

RF Test Data for 2.4G (Conducted Measurements)

General Description of EUT	
Product Name:	TETRIX 2.4 GHZ 4 CHANNEL WIRELESS GAMEPAD
Test Model:	40239
Sample ID:	HC-C-202408-0268-01-02#
Environmental Conditions	
Temperature:	22.0℃-25℃
Relative Humidity:	43%-55%
Test Voltage:	DC 3.8V
Test Engineer:	ZKN Zhou
Note: For a more detailed features description, please refer to the report TBR-C-202408-0268-2 The report only show the worst case data.	

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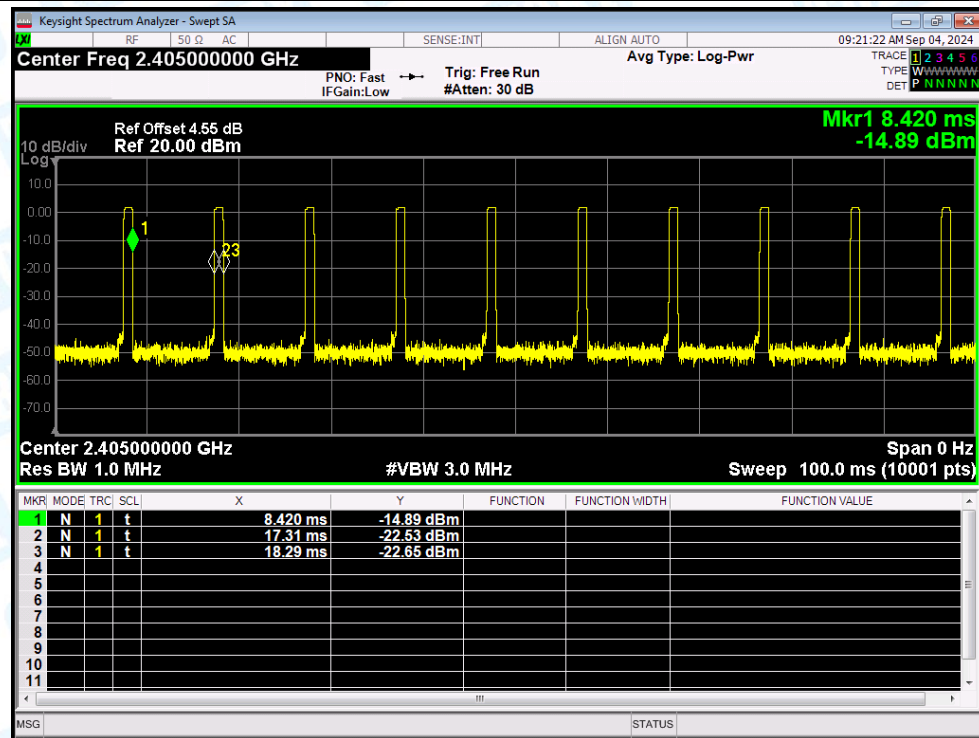
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1.Duty Cycle

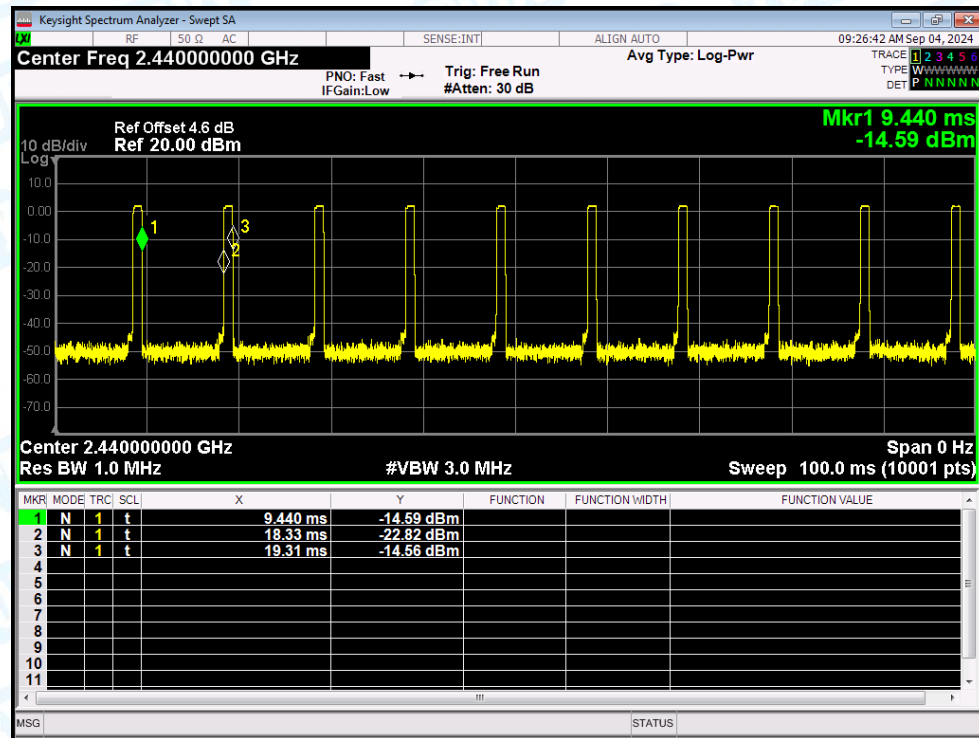
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	GFSK	2405	Ant1	9.93	10.03	1.02
NVNT	GFSK	2440	Ant1	9.93	10.03	1.02
NVNT	GFSK	2475	Ant1	9.83	10.07	1.03

