

Appendix

Test Data

for BTEK241218089A01E02

Start date	2024/12/30	Finish date	2024/12/30
Temperature	21.3℃	Humidity	33%
RF specifications	1Mbps/2Mbps	Test Engineer	Zora



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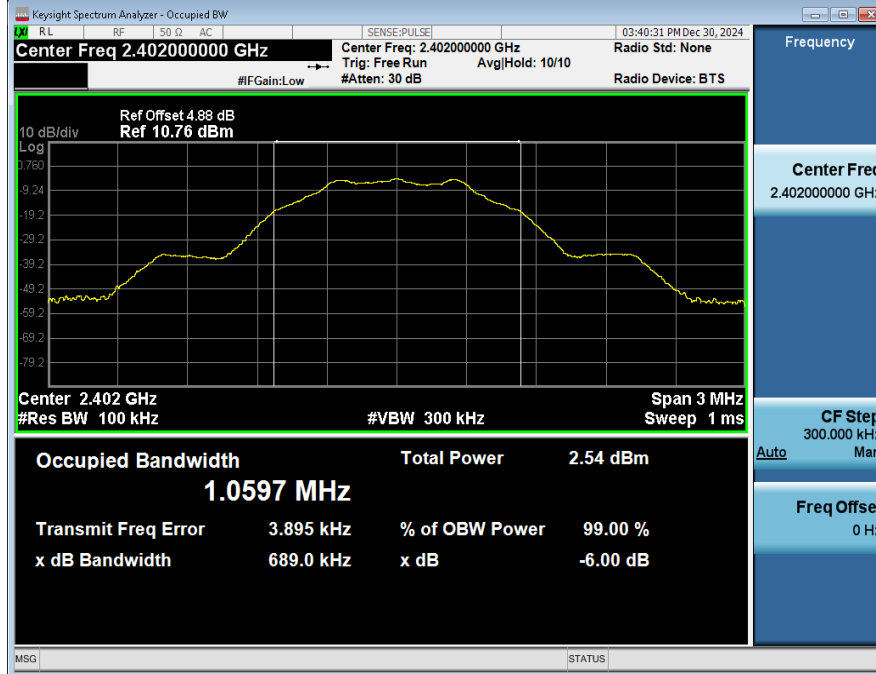
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1. -6dB Bandwidth

Condition	Antenna	Rate	Frequency (MHz)	-6dB BW(kHz)	limit(kHz)	Result
NVNT	ANT1	1Mbps	2402.00	688.99	500	Pass
NVNT	ANT1	1Mbps	2440.00	694.88	500	Pass
NVNT	ANT1	1Mbps	2480.00	693.85	500	Pass
NVNT	ANT1	2Mbps	2402.00	1170.02	500	Pass
NVNT	ANT1	2Mbps	2440.00	1170.73	500	Pass
NVNT	ANT1	2Mbps	2480.00	1163.20	500	Pass

