

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

General Description of EUT	
<b>Product Name:</b>	<b>2.4GHz Digital Wireless Video Baby Monitor</b>
<b>FCC ID Test Model:</b>	<b>HB6099</b>
<b>IC Test Model:</b>	<b>VT60TR99</b>
<b>Sample ID:</b>	<b>20211008-13_01-2#</b>
Environmental Conditions	
<b>Temperature:</b>	<b>25°C</b>
<b>Relative Humidity:</b>	<b>55%</b>
<b>Test Voltage:</b>	<b>AC 120V/60Hz</b>
<b>Test Engineer:</b>	<b>HEJINGCHANG</b>
Note: For a more detailed features description, please refer to the report TB-FCC185109&TB-IC186027.	

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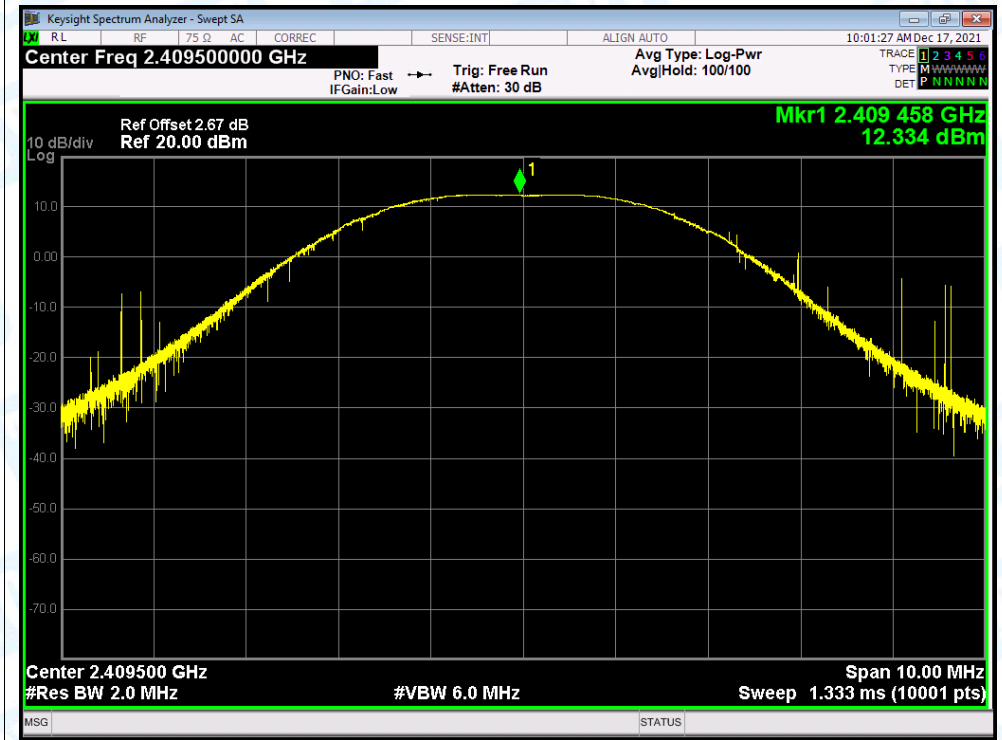


### 1. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	user	2409.5	Ant1	12.334	0	12.334	21	Pass
NVNT	user	2439.5	Ant1	17.058	0	17.058	21	Pass
NVNT	user	2468	Ant1	10.447	0	10.447	21	Pass

Test Graphs

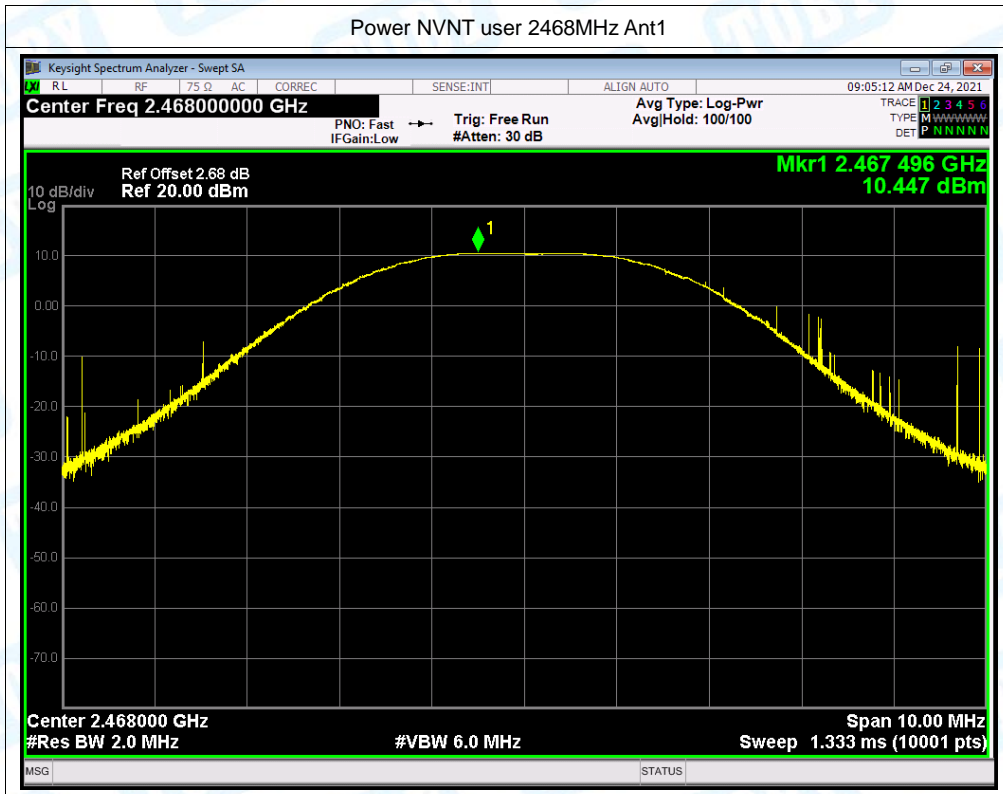
Power NVNT user 2409.5MHz Ant1



Power NVNT user 2439.5MHz Ant1







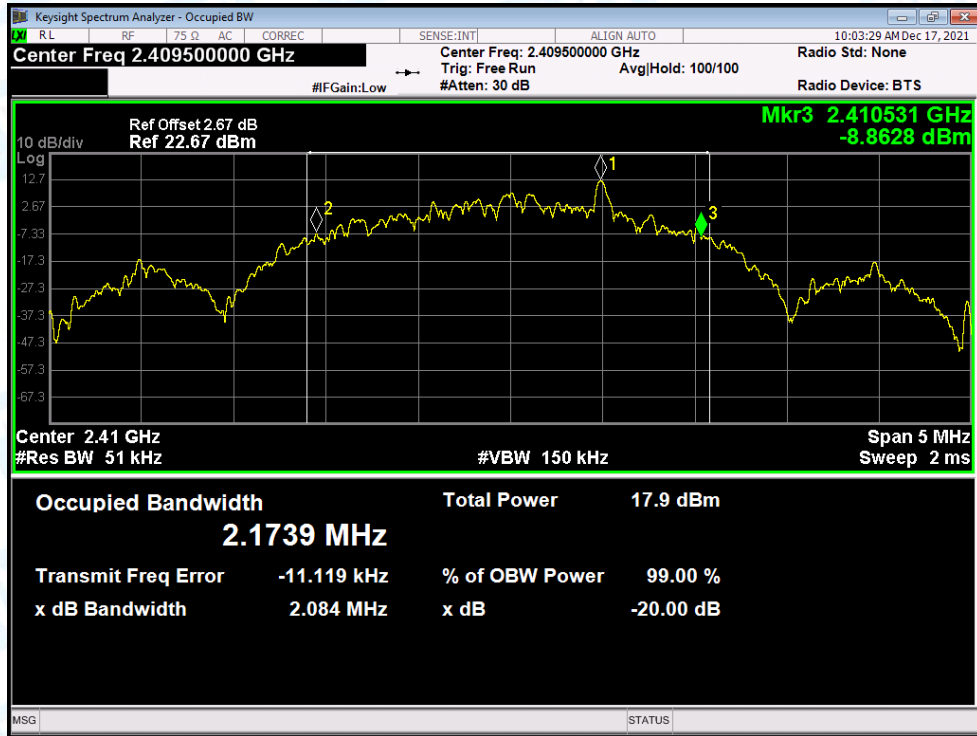
## 2.-20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	20dB Bandwidth *2/3 (MHz)	Verdict
NVNT	user	2409.5	Ant1	2.08	1.39	Pass
NVNT	user	2439.5	Ant1	2.392	1.595	Pass
NVNT	user	2468	Ant1	2.25	1.5	Pass

