

Appendix

Test Data

for BTEK241218089A01E03

Start date	2024/12/30	Finish date	2024/12/30
Temperature	21.3℃	Humidity	33%
RF specifications	BT	Test Engineer	Zora



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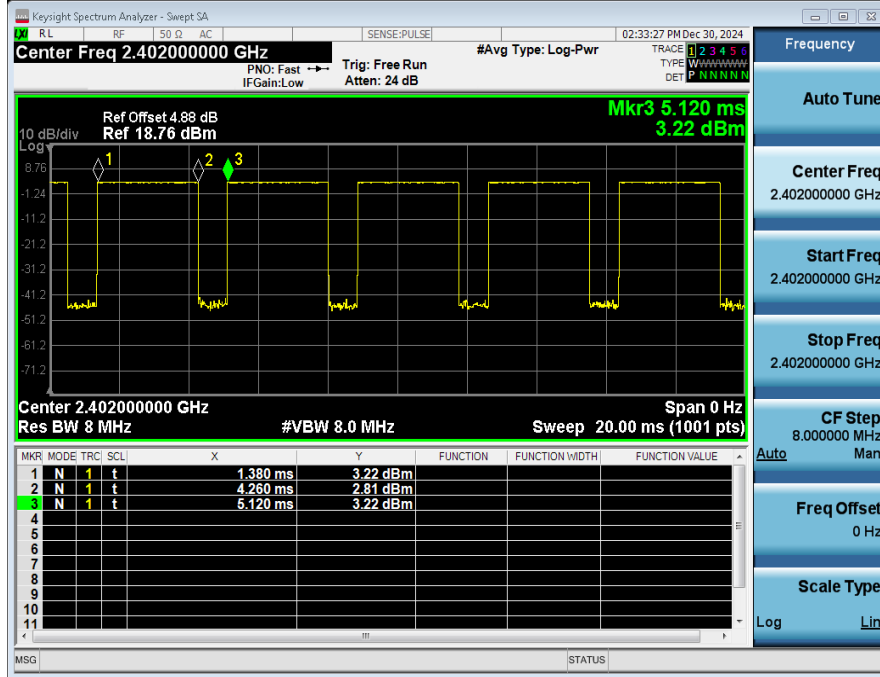
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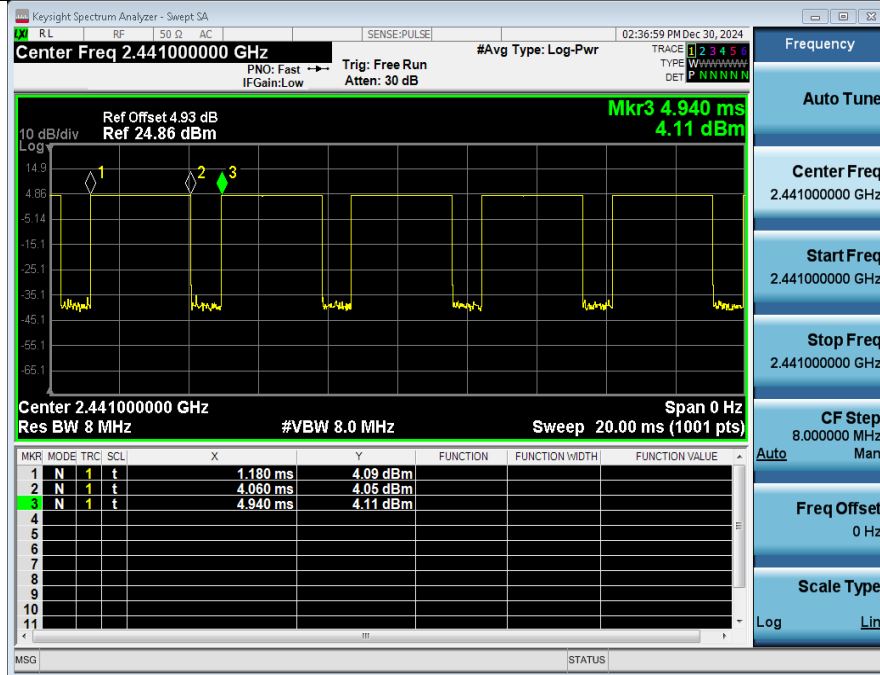
1. Duty Cycle

Condition	Antenna	Rate	Frequency (MHz)	Dutycycle(%)	Duty_factor
NVNT	ANT1	1-DH5	2402.00	77.54	1.10
NVNT	ANT1	1-DH5	2441.00	77.13	1.13
NVNT	ANT1	1-DH5	2480.00	77.01	1.13
NVNT	ANT1	2-DH5	2402.00	76.60	1.16
NVNT	ANT1	2-DH5	2441.00	77.01	1.13
NVNT	ANT1	2-DH5	2480.00	77.54	1.10
NVNT	ANT1	3-DH5	2402.00	77.66	1.10
NVNT	ANT1	3-DH5	2441.00	77.66	1.10
NVNT	ANT1	3-DH5	2480.00	77.13	1.13

Duty_Cycle_NVNT_ANT1_1-DH5_2402

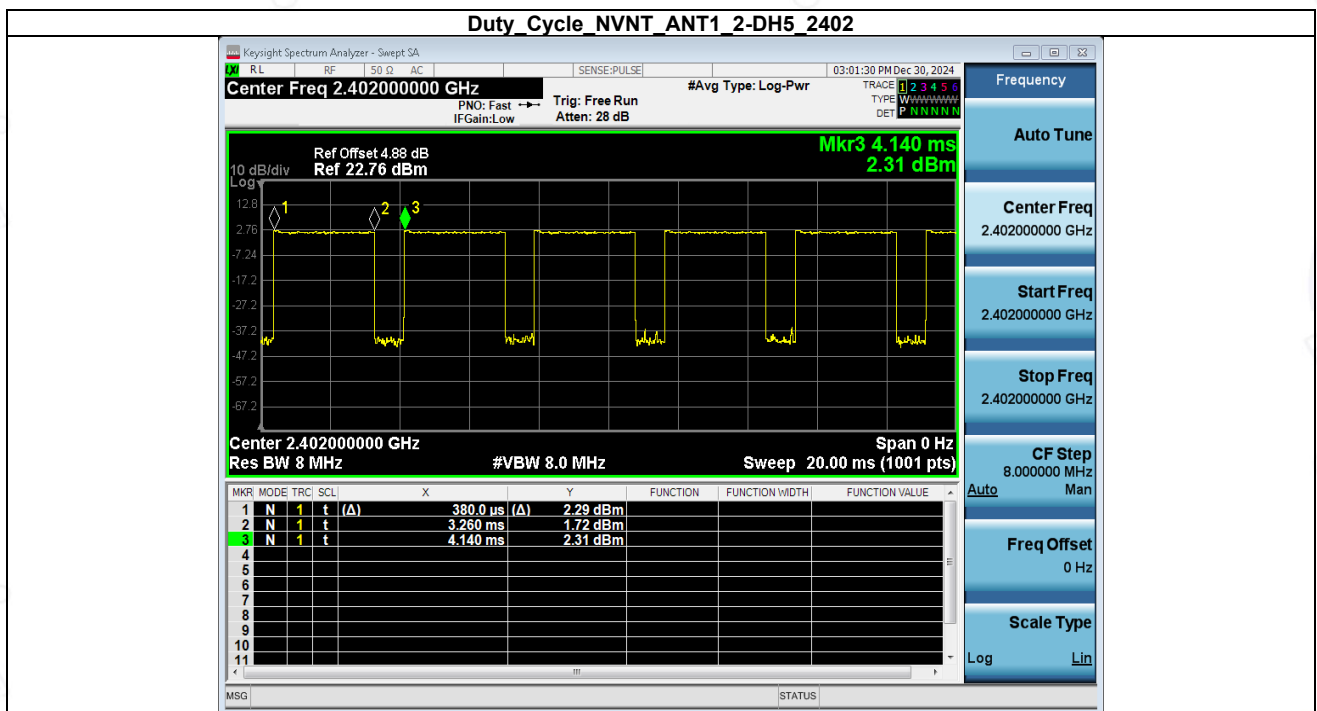
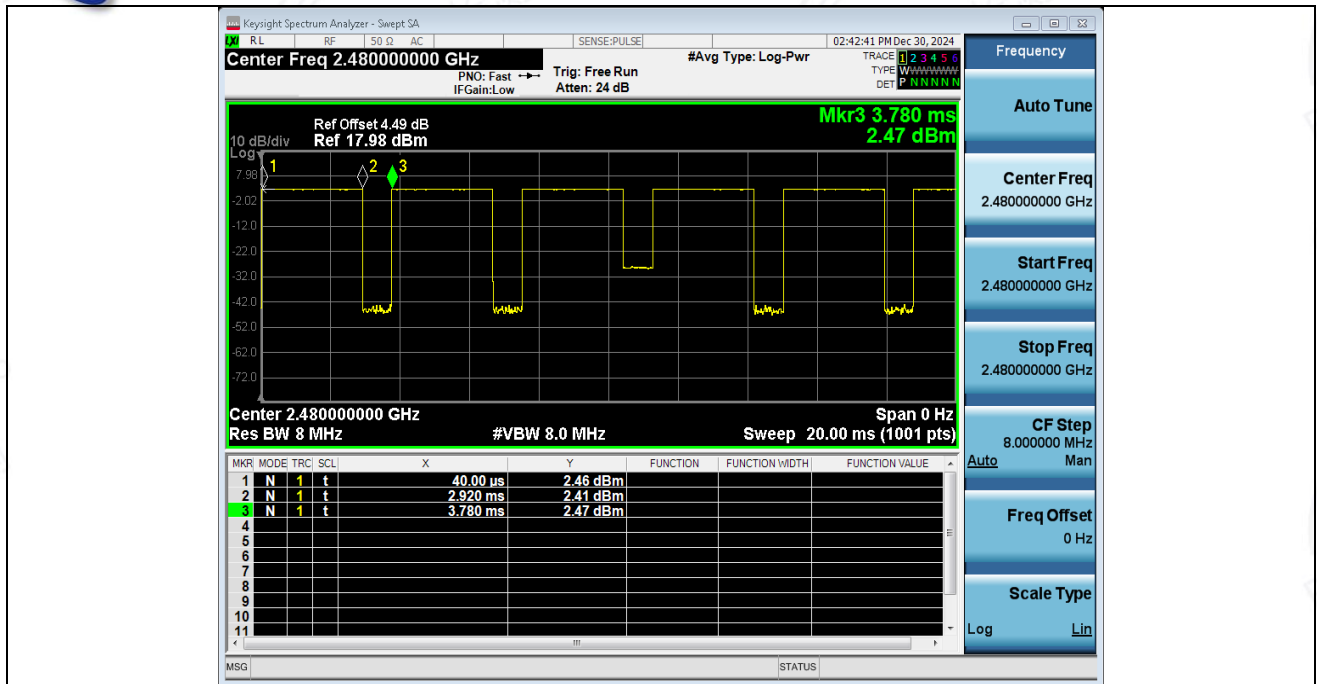


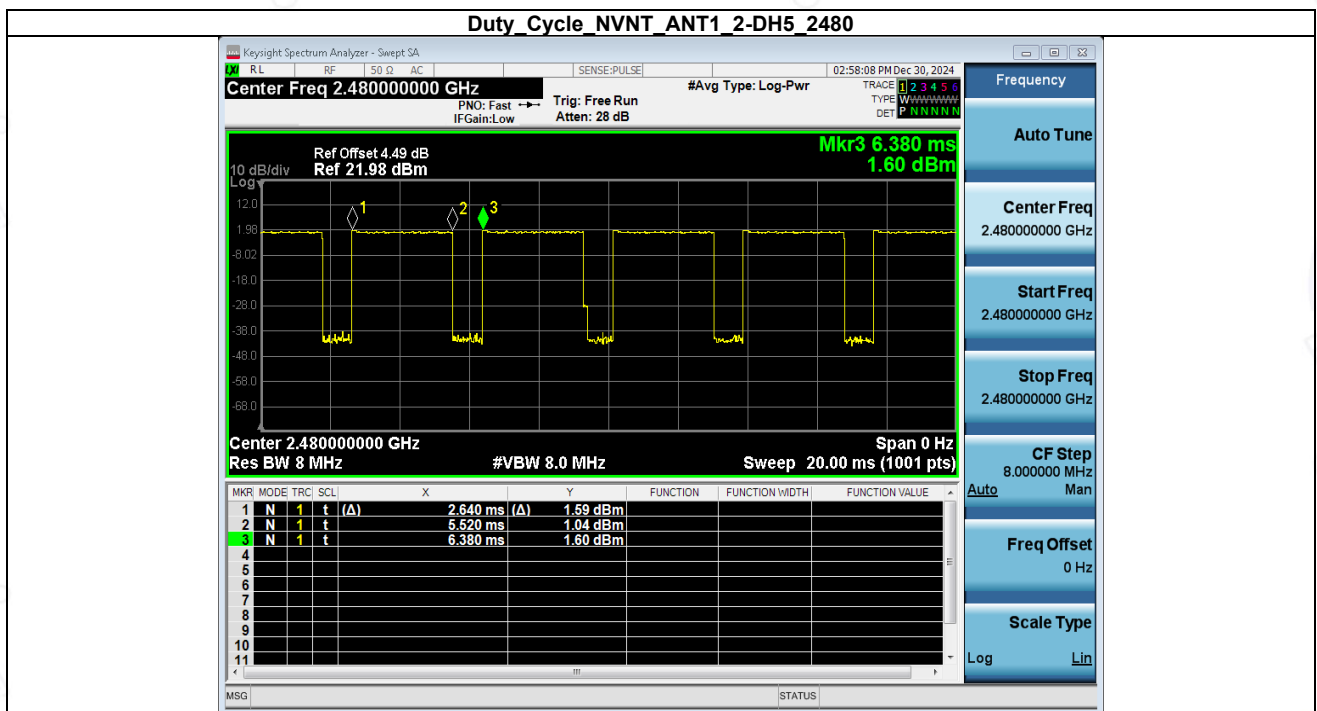
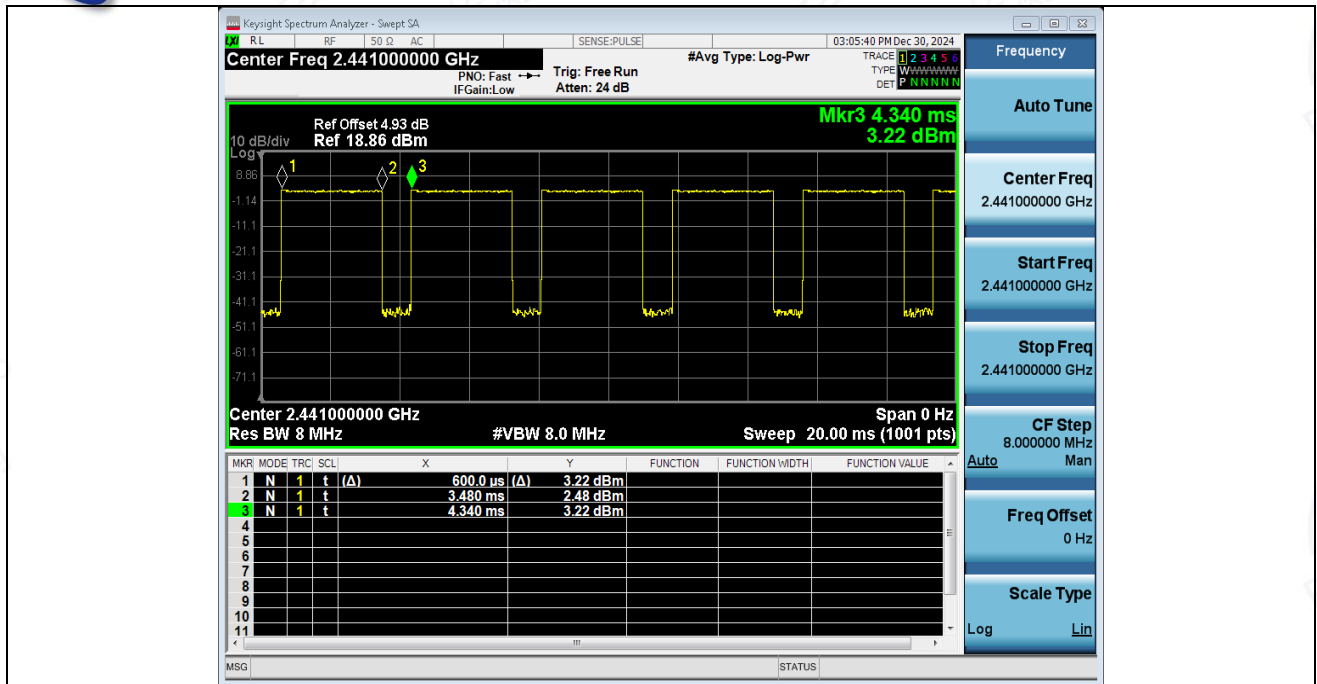
Duty_Cycle_NVNT_ANT1_1-DH5_2441

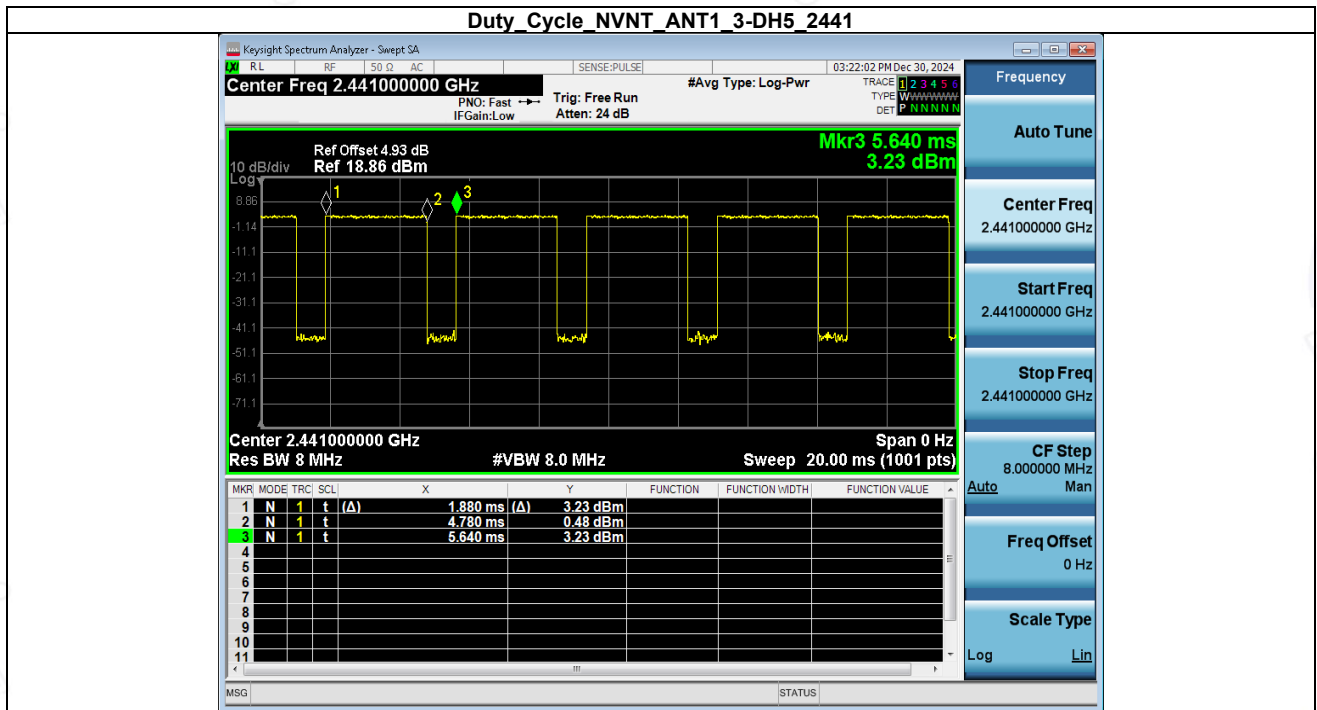
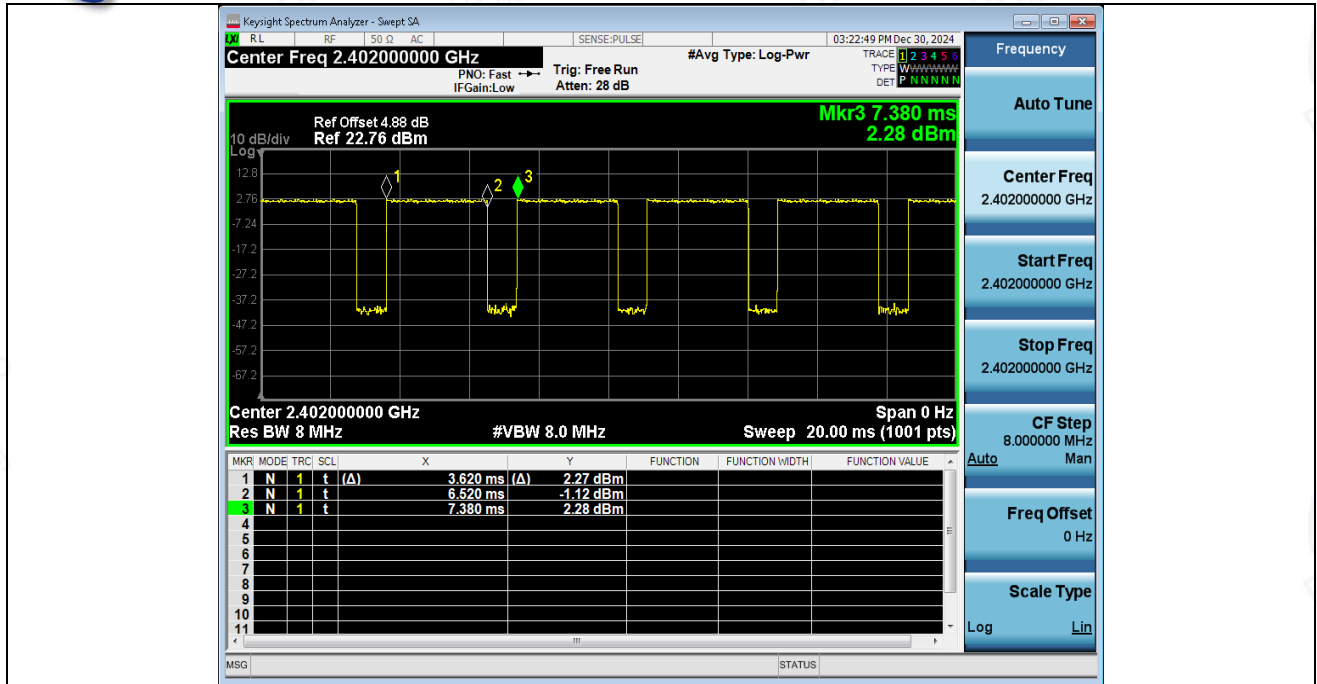


