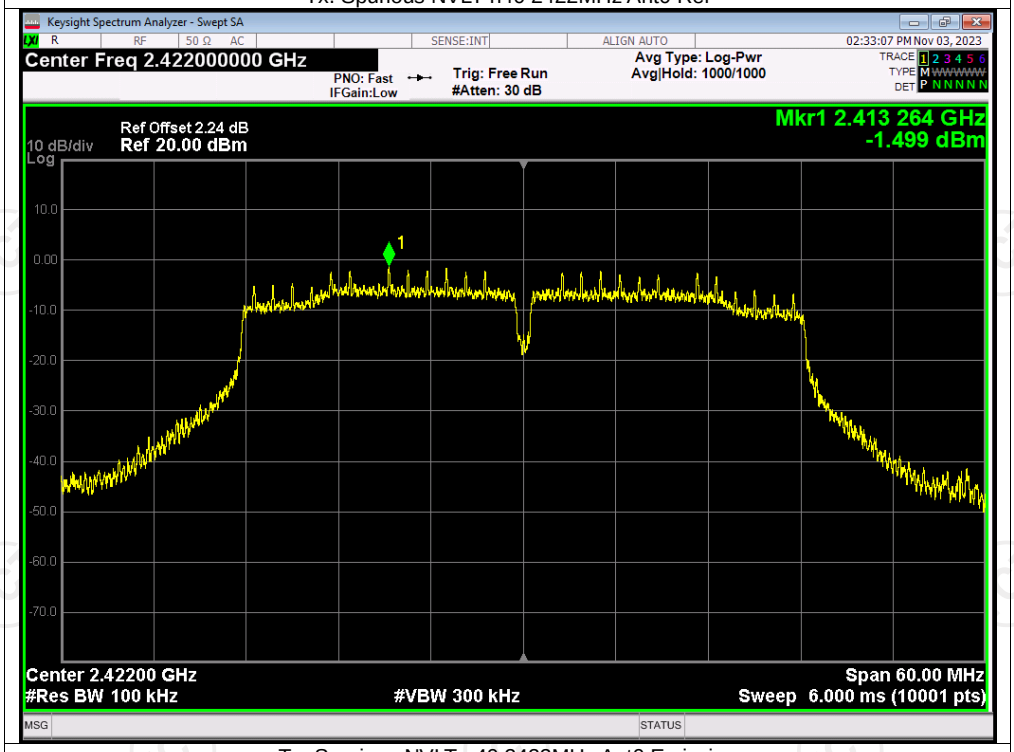
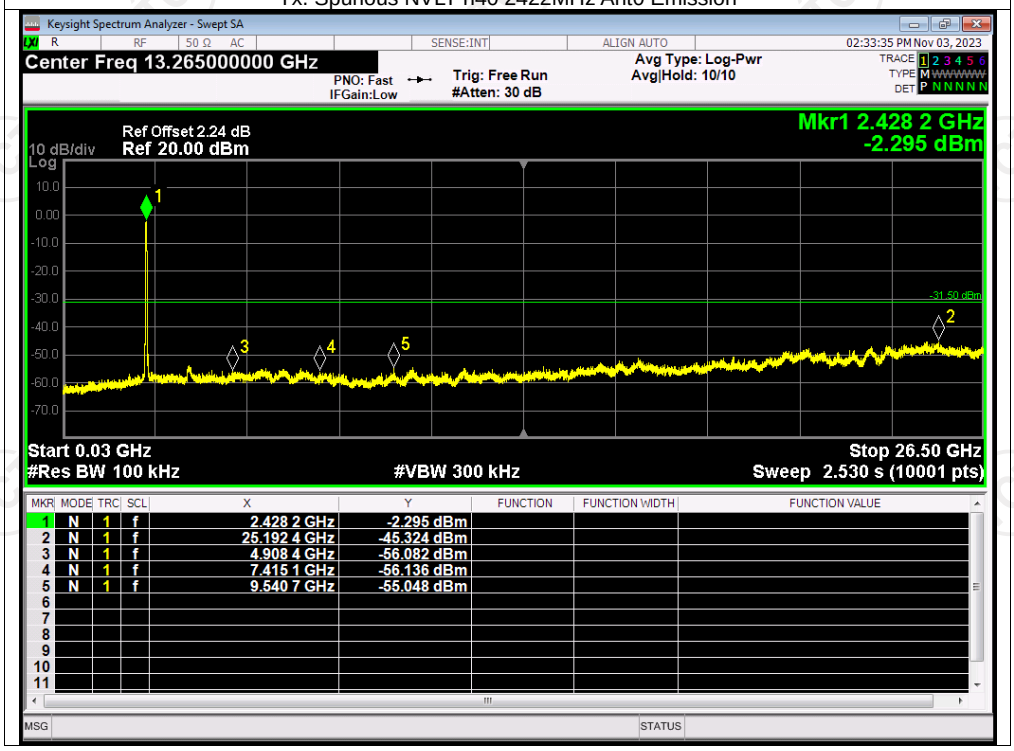
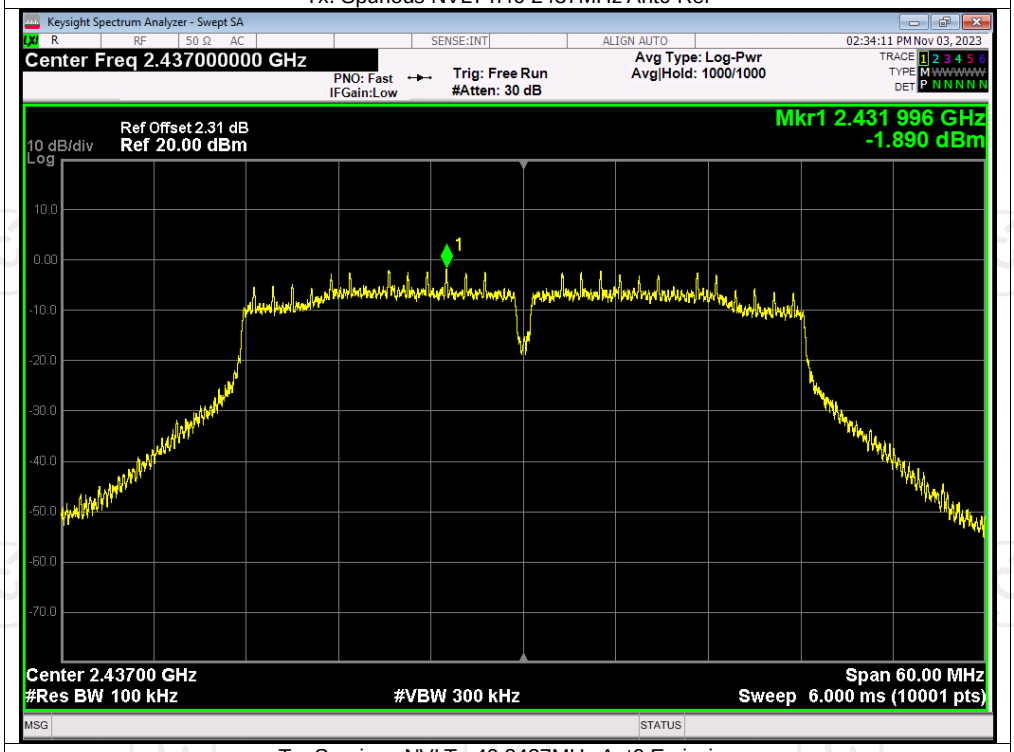
Tx. Spurious NVLT n40 2422MHz Ant0 Ref



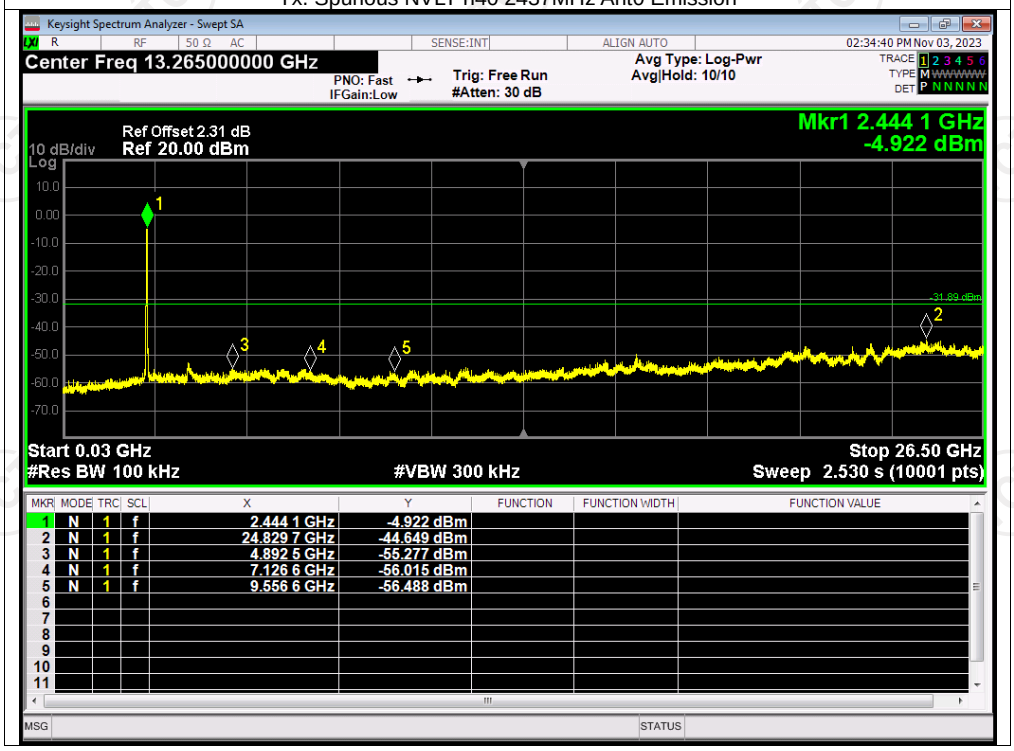
Tx. Spurious NVLT n40 2422MHz Ant0 Emission



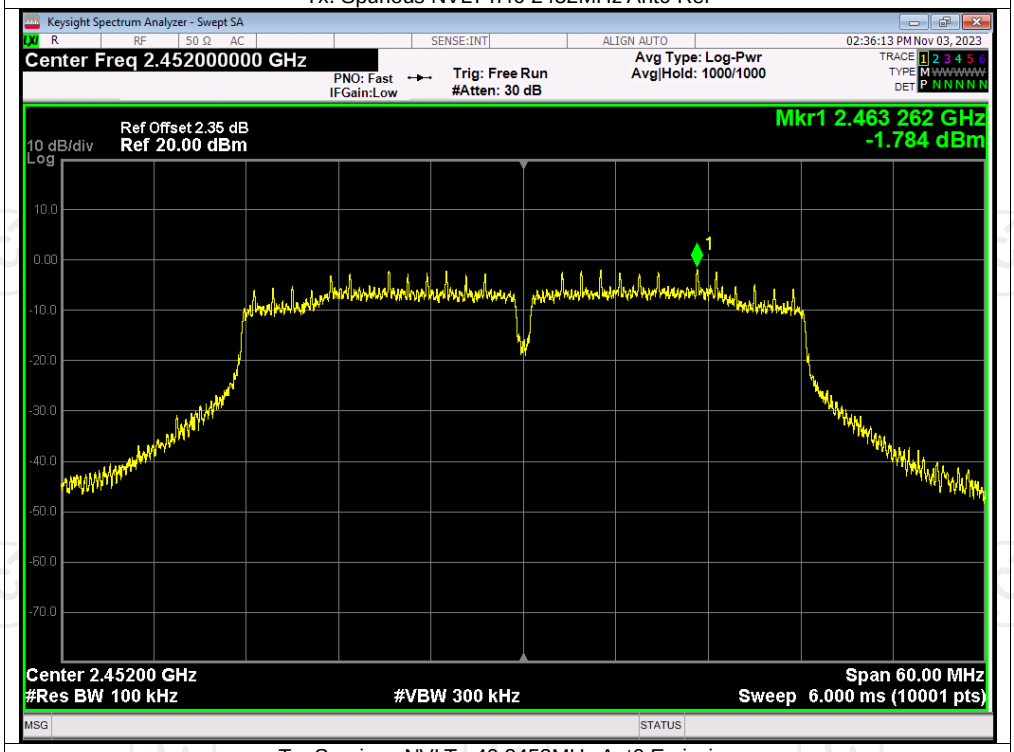
Tx. Spurious NVLT n40 2437MHz Ant0 Ref



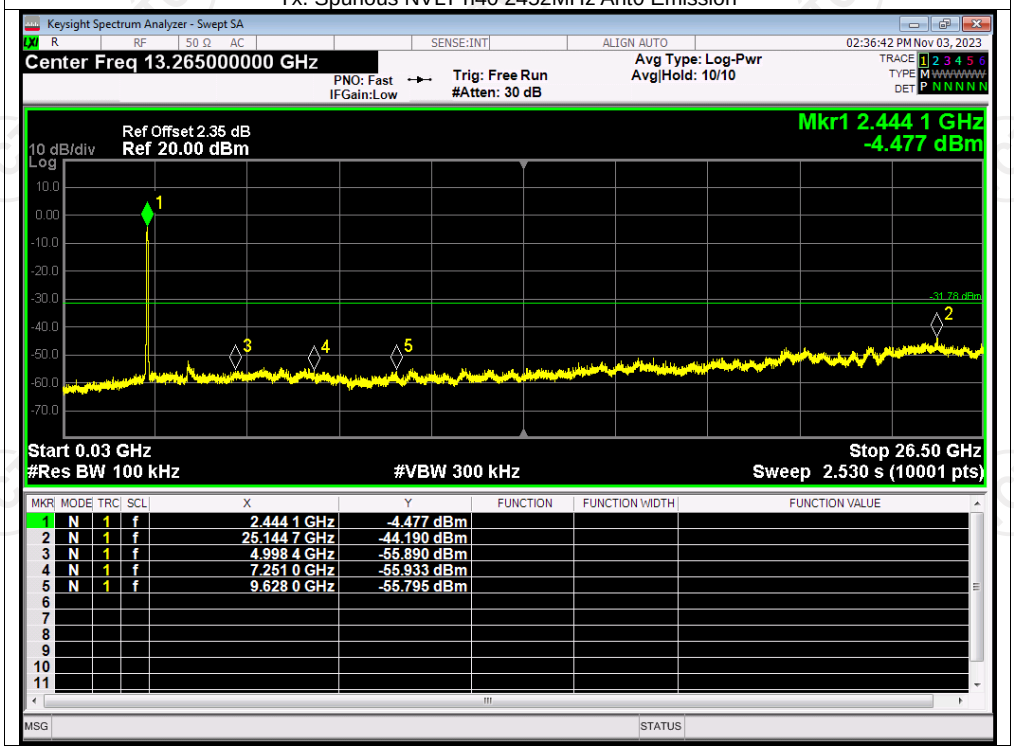
Tx. Spurious NVLT n40 2437MHz Ant0 Emission



Tx. Spurious NVLT n40 2452MHz Ant0 Ref



Tx. Spurious NVLT n40 2452MHz Ant0 Emission



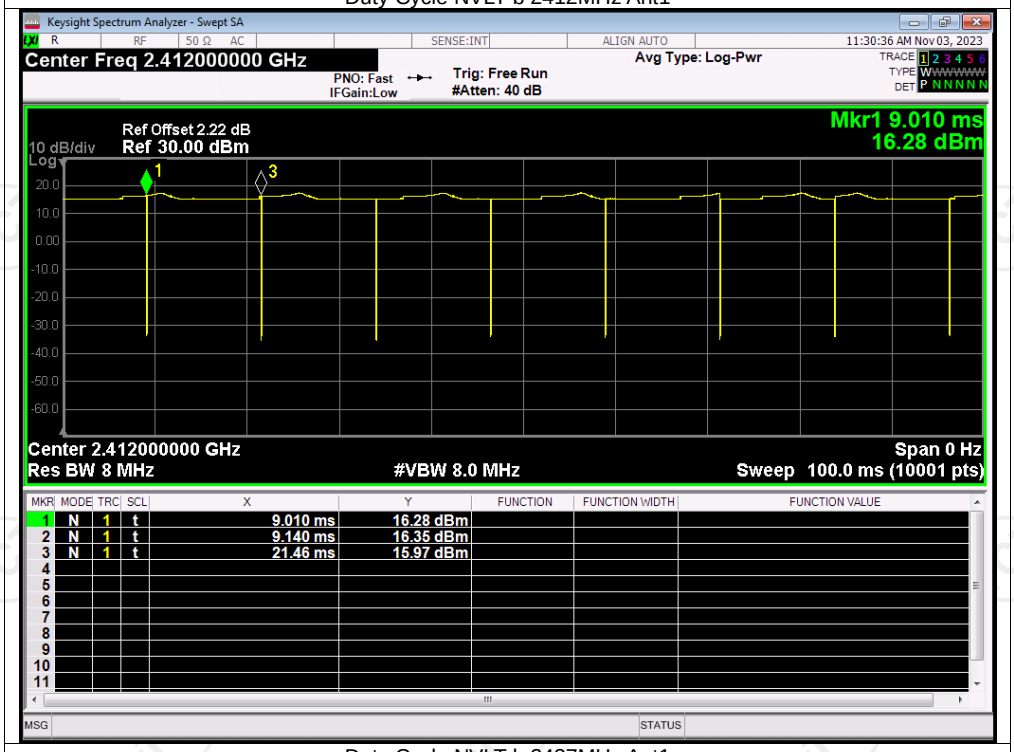
Antenna 1

Duty Cycle

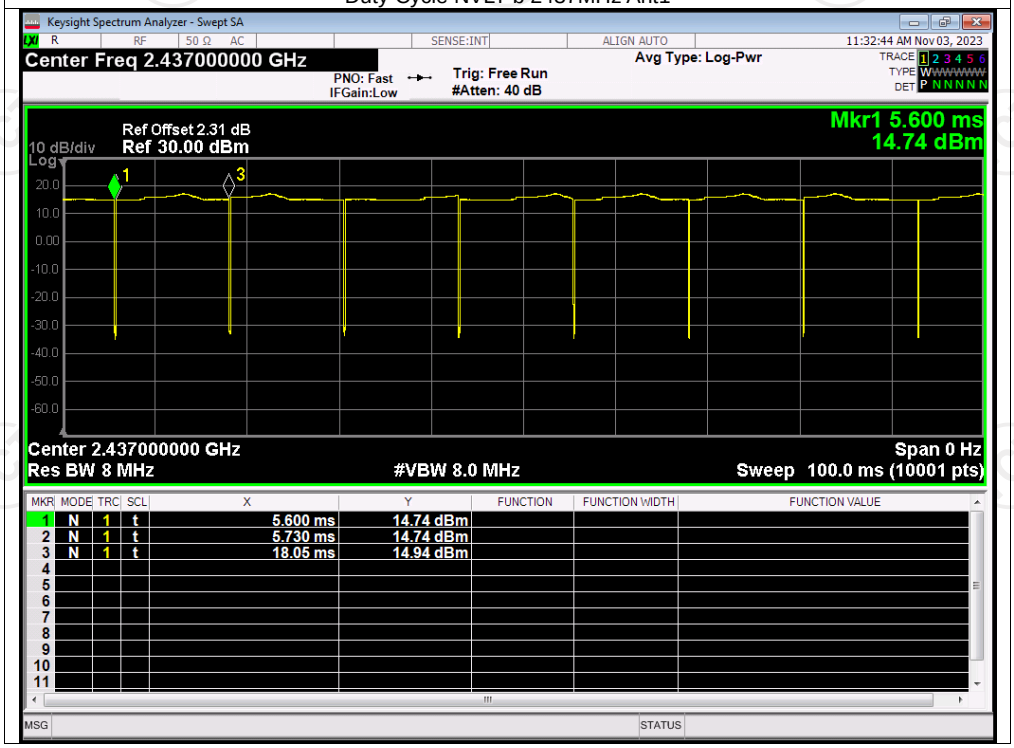
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	b	2412	Ant1	99.04	0
NVNT	b	2437	Ant1	99.04	0
NVNT	b	2462	Ant1	99.04	0
NVNT	g	2412	Ant1	98.37	0
NVNT	g	2437	Ant1	98.41	0
NVNT	g	2462	Ant1	98.43	0
NVNT	n20	2412	Ant1	98.31	0
NVNT	n20	2437	Ant1	98.32	0
NVNT	n20	2462	Ant1	98.24	0
NVNT	n40	2422	Ant1	96.94	0.13
NVNT	n40	2437	Ant1	96.94	0.13
NVNT	n40	2452	Ant1	96.94	0.13

