

RF Test Data for 2.4G (Conducted Measurements)

General Description of EUT	
Product Name:	Remote control ball
Test Model:	Q01
Sample ID:	HC-C-202404-0185-01-01
Environmental Conditions	
Temperature:	25.2℃
Relative Humidity:	52.6%
Test Voltage:	DC 3.7V
Test Engineer:	Jolin Lee
Note: For a more detailed features description, please refer to the report TBR-C-202404-0185-20 The report only show the worst case data.	

Contents

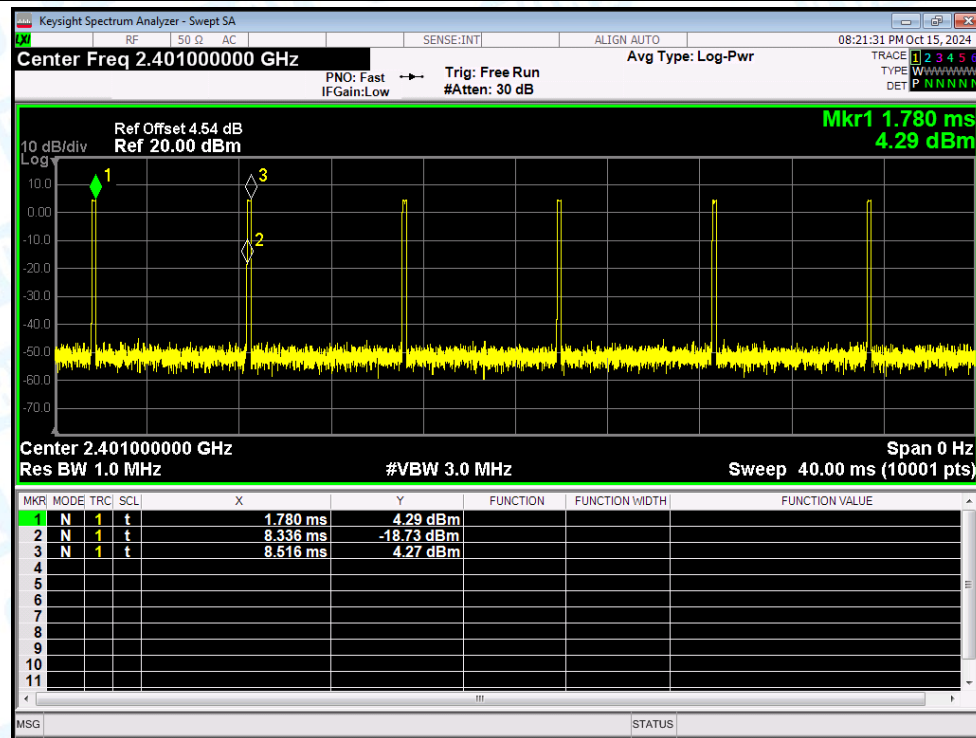
1. Duty Cycle.....	3
2. Restrict Band.....	6
3. Maximum Conducted Output Power.....	9
4. -6dB Bandwidth.....	12
5. Occupied Channel Bandwidth.....	15
6. Maximum Power Spectral Density Level.....	18
7. Band Edge.....	21
8. Conducted RF Spurious Emission.....	24

1. Duty Cycle

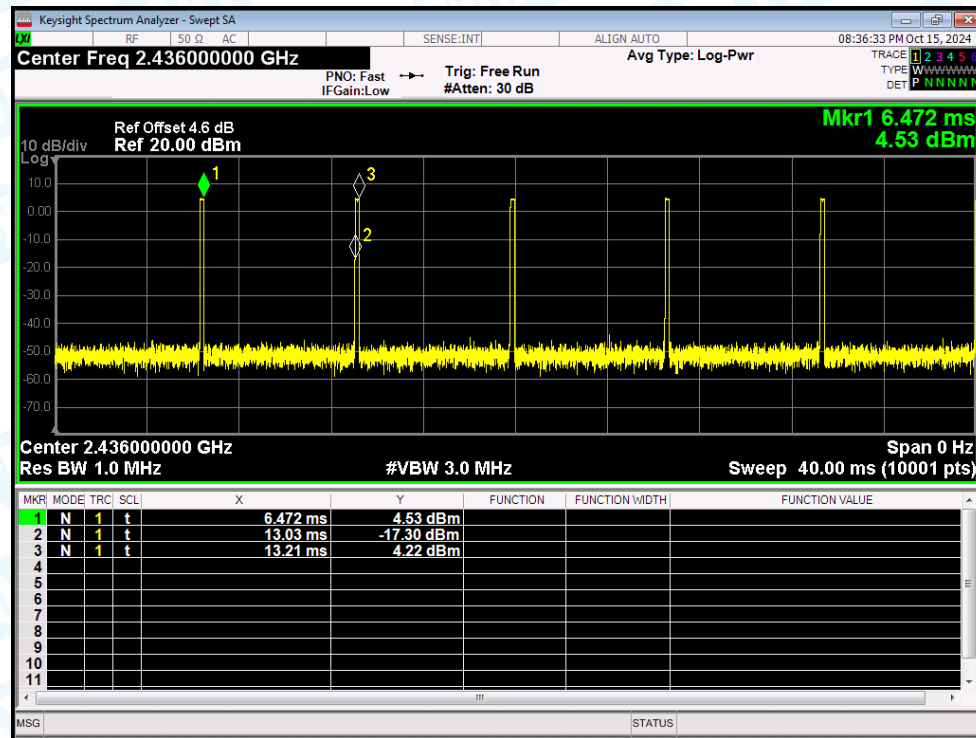
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	2.4G	2401	Ant1	2.67	15.73	5.56
NVNT	2.4G	2436	Ant1	2.67	15.73	5.56
NVNT	2.4G	2470	Ant1	2.67	15.73	5.56

