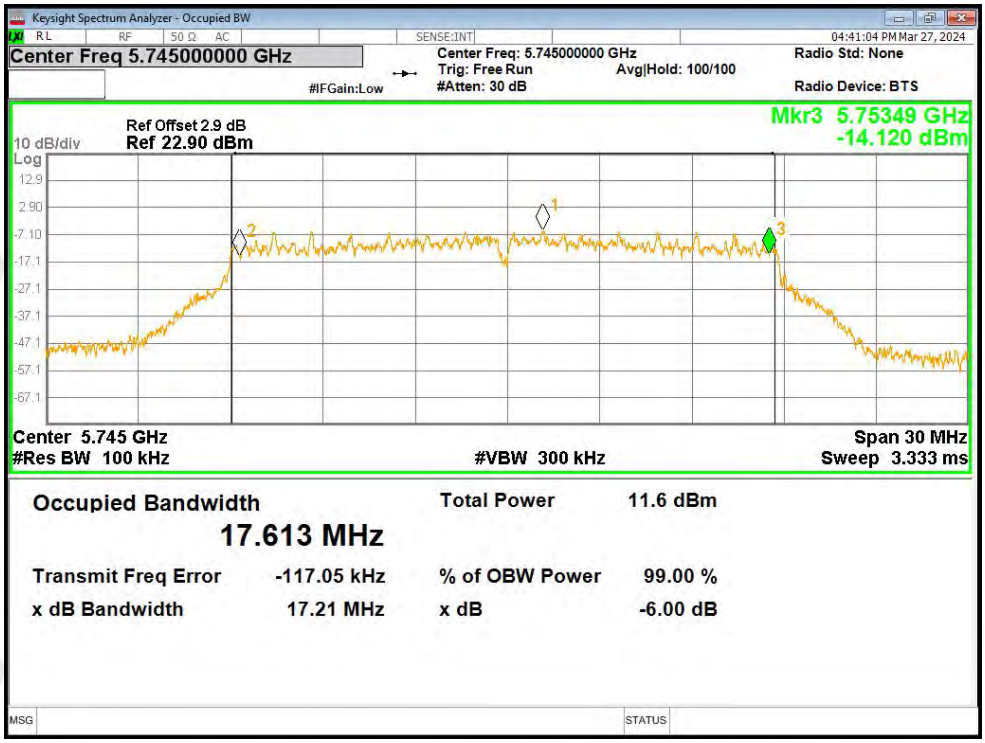
-6dB Bandwidth NVNT n40 5755MHz Ant1



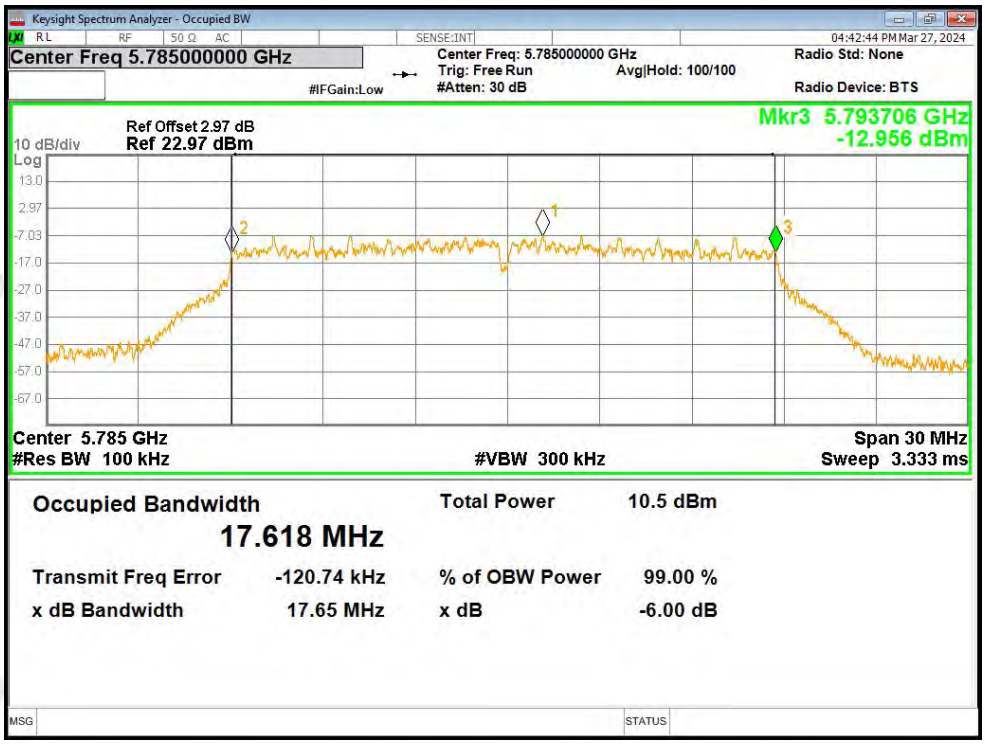
-6dB Bandwidth NVNT n40 5795MHz Ant1



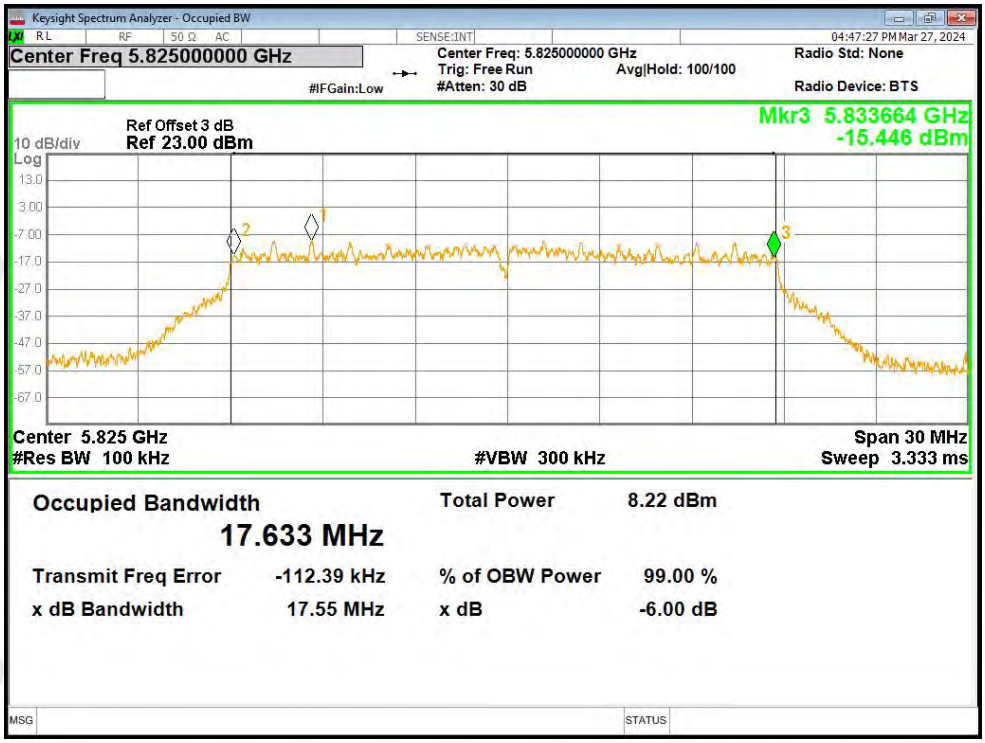
-6dB Bandwidth NVNT ac20 5745MHz Ant1



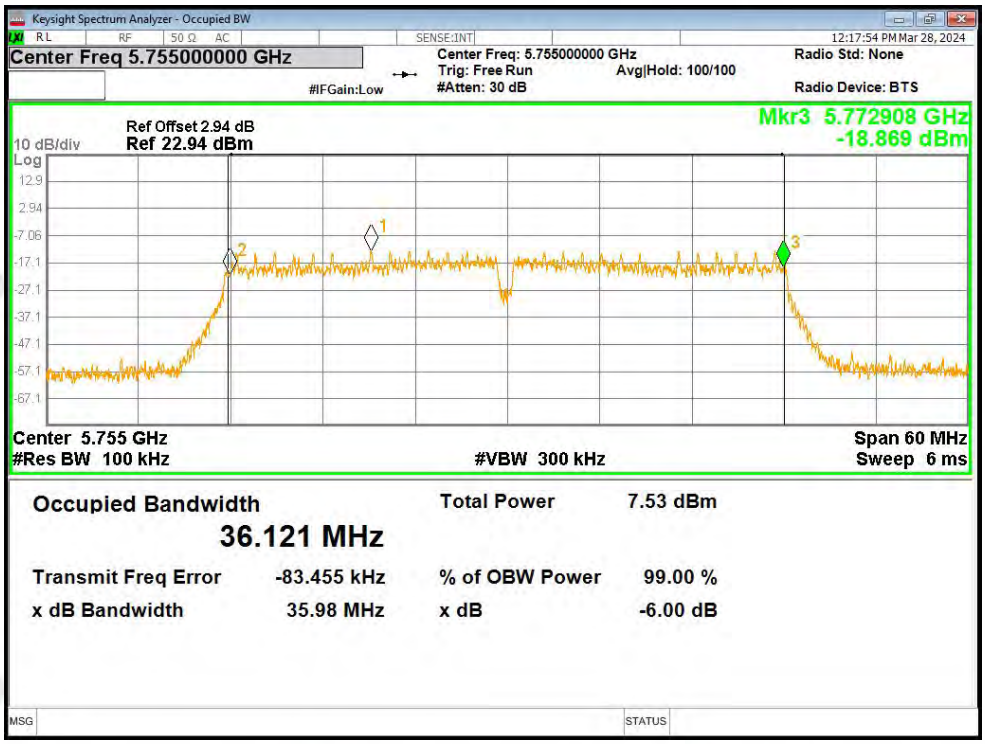
-6dB Bandwidth NVNT ac20 5785MHz Ant1



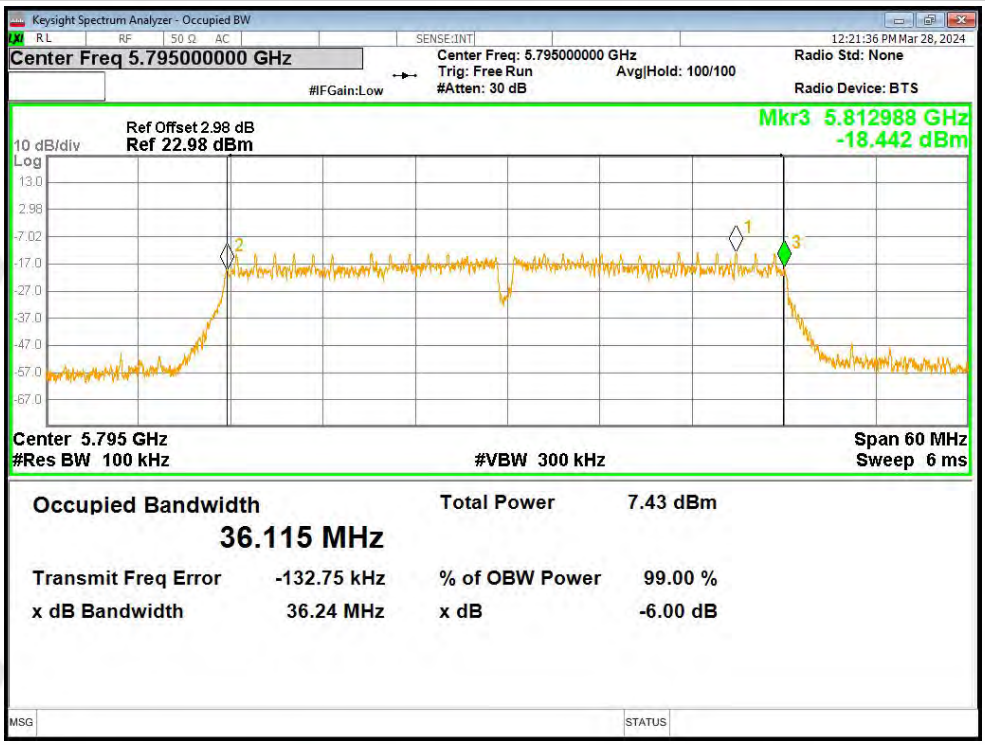
