



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



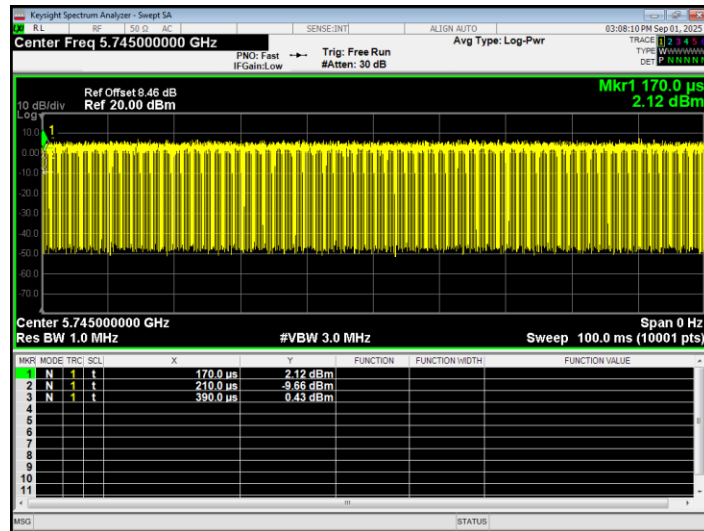
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5745	Ant1	81.82	0.87
NVNT	a	5785	Ant1	77.27	1.12
NVNT	a	5825	Ant1	81.82	0.87
NVNT	ac20	5745	Ant1	97.06	0.13
NVNT	ac20	5785	Ant1	97.06	0.13
NVNT	ac20	5825	Ant1	97.04	0.13
NVNT	ac40	5755	Ant1	94.29	0.26
NVNT	ac40	5795	Ant1	94.2	0.26
NVNT	ac80	5775	Ant1	88.89	0.51
NVNT	n20	5745	Ant1	97.01	0.13
NVNT	n20	5785	Ant1	97.04	0.13
NVNT	n20	5825	Ant1	97.04	0.13
NVNT	n40	5755	Ant1	94.2	0.26
NVNT	n40	5795	Ant1	92.86	0.32

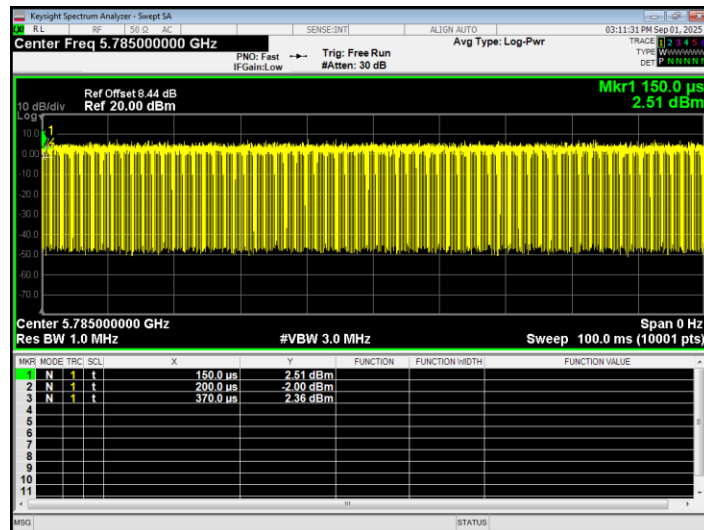


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Duty Cycle NVNT a 5745MHz Ant1



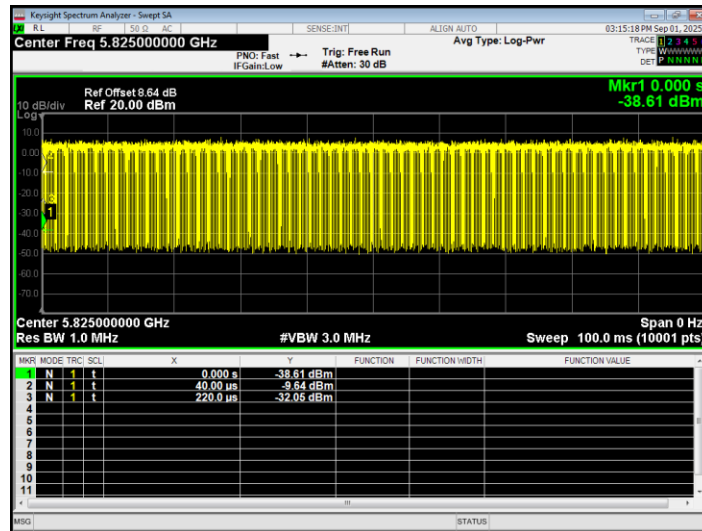
Duty Cycle NVNT a 5785MHz Ant1



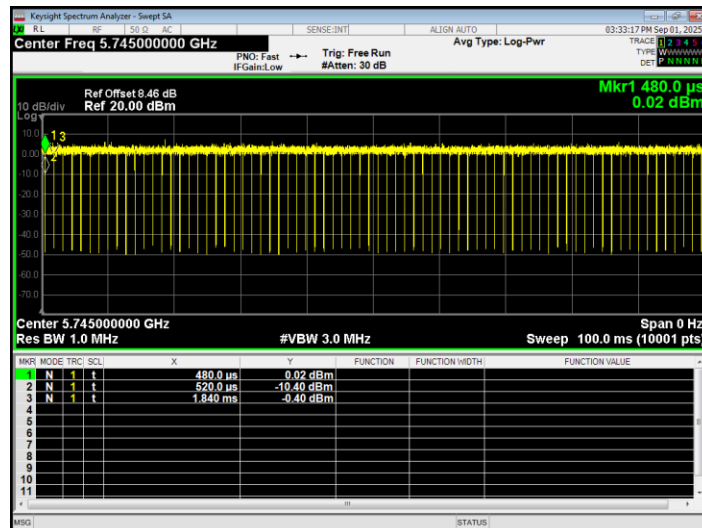


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Duty Cycle NVNT a 5825MHz Ant1



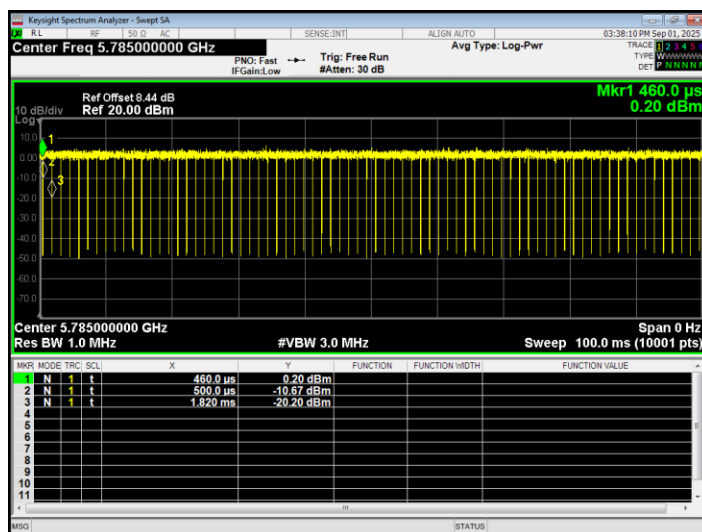
Duty Cycle NVNT ac20 5745MHz Ant1



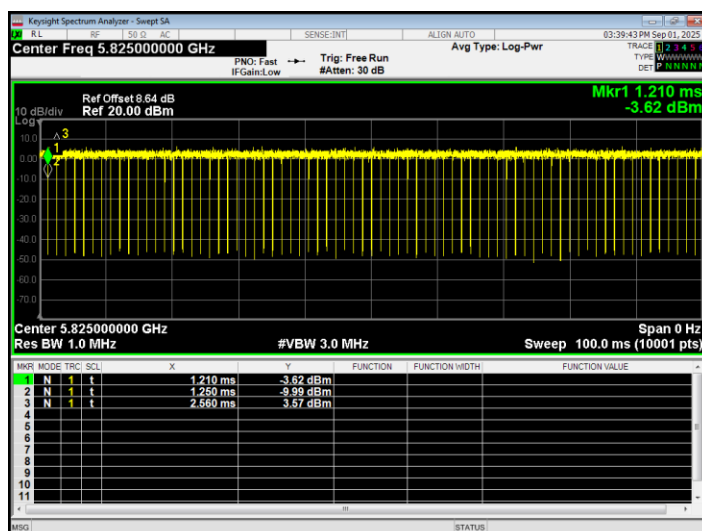


Shenzhen DL Testing Technology Co., Ltd.

Duty Cycle NVNT ac20 5785MHz Ant1



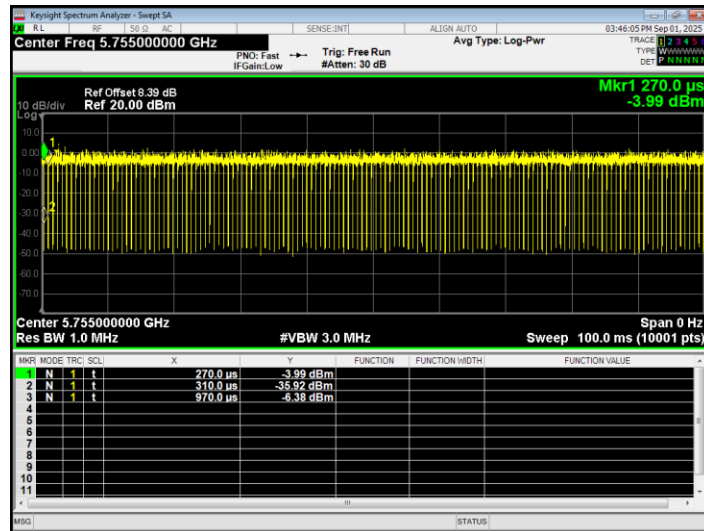
Duty Cycle NVNT ac20 5825MHz Ant1



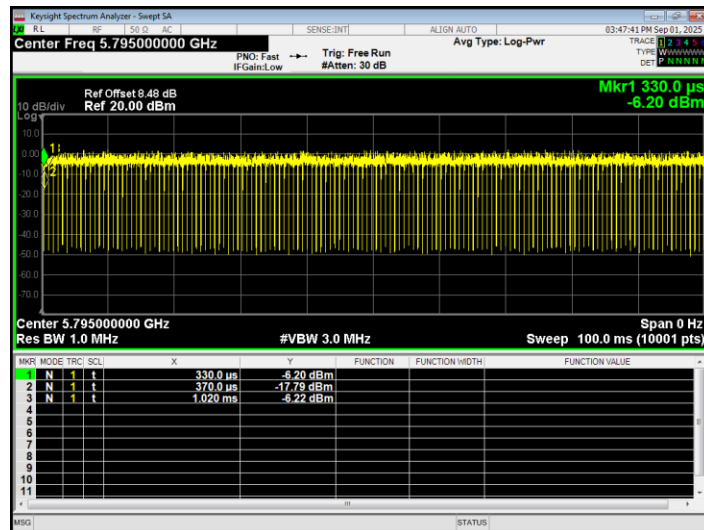


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Duty Cycle NVNT ac40 5755MHz Ant1



