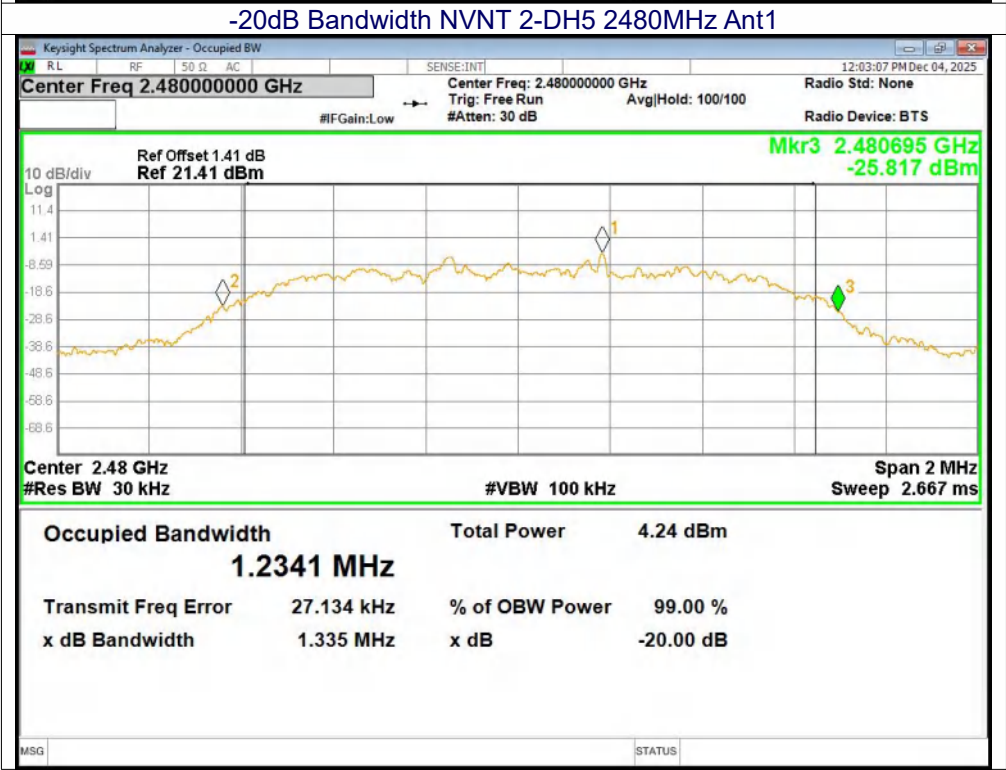
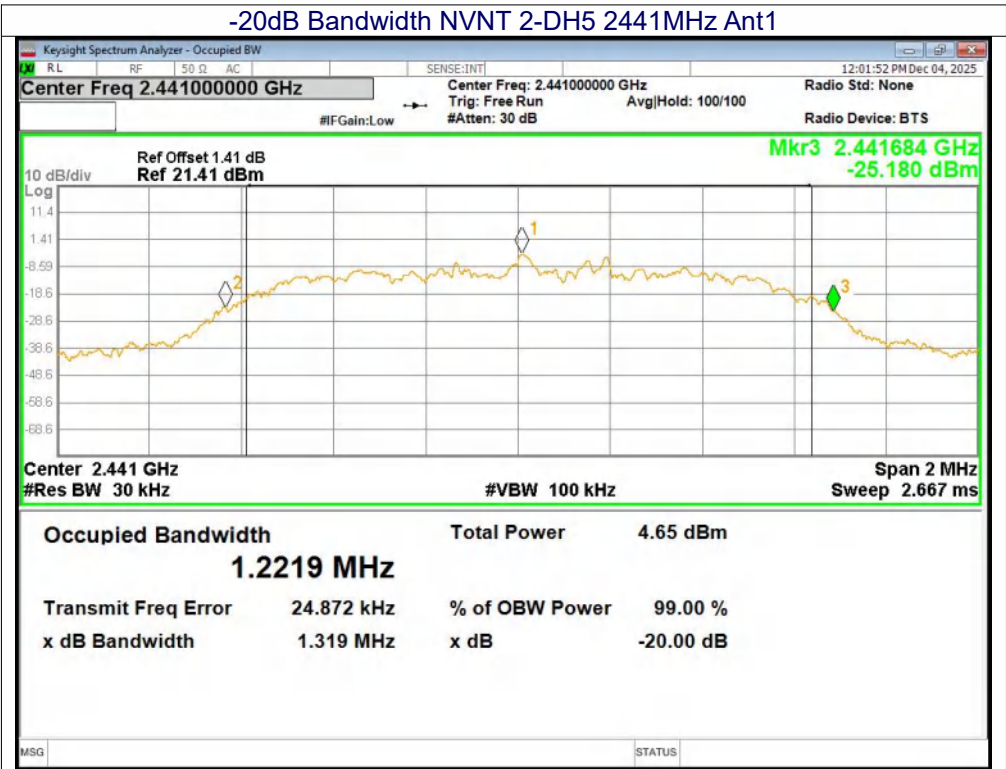
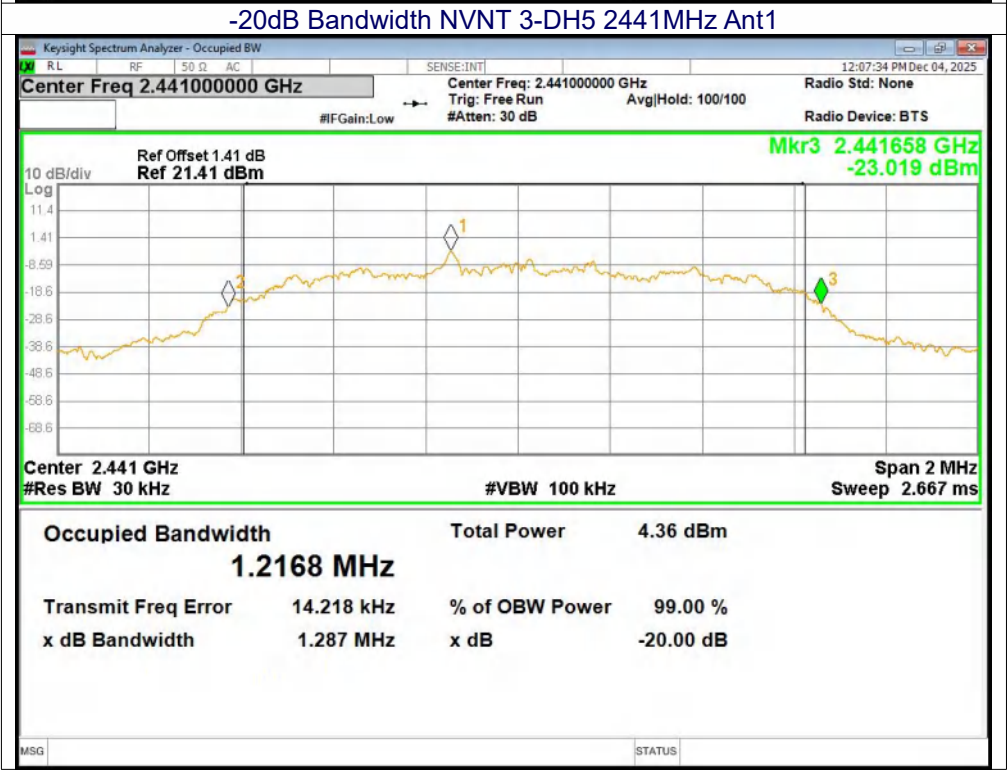
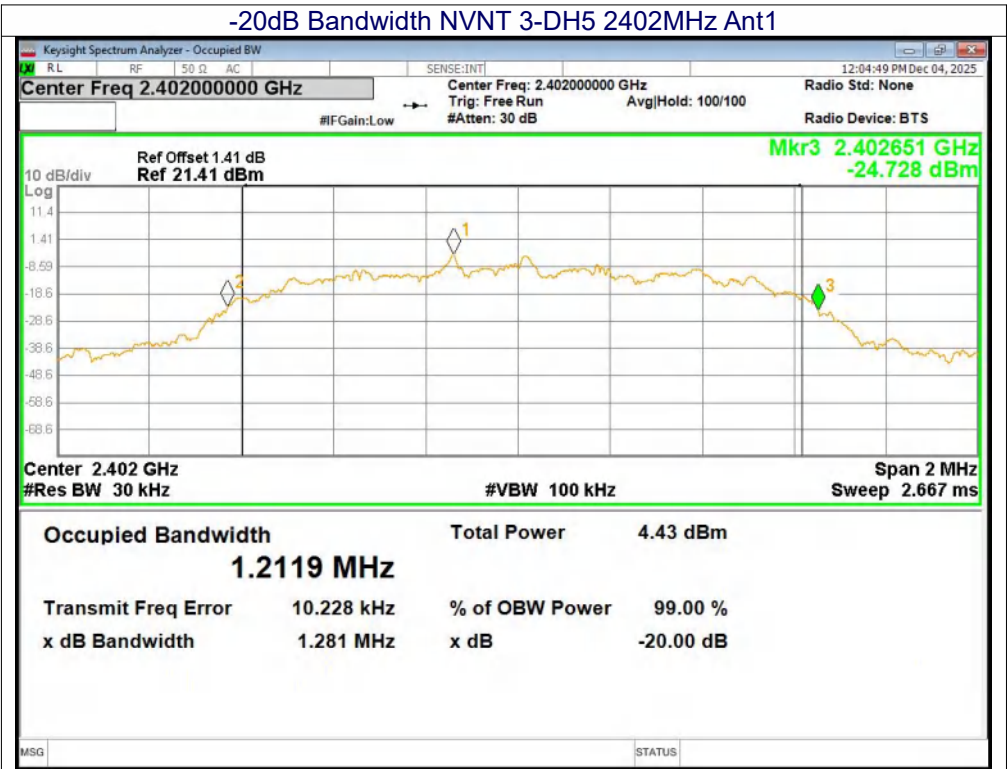
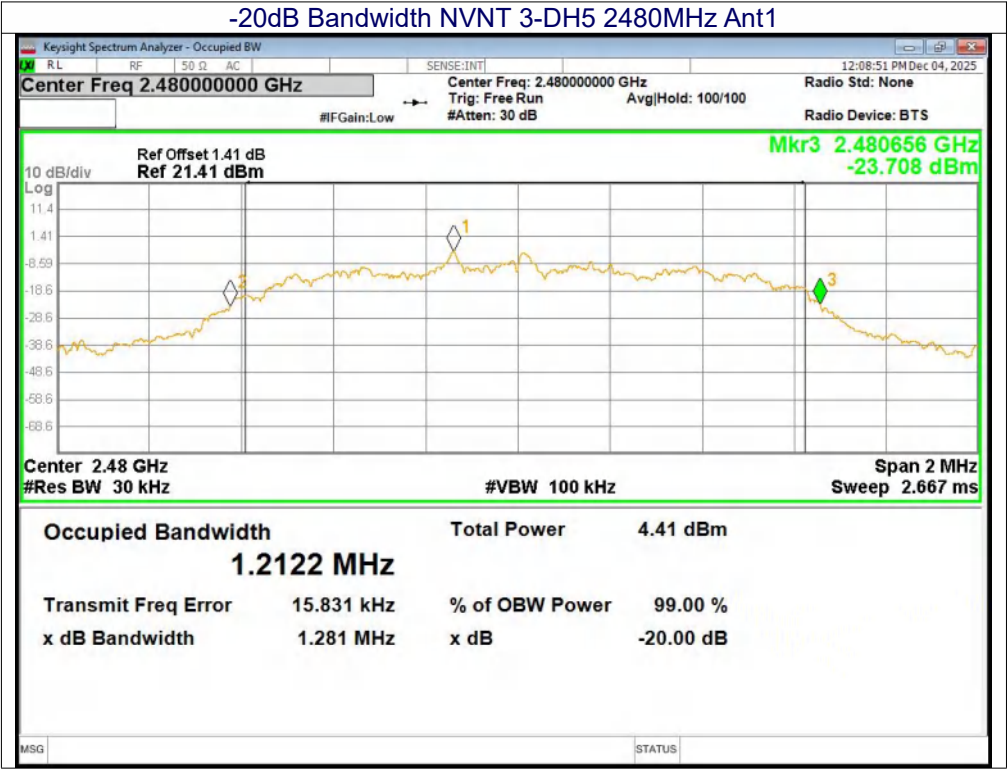
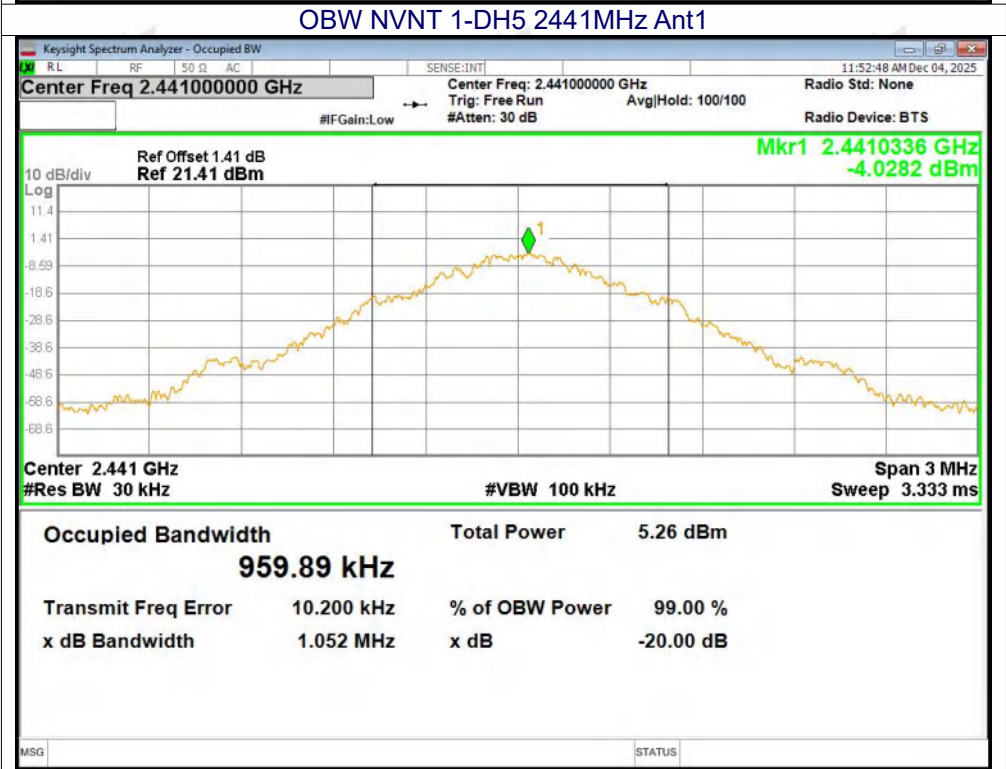
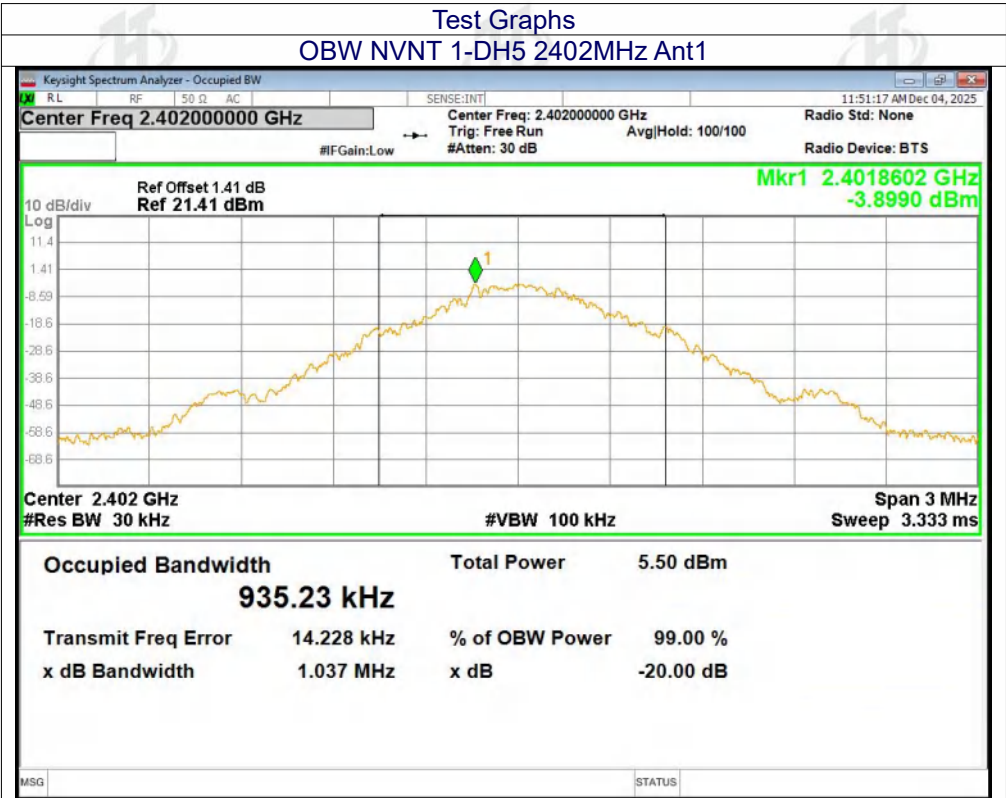


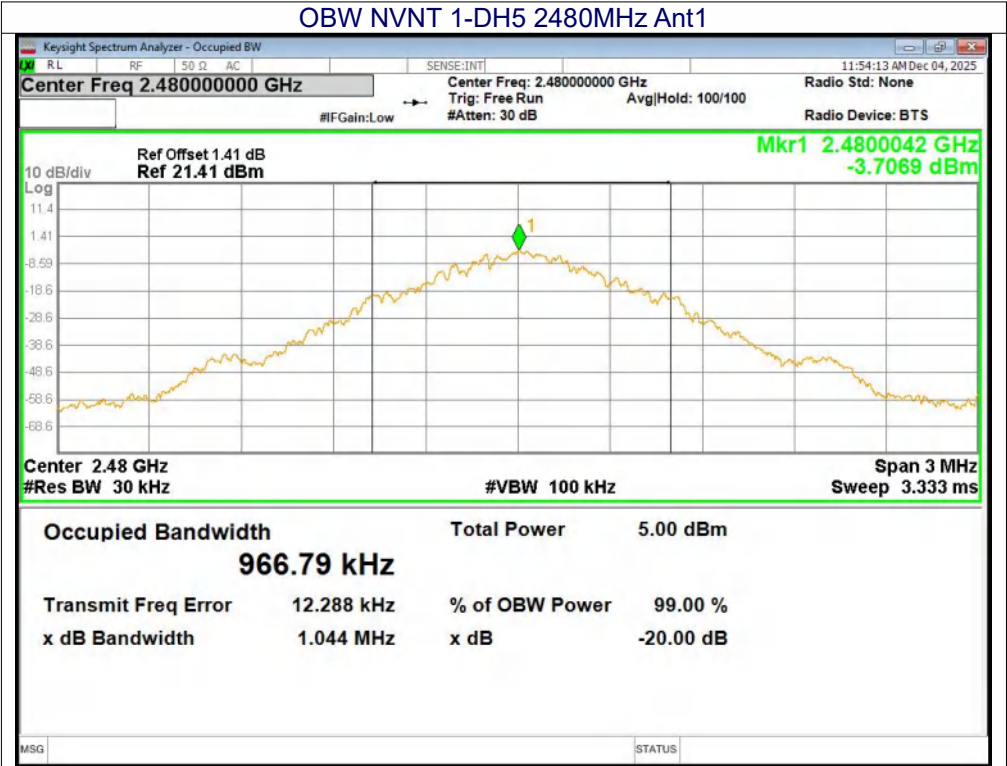




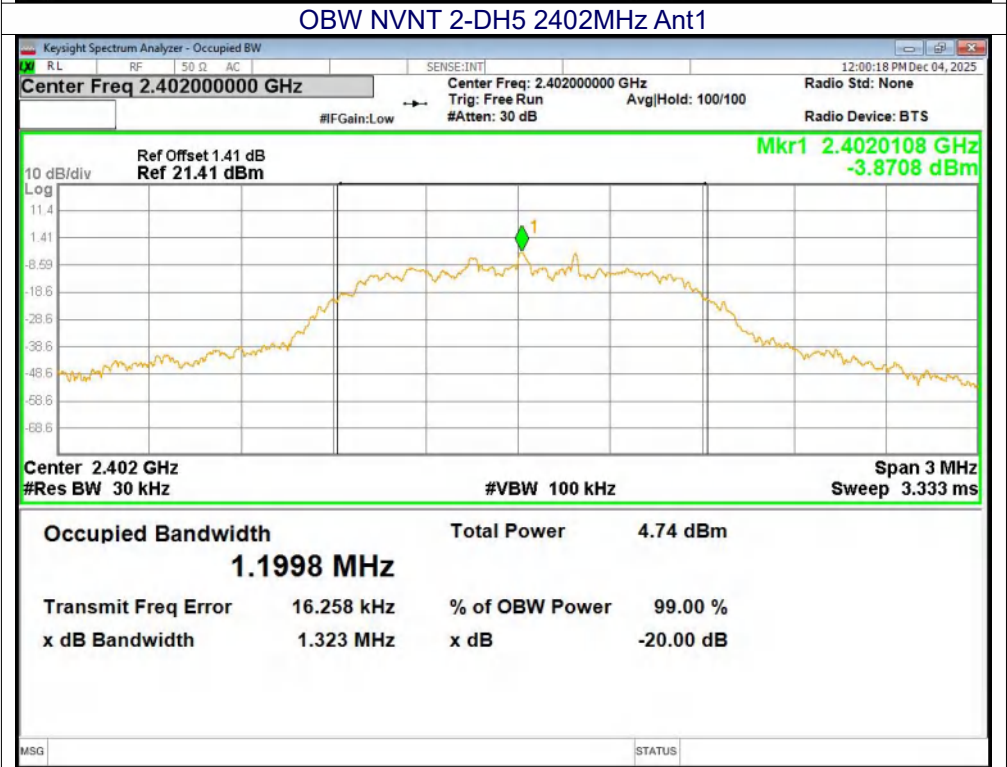


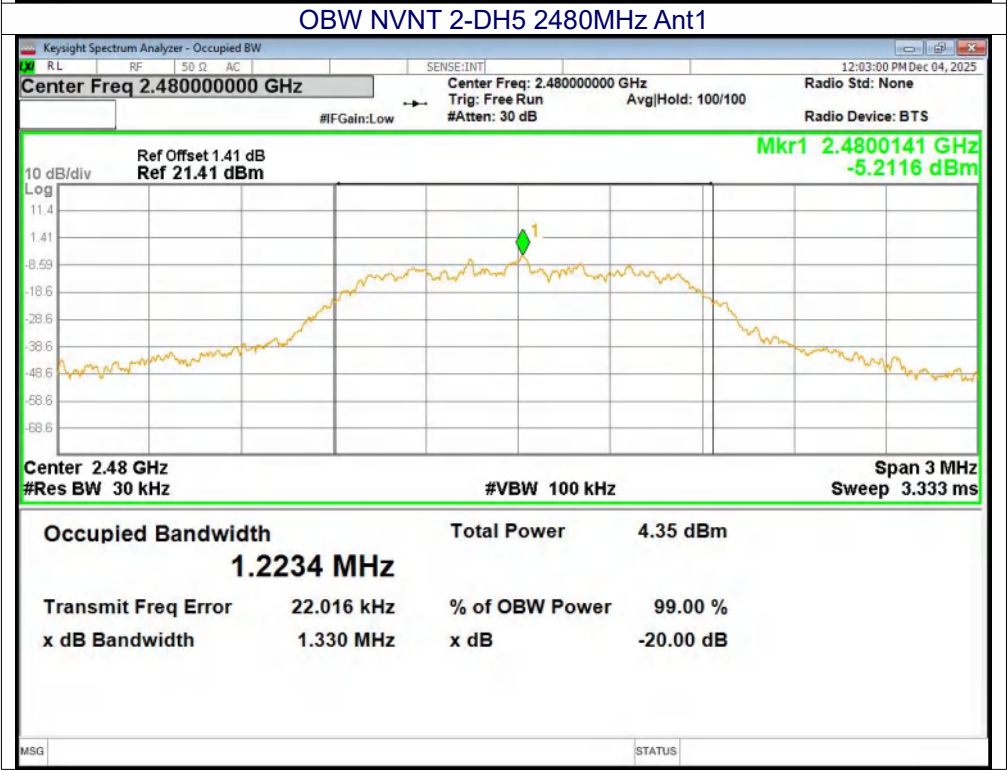
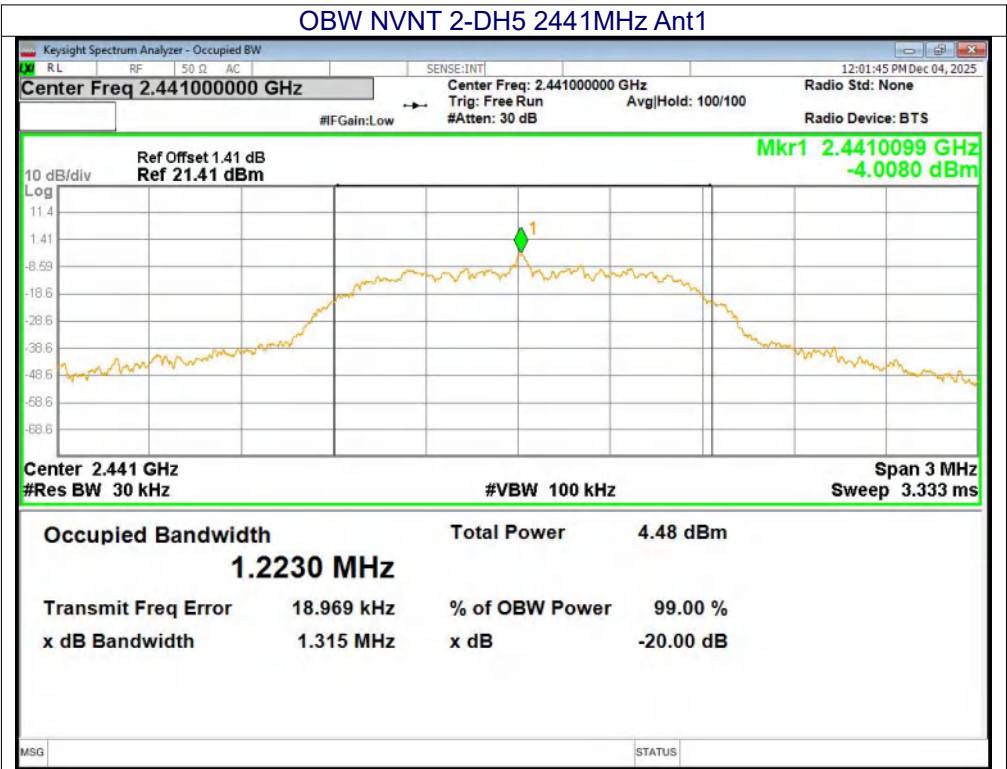


