

Appendix

Test Data

for BTEK241125107A02E02

Start date	2024/12/20	Finish date	2024/12/20
Temperature	19.1℃	Humidity	33%
RF specifications	BT	Test Engineer	Zora



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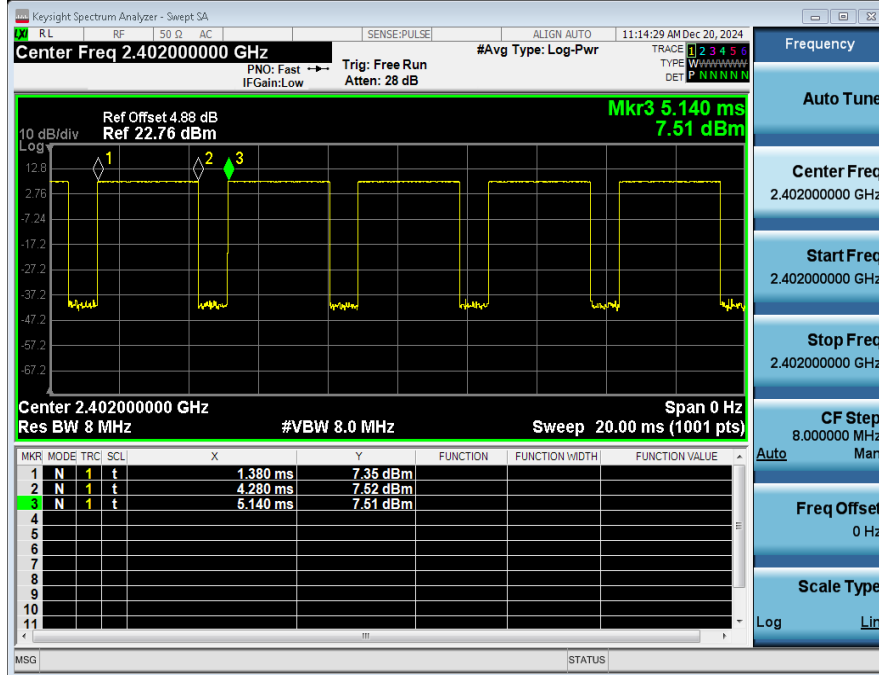
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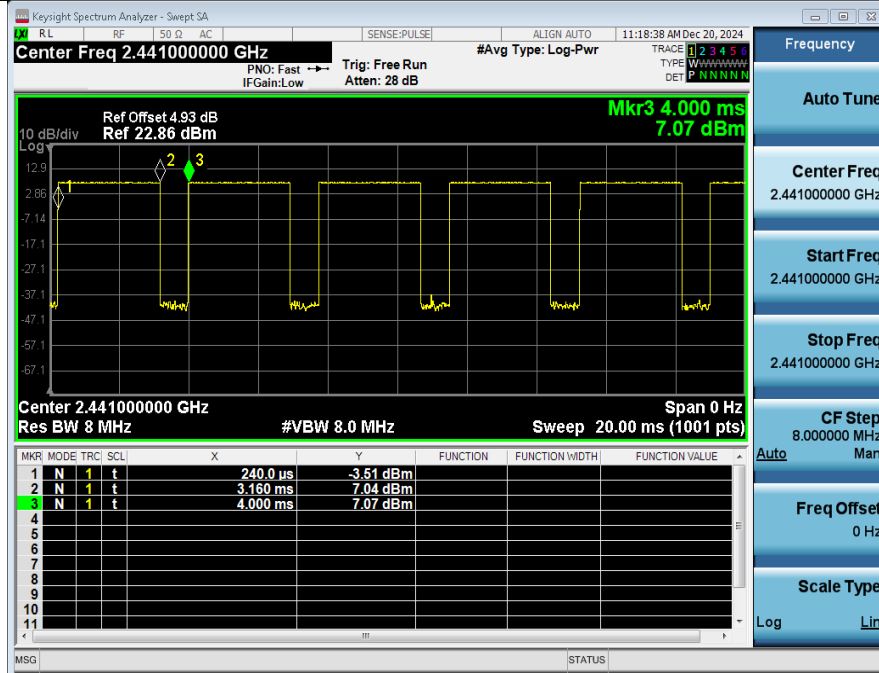
1. Duty Cycle

Condition	Antenna	Rate	Frequency (MHz)	Dutycycle(%)	Duty_factor
NVNT	ANT1	1-DH5	2402.00	77.66	1.10
NVNT	ANT1	1-DH5	2441.00	77.66	1.10
NVNT	ANT1	1-DH5	2480.00	78.07	1.07
NVNT	ANT1	2-DH5	2402.00	78.19	1.07
NVNT	ANT1	2-DH5	2441.00	78.19	1.07
NVNT	ANT1	2-DH5	2480.00	78.07	1.07
NVNT	ANT1	3-DH5	2402.00	78.19	1.07
NVNT	ANT1	3-DH5	2441.00	78.61	1.05
NVNT	ANT1	3-DH5	2480.00	78.07	1.07

Duty_Cycle_NVNT_ANT1_1-DH5_2402

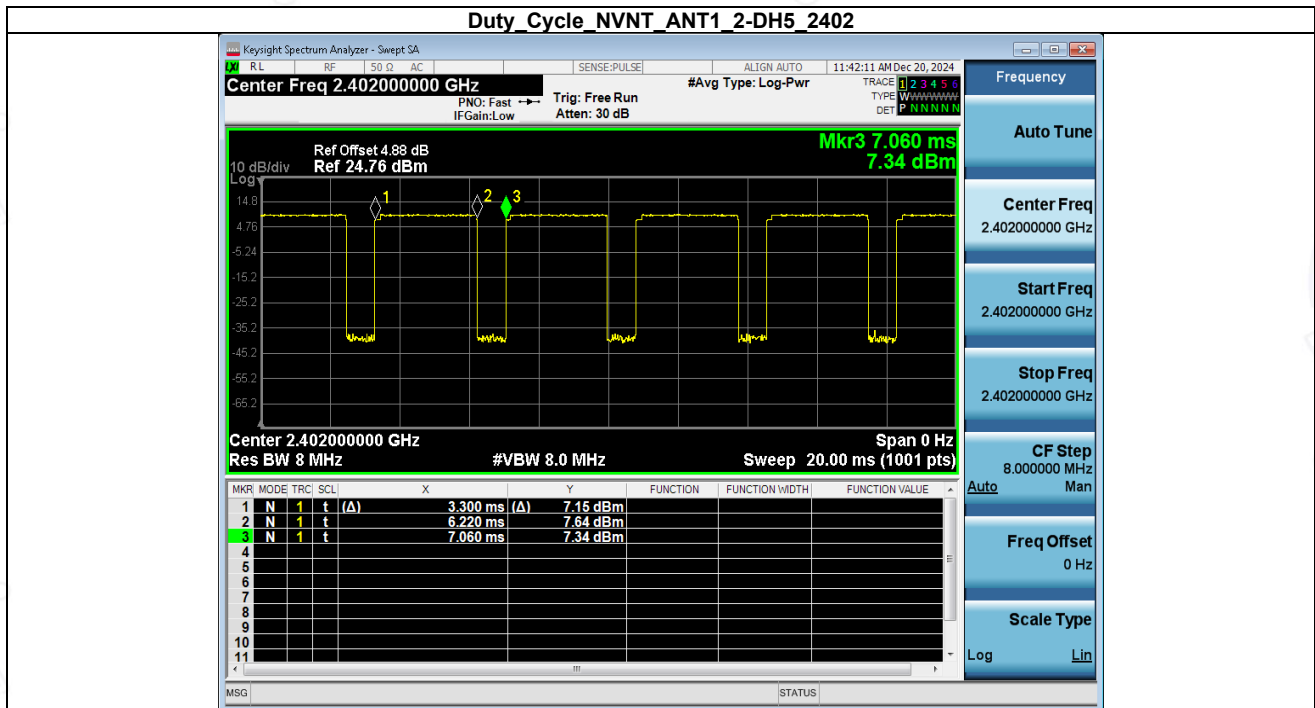
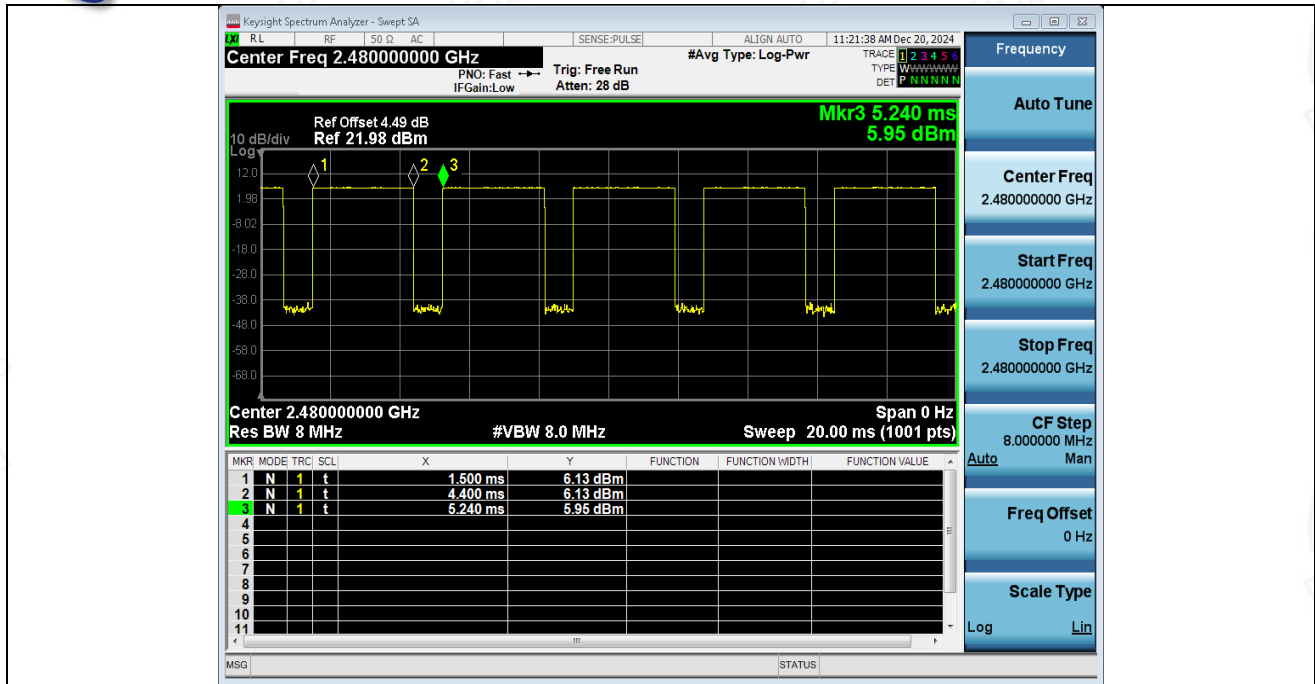


Duty_Cycle_NVNT_ANT1_1-DH5_2441



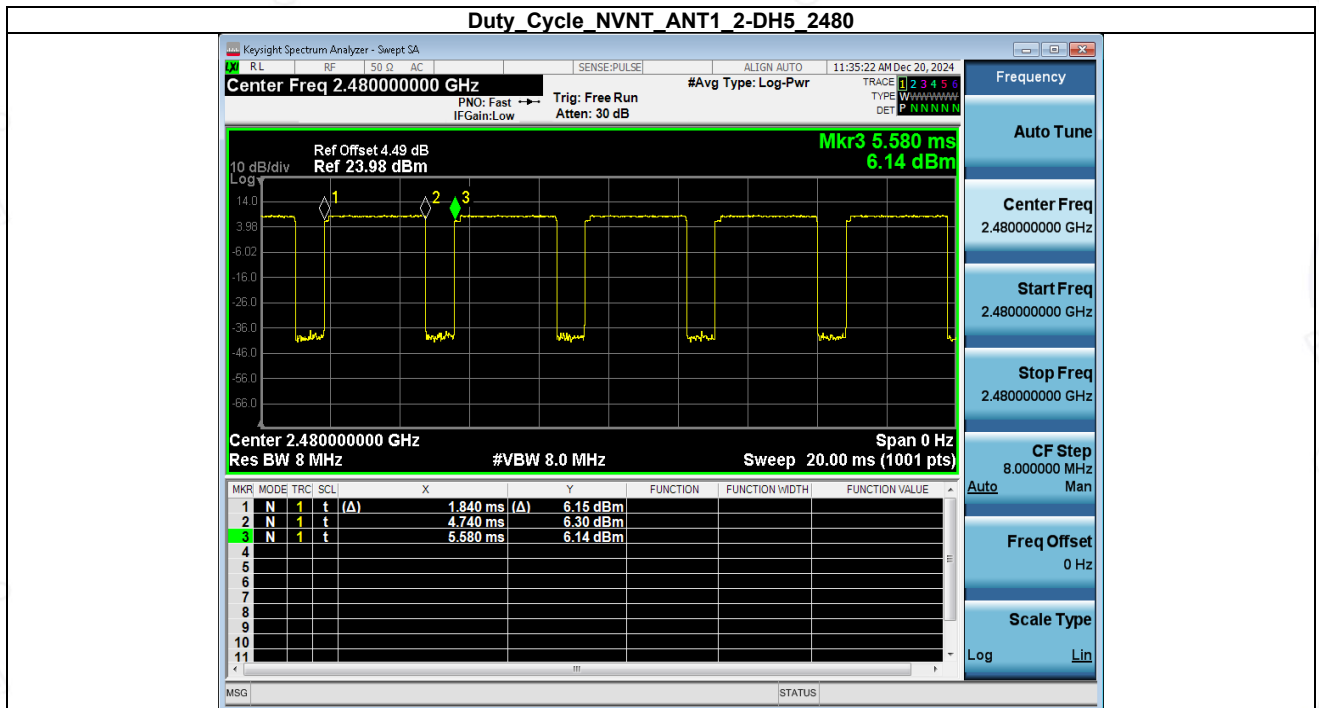
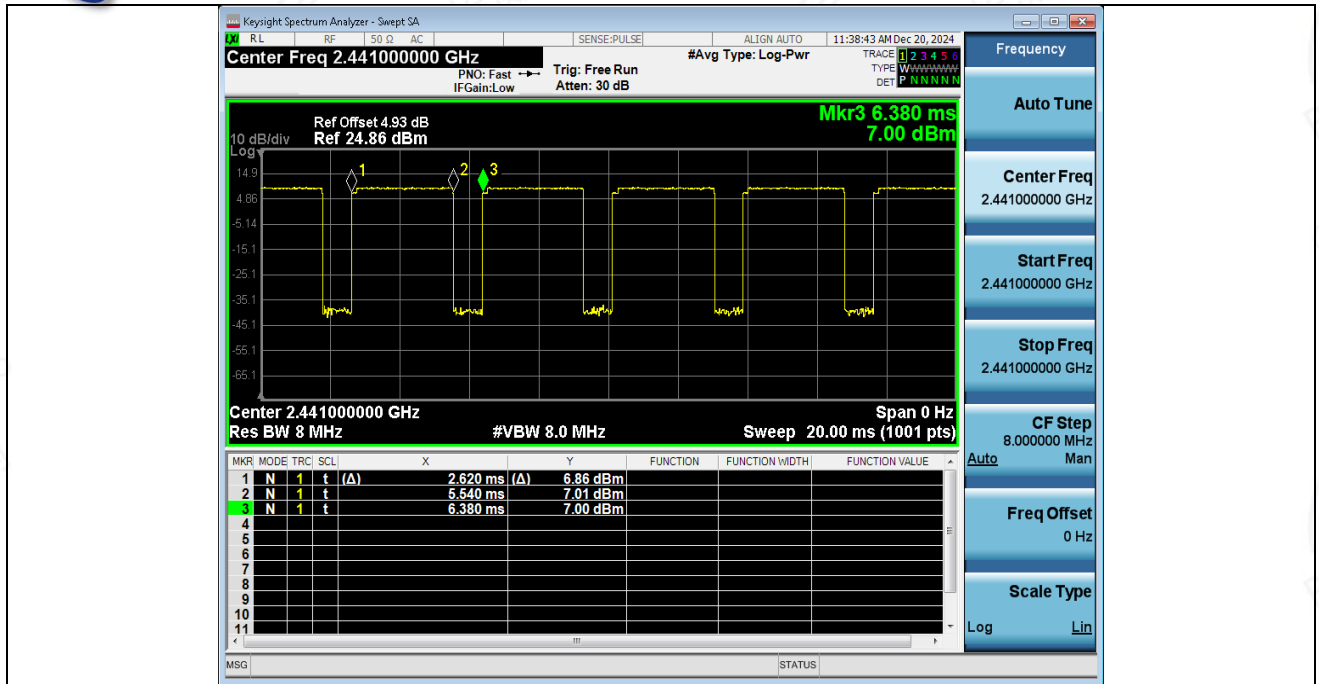
Duty_Cycle_NVNT_ANT1_1-DH5_2480





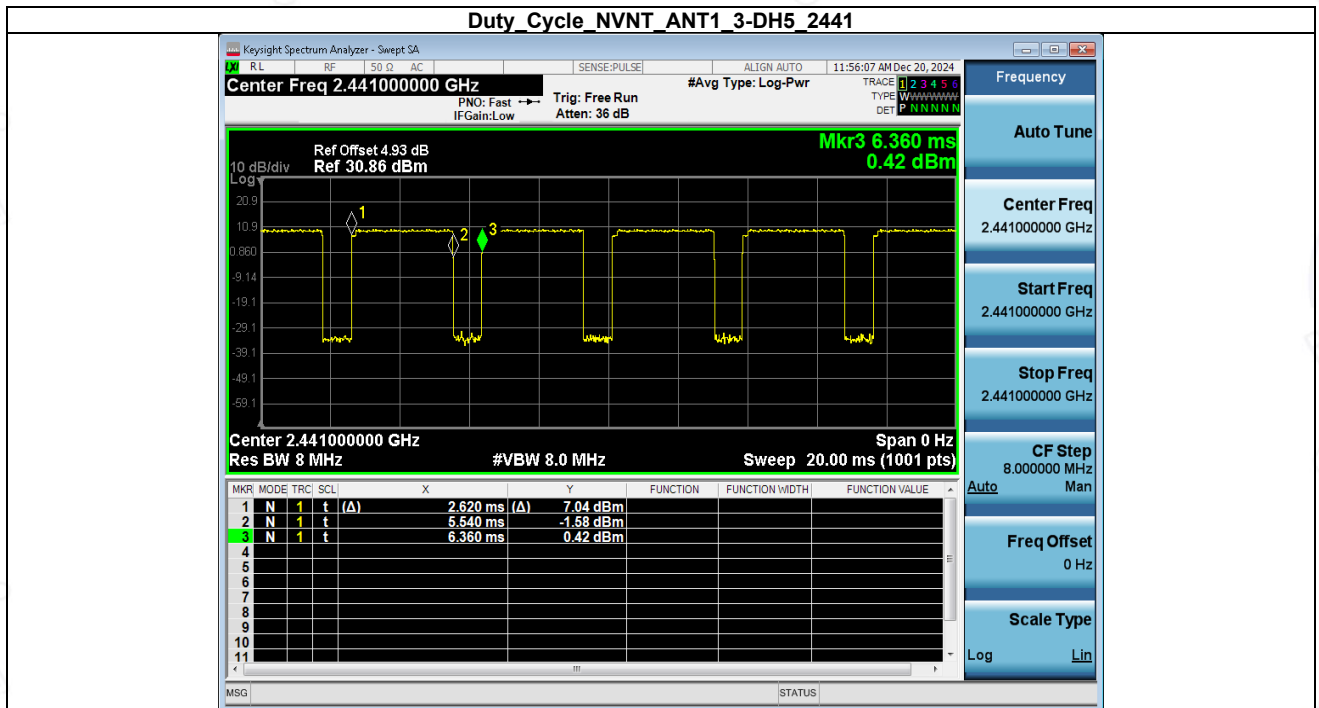
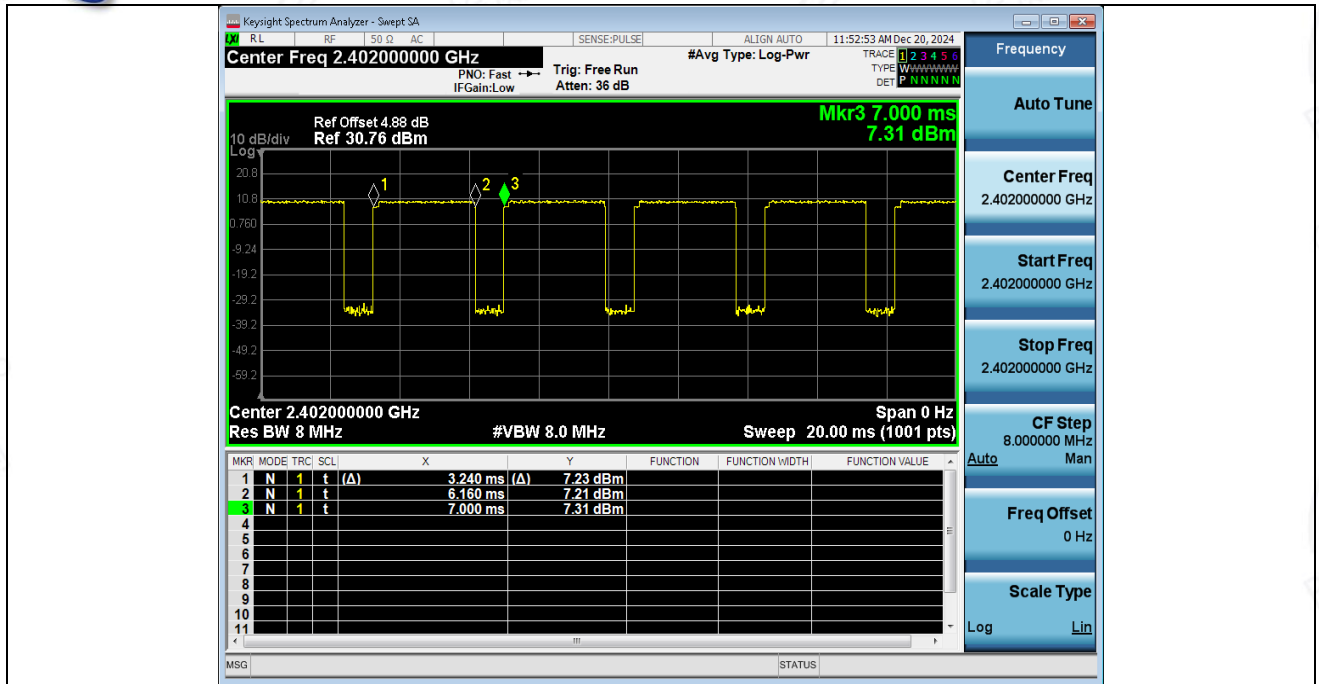
Duty Cycle_NVNT_ANT1_2-DH5_2441