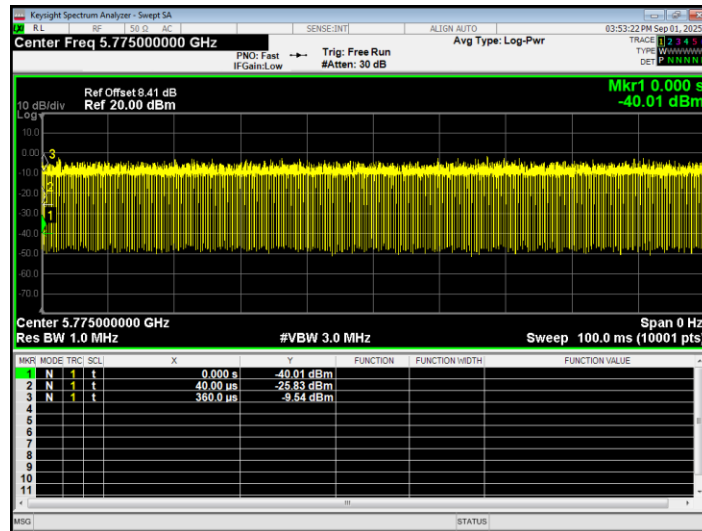
Duty Cycle NVNT ac40 5795MHz Ant1



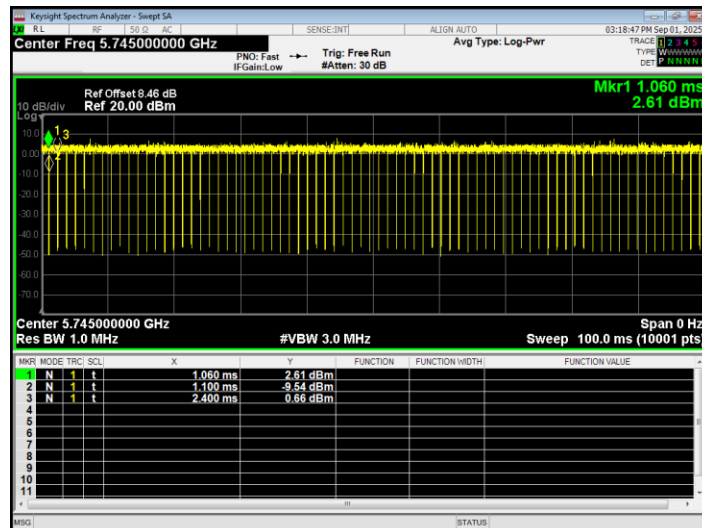


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Duty Cycle NVNT ac80 5775MHz Ant1



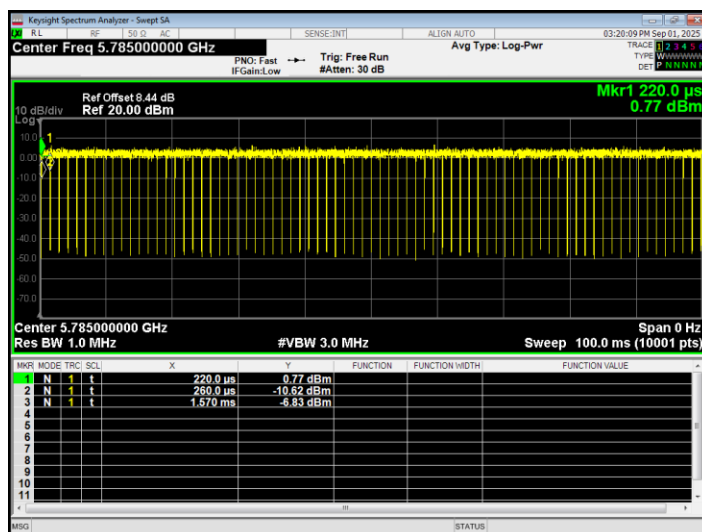
Duty Cycle NVNT n20 5745MHz Ant1



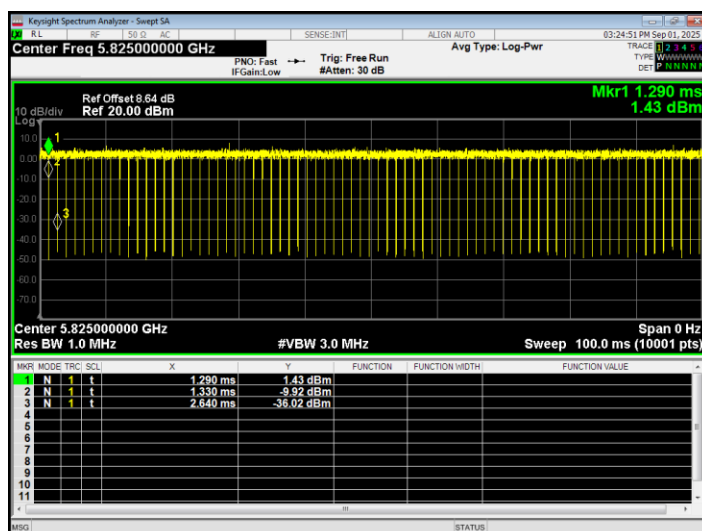


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Duty Cycle NVNT n20 5785MHz Ant1



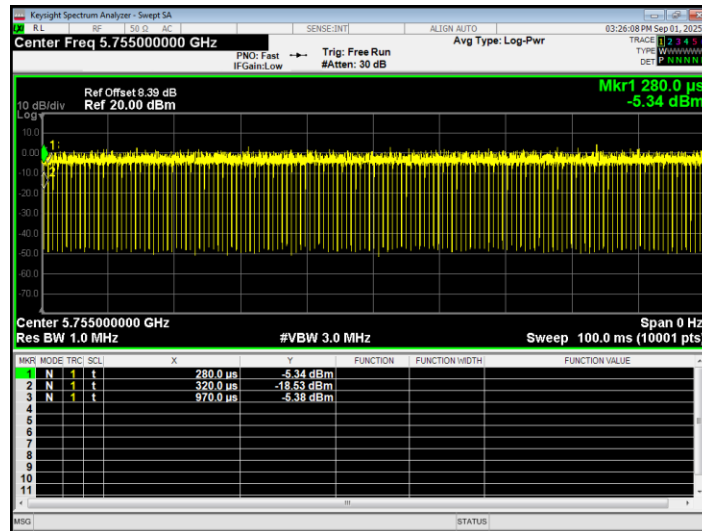
Duty Cycle NVNT n20 5825MHz Ant1



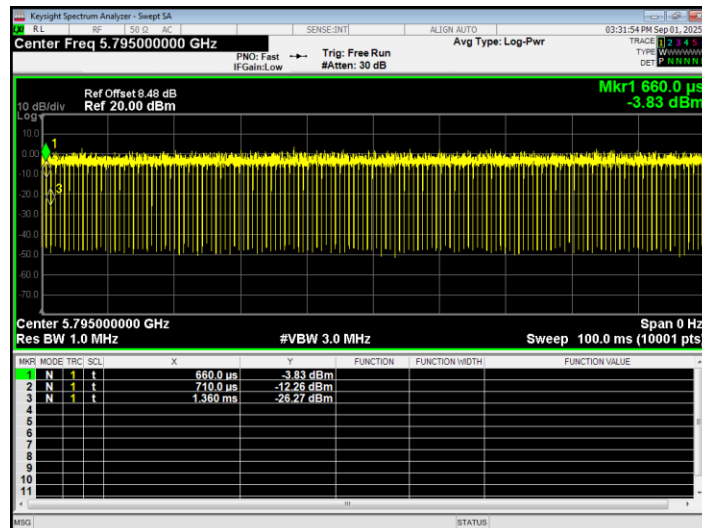


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Duty Cycle NVNT n40 5755MHz Ant1



Duty Cycle NVNT n40 5795MHz Ant1





Conducted Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	-33.83	15.6	Pass
NVNT	a	5825	Ant1	-37.44	15.6	Pass
NVNT	ac20	5745	Ant1	-29.7	15.6	Pass
NVNT	ac20	5825	Ant1	-34.91	12.4	Pass
NVNT	ac40	5755	Ant1	-33.22	12.1	Pass
NVNT	ac40	5795	Ant1	-40.41	15.6	Pass
NVNT	ac80	5775	Ant1	-34.06	12.3	Pass
NVNT	n20	5745	Ant1	-28.82	15.6	Pass
NVNT	n20	5825	Ant1	-31.58	12.4	Pass
NVNT	n40	5755	Ant1	-24.08	15.6	Pass
NVNT	n40	5795	Ant1	-38.84	12.1	Pass

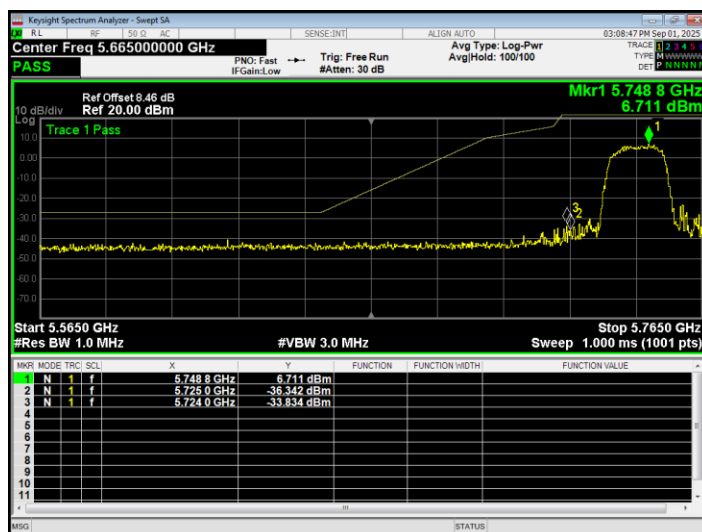
Note: The antenna gain is compensated in the test data.

