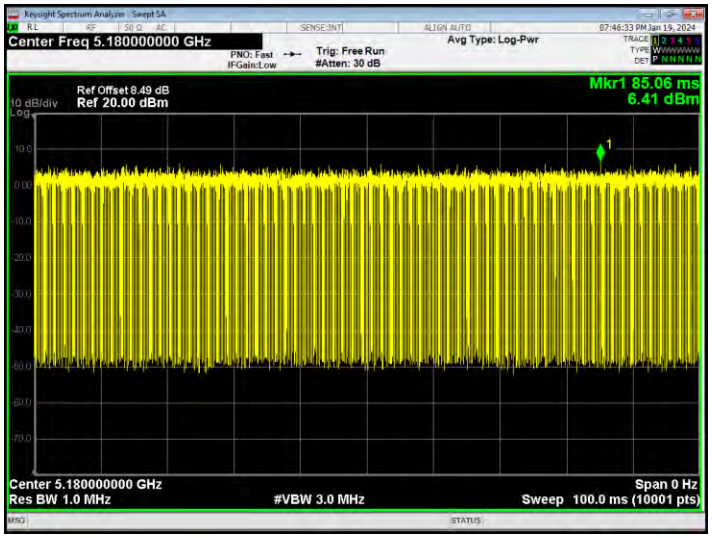
ANNEX 2
FCC Part 15E Test Report
FCC ID: 2BD2Q-CUSTOS

Applicant:	Vernte Technologies
Address:	9222 Alloway Dr Hagerstown, Maryland, USA (21740)
Manufacturer:	Zhongshan Saier Intelligent Technology Co., Ltd
Address:	Area A, Floor 4, NO.1 Factory Building, NO.77 Huanzhou North Road, Tanzhou Town, Zhongshan City, Guangdong, China
EUT:	Custos Smart Headphones
Trade Mark:	Vernte
Model Number:	Custos
Date of Receipt:	Jan. 14, 2024
Test Date:	Jan. 14, 2024 - Jan. 28, 2024
Date of Report:	Jan. 28, 2024
Prepared By:	Shenzhen DL Testing Technology Co., Ltd.
Address:	101-201, Building C, Shuanghuan, No.8, Baoqing Road, Baolong Industrial Zone, Baolong Street, Longgang District, Shenzhen, Guangdong, China

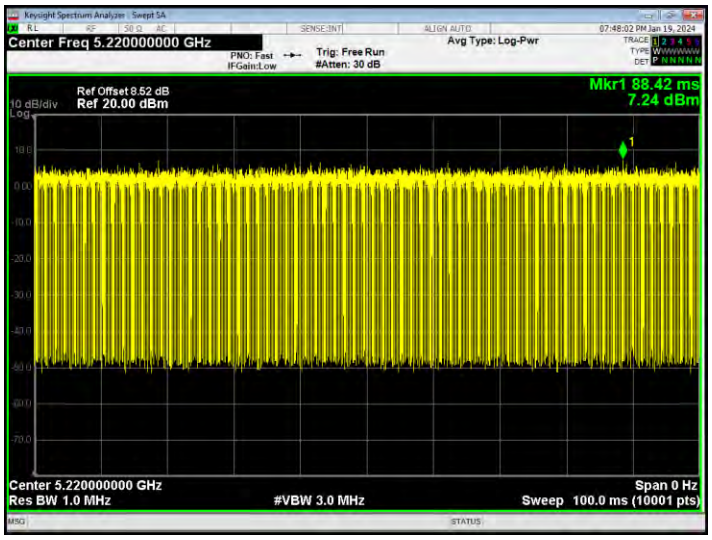
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5180	Ant1	85.23	0.69
NVNT	a	5220	Ant1	85.23	0.69
NVNT	a	5240	Ant1	85.26	0.69
NVNT	ac20	5180	Ant1	95.47	0.2
NVNT	ac20	5220	Ant1	95.53	0.2
NVNT	ac20	5240	Ant1	95.53	0.2
NVNT	ac40	5190	Ant1	91.75	0.37
NVNT	ac40	5230	Ant1	91.73	0.37
NVNT	ac80	5210	Ant1	85.82	0.66
NVNT	n20	5180	Ant1	97.56	0.11
NVNT	n20	5220	Ant1	97.55	0.11
NVNT	n20	5240	Ant1	97.64	0.1
NVNT	n40	5190	Ant1	95.31	0.21
NVNT	n40	5230	Ant1	95.36	0.21

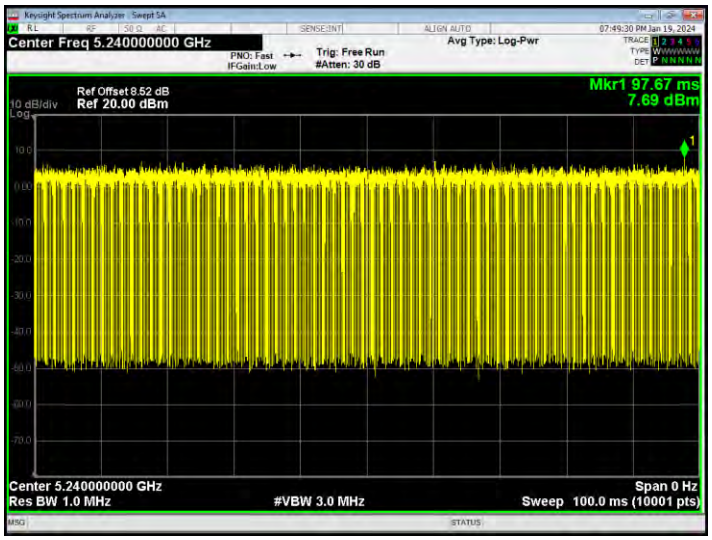
Duty Cycle NVNT a 5180MHz Ant1



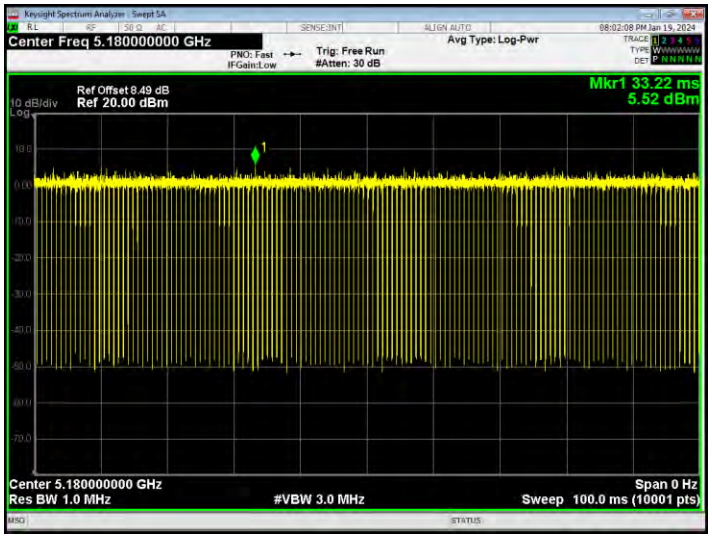
Duty Cycle NVNT a 5220MHz Ant1



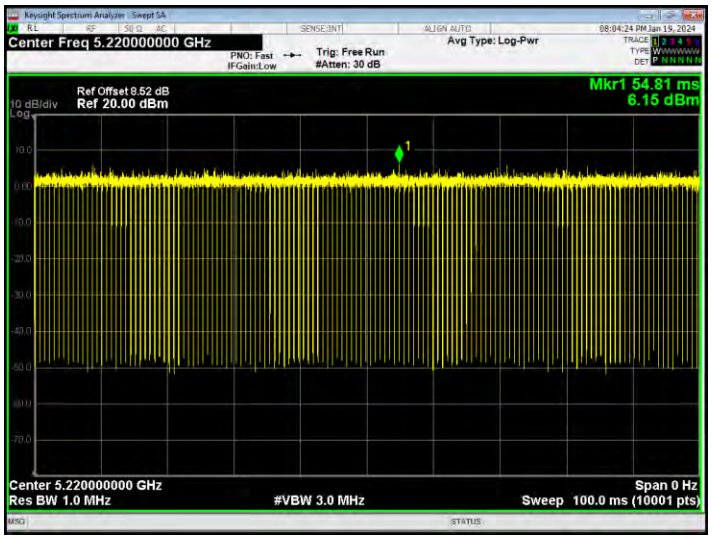
Duty Cycle NVNT a 5240MHz Ant1



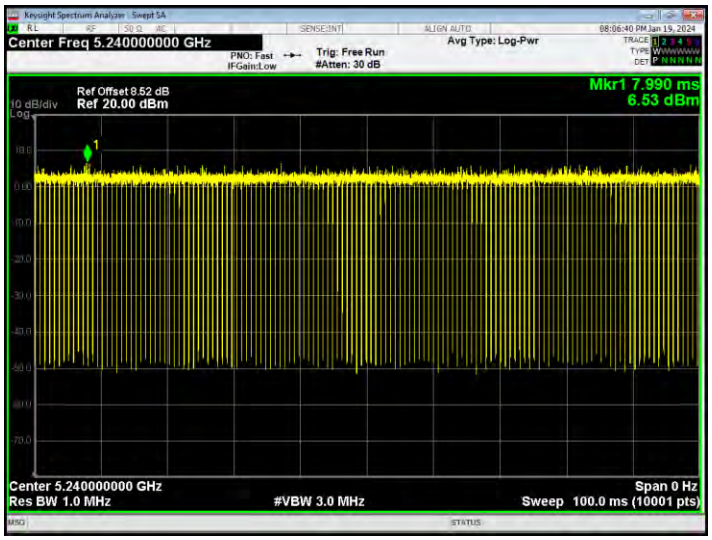
Duty Cycle NVNT ac20 5180MHz Ant1



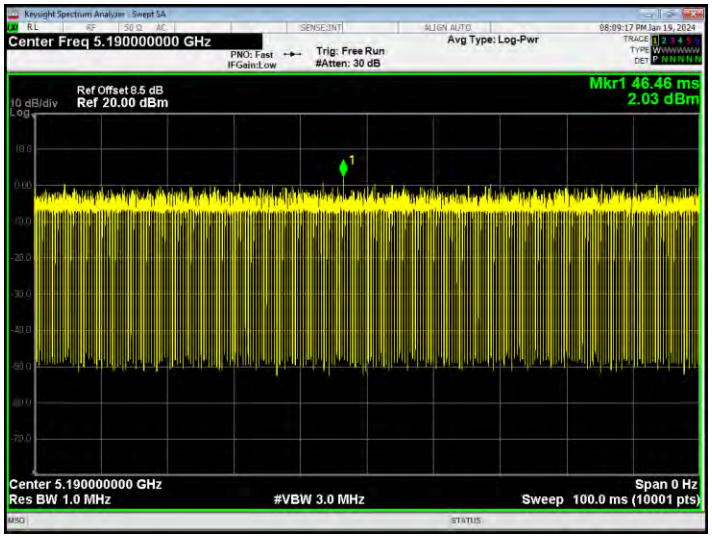
Duty Cycle NVNT ac20 5220MHz Ant1



Duty Cycle NVNT ac20 5240MHz Ant1

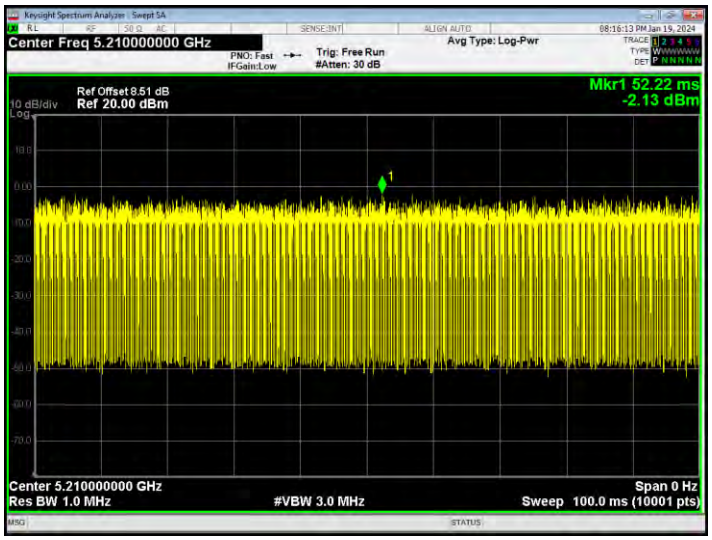


Duty Cycle NVNT ac40 5190MHz Ant1

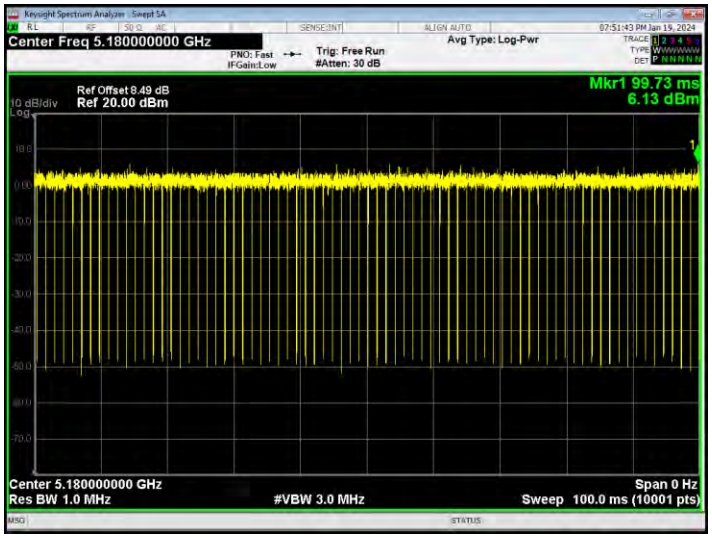


Duty Cycle NVNT ac40 5230MHz Ant1

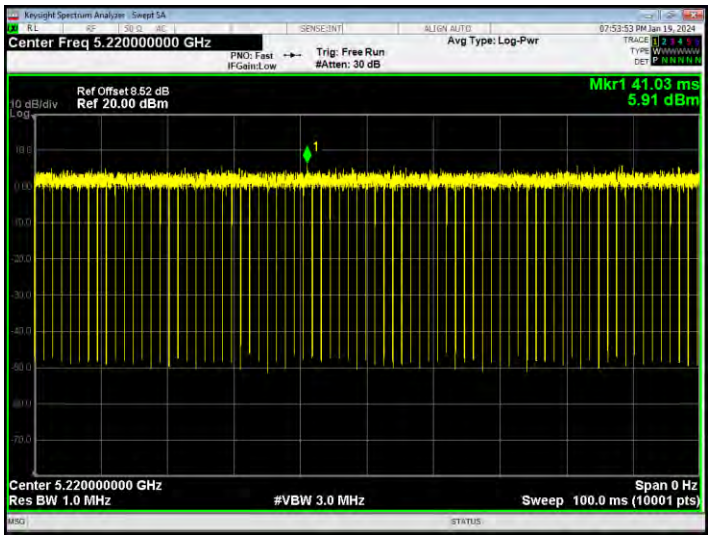
Duty Cycle NVNT ac80 5210MHz Ant1



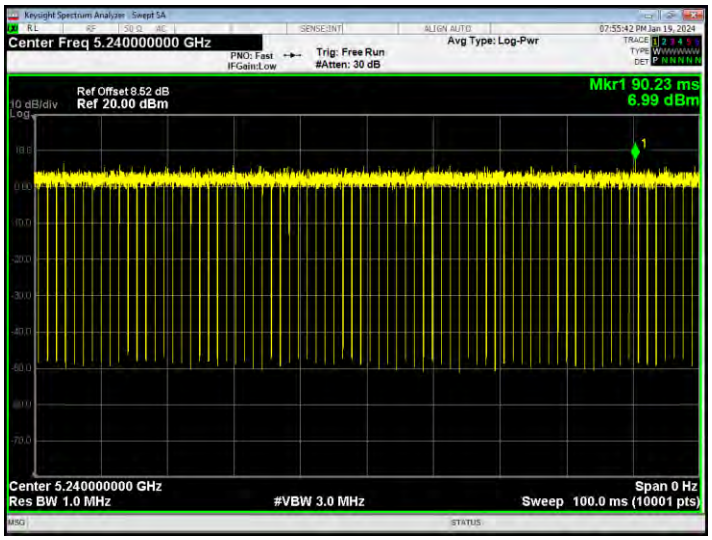
Duty Cycle NVNT n20 5180MHz Ant1



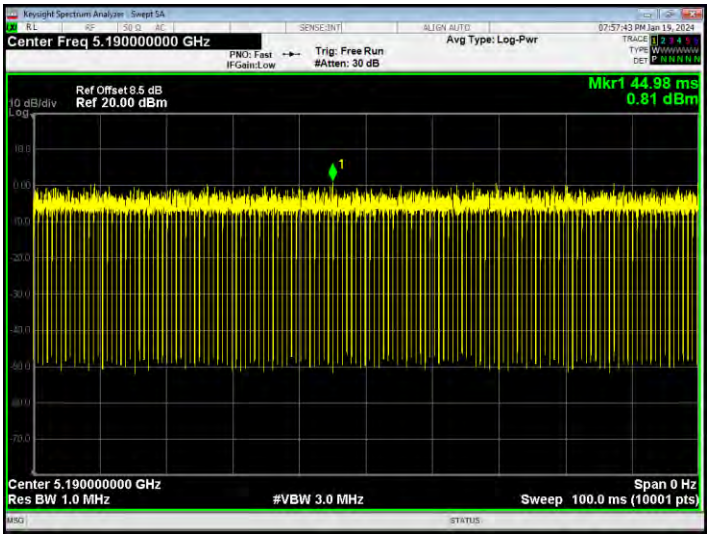
Duty Cycle NVNT n20 5220MHz Ant1



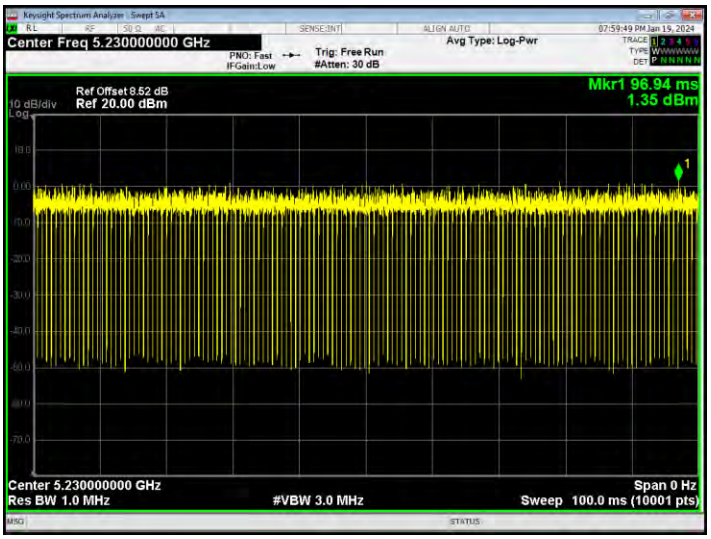
Duty Cycle NVNT n20 5240MHz Ant1



Duty Cycle NVNT n40 5190MHz Ant1



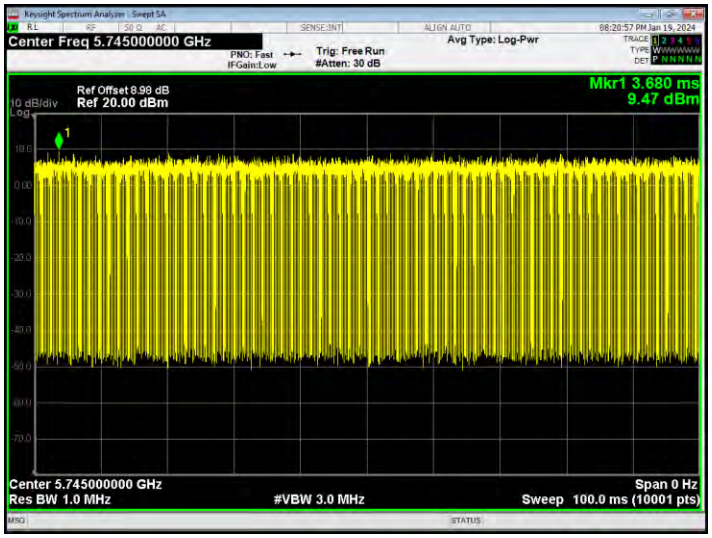
Duty Cycle NVNT n40 5230MHz Ant1



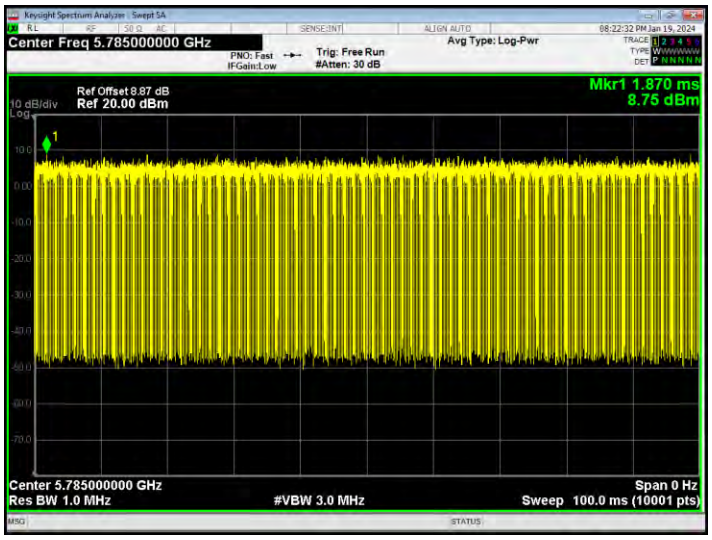
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5745	Ant1	85.37	0.69
NVNT	a	5785	Ant1	84.78	0.72
NVNT	a	5825	Ant1	84.84	0.71
NVNT	ac20	5745	Ant1	95.4	0.2
NVNT	ac20	5785	Ant1	95.38	0.21
NVNT	ac20	5825	Ant1	95.4	0.2
NVNT	ac40	5755	Ant1	91.77	0.37
NVNT	ac40	5795	Ant1	91.57	0.38
NVNT	ac80	5775	Ant1	85.95	0.66
NVNT	n20	5745	Ant1	97.51	0.11
NVNT	n20	5785	Ant1	97.48	0.11
NVNT	n20	5825	Ant1	97.49	0.11
NVNT	n40	5755	Ant1	95.21	0.21
NVNT	n40	5795	Ant1	95.23	0.21

