



Shenzhen DL Testing Technology Co., Ltd.

Appendix 1

FCC Test Report

FCC ID: 2BS07-SPAMW21XXE1

Applicant: SUNPLUS TECHNOLOGY CO., LTD.
Address: 19, Innovation First Road Hsinchu Science Park, Taiwan 30076
Manufacturer: SUNPLUS TECHNOLOGY CO., LTD.
Address: 19, Innovation First Road Hsinchu Science Park, Taiwan 30076
EUT: Wireless Audio Module
Trade Mark: N/A
Model Number: SPA-MW21xx-E, SPA-MW21F3-E, SPA-MW21P2-E
Date of Receipt: Oct. 10, 2025
Test Date: Oct. 10, 2025 - Nov. 29, 2025
Date of Report: Nov. 29, 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



Shenzhen DL Testing Technology Co., Ltd.

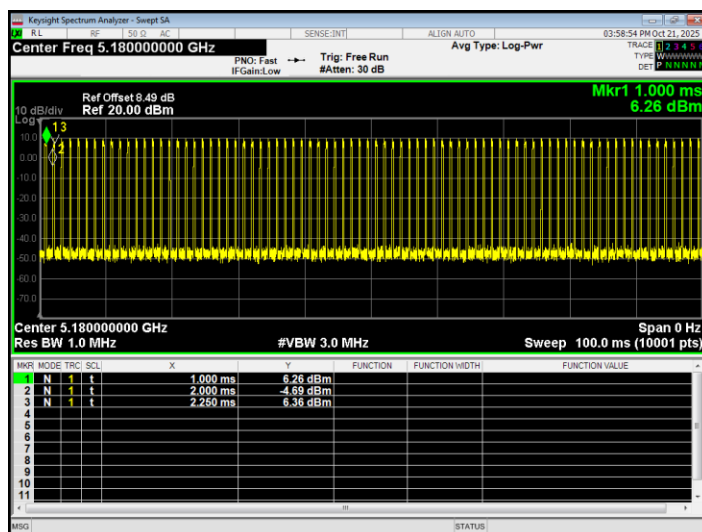
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5180	Ant1	20	6.99
NVNT	a	5220	Ant1	20	6.99
NVNT	a	5240	Ant1	20	6.99
NVNT	n20	5180	Ant1	18.7	7.28
NVNT	n20	5220	Ant1	18.03	7.44
NVNT	n20	5240	Ant1	18.03	7.44
NVNT	n40	5190	Ant1	11.5	9.39
NVNT	n40	5230	Ant1	11.5	9.39

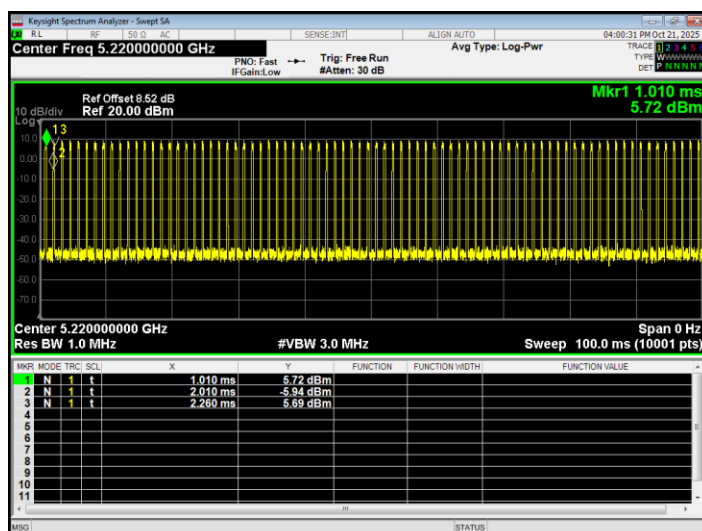


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Duty Cycle NVNT a 5180MHz Ant1



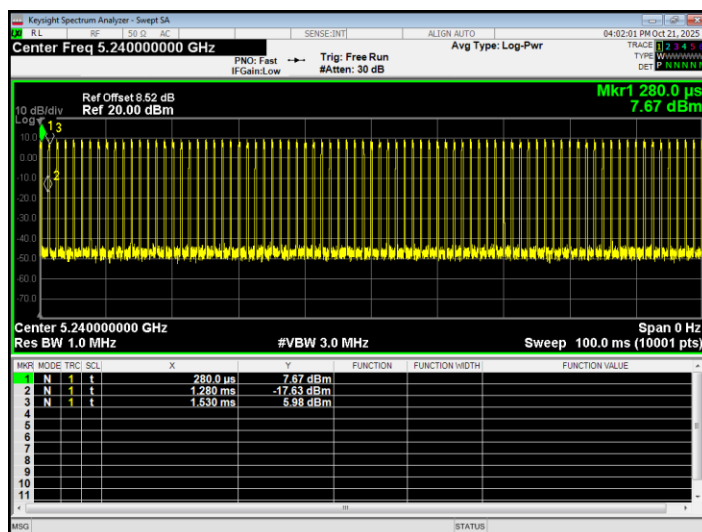
Duty Cycle NVNT a 5220MHz Ant1



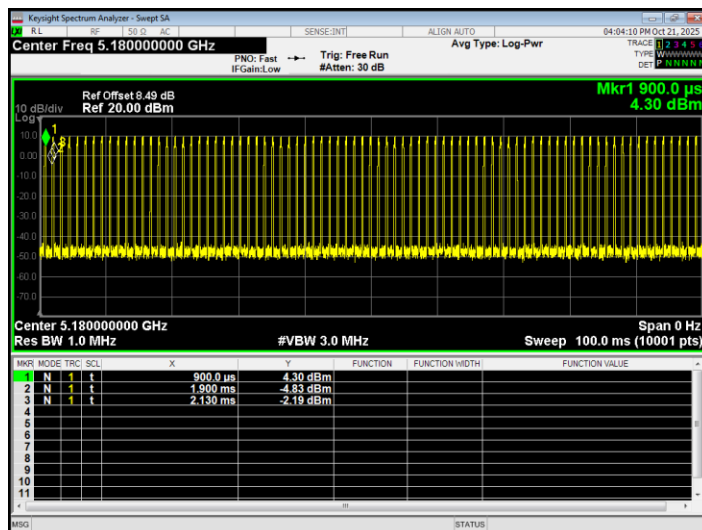


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Duty Cycle NVNT a 5240MHz Ant1