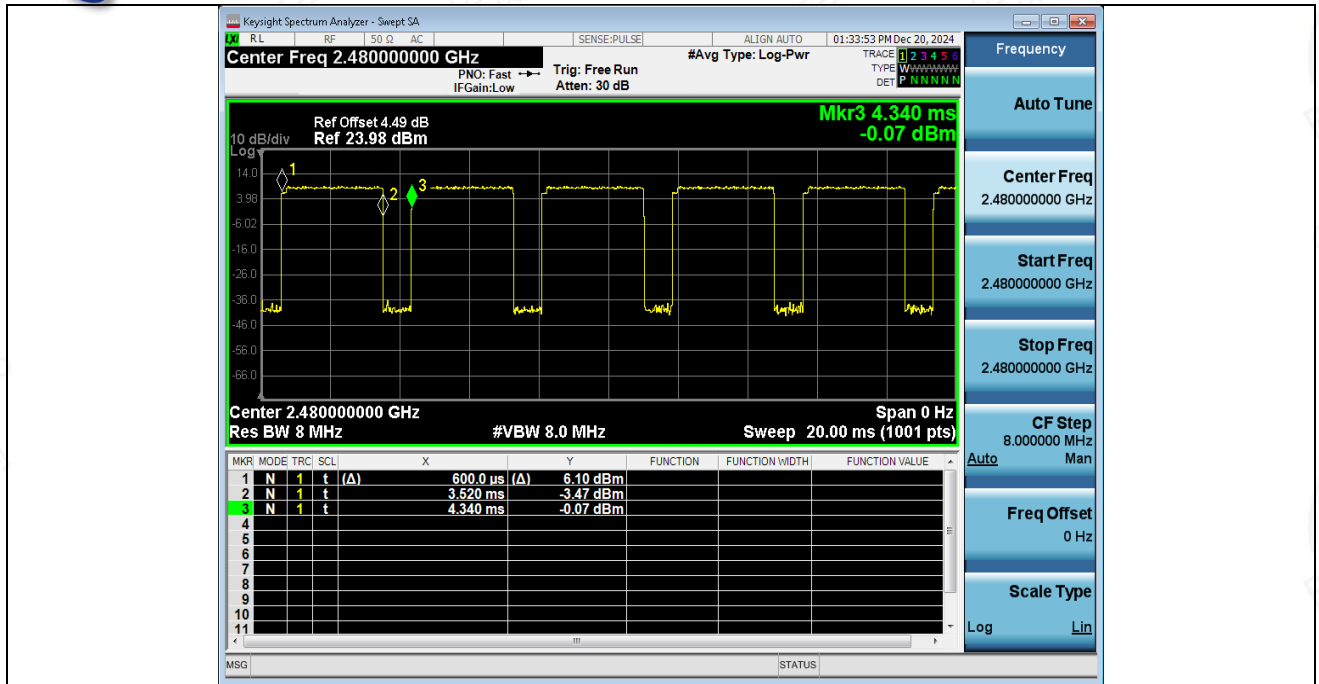
Duty Cycle_NVNT_ANT1_3-DH5_2402





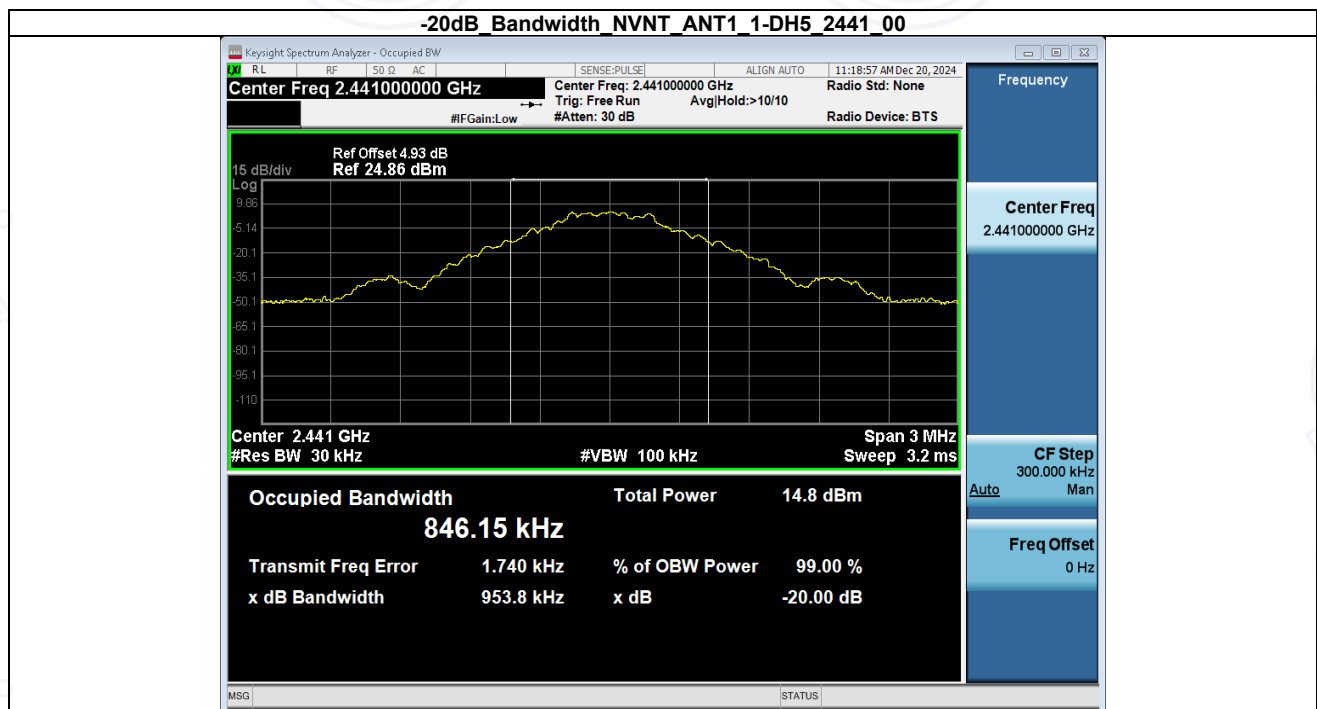
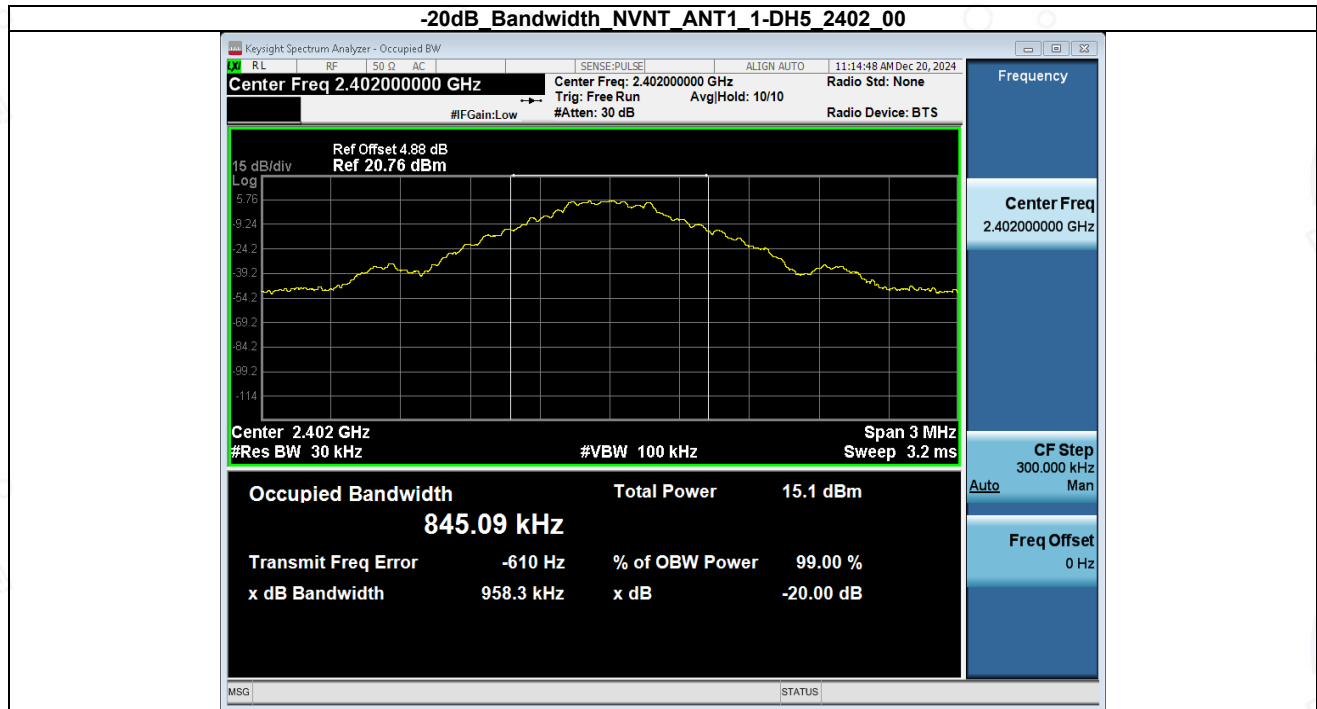
Duty Cycle_NVNT_ANT1_3-DH5_2480

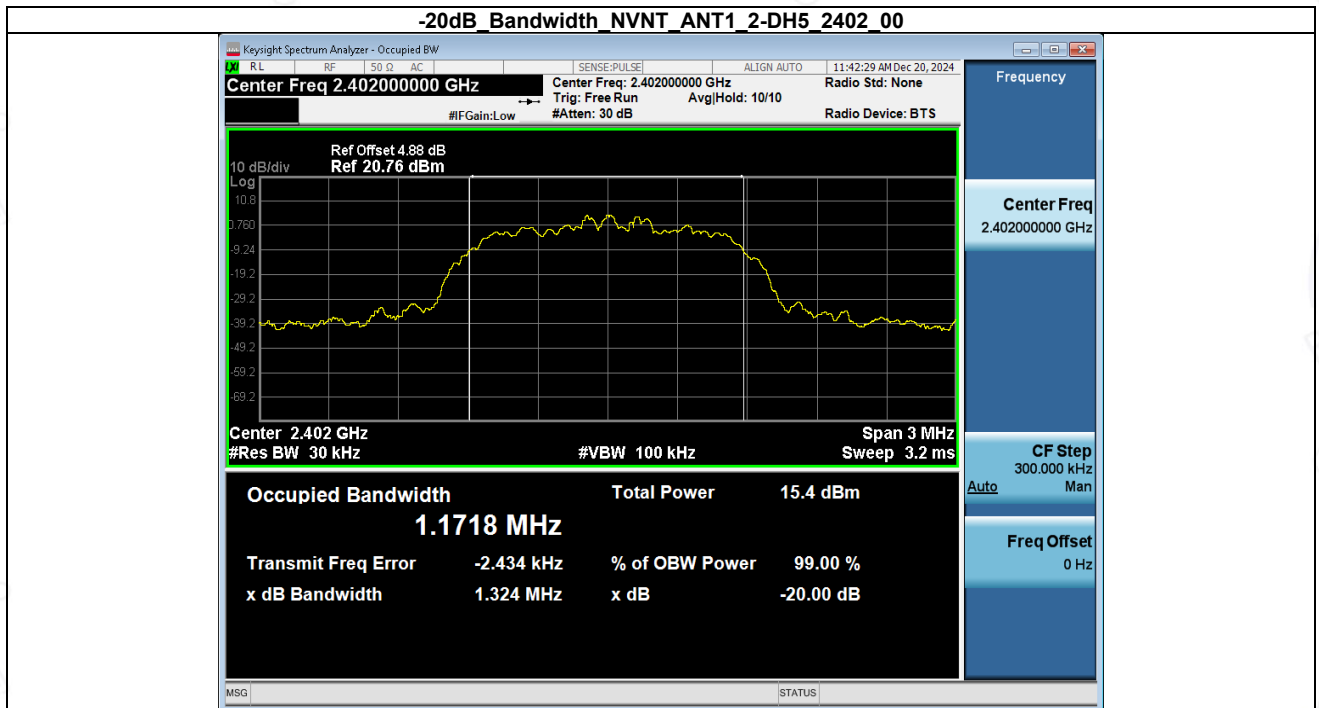
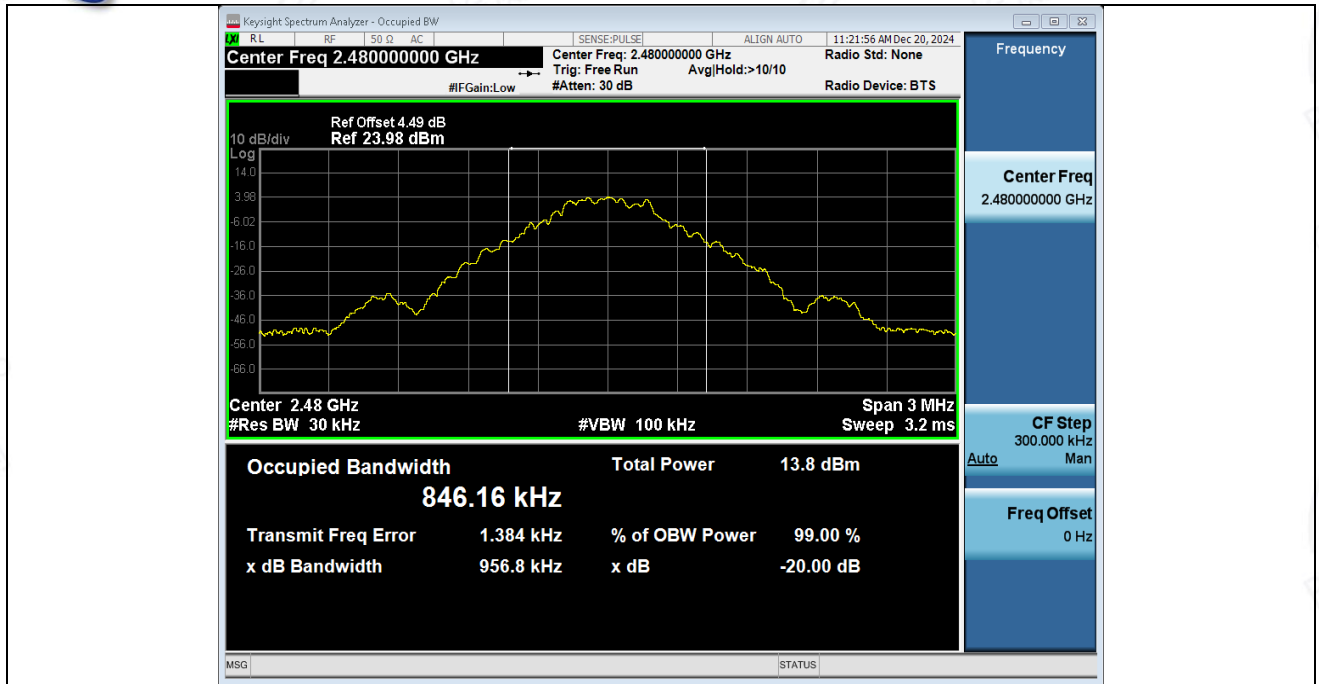


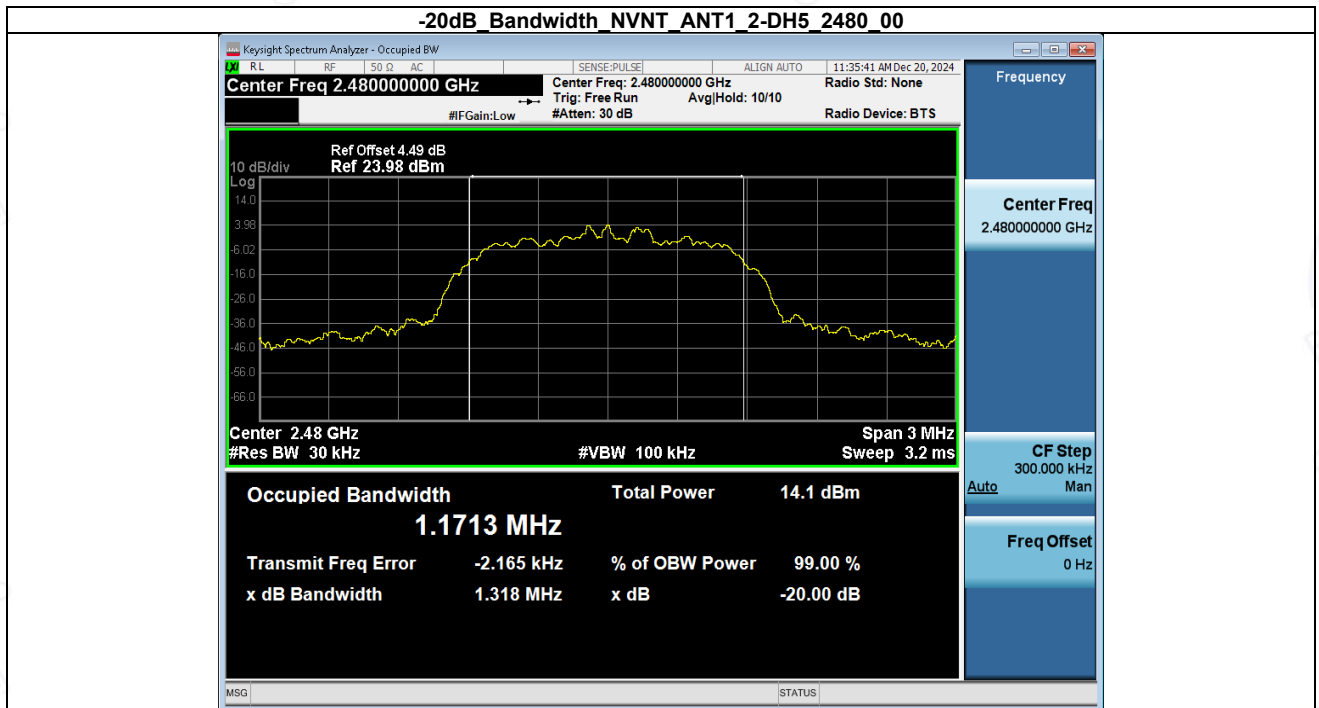


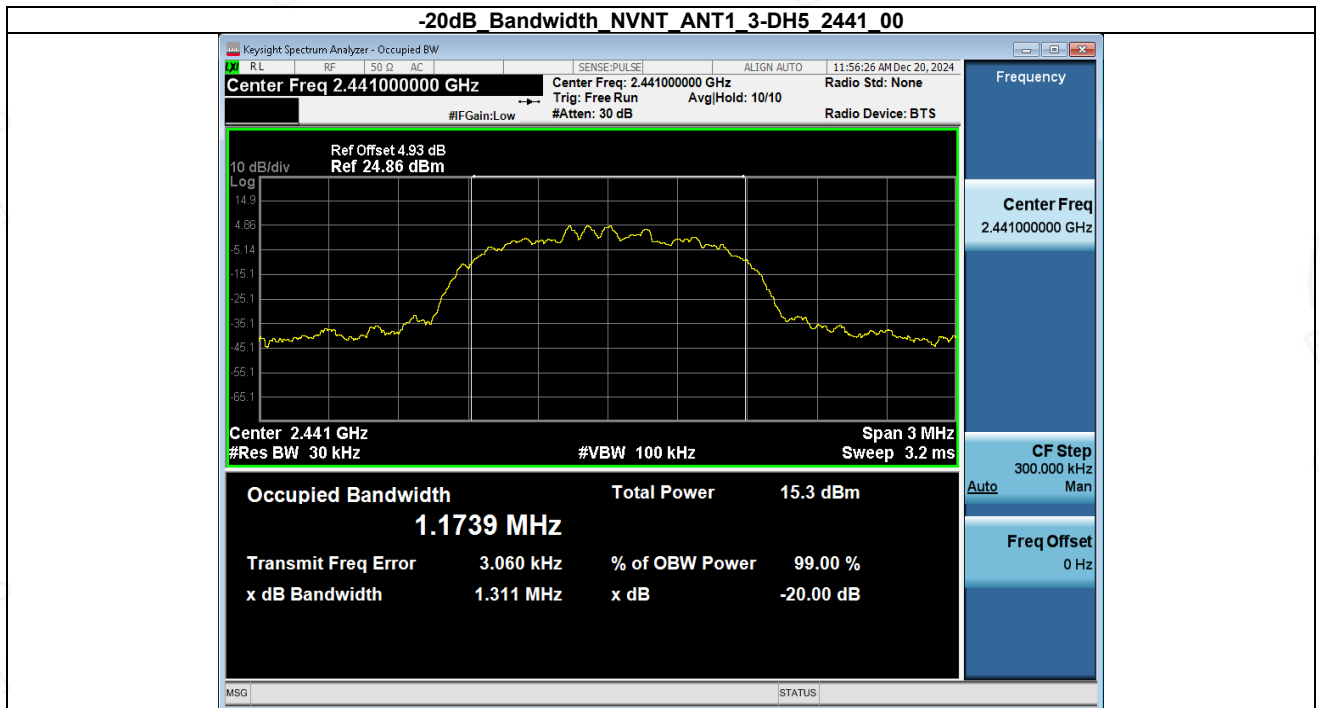
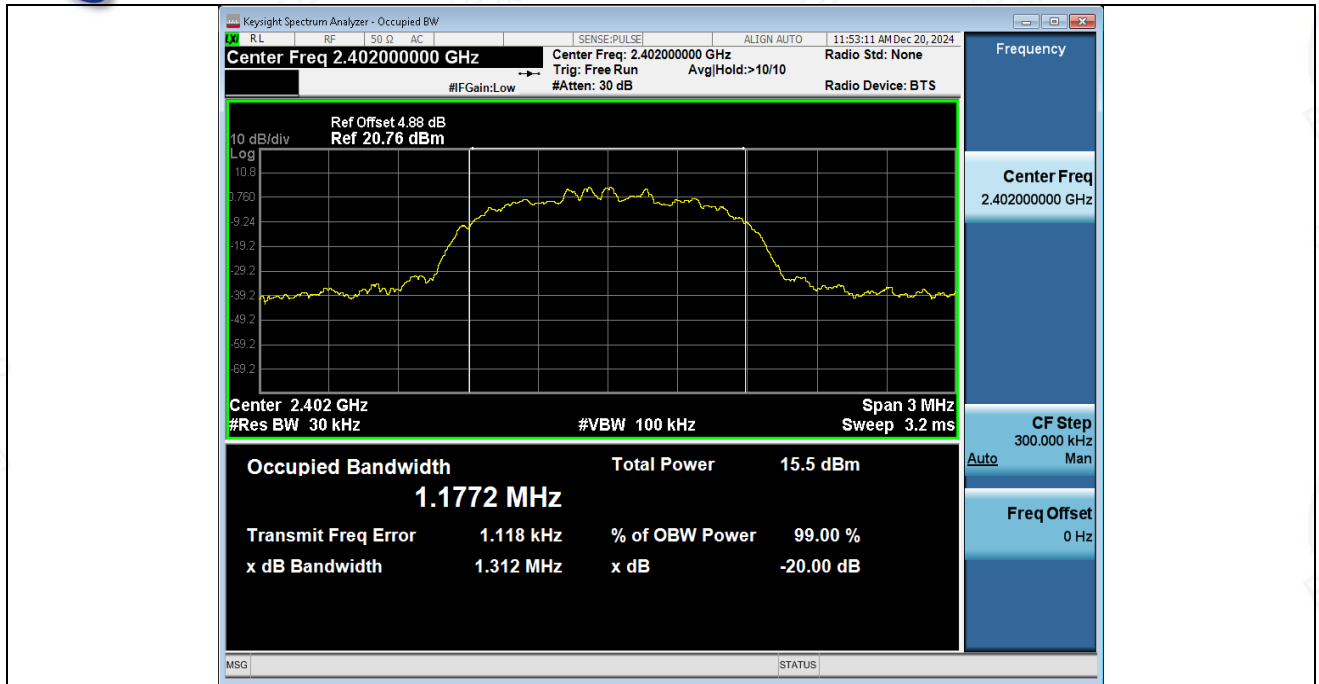
2. -20dB Bandwidth

