

RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	ORBIT Trio AIR
Test Model:	ORBIT Trio AIR/KR2015
Sample ID:	HC-C-202506-0212-01-2#
Environmental Conditions	
Temperature:	24.6℃
Relative Humidity:	52.3%RH
Test Voltage:	DC 12V
Test Engineer:	Lily Zhang
Note: For a more detailed features description, please refer to the report TBR-C-202506-0212-16 The report only show the worst case data.	

Contents

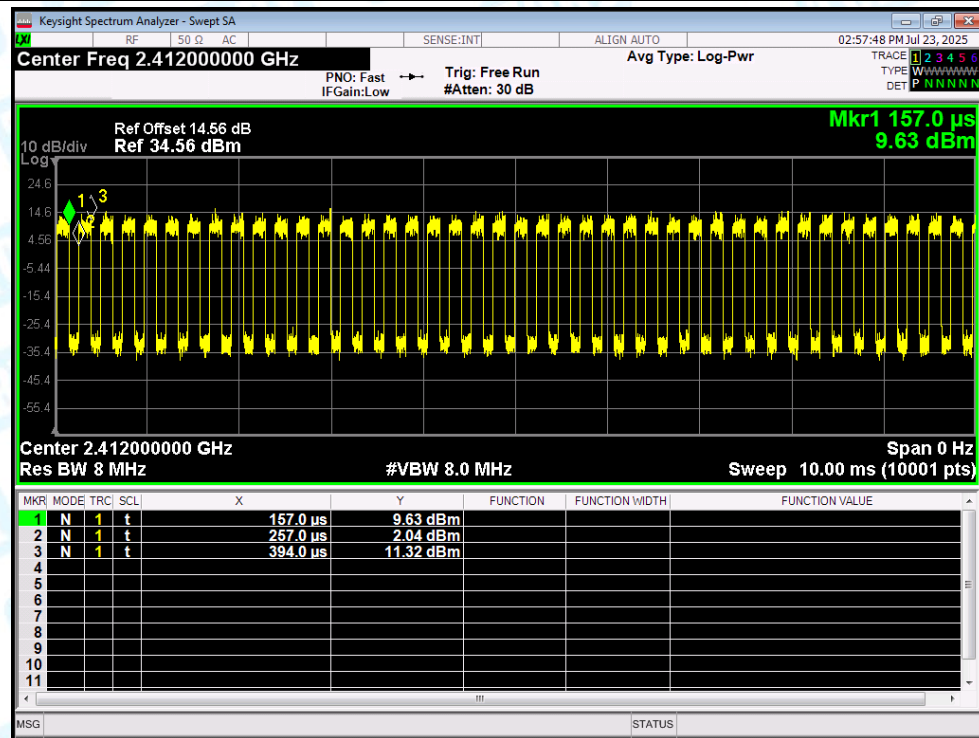
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1. Duty Cycle

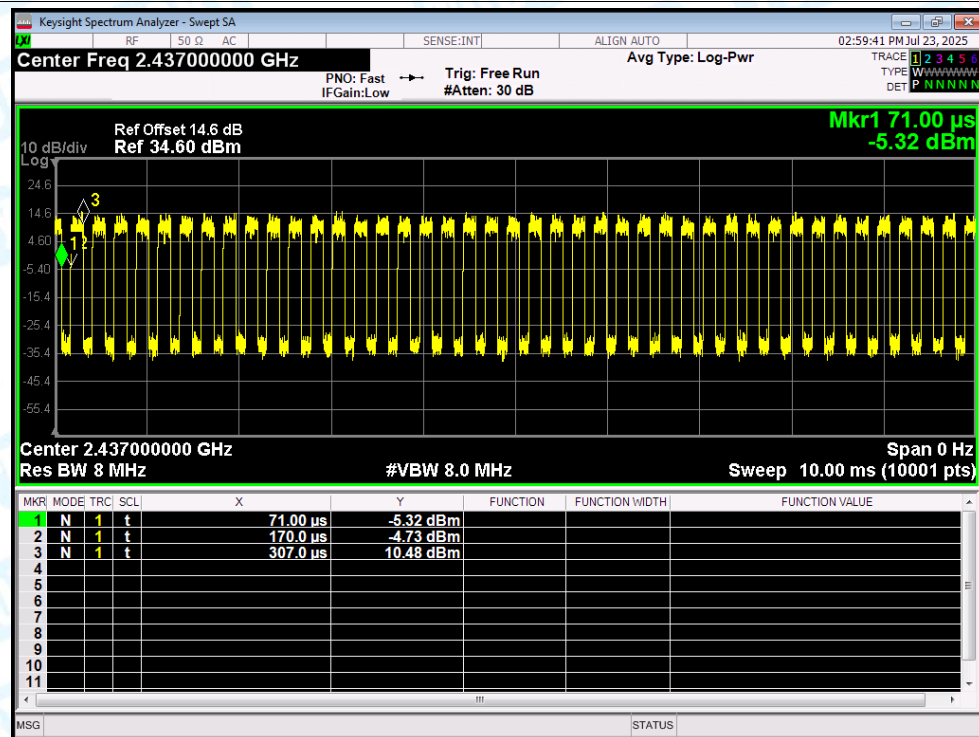
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	ax(HE20)	2412	Sum	57.81	2.38	7.3
NVNT	ax(HE20)	2437	Sum	58.05	2.36	7.3
NVNT	ax(HE20)	2462	Sum	58.05	2.36	7.3
NVNT	b	2412	Ant1	98.94	0.05	0.12
NVNT	b	2437	Ant1	98.94	0.05	0.12
NVNT	b	2462	Ant1	98.94	0.05	0.12
NVNT	b	2412	Ant2	98.82	0.05	0.12
NVNT	b	2437	Ant2	98.94	0.05	0.12
NVNT	b	2462	Ant2	98.82	0.05	0.12
NVNT	g	2412	Ant1	93.38	0.3	0.72
NVNT	g	2437	Ant1	93.38	0.3	0.72
NVNT	g	2462	Ant1	93.38	0.3	0.72
NVNT	g	2412	Ant2	93.38	0.3	0.72
NVNT	g	2437	Ant2	93.44	0.29	0.72
NVNT	g	2462	Ant2	93.38	0.3	0.72
NVNT	n(HT20)	2412	Sum	87.11	0.6	1.48
NVNT	n(HT20)	2437	Sum	87.11	0.6	1.48
NVNT	n(HT20)	2462	Sum	87.11	0.6	1.48

Test Graphs

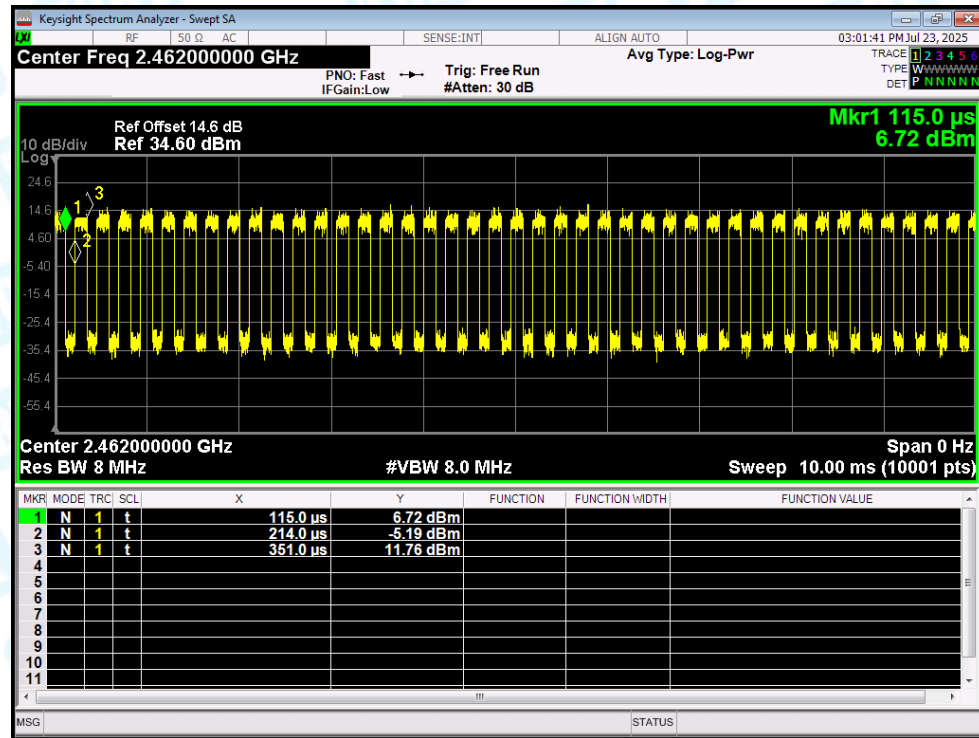
Duty Cycle NVNT ax(HE20) 2412MHz Sum



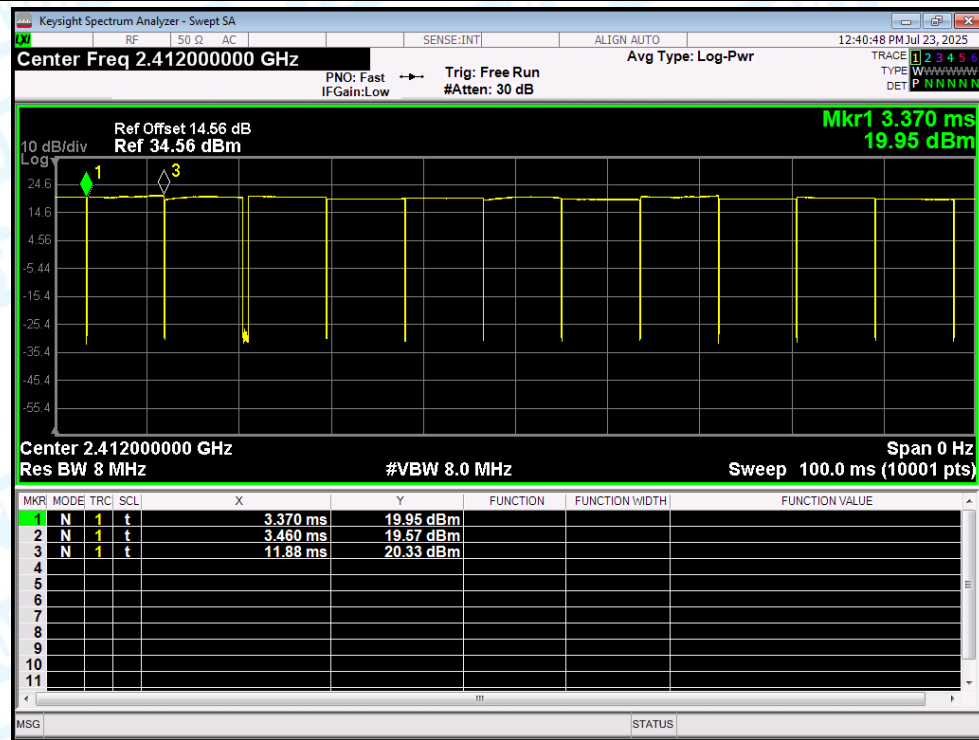
Duty Cycle NVNT ax(HE20) 2437MHz Sum



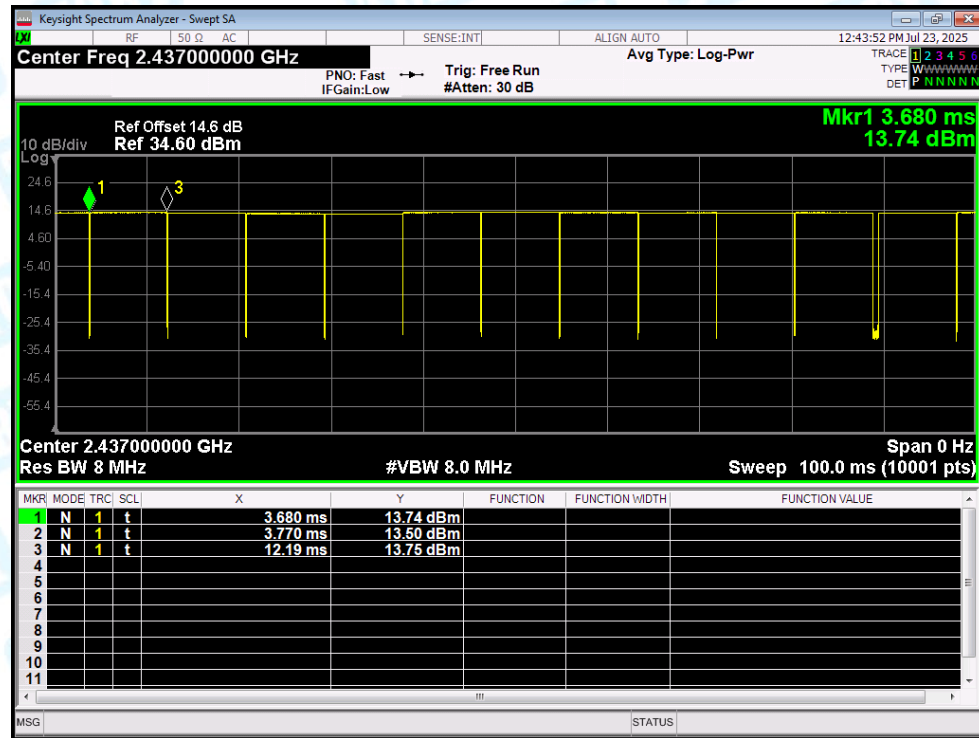
Duty Cycle NVNT ax(HE20) 2462MHz Sum



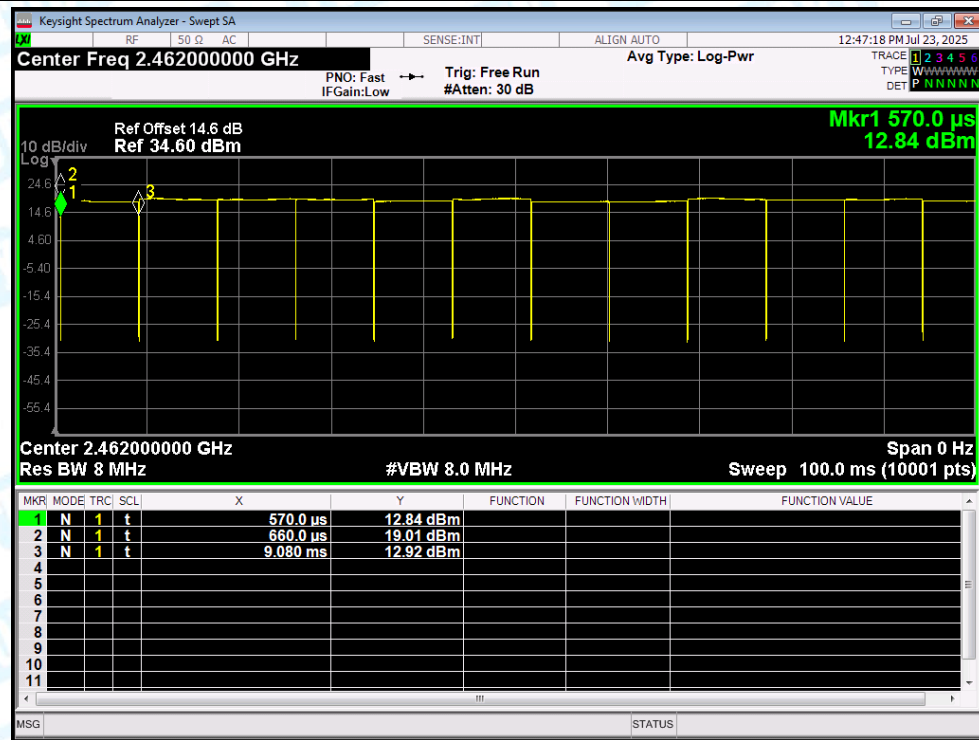
Duty Cycle NVNT b 2412MHz Ant1



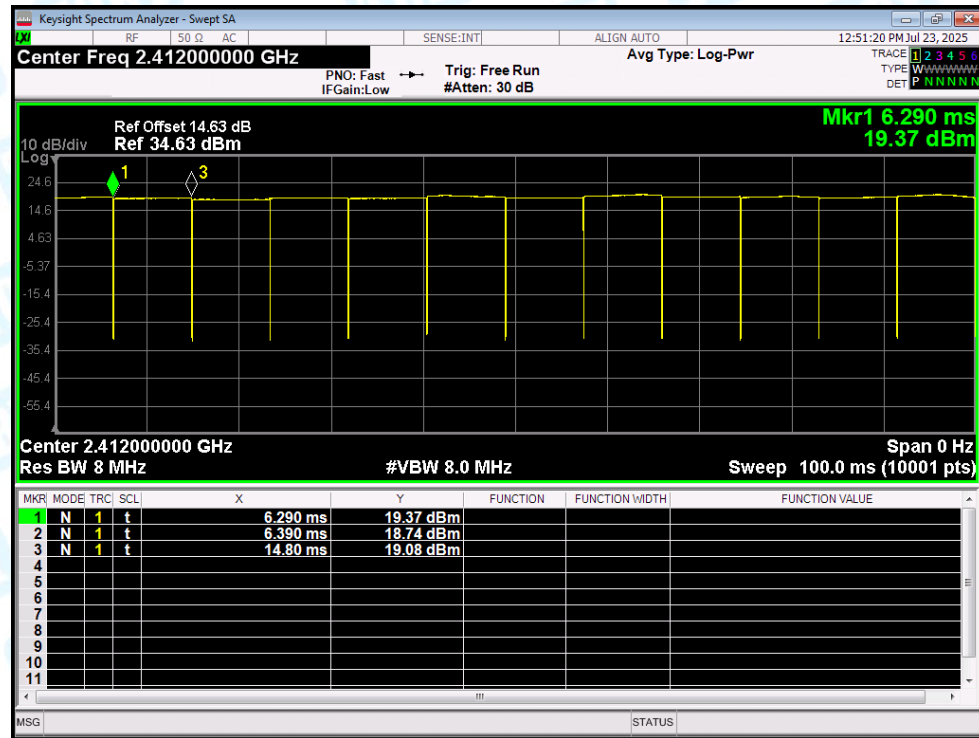
Duty Cycle NVNT b 2437MHz Ant1



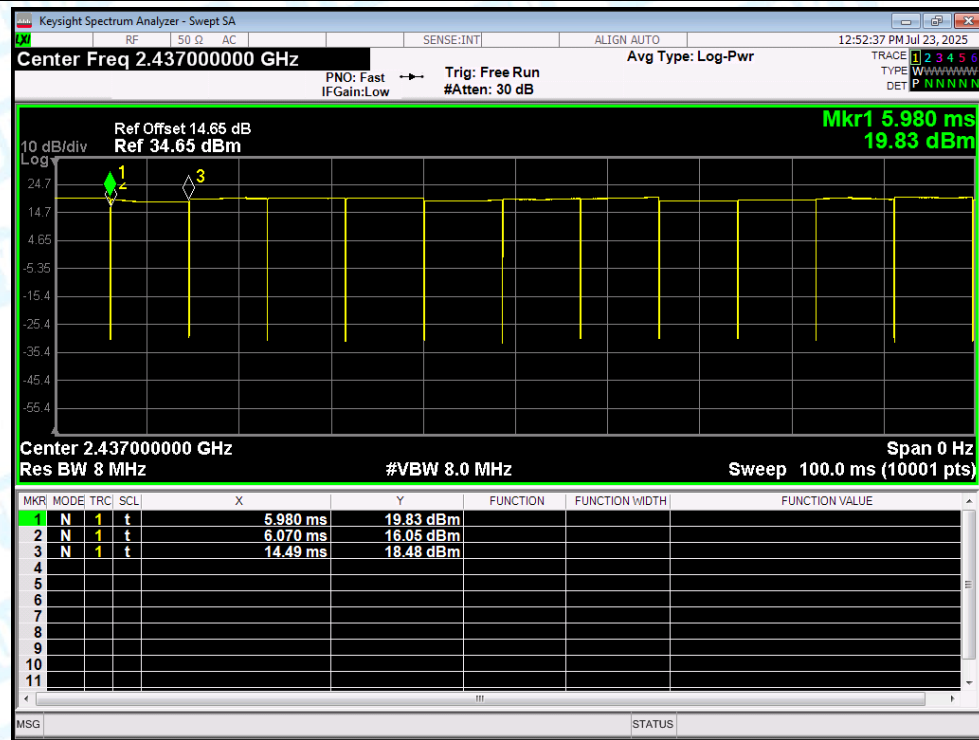
Duty Cycle NVNT b 2462MHz Ant1



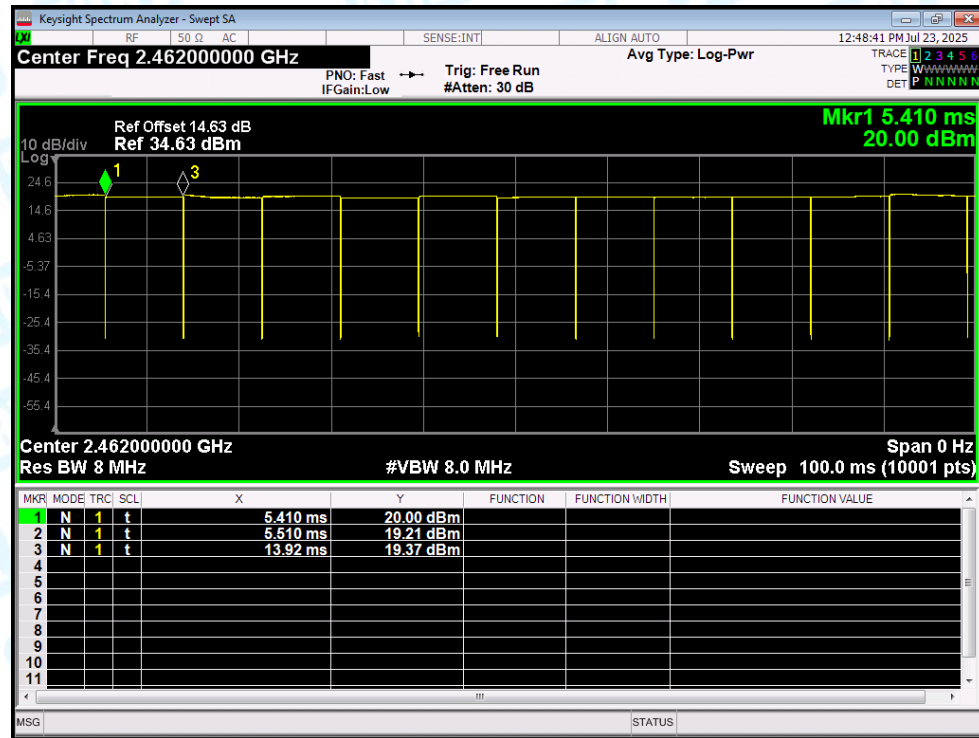
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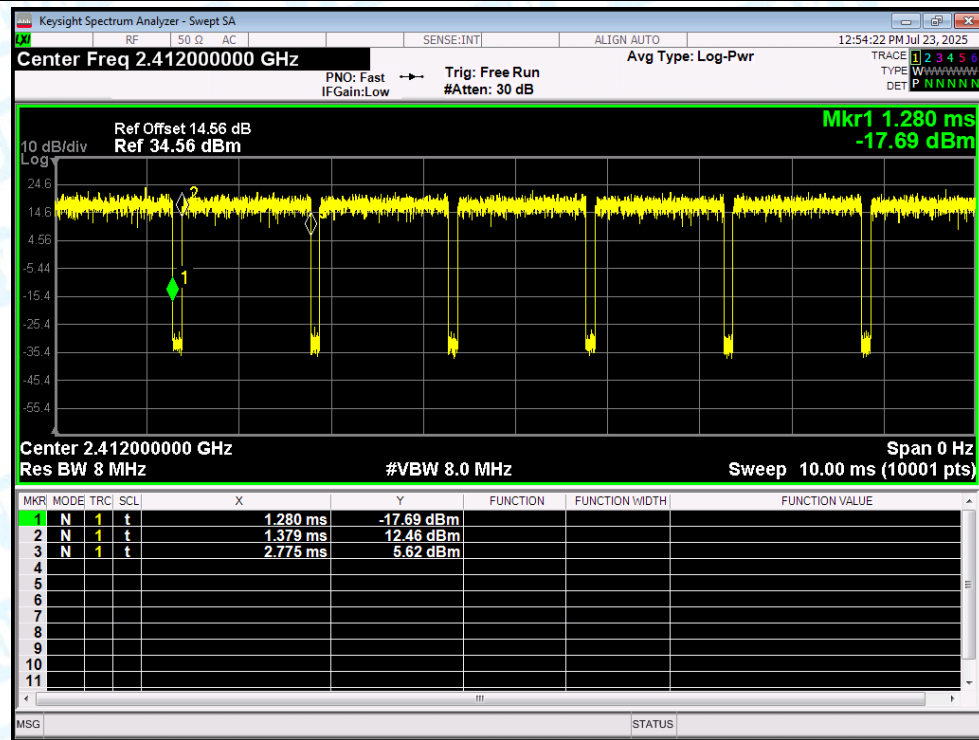
Duty Cycle NVNT b 2437MHz Ant2



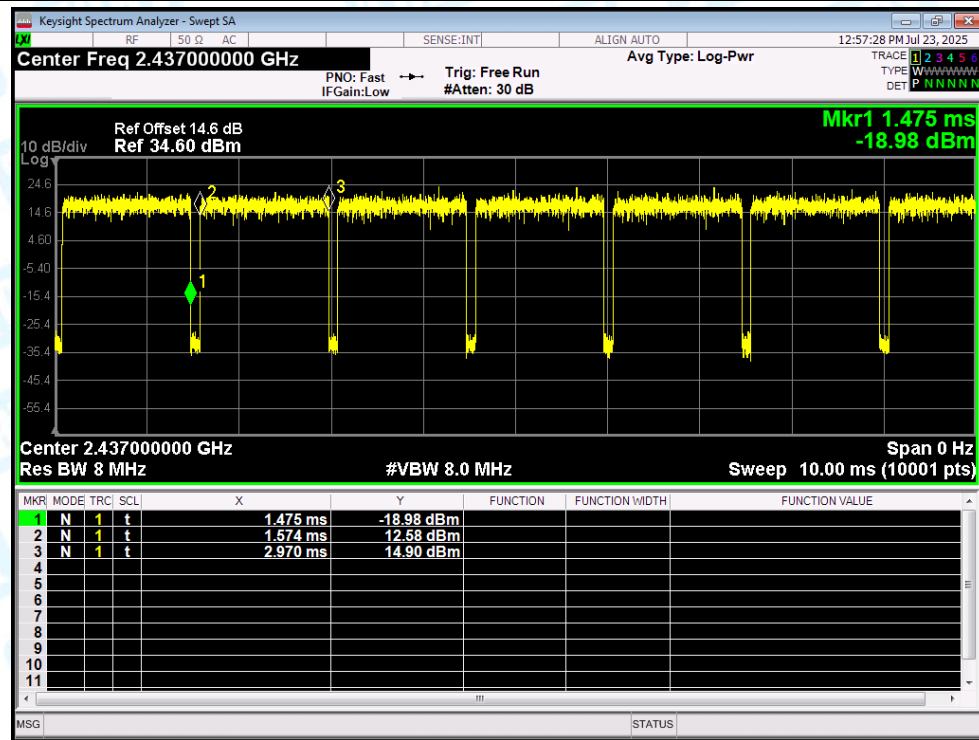
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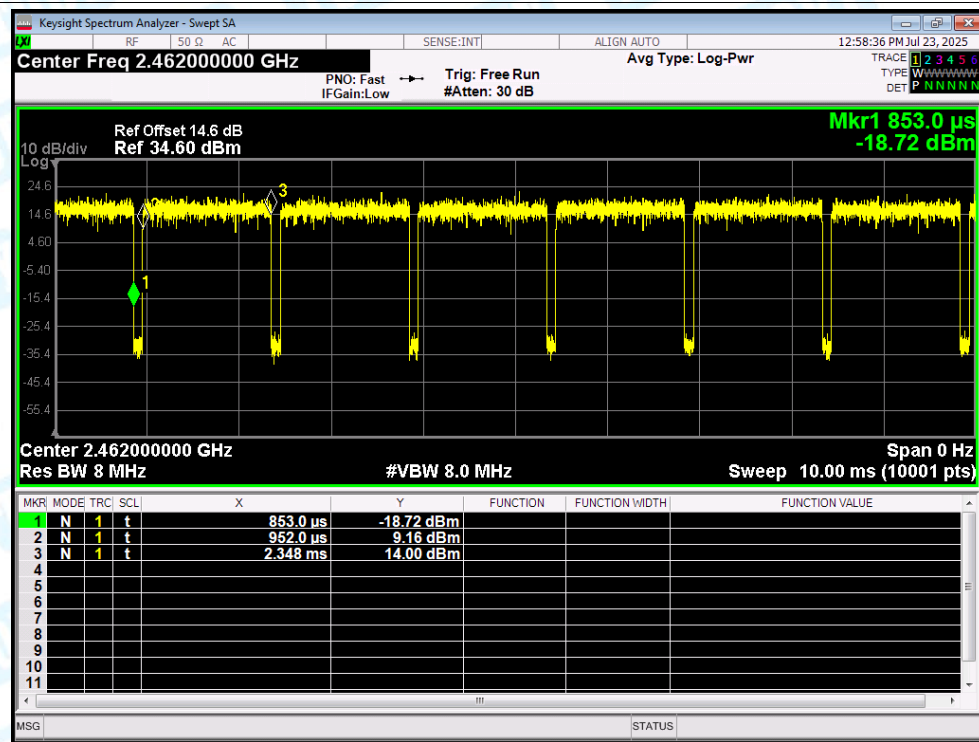
Duty Cycle NVNT g 2412MHz Ant1



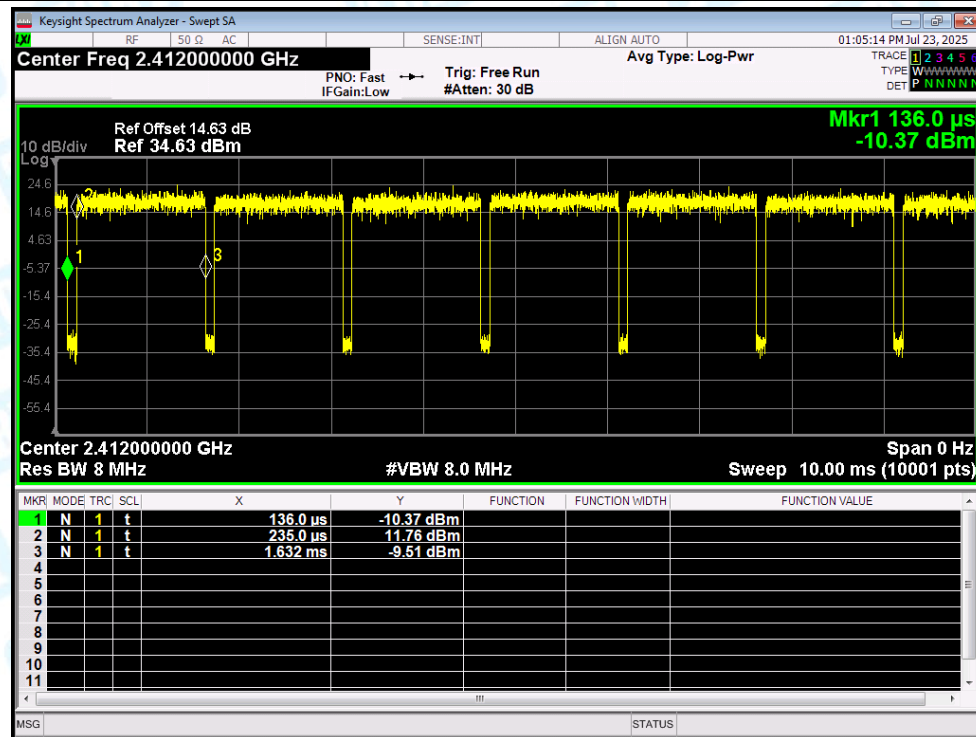
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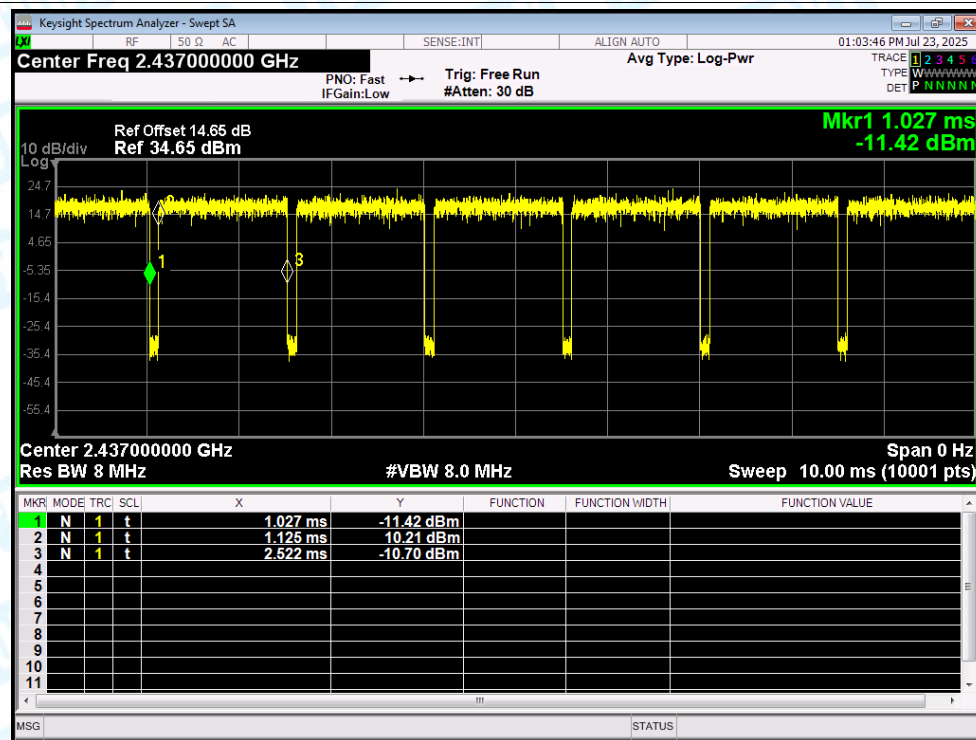
Duty Cycle NVNT g 2462MHz Ant1



