

Appendix

Test Data

for BTEK241216075A01-T01

Start date	2024/12/23	Finish date	2024/12/23
Temperature	20.0℃	Humidity	26%
RF specifications	BT	Test Engineer	Zora



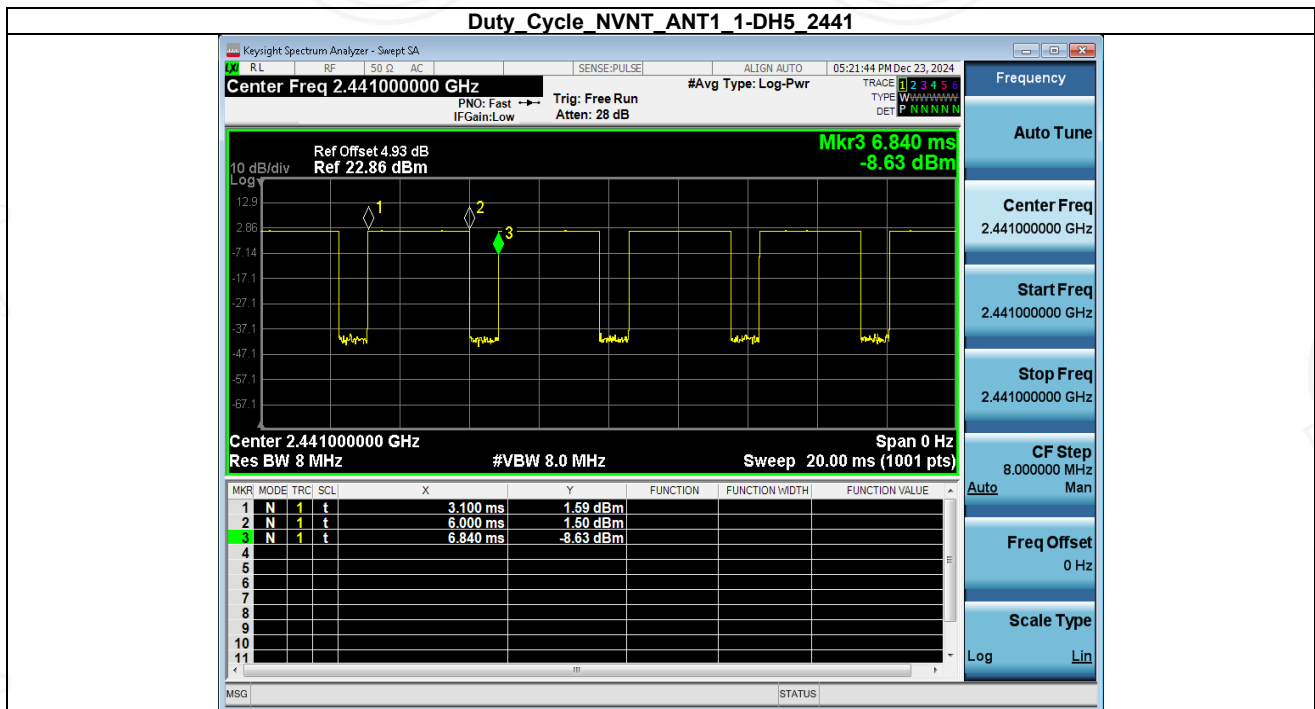
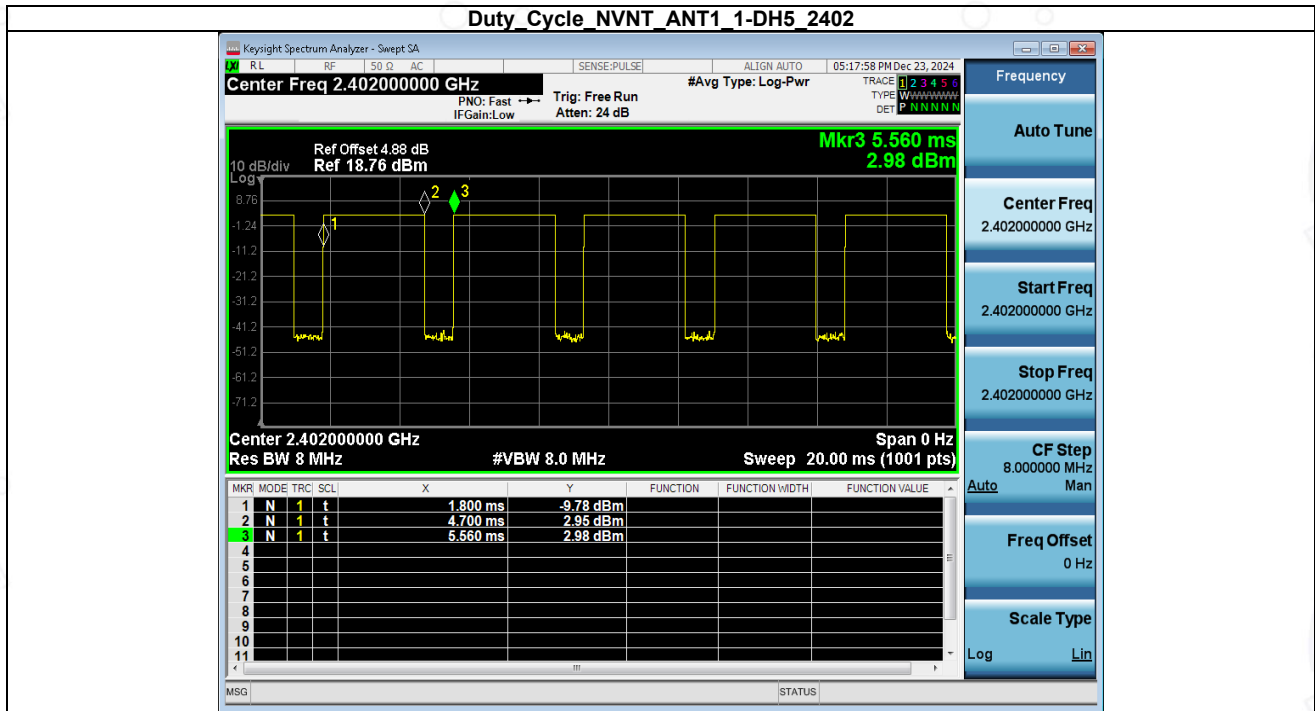
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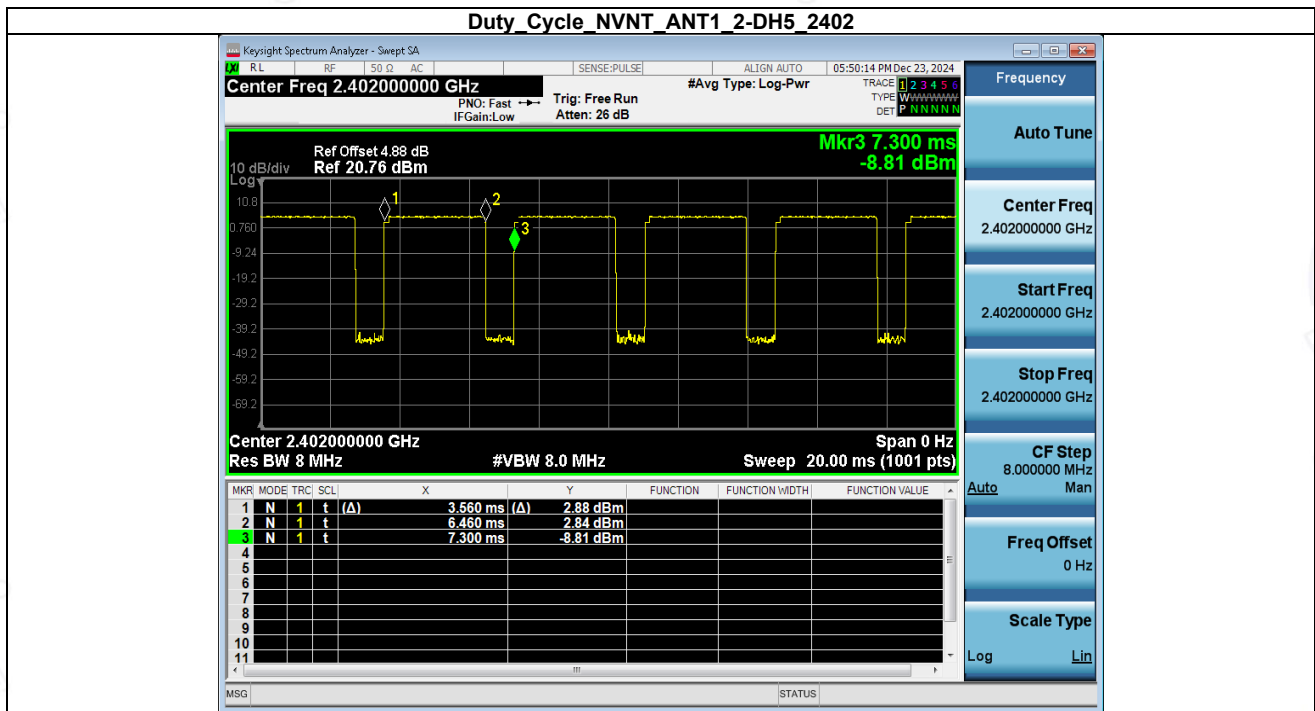
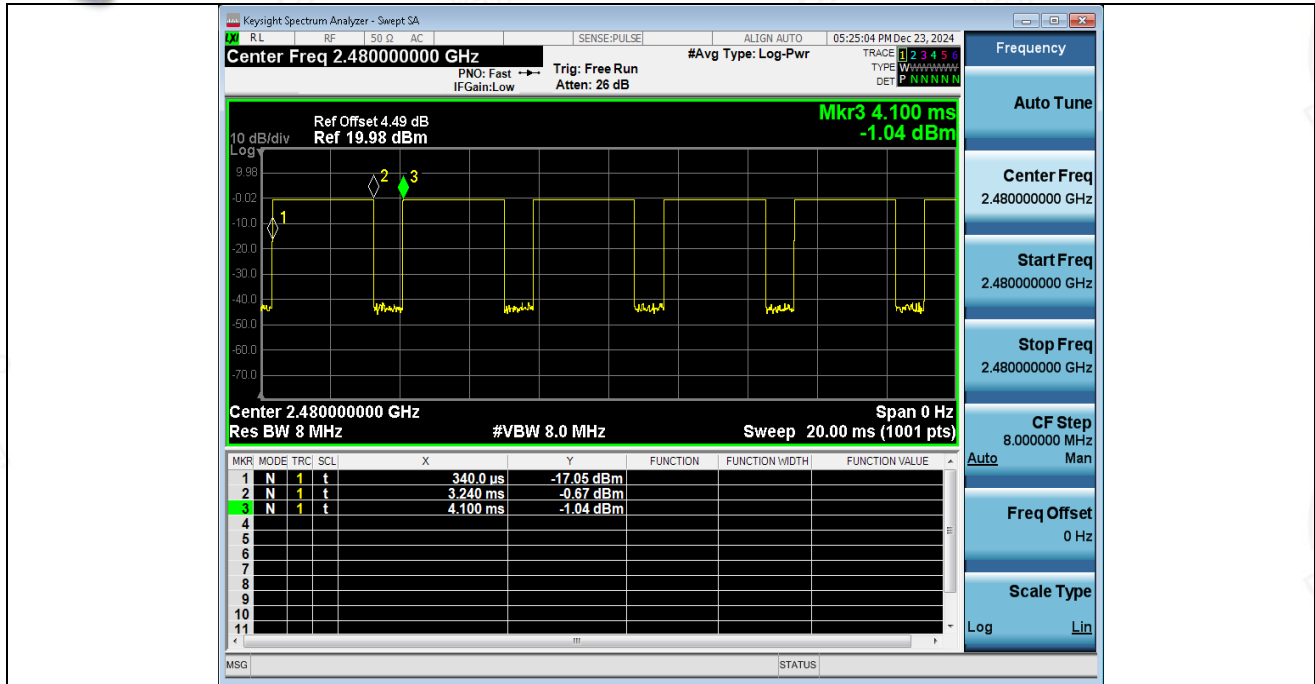
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1. Duty Cycle

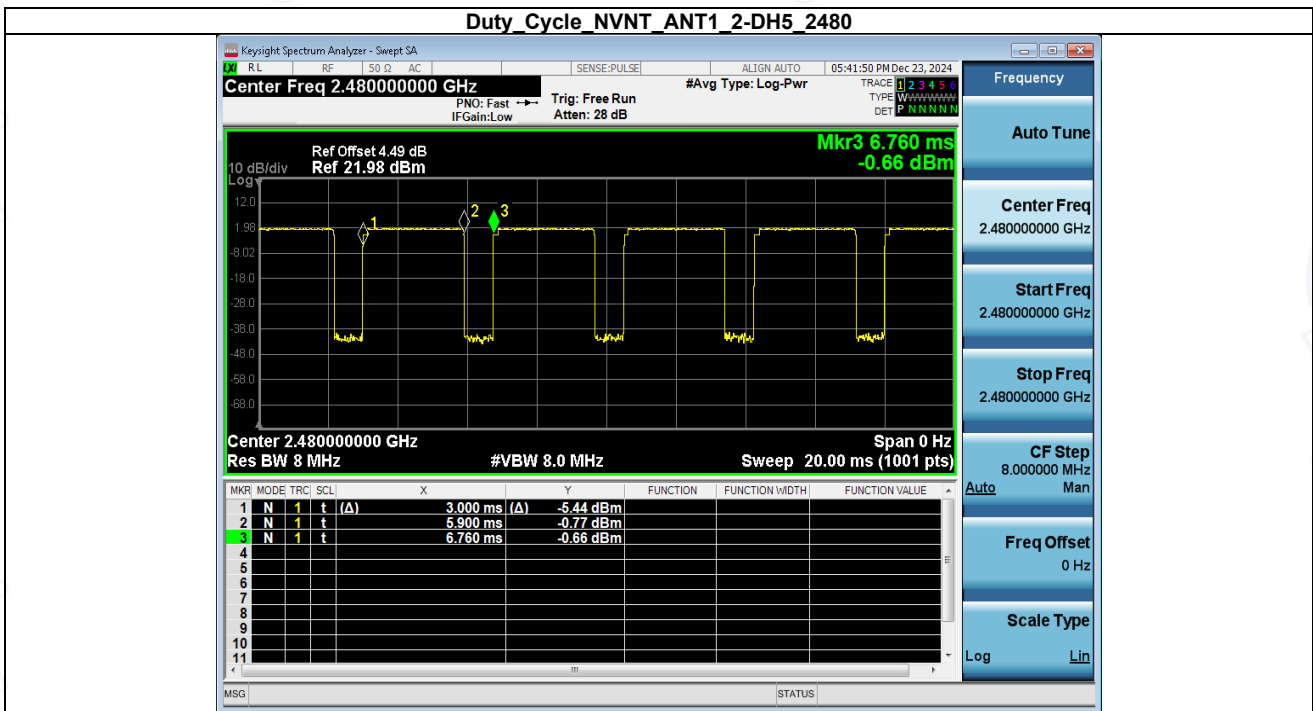
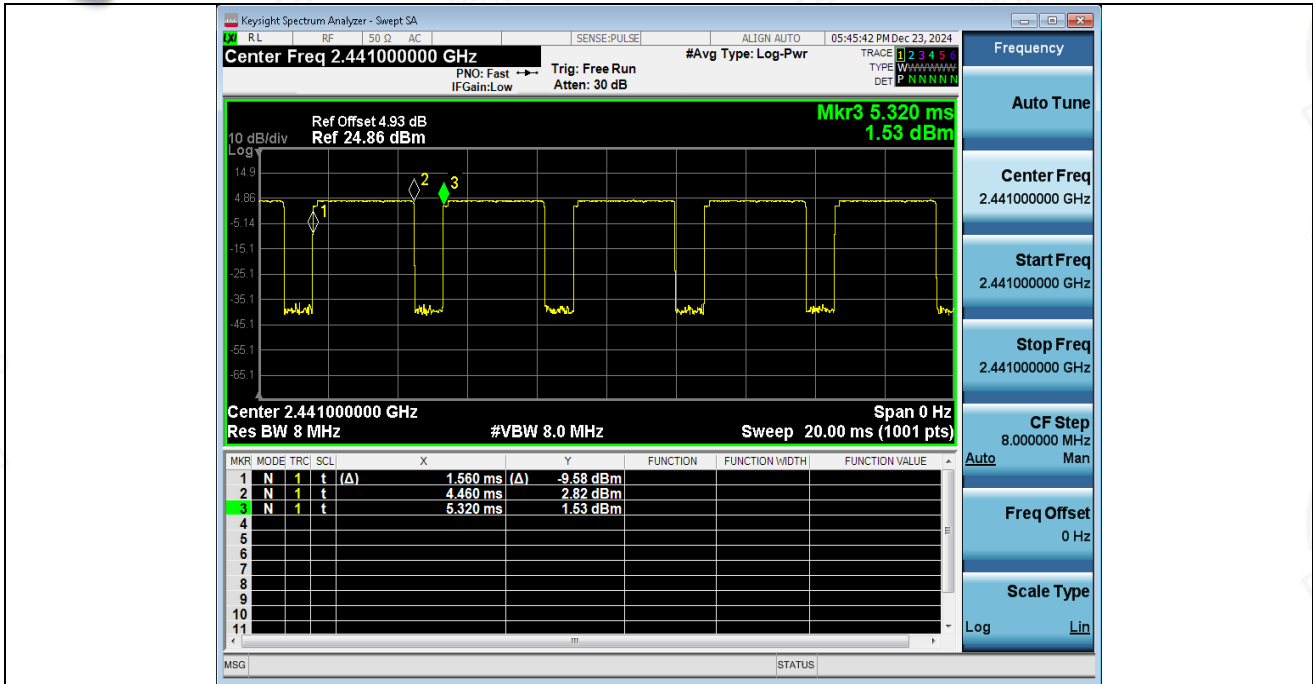
Condition	Antenna	Rate	Frequency (MHz)	Dutycycle(%)	Duty_factor
NVNT	ANT1	1-DH5	2402.00	77.66	1.10
NVNT	ANT1	1-DH5	2441.00	78.07	1.07
NVNT	ANT1	1-DH5	2480.00	77.13	1.13
NVNT	ANT1	2-DH5	2402.00	78.07	1.07
NVNT	ANT1	2-DH5	2441.00	77.66	1.10
NVNT	ANT1	2-DH5	2480.00	77.66	1.10
NVNT	ANT1	3-DH5	2402.00	78.19	1.07
NVNT	ANT1	3-DH5	2441.00	78.19	1.07
NVNT	ANT1	3-DH5	2480.00	78.07	1.07





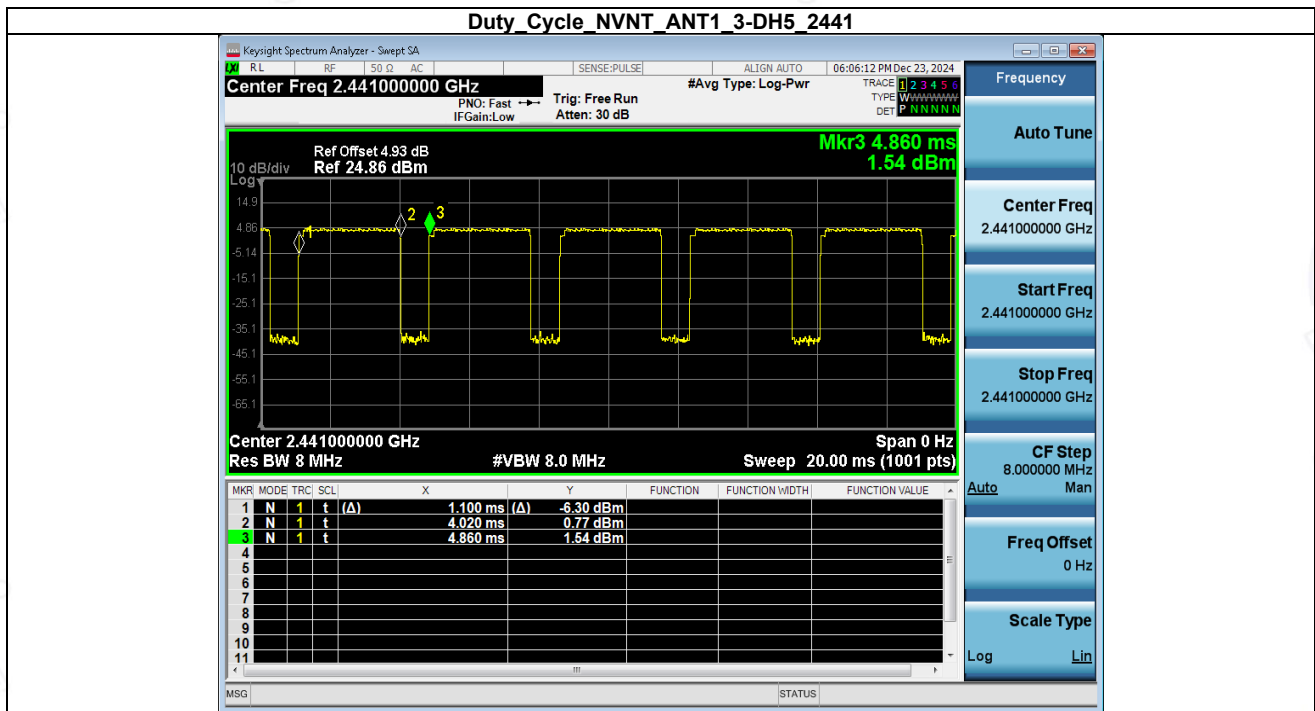
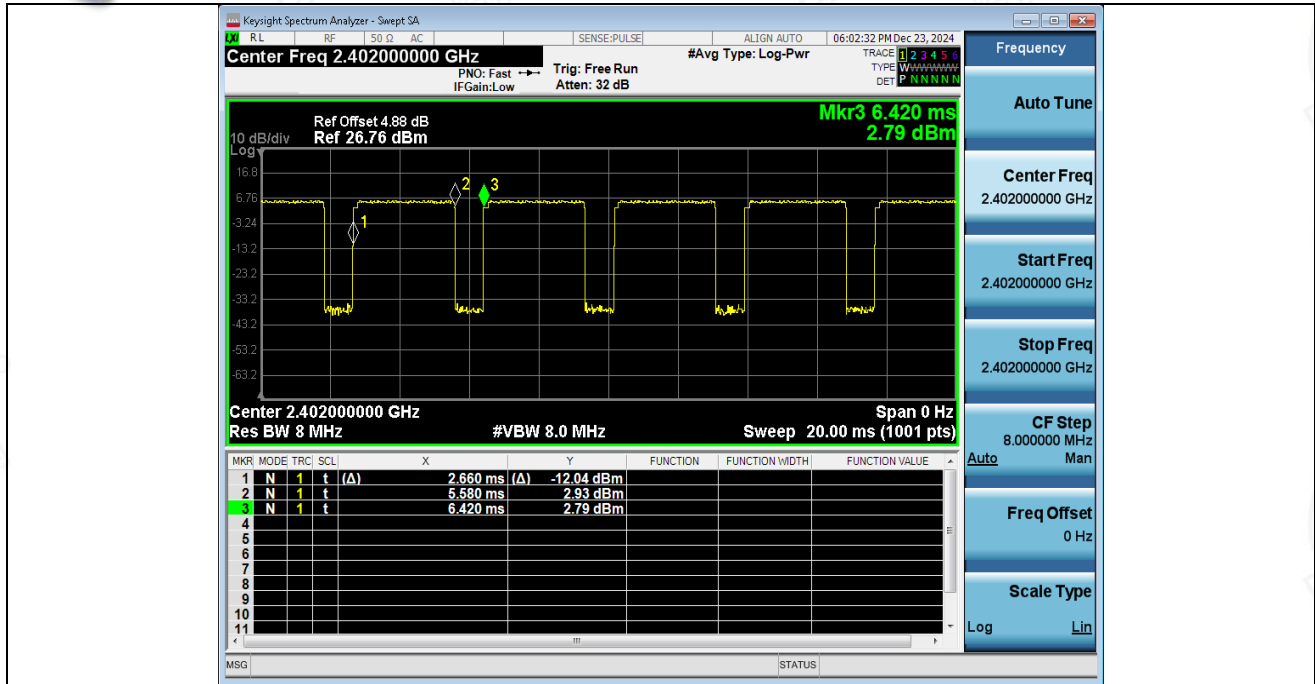
Duty Cycle_NVNT_ANT1_2-DH5_2441