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

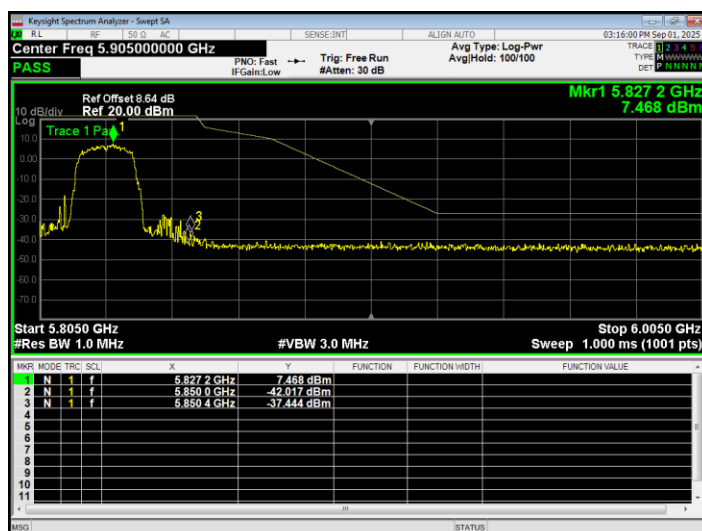


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Band Edge NVNT a 5745MHz Low Ant1



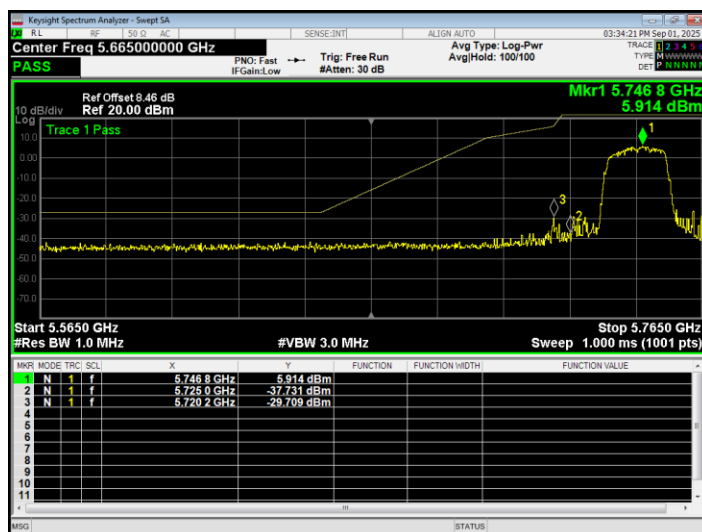
Band Edge NVNT a 5825MHz High Ant1



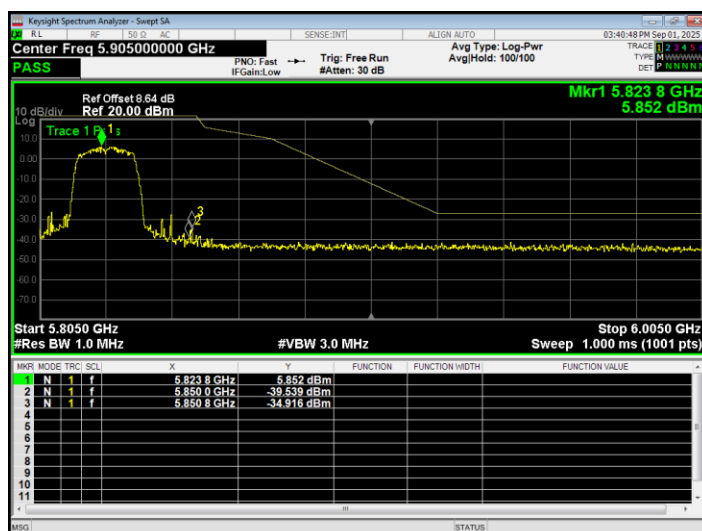


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Band Edge NVNT ac20 5745MHz Low Ant1



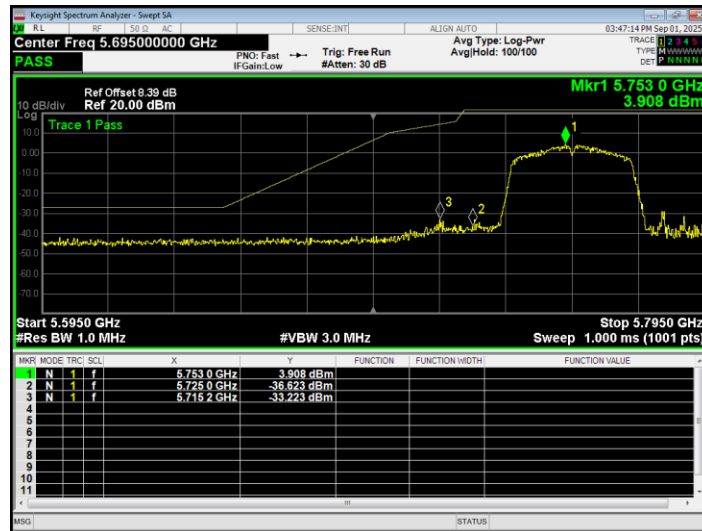
Band Edge NVNT ac20 5825MHz High Ant1



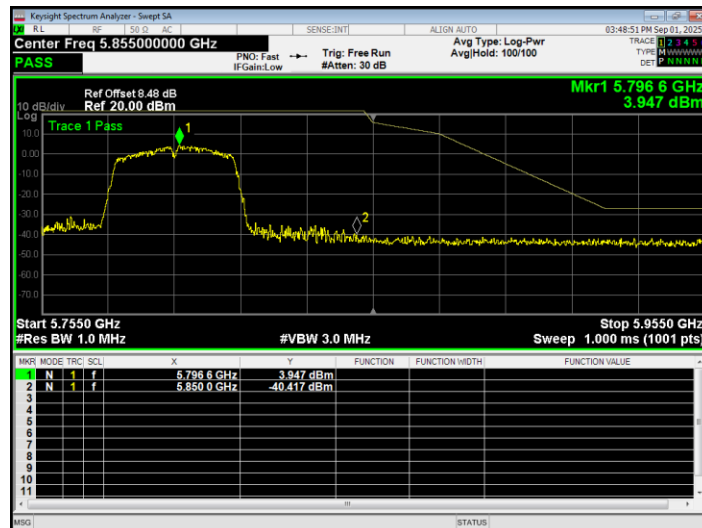


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Band Edge NVNT ac40 5755MHz Low Ant1



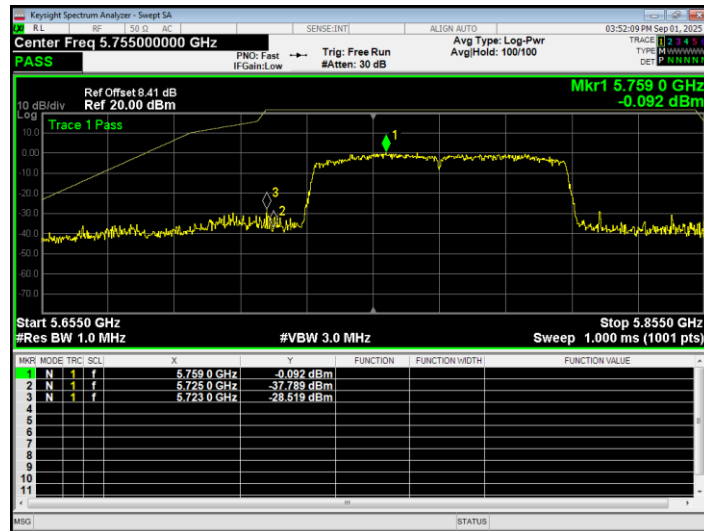
Band Edge NVNT ac40 5795MHz High Ant1



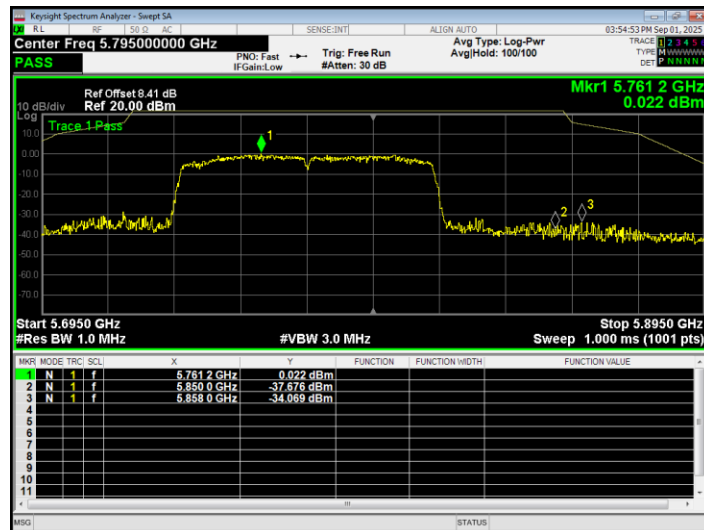


Shenzhen DL Testing Technology Co., Ltd.

Band Edge NVNT ac80 5775MHz High Ant1



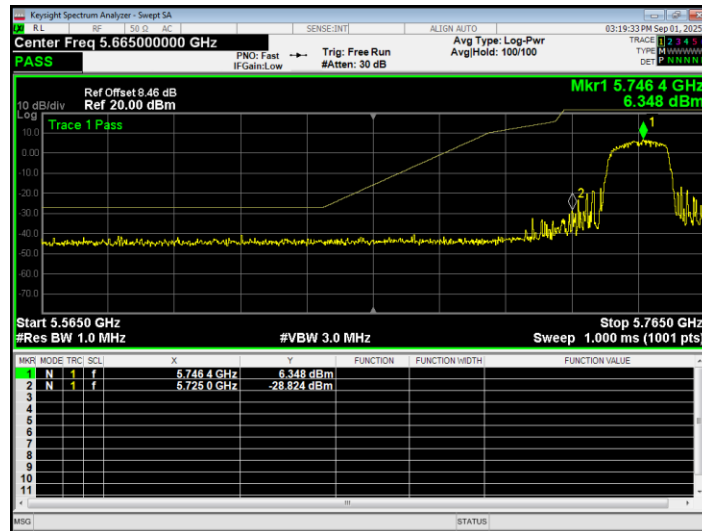
Band Edge NVNT ac80 5775MHz High Ant1





Shenzhen DL Testing Technology Co., Ltd.

Band Edge NVNT n20 5745MHz Low Ant1



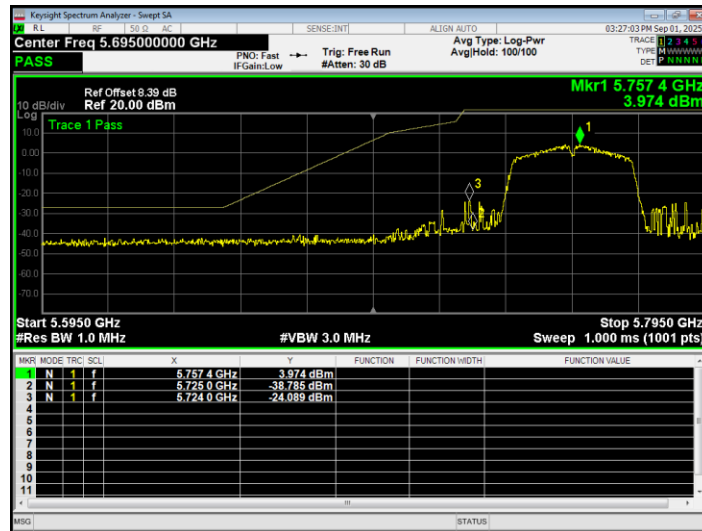
Band Edge NVNT n20 5825MHz High Ant1



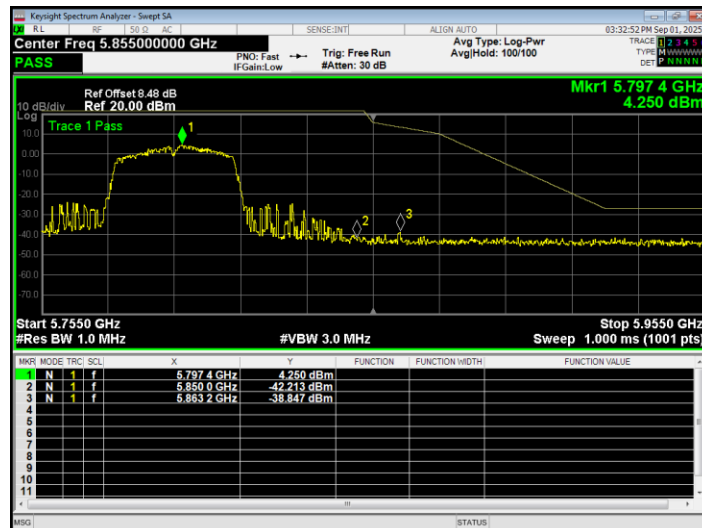


Shenzhen DL Testing Technology Co., Ltd.