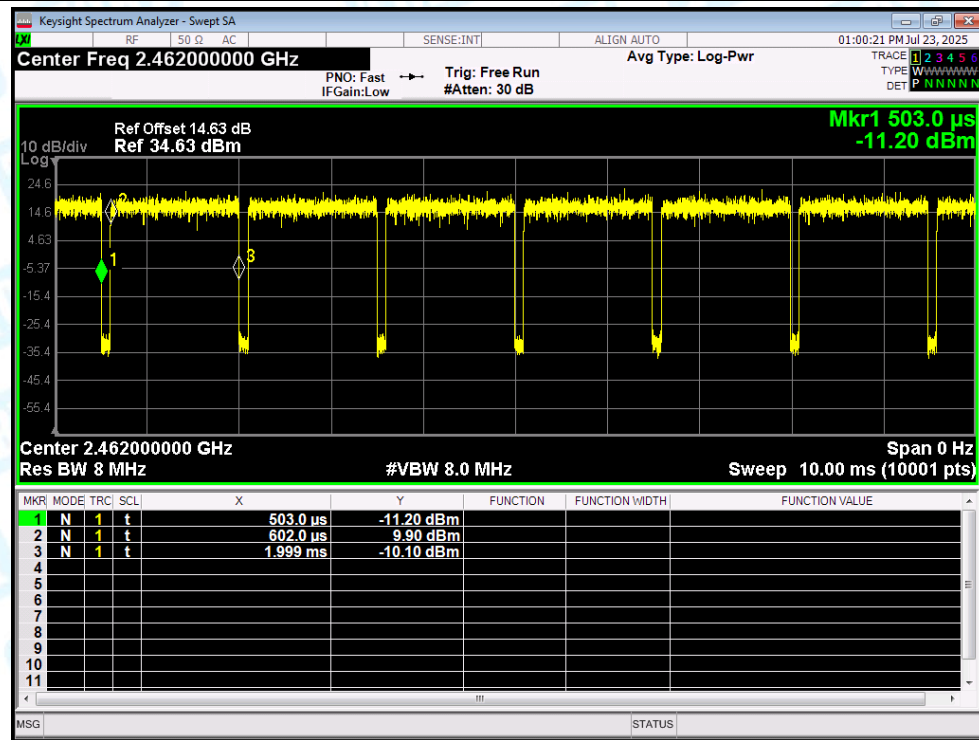
Duty Cycle NVNT g 2412MHz Ant2



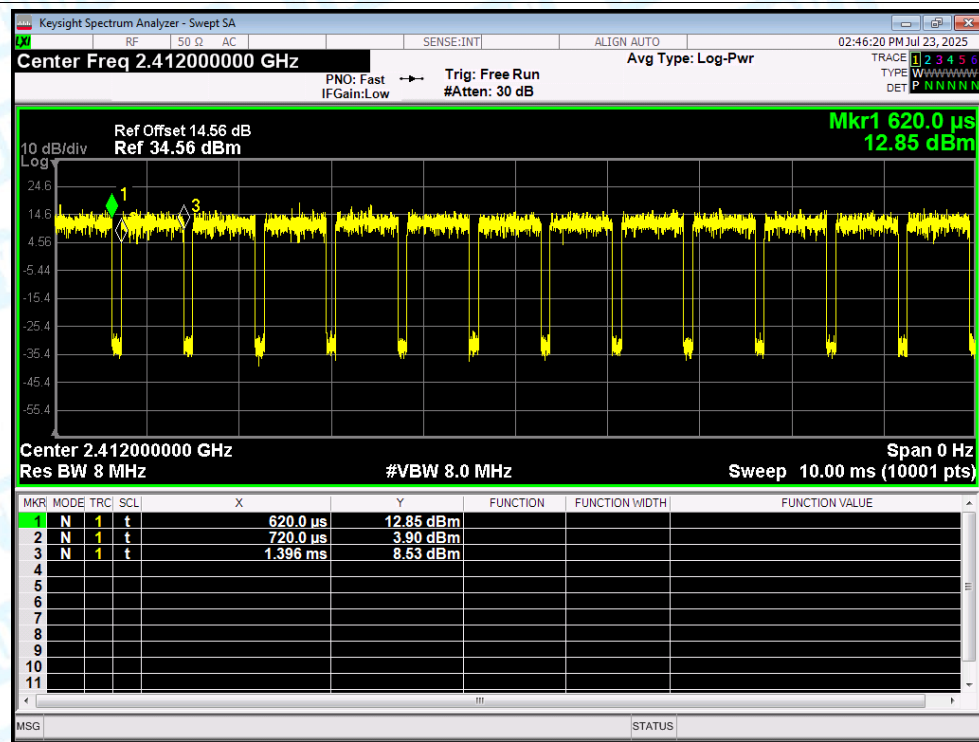
Duty Cycle NVNT g 2437MHz Ant2



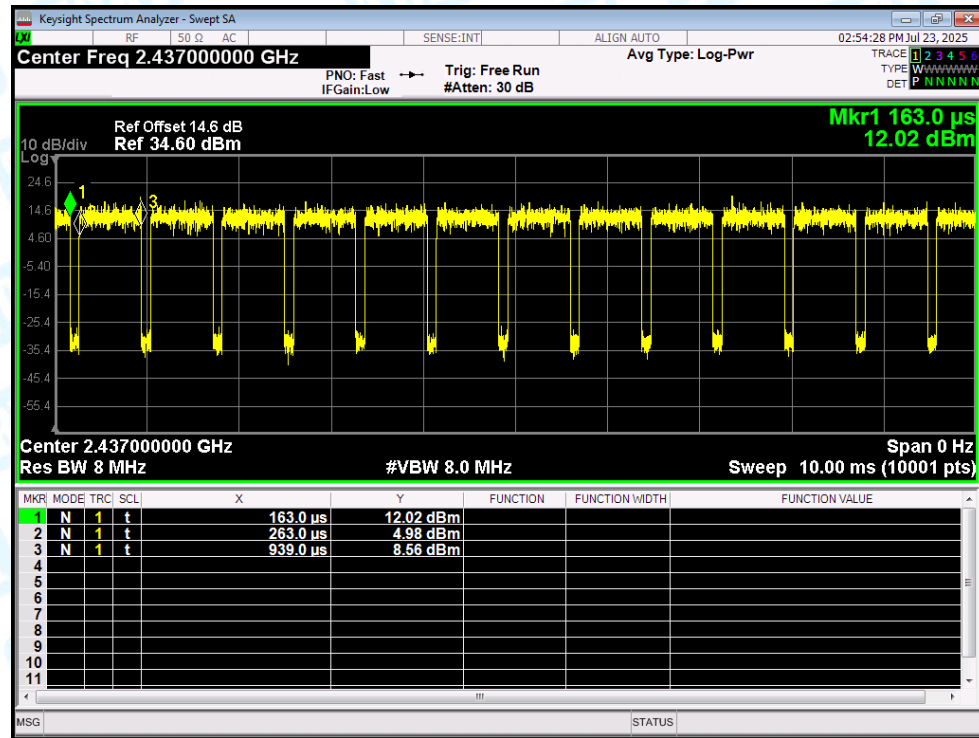
Duty Cycle NVNT g 2462MHz Ant2



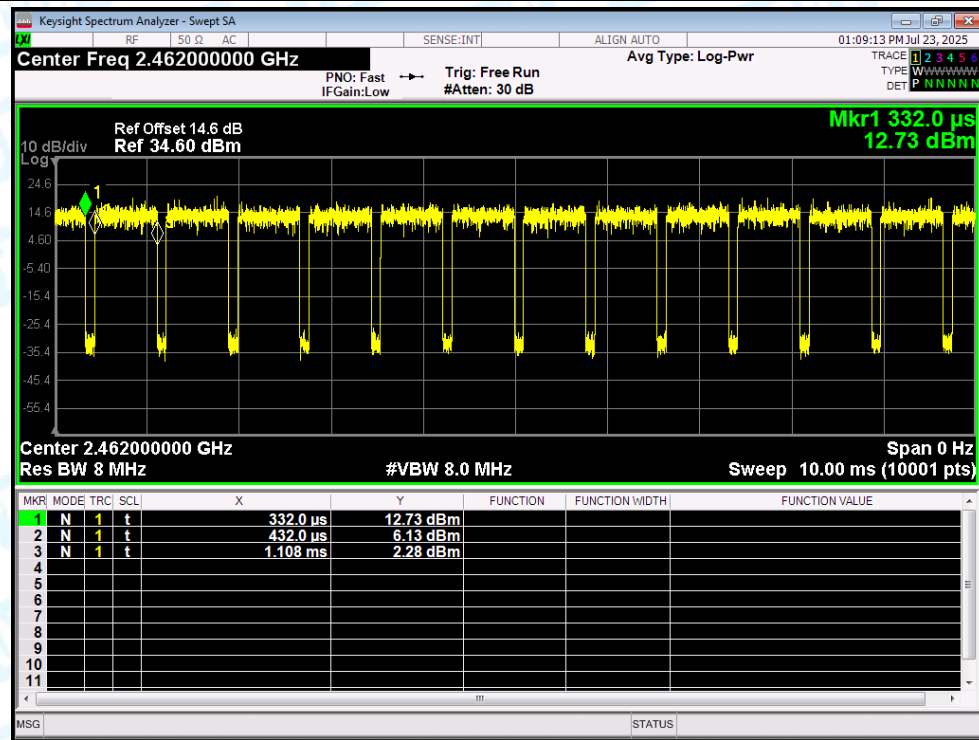
Duty Cycle NVNT n(HT20) 2412MHz Sum



Duty Cycle NVNT n(HT20) 2437MHz Sum



Duty Cycle NVNT n(HT20) 2462MHz Sum



2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	ax(HE20)	2412	Ant1	11.5	30	Pass
NVNT	ax(HE20)	2412	Ant2	13.05	30	Pass
NVNT	ax(HE20)	2412	Sum	15.354	30	Pass
NVNT	ax(HE20)	2437	Ant1	11.02	30	Pass
NVNT	ax(HE20)	2437	Ant2	12.4	30	Pass
NVNT	ax(HE20)	2437	Sum	14.775	30	Pass
NVNT	ax(HE20)	2462	Ant1	12.09	30	Pass
NVNT	ax(HE20)	2462	Ant2	12.97	30	Pass
NVNT	ax(HE20)	2462	Sum	15.563	30	Pass
NVNT	b	2412	Ant1	16	30	Pass
NVNT	b	2437	Ant1	15.63	30	Pass
NVNT	b	2462	Ant1	14.67	30	Pass
NVNT	b	2412	Ant2	14.76	30	Pass
NVNT	b	2437	Ant2	14.93	30	Pass
NVNT	b	2462	Ant2	15.14	30	Pass
NVNT	g	2412	Ant1	15.45	30	Pass
NVNT	g	2437	Ant1	14.9	30	Pass
NVNT	g	2462	Ant1	14.04	30	Pass
NVNT	g	2412	Ant2	15.77	30	Pass
NVNT	g	2437	Ant2	15.08	30	Pass
NVNT	g	2462	Ant2	14.37	30	Pass
NVNT	n(HT20)	2412	Ant1	10.78	30	Pass
NVNT	n(HT20)	2412	Ant2	12.16	30	Pass
NVNT	n(HT20)	2412	Sum	14.535	30	Pass
NVNT	n(HT20)	2437	Ant1	11.41	30	Pass
NVNT	n(HT20)	2437	Ant2	12.42	30	Pass
NVNT	n(HT20)	2437	Sum	14.955	30	Pass
NVNT	n(HT20)	2462	Ant1	12.34	30	Pass
NVNT	n(HT20)	2462	Ant2	12.87	30	Pass
NVNT	n(HT20)	2462	Sum	15.623	30	Pass

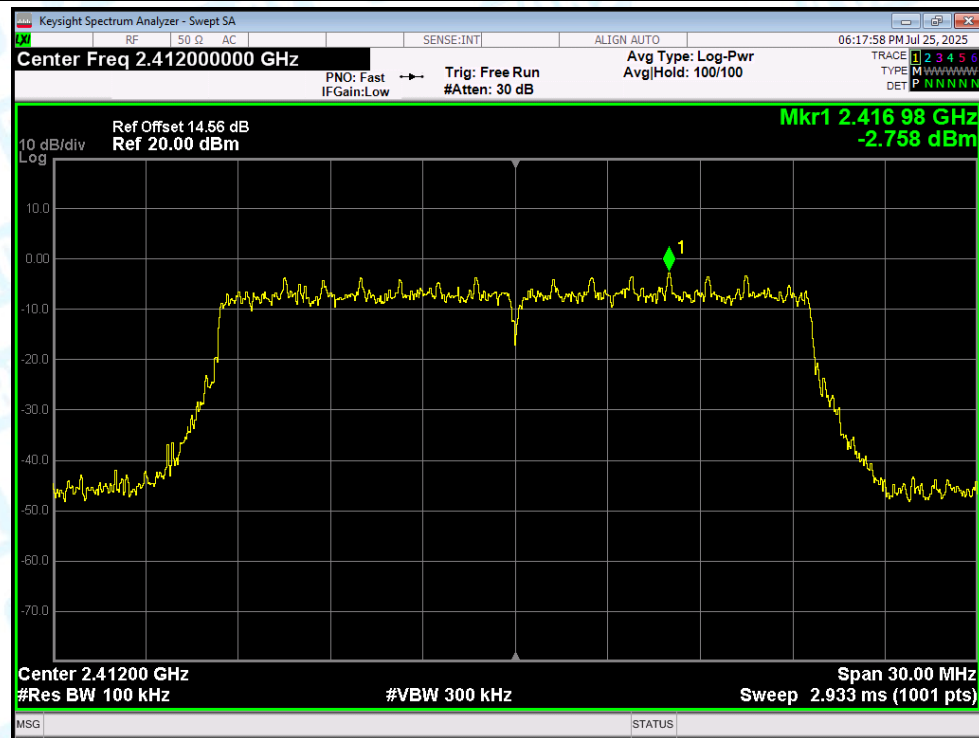
Note: The duty factor has been compensated into the result.

3. Band Edge

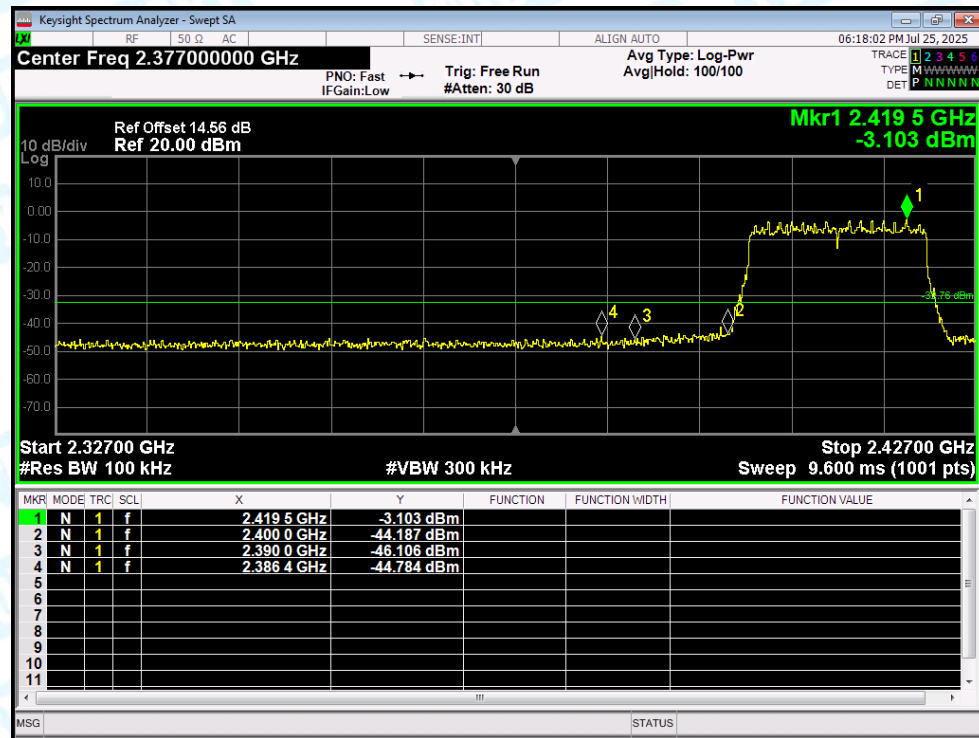
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	ax(HE20)	2412	Ant1	-42.02	-30	Pass
NVNT	ax(HE20)	2412	Ant2	-42.34	-30	Pass
NVNT	ax(HE20)	2472	Ant1	-37.5	-30	Pass
NVNT	ax(HE20)	2472	Ant2	-36.91	-30	Pass
NVNT	b	2412	Ant1	-52.46	-30	Pass
NVNT	b	2472	Ant1	-49.86	-30	Pass
NVNT	b	2412	Ant2	-52.61	-30	Pass
NVNT	b	2472	Ant2	-49.22	-30	Pass
NVNT	g	2412	Ant1	-43.05	-30	Pass
NVNT	g	2472	Ant1	-31.35	-30	Pass
NVNT	g	2412	Ant2	-43.21	-30	Pass
NVNT	g	2472	Ant2	-31.99	-30	Pass
NVNT	n(HT20)	2412	Ant1	-42.43	-30	Pass
NVNT	n(HT20)	2412	Ant2	-42.78	-30	Pass
NVNT	n(HT20)	2472	Ant1	-33.84	-30	Pass
NVNT	n(HT20)	2472	Ant2	-33.06	-30	Pass

Test Graphs

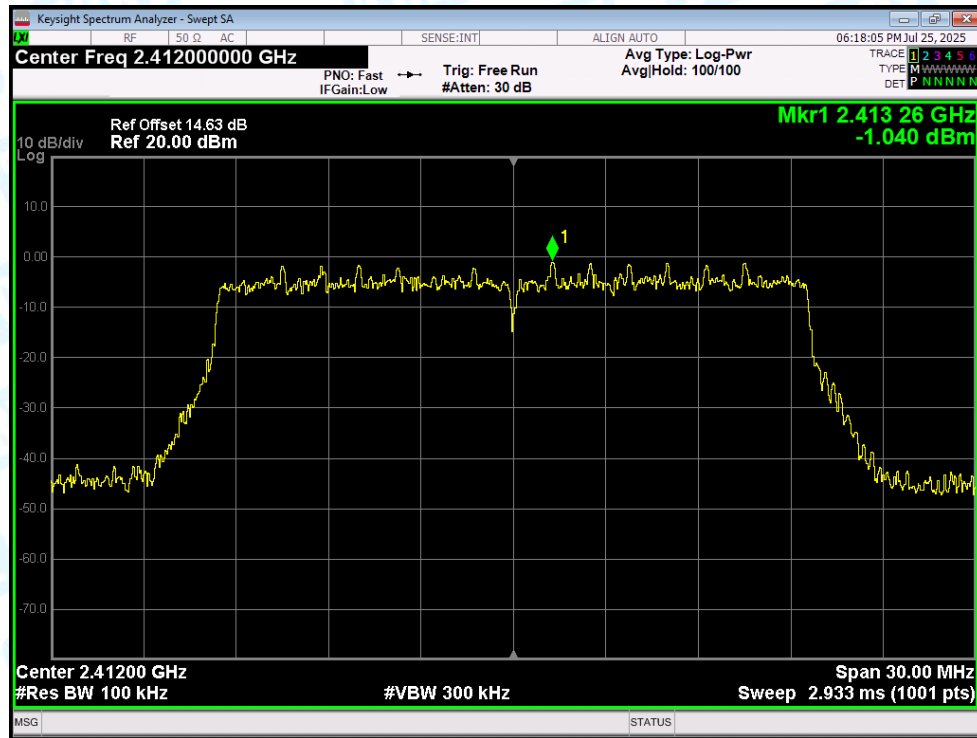
Band Edge NVNT ax(HE20) 2412MHz Ant1 Ref



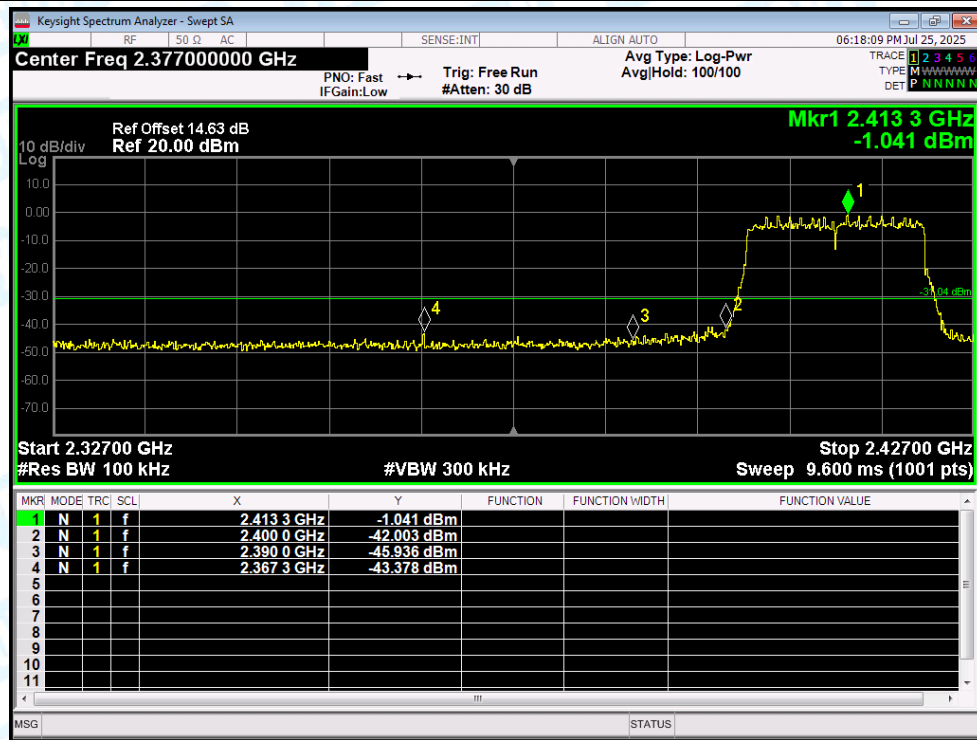
Band Edge NVNT ax(HE20) 2412MHz Ant1 Emission



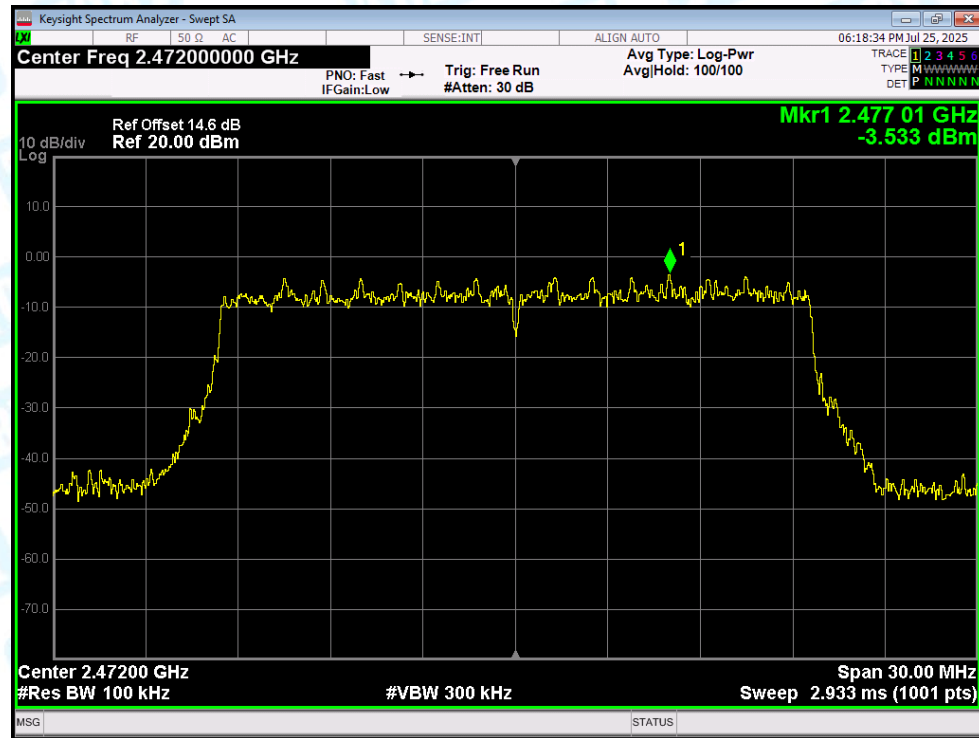
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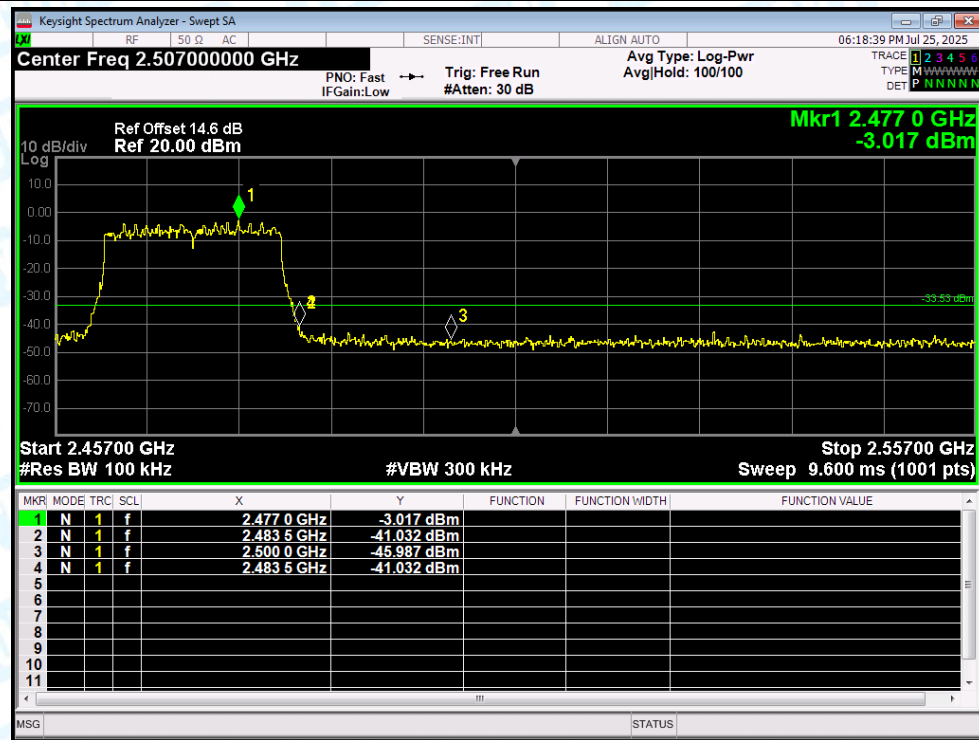
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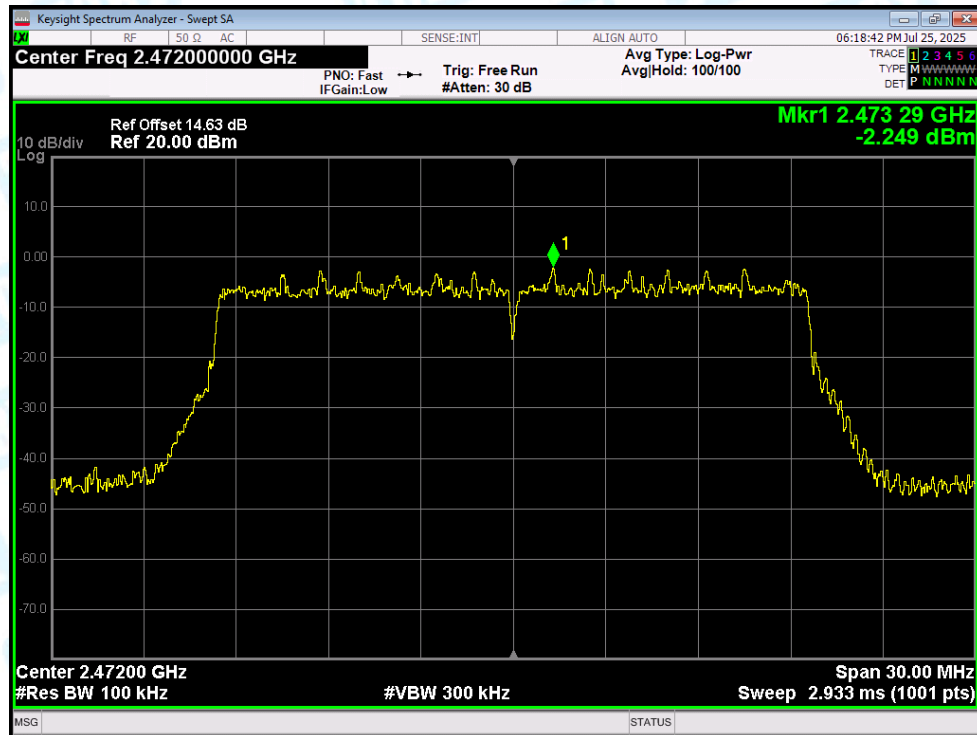
Band Edge NVNT ax(HE20) 2472MHz Ant1 Ref



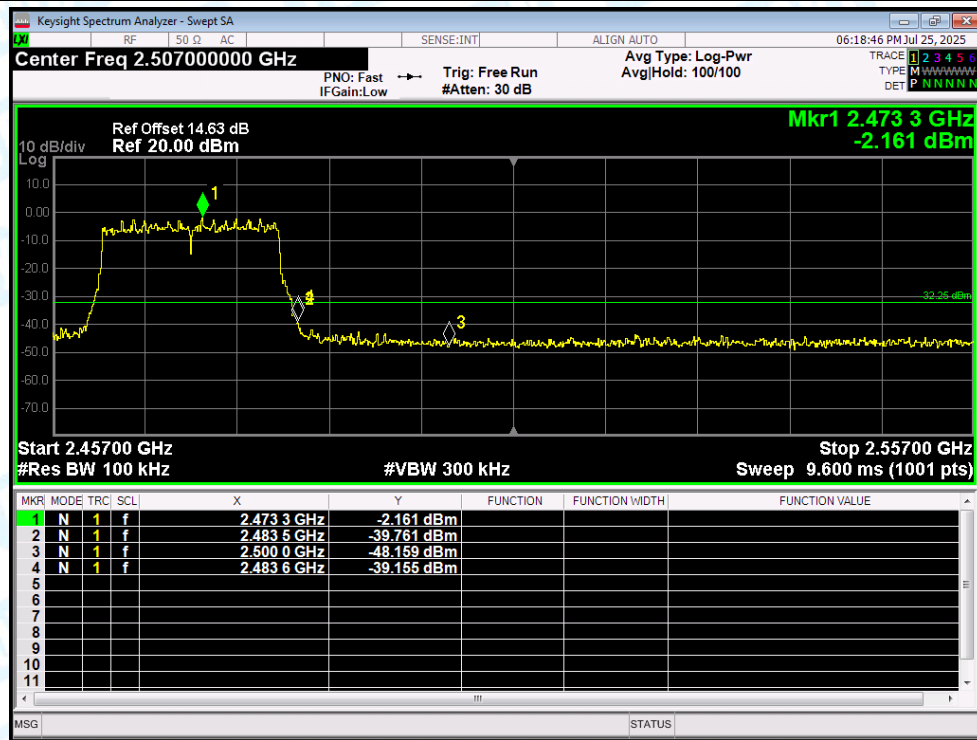
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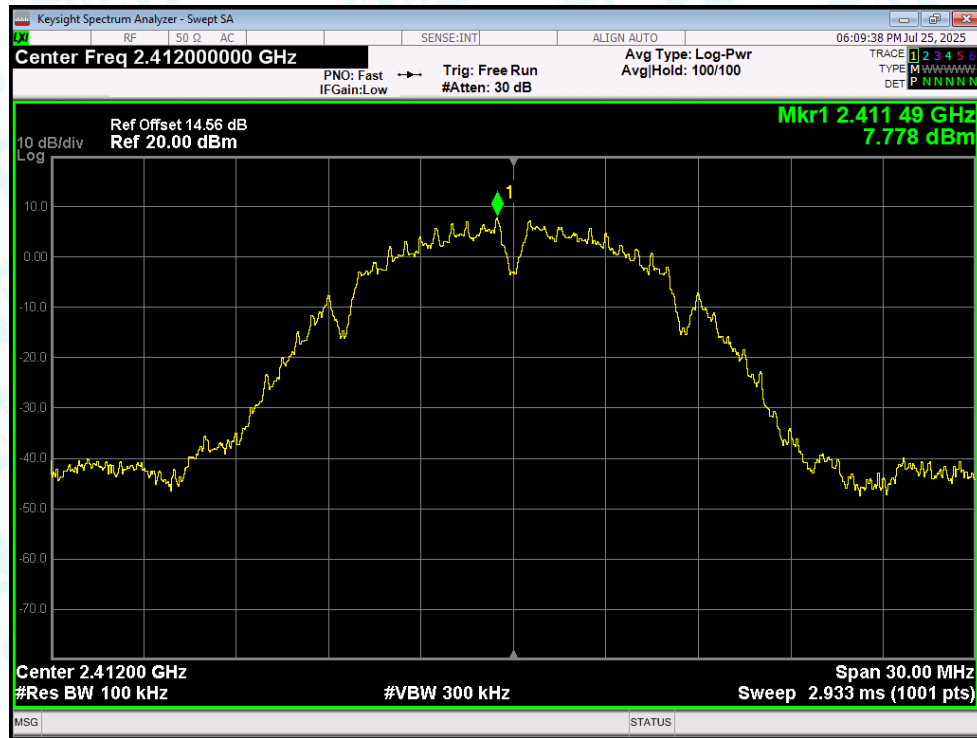
Band Edge NVNT ax(HE20) 2472MHz Ant2 Ref