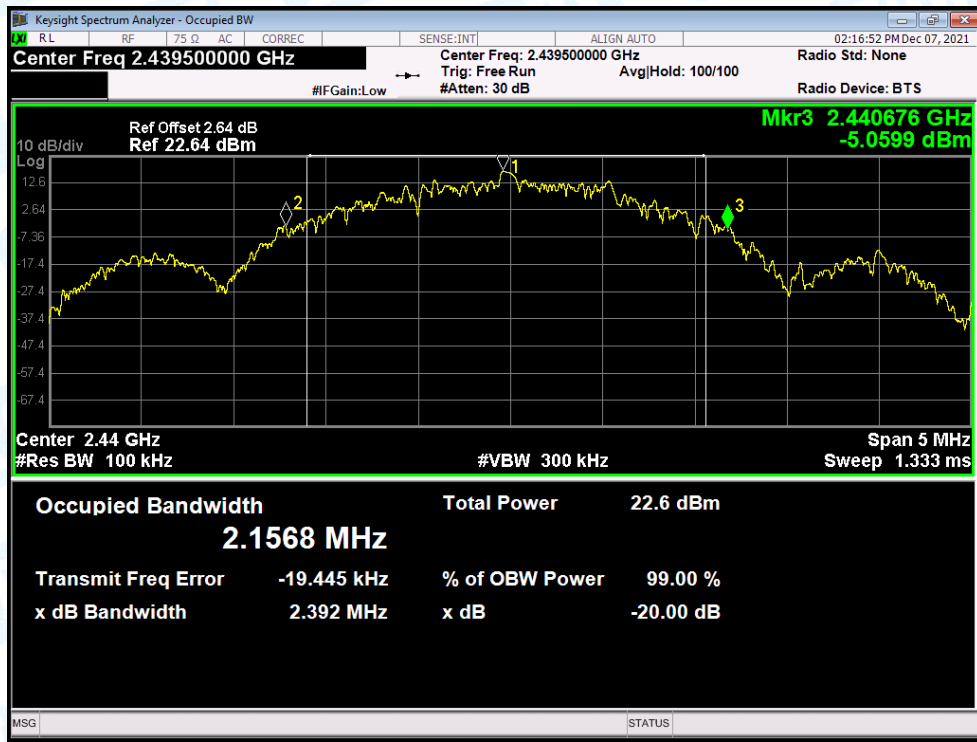


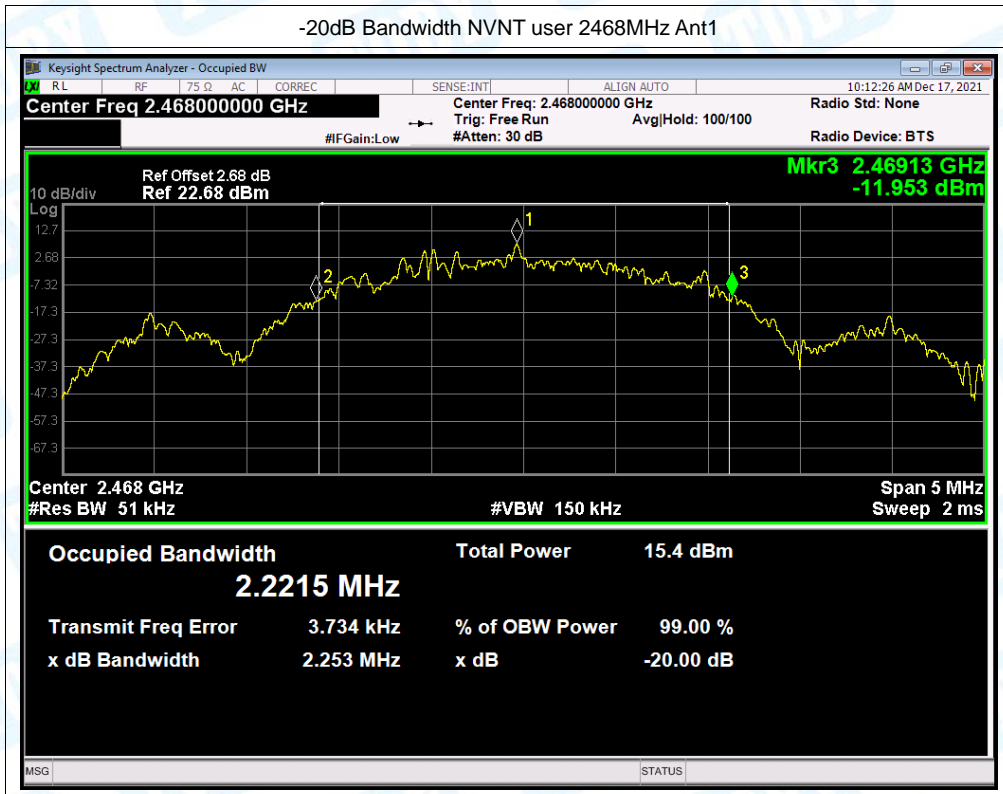
Test Graphs

-20dB Bandwidth NVNT user 2409.5MHz Ant1



-20dB Bandwidth NVNT user 2439.5MHz Ant1





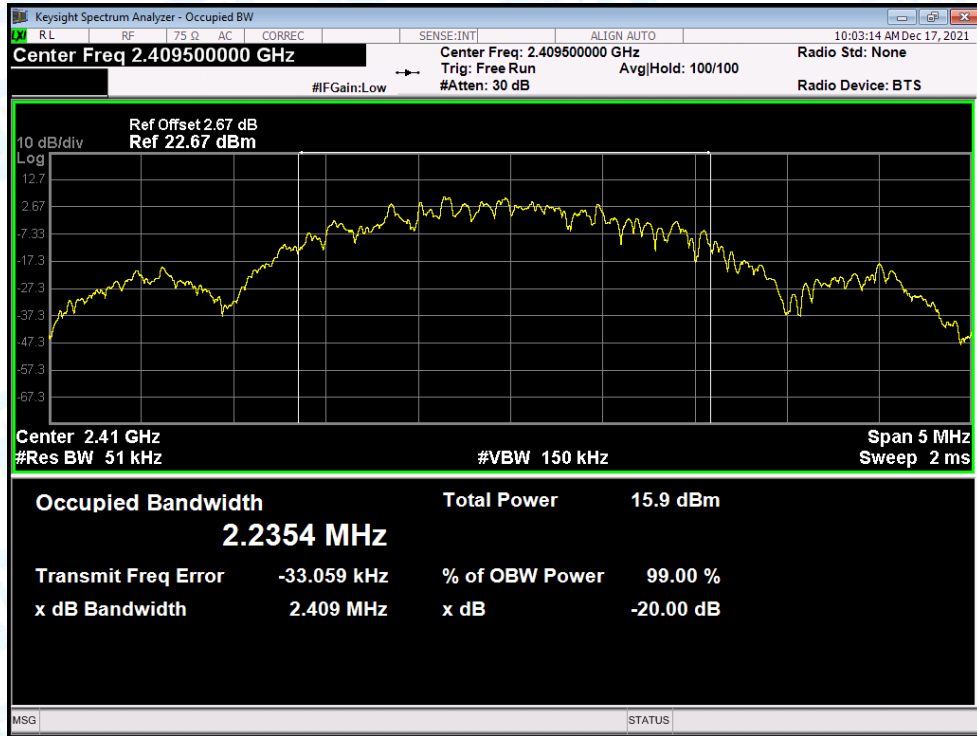


### 3.Occupied Channel Bandwidth

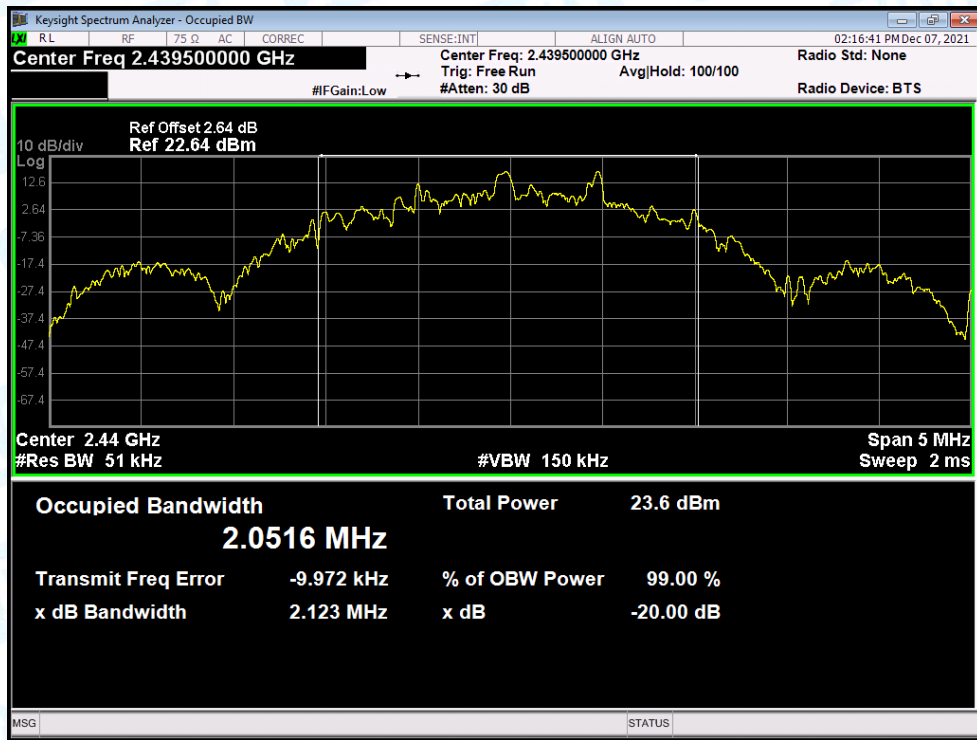
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	user	2409.5	Ant1	2.235
NVNT	user	2439.5	Ant1	2.051611729
NVNT	user	2468	Ant1	2.149