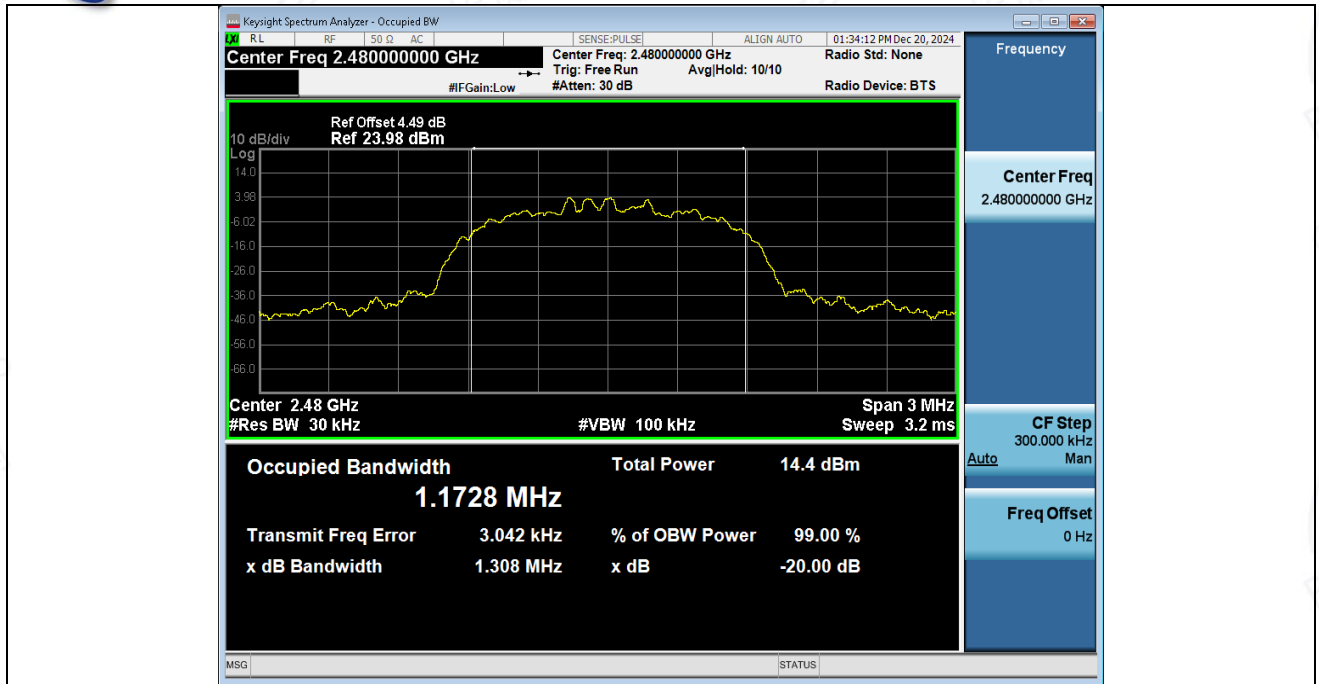
Condition	Antenna	Modulation	Frequency (MHz)	-20dB BW(MHz)	if larger than CFS
NVNT	ANT1	1-DH5	2402.00	0.958	No
NVNT	ANT1	1-DH5	2441.00	0.954	No
NVNT	ANT1	1-DH5	2480.00	0.957	No
NVNT	ANT1	2-DH5	2402.00	1.324	Yes
NVNT	ANT1	2-DH5	2441.00	1.317	Yes
NVNT	ANT1	2-DH5	2480.00	1.318	Yes
NVNT	ANT1	3-DH5	2402.00	1.312	Yes
NVNT	ANT1	3-DH5	2441.00	1.311	Yes
NVNT	ANT1	3-DH5	2480.00	1.308	Yes







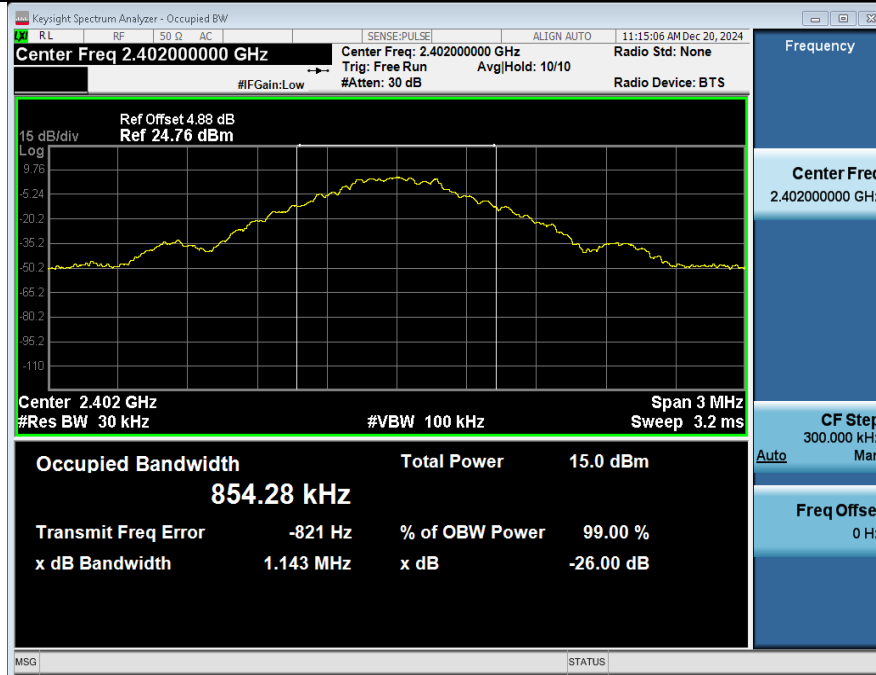




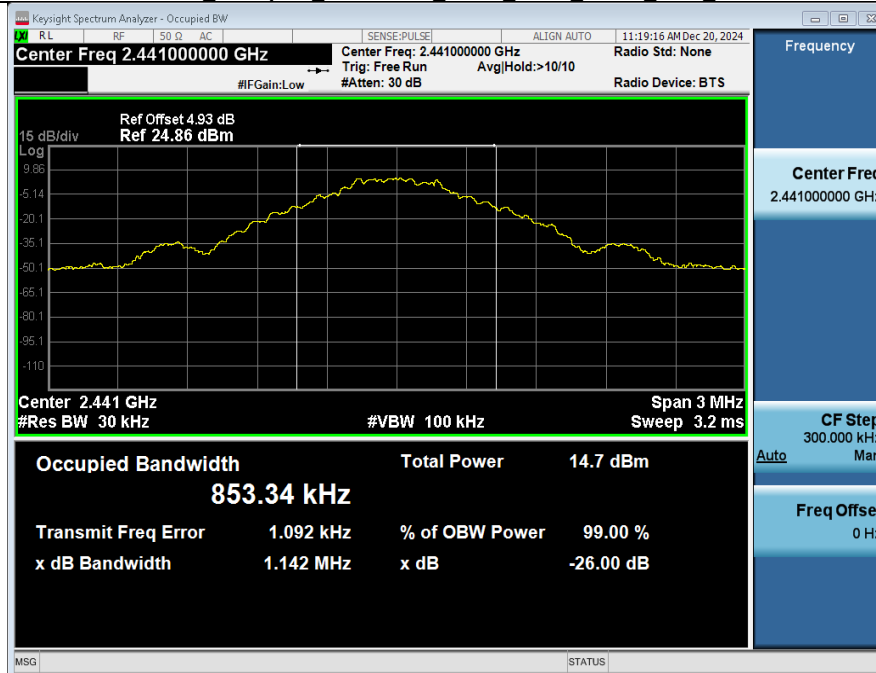
3. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	1-DH5	2402.00	0.854
NVNT	ANT1	1-DH5	2441.00	0.853
NVNT	ANT1	1-DH5	2480.00	0.845
NVNT	ANT1	2-DH5	2402.00	1.170
NVNT	ANT1	2-DH5	2441.00	1.169
NVNT	ANT1	2-DH5	2480.00	1.169
NVNT	ANT1	3-DH5	2402.00	1.175
NVNT	ANT1	3-DH5	2441.00	1.174
NVNT	ANT1	3-DH5	2480.00	1.177

