

RF Test Data for 2.4G (Conducted Measurements)

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

Contents

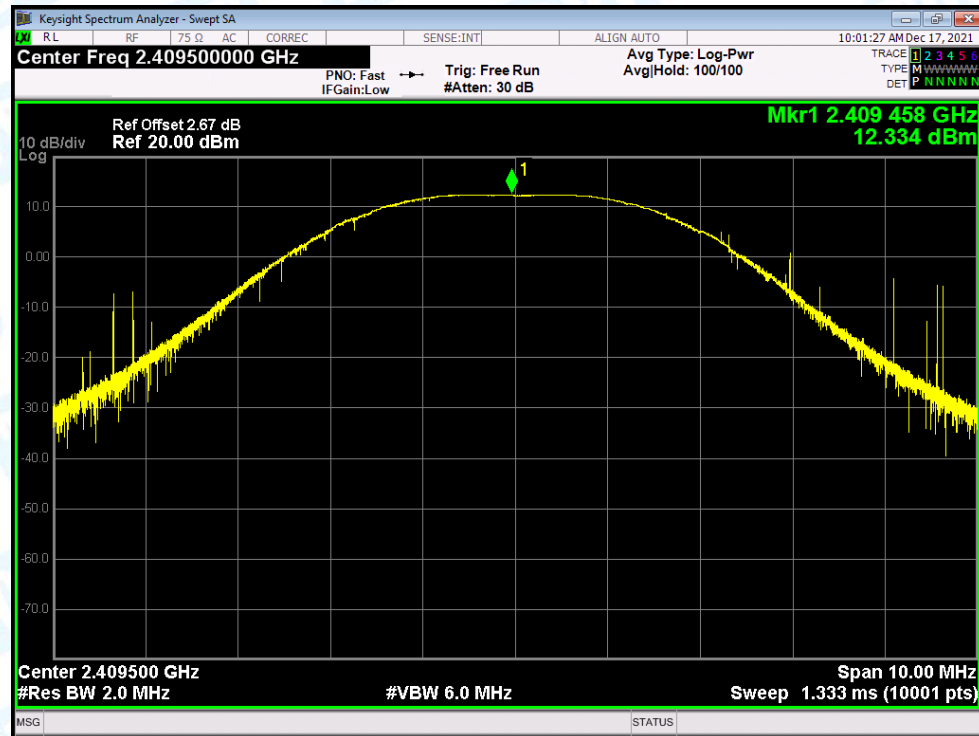
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1.Maximum Conducted Output Power

