

Appendix – 2.4G Wi-Fi

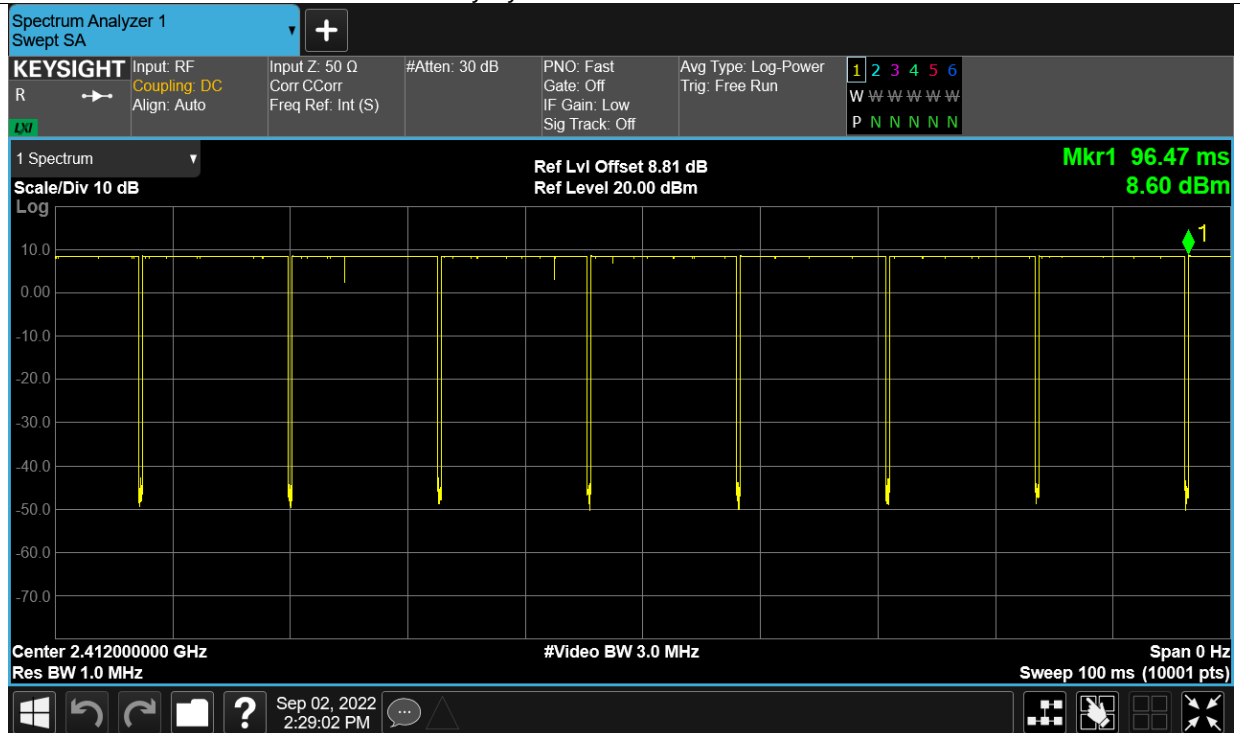
Test Data

Duty Cycle

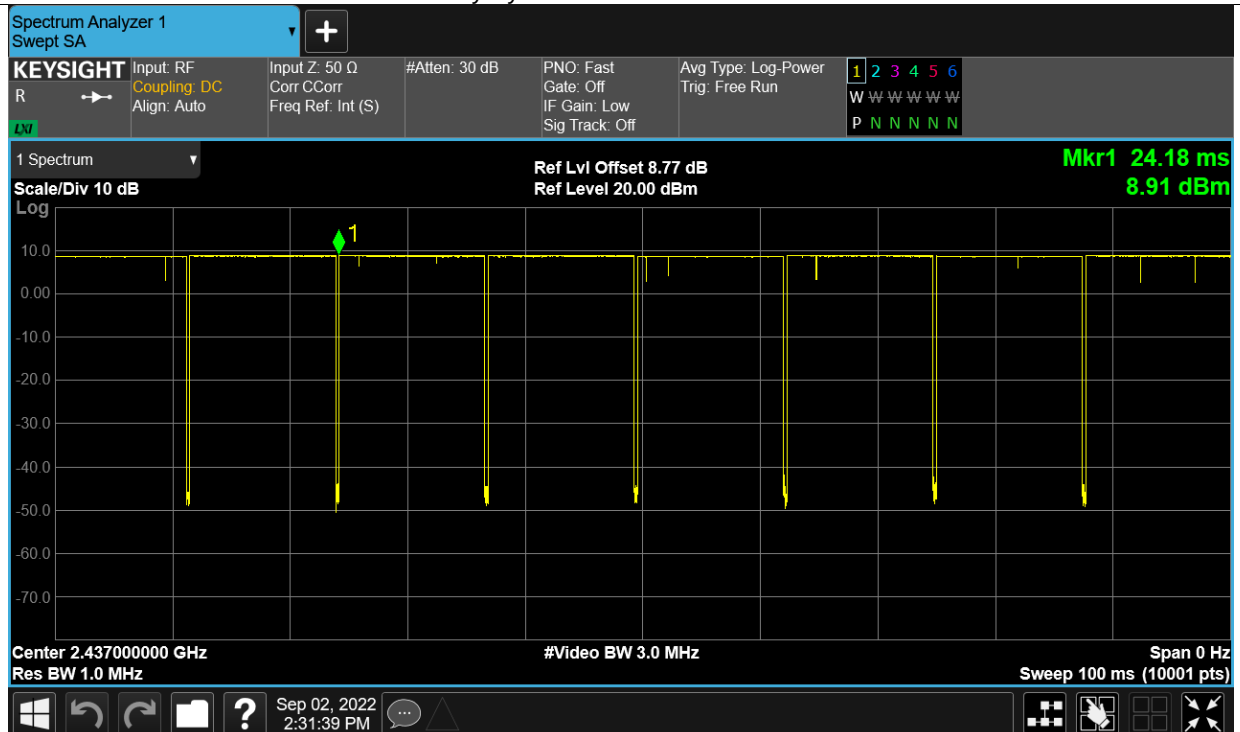
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	b	2412	Ant1	97.73	0.1
NVNT	b	2437	Ant1	98.02	0.09
NVNT	b	2462	Ant1	97.77	0.1
NVNT	g	2412	Ant1	87.39	0.59
NVNT	g	2437	Ant1	87.82	0.56
NVNT	g	2462	Ant1	87.56	0.58
NVNT	n20	2412	Ant1	86.95	0.61
NVNT	n20	2437	Ant1	86.96	0.61
NVNT	n20	2462	Ant1	86.94	0.61
NVNT	n40	2422	Ant1	76.77	1.15
NVNT	n40	2437	Ant1	76.7	1.15
NVNT	n40	2452	Ant1	76.56	1.16