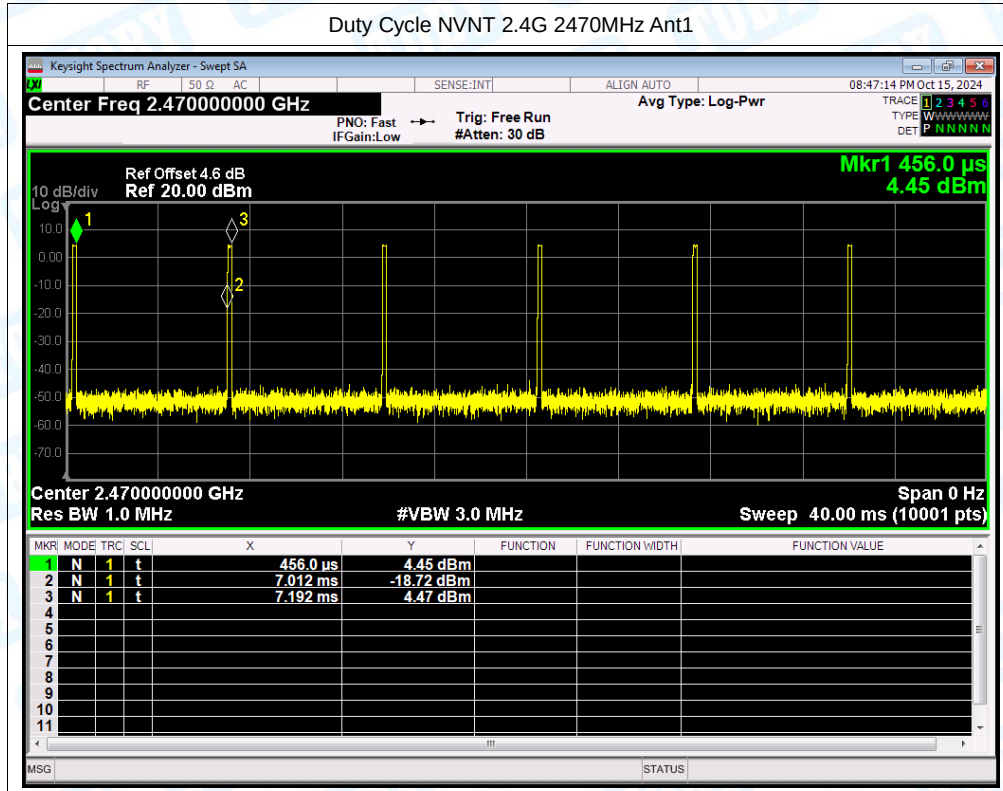
Test Graphs

Duty Cycle NVNT 2.4G 2401MHz Ant1



Duty Cycle NVNT 2.4G 2436MHz Ant1



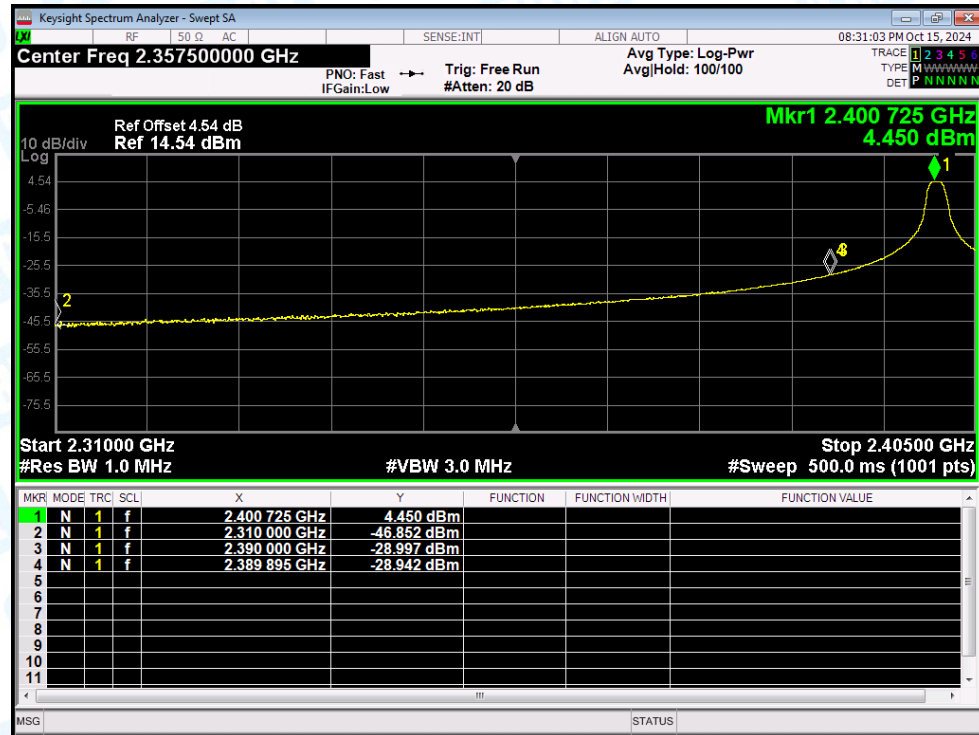


2. Restrict Band

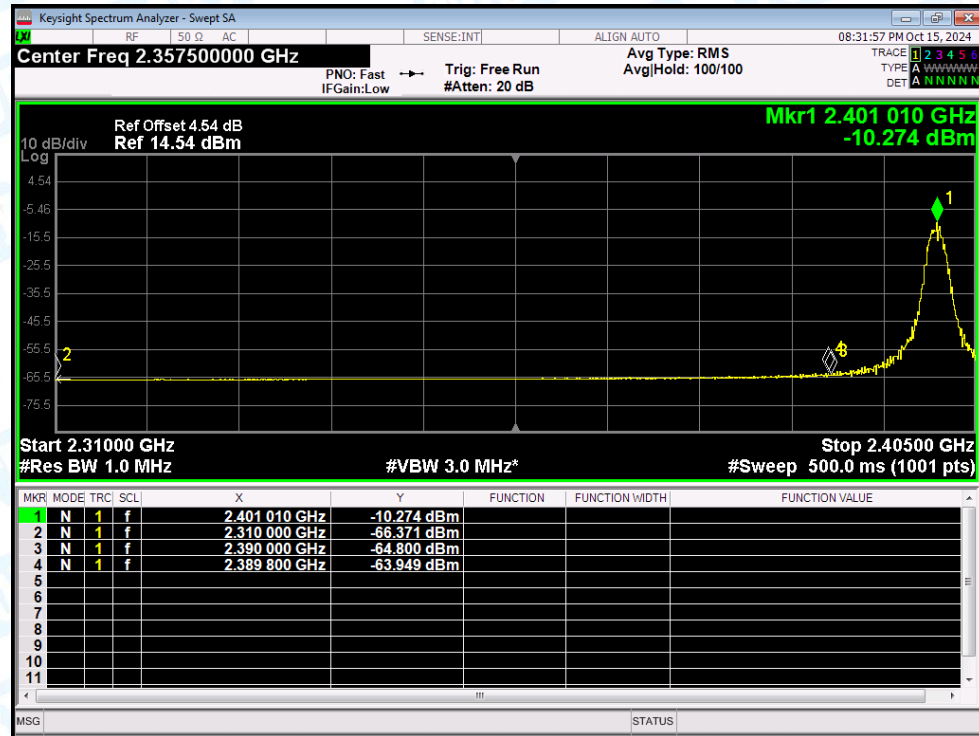
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	2.4G	2401	Ant1	2310	-46.85	2	-	50.41	Peak	74	Pass
NVNT	2.4G	2401	Ant1	2310	-66.37	2	15.73	46.62	Average	54	Pass
NVNT	2.4G	2401	Ant1	2389.895	-28.94	2	-	68.32	Peak	74	Pass
NVNT	2.4G	2401	Ant1	2389.8	-63.95	2	15.73	49.04	Average	54	Pass
NVNT	2.4G	2401	Ant1	2390	-29	2	-	68.26	Peak	74	Pass
NVNT	2.4G	2401	Ant1	2390	-64.8	2	15.73	48.19	Average	54	Pass
NVNT	2.4G	2470	Ant1	2483.5	-30.88	2	-	66.38	Peak	74	Pass
NVNT	2.4G	2470	Ant1	2483.5	-64.67	2	15.73	48.32	Average	54	Pass
NVNT	2.4G	2470	Ant1	2483.578	-30.69	2	-	66.57	Peak	74	Pass
NVNT	2.4G	2470	Ant1	2483.68	-64.31	2	15.73	48.68	Average	54	Pass
NVNT	2.4G	2470	Ant1	2500	-37.32	2	-	59.94	Peak	74	Pass
NVNT	2.4G	2470	Ant1	2500	-65.3	2	15.73	47.69	Average	54	Pass