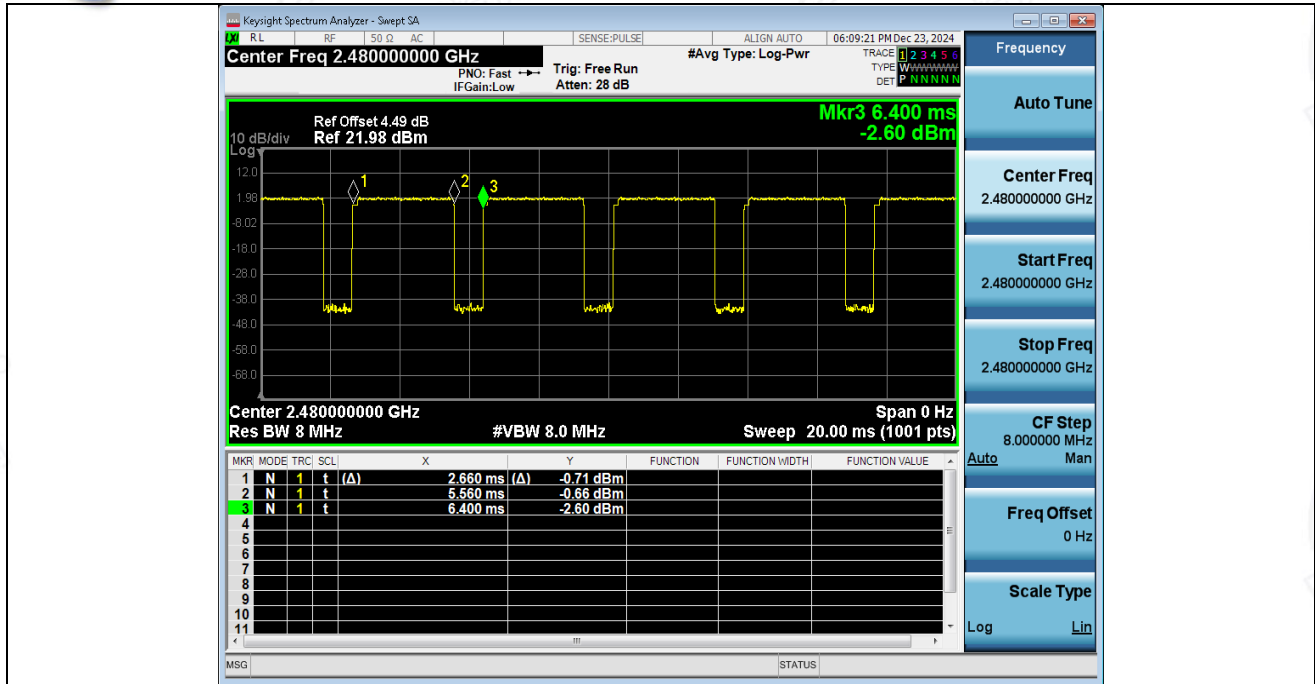
Duty Cycle_NVNT_ANT1_3-DH5_2402





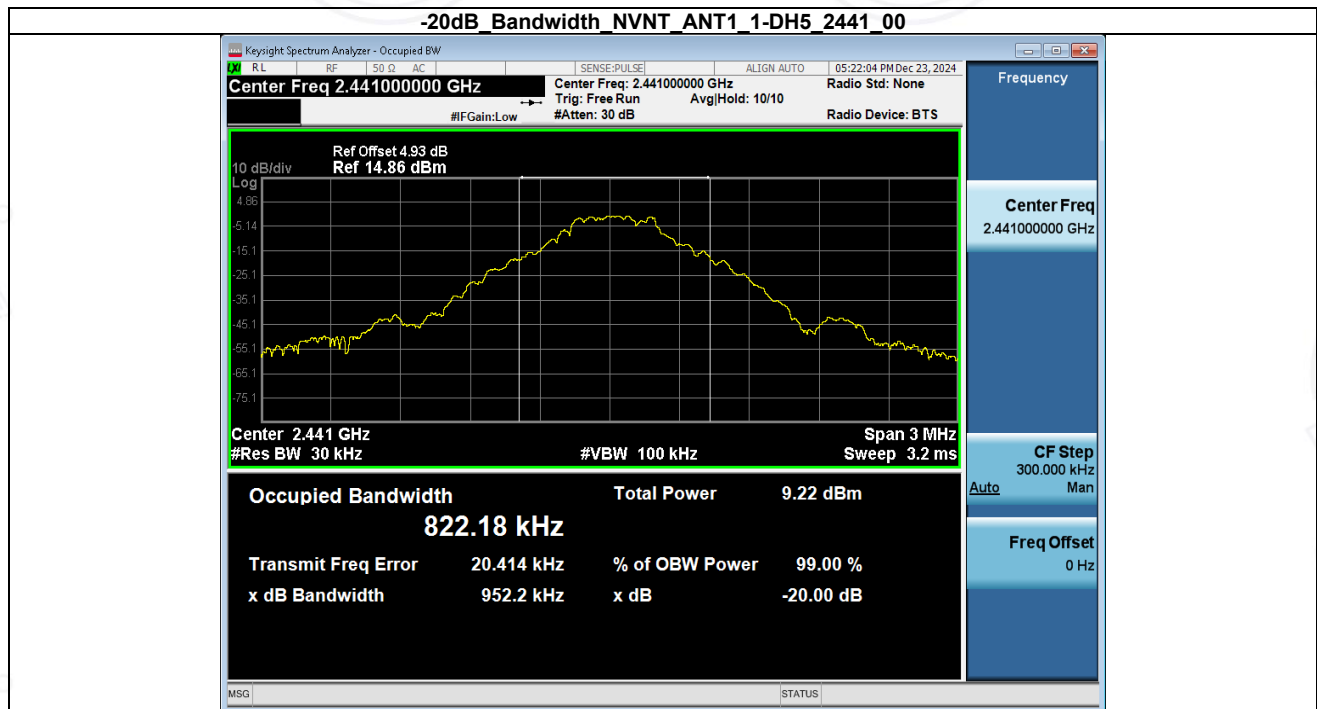
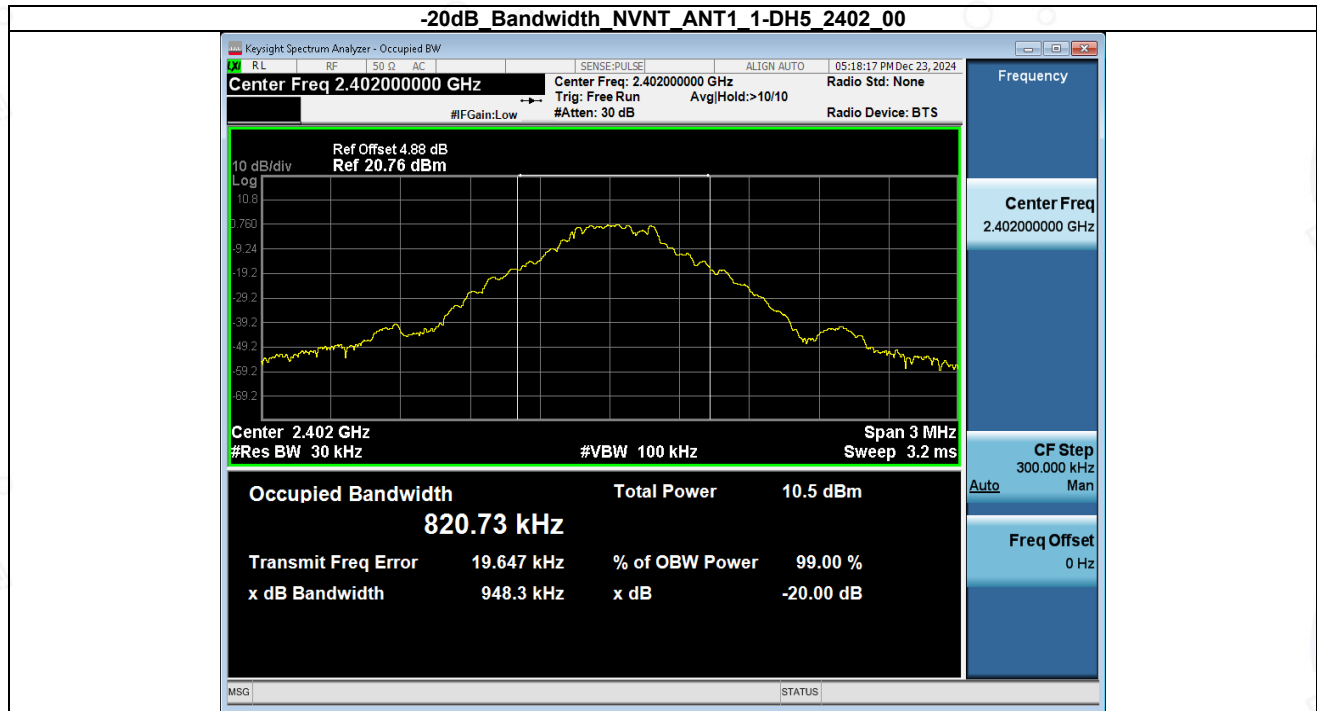
Duty Cycle_NVNT_ANT1_3-DH5_2480

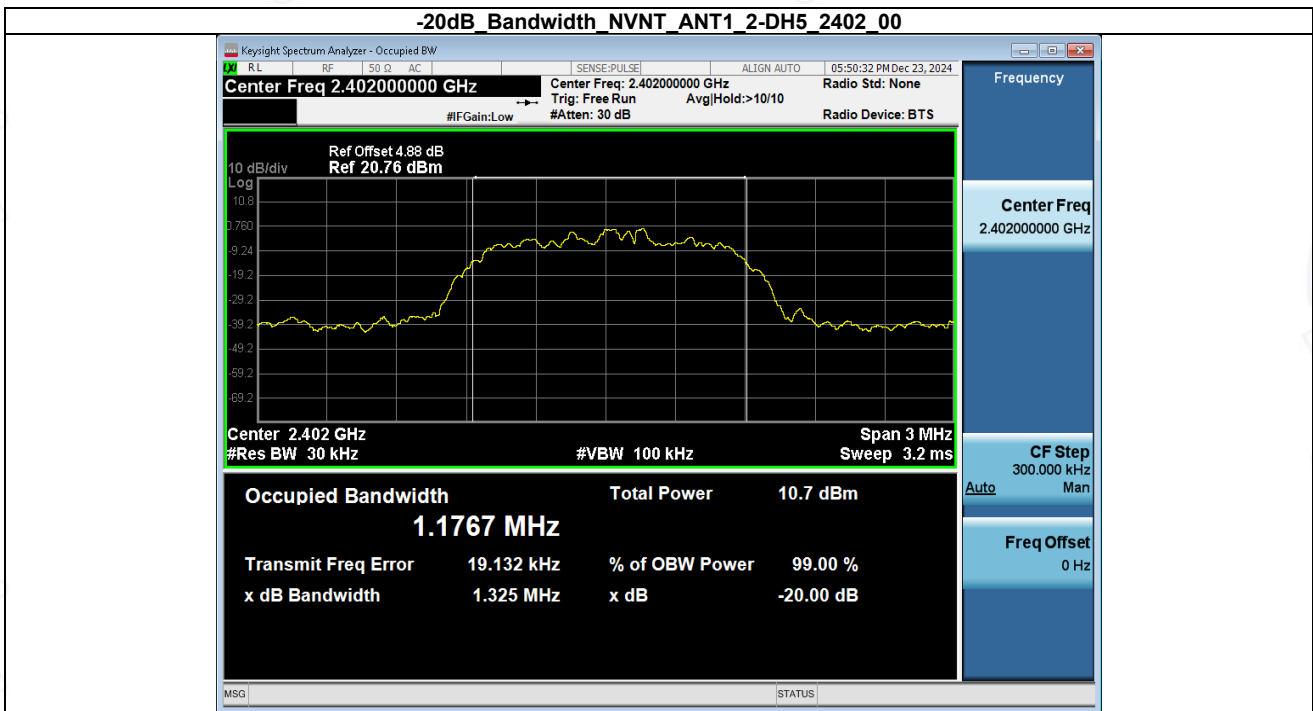




2. -20dB Bandwidth

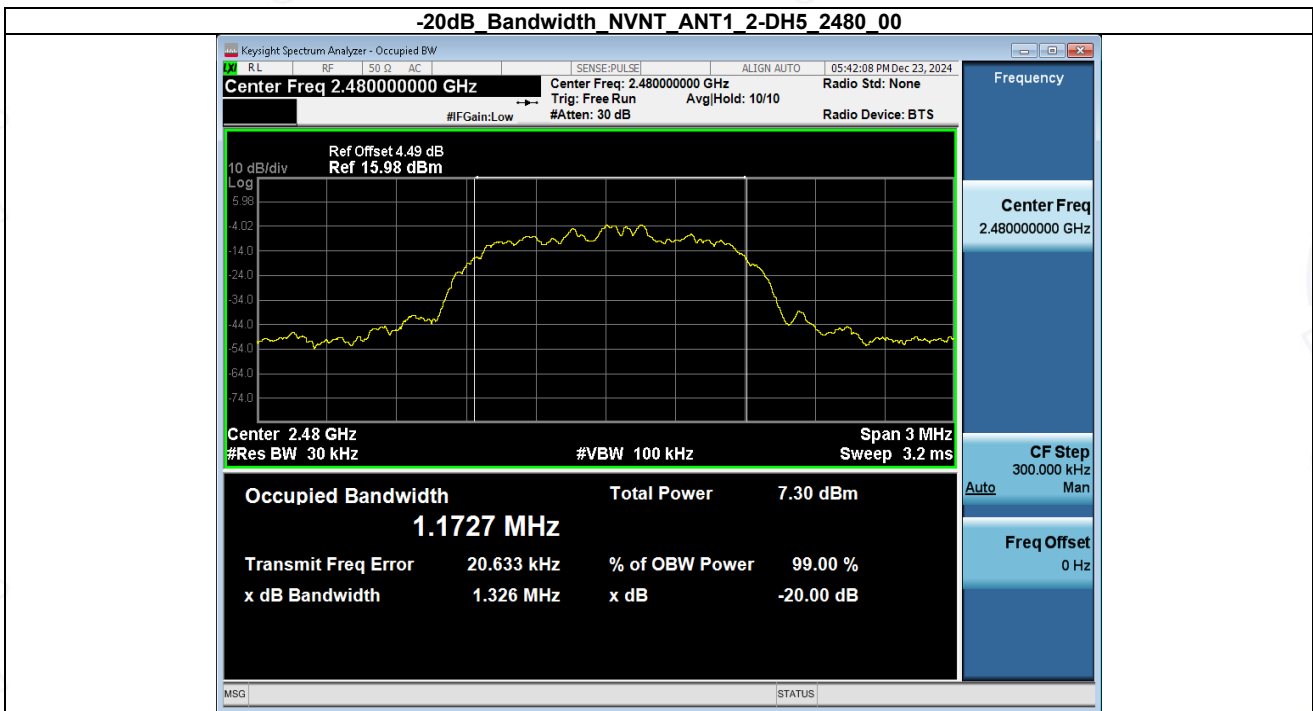
Condition	Antenna	Modulation	Frequency (MHz)	-20dB BW(MHz)	if larger than CFS
NVNT	ANT1	1-DH5	2402.00	0.948	No
NVNT	ANT1	1-DH5	2441.00	0.952	No
NVNT	ANT1	1-DH5	2480.00	0.949	No
NVNT	ANT1	2-DH5	2402.00	1.325	Yes
NVNT	ANT1	2-DH5	2441.00	1.319	Yes
NVNT	ANT1	2-DH5	2480.00	1.326	Yes
NVNT	ANT1	3-DH5	2402.00	1.299	Yes
NVNT	ANT1	3-DH5	2441.00	1.305	Yes
NVNT	ANT1	3-DH5	2480.00	1.304	Yes





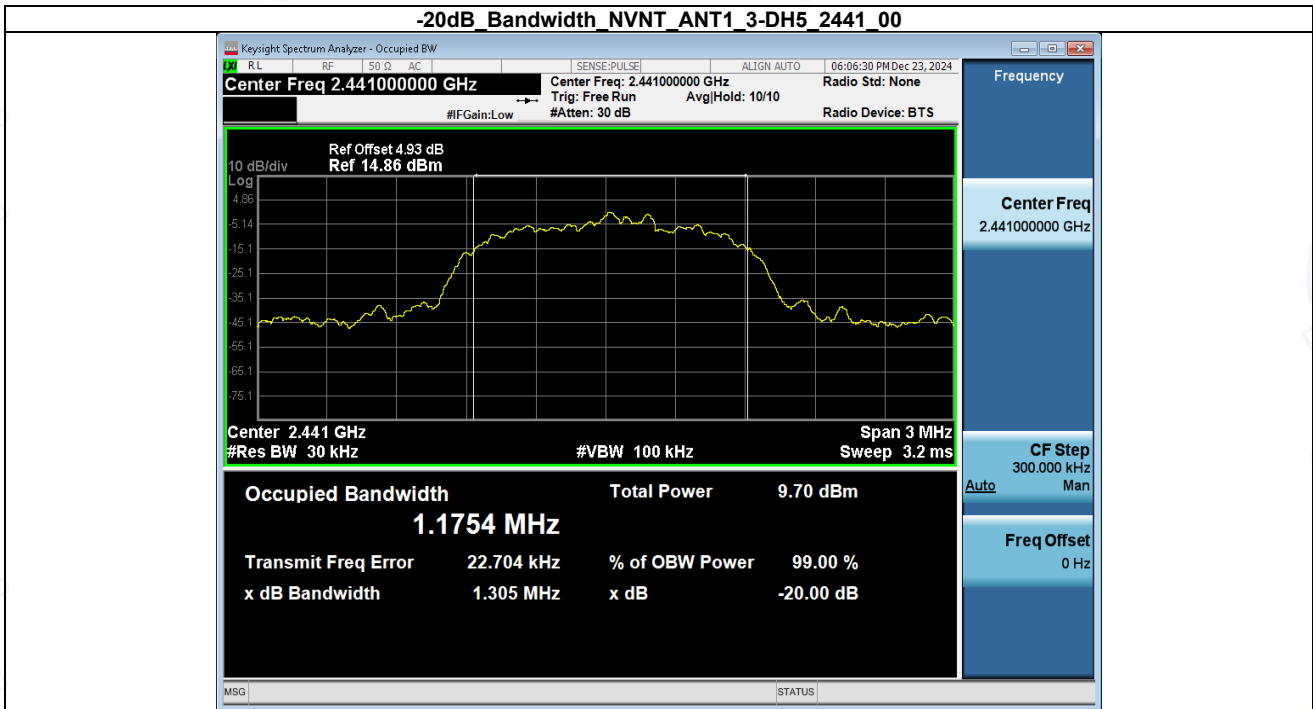
-20dB Bandwidth NVNT_ANT1_2-DH5_2441_00





-20dB Bandwidth_NVNT_ANT1_3-DH5_2402_00





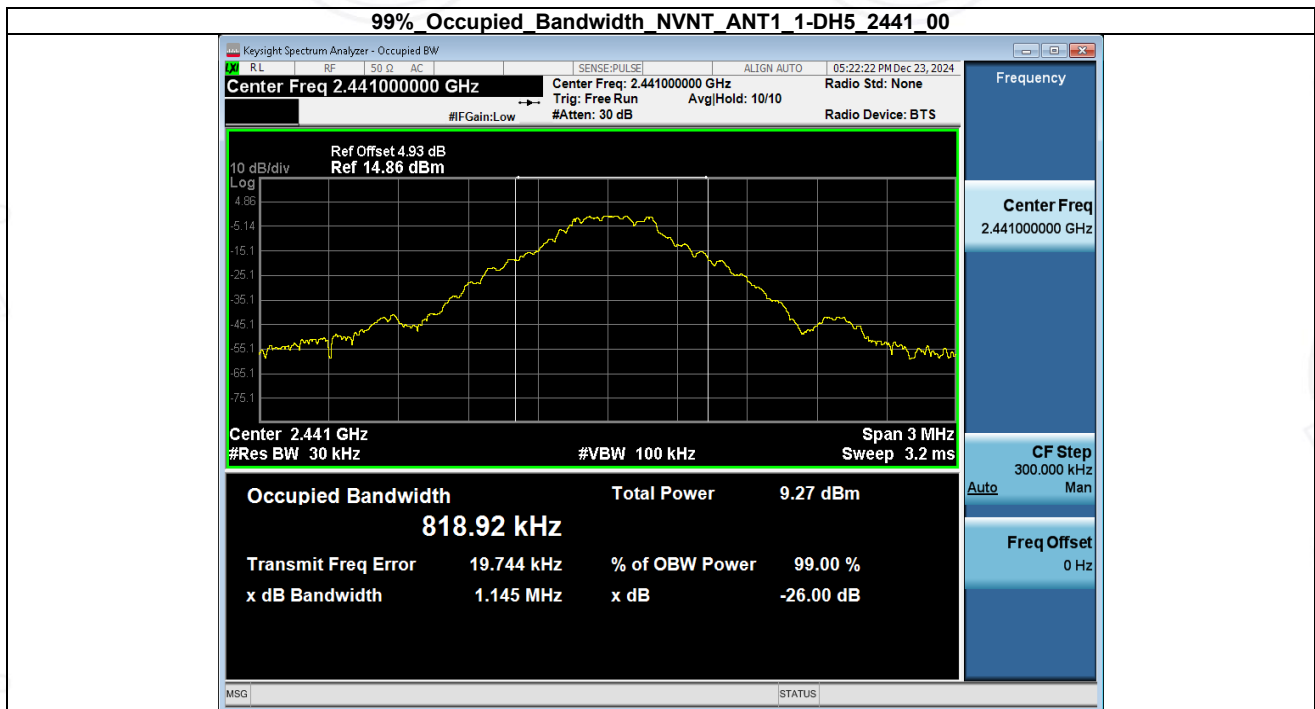
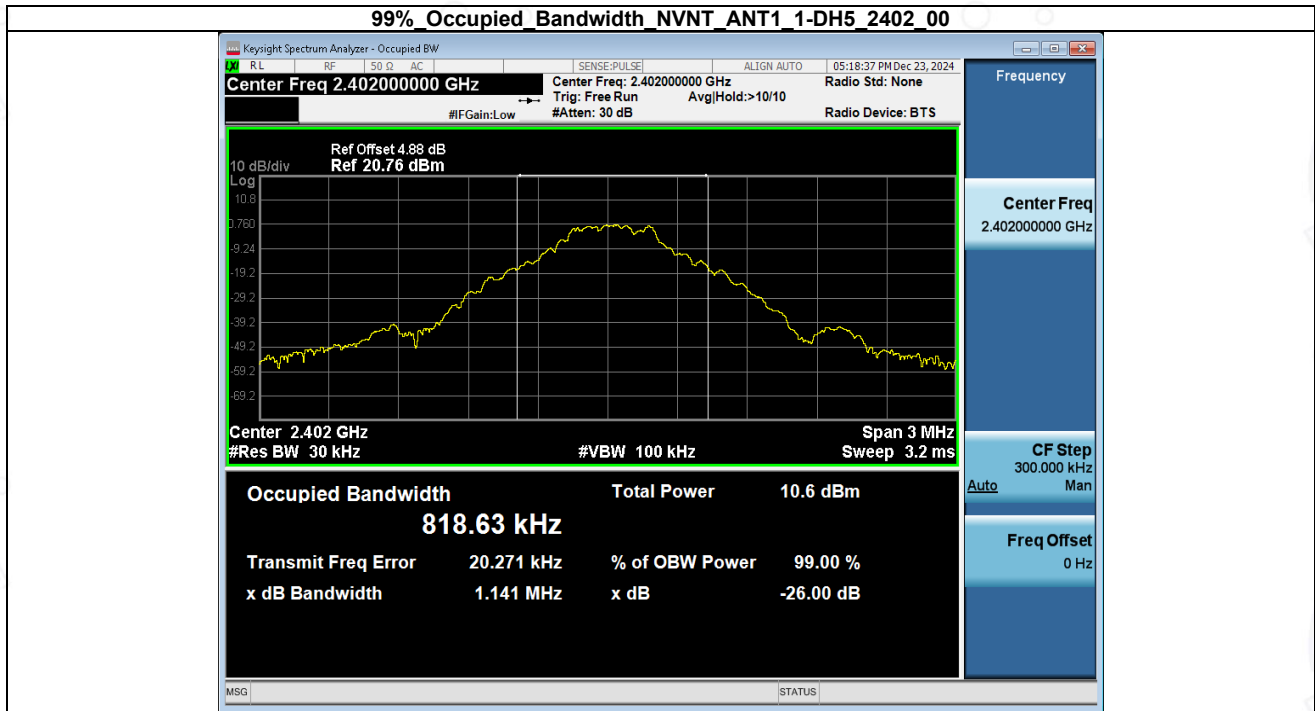
-20dB_Bandwidth_NVNT_ANT1_3-DH5_2480_00