Test Graphs

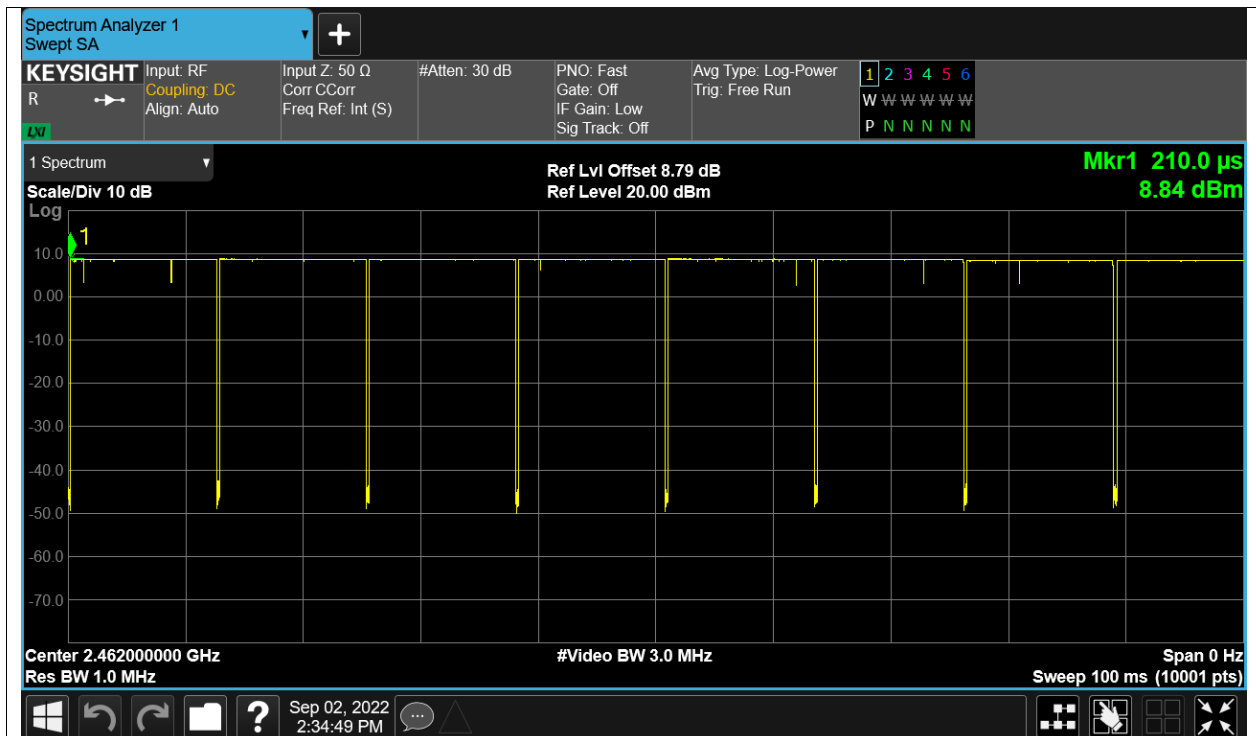
Duty Cycle NVNT b 2412MHz Ant1



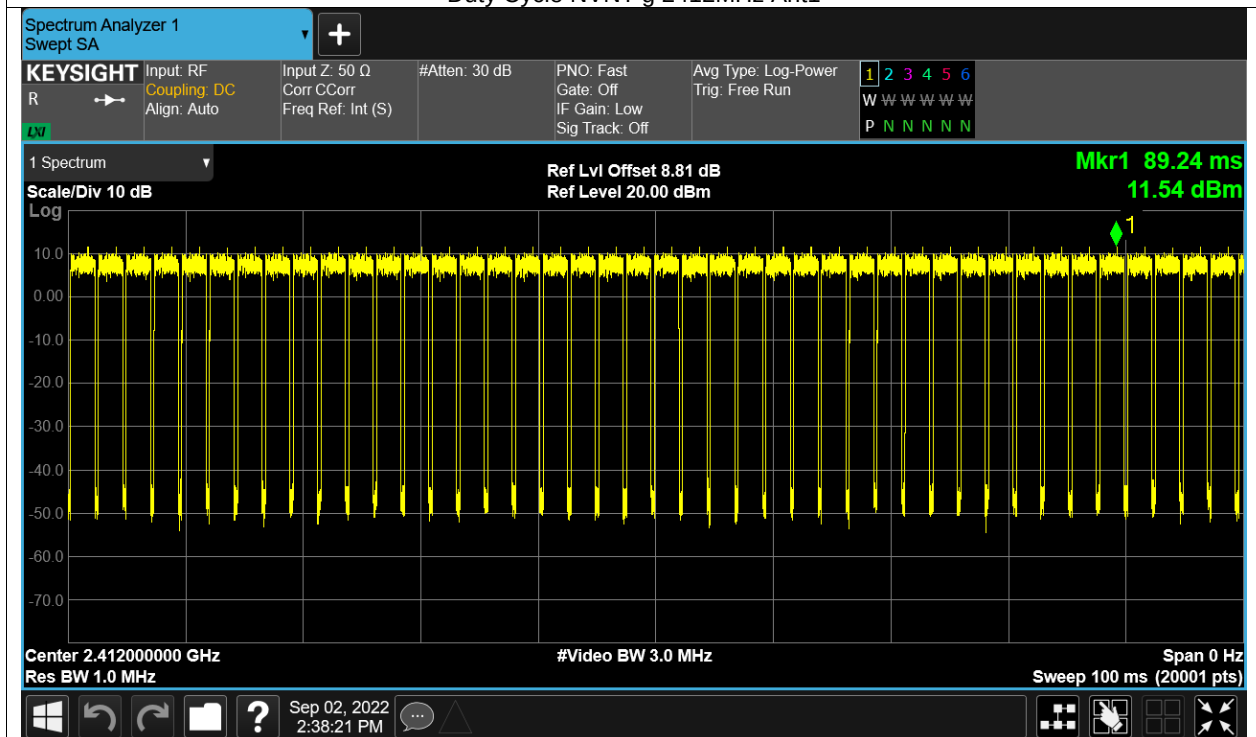
Duty Cycle NVNT b 2437MHz Ant1



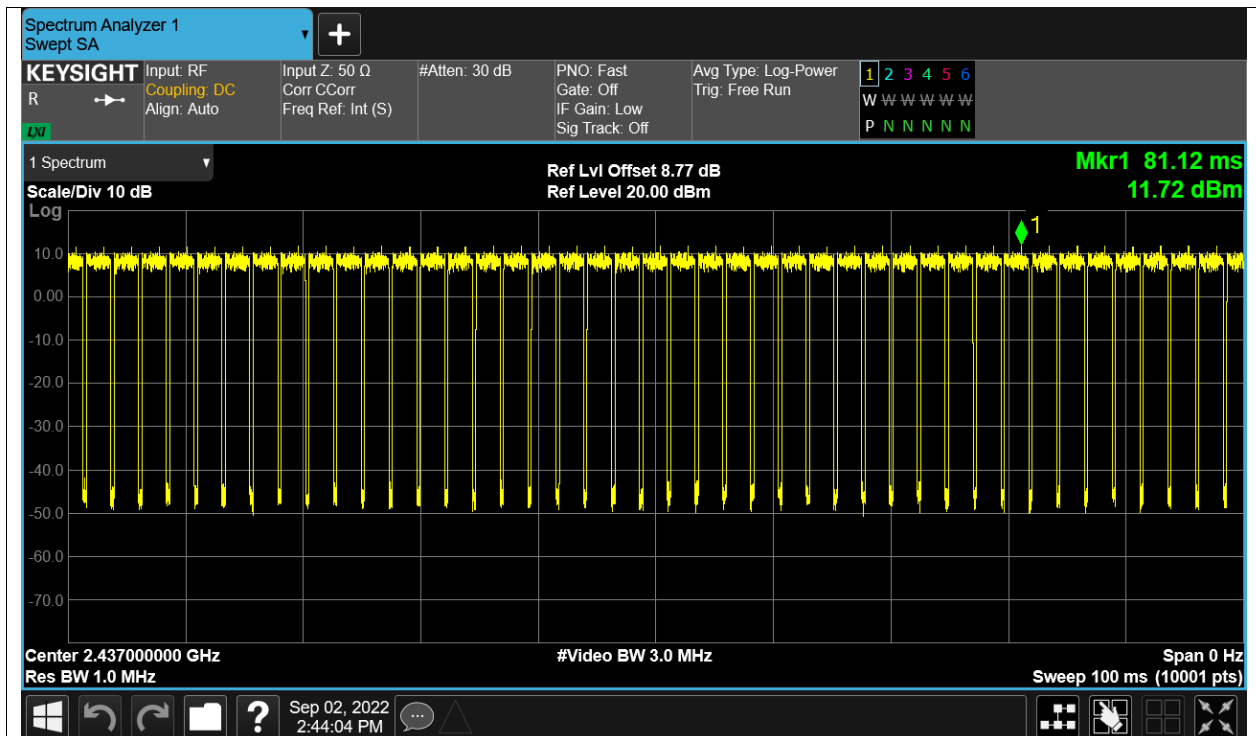
Duty Cycle NVNT b 2462MHz Ant1



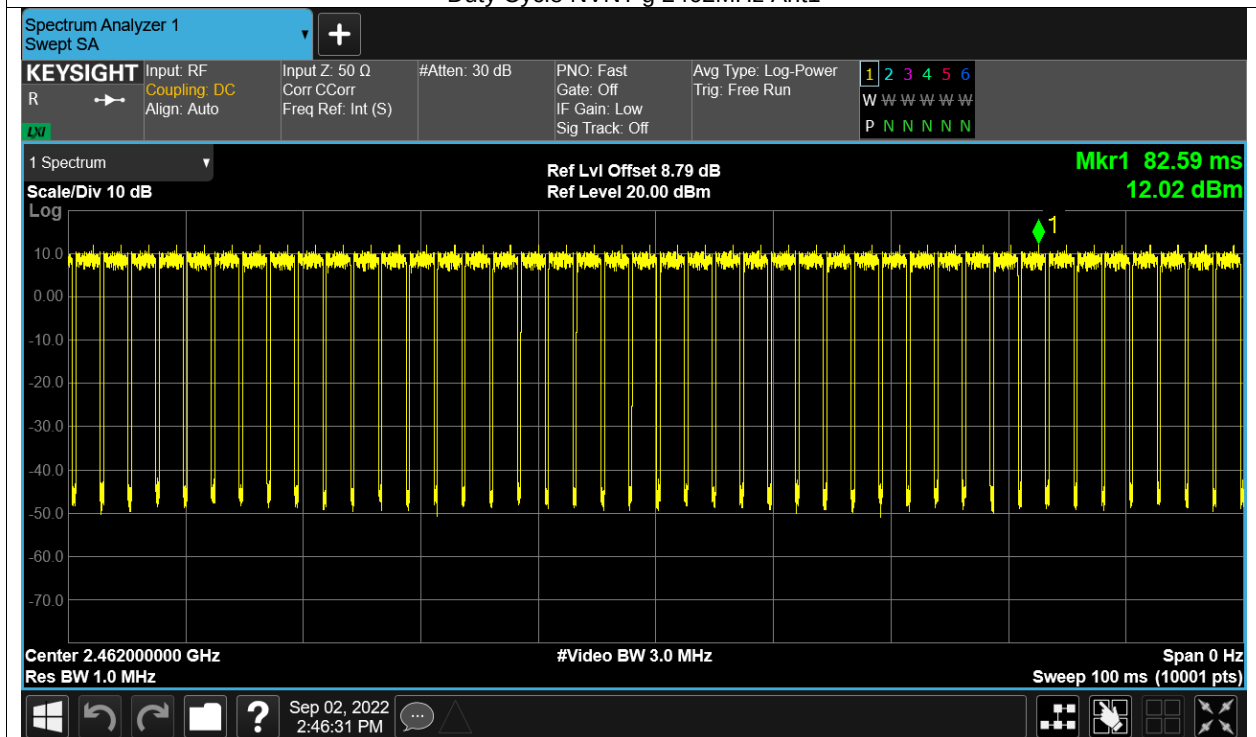
Duty Cycle NVNT g 2412MHz Ant1



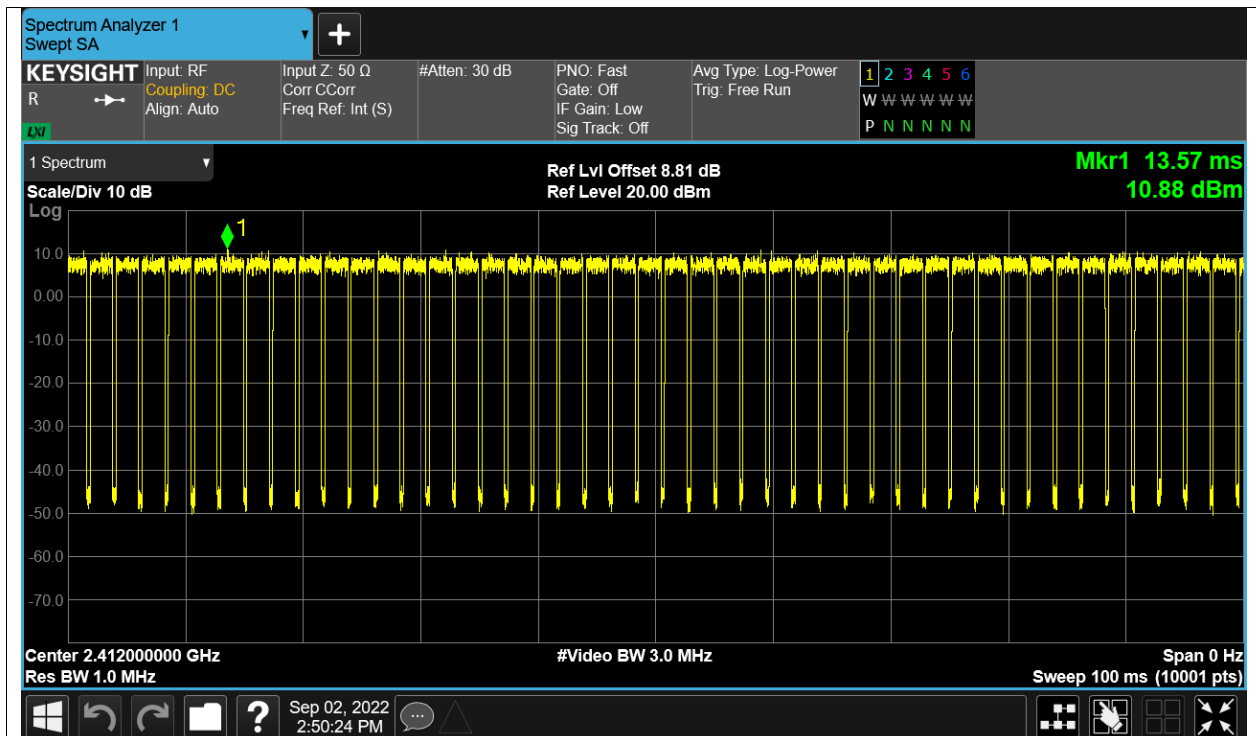
Duty Cycle NVNT g 2437MHz Ant1



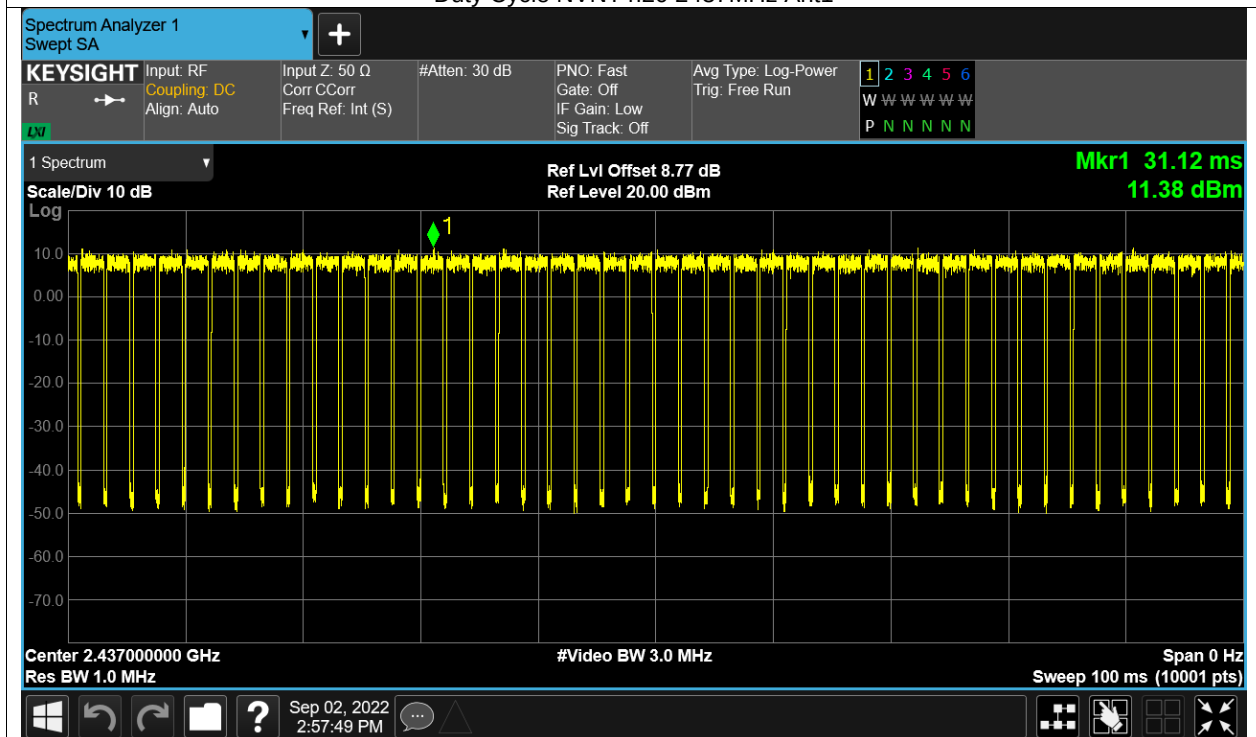
Duty Cycle NVNT g 2462MHz Ant1



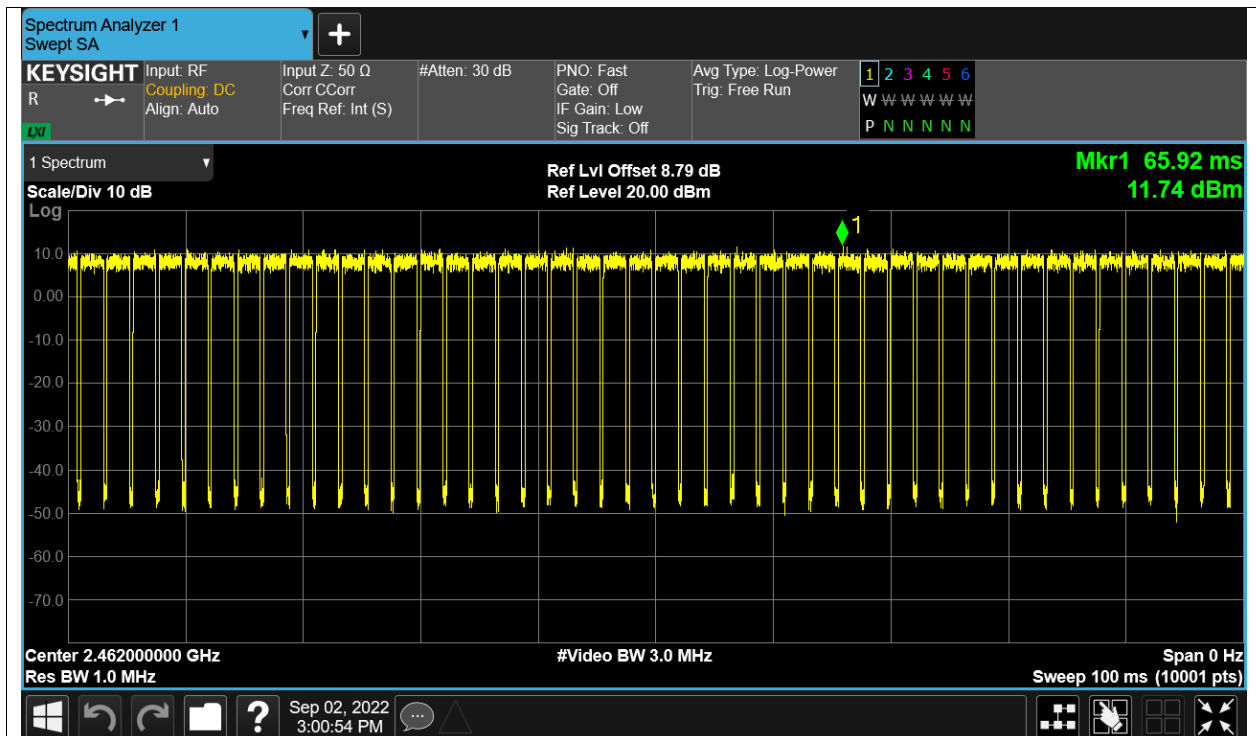
Duty Cycle NVNT n20 2412MHz Ant1



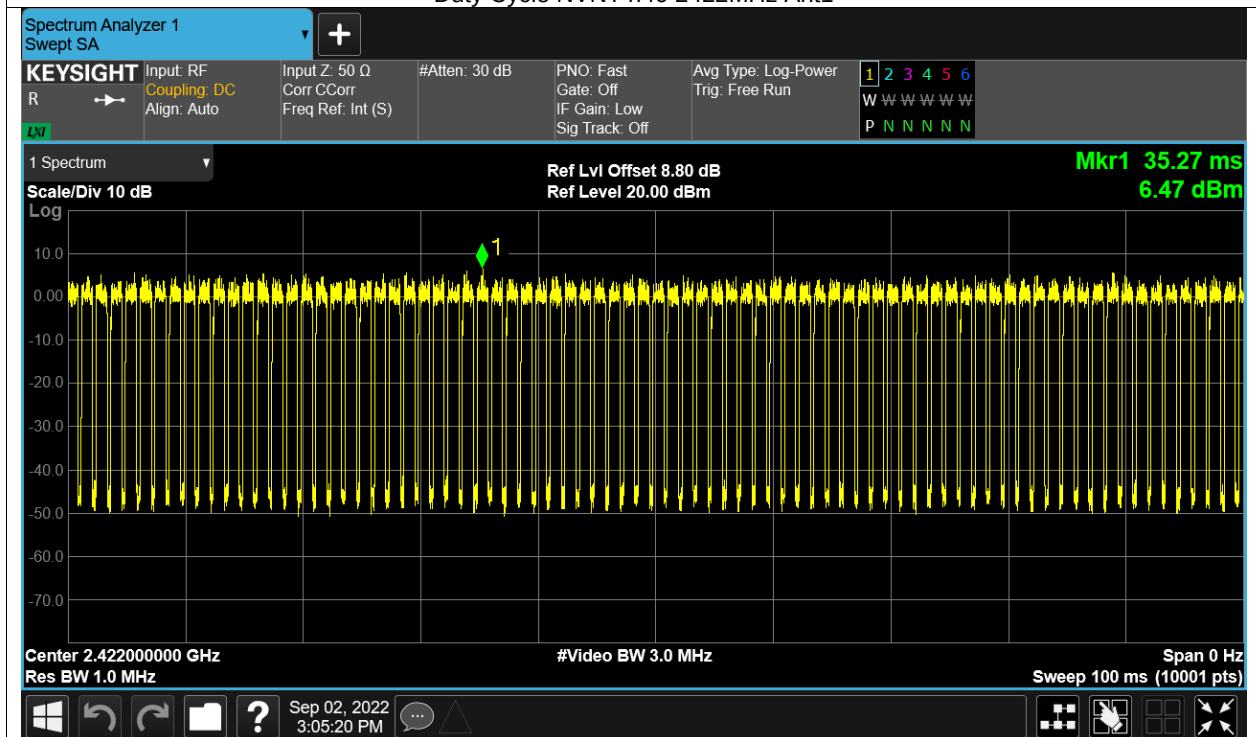
Duty Cycle NVNT n20 2437MHz Ant1



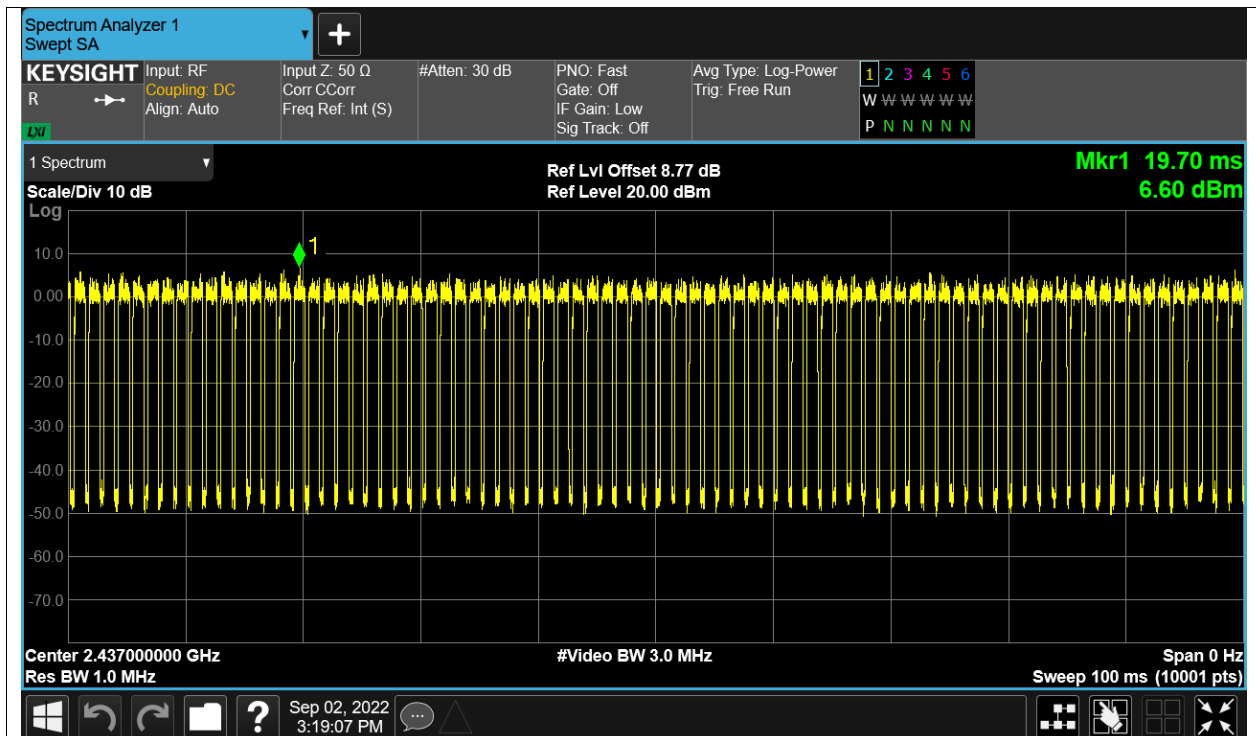
Duty Cycle NVNT n20 2462MHz Ant1



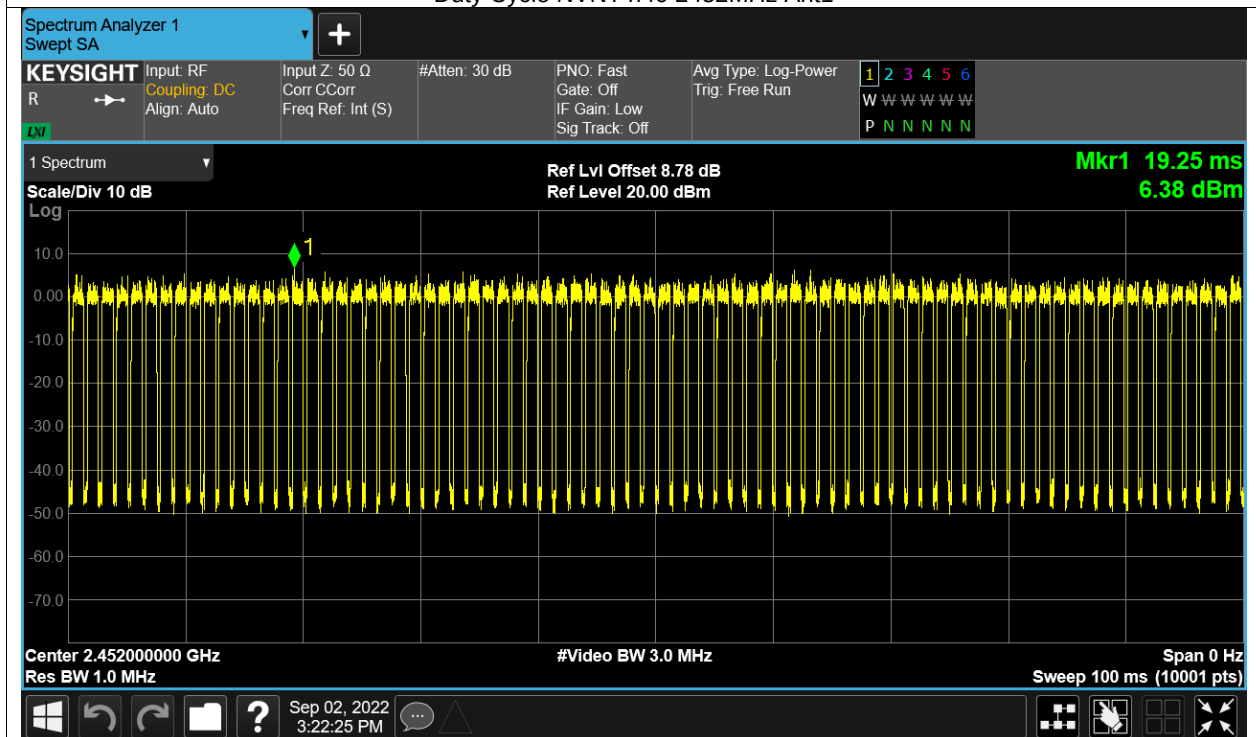
Duty Cycle NVNT n40 2422MHz Ant1



Duty Cycle NVNT n40 2437MHz Ant1



Duty Cycle NVNT n40 2452MHz Ant1



Maximum Conducted Output Power

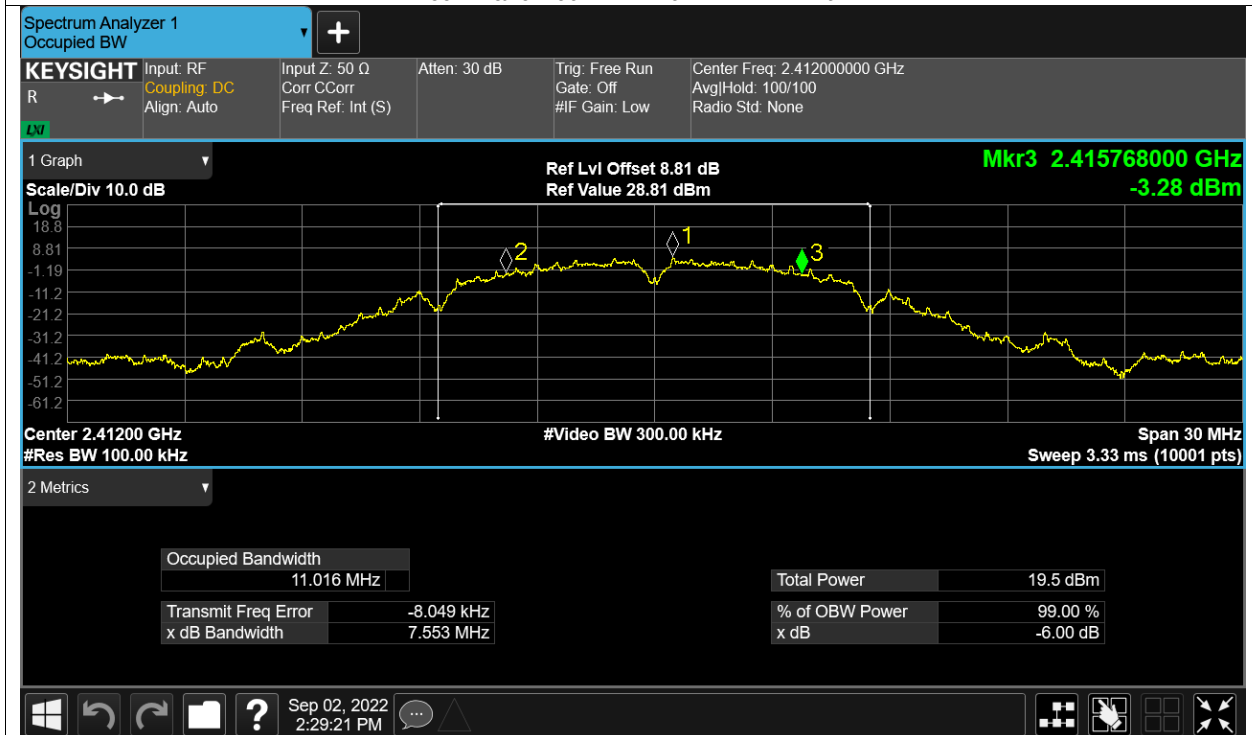
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	13.4	0.1	13.5	30	Pass
NVNT	b	2437	Ant1	13.7	0.09	13.79	30	Pass
NVNT	b	2462	Ant1	13.58	0.1	13.68	30	Pass
NVNT	g	2412	Ant1	12.9	0.59	13.49	30	Pass
NVNT	g	2437	Ant1	12.96	0.56	13.52	30	Pass
NVNT	g	2462	Ant1	13.02	0.58	13.6	30	Pass
NVNT	n20	2412	Ant1	12.38	0.61	12.99	30	Pass
NVNT	n20	2437	Ant1	12.69	0.61	13.3	30	Pass
NVNT	n20	2462	Ant1	12.7	0.61	13.31	30	Pass
NVNT	n40	2422	Ant1	11.35	1.15	12.5	30	Pass
NVNT	n40	2437	Ant1	11.6	1.15	12.75	30	Pass
NVNT	n40	2452	Ant1	11.5	1.16	12.66	30	Pass

-6dB Bandwidth

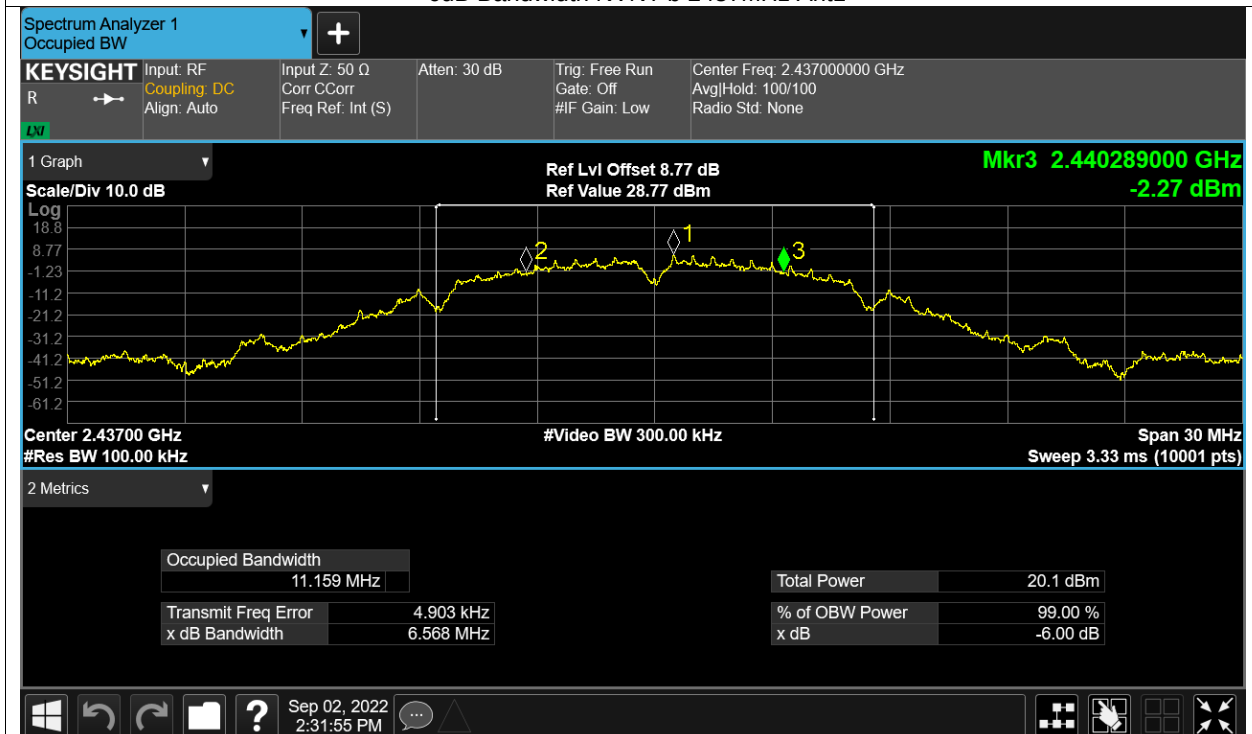
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	limit	Verdic
NVNT	b	2412	Ant1	7.553	0.5	Pass
NVNT	b	2437	Ant1	6.568	0.5	Pass
NVNT	b	2462	Ant1	7.539	0.5	Pass
NVNT	g	2412	Ant1	13.012	0.5	Pass
NVNT	g	2437	Ant1	13.112	0.5	Pass
NVNT	g	2462	Ant1	15.063	0.5	Pass
NVNT	n20	2412	Ant1	13.828	0.5	Pass
NVNT	n20	2437	Ant1	14.922	0.5	Pass
NVNT	n20	2462	Ant1	15.033	0.5	Pass
NVNT	n40	2422	Ant1	35.007	0.5	Pass
NVNT	n40	2437	Ant1	35.156	0.5	Pass
NVNT	n40	2452	Ant1	35.152	0.5	Pass

Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1



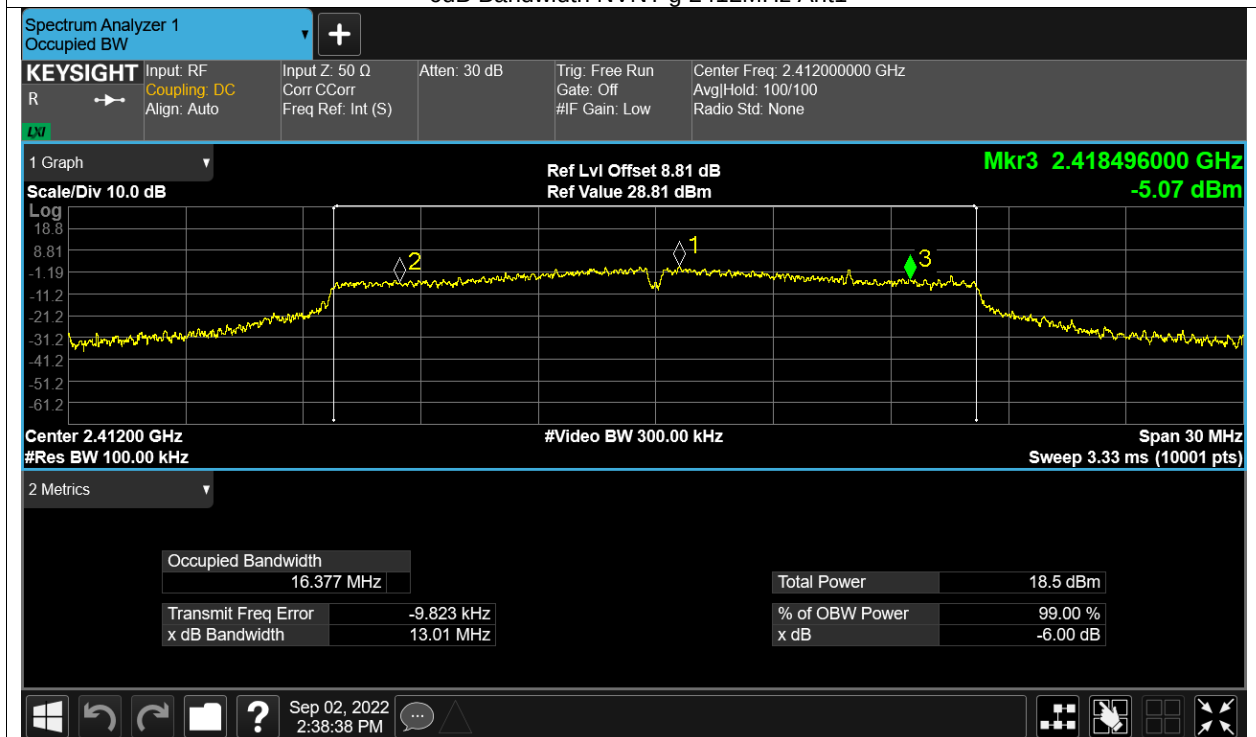
-6dB Bandwidth NVNT b 2437MHz Ant1



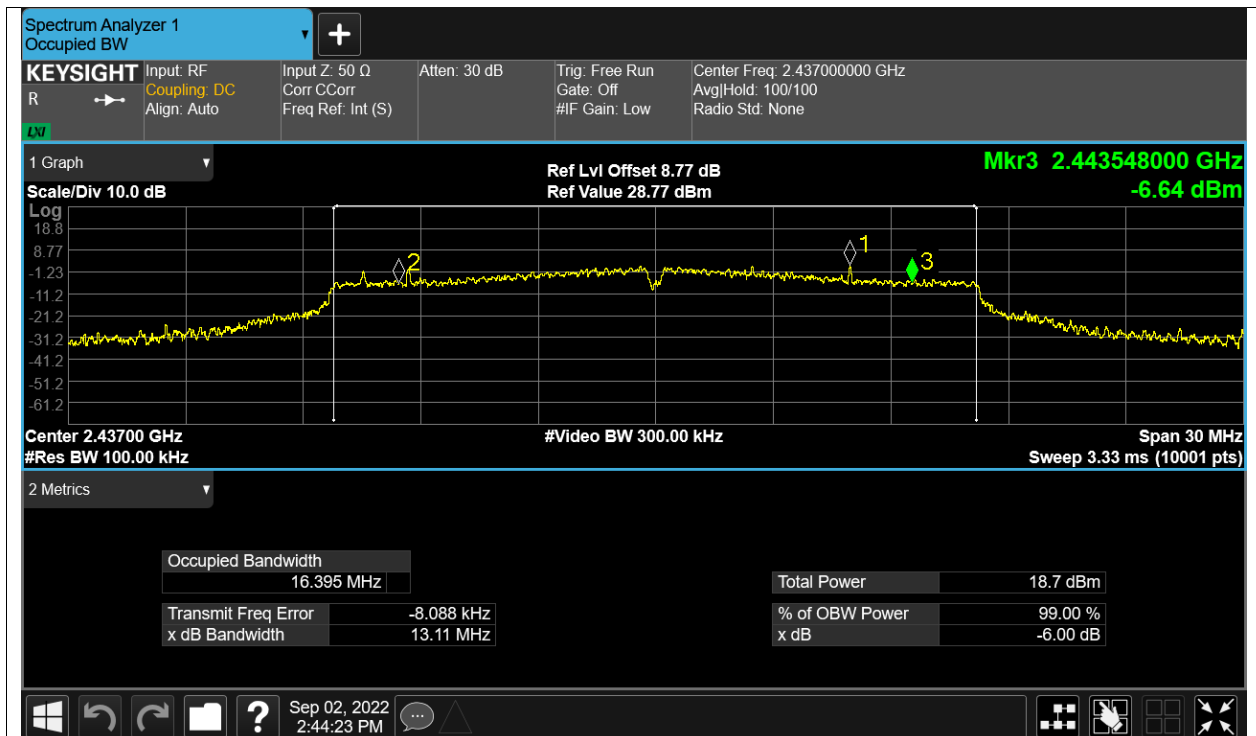
-6dB Bandwidth NVNT b 2462MHz Ant1



-6dB Bandwidth NVNT g 2412MHz Ant1



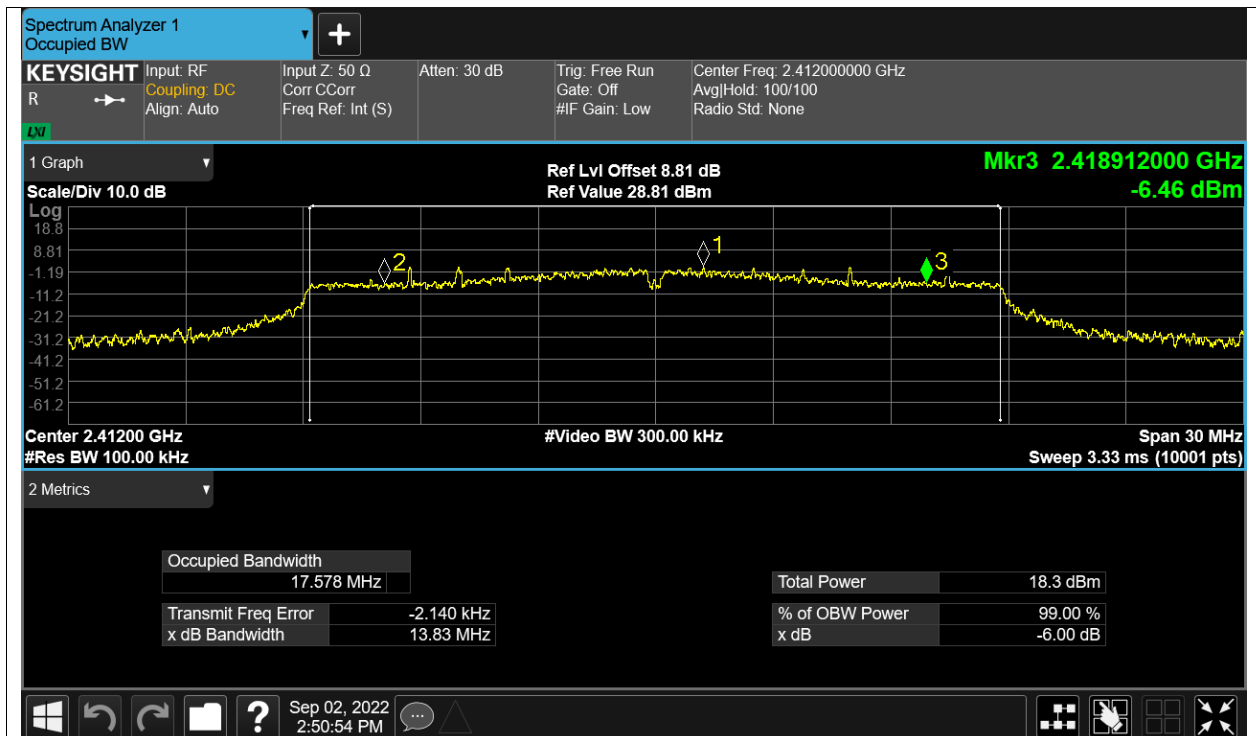
-6dB Bandwidth NVNT g 2437MHz Ant1



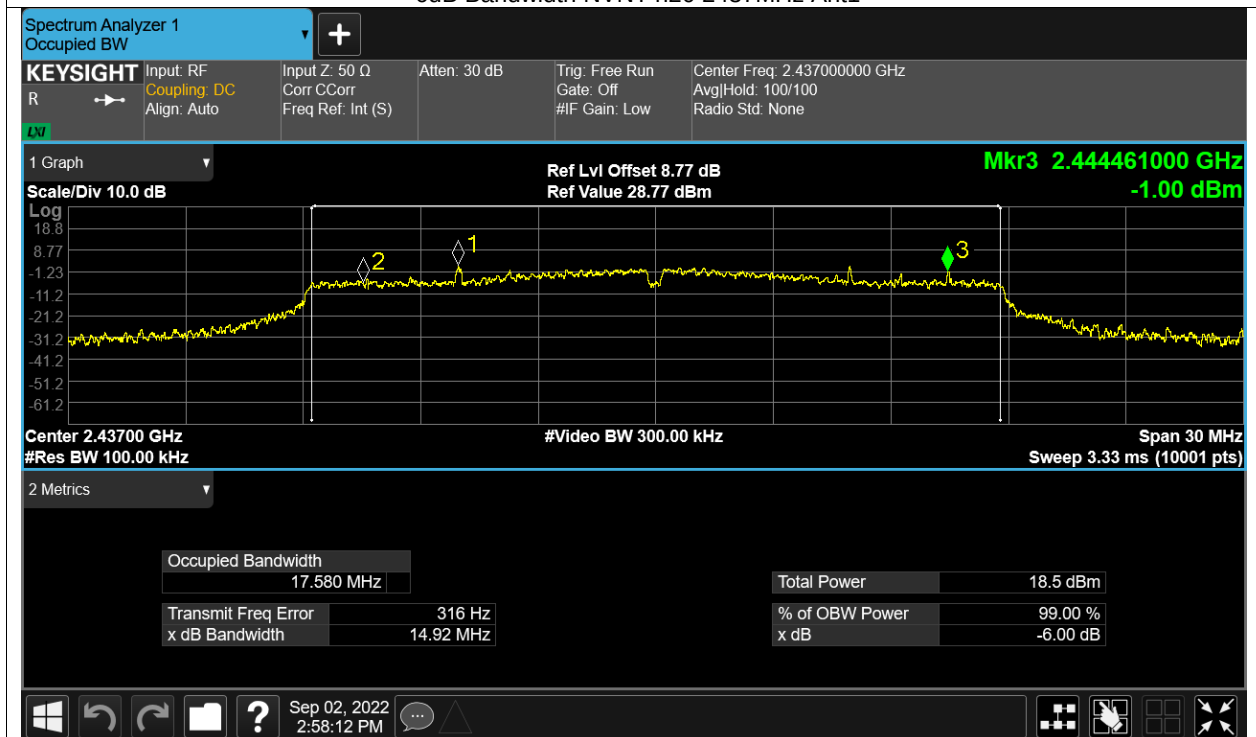
-6dB Bandwidth NVNT g 2462MHz Ant1



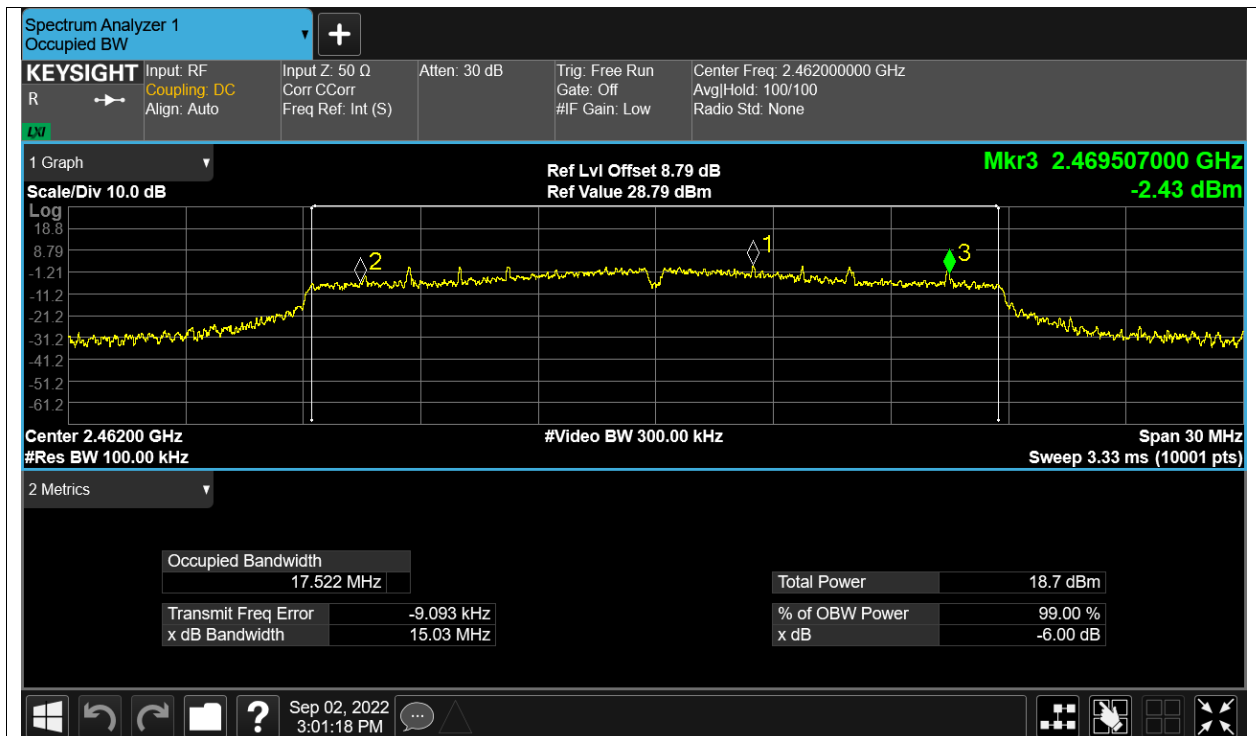
-6dB Bandwidth NVNT n20 2412MHz Ant1



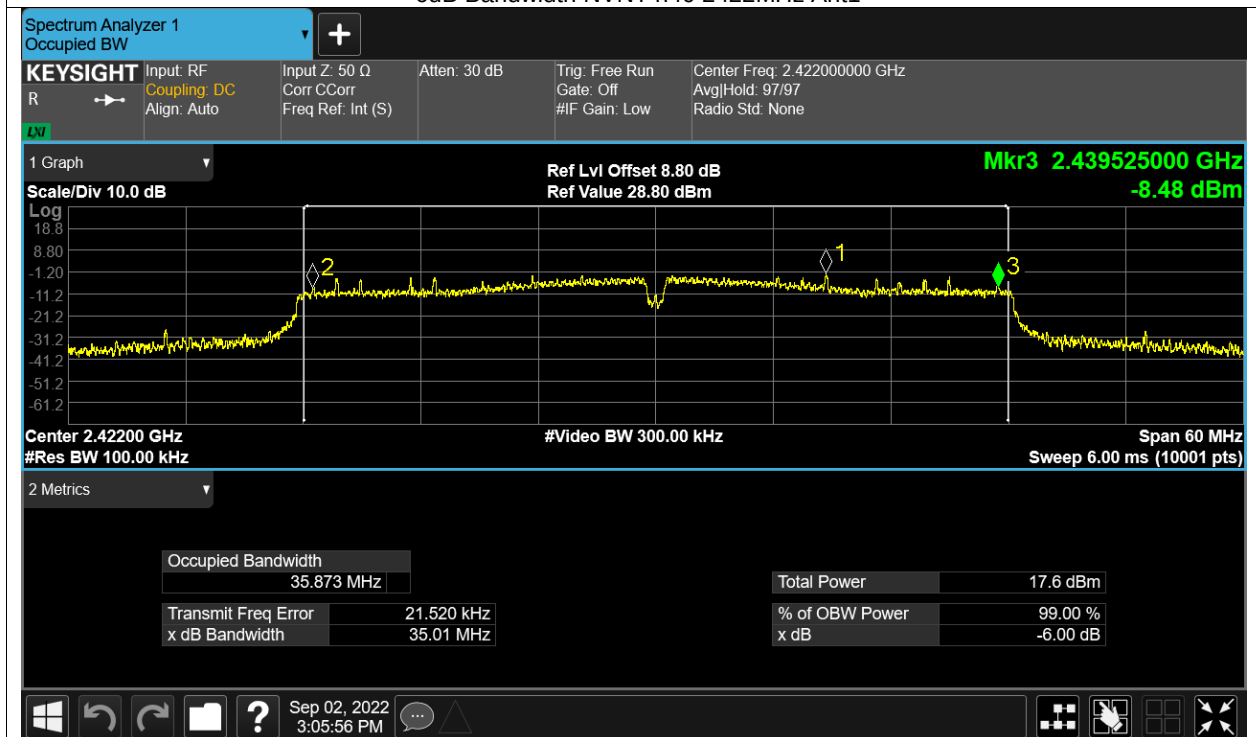
-6dB Bandwidth NVNT n20 2437MHz Ant1



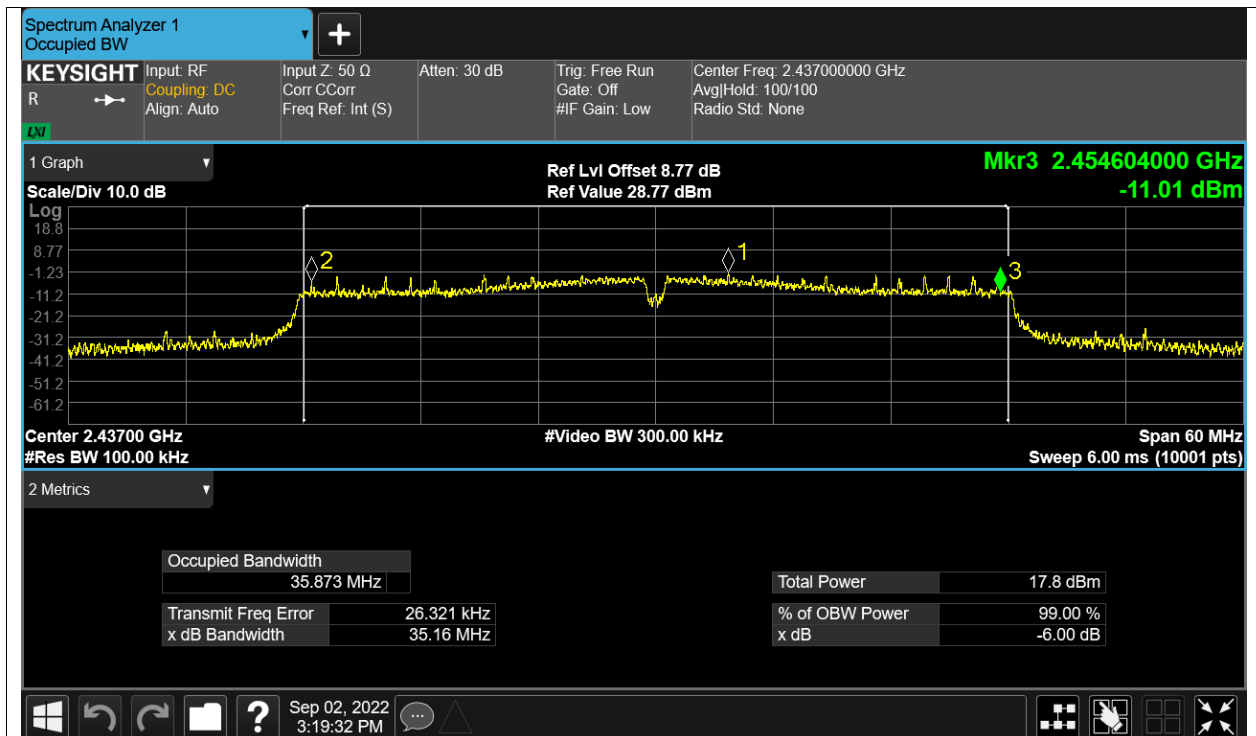
-6dB Bandwidth NVNT n20 2462MHz Ant1



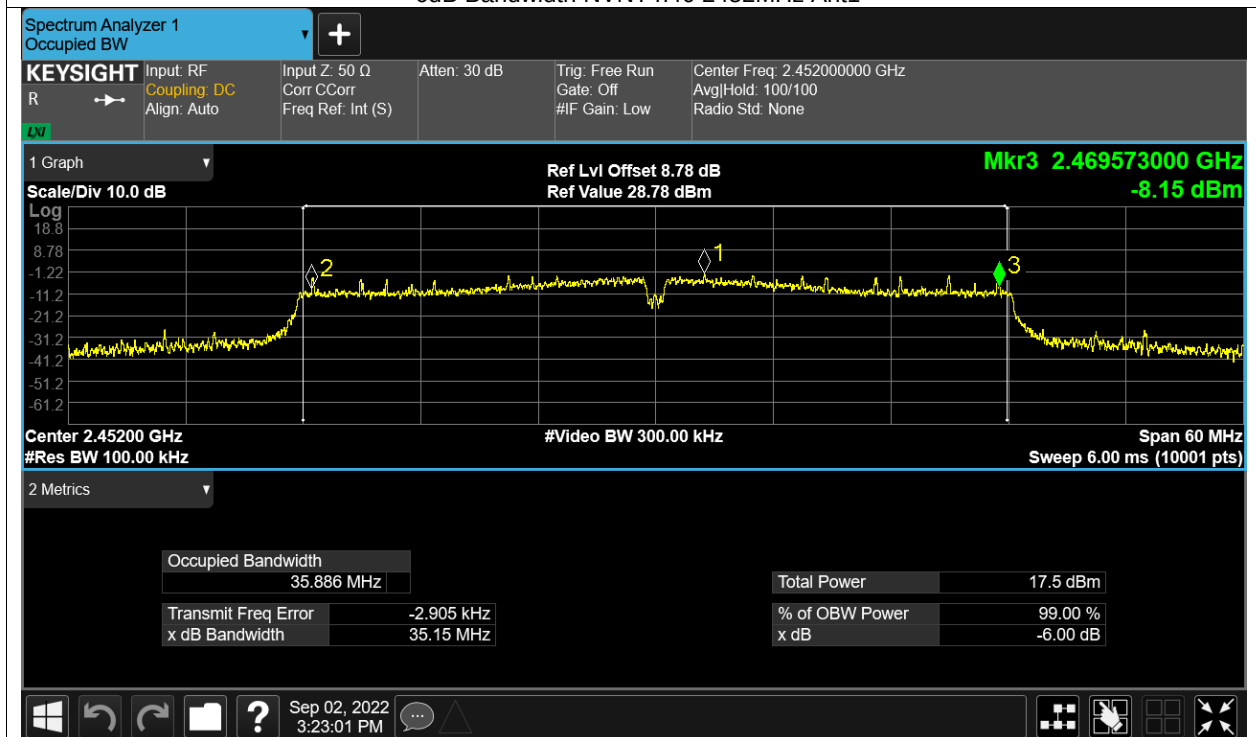
-6dB Bandwidth NVNT n40 2422MHz Ant1



-6dB Bandwidth NVNT n40 2437MHz Ant1



-6dB Bandwidth NVNT n40 2452MHz Ant1



Occupied Channel Bandwidth

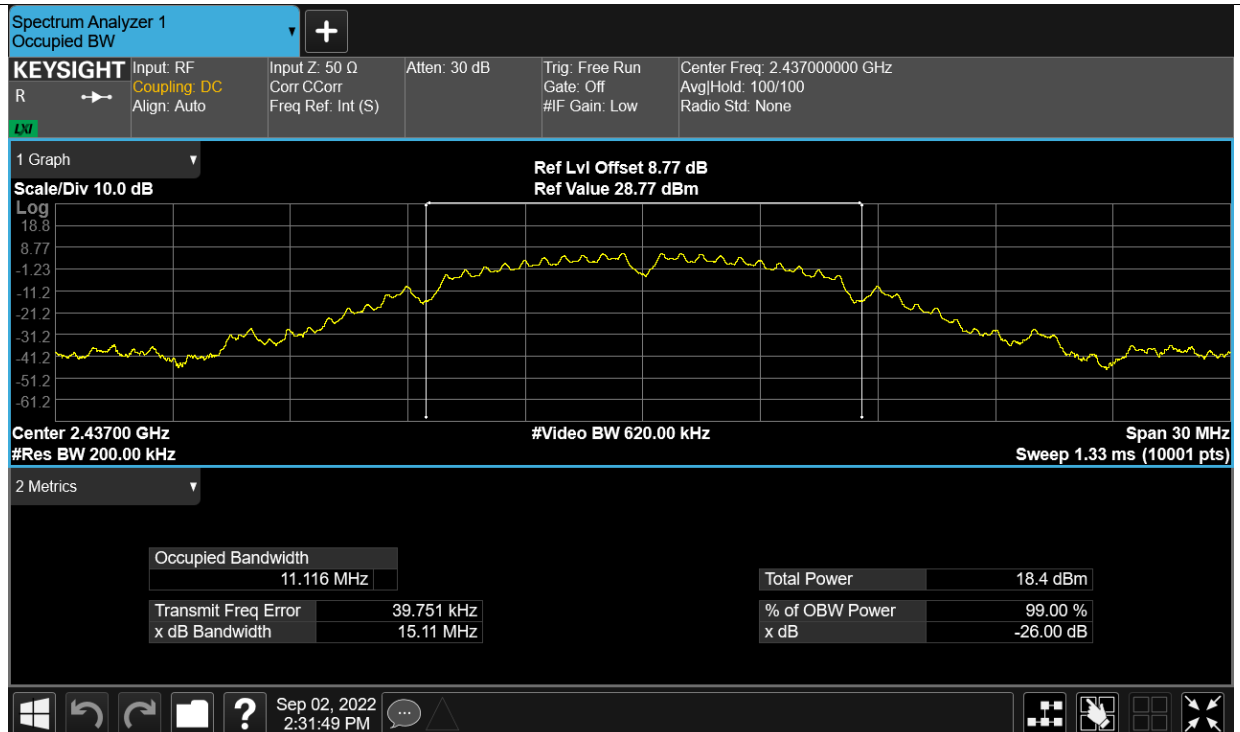
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	11.01379297
NVNT	b	2437	Ant1	11.11623619
NVNT	b	2462	Ant1	11.67352899
NVNT	g	2412	Ant1	16.50654659
NVNT	g	2437	Ant1	16.48807182
NVNT	g	2462	Ant1	16.38725492
NVNT	n20	2412	Ant1	17.60525745
NVNT	n20	2437	Ant1	17.63045575
NVNT	n20	2462	Ant1	17.52728958
NVNT	n40	2422	Ant1	36.00182542
NVNT	n40	2437	Ant1	35.95906074
NVNT	n40	2452	Ant1	35.99613421