Test Graphs

Restrict Band NVNT 2.4G 2401MHz Ant1 Peak



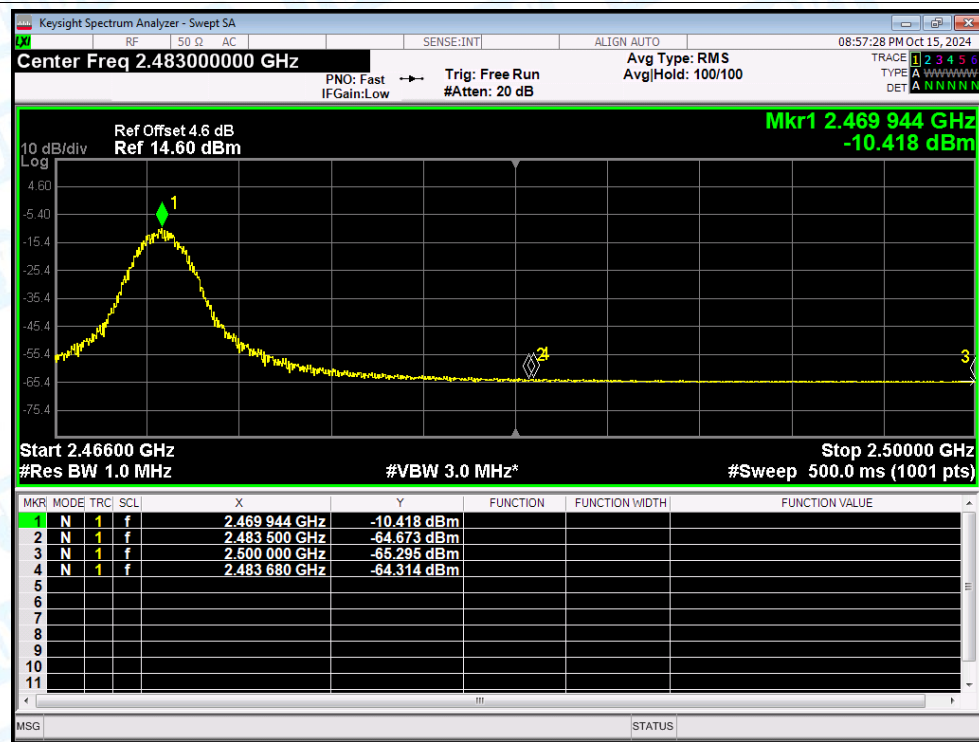
Restrict Band NVNT 2.4G 2401MHz Ant1 Average



Restrict Band NVNT 2.4G 2470MHz Ant1 Peak



Restrict Band NVNT 2.4G 2470MHz Ant1 Average

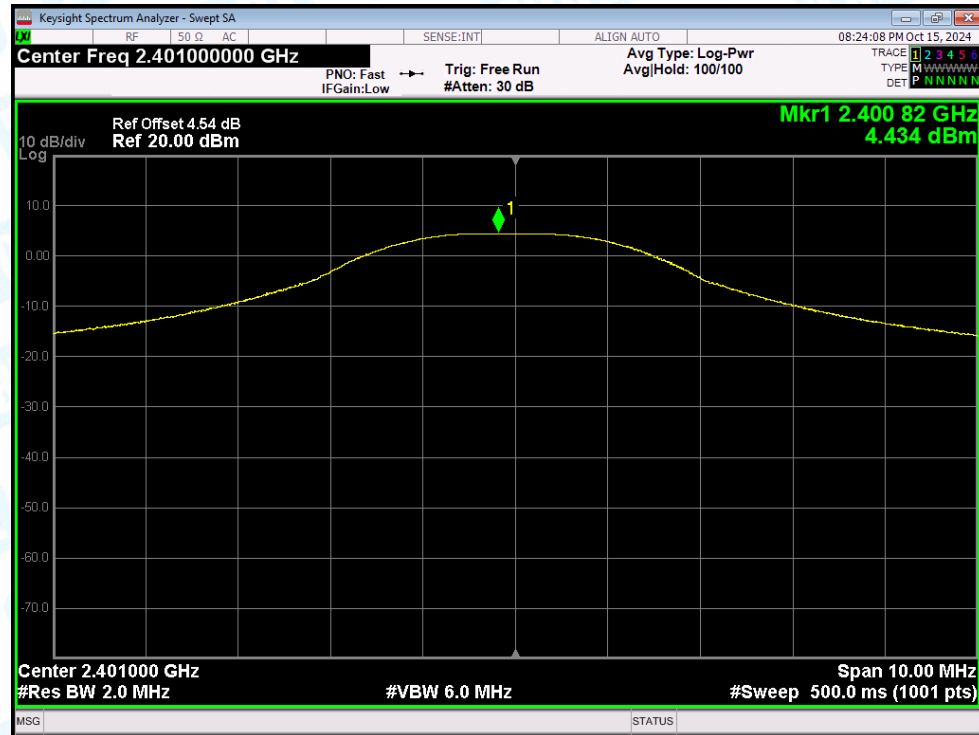


3. Maximum Conducted Output Power

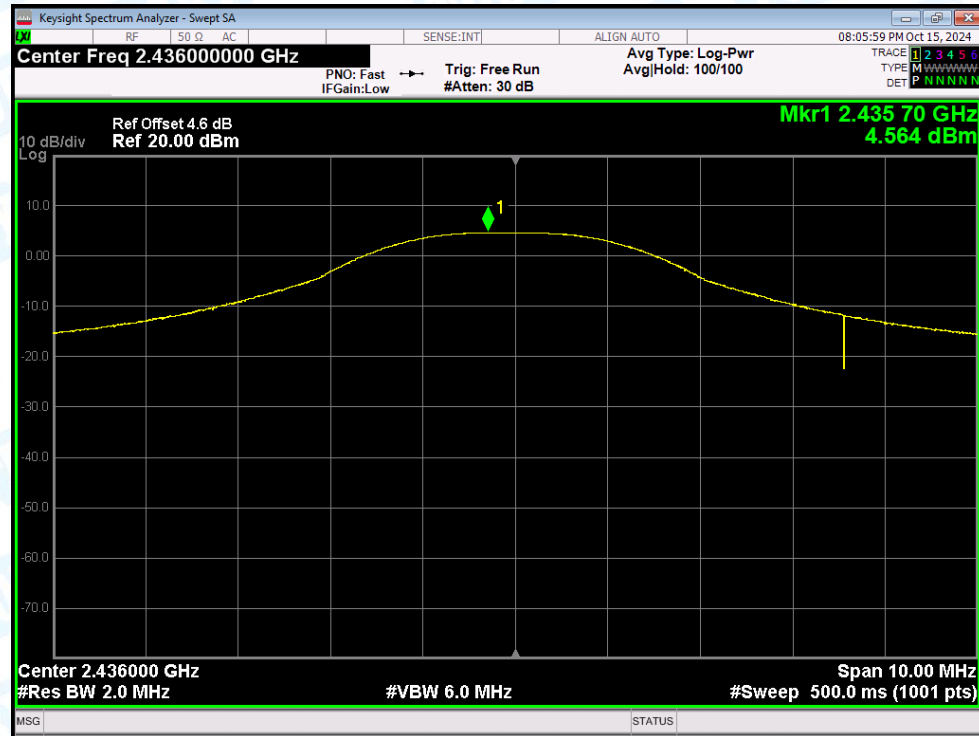
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	2.4G	2401	Ant1	4.434	30	Pass
NVNT	2.4G	2436	Ant1	4.564	30	Pass
NVNT	2.4G	2470	Ant1	4.589	30	Pass