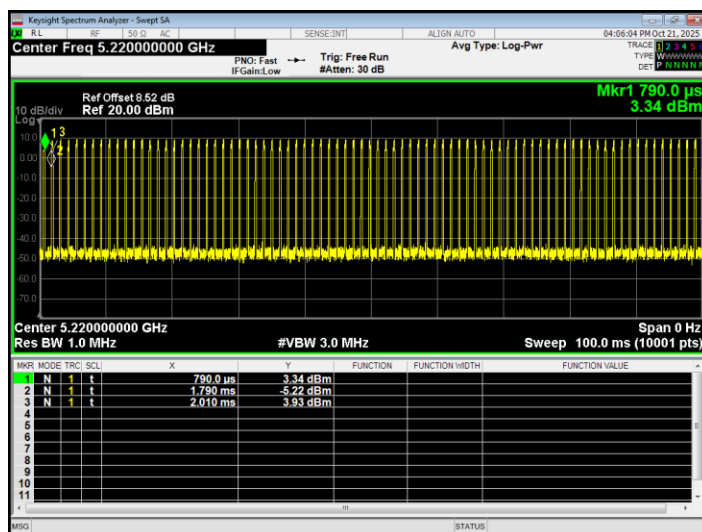
Duty Cycle NVNT n20 5180MHz Ant1



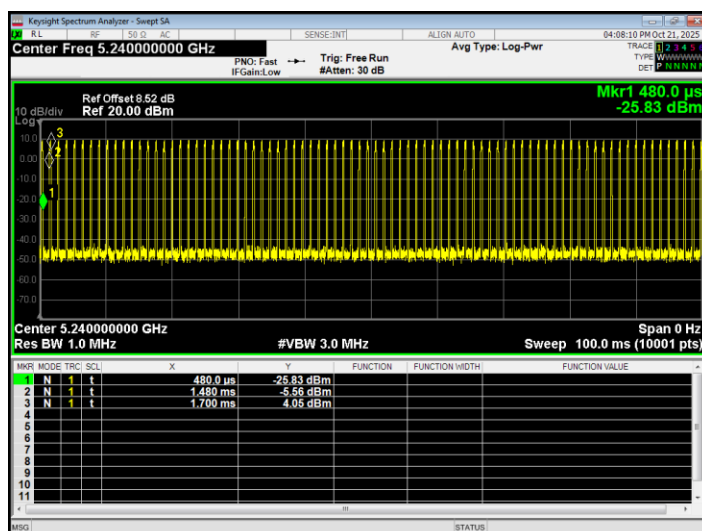


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Duty Cycle NVNT n20 5220MHz Ant1



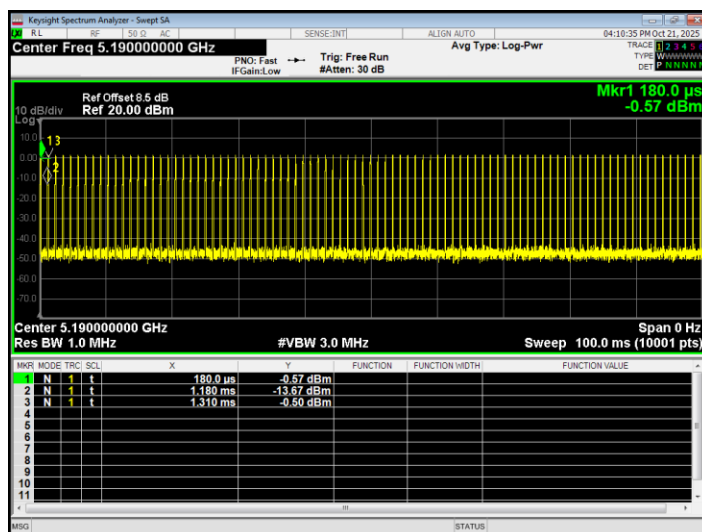
Duty Cycle NVNT n20 5240MHz Ant1



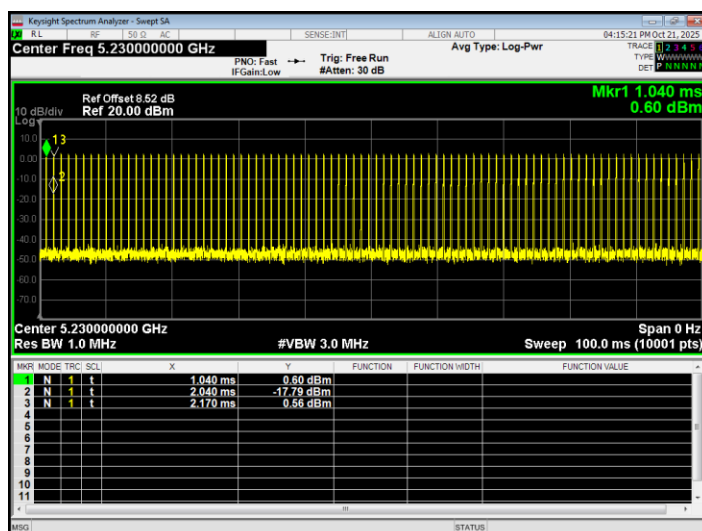


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Duty Cycle NVNT n40 5190MHz Ant1



Duty Cycle NVNT n40 5230MHz Ant1





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Conducted Band Edge

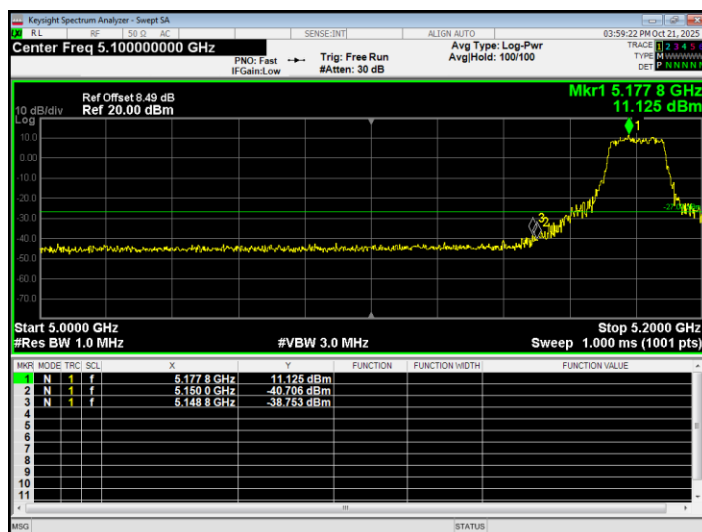
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-38.75	-27	Pass
NVNT	a	5240	Ant1	-41.94	-27	Pass
NVNT	n20	5180	Ant1	-35.82	-27	Pass
NVNT	n20	5240	Ant1	-41.8	-27	Pass
NVNT	n40	5190	Ant1	-50.03	-27	Pass
NVNT	n40	5230	Ant1	-42.22	-27	Pass

