



Appendix 1

FCC Test Report

FCC ID: 2A9PI-PORTALCAM

Applicant: SHENZHEN XGRIDS-INNOVATION CO., LTD
Address: 2403&2404, 24 Floor, Building 1B, Shenzhen International Innovation Valley, Liuxiandong, Nanshan District, Shenzhen, Guangdong, China
Manufacturer: SHENZHEN XGRIDS-INNOVATION CO., LTD
Address: 2403&2404, 24 Floor, Building 1B, Shenzhen International Innovation Valley, Liuxiandong, Nanshan District, Shenzhen, Guangdong, China
EUT: Spatial Camera
Trade Mark: XGRIDS
Model Number: PortalCam
Date of Receipt: Aug. 20, 2025
Test Date: Aug. 20, 2025 - Sep. 15, 2025
Date of Report: Sep. 15, 2025
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
Test Result: Pass



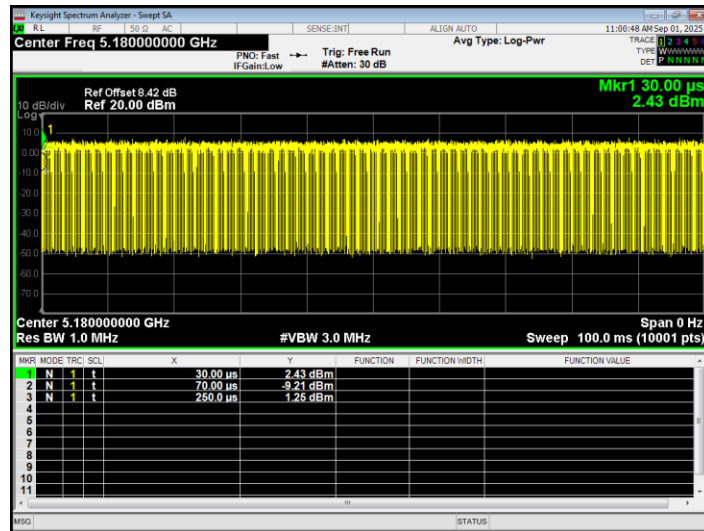
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5180	Ant1	81.82	0.87
NVNT	a	5220	Ant1	81.82	0.87
NVNT	a	5240	Ant1	81.82	0.87
NVNT	ac20	5180	Ant1	97.04	0.13
NVNT	ac20	5220	Ant1	97.04	0.13
NVNT	ac20	5240	Ant1	97.04	0.13
NVNT	ac40	5190	Ant1	94.2	0.26
NVNT	ac40	5230	Ant1	92.86	0.32
NVNT	ac80	5210	Ant1	89.19	0.5
NVNT	n20	5180	Ant1	97.01	0.13
NVNT	n20	5220	Ant1	96.3	0.16
NVNT	n20	5240	Ant1	97.01	0.13
NVNT	n40	5190	Ant1	94.2	0.26
NVNT	n40	5230	Ant1	94.2	0.26

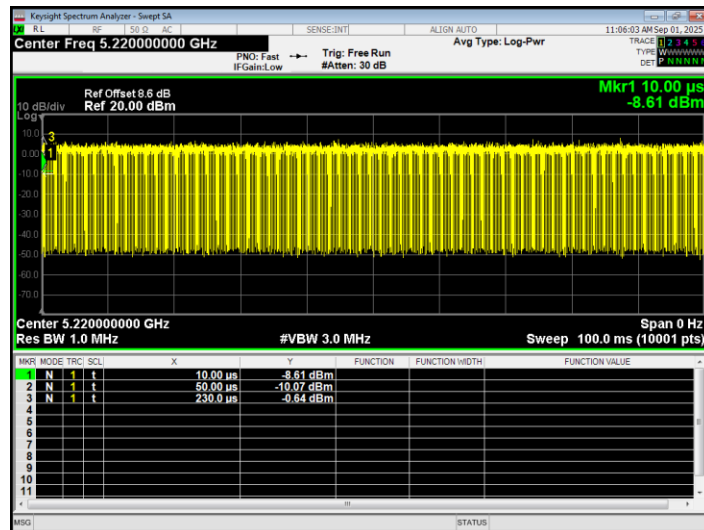


Shenzhen DL Testing Technology Co., Ltd.

Duty Cycle NVNT a 5180MHz Ant1



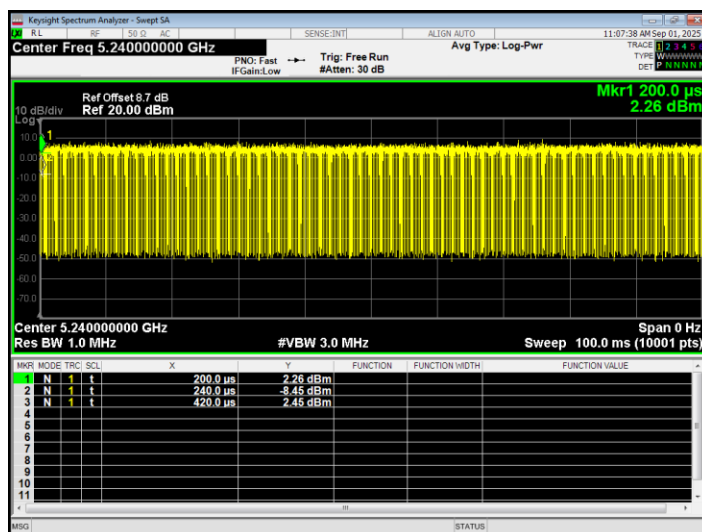
Duty Cycle NVNT a 5220MHz Ant1



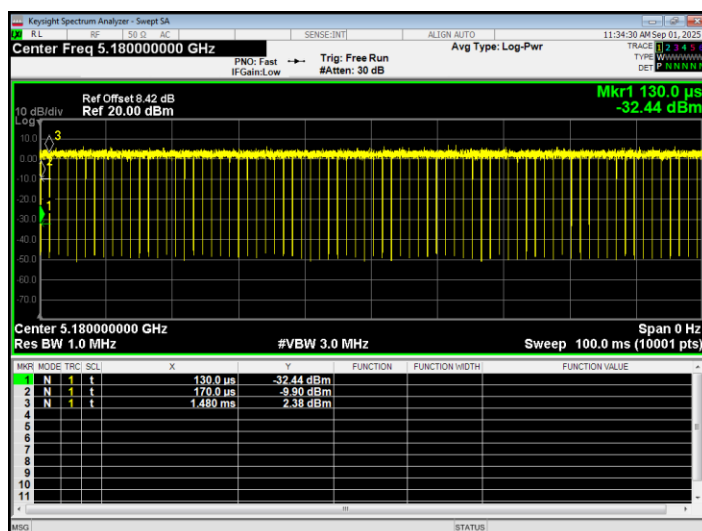


Shenzhen DL Testing Technology Co., Ltd.

Duty Cycle NVNT a 5240MHz Ant1



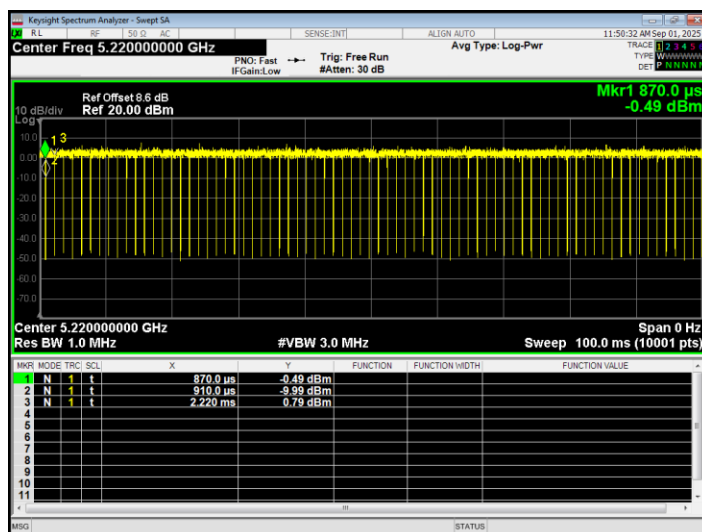
Duty Cycle NVNT ac20 5180MHz Ant1



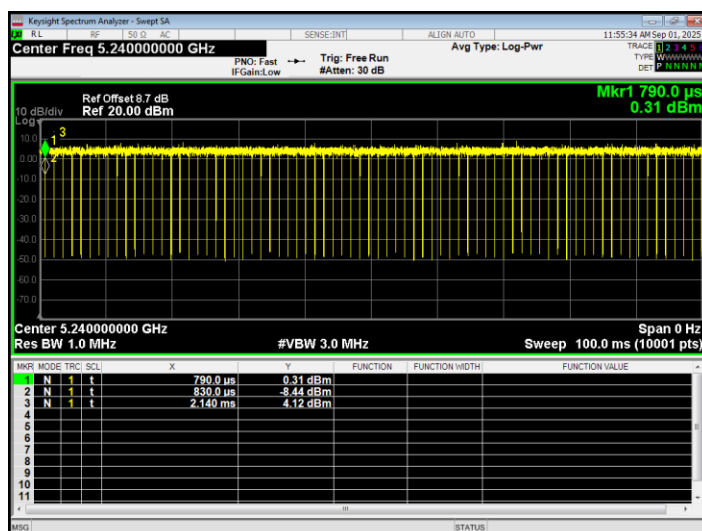


Shenzhen DL Testing Technology Co., Ltd.

Duty Cycle NVNT ac20 5220MHz Ant1



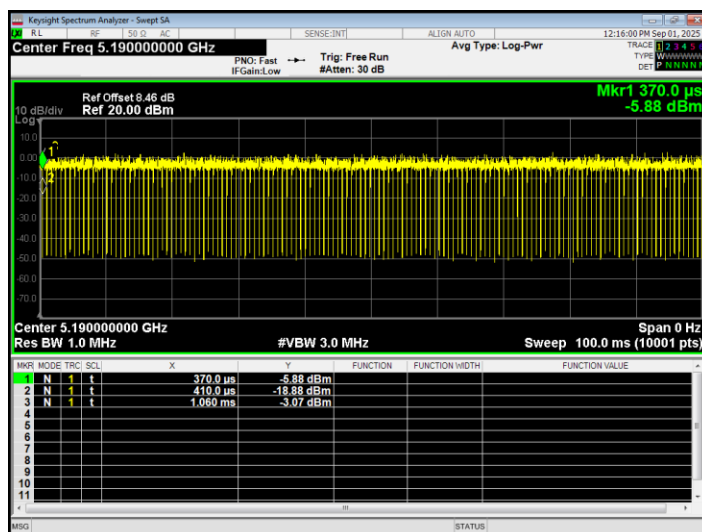
Duty Cycle NVNT ac20 5240MHz Ant1



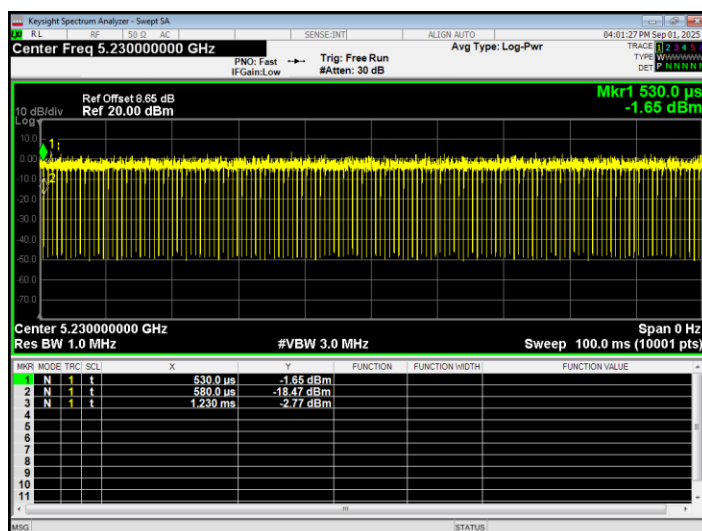


Shenzhen DL Testing Technology Co., Ltd.