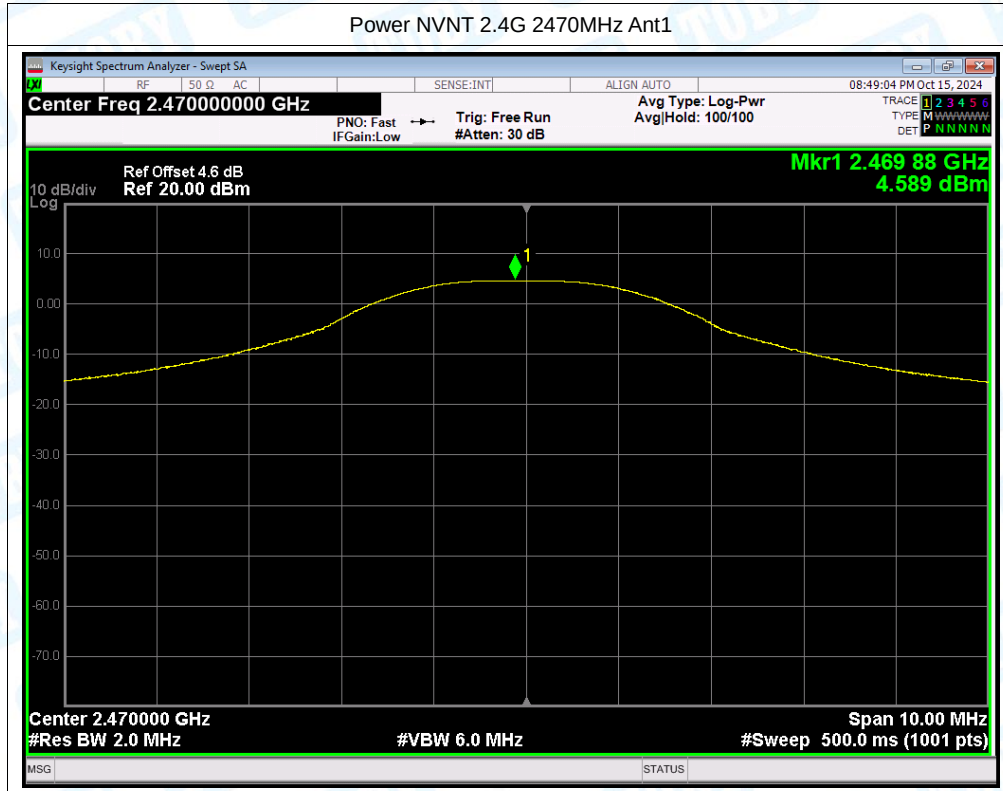
Test Graphs

Power NVNT 2.4G 2401MHz Ant1



Power NVNT 2.4G 2436MHz Ant1



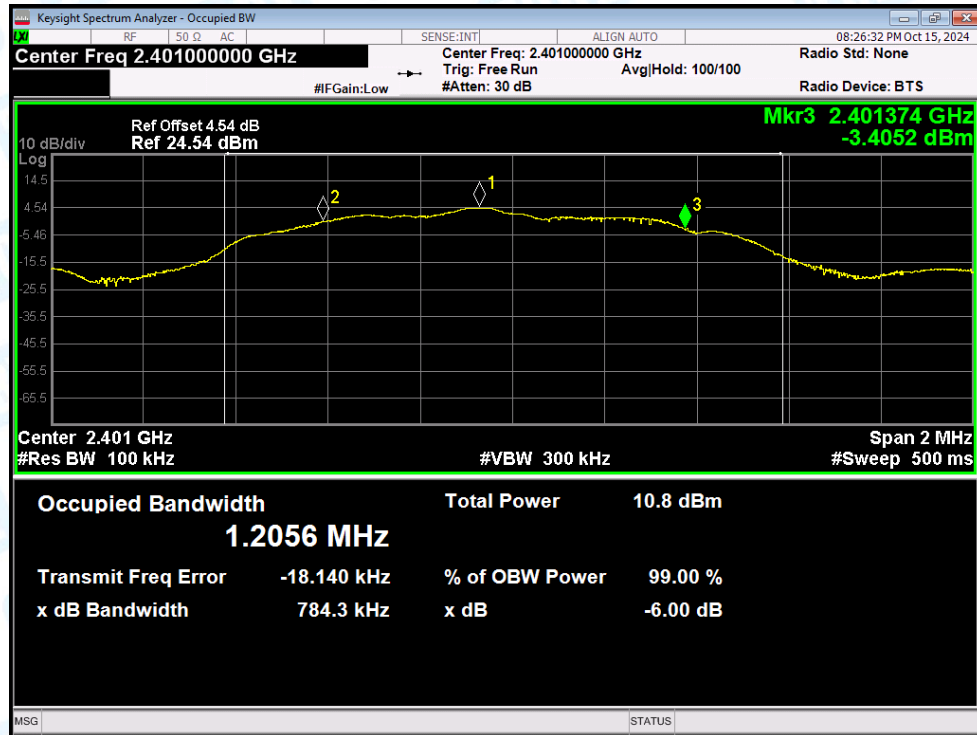


4. -6dB Bandwidth

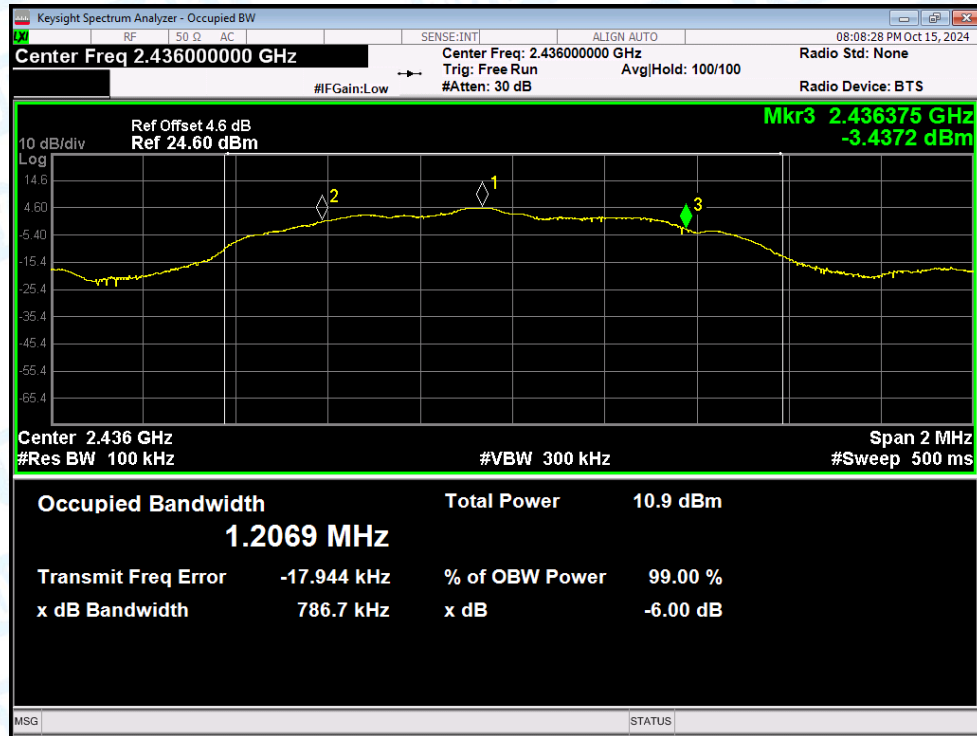
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	2.4G	2401	Ant1	0.78	0.5	Pass
NVNT	2.4G	2436	Ant1	0.79	0.5	Pass
NVNT	2.4G	2470	Ant1	0.82	0.5	Pass