Band Edge NVNT n40 5755MHz Low Ant1



Band Edge NVNT n40 5795MHz 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	5745	Ant1	8.02	0.87	8.89	30	Pass
NVNT	a	5785	Ant1	7.788	1.12	8.908	30	Pass
NVNT	a	5825	Ant1	8.131	0.87	9.001	30	Pass
NVNT	ac20	5745	Ant1	8.231	0.13	8.361	30	Pass
NVNT	ac20	5785	Ant1	7.807	0.13	7.937	30	Pass
NVNT	ac20	5825	Ant1	8.457	0.13	8.587	30	Pass
NVNT	ac40	5755	Ant1	8.222	0.26	8.482	30	Pass
NVNT	ac40	5795	Ant1	8.687	0.26	8.947	30	Pass
NVNT	ac80	5775	Ant1	8.141	0.51	8.651	30	Pass
NVNT	n20	5745	Ant1	8.783	0.13	8.913	30	Pass
NVNT	n20	5785	Ant1	8.43	0.13	8.56	30	Pass
NVNT	n20	5825	Ant1	8.405	0.13	8.535	30	Pass
NVNT	n40	5755	Ant1	8.234	0.26	8.494	30	Pass
NVNT	n40	5795	Ant1	8.733	0.32	9.053	30	Pass



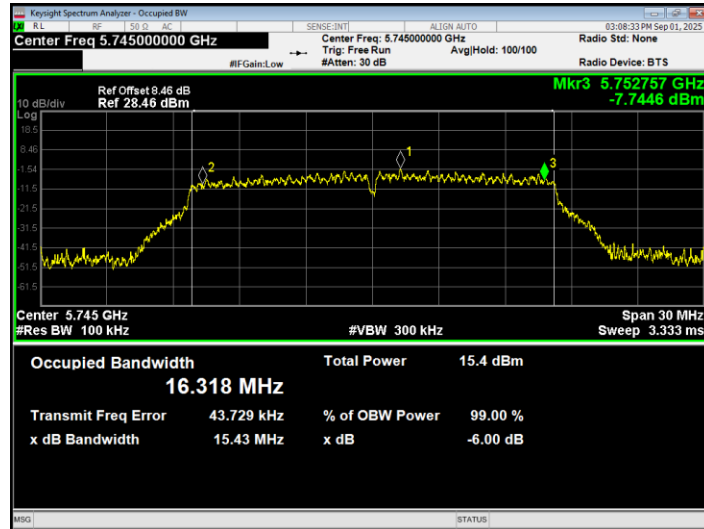
-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant1	15.427	0.5	Pass
NVNT	a	5785	Ant1	15.53	0.5	Pass
NVNT	a	5825	Ant1	15.941	0.5	Pass
NVNT	ac20	5745	Ant1	16.069	0.5	Pass
NVNT	ac20	5785	Ant1	13.874	0.5	Pass
NVNT	ac20	5825	Ant1	15.244	0.5	Pass
NVNT	ac40	5755	Ant1	32.532	0.5	Pass
NVNT	ac40	5795	Ant1	30.023	0.5	Pass
NVNT	ac80	5775	Ant1	75.053	0.5	Pass
NVNT	n20	5745	Ant1	16.249	0.5	Pass
NVNT	n20	5785	Ant1	15.4	0.5	Pass
NVNT	n20	5825	Ant1	16.896	0.5	Pass
NVNT	n40	5755	Ant1	28.833	0.5	Pass
NVNT	n40	5795	Ant1	30.033	0.5	Pass

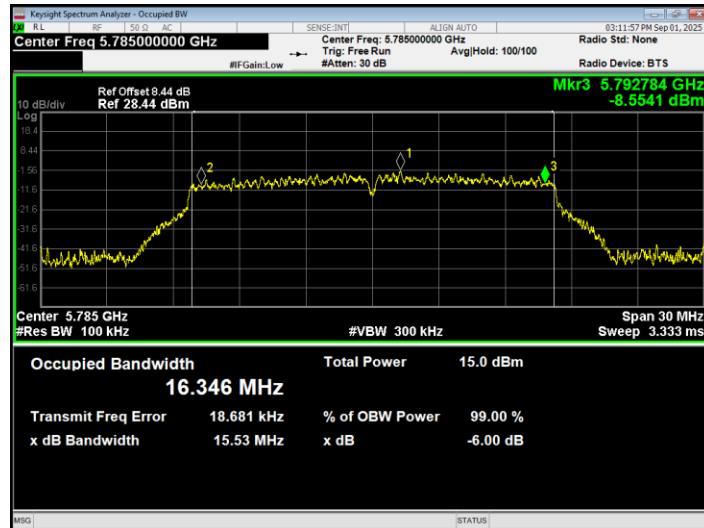


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-6dB Bandwidth NVNT a 5745MHz Ant1



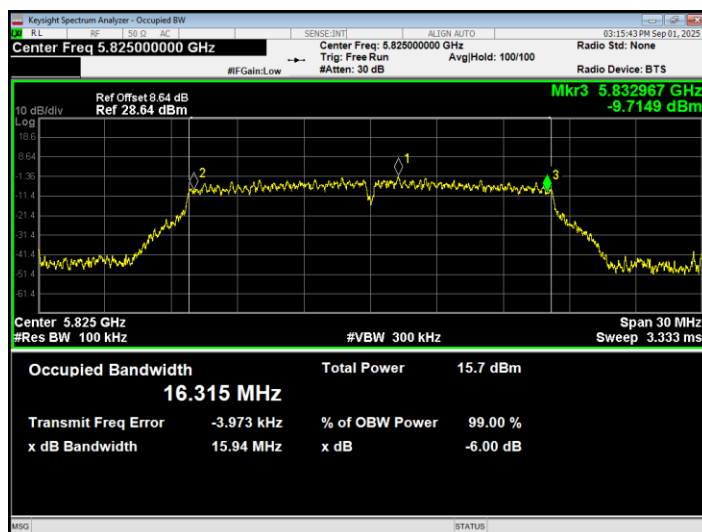
-6dB Bandwidth NVNT a 5785MHz Ant1



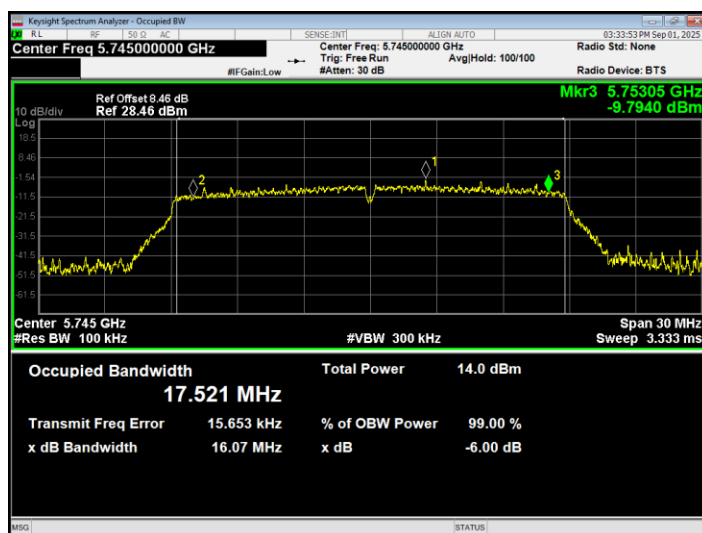


Shenzhen DL Testing Technology Co., Ltd.

-6dB Bandwidth NVNT a 5825MHz Ant1



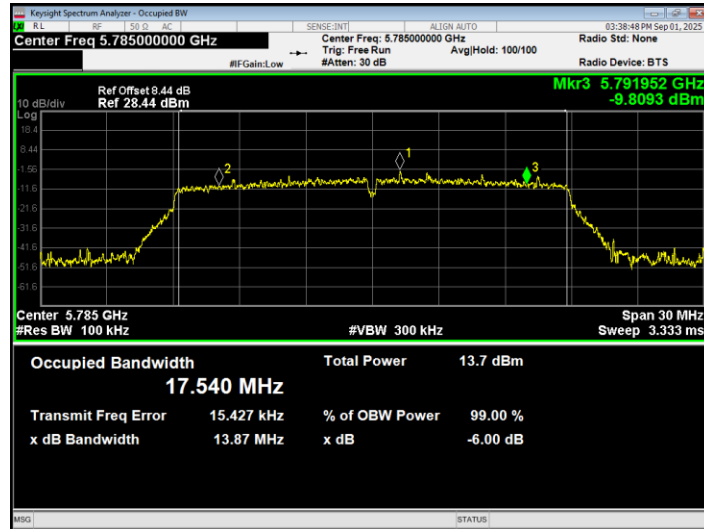
-6dB Bandwidth NVNT ac20 5745MHz Ant1



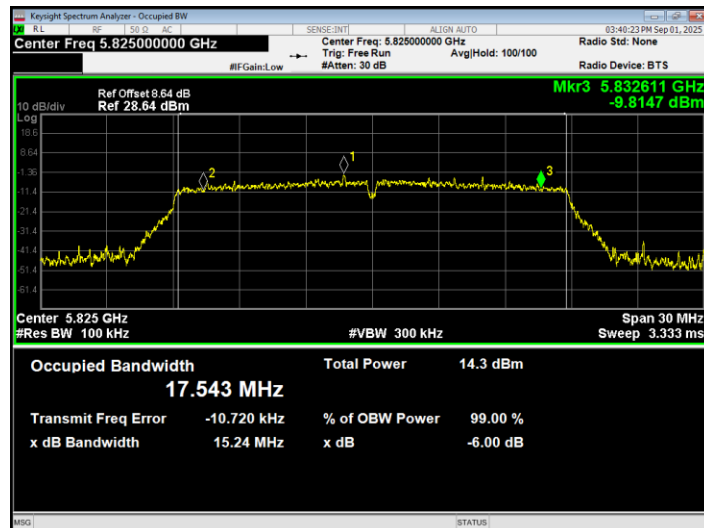


Shenzhen DL Testing Technology Co., Ltd.