99% Occupied Bandwidth NVNT ANT1 1-DH5 2402_00



99% Occupied Bandwidth NVNT ANT1 1-DH5 2441_00

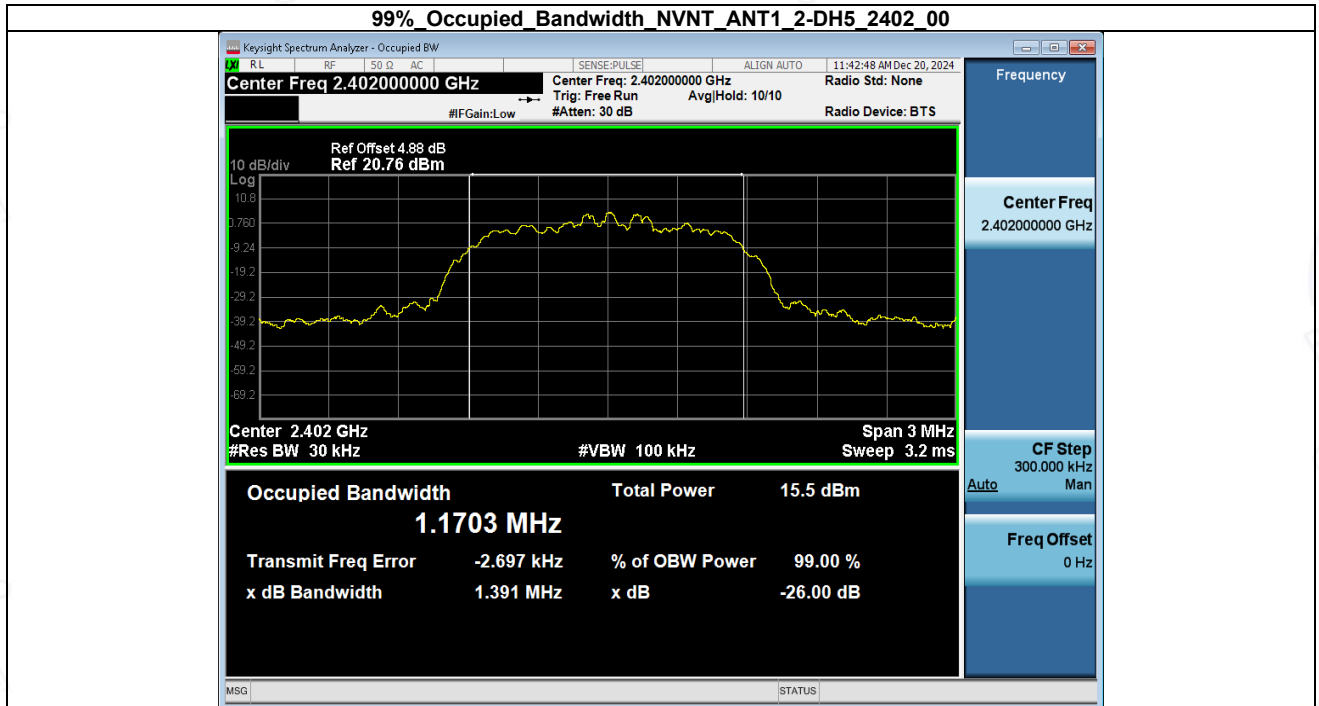


99% Occupied Bandwidth NVNT ANT1 1-DH5 2480_00





99% Occupied Bandwidth_NVNT_ANT1_2-DH5_2402_00

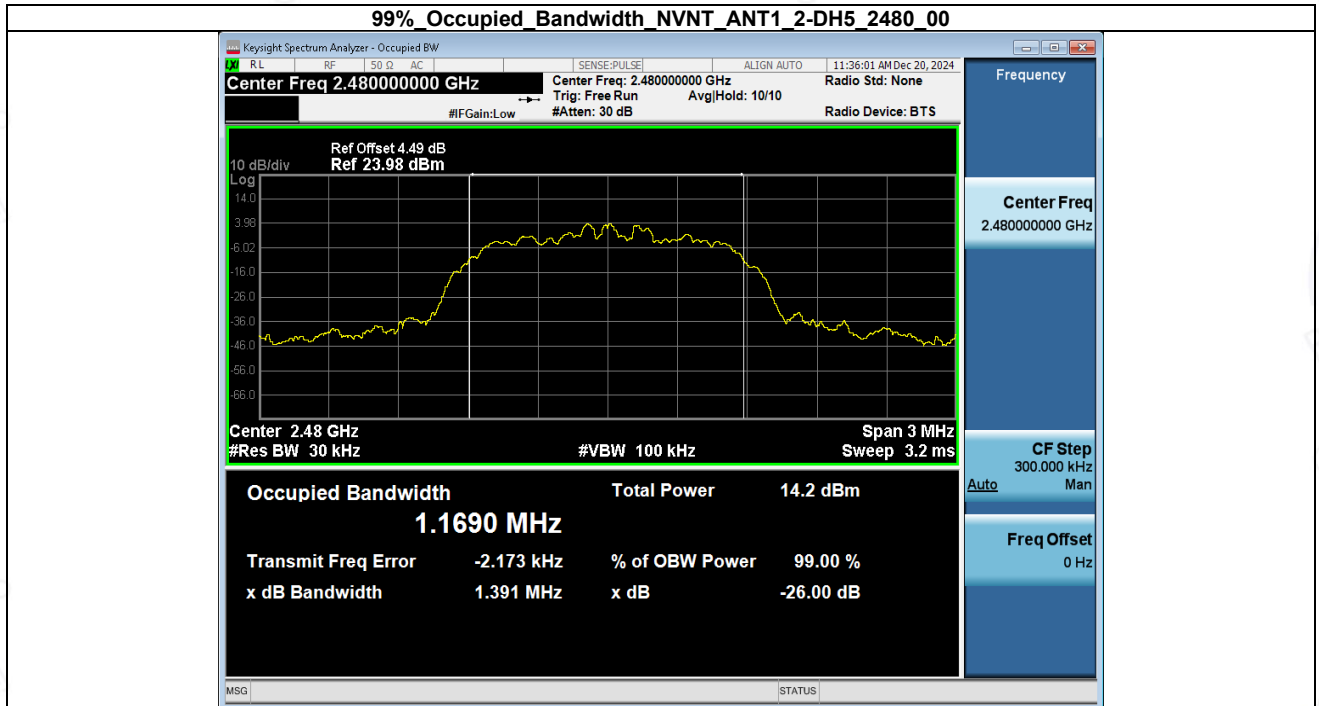


99% Occupied Bandwidth_NVNT_ANT1_2-DH5_2441_00



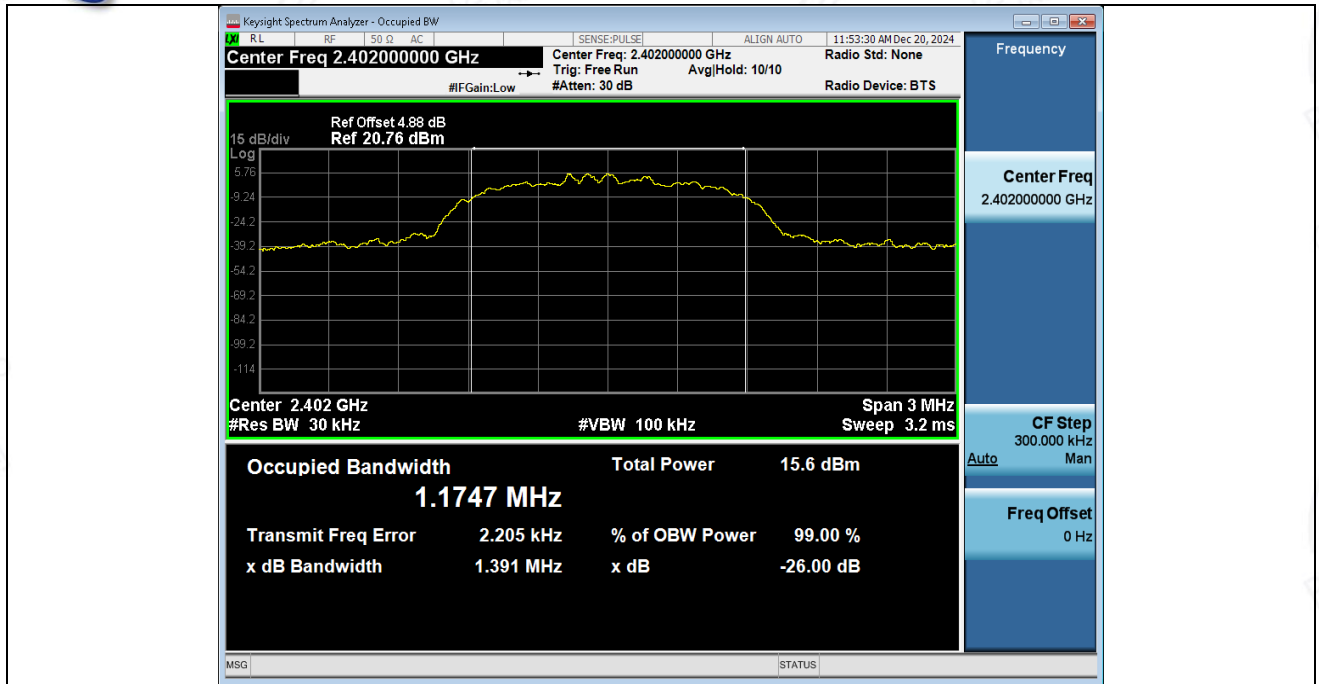


99% Occupied Bandwidth_NVNT_ANT1_2-DH5_2480_00

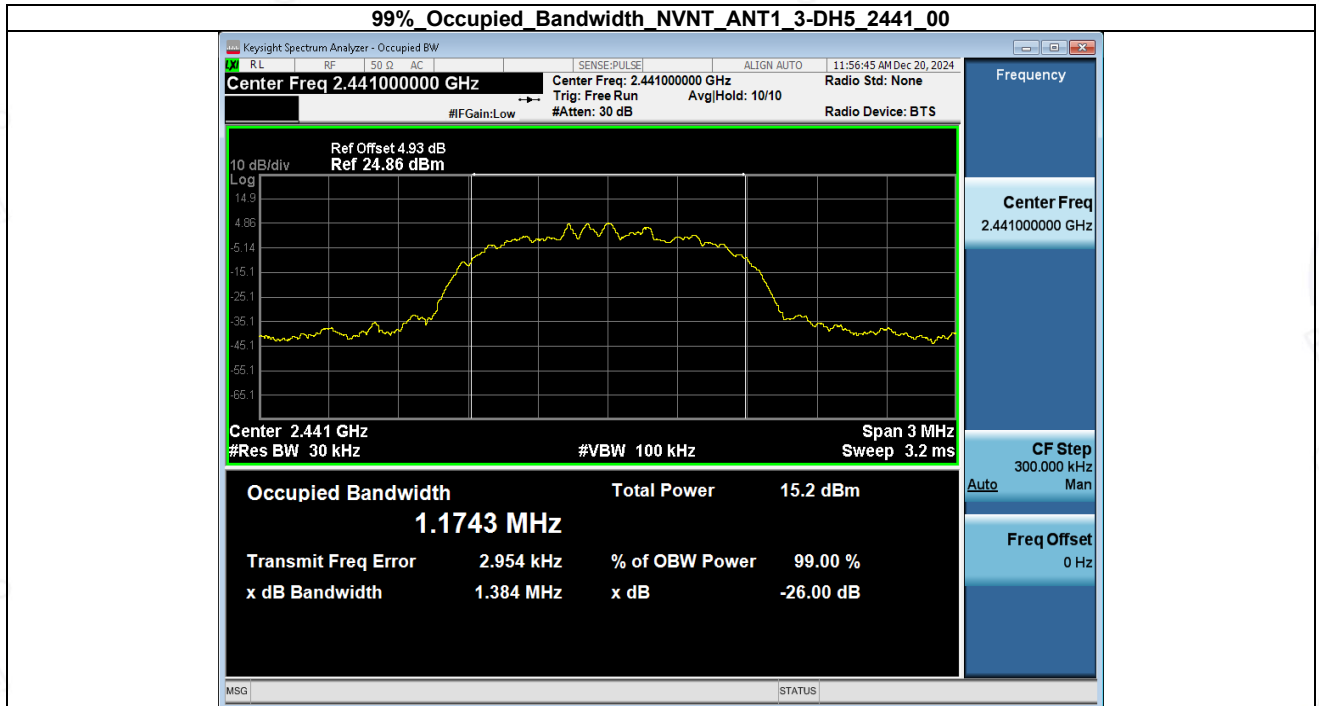


99% Occupied Bandwidth_NVNT_ANT1_3-DH5_2402_00



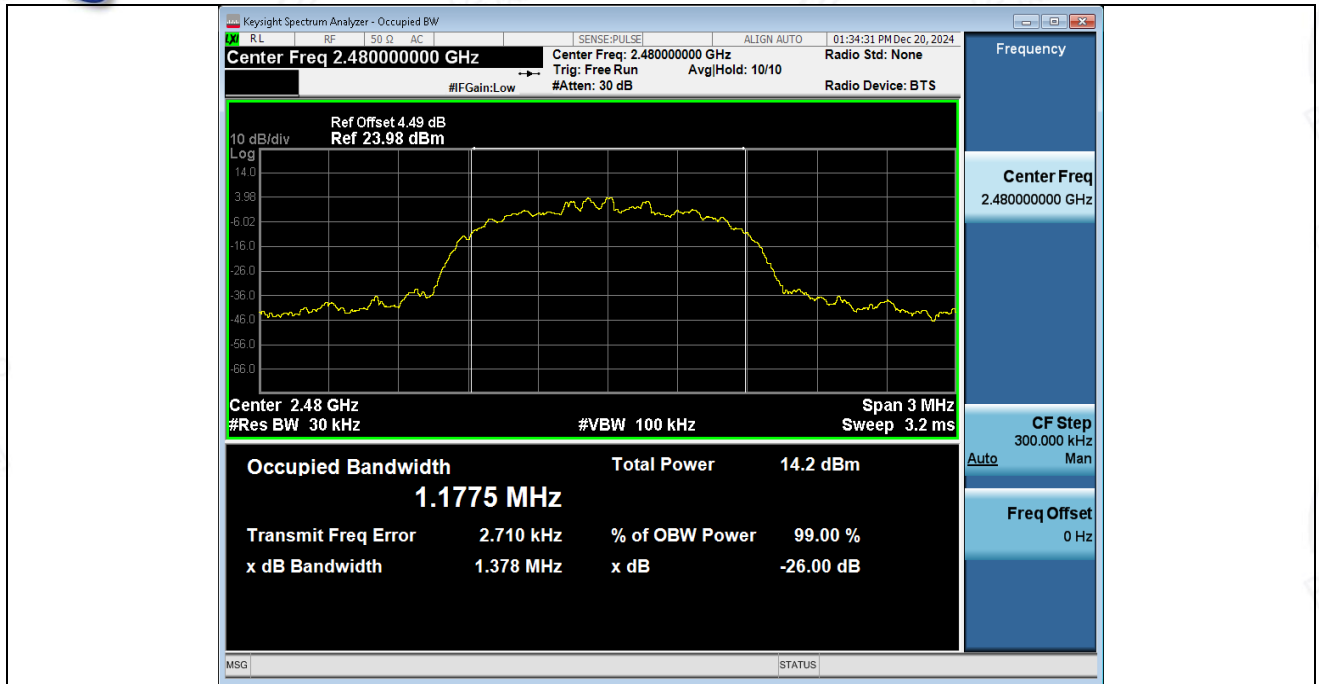


99% Occupied Bandwidth_NVNT_ANT1_3-DH5_2441_00



99% Occupied Bandwidth_NVNT_ANT1_3-DH5_2480_00

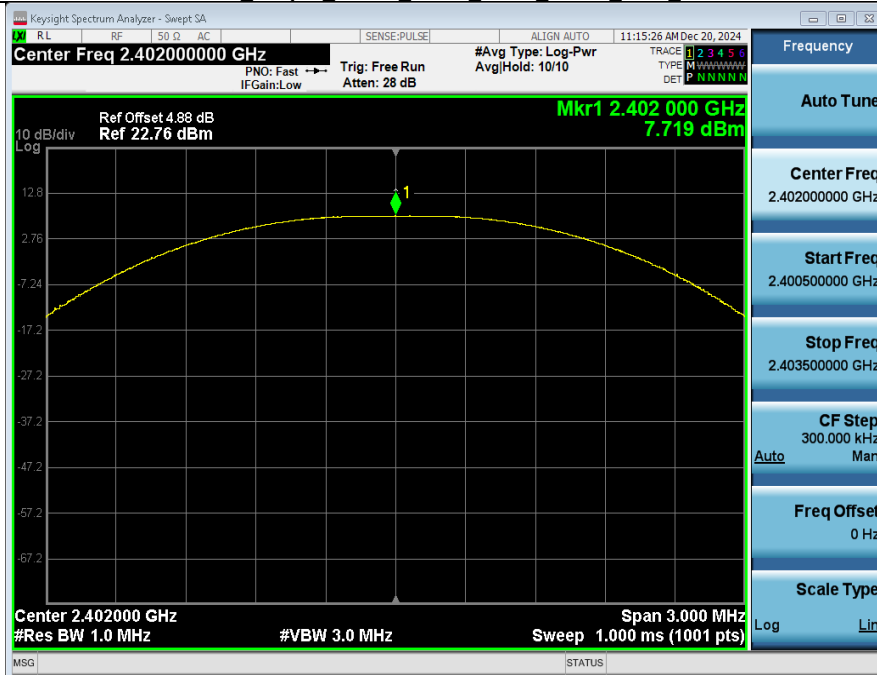




4. Peak Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Max. Conducted Power(dBm)	Max. Conducted Power(mW)	Limit(mW)	Result
NVNT	ANT1	1-DH5	2402.00	7.72	5.91	1000	Pass
NVNT	ANT1	1-DH5	2441.00	7.36	5.45	1000	Pass
NVNT	ANT1	1-DH5	2480.00	6.41	4.37	1000	Pass
NVNT	ANT1	2-DH5	2402.00	7.24	5.30	125	Pass
NVNT	ANT1	2-DH5	2441.00	7.07	5.10	125	Pass
NVNT	ANT1	2-DH5	2480.00	8.45	7.00	125	Pass
NVNT	ANT1	3-DH5	2402.00	7.68	5.86	125	Pass
NVNT	ANT1	3-DH5	2441.00	7.47	5.58	125	Pass
NVNT	ANT1	3-DH5	2480.00	8.89	7.74	125	Pass

