

RF Test Data for 2.4G (Conducted Measurements)

General Description of EUT	
Product Name:	YUEQUN DRONE
Test Model:	C10
Sample ID:	HC-C-202403-0396-02-02#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 22.2V
Test Engineer:	Mike Yan
Note: For a more detailed features description, please refer to the report TBR-C-202403-0396-7 The report only show the worst case data.	

Contents

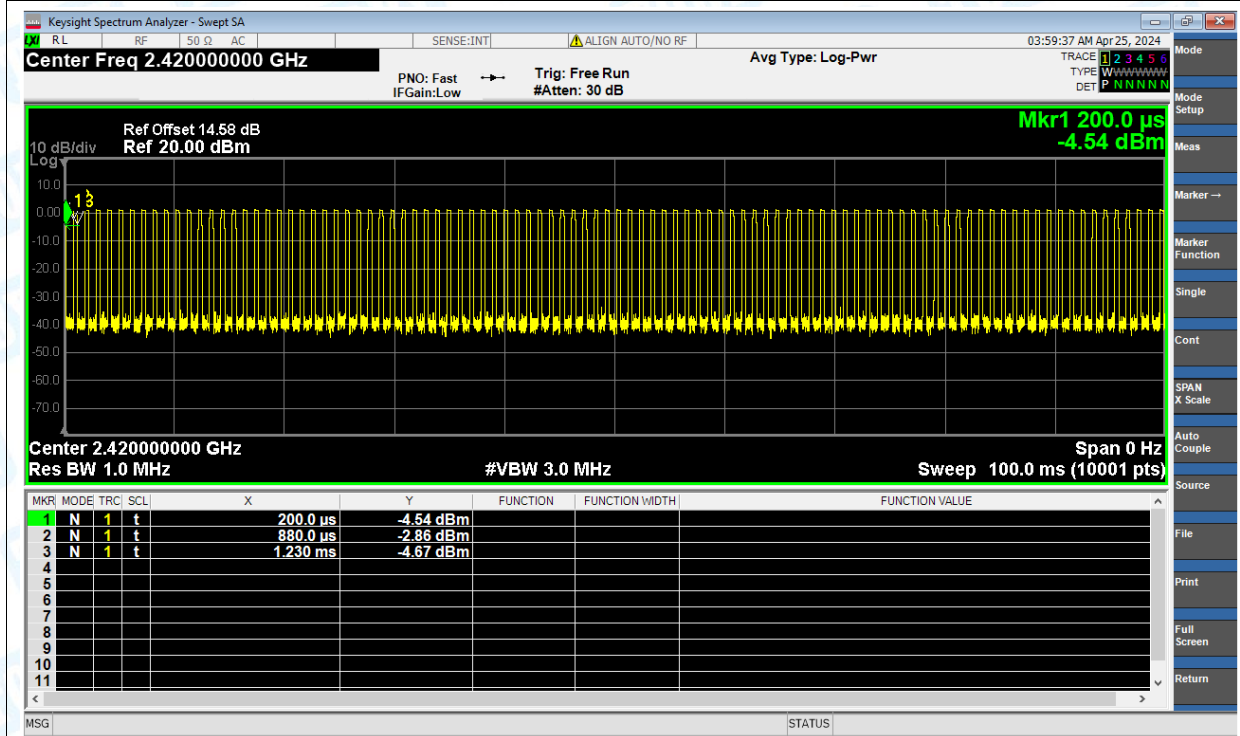
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1.Duty Cycle

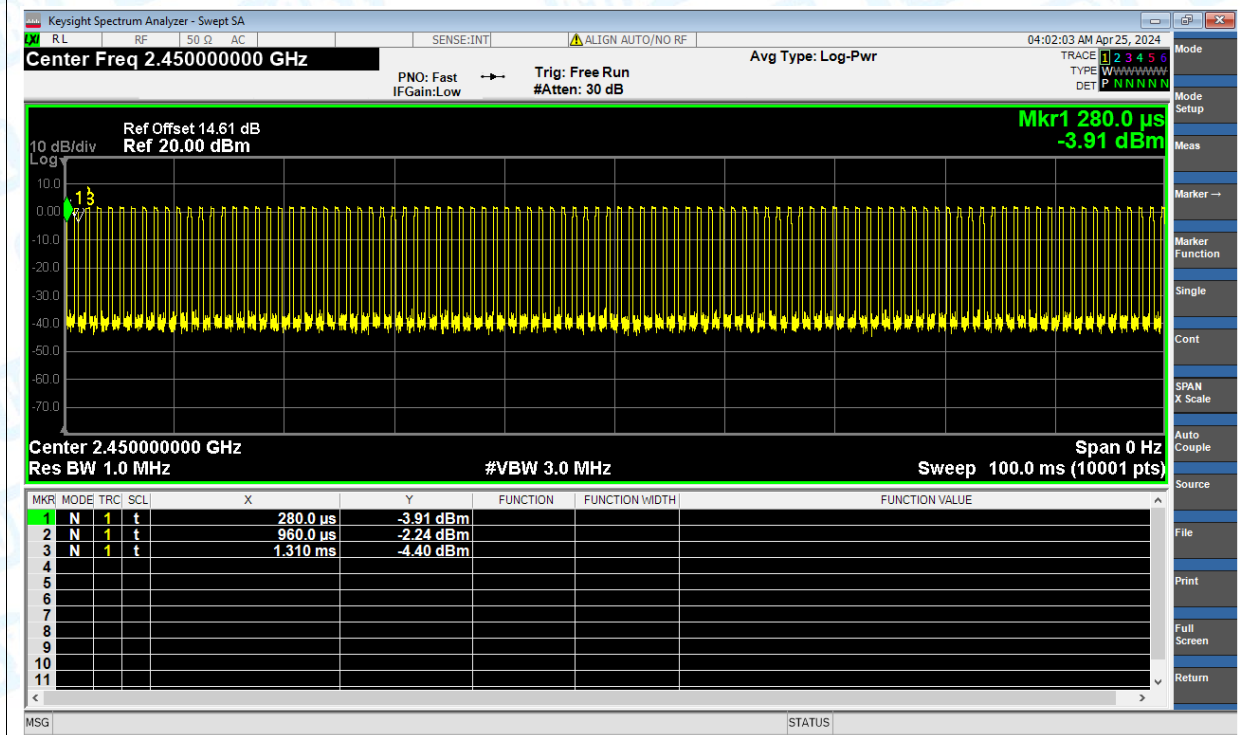
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	QPSK	2420	Ant1	33.98	4.69	2.86
NVNT	QPSK	2450	Ant1	33.98	4.69	2.86
NVNT	QPSK	2480	Ant1	33.01	4.81	2.94
NVNT	QPSK	2420	Ant2	34.31	4.65	2.86
NVNT	QPSK	2450	Ant2	33.98	4.69	2.86
NVNT	QPSK	2480	Ant2	33.98	4.69	2.86

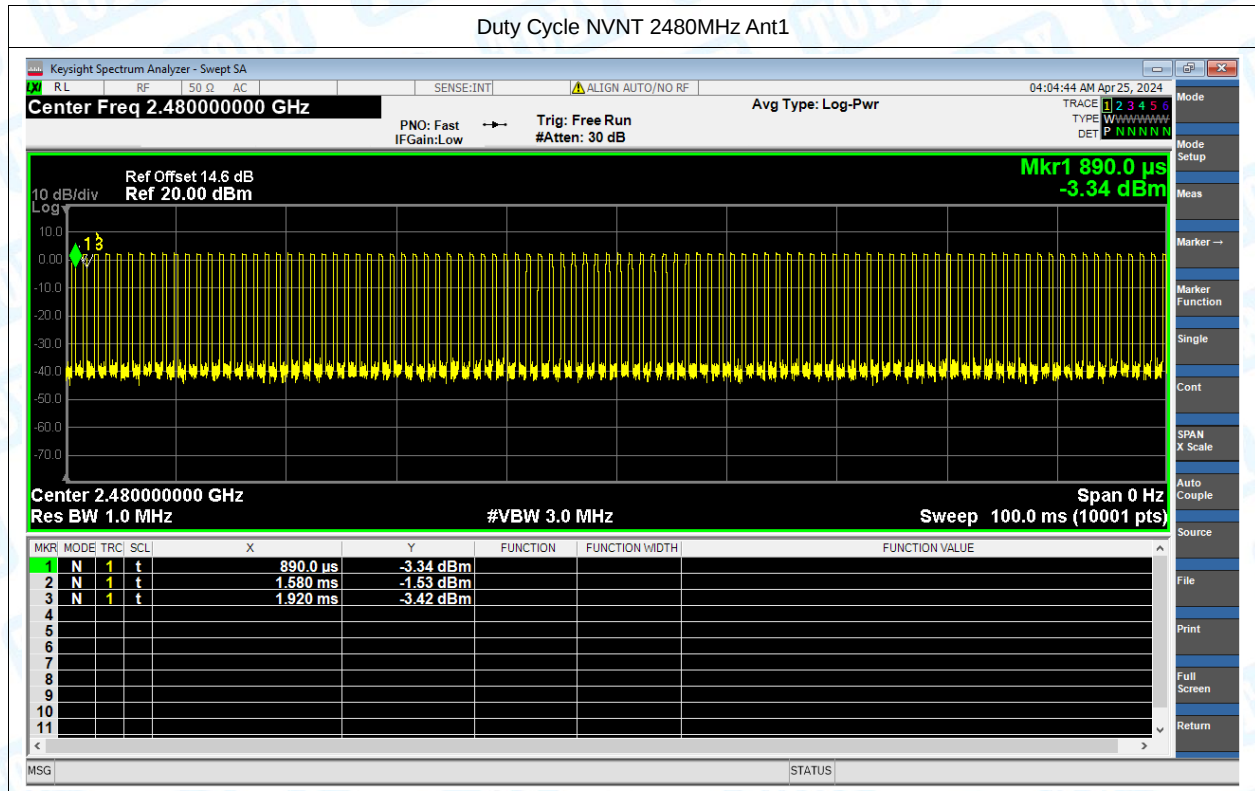
Test Graphs

Duty Cycle NVNT 2420MHz Ant1



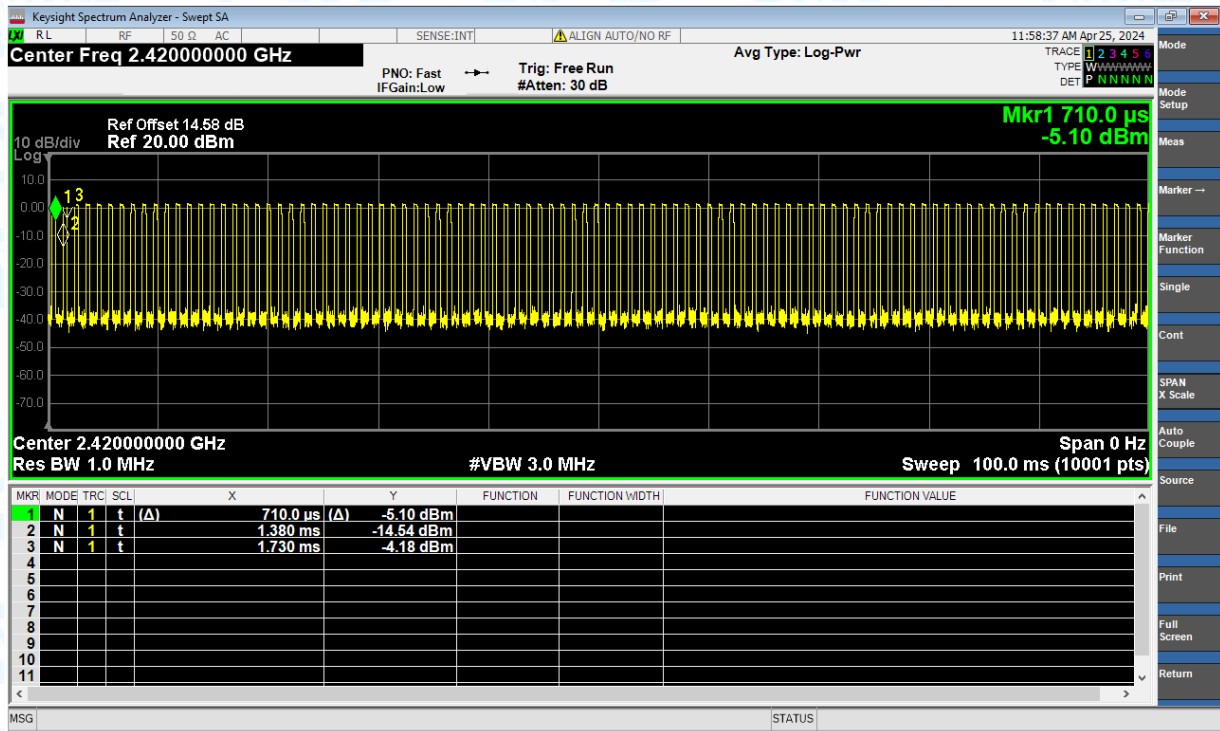
Duty Cycle NVNT 2450MHz Ant1



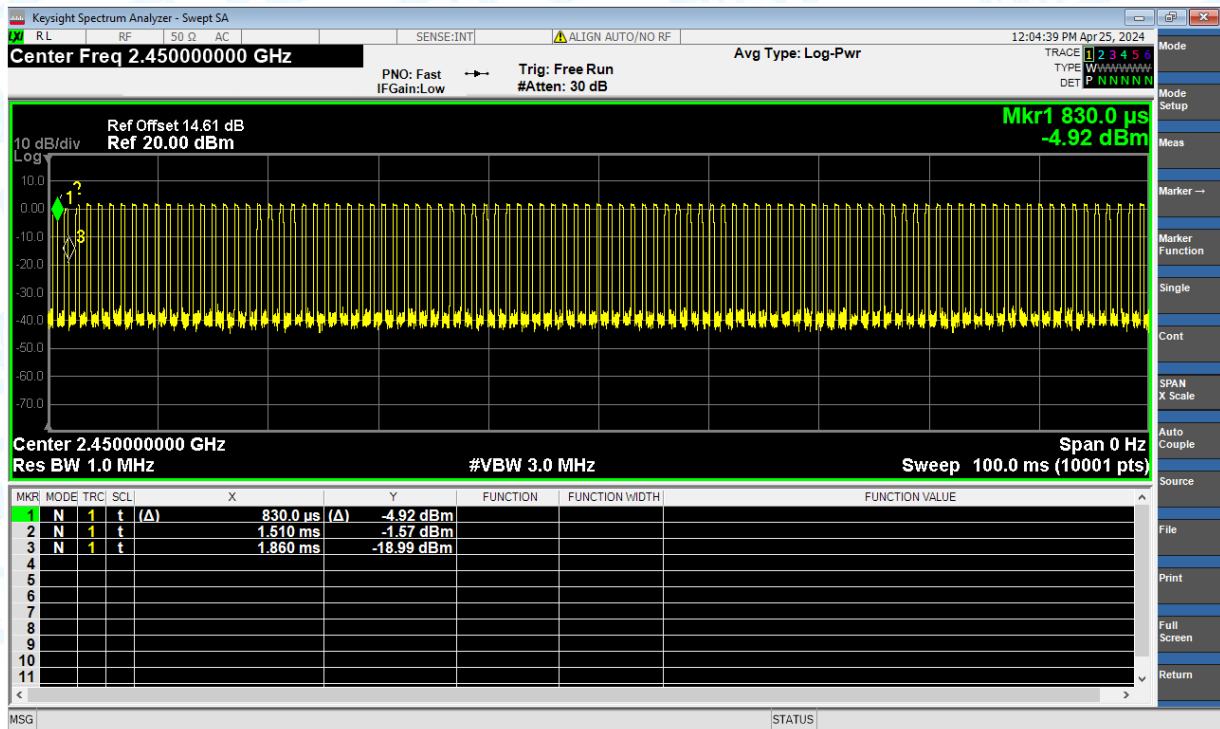


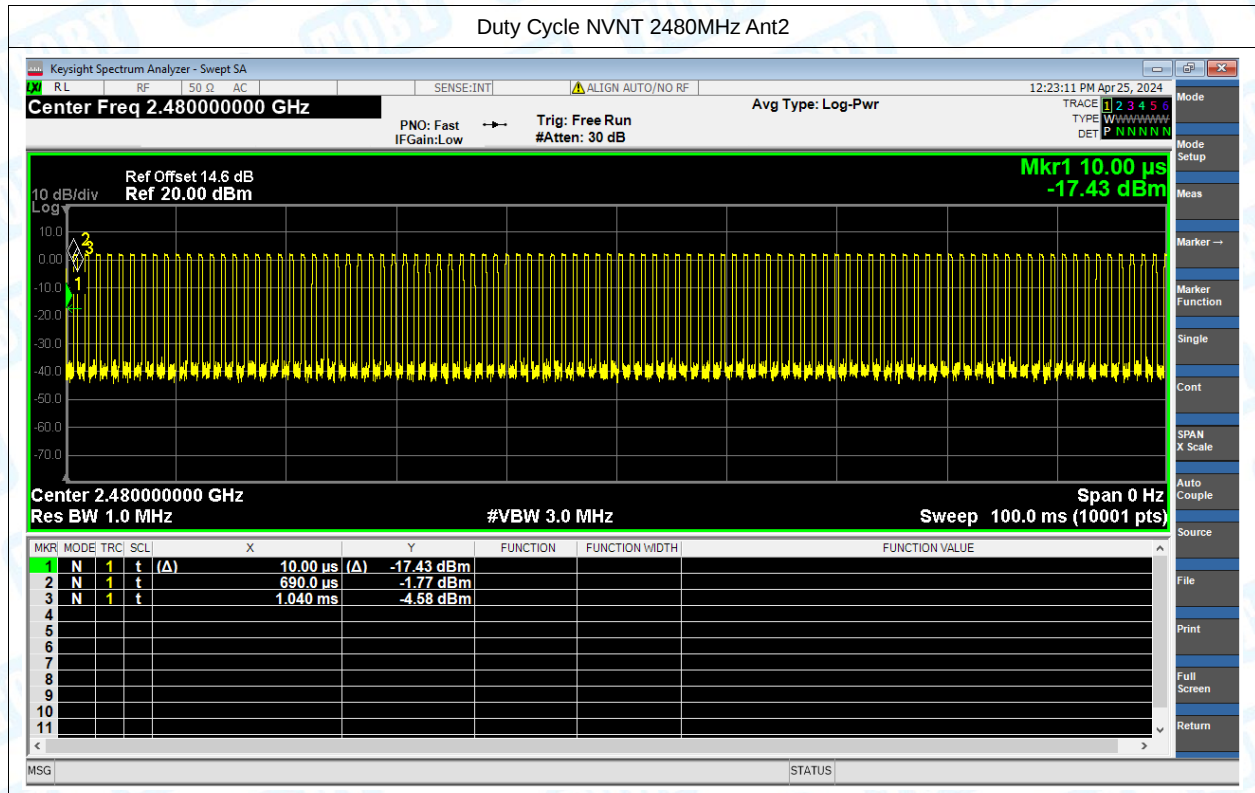
Test Graphs

Duty Cycle NVNT 2420MHz Ant2



Duty Cycle NVNT 2450MHz Ant2



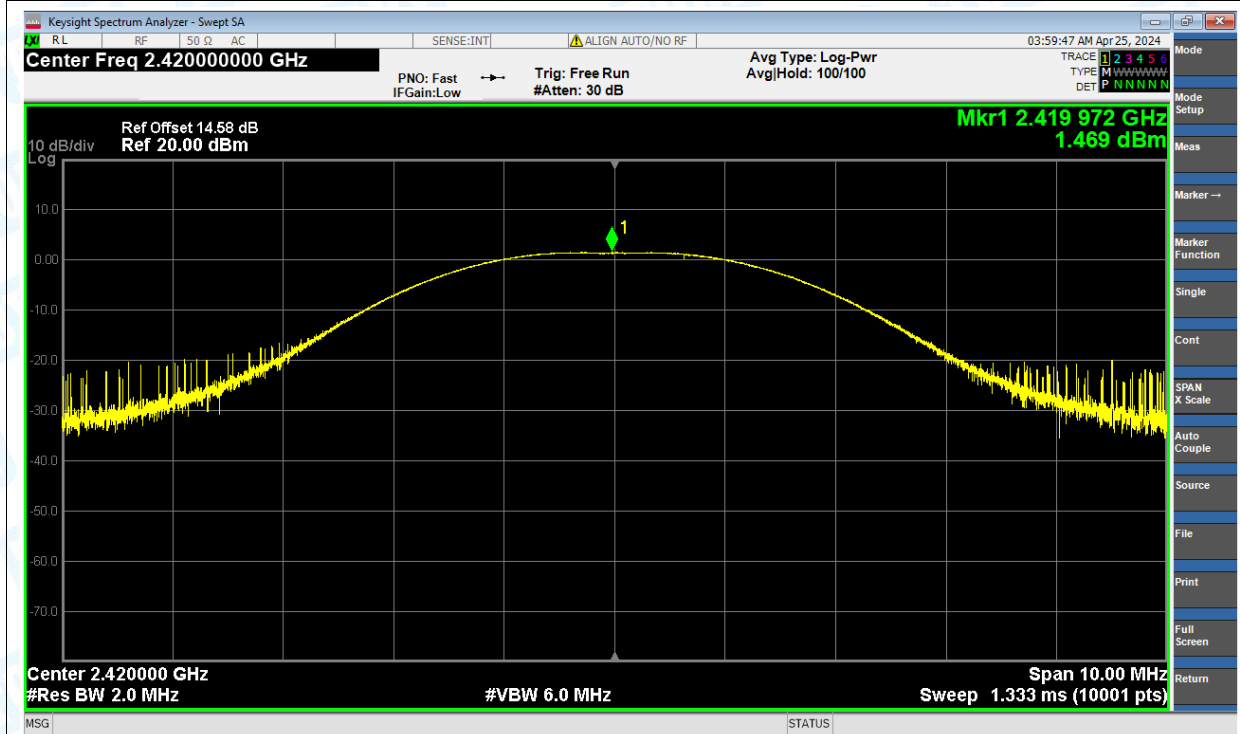


2.Maximum Conducted Output Power

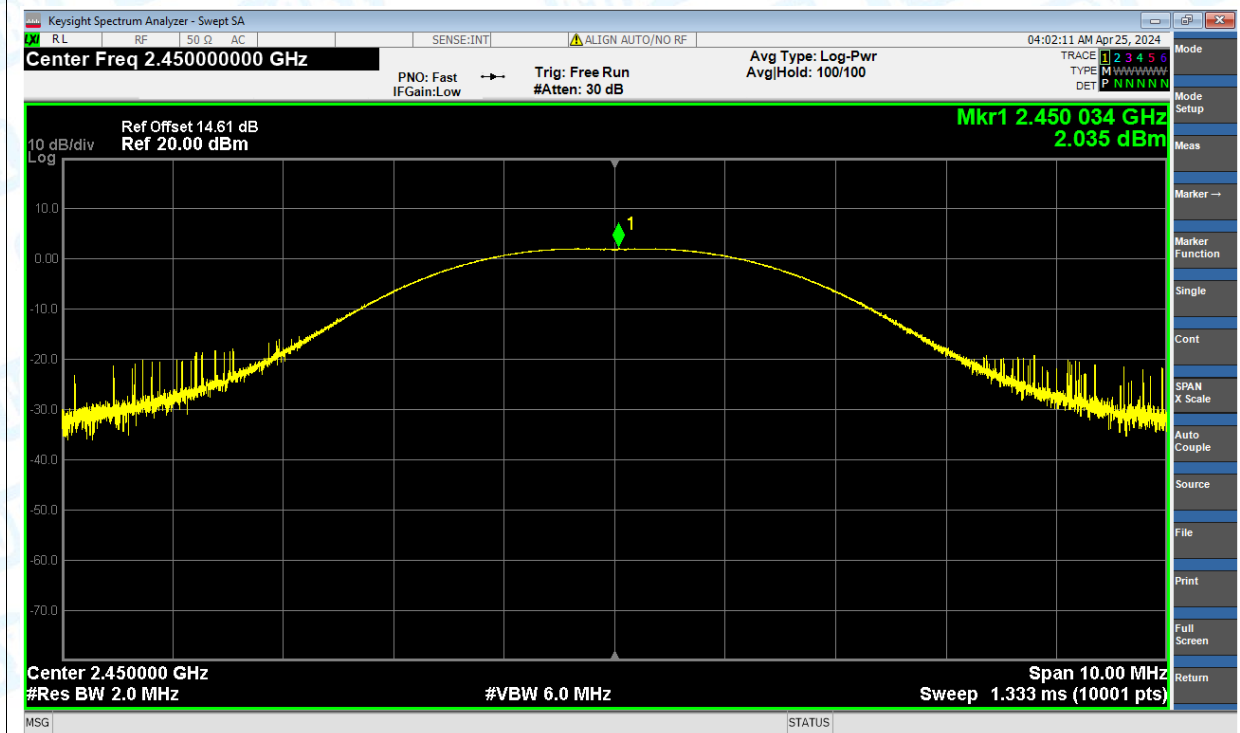
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	QPSK	2420	Ant1	1.469	21	Pass
NVNT	QPSK	2450	Ant1	2.035	21	Pass
NVNT	QPSK	2480	Ant1	2.651	21	Pass
NVNT	QPSK	2420	Ant2	1.748	21	Pass
NVNT	QPSK	2450	Ant2	2.12	21	Pass
NVNT	QPSK	2480	Ant2	2.468	21	Pass