OBW NVNT 1-DH5 2480MHz Ant1

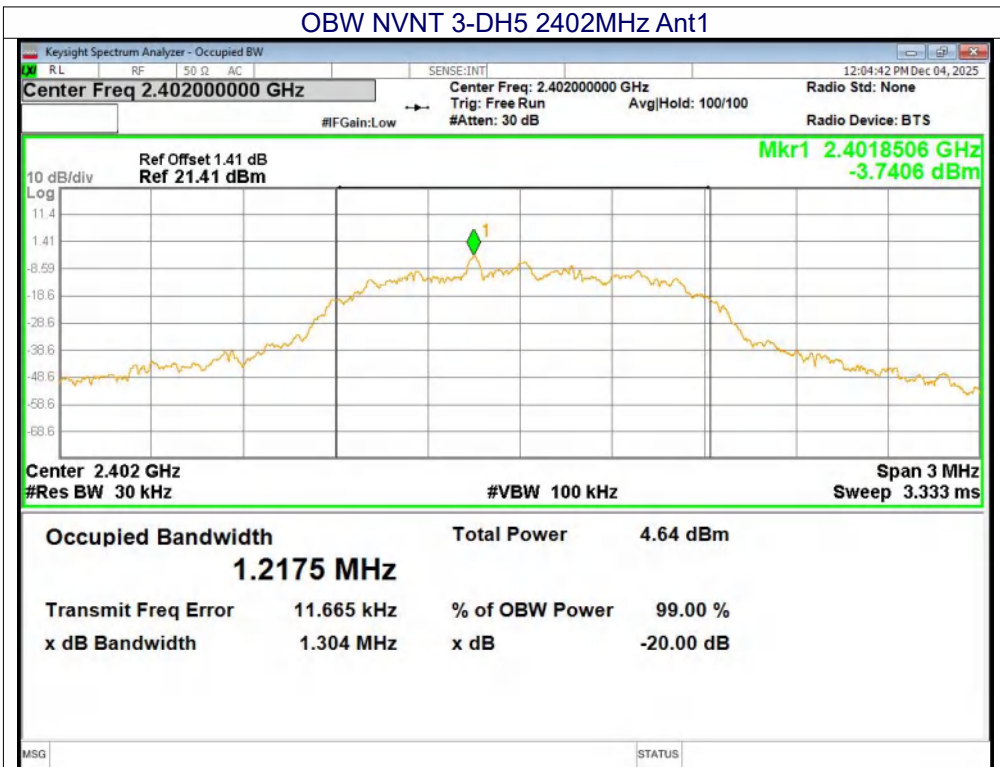


OBW NVNT 2-DH5 2402MHz Ant1

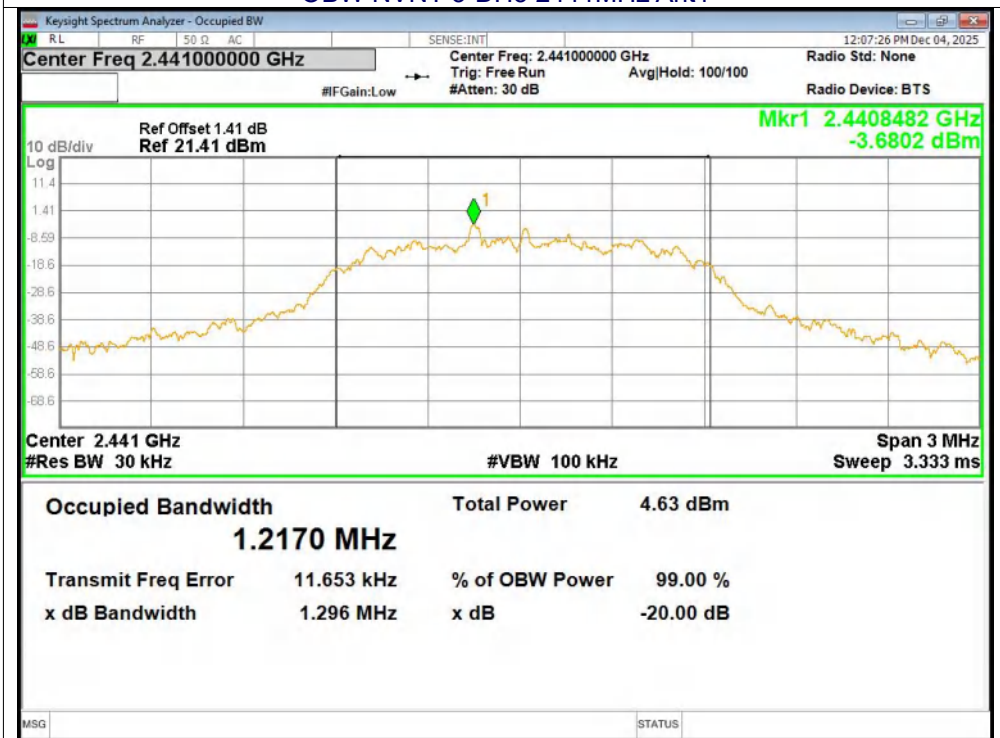


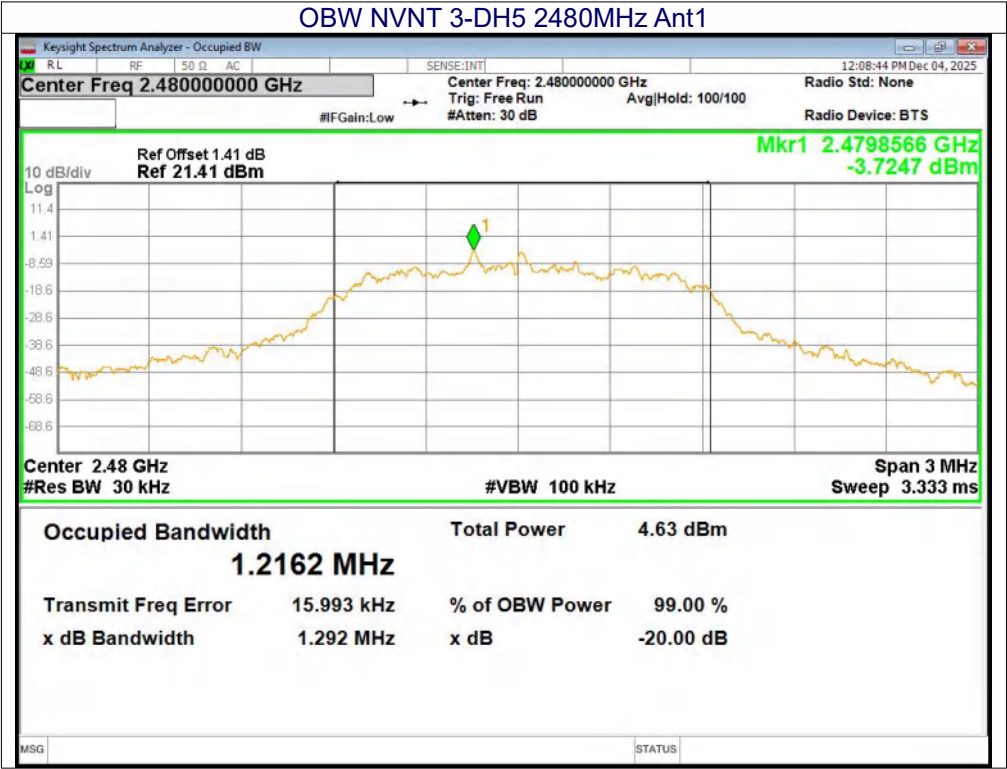


OBW NVNT 3-DH5 2402MHz Ant1



OBW NVNT 3-DH5 2441MHz Ant1

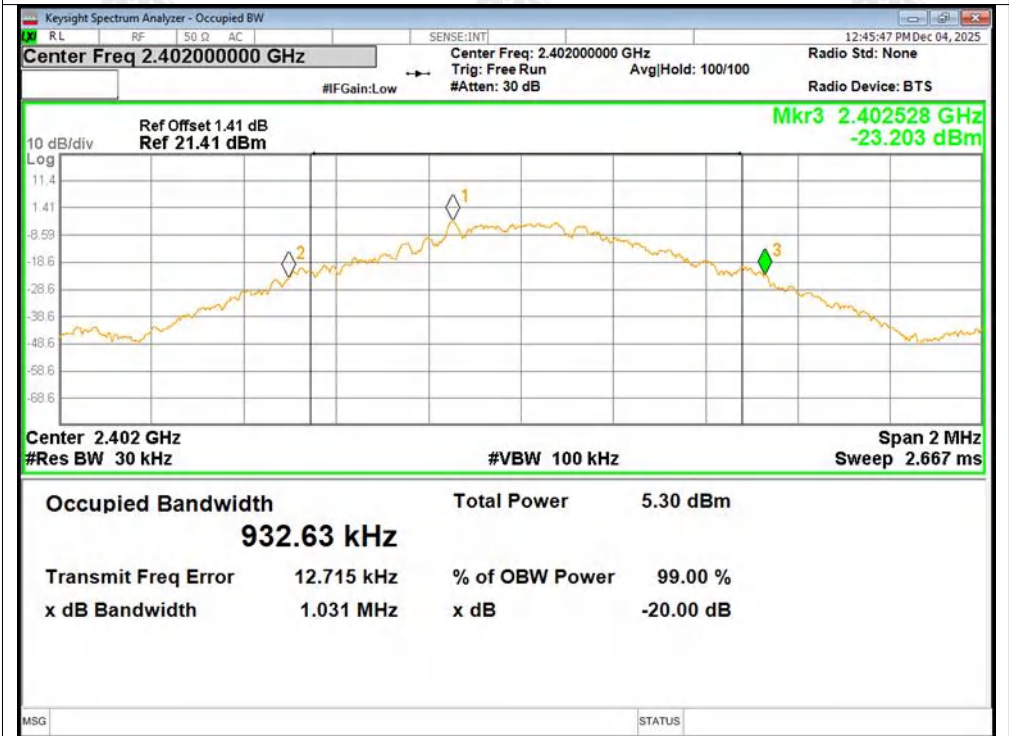




Right earphone				
Mode	Test channel	20dB Emission Bandwidth (MHz)	99%Bandwidth (MHz)	Result
GFSK	Lowest	1.031	0.941	Pass
	Middle	1.032	0.942	
	Highest	1.042	0.956	
$\pi/4$ DQPSK	Lowest	1.318	1.208	Pass
	Middle	1.316	1.239	
	Highest	1.347	1.234	
8DPSK	Lowest	1.304	1.231	Pass
	Middle	1.297	1.227	
	Highest	1.295	1.216	

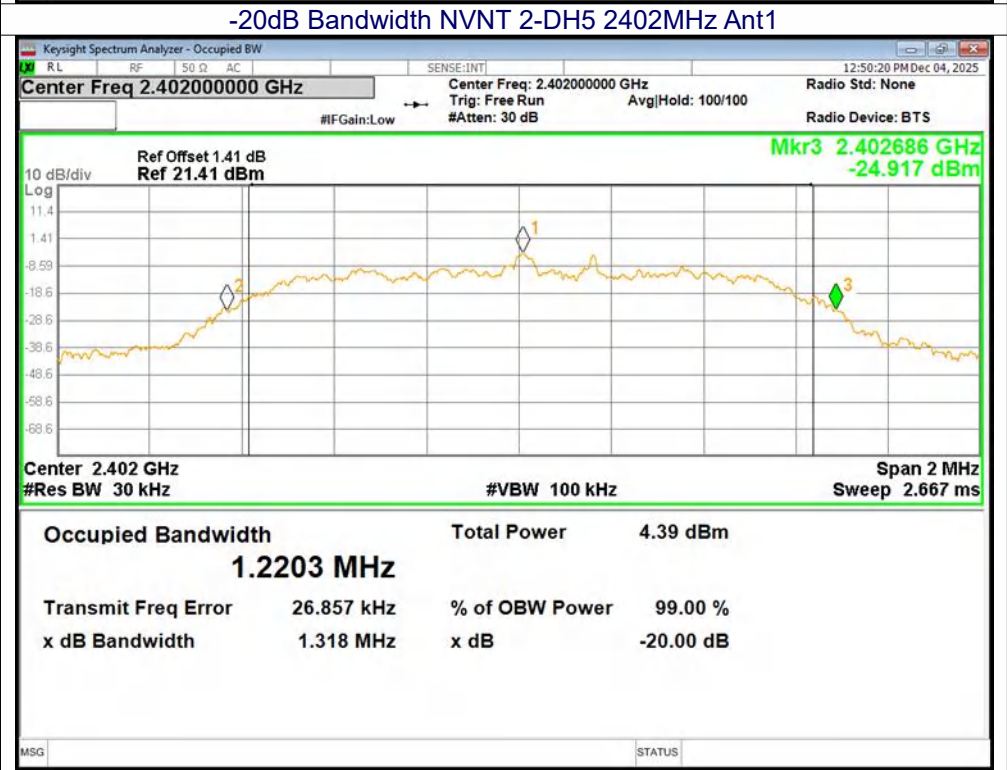
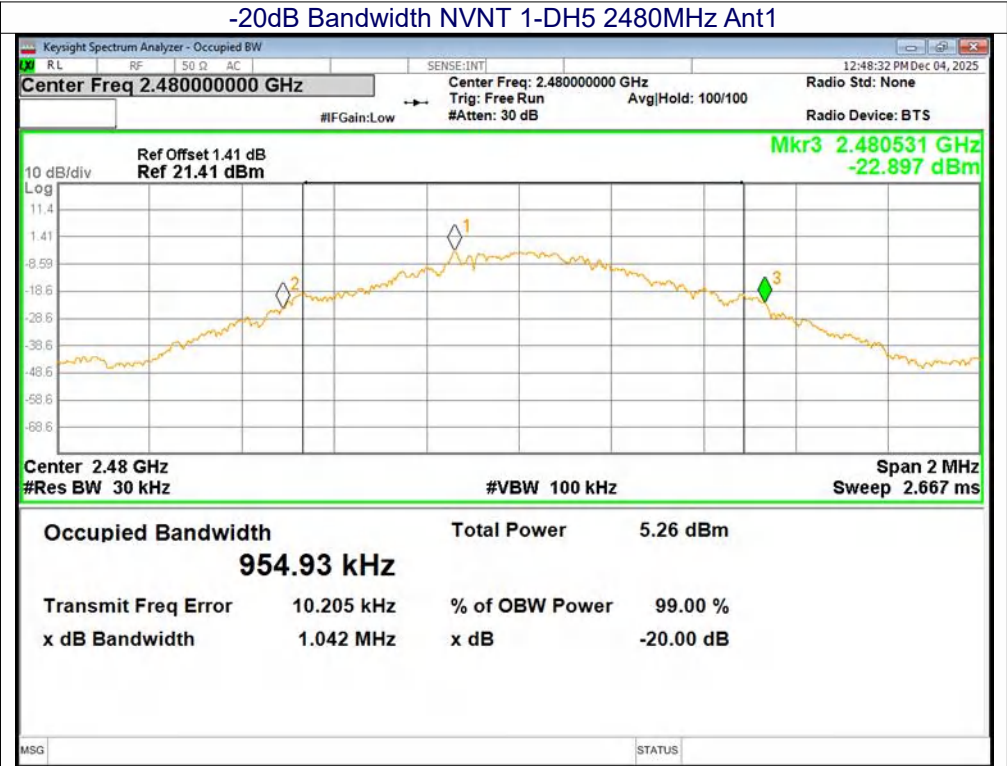
Test Graphs

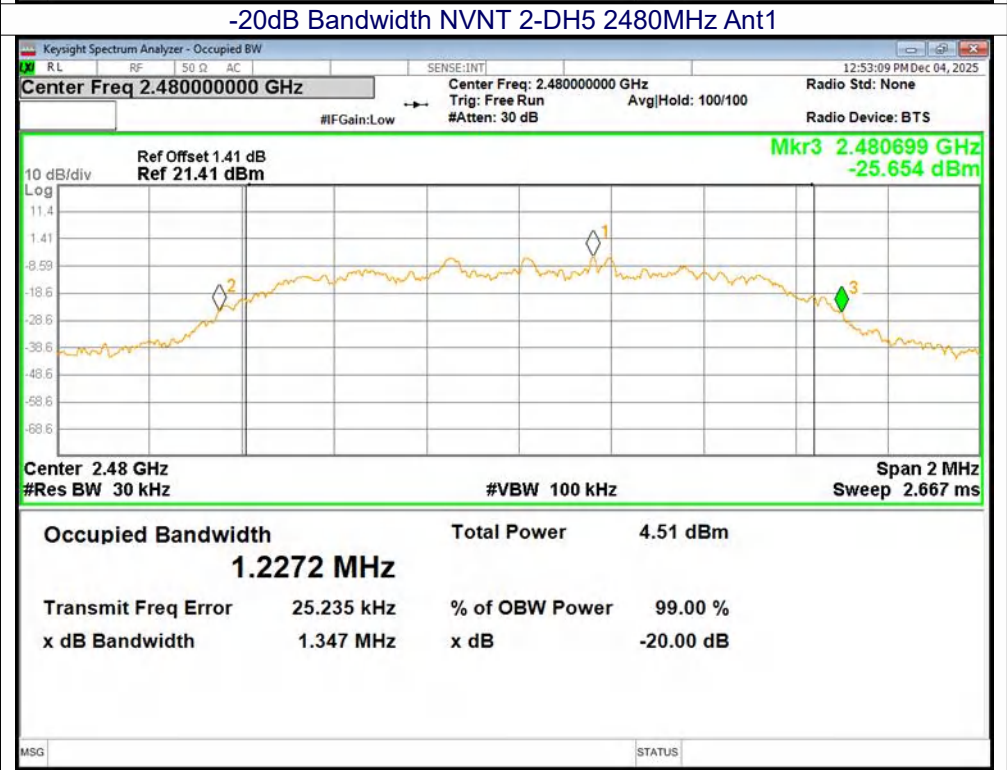
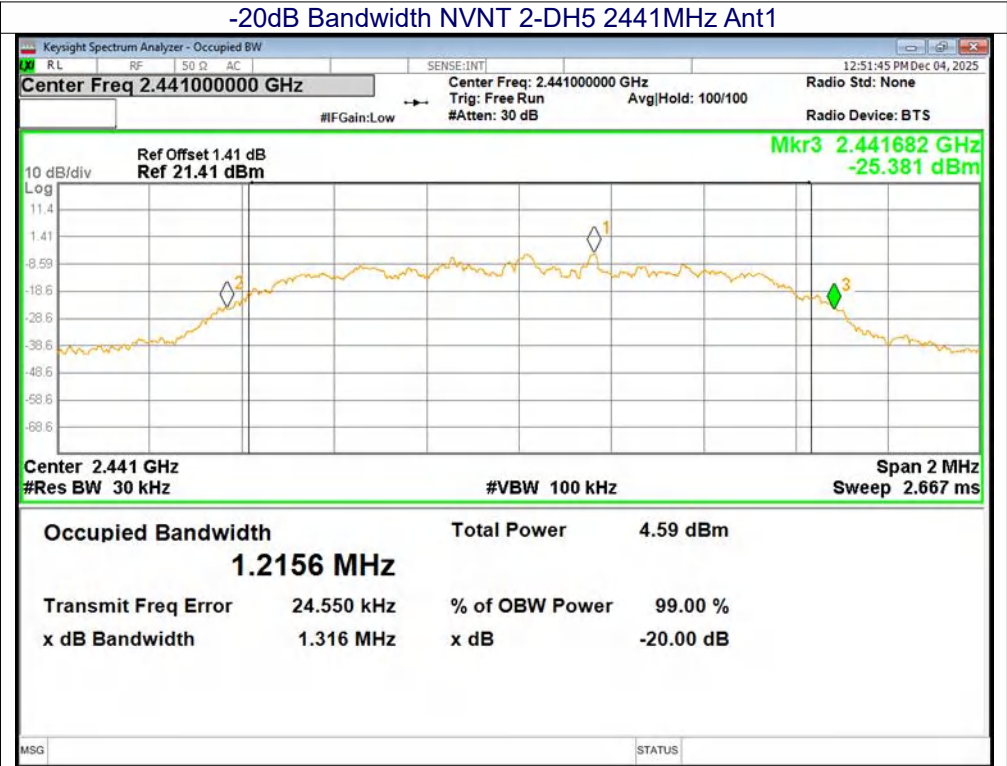
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1

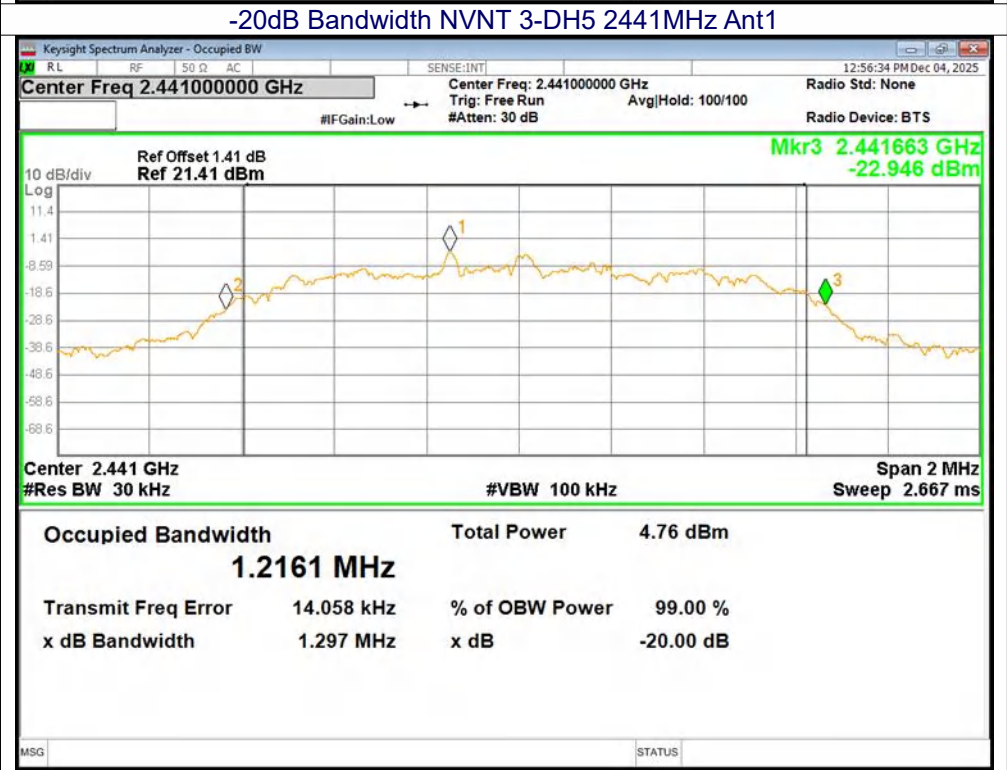
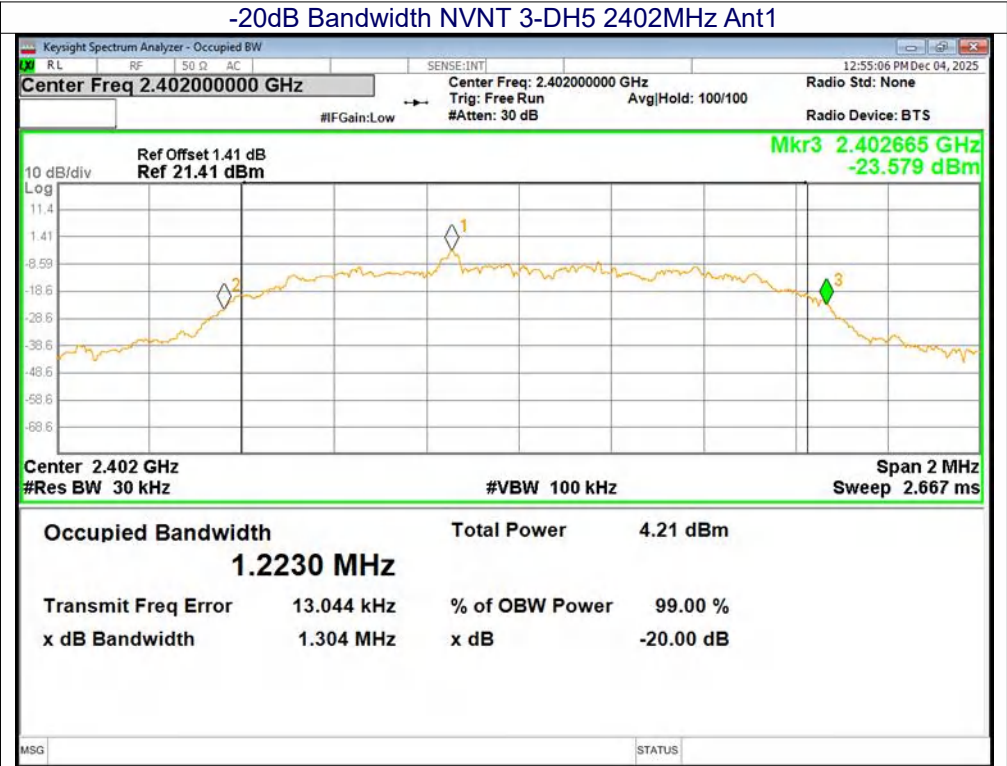


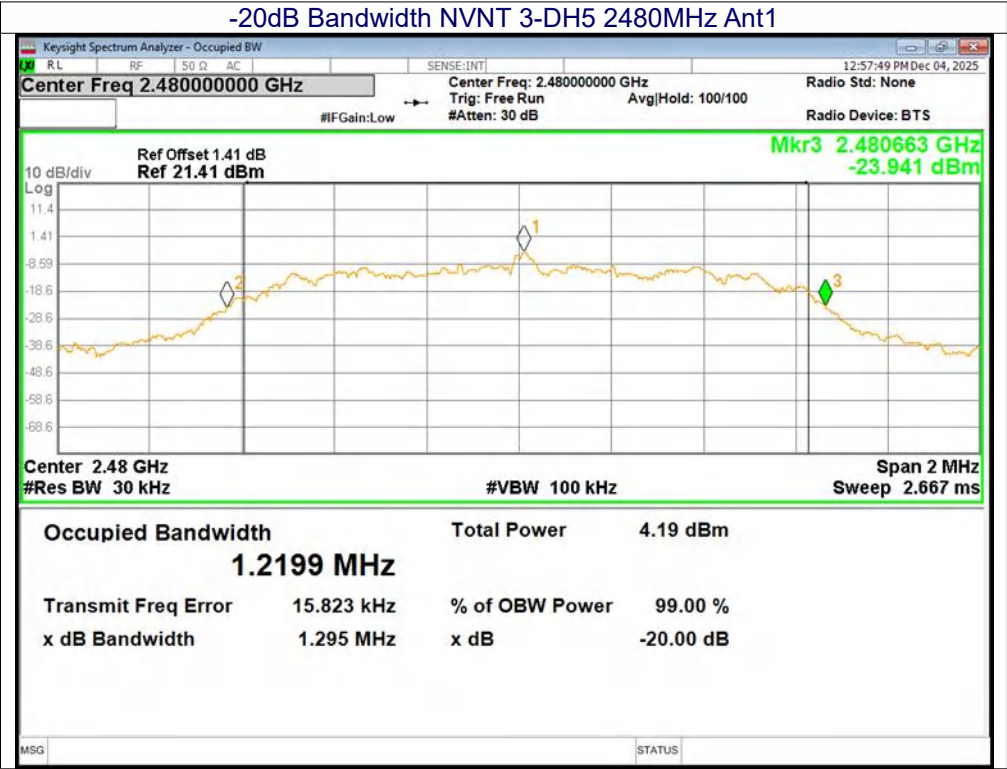
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1

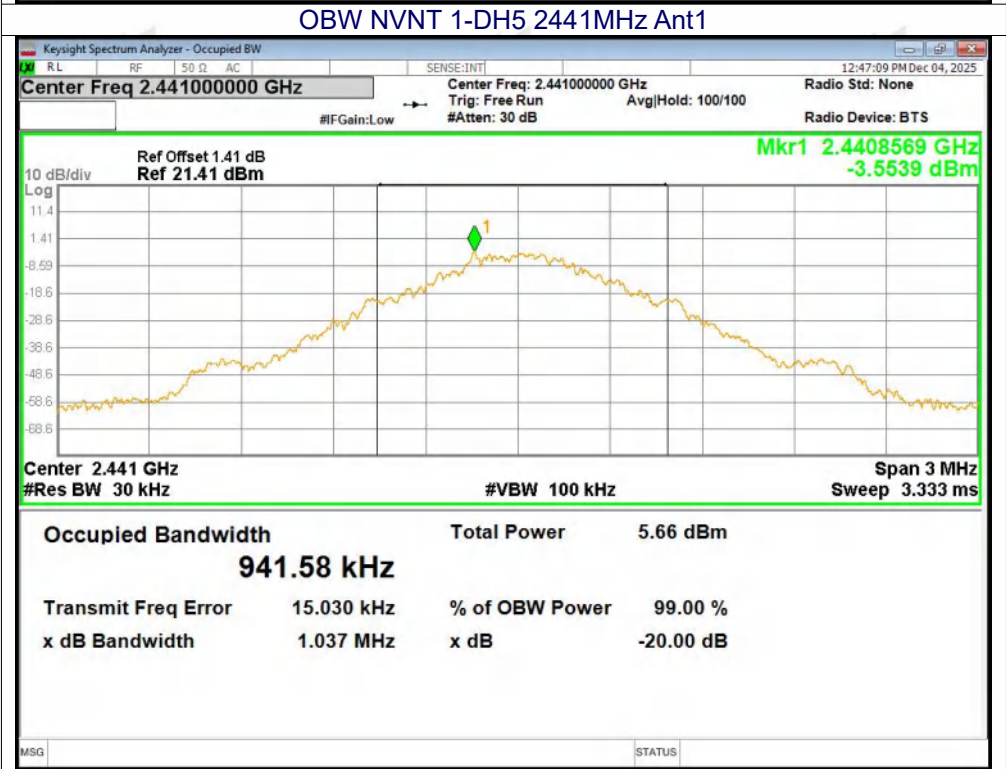
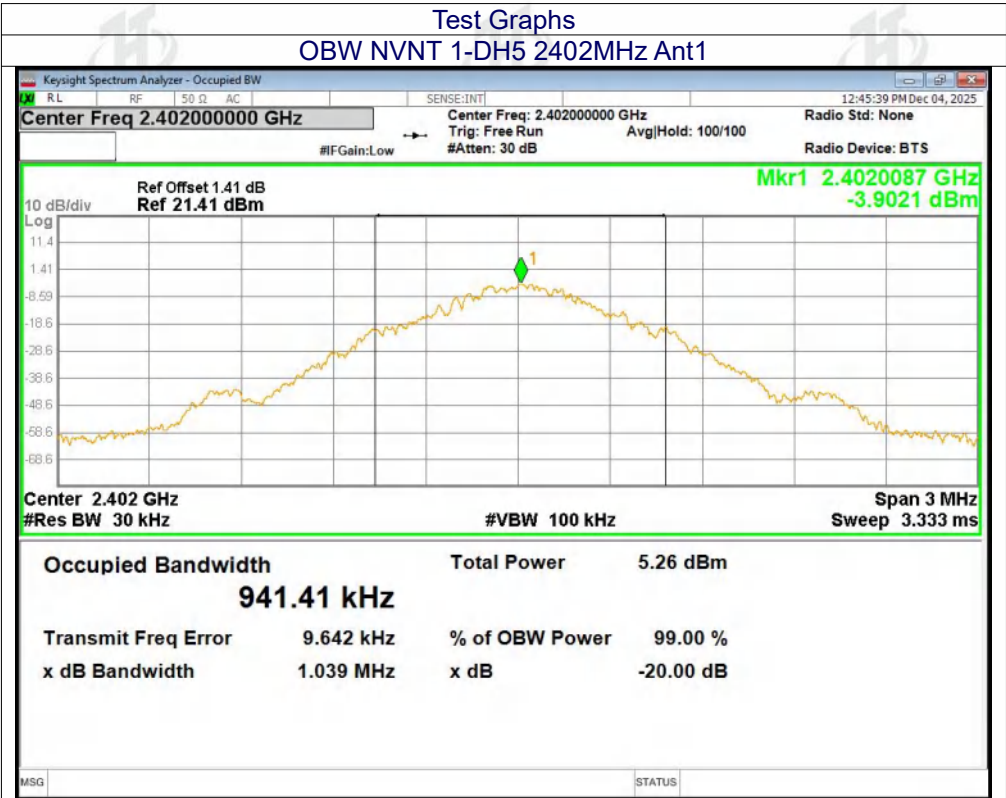