Test Graphs

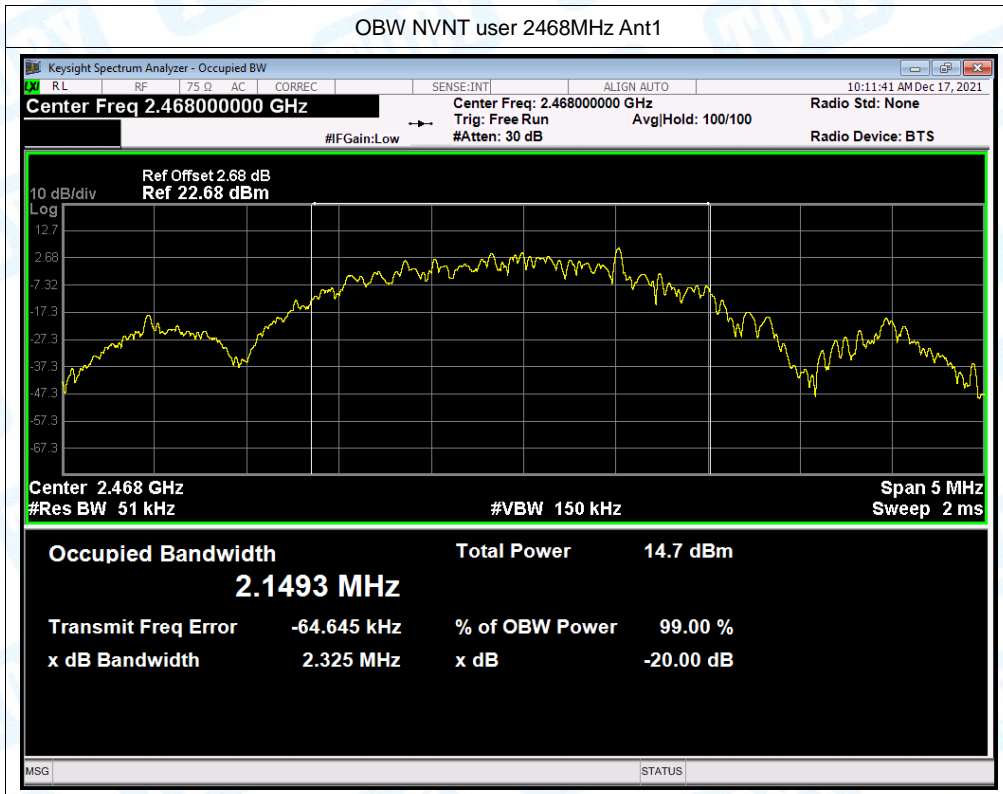
OBW NVNT user 2409.5MHz Ant1



OBW NVNT user 2439.5MHz Ant1







## 4. Carrier Frequencies Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	user	Ant1	2409.487	2410.992	1.505	1.387	Pass
NVNT	user	Ant1	2439.4695	2440.971	1.5015	0.025	Pass
NVNT	user	Ant1	2466.48	2467.978	1.498	0.025	Pass