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

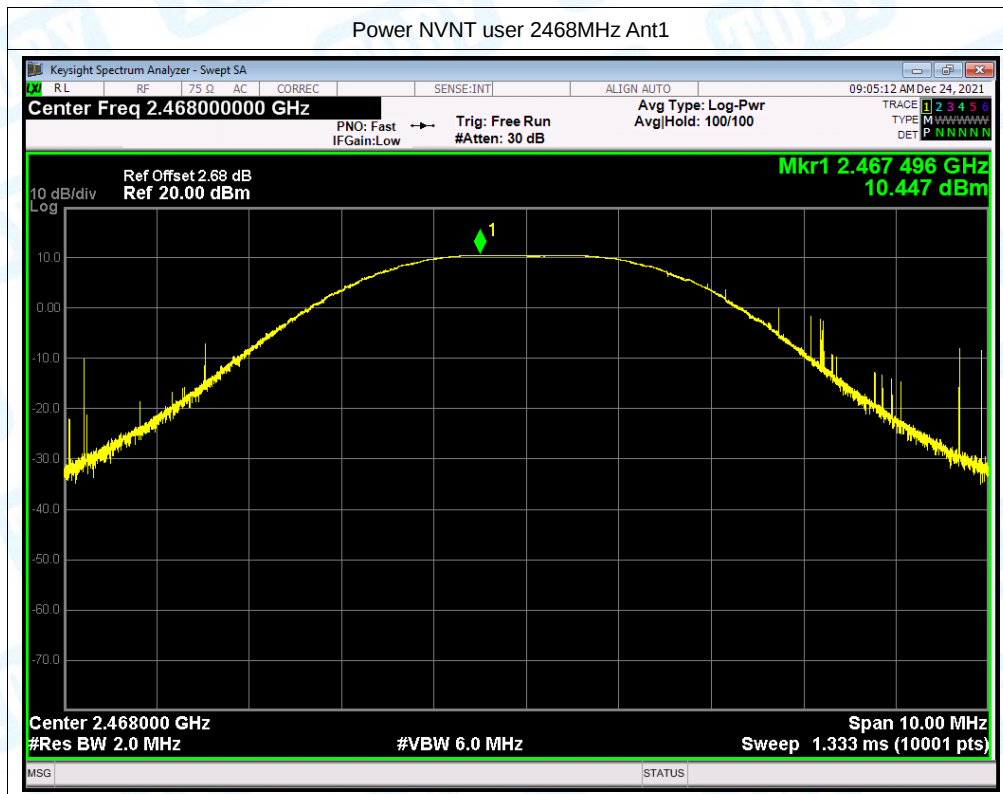
Test Graphs

Power NVNT user 2409.5MHz Ant1



Power NVNT user 2439.5MHz Ant1



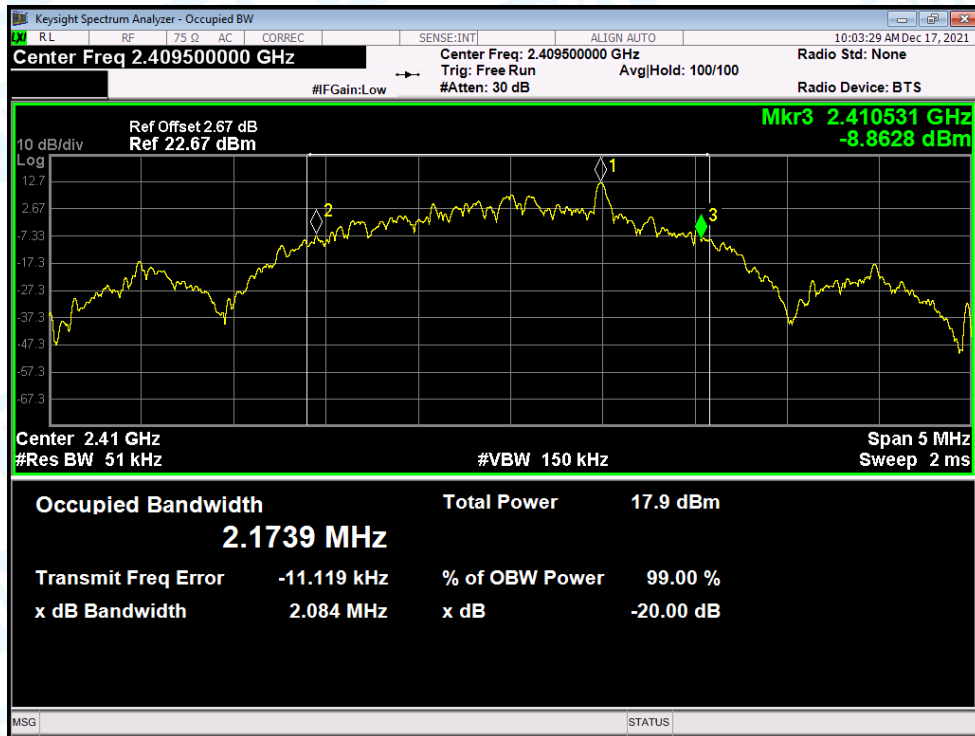


2.-20dB Bandwidth

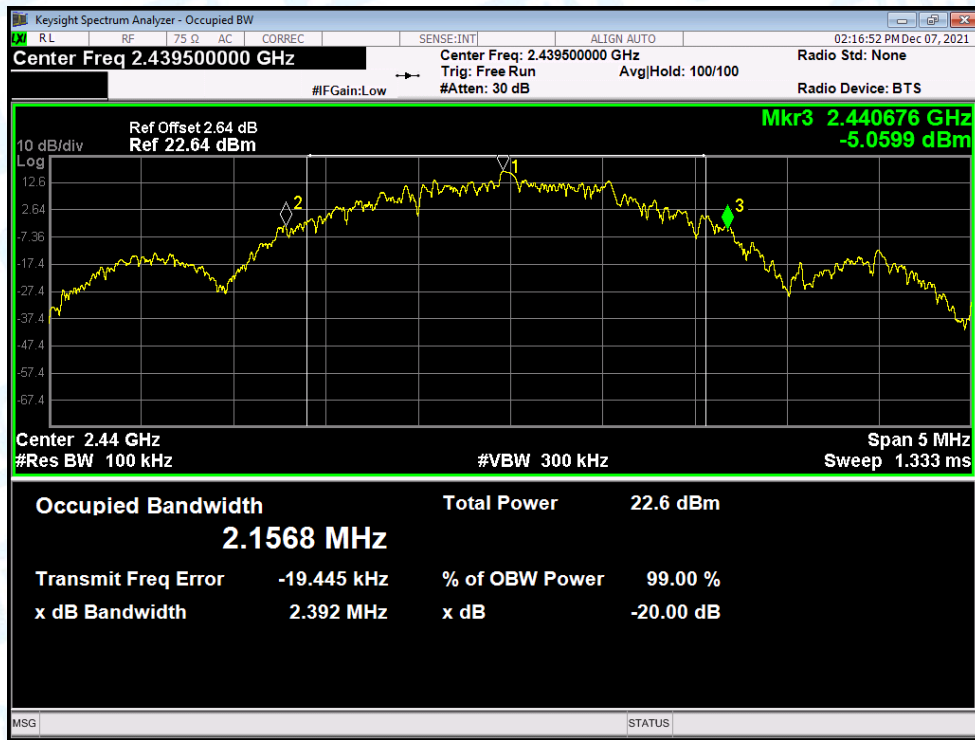
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	20dB Bandwidth *2/3 (MHz)	Verdict
NVNT	user	2409.5	Ant1	2.08	1.39	Pass
NVNT	user	2439.5	Ant1	2.392	1.595	Pass
NVNT	user	2468	Ant1	2.25	1.5	Pass

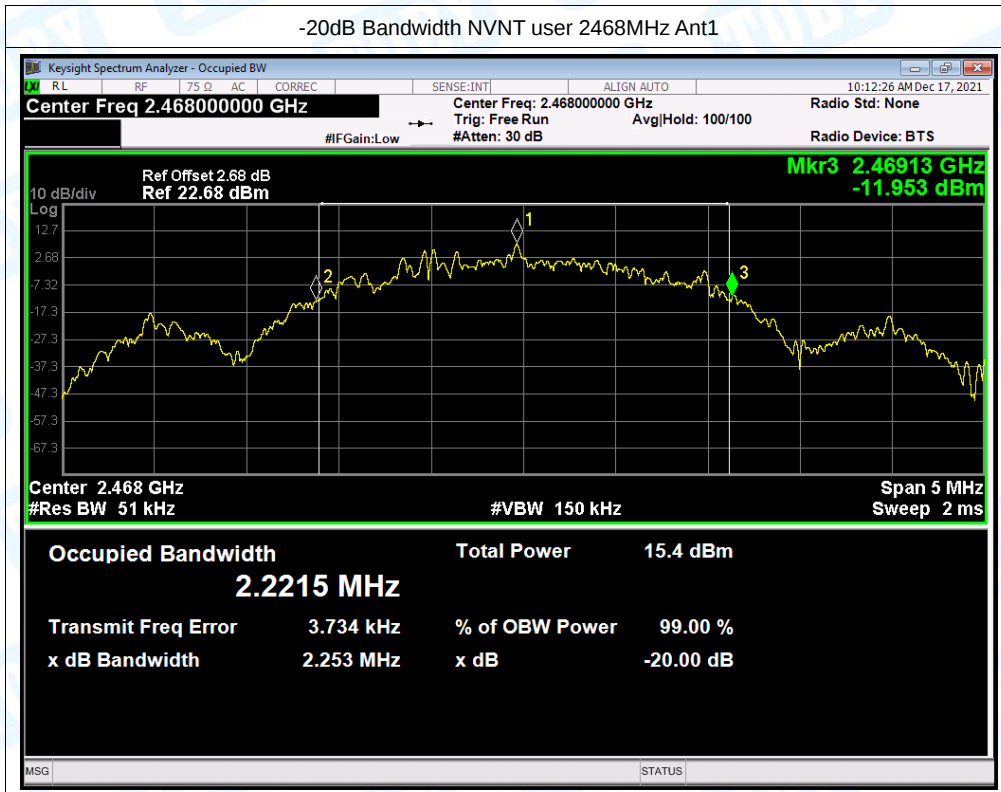
Test Graphs

-20dB Bandwidth NVNT user 2409.5MHz Ant1



-20dB Bandwidth NVNT user 2439.5MHz Ant1



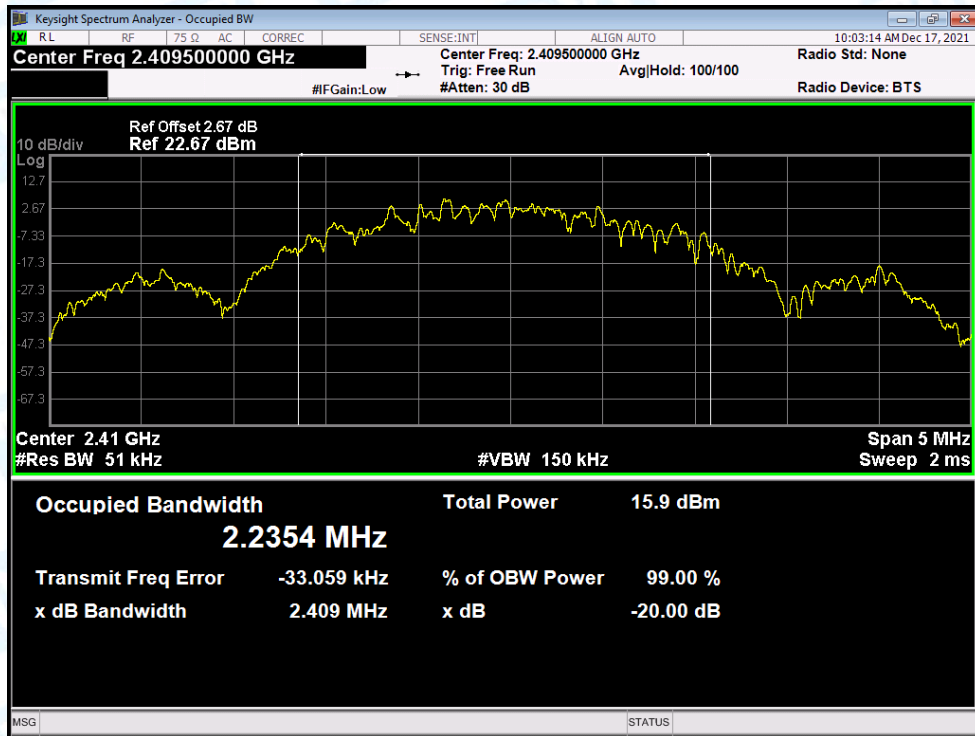


3.Occupied Channel Bandwidth

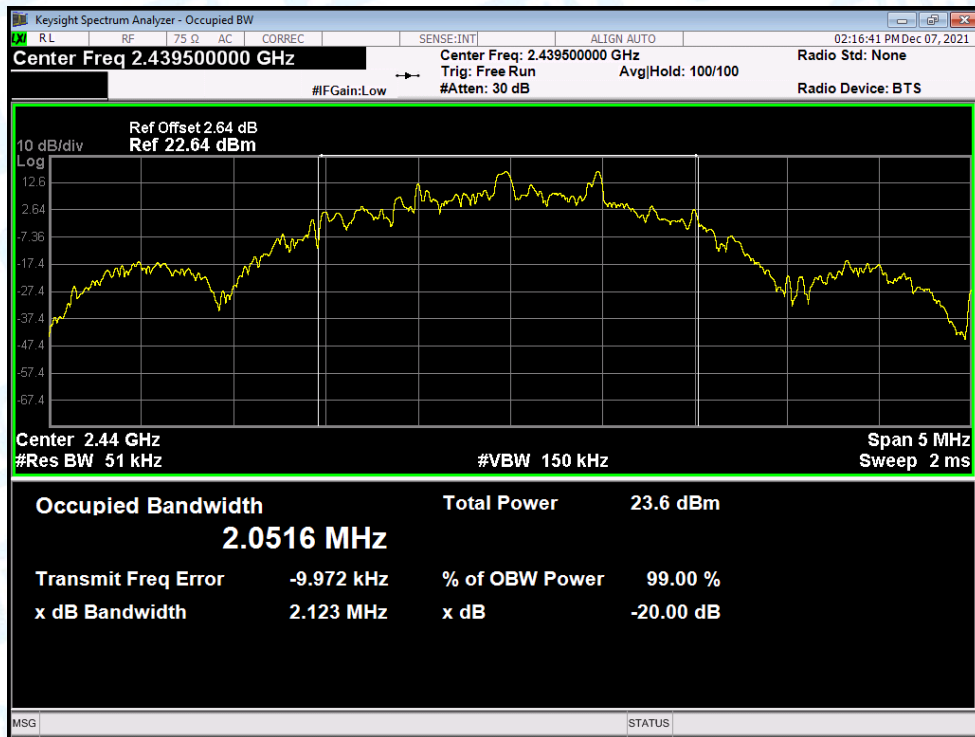
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	user	2409.5	Ant1	2.235
NVNT	user	2439.5	Ant1	2.051611729
NVNT	user	2468	Ant1	2.149