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

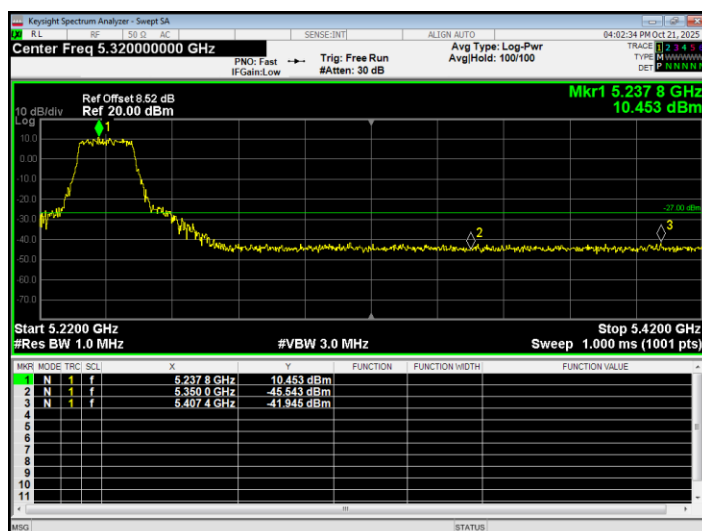


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Band Edge NVNT a 5180MHz Low Ant1



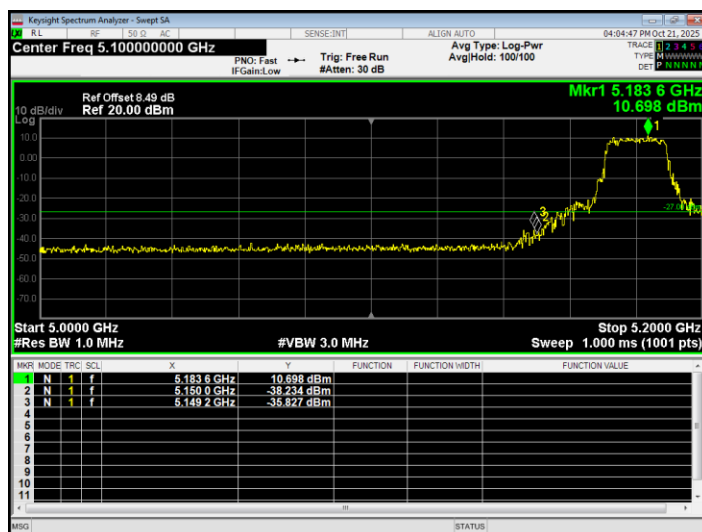
Band Edge NVNT a 5240MHz High Ant1



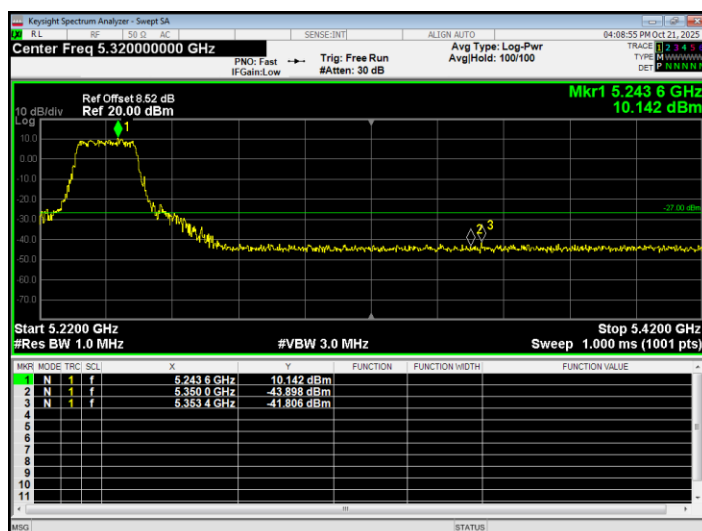


Shenzhen DL Testing Technology Co., Ltd.

Band Edge NVNT n20 5180MHz Low Ant1



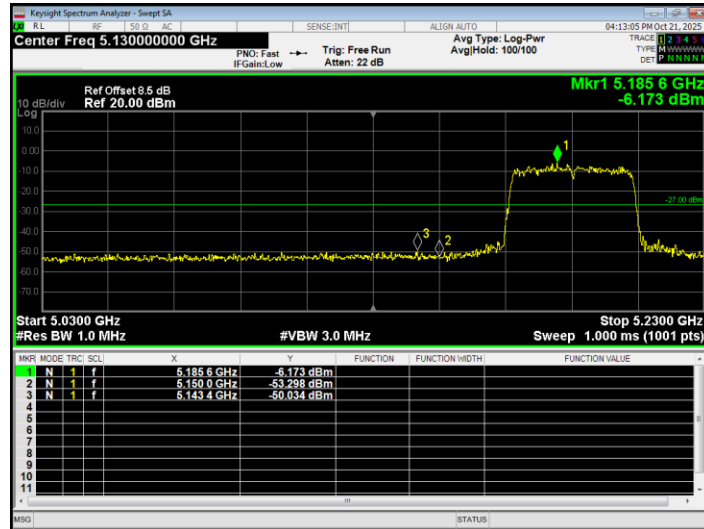
Band Edge NVNT n20 5240MHz High Ant1



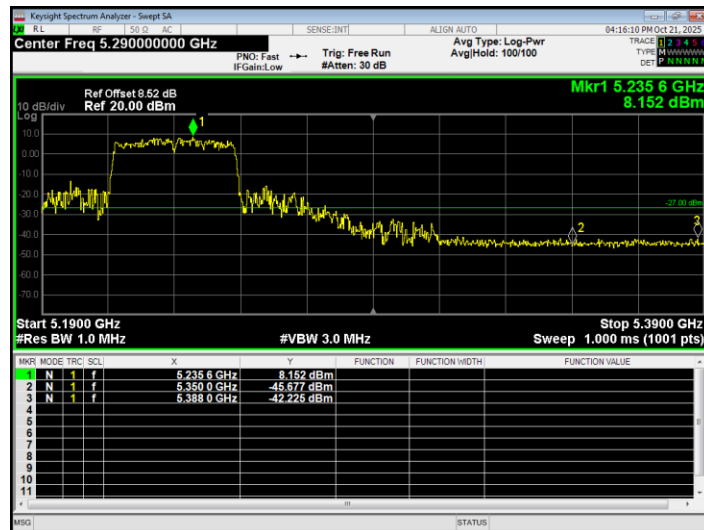


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Band Edge NVNT n40 5190MHz Low Ant1



