

RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	SMART DENTAL CAMERA
Test Model:	YS03
Sample ID:	202401-0347-1-2#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	Jolin Lee
Note: For a more detailed features description, please refer to the report TBR-C-202401-0347-6 The report only show the worst case data.	

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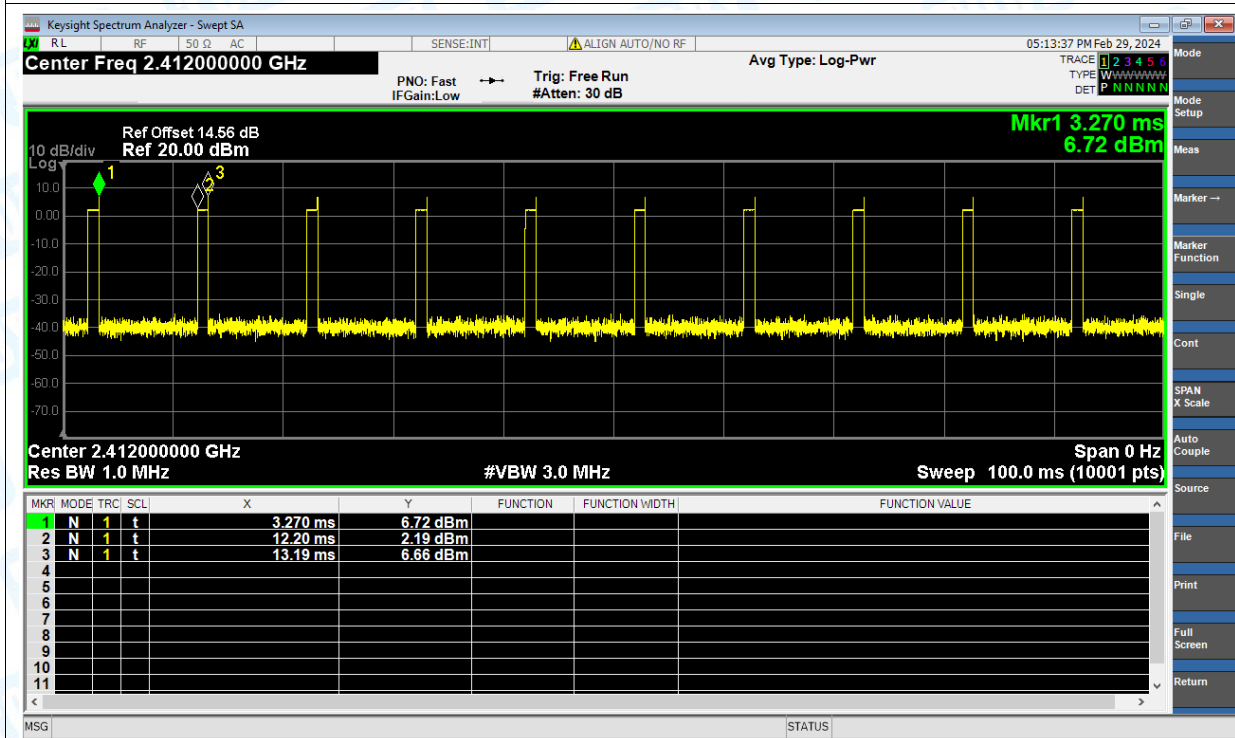
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1. Duty Cycle

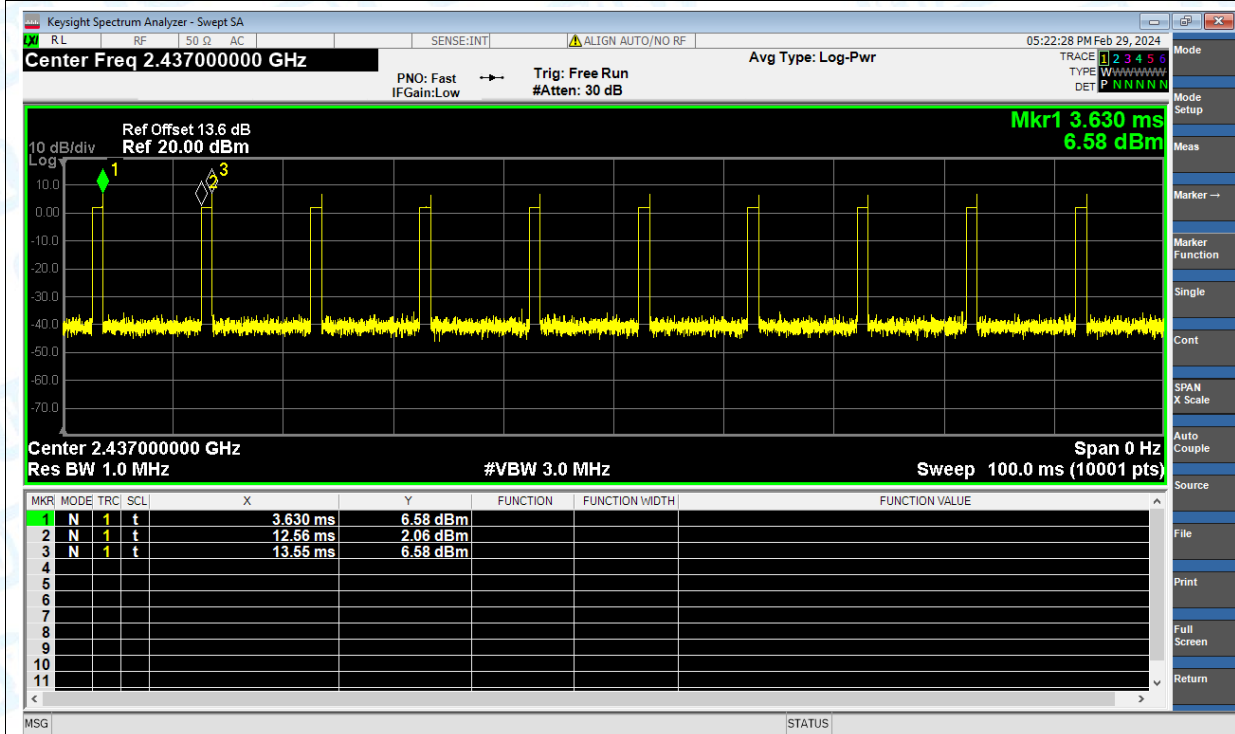
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	9.98	10.01	1.01
NVNT	b	2437	Ant1	9.98	10.01	1.01
NVNT	b	2462	Ant1	9.98	10.01	1.01
NVNT	g	2412	Ant1	10.24	9.9	5.88
NVNT	g	2437	Ant1	9.7	10.13	6.25
NVNT	g	2462	Ant1	9.64	10.16	6.25
NVNT	n(HT20)	2412	Ant1	9.47	10.24	6.25
NVNT	n(HT20)	2437	Ant1	9.47	10.24	6.25
NVNT	n(HT20)	2462	Ant1	9.47	10.24	6.25
NVNT	n(HT40)	2422	Ant1	10.38	9.84	9.09
NVNT	n(HT40)	2437	Ant1	9.43	10.25	10
NVNT	n(HT40)	2452	Ant1	9.52	10.21	10

Test Graphs

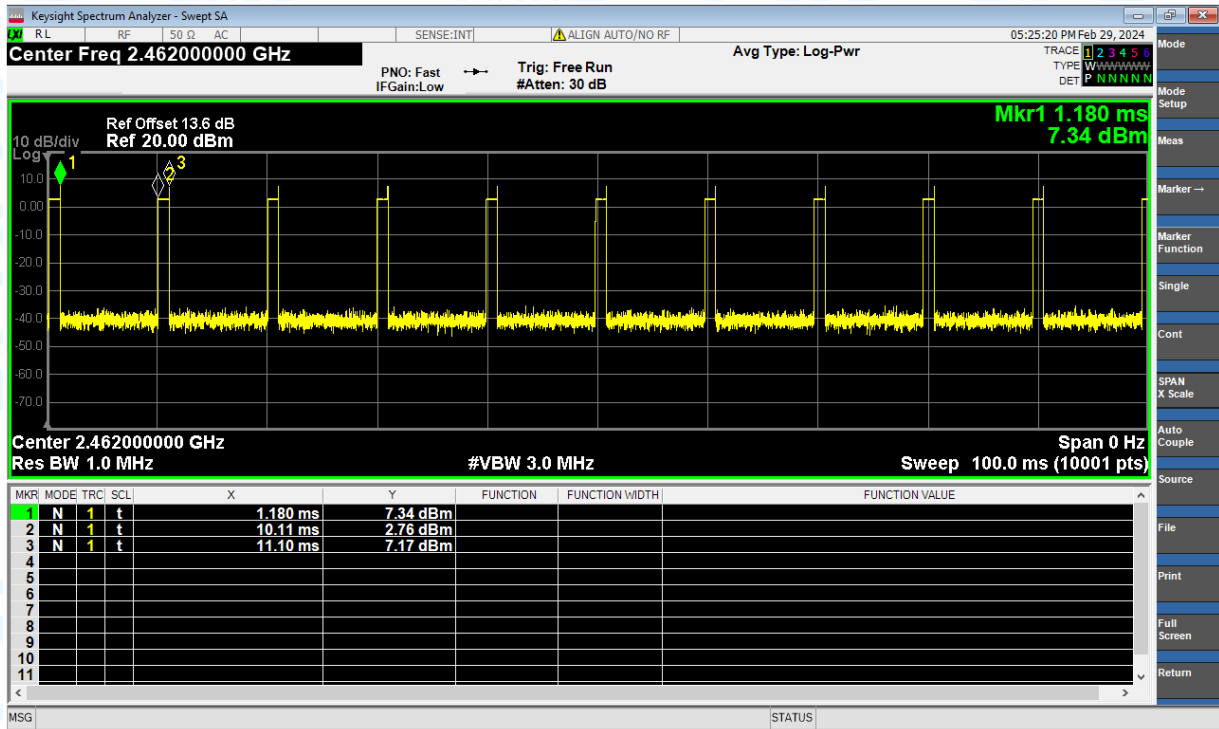
Duty Cycle NVNT b 2412MHz Ant1



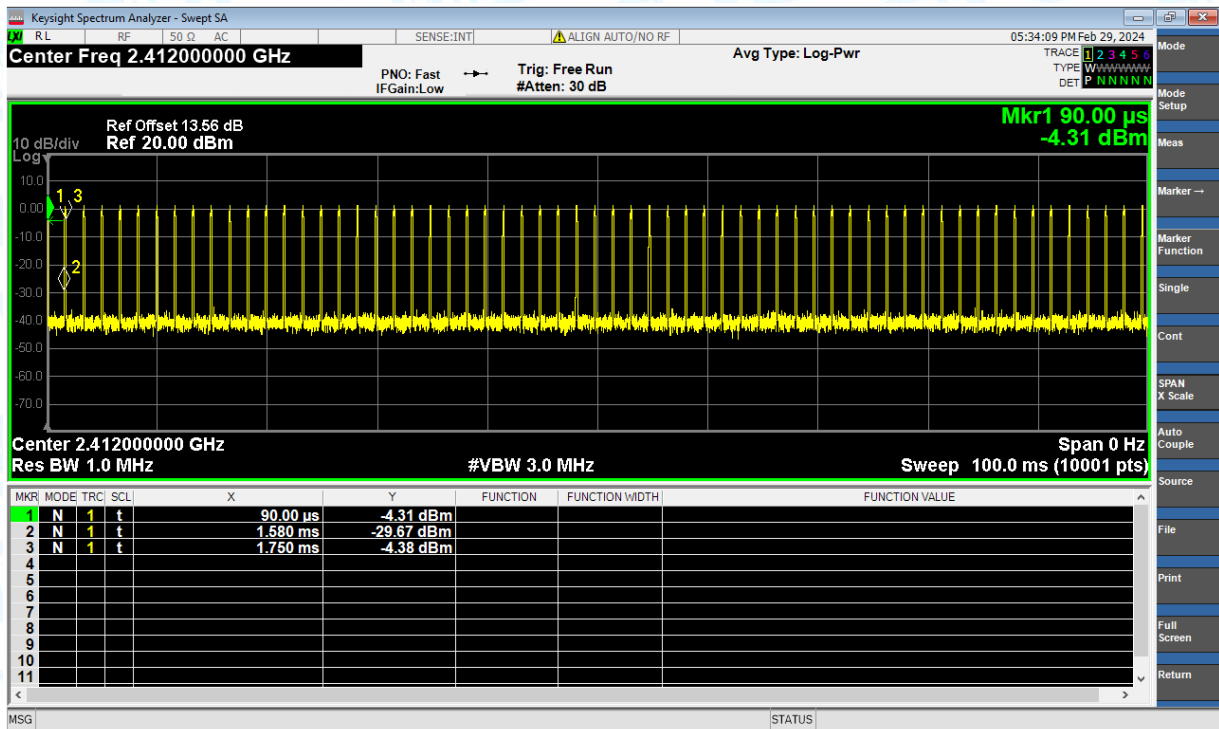
Duty Cycle NVNT b 2437MHz Ant1



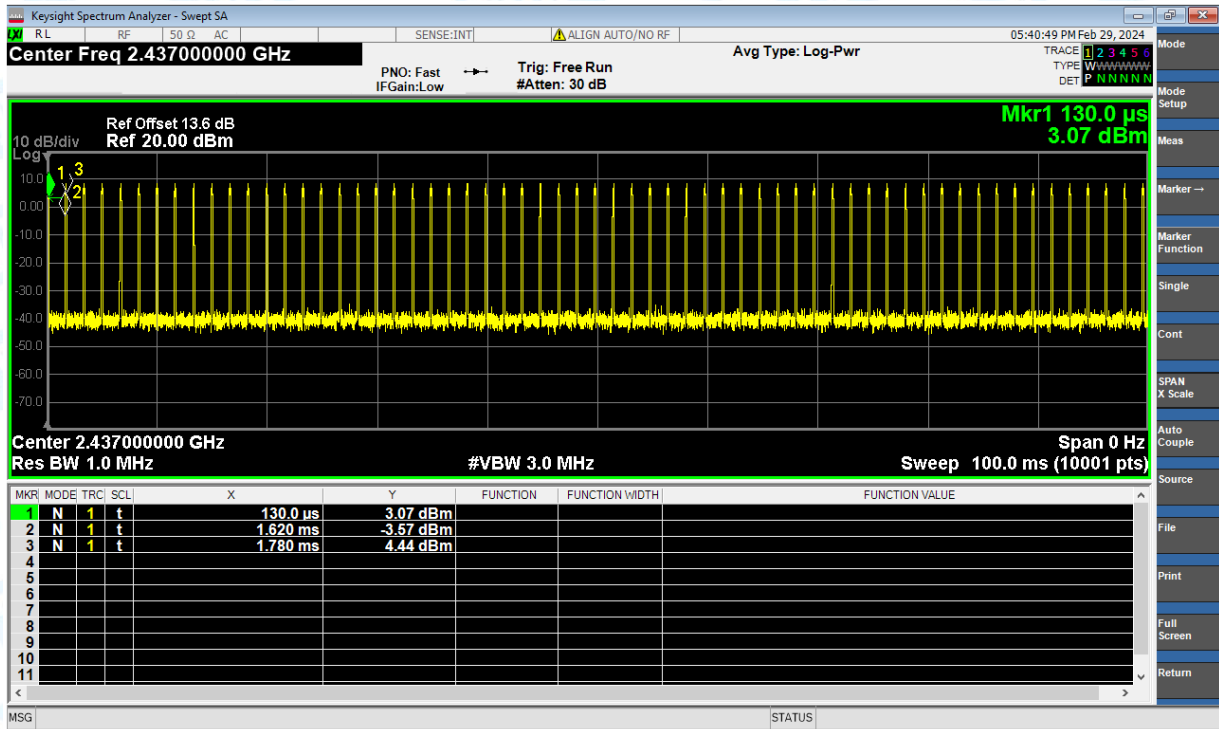
Duty Cycle NVNT b 2462MHz Ant1



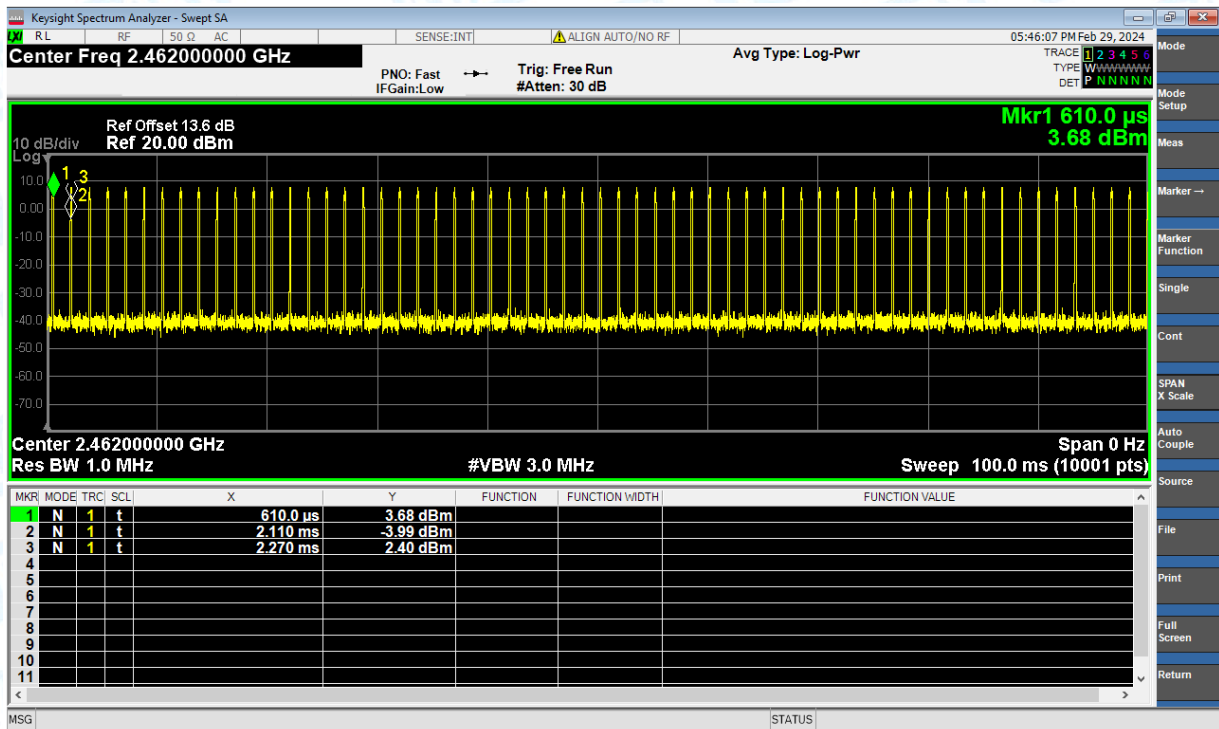
Duty Cycle NVNT g 2412MHz Ant1



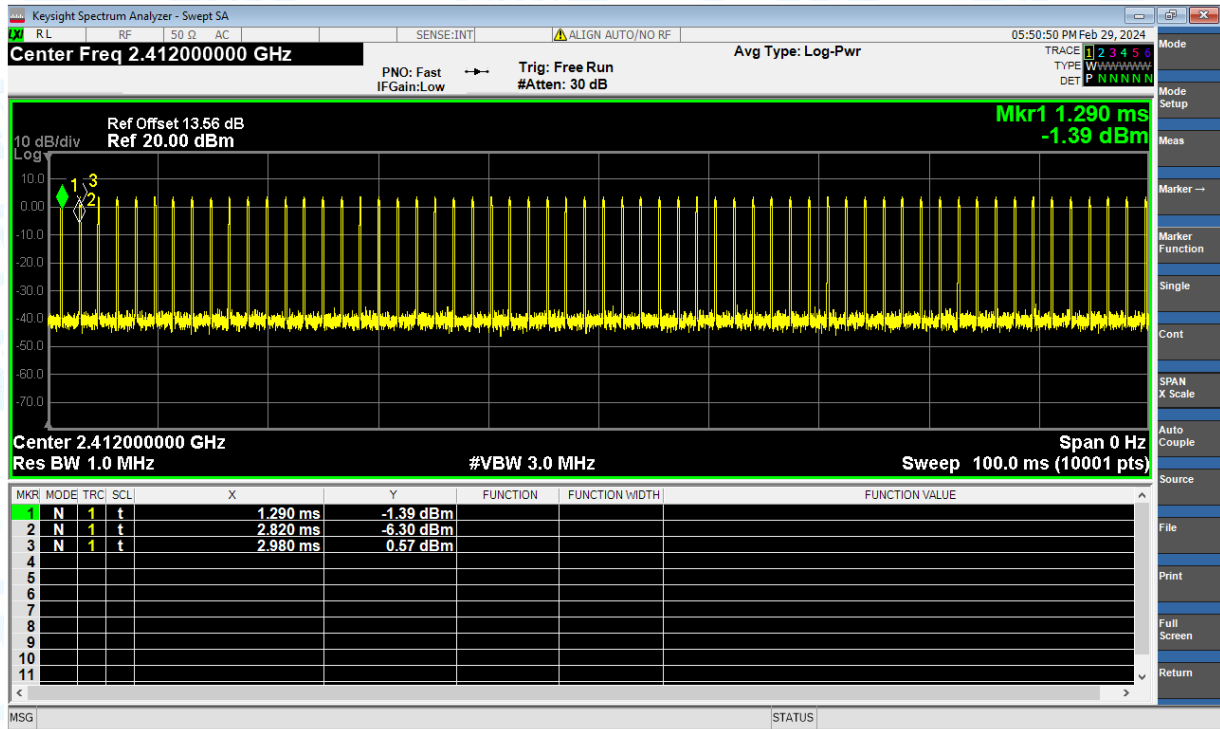
Duty Cycle NVNT g 2437MHz Ant1



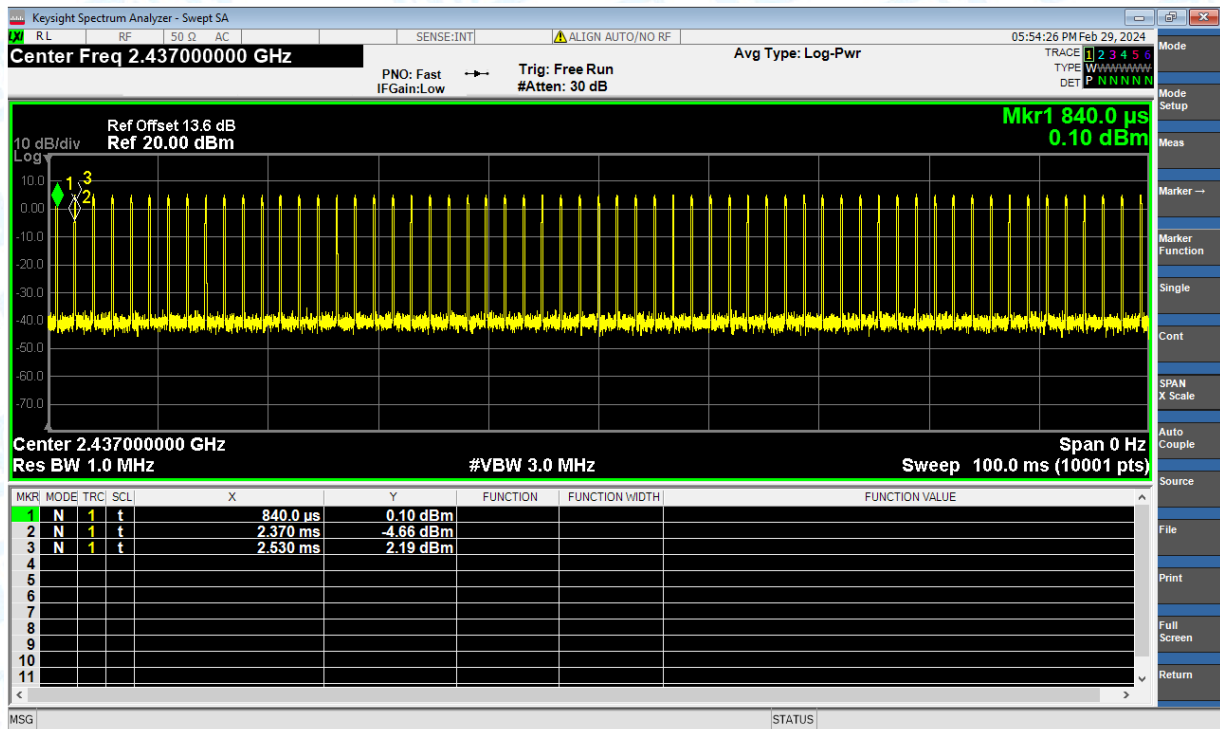
Duty Cycle NVNT g 2462MHz Ant1



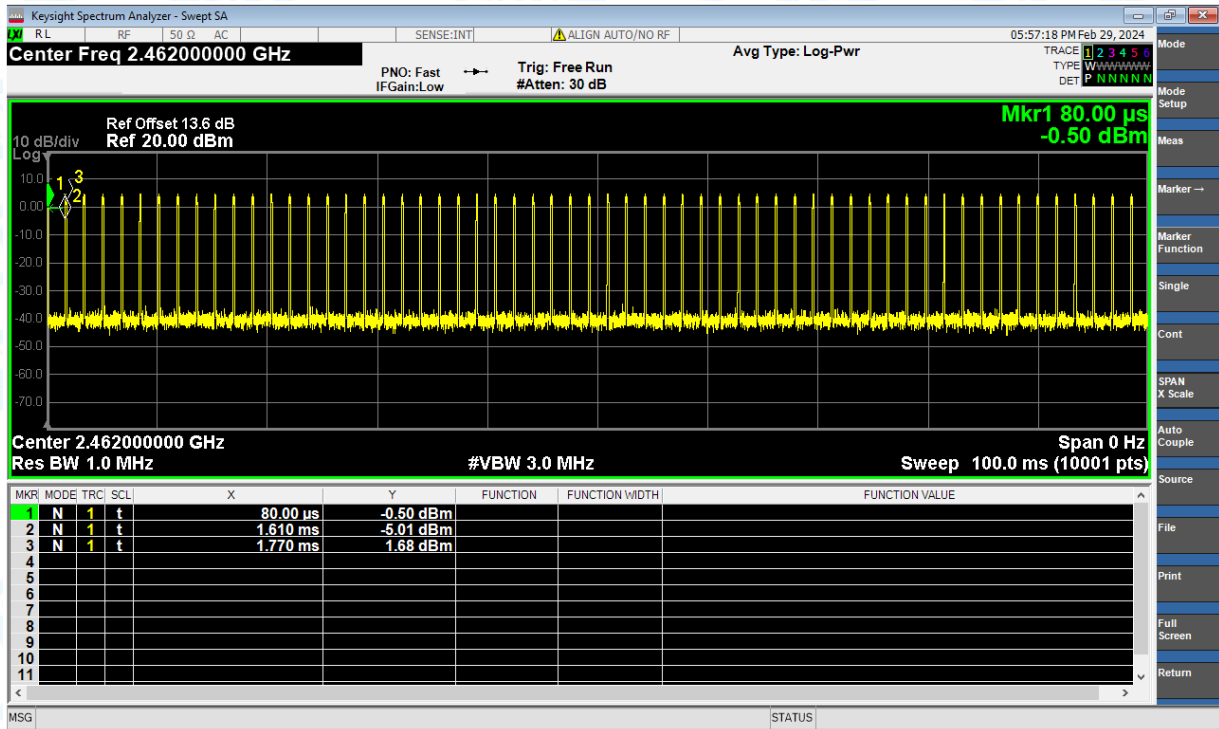
Duty Cycle NVNT n(HT20) 2412MHz Ant1



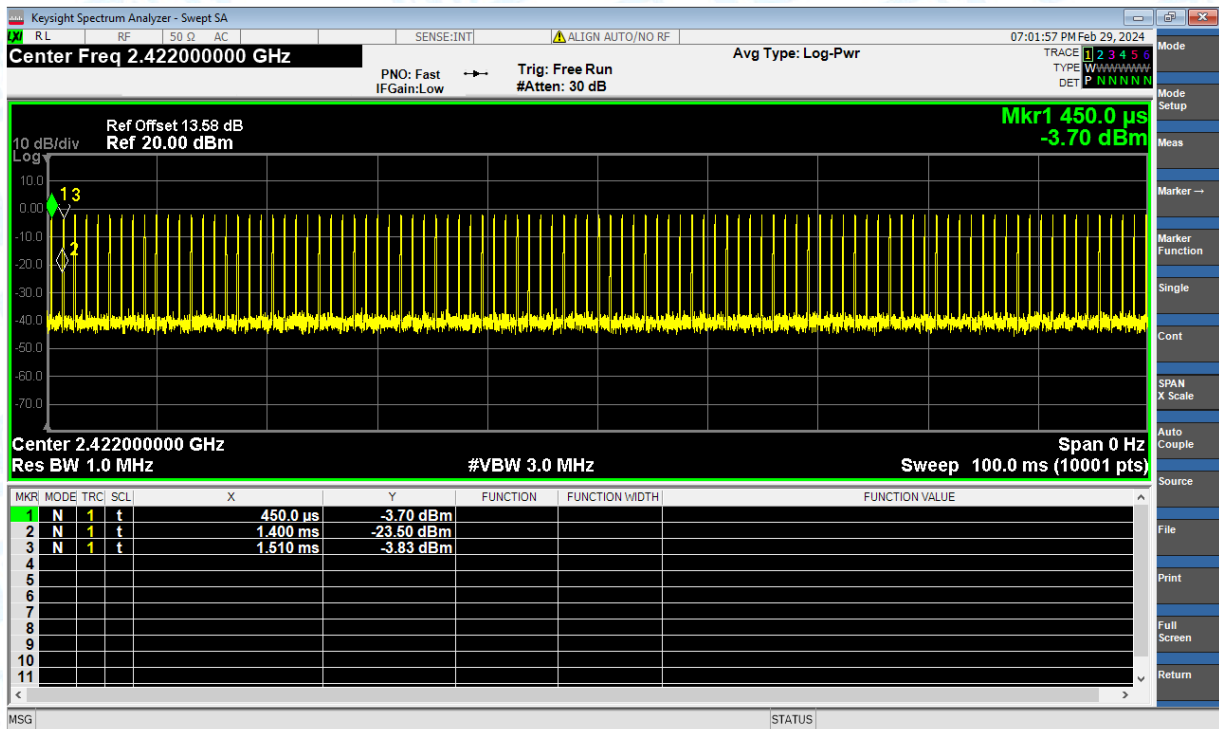
Duty Cycle NVNT n(HT20) 2437MHz Ant1



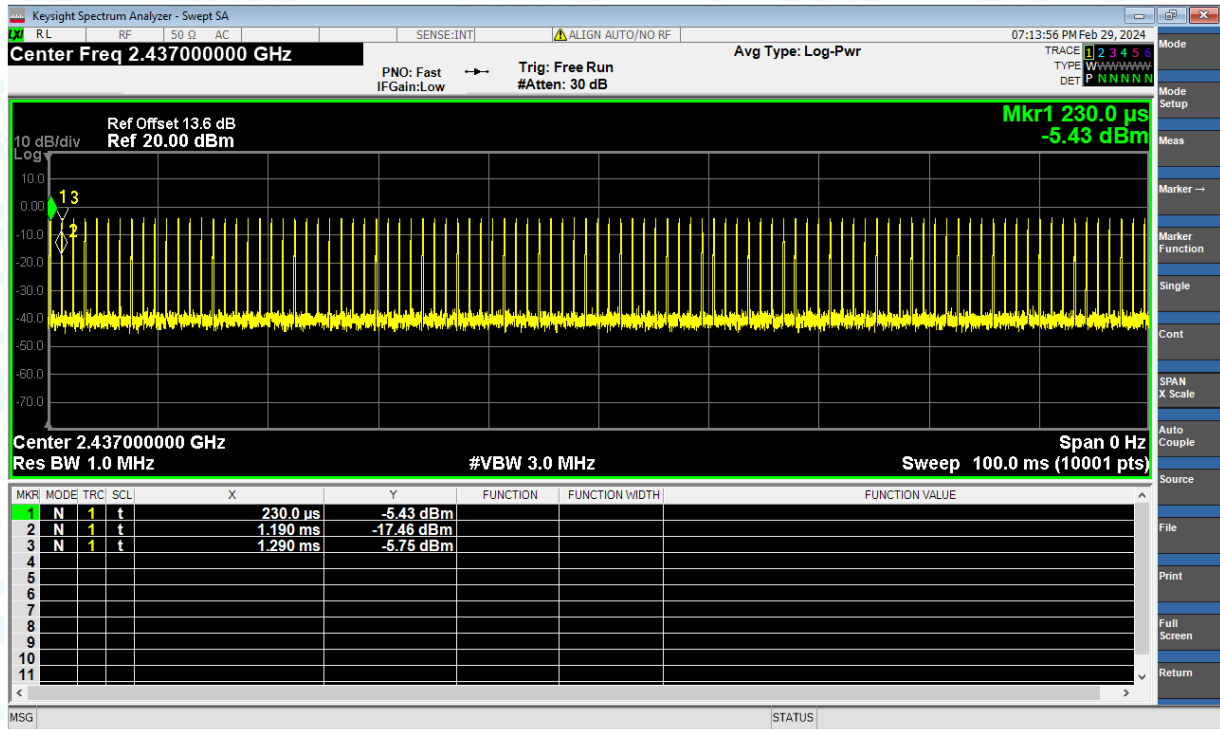
Duty Cycle NVNT n(HT20) 2462MHz Ant1



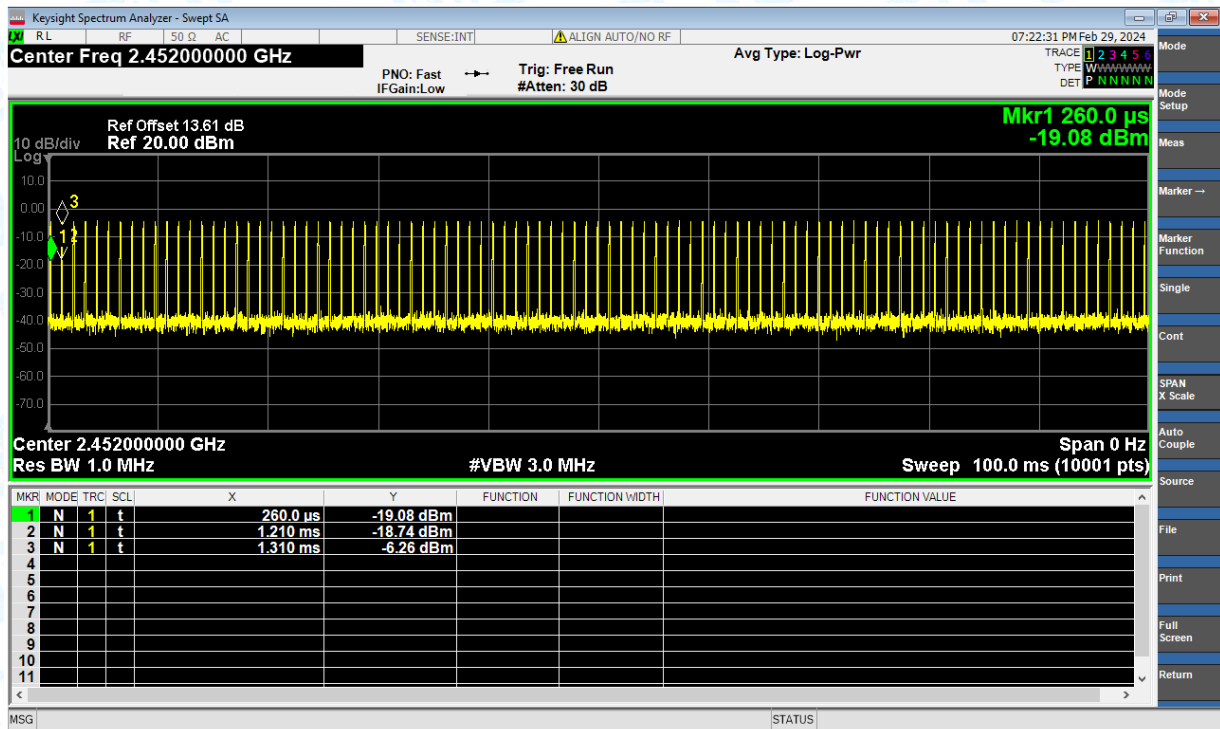
Duty Cycle NVNT n(HT40) 2422MHz Ant1



Duty Cycle NVNT n(HT40) 2437MHz Ant1



Duty Cycle NVNT n(HT40) 2452MHz Ant1



2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	8.322	30	Pass
NVNT	b	2437	Ant1	8.214	30	Pass
NVNT	b	2462	Ant1	7.664	30	Pass
NVNT	g	2412	Ant1	7.945	30	Pass
NVNT	g	2437	Ant1	8.235	30	Pass
NVNT	g	2462	Ant1	7.79	30	Pass
NVNT	n(HT20)	2412	Ant1	8.046	30	Pass
NVNT	n(HT20)	2437	Ant1	8.044	30	Pass
NVNT	n(HT20)	2462	Ant1	7.508	30	Pass
NVNT	n(HT40)	2422	Ant1	3.93	30	Pass
NVNT	n(HT40)	2437	Ant1	5.006	30	Pass
NVNT	n(HT40)	2452	Ant1	4.011	30	Pass

