

ANNEX 2-2

FCC Part 15C Test Report

FCC ID: 2BCCG-DELTA

Applicant: Shenzhen Algo Technologies Co., Ltd.

Address: 5th Floor, Building E5, Juyin Technology Industrial Park, Ganli Road, Longgang District, Shenzhen 518116, China

Manufacturer: Shenzhen Algo Technologies Co., Ltd.

Address: 5th Floor, Building E5, Juyin Technology Industrial Park, Ganli Road, Longgang District, Shenzhen 518116, China

EUT: Laser Engraver

Trade Mark: N/A

Model Number: Delta
Delta MK2, Alpha, Alpha MK2, Gamma, Epsilon, Zeta, DIY KIT, DIY KIT Plus, DIY KIT Pro, DIY KIT Plus Pro, DIY KIT MK2, DIY KIT Plus MK2, DIY KIT Pro MK2, DIY KIT Plus Pro MK2, Laser Master 1 MK2, Laser Master 2 MK2

Date of Receipt: Jul. 08, 2023

Test Date: Jul. 08, 2023 - Jul. 22, 2023

Date of Report: Jul. 22, 2023

Prepared By: BTF Testing Lab (Shenzhen) Co., Ltd.

Address: F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China

Applicable Standards: FCC PART 15 C 15.247
ANSI C63.10:2013

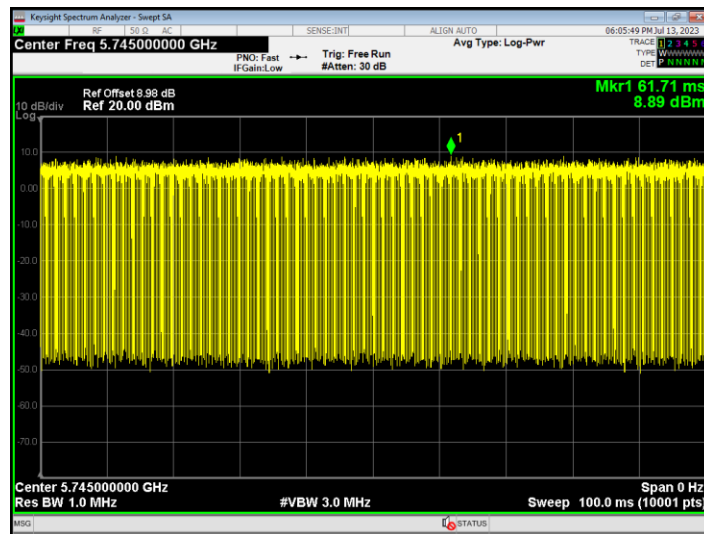
Test Result: Pass

Report Number: BTF230718R01702

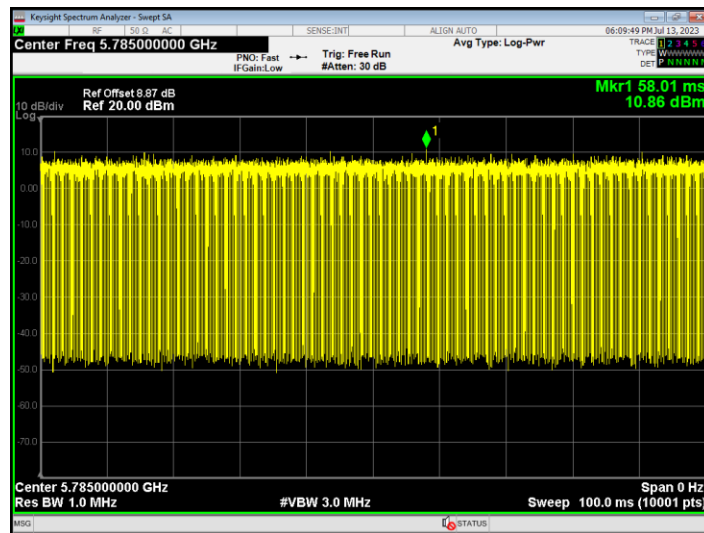
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5745	Ant1	85.33	0.69
NVNT	a	5785	Ant1	85.4	0.69
NVNT	a	5825	Ant1	85.4	0.69
NVNT	n20	5745	Ant1	97.6	0.11
NVNT	n20	5785	Ant1	97.63	0.1
NVNT	n20	5825	Ant1	97.6	0.11
NVNT	n40	5755	Ant1	95.38	0.21
NVNT	n40	5795	Ant1	95.34	0.21