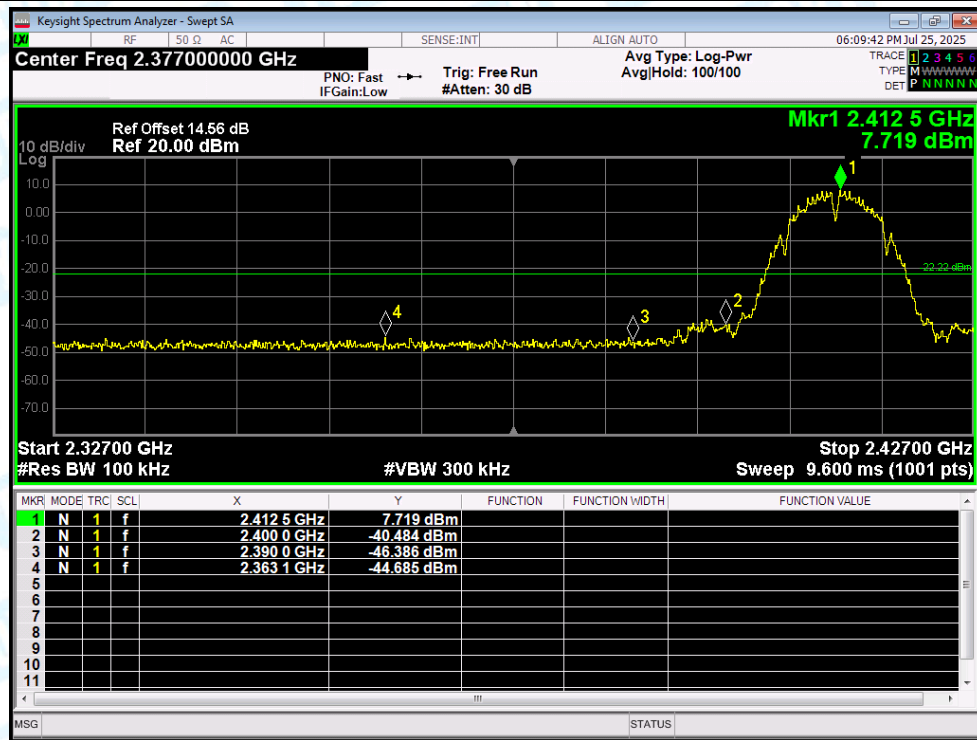
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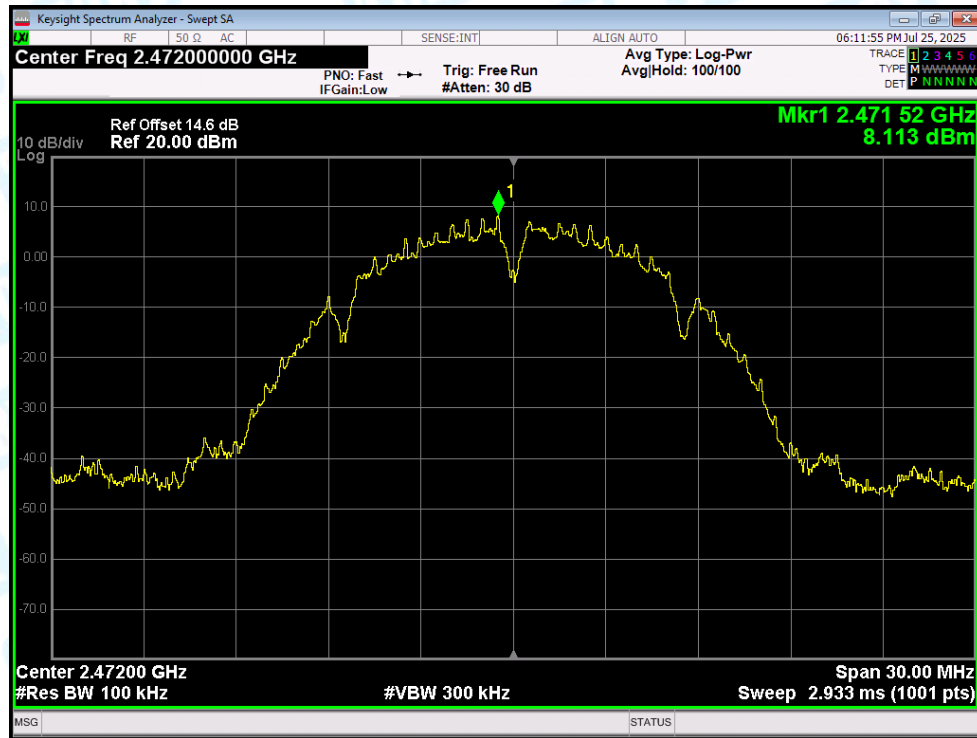
Band Edge NVNT b 2412MHz Ant1 Ref



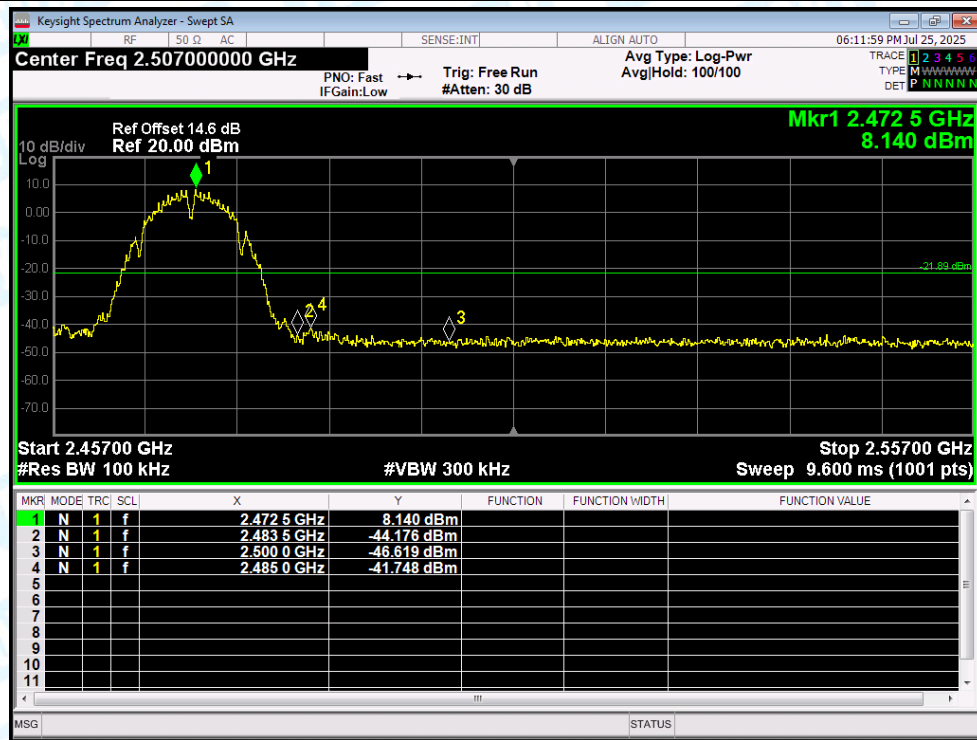
Band Edge NVNT b 2412MHz Ant1 Emission



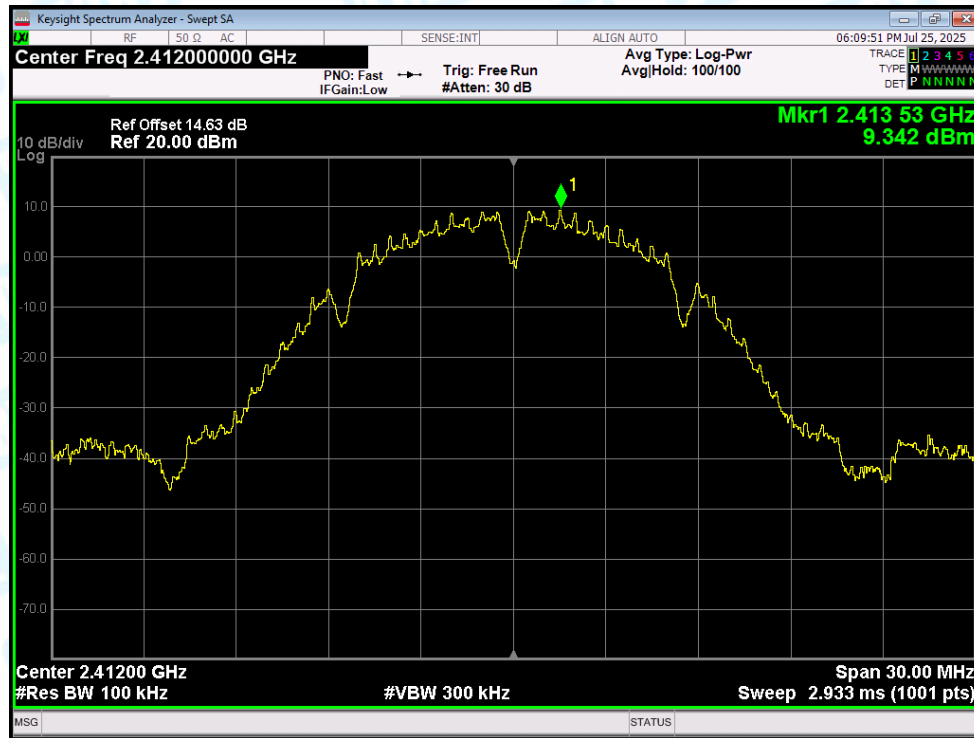
Band Edge NVNT b 2472MHz Ant1 Ref



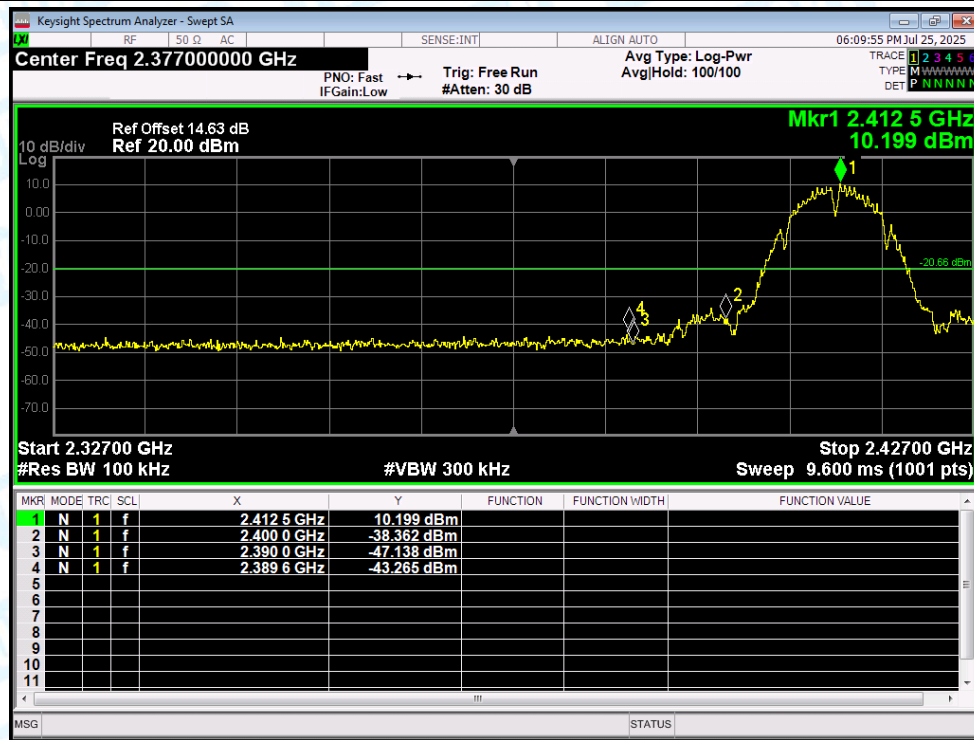
Band Edge NVNT b 2472MHz Ant1 Emission



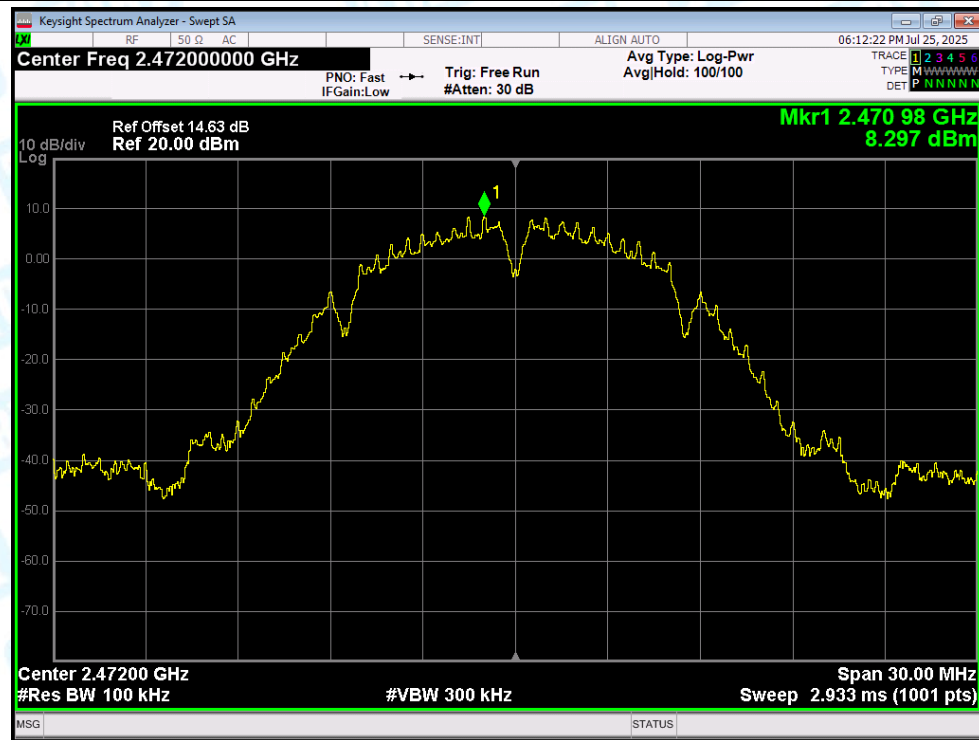
Band Edge NVNT b 2412MHz Ant2 Ref



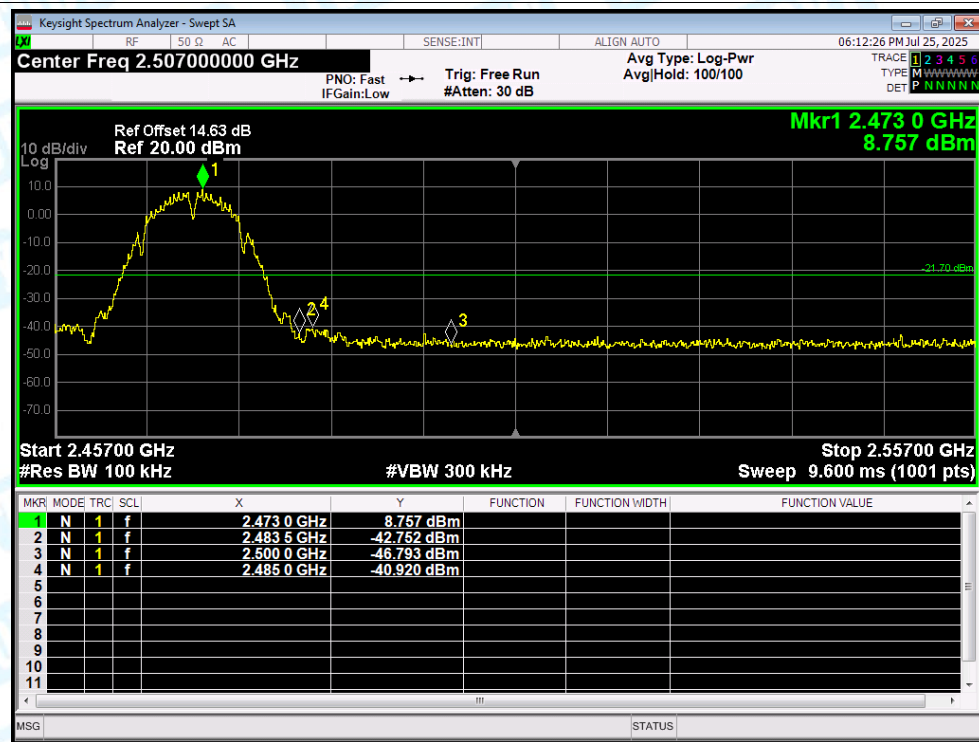
Band Edge NVNT b 2412MHz Ant2 Emission



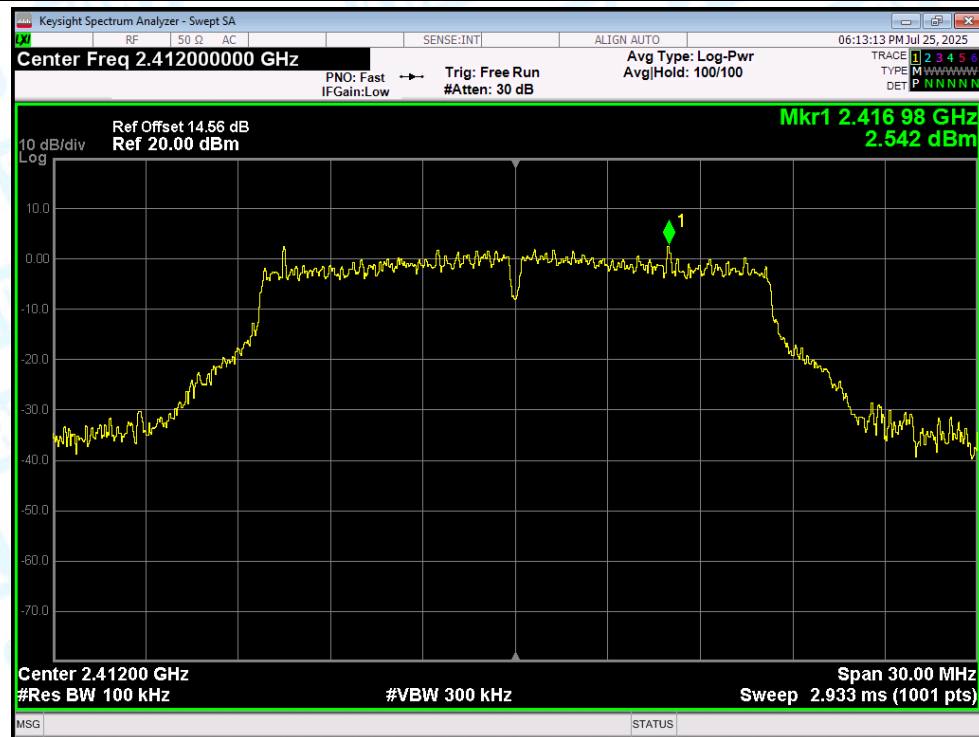
Band Edge NVNT b 2472MHz Ant2 Ref



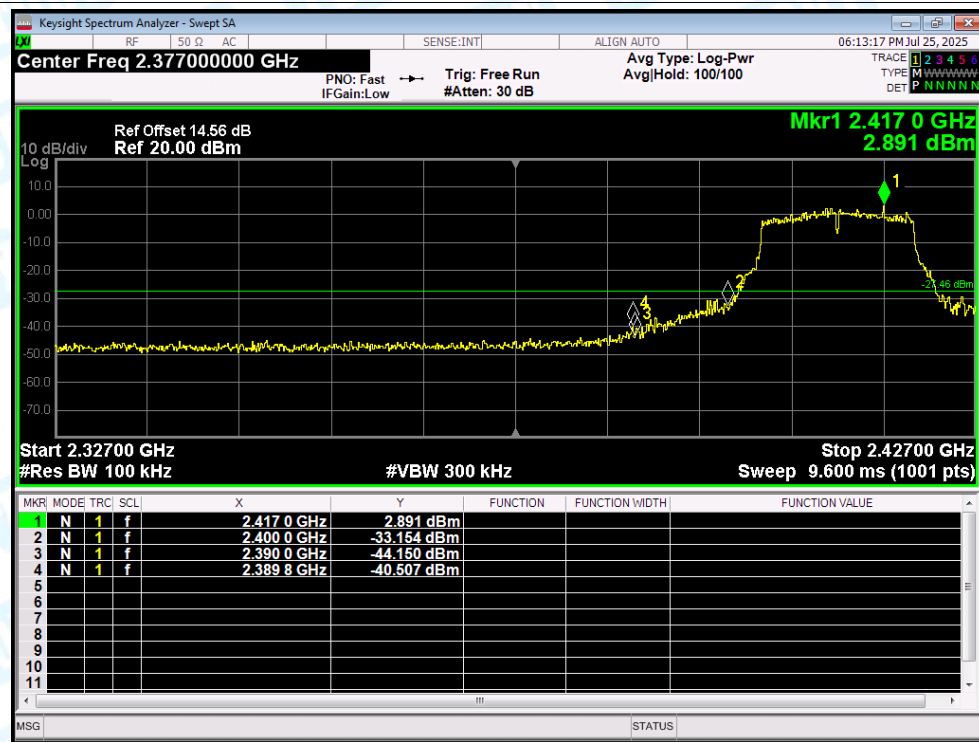
Band Edge NVNT b 2472MHz Ant2 Emission



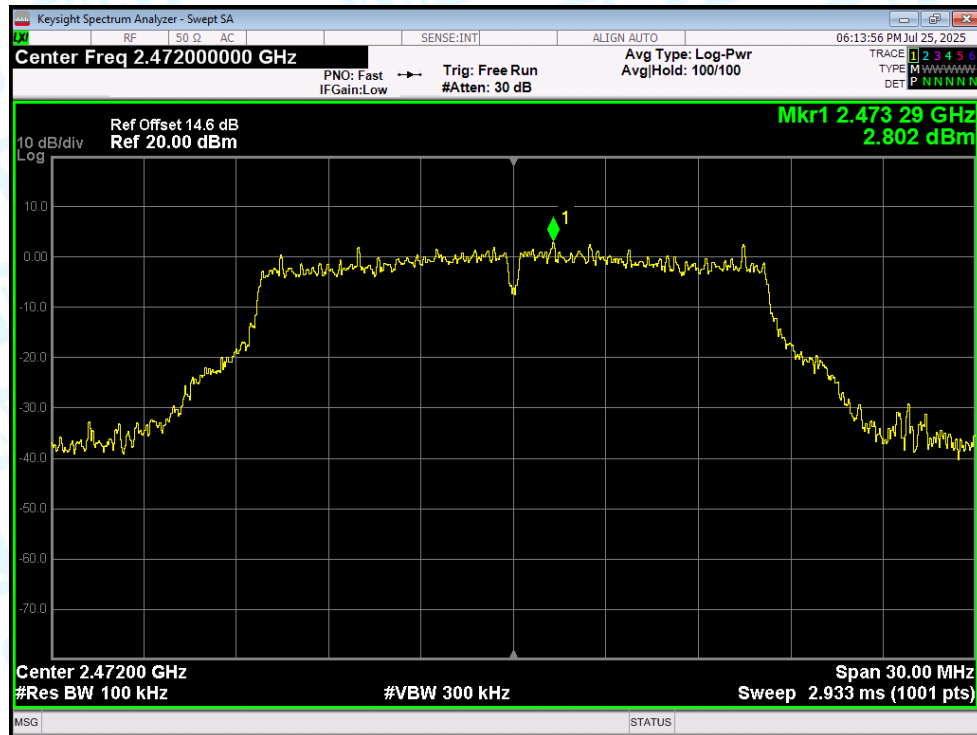
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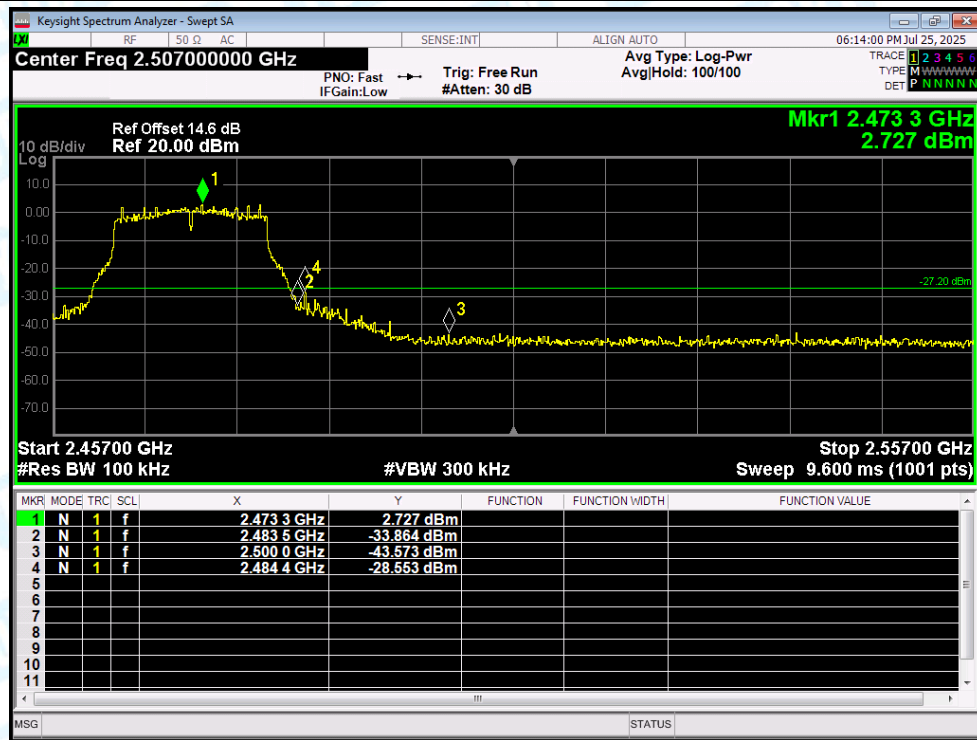
Band Edge NVNT g 2412MHz Ant1 Emission



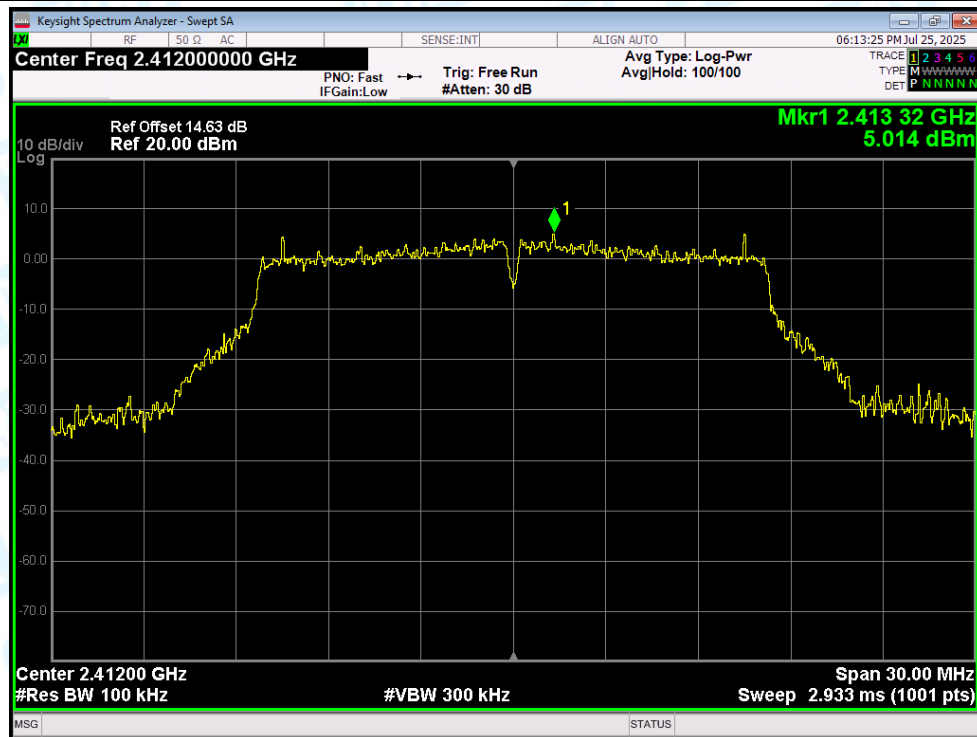
Band Edge NVNT g 2472MHz Ant1 Ref



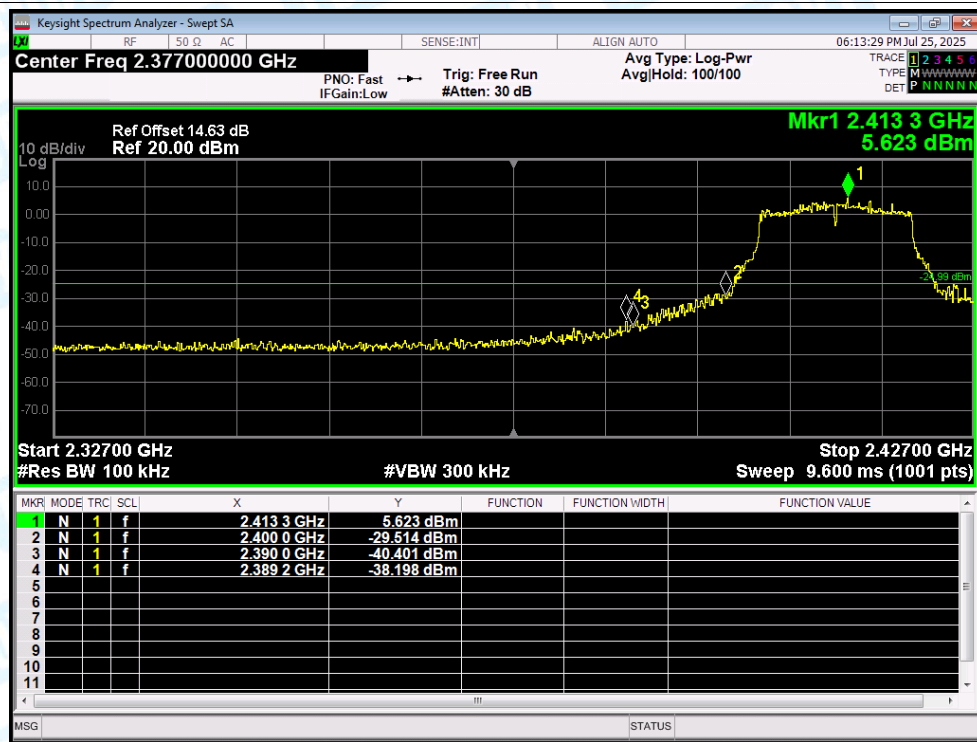
Band Edge NVNT g 2472MHz Ant1 Emission



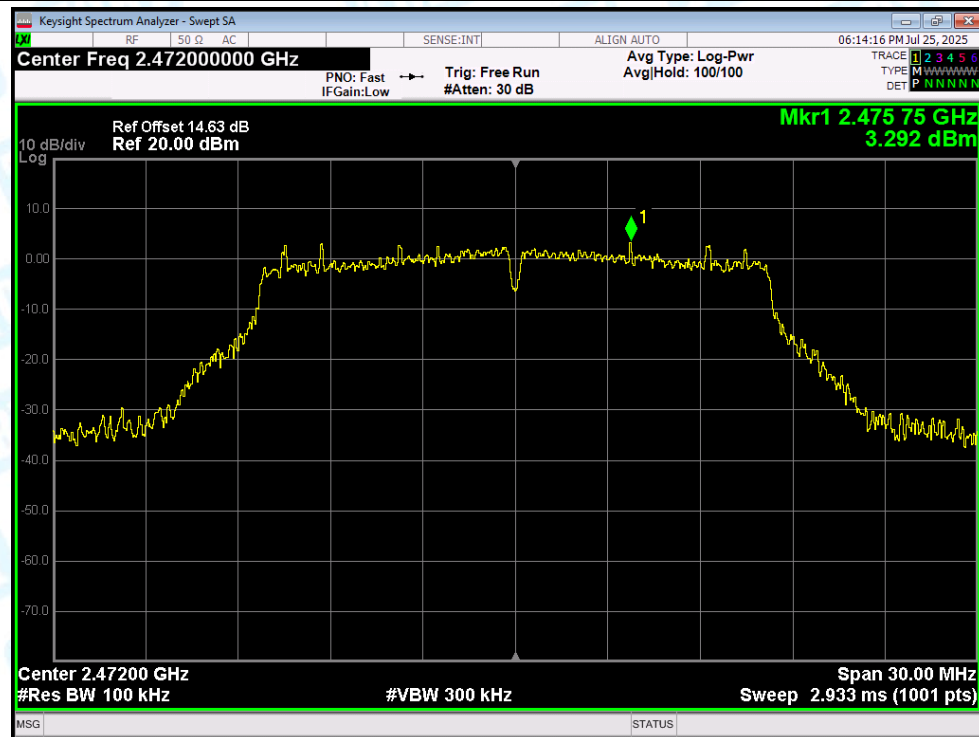
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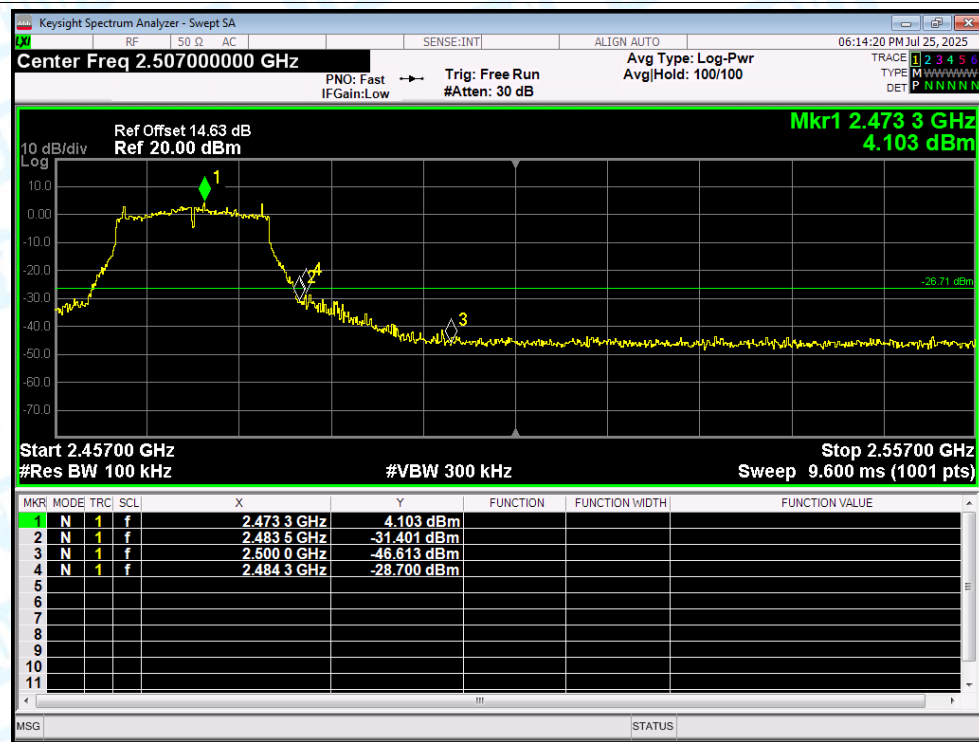
Band Edge NVNT g 2412MHz Ant2 Emission