Duty_Cycle_NVNT_ANT1_1-DH5_2480



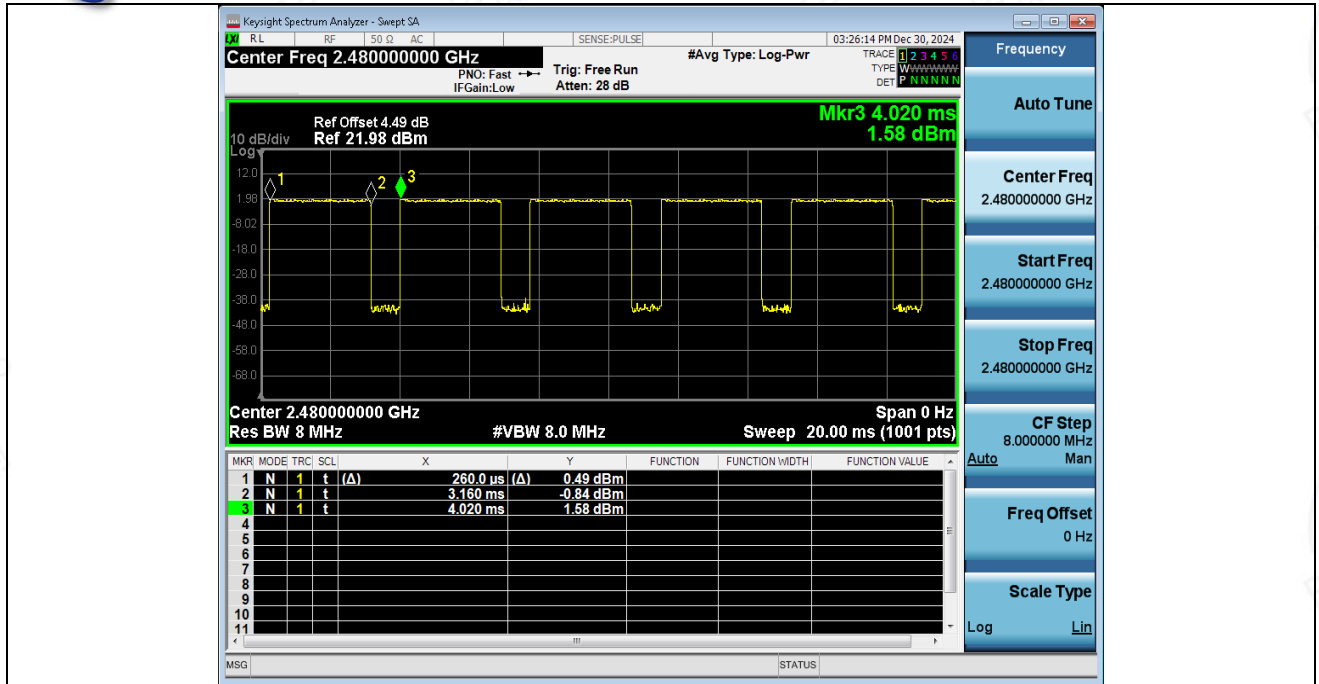






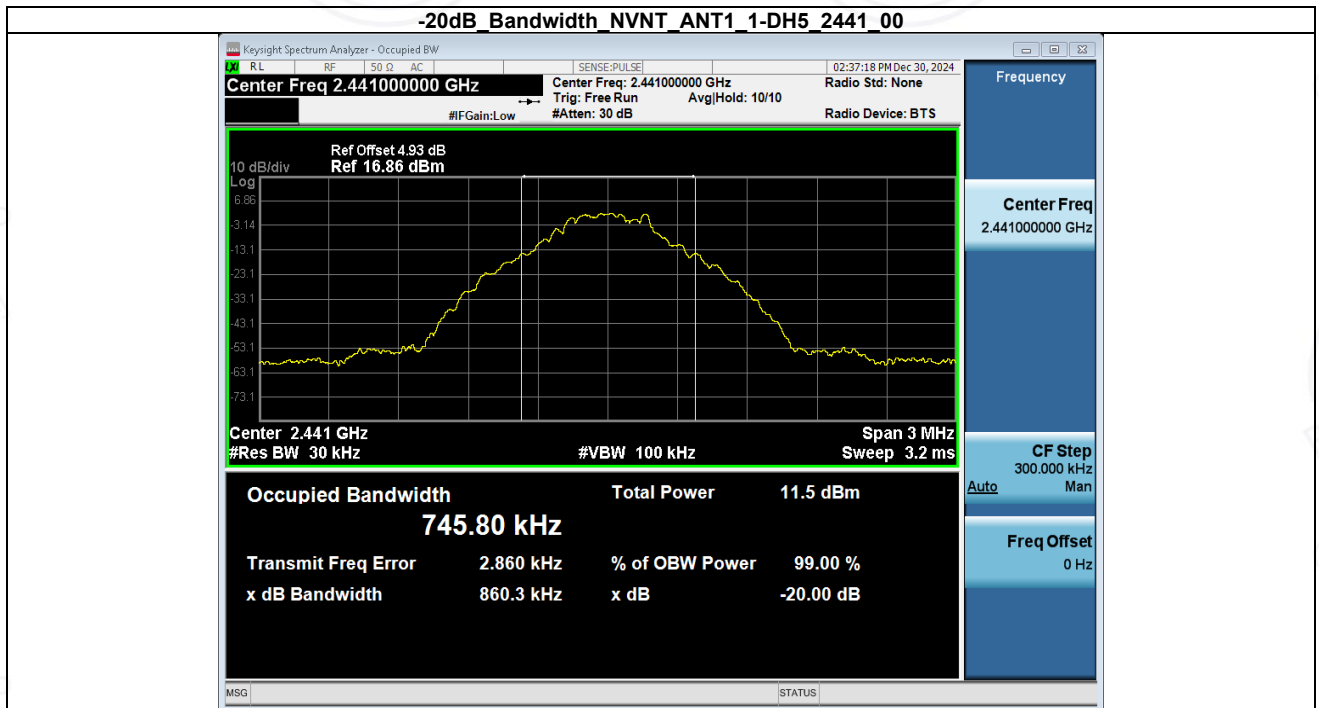
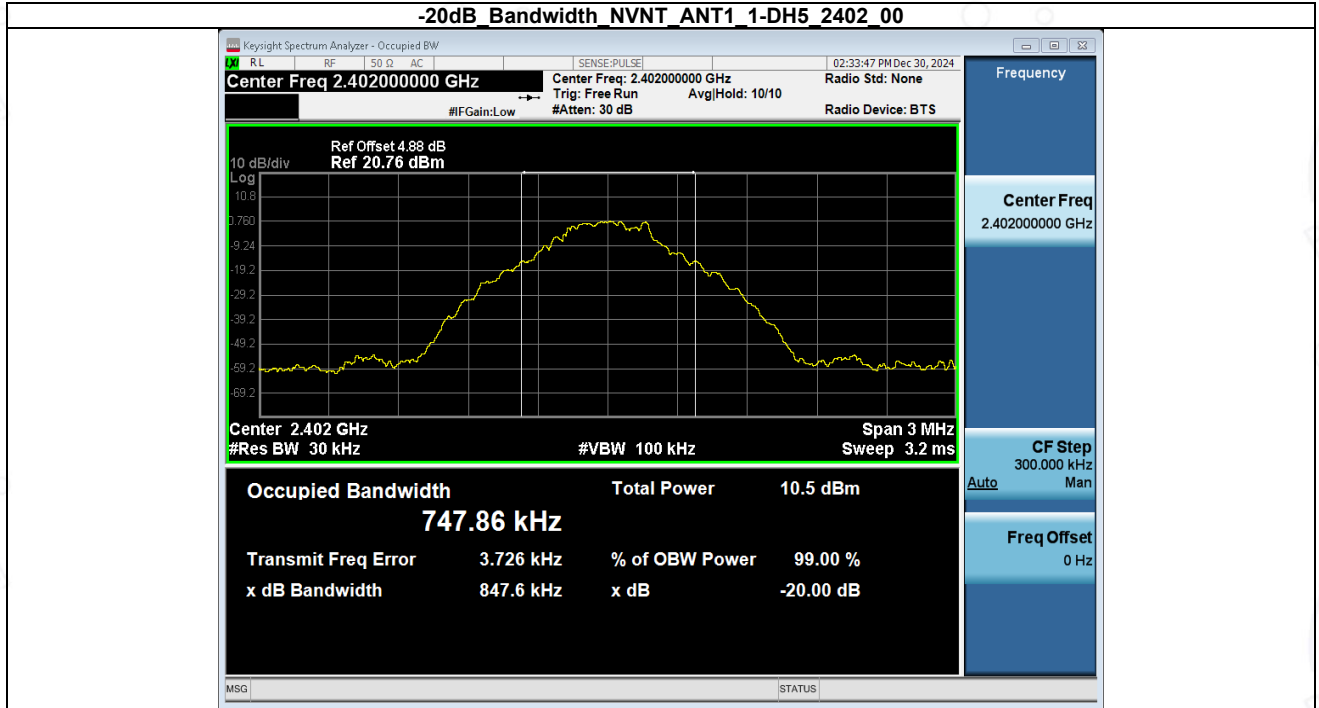
Duty Cycle_NVNT_ANT1_3-DH5_2480

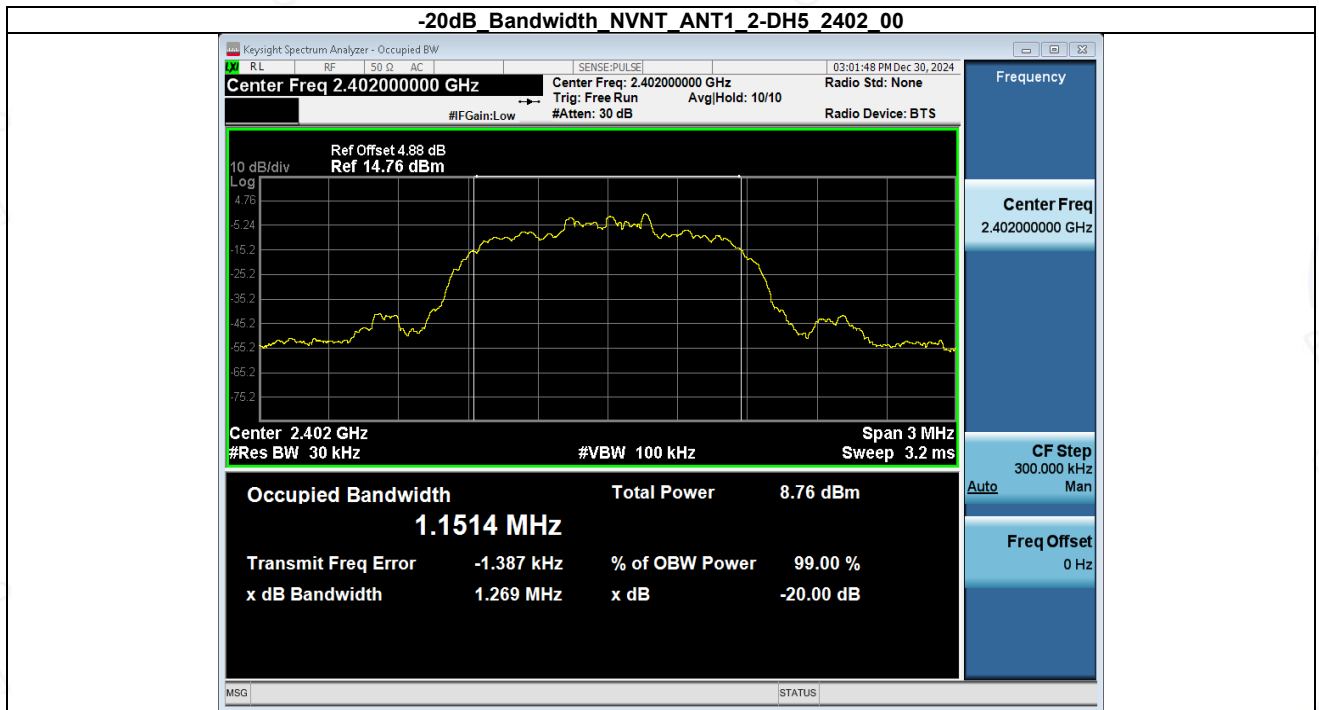
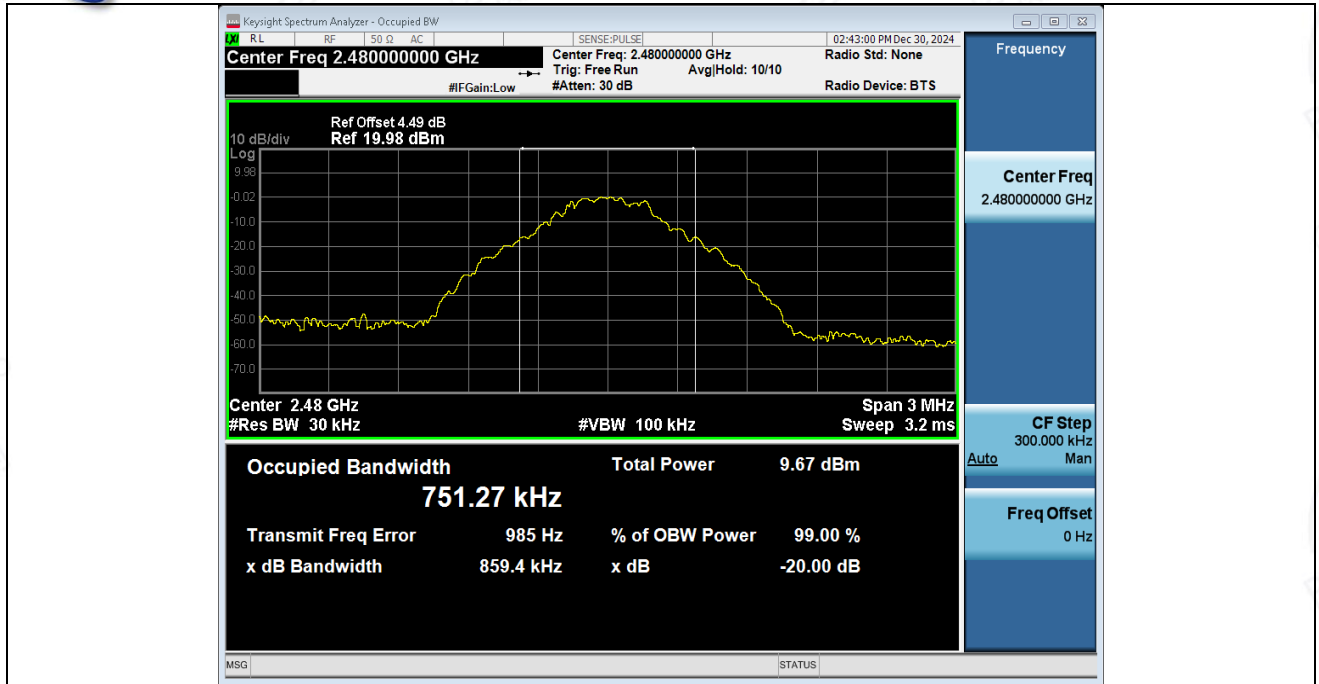


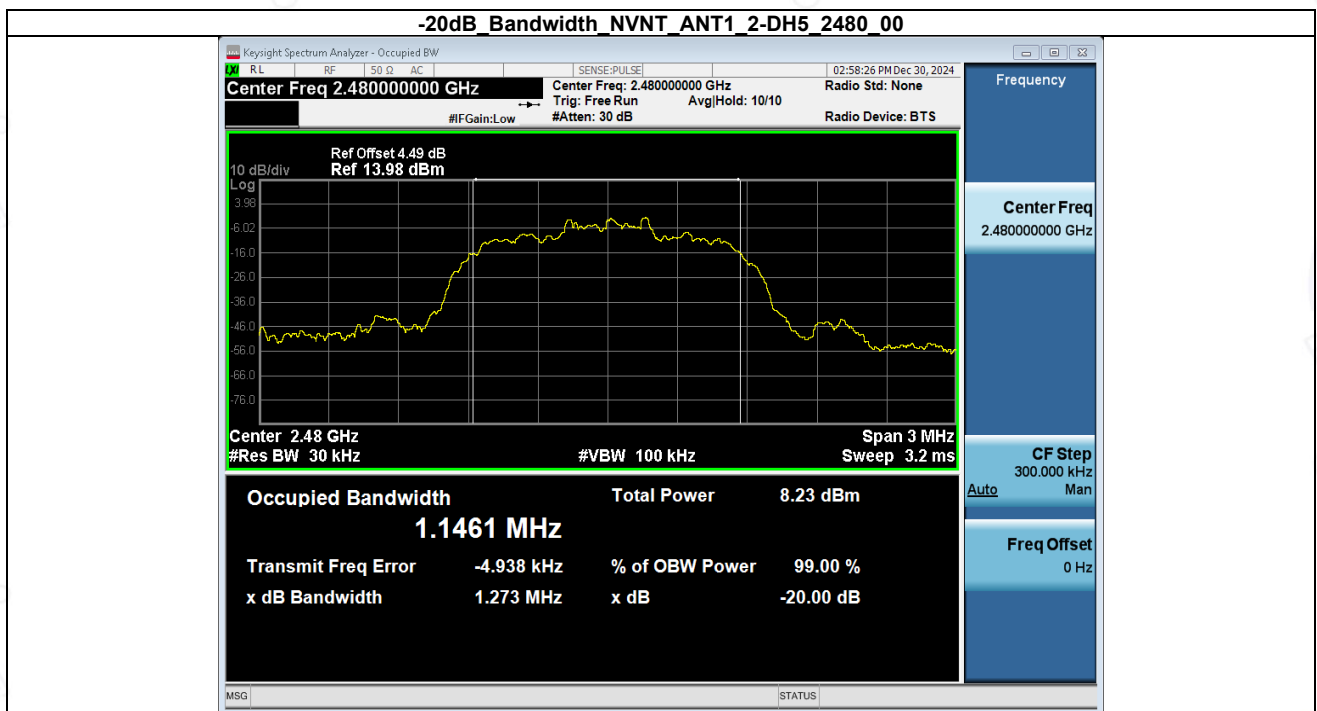
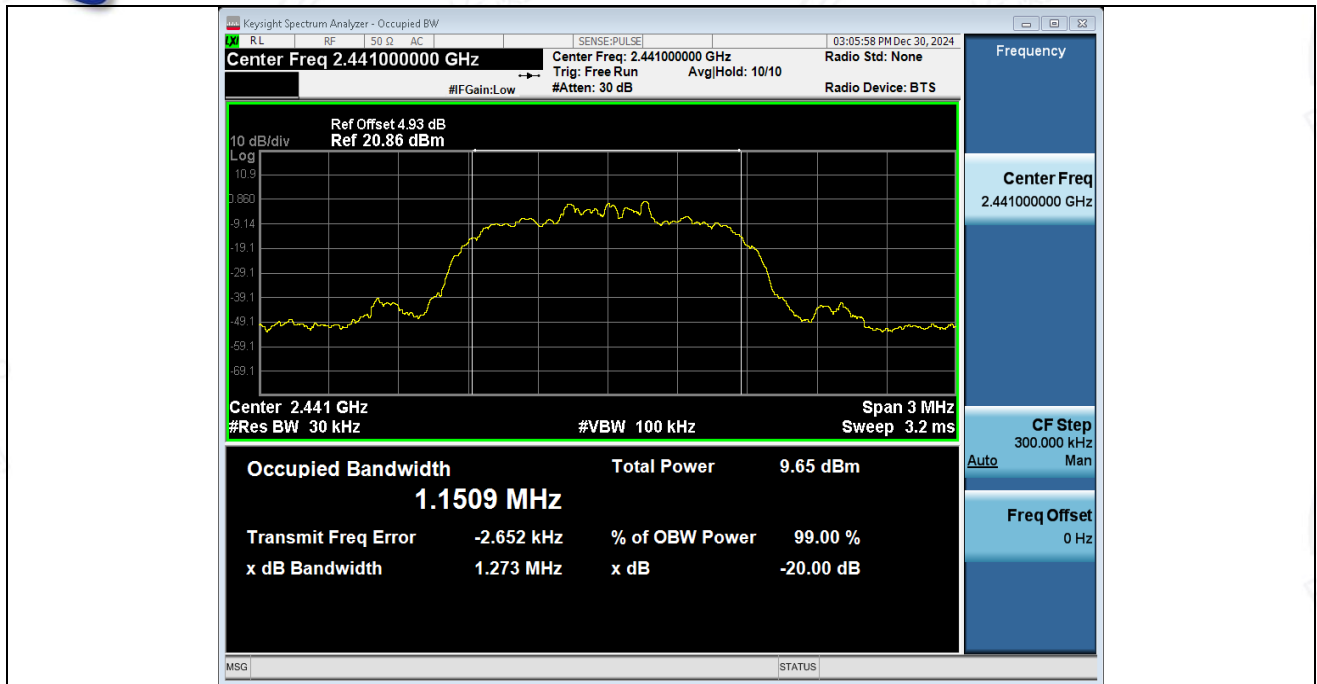


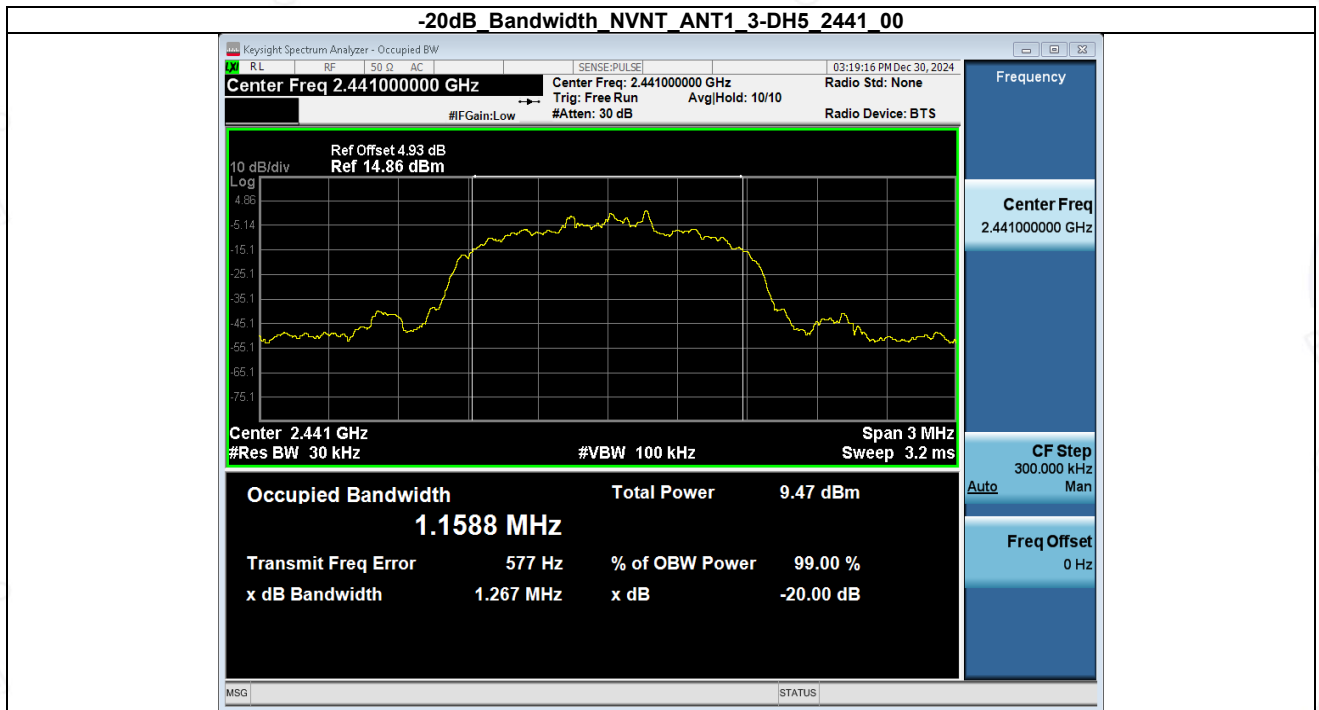
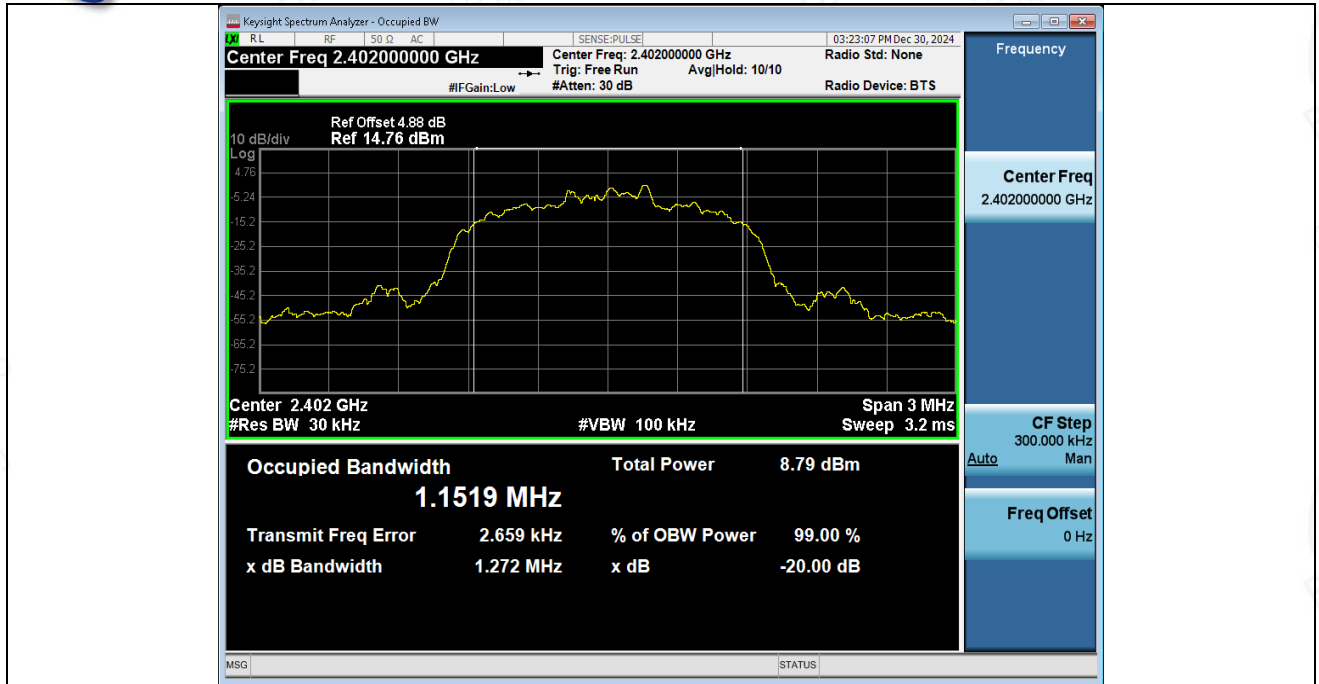
2. -20dB Bandwidth