Test Graphs

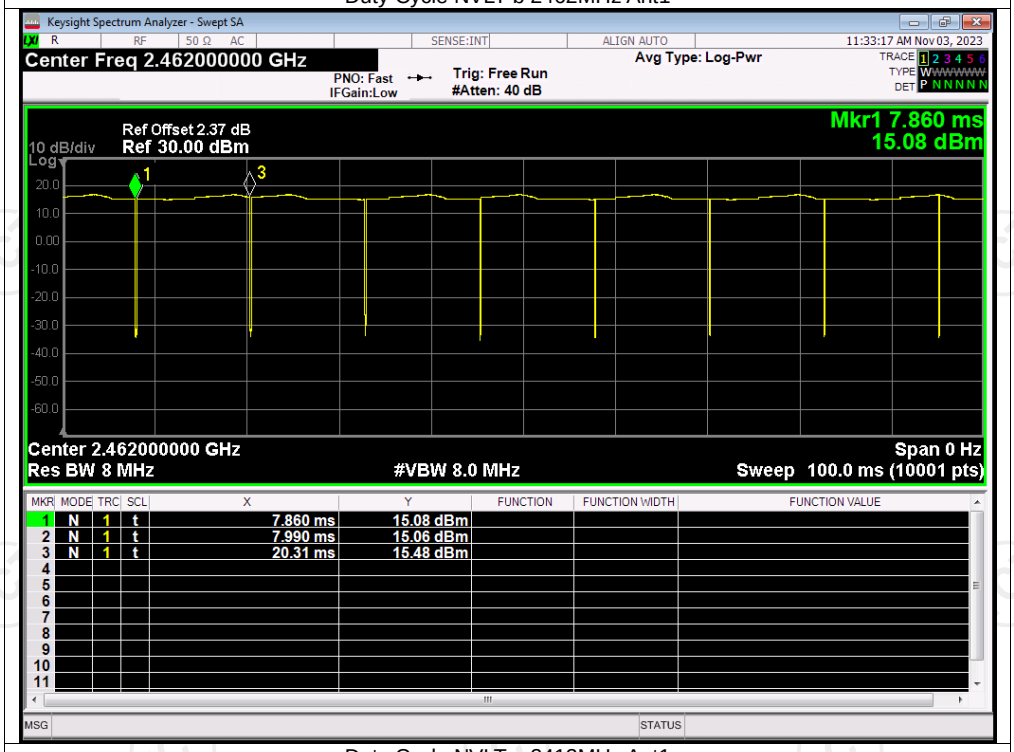
Duty Cycle NVLT b 2412MHz Ant1



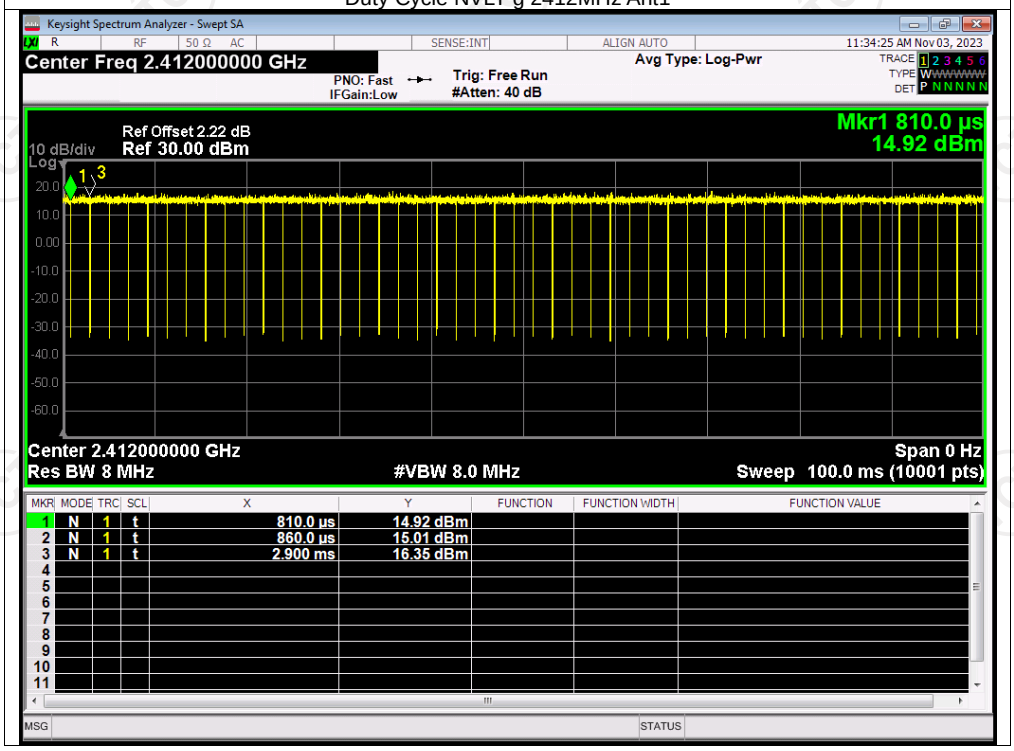
Duty Cycle NVLT b 2437MHz Ant1



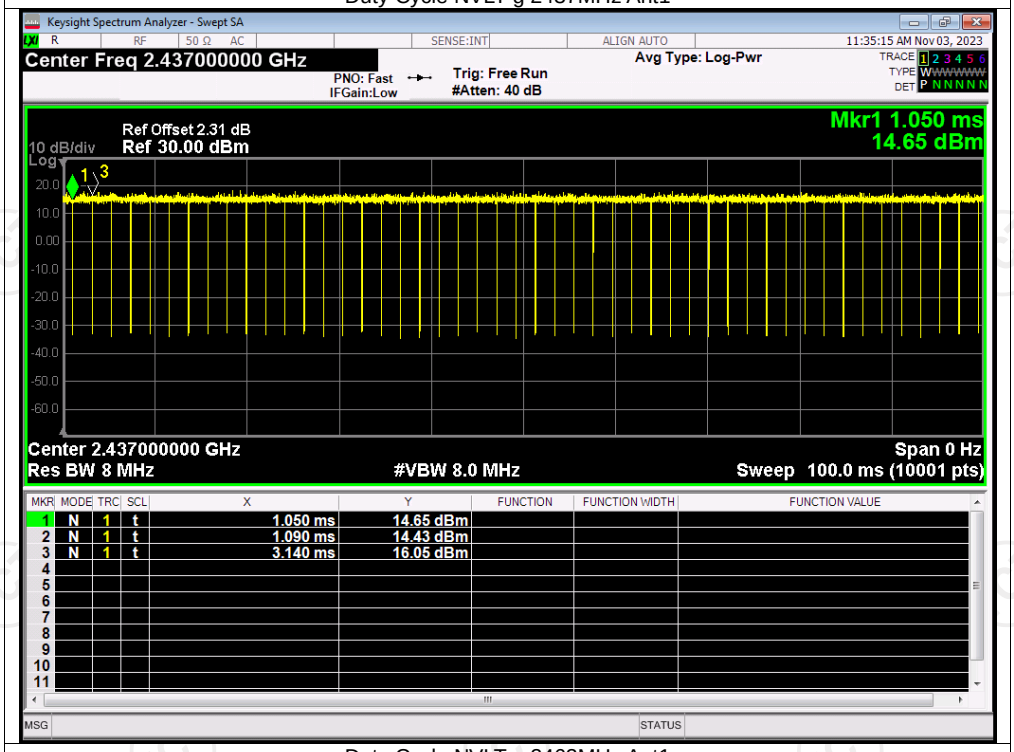
Duty Cycle NVLT b 2462MHz Ant1



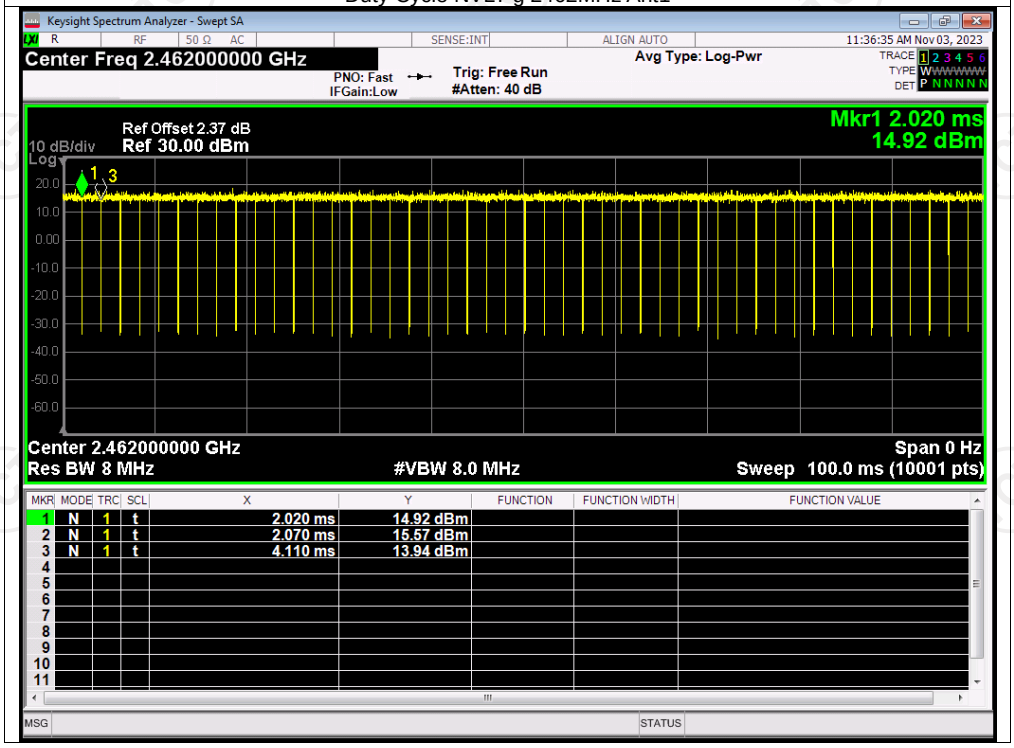
Duty Cycle NVLT g 2412MHz Ant1



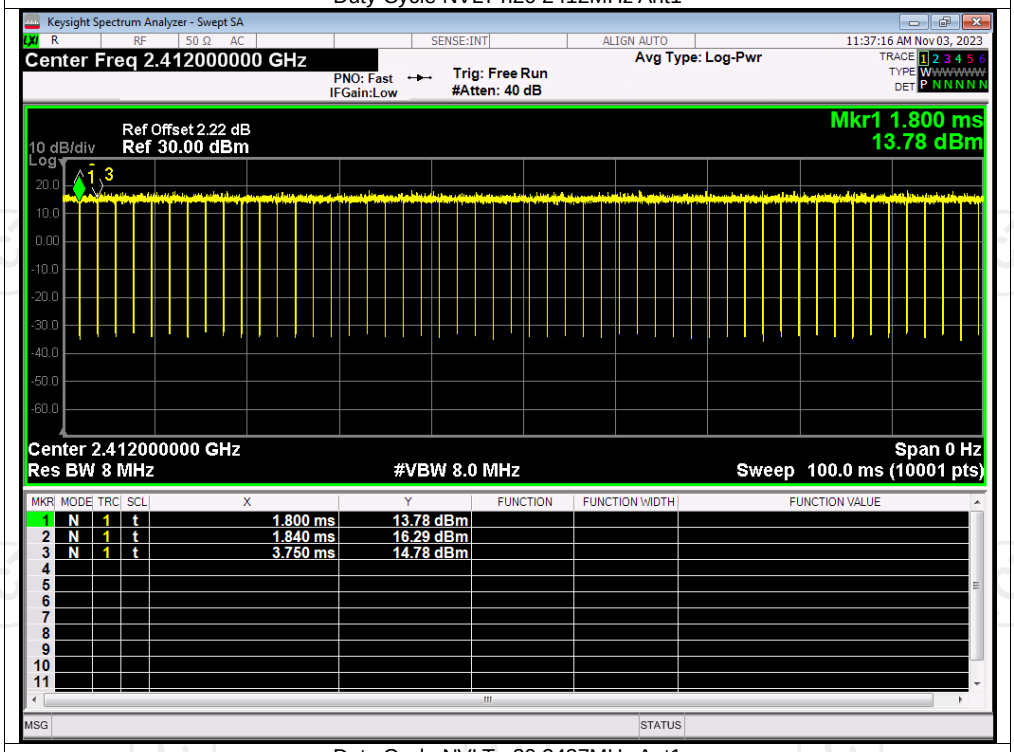
Duty Cycle NVLT g 2437MHz Ant1



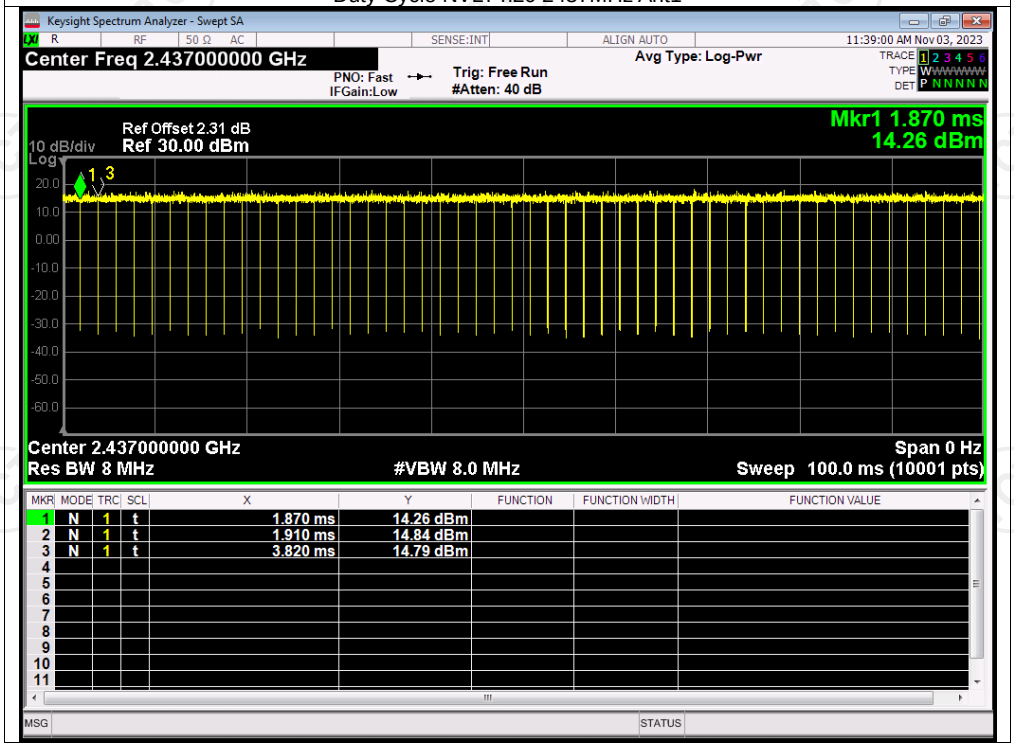
Duty Cycle NVLT g 2462MHz Ant1



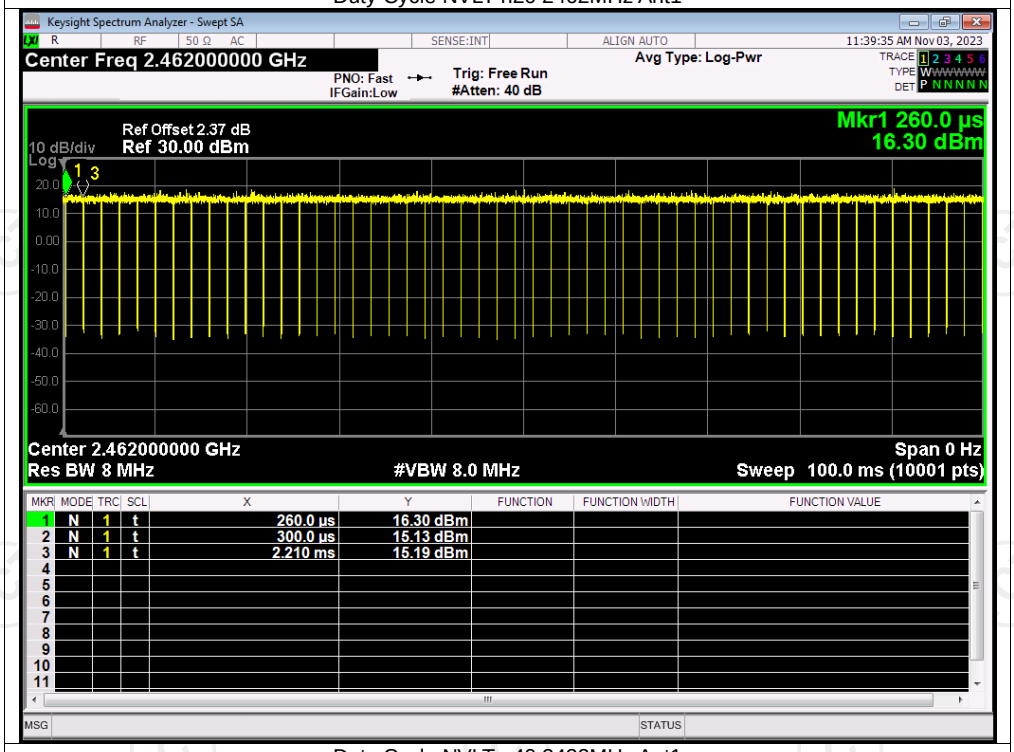
Duty Cycle NVLT n20 2412MHz Ant1



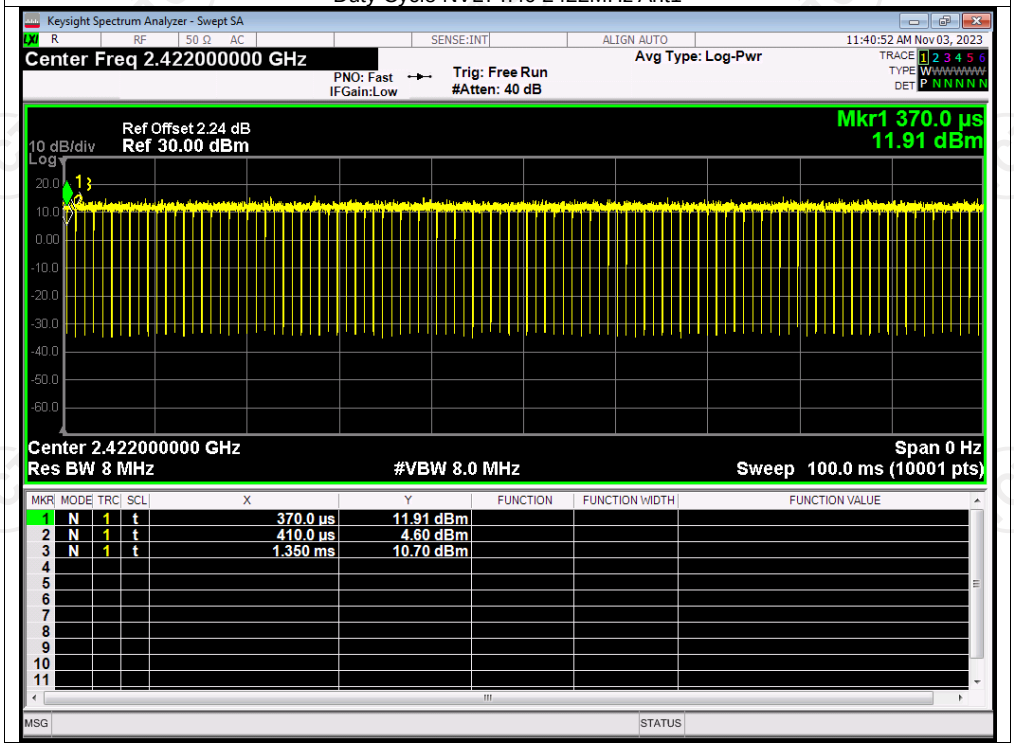
Duty Cycle NVLT n20 2437MHz Ant1



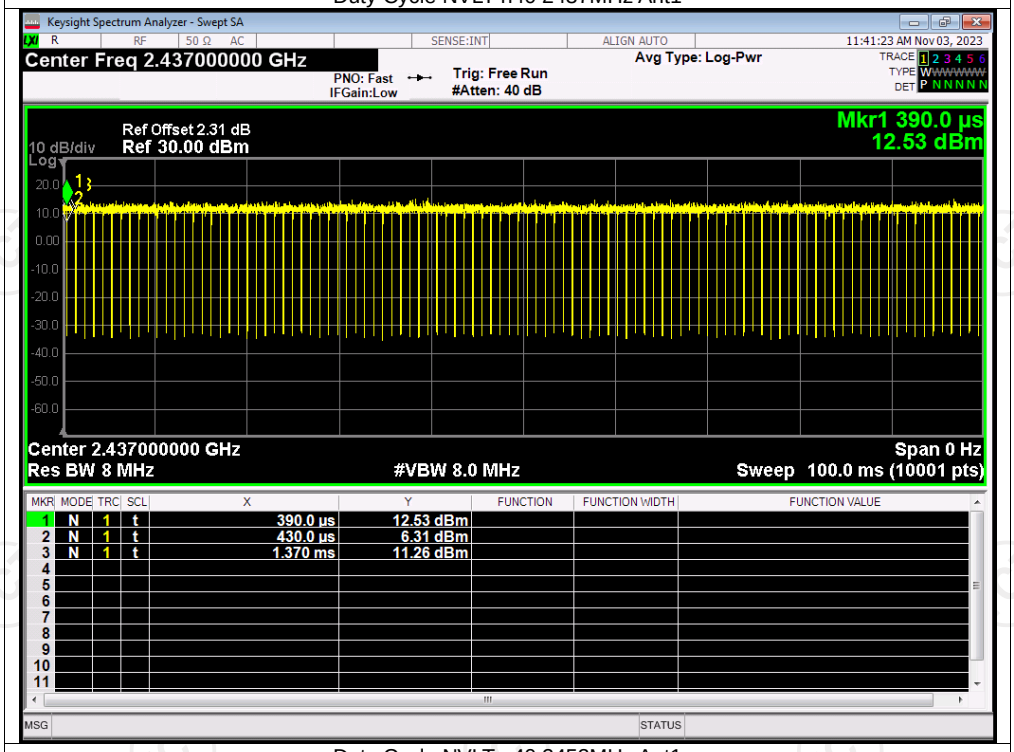
Duty Cycle NVLT n20 2462MHz Ant1



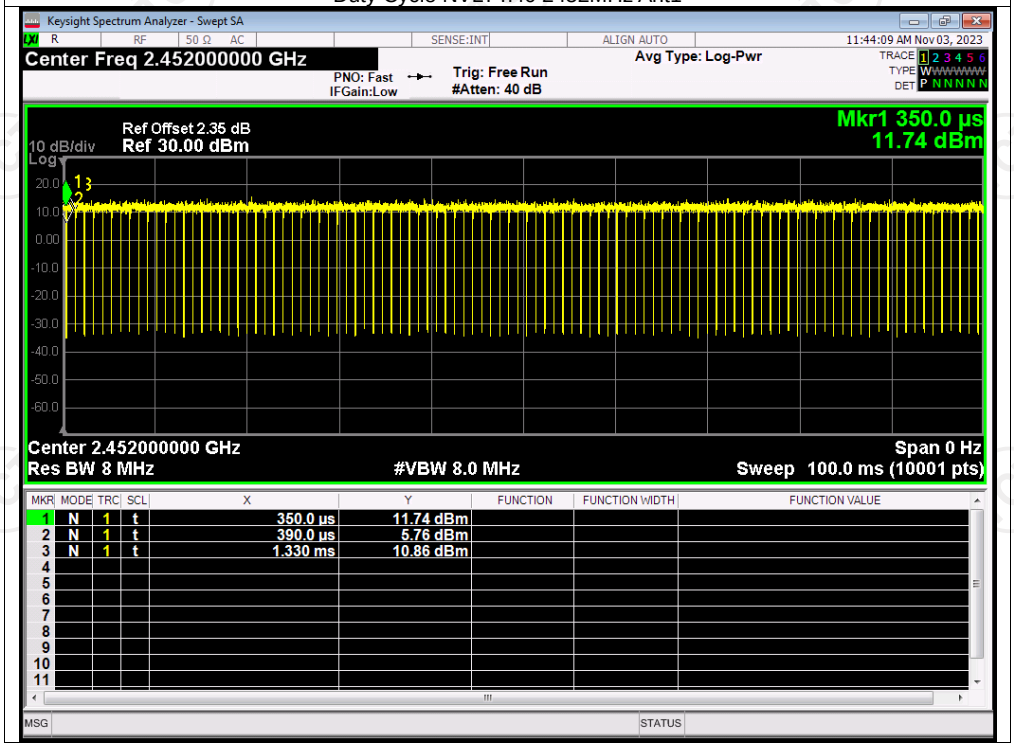
Duty Cycle NVLT n40 2422MHz Ant1



Duty Cycle NVLT n40 2437MHz Ant1



Duty Cycle NVLT n40 2452MHz Ant1

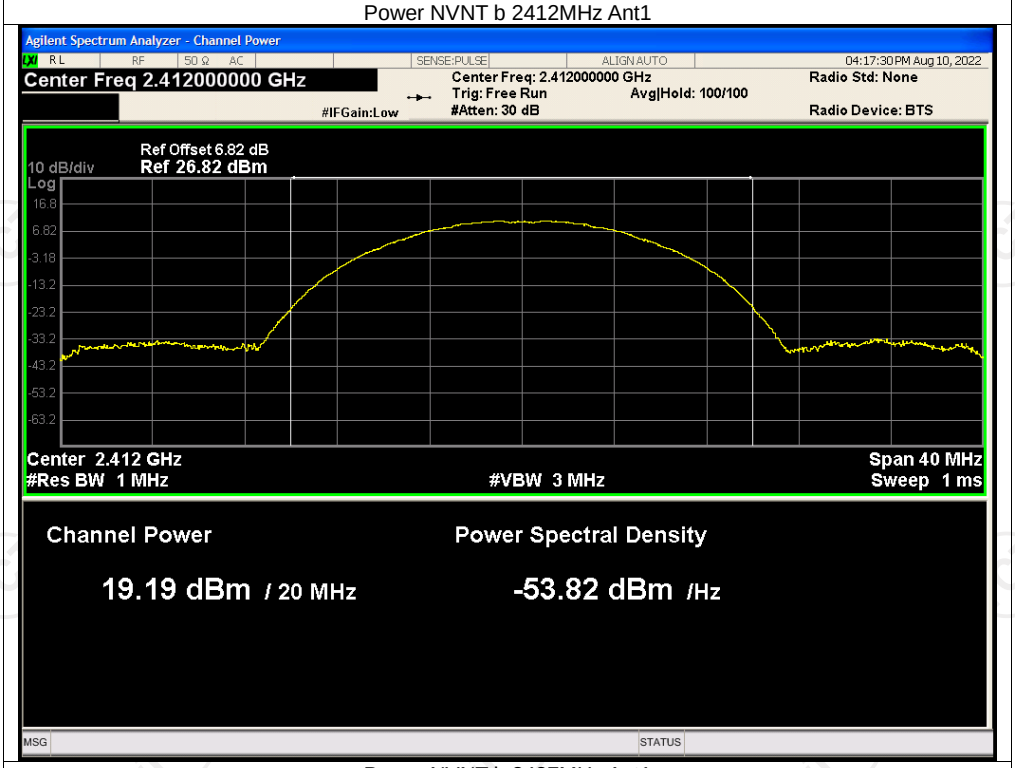


Maximum Conducted Output Power

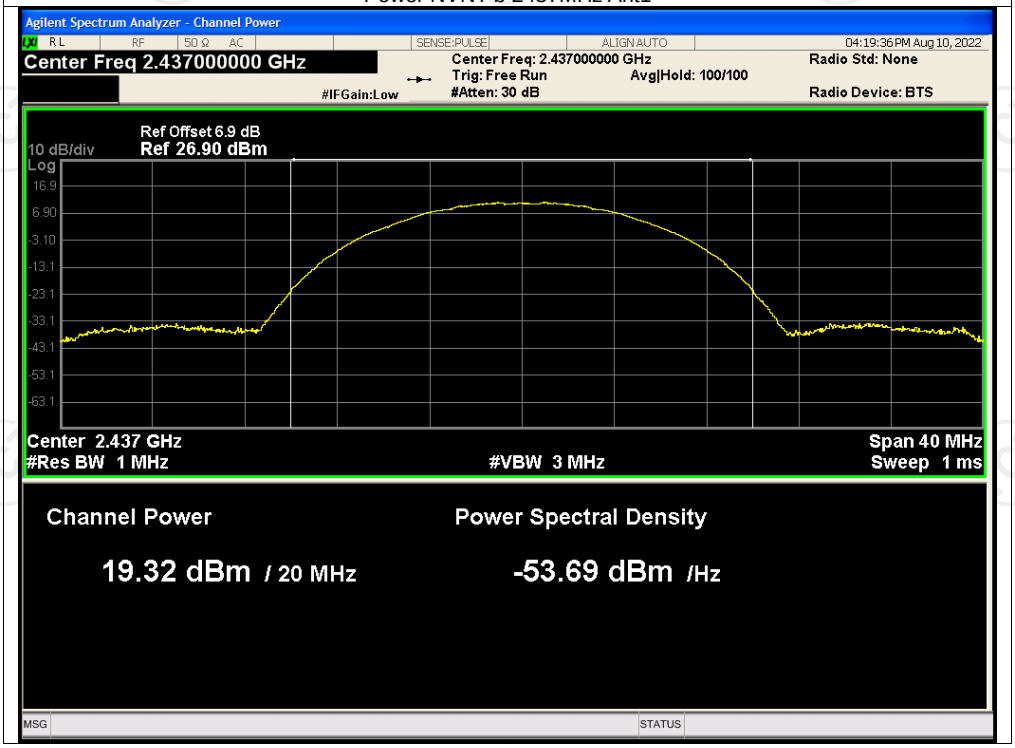
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	19.19	0	19.19	30	Pass
NVNT	b	2437	Ant1	19.32	0	19.32	30	Pass
NVNT	b	2462	Ant1	19.32	0	19.32	30	Pass
NVNT	g	2412	Ant1	13.47	0	13.47	30	Pass
NVNT	g	2437	Ant1	13.28	0	13.28	30	Pass
NVNT	g	2462	Ant1	13.65	0	13.65	30	Pass
NVNT	n20	2412	Ant1	13.42	0	13.42	30	Pass
NVNT	n20	2437	Ant1	13.10	0	13.10	30	Pass
NVNT	n20	2462	Ant1	13.39	0	13.39	30	Pass
NVNT	n40	2422	Ant1	12.36	0.13	12.49	30	Pass
NVNT	n40	2437	Ant1	12.26	0.13	12.39	30	Pass
NVNT	n40	2452	Ant1	12.45	0.13	12.58	30	Pass