-6dB Bandwidth NVNT ac20 5825MHz Ant1



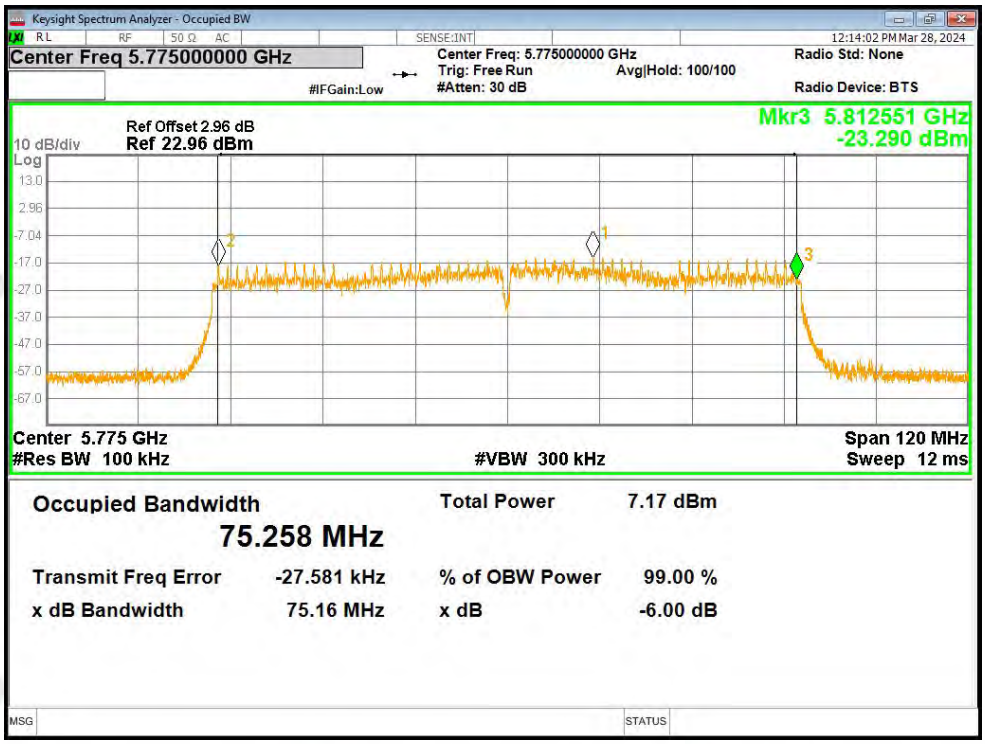
-6dB Bandwidth NVNT ac40 5755MHz Ant1



-6dB Bandwidth NVNT ac40 5795MHz Ant1



-6dB Bandwidth NVNT ac80 5775MHz Ant1

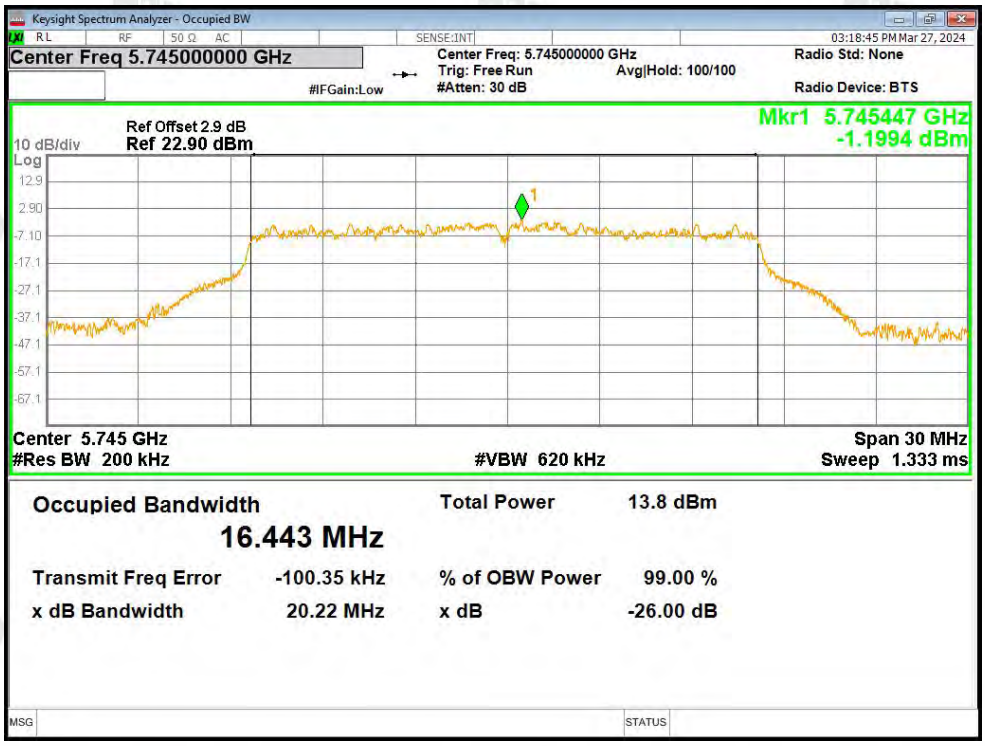


B4. Occupied Channel Bandwidth

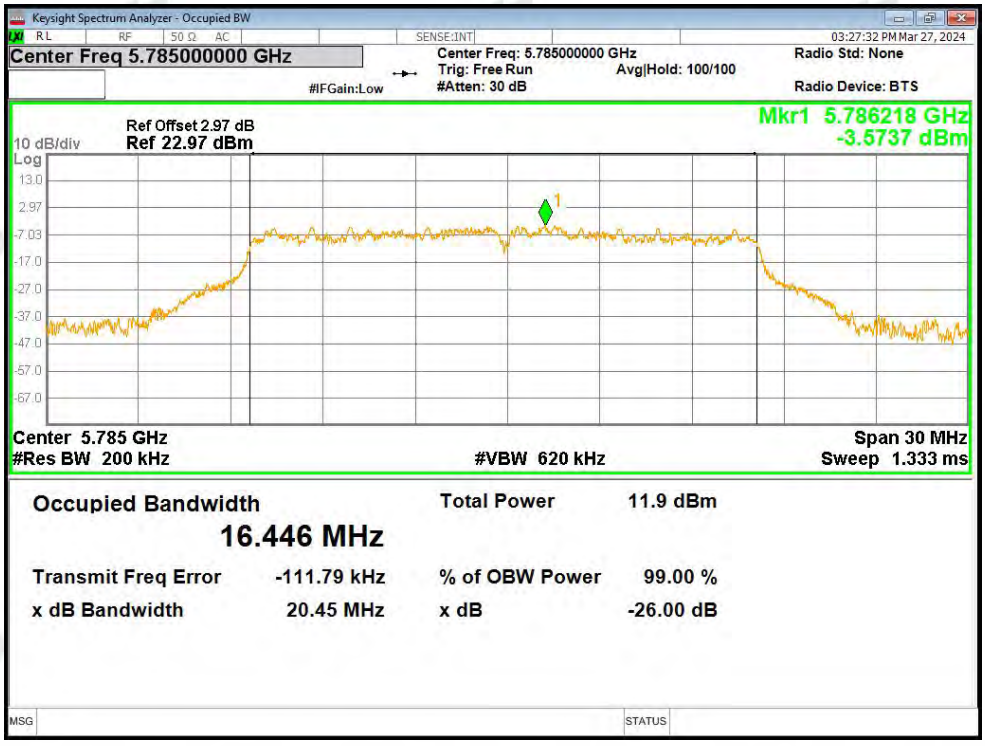
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5745	Ant1	16.443
NVNT	a	5785	Ant1	16.446
NVNT	a	5825	Ant1	16.497
NVNT	n20	5745	Ant1	17.649
NVNT	n20	5785	Ant1	17.607
NVNT	n20	5825	Ant1	17.682
NVNT	n40	5755	Ant1	36.237
NVNT	n40	5795	Ant1	36.174
NVNT	ac20	5745	Ant1	17.628
NVNT	ac20	5785	Ant1	17.666
NVNT	ac20	5825	Ant1	17.7
NVNT	ac40	5755	Ant1	36.317
NVNT	ac40	5795	Ant1	36.297
NVNT	ac80	5775	Ant1	75.479