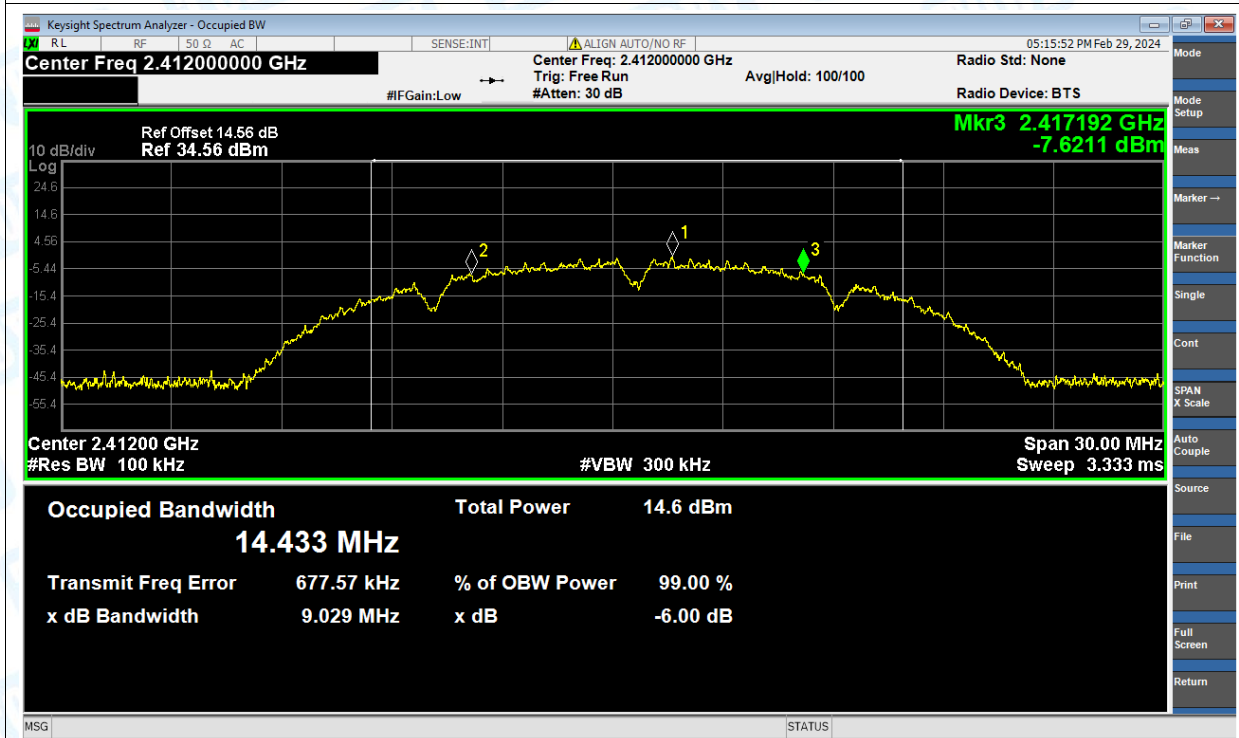
Note: The duty factor has been compensated into the result.

3. -6dB Bandwidth

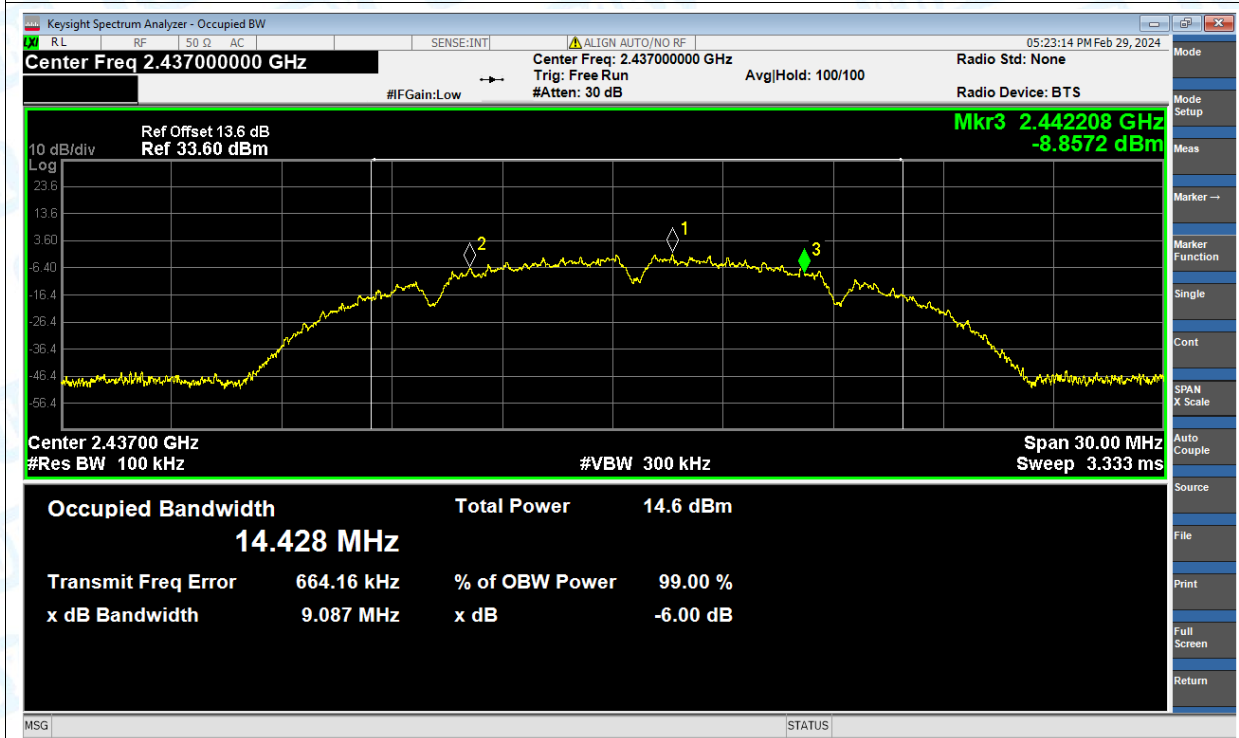
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	9.03	0.5	Pass
NVNT	b	2437	Ant1	9.09	0.5	Pass
NVNT	b	2462	Ant1	9.1	0.5	Pass
NVNT	g	2412	Ant1	12.57	0.5	Pass
NVNT	g	2437	Ant1	12.57	0.5	Pass
NVNT	g	2462	Ant1	13.8	0.5	Pass
NVNT	n(HT20)	2412	Ant1	10.1	0.5	Pass
NVNT	n(HT20)	2437	Ant1	12.58	0.5	Pass
NVNT	n(HT20)	2462	Ant1	11.34	0.5	Pass
NVNT	n(HT40)	2422	Ant1	31.32	0.5	Pass
NVNT	n(HT40)	2437	Ant1	31.32	0.5	Pass
NVNT	n(HT40)	2452	Ant1	33.8	0.5	Pass

Test Graphs

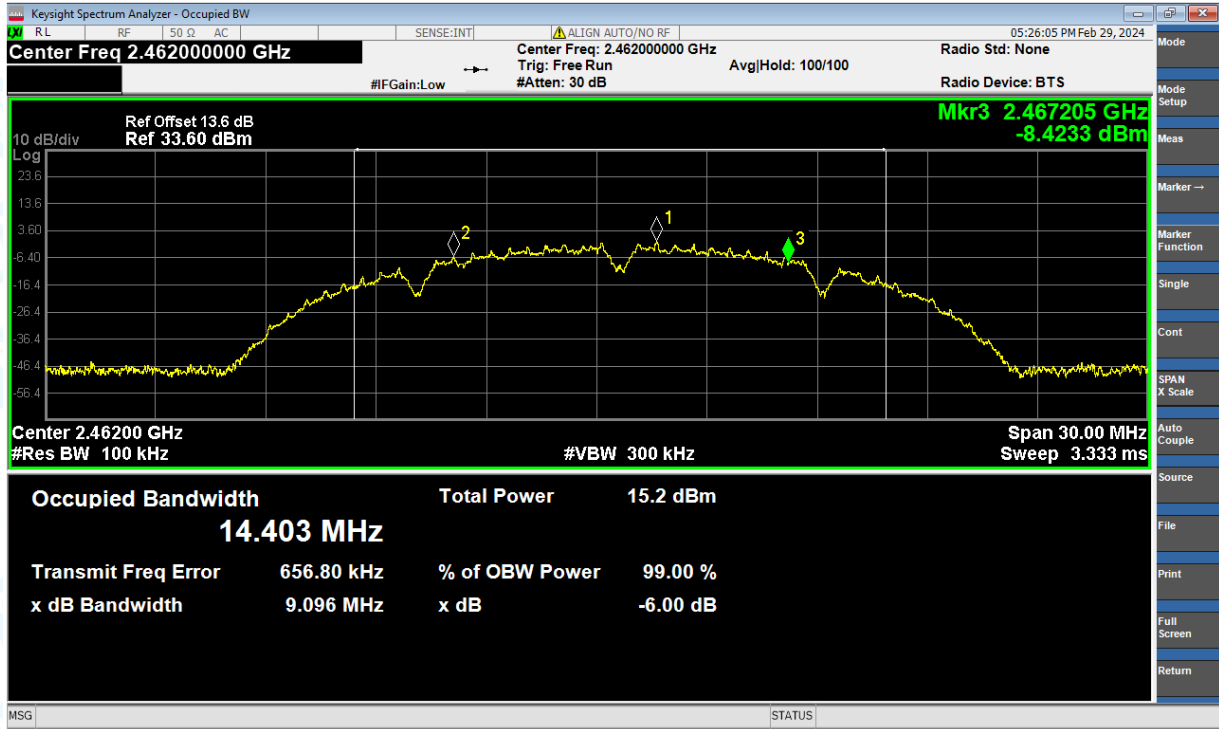
-6dB Bandwidth NVNT b 2412MHz Ant1



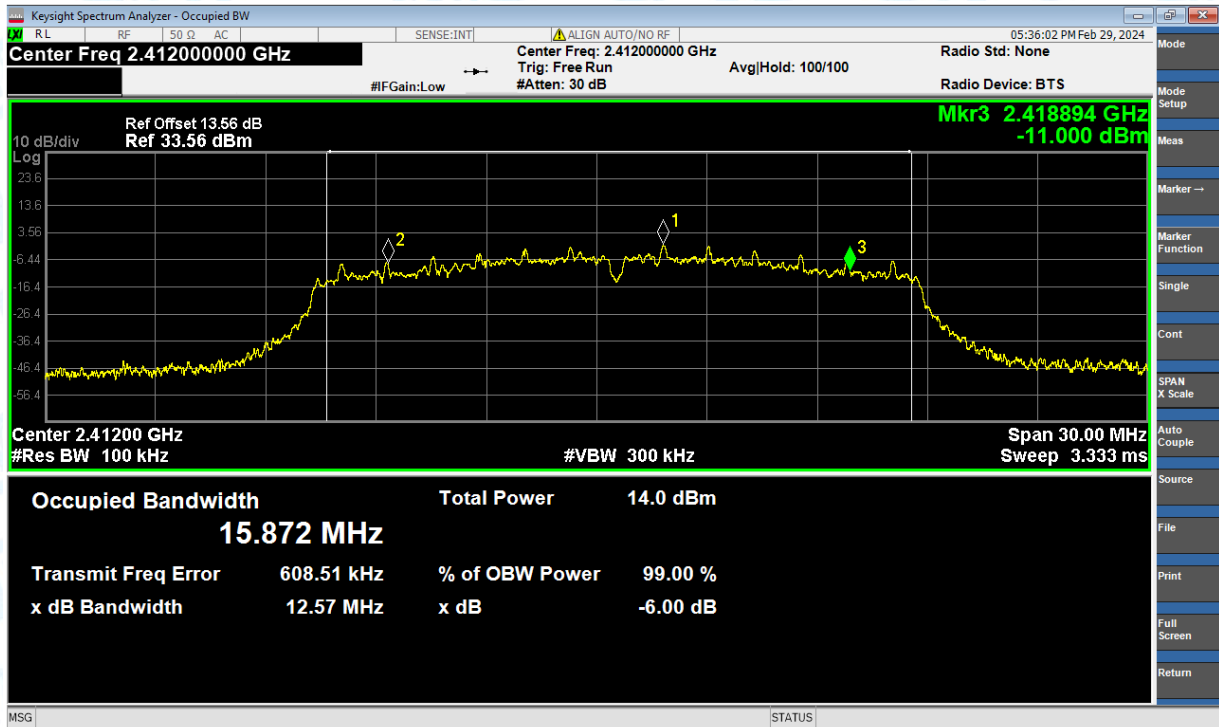
-6dB Bandwidth NVNT b 2437MHz Ant1



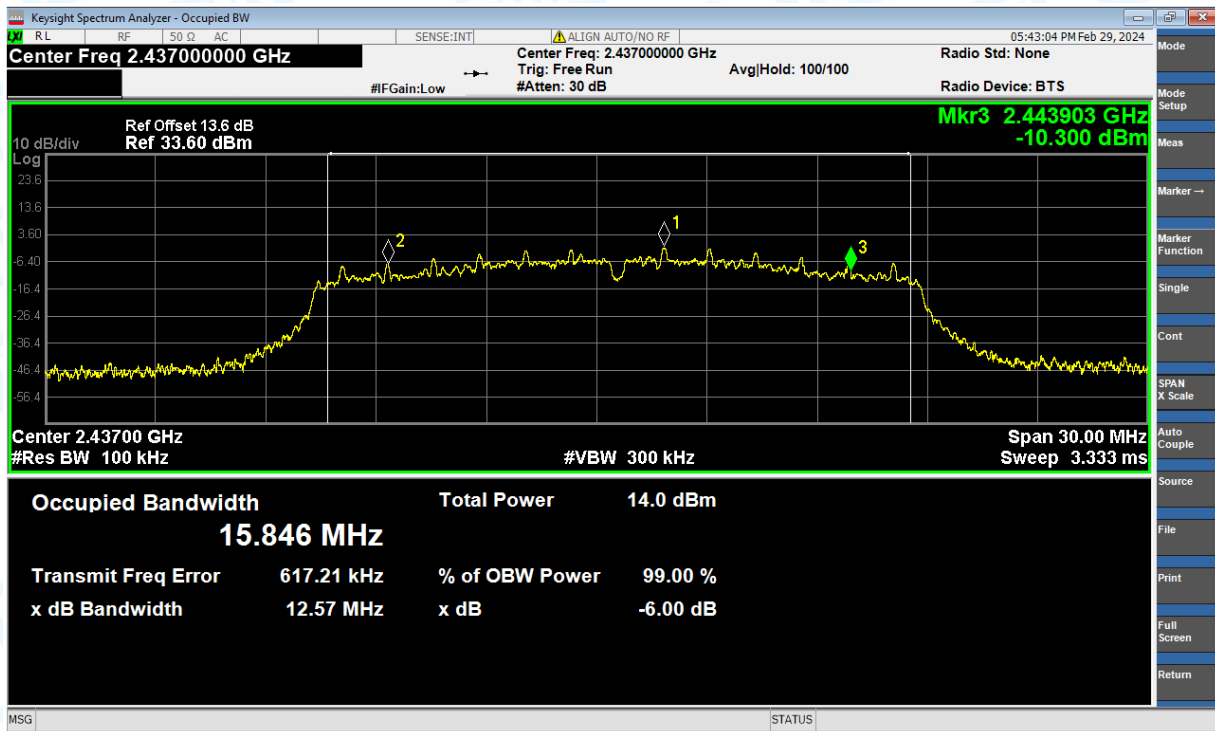
-6dB Bandwidth NVNT b 2462MHz Ant1



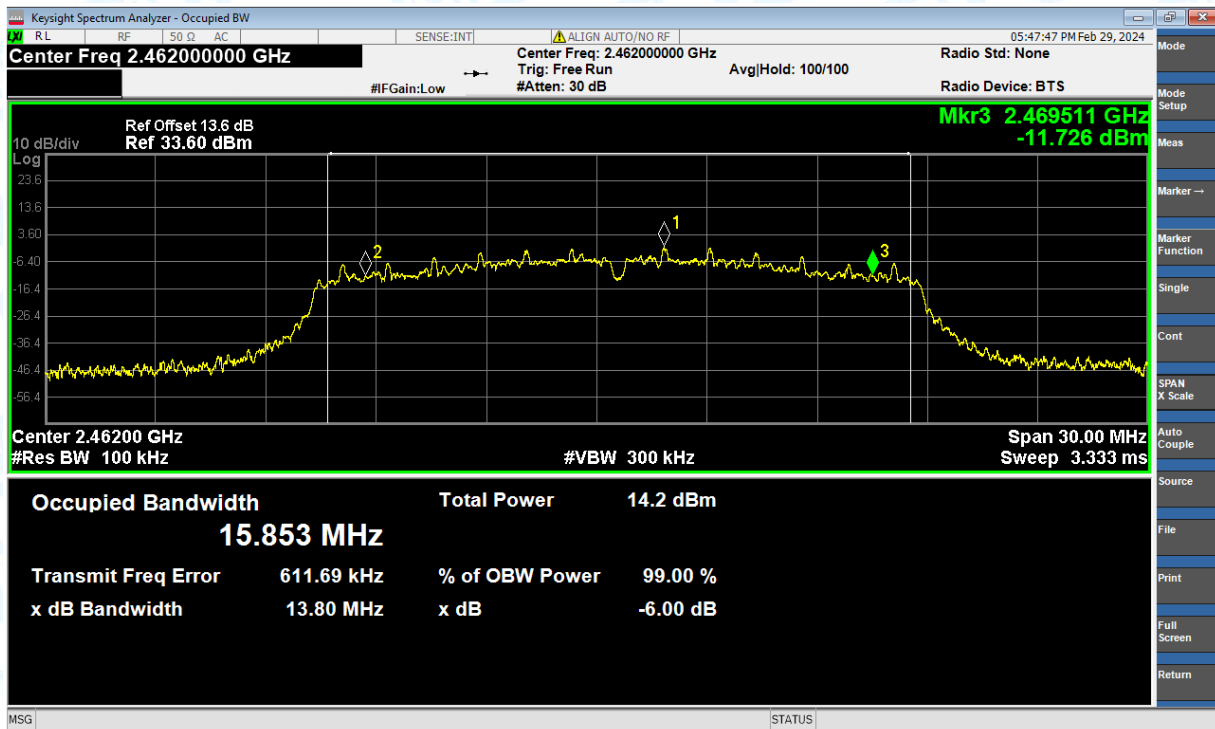
-6dB Bandwidth NVNT g 2412MHz Ant1



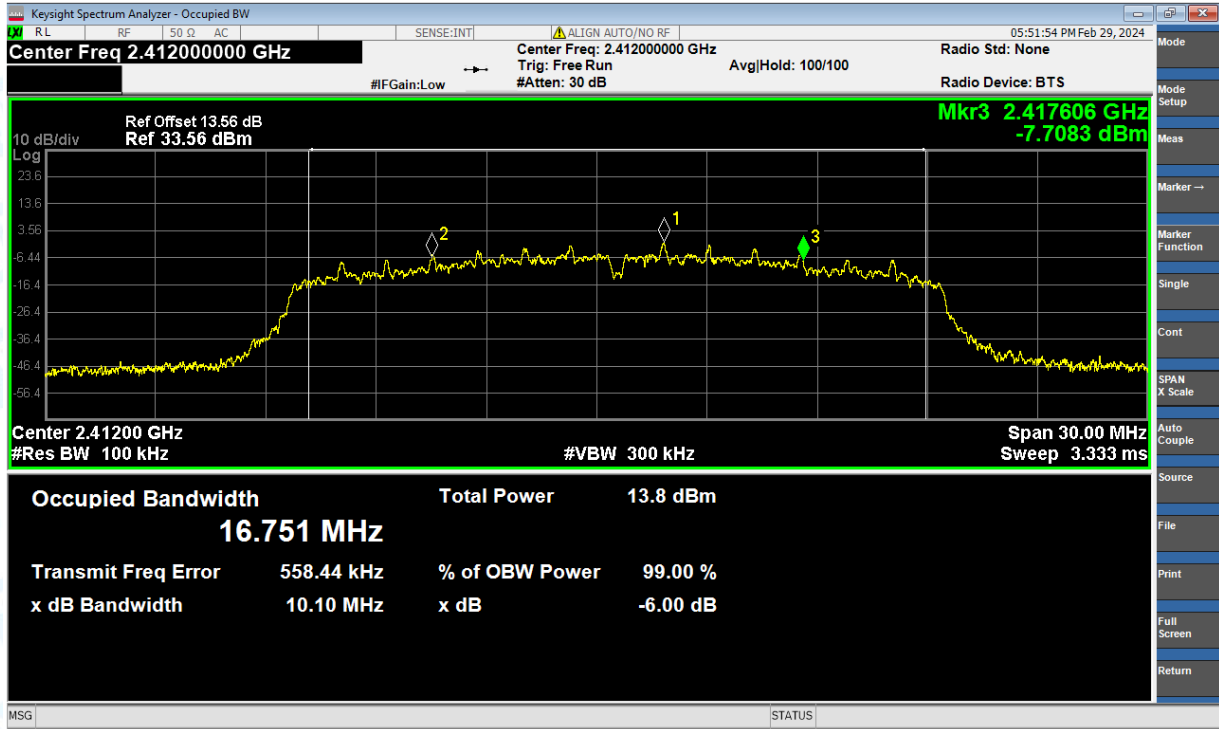
-6dB Bandwidth NVNT g 2437MHz Ant1



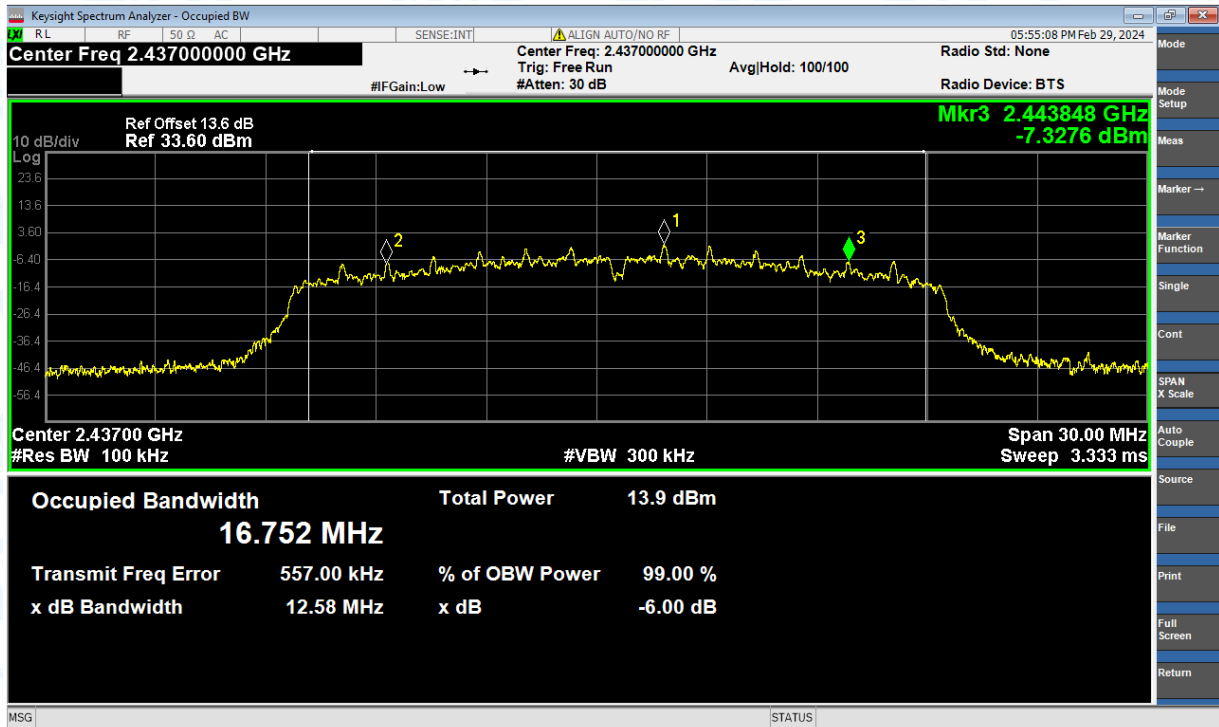
-6dB Bandwidth NVNT g 2462MHz Ant1



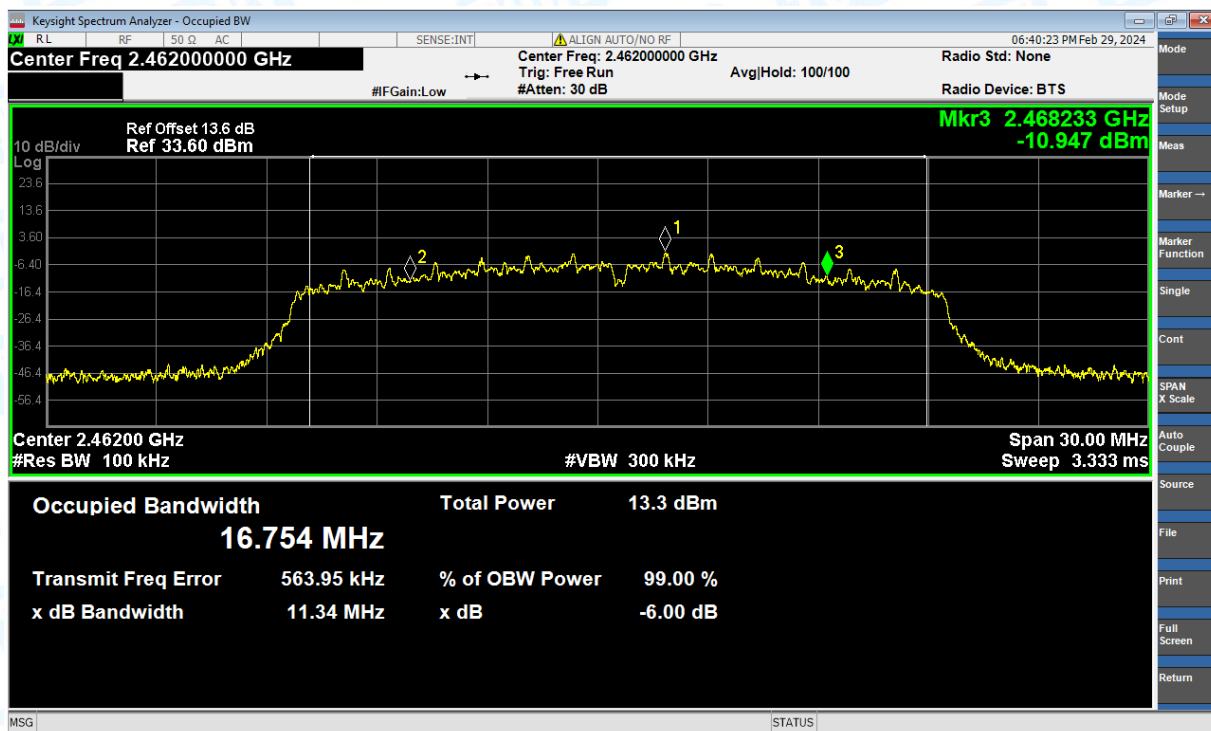
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



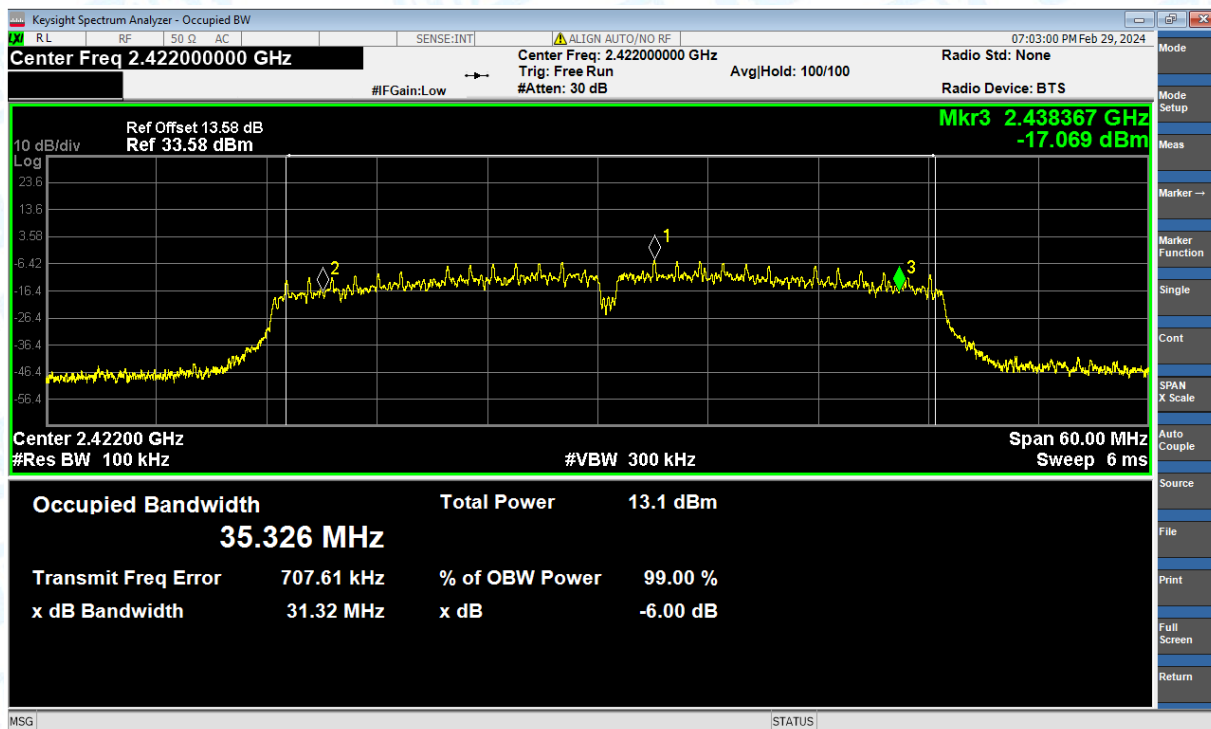
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1