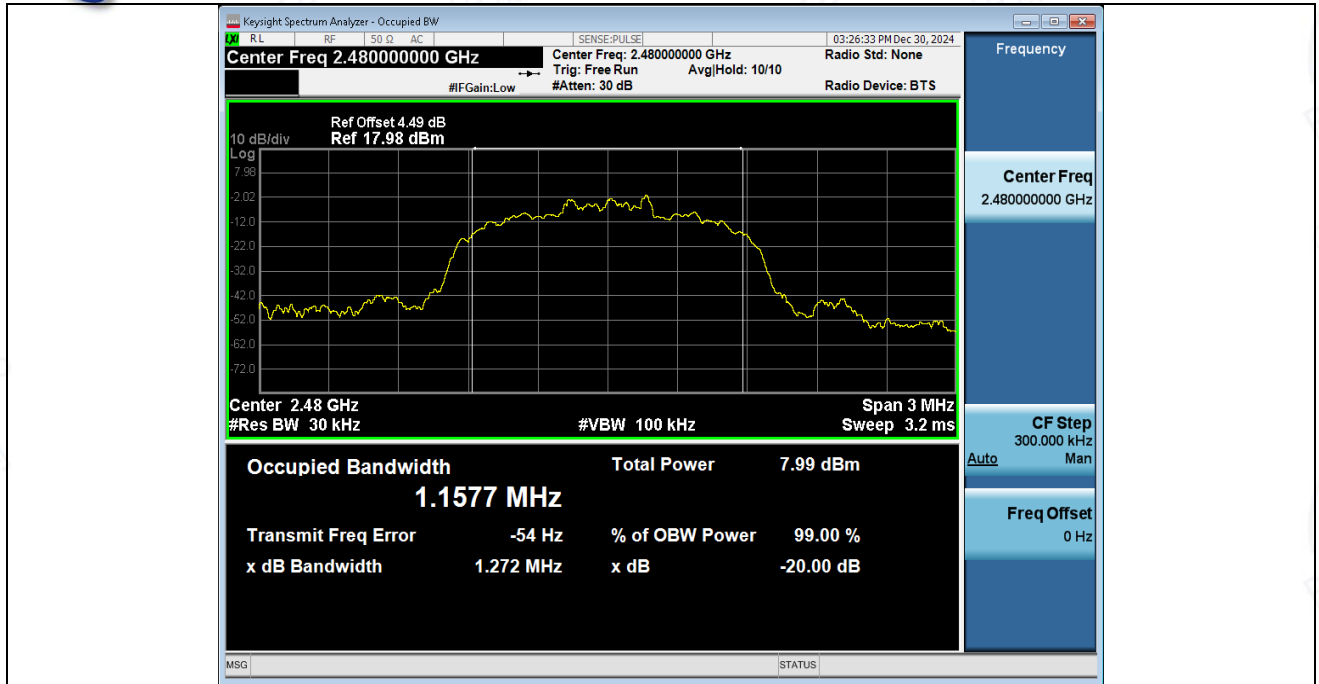
Condition	Antenna	Modulation	Frequency (MHz)	-20dB BW(MHz)	if larger than CFS
NVNT	ANT1	1-DH5	2402.00	0.848	No
NVNT	ANT1	1-DH5	2441.00	0.860	No
NVNT	ANT1	1-DH5	2480.00	0.859	No
NVNT	ANT1	2-DH5	2402.00	1.269	Yes
NVNT	ANT1	2-DH5	2441.00	1.273	Yes
NVNT	ANT1	2-DH5	2480.00	1.273	Yes
NVNT	ANT1	3-DH5	2402.00	1.272	Yes
NVNT	ANT1	3-DH5	2441.00	1.267	Yes
NVNT	ANT1	3-DH5	2480.00	1.272	Yes







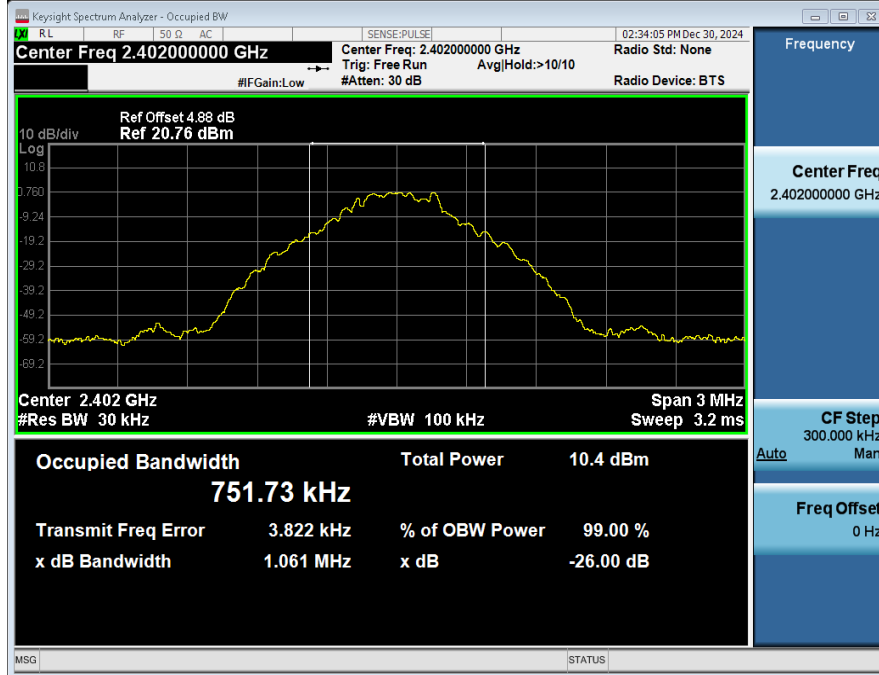




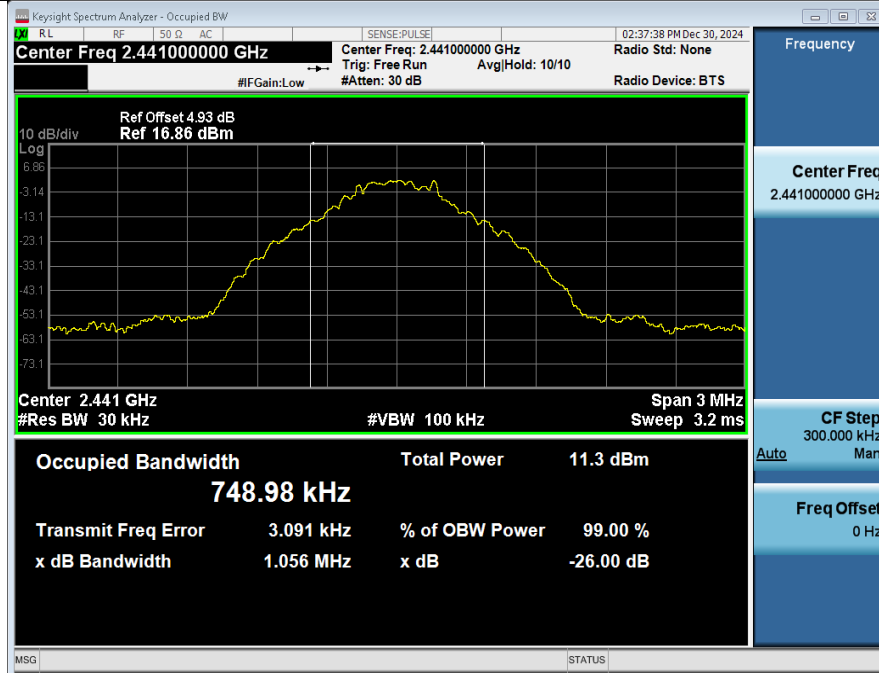
3. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	1-DH5	2402.00	0.752
NVNT	ANT1	1-DH5	2441.00	0.749
NVNT	ANT1	1-DH5	2480.00	0.747
NVNT	ANT1	2-DH5	2402.00	1.146
NVNT	ANT1	2-DH5	2441.00	1.149
NVNT	ANT1	2-DH5	2480.00	1.152
NVNT	ANT1	3-DH5	2402.00	1.153
NVNT	ANT1	3-DH5	2441.00	1.156
NVNT	ANT1	3-DH5	2480.00	1.157