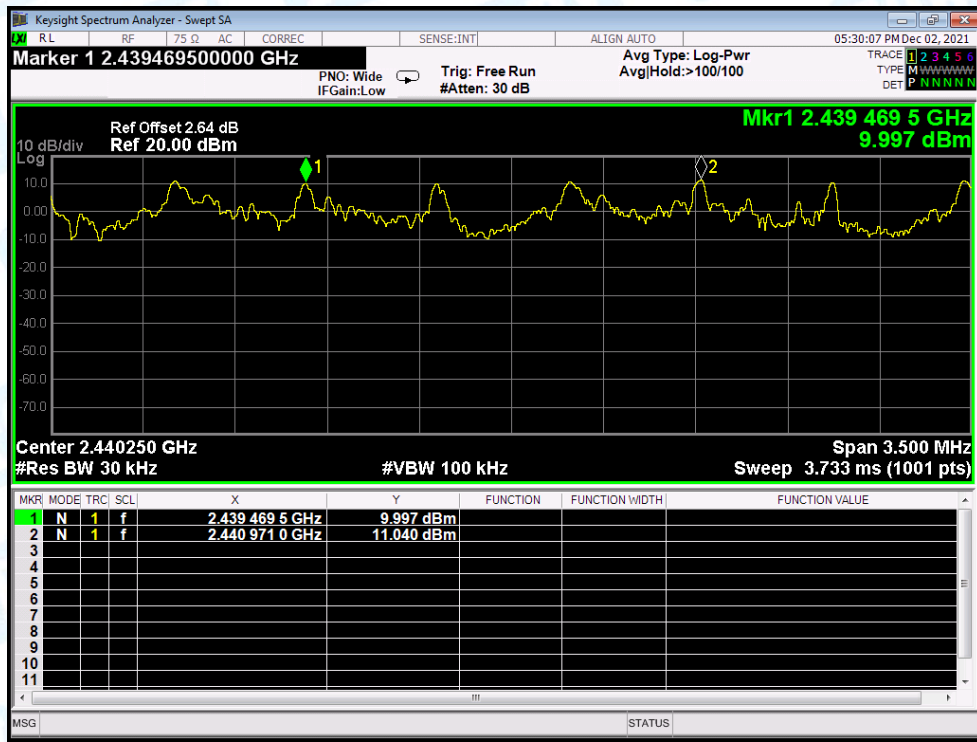


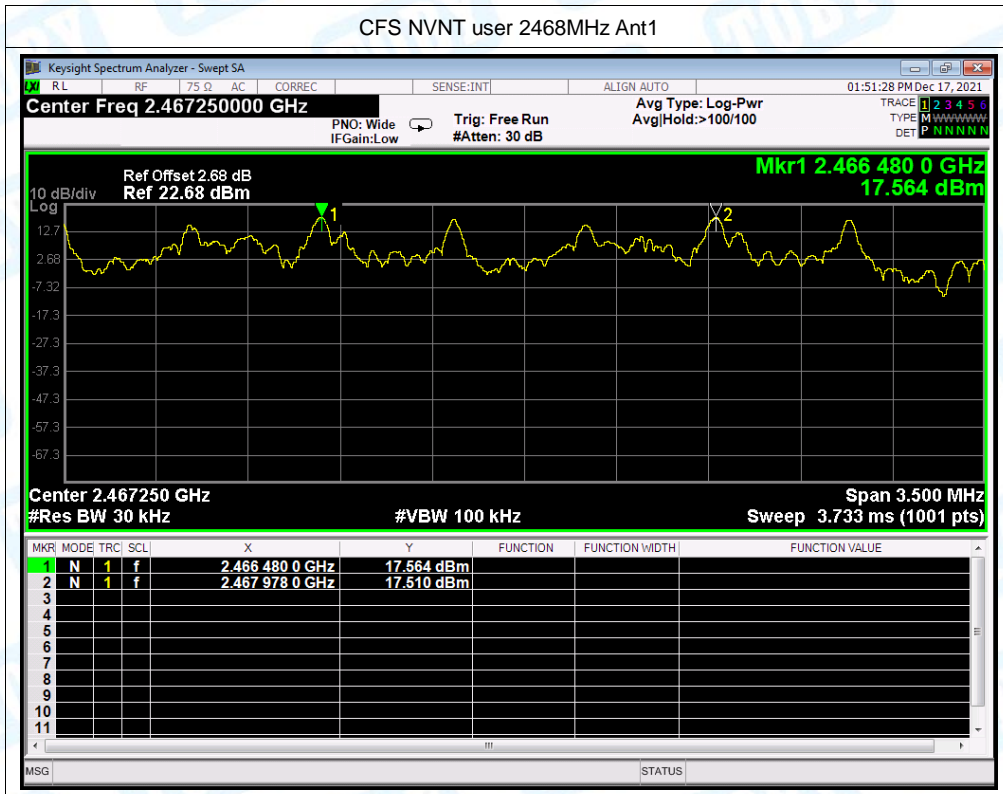
Test Graphs

CFS NVNT user 2409.5MHz Ant1



CFS NVNT user 2439.5MHz Ant1

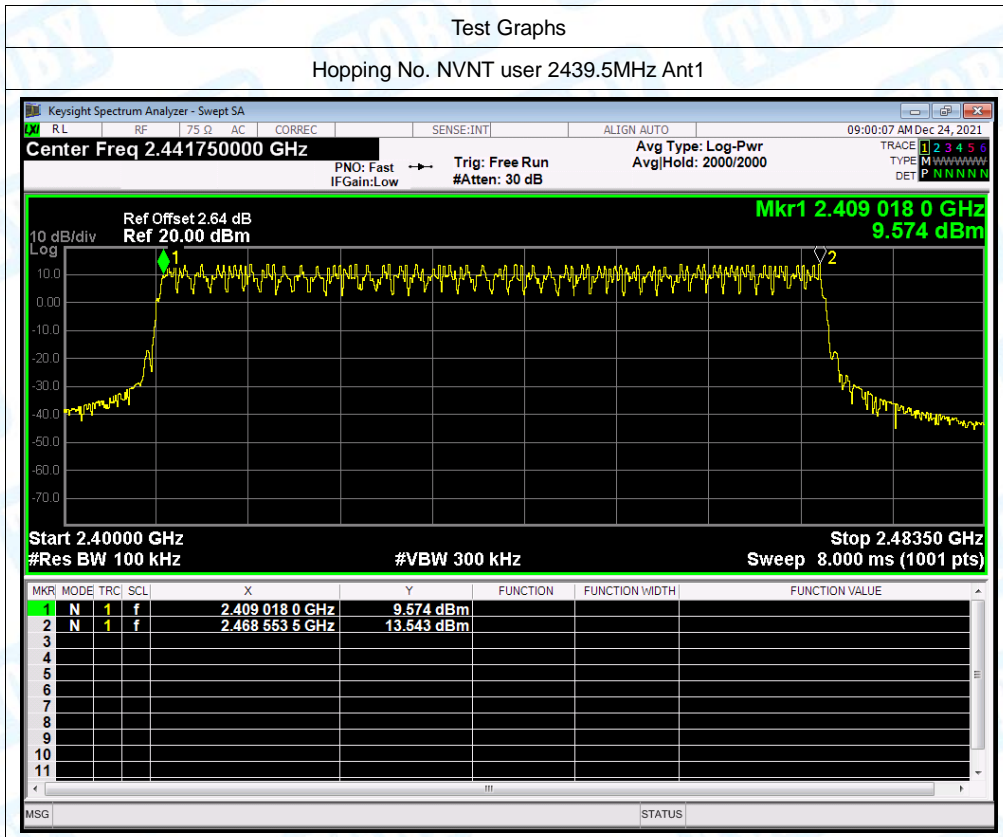






## 5. Number of Hopping Channel

Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	user	Ant1	40	15	Pass



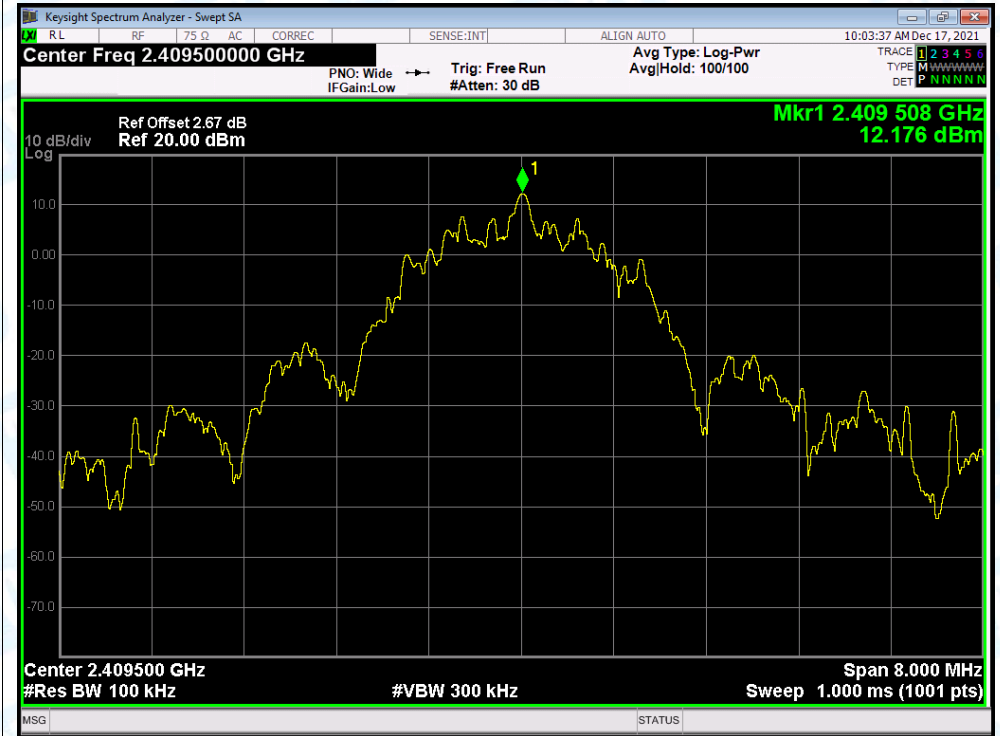


## 6.Band Edge

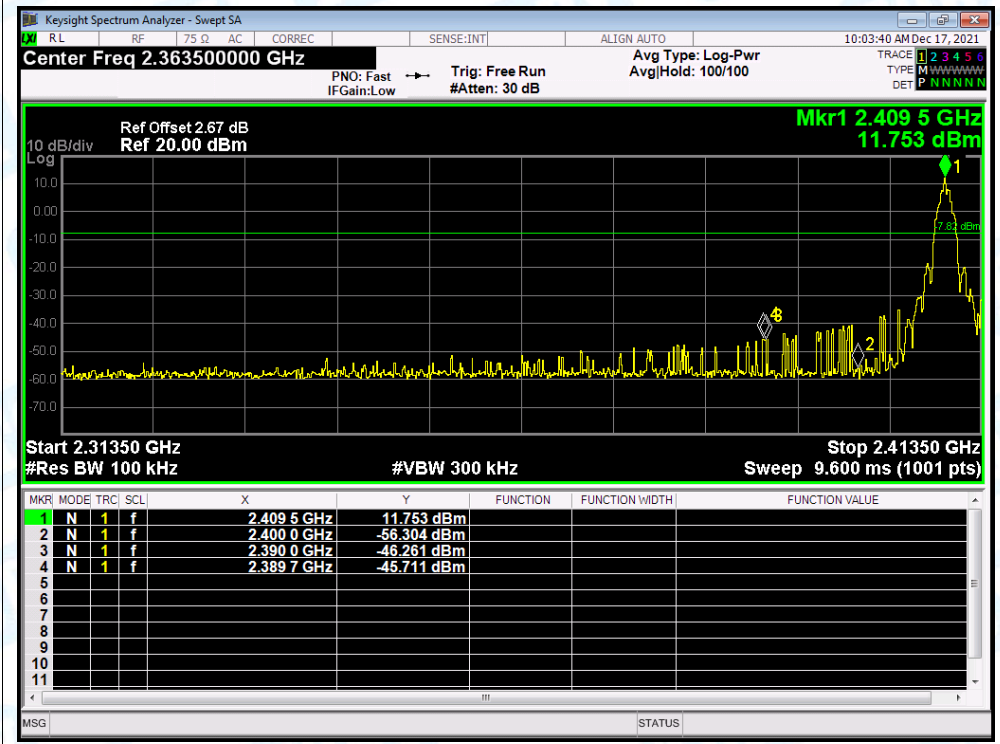
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	user	2409.5	Ant1	No-Hopping	-57.89	-20	Pass
NVNT	user	2468	Ant1	No-Hopping	-55.24	-20	Pass