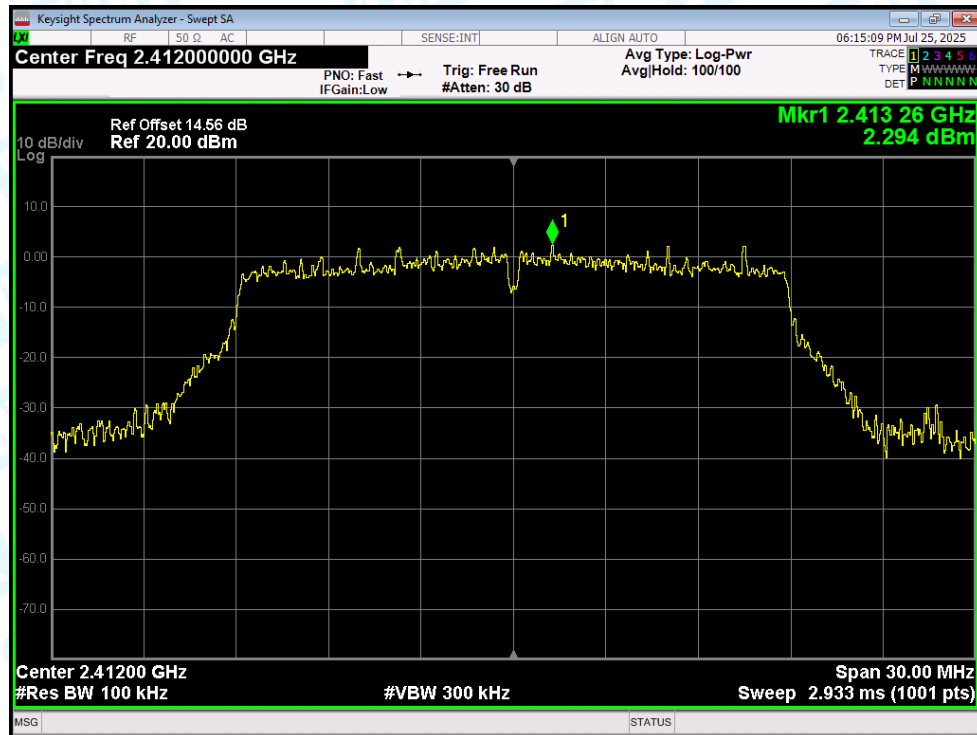
Band Edge NVNT g 2472MHz Ant2 Ref



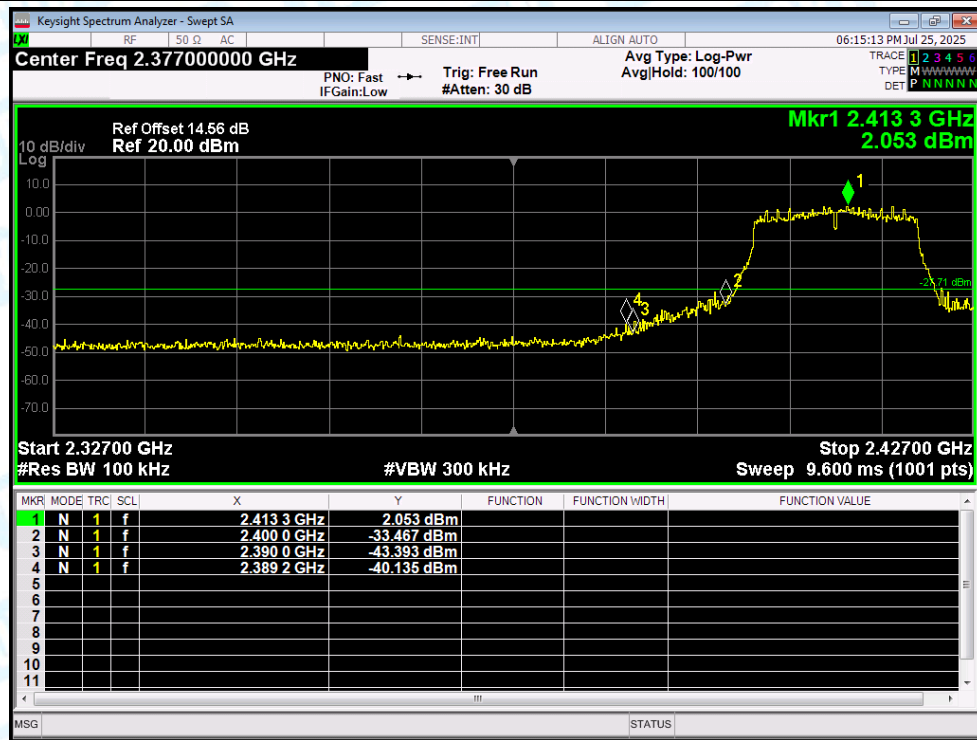
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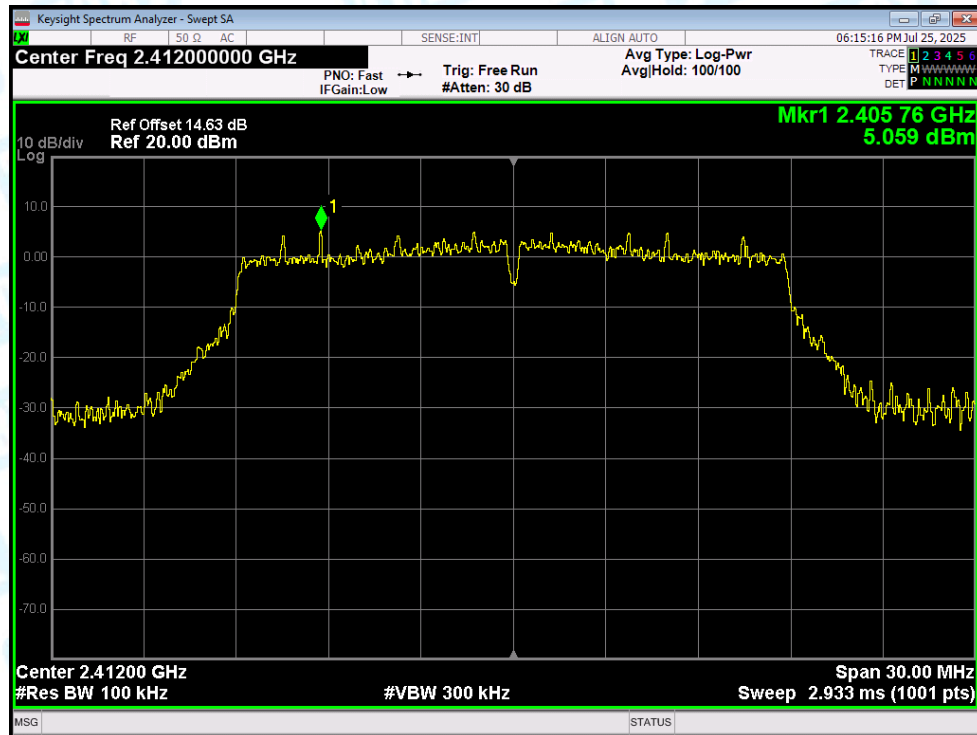
Band Edge NVNT n(HT20) 2412MHz Ant1 Ref



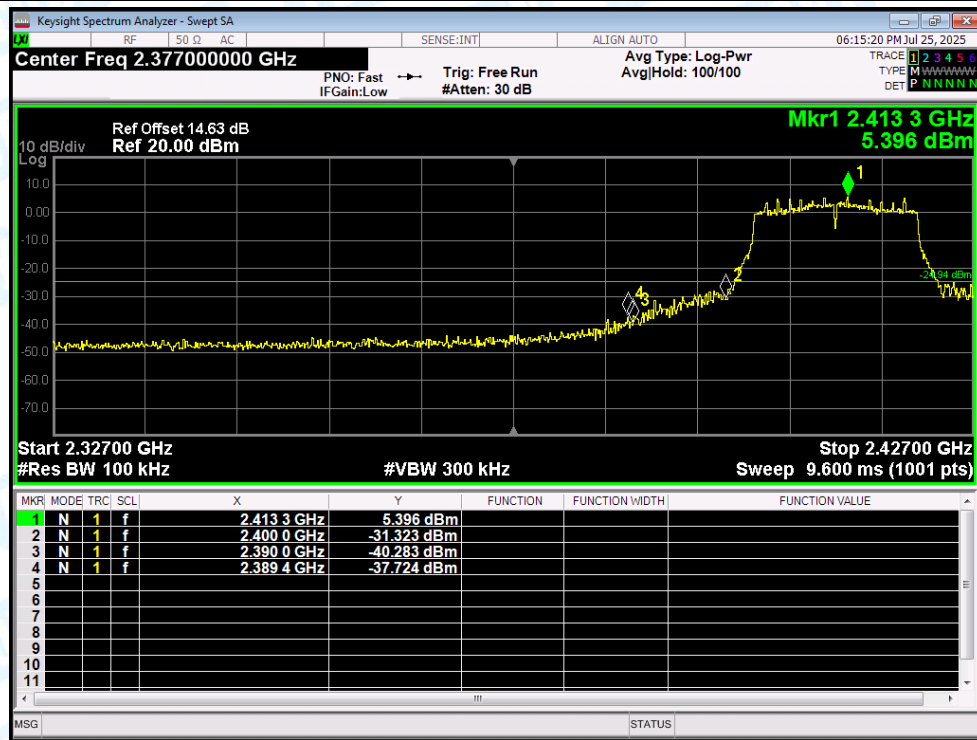
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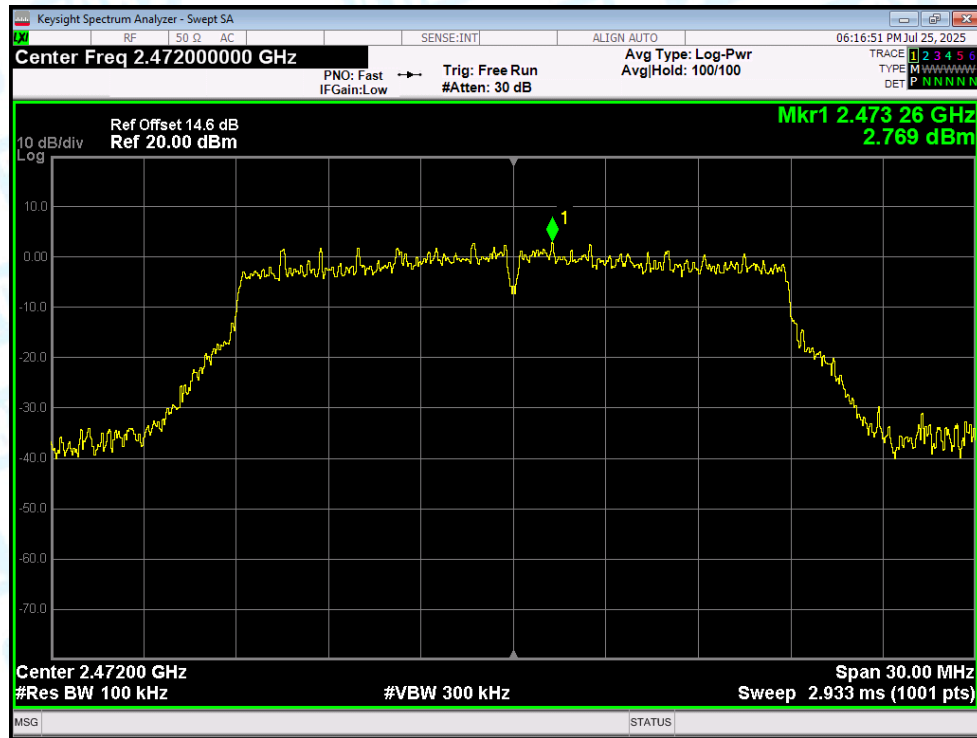
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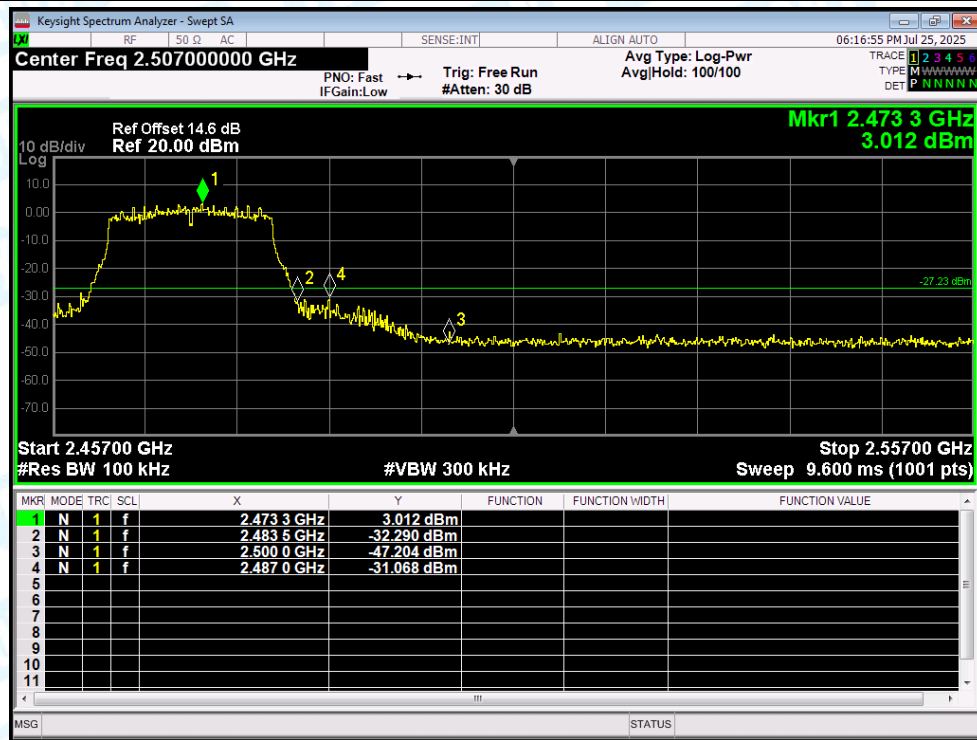
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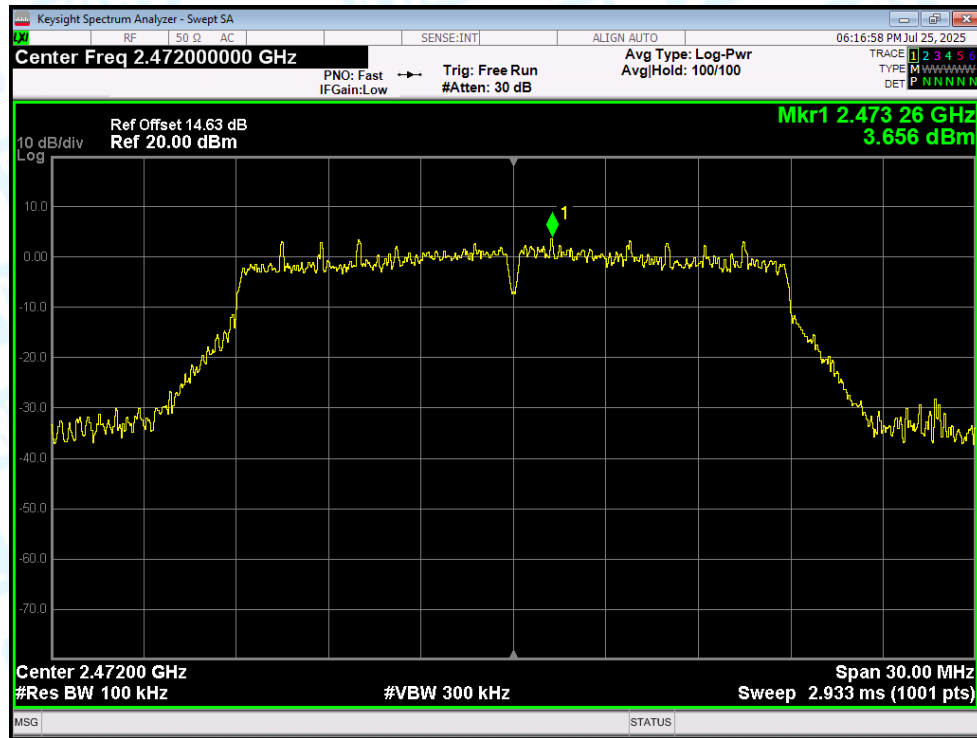
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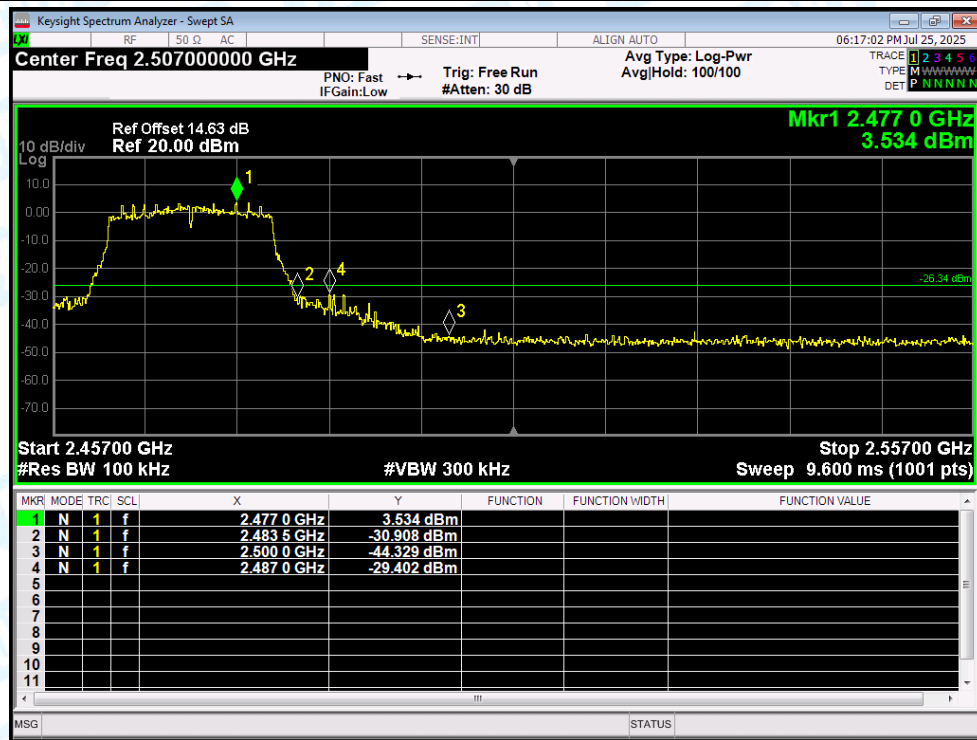
Band Edge NVNT n(HT20) 2472MHz Ant1 Emission



Band Edge NVNT n(HT20) 2472MHz Ant2 Ref



Band Edge NVNT n(HT20) 2472MHz Ant2 Emission

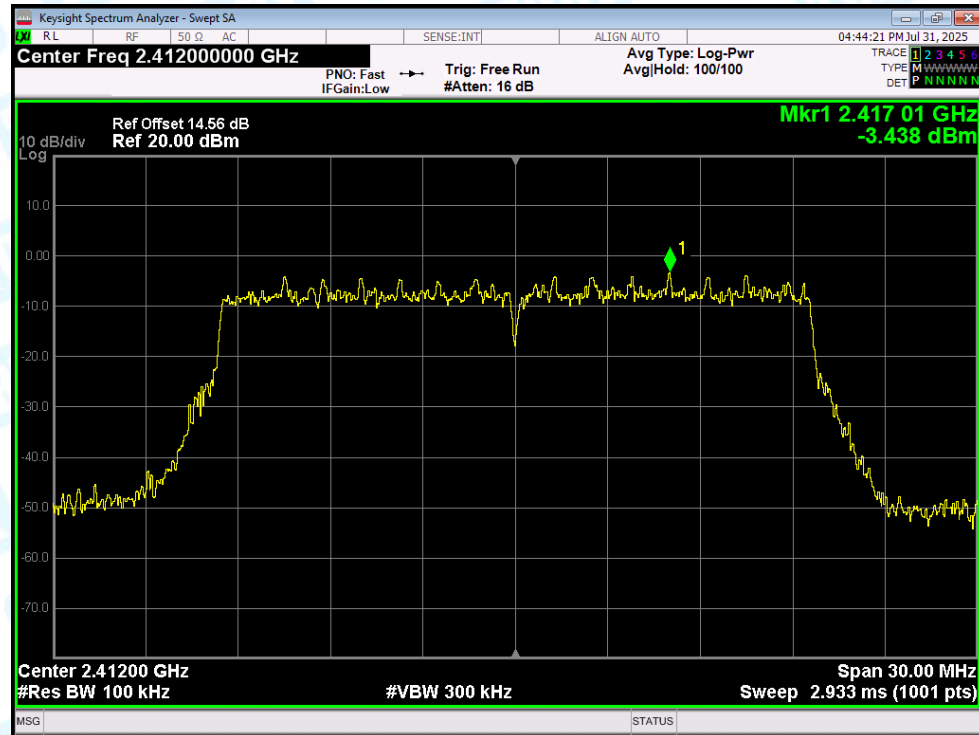


4. Conducted RF Spurious Emission

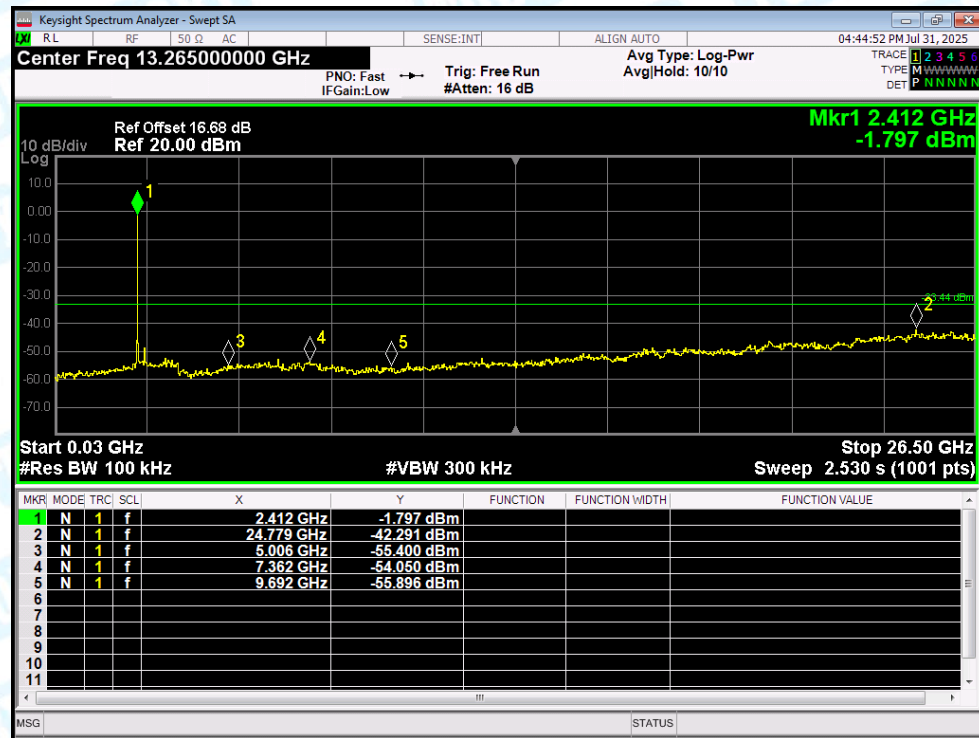
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	ax(HE20)	2412	Ant1	-38.85	-30	Pass
NVNT	ax(HE20)	2412	Ant2	-40.94	-30	Pass
NVNT	ax(HE20)	2437	Ant1	-40.05	-30	Pass
NVNT	ax(HE20)	2437	Ant2	-40.77	-30	Pass
NVNT	ax(HE20)	2462	Ant1	-40.13	-30	Pass
NVNT	ax(HE20)	2462	Ant2	-40.5	-30	Pass
NVNT	b	2412	Ant1	-47.44	-30	Pass
NVNT	b	2437	Ant1	-47.69	-30	Pass
NVNT	b	2462	Ant1	-47.79	-30	Pass
NVNT	b	2412	Ant2	-49.24	-30	Pass
NVNT	b	2437	Ant2	-47.95	-30	Pass
NVNT	b	2462	Ant2	-48.3	-30	Pass
NVNT	g	2412	Ant1	-44.49	-30	Pass
NVNT	g	2437	Ant1	-43.27	-30	Pass
NVNT	g	2462	Ant1	-43.4	-30	Pass
NVNT	g	2412	Ant2	-44.1	-30	Pass
NVNT	g	2437	Ant2	-43.3	-30	Pass
NVNT	g	2462	Ant2	-44.24	-30	Pass
NVNT	n(HT20)	2412	Ant1	-38.89	-30	Pass
NVNT	n(HT20)	2412	Ant2	-40.95	-30	Pass
NVNT	n(HT20)	2437	Ant1	-39.04	-30	Pass
NVNT	n(HT20)	2437	Ant2	-39.15	-30	Pass
NVNT	n(HT20)	2462	Ant1	-40.03	-30	Pass
NVNT	n(HT20)	2462	Ant2	-39.42	-30	Pass

Test Graphs

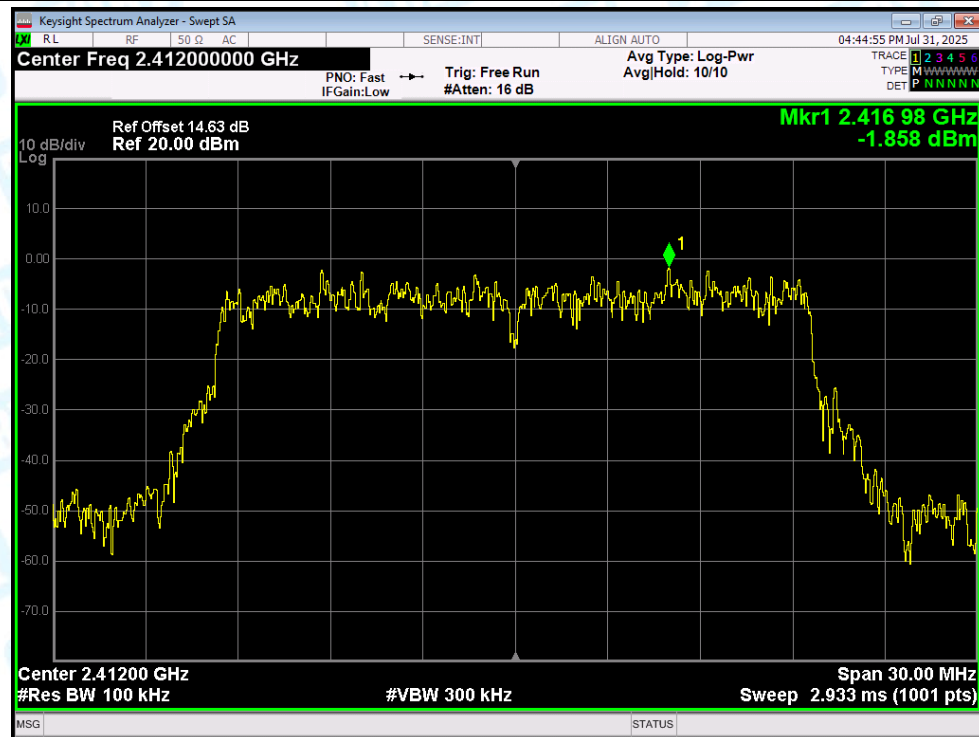
Tx. Spurious NVNT ax(HE20) 2412MHz Ant1 Ref



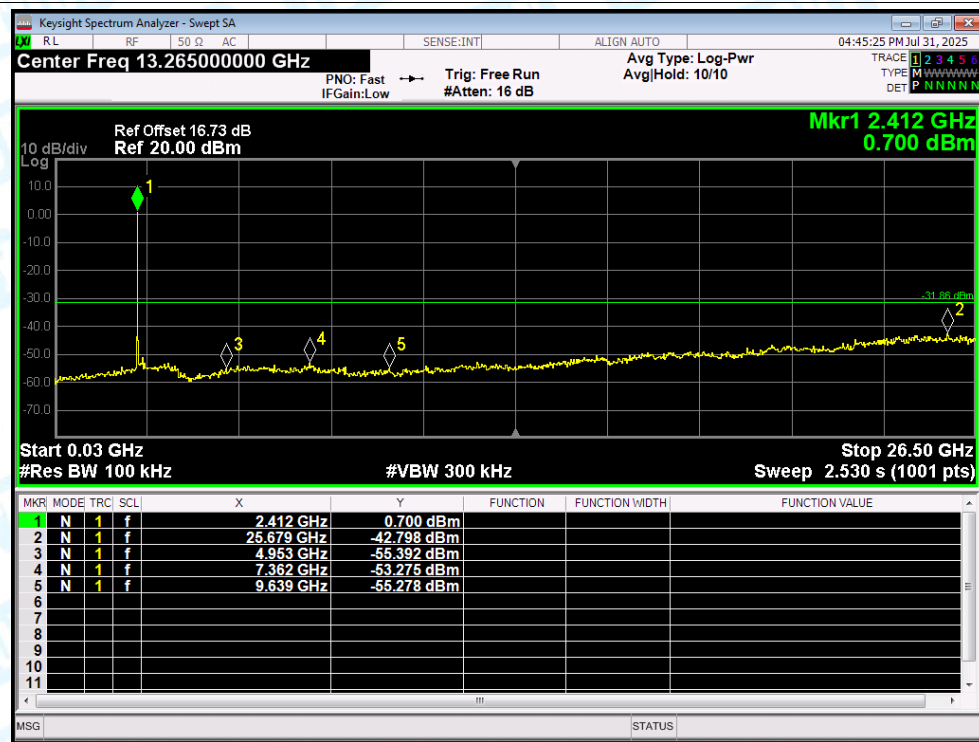
Tx. Spurious NVNT ax(HE20) 2412MHz Ant1 Emission



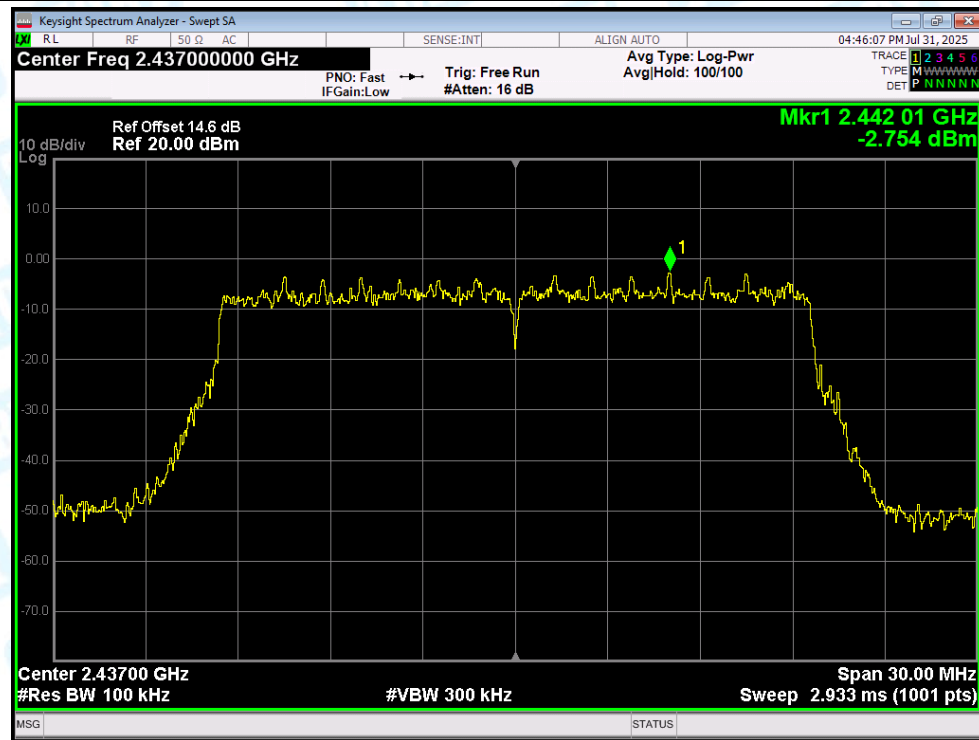
Tx. Spurious NVNT ax(HE20) 2412MHz Ant2 Ref