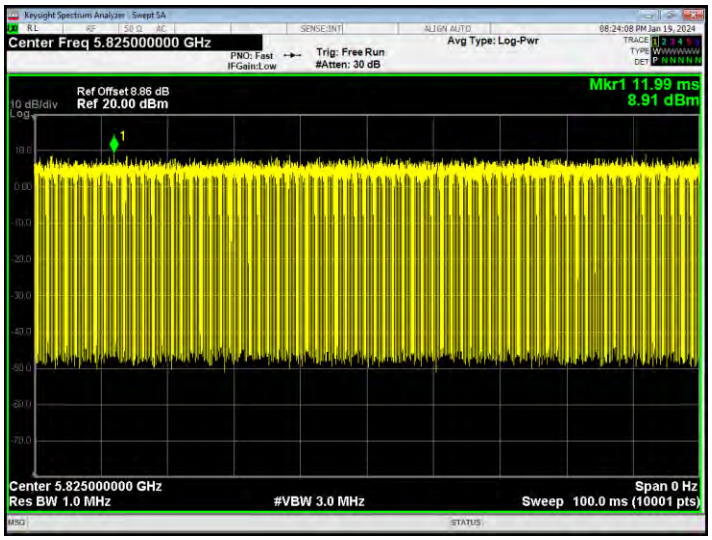
Duty Cycle NVNT a 5745MHz Ant1



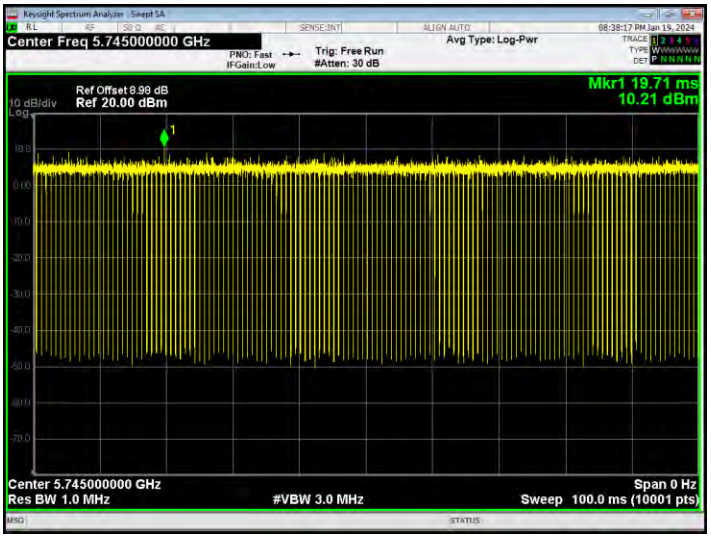
Duty Cycle NVNT a 5785MHz Ant1



Duty Cycle NVNT a 5825MHz Ant1

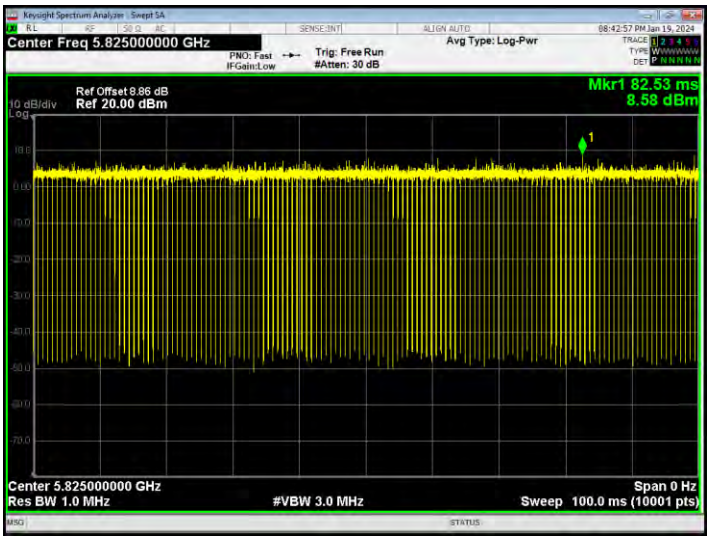


Duty Cycle NVNT ac20 5745MHz Ant1

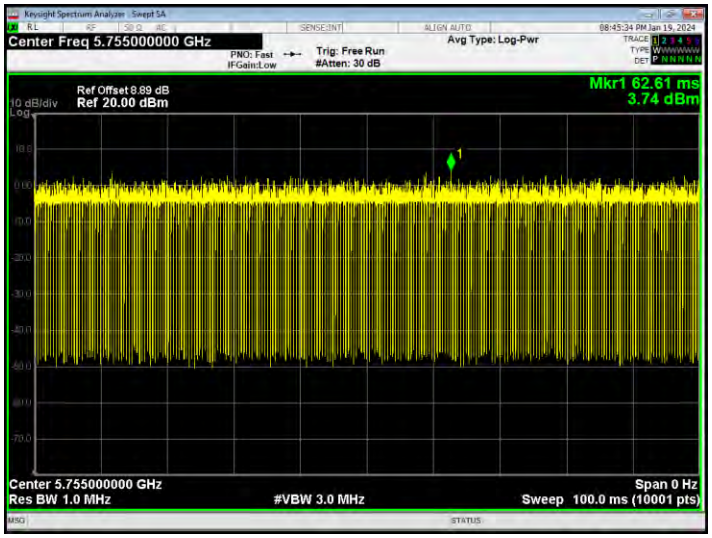


Duty Cycle NVNT ac20 5785MHz Ant1

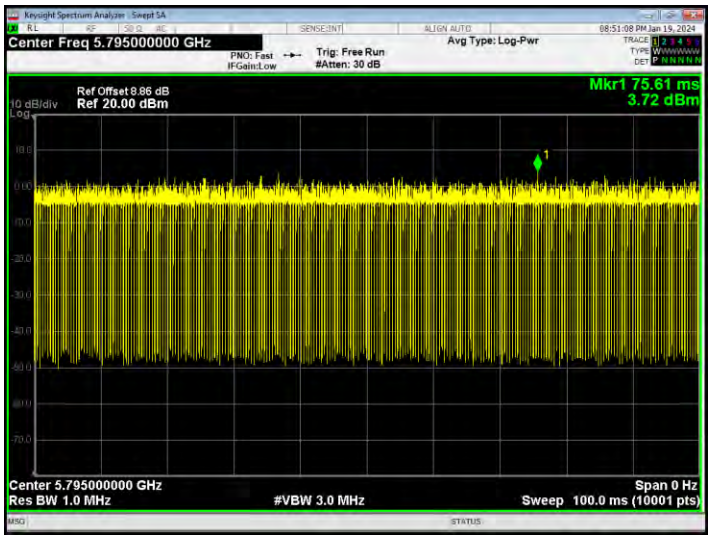
Duty Cycle NVNT ac20 5825MHz Ant1



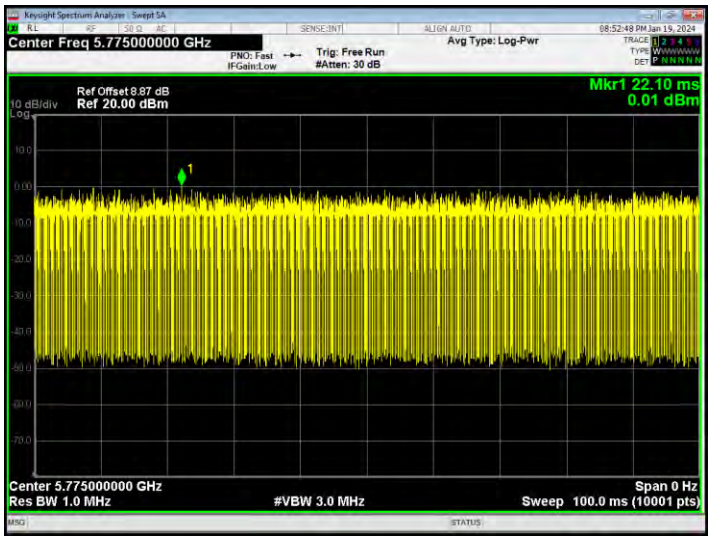
Duty Cycle NVNT ac40 5755MHz Ant1



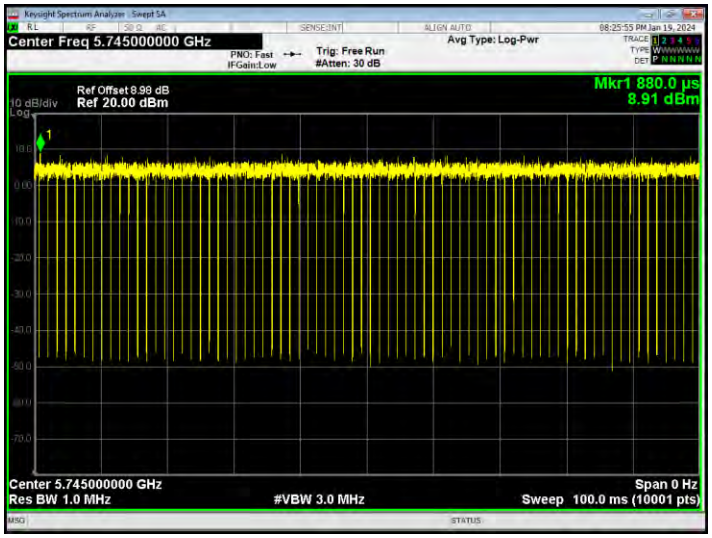
Duty Cycle NVNT ac40 5795MHz Ant1



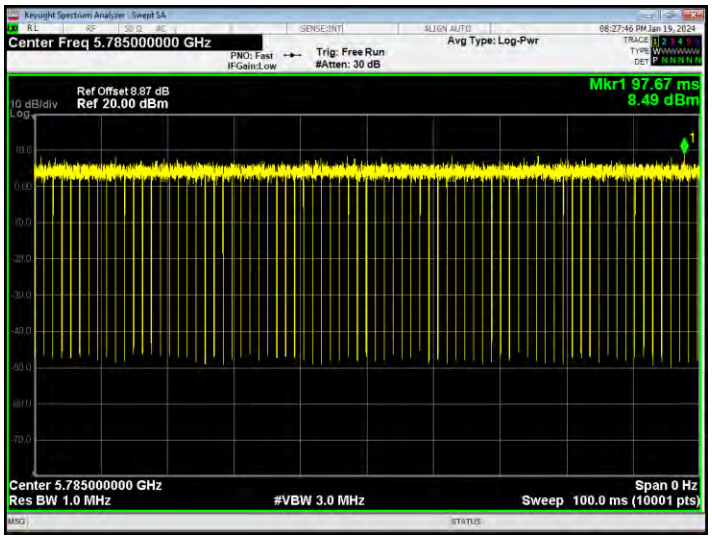
Duty Cycle NVNT ac80 5775MHz Ant1



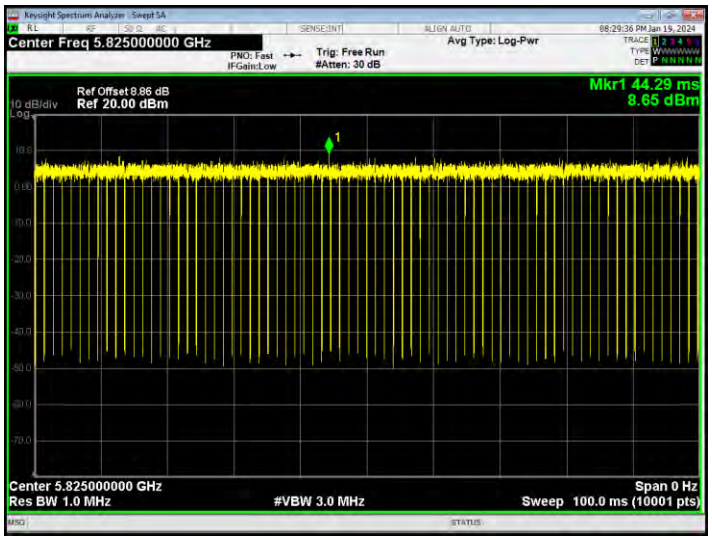
Duty Cycle NVNT n20 5745MHz Ant1



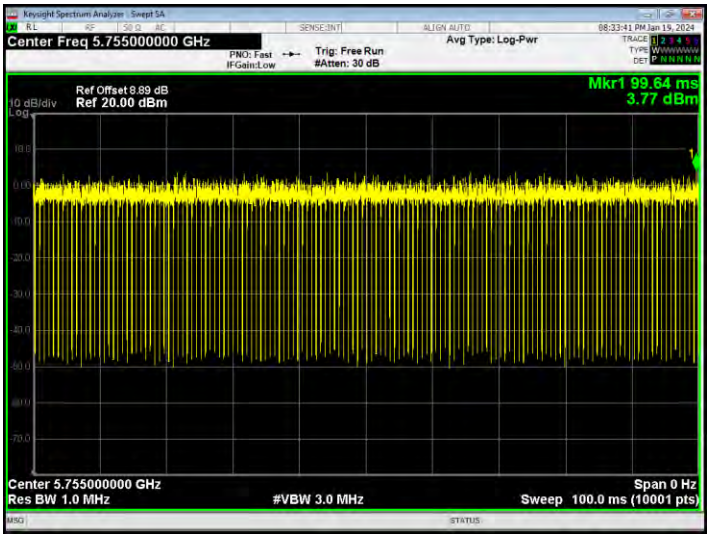
Duty Cycle NVNT n20 5785MHz Ant1



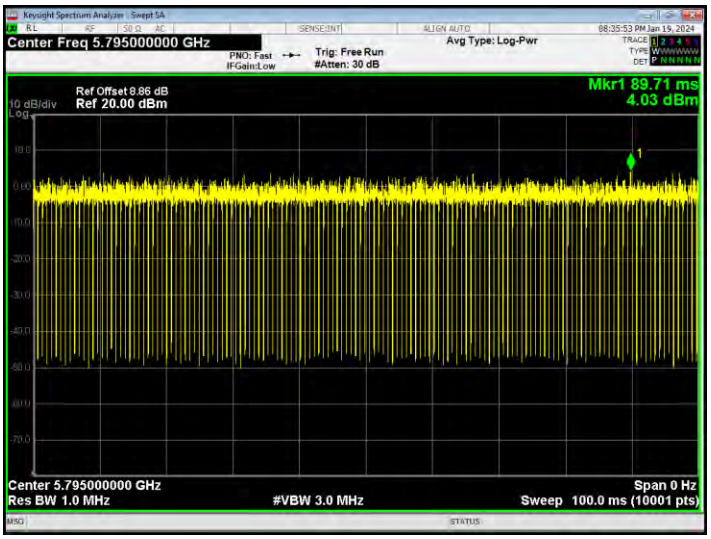
Duty Cycle NVNT n20 5825MHz Ant1



Duty Cycle NVNT n40 5755MHz Ant1



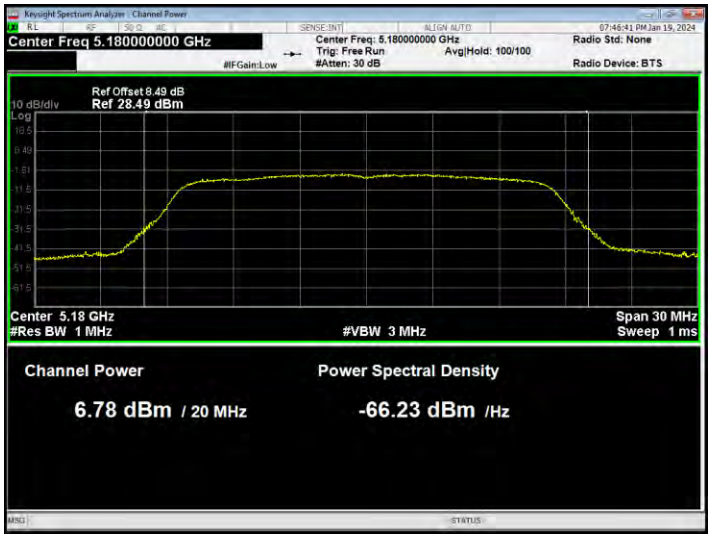
Duty Cycle NVNT n40 5795MHz Ant1



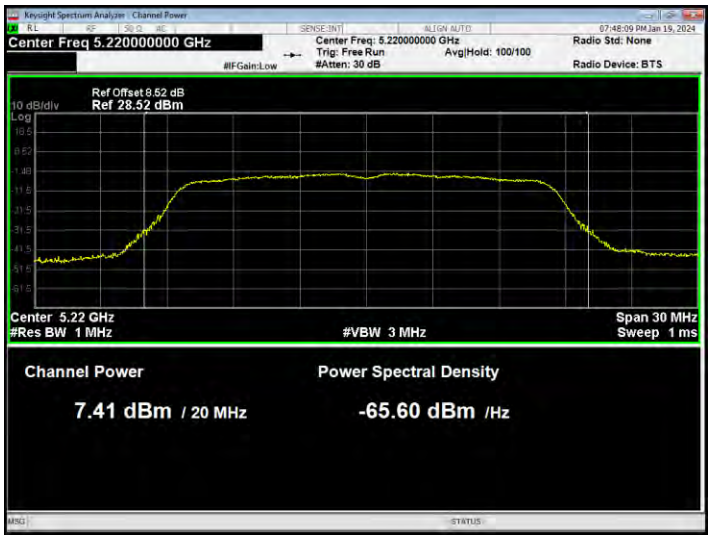
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	6.778	0.69	7.468	24	Pass
NVNT	a	5220	Ant1	7.414	0.69	8.104	24	Pass
NVNT	a	5240	Ant1	7.977	0.69	8.667	24	Pass
NVNT	ac20	5180	Ant1	7.126	0.2	7.326	24	Pass
NVNT	ac20	5220	Ant1	7.636	0.2	7.836	24	Pass
NVNT	ac20	5240	Ant1	8.519	0.2	8.719	24	Pass
NVNT	ac40	5190	Ant1	7.022	0.37	7.392	24	Pass
NVNT	ac40	5230	Ant1	7.901	0.37	8.271	24	Pass
NVNT	ac80	5210	Ant1	7.247	0.66	7.907	24	Pass
NVNT	n20	5180	Ant1	7.642	0.11	7.752	24	Pass
NVNT	n20	5220	Ant1	8.118	0.11	8.228	24	Pass
NVNT	n20	5240	Ant1	8.531	0.1	8.631	24	Pass
NVNT	n40	5190	Ant1	7.381	0.21	7.591	24	Pass
NVNT	n40	5230	Ant1	7.999	0.21	8.209	24	Pass