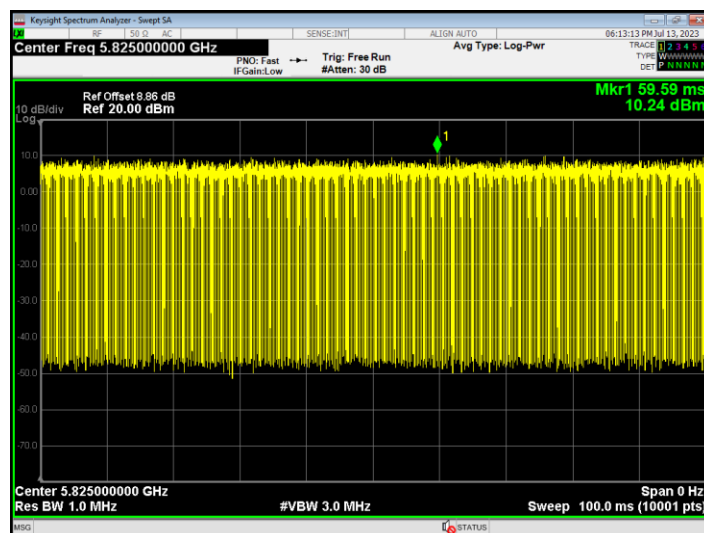
Duty Cycle NVNT a 5745MHz Ant1



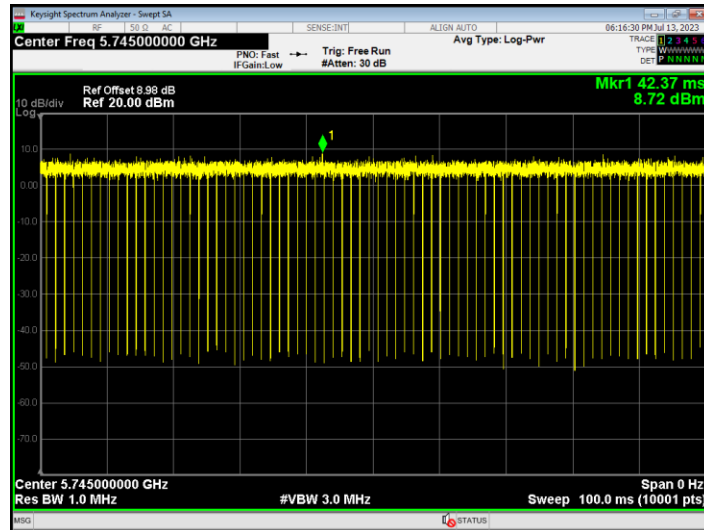
Duty Cycle NVNT a 5785MHz Ant1



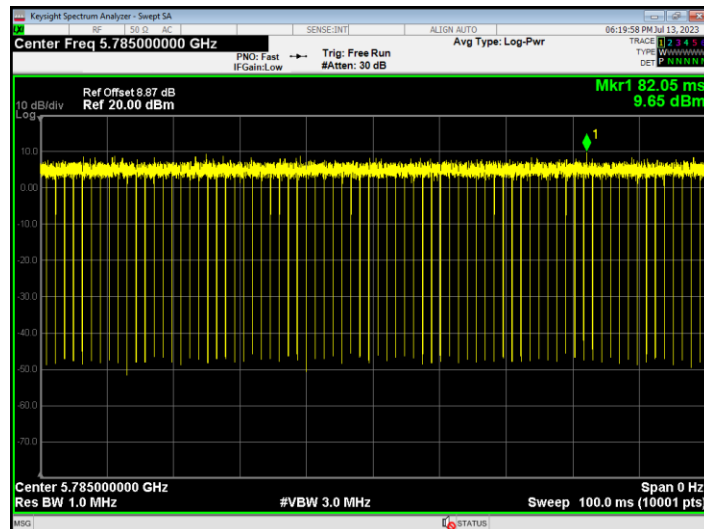
Duty Cycle NVNT a 5825MHz Ant1



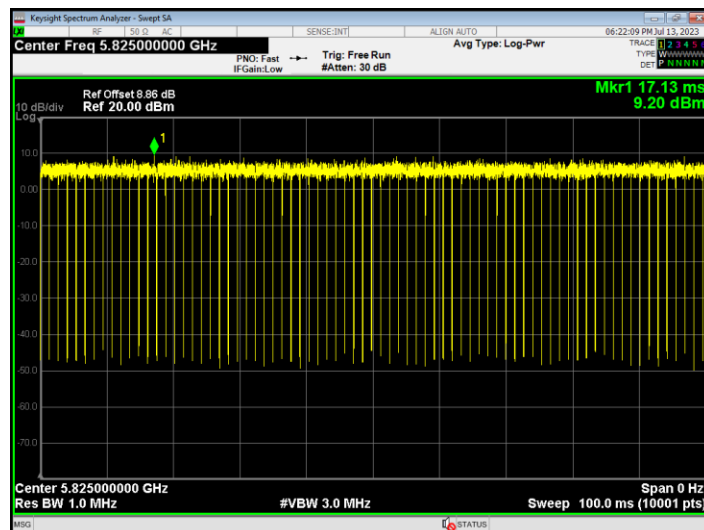
Duty Cycle NVNT n20 5745MHz Ant1



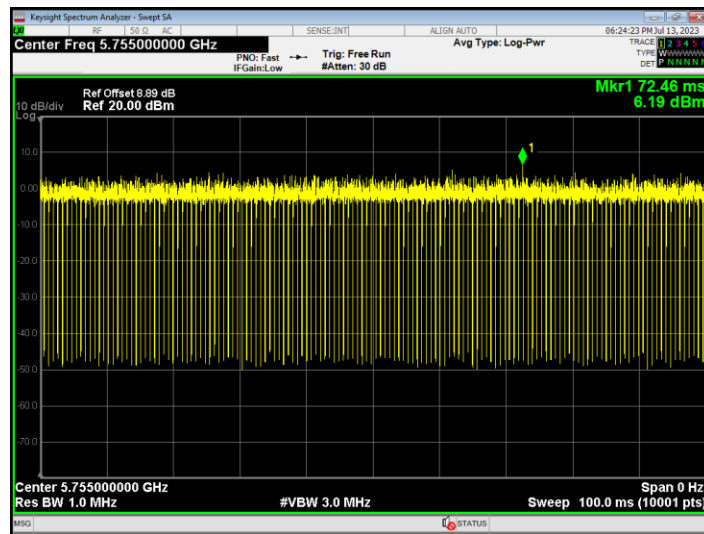
Duty Cycle NVNT n20 5785MHz Ant1



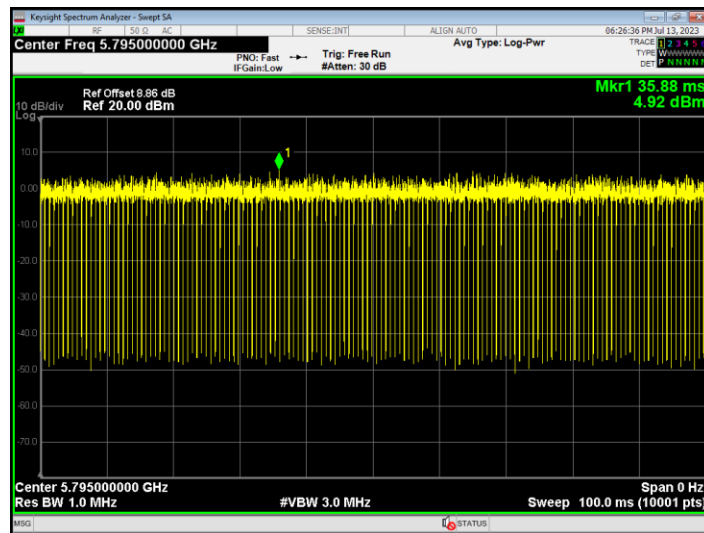
Duty Cycle NVNT n20 5825MHz Ant1



Duty Cycle NVNT n40 5755MHz Ant1



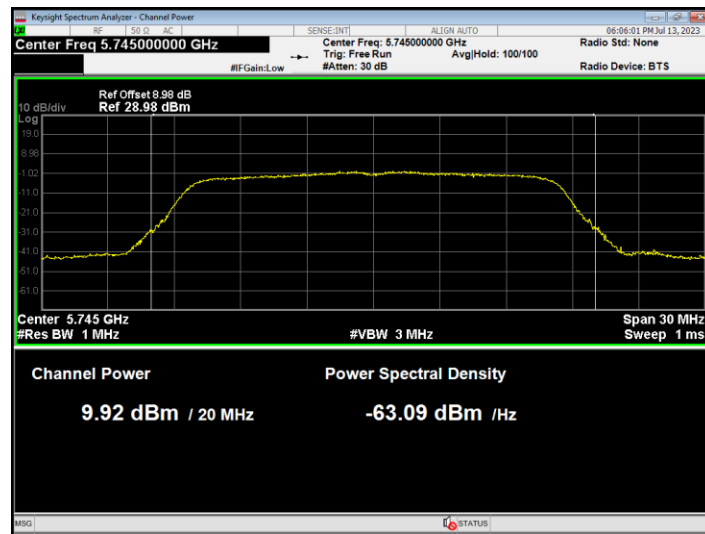
Duty Cycle NVNT n40 5795MHz Ant1



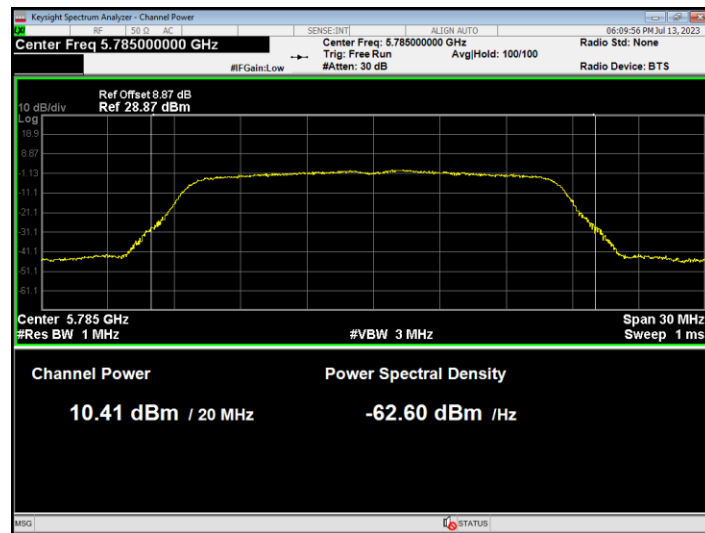
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	9.921	0.69	10.611	30	Pass
NVNT	a	5785	Ant1	10.41	0.69	11.1	30	Pass
NVNT	a	5825	Ant1	10.643	0.69	11.333	30	Pass
NVNT	n20	5745	Ant1	10.674	0.11	10.784	30	Pass
NVNT	n20	5785	Ant1	11.108	0.1	11.208	30	Pass
NVNT	n20	5825	Ant1	11.318	0.11	11.428	30	Pass
NVNT	n40	5755	Ant1	10.838	0.21	11.048	30	Pass
NVNT	n40	5795	Ant1	11.208	0.21	11.418	30	Pass