Test Graphs

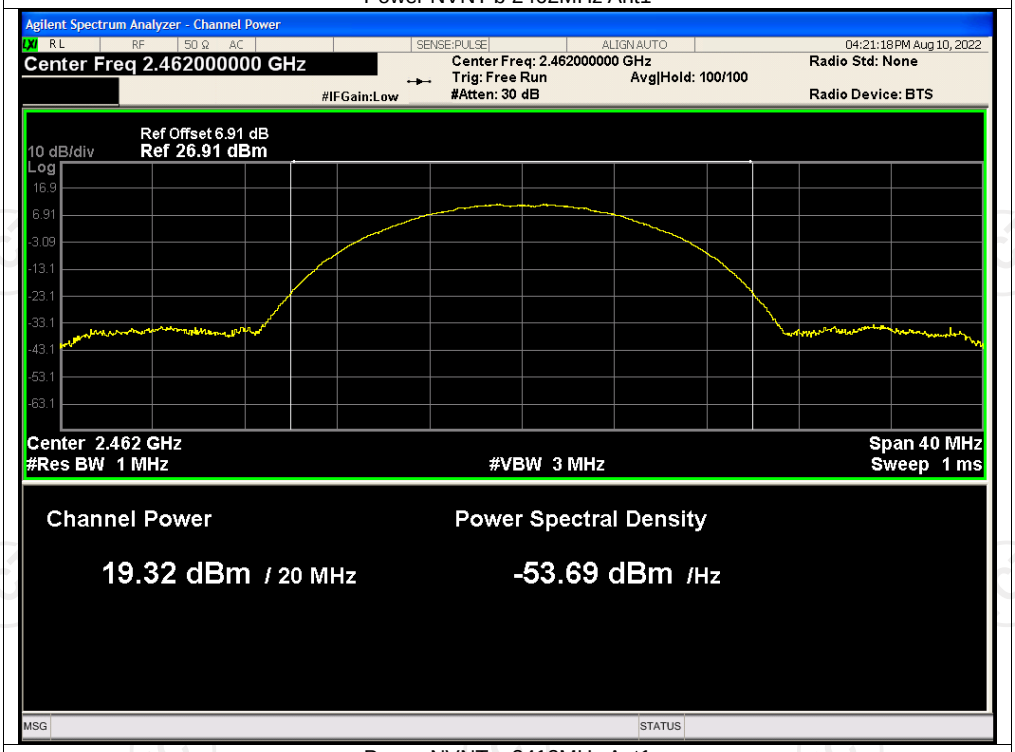
Power NVNT b 2412MHz Ant1



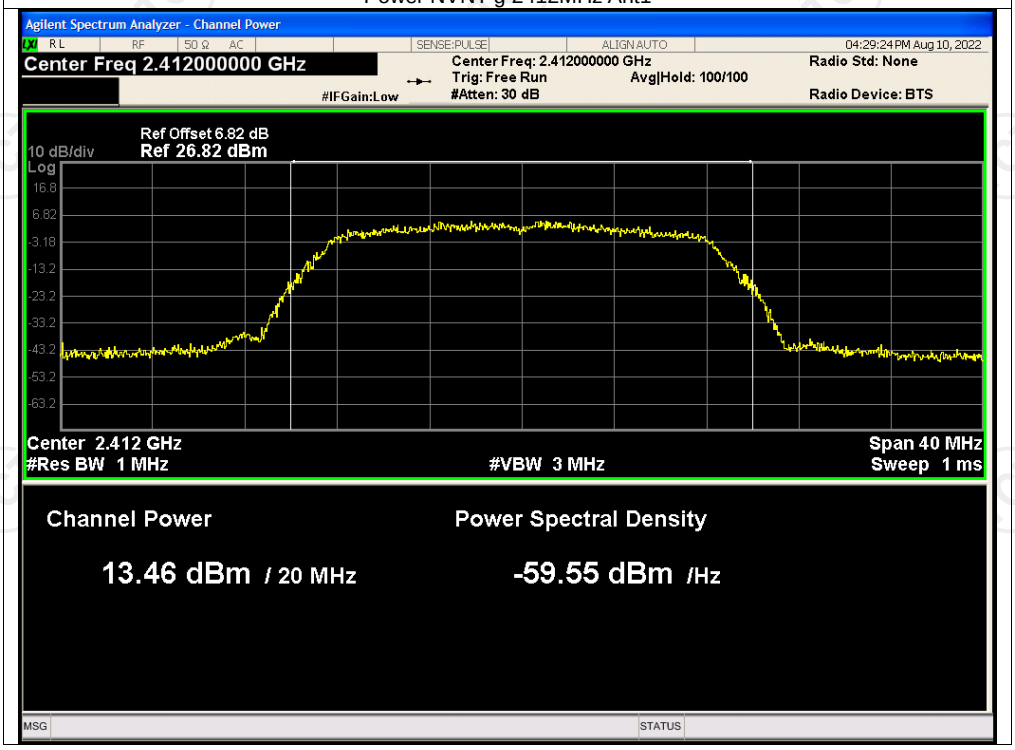
Power NVNT b 2437MHz Ant1



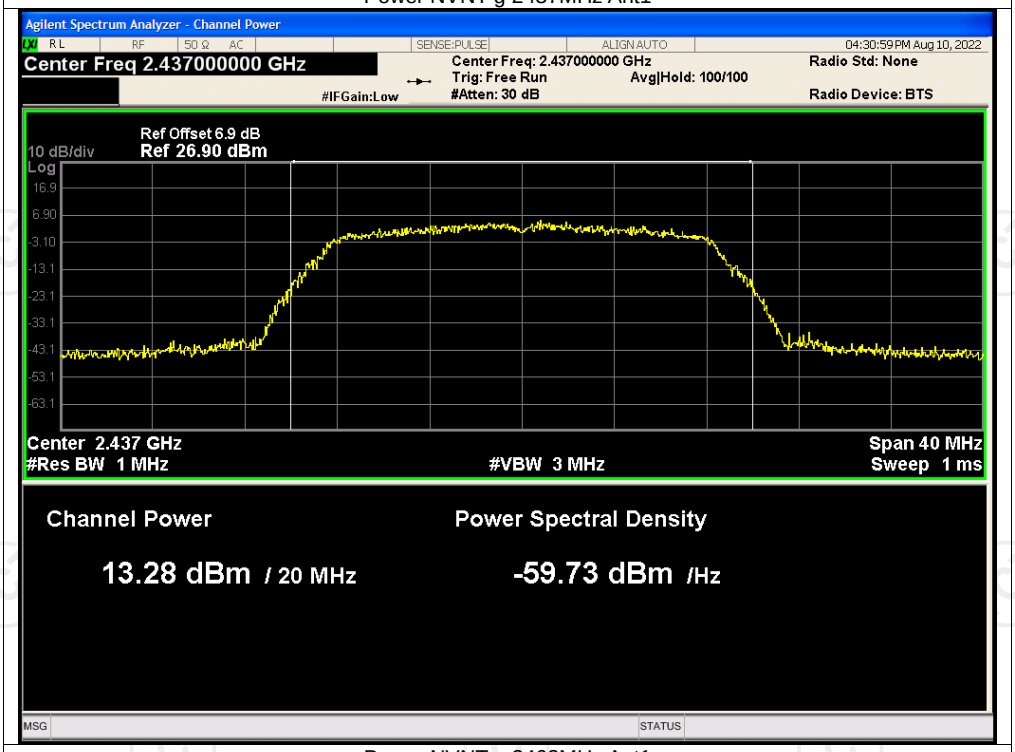
Power NVNT b 2462MHz Ant1



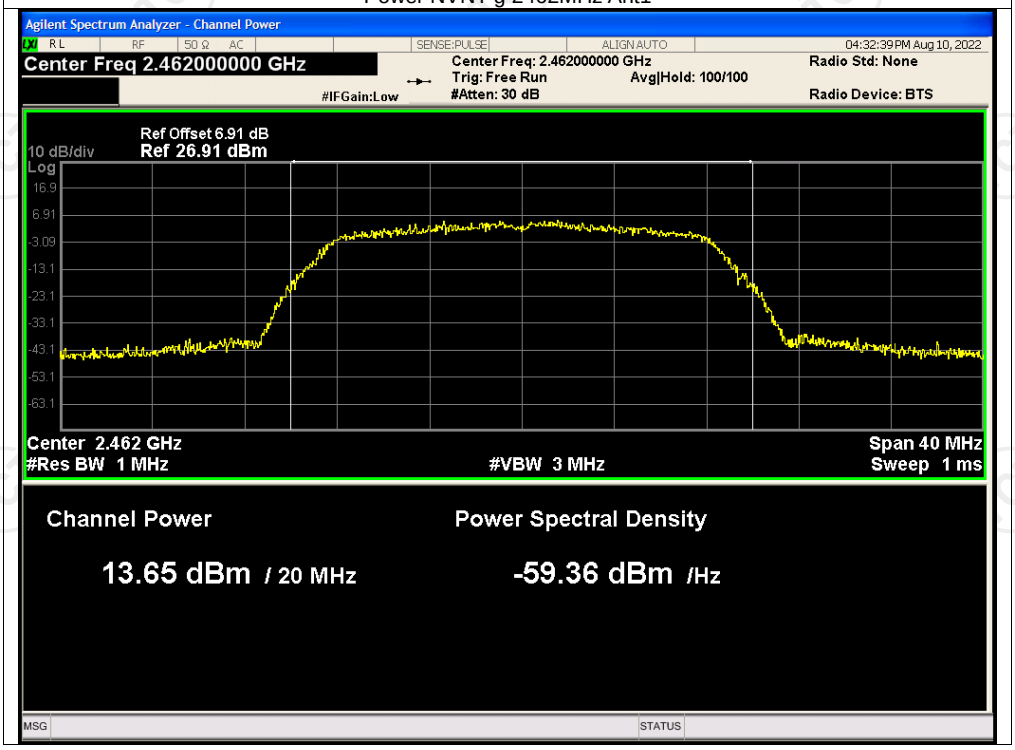
Power NVNT g 2412MHz Ant1



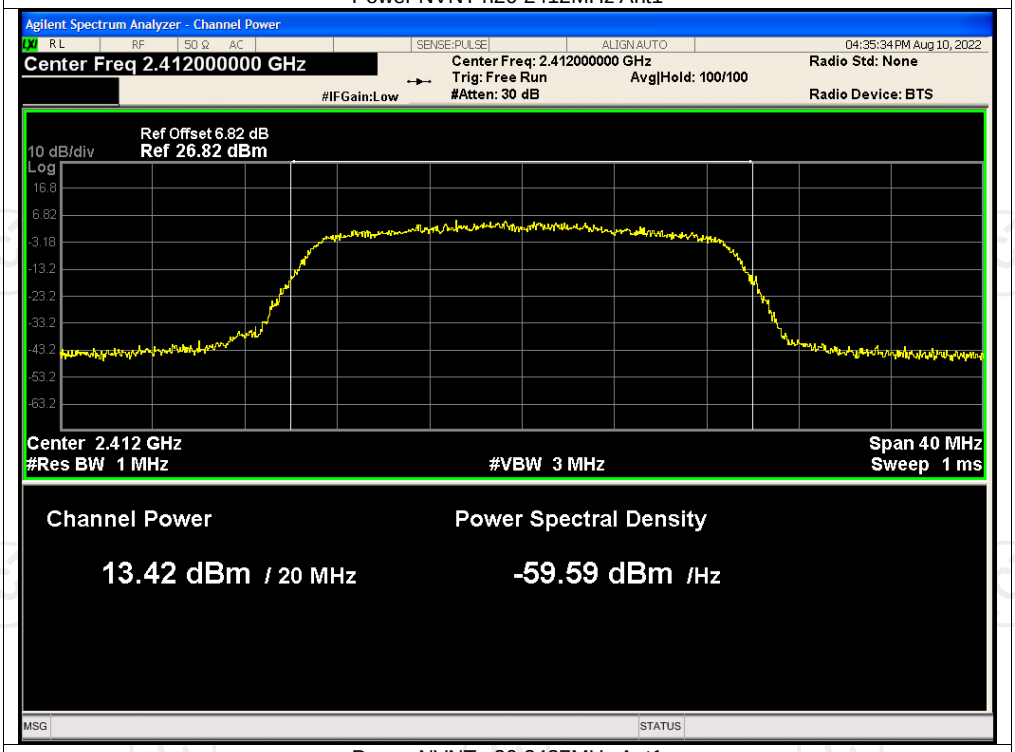
Power NVNT g 2437MHz Ant1



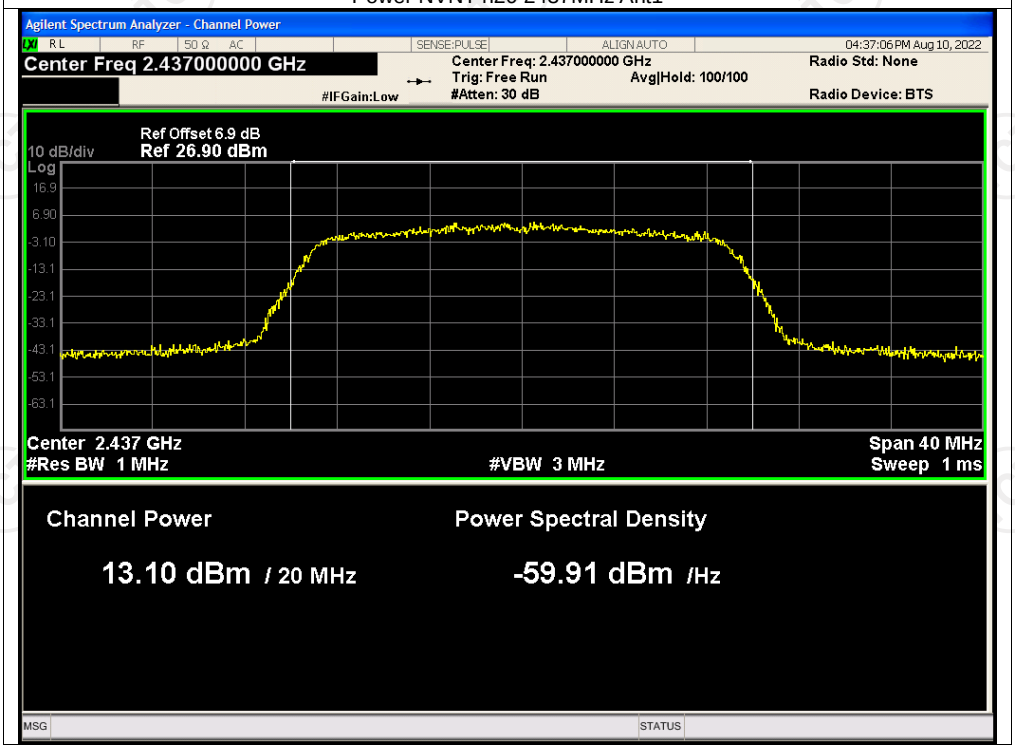
Power NVNT g 2462MHz Ant1



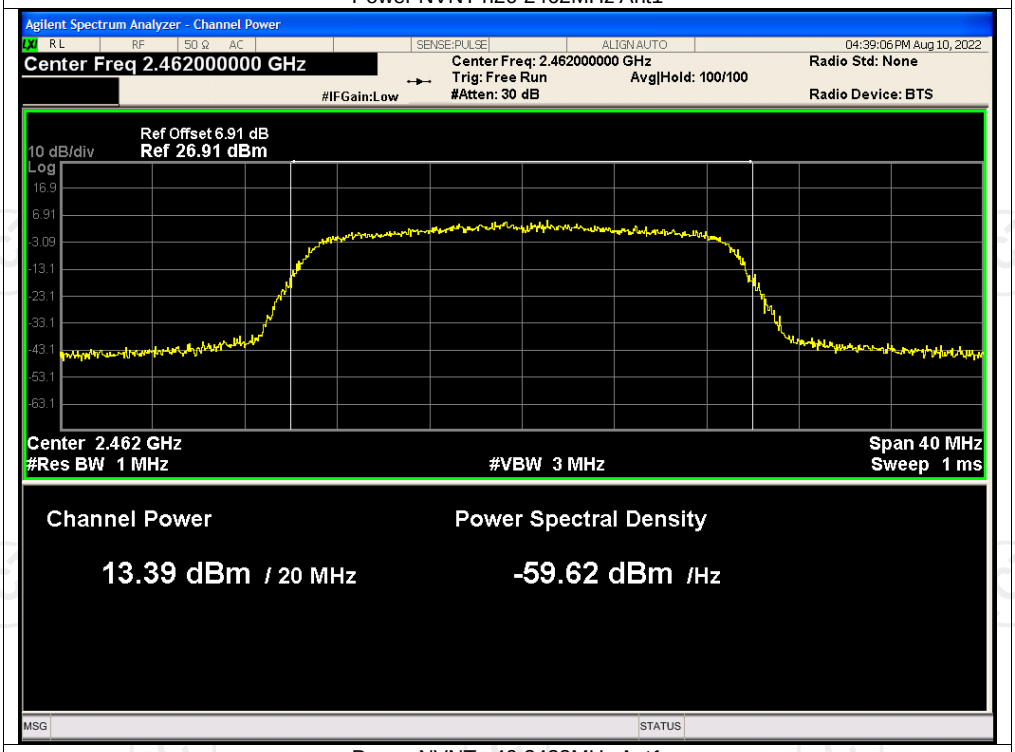
Power NVNT n20 2412MHz Ant1



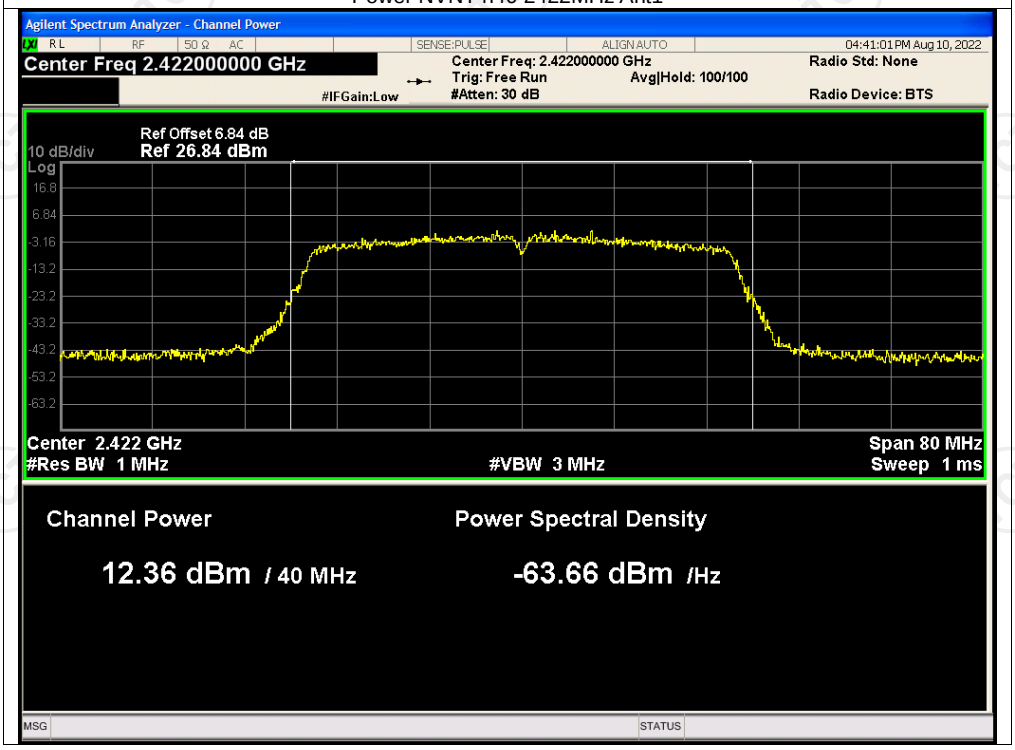
Power NVNT n20 2437MHz Ant1



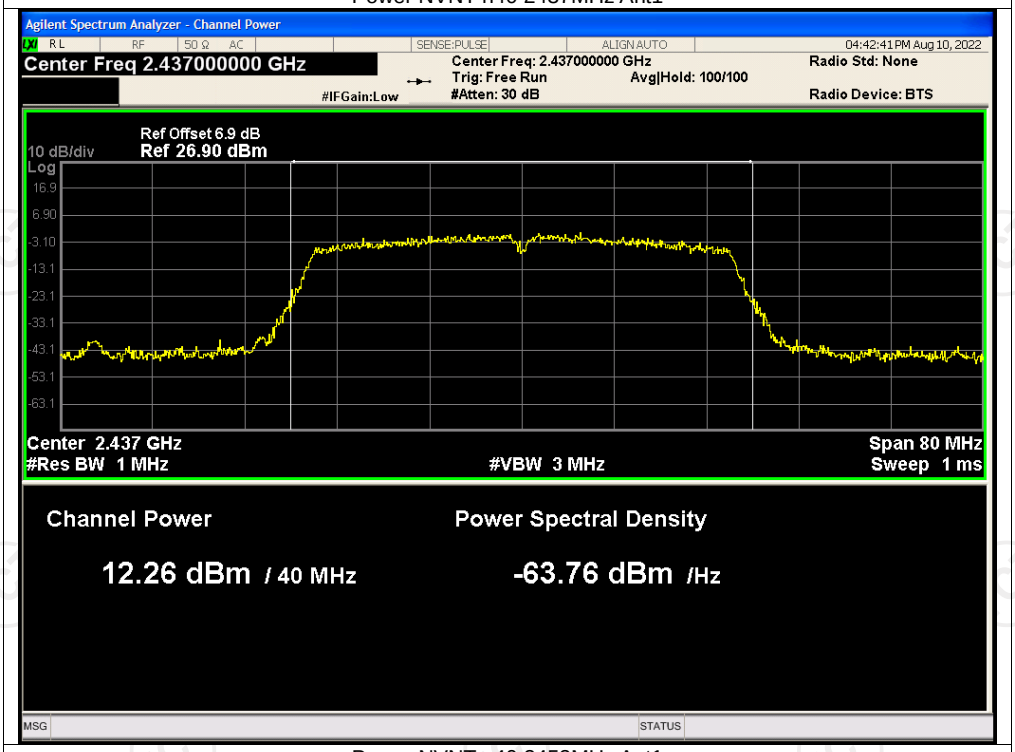
Power NVNT n20 2462MHz Ant1



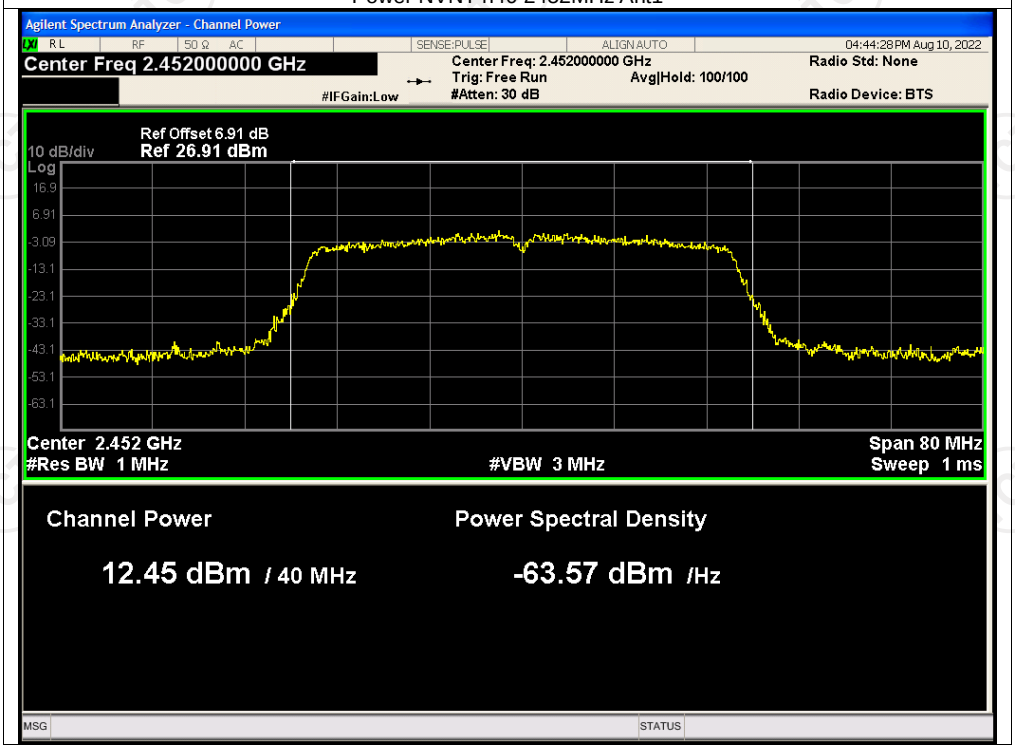
Power NVNT n40 2422MHz Ant1



Power NVNT n40 2437MHz Ant1



Power NVNT n40 2452MHz Ant1

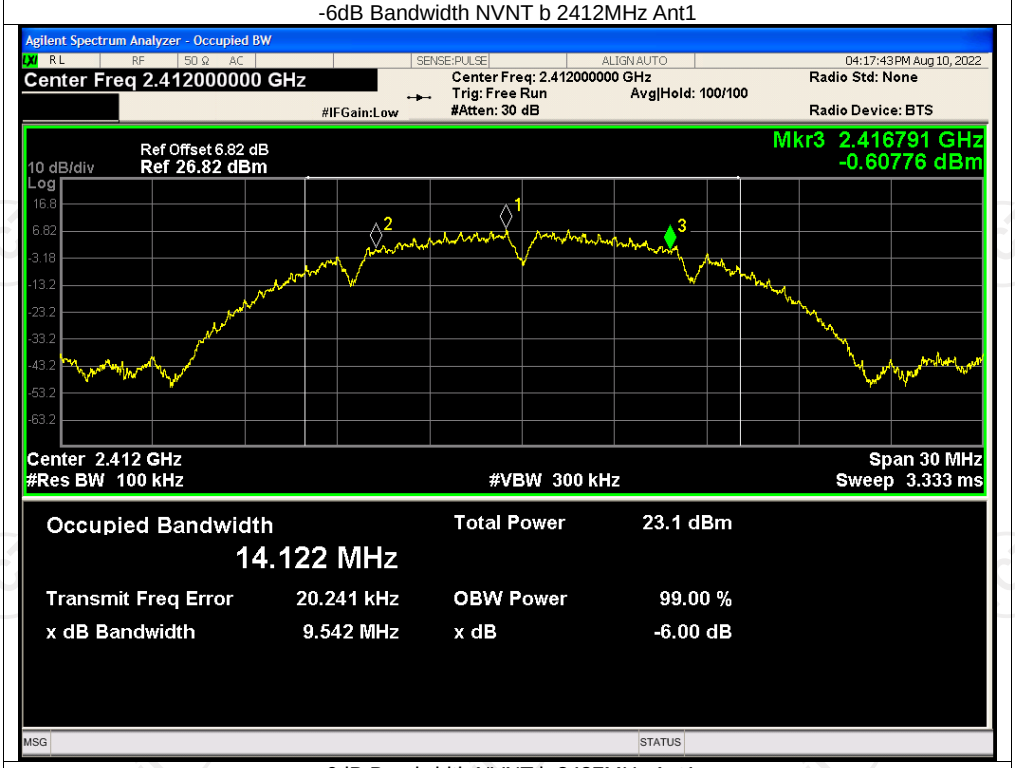


-6dB Bandwidth

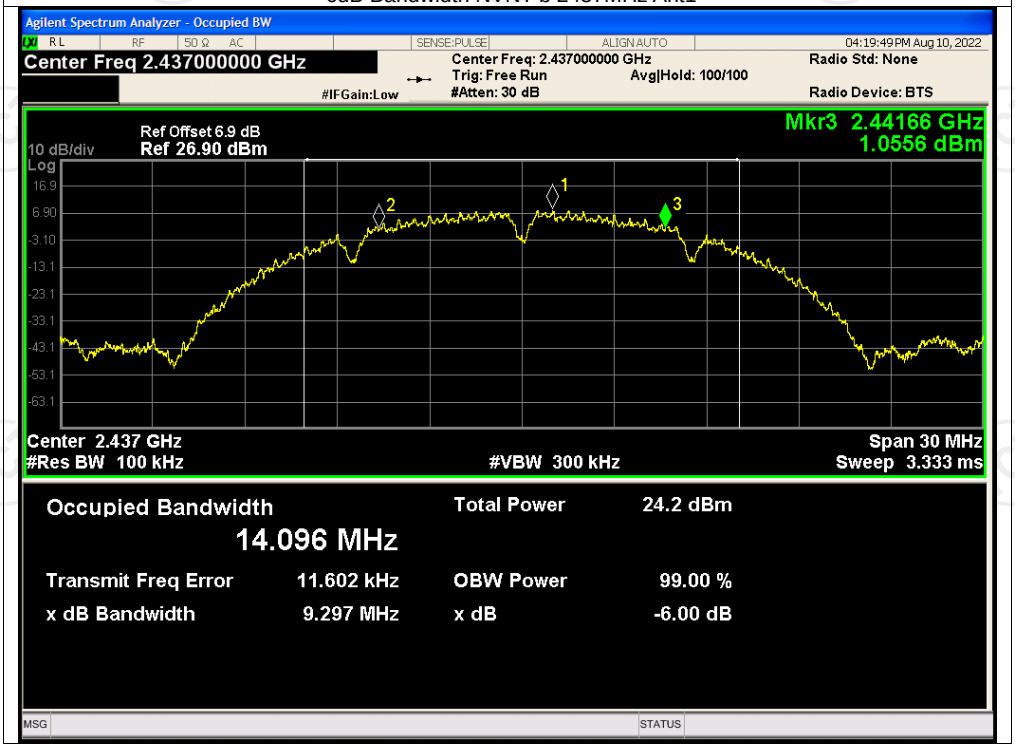
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	9.542	0.5	Pass
NVNT	b	2437	Ant1	9.297	0.5	Pass
NVNT	b	2462	Ant1	9.063	0.5	Pass
NVNT	g	2412	Ant1	15.103	0.5	Pass
NVNT	g	2437	Ant1	15.617	0.5	Pass
NVNT	g	2462	Ant1	15.103	0.5	Pass
NVNT	n20	2412	Ant1	16.009	0.5	Pass
NVNT	n20	2437	Ant1	15.960	0.5	Pass
NVNT	n20	2462	Ant1	16.032	0.5	Pass
NVNT	n40	2422	Ant1	35.063	0.5	Pass
NVNT	n40	2437	Ant1	35.086	0.5	Pass
NVNT	n40	2452	Ant1	35.094	0.5	Pass