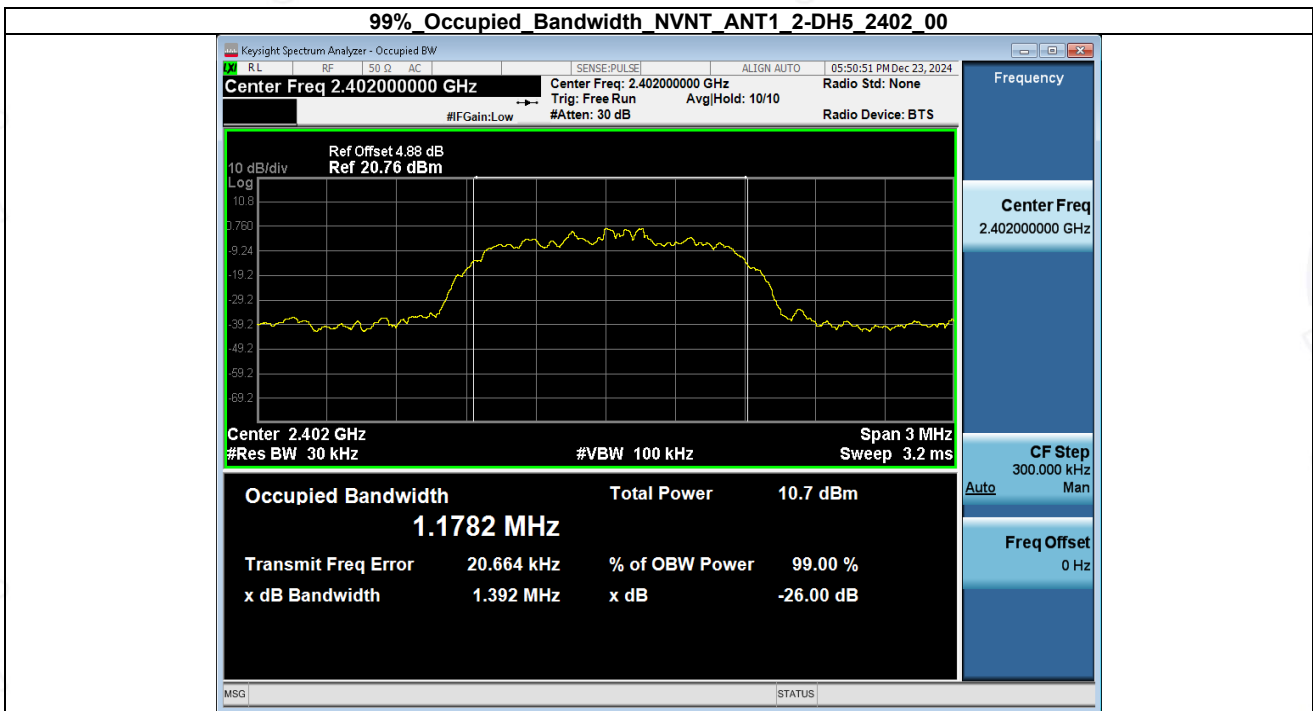
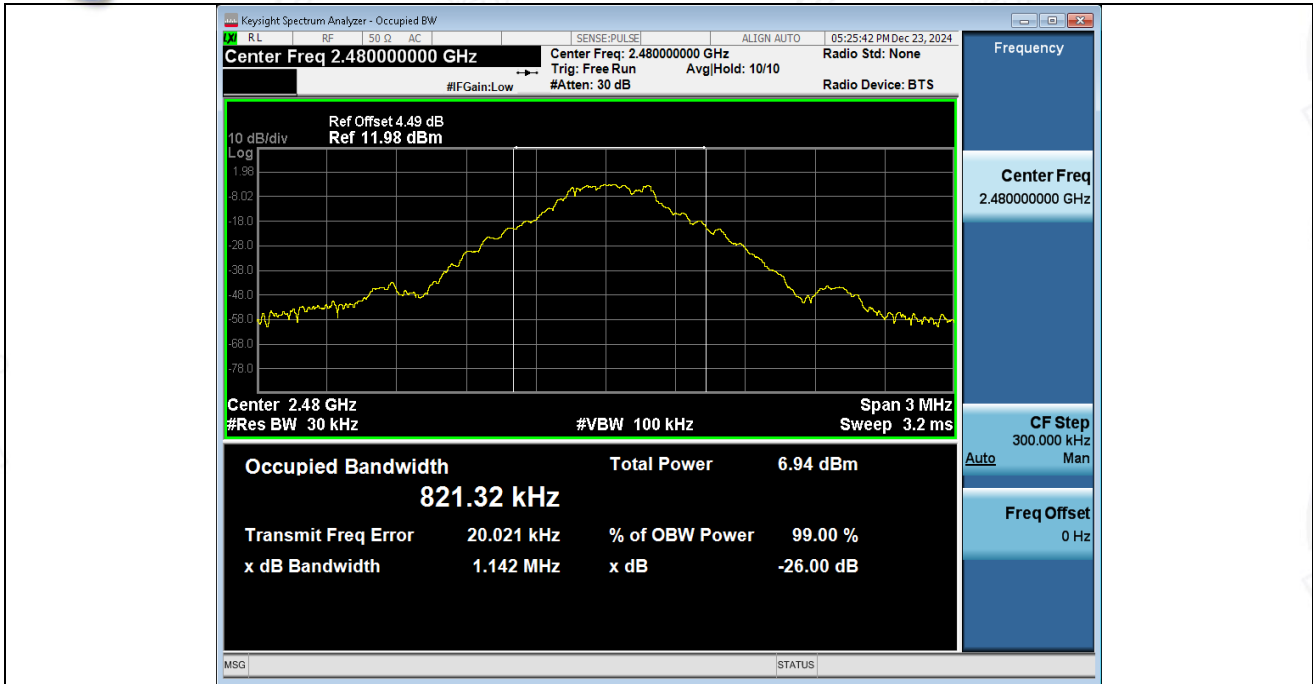
3. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	1-DH5	2402.00	0.819
NVNT	ANT1	1-DH5	2441.00	0.819
NVNT	ANT1	1-DH5	2480.00	0.821
NVNT	ANT1	2-DH5	2402.00	1.178
NVNT	ANT1	2-DH5	2441.00	1.174
NVNT	ANT1	2-DH5	2480.00	1.171
NVNT	ANT1	3-DH5	2402.00	1.180
NVNT	ANT1	3-DH5	2441.00	1.178
NVNT	ANT1	3-DH5	2480.00	1.175



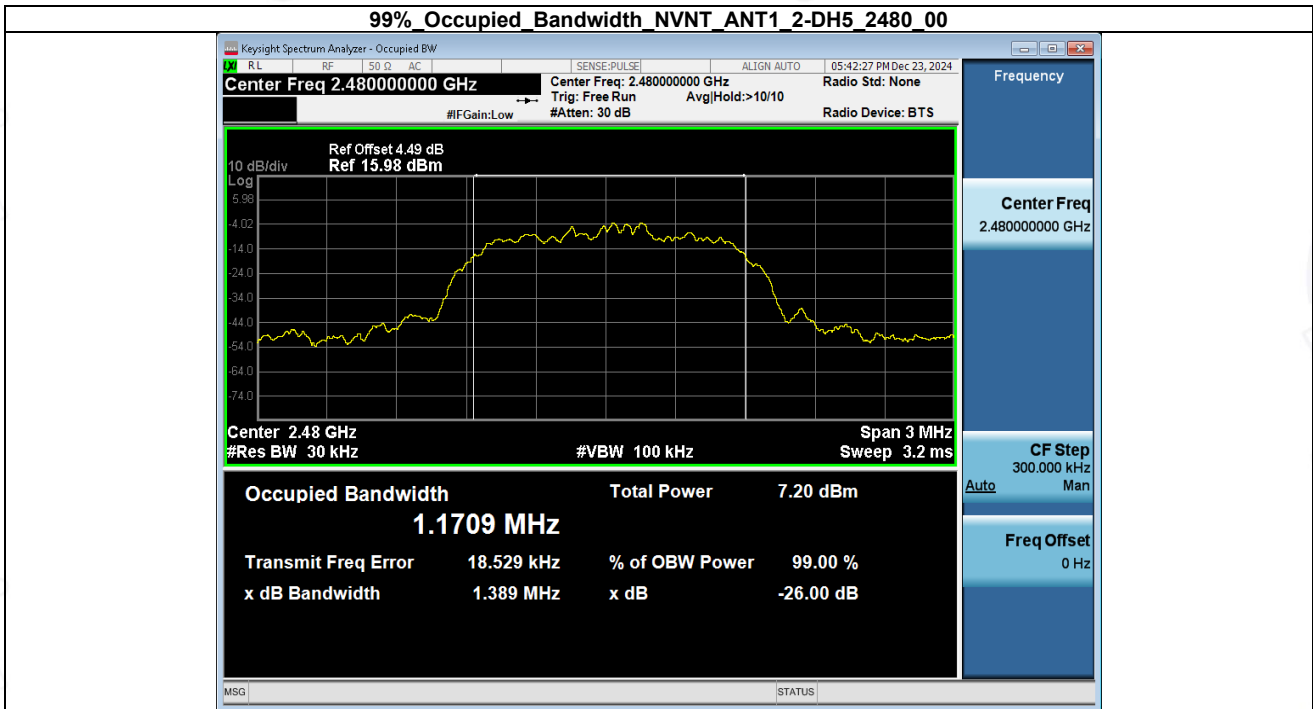
99% Occupied Bandwidth NVNT ANT1 1-DH5 2480 00





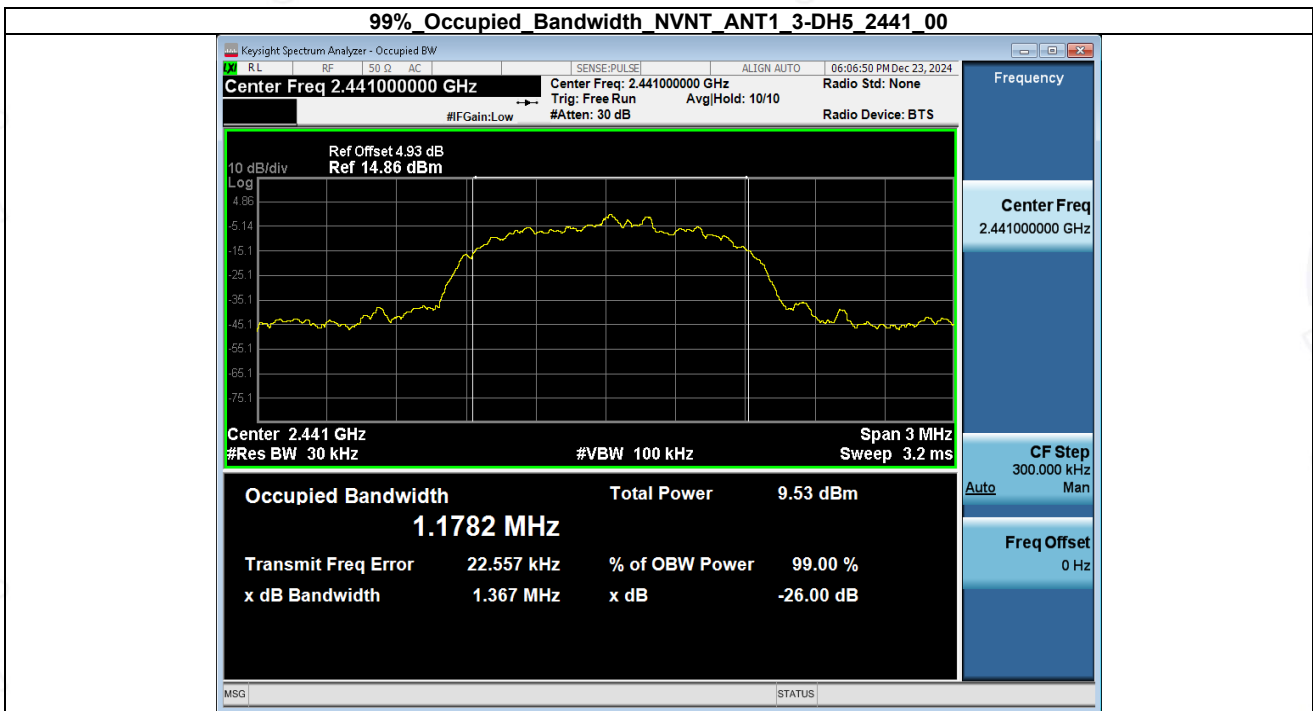
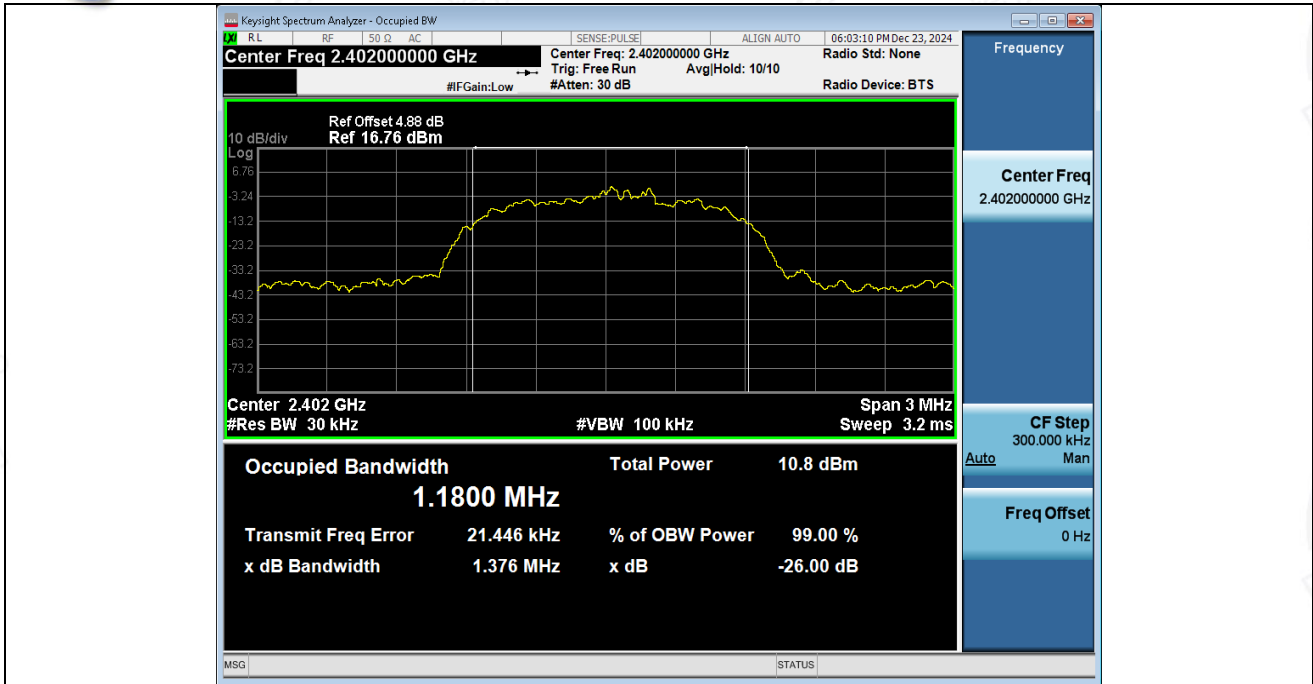
99% Occupied Bandwidth NVNT_ANT1_2-DH5_2441_00





99% Occupied Bandwidth NVNT_ANT1_3-DH5_2402_00





99% Occupied Bandwidth NVNT_ANT1_3-DH5_2480_00

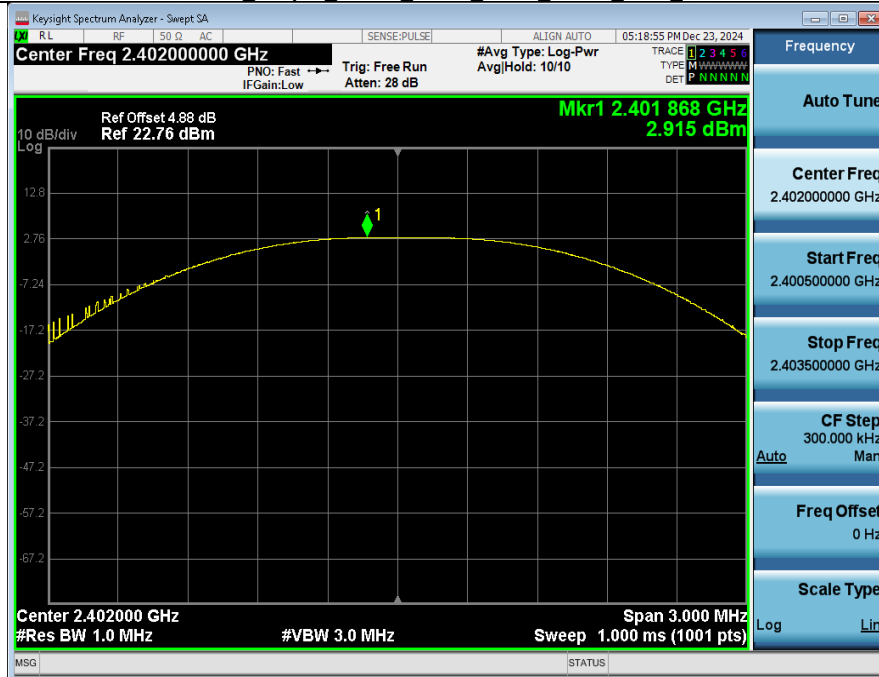




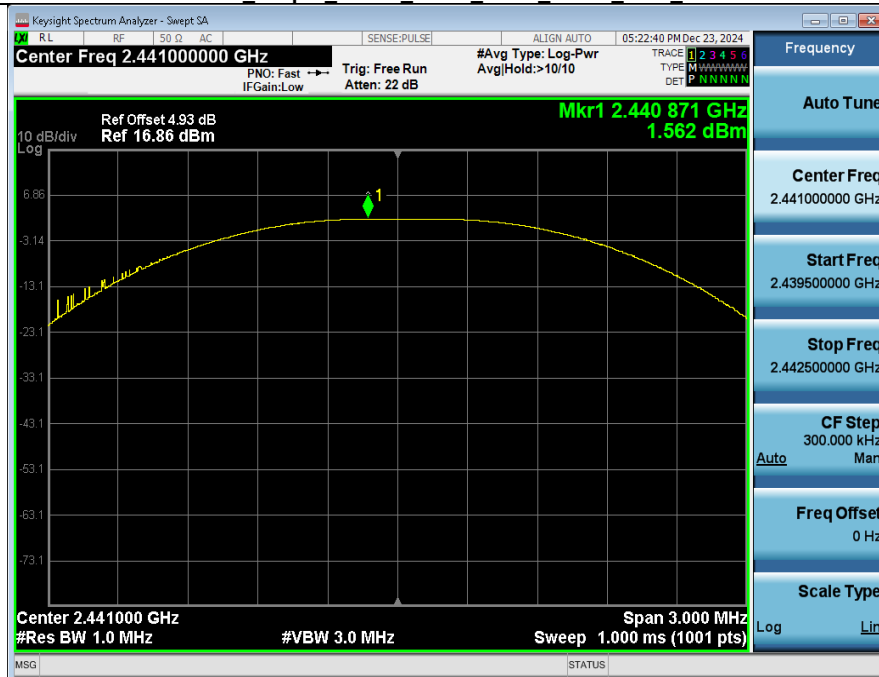
4. Peak Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Max. Conducted Power(dBm)	Max. Conducted Power(mW)	Limit(mW)	Result
NVNT	ANT1	1-DH5	2402.00	2.92	1.96	1000	Pass
NVNT	ANT1	1-DH5	2441.00	1.56	1.43	1000	Pass
NVNT	ANT1	1-DH5	2480.00	-0.69	0.85	1000	Pass
NVNT	ANT1	2-DH5	2402.00	5.22	3.32	125	Pass
NVNT	ANT1	2-DH5	2441.00	3.94	2.48	125	Pass
NVNT	ANT1	2-DH5	2480.00	1.67	1.47	125	Pass
NVNT	ANT1	3-DH5	2402.00	5.83	3.83	125	Pass
NVNT	ANT1	3-DH5	2441.00	4.51	2.83	125	Pass
NVNT	ANT1	3-DH5	2480.00	2.22	1.67	125	Pass

