

# RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
<b>Product Name:</b>	Kids Tablet
<b>Test Model:</b>	AT81K
<b>Sample ID:</b>	202401-0115-11-2#
Environmental Conditions	
<b>Temperature:</b>	25°C
<b>Relative Humidity:</b>	55%
<b>Test Voltage:</b>	DC 3.8V
<b>Test Engineer:</b>	Zhou zhen
Note: For a more detailed features description, please refer to the report TBR-C-202401-0115-182 The report only show the worst case data.	



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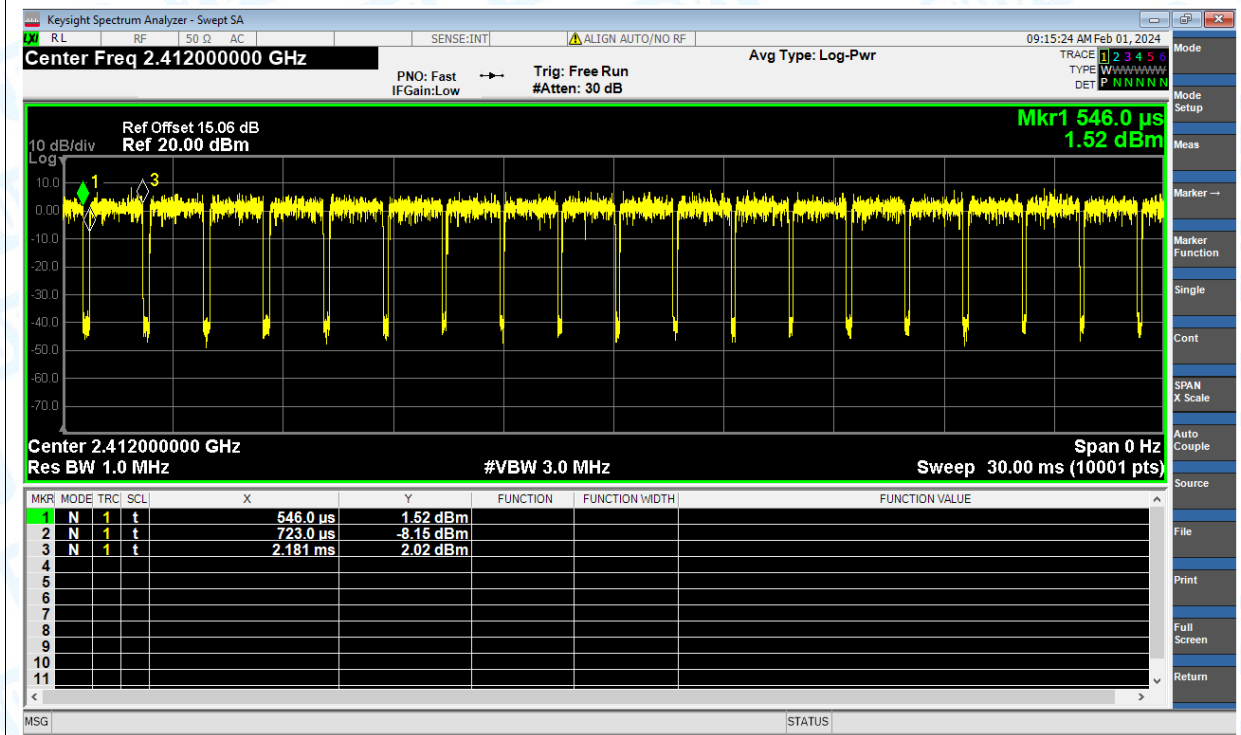


# 1. Duty Cycle

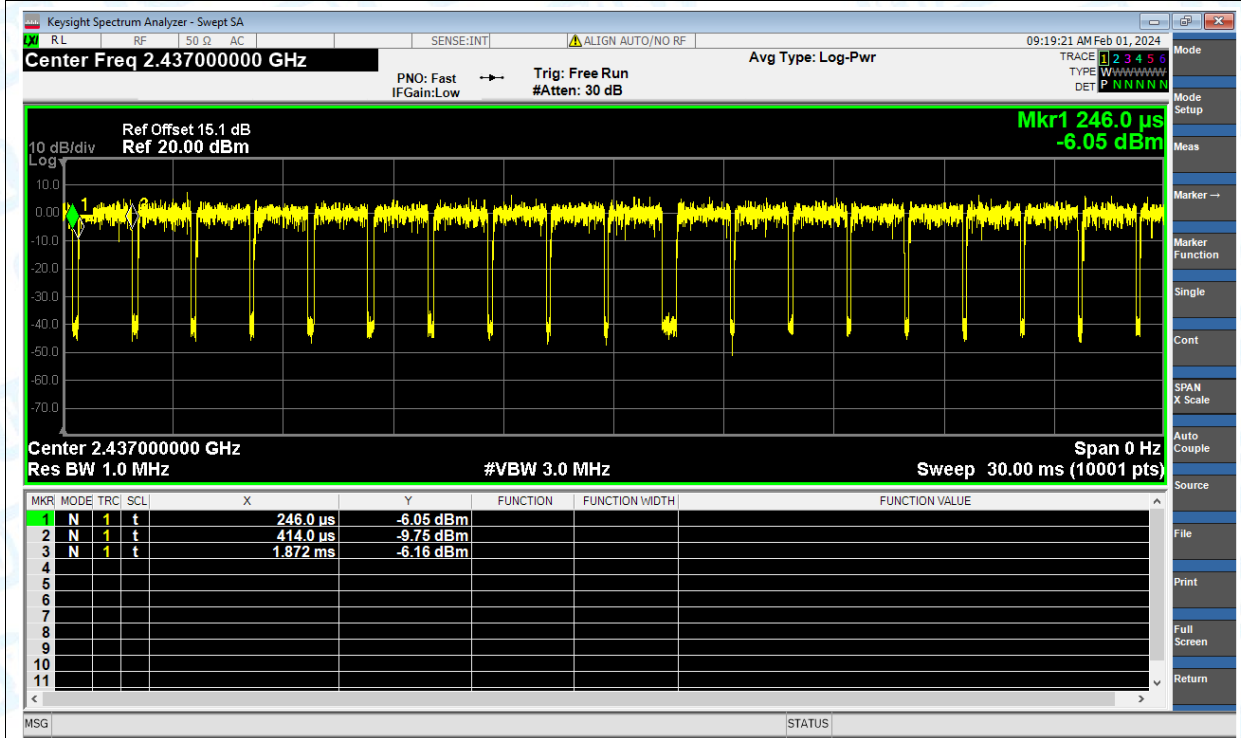
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	ax(HE20)	2412	Ant1	89.17	0.5	0.69
NVNT	ax(HE20)	2437	Ant1	89.67	0.47	0.69
NVNT	ax(HE20)	2462	Ant1	91.37	0.39	0.68
NVNT	ax(HE40)	2422	Ant1	82.61	0.83	1.32
NVNT	ax(HE40)	2437	Ant1	81.9	0.87	1.32
NVNT	ax(HE40)	2452	Ant1	84.82	0.72	1.32
NVNT	b	2412	Ant1	99.12	0.04	0.08
NVNT	b	2437	Ant1	99.12	0.04	0.08
NVNT	b	2462	Ant1	98.91	0.05	0.08
NVNT	g	2412	Ant1	94.69	0.24	0.49
NVNT	g	2437	Ant1	94.69	0.24	0.49
NVNT	g	2462	Ant1	93.9	0.27	0.49
NVNT	n(HT20)	2412	Ant1	92.25	0.35	0.53
NVNT	n(HT20)	2437	Ant1	94.32	0.25	0.53
NVNT	n(HT20)	2462	Ant1	94.32	0.25	0.53
NVNT	n(HT40)	2422	Ant1	89.31	0.49	1.07
NVNT	n(HT40)	2437	Ant1	89.23	0.49	1.08
NVNT	n(HT40)	2452	Ant1	89.31	0.49	1.07