Test Graphs

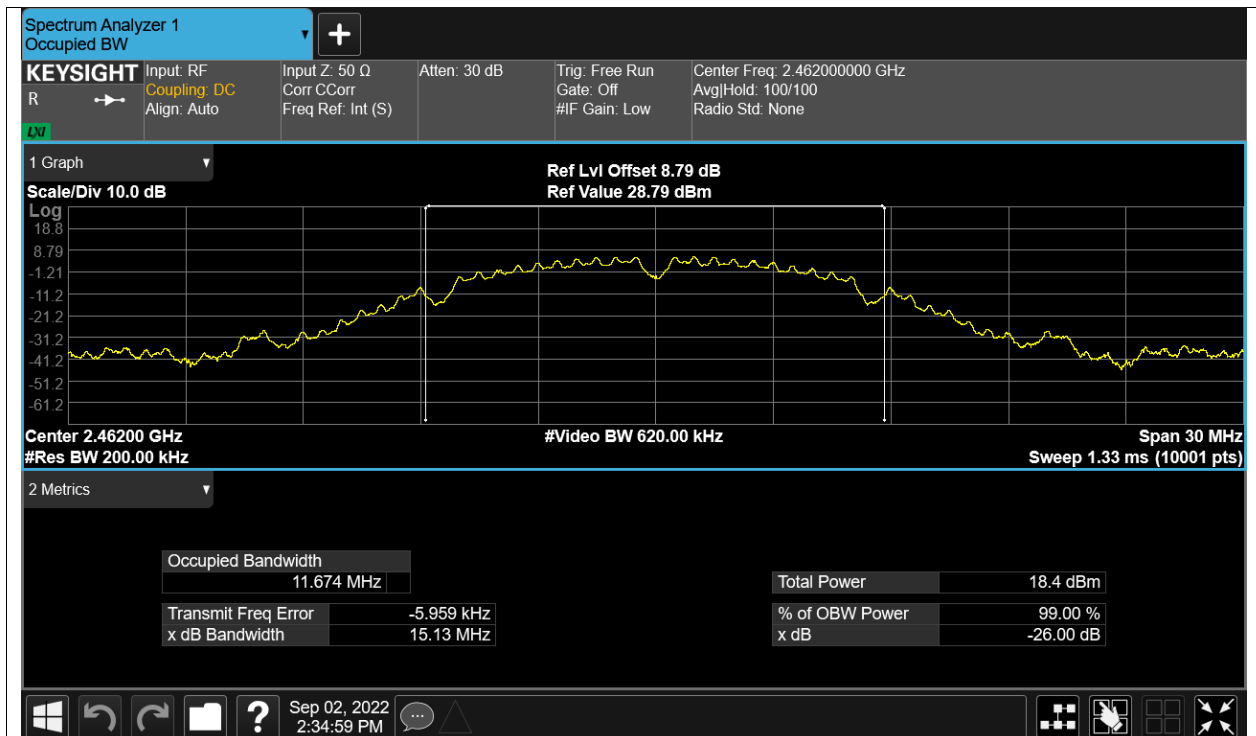
OBW NVNT b 2412MHz Ant1



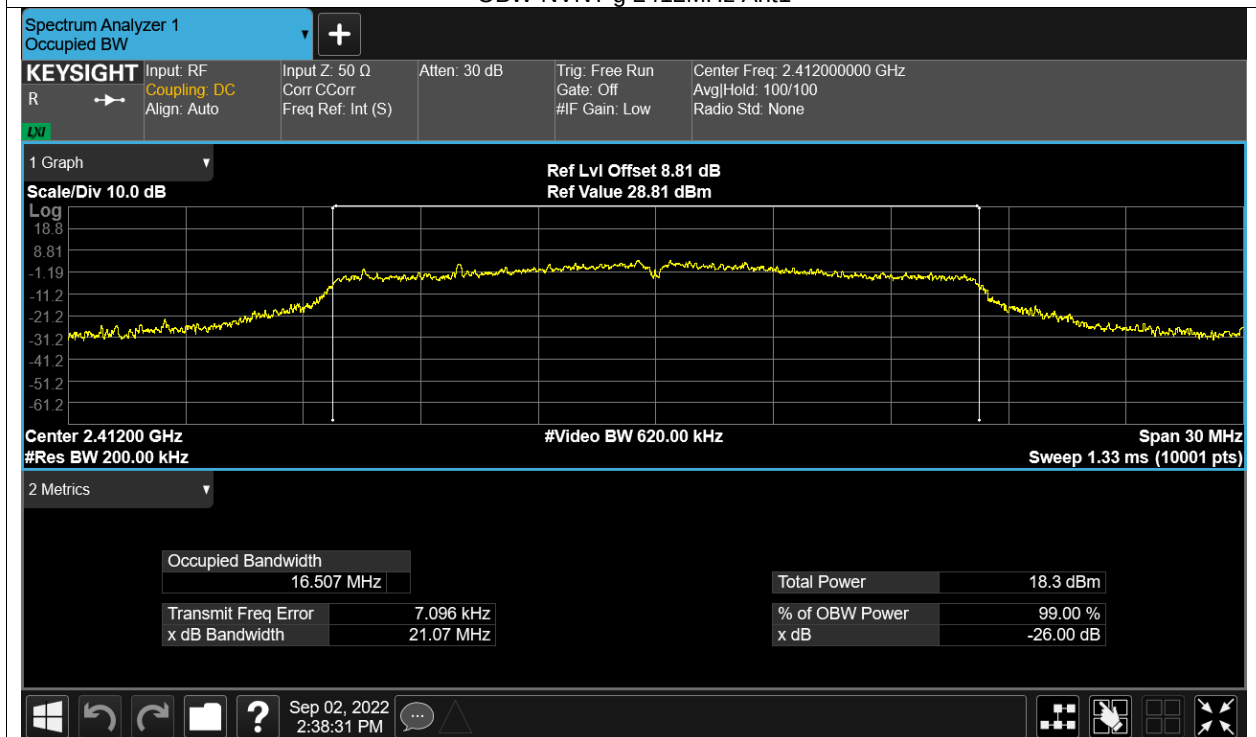
OBW NVNT b 2437MHz Ant1



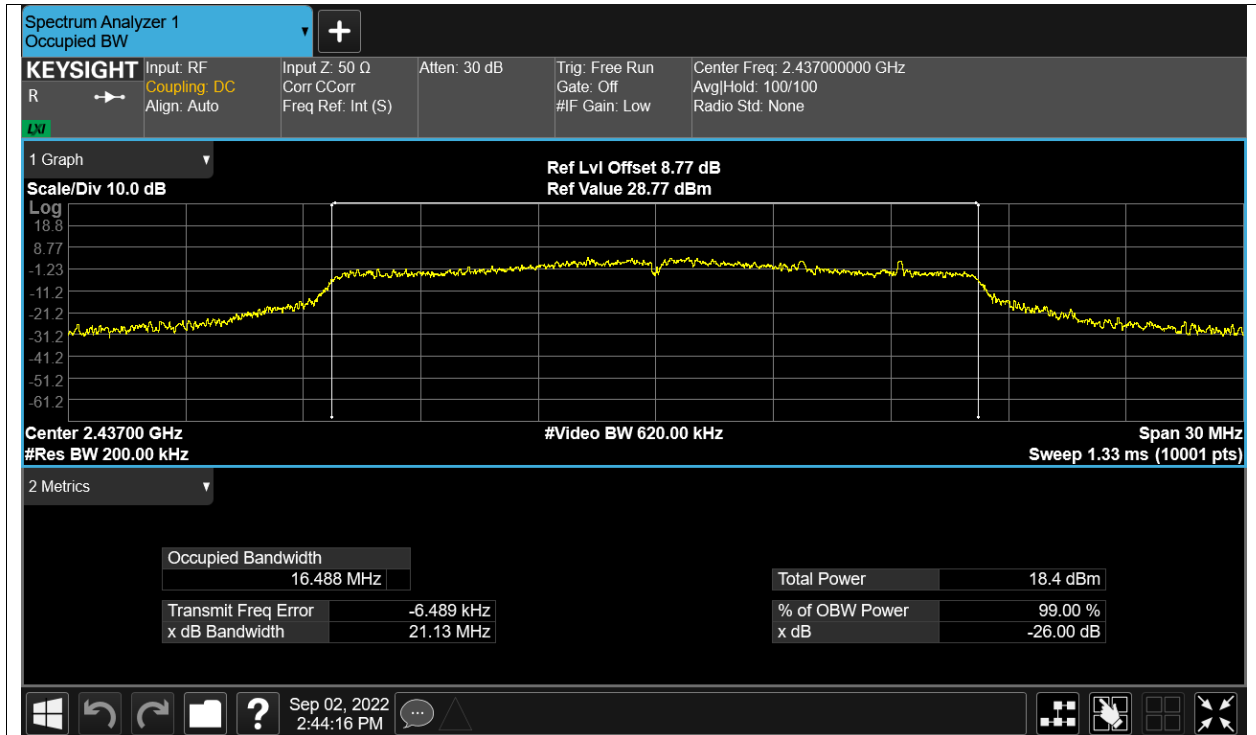
OBW NVNT b 2462MHz Ant1



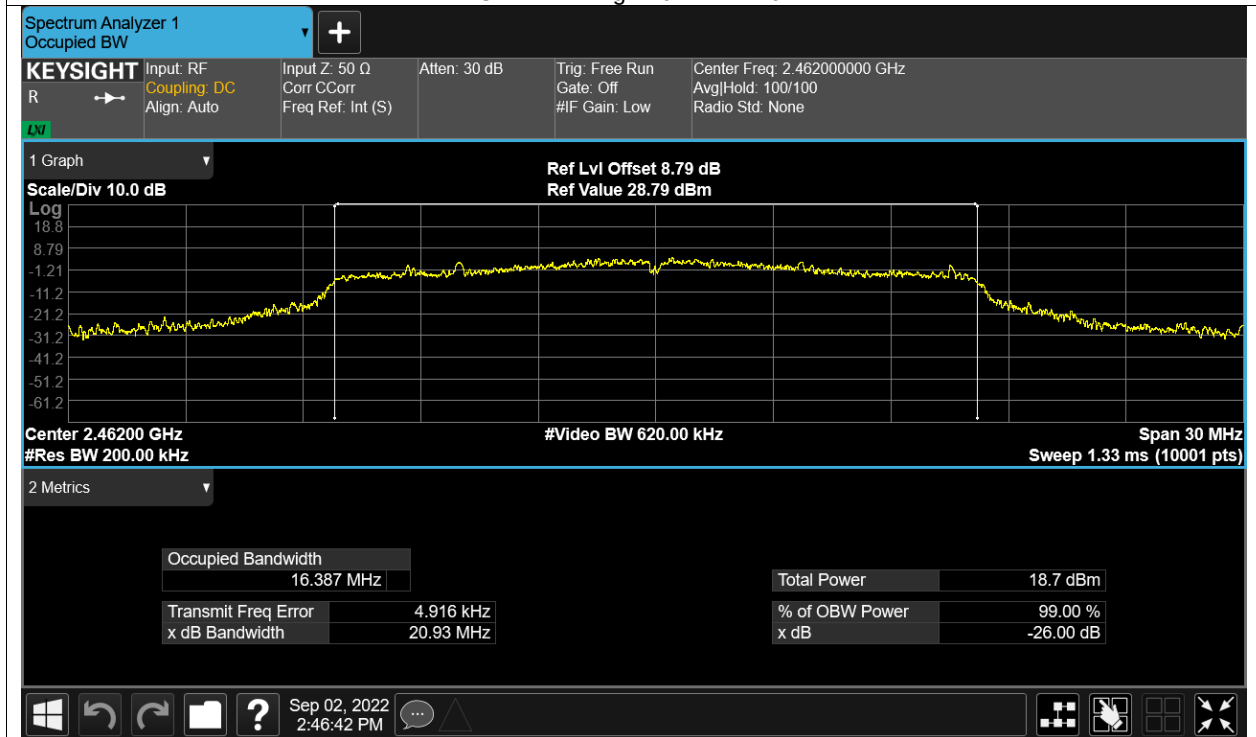
OBW NVNT g 2412MHz Ant1



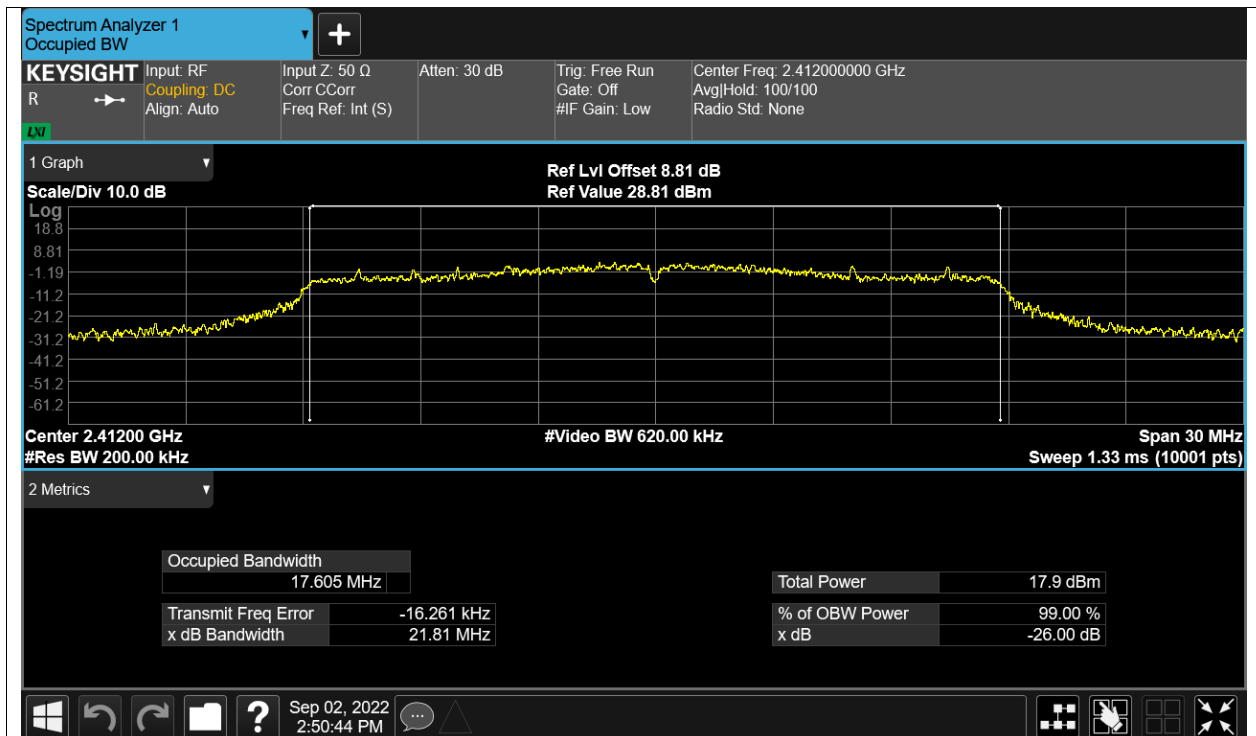
OBW NVNT g 2437MHz Ant1



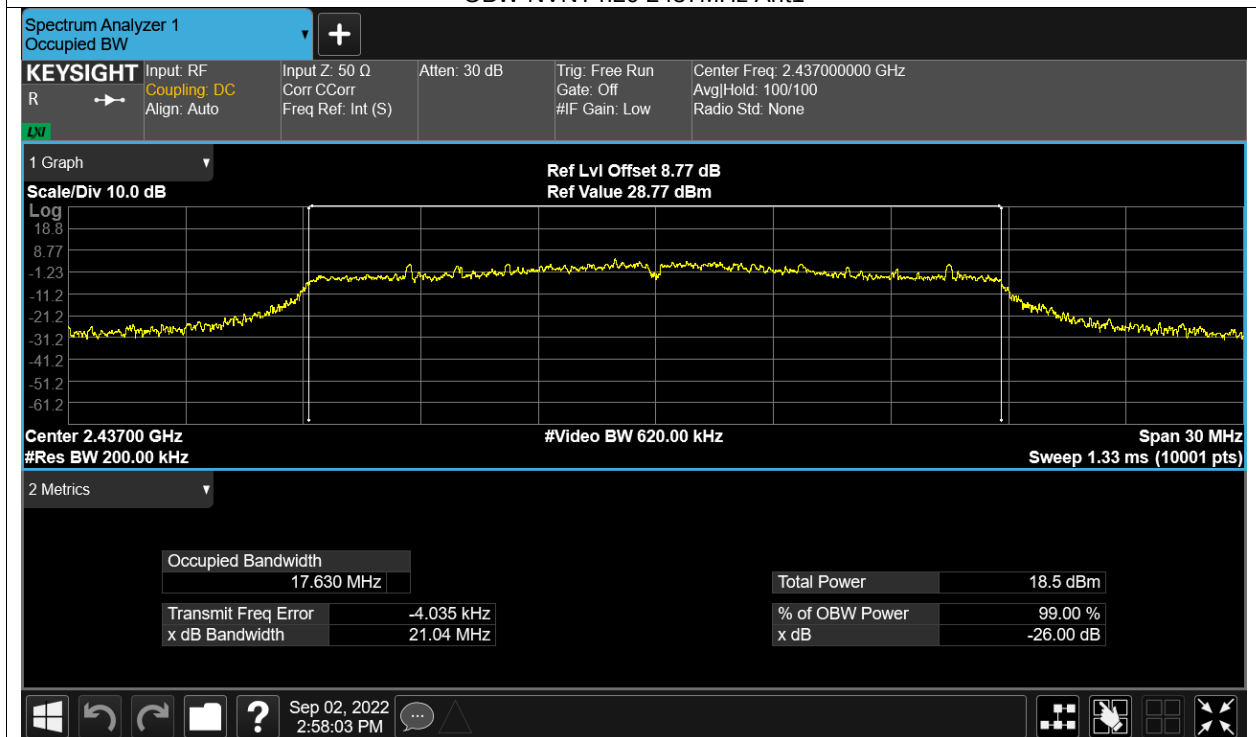
OBW NVNT g 2462MHz Ant1



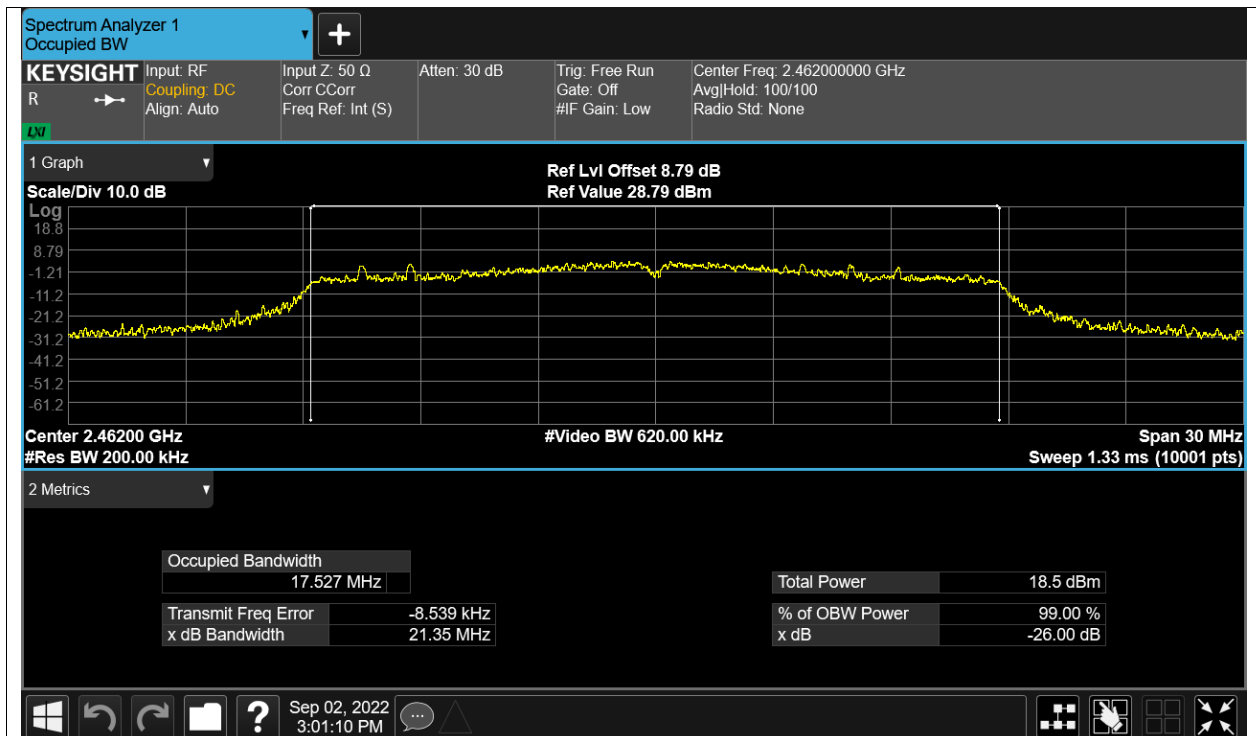
OBW NVNT n20 2412MHz Ant1



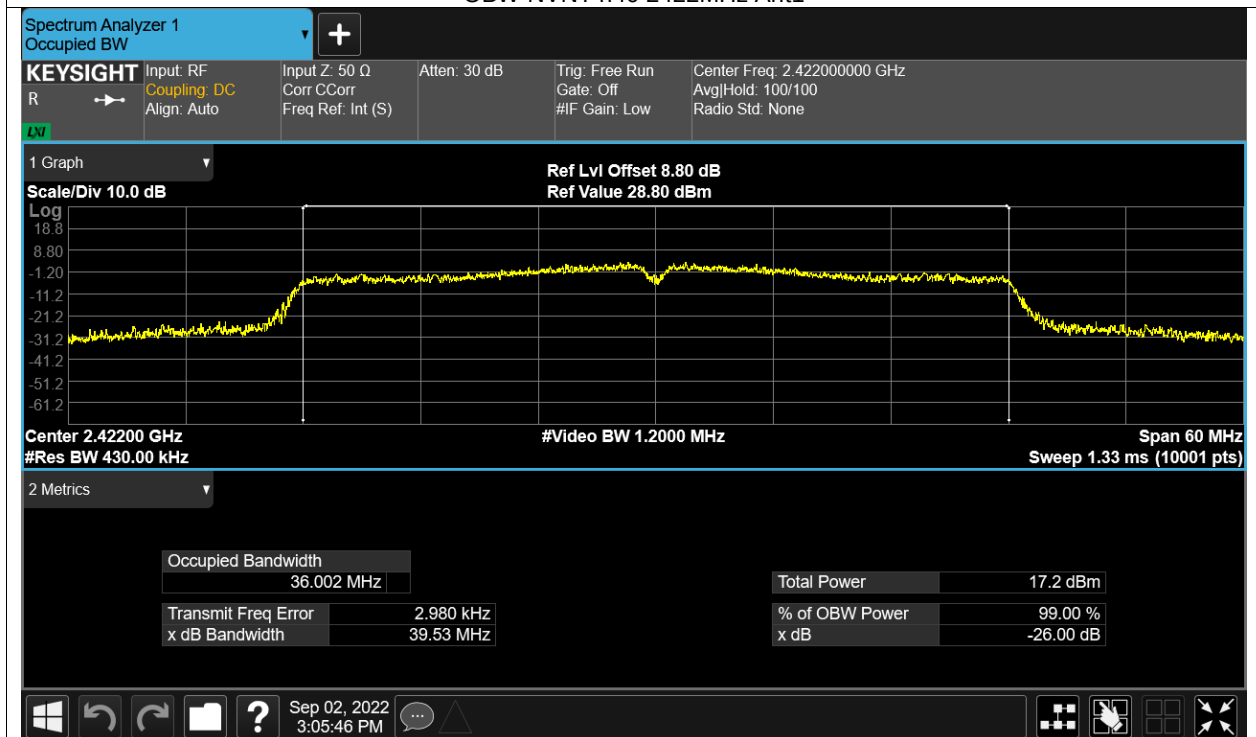
OBW NVNT n20 2437MHz Ant1



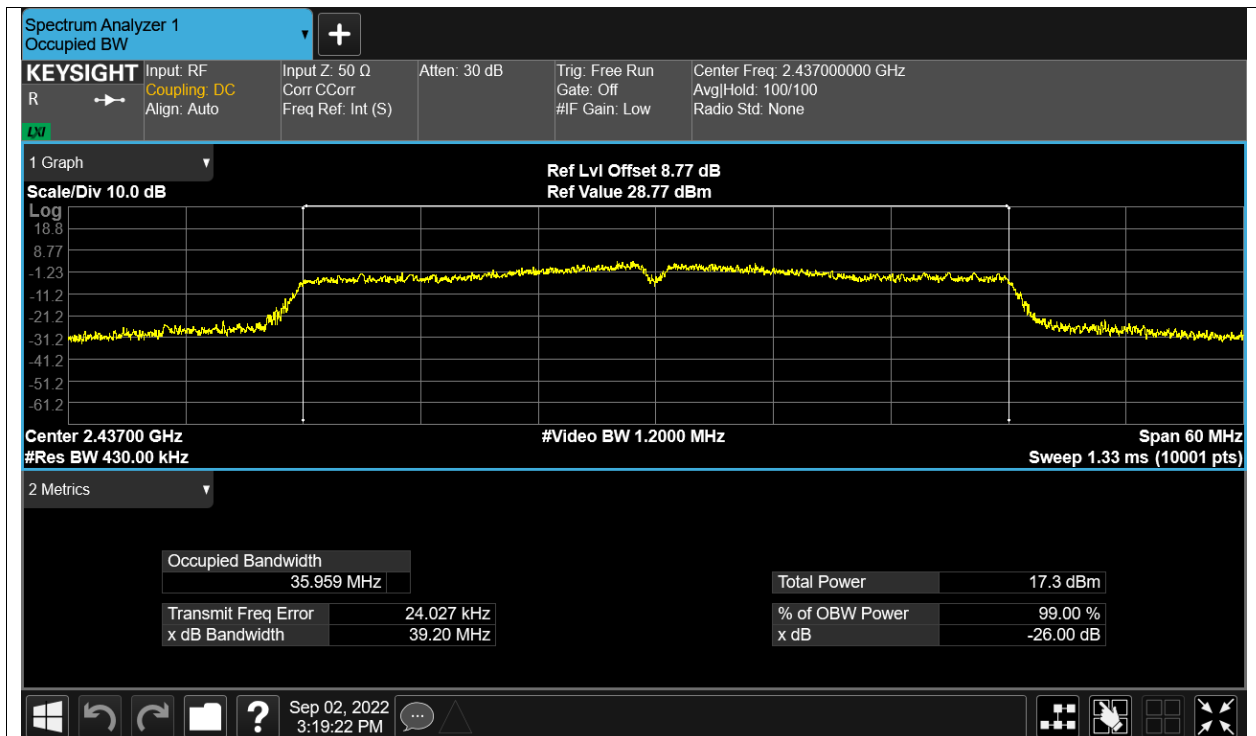
OBW NVNT n20 2462MHz Ant1



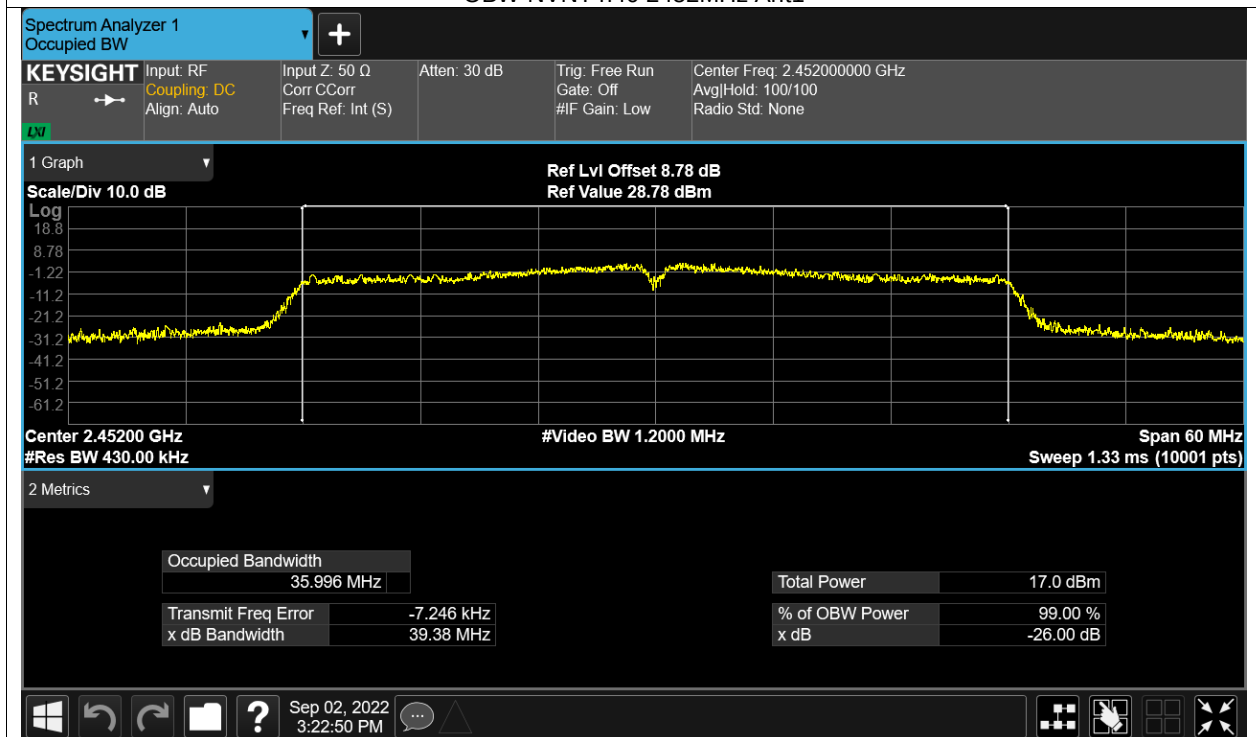
OBW NVNT n40 2422MHz Ant1



OBW NVNT n40 2437MHz Ant1

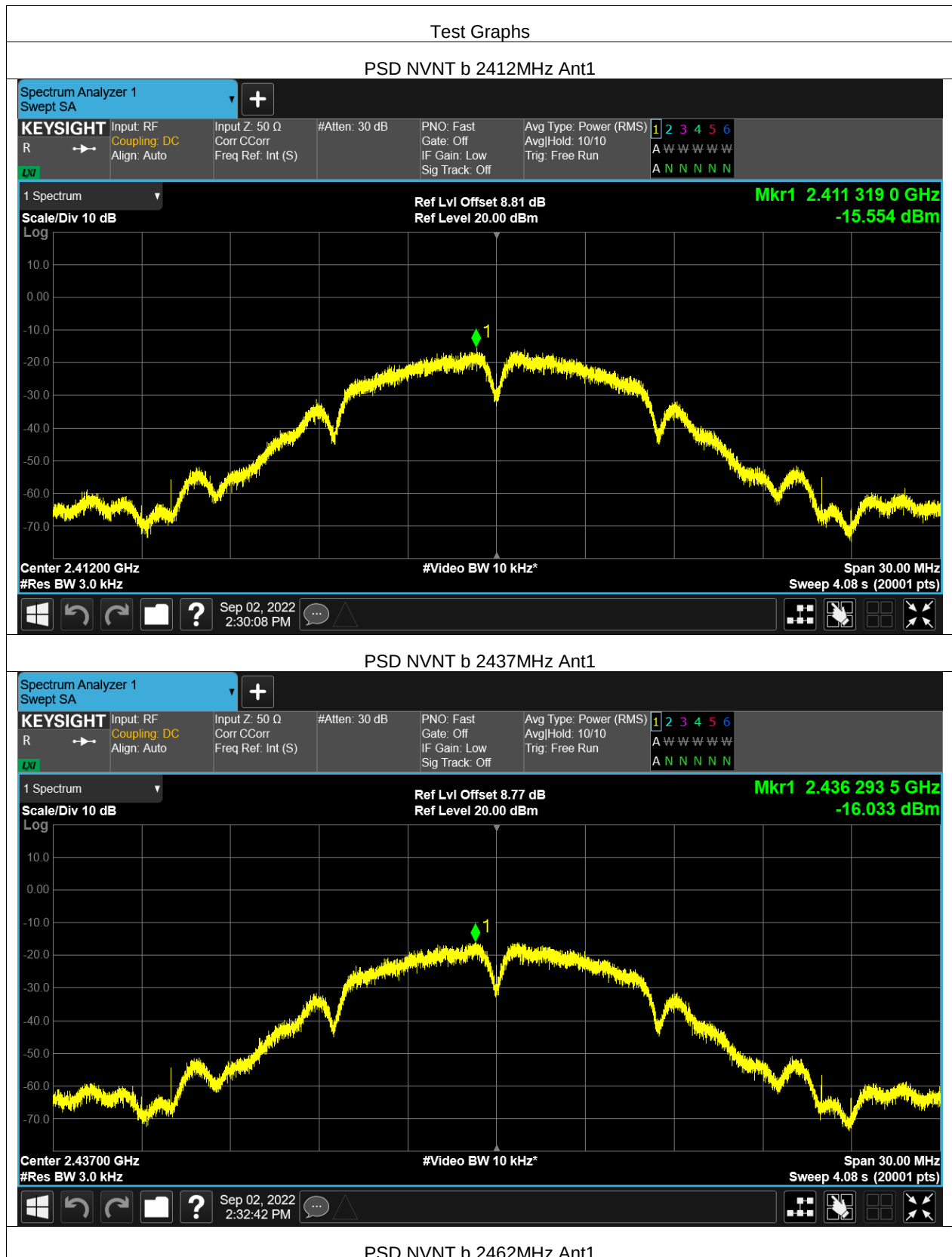


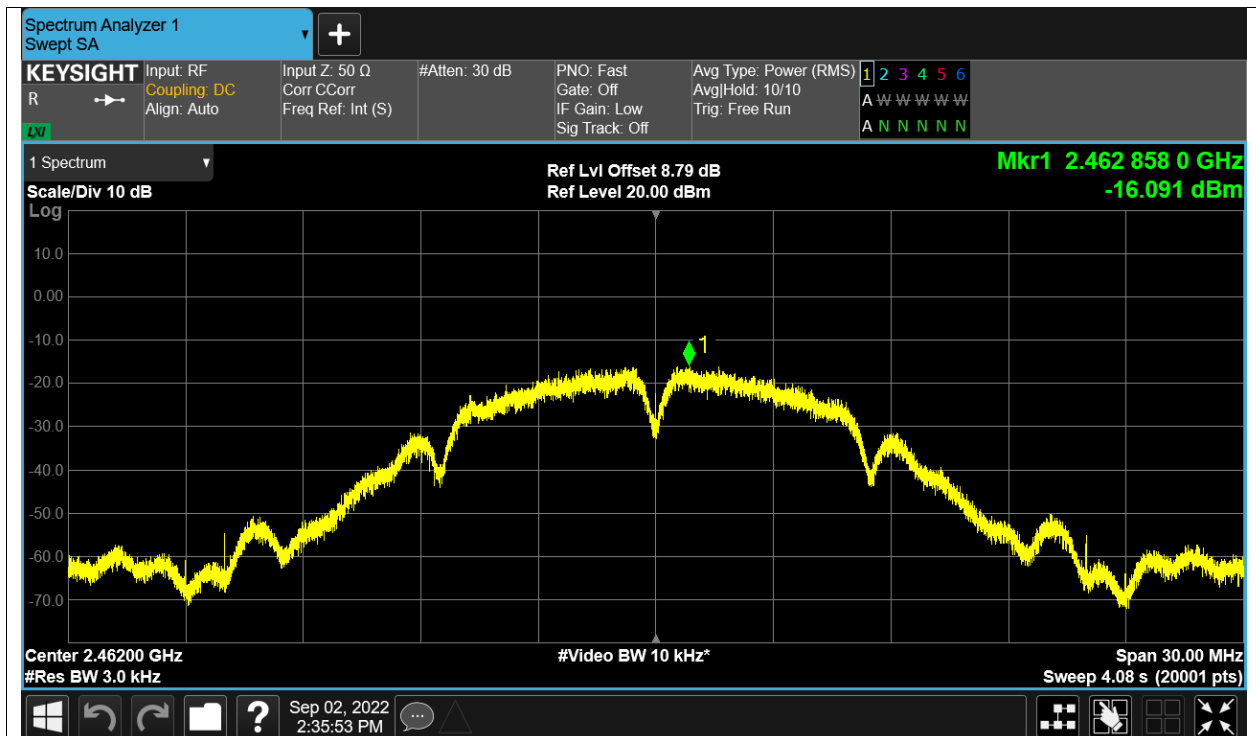
OBW NVNT n40 2452MHz Ant1



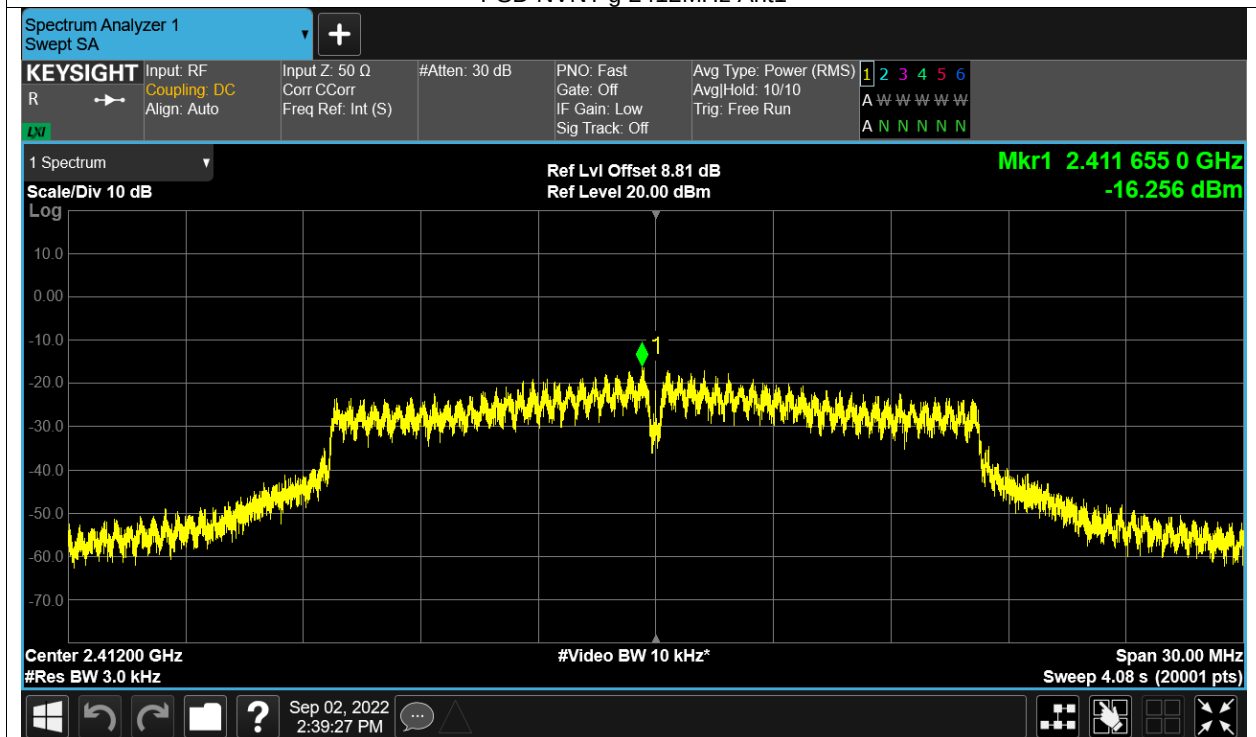
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-15.554	8	Pass
NVNT	b	2437	Ant1	-16.033	8	Pass
NVNT	b	2462	Ant1	-16.091	8	Pass
NVNT	g	2412	Ant1	-16.256	8	Pass
NVNT	g	2437	Ant1	-14.926	8	Pass
NVNT	g	2462	Ant1	-16.101	8	Pass
NVNT	n20	2412	Ant1	-18.294	8	Pass
NVNT	n20	2437	Ant1	-17.456	8	Pass
NVNT	n20	2462	Ant1	-17.34	8	Pass
NVNT	n40	2422	Ant1	-20.855	8	Pass
NVNT	n40	2437	Ant1	-19.897	8	Pass
NVNT	n40	2452	Ant1	-21.409	8	Pass

