

ANNEX 1 TEST DATA

FCC ID: 2A54Y-HA116

Applicant: Shenzhen TFIRETEK Technology Co., Ltd.

Address: 204, Building 2, Stech Park, Taoyuan Community, Dalang Street, LongHua District, ShenZhen

Manufacturer: Shenzhen TFIRETEK Technology Co., Ltd.

Address: 204, Building 2, Stech Park, Taoyuan Community, Dalang Street, LongHua District, ShenZhen

Product Name: Projector

Trade Mark: N/A

Model Number: HA116, HA116-A, HA116-B, HA116-C, HA116-D, HA116-PRO, HA116-PLUS, HA116-Ultra

Date of Receipt: Jul. 21, 2026

Test Date: Jul. 21, 2026 – Aug. 07, 2026

Date of Report: Aug. 07, 2026

Prepared By: Shenzhen DL Testing Technology Co., Ltd.

Address: 101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China

Applicable Standards: FCC PART 15 E 15.407
ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024

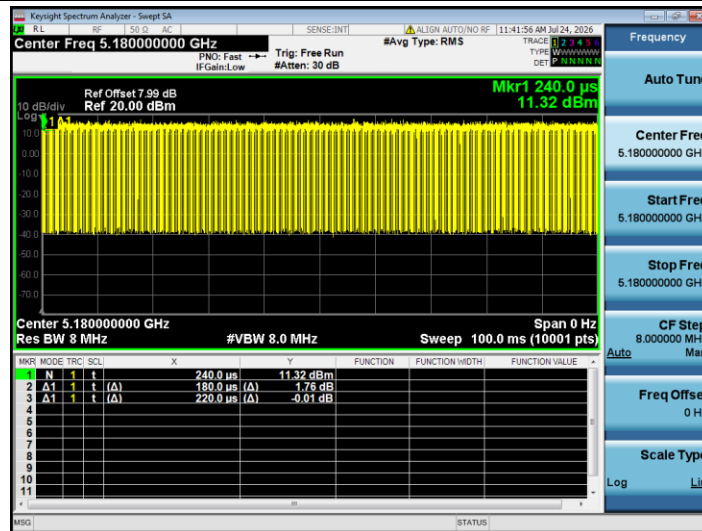
Test Result: Pass

Report Number: DLE-260721008R

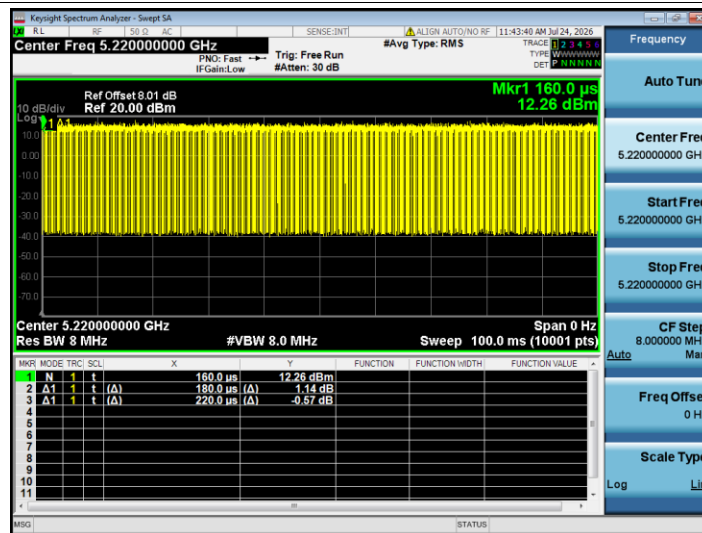
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	81.82	0.87	5.56
NVNT	a	5220	Ant1	81.82	0.87	5.56
NVNT	a	5240	Ant1	81.82	0.87	5.56
NVNT	n20	5180	Ant1	97.01	0.13	0.77
NVNT	n20	5220	Ant1	96.3	0.16	0.77
NVNT	n20	5240	Ant1	97.01	0.13	0.77
NVNT	n40	5190	Ant1	94.2	0.26	1.54
NVNT	n40	5230	Ant1	94.2	0.26	1.54
NVNT	ac20	5180	Ant1	96.32	0.16	0.76
NVNT	ac20	5220	Ant1	96.32	0.16	0.76
NVNT	ac20	5240	Ant1	97.04	0.13	0.76
NVNT	ac40	5190	Ant1	94.29	0.26	1.52
NVNT	ac40	5230	Ant1	92.86	0.32	1.54