Duty Cycle NVNT ac40 5190MHz Ant1



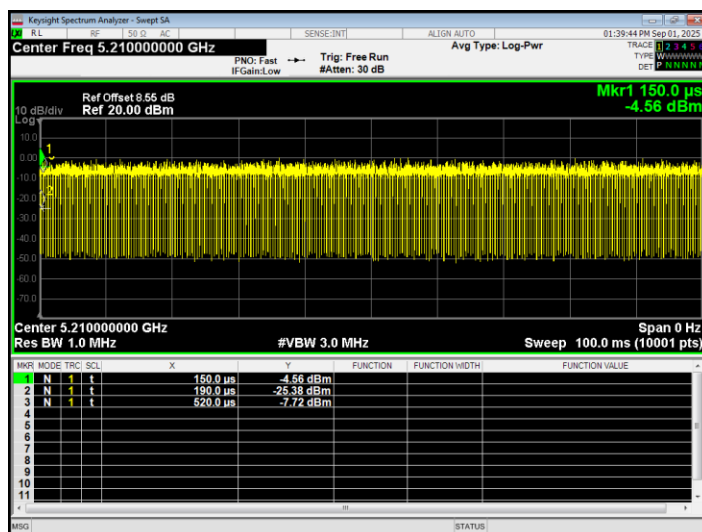
Duty Cycle NVNT ac40 5230MHz Ant1



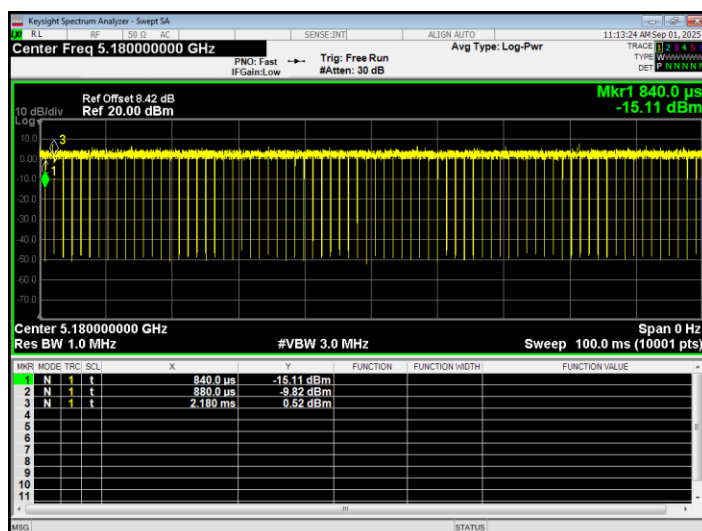


Shenzhen DL Testing Technology Co., Ltd.

Duty Cycle NVNT ac80 5210MHz Ant1



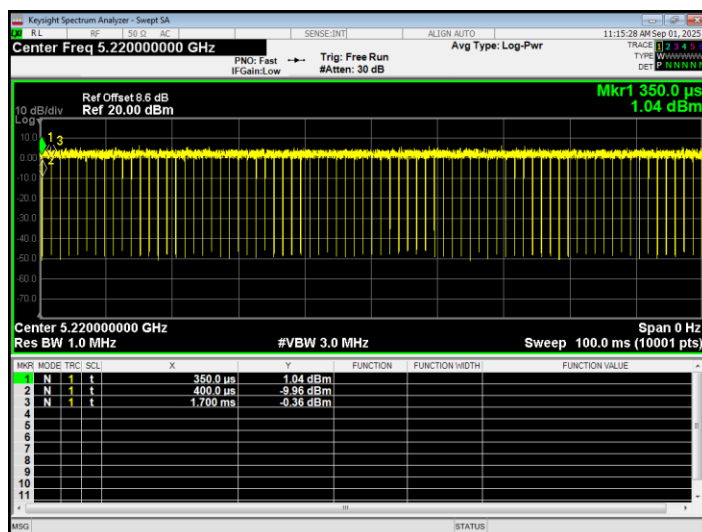
Duty Cycle NVNT n20 5180MHz Ant1



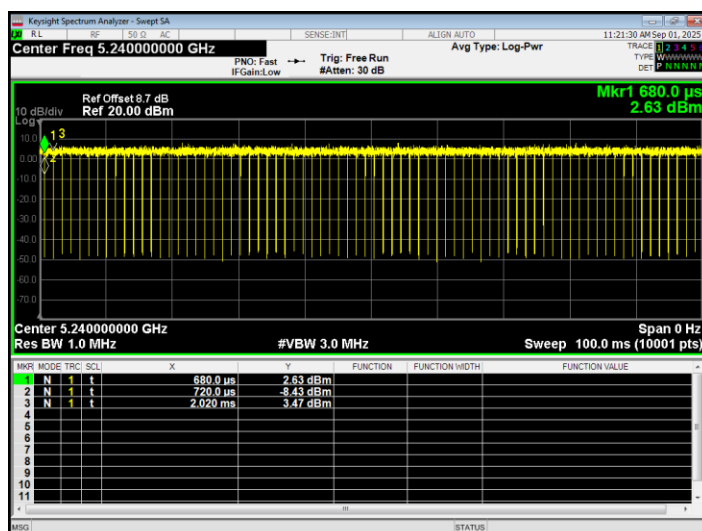


Shenzhen DL Testing Technology Co., Ltd.

Duty Cycle NVNT n20 5220MHz Ant1



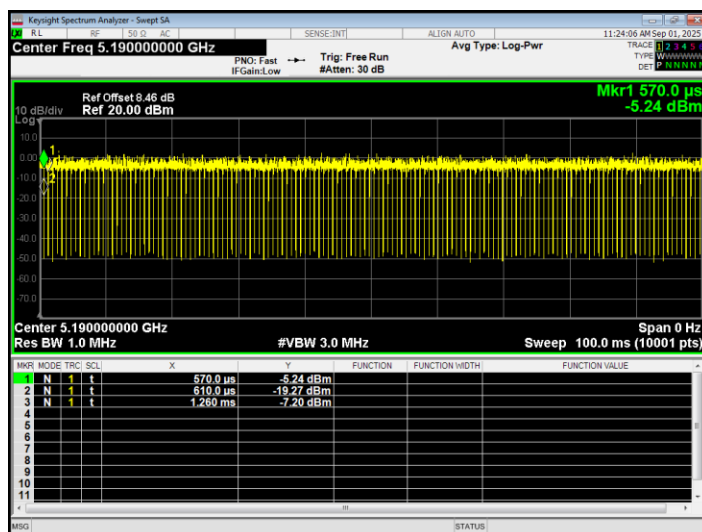
Duty Cycle NVNT n20 5240MHz Ant1



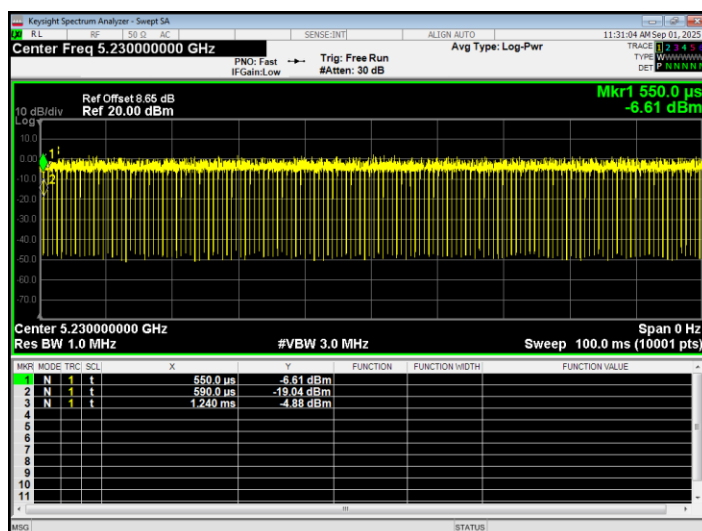


Shenzhen DL Testing Technology Co., Ltd.

Duty Cycle NVNT n40 5190MHz Ant1



Duty Cycle NVNT n40 5230MHz Ant1





Conducted Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-35.96	-27	Pass
NVNT	a	5240	Ant1	-41.35	-27	Pass
NVNT	ac20	5180	Ant1	-36.49	-27	Pass
NVNT	ac20	5240	Ant1	-41.89	-27	Pass
NVNT	ac40	5190	Ant1	-33.01	-27	Pass
NVNT	ac40	5230	Ant1	-41.66	-27	Pass
NVNT	ac80	5210	Ant1	-30.96	-27	Pass
NVNT	n20	5180	Ant1	-33.41	-27	Pass
NVNT	n20	5240	Ant1	-40.61	-27	Pass
NVNT	n40	5190	Ant1	-33.55	-27	Pass
NVNT	n40	5230	Ant1	-41.94	-27	Pass

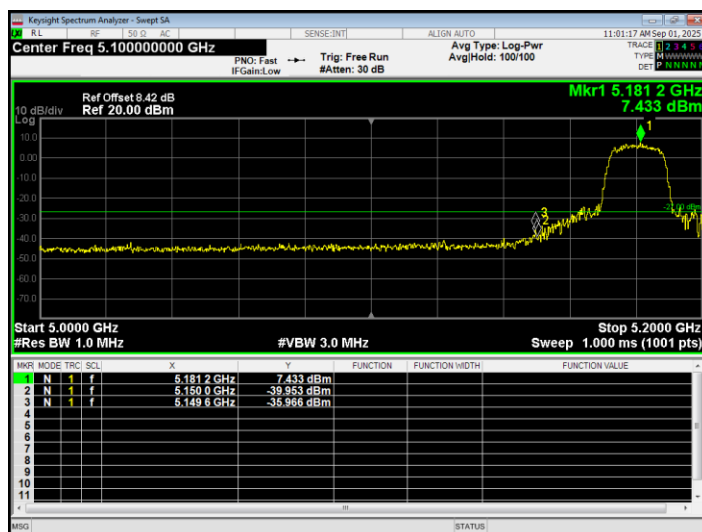
Note: The antenna gain is compensated in the test data.

The ANT 1&ANT 2 both has 3dB margin below the limit, so the MIMo mode is passed.