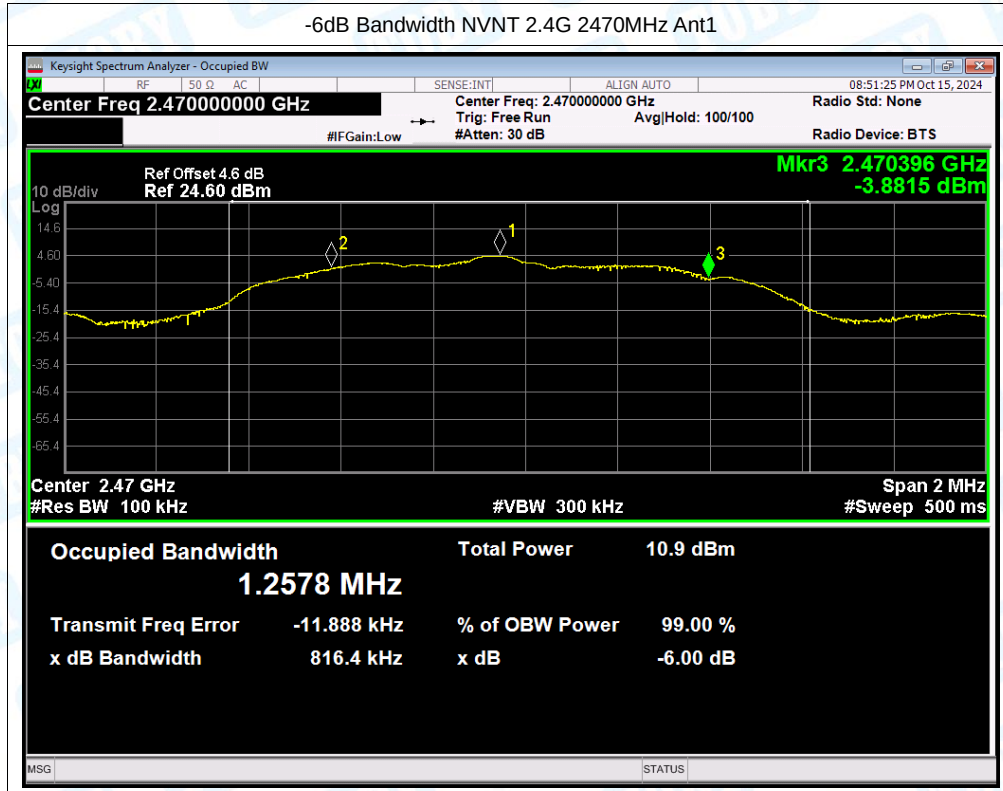
Test Graphs

-6dB Bandwidth NVNT 2.4G 2401MHz Ant1



-6dB Bandwidth NVNT 2.4G 2436MHz Ant1



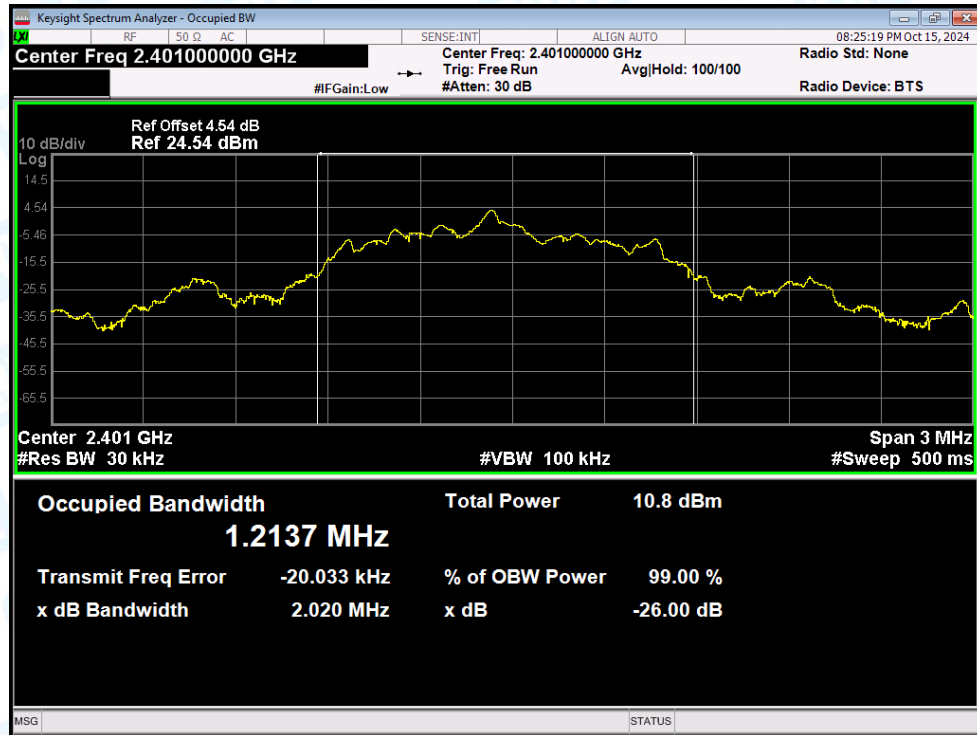


5. Occupied Channel Bandwidth

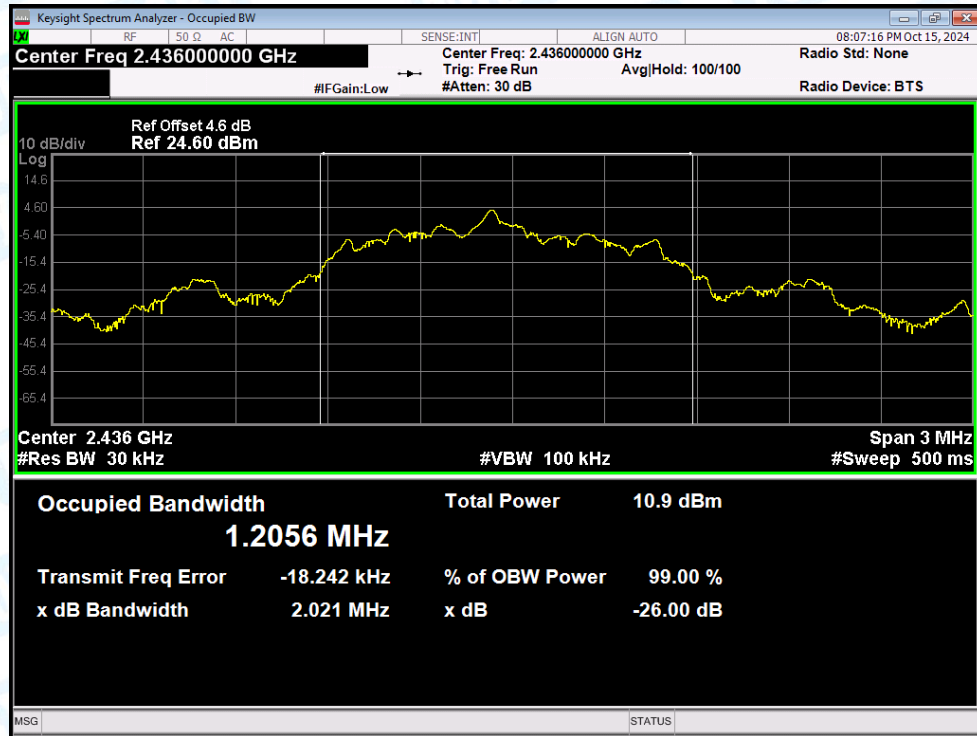
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	2.4G	2401	Ant1	1.214
NVNT	2.4G	2436	Ant1	1.206
NVNT	2.4G	2470	Ant1	1.311