Peak Output Power NVNT_ANT1_1-DH5_2402_00

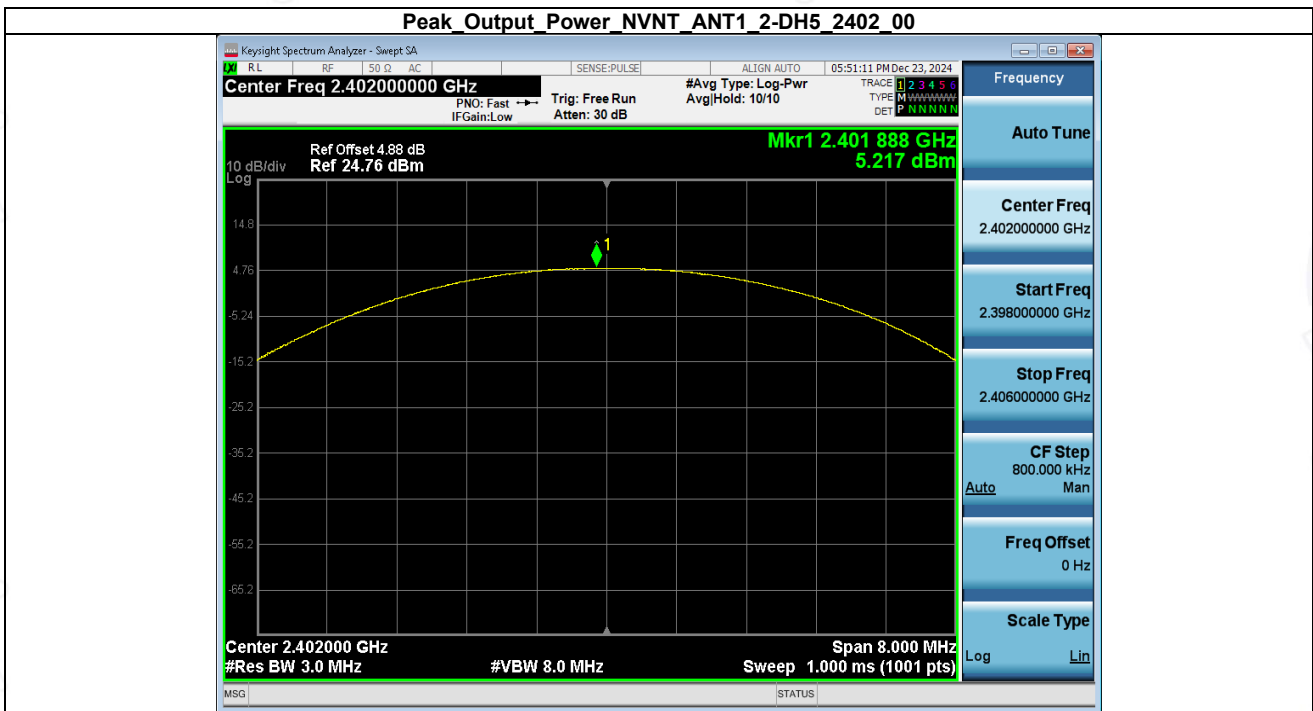
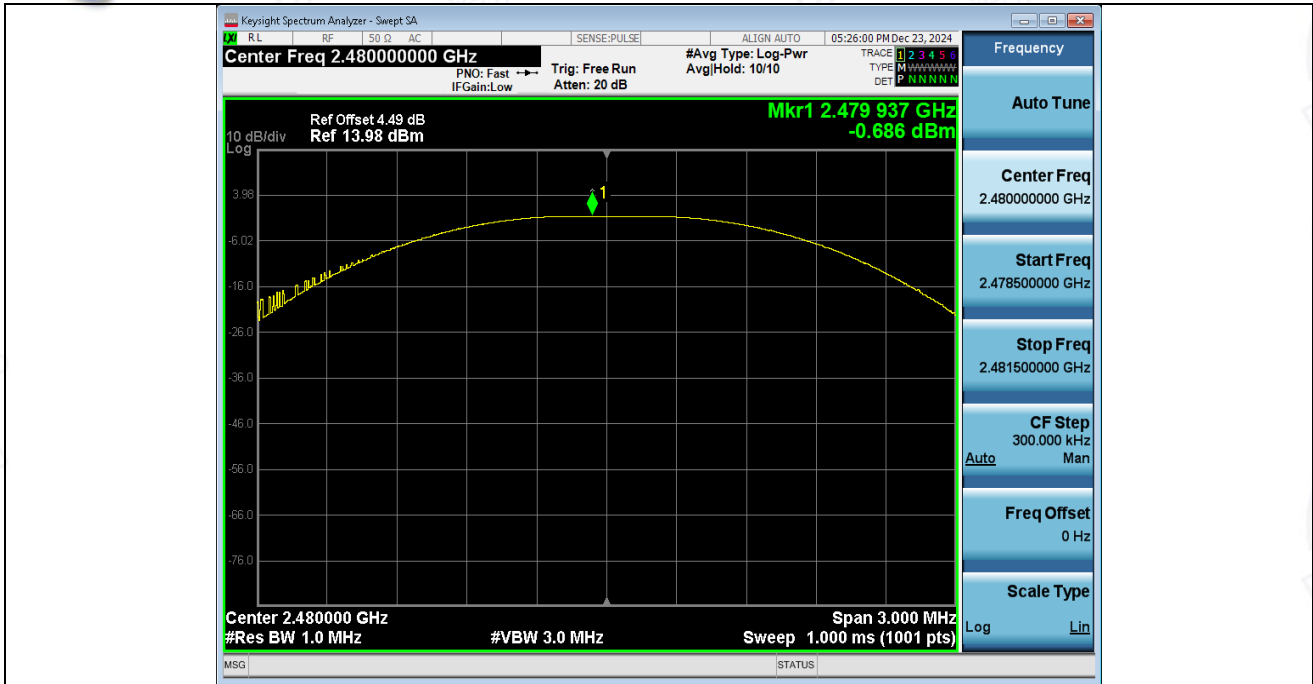


Peak Output Power NVNT_ANT1_1-DH5_2441_00



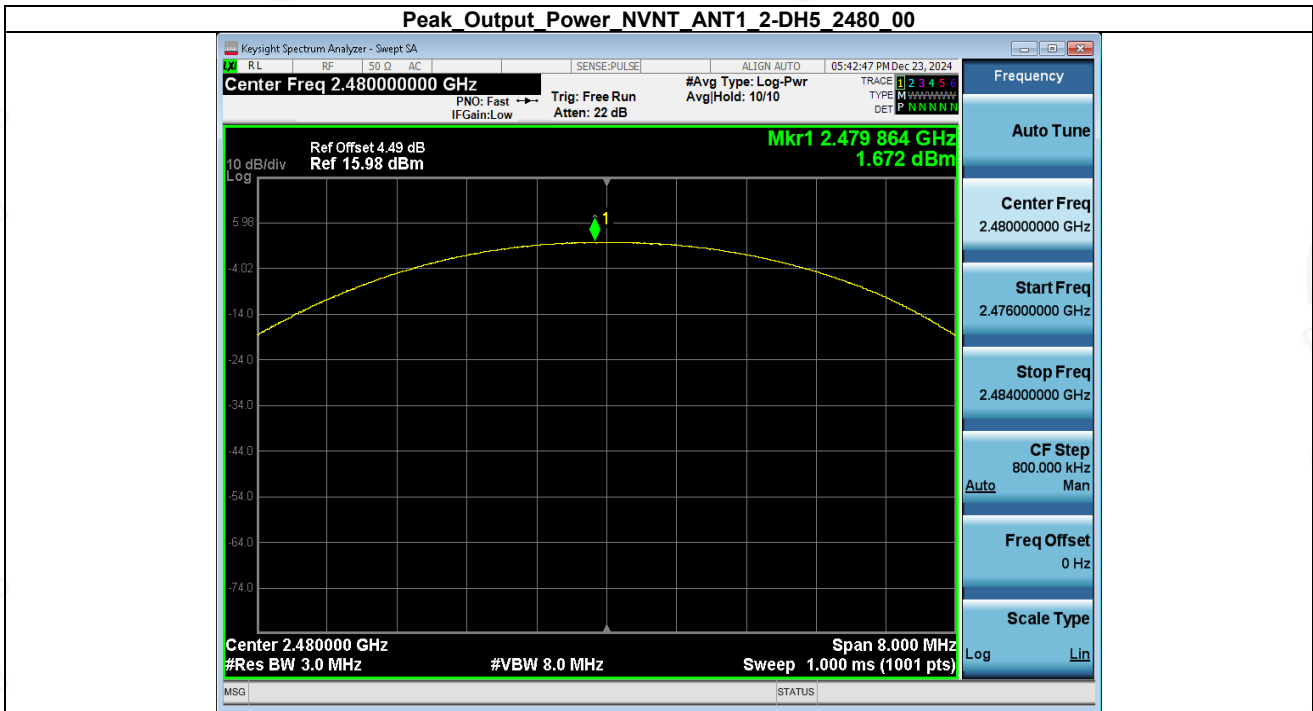
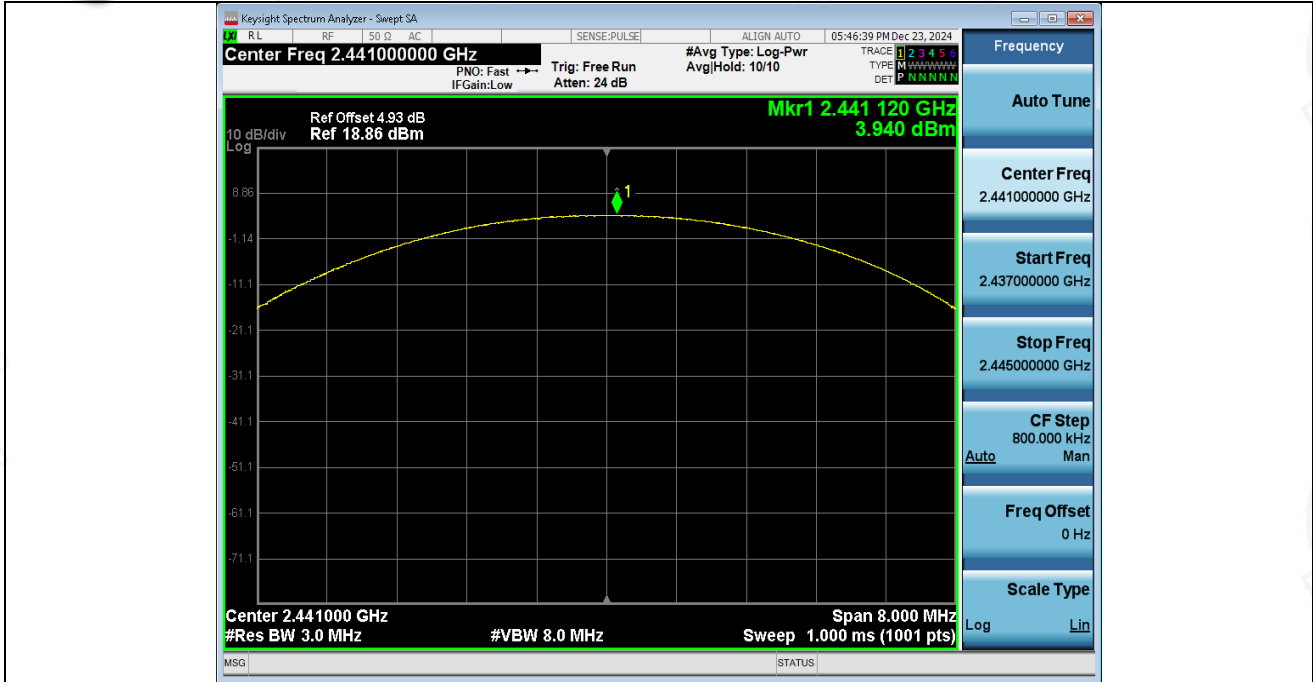
Peak Output Power NVNT_ANT1_1-DH5_2480_00





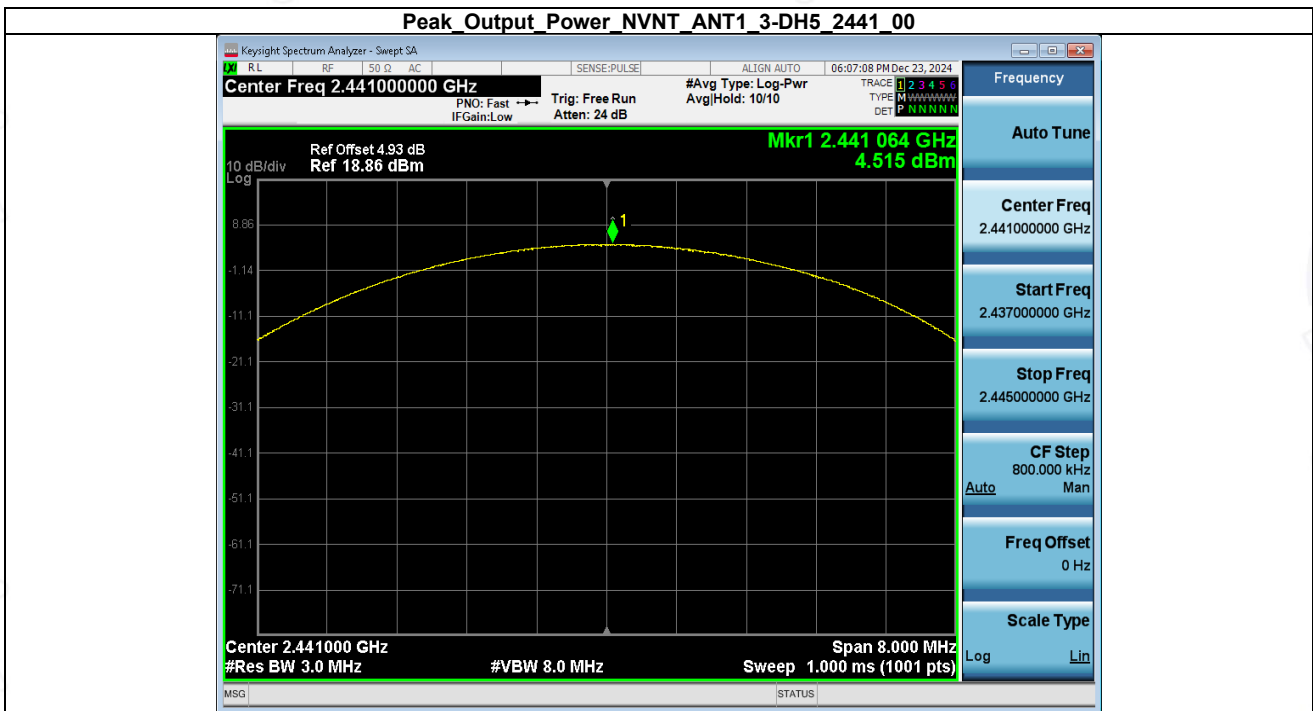
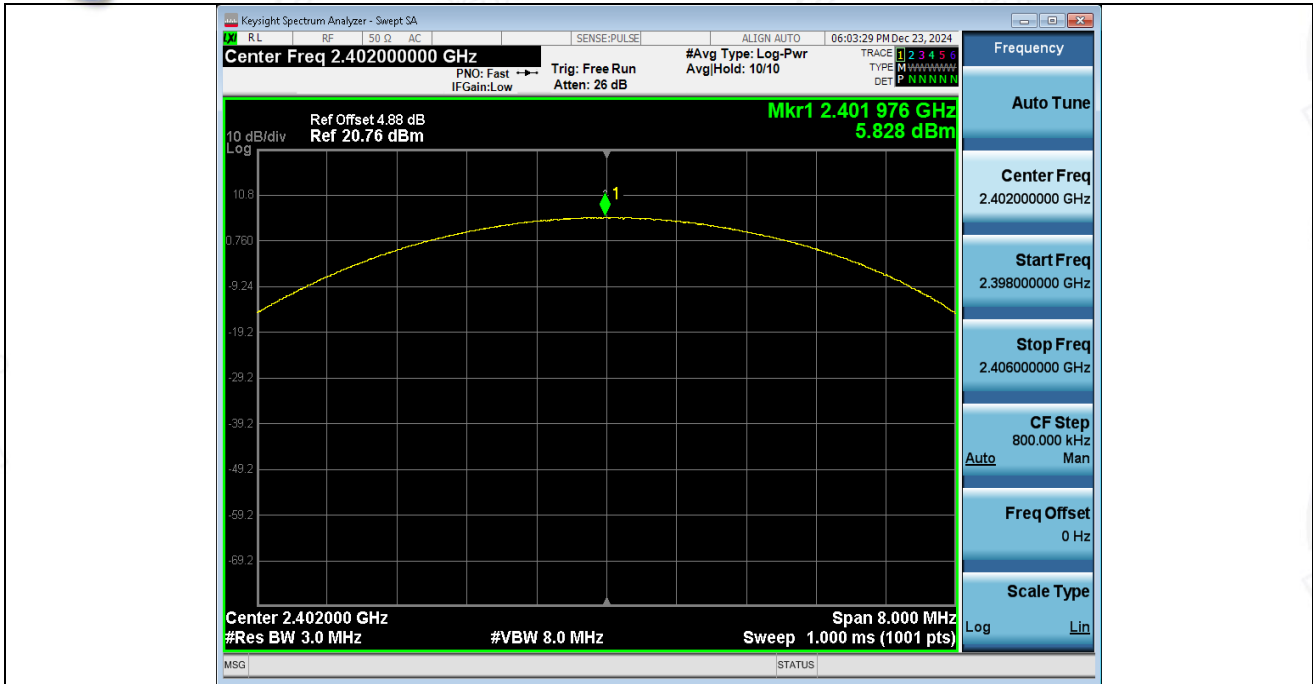
Peak Output Power_NVNT_ANT1_2-DH5_2441_00





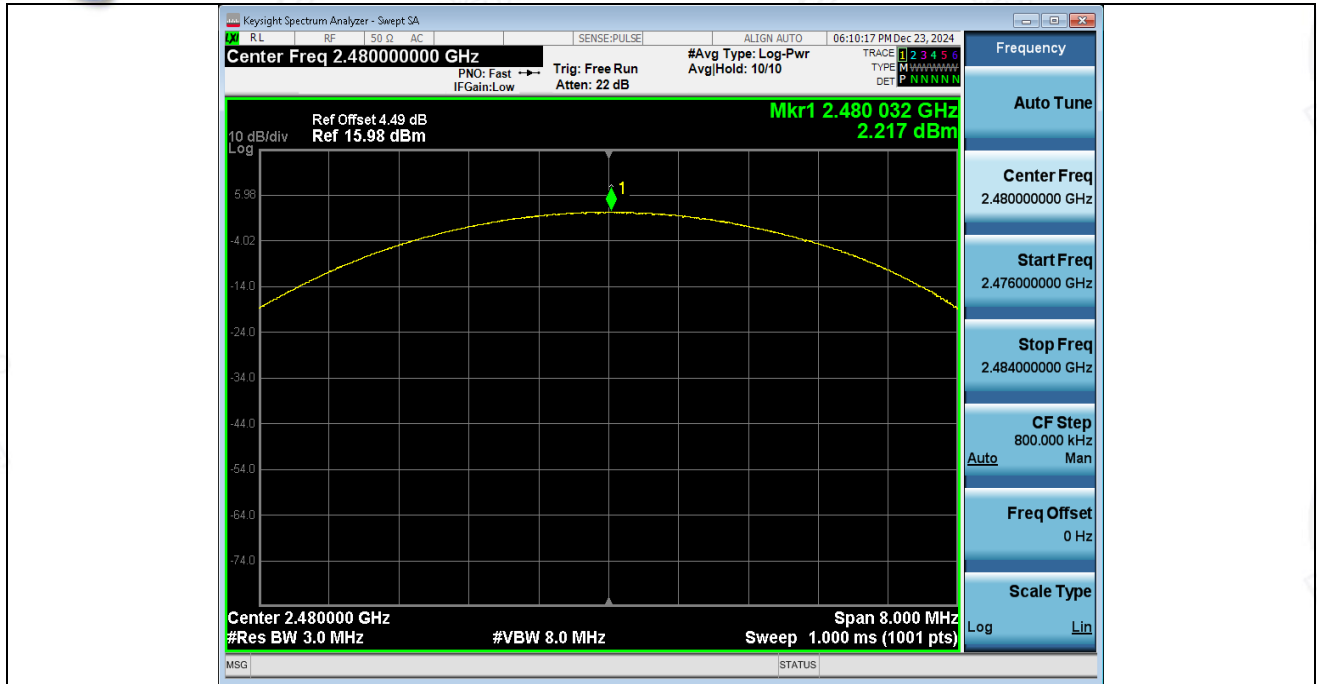
Peak Output Power_NVNT_ANT1_3-DH5_2402_00





Peak Output Power_NVNT_ANT1_3-DH5_2480_00

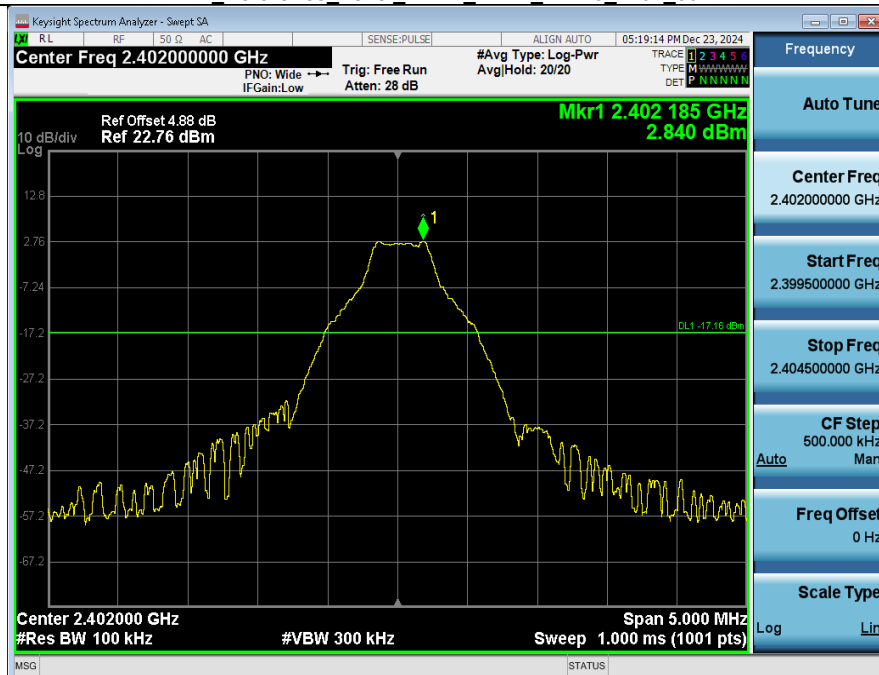




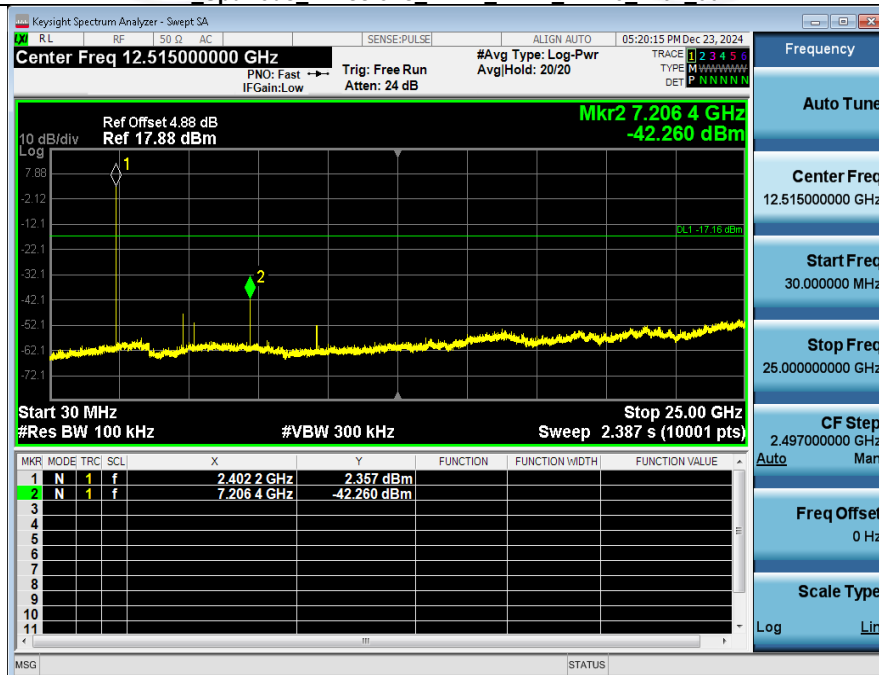
5. Spurious Emissions

Condition	Antenna	Modulation	TX Mode	Ref_level(dBm)	Spurious MAX.Value(dBm)	Limit	Result
NVNT	ANT1	1-DH5	2402.00	2.840	-42.260	-17.160	Pass
NVNT	ANT1	1-DH5	2441.00	1.473	-47.740	-18.527	Pass
NVNT	ANT1	1-DH5	2480.00	-0.957	-49.283	-20.957	Pass
NVNT	ANT1	2-DH5	2402.00	2.596	-47.529	-17.404	Pass
NVNT	ANT1	2-DH5	2441.00	1.253	-48.088	-18.747	Pass
NVNT	ANT1	2-DH5	2480.00	-1.007	-49.617	-21.007	Pass
NVNT	ANT1	3-DH5	2402.00	2.756	-43.665	-17.244	Pass
NVNT	ANT1	3-DH5	2441.00	1.410	-46.722	-18.590	Pass
NVNT	ANT1	3-DH5	2480.00	-0.830	-49.853	-20.830	Pass