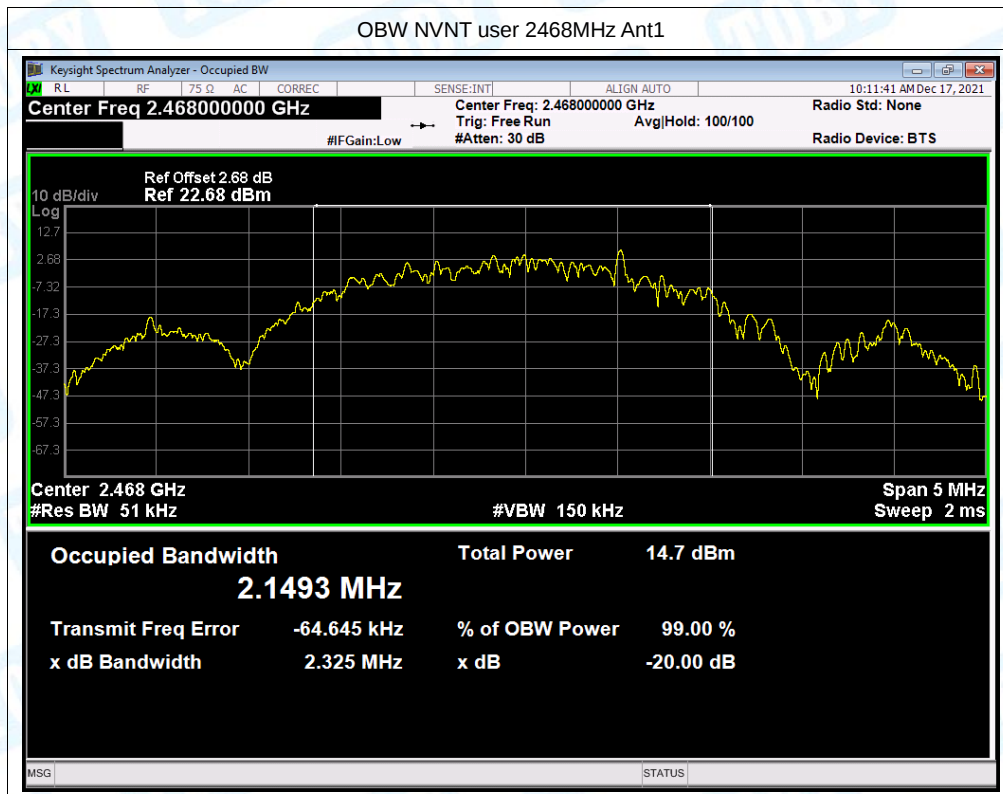
Test Graphs

OBW NVNT user 2409.5MHz Ant1



OBW NVNT user 2439.5MHz Ant1





4.Carrier Frequencies Separation

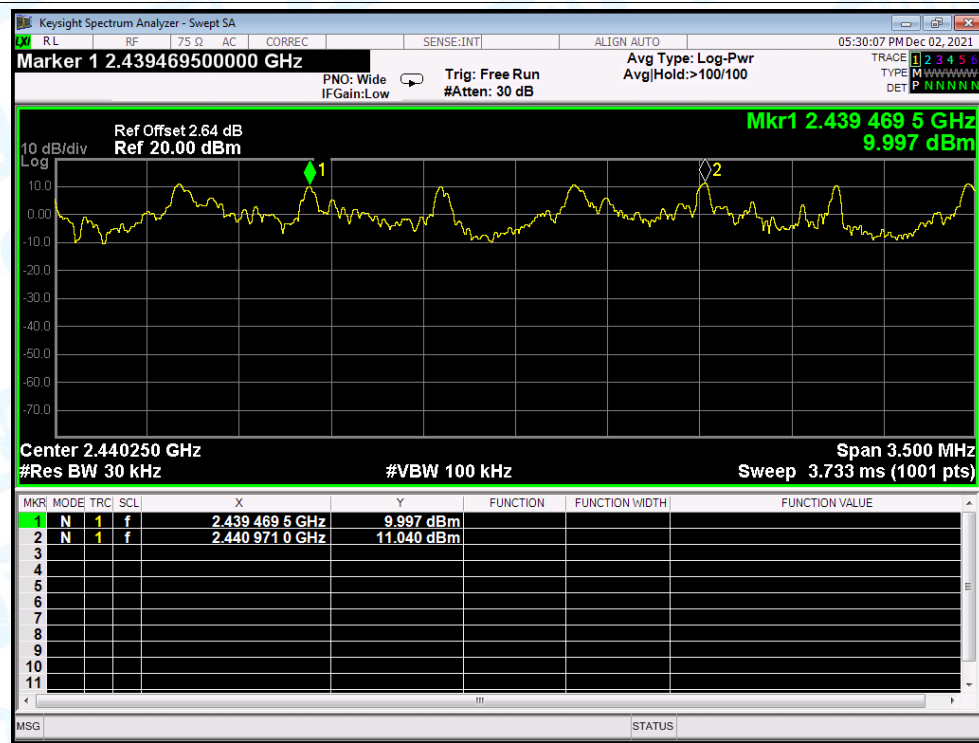
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	user	Ant1	2409.487	2410.992	1.505	1.387	Pass
NVNT	user	Ant1	2439.4695	2440.971	1.5015	0.025	Pass
NVNT	user	Ant1	2466.48	2467.978	1.498	0.025	Pass