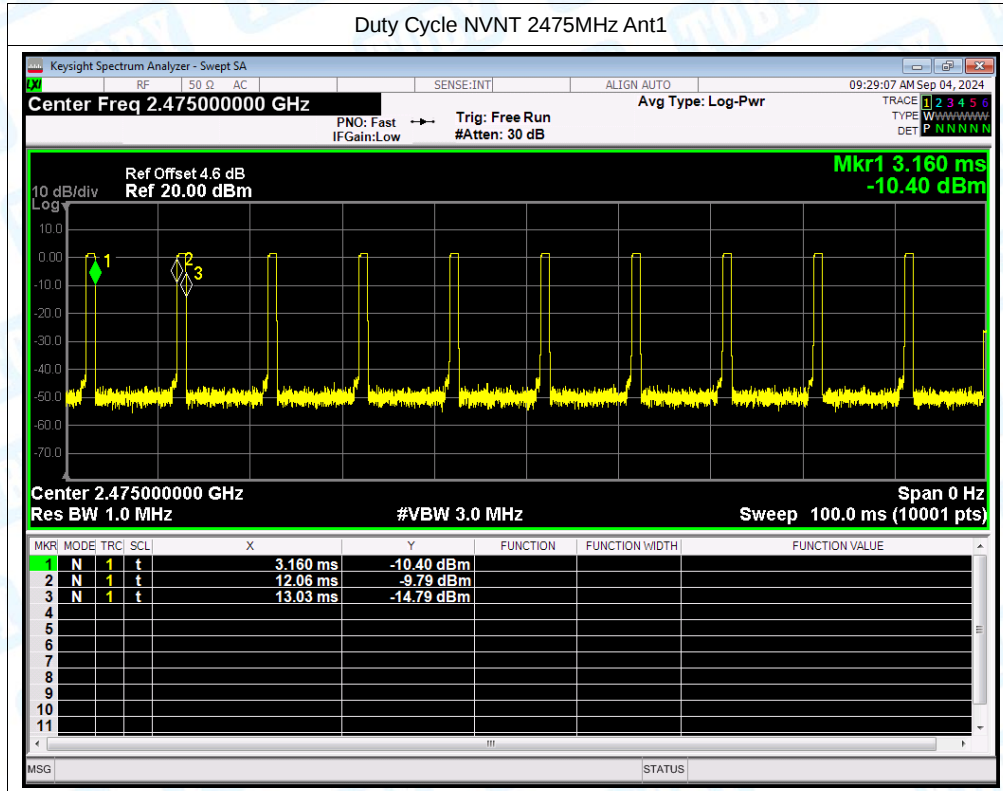
Test Graphs

Duty Cycle NVNT 2405MHz Ant1



Duty Cycle NVNT 2440MHz Ant1



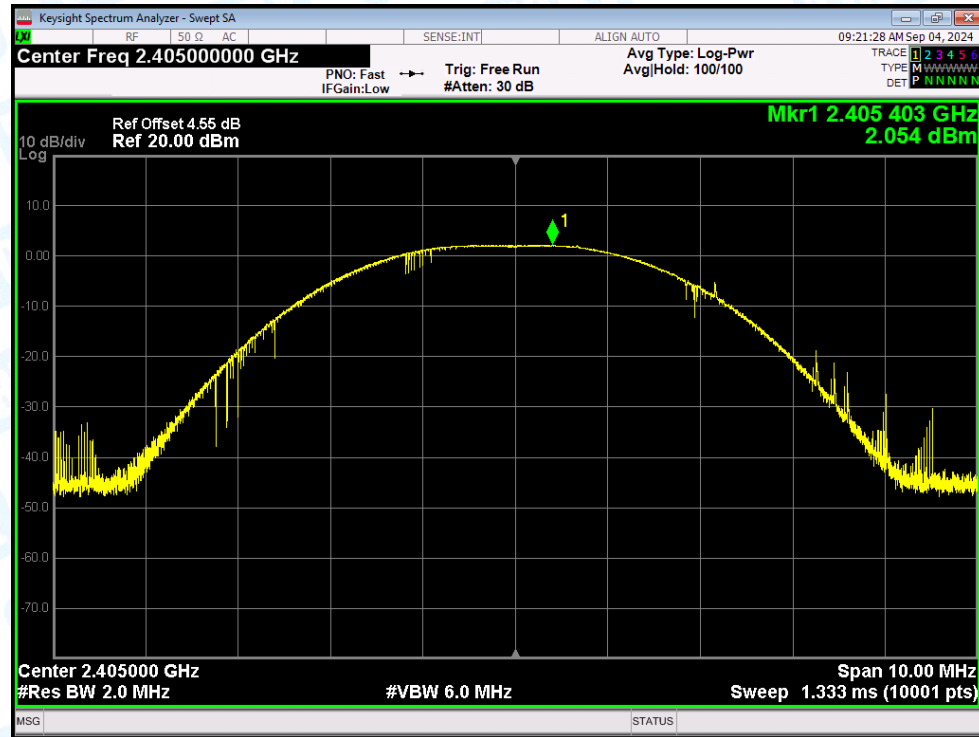


2.Maximum Conducted Output Power

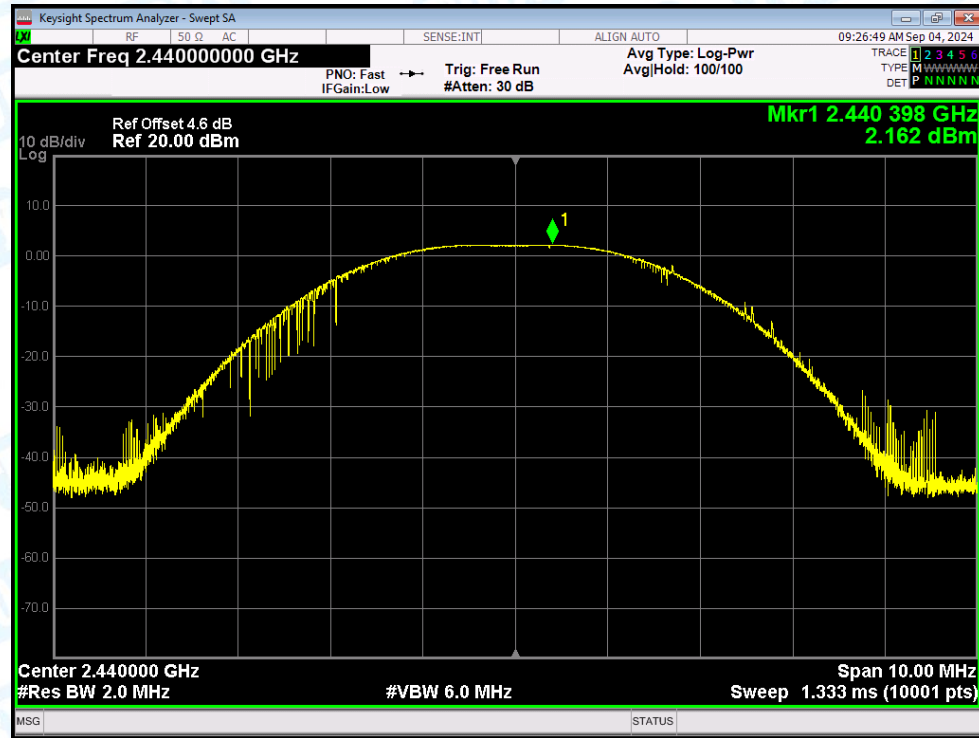
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	GFSK	2405	Ant1	2.054	30	Pass
NVNT	GFSK	2440	Ant1	2.162	30	Pass
NVNT	GFSK	2475	Ant1	1.715	30	Pass