Test Graphs

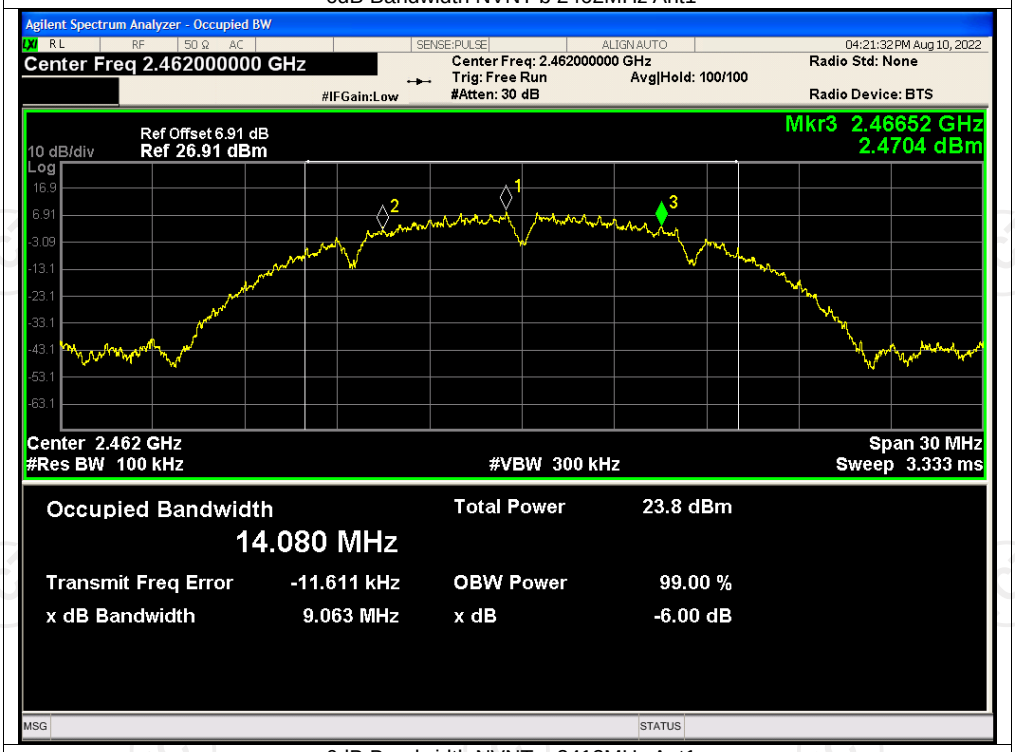
-6dB Bandwidth NVNT b 2412MHz Ant1



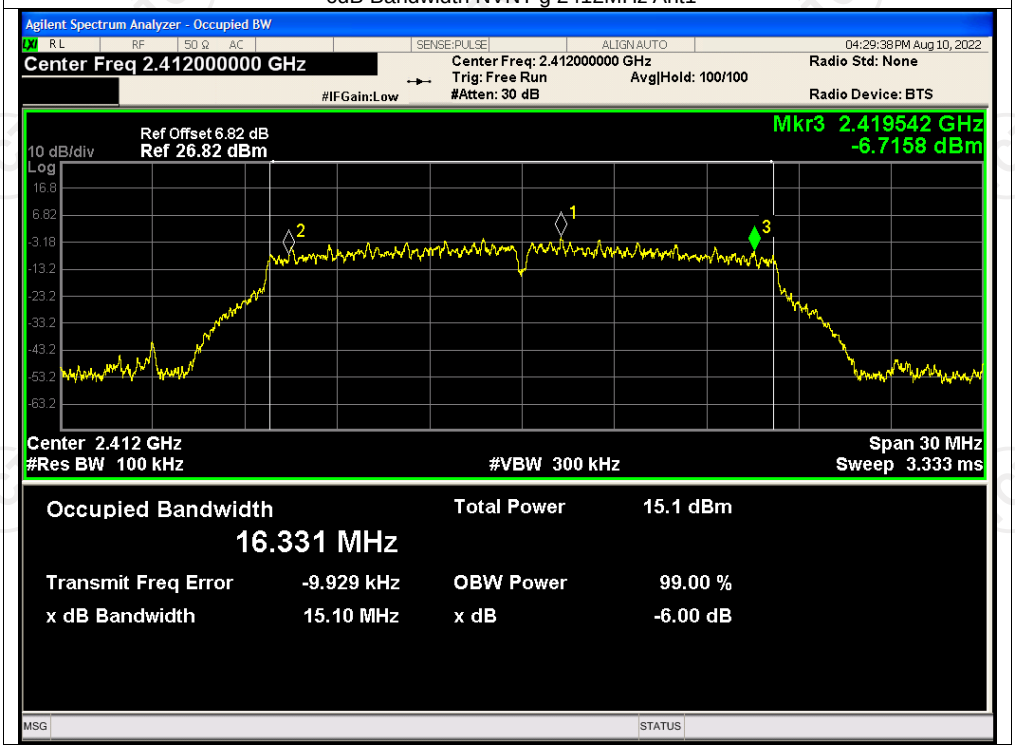
-6dB Bandwidth NVNT b 2437MHz Ant1



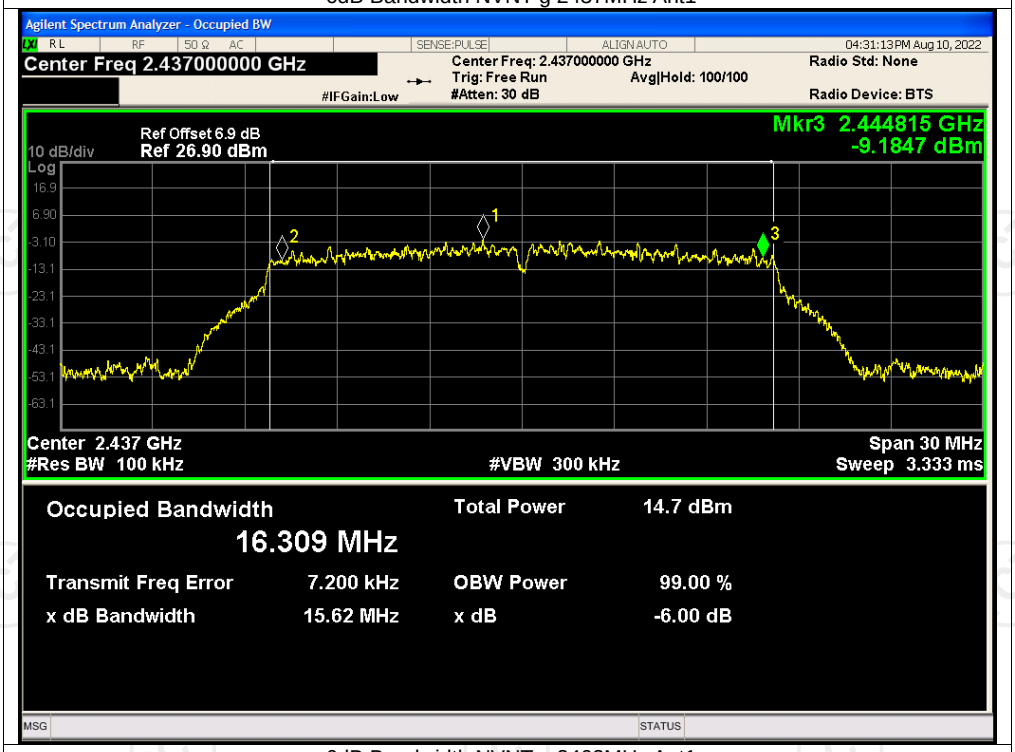
-6dB Bandwidth NVNT b 2462MHz Ant1



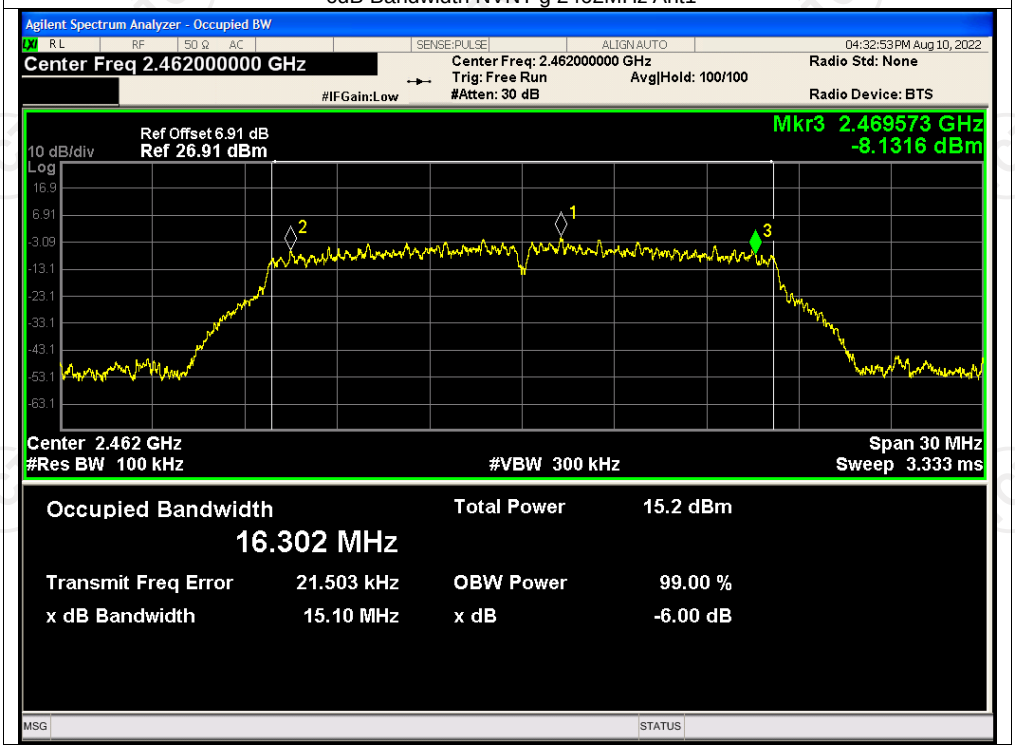
-6dB Bandwidth NVNT g 2412MHz Ant1



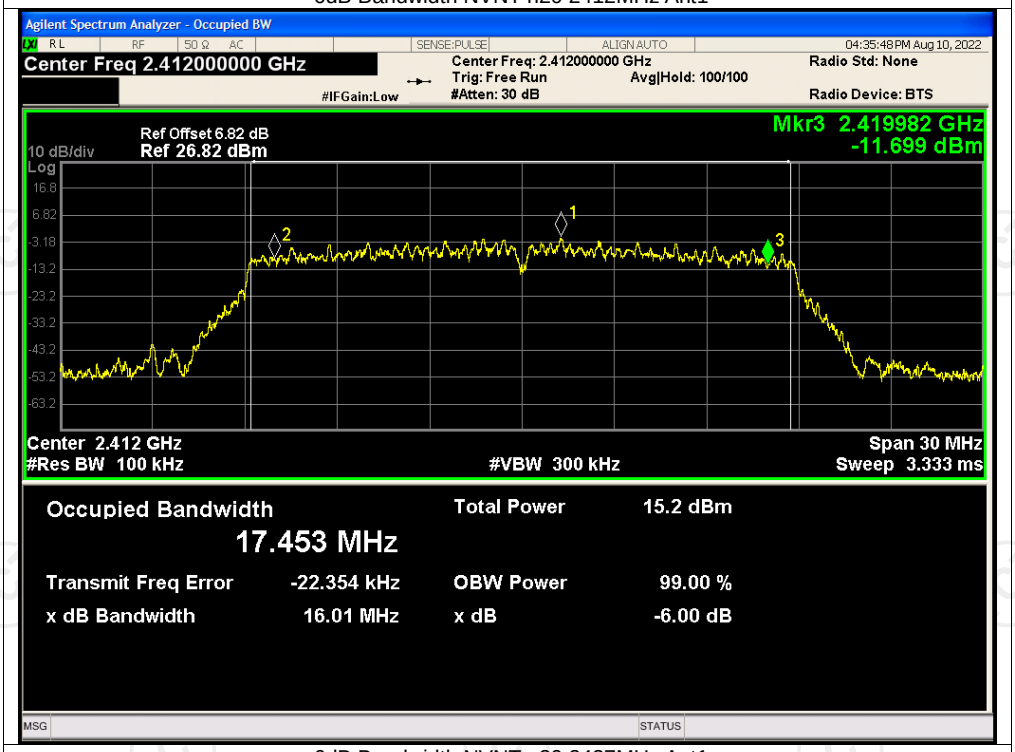
-6dB Bandwidth NVNT g 2437MHz Ant1



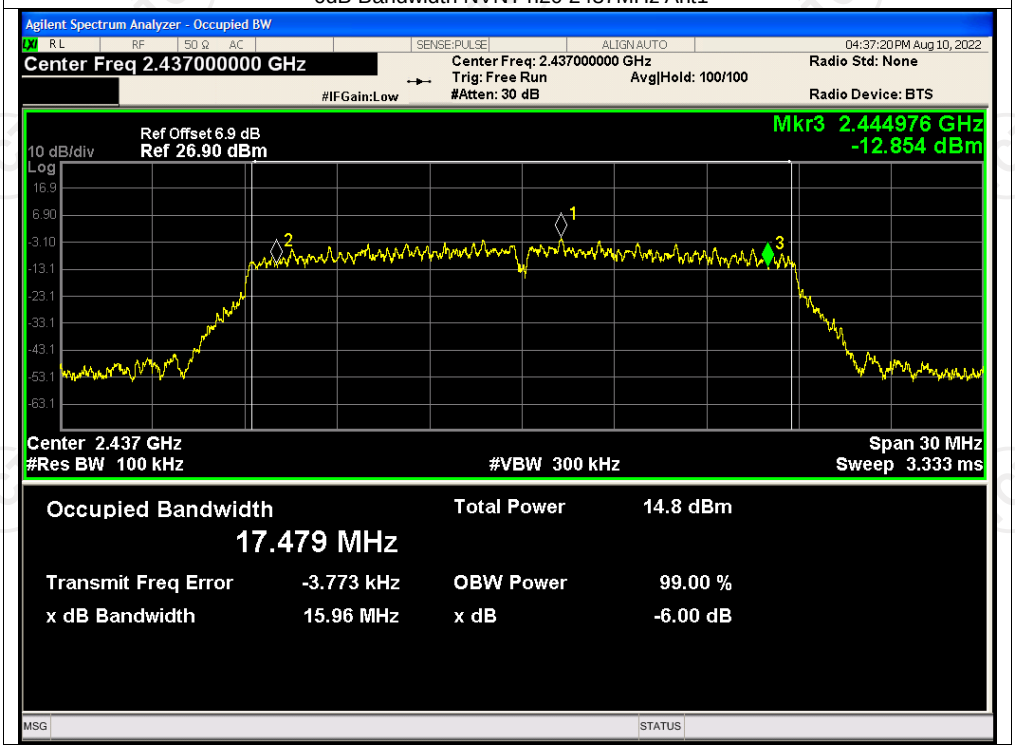
-6dB Bandwidth NVNT g 2462MHz Ant1



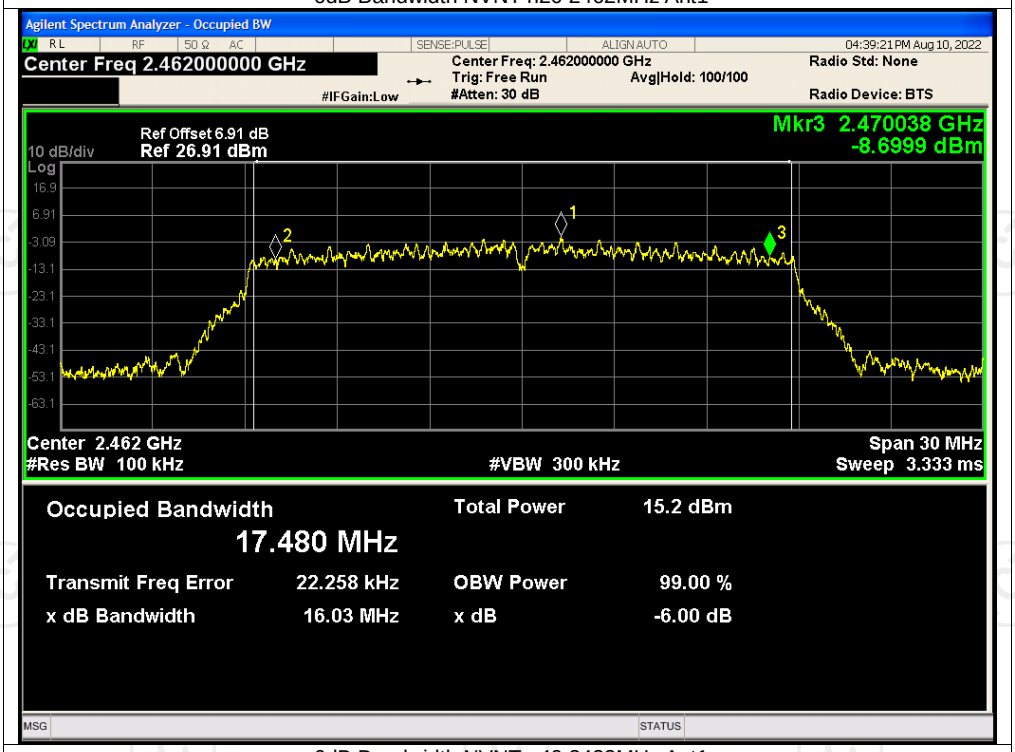
-6dB Bandwidth NVNT n20 2412MHz Ant1



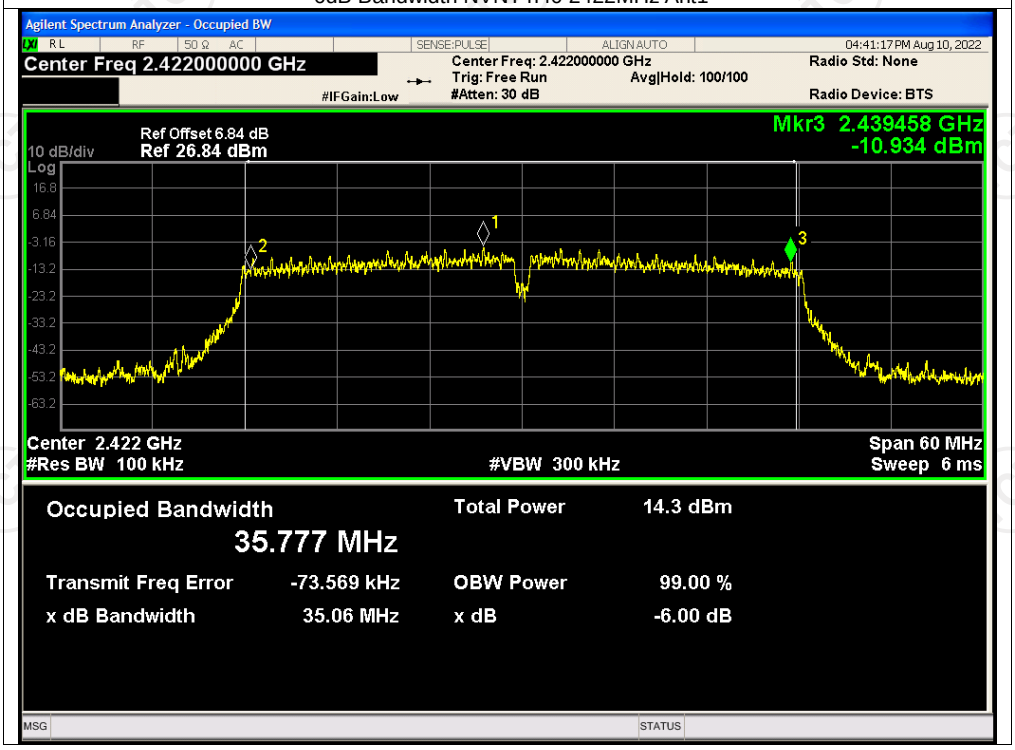
-6dB Bandwidth NVNT n20 2437MHz Ant1



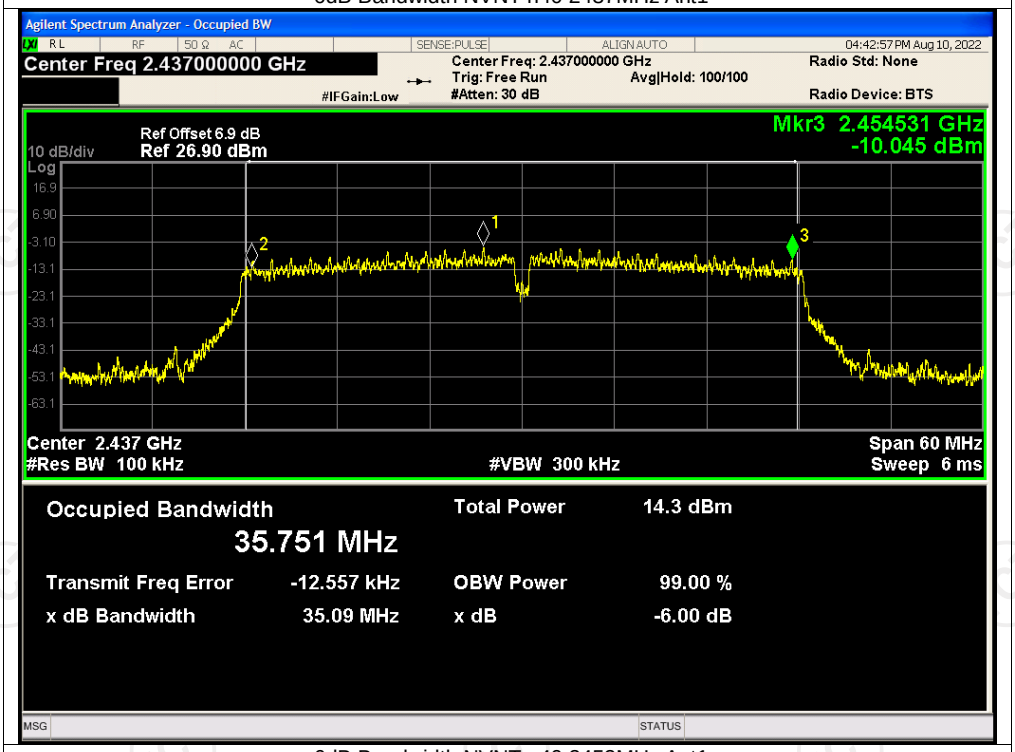
-6dB Bandwidth NVNT n20 2462MHz Ant1



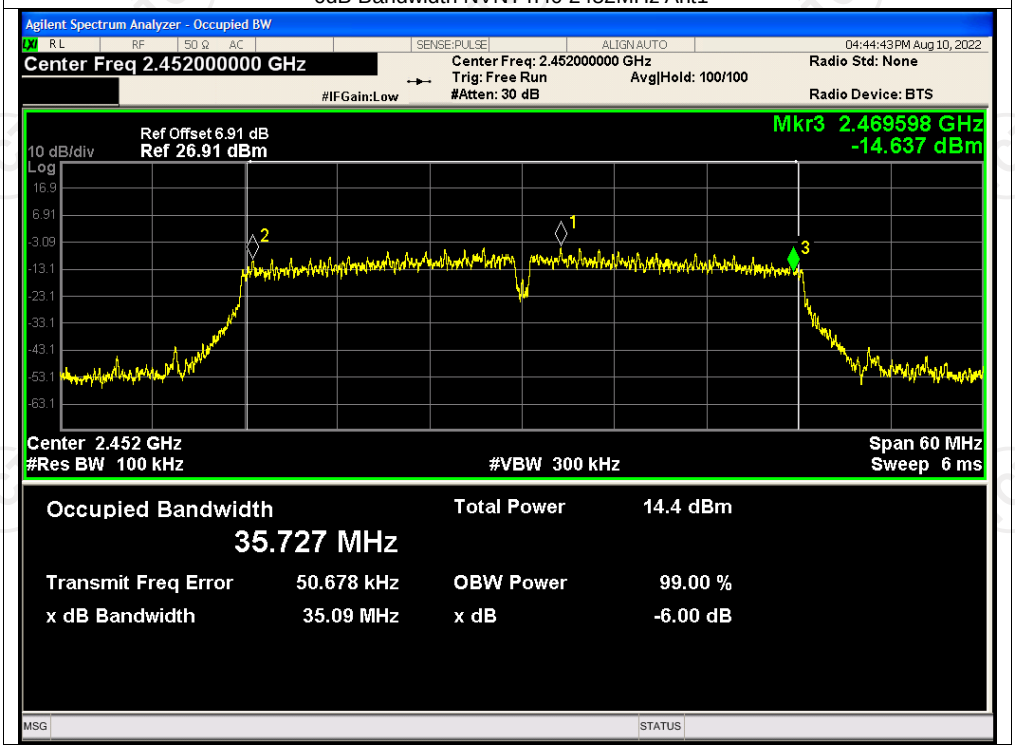
-6dB Bandwidth NVNT n40 2422MHz Ant1



-6dB Bandwidth NVNT n40 2437MHz Ant1



-6dB Bandwidth NVNT n40 2452MHz Ant1



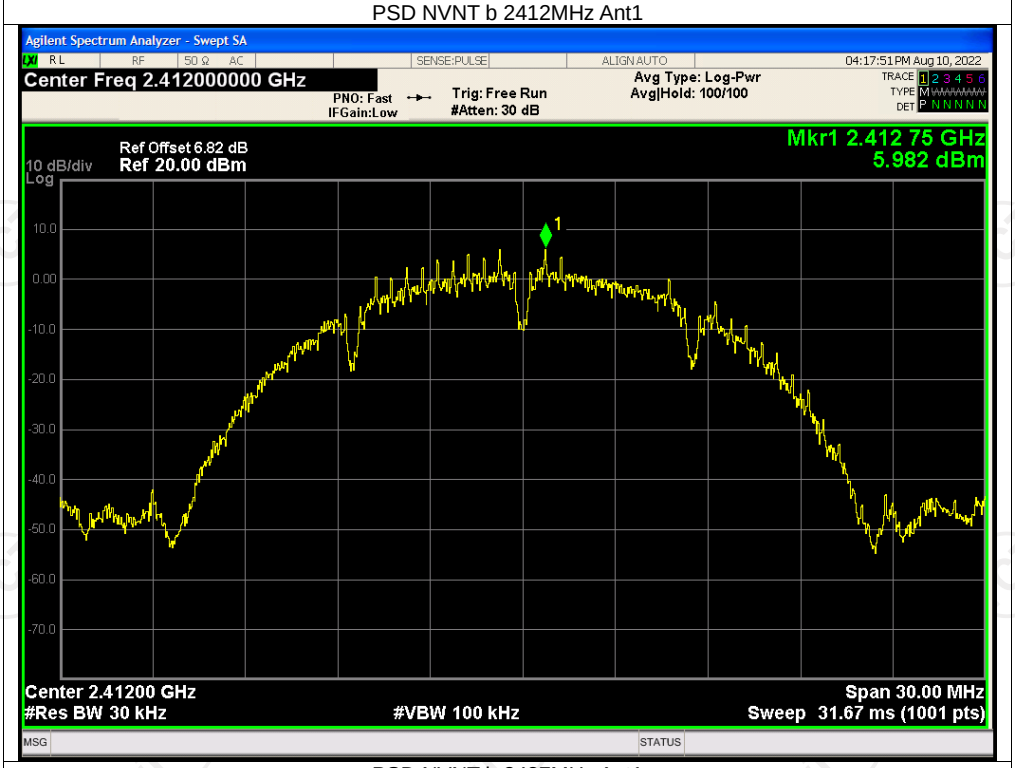
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/30kHz)	Duty Factor (dB)	Total PSD (dBm/30kHz)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	5.98	0	5.98	-4.02	8	Pass
NVNT	b	2437	Ant1	3.80	0	3.80	-6.20	8	Pass
NVNT	b	2462	Ant1	7.32	0	7.32	-2.68	8	Pass
NVNT	g	2412	Ant1	-6.57	0	-6.57	-16.57	8	Pass
NVNT	g	2437	Ant1	-6.63	0	-6.63	-16.63	8	Pass
NVNT	g	2462	Ant1	-6.00	0	-6.00	-16.00	8	Pass
NVNT	n20	2412	Ant1	-5.63	0	-5.63	-15.63	8	Pass
NVNT	n20	2437	Ant1	-6.01	0	-6.01	-16.01	8	Pass
NVNT	n20	2462	Ant1	-5.65	0	-5.65	-15.65	8	Pass
NVNT	n40	2422	Ant1	-5.24	0.13	-5.11	-15.11	8	Pass
NVNT	n40	2437	Ant1	-5.23	0.13	-5.10	-15.10	8	Pass
NVNT	n40	2452	Ant1	-5.12	0.13	-4.99	-14.99	8	Pass

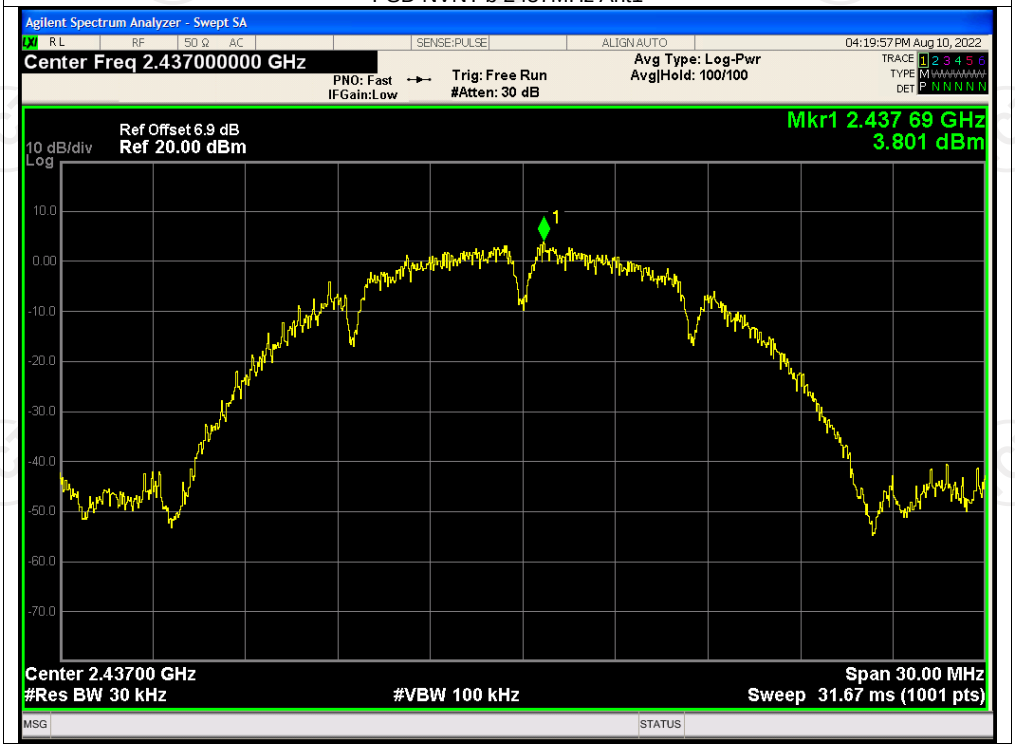
Note: Total PSD (dBm/3kHz) = Total PSD (dBm/30kHz) +10log(3kHz/30kHz)

Test Graphs

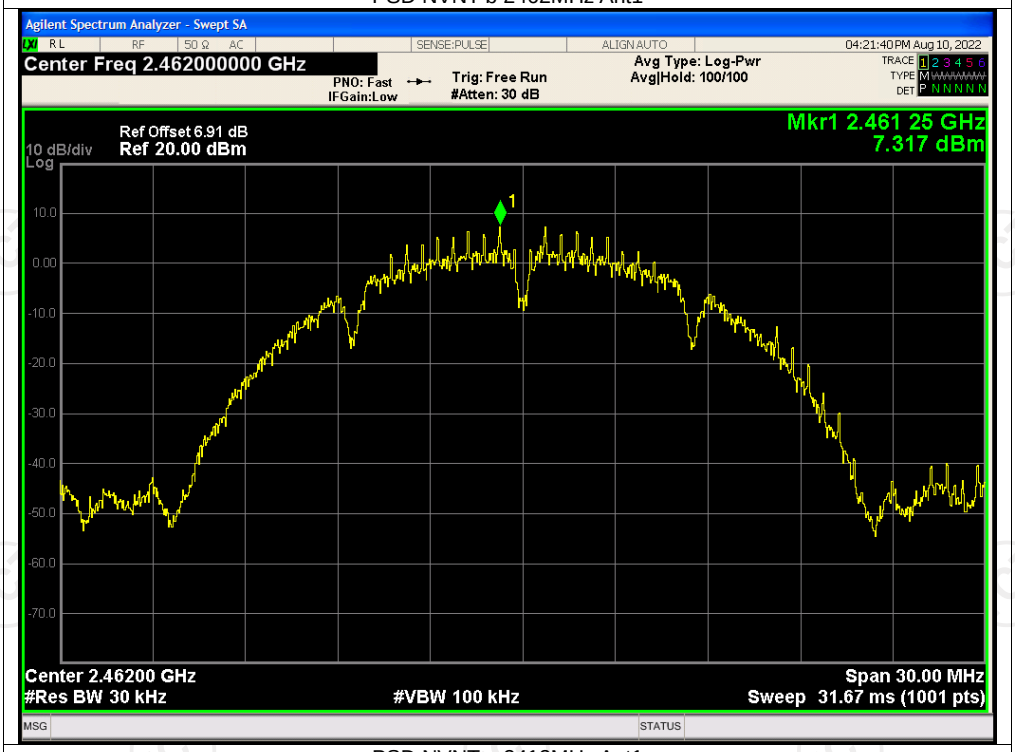
PSD NVNT b 2412MHz Ant1



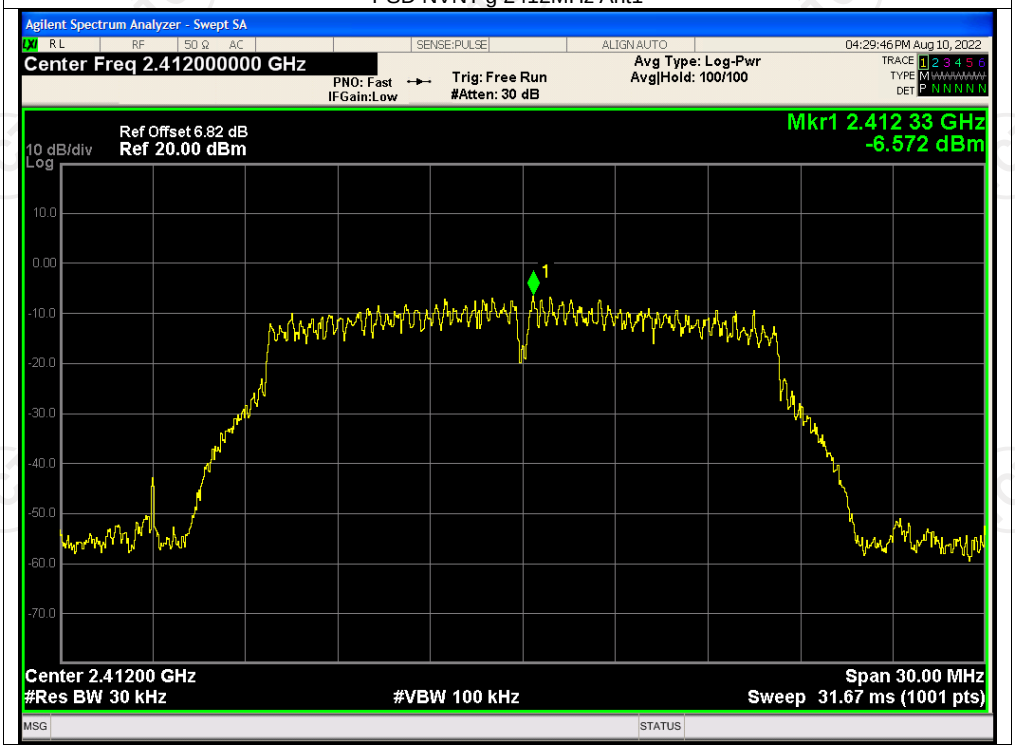
PSD NVNT b 2437MHz Ant1



PSD NVNT b 2462MHz Ant1



PSD NVNT g 2412MHz Ant1



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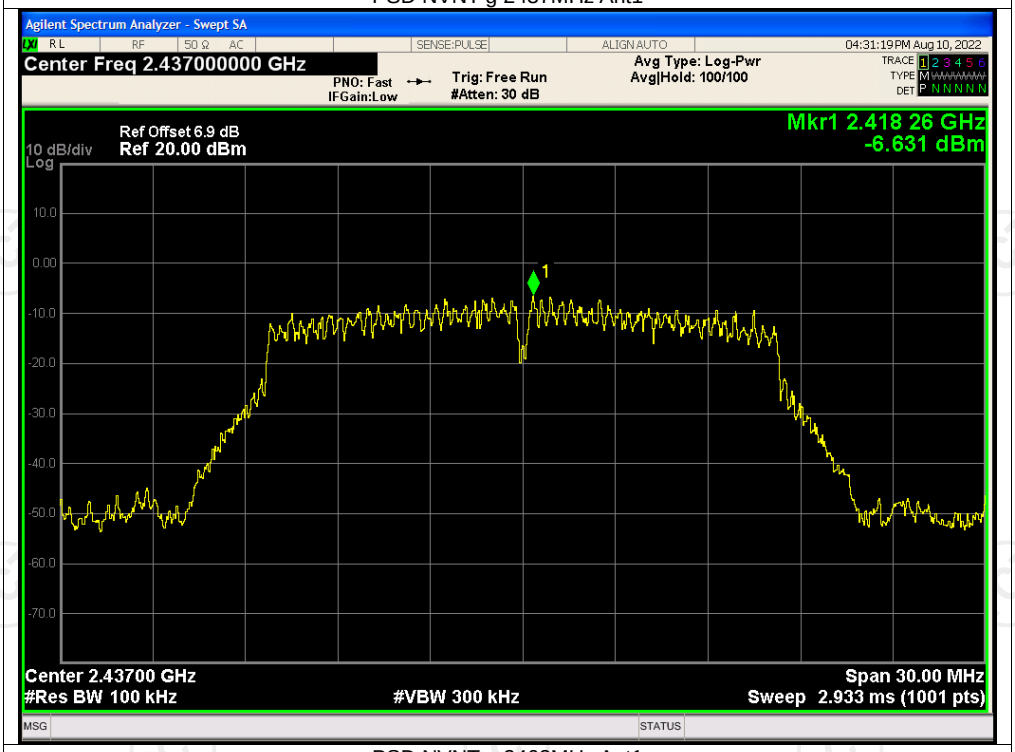
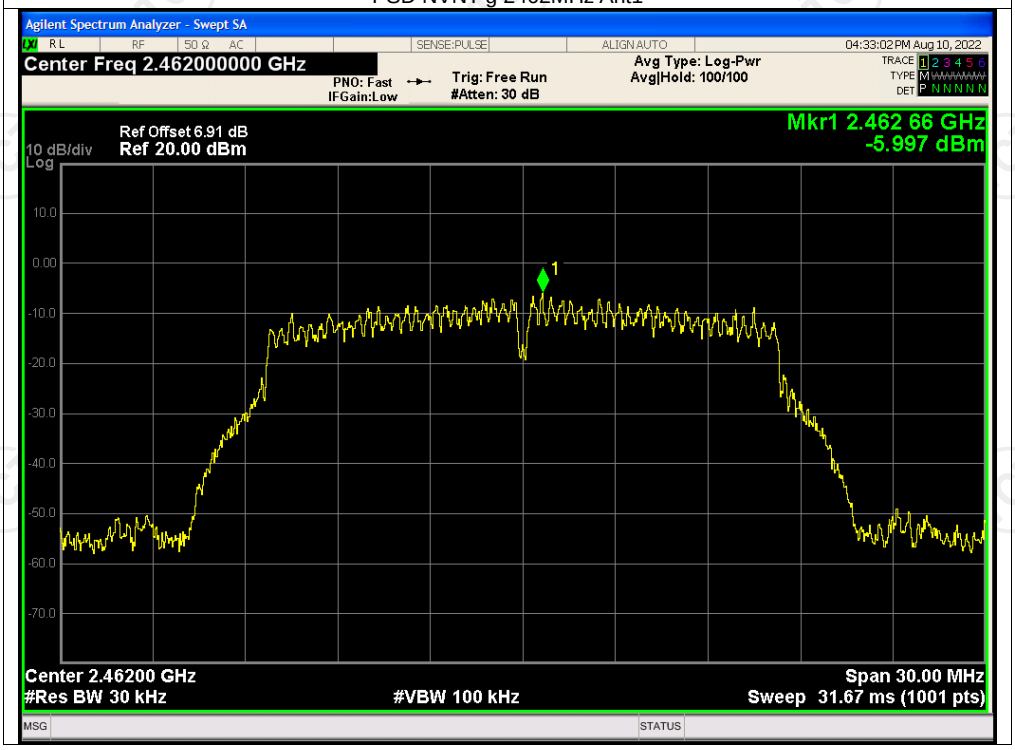
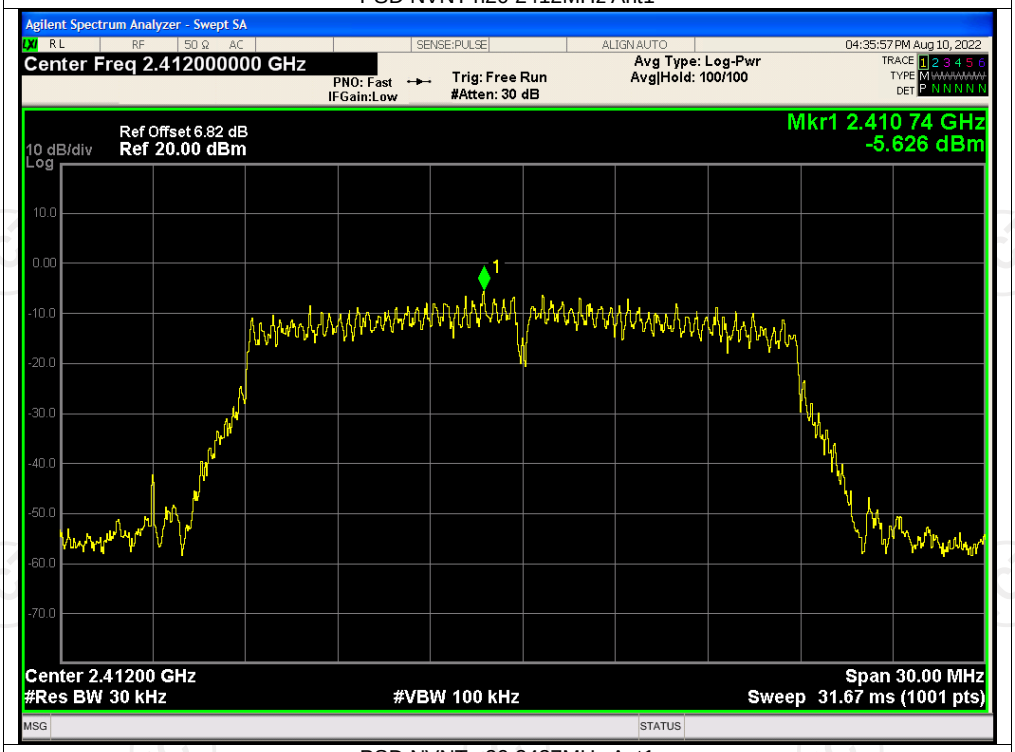