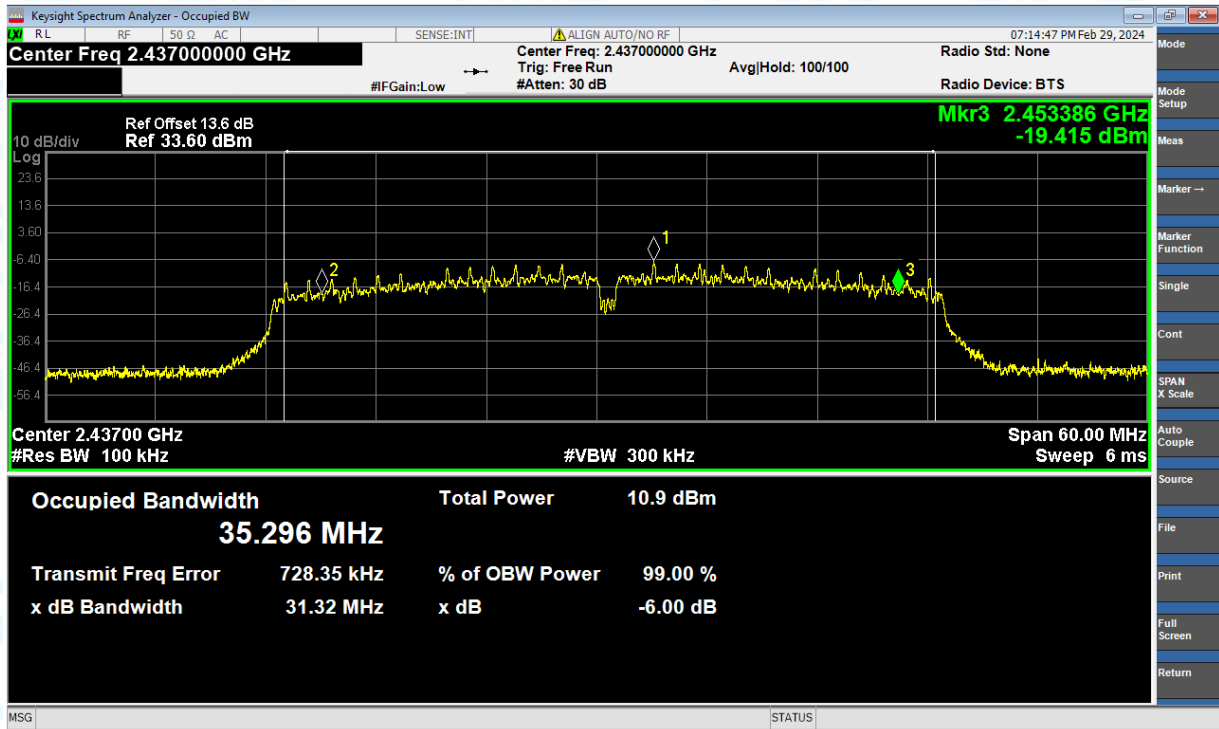
-6dB Bandwidth NVNT n(HT20) 2462MHz Ant1



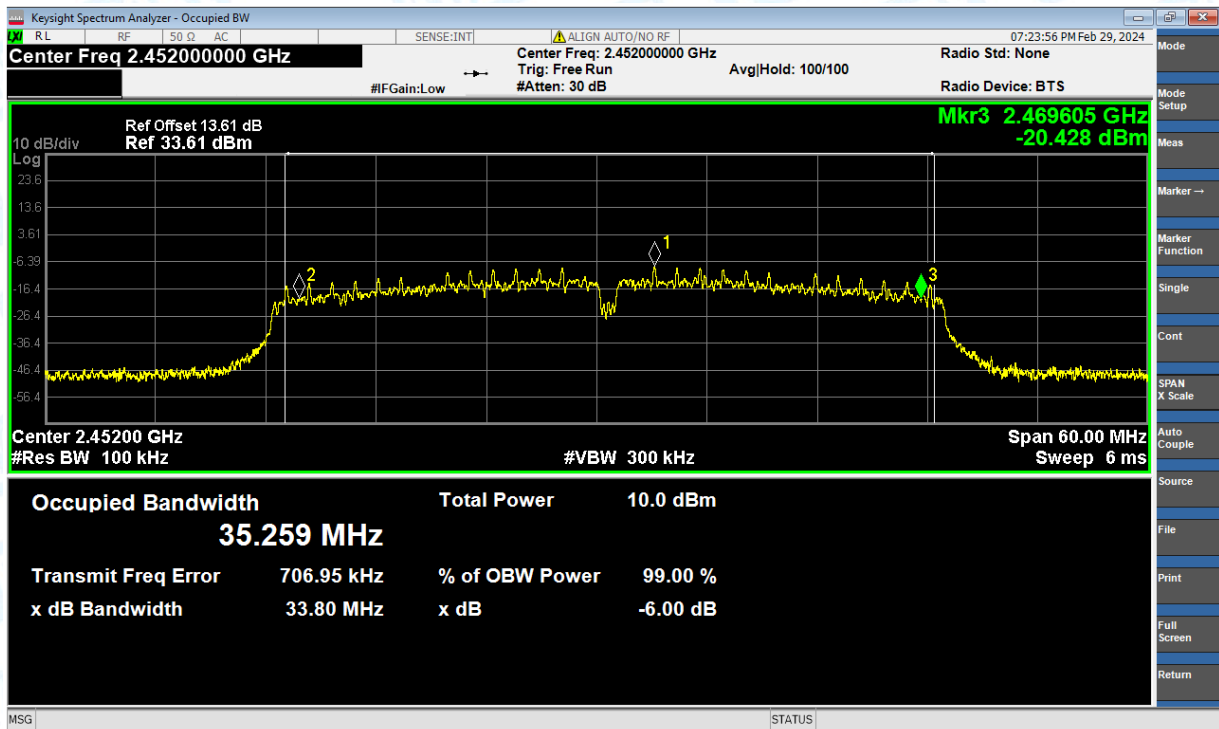
-6dB Bandwidth NVNT n(HT40) 2422MHz Ant1



-6dB Bandwidth NVNT n(HT40) 2437MHz Ant1



-6dB Bandwidth NVNT n(HT40) 2452MHz Ant1

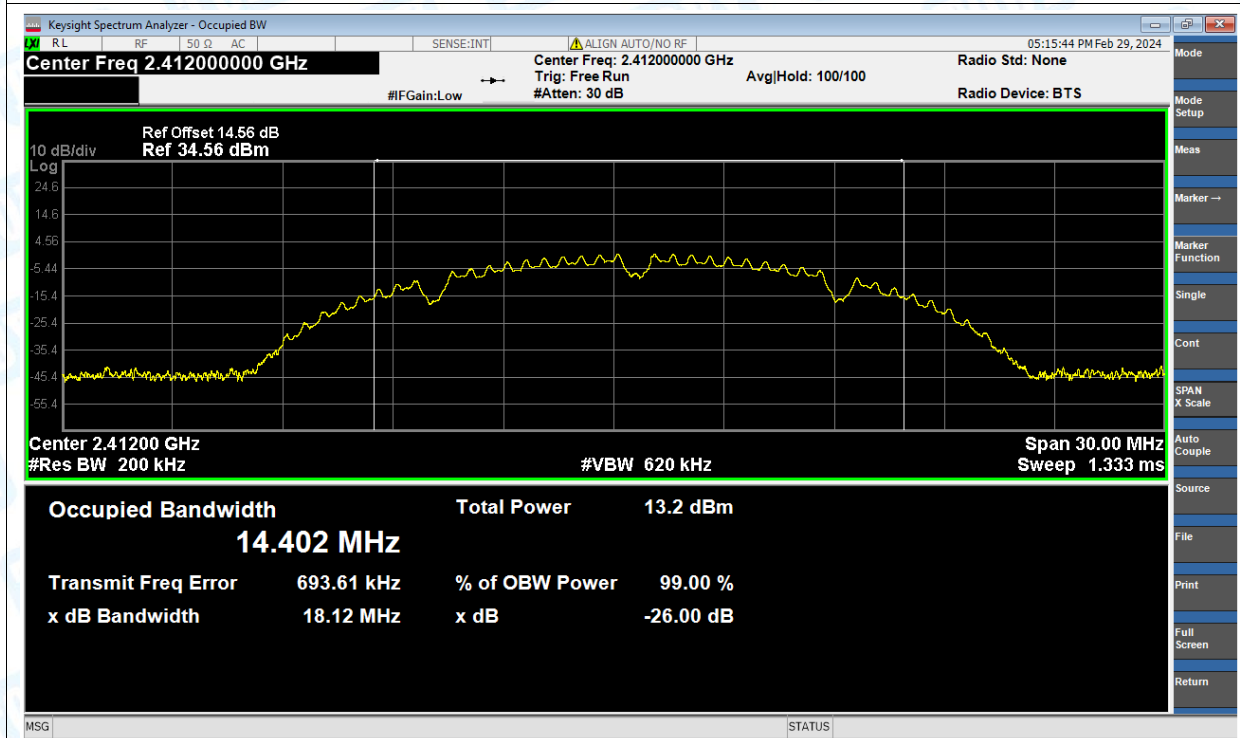


4. Occupied Channel Bandwidth

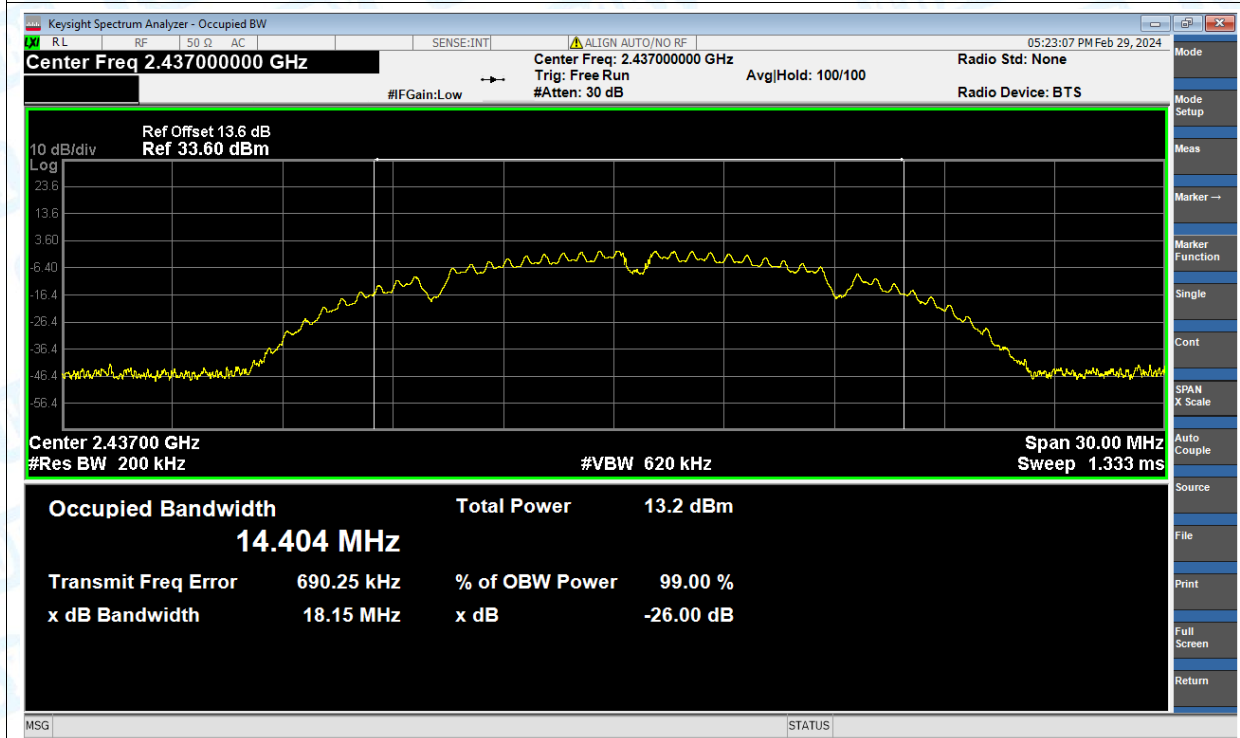
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	14.402
NVNT	b	2437	Ant1	14.404
NVNT	b	2462	Ant1	14.379
NVNT	g	2412	Ant1	15.899
NVNT	g	2437	Ant1	15.893
NVNT	g	2462	Ant1	15.891
NVNT	n(HT20)	2412	Ant1	16.688
NVNT	n(HT20)	2437	Ant1	16.655
NVNT	n(HT20)	2462	Ant1	16.638
NVNT	n(HT40)	2422	Ant1	35.474
NVNT	n(HT40)	2437	Ant1	35.447
NVNT	n(HT40)	2452	Ant1	35.495