Test Graphs

Duty Cycle NVNT ax(HE20) 2412MHz Ant1

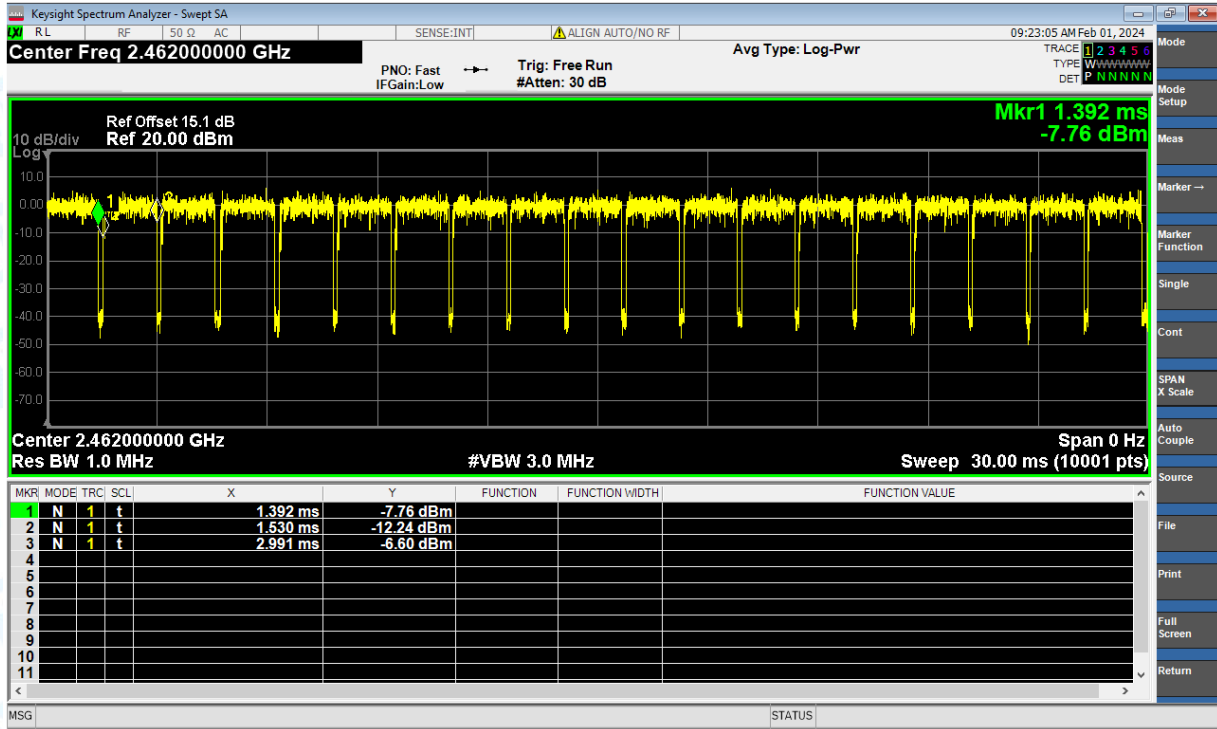


Duty Cycle NVNT ax(HE20) 2437MHz Ant1

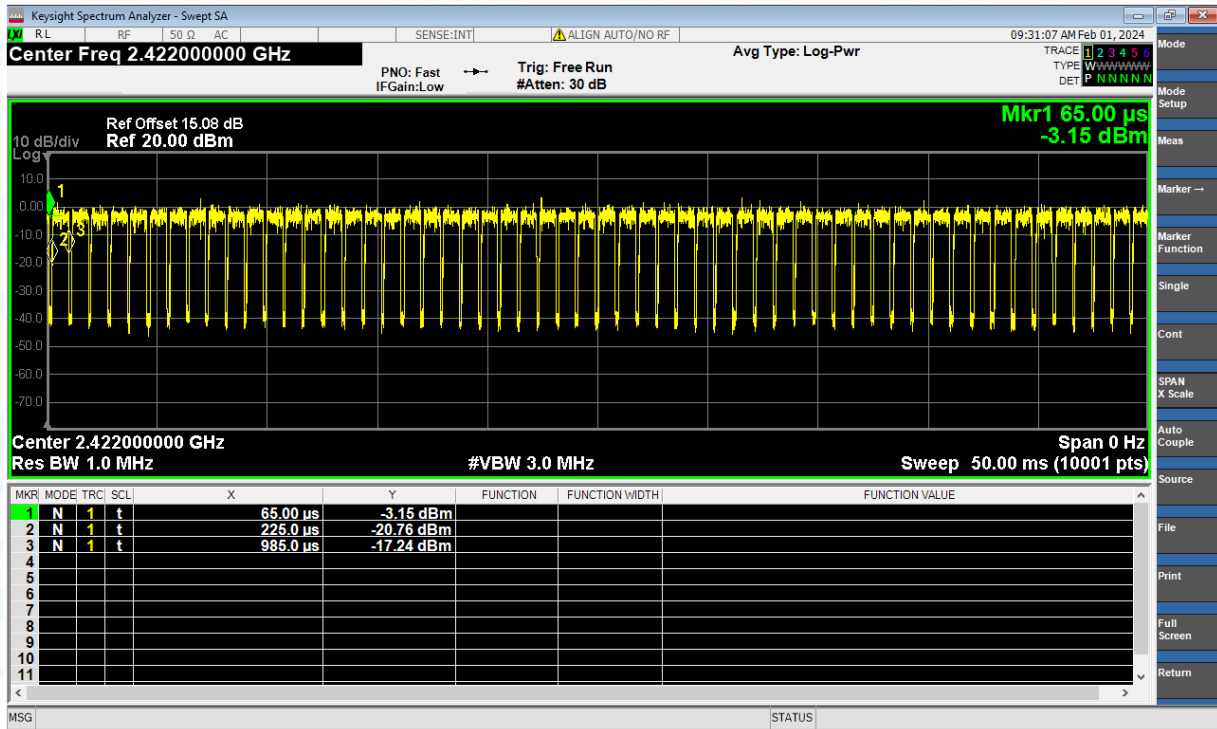




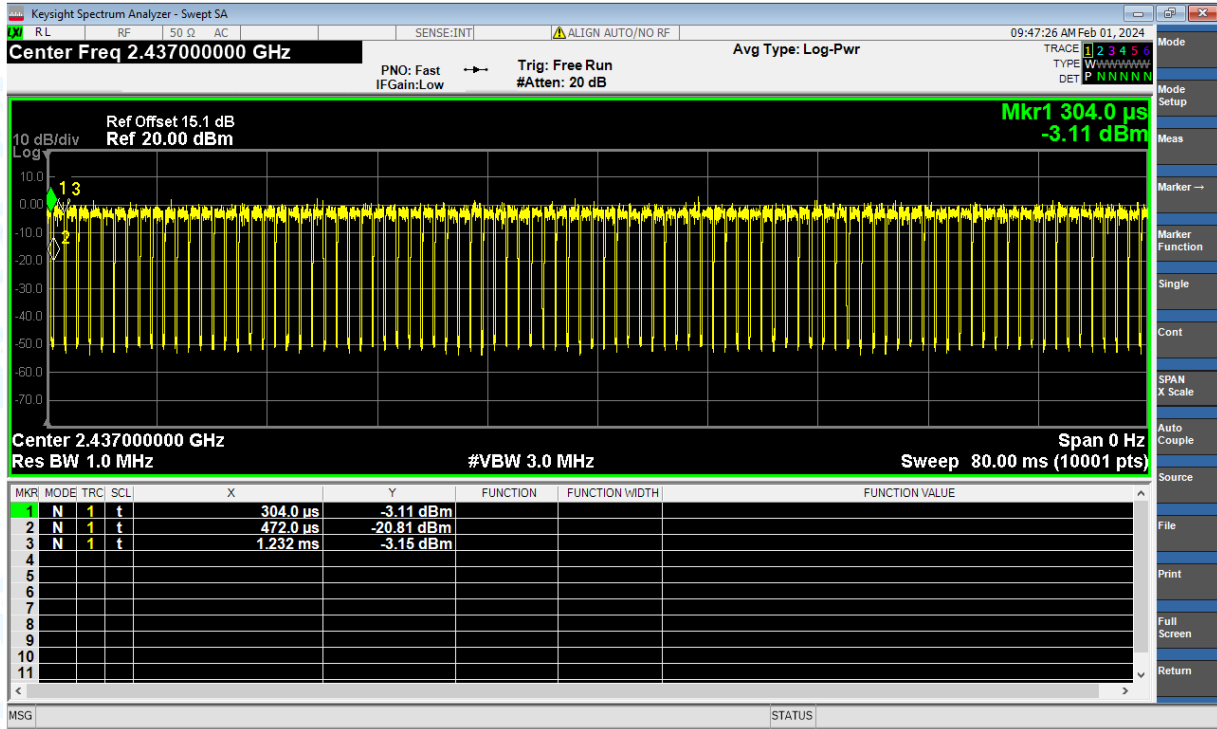
Duty Cycle NVNT ax(HE20) 2462MHz Ant1



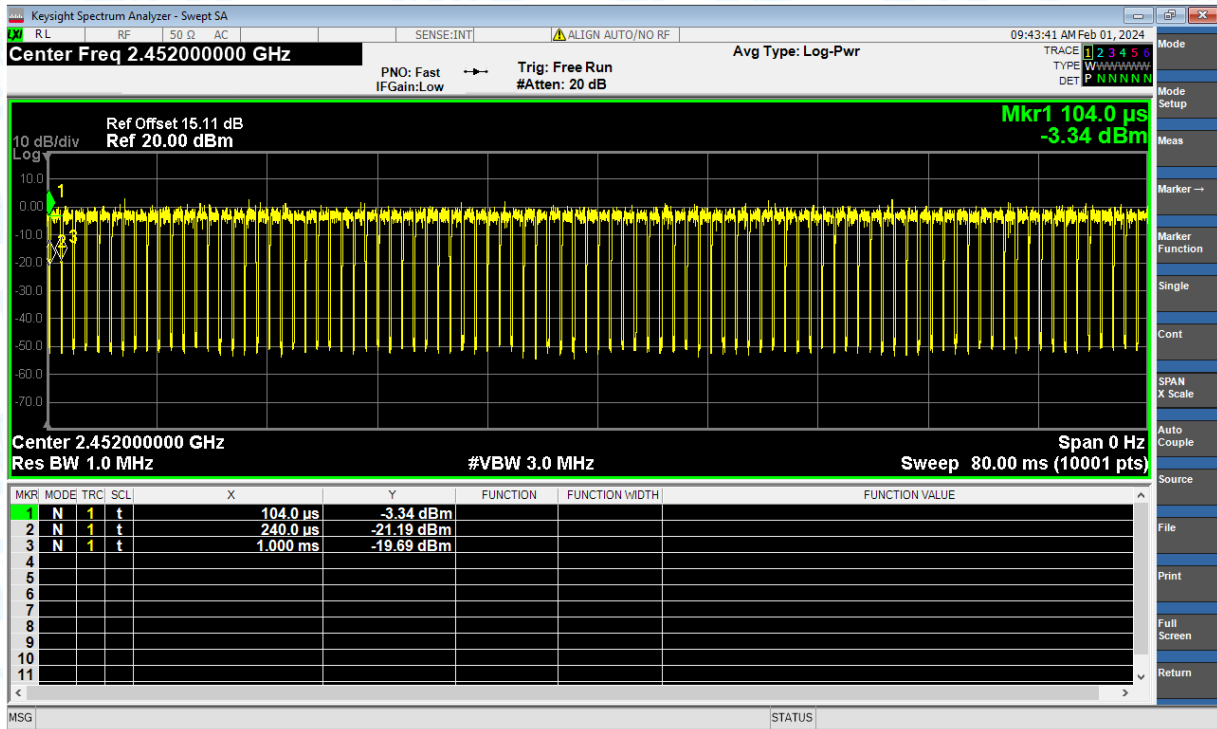
Duty Cycle NVNT ax(HE40) 2422MHz Ant1



Duty Cycle NVNT ax(HE40) 2437MHz Ant1

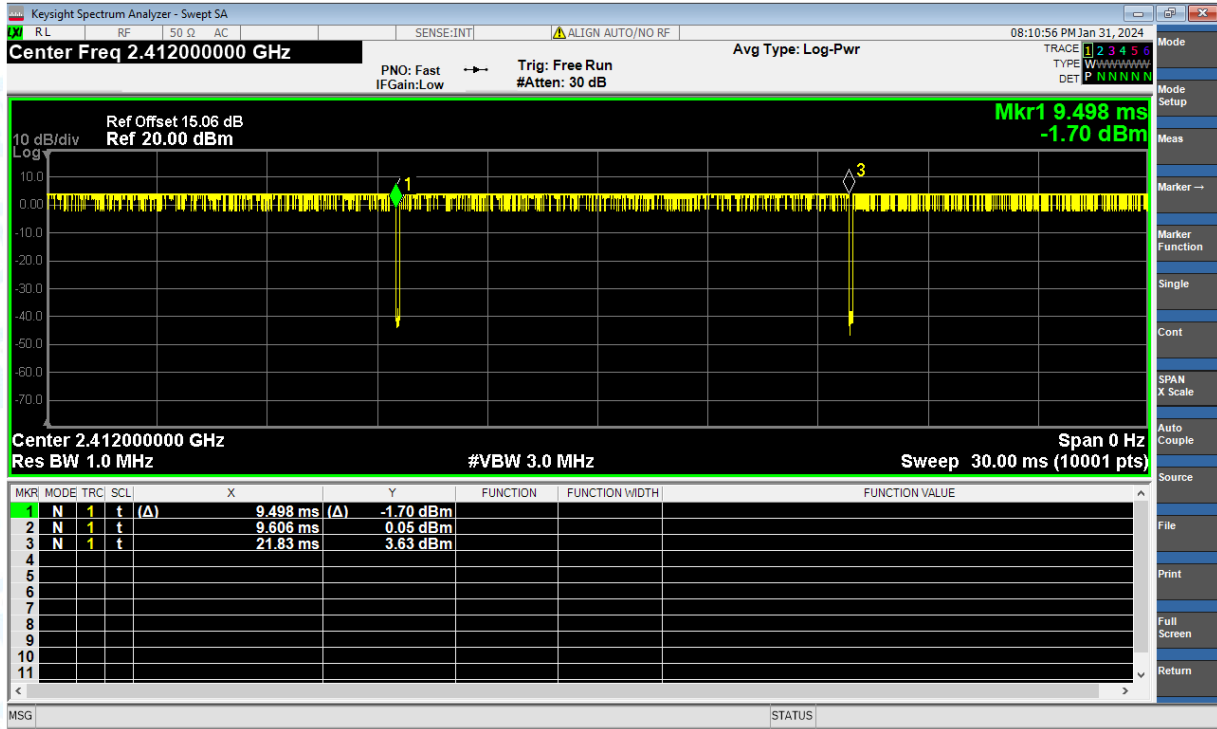


Duty Cycle NVNT ax(HE40) 2452MHz Ant1

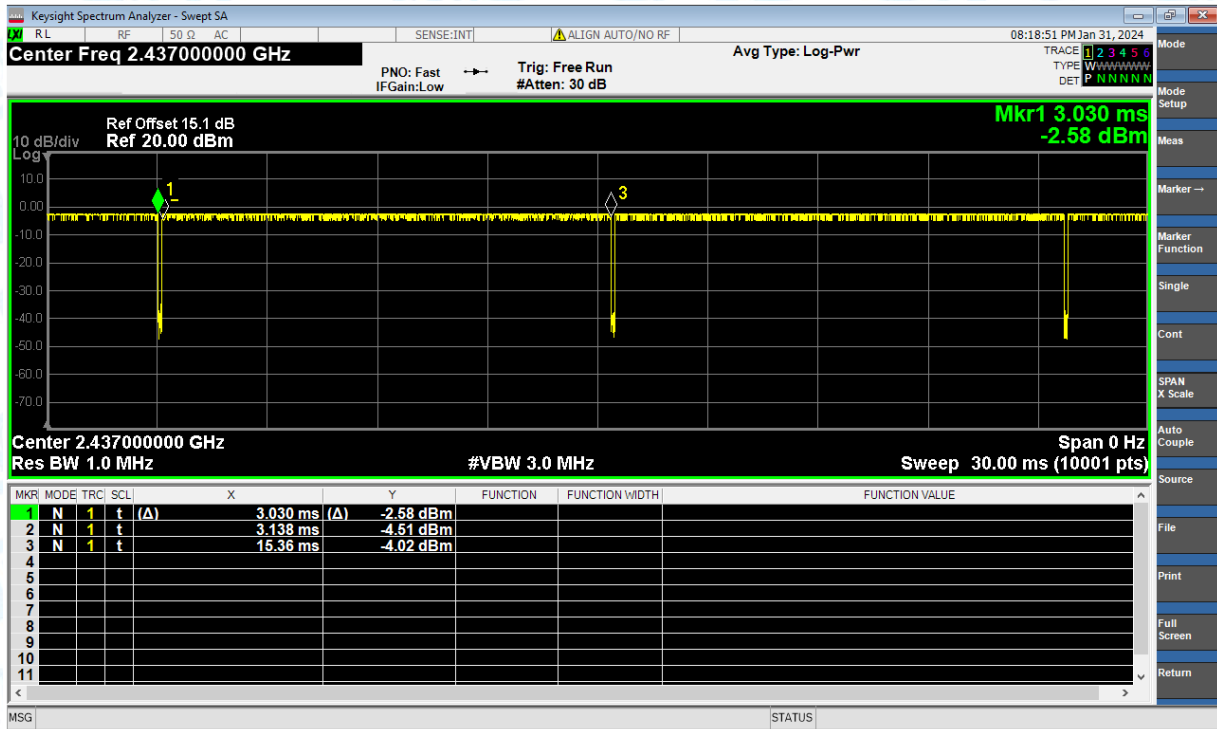




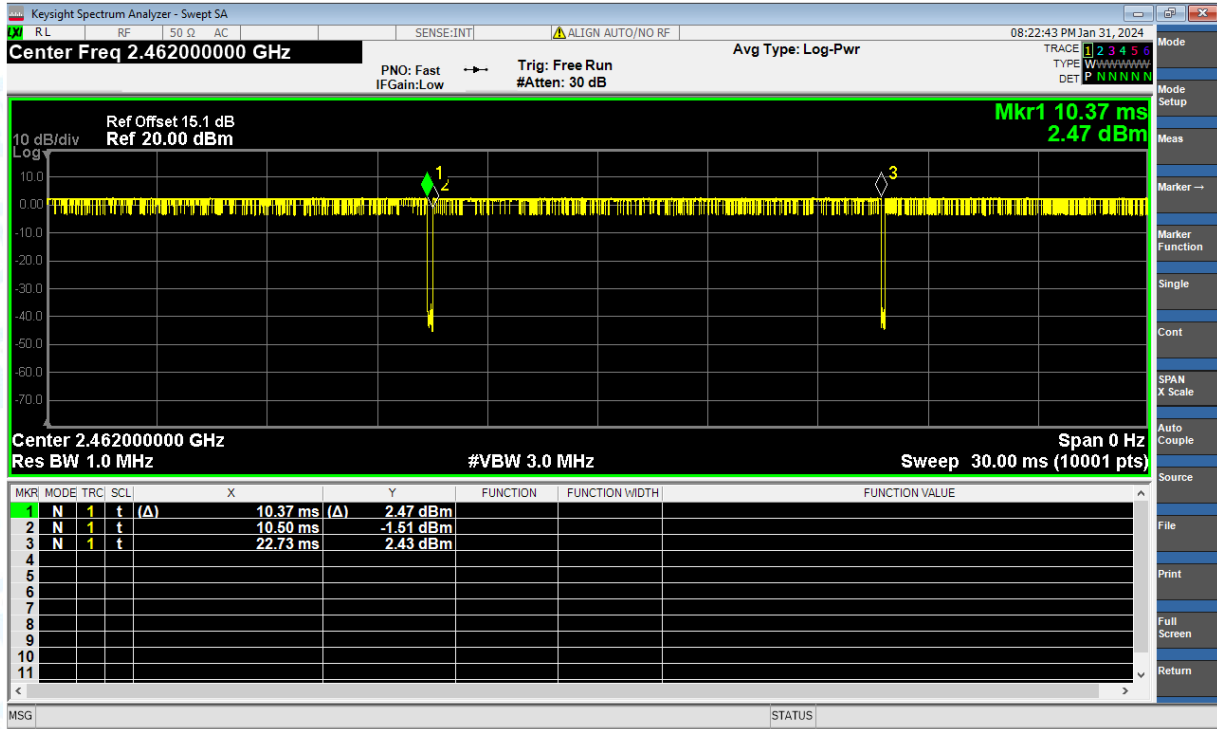
Duty Cycle NVNT b 2412MHz Ant1



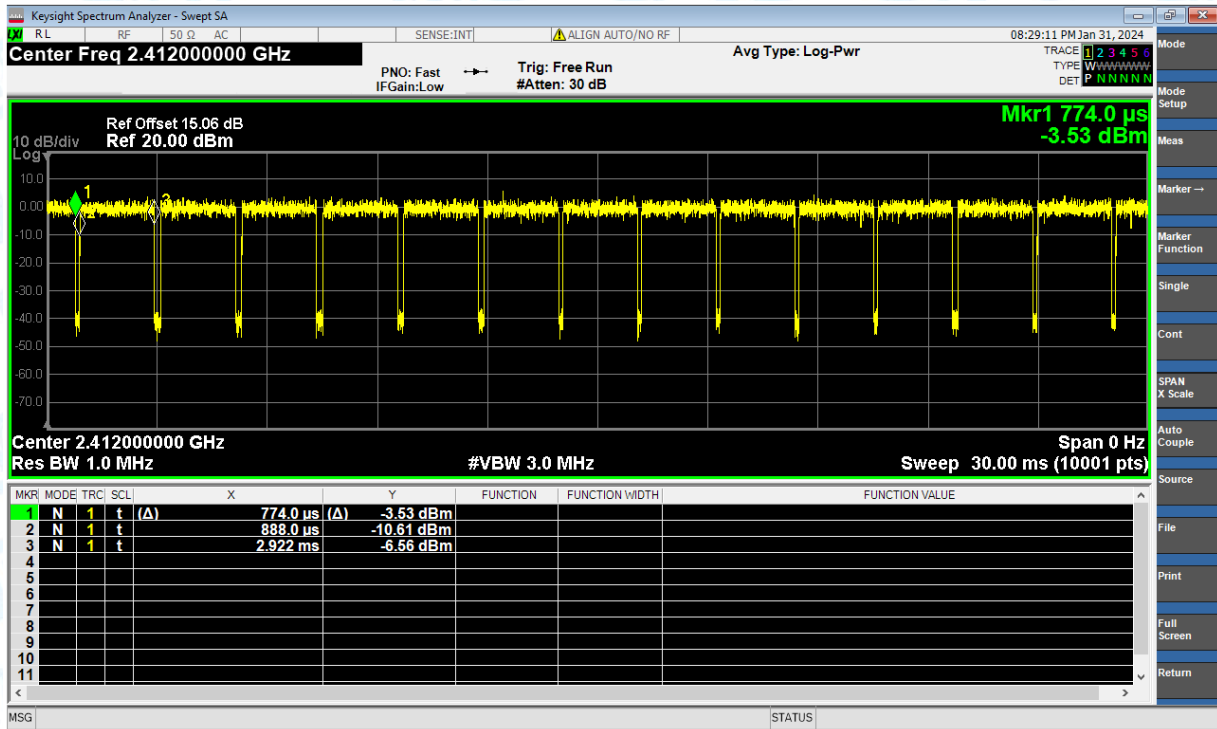
Duty Cycle NVNT b 2437MHz Ant1



Duty Cycle NVNT b 2462MHz Ant1

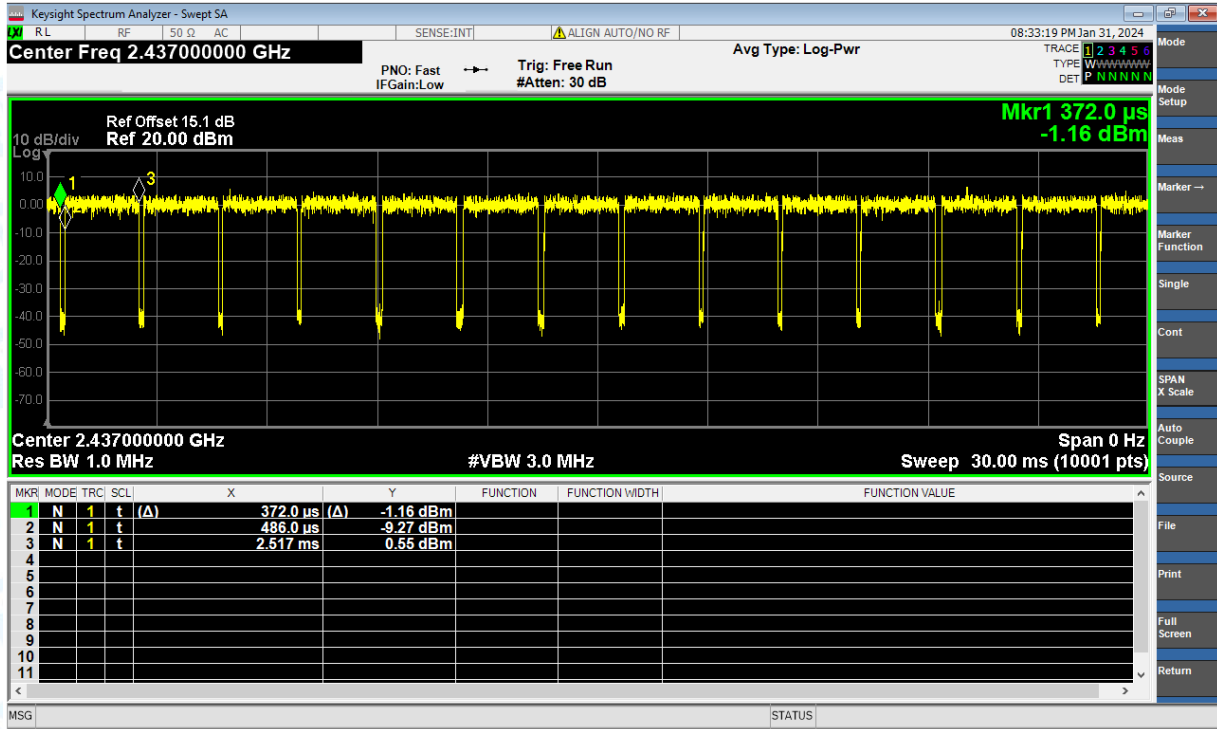


Duty Cycle NVNT g 2412MHz Ant1

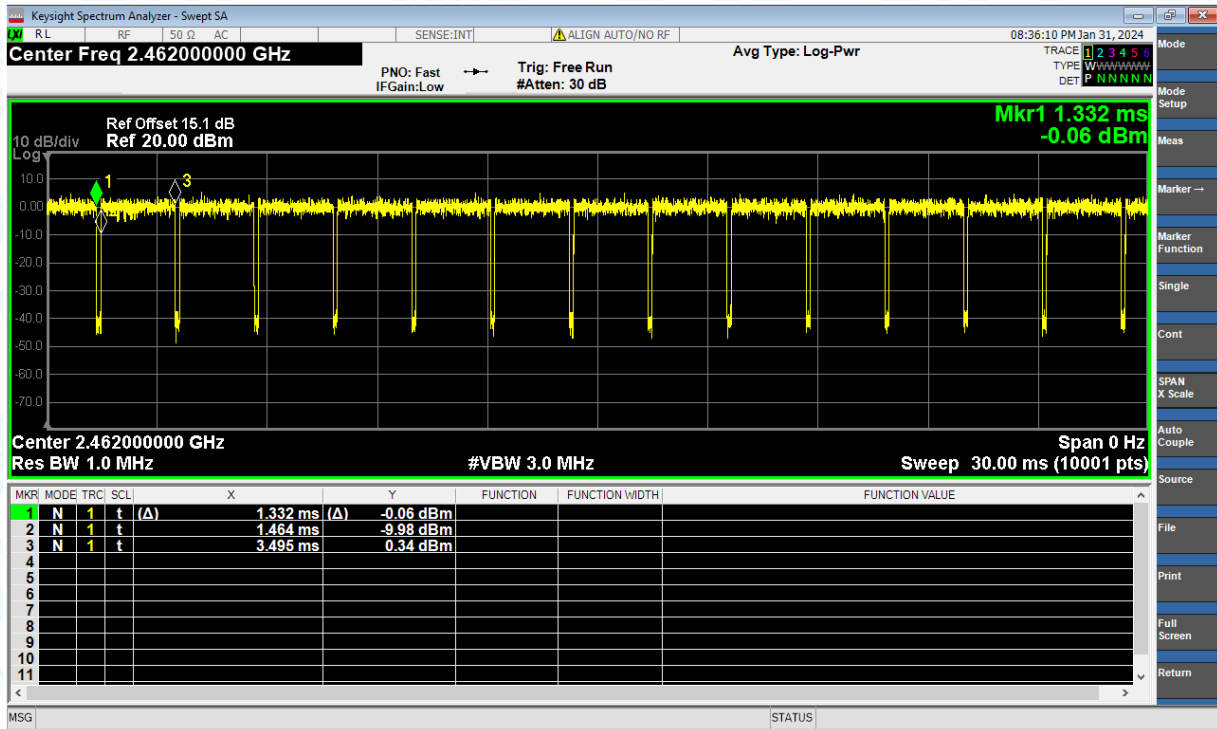




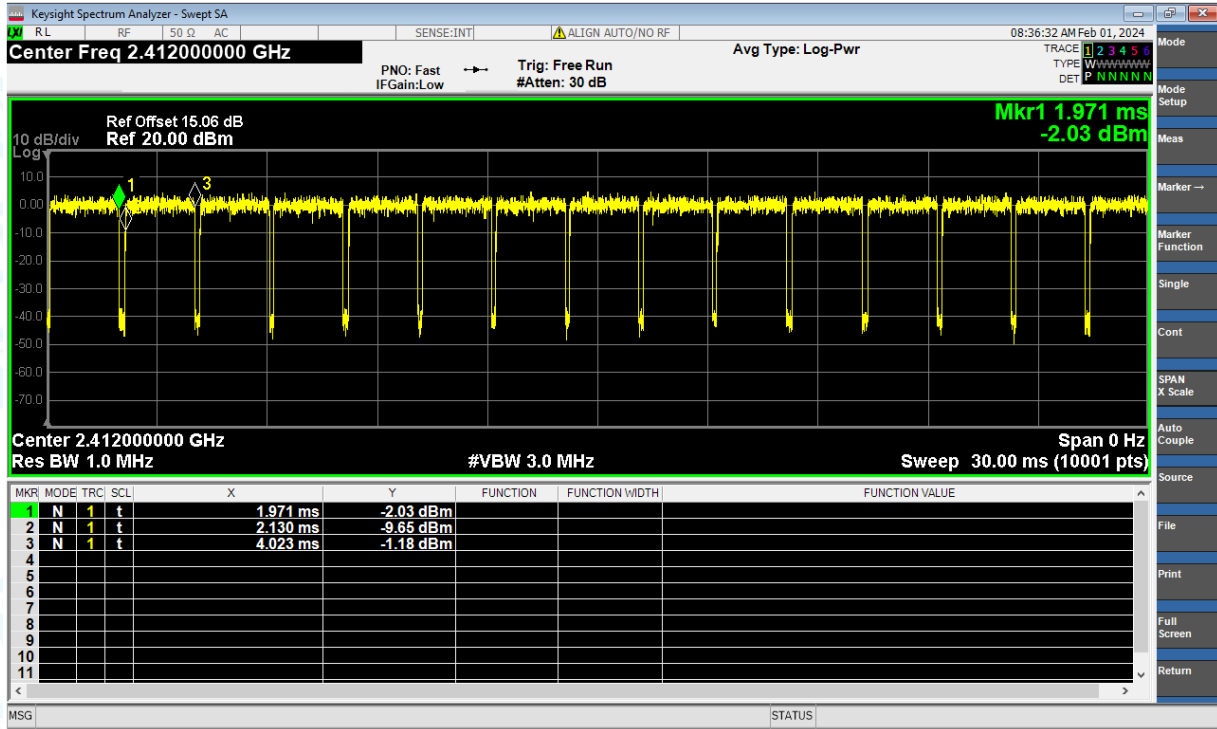
Duty Cycle NVNT g 2437MHz Ant1



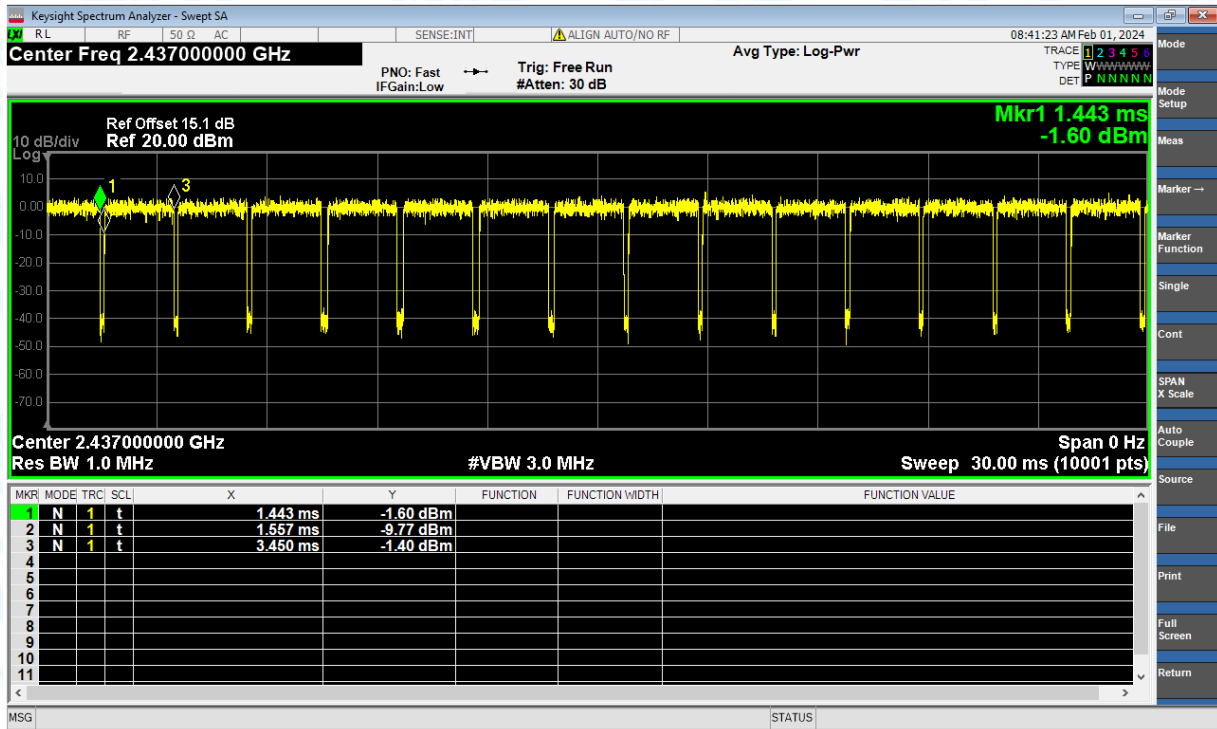
Duty Cycle NVNT g 2462MHz Ant1



Duty Cycle NVNT n(HT20) 2412MHz Ant1

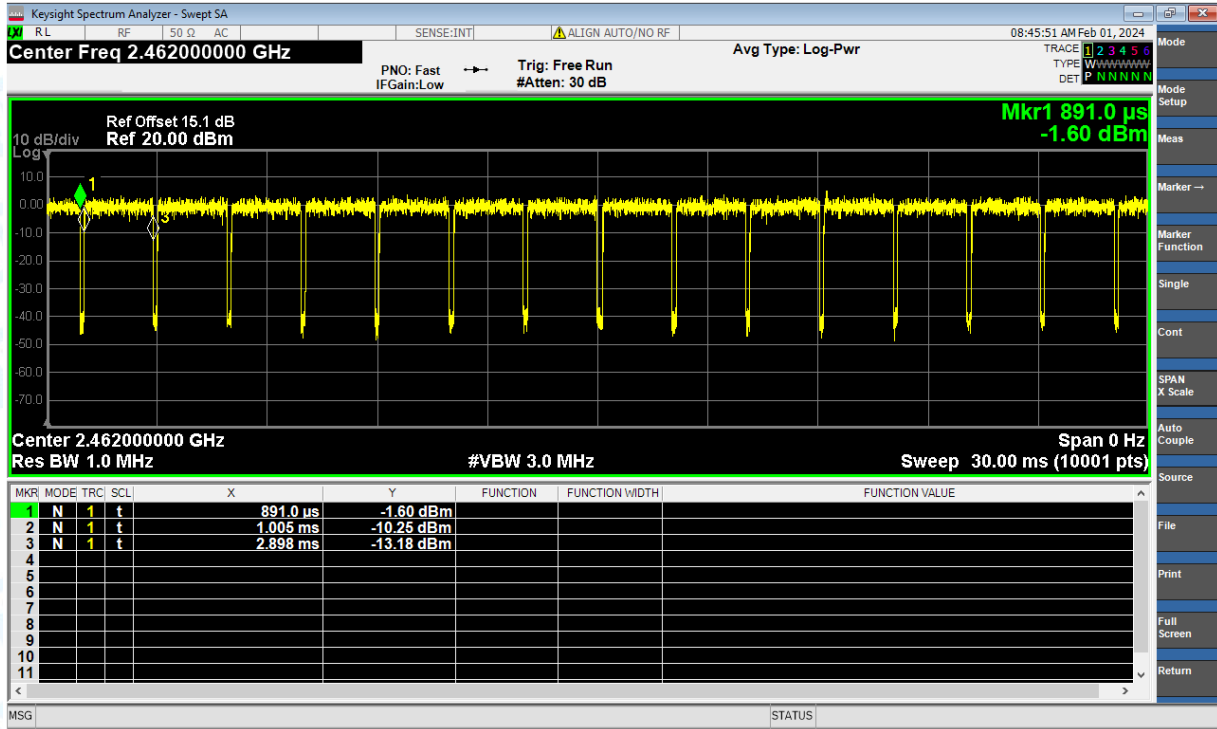


Duty Cycle NVNT n(HT20) 2437MHz Ant1

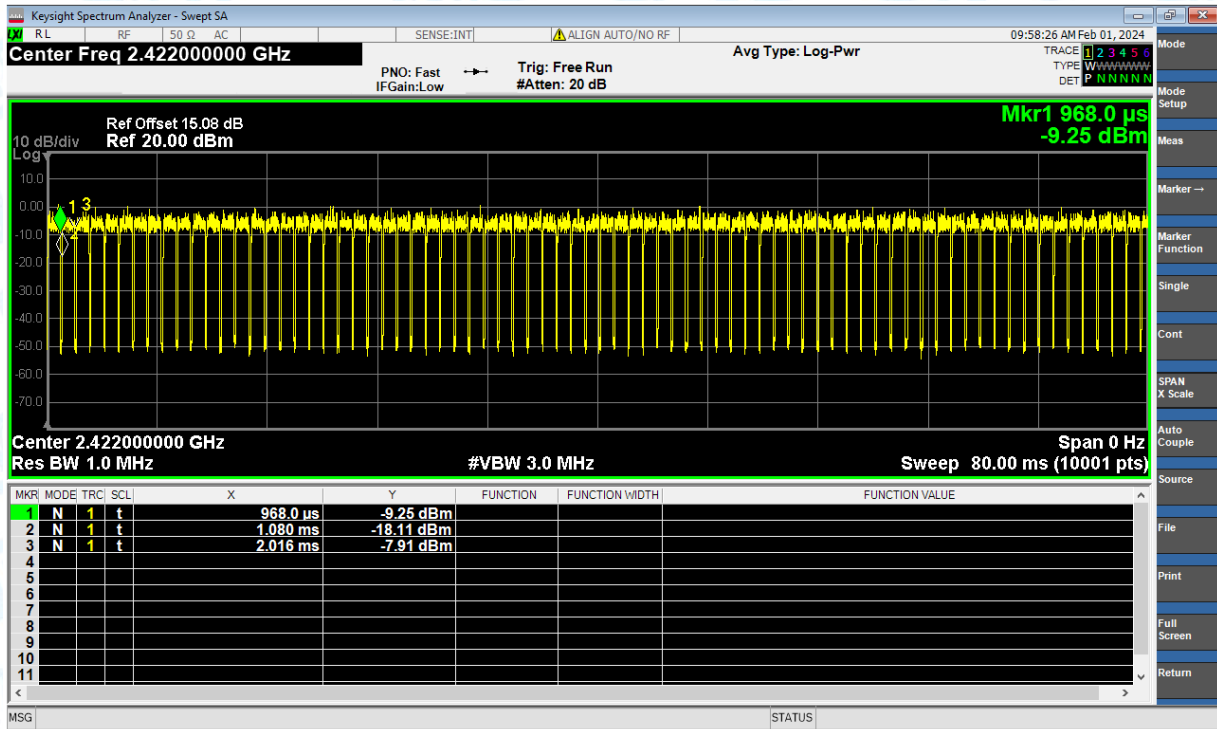




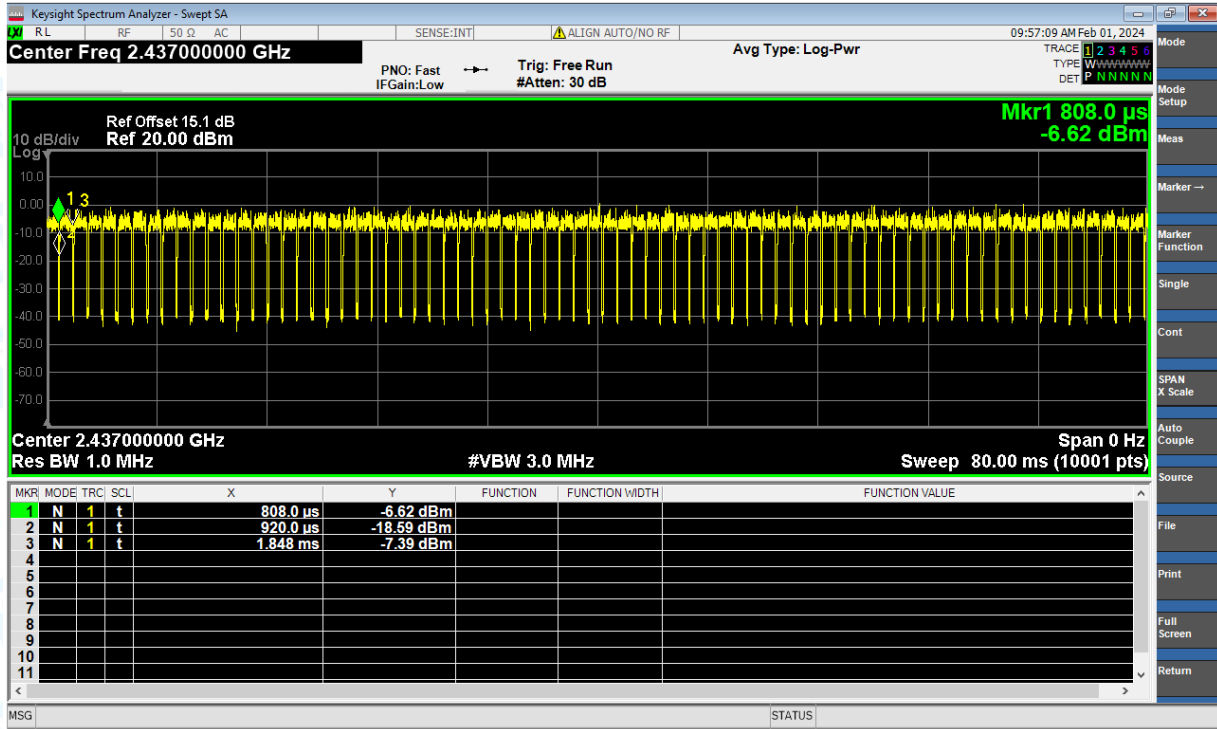
Duty Cycle NVNT n(HT20) 2462MHz Ant1



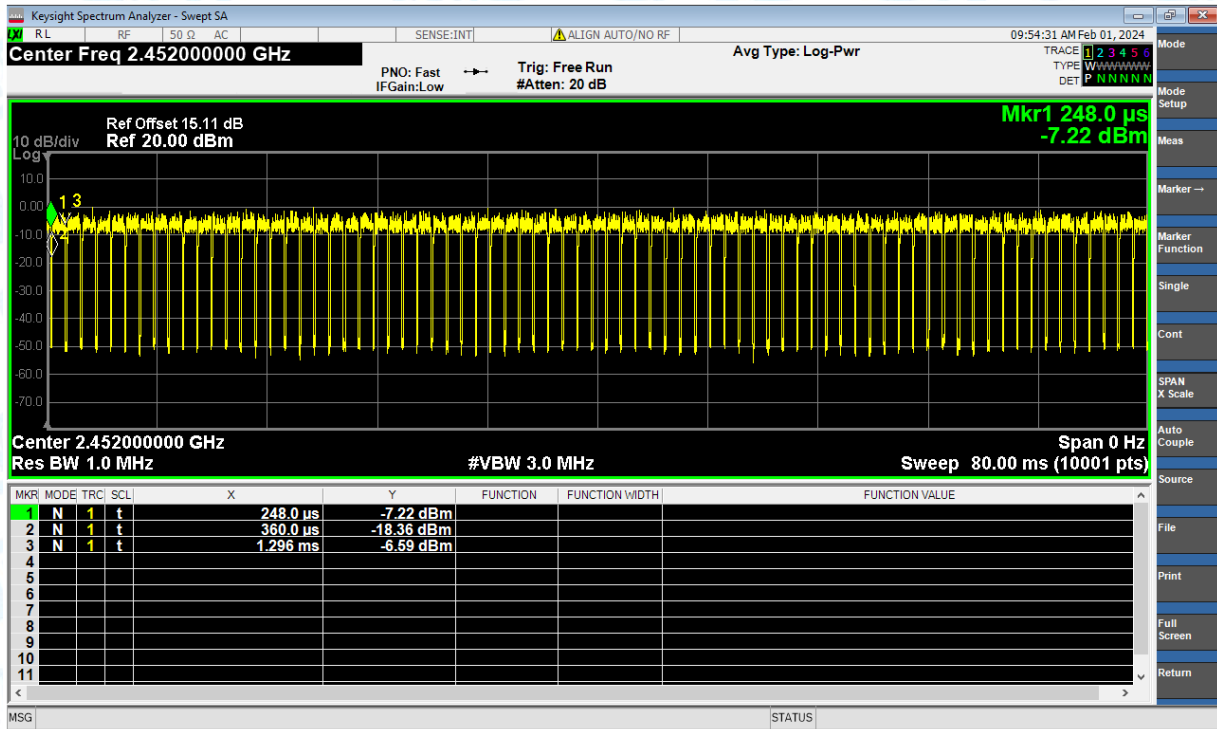
Duty Cycle NVNT n(HT40) 2422MHz Ant1



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	ax(HE20)	2412	Ant1	7.16	30	Pass
NVNT	ax(HE20)	2437	Ant1	6.94	30	Pass
NVNT	ax(HE20)	2462	Ant1	6.45	30	Pass
NVNT	ax(HE40)	2422	Ant1	7.37	30	Pass
NVNT	ax(HE40)	2437	Ant1	7.27	30	Pass
NVNT	ax(HE40)	2452	Ant1	6.91	30	Pass
NVNT	b	2412	Ant1	7.88	30	Pass
NVNT	b	2437	Ant1	7.25	30	Pass
NVNT	b	2462	Ant1	7.05	30	Pass
NVNT	g	2412	Ant1	7.35	30	Pass
NVNT	g	2437	Ant1	7.12	30	Pass
NVNT	g	2462	Ant1	6.75	30	Pass
NVNT	n(HT20)	2412	Ant1	7.01	30	Pass
NVNT	n(HT20)	2437	Ant1	6.72	30	Pass
NVNT	n(HT20)	2462	Ant1	7.9	30	Pass
NVNT	n(HT40)	2422	Ant1	7.12	30	Pass
NVNT	n(HT40)	2437	Ant1	6.97	30	Pass
NVNT	n(HT40)	2452	Ant1	6.75	30	Pass



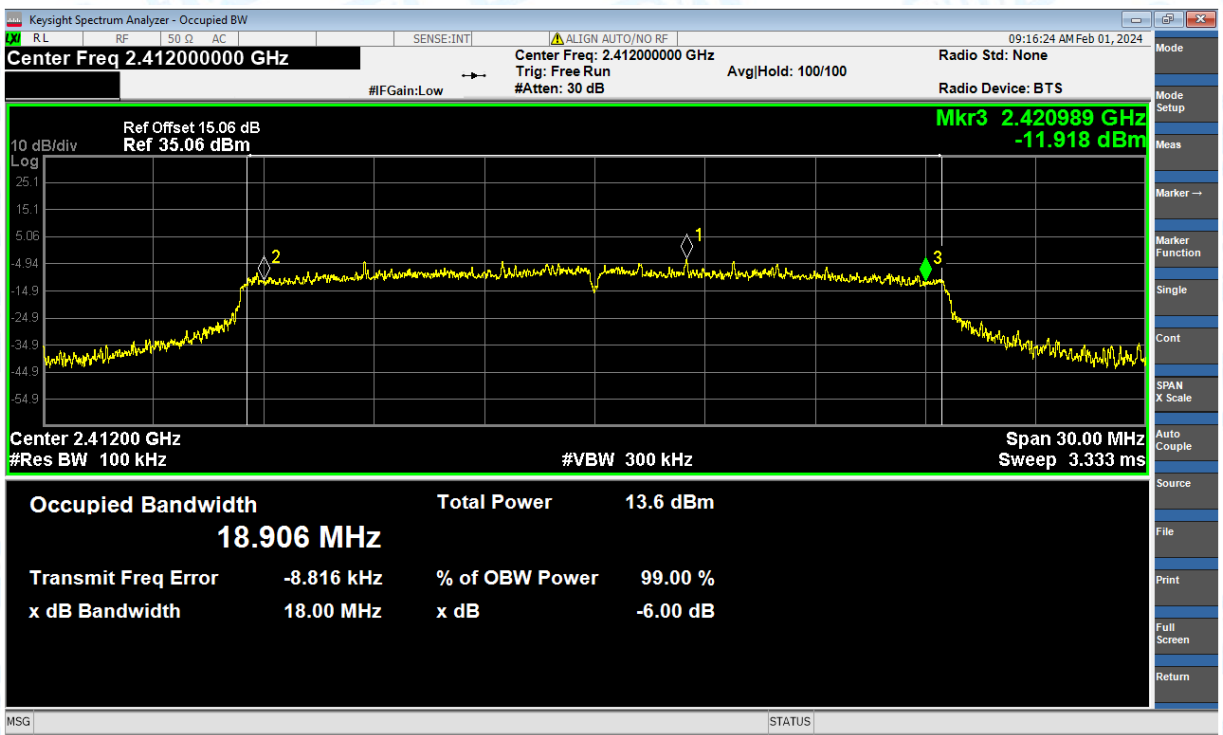
### 3. -6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	ax(HE20)	2412	Ant1	18	0.5	Pass
NVNT	ax(HE20)	2437	Ant1	16.98	0.5	Pass
NVNT	ax(HE20)	2462	Ant1	16.13	0.5	Pass
NVNT	ax(HE40)	2422	Ant1	36.77	0.5	Pass
NVNT	ax(HE40)	2437	Ant1	35.91	0.5	Pass
NVNT	ax(HE40)	2452	Ant1	34.9	0.5	Pass
NVNT	b	2412	Ant1	10.01	0.5	Pass
NVNT	b	2437	Ant1	9.58	0.5	Pass
NVNT	b	2462	Ant1	10.06	0.5	Pass
NVNT	g	2412	Ant1	15.63	0.5	Pass
NVNT	g	2437	Ant1	15.41	0.5	Pass
NVNT	g	2462	Ant1	15.93	0.5	Pass
NVNT	n(HT20)	2412	Ant1	15.93	0.5	Pass
NVNT	n(HT20)	2437	Ant1	15.08	0.5	Pass
NVNT	n(HT20)	2462	Ant1	14.96	0.5	Pass
NVNT	n(HT40)	2422	Ant1	35.02	0.5	Pass
NVNT	n(HT40)	2437	Ant1	32.98	0.5	Pass
NVNT	n(HT40)	2452	Ant1	35.13	0.5	Pass