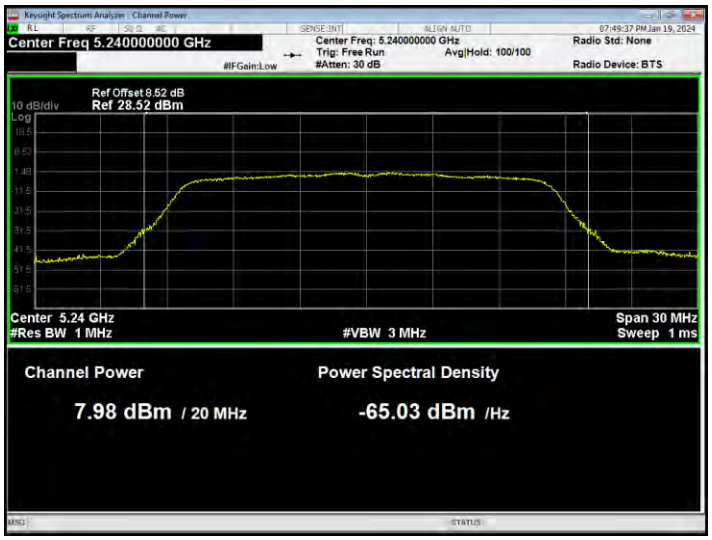
Power NVNT a 5180MHz Ant1



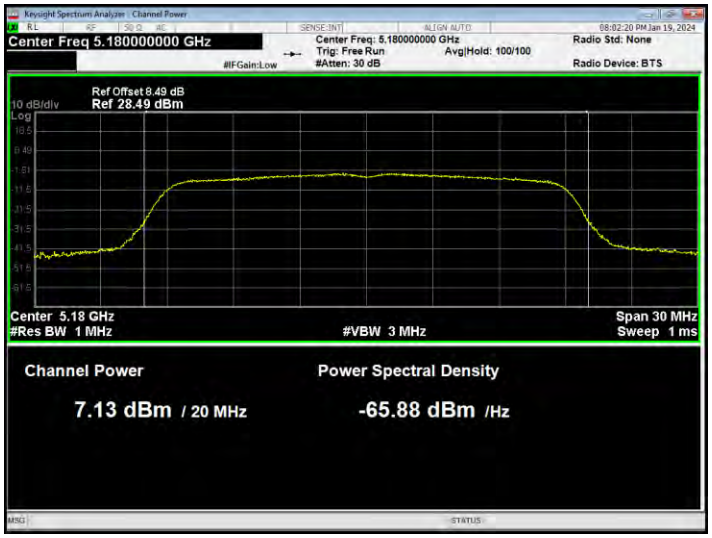
Power NVNT a 5220MHz Ant1



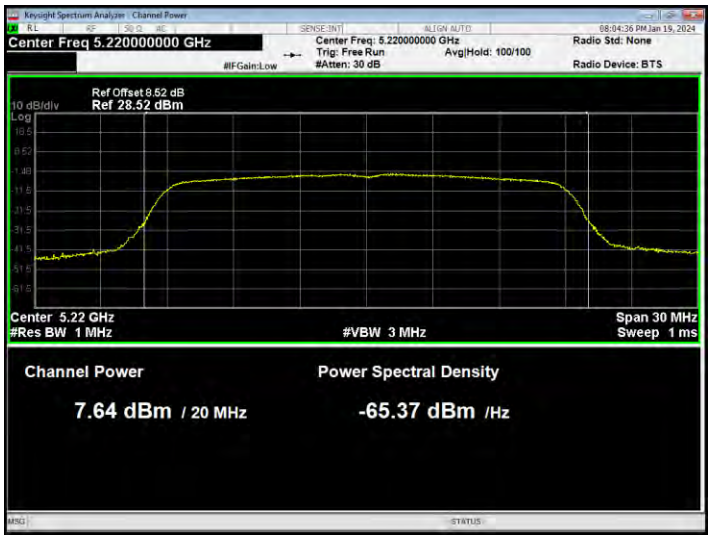
Power NVNT a 5240MHz Ant1



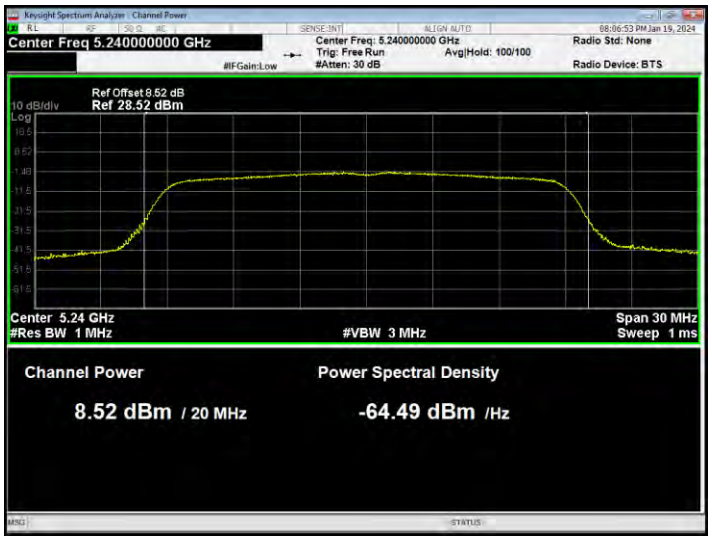
Power NVNT ac20 5180MHz Ant1



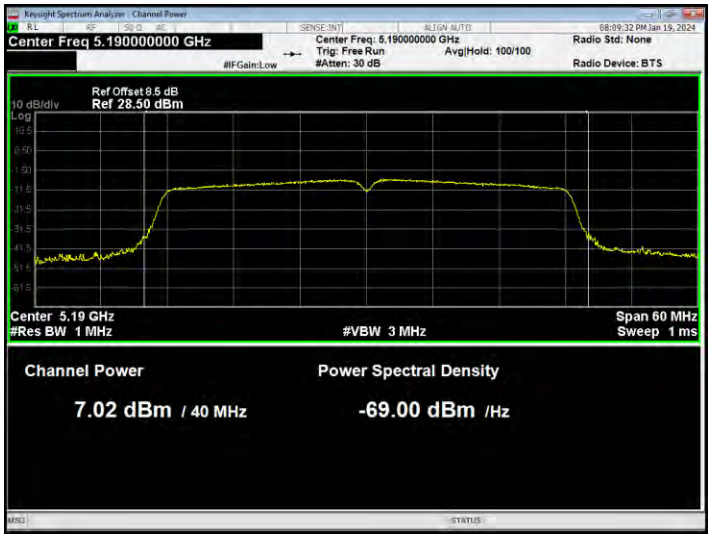
Power NVNT ac20 5220MHz Ant1



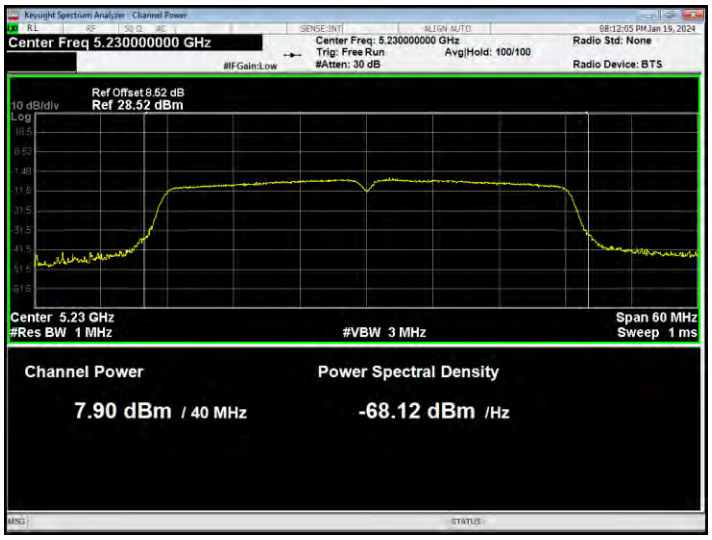
Power NVNT ac20 5240MHz Ant1



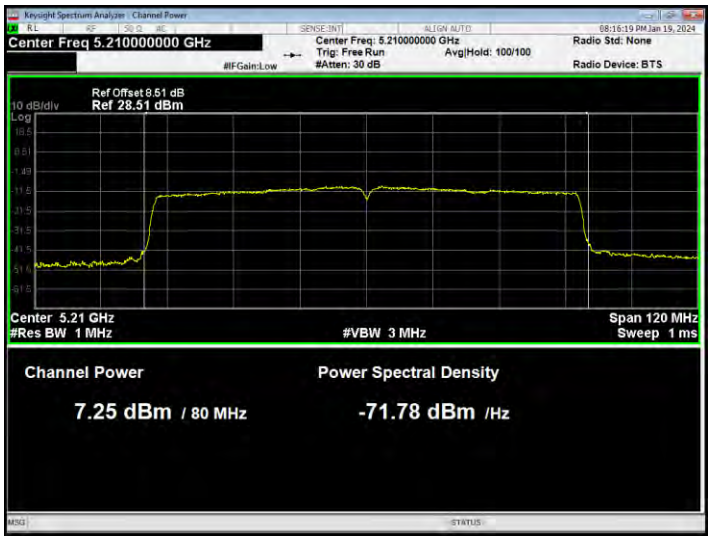
Power NVNT ac40 5190MHz Ant1



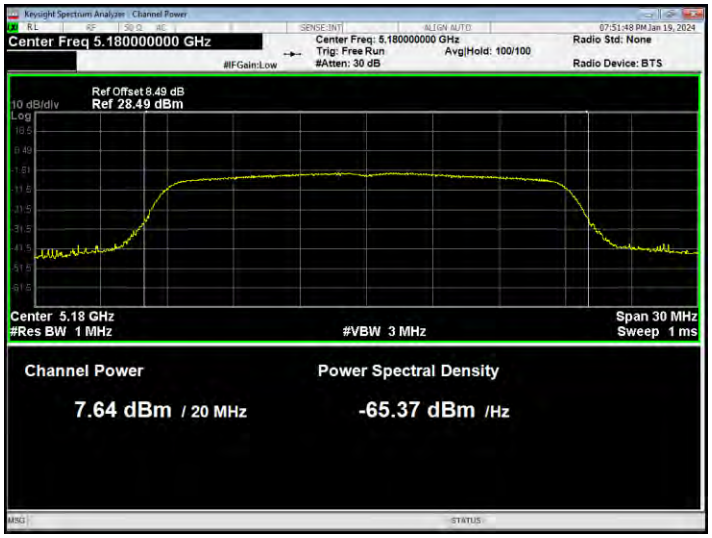
Power NVNT ac40 5230MHz Ant1



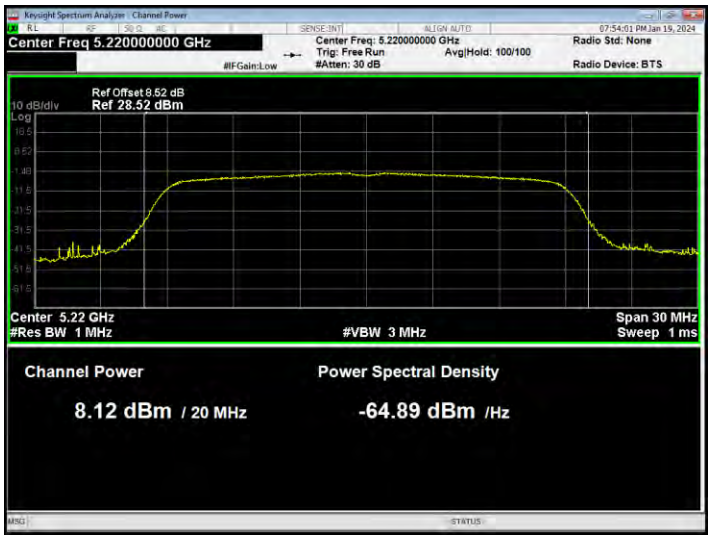
Power NVNT ac80 5210MHz Ant1



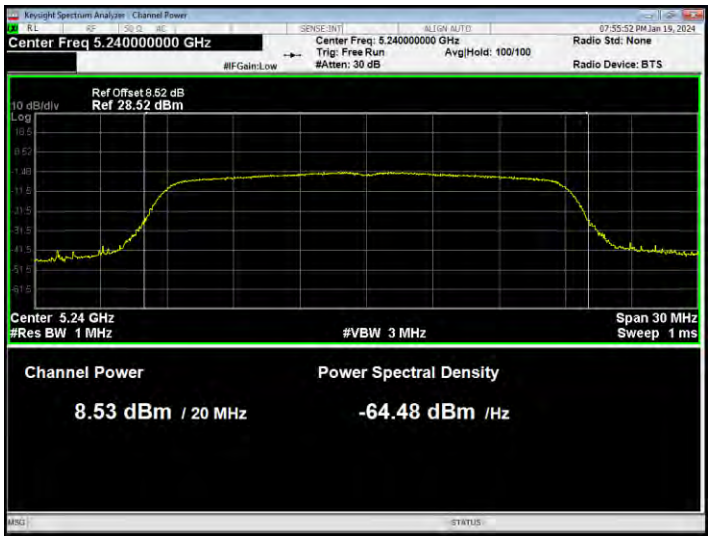
Power NVNT n20 5180MHz Ant1



Power NVNT n20 5220MHz Ant1

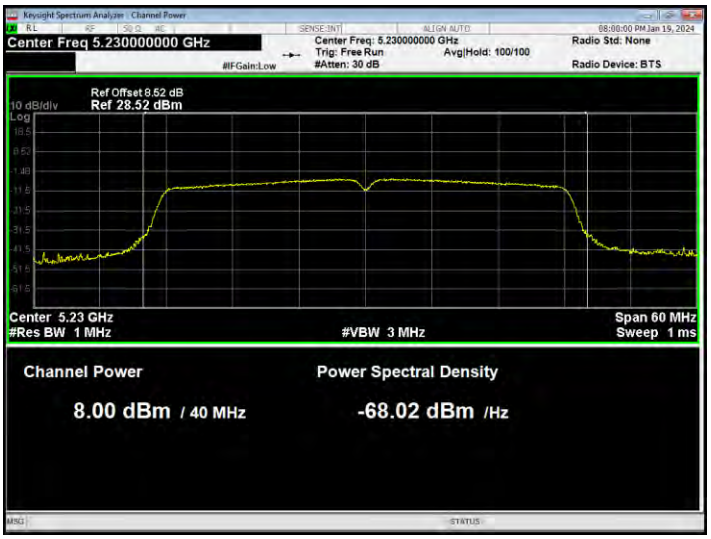


Power NVNT n20 5240MHz Ant1



Power NVNT n40 5190MHz Ant1

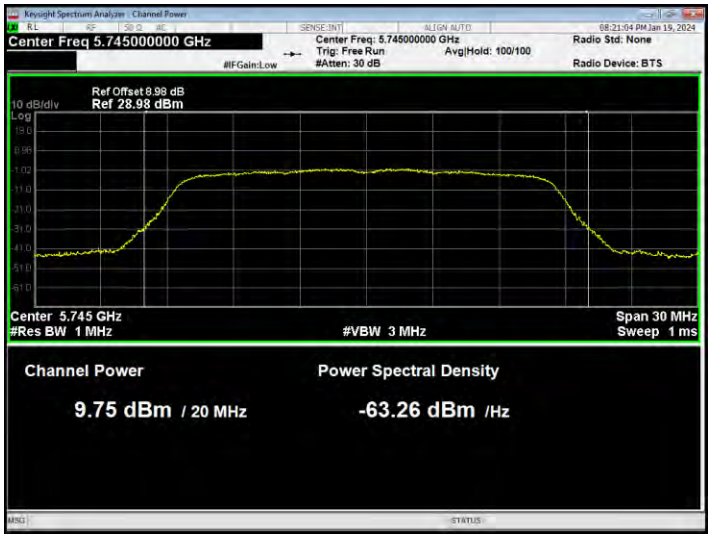
Power NVNT n40 5230MHz Ant1



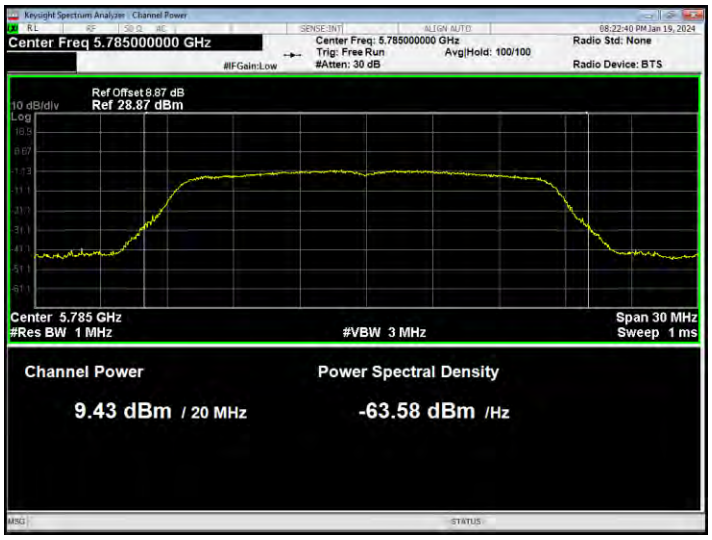
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	9.746	0.69	10.436	30	Pass
NVNT	a	5785	Ant1	9.432	0.72	10.152	30	Pass
NVNT	a	5825	Ant1	9.454	0.71	10.164	30	Pass
NVNT	ac20	5745	Ant1	10.503	0.2	10.703	30	Pass
NVNT	ac20	5785	Ant1	10.083	0.21	10.293	30	Pass
NVNT	ac20	5825	Ant1	9.429	0.2	9.629	30	Pass
NVNT	ac40	5755	Ant1	9.344	0.37	9.714	30	Pass
NVNT	ac40	5795	Ant1	9.218	0.38	9.598	30	Pass
NVNT	ac80	5775	Ant1	9.029	0.66	9.689	30	Pass
NVNT	n20	5745	Ant1	10.408	0.11	10.518	30	Pass
NVNT	n20	5785	Ant1	10.221	0.11	10.331	30	Pass
NVNT	n20	5825	Ant1	10.245	0.11	10.355	30	Pass
NVNT	n40	5755	Ant1	10.078	0.21	10.288	30	Pass
NVNT	n40	5795	Ant1	10.238	0.21	10.448	30	Pass