Test Graphs

Power NVNT 2420MHz Ant1



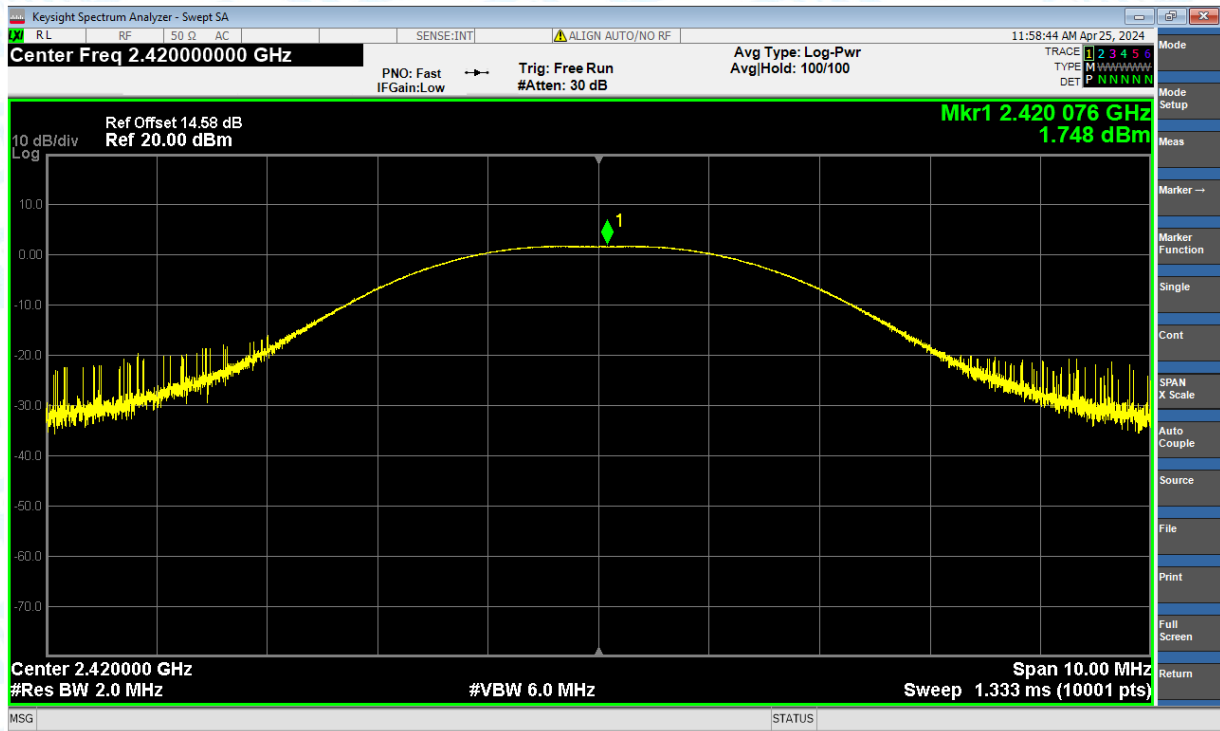
Power NVNT 2450MHz Ant1



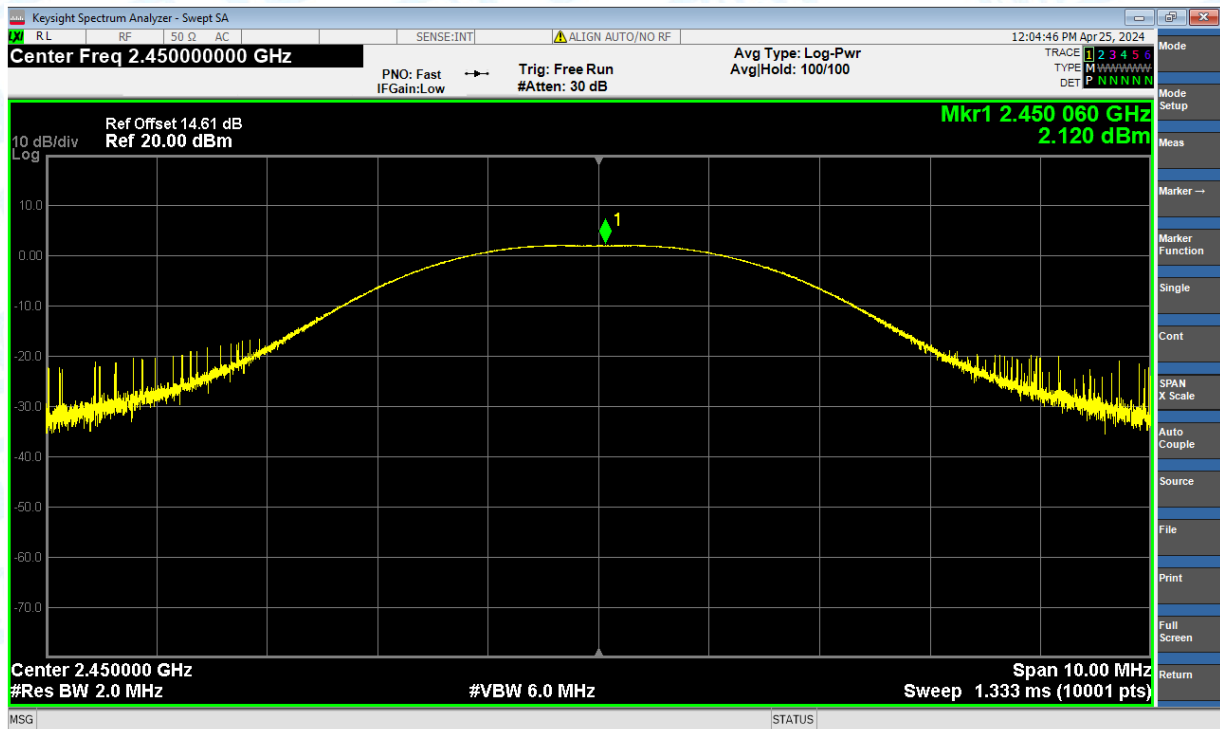


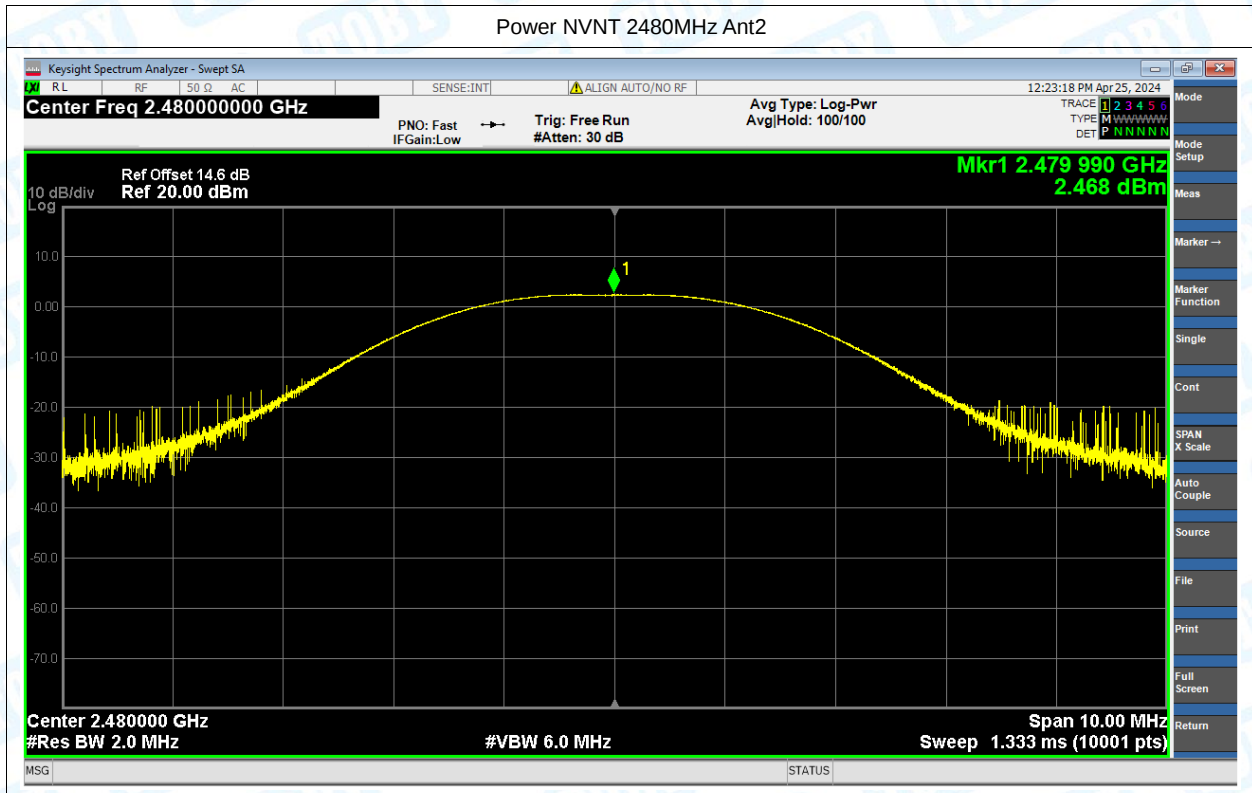
Test Graphs

Power NVNT 2420MHz Ant2



Power NVNT 2450MHz Ant2



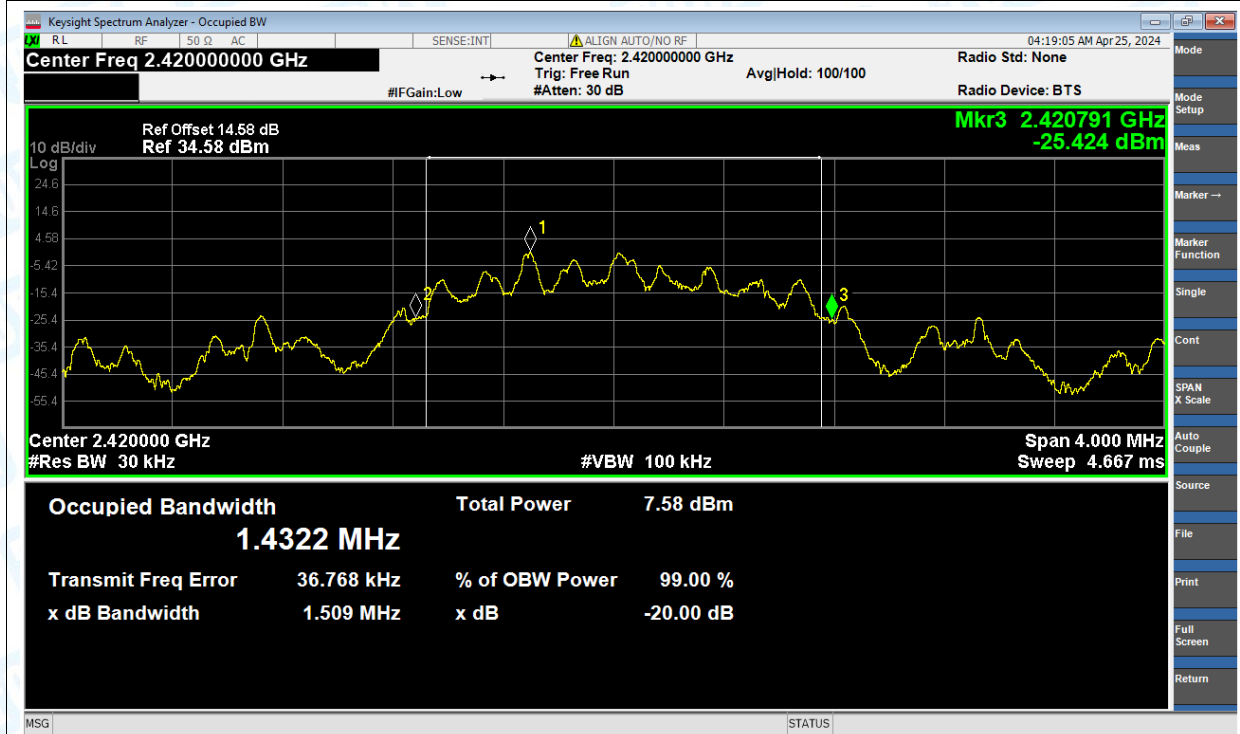


3.-20dB Bandwidth

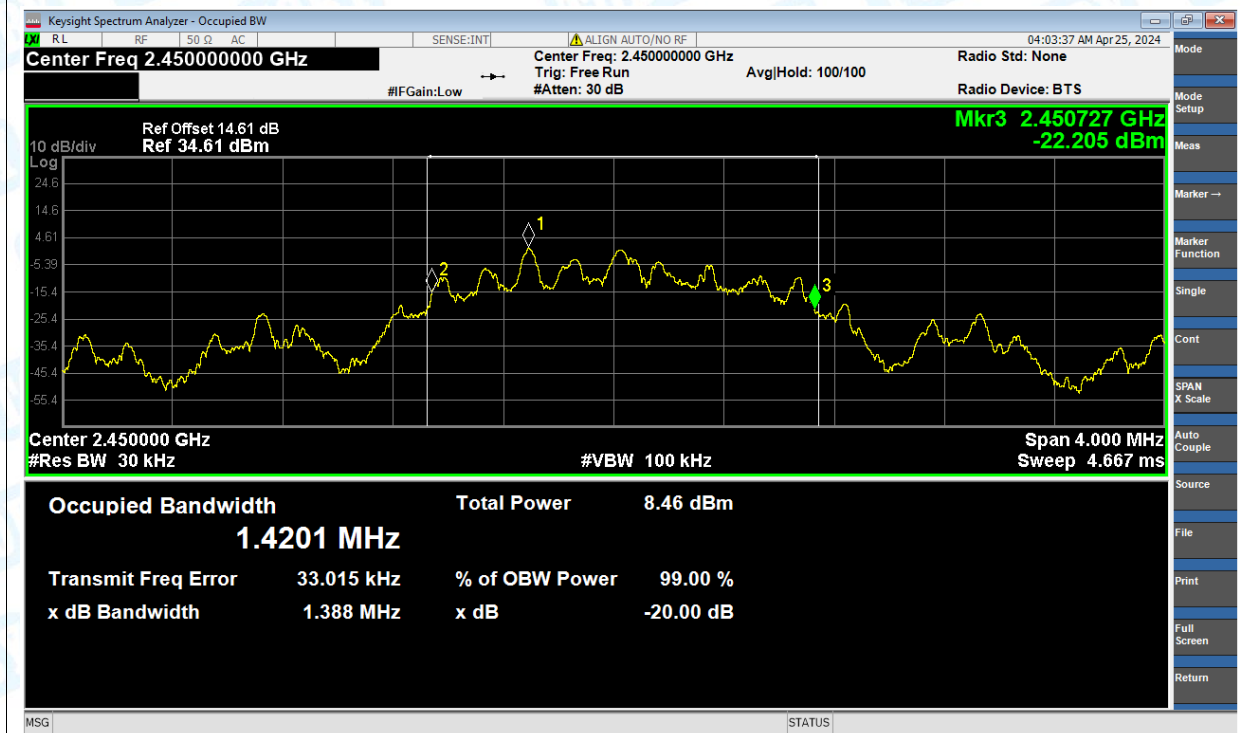
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	QPSK	2420	Ant1	1.51	0	Pass
NVNT	QPSK	2450	Ant1	1.39	0	Pass
NVNT	QPSK	2480	Ant1	1.4	0	Pass
NVNT	QPSK	2420	Ant2	1.39	0	Pass
NVNT	QPSK	2450	Ant2	1.39	0	Pass
NVNT	QPSK	2480	Ant2	1.51	0	Pass