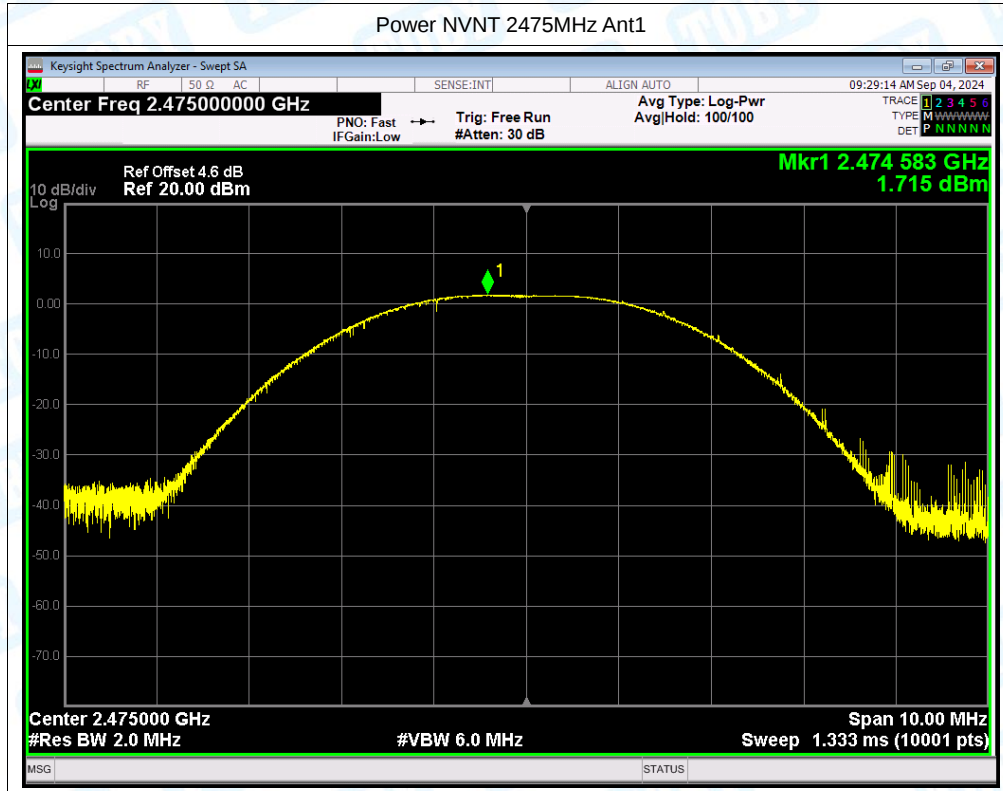
Test Graphs

Power NVNT 2405MHz Ant1



Power NVNT 2440MHz Ant1



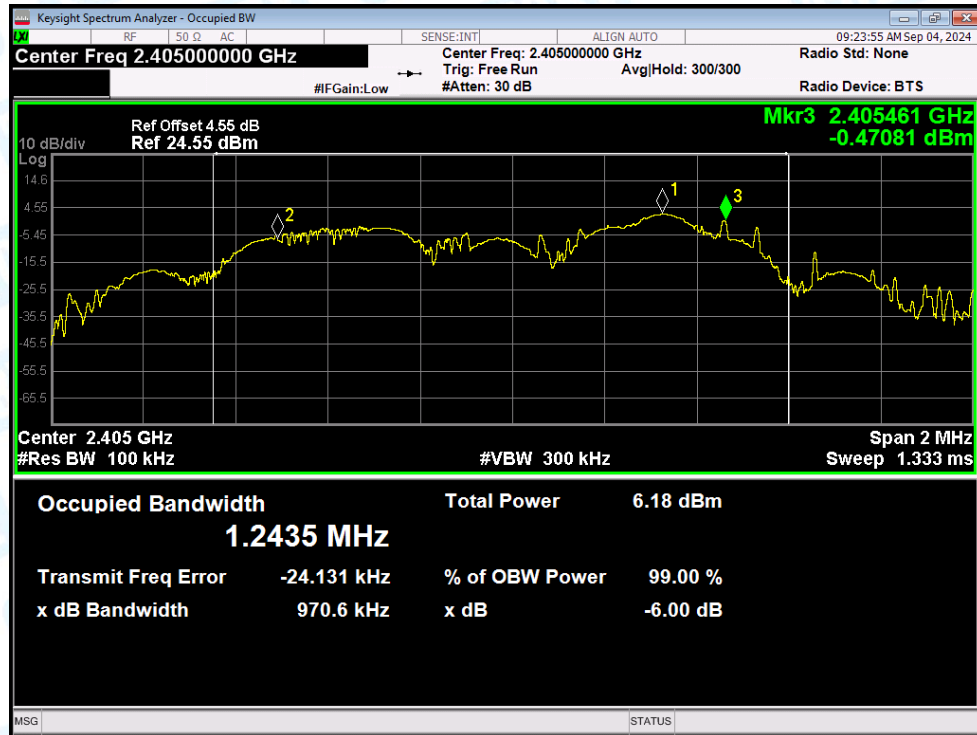


3.-6dB Bandwidth

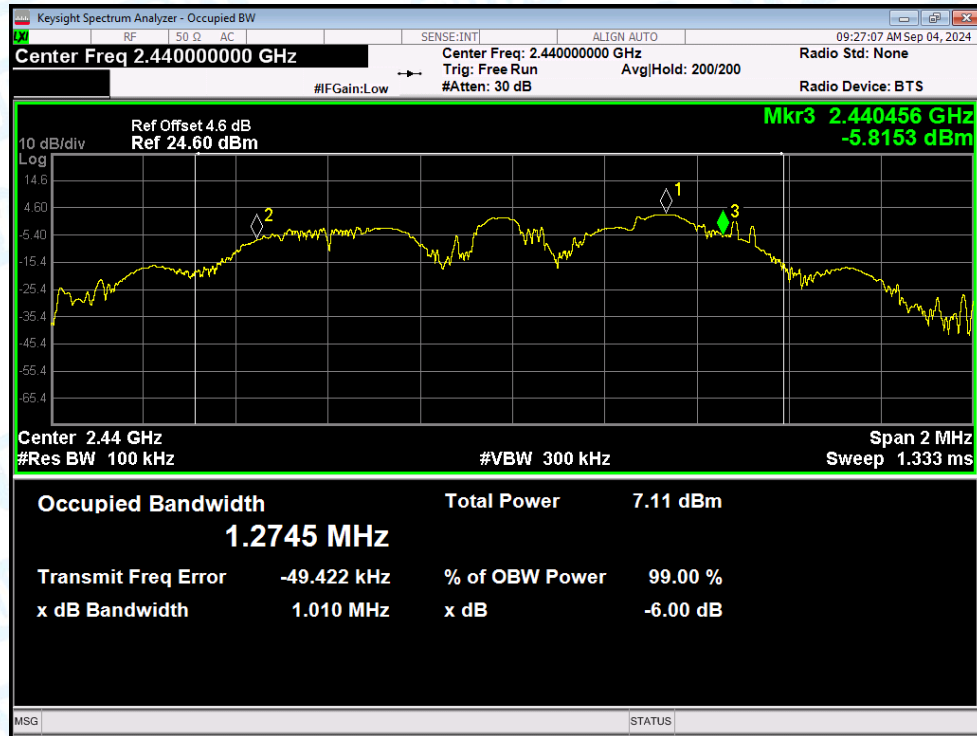
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	GFSK	2405	Ant1	0.97	0.5	Pass
NVNT	GFSK	2440	Ant1	1.01	0.5	Pass
NVNT	GFSK	2475	Ant1	1.01	0.5	Pass