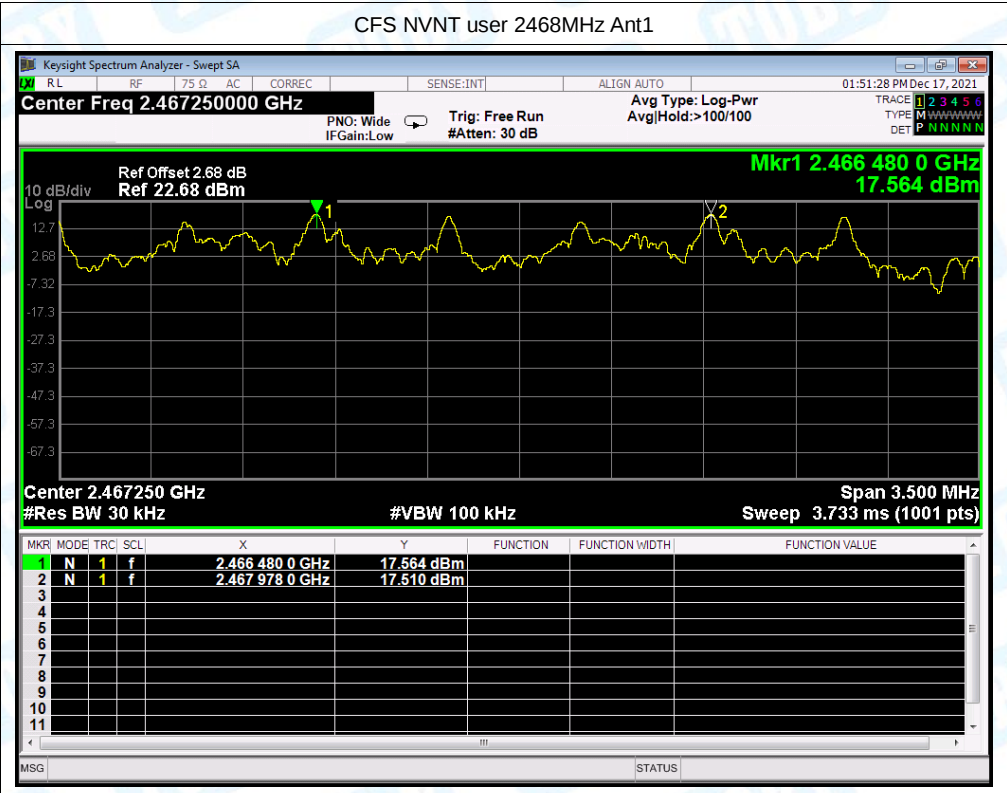
Test Graphs

CFS NVNT user 2409.5MHz Ant1



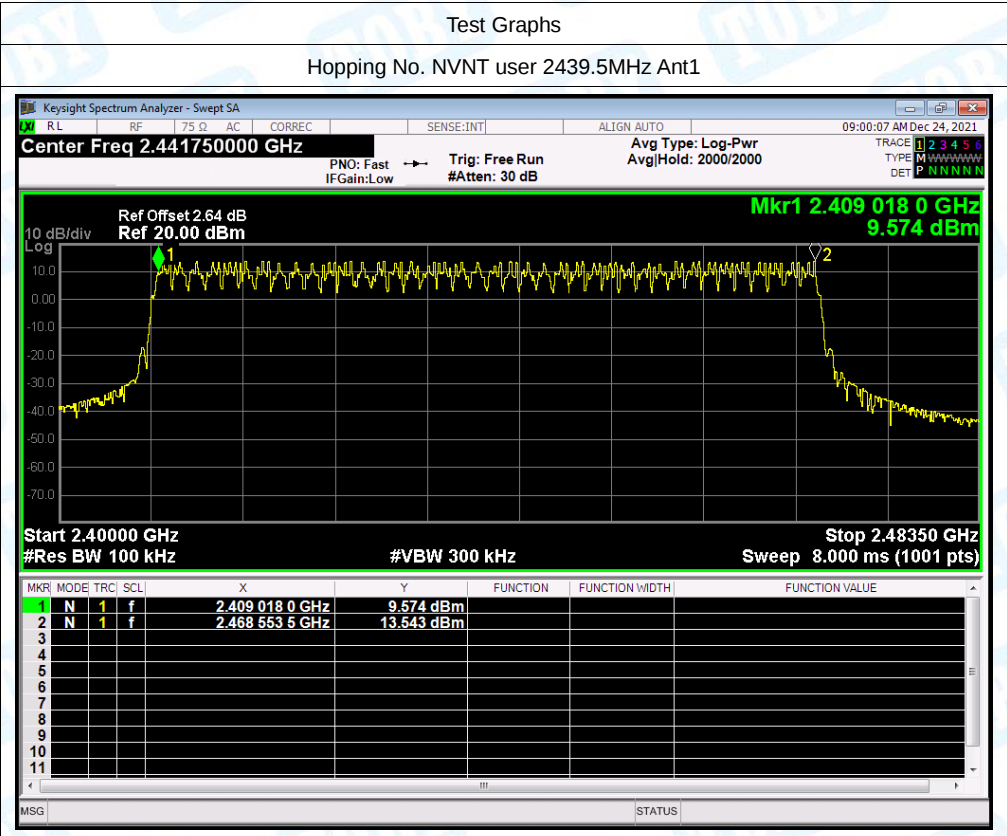
CFS NVNT user 2439.5MHz Ant1





5.Number of Hopping Channel

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



6.Band Edge

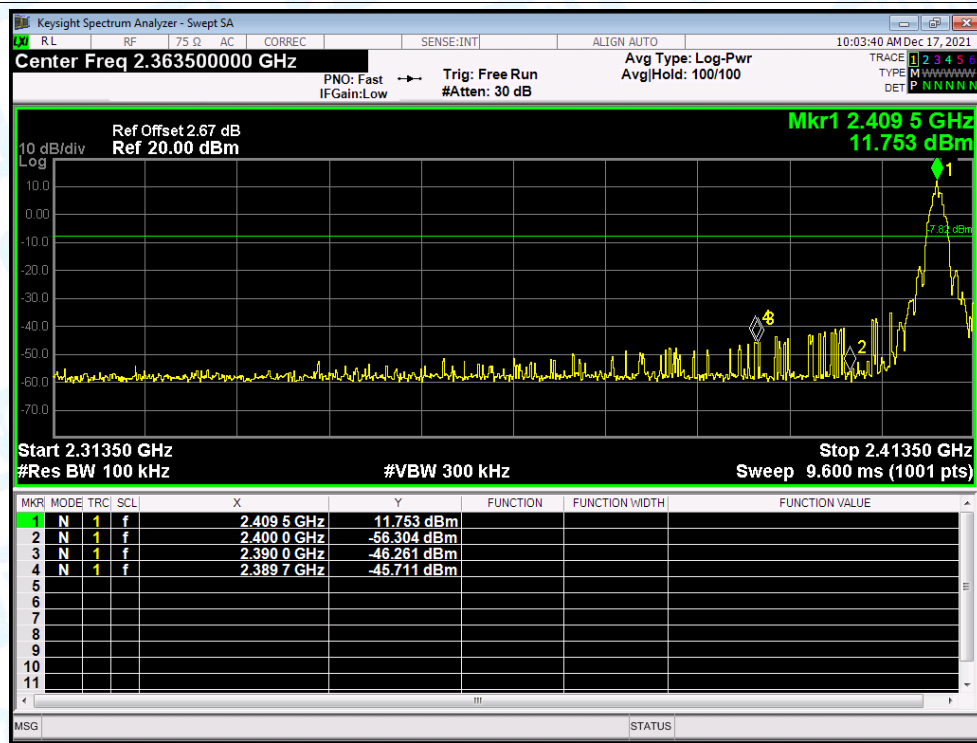
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	user	2409.5	Ant1	No-Hopping	-57.89	-20	Pass
NVNT	user	2468	Ant1	No-Hopping	-55.24	-20	Pass