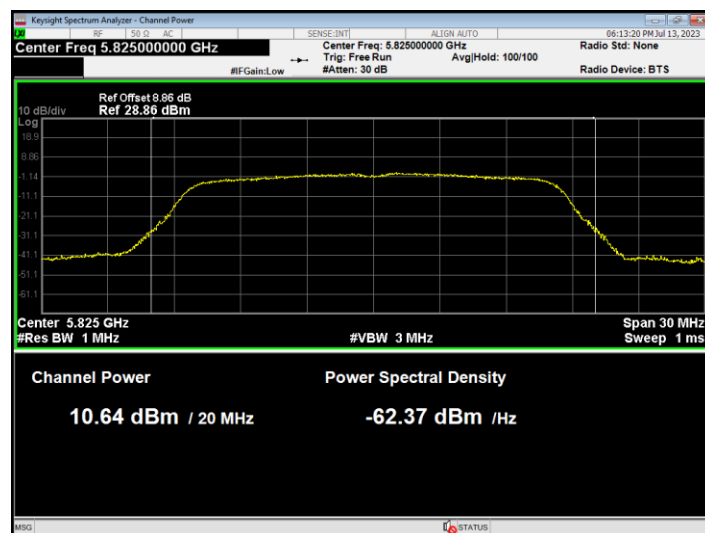
Power NVNT a 5745MHz Ant1



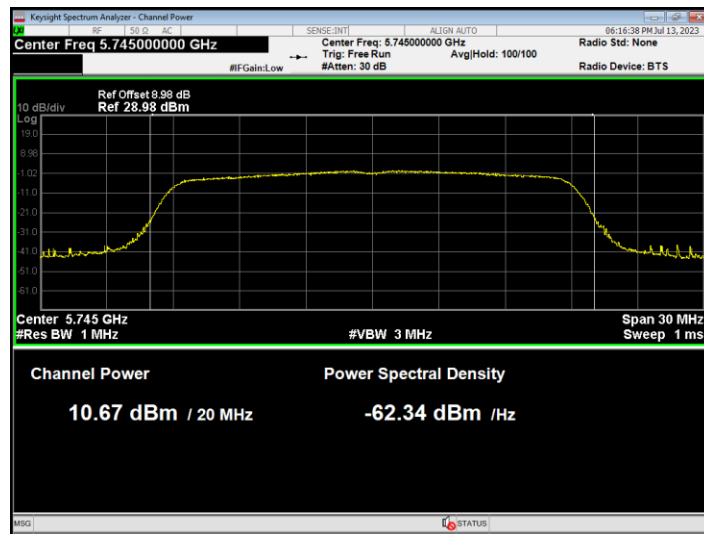
Power NVNT a 5785MHz Ant1



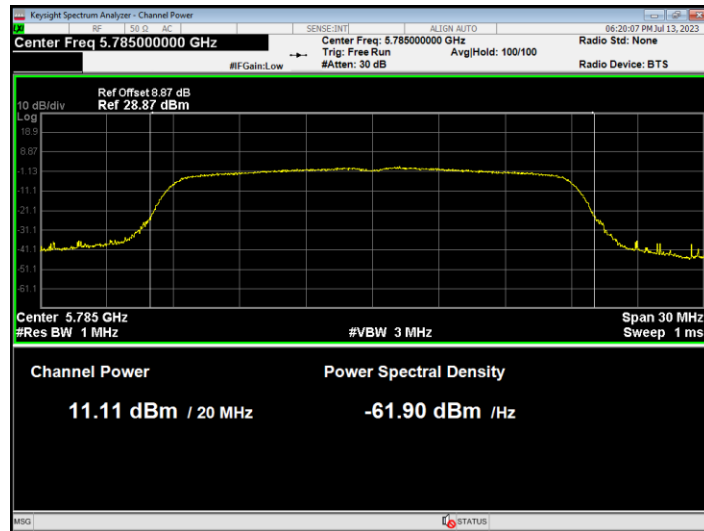
Power NVNT a 5825MHz Ant1



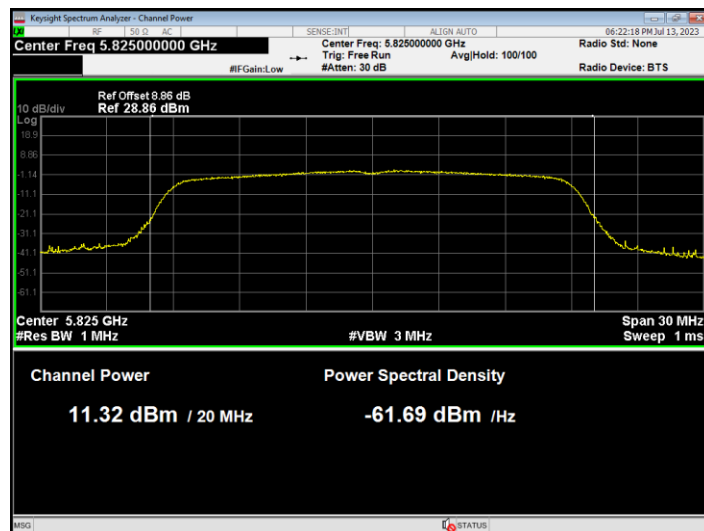
Power NVNT n20 5745MHz Ant1



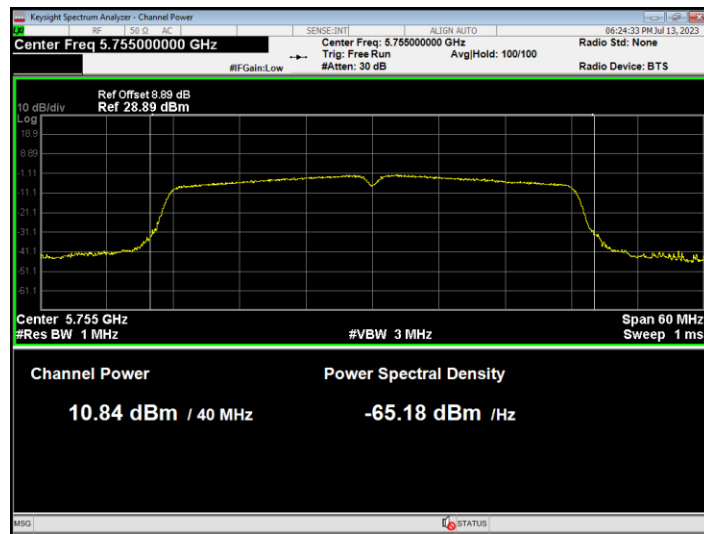
Power NVNT n20 5785MHz Ant1



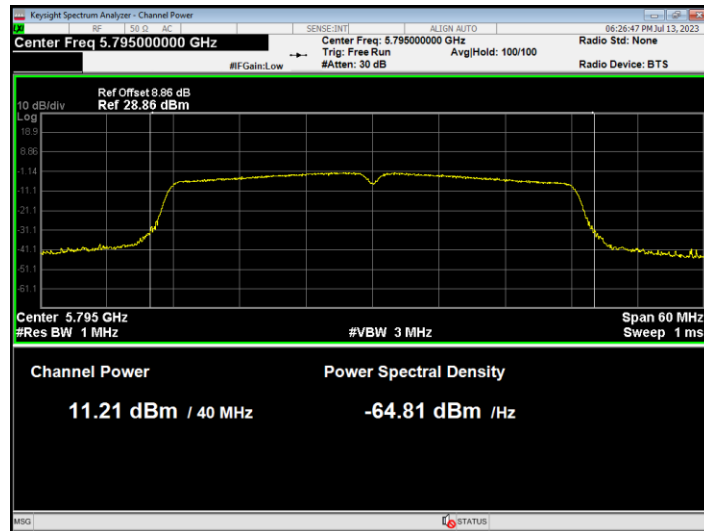
Power NVNT n20 5825MHz Ant1



Power NVNT n40 5755MHz Ant1



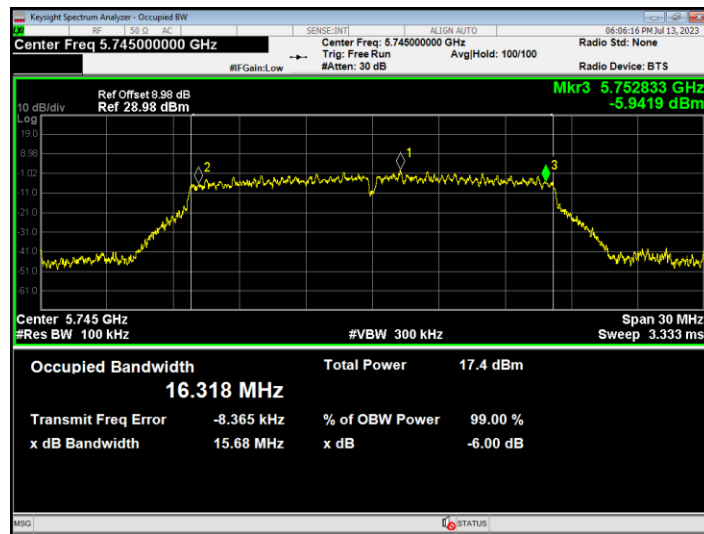
Power NVNT n40 5795MHz Ant1



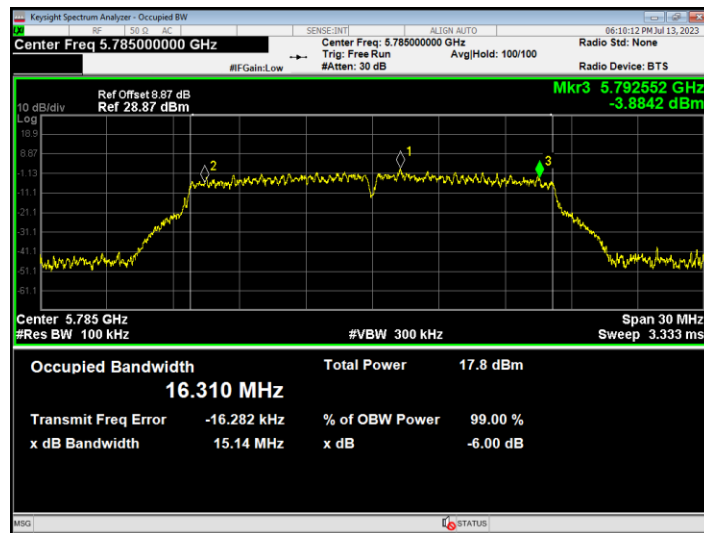
-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant1	15.683	0.5	Pass
NVNT	a	5785	Ant1	15.136	0.5	Pass
NVNT	a	5825	Ant1	15.957	0.5	Pass
NVNT	n20	5745	Ant1	13.871	0.5	Pass
NVNT	n20	5785	Ant1	15.065	0.5	Pass
NVNT	n20	5825	Ant1	16.268	0.5	Pass
NVNT	n40	5755	Ant1	34.994	0.5	Pass
NVNT	n40	5795	Ant1	32.521	0.5	Pass