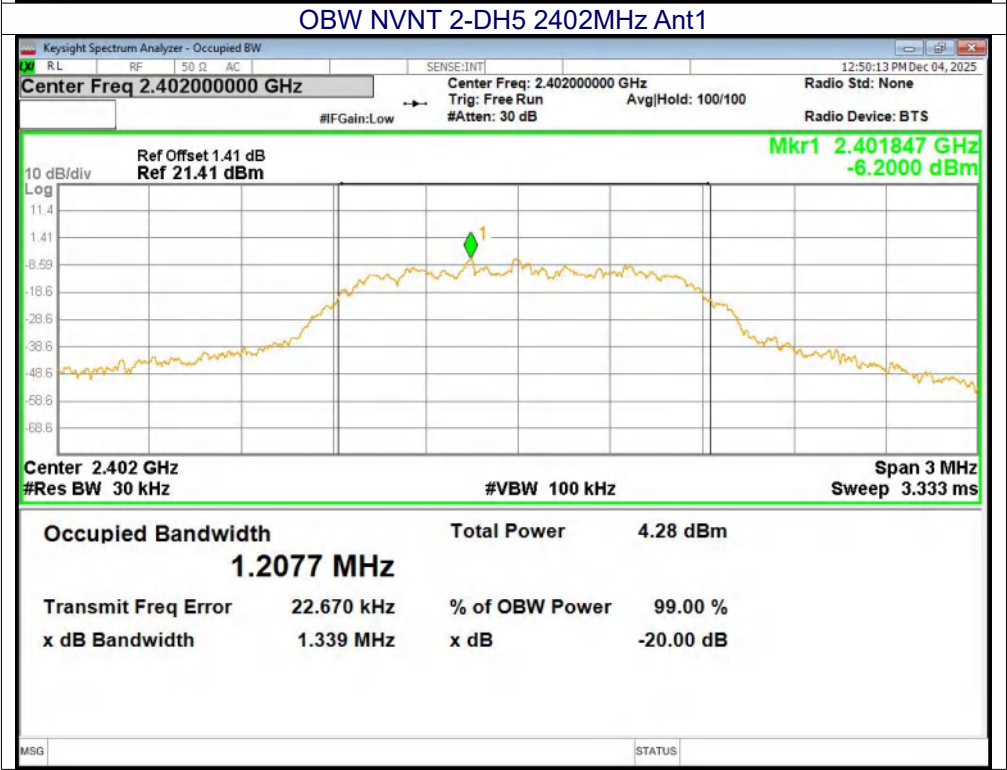
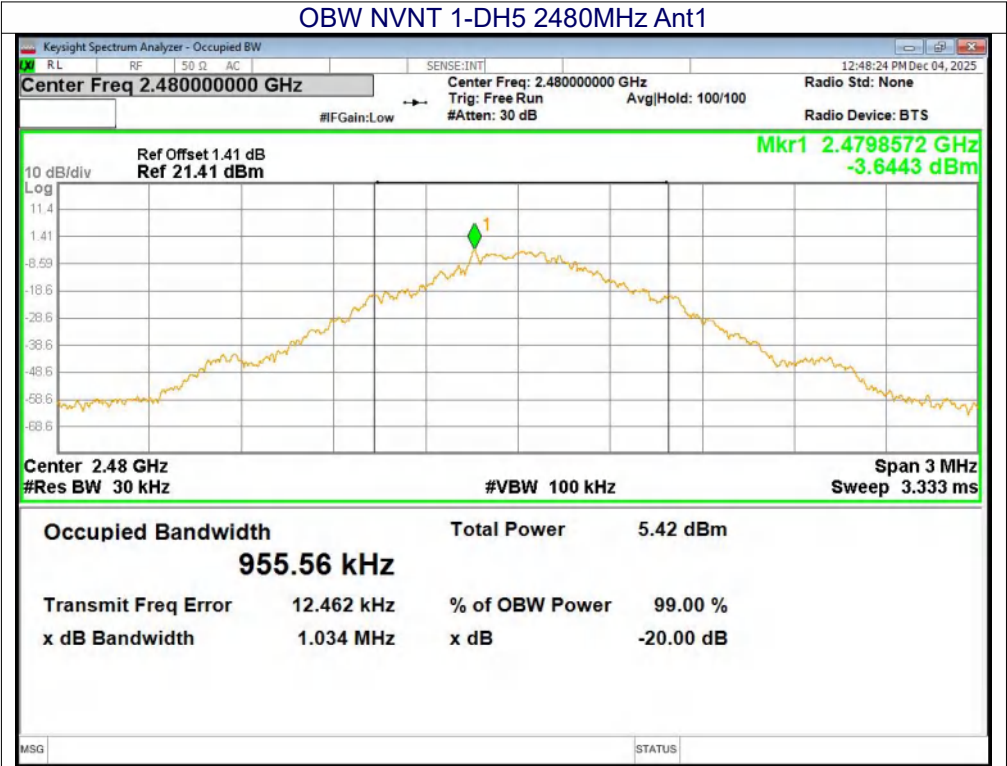




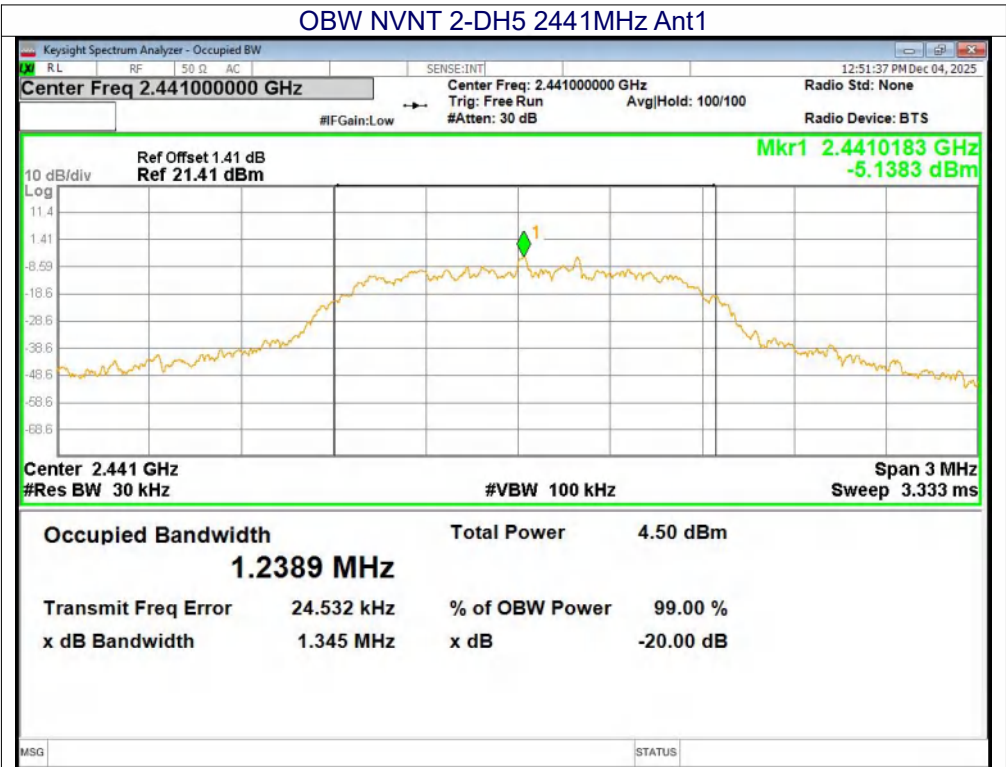




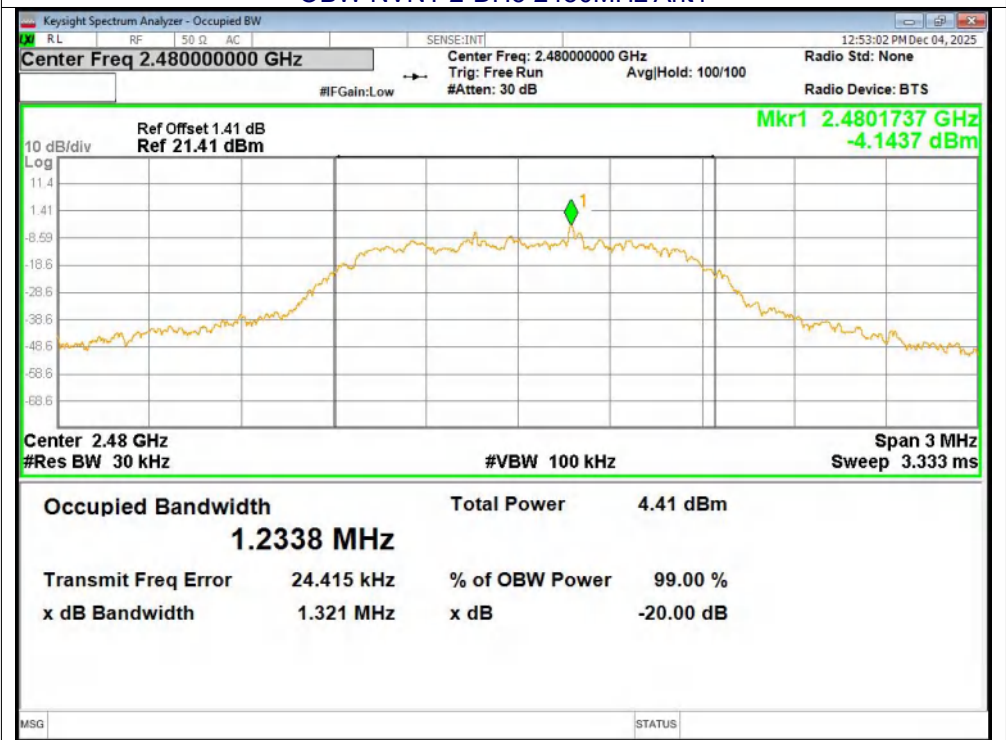




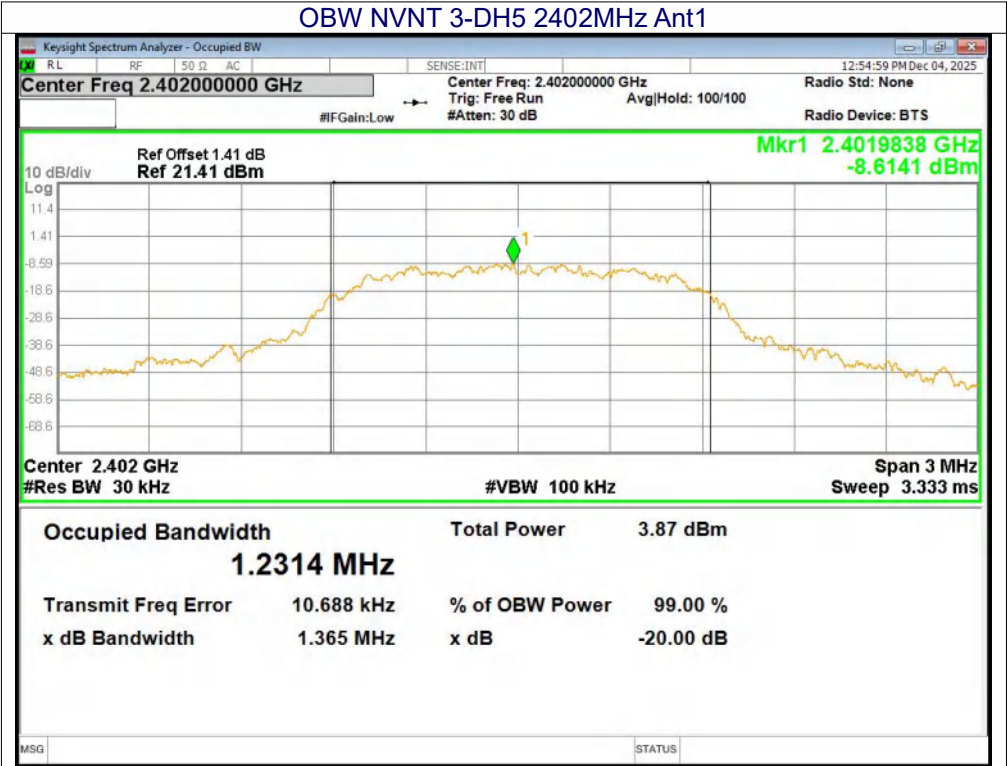
OBW NVNT 2-DH5 2441MHz Ant1



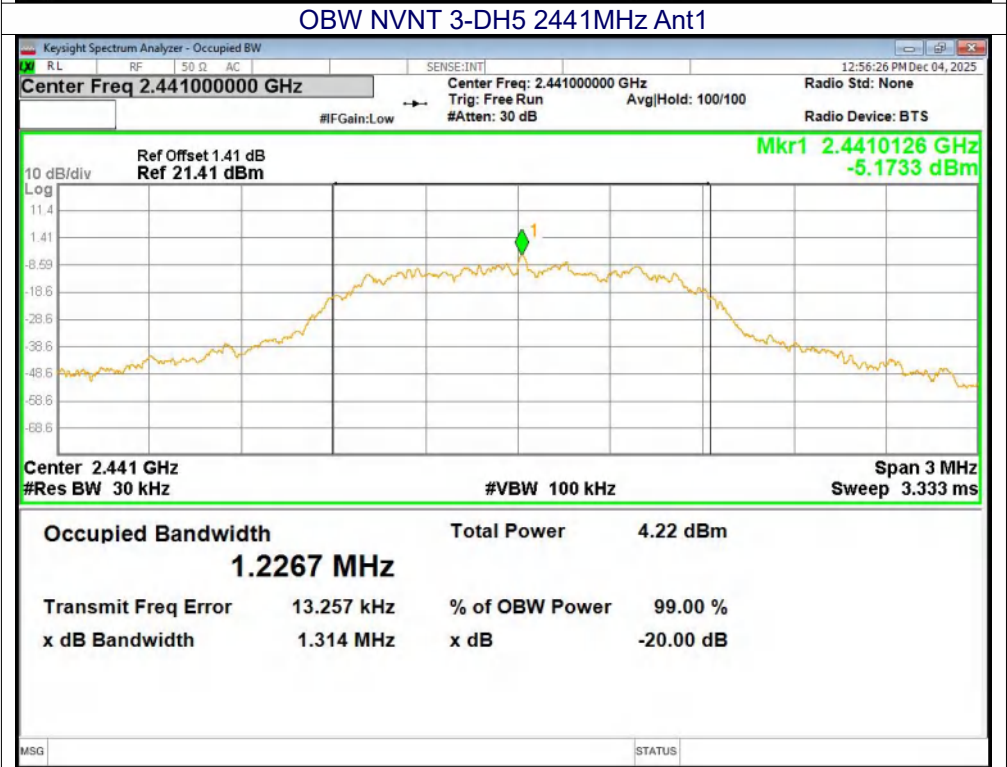
OBW NVNT 2-DH5 2480MHz Ant1

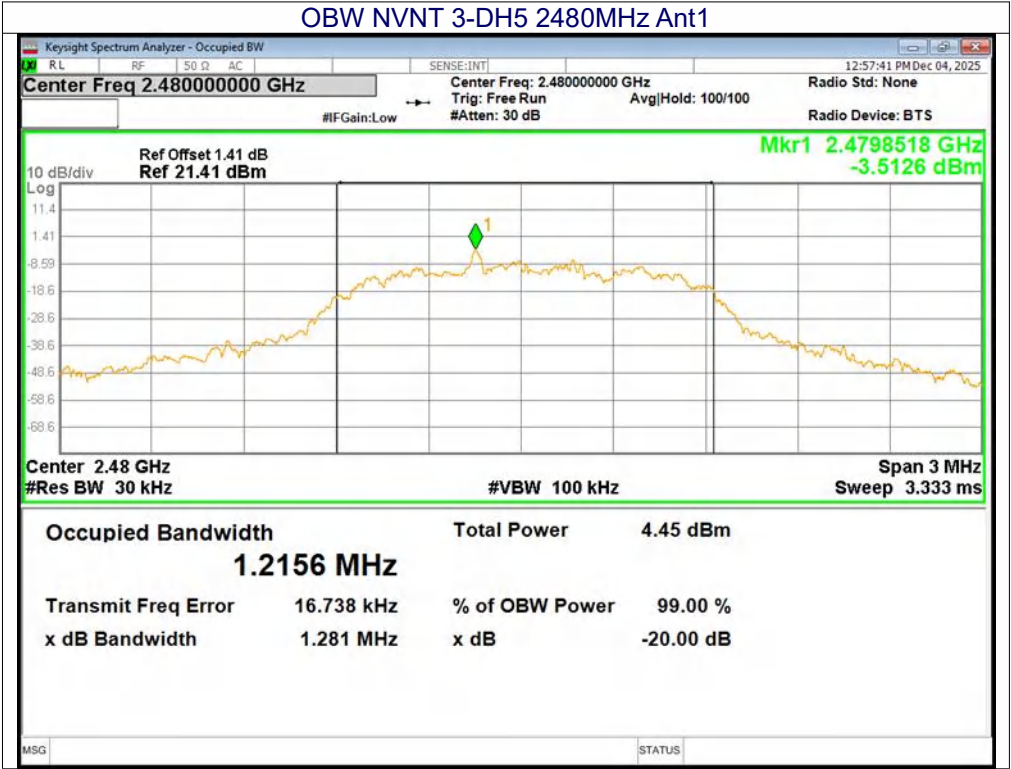


OBW NVNT 3-DH5 2402MHz Ant1



OBW NVNT 3-DH5 2441MHz Ant1





8. Maximum Peak Output Power

Test Requirement:	FCC Part15 C Section 15.247 (b)(1)
Test Method:	ANSI C63.10-2020

8.1 Block Diagram Of Test Setup



8.2 Limit

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

For FHSs operating in the band 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1.0 W if the hopset uses 75 or more hopping channels; the maximum peak conducted output power shall not exceed 0.125 W if the hopset uses less than 75 hopping channels. The e.i.r.p. shall not exceed 4 W.

8.3 Test procedure

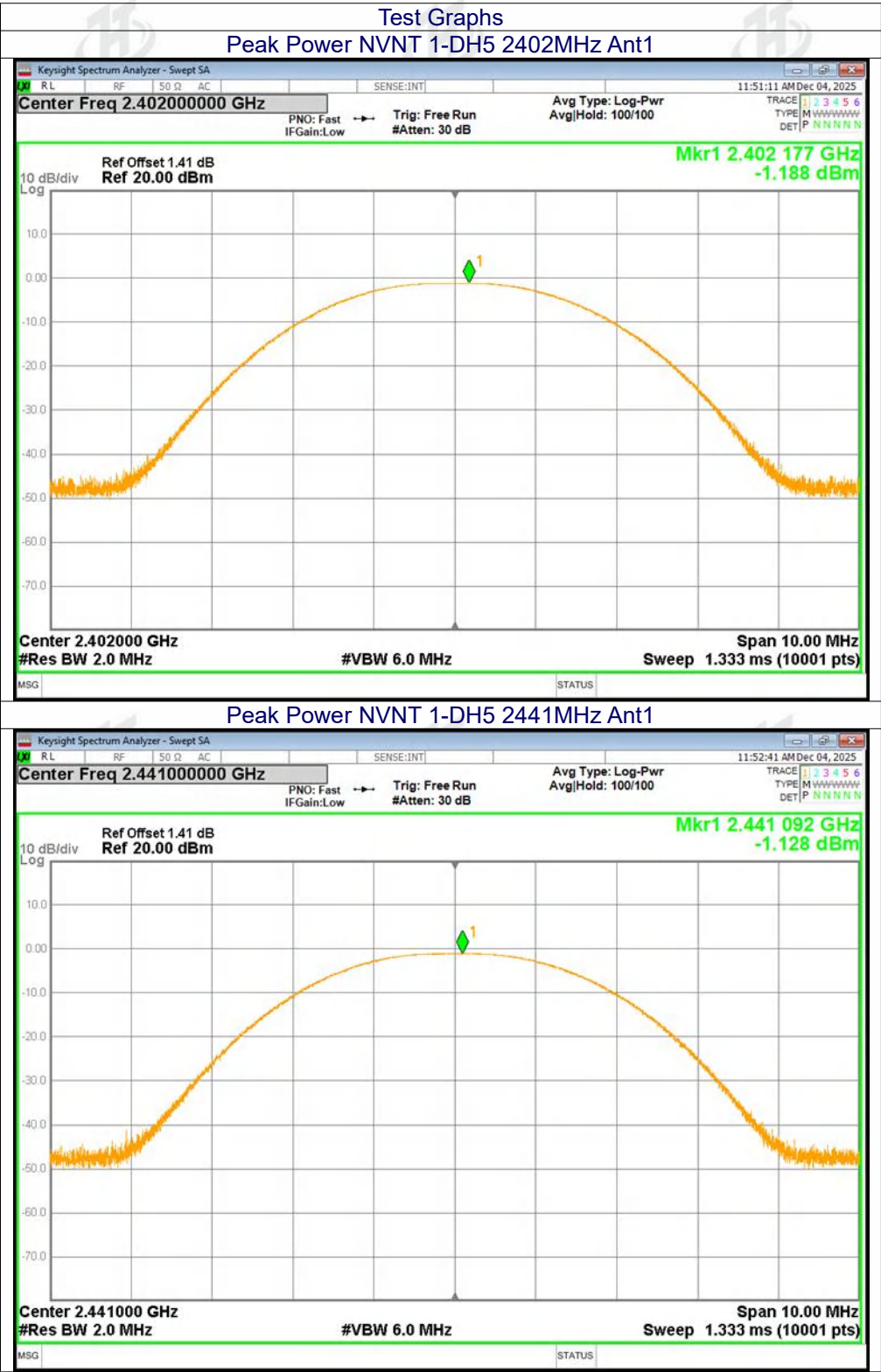
1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.
2. Set the spectrum analyzer: RBW = 2MHz. VBW =6MHz. Sweep = auto; Detector Function = Peak.
3. Keep the EUT in transmitting at lowest, medium and highest channel individually. Record the max value.

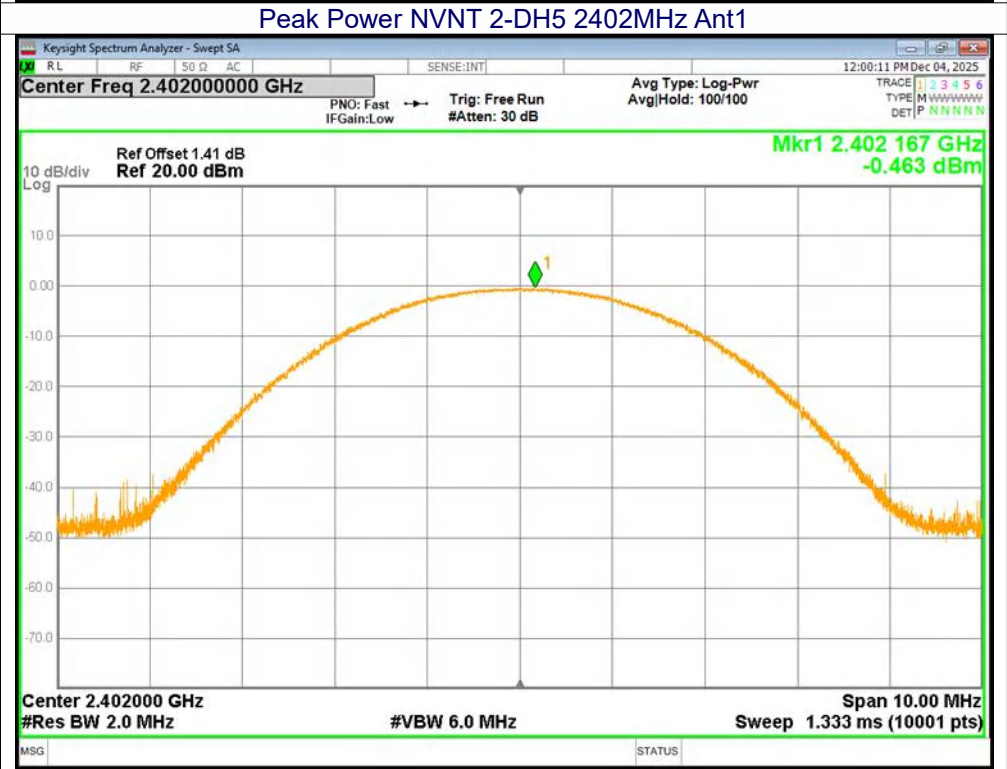
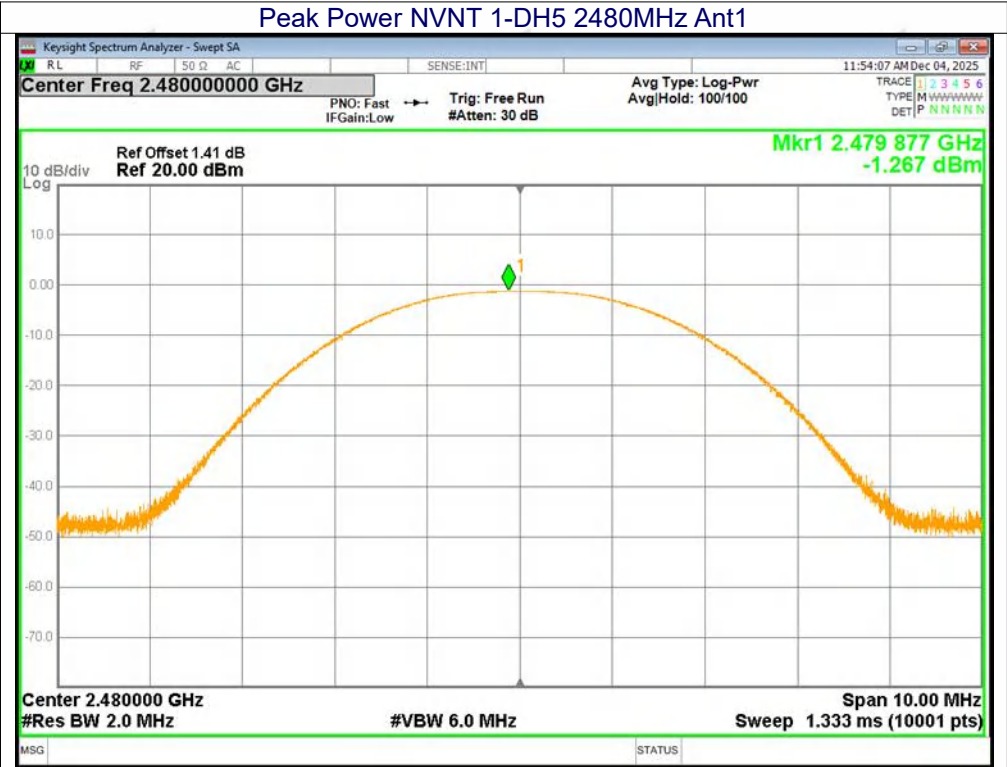
8.4 DEVIATION FROM STANDARD

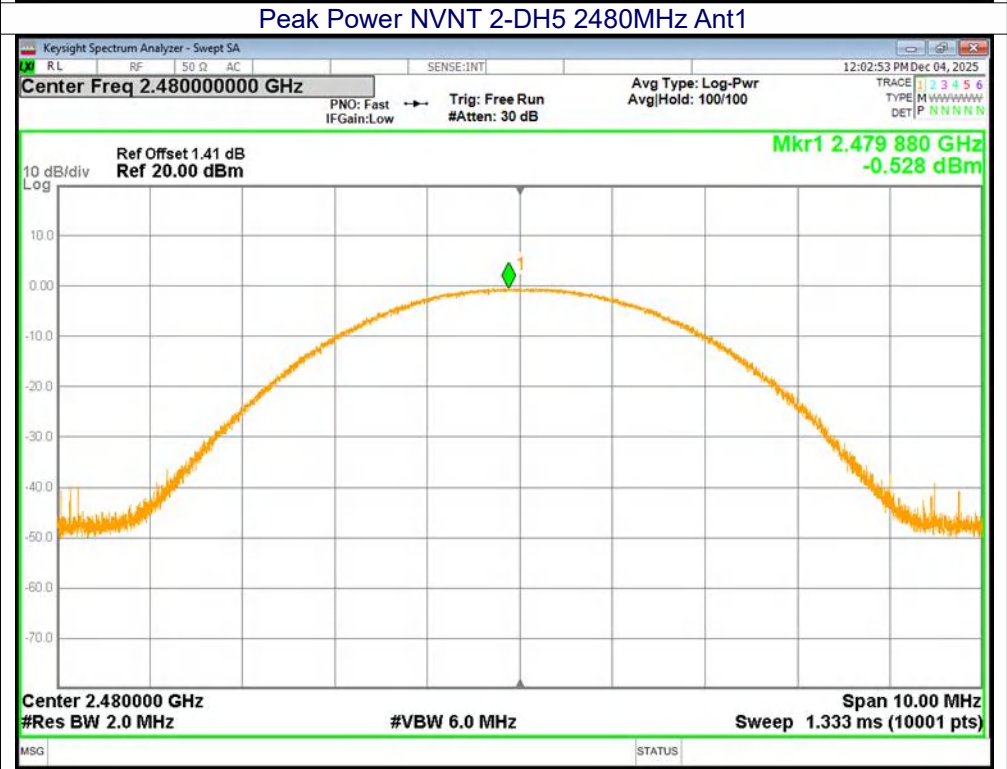
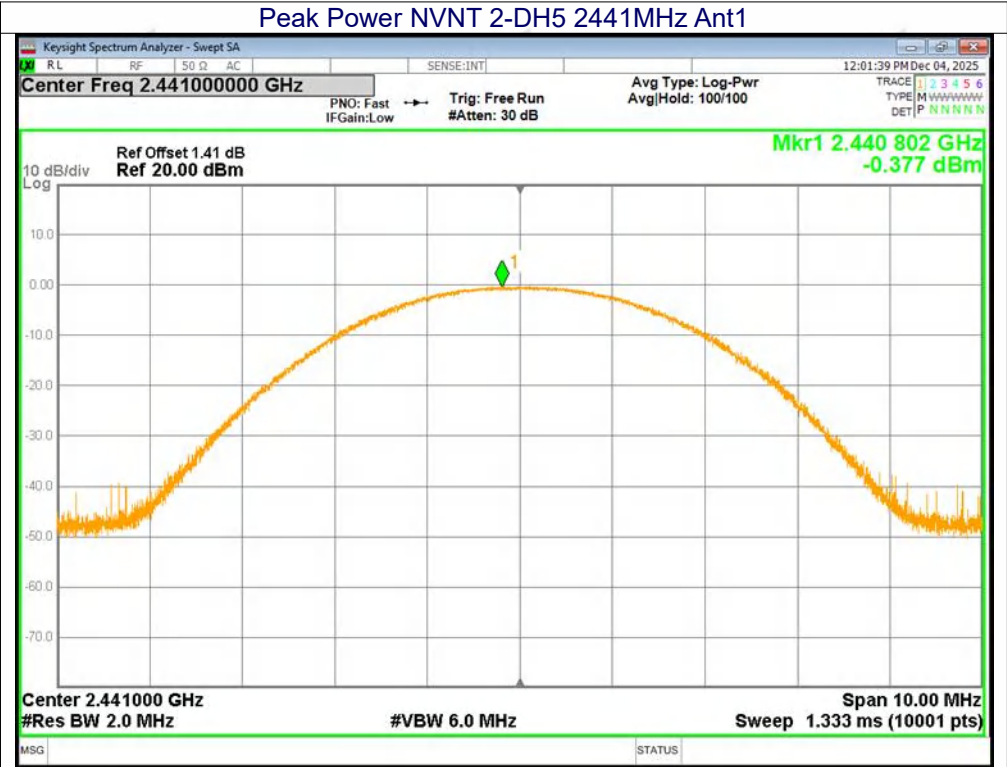
No deviation.