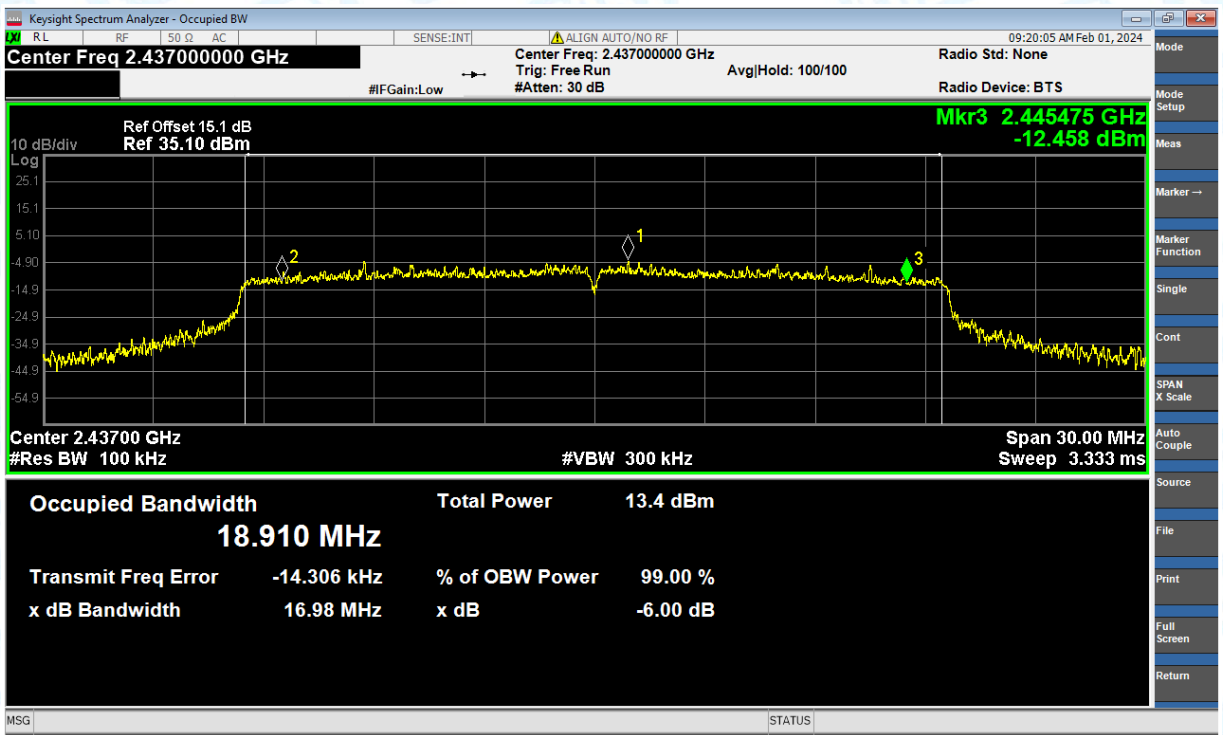


Test Graphs

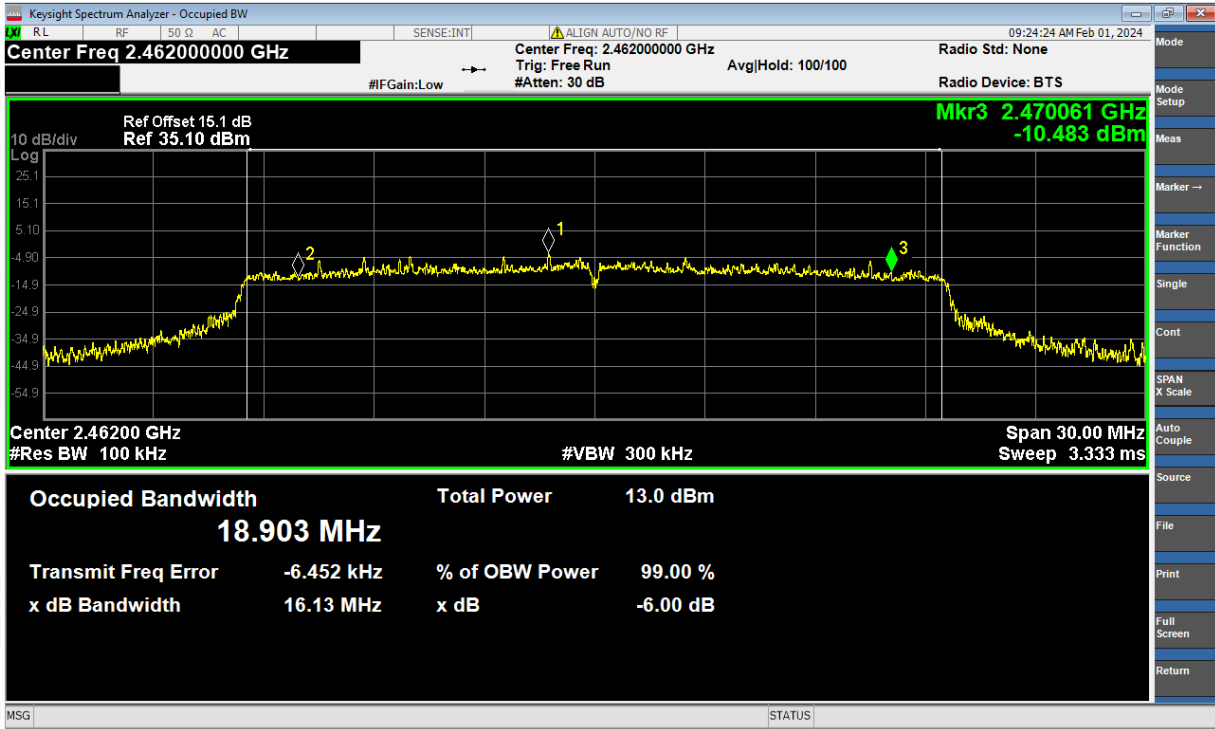
-6dB Bandwidth NVNT ax(HE20) 2412MHz Ant1



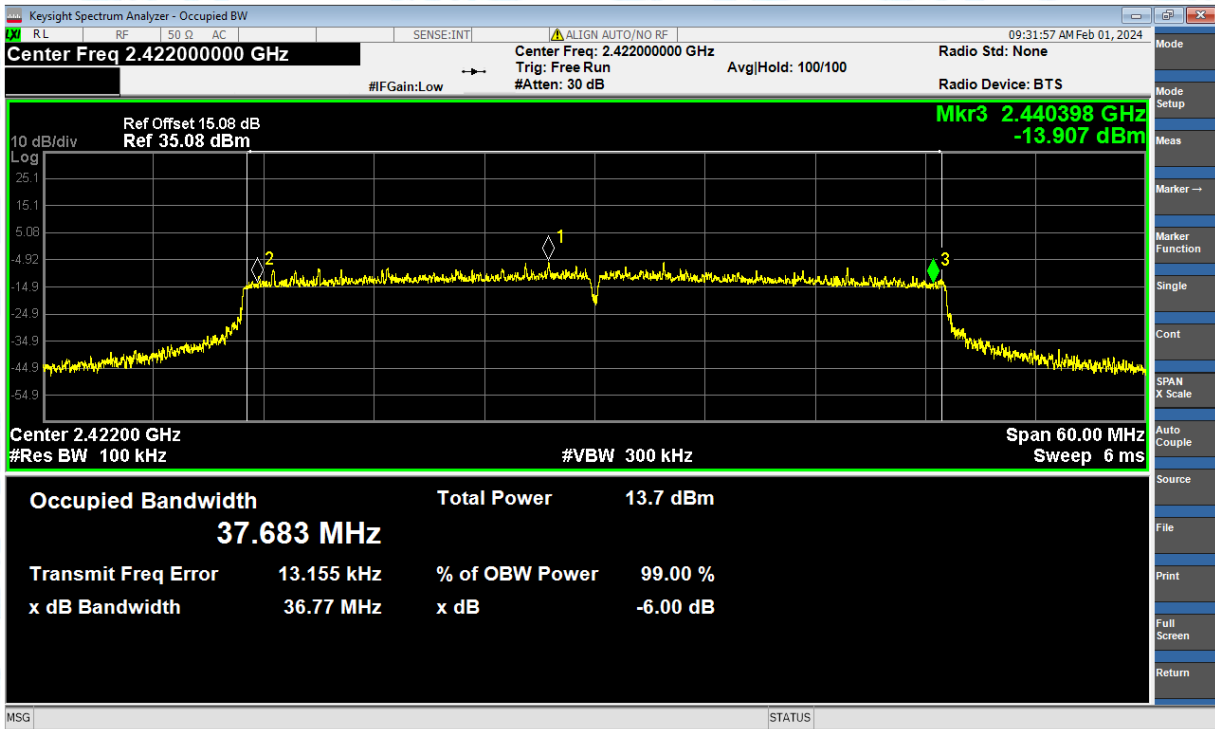
-6dB Bandwidth NVNT ax(HE20) 2437MHz Ant1



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

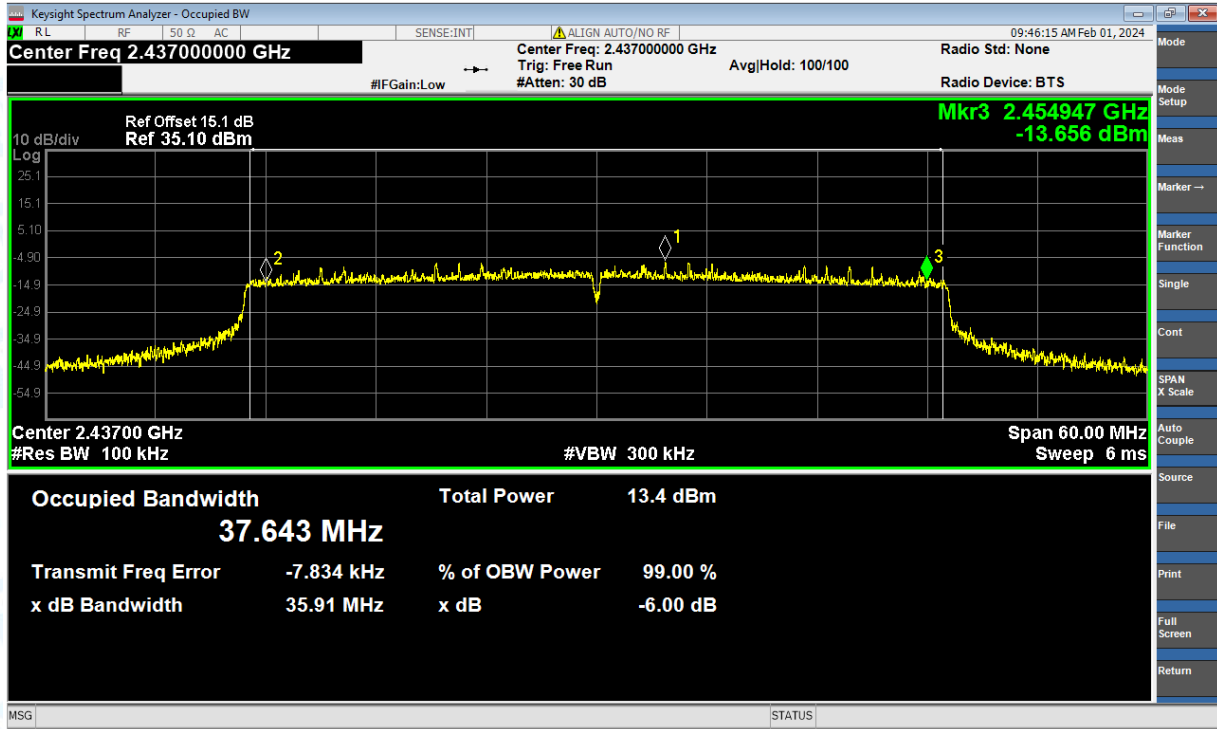


-6dB Bandwidth NVNT ax(HE40) 2422MHz Ant1

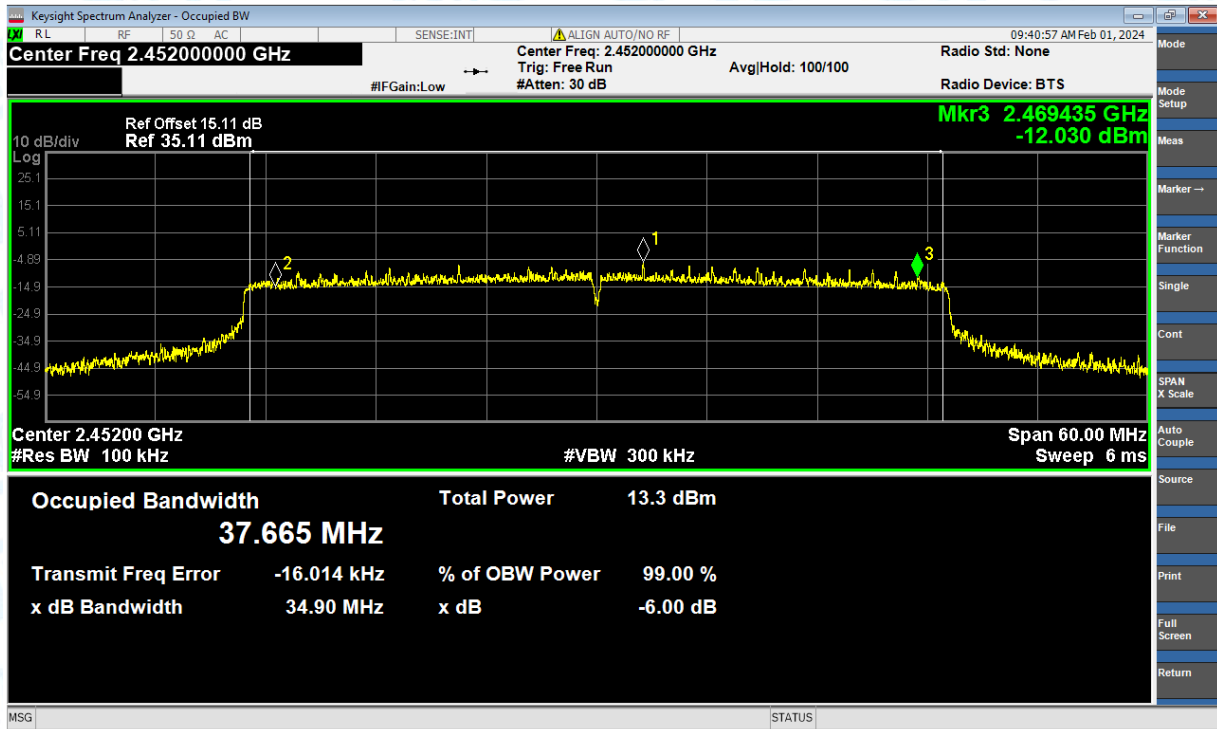




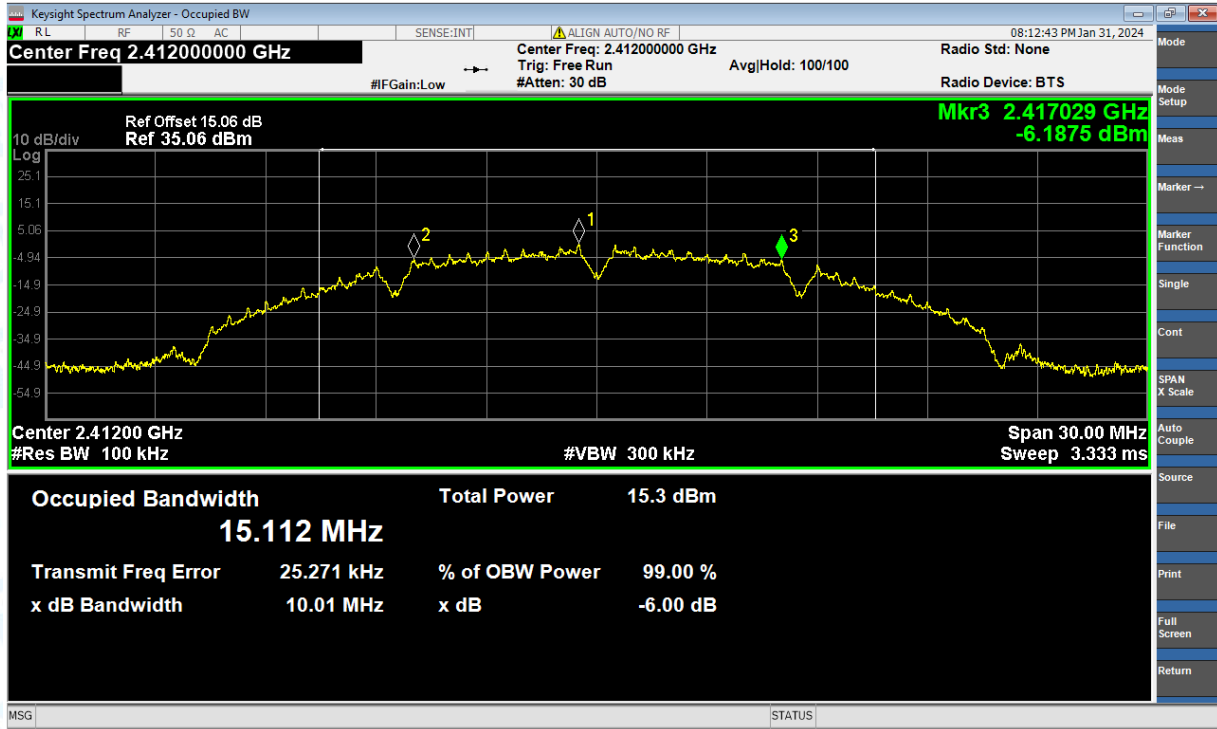
-6dB Bandwidth NVNT ax(HE40) 2437MHz Ant1



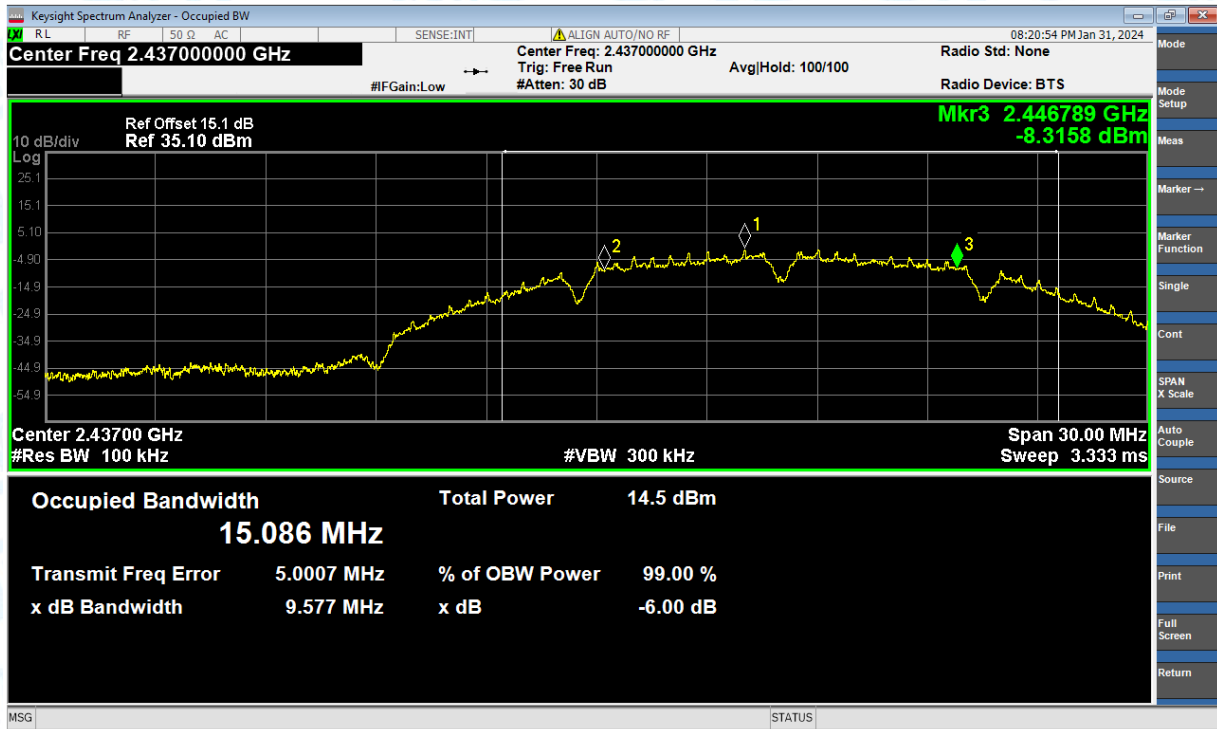
-6dB Bandwidth NVNT ax(HE40) 2452MHz Ant1