-6dB Bandwidth NVNT ac20 5785MHz Ant1



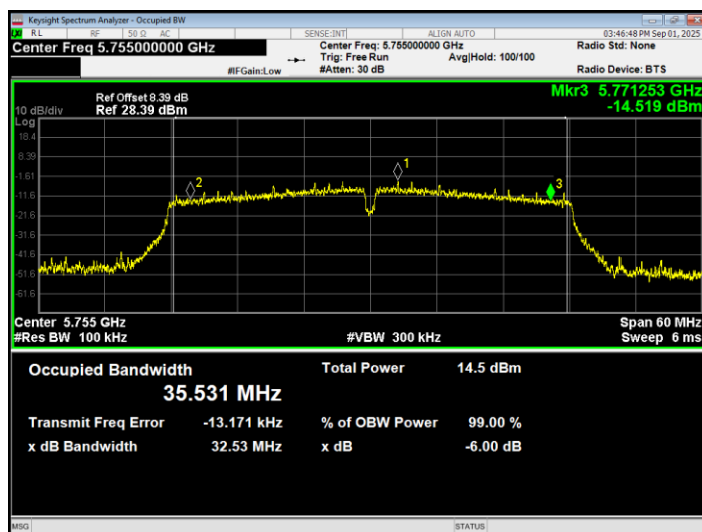
-6dB Bandwidth NVNT ac20 5825MHz Ant1



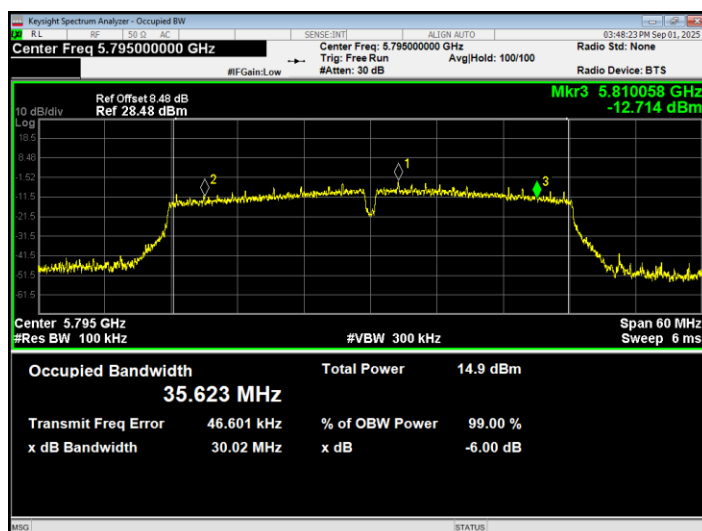


Shenzhen DL Testing Technology Co., Ltd.

-6dB Bandwidth NVNT ac40 5755MHz Ant1



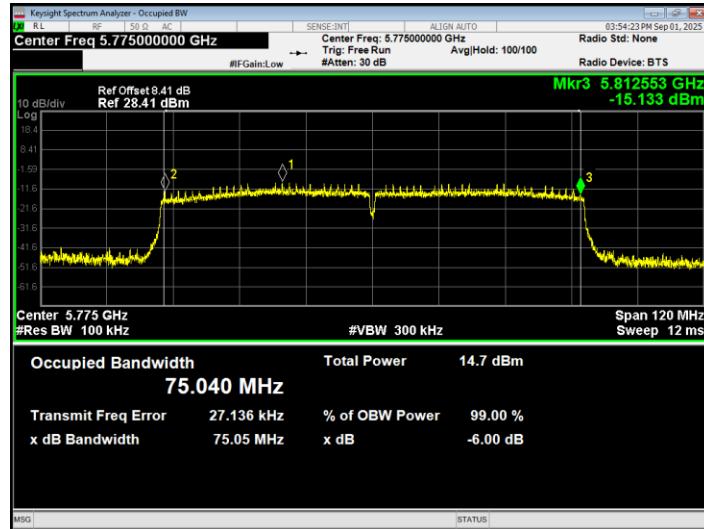
-6dB Bandwidth NVNT ac40 5795MHz Ant1



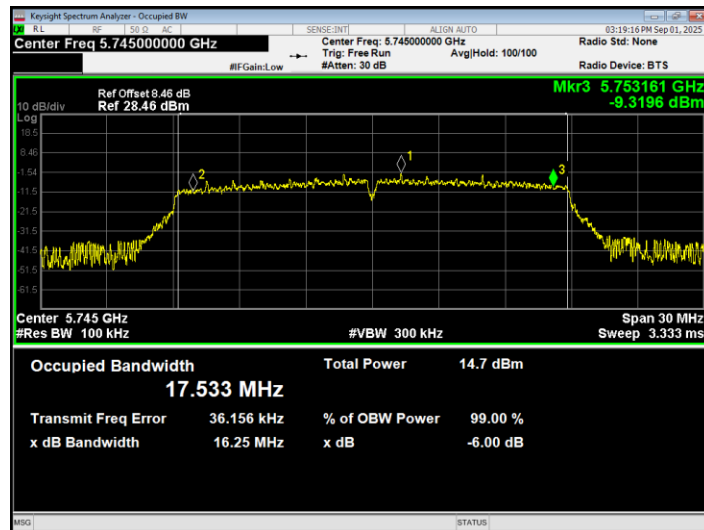


Shenzhen DL Testing Technology Co., Ltd.

-6dB Bandwidth NVNT ac80 5775MHz Ant1



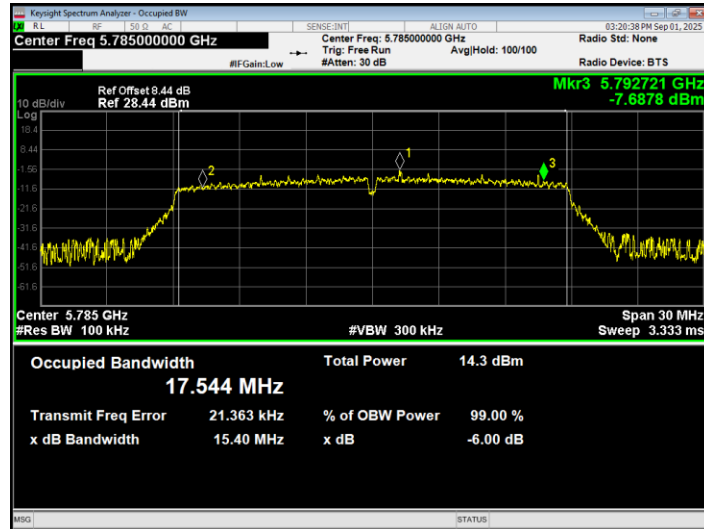
-6dB Bandwidth NVNT n20 5745MHz Ant1



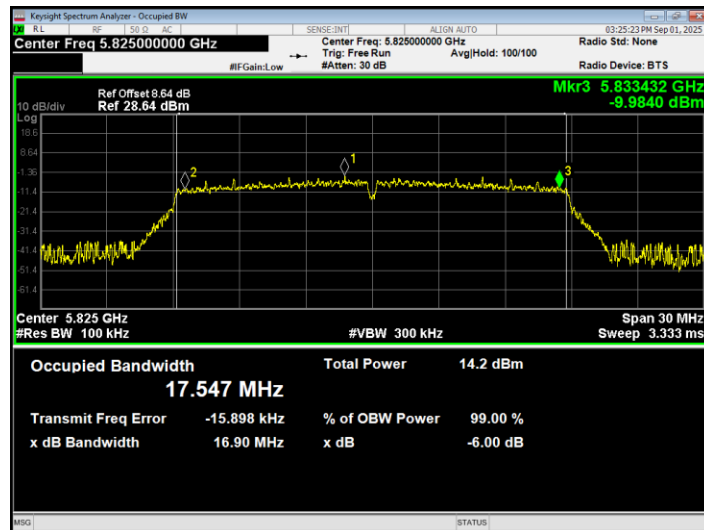


Shenzhen DL Testing Technology Co., Ltd.

-6dB Bandwidth NVNT n20 5785MHz Ant1



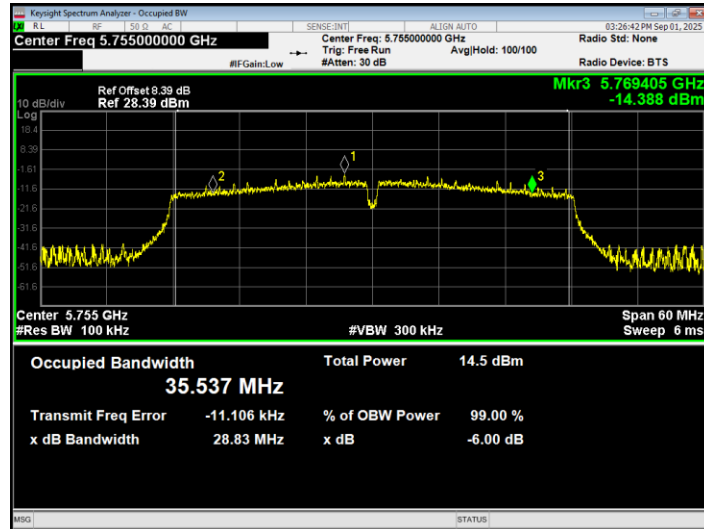
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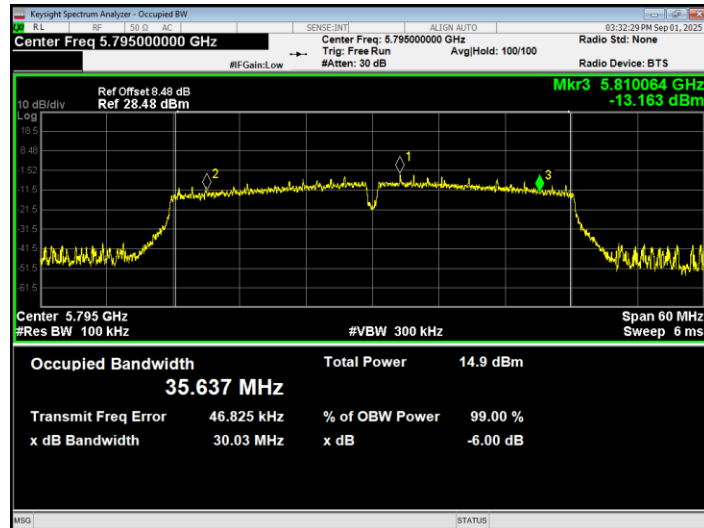


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-6dB Bandwidth NVNT n40 5755MHz Ant1