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	13.51	6.99	20.5	24	Pass
NVNT	a	5220	Ant1	12.429	6.99	19.419	24	Pass
NVNT	a	5240	Ant1	12.986	6.99	19.976	24	Pass
NVNT	n20	5180	Ant1	12.611	7.28	19.891	24	Pass
NVNT	n20	5220	Ant1	11.093	7.44	18.533	24	Pass
NVNT	n20	5240	Ant1	12.112	7.44	19.552	24	Pass
NVNT	n40	5190	Ant1	10.422	9.39	19.812	24	Pass
NVNT	n40	5230	Ant1	11.549	9.39	20.939	24	Pass



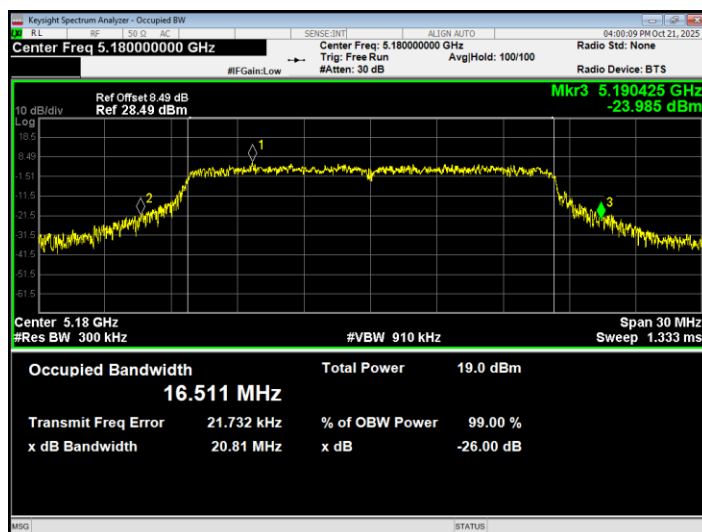
-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	20.81	Pass
NVNT	a	5220	Ant1	21.05	Pass
NVNT	a	5240	Ant1	20.44	Pass
NVNT	n20	5180	Ant1	22.48	Pass
NVNT	n20	5220	Ant1	22.89	Pass
NVNT	n20	5240	Ant1	22.76	Pass
NVNT	n40	5190	Ant1	38.68	Pass
NVNT	n40	5230	Ant1	56.83	Pass

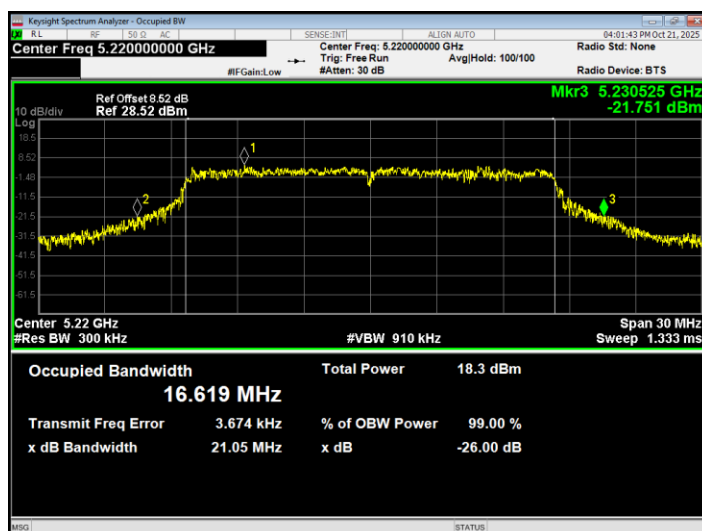


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-26dB Bandwidth NVNT a 5180MHz Ant1



-26dB Bandwidth NVNT a 5220MHz Ant1



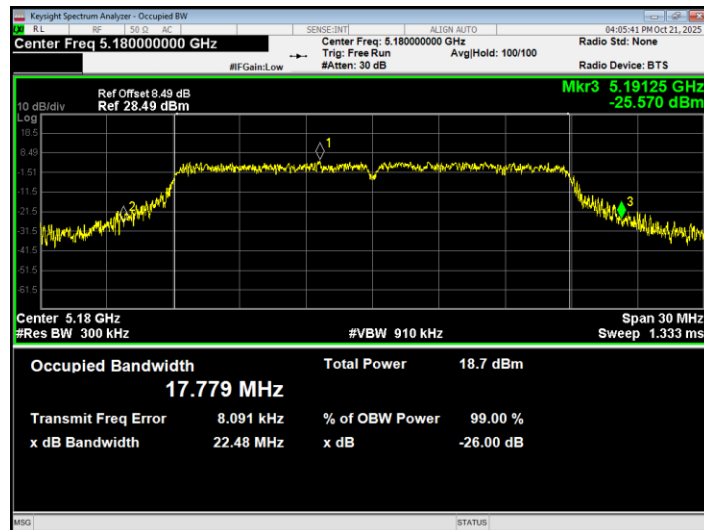


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-26dB Bandwidth NVNT a 5240MHz Ant1