Test Graphs

-20dB Bandwidth 2420MHz Ant1



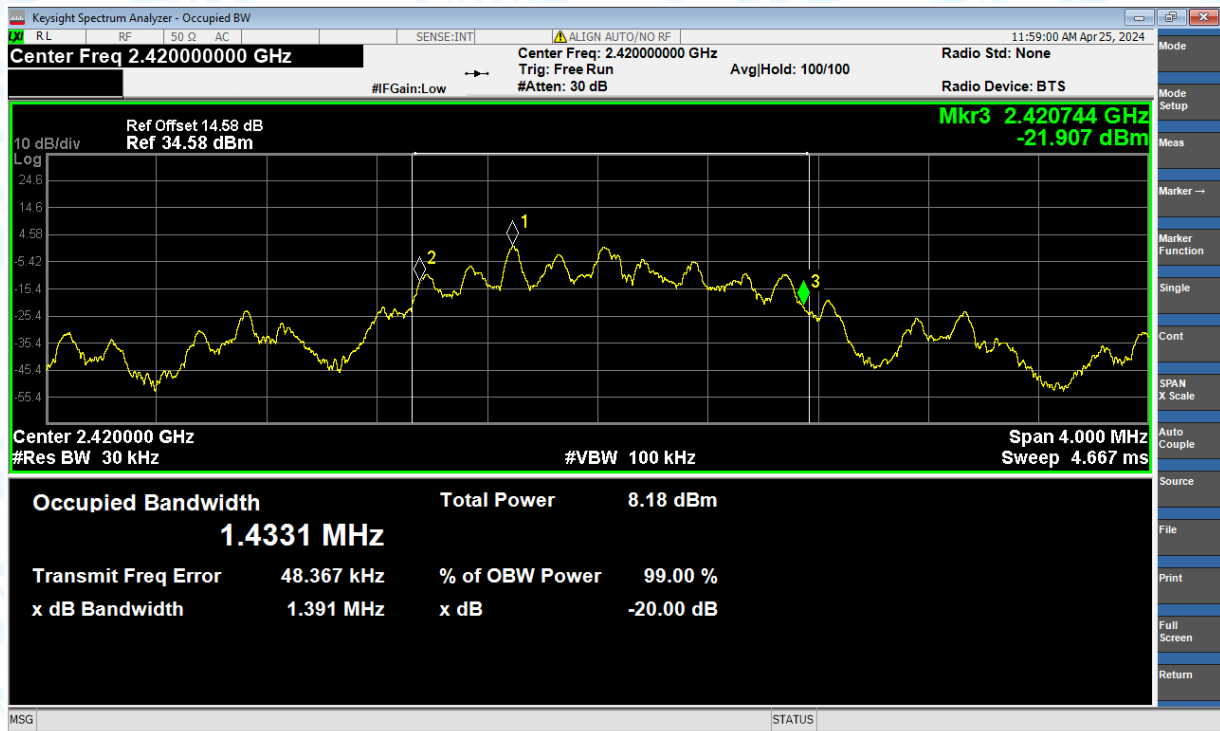
-20dB Bandwidth 2450MHz Ant1



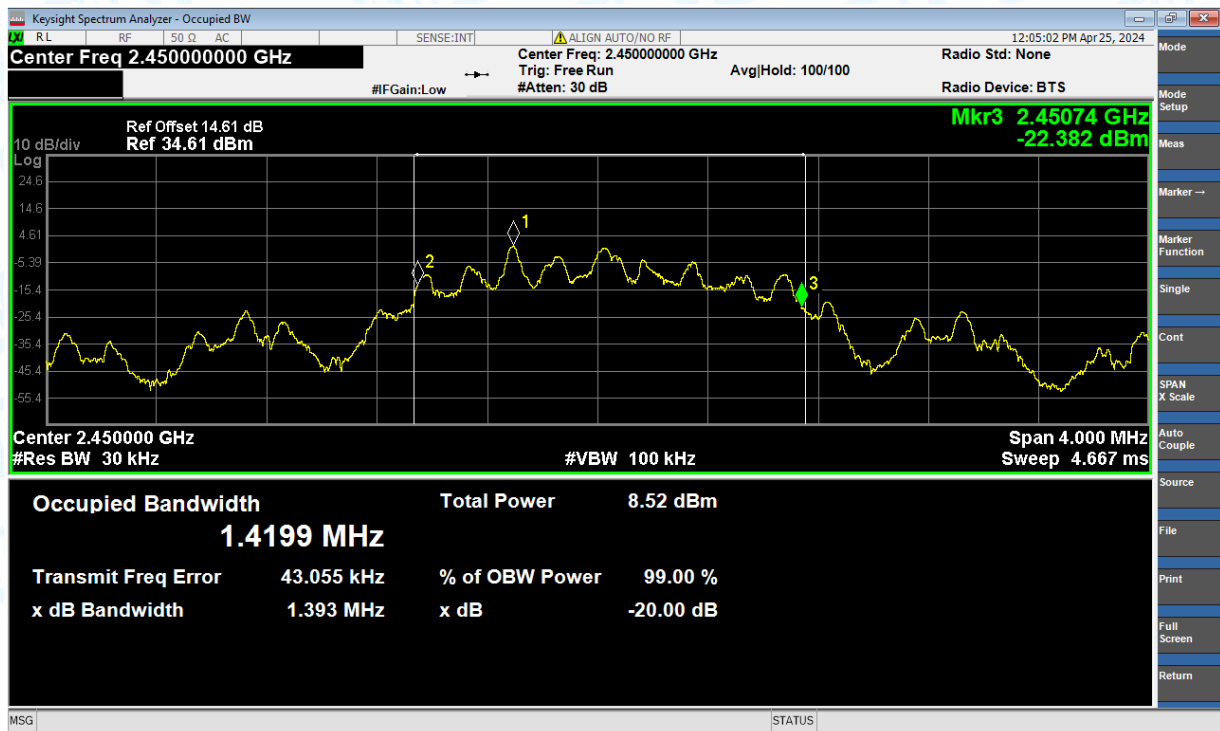


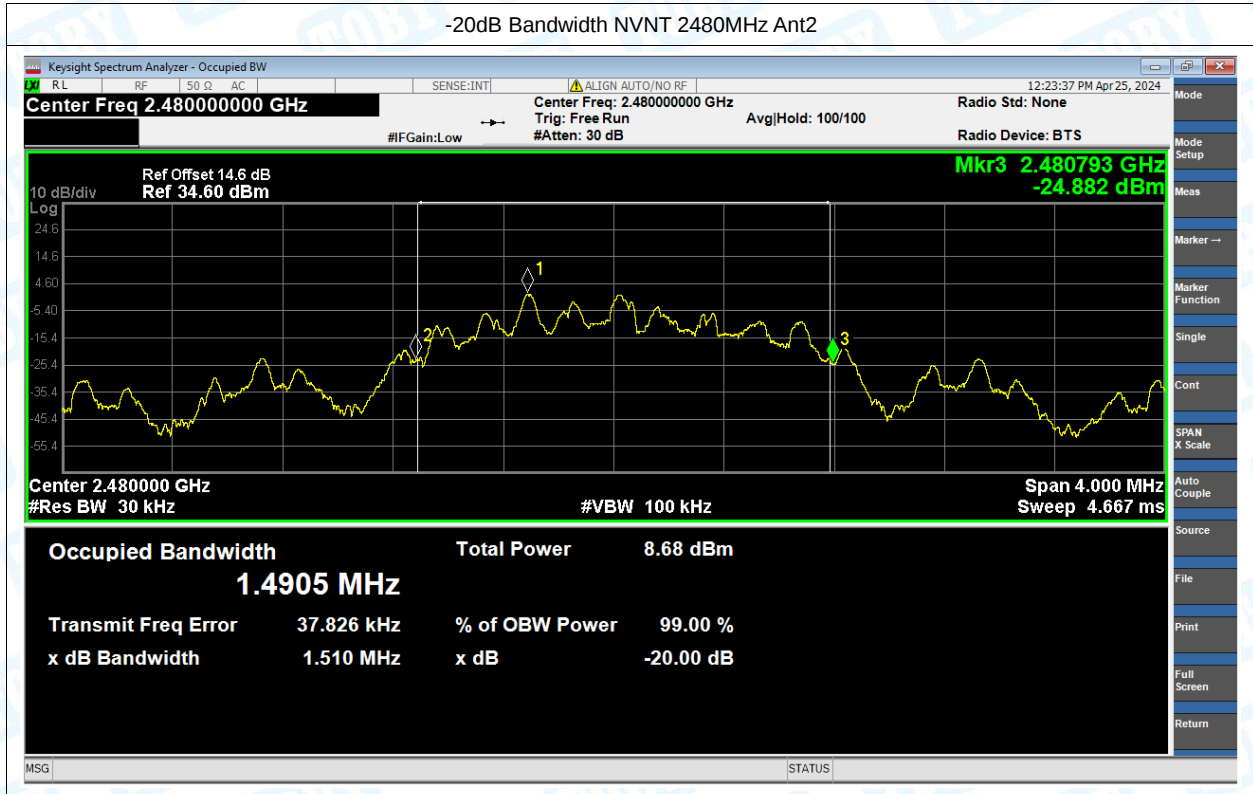
Test Graphs

-20dB Bandwidth NVNT 2420MHz Ant2



-20dB Bandwidth NVNT 2450MHz Ant2



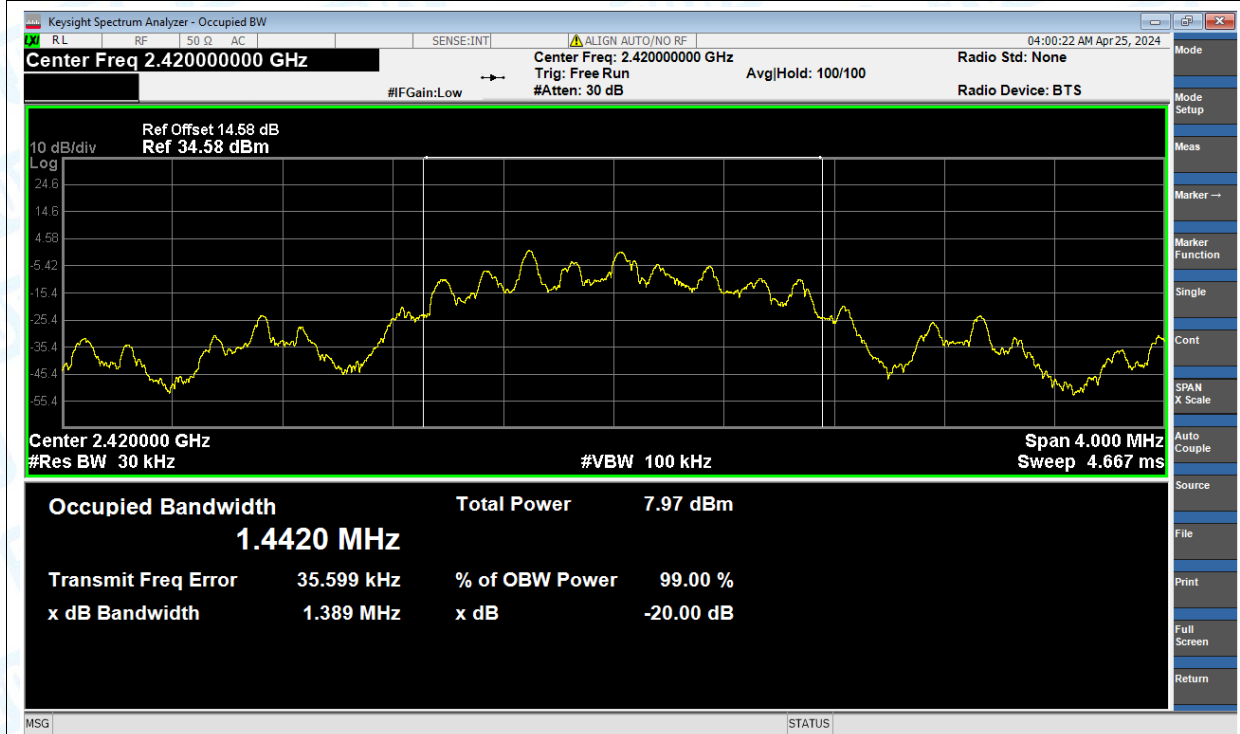


4.Occupied Channel Bandwidth

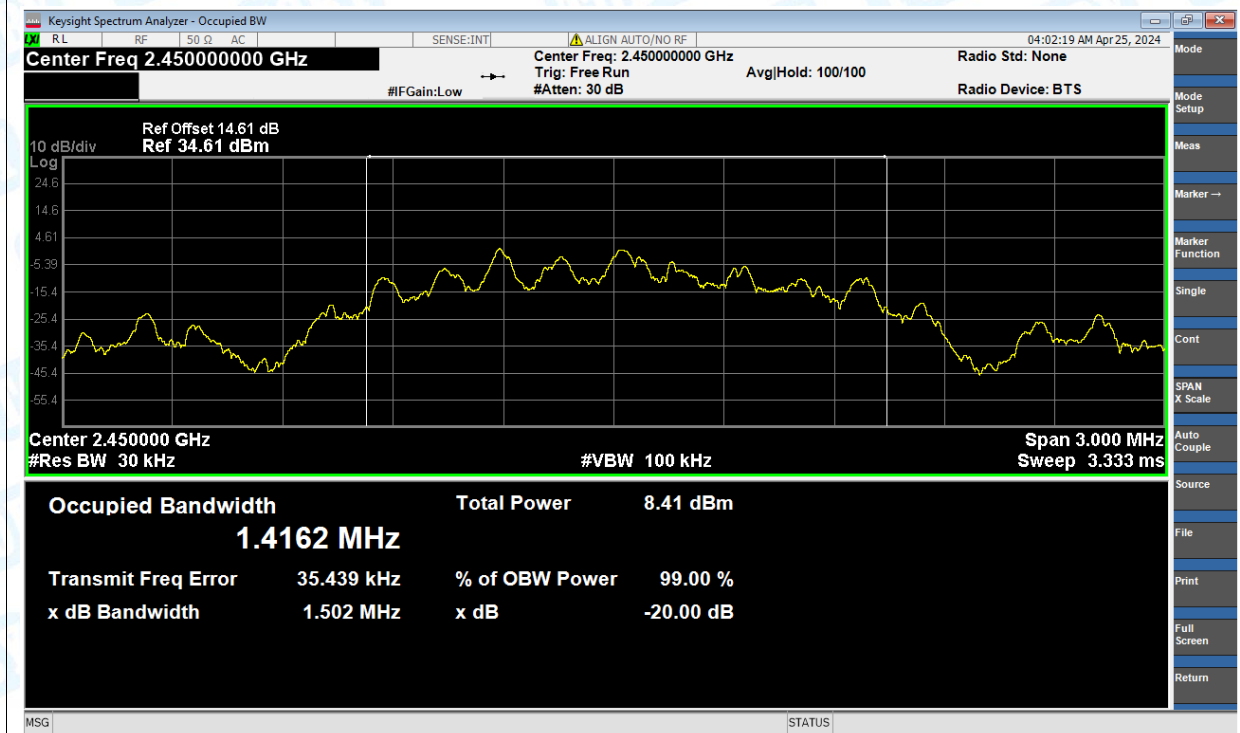
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	QPSK	2420	Ant1	1.442
NVNT	QPSK	2450	Ant1	1.416
NVNT	QPSK	2480	Ant1	1.453
NVNT	QPSK	2420	Ant2	1.451
NVNT	QPSK	2450	Ant2	1.433
NVNT	QPSK	2480	Ant2	1.472