Test Graphs

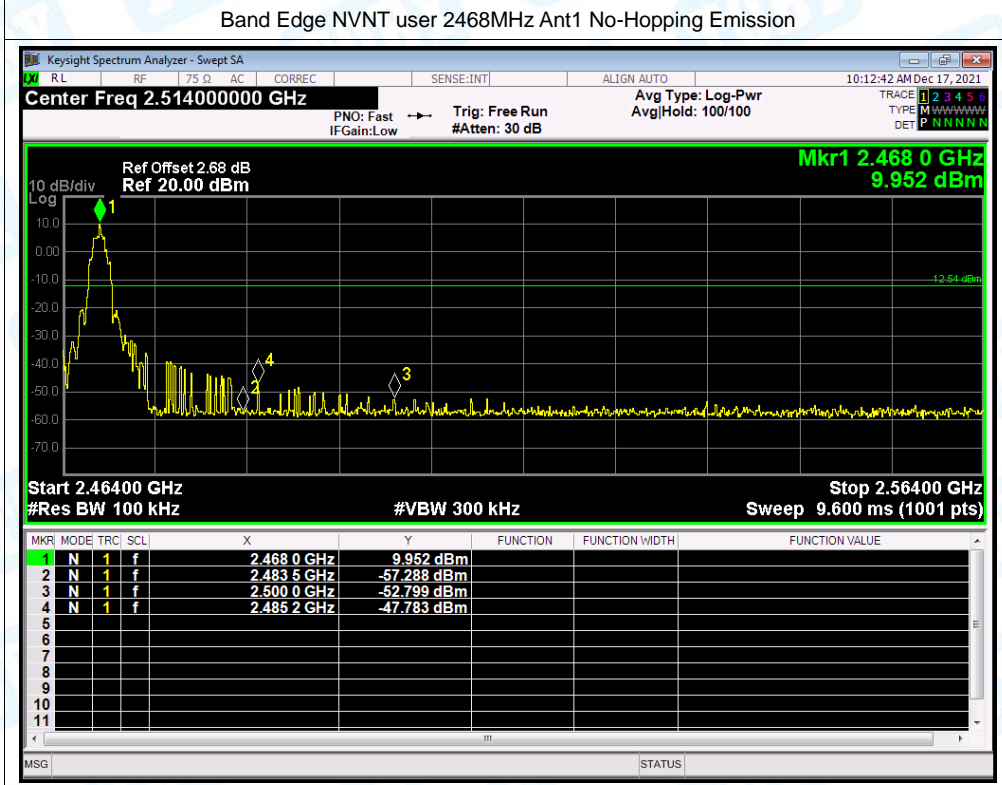
Band Edge NVNT user 2409.5MHz Ant1 No-Hopping Ref



Band Edge NVNT user 2409.5MHz Ant1 No-Hopping Emission







## 7.Band Edge(Hopping)

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	user	2409.5	Ant1	Hopping	-58.63	-20	Pass
NVNT	user	2468	Ant1	Hopping	-56.93	-20	Pass

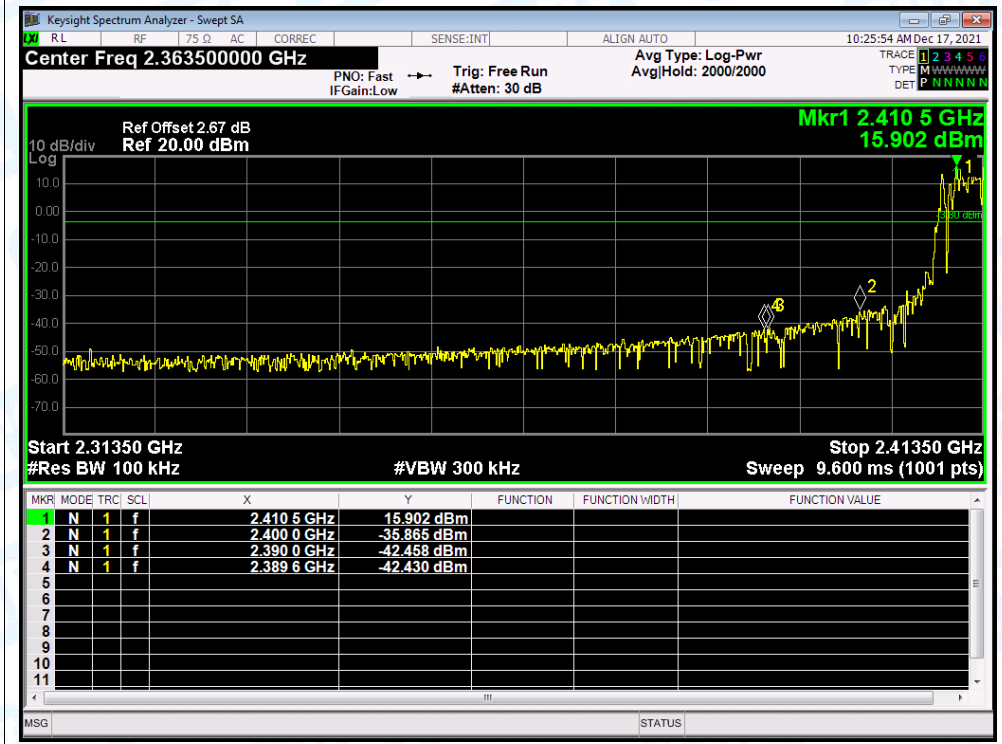


Test Graphs

Band Edge(Hopping) NVNT user 2409.5MHz Ant1 Hopping Ref



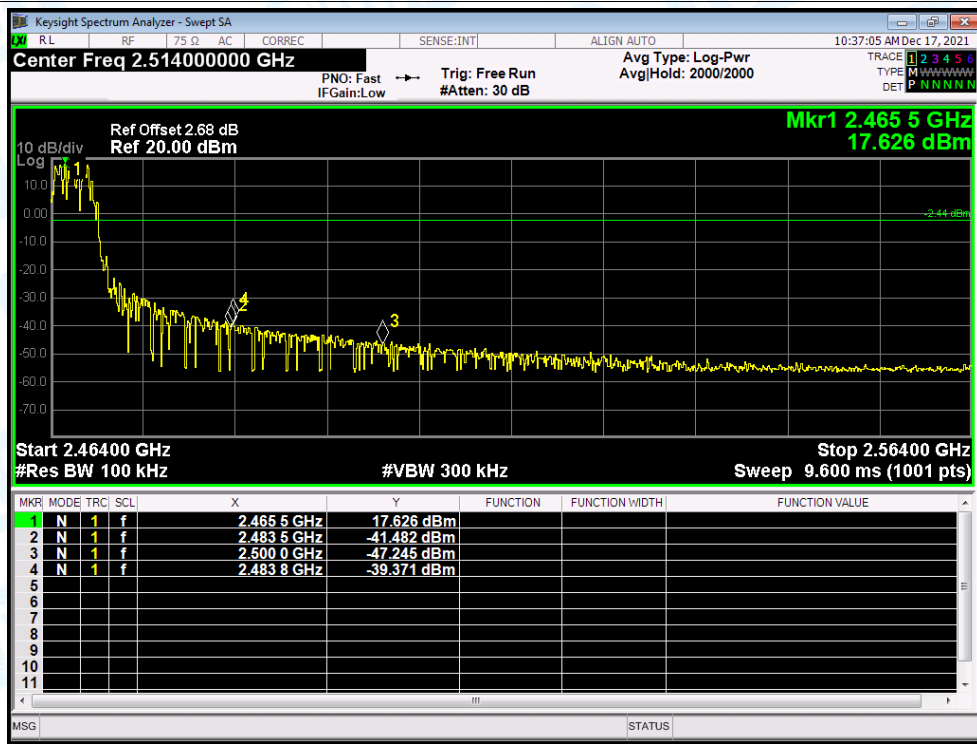
Band Edge(Hopping) NVNT user 2409.5MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT user 2468MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT user 2468MHz Ant1 Hopping Emission