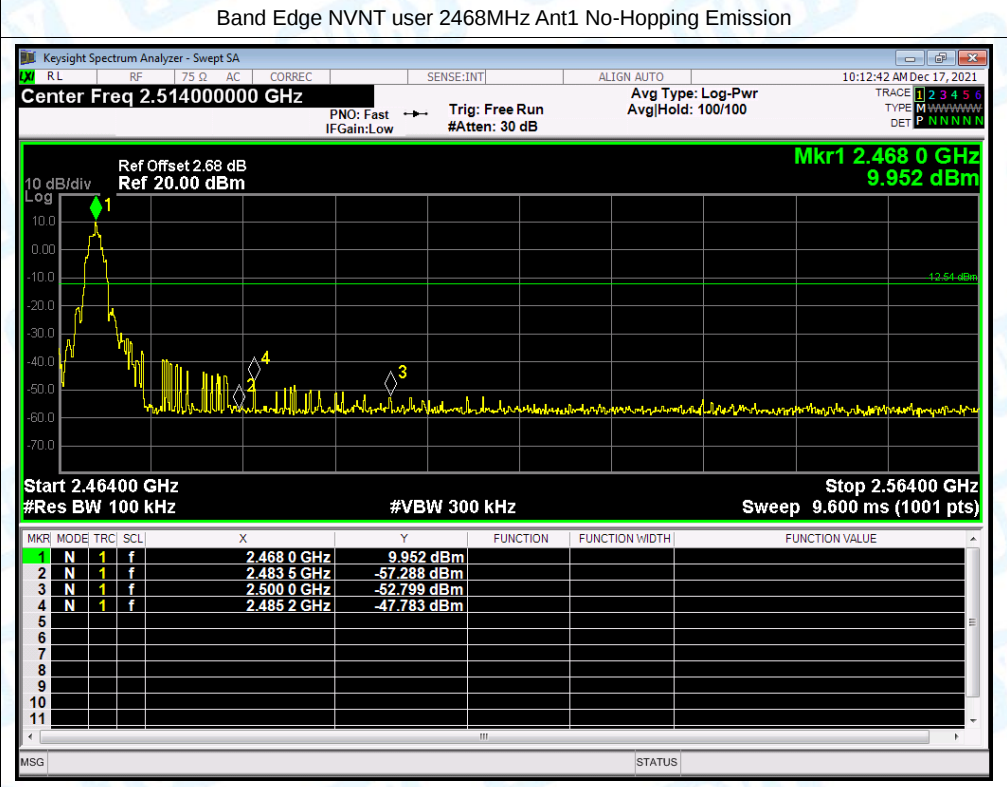
Test Graphs

Band Edge NVNT user 2409.5MHz Ant1 No-Hopping Ref



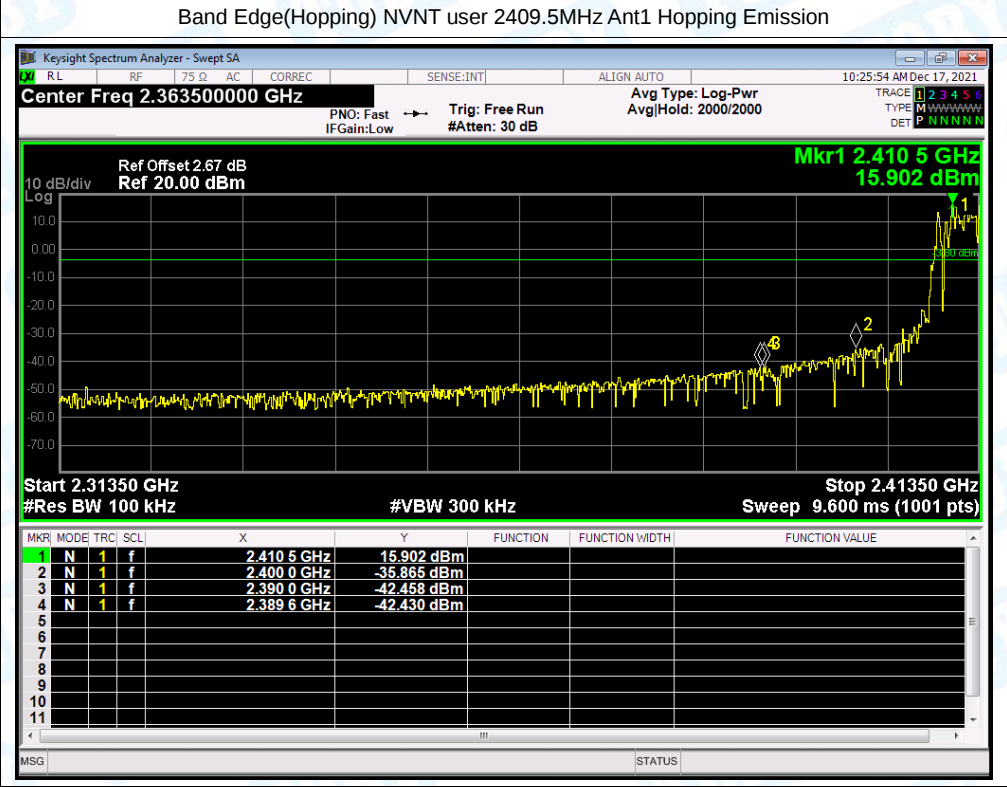
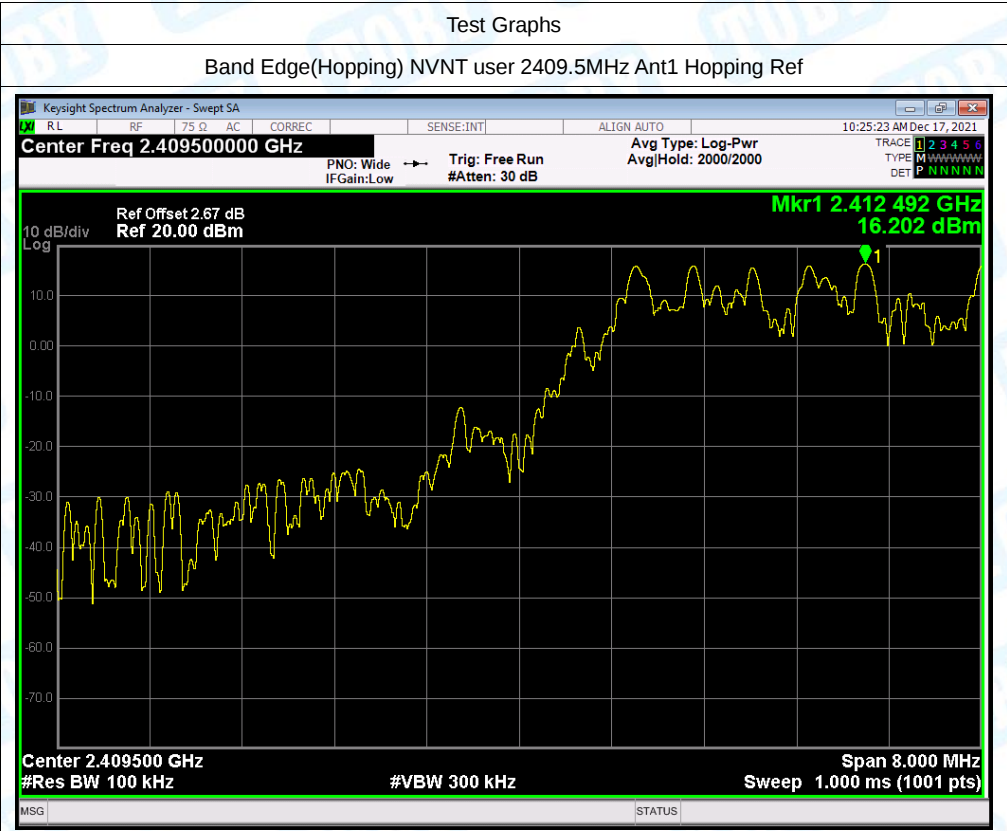
Band Edge NVNT user 2409.5MHz Ant1 No-Hopping Emission

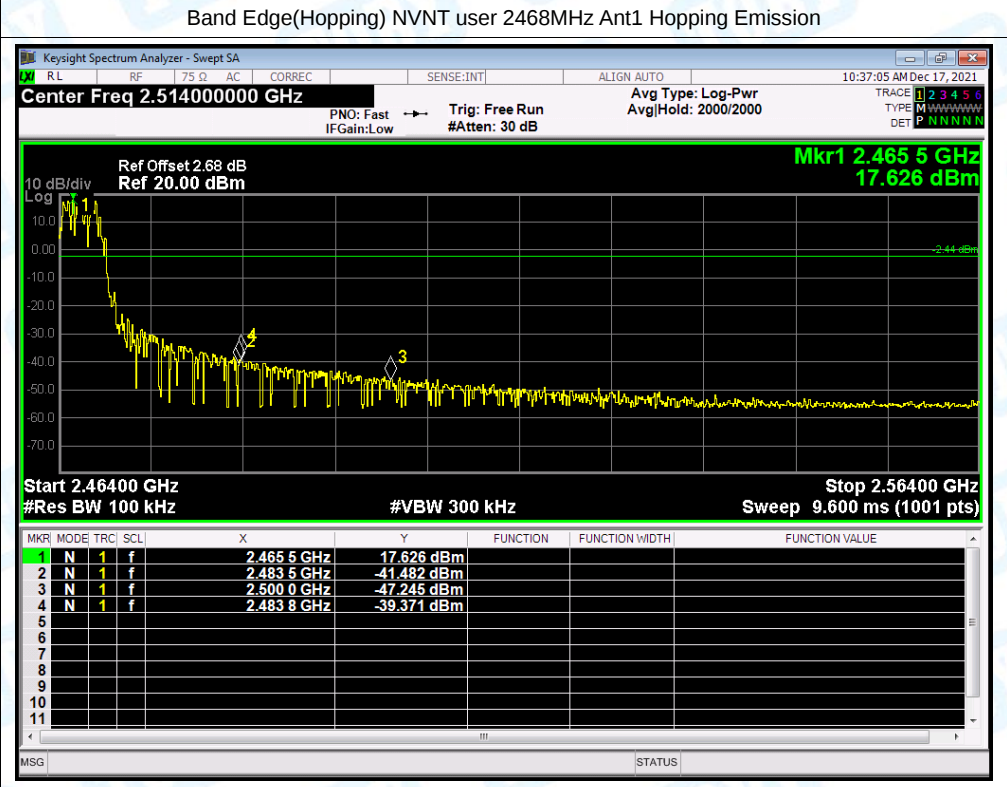
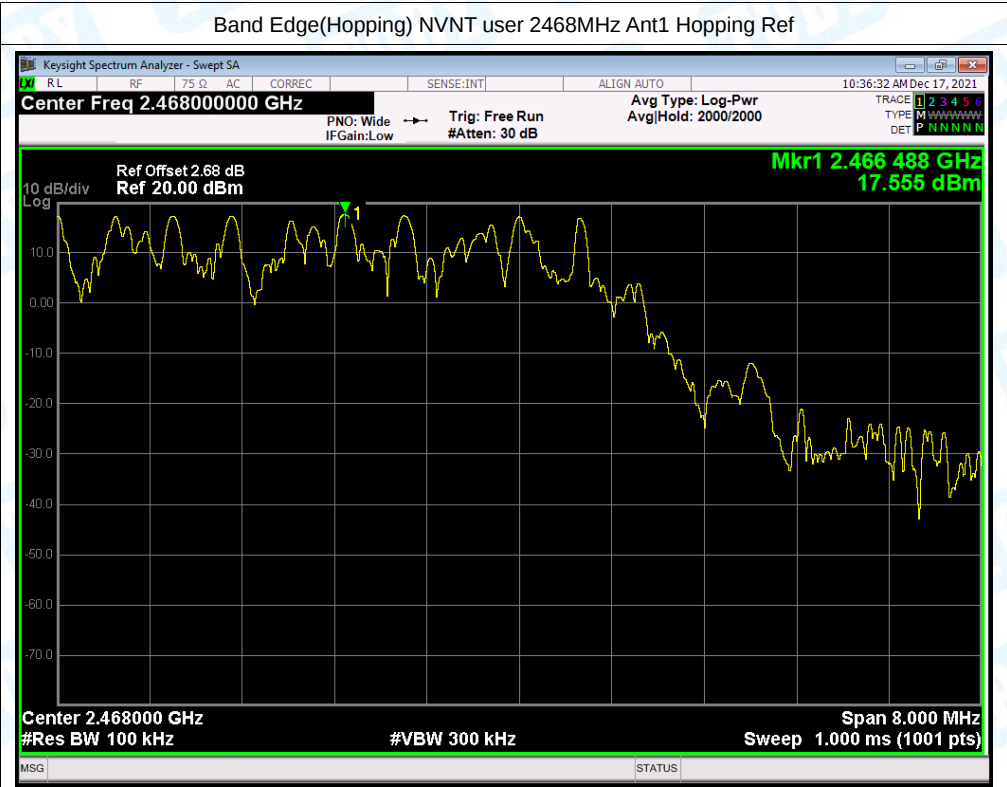