-6dB Bandwidth NVNT b 2412MHz Ant1

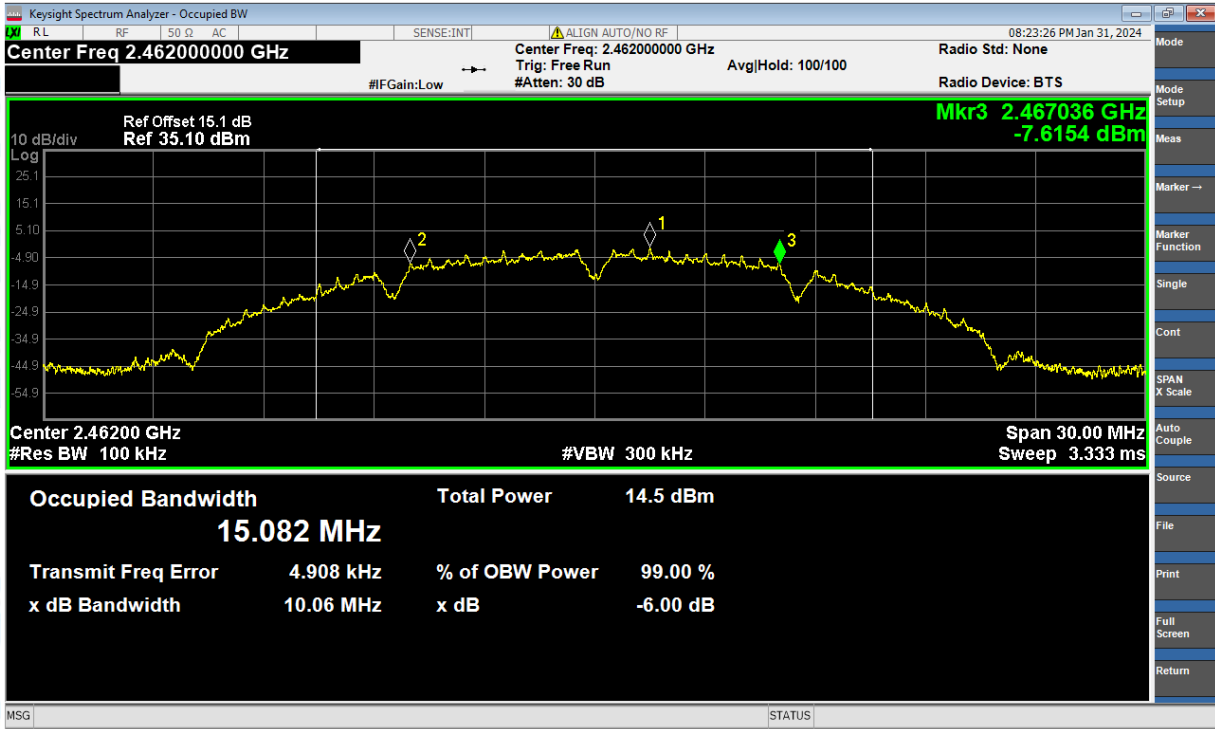


-6dB Bandwidth NVNT b 2437MHz Ant1

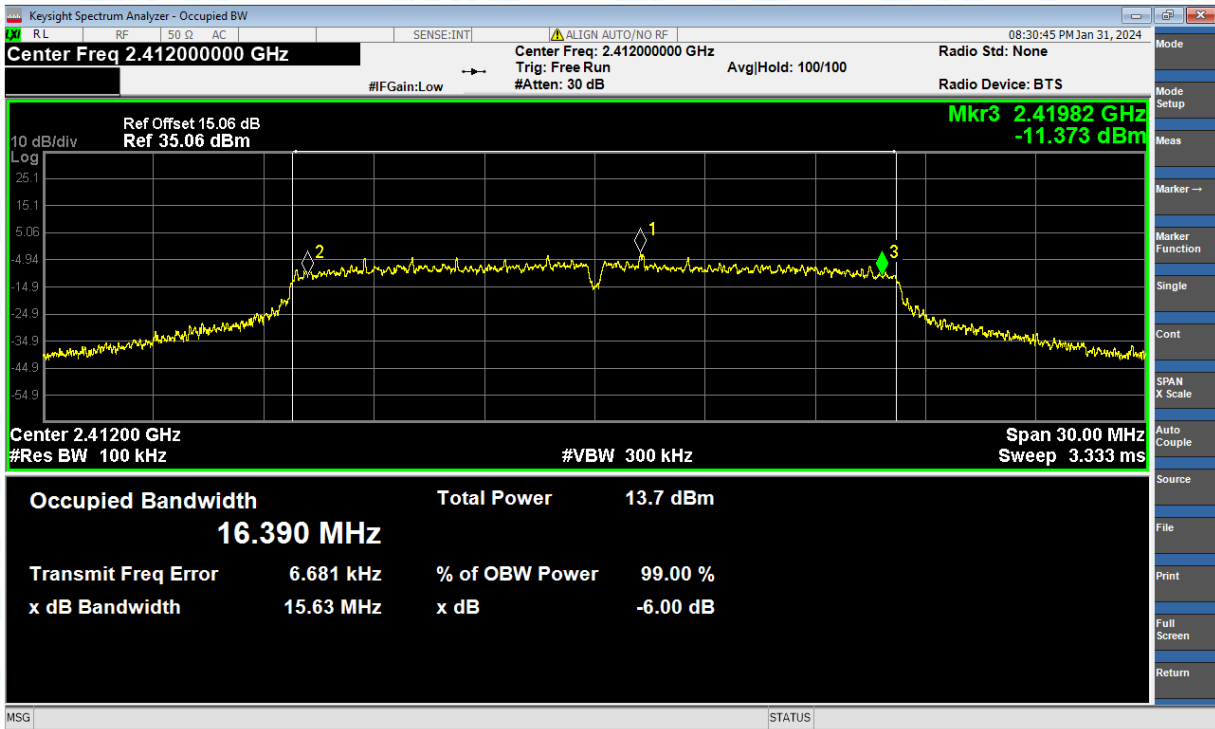




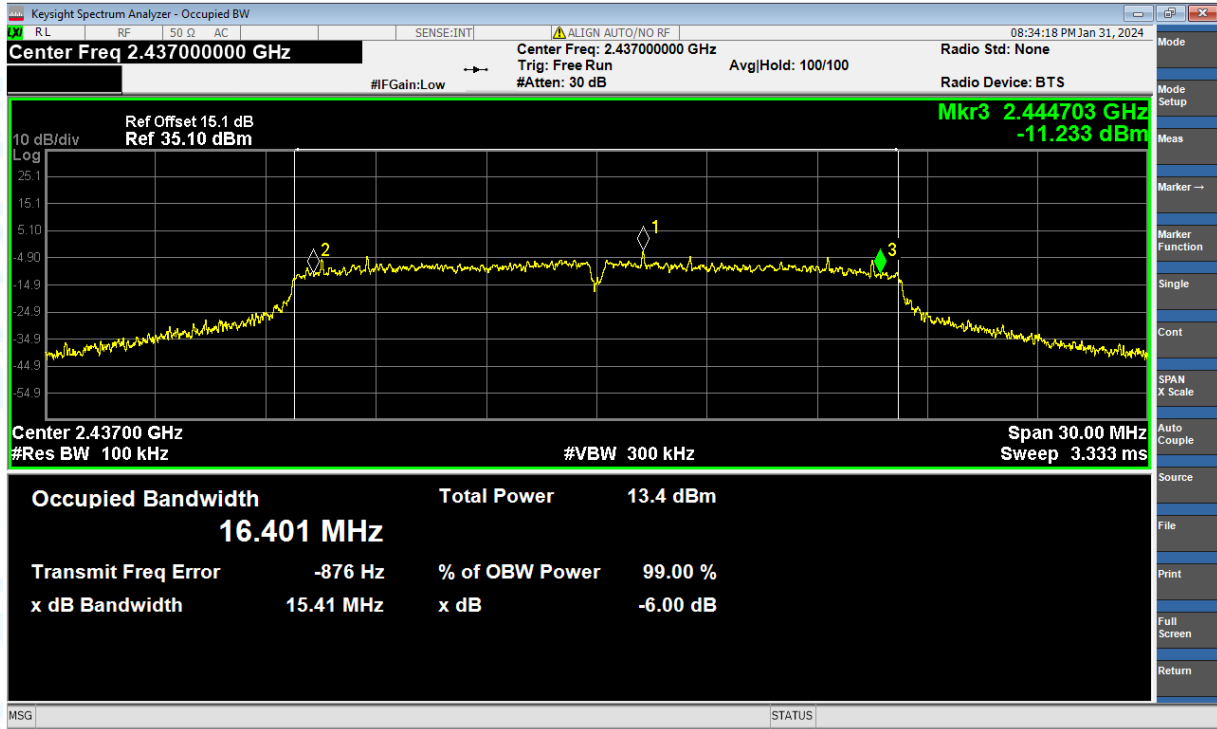
-6dB Bandwidth NVNT b 2462MHz Ant1



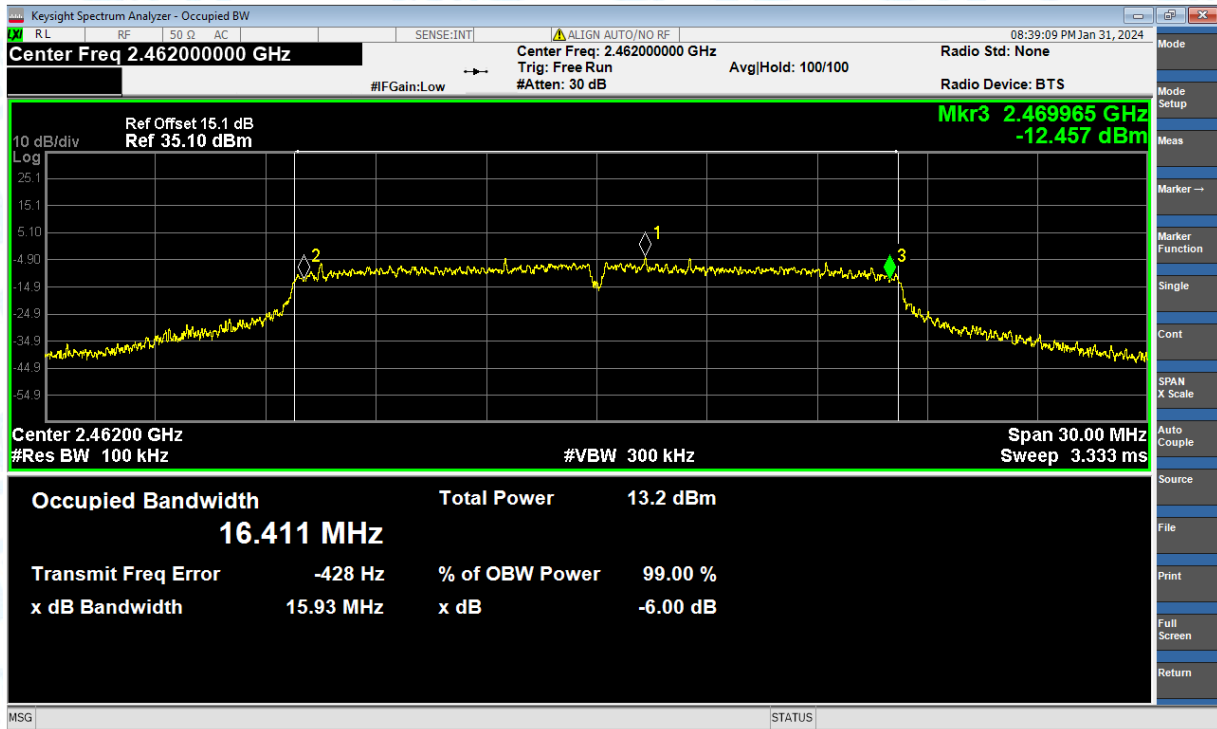
-6dB Bandwidth NVNT g 2412MHz Ant1



-6dB Bandwidth NVNT g 2437MHz Ant1

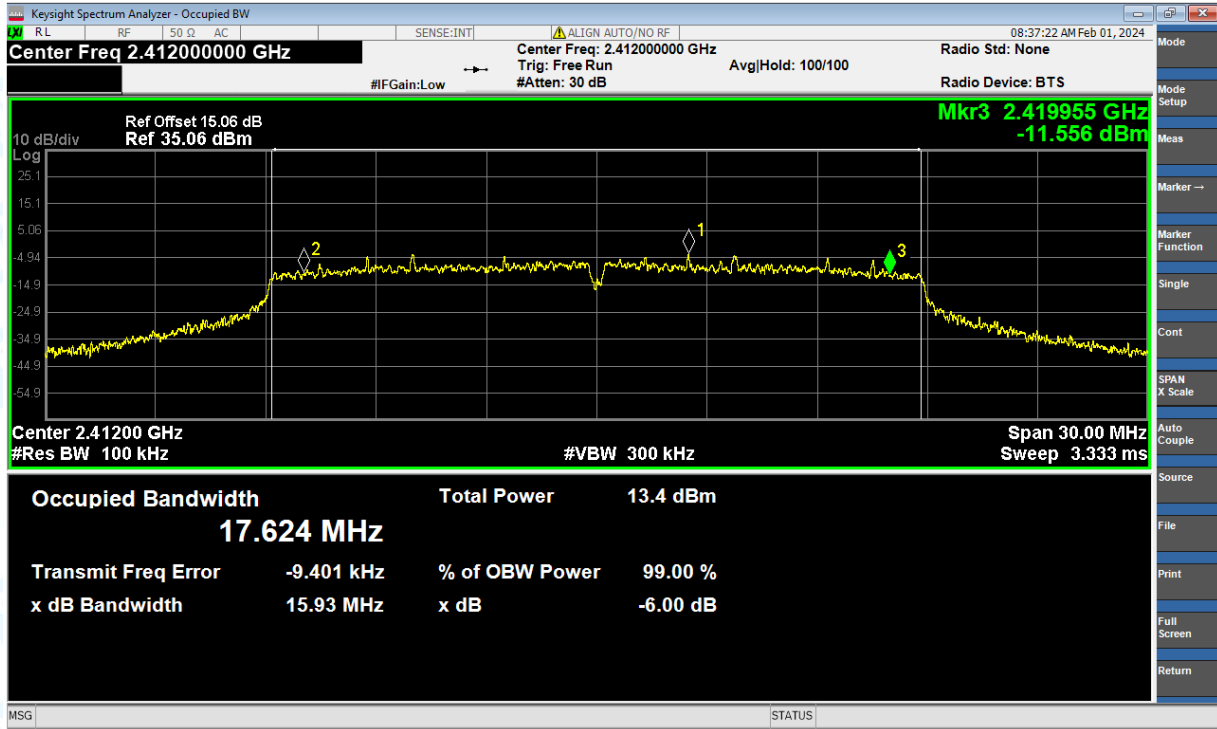


-6dB Bandwidth NVNT g 2462MHz Ant1

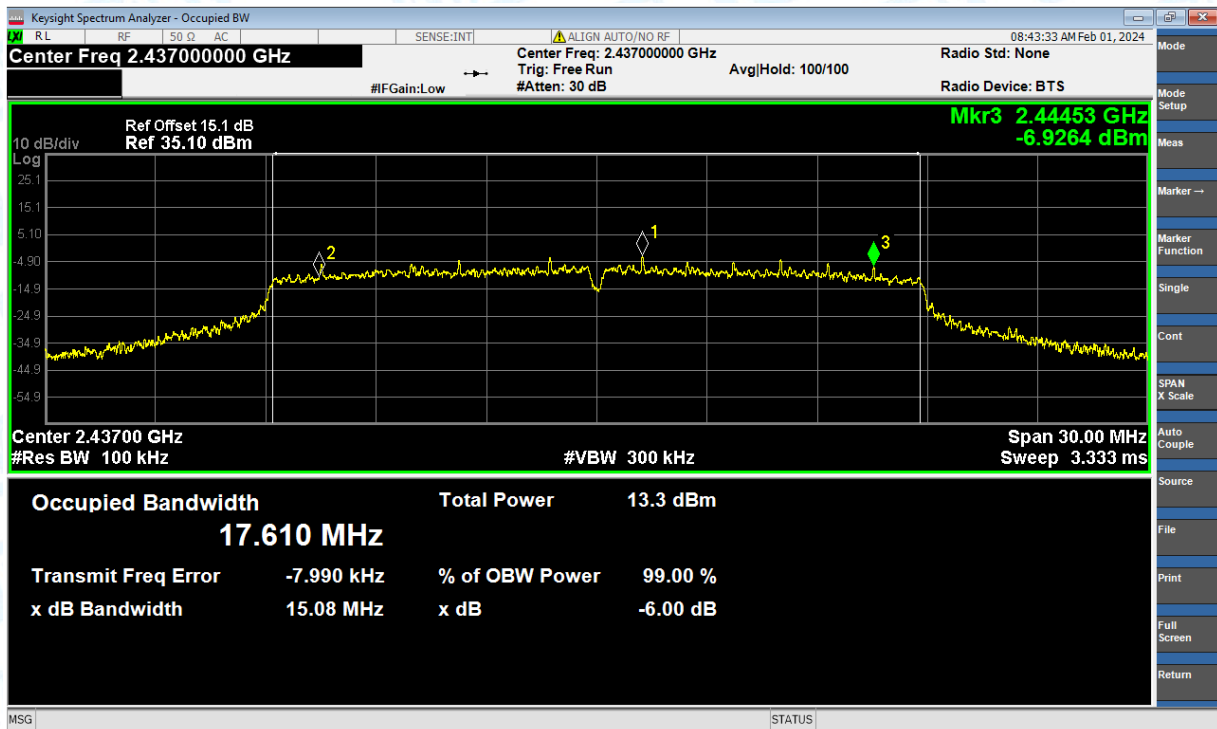




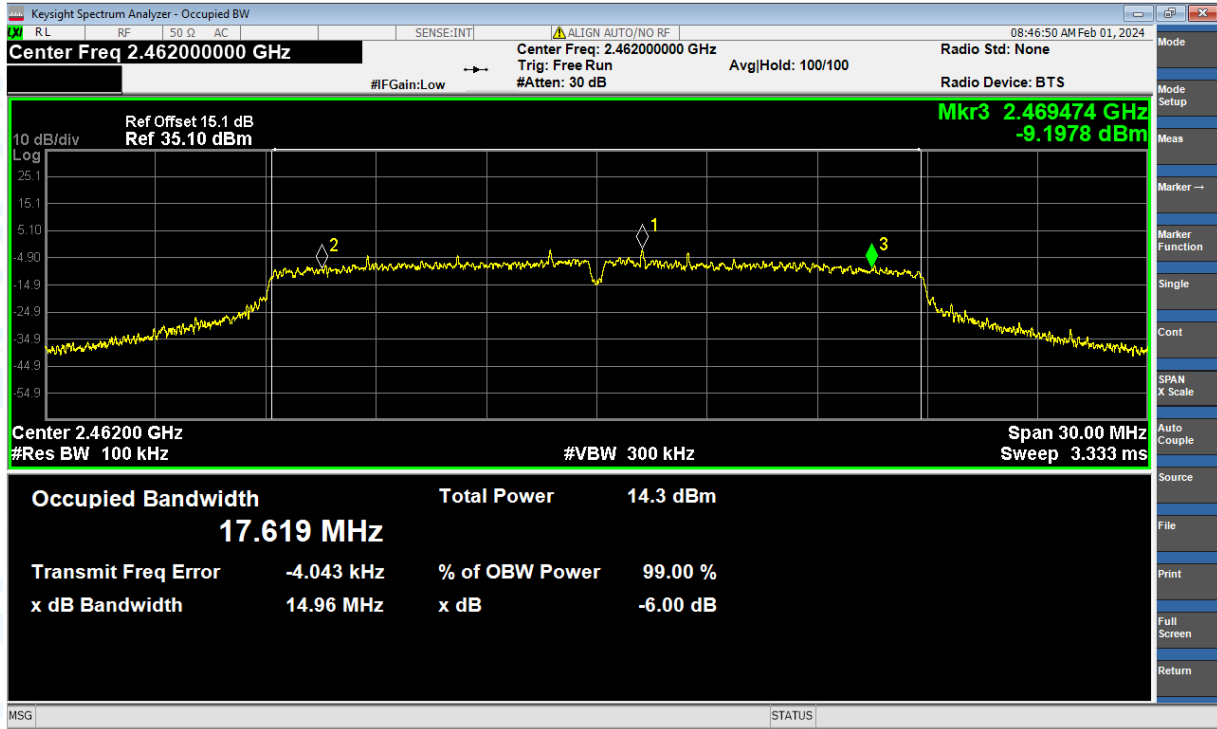
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



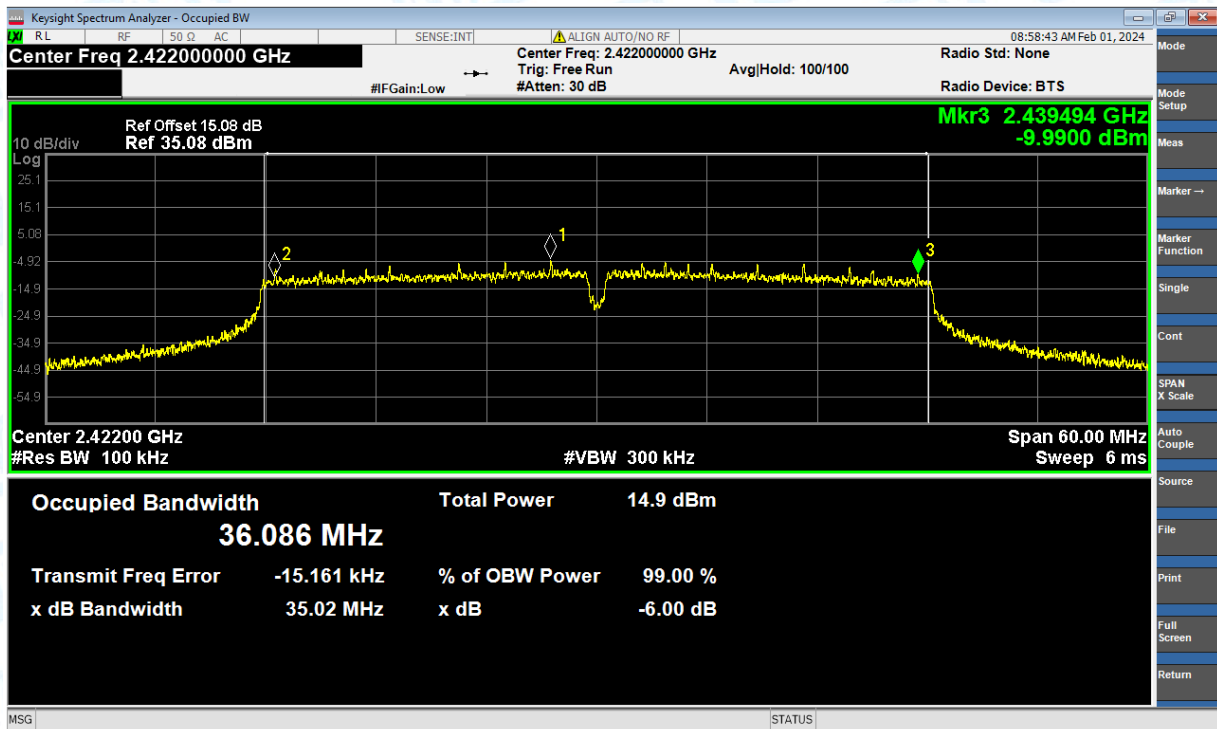
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1



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

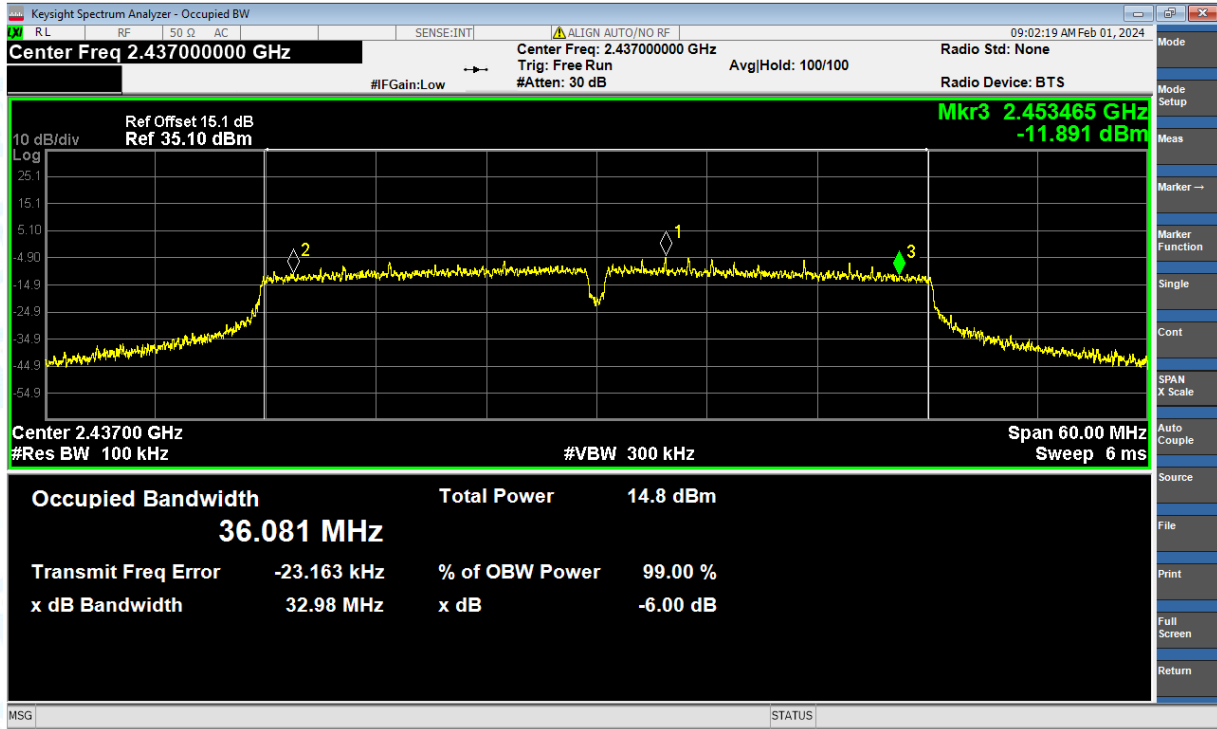


-6dB Bandwidth NVNT n(HT40) 2422MHz Ant1

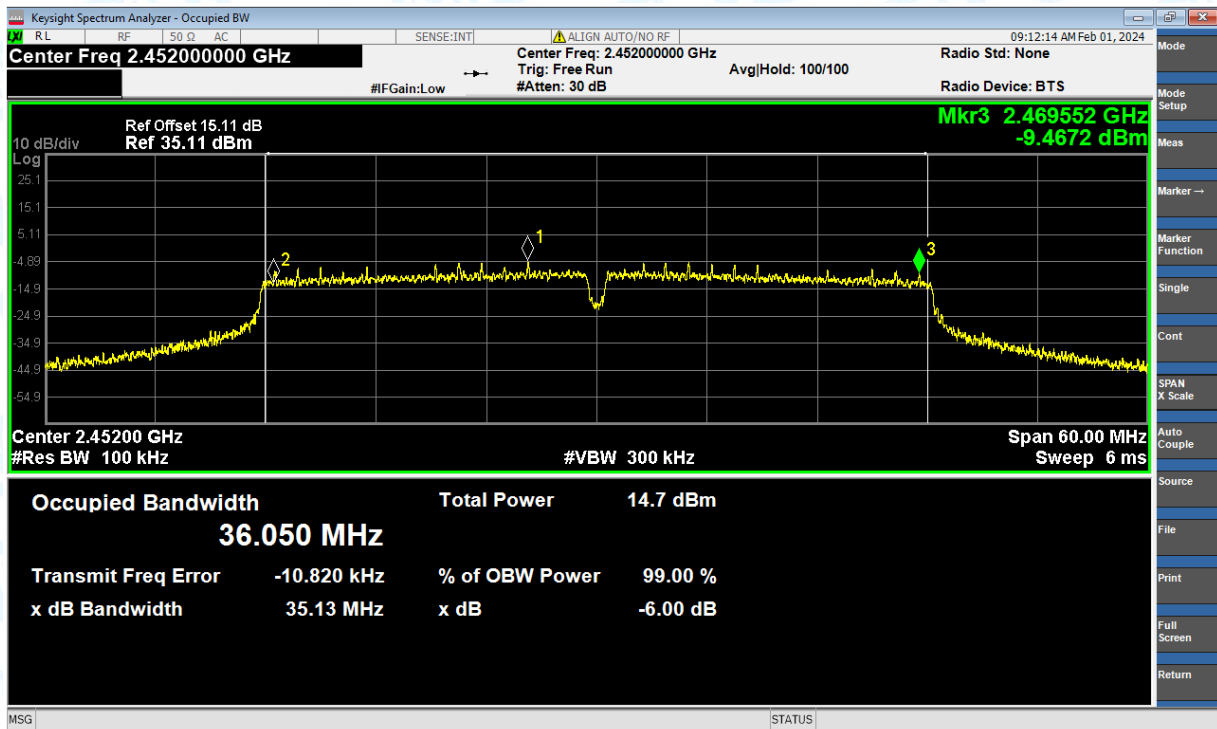




-6dB Bandwidth NVNT n(HT40) 2437MHz Ant1



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



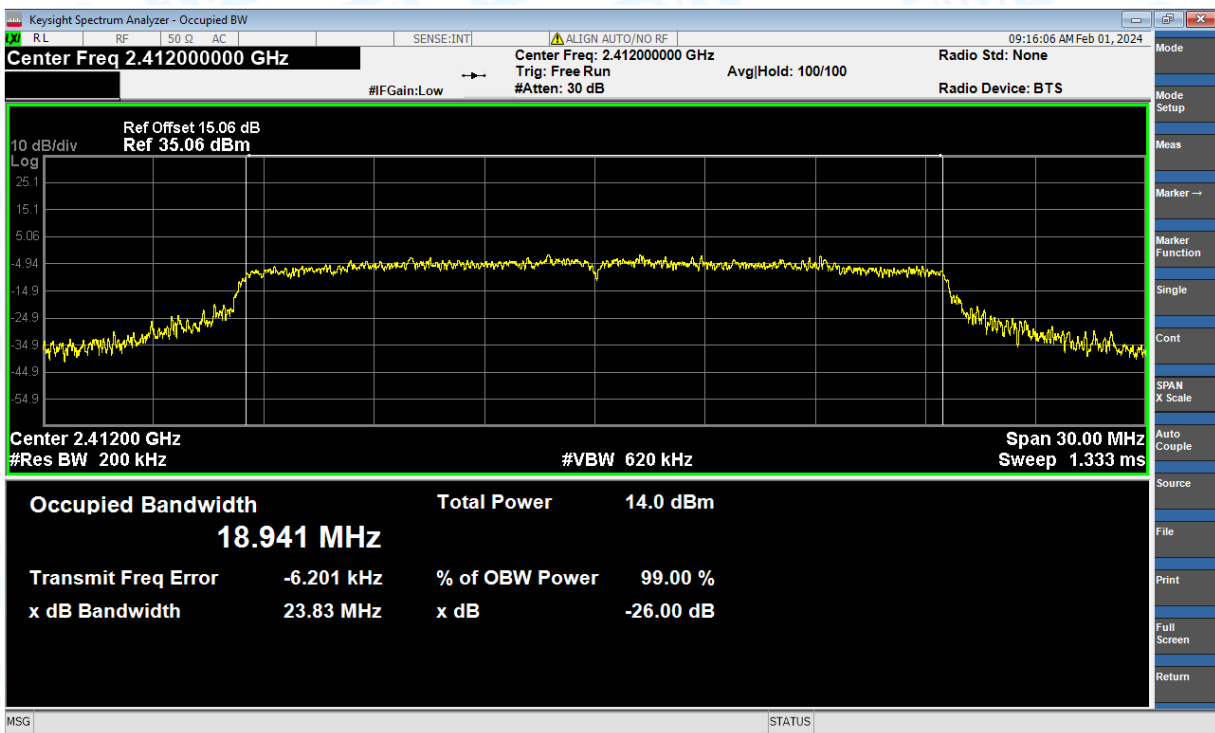
## 4. Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	ax(HE20)	2412	Ant1	18.941
NVNT	ax(HE20)	2437	Ant1	18.914
NVNT	ax(HE20)	2462	Ant1	18.964
NVNT	ax(HE40)	2422	Ant1	37.831
NVNT	ax(HE40)	2437	Ant1	37.855
NVNT	ax(HE40)	2452	Ant1	37.778
NVNT	b	2412	Ant1	15.125
NVNT	b	2437	Ant1	15.126
NVNT	b	2462	Ant1	15.136
NVNT	g	2412	Ant1	16.504
NVNT	g	2437	Ant1	16.536
NVNT	g	2462	Ant1	16.557
NVNT	n(HT20)	2412	Ant1	17.697
NVNT	n(HT20)	2437	Ant1	17.728
NVNT	n(HT20)	2462	Ant1	17.759
NVNT	n(HT40)	2422	Ant1	36.356
NVNT	n(HT40)	2437	Ant1	36.358
NVNT	n(HT40)	2452	Ant1	36.336