99% Occupied Bandwidth NVNT ANT1 1-DH5 2402_00

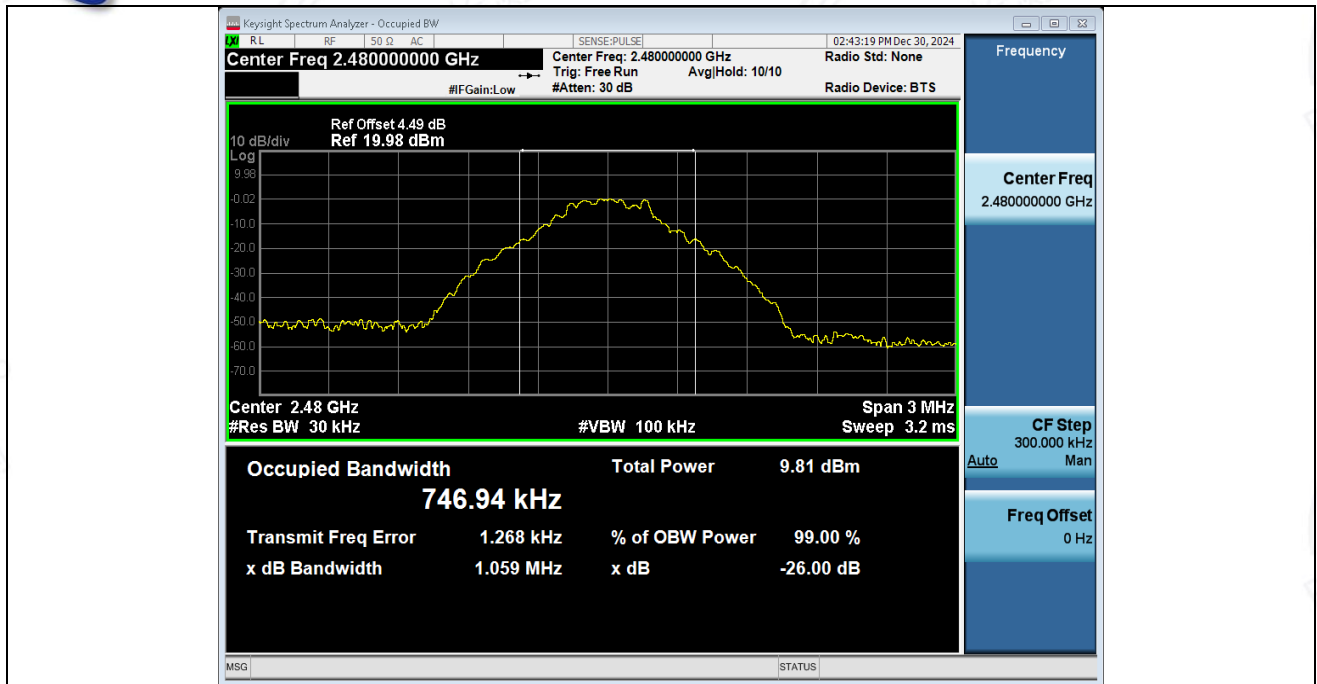


99% Occupied Bandwidth NVNT ANT1 1-DH5 2441_00

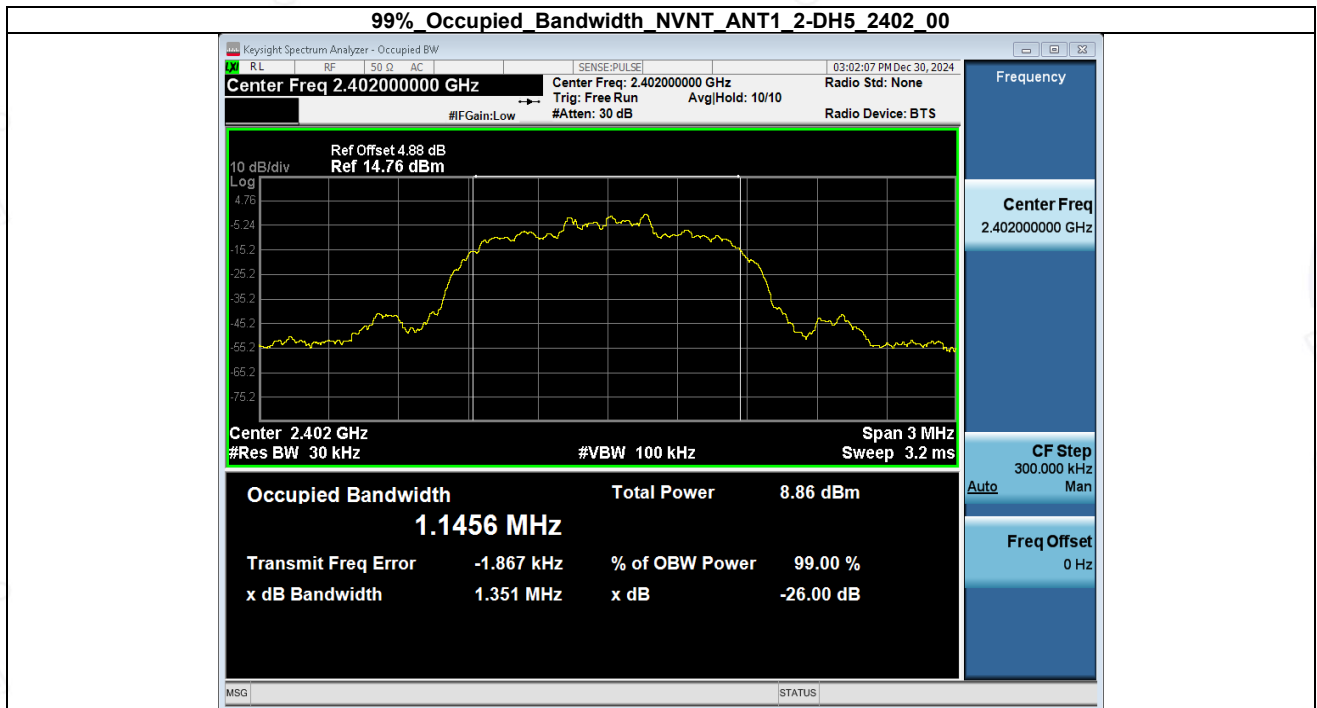


99% Occupied Bandwidth NVNT ANT1 1-DH5 2480_00





99% Occupied Bandwidth_NVNT_ANT1_2-DH5_2402_00

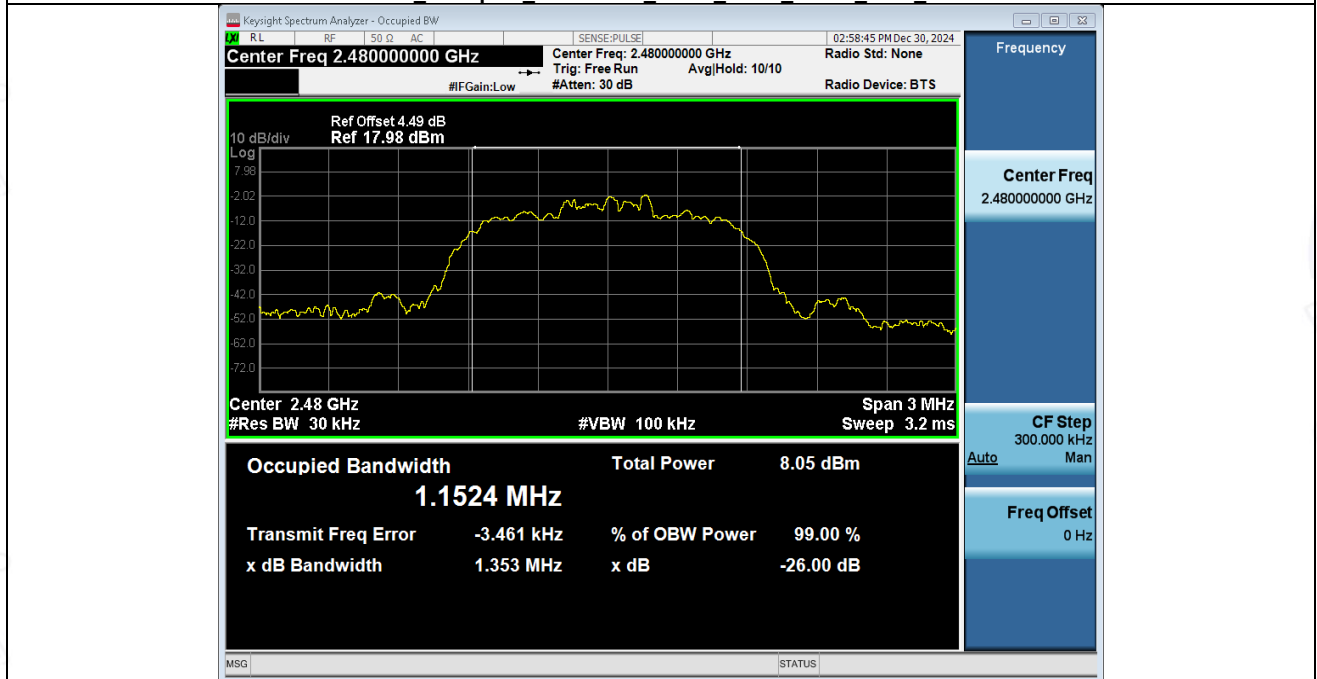


99% Occupied Bandwidth_NVNT_ANT1_2-DH5_2441_00





99% Occupied Bandwidth_NVNT_ANT1_2-DH5_2480_00

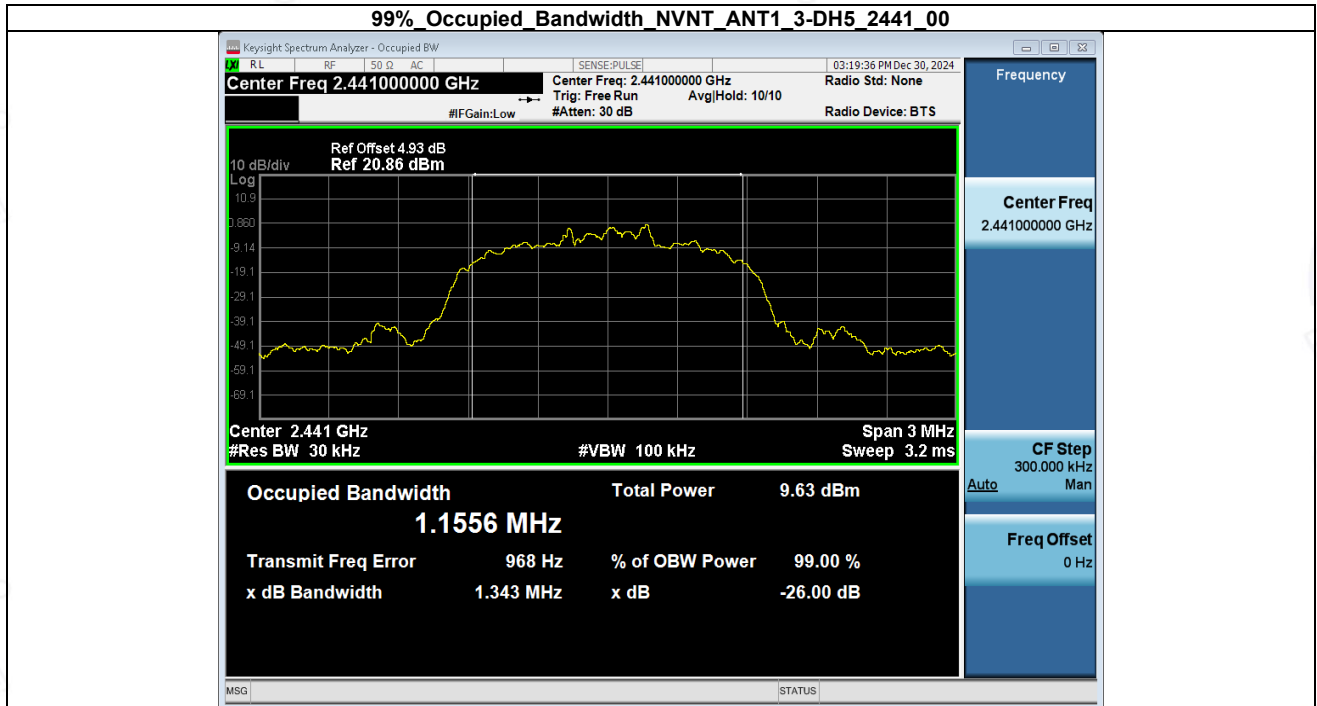


99% Occupied Bandwidth_NVNT_ANT1_3-DH5_2402_00



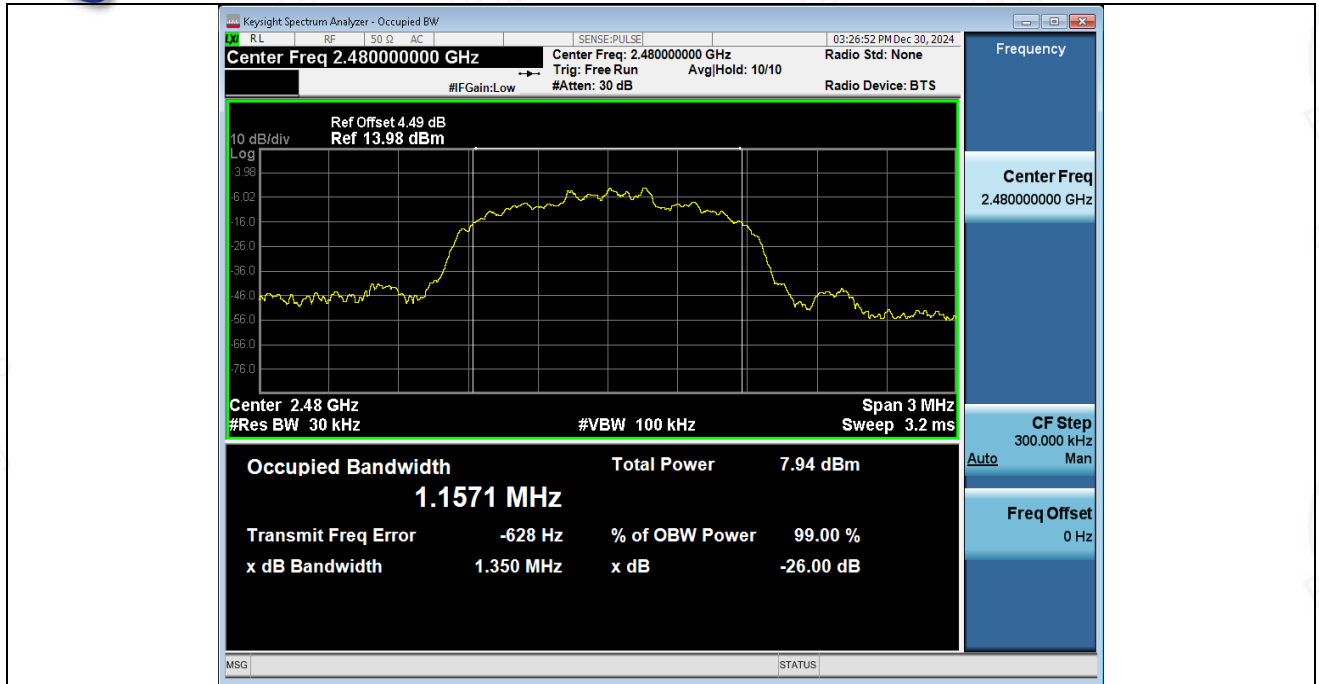


99% Occupied Bandwidth NVNT_ANT1_3-DH5_2441_00



99% Occupied Bandwidth NVNT_ANT1_3-DH5_2480_00

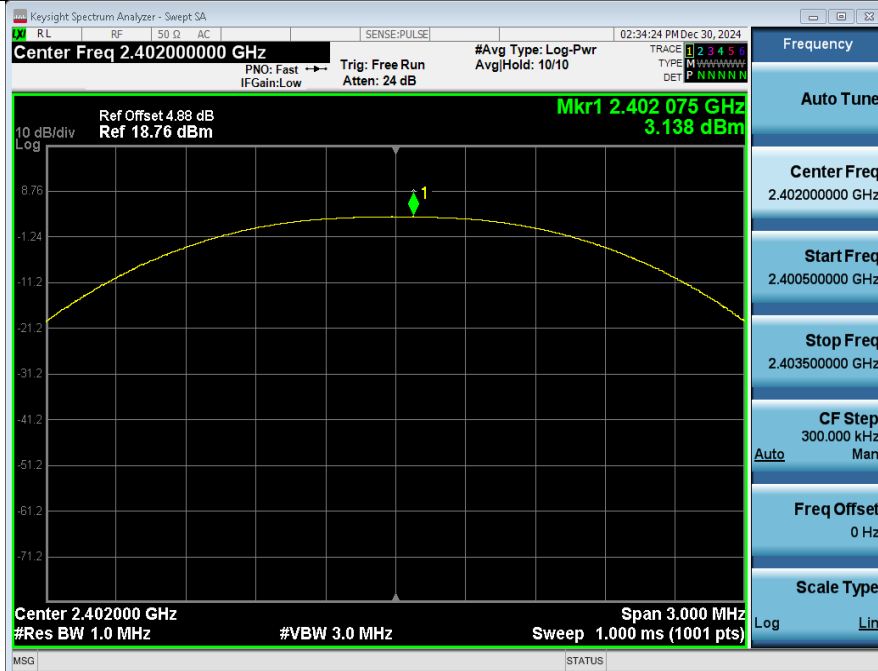




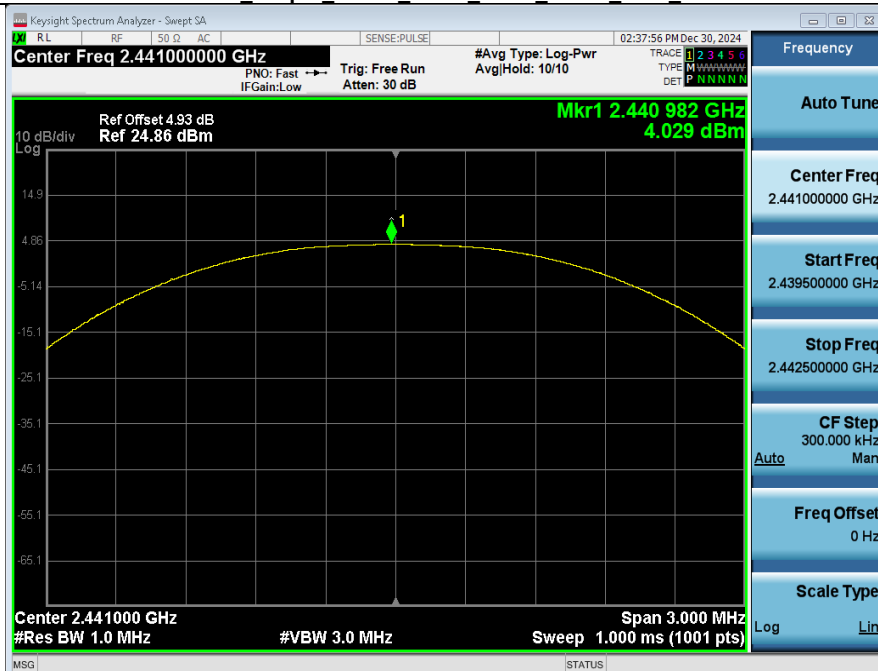
4. Peak Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Max. Conducted Power(dBm)	Max. Conducted Power(mW)	Limit(mW)	Result
NVNT	ANT1	1-DH5	2402.00	3.14	2.06	1000	Pass
NVNT	ANT1	1-DH5	2441.00	4.03	2.53	1000	Pass
NVNT	ANT1	1-DH5	2480.00	2.40	1.74	1000	Pass
NVNT	ANT1	2-DH5	2402.00	2.29	1.70	125	Pass
NVNT	ANT1	2-DH5	2441.00	3.26	2.12	125	Pass
NVNT	ANT1	2-DH5	2480.00	1.58	1.44	125	Pass
NVNT	ANT1	3-DH5	2402.00	2.31	1.70	125	Pass
NVNT	ANT1	3-DH5	2441.00	3.31	2.14	125	Pass
NVNT	ANT1	3-DH5	2480.00	1.72	1.49	125	Pass