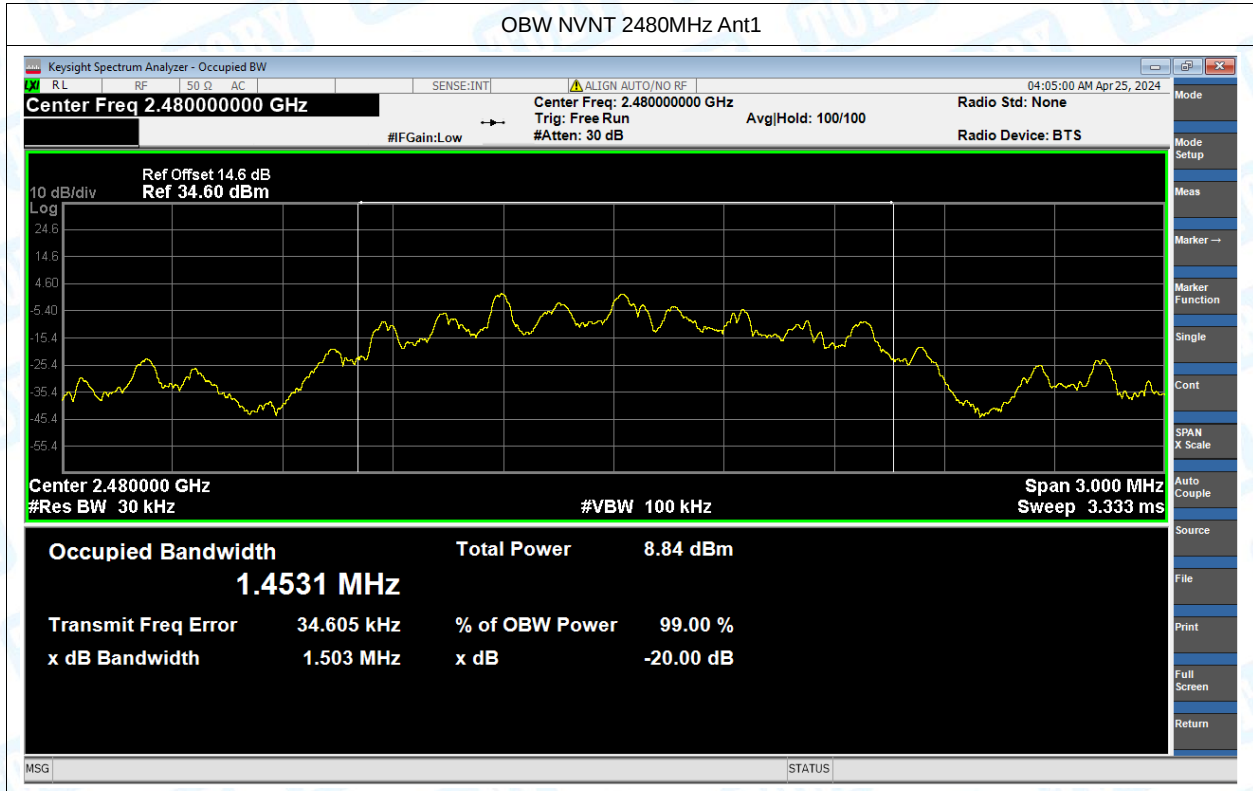
Test Graphs

OBW NVNT 2420MHz Ant1



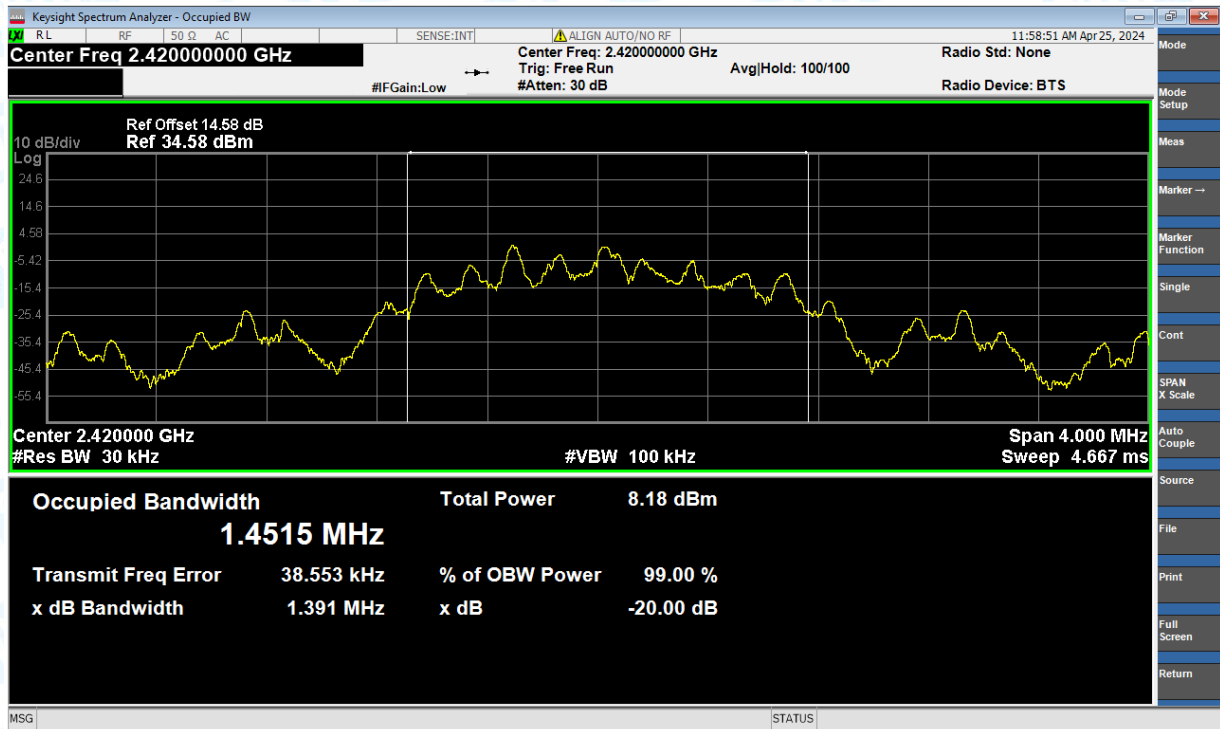
OBW NVNT 2450MHz Ant1



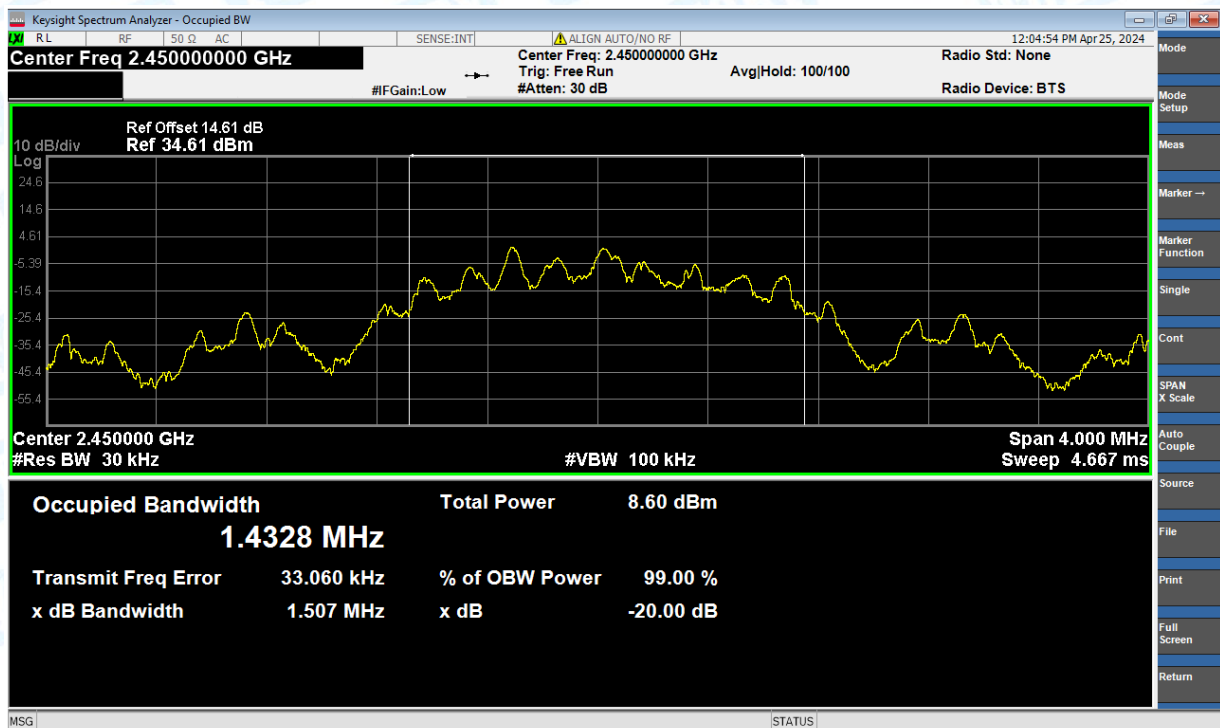


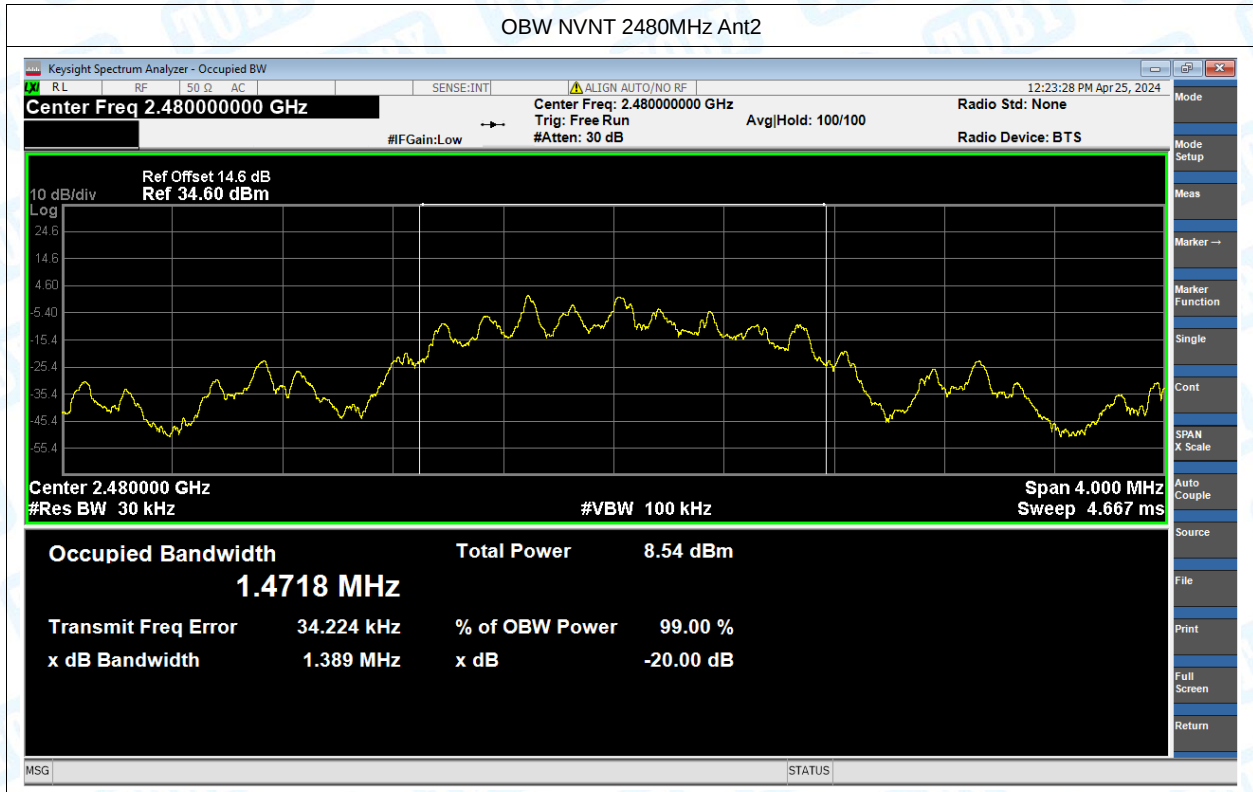
Test Graphs

OBW NVNT 2420MHz Ant2



OBW NVNT 2450MHz Ant2





5.Band Edge

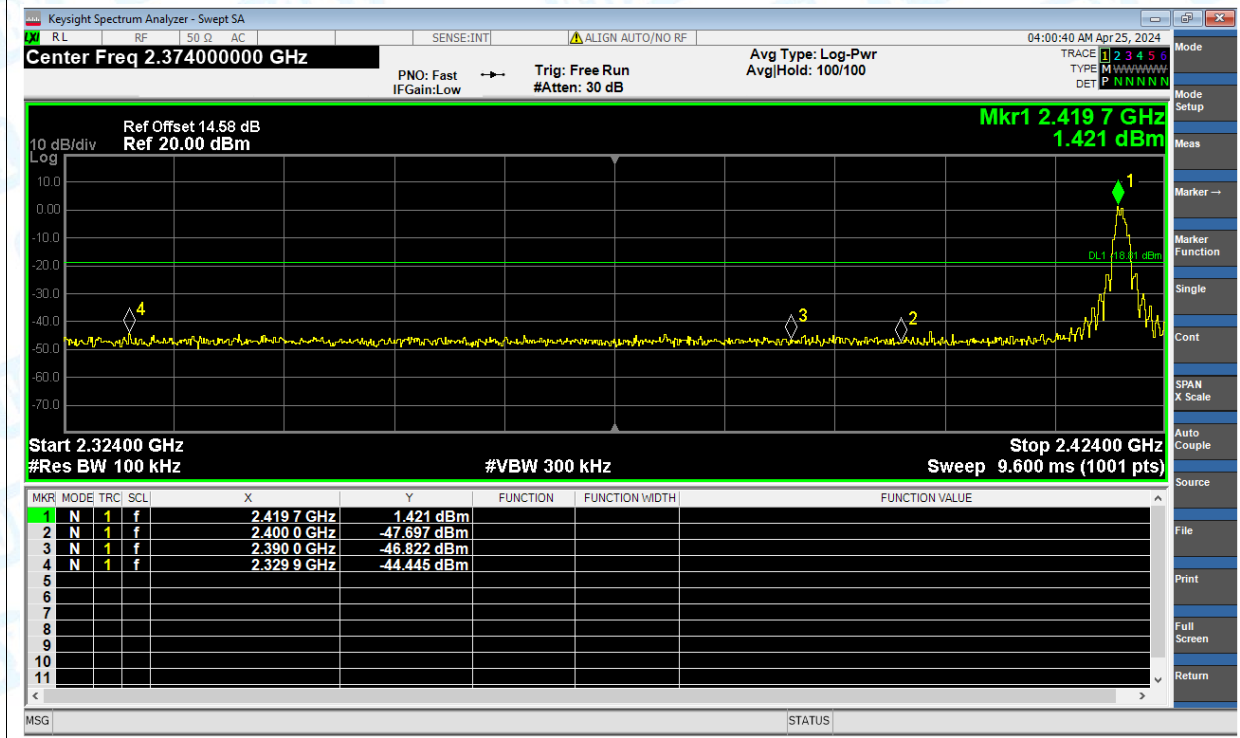
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	QPSK	2420	Ant1	No-Hopping	-45.64	-20	Pass
NVNT	QPSK	2480	Ant1	No-Hopping	-42.93	-20	Pass
NVNT	QPSK	2420	Ant2	No-Hopping	-45.56	-20	Pass
NVNT	QPSK	2480	Ant2	No-Hopping	-43.07	-20	Pass

Test Graphs

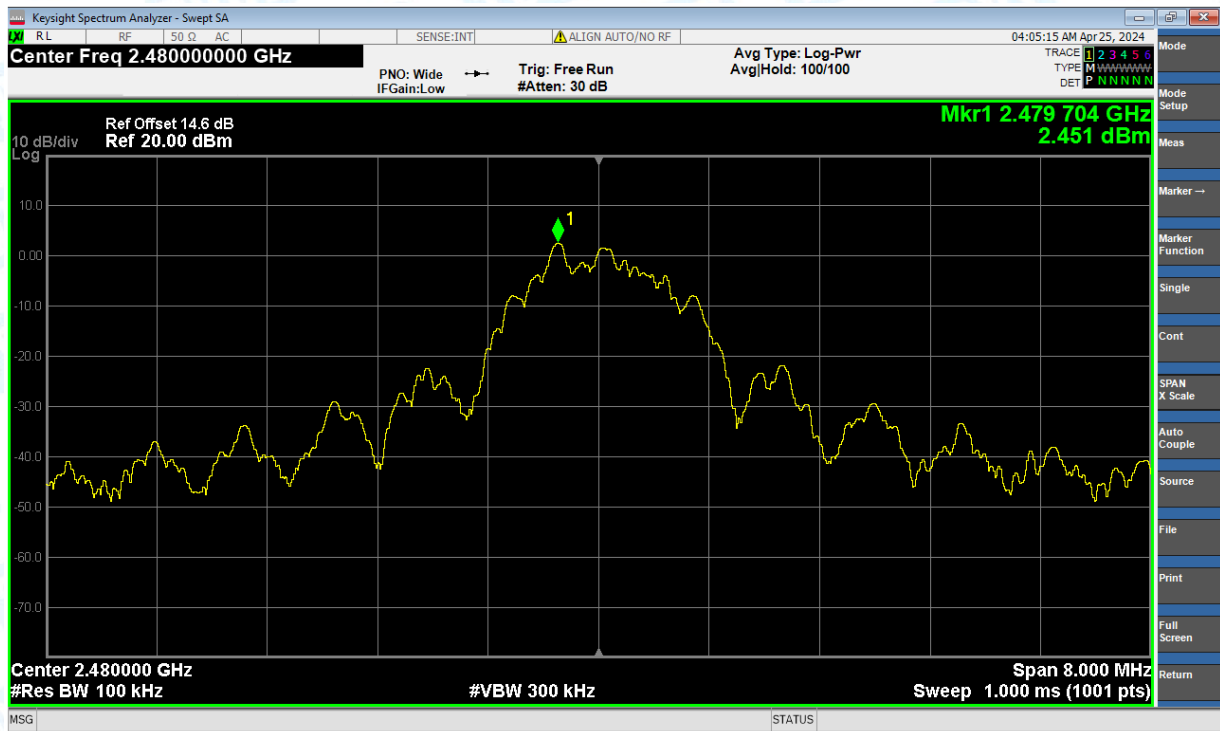
Band Edge NVNT 2420MHz Ant1 No-Hopping Ref



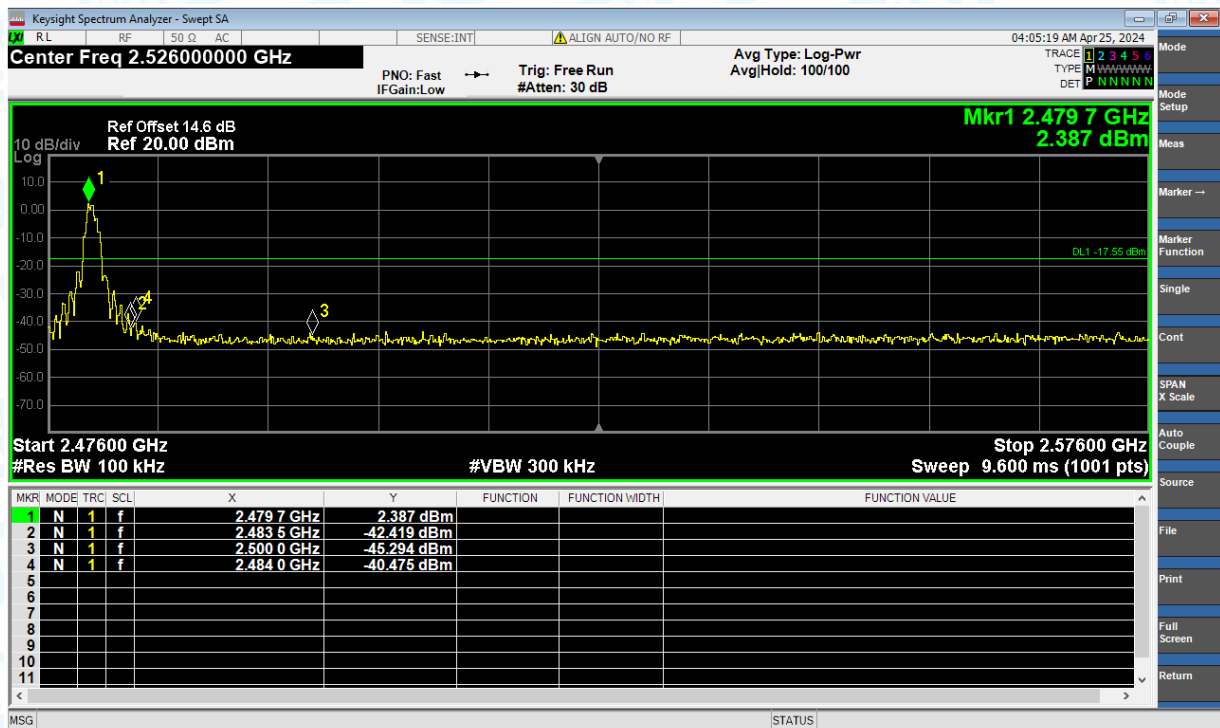
Band Edge NVNT 2420MHz Ant1 No-Hopping Emission



Band Edge NVNT 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 2480MHz Ant1 No-Hopping Emission

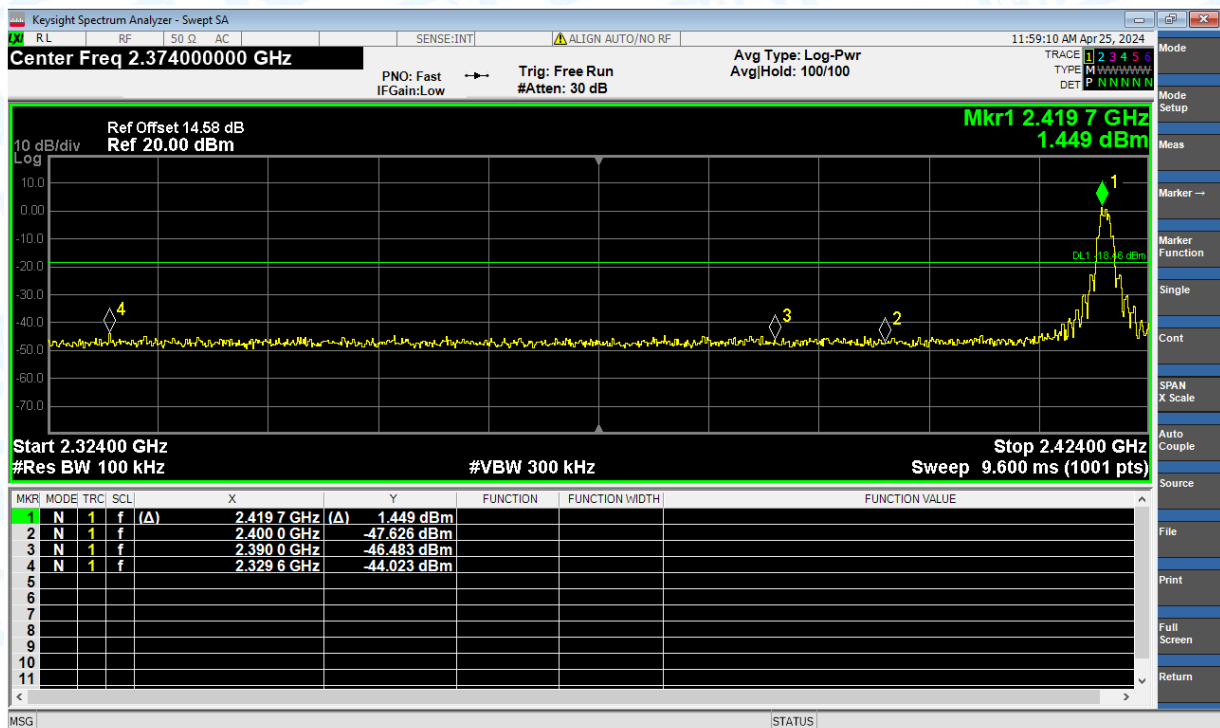


Test Graphs

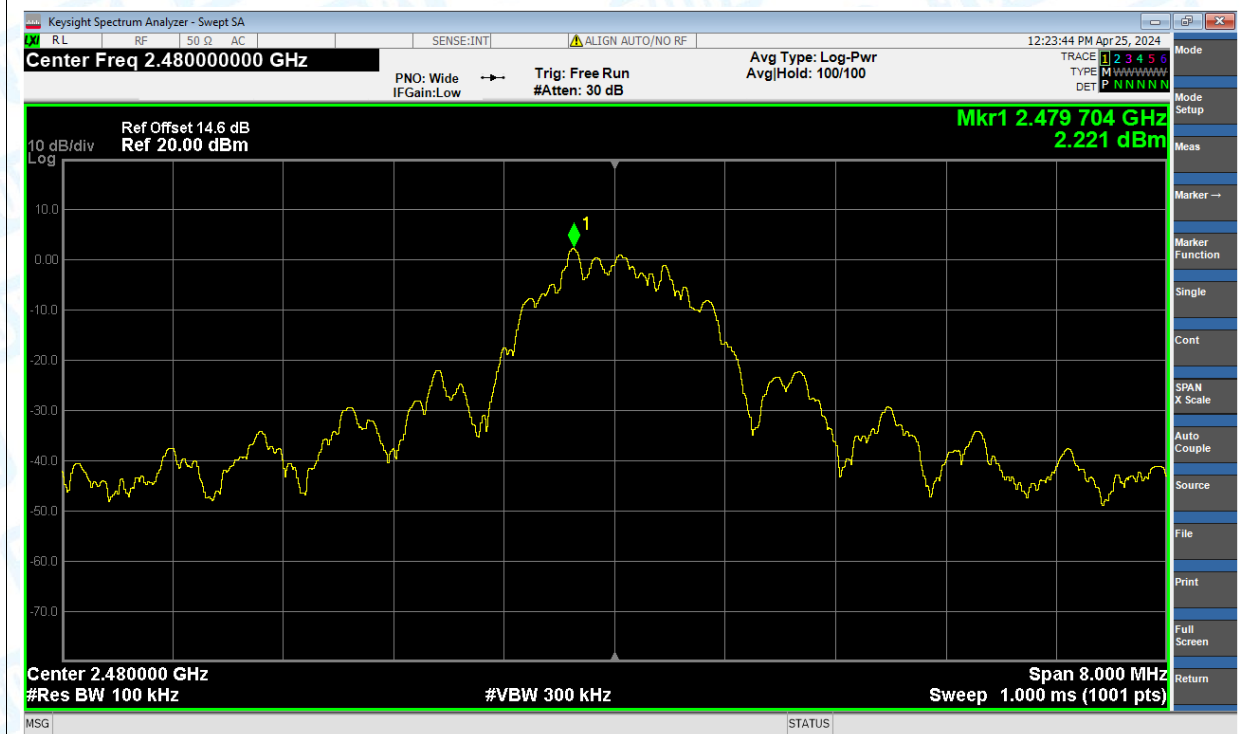
Band Edge NVNT 2420MHz Ant2 No-Hopping Ref



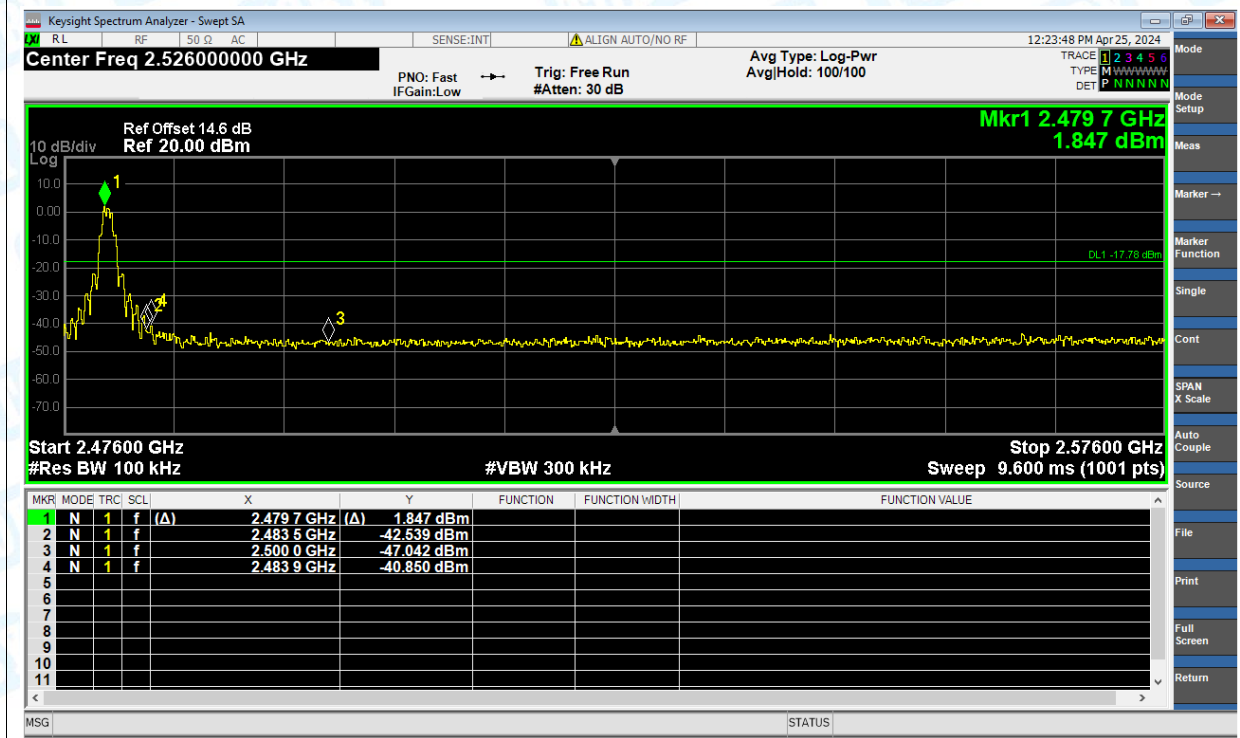
Band Edge NVNT 2420MHz Ant2 No-Hopping Emission



Band Edge NVNT 2480MHz Ant2 No-Hopping Ref



Band Edge NVNT 2480MHz Ant2 No-Hopping Emission



6.Band Edge(Hopping)

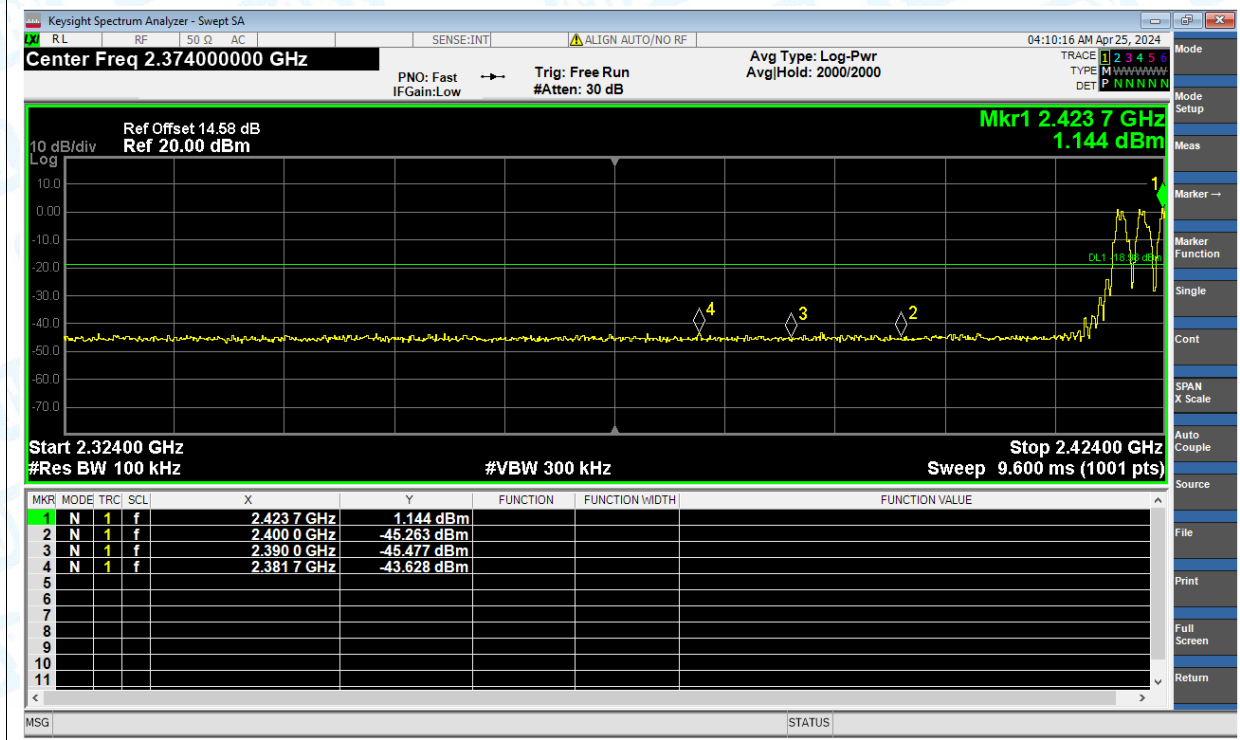
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	QPSK	2420	Ant1	Hopping	-44.65	-20	Pass
NVNT	QPSK	2480	Ant1	Hopping	-43.36	-20	Pass
NVNT	QPSK	2420	Ant2	Hopping	-44.69	-20	Pass
NVNT	QPSK	2480	Ant2	Hopping	-43.94	-20	Pass