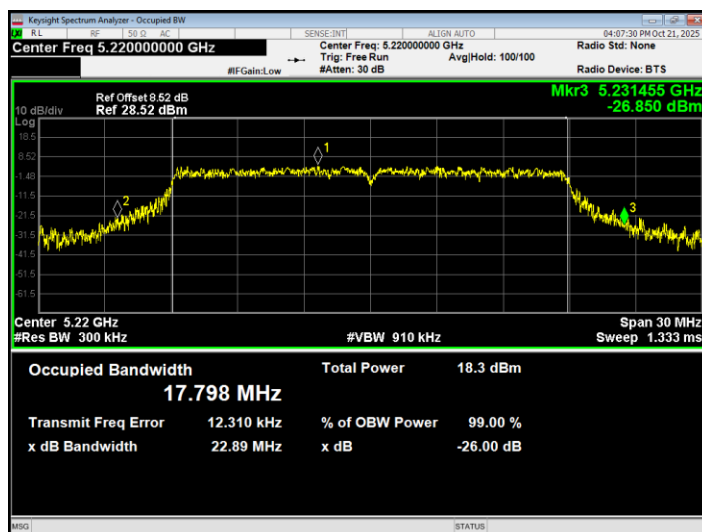
-26dB Bandwidth NVNT n20 5180MHz Ant1



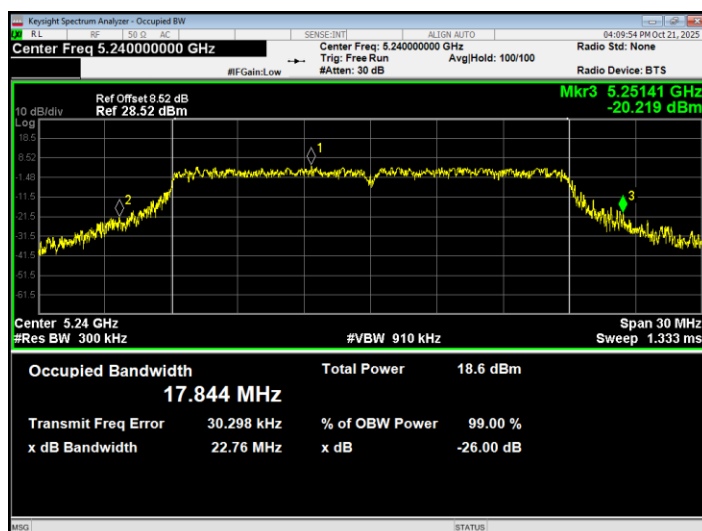


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-26dB Bandwidth NVNT n20 5220MHz Ant1



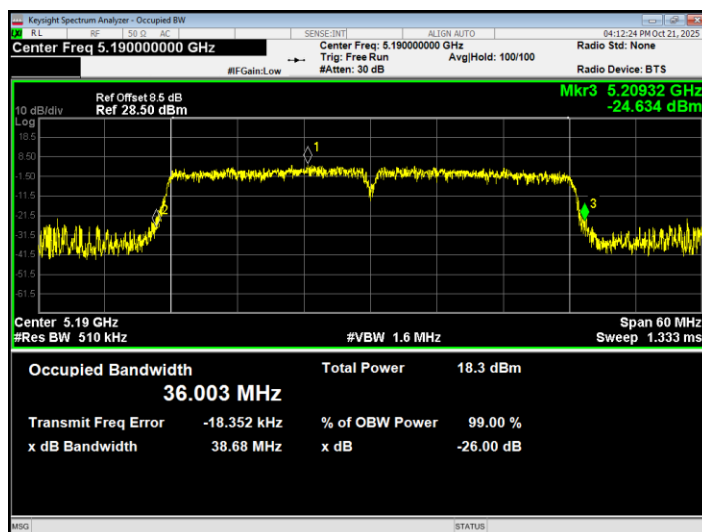
-26dB Bandwidth NVNT n20 5240MHz Ant1



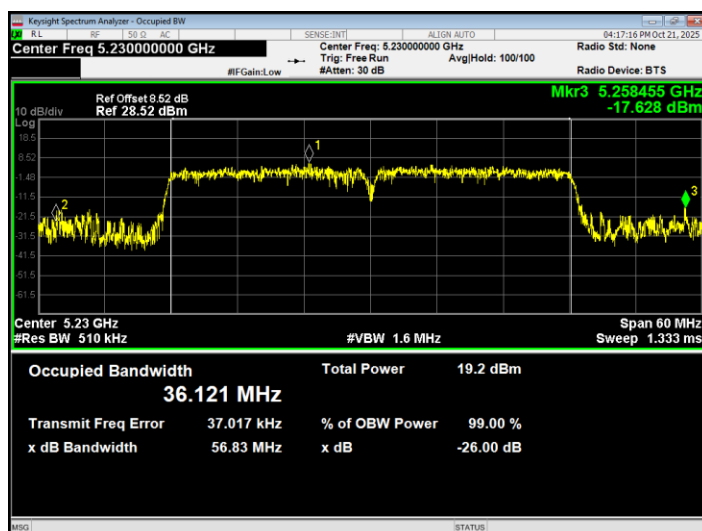


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-26dB Bandwidth NVNT n40 5190MHz Ant1



-26dB Bandwidth NVNT n40 5230MHz Ant1





Shenzhen DL Testing Technology Co., Ltd.

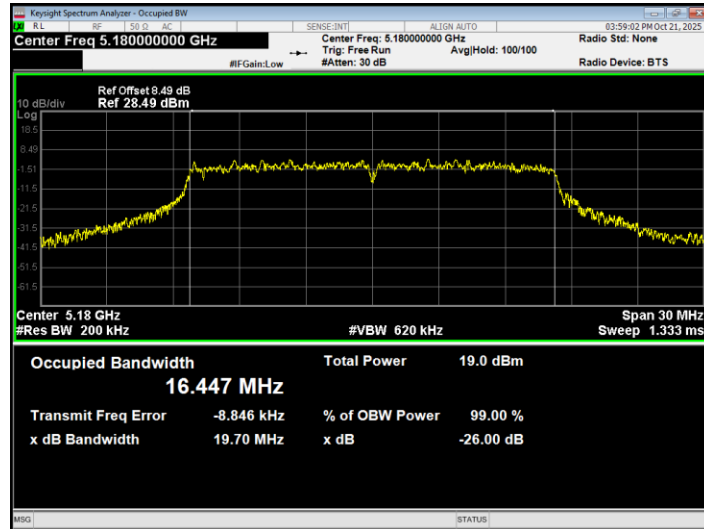
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.447
NVNT	a	5220	Ant1	16.476
NVNT	a	5240	Ant1	16.483
NVNT	n20	5180	Ant1	17.704
NVNT	n20	5220	Ant1	17.709
NVNT	n20	5240	Ant1	17.769
NVNT	n40	5190	Ant1	36.034
NVNT	n40	5230	Ant1	36.15