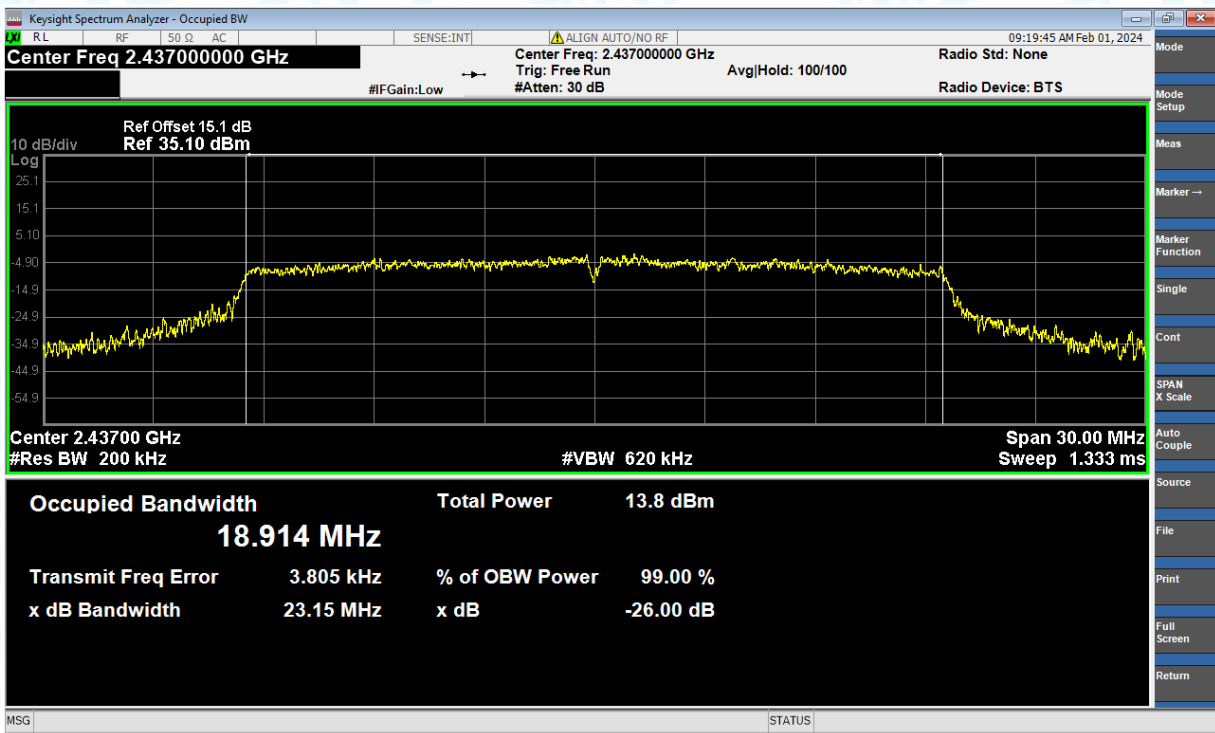


Test Graphs

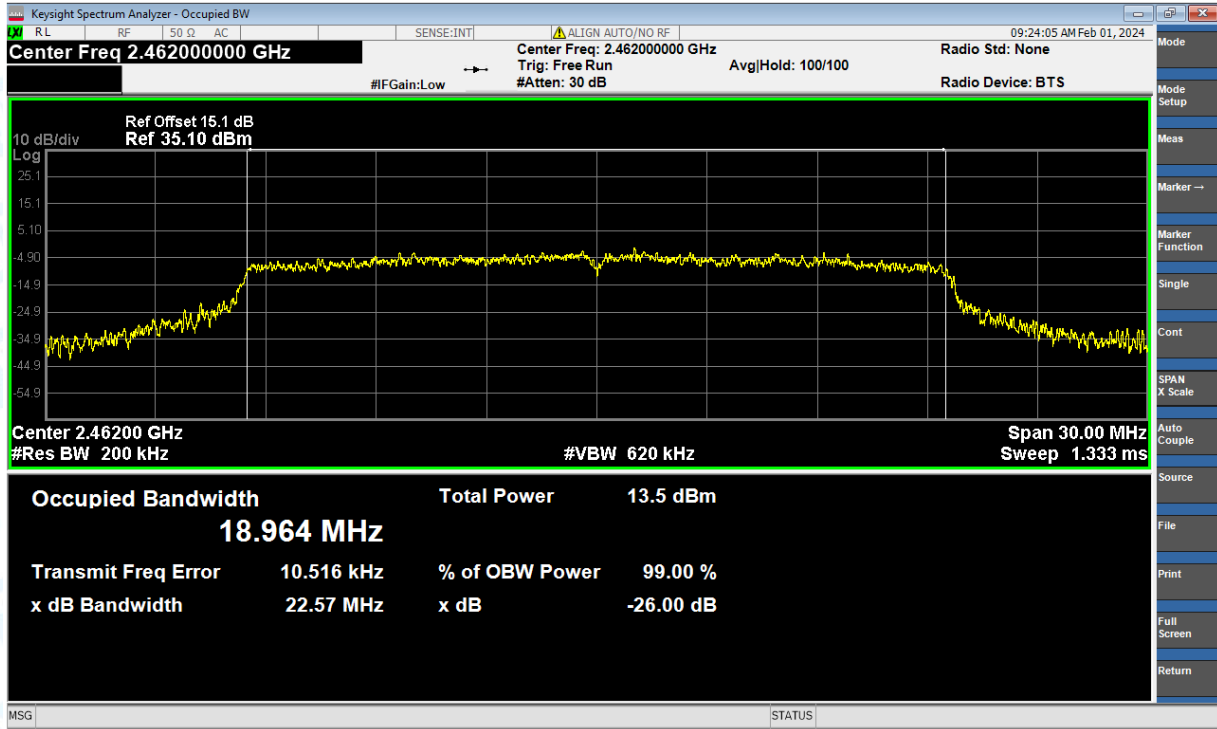
OBW NVNT ax(HE20) 2412MHz Ant1



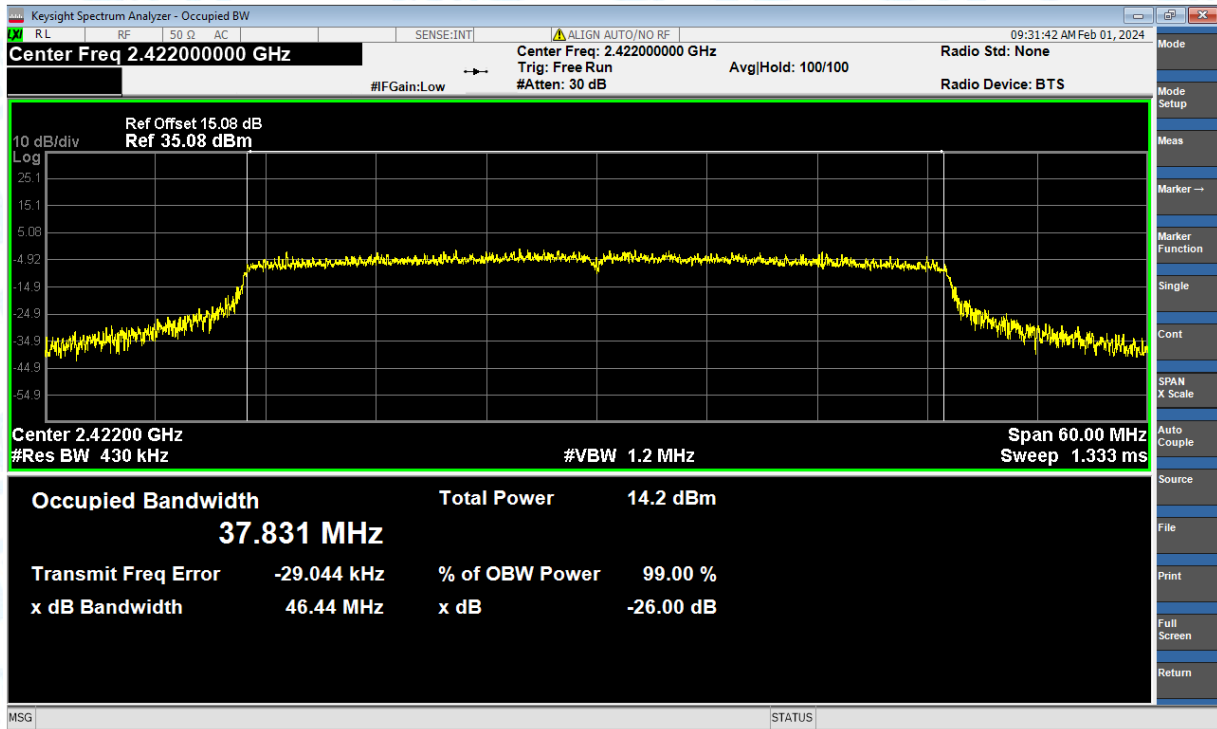
OBW NVNT ax(HE20) 2437MHz Ant1



OBW NVNT ax(HE20) 2462MHz Ant1

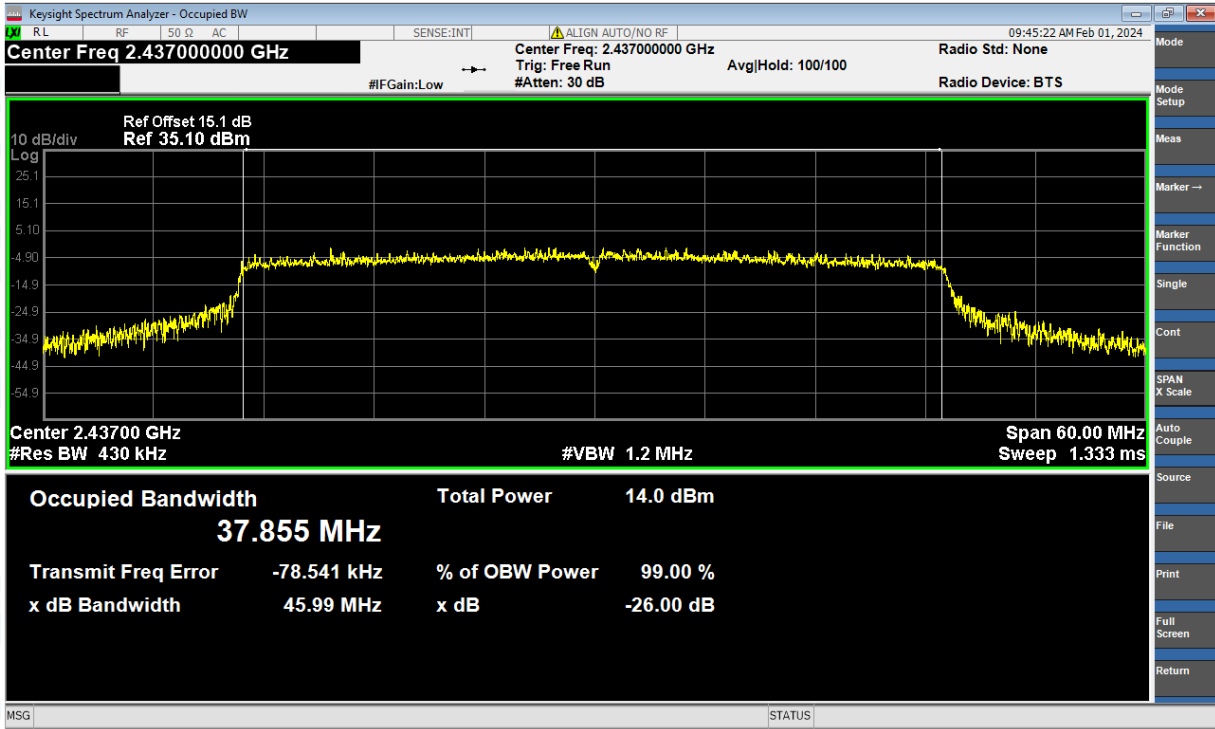


OBW NVNT ax(HE40) 2422MHz Ant1

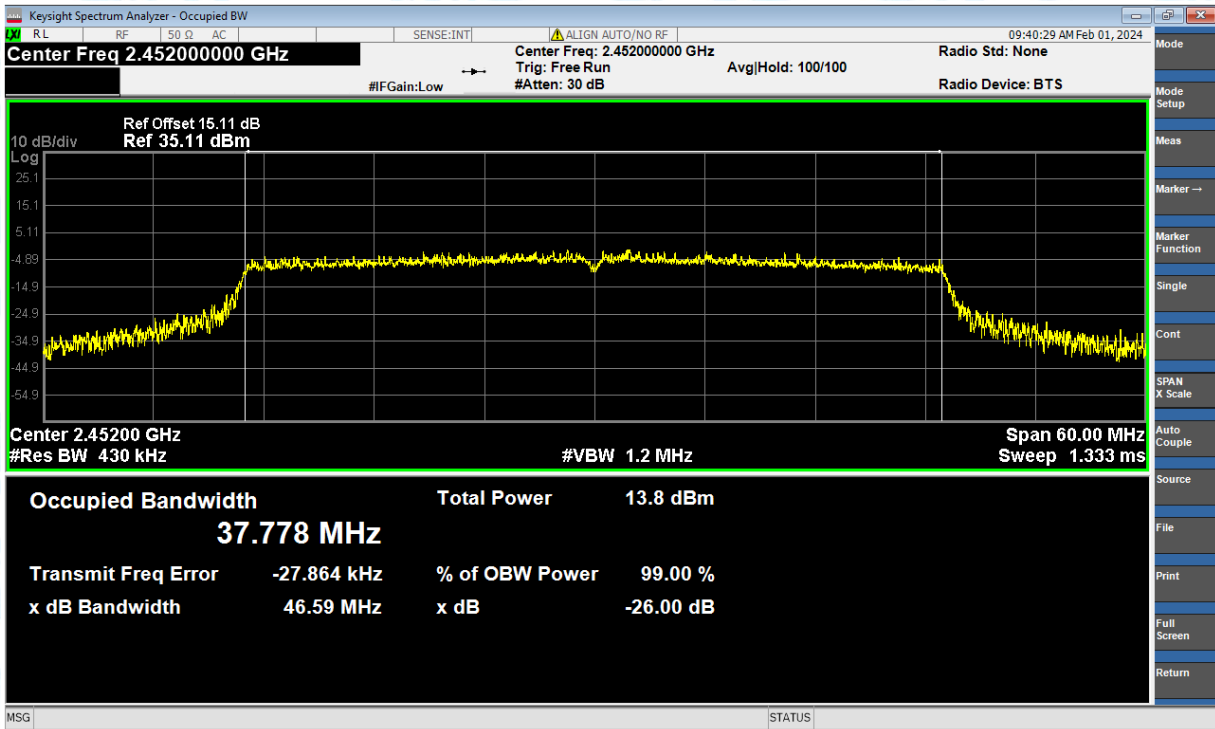




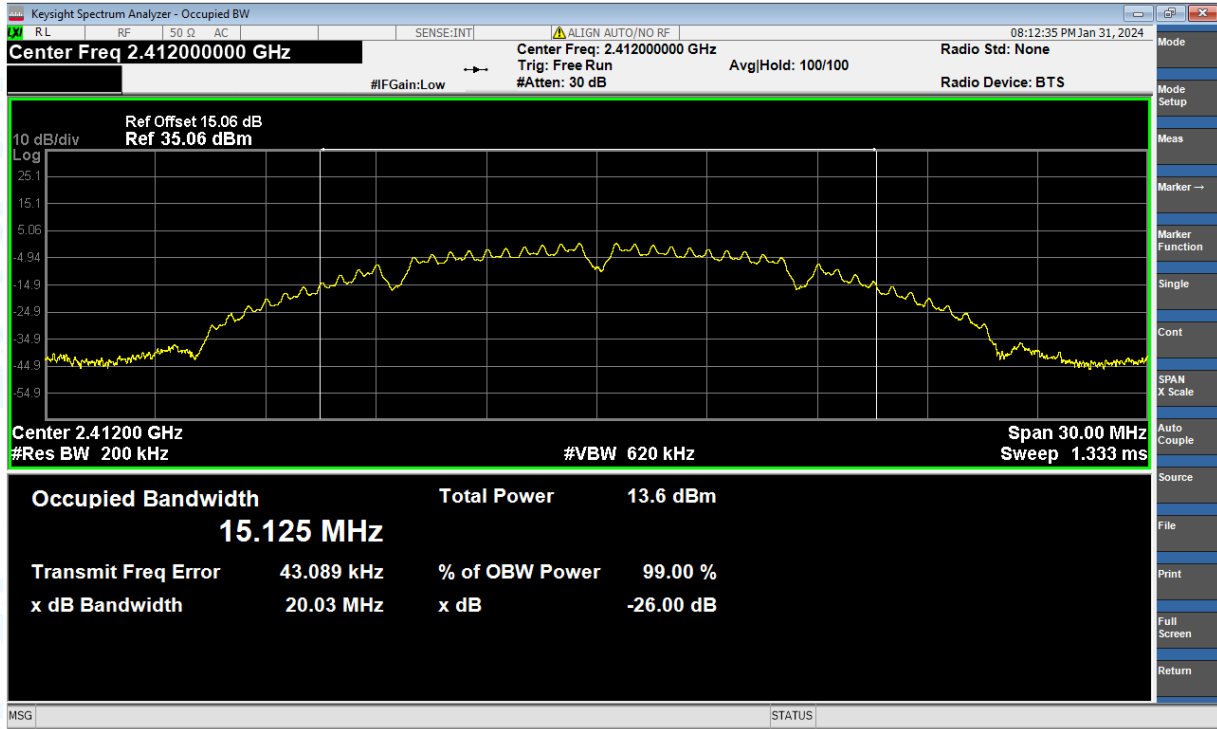
OBW NVNT ax(HE40) 2437MHz Ant1



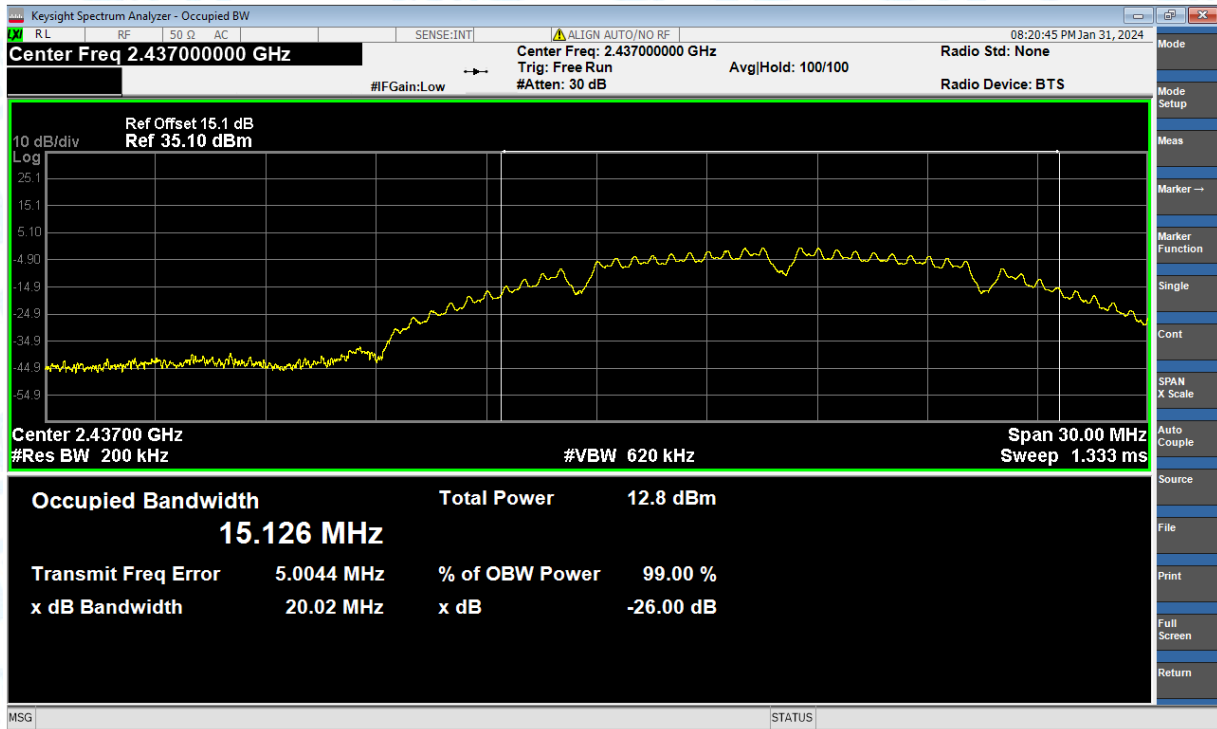
OBW NVNT ax(HE40) 2452MHz Ant1



OBW NVNT b 2412MHz Ant1

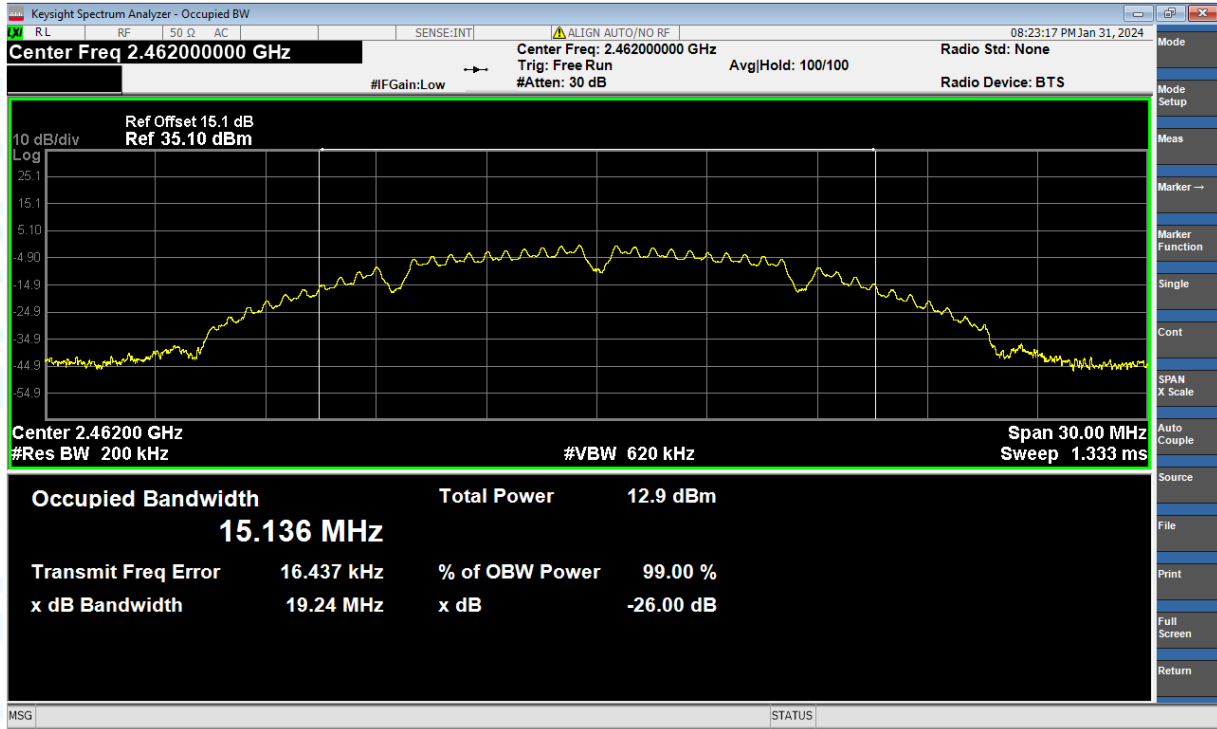


OBW NVNT b 2437MHz Ant1

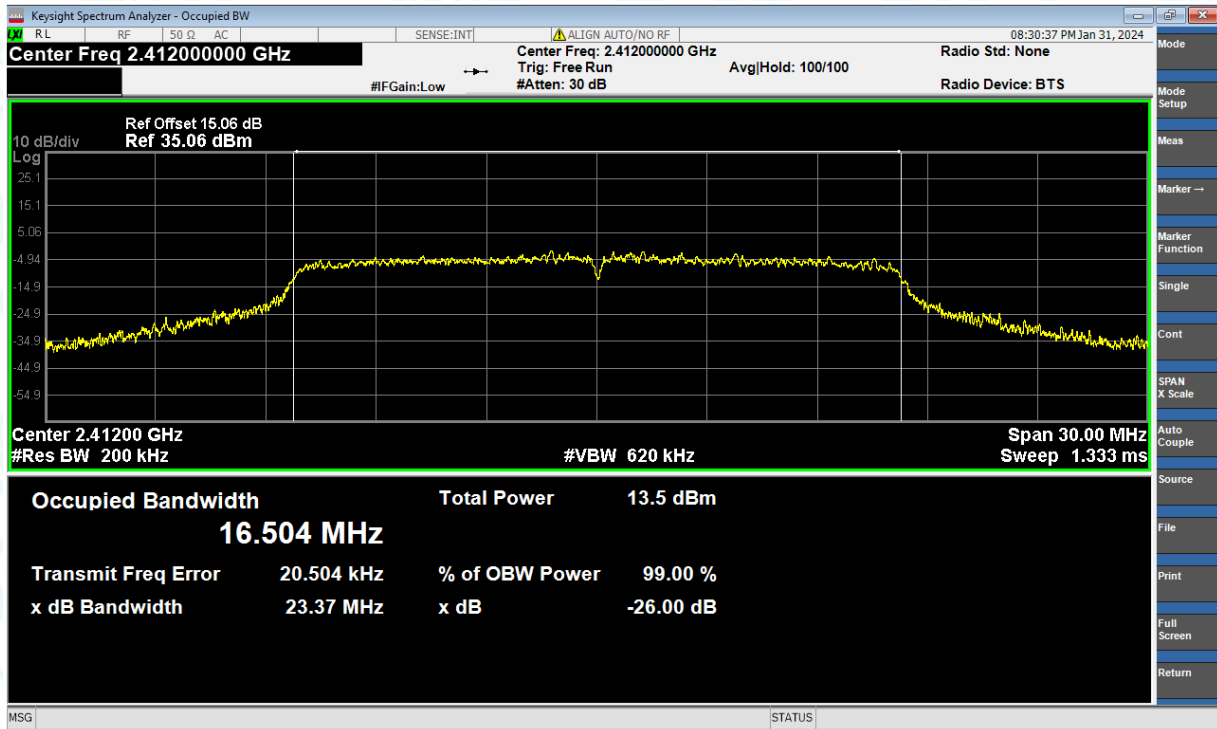




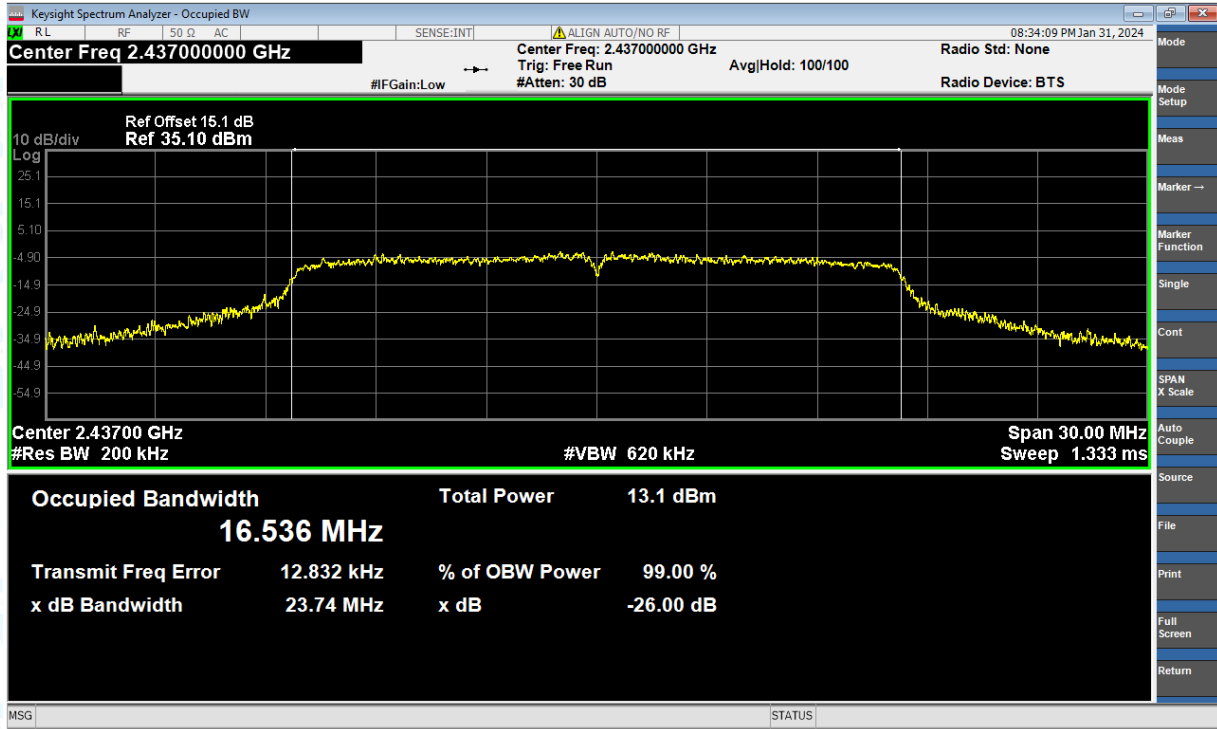
OBW NVNT b 2462MHz Ant1



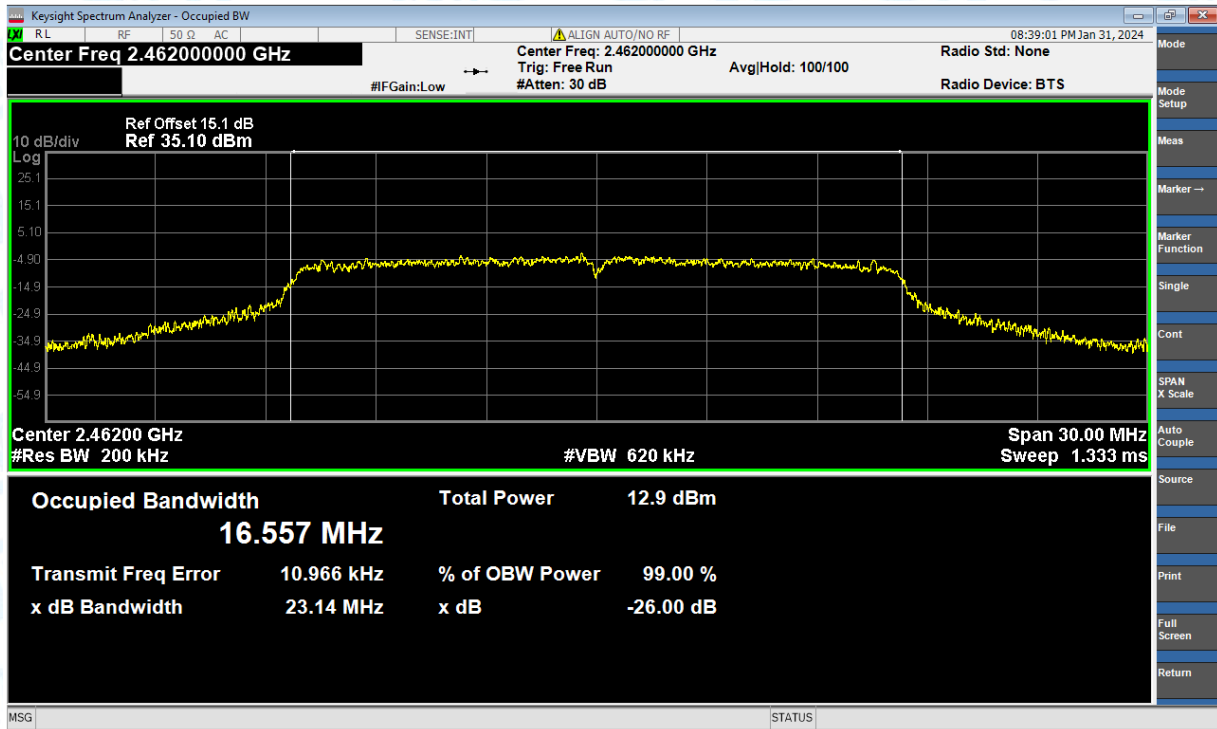
OBW NVNT g 2412MHz Ant1



OBW NVNT g 2437MHz Ant1

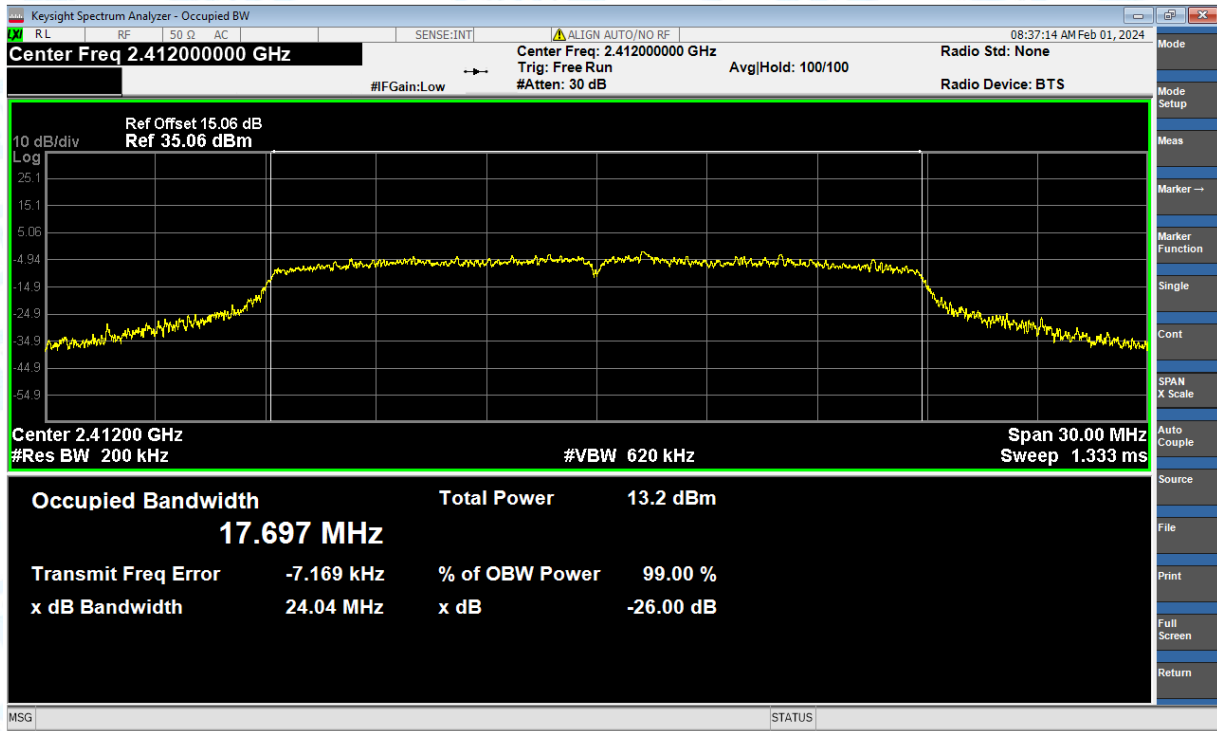


OBW NVNT g 2462MHz Ant1

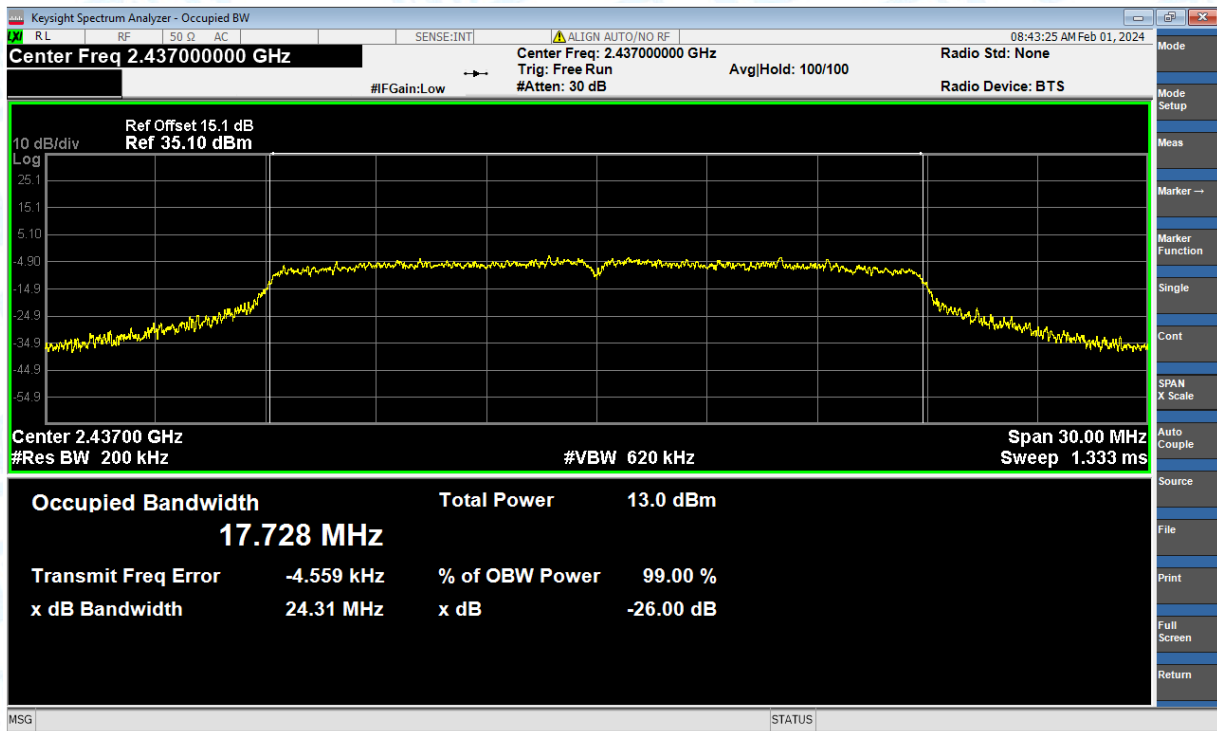




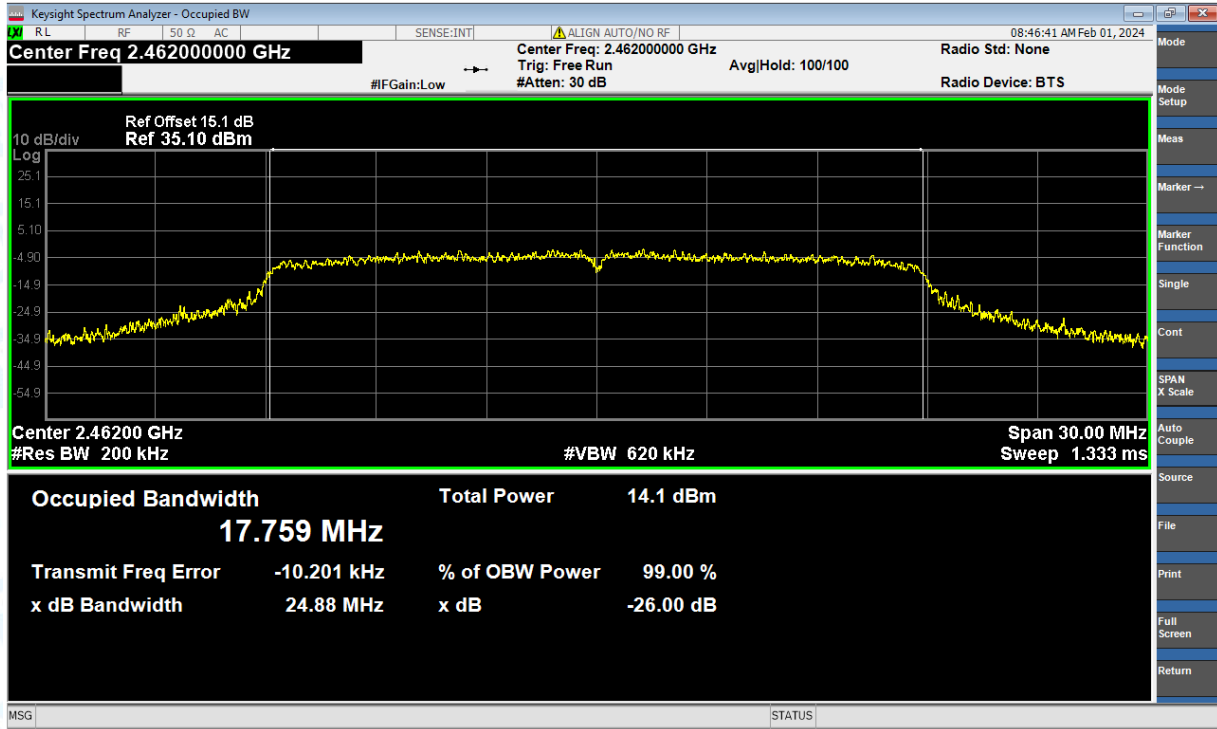
OBW NVNT n(HT20) 2412MHz Ant1



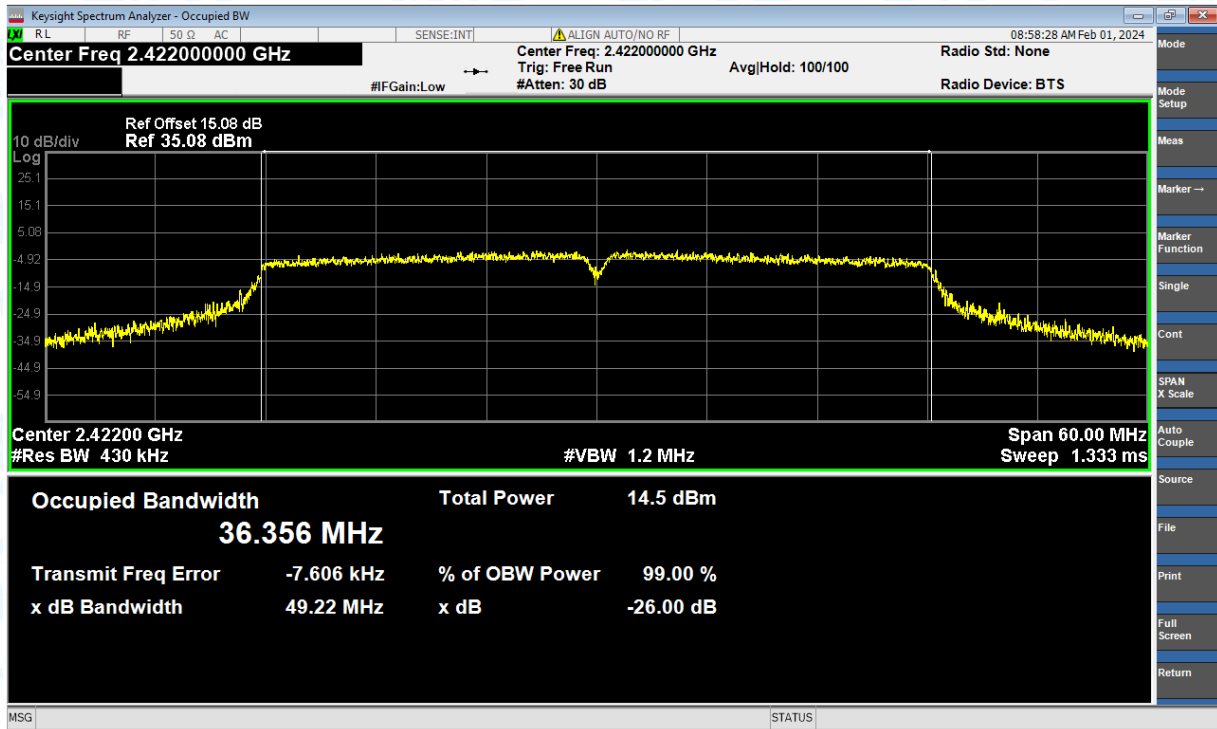
OBW NVNT n(HT20) 2437MHz Ant1



OBW NVNT n(HT20) 2462MHz Ant1

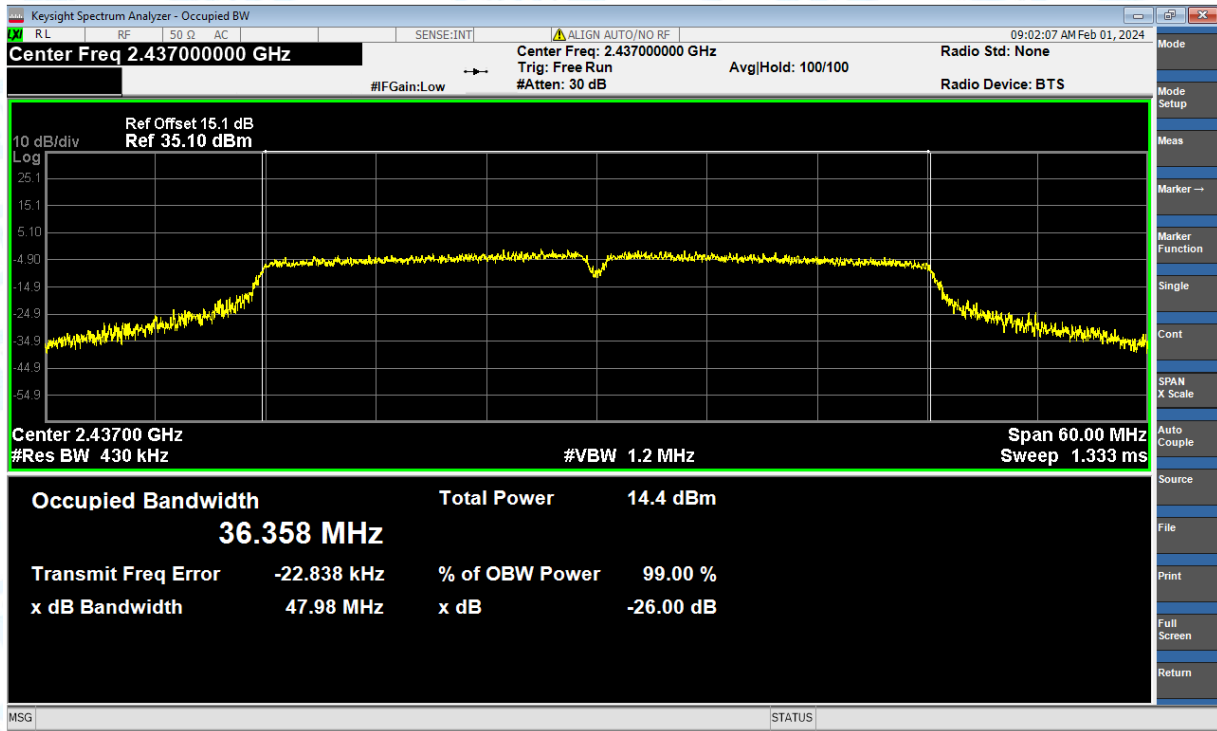