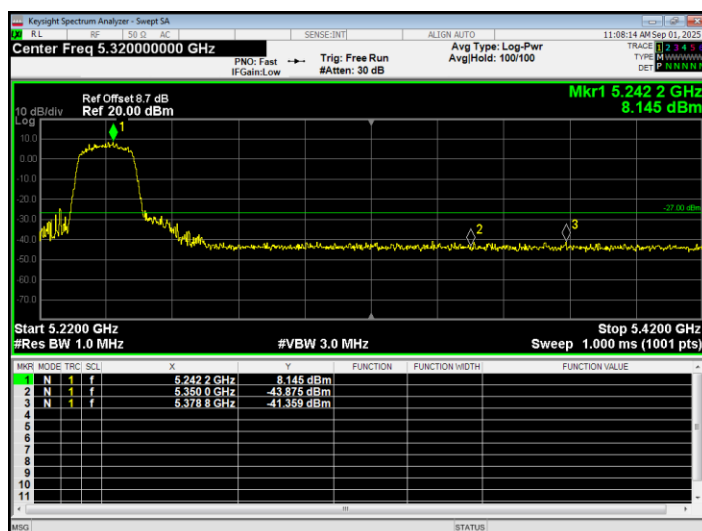


Shenzhen DL Testing Technology Co., Ltd.

Band Edge NVNT a 5180MHz Low Ant1



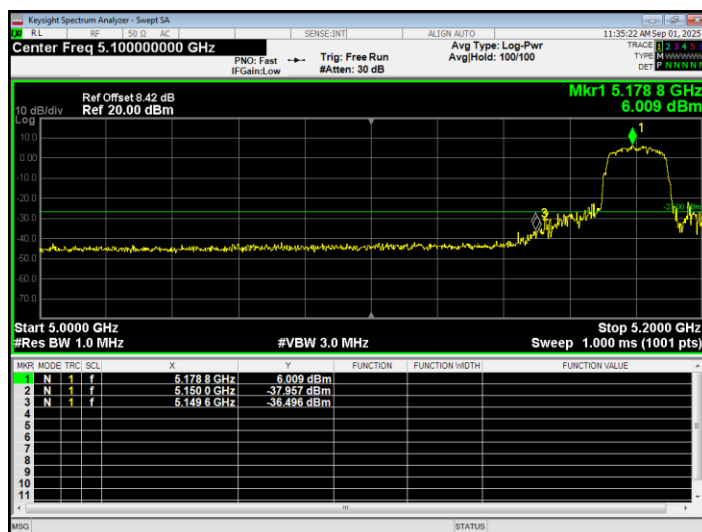
Band Edge NVNT a 5240MHz High Ant1



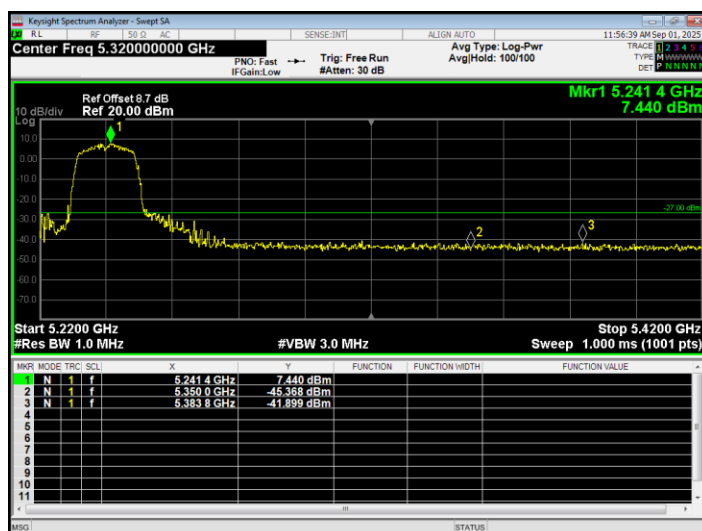


Shenzhen DL Testing Technology Co., Ltd.

Band Edge NVNT ac20 5180MHz Low Ant1



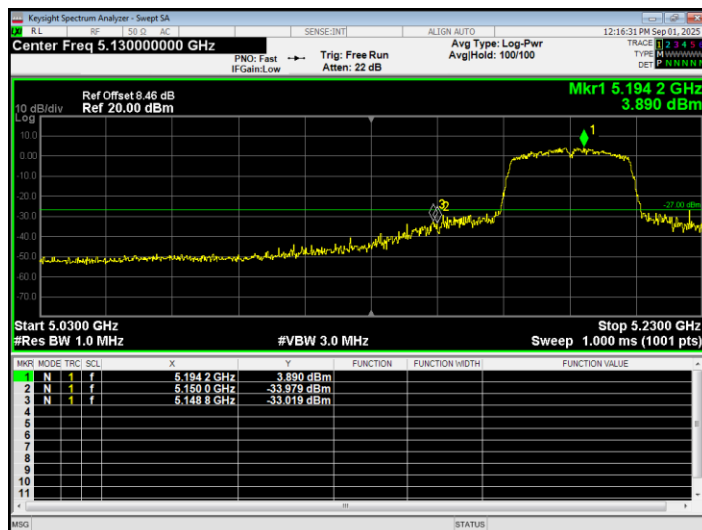
Band Edge NVNT ac20 5240MHz High Ant1



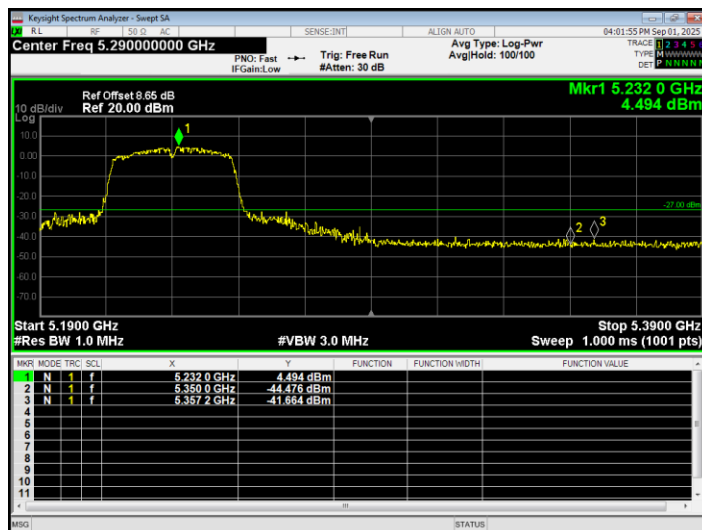


Shenzhen DL Testing Technology Co., Ltd.

Band Edge NVNT ac40 5190MHz Low Ant1



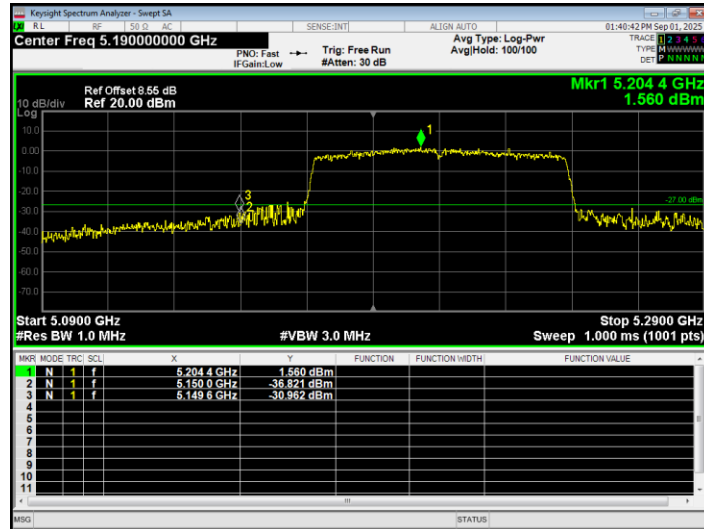
Band Edge NVNT ac40 5230MHz High Ant1





Shenzhen DL Testing Technology Co., Ltd.

Band Edge NVNT ac80 5210MHz Low Ant1



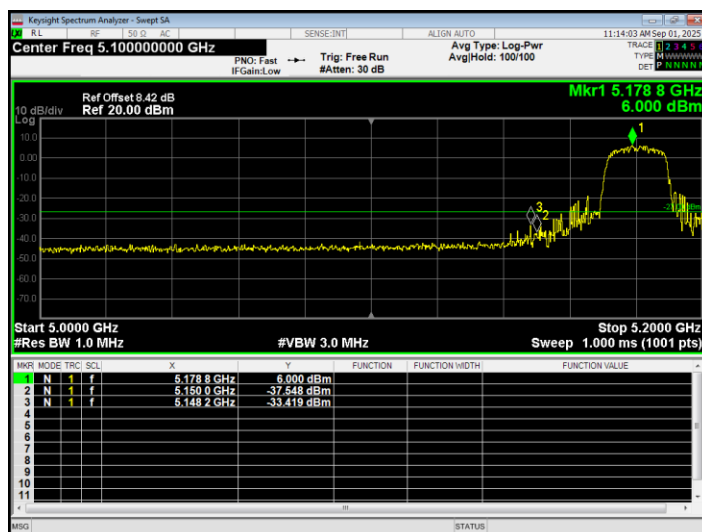
Band Edge NVNT ac80 5210MHz Low Ant1



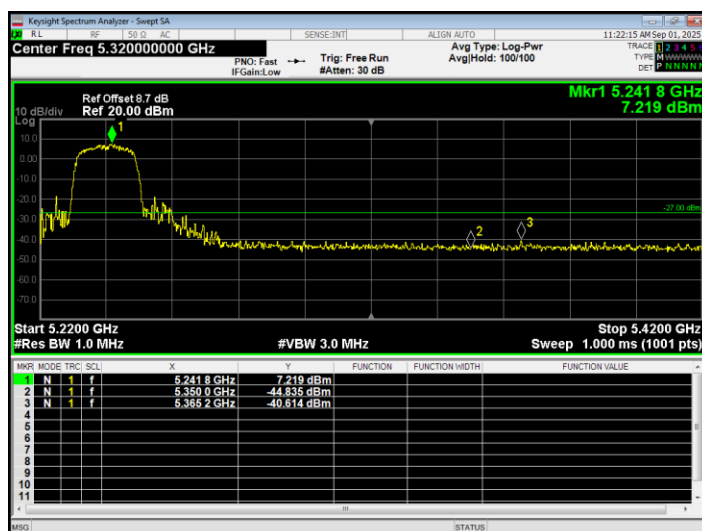


Shenzhen DL Testing Technology Co., Ltd.