Peak_Output_Power_NVNT_ANT1_1-DH5_2402_00

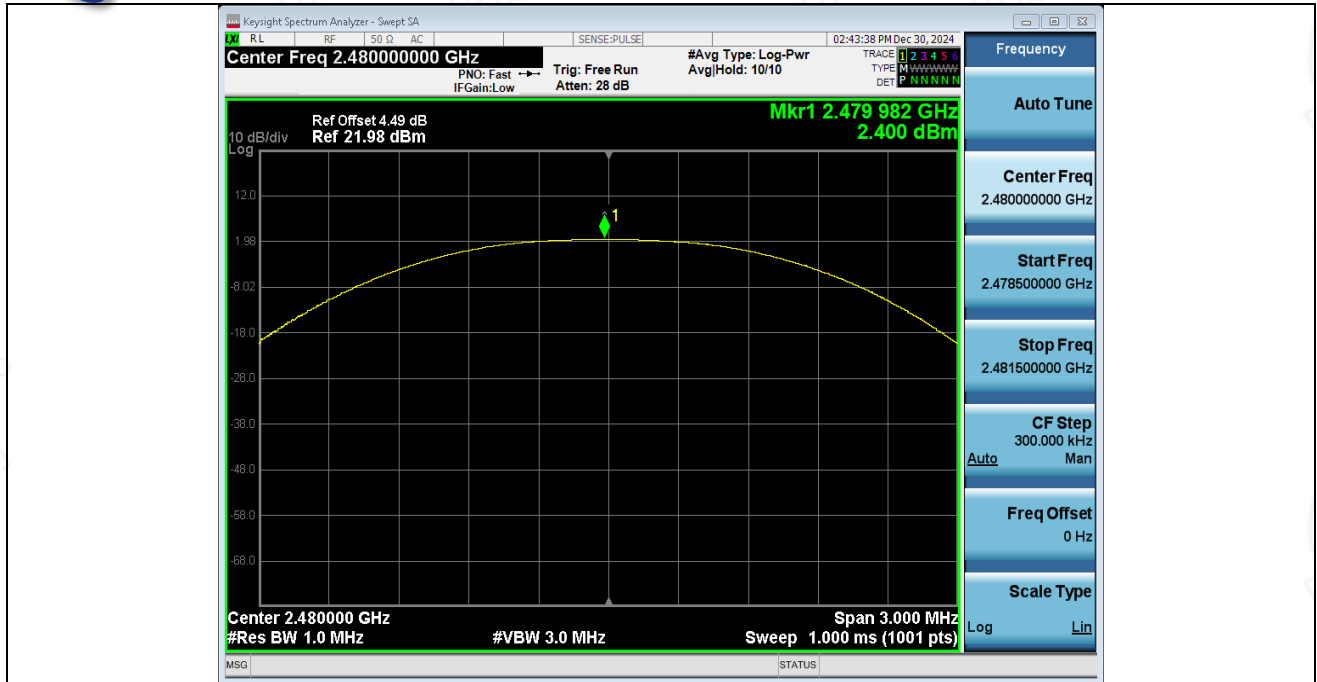


Peak_Output_Power_NVNT_ANT1_1-DH5_2441_00

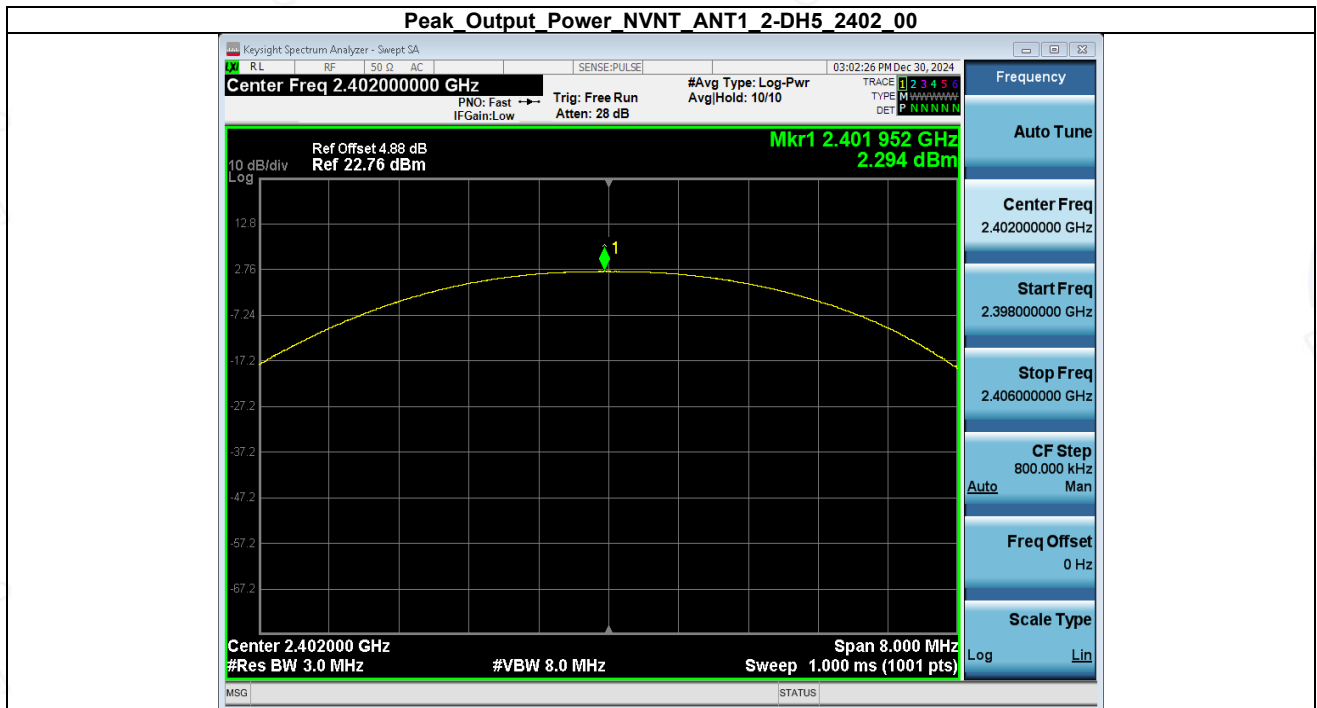


Peak_Output_Power_NVNT_ANT1_1-DH5_2480_00



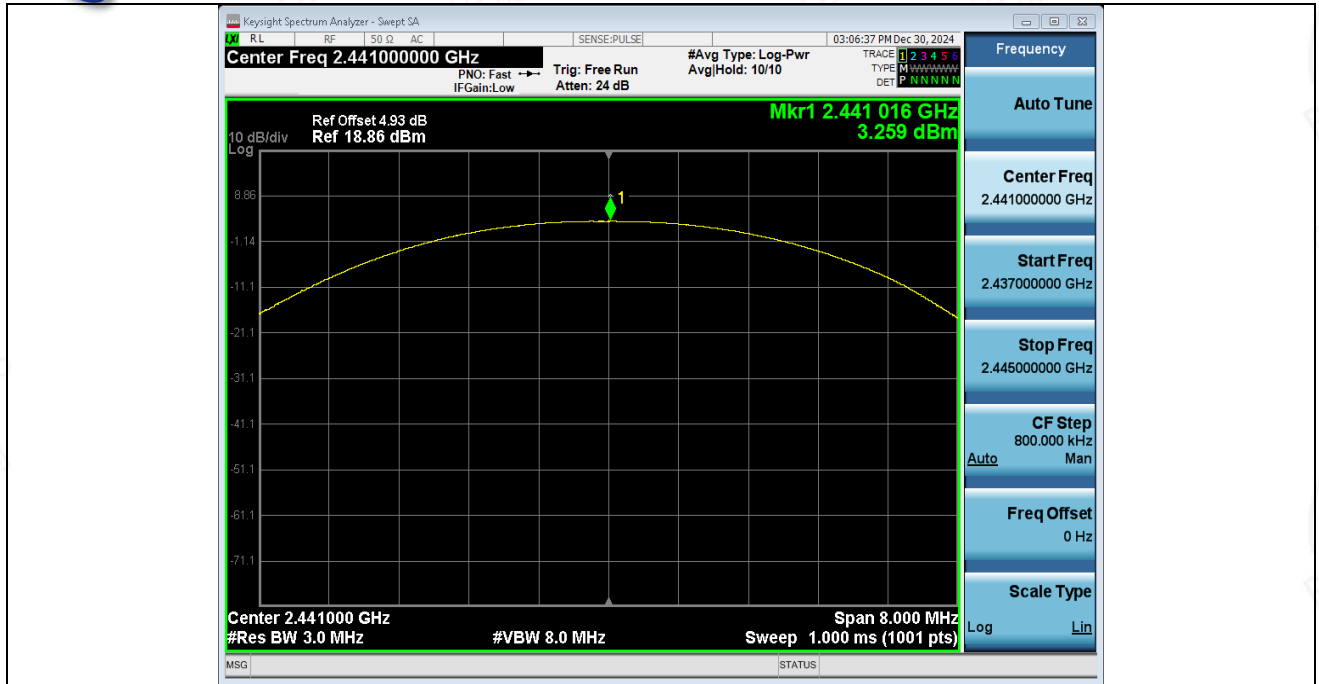


Peak_Output_Power_NVNT_ANT1_2-DH5_2402_00

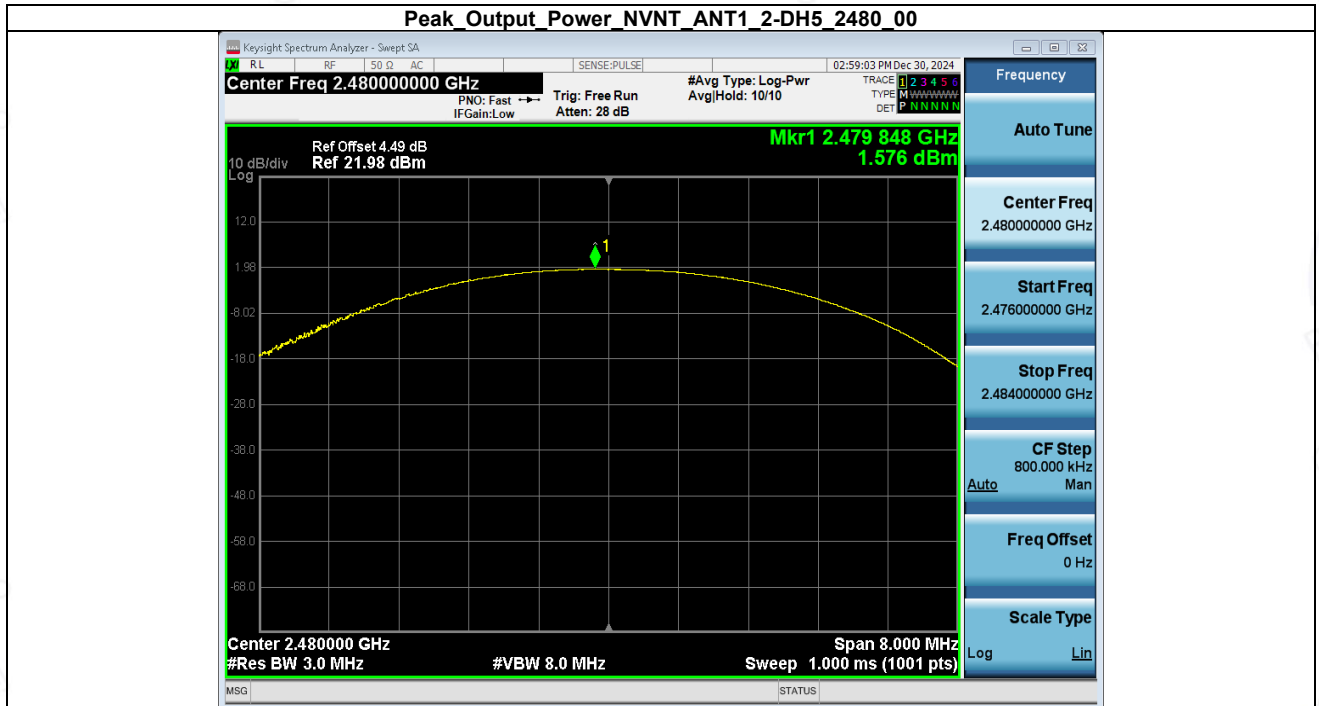


Peak_Output_Power_NVNT_ANT1_2-DH5_2441_00



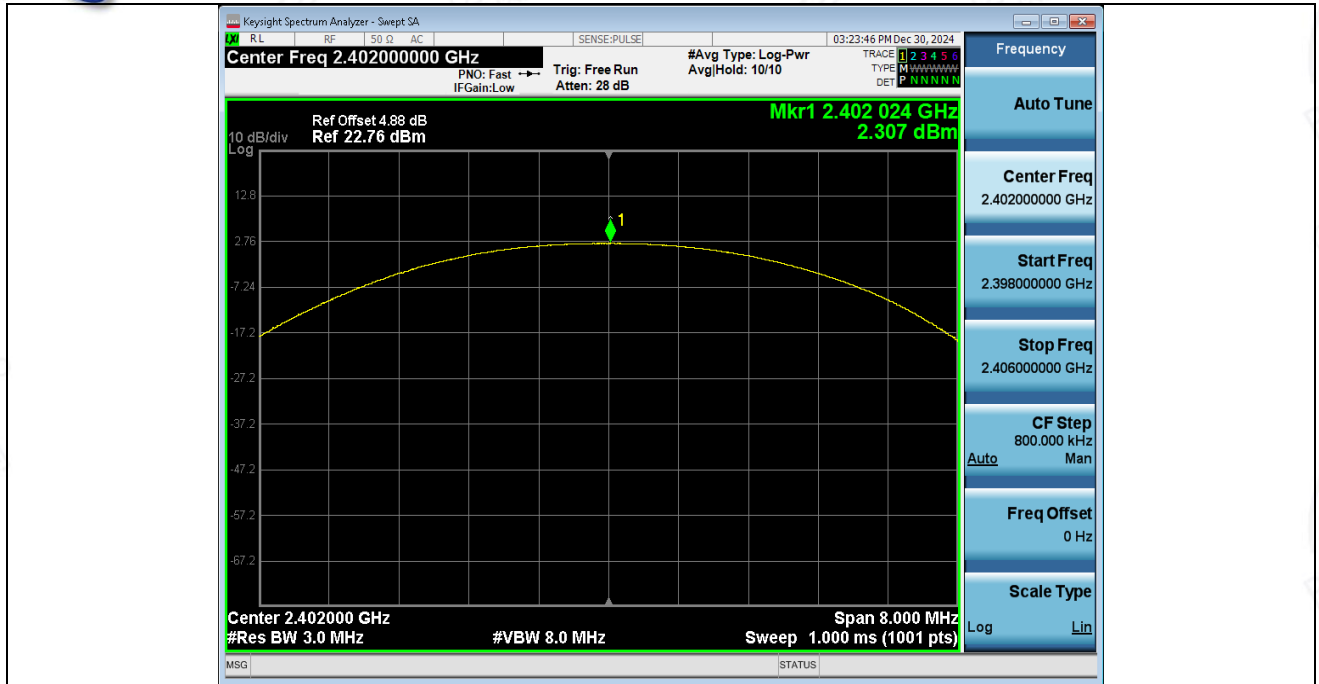


Peak_Output_Power_NVNT_ANT1_2-DH5_2480_00

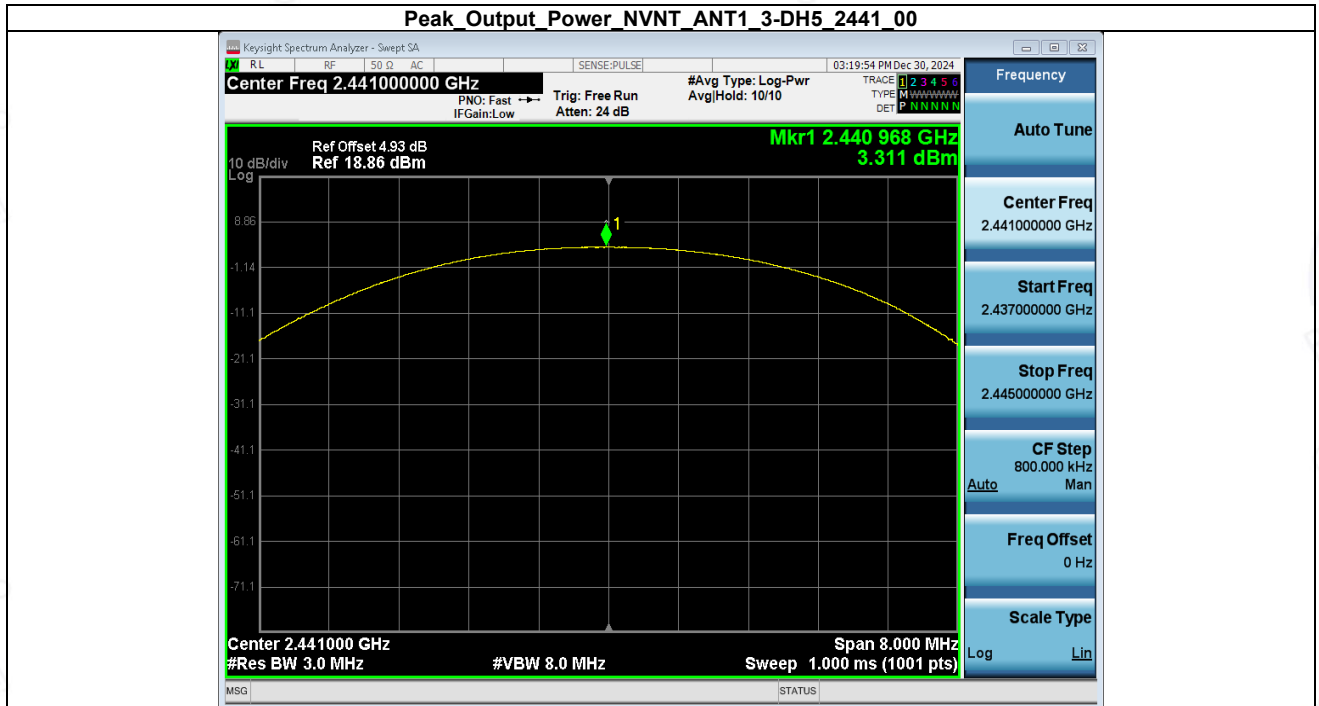


Peak_Output_Power_NVNT_ANT1_3-DH5_2402_00





Peak_Output_Power_NVNT_ANT1_3-DH5_2441_00



Peak_Output_Power_NVNT_ANT1_3-DH5_2480_00

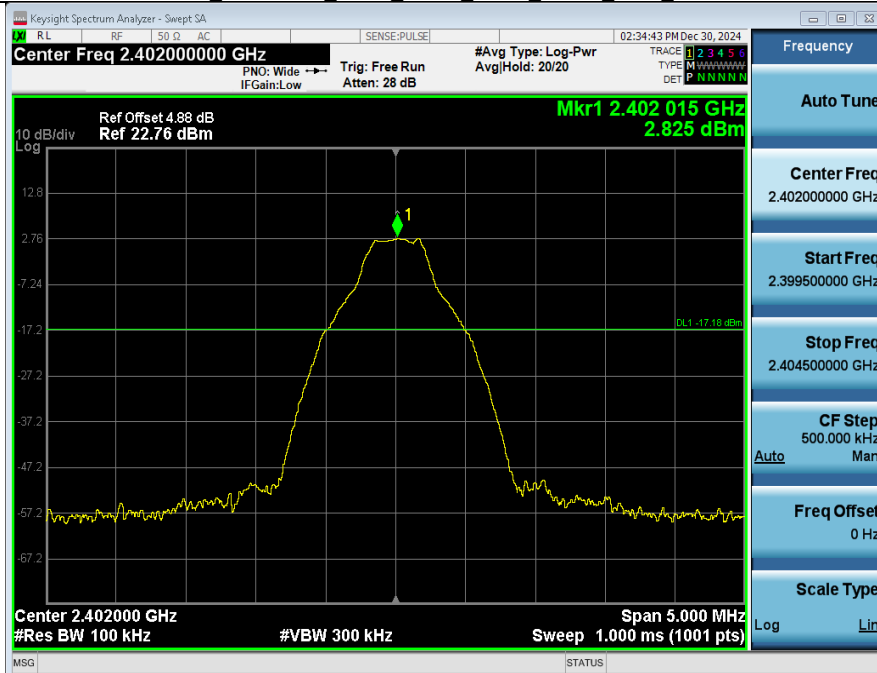




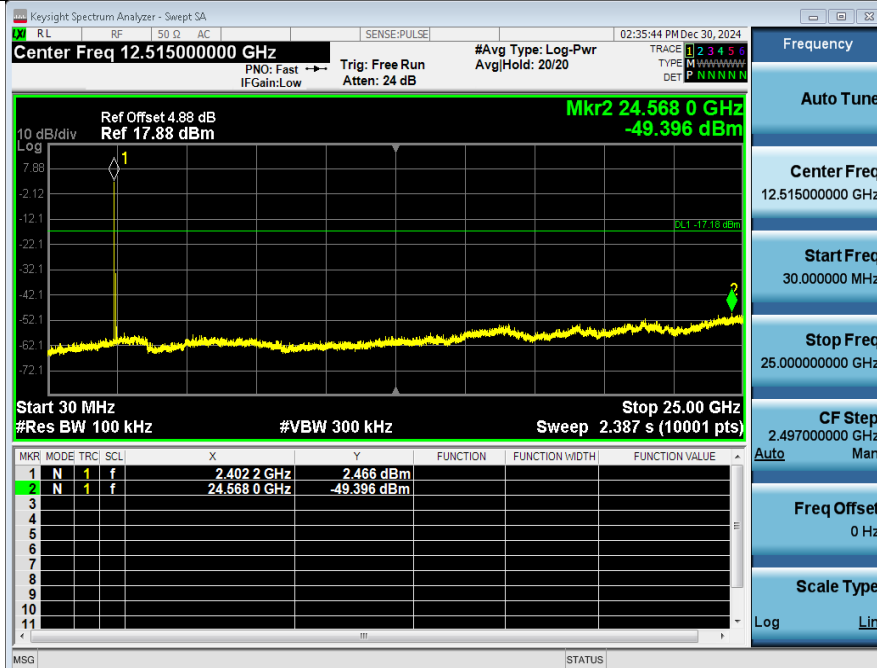
5. Spurious Emissions

Condition	Antenna	Modulation	TX Mode	Ref_level(dBm)	Spurious MAX.Value(dBm)	Limit	Result
NVNT	ANT1	1-DH5	2402.00	2.825	-49.396	-17.175	Pass
NVNT	ANT1	1-DH5	2441.00	3.718	-53.633	-16.282	Pass
NVNT	ANT1	1-DH5	2480.00	1.993	-49.392	-18.007	Pass
NVNT	ANT1	2-DH5	2402.00	1.853	-55.957	-18.147	Pass
NVNT	ANT1	2-DH5	2441.00	2.742	-49.709	-17.258	Pass
NVNT	ANT1	2-DH5	2480.00	1.157	-56.323	-18.843	Pass
NVNT	ANT1	3-DH5	2402.00	2.115	-55.473	-17.885	Pass
NVNT	ANT1	3-DH5	2441.00	3.079	-54.090	-16.921	Pass
NVNT	ANT1	3-DH5	2480.00	1.363	-56.282	-18.637	Pass

1 Reference Level NVNT ANT1 1-DH5 2402_00

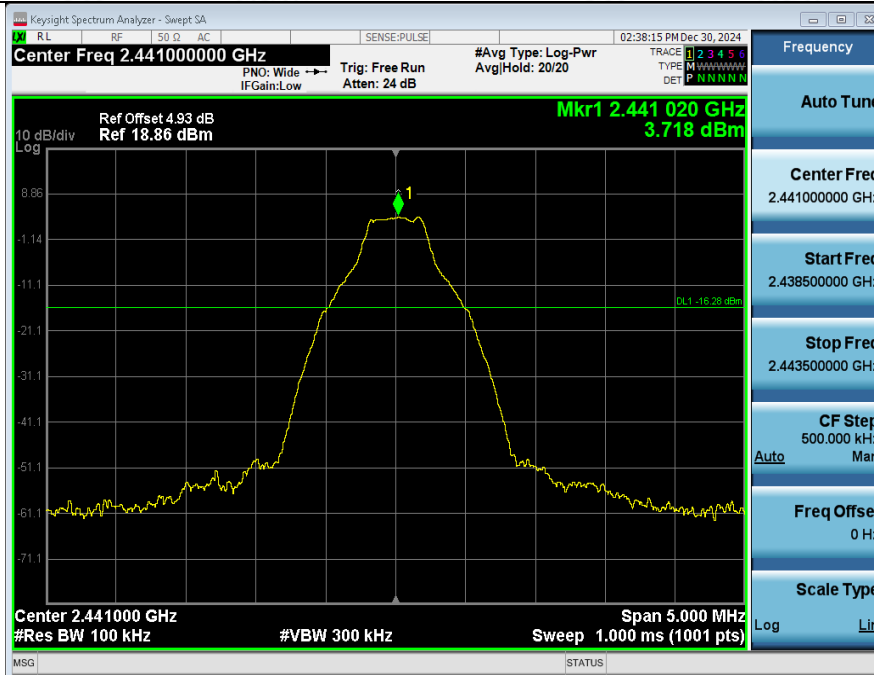


2 Spurious Emissions NVNT ANT1 1-DH5 2402_00

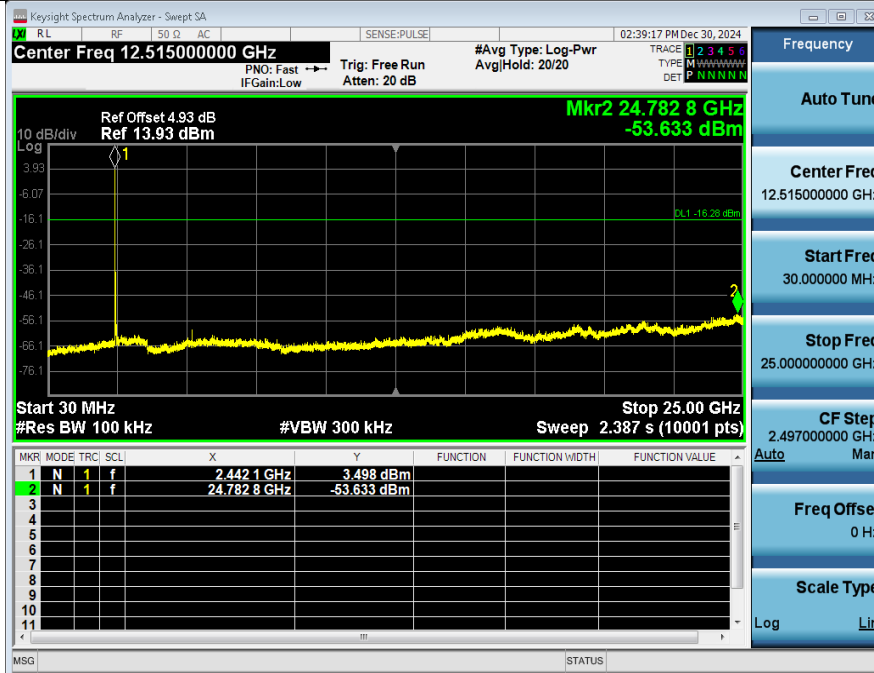


1 Reference Level NVNT ANT1 1-DH5 2441_00



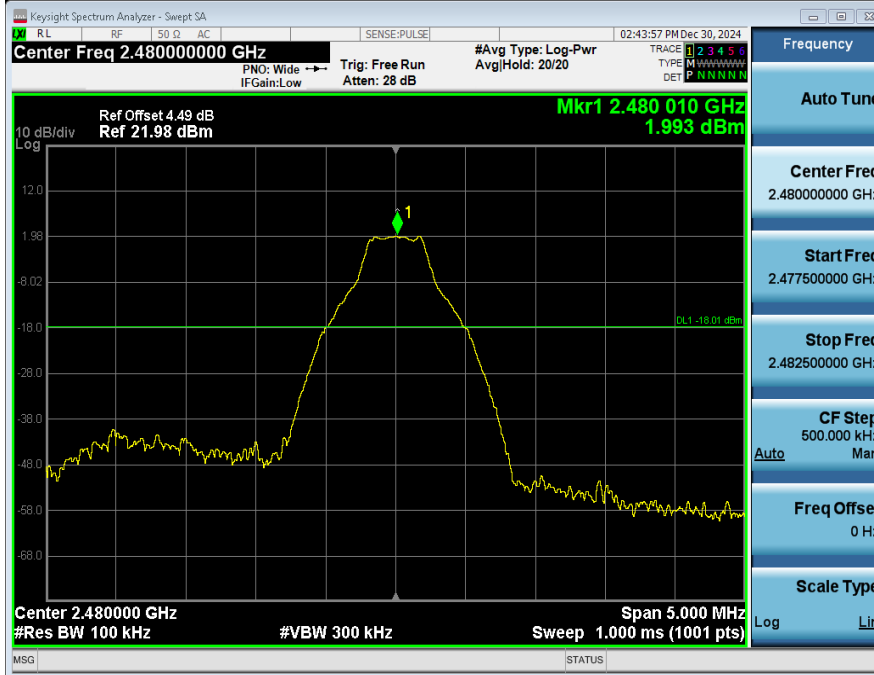


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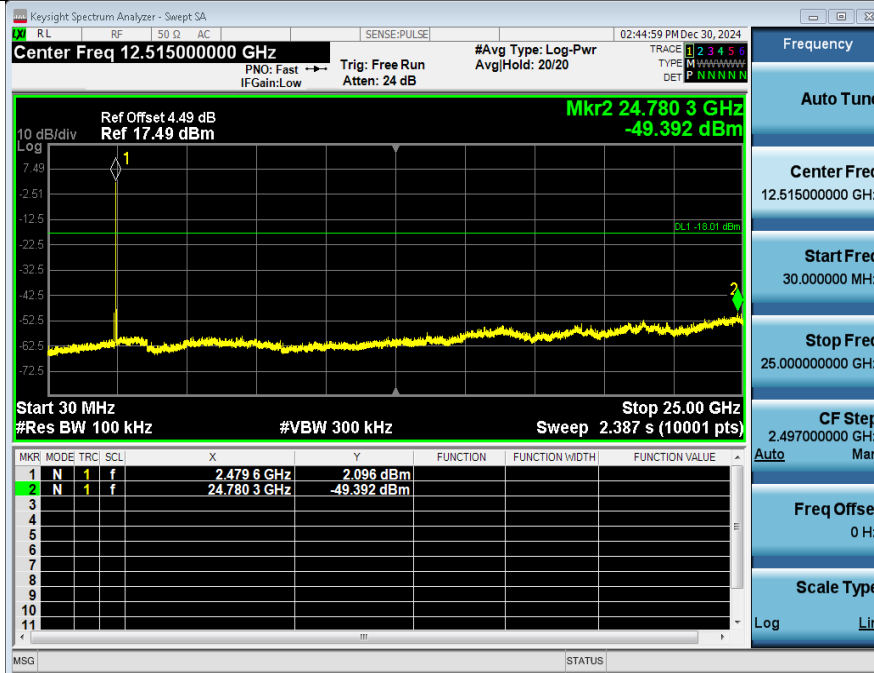