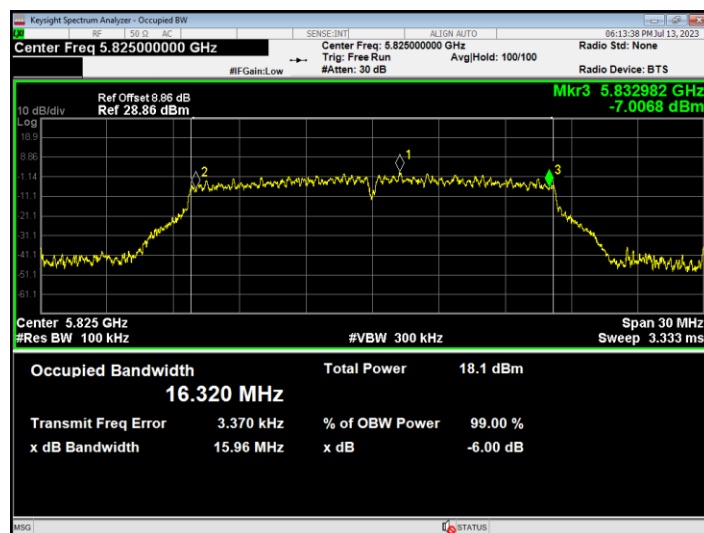
-6dB Bandwidth NVNT a 5745MHz Ant1



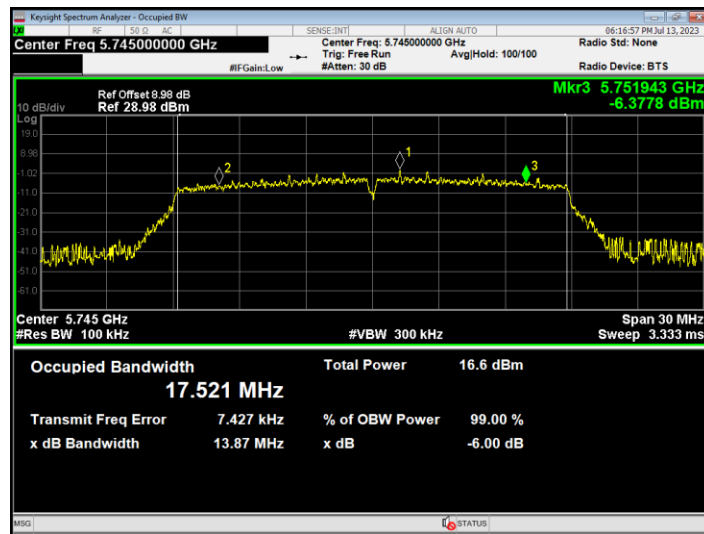
-6dB Bandwidth NVNT a 5785MHz Ant1



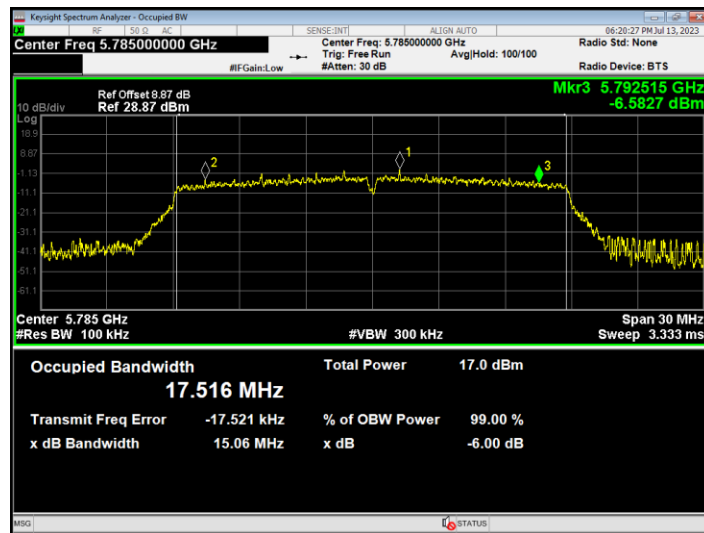
-6dB Bandwidth NVNT a 5825MHz Ant1



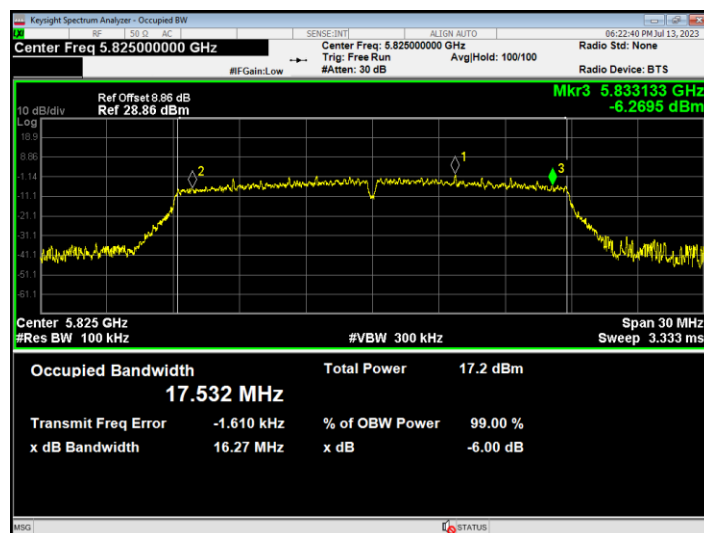
-6dB Bandwidth NVNT n20 5745MHz Ant1



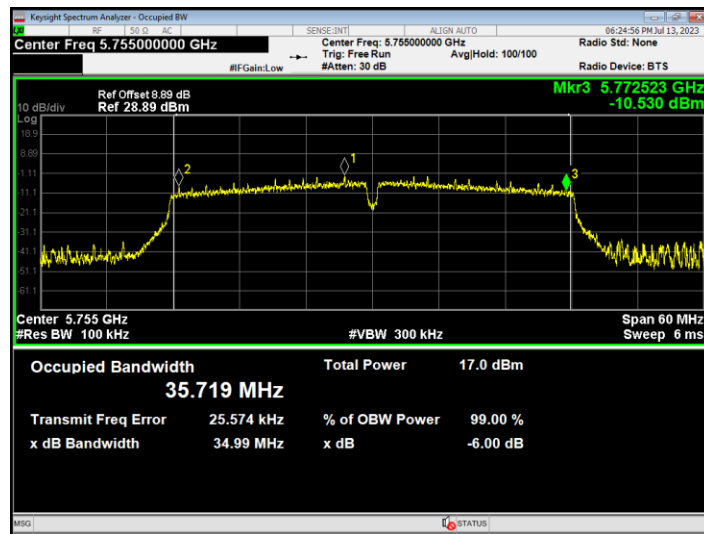
-6dB Bandwidth NVNT n20 5785MHz Ant1



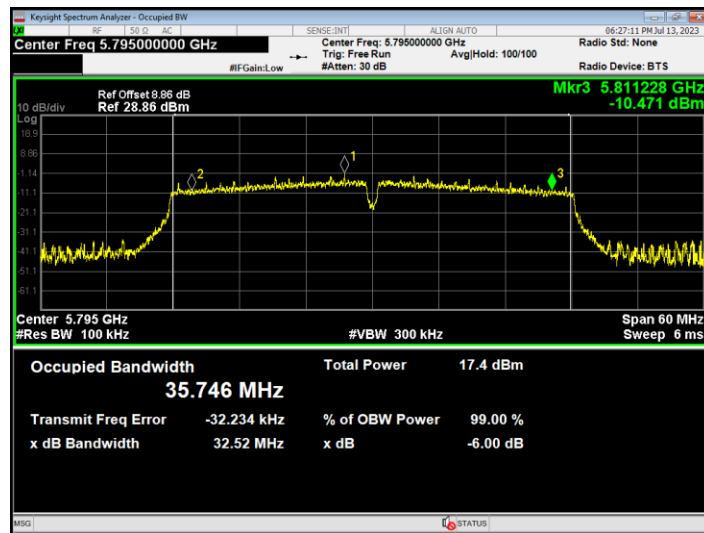
-6dB Bandwidth NVNT n20 5825MHz Ant1



-6dB Bandwidth NVNT n40 5755MHz Ant1



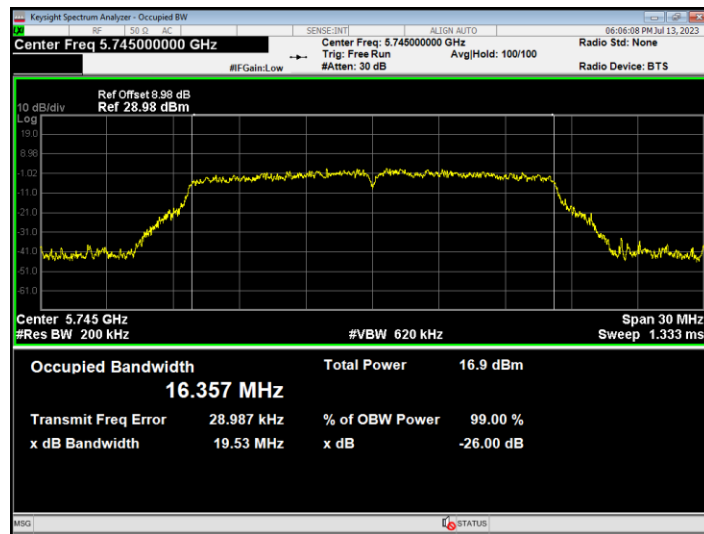
-6dB Bandwidth NVNT n40 5795MHz Ant1



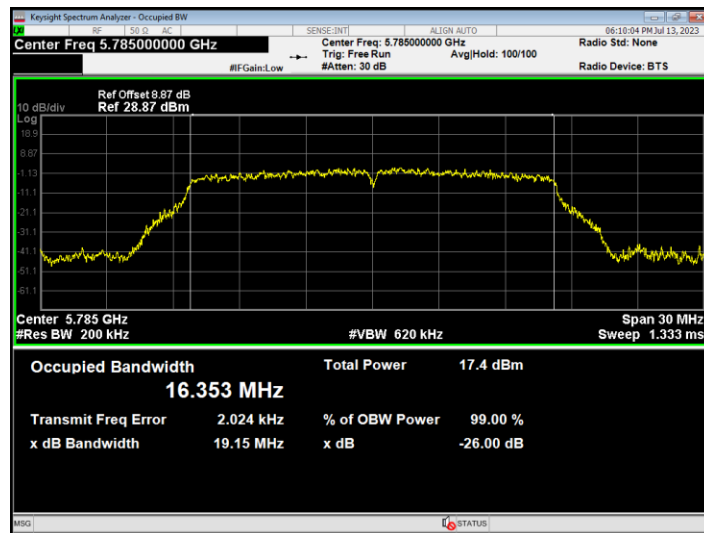
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5745	Ant1	16.35691083
NVNT	a	5785	Ant1	16.35334722
NVNT	a	5825	Ant1	16.33310393
NVNT	n20	5745	Ant1	17.51492945
NVNT	n20	5785	Ant1	17.53974887
NVNT	n20	5825	Ant1	17.53540559
NVNT	n40	5755	Ant1	35.86024136
NVNT	n40	5795	Ant1	35.85292143