7.Band Edge(Hopping)

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



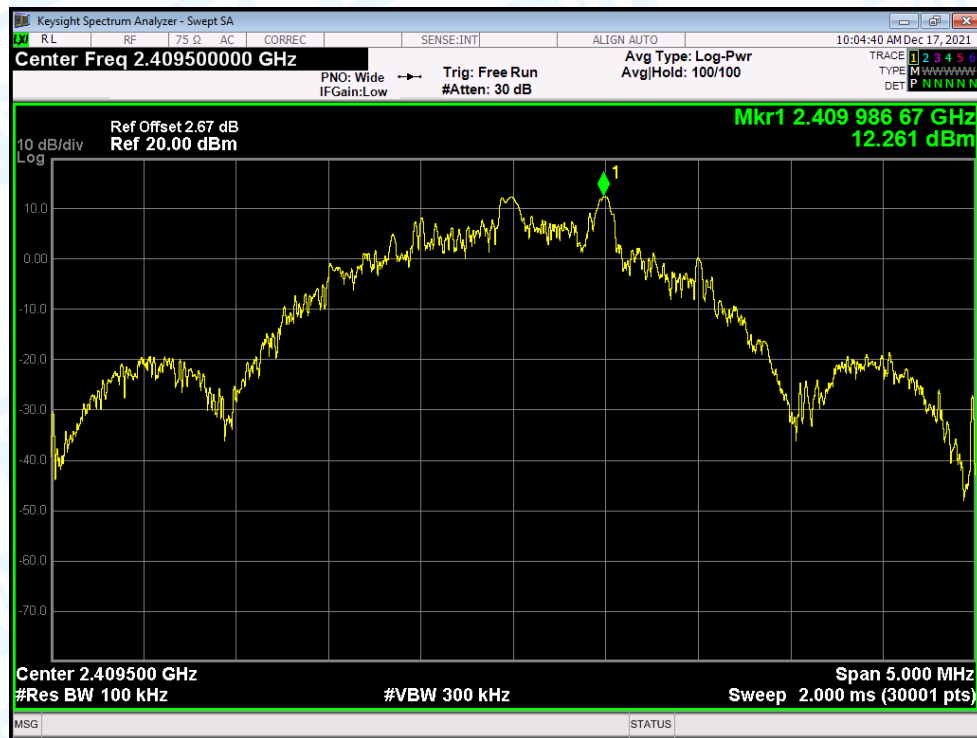


8. Conducted RF Spurious Emission

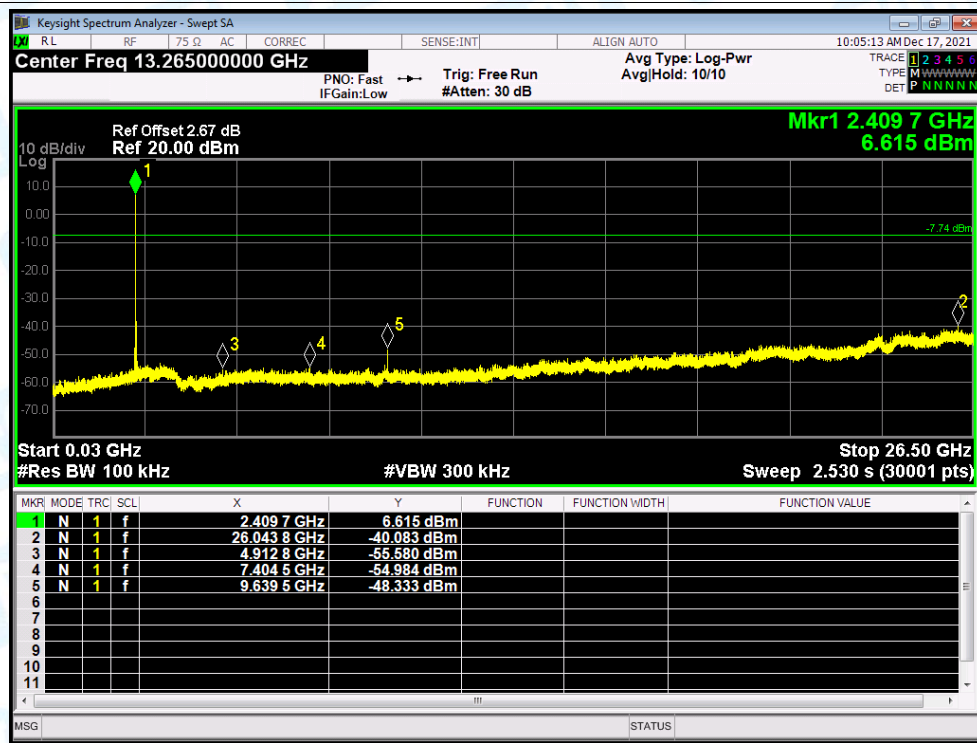
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	user	2409.5	Ant1	-52.34	-20	Pass
NVNT	user	2439.5	Ant1	-56.15	-20	Pass
NVNT	user	2468	Ant1	-59.15	-20	Pass

Test Graphs

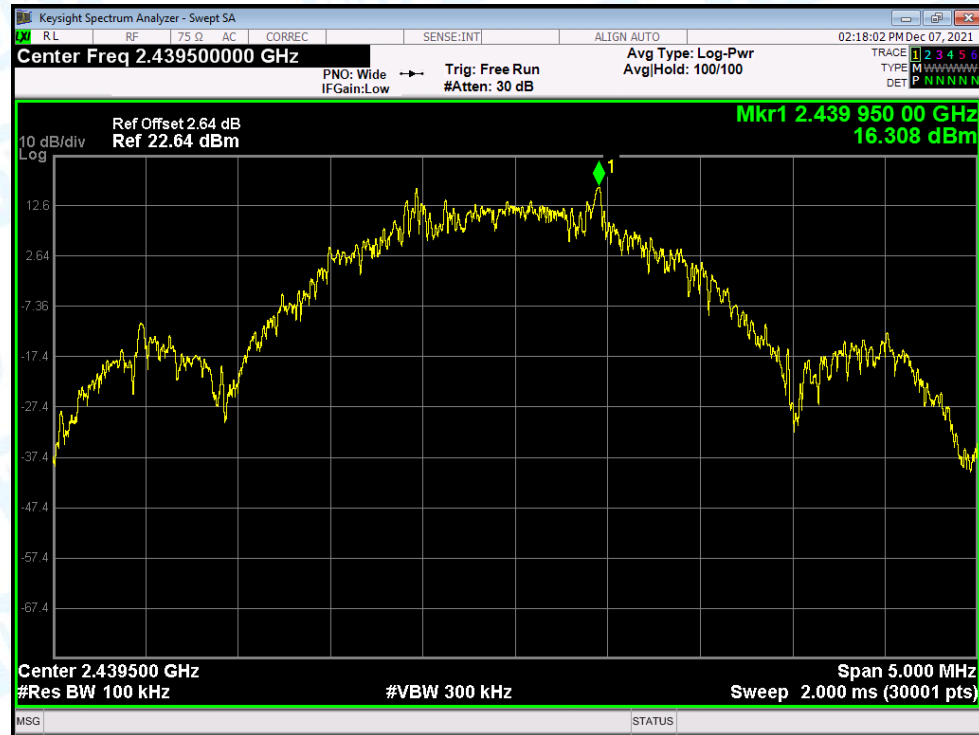
Tx. Spurious NVNT user 2409.5MHz Ant1 Ref