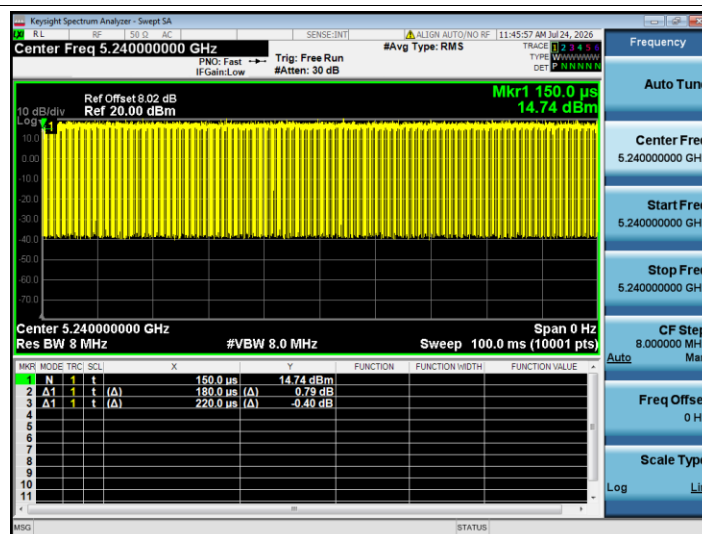
Report



Duty Cycle NVNT a 5180MHz Ant1

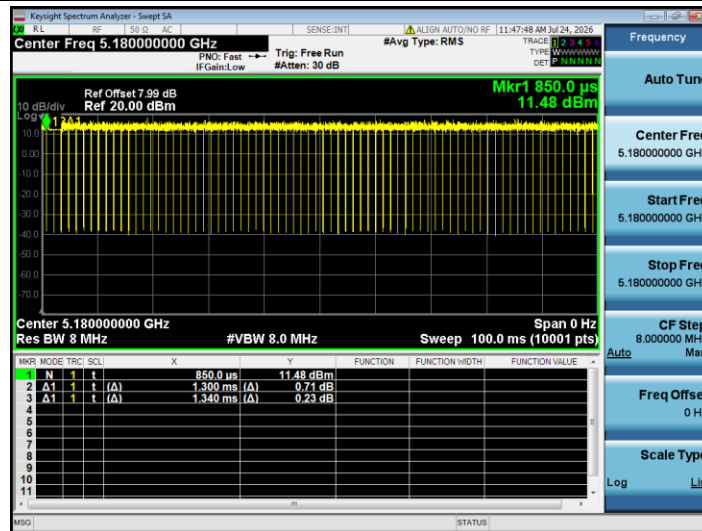


Duty Cycle NVNT a 5220MHz Ant1

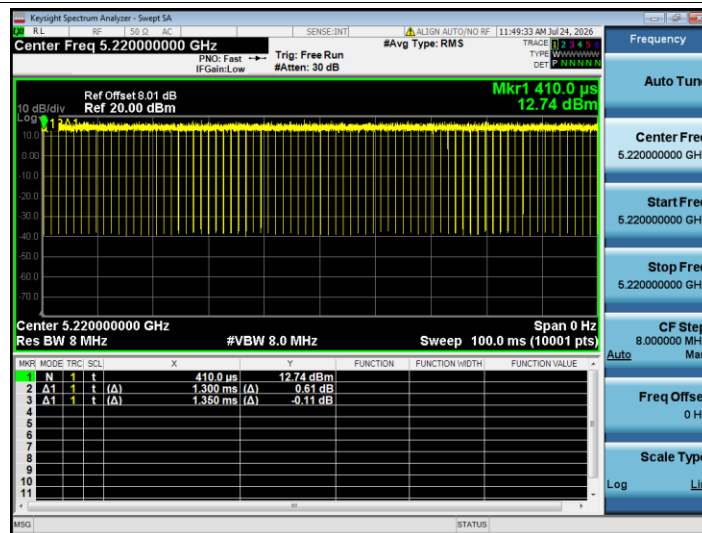


Duty Cycle NVNT a 5240MHz Ant1

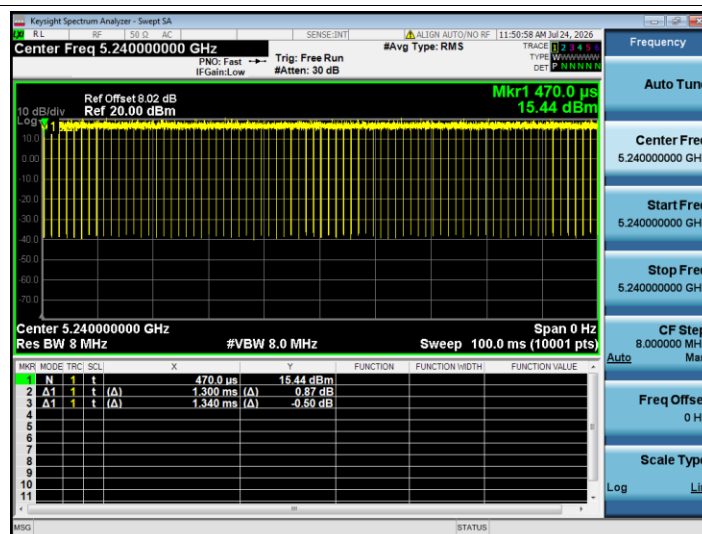
Report



Duty Cycle NVNT n20 5180MHz Ant1

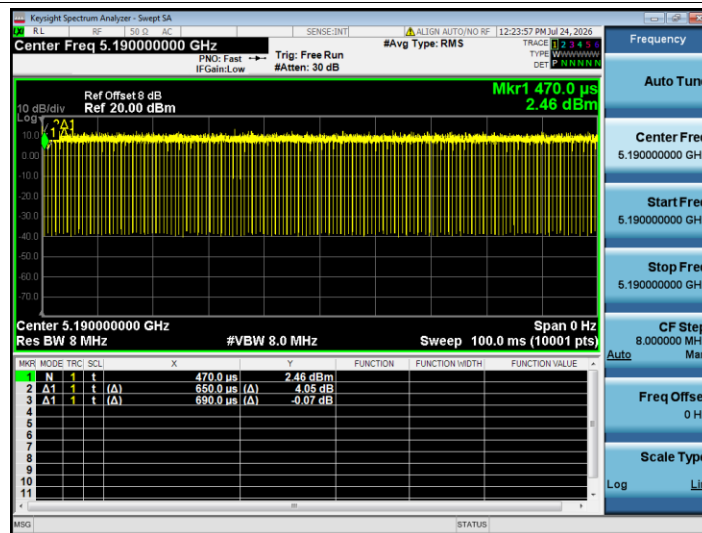


Duty Cycle NVNT n20 5220MHz Ant1

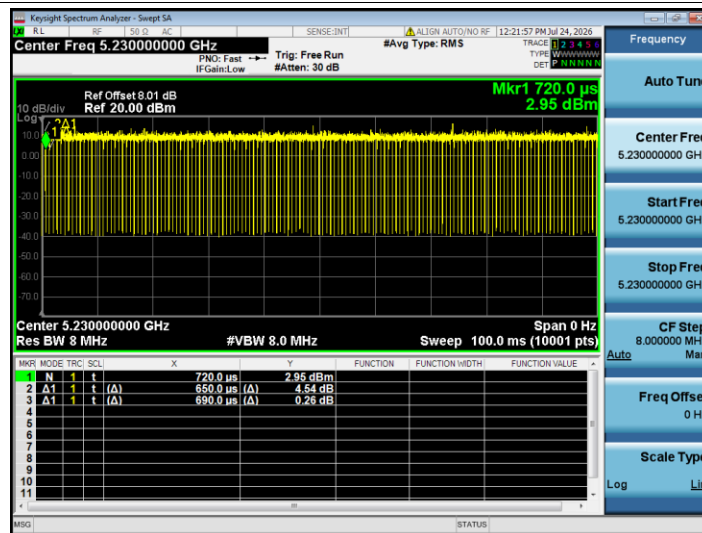


Duty Cycle NVNT n20 5240MHz Ant1

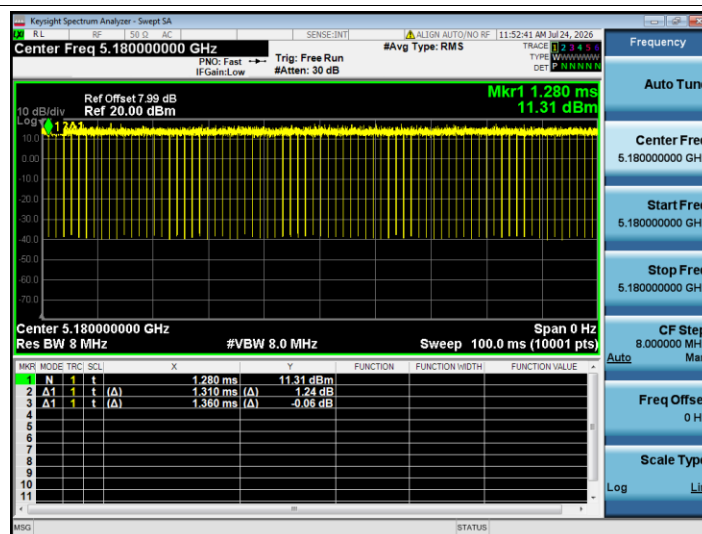
Report



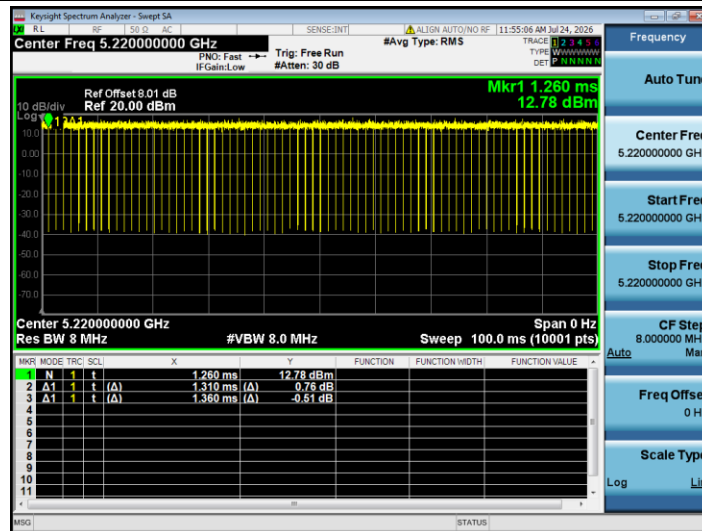
Duty Cycle NVNT n40 5190MHz Ant1



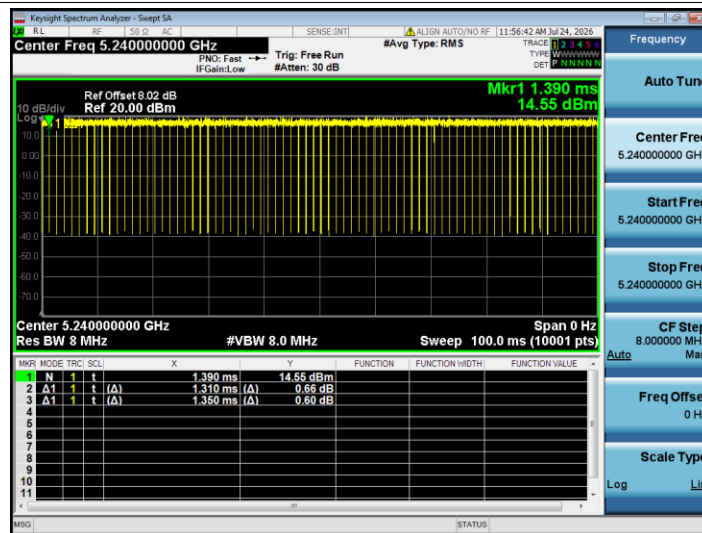
Duty Cycle NVNT n40 5230MHz Ant1



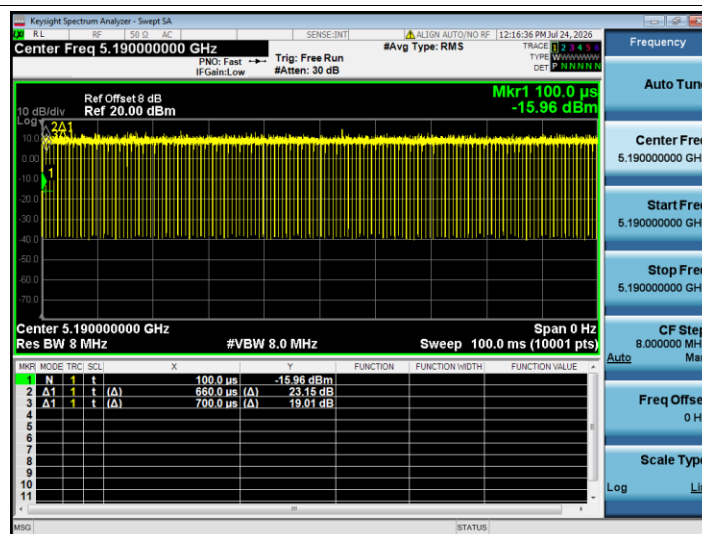
Duty Cycle NVNT ac20 5180MHz Ant1



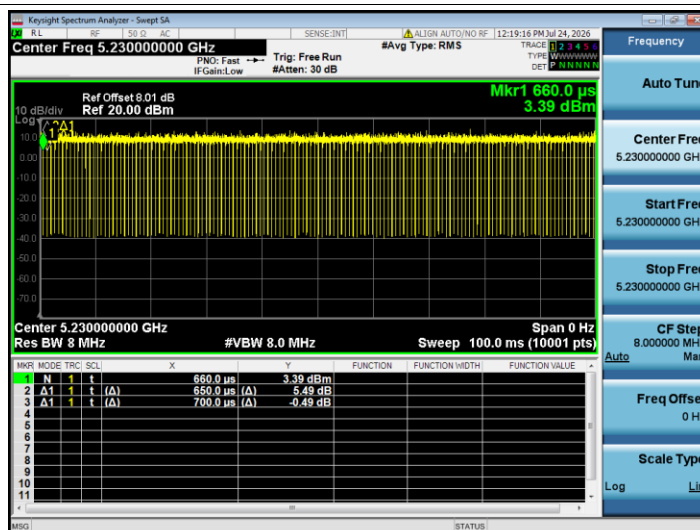
Duty Cycle NVNT ac20 5220MHz Ant1



Duty Cycle NVNT ac20 5240MHz Ant1



Duty Cycle NVNT ac40 5190MHz Ant1



Duty Cycle NVNT ac40 5230MHz Ant1

Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Conducted Power (dBm)	Limit EIRP (dBm)	Verdict
NVNT	a	5180	Ant1	7.84	0.87	8.71	24	Pass
NVNT	a	5220	Ant1	8.72	0.87	9.59	24	Pass
NVNT	a	5240	Ant1	10.85	0.87	11.72	24	Pass
NVNT	n20	5180	Ant1	9.12	0.13	9.25	24	Pass
NVNT	n20	5220	Ant1	9.95	0.16	10.11	24	Pass
NVNT	n20	5240	Ant1	12.11	0.13	12.24	24	Pass
NVNT	n40	5190	Ant1	6.28	0.26	6.54	24	Pass
NVNT	n40	5230	Ant1	7.51	0.26	7.77	24	Pass
NVNT	ac20	5180	Ant1	9.02	0.16	9.18	24	Pass
NVNT	ac20	5220	Ant1	9.93	0.16	10.09	24	Pass
NVNT	ac20	5240	Ant1	12.08	0.13	12.21	24	Pass
NVNT	ac40	5190	Ant1	6.77	0.26	7.03	24	Pass
NVNT	ac40	5230	Ant1	7.52	0.32	7.84	24	Pass

-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	a	5180	Ant1	19.64
NVNT	a	5220	Ant1	19.75
NVNT	a	5240	Ant1	19.7
NVNT	n20	5180	Ant1	24.44
NVNT	n20	5220	Ant1	28.64
NVNT	n20	5240	Ant1	22.47
NVNT	n40	5190	Ant1	39.84
NVNT	n40	5230	Ant1	40.5
NVNT	ac20	5180	Ant1	20.28
NVNT	ac20	5220	Ant1	25.97
NVNT	ac20	5240	Ant1	22.12
NVNT	ac40	5190	Ant1	40.05
NVNT	ac40	5230	Ant1	39.97