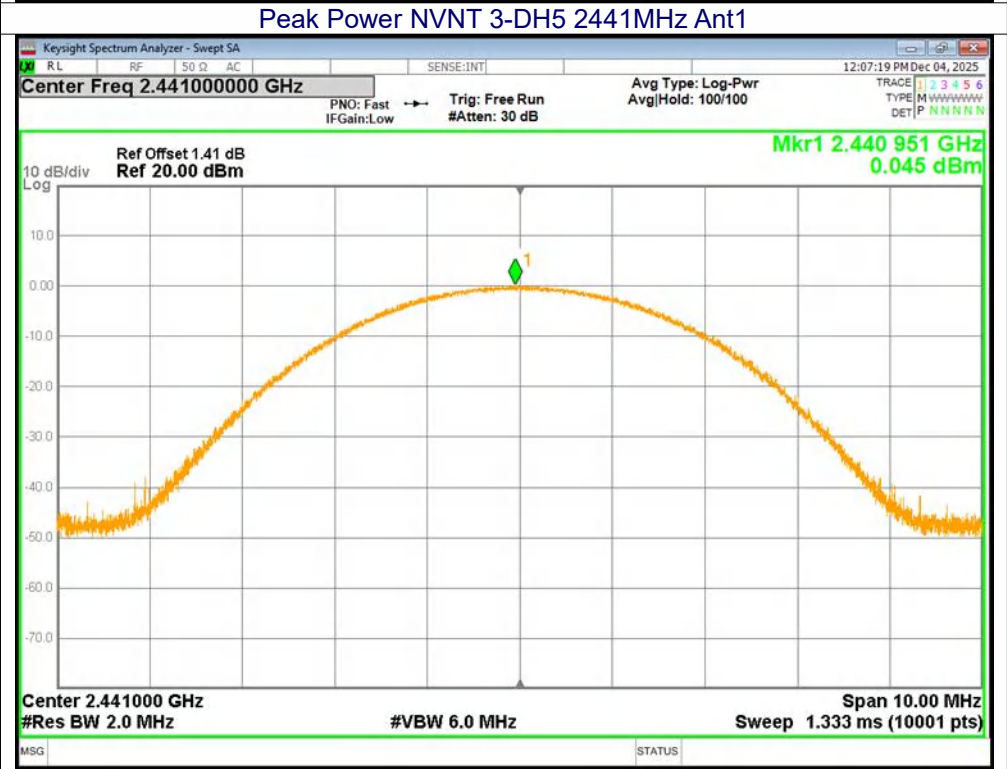
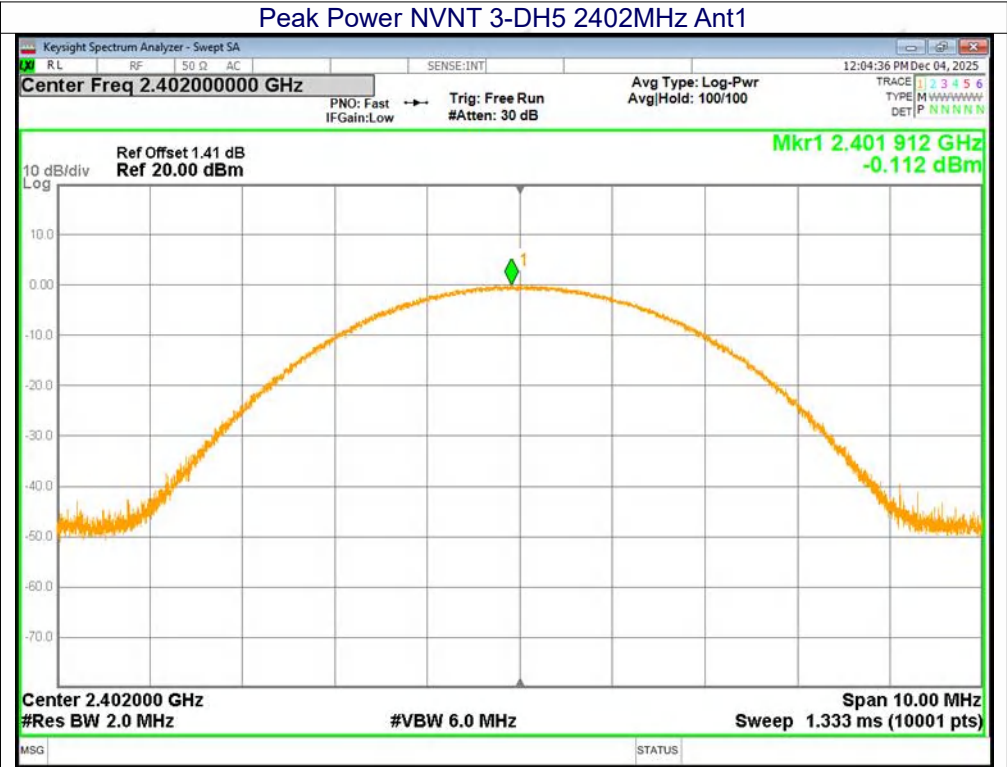
8.5 Test Result

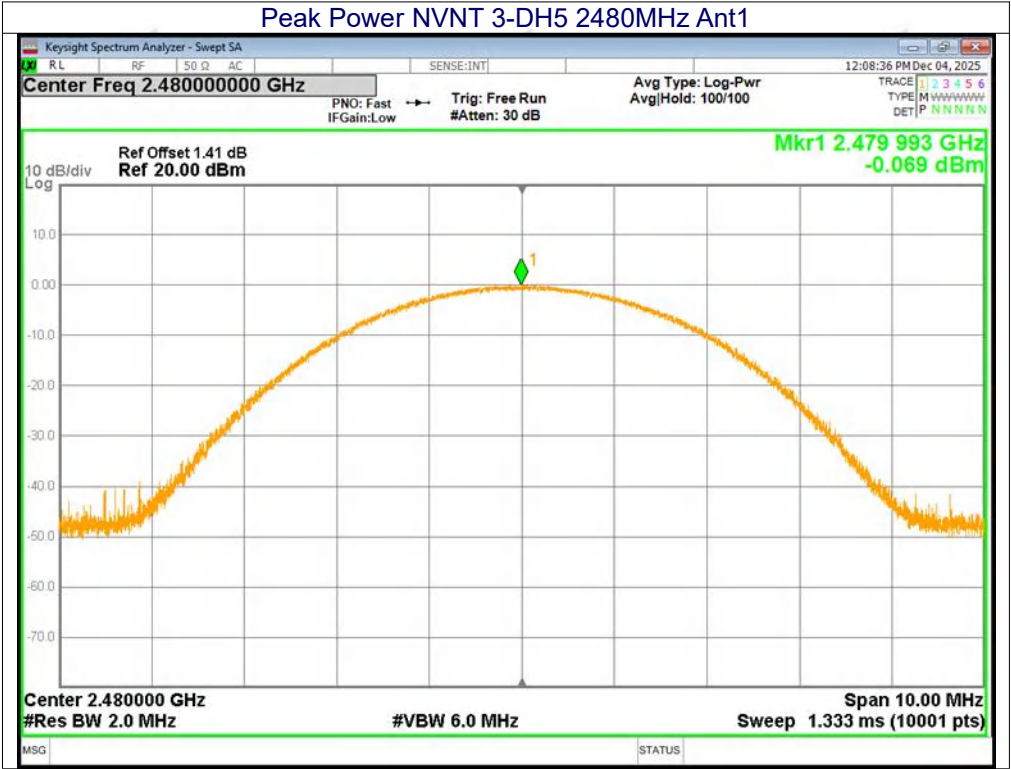
Left earphone				
Mode	Test channel	Peak Output Power (dBm)	Peak Output Power Limit (dBm)	Result
GFSK	Lowest	-1.19	21.00	Pass
	Middle	-1.13		
	Highest	-1.27		
$\pi/4$ DQPSK	Lowest	-0.46	21.00	Pass
	Middle	-0.38		
	Highest	-0.53		
8DPSK	Lowest	-0.11	21.00	Pass
	Middle	0.05		
	Highest	-0.07		







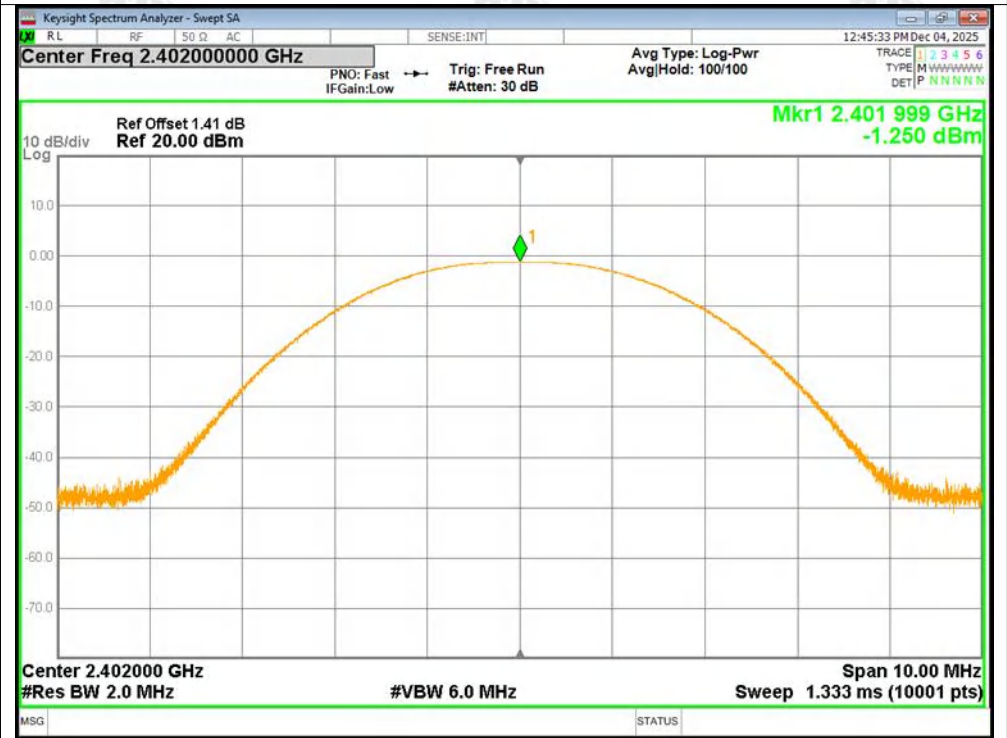




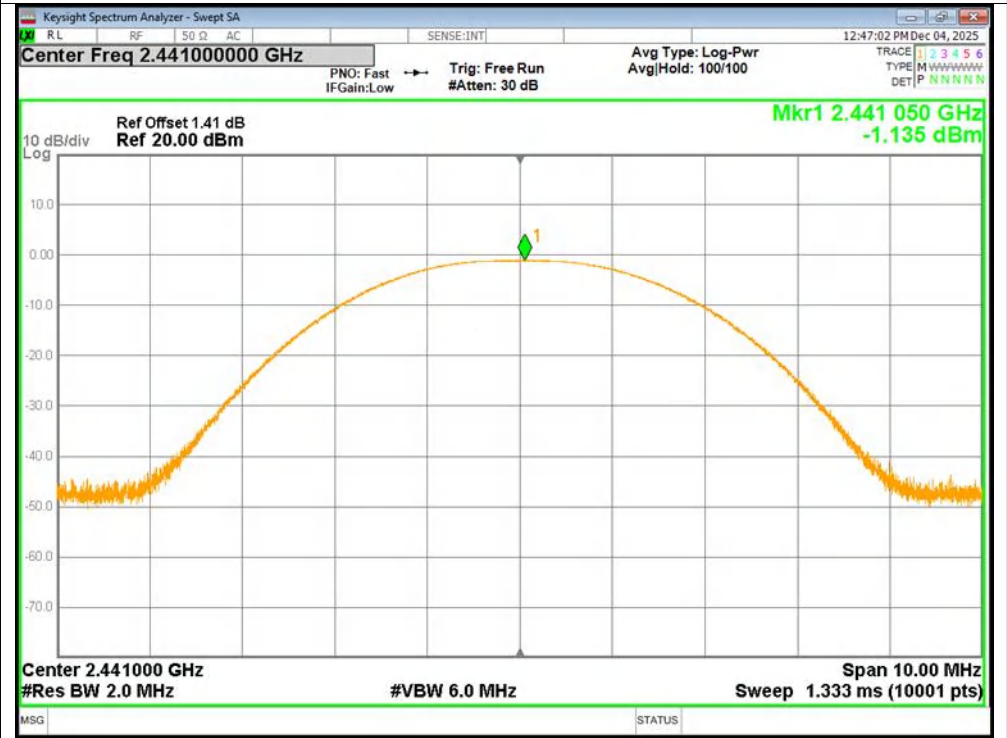
Right earphone				
Mode	Test channel	Peak Output Power (dBm)	Peak Output Power Limit (dBm)	Result
GFSK	Lowest	-1.25	21.00	Pass
	Middle	-1.14		
	Highest	-1.27		
$\pi/4$ DQPSK	Lowest	-0.42	21.00	Pass
	Middle	-0.28		
	Highest	-0.43		
8DPSK	Lowest	-0.06	21.00	Pass
	Middle	0.09		
	Highest	-0.03		

Test Graphs

Peak Power NVNT 1-DH5 2402MHz Ant1



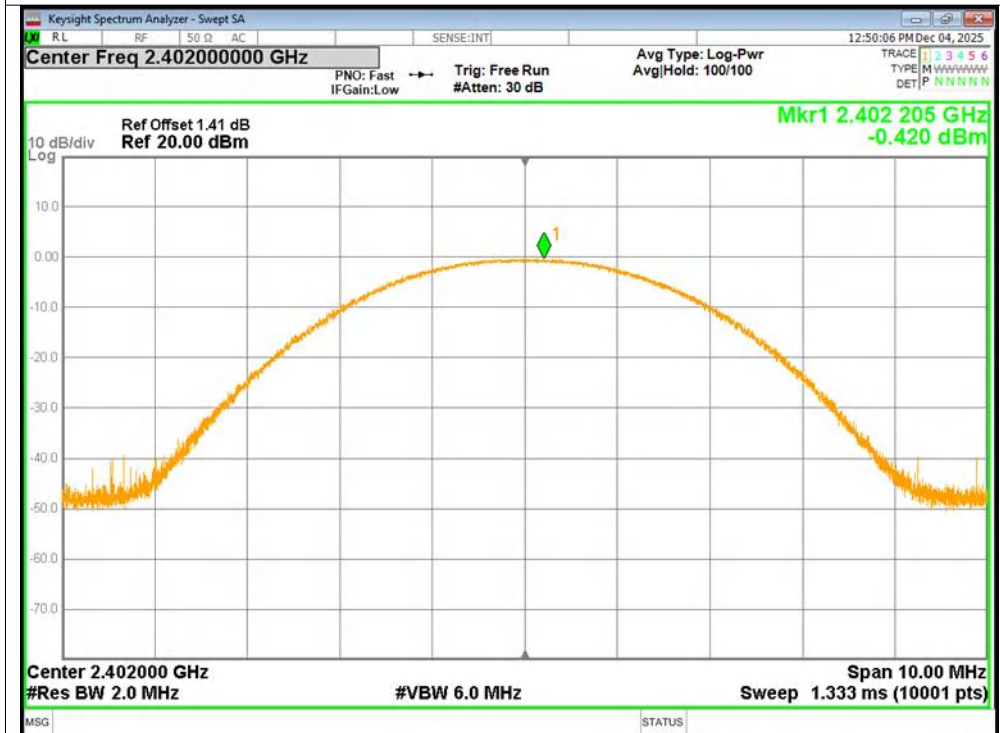
Peak Power NVNT 1-DH5 2441MHz Ant1

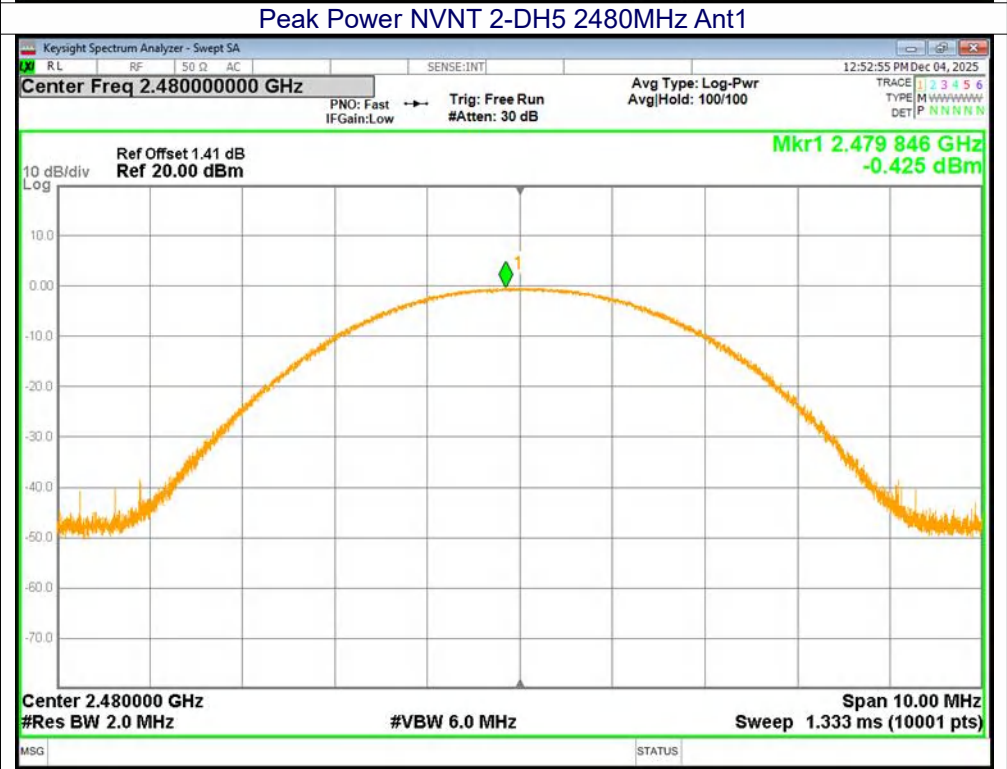
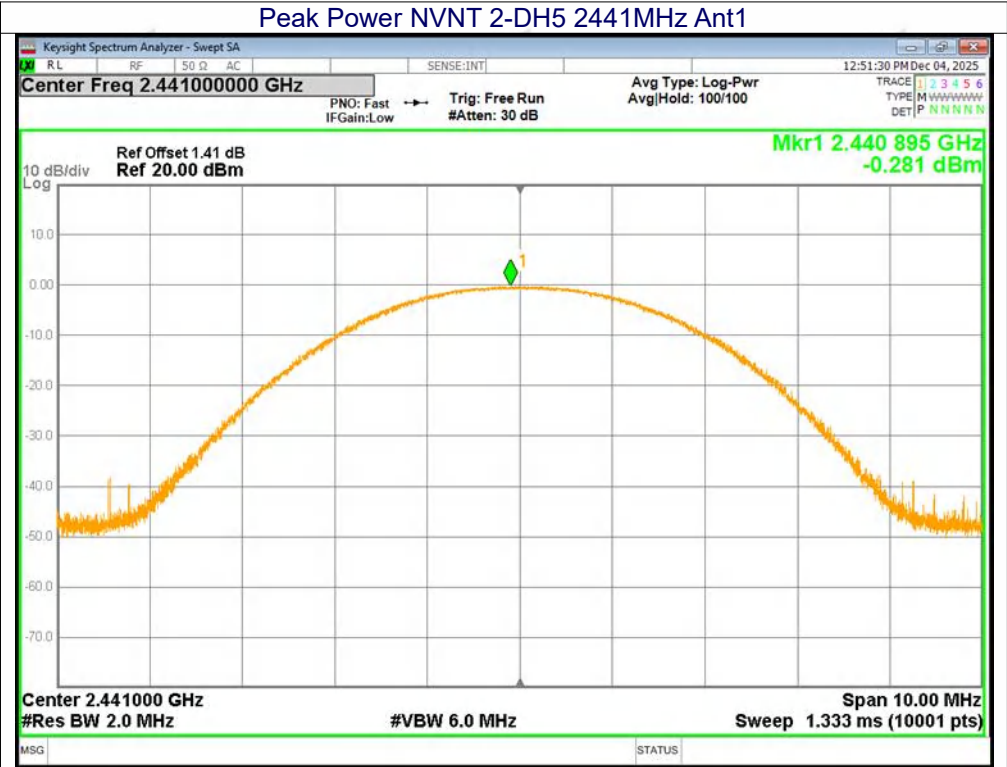


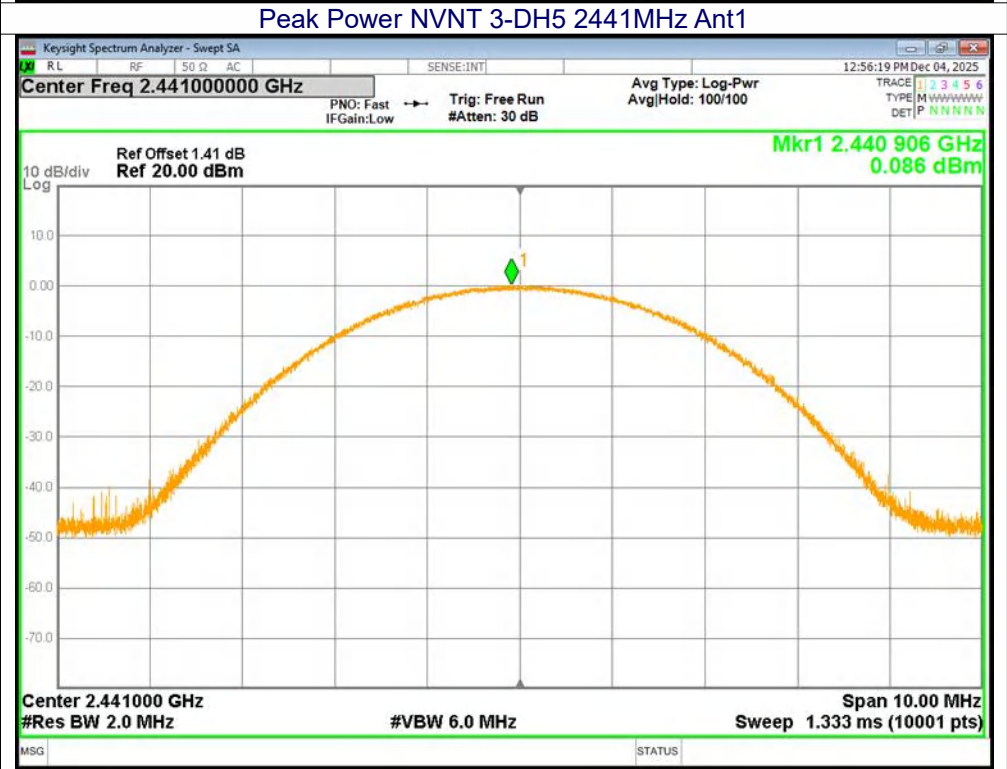
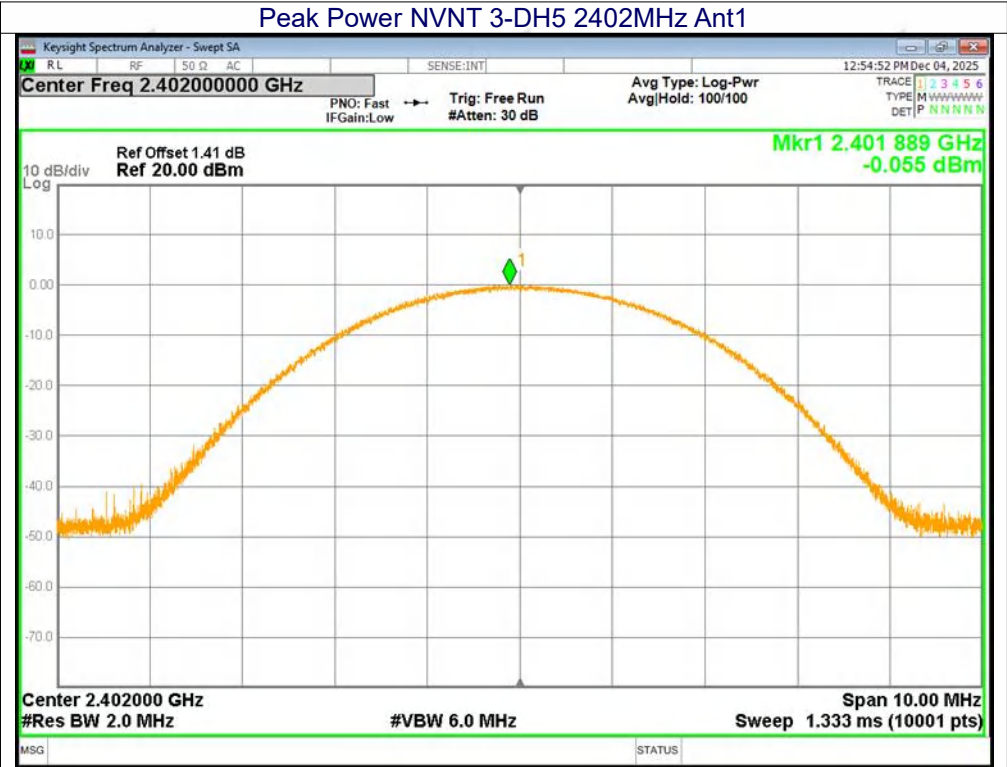
Peak Power NVNT 1-DH5 2480MHz Ant1

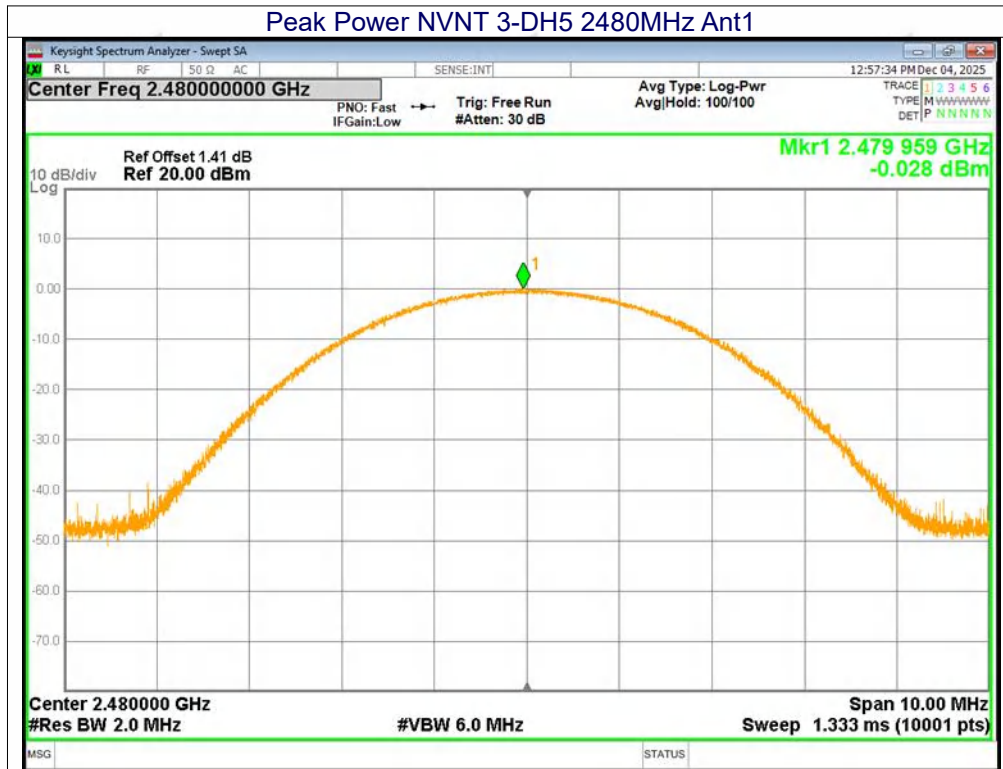


Peak Power NVNT 2-DH5 2402MHz Ant1









9. HOPPING CHANNEL SEPARATION

Test Requirement:	FCC Part15 C Section 15.247 (a)(1)
Test Method:	ANSI C63.10-2020
Limit:	GFSK, $\pi/4$ -DQPSK & 8DSK: 0.025MHz or 2/3 of the 20dB bandwidth (whichever is greater)

9.1 Test Setup



9.2 Test procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.
2. Set the spectrum analyzer: RBW = 300kHz. VBW = 300kHz for GFSK , RBW = 100kHz. VBW = 100kHz for $\pi/4$ -DQPSK & 8DSK, Span = auto. Sweep = auto; Detector Function = Peak. Trace = Max hold.
3. Allow the trace to stabilize. Use the marker-delta function to determine the separation between the peaks of the adjacent channels. The limit is specified in one of the subparagraphs of this Section Submit this plot.