Test Graphs

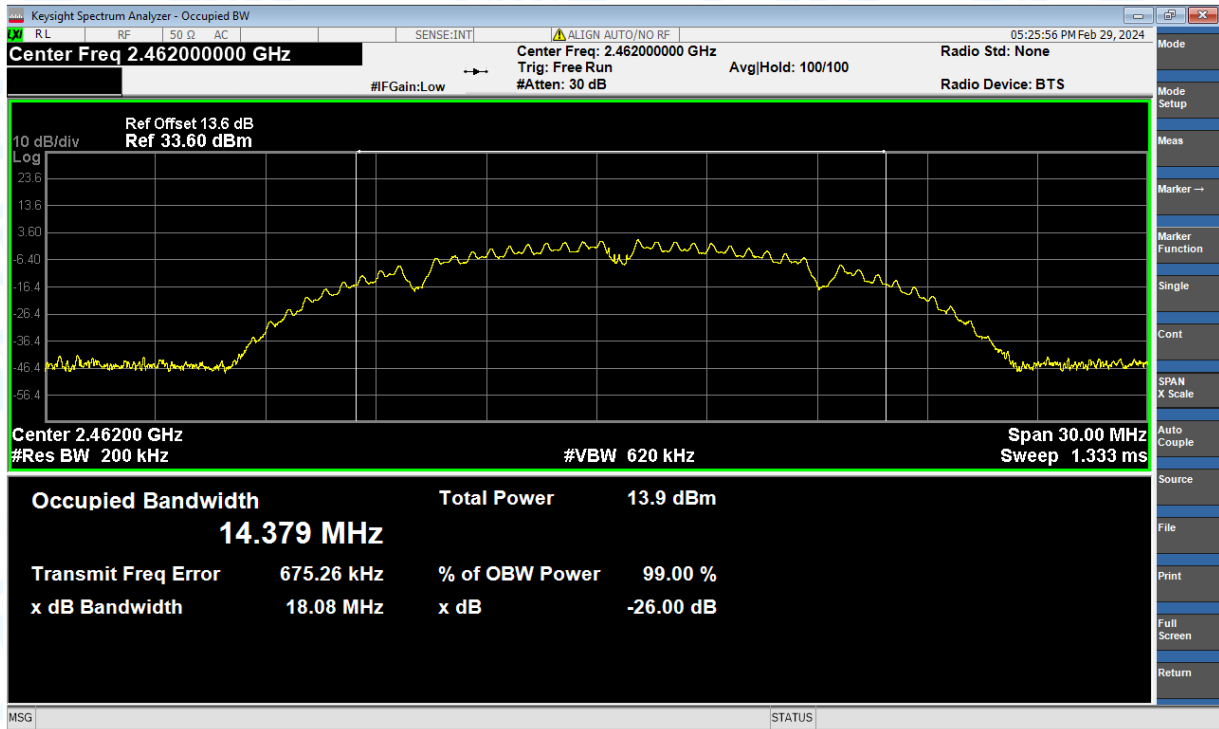
OBW NVNT b 2412MHz Ant1



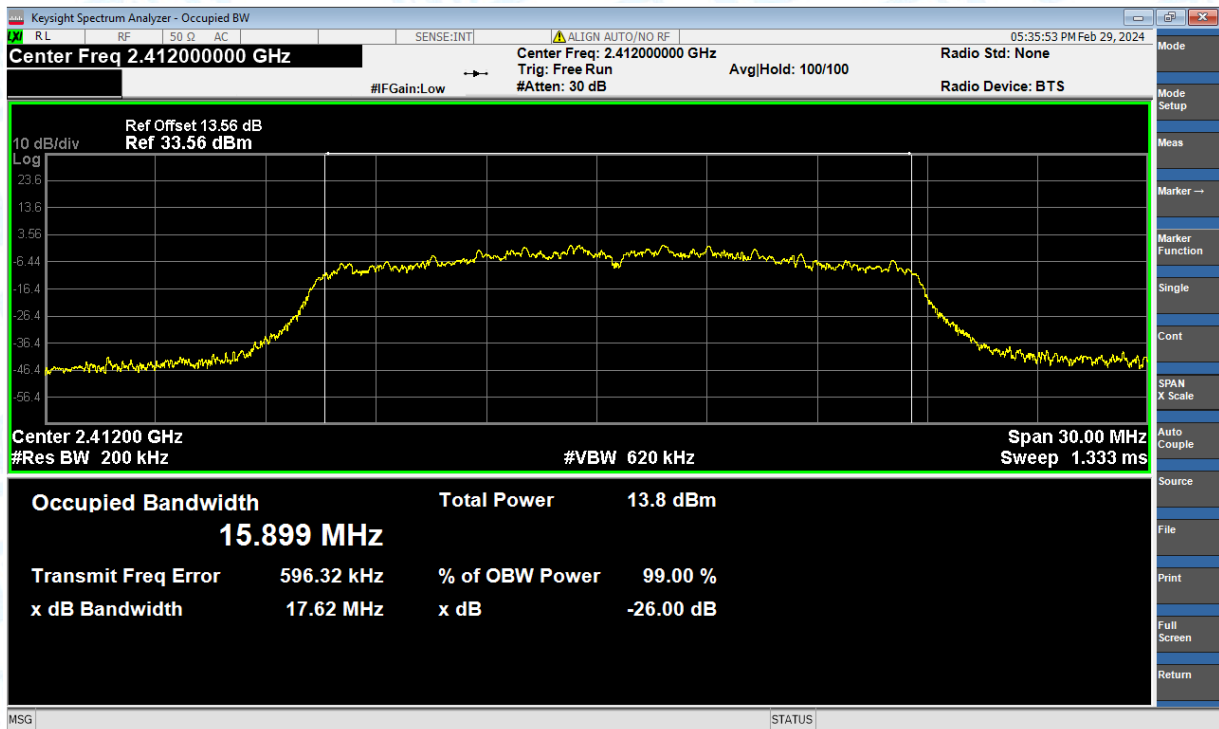
OBW NVNT b 2437MHz Ant1



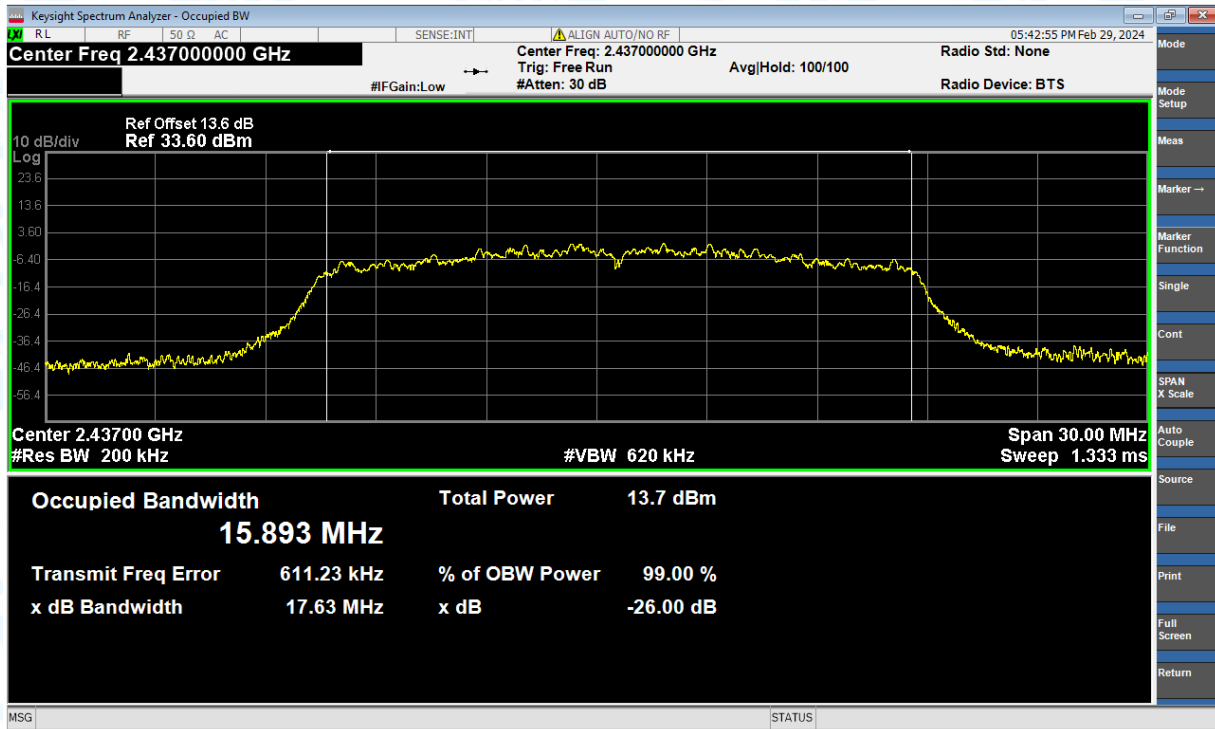
OBW NVNT b 2462MHz Ant1



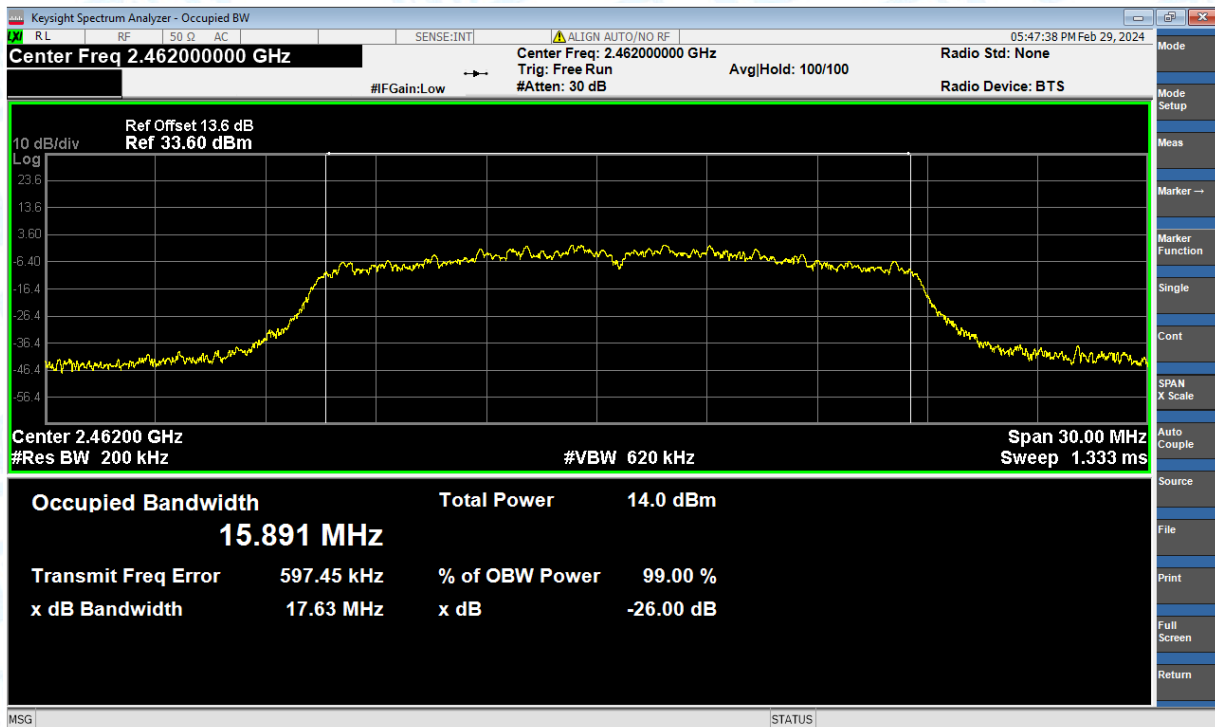
OBW NVNT g 2412MHz Ant1



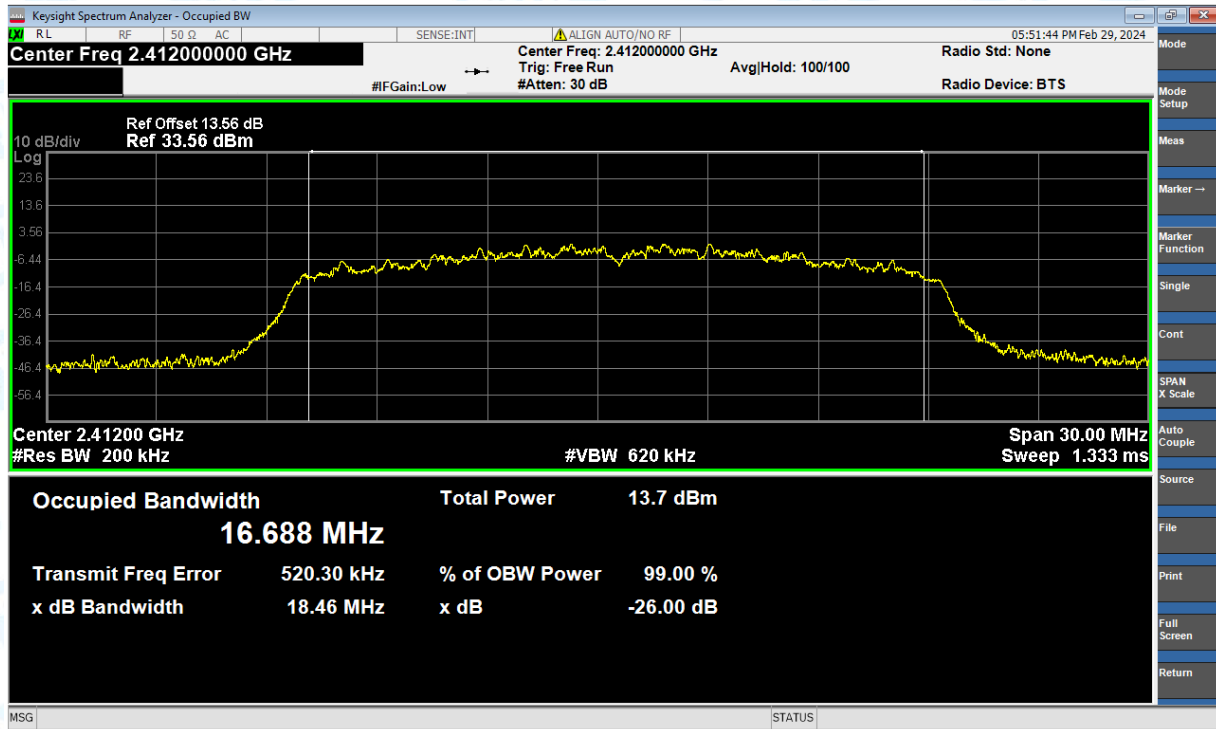
OBW NVNT g 2437MHz Ant1



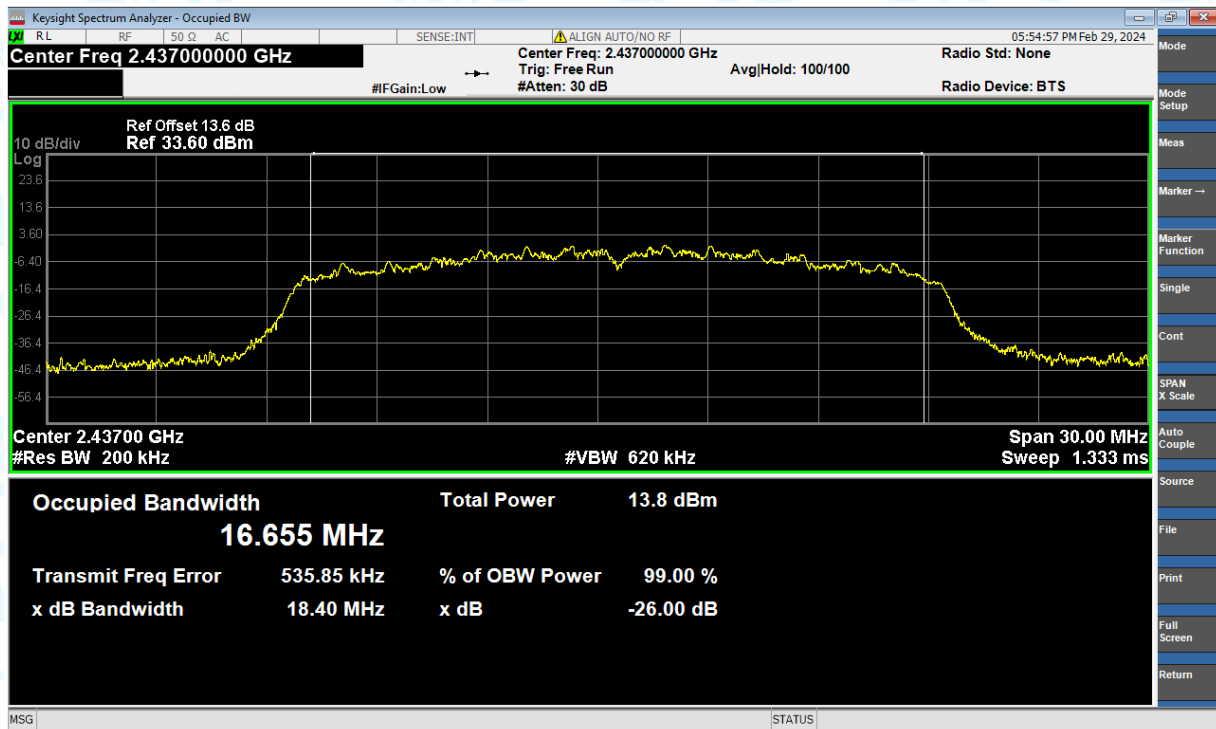
OBW NVNT g 2462MHz Ant1



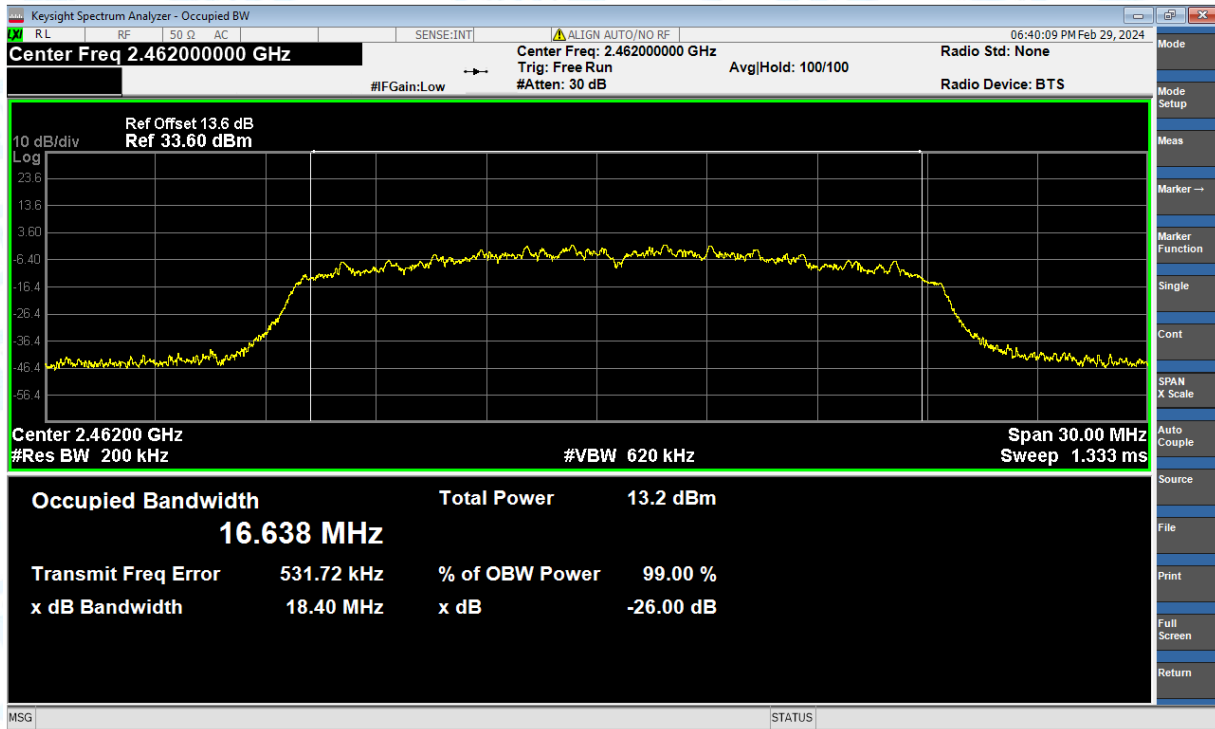
OBW NVNT n(HT20) 2412MHz Ant1



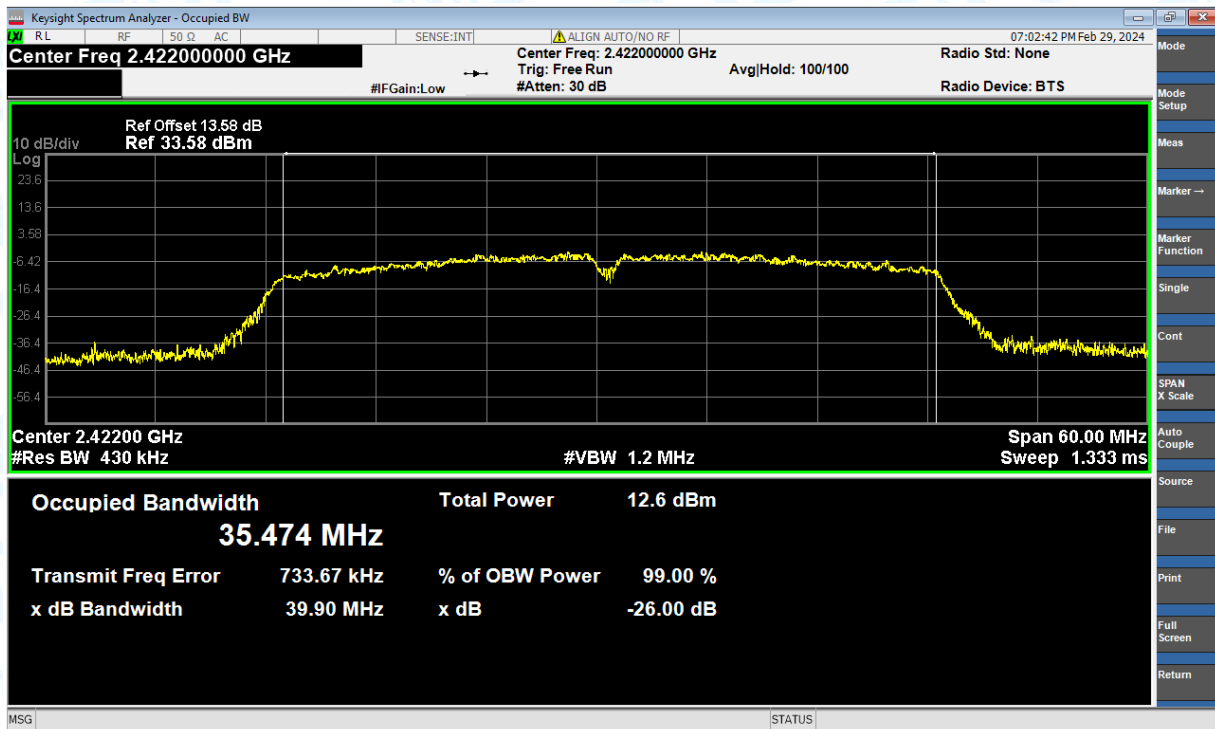
OBW NVNT n(HT20) 2437MHz Ant1



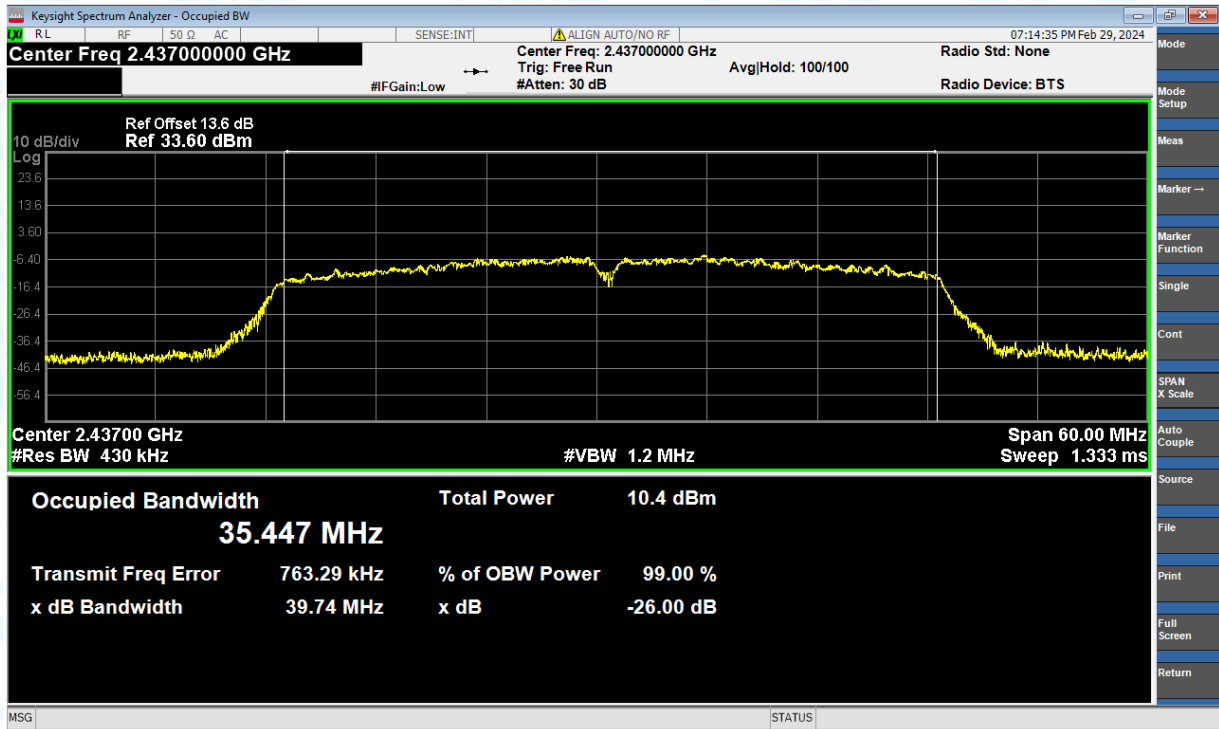
OBW NVNT n(HT20) 2462MHz Ant1



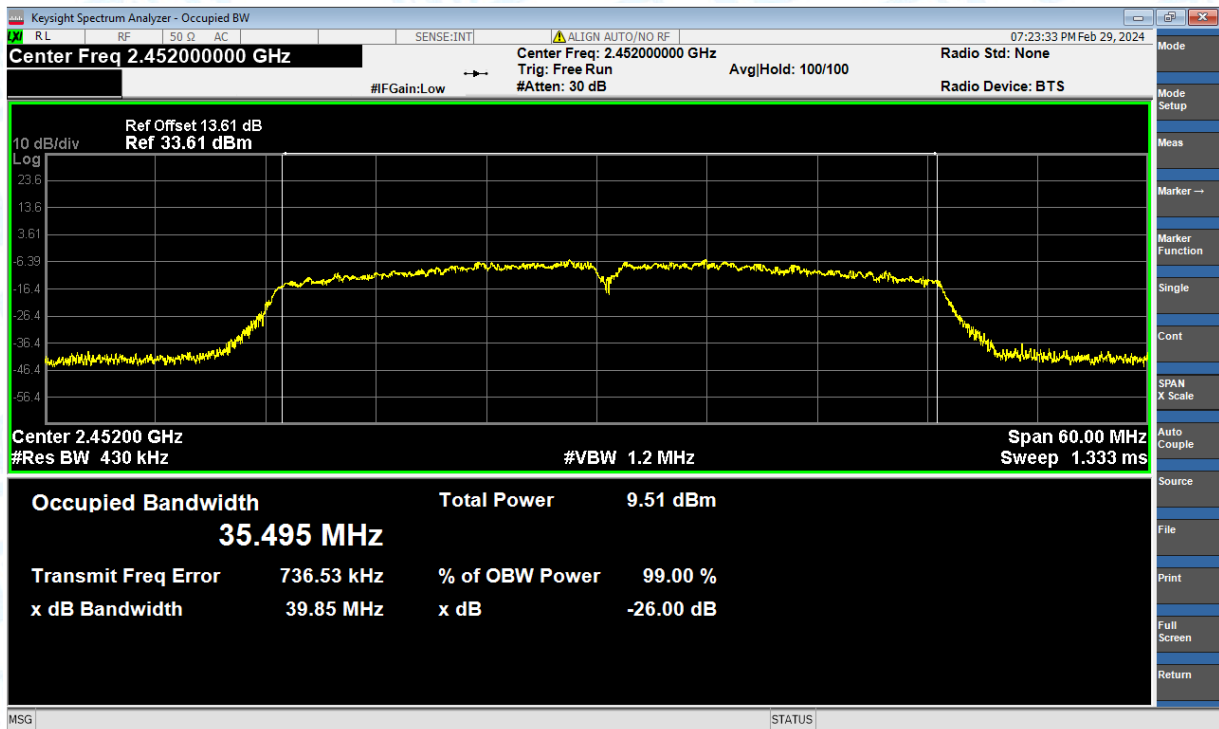
OBW NVNT n(HT40) 2422MHz Ant1



OBW NVNT n(HT40) 2437MHz Ant1



OBW NVNT n(HT40) 2452MHz Ant1

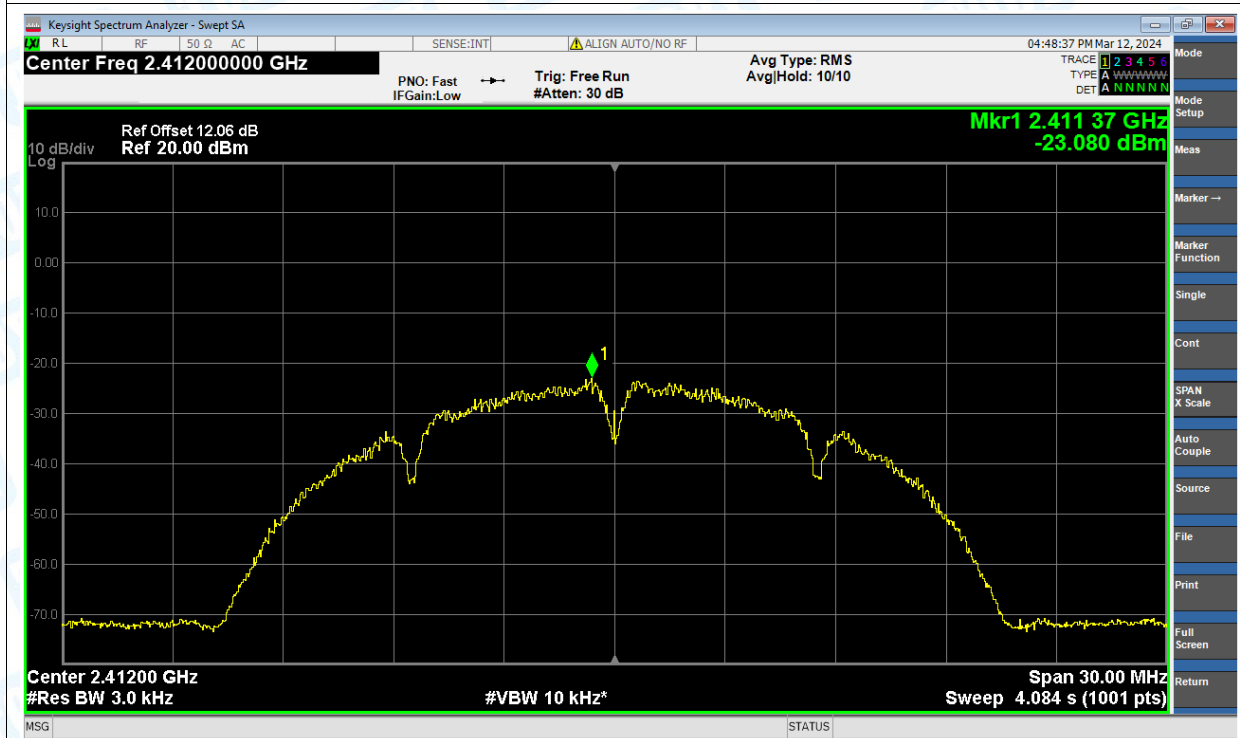


5. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-23.08	8	Pass
NVNT	b	2437	Ant1	-22.931	8	Pass
NVNT	b	2462	Ant1	-23.987	8	Pass
NVNT	g	2412	Ant1	-21.859	8	Pass
NVNT	g	2437	Ant1	-21.705	8	Pass
NVNT	g	2462	Ant1	-22.101	8	Pass
NVNT	n(HT20)	2412	Ant1	-21.645	8	Pass
NVNT	n(HT20)	2437	Ant1	-21.593	8	Pass
NVNT	n(HT20)	2462	Ant1	-23.48	8	Pass
NVNT	n(HT40)	2422	Ant1	-28.389	8	Pass
NVNT	n(HT40)	2437	Ant1	-27.84	8	Pass
NVNT	n(HT40)	2452	Ant1	-29.882	8	Pass