Test Graphs

OBW NVNT 2.4G 2401MHz Ant1



OBW NVNT 2.4G 2436MHz Ant1



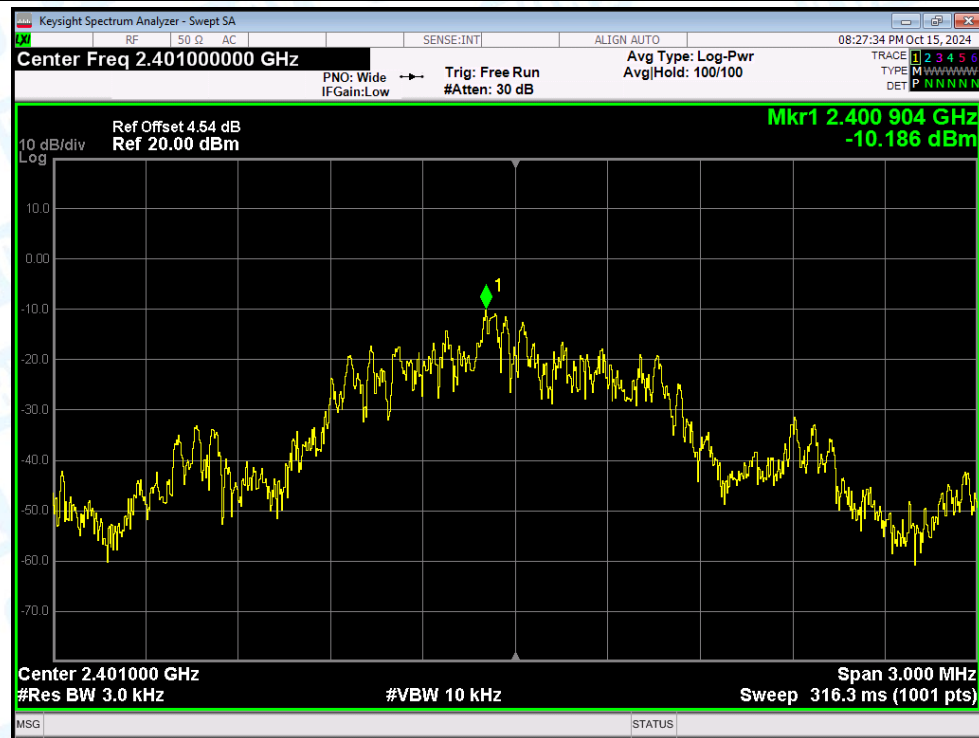


6. Maximum Power Spectral Density Level

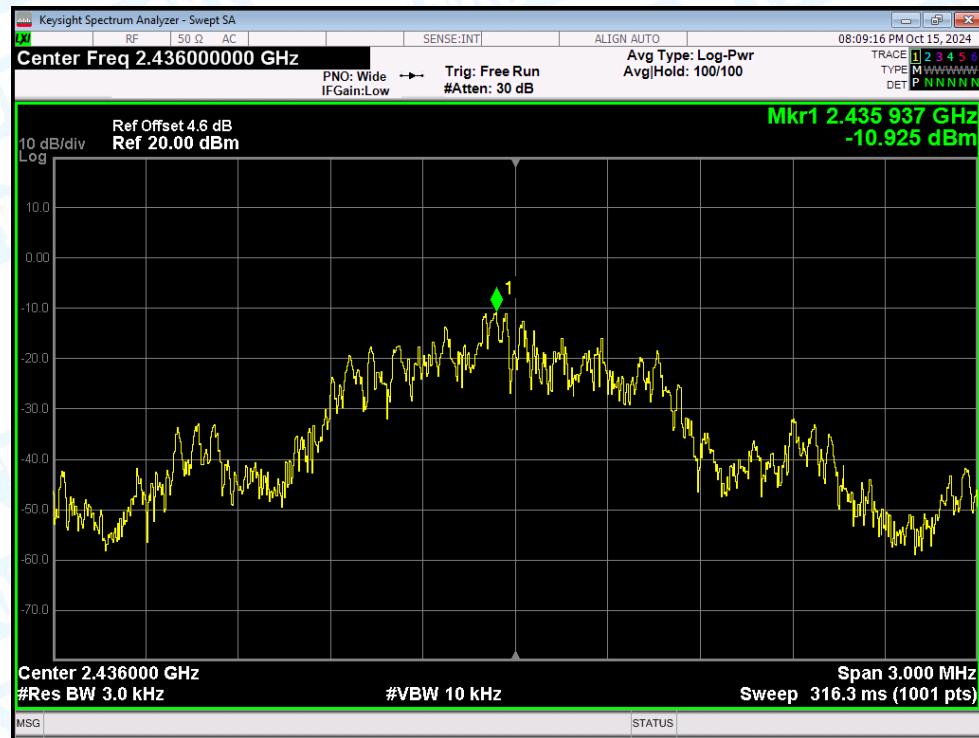
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	2.4G	2401	Ant1	-10.186	8	Pass
NVNT	2.4G	2436	Ant1	-10.925	8	Pass
NVNT	2.4G	2470	Ant1	-11.199	8	Pass