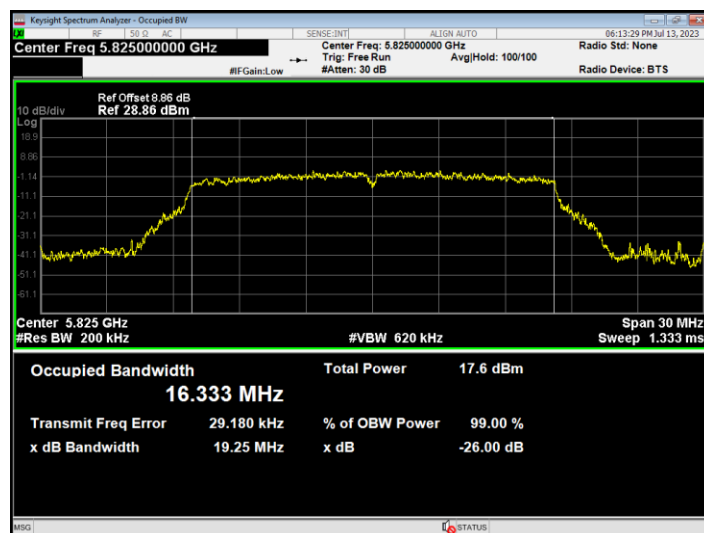
OBW NVNT a 5745MHz Ant1



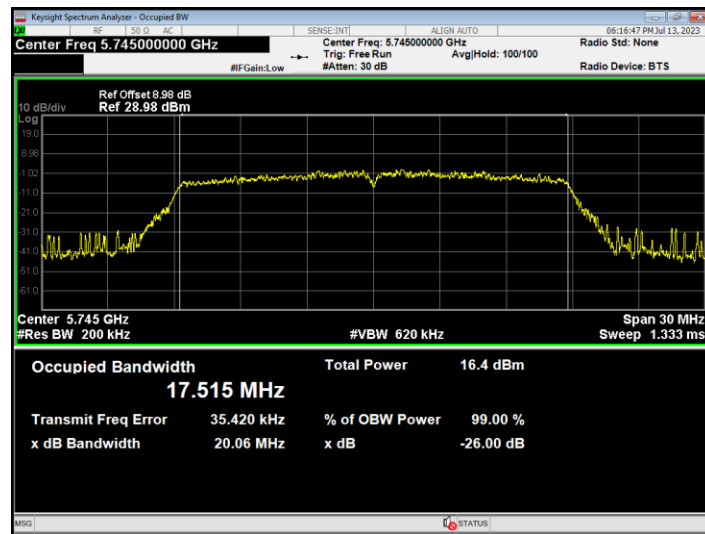
OBW NVNT a 5785MHz Ant1



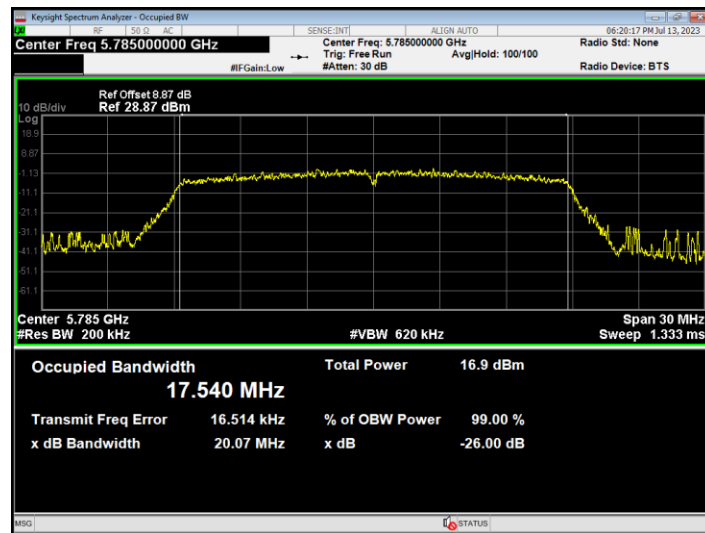
OBW NVNT a 5825MHz Ant1



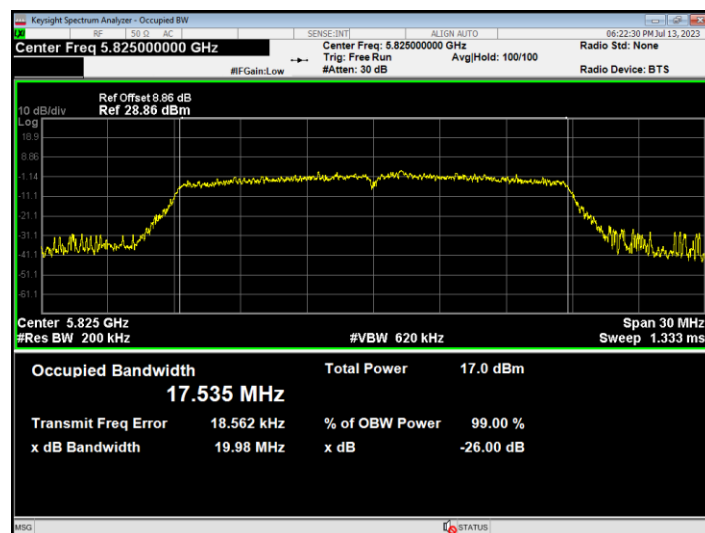
OBW NVNT n20 5745MHz Ant1



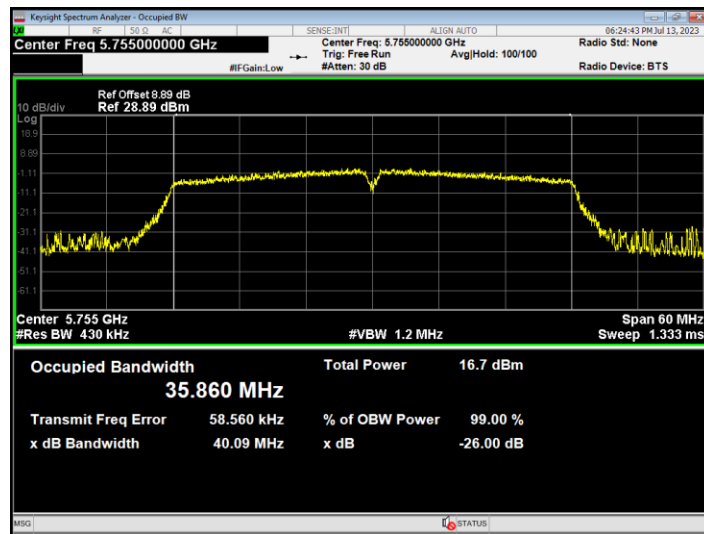
OBW NVNT n20 5785MHz Ant1



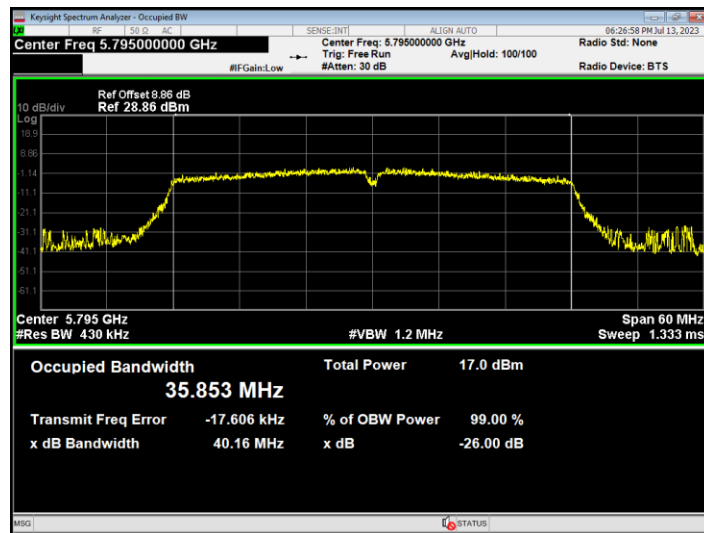
OBW NVNT n20 5825MHz Ant1



OBW NVNT n40 5755MHz Ant1



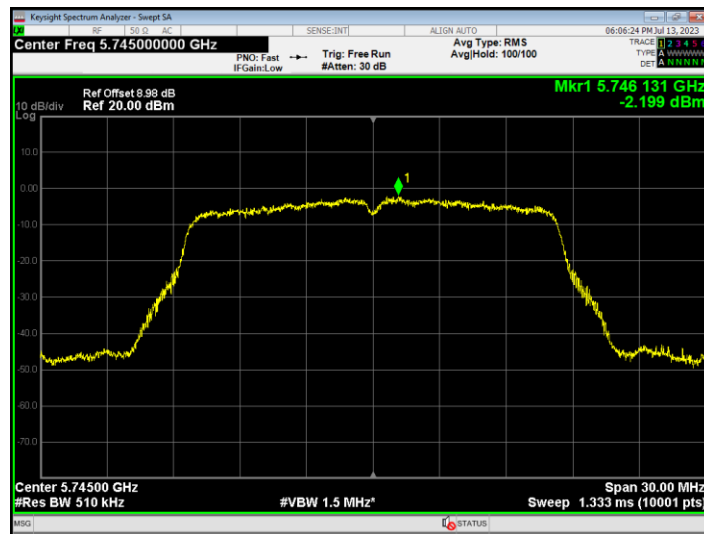
OBW NVNT n40 5795MHz Ant1