OBW NVNT n(HT40) 2422MHz Ant1

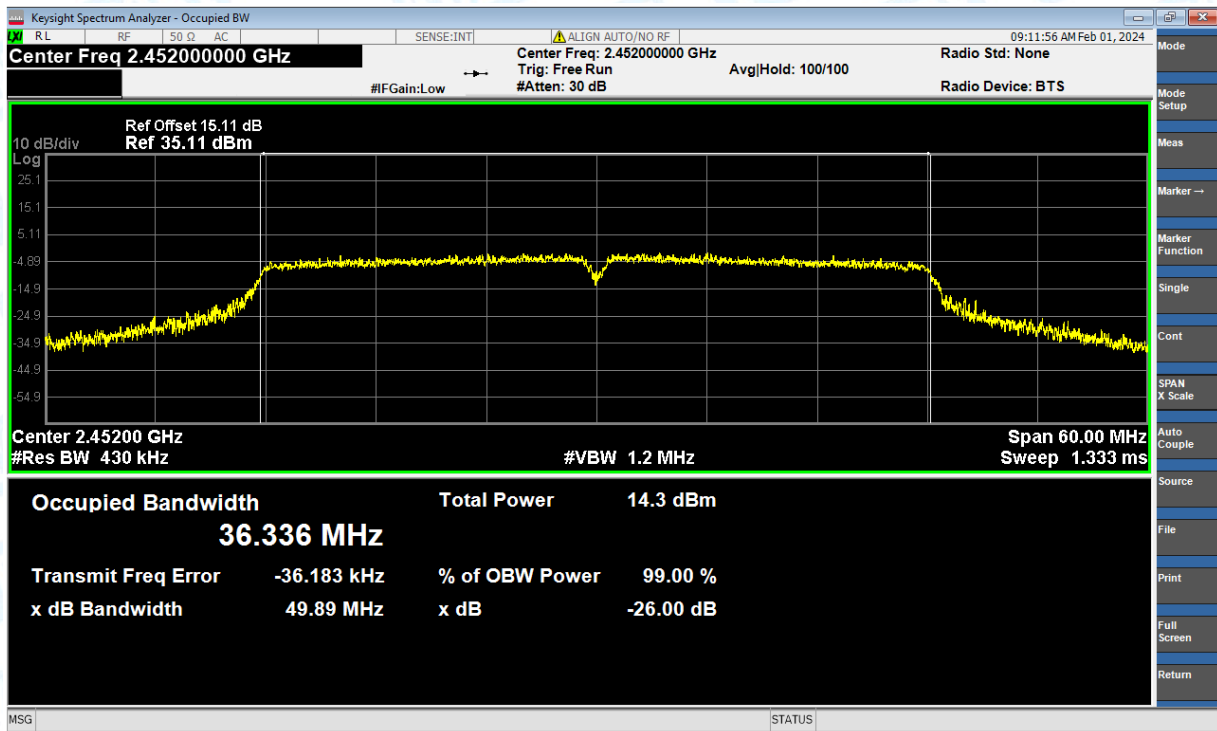




OBW NVNT n(HT40) 2437MHz Ant1



OBW NVNT n(HT40) 2452MHz Ant1



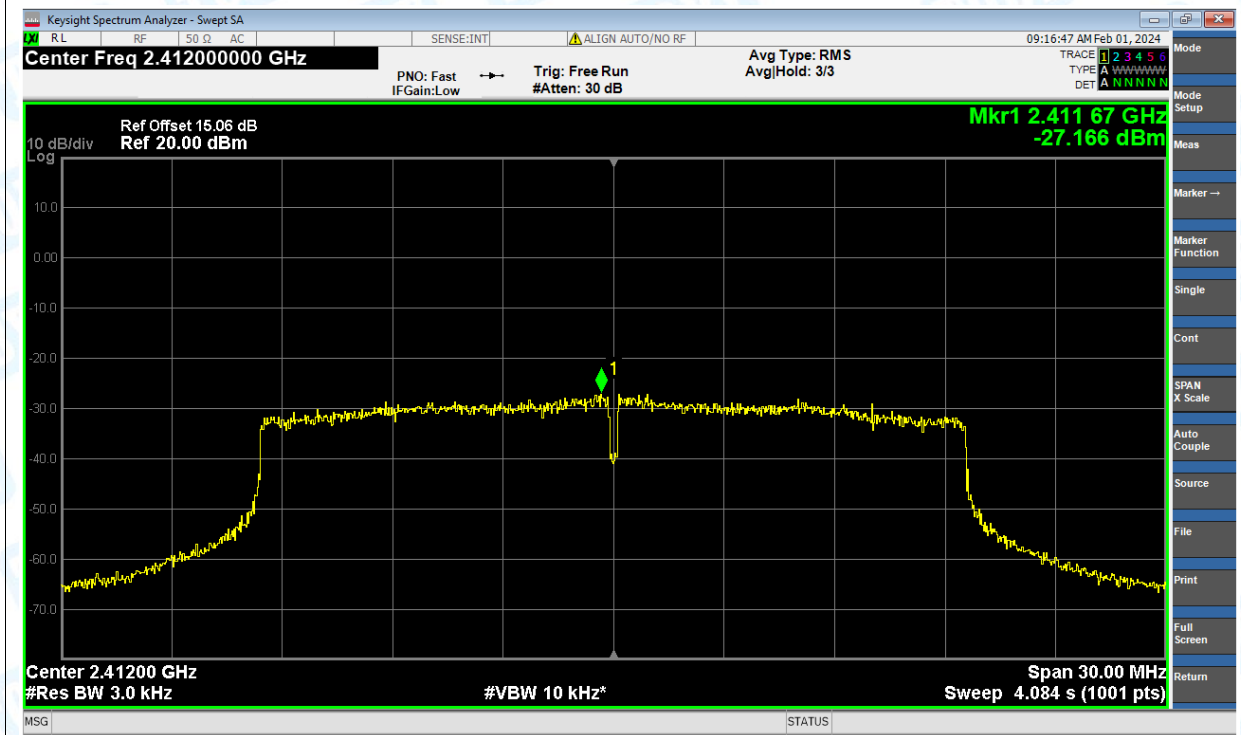
## 5. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	ax(HE20)	2412	Ant1	-27.166	8	Pass
NVNT	ax(HE20)	2437	Ant1	-27.107	8	Pass
NVNT	ax(HE20)	2462	Ant1	-27.281	8	Pass
NVNT	ax(HE40)	2422	Ant1	-31.079	8	Pass
NVNT	ax(HE40)	2437	Ant1	-31.69	8	Pass
NVNT	ax(HE40)	2452	Ant1	-31.878	8	Pass
NVNT	b	2412	Ant1	-23.07	8	Pass
NVNT	b	2437	Ant1	-23.691	8	Pass
NVNT	b	2462	Ant1	-23.778	8	Pass
NVNT	g	2412	Ant1	-25.721	8	Pass
NVNT	g	2437	Ant1	-26.046	8	Pass
NVNT	g	2462	Ant1	-26.178	8	Pass
NVNT	n(HT20)	2412	Ant1	-26.047	8	Pass
NVNT	n(HT20)	2437	Ant1	-25.904	8	Pass
NVNT	n(HT20)	2462	Ant1	-25.163	8	Pass
NVNT	n(HT40)	2422	Ant1	-30.223	8	Pass
NVNT	n(HT40)	2437	Ant1	-30.257	8	Pass
NVNT	n(HT40)	2452	Ant1	-30.064	8	Pass

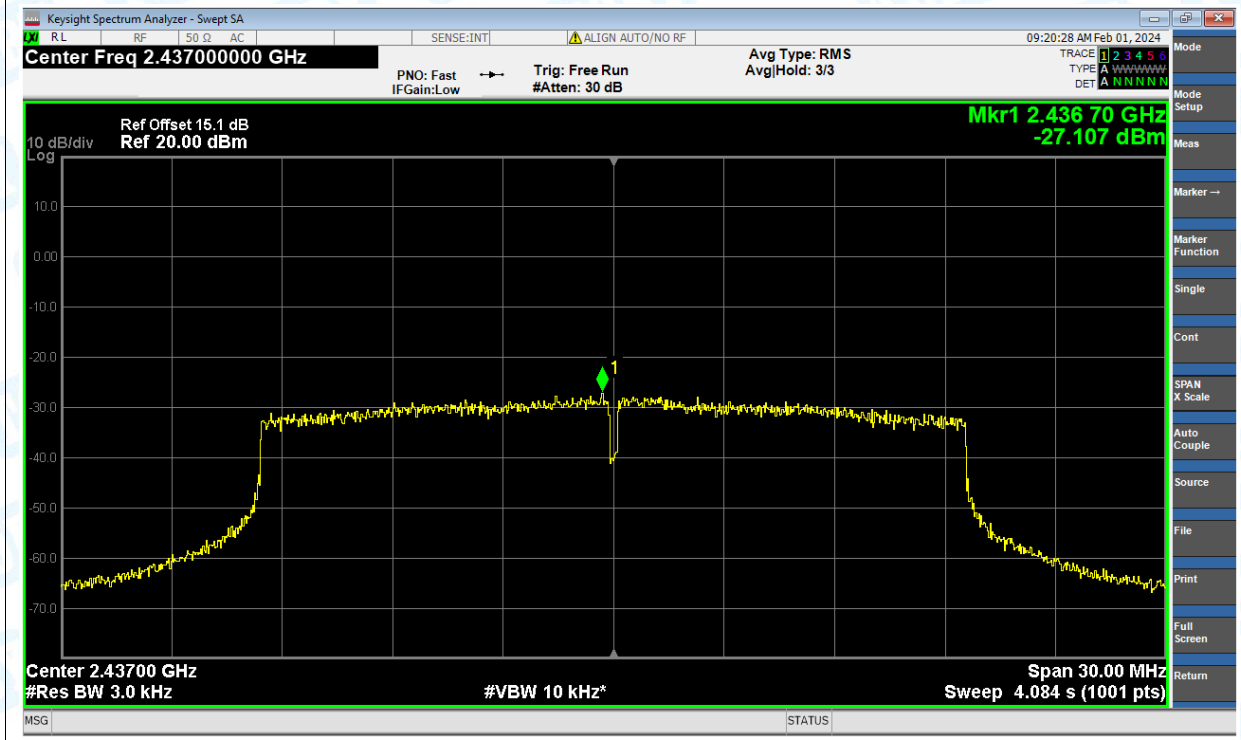


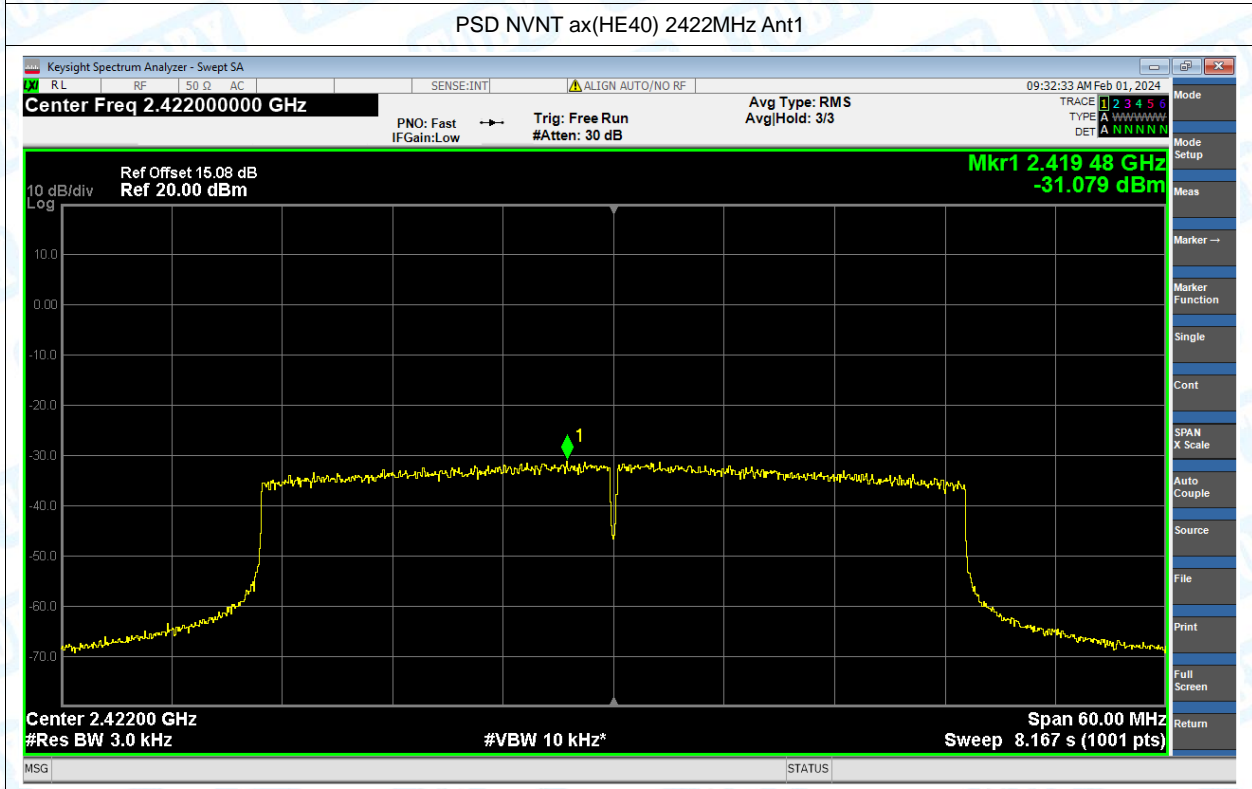
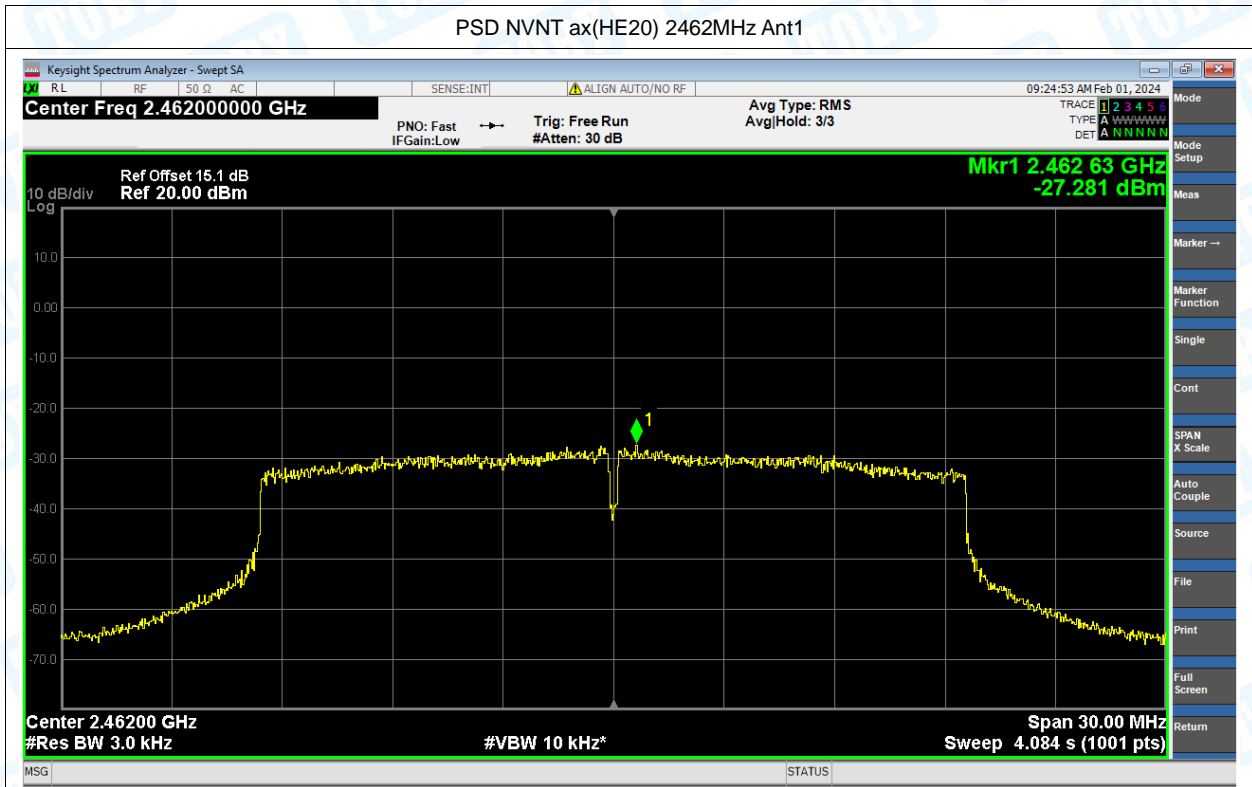
Test Graphs

PSD NVNT ax(HE20) 2412MHz Ant1

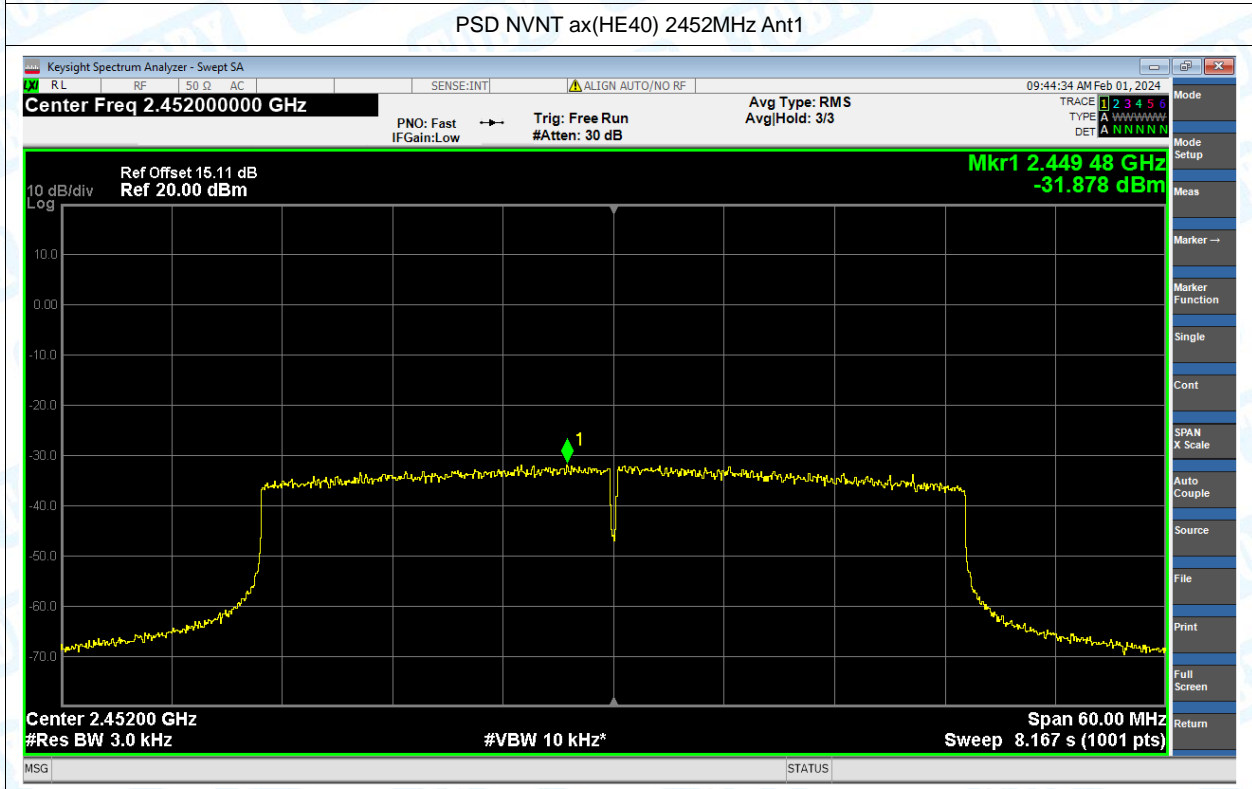
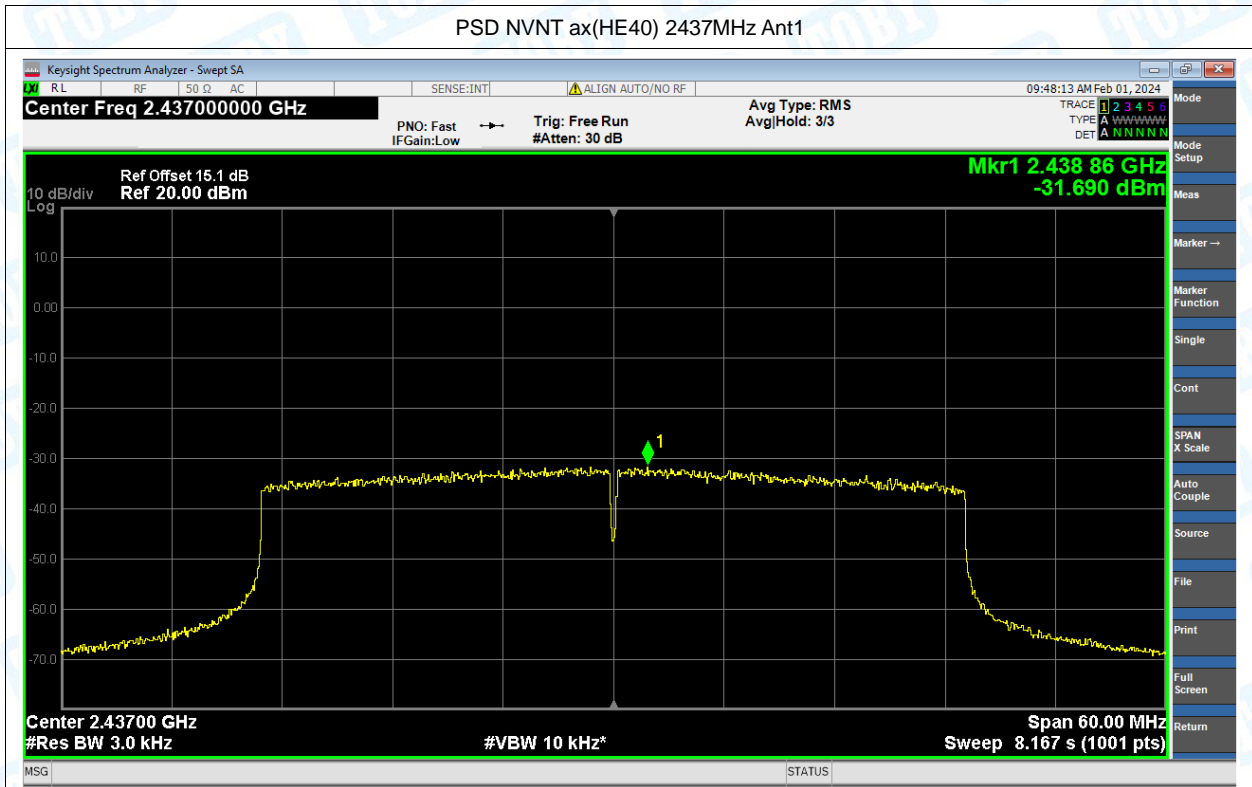