-6dB_Bandwidth_NVNT_ANT1_1Mbps_2402

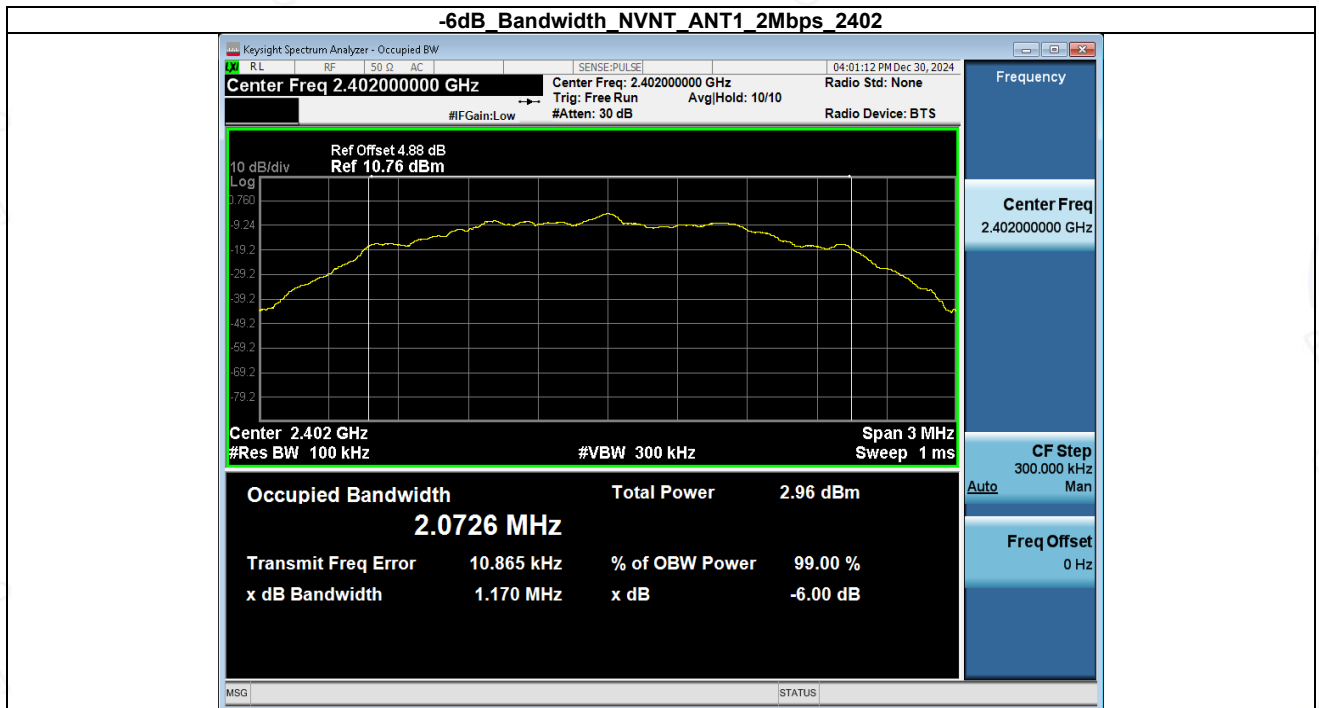


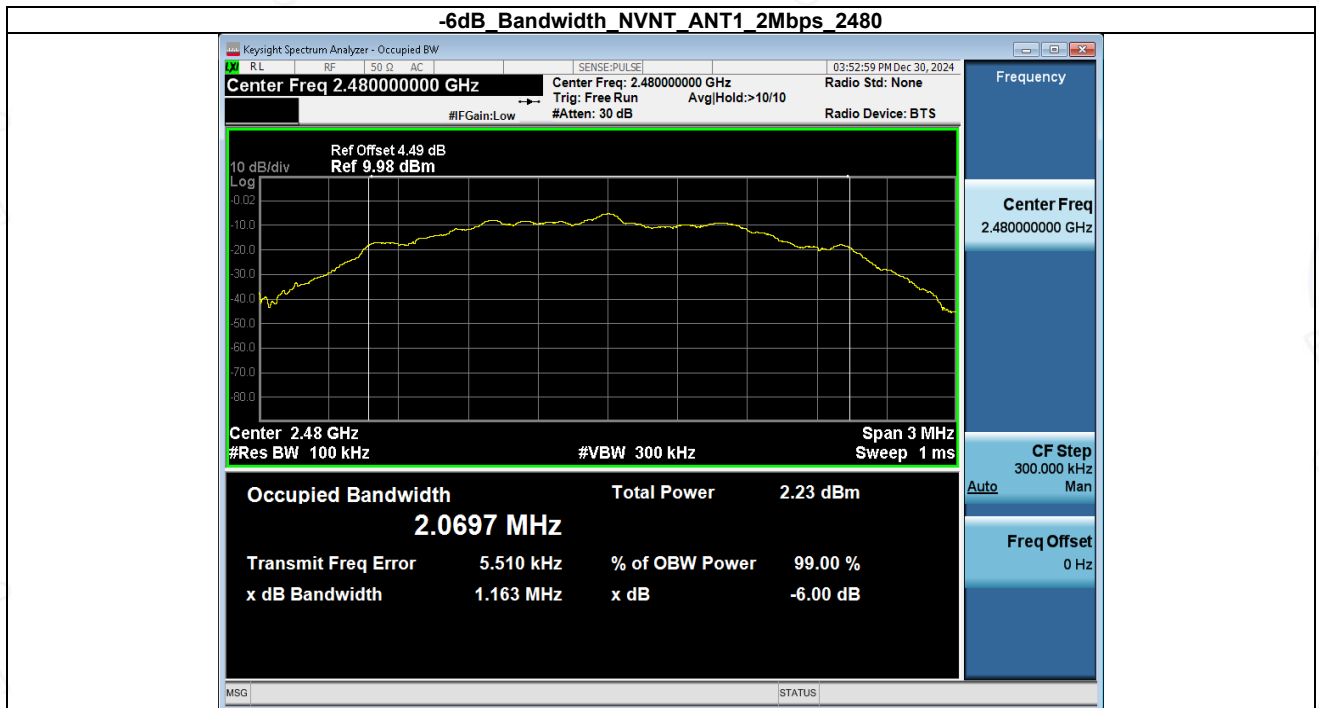
-6dB_Bandwidth_NVNT_ANT1_1Mbps_2440



-6dB_Bandwidth_NVNT_ANT1_1Mbps_2480







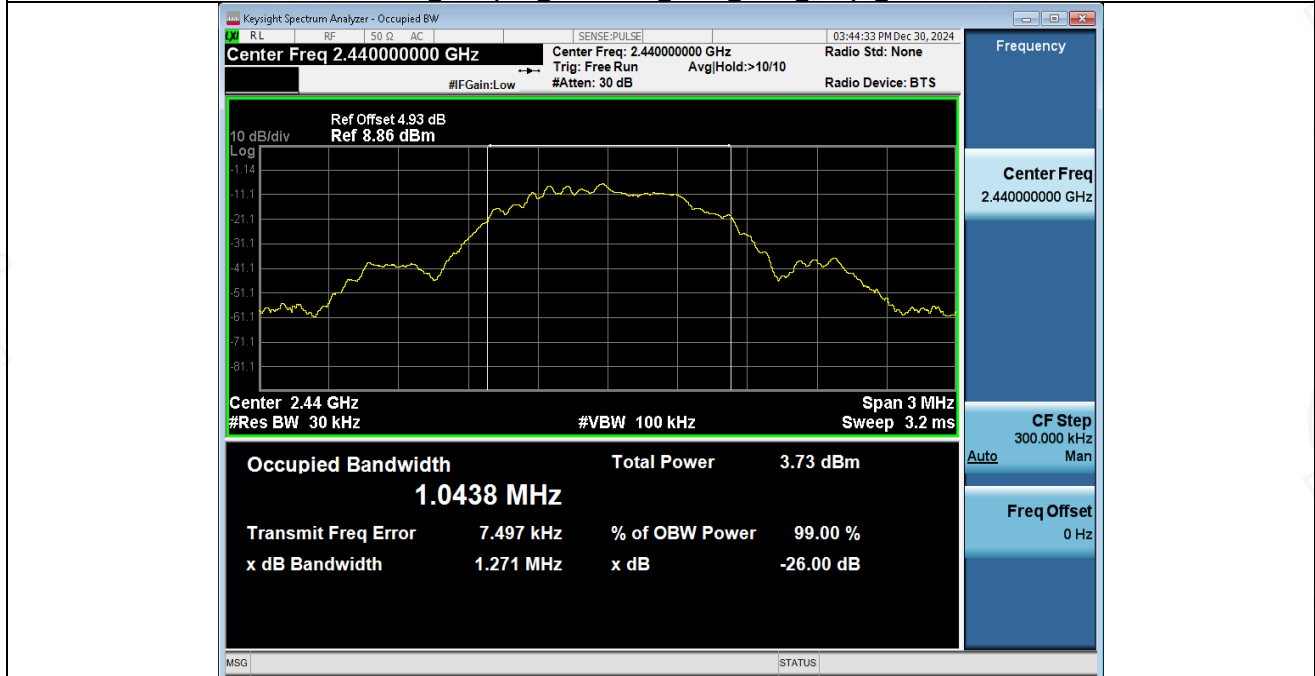
2. 99% Occupied Bandwidth

Condition	Antenna	Rate	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	1Mbps	2402.00	1.044
NVNT	ANT1	1Mbps	2440.00	1.044
NVNT	ANT1	1Mbps	2480.00	1.048
NVNT	ANT1	2Mbps	2402.00	2.063
NVNT	ANT1	2Mbps	2440.00	2.065
NVNT	ANT1	2Mbps	2480.00	2.064

99% Occupied Bandwidth_NVNT_ANT1_1Mbps_2402

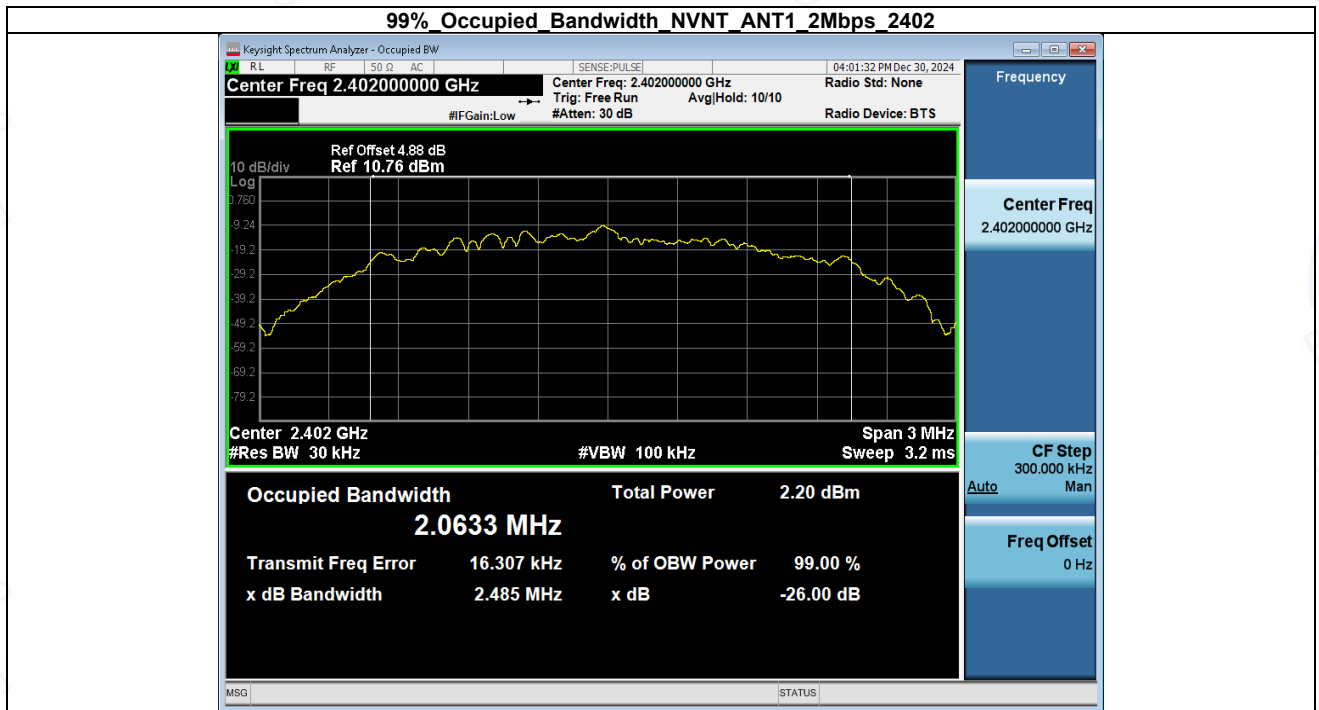


99% Occupied Bandwidth_NVNT_ANT1_1Mbps_2440



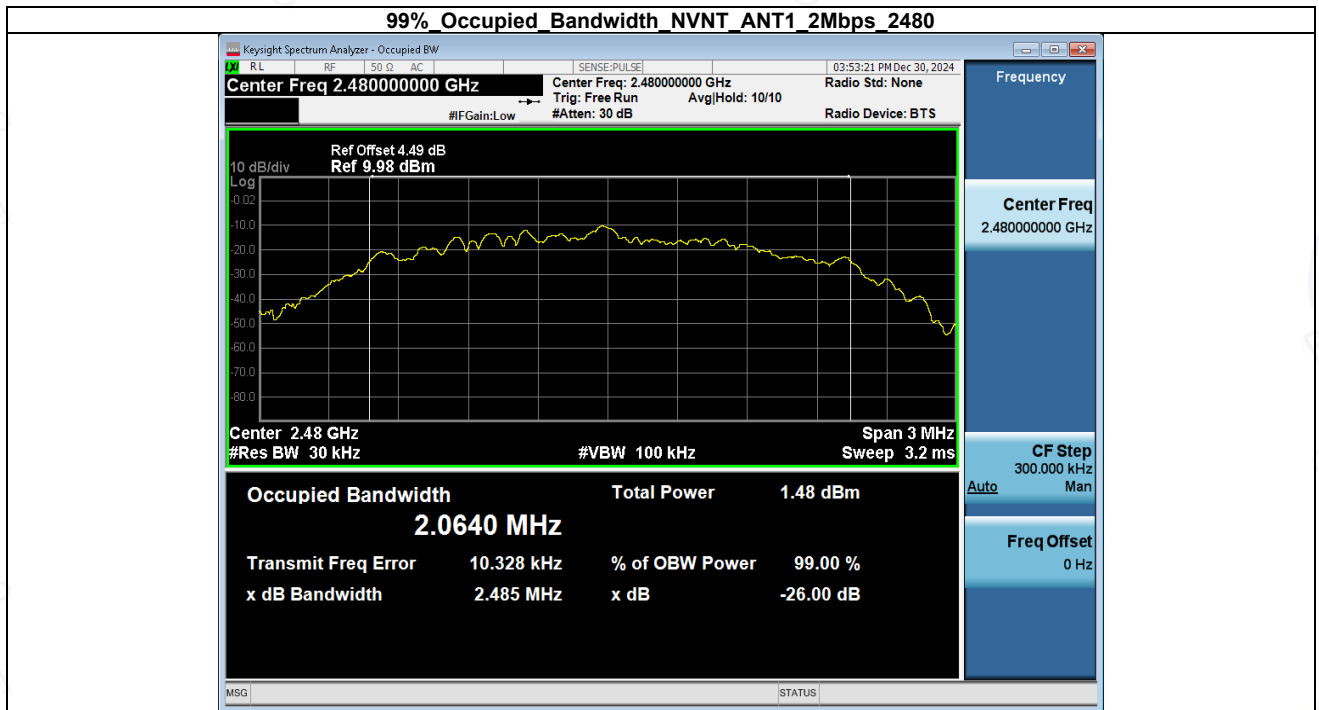
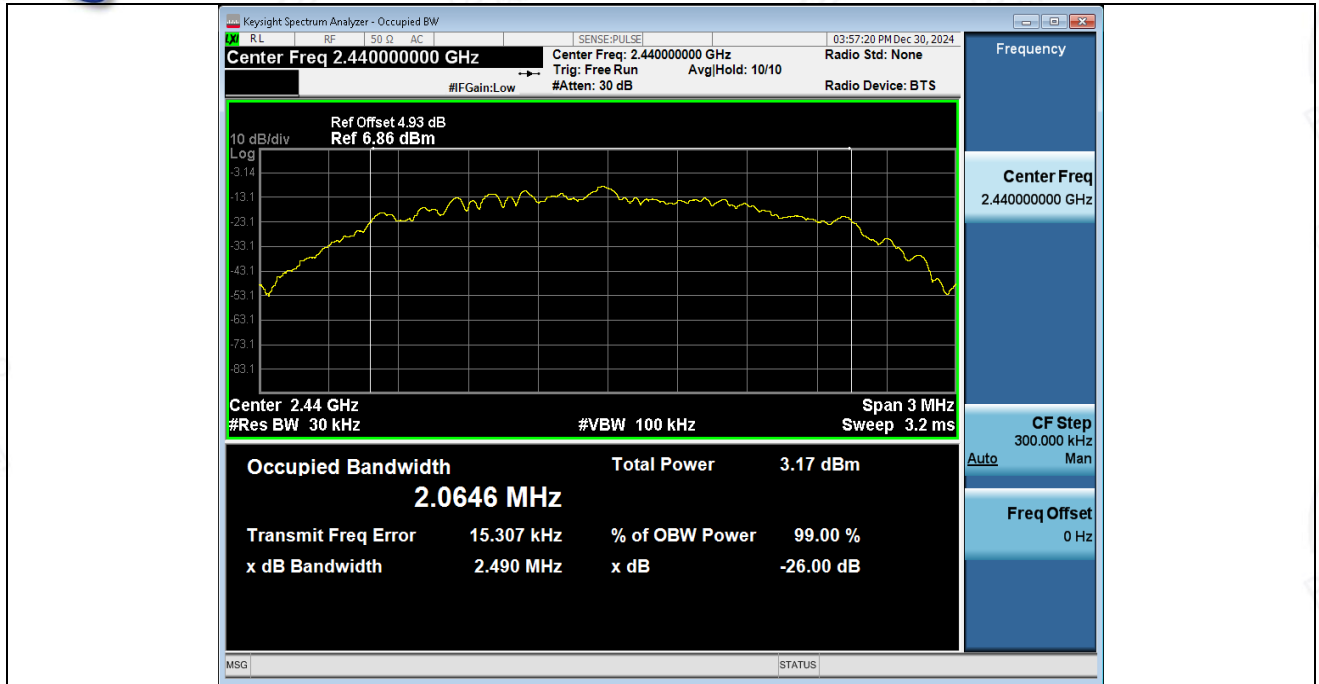
99% Occupied Bandwidth_NVNT_ANT1_1Mbps_2480