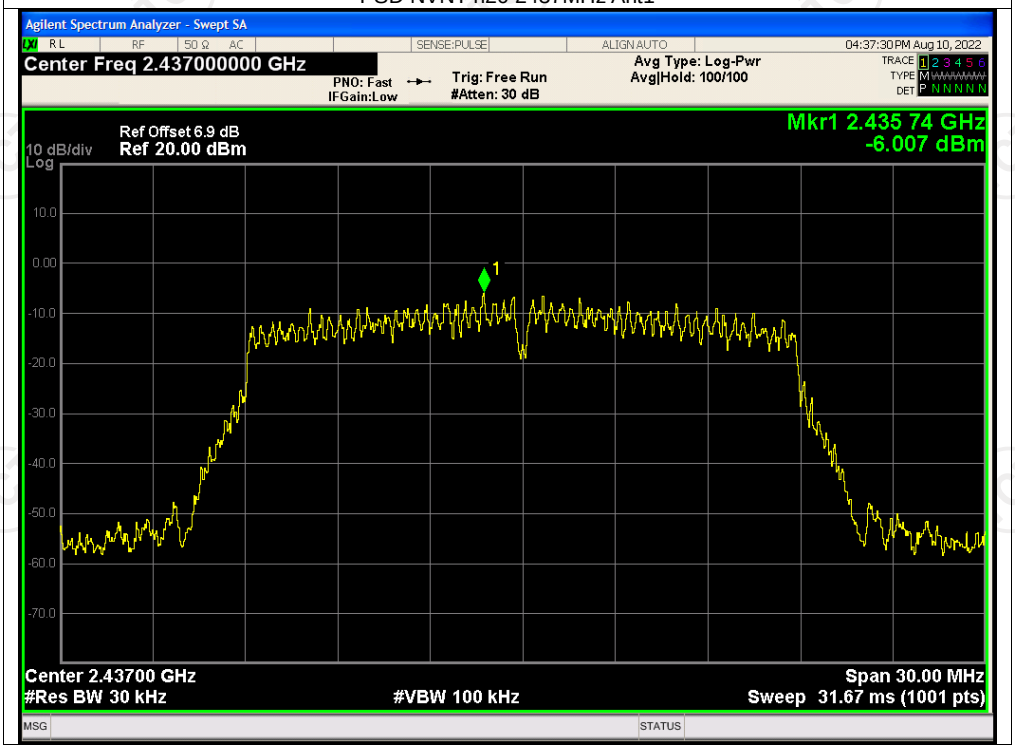
PSD NVNT g 2462MHz Ant1



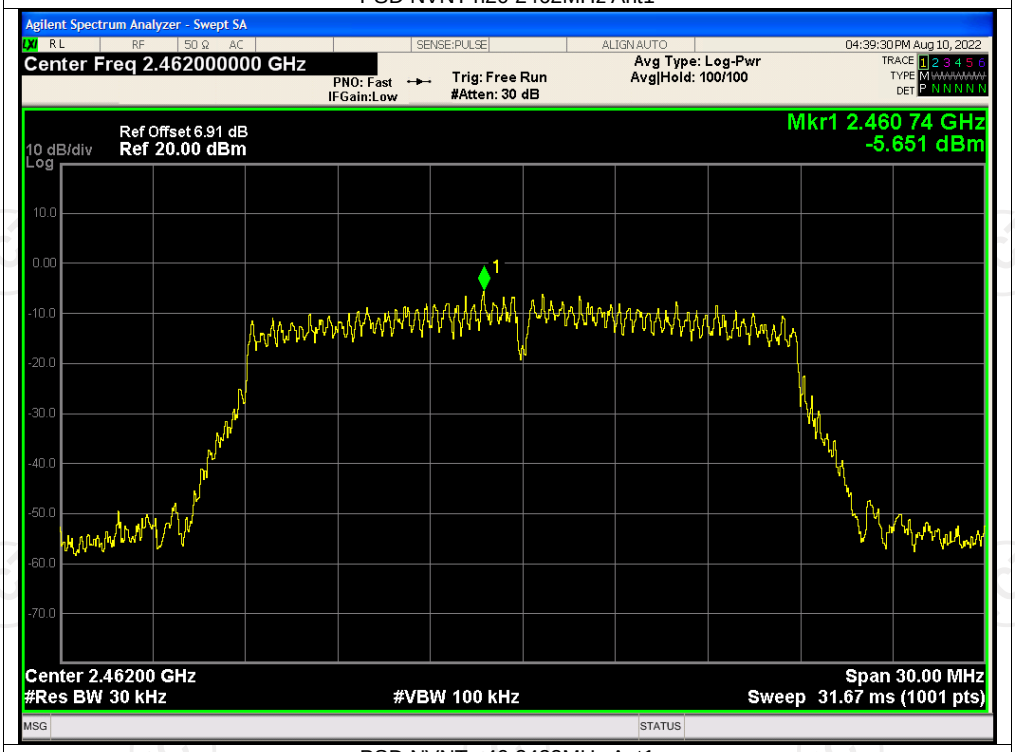
PSD NVNT n20 2412MHz Ant1



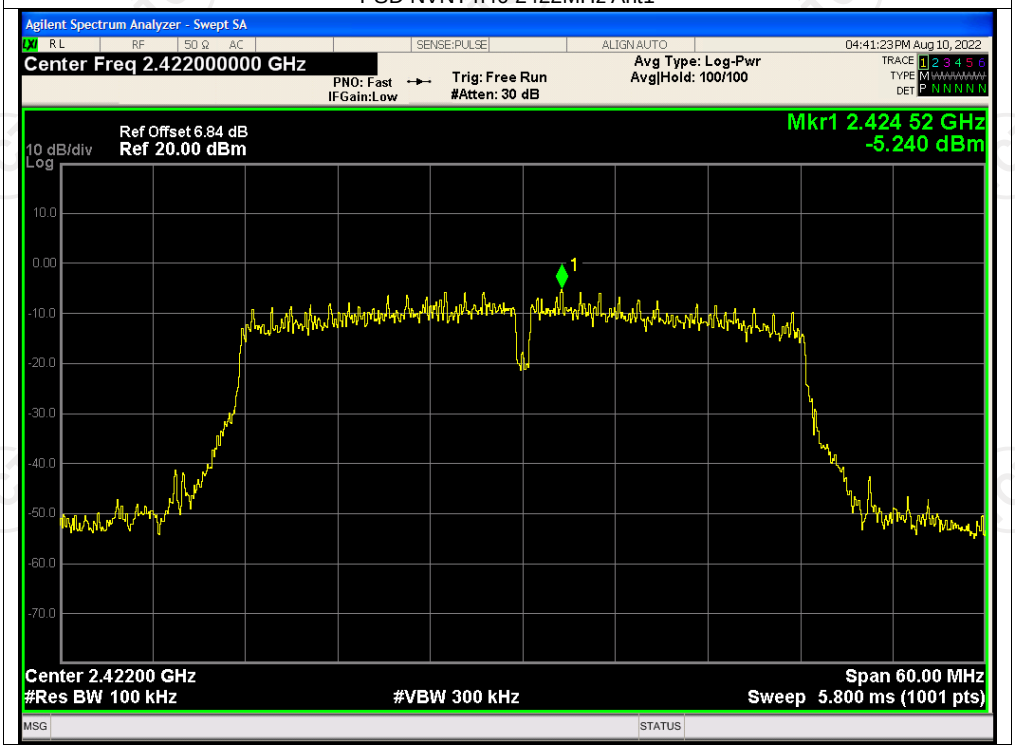
PSD NVNT n20 2437MHz Ant1



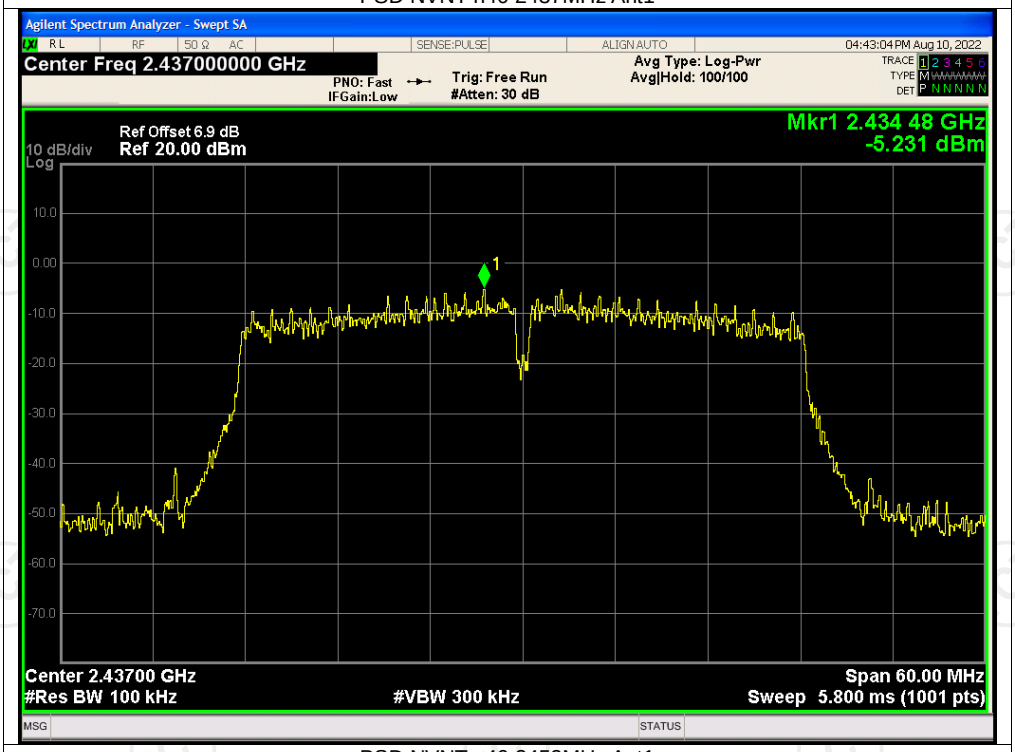
PSD NVNT n20 2462MHz Ant1



PSD NVNT n40 2422MHz Ant1



PSD NVNT n40 2437MHz Ant1



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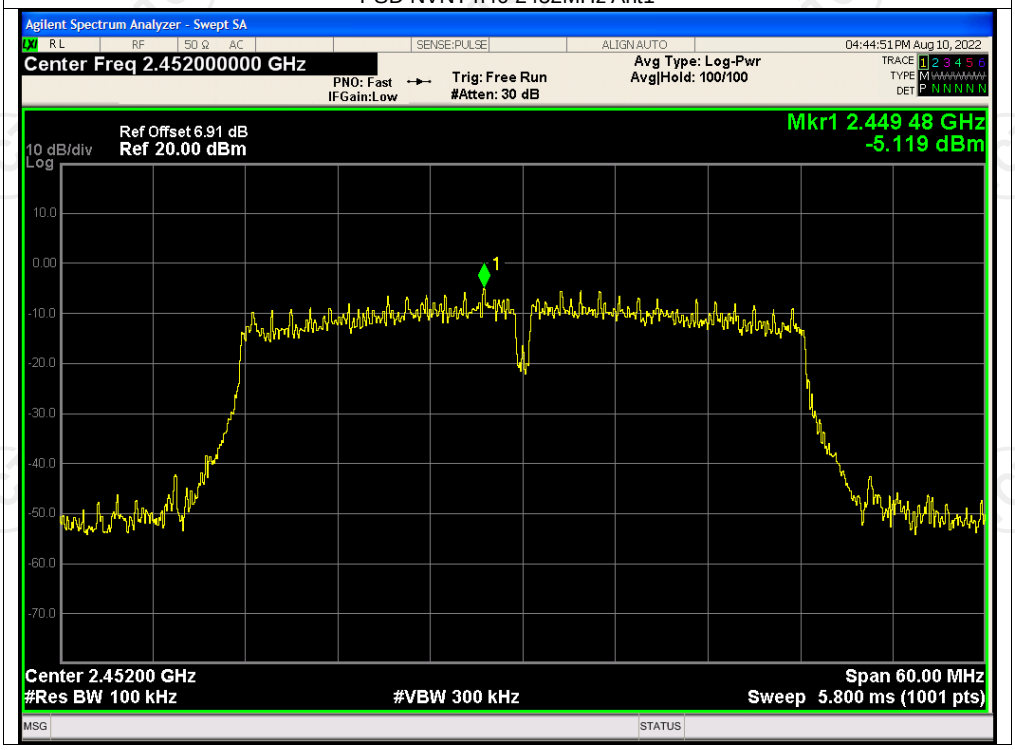
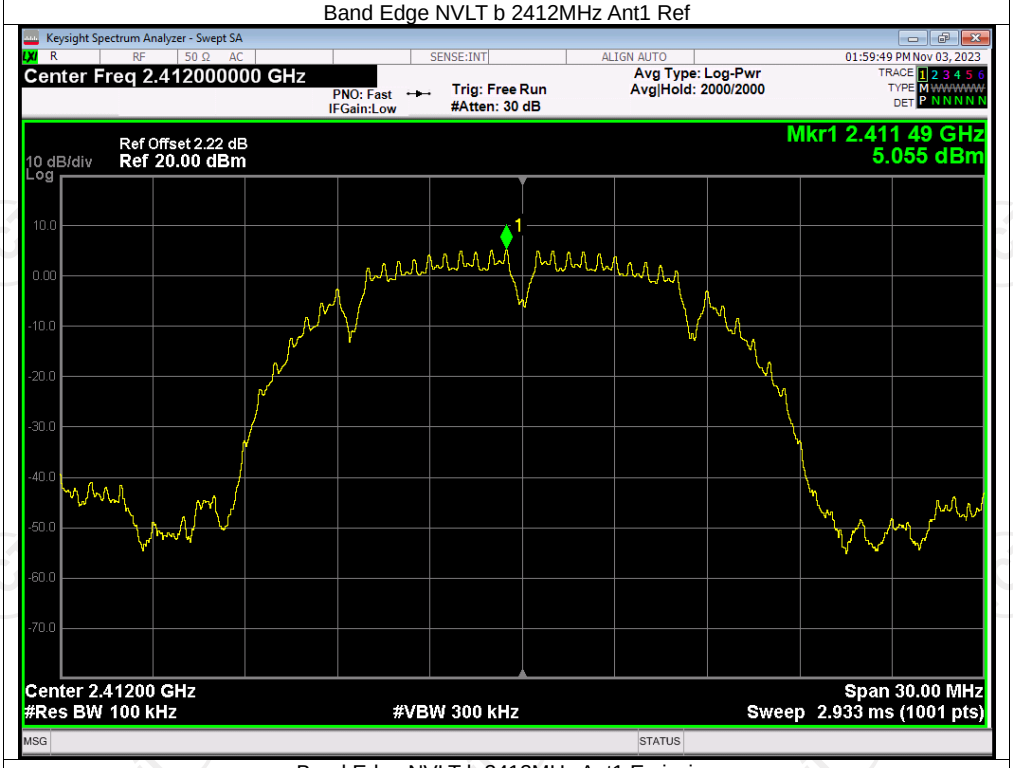


Band Edge

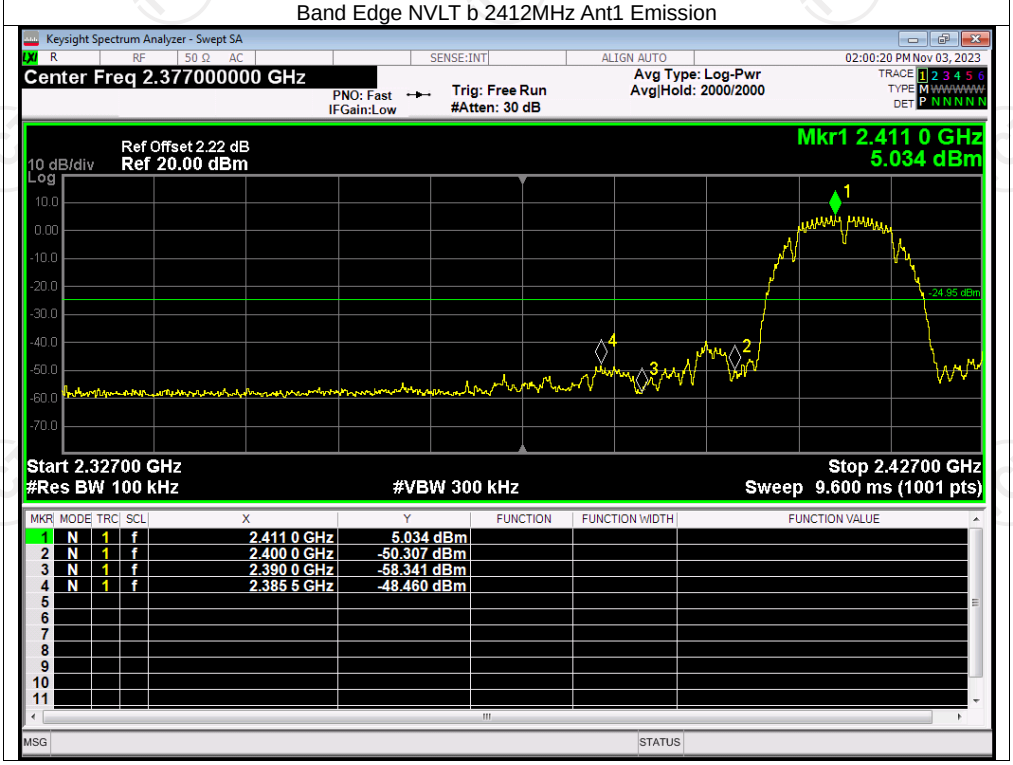
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-53.51	-30	Pass
NVNT	b	2462	Ant1	-56.8	-30	Pass
NVNT	g	2412	Ant1	-51.02	-30	Pass
NVNT	g	2462	Ant1	-54.58	-30	Pass
NVNT	n20	2412	Ant1	-51.24	-30	Pass
NVNT	n20	2462	Ant1	-54.39	-30	Pass
NVNT	n40	2422	Ant1	-37.82	-30	Pass
NVNT	n40	2452	Ant1	-36.32	-30	Pass