Test Graphs

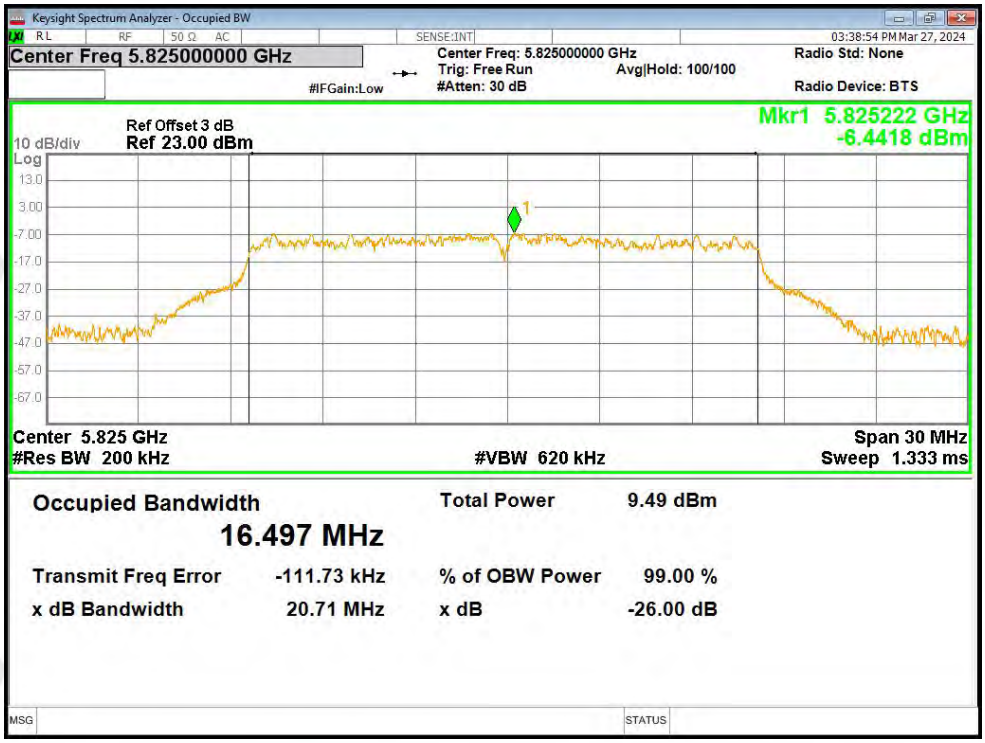
OBW NVNT a 5745MHz Ant1



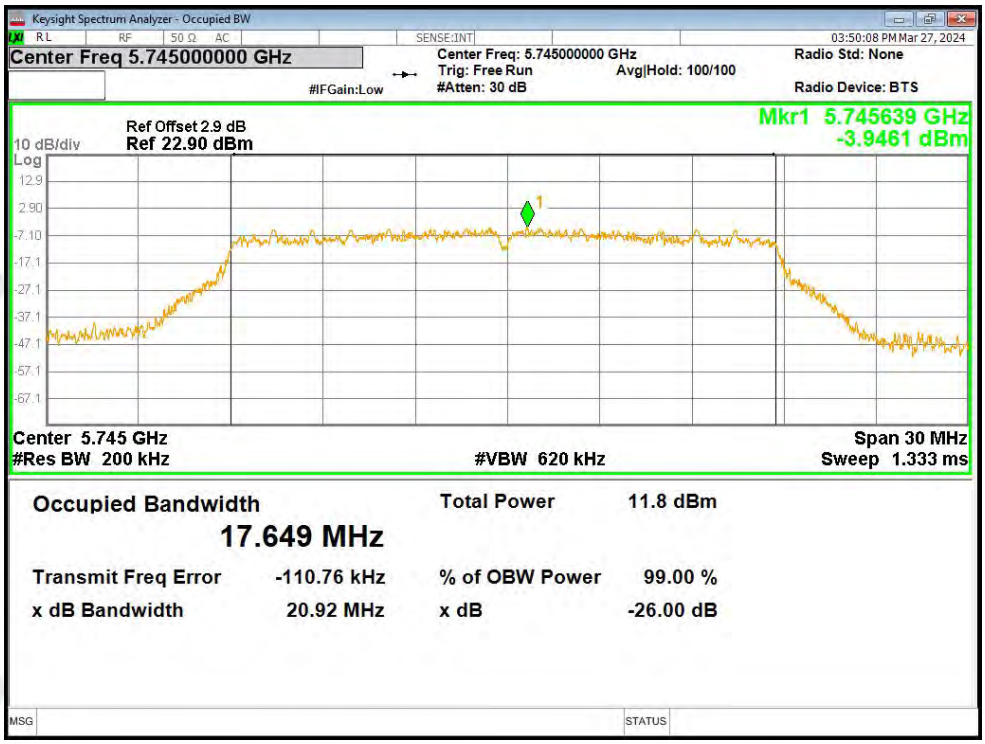
OBW NVNT a 5785MHz Ant1



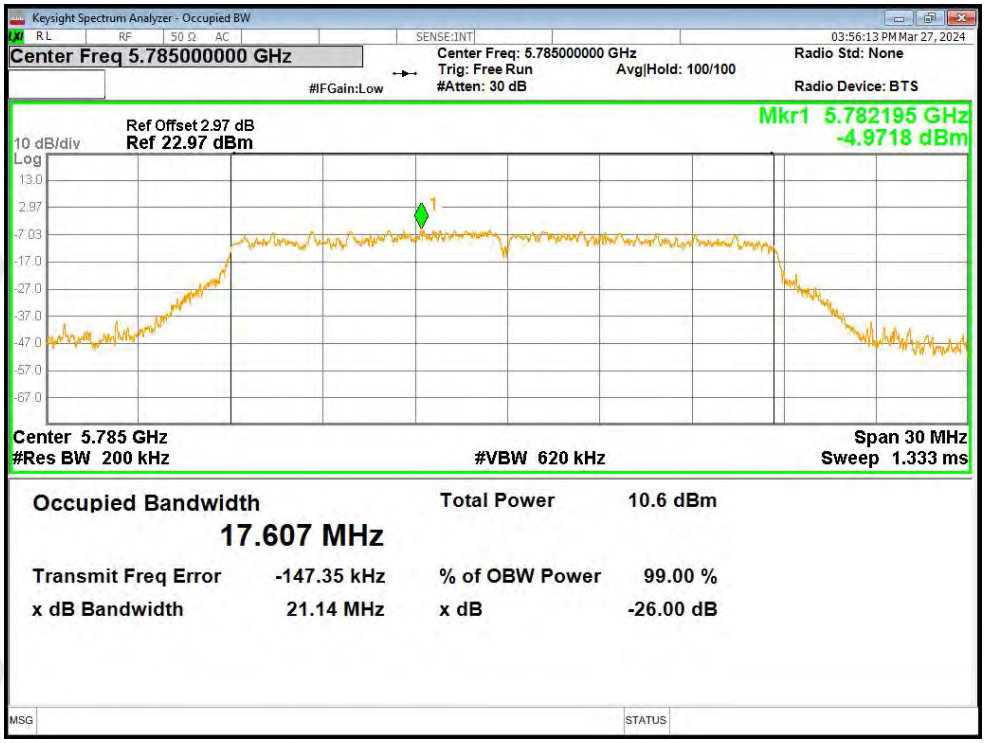
OBW NVNT a 5825MHz Ant1