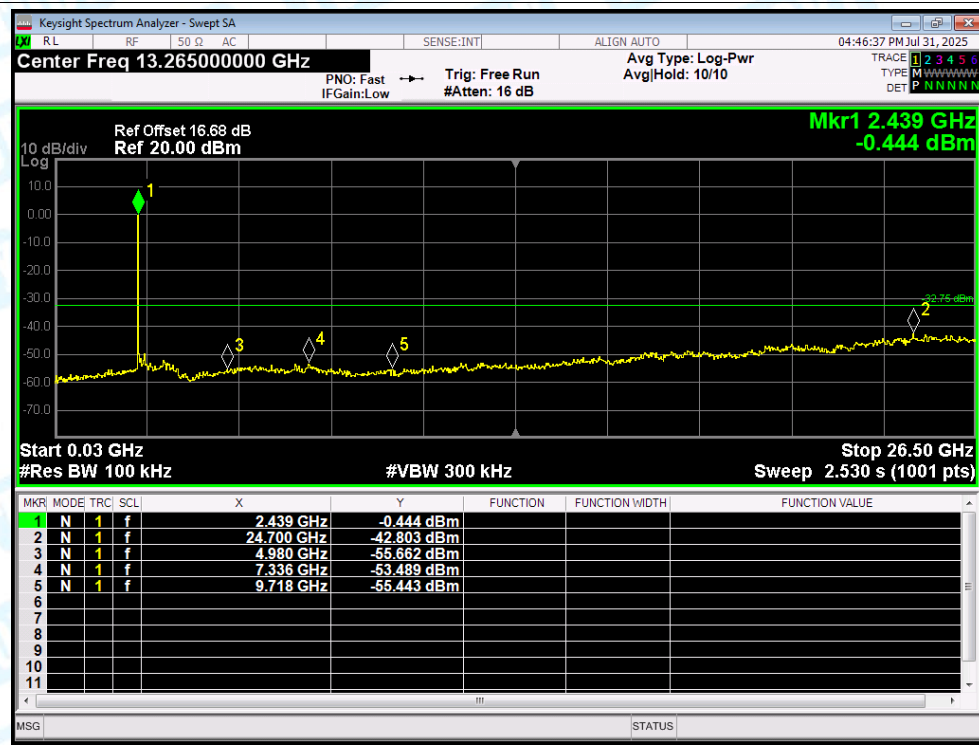
Tx. Spurious NVNT ax(HE20) 2412MHz Ant2 Emission



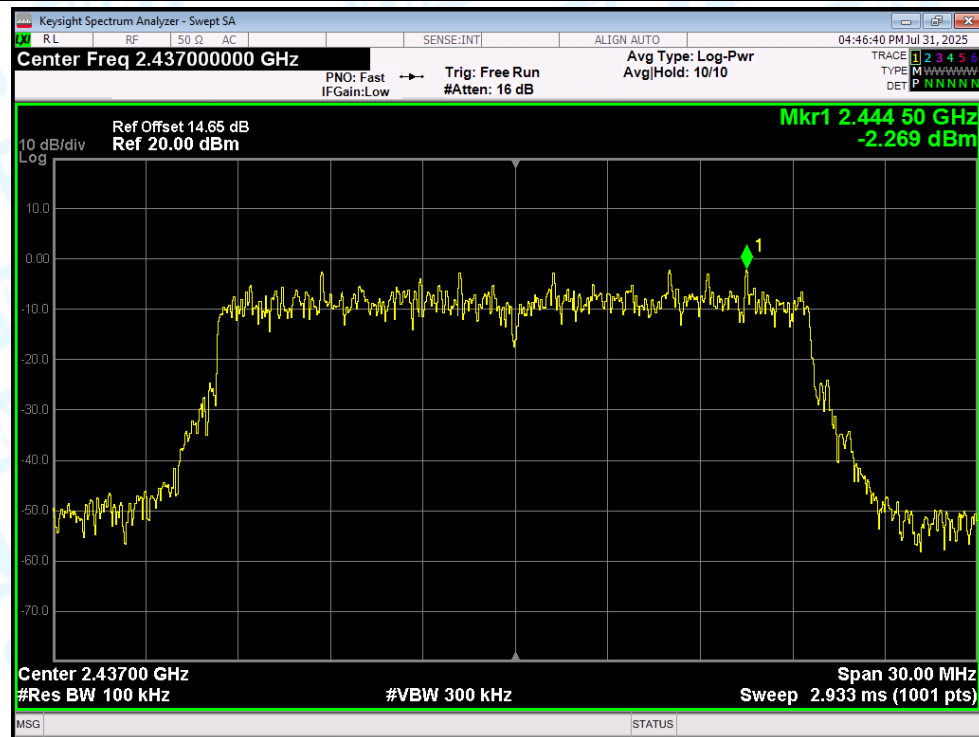
Tx. Spurious NVNT ax(HE20) 2437MHz Ant1 Ref



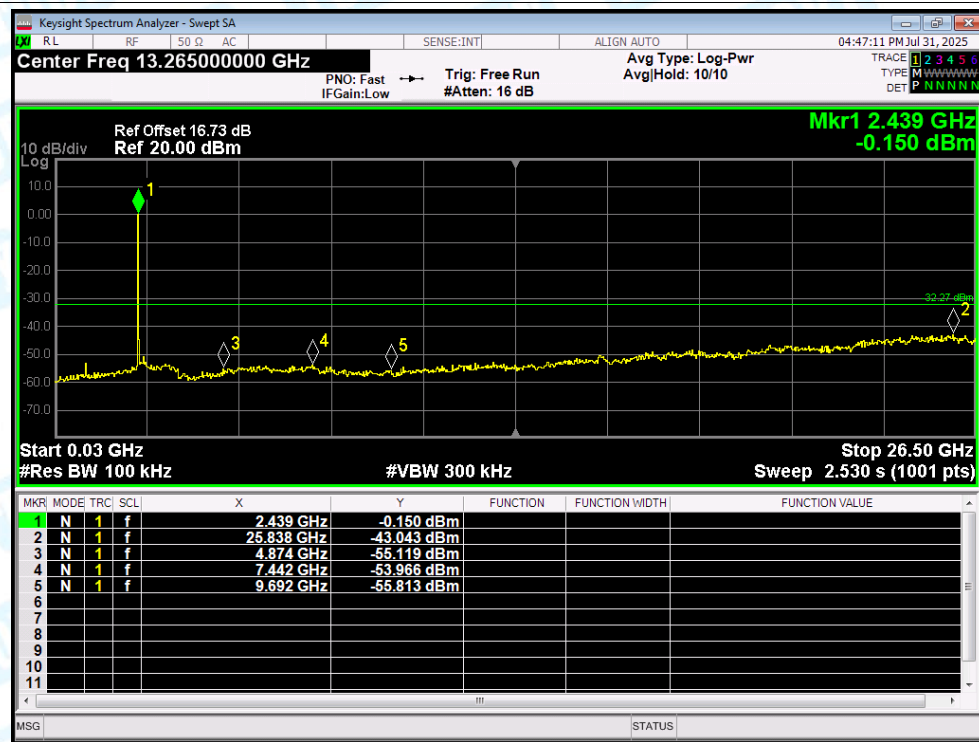
Tx. Spurious NVNT ax(HE20) 2437MHz Ant1 Emission



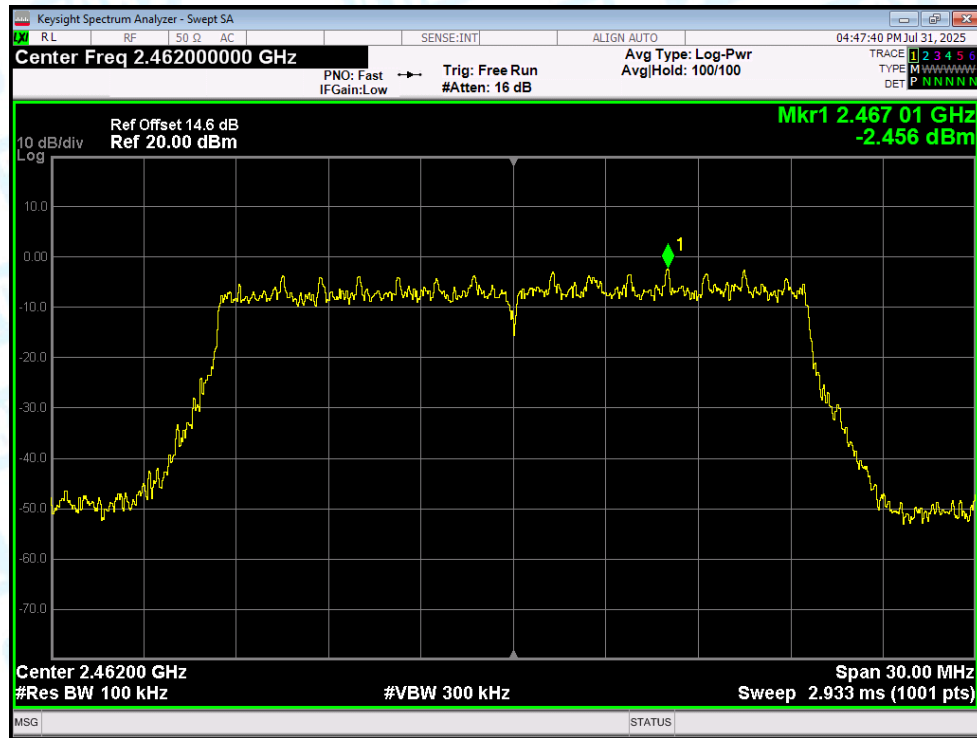
Tx. Spurious NVNT ax(HE20) 2437MHz Ant2 Ref



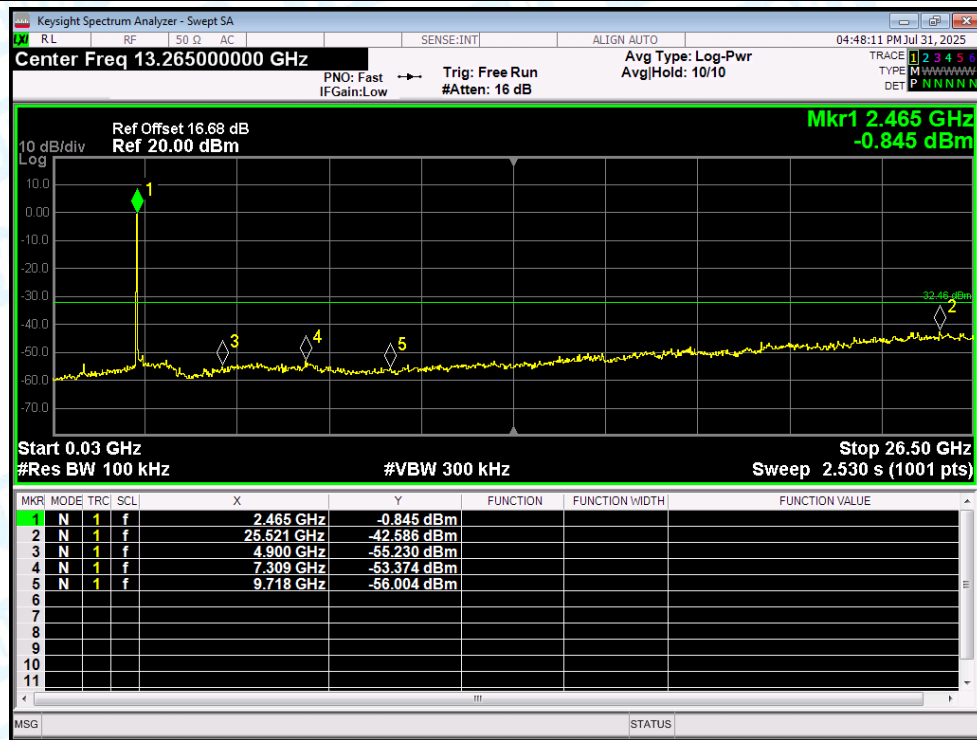
Tx. Spurious NVNT ax(HE20) 2437MHz Ant2 Emission



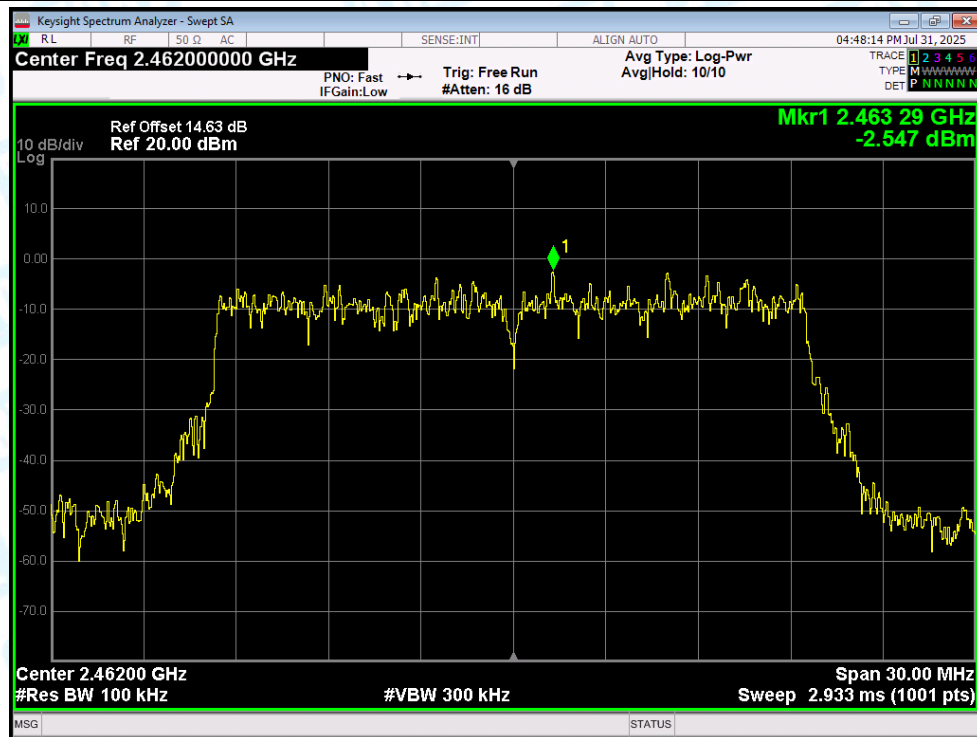
Tx. Spurious NVNT ax(HE20) 2462MHz Ant1 Ref



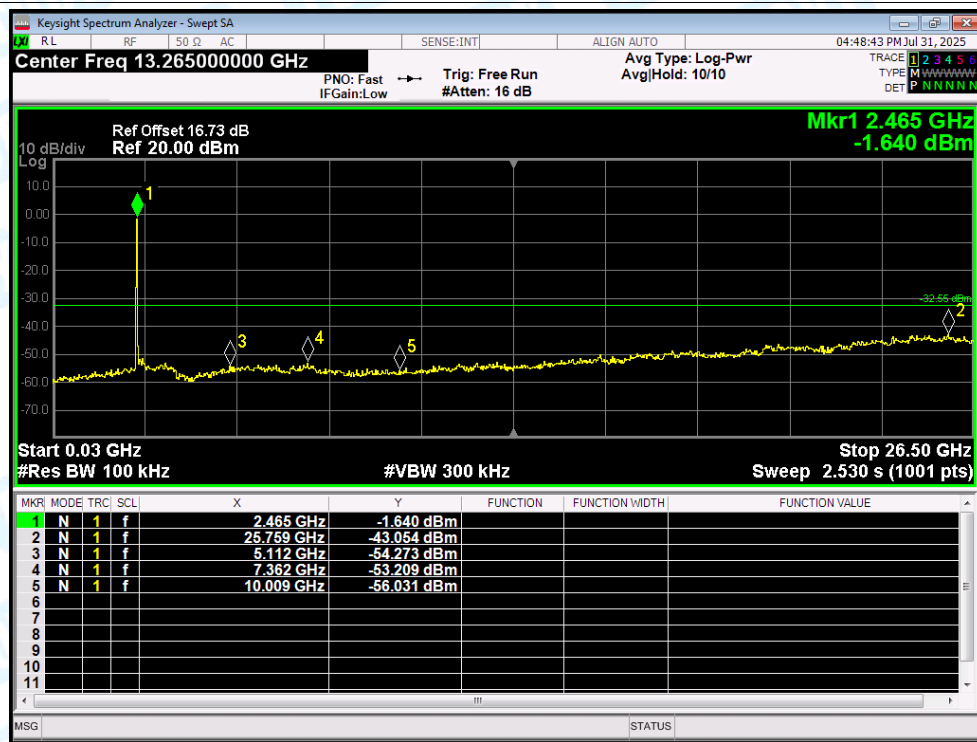
Tx. Spurious NVNT ax(HE20) 2462MHz Ant1 Emission



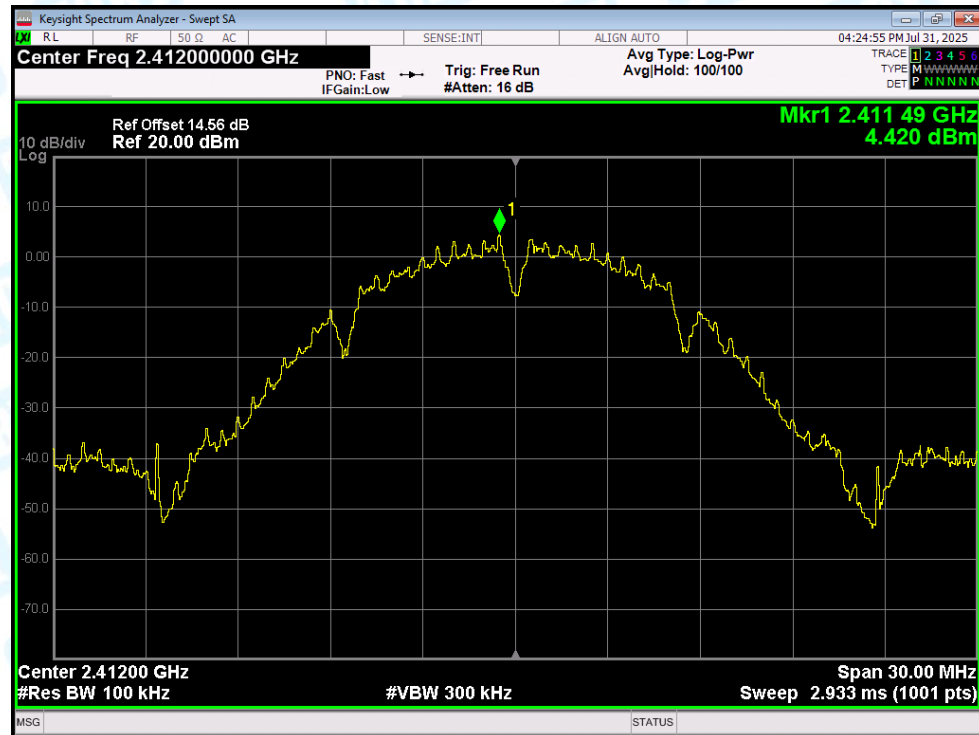
Tx. Spurious NVNT ax(HE20) 2462MHz Ant2 Ref



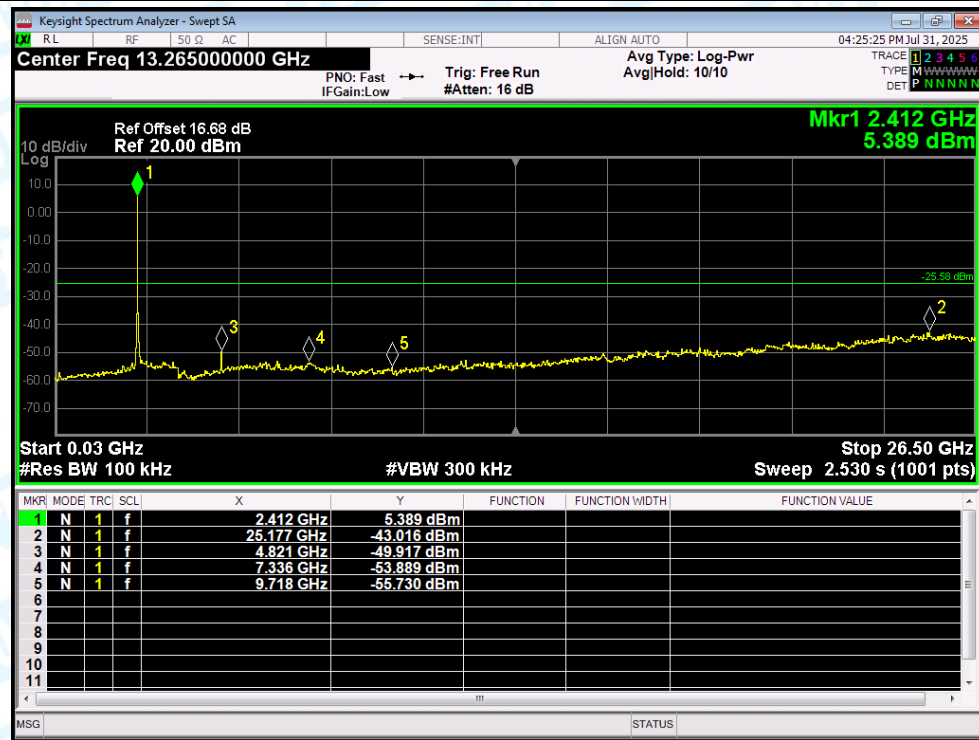
Tx. Spurious NVNT ax(HE20) 2462MHz Ant2 Emission



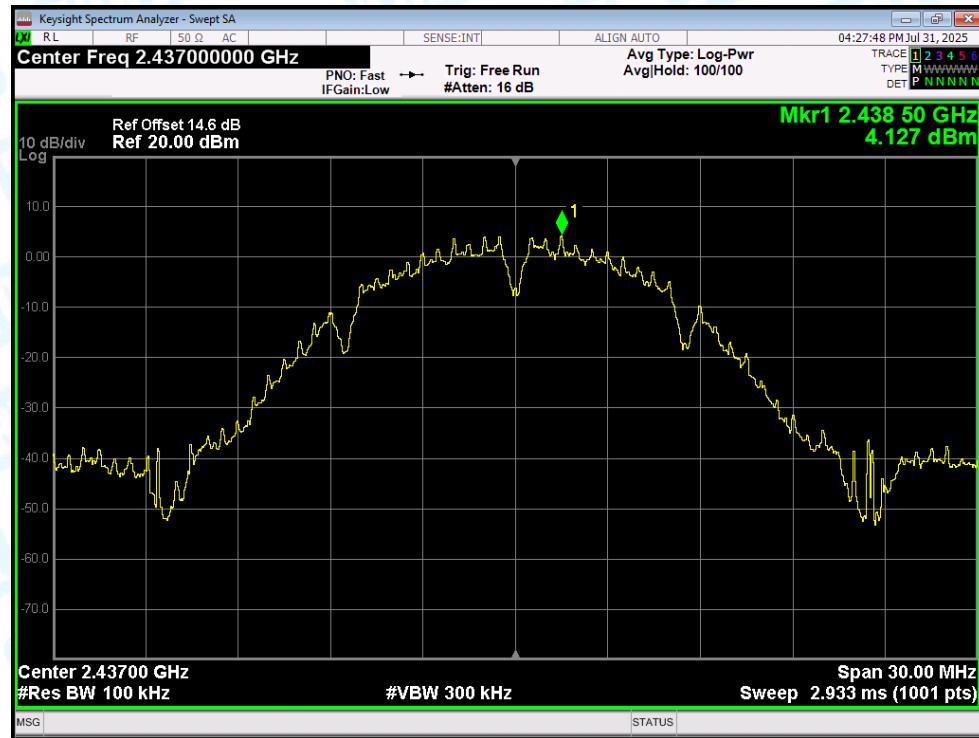
Tx. Spurious NVNT b 2412MHz Ant1 Ref



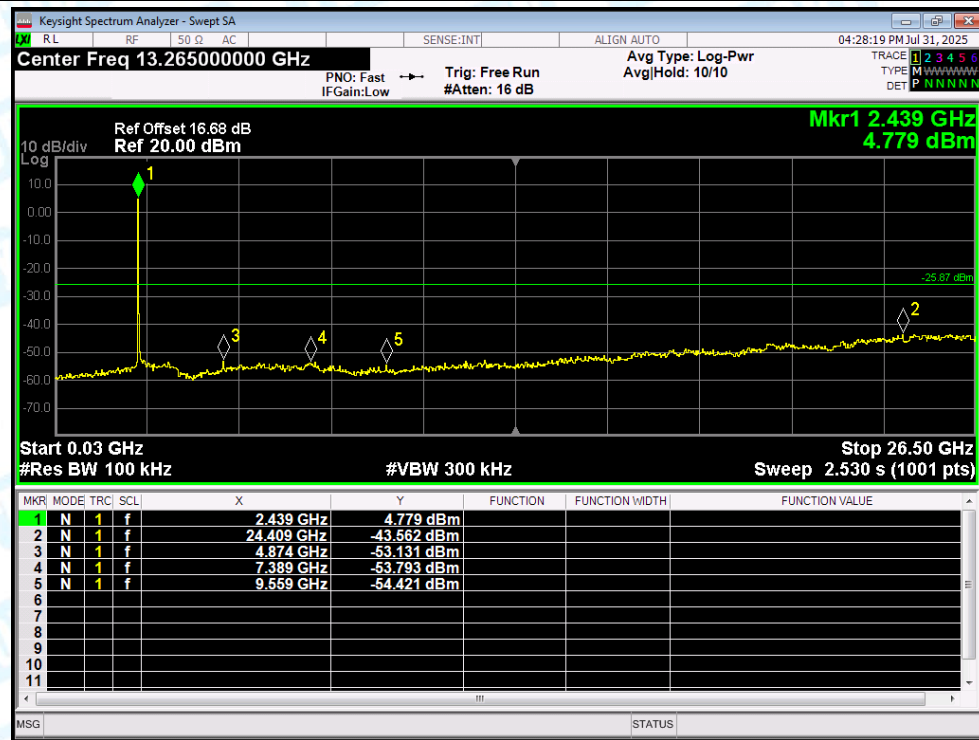
Tx. Spurious NVNT b 2412MHz Ant1 Emission



Tx. Spurious NVNT b 2437MHz Ant1 Ref



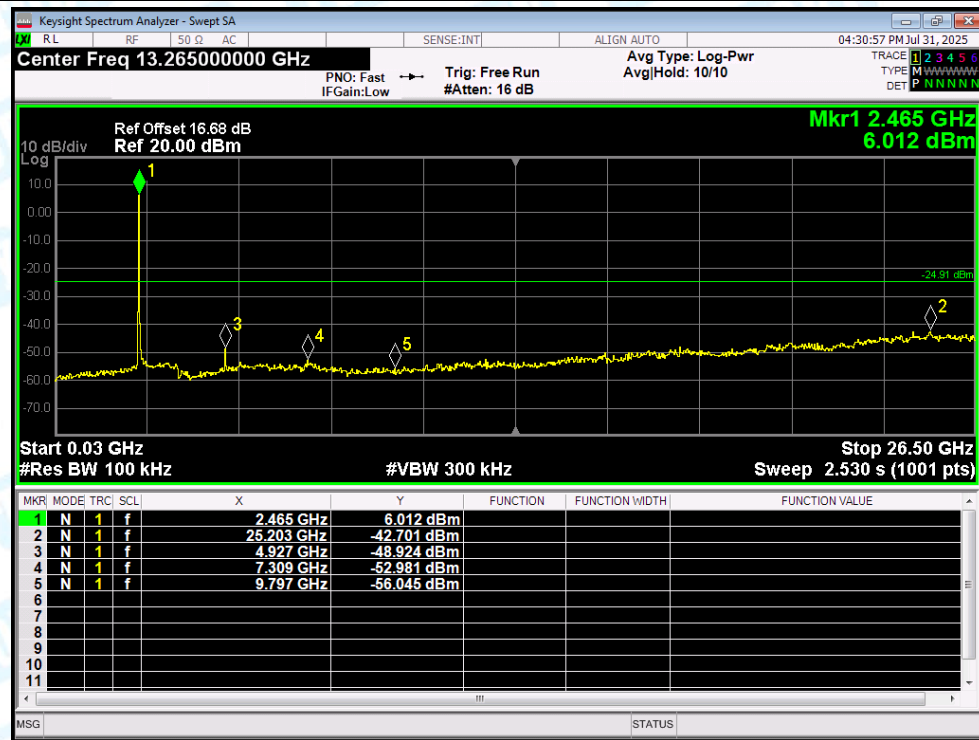
Tx. Spurious NVNT b 2437MHz Ant1 Emission



Tx. Spurious NVNT b 2462MHz Ant1 Ref



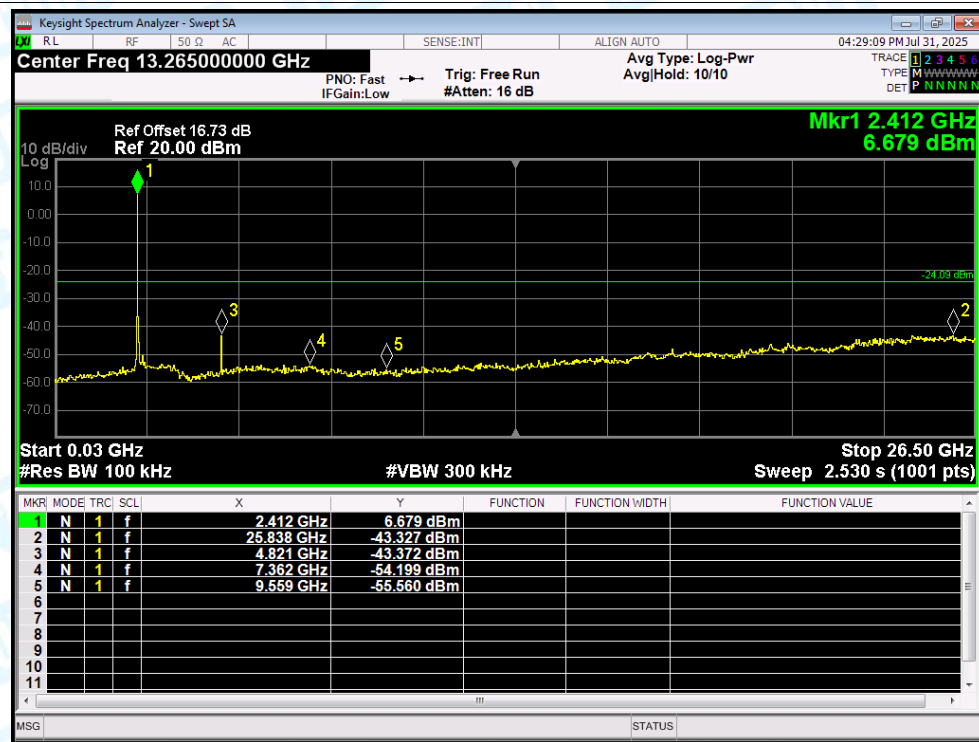
Tx. Spurious NVNT b 2462MHz Ant1 Emission