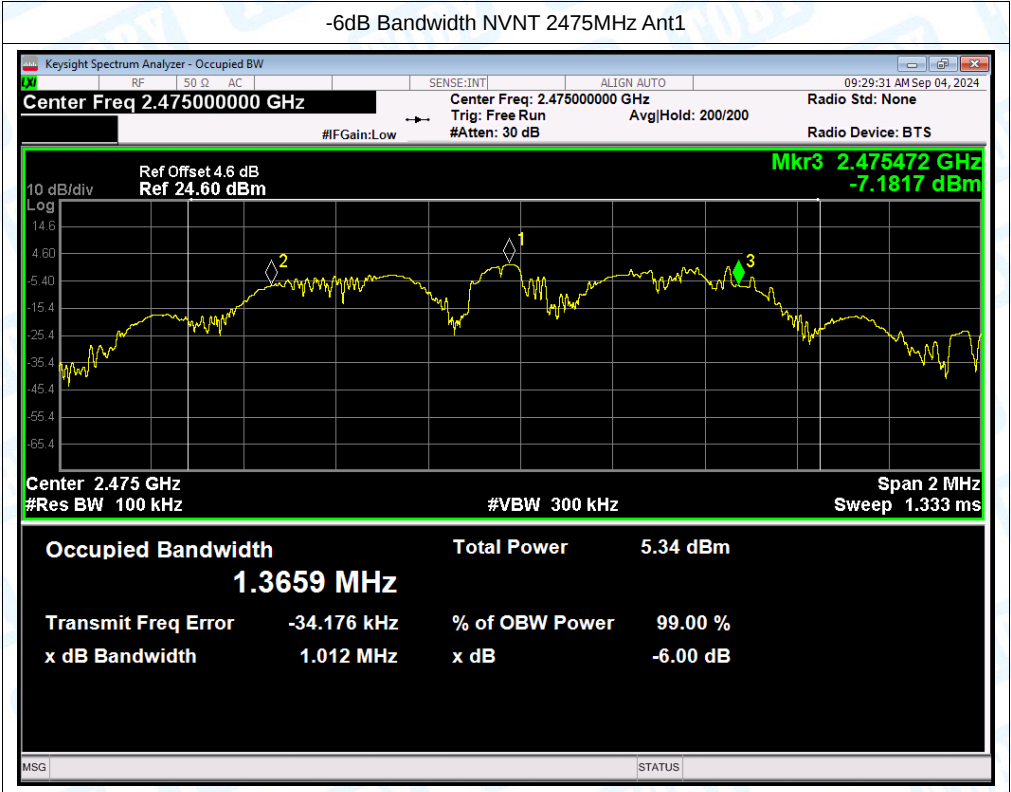
Test Graphs

-6dB Bandwidth 2405MHz Ant1



-6dB Bandwidth NVNT 2440MHz Ant1



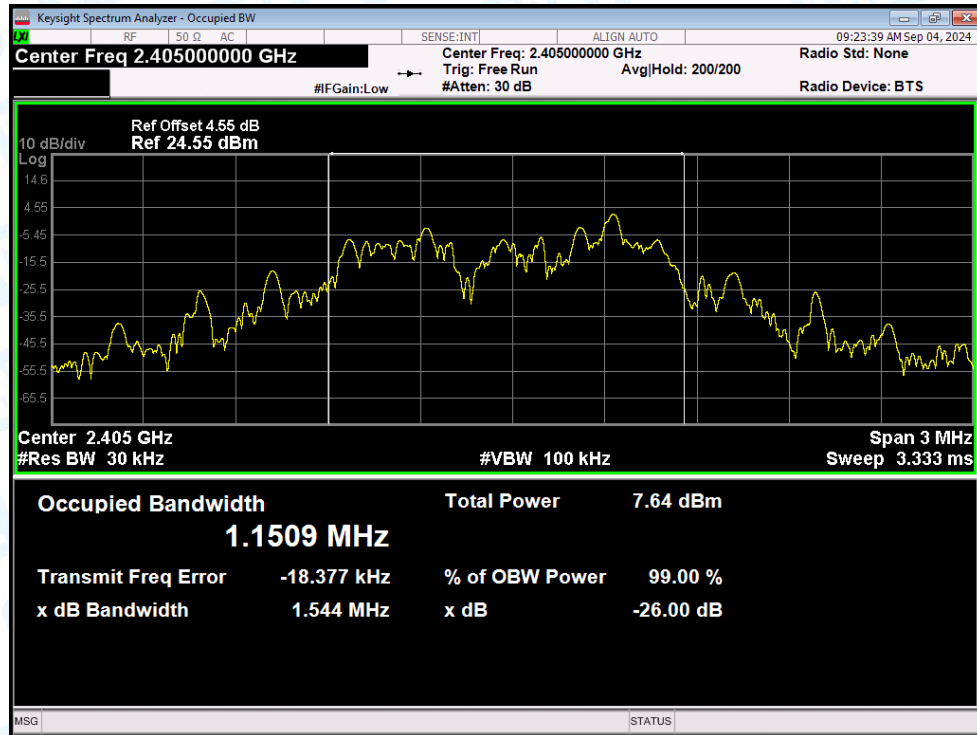


4.Occupied Channel Bandwidth

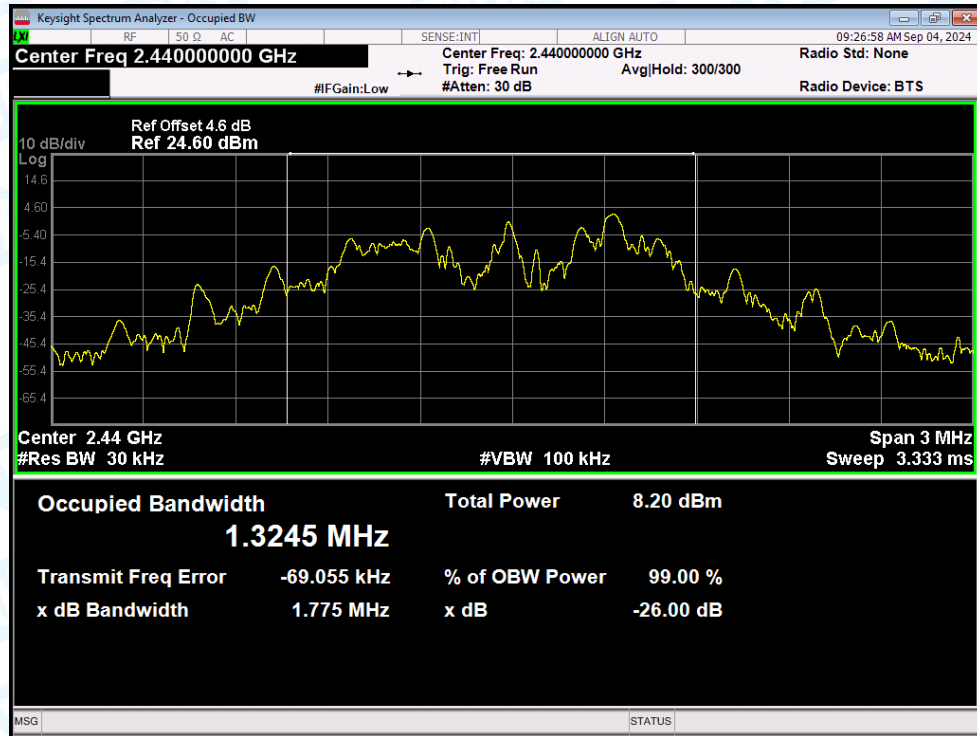
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	GFSK	2405	Ant1	1.151
NVNT	GFSK	2440	Ant1	1.325
NVNT	GFSK	2475	Ant1	1.367

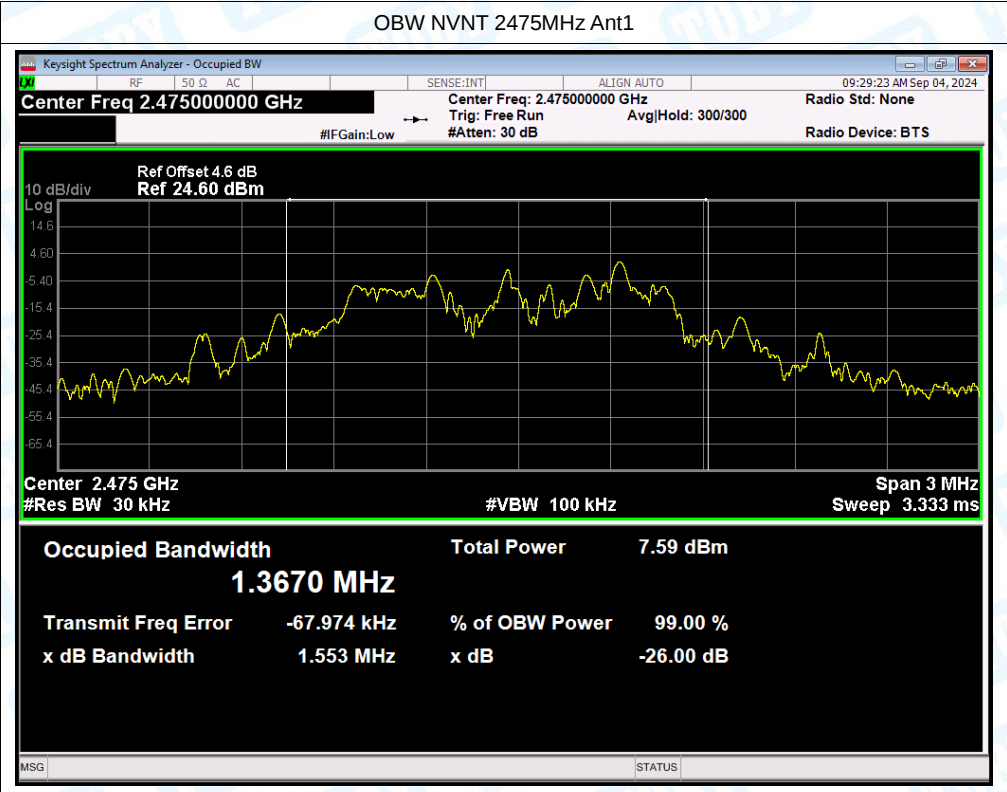
Test Graphs

OBW NVNT 2405MHz Ant1



OBW NVNT 2440MHz Ant1





5.Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	GFSK	2405	Ant1	-2.589	8	Pass
NVNT	GFSK	2440	Ant1	-2.797	8	Pass
NVNT	GFSK	2475	Ant1	-3.187	8	Pass