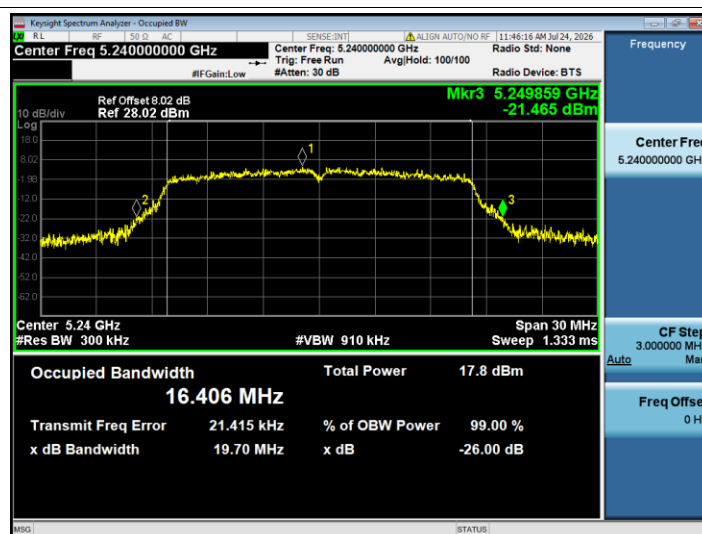
Report



-26dB Bandwidth NVNT a 5180MHz Ant1

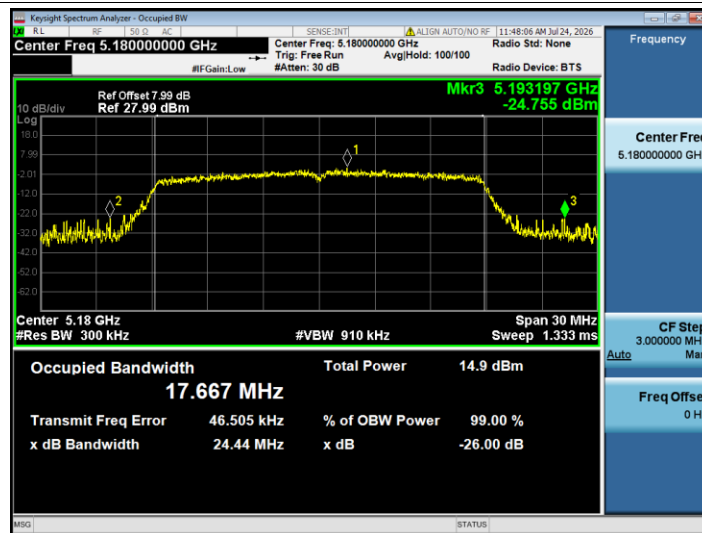


-26dB Bandwidth NVNT a 5220MHz Ant1



-26dB Bandwidth NVNT a 5240MHz Ant1

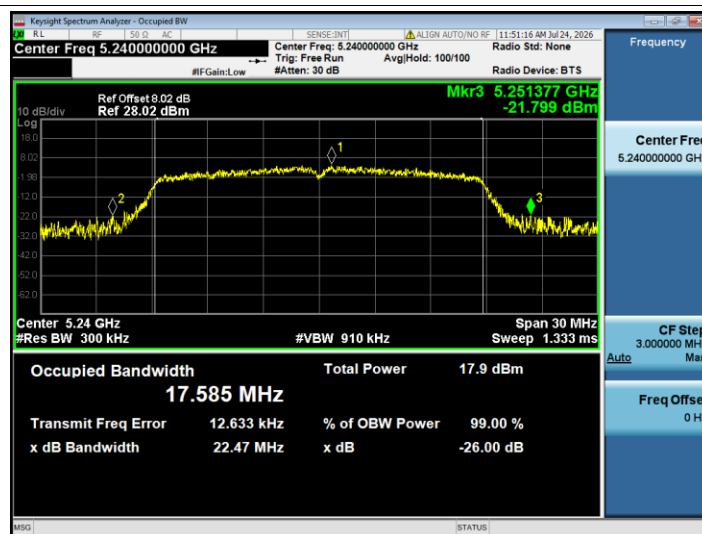
Report



-26dB Bandwidth NVNT n20 5180MHz Ant1

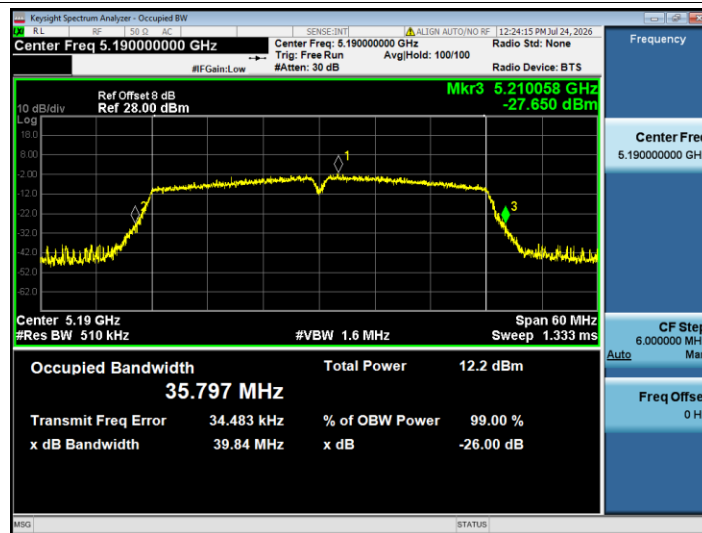


-26dB Bandwidth NVNT n20 5220MHz Ant1

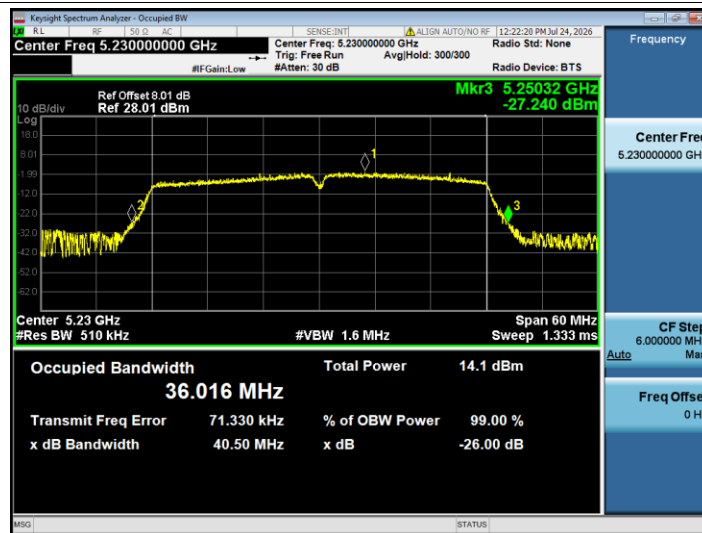


-26dB Bandwidth NVNT n20 5240MHz Ant1

Report



-26dB Bandwidth NVNT n40 5190MHz Ant1



-26dB Bandwidth NVNT n40 5230MHz Ant1



-26dB Bandwidth NVNT ac20 5180MHz Ant1

Report



-26dB Bandwidth NVNT ac20 5220MHz Ant1



-26dB Bandwidth NVNT ac20 5240MHz Ant1



-26dB Bandwidth NVNT ac40 5190MHz Ant1

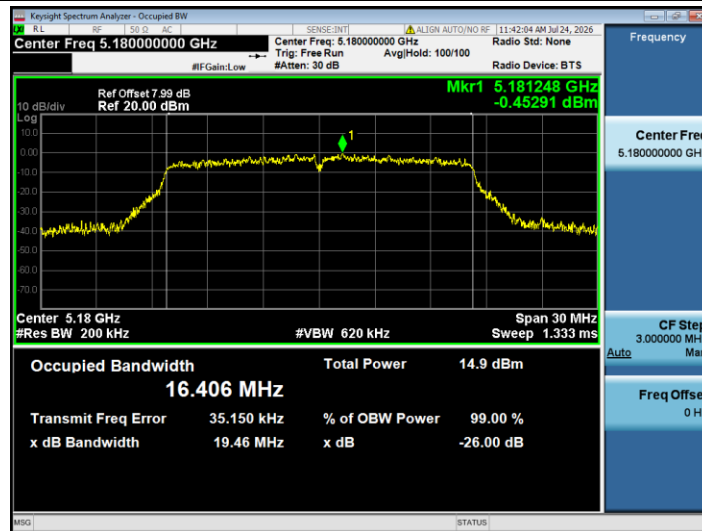


-26dB Bandwidth NVNT ac40 5230MHz Ant1

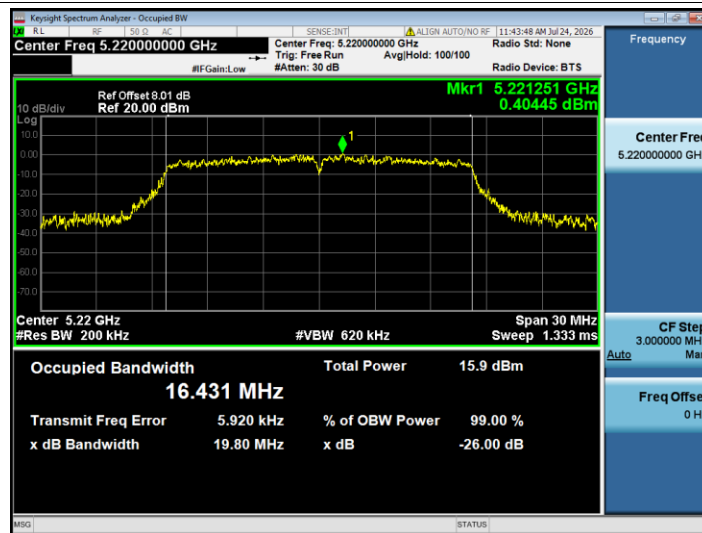
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.406
NVNT	a	5220	Ant1	16.431
NVNT	a	5240	Ant1	16.308
NVNT	n20	5180	Ant1	17.572
NVNT	n20	5220	Ant1	17.663
NVNT	n20	5240	Ant1	17.516
NVNT	n40	5190	Ant1	35.725
NVNT	n40	5230	Ant1	35.952
NVNT	ac20	5180	Ant1	17.596
NVNT	ac20	5220	Ant1	17.653
NVNT	ac20	5240	Ant1	17.53
NVNT	ac40	5190	Ant1	35.738
NVNT	ac40	5230	Ant1	35.925