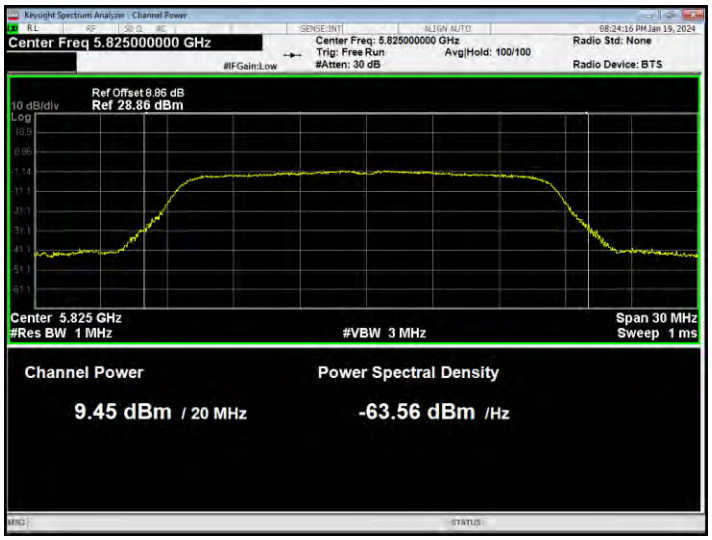
Power NVNT a 5745MHz Ant1



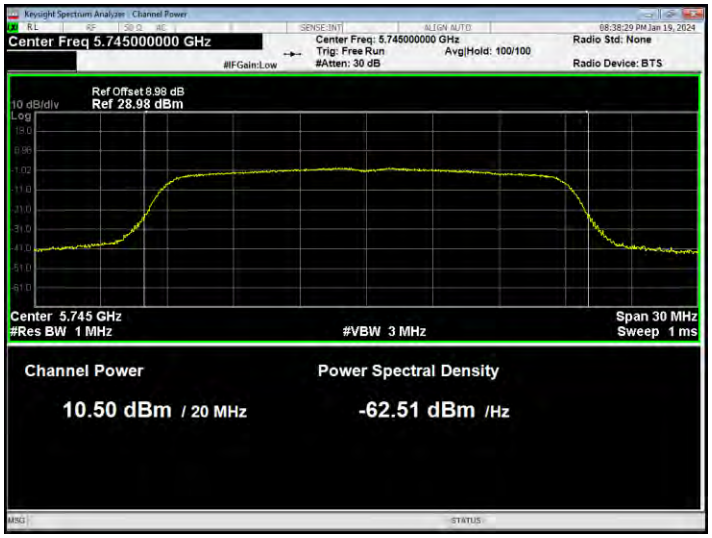
Power NVNT a 5785MHz Ant1



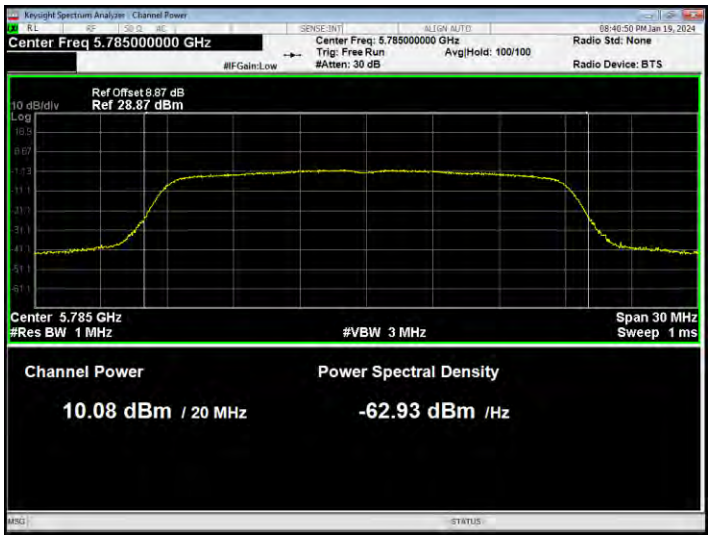
Power NVNT a 5825MHz Ant1



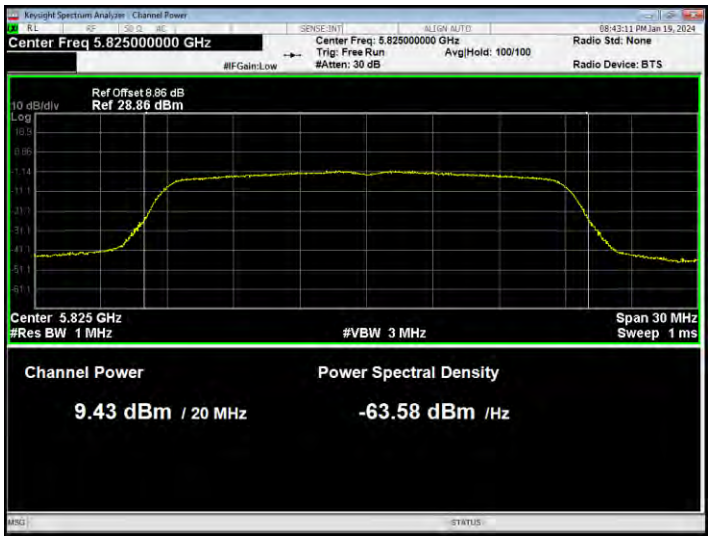
Power NVNT ac20 5745MHz Ant1



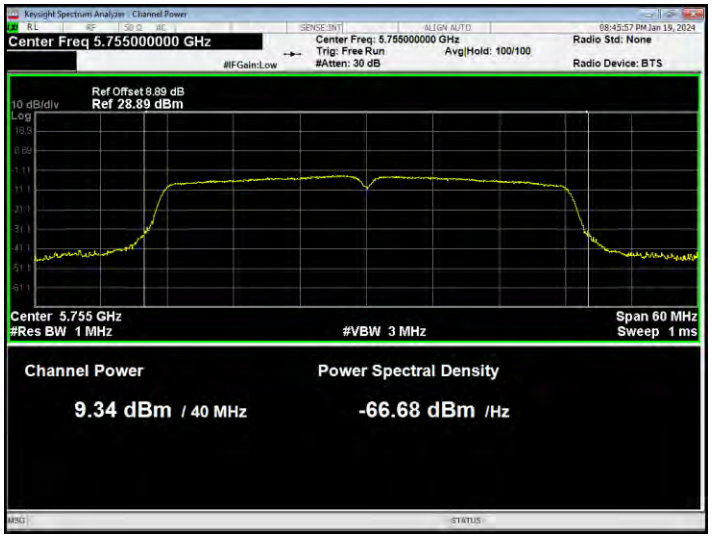
Power NVNT ac20 5785MHz Ant1



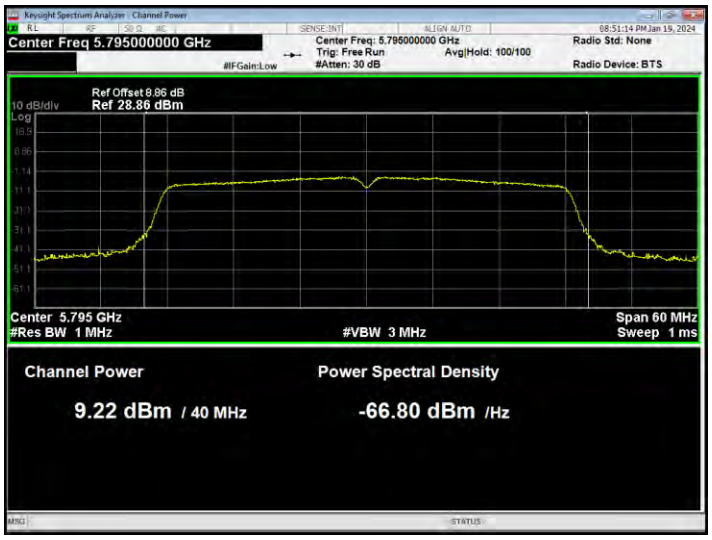
Power NVNT ac20 5825MHz Ant1



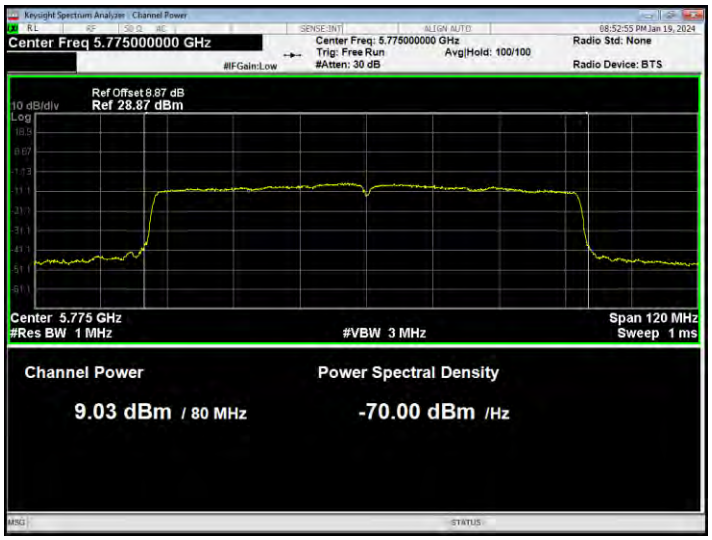
Power NVNT ac40 5755MHz Ant1



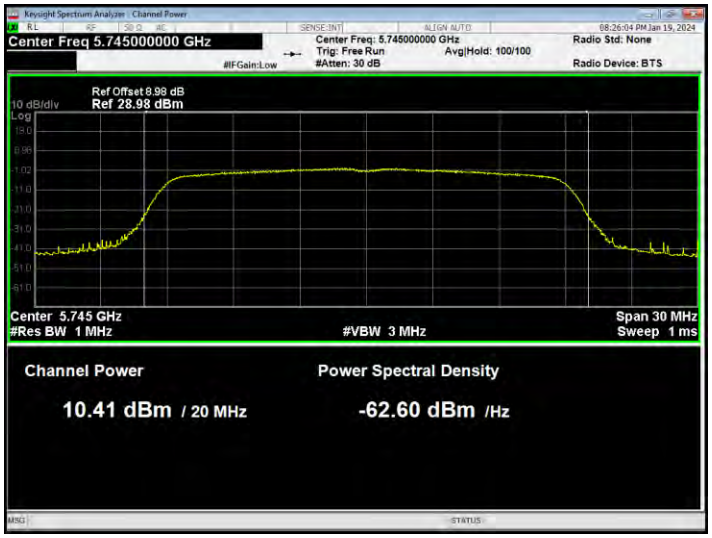
Power NVNT ac40 5795MHz Ant1



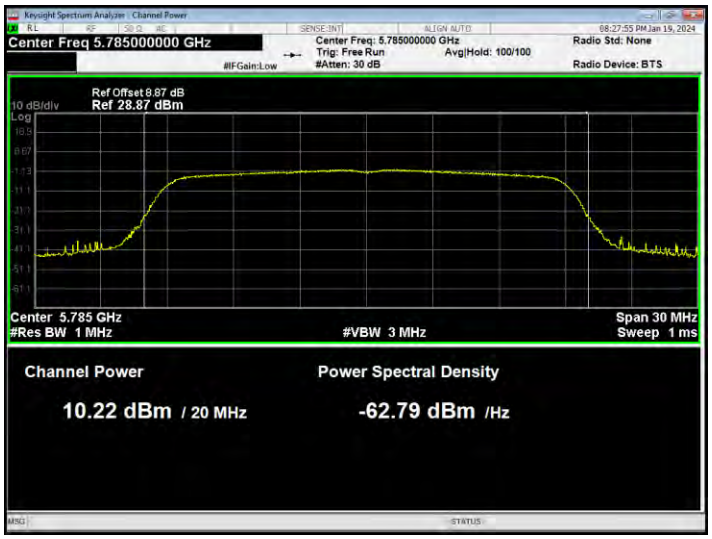
Power NVNT ac80 5775MHz Ant1



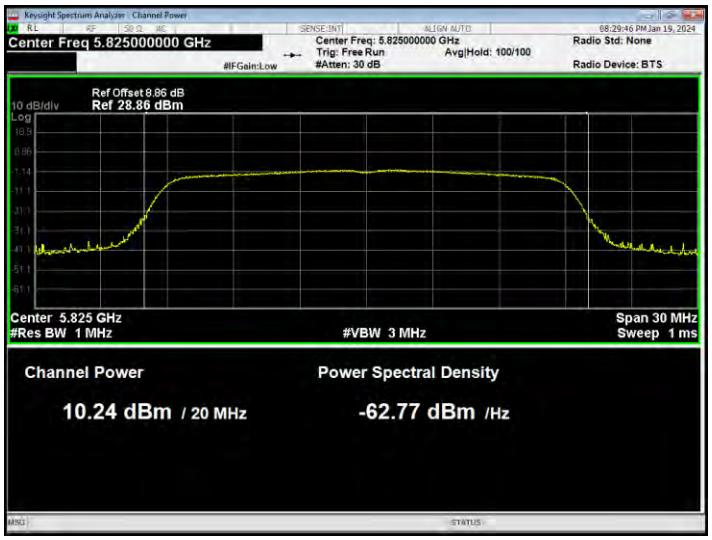
Power NVNT n20 5745MHz Ant1



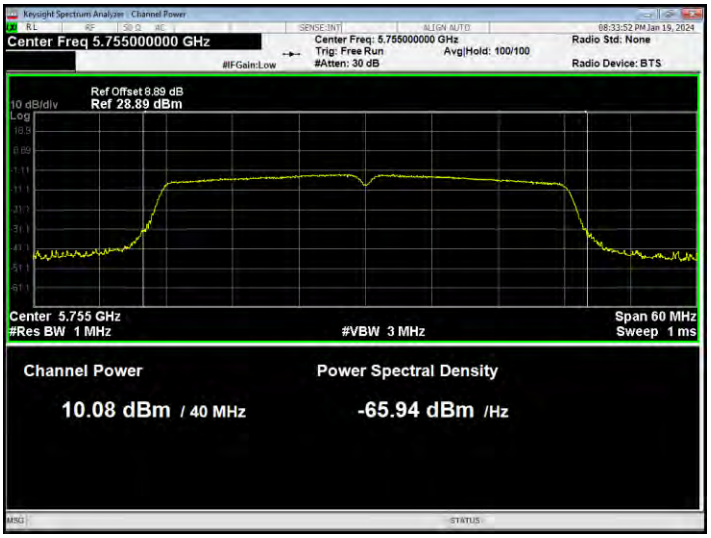
Power NVNT n20 5785MHz Ant1



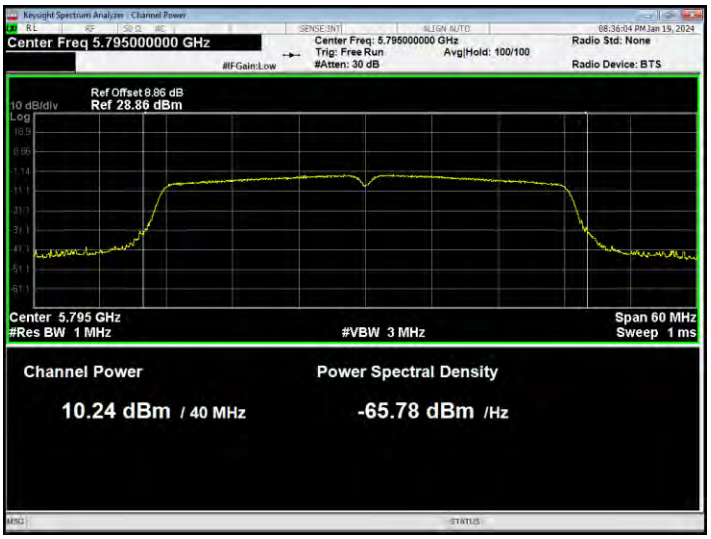
Power NVNT n20 5825MHz Ant1



Power NVNT n40 5755MHz Ant1



Power NVNT n40 5795MHz Ant1

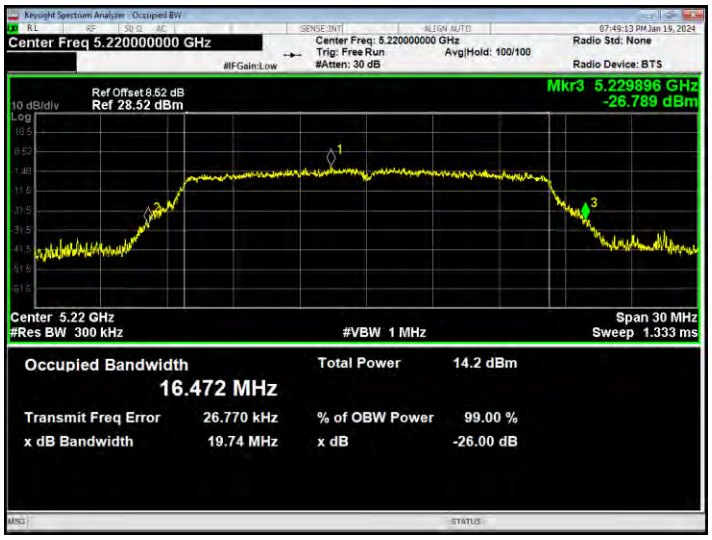


-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	19.829	0.5	Pass
NVNT	a	5220	Ant1	19.739	0.5	Pass
NVNT	a	5240	Ant1	19.731	0.5	Pass
NVNT	ac20	5180	Ant1	20.198	0.5	Pass
NVNT	ac20	5220	Ant1	20.212	0.5	Pass
NVNT	ac20	5240	Ant1	20.15	0.5	Pass
NVNT	ac40	5190	Ant1	39.508	0.5	Pass
NVNT	ac40	5230	Ant1	39.276	0.5	Pass
NVNT	n20	5180	Ant1	20.445	0.5	Pass
NVNT	n20	5220	Ant1	20.44	0.5	Pass
NVNT	n20	5240	Ant1	20.277	0.5	Pass
NVNT	n40	5190	Ant1	39.864	0.5	Pass
NVNT	n40	5230	Ant1	39.635	0.5	Pass

-26dB Bandwidth NVNT a 5180MHz Ant1

-26dB Bandwidth NVNT a 5220MHz Ant1



-26dB Bandwidth NVNT a 5240MHz Ant1

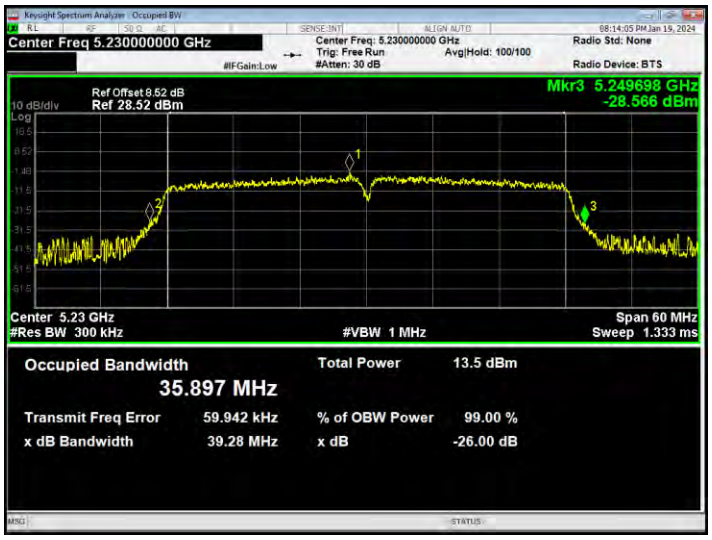
-26dB Bandwidth NVNT ac20 5180MHz Ant1

-26dB Bandwidth NVNT ac20 5220MHz Ant1

-26dB Bandwidth NVNT ac20 5240MHz Ant1

-26dB Bandwidth NVNT ac40 5190MHz Ant1

-26dB Bandwidth NVNT ac40 5230MHz Ant1



-26dB Bandwidth NVNT n20 5180MHz Ant1

-26dB Bandwidth NVNT n20 5220MHz Ant1

-26dB Bandwidth NVNT n20 5240MHz Ant1

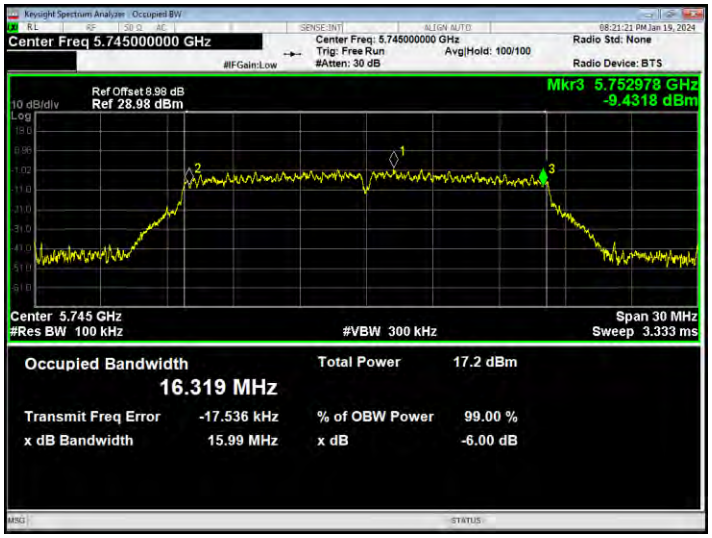
-26dB Bandwidth NVNT n40 5190MHz Ant1

-26dB Bandwidth NVNT n40 5230MHz Ant1

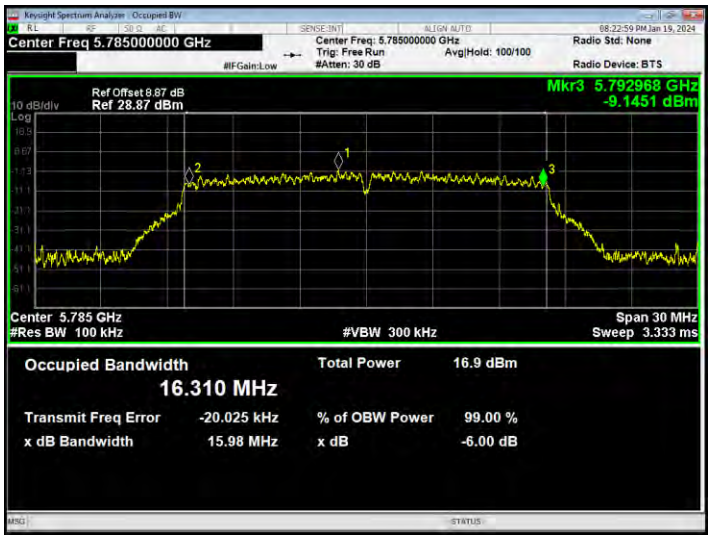
-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant1	15.99	0.5	Pass
NVNT	a	5785	Ant1	15.977	0.5	Pass
NVNT	a	5825	Ant1	15.766	0.5	Pass
NVNT	ac20	5745	Ant1	15.42	0.5	Pass
NVNT	ac20	5785	Ant1	14.074	0.5	Pass
NVNT	ac20	5825	Ant1	15.367	0.5	Pass
NVNT	ac40	5755	Ant1	35.064	0.5	Pass
NVNT	ac40	5795	Ant1	35.094	0.5	Pass
NVNT	ac80	5775	Ant1	75.113	0.5	Pass
NVNT	n20	5745	Ant1	15.115	0.5	Pass
NVNT	n20	5785	Ant1	15.219	0.5	Pass
NVNT	n20	5825	Ant1	15.086	0.5	Pass
NVNT	n40	5755	Ant1	31.249	0.5	Pass
NVNT	n40	5795	Ant1	35.077	0.5	Pass