-6dB Bandwidth NVNT n40 5795MHz Ant1





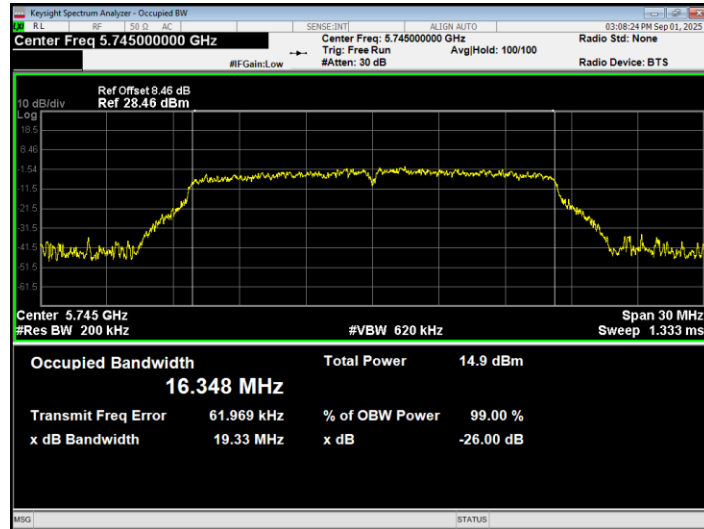
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5745	Ant1	16.3477073
NVNT	a	5785	Ant1	16.3999493
NVNT	a	5825	Ant1	16.39414101
NVNT	ac20	5745	Ant1	17.53469848
NVNT	ac20	5785	Ant1	17.54976486
NVNT	ac20	5825	Ant1	17.57070111
NVNT	ac40	5755	Ant1	35.59145601
NVNT	ac40	5795	Ant1	35.72263637
NVNT	ac80	5775	Ant1	75.00767994
NVNT	n20	5745	Ant1	17.55238952
NVNT	n20	5785	Ant1	17.58231511
NVNT	n20	5825	Ant1	17.56833542
NVNT	n40	5755	Ant1	35.69974258
NVNT	n40	5795	Ant1	35.72335496

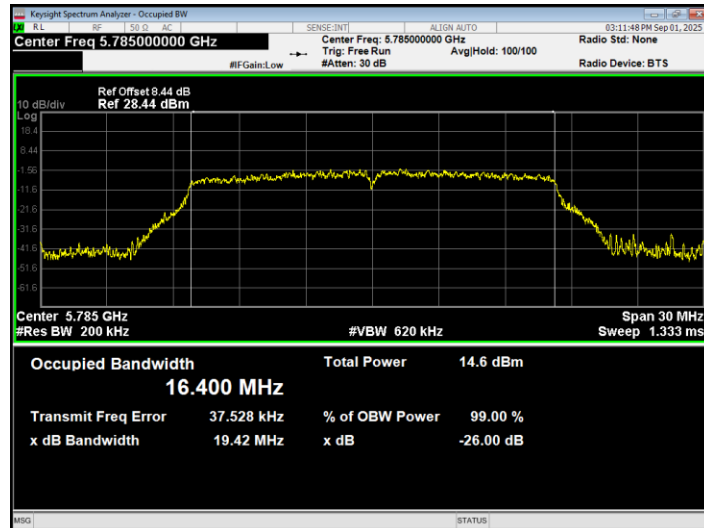


Shenzhen DL Testing Technology Co., Ltd.

OBW NVNT a 5745MHz Ant1



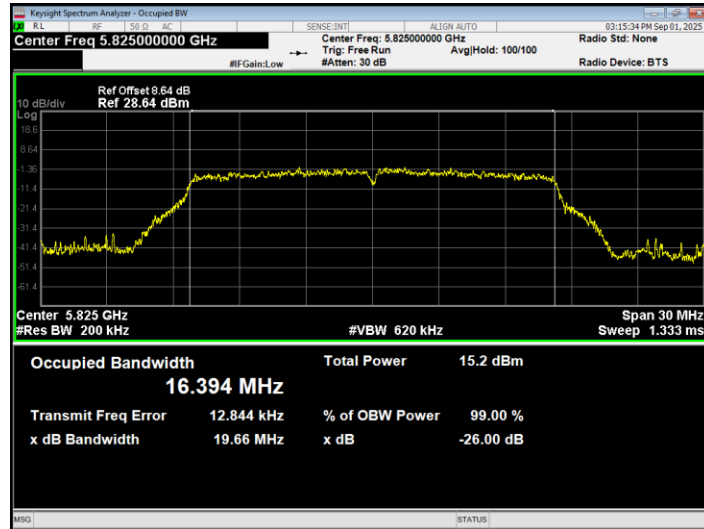
OBW NVNT a 5785MHz Ant1



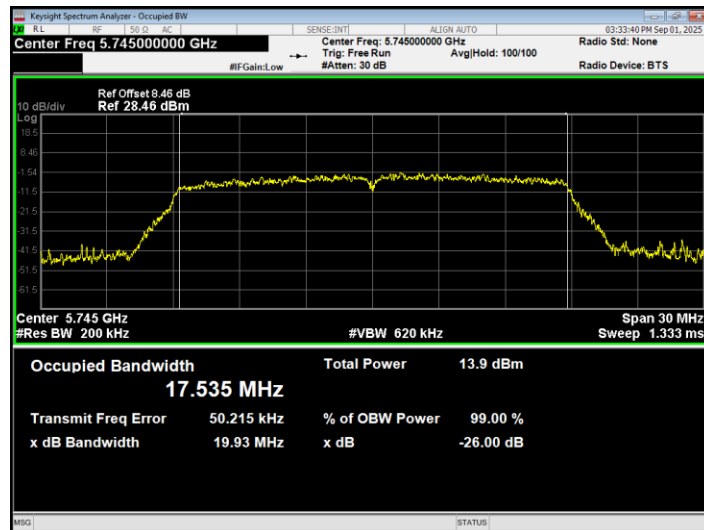


Shenzhen DL Testing Technology Co., Ltd.

OBW NVNT a 5825MHz Ant1



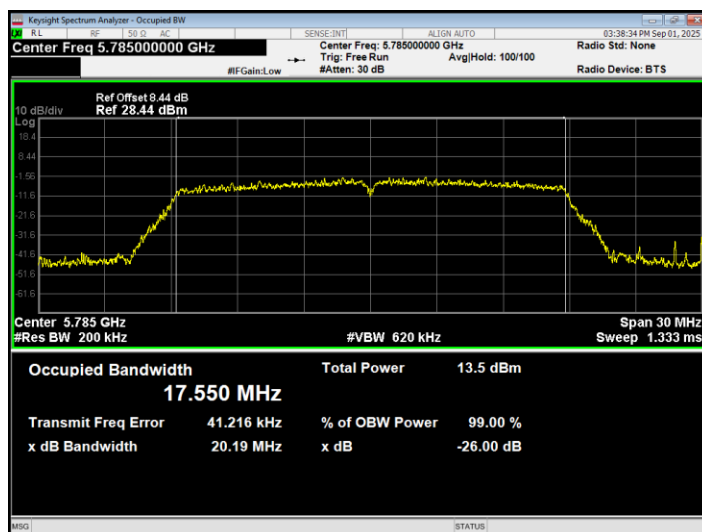
OBW NVNT ac20 5745MHz Ant1



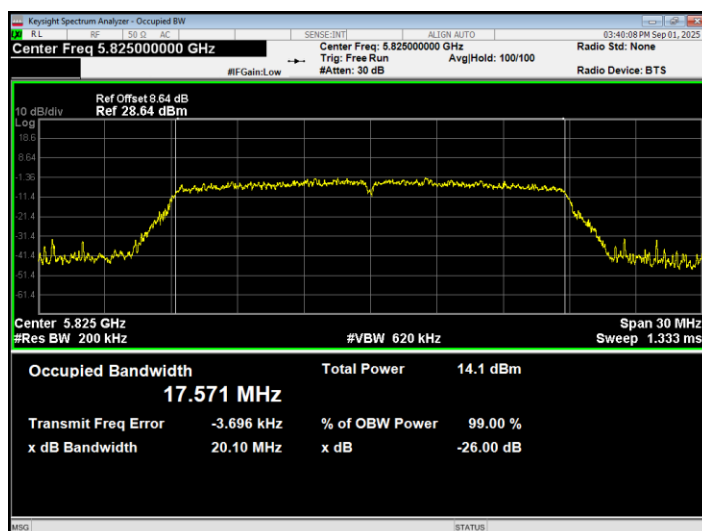


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OBW NVNT ac20 5785MHz Ant1



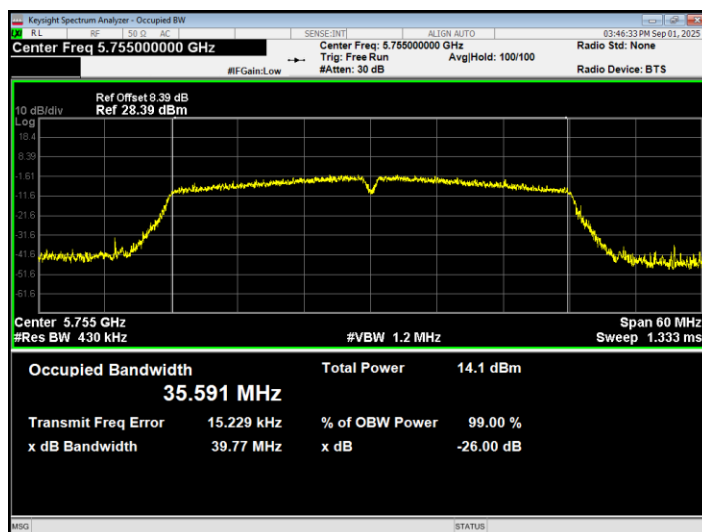
OBW NVNT ac20 5825MHz Ant1



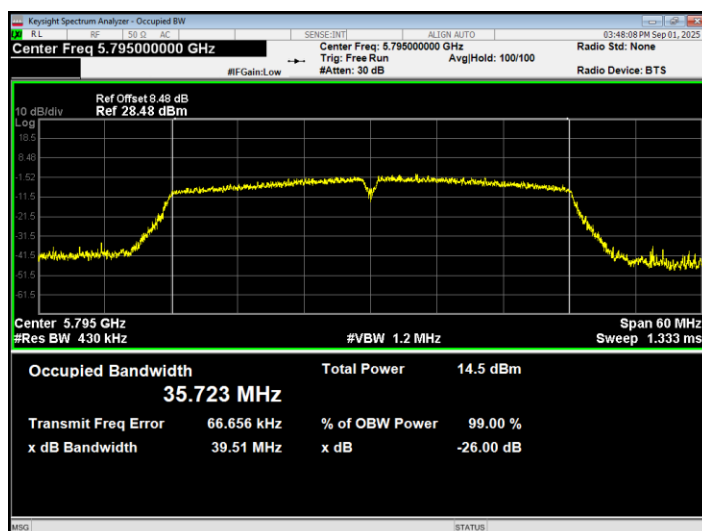


Shenzhen DL Testing Technology Co., Ltd.