1_Reference_Level_NVNT_ANT1_1-DH5_2480_00





2_Spurious_Emissions_NVNT_ANT1_1-DH5_2480_00

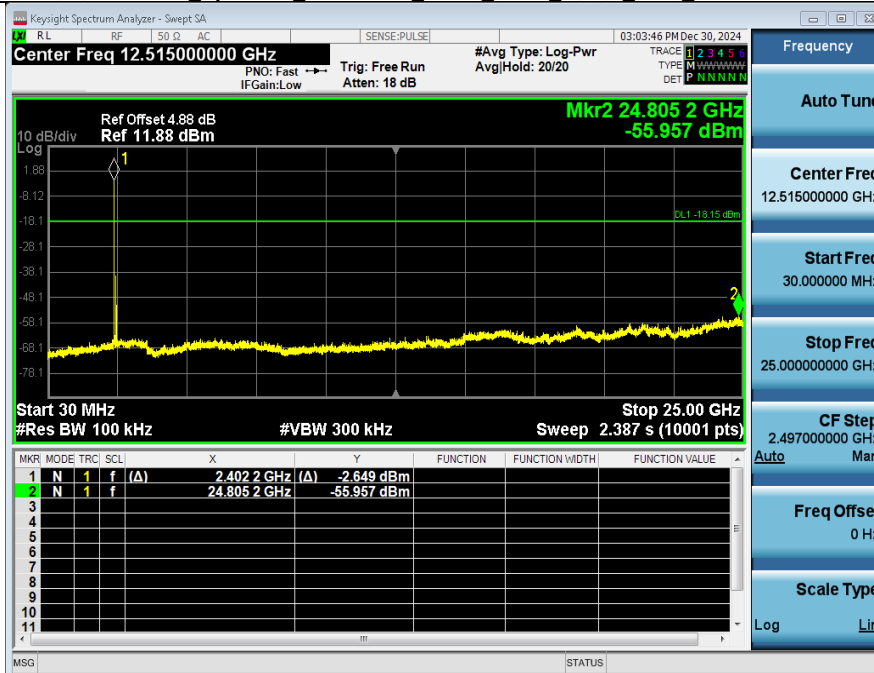


1_Reference_Level_NVNT_ANT1_2-DH5_2402_00





2_Spurious_Emissions_NVNT_ANT1_2-DH5_2402_00

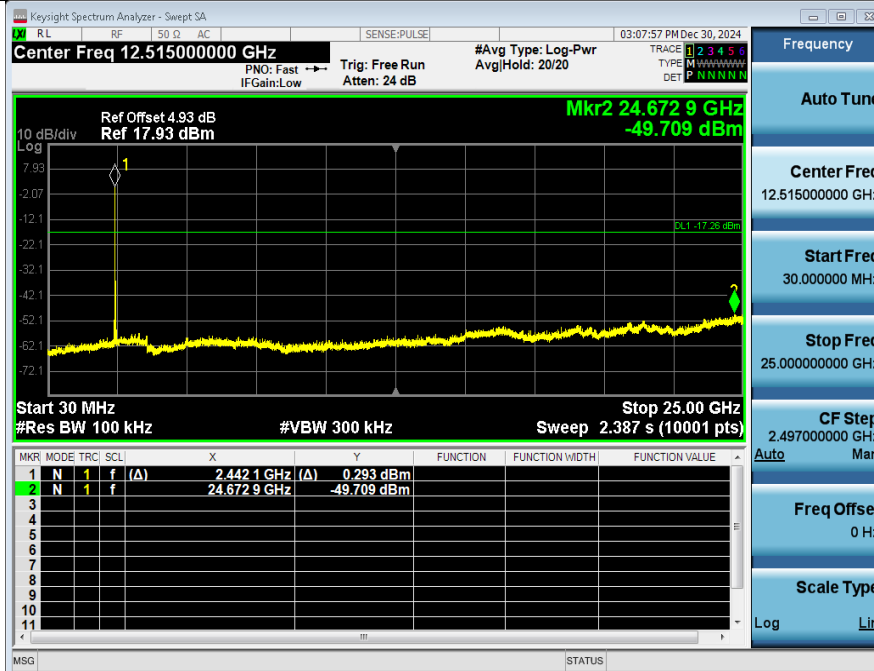


1_Reference_Level_NVNT_ANT1_2-DH5_2441_00





2_Spurious_Emissions_NVNT_ANT1_2-DH5_2441_00

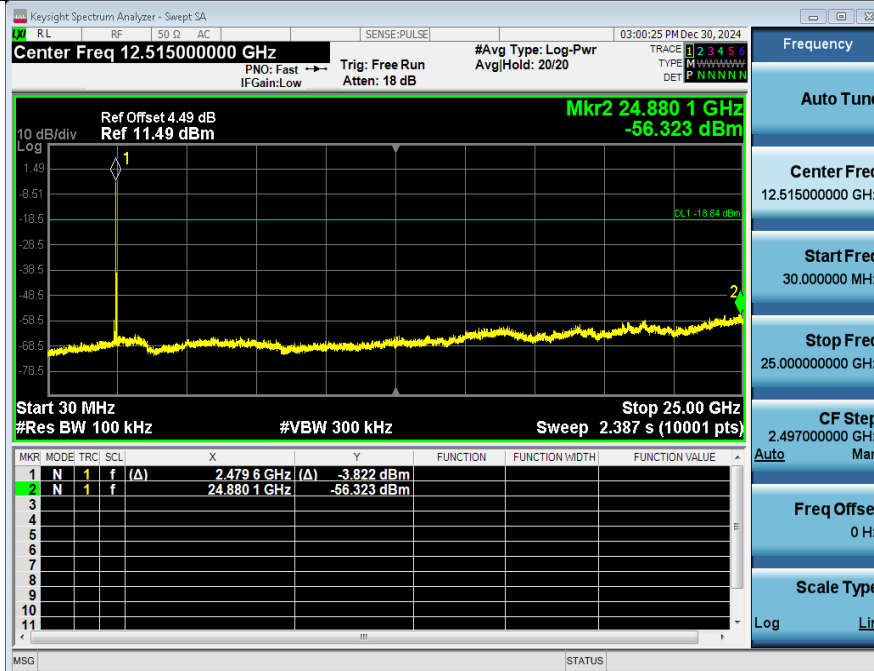


1_Reference_Level_NVNT_ANT1_2-DH5_2480_00





2_Spurious_Emissions_NVNT_ANT1_2-DH5_2480_00

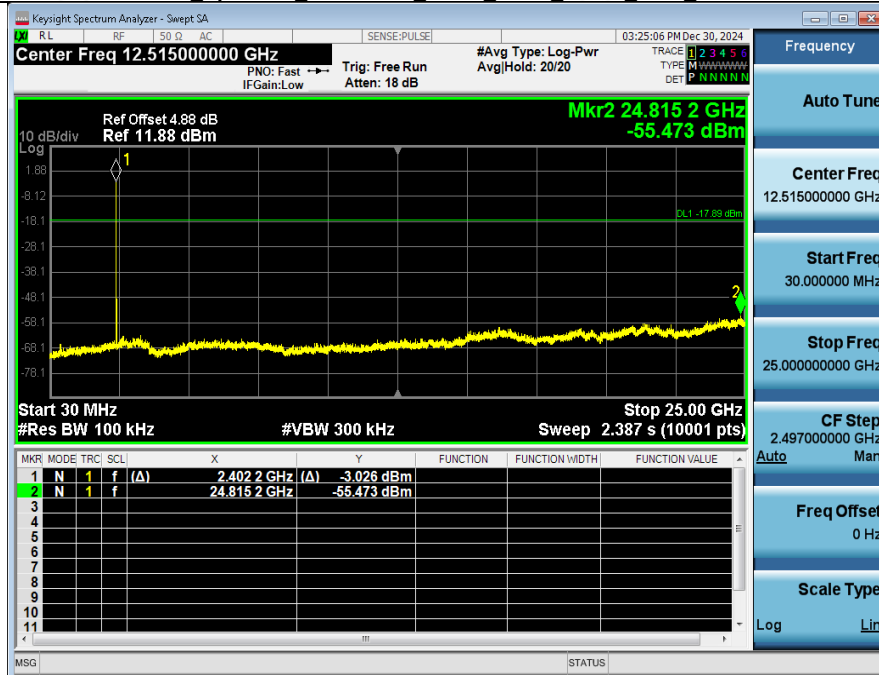


1_Reference_Level_NVNT_ANT1_3-DH5_2402_00





2_Spurious_Emissions_NVNT_ANT1_3-DH5_2402_00

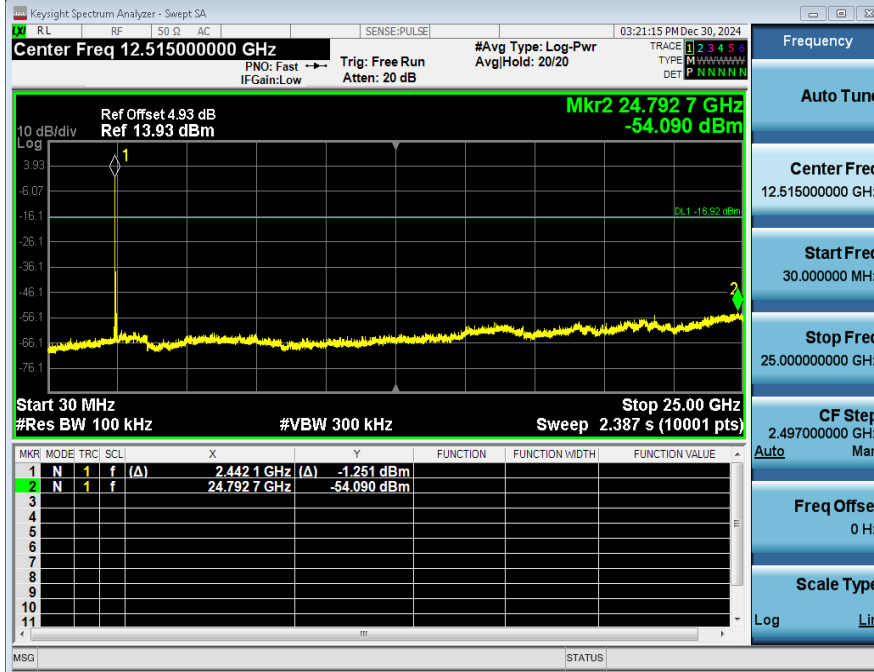


1_Reference_Level_NVNT_ANT1_3-DH5_2441_00





2_Spurious_Emissions_NVNT_ANT1_3-DH5_2441_00

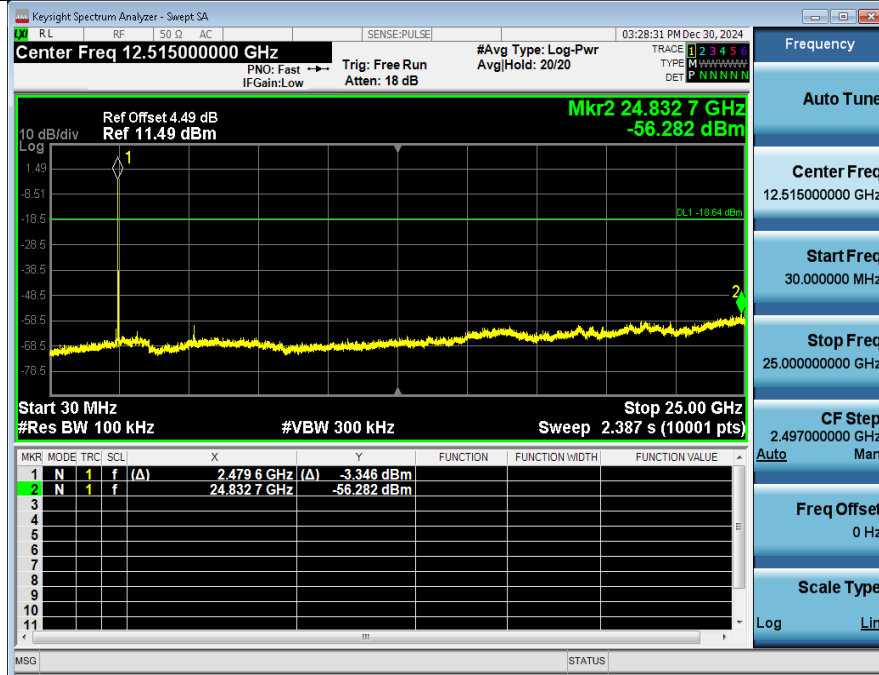


1_Reference_Level_NVNT_ANT1_3-DH5_2480_00





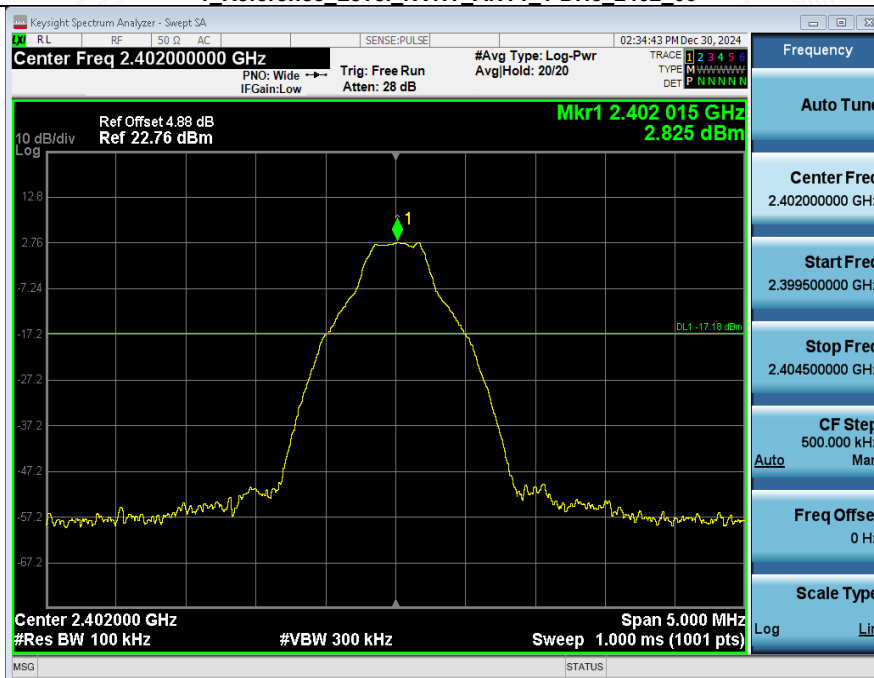
2_Spurious_Emissions_NVNT_ANT1_3-DH5_2480_00



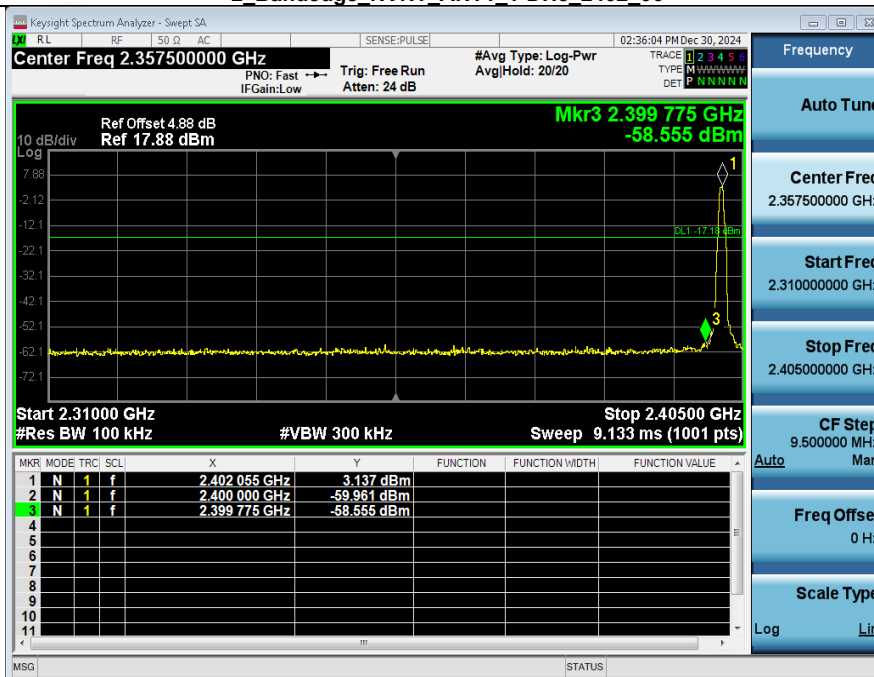
6. Bandedge

Condition	Antenna	Modulation	TX Mode	Ref_level(dBm)	Bandedge MAX.Value	Limit	Result
NVNT	ANT1	1-DH5	2402.00	2.825	-58.555	-17.175	Pass
NVNT	ANT1	1-DH5	Hopping_LCH	4.402	-58.155	-15.598	Pass
NVNT	ANT1	1-DH5	2480.00	1.993	-58.982	-18.007	Pass
NVNT	ANT1	1-DH5	Hopping_HCH	3.836	-54.951	-16.164	Pass
NVNT	ANT1	2-DH5	2402.00	1.853	-59.400	-18.147	Pass
NVNT	ANT1	2-DH5	Hopping_LCH	3.214	-61.495	-16.786	Pass
NVNT	ANT1	2-DH5	2480.00	1.157	-60.165	-18.843	Pass
NVNT	ANT1	2-DH5	Hopping_HCH	2.976	-60.092	-17.024	Pass
NVNT	ANT1	3-DH5	2402.00	2.115	-58.141	-17.885	Pass
NVNT	ANT1	3-DH5	Hopping_LCH	3.511	-60.891	-16.489	Pass
NVNT	ANT1	3-DH5	2480.00	1.363	-58.486	-18.637	Pass
NVNT	ANT1	3-DH5	Hopping_HCH	2.984	-56.427	-17.016	Pass