9.3 DEVIATION FROM STANDARD

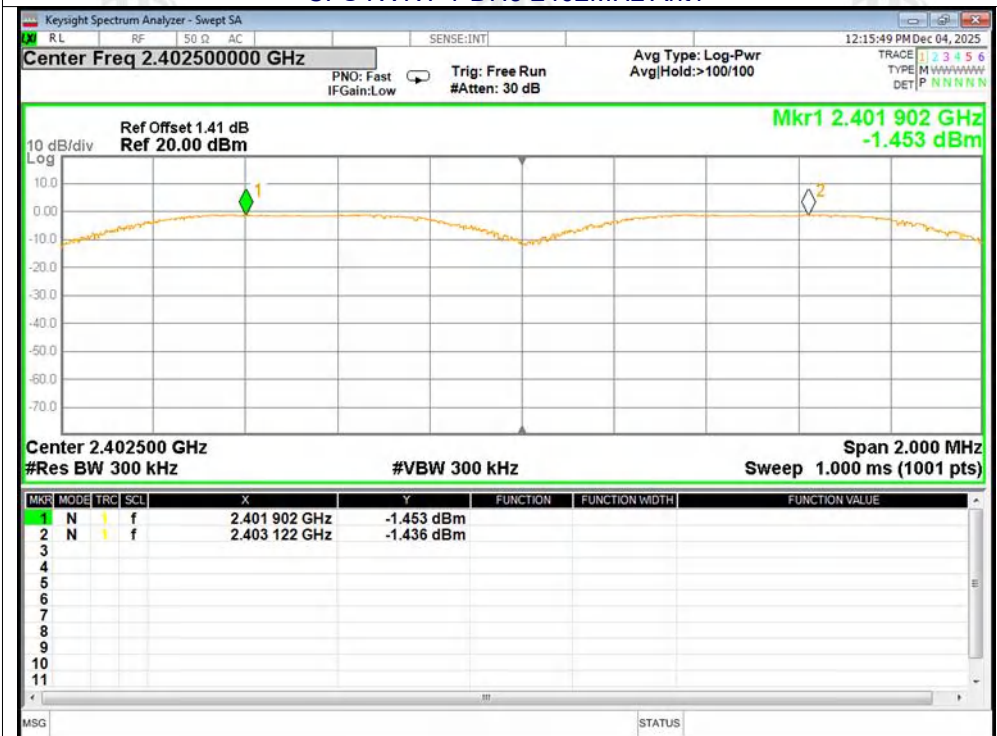
No deviation.

9.4 Test Result

Left earphone							
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.902	2403.122	1.22	0.683	Pass
NVNT	1-DH5	Ant1	2440.938	2441.952	1.014	0.687	Pass
NVNT	1-DH5	Ant1	2478.916	2479.912	0.996	0.697	Pass
NVNT	2-DH5	Ant1	2402.1672	2403.1708	1.0036	0.875	Pass
NVNT	2-DH5	Ant1	2441.0424	2442.0304	0.988	0.879	Pass
NVNT	2-DH5	Ant1	2478.85	2480.1734	1.3234	0.89	Pass
NVNT	3-DH5	Ant1	2401.9514	2402.9628	1.0114	0.854	Pass
NVNT	3-DH5	Ant1	2440.9358	2441.9108	0.975	0.858	Pass
NVNT	3-DH5	Ant1	2478.9904	2479.8614	0.871	0.854	Pass

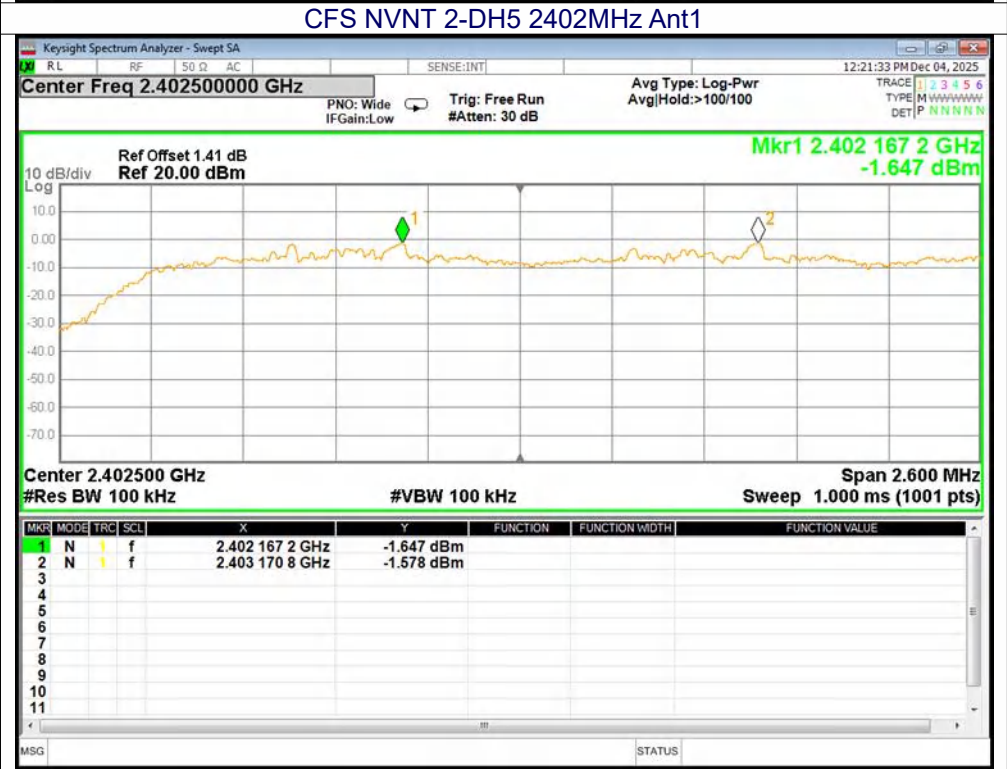
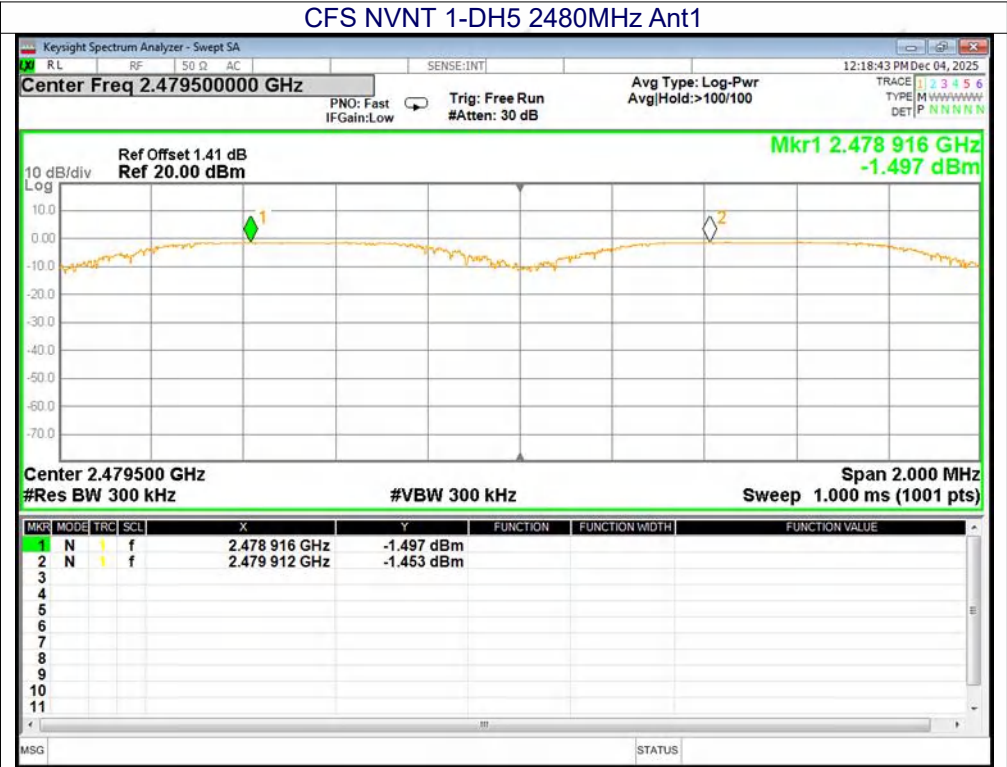
Test Graphs

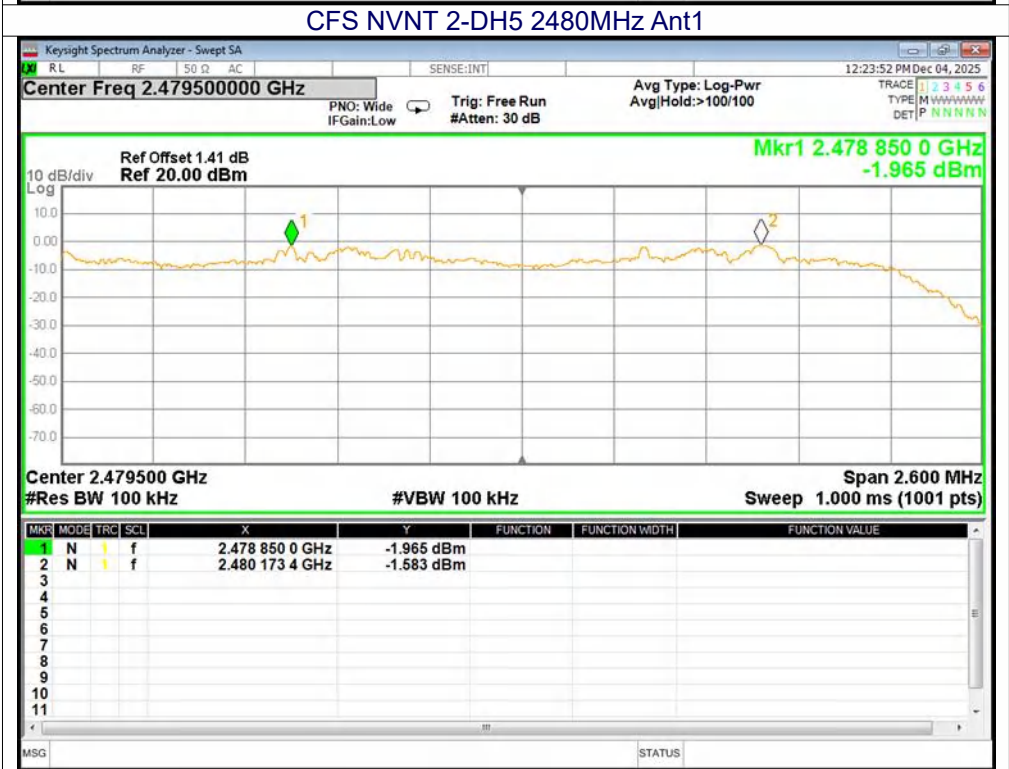
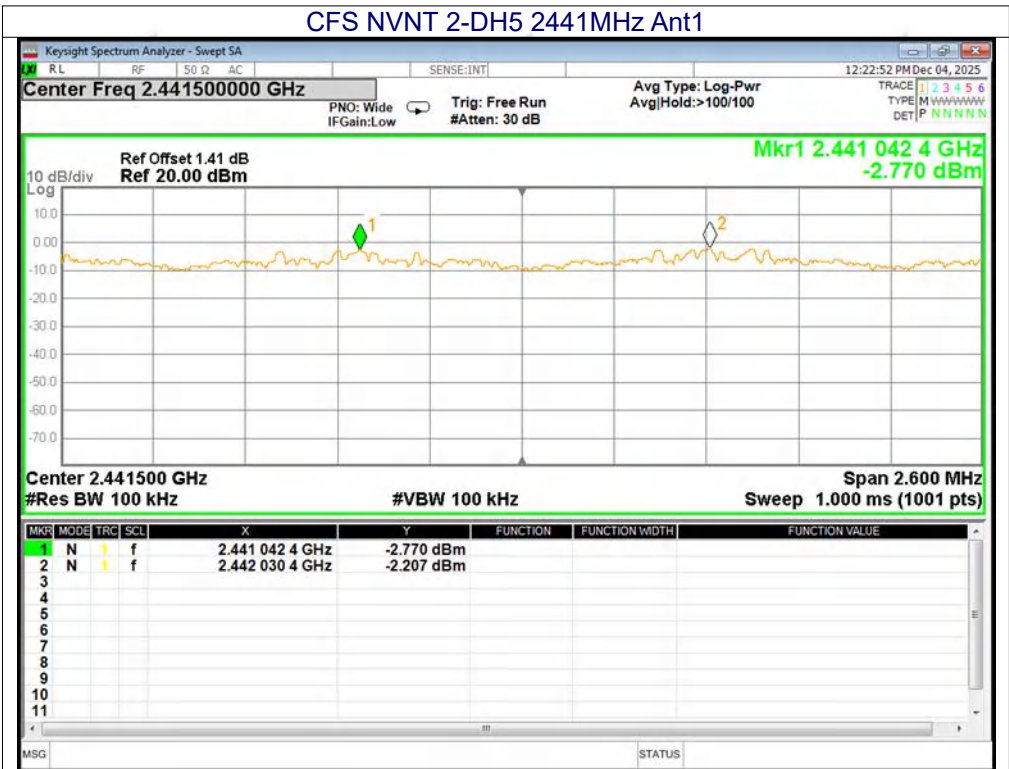
CFS NVNT 1-DH5 2402MHz Ant1

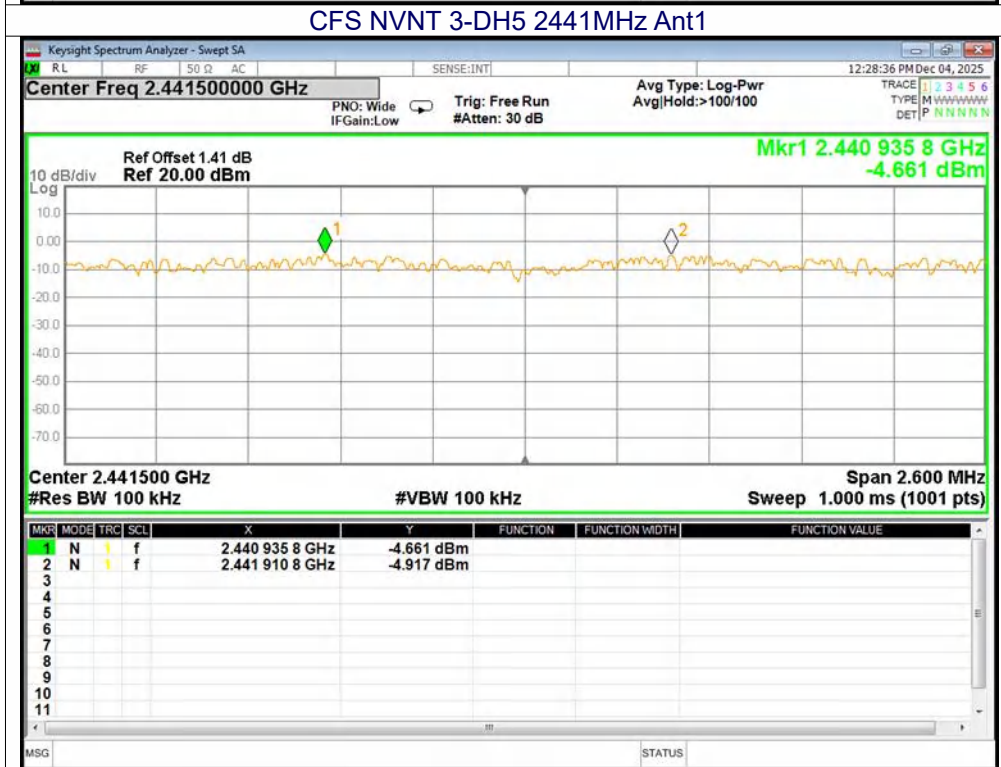
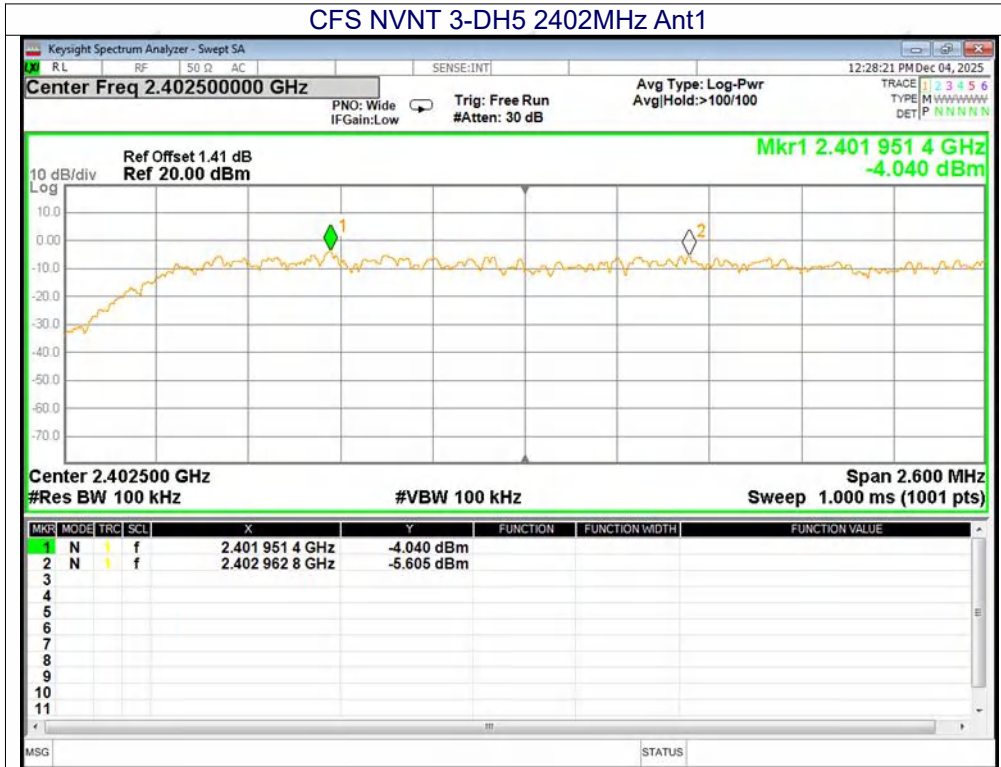


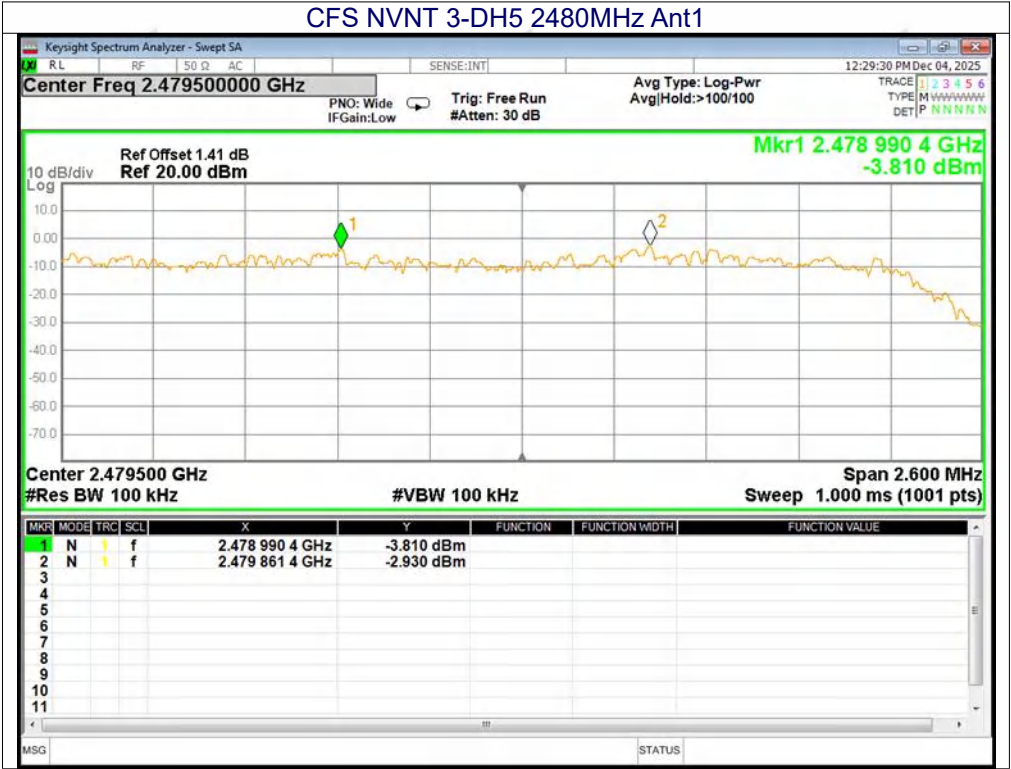
CFS NVNT 1-DH5 2441MHz Ant1





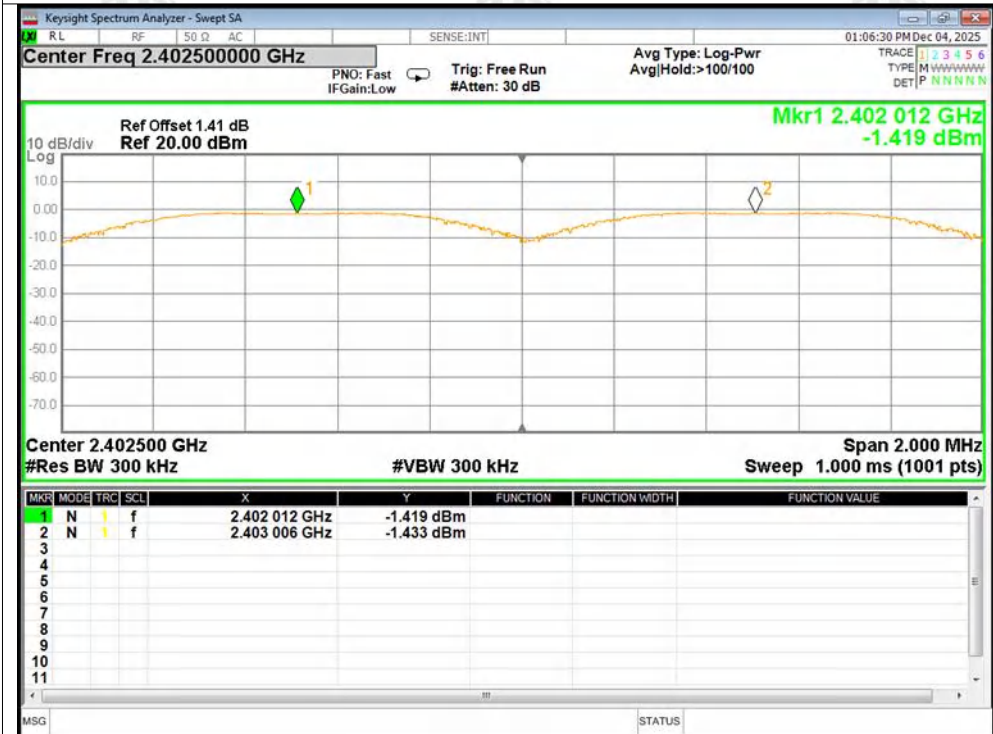




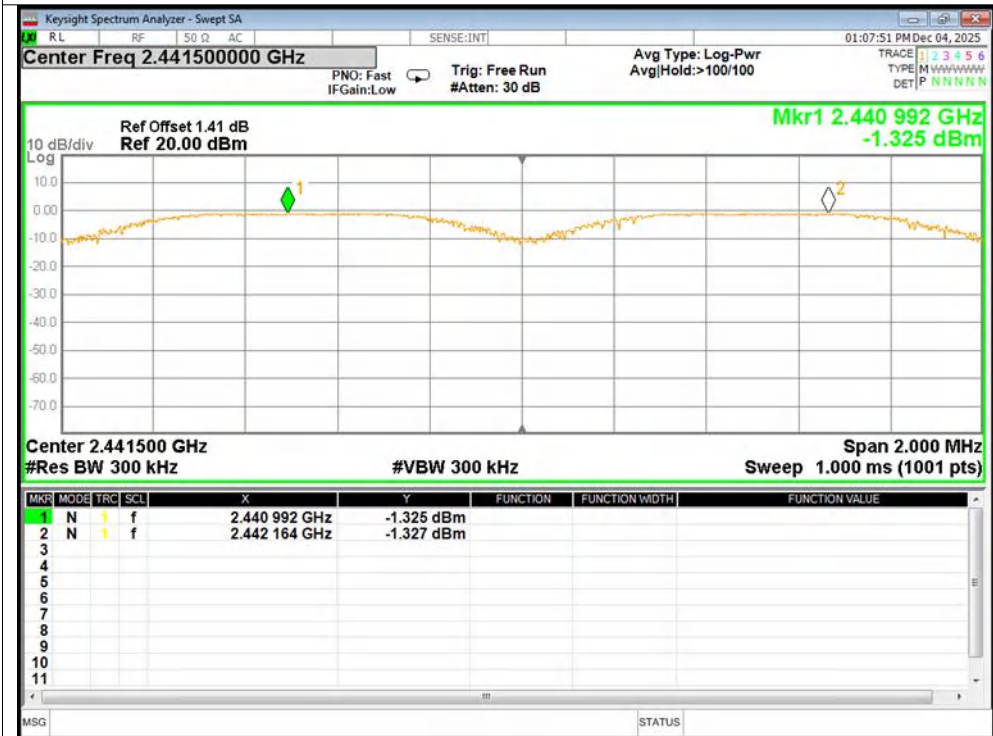


Right earphone							
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.012	2403.006	0.994	0.687	Pass
NVNT	1-DH5	Ant1	2440.992	2442.164	1.172	0.688	Pass
NVNT	1-DH5	Ant1	2479.11	2480.08	0.97	0.695	Pass
NVNT	2-DH5	Ant1	2401.8734	2402.981	1.1076	0.879	Pass
NVNT	2-DH5	Ant1	2440.8526	2441.8458	0.9932	0.877	Pass
NVNT	2-DH5	Ant1	2478.8474	2480.033	1.1856	0.898	Pass
NVNT	3-DH5	Ant1	2402.1646	2403.046	0.8814	0.854	Pass
NVNT	3-DH5	Ant1	2440.811	2441.9368	1.1258	0.858	Pass
NVNT	3-DH5	Ant1	2478.8526	2479.8458	0.9932	0.854	Pass