Test Graphs

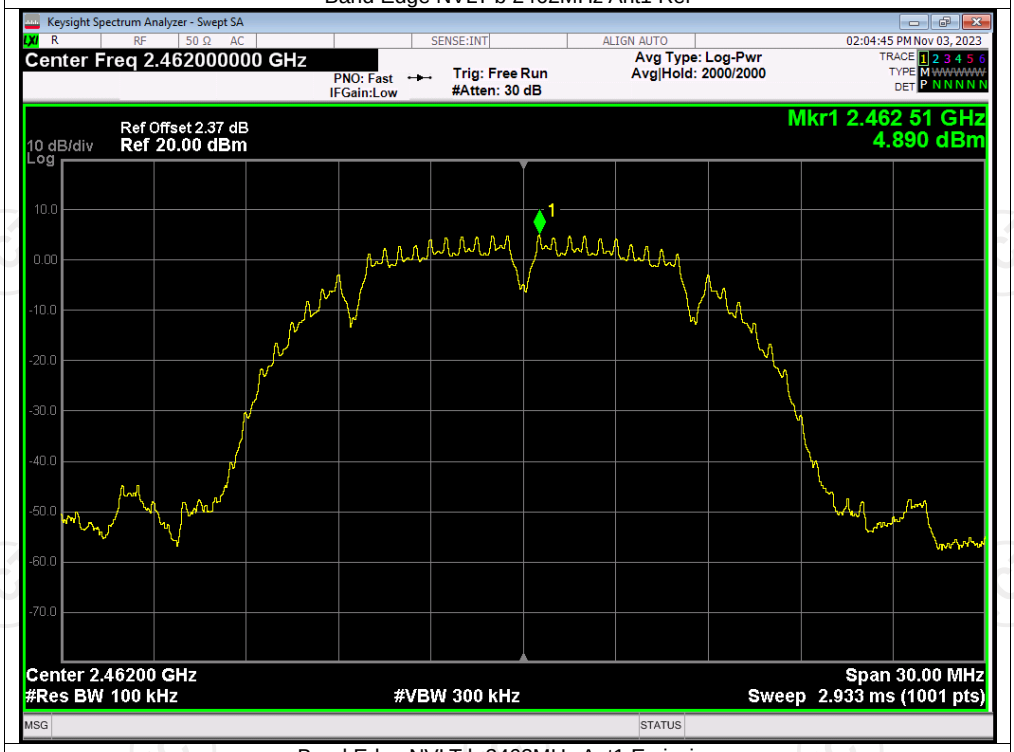
Band Edge NVLT b 2412MHz Ant1 Ref



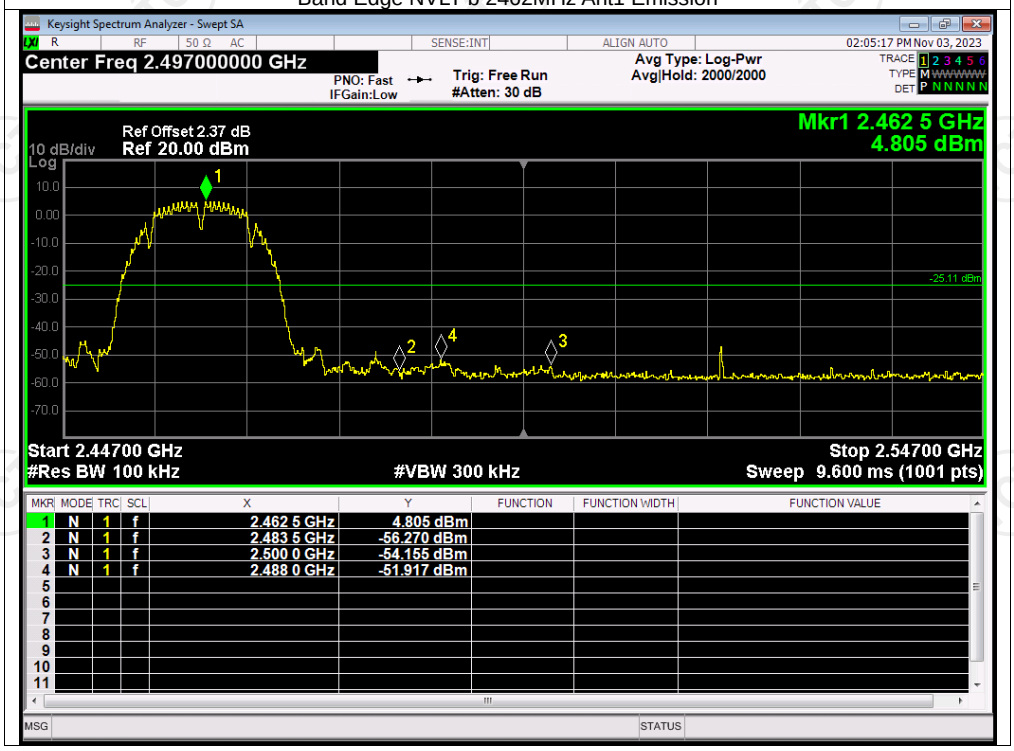
Band Edge NVLT b 2412MHz Ant1 Emission



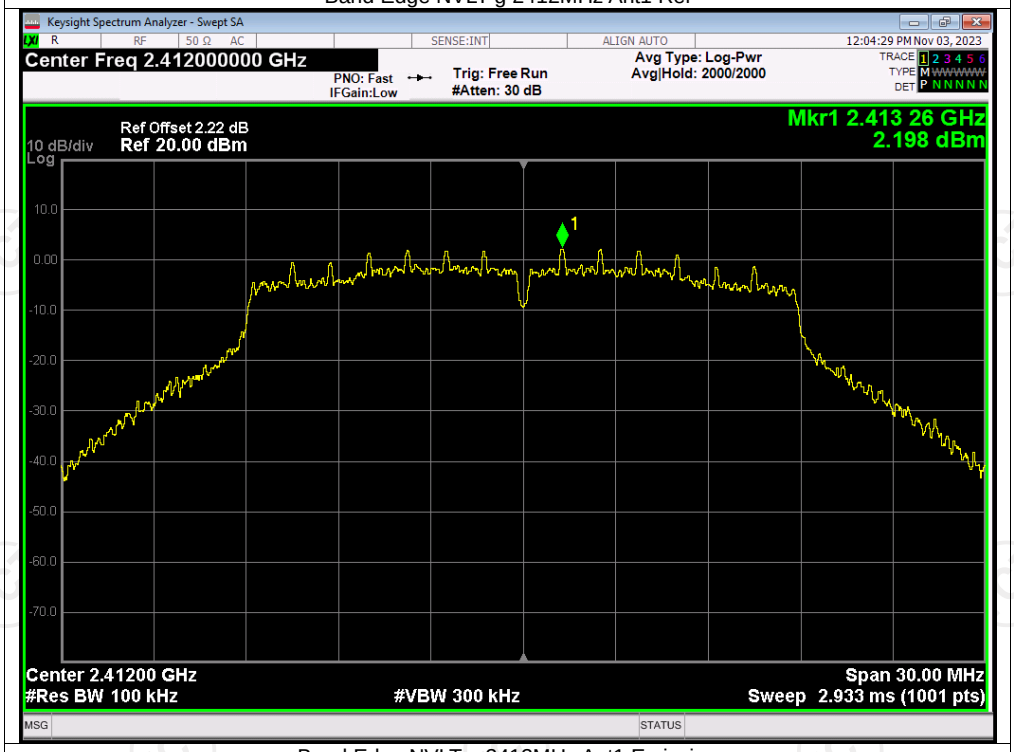
Band Edge NVLT b 2462MHz Ant1 Ref



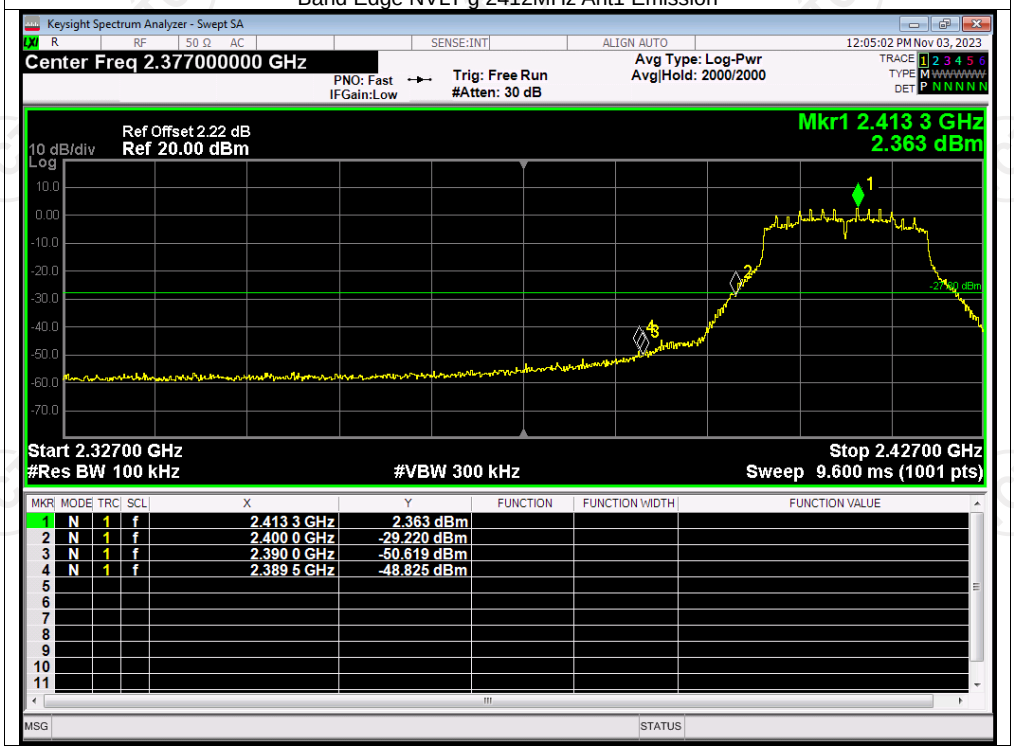
Band Edge NVLT b 2462MHz Ant1 Emission



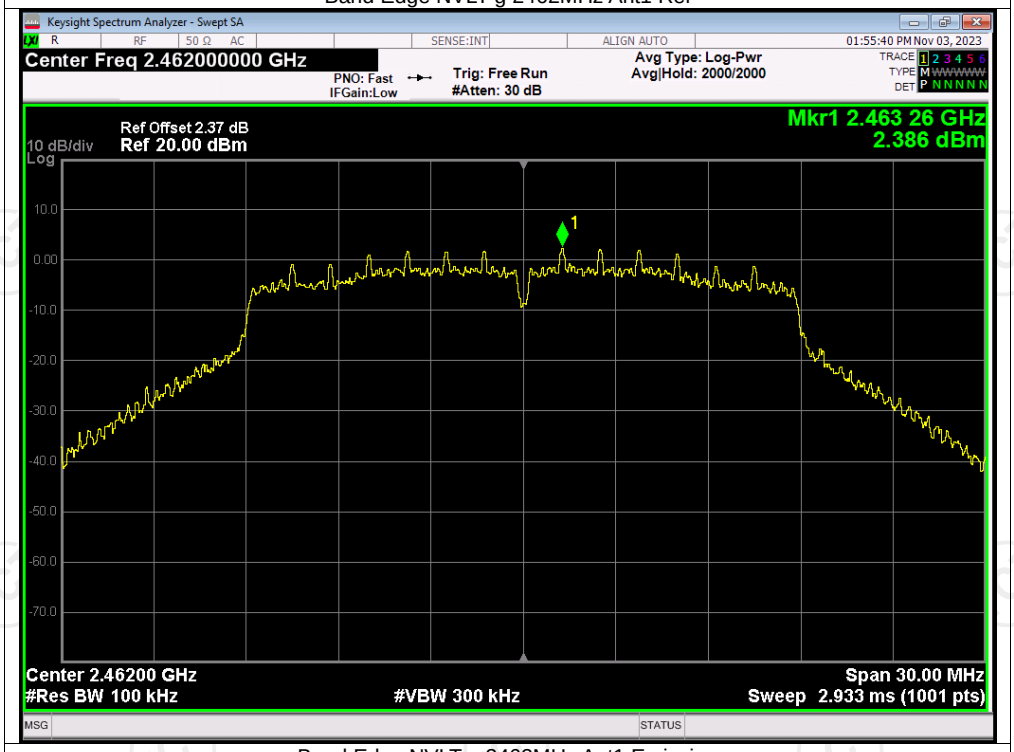
Band Edge NVLT g 2412MHz Ant1 Ref



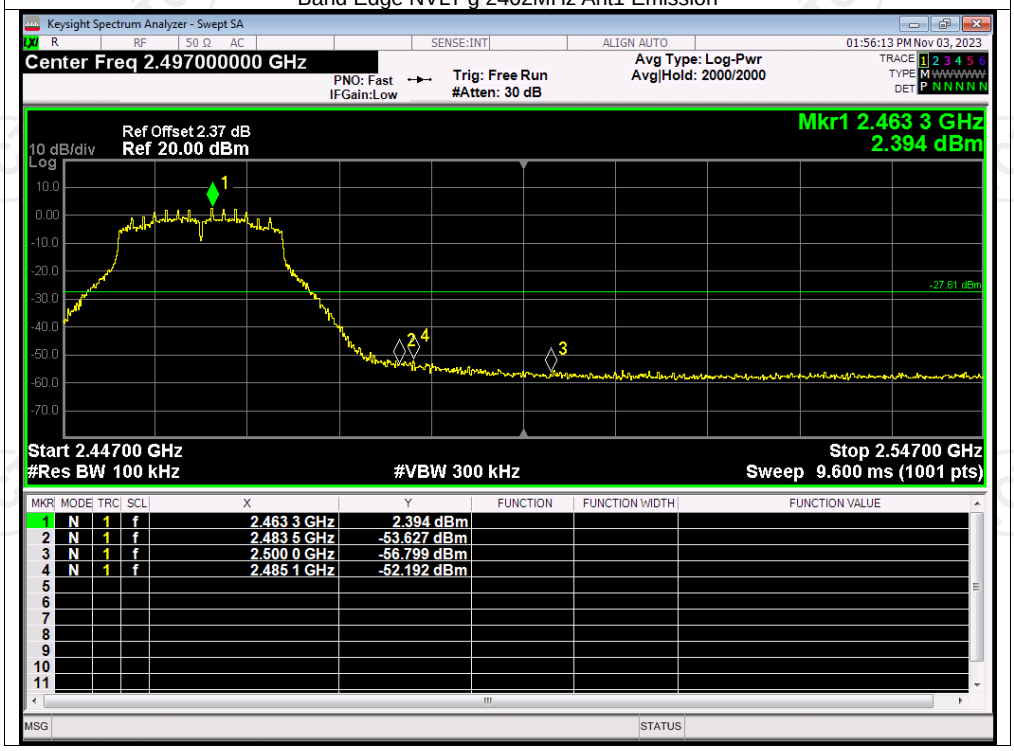
Band Edge NVLT g 2412MHz Ant1 Emission



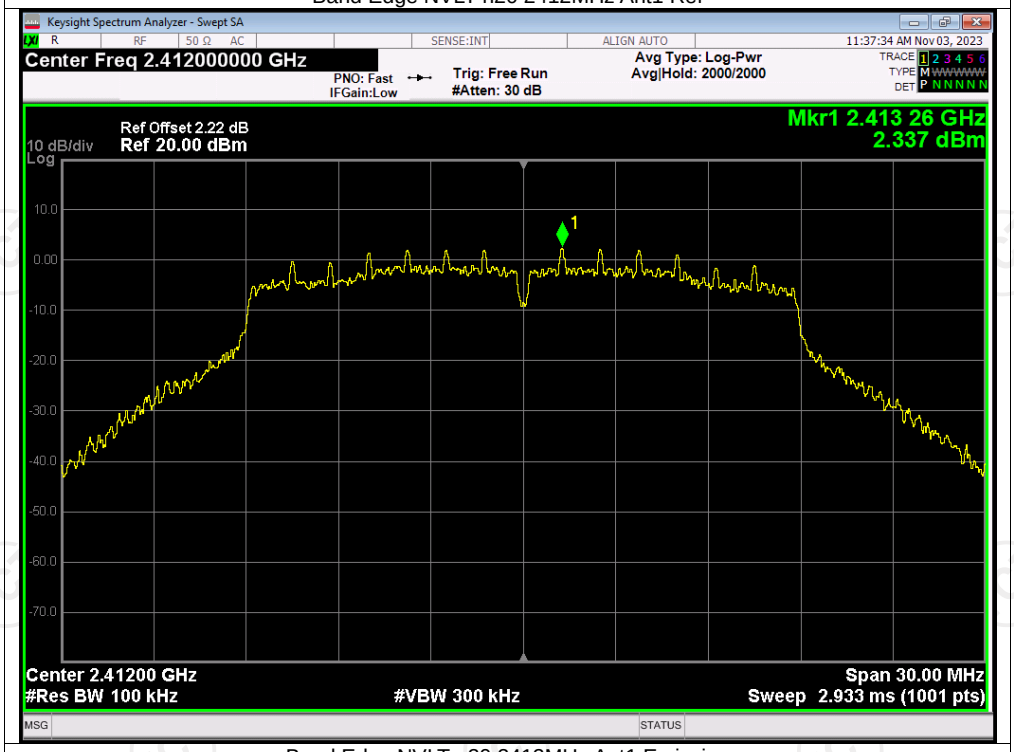
Band Edge NVLT g 2462MHz Ant1 Ref



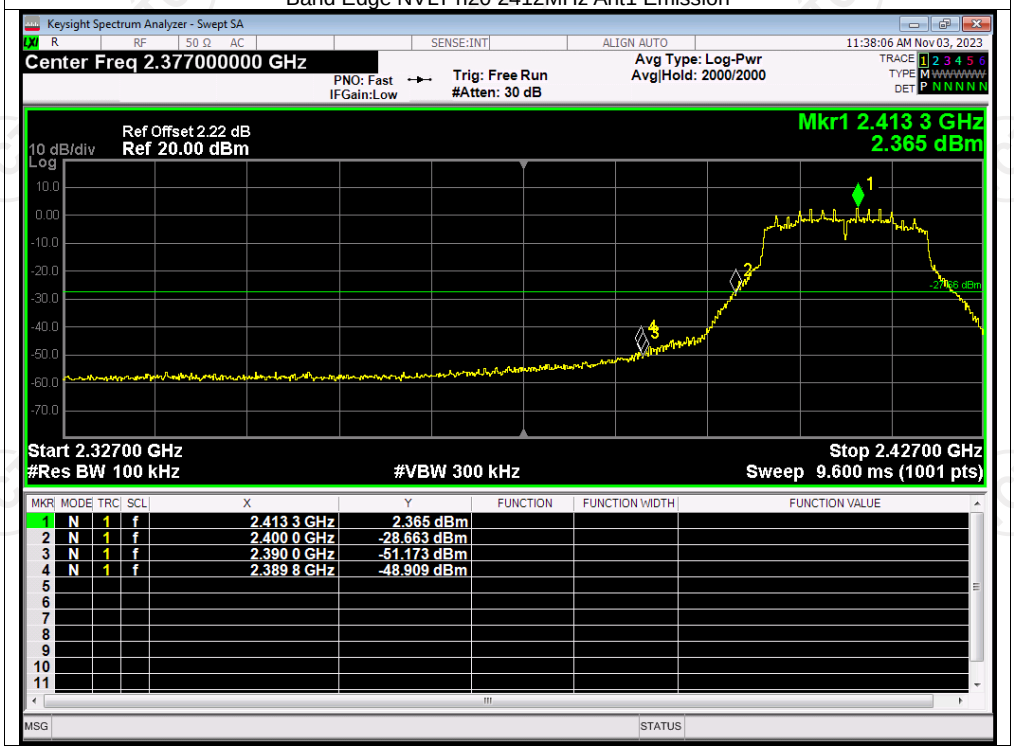
Band Edge NVLT g 2462MHz Ant1 Emission



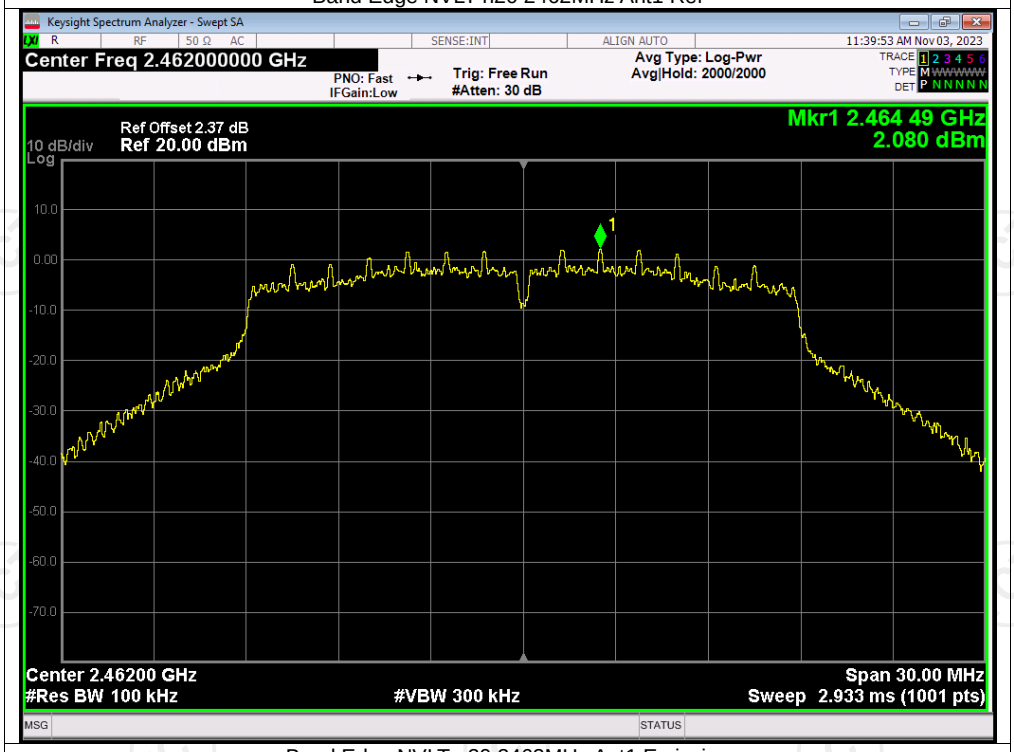
Band Edge NVLT n20 2412MHz Ant1 Ref



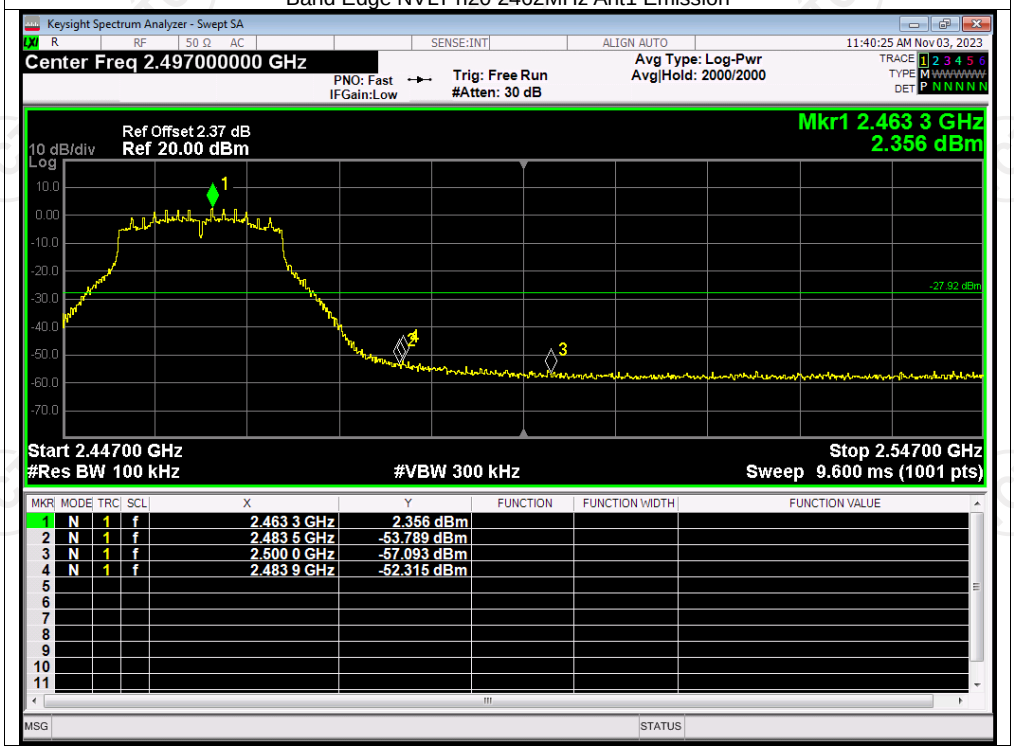
Band Edge NVLT n20 2412MHz Ant1 Emission



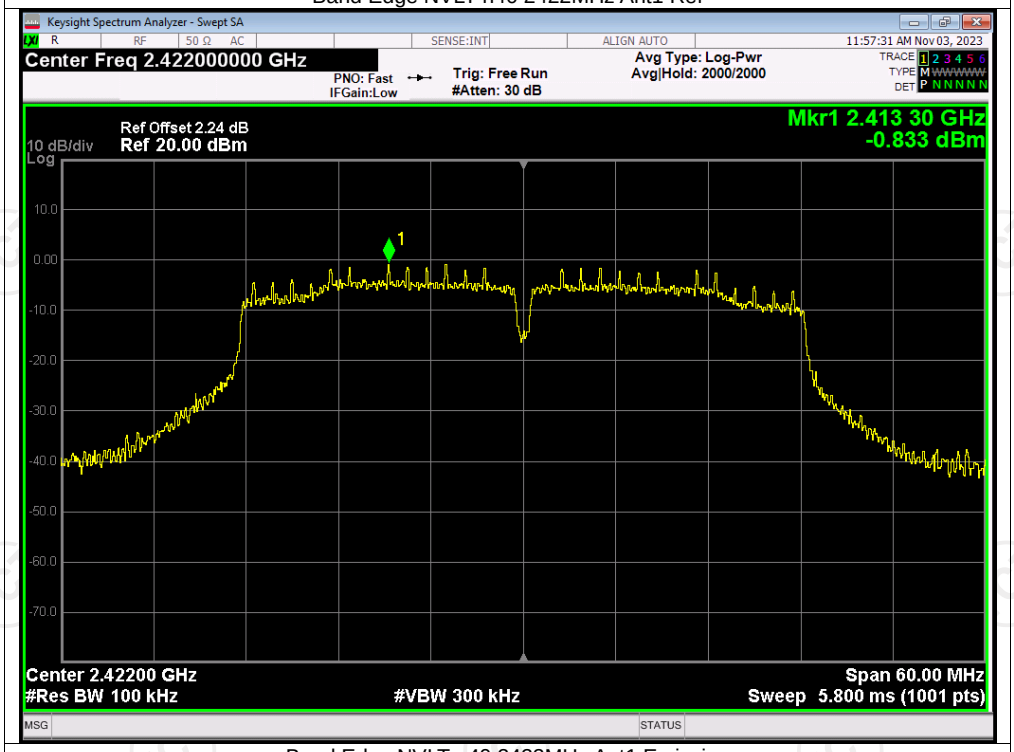
Band Edge NVLT n20 2462MHz Ant1 Ref



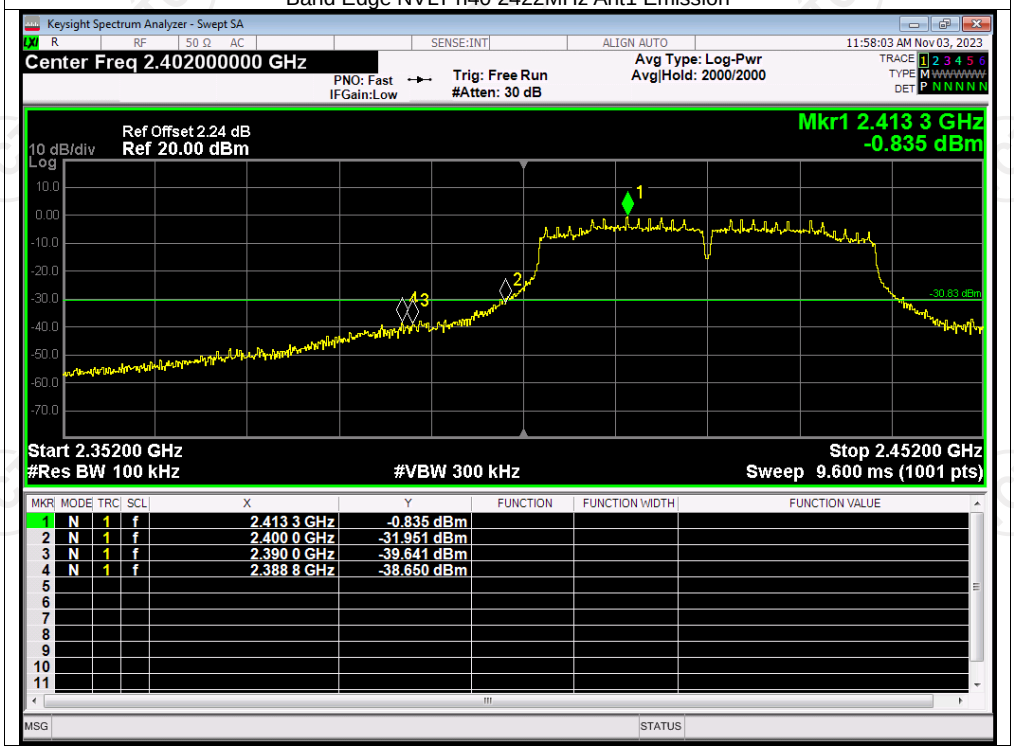
Band Edge NVLT n20 2462MHz Ant1 Emission



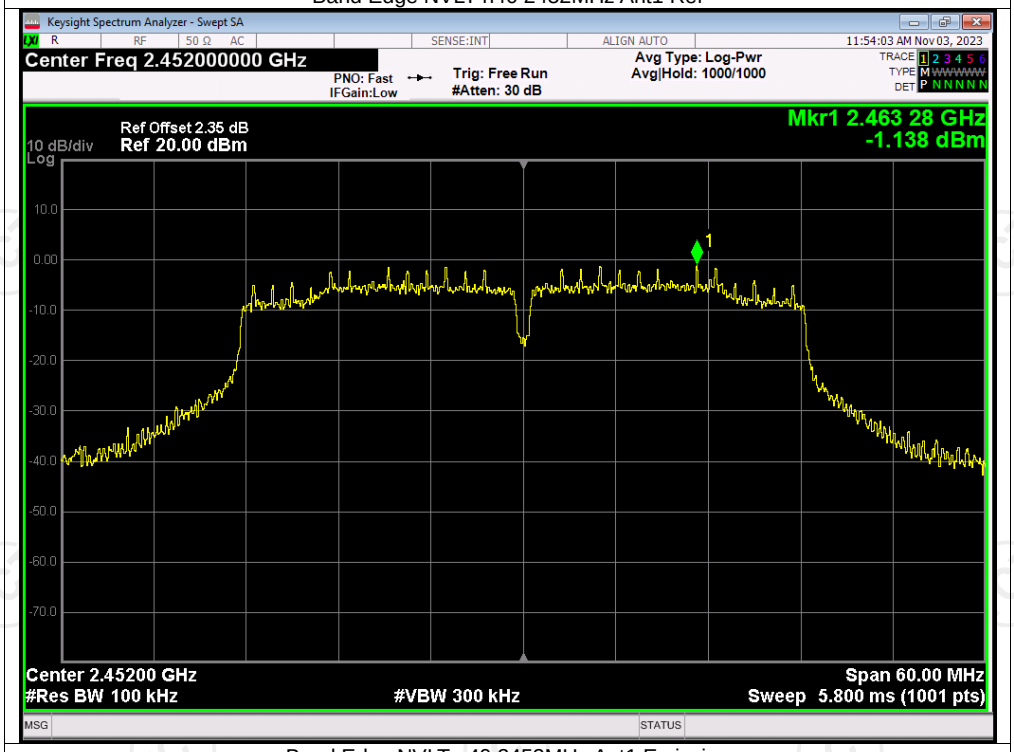
Band Edge NVLT n40 2422MHz Ant1 Ref



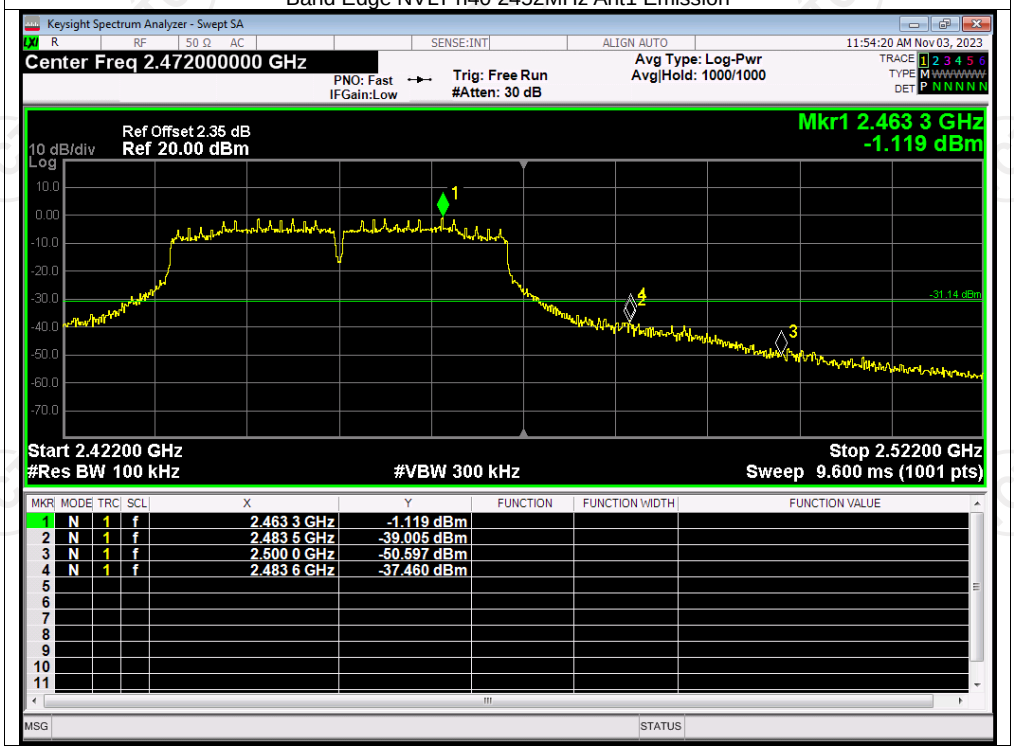
Band Edge NVLT n40 2422MHz Ant1 Emission



Band Edge NVLT n40 2452MHz Ant1 Ref



Band Edge NVLT n40 2452MHz Ant1 Emission

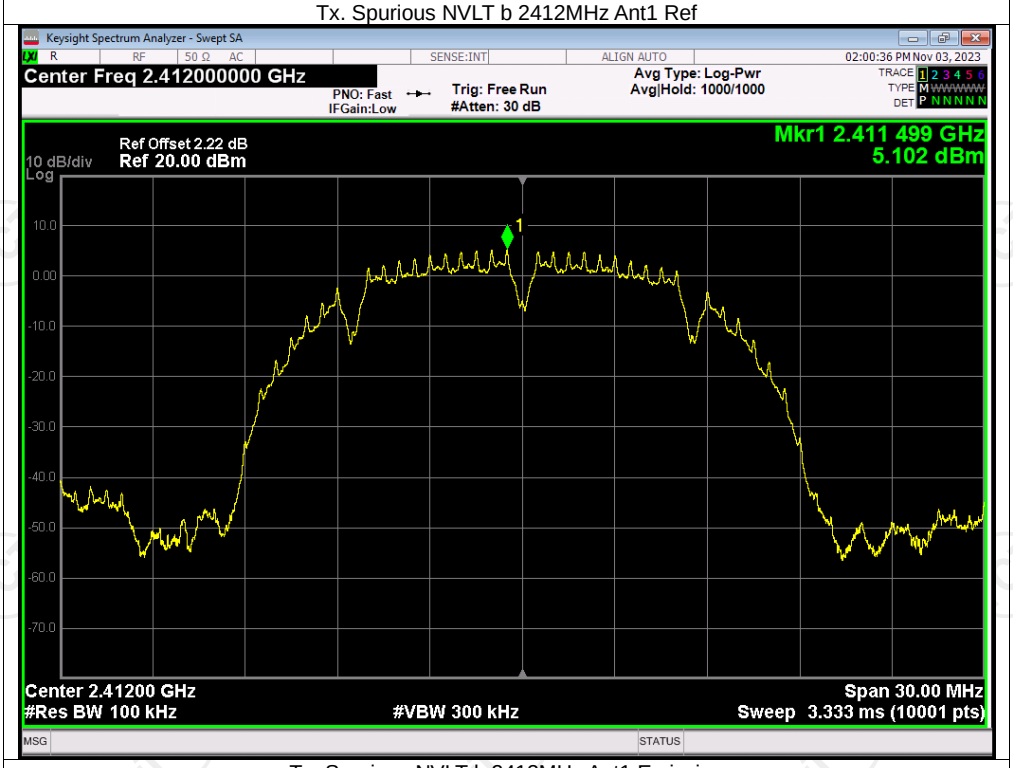


Conducted RF Spurious Emission

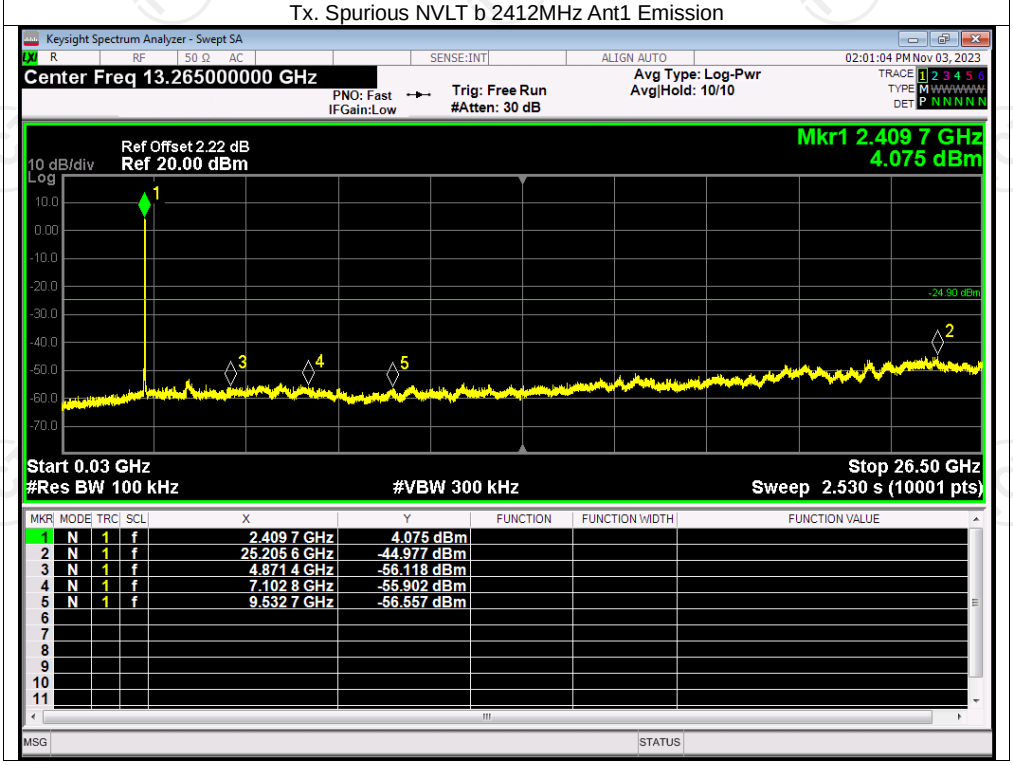
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-50.07	-30	Pass
NVNT	b	2437	Ant1	-49.44	-30	Pass
NVNT	b	2462	Ant1	-49.75	-30	Pass
NVNT	g	2412	Ant1	-47.56	-30	Pass
NVNT	g	2437	Ant1	-47.35	-30	Pass
NVNT	g	2462	Ant1	-47.30	-30	Pass
NVNT	n20	2412	Ant1	-46.71	-30	Pass
NVNT	n20	2437	Ant1	-46.80	-30	Pass
NVNT	n20	2462	Ant1	-46.36	-30	Pass
NVNT	n40	2422	Ant1	-44.67	-30	Pass
NVNT	n40	2437	Ant1	-43.51	-30	Pass
NVNT	n40	2452	Ant1	-44.41	-30	Pass

Test Graphs

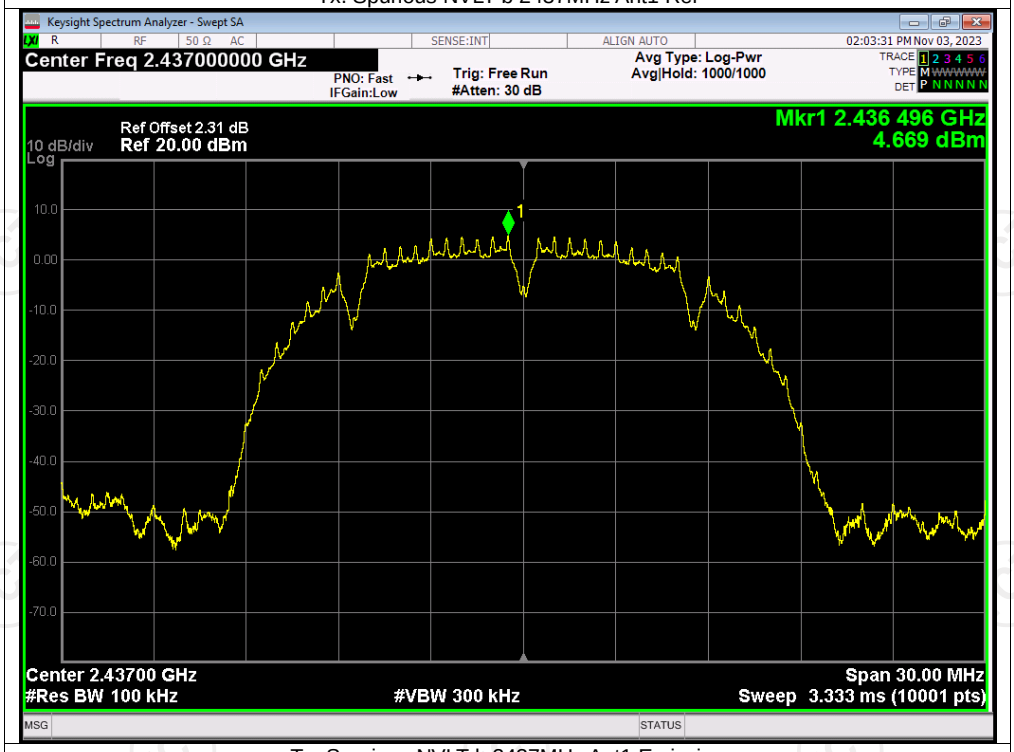
Tx. Spurious NVLT b 2412MHz Ant1 Ref



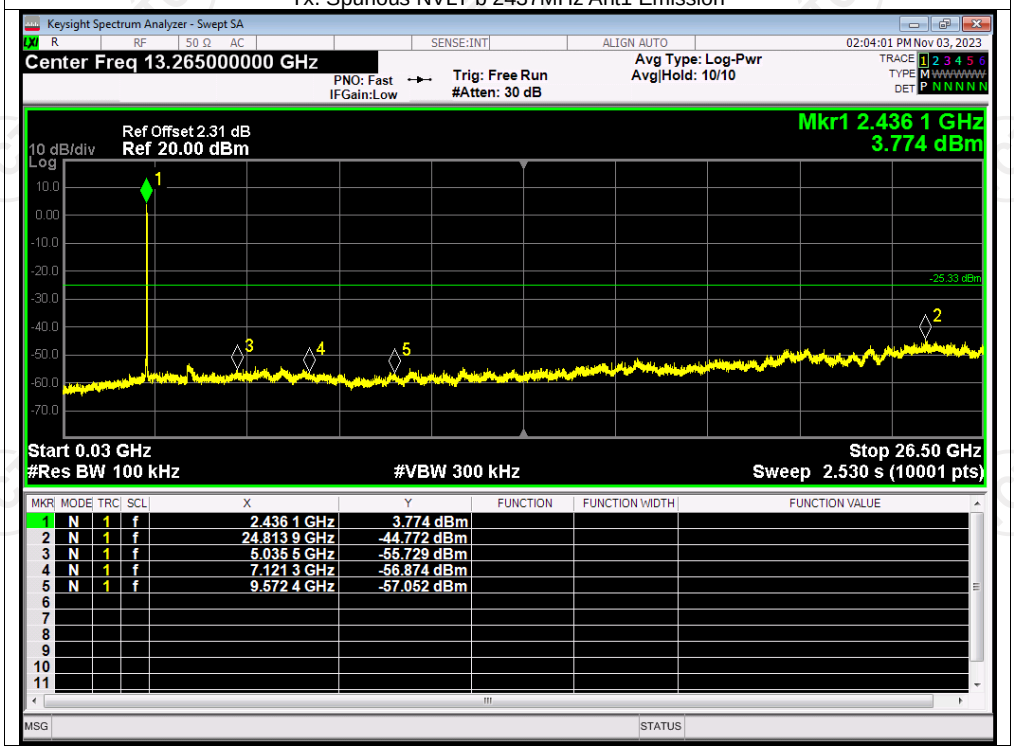
Tx. Spurious NVLT b 2412MHz Ant1 Emission