1_Reference_Level_NVNT_ANT1_1-DH5_2402_00

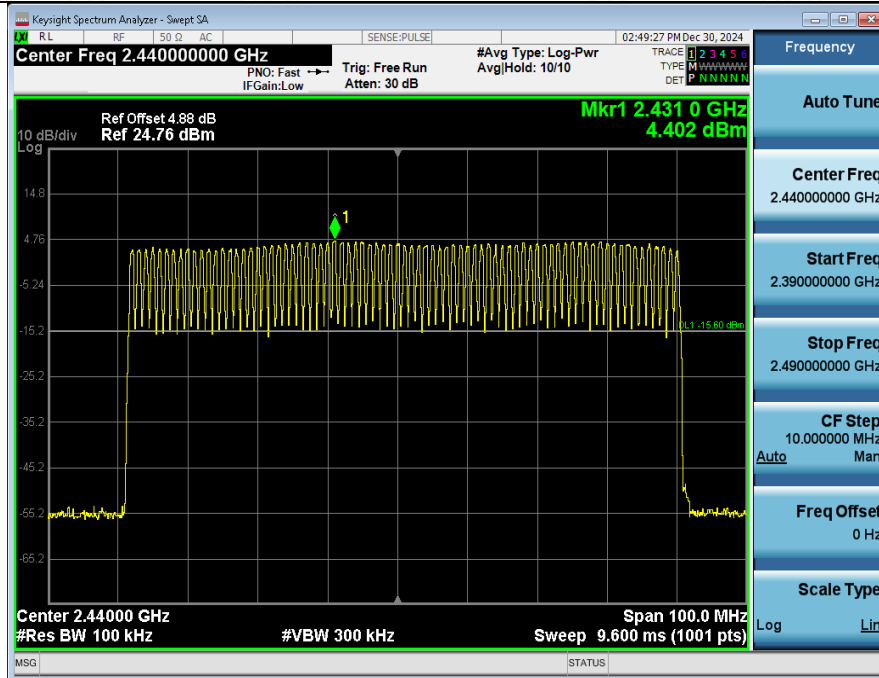


2_Bandedge_NVNT_ANT1_1-DH5_2402_00

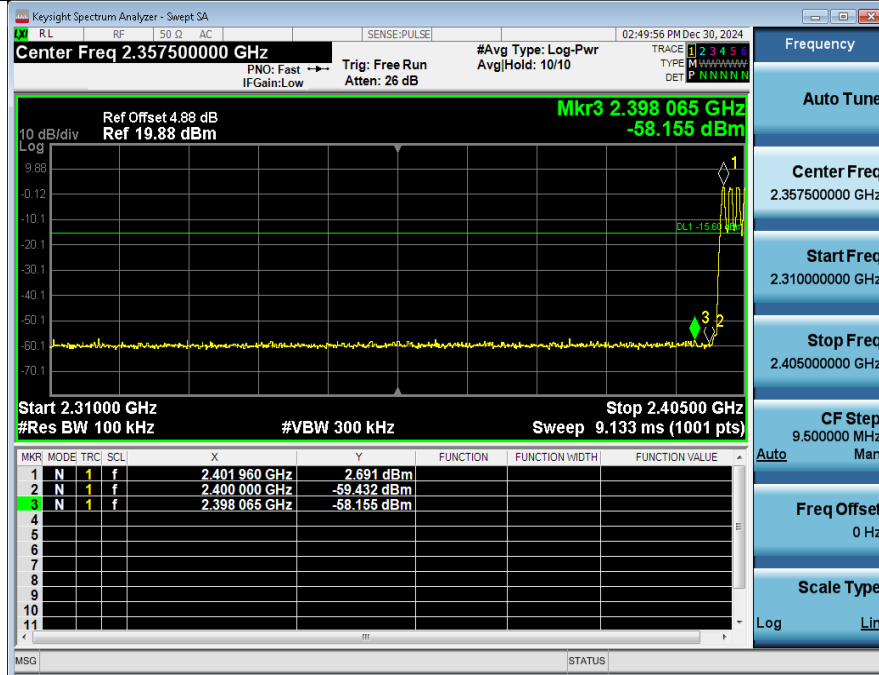


1_Reference_Level_Hopping_NVNT_ANT1_1-DH5_Hopping



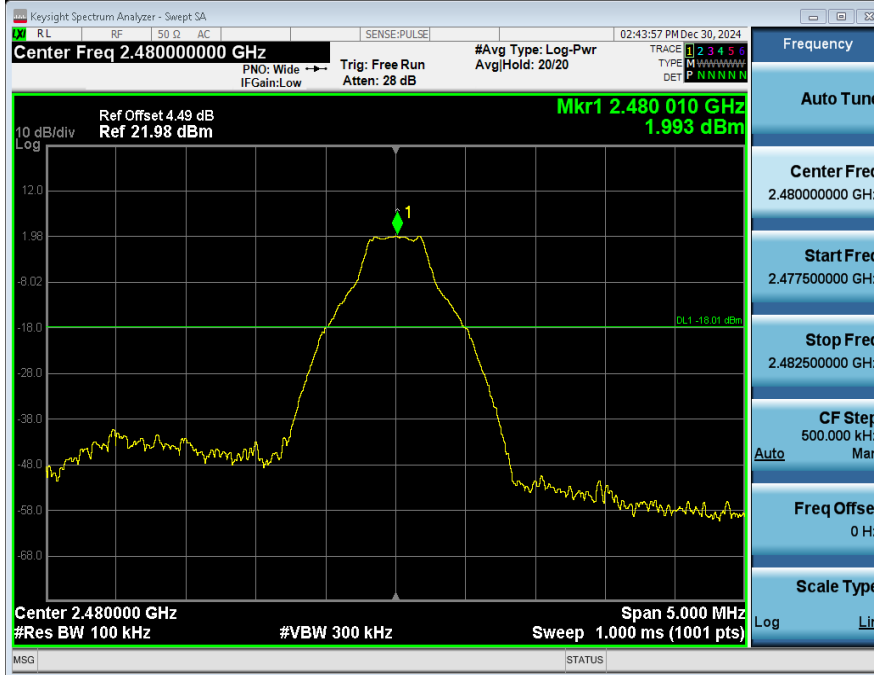


2_Band_Edge_(Hopping)_NVNT_ANT1_1-DH5_Hopping

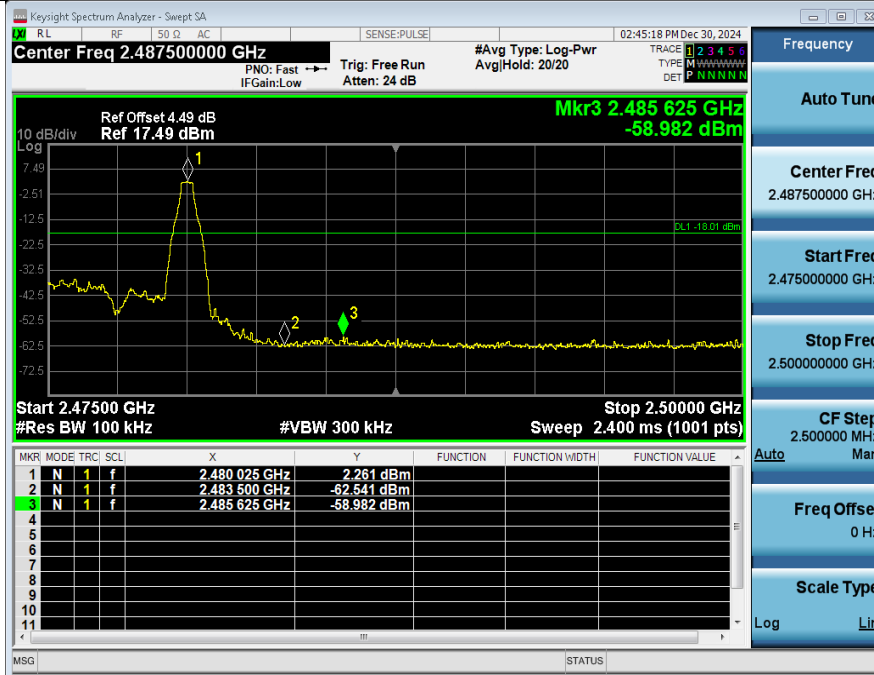


1_Reference_Level_NVNT_ANT1_1-DH5_2480_00



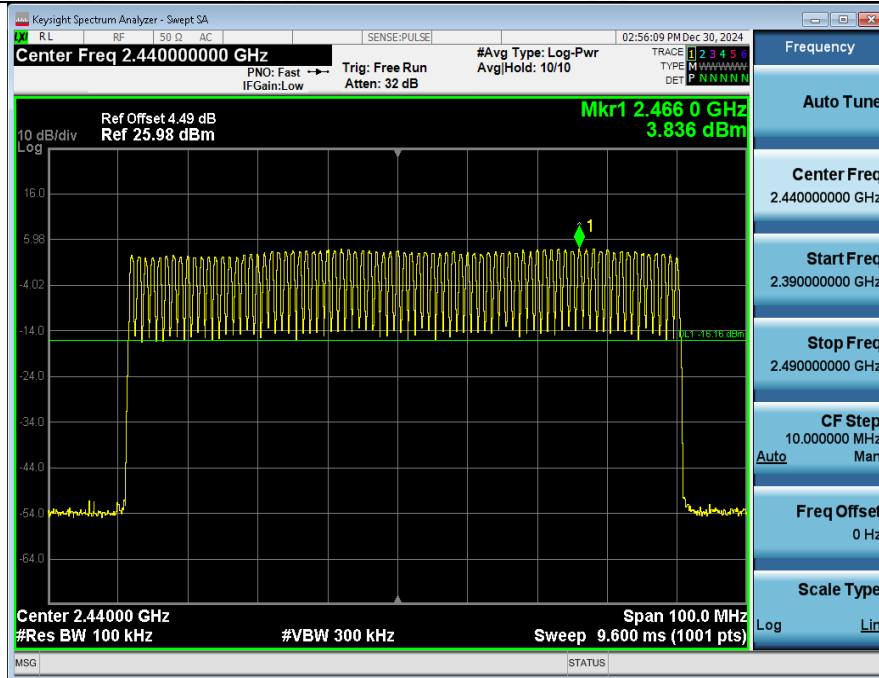


2_Bandedge_NVNT_ANT1_1-DH5_2480_00

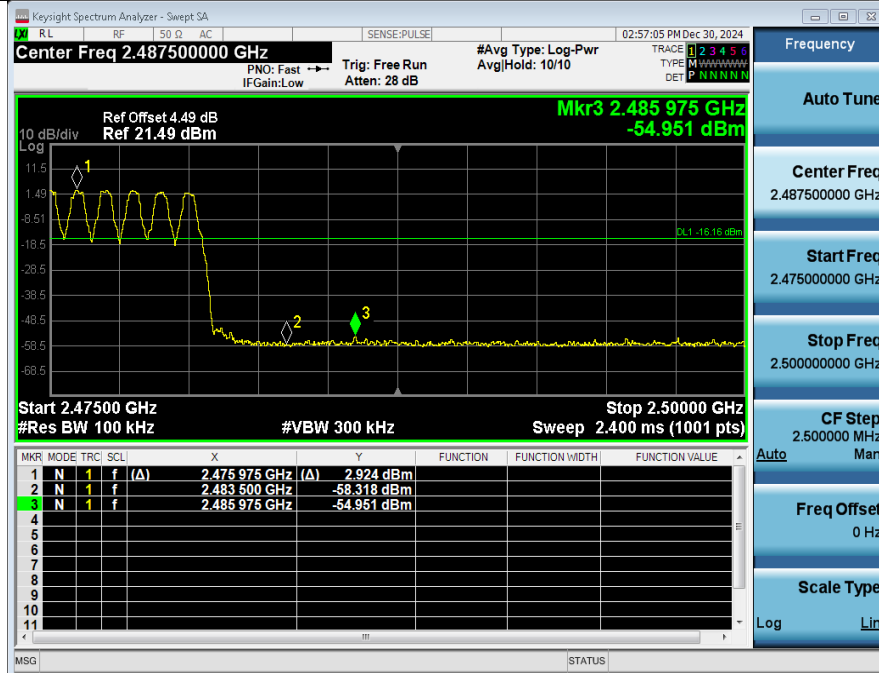


1_Reference_Level_Hopping_NVNT_ANT1_1-DH5_Hopping





2_Band_Edge_(Hopping)_NVNT_ANT1_1-DH5_Hopping

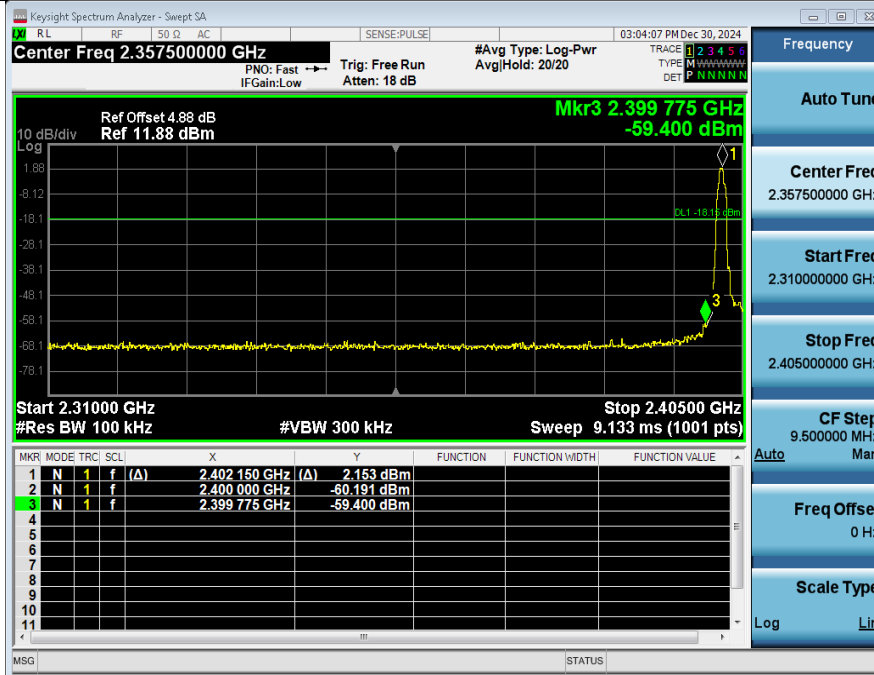


1_Reference_Level_NVNT_ANT1_2-DH5_2402_00



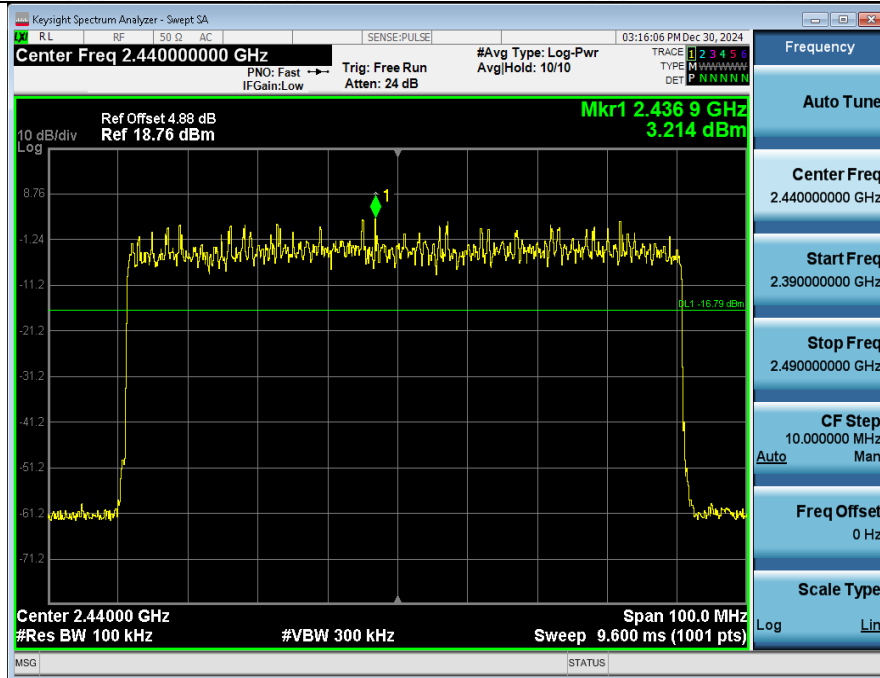


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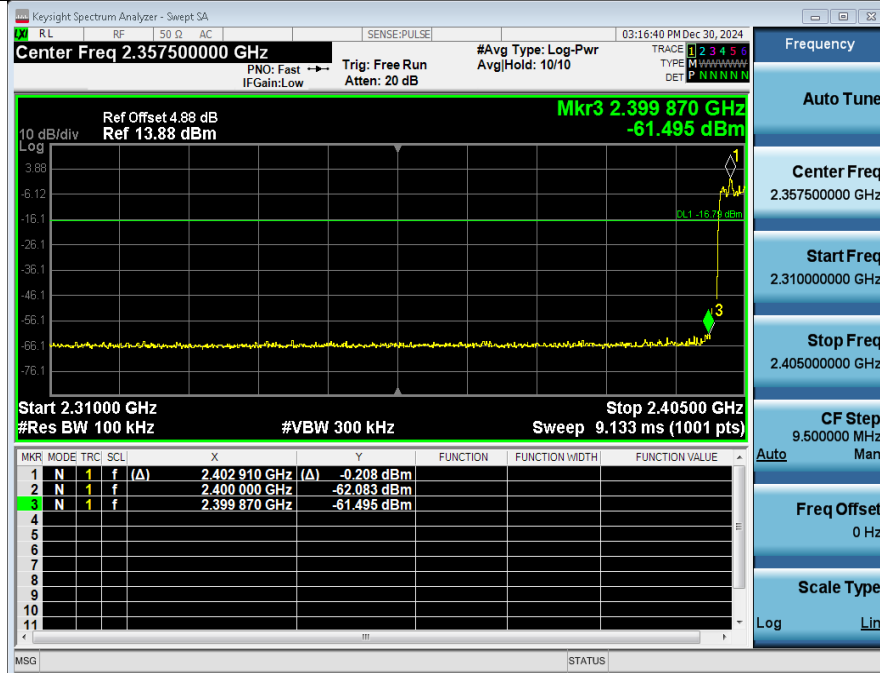


1_Reference_Level_Hopping_NVNT_ANT1_2-DH5_Hopping





2_Band_Edge_(Hopping)_NVNT_ANT1_2-DH5_Hopping

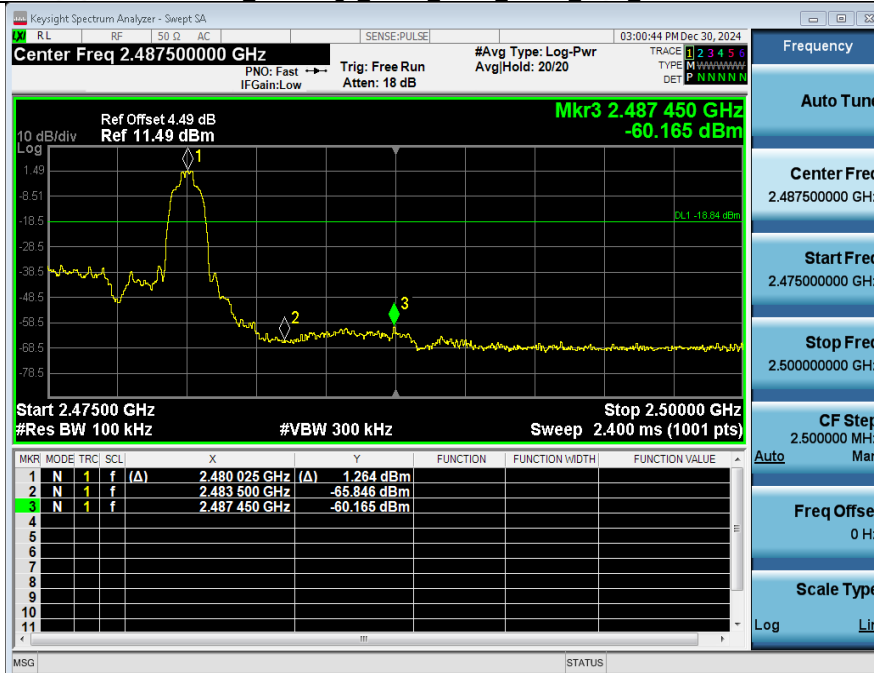


1_Reference_Level_NVNT_ANT1_2-DH5_2480_00



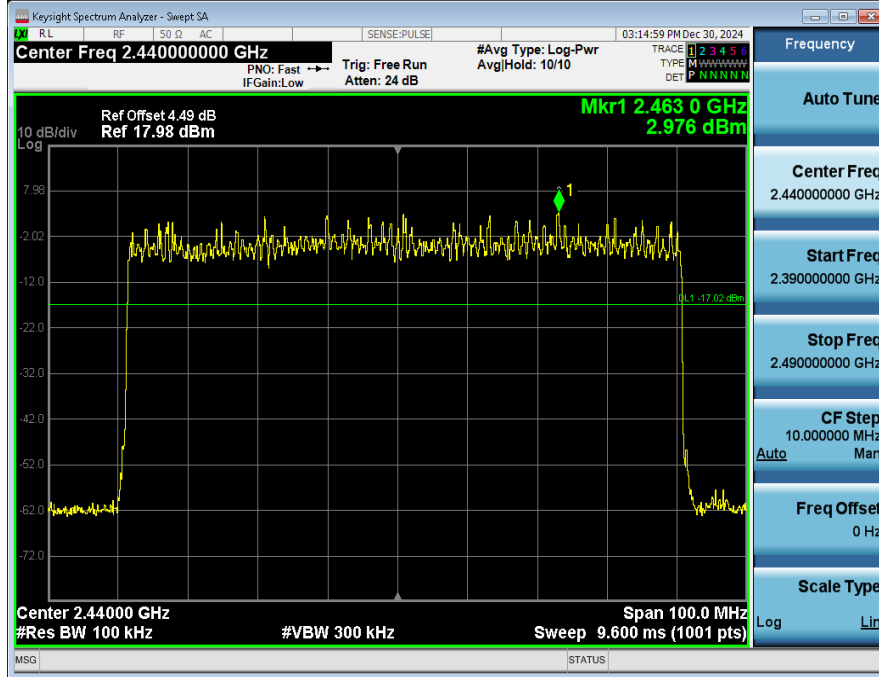


2_Bandedge_NVNT_ANT1_2-DH5_2480_00



1_Reference_Level_Hopping_NVNT_ANT1_2-DH5_Hopping





2_Band_Edge_(Hopping)_NVNT_ANT1_2-DH5_Hopping

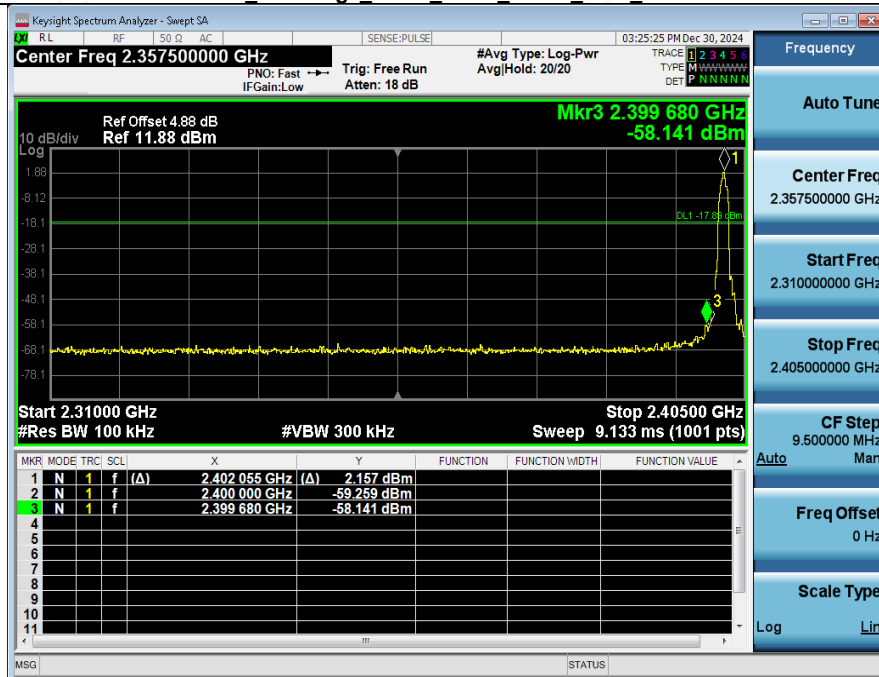


1_Reference_Level_NVNT_ANT1_3-DH5_2402_00



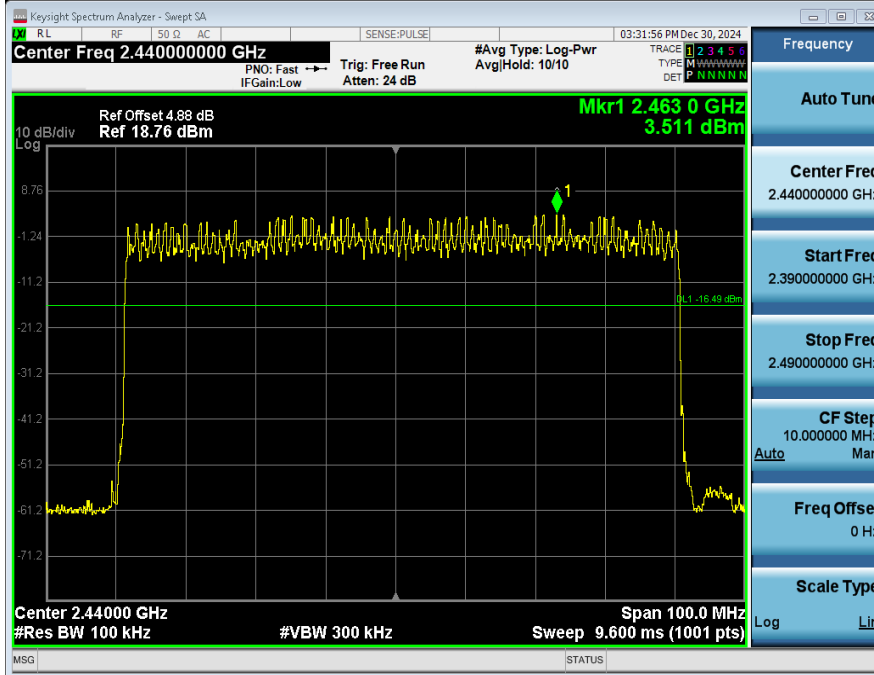


2_Bandedge_NVNT_ANT1_3-DH5_2402_00

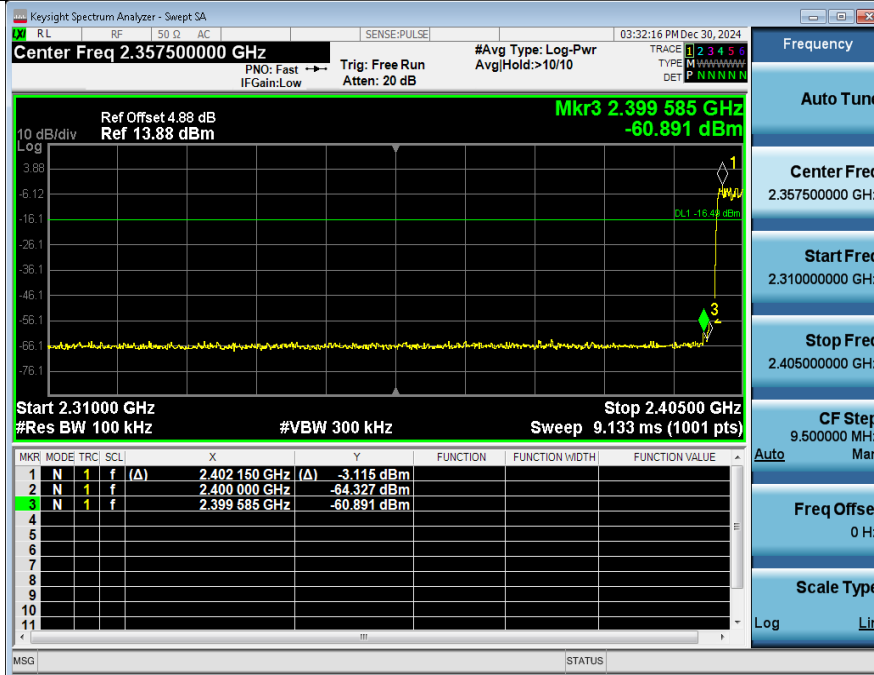


1_Reference_Level_Hopping_NVNT_ANT1_3-DH5_Hopping





2_Band_Edge_(Hopping)_NVNT_ANT1_3-DH5_Hopping



1_Reference_Level_NVNT_ANT1_3-DH5_2480_00



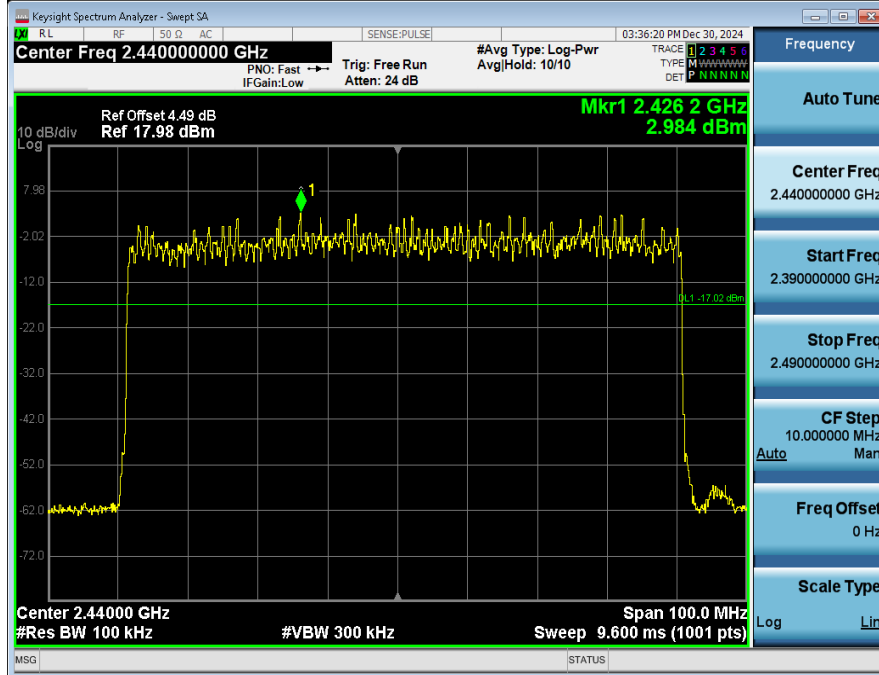


2_Bandedge_NVNT_ANT1_3-DH5_2480_00

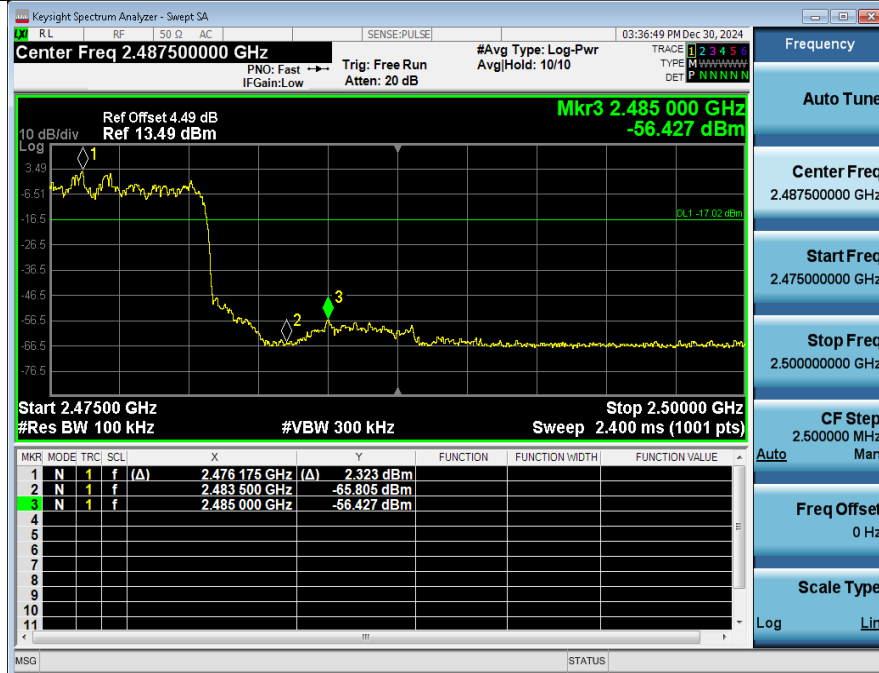


1_Reference_Level_Hopping_NVNT_ANT1_3-DH5_Hopping





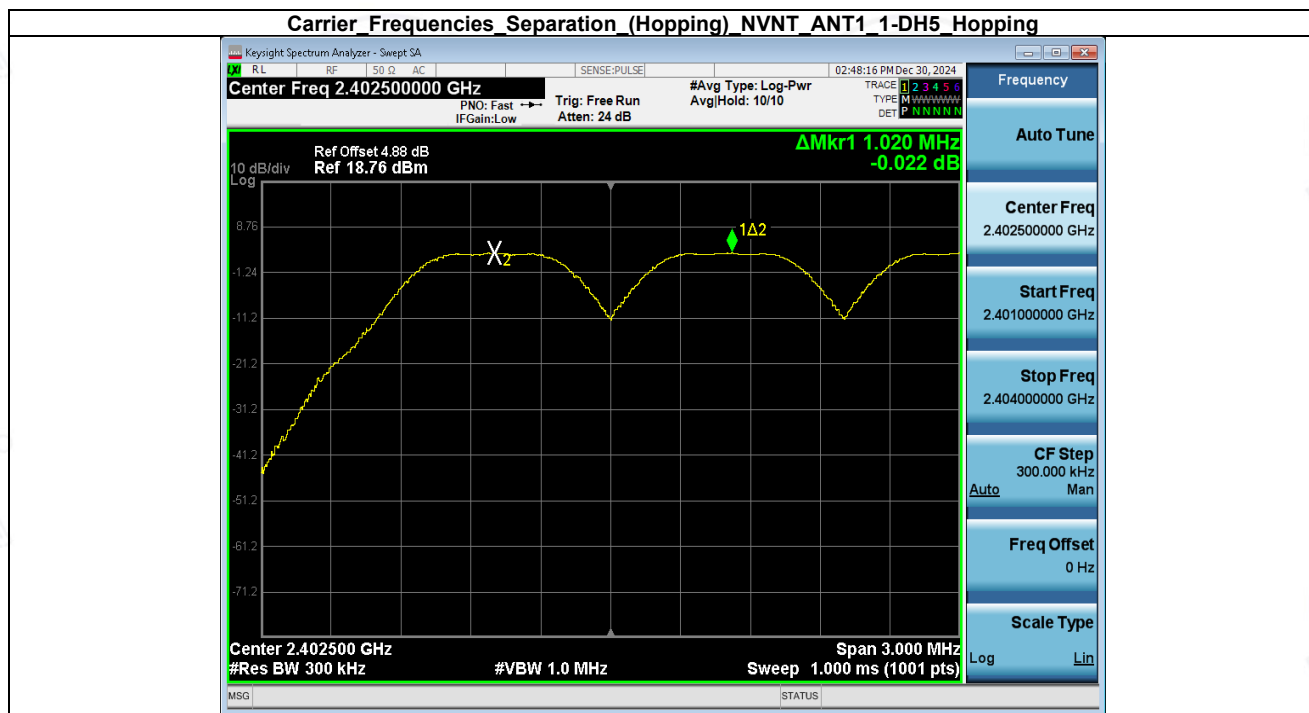
2_Band_Edge_(Hopping)_NVNT_ANT1_3-DH5_Hopping



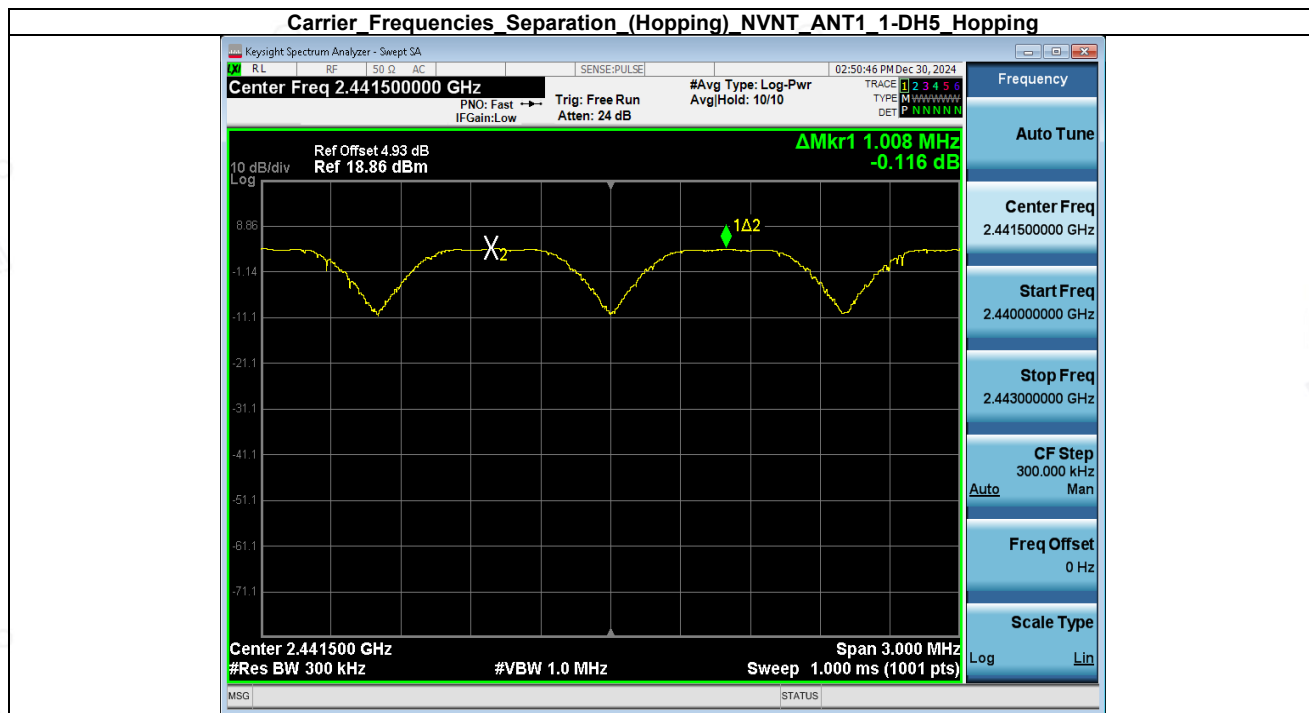
7. Carrier Frequencies Separation (Hopping)