Peak_Output_Power_NVNT_ANT1_1-DH5_2402_00

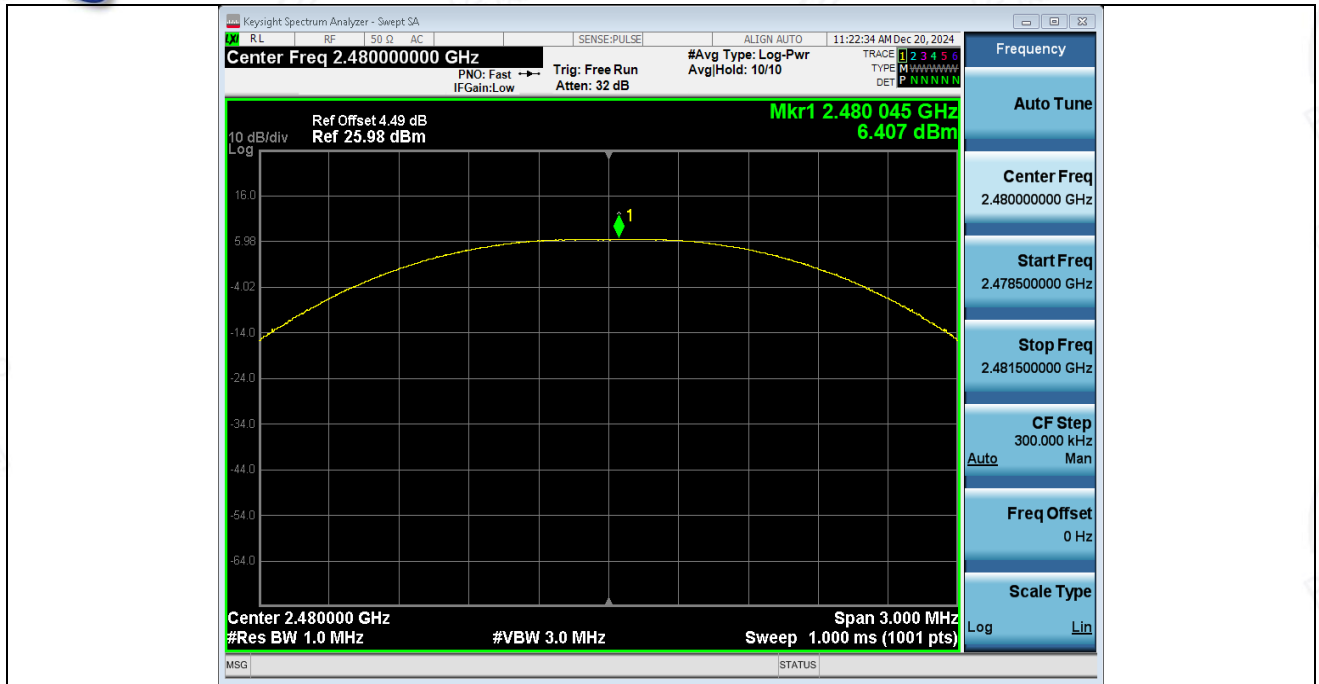


Peak_Output_Power_NVNT_ANT1_1-DH5_2441_00

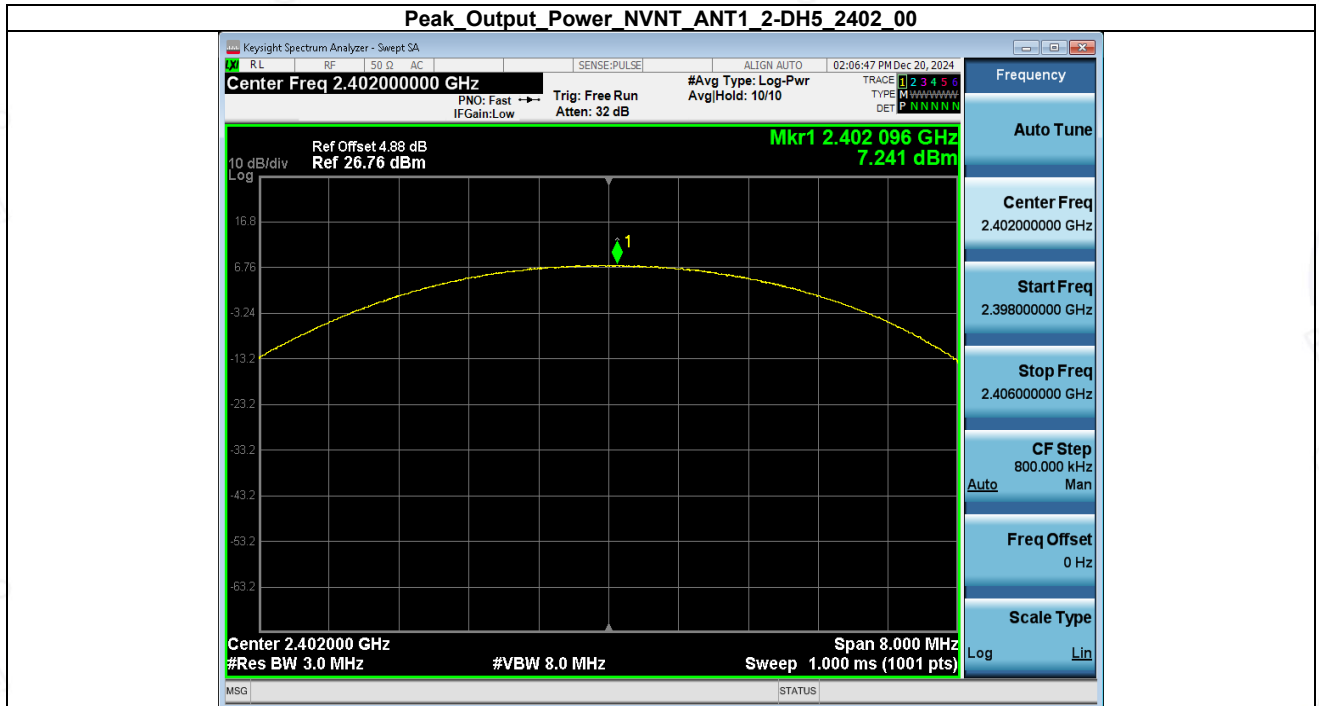


Peak_Output_Power_NVNT_ANT1_1-DH5_2480_00



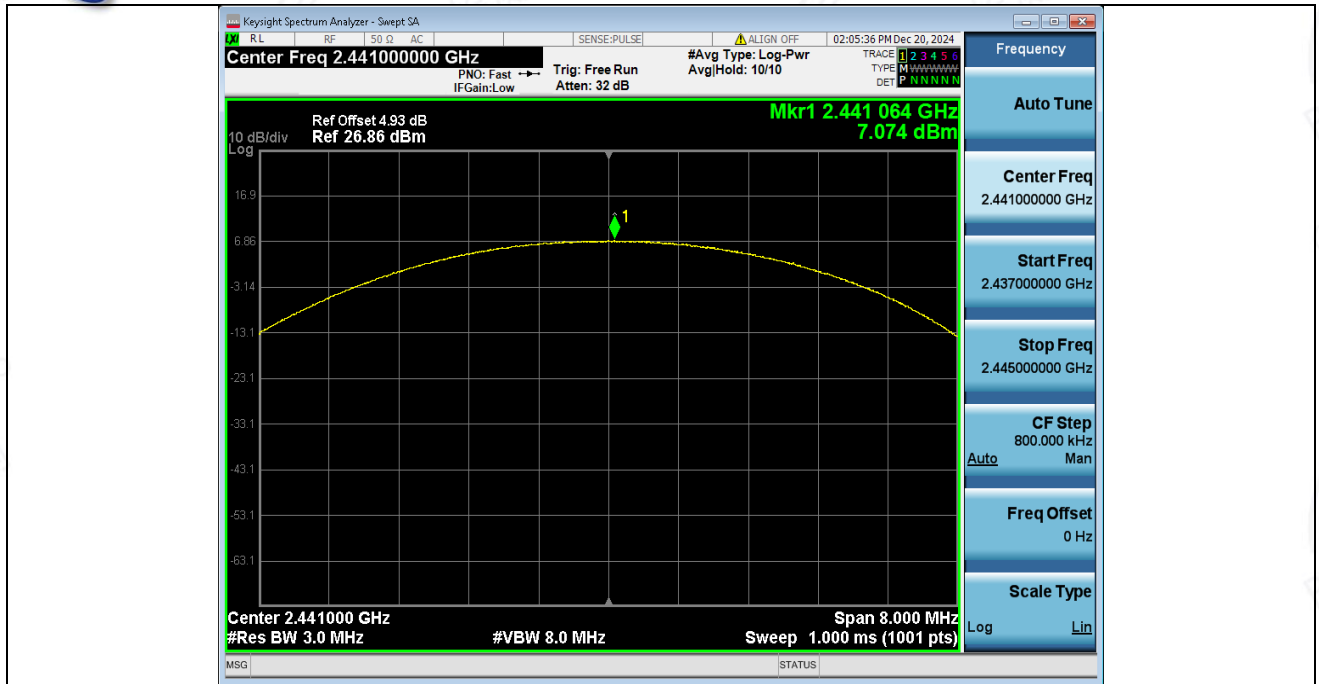


Peak_Output_Power_NVNT_ANT1_2-DH5_2402_00

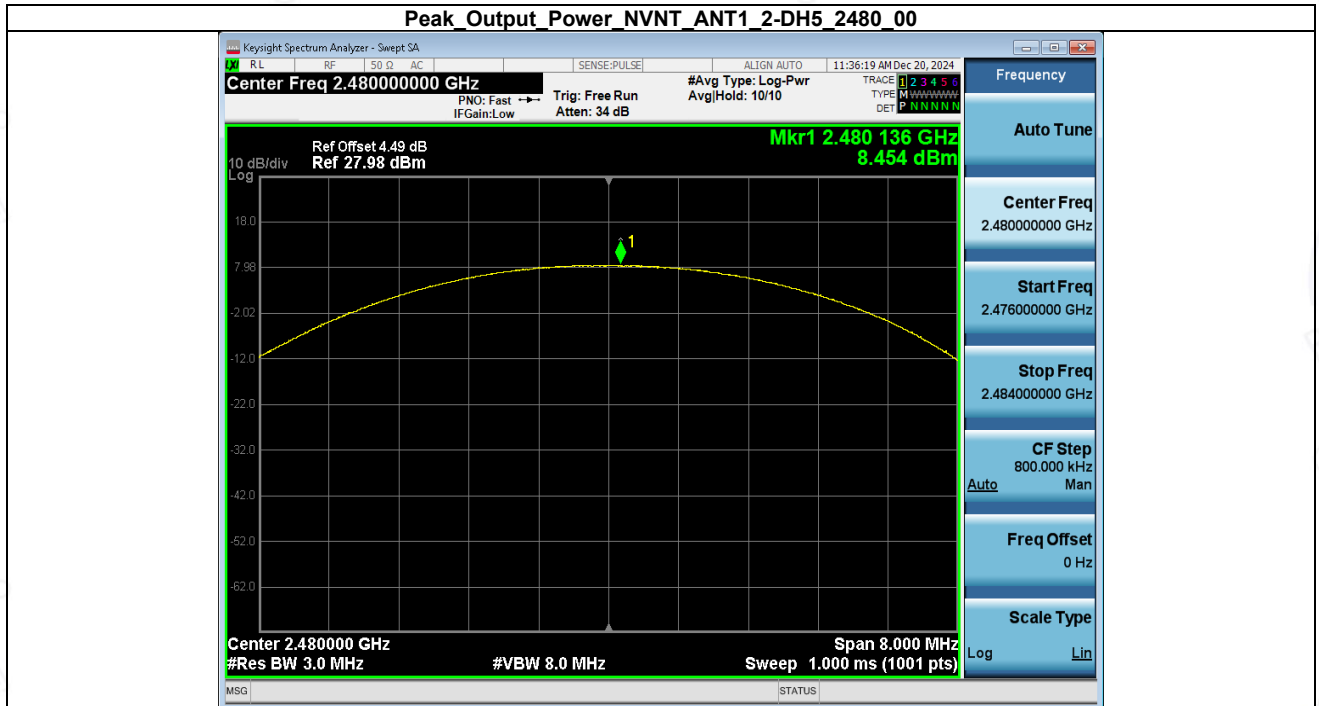


Peak_Output_Power_NVNT_ANT1_2-DH5_2441_00



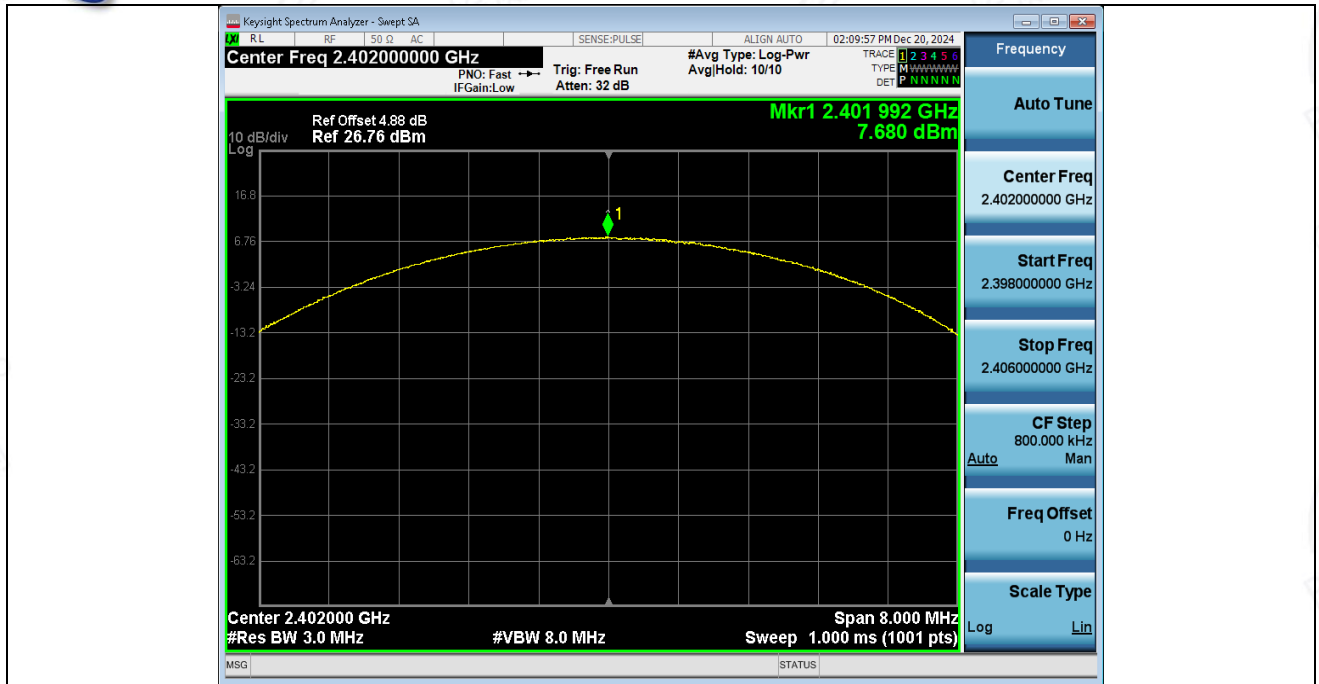


Peak_Output_Power_NVNT_ANT1_2-DH5_2480_00

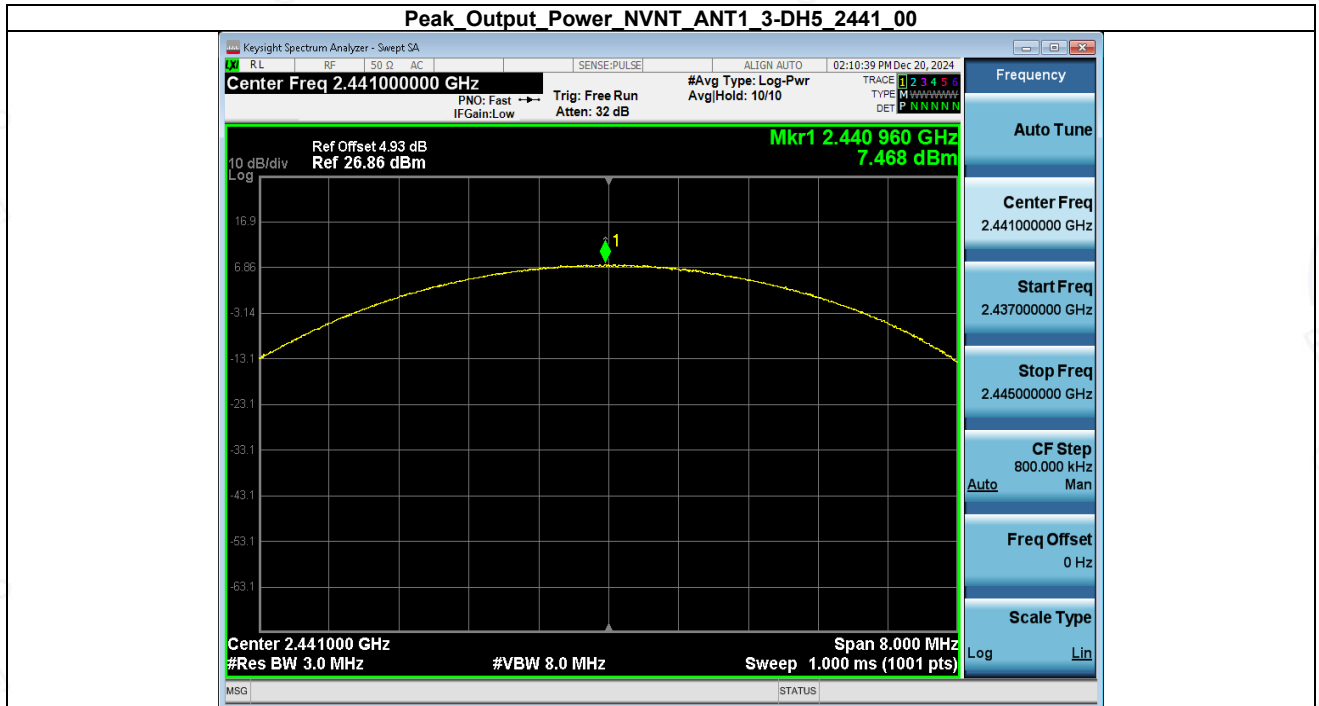


Peak_Output_Power_NVNT_ANT1_3-DH5_2402_00



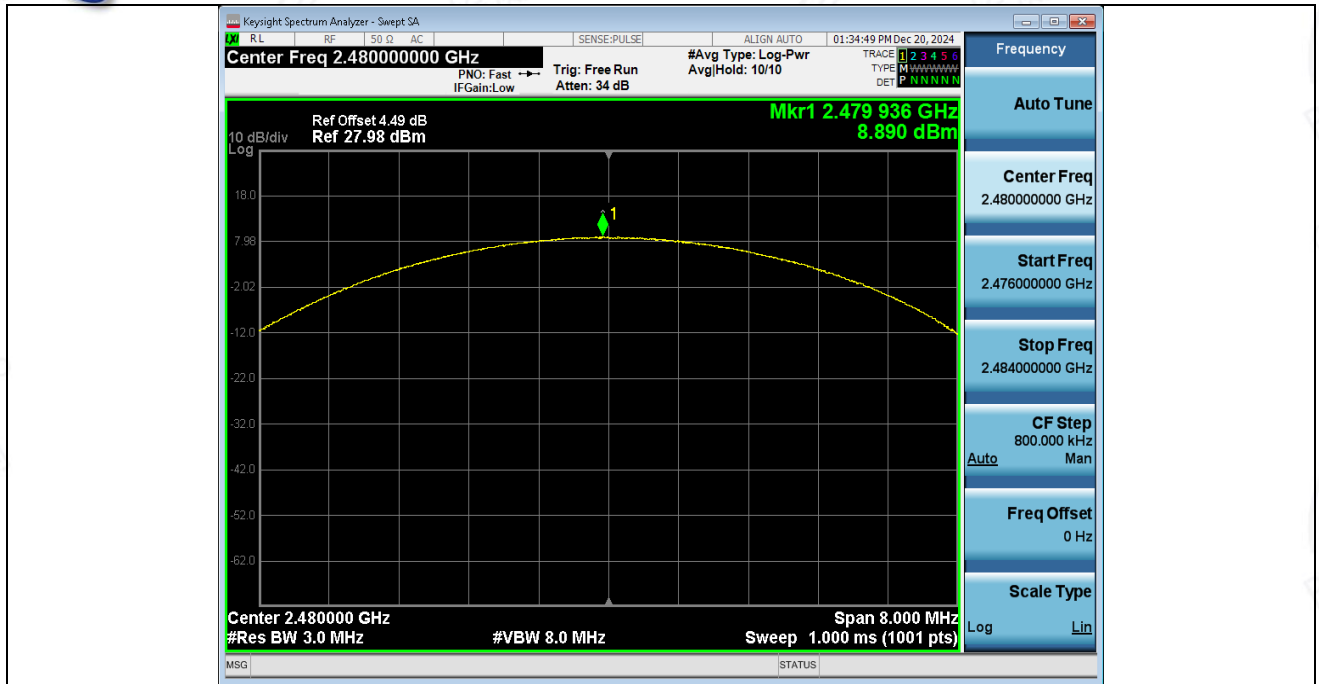


Peak_Output_Power_NVNT_ANT1_3-DH5_2441_00



Peak_Output_Power_NVNT_ANT1_3-DH5_2480_00





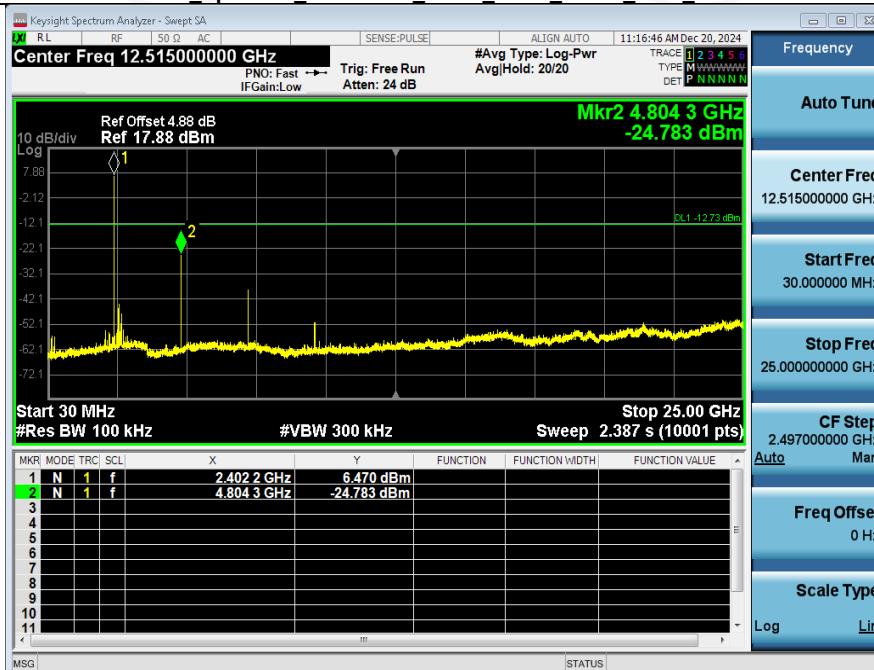
5. Spurious Emissions

Condition	Antenna	Modulation	TX Mode	Ref_level(dBm)	Spurious MAX.Value(dBm)	Limit	Result
NVNT	ANT1	1-DH5	2402.00	7.271	-24.783	-12.729	Pass
NVNT	ANT1	1-DH5	2441.00	6.977	-26.061	-13.023	Pass
NVNT	ANT1	1-DH5	2480.00	6.010	-27.249	-13.990	Pass
NVNT	ANT1	2-DH5	2402.00	7.217	-24.441	-12.783	Pass
NVNT	ANT1	2-DH5	2441.00	6.952	-27.601	-13.048	Pass
NVNT	ANT1	2-DH5	2480.00	5.765	-26.566	-14.235	Pass
NVNT	ANT1	3-DH5	2402.00	7.392	-22.878	-12.608	Pass
NVNT	ANT1	3-DH5	2441.00	6.967	-28.398	-13.033	Pass
NVNT	ANT1	3-DH5	2480.00	6.090	-29.397	-13.910	Pass

1 Reference Level NVNT ANT1 1-DH5 2402 00



2 Spurious Emissions NVNT ANT1 1-DH5 2402 00

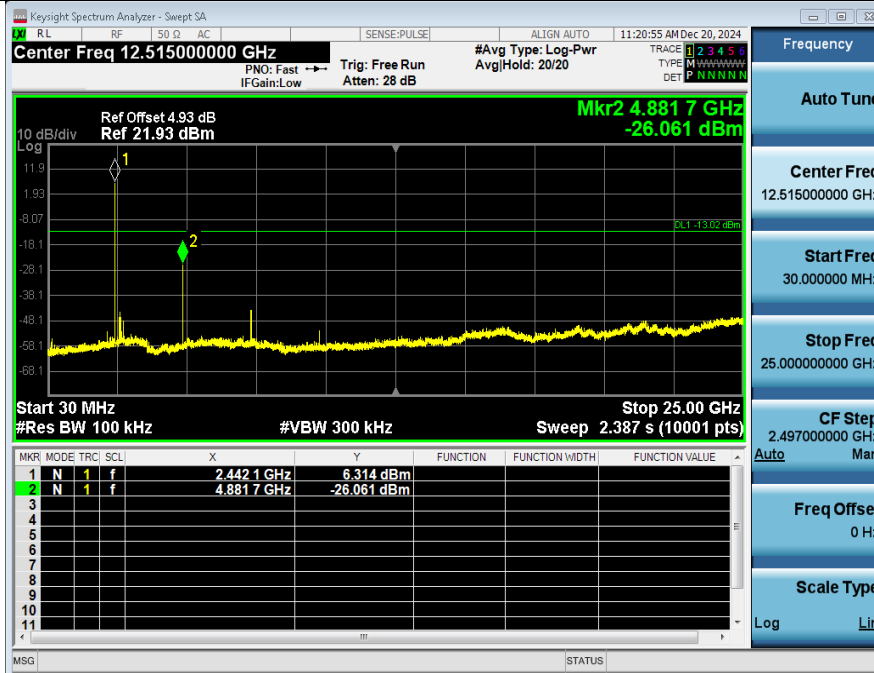


1 Reference Level NVNT ANT1 1-DH5 2441 00





2_Spurious_Emissions_NVNT_ANT1_1-DH5_2441_00



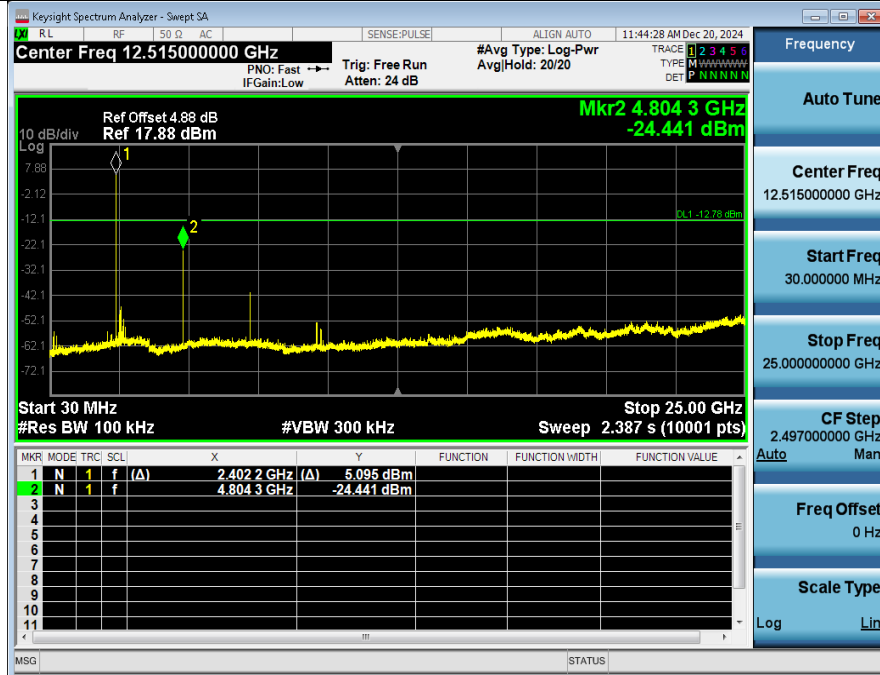
1_Reference_Level_NVNT_ANT1_1-DH5_2480_00