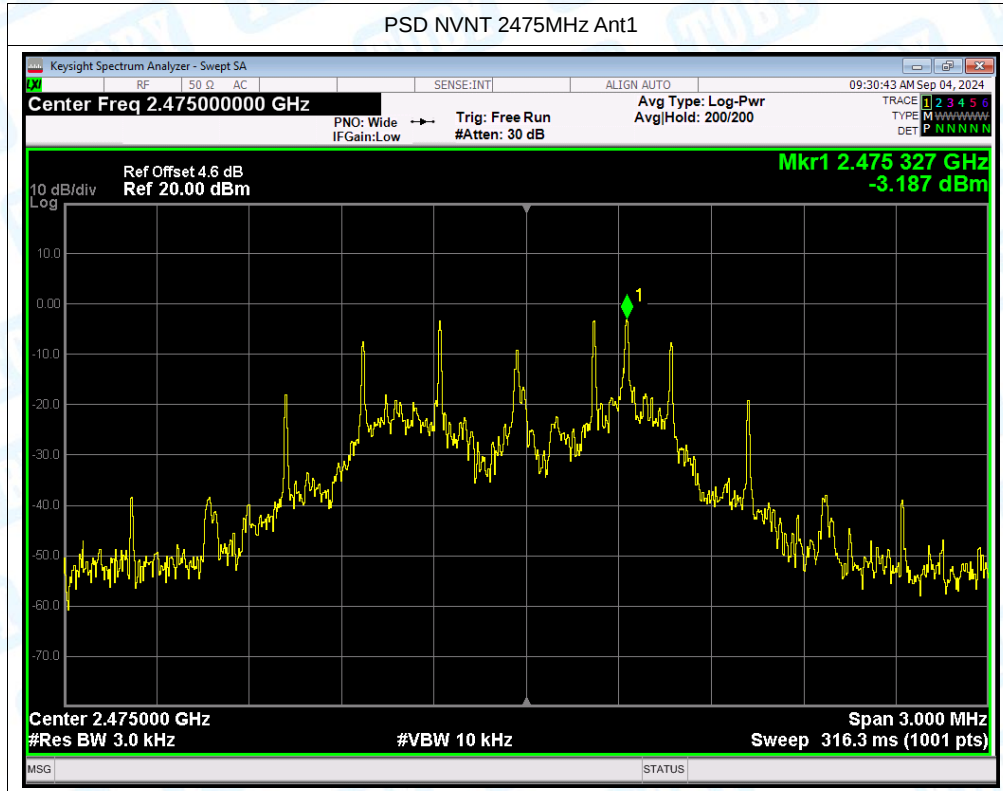
Test Graphs

PSD NVNT 2405MHz Ant1



PSD NVNT 2440MHz Ant1



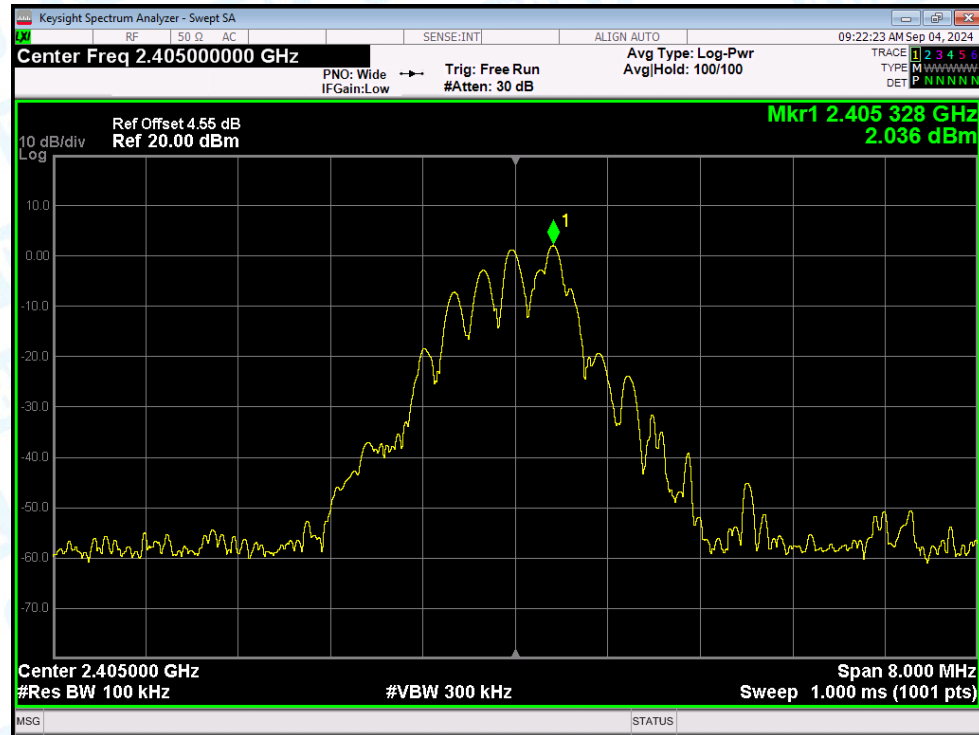


6.Band Edge

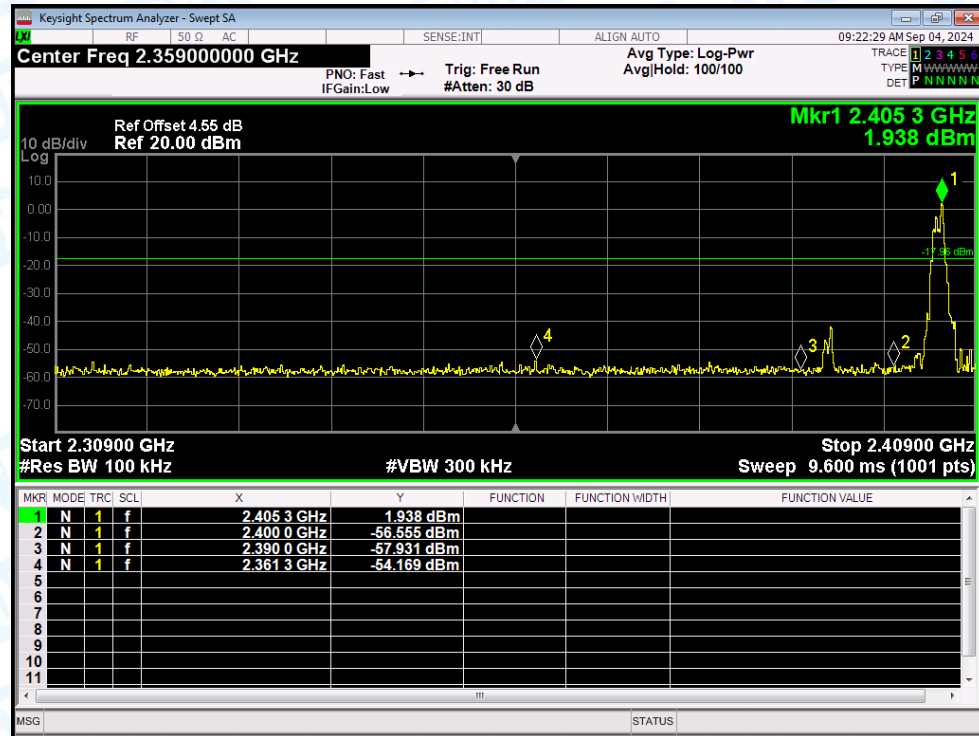
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	GFSK	2405	Ant1	-56.21	-20	Pass
NVNT	GFSK	2475	Ant1	-45.35	-20	Pass