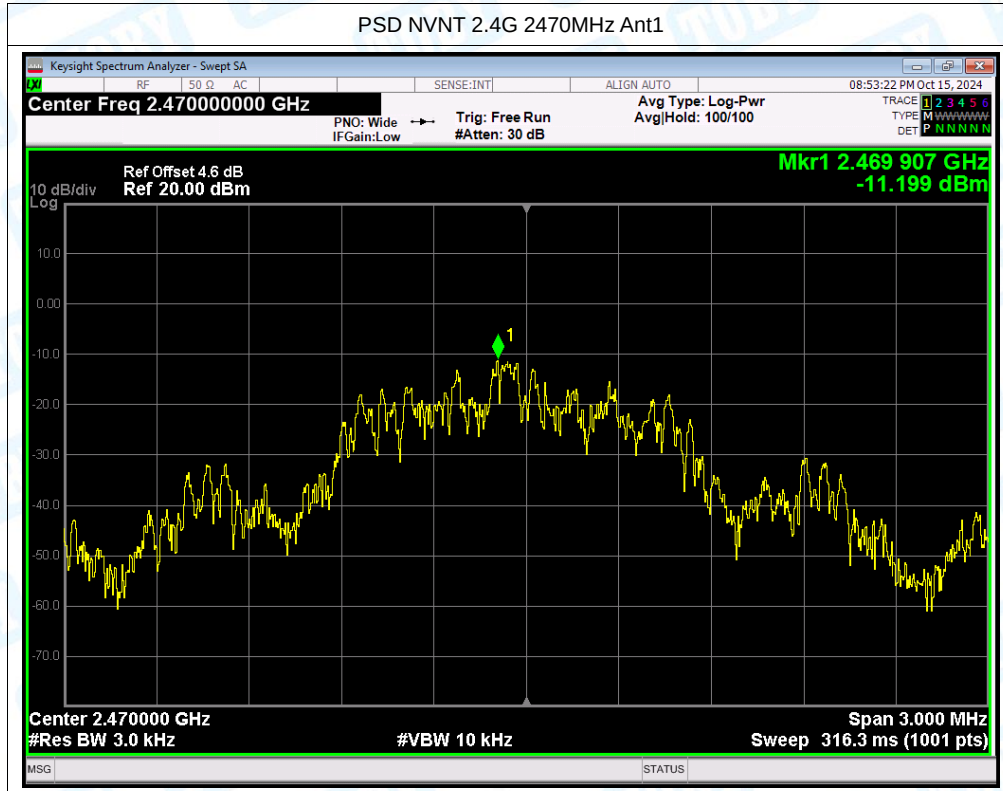
Test Graphs

PSD NVNT 2.4G 2401MHz Ant1



PSD NVNT 2.4G 2436MHz Ant1



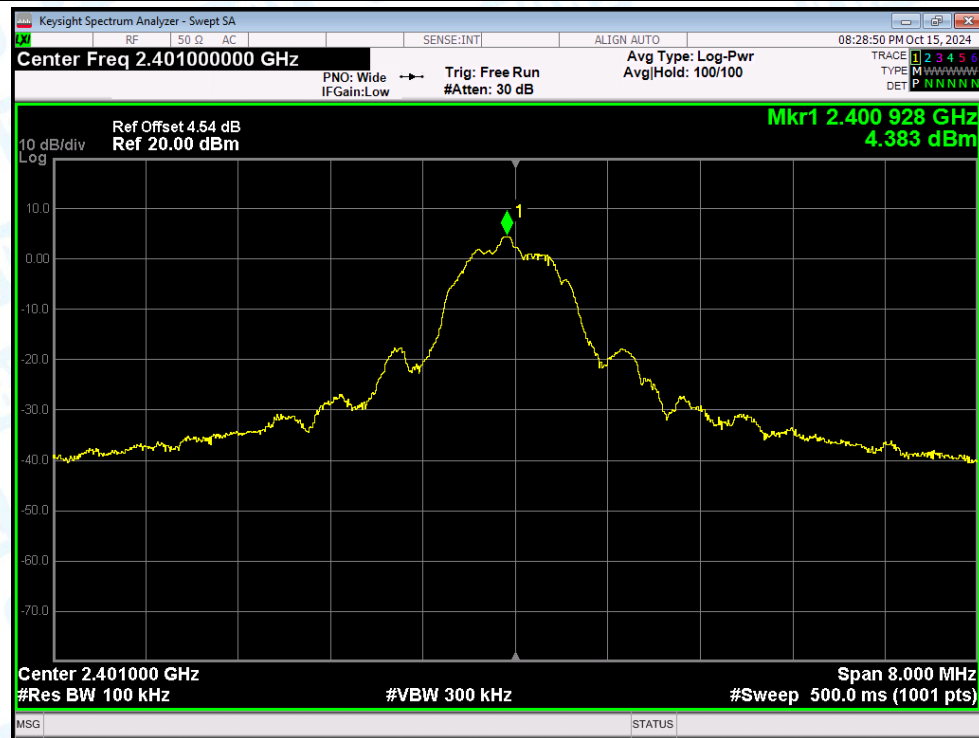


7. Band Edge

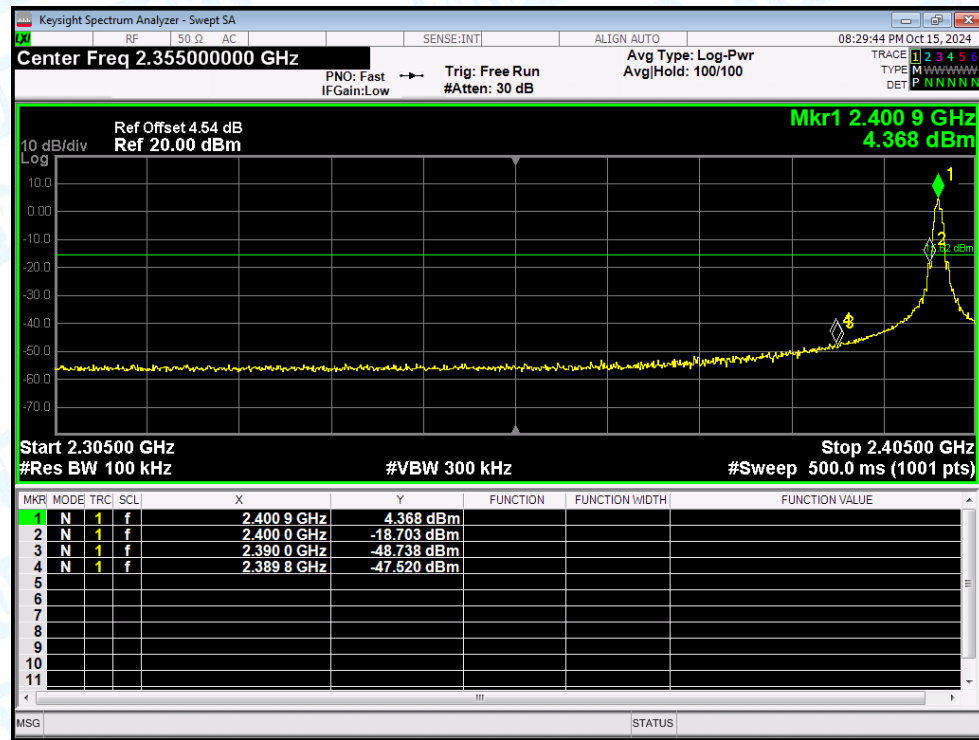
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2401	Ant1	-51.9	-20	Pass
NVNT	2.4G	2470	Ant1	-52.89	-20	Pass

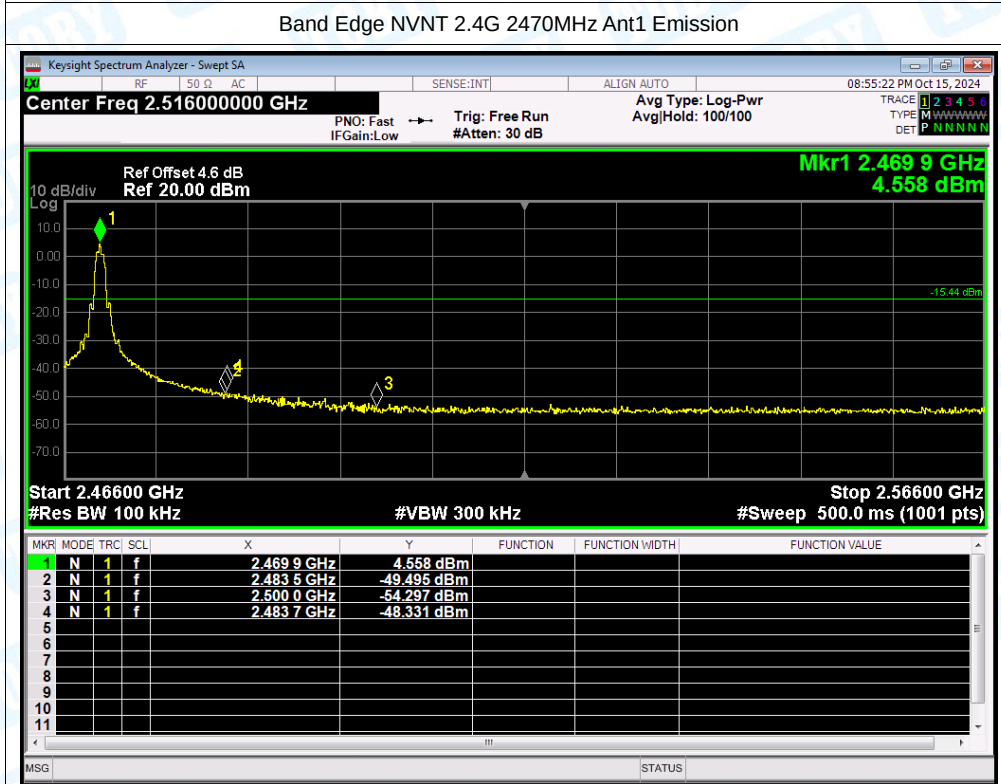
Test Graphs

Band Edge NVNT 2.4G 2401MHz Ant1 Ref



Band Edge NVNT 2.4G 2401MHz Ant1 Emission





8. Conducted RF Spurious Emission

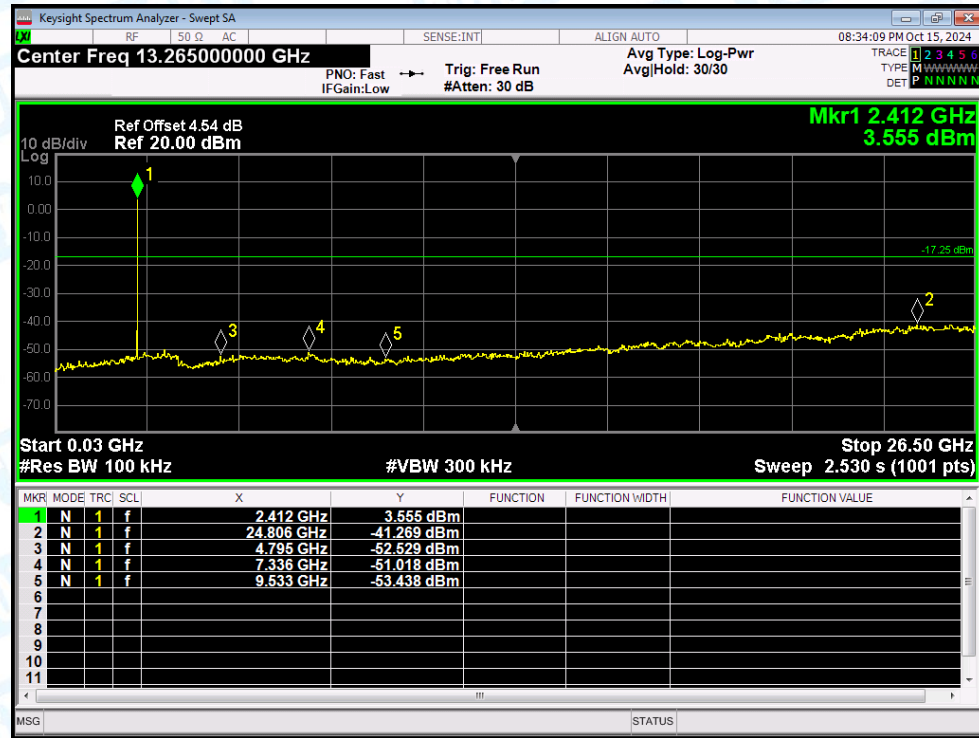
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2401	Ant1	-44.03	-20	Pass
NVNT	2.4G	2436	Ant1	-42.27	-20	Pass
NVNT	2.4G	2470	Ant1	-45.61	-20	Pass