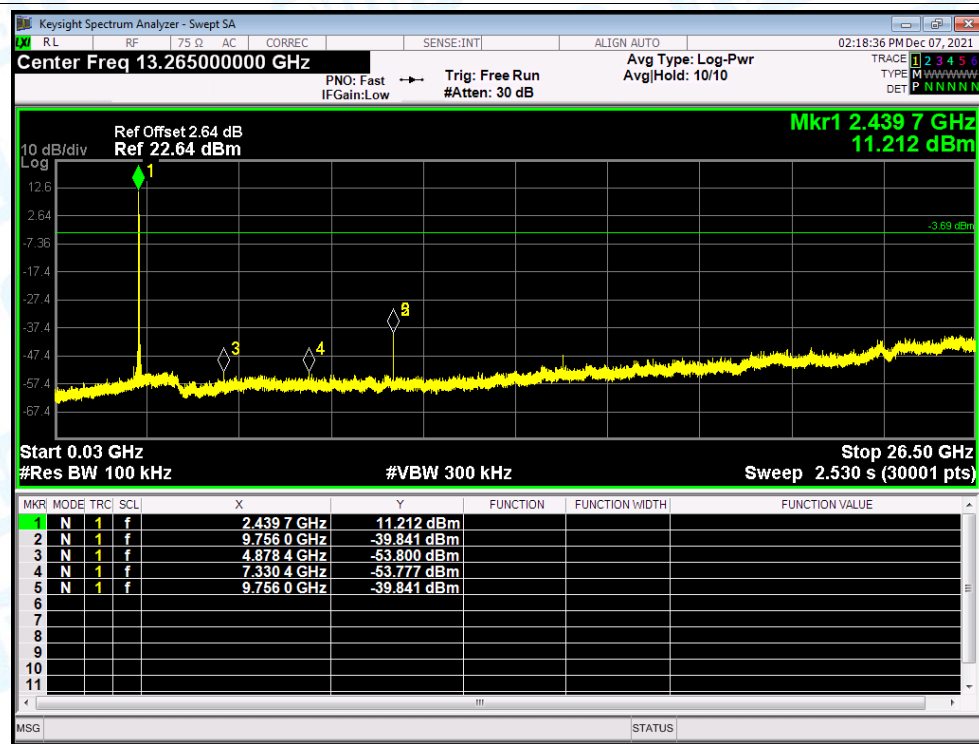
Tx. Spurious NVNT user 2409.5MHz Ant1 Emission



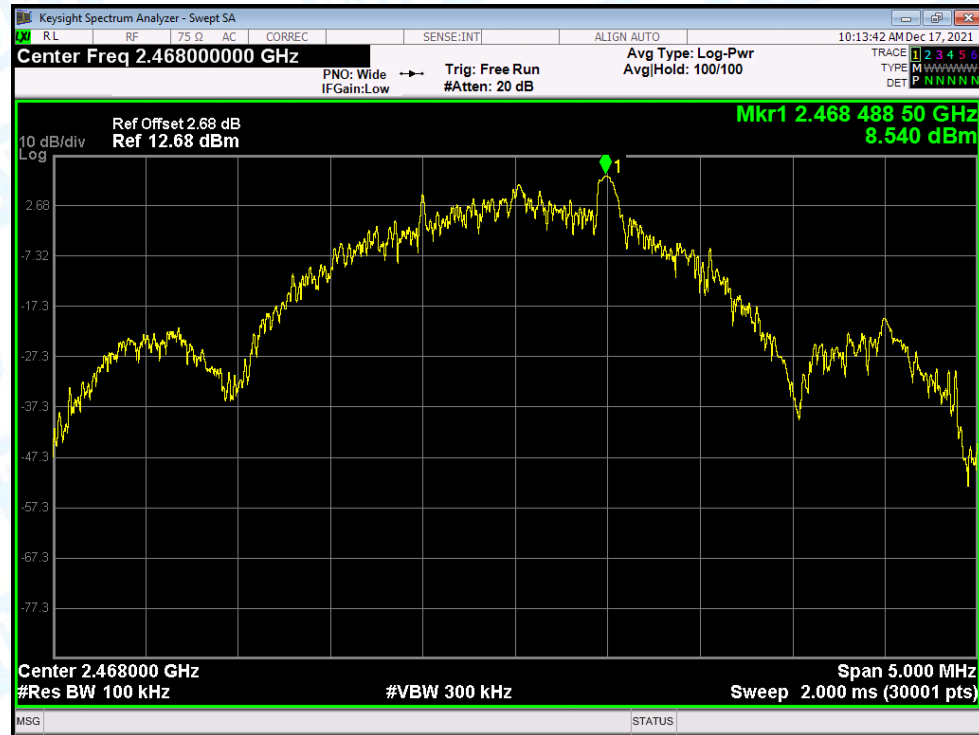
Tx. Spurious NVNT user 2439.5MHz Ant1 Ref



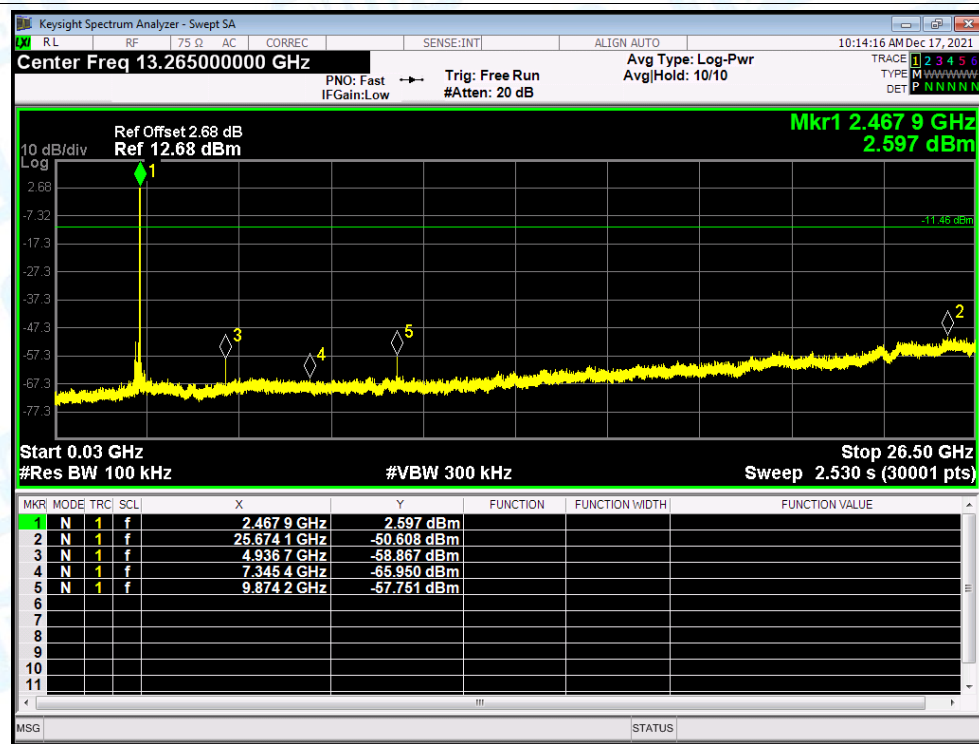
Tx. Spurious NVNT user 2439.5MHz Ant1 Emission