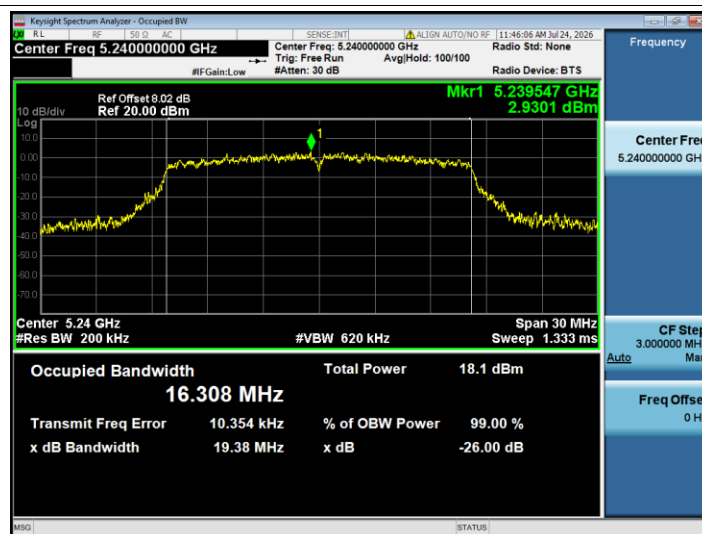
Report



OBW NVNT a 5180MHz Ant1

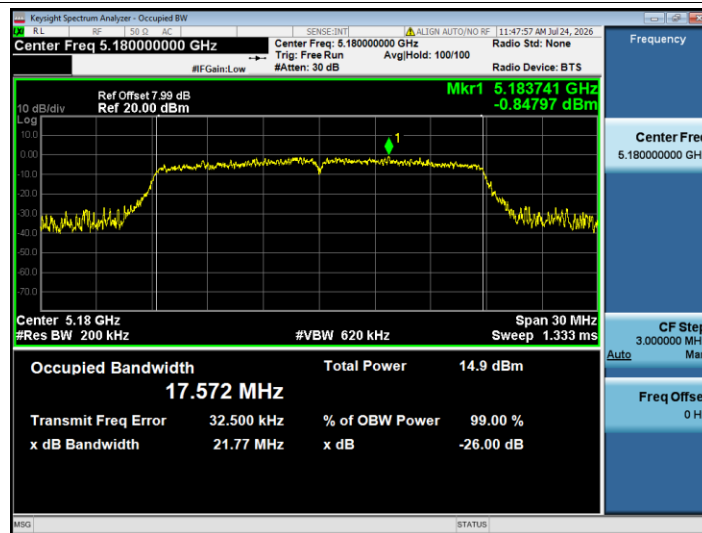


OBW NVNT a 5220MHz Ant1



OBW NVNT a 5240MHz Ant1

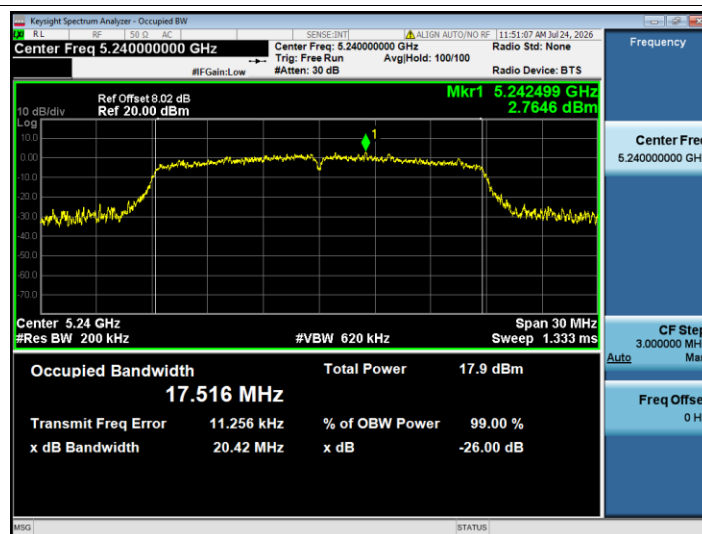
Report



OBW NVNT n20 5180MHz Ant1

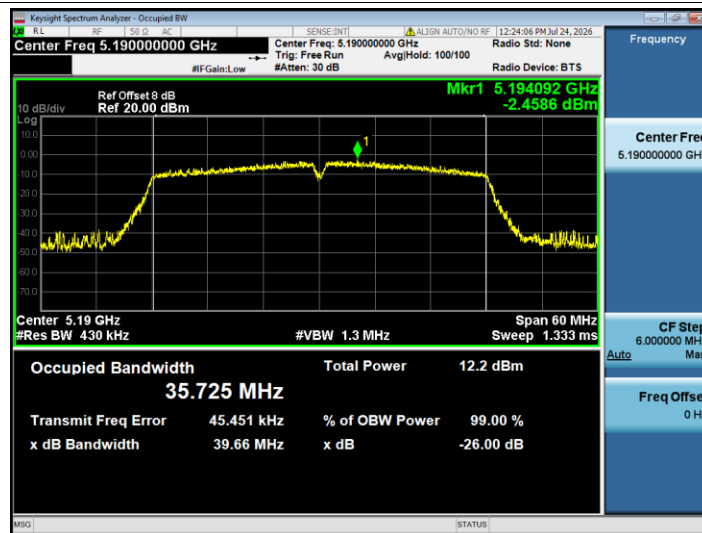


OBW NVNT n20 5220MHz Ant1



OBW NVNT n20 5240MHz Ant1

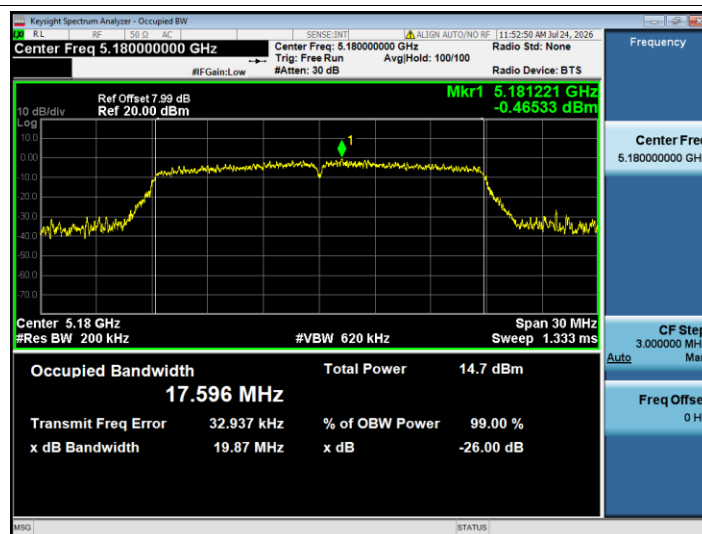
Report



OBW NVNT n40 5190MHz Ant1



OBW NVNT n40 5230MHz Ant1

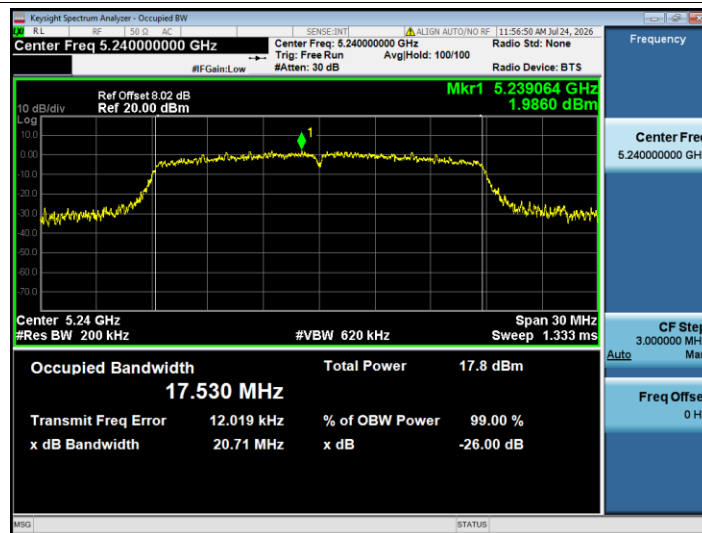


OBW NVNT ac20 5180MHz Ant1

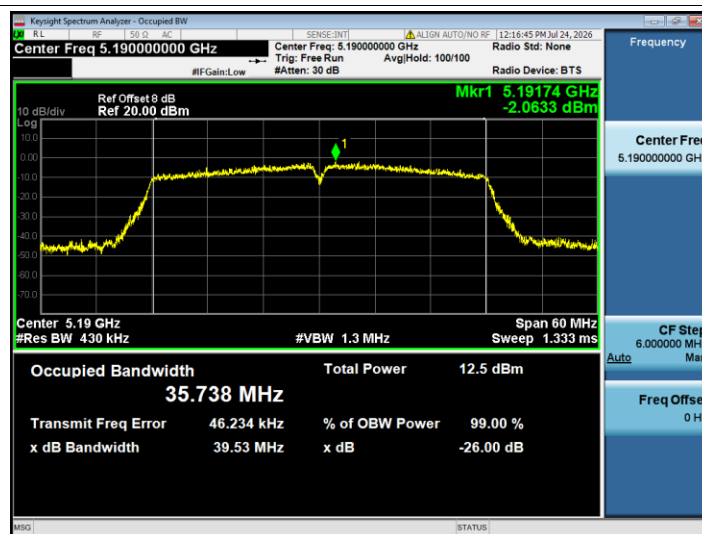
Report



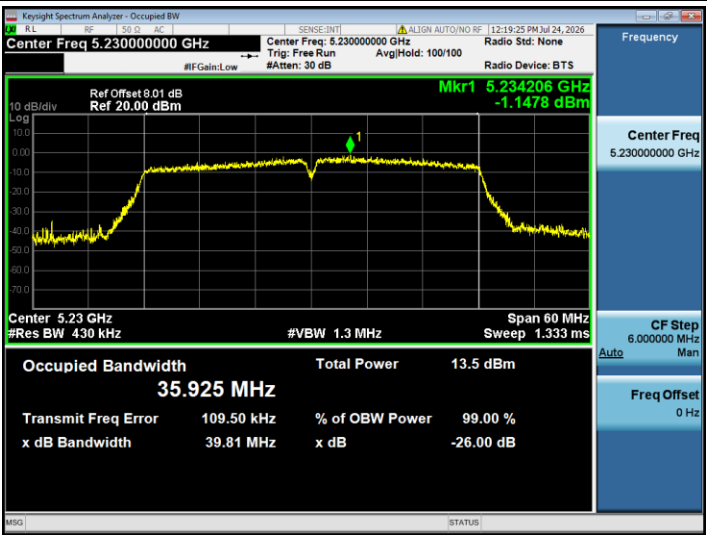
OBW NVNT ac20 5220MHz Ant1



OBW NVNT ac20 5240MHz Ant1



OBW NVNT ac40 5190MHz Ant1

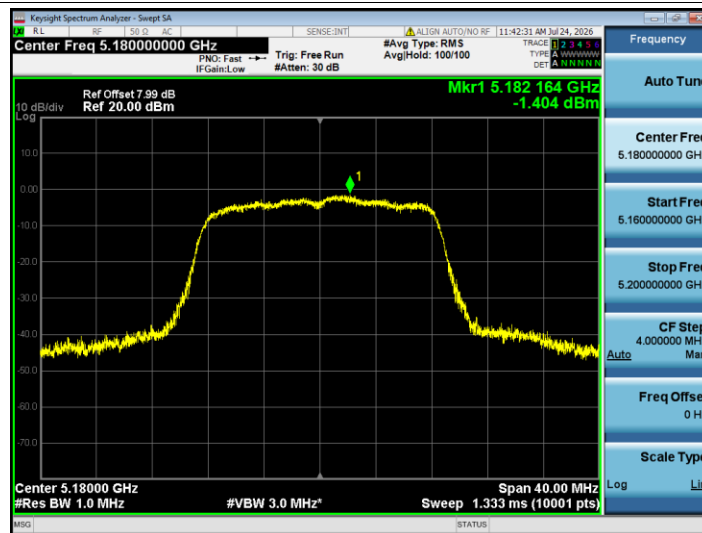


OBW NVNT ac40 5230MHz Ant1

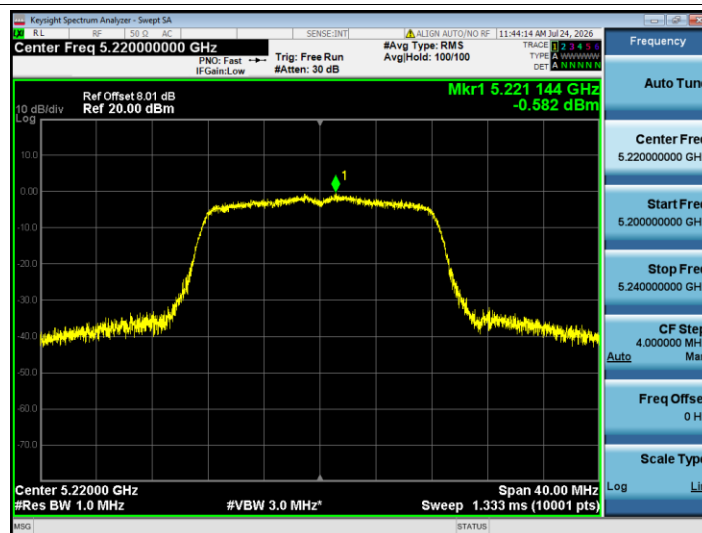
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total Conducted PSD (dBm)	Limit EIRP (dBm)	Verdict
NVNT	a	5180	Ant1	-1.4	0.87	-0.53	11	Pass
NVNT	a	5220	Ant1	-0.58	0.87	0.29	11	Pass
NVNT	a	5240	Ant1	1.69	0.87	2.56	11	Pass
NVNT	n20	5180	Ant1	-0.76	0.13	-0.63	11	Pass
NVNT	n20	5220	Ant1	-0.15	0.16	0.01	11	Pass
NVNT	n20	5240	Ant1	2.63	0.13	2.76	11	Pass
NVNT	n40	5190	Ant1	-5.74	0.26	-5.48	11	Pass
NVNT	n40	5230	Ant1	-4.73	0.26	-4.47	11	Pass
NVNT	ac20	5180	Ant1	-0.81	0.16	-0.65	11	Pass
NVNT	ac20	5220	Ant1	0	0.16	0.16	11	Pass
NVNT	ac20	5240	Ant1	2.53	0.13	2.66	11	Pass
NVNT	ac40	5190	Ant1	-5.12	0.26	-4.86	11	Pass
NVNT	ac40	5230	Ant1	-4.91	0.32	-4.59	11	Pass