Test Graphs
CFS NVNT 1-DH5 2402MHz Ant1



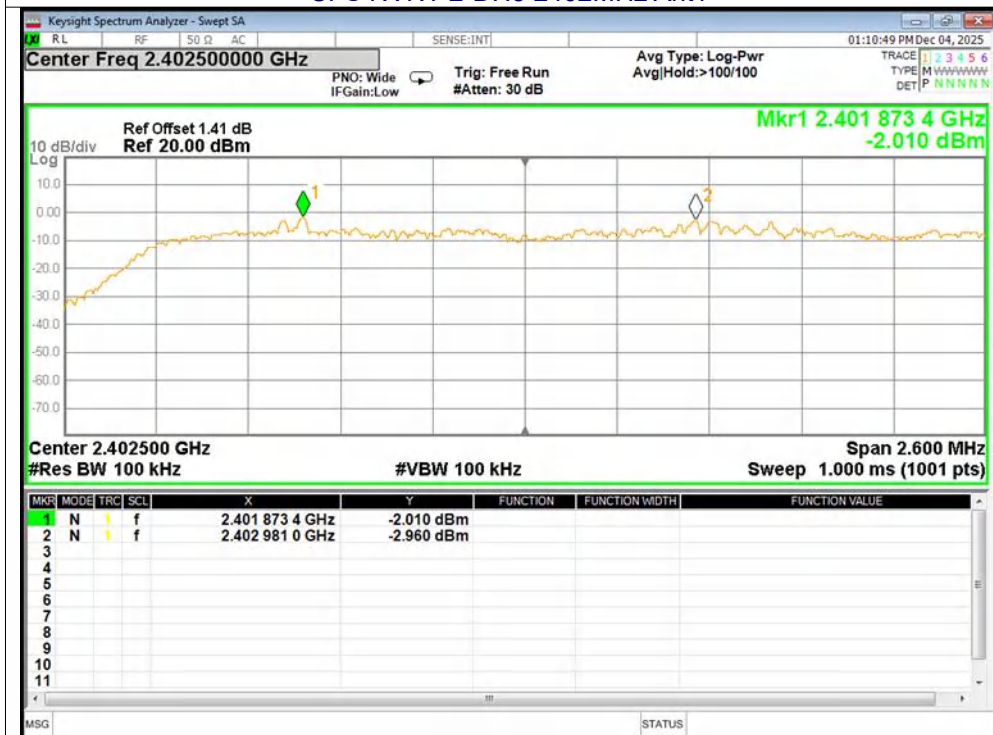
CFS NVNT 1-DH5 2441MHz Ant1

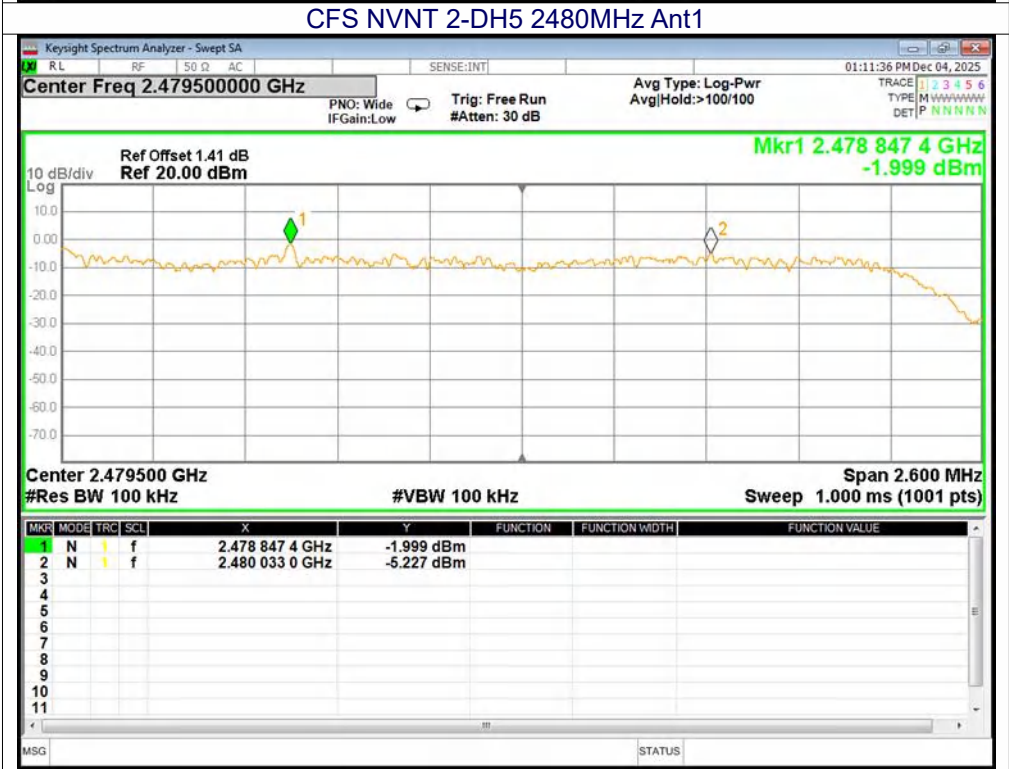
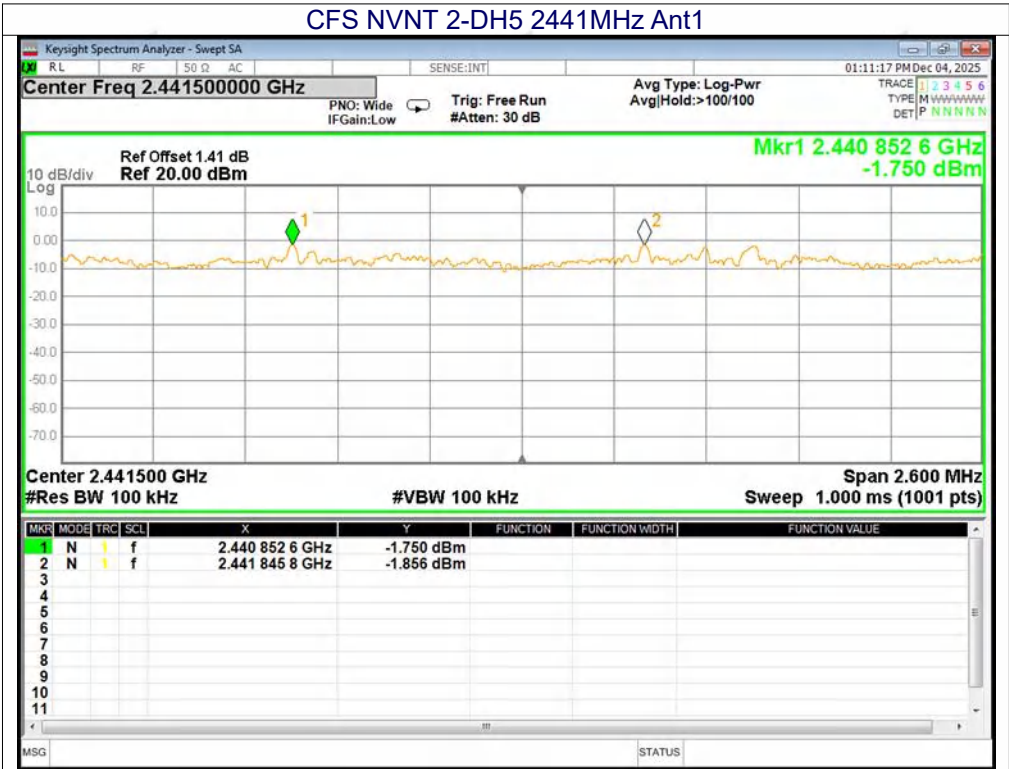


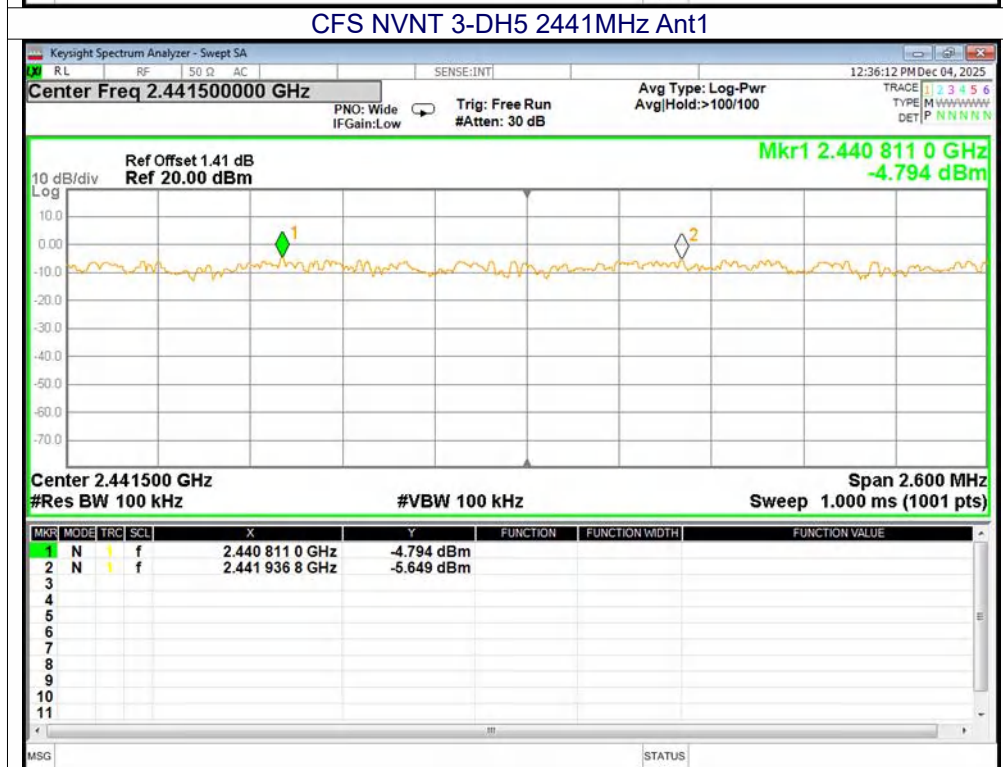
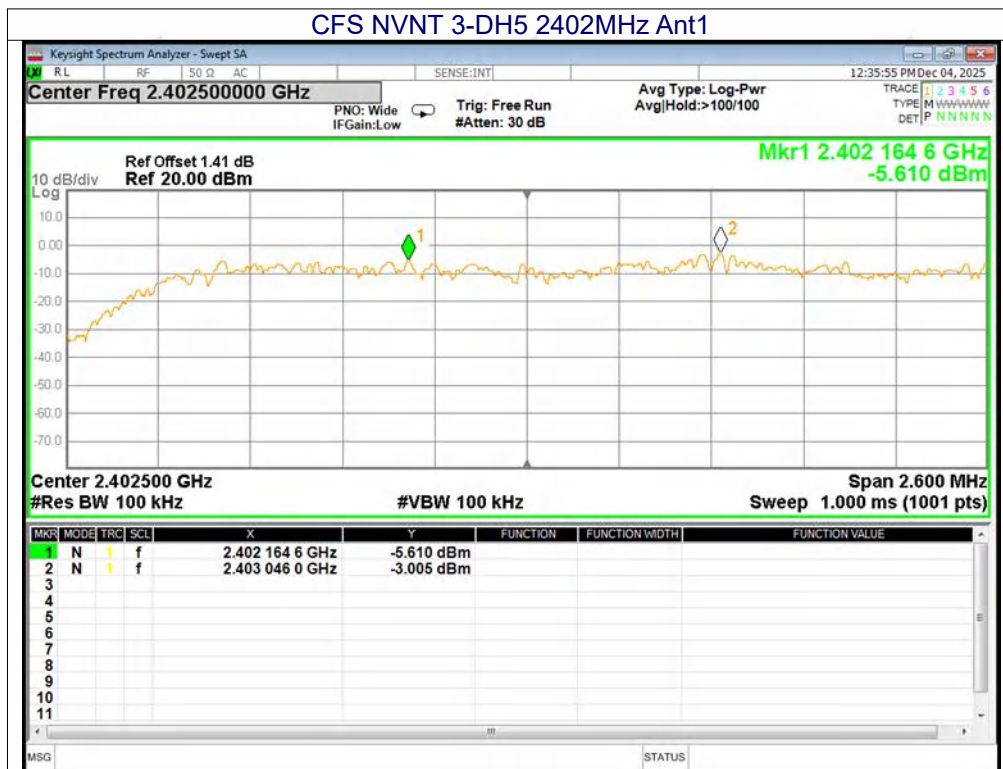
CFS NVNT 1-DH5 2480MHz Ant1

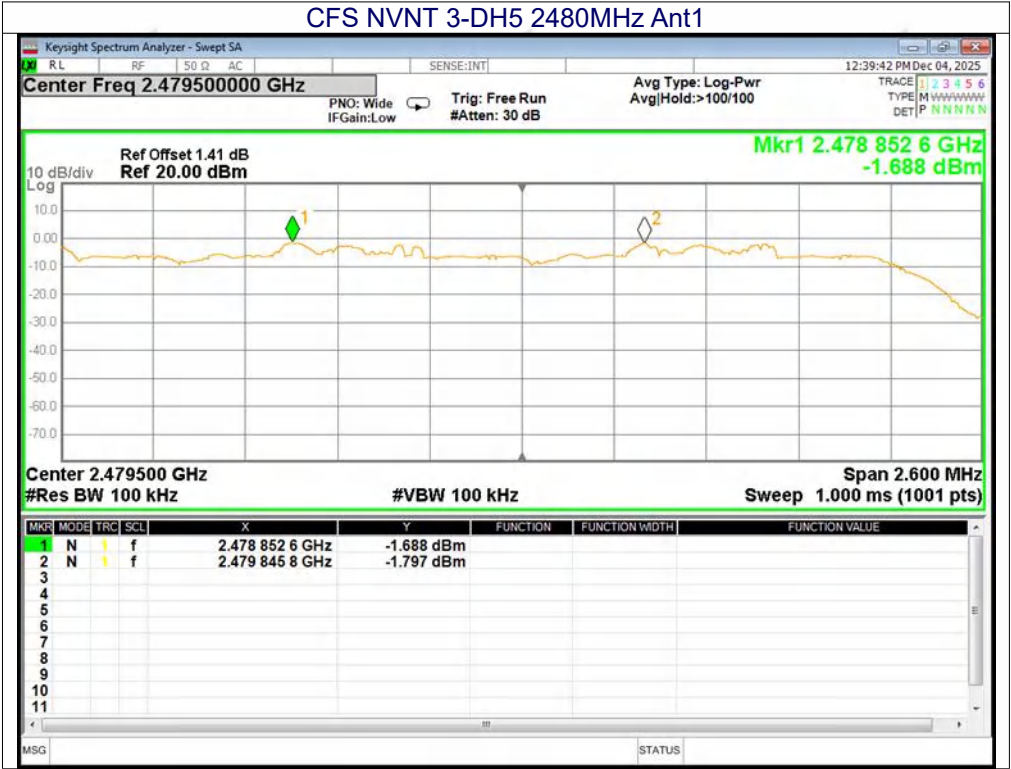


CFS NVNT 2-DH5 2402MHz Ant1









10.NUMBER OF HOPPING FREQUENCY

Test Requirement:	FCC Part15 C Section 15.247 (a)(1)(iii)
Test Method:	ANSI C63.10-2020
Receiver setup:	RBW=100kHz, VBW=300kHz, Frequency range=2400MHz-2483.5MHz, Detector=Peak
Limit:	15 channels

10.1 Test Setup



10.2 Test procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.
2. Set the spectrum analyzer: RBW = 100kHz. VBW = 300kHz. Sweep = auto; Detector Function = Peak. Trace = Max hold.
3. Allow the trace to stabilize. It may prove necessary to break the span up to sections. in order to clearly show all of the hopping frequencies. The limit is specified in one of the subparagraphs of this Section.
4. Set the spectrum analyzer: Start Frequency = 2.4GHz, Stop Frequency = 2.4835GHz. Sweep=auto;

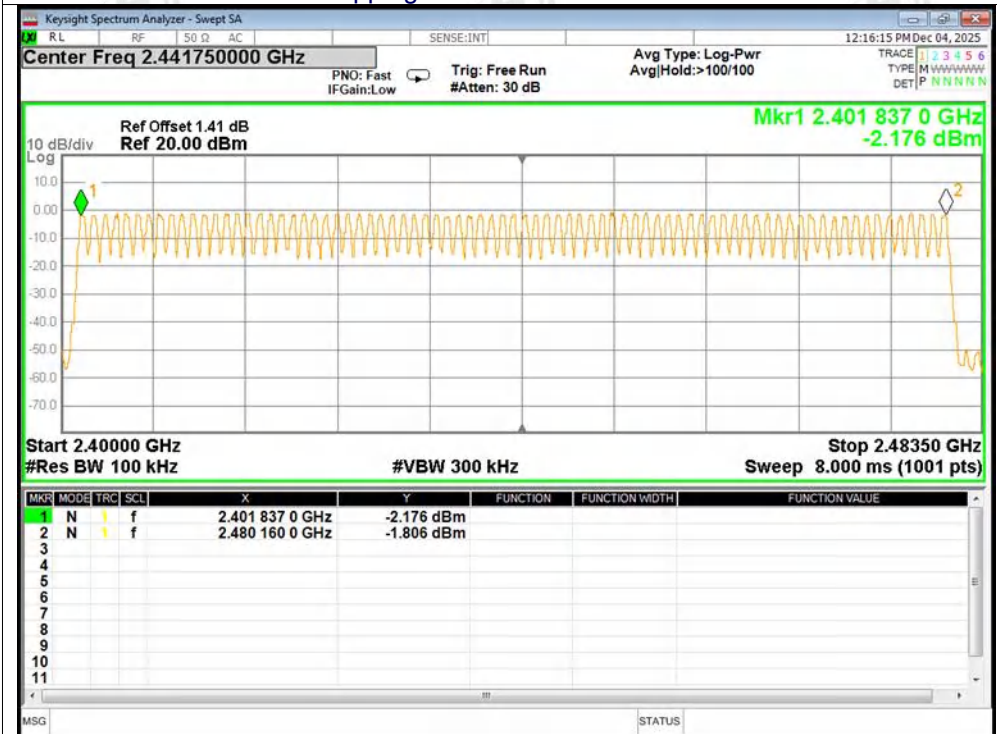
10.3 DEVIATION FROM STANDARD

No deviation.

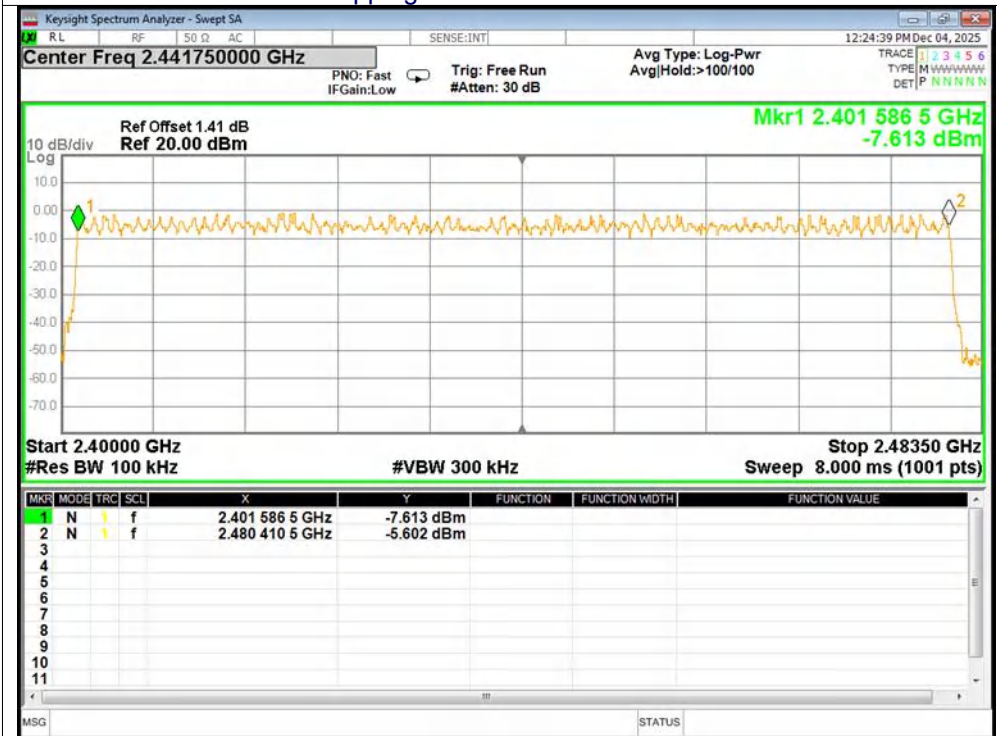
10.4 Test Result

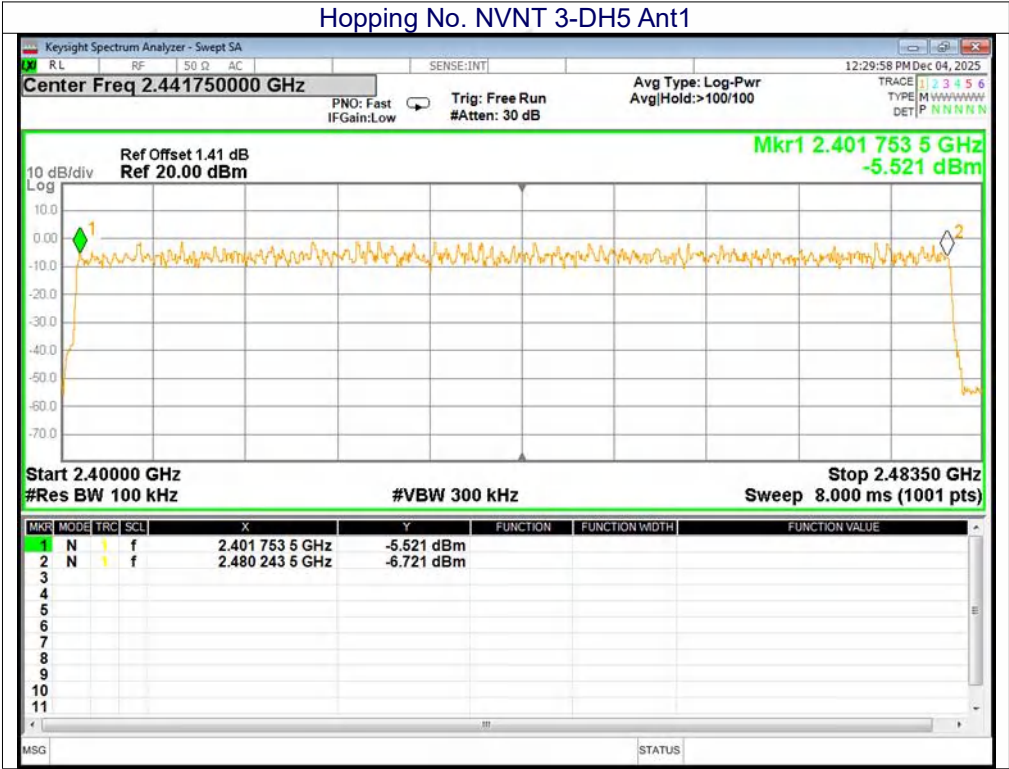
Left earphone				
Mode	Antenna	Hopping Number	Limit	Verdict
1-DH5	Ant1	79	15	Pass
2-DH5	Ant1	79	15	Pass
3-DH5	Ant1	79	15	Pass

Test Graphs Hopping No. NVNT 1-DH5 Ant1



Hopping No. NVNT 2-DH5 Ant1

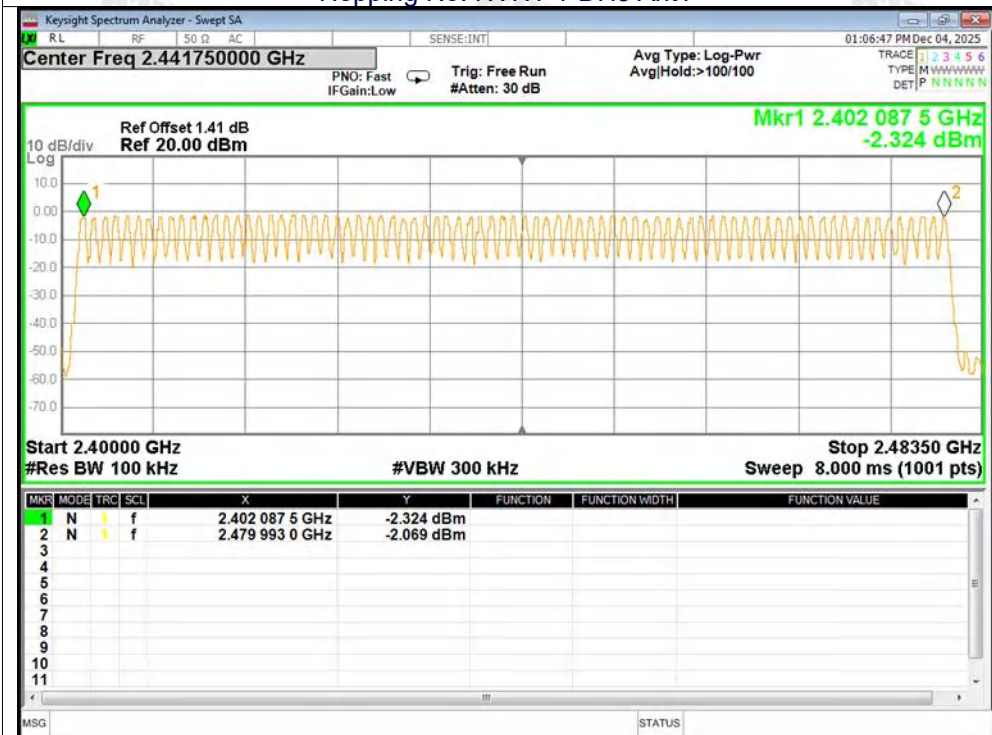




Right earphone				
Mode	Antenna	Hopping Number	Limit	Verdict
1-DH5	Ant1	79	15	Pass
2-DH5	Ant1	79	15	Pass
3-DH5	Ant1	79	15	Pass

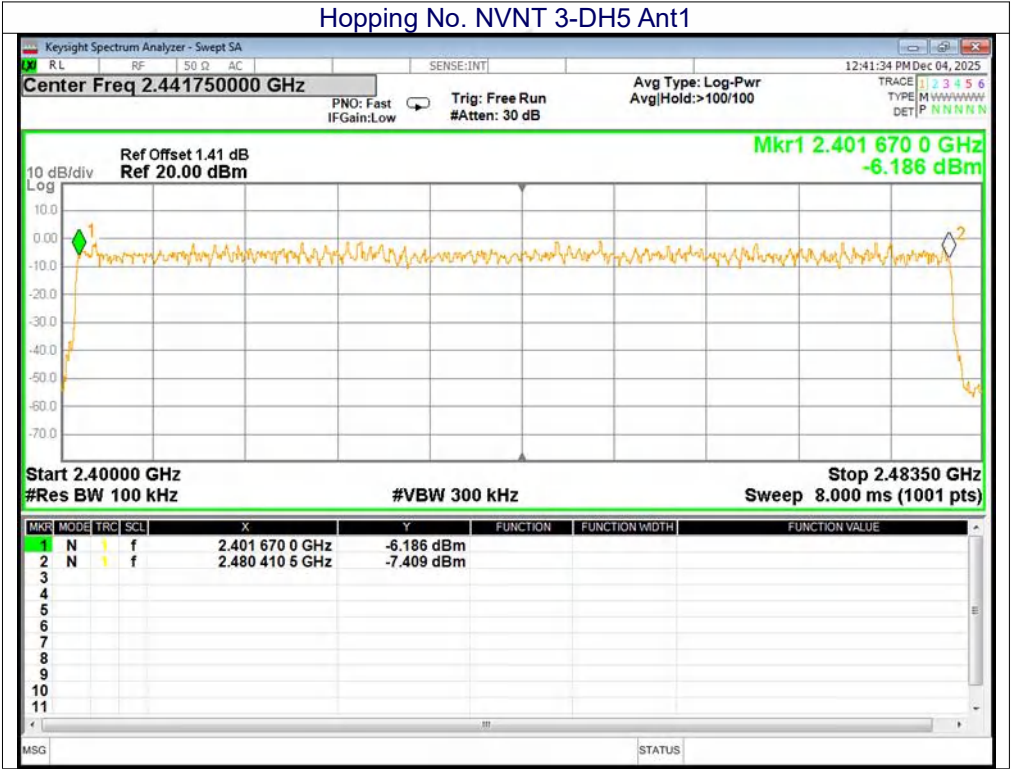
Test Graphs

Hopping No. NVNT 1-DH5 Ant1



Hopping No. NVNT 2-DH5 Ant1





11. DWELL TIME

Test Requirement:	FCC Part15 C Section 15.247 (a)(1)(iii)
Test Method:	ANSI C63.10-2020
Receiver setup:	RBW=1MHz, VBW=3MHz, Span=0Hz, Detector=Peak
Limit:	0.4 Second

11.1 Test Setup



11.2 Test procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.
2. Set spectrum analyzer span = 0Hz;
3. Set RBW = 1MHz and VBW = 3MHz. Sweep = as necessary to capture the entire dwell time per hopping channel. Set the EUT for DH5, DH3, DH1, 2DH5, 2DH3, 2DH1, 3DH5, 3DH3 and 3DH1 packet transmitting.
4. Use the marker-delta function to determine the dwell time. If this value varies with different modes of operation (e.g.. data rate. modulation format. etc.). repeat this test for each variation. The limit is specified in one of the subparagraphs of this Section. Submit this plot(s).

11.3 DEVIATION FROM STANDARD

No deviation.