1 Reference Level NVNT ANT1 1-DH5 2402_00



2 Spurious Emissions NVNT ANT1 1-DH5 2402_00

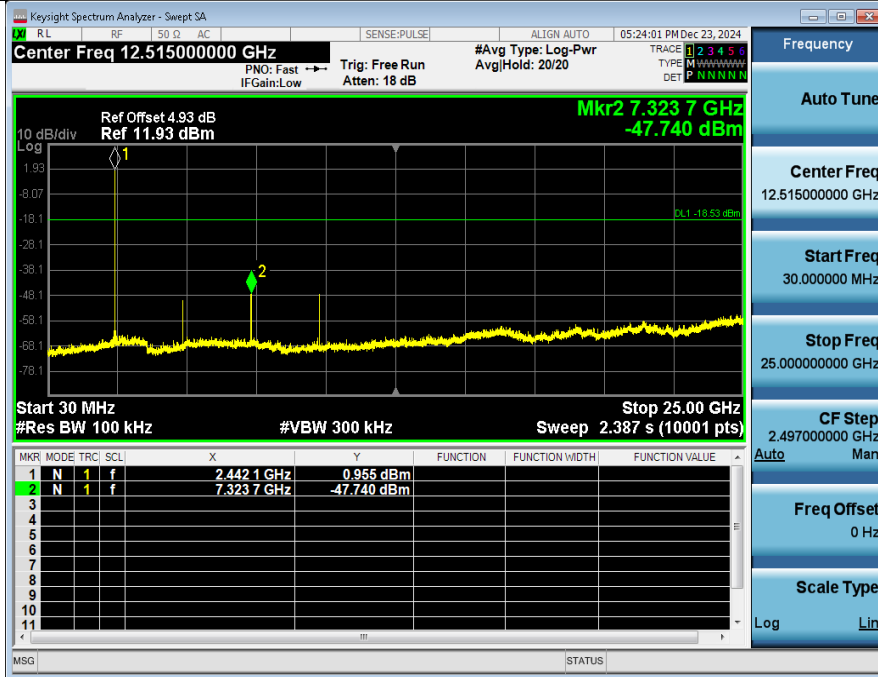


1 Reference Level NVNT ANT1 1-DH5 2441_00





2_Spurious_Emissions_NVNT_ANT1_1-DH5_2441_00

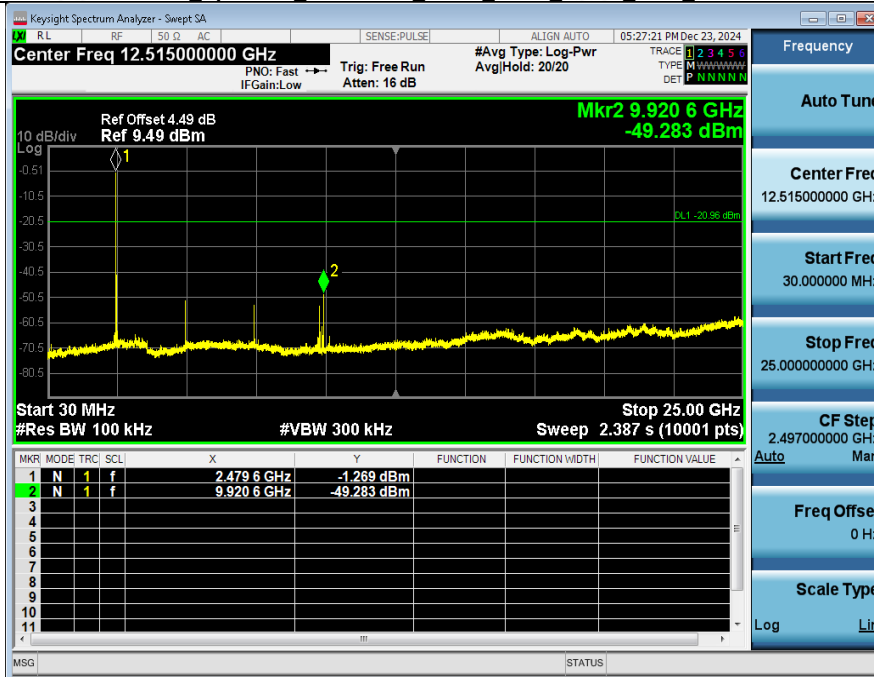


1_Reference_Level_NVNT_ANT1_1-DH5_2480_00





2 Spurious Emissions NVNT_ANT1_1-DH5_2480_00

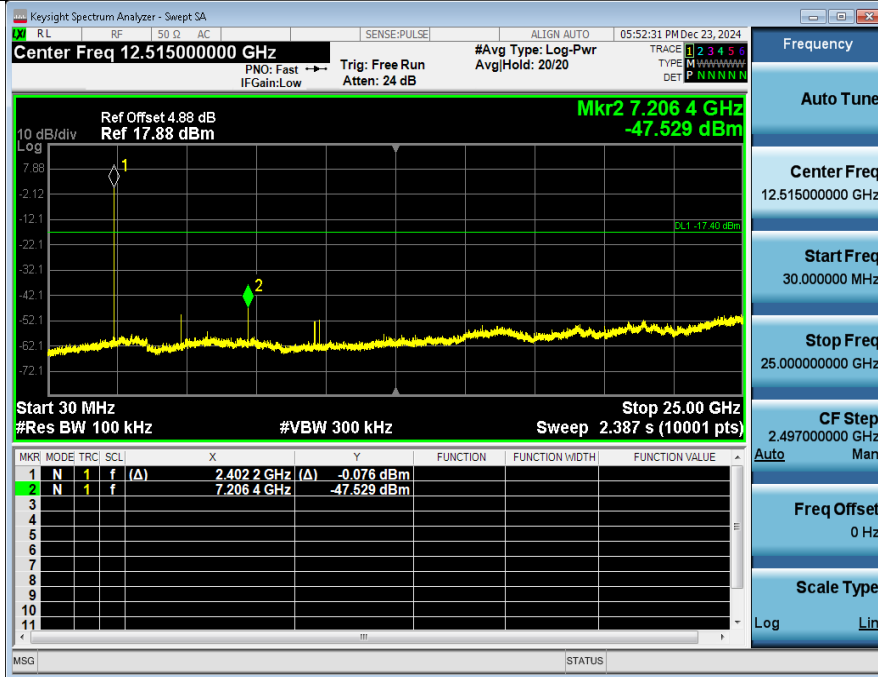


1 Reference Level NVNT_ANT1_2-DH5_2402_00





2 Spurious Emissions NVNT_ANT1_2-DH5_2402_00

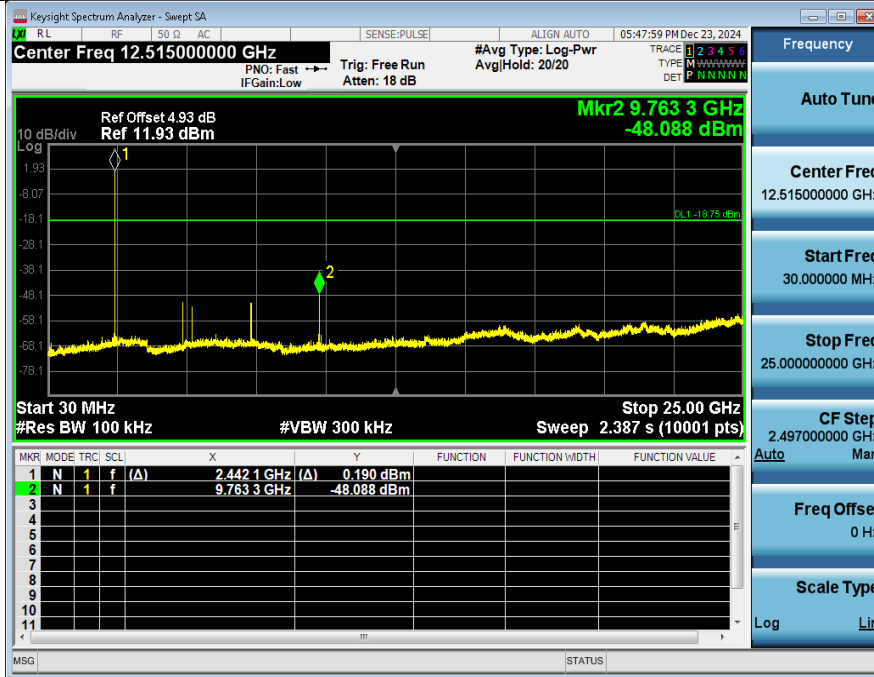


1 Reference_Level_NVNT_ANT1_2-DH5_2441_00





2 Spurious Emissions NVNT_ANT1_2-DH5_2441_00

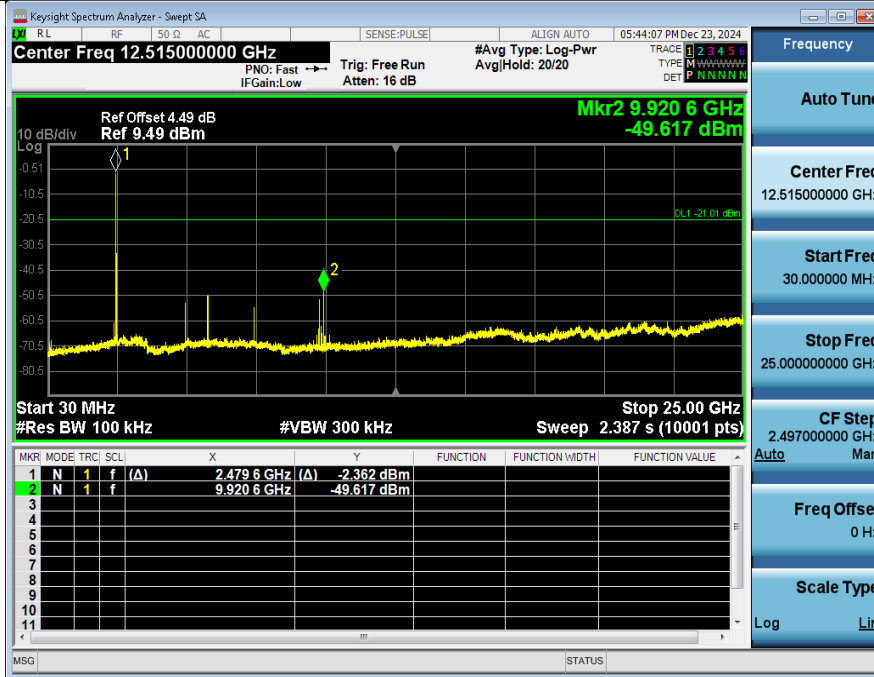


1 Reference_Level_NVNT_ANT1_2-DH5_2480_00





2_Spurious_Emissions_NVNT_ANT1_2-DH5_2480_00

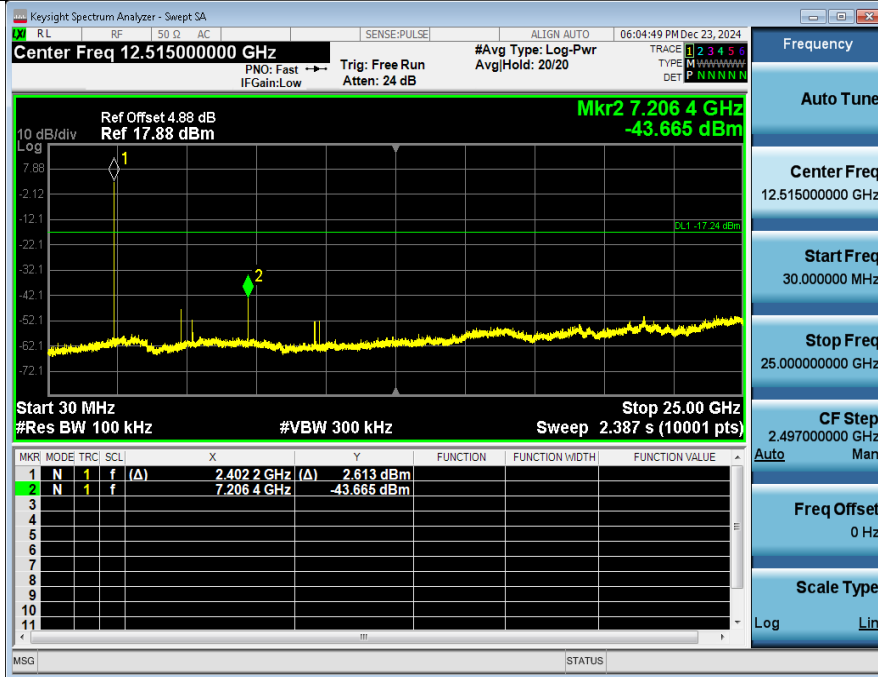


1_Reference_Level_NVNT_ANT1_3-DH5_2402_00



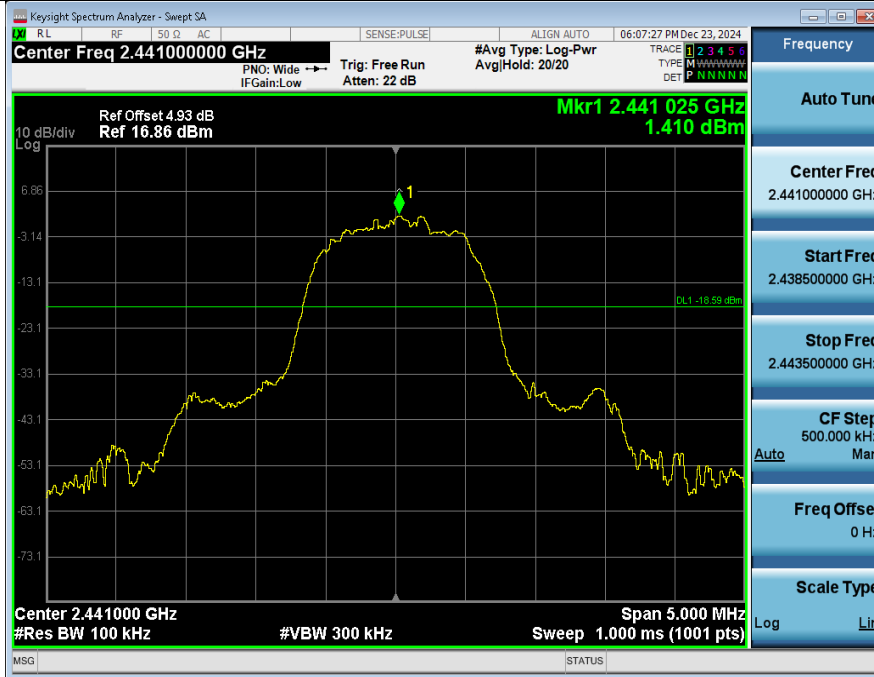


2 Spurious Emissions NVNT_ANT1_3-DH5_2402_00

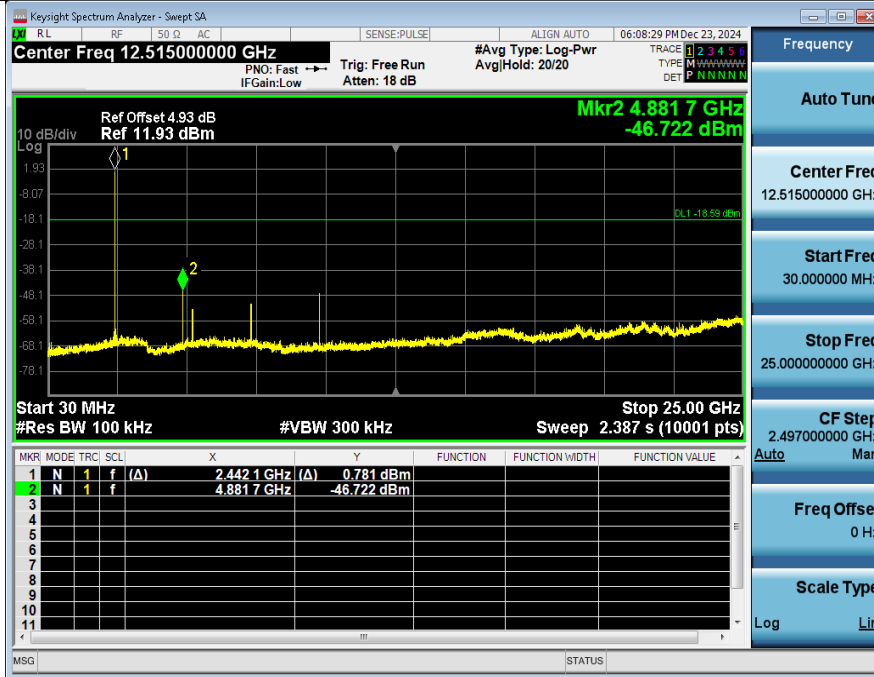


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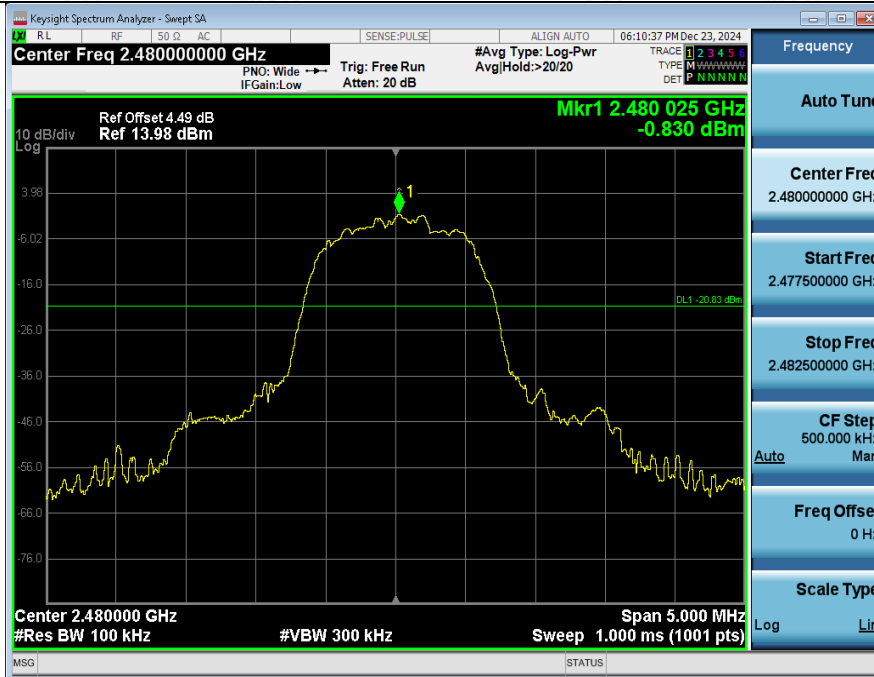


2 Spurious Emissions NVNT_ANT1_3-DH5_2441_00

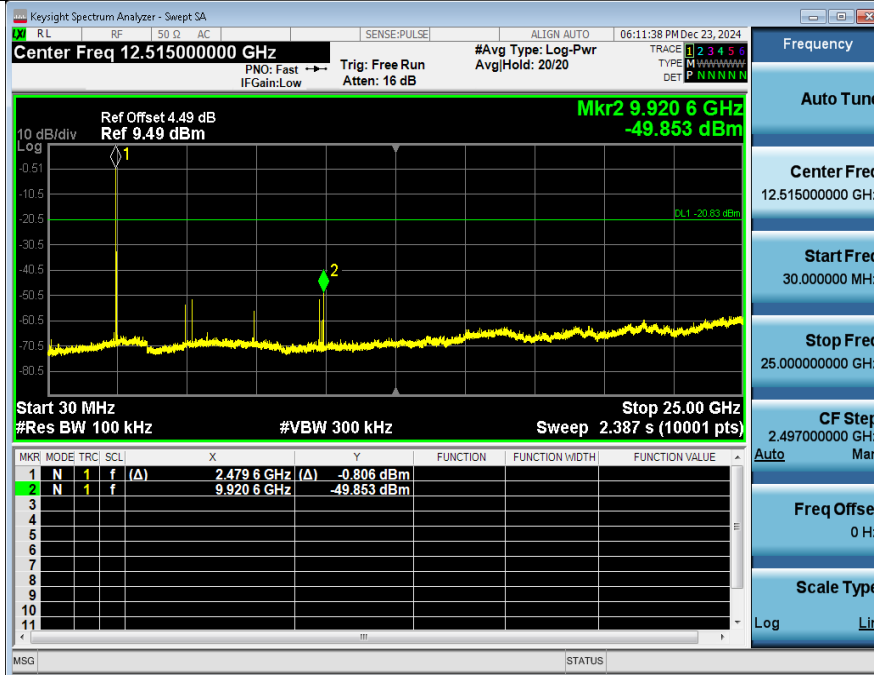


1 Reference_Level_NVNT_ANT1_3-DH5_2480_00





2 Spurious Emissions NVNT ANT1_3-DH5_2480_00



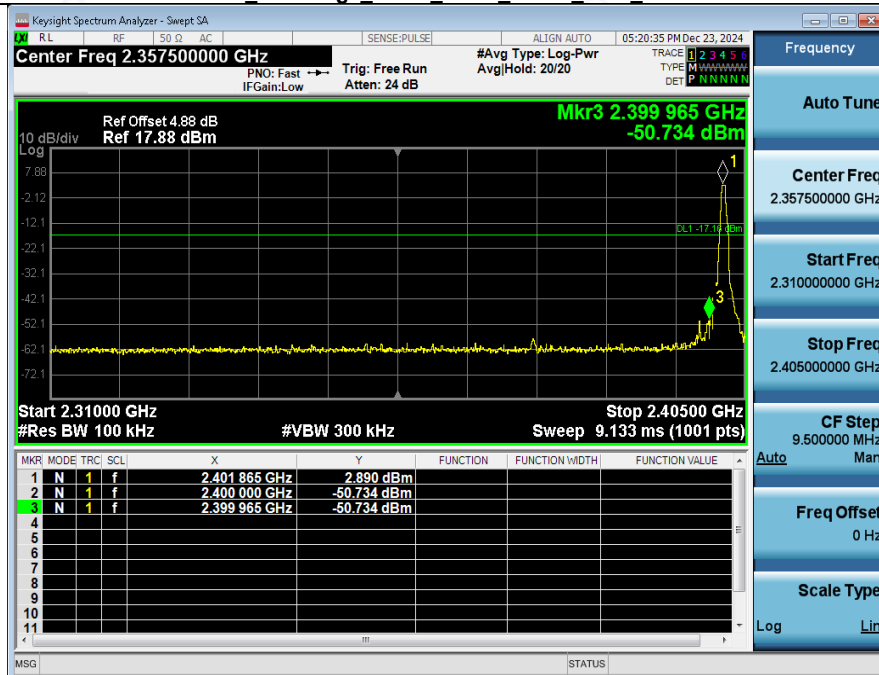
6. Bandedge

Condition	Antenna	Modulation	TX Mode	Ref_level(dBm)	Bandedge MAX.Value	Limit	Result
NVNT	ANT1	1-DH5	2402.00	2.840	-50.734	-17.160	Pass
NVNT	ANT1	1-DH5	Hopping_LCH	2.642	-54.545	-17.358	Pass
NVNT	ANT1	1-DH5	2480.00	-0.957	-62.563	-20.957	Pass
NVNT	ANT1	1-DH5	Hopping_HCH	2.153	-58.487	-17.847	Pass
NVNT	ANT1	2-DH5	2402.00	2.596	-50.355	-17.404	Pass
NVNT	ANT1	2-DH5	Hopping_LCH	1.929	-54.206	-18.071	Pass
NVNT	ANT1	2-DH5	2480.00	-1.007	-65.124	-21.007	Pass
NVNT	ANT1	2-DH5	Hopping_HCH	1.937	-59.283	-18.063	Pass
NVNT	ANT1	3-DH5	2402.00	2.756	-48.753	-17.244	Pass
NVNT	ANT1	3-DH5	Hopping_LCH	2.368	-50.685	-17.632	Pass
NVNT	ANT1	3-DH5	2480.00	-0.830	-62.682	-20.830	Pass
NVNT	ANT1	3-DH5	Hopping_HCH	2.090	-58.894	-17.910	Pass