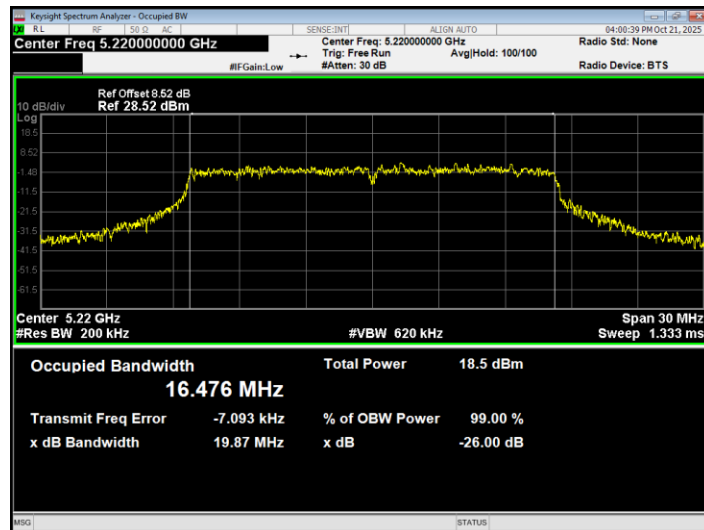


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OBW NVNT a 5180MHz Ant1



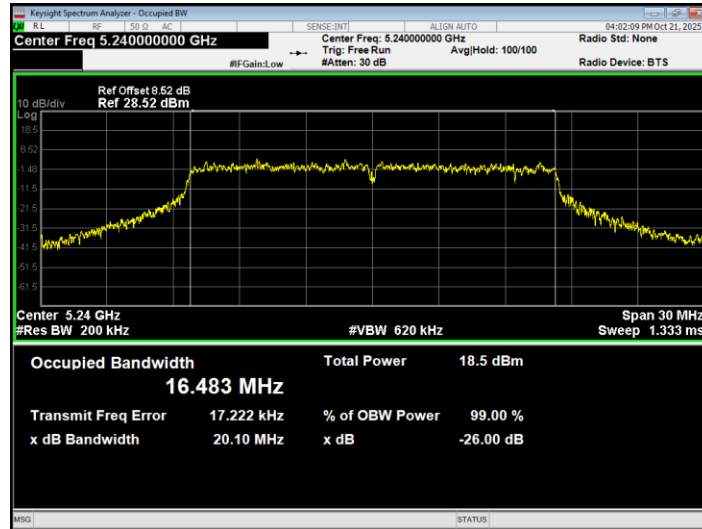
OBW NVNT a 5220MHz Ant1



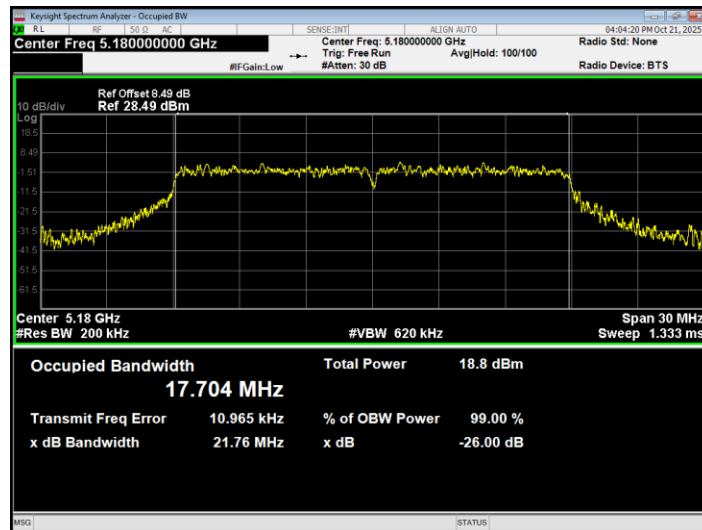


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OBW NVNT a 5240MHz Ant1



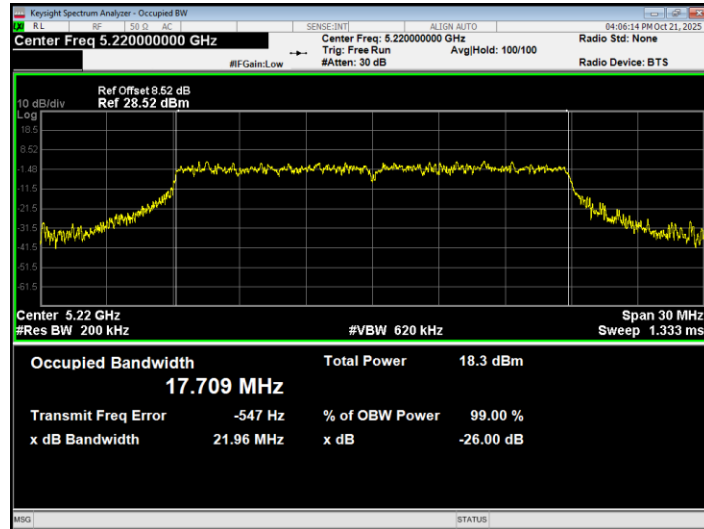
OBW NVNT n20 5180MHz Ant1



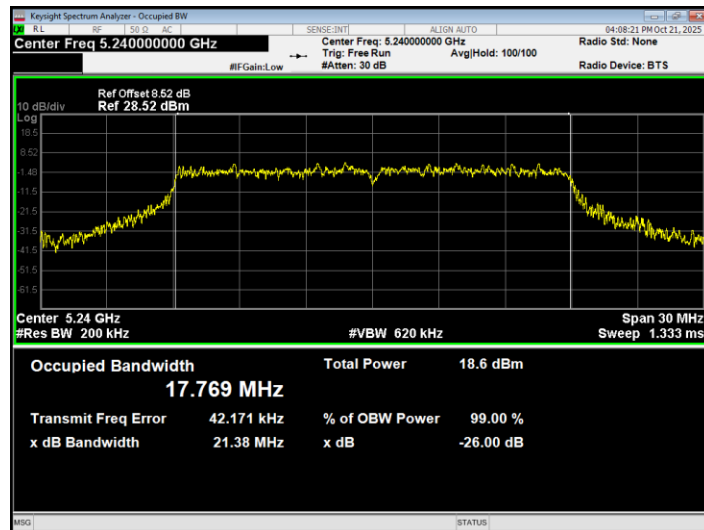


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OBW NVNT n20 5220MHz Ant1



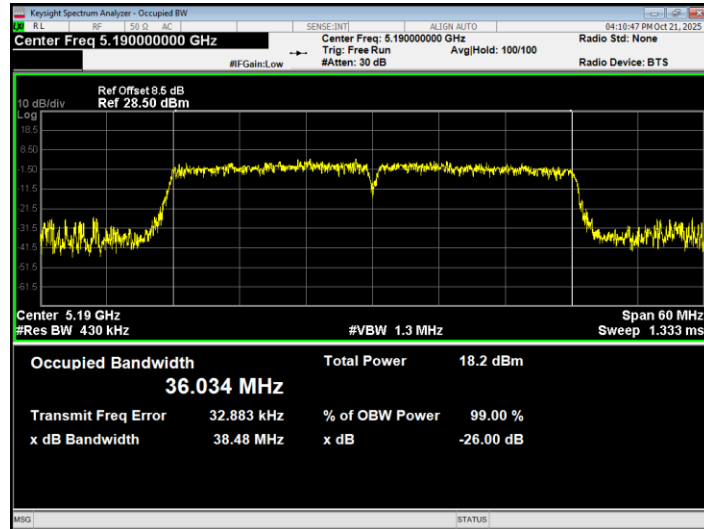
OBW NVNT n20 5240MHz Ant1