11.4 Test Result

Left earphone									
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.376	117.688	313	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.632	257.856	158	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.88	282.24	98	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.383	121.411	317	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.638	262.08	160	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.885	331.775	115	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.386	121.976	316	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.636	273.212	167	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.888	309.016	107	31600	400	Pass

Remarks:

The test period: $T = 0.4 \text{ Second/Channel} \times 79 \text{ Channel} = 31.6 \text{ s}$

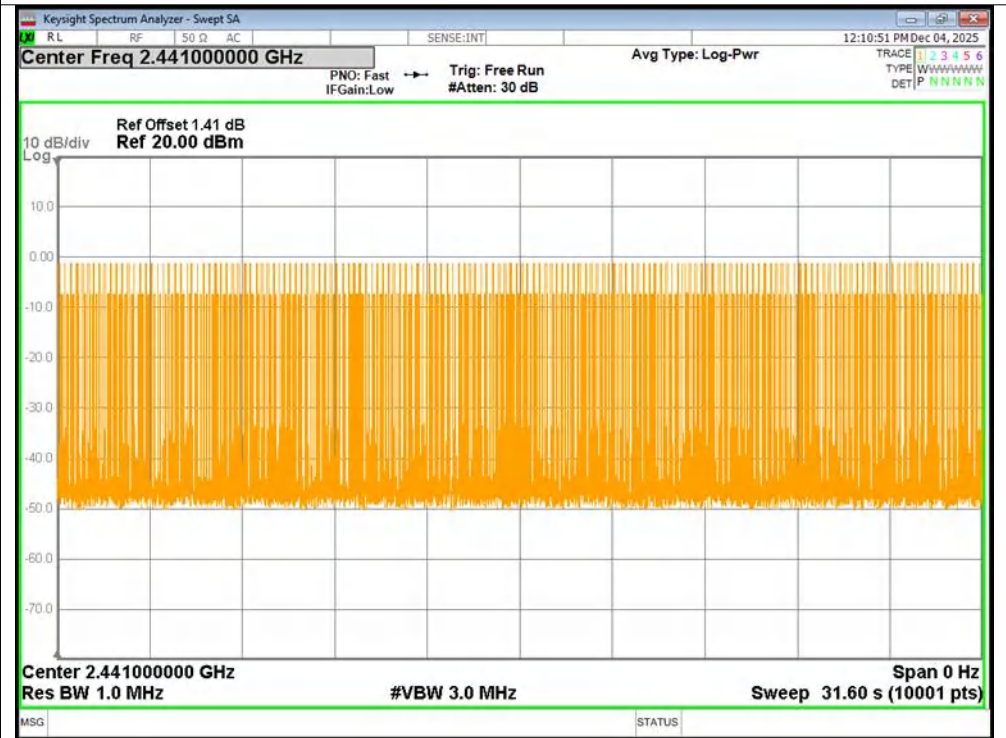
Total Dwell time(ms) = Pulse Time(ms) * Burst Count.

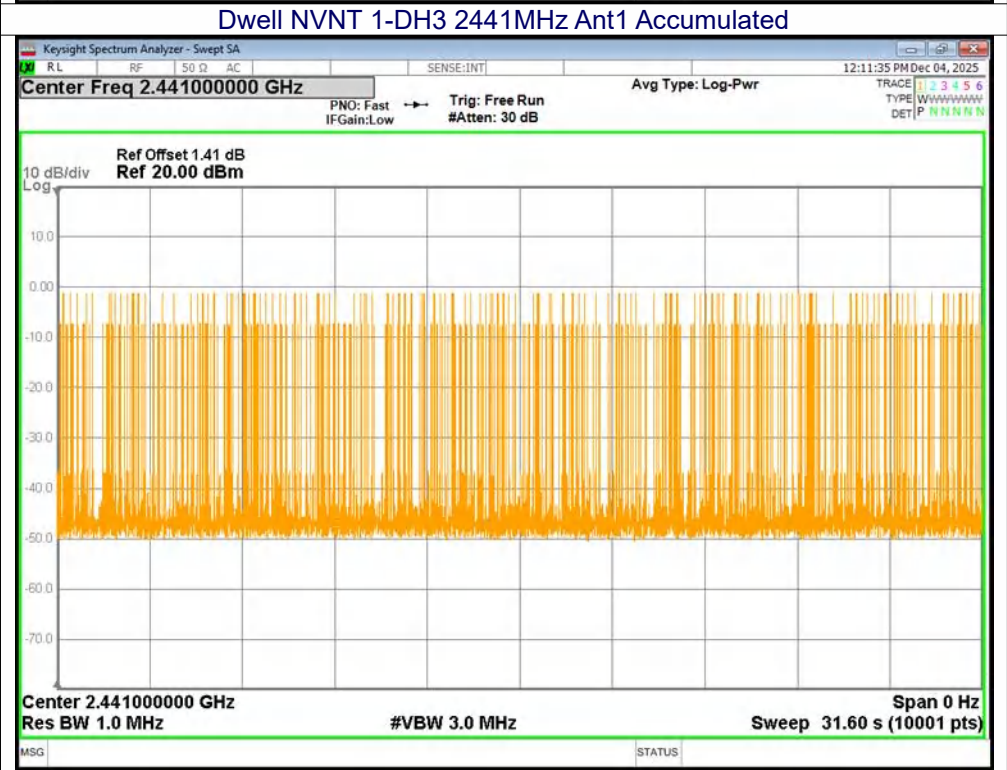
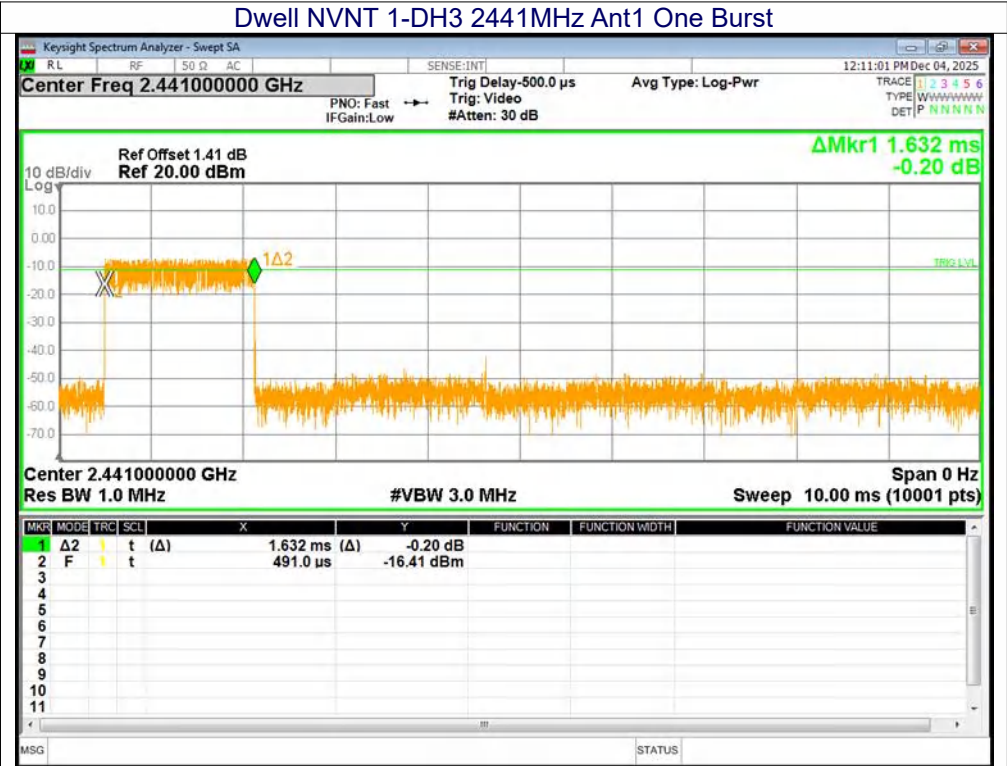
Test Graphs

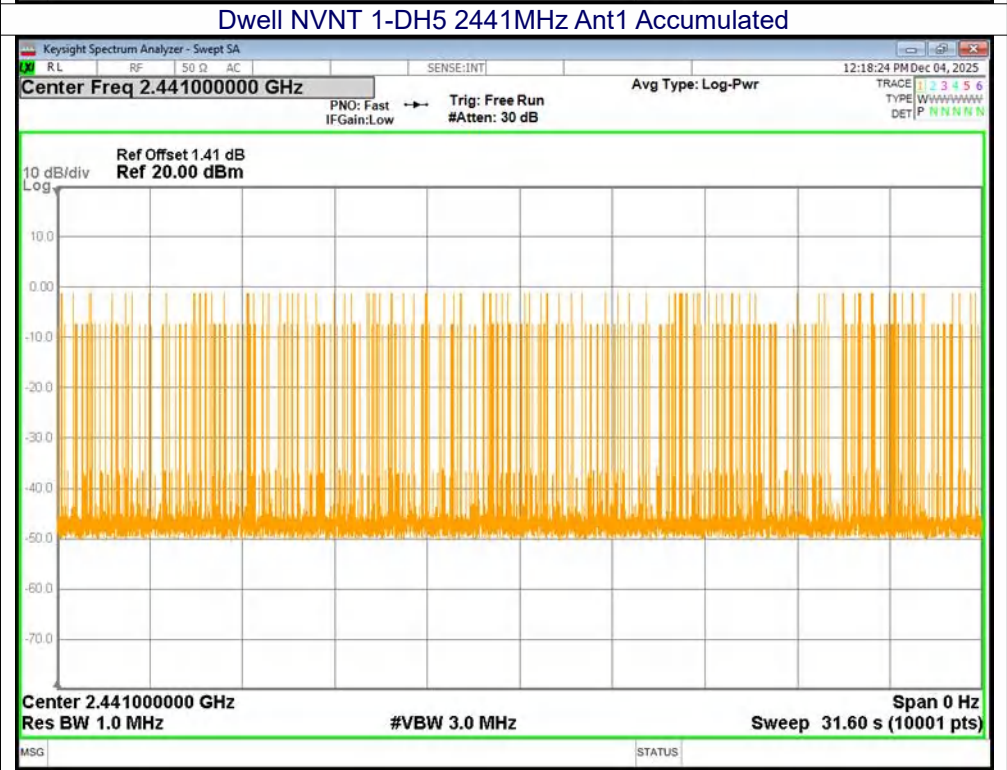
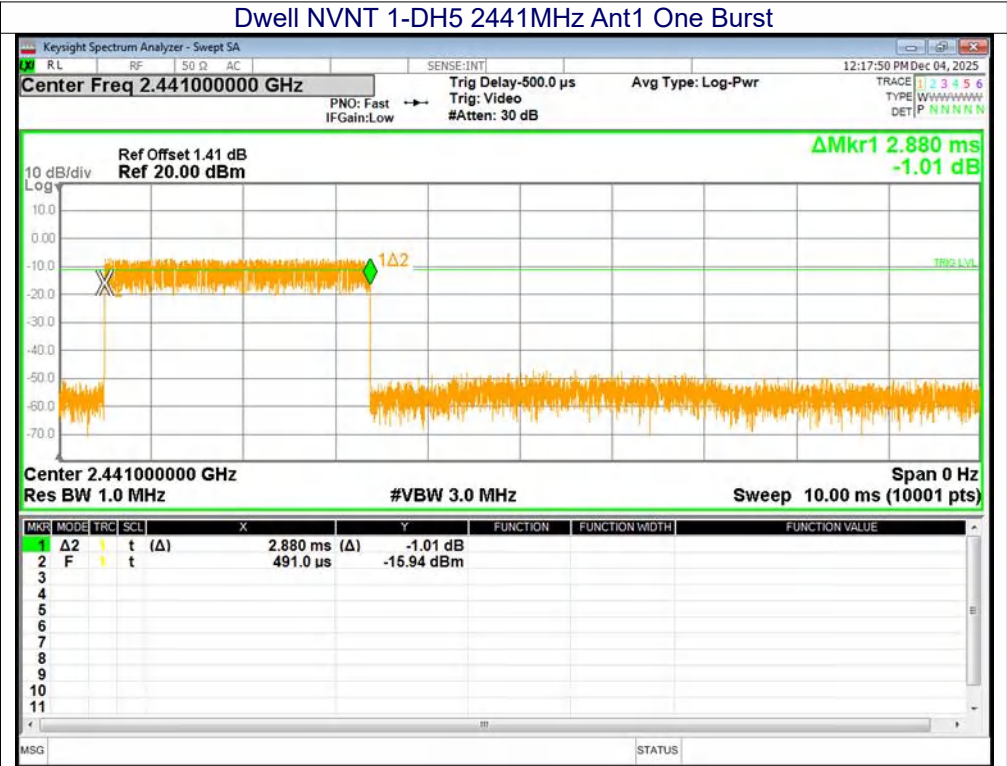
Dwell NVNT 1-DH1 2441MHz Ant1 One Burst

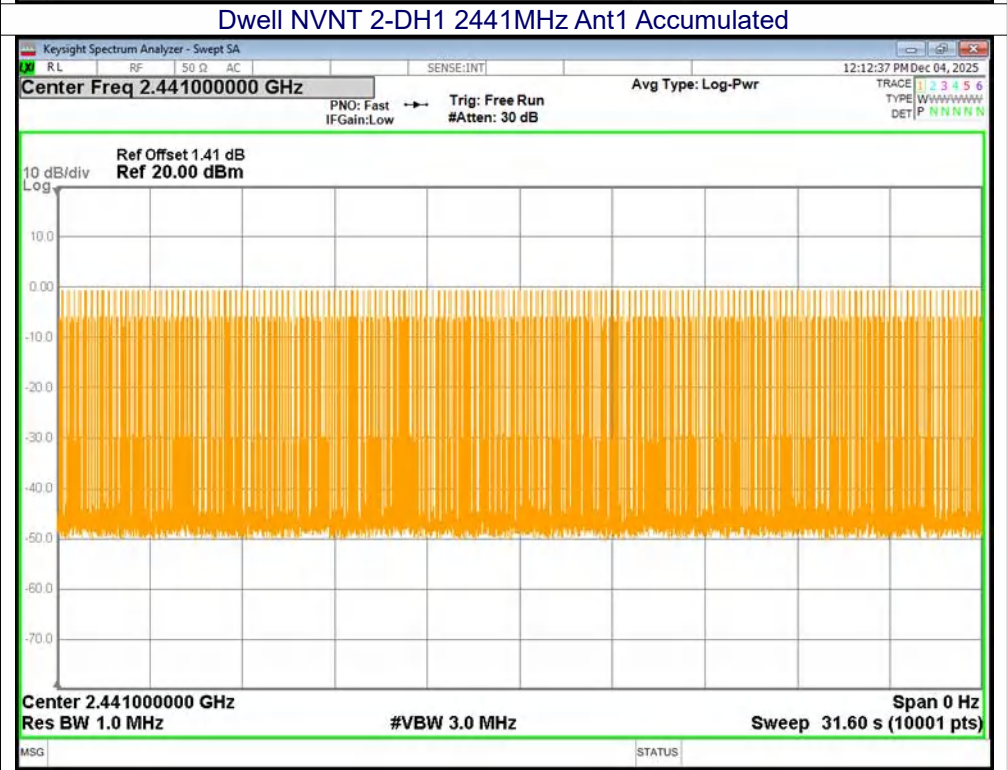
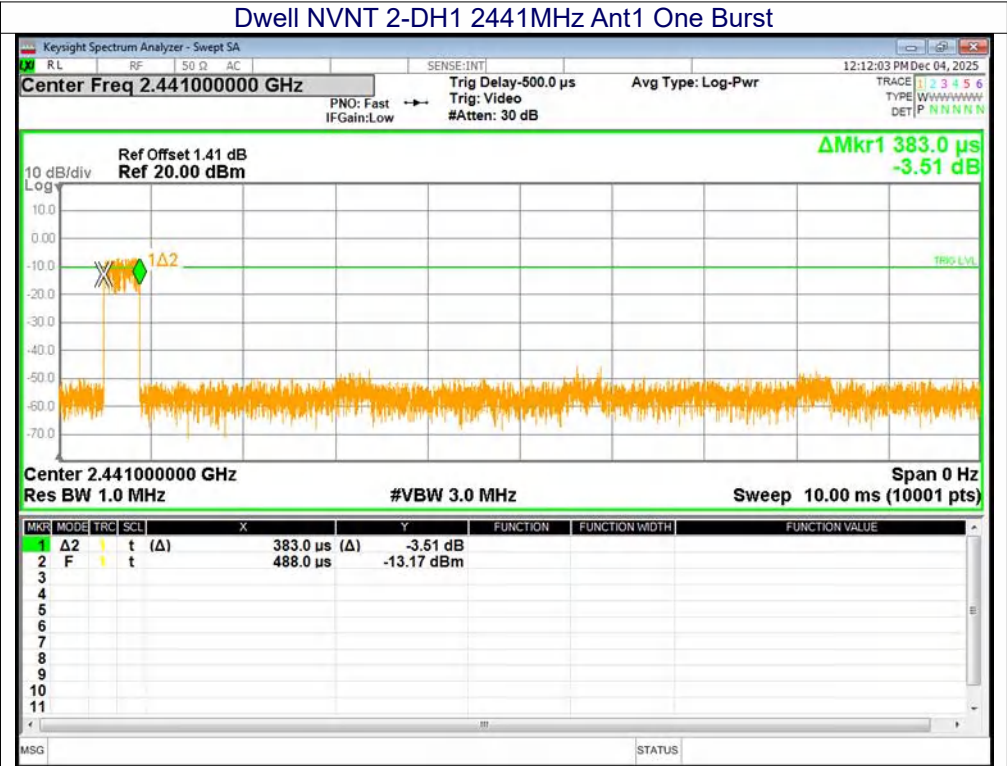


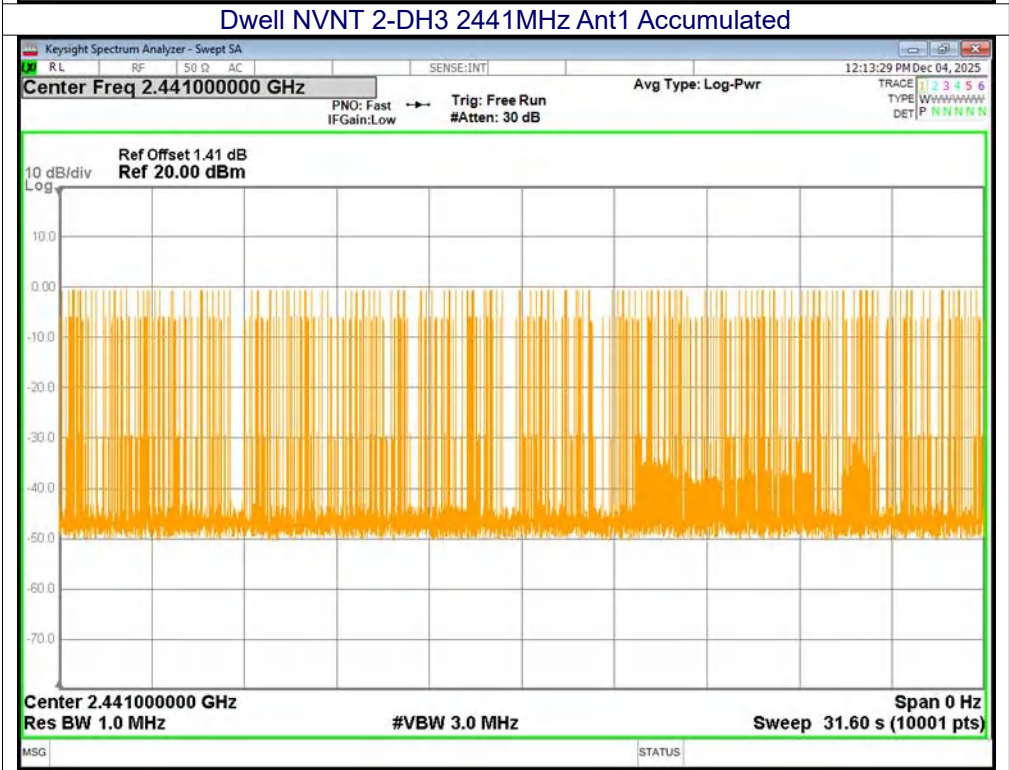
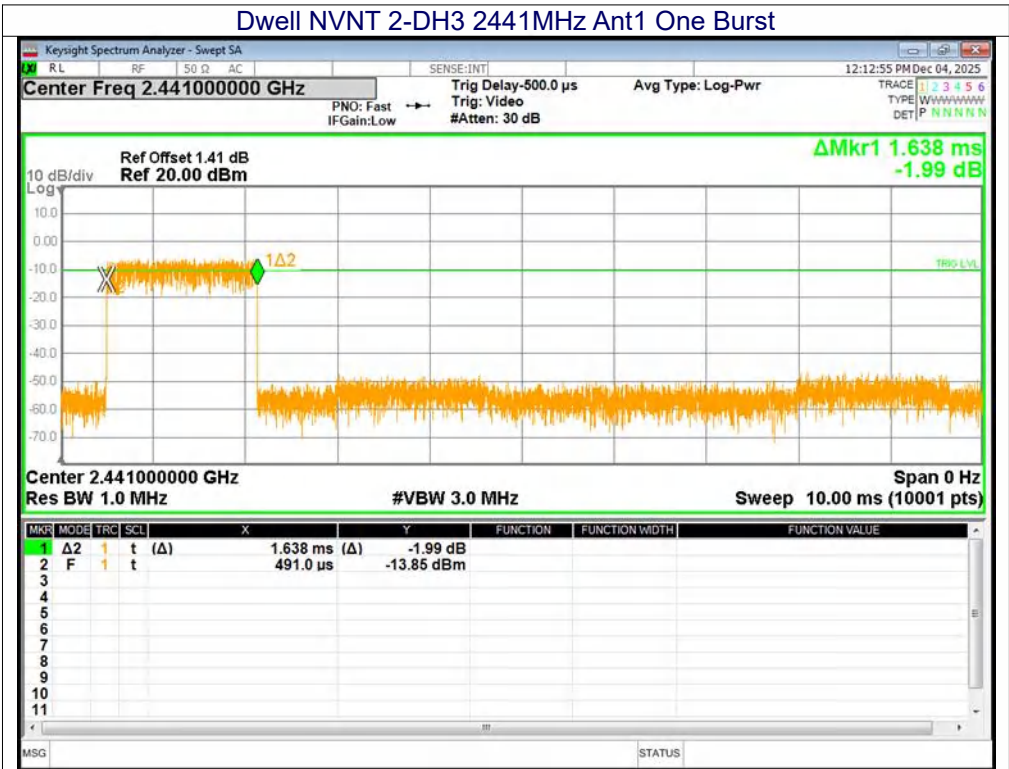
Dwell NVNT 1-DH1 2441MHz Ant1 Accumulated

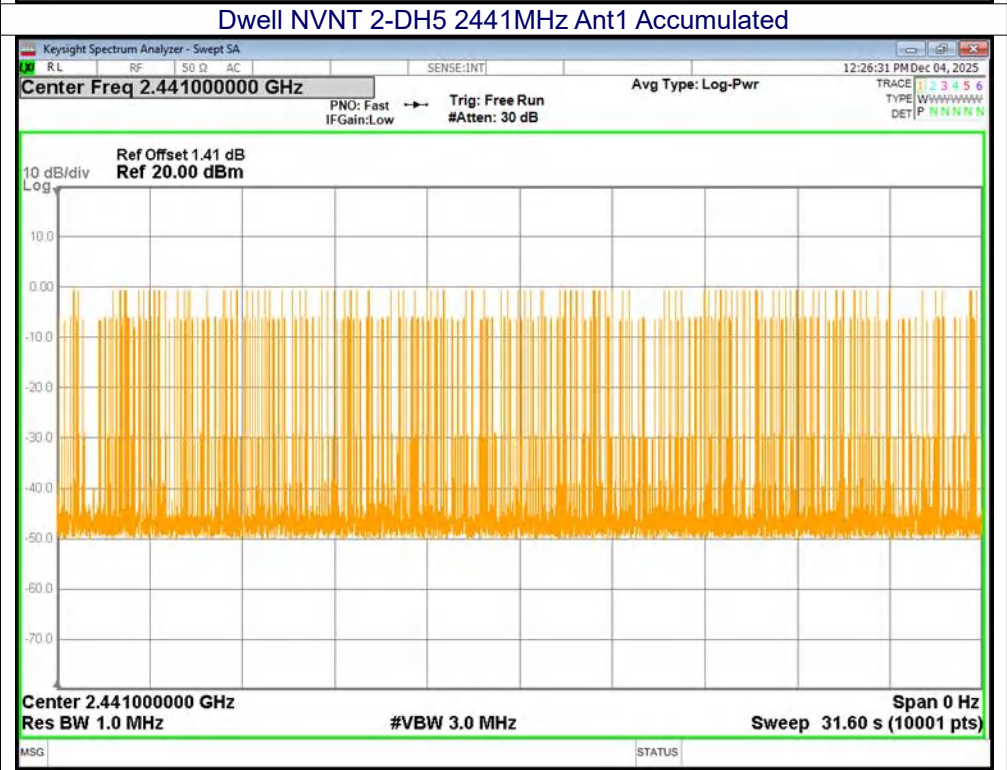
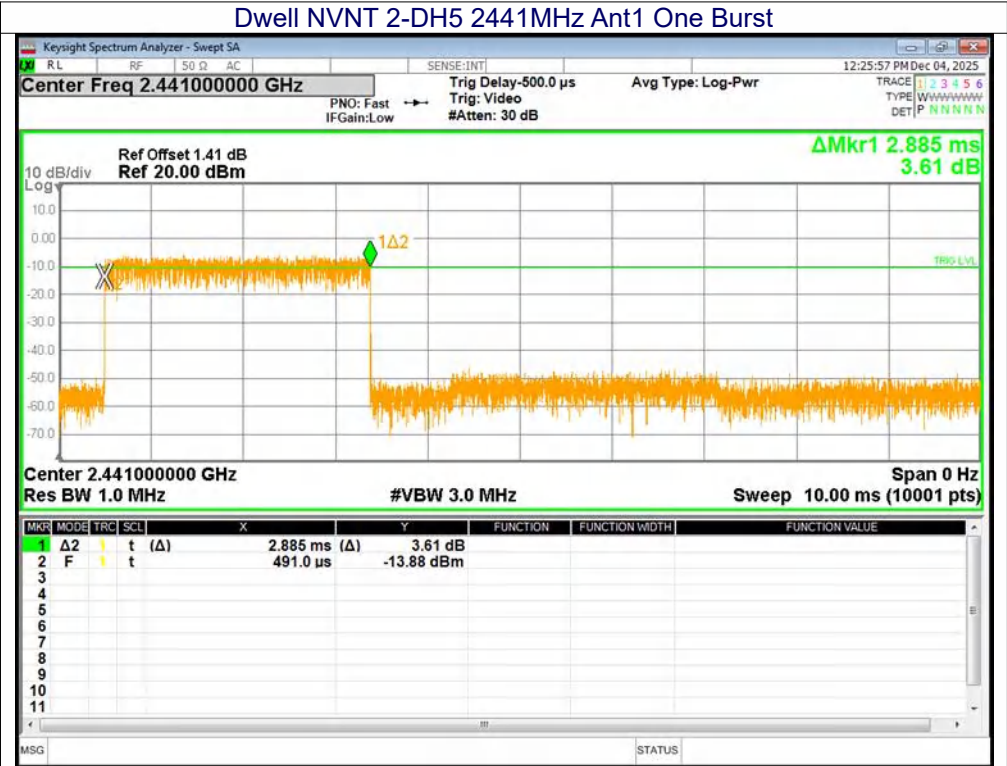