OBW NVNT n20 5745MHz Ant1



OBW NVNT n20 5785MHz Ant1



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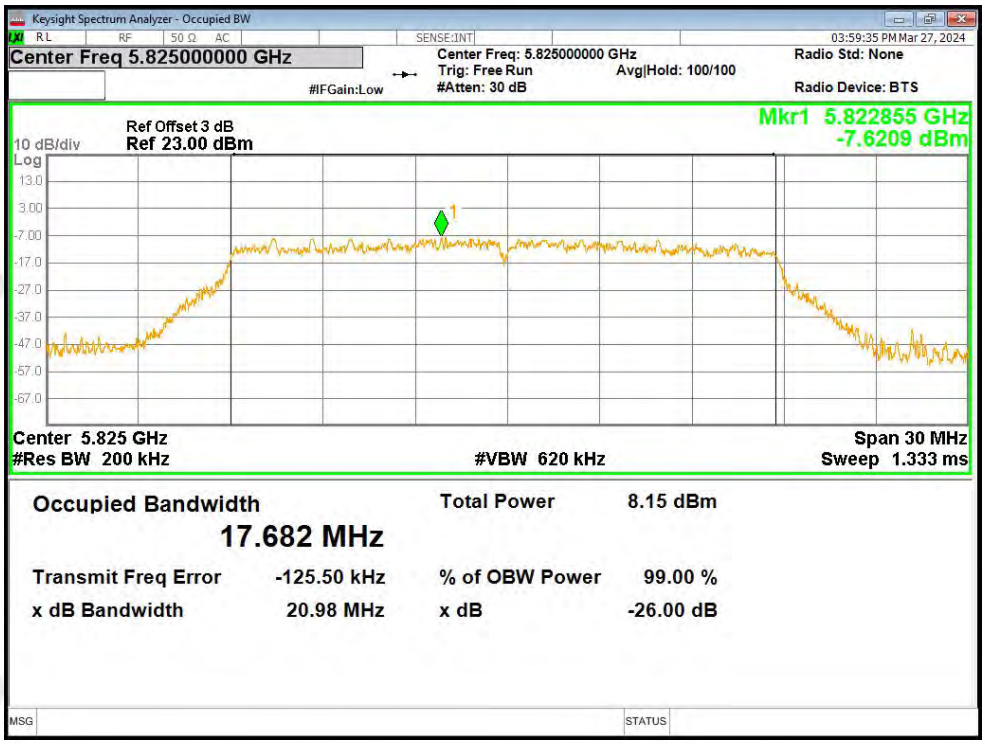
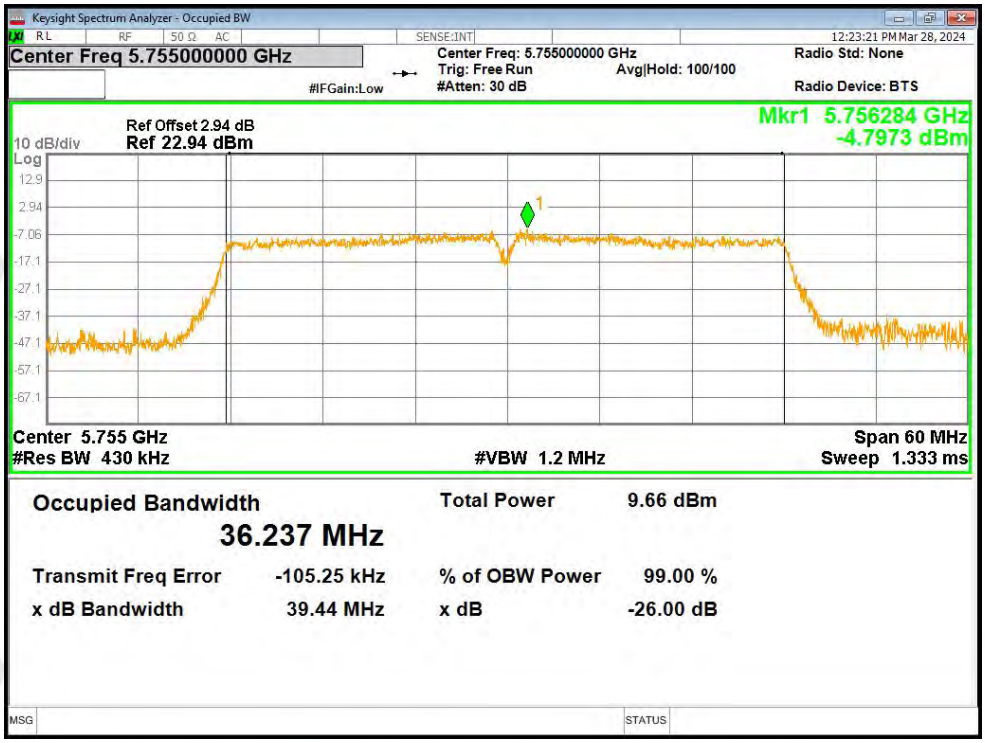
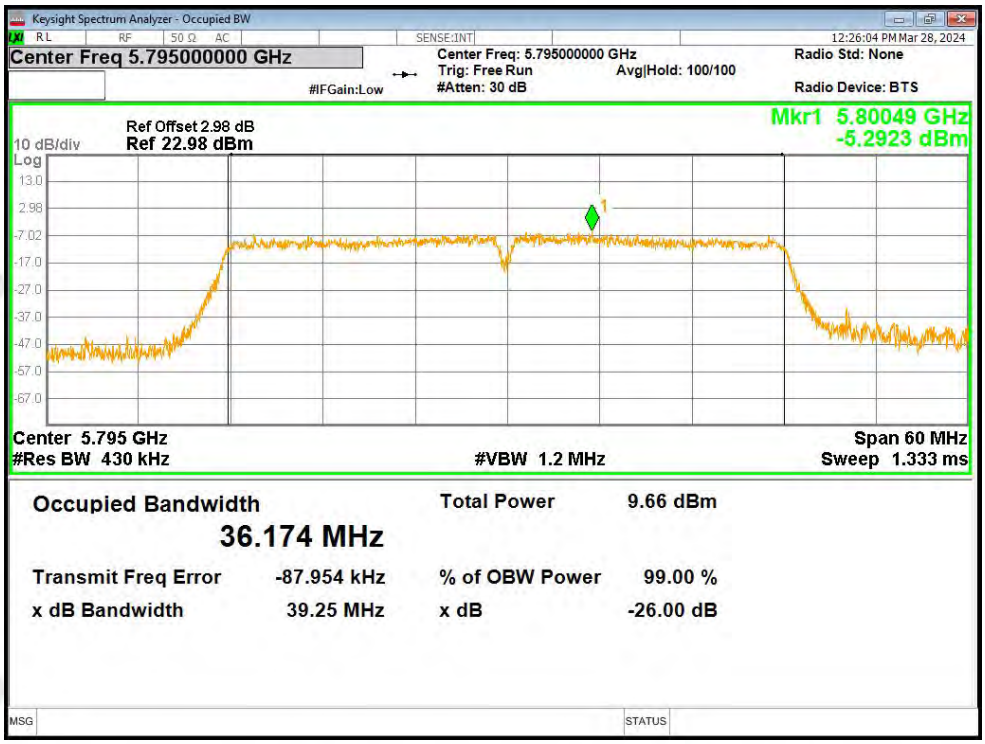