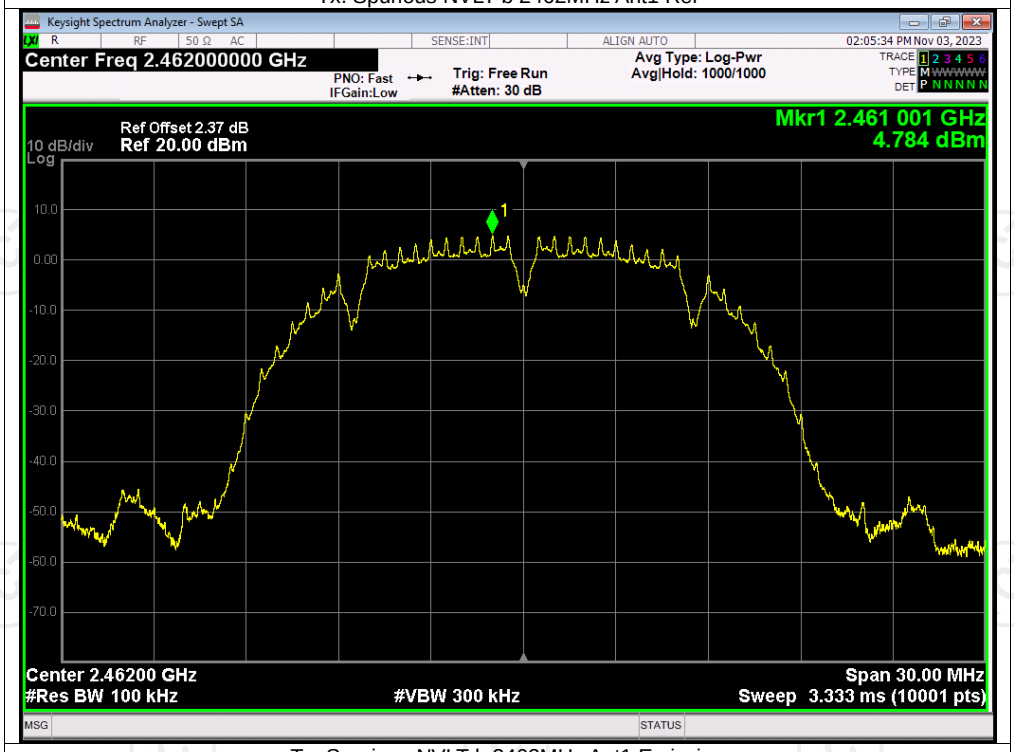
Tx. Spurious NVLT b 2437MHz Ant1 Ref



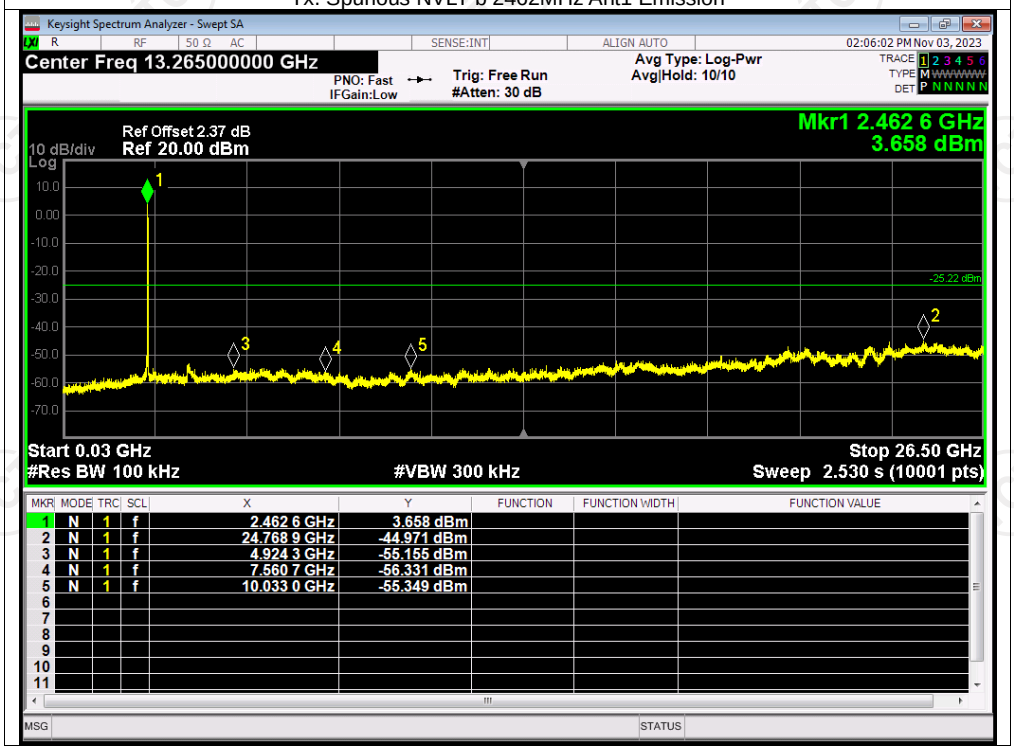
Tx. Spurious NVLT b 2437MHz Ant1 Emission



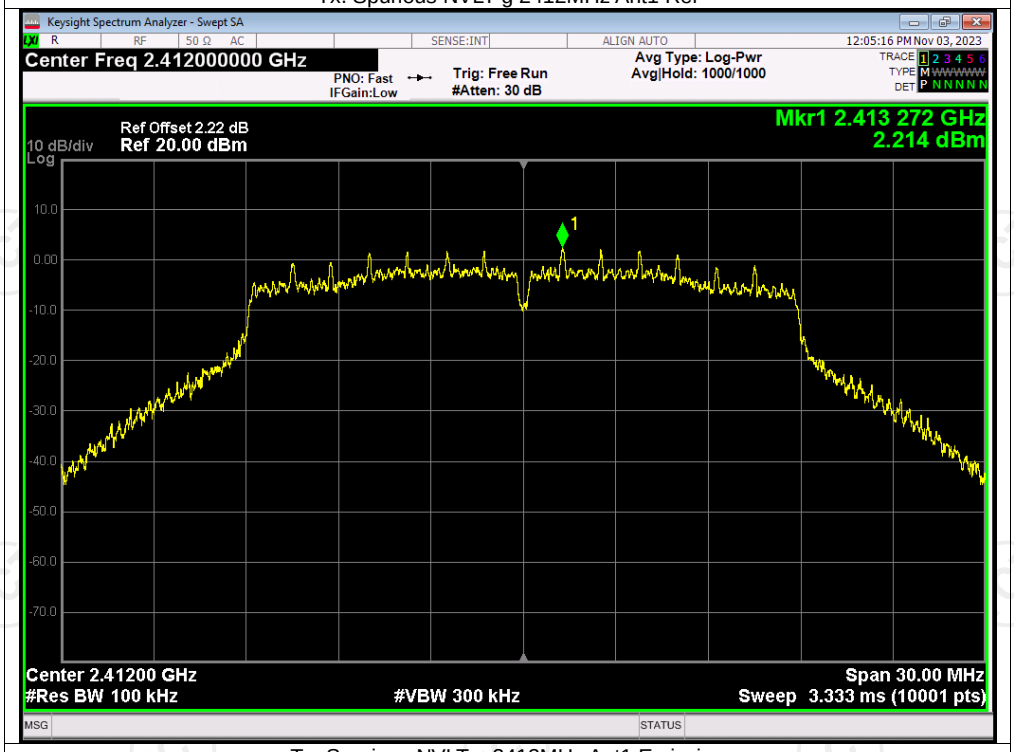
Tx. Spurious NVLT b 2462MHz Ant1 Ref



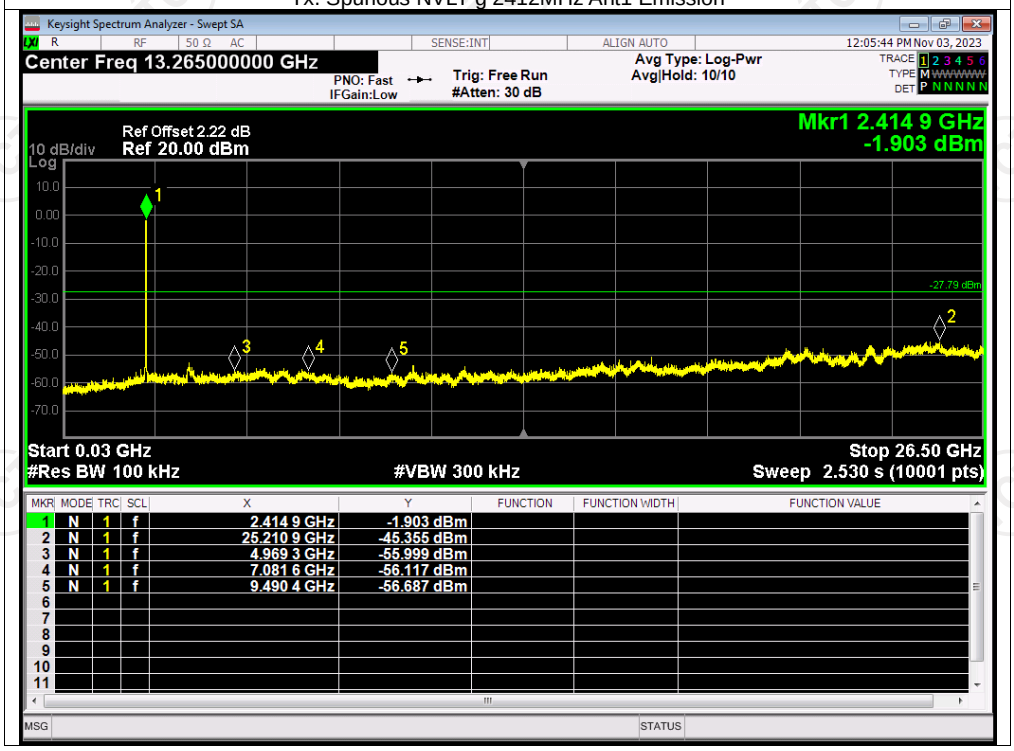
Tx. Spurious NVLT b 2462MHz Ant1 Emission



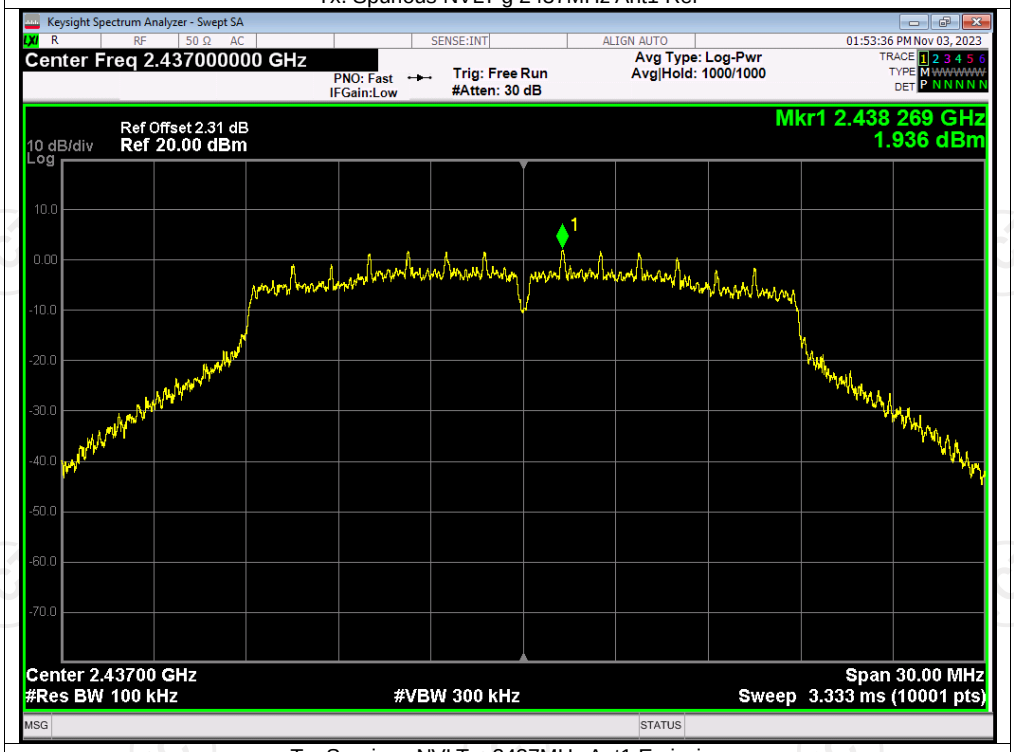
Tx. Spurious NVLT g 2412MHz Ant1 Ref



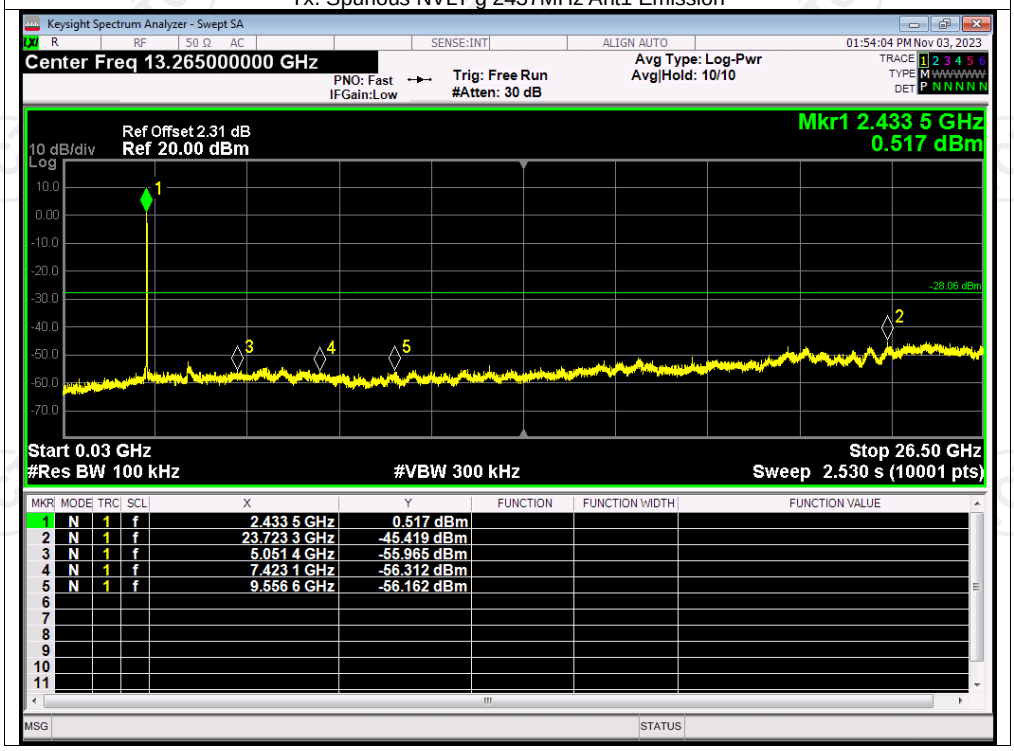
Tx. Spurious NVLT g 2412MHz Ant1 Emission



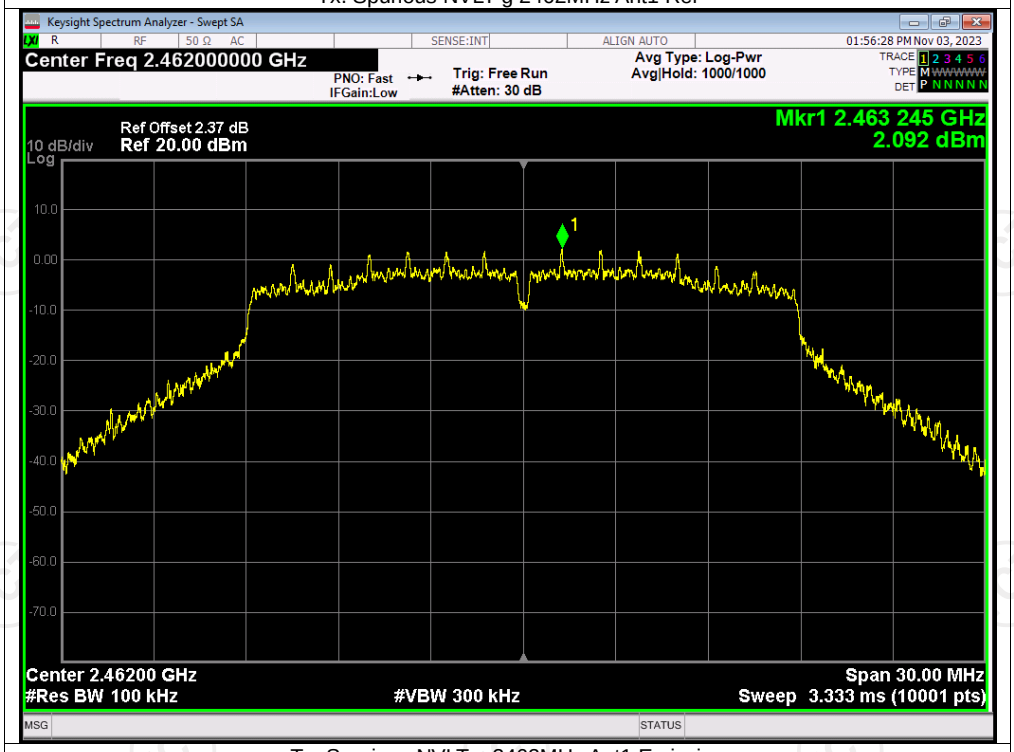
Tx. Spurious NVLT g 2437MHz Ant1 Ref



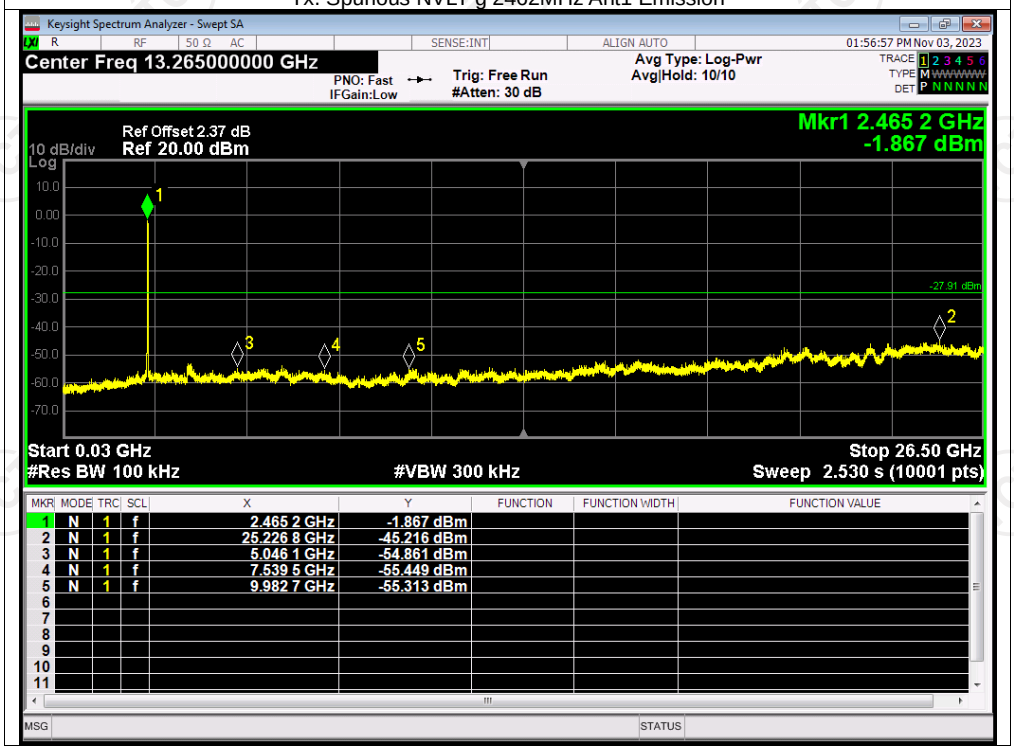
Tx. Spurious NVLT g 2437MHz Ant1 Emission



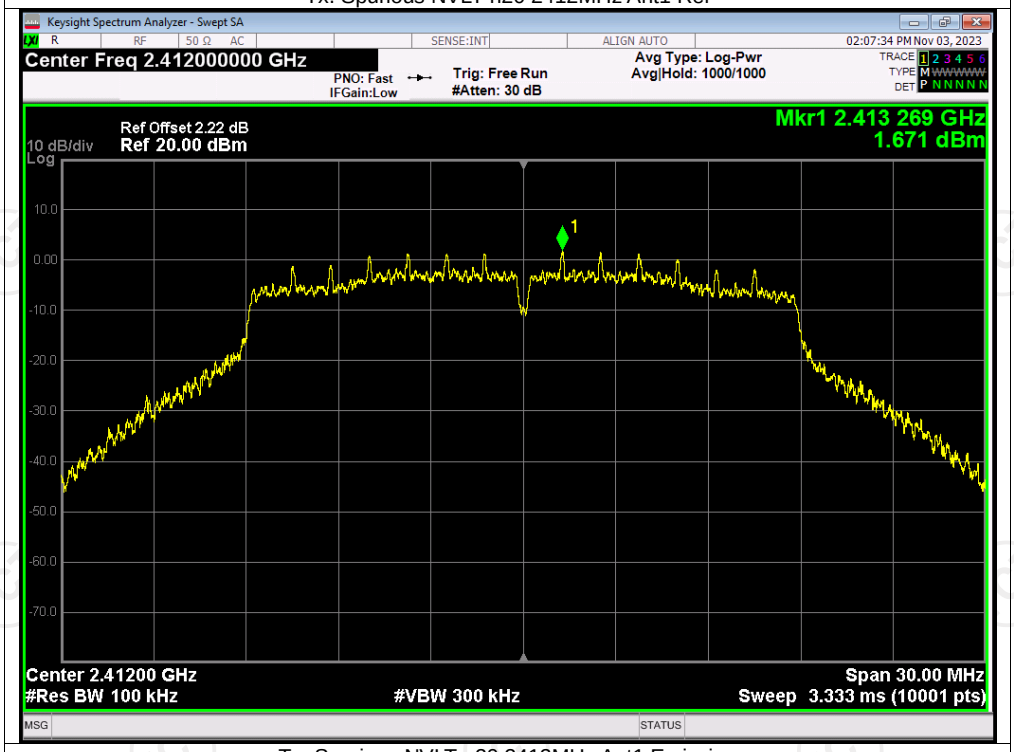
Tx. Spurious NVLT g 2462MHz Ant1 Ref



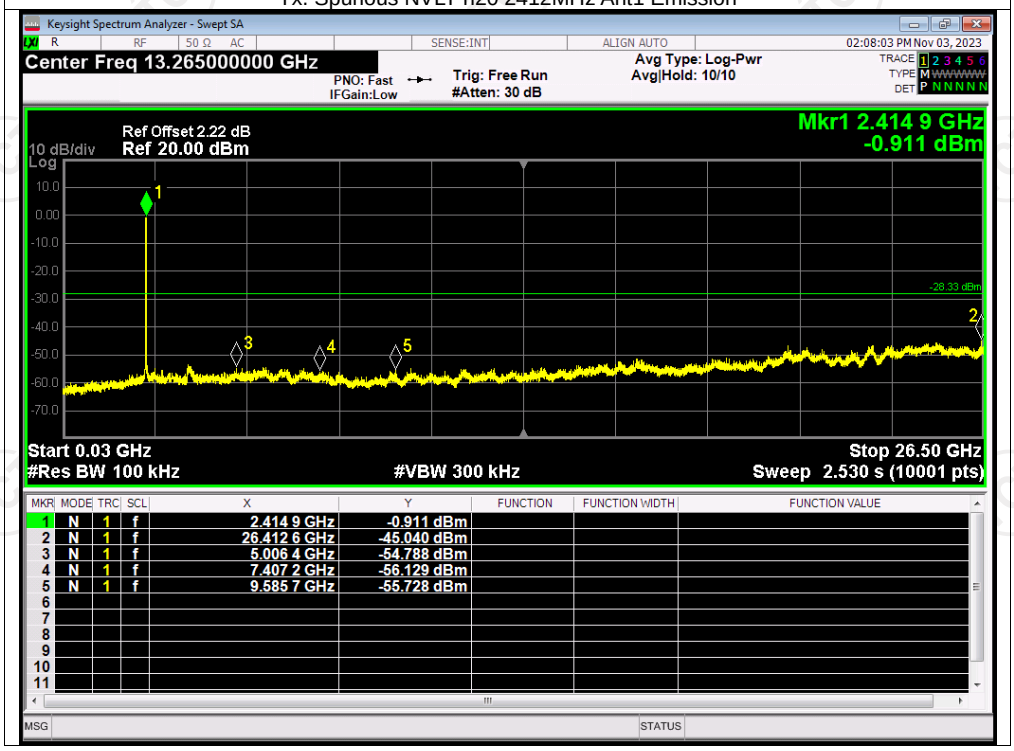
Tx. Spurious NVLT g 2462MHz Ant1 Emission



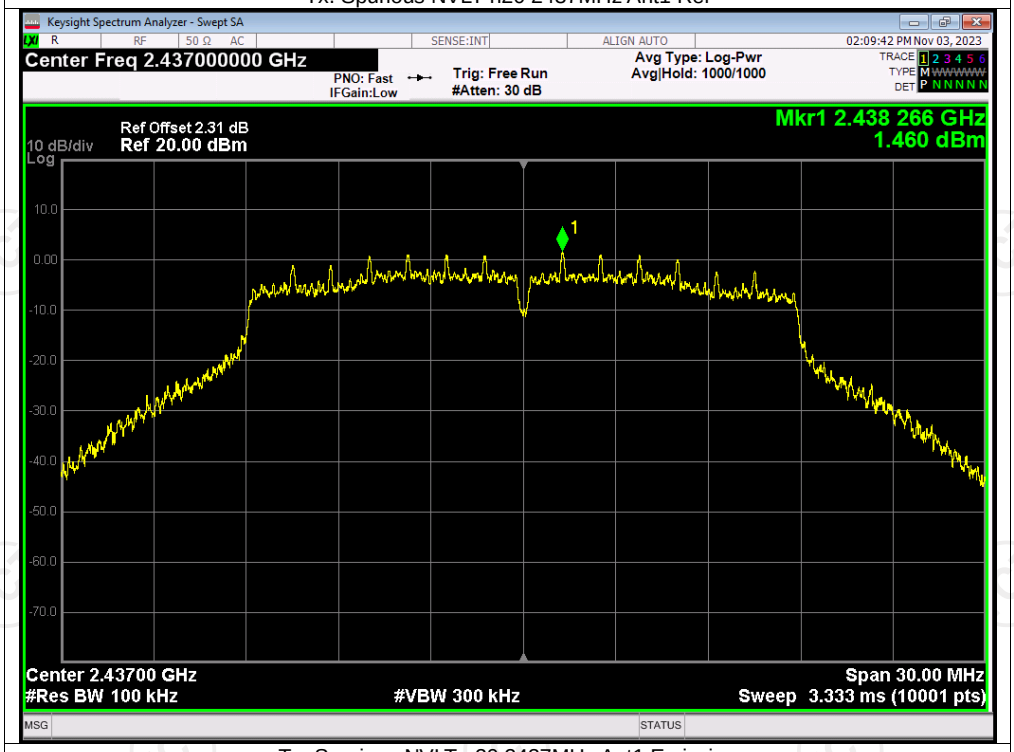
Tx. Spurious NVLT n20 2412MHz Ant1 Ref



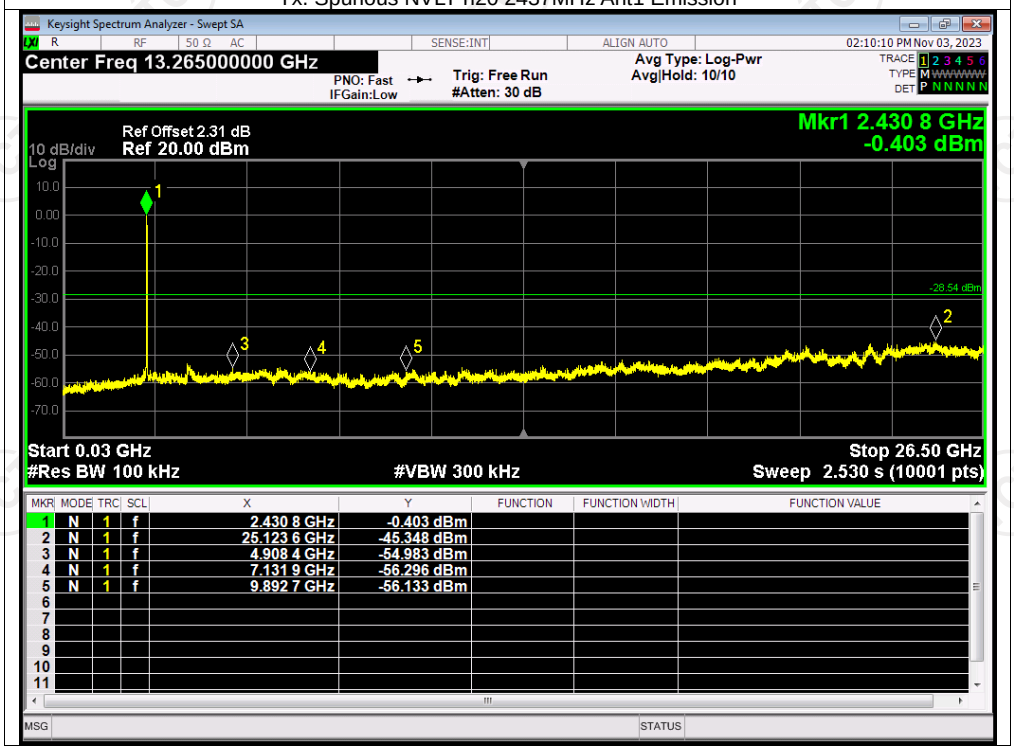
Tx. Spurious NVLT n20 2412MHz Ant1 Emission



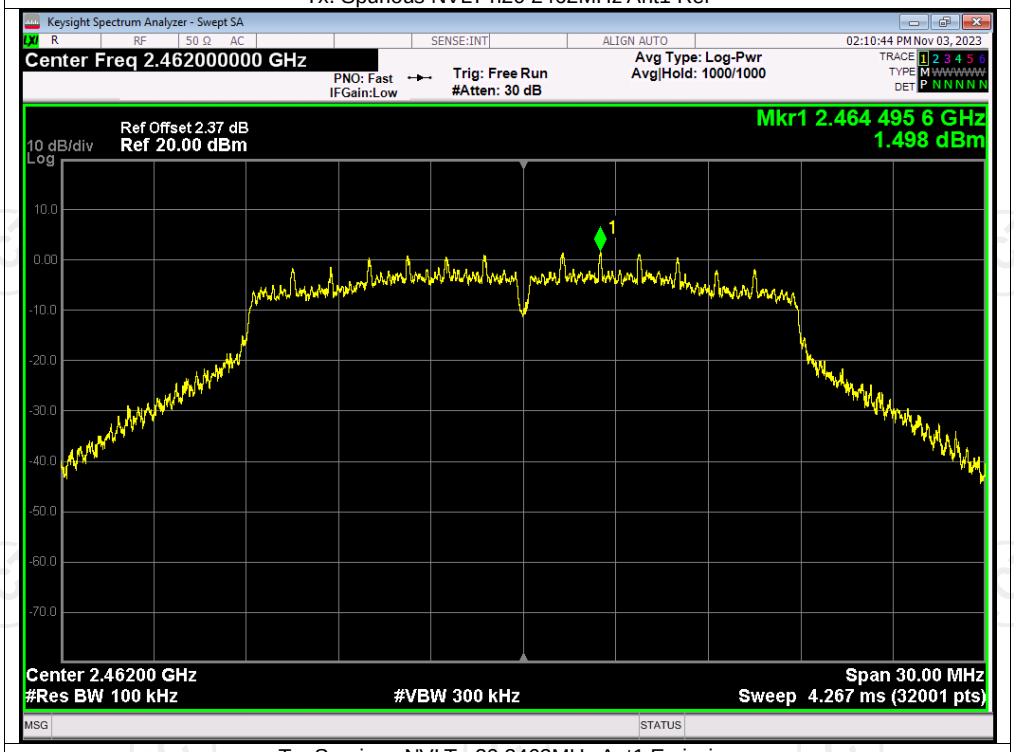
Tx. Spurious NVLT n20 2437MHz Ant1 Ref



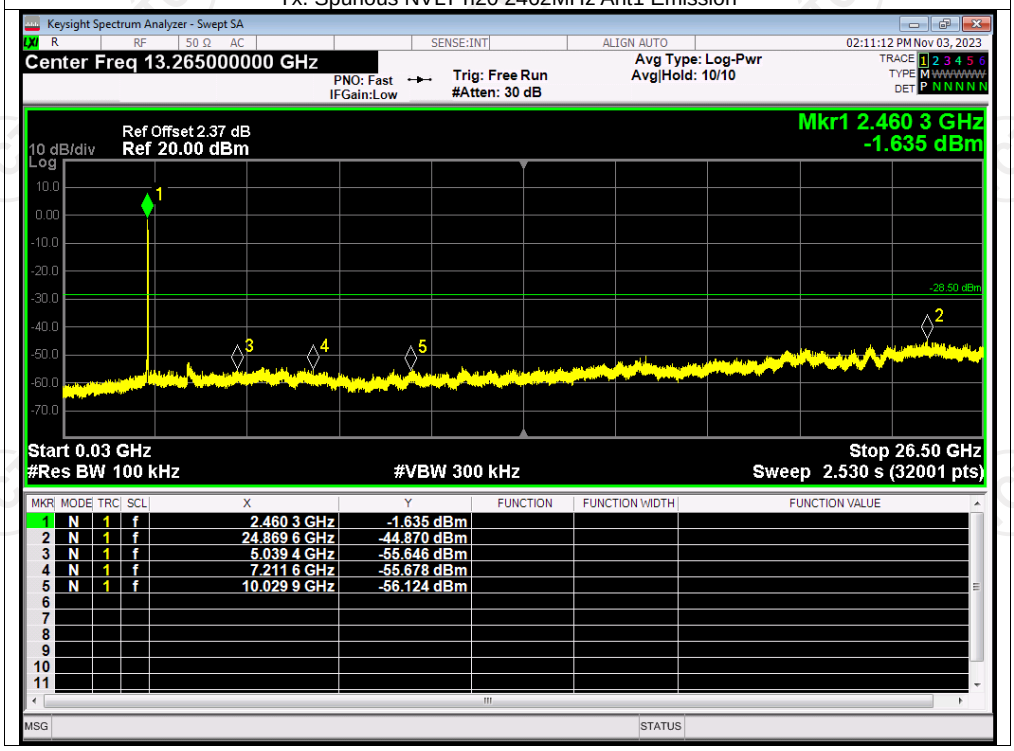
Tx. Spurious NVLT n20 2437MHz Ant1 Emission