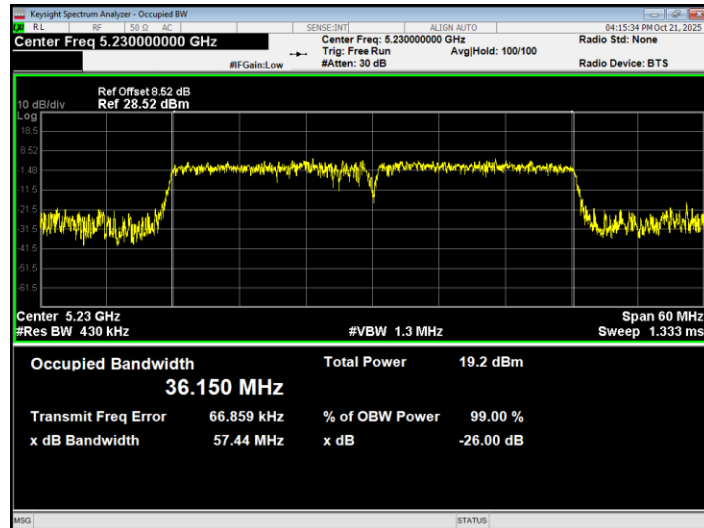


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OBW NVNT n40 5190MHz Ant1



OBW NVNT n40 5230MHz Ant1





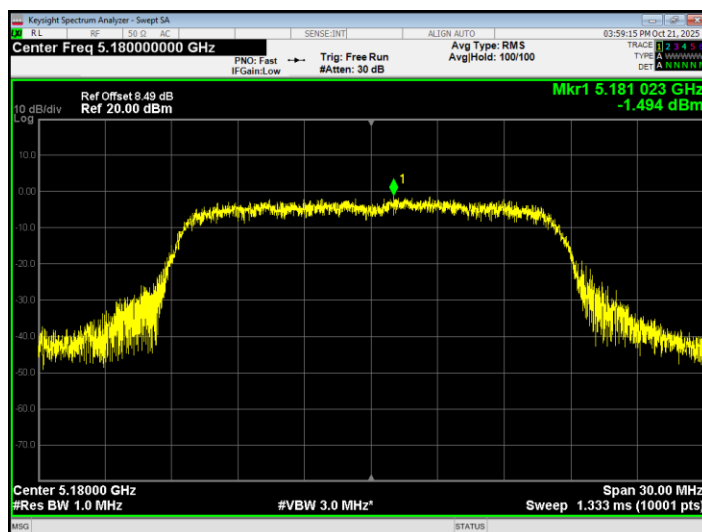
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-1.494	6.99	5.496	11	Pass
NVNT	a	5220	Ant1	-2.691	6.99	4.299	11	Pass
NVNT	a	5240	Ant1	-2.33	6.99	4.66	11	Pass
NVNT	n20	5180	Ant1	-2.201	7.28	5.079	11	Pass
NVNT	n20	5220	Ant1	-2.441	7.44	4.999	11	Pass
NVNT	n20	5240	Ant1	-2.76	7.44	4.68	11	Pass
NVNT	n40	5190	Ant1	-6.076	9.39	3.314	11	Pass
NVNT	n40	5230	Ant1	-4.782	9.39	4.608	11	Pass