Band Edge NVNT n20 5180MHz Low Ant1



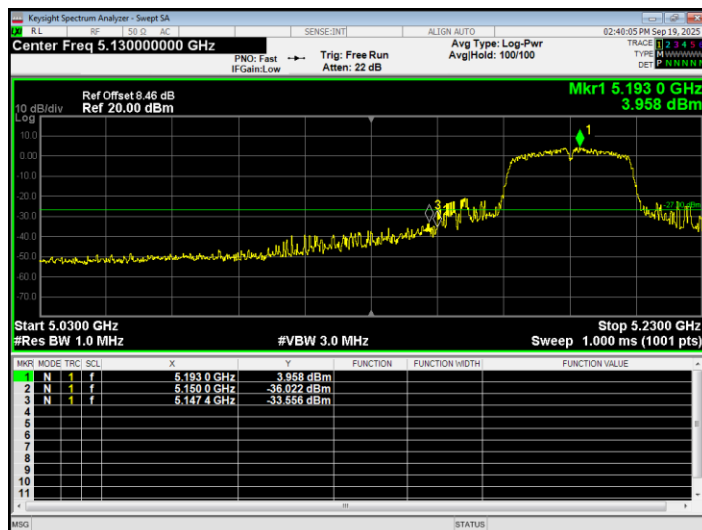
Band Edge NVNT n20 5240MHz High Ant1



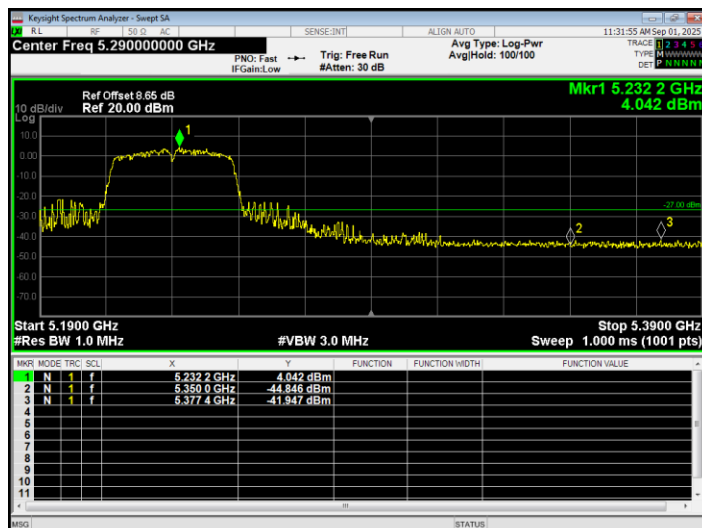


Shenzhen DL Testing Technology Co., Ltd.

Band Edge NVNT n40 5190MHz Low Ant1



Band Edge NVNT n40 5230MHz High Ant1





Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Output Power (dBm)	Duty Factor (dB)	Total Output Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	8.437	0.87	9.307	24	Pass
NVNT	a	5220	Ant1	7.736	0.87	8.606	24	Pass
NVNT	a	5240	Ant1	9.419	0.87	10.289	24	Pass
NVNT	ac20	5180	Ant1	8.753	0.13	8.883	24	Pass
NVNT	ac20	5220	Ant1	8.703	0.13	8.833	24	Pass
NVNT	ac20	5240	Ant1	10.195	0.13	10.325	24	Pass
NVNT	ac40	5190	Ant1	9.085	0.26	9.345	24	Pass
NVNT	ac40	5230	Ant1	9.776	0.32	10.096	24	Pass
NVNT	ac80	5210	Ant1	9.444	0.5	9.944	24	Pass
NVNT	n20	5180	Ant1	8.665	0.13	8.795	24	Pass
NVNT	n20	5220	Ant1	8.45	0.16	8.61	24	Pass
NVNT	n20	5240	Ant1	10.179	0.13	10.309	24	Pass
NVNT	n40	5190	Ant1	9.232	0.26	9.492	24	Pass
NVNT	n40	5230	Ant1	9.166	0.26	9.426	24	Pass



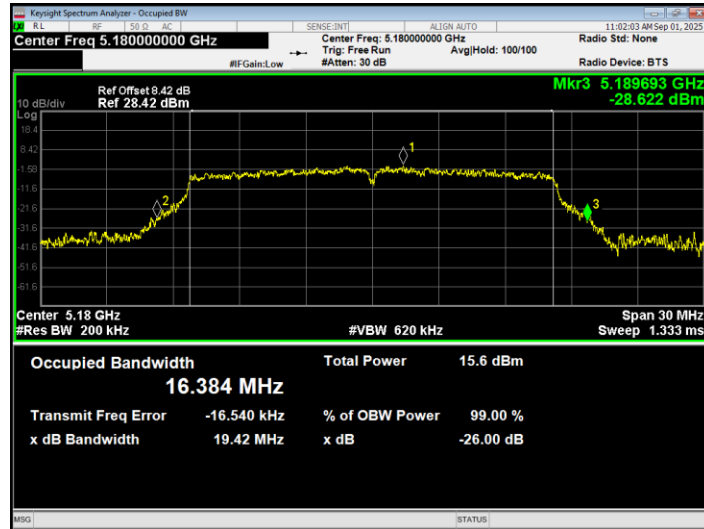
-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	19.419	Pass
NVNT	a	5220	Ant1	19.457	Pass
NVNT	a	5240	Ant1	19.276	Pass
NVNT	ac20	5180	Ant1	19.902	Pass
NVNT	ac20	5220	Ant1	20.035	Pass
NVNT	ac20	5240	Ant1	20.072	Pass
NVNT	ac40	5190	Ant1	39.921	Pass
NVNT	ac40	5230	Ant1	40.015	Pass
NVNT	ac80	5210	Ant1	80.274	Pass
NVNT	n20	5180	Ant1	20.087	Pass
NVNT	n20	5220	Ant1	20.004	Pass
NVNT	n20	5240	Ant1	20.128	Pass
NVNT	n40	5190	Ant1	40.338	Pass
NVNT	n40	5230	Ant1	40.685	Pass

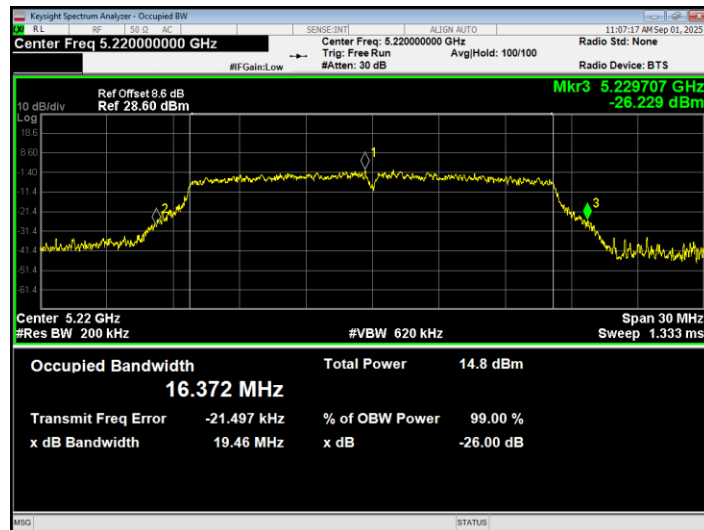


Shenzhen DL Testing Technology Co., Ltd.

-26dB Bandwidth NVNT a 5180MHz Ant1



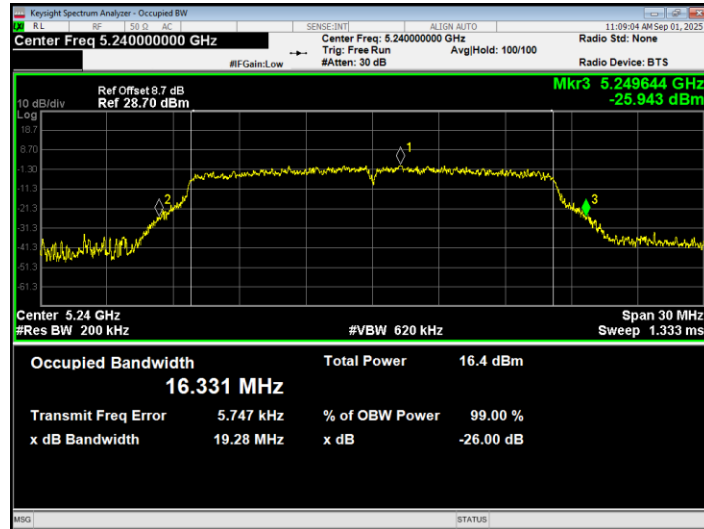
-26dB Bandwidth NVNT a 5220MHz Ant1



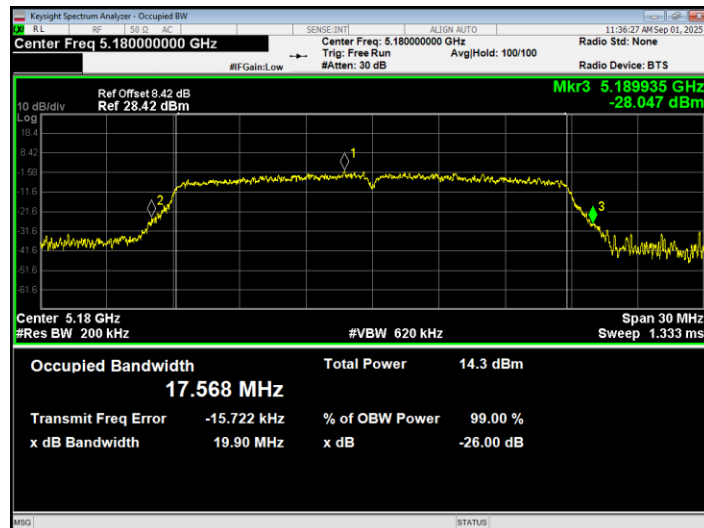


Shenzhen DL Testing Technology Co., Ltd.

-26dB Bandwidth NVNT a 5240MHz Ant1



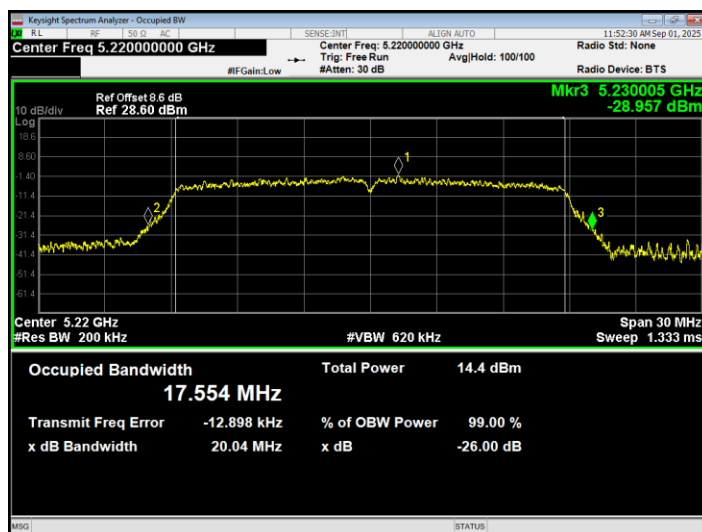
-26dB Bandwidth NVNT ac20 5180MHz Ant1



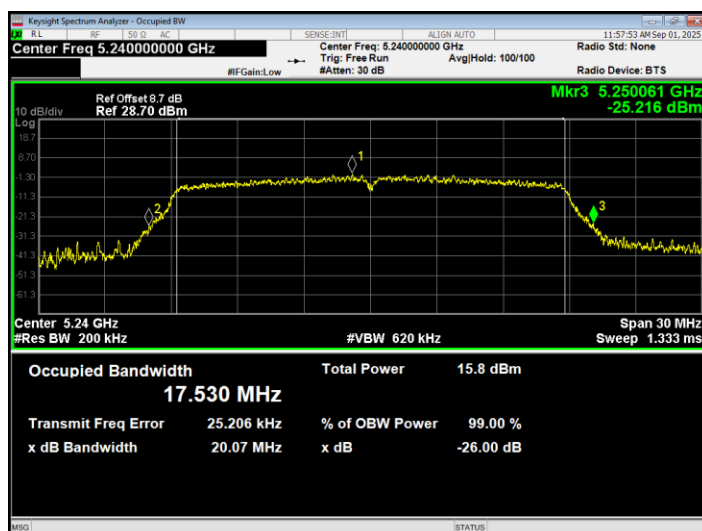


Shenzhen DL Testing Technology Co., Ltd.