Test Graphs

Tx. Spurious NVNT 2.4G 2401MHz Ant1 Ref



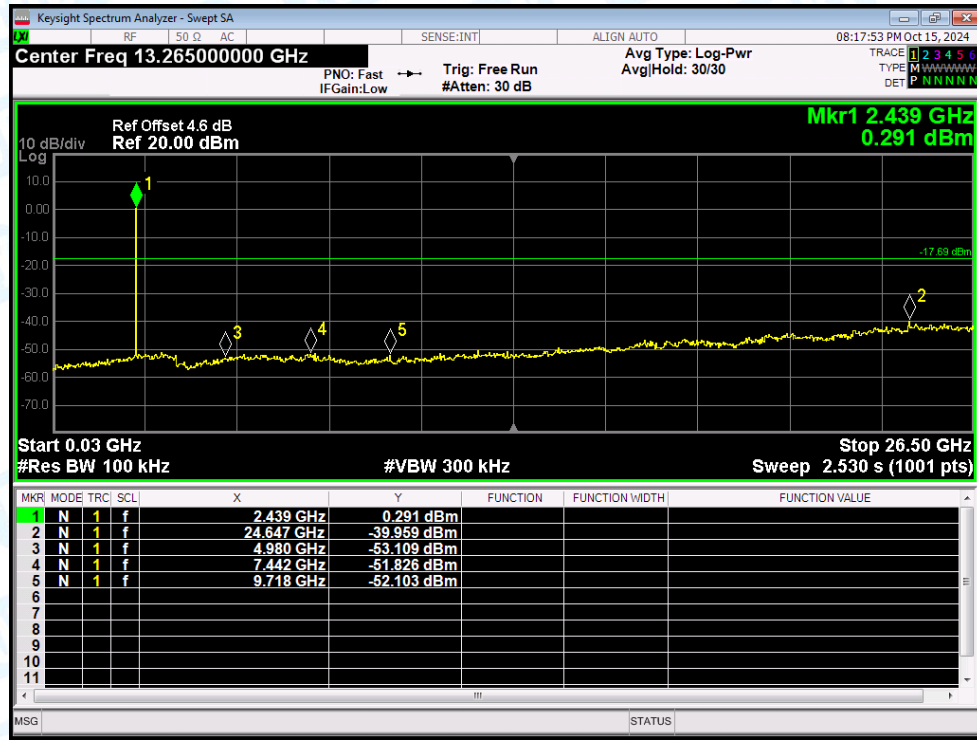
Tx. Spurious NVNT 2.4G 2401MHz Ant1 Emission



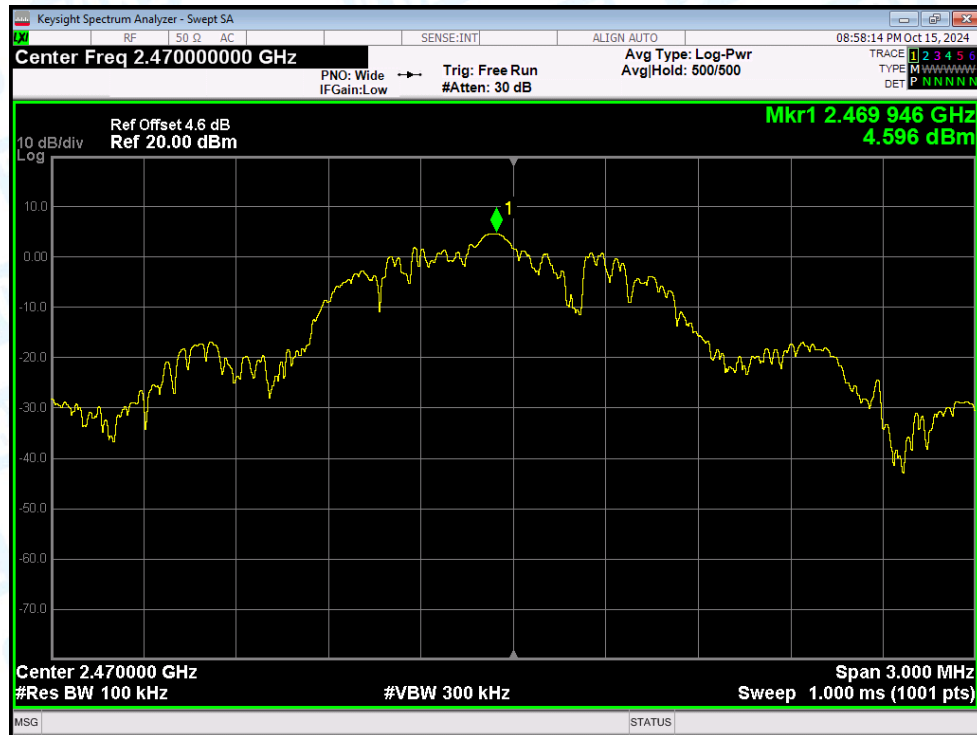
Tx. Spurious NVNT 2.4G 2436MHz Ant1 Ref



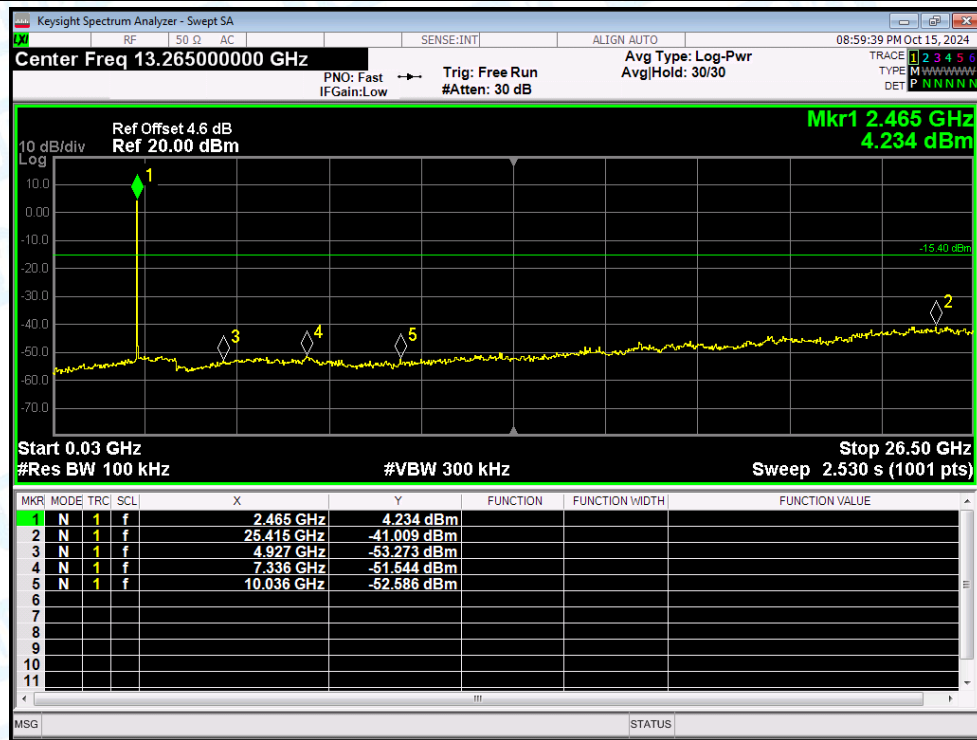
Tx. Spurious NVNT 2.4G 2436MHz Ant1 Emission



Tx. Spurious NVNT 2.4G 2470MHz Ant1 Ref



Tx. Spurious NVNT 2.4G 2470MHz Ant1 Emission



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