Test Graphs

Band Edge(Hopping) NVNT 2420MHz Ant1 Hopping Ref



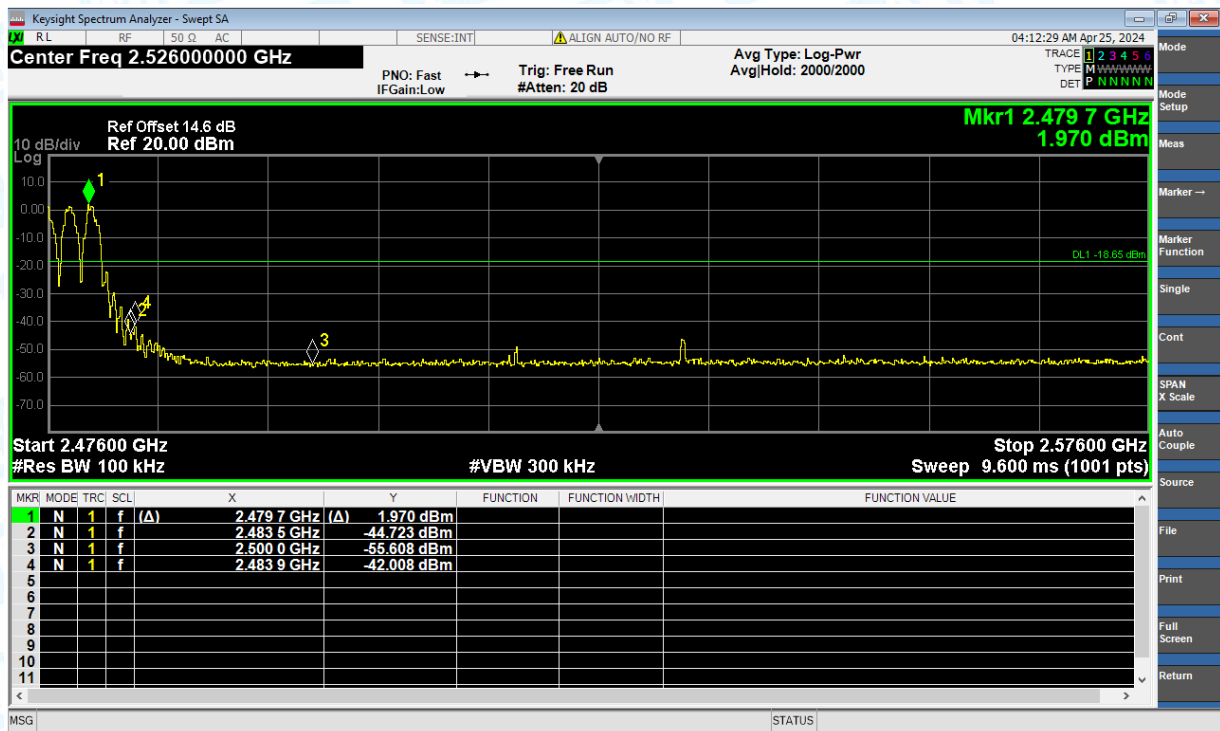
Band Edge(Hopping) NVNT 2420MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 2480MHz Ant1 Hopping Emission

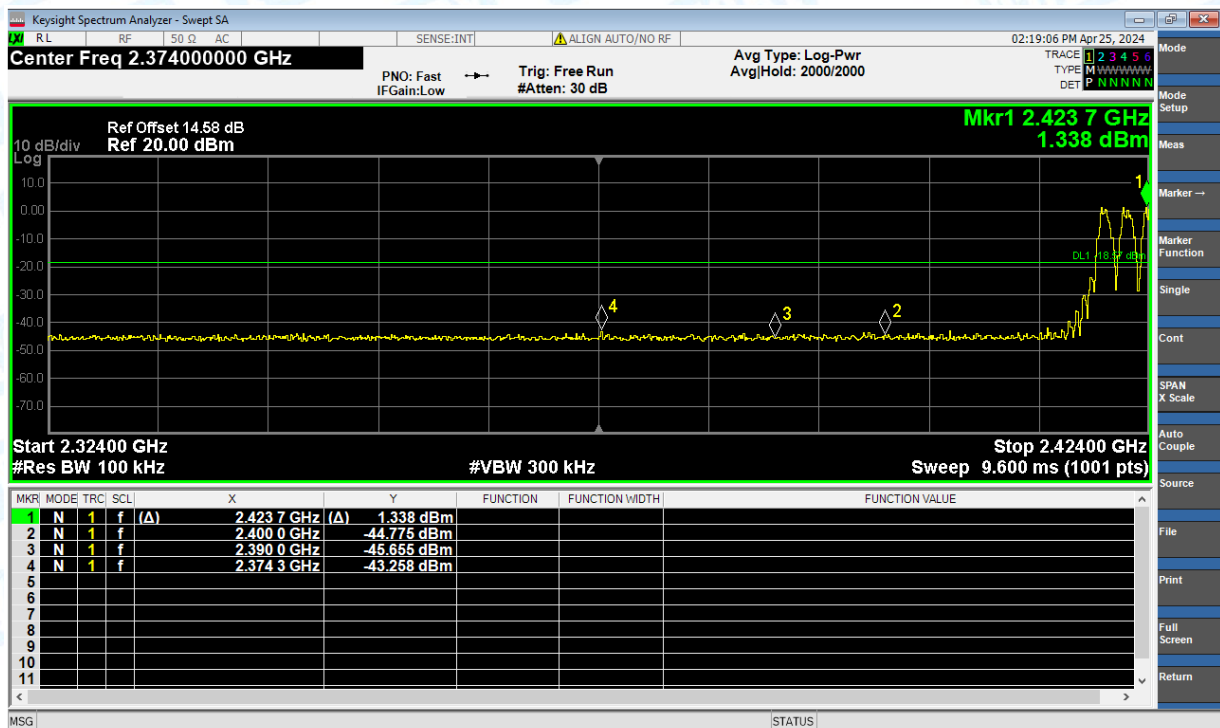


Test Graphs

Band Edge(Hopping) NVNT 2420MHz Ant2 Hopping Ref



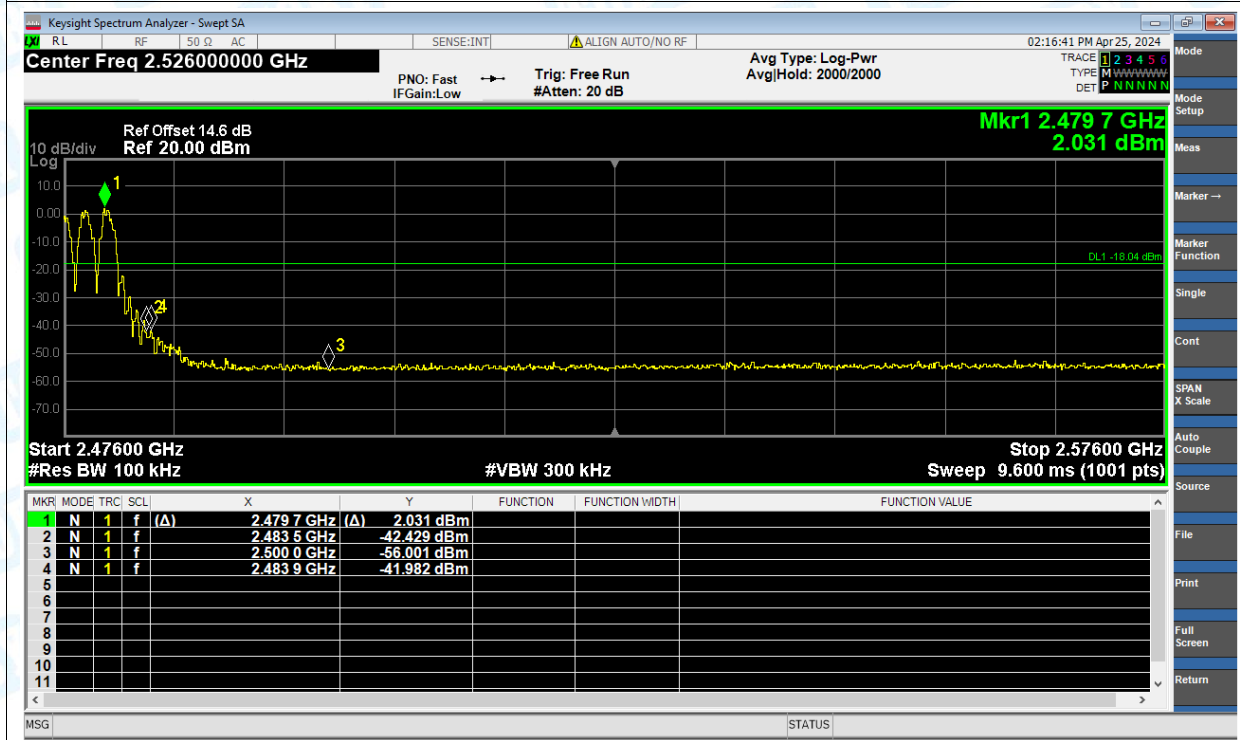
Band Edge(Hopping) NVNT 2420MHz Ant2 Hopping Emission



Band Edge(Hopping) NVNT 2480MHz Ant2 Hopping Ref



Band Edge(Hopping) NVNT 2480MHz Ant2 Hopping Emission

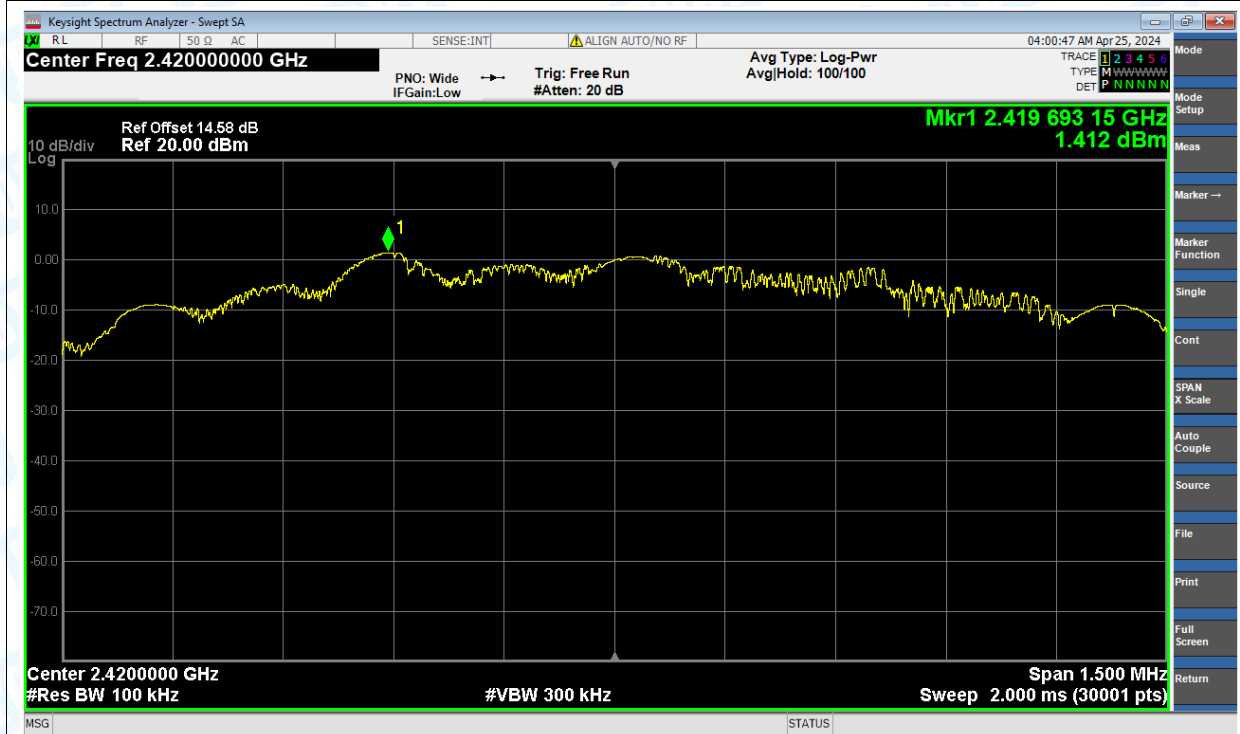


7. Conducted RF Spurious Emission

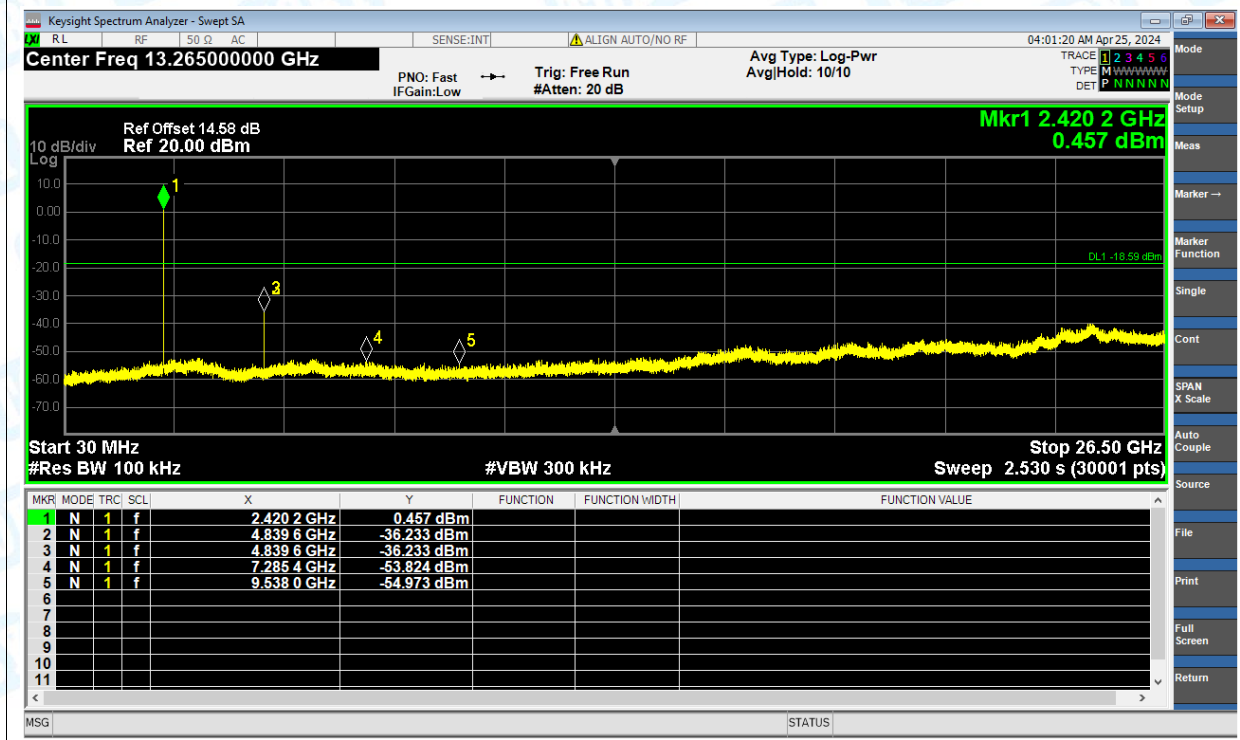
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	QPSK	2420	Ant1	-37.64	-20	Pass
NVNT	QPSK	2450	Ant1	-37.16	-20	Pass
NVNT	QPSK	2480	Ant1	-38.07	-20	Pass
NVNT	QPSK	2420	Ant2	-34.1	-20	Pass
NVNT	QPSK	2450	Ant2	-38.19	-20	Pass
NVNT	QPSK	2480	Ant2	-36.78	-20	Pass