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	2402.002	2403.022	1.02	0.848	Pass
NVNT	ANT1	1-DH5	2441.00	2440.987	2441.995	1.01	0.860	Pass
NVNT	ANT1	1-DH5	2480.00	2478.981	2480.019	1.04	0.859	Pass
NVNT	ANT1	2-DH5	2402.00	2401.831	2402.818	0.99	0.846	Pass
NVNT	ANT1	2-DH5	2441.00	2441.119	2442.187	1.07	0.849	Pass
NVNT	ANT1	2-DH5	2480.00	2478.855	2479.842	0.99	0.849	Pass
NVNT	ANT1	3-DH5	2402.00	2402.185	2403.172	0.99	0.848	Pass
NVNT	ANT1	3-DH5	2441.00	2440.855	2442.133	1.28	0.845	Pass
NVNT	ANT1	3-DH5	2480.00	2478.822	2480.151	1.33	0.848	Pass

Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH5_Hopping

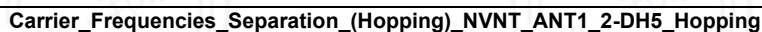
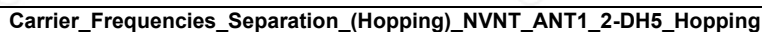


Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH5_Hopping



Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH5_Hopping







Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_2-DH5_Hopping

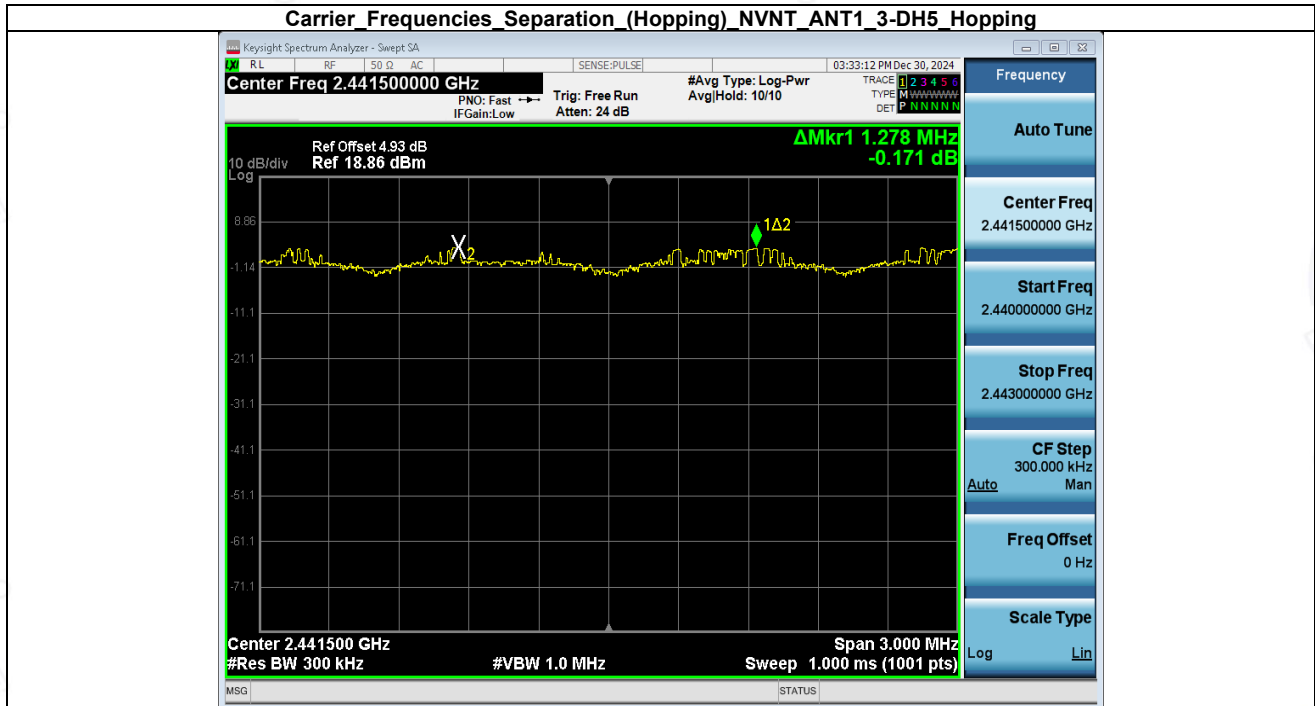


Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_3-DH5_Hopping





Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_3-DH5_Hopping



Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_3-DH5_Hopping

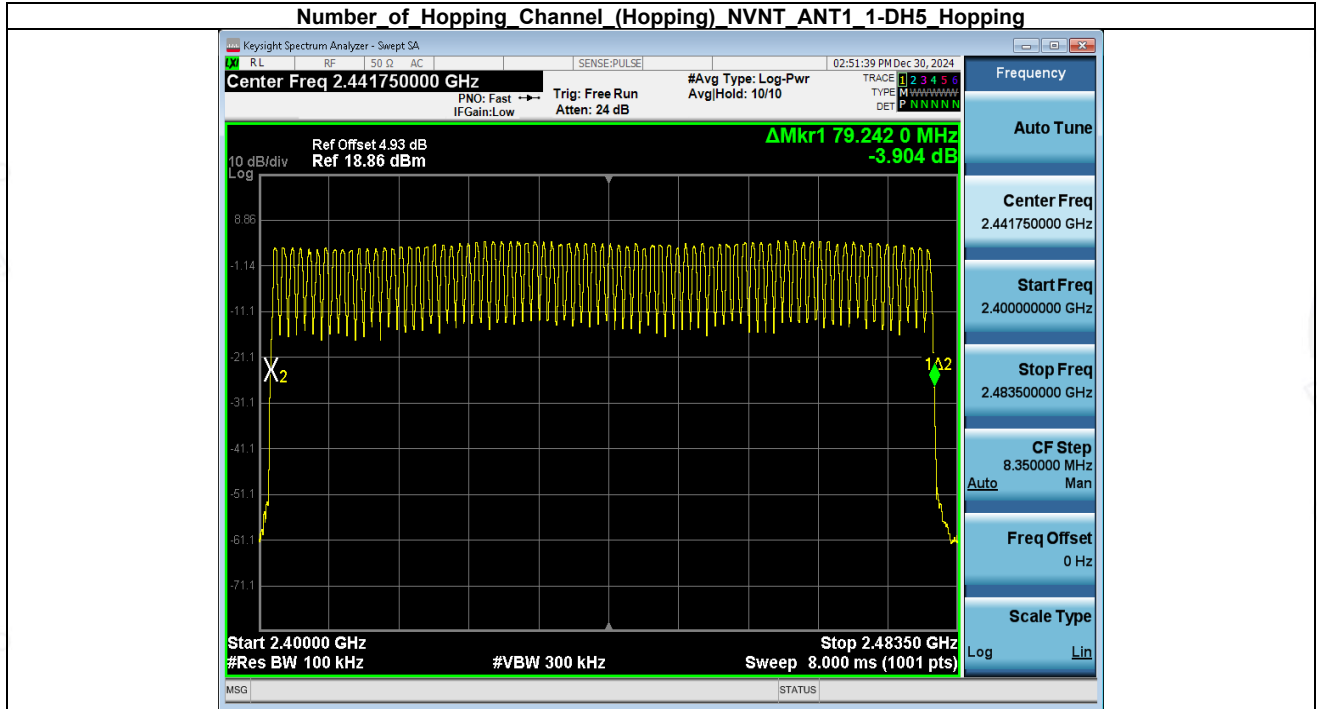




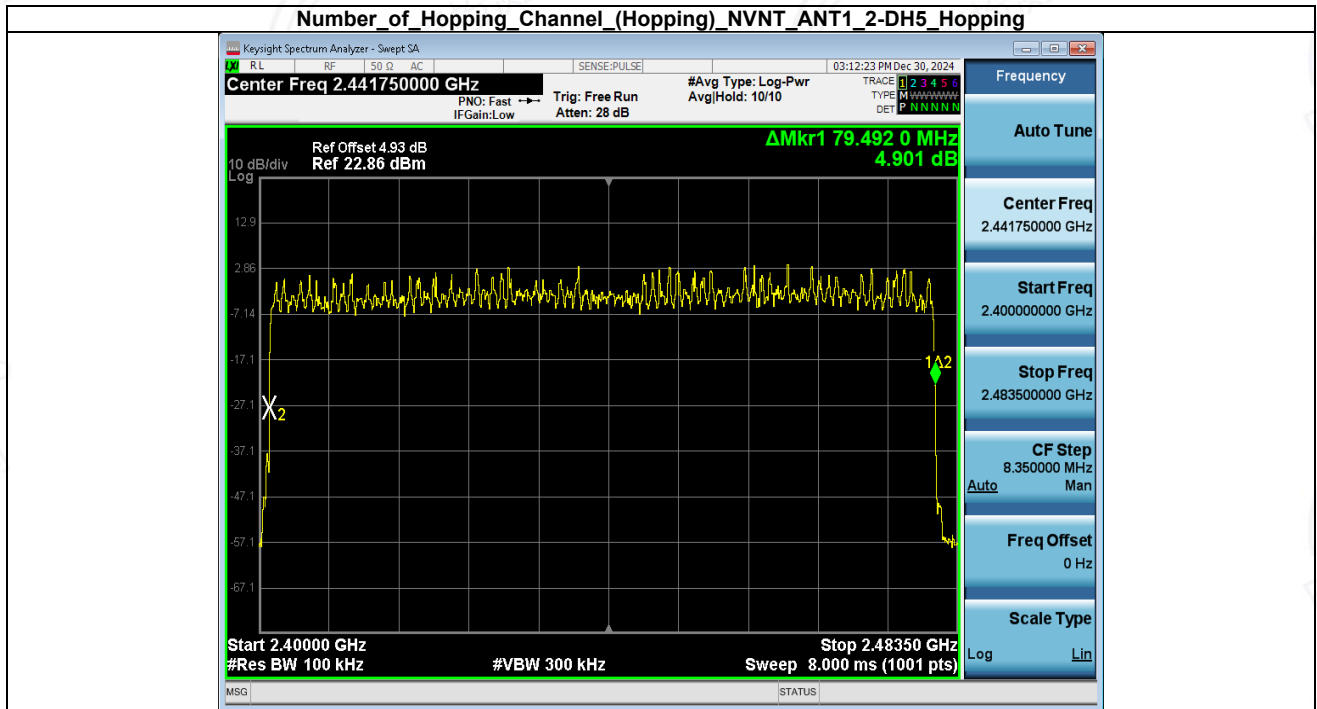
8. Number of Hopping Channel (Hopping)

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

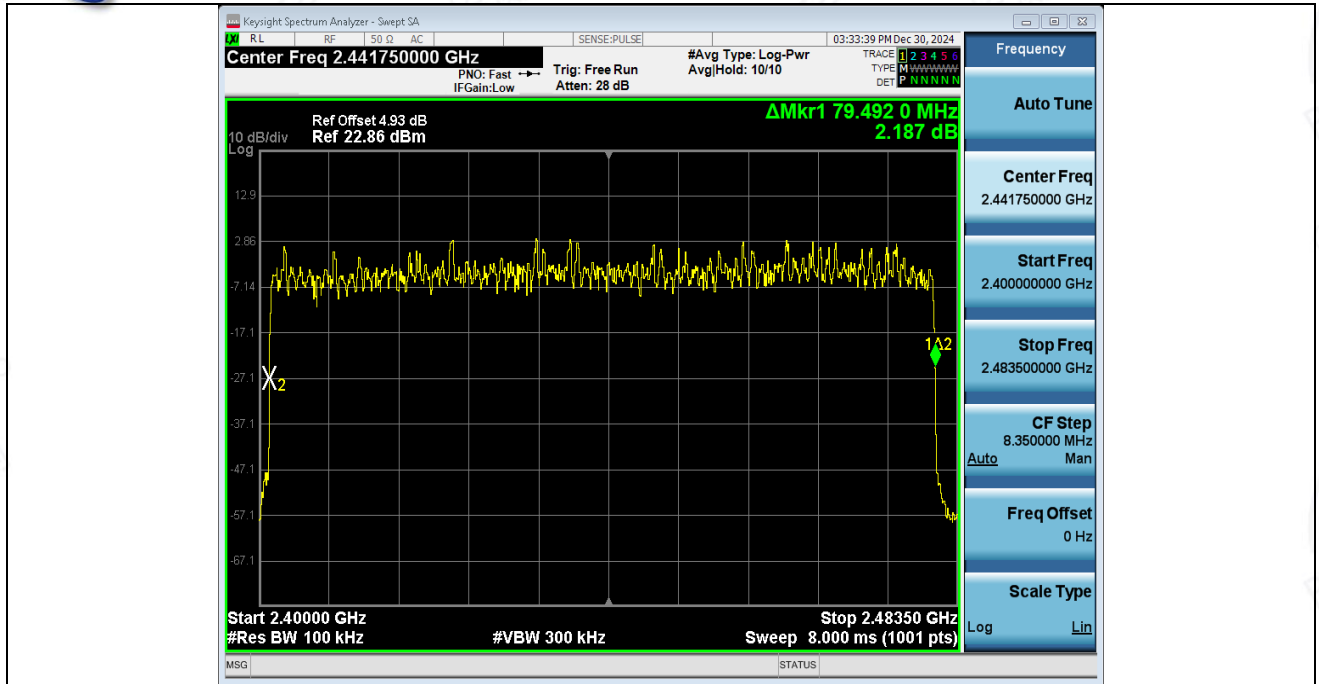


Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_2-DH5_Hopping



Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_3-DH5_Hopping

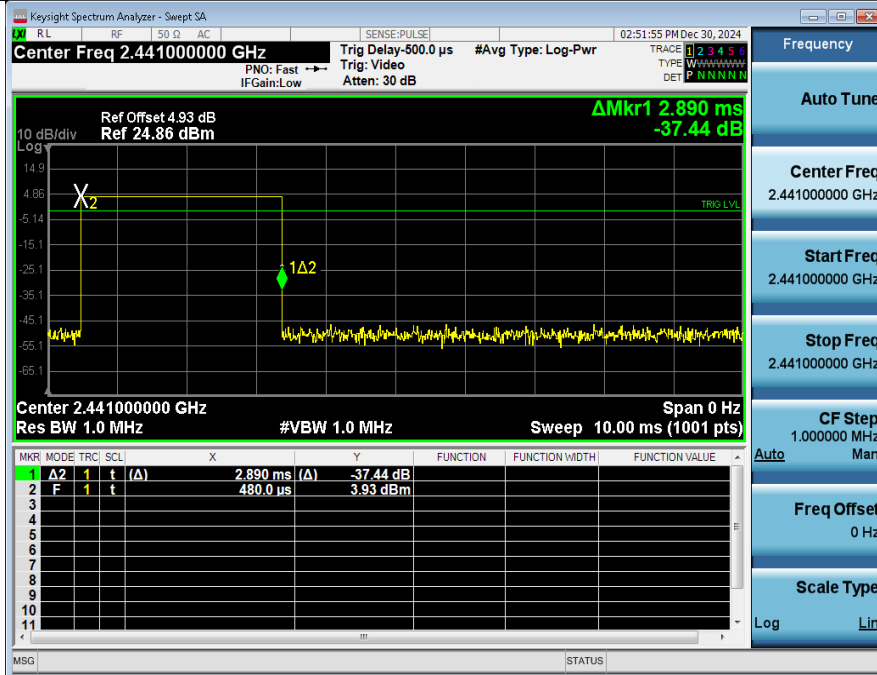




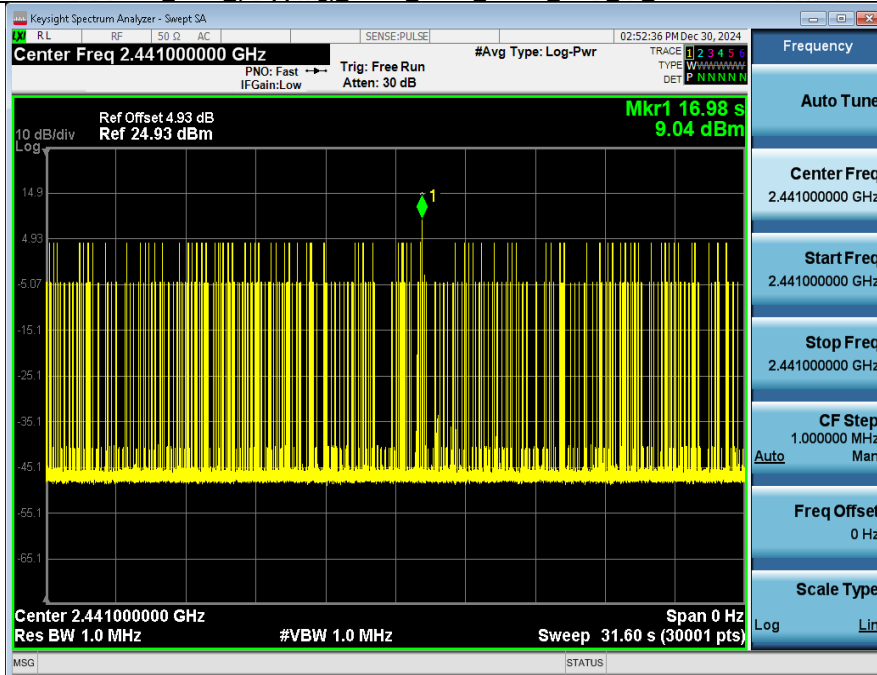
9. Dwell Time (Hopping)

Condition	Antenna	Packet Type	Pulse Time(ms)	Hops	Dwell Time(ms)	Limit(s)	Result
NVNT	ANT1	1-DH5	2.890	1.00	2.890	0.40	Pass
NVNT	ANT1	2-DH5	2.900	107.00	310.300	0.40	Pass
NVNT	ANT1	3-DH5	2.900	107.00	310.300	0.40	Pass

Dwell Time (Hopping) NVNT ANT1 1-DH5 2441 00 One Burst Time

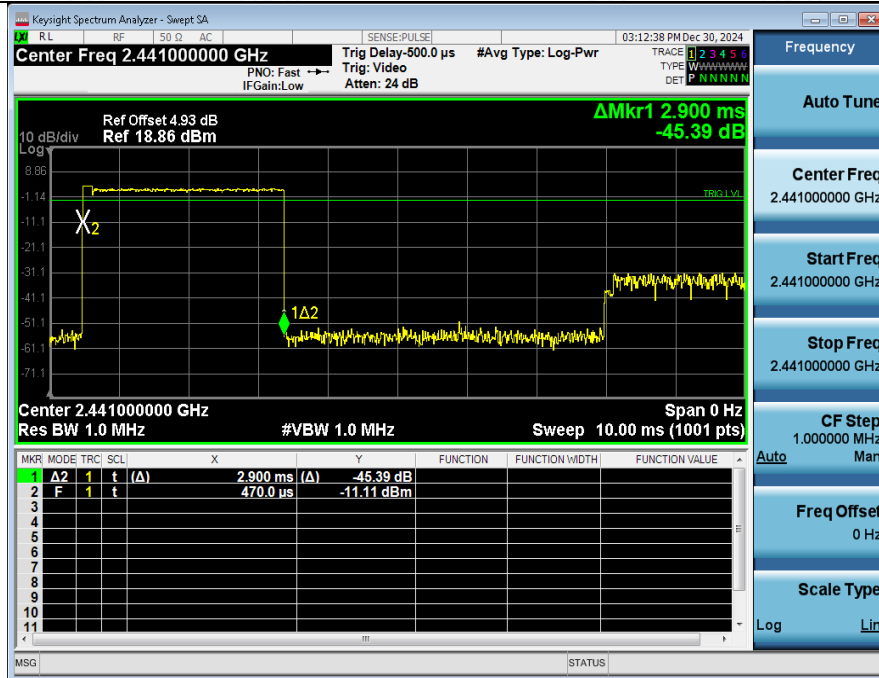


Dwell Time (Hopping) NVNT ANT1 1-DH5 2441 00 Accumulated

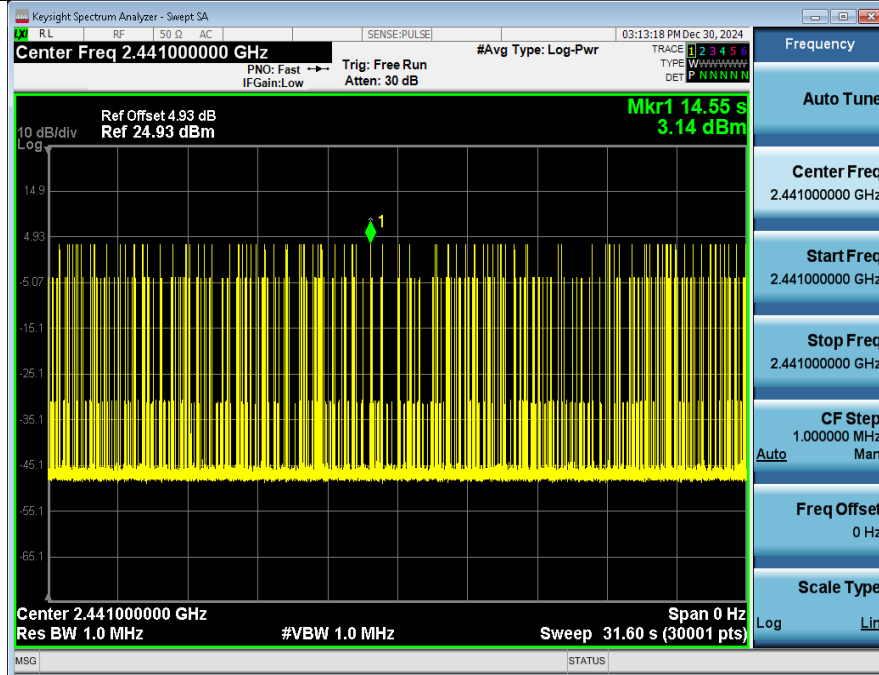


Dwell Time (Hopping) NVNT ANT1 2-DH5 2441 00 One Burst Time





Dwell Time (Hopping) NVNT_ANT1_2-DH5_2441_00_Accumulated



Dwell Time (Hopping) NVNT_ANT1_3-DH5_2441_00_One_Burst_Time



