

Appendix

Test Data

for BTEK240716002AE

Start date	2024/7/22	Finish date	2024/7/22
Temperature	23.1℃	Humidity	63%
RF specifications	BLE	Test Engineer	Zora



Table of Contents

1. -6dB Bandwidth	3
2. 99% Occupied Bandwidth	5
3. Duty Cycle	7
4. Peak Output Power	9
5. Power Spectral Density	11
6. Bandedge	13
7. Spurious Emission	15



1. -6dB Bandwidth

Condition	Antenna	Rate	Frequency (MHz)	-6dB BW(kHz)	limit(kHz)	Result
NVNT	ANT1	1Mbps	2402.00	692.93	500	Pass
NVNT	ANT1	1Mbps	2440.00	691.26	500	Pass
NVNT	ANT1	1Mbps	2480.00	690.40	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	1.046
NVNT	ANT1	1Mbps	2440.00	1.049
NVNT	ANT1	1Mbps	2480.00	1.051

99%_Occupied_Bandwidth_NVNT_ANT1_1Mbps_2402



99%_Occupied_Bandwidth_NVNT_ANT1_1Mbps_2440



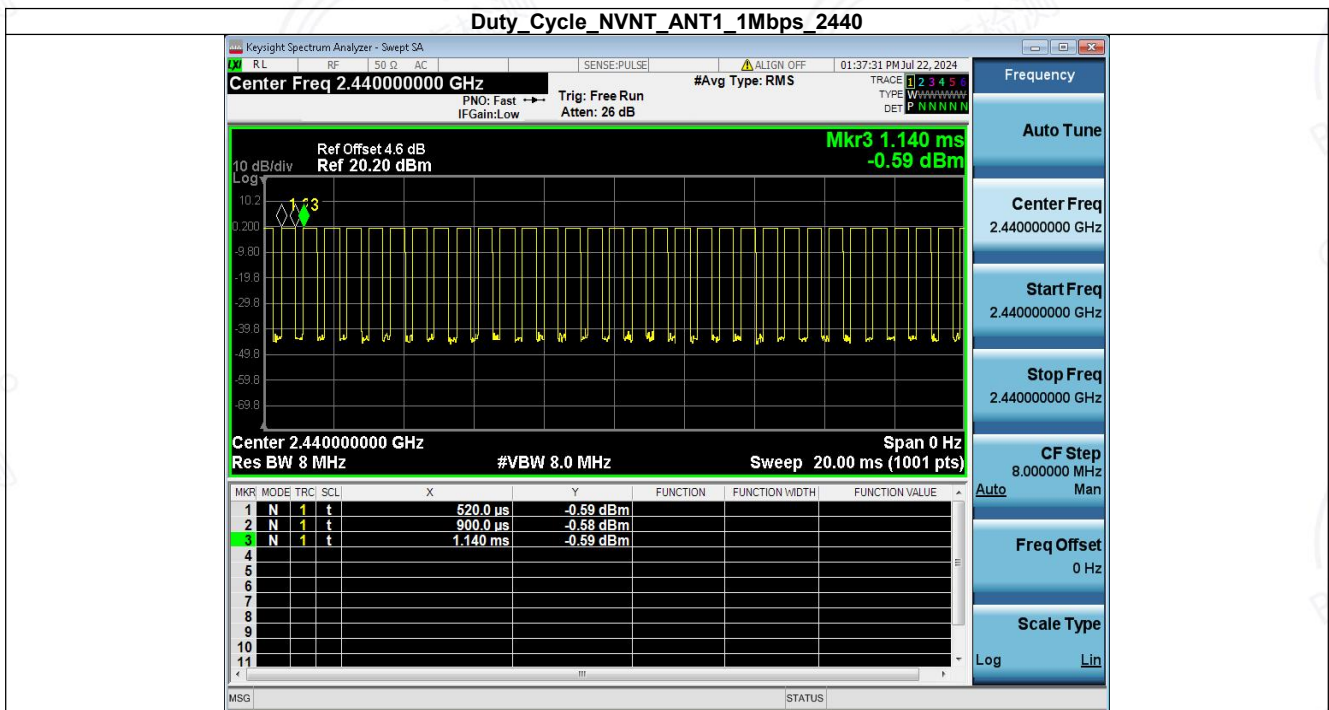
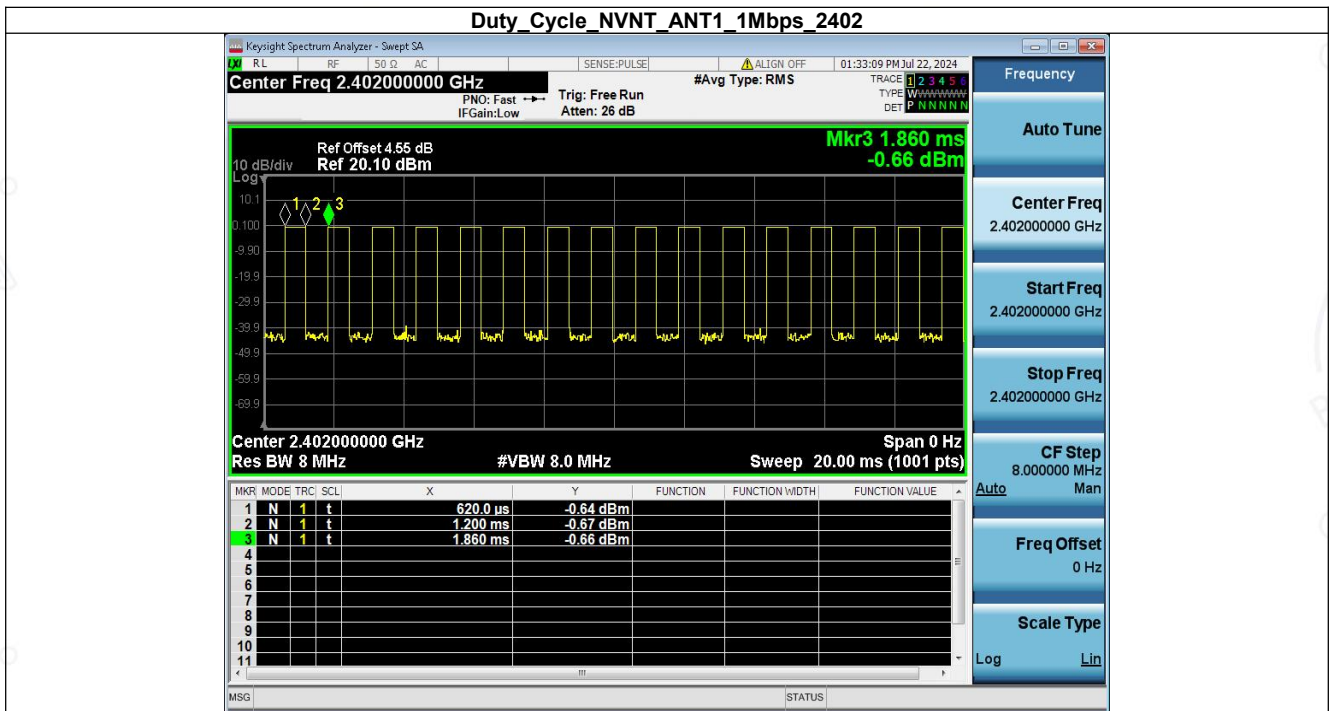
99%_Occupied_Bandwidth_NVNT_ANT1_1Mbps_2480