Test Graphs

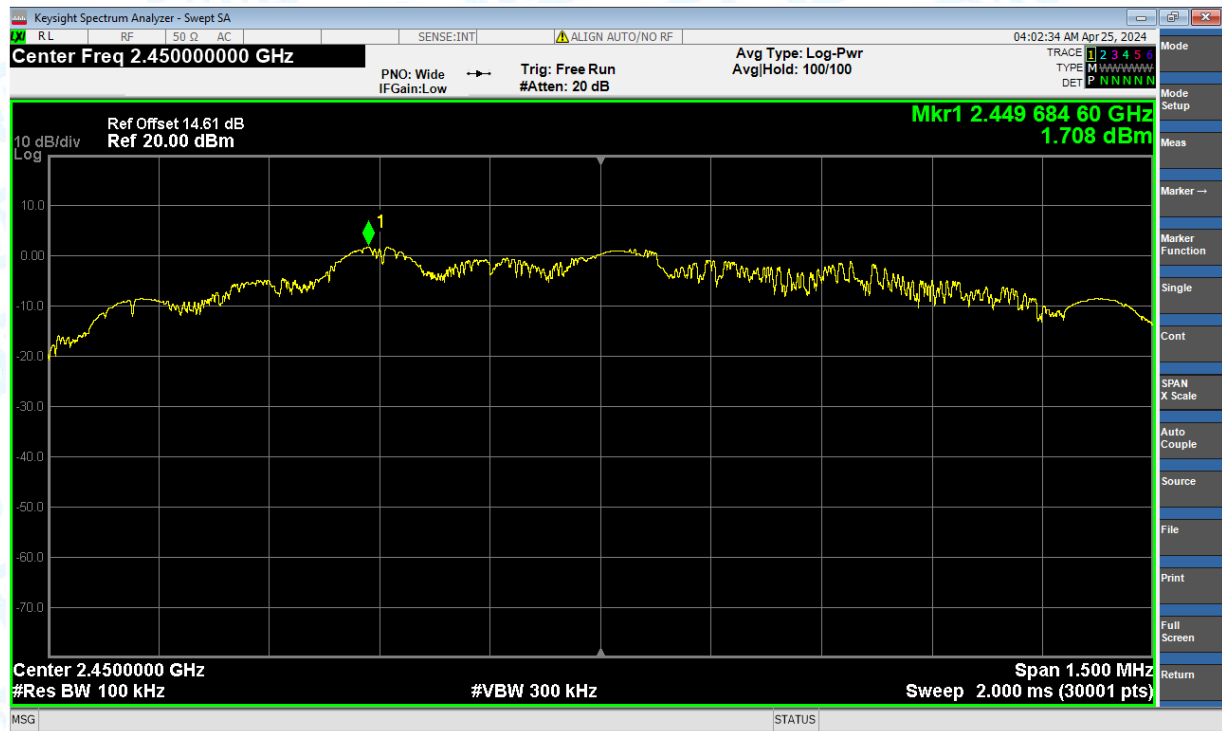
Tx. Spurious NVNT 2420MHz Ant1 Ref



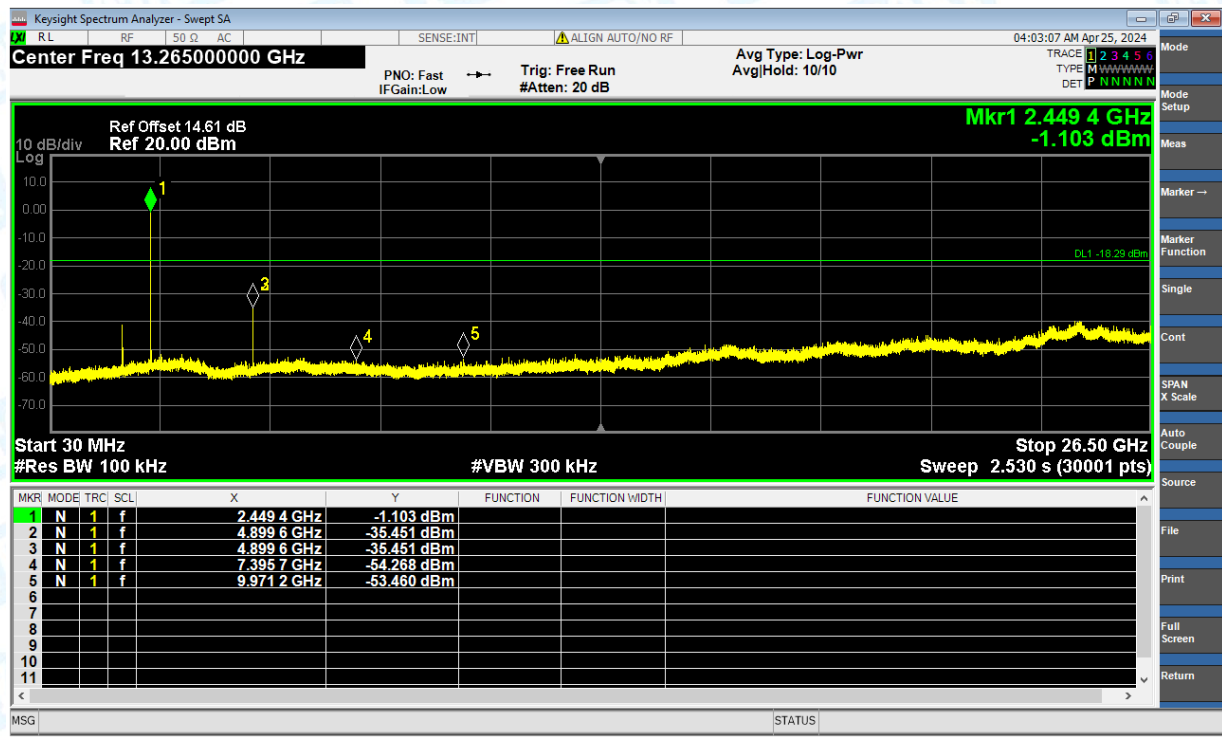
Tx. Spurious NVNT 2420MHz Ant1 Emission



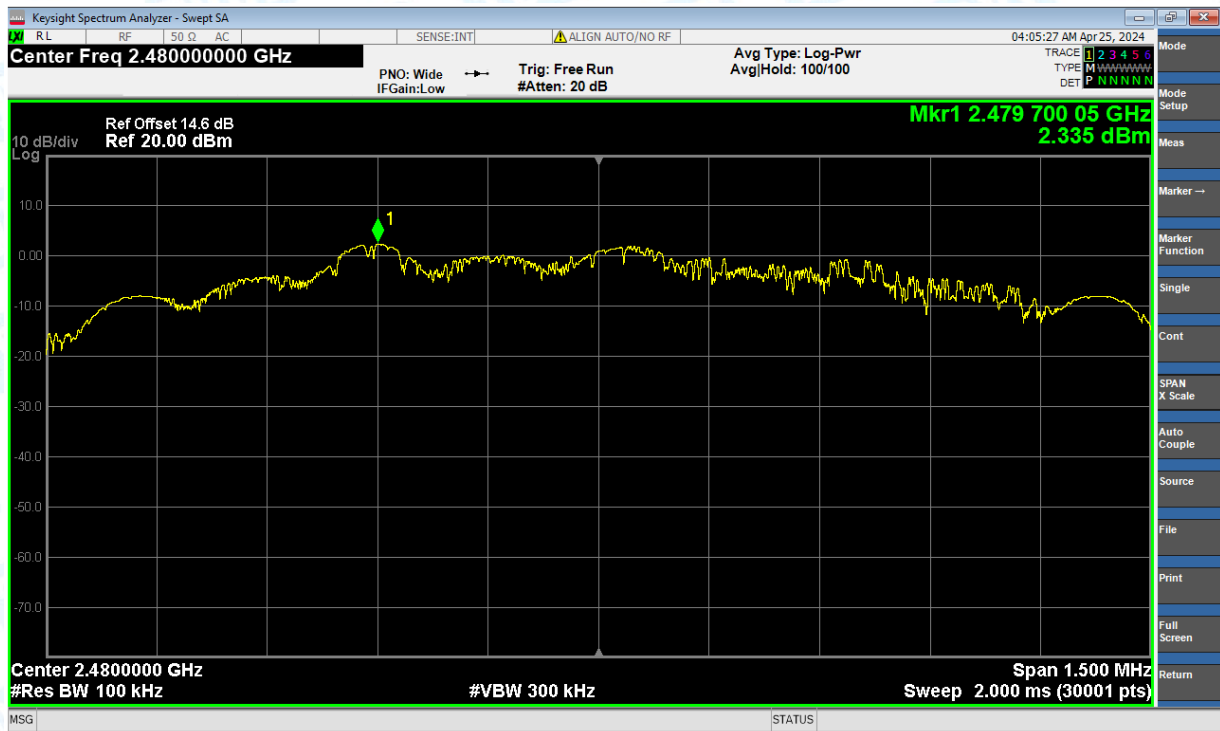
Tx. Spurious NVNT 2450MHz Ant1 Ref



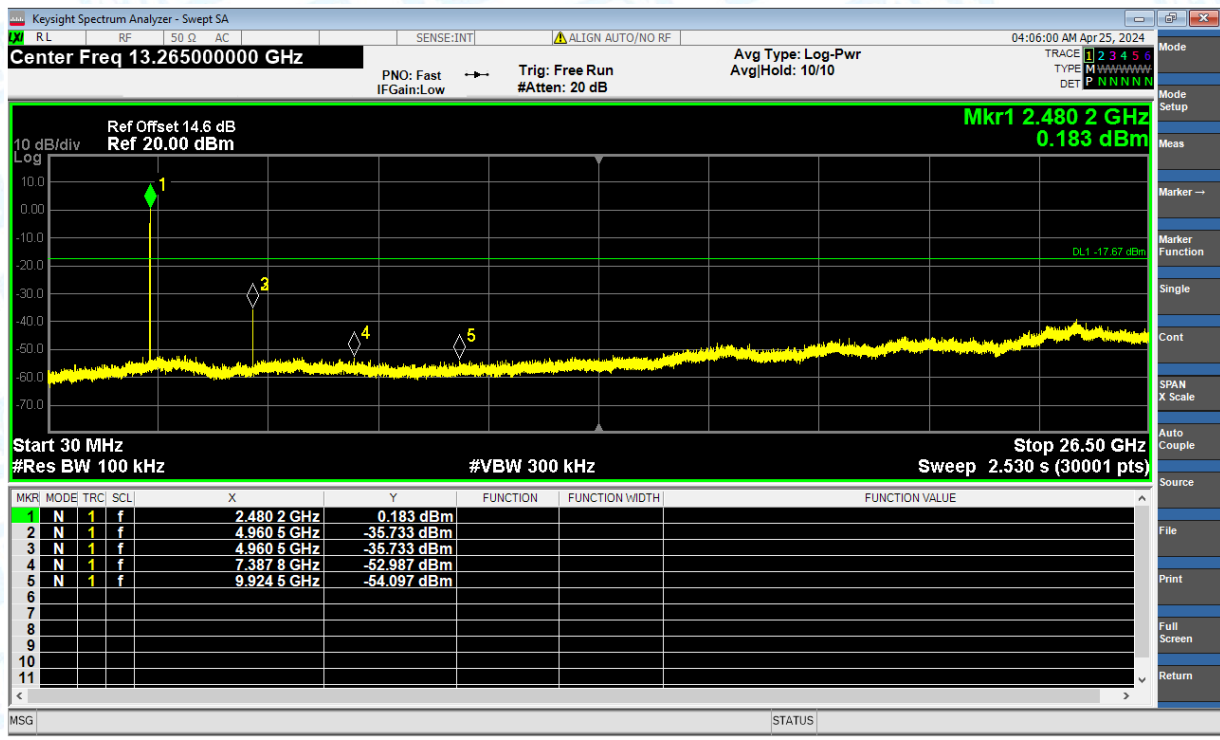
Tx. Spurious NVNT 2450MHz Ant1 Emission



Tx. Spurious NVNT 2480MHz Ant1 Ref

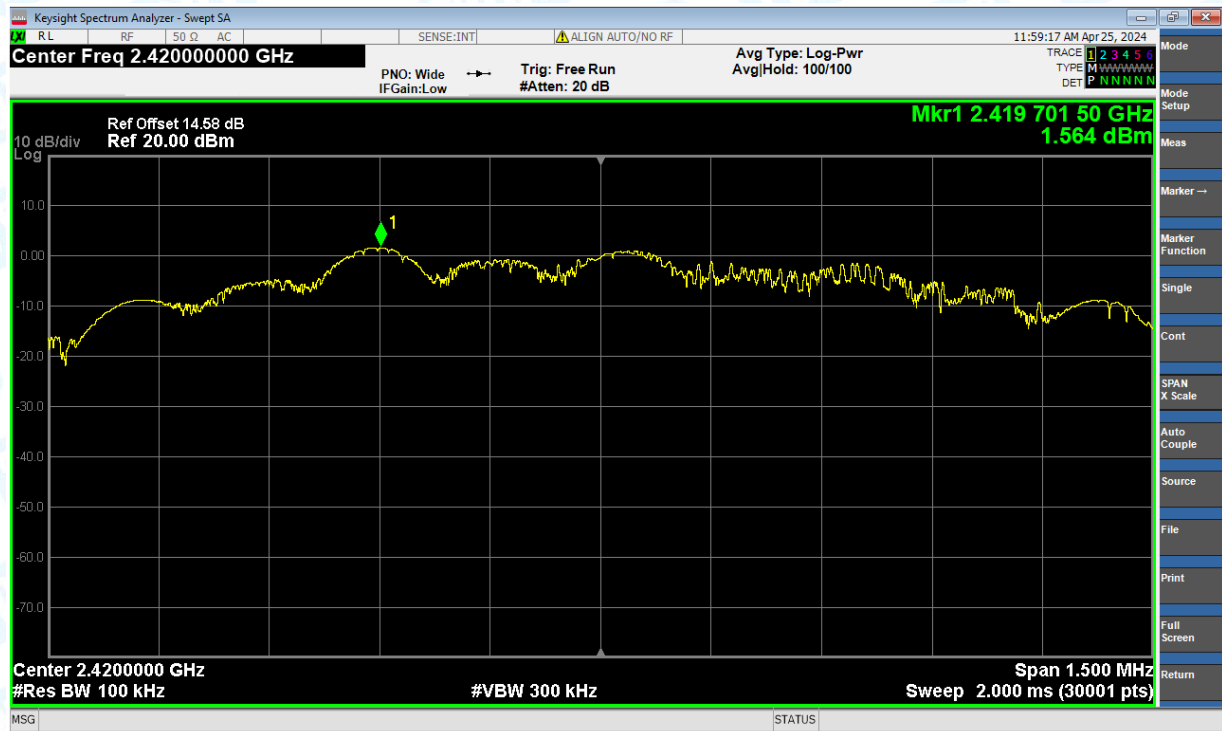


Tx. Spurious NVNT 2480MHz Ant1 Emission

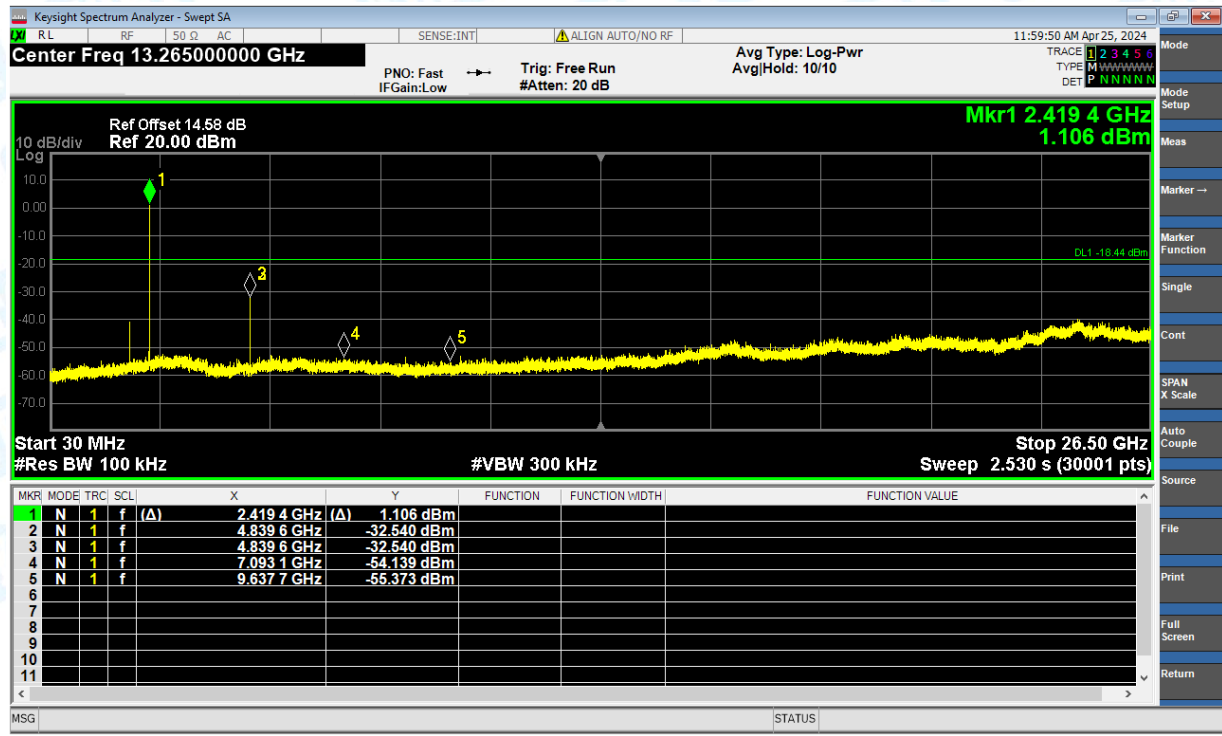


Test Graphs

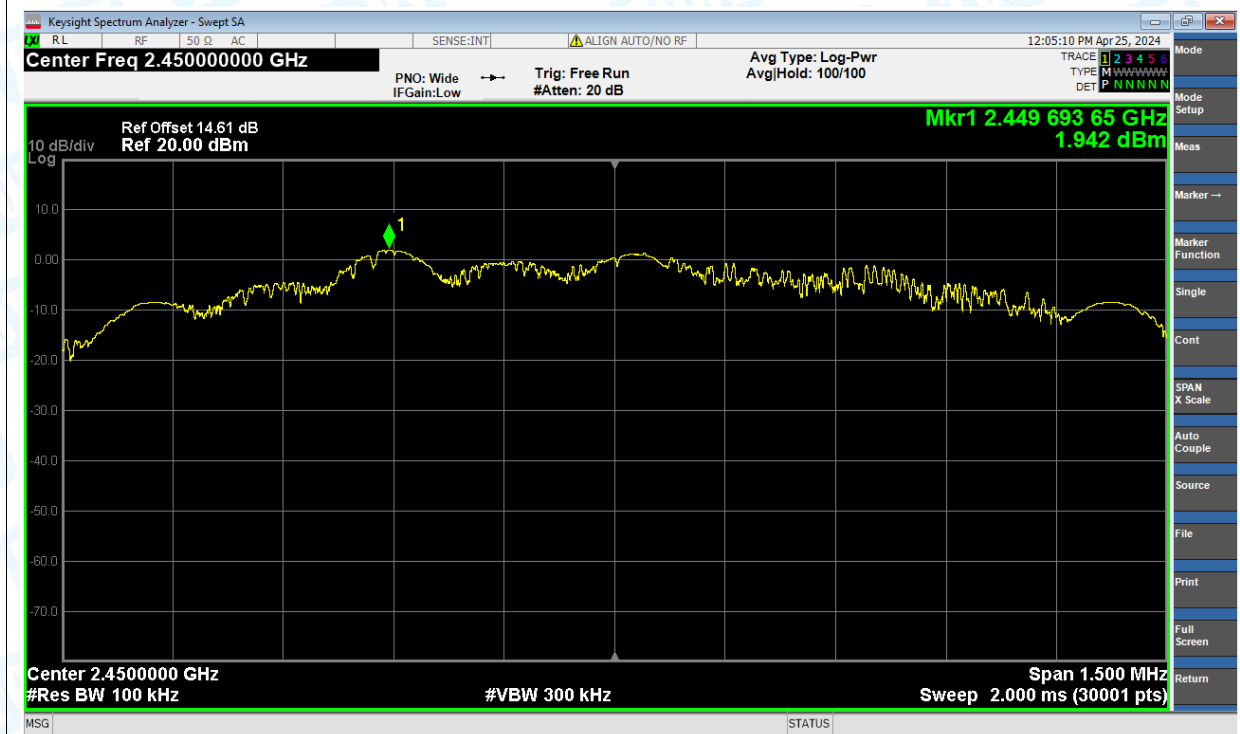
Tx. Spurious NVNT 2420MHz Ant2 Ref



Tx. Spurious NVNT 2420MHz Ant2 Emission



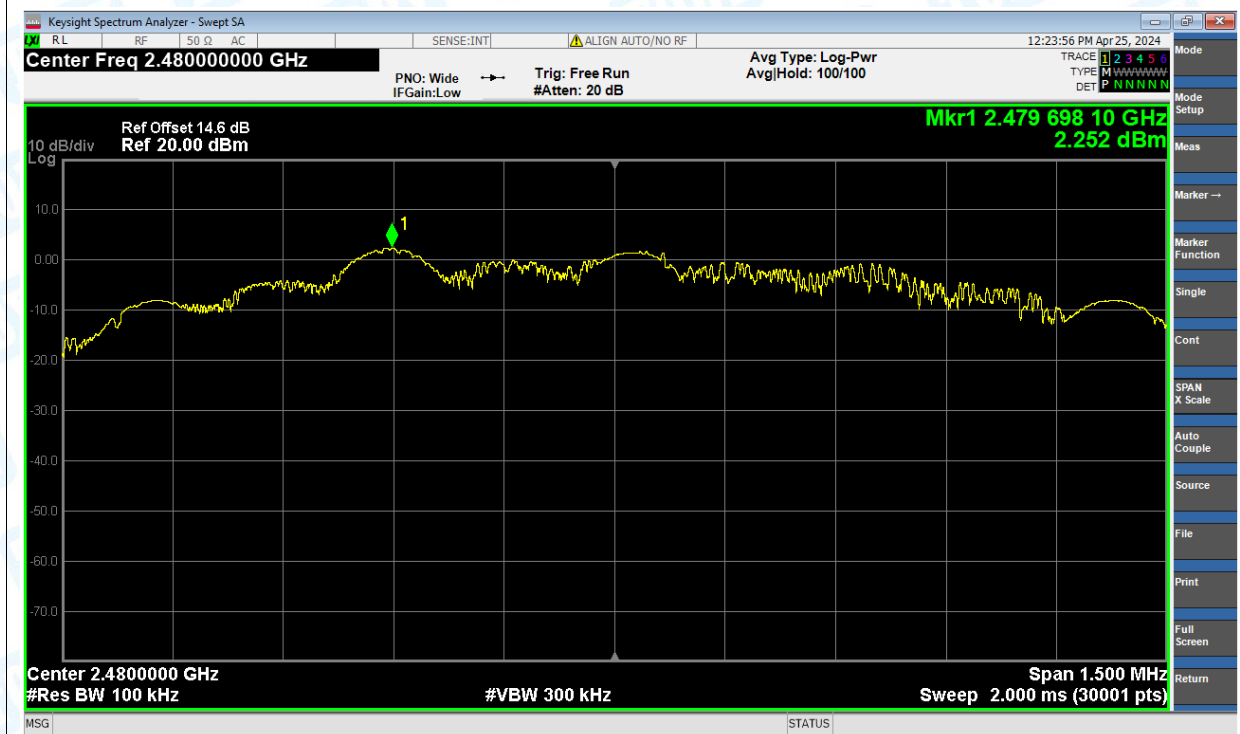
Tx. Spurious NVNT 2450MHz Ant2 Ref



Tx. Spurious NVNT 2450MHz Ant2 Emission



Tx. Spurious NVNT 2480MHz Ant2 Ref



Tx. Spurious NVNT 2480MHz Ant2 Emission

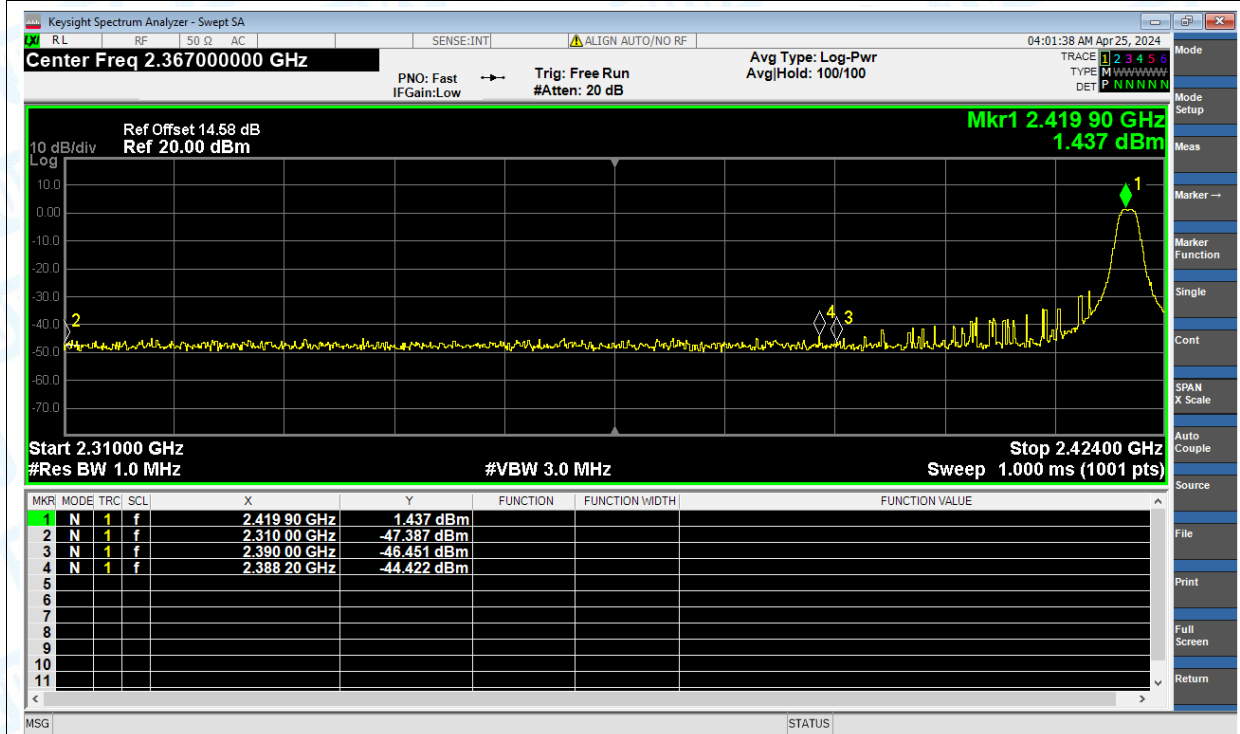


8.Restrict Band

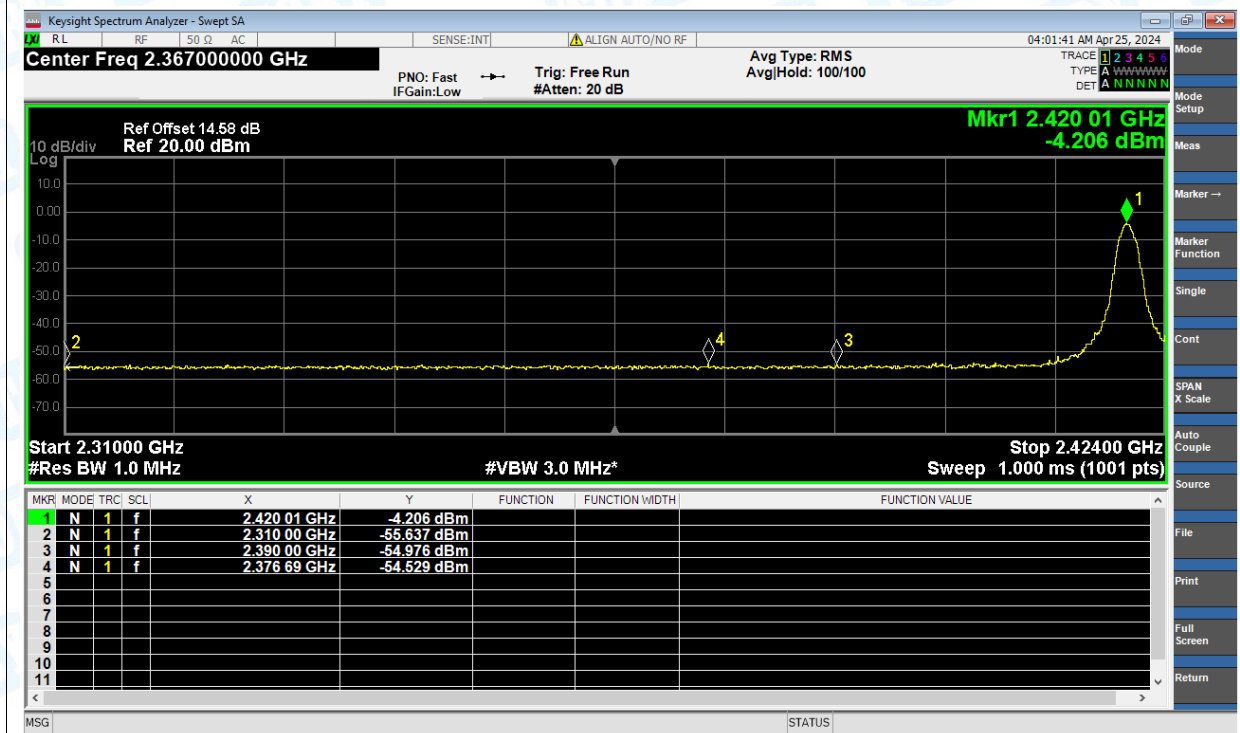
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	QPSK	2420	Ant1	No-Hopping	2310	-47.39	2	-	49.87	Peak	74	Pass
NVNT	QPSK	2420	Ant1	No-Hopping	2310	-55.64	2	4.69	46.31	Average	54	Pass
NVNT	QPSK	2420	Ant1	No-Hopping	2388.204	-44.42	2	-	52.84	Peak	74	Pass
NVNT	QPSK	2420	Ant1	No-Hopping	2376.69	-54.53	2	4.69	47.42	Average	54	Pass
NVNT	QPSK	2420	Ant1	No-Hopping	2390	-46.45	2	-	50.81	Peak	74	Pass
NVNT	QPSK	2420	Ant1	No-Hopping	2390	-54.98	2	4.69	46.97	Average	54	Pass
NVNT	QPSK	2480	Ant1	No-Hopping	2483.5	-42.79	2	-	54.47	Peak	74	Pass
NVNT	QPSK	2480	Ant1	No-Hopping	2483.5	-49.16	2	4.81	52.91	Average	54	Pass