99% Occupied Bandwidth_NVNT_ANT1_2Mbps_2440

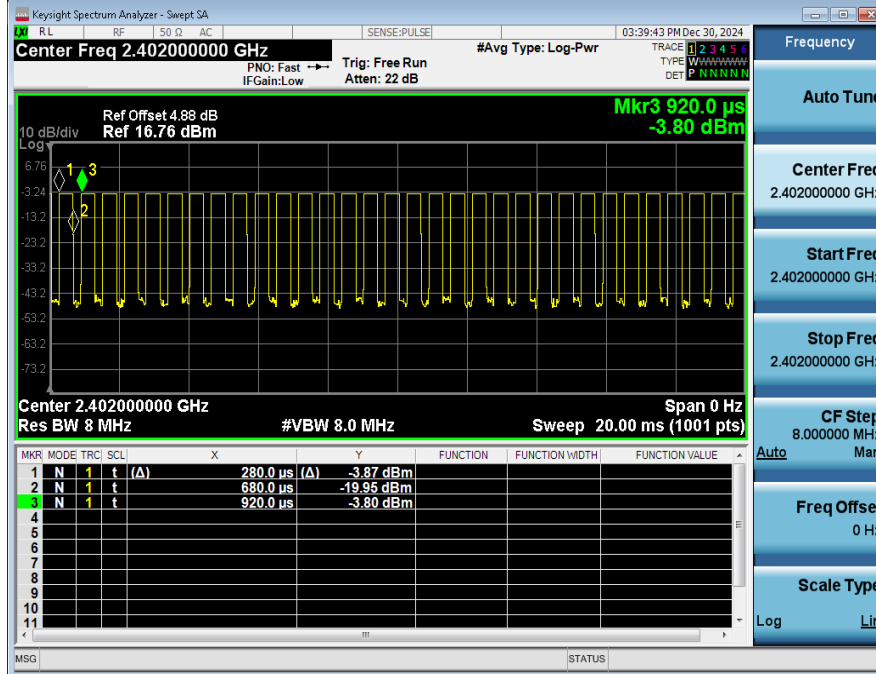




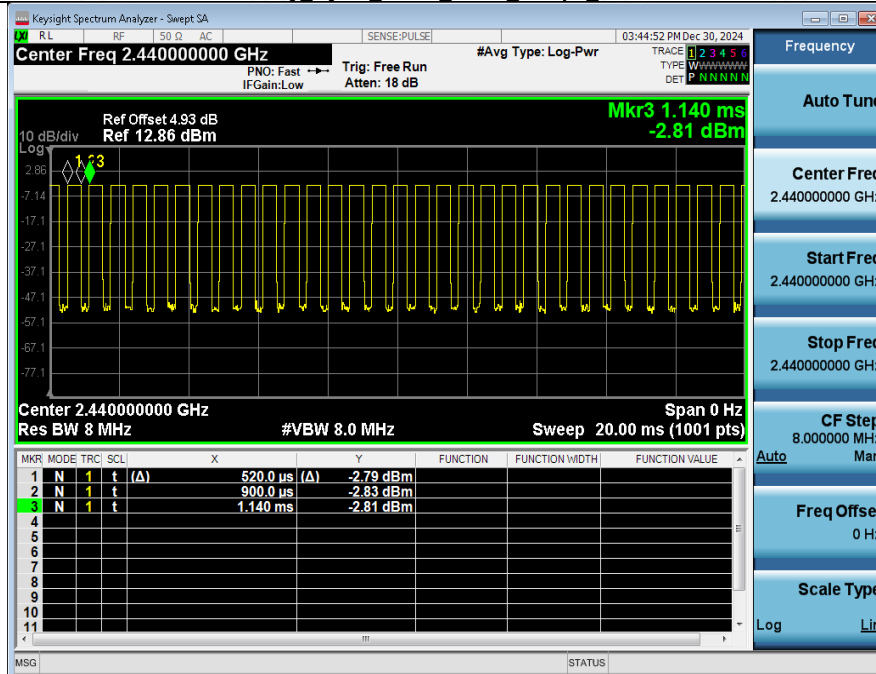
3. Duty Cycle

Condition	Antenna	Rate	Frequency (MHz)	Dutycycle(%)	Duty_factor
NVNT	ANT1	1Mbps	2402.00	65.63	1.83
NVNT	ANT1	1Mbps	2440.00	64.52	1.90
NVNT	ANT1	1Mbps	2480.00	61.29	2.13
NVNT	ANT1	2Mbps	2402.00	32.26	4.91
NVNT	ANT1	2Mbps	2440.00	32.26	4.91
NVNT	ANT1	2Mbps	2480.00	32.26	4.91

Duty_Cycle_NVNT_ANT1_1Mbps_2402

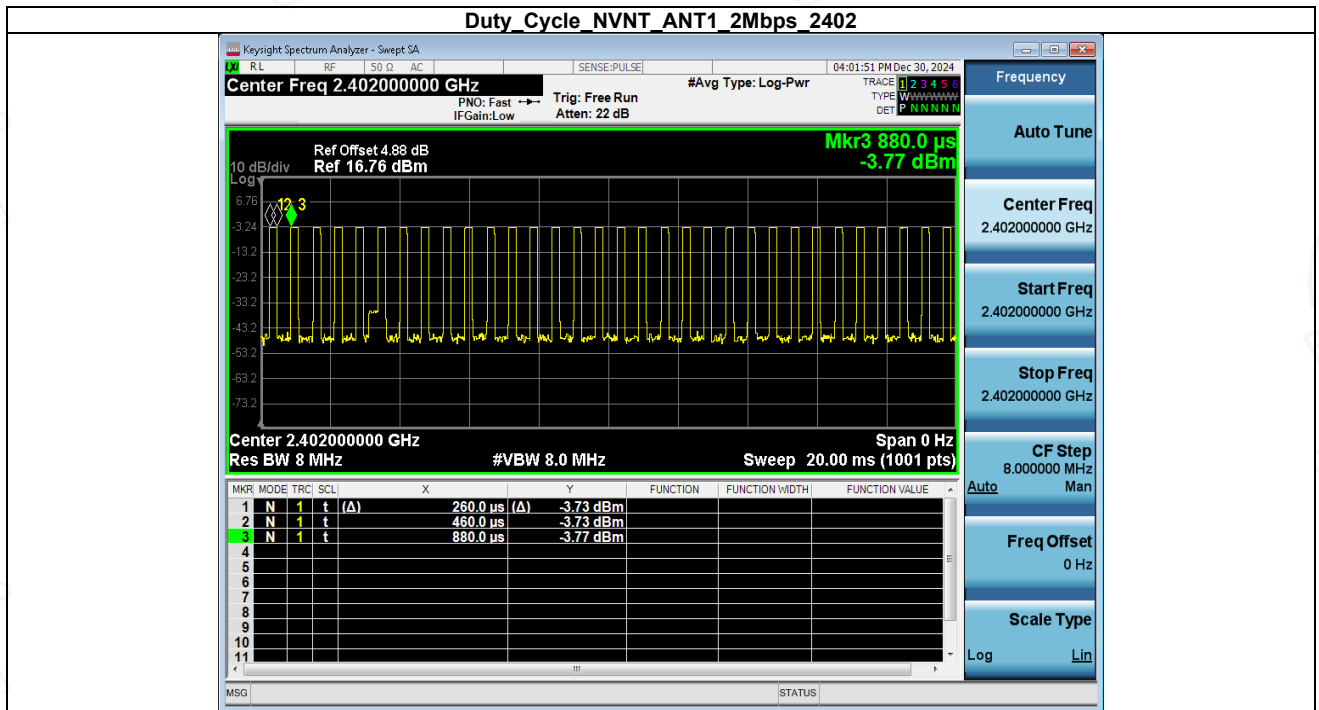
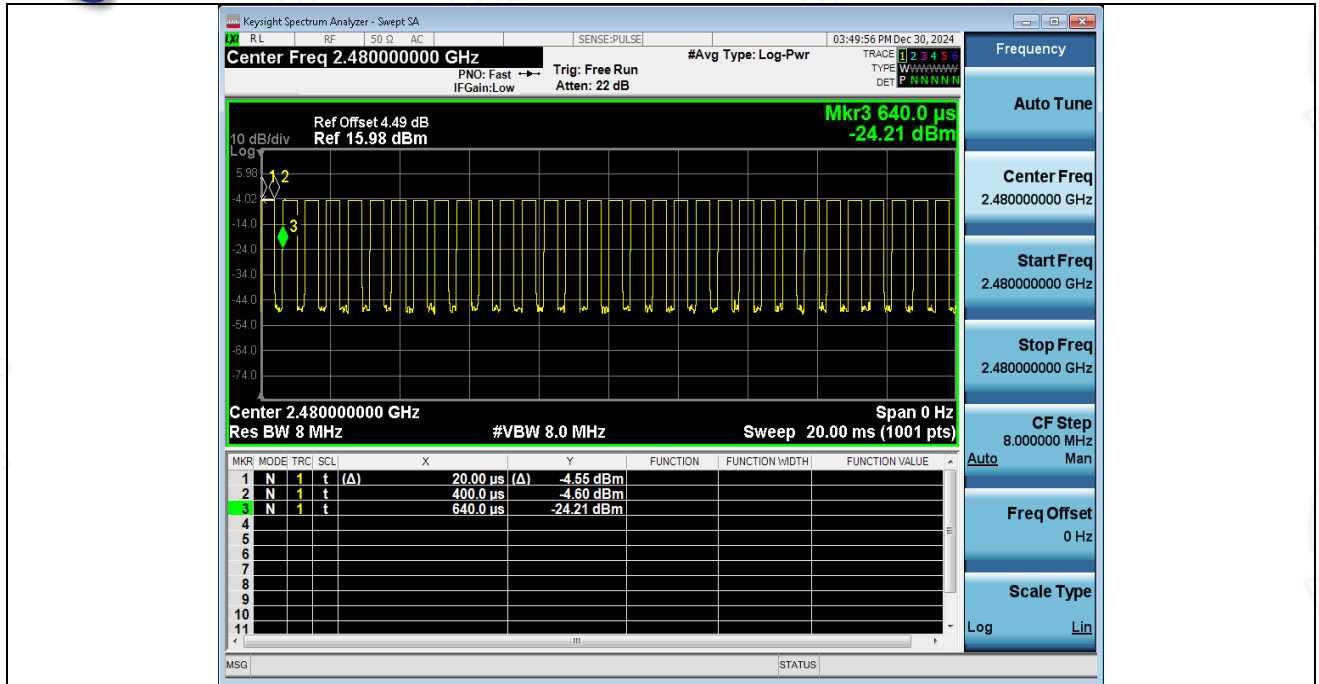