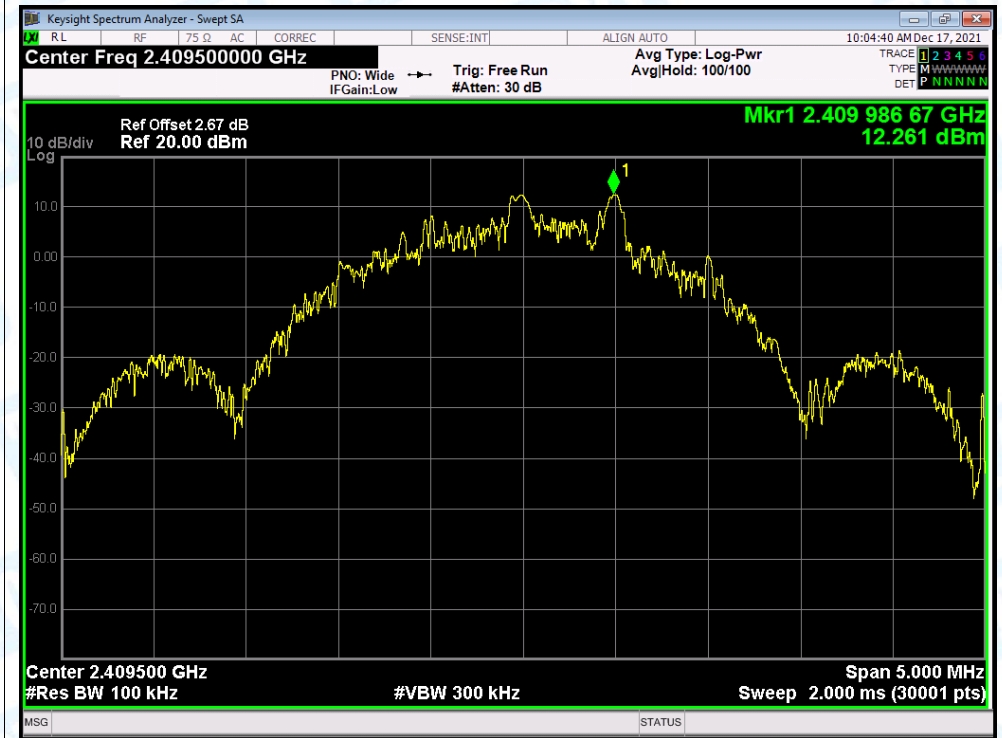


## 8. Conducted RF Spurious Emission

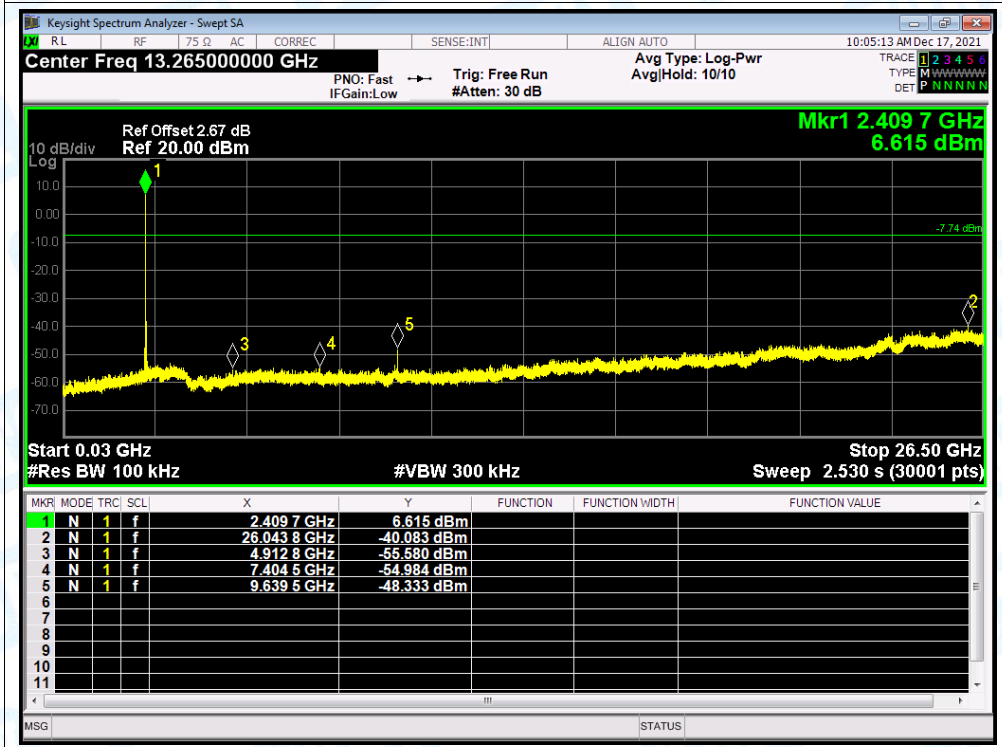
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	user	2409.5	Ant1	-52.34	-20	Pass
NVNT	user	2439.5	Ant1	-56.15	-20	Pass
NVNT	user	2468	Ant1	-59.15	-20	Pass

Test Graphs

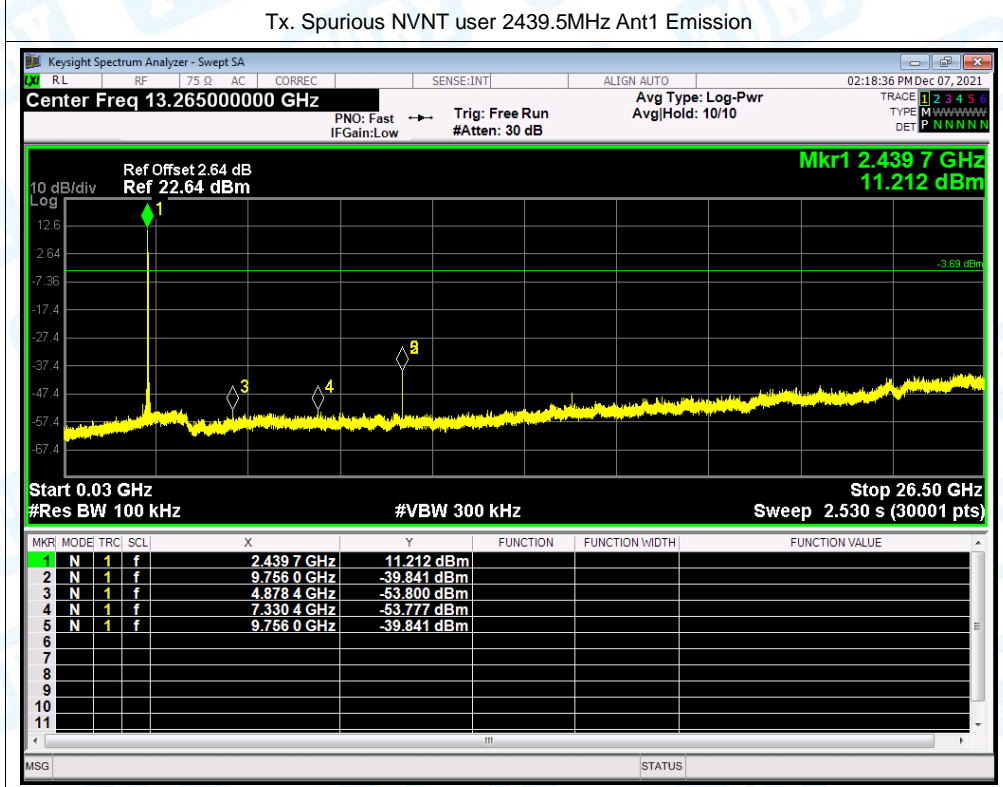
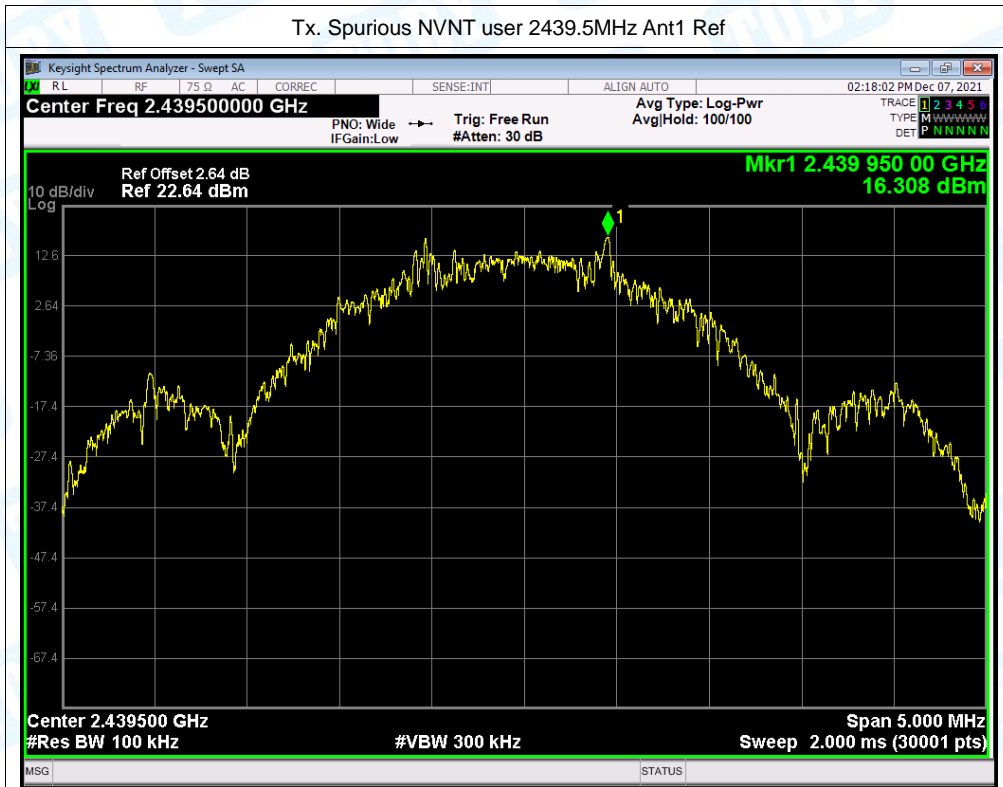
Tx. Spurious NVNT user 2409.5MHz Ant1 Ref