NVNT	QPSK	2480	Ant1	No-Hopping	2483.56	-41.85	2	-	55.41	Peak	74	Pass
NVNT	QPSK	2480	Ant1	No-Hopping	2483.632	-48.2	2	4.81	53.87	Average	54	Pass
NVNT	QPSK	2480	Ant1	No-Hopping	2500	-49.71	2	-	47.55	Peak	74	Pass
NVNT	QPSK	2480	Ant1	No-Hopping	2500	-57.87	2	4.81	44.2	Average	54	Pass
NVNT	QPSK	2420	Ant2	No-Hopping	2310	-45.21	2	-	52.05	Peak	74	Pass
NVNT	QPSK	2420	Ant2	No-Hopping	2310	-56.04	2	4.65	45.87	Average	54	Pass
NVNT	QPSK	2420	Ant2	No-Hopping	2383.53	-43.58	2	-	53.68	Peak	74	Pass
NVNT	QPSK	2420	Ant2	No-Hopping	2387.064	-54.93	2	4.65	46.98	Average	54	Pass
NVNT	QPSK	2420	Ant2	No-Hopping	2390	-46.28	2	-	50.98	Peak	74	Pass
NVNT	QPSK	2420	Ant2	No-Hopping	2390	-56.01	2	4.65	45.9	Average	54	Pass
NVNT	QPSK	2480	Ant2	No-Hopping	2483.5	-41.83	2	-	55.43	Peak	74	Pass
NVNT	QPSK	2480	Ant2	No-Hopping	2483.5	-48.07	2	4.69	53.88	Average	54	Pass
NVNT	QPSK	2480	Ant2	No-Hopping	2483.632	-41.6	2	-	55.66	Peak	74	Pass
NVNT	QPSK	2480	Ant2	No-Hopping	2483.608	-47.98	2	4.69	53.97	Average	54	Pass
NVNT	QPSK	2480	Ant2	No-Hopping	2500	-50.25	2	-	47.01	Peak	74	Pass
NVNT	QPSK	2480	Ant2	No-Hopping	2500	-58.17	2	4.69	43.78	Average	54	Pass

Test Graphs

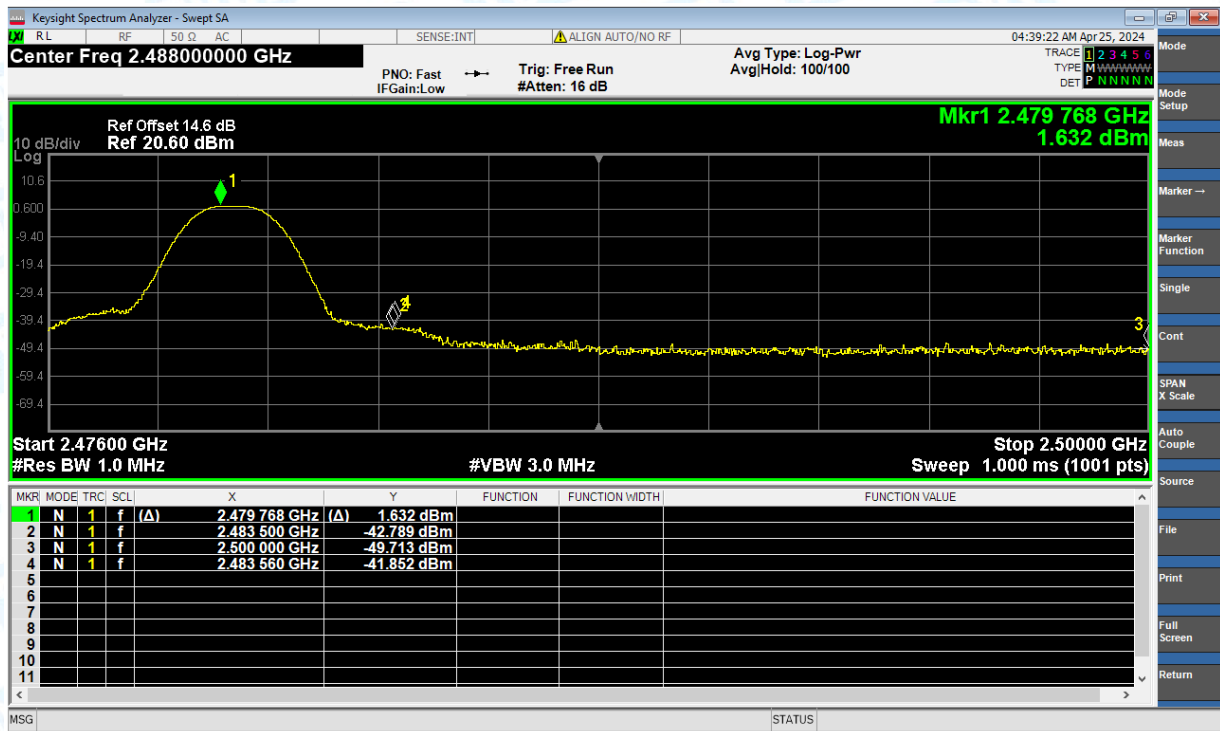
Restrict Band NVNT 2420MHz Ant1 No-Hopping Peak



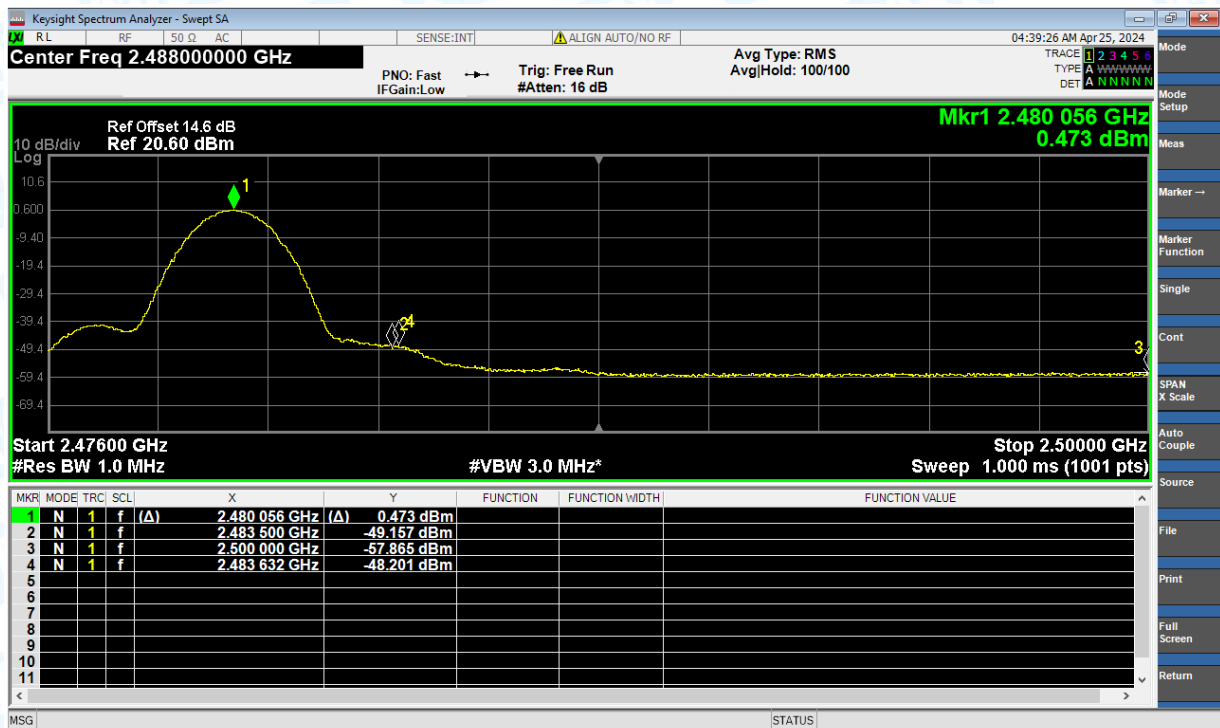
Restrict Band NVNT 2420MHz Ant1 No-Hopping Average



Restrict Band NVNT 2480MHz Ant1 No-Hopping Peak

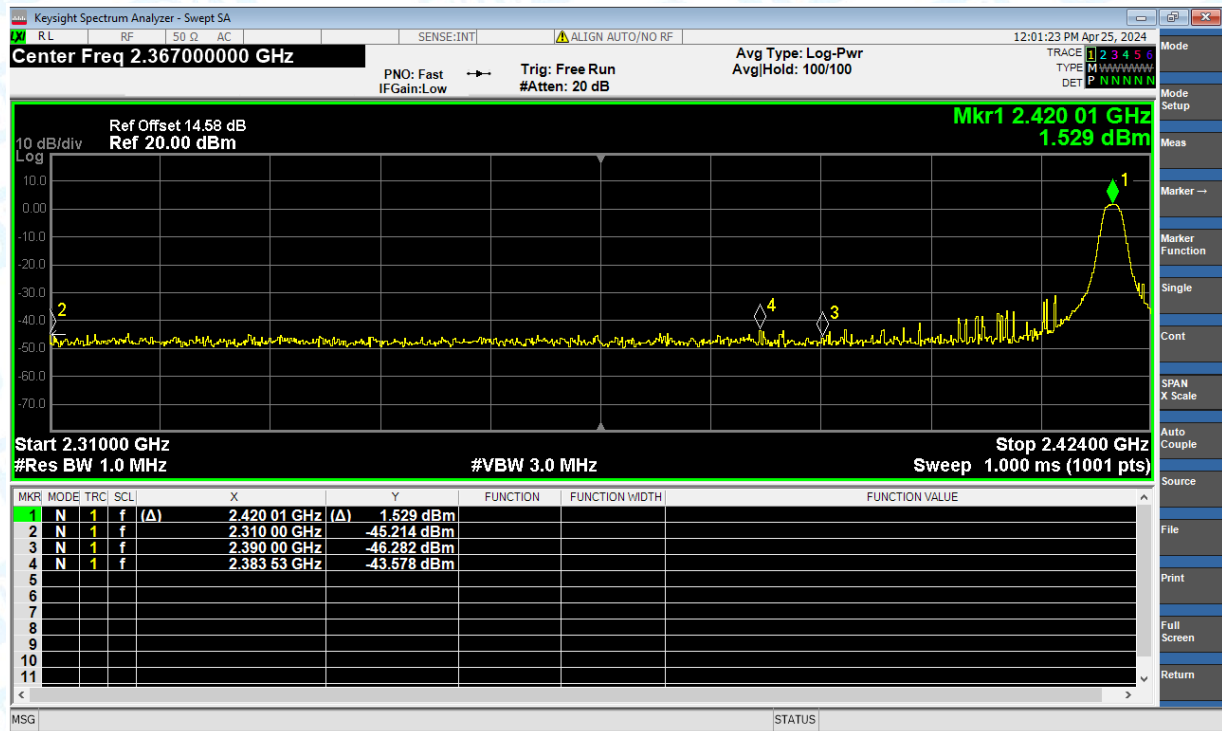


Restrict Band NVNT 2480MHz Ant1 No-Hopping Average

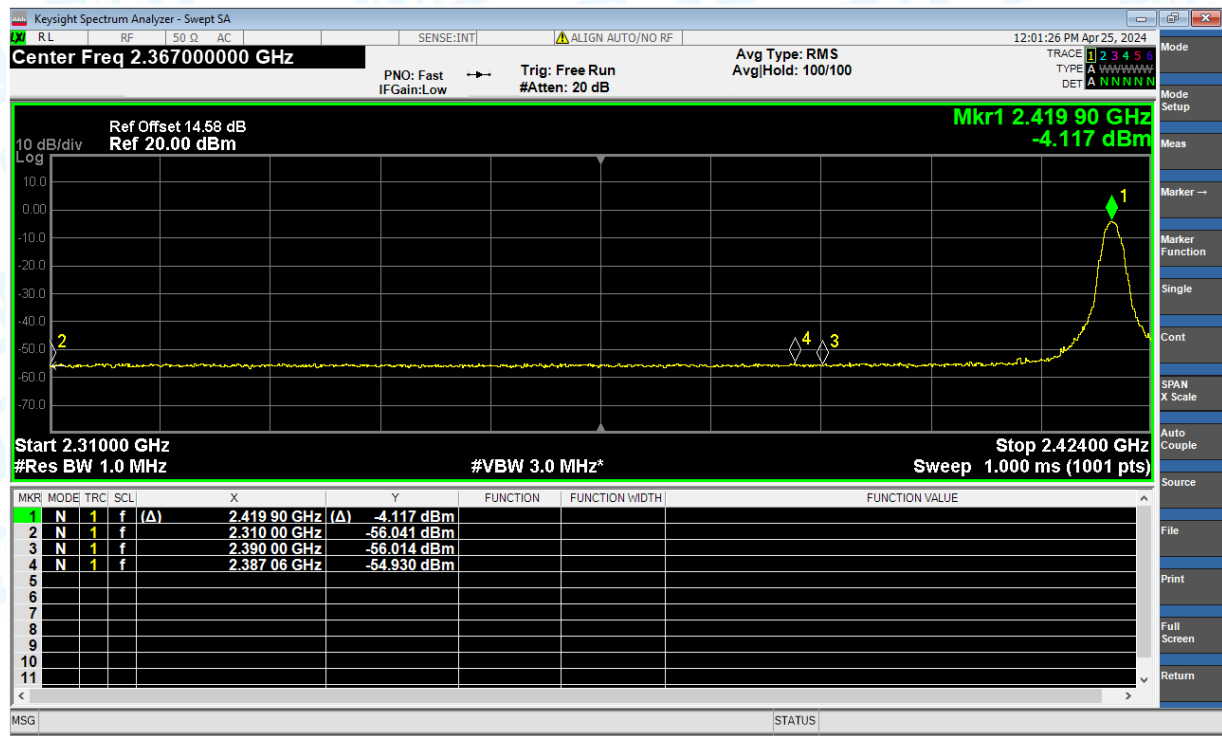


Test Graphs

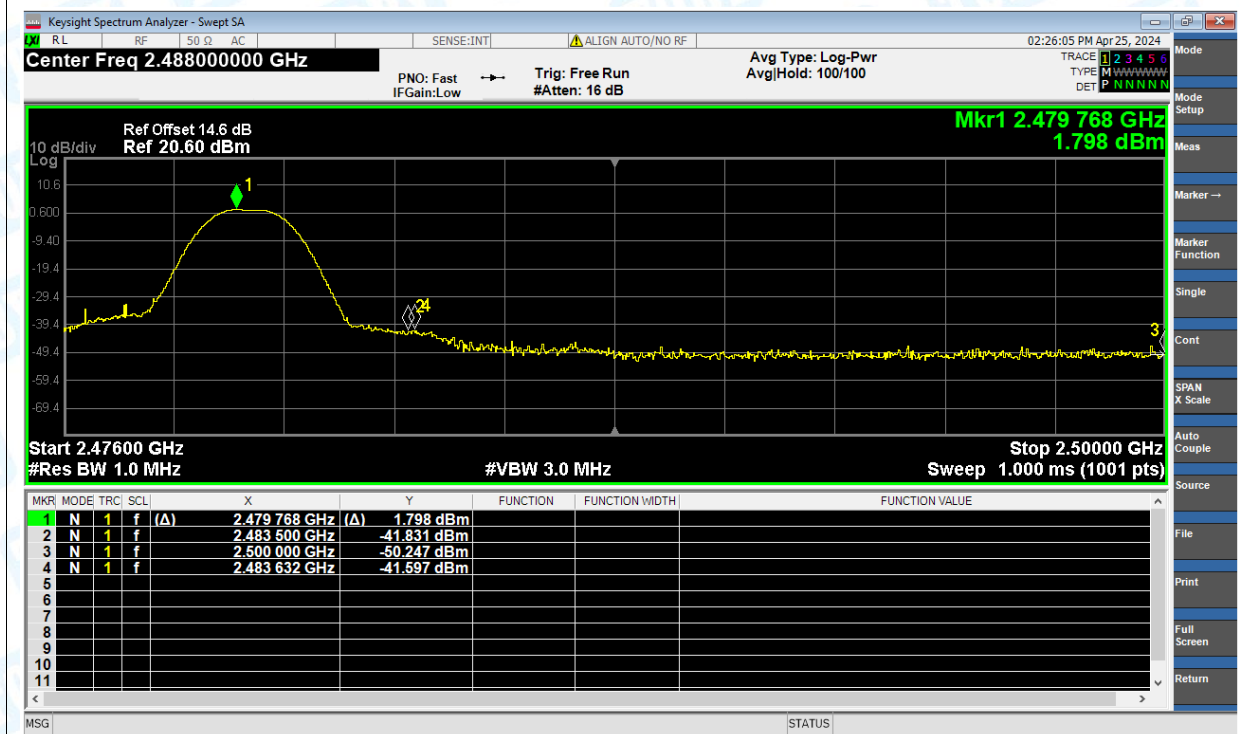
Restrict Band NVNT 2420MHz Ant2 No-Hopping Peak