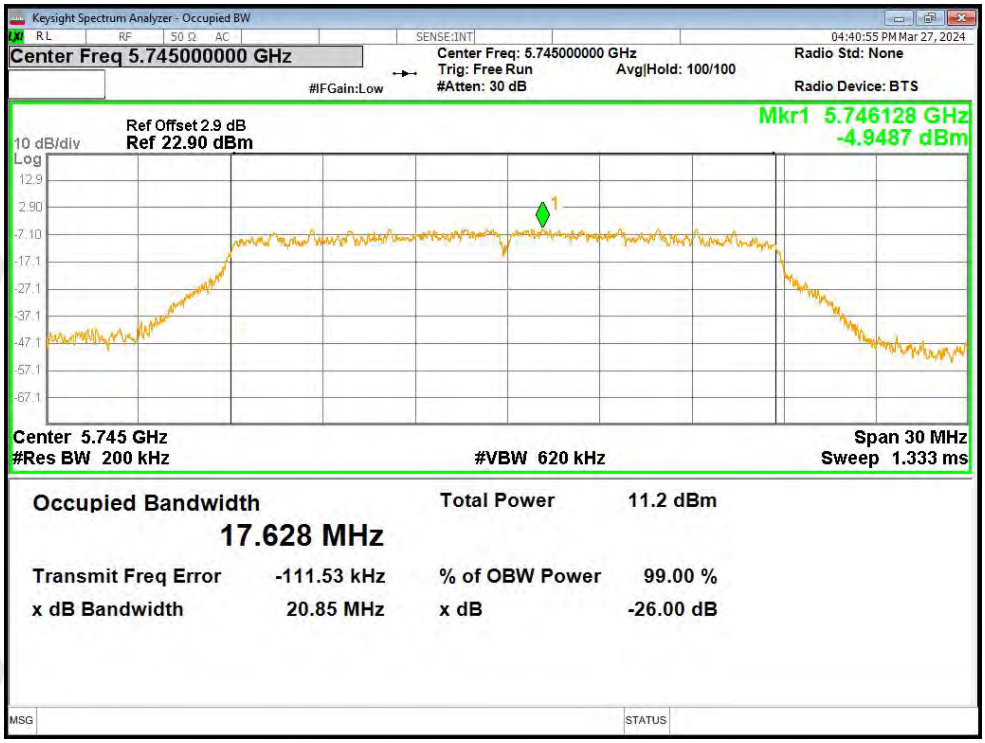
OBW NVNT n40 5755MHz Ant1



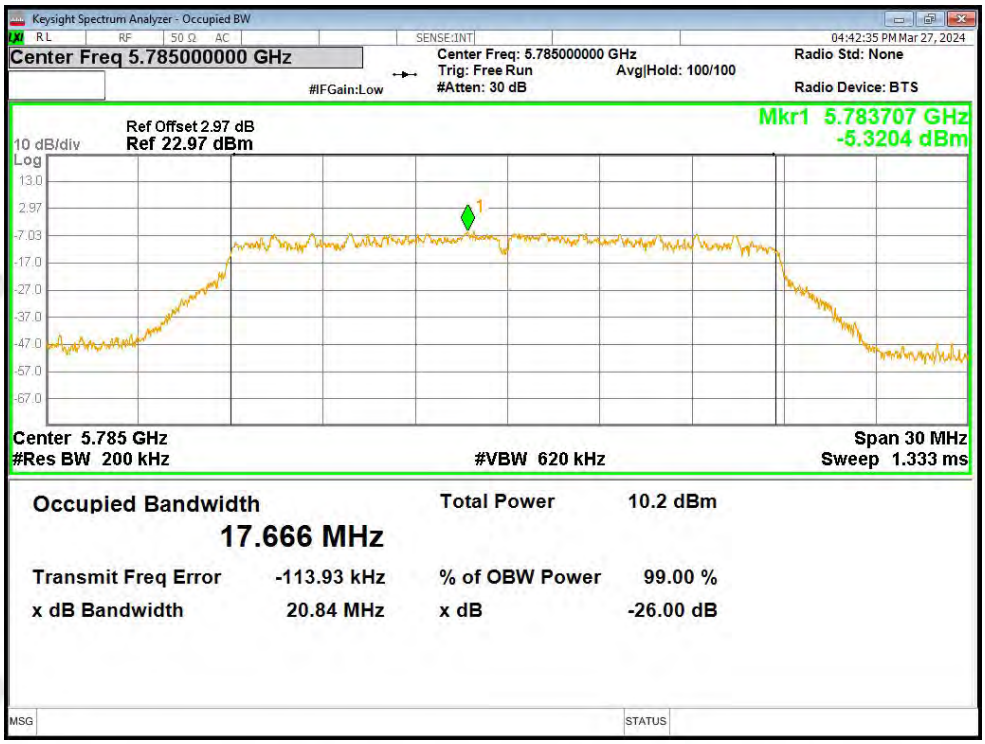
OBW NVNT n40 5795MHz Ant1



OBW NVNT ac20 5745MHz Ant1



OBW NVNT ac20 5785MHz Ant1



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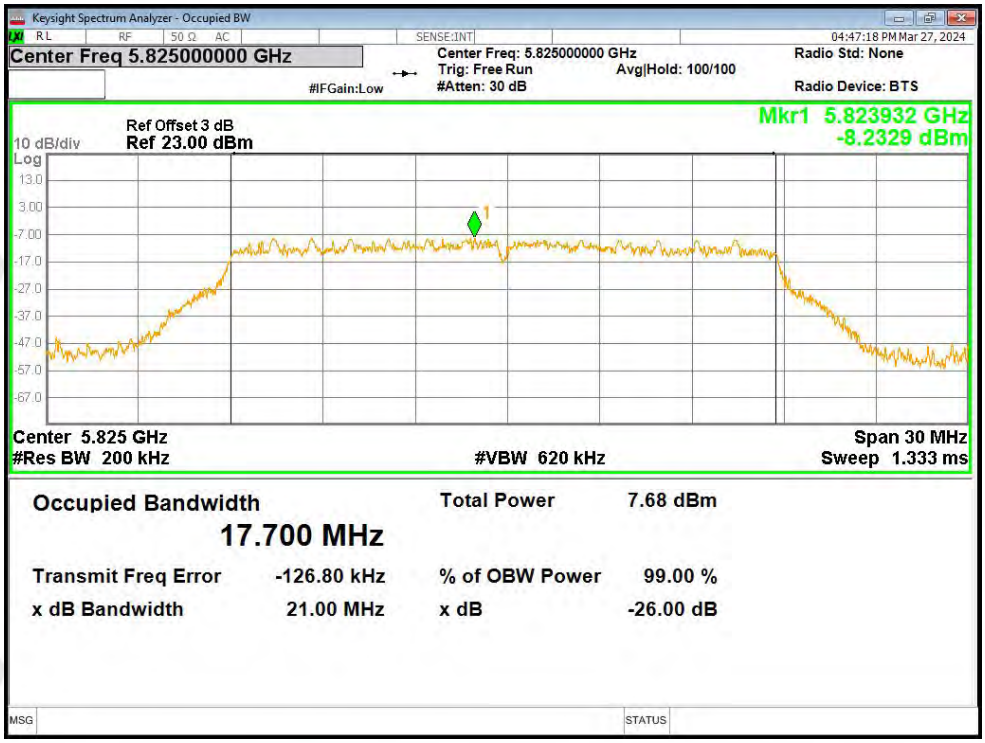