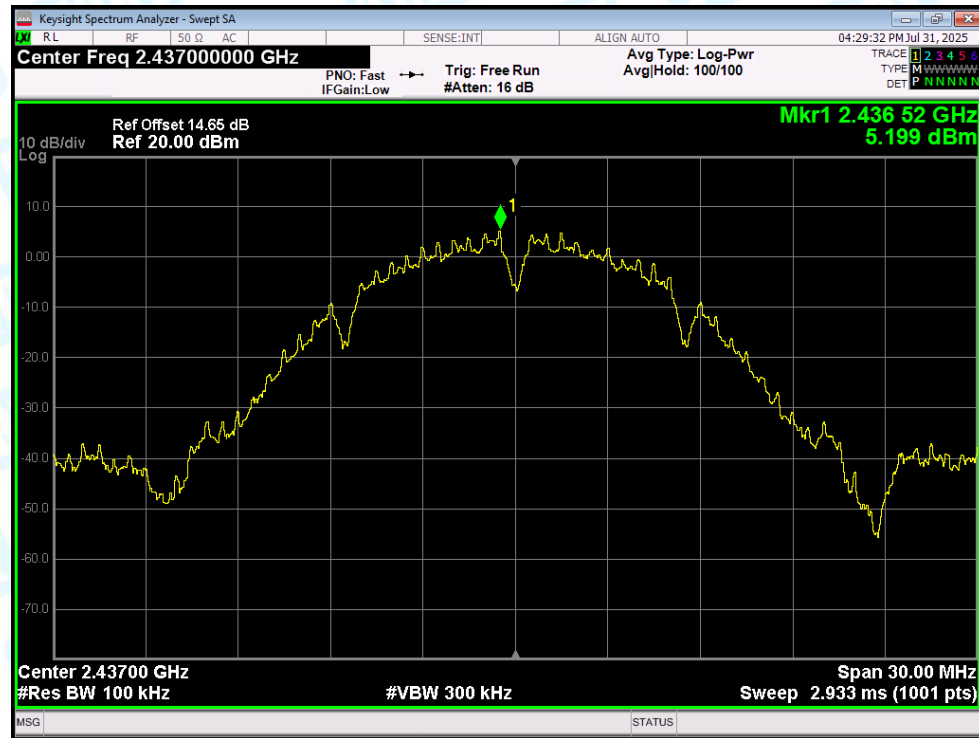
Tx. Spurious NVNT b 2412MHz Ant2 Ref



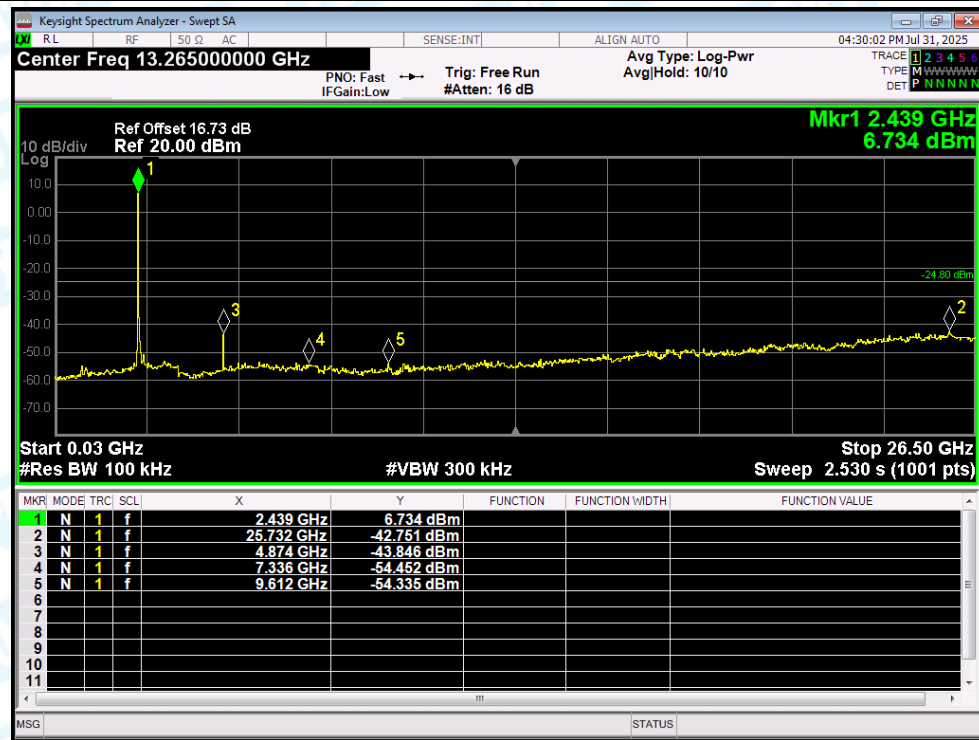
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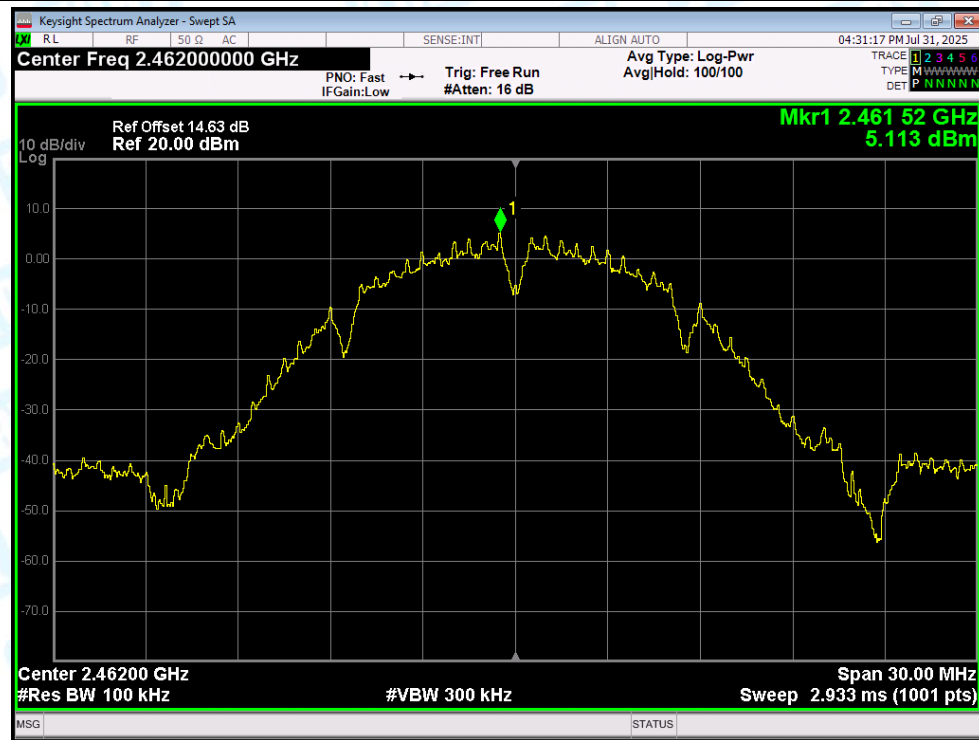
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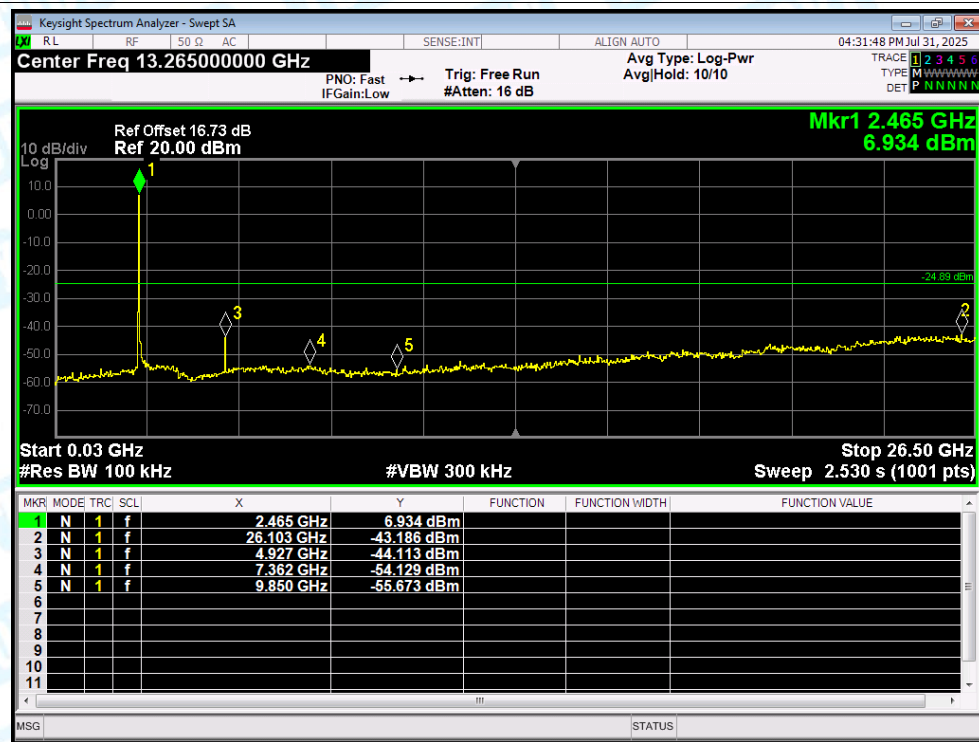
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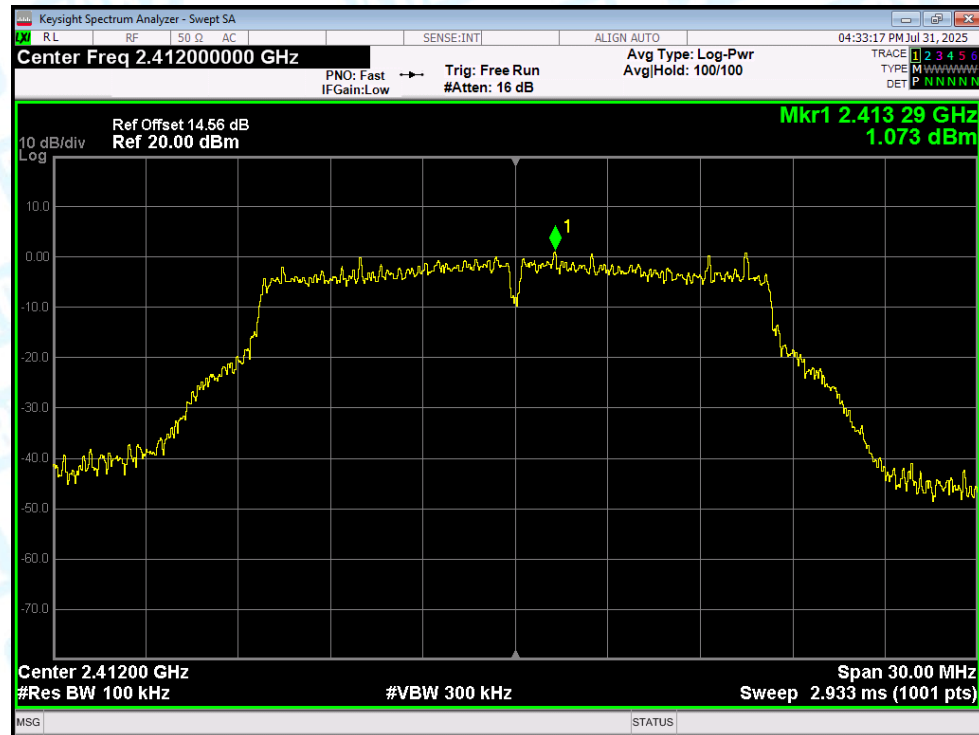
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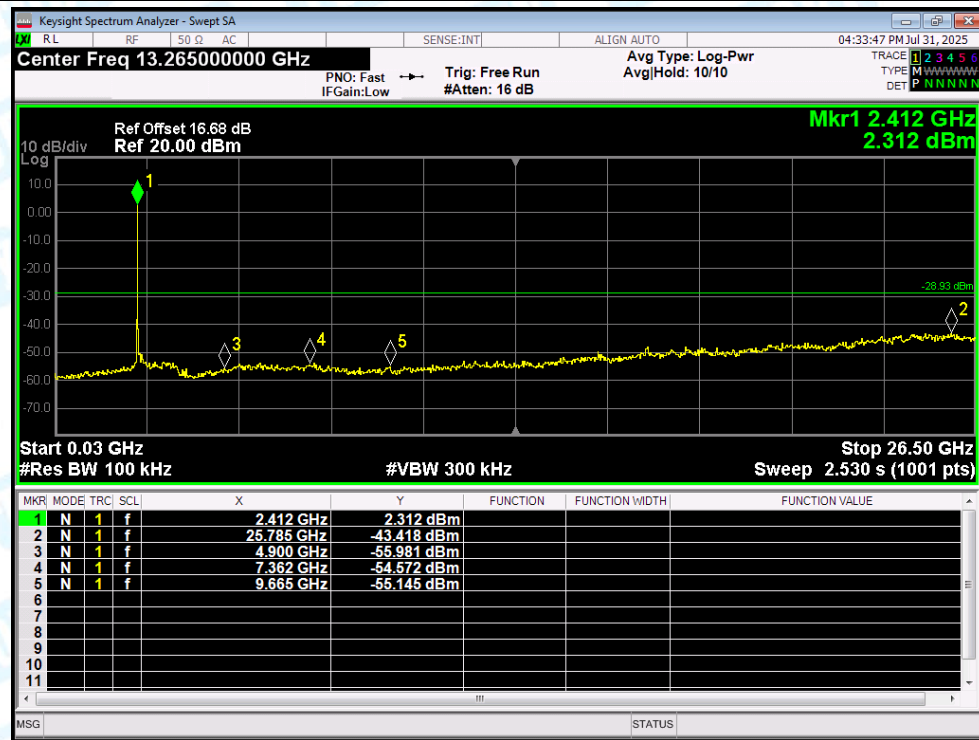
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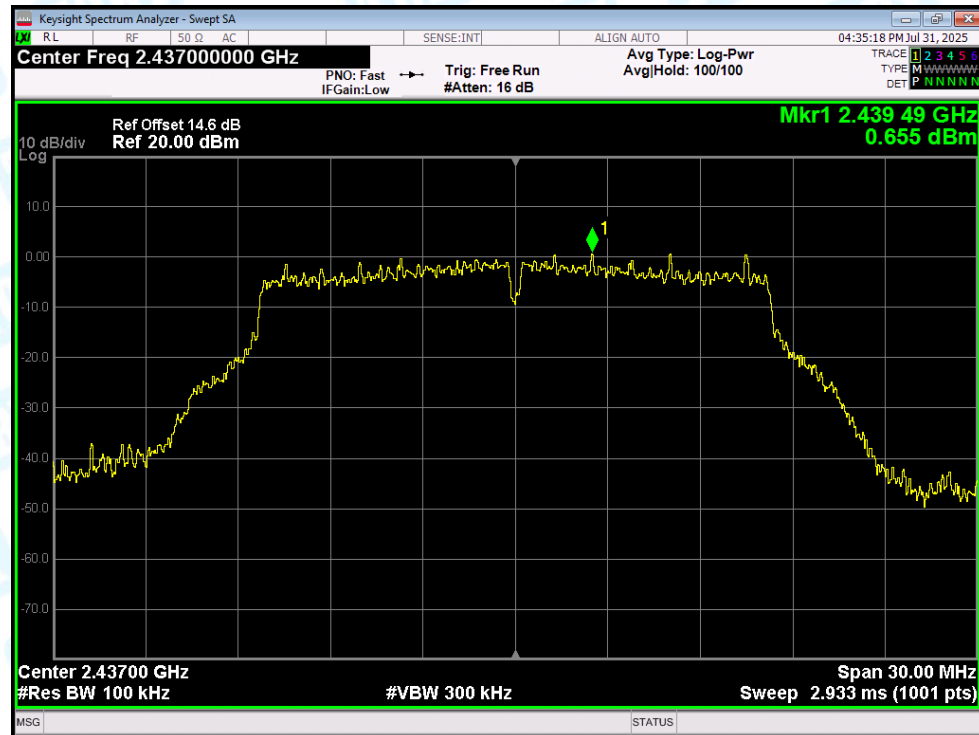
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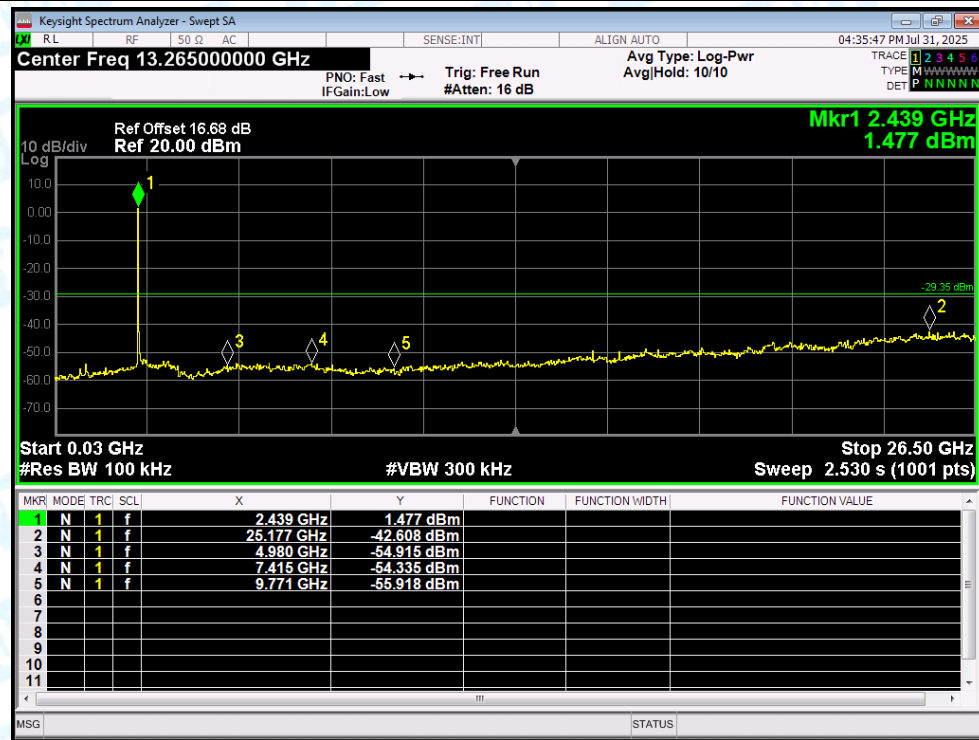
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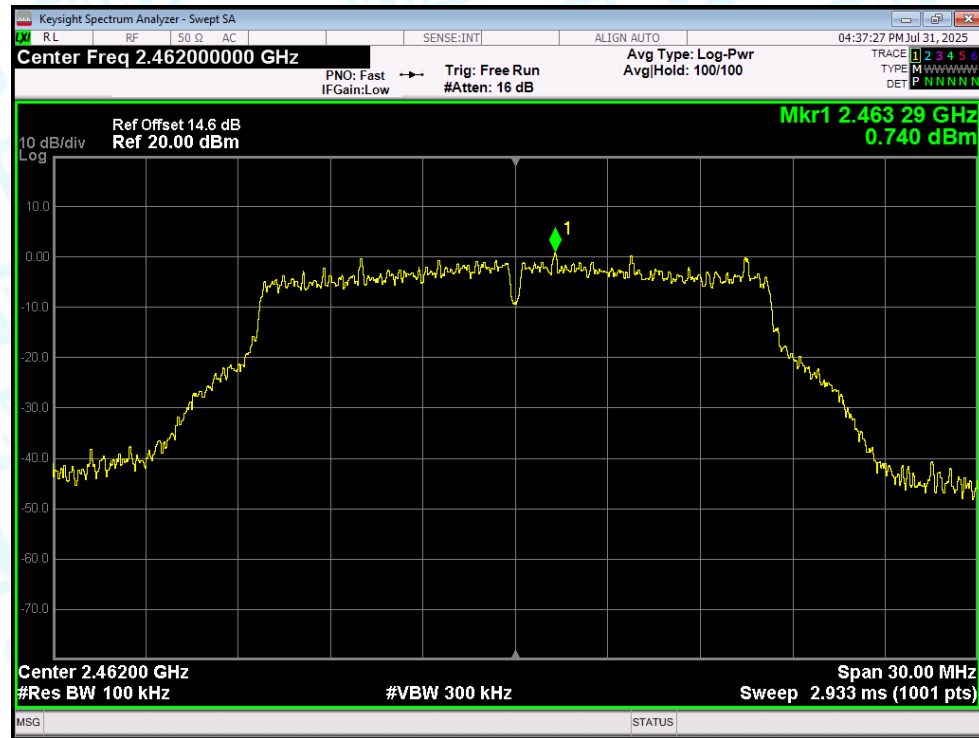
Tx. Spurious NVNT g 2437MHz Ant1 Ref



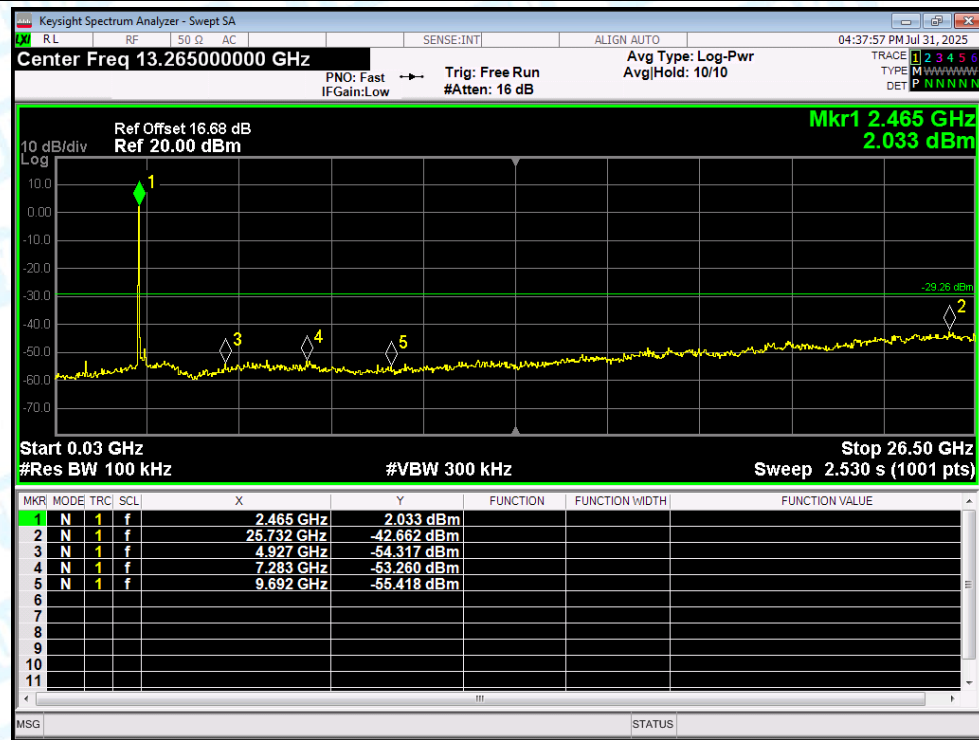
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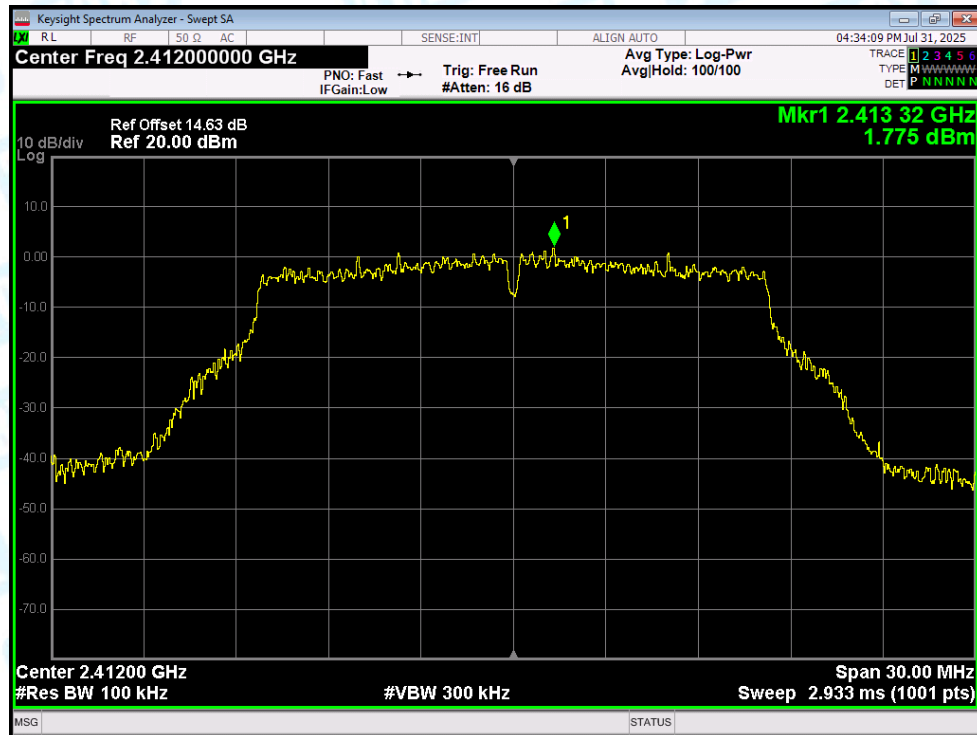
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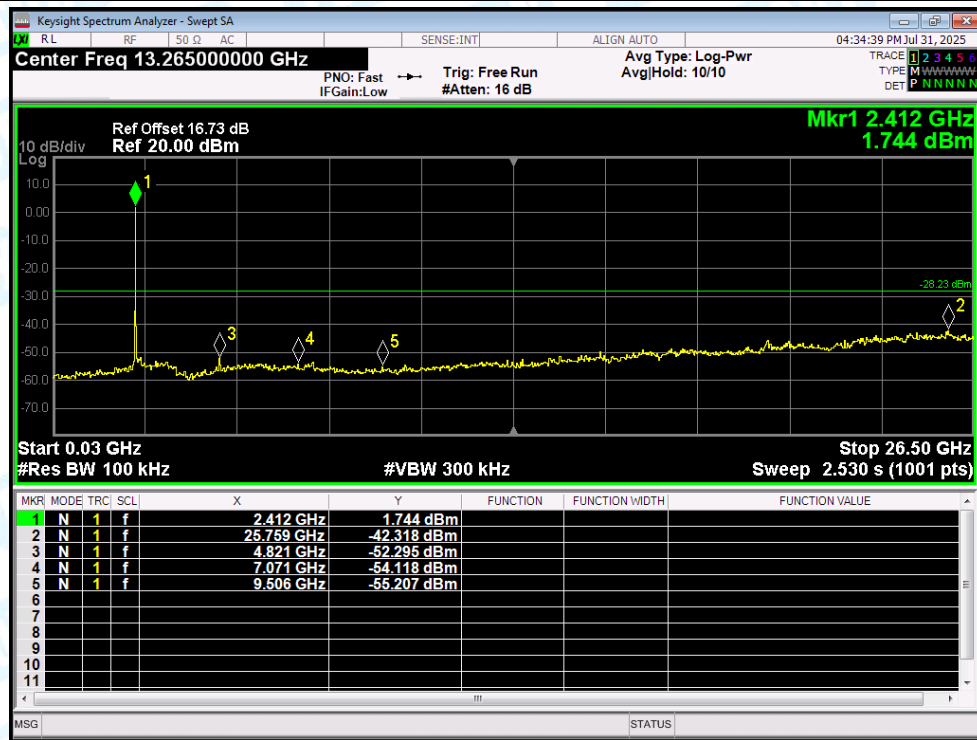
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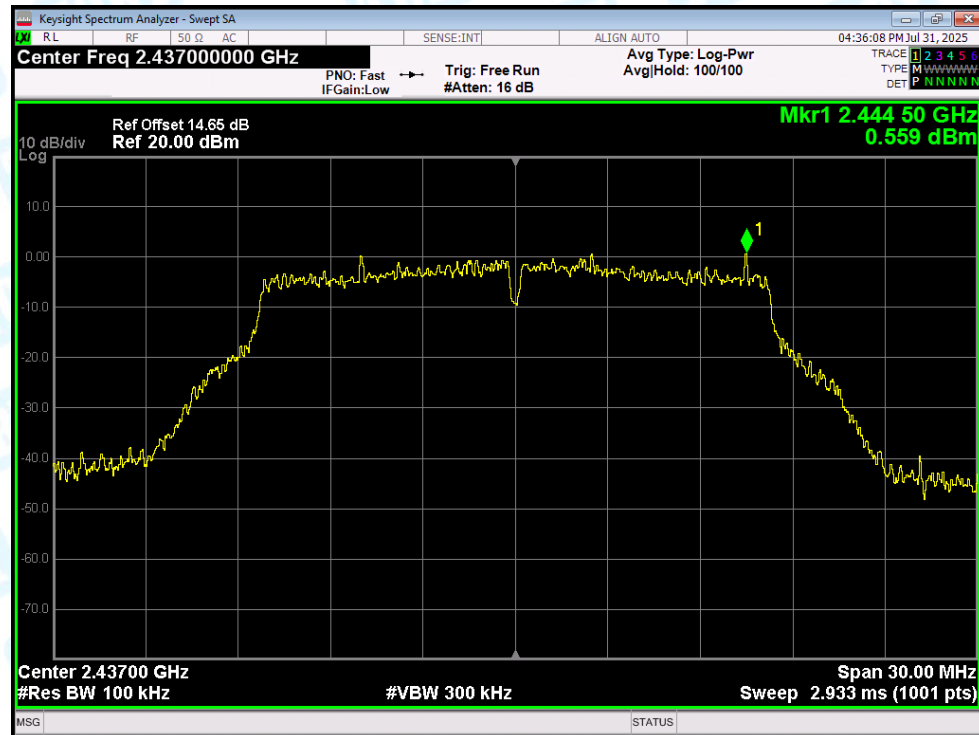
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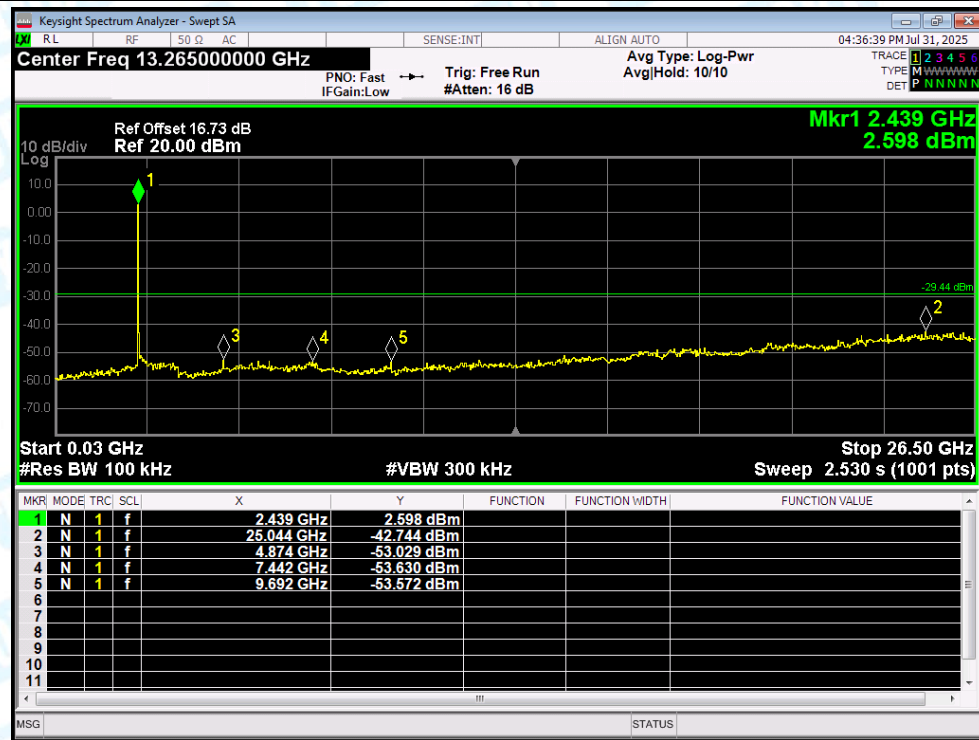
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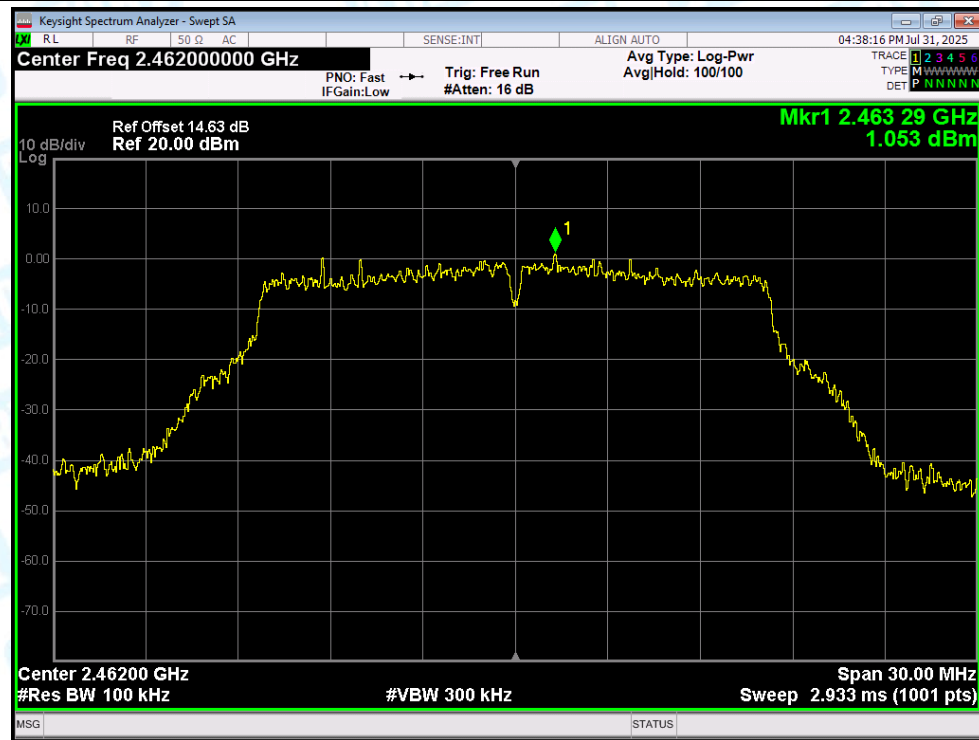
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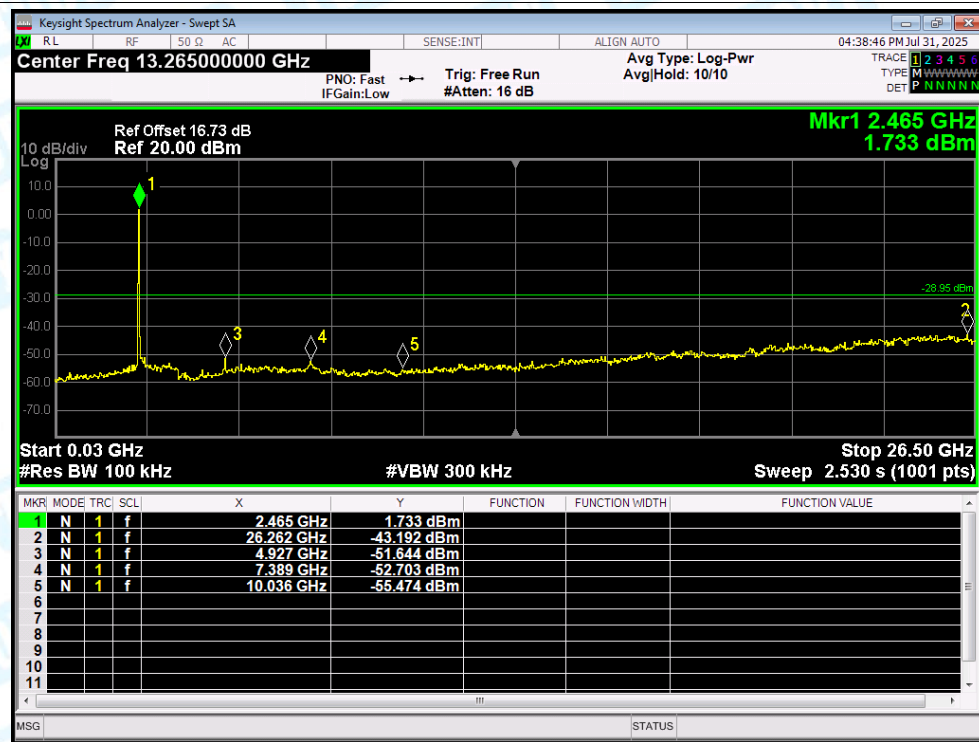
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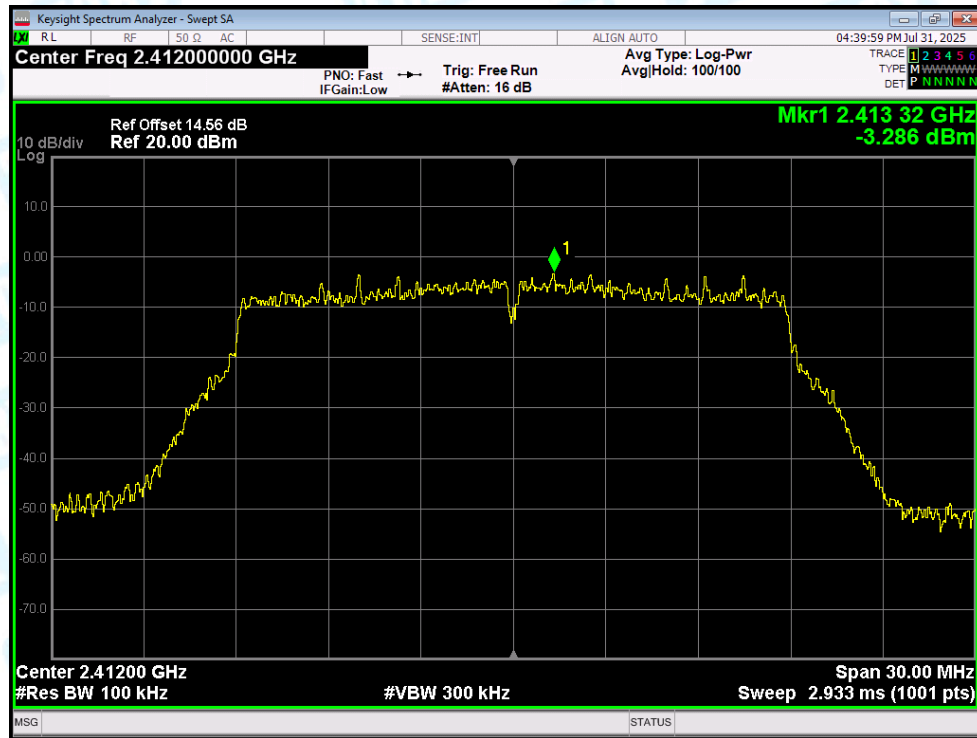
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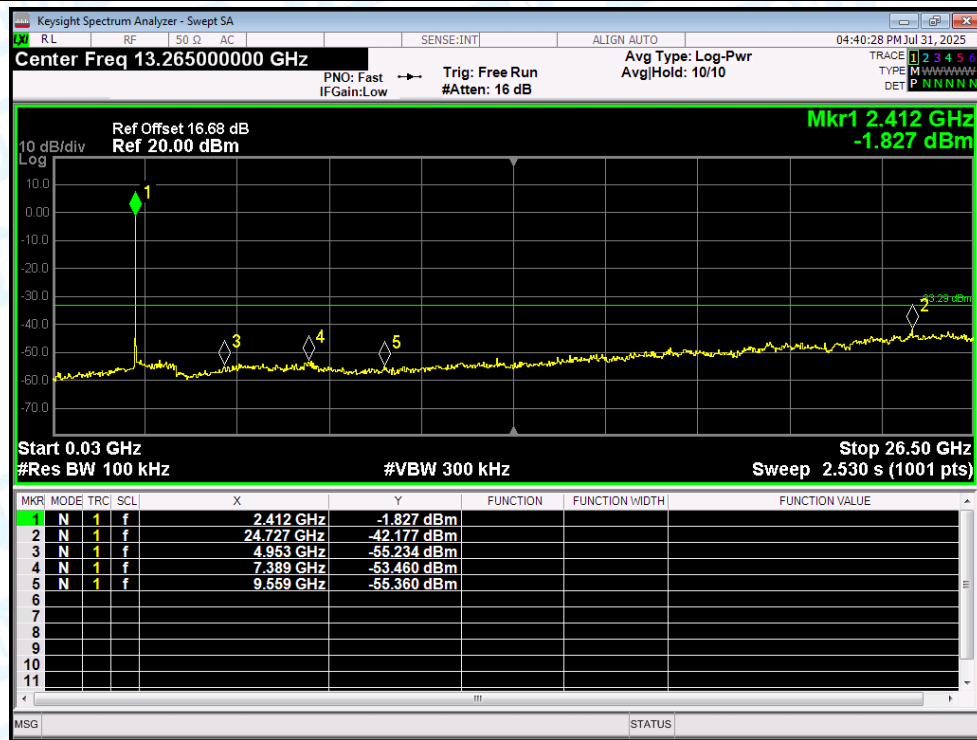
Tx. Spurious NVNT g 2462MHz Ant2 Emission