Test Graphs

PSD NVNT b 2412MHz Ant1



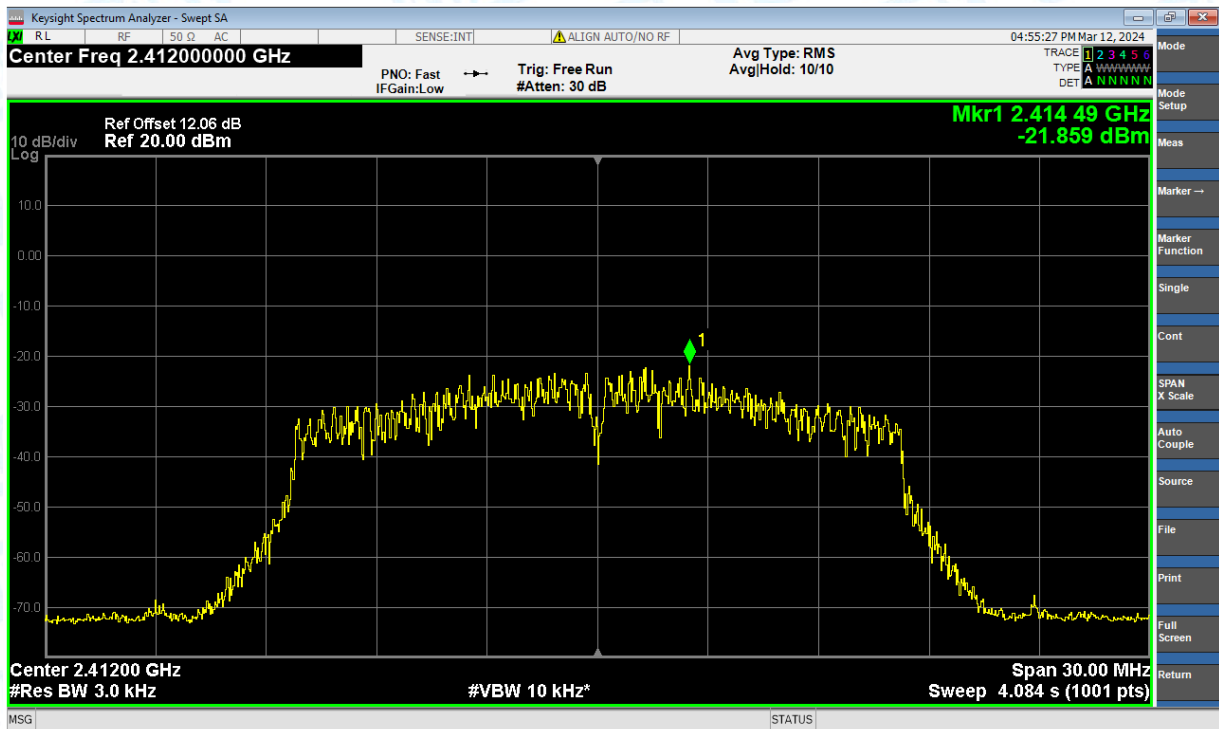
PSD NVNT b 2437MHz Ant1



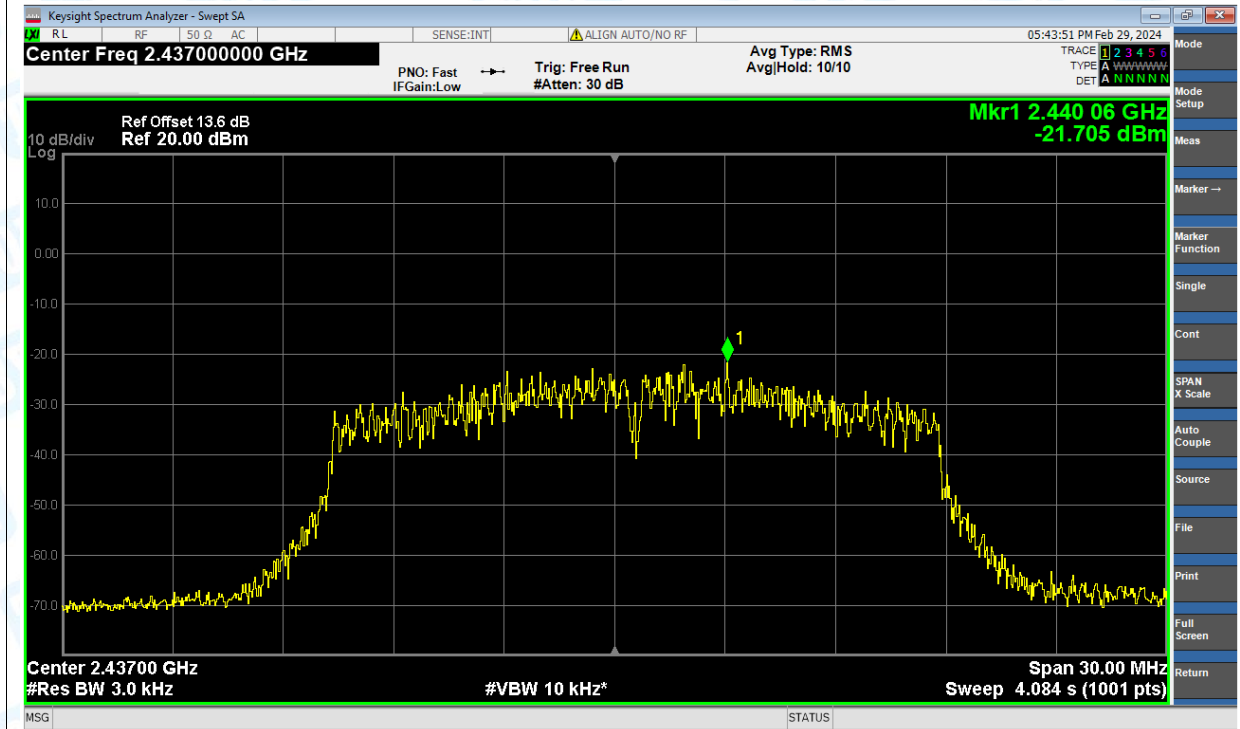
PSD NVNT b 2462MHz Ant1



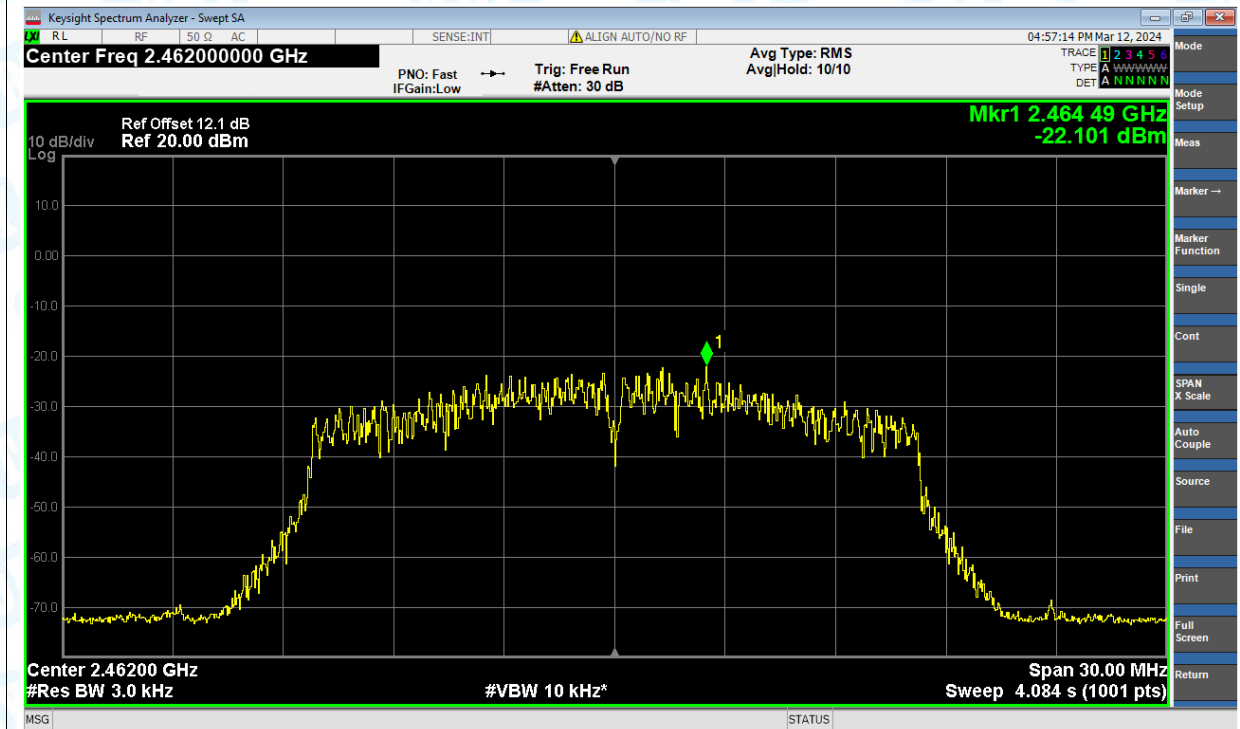
PSD NVNT g 2412MHz Ant1



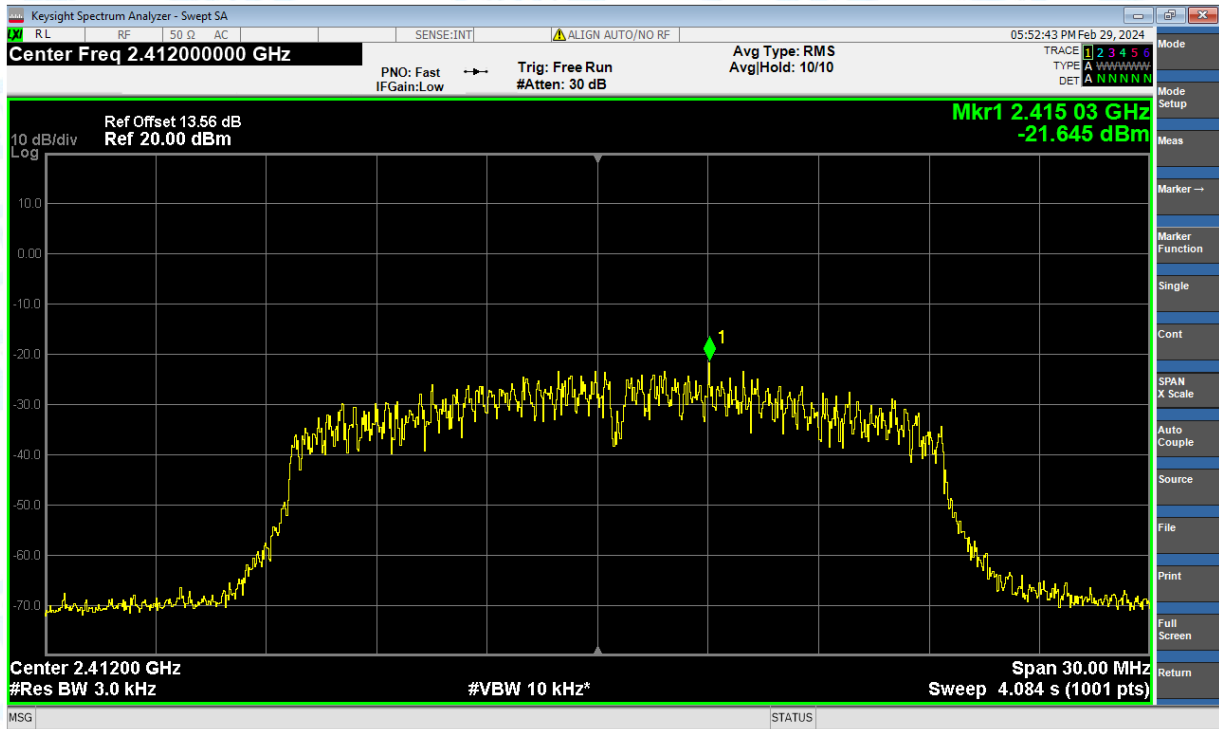
PSD NVNT g 2437MHz Ant1



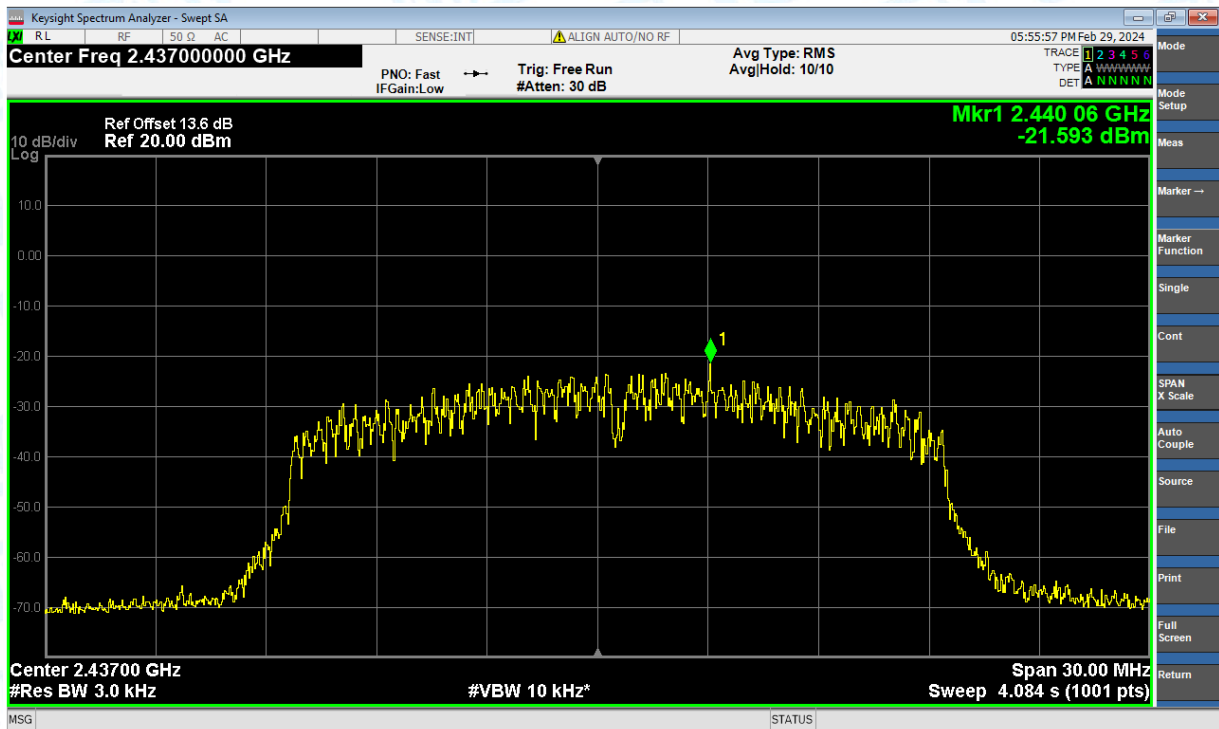
PSD NVNT g 2462MHz Ant1



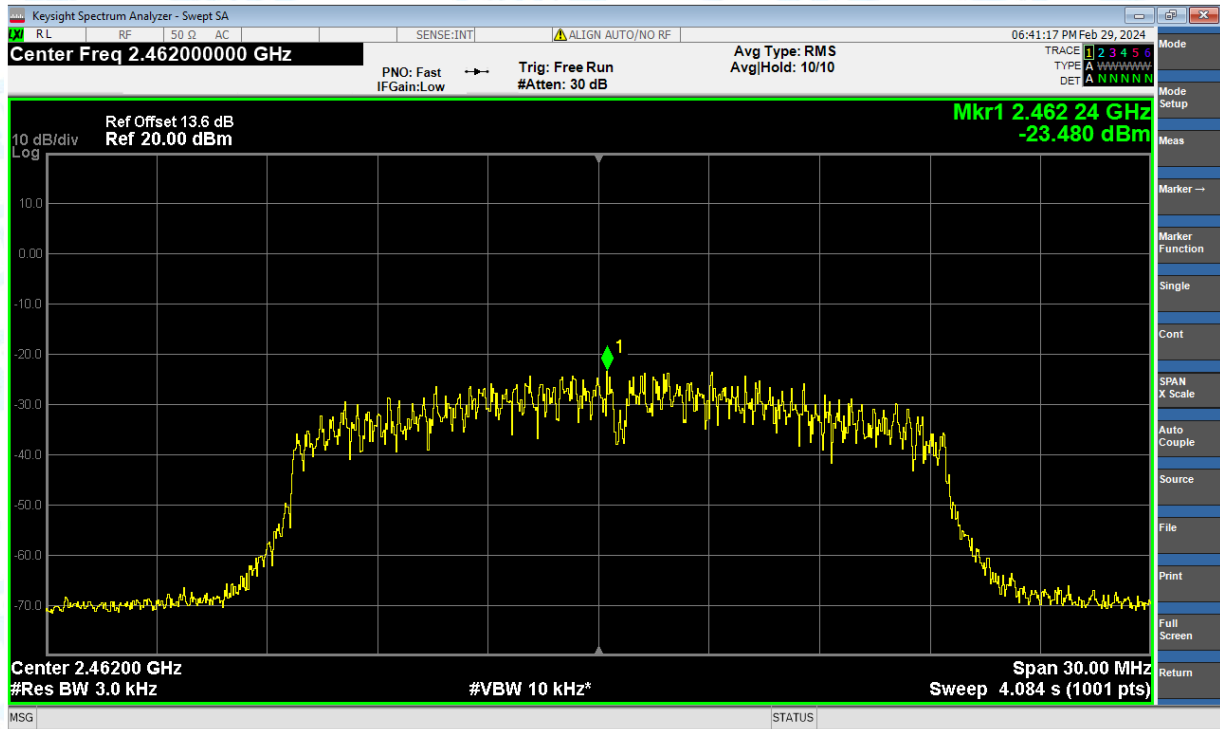
PSD NVNT n(HT20) 2412MHz Ant1



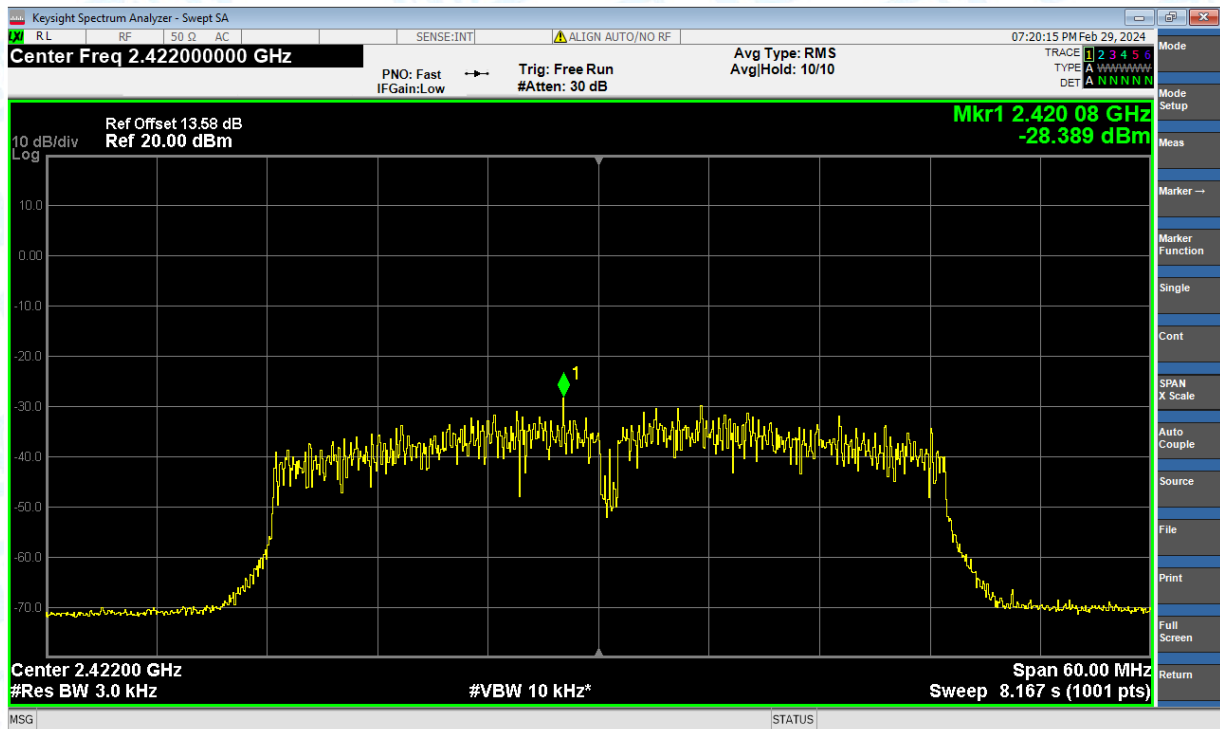
PSD NVNT n(HT20) 2437MHz Ant1



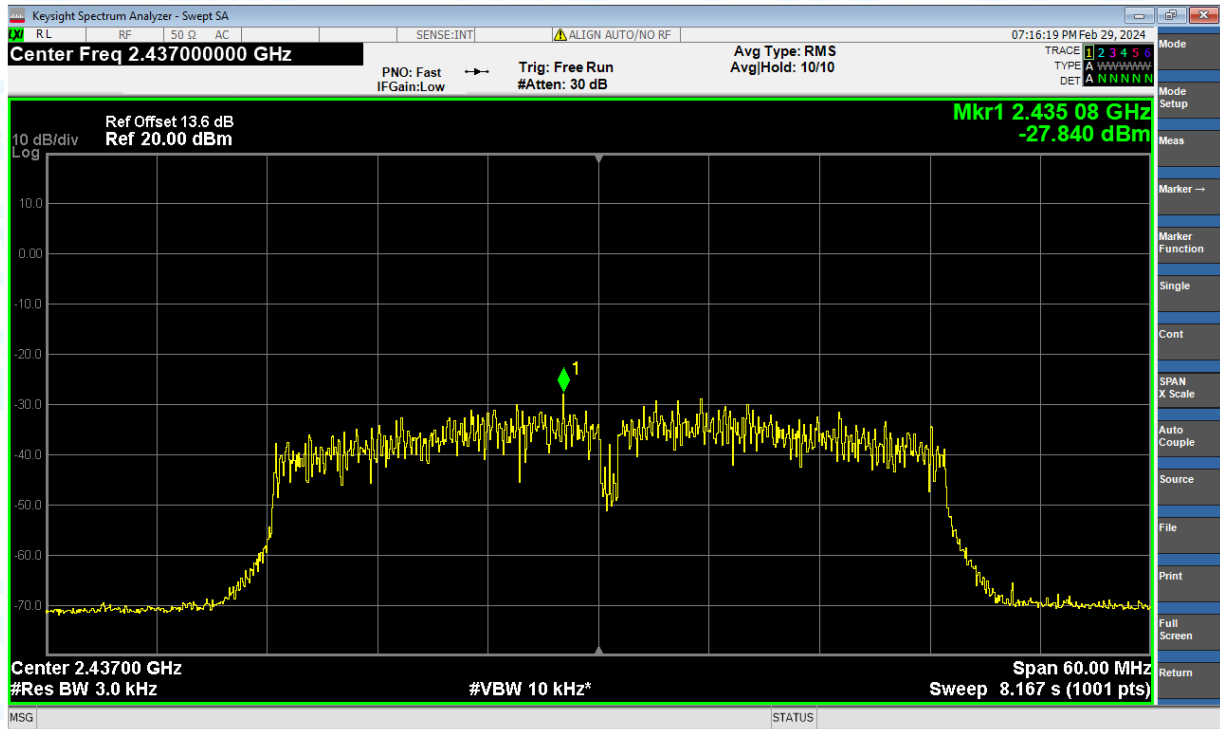
PSD NVNT n(HT20) 2462MHz Ant1



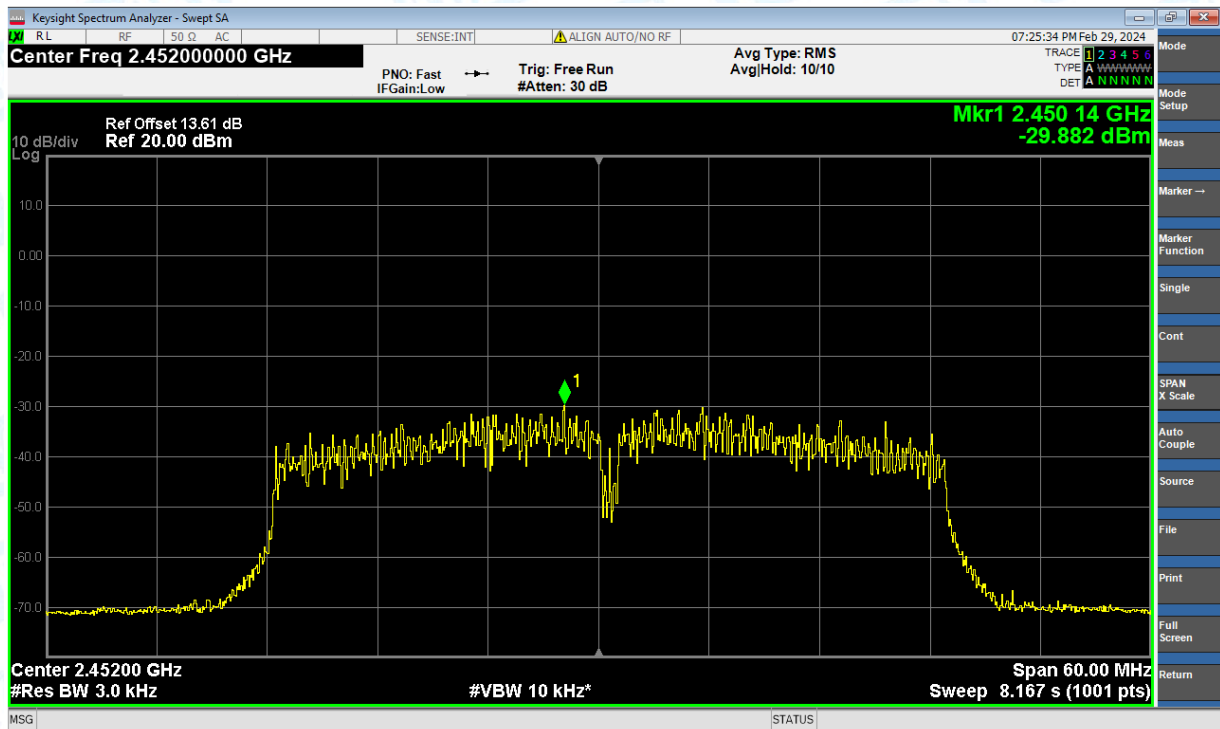
PSD NVNT n(HT40) 2422MHz Ant1



PSD NVNT n(HT40) 2437MHz Ant1



PSD NVNT n(HT40) 2452MHz Ant1



6. Band Edge

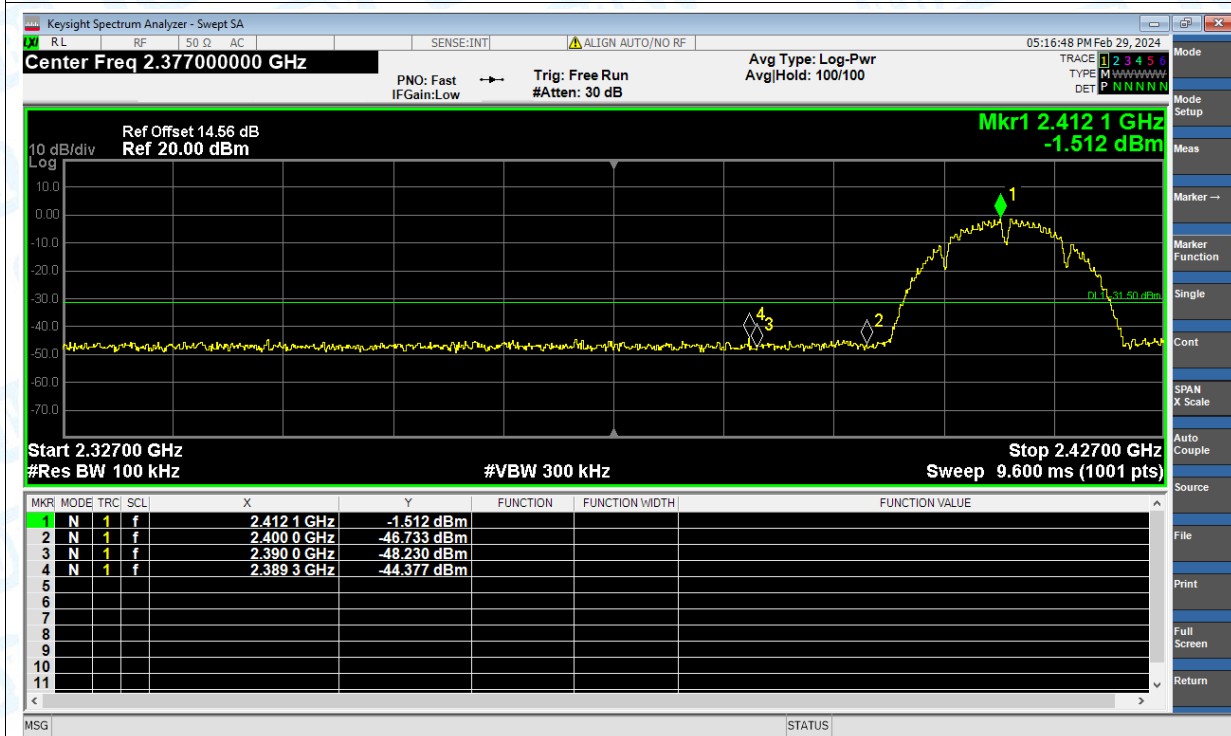
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-42.88	-30	Pass
NVNT	b	2462	Ant1	-44.96	-30	Pass
NVNT	g	2412	Ant1	-43.19	-30	Pass
NVNT	g	2462	Ant1	-44.23	-30	Pass
NVNT	n(HT20)	2412	Ant1	-43.59	-30	Pass
NVNT	n(HT20)	2462	Ant1	-43.5	-30	Pass
NVNT	n(HT40)	2422	Ant1	-37.04	-30	Pass
NVNT	n(HT40)	2452	Ant1	-36.84	-30	Pass

Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref



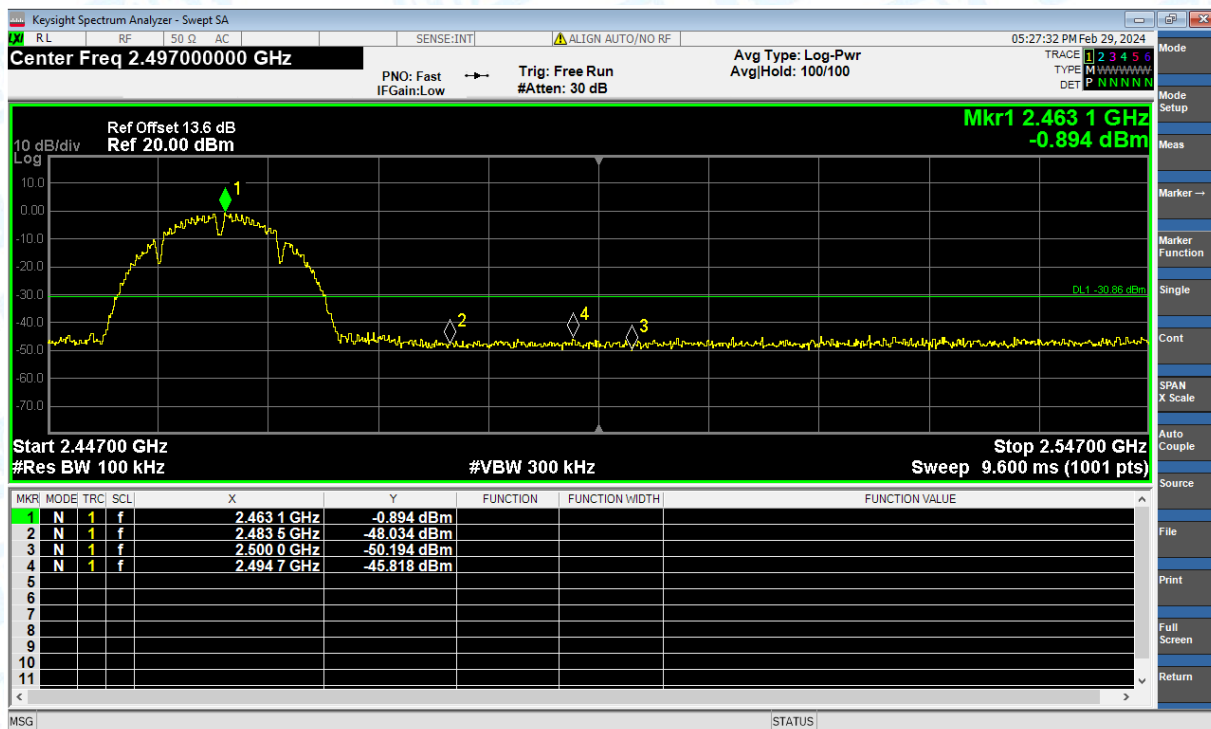
Band Edge NVNT b 2412MHz Ant1 Emission



Band Edge NVNT b 2462MHz Ant1 Ref



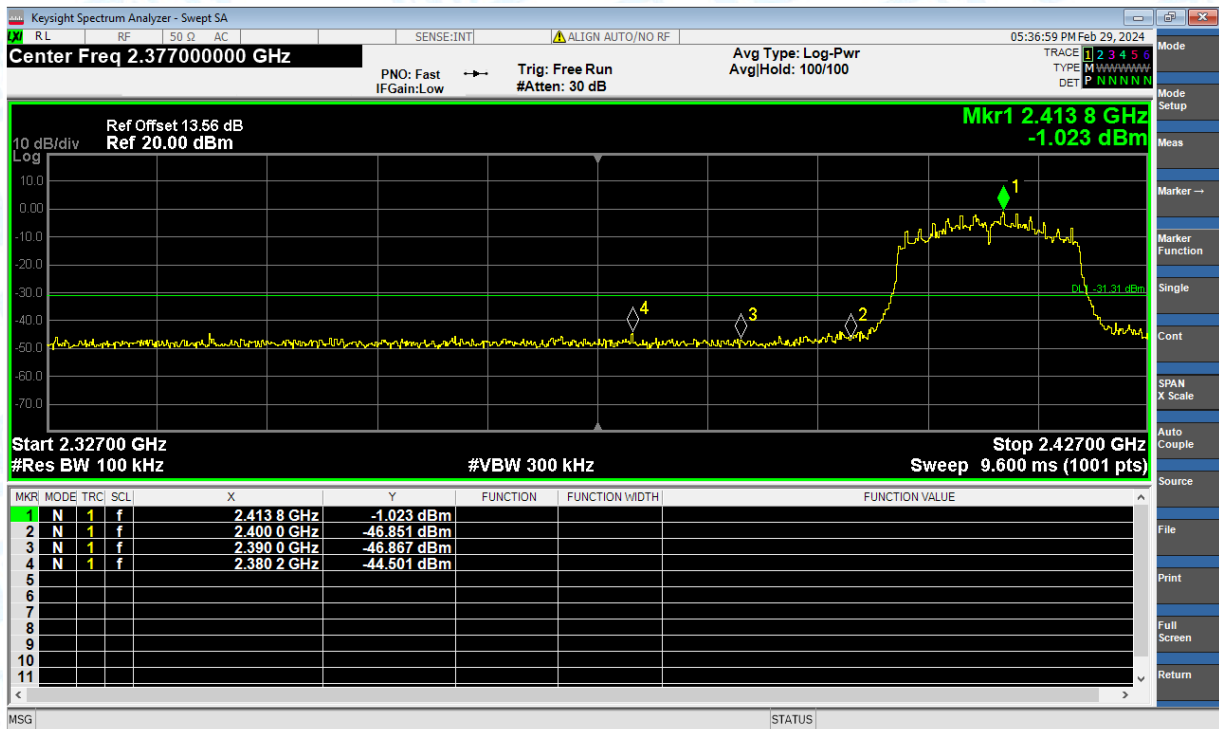
Band Edge NVNT b 2462MHz Ant1 Emission



Band Edge NVNT g 2412MHz Ant1 Ref



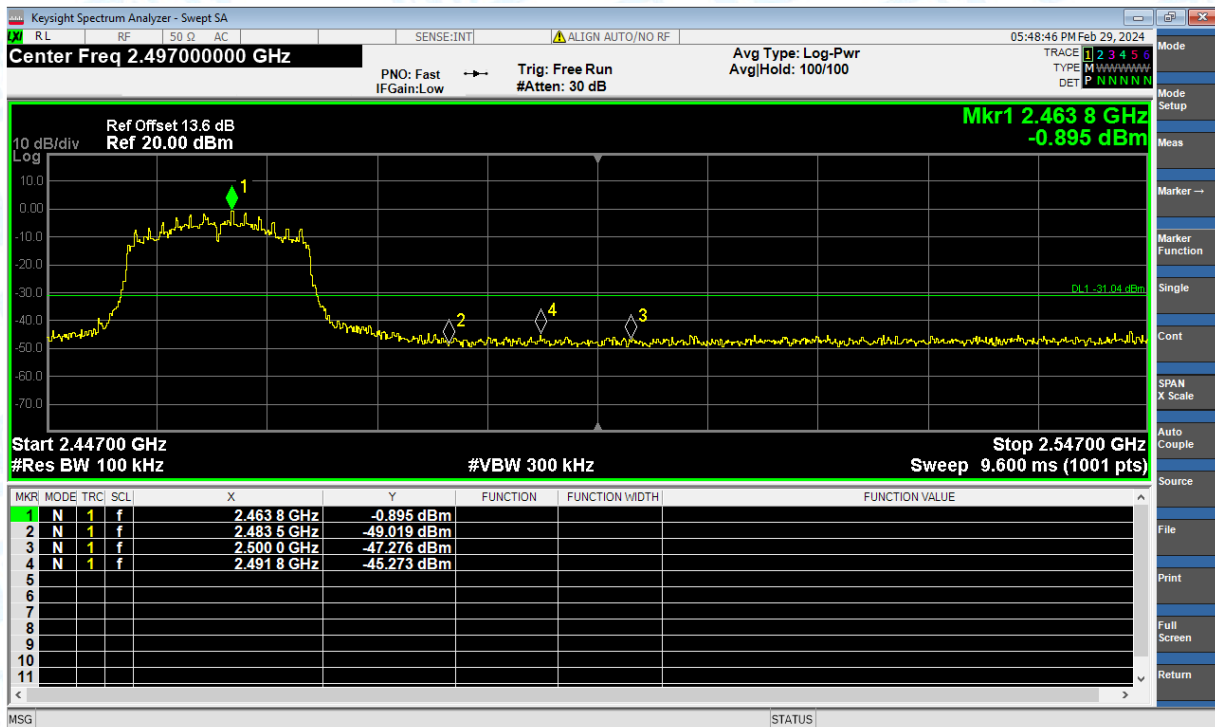
Band Edge NVNT g 2412MHz Ant1 Emission



Band Edge NVNT g 2462MHz Ant1 Ref



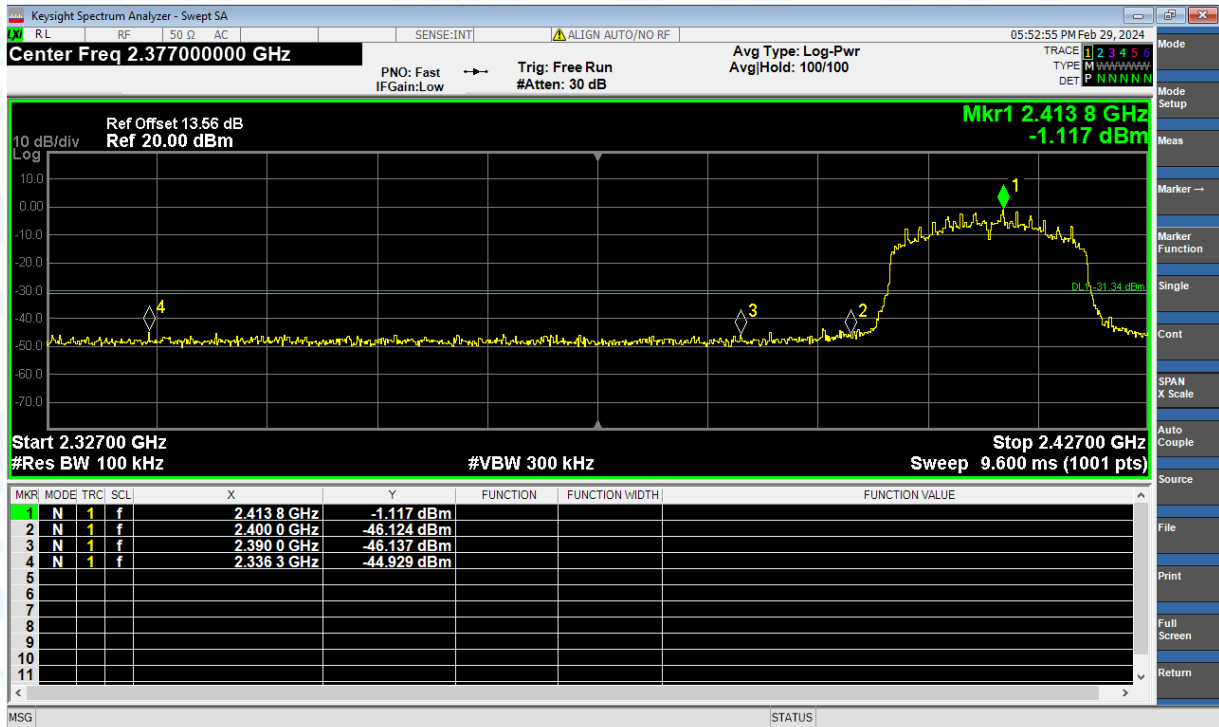
Band Edge NVNT g 2462MHz Ant1 Emission



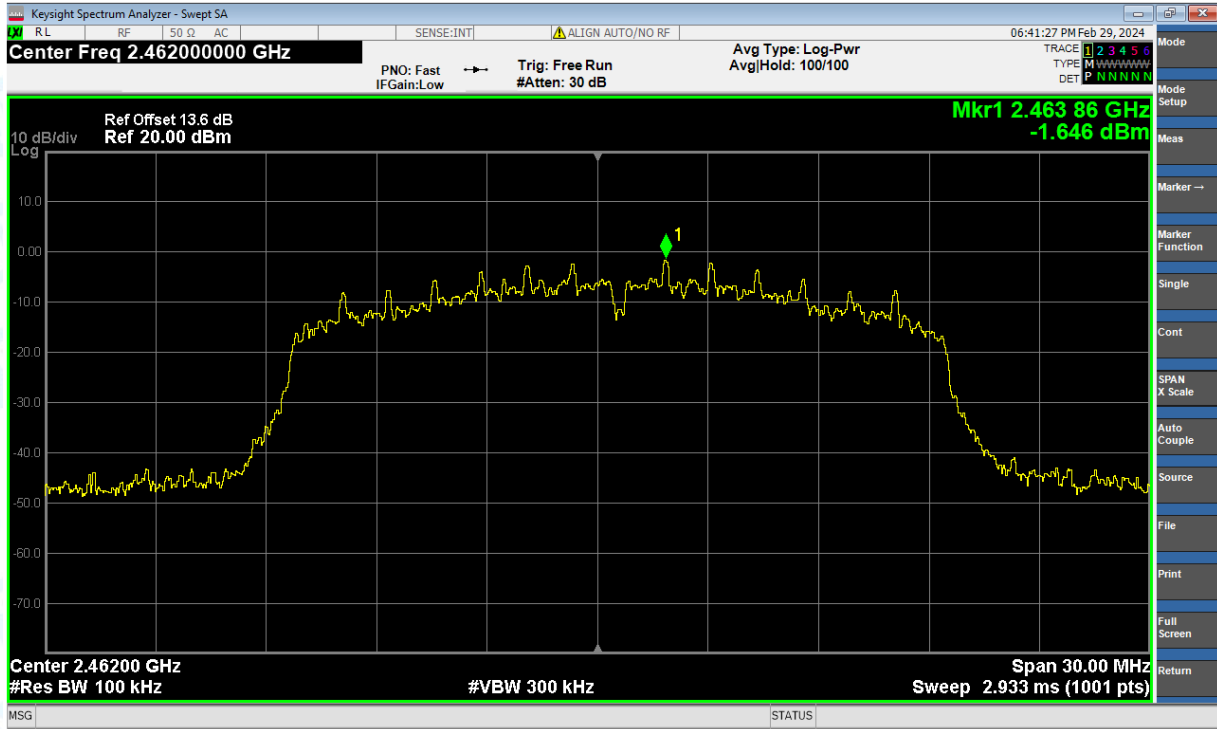
Band Edge NVNT n(HT20) 2412MHz Ant1 Ref



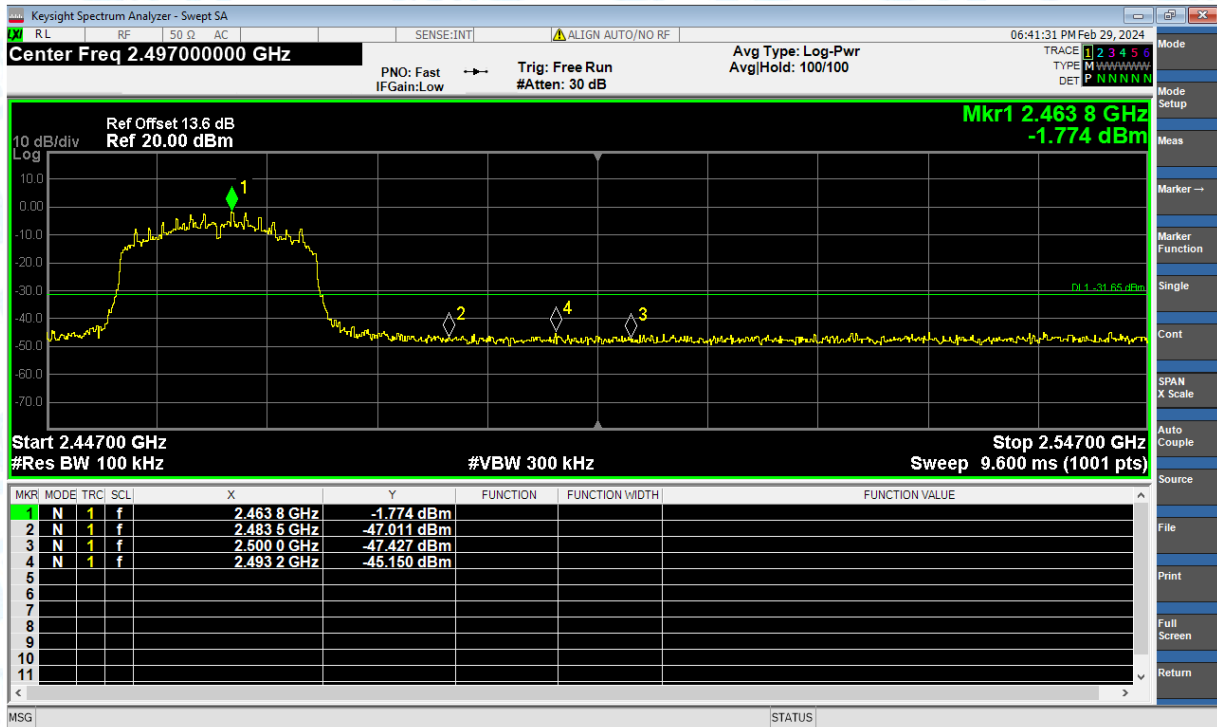
Band Edge NVNT n(HT20) 2412MHz Ant1 Emission



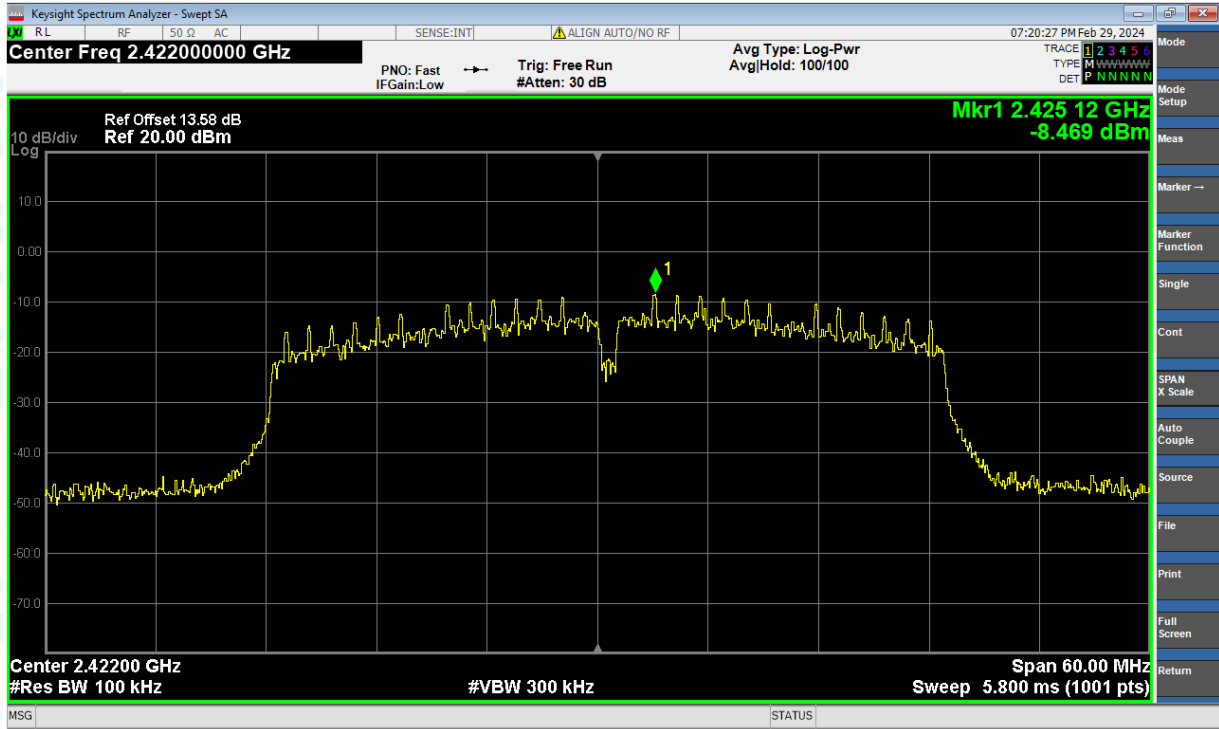
Band Edge NVNT n(HT20) 2462MHz Ant1 Ref



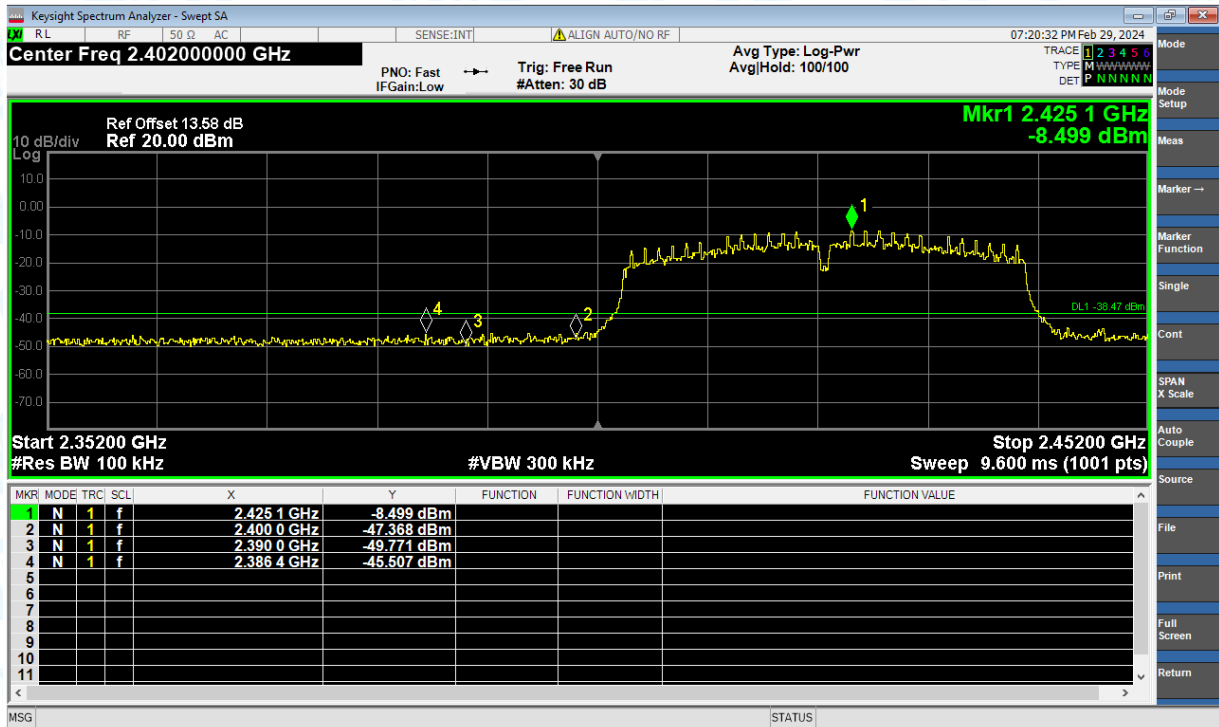
Band Edge NVNT n(HT20) 2462MHz Ant1 Emission