Tx. Spurious NVNT user 2468MHz Ant1 Ref

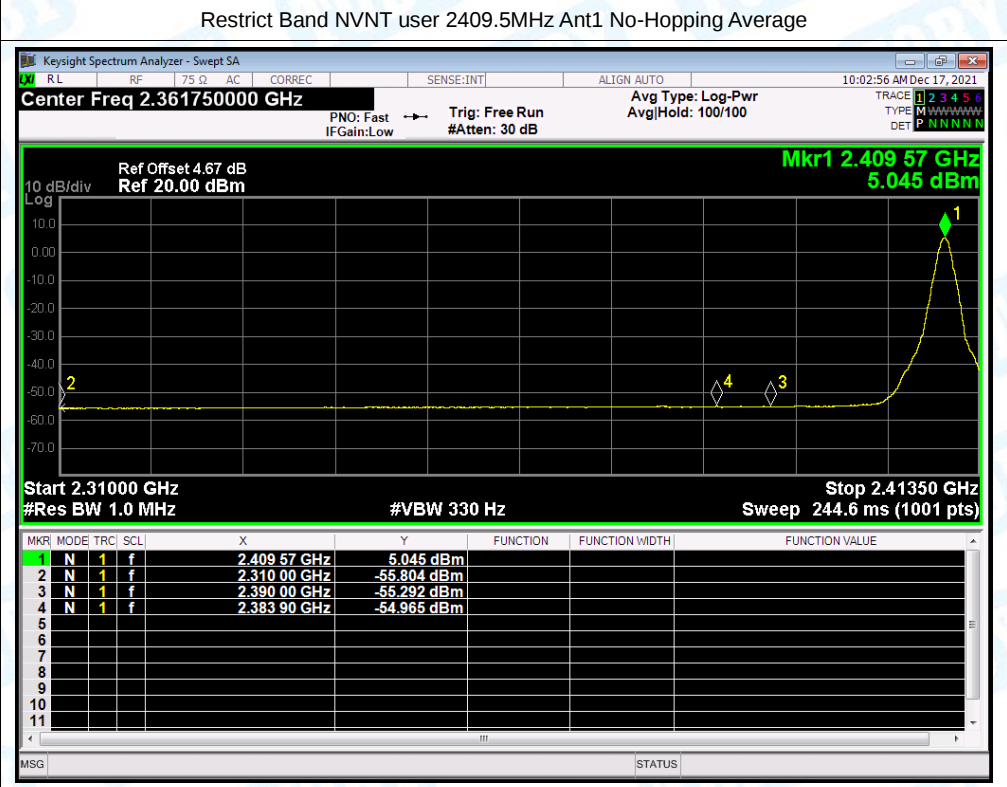
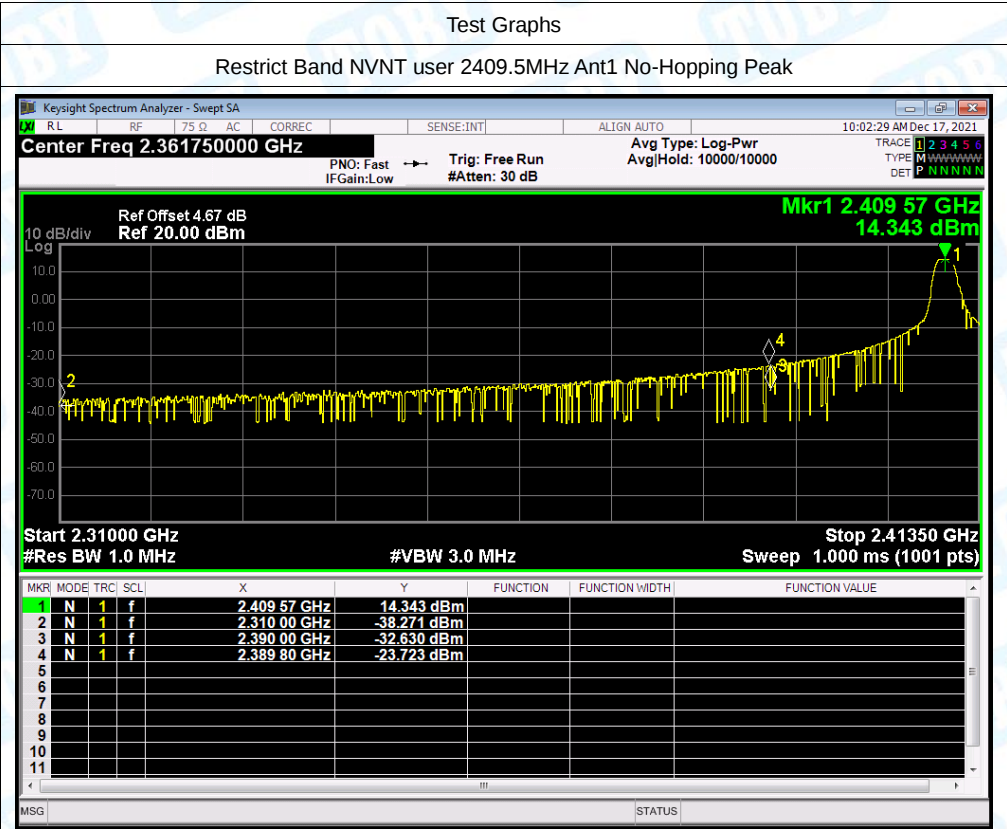


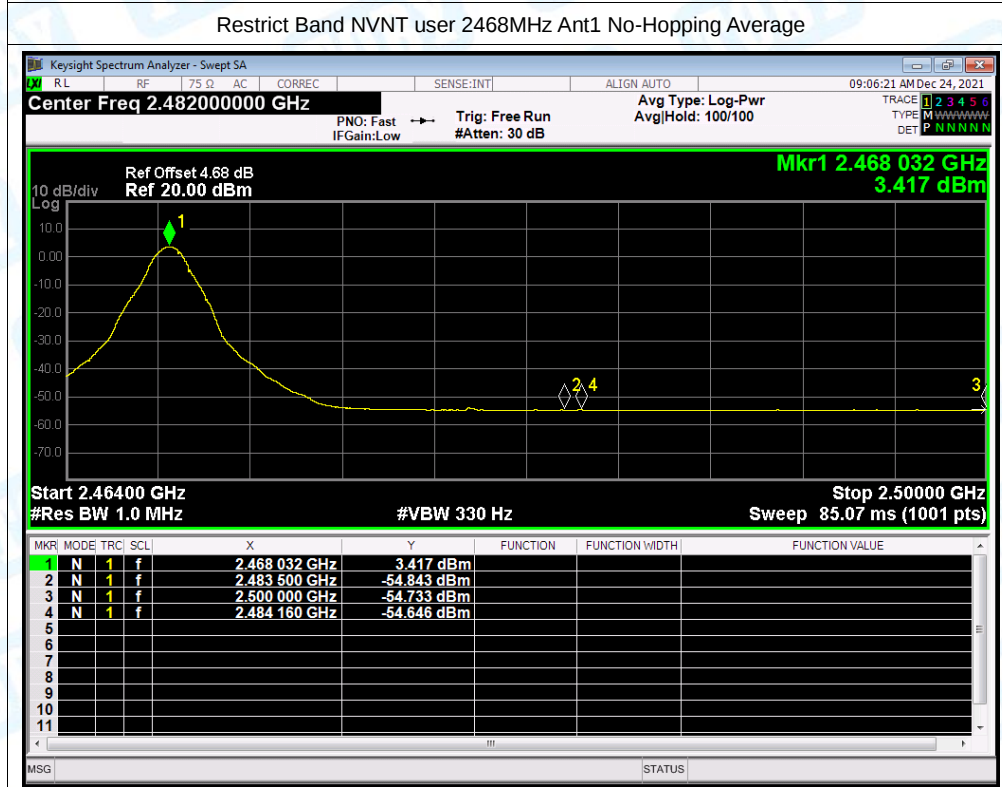
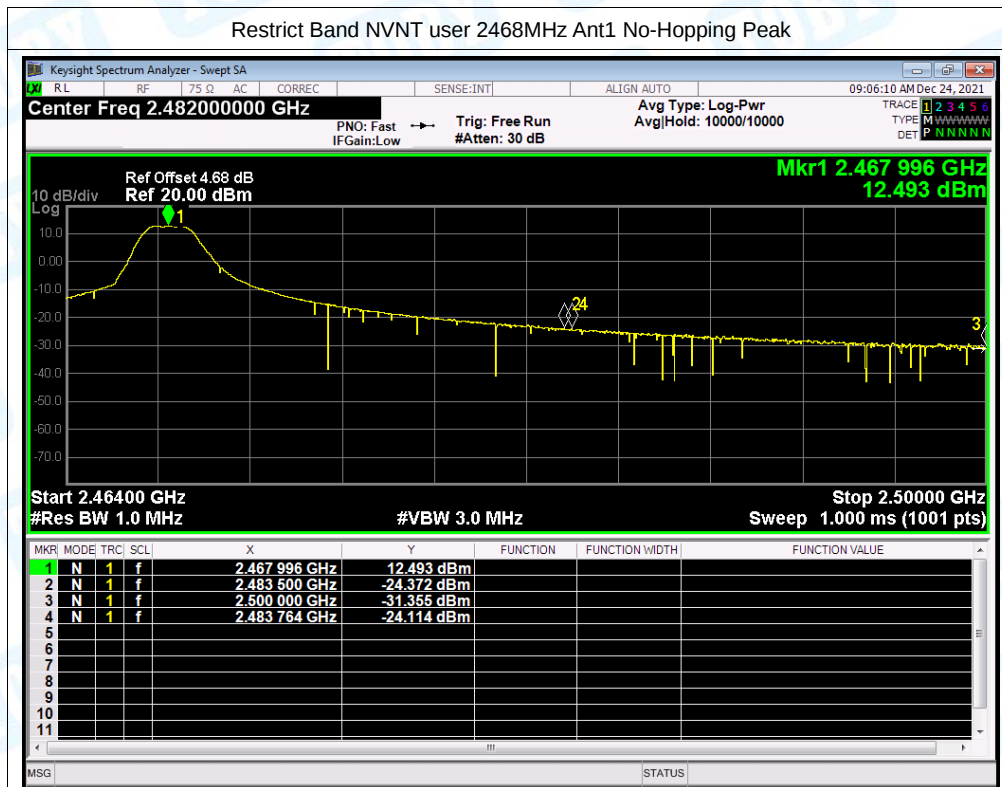
Tx. Spurious NVNT user 2468MHz Ant1 Emission



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





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] * 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