-26dB Bandwidth NVNT ac20 5220MHz Ant1



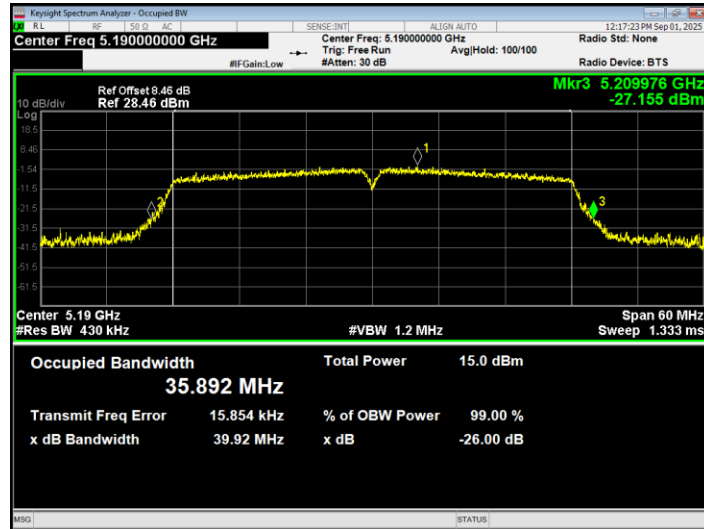
-26dB Bandwidth NVNT ac20 5240MHz Ant1



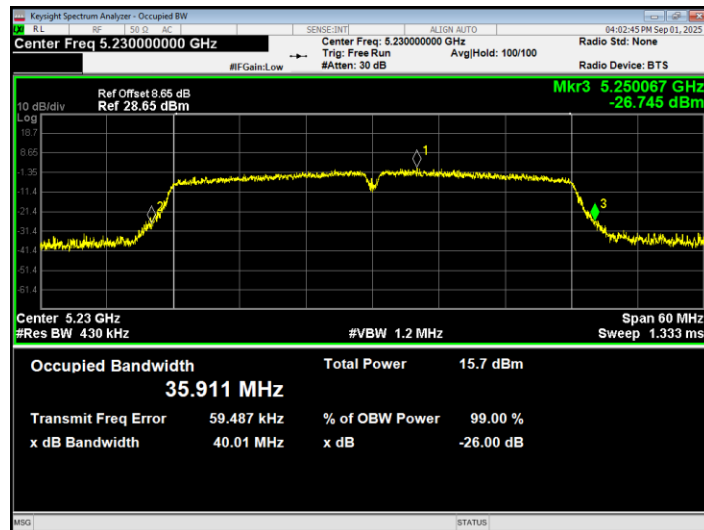


Shenzhen DL Testing Technology Co., Ltd.

-26dB Bandwidth NVNT ac40 5190MHz Ant1



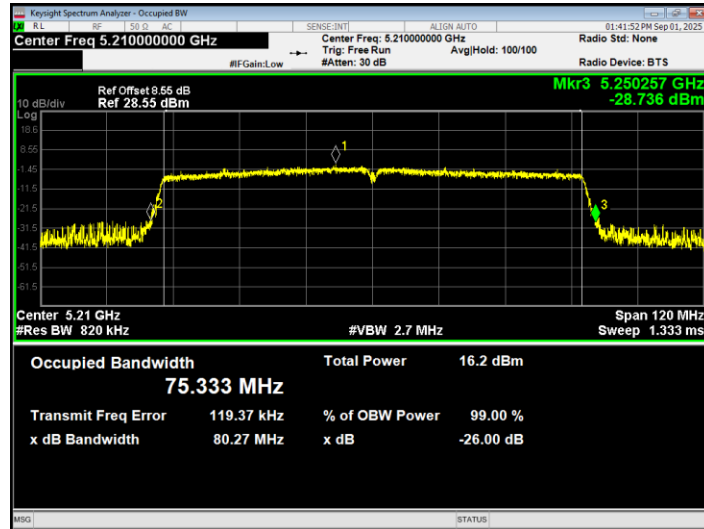
-26dB Bandwidth NVNT ac40 5230MHz Ant1



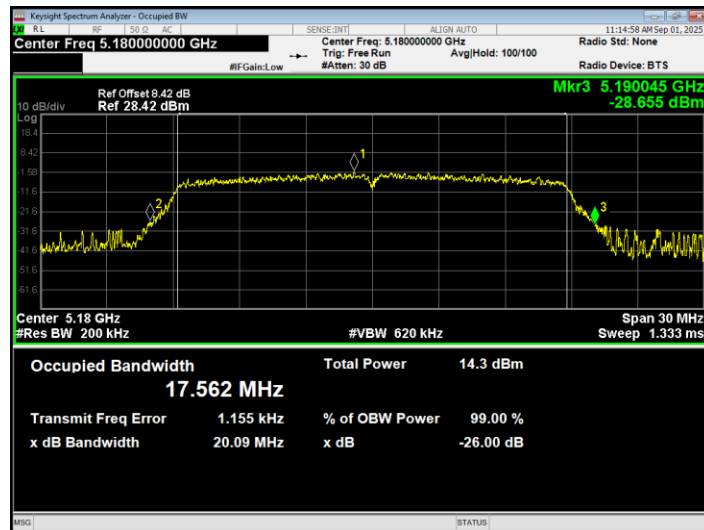


Shenzhen DL Testing Technology Co., Ltd.

-26dB Bandwidth NVNT ac80 5210MHz Ant1



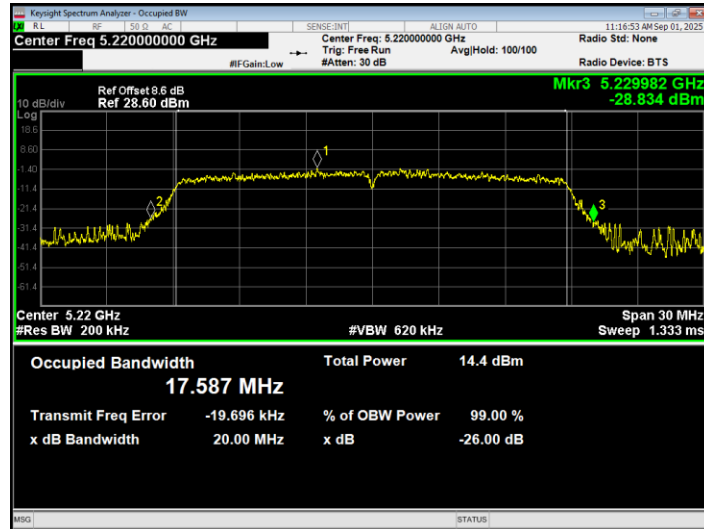
-26dB Bandwidth NVNT n20 5180MHz Ant1



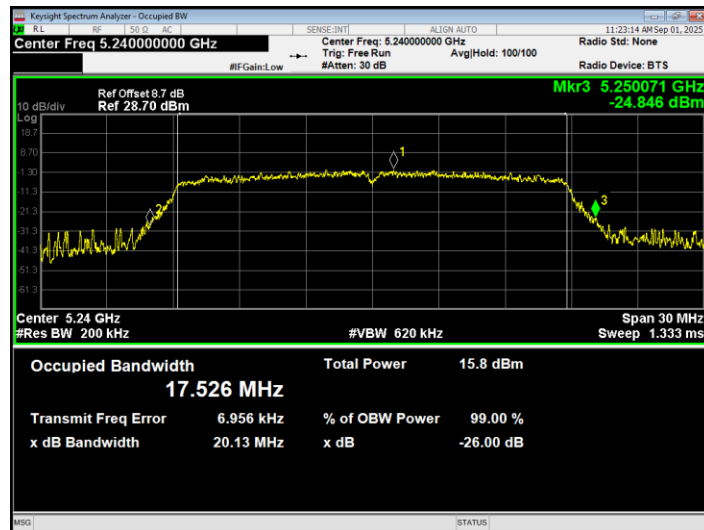


Shenzhen DL Testing Technology Co., Ltd.

-26dB Bandwidth NVNT n20 5220MHz Ant1



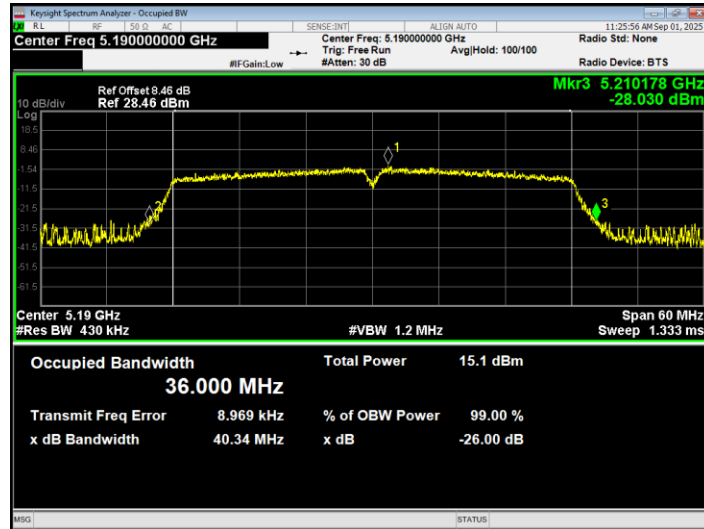
-26dB Bandwidth NVNT n20 5240MHz Ant1



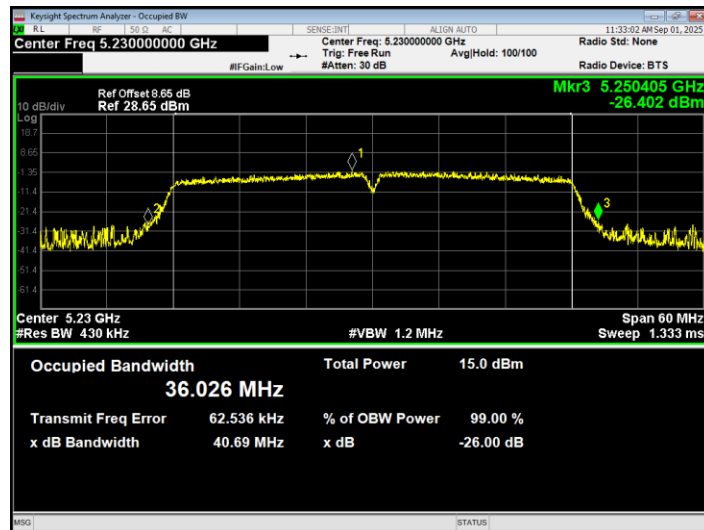


Shenzhen DL Testing Technology Co., Ltd.