1_Reference_Level_NVNT_ANT1_1-DH5_2402_00

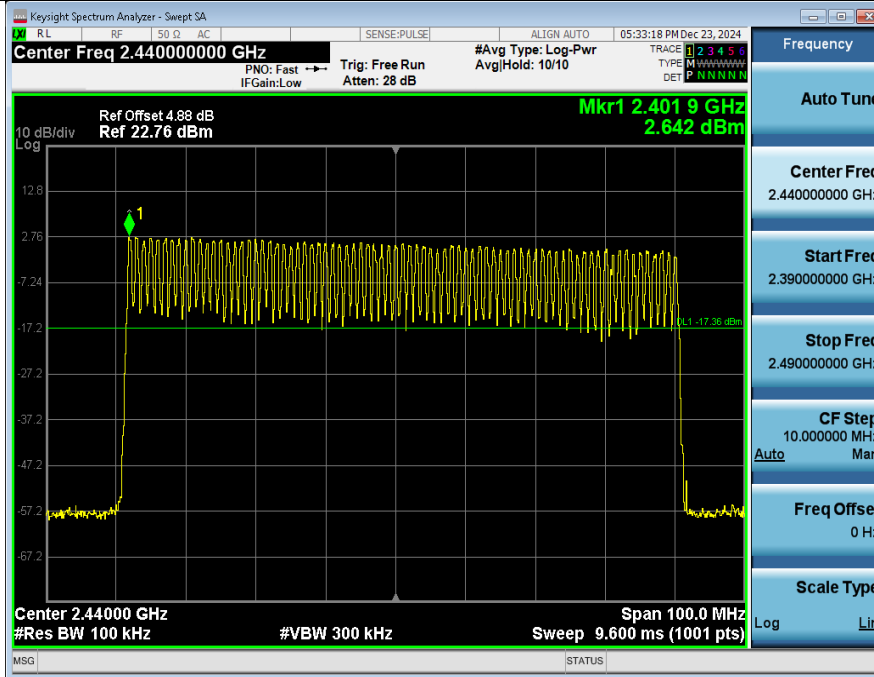


2_Bandedge_NVNT_ANT1_1-DH5_2402_00

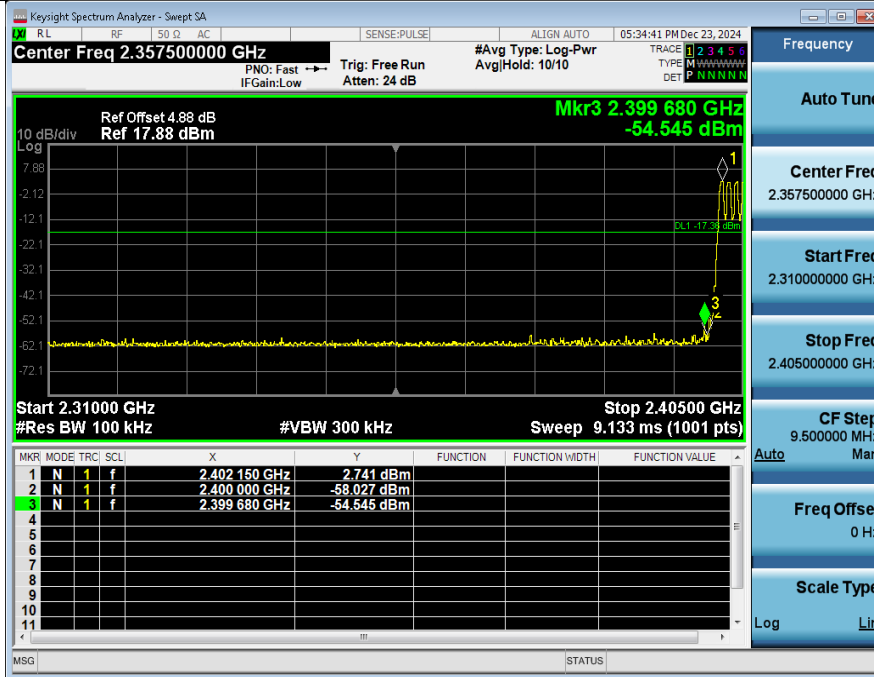


1_Reference_Level_Hopping_NVNT_ANT1_1-DH5_Hopping





2_Band_Edge_(Hopping)_NVNT_ANT1_1-DH5_Hopping

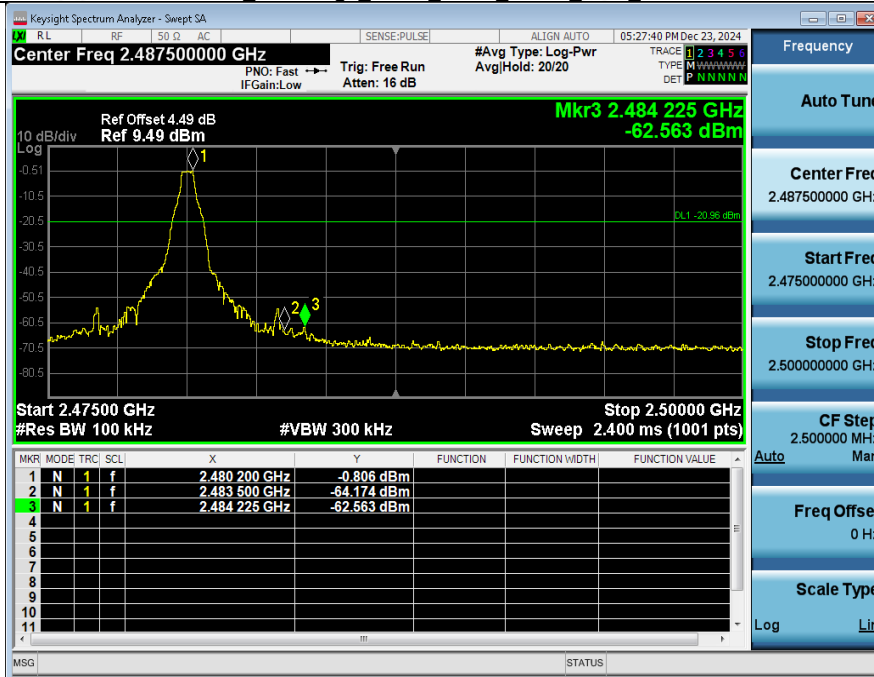


1_Reference_Level_NVNT_ANT1_1-DH5_2480_00



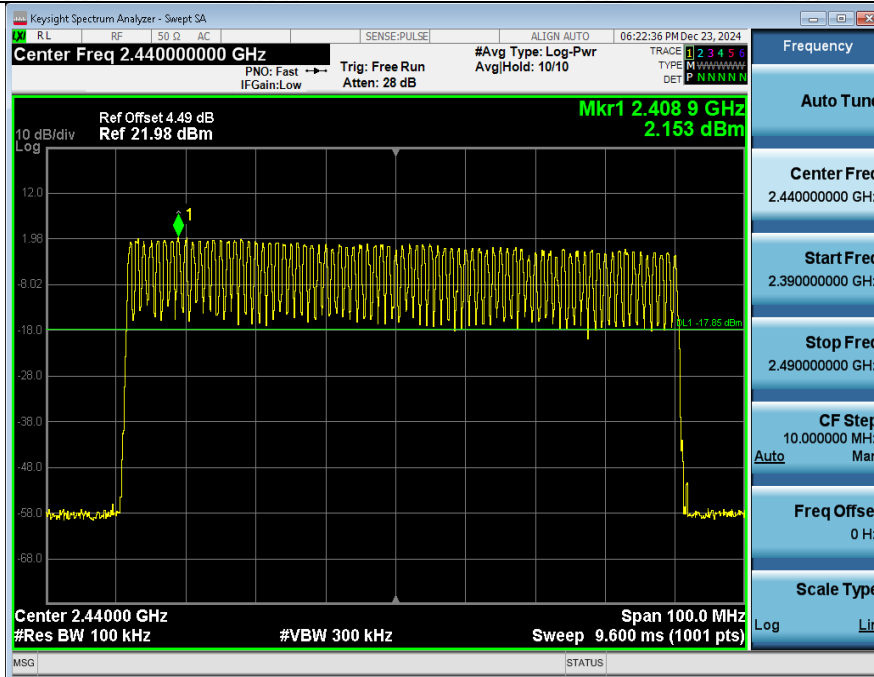


2_Bandedge_NVNT_ANT1_1-DH5_2480_00

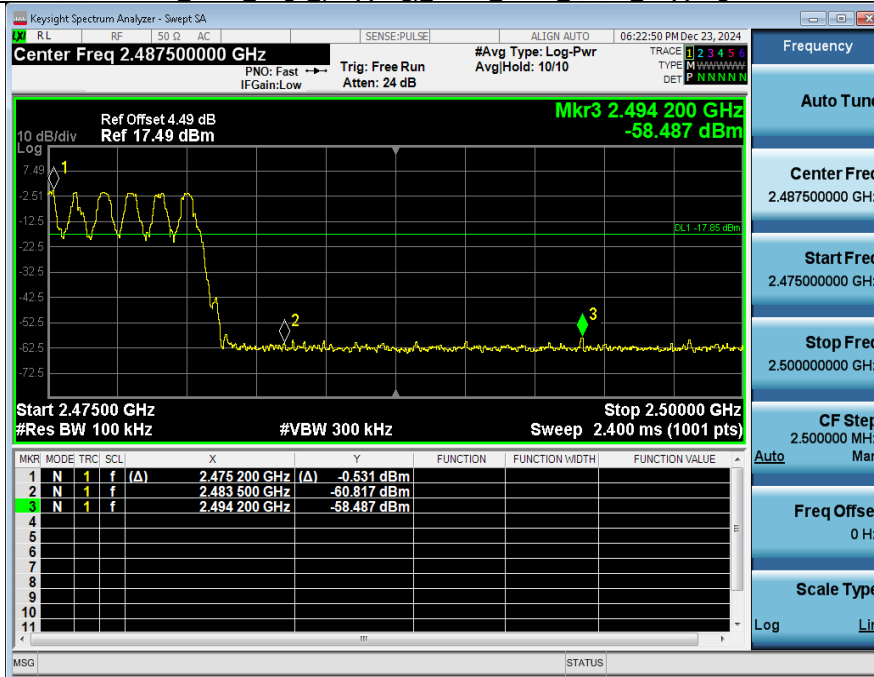


1_Reference_Level_Hopping_NVNT_ANT1_1-DH5_Hopping





2_Band_Edge_(Hopping)_NVNT_ANT1_1-DH5_Hopping

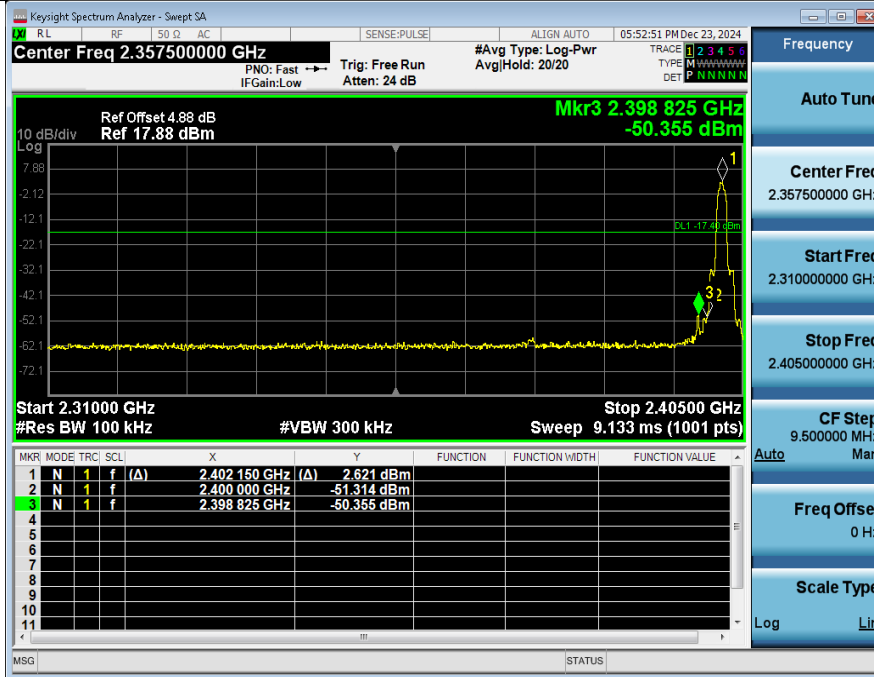


1_Reference_Level_NVNT_ANT1_2-DH5_2402_00



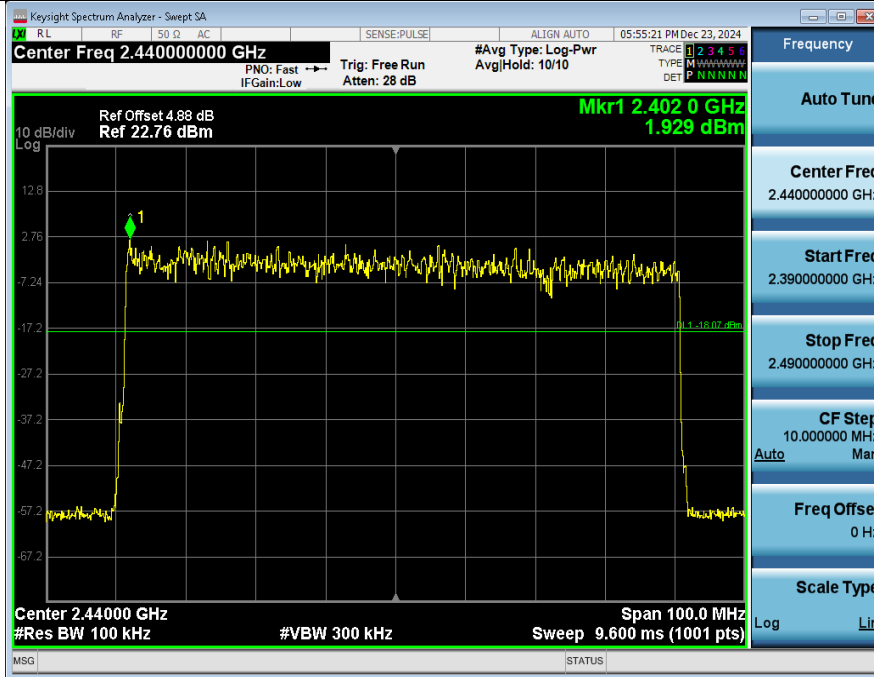


2_Bandedge_NVNT_ANT1_2-DH5_2402_00

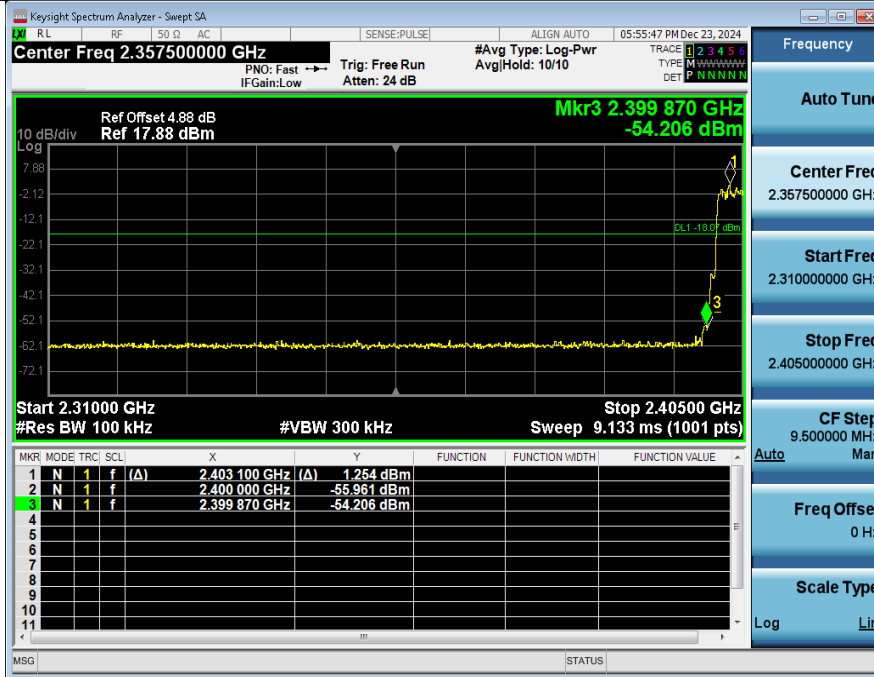


1_Reference_Level_Hopping_NVNT_ANT1_2-DH5_Hopping





2_Band_Edge_(Hopping)_NVNT_ANT1_2-DH5_Hopping

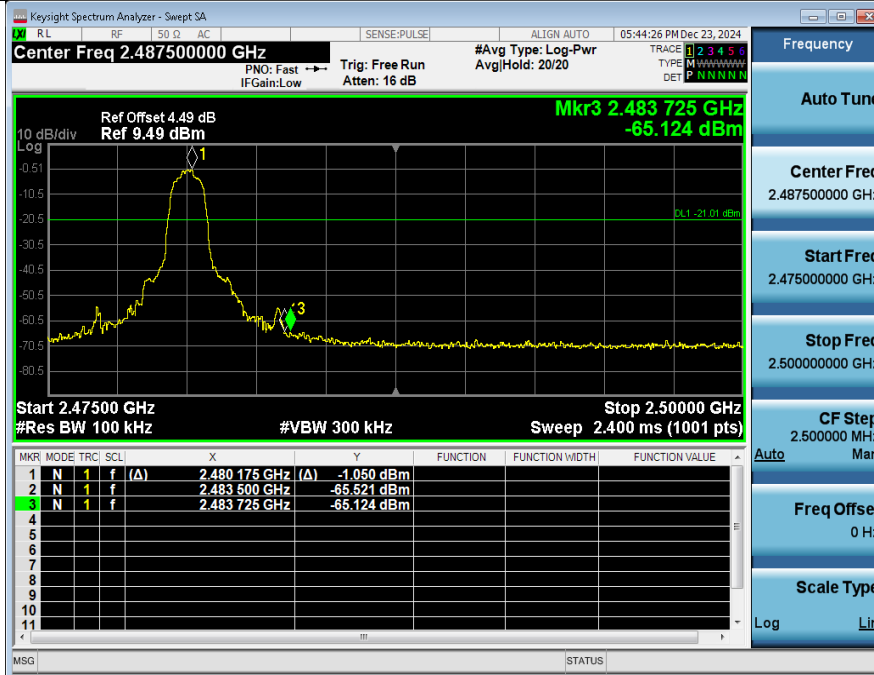


1_Reference_Level_NVNT_ANT1_2-DH5_2480_00



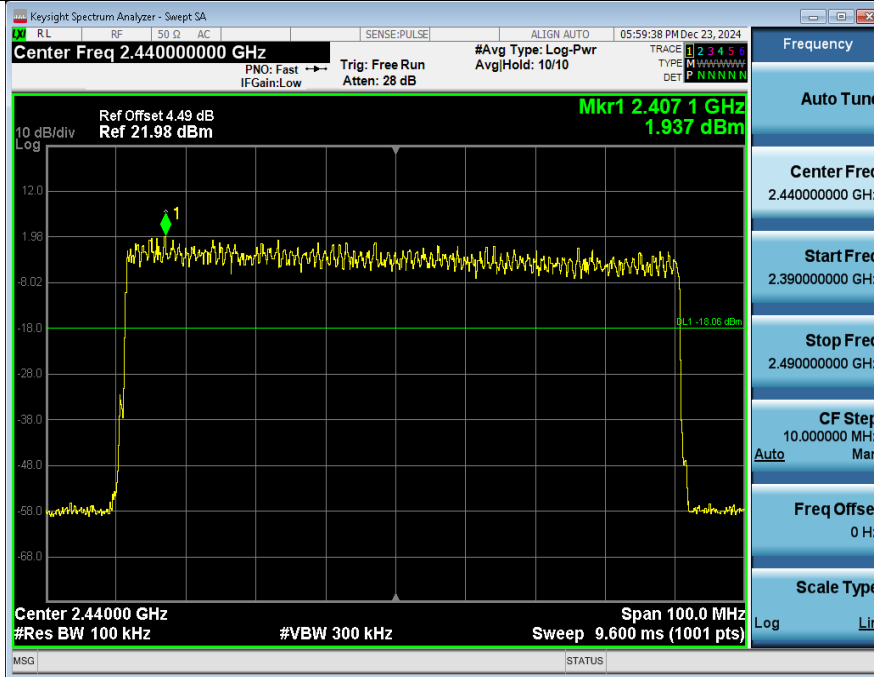


2_Bandedge_NVNT_ANT1_2-DH5_2480_00

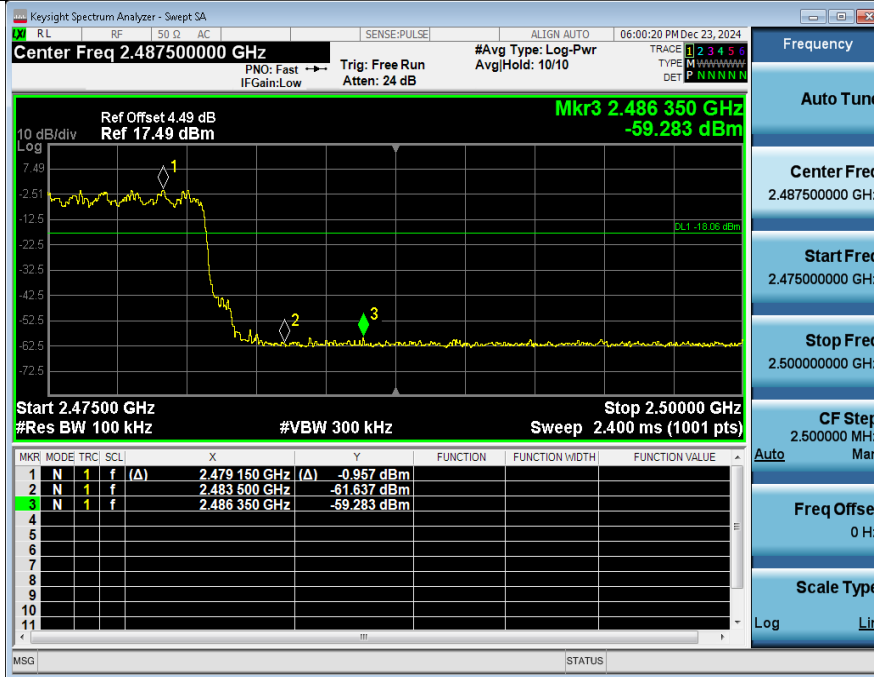


1_Reference_Level_Hopping_NVNT_ANT1_2-DH5_Hopping





2_Band_Edge_(Hopping)_NVNT_ANT1_2-DH5_Hopping

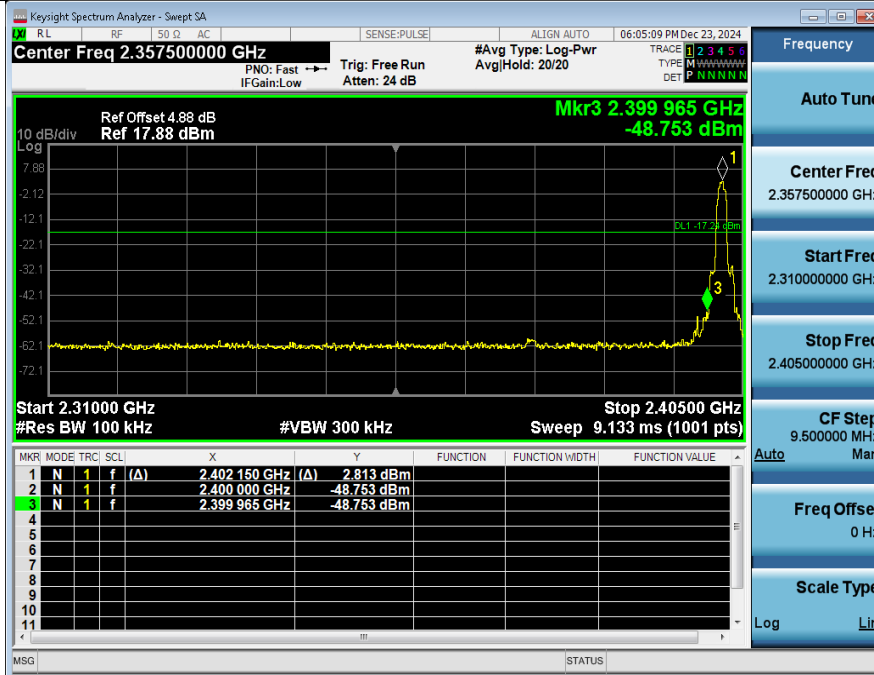


1_Reference_Level_NVNT_ANT1_3-DH5_2402_00



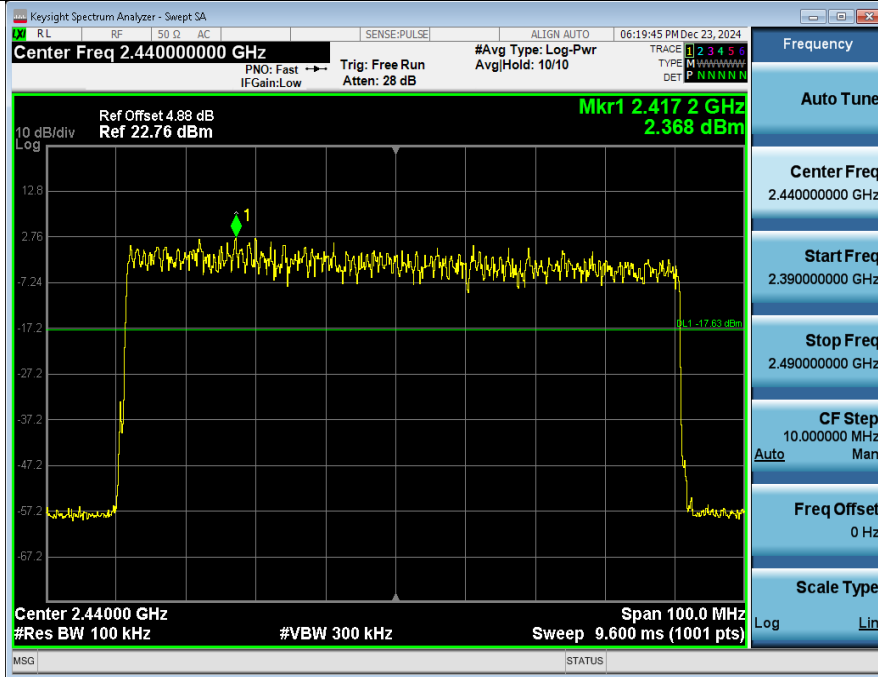


2_Bandedge_NVNT_ANT1_3-DH5_2402_00

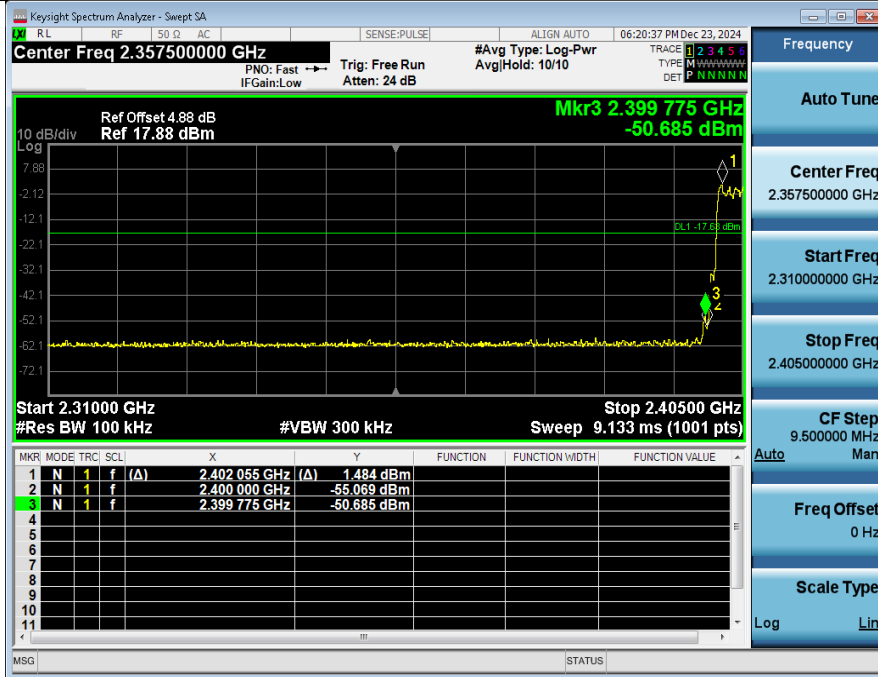