Test Graphs

Band Edge NVNT 2405MHz Ant1 Ref



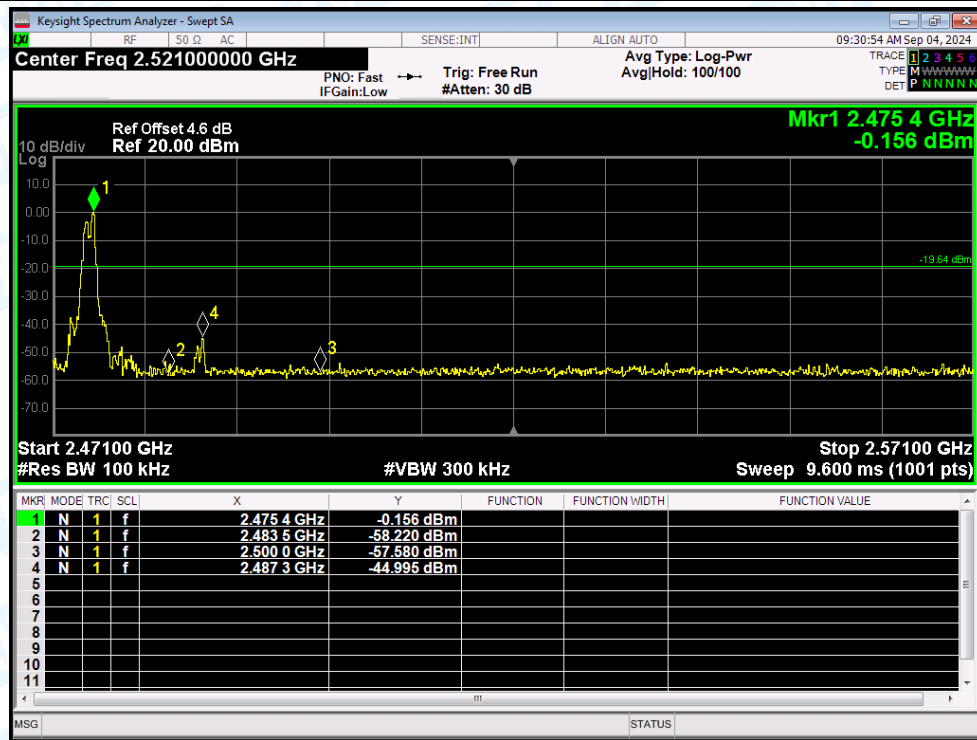
Band Edge NVNT 2405MHz Ant1 Emission



Band Edge NVNT 2475MHz Ant1 Ref



Band Edge NVNT 2475MHz Ant1 Emission

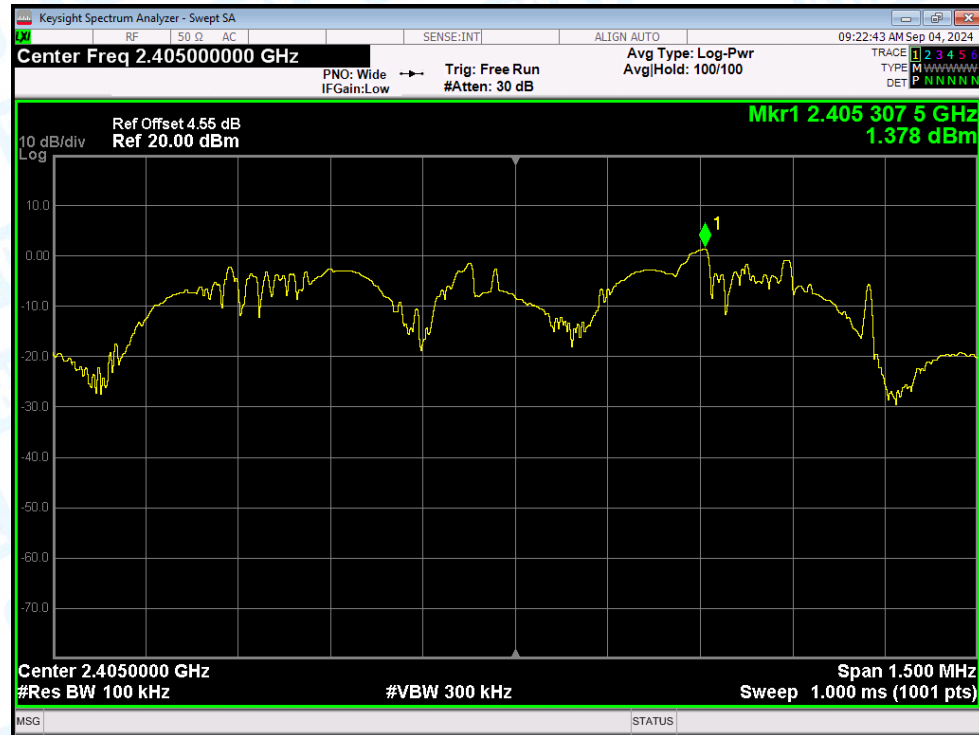


7. Conducted RF Spurious Emission

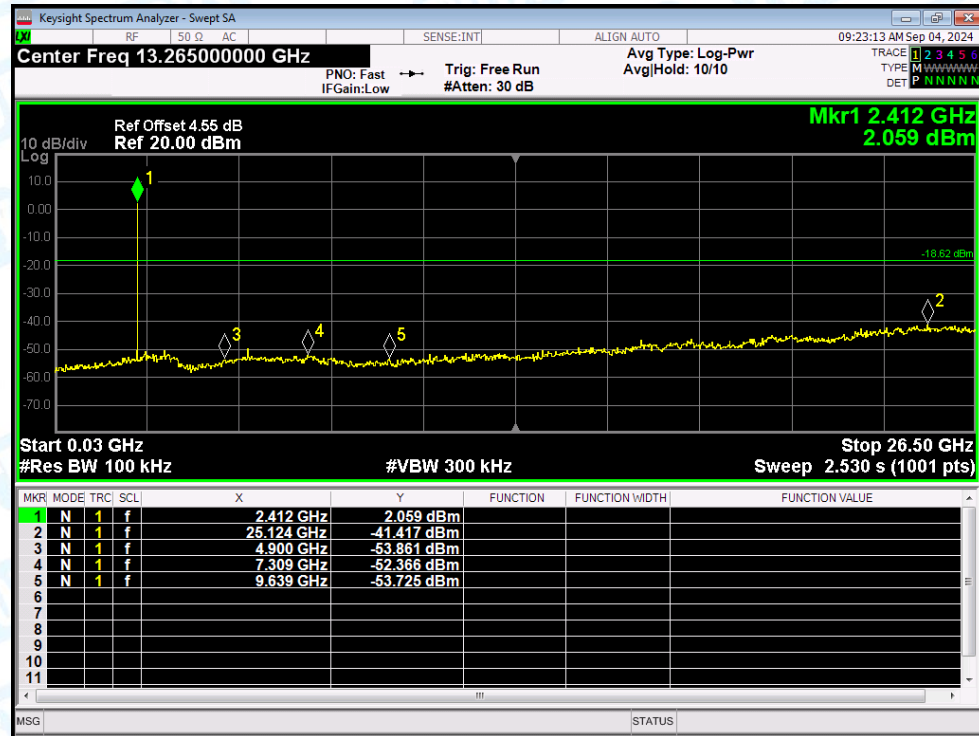
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	GFSK	2405	Ant1	-42.8	-20	Pass
NVNT	GFSK	2440	Ant1	-43.45	-20	Pass
NVNT	GFSK	2475	Ant1	-43	-20	Pass