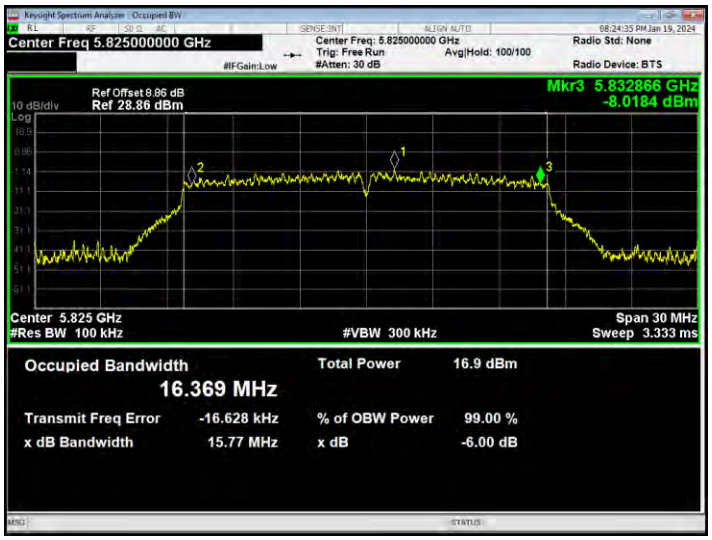
-6dB Bandwidth NVNT a 5745MHz Ant1



-6dB Bandwidth NVNT a 5785MHz Ant1



-6dB Bandwidth NVNT a 5825MHz Ant1



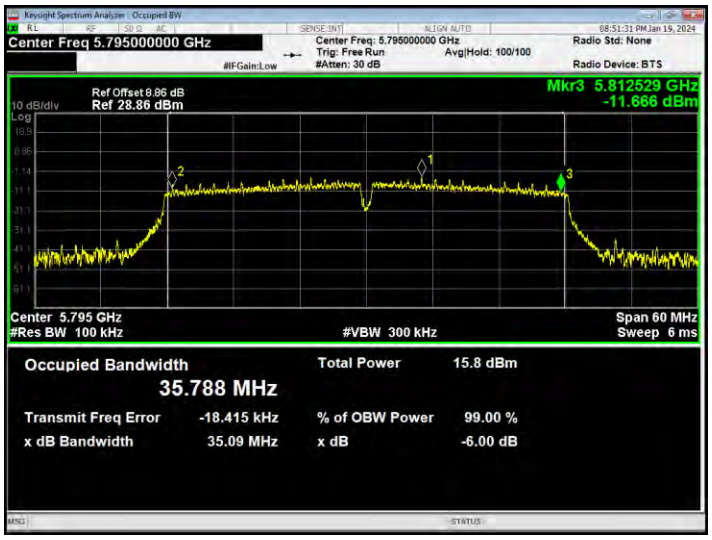
-6dB Bandwidth NVNT ac20 5745MHz Ant1

-6dB Bandwidth NVNT ac20 5785MHz Ant1

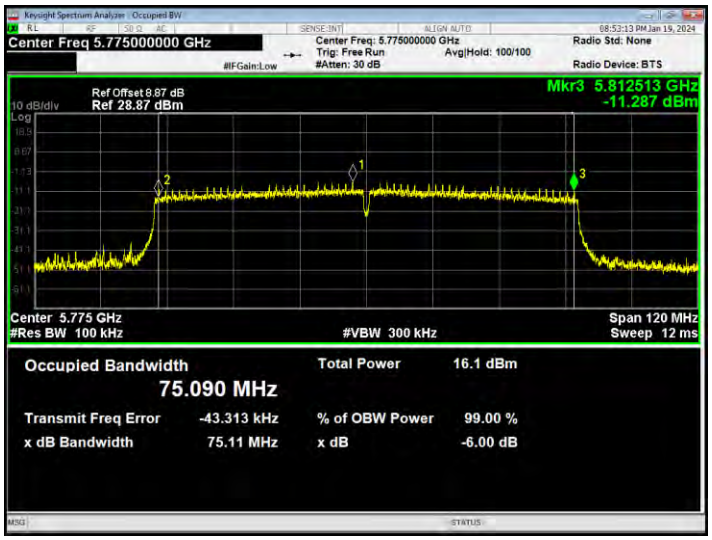
-6dB Bandwidth NVNT ac20 5825MHz Ant1

-6dB Bandwidth NVNT ac40 5755MHz Ant1

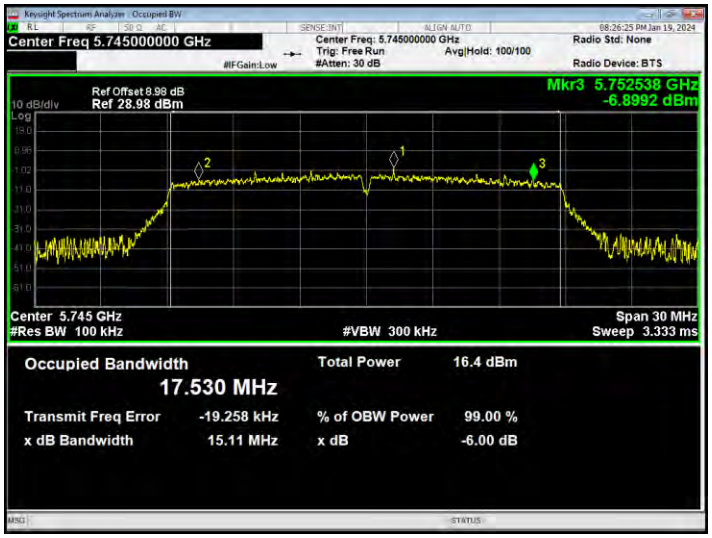
-6dB Bandwidth NVNT ac40 5795MHz Ant1



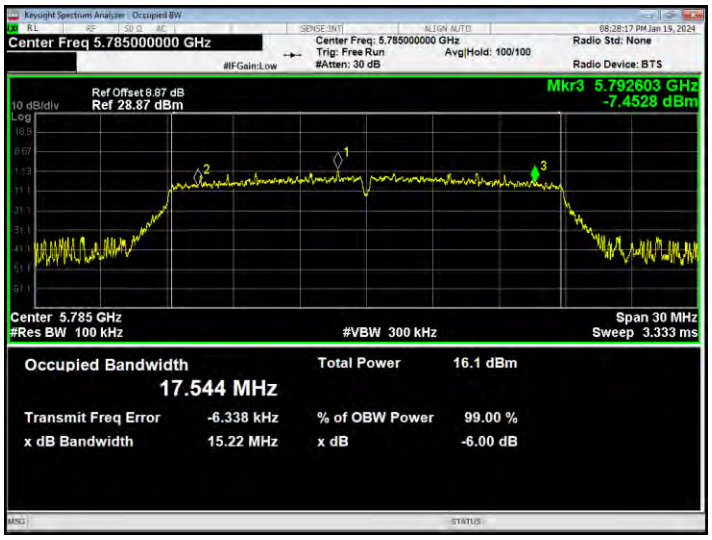
-6dB Bandwidth NVNT ac80 5775MHz Ant1



-6dB Bandwidth NVNT n20 5745MHz Ant1

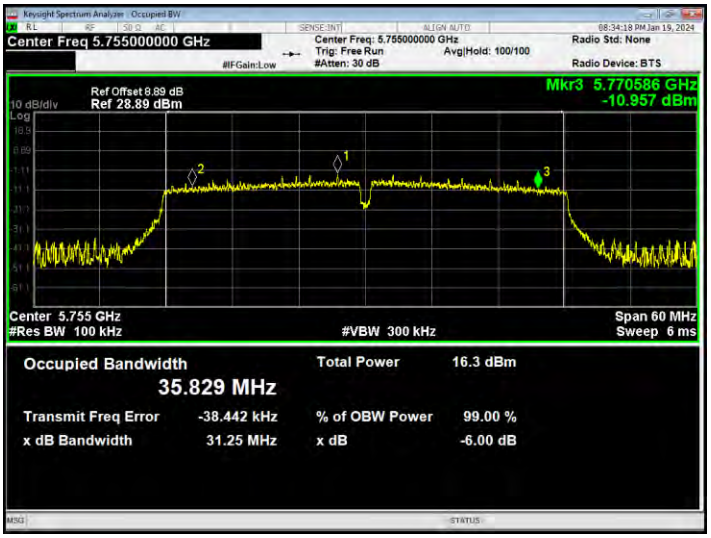


-6dB Bandwidth NVNT n20 5785MHz Ant1

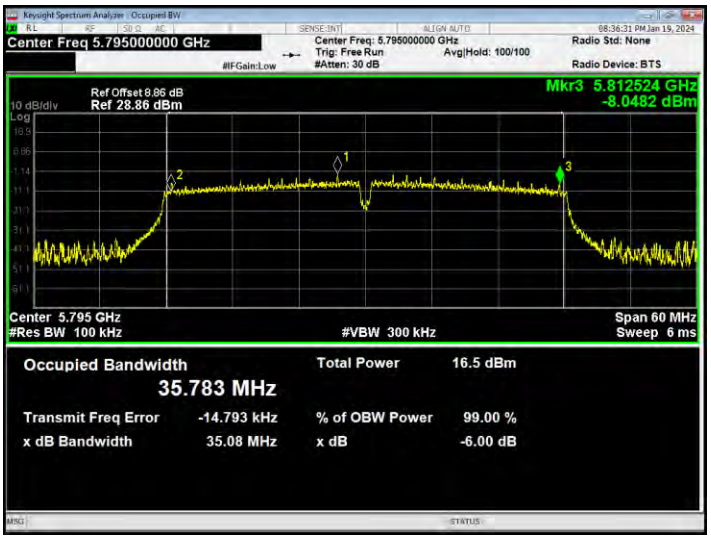


-6dB Bandwidth NVNT n20 5825MHz Ant1

-6dB Bandwidth NVNT n40 5755MHz Ant1



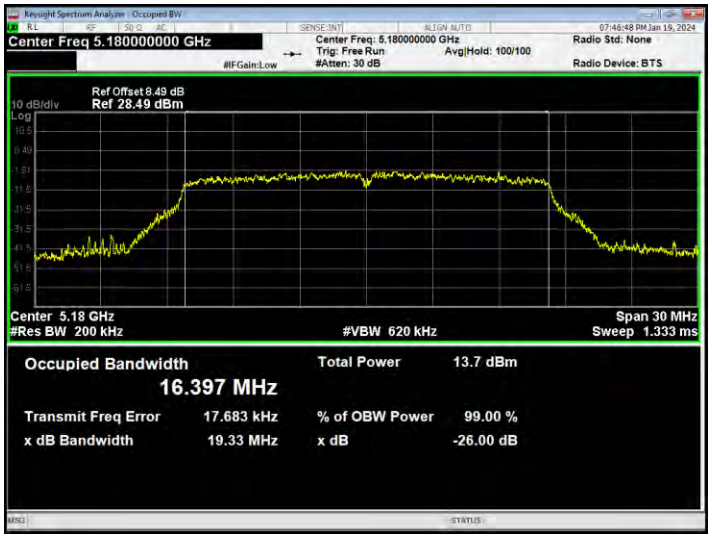
-6dB Bandwidth NVNT n40 5795MHz Ant1



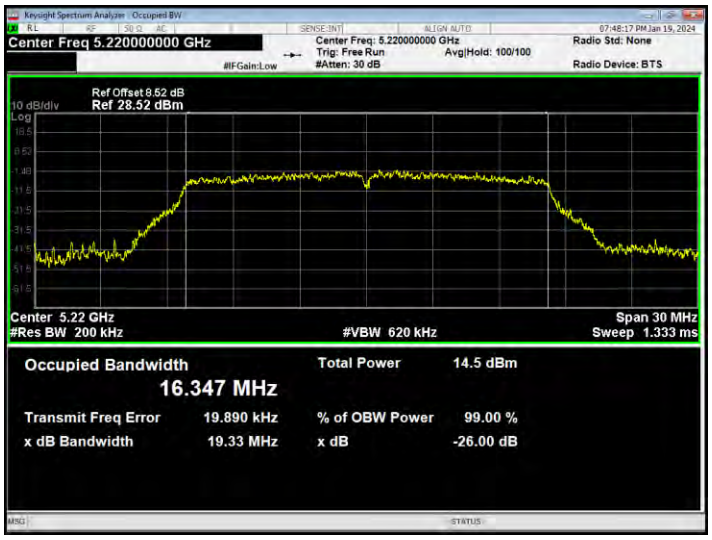
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.39657507
NVNT	a	5220	Ant1	16.34724387
NVNT	a	5240	Ant1	16.37494212
NVNT	ac20	5180	Ant1	17.5280501
NVNT	ac20	5220	Ant1	17.54225208
NVNT	ac20	5240	Ant1	17.53772895
NVNT	ac40	5190	Ant1	35.89929339
NVNT	ac40	5230	Ant1	36.00180497
NVNT	ac80	5210	Ant1	75.28564124
NVNT	n20	5180	Ant1	17.56233643
NVNT	n20	5220	Ant1	17.56820236
NVNT	n20	5240	Ant1	17.5627316
NVNT	n40	5190	Ant1	35.99590267
NVNT	n40	5230	Ant1	35.95749023