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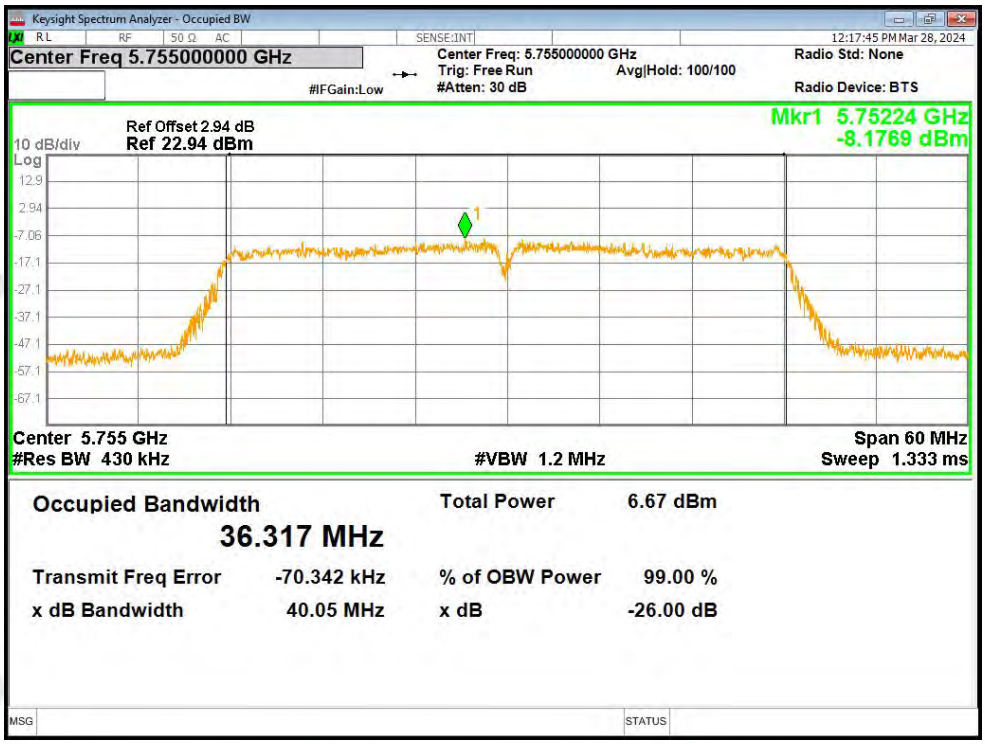
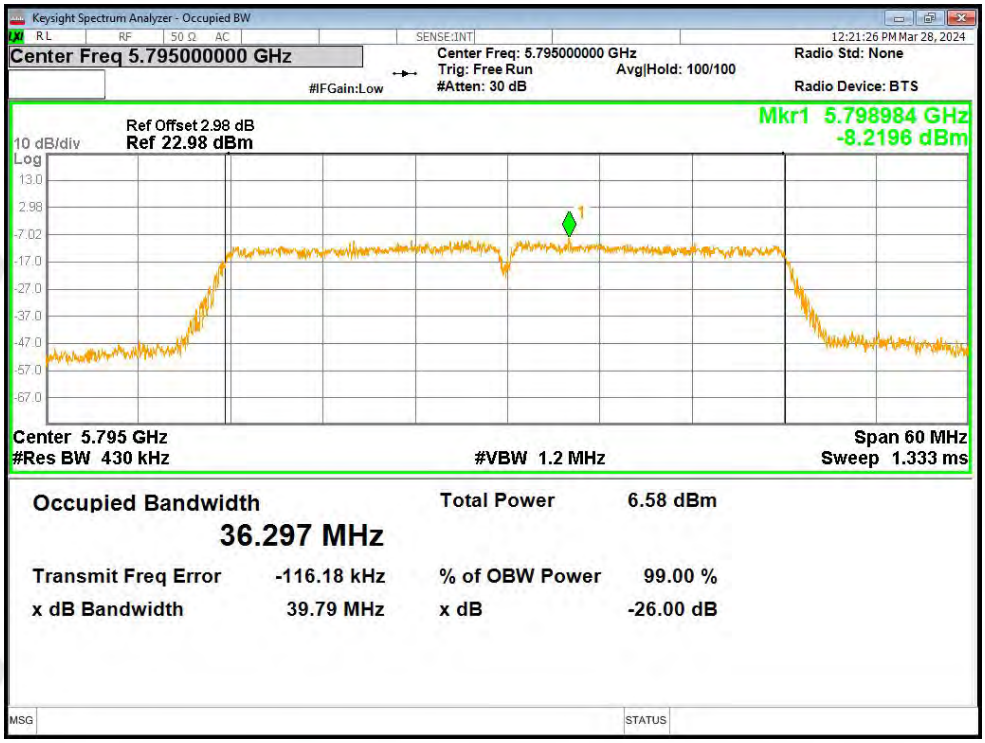
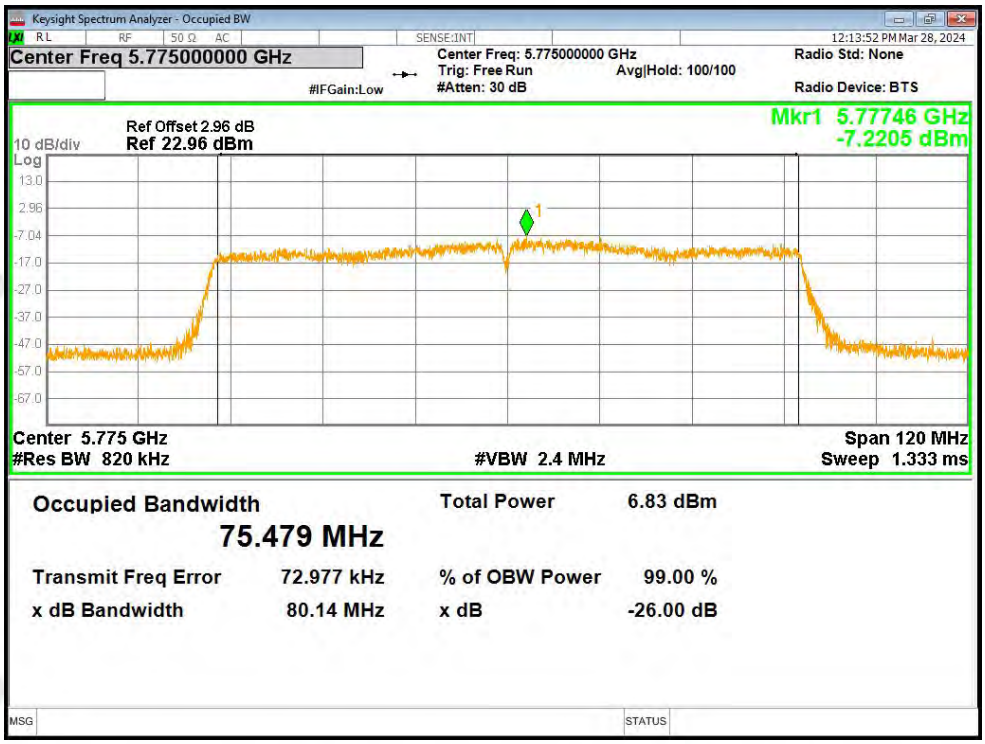


OBW NVNT ac40 5795MHz Ant1



OBW NVNT ac80 5775MHz Ant1



B5. 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	-20.69	1.92	-18.77	30	Pass
NVNT	a	5785	Ant1	-24.32	2.07	-22.25	30	Pass
NVNT	a	5825	Ant1	-26.32	1.92	-24.4	30	Pass
NVNT	n20	5745	Ant1	-20.37	1.57	-18.8	30	Pass
NVNT	n20	5785	Ant1	-23.92	1.57	-22.35	30	Pass
NVNT	n20	5825	Ant1	-23.75	1.57	-22.18	30	Pass
NVNT	n40	5755	Ant1	-30.88	2.48	-28.4	30	Pass
NVNT	n40	5795	Ant1	-30.28	2.83	-27.45	30	Pass
NVNT	ac20	5745	Ant1	-26.27	2.22	-24.05	30	Pass
NVNT	ac20	5785	Ant1	-27.51	2.39	-25.12	30	Pass
NVNT	ac20	5825	Ant1	-30.11	2.22	-27.89	30	Pass
NVNT	ac40	5755	Ant1	-34.42	1.25	-33.17	30	Pass
NVNT	ac40	5795	Ant1	-35.14	3.76	-31.38	30	Pass
NVNT	ac80	5775	Ant1	-39.73	6.28	-33.45	30	Pass

Test Graphs

PSD NVNT a 5745MHz Ant1

PSD NVNT a 5785MHz Ant1

PSD NVNT a 5825MHz Ant1

PSD NVNT n20 5745MHz Ant1