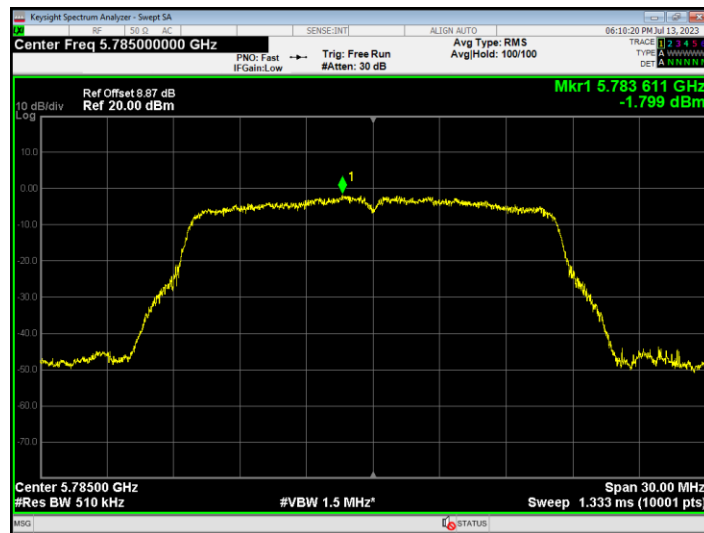
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Reading (dBm)	Duty Factor (dB)	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	-2.199	0.69	-1.51	30	Pass
NVNT	a	5785	Ant1	-1.799	0.69	-1.11	30	Pass
NVNT	a	5825	Ant1	-1.714	0.69	-1.02	30	Pass
NVNT	n20	5745	Ant1	-2.191	0.11	-2.08	30	Pass
NVNT	n20	5785	Ant1	-1.483	0.1	-1.38	30	Pass
NVNT	n20	5825	Ant1	-1.48	0.11	-1.37	30	Pass
NVNT	n40	5755	Ant1	-4.602	0.21	-4.39	30	Pass
NVNT	n40	5795	Ant1	-4.091	0.21	-3.88	30	Pass