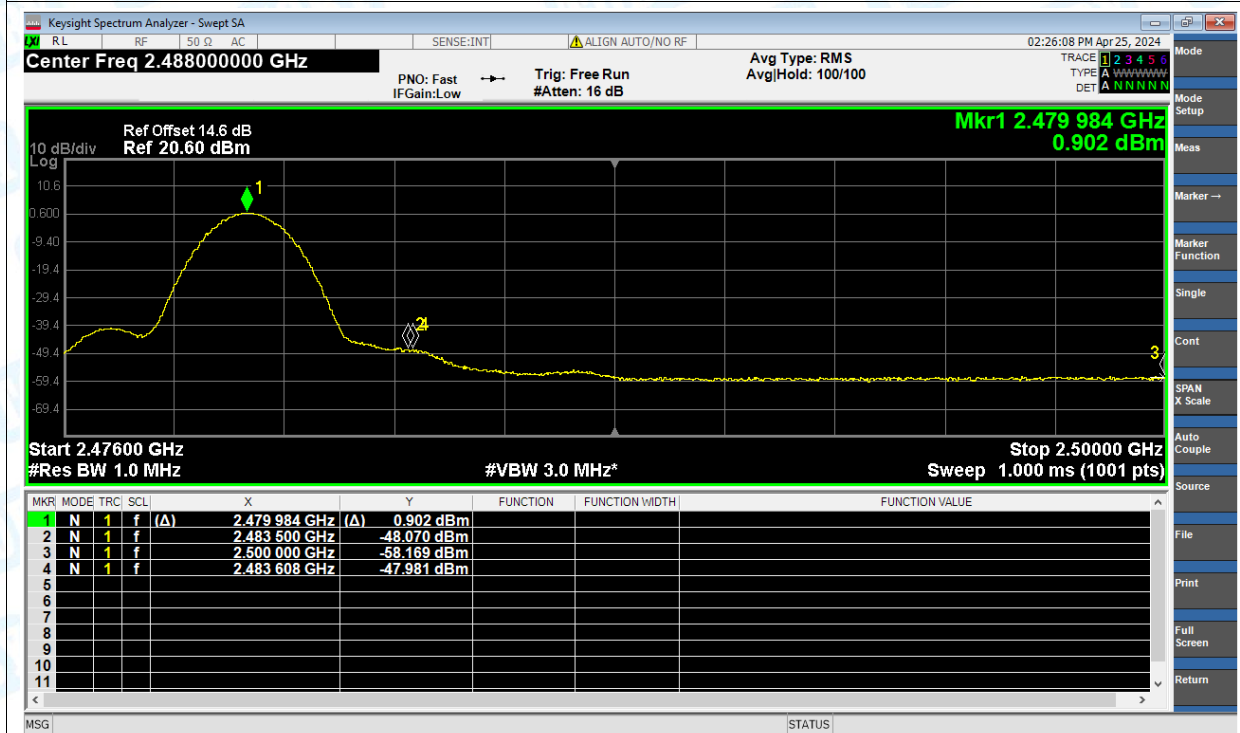
Restrict Band NVNT 2420MHz Ant2 No-Hopping Average



Restrict Band NVNT 2480MHz Ant2 No-Hopping Peak

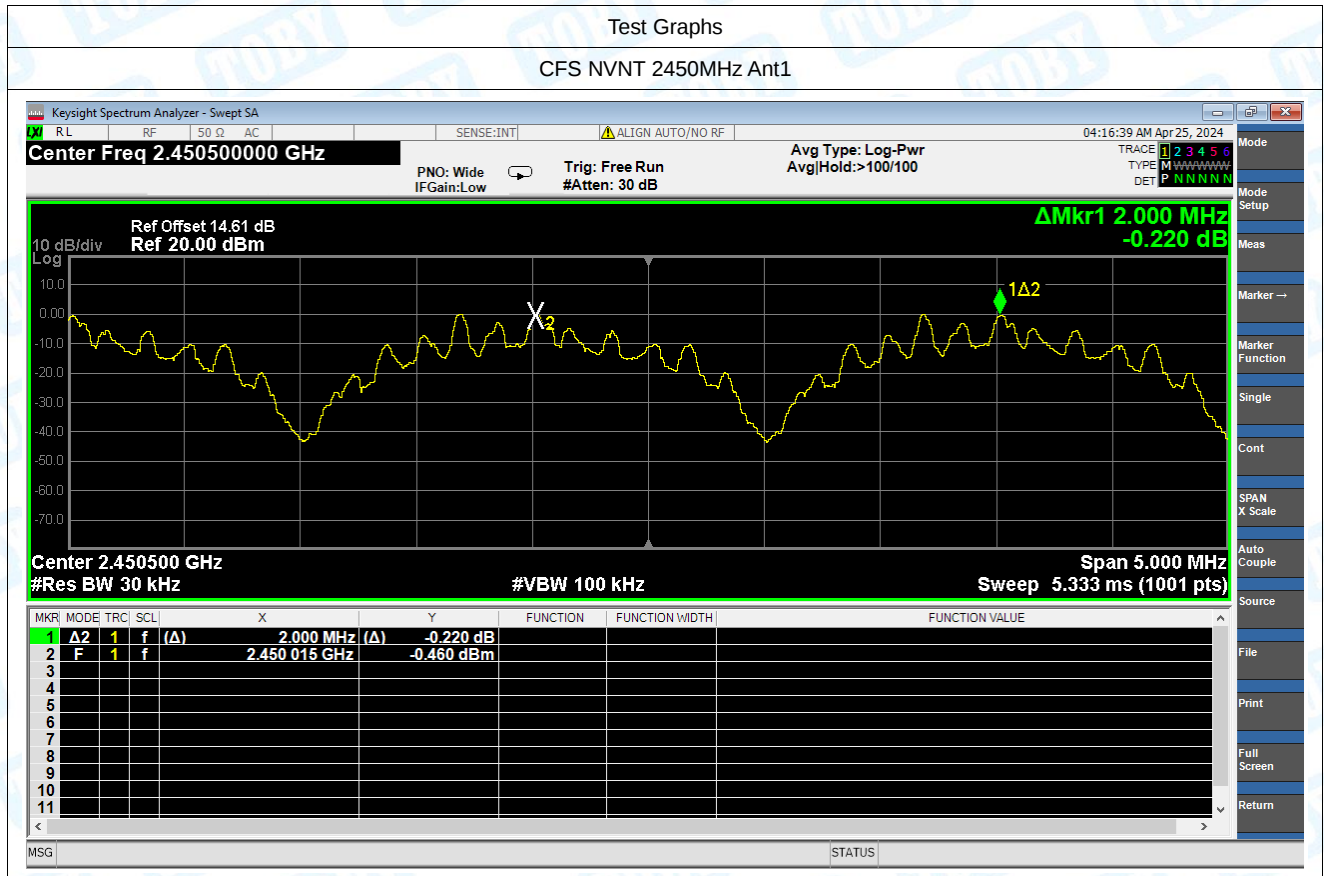


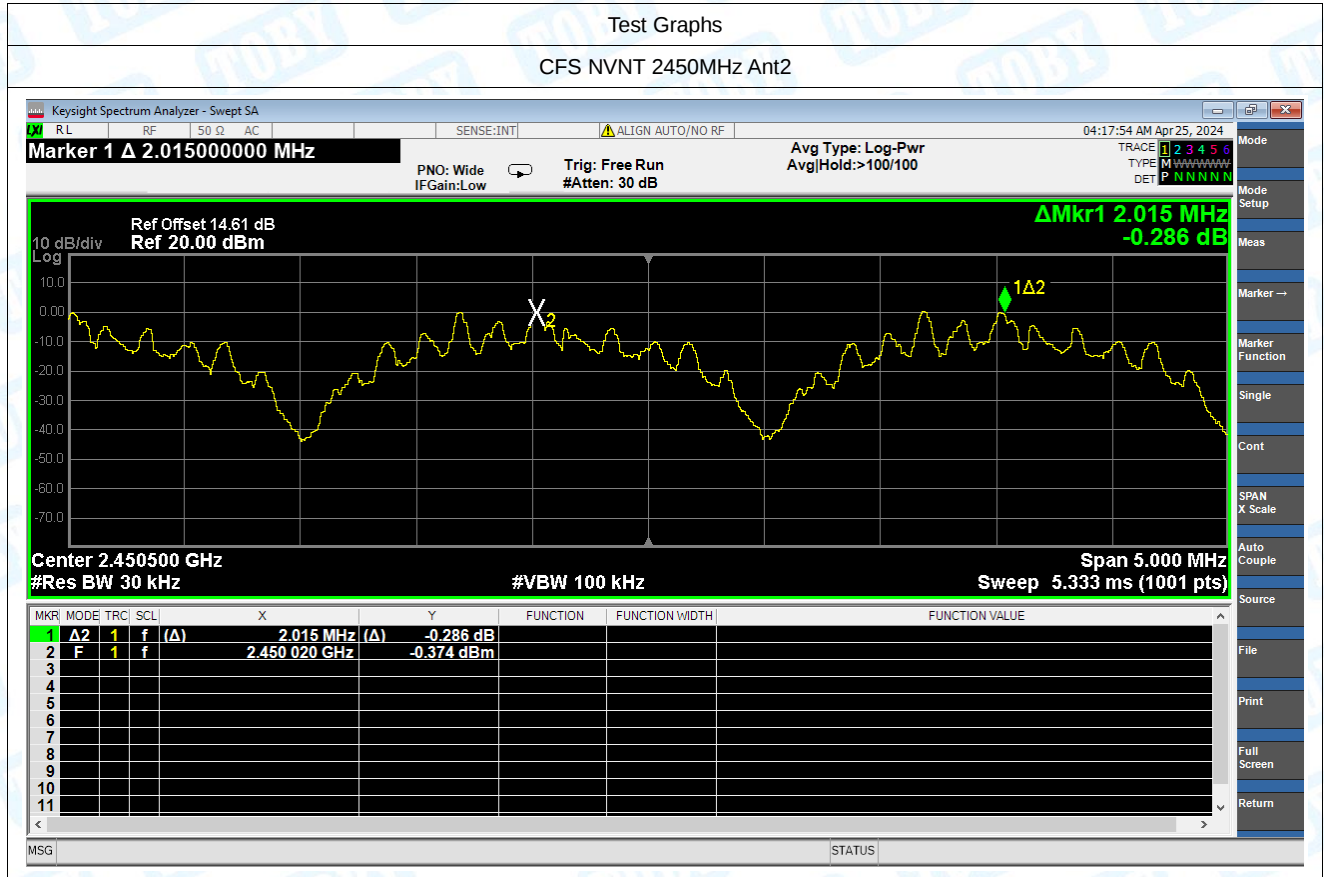
Restrict Band NVNT 2480MHz Ant2 No-Hopping Average



9.Carrier Frequencies Separation

Condition	Mode	Antenna	HFS (MHz)	Limit (MHz)	Verdict
NVNT	QPSK	Ant1	2	0.927	Pass
NVNT	QPSK	Ant2	2.015	0.927	Pass



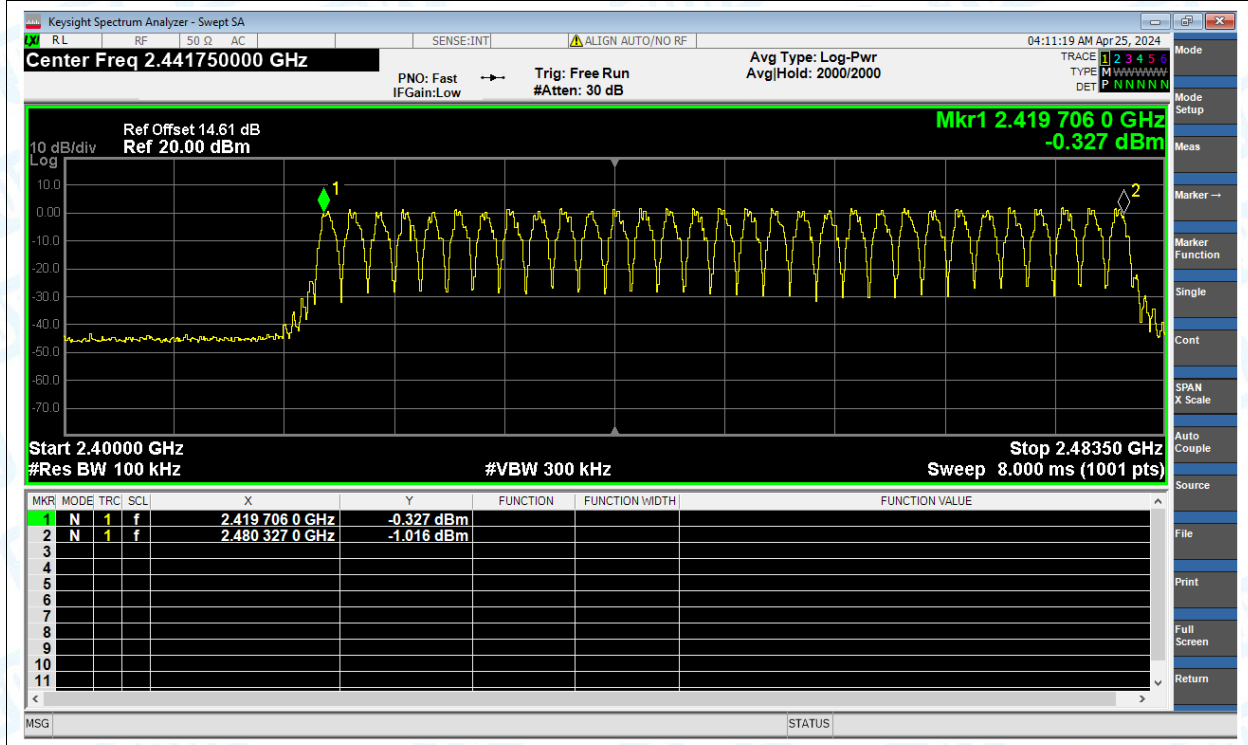


10.Number of Hopping Channel

Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	QPSK	Ant1	31	15	Pass
NVNT	QPSK	Ant2	31	15	Pass

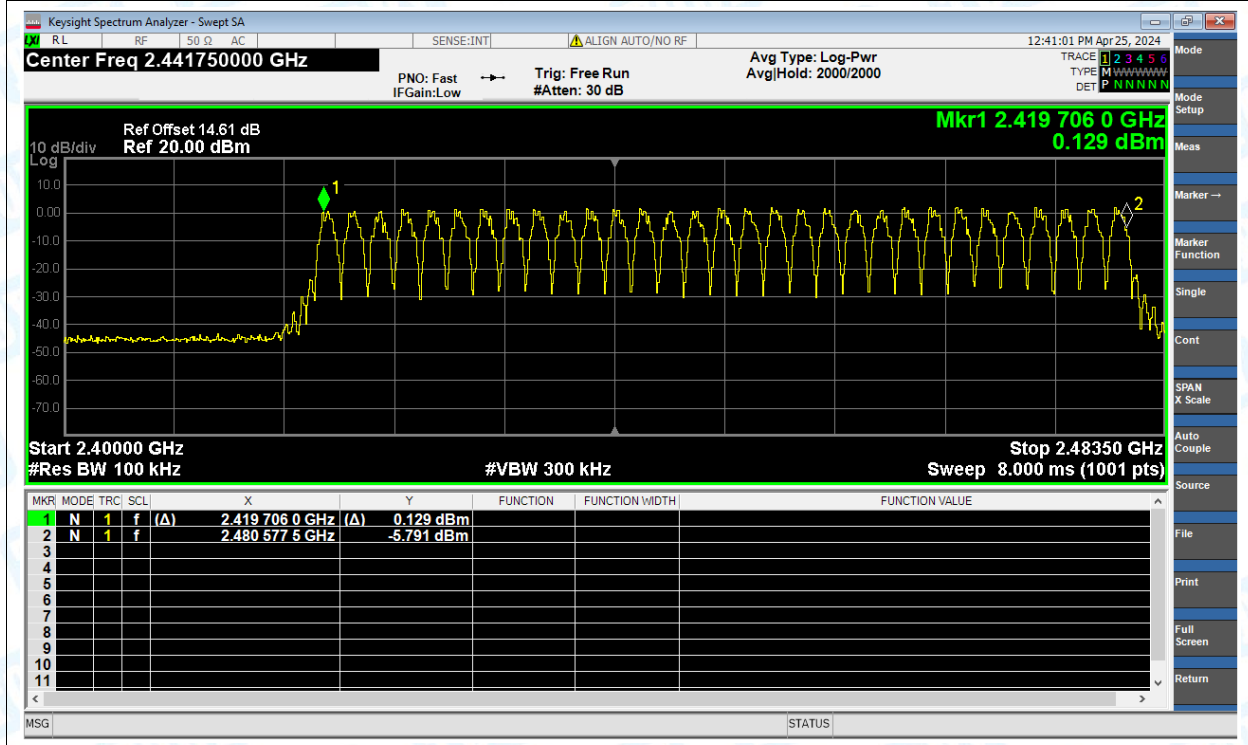
Test Graphs

Hopping No. NVNT 2450MHz Ant1



Test Graphs

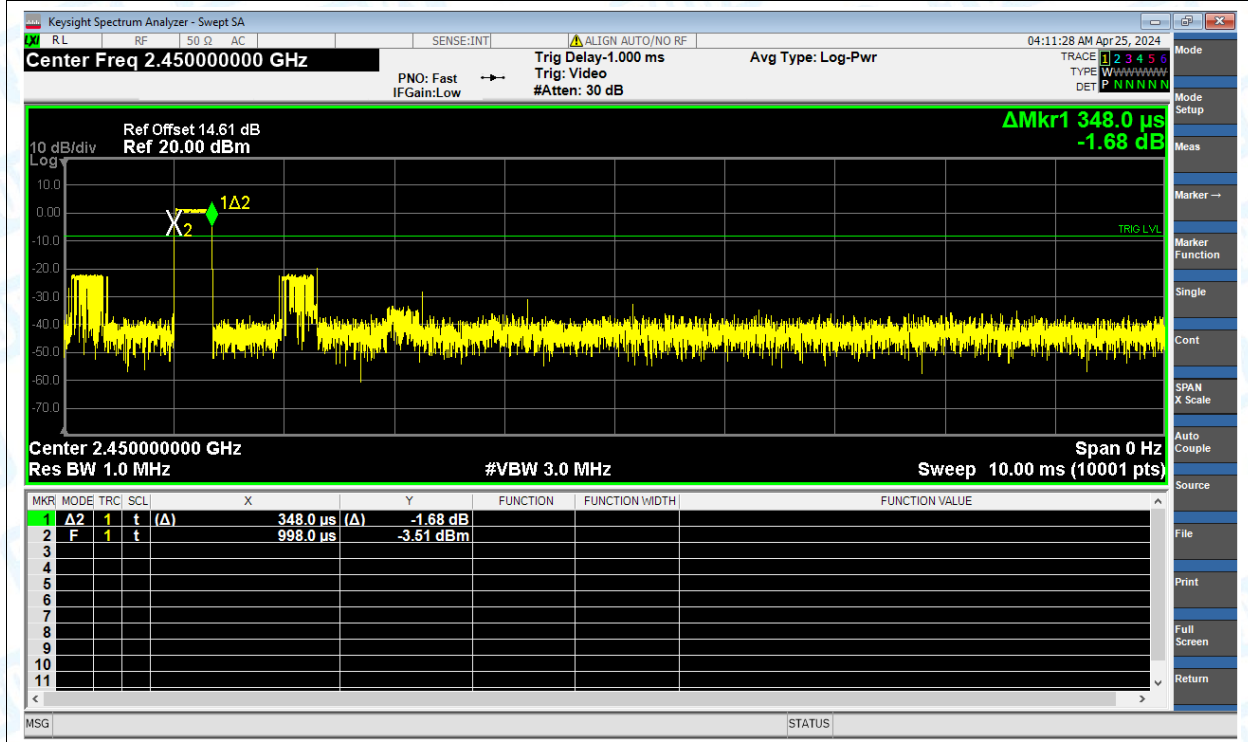
Hopping No. NVNT 2450MHz Ant2

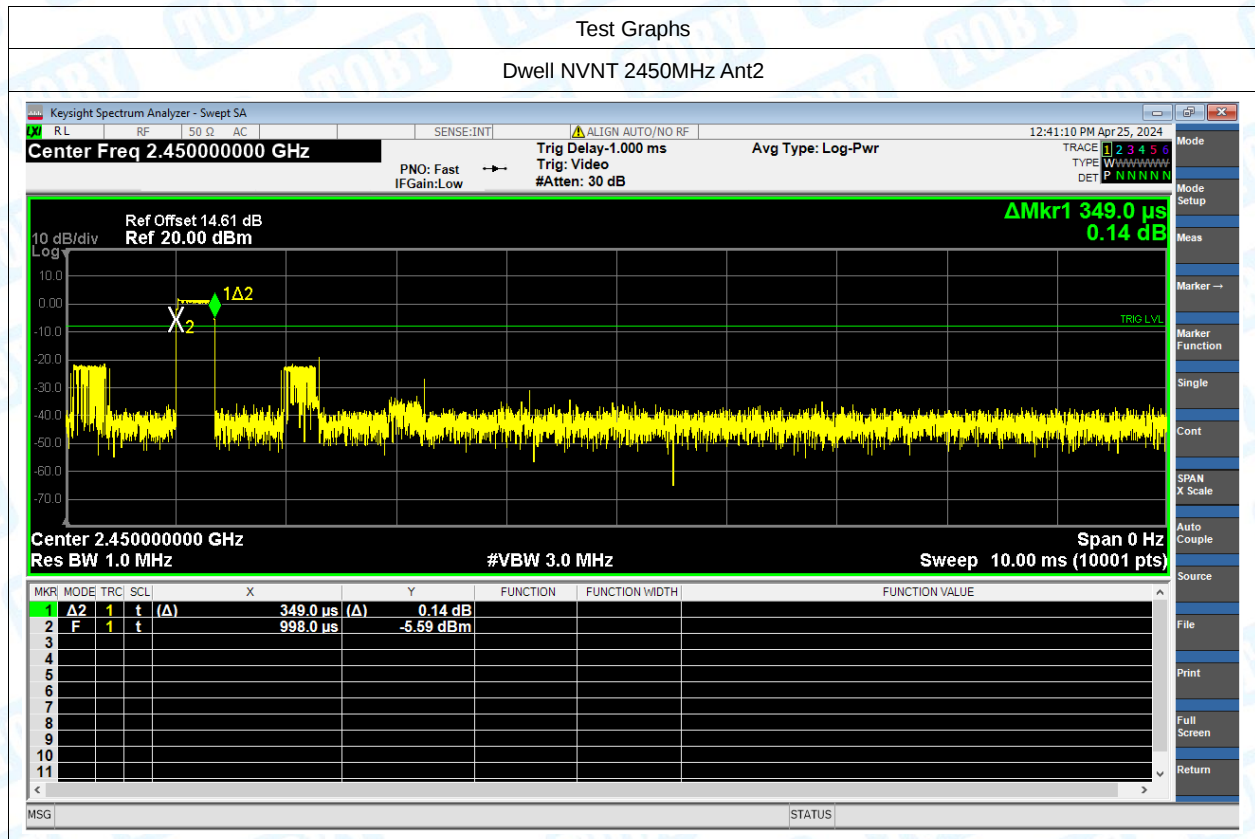


11.Dwell Time

Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	QPSK	2450	Ant1	0.348	111.36	31600	400	Pass
NVNT	QPSK	2450	Ant2	0.349	111.68	31600	400	Pass

Dwell NVNT 2450MHz Ant1





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