OBW NVNT ac40 5755MHz Ant1



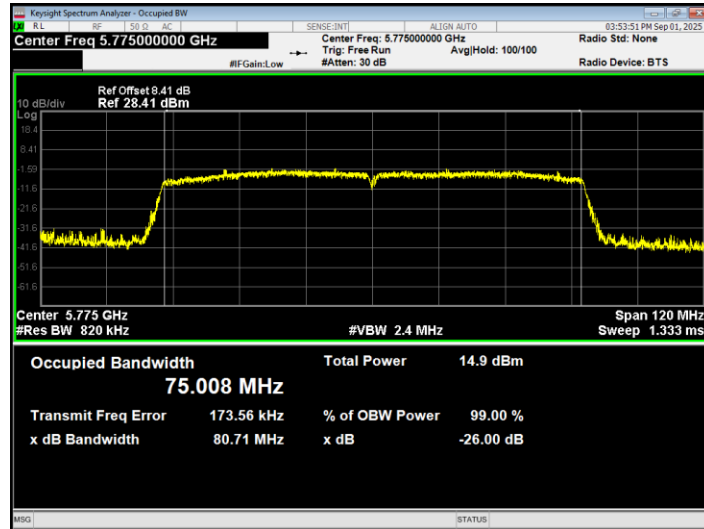
OBW NVNT ac40 5795MHz Ant1



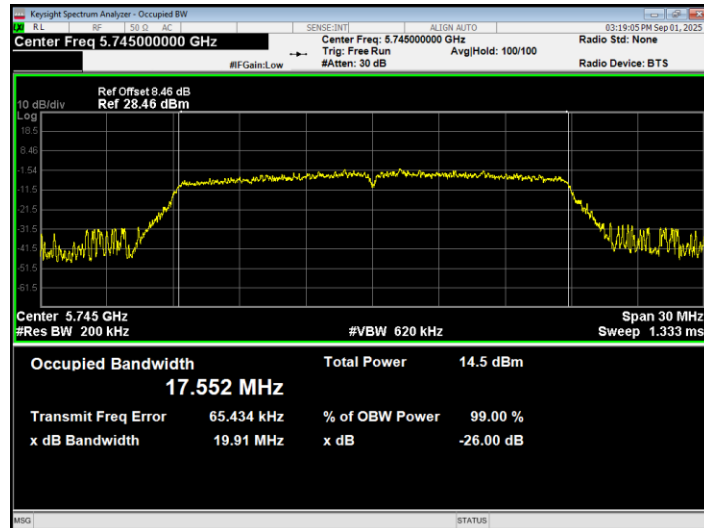


Shenzhen DL Testing Technology Co., Ltd.

OBW NVNT ac80 5775MHz Ant1



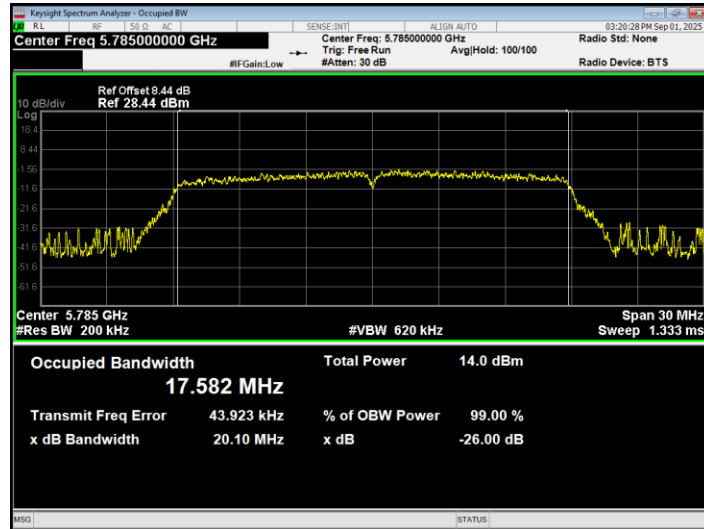
OBW NVNT n20 5745MHz Ant1



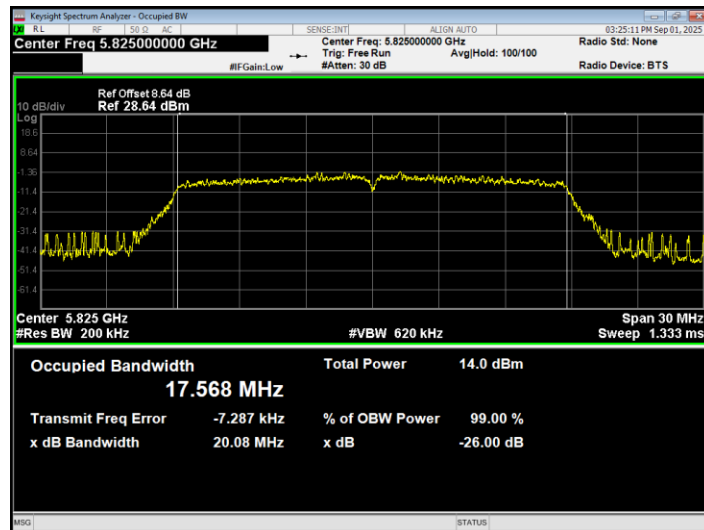


Shenzhen DL Testing Technology Co., Ltd.

OBW NVNT n20 5785MHz Ant1



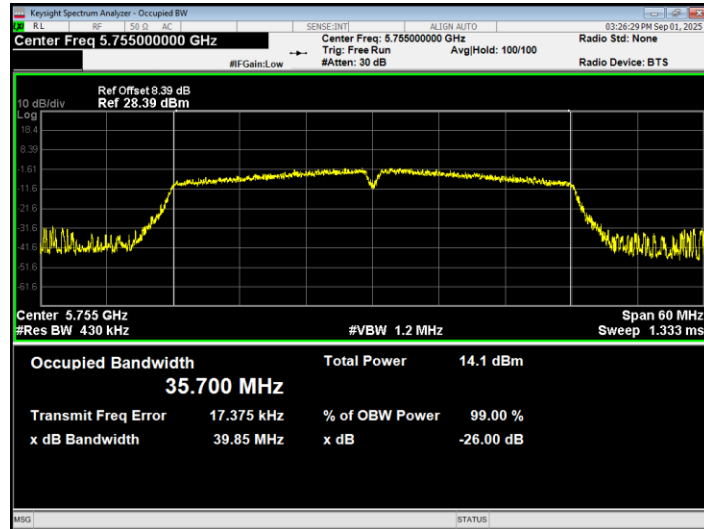
OBW NVNT n20 5825MHz Ant1



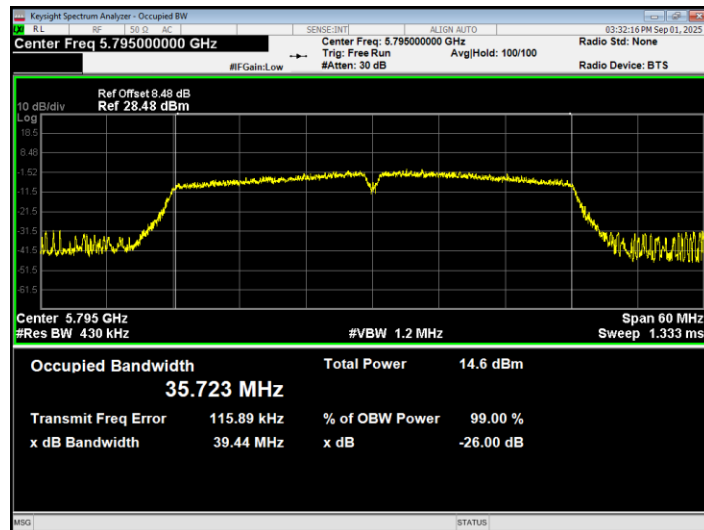


Shenzhen DL Testing Technology Co., Ltd.

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	-4.239	0.87	-3.369	30	Pass
NVNT	a	5785	Ant1	-4.105	1.12	-2.985	30	Pass
NVNT	a	5825	Ant1	-3.917	0.87	-3.047	30	Pass
NVNT	ac20	5745	Ant1	-4.535	0.13	-4.405	30	Pass
NVNT	ac20	5785	Ant1	-4.651	0.13	-4.521	30	Pass
NVNT	ac20	5825	Ant1	-4.146	0.13	-4.016	30	Pass
NVNT	ac40	5755	Ant1	-6.435	0.26	-6.175	30	Pass
NVNT	ac40	5795	Ant1	-6.307	0.26	-6.047	30	Pass
NVNT	ac80	5775	Ant1	-11.515	0.51	-11.005	30	Pass
NVNT	n20	5745	Ant1	-3.897	0.13	-3.767	30	Pass
NVNT	n20	5785	Ant1	-4.468	0.13	-4.338	30	Pass
NVNT	n20	5825	Ant1	-4.328	0.13	-4.198	30	Pass
NVNT	n40	5755	Ant1	-6.785	0.26	-6.525	30	Pass
NVNT	n40	5795	Ant1	-6.318	0.32	-5.998	30	Pass

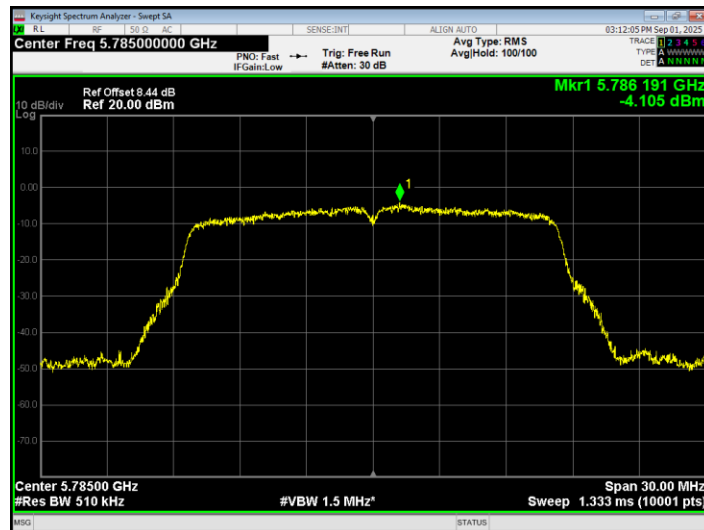


Shenzhen DL Testing Technology Co., Ltd.