Duty_Cycle_NVNT_ANT1_1Mbps_2440



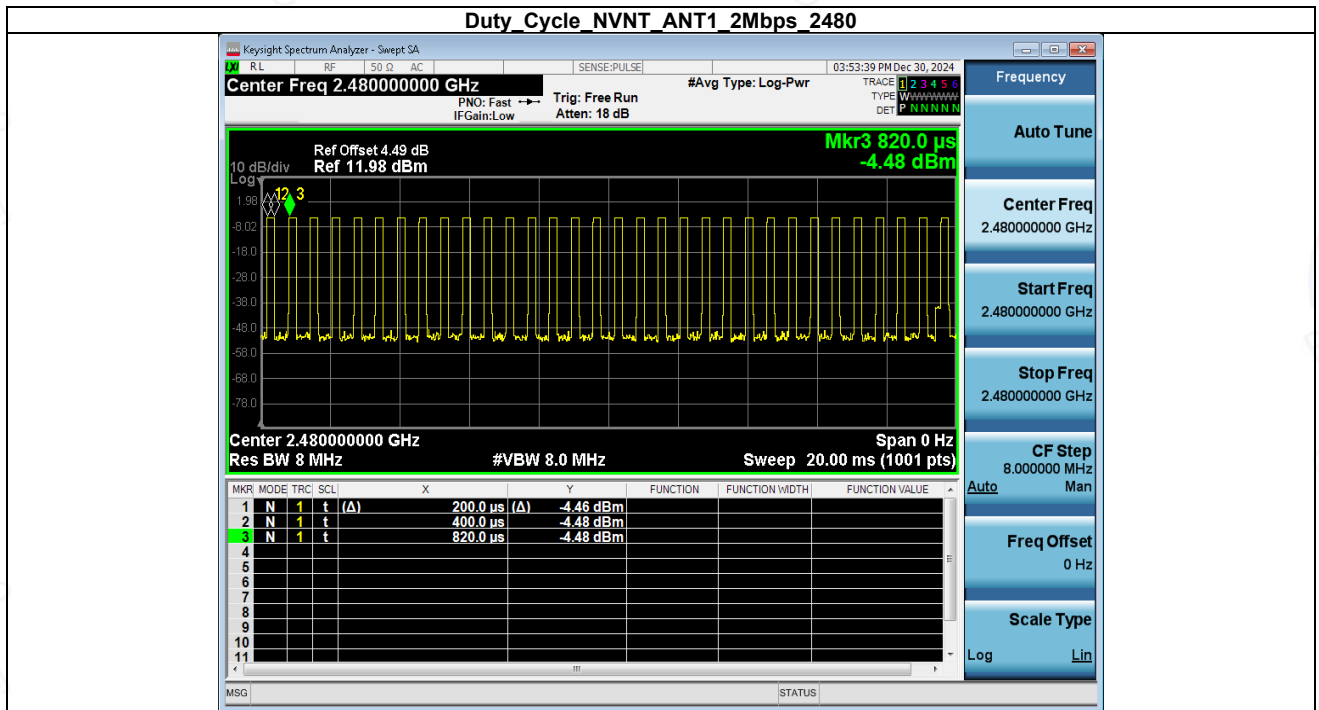
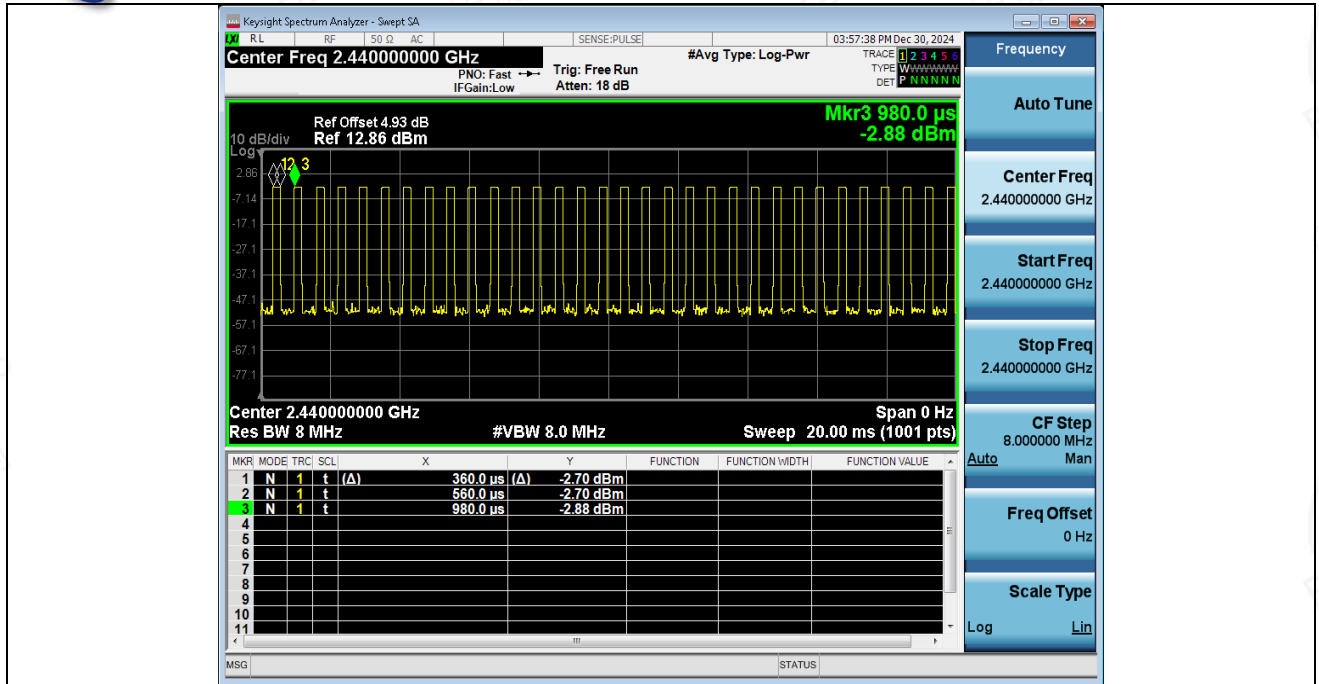
Duty_Cycle_NVNT_ANT1_1Mbps_2480