-26dB Bandwidth NVNT n40 5190MHz Ant1



-26dB Bandwidth NVNT n40 5230MHz Ant1





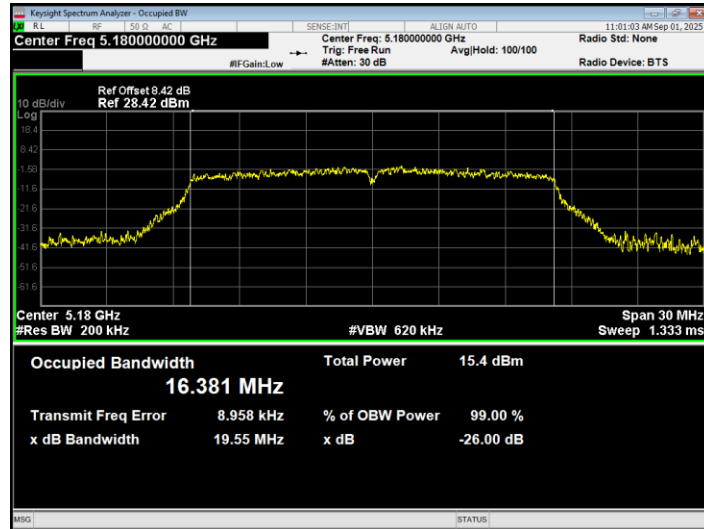
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.38064268
NVNT	a	5220	Ant1	16.37394966
NVNT	a	5240	Ant1	16.34712174
NVNT	ac20	5180	Ant1	17.55736859
NVNT	ac20	5220	Ant1	17.57628092
NVNT	ac20	5240	Ant1	17.51108851
NVNT	ac40	5190	Ant1	35.92066094
NVNT	ac40	5230	Ant1	35.96243714
NVNT	ac80	5210	Ant1	75.33074479
NVNT	n20	5180	Ant1	17.57999755
NVNT	n20	5220	Ant1	17.5825742
NVNT	n20	5240	Ant1	17.53952287
NVNT	n40	5190	Ant1	35.924033
NVNT	n40	5230	Ant1	36.01023543

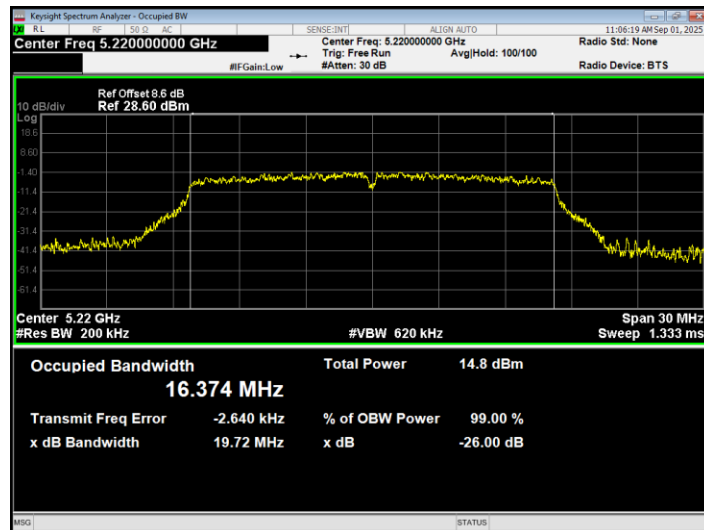


Shenzhen DL Testing Technology Co., Ltd.

OBW NVNT a 5180MHz Ant1



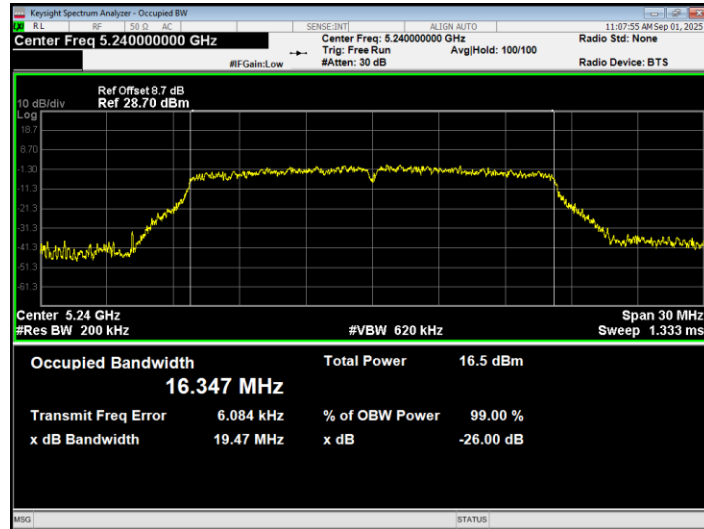
OBW NVNT a 5220MHz Ant1



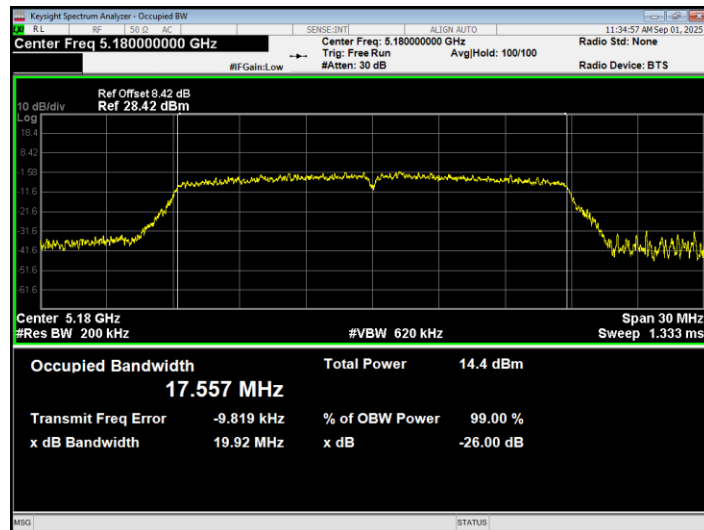


Shenzhen DL Testing Technology Co., Ltd.

OBW NVNT a 5240MHz Ant1



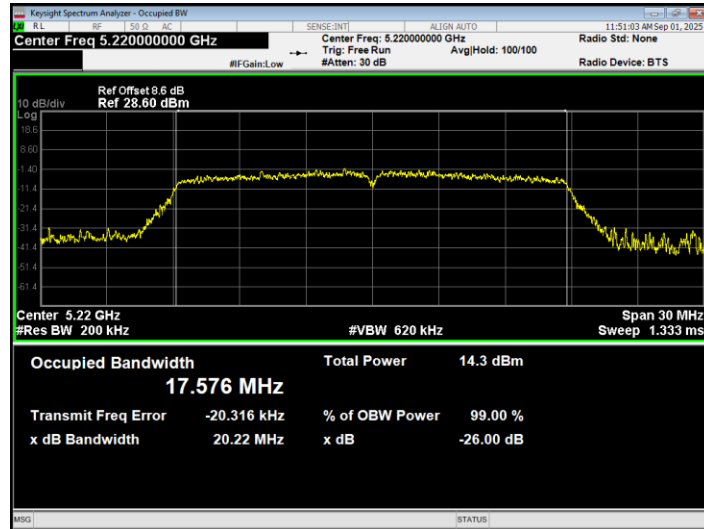
OBW NVNT ac20 5180MHz Ant1



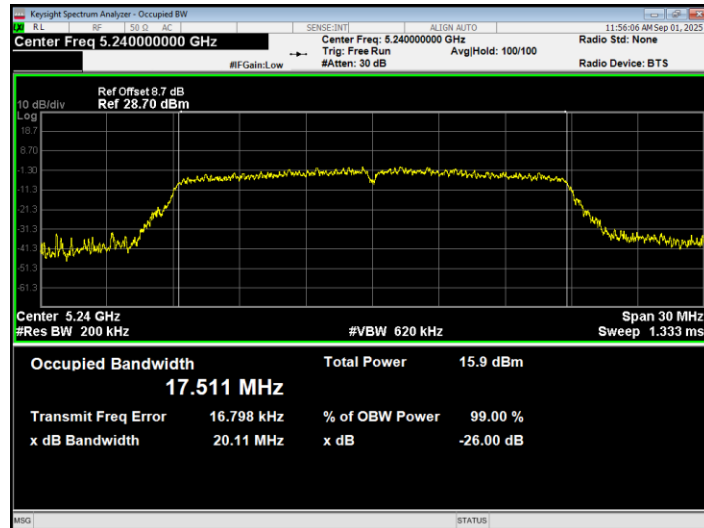


Shenzhen DL Testing Technology Co., Ltd.

OBW NVNT ac20 5220MHz Ant1



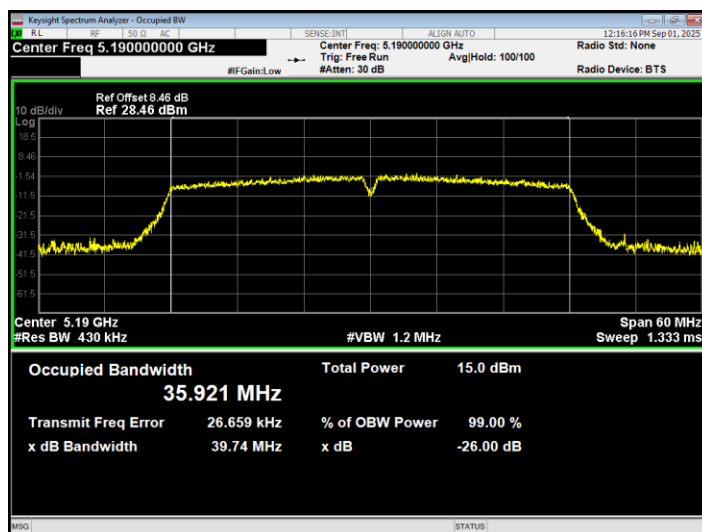
OBW NVNT ac20 5240MHz Ant1



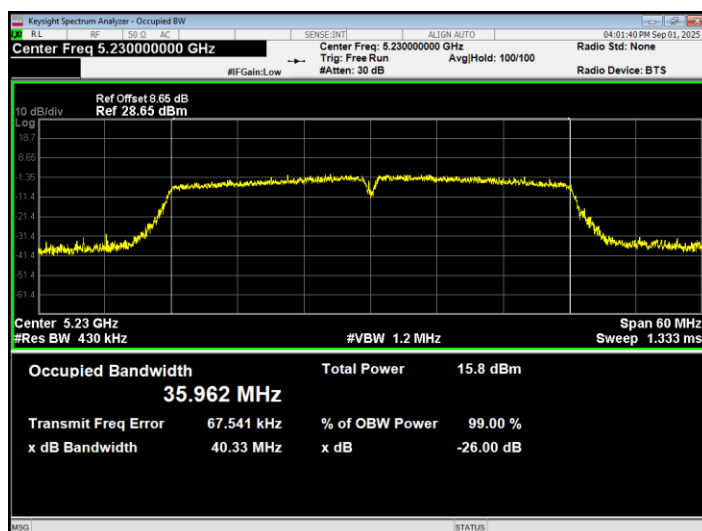


Shenzhen DL Testing Technology Co., Ltd.