1_Reference_Level_Hopping_NVNT_ANT1_3-DH5_Hopping



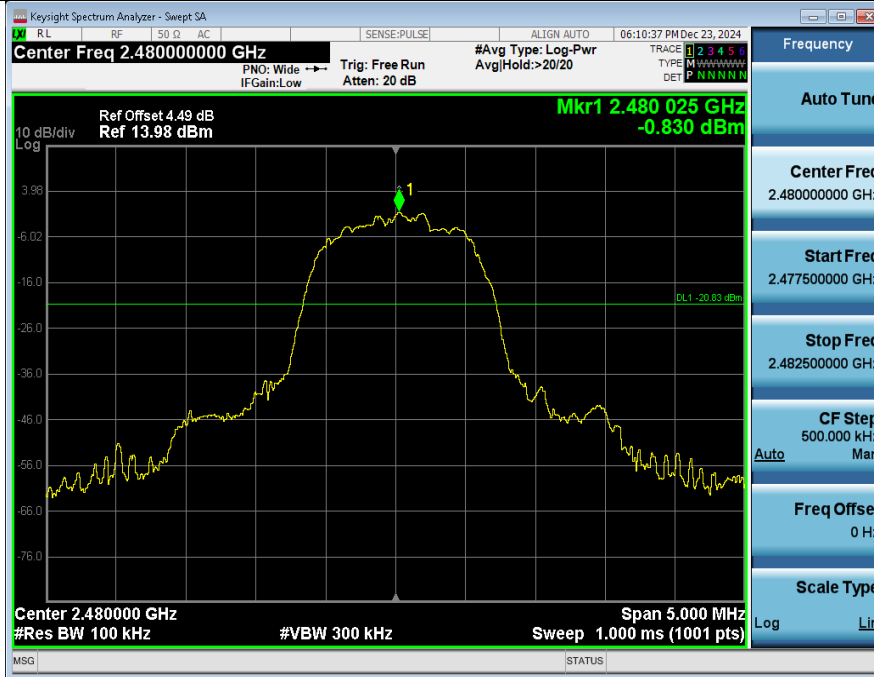


2_Band_Edge_(Hopping)_NVNT_ANT1_3-DH5_Hopping

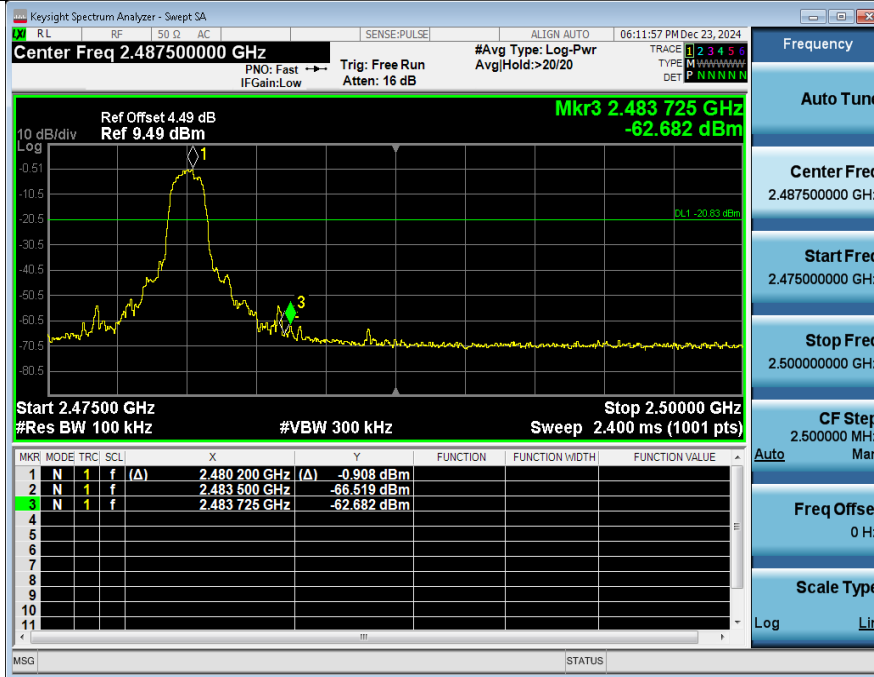


1_Reference_Level_NVNT_ANT1_3-DH5_2480_00



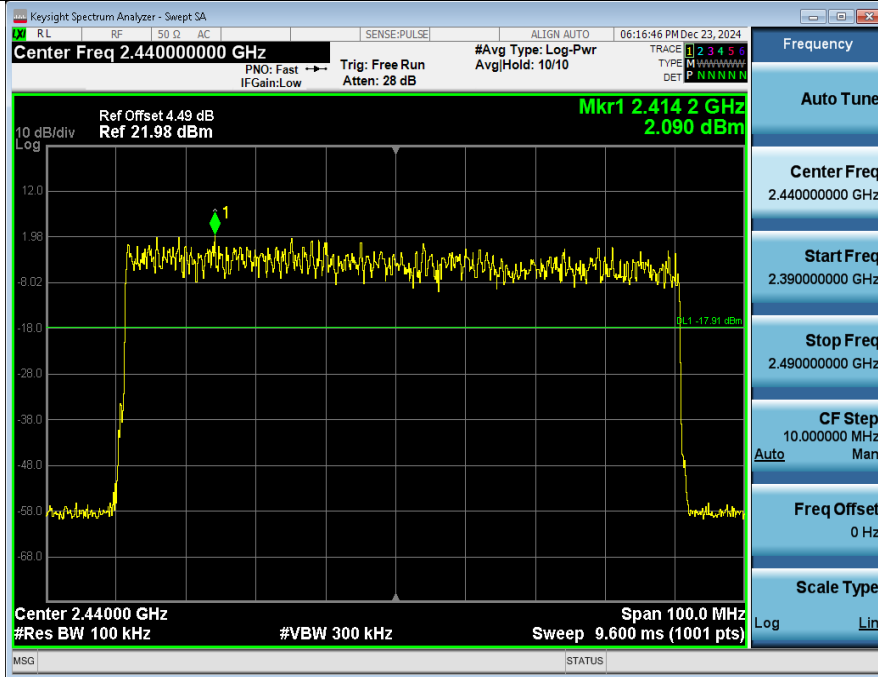


2_Bandedge_NVNT_ANT1_3-DH5_2480_00

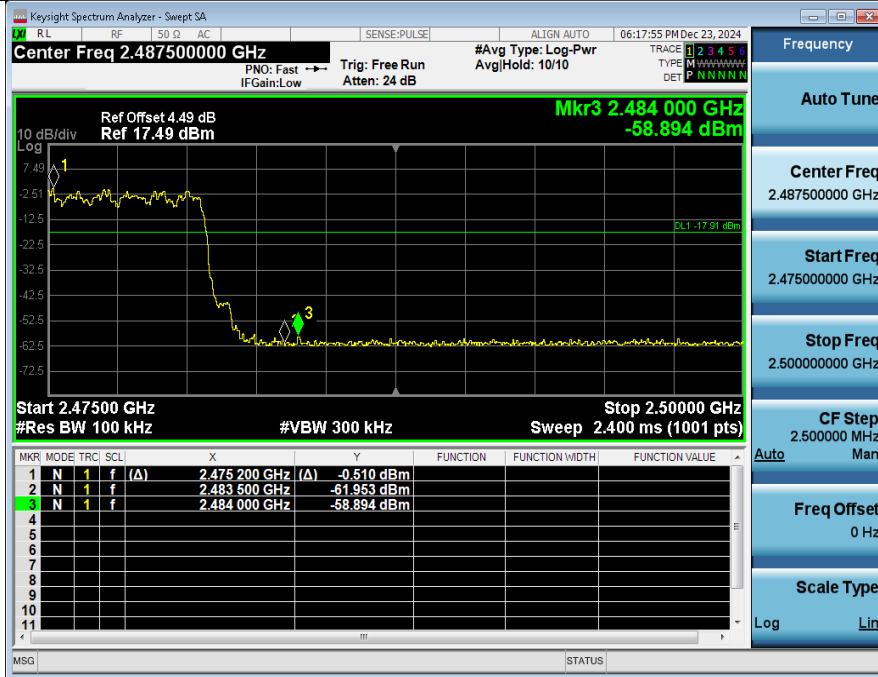


1_Reference_Level_Hopping_NVNT_ANT1_3-DH5_Hopping





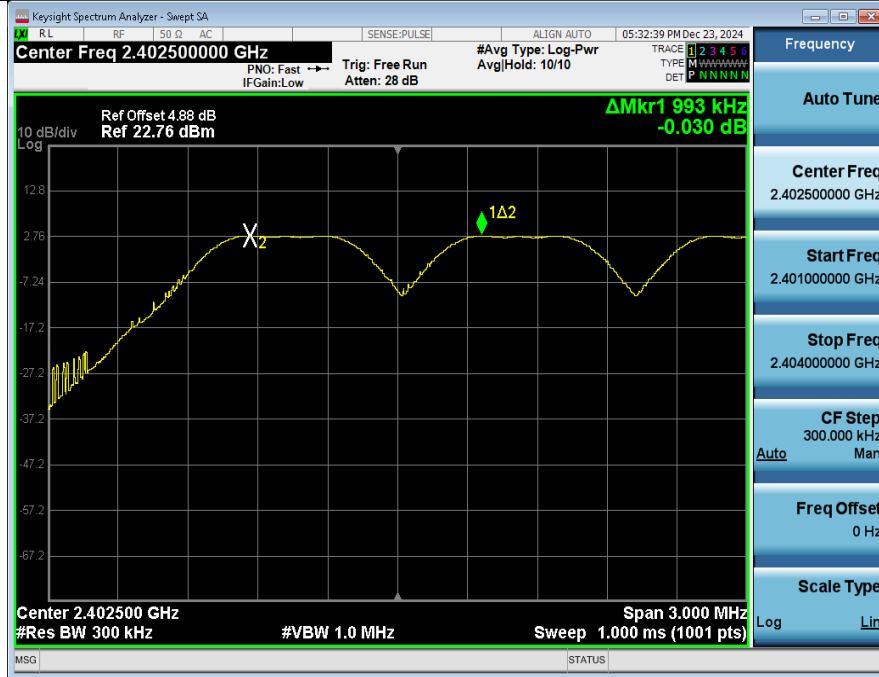
2_Band_Edge_(Hopping)_NVNT_ANT1_3-DH5_Hopping



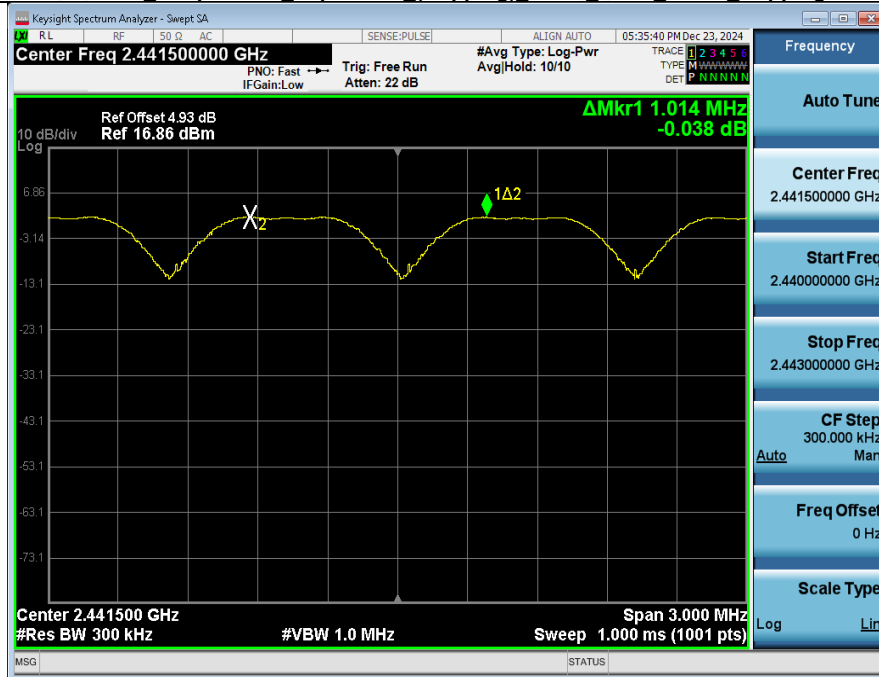
7. Carrier Frequencies Separation (Hopping)

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	2401.867	2402.860	0.99	0.948	Pass
NVNT	ANT1	1-DH5	2441.00	2440.867	2441.881	1.01	0.952	Pass
NVNT	ANT1	1-DH5	2480.00	2478.870	2479.857	0.99	0.949	Pass
NVNT	ANT1	2-DH5	2402.00	2401.921	2402.860	0.94	0.883	Pass
NVNT	ANT1	2-DH5	2441.00	2440.870	2441.869	1.00	0.879	Pass
NVNT	ANT1	2-DH5	2480.00	2478.903	2479.896	0.99	0.884	Pass
NVNT	ANT1	3-DH5	2402.00	2401.903	2403.076	1.17	0.866	Pass
NVNT	ANT1	3-DH5	2441.00	2440.858	2442.163	1.30	0.870	Pass
NVNT	ANT1	3-DH5	2480.00	2478.804	2480.028	1.22	0.869	Pass

Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH5_Hopping

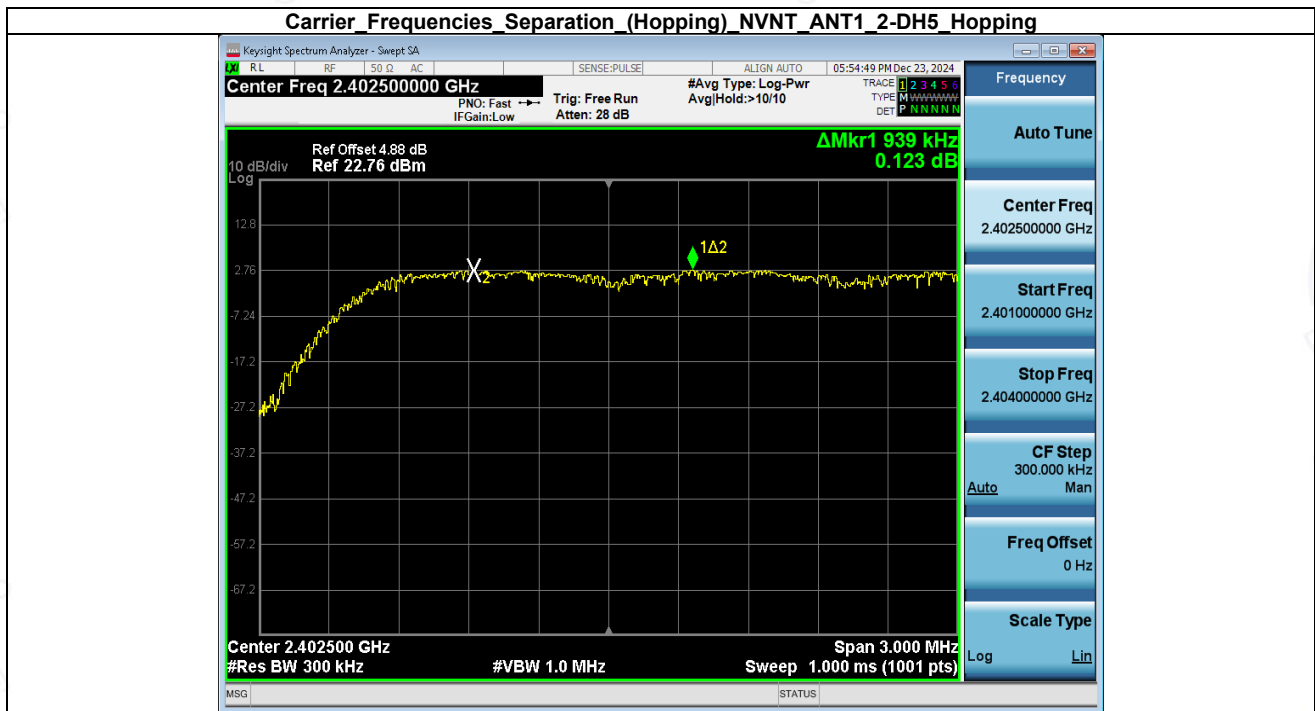


Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH5_Hopping



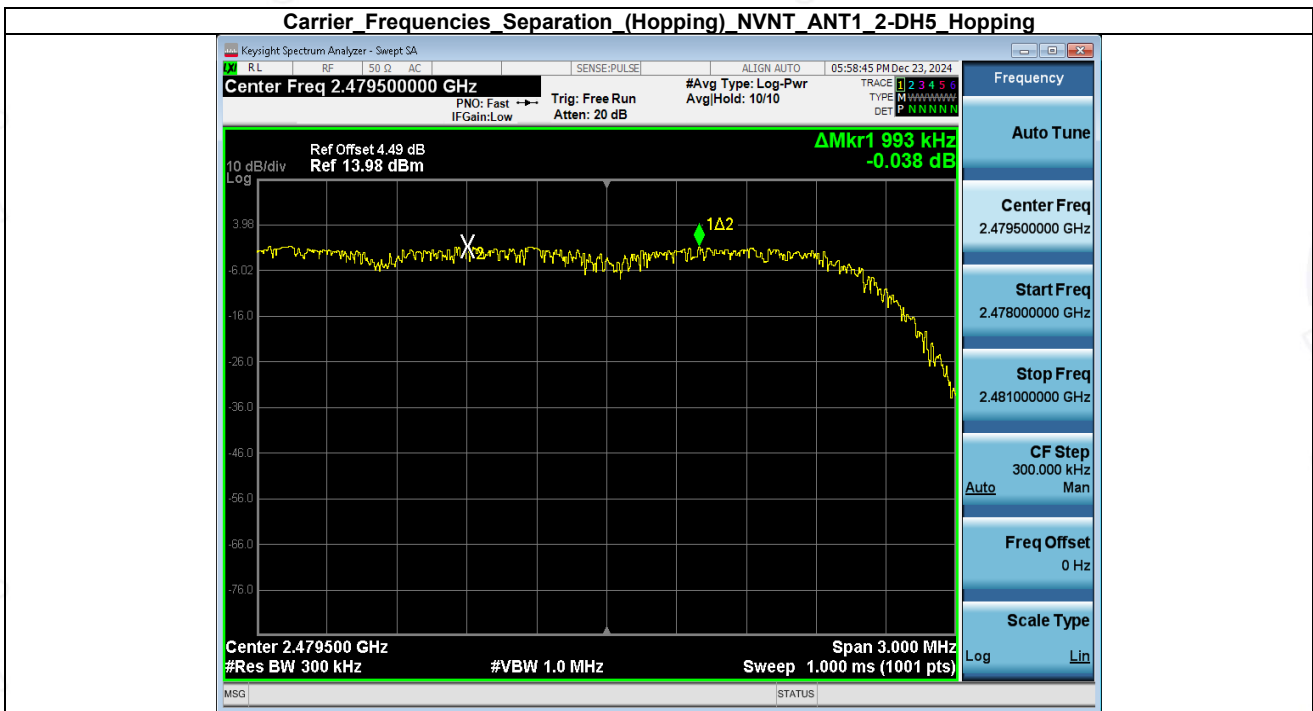
Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_1-DH5_Hopping