PSD NVNT ax(HE20) 2437MHz Ant1

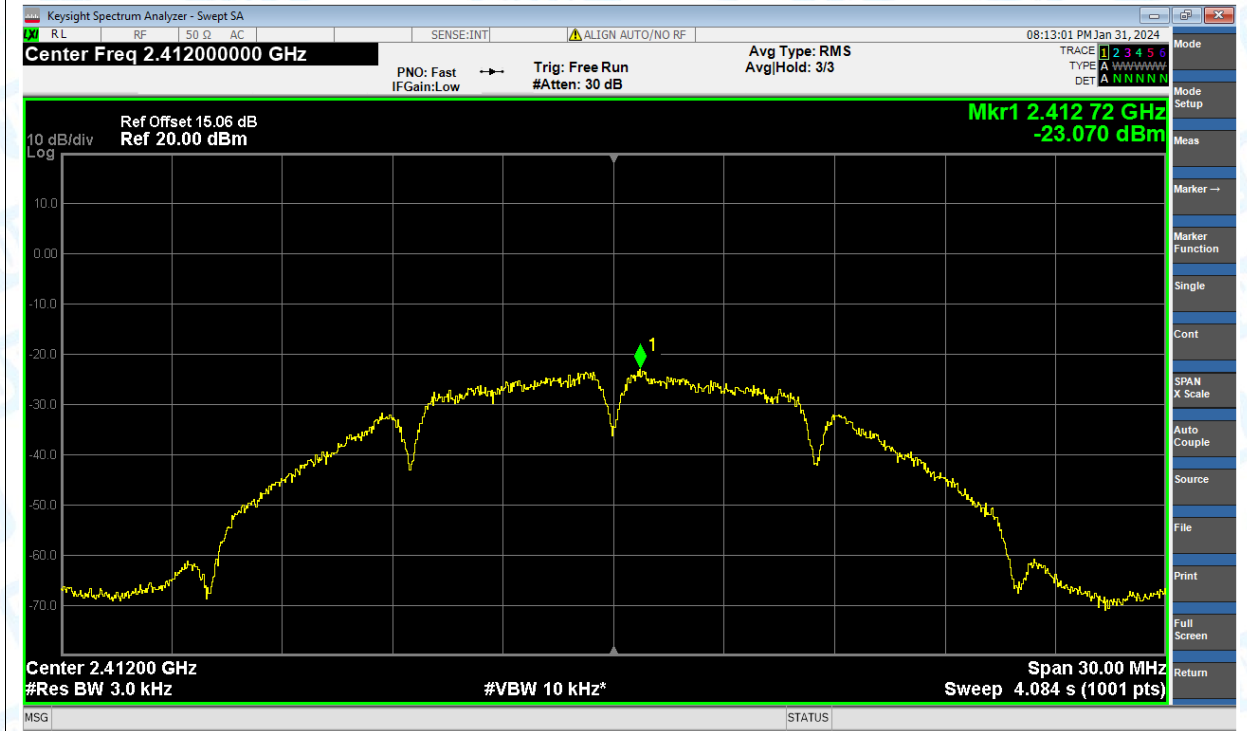








PSD NVNT b 2412MHz Ant1

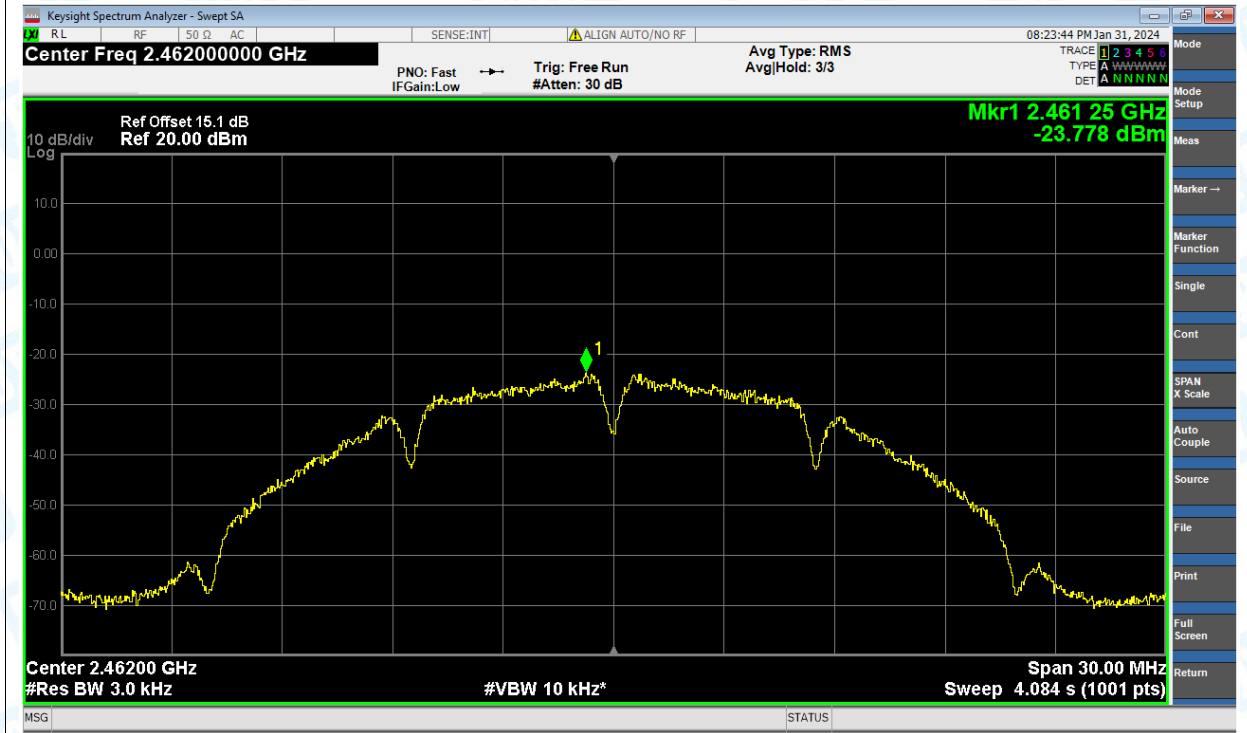


PSD NVNT b 2437MHz Ant1

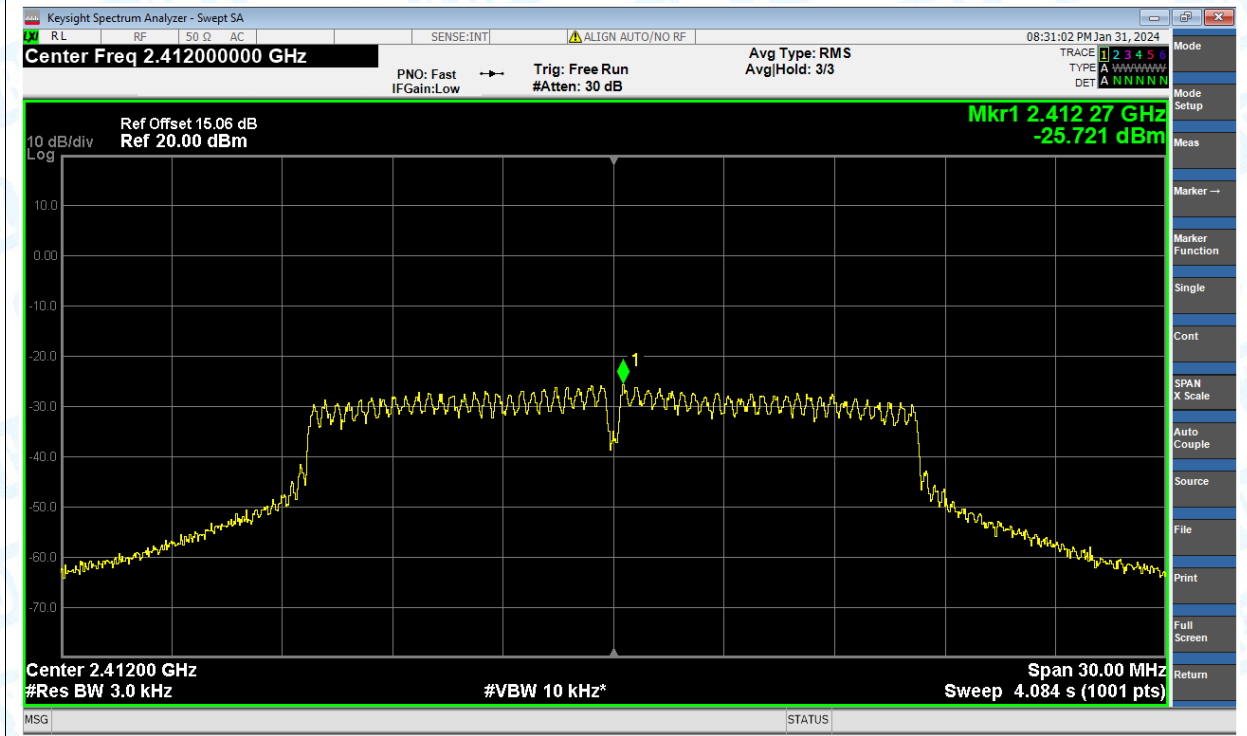


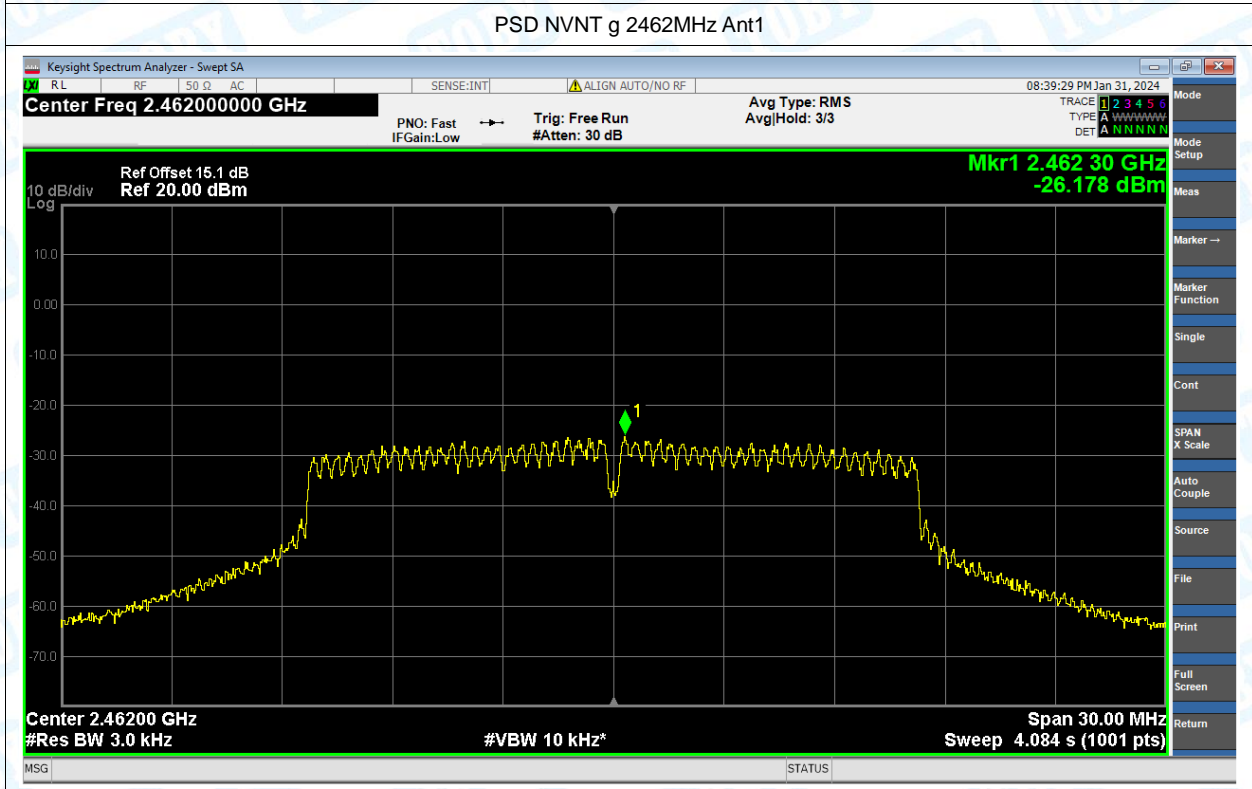
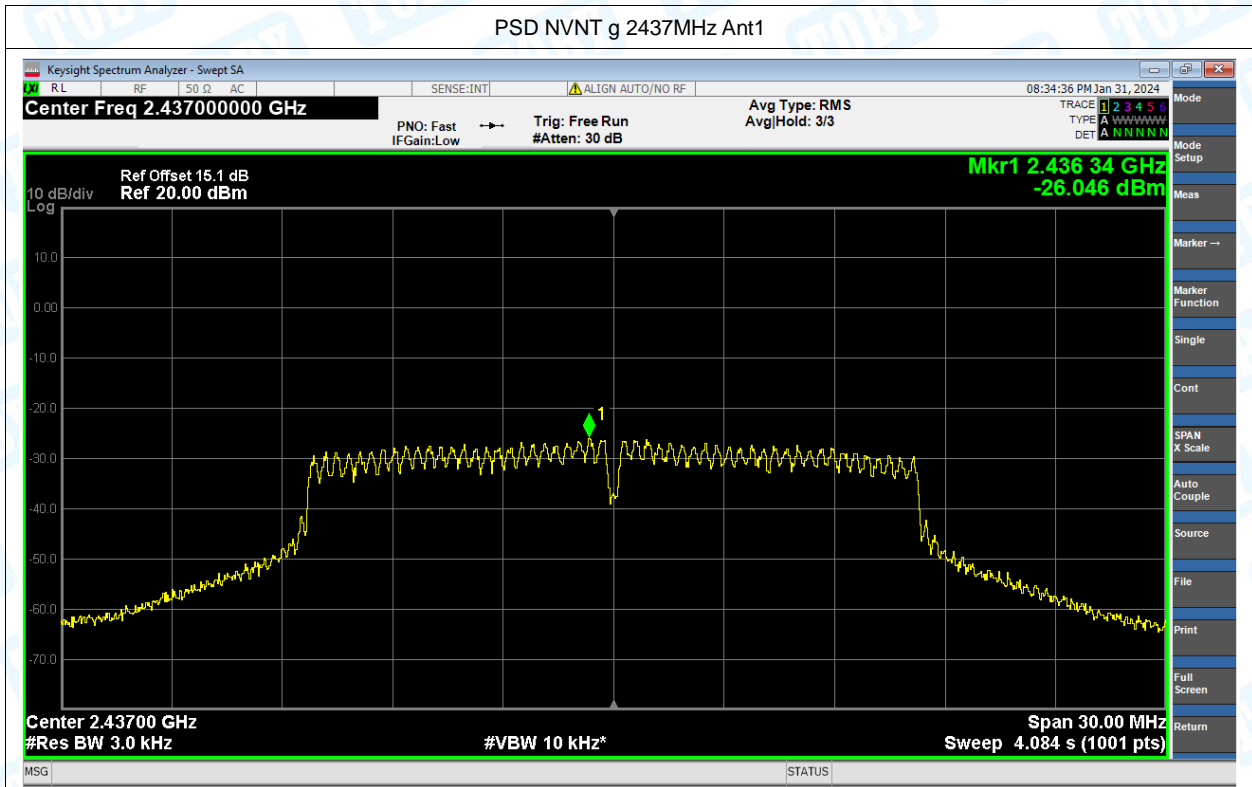


PSD NVNT b 2462MHz Ant1

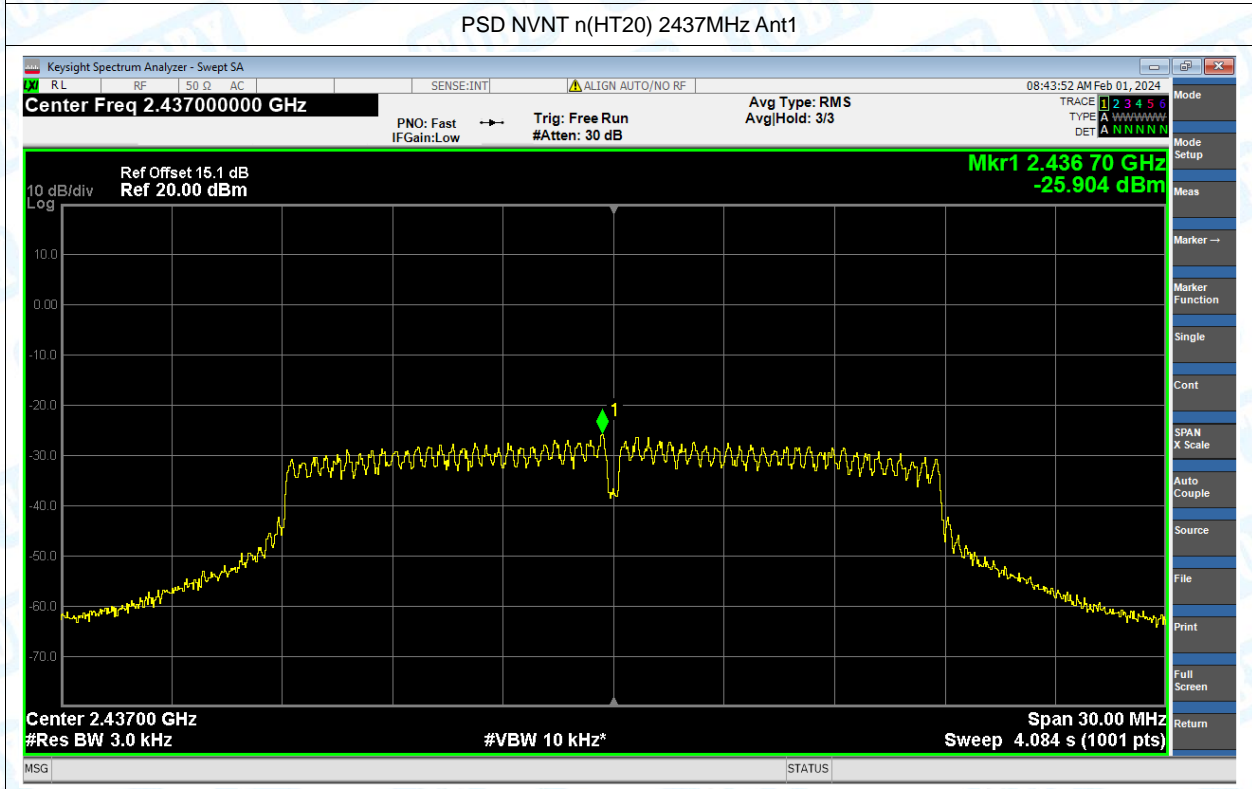
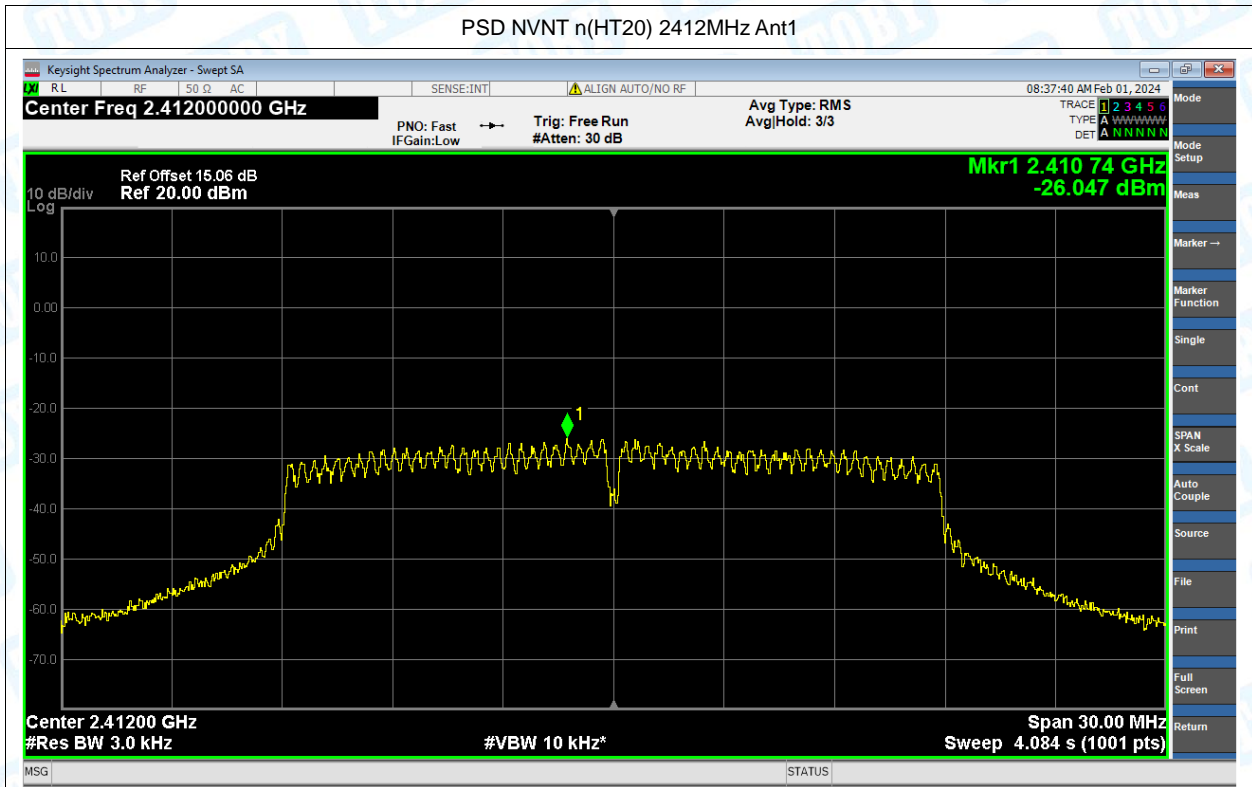


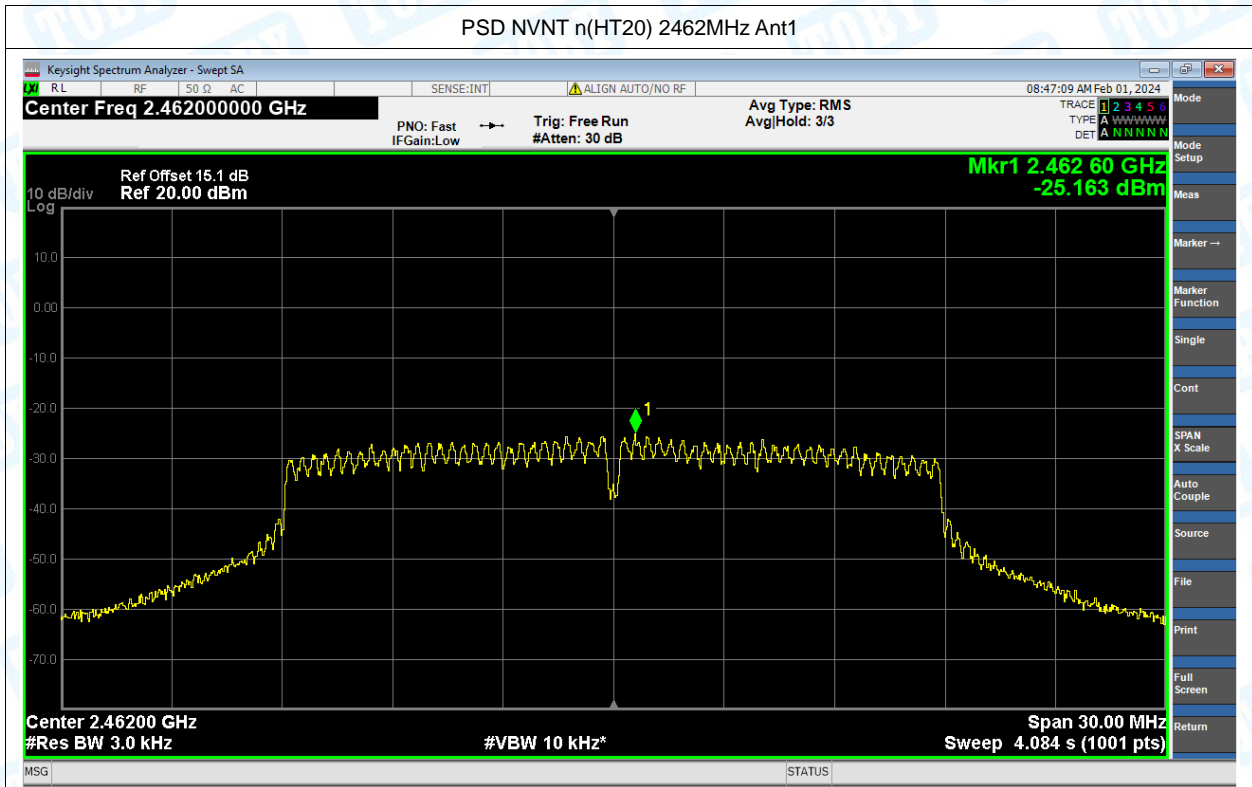
PSD NVNT g 2412MHz Ant1



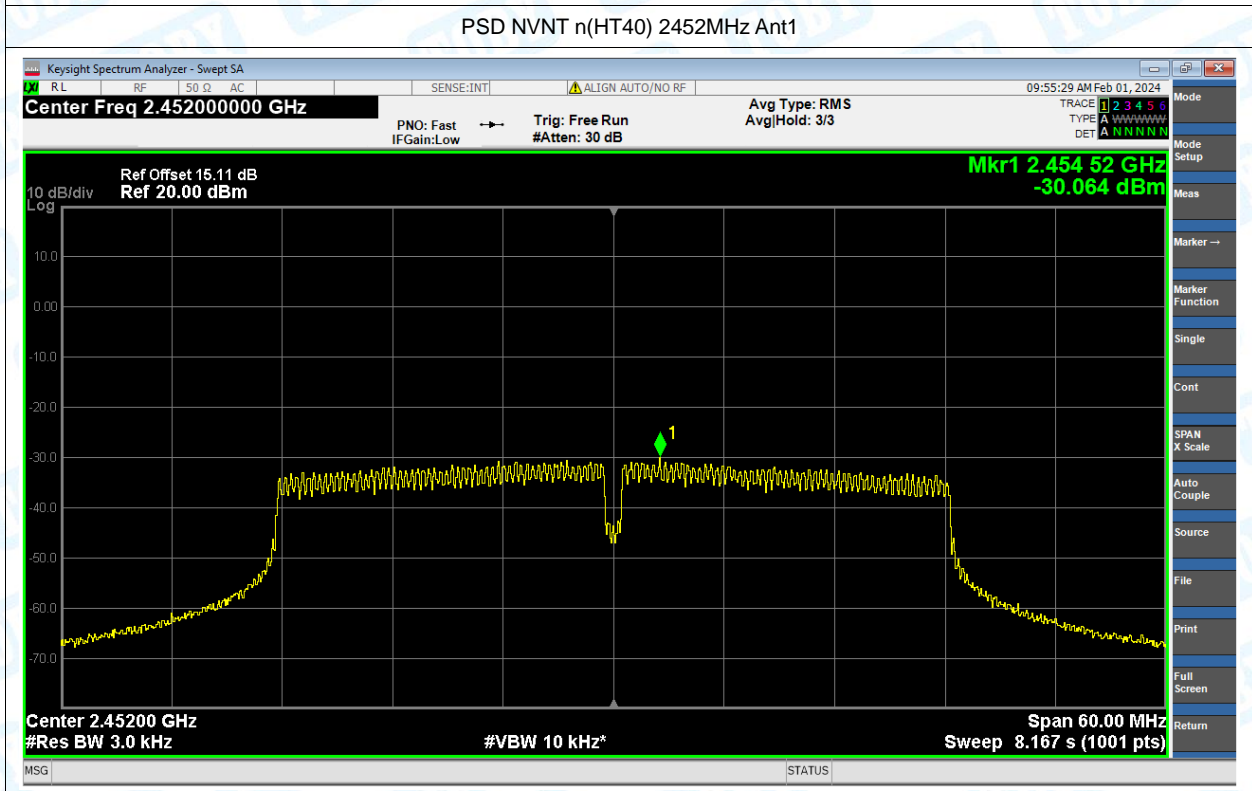
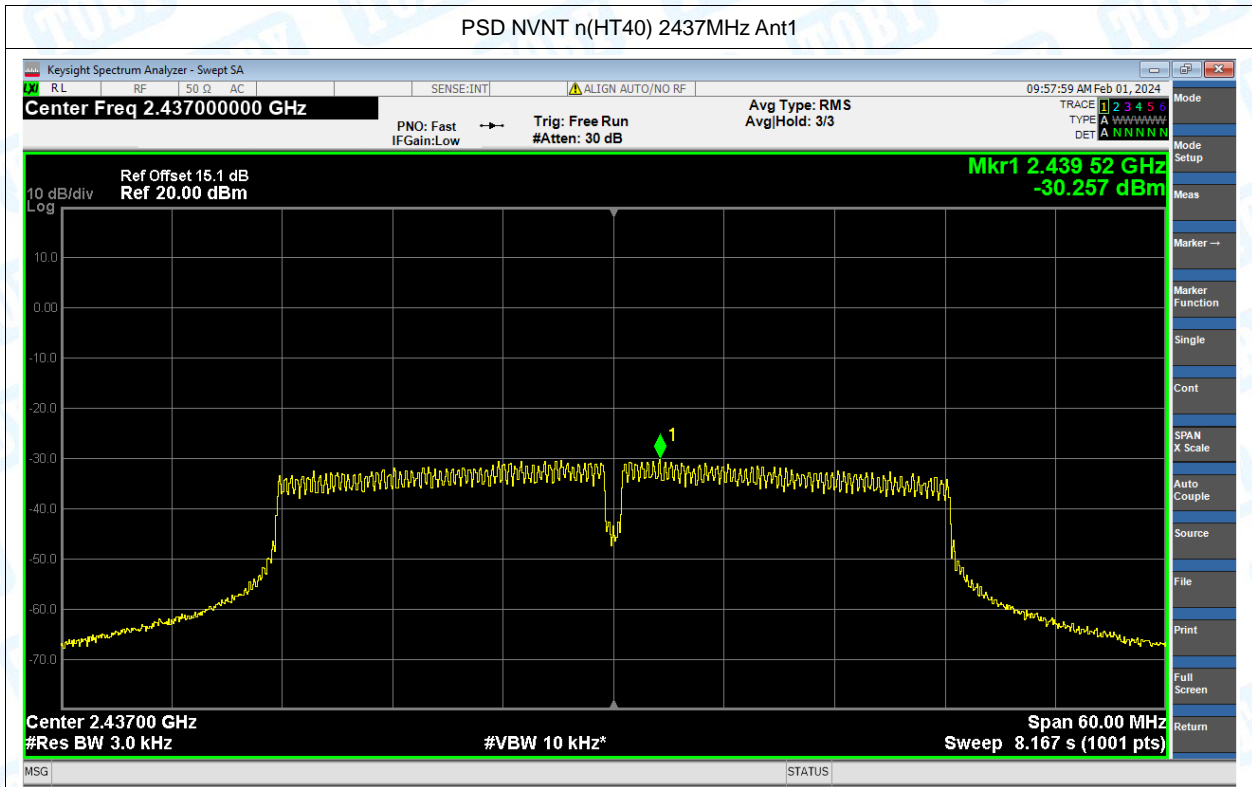