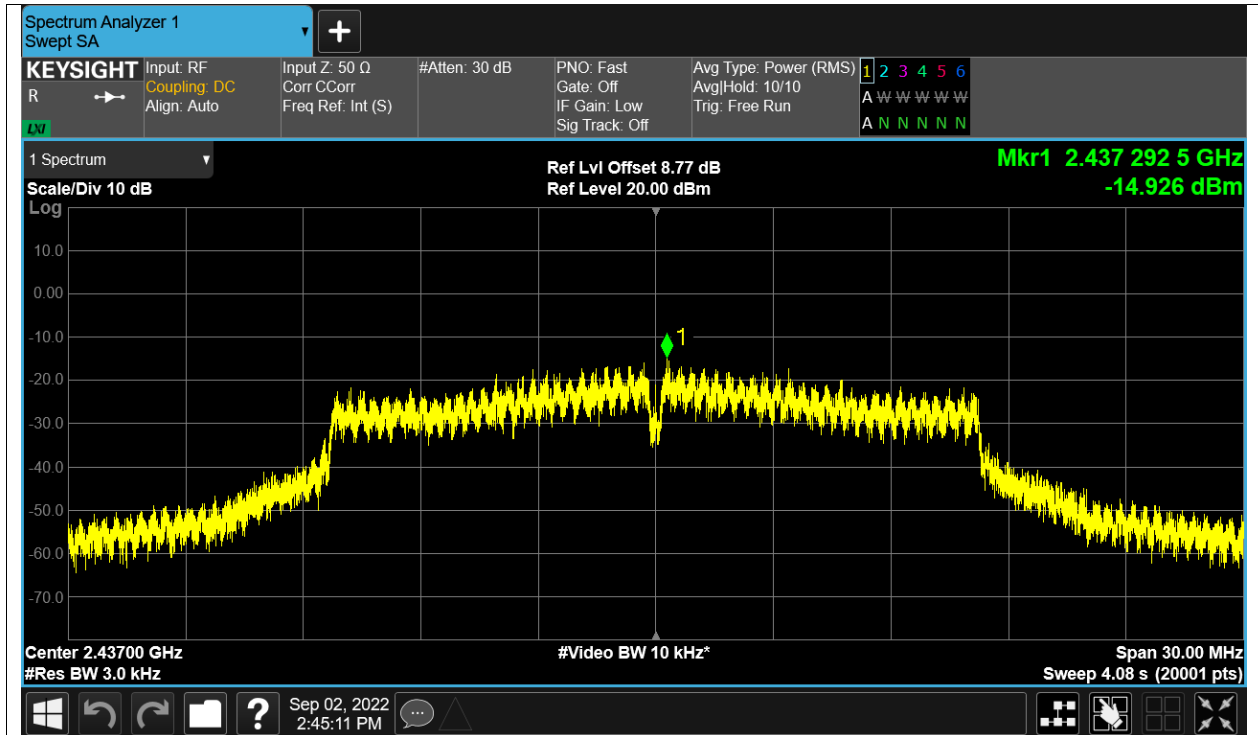




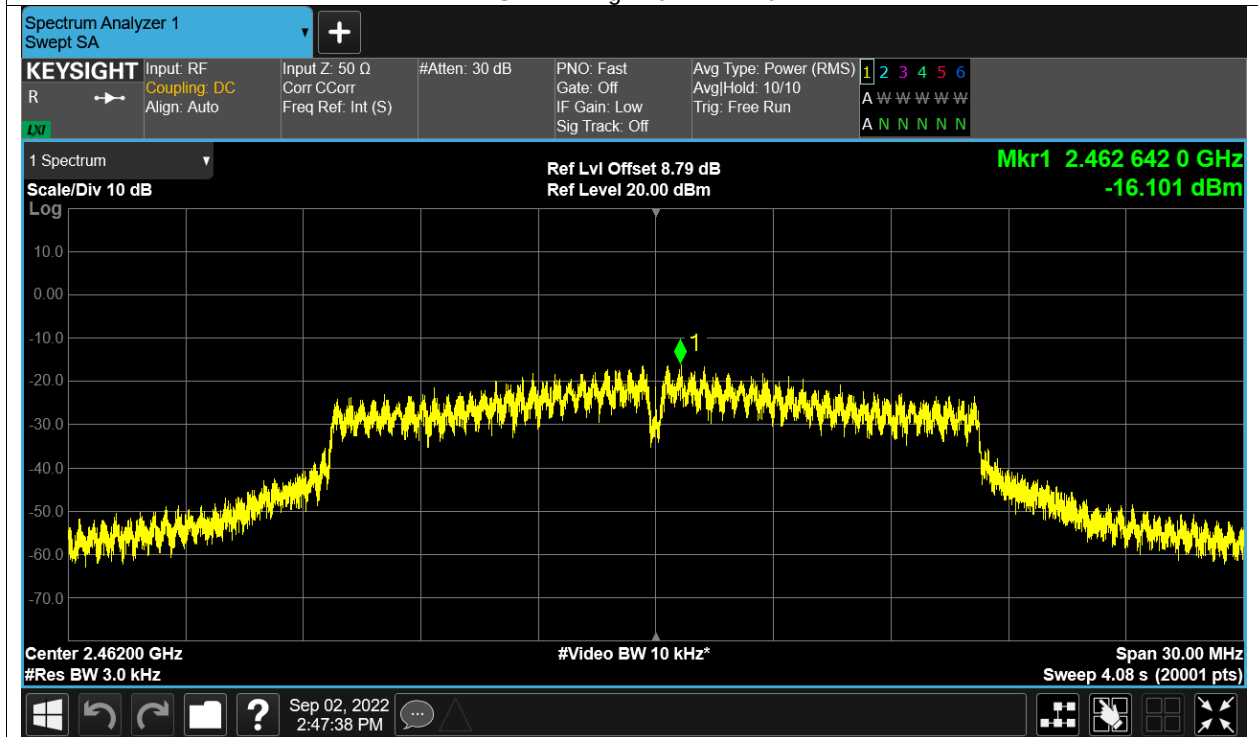
PSD NVNT g 2412MHz Ant1



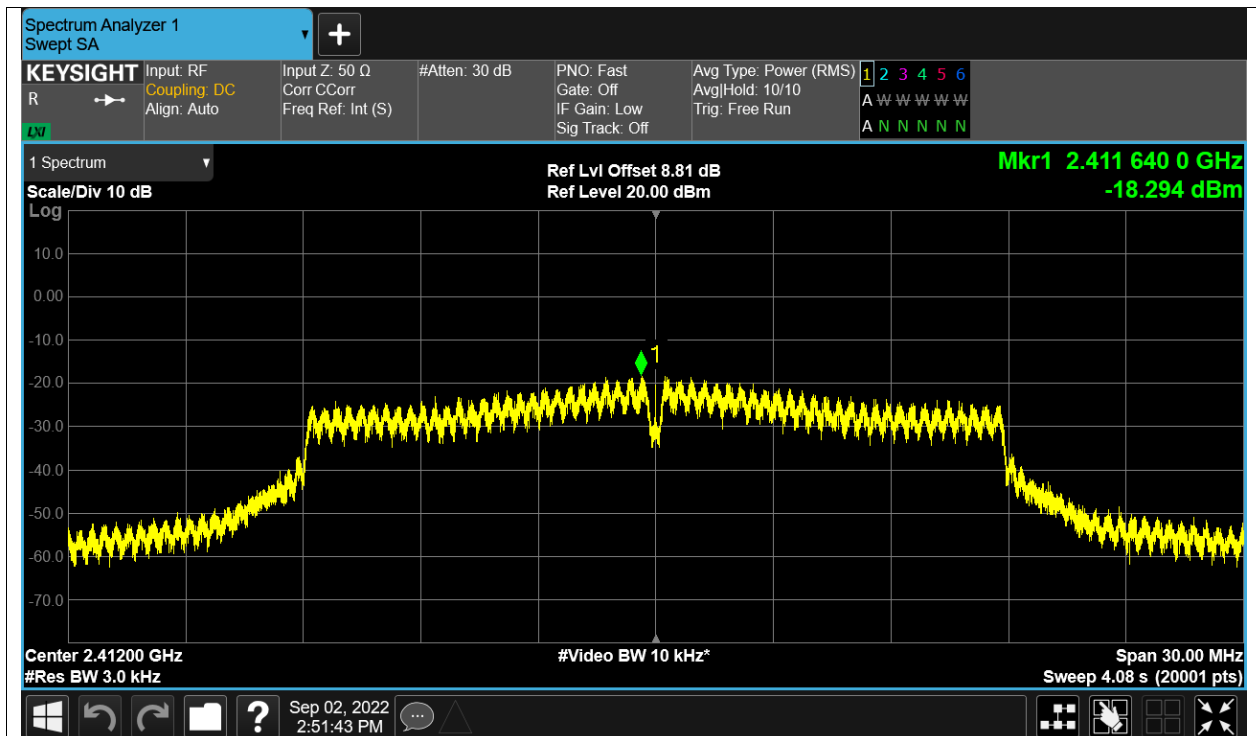
PSD NVNT g 2437MHz Ant1



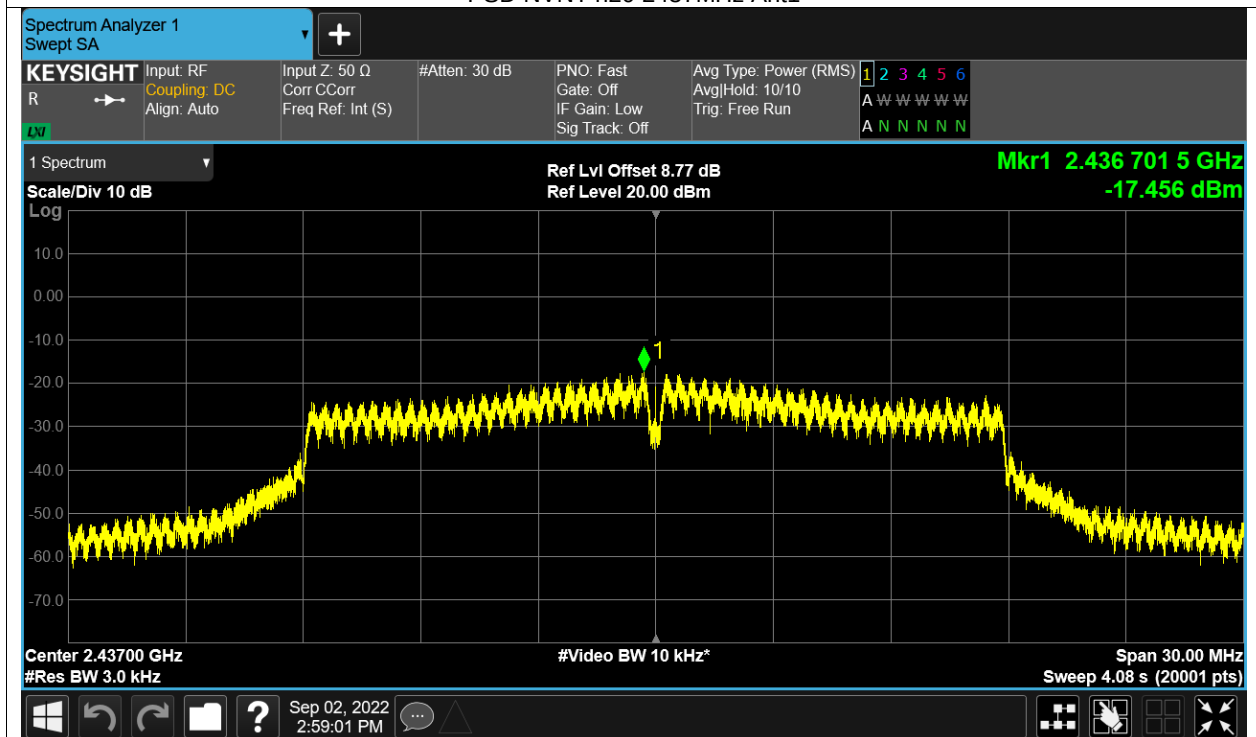
PSD NVNT g 2462MHz Ant1



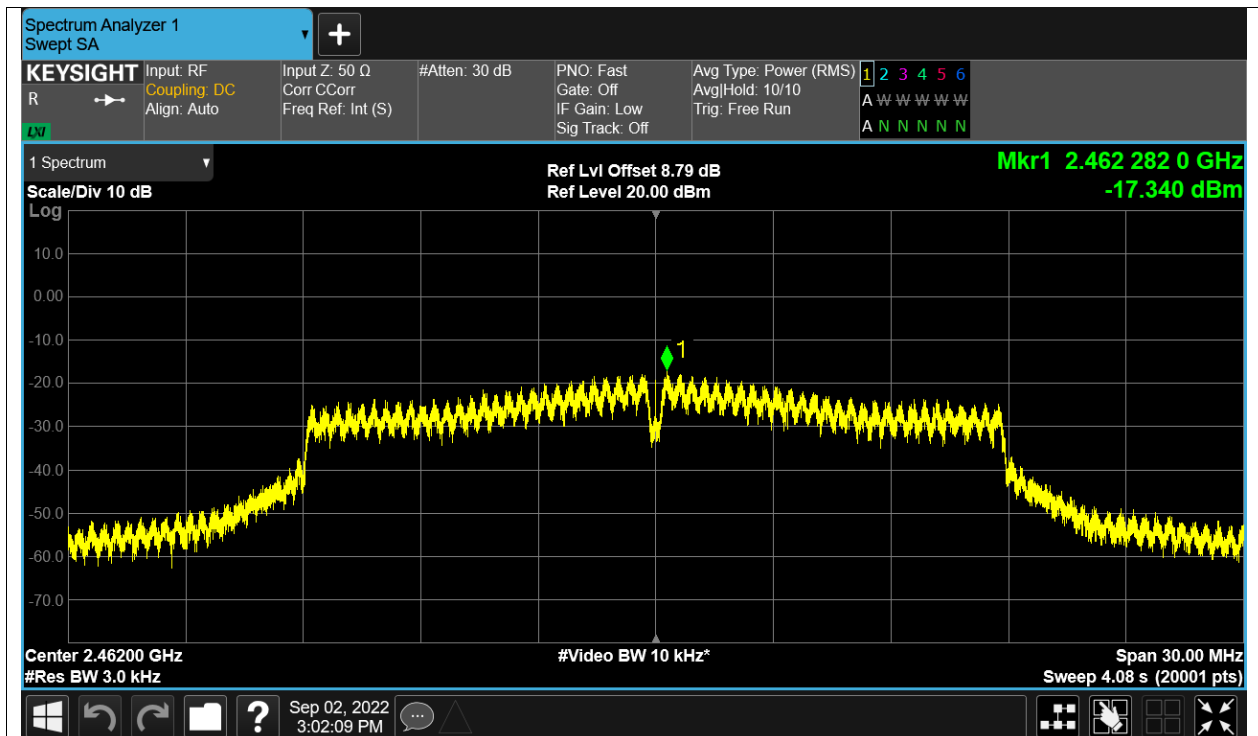
PSD NVNT n20 2412MHz Ant1



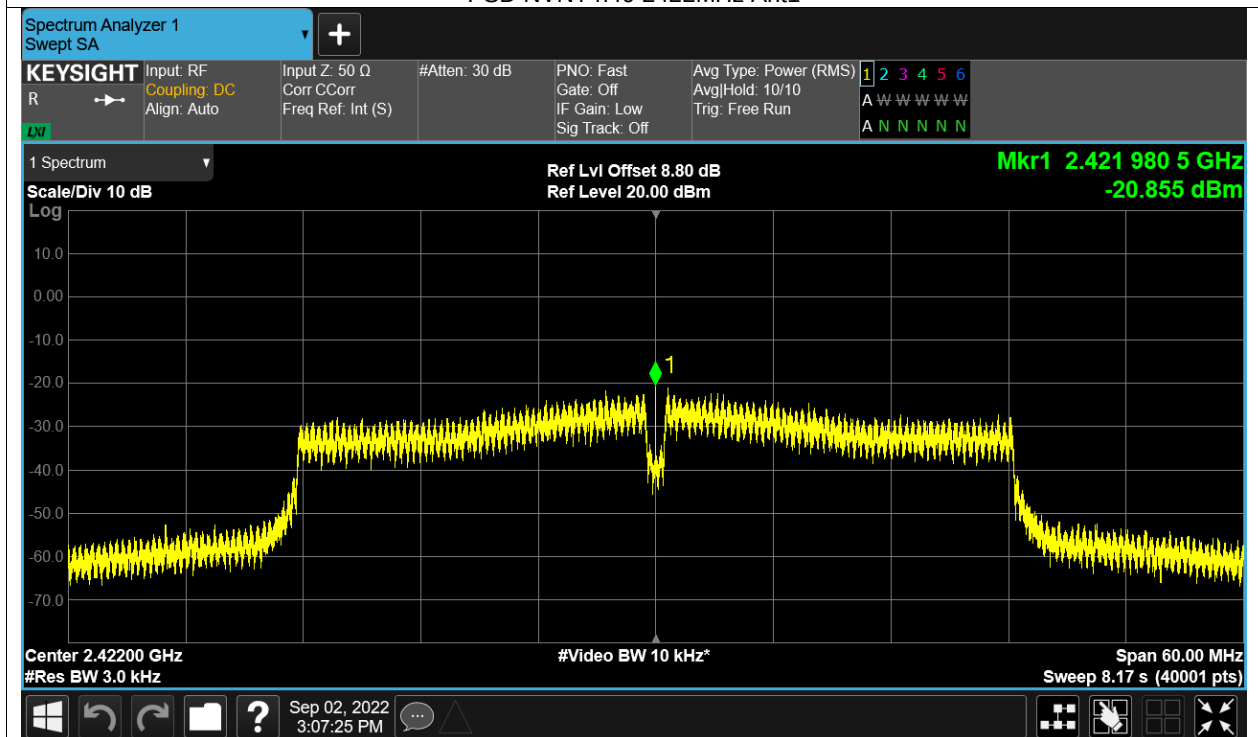
PSD NVNT n20 2437MHz Ant1



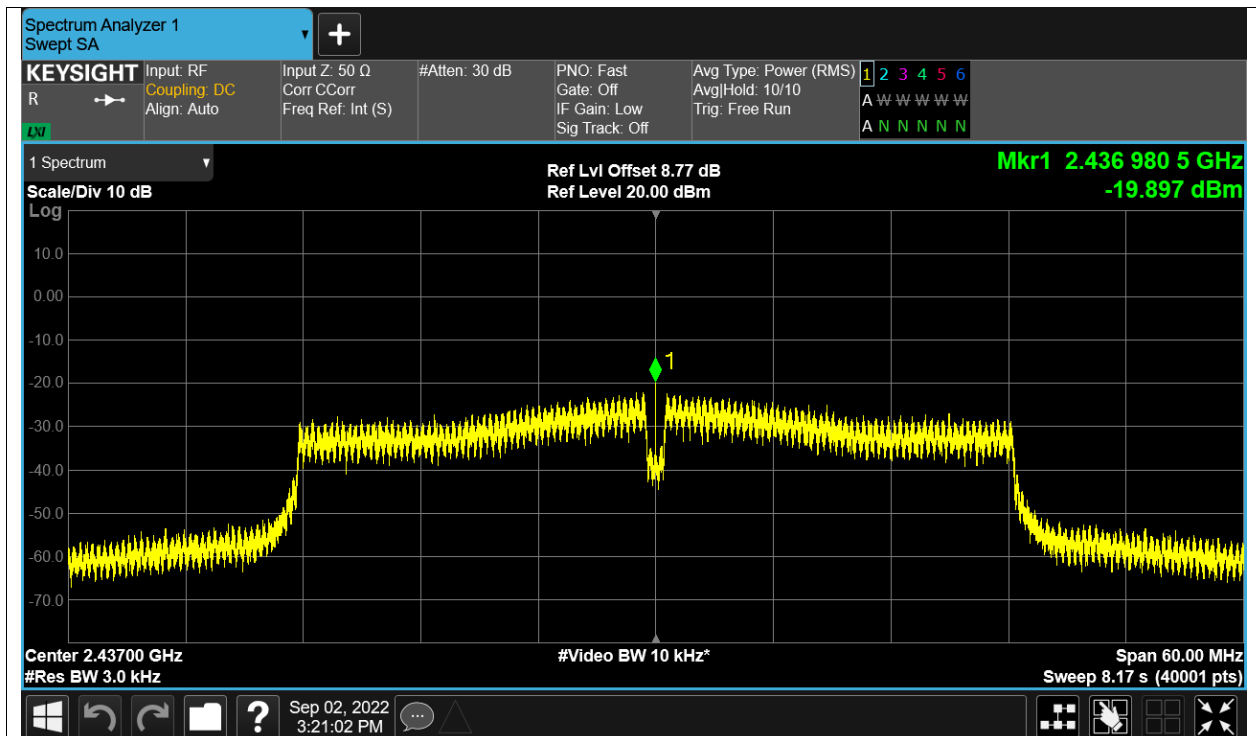
PSD NVNT n20 2462MHz Ant1



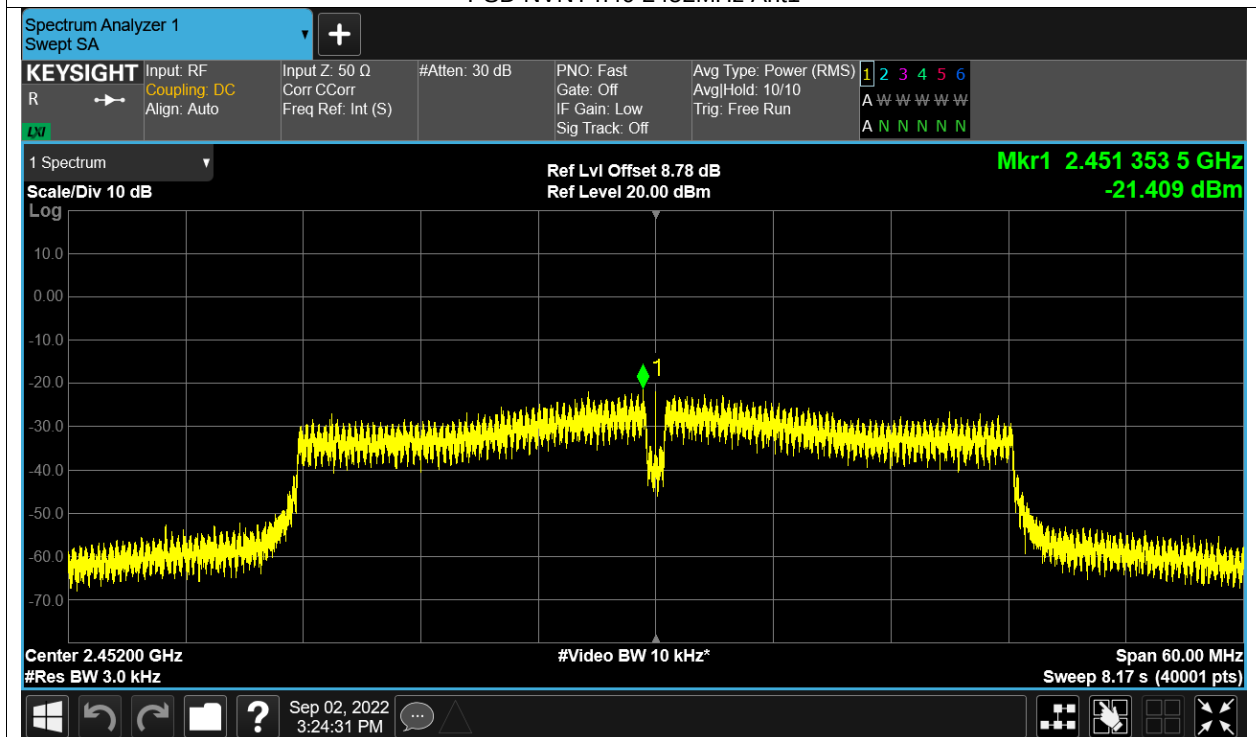
PSD NVNT n40 2422MHz Ant1



PSD NVNT n40 2437MHz Ant1



PSD NVNT n40 2452MHz Ant1

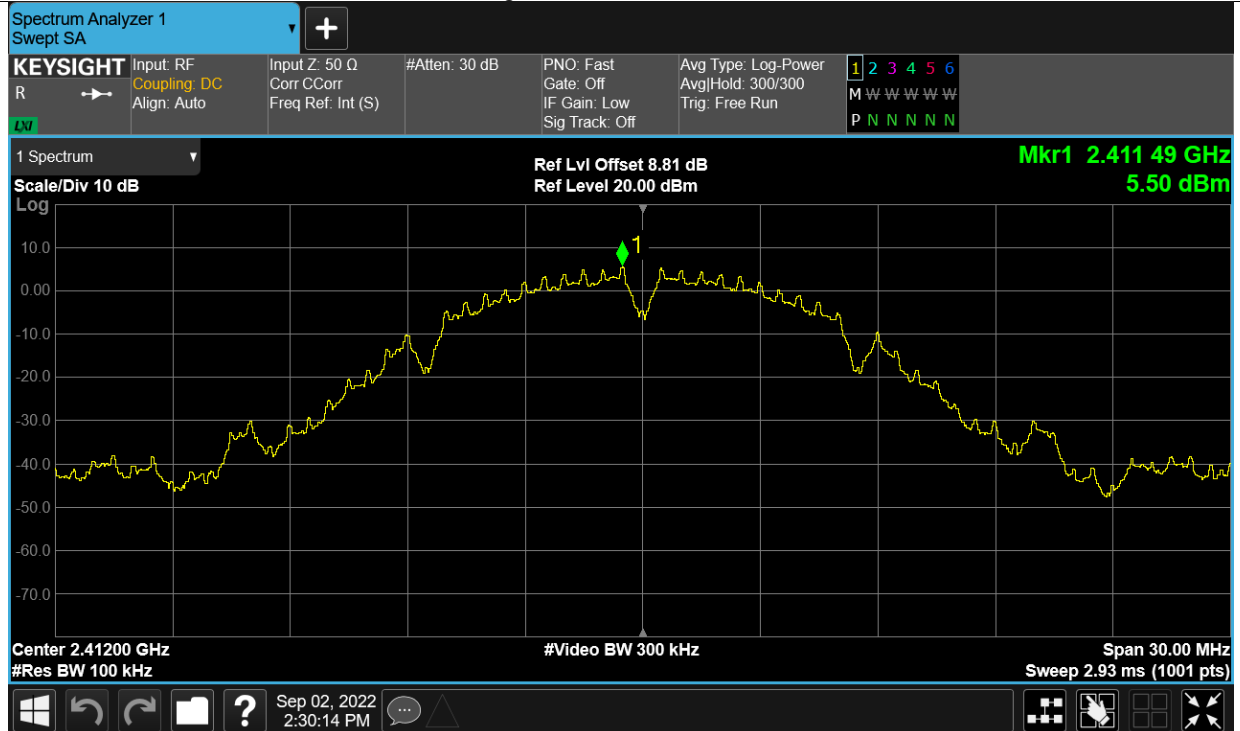


Band Edge

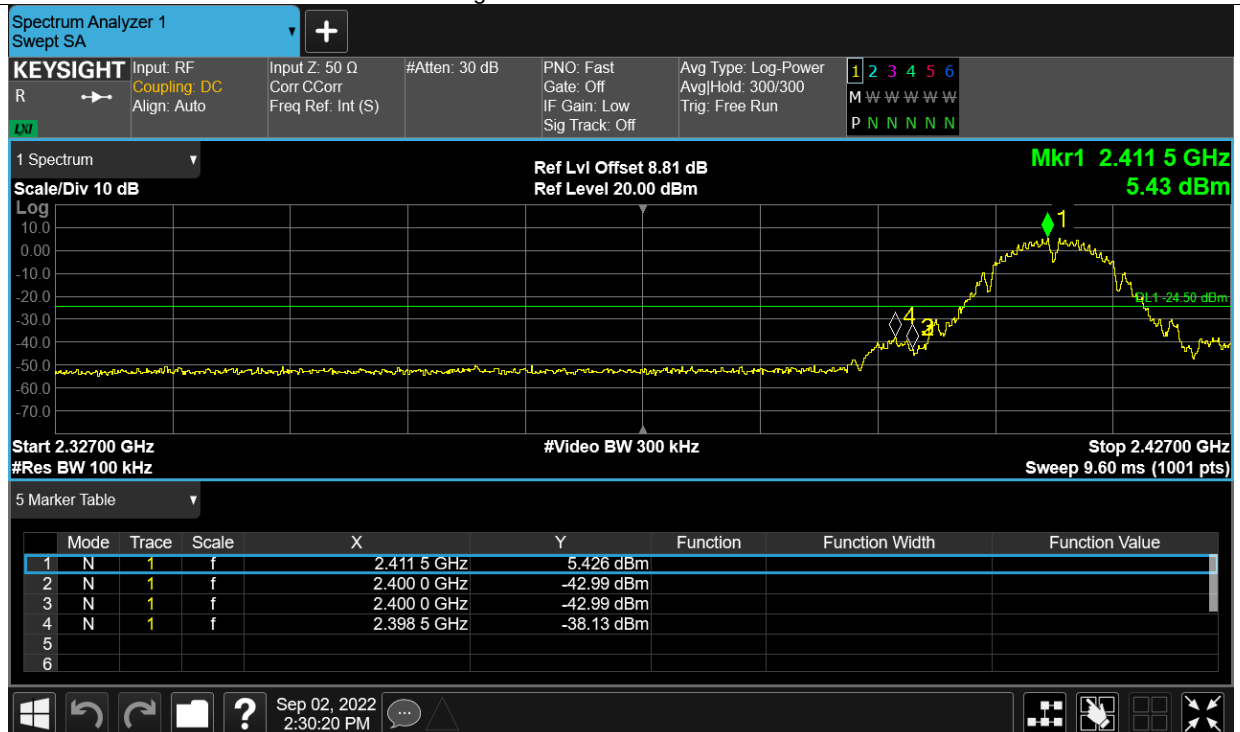
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-43.63	-30	Pass
NVNT	b	2462	Ant1	-55.61	-30	Pass
NVNT	g	2412	Ant1	-30.38	-30	Pass
NVNT	g	2462	Ant1	-43.27	-30	Pass
NVNT	n20	2412	Ant1	-30.94	-30	Pass
NVNT	n20	2462	Ant1	-42.87	-30	Pass
NVNT	n40	2422	Ant1	-31	-30	Pass
NVNT	n40	2452	Ant1	-31.76	-30	Pass