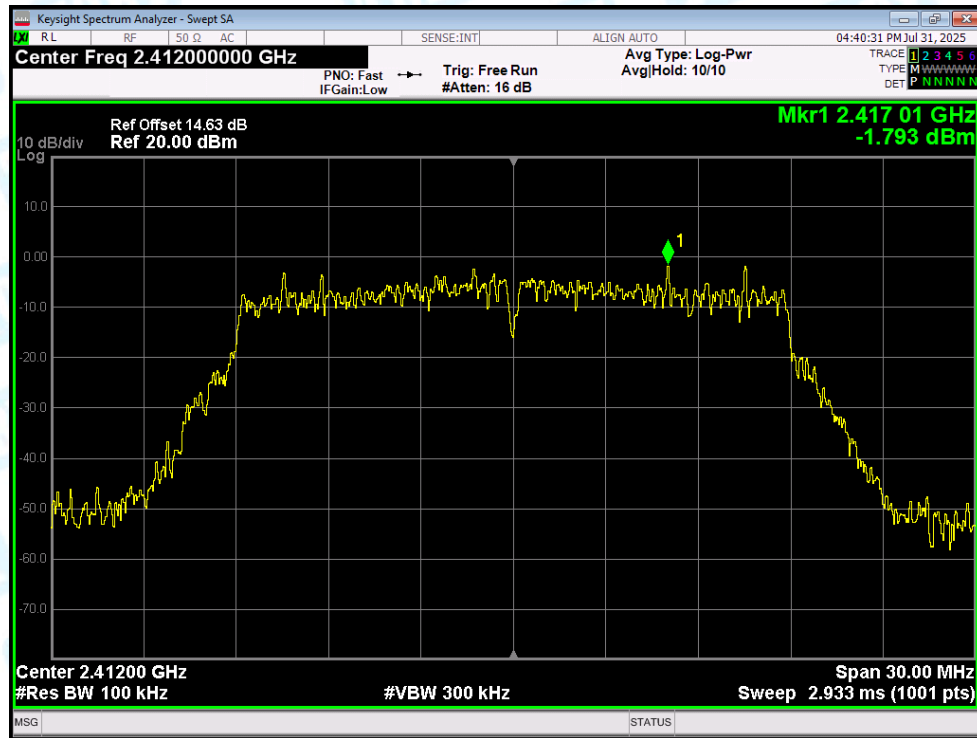
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Ref



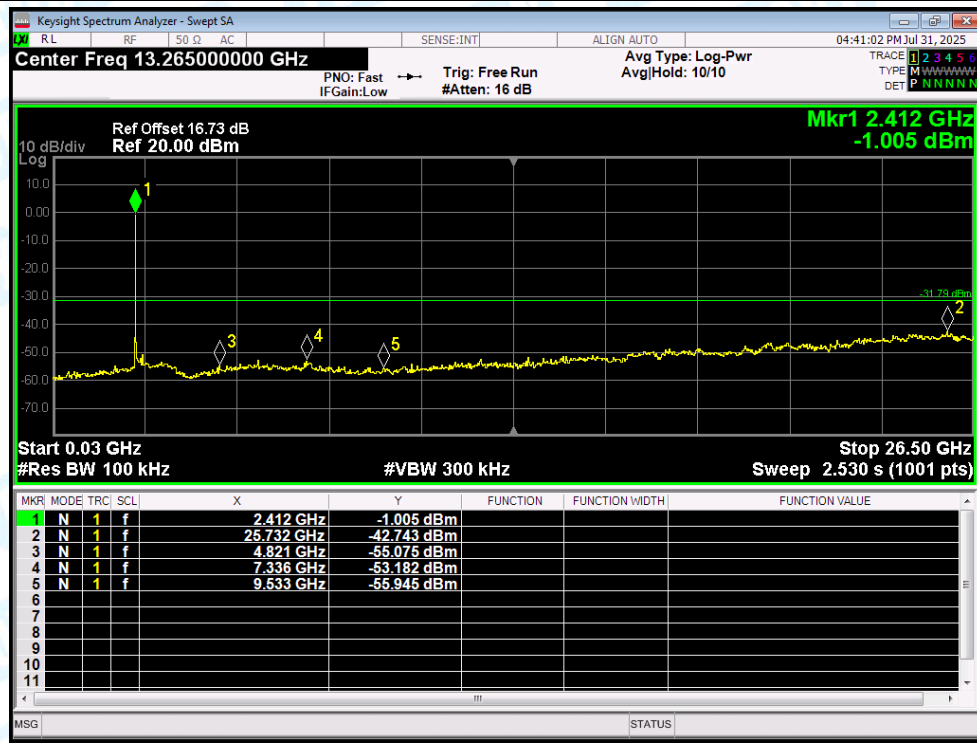
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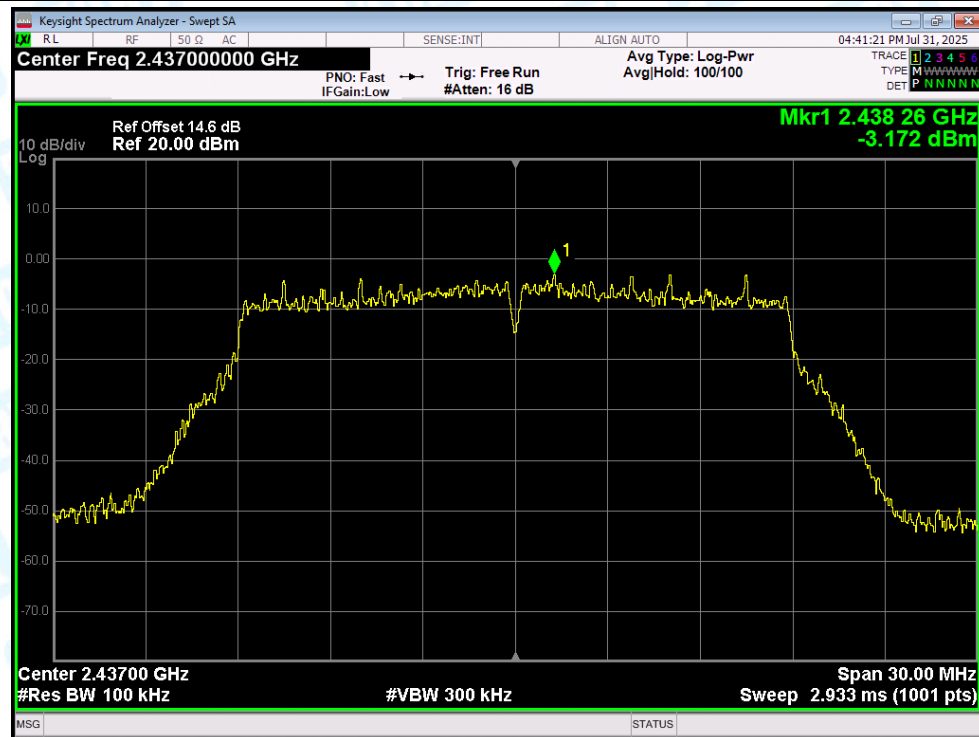
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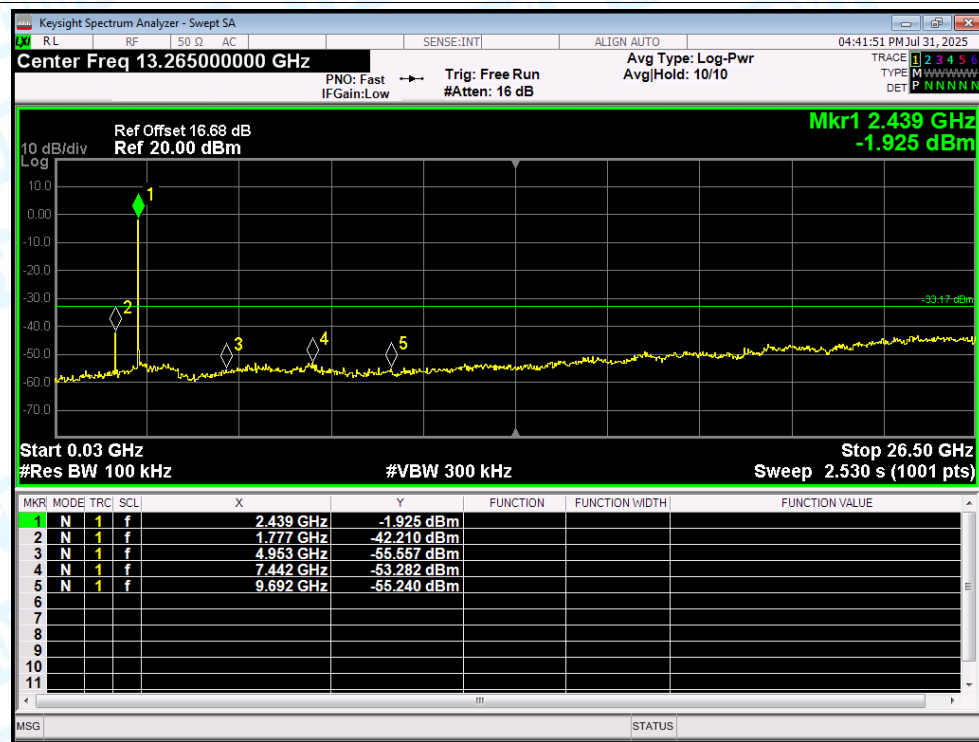
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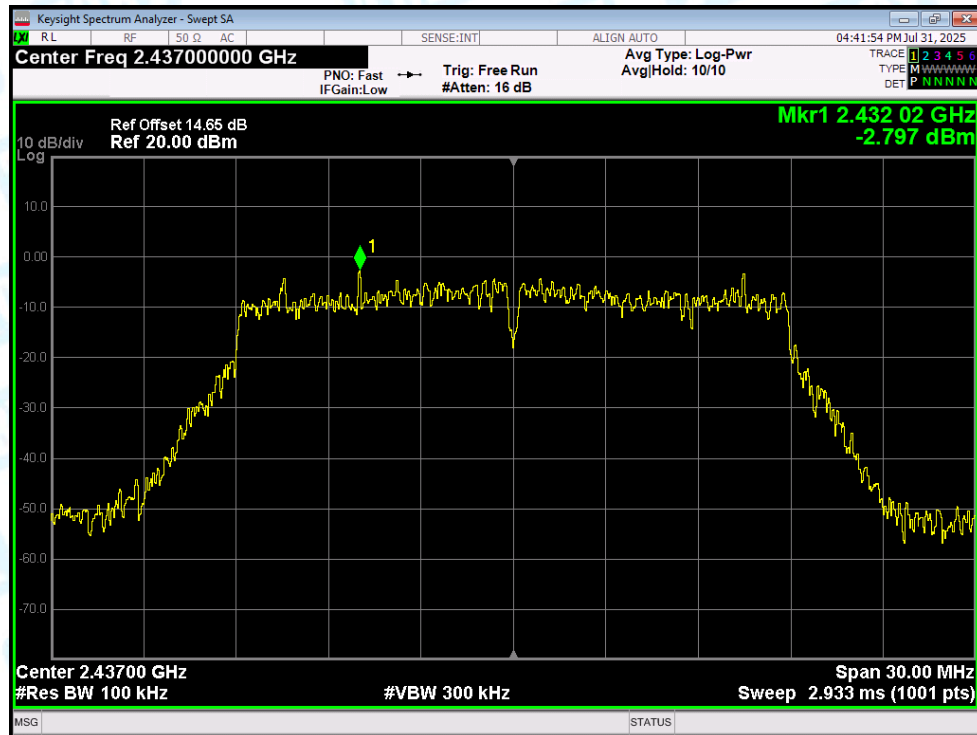
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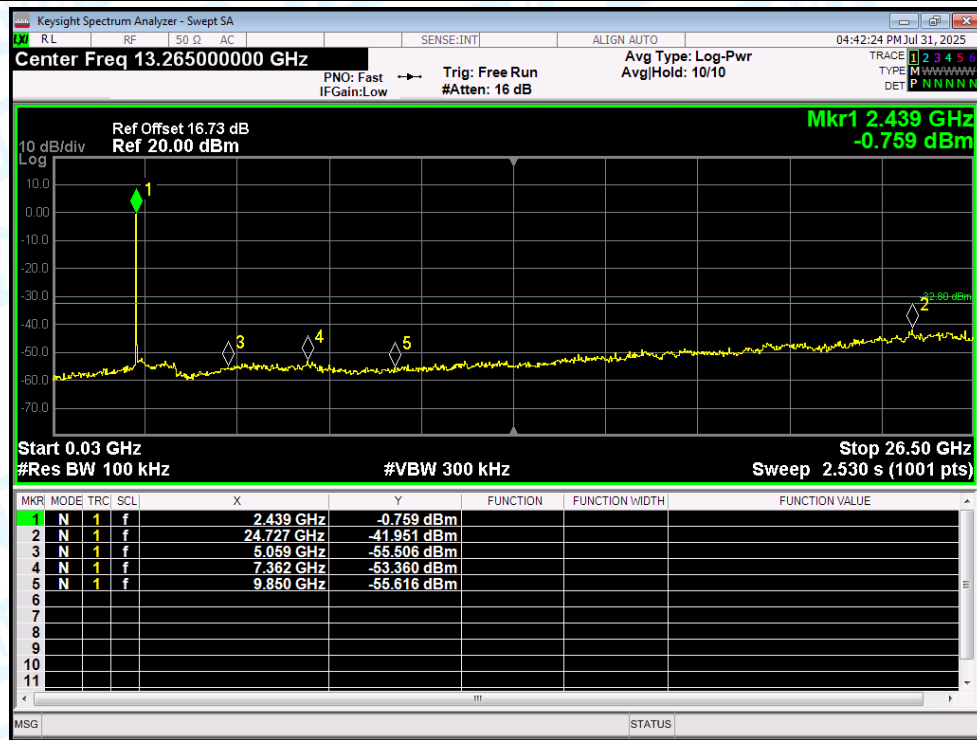
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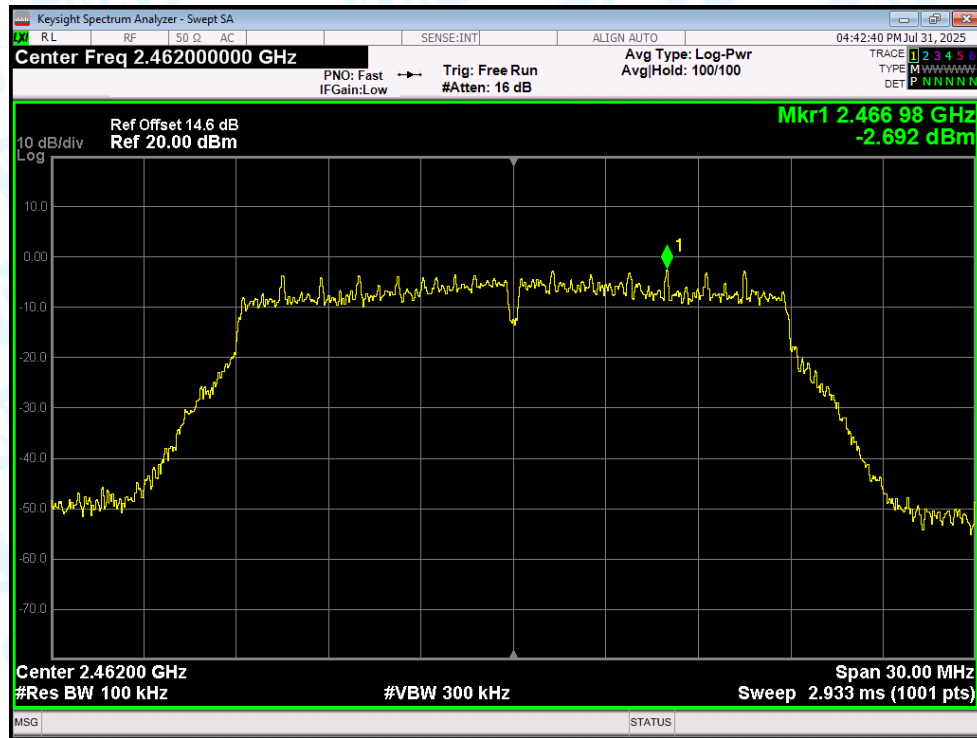
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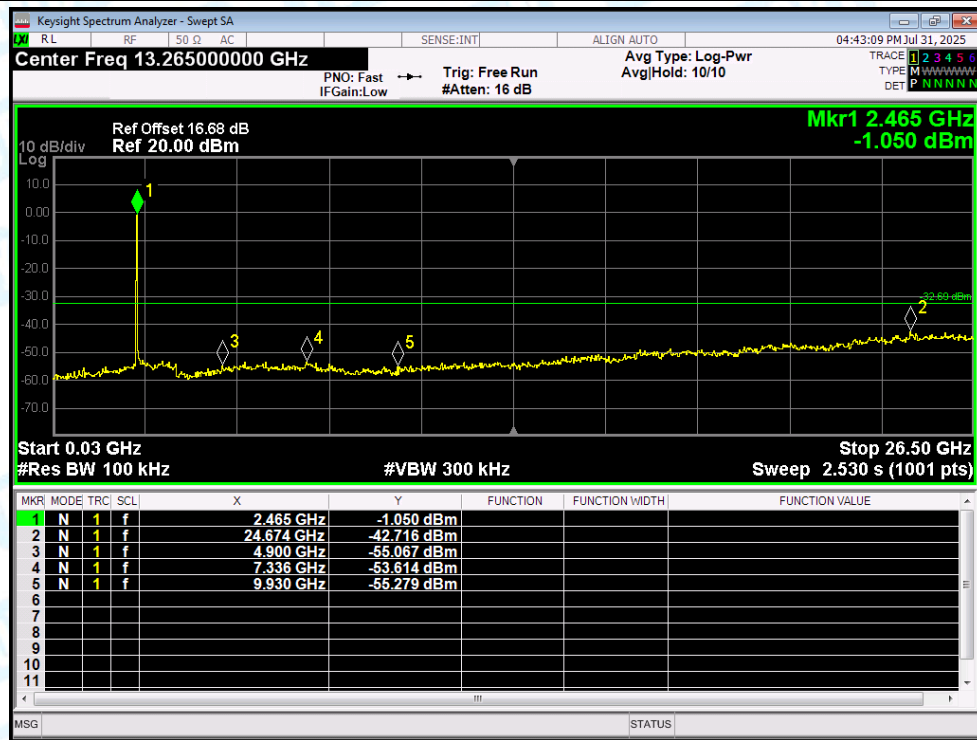
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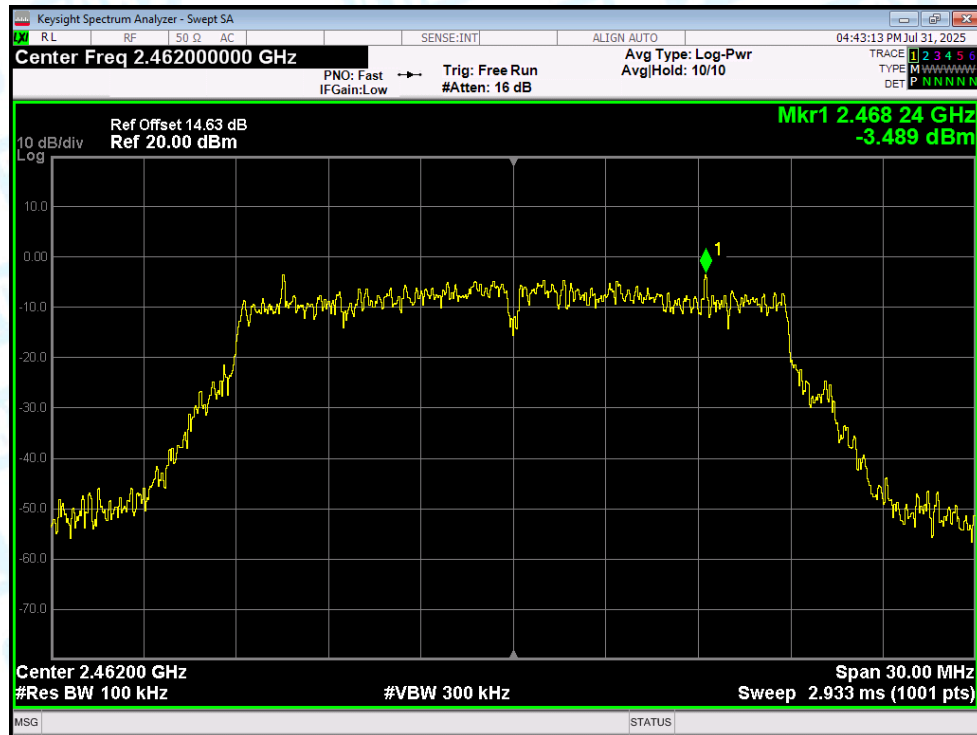
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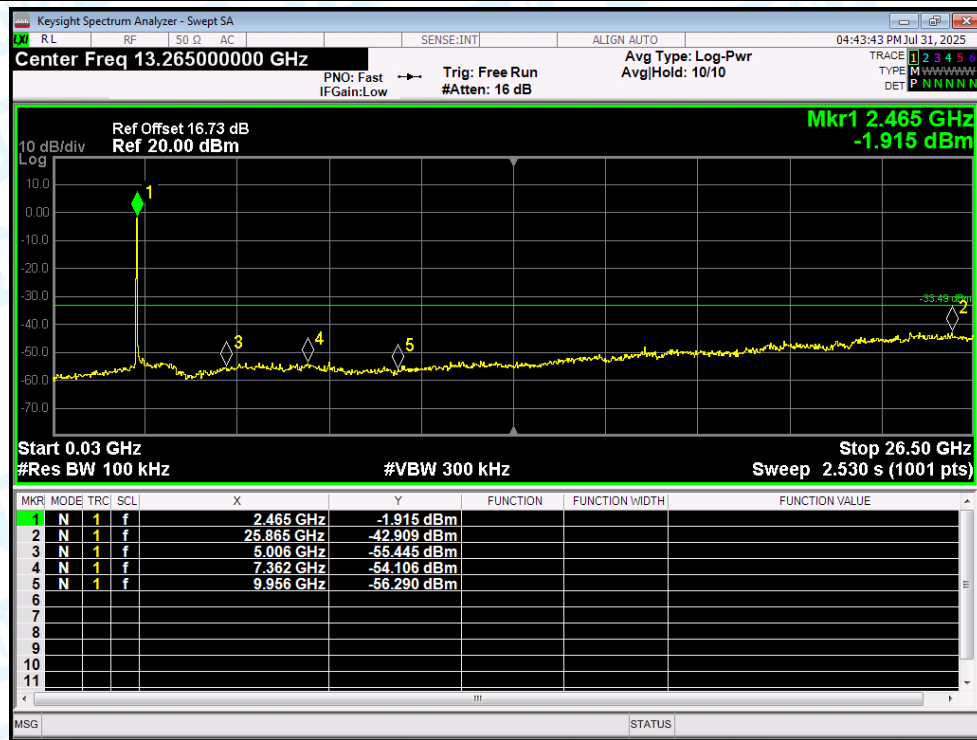
Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Emission



Tx. Spurious NVNT n(HT20) 2462MHz Ant2 Ref



Tx. Spurious NVNT n(HT20) 2462MHz Ant2 Emission

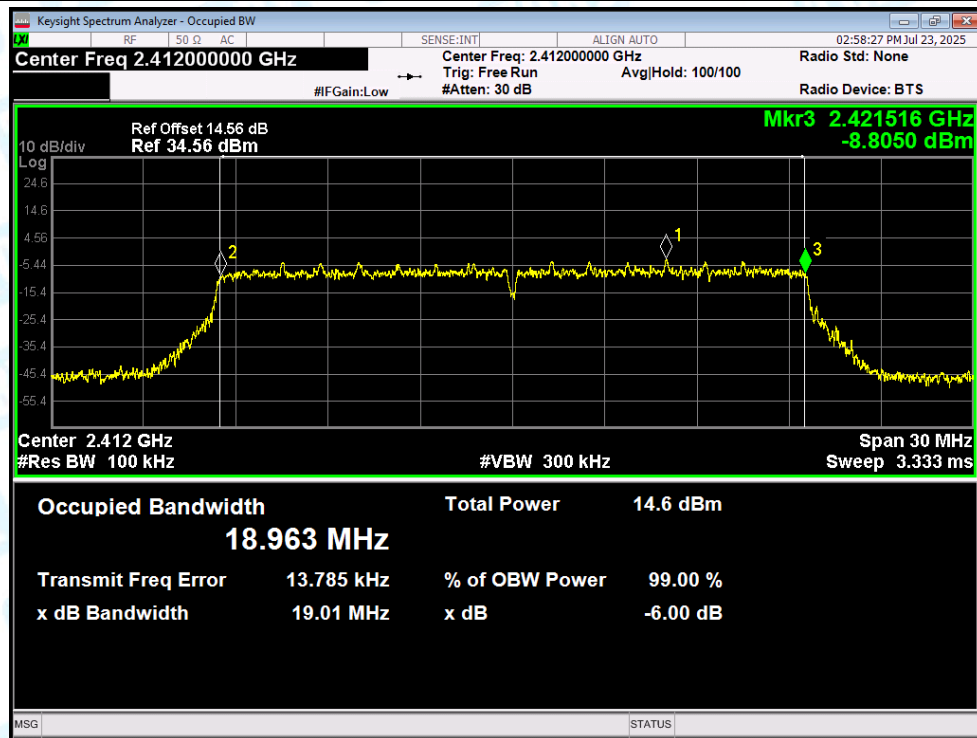


5. -6dB Bandwidth

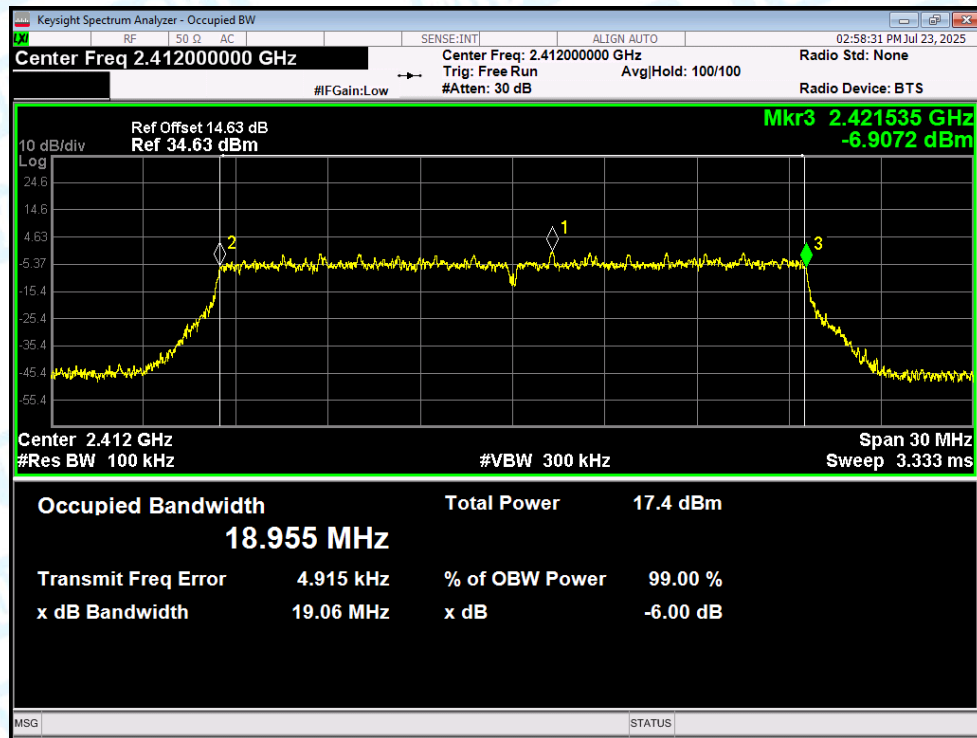
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	ax(HE20)	2412	Ant1	19.01	0.5	Pass
NVNT	ax(HE20)	2412	Ant2	19.06	0.5	Pass
NVNT	ax(HE20)	2437	Ant1	19.09	0.5	Pass
NVNT	ax(HE20)	2437	Ant2	18.97	0.5	Pass
NVNT	ax(HE20)	2462	Ant1	19.05	0.5	Pass
NVNT	ax(HE20)	2462	Ant2	19.07	0.5	Pass
NVNT	b	2412	Ant1	7.01	0.5	Pass
NVNT	b	2437	Ant1	7.58	0.5	Pass
NVNT	b	2462	Ant1	7.58	0.5	Pass
NVNT	b	2412	Ant2	7.56	0.5	Pass
NVNT	b	2437	Ant2	7.09	0.5	Pass
NVNT	b	2462	Ant2	7.06	0.5	Pass
NVNT	g	2412	Ant1	16.33	0.5	Pass
NVNT	g	2437	Ant1	16.32	0.5	Pass
NVNT	g	2462	Ant1	16.35	0.5	Pass
NVNT	g	2412	Ant2	16.38	0.5	Pass
NVNT	g	2437	Ant2	16.34	0.5	Pass
NVNT	g	2462	Ant2	16.29	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.3	0.5	Pass
NVNT	n(HT20)	2412	Ant2	17.56	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.59	0.5	Pass
NVNT	n(HT20)	2437	Ant2	17.56	0.5	Pass
NVNT	n(HT20)	2462	Ant1	17.56	0.5	Pass
NVNT	n(HT20)	2462	Ant2	17.18	0.5	Pass