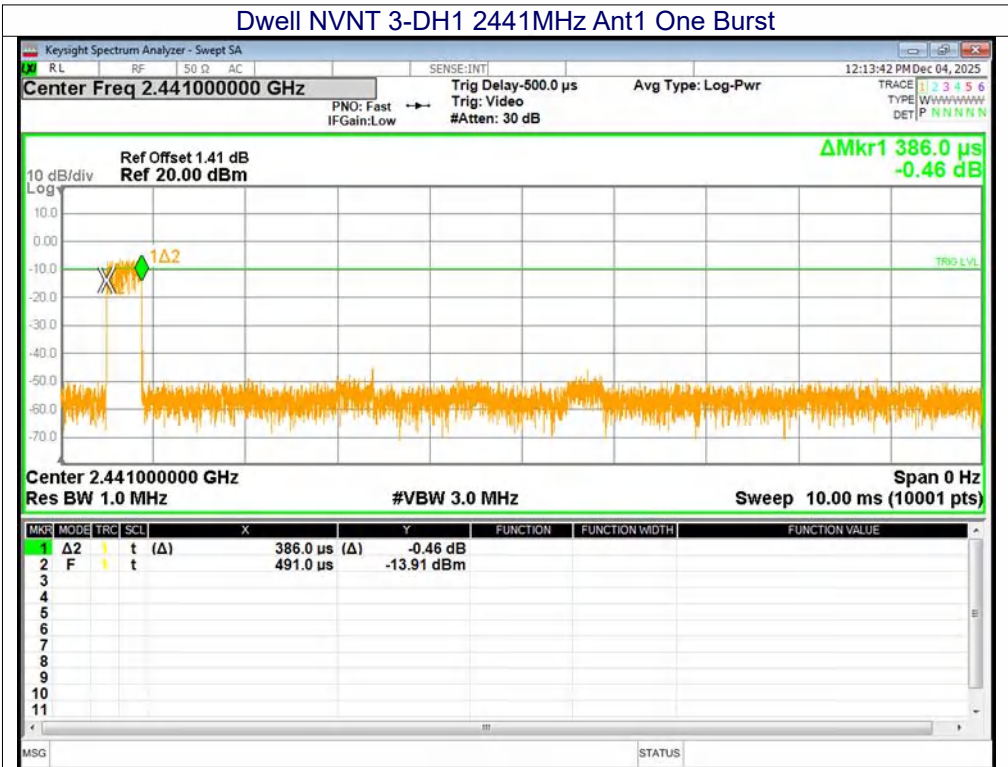




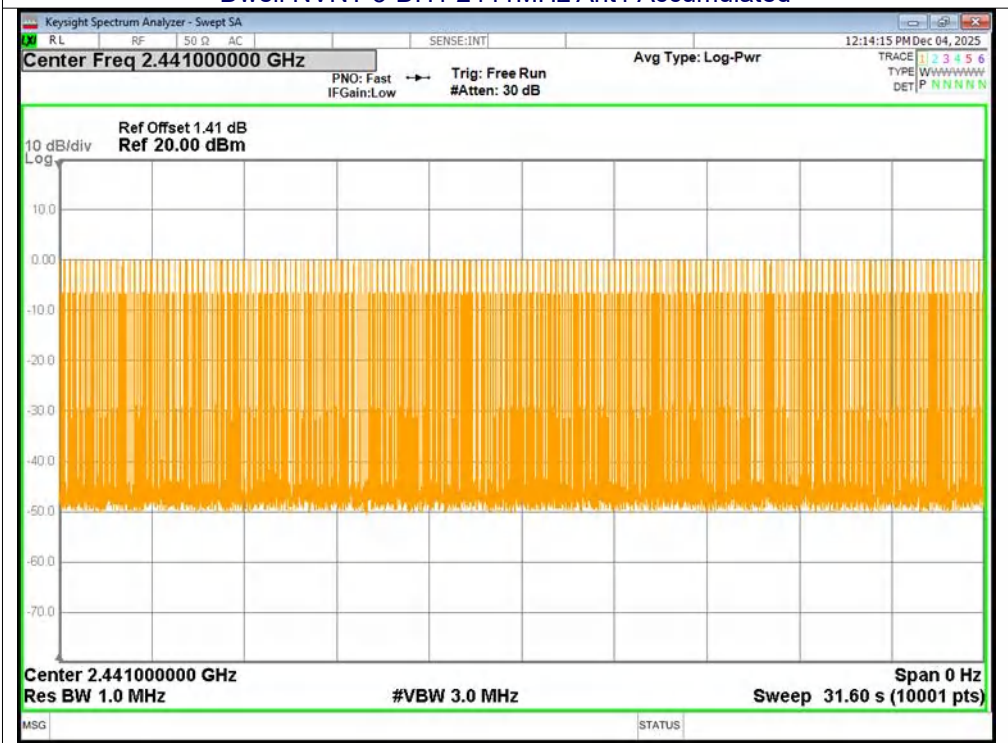


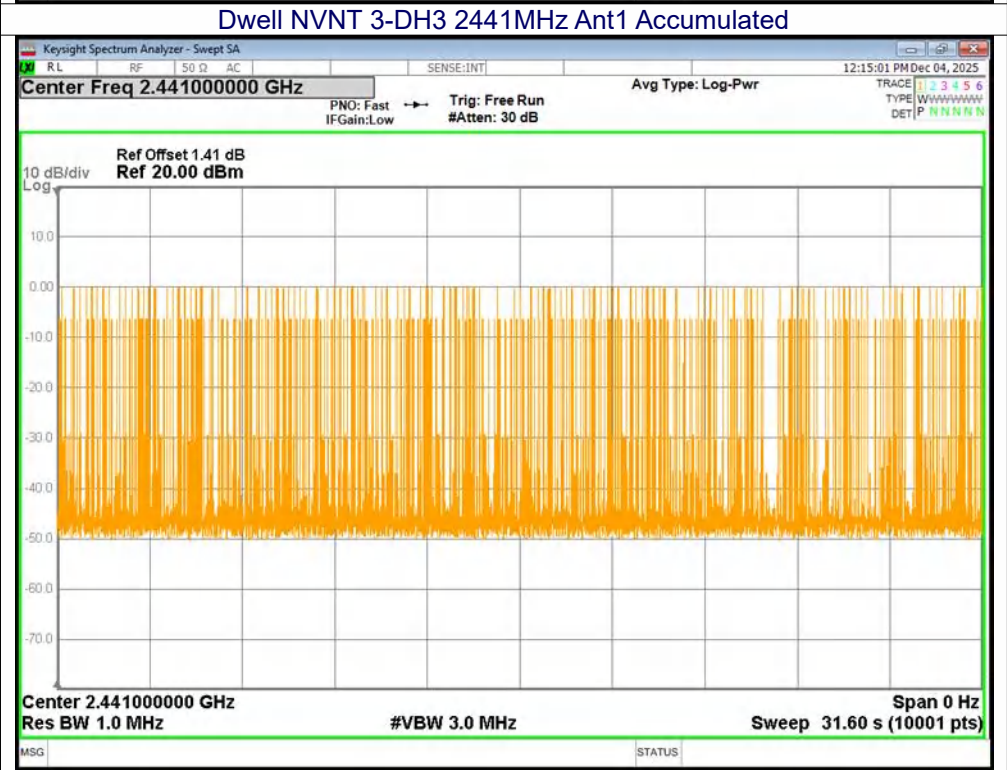
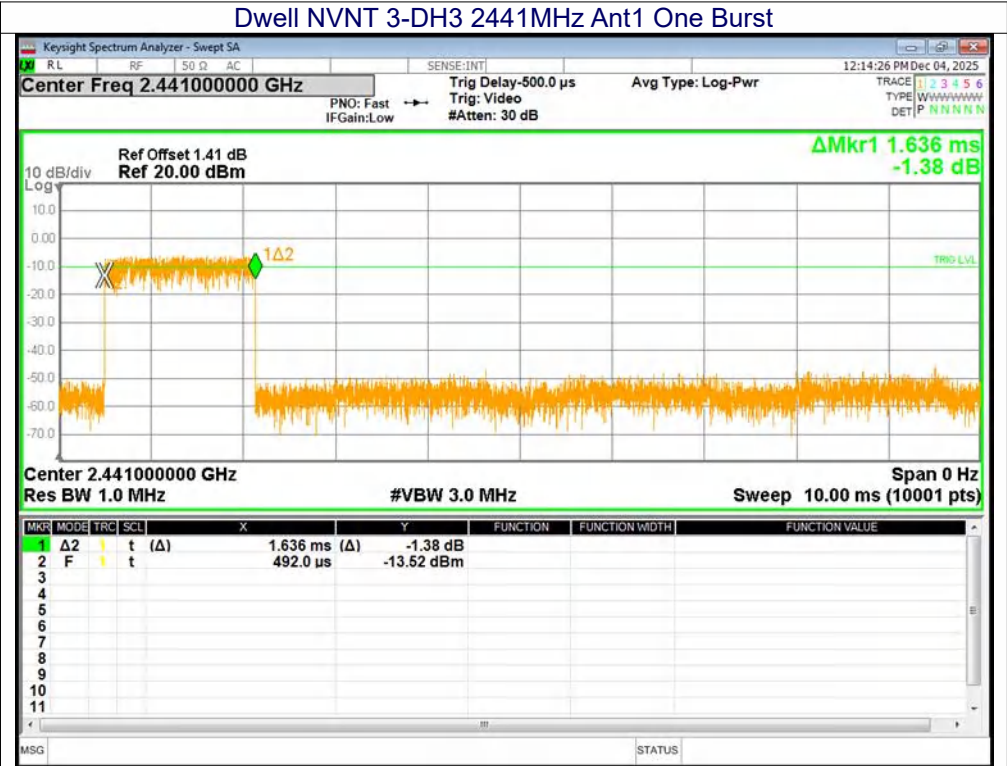


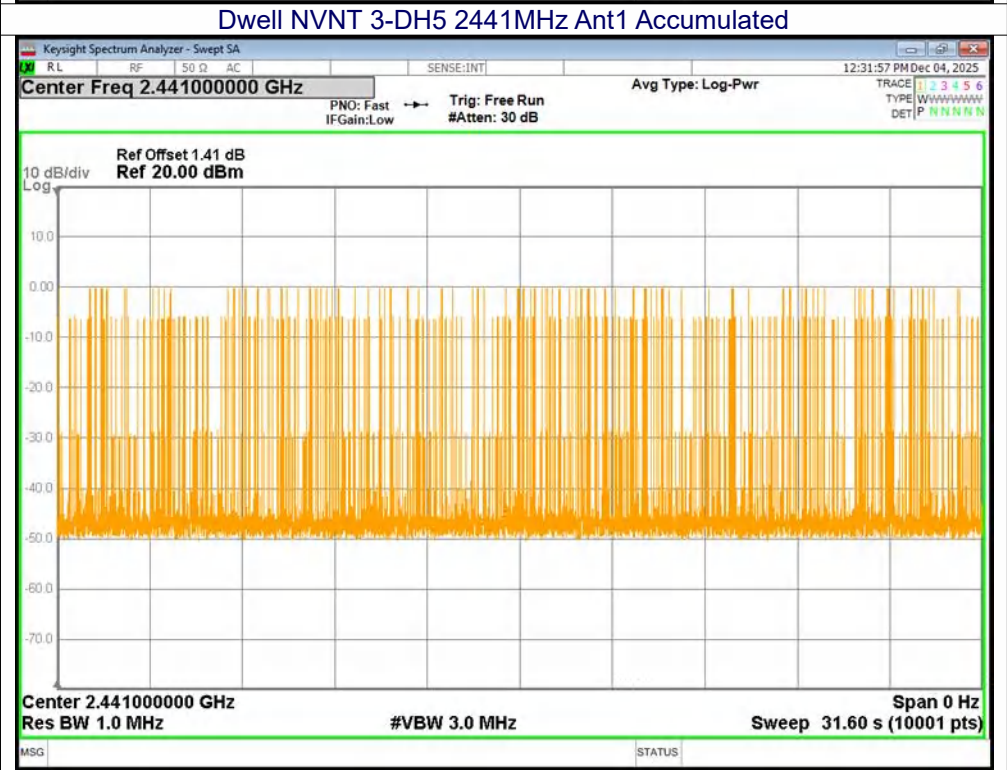
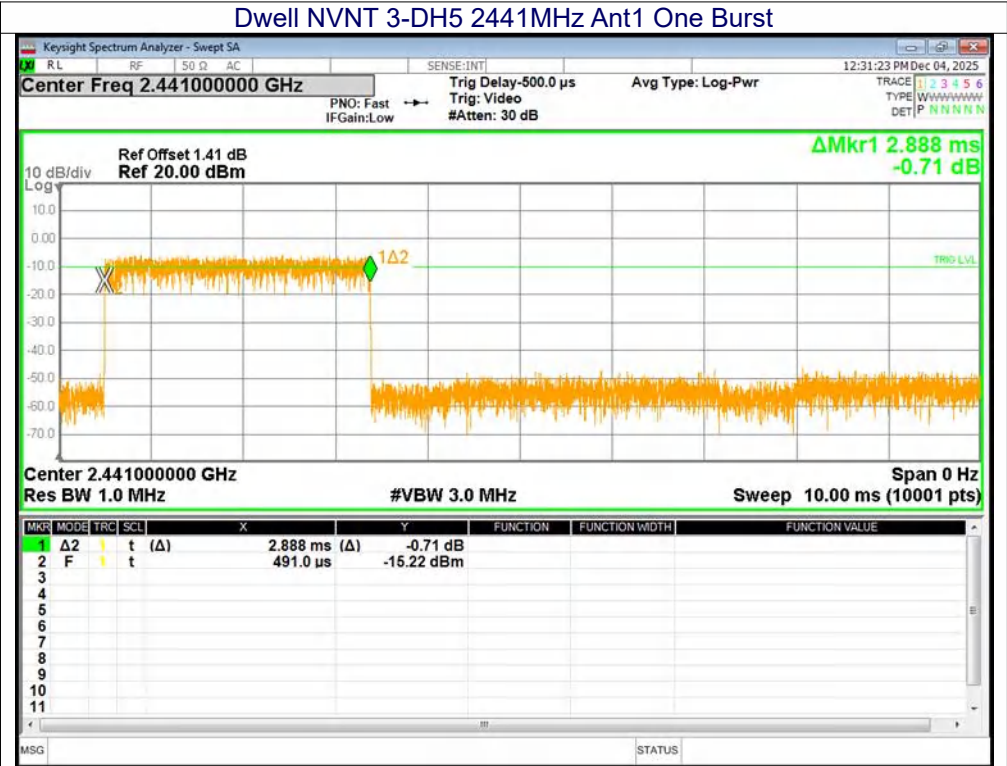
Dwell NVNT 3-DH1 2441MHz Ant1 One Burst



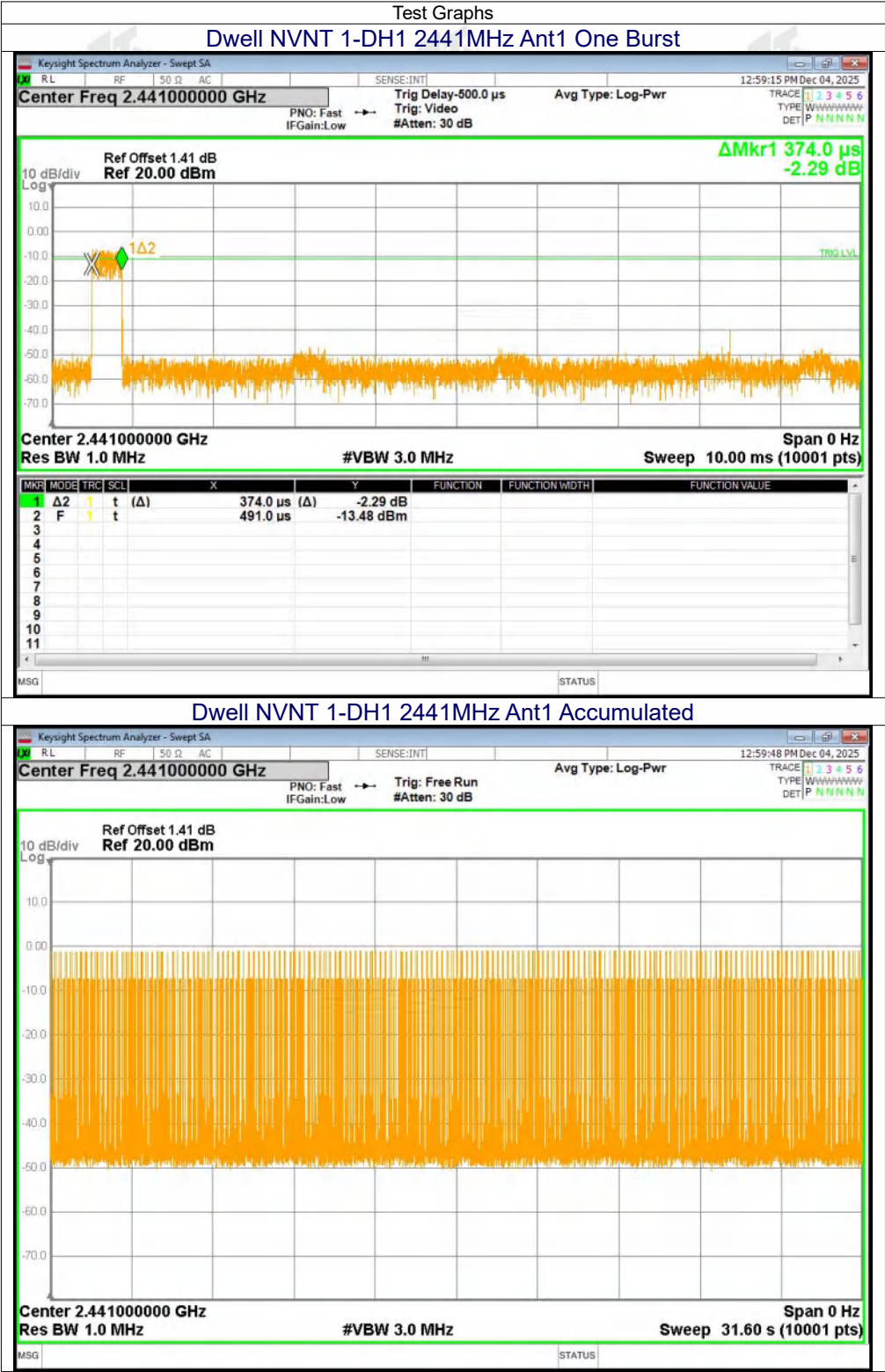
Dwell NVNT 3-DH1 2441MHz Ant1 Accumulated

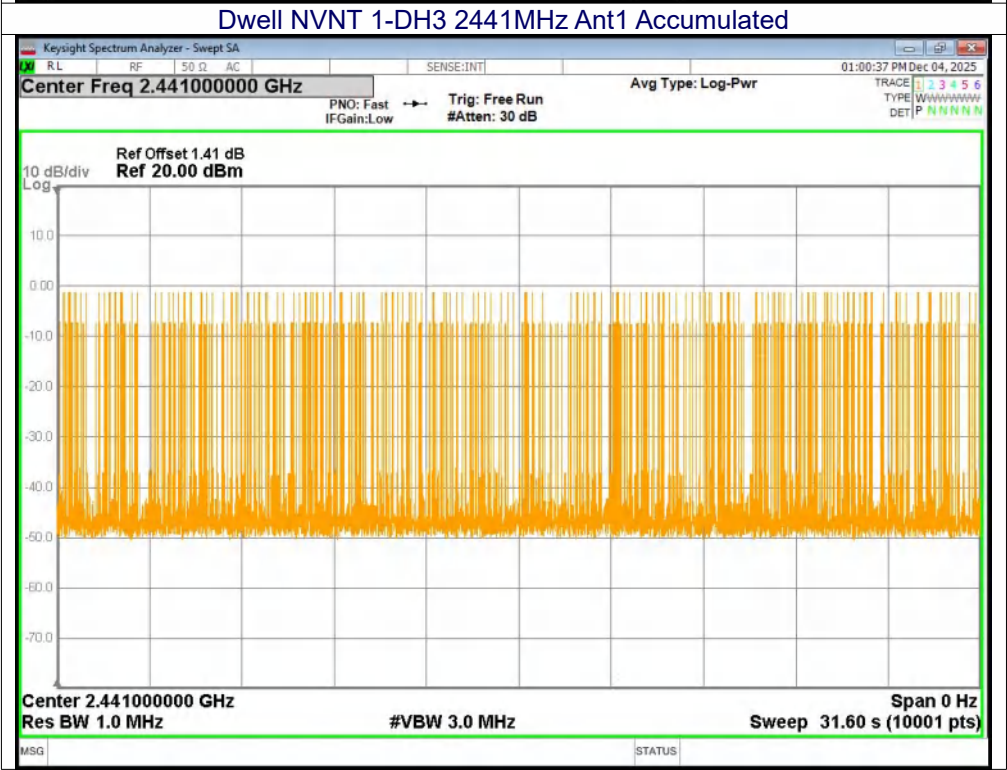
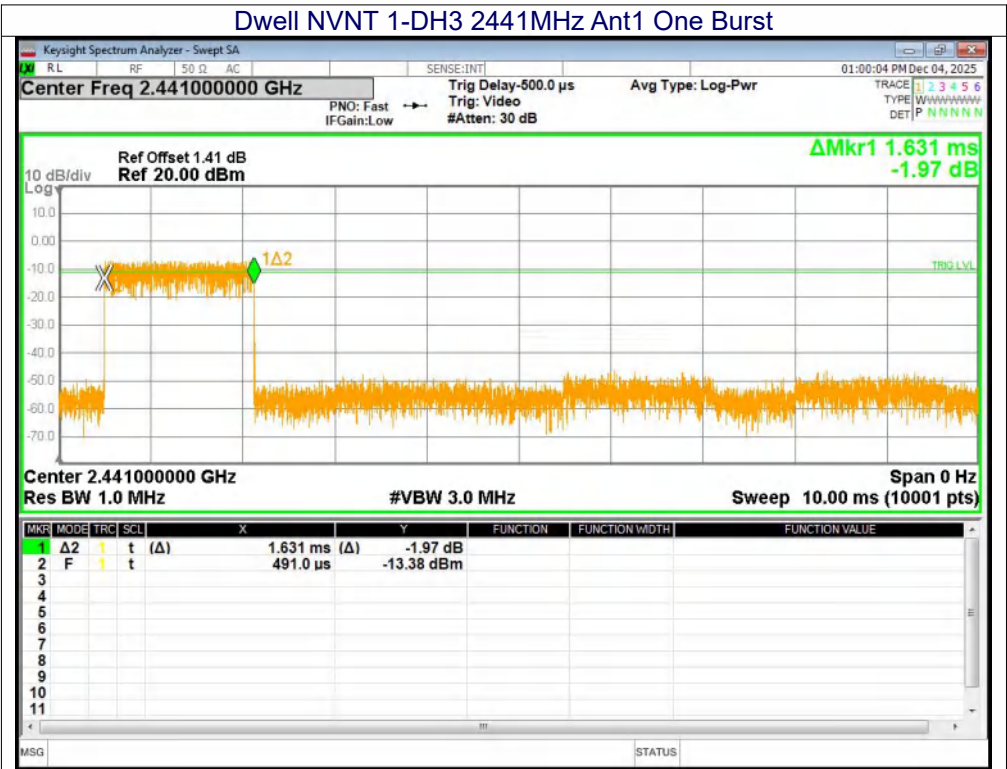




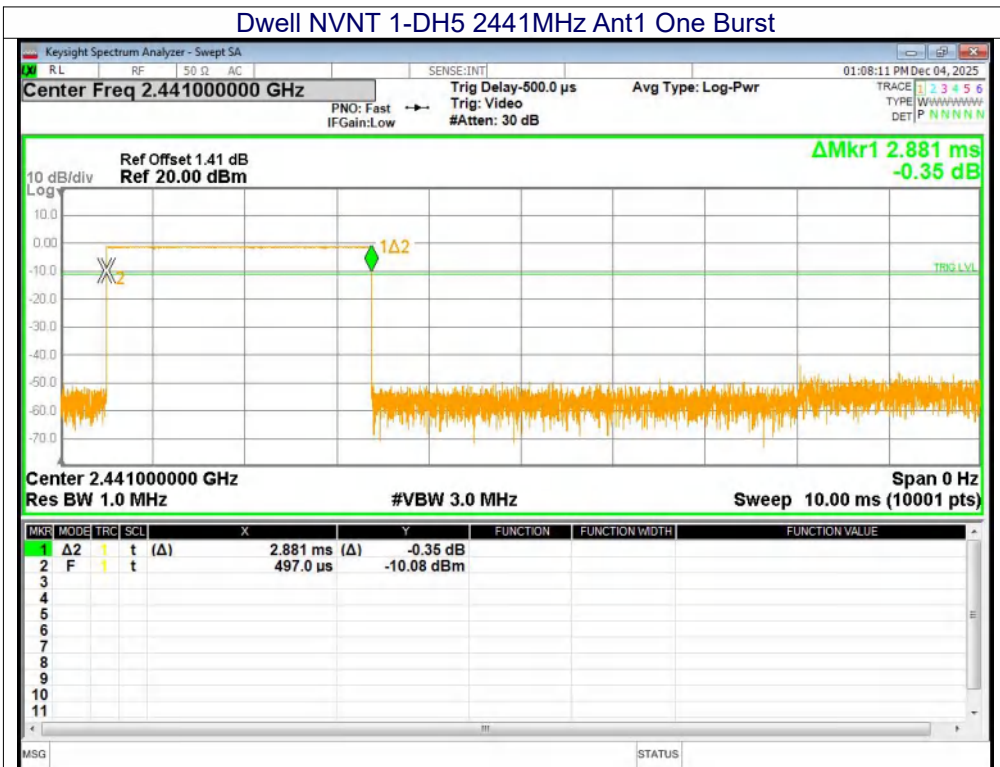


Right earphone									
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.374	118.932	318	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.631	270.746	166	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.881	279.457	97	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.385	122.815	319	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.635	232.17	142	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.879	336.843	117	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.387	123.453	319	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.637	260.283	159	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.888	323.456	112	31600	400	Pass

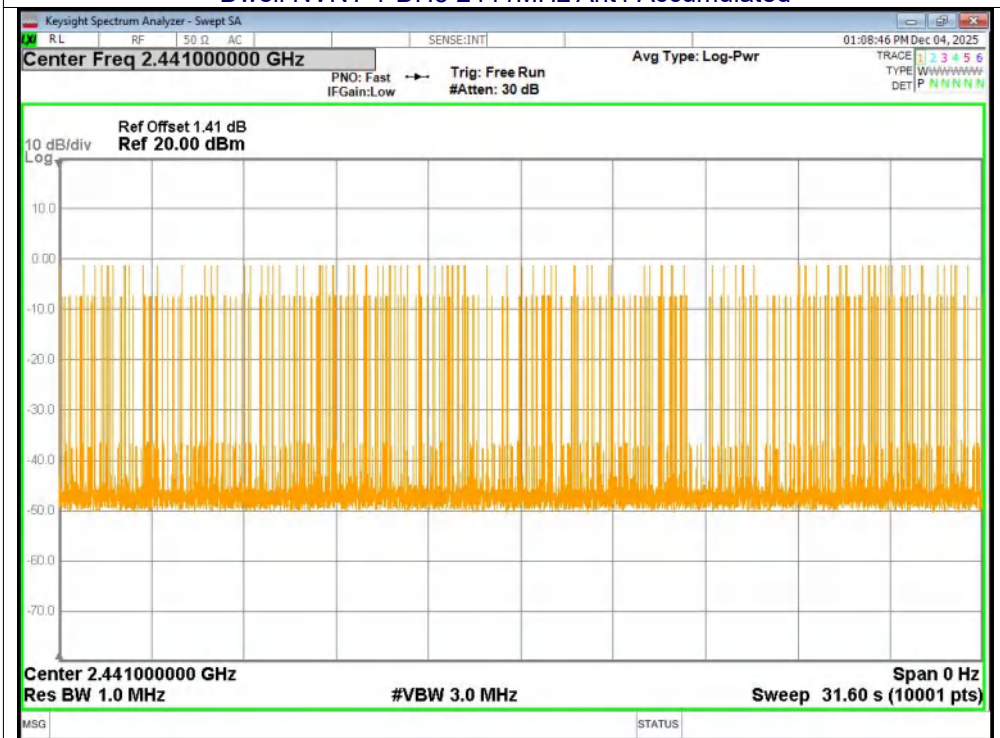




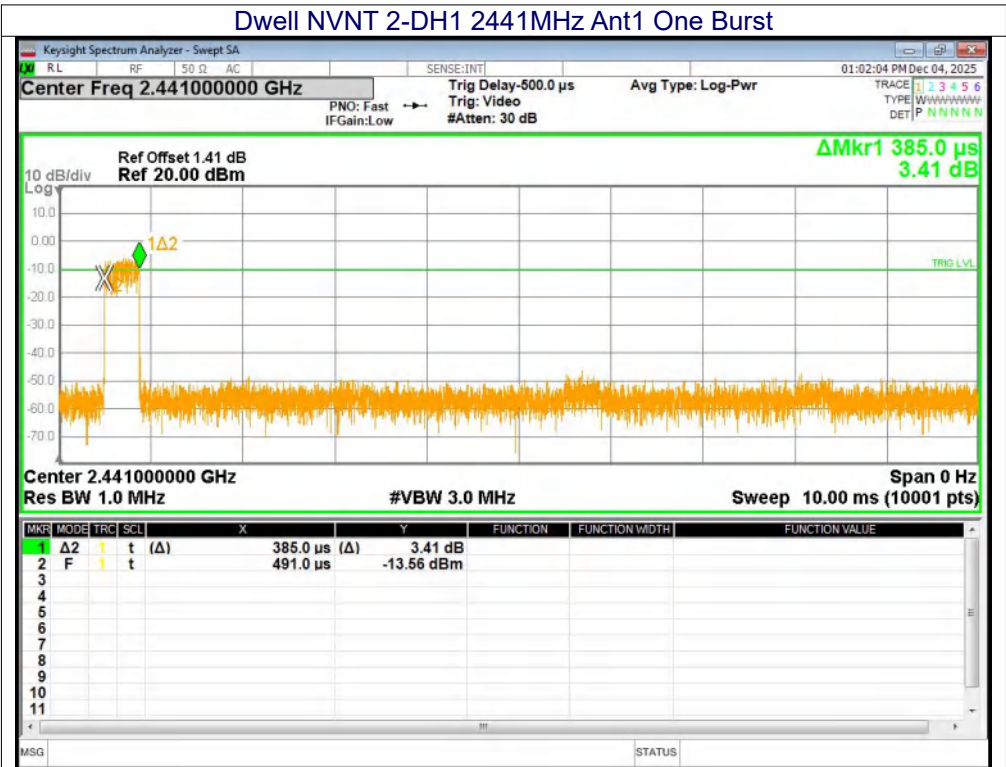
Dwell NVNT 1-DH5 2441MHz Ant1 One Burst



Dwell NVNT 1-DH5 2441MHz Ant1 Accumulated



Dwell NVNT 2-DH1 2441MHz Ant1 One Burst



Dwell NVNT 2-DH1 2441MHz Ant1 Accumulated