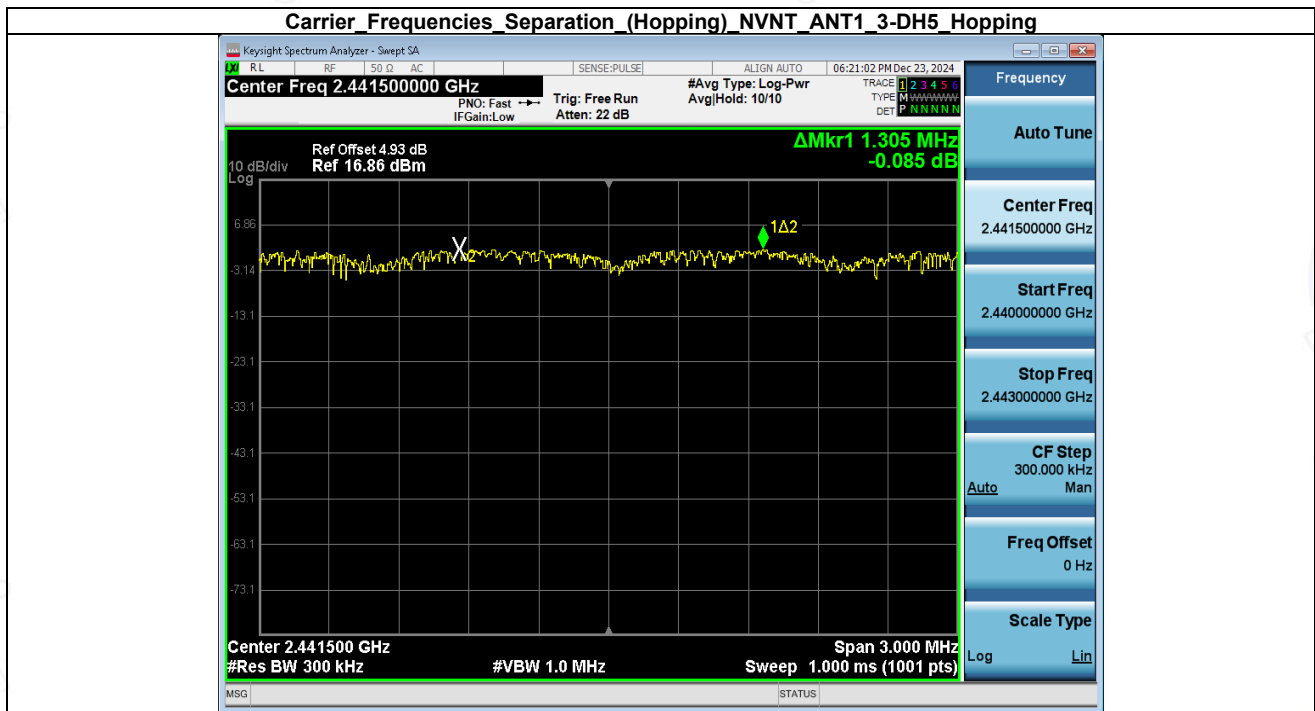
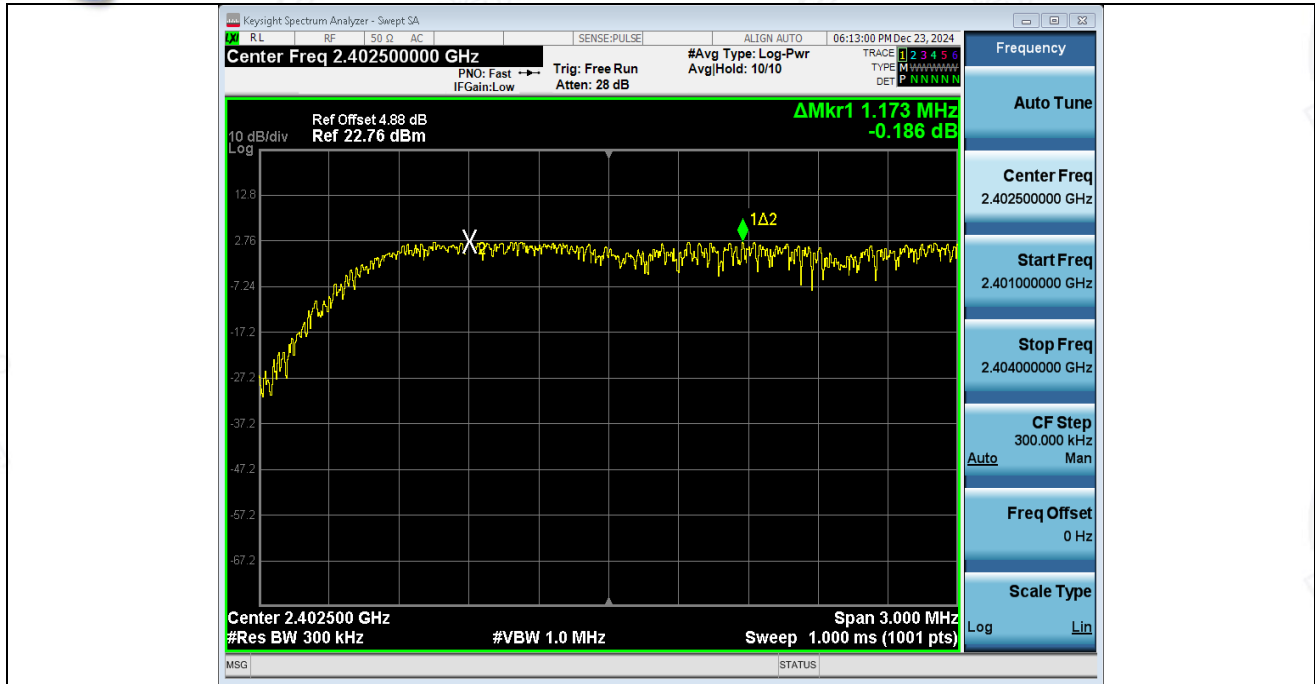
Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_2-DH5_Hopping





Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_3-DH5_Hopping





Carrier_Frequencies_Separation_(Hopping)_NVNT_ANT1_3-DH5_Hopping

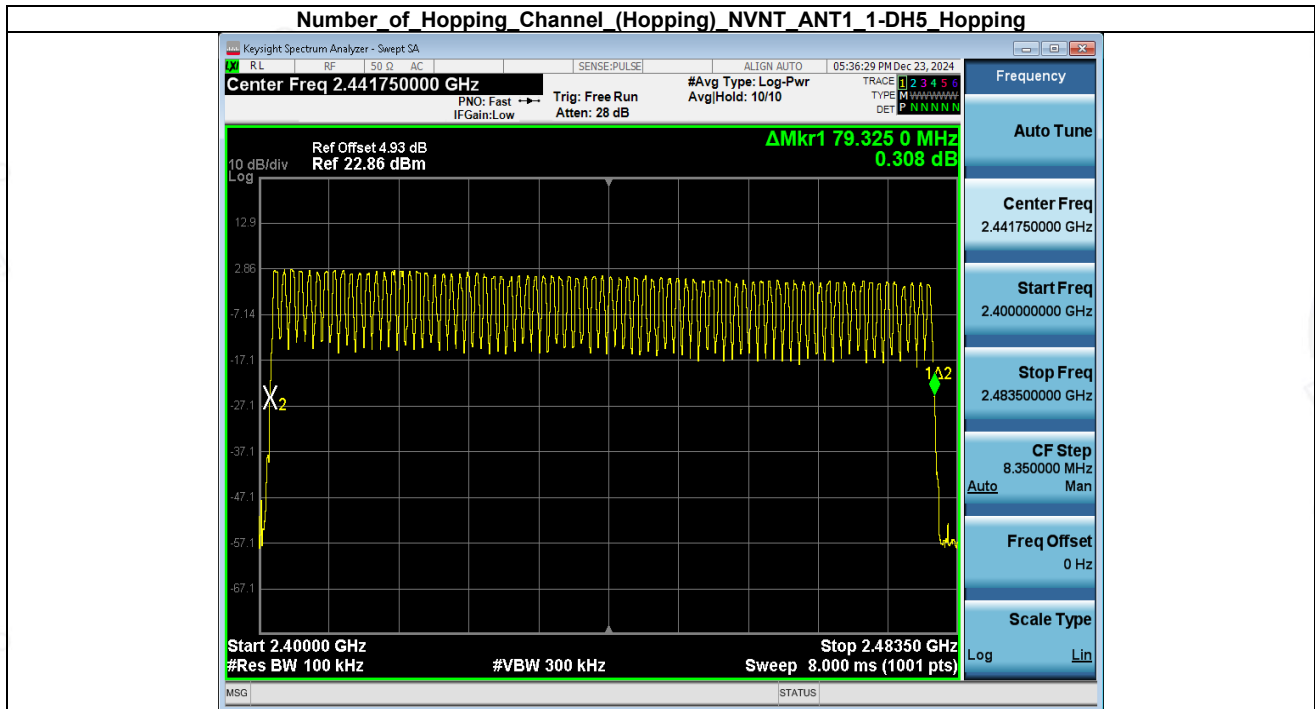




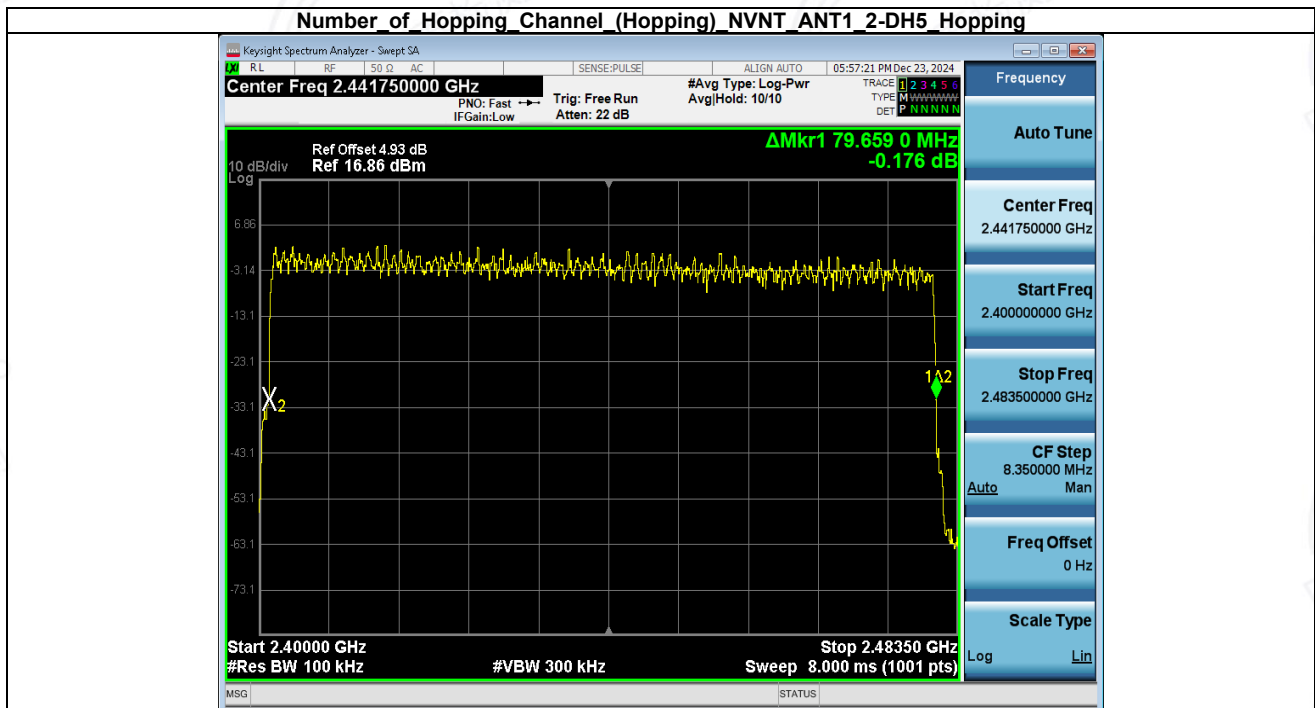
8. Number of Hopping Channel (Hopping)

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

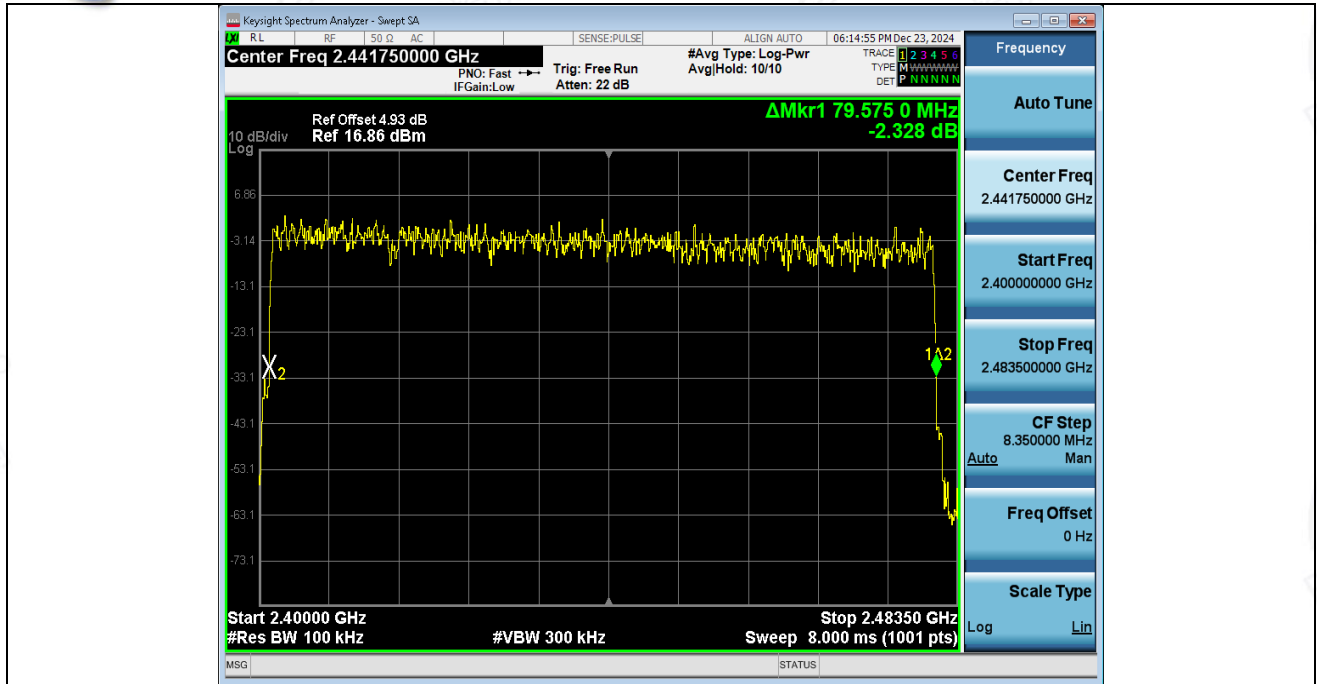


Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_2-DH5_Hopping



Number_of_Hopping_Channel_(Hopping)_NVNT_ANT1_3-DH5_Hopping

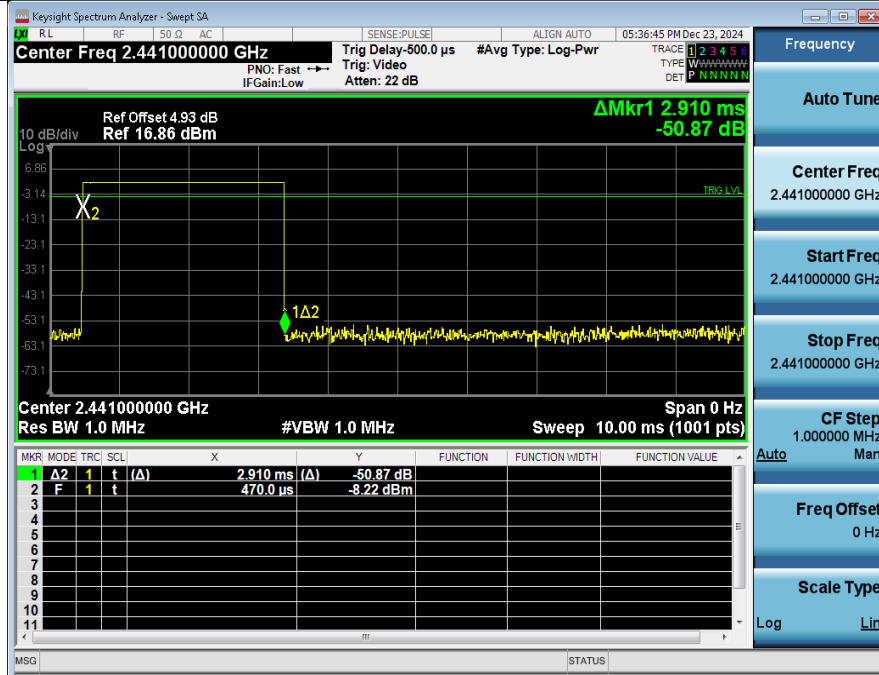




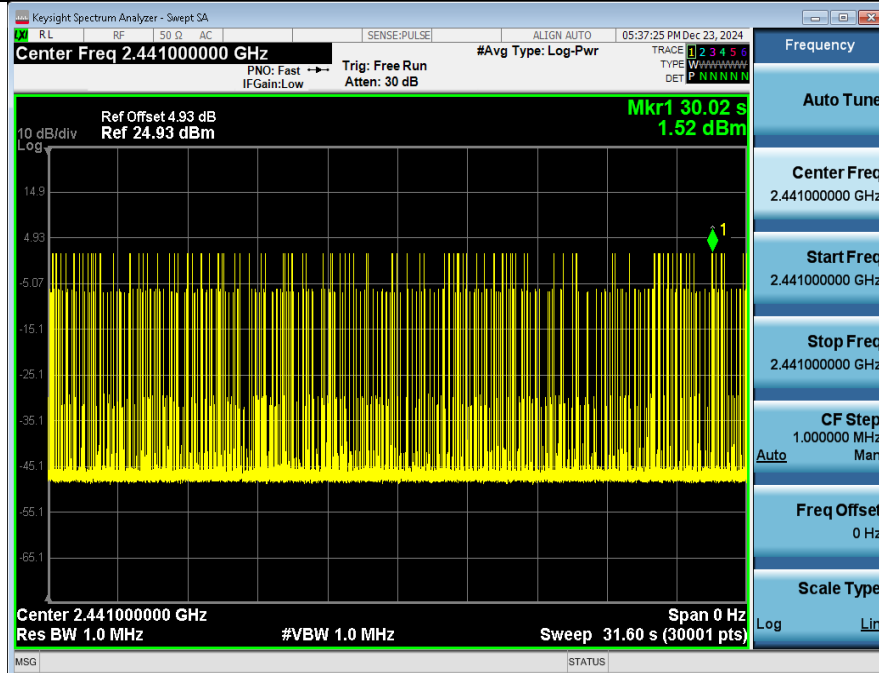
9. Dwell Time (Hopping)

Condition	Antenna	Packet Type	Pulse Time(ms)	Hops	Dwell Time(ms)	Limit(s)	Result
NVNT	ANT1	1-DH5	2.910	103.00	299.730	0.40	Pass
NVNT	ANT1	2-DH5	2.910	110.00	320.100	0.40	Pass
NVNT	ANT1	3-DH5	2.920	117.00	341.640	0.40	Pass

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

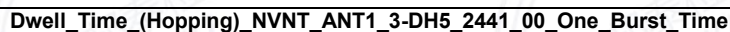


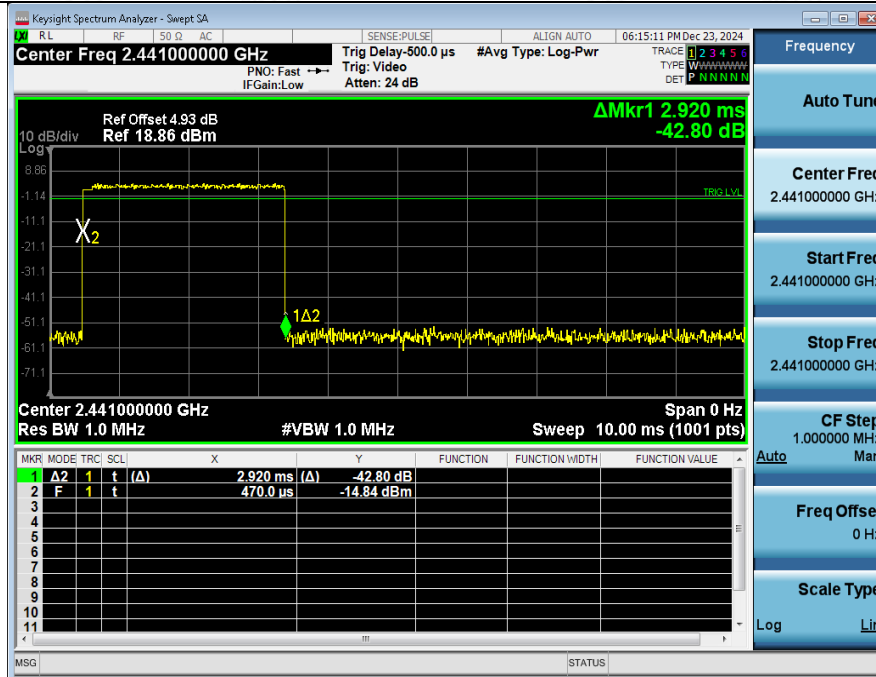
Dwell Time (Hopping) NVNT ANT1 1-DH5 2441 00 Accumulated



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







Dwell Time (Hopping) NVNT ANT1 3-DH5 2441_00 Accumulated