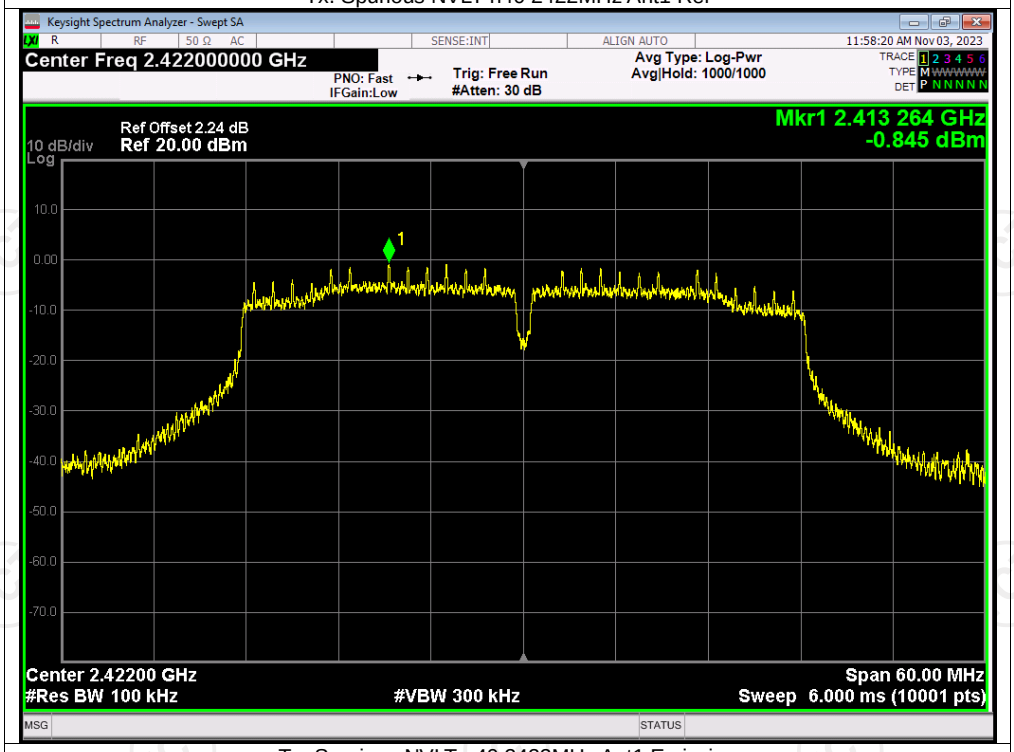
Tx. Spurious NVLT n20 2462MHz Ant1 Ref



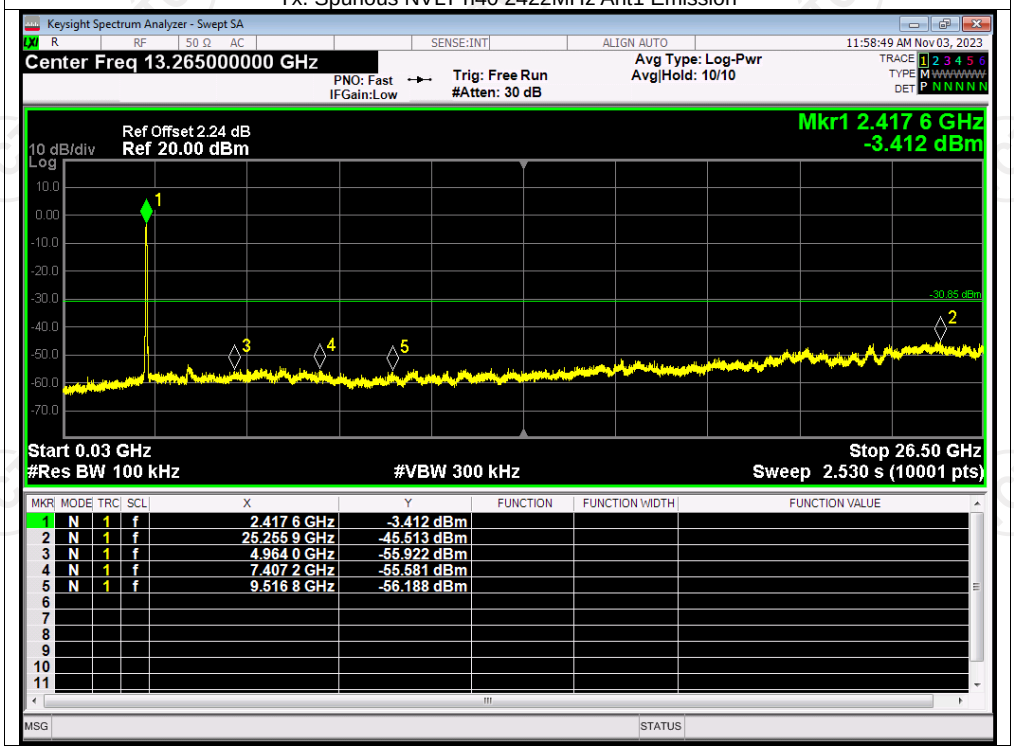
Tx. Spurious NVLT n20 2462MHz Ant1 Emission



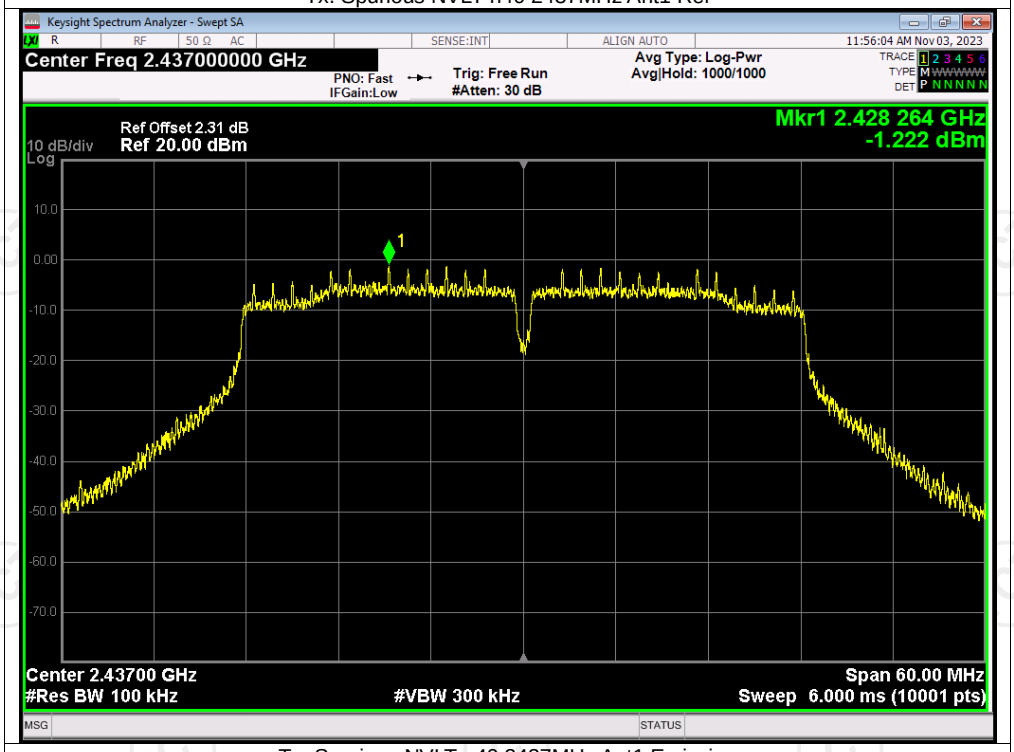
Tx. Spurious NVLT n40 2422MHz Ant1 Ref



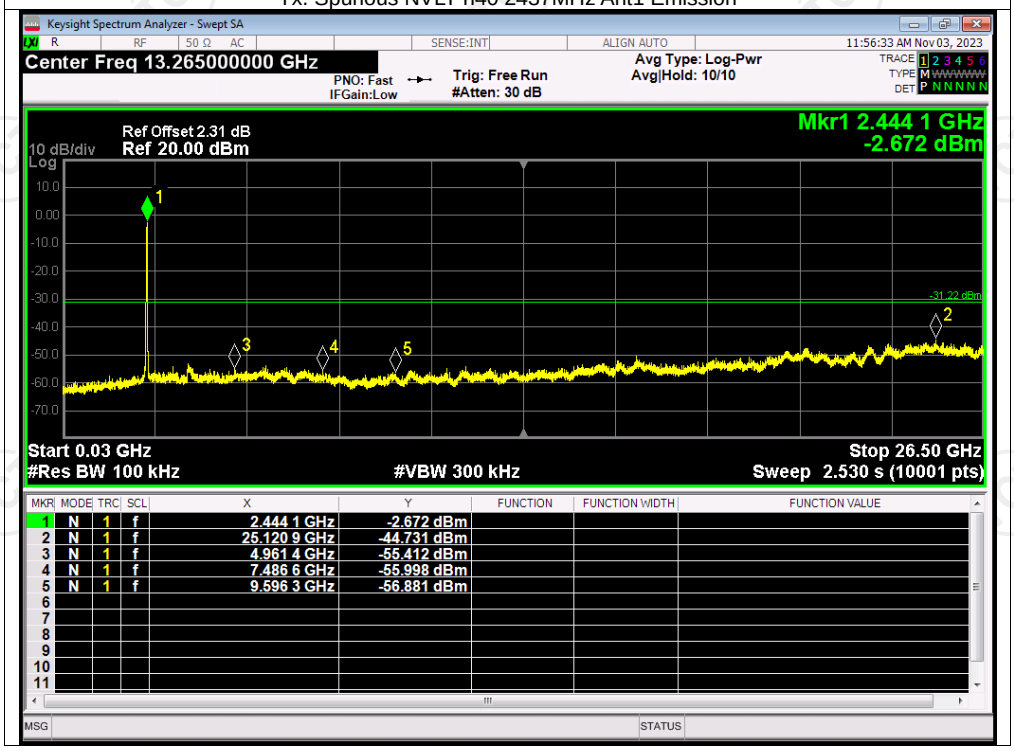
Tx. Spurious NVLT n40 2422MHz Ant1 Emission



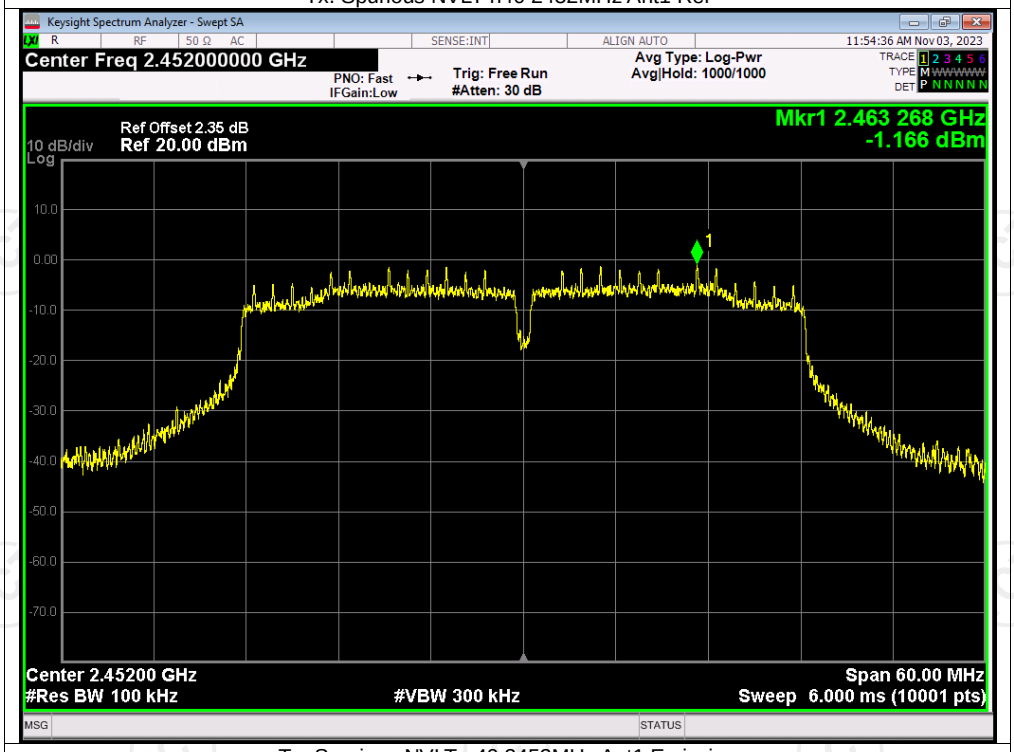
Tx. Spurious NVLT n40 2437MHz Ant1 Ref



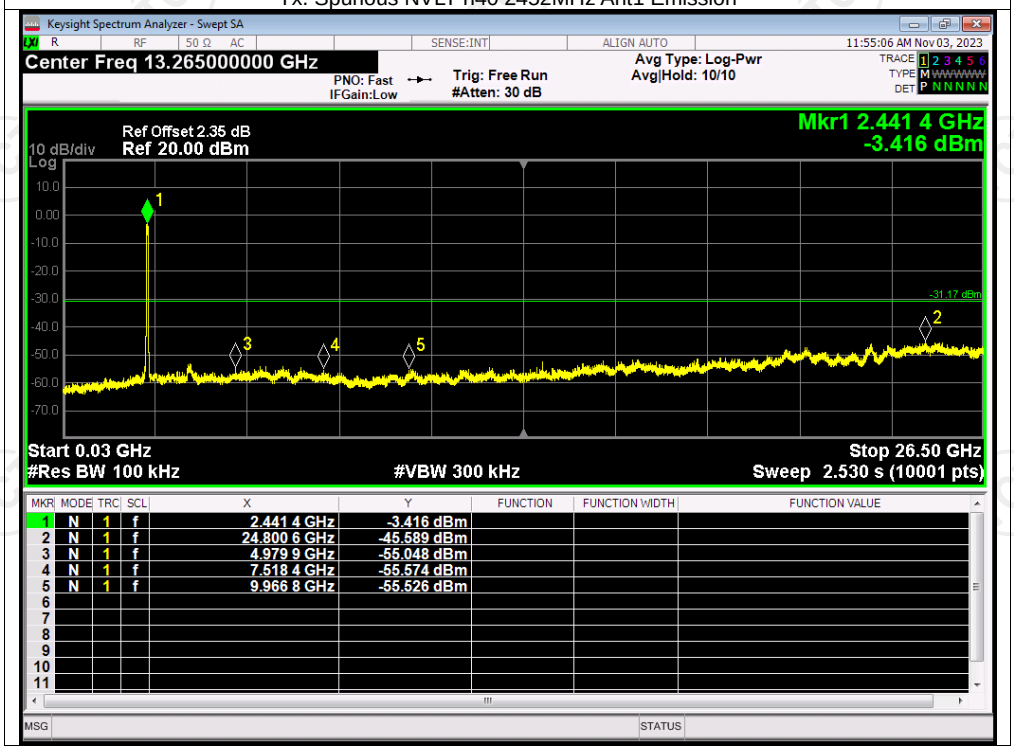
Tx. Spurious NVLT n40 2437MHz Ant1 Emission



Tx. Spurious NVLT n40 2452MHz Ant1 Ref

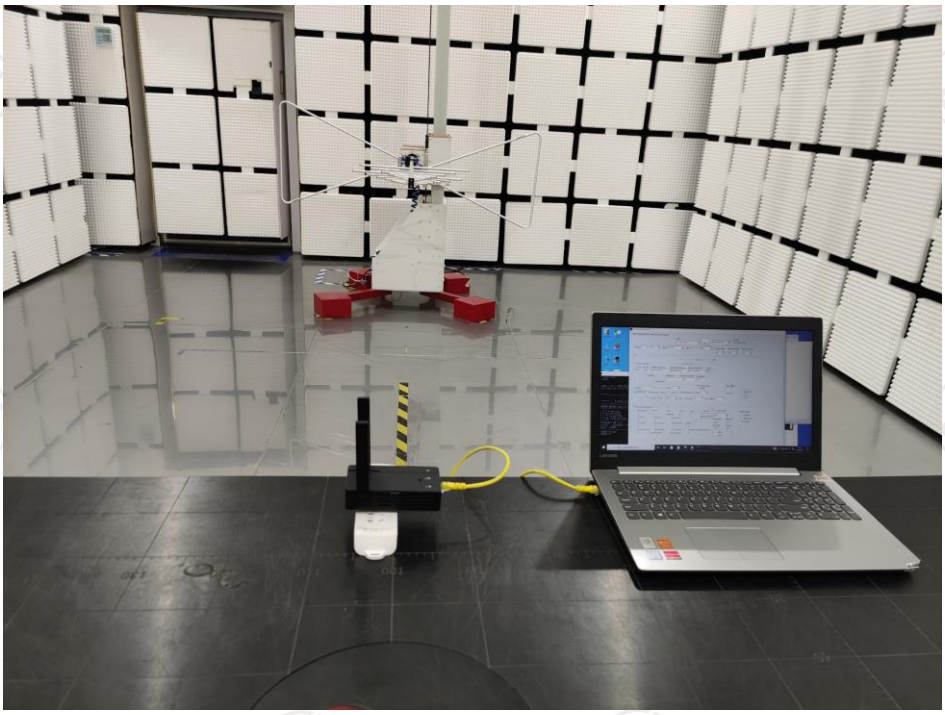


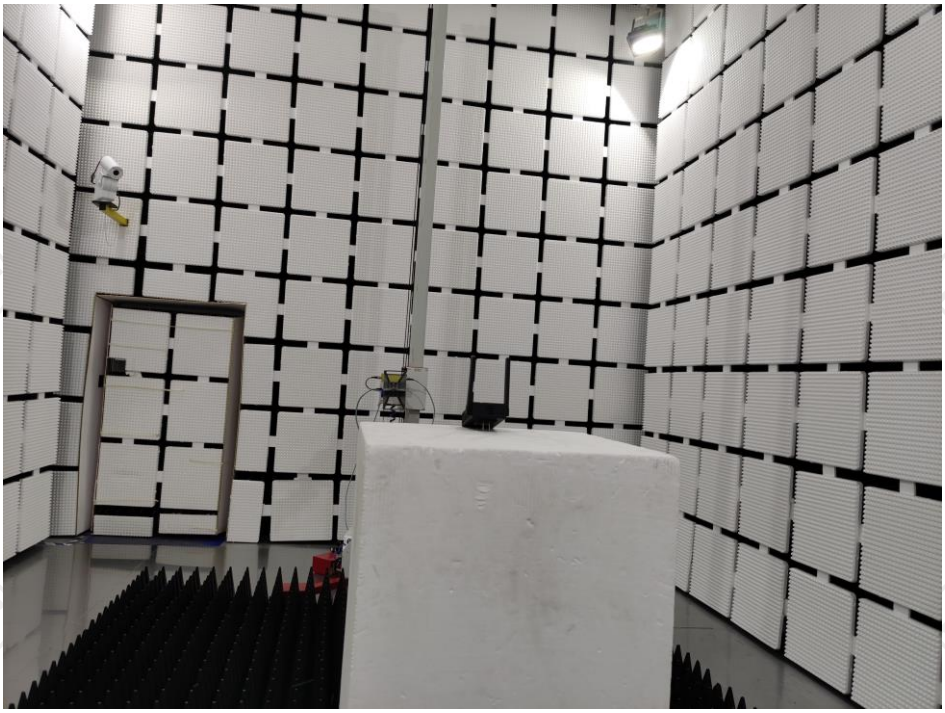
Tx. Spurious NVLT n40 2452MHz Ant1 Emission



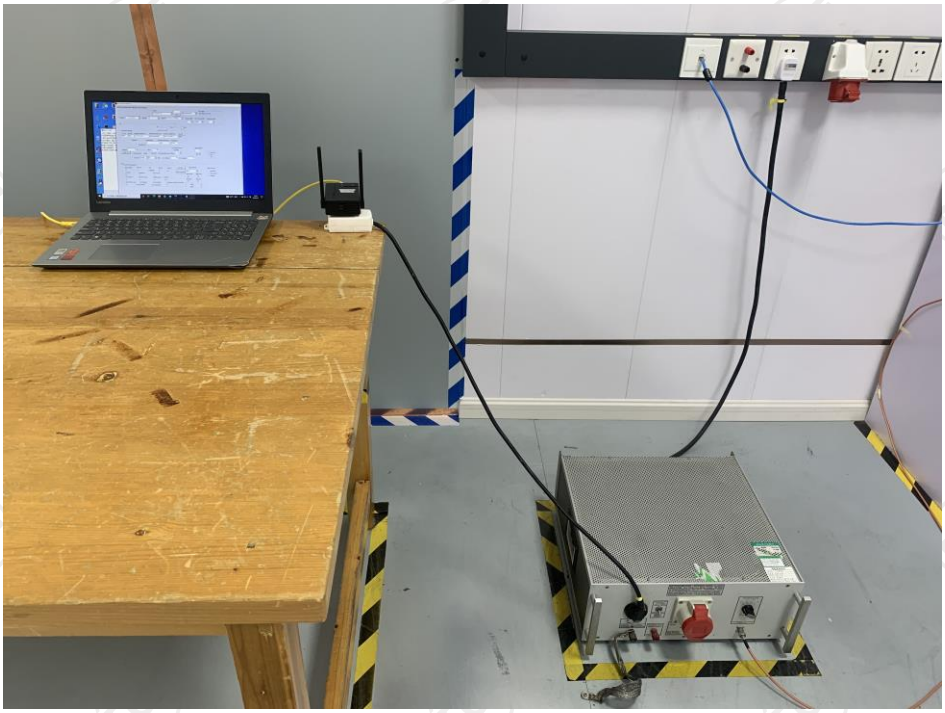
Appendix B: Photographs of Test Setup

Product: 300M Wi-Fi Extender
Model: Z01-01
Radiated Emission





Conducted Emission

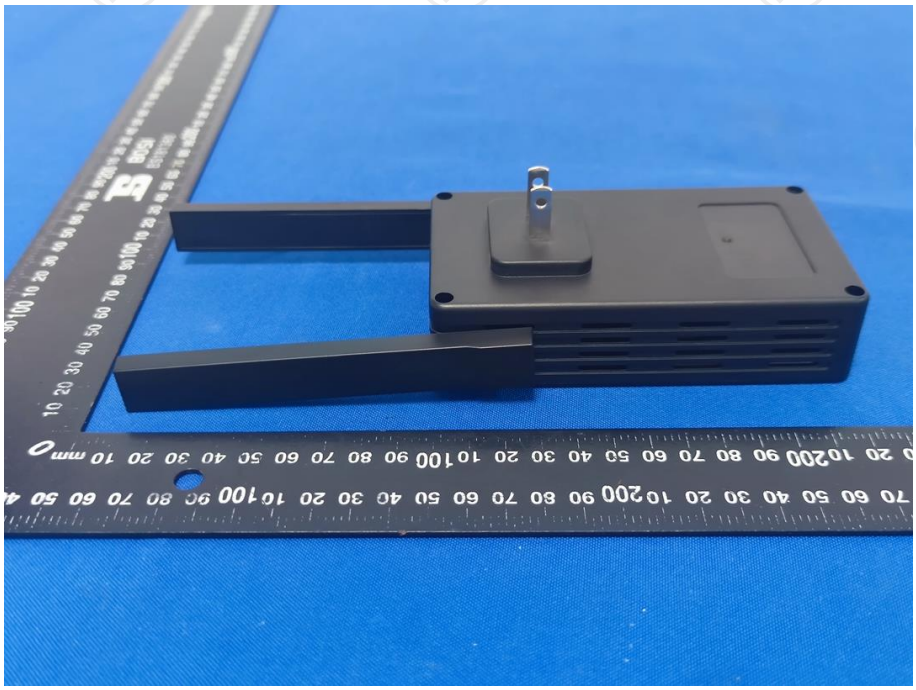


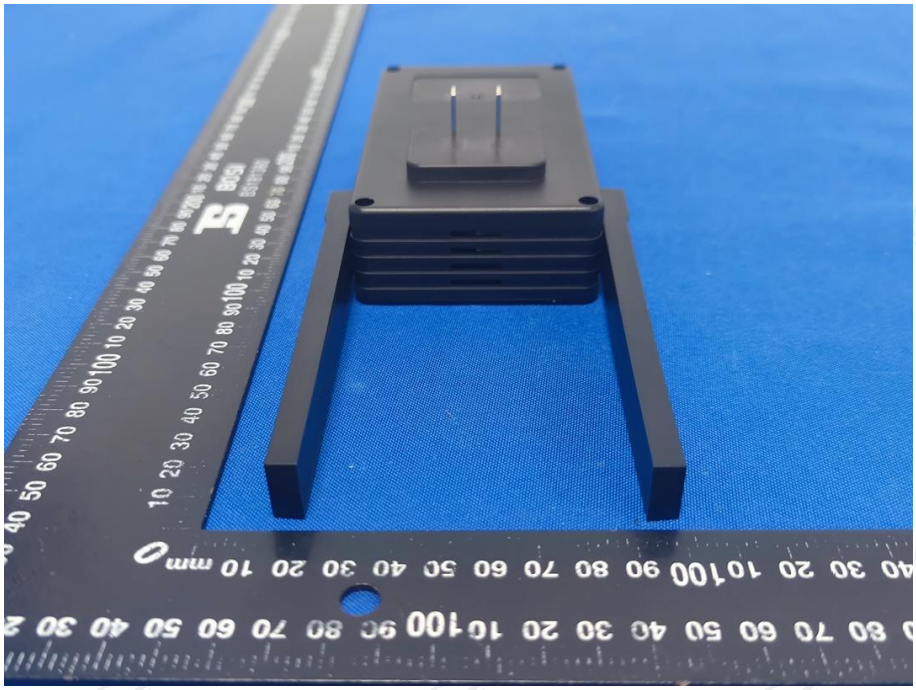
Appendix C: Photographs of EUT

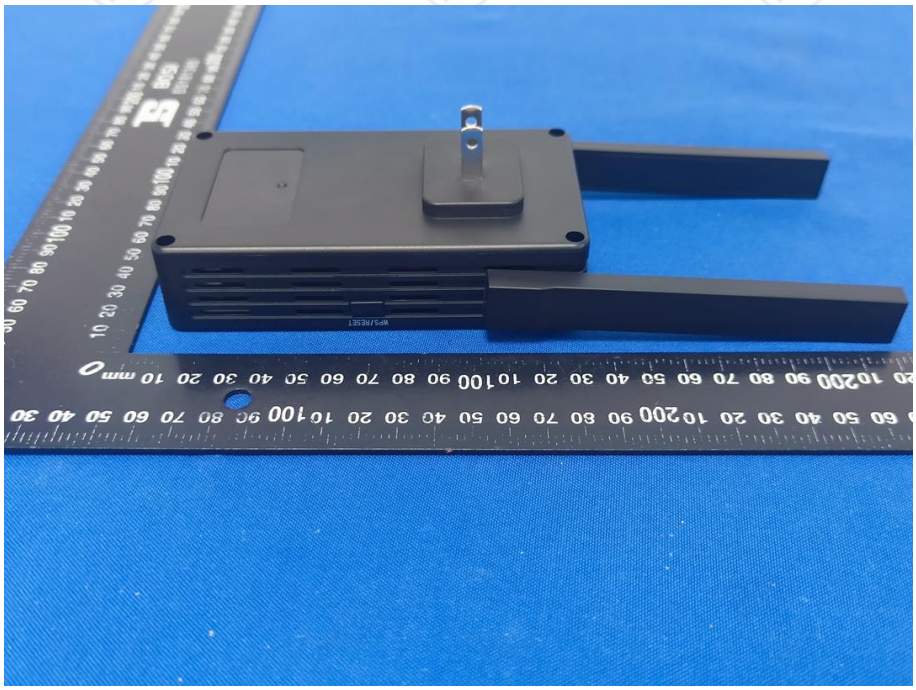
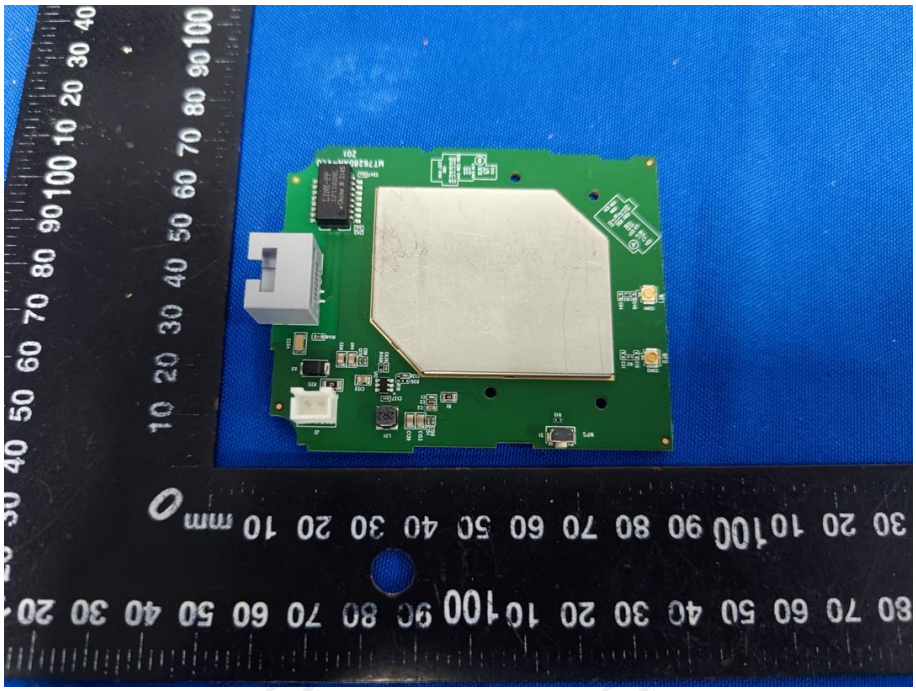
Product: 300M Wi-Fi Extender
Model: Z01-01
External Photos

BOSI
BS181360

BOSI
BS181360







Product: 300M Wi-Fi Extender
Model: Z01-01
Internal Photos