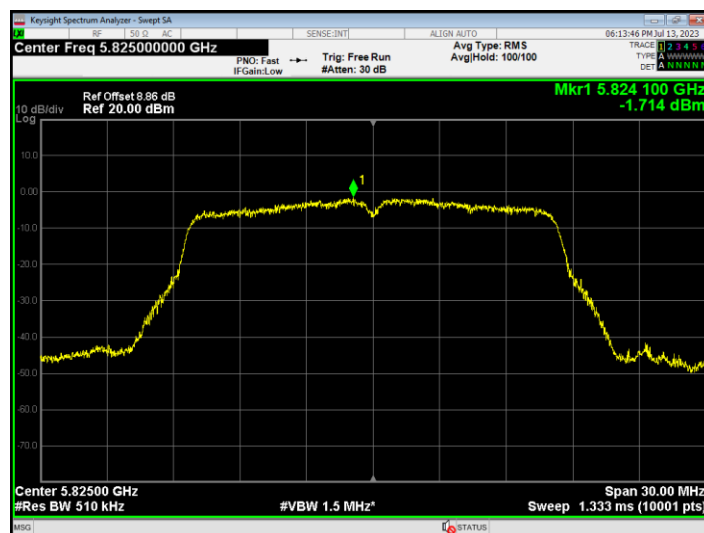
PSD NVNT a 5745MHz Ant1



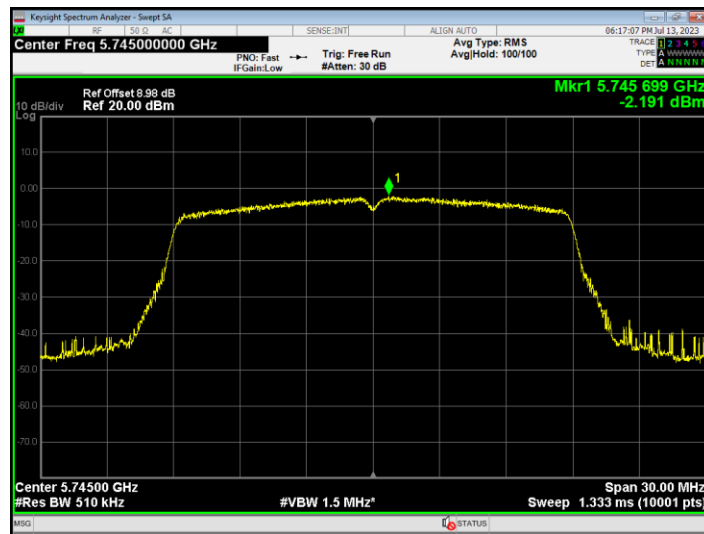
PSD NVNT a 5785MHz Ant1



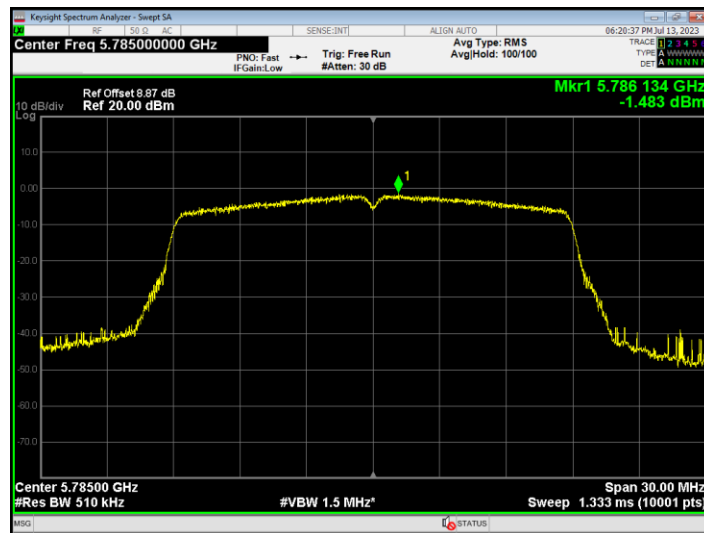
PSD NVNT a 5825MHz Ant1



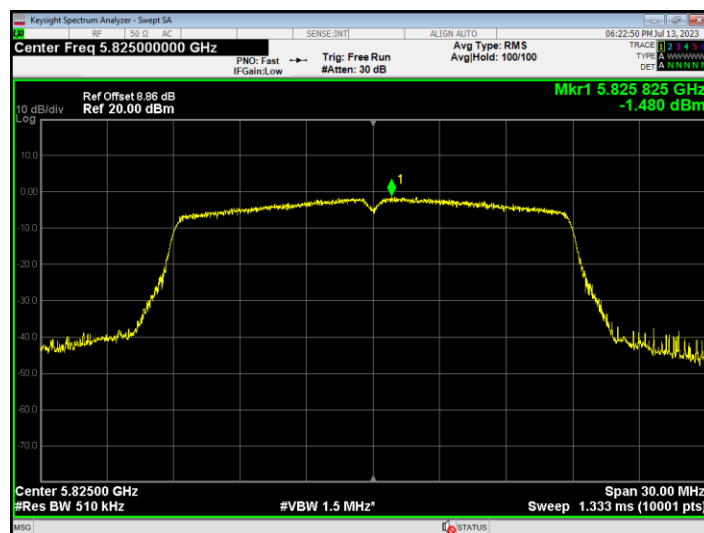
PSD NVNT n20 5745MHz Ant1



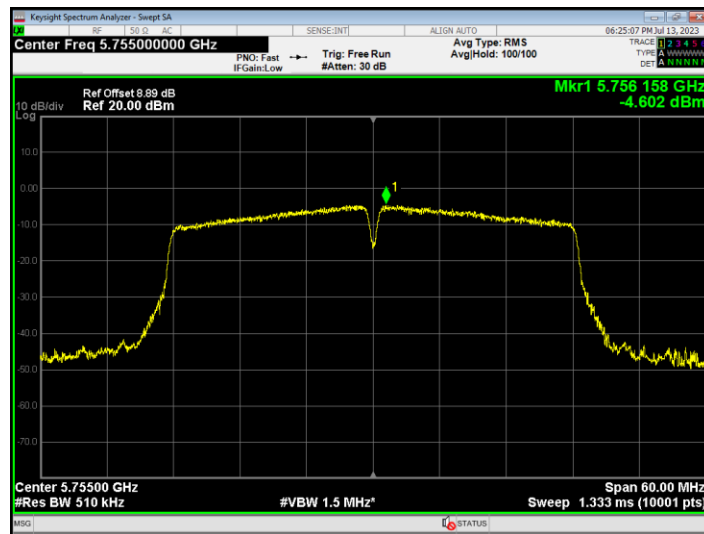
PSD NVNT n20 5785MHz Ant1



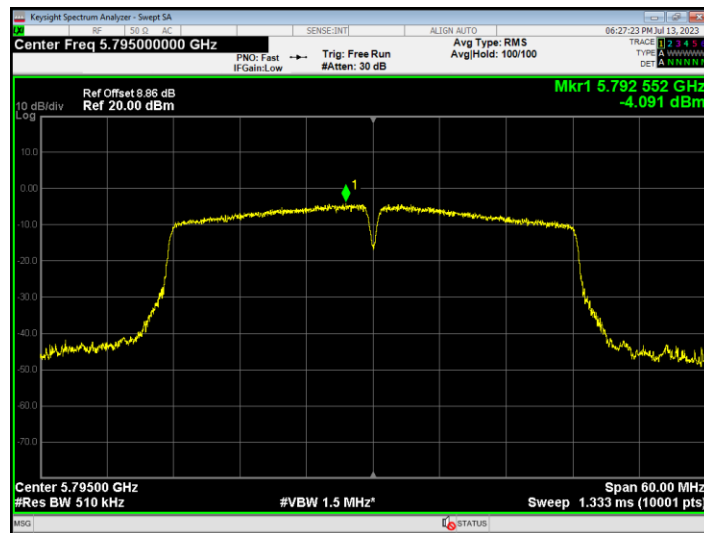
PSD NVNT n20 5825MHz Ant1



PSD NVNT n40 5755MHz Ant1



PSD NVNT n40 5795MHz Ant1

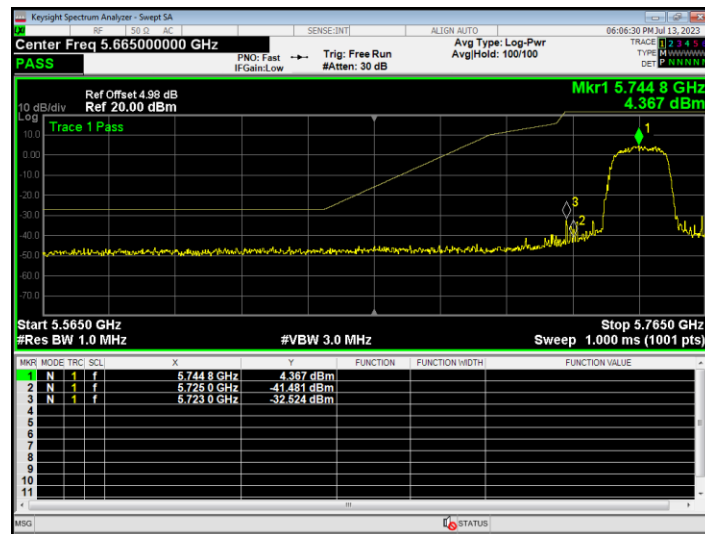


Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Verdict