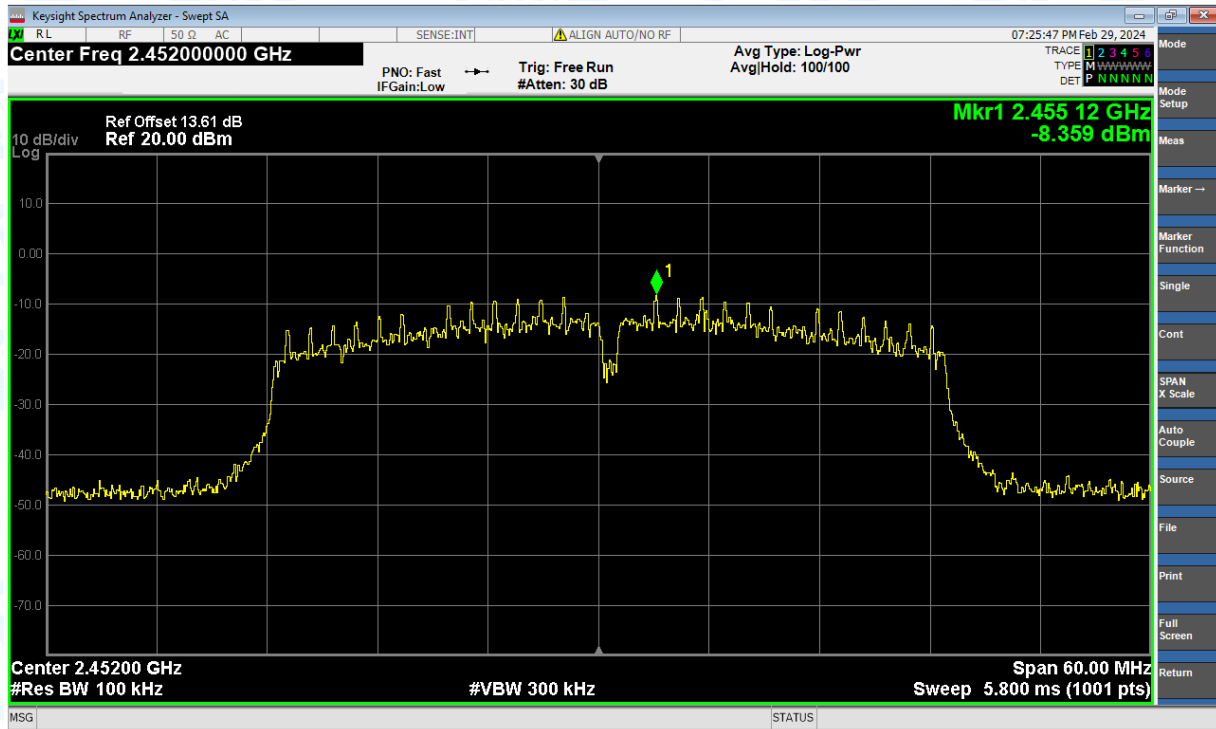
Band Edge NVNT n(HT40) 2422MHz Ant1 Ref



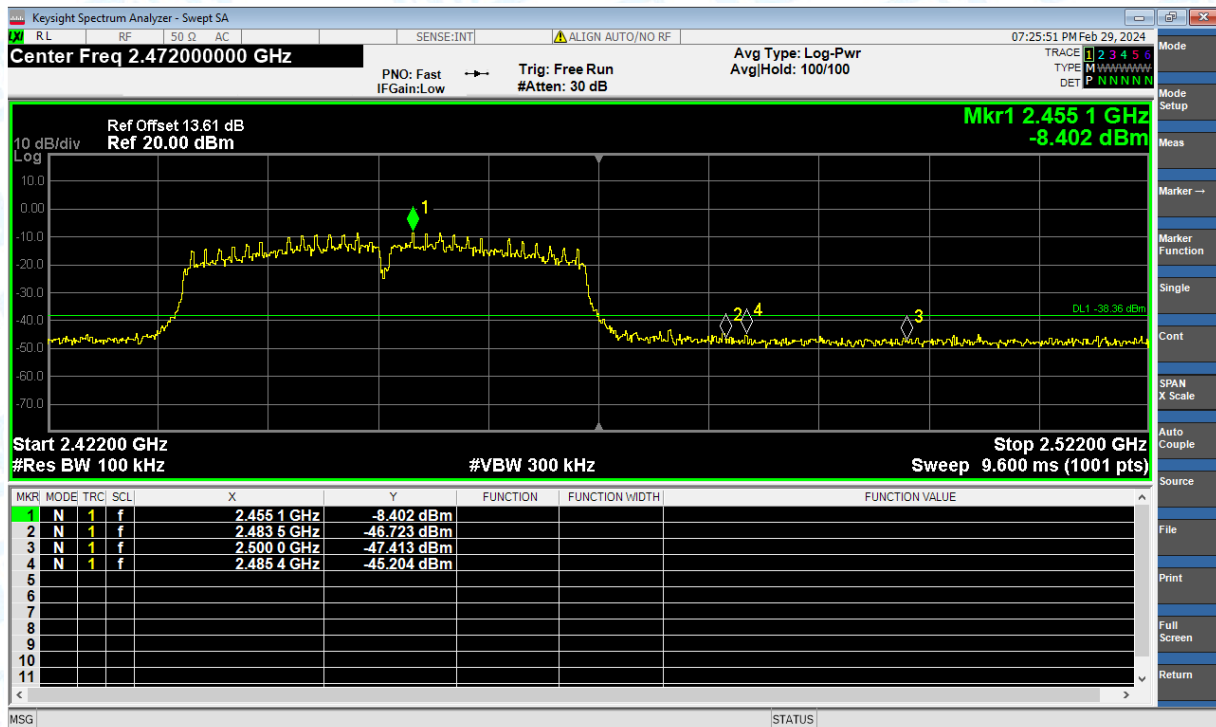
Band Edge NVNT n(HT40) 2422MHz Ant1 Emission



Band Edge NVNT n(HT40) 2452MHz Ant1 Ref



Band Edge NVNT n(HT40) 2452MHz Ant1 Emission



7. Conducted RF Spurious Emission

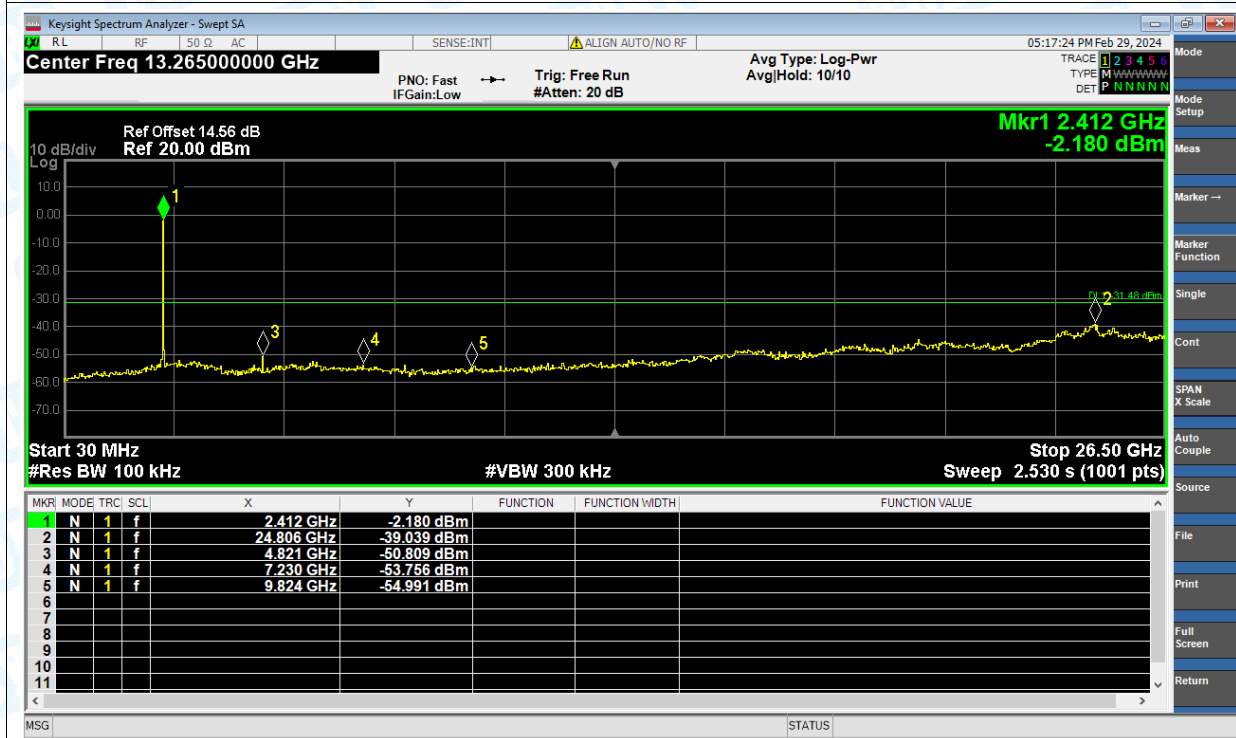
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-37.56	-30	Pass
NVNT	b	2437	Ant1	-38.52	-30	Pass
NVNT	b	2462	Ant1	-39.96	-30	Pass
NVNT	g	2412	Ant1	-40.01	-30	Pass
NVNT	g	2437	Ant1	-39.65	-30	Pass
NVNT	g	2462	Ant1	-39.14	-30	Pass
NVNT	n(HT20)	2412	Ant1	-39.88	-30	Pass
NVNT	n(HT20)	2437	Ant1	-38.31	-30	Pass
NVNT	n(HT20)	2462	Ant1	-38.71	-30	Pass
NVNT	n(HT40)	2422	Ant1	-36.02	-30	Pass
NVNT	n(HT40)	2437	Ant1	-31.64	-30	Pass
NVNT	n(HT40)	2452	Ant1	-32.28	-30	Pass

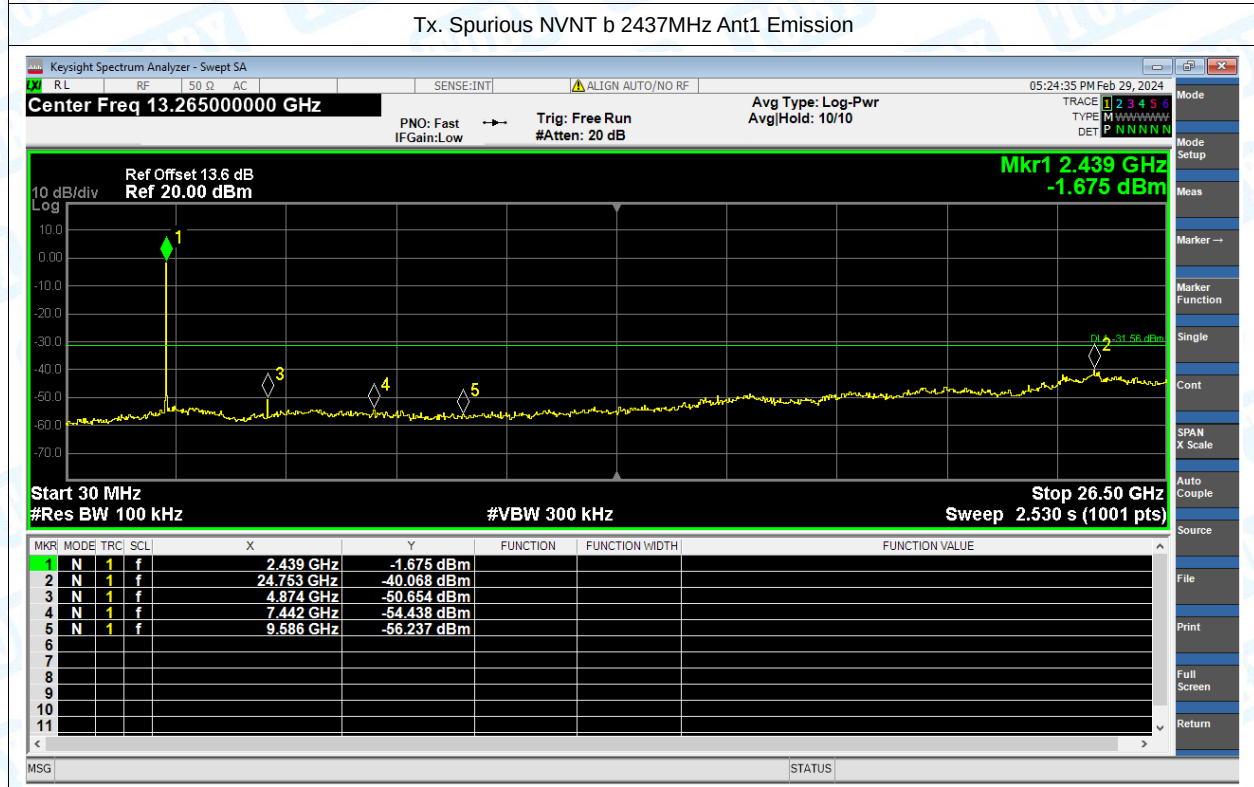
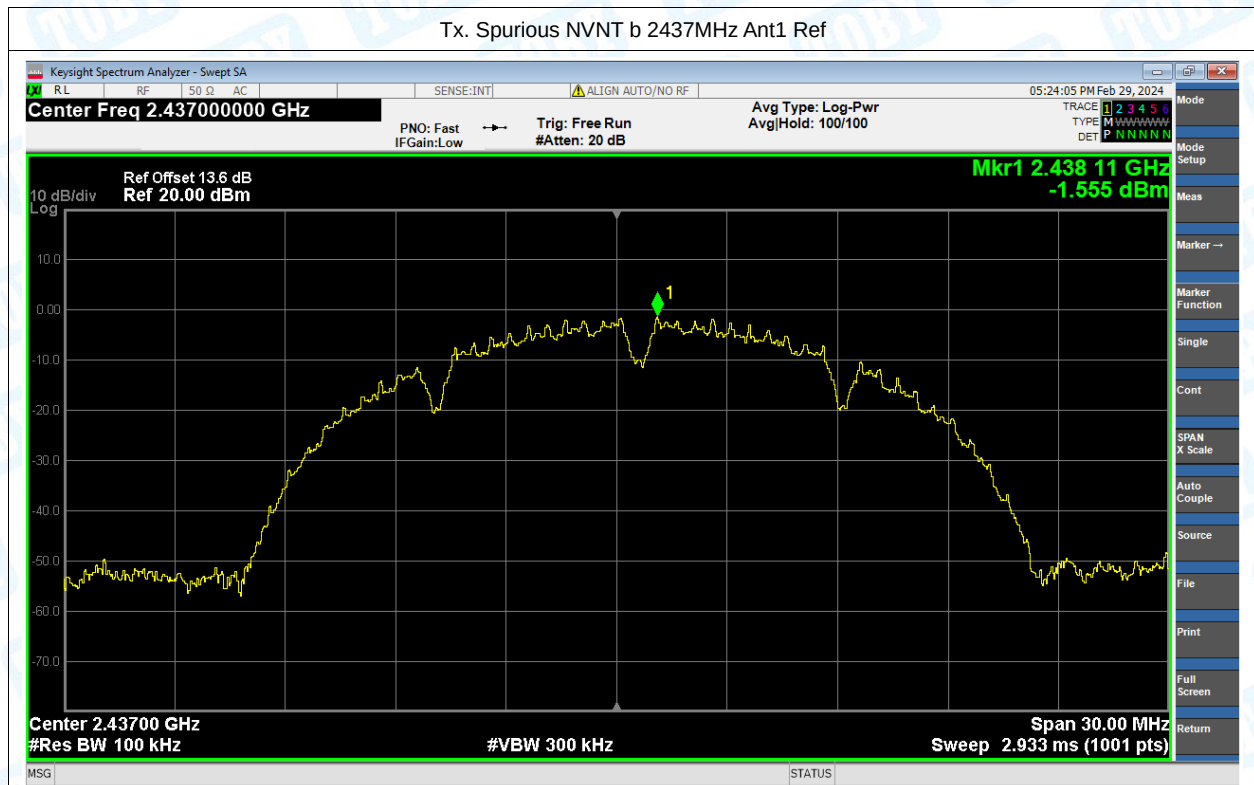
Test Graphs

Tx. Spurious NVNT b 2412MHz Ant1 Ref



Tx. Spurious NVNT b 2412MHz Ant1 Emission

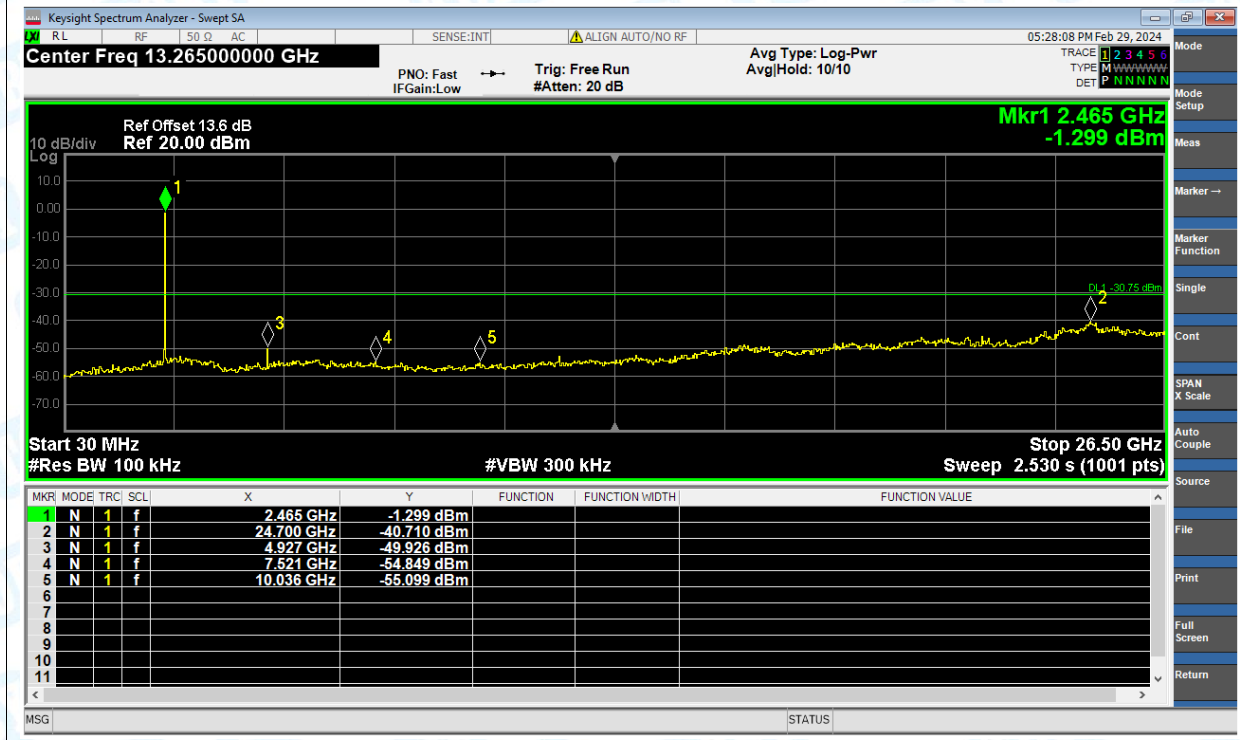




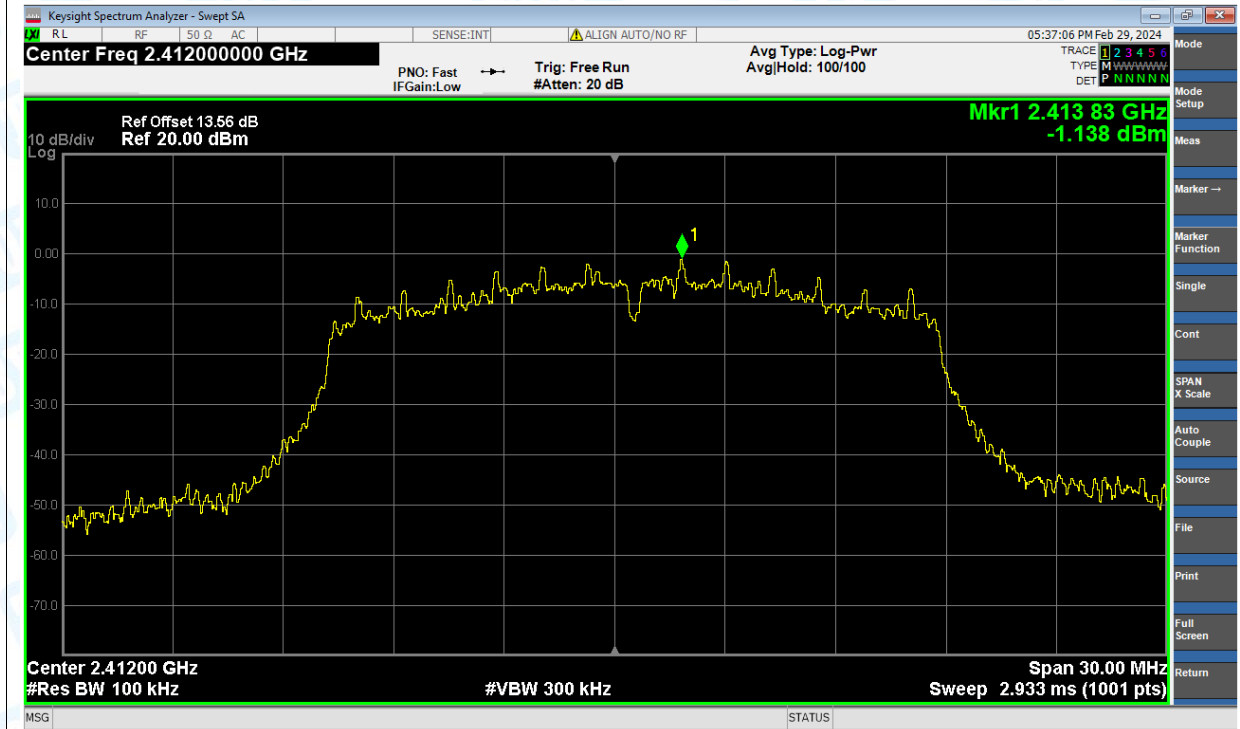
Tx. Spurious NVNT b 2462MHz Ant1 Ref



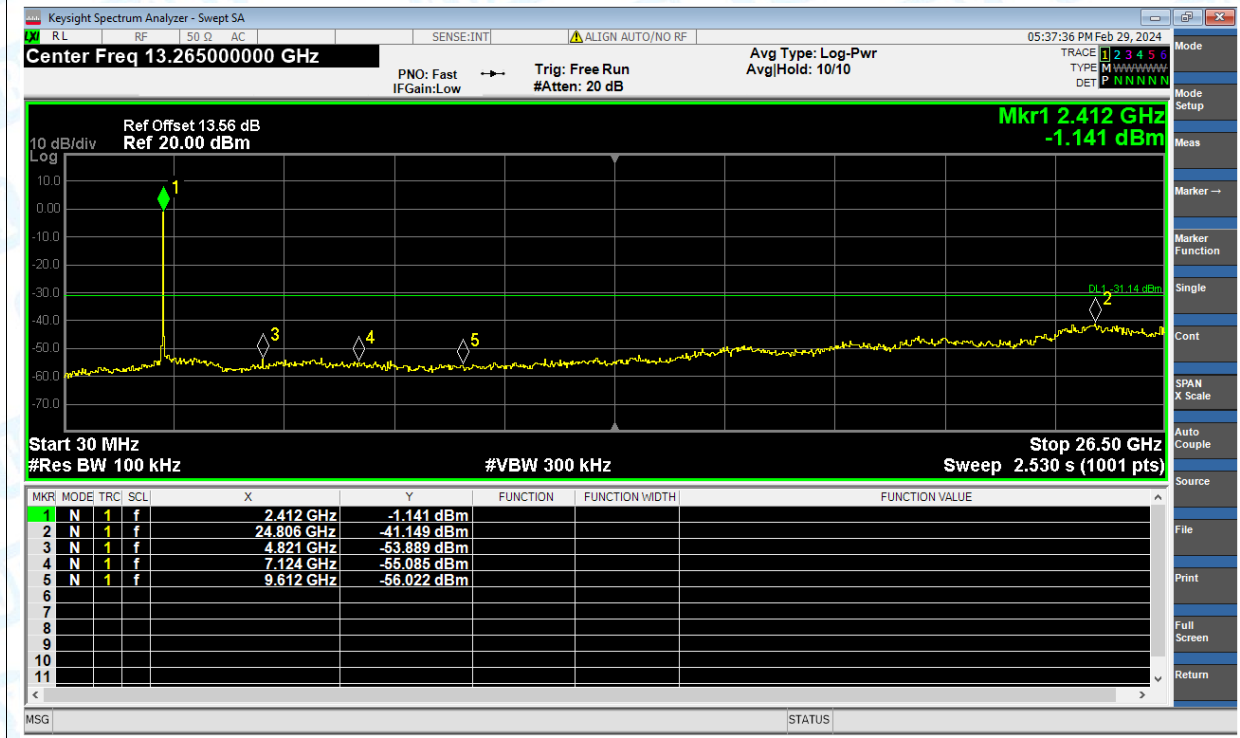
Tx. Spurious NVNT b 2462MHz Ant1 Emission



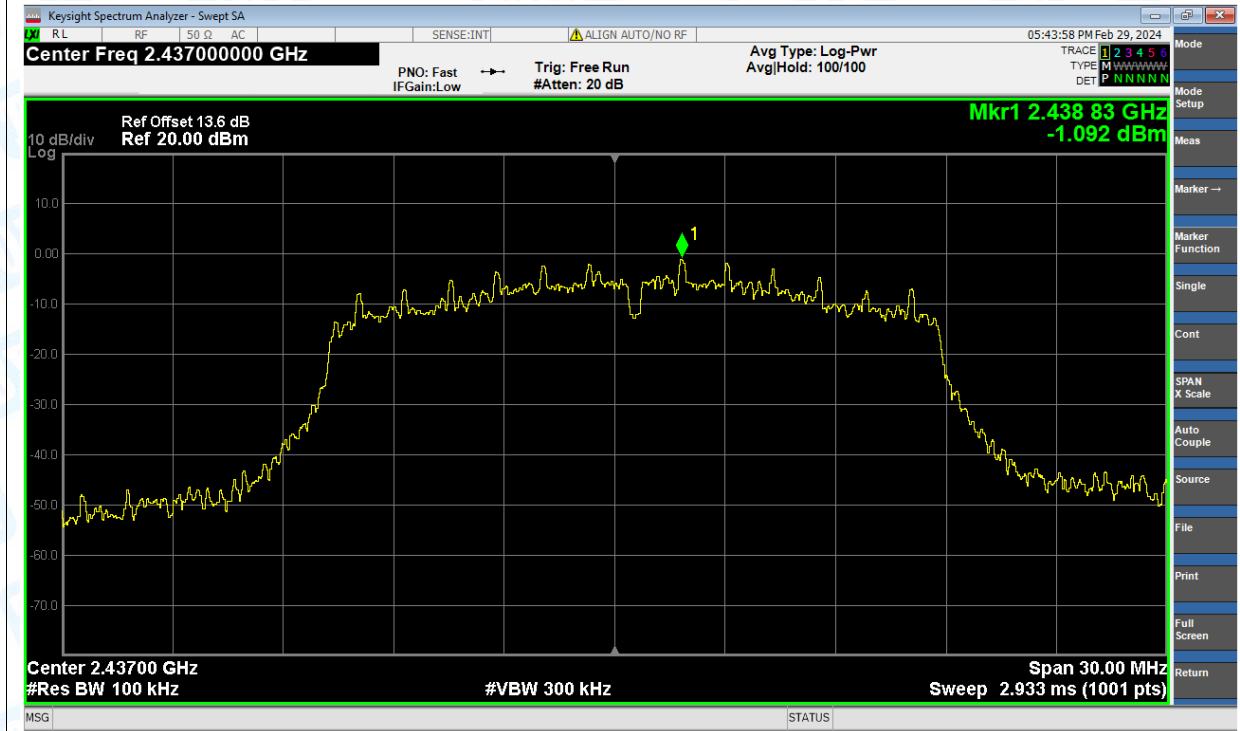
Tx. Spurious NVNT g 2412MHz Ant1 Ref



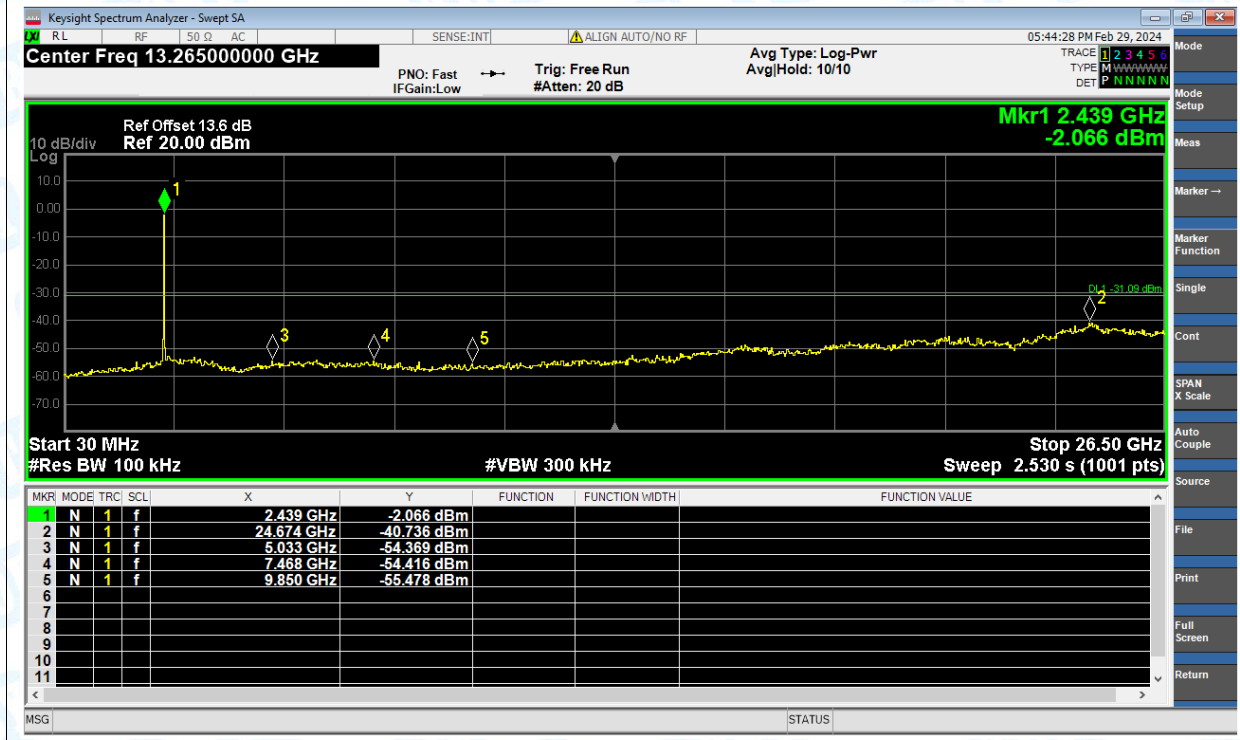
Tx. Spurious NVNT g 2412MHz Ant1 Emission



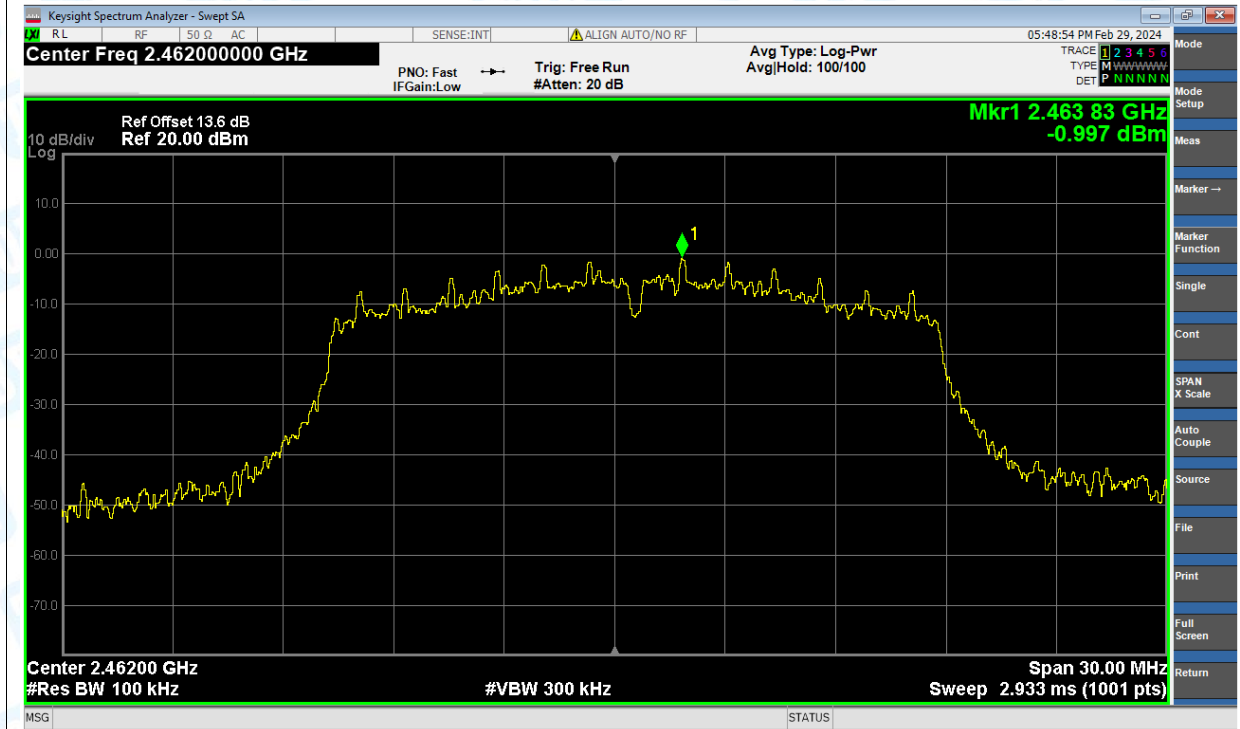
Tx. Spurious NVNT g 2437MHz Ant1 Ref



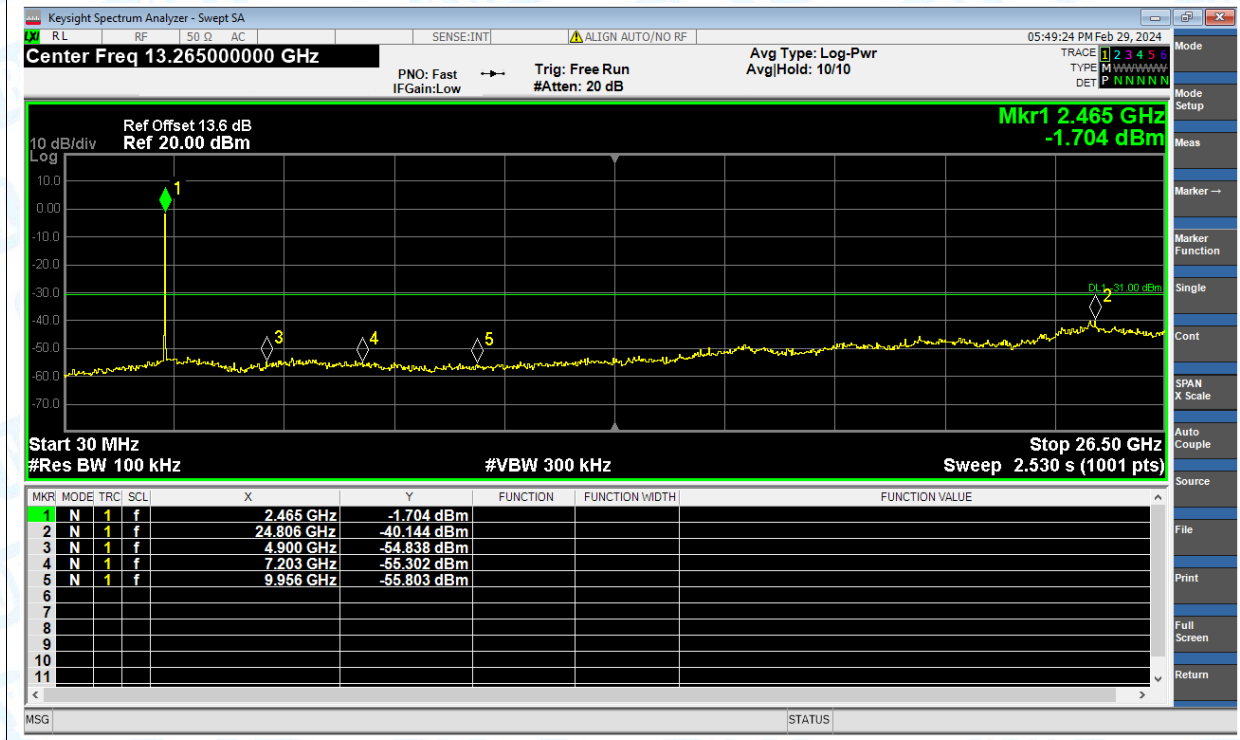
Tx. Spurious NVNT g 2437MHz Ant1 Emission