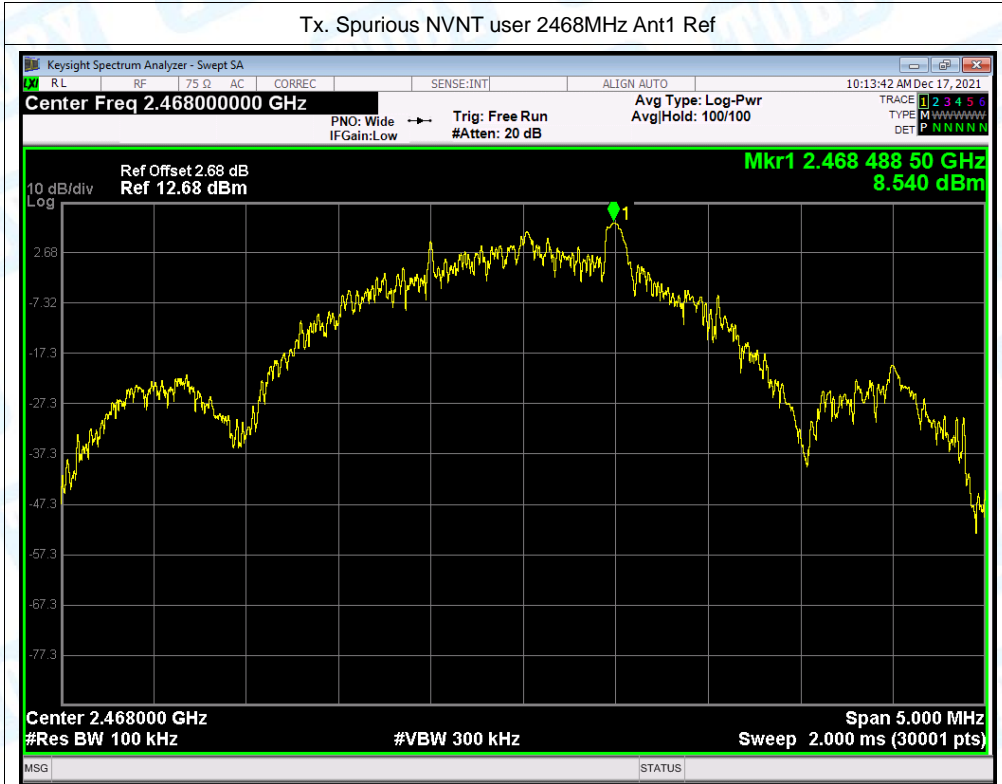
Tx. Spurious NVNT user 2409.5MHz Ant1 Emission