OBW NVNT ac40 5190MHz Ant1



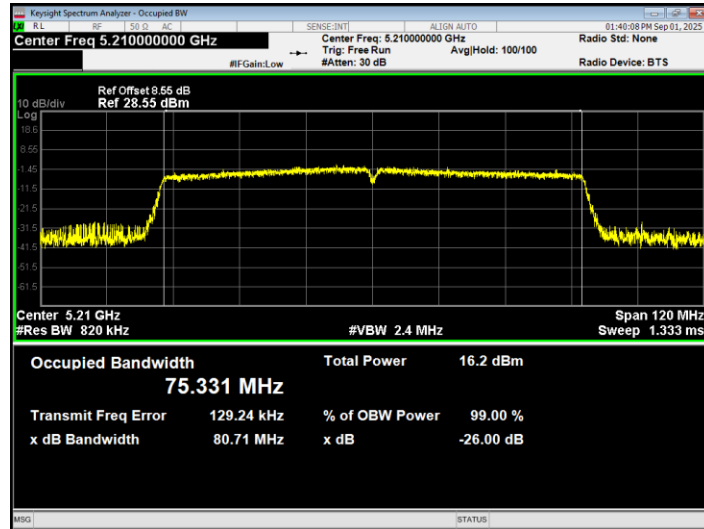
OBW NVNT ac40 5230MHz Ant1



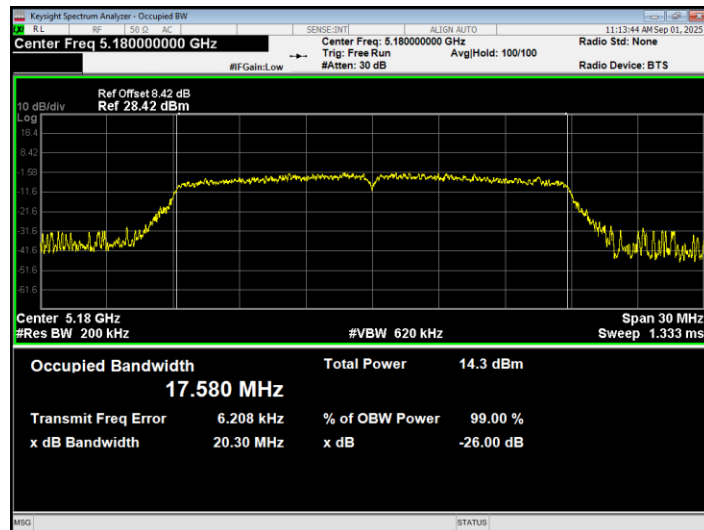


Shenzhen DL Testing Technology Co., Ltd.

OBW NVNT ac80 5210MHz Ant1



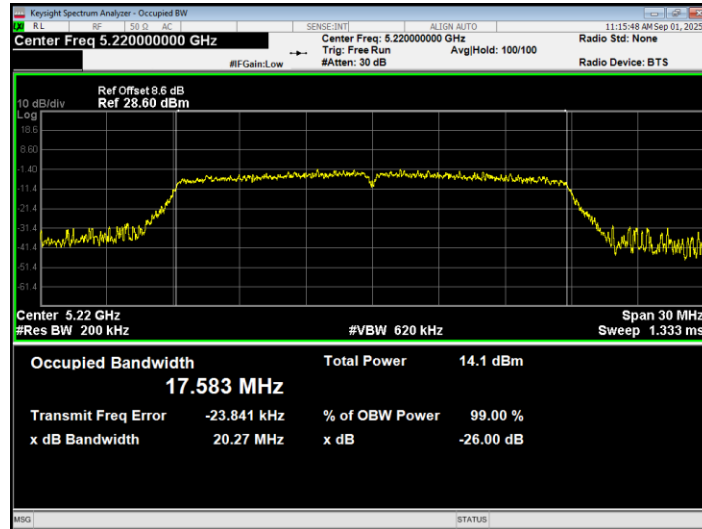
OBW NVNT n20 5180MHz Ant1



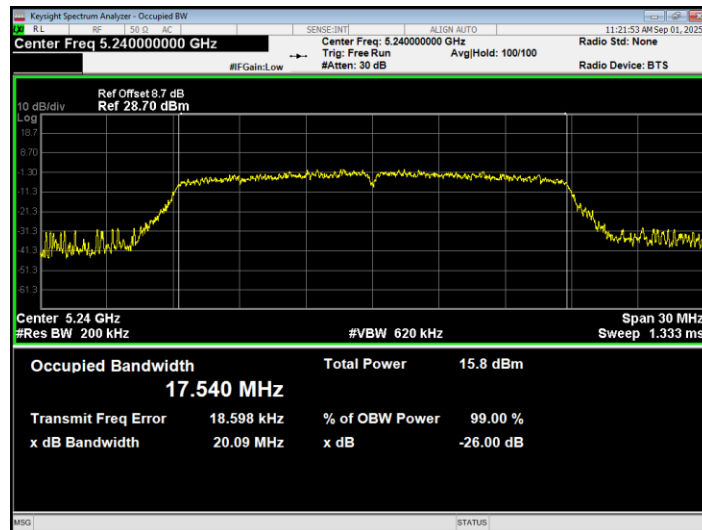


Shenzhen DL Testing Technology Co., Ltd.

OBW NVNT n20 5220MHz Ant1



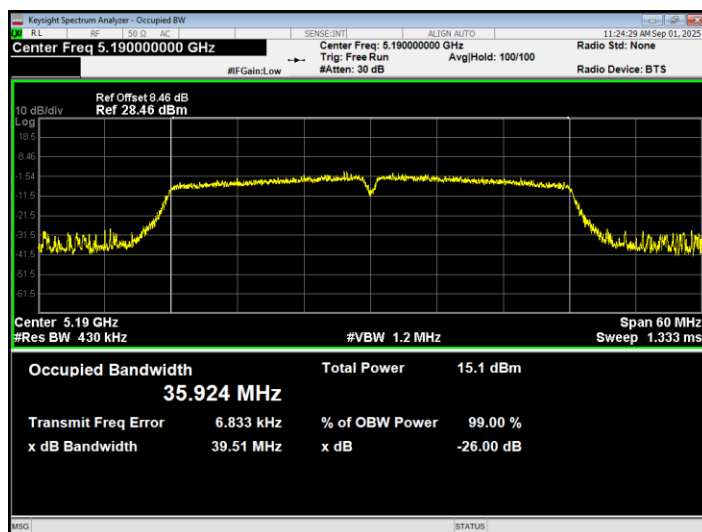
OBW NVNT n20 5240MHz Ant1



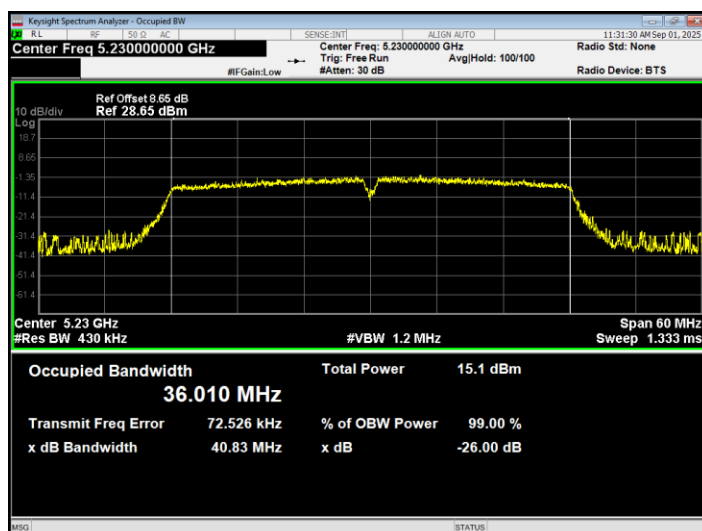


Shenzhen DL Testing Technology Co., Ltd.

OBW NVNT n40 5190MHz Ant1



OBW NVNT n40 5230MHz Ant1





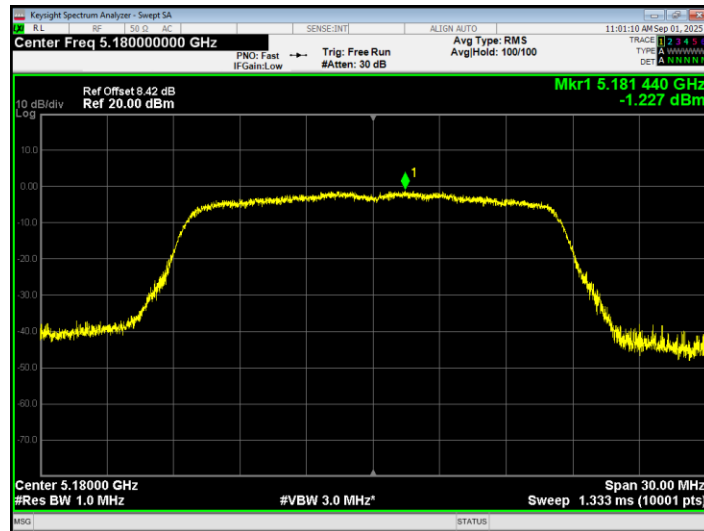
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-1.227	0.87	-0.357	11	Pass
NVNT	a	5220	Ant1	-1.609	0.87	-0.739	11	Pass
NVNT	a	5240	Ant1	-0.069	0.87	0.801	11	Pass
NVNT	ac20	5180	Ant1	-0.947	0.13	-0.817	11	Pass
NVNT	ac20	5220	Ant1	-1.189	0.13	-1.059	11	Pass
NVNT	ac20	5240	Ant1	0.442	0.13	0.572	11	Pass
NVNT	ac40	5190	Ant1	-3.57	0.26	-3.31	11	Pass
NVNT	ac40	5230	Ant1	-2.747	0.32	-2.427	11	Pass
NVNT	ac80	5210	Ant1	-6.732	0.5	-6.232	11	Pass
NVNT	n20	5180	Ant1	-0.995	0.13	-0.865	11	Pass
NVNT	n20	5220	Ant1	-1.057	0.16	-0.897	11	Pass
NVNT	n20	5240	Ant1	0.425	0.13	0.555	11	Pass
NVNT	n40	5190	Ant1	-3.373	0.26	-3.113	11	Pass
NVNT	n40	5230	Ant1	-3.549	0.26	-3.289	11	Pass

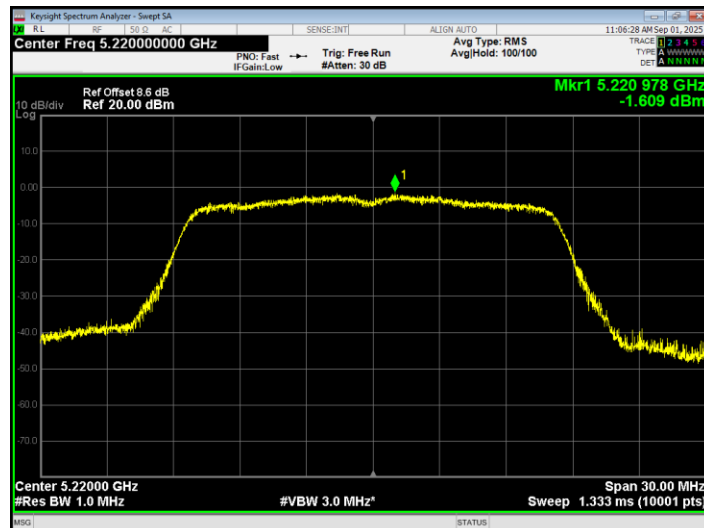


Shenzhen DL Testing Technology Co., Ltd.