PSD NVNT a 5745MHz Ant1



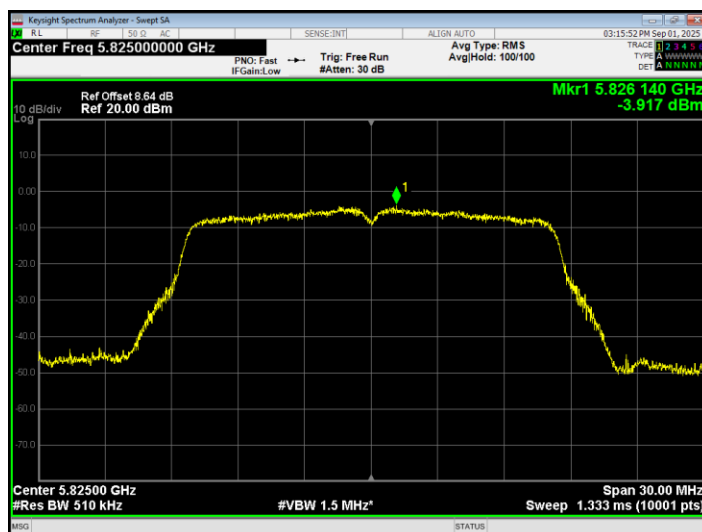
PSD NVNT a 5785MHz Ant1



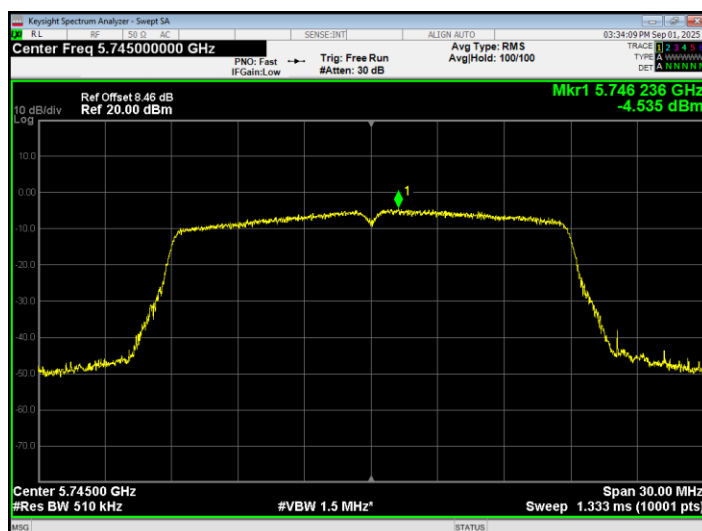


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PSD NVNT a 5825MHz Ant1



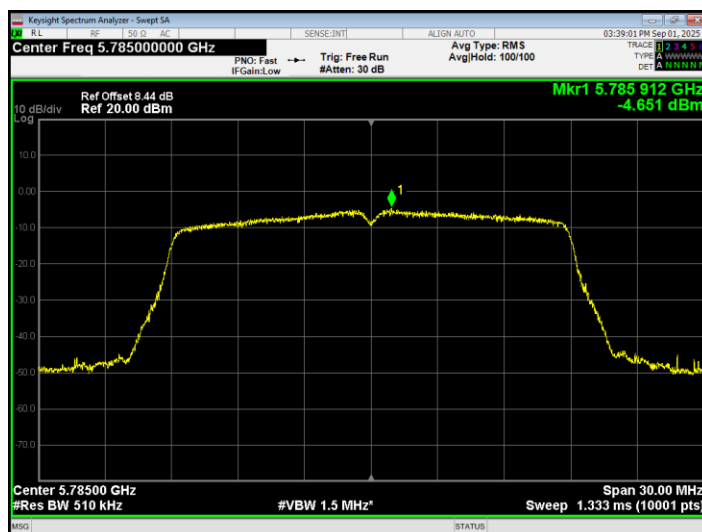
PSD NVNT ac20 5745MHz Ant1



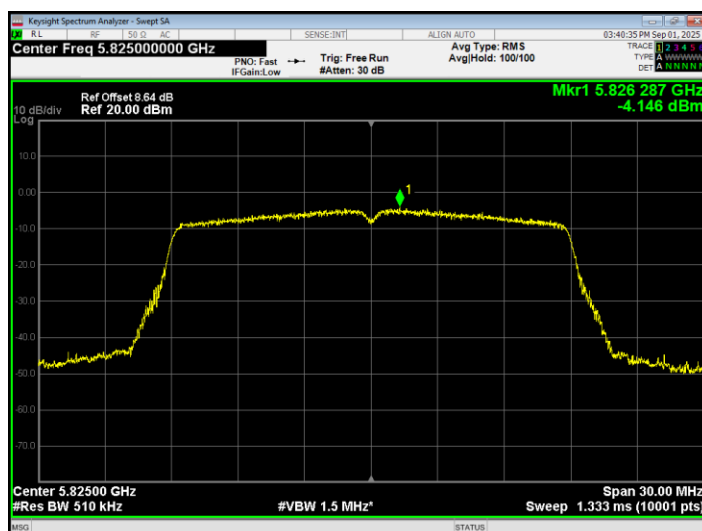


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PSD NVNT ac20 5785MHz Ant1



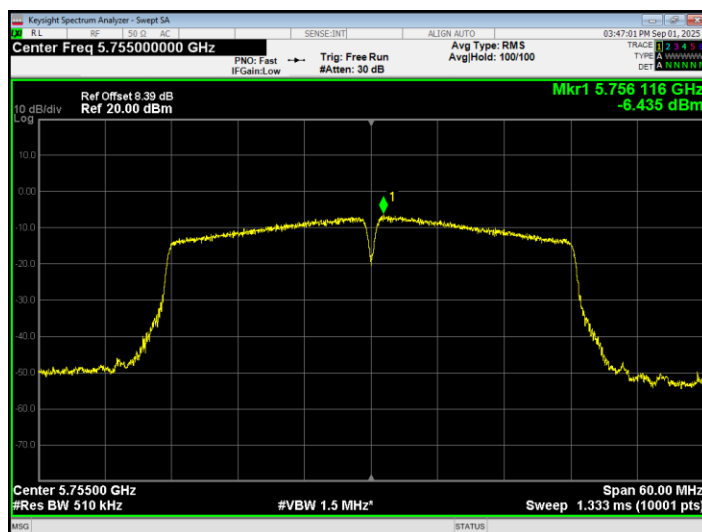
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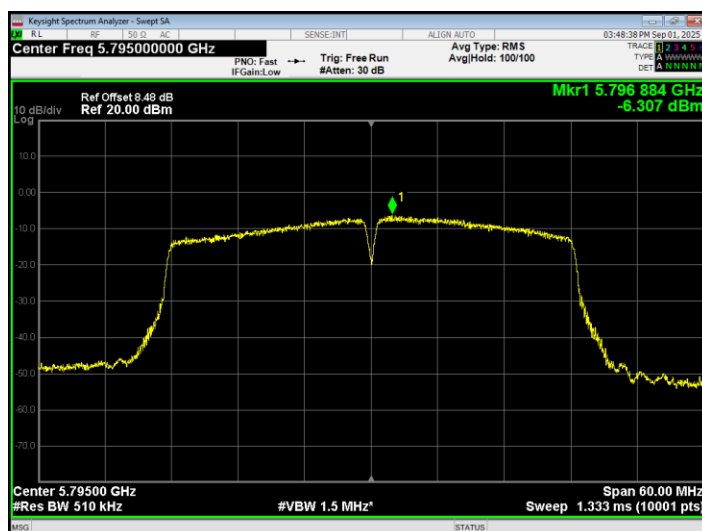


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PSD NVNT ac40 5755MHz Ant1



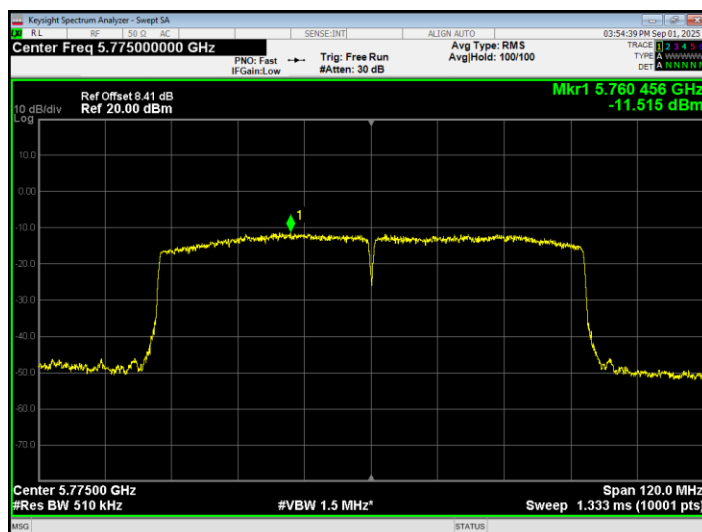
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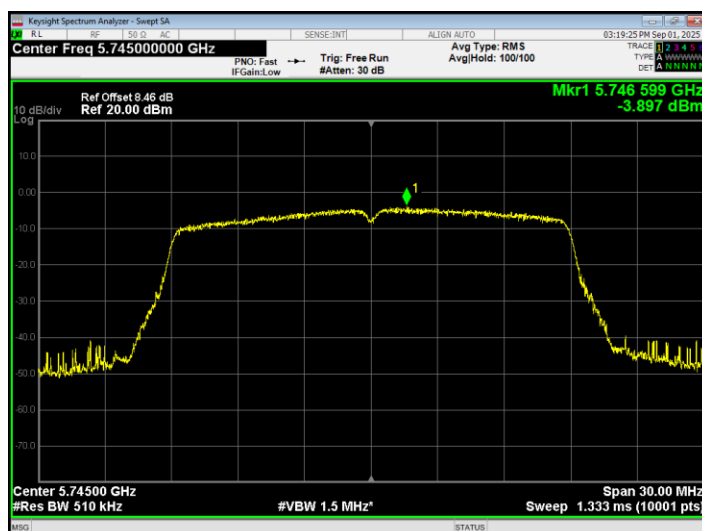


Shenzhen DL Testing Technology Co., Ltd.

PSD NVNT ac80 5775MHz Ant1

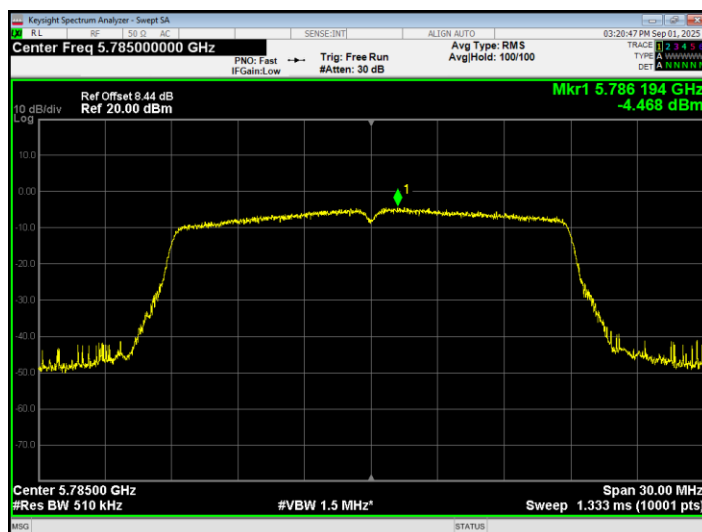


PSD NVNT n20 5745MHz Ant1





PSD NVNT n20 5785MHz Ant1



PSD NVNT n20 5825MHz Ant1