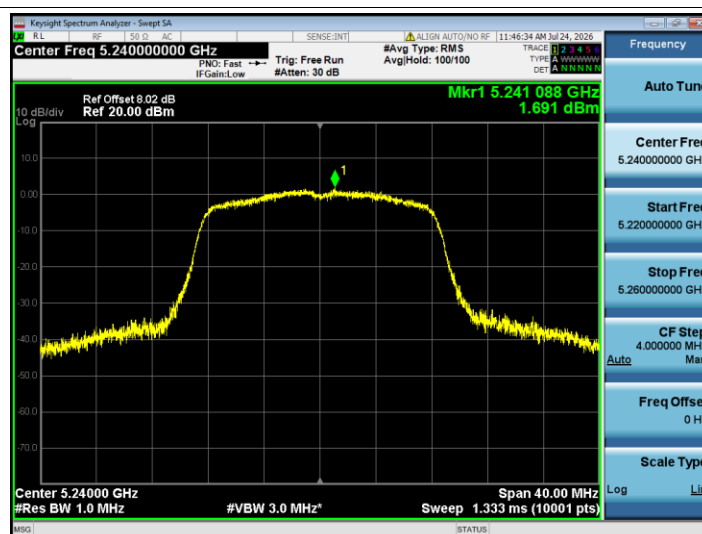
Report



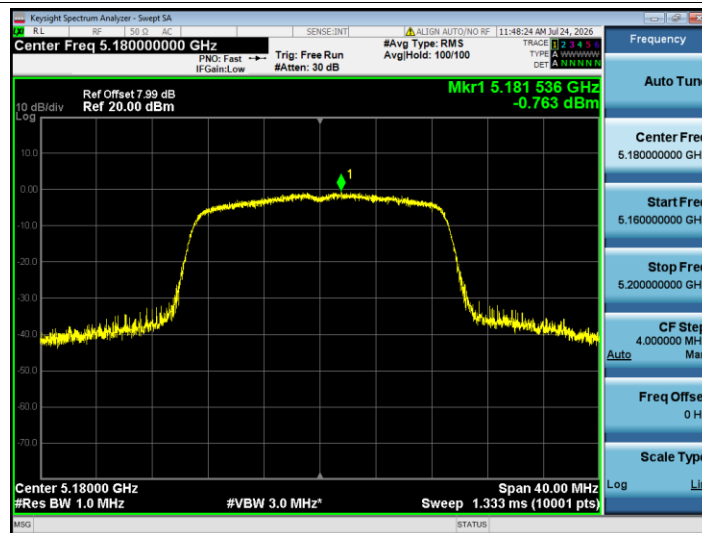
PSD NVNT a 5180MHz Ant1



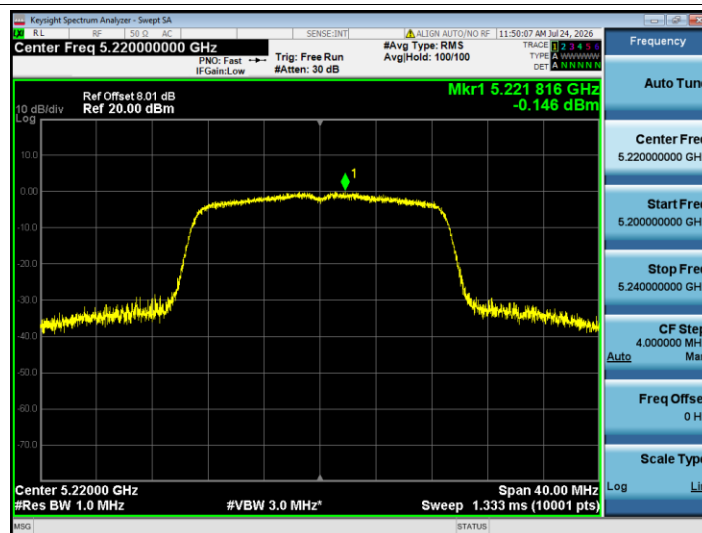
PSD NVNT a 5220MHz Ant1



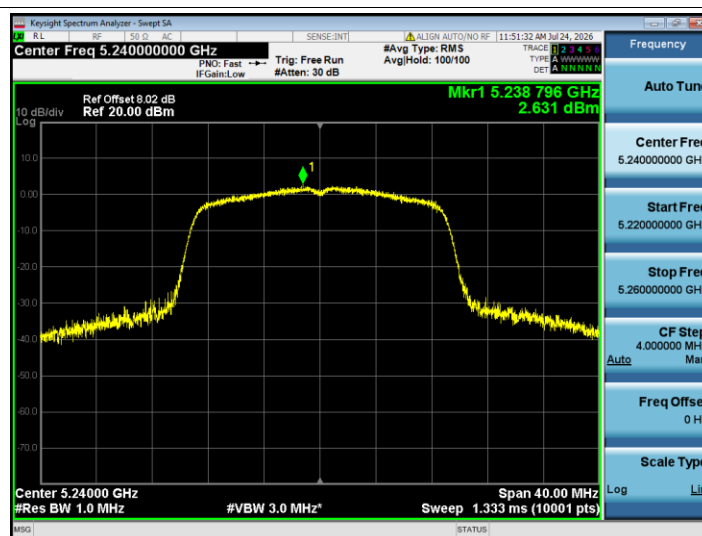
PSD NVNT a 5240MHz Ant1



PSD NVNT n20 5180MHz Ant1

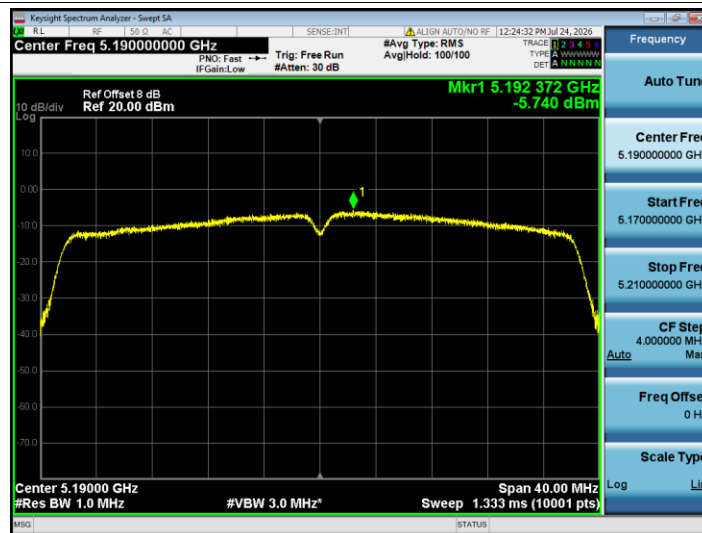


PSD NVNT n20 5220MHz Ant1

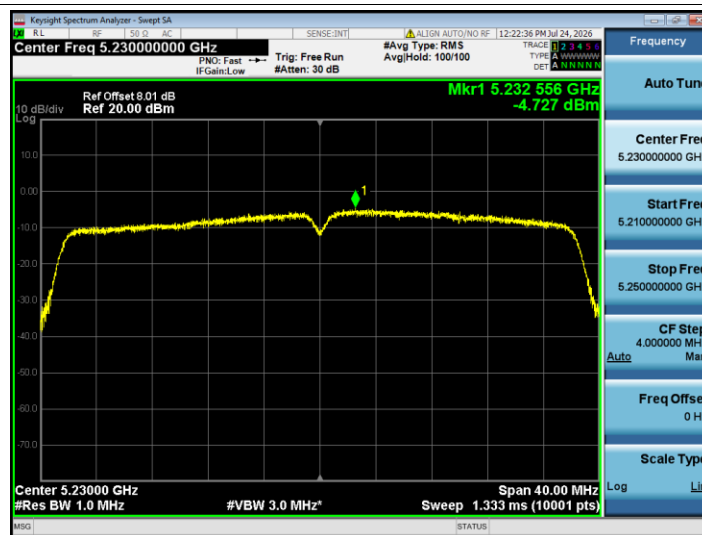


PSD NVNT n20 5240MHz Ant1

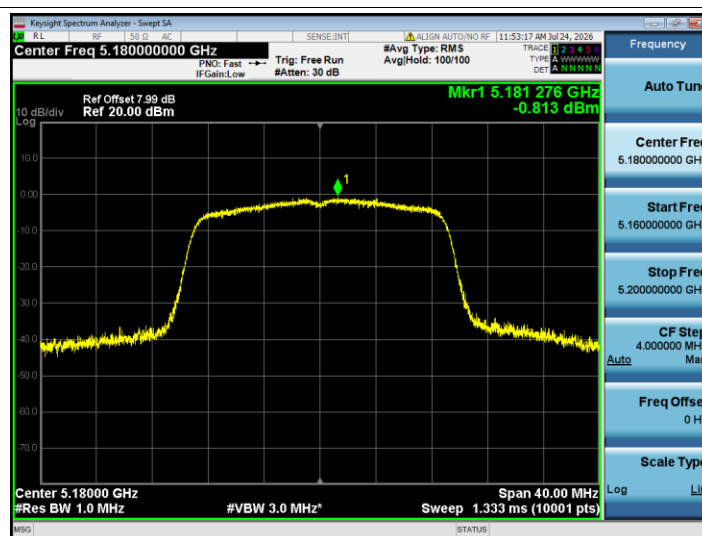
Report



PSD NVNT n40 5190MHz Ant1

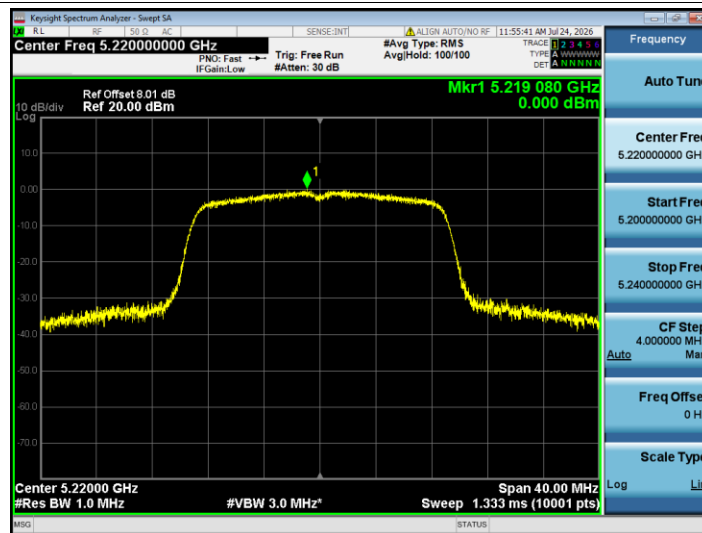


PSD NVNT n40 5230MHz Ant1

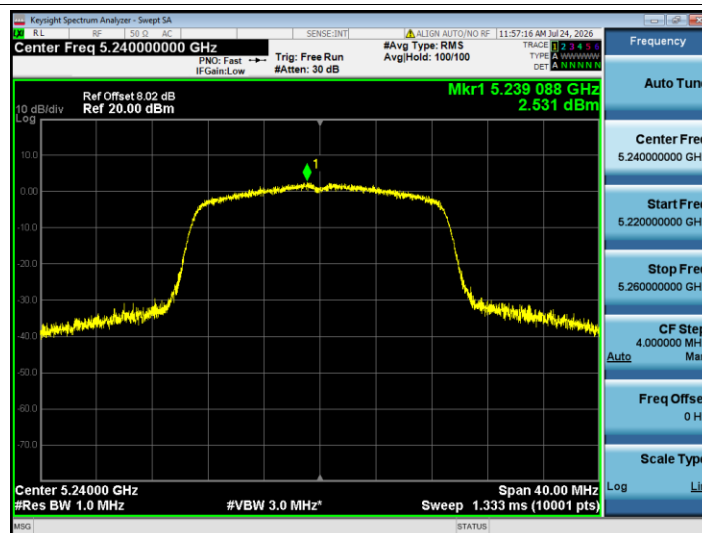


PSD NVNT ac20 5180MHz Ant1

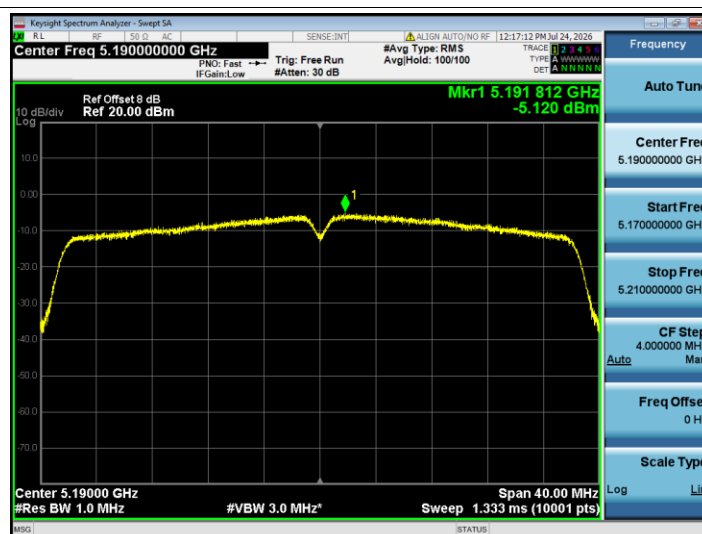
Report