PSD NVNT a 5180MHz Ant1



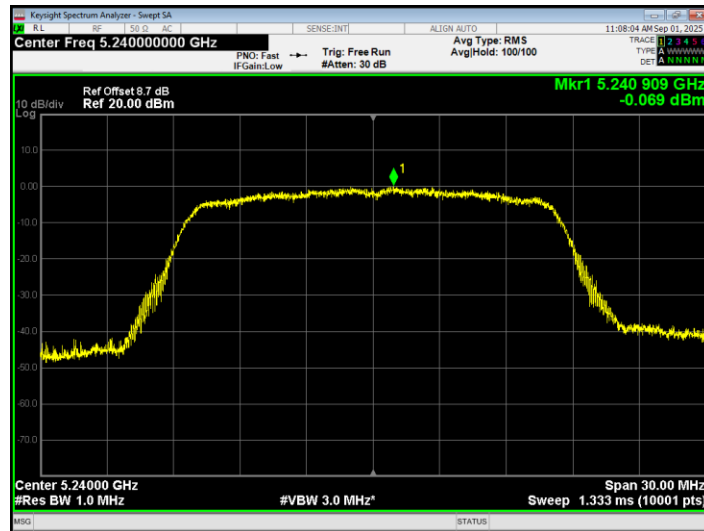
PSD NVNT a 5220MHz Ant1



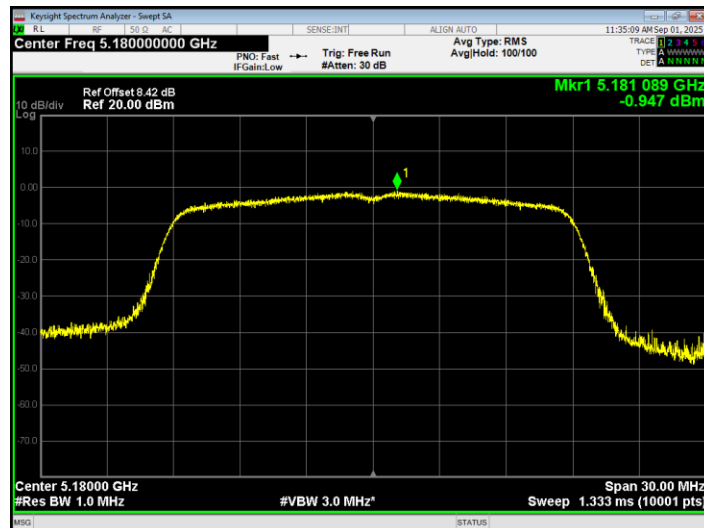


Shenzhen DL Testing Technology Co., Ltd.

PSD NVNT a 5240MHz Ant1



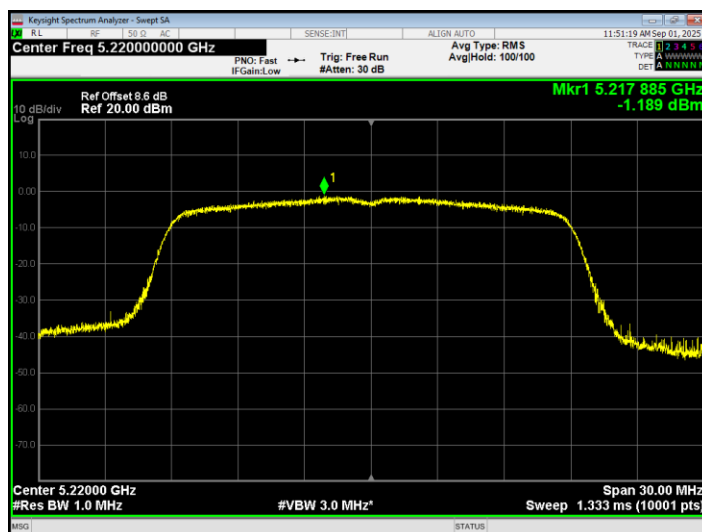
PSD NVNT ac20 5180MHz Ant1



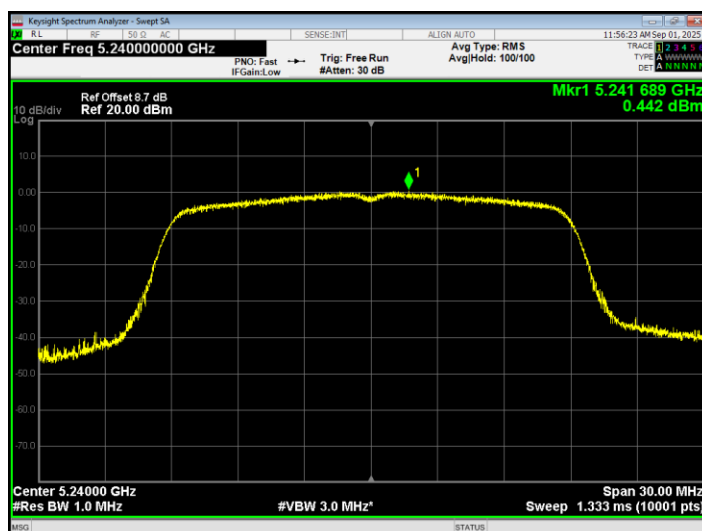


Shenzhen DL Testing Technology Co., Ltd.

PSD NVNT ac20 5220MHz Ant1



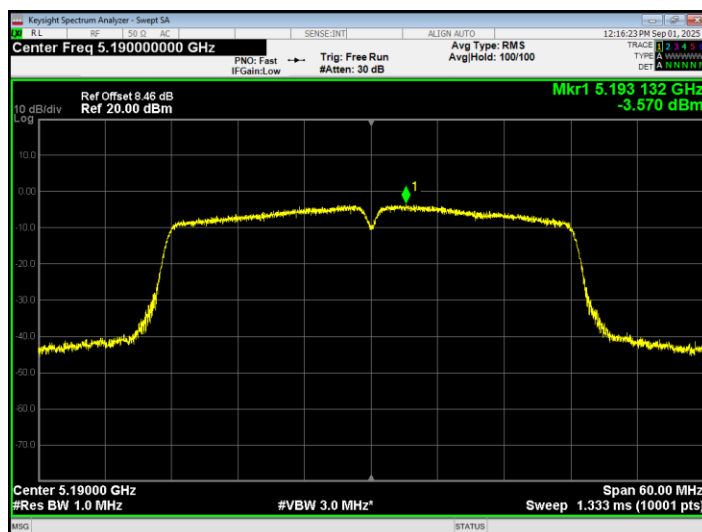
PSD NVNT ac20 5240MHz Ant1



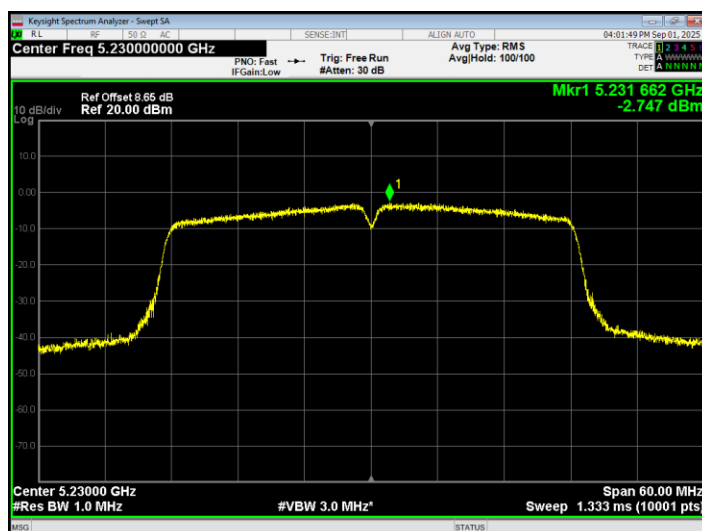


Shenzhen DL Testing Technology Co., Ltd.

PSD NVNT ac40 5190MHz Ant1



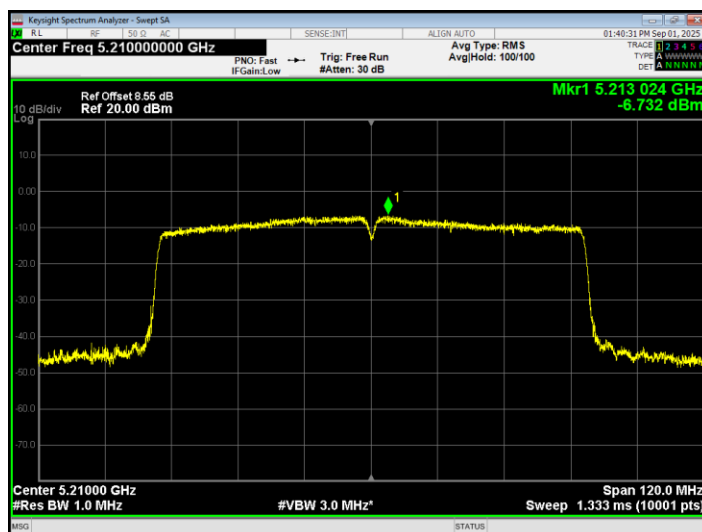
PSD NVNT ac40 5230MHz Ant1



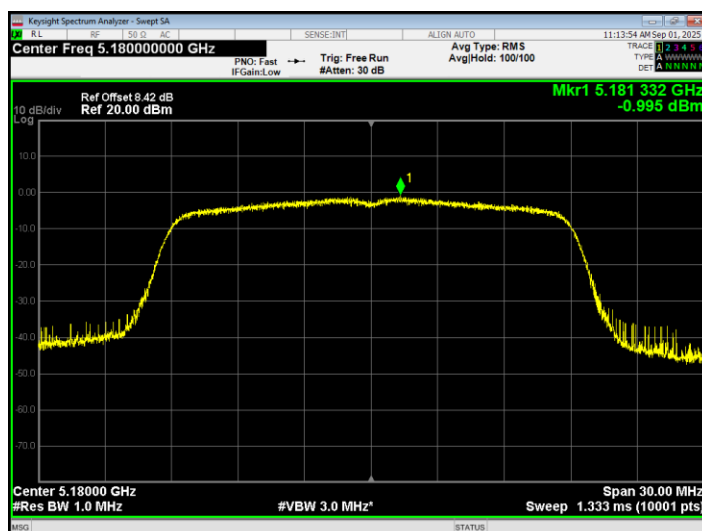


Shenzhen DL Testing Technology Co., Ltd.

PSD NVNT ac80 5210MHz Ant1



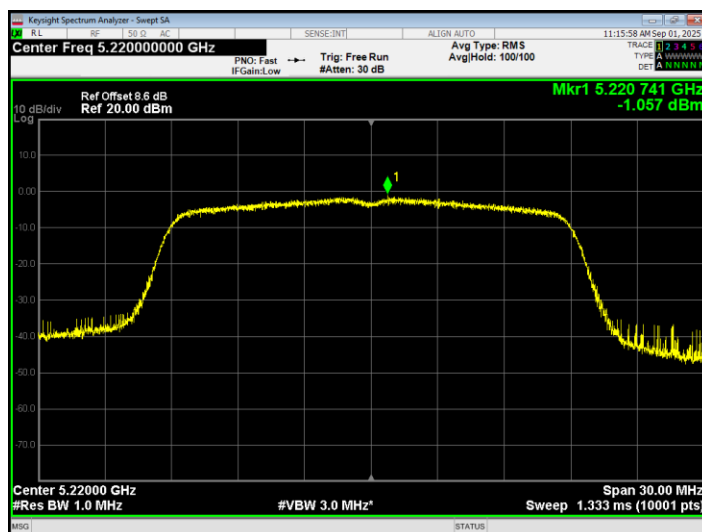
PSD NVNT n20 5180MHz Ant1





Shenzhen DL Testing Technology Co., Ltd.

PSD NVNT n20 5220MHz Ant1



PSD NVNT n20 5240MHz Ant1