Duty Cycle_NVNT_ANT1_2Mbps_2440

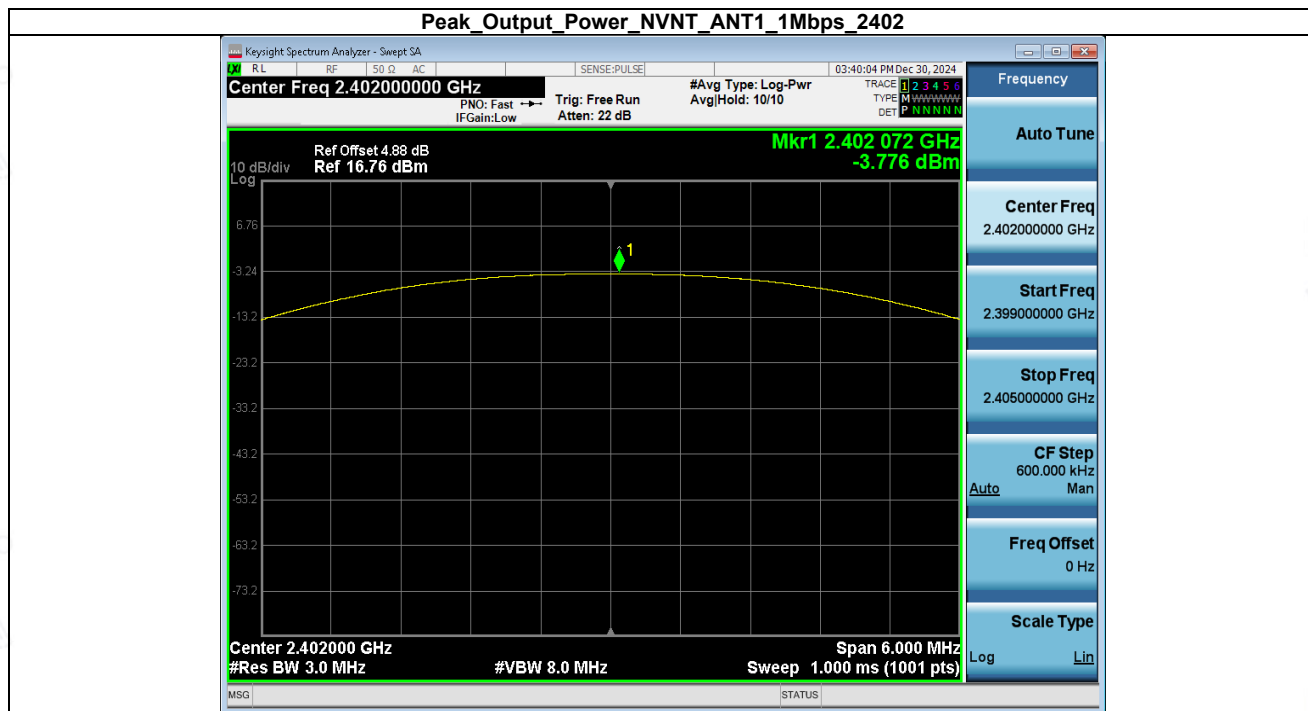




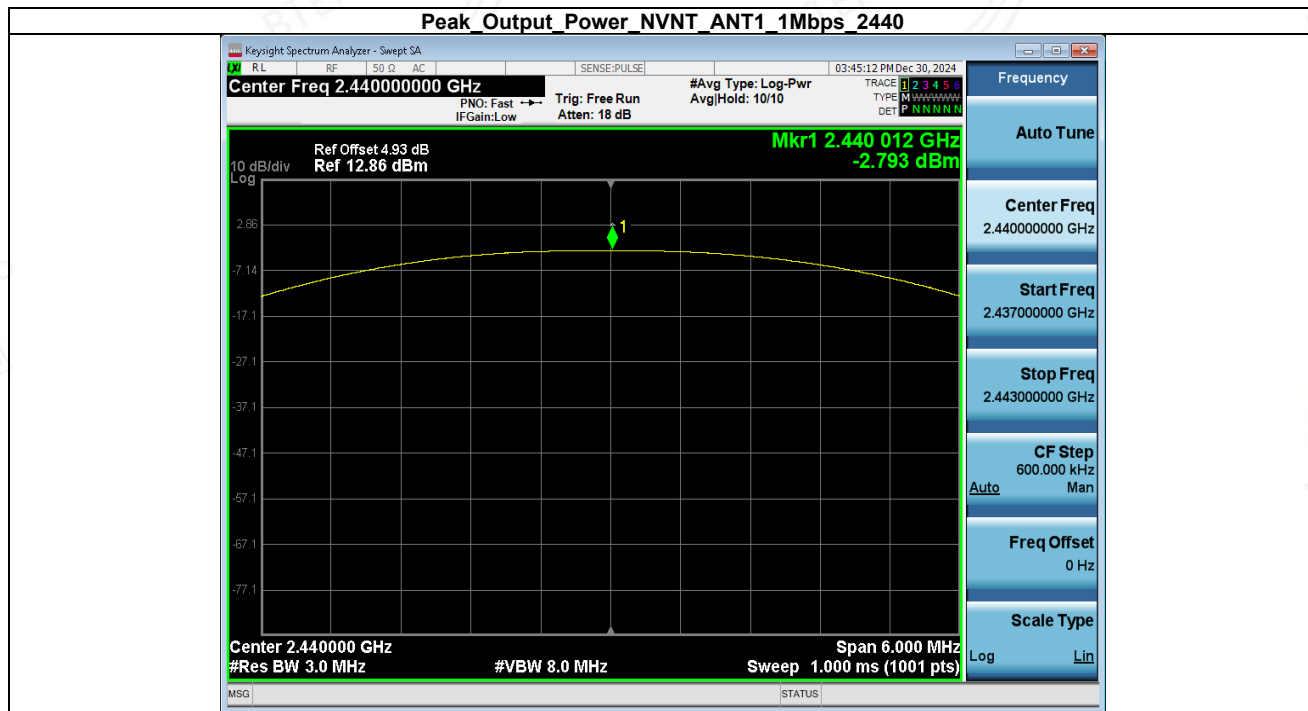
4. Peak Output Power

Condition	Antenna	Rate	Frequency (MHz)	Max. Conducted Power(dBm)	Max. Conducted Power(mW)	Limit(mW)	Result
NVNT	ANT1	1Mbps	2402.00	-3.78	0.42	1000	Pass
NVNT	ANT1	1Mbps	2440.00	-2.79	0.53	1000	Pass
NVNT	ANT1	1Mbps	2480.00	-4.24	0.38	1000	Pass
NVNT	ANT1	2Mbps	2402.00	-3.71	0.43	1000	Pass
NVNT	ANT1	2Mbps	2440.00	-2.76	0.53	1000	Pass
NVNT	ANT1	2Mbps	2480.00	-4.18	0.38	1000	Pass

Peak_Output_Power_NVNT_ANT1_1Mbps_2402

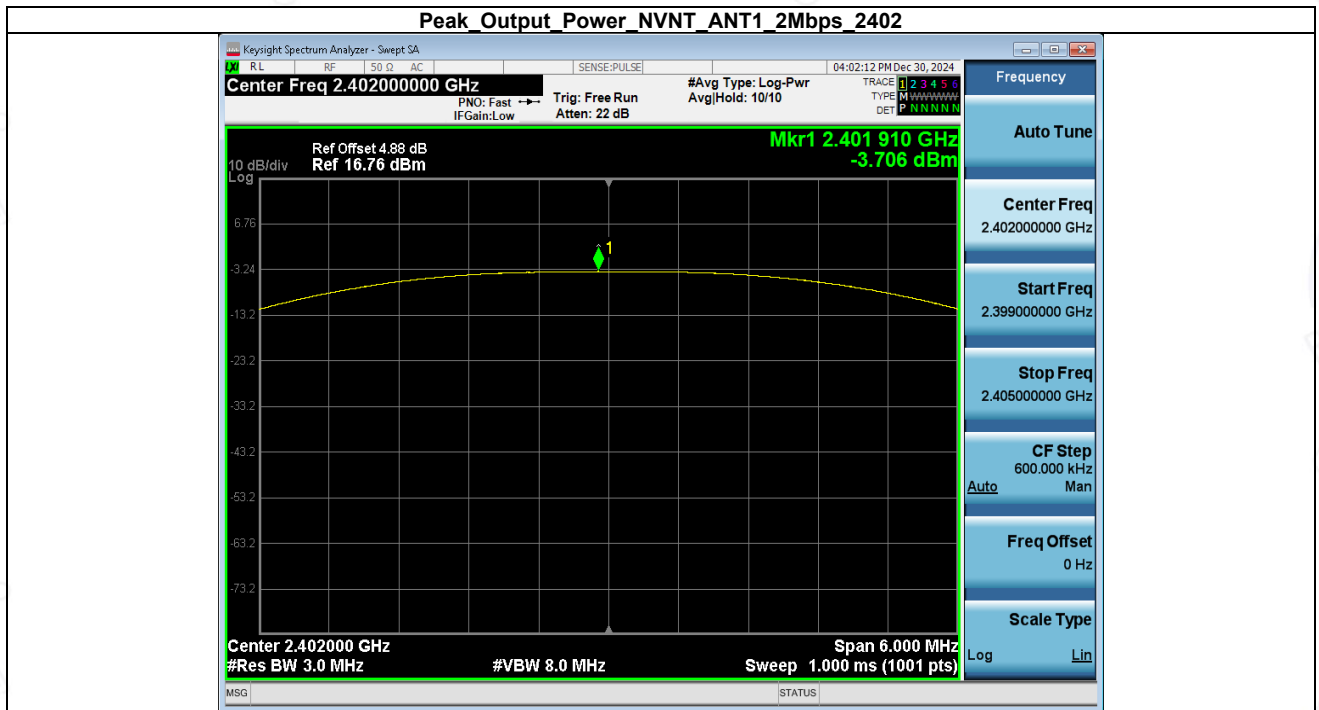


Peak_Output_Power_NVNT_ANT1_1Mbps_2440



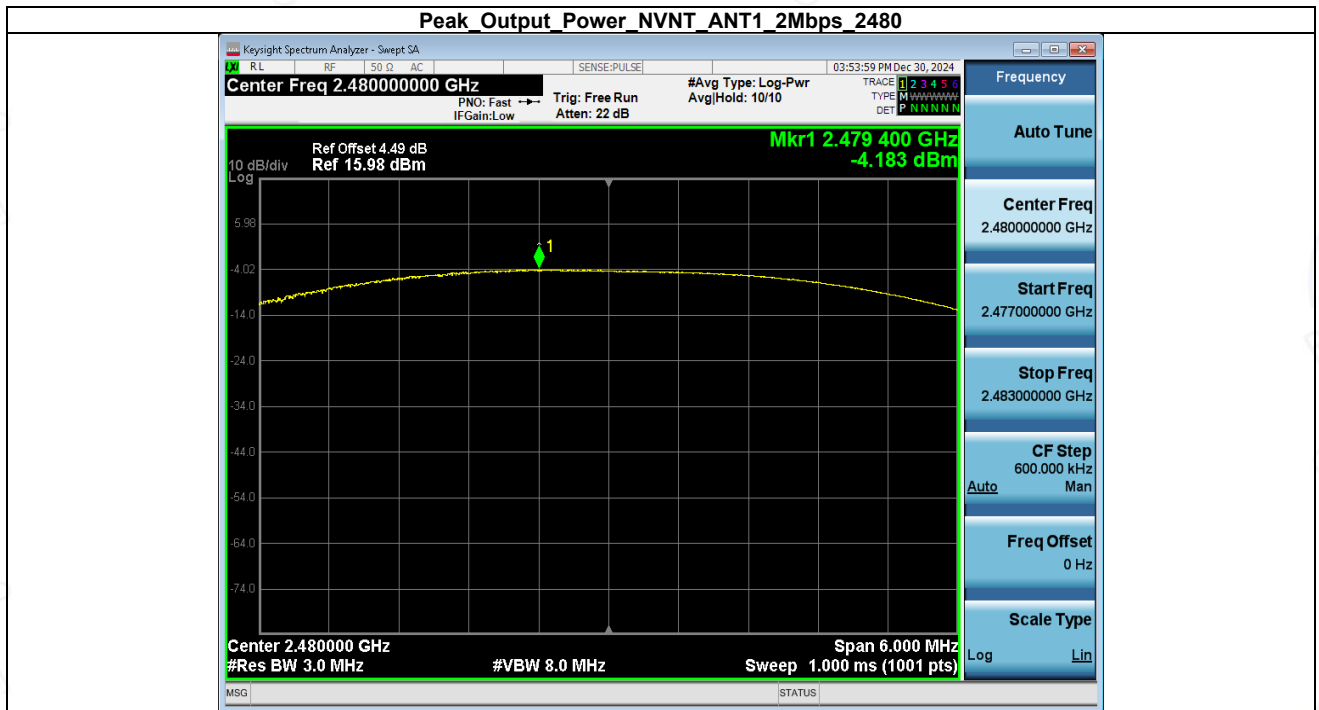
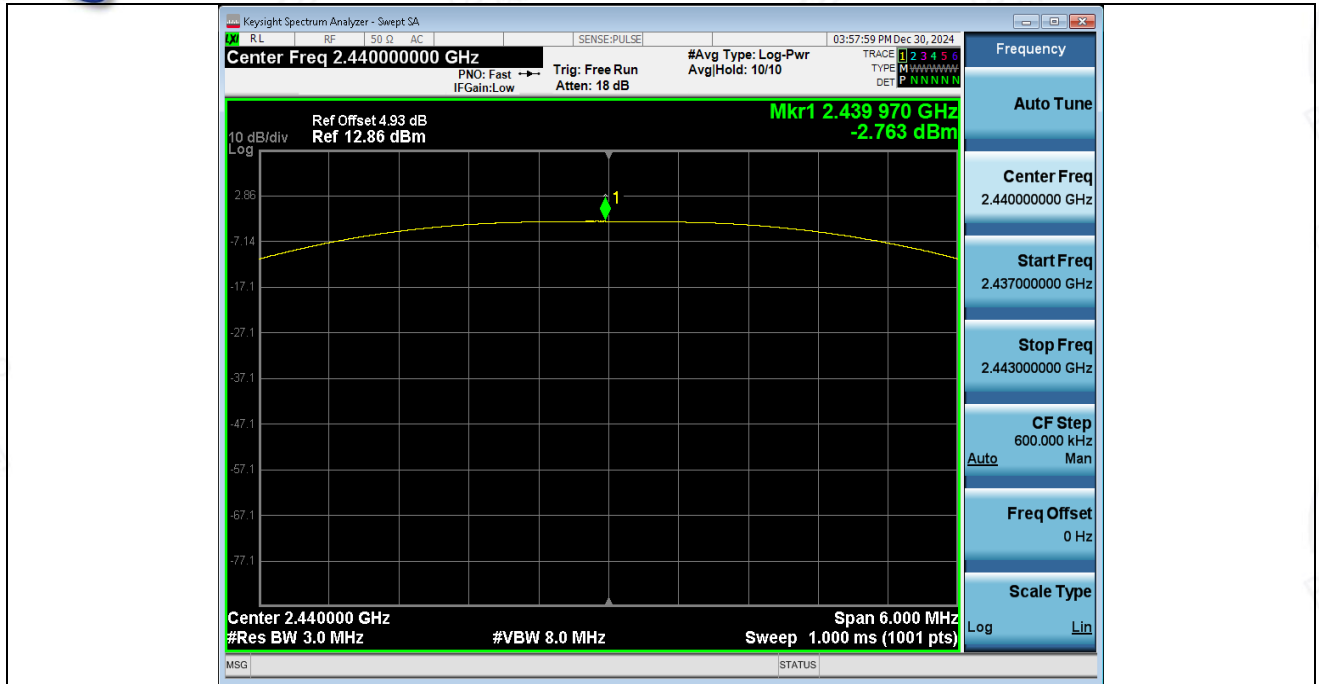
Peak_Output_Power_NVNT_ANT1_1Mbps_2480