PSD NVNT ac20 5220MHz Ant1



PSD NVNT ac20 5240MHz Ant1



PSD NVNT ac40 5190MHz Ant1

Report

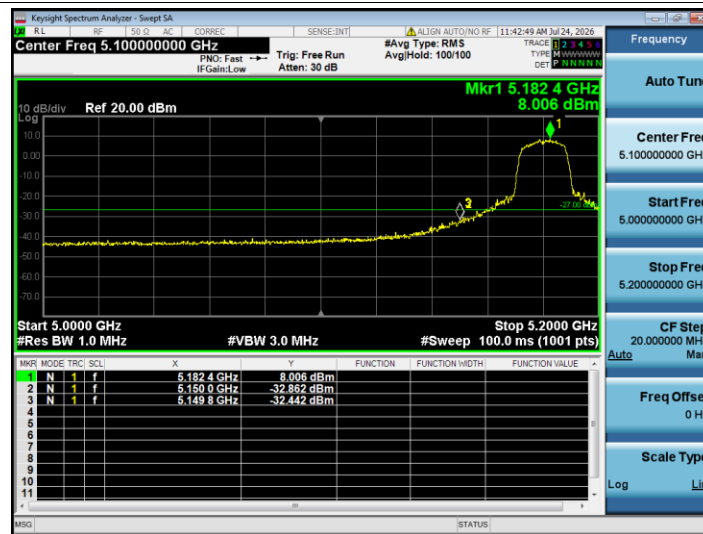


PSD NVNT ac40 5230MHz Ant1

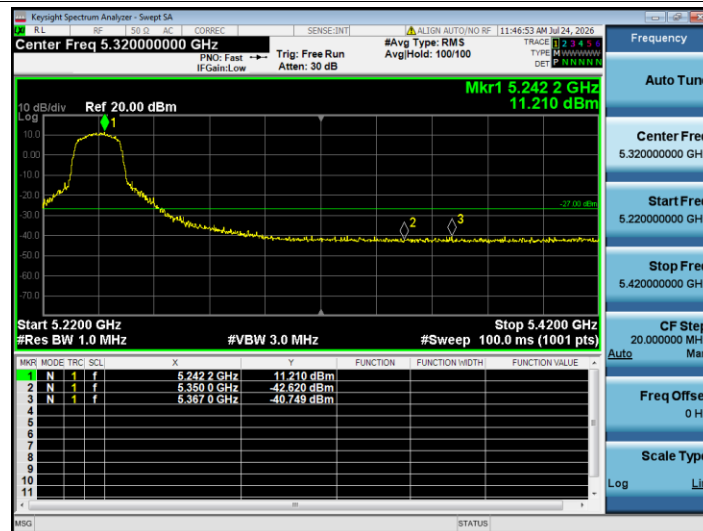
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-32.44	-27	Pass
NVNT	a	5240	Ant1	-40.75	-27	Pass
NVNT	n20	5180	Ant1	-28.78	-27	Pass
NVNT	n20	5240	Ant1	-40.6	-27	Pass
NVNT	n40	5190	Ant1	-32.02	-27	Pass
NVNT	n40	5230	Ant1	-40.88	-27	Pass
NVNT	ac20	5180	Ant1	-27.94	-27	Pass
NVNT	ac20	5240	Ant1	-40.02	-27	Pass
NVNT	ac40	5190	Ant1	-40.86	-27	Pass
NVNT	ac40	5230	Ant1	-40.72	-27	Pass

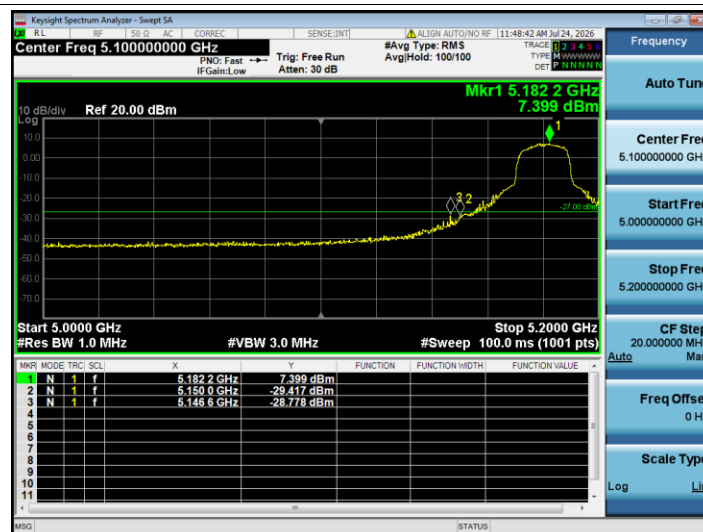
The antenna gain is compensated in the test data.