Test Graphs

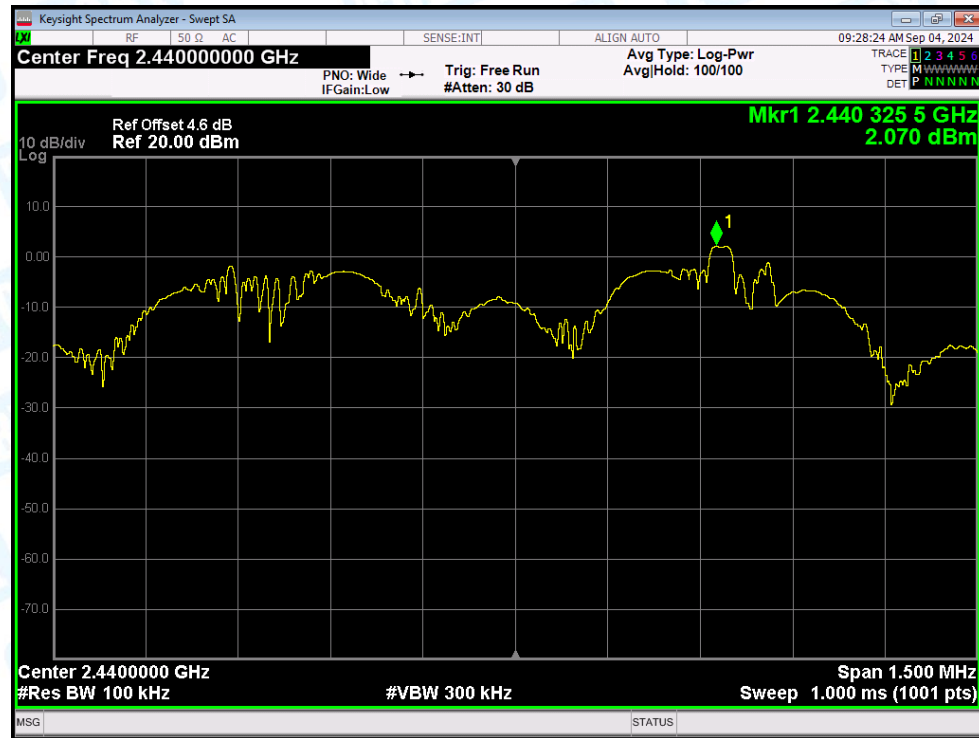
Tx. Spurious NVNT 2405MHz Ant1 Ref



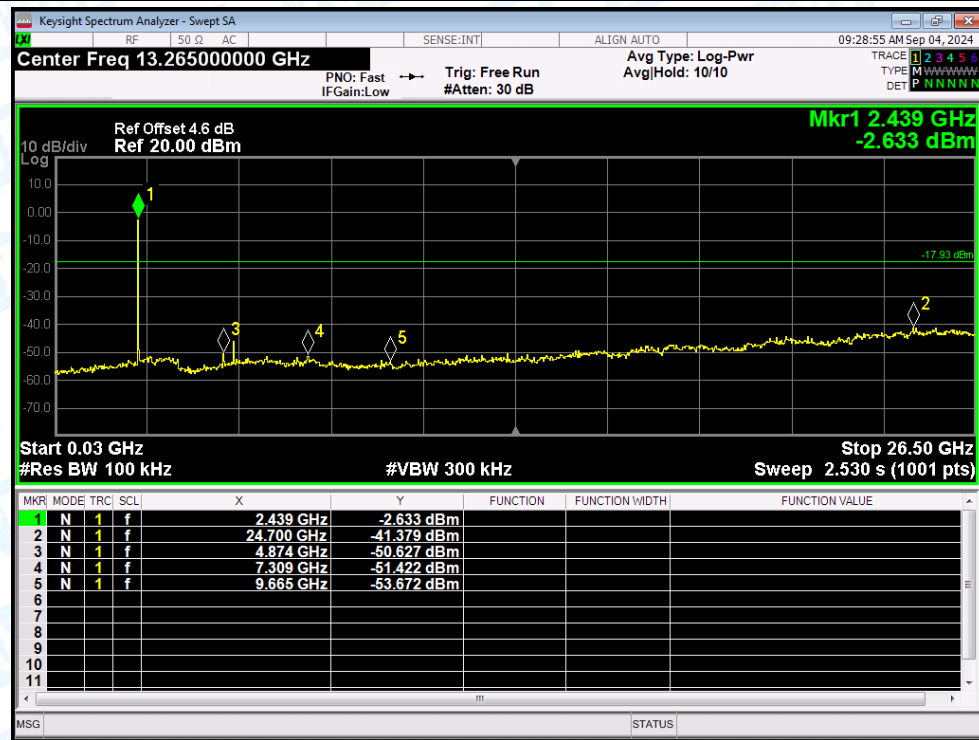
Tx. Spurious NVNT 2405MHz Ant1 Emission



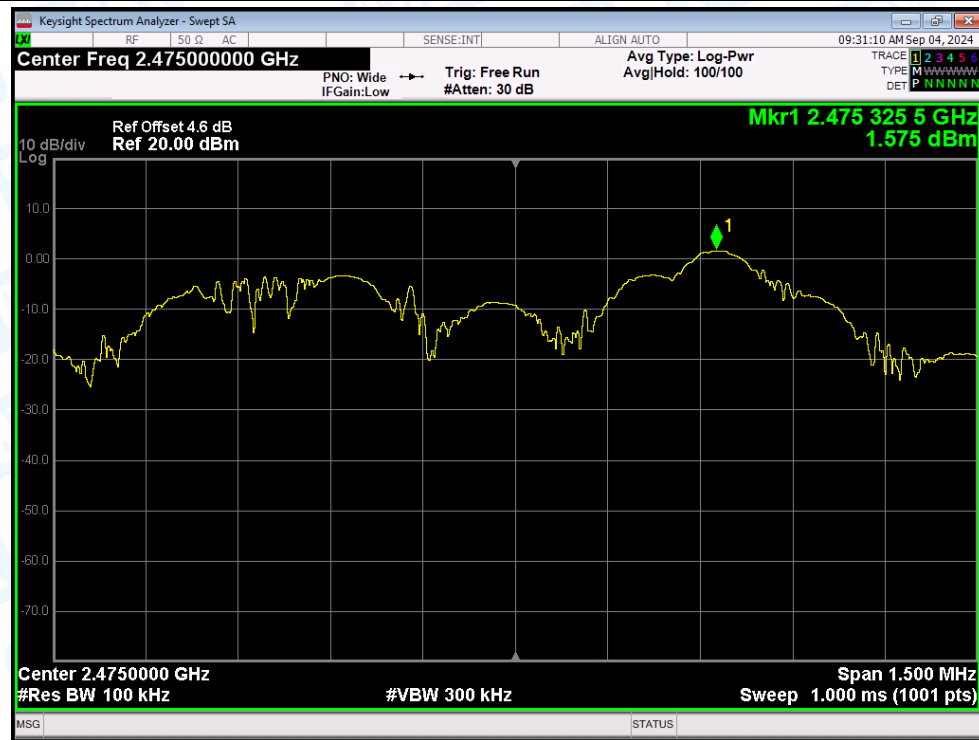
Tx. Spurious NVNT 2440MHz Ant1 Ref



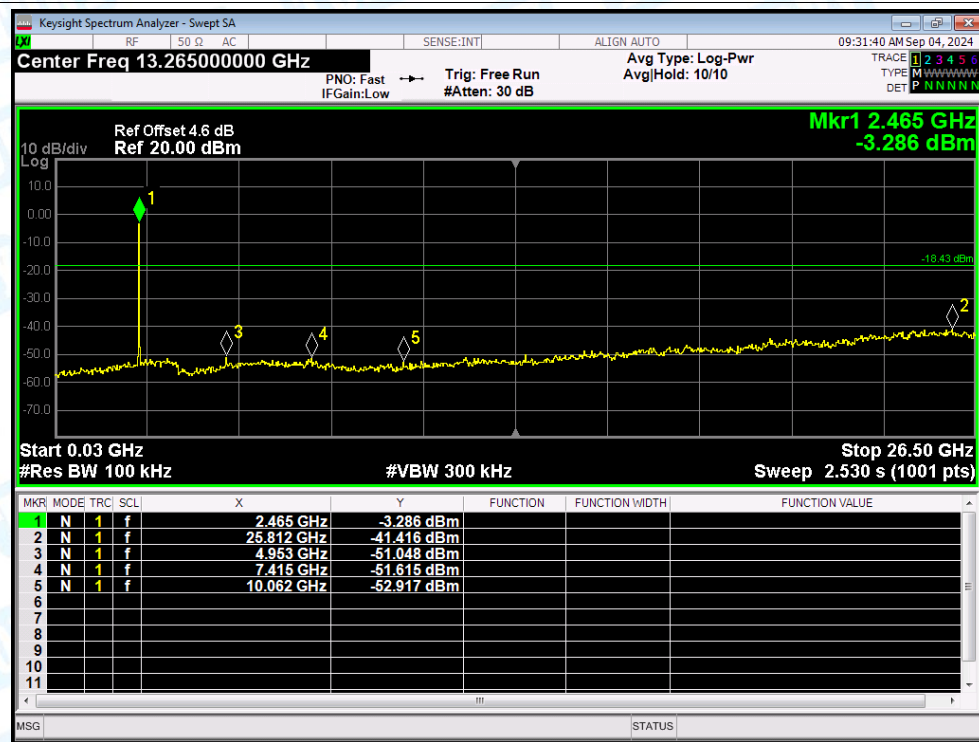
Tx. Spurious NVNT 2440MHz Ant1 Emission



Tx. Spurious NVNT 2475MHz Ant1 Ref



Tx. Spurious NVNT 2475MHz Ant1 Emission

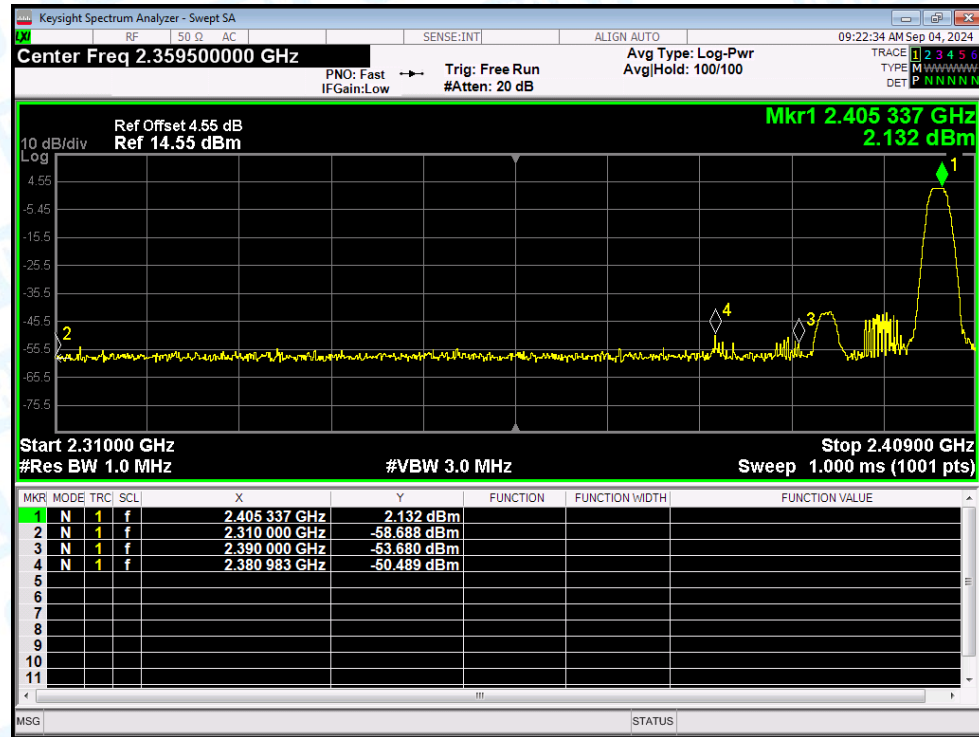


8.Restrict Band

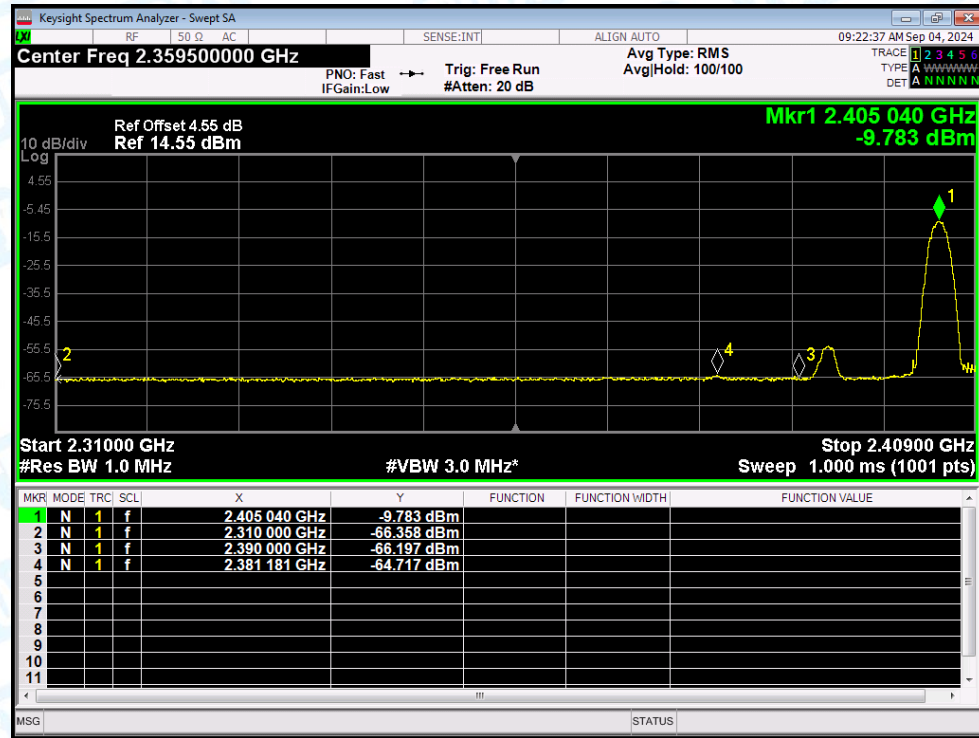
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	GFSK	2405	Ant1	2310	-58.69	2	-	38.57	Peak	74	Pass
NVNT	GFSK	2405	Ant1	2310	-66.36	2	10.03	40.93	Average	54	Pass
NVNT	GFSK	2405	Ant1	2380.983	-50.49	2	-	46.77	Peak	74	Pass