2_Spurious_Emissions_NVNT_ANT1_2-DH5_2402_00

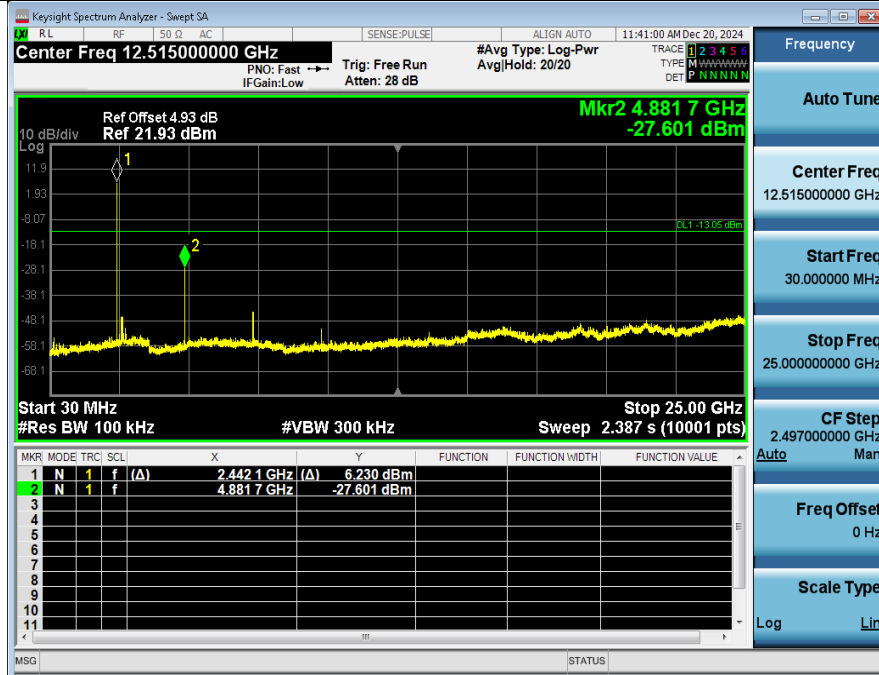


1_Reference_Level_NVNT_ANT1_2-DH5_2441_00





2_Spurious_Emissions_NVNT_ANT1_2-DH5_2441_00

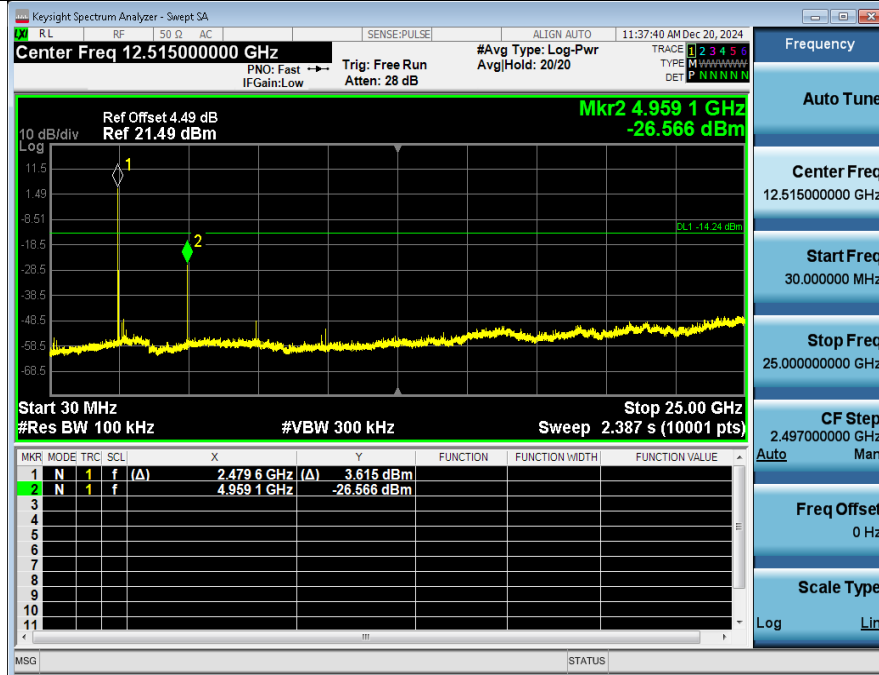


1_Reference_Level_NVNT_ANT1_2-DH5_2480_00



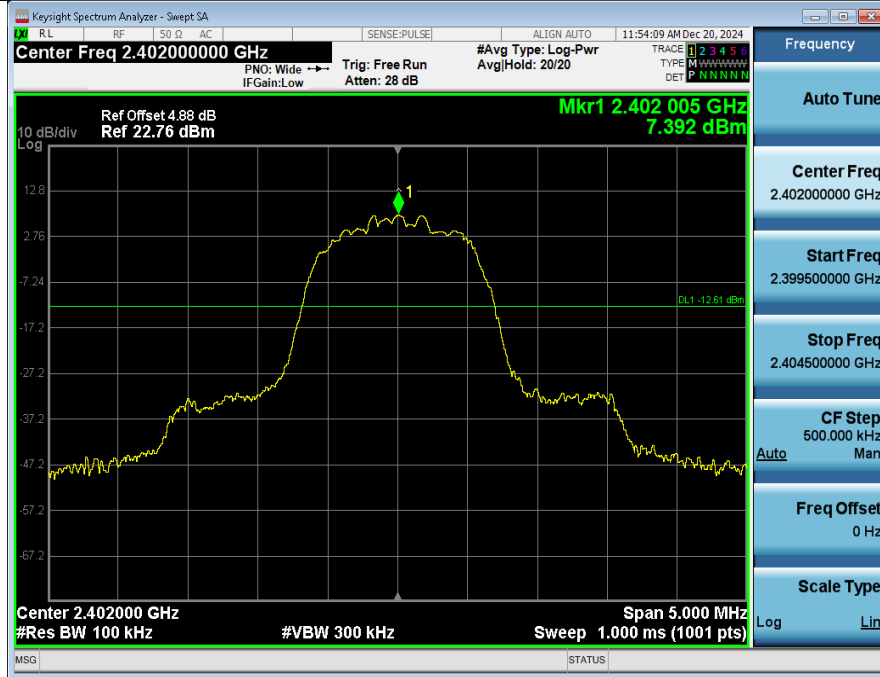


2_Spurious_Emissions_NVNT_ANT1_2-DH5_2480_00

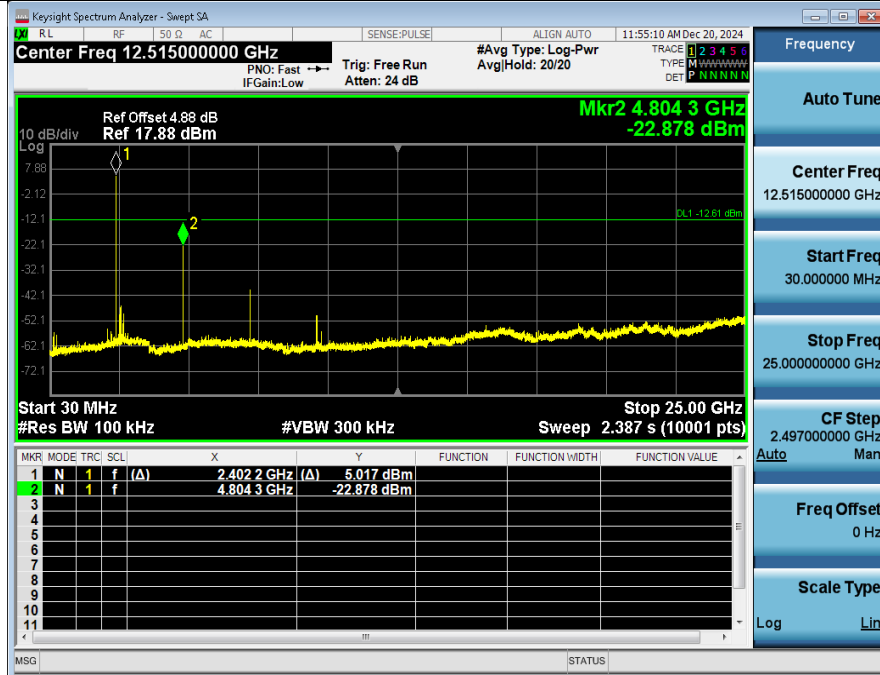


1_Reference_Level_NVNT_ANT1_3-DH5_2402_00





2_Spurious_Emissions_NVNT_ANT1_3-DH5_2402_00

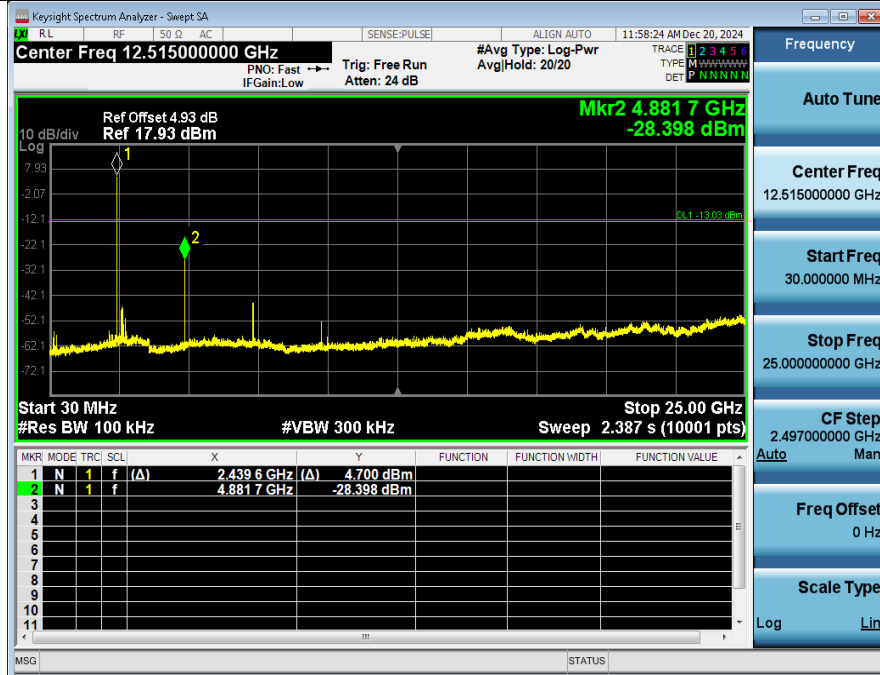


1_Reference_Level_NVNT_ANT1_3-DH5_2441_00



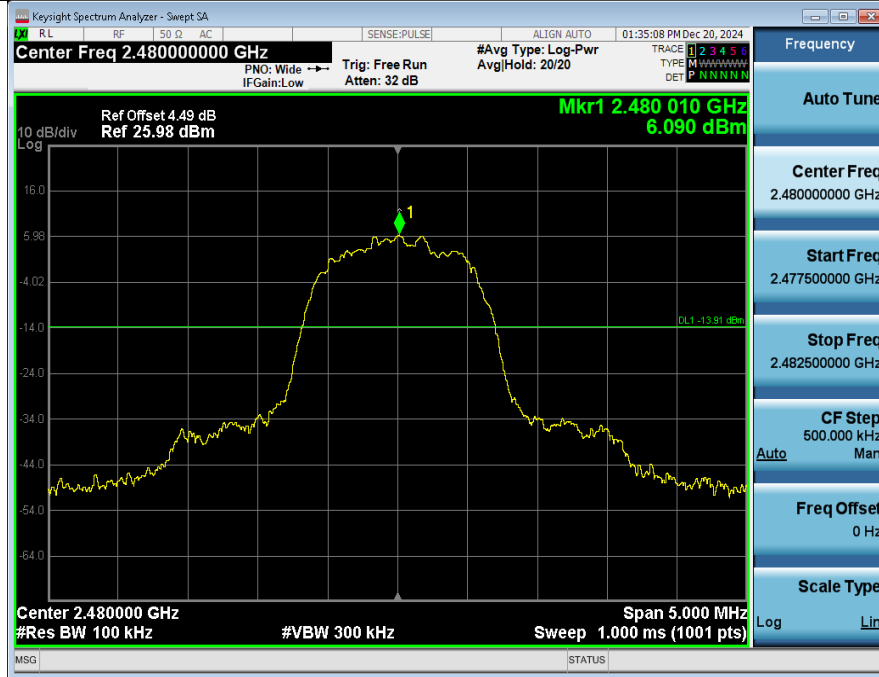


2_Spurious_Emissions_NVNT_ANT1_3-DH5_2441_00

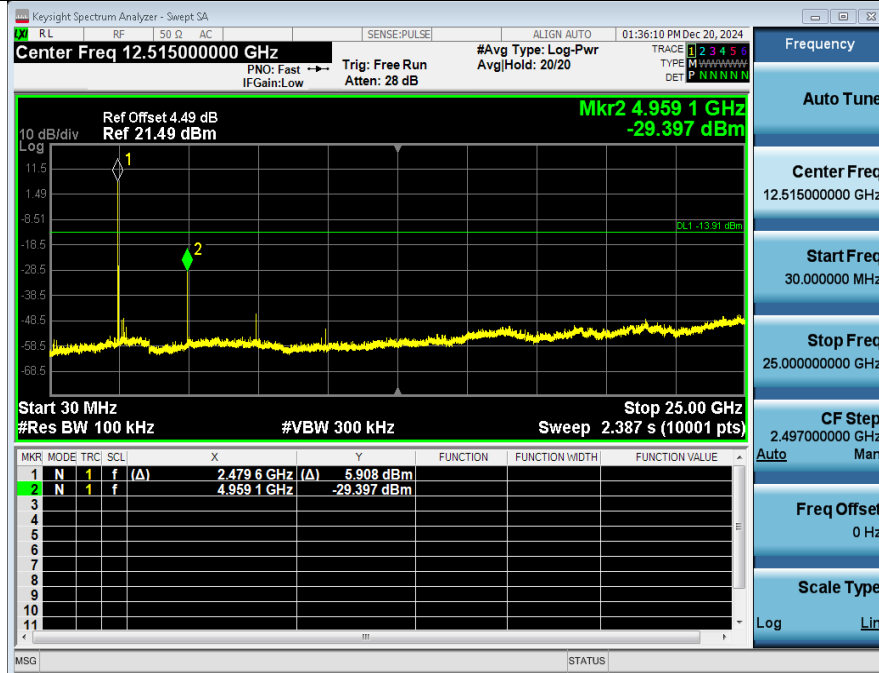


1_Reference_Level_NVNT_ANT1_3-DH5_2480_00





2 Spurious Emissions NVNT ANT1 3-DH5 2480 00



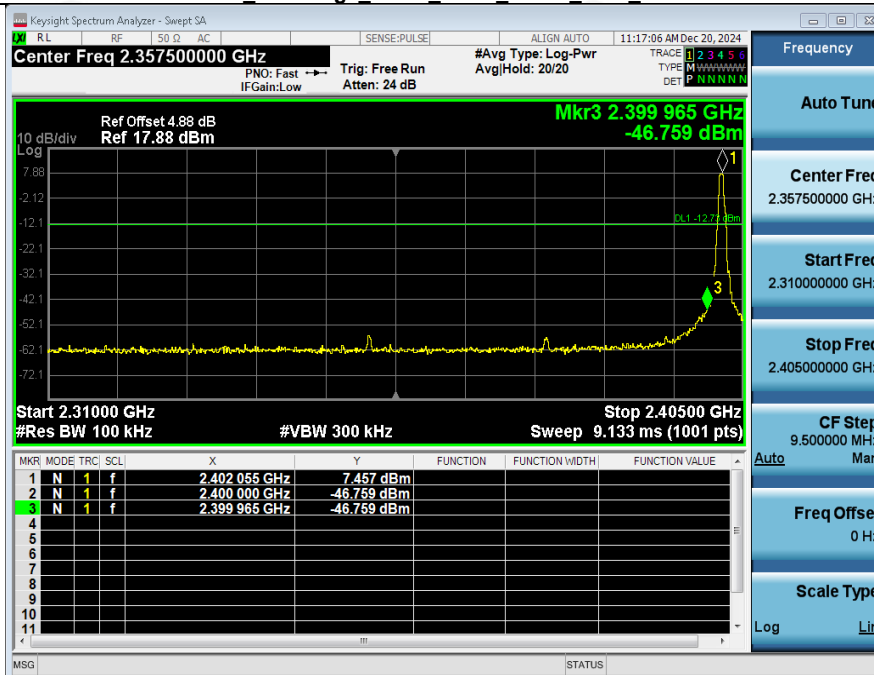
6. Bandedge

Condition	Antenna	Modulation	TX Mode	Ref_level(dBm)	Bandedge MAX.Value	Limit	Result
NVNT	ANT1	1-DH5	2402.00	7.271	-46.759	-12.729	Pass
NVNT	ANT1	1-DH5	Hopping_LCH	7.331	-48.731	-12.669	Pass
NVNT	ANT1	1-DH5	2480.00	6.010	-52.152	-13.990	Pass
NVNT	ANT1	1-DH5	Hopping_HCH	6.978	-53.665	-13.022	Pass
NVNT	ANT1	2-DH5	2402.00	7.217	-45.171	-12.783	Pass
NVNT	ANT1	2-DH5	Hopping_LCH	7.154	-48.679	-12.846	Pass
NVNT	ANT1	2-DH5	2480.00	5.765	-51.445	-14.235	Pass
NVNT	ANT1	2-DH5	Hopping_HCH	6.727	-56.596	-13.273	Pass
NVNT	ANT1	3-DH5	2402.00	7.392	-45.942	-12.608	Pass
NVNT	ANT1	3-DH5	Hopping_LCH	7.394	-47.426	-12.606	Pass
NVNT	ANT1	3-DH5	2480.00	6.090	-50.502	-13.910	Pass
NVNT	ANT1	3-DH5	Hopping_HCH	7.060	-51.089	-12.940	Pass

1_Reference_Level_NVNT_ANT1_1-DH5_2402_00

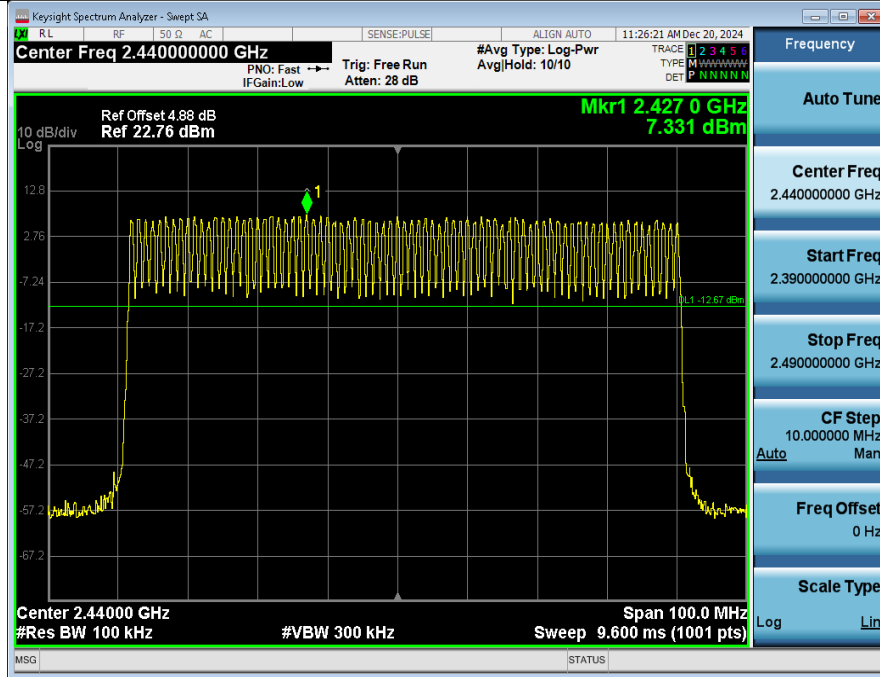


2_Bandedge_NVNT_ANT1_1-DH5_2402_00

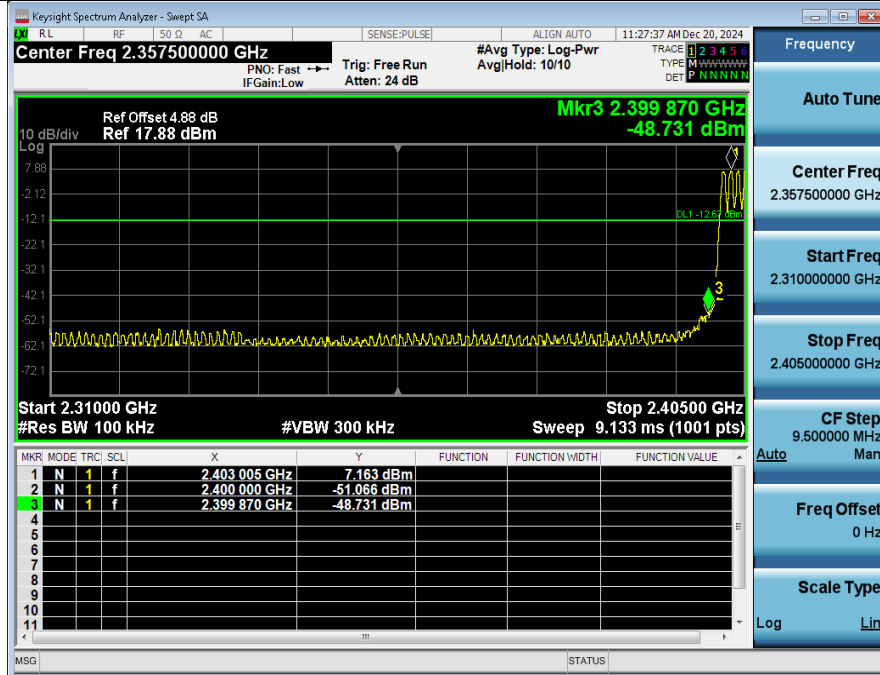


1_Reference_Level_Hopping_NVNT_ANT1_1-DH5_Hopping





2_Band_Edge_(Hopping)_NVNT_ANT1_1-DH5_Hopping

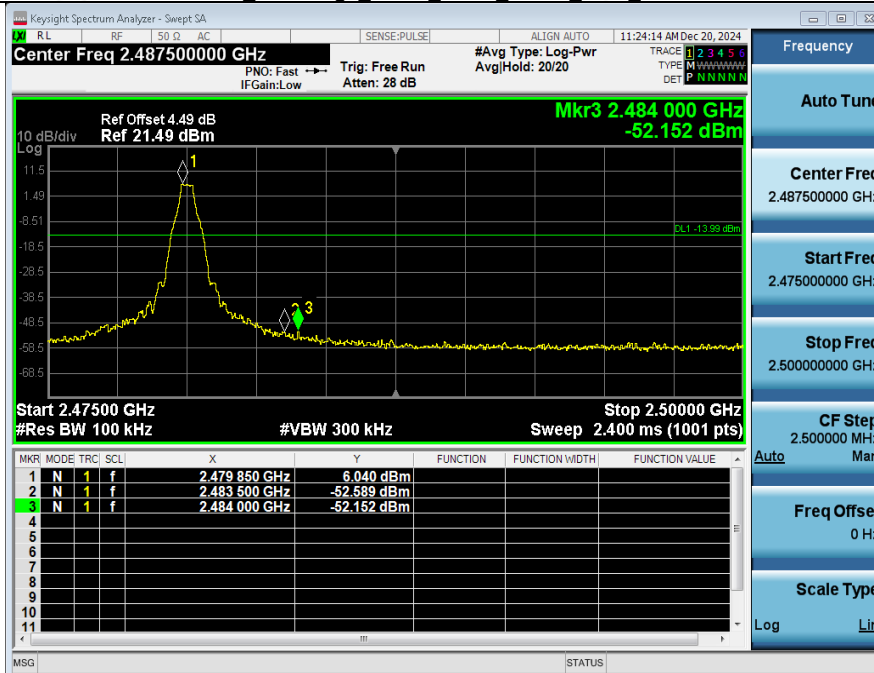


1_Reference_Level_NVNT_ANT1_1-DH5_2480_00



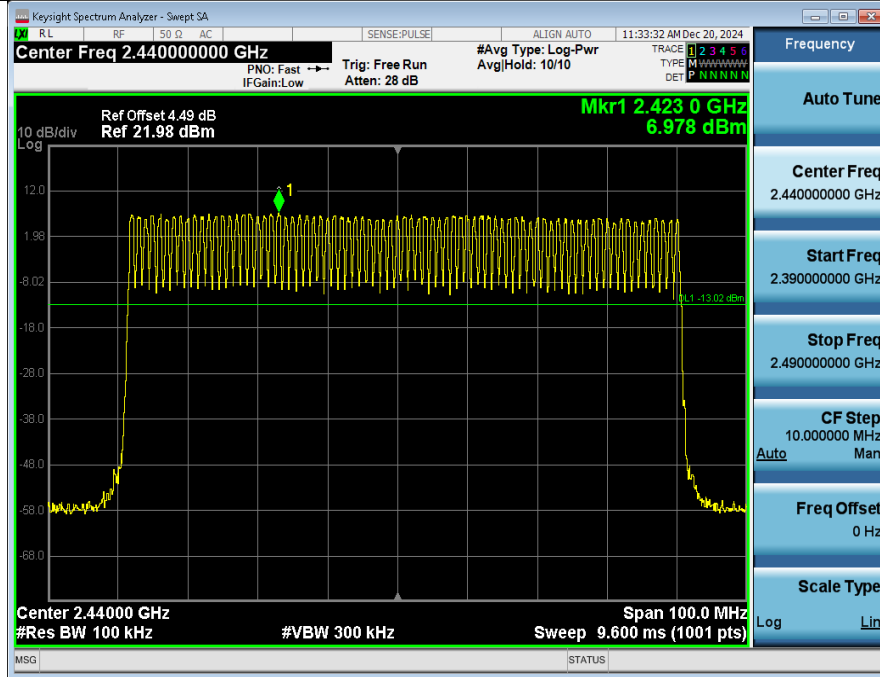


2_Bandedge_NVNT_ANT1_1-DH5_2480_00

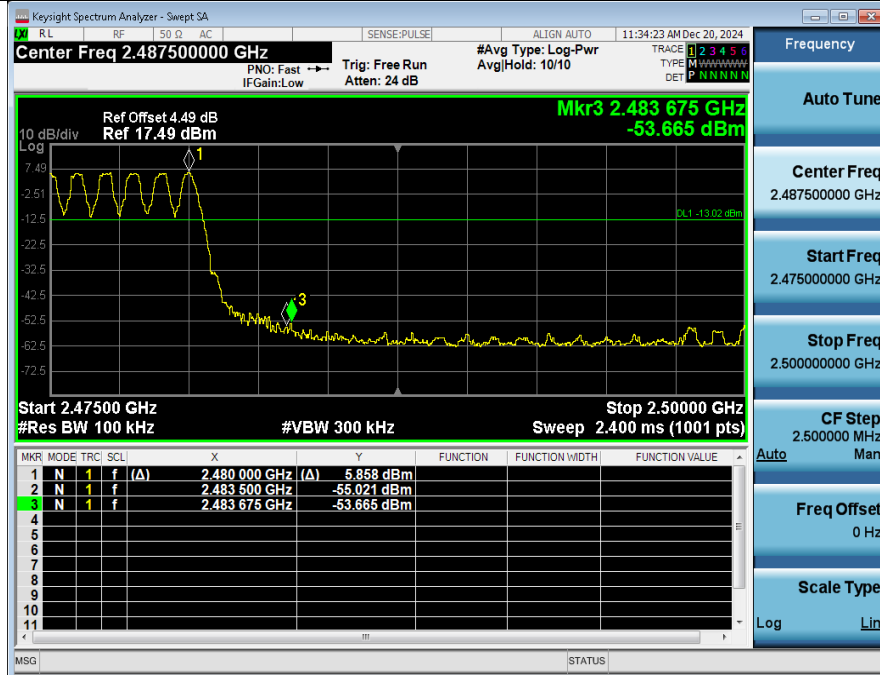


1_Reference_Level_Hopping_NVNT_ANT1_1-DH5_Hopping





2_Band_Edge_(Hopping)_NVNT_ANT1_1-DH5_Hopping

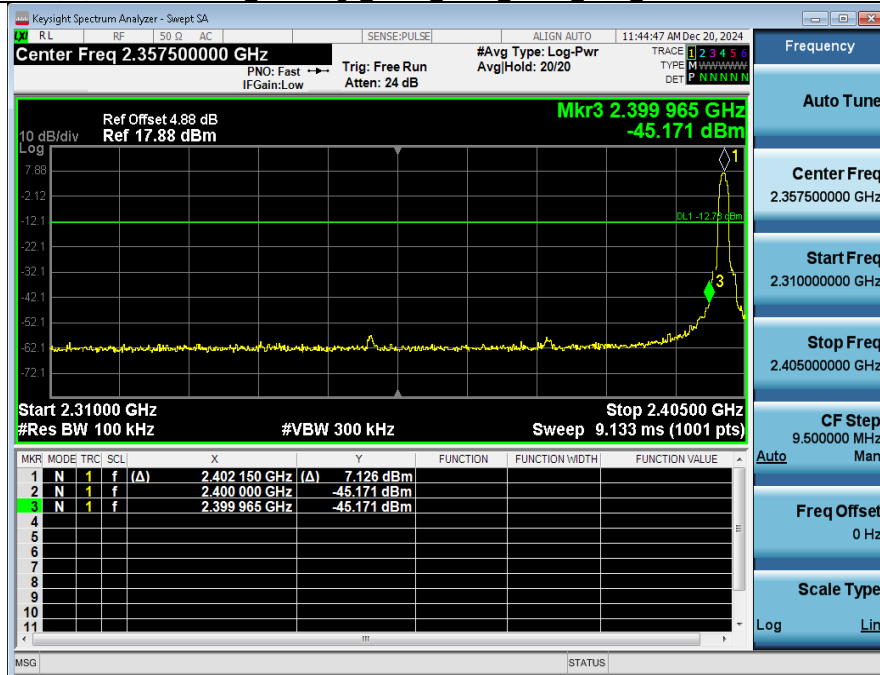


1_Reference_Level_NVNT_ANT1_2-DH5_2402_00



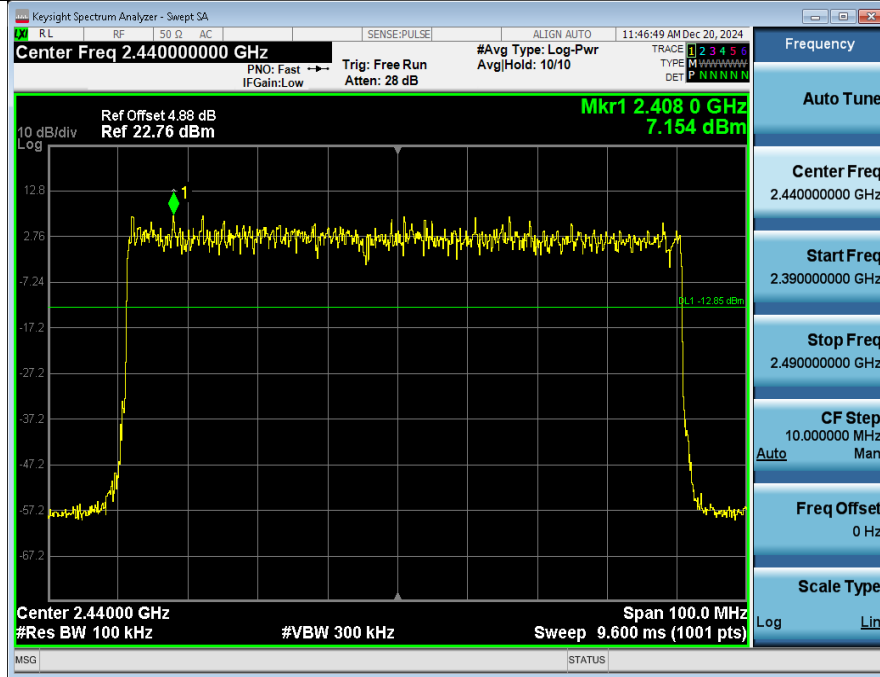


2_Bandedge_NVNT_ANT1_2-DH5_2402_00

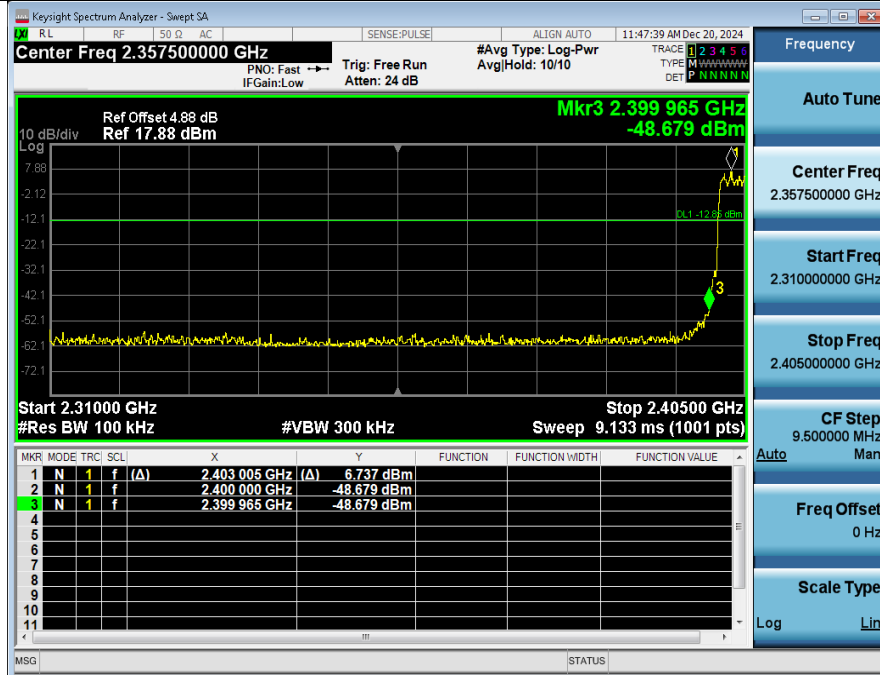


1_Reference_Level_Hopping_NVNT_ANT1_2-DH5_Hopping





2_Band_Edge_(Hopping)_NVNT_ANT1_2-DH5_Hopping

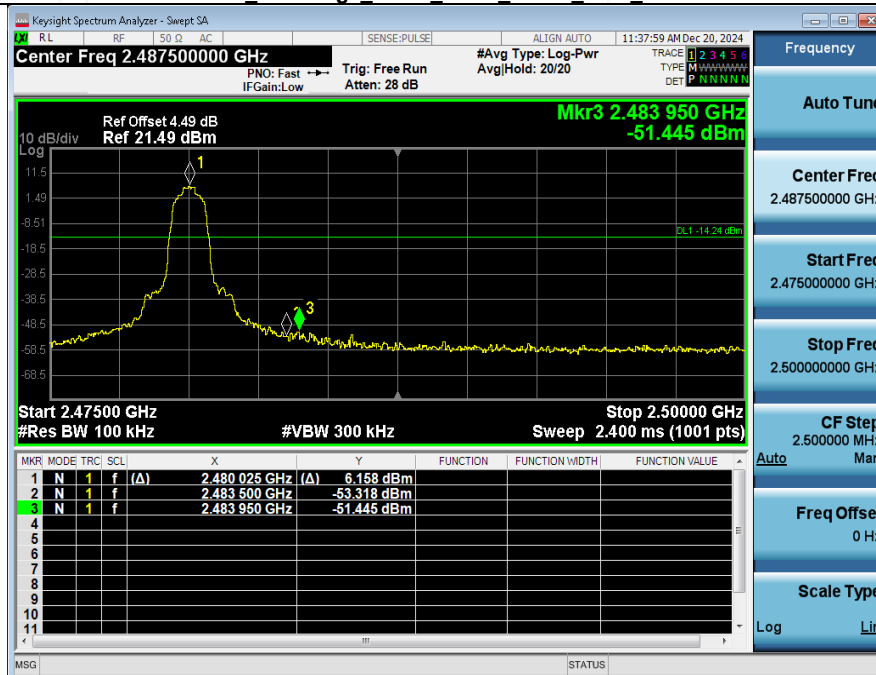


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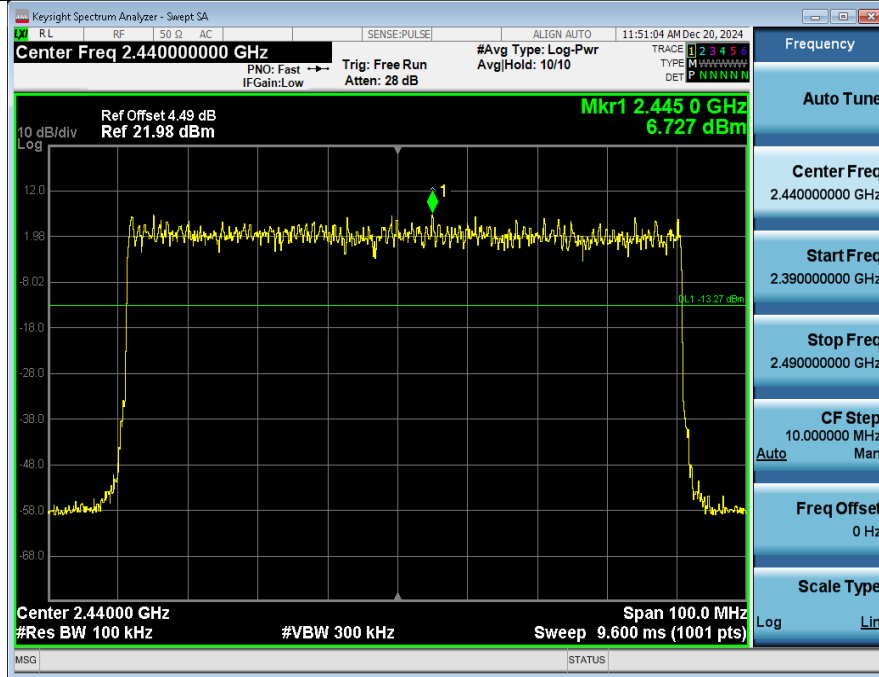