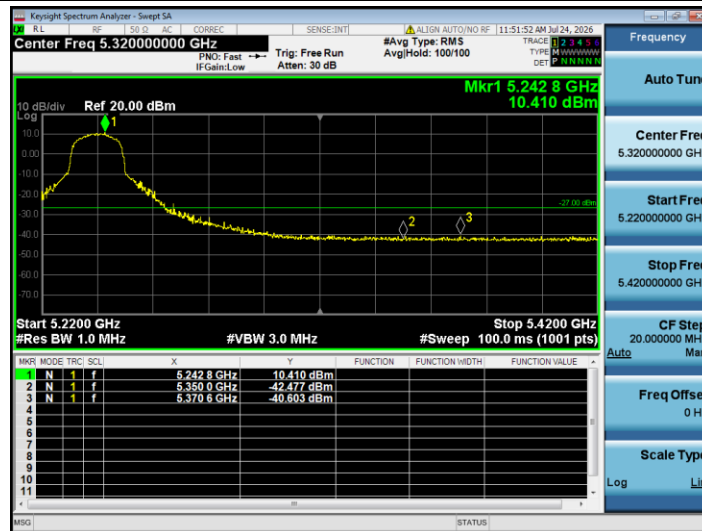
Band Edge NVNT a 5180MHz Low Ant1



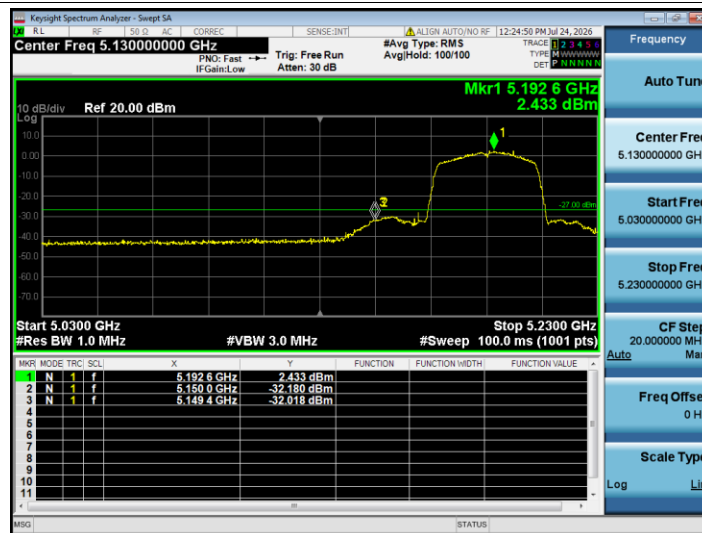
Band Edge NVNT a 5240MHz High Ant1



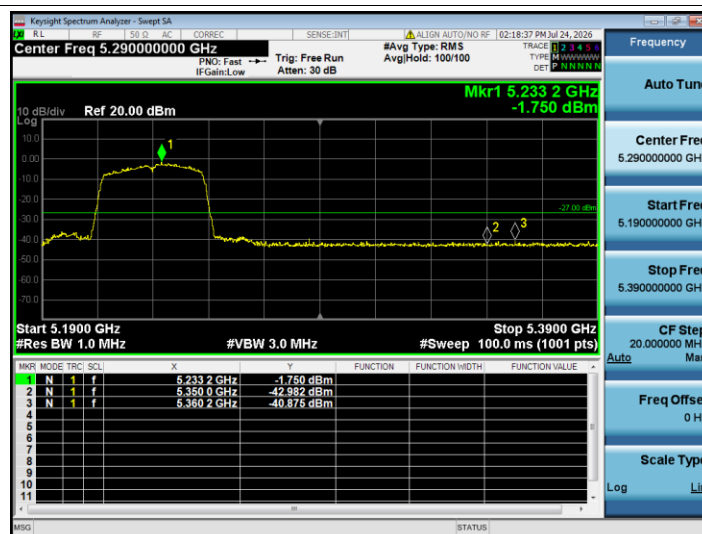
Band Edge NVNT n20 5180MHz Low Ant1



Band Edge NVNT n20 5240MHz High Ant1

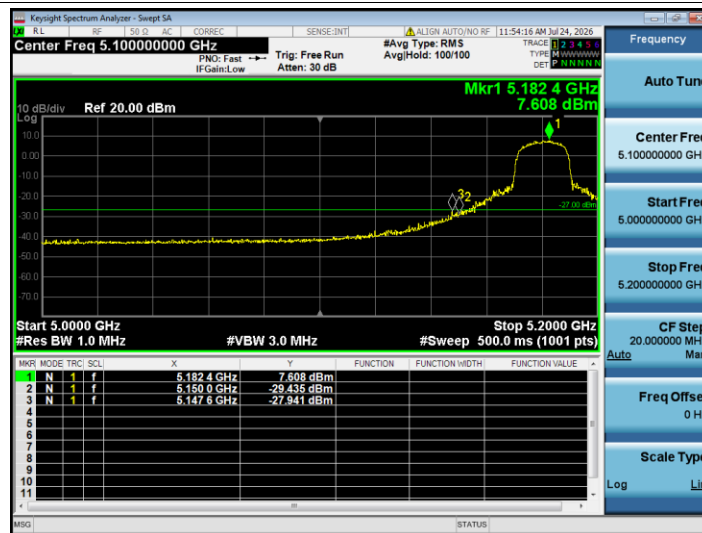


Band Edge NVNT n40 5190MHz Low Ant1

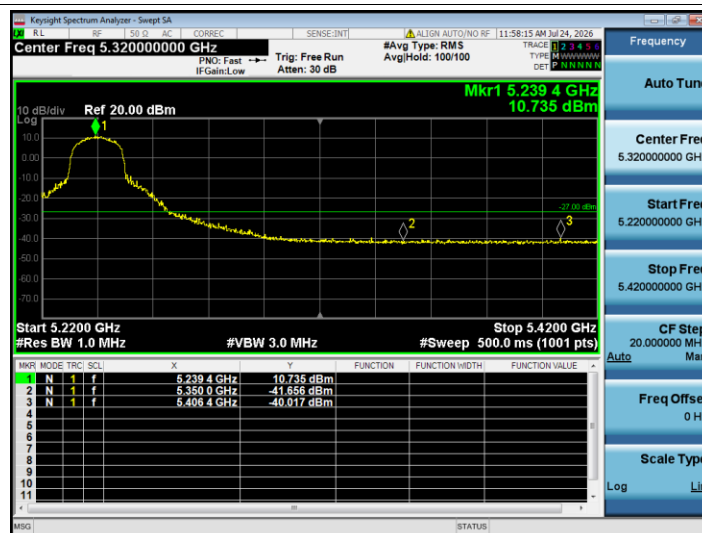


Band Edge NVNT n40 5230MHz High Ant1

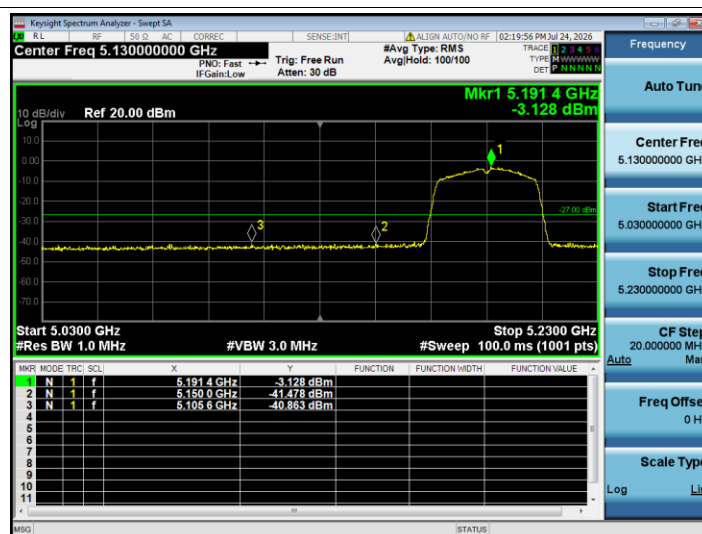
Report



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