## 6. Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	ax(HE20)	2412	Ant1	-40.05	-30	Pass
NVNT	ax(HE20)	2462	Ant1	-40.85	-30	Pass
NVNT	ax(HE40)	2422	Ant1	-37.27	-30	Pass
NVNT	ax(HE40)	2452	Ant1	-37.55	-30	Pass
NVNT	b	2412	Ant1	-44.04	-30	Pass
NVNT	b	2462	Ant1	-43.08	-30	Pass
NVNT	g	2412	Ant1	-41.19	-30	Pass
NVNT	g	2462	Ant1	-39.87	-30	Pass
NVNT	n(HT20)	2412	Ant1	-41.62	-30	Pass
NVNT	n(HT20)	2462	Ant1	-42.36	-30	Pass
NVNT	n(HT40)	2422	Ant1	-37.94	-30	Pass
NVNT	n(HT40)	2452	Ant1	-37.7	-30	Pass

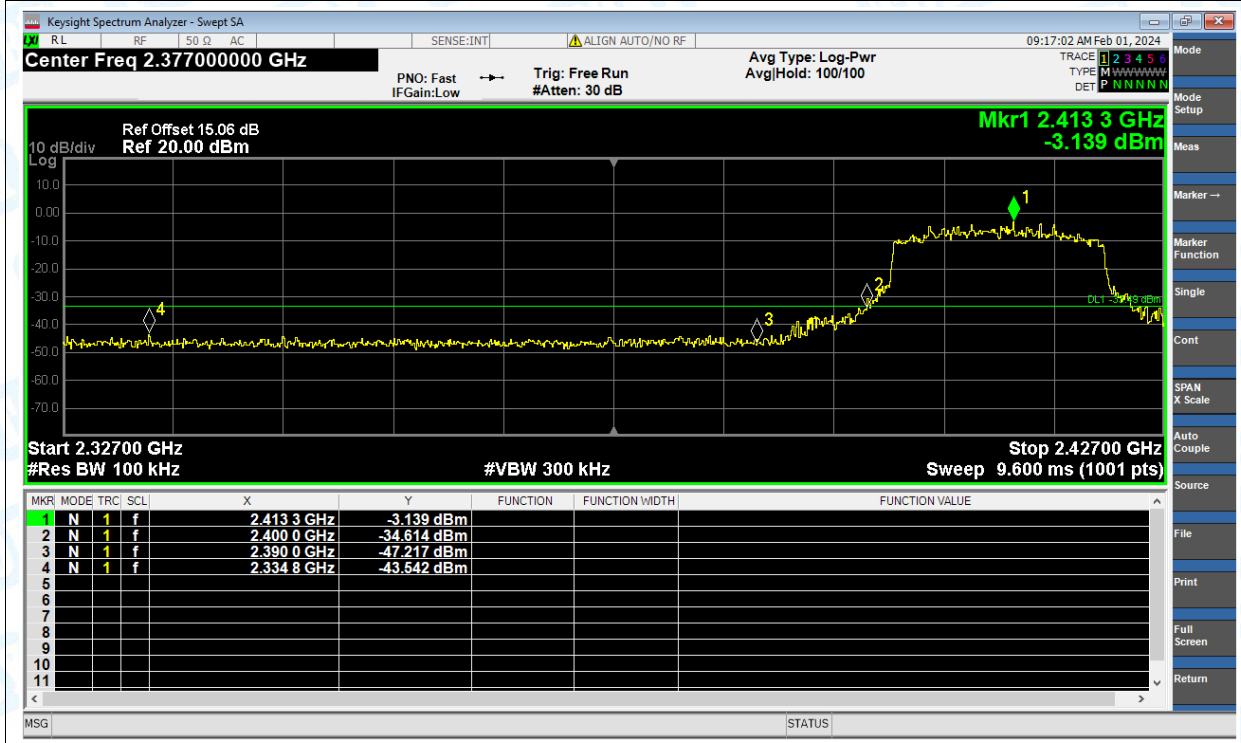


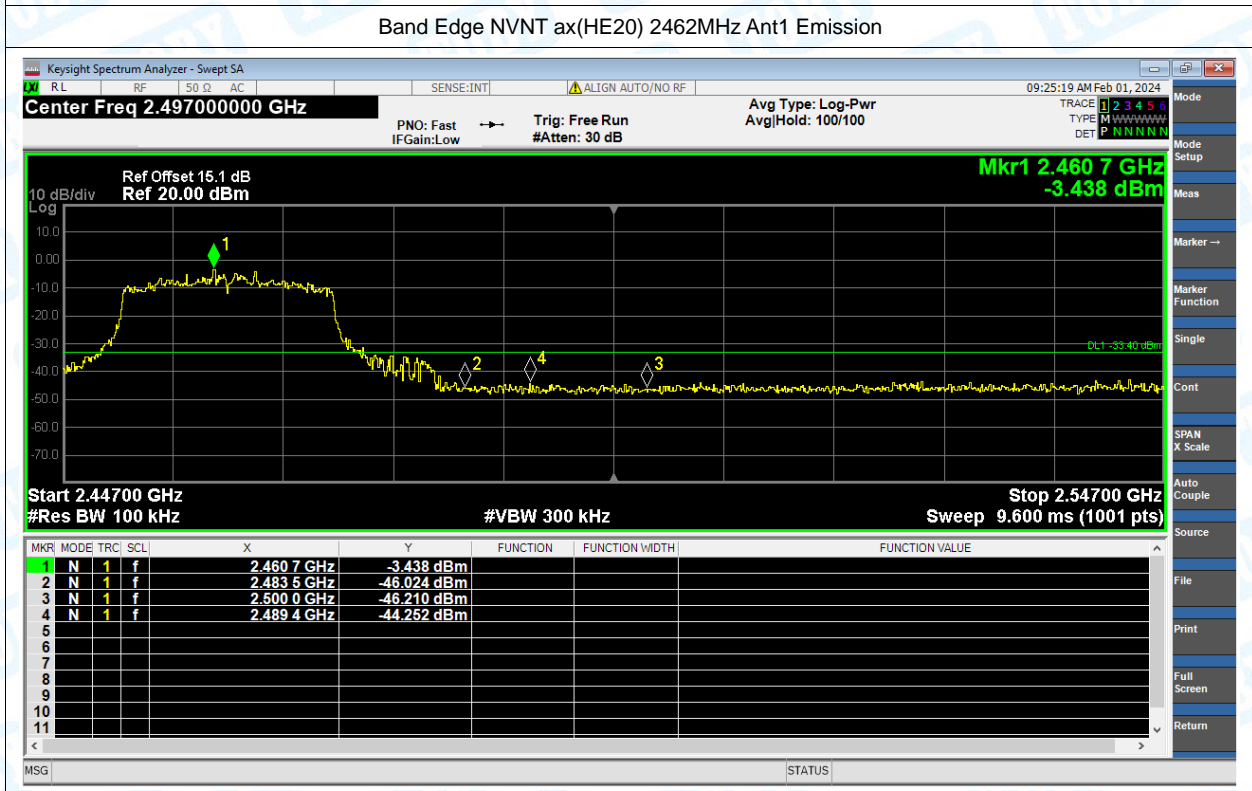
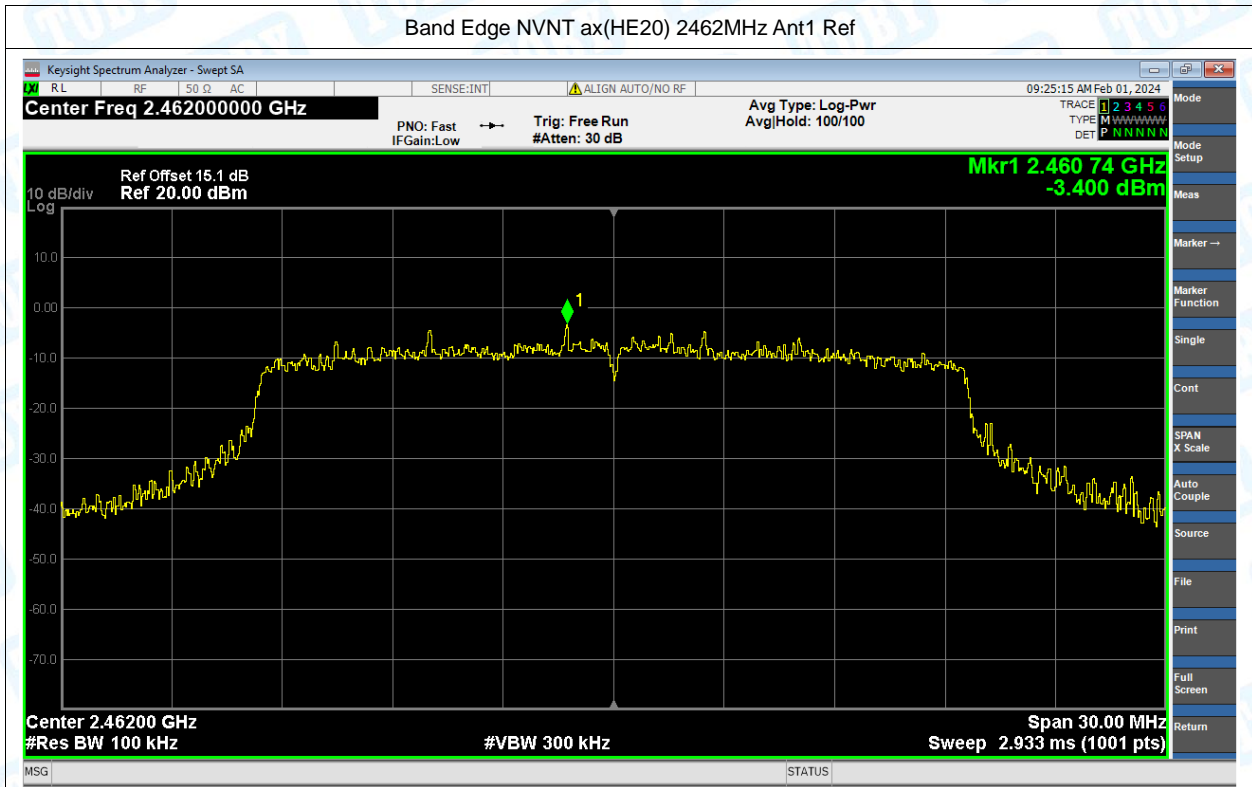
Test Graphs

Band Edge NVNT ax(HE20) 2412MHz Ant1 Ref



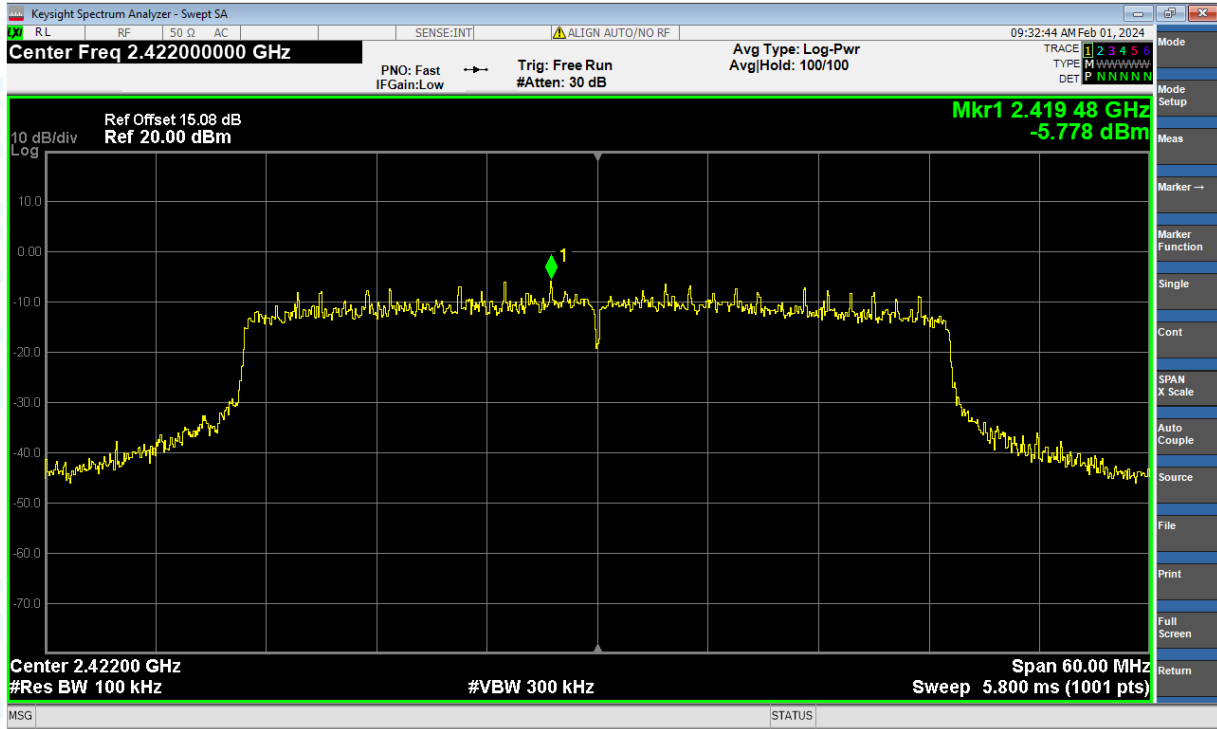
Band Edge NVNT ax(HE20) 2412MHz Ant1 Emission



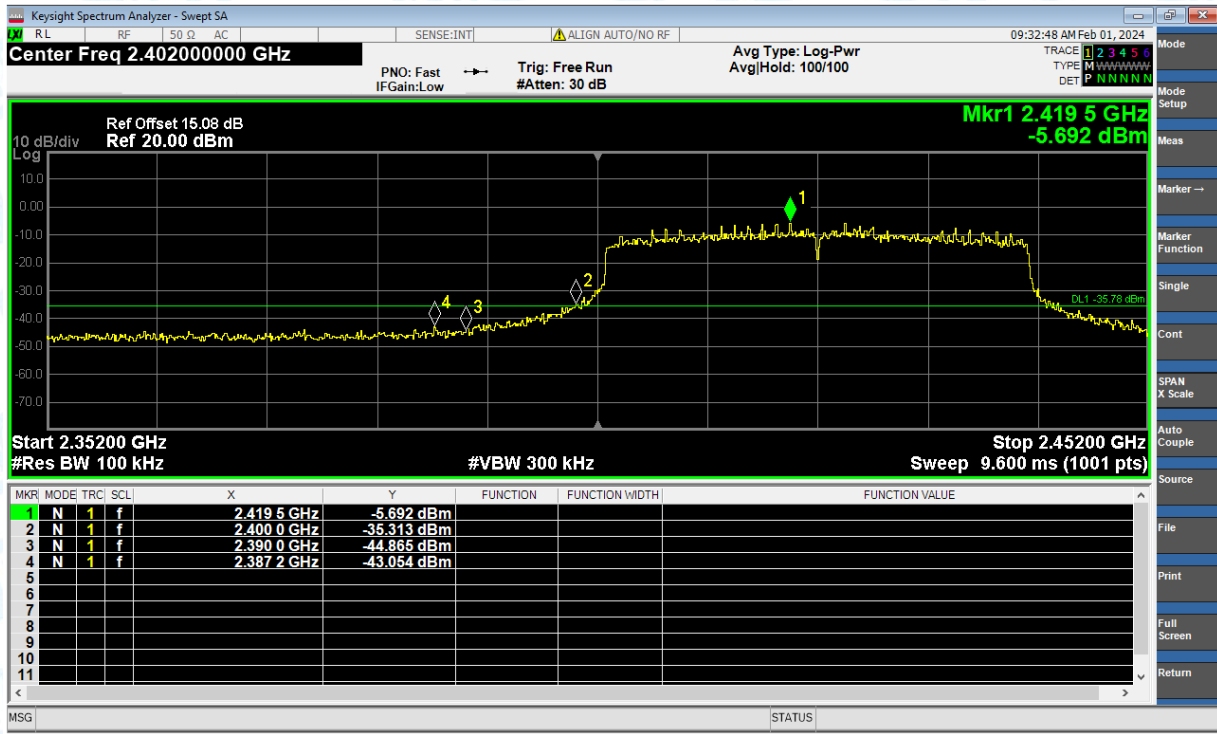




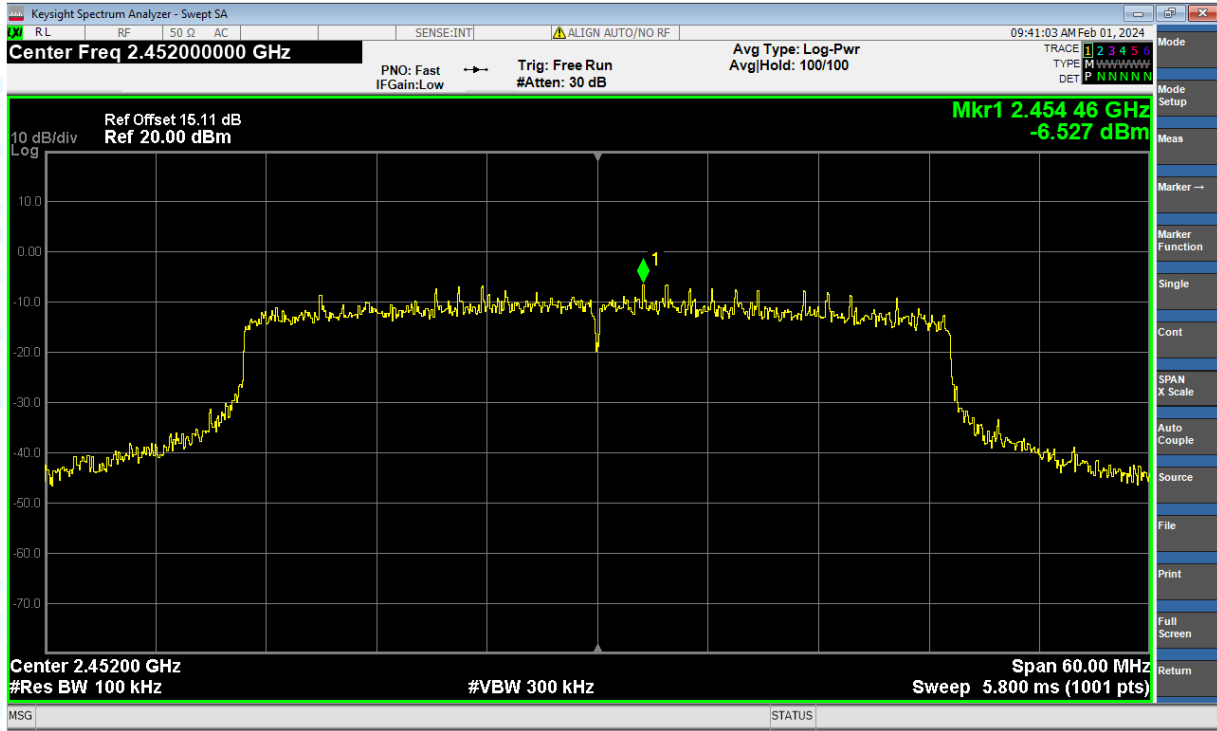
Band Edge NVNT ax(HE40) 2422MHz Ant1 Ref



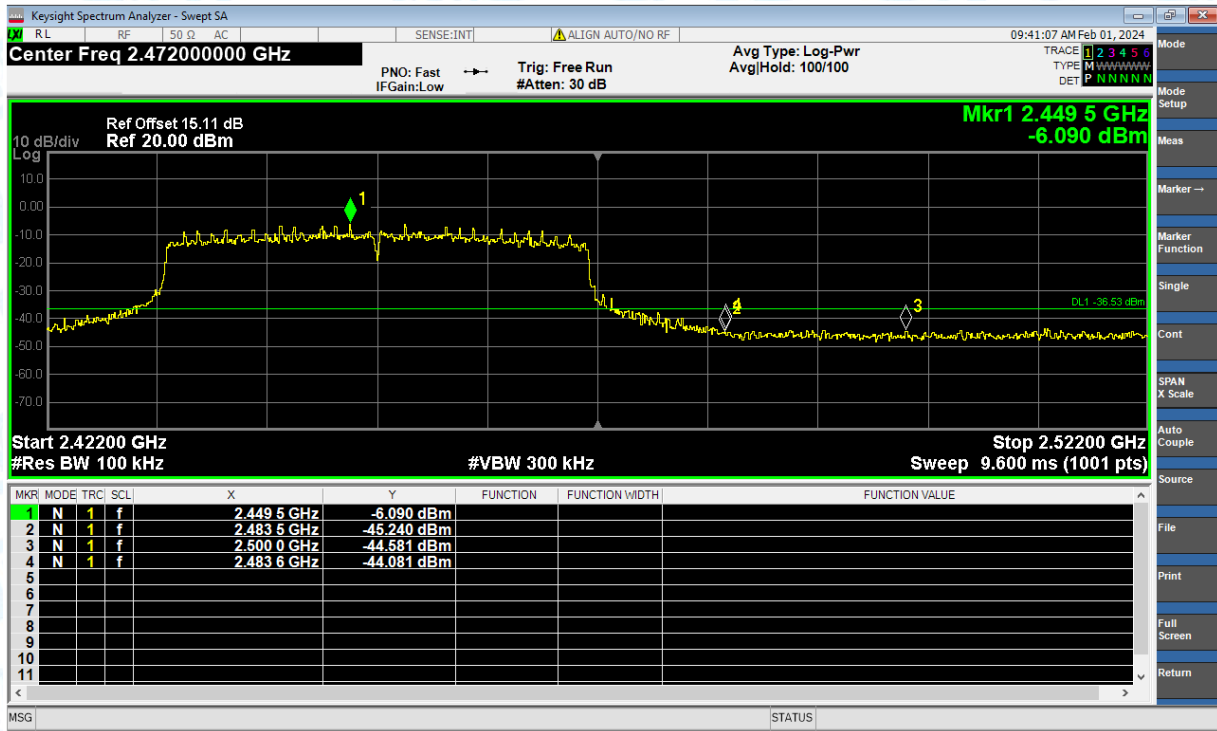
Band Edge NVNT ax(HE40) 2422MHz Ant1 Emission



Band Edge NVNT ax(HE40) 2452MHz Ant1 Ref

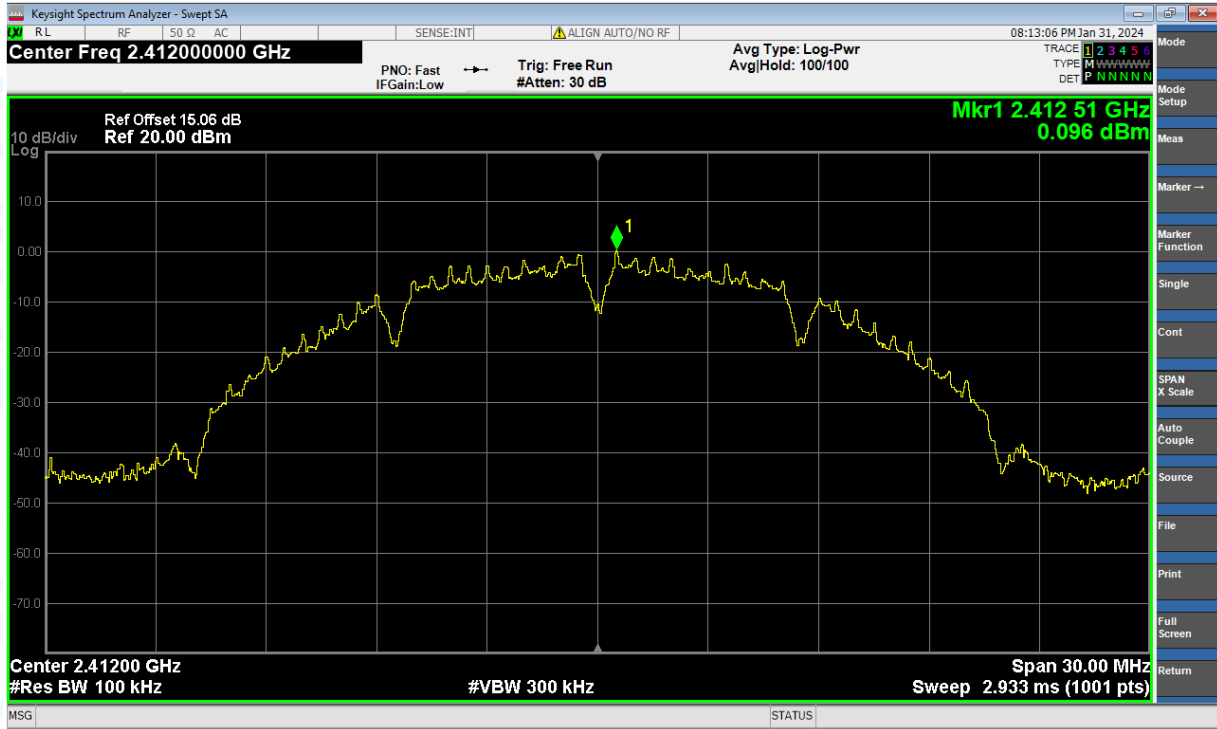


Band Edge NVNT ax(HE40) 2452MHz Ant1 Emission

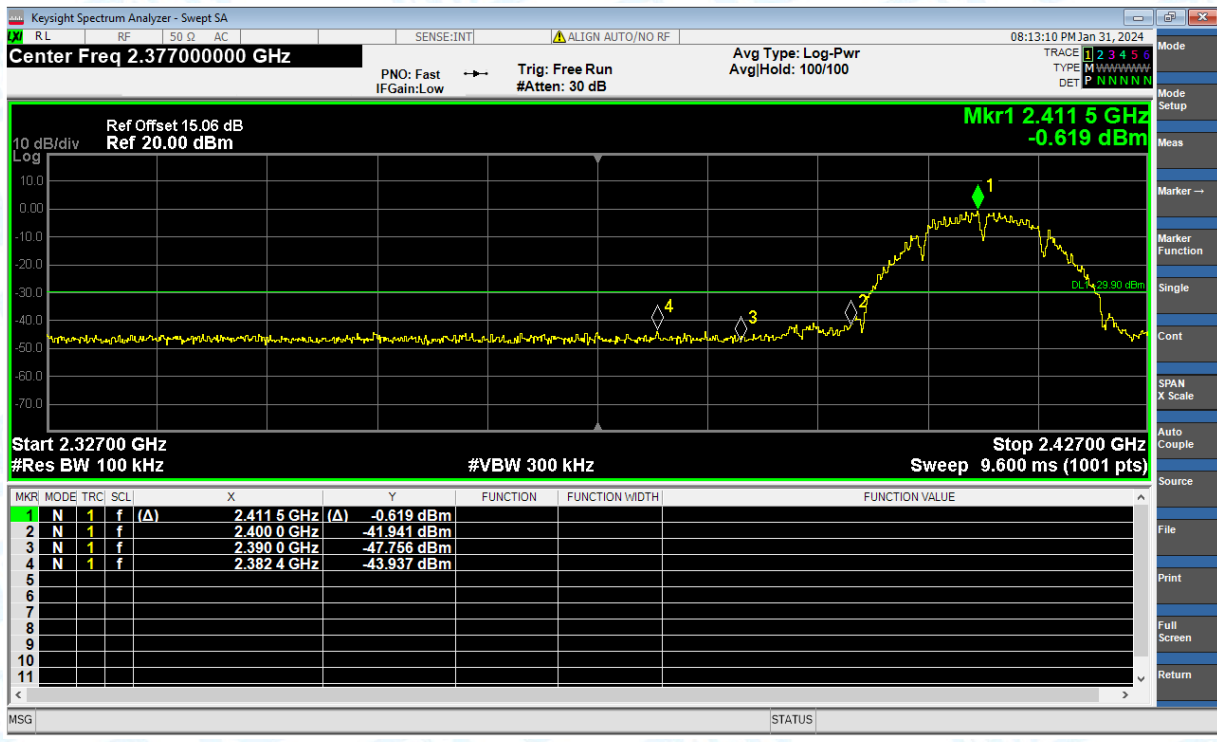




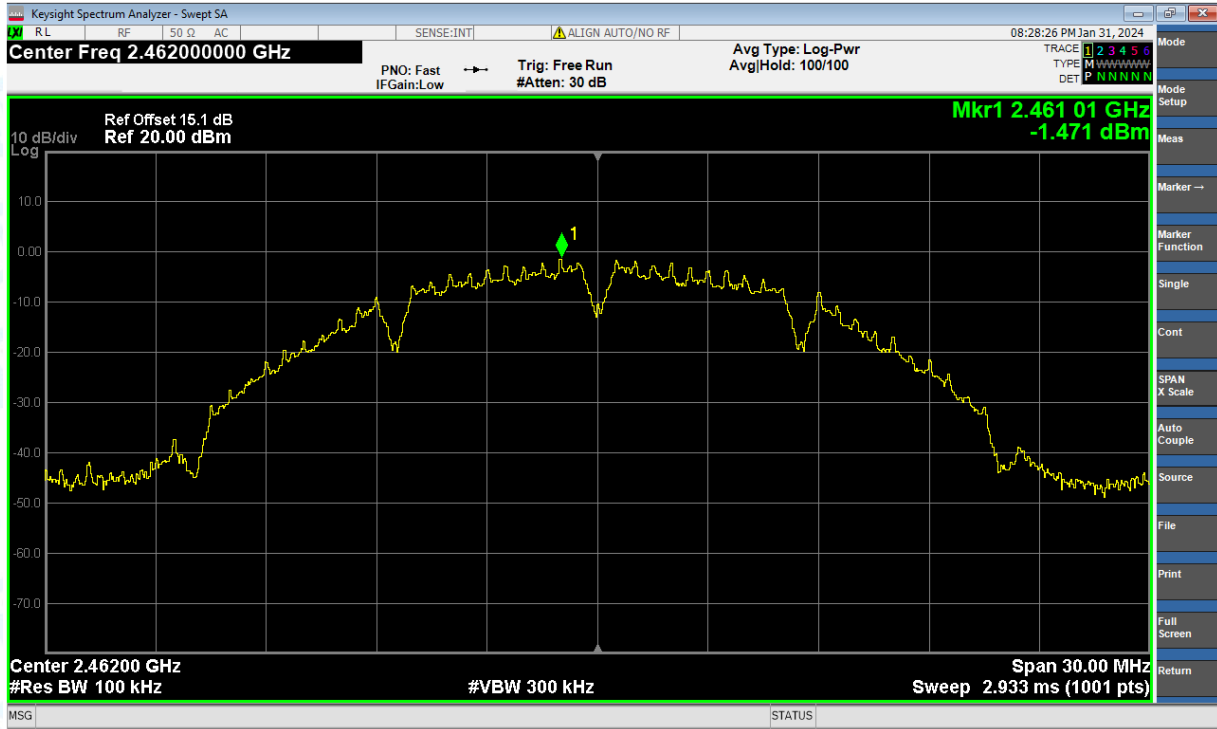
Band Edge NVNT b 2412MHz Ant1 Ref



Band Edge NVNT b 2412MHz Ant1 Emission



Band Edge NVNT b 2462MHz Ant1 Ref



Band Edge NVNT b 2462MHz Ant1 Emission