Peak_Output_Power_NVNT_ANT1_2Mbps_2440

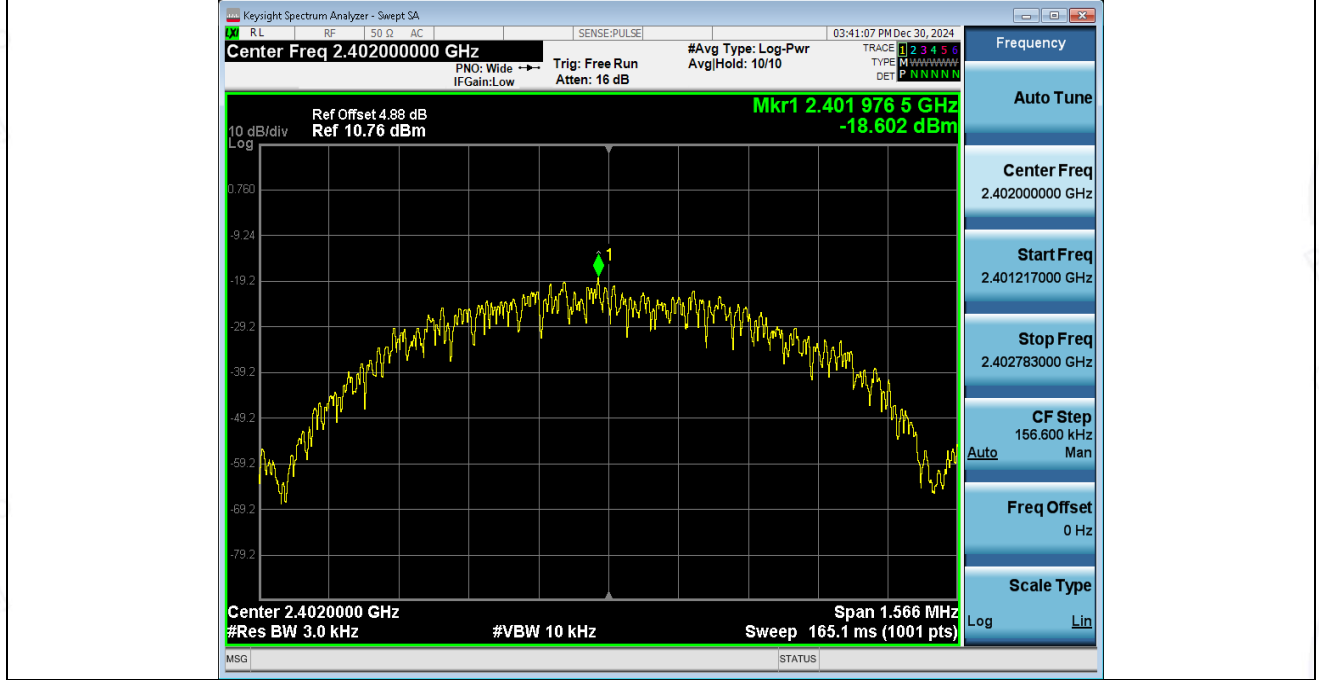




5. Power Spectral Density

Condition	Antenna	Rate	Frequency (MHz)	Power Spectral Density(dBm/3kHz)	Limit(dBm/3kHz)	Result
NVNT	ANT1	1Mbps	2402.00	-18.60	8	Pass
NVNT	ANT1	1Mbps	2440.00	-17.61	8	Pass
NVNT	ANT1	1Mbps	2480.00	-19.39	8	Pass
NVNT	ANT1	2Mbps	2402.00	-21.33	8	Pass
NVNT	ANT1	2Mbps	2440.00	-20.33	8	Pass
NVNT	ANT1	2Mbps	2480.00	-22.00	8	Pass