2_Bandedge_NVNT_ANT1_2-DH5_2480_00

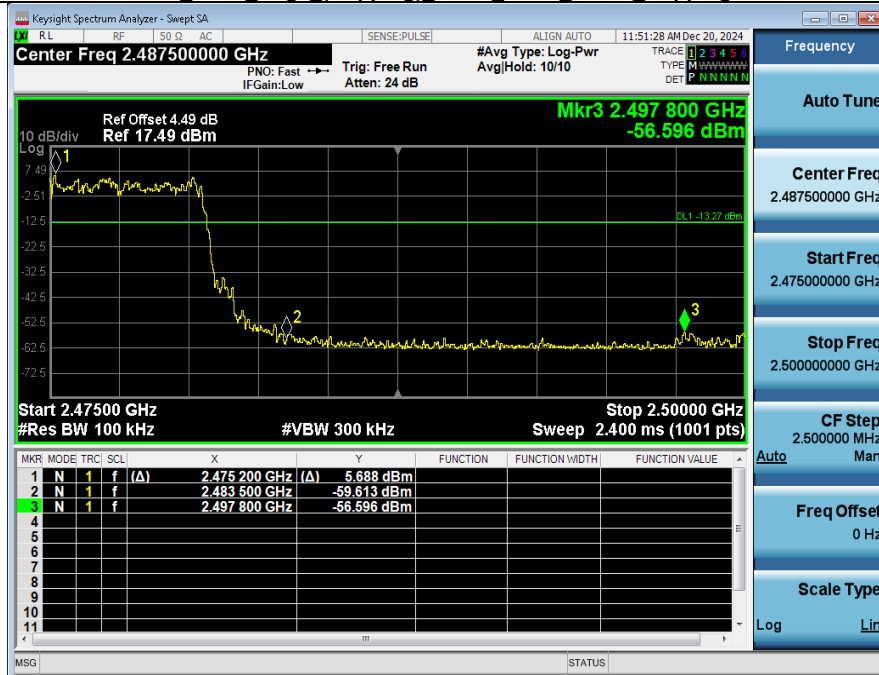


1_Reference_Level_Hopping_NVNT_ANT1_2-DH5_Hopping



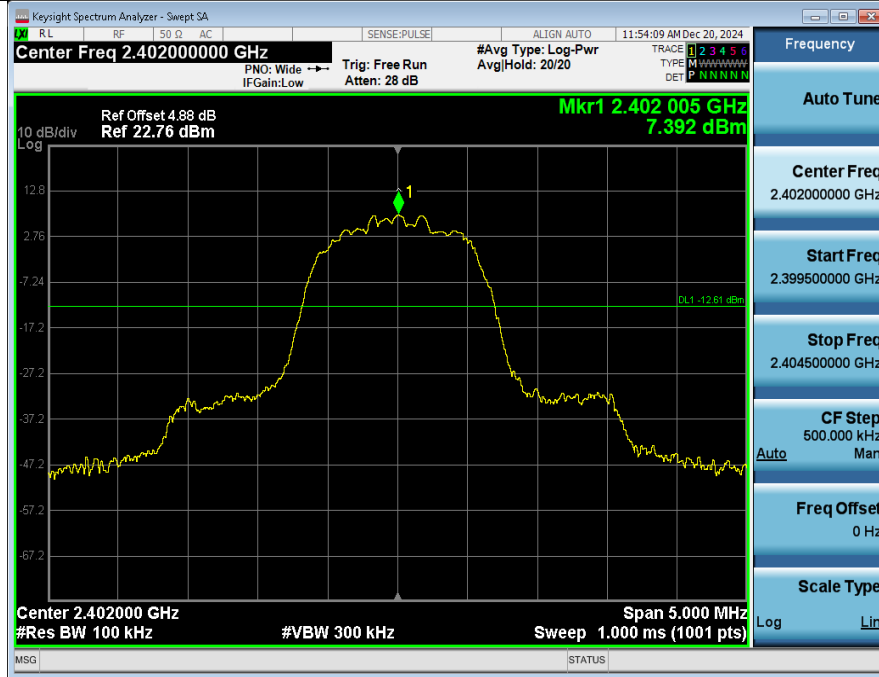


2_Band_Edge_(Hopping)_NVNT_ANT1_2-DH5_Hopping

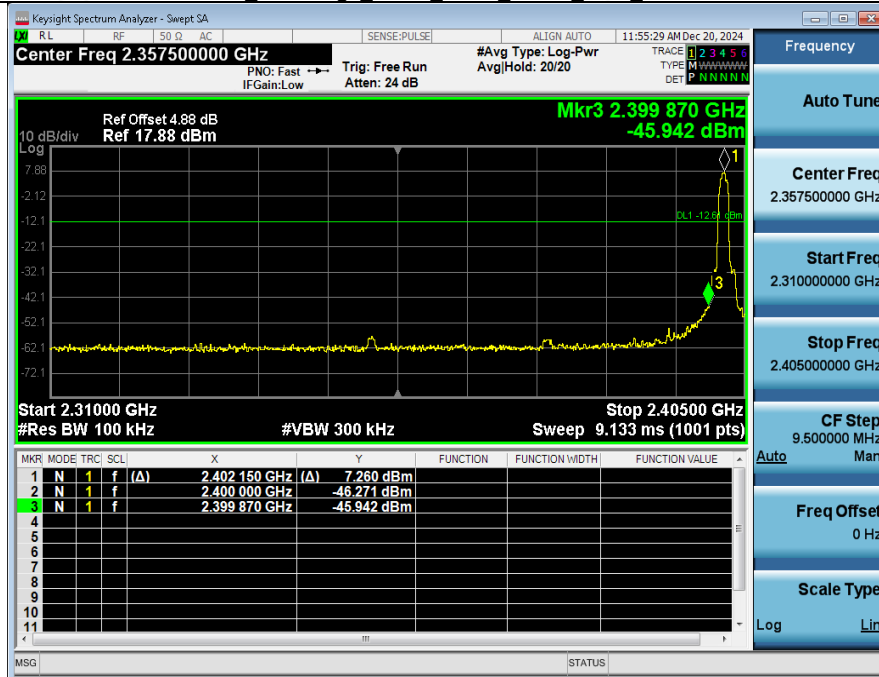


1_Reference_Level_NVNT_ANT1_3-DH5_2402_00



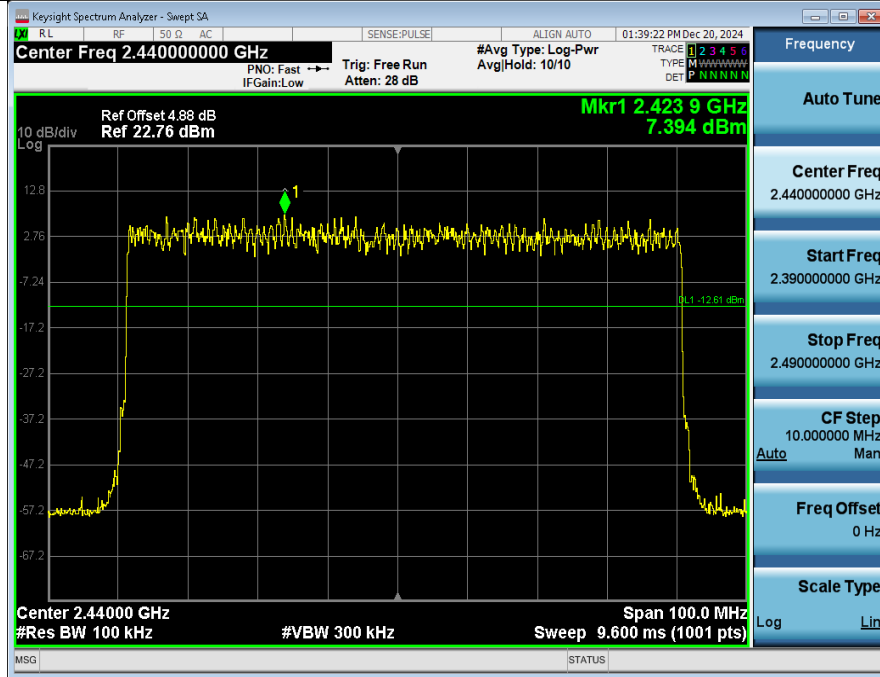


2_Bandedge_NVNT_ANT1_3-DH5_2402_00

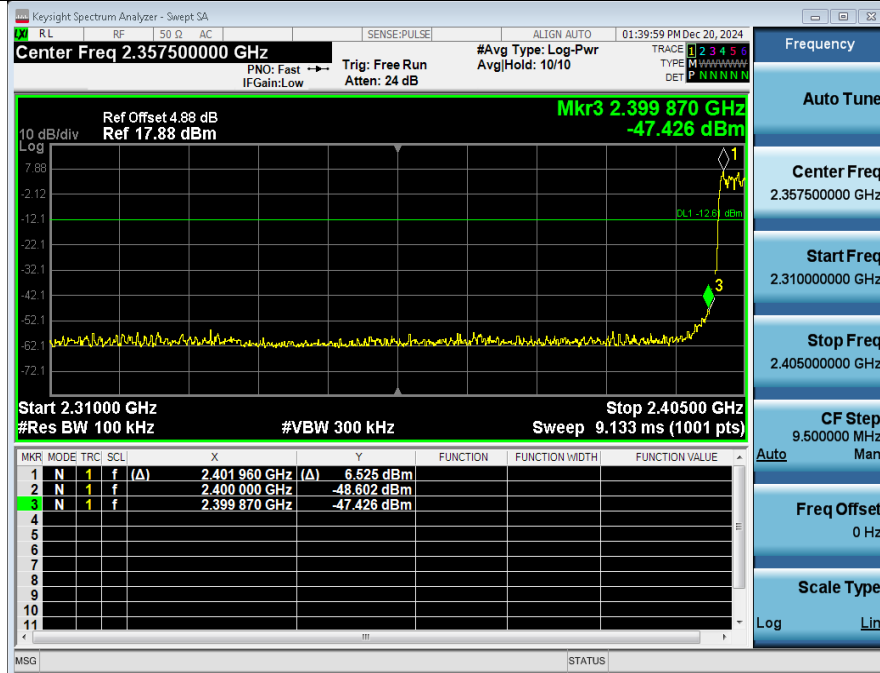


1_Reference_Level_Hopping_NVNT_ANT1_3-DH5_Hopping





2_Band_Edge_(Hopping)_NVNT_ANT1_3-DH5_Hopping

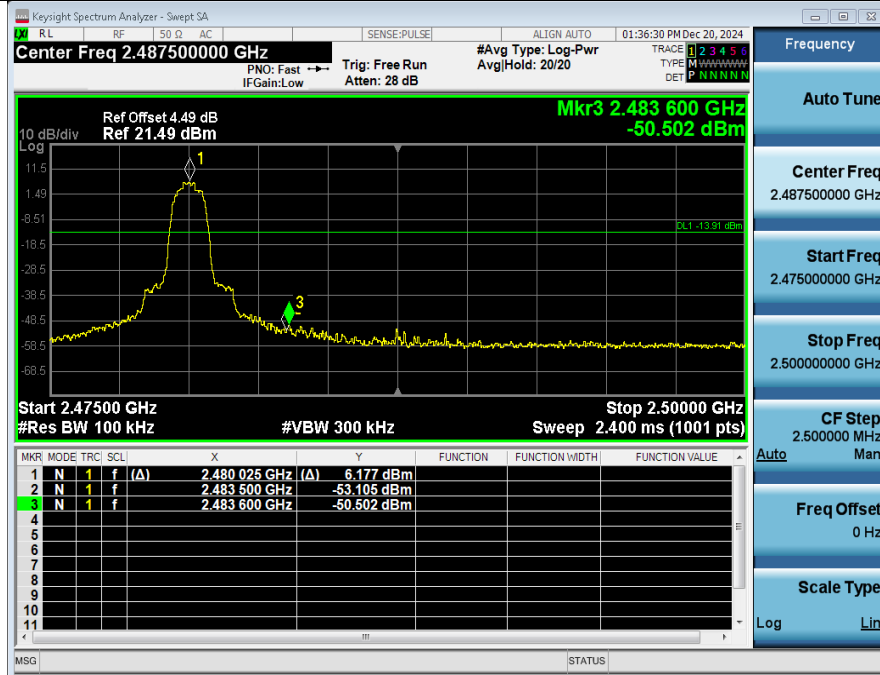


1_Reference_Level_NVNT_ANT1_3-DH5_2480_00



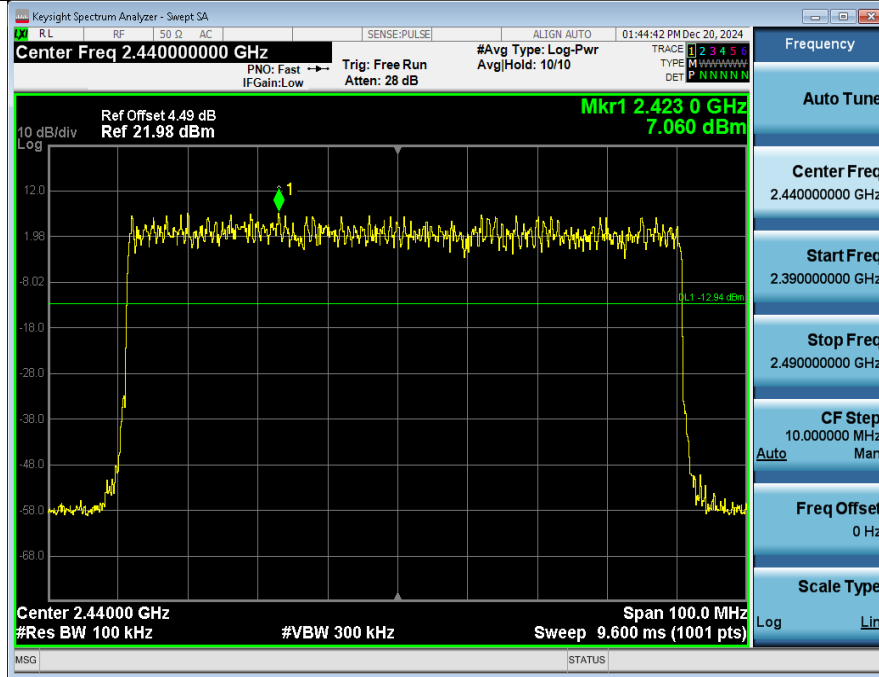


2_Bandedge_NVNT_ANT1_3-DH5_2480_00

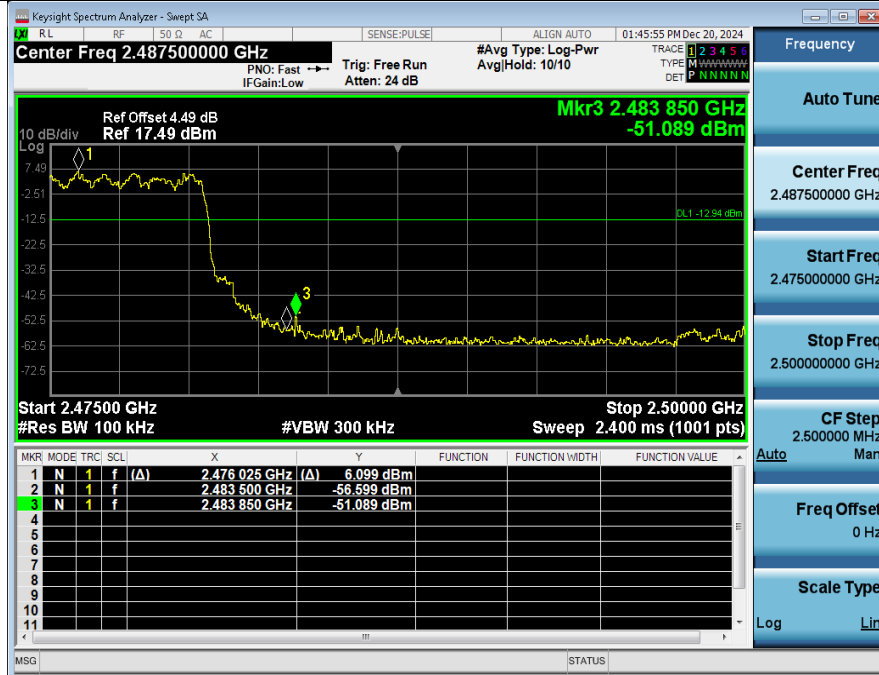


1_Reference_Level_Hopping_NVNT_ANT1_3-DH5_Hopping





2_Band_Edge_(Hopping)_NVNT_ANT1_3-DH5_Hopping



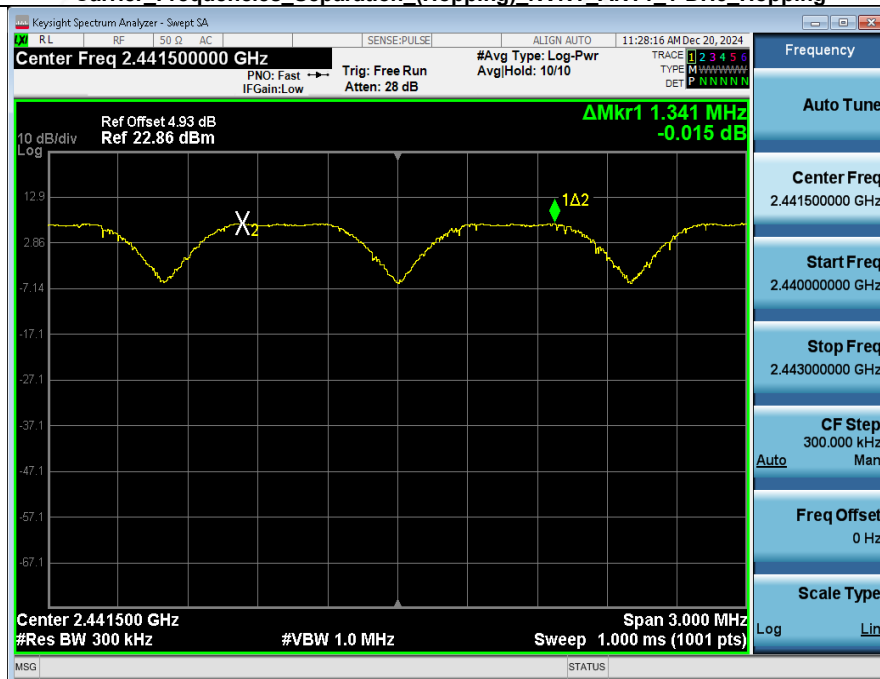
7. Carrier Frequencies Separation (Hopping)

Condition	Antenna	Modulation	Frequency(MHz)	Hopping NO.0 (MHz)	Hopping NO.1 (MHz)	Carrier Frequencies Separation(MHz)	Limit(MHz)	Result
NVNT	ANT1	1-DH5	2402.00	2402.185	2403.178	0.99	0.958	Pass
NVNT	ANT1	1-DH5	2441.00	2440.834	2442.175	1.34	0.954	Pass
NVNT	ANT1	1-DH5	2480.00	2478.807	2479.977	1.17	0.957	Pass
NVNT	ANT1	2-DH5	2402.00	2401.990	2403.007	1.02	0.883	Pass
NVNT	ANT1	2-DH5	2441.00	2440.993	2442.031	1.04	0.878	Pass
NVNT	ANT1	2-DH5	2480.00	2479.164	2480.190	1.03	0.879	Pass
NVNT	ANT1	3-DH5	2402.00	2402.005	2403.043	1.04	0.875	Pass
NVNT	ANT1	3-DH5	2441.00	2440.984	2442.178	1.19	0.874	Pass
NVNT	ANT1	3-DH5	2480.00	2479.032	2480.136	1.10	0.872	Pass

Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH5_Hopping

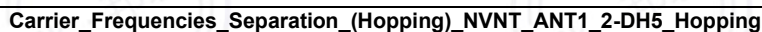
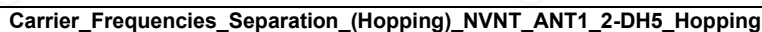


Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH5_Hopping



Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH5_Hopping







Carrier Frequencies Separation (Hopping) NVNT ANT1 2-DH5 Hopping

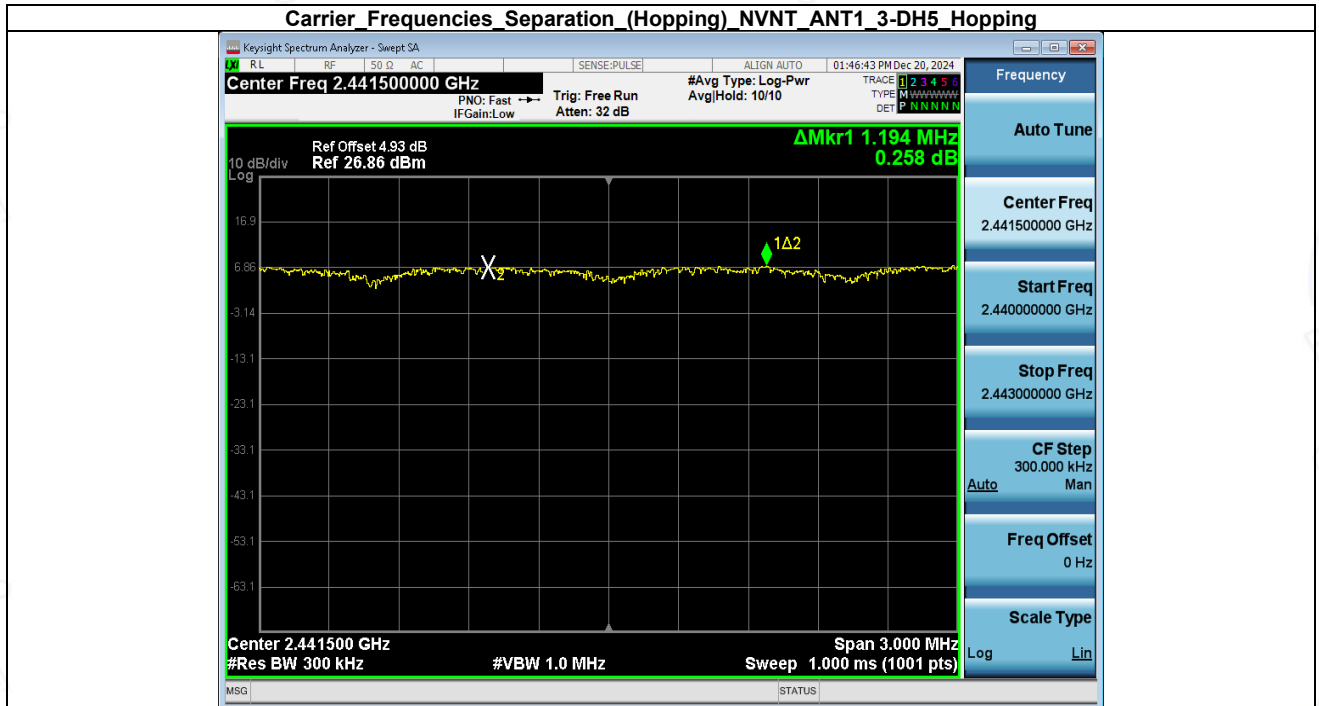


Carrier Frequencies Separation (Hopping) NVNT ANT1 3-DH5 Hopping





Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_3-DH5_Hopping



Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_3-DH5_Hopping

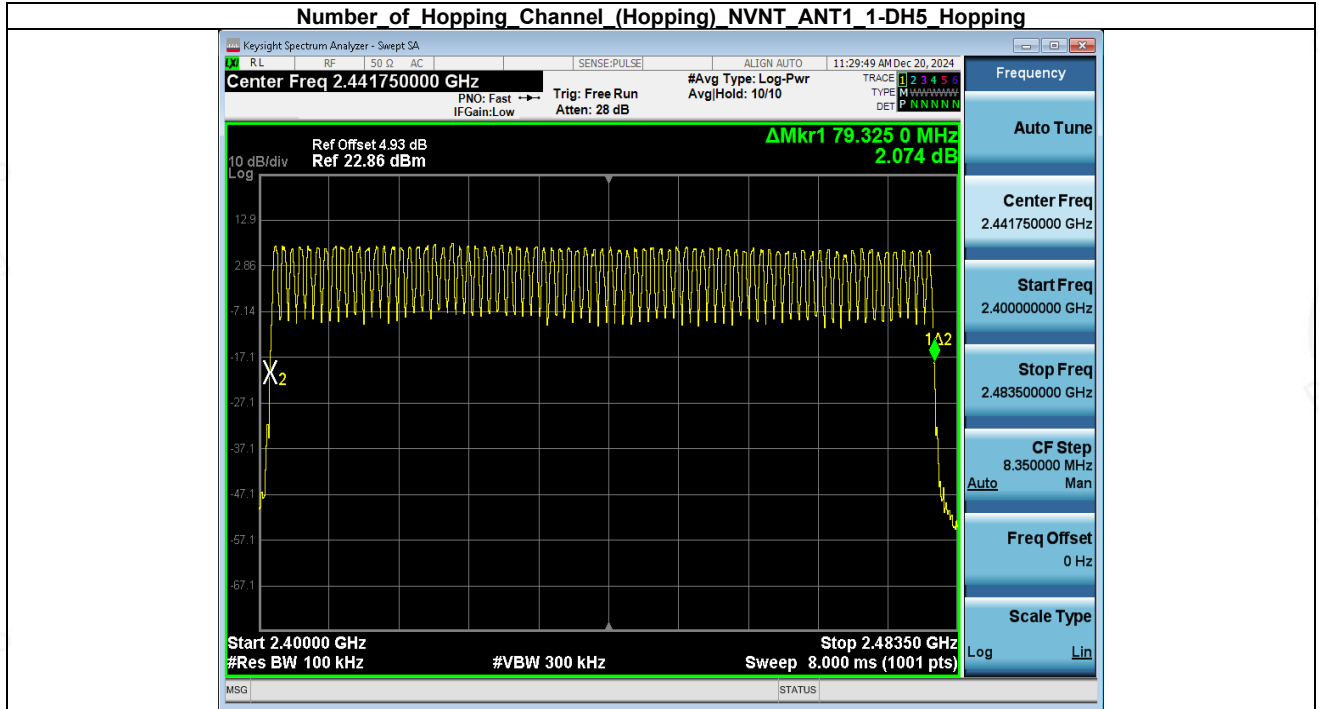




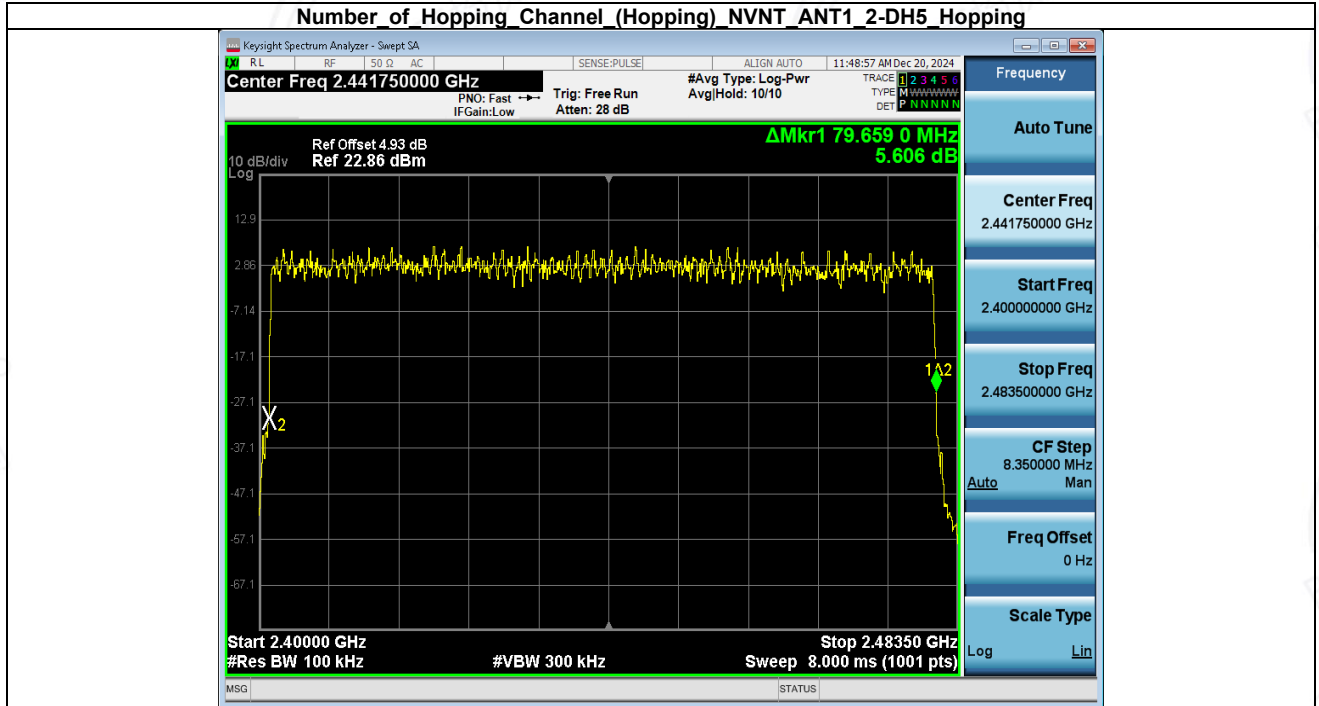
8. Number of Hopping Channel (Hopping)

Condition	Antenna	Modulation	Hopping Num	Limit	Result
NVNT	ANT1	1-DH5	79	15	Pass
NVNT	ANT1	2-DH5	79	15	Pass
NVNT	ANT1	3-DH5	79	15	Pass

Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_1-DH5_Hopping

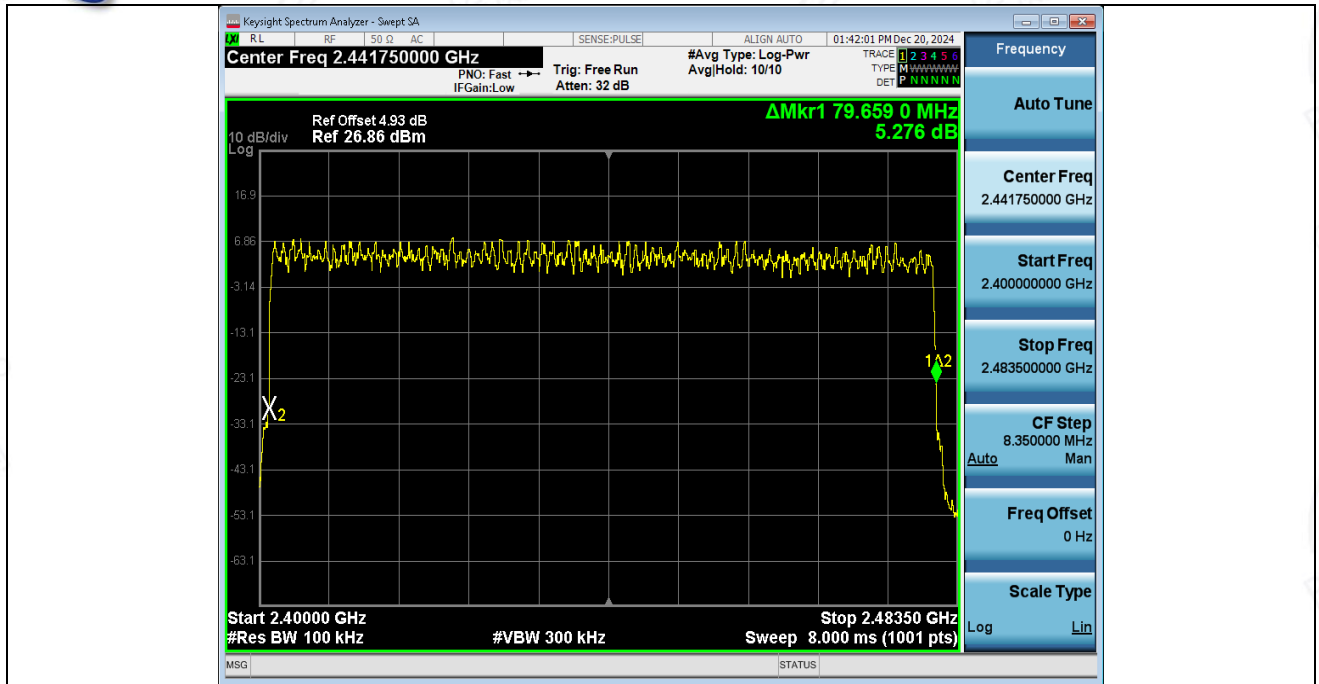


Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_2-DH5_Hopping



Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_3-DH5_Hopping

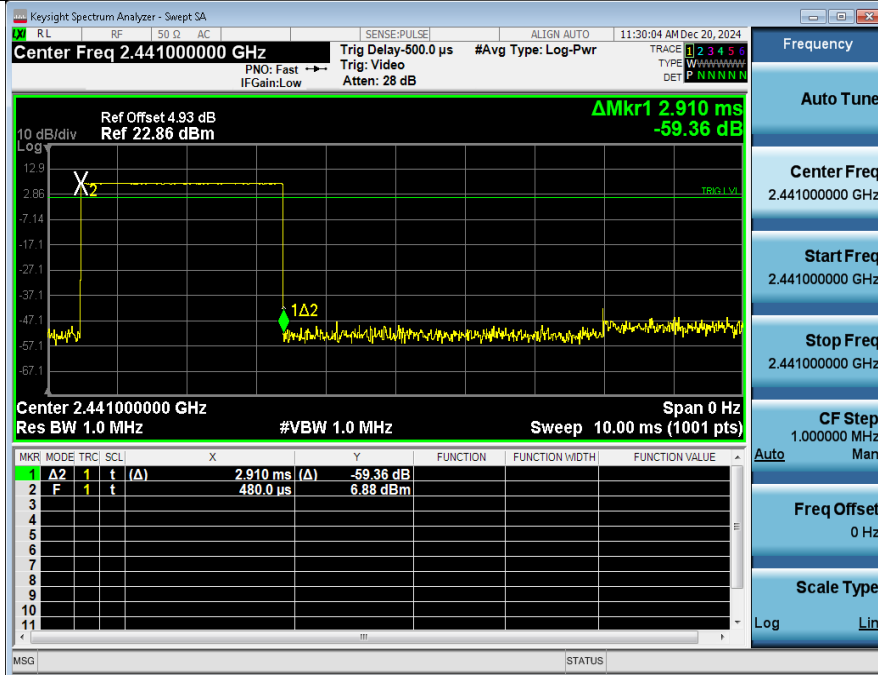




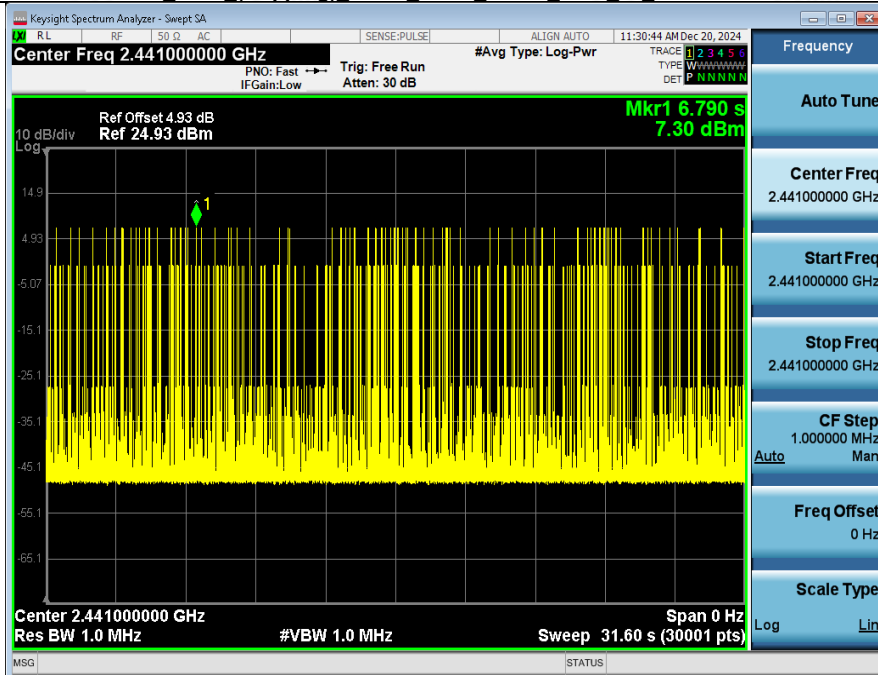
9. Dwell Time (Hopping)

Condition	Antenna	Packet Type	Pulse Time(ms)	Hops	Dwell Time(ms)	Limit(s)	Result
NVNT	ANT1	1-DH5	2.910	97.00	282.270	0.40	Pass
NVNT	ANT1	2-DH5	2.930	104.00	304.720	0.40	Pass
NVNT	ANT1	3-DH5	2.920	107.00	312.440	0.40	Pass

Dwell_Time (Hopping)_NVNT_ANT1_1-DH5_2441_00_One_Burst_Time

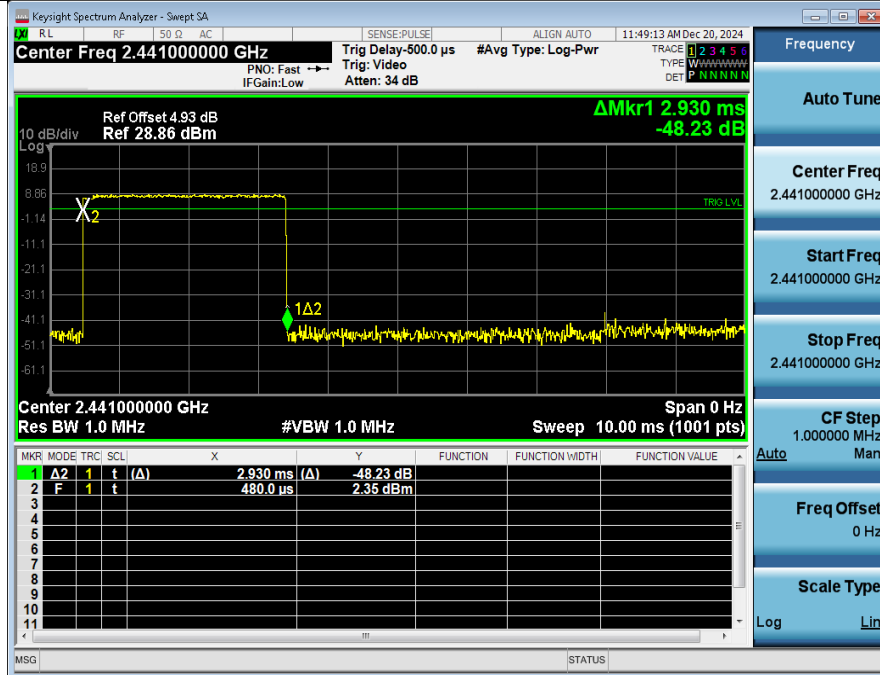


Dwell_Time (Hopping)_NVNT_ANT1_1-DH5_2441_00_Accumulated

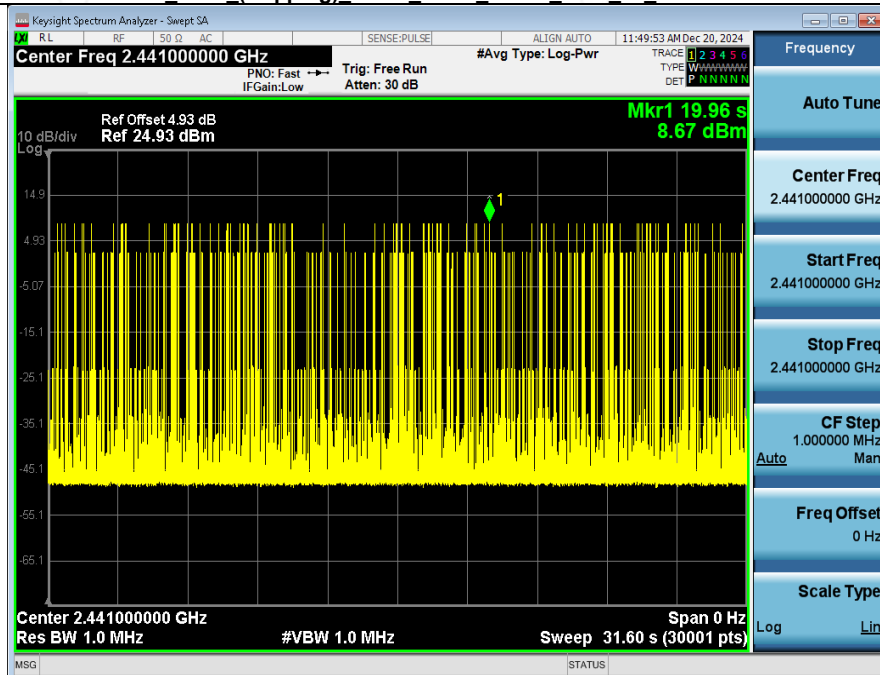


Dwell_Time (Hopping)_NVNT_ANT1_2-DH5_2441_00_One_Burst_Time



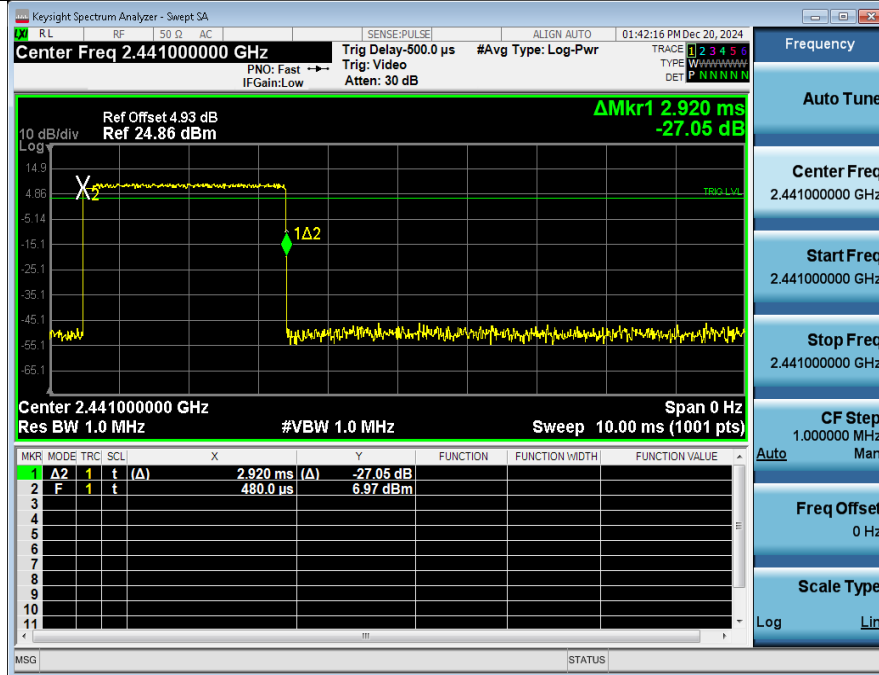


Dwell Time (Hopping) NVNT_ANT1_2-DH5_2441_00_Accumulated



Dwell Time (Hopping) NVNT_ANT1_3-DH5_2441_00_One_Burst_Time





Dwell Time (Hopping) NVNT_ANT1_3-DH5_2441_00_Accumulated