Test Graphs

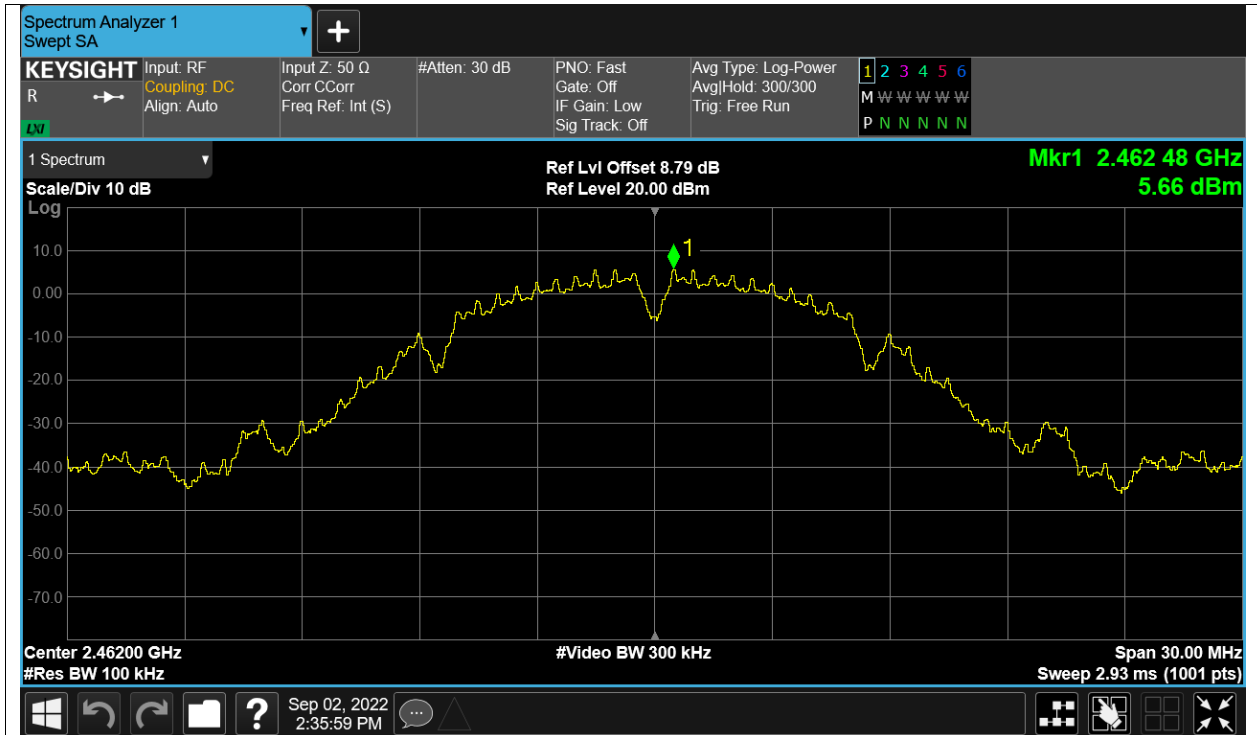
Band Edge NVNT b 2412MHz Ant1 Ref



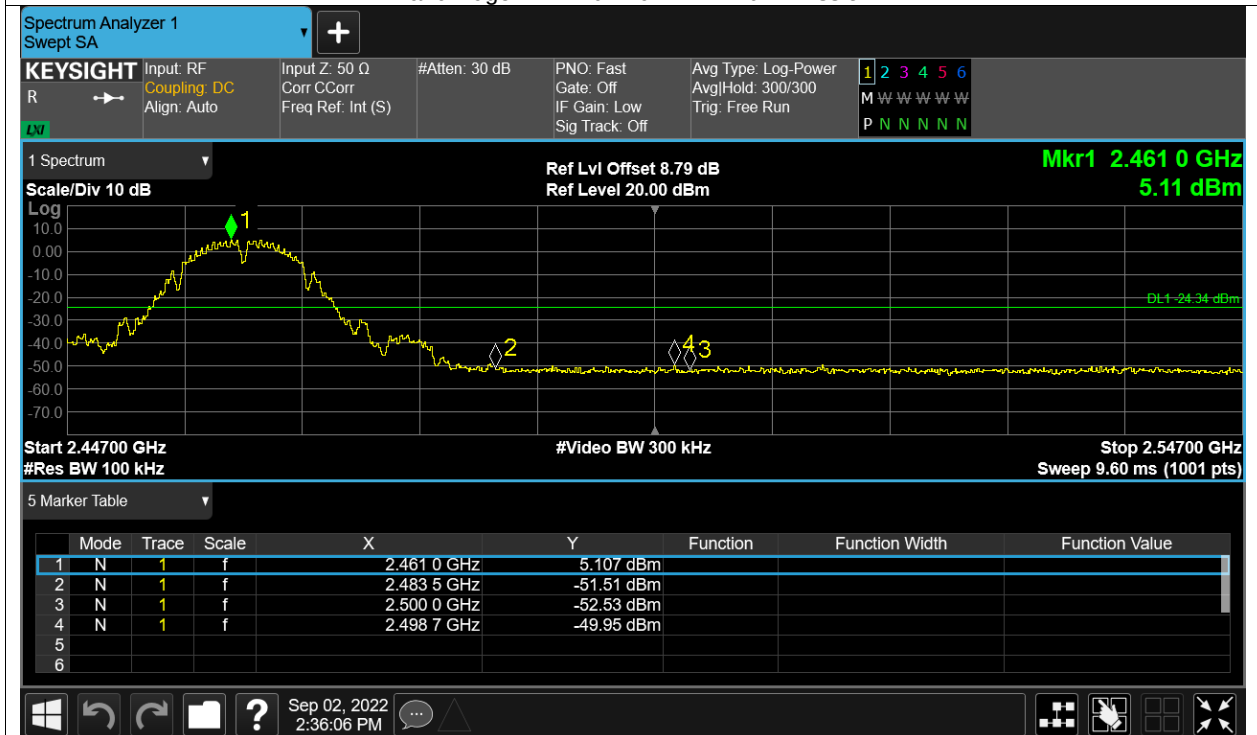
Band Edge NVNT b 2412MHz Ant1 Emission



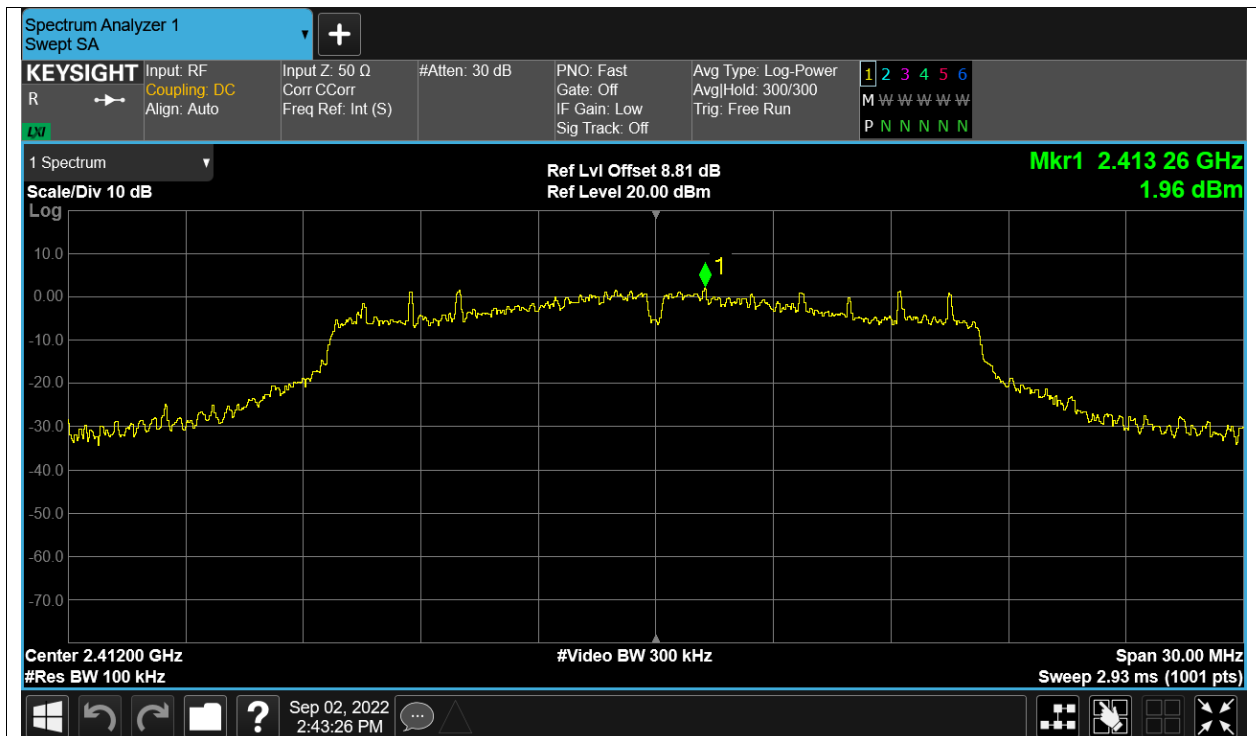
Band Edge NVNT b 2462MHz Ant1 Ref



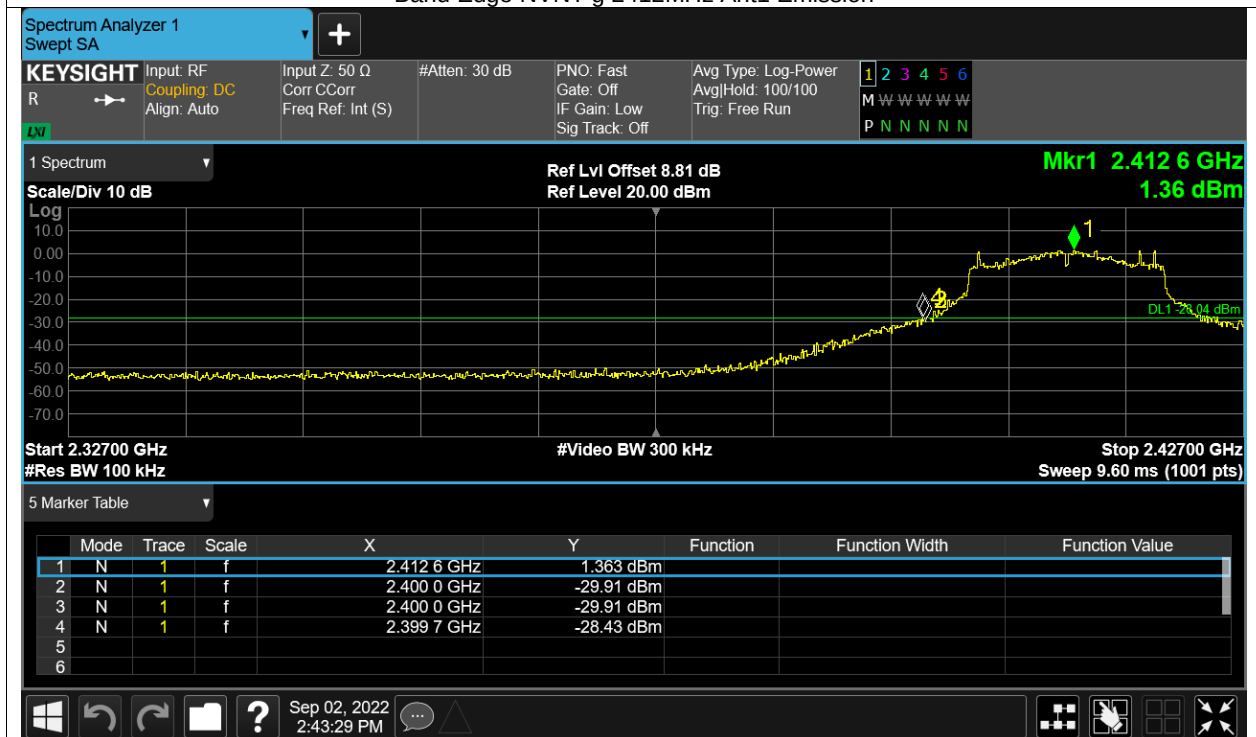
Band Edge NVNT b 2462MHz Ant1 Emission



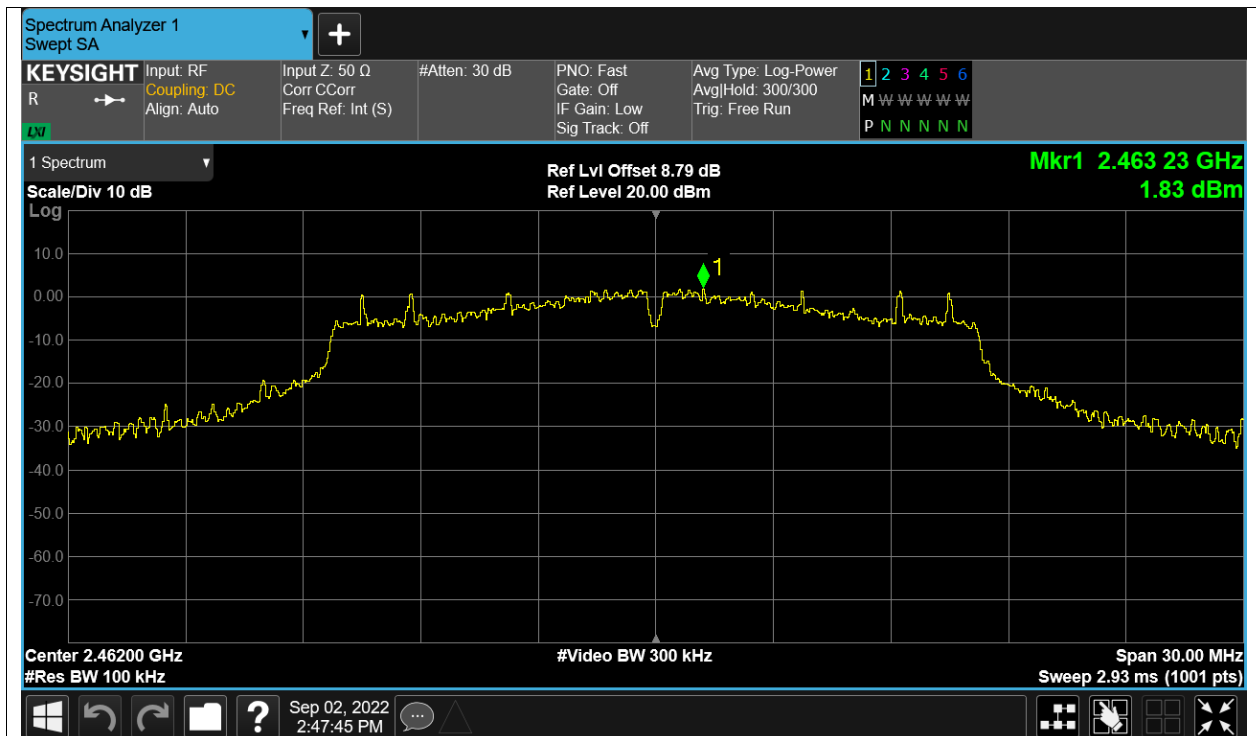
Band Edge NVNT g 2412MHz Ant1 Ref



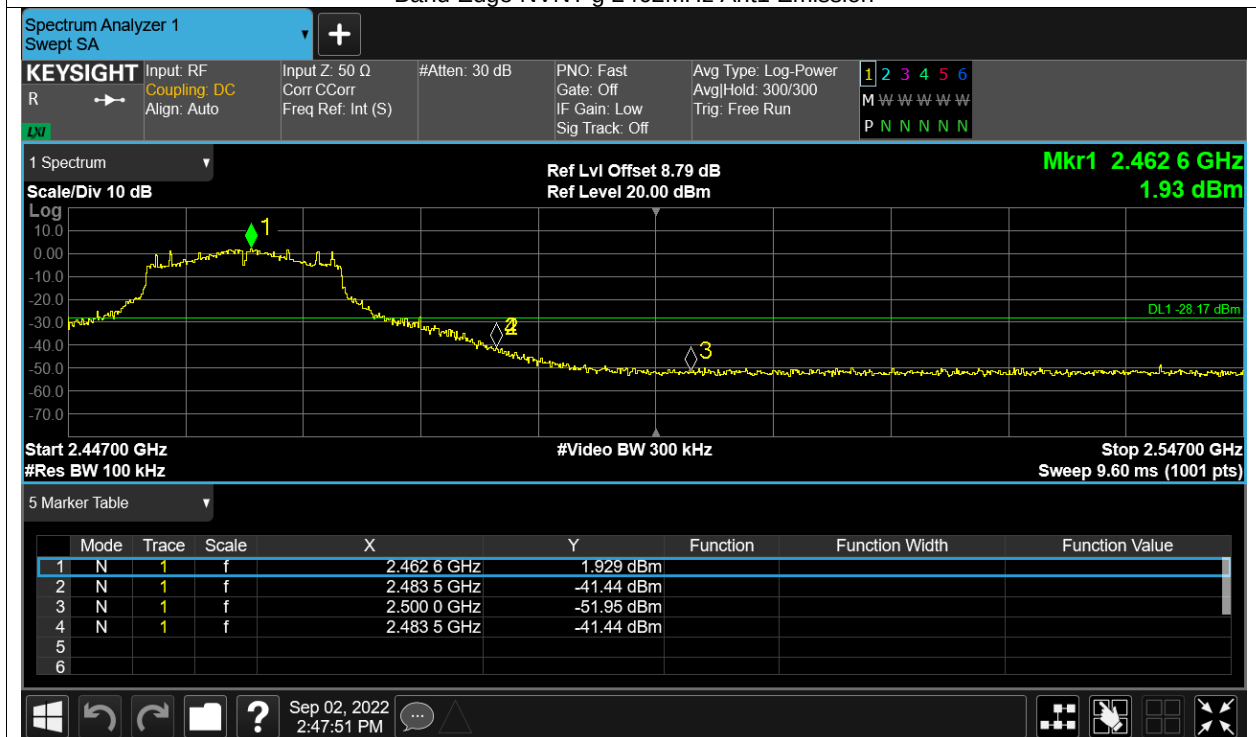
Band Edge NVNT g 2412MHz Ant1 Emission



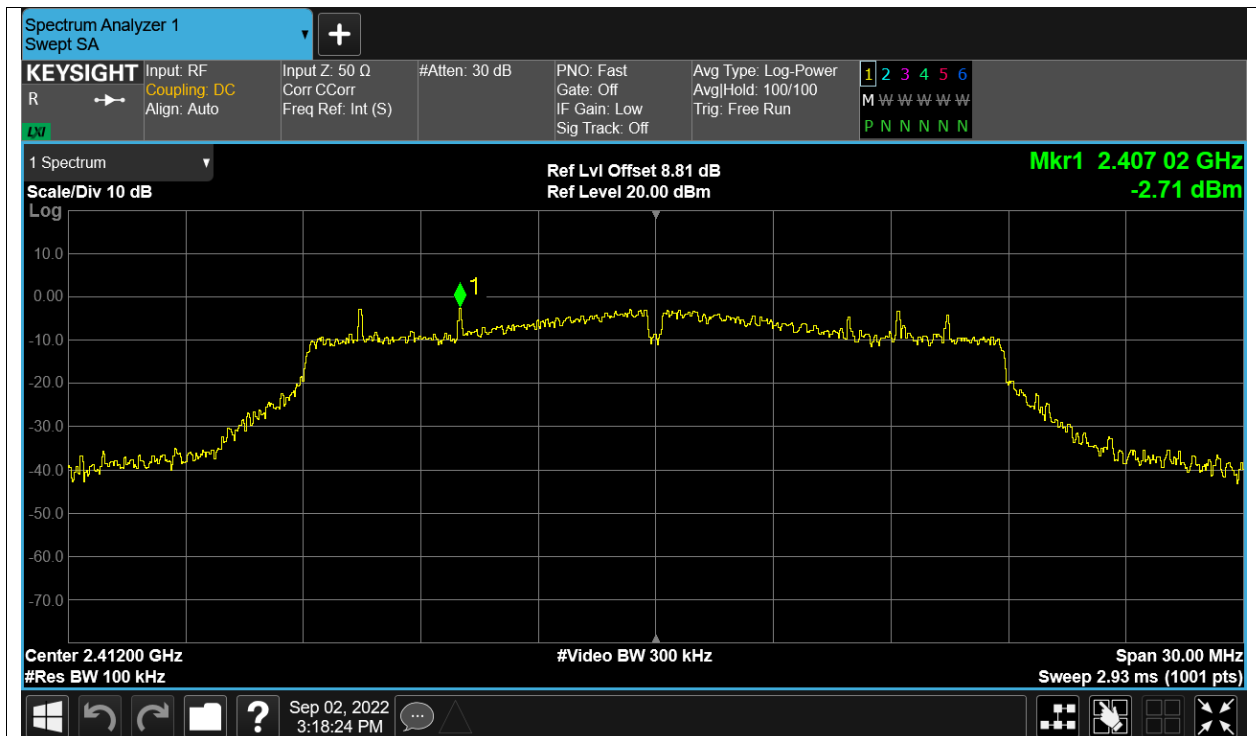
Band Edge NVNT g 2462MHz Ant1 Ref



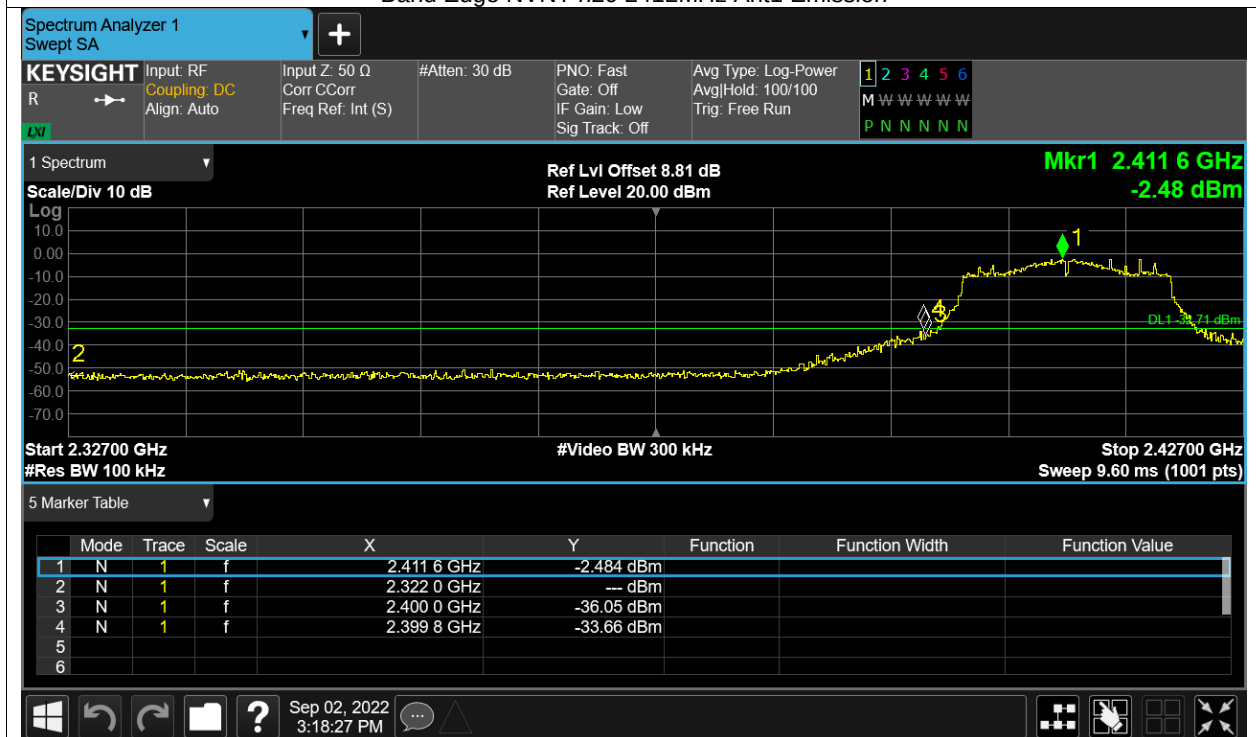
Band Edge NVNT g 2462MHz Ant1 Emission



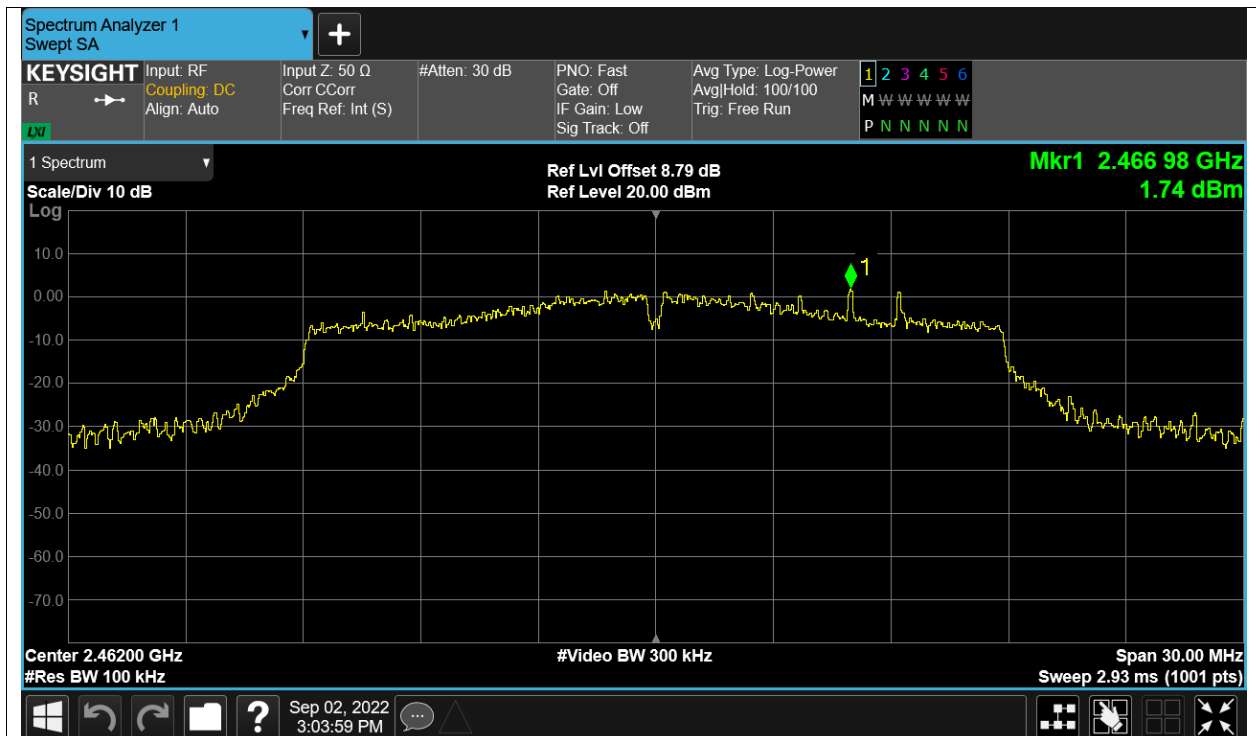
Band Edge NVNT n20 2412MHz Ant1 Ref



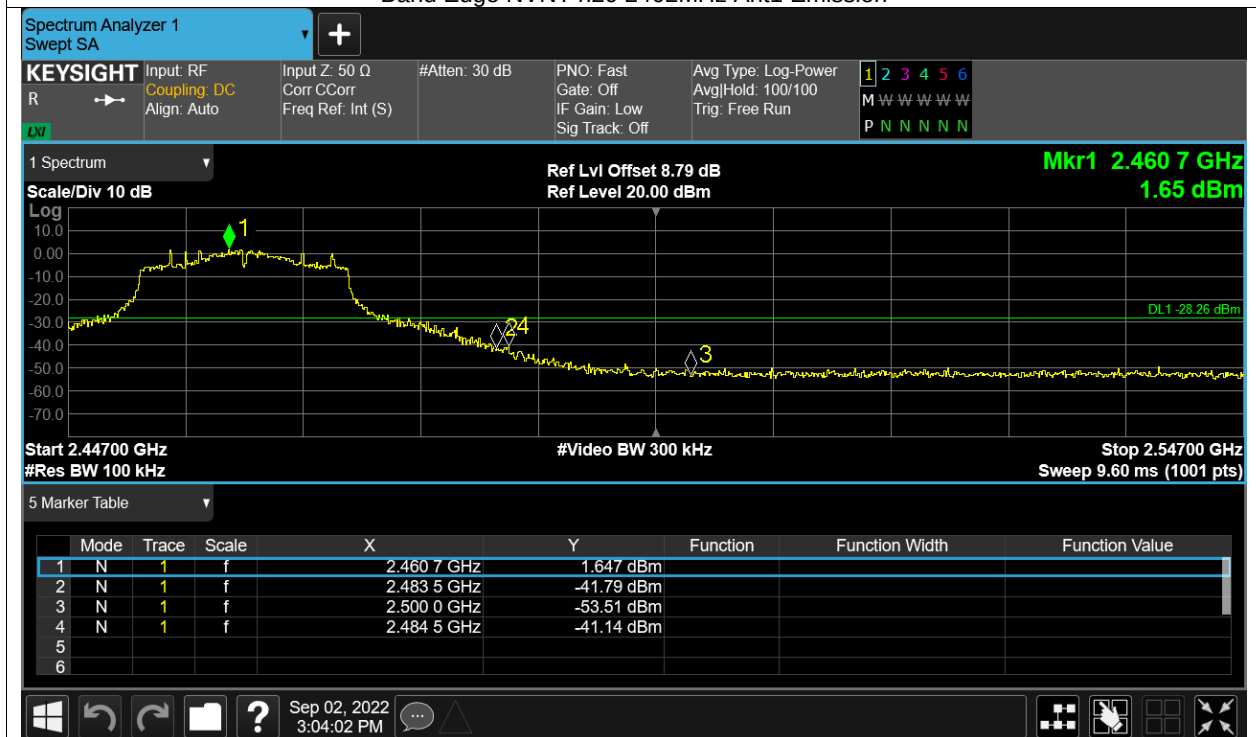
Band Edge NVNT n20 2412MHz Ant1 Emission



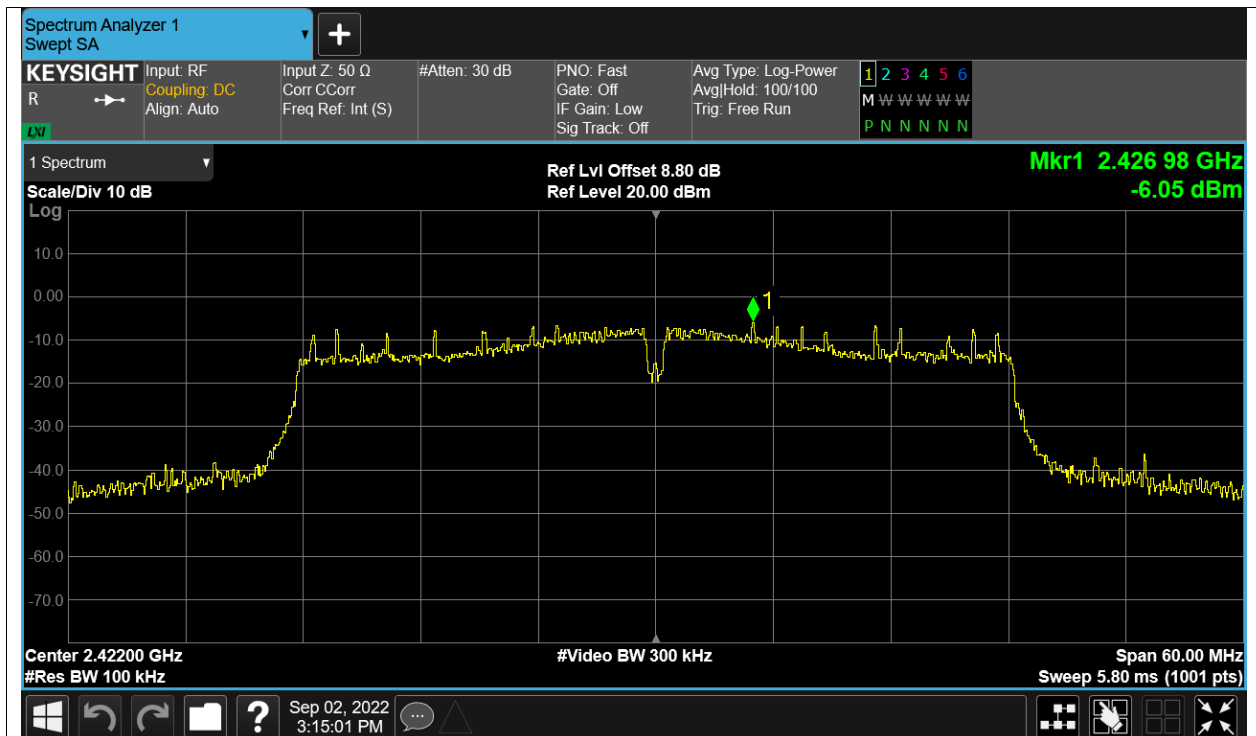
Band Edge NVNT n20 2462MHz Ant1 Ref



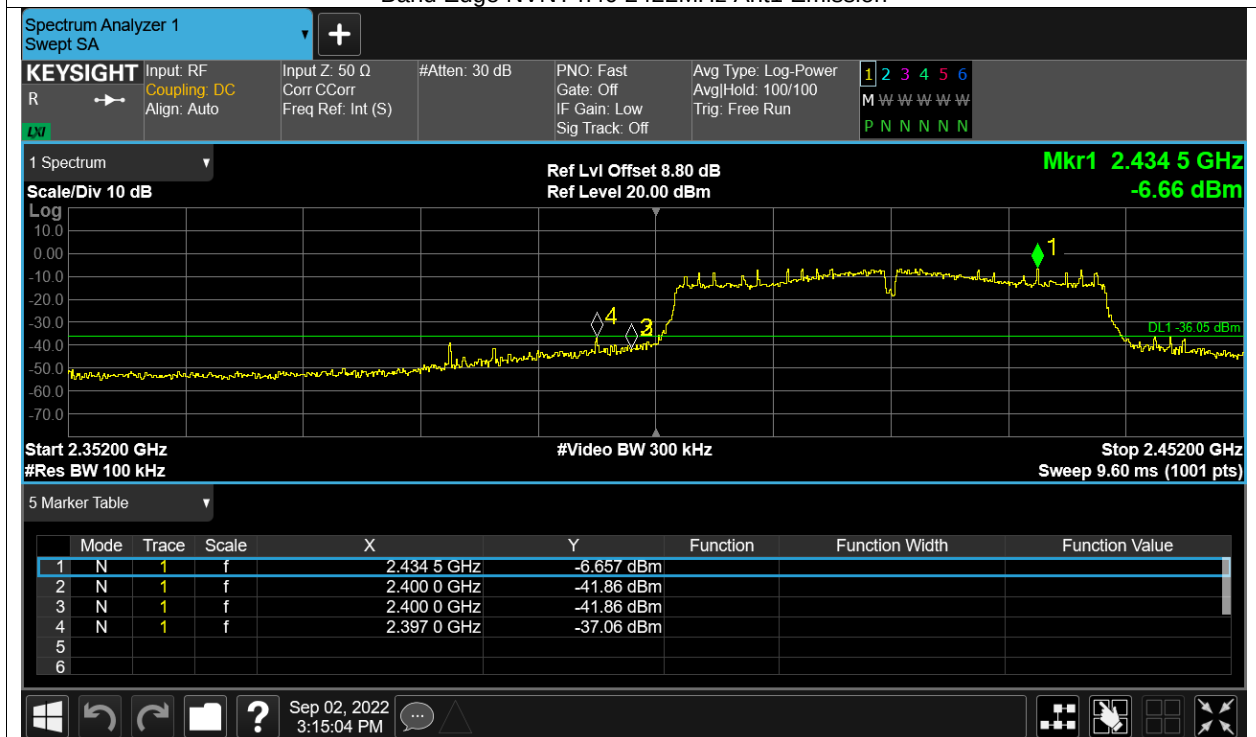
Band Edge NVNT n20 2462MHz Ant1 Emission



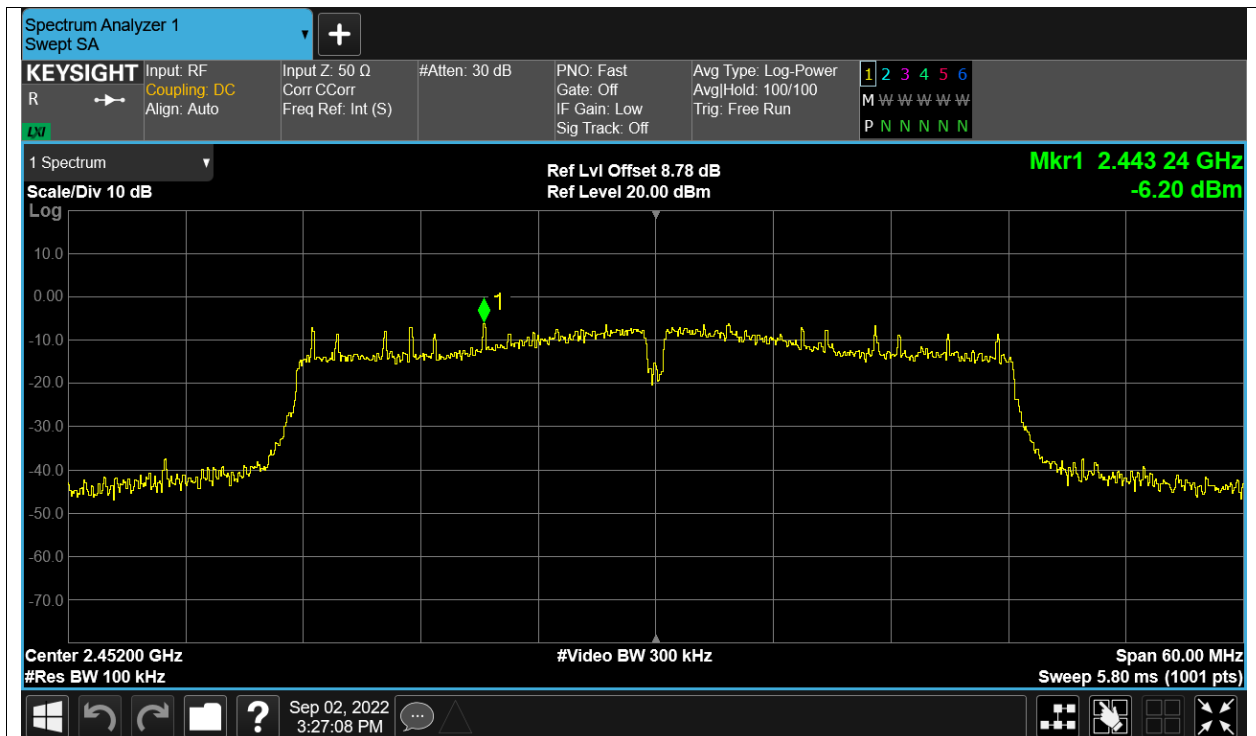
Band Edge NVNT n40 2422MHz Ant1 Ref



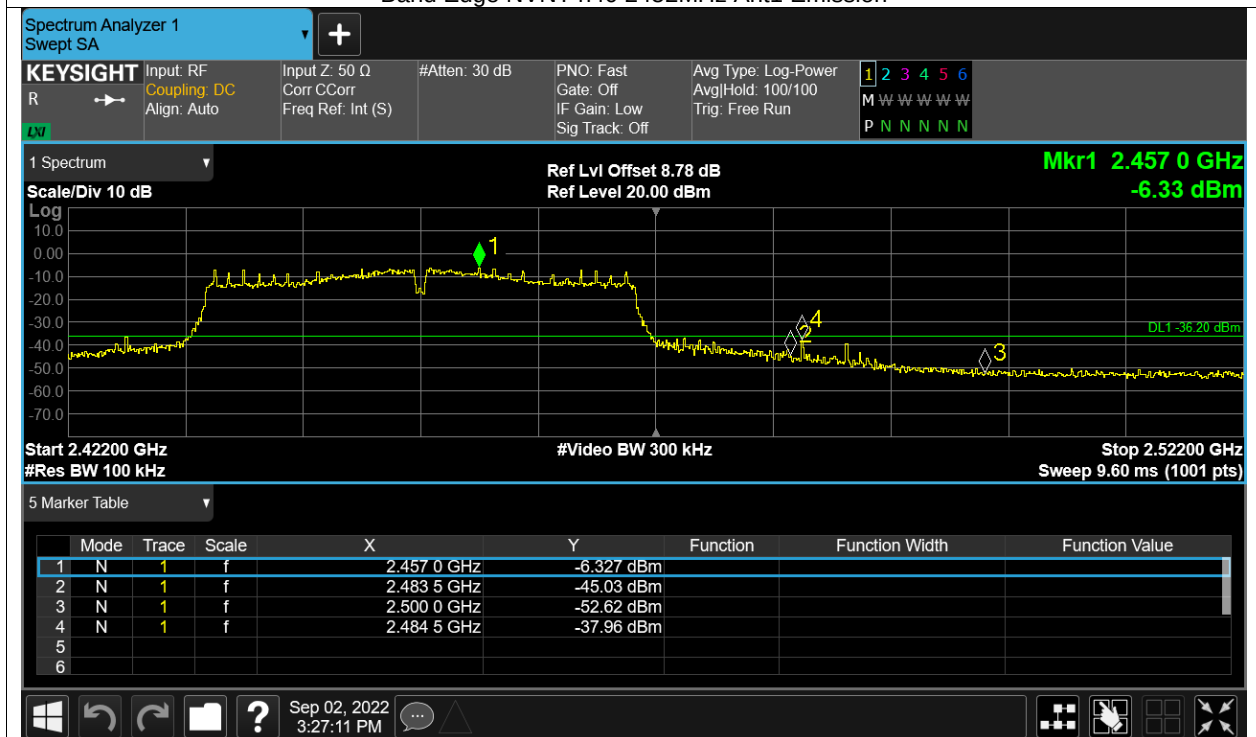
Band Edge NVNT n40 2422MHz Ant1 Emission



Band Edge NVNT n40 2452MHz Ant1 Ref



Band Edge NVNT n40 2452MHz Ant1 Emission

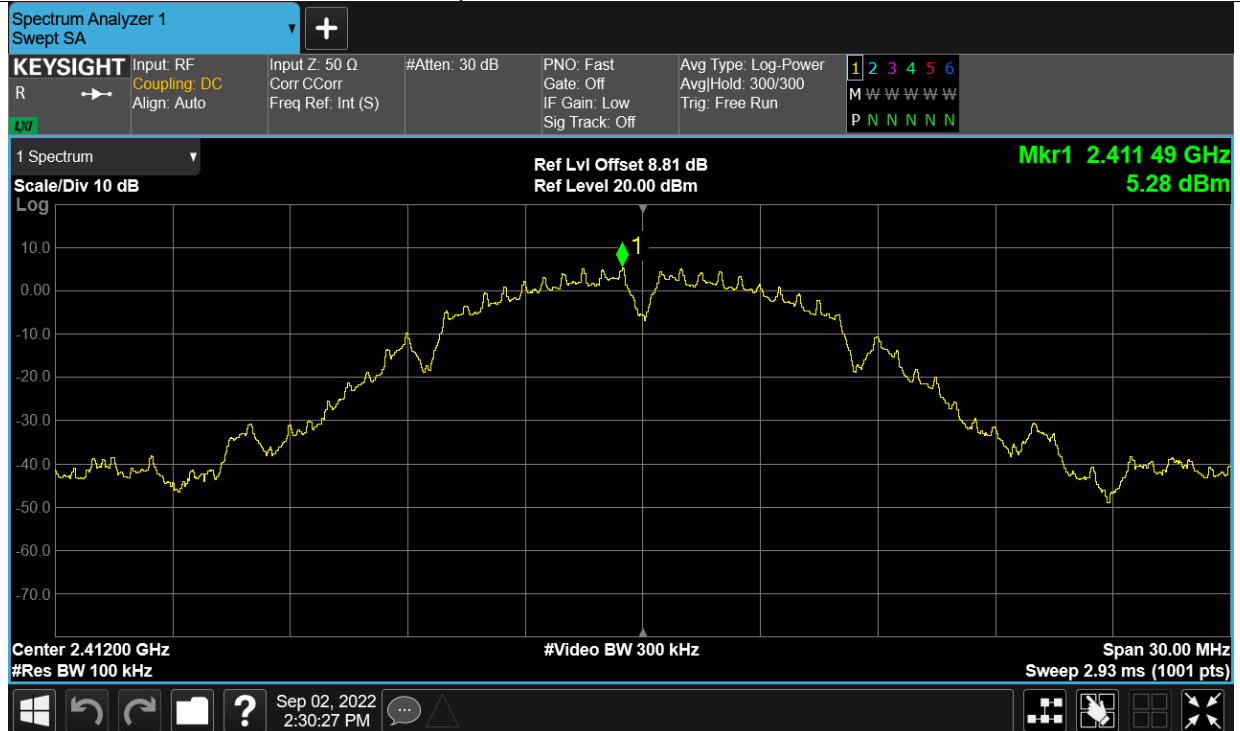


Conducted RF Spurious Emission

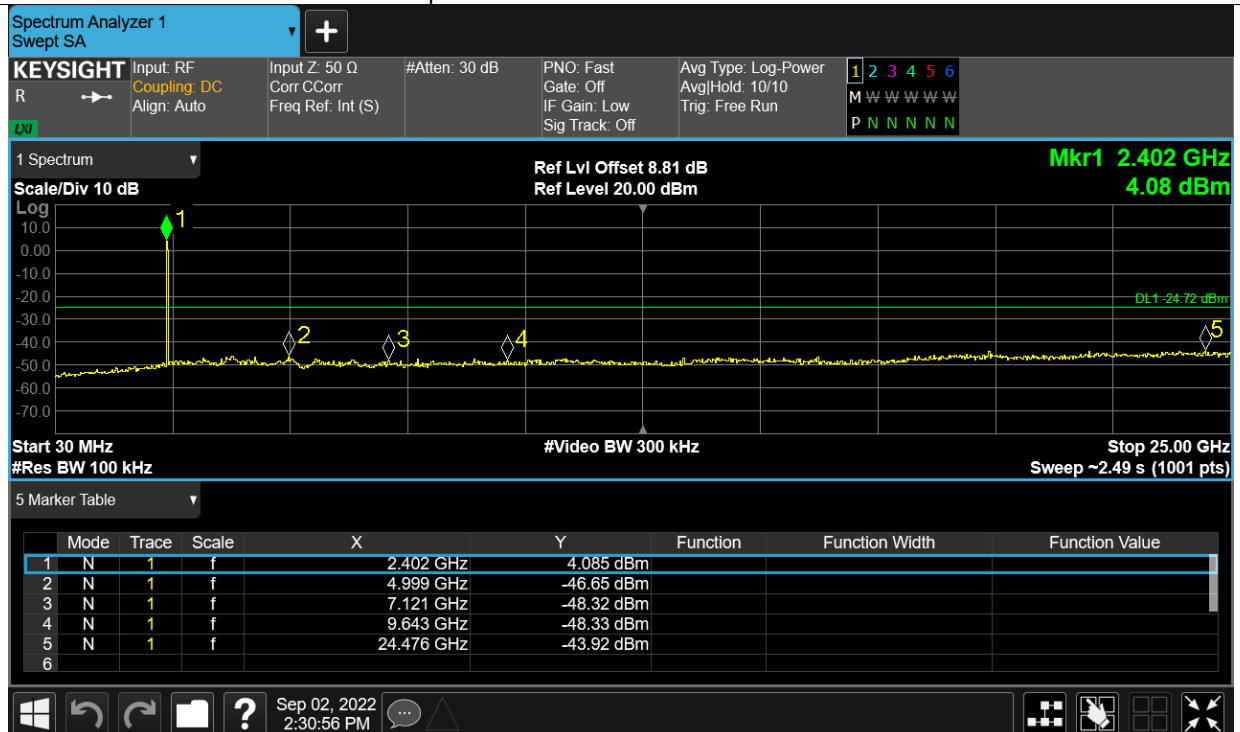
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-49.19	-30	Pass
NVNT	b	2437	Ant1	-49.86	-30	Pass
NVNT	b	2462	Ant1	-48.69	-30	Pass
NVNT	g	2412	Ant1	-43.73	-30	Pass
NVNT	g	2437	Ant1	-44.75	-30	Pass
NVNT	g	2462	Ant1	-45.01	-30	Pass
NVNT	n20	2412	Ant1	-44.14	-30	Pass
NVNT	n20	2437	Ant1	-44.01	-30	Pass
NVNT	n20	2462	Ant1	-50.13	-30	Pass
NVNT	n40	2422	Ant1	-41.11	-30	Pass
NVNT	n40	2437	Ant1	-41.36	-30	Pass
NVNT	n40	2452	Ant1	-37.67	-30	Pass