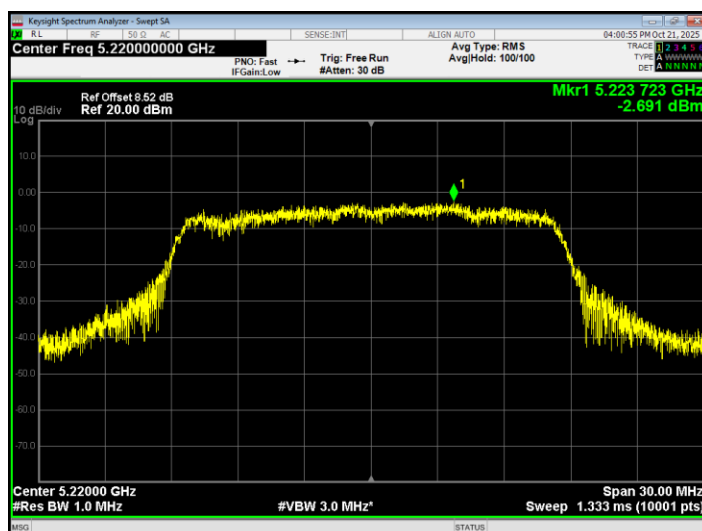


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PSD NVNT a 5180MHz Ant1



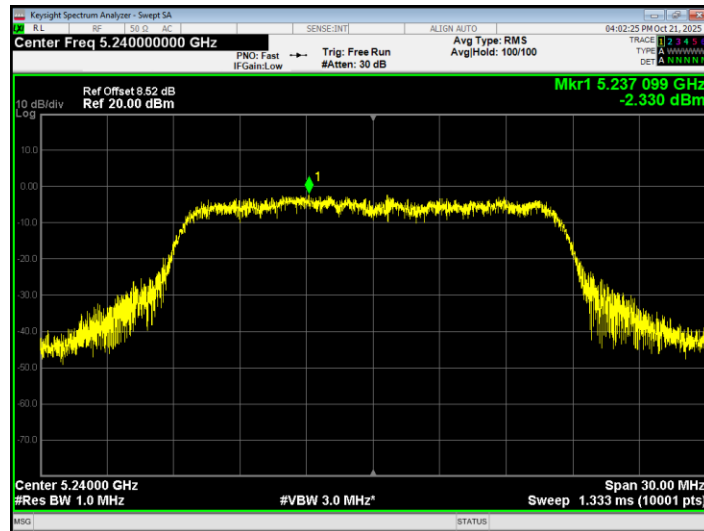
PSD NVNT a 5220MHz Ant1



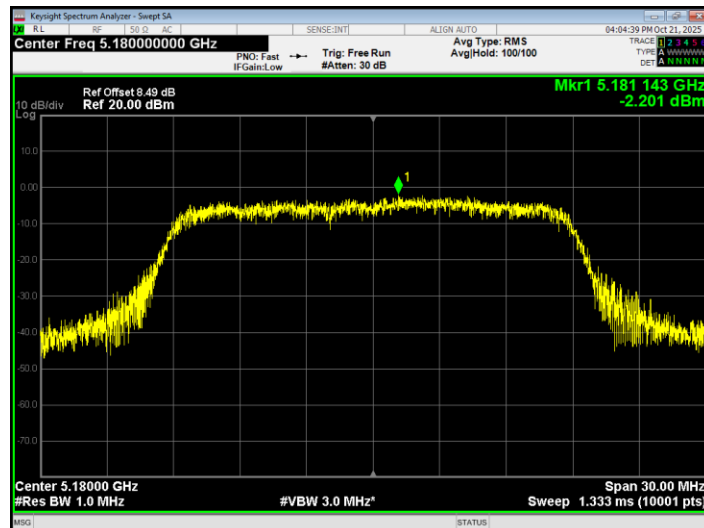


Shenzhen DL Testing Technology Co., Ltd.

PSD NVNT a 5240MHz Ant1



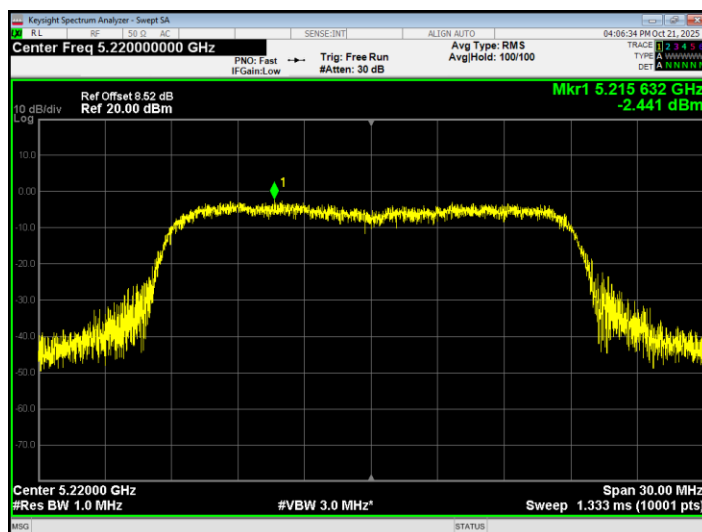
PSD NVNT n20 5180MHz Ant1



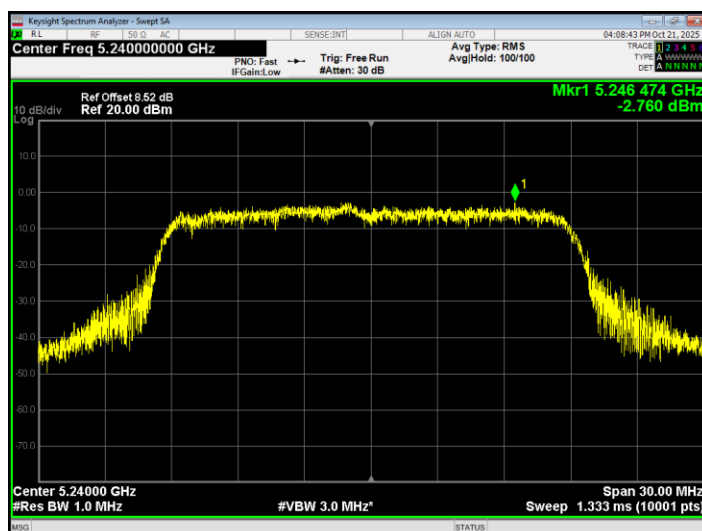


Shenzhen DL Testing Technology Co., Ltd.

PSD NVNT n20 5220MHz Ant1



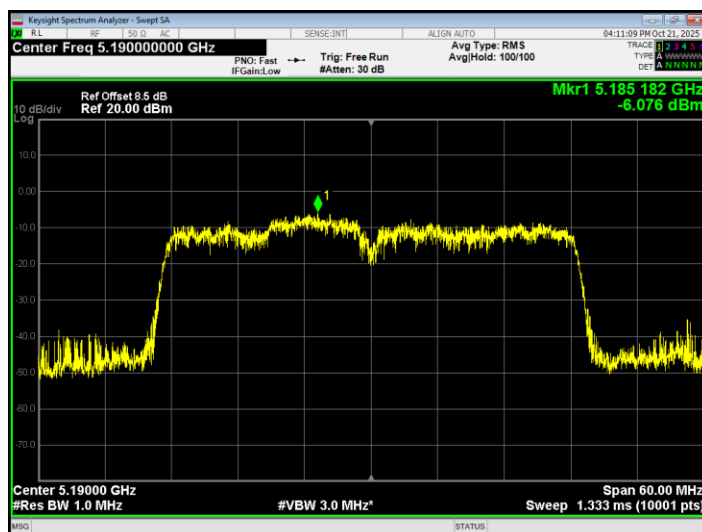
PSD NVNT n20 5240MHz Ant1





Shenzhen DL Testing Technology Co., Ltd.

PSD NVNT n40 5190MHz Ant1



PSD NVNT n40 5230MHz Ant1