Power_Spectral_Density_NVNT_ANT1_1Mbps_2402

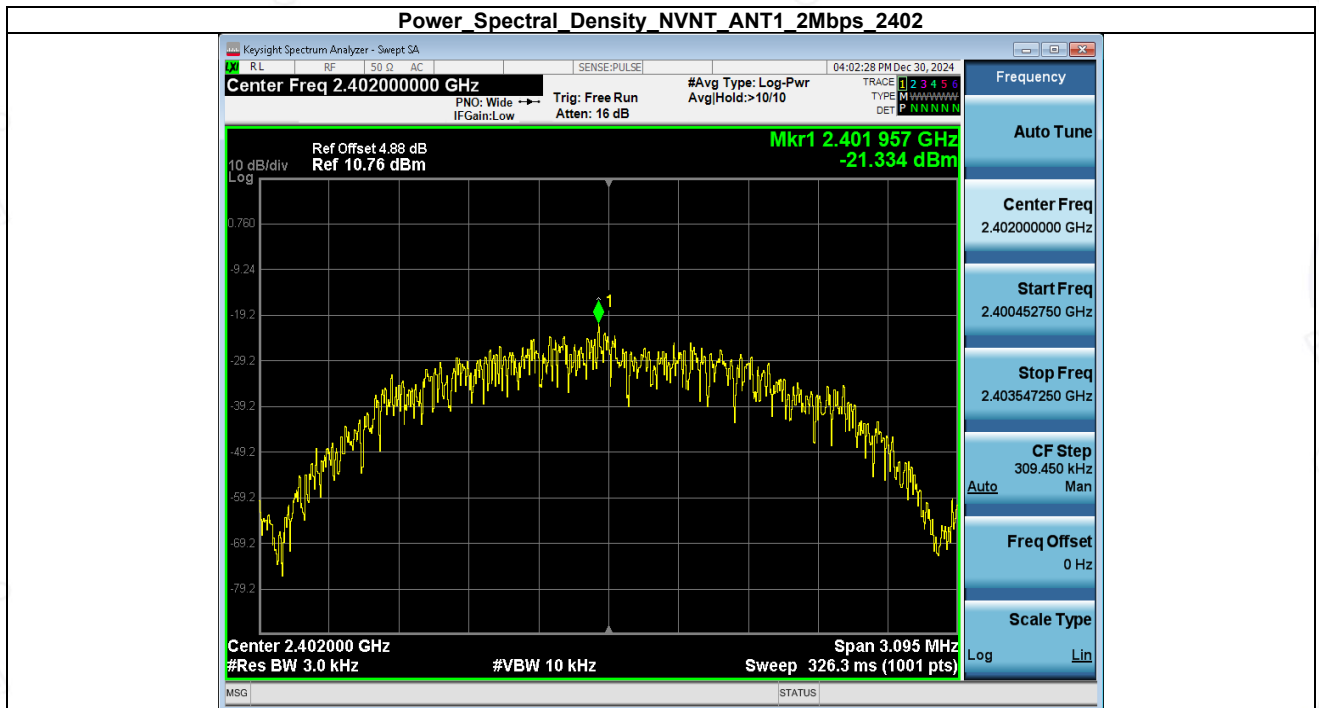


Power_Spectral_Density_NVNT_ANT1_1Mbps_2440



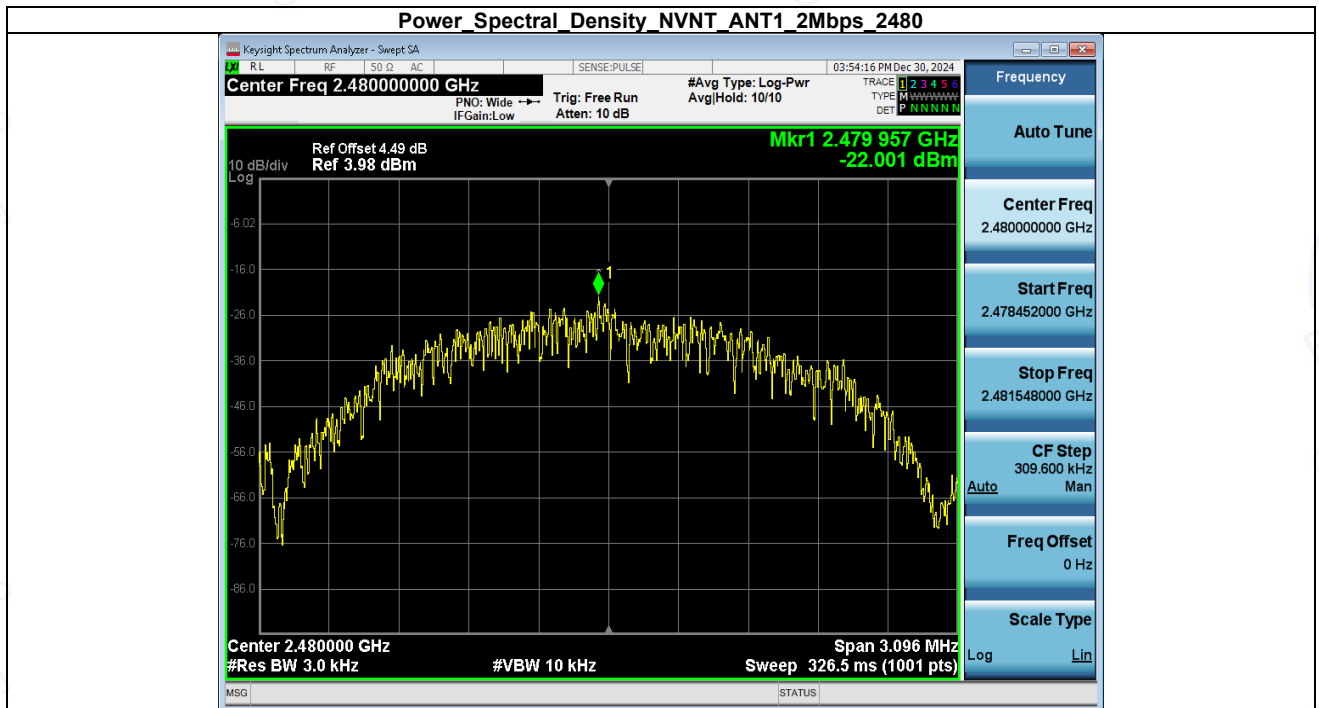
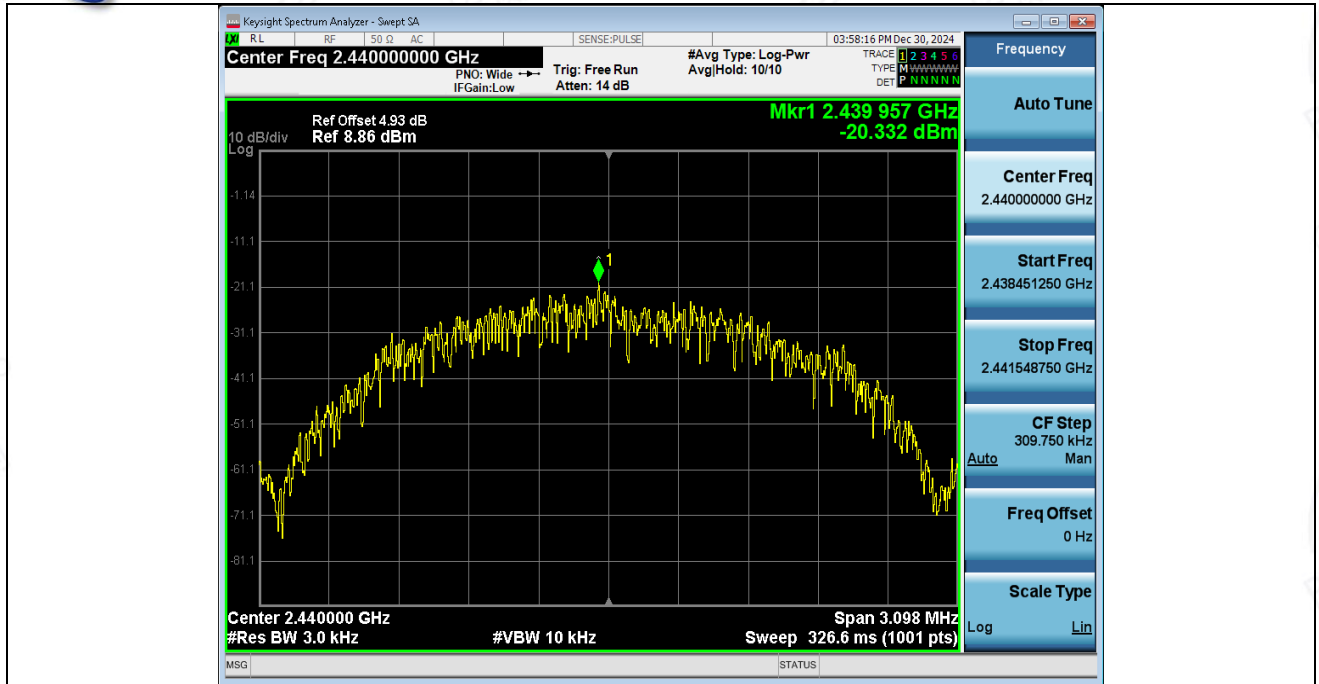
Power_Spectral_Density_NVNT_ANT1_1Mbps_2480





Power Spectral Density_NVNT_ANT1_2Mbps_2440





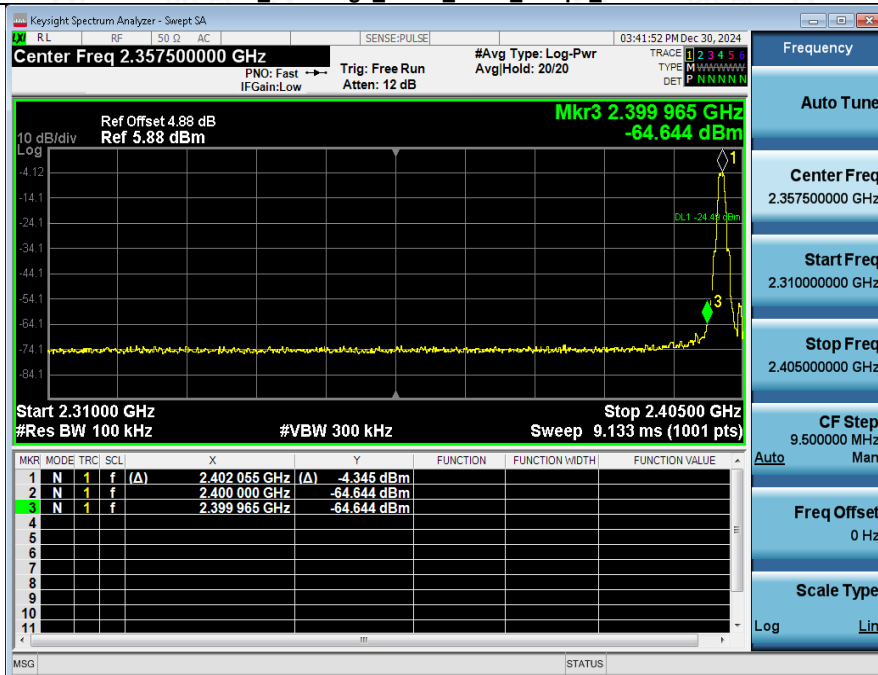
6. Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_freq(MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	1Mbps	2402.00	2399.965	-4.491	-64.644	-24.491	Pass
NVNT	ANT1	1Mbps	2480.00	2485.000	-5.239	-58.740	-25.239	Pass
NVNT	ANT1	2Mbps	2402.00	2399.965	-4.487	-35.595	-24.487	Pass
NVNT	ANT1	2Mbps	2480.00	2486.475	-5.278	-58.535	-25.278	Pass

1_Reference_Level_NVNT_ANT1_1Mbps_2402



2_Bandedge_NVNT_ANT1_1Mbps_2402



1_Reference_Level_NVNT_ANT1_1Mbps_2480





2_Bandedge_NVNT_ANT1_1Mbps_2480

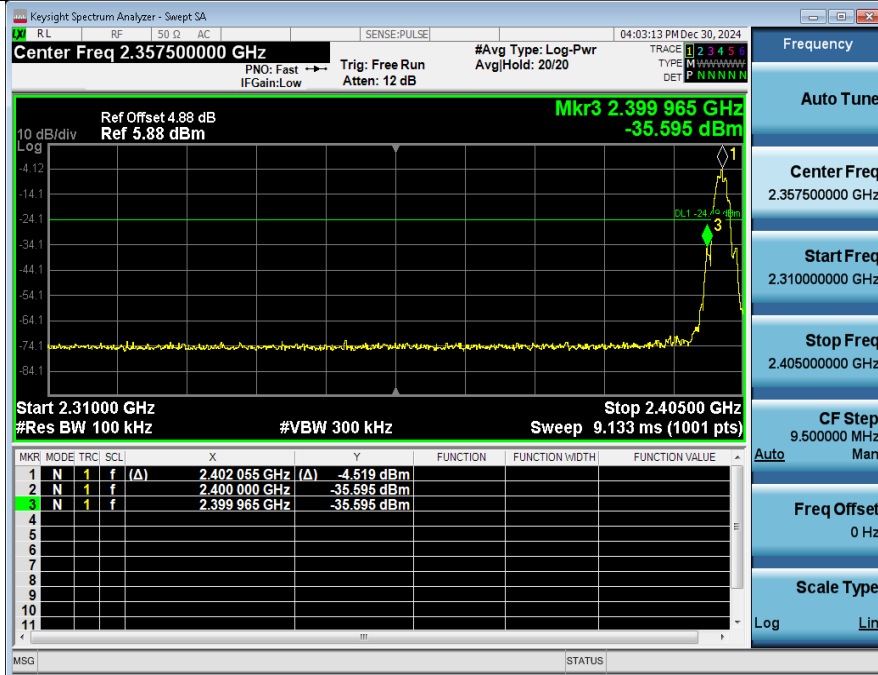


1_Reference_Level_NVNT_ANT1_2Mbps_2402





2_Bandedge_NVNT_ANT1_2Mbps_2402



1_Reference_Level_NVNT_ANT1_2Mbps_2480





2_Bandedge_NVNT_ANT1_2Mbps_2480



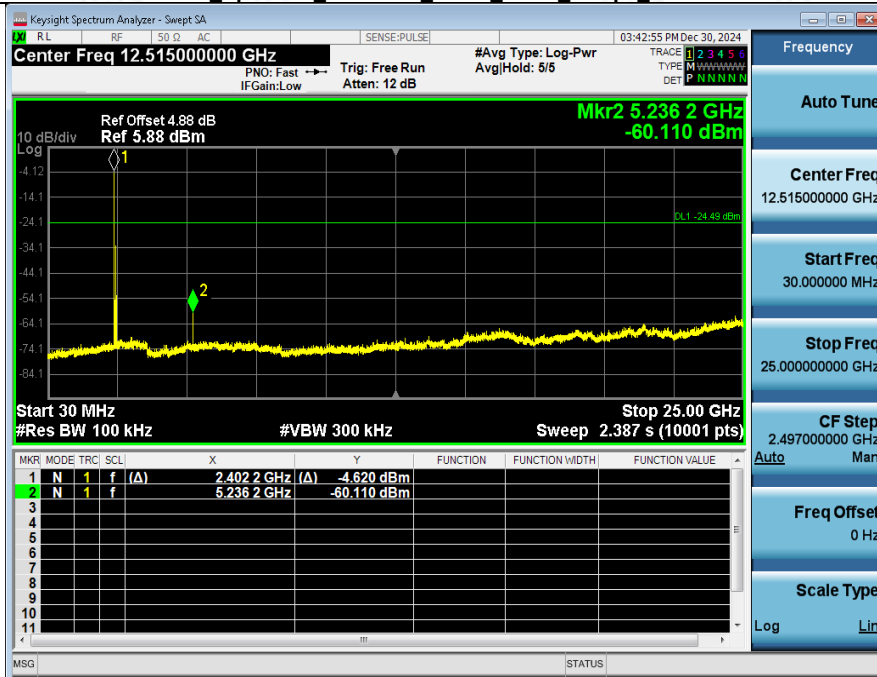
7. Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Ref_level(dBm)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	1Mbps	2402.00	-4.491	-60.110	-24.491	Pass
NVNT	ANT1	1Mbps	2440.00	-3.522	-55.903	-23.522	Pass
NVNT	ANT1	1Mbps	2480.00	-5.239	-61.942	-25.239	Pass
NVNT	ANT1	2Mbps	2402.00	-4.487	-61.960	-24.487	Pass
NVNT	ANT1	2Mbps	2440.00	-3.537	-55.329	-23.537	Pass
NVNT	ANT1	2Mbps	2480.00	-5.278	-61.156	-25.278	Pass