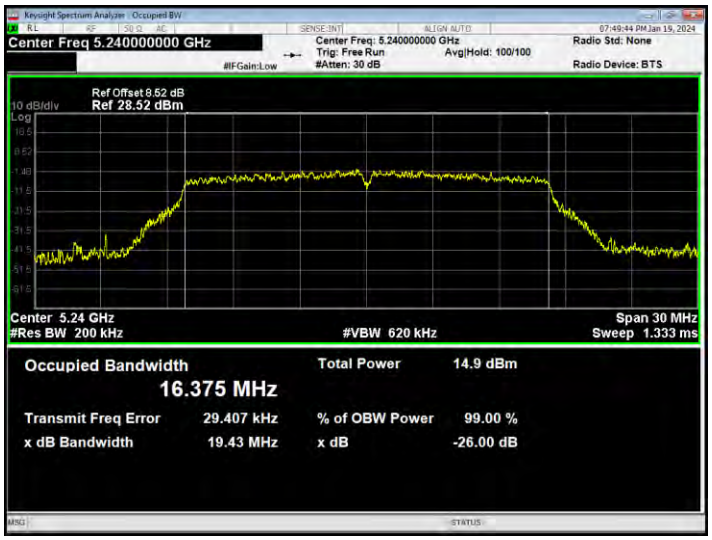
OBW NVNT a 5180MHz Ant1



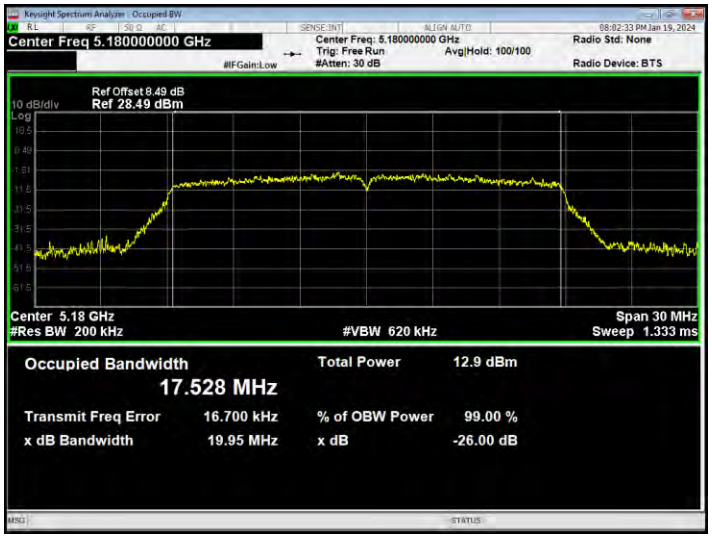
OBW NVNT a 5220MHz Ant1



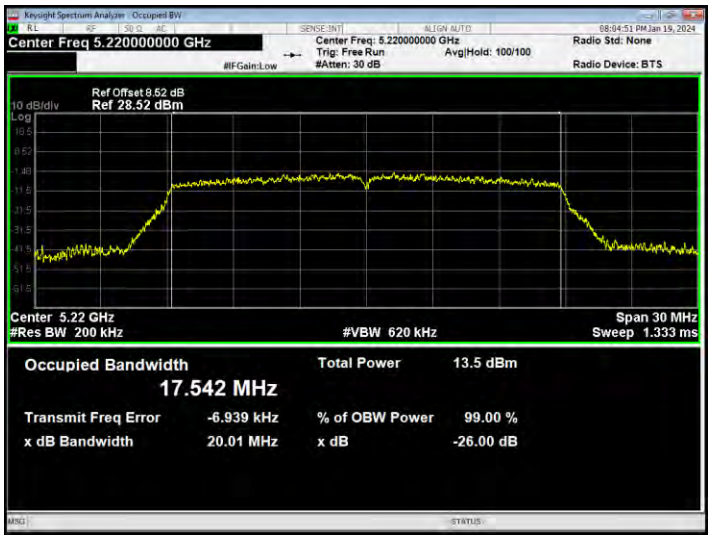
OBW NVNT a 5240MHz Ant1



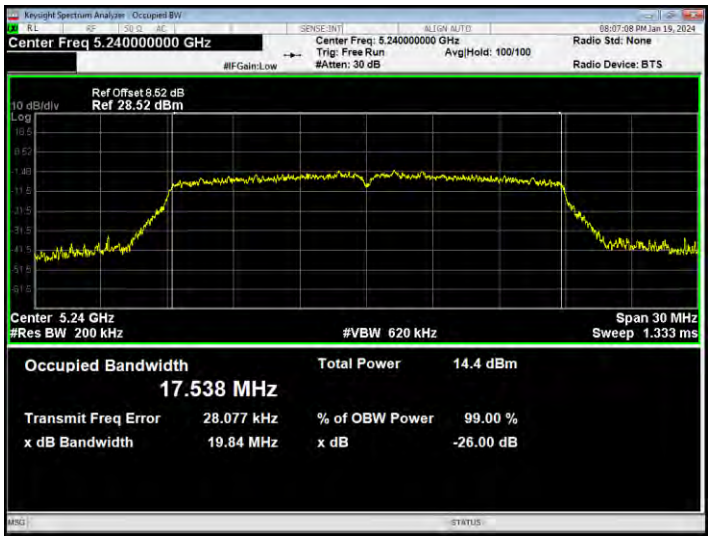
OBW NVNT ac20 5180MHz Ant1



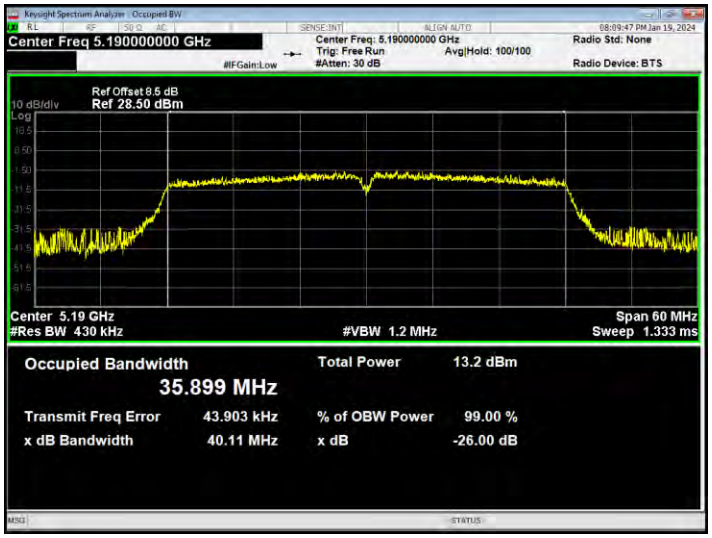
OBW NVNT ac20 5220MHz Ant1



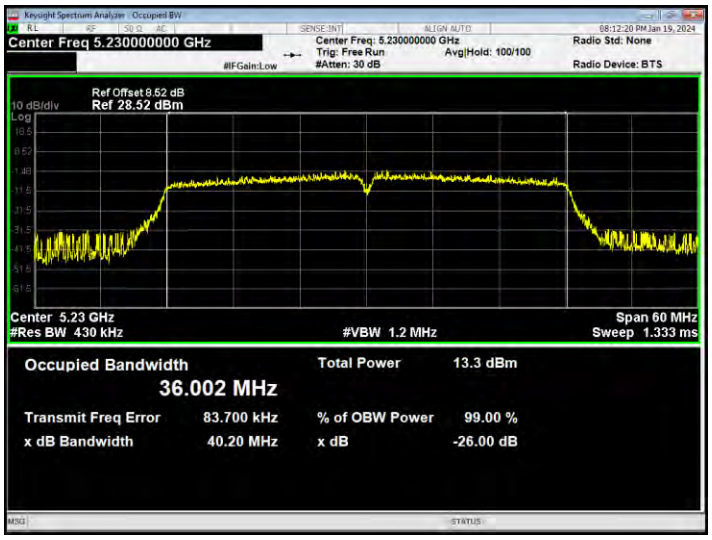
OBW NVNT ac20 5240MHz Ant1



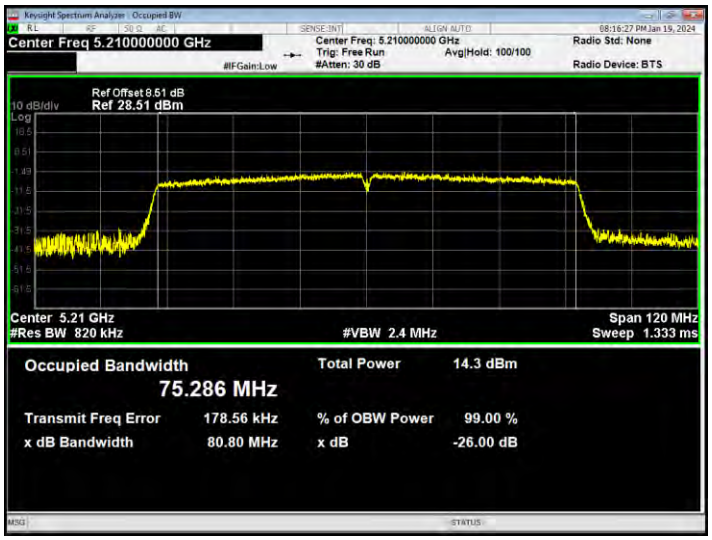
OBW NVNT ac40 5190MHz Ant1



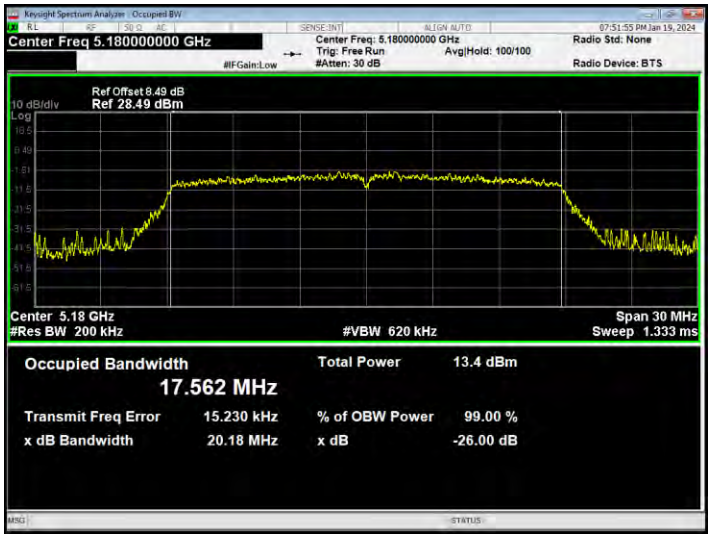
OBW NVNT ac40 5230MHz Ant1



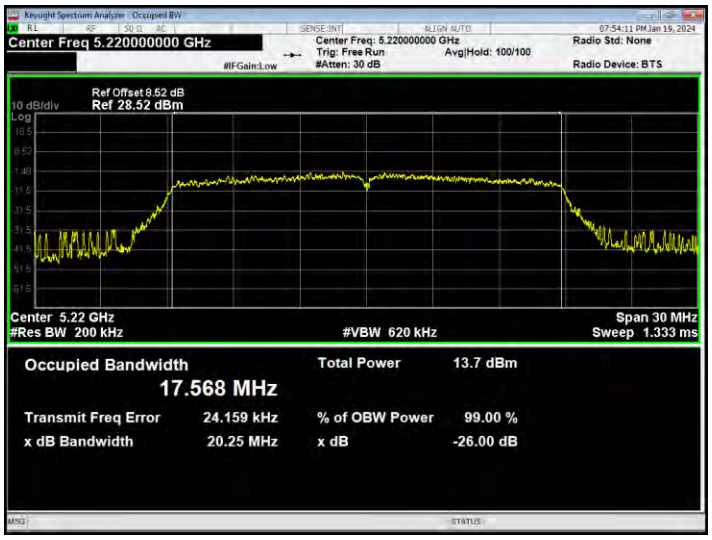
OBW NVNT ac80 5210MHz Ant1



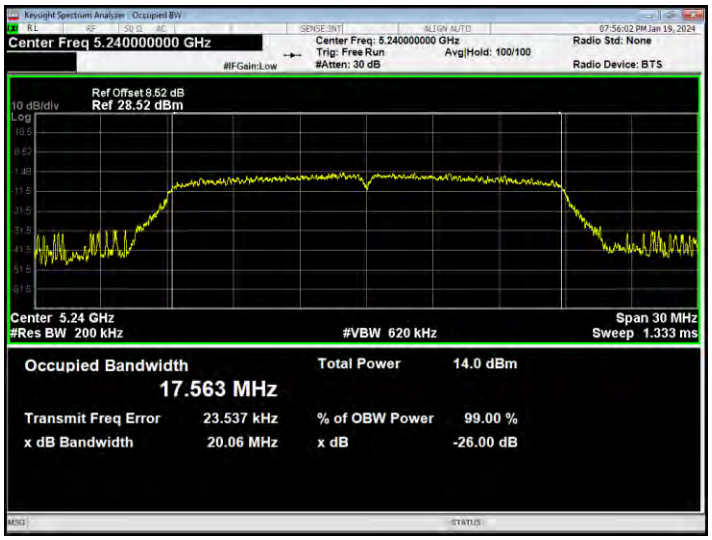
OBW NVNT n20 5180MHz Ant1



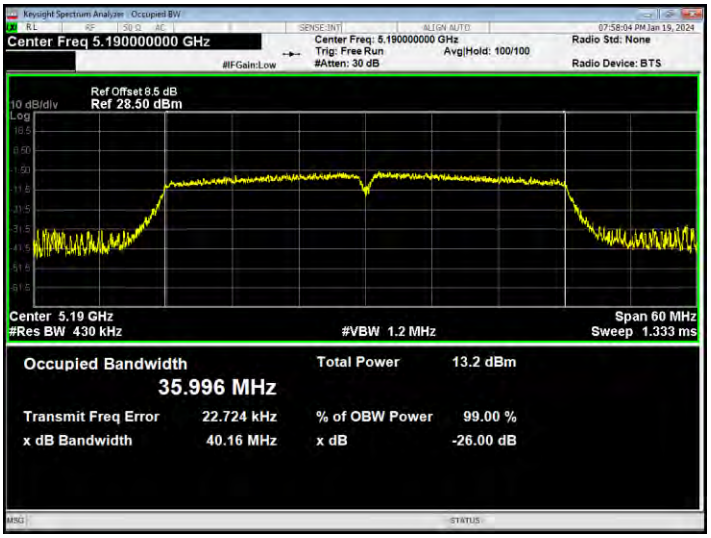
OBW NVNT n20 5220MHz Ant1



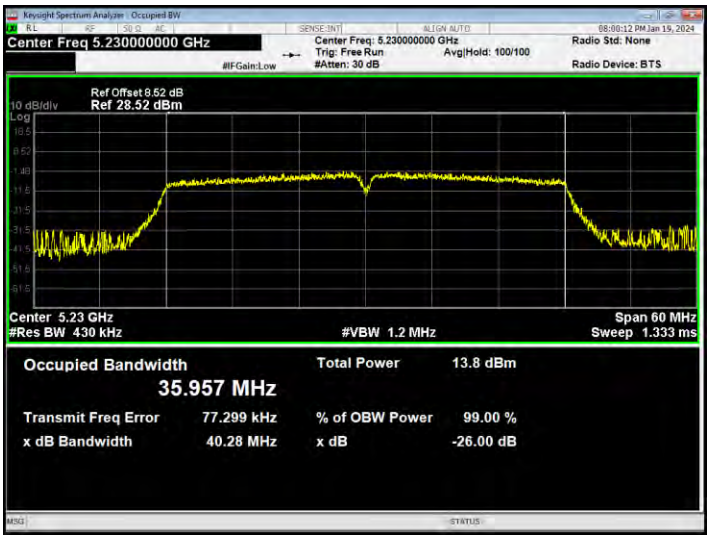
OBW NVNT n20 5240MHz Ant1



OBW NVNT n40 5190MHz Ant1



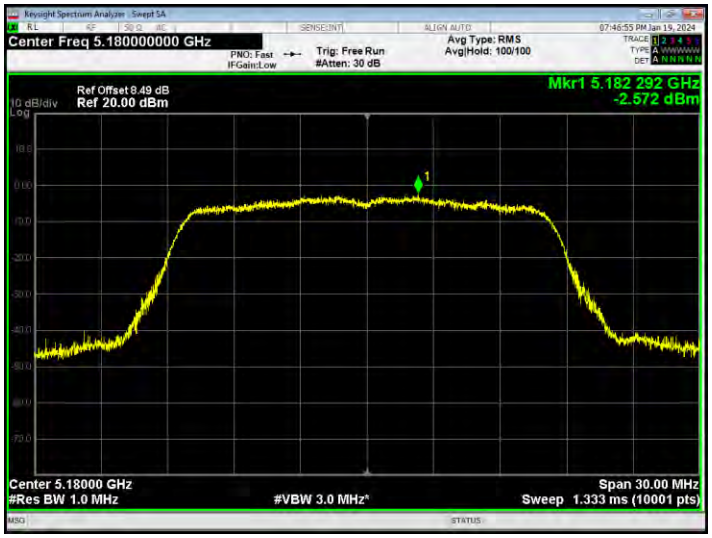
OBW NVNT n40 5230MHz Ant1



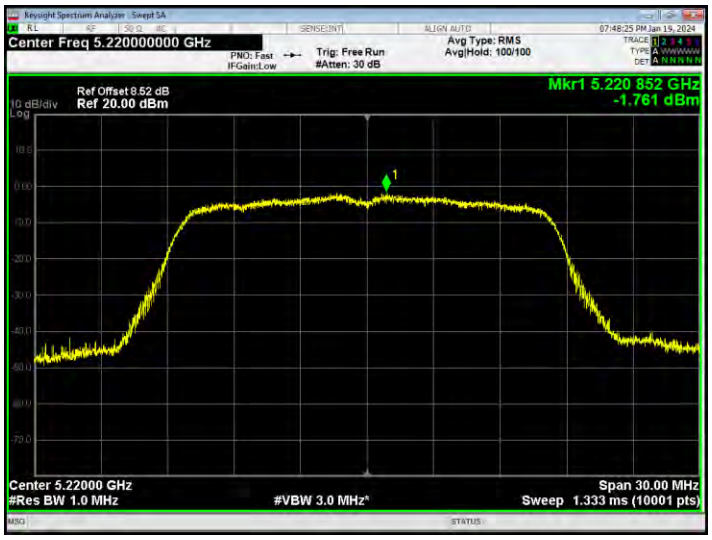
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-2.572	0.69	-1.882	11	Pass
NVNT	a	5220	Ant1	-1.761	0.69	-1.071	11	Pass
NVNT	a	5240	Ant1	-1.409	0.69	-0.719	11	Pass
NVNT	ac20	5180	Ant1	-2.71	0.2	-2.51	11	Pass
NVNT	ac20	5220	Ant1	-2.388	0.2	-2.188	11	Pass
NVNT	ac20	5240	Ant1	-1.314	0.2	-1.114	11	Pass
NVNT	ac40	5190	Ant1	-5.711	0.37	-5.341	11	Pass
NVNT	ac40	5230	Ant1	-5.494	0.37	-5.124	11	Pass
NVNT	ac80	5210	Ant1	-8.651	0.66	-7.991	11	Pass
NVNT	n20	5180	Ant1	-2.401	0.11	-2.291	11	Pass
NVNT	n20	5220	Ant1	-1.686	0.11	-1.576	11	Pass
NVNT	n20	5240	Ant1	-1.072	0.1	-0.972	11	Pass
NVNT	n40	5190	Ant1	-5.077	0.21	-4.867	11	Pass
NVNT	n40	5230	Ant1	-4.405	0.21	-4.195	11	Pass

PSD NVNT a 5180MHz Ant1

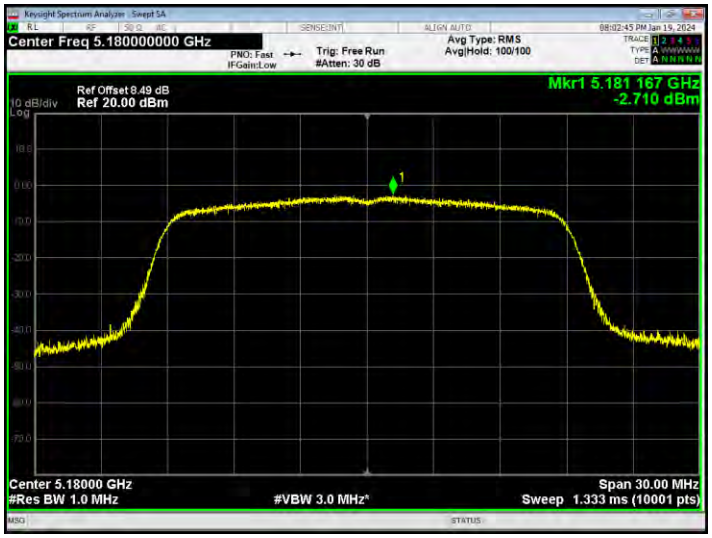


PSD NVNT a 5220MHz Ant1

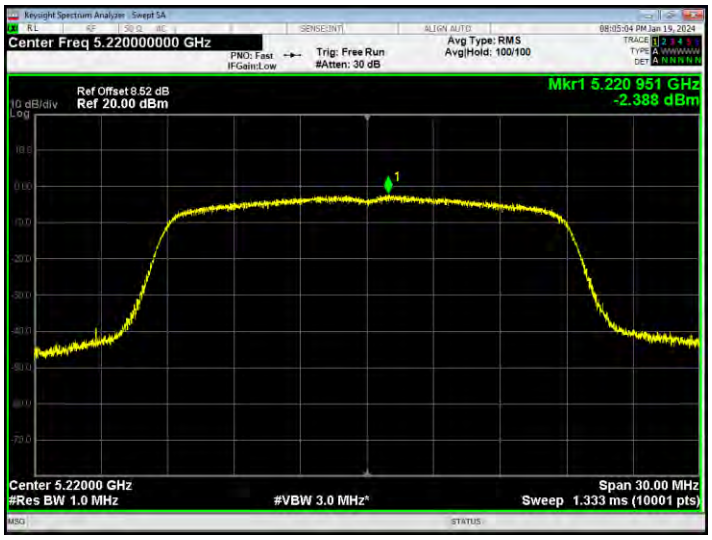


PSD NVNT a 5240MHz Ant1

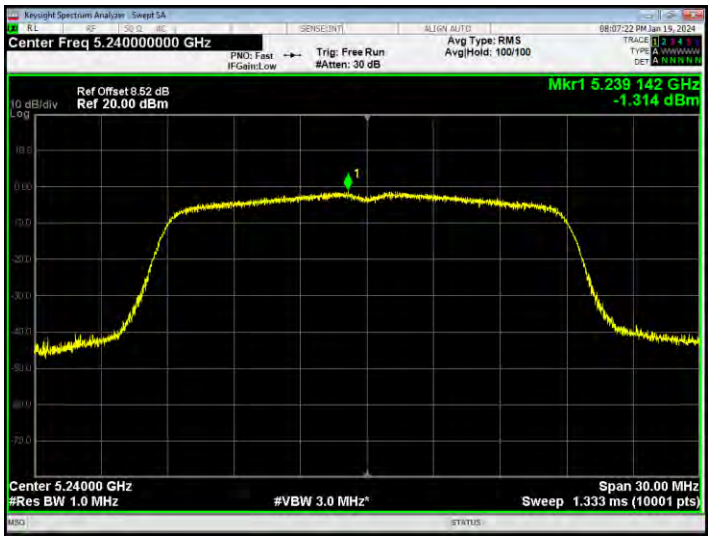
PSD NVNT ac20 5180MHz Ant1



PSD NVNT ac20 5220MHz Ant1

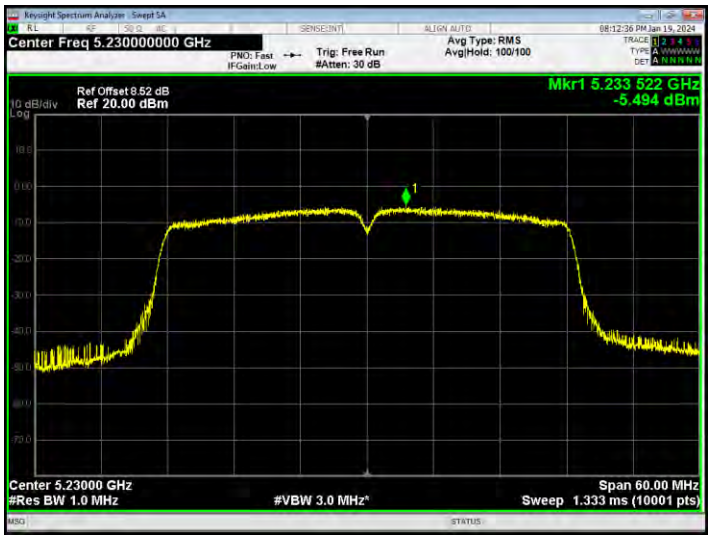


PSD NVNT ac20 5240MHz Ant1



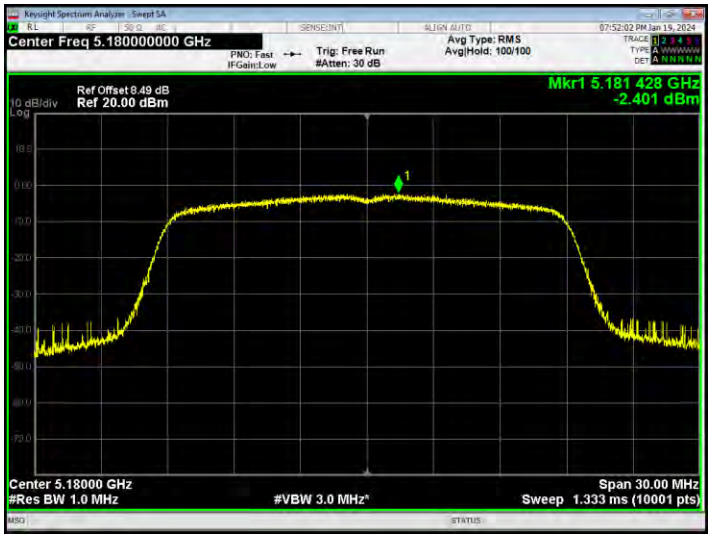
PSD NVNT ac40 5190MHz Ant1

PSD NVNT ac40 5230MHz Ant1

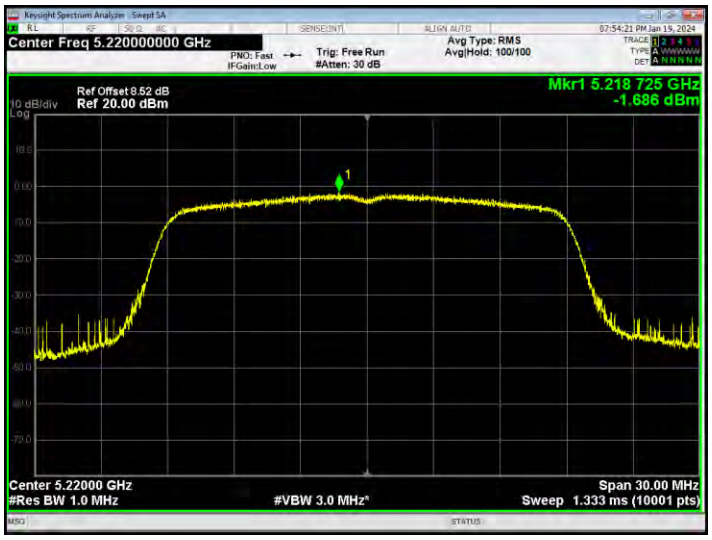


PSD NVNT ac80 5210MHz Ant1

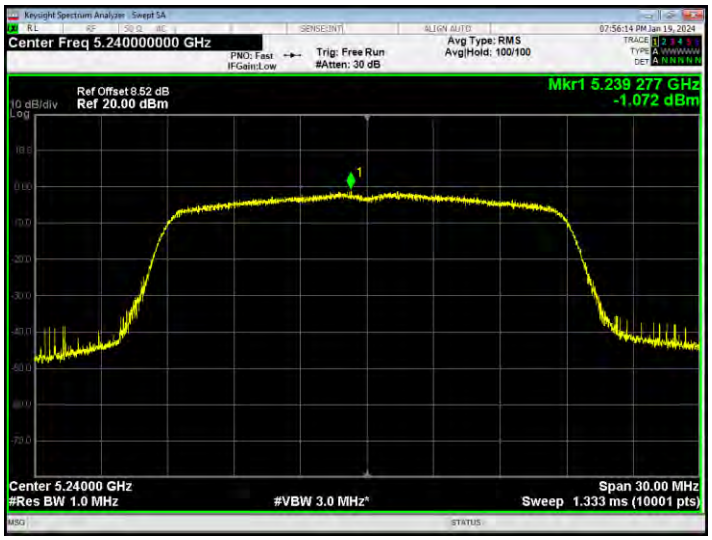
PSD NVNT n20 5180MHz Ant1



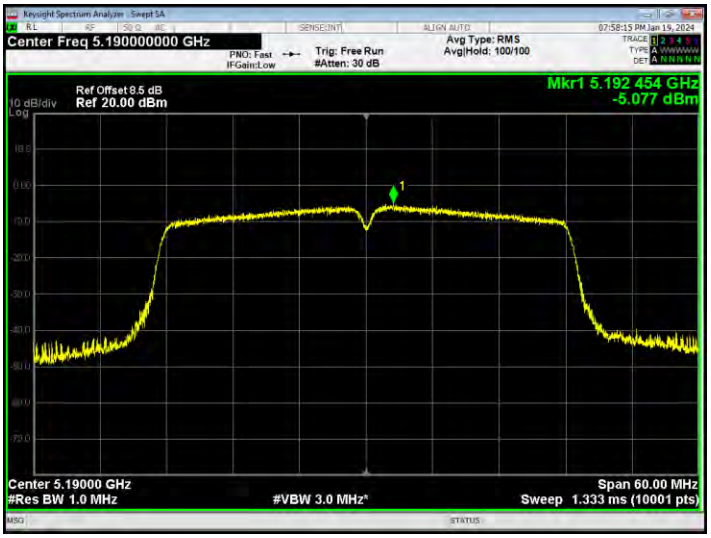
PSD NVNT n20 5220MHz Ant1



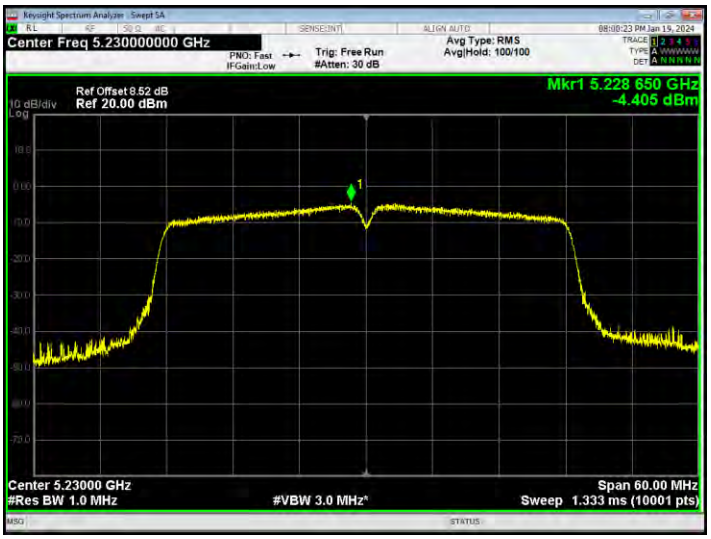
PSD NVNT n20 5240MHz Ant1



PSD NVNT n40 5190MHz Ant1



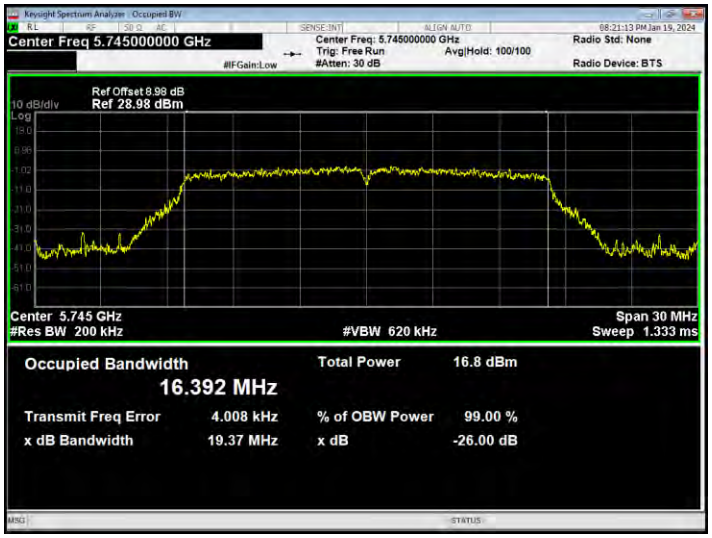
PSD NVNT n40 5230MHz Ant1



Occupied Channel Bandwidth

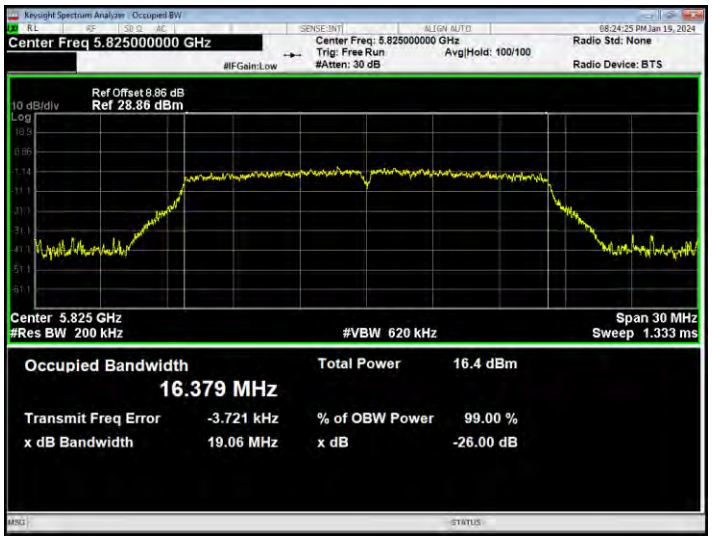
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5745	Ant1	16.39234392
NVNT	a	5785	Ant1	16.38473563
NVNT	a	5825	Ant1	16.37877081
NVNT	ac20	5745	Ant1	17.5387471
NVNT	ac20	5785	Ant1	17.51755603
NVNT	ac20	5825	Ant1	17.52283663
NVNT	ac40	5755	Ant1	35.97427595
NVNT	ac40	5795	Ant1	35.90414044
NVNT	ac80	5775	Ant1	75.20661391
NVNT	n20	5745	Ant1	17.53789321
NVNT	n20	5785	Ant1	17.57533493
NVNT	n20	5825	Ant1	17.56709327
NVNT	n40	5755	Ant1	35.94235045
NVNT	n40	5795	Ant1	35.92664652