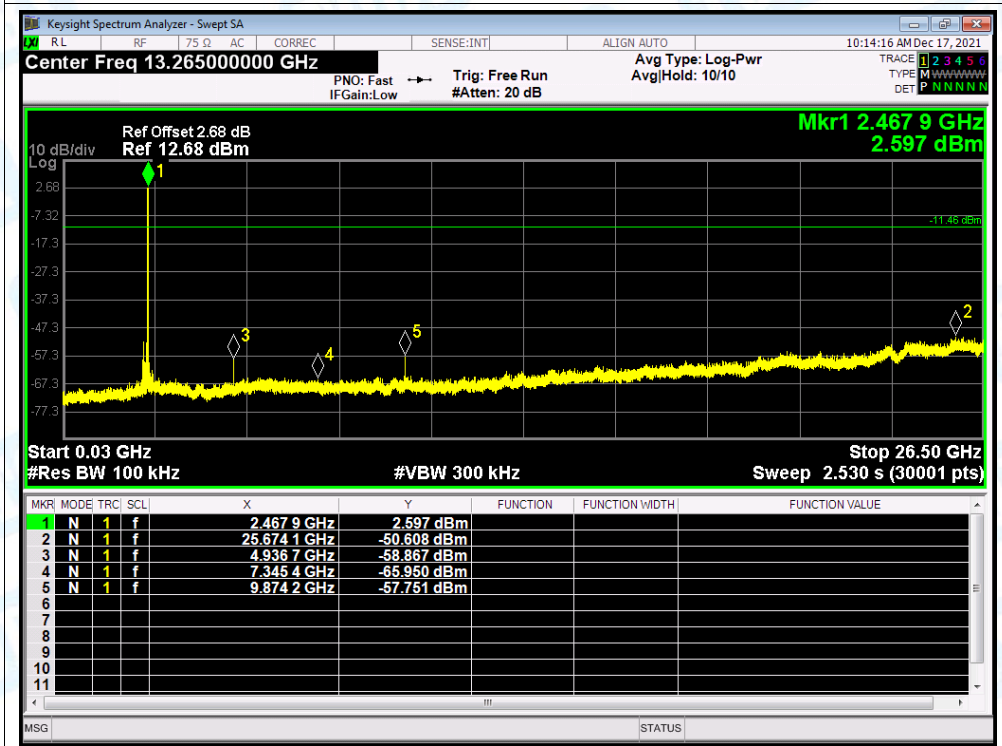




Tx. Spurious NVNT user 2468MHz Ant1 Ref



Tx. Spurious NVNT user 2468MHz Ant1 Emission



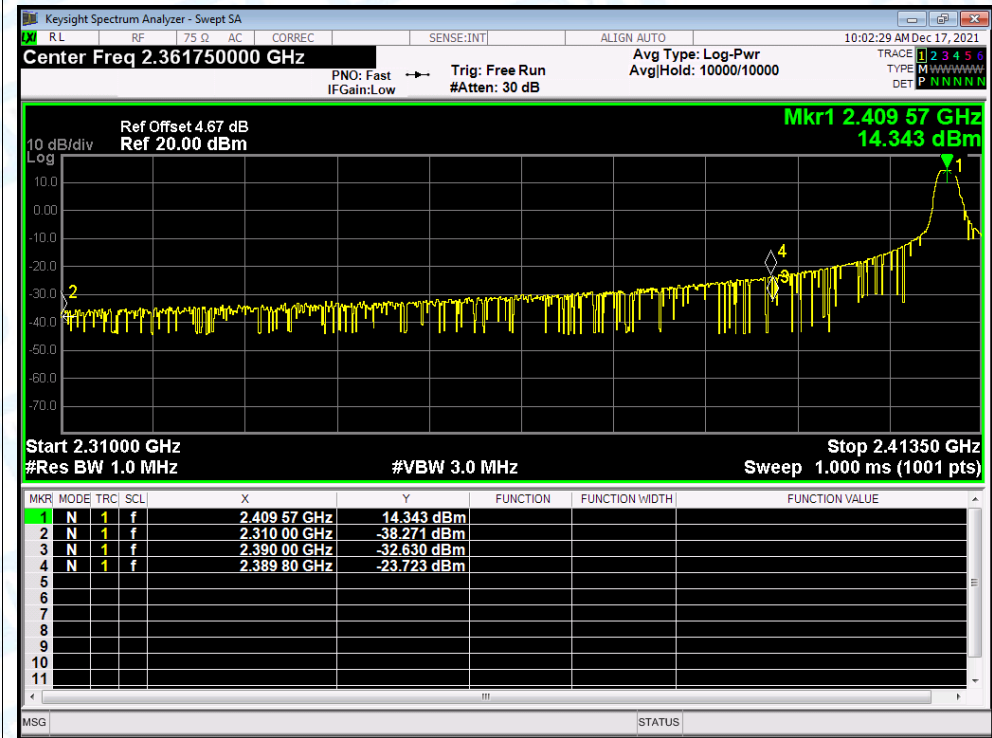


### 9.Restrict Band

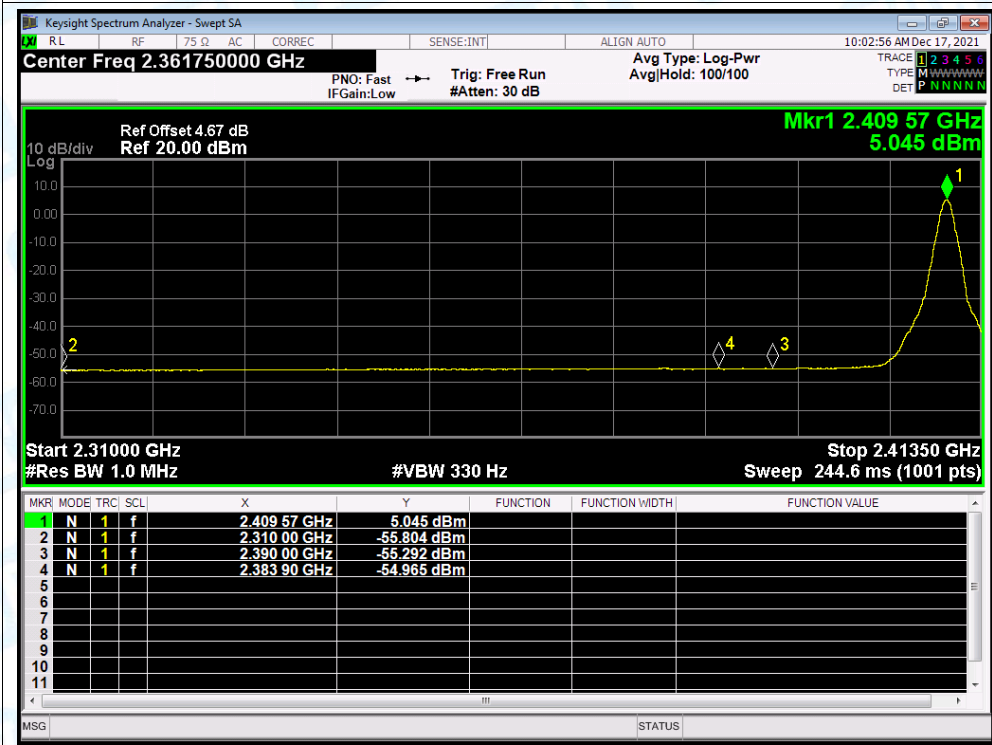
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	user	2409.5	Ant1	No-Hopping	2310	-38.27	2	58.99	Peak	74	Pass
NVNT	user	2409.5	Ant1	No-Hopping	2310	-55.8	2	41.46	Average	54	Pass
NVNT	user	2409.5	Ant1	No-Hopping	2389.7985	-23.72	2	73.54	Peak	74	Pass
NVNT	user	2409.5	Ant1	No-Hopping	2383.899	-54.96	2	42.3	Average	54	Pass
NVNT	user	2409.5	Ant1	No-Hopping	2390	-32.63	2	64.63	Peak	74	Pass
NVNT	user	2409.5	Ant1	No-Hopping	2390	-55.29	2	41.97	Average	54	Pass
NVNT	user	2468	Ant1	No-Hopping	2483.5	-24.37	2	72.89	Peak	74	Pass
NVNT	user	2468	Ant1	No-Hopping	2483.5	-54.84	2	42.42	Average	54	Pass
NVNT	user	2468	Ant1	No-Hopping	2483.764	-24.11	2	73.15	Peak	74	Pass
NVNT	user	2468	Ant1	No-Hopping	2484.16	-54.65	2	42.61	Average	54	Pass
NVNT	user	2468	Ant1	No-Hopping	2500	-31.36	2	65.9	Peak	74	Pass
NVNT	user	2468	Ant1	No-Hopping	2500	-54.73	2	42.53	Average	54	Pass

Test Graphs

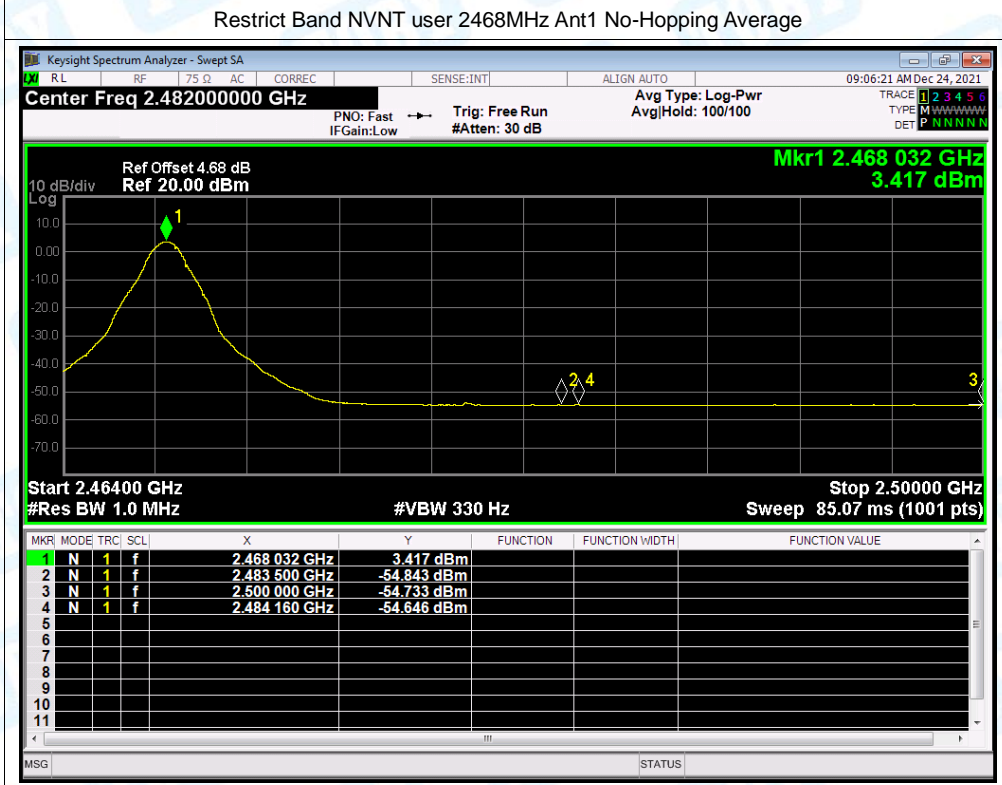
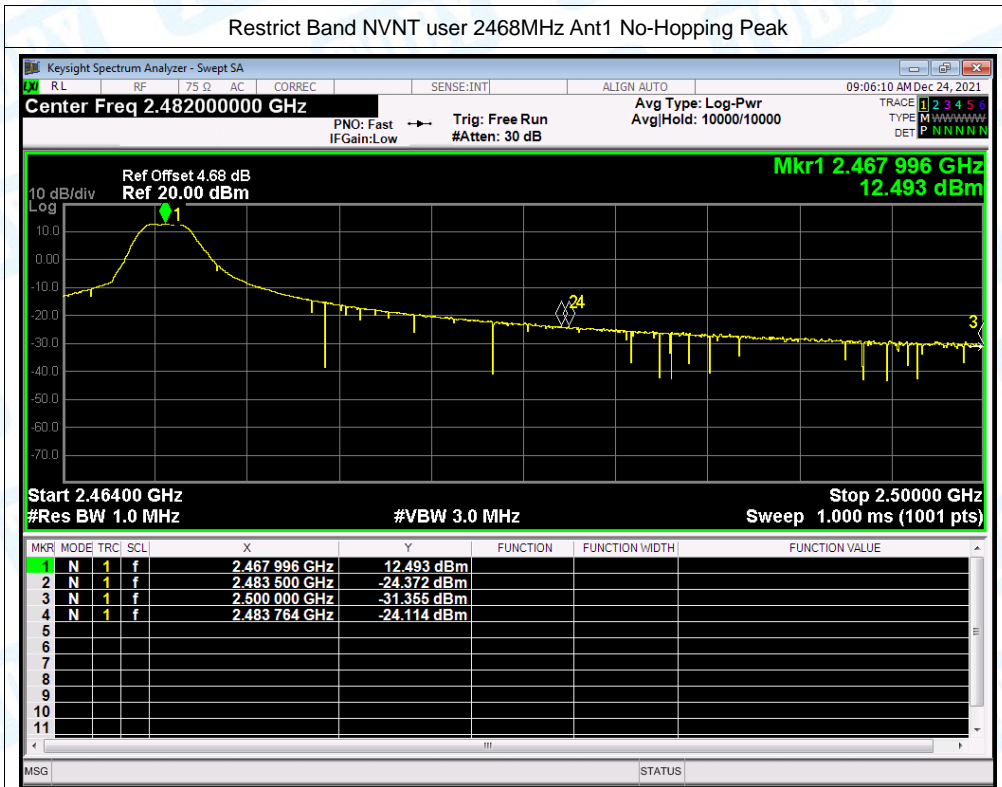
Restrict Band NVNT user 2409.5MHz Ant1 No-Hopping Peak



Restrict Band NVNT user 2409.5MHz Ant1 No-Hopping Average







## 10.Dwell Time

Test Mode	Channel (MHz)	Reading Time (ms)	Total hops (N)	Test Result (ms)	Limit (ms)	Result
GFSK	2442	0.42	40	16.8	400	PASS

The Dwell Time = Burst Width \* Total Hops. The detailed calculations are showed as follows:

The duration for dwell time calculation:  $0.4 [s] * \text{hopping number} = 0.4 [s] * 40 [ch] = 16[s*ch]$ ;

The burst width, which is directly measured, refers to the duration on one channel hop.

The maximum number of hopping channels in 16s is 40.

Reading Time= $0.42ms*40=16.8$



Test Graphs

Dwell NVNT user 2439.5MHz Ant1