Tx. Spurious NVNT g 2462MHz Ant1 Ref



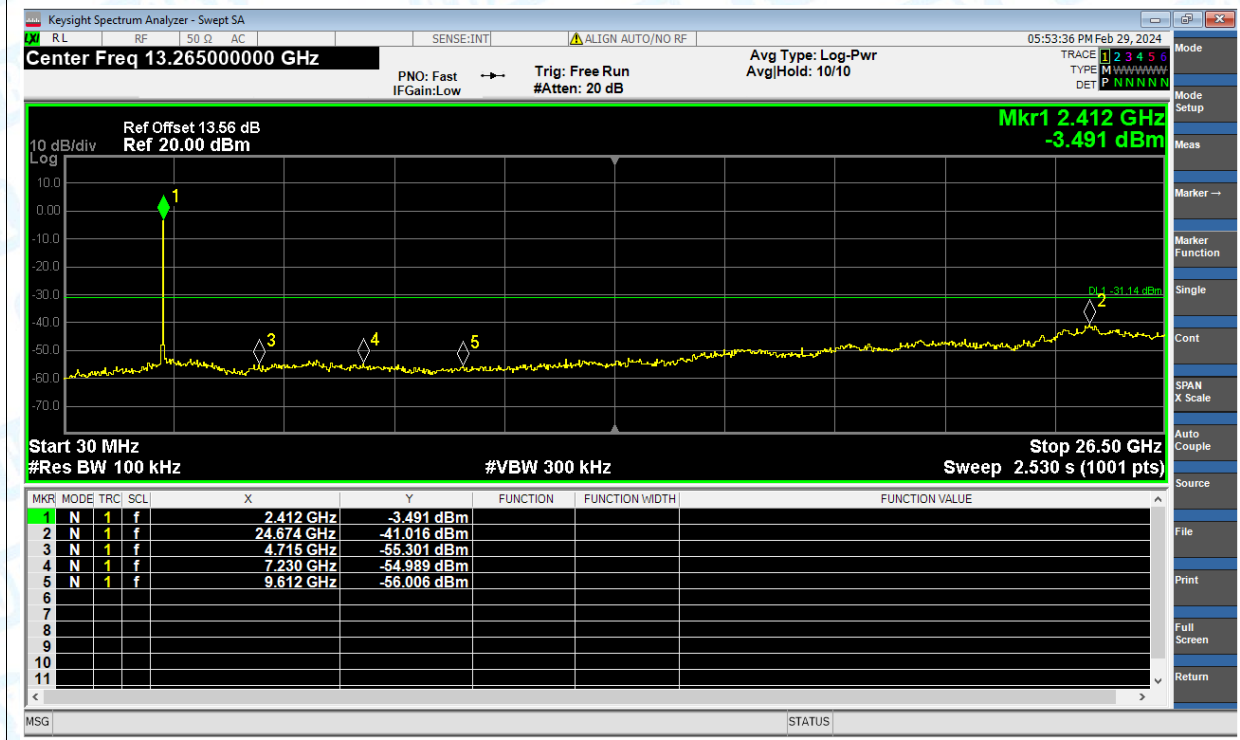
Tx. Spurious NVNT g 2462MHz Ant1 Emission



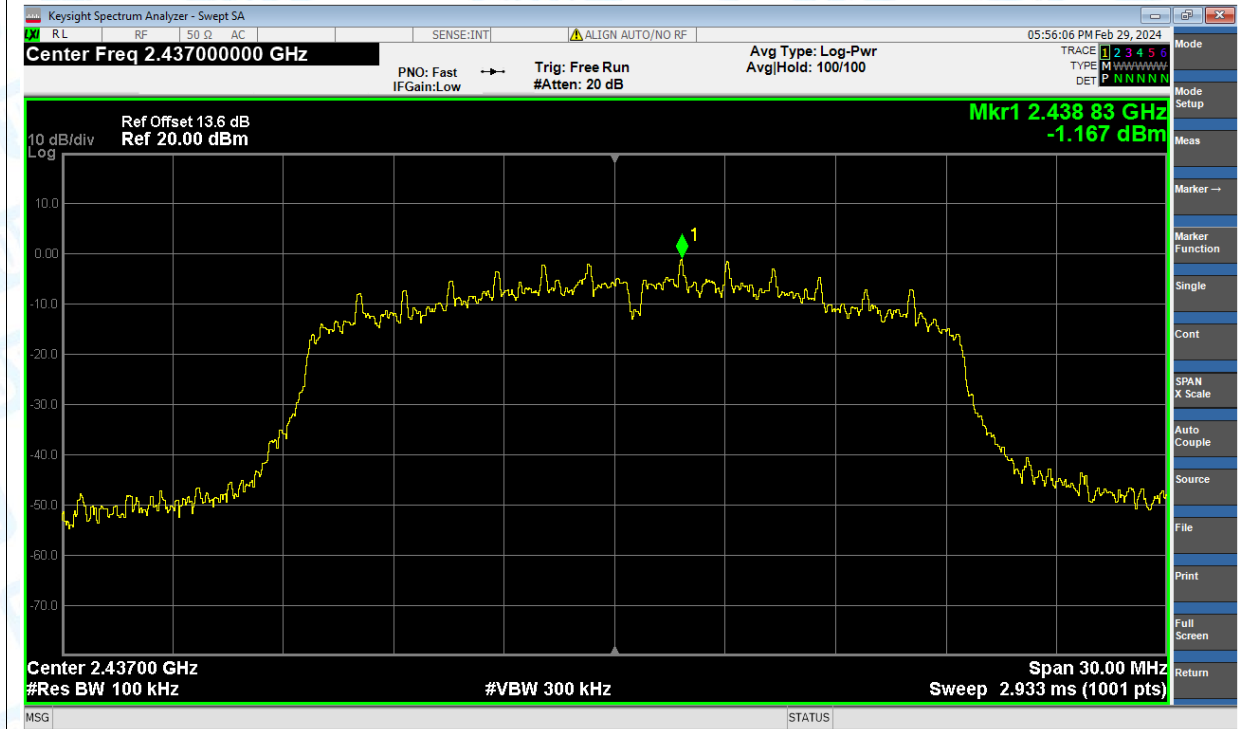
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Ref



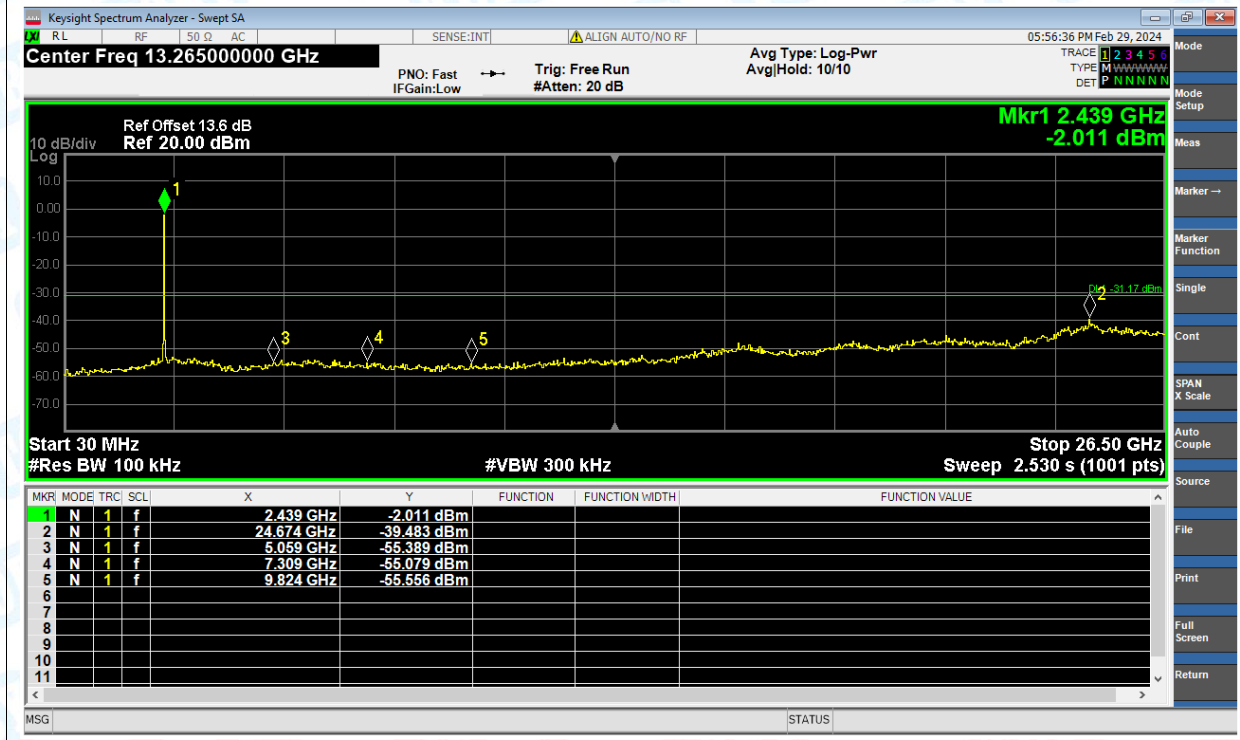
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Emission



Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Ref



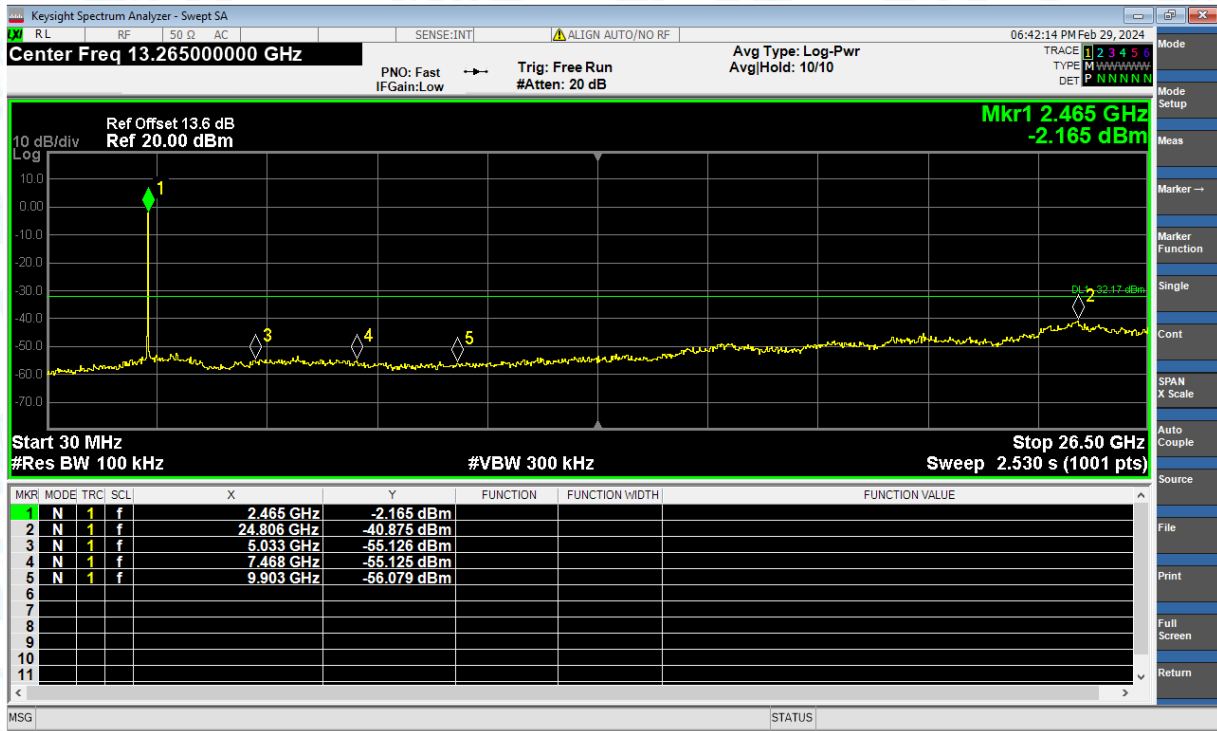
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Emission



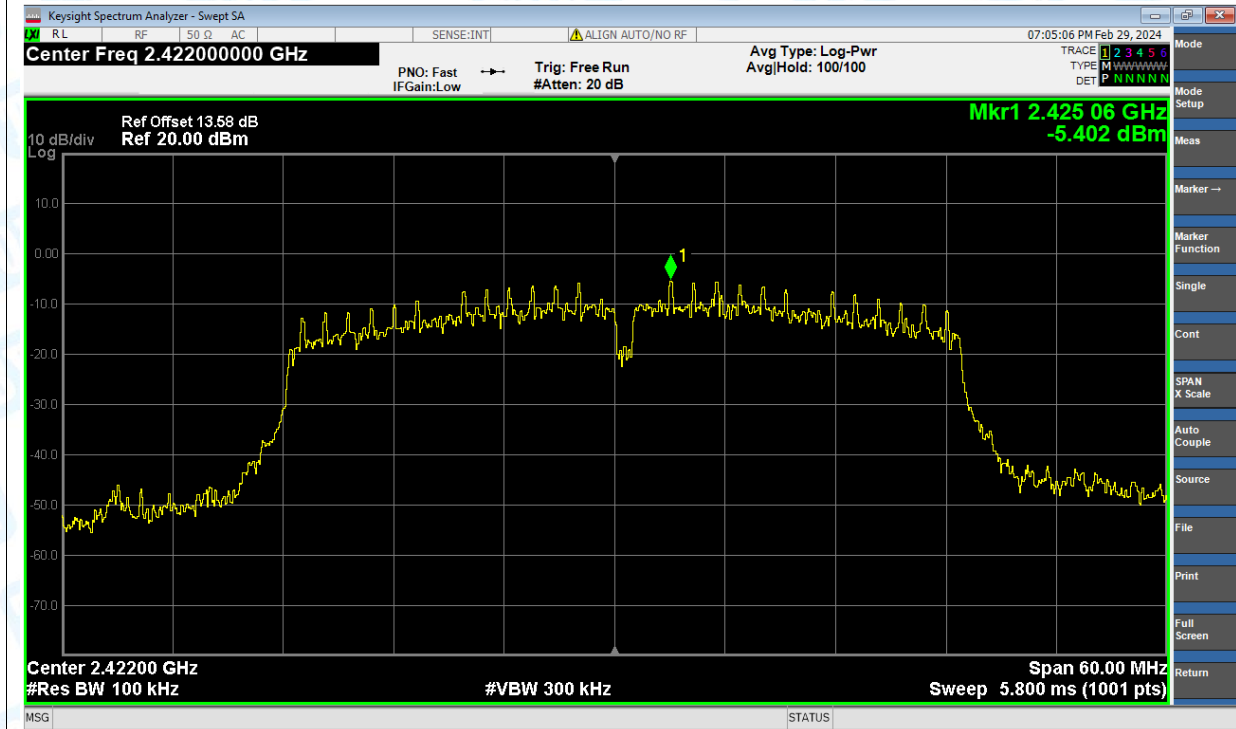
Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Ref



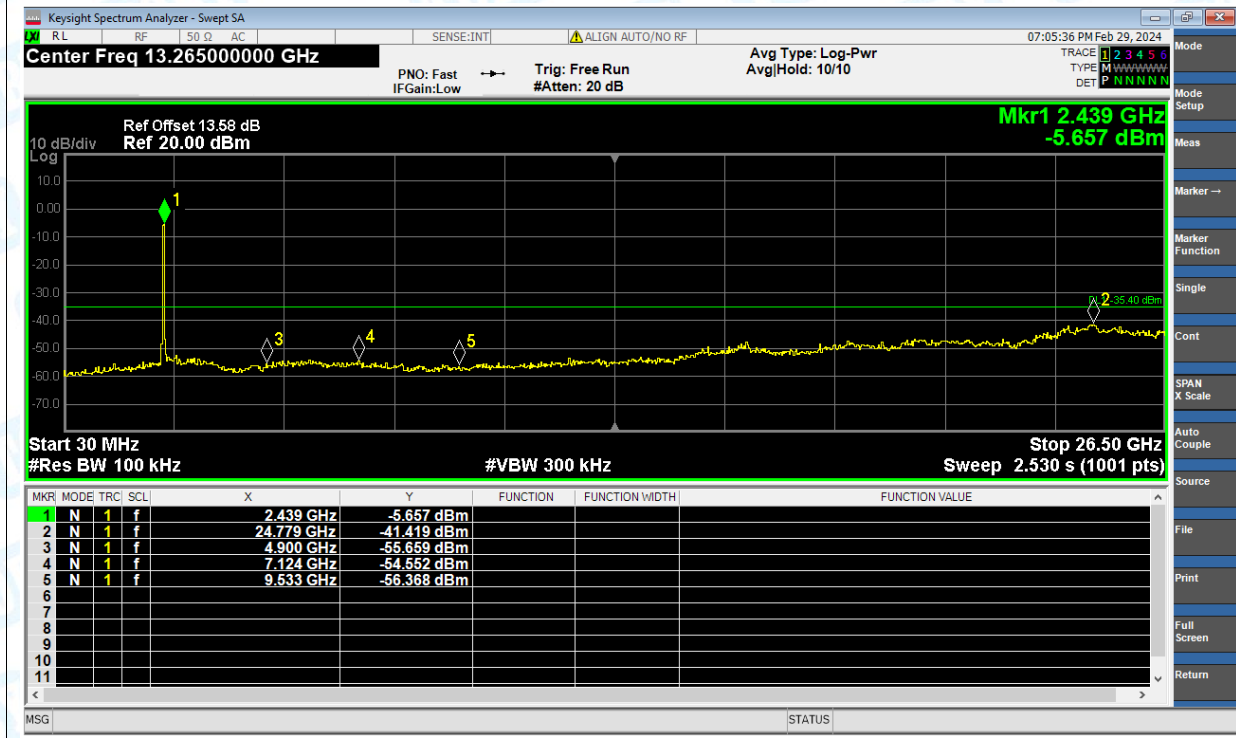
Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Emission



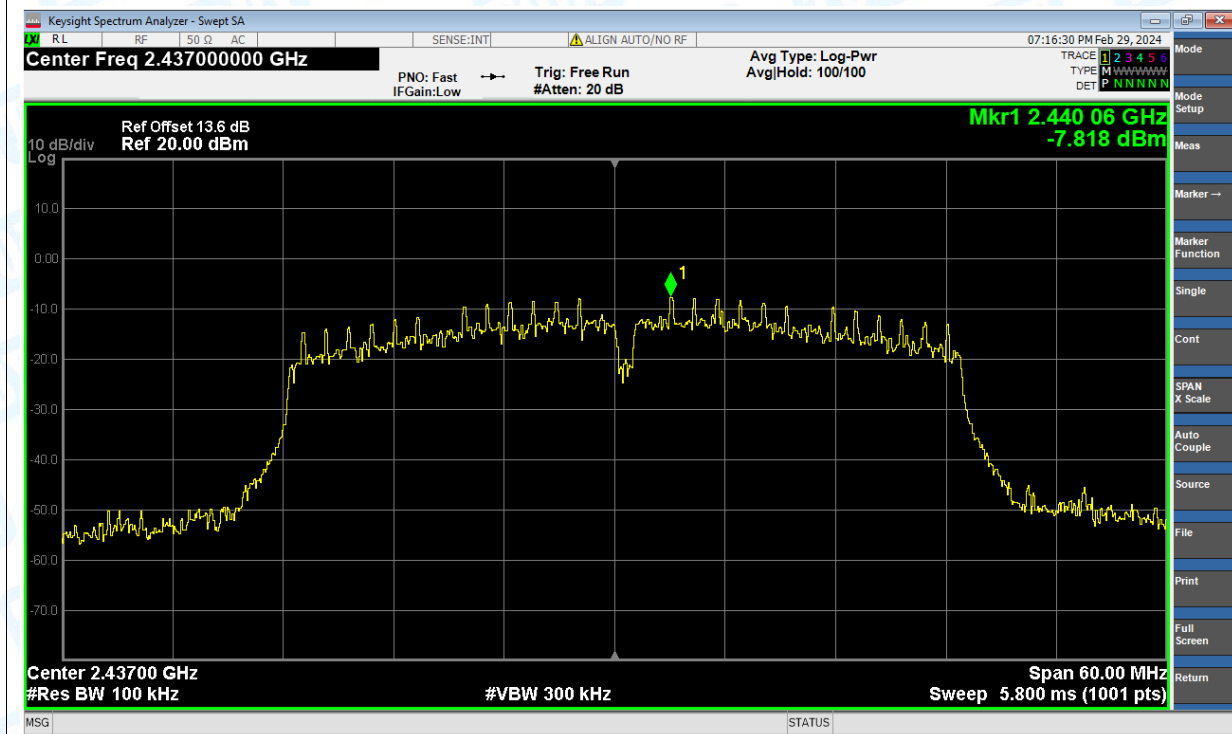
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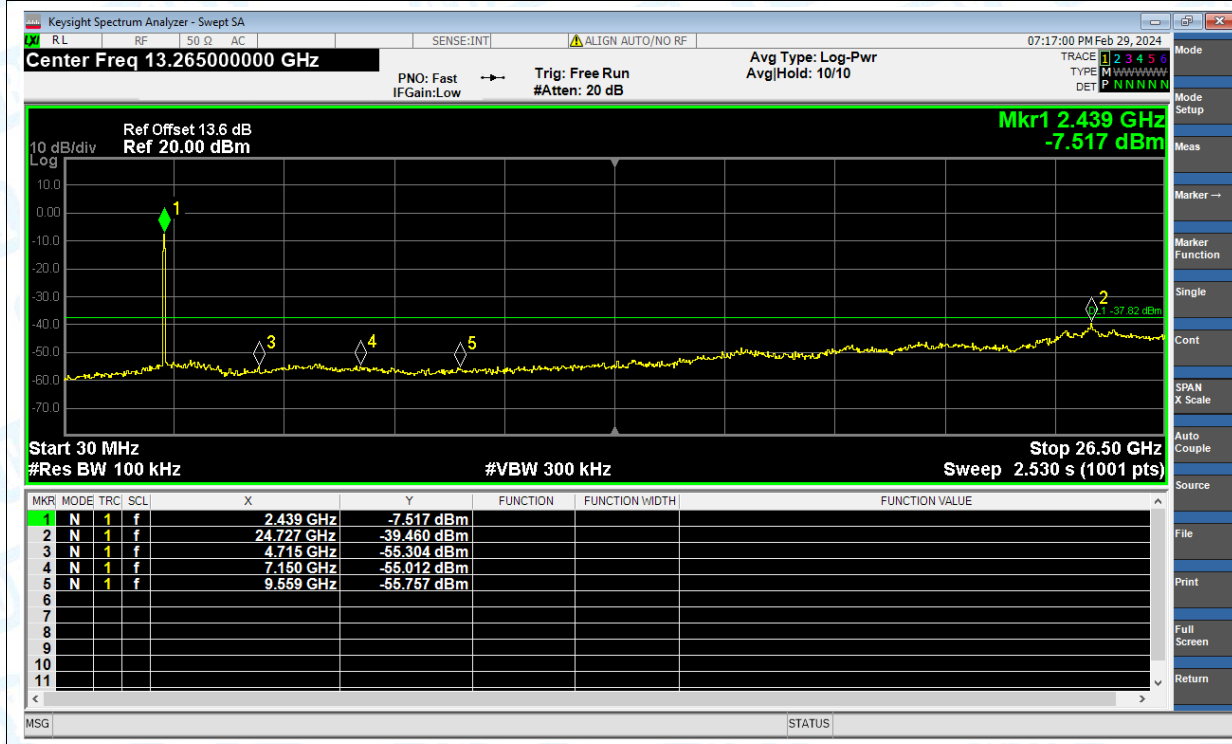
Tx. Spurious NVNT n(HT40) 2422MHz Ant1 Emission



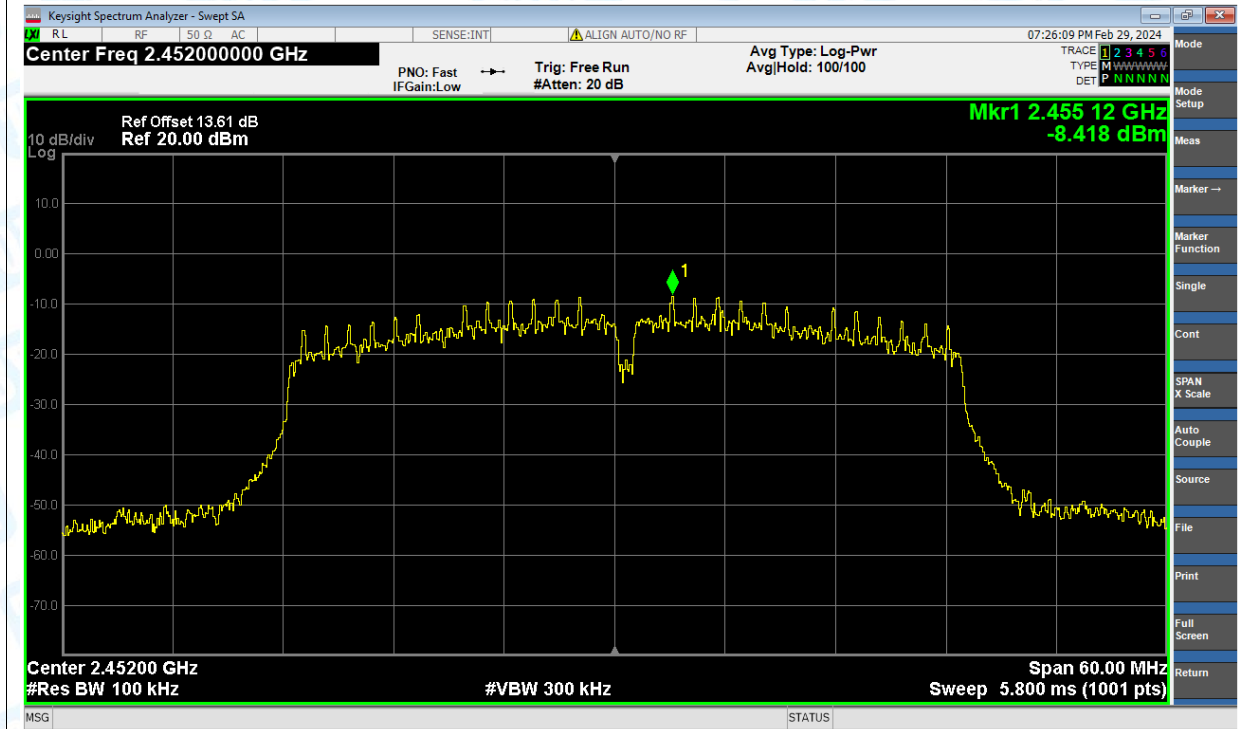
Tx. Spurious NVNT n(HT40) 2437MHz Ant1 Ref



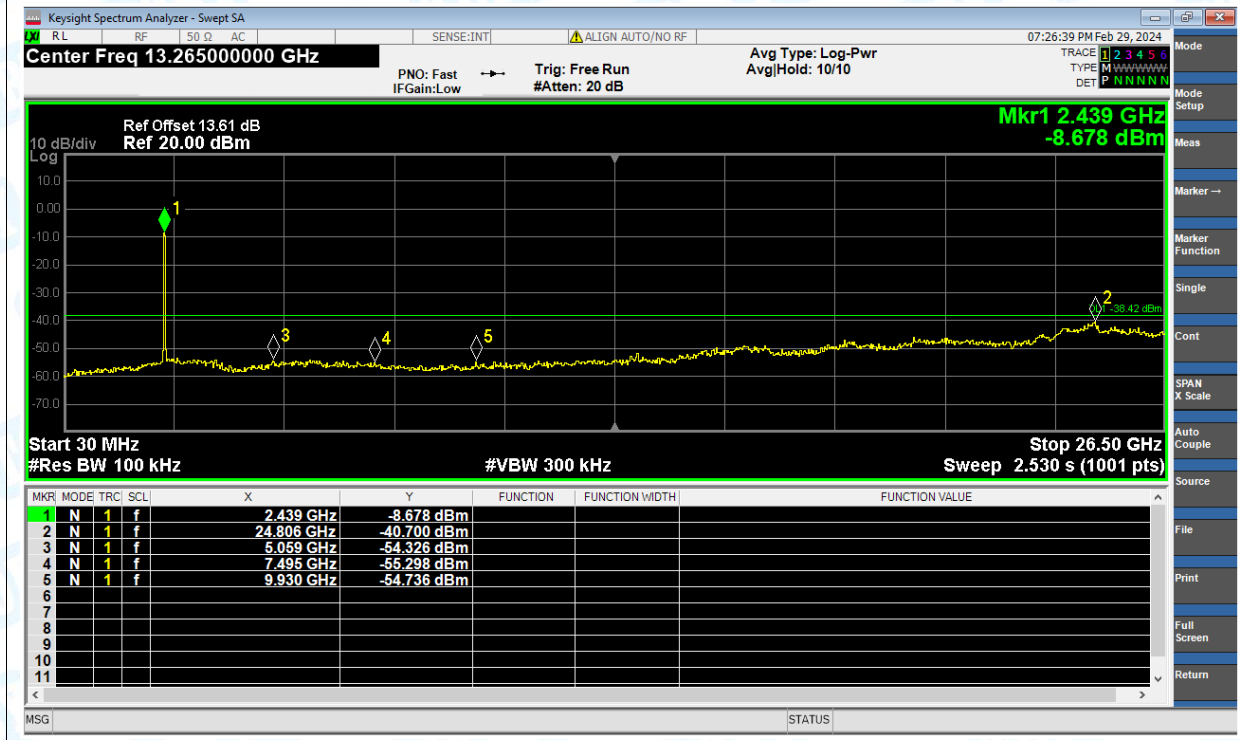
Tx. Spurious NVNT n(HT40) 2437MHz Ant1 Emission