NVNT	GFSK	2405	Ant1	2381.181	-64.72	2	10.03	42.57	Average	54	Pass
NVNT	GFSK	2405	Ant1	2390	-53.68	2	-	43.58	Peak	74	Pass
NVNT	GFSK	2405	Ant1	2390	-66.2	2	10.03	41.09	Average	54	Pass
NVNT	GFSK	2475	Ant1	2483.5	-56.99	2	-	40.27	Peak	74	Pass
NVNT	GFSK	2475	Ant1	2483.5	-65.1	2	10.07	42.23	Average	54	Pass
NVNT	GFSK	2475	Ant1	2487.24	-42.54	2	-	54.72	Peak	74	Pass
NVNT	GFSK	2475	Ant1	2487.066	-54.26	2	10.07	53.07	Average	54	Pass
NVNT	GFSK	2475	Ant1	2500	-57.73	2	-	39.53	Peak	74	Pass
NVNT	GFSK	2475	Ant1	2500	-64.7	2	10.07	42.63	Average	54	Pass

Test Graphs

Restrict Band NVNT 2405MHz Ant1 Peak



Restrict Band NVNT 2405MHz Ant1 Average



Restrict Band NVNT 2475MHz Ant1 Peak



Restrict Band NVNT 2475MHz Ant1 Average