NVNT	a	5745	Ant1	-32.52	Pass
NVNT	a	5825	Ant1	-38.55	Pass
NVNT	n20	5745	Ant1	-33.61	Pass
NVNT	n20	5825	Ant1	2.38	Pass
NVNT	n40	5755	Ant1	-26.84	Pass
NVNT	n40	5795	Ant1	-38.88	Pass

In the test plot, ref offset=antenna gain + cable loss

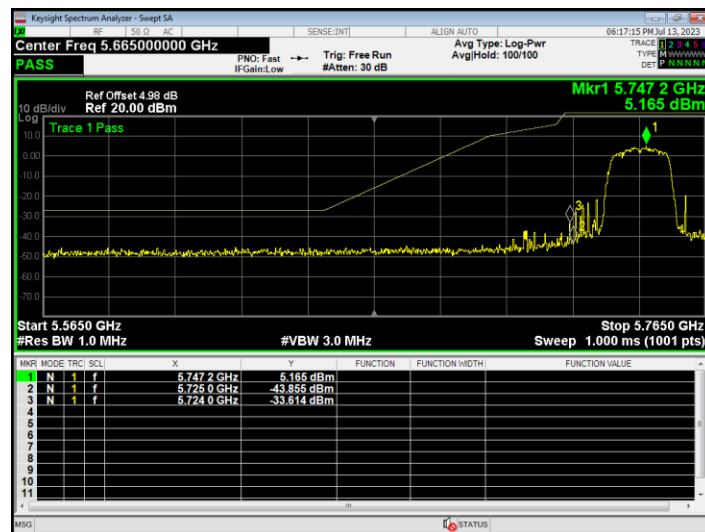
Band Edge NVNT a 5745MHz Low Ant1



Band Edge NVNT a 5825MHz High Ant1



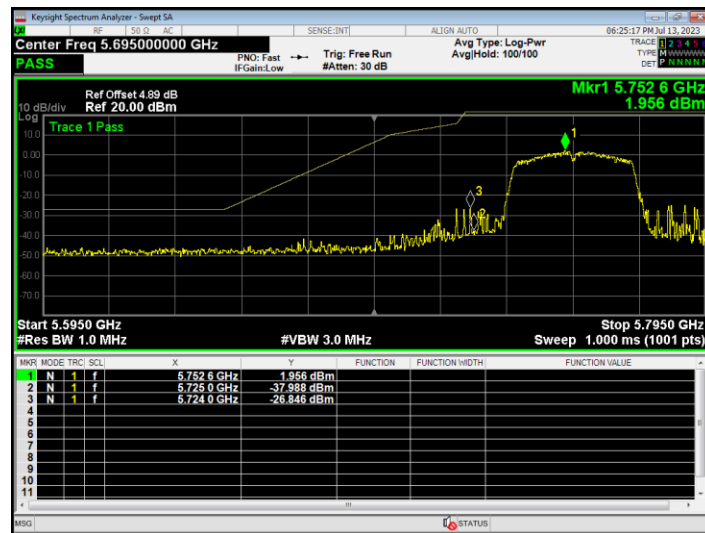
Band Edge NVNT n20 5745MHz Low Ant1



Band Edge NVNT n20 5825MHz High Ant1



Band Edge NVNT n40 5755MHz Low Ant1



Band Edge NVNT n40 5795MHz High Ant1