Tx. Spurious NVNT n(HT40) 2452MHz Ant1 Ref



Tx. Spurious NVNT n(HT40) 2452MHz Ant1 Emission



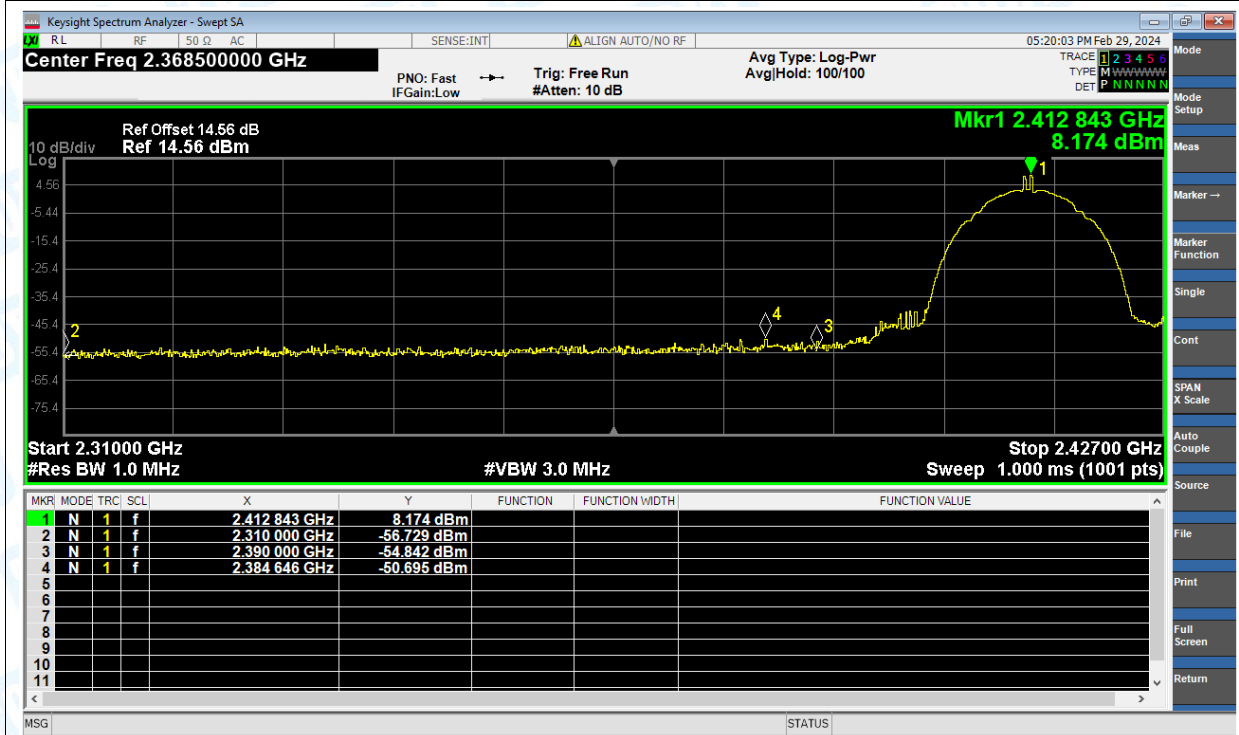
8. Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	b	2412	Ant1	2310	-56.73	3.72	-	42.25	Peak	74	Pass
NVNT	b	2412	Ant1	2310	-64.27	3.72	10.01	44.72	Average	54	Pass
NVNT	b	2412	Ant1	2384.646	-50.69	3.72	-	48.29	Peak	74	Pass
NVNT	b	2412	Ant1	2386.635	-60.91	3.72	10.01	48.08	Average	54	Pass
NVNT	b	2412	Ant1	2390	-54.84	3.72	-	44.14	Peak	74	Pass
NVNT	b	2412	Ant1	2390	-61.42	3.72	10.01	47.57	Average	54	Pass
NVNT	b	2462	Ant1	2483.5	-52.7	3.72	-	46.28	Peak	74	Pass
NVNT	b	2462	Ant1	2483.5	-60.8	3.72	10.01	48.19	Average	54	Pass
NVNT	b	2462	Ant1	2486.962	-49.44	3.72	-	49.54	Peak	74	Pass
NVNT	b	2462	Ant1	2487.174	-59.18	3.72	10.01	49.81	Average	54	Pass
NVNT	b	2462	Ant1	2500	-52.88	3.72	-	46.1	Peak	74	Pass
NVNT	b	2462	Ant1	2500	-61.61	3.72	10.01	47.38	Average	54	Pass
NVNT	g	2412	Ant1	2310	-54.95	3.72	-	44.03	Peak	74	Pass
NVNT	g	2412	Ant1	2310	-63.39	3.72	9.9	45.49	Average	54	Pass
NVNT	g	2412	Ant1	2389.794	-48.38	3.72	-	50.6	Peak	74	Pass
NVNT	g	2412	Ant1	2389.677	-59.35	3.72	9.9	49.53	Average	54	Pass
NVNT	g	2412	Ant1	2390	-51.71	3.72	-	47.27	Peak	74	Pass
NVNT	g	2412	Ant1	2390	-60.03	3.72	9.9	48.85	Average	54	Pass
NVNT	g	2462	Ant1	2483.5	-44.62	3.72	-	54.36	Peak	74	Pass
NVNT	g	2462	Ant1	2483.5	-56	3.72	10.16	53.14	Average	54	Pass
NVNT	g	2462	Ant1	2483.623	-42.72	3.72	-	56.26	Peak	74	Pass
NVNT	g	2462	Ant1	2483.57	-55.15	3.72	10.16	53.99	Average	54	Pass
NVNT	g	2462	Ant1	2500	-49.64	3.72	-	49.34	Peak	74	Pass
NVNT	g	2462	Ant1	2500	-58.01	3.72	10.16	51.13	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2310	-56.47	3.72	-	42.51	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2310	-63.64	3.72	10.24	45.58	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2389.092	-49.96	3.72	-	49.02	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2389.092	-59.43	3.72	10.24	49.79	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2390	-51.72	3.72	-	47.26	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2390	-59.73	3.72	10.24	49.49	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-45.02	3.72	-	53.96	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-55.84	3.72	10.24	53.38	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2483.888	-37.08	3.72	-	61.9	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2484.047	-55.6	3.72	10.24	53.62	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2500	-51.53	3.72	-	47.45	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2500	-63.67	3.72	10.24	45.55	Average	54	Pass
NVNT	n(HT40)	2422	Ant1	2310	-55.24	3.72	-	43.74	Peak	74	Pass
NVNT	n(HT40)	2422	Ant1	2310	-63.05	3.72	9.84	45.77	Average	54	Pass
NVNT	n(HT40)	2422	Ant1	2389.52	-43.02	3.72	-	55.96	Peak	74	Pass
NVNT	n(HT40)	2422	Ant1	2389.946	-55.15	3.72	9.84	53.67	Average	54	Pass
NVNT	n(HT40)	2422	Ant1	2390	-48.32	3.72	-	50.66	Peak	74	Pass

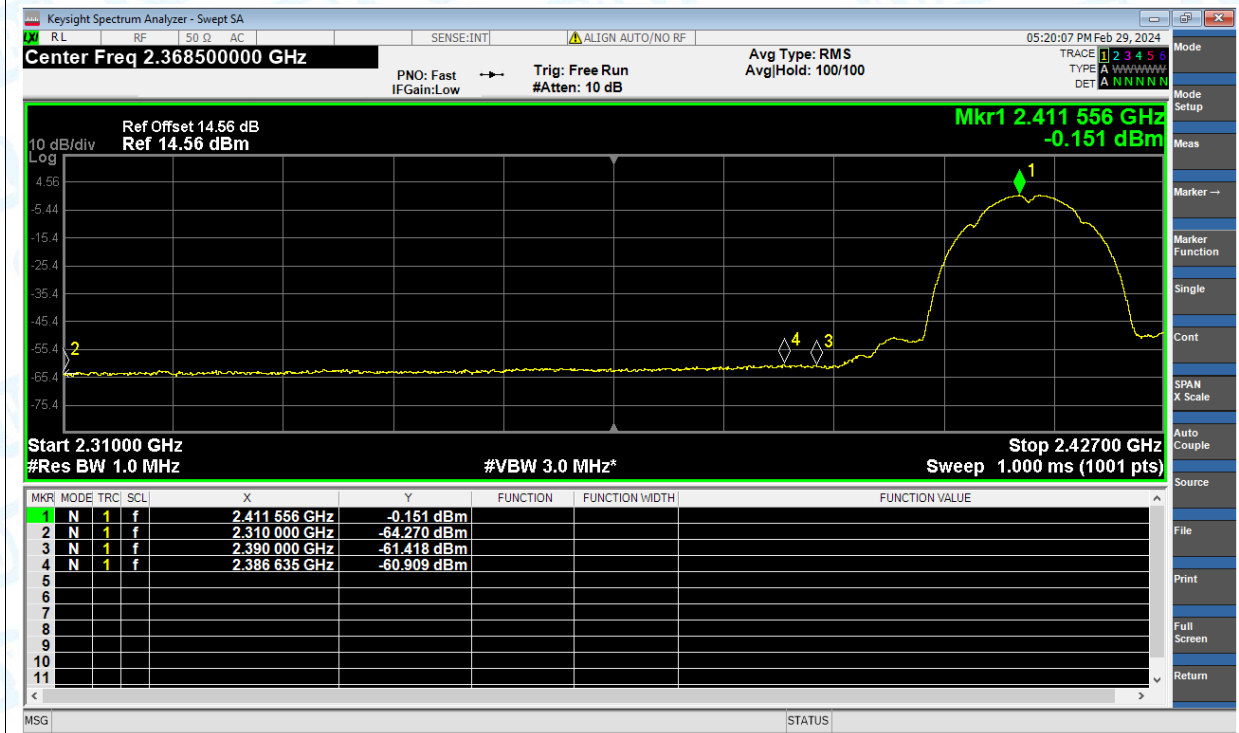
NVNT	n(HT40)	2422	Ant1	2390	-55.15	3.72	9.84	53.67	Average	54	Pass
NVNT	n(HT40)	2452	Ant1	2483.5	-45.64	3.72	-	53.34	Peak	74	Pass
NVNT	n(HT40)	2452	Ant1	2483.5	-59.86	3.72	10.21	49.33	Average	54	Pass
NVNT	n(HT40)	2452	Ant1	2483.932	-37.2	3.72	-	61.78	Peak	74	Pass
NVNT	n(HT40)	2452	Ant1	2483.776	-55.29	3.72	10.21	53.9	Average	54	Pass
NVNT	n(HT40)	2452	Ant1	2500	-51.6	3.72	-	47.38	Peak	74	Pass
NVNT	n(HT40)	2452	Ant1	2500	-64.27	3.72	10.21	44.92	Average	54	Pass

Test Graphs

Restrict Band NVNT b 2412MHz Ant1 Peak



Restrict Band NVNT b 2412MHz Ant1 Average



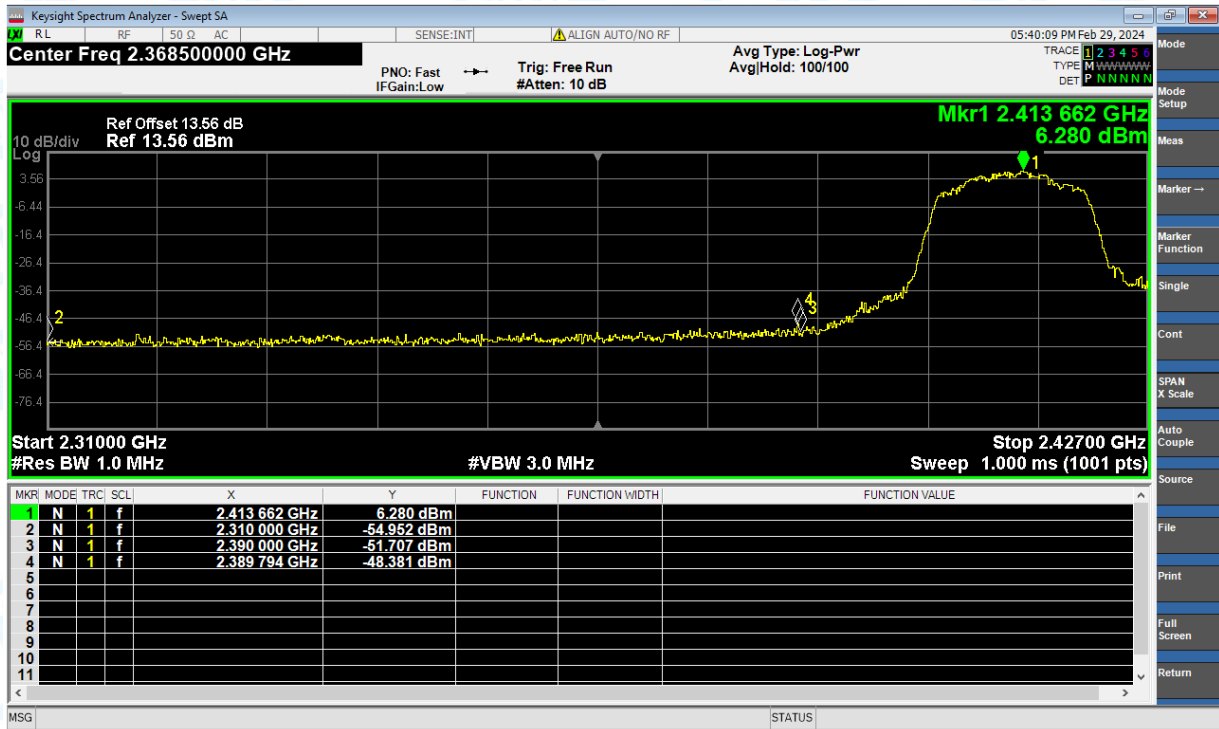
Restrict Band NVNT b 2462MHz Ant1 Peak



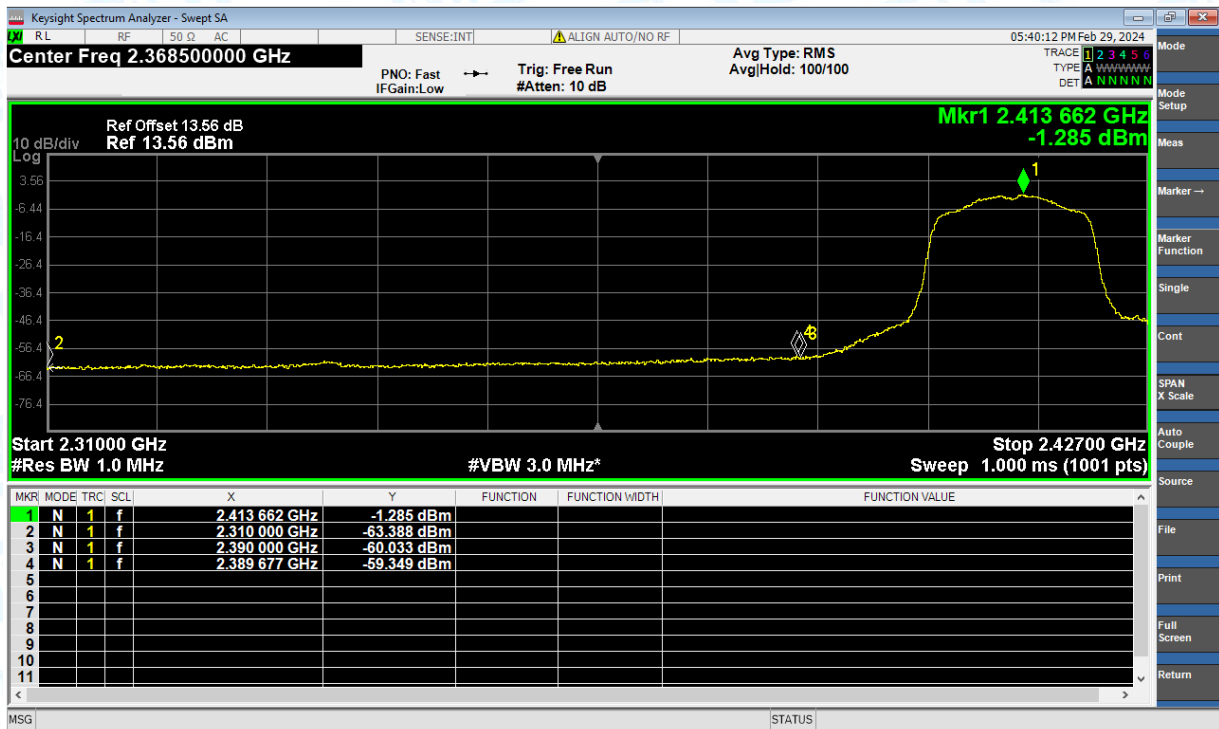
Restrict Band NVNT b 2462MHz Ant1 Average



Restrict Band NVNT g 2412MHz Ant1 Peak



Restrict Band NVNT g 2412MHz Ant1 Average



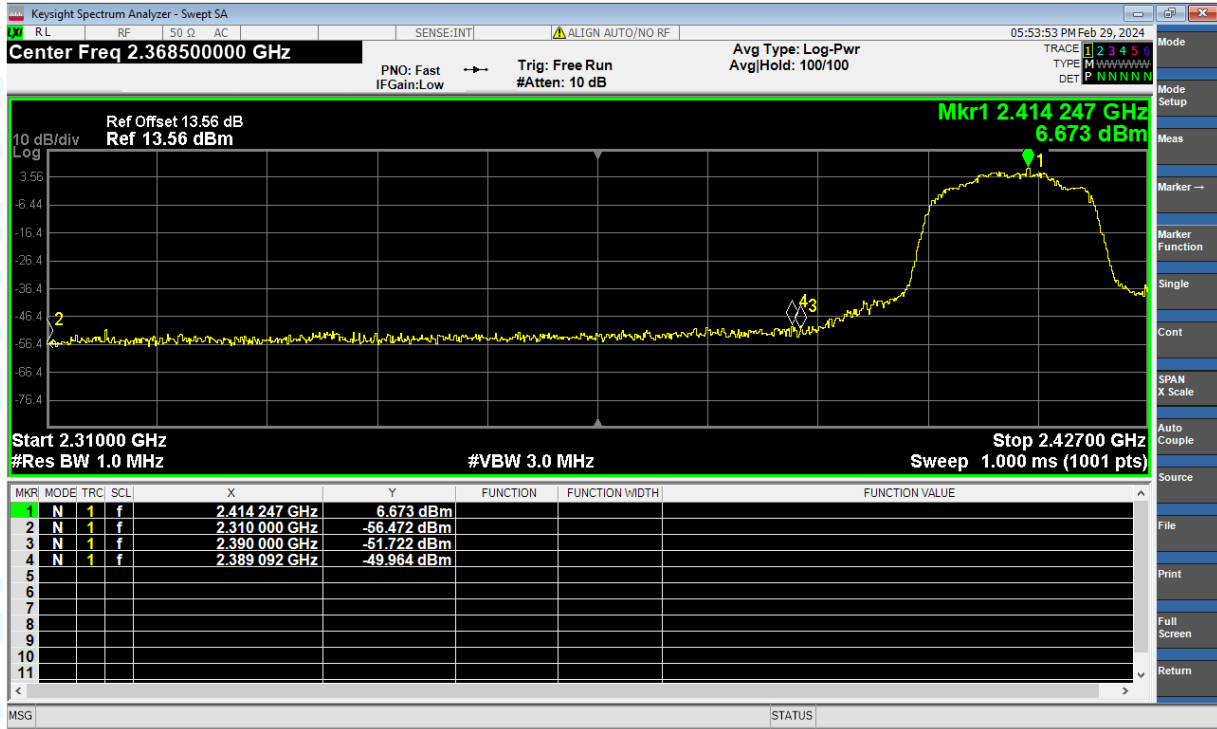
Restrict Band NVNT g 2462MHz Ant1 Peak



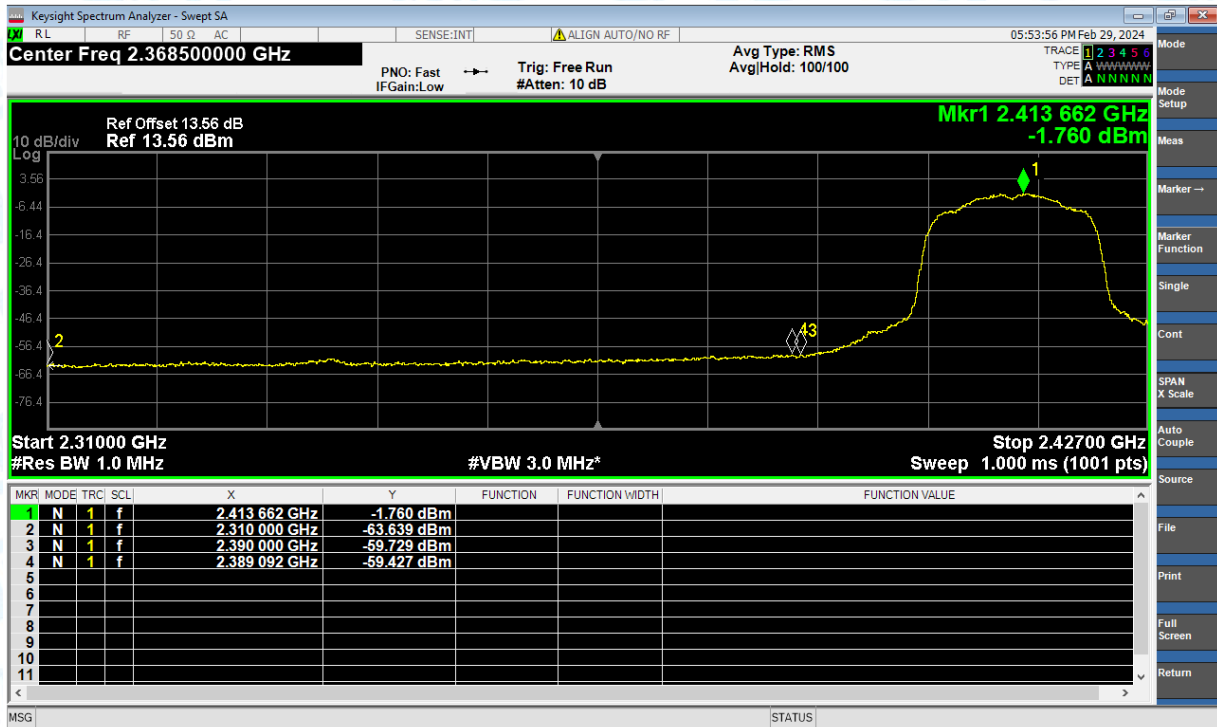
Restrict Band NVNT g 2462MHz Ant1 Average



Restrict Band NVNT n(HT20) 2412MHz Ant1 Peak



Restrict Band NVNT n(HT20) 2412MHz Ant1 Average



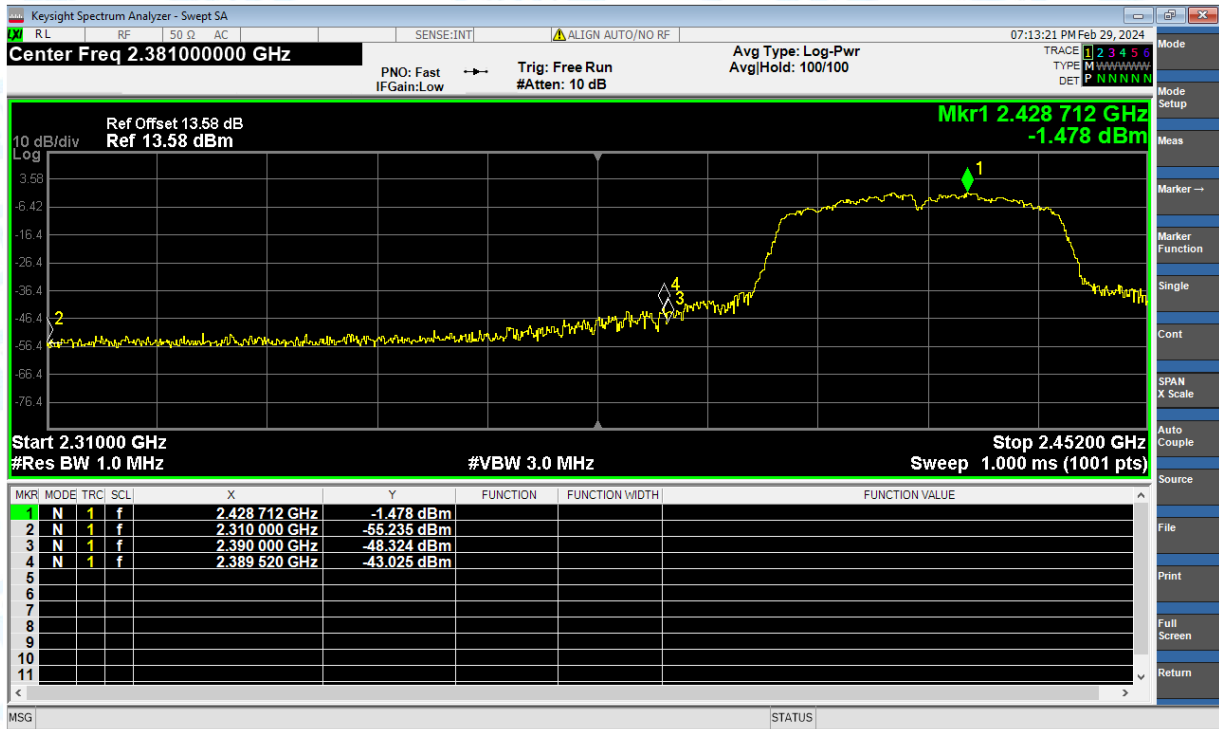
Restrict Band NVNT n(HT20) 2462MHz Ant1 Peak



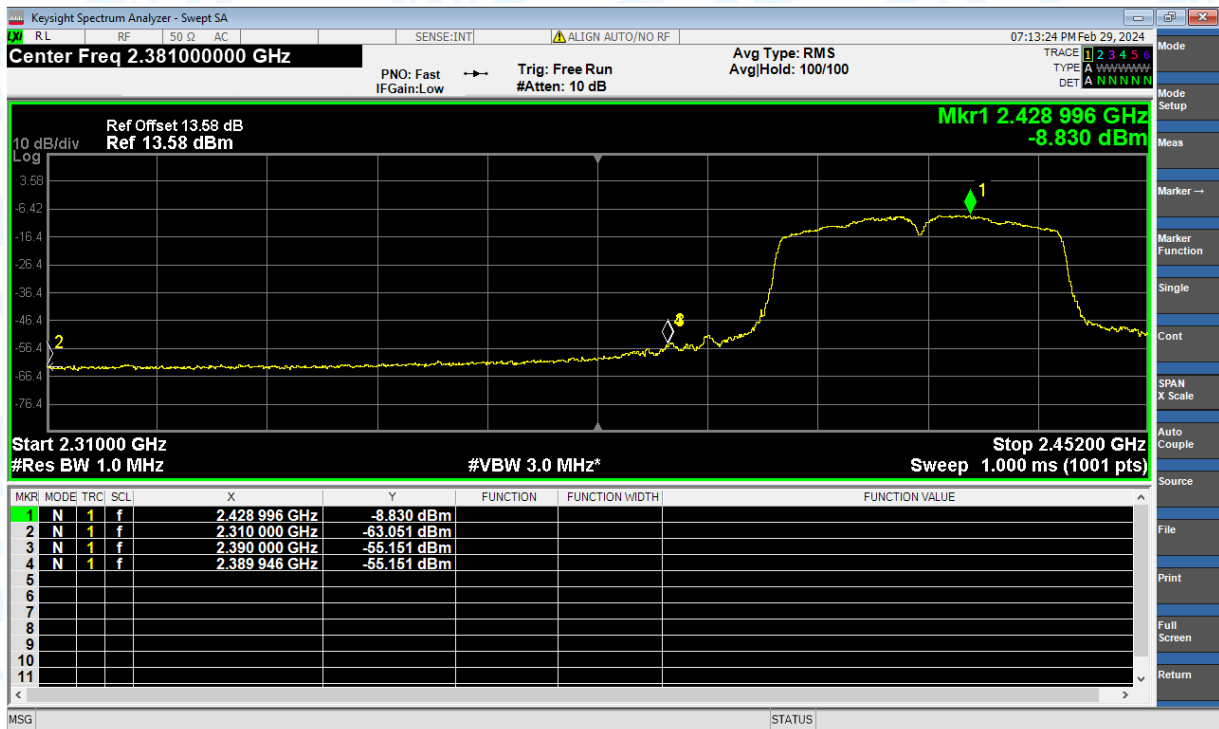
Restrict Band NVNT n(HT20) 2462MHz Ant1 Average



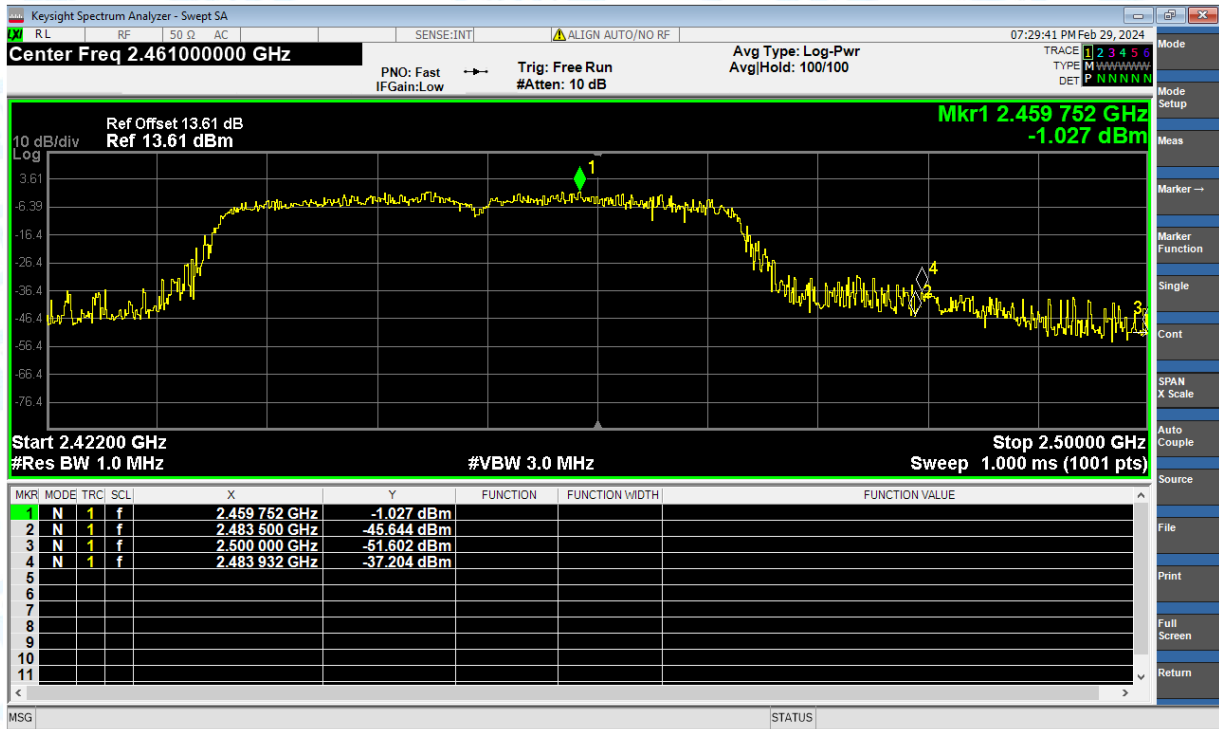
Restrict Band NVNT n(HT40) 2422MHz Ant1 Peak



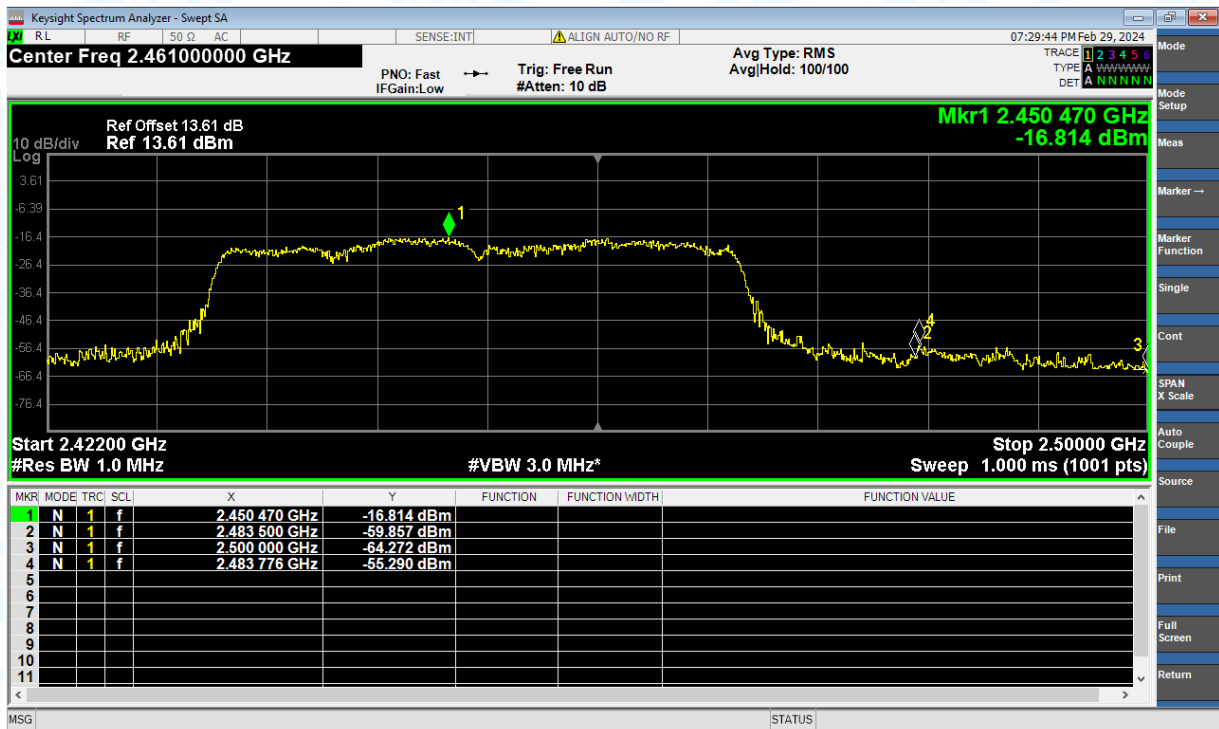
Restrict Band NVNT n(HT40) 2422MHz Ant1 Average



Restrict Band NVNT n(HT40) 2452MHz Ant1 Peak



Restrict Band NVNT n(HT40) 2452MHz Ant1 Average



-----END OF THE REPORT-----