Test Graphs

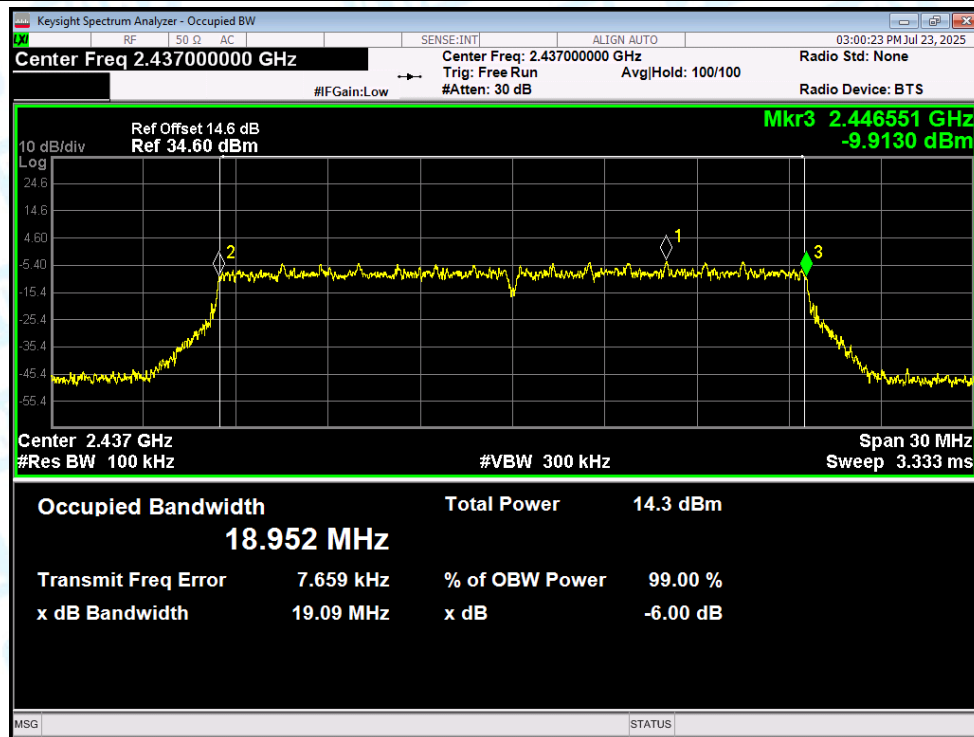
-6dB Bandwidth NVNT ax(HE20) 2412MHz Ant1



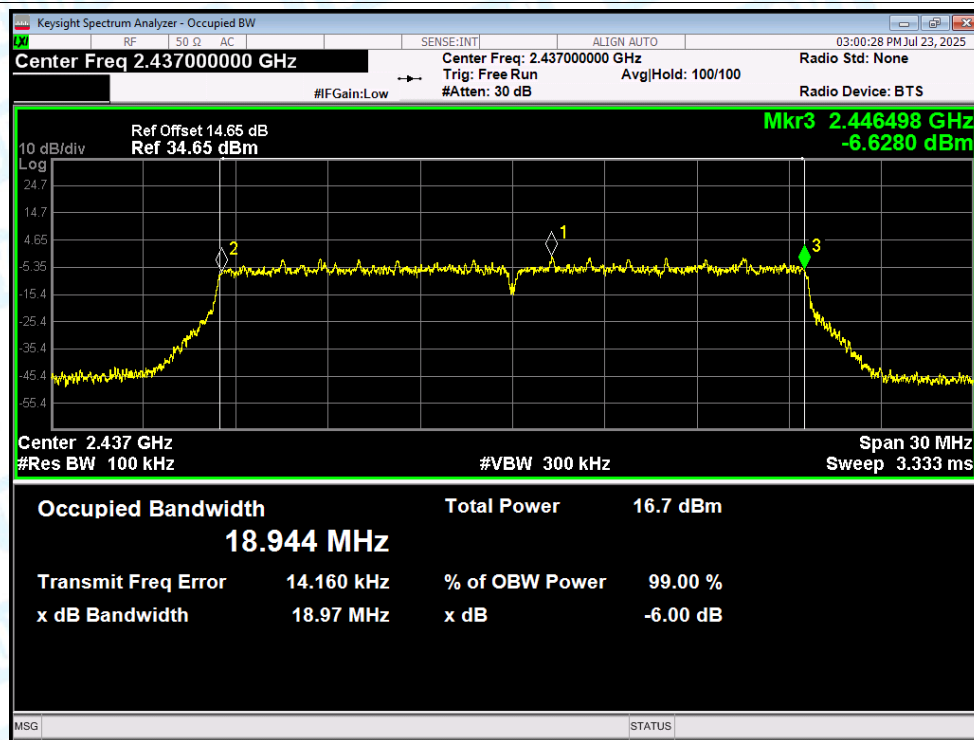
-6dB Bandwidth NVNT ax(HE20) 2412MHz Ant2



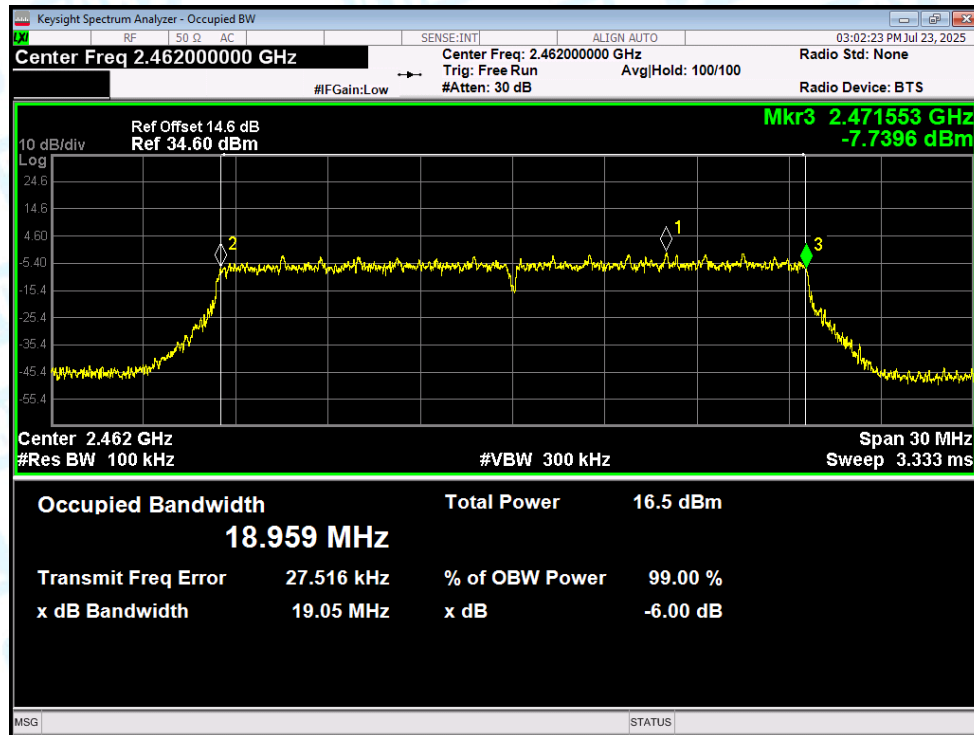
-6dB Bandwidth NVNT ax(HE20) 2437MHz Ant1



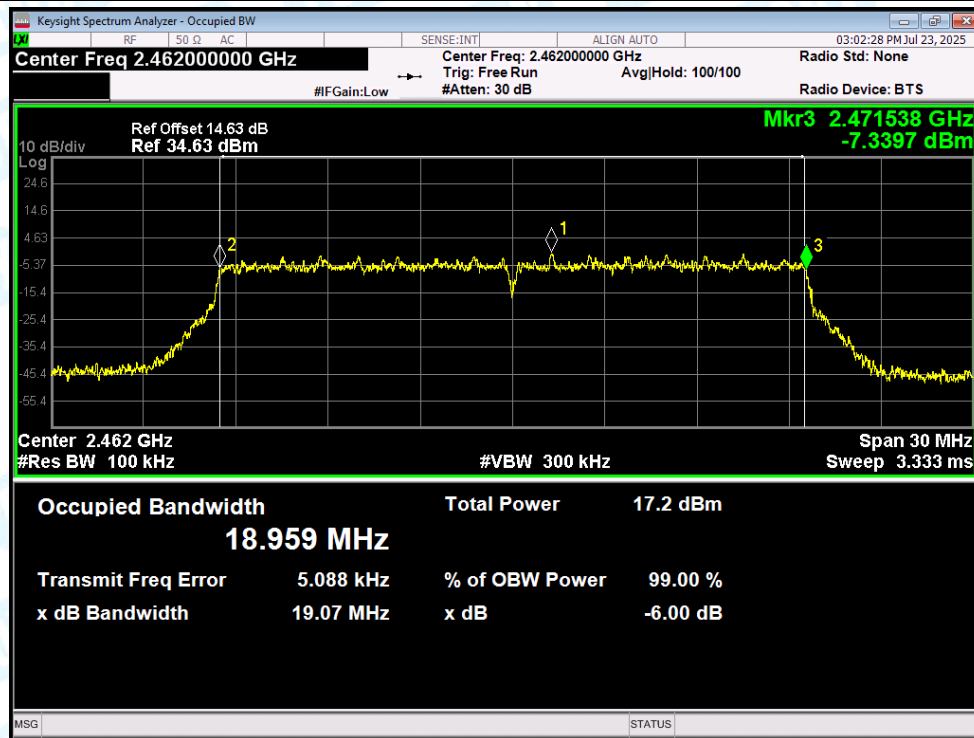
-6dB Bandwidth NVNT ax(HE20) 2437MHz Ant2



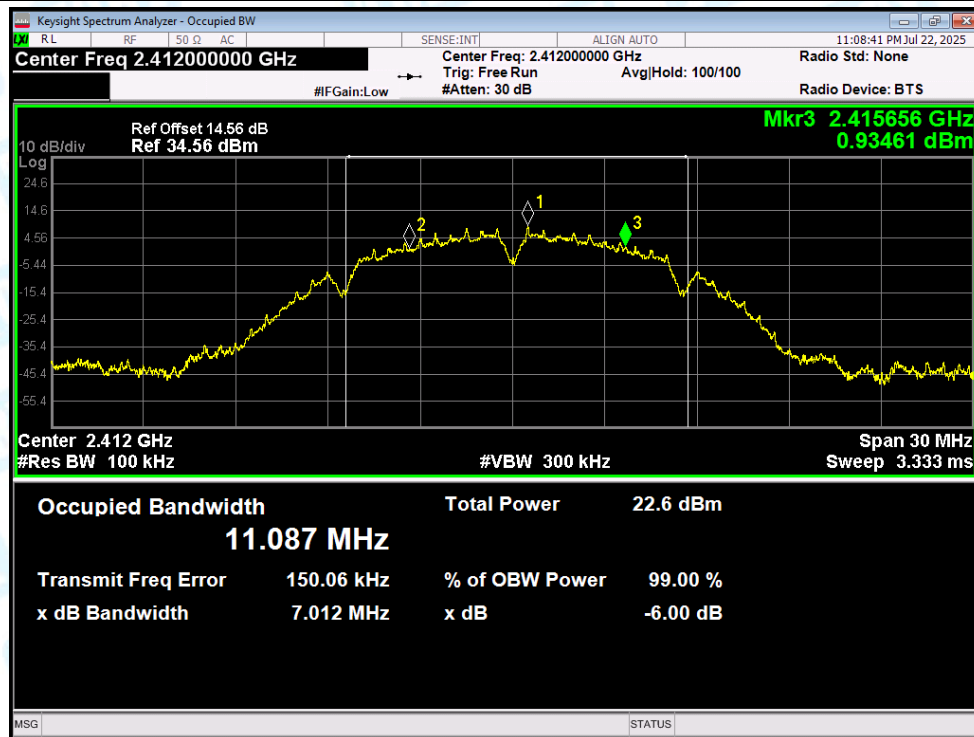
-6dB Bandwidth NVNT ax(HE20) 2462MHz Ant1



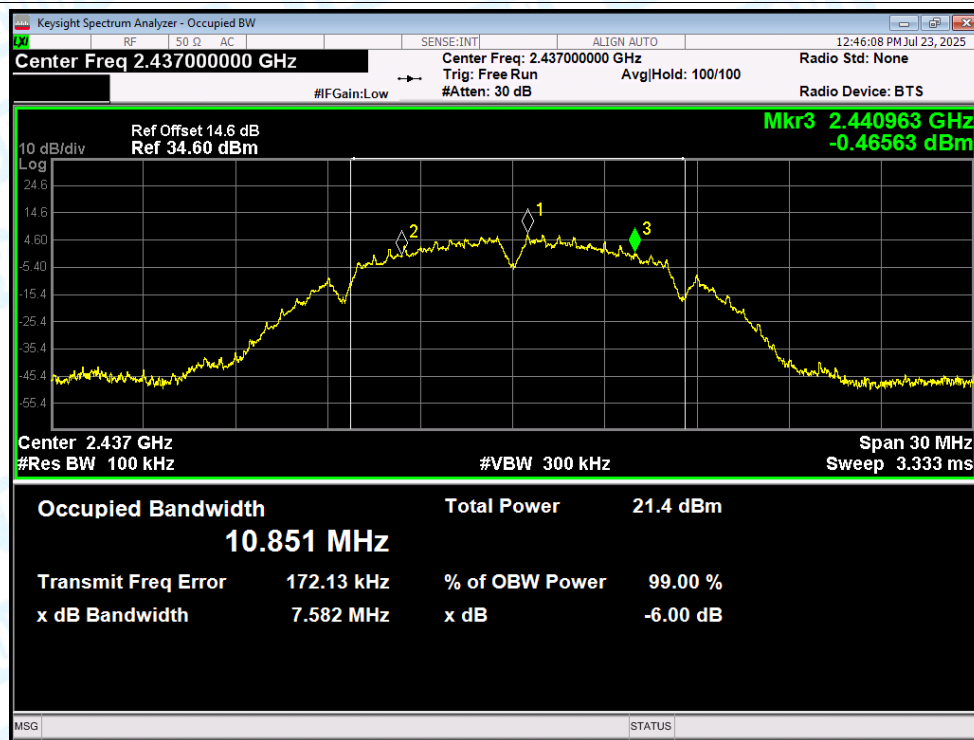
-6dB Bandwidth NVNT ax(HE20) 2462MHz Ant2



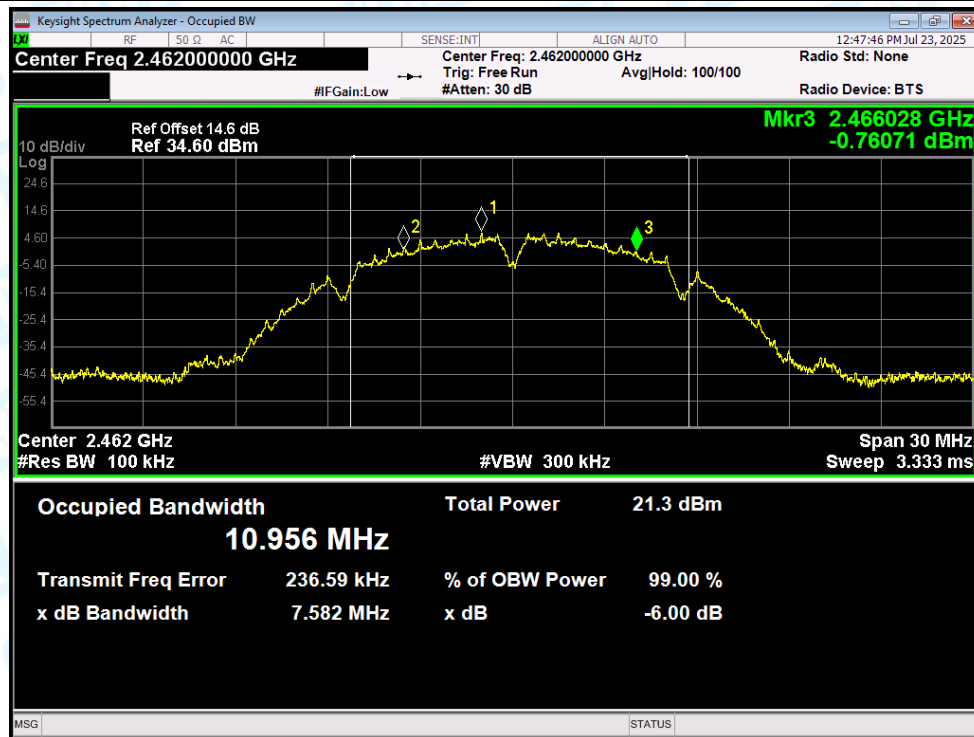
-6dB Bandwidth NVNT b 2412MHz Ant1



-6dB Bandwidth NVNT b 2437MHz Ant1



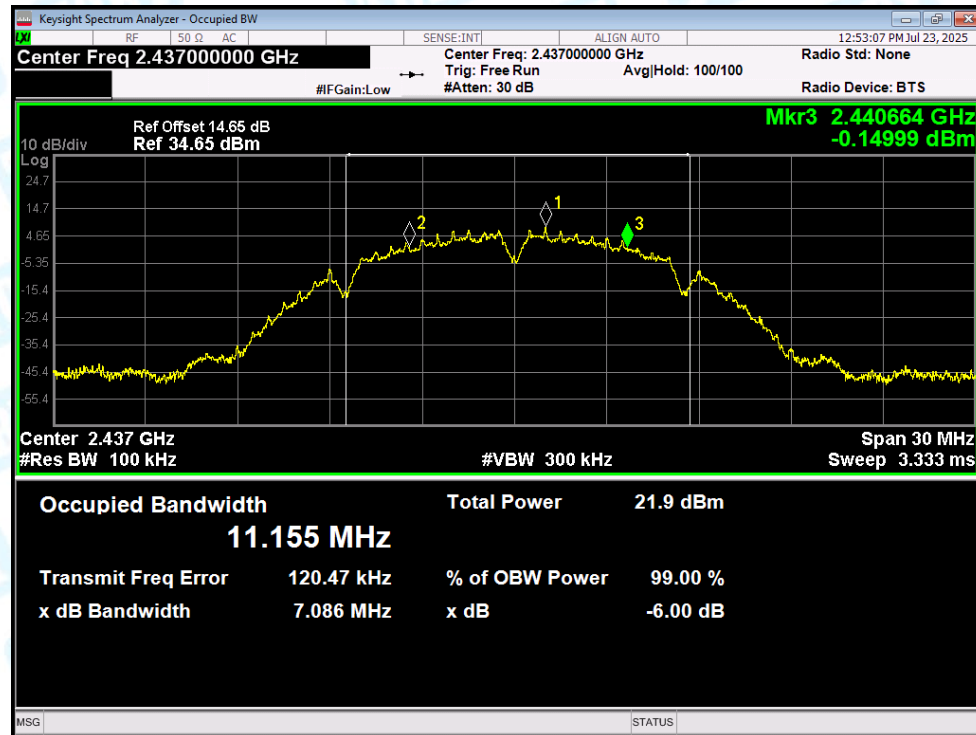
-6dB Bandwidth NVNT b 2462MHz Ant1



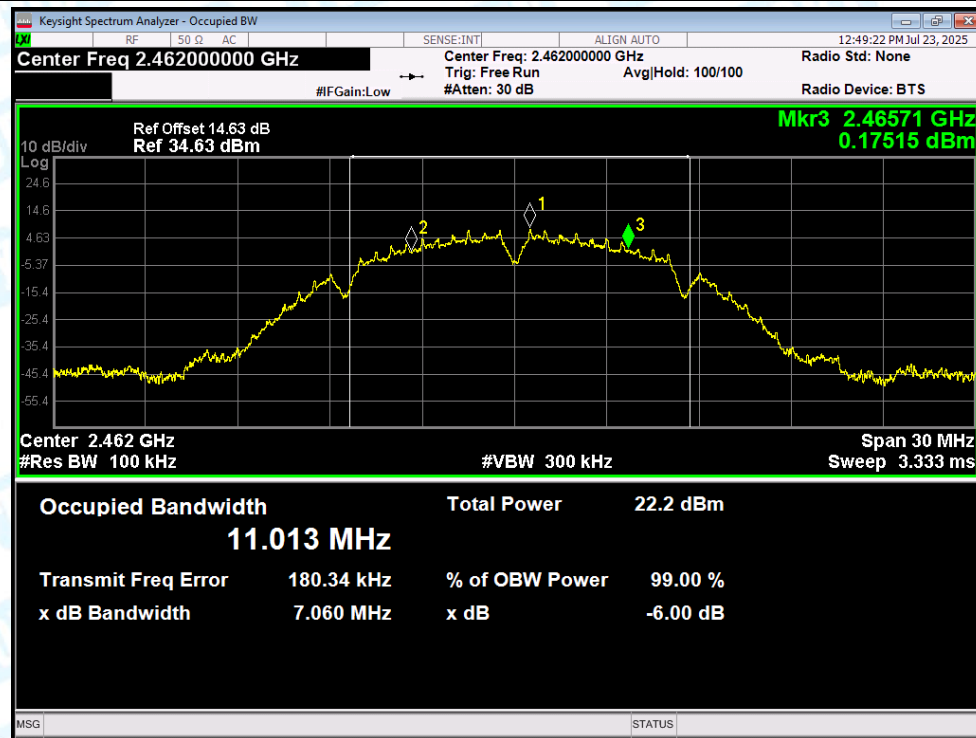
-6dB Bandwidth NVNT b 2412MHz Ant2



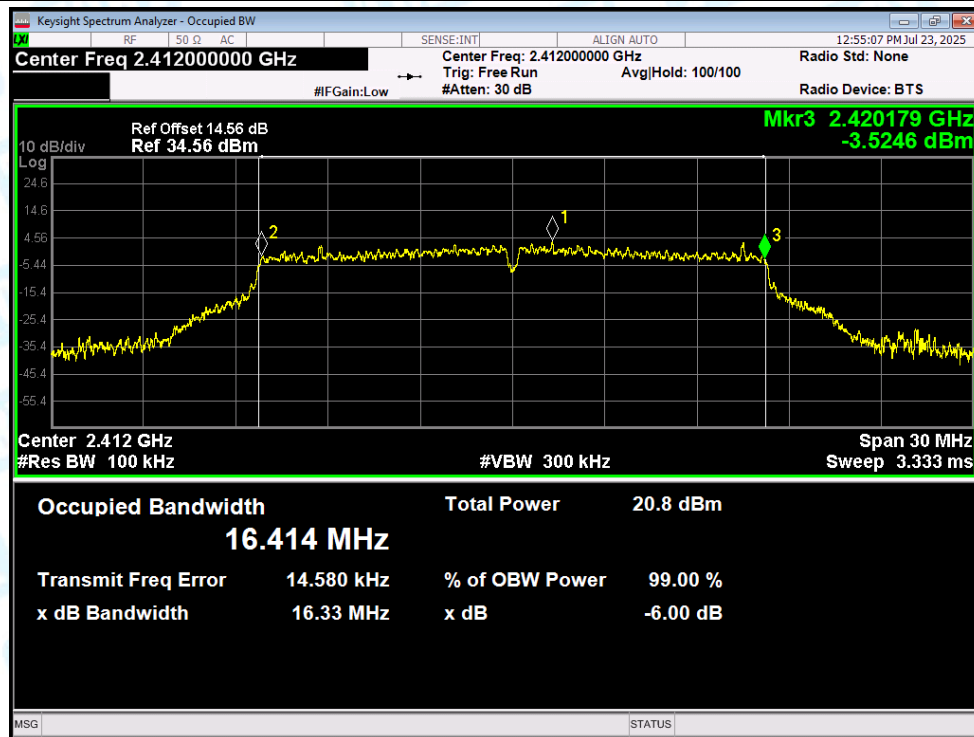
-6dB Bandwidth NVNT b 2437MHz Ant2



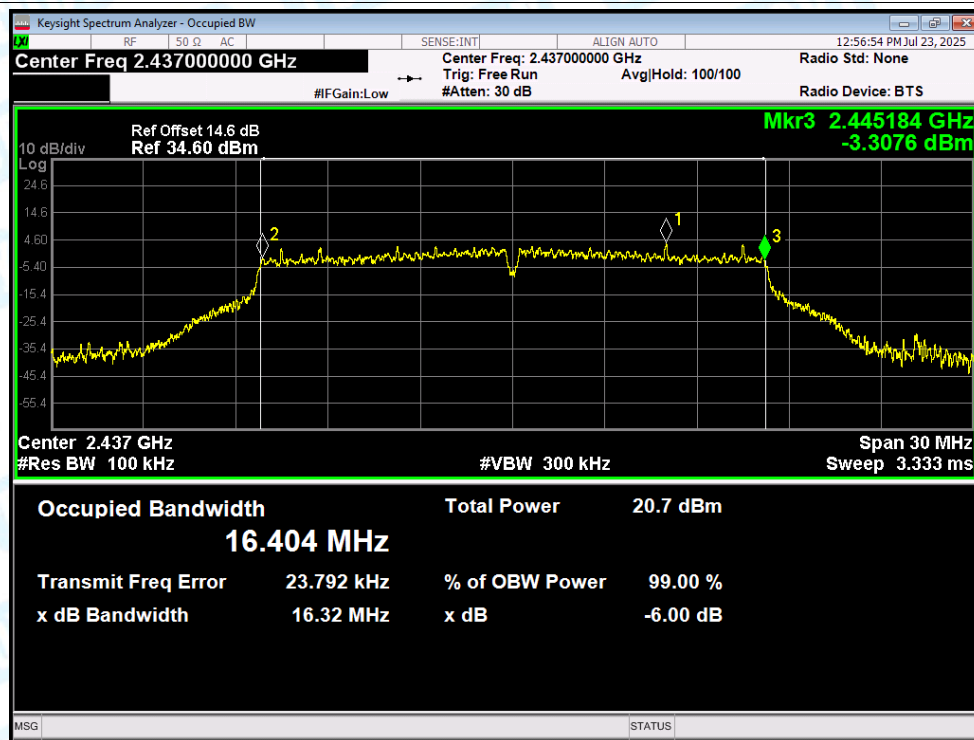
-6dB Bandwidth NVNT b 2462MHz Ant2



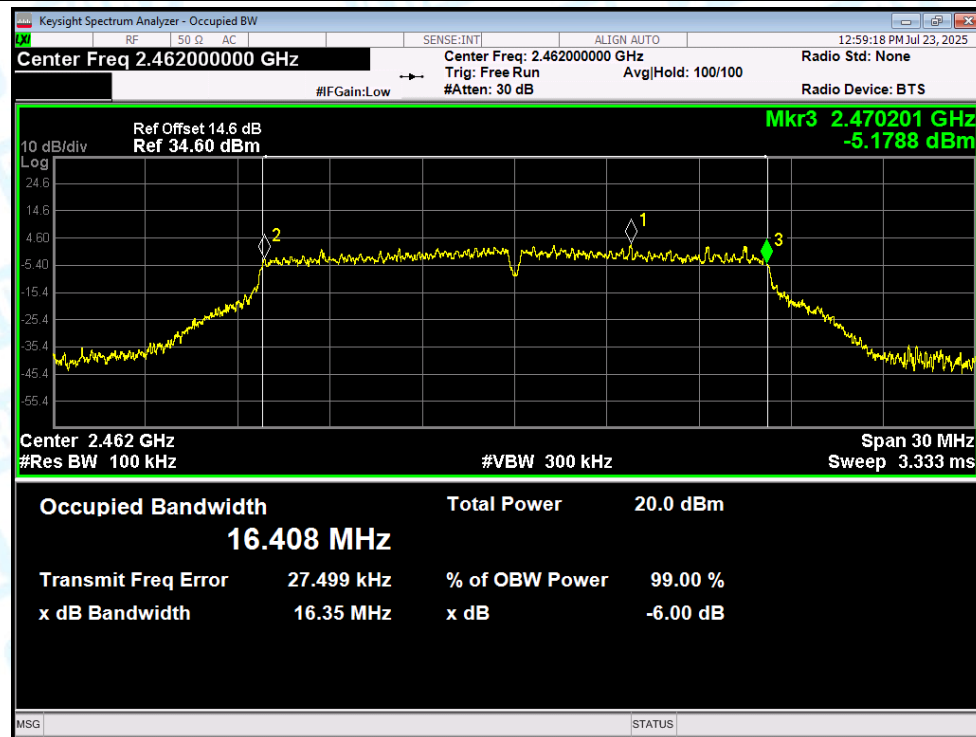
-6dB Bandwidth NVNT g 2412MHz Ant1



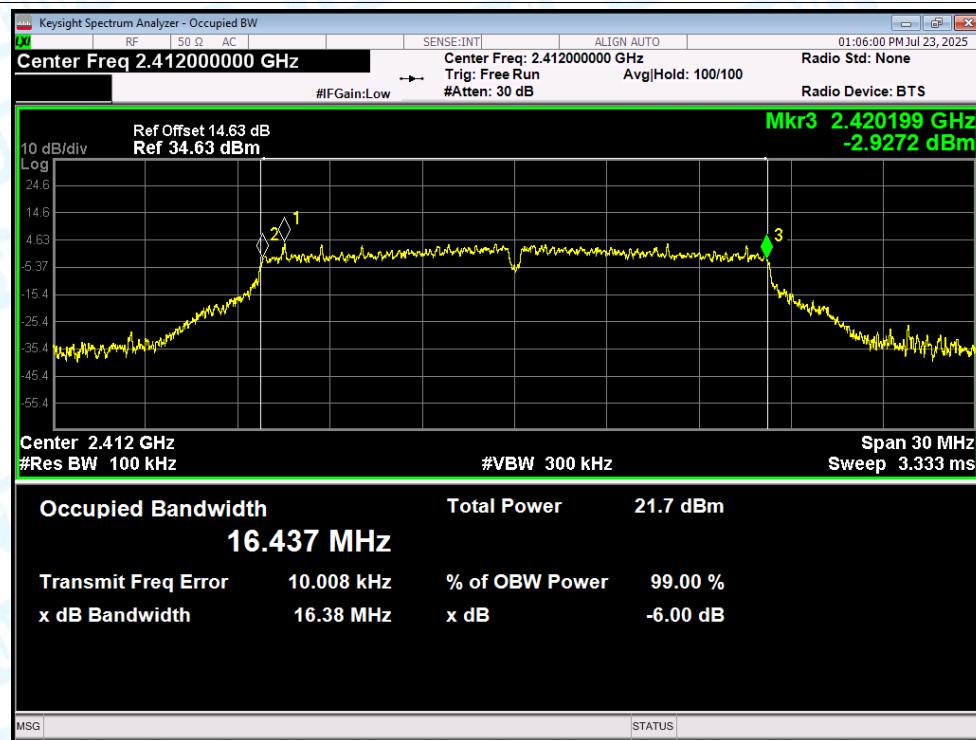
-6dB Bandwidth NVNT g 2437MHz Ant1



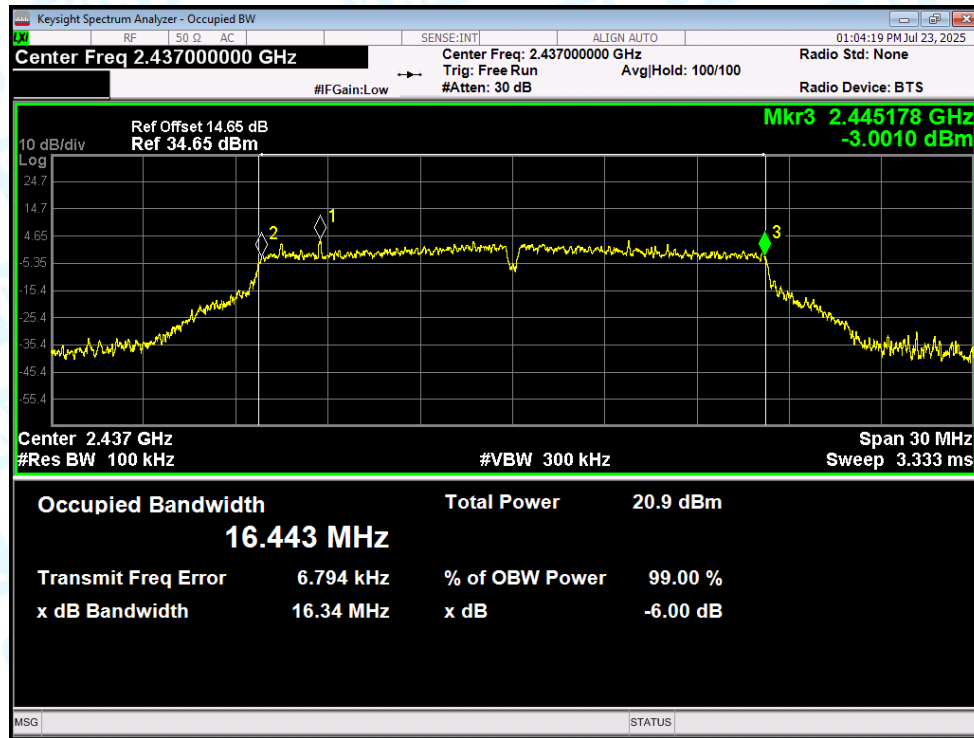
-6dB Bandwidth NVNT g 2462MHz Ant1



-6dB Bandwidth NVNT g 2412MHz Ant2



-6dB Bandwidth NVNT g 2437MHz Ant2



-6dB Bandwidth NVNT g 2462MHz Ant2