OBW NVNT a 5745MHz Ant1

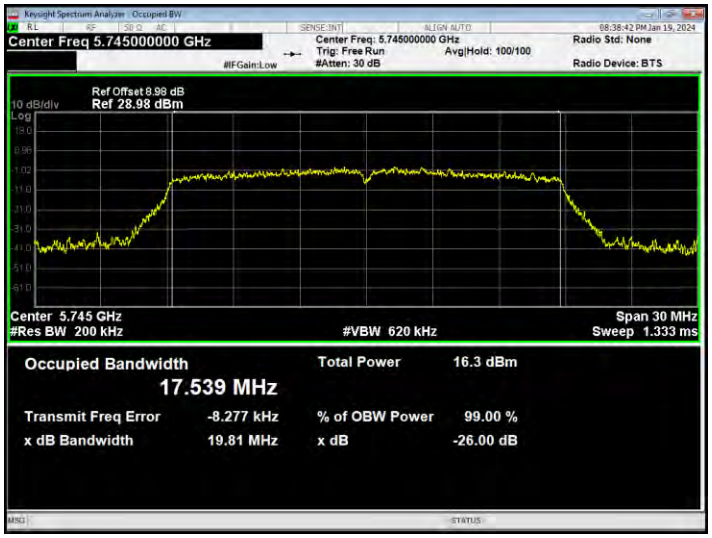


OBW NVNT a 5785MHz Ant1

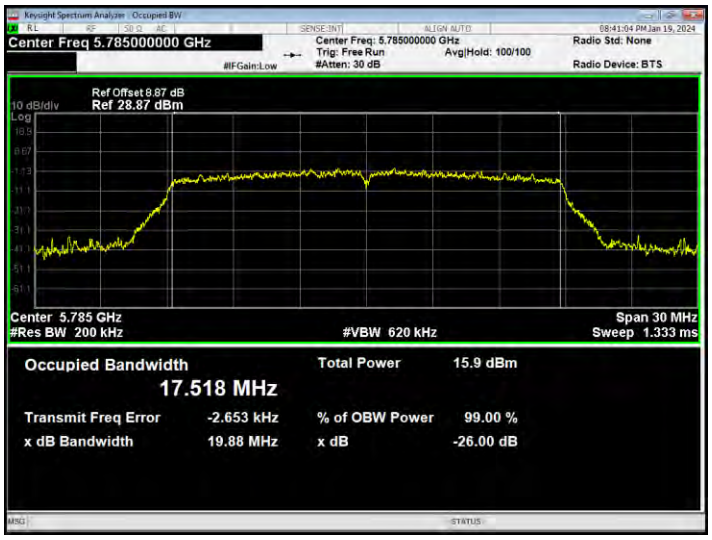
OBW NVNT a 5825MHz Ant1



OBW NVNT ac20 5745MHz Ant1



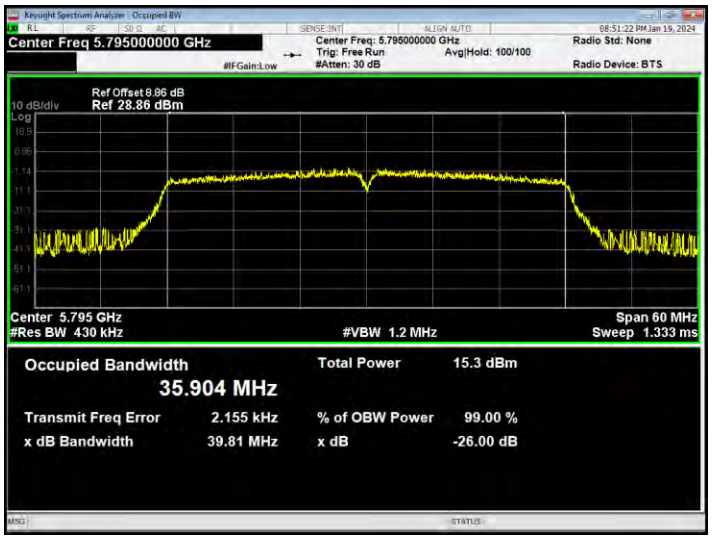
OBW NVNT ac20 5785MHz Ant1



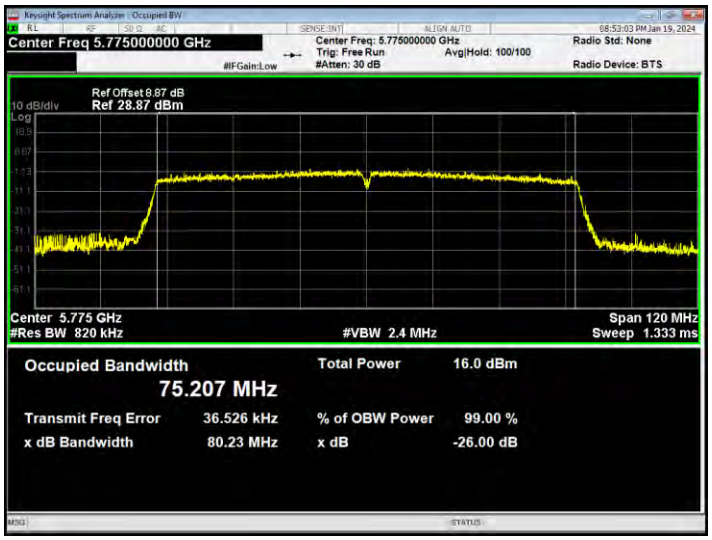
OBW NVNT ac20 5825MHz Ant1

OBW NVNT ac40 5755MHz Ant1

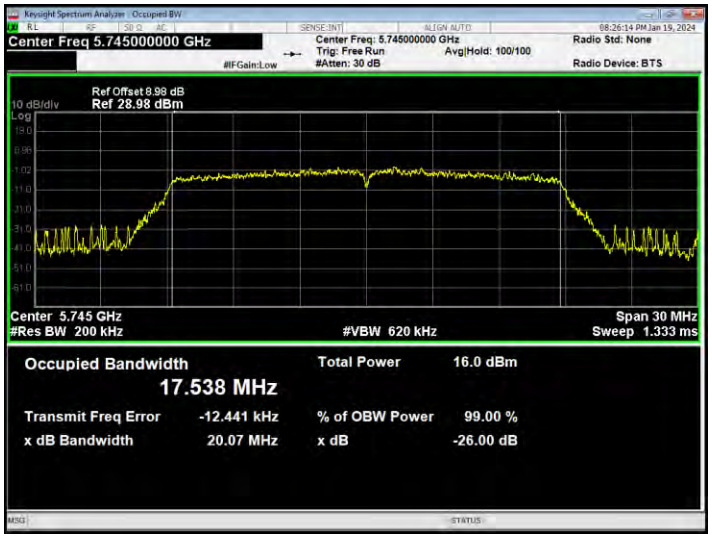
OBW NVNT ac40 5795MHz Ant1



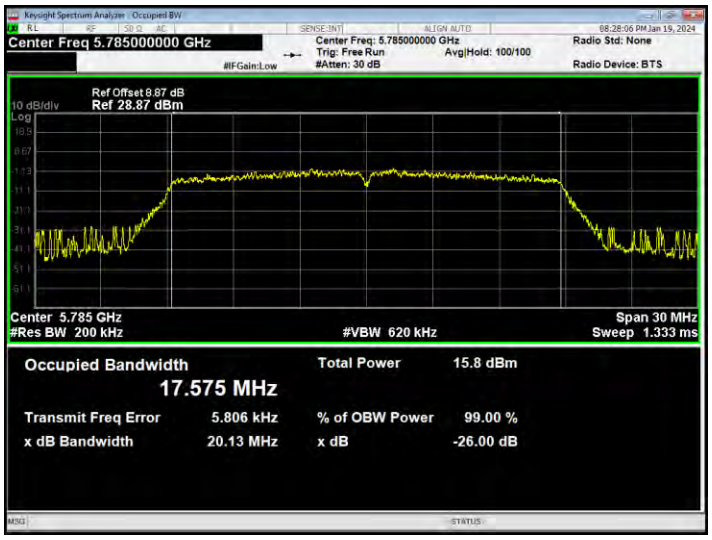
OBW NVNT ac80 5775MHz Ant1



OBW NVNT n20 5745MHz Ant1

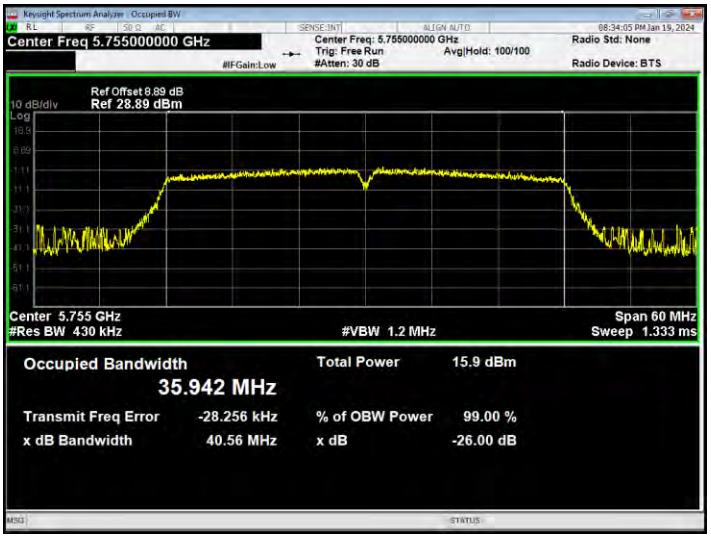


OBW NVNT n20 5785MHz Ant1

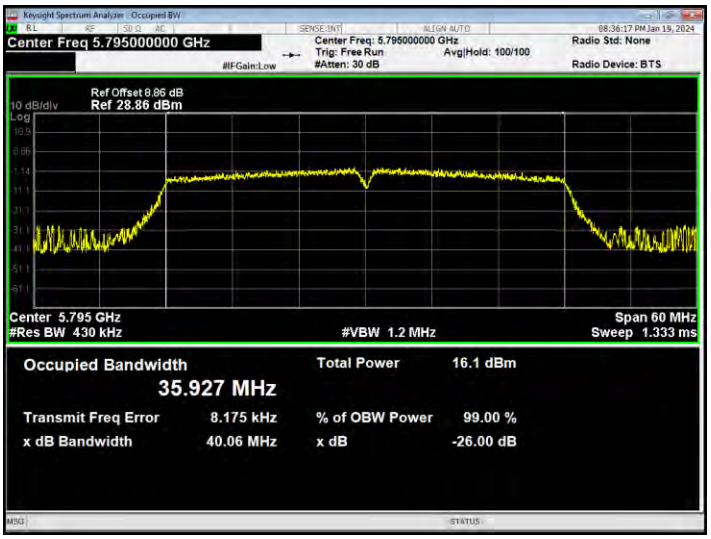


OBW NVNT n20 5825MHz Ant1

OBW NVNT n40 5755MHz Ant1



OBW NVNT n40 5795MHz Ant1



Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	-2.546	0.69	-1.856	30	Pass
NVNT	a	5785	Ant1	-3.019	0.72	-2.299	30	Pass
NVNT	a	5825	Ant1	-2.998	0.71	-2.288	30	Pass
NVNT	ac20	5745	Ant1	-2.256	0.2	-2.056	30	Pass
NVNT	ac20	5785	Ant1	-2.59	0.21	-2.38	30	Pass
NVNT	ac20	5825	Ant1	-3.354	0.2	-3.154	30	Pass
NVNT	ac40	5755	Ant1	-6.044	0.37	-5.674	30	Pass
NVNT	ac40	5795	Ant1	-6.239	0.38	-5.859	30	Pass
NVNT	ac80	5775	Ant1	-9.969	0.66	-9.309	30	Pass
NVNT	n20	5745	Ant1	-2.105	0.11	-1.995	30	Pass
NVNT	n20	5785	Ant1	-2.717	0.11	-2.607	30	Pass
NVNT	n20	5825	Ant1	-2.294	0.11	-2.184	30	Pass
NVNT	n40	5755	Ant1	-5.656	0.21	-5.446	30	Pass
NVNT	n40	5795	Ant1	-5.383	0.21	-5.173	30	Pass