1_Reference_Level_NVNT_ANT1_1Mbps_2402

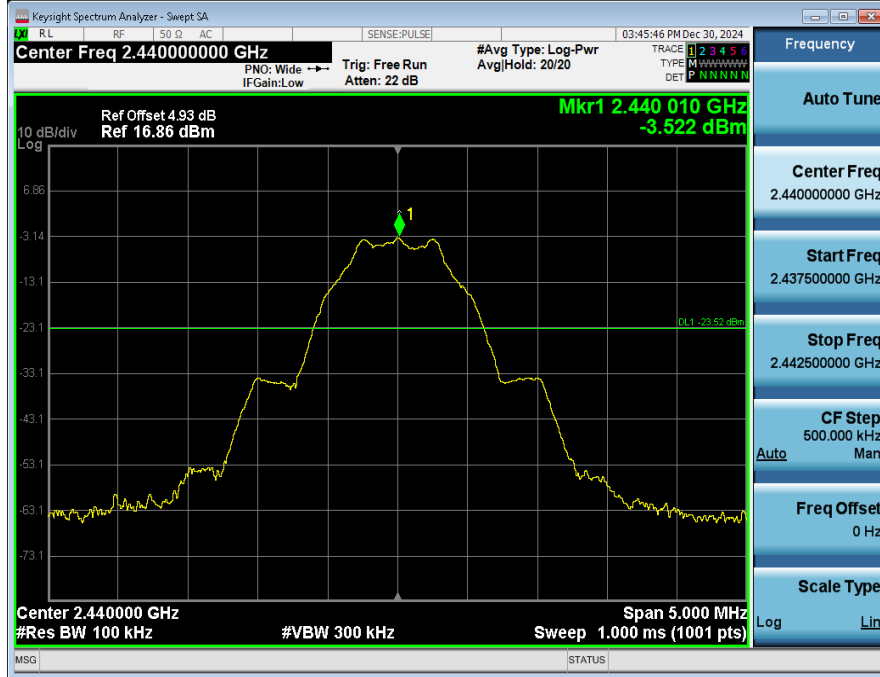


2_Spurious_Emission_NVNT_ANT1_1Mbps_2402

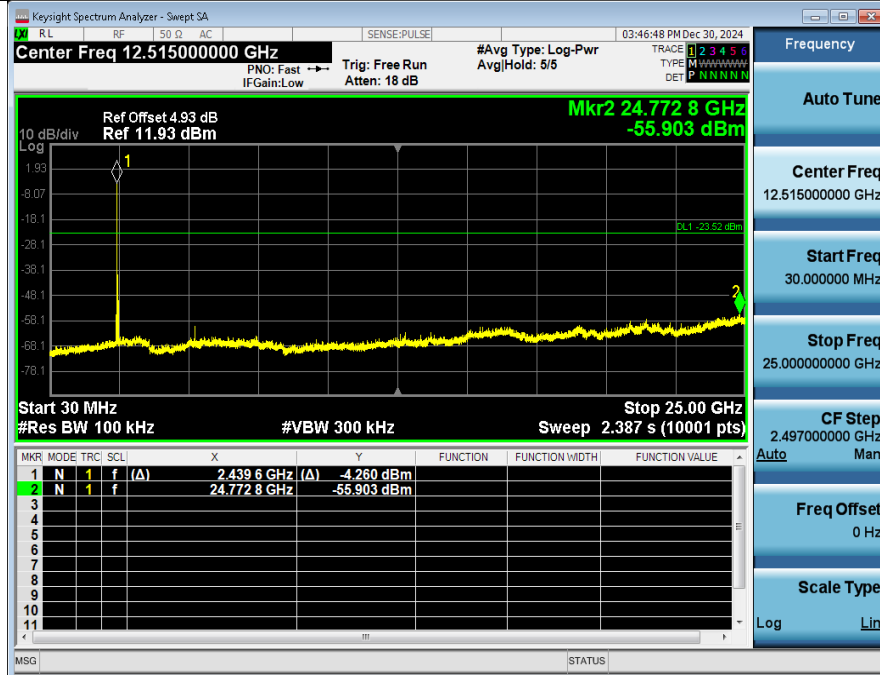


1_Reference_Level_NVNT_ANT1_1Mbps_2440





2_Spurious_Emission_NVNT_ANT1_1Mbps_2440

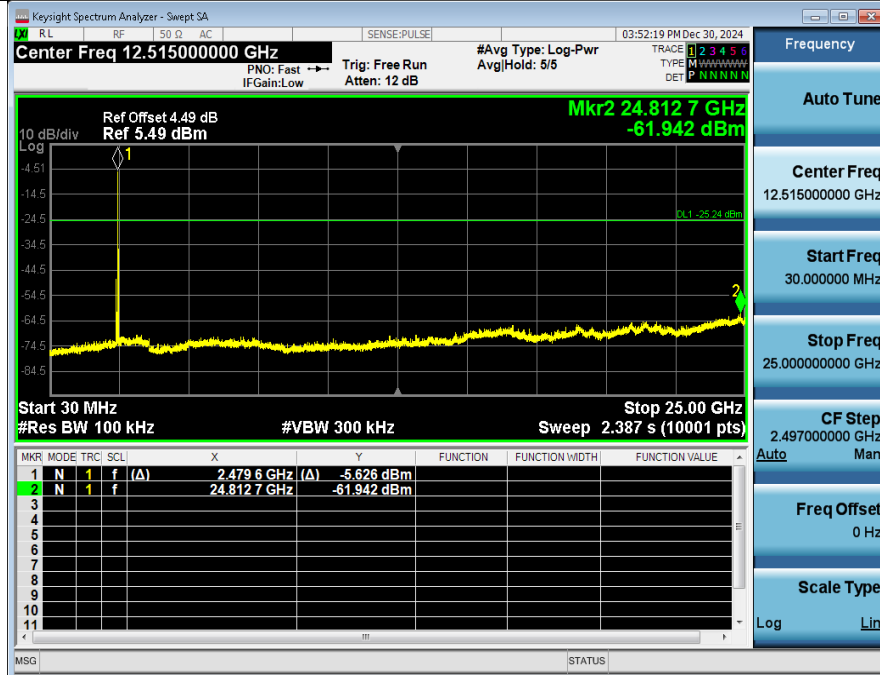


1_Reference_Level_NVNT_ANT1_1Mbps_2480





2_Spurious_Emission_NVNT_ANT1_1Mbps_2480

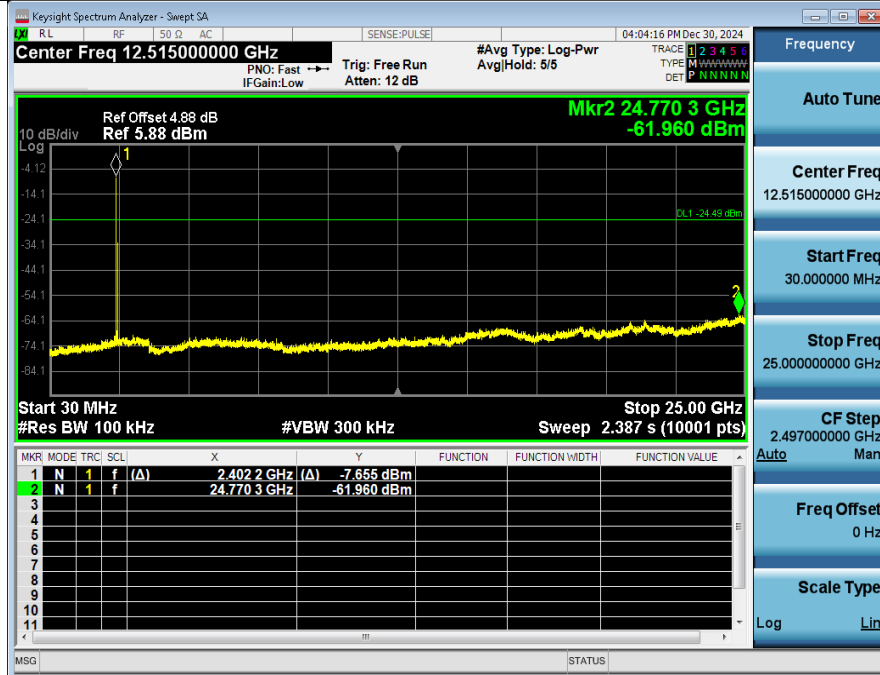


1_Reference_Level_NVNT_ANT1_2Mbps_2402





2_Spurious_Emission_NVNT_ANT1_2Mbps_2402

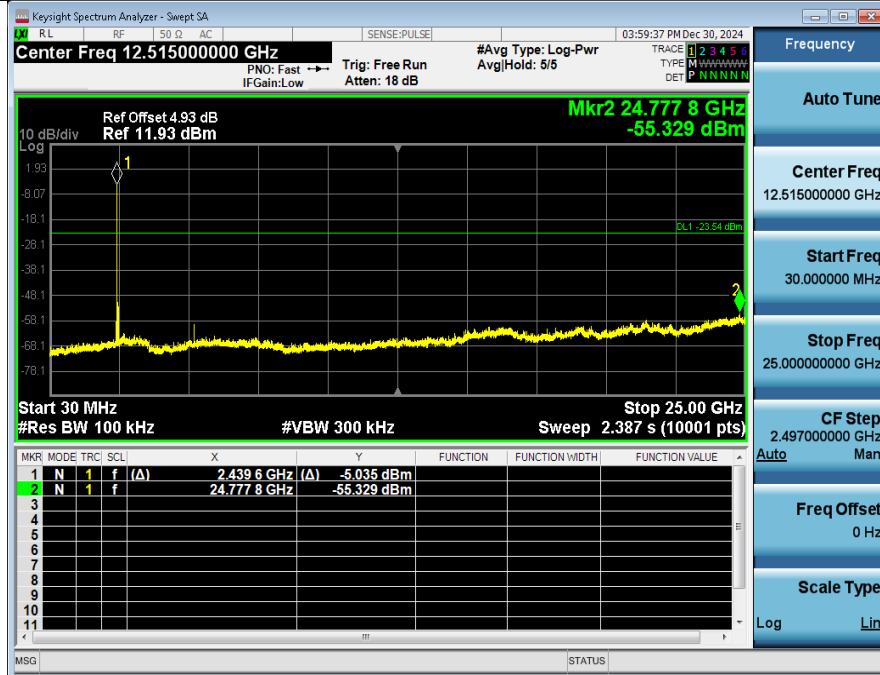


1_Reference_Level_NVNT_ANT1_2Mbps_2440





2_Spurious_Emission_NVNT_ANT1_2Mbps_2440



1_Reference_Level_NVNT_ANT1_2Mbps_2480





2_Spurious_Emission_NVNT_ANT1_2Mbps_2480