Test Graphs

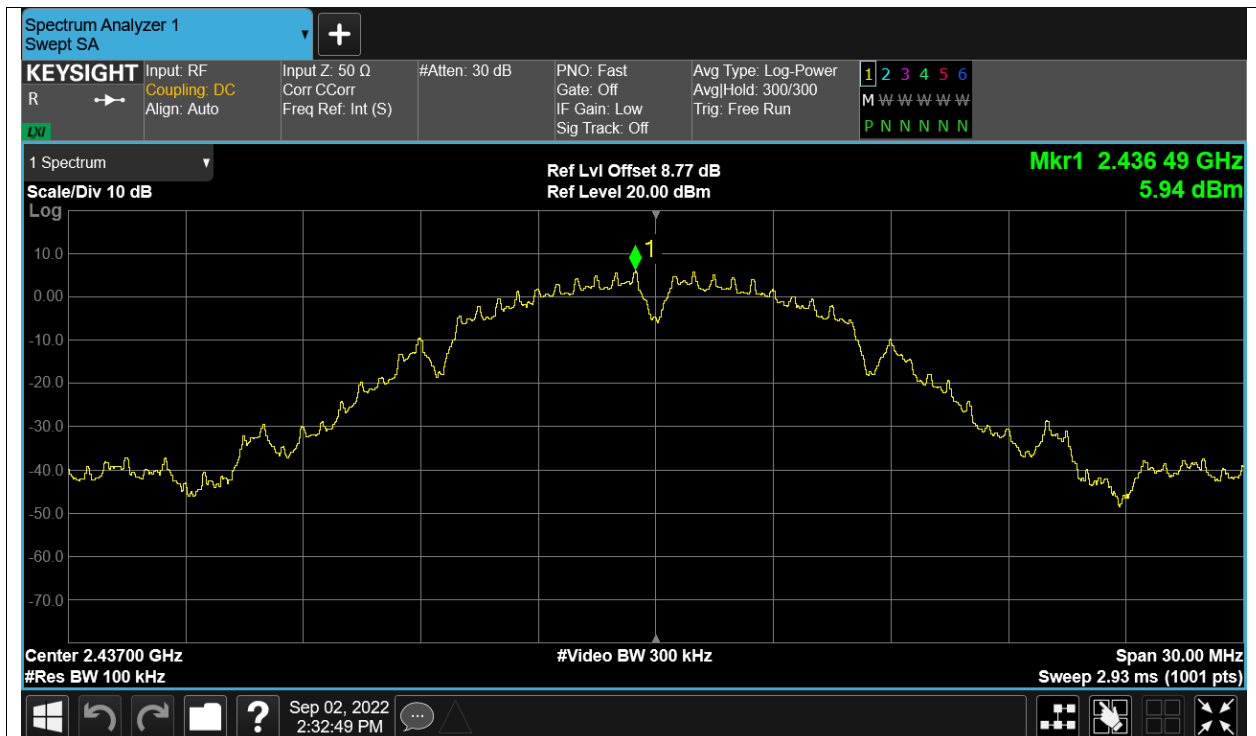
Tx. Spurious NVNT b 2412MHz Ant1 Ref



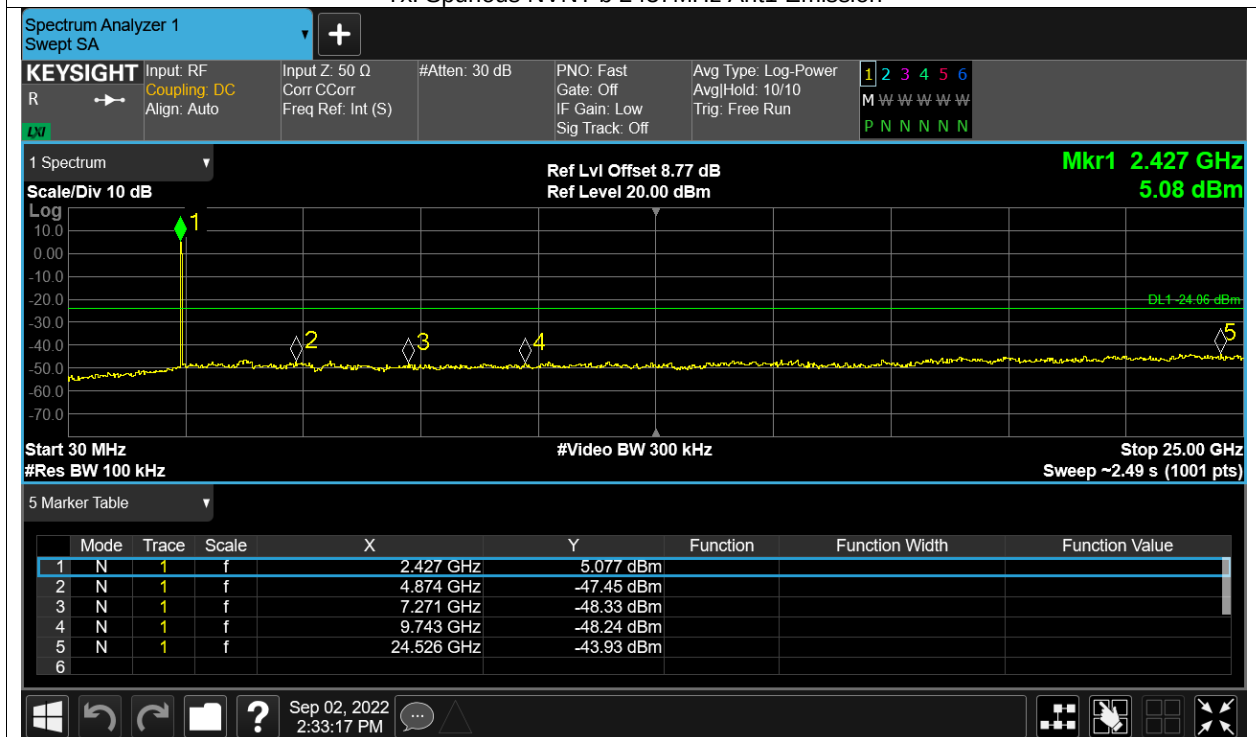
Tx. Spurious NVNT b 2412MHz Ant1 Emission



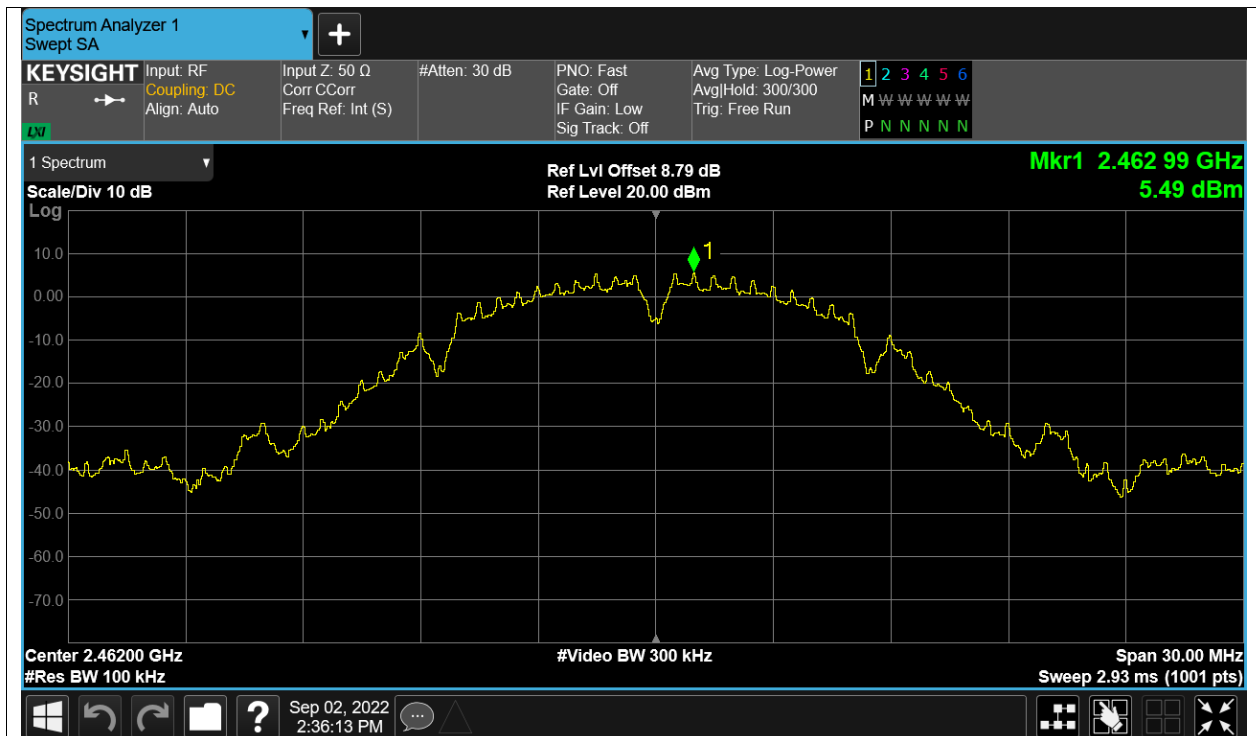
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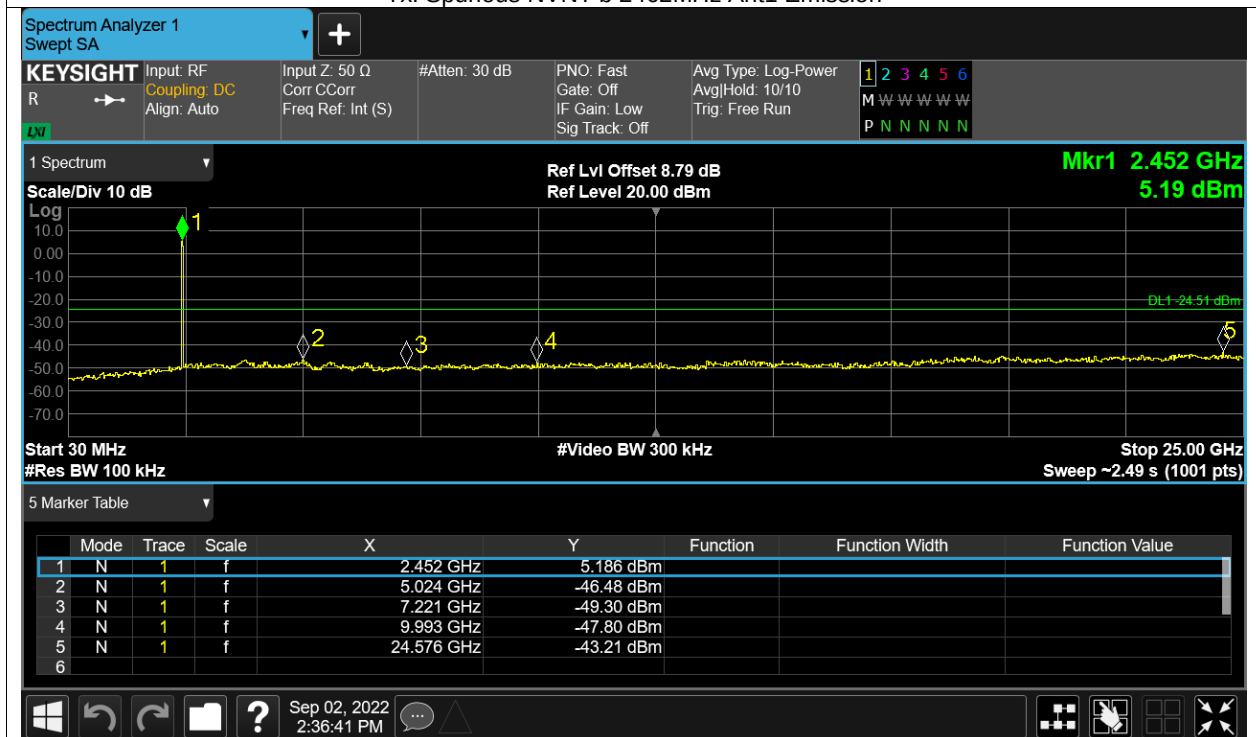
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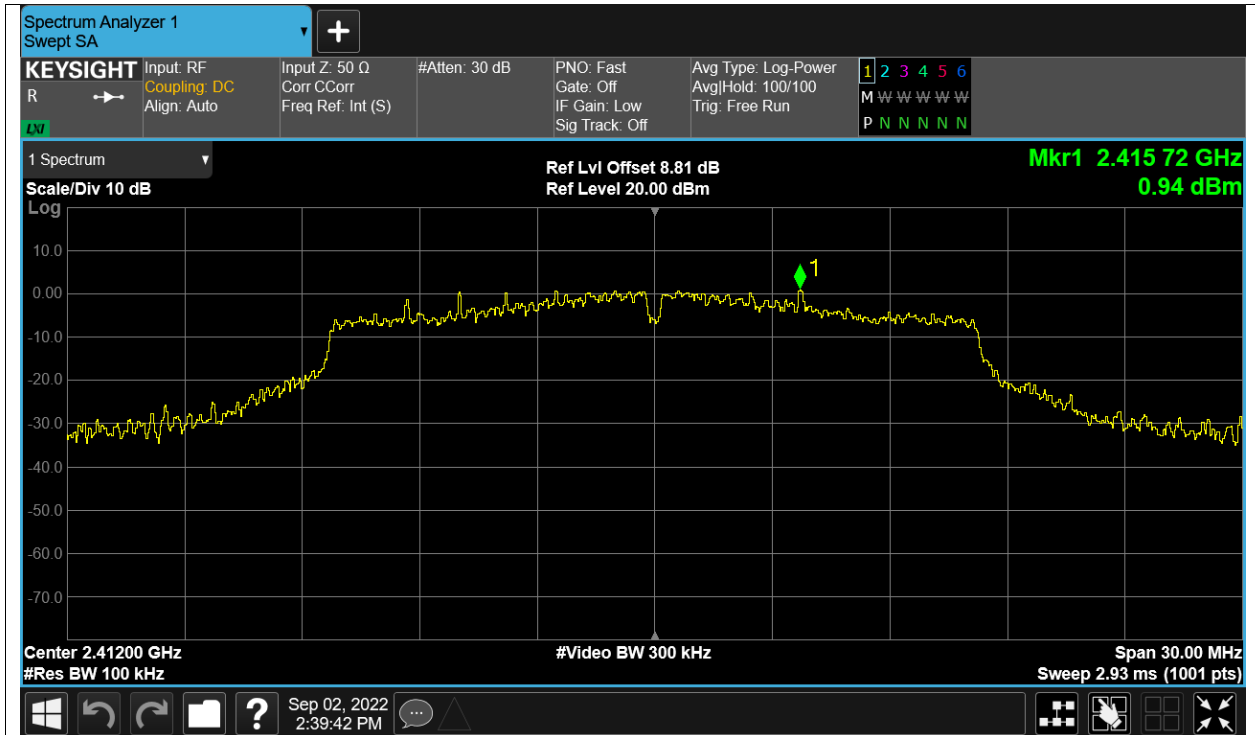
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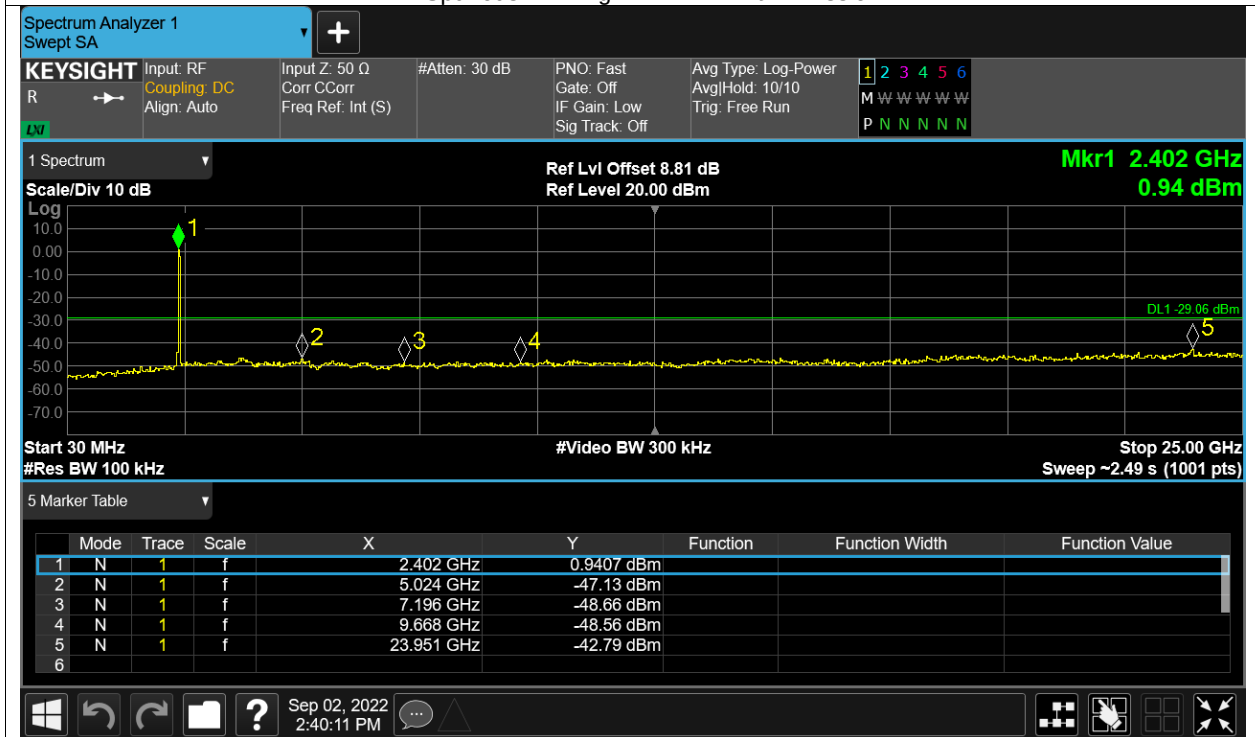
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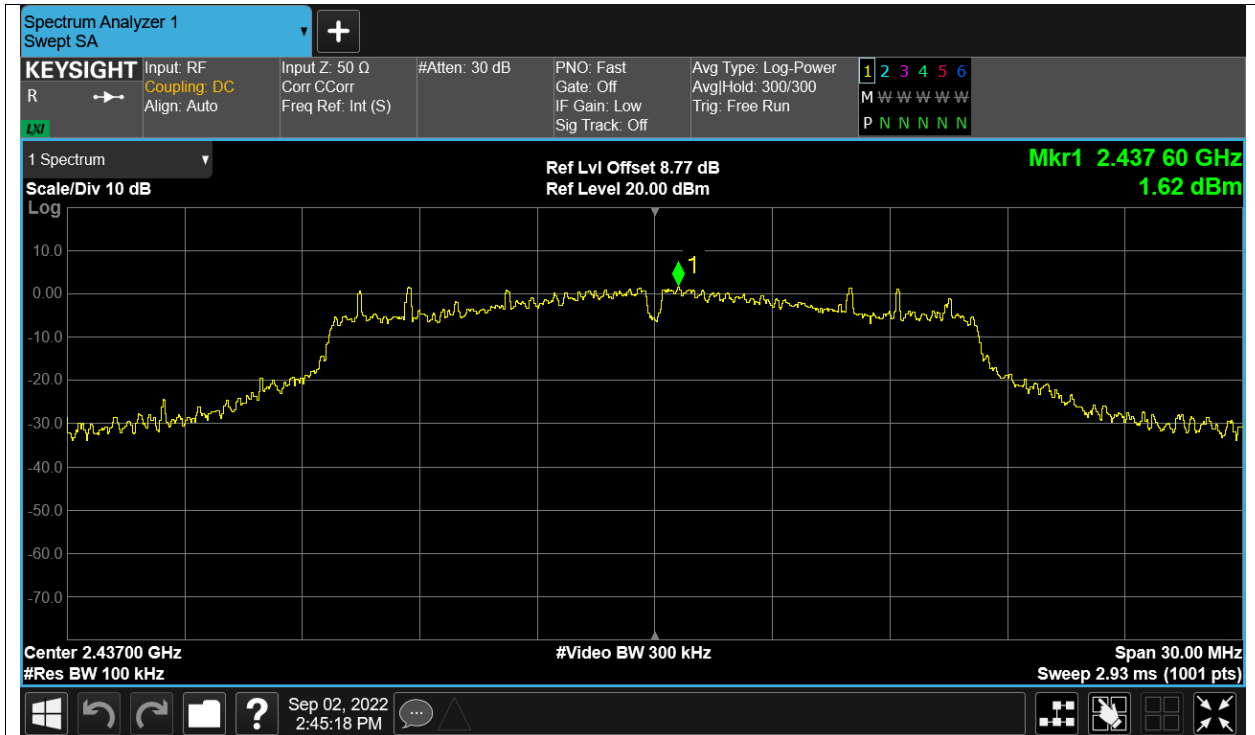
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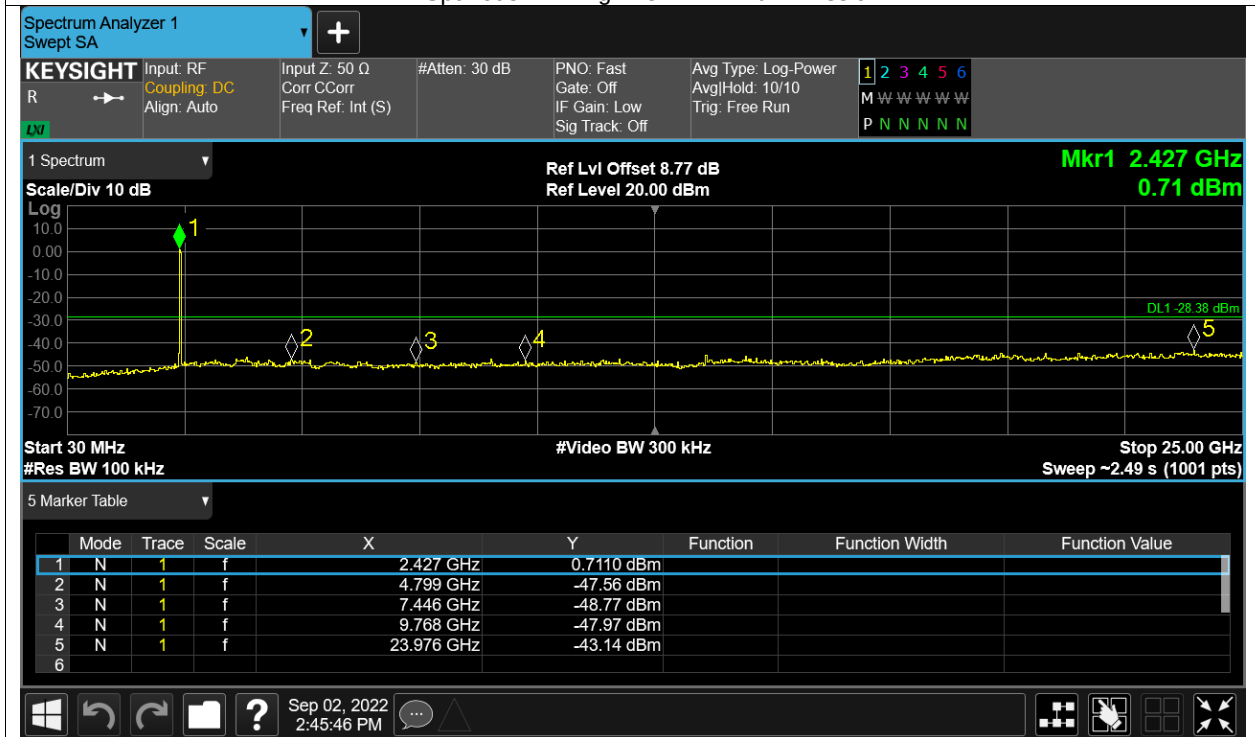
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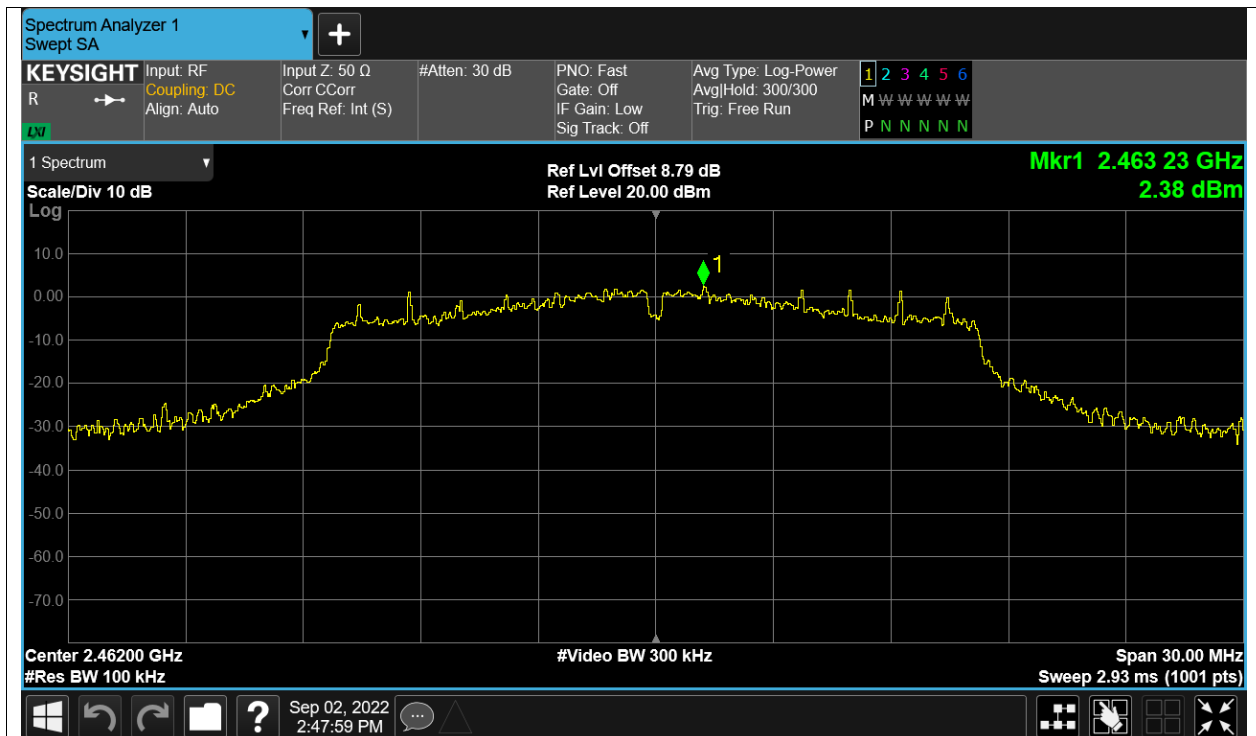
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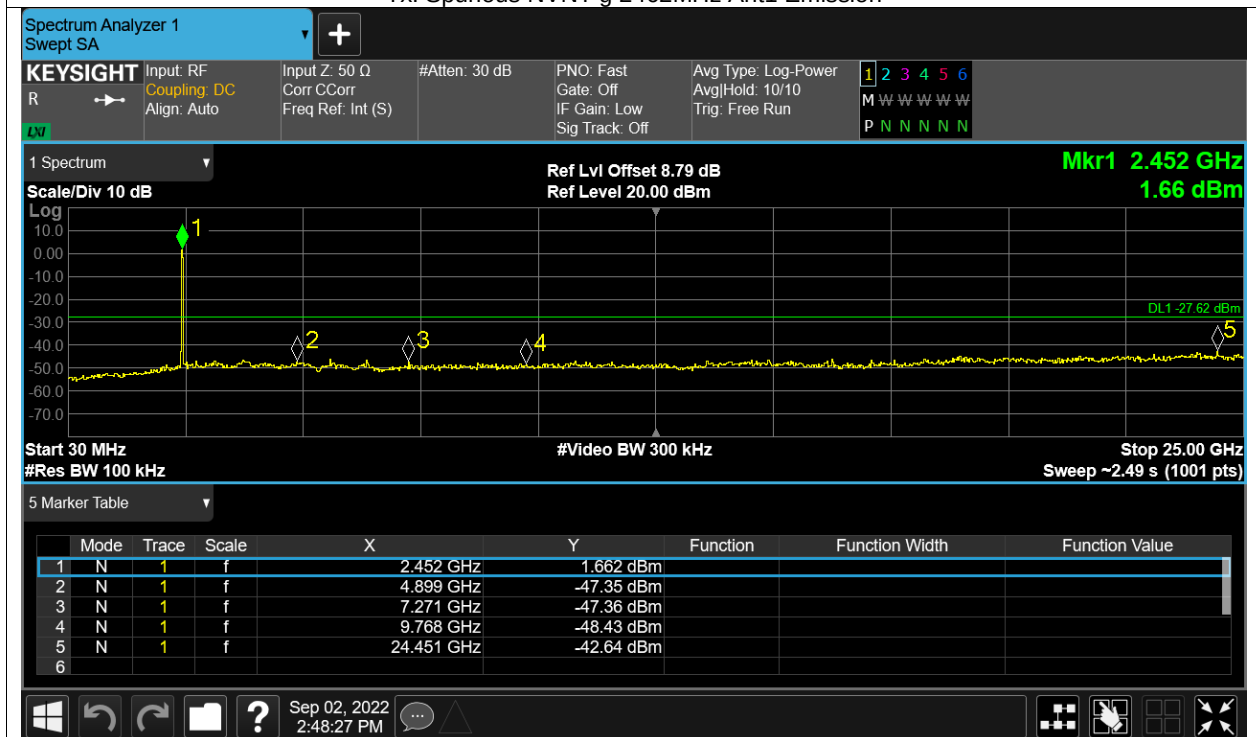
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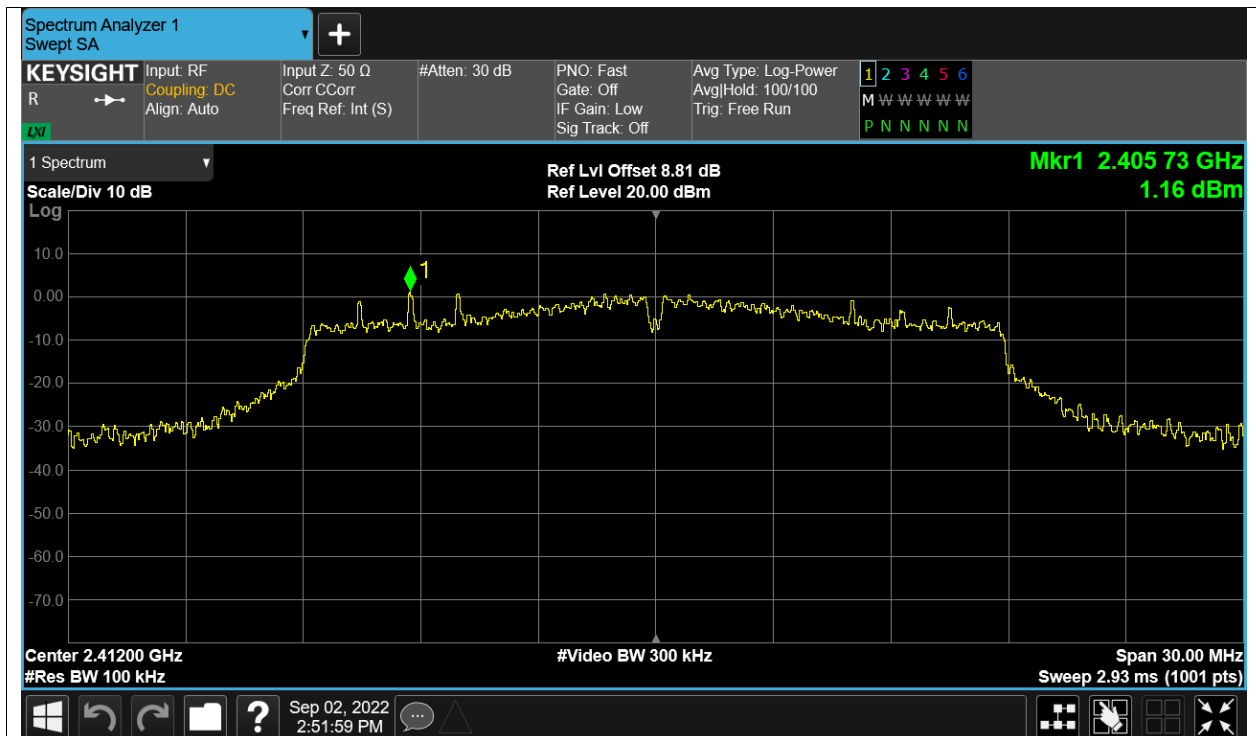
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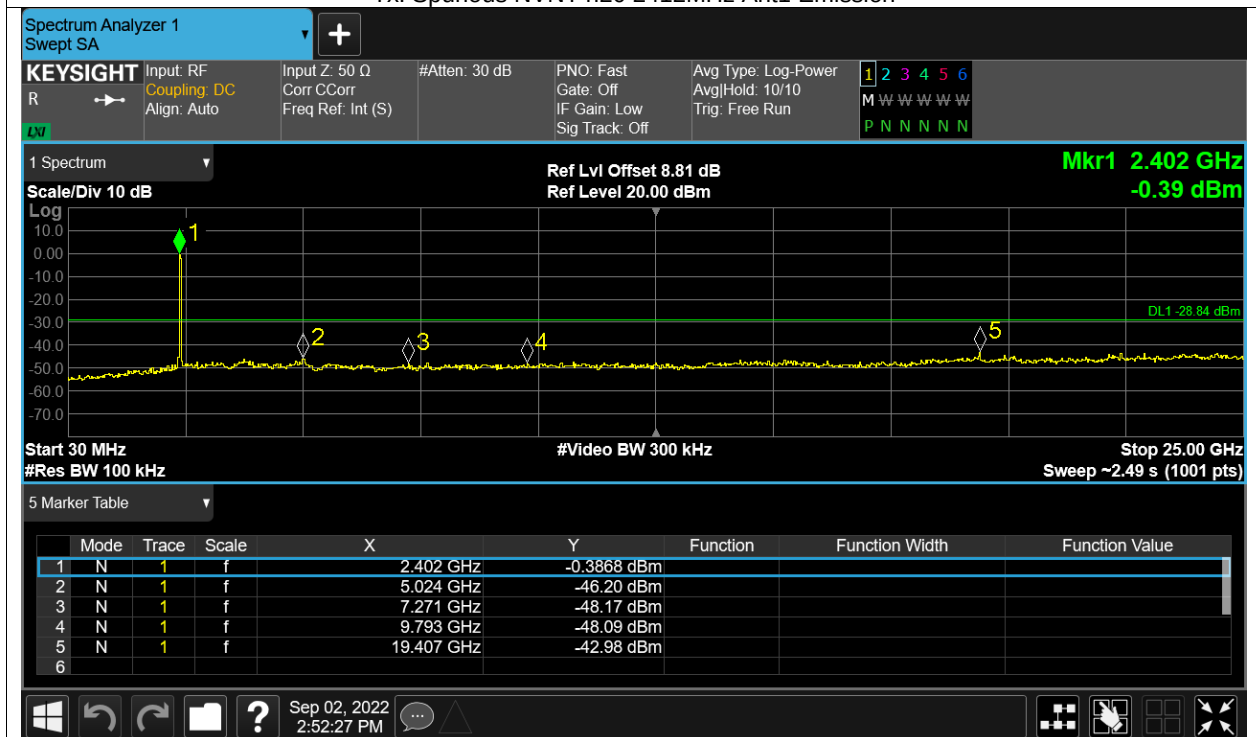
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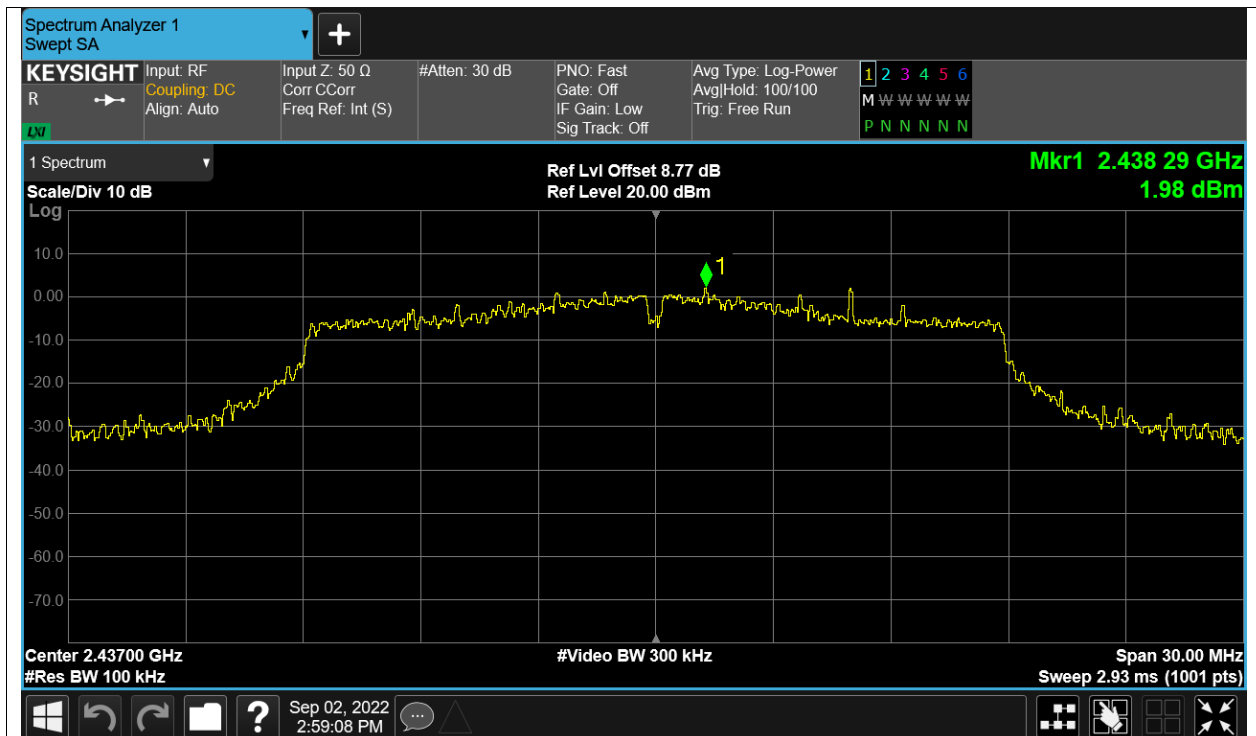
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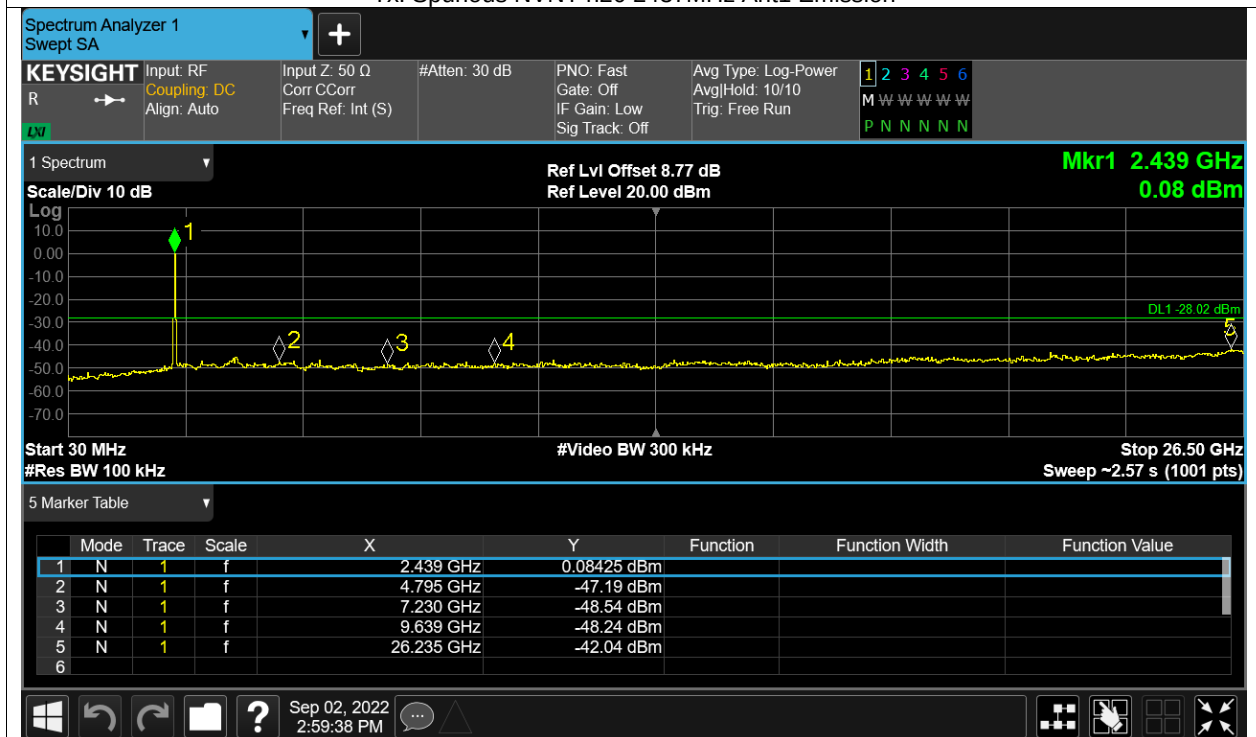
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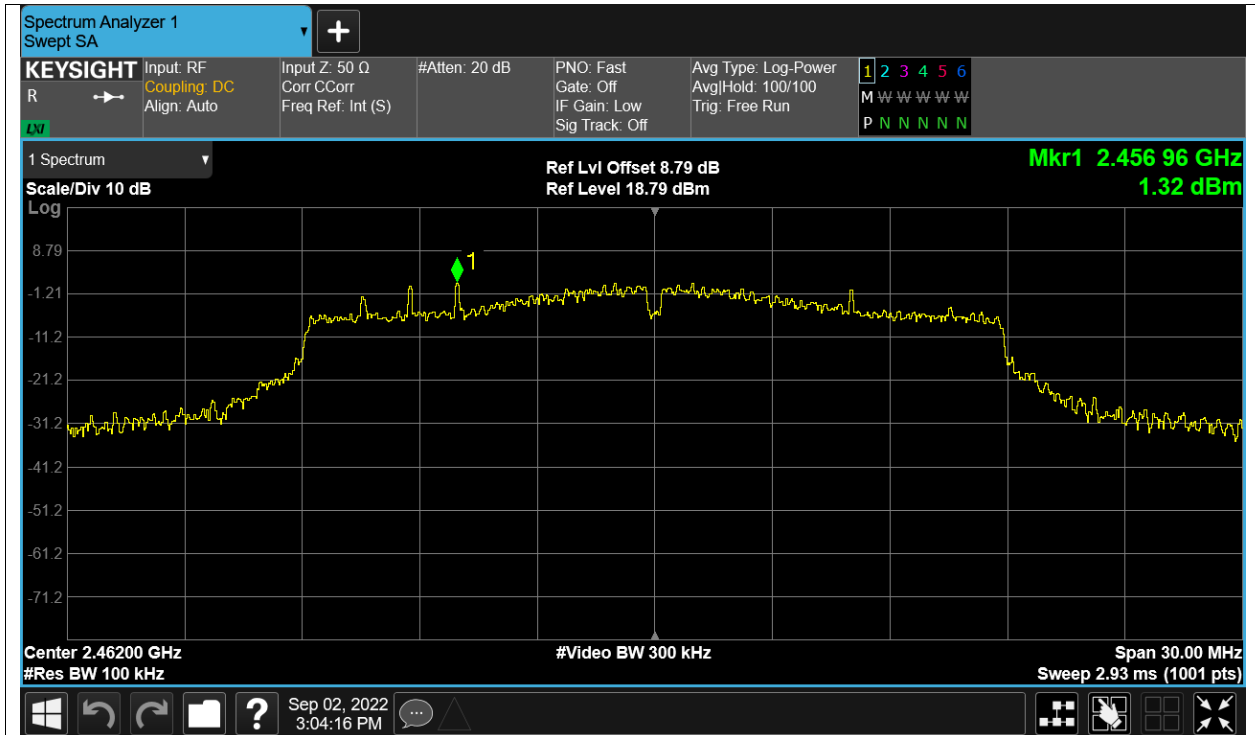
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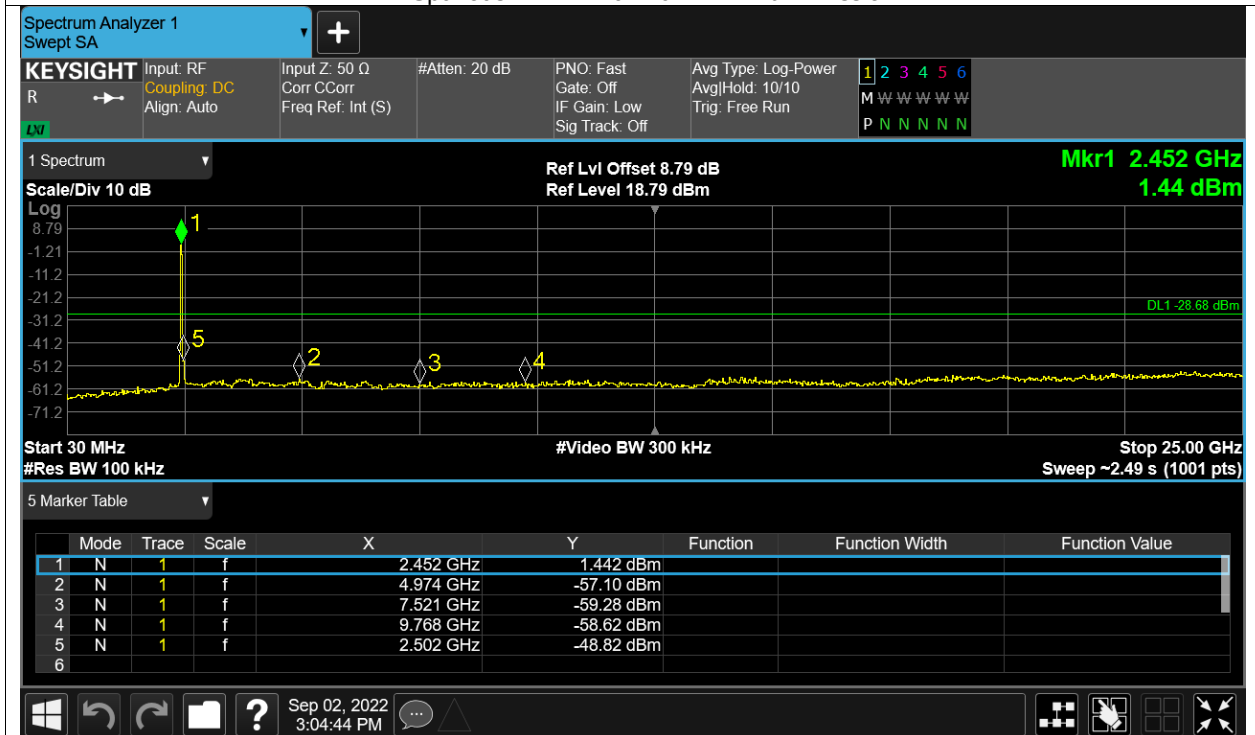
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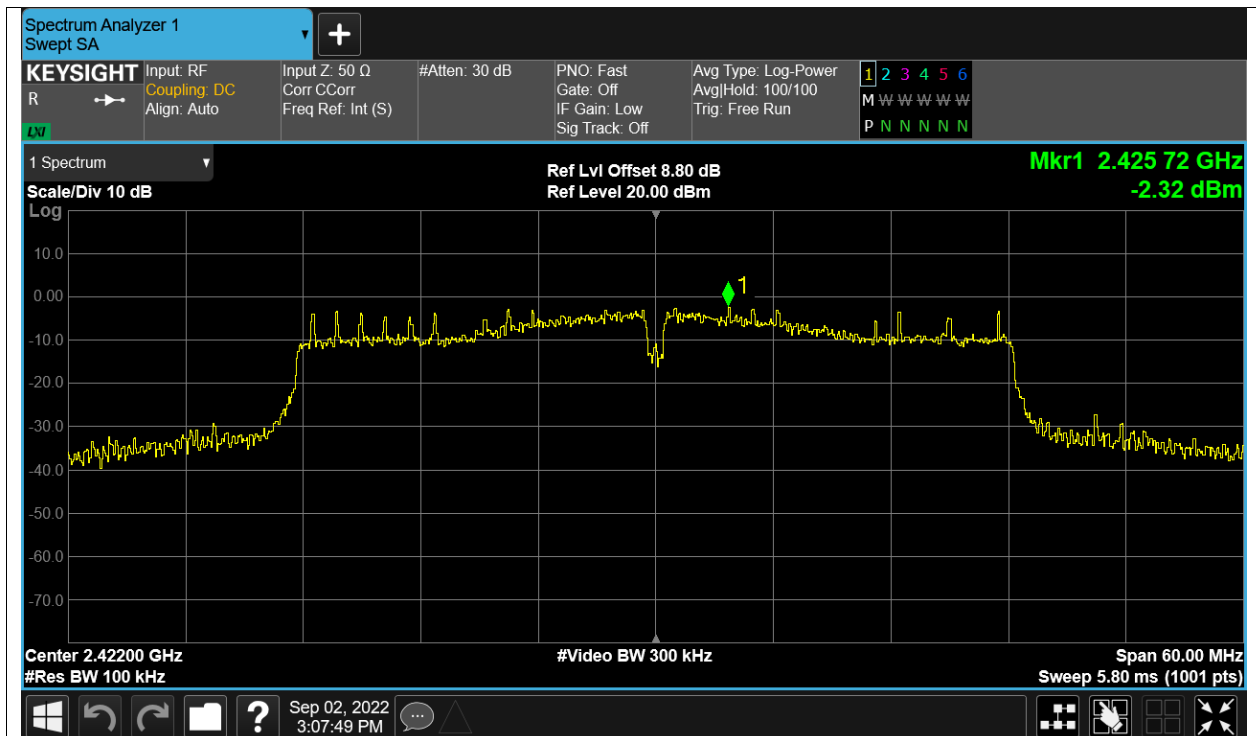
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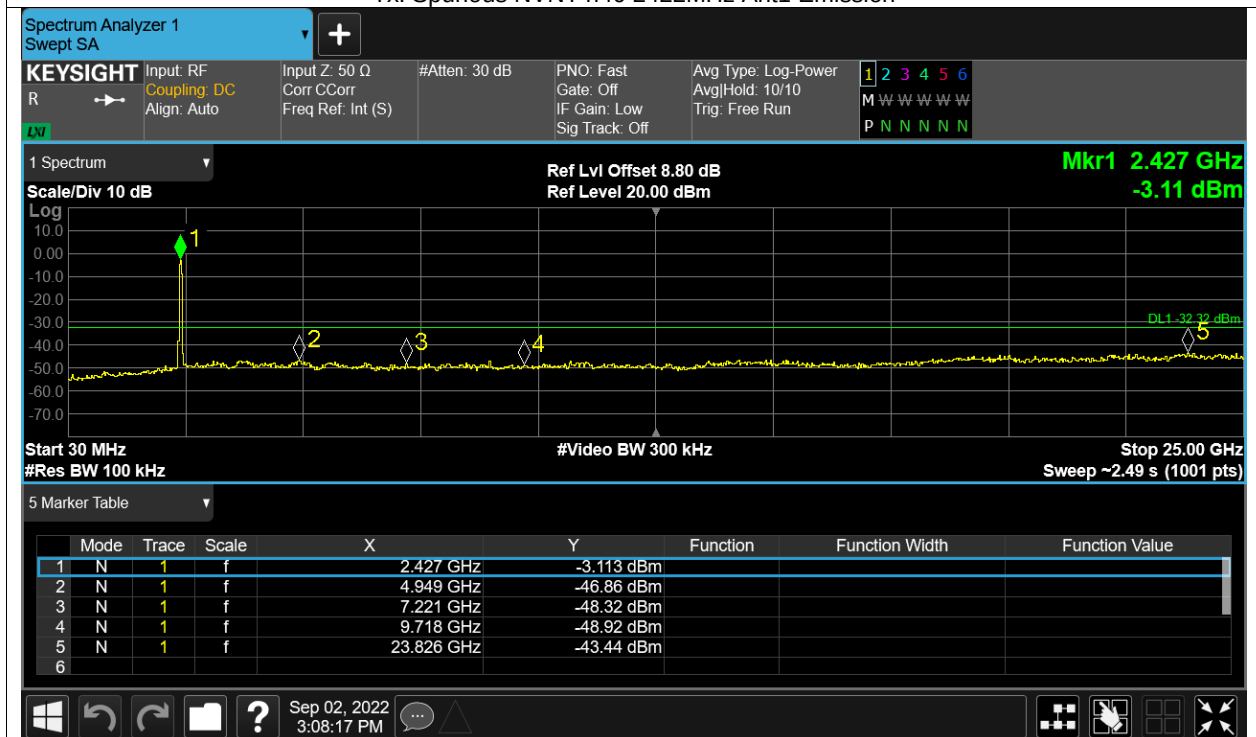
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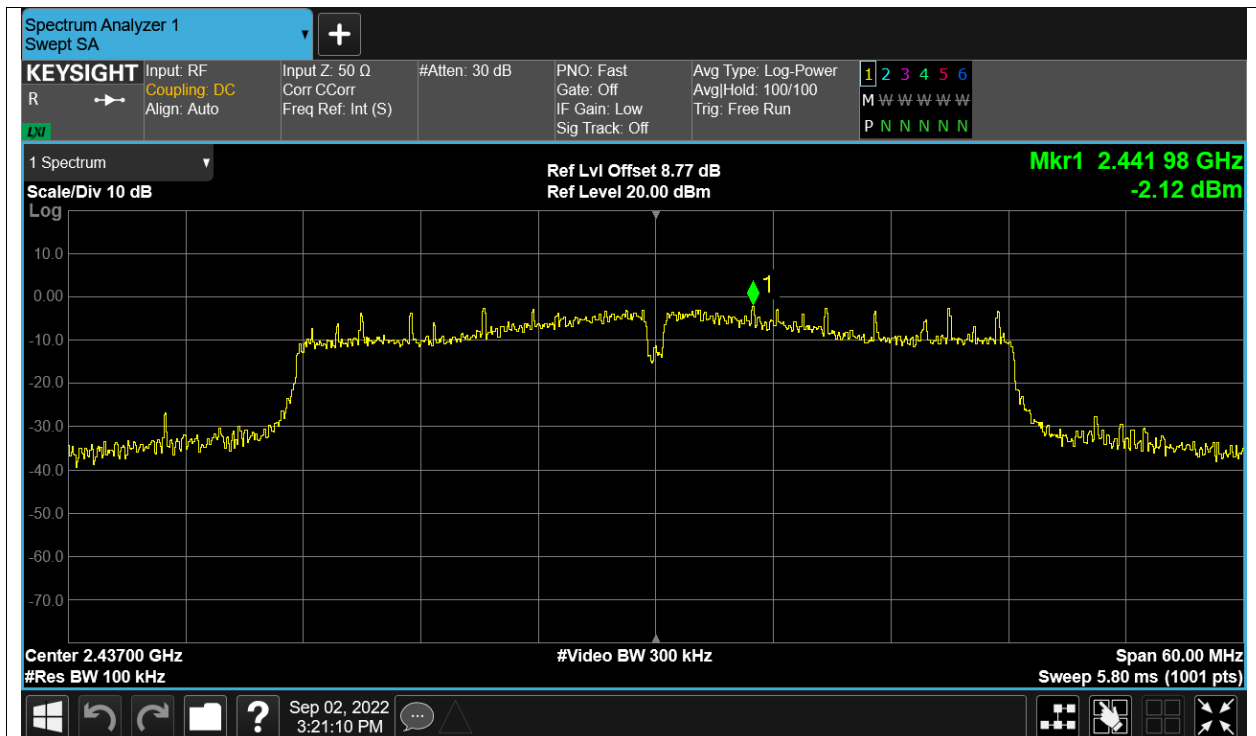
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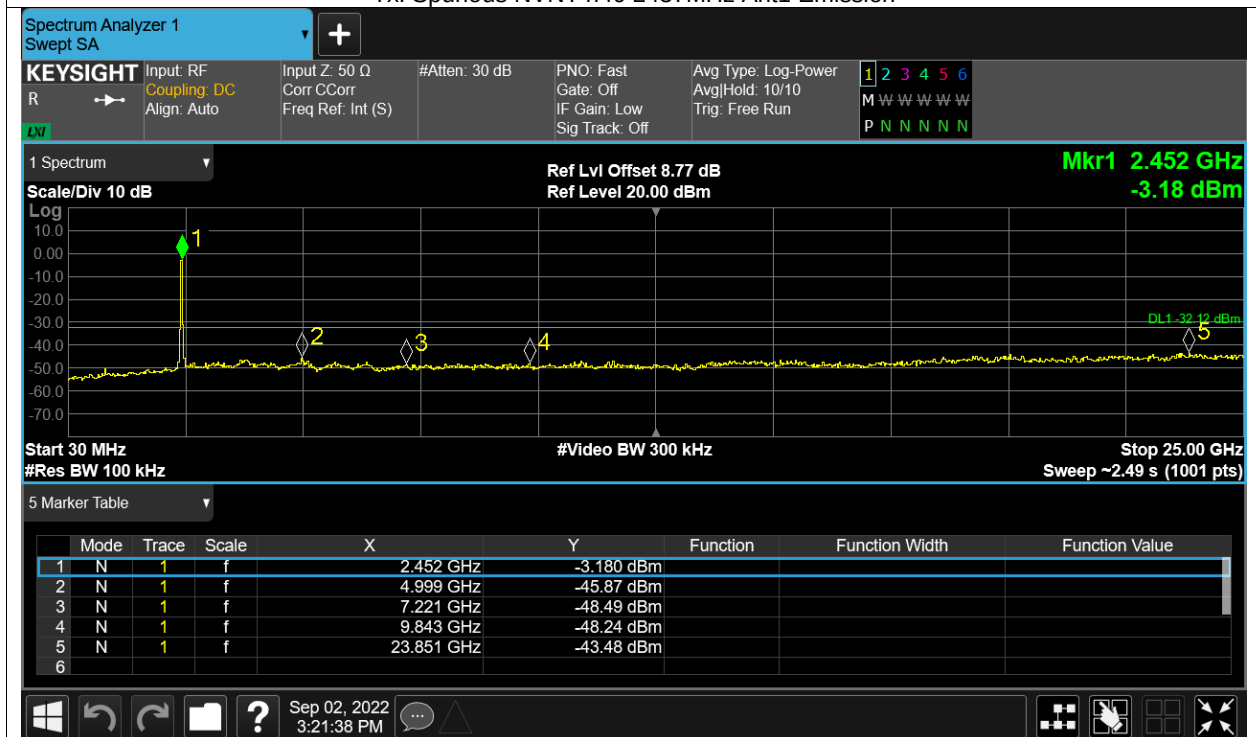
Tx. Spurious NVNT n40 2422MHz Ant1 Emission