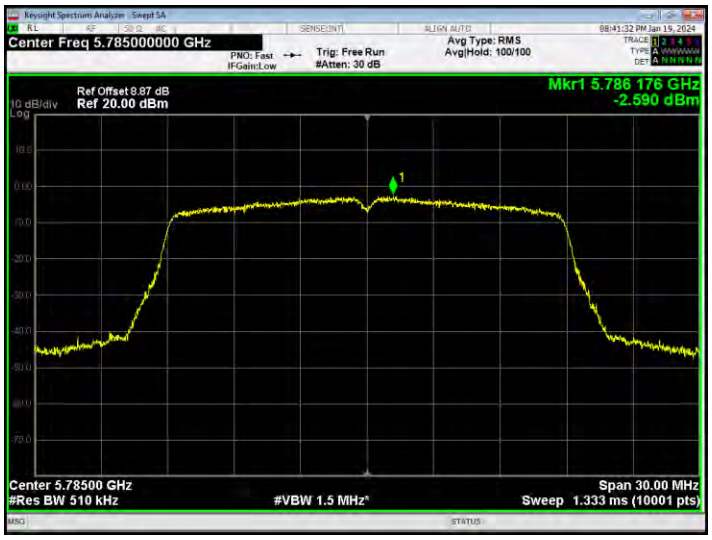
PSD NVNT a 5745MHz Ant1

PSD NVNT a 5785MHz Ant1

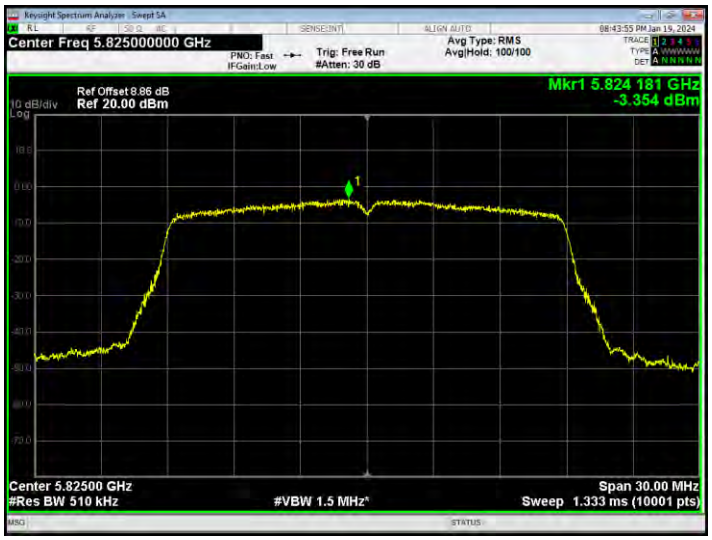
PSD NVNT a 5825MHz Ant1

PSD NVNT ac20 5745MHz Ant1

PSD NVNT ac20 5785MHz Ant1



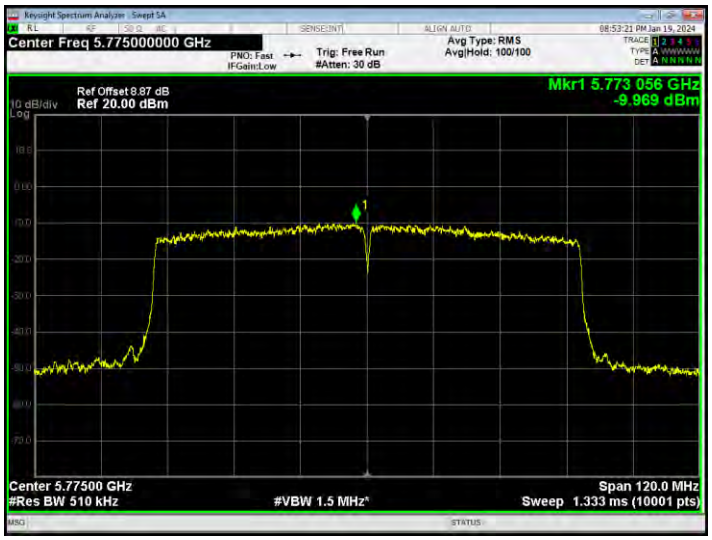
PSD NVNT ac20 5825MHz Ant1



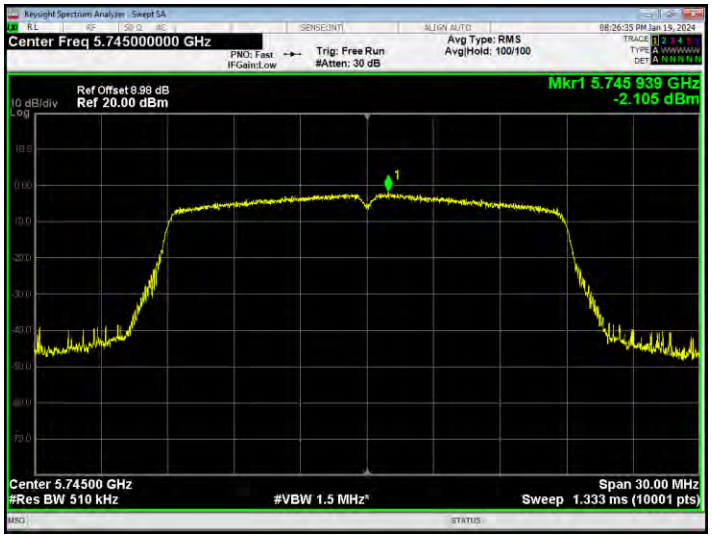
PSD NVNT ac40 5755MHz Ant1

PSD NVNT ac40 5795MHz Ant1

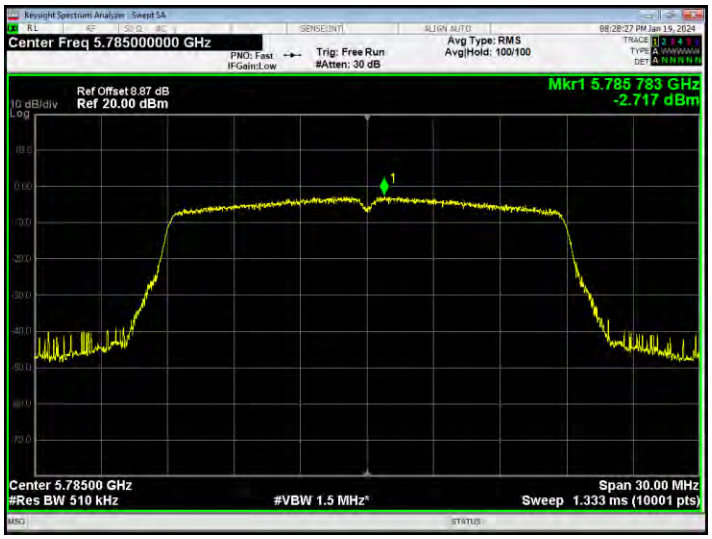
PSD NVNT ac80 5775MHz Ant1



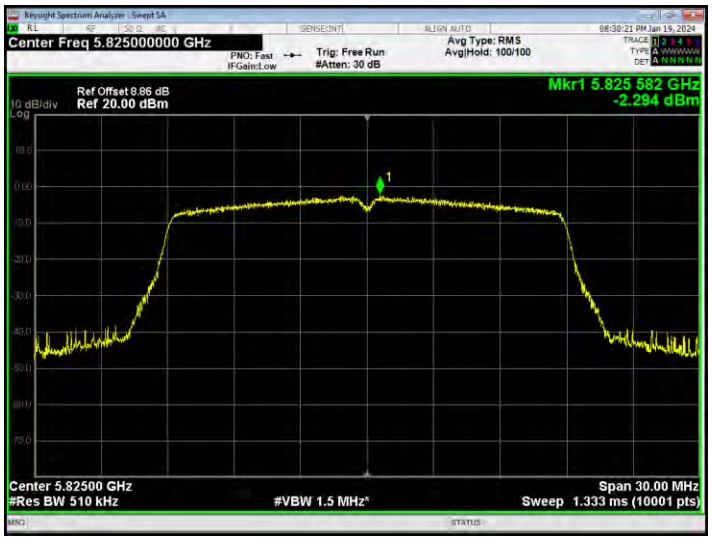
PSD NVNT n20 5745MHz Ant1



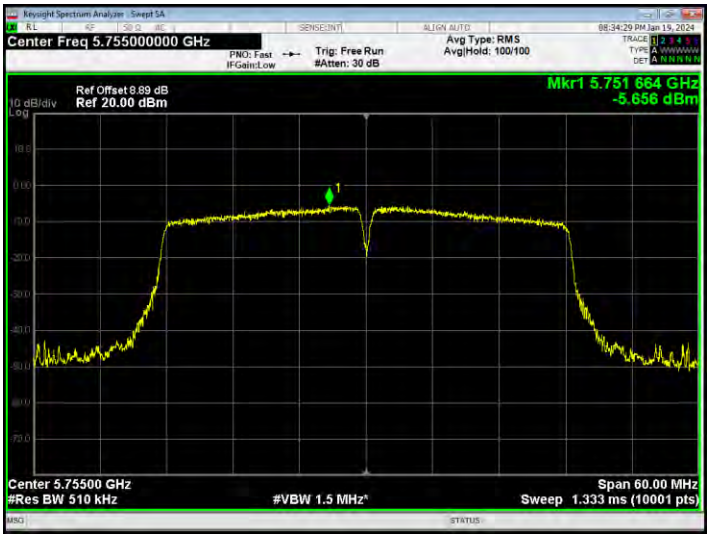
PSD NVNT n20 5785MHz Ant1



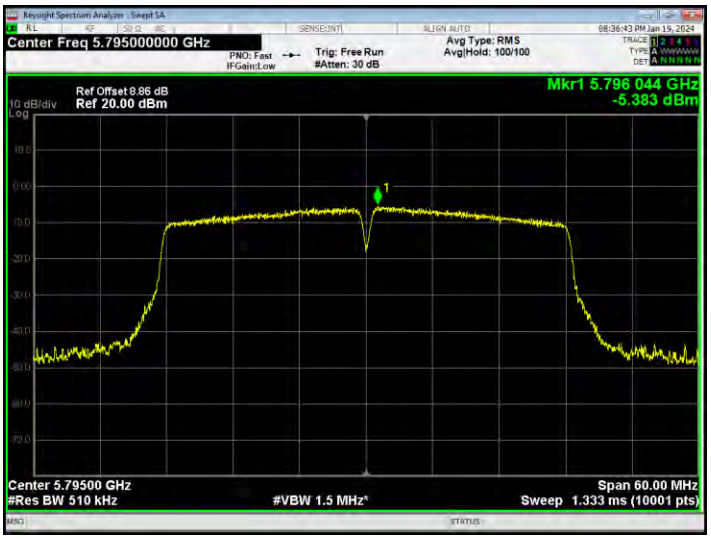
PSD NVNT n20 5825MHz Ant1



PSD NVNT n40 5755MHz Ant1



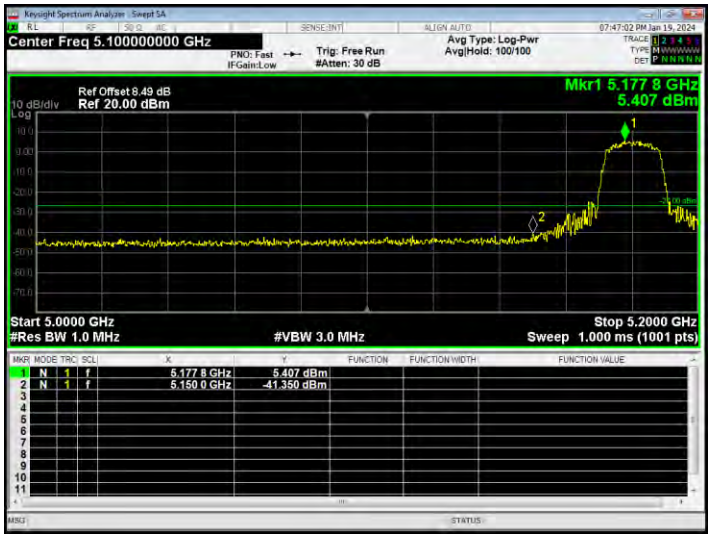
PSD NVNT n40 5795MHz Ant1



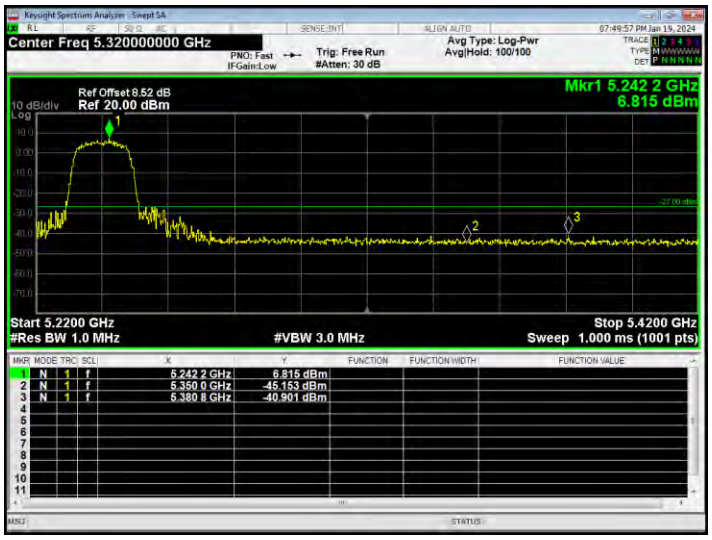
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-41.34	-27	Pass
NVNT	a	5240	Ant1	-40.9	-27	Pass
NVNT	ac20	5180	Ant1	-39.46	-27	Pass
NVNT	ac20	5240	Ant1	-41.7	-27	Pass
NVNT	ac40	5190	Ant1	-33.57	-27	Pass
NVNT	ac40	5230	Ant1	-42.34	-27	Pass
NVNT	ac80	5210	Ant1	-33.69	-27	Pass
NVNT	n20	5180	Ant1	-37.46	-27	Pass
NVNT	n20	5240	Ant1	-41.35	-27	Pass
NVNT	n40	5190	Ant1	-35.65	-27	Pass
NVNT	n40	5230	Ant1	-42.24	-27	Pass

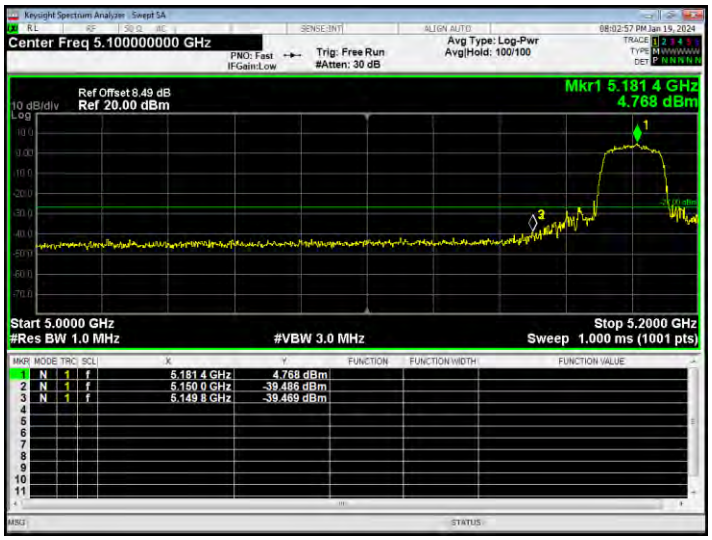
Band Edge NVNT a 5180MHz Low Ant1



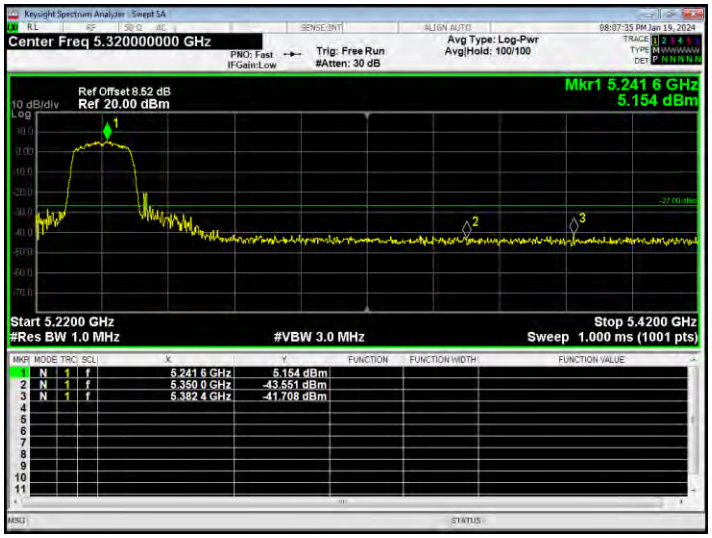
Band Edge NVNT a 5240MHz High Ant1



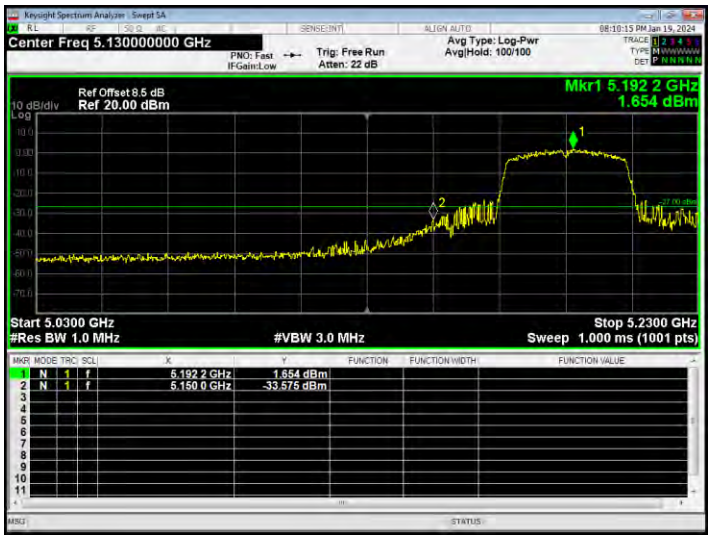
Band Edge NVNT ac20 5180MHz Low Ant1



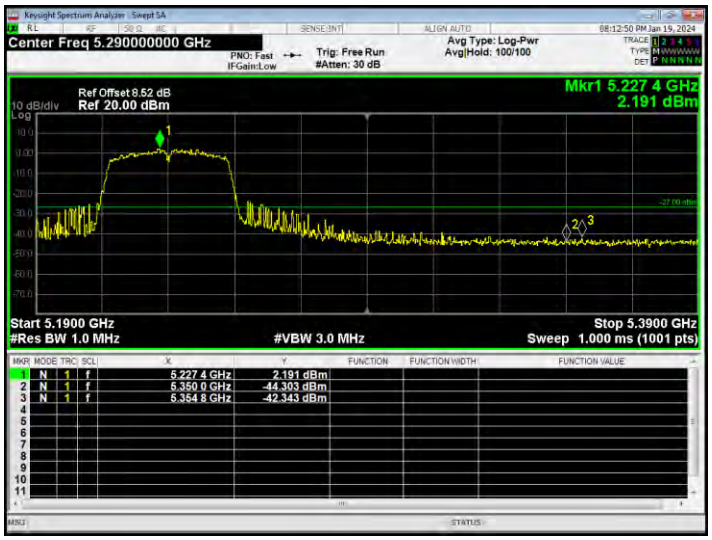
Band Edge NVNT ac20 5240MHz High Ant1



Band Edge NVNT ac40 5190MHz Low Ant1

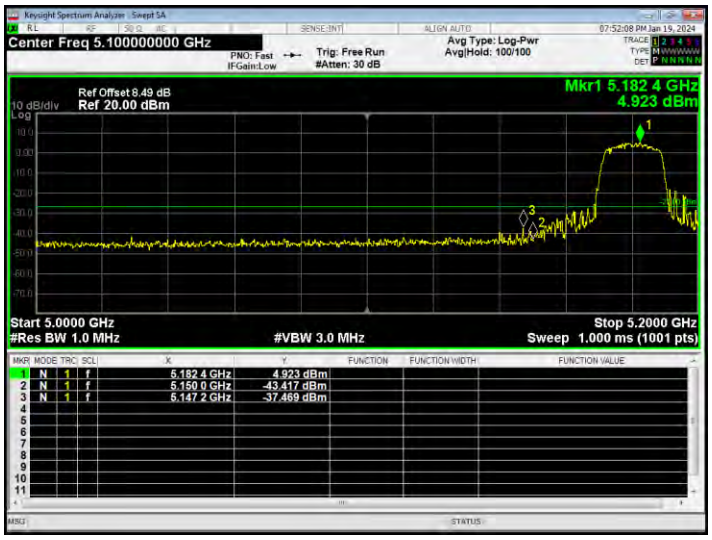


Band Edge NVNT ac40 5230MHz High Ant1

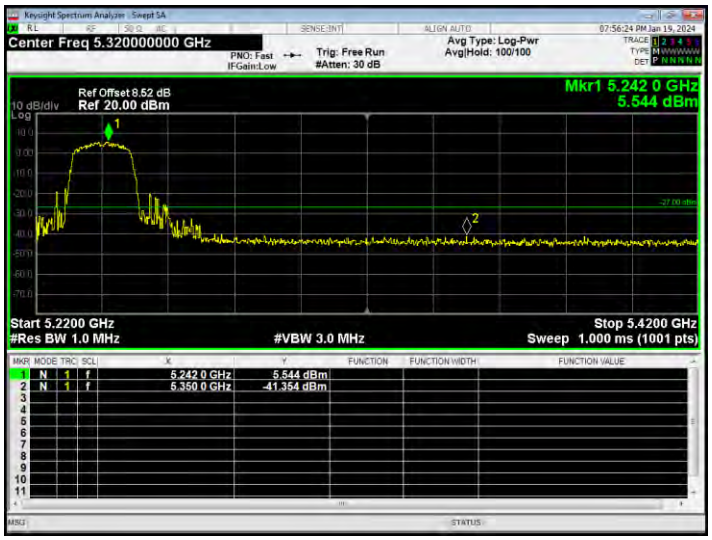


Band Edge NVNT ac80 5210MHz Low Ant1

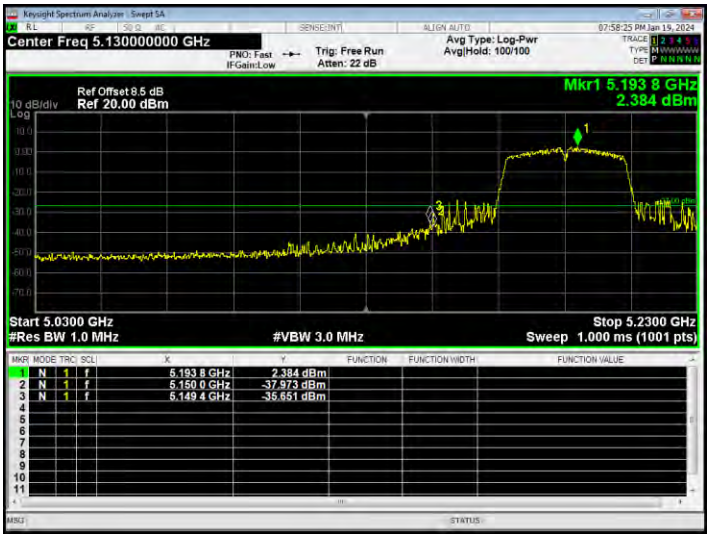
Band Edge NVNT n20 5180MHz Low Ant1



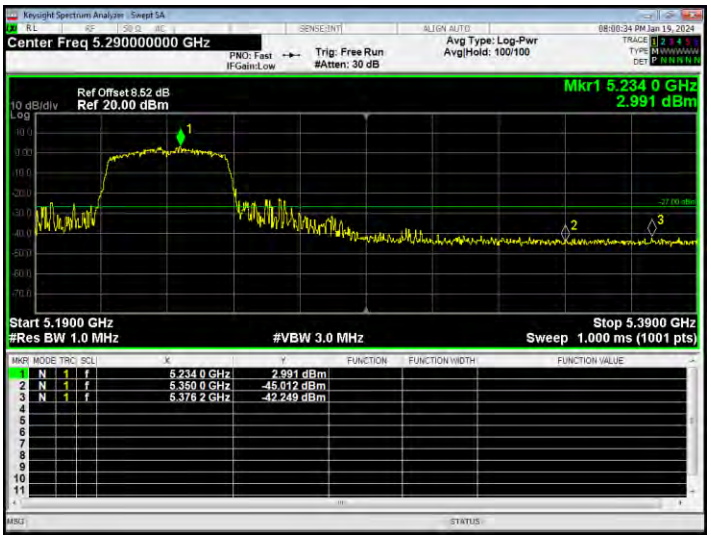
Band Edge NVNT n20 5240MHz High Ant1



Band Edge NVNT n40 5190MHz Low Ant1



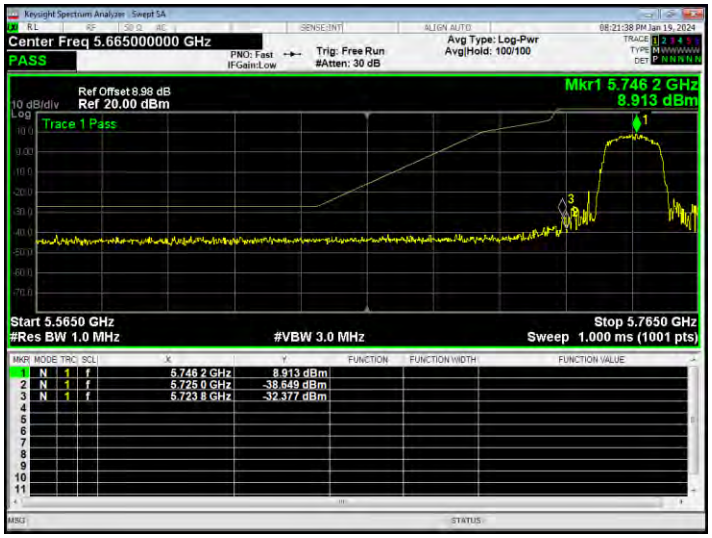
Band Edge NVNT n40 5230MHz High Ant1



Band Edge

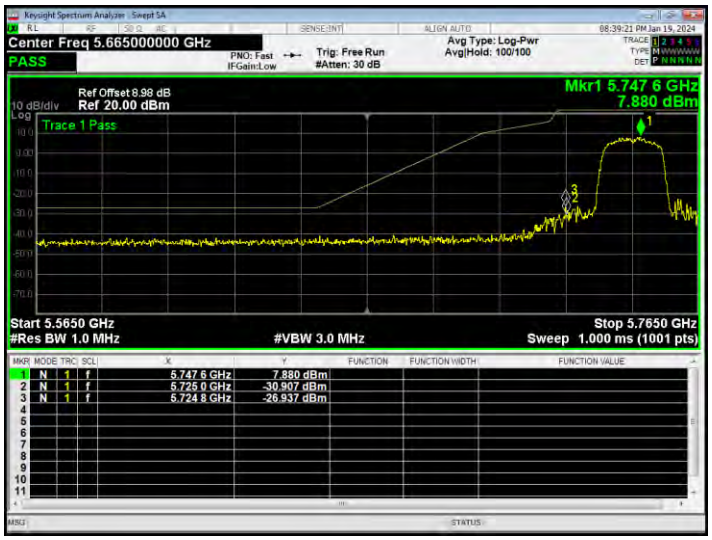
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	-32.37		Pass
NVNT	a	5825	Ant1	-33		Pass
NVNT	ac20	5745	Ant1	-26.93		Pass
NVNT	ac20	5825	Ant1	-33.44		Pass
NVNT	ac40	5755	Ant1	-25.98		Pass
NVNT	ac40	5795	Ant1	-37.9		Pass
NVNT	ac80	5775	Ant1	-30.53		Pass
NVNT	n20	5745	Ant1	-27.73		Pass
NVNT	n20	5825	Ant1	5.1		Pass
NVNT	n40	5755	Ant1	-21.05		Pass
NVNT	n40	5795	Ant1	-37.1		Pass

Band Edge NVNT a 5745MHz Low Ant1

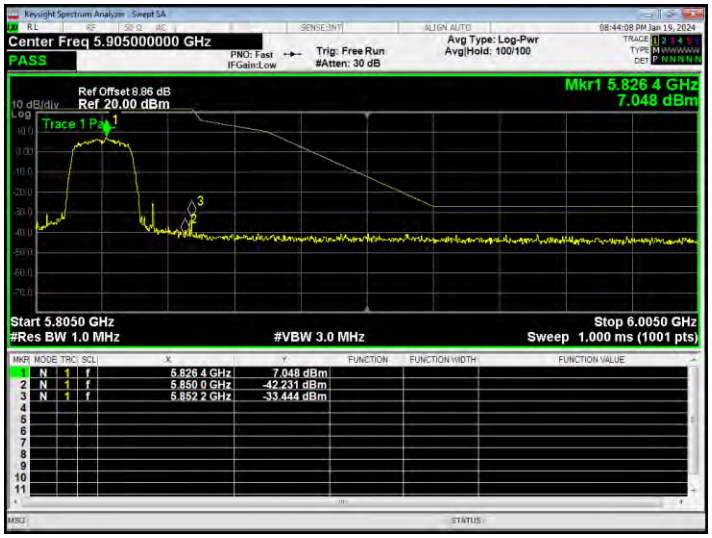


Band Edge NVNT a 5825MHz High Ant1

Band Edge NVNT ac20 5745MHz Low Ant1



Band Edge NVNT ac20 5825MHz High Ant1

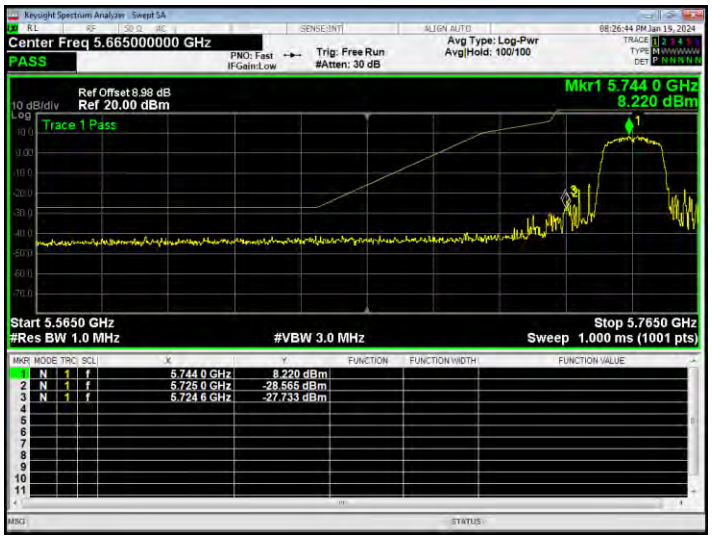


Band Edge NVNT ac40 5755MHz Low Ant1

Band Edge NVNT ac40 5795MHz High Ant1

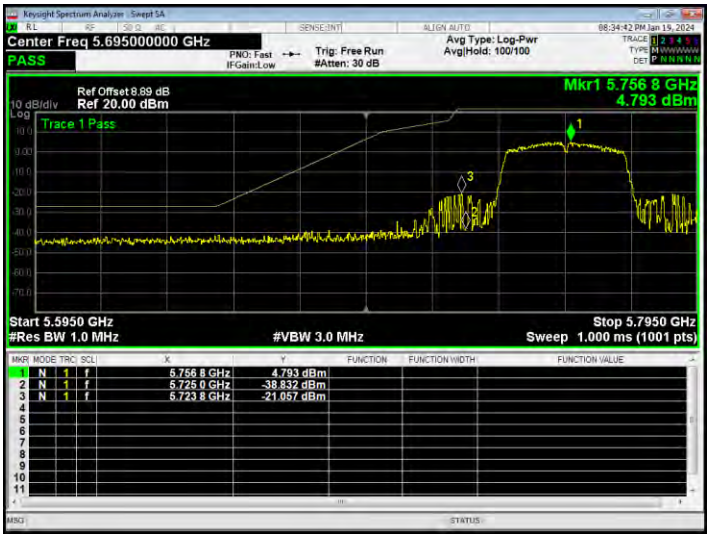
Band Edge NVNT ac80 5775MHz Low Ant1

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