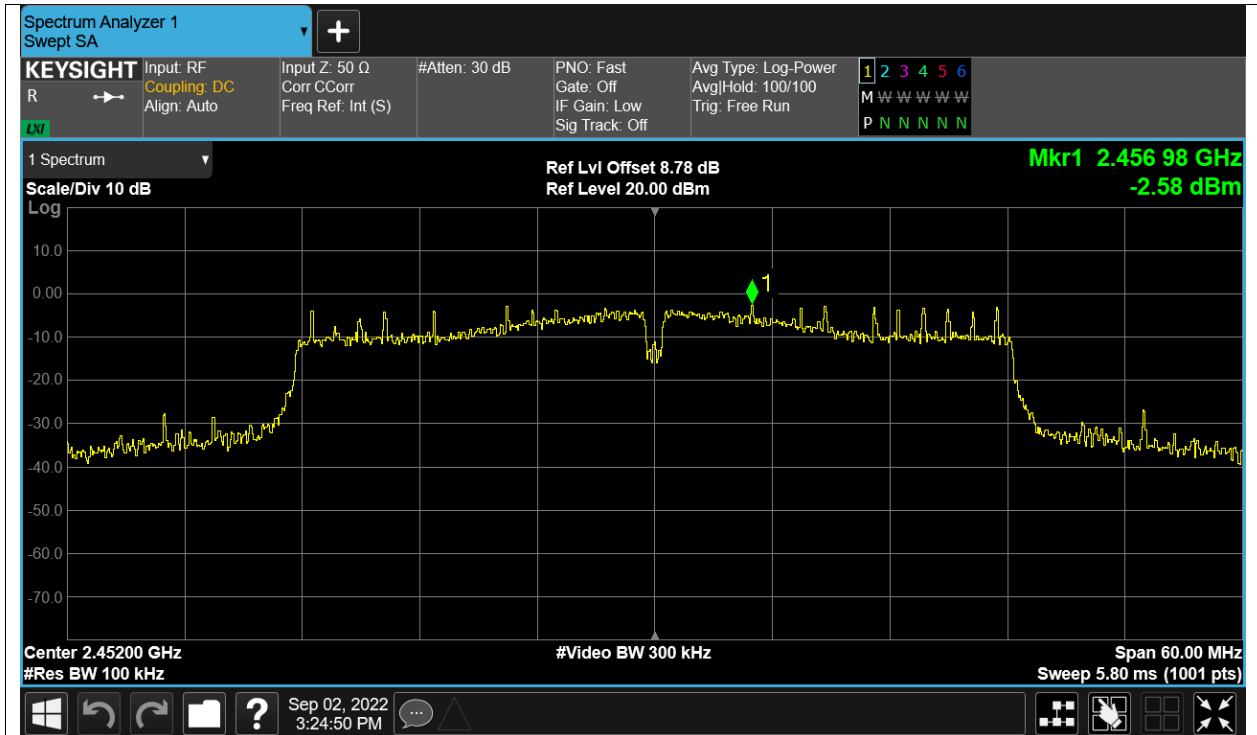
Tx. Spurious NVNT n40 2437MHz Ant1 Ref



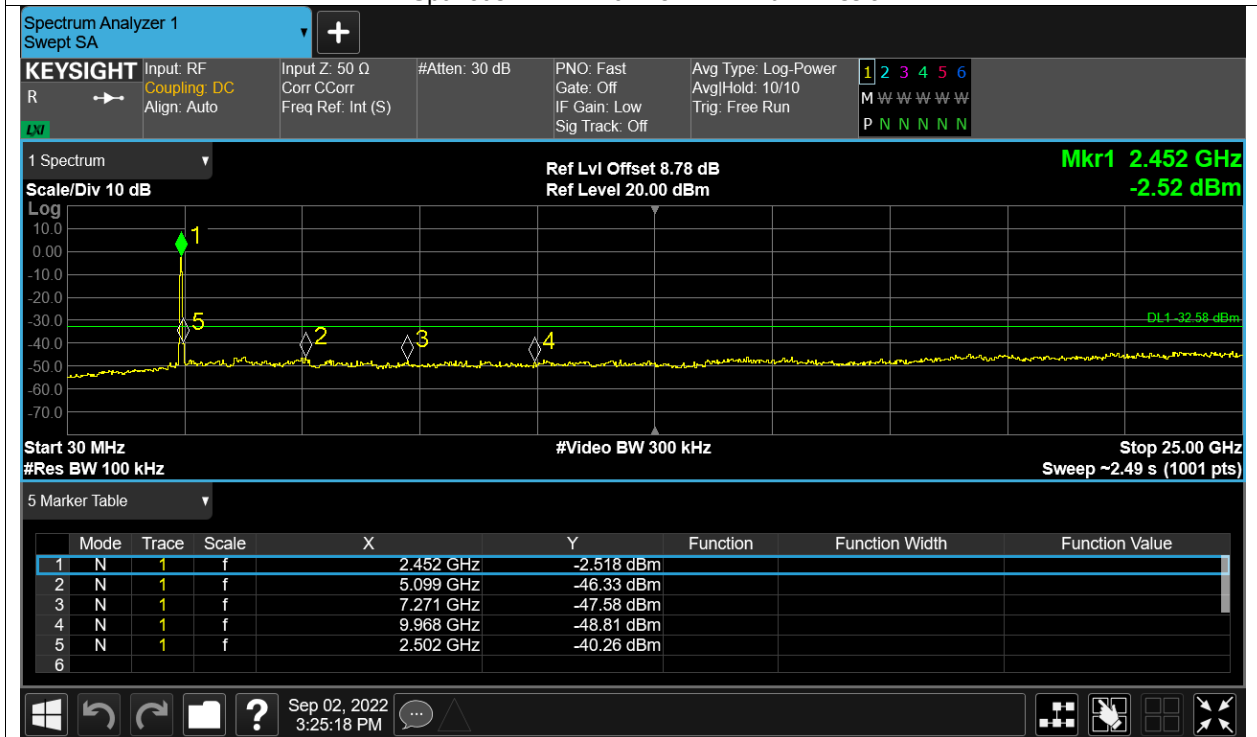
Tx. Spurious NVNT n40 2437MHz Ant1 Emission



Tx. Spurious NVNT n40 2452MHz Ant1 Ref



Tx. Spurious NVNT n40 2452MHz Ant1 Emission



-----End of report-----