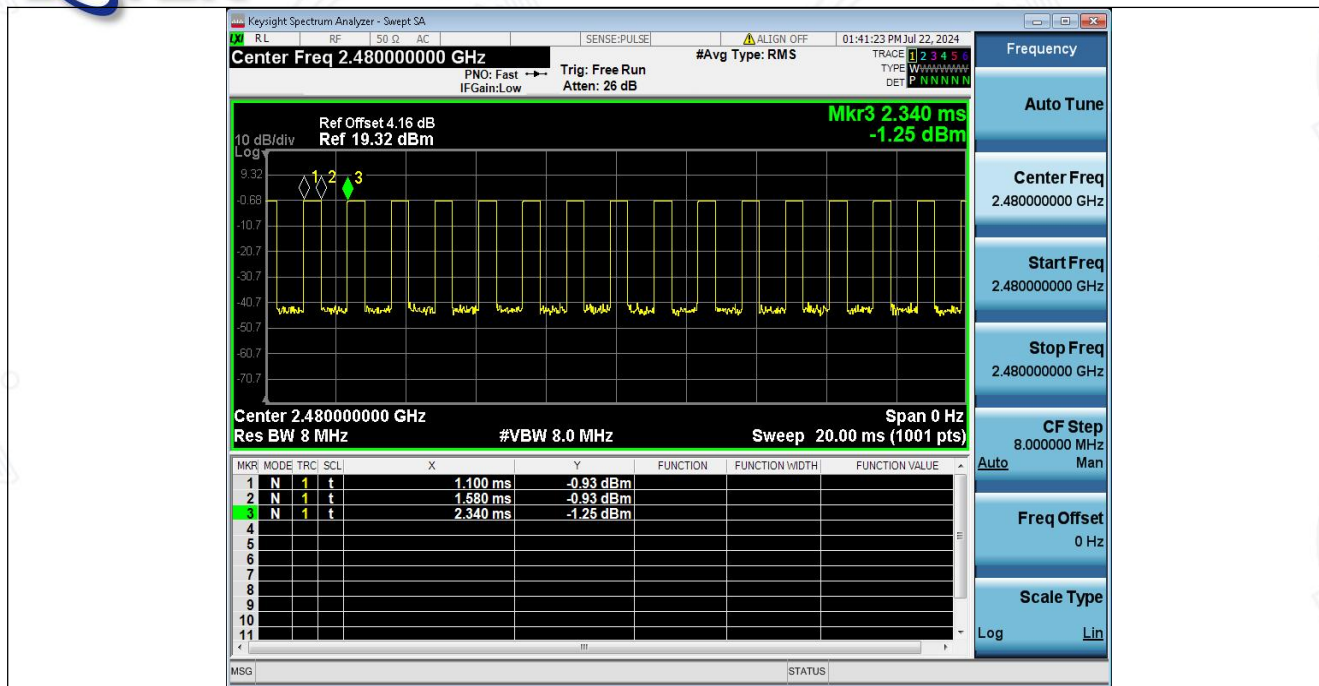




3. Duty Cycle

Condition	Antenna	Rate	Frequency (MHz)	Dutycycle(%)	Duty_factor
NVNT	ANT1	1Mbps	2402.00	46.77	3.30
NVNT	ANT1	1Mbps	2440.00	64.52	1.90
NVNT	ANT1	1Mbps	2480.00	40.32	3.94





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	-0.65	0.86	1000	Pass
NVNT	ANT1	1Mbps	2440.00	-0.59	0.87	1000	Pass
NVNT	ANT1	1Mbps	2480.00	-0.91	0.81	1000	Pass

Peak_Output_Power_NVNT_ANT1_1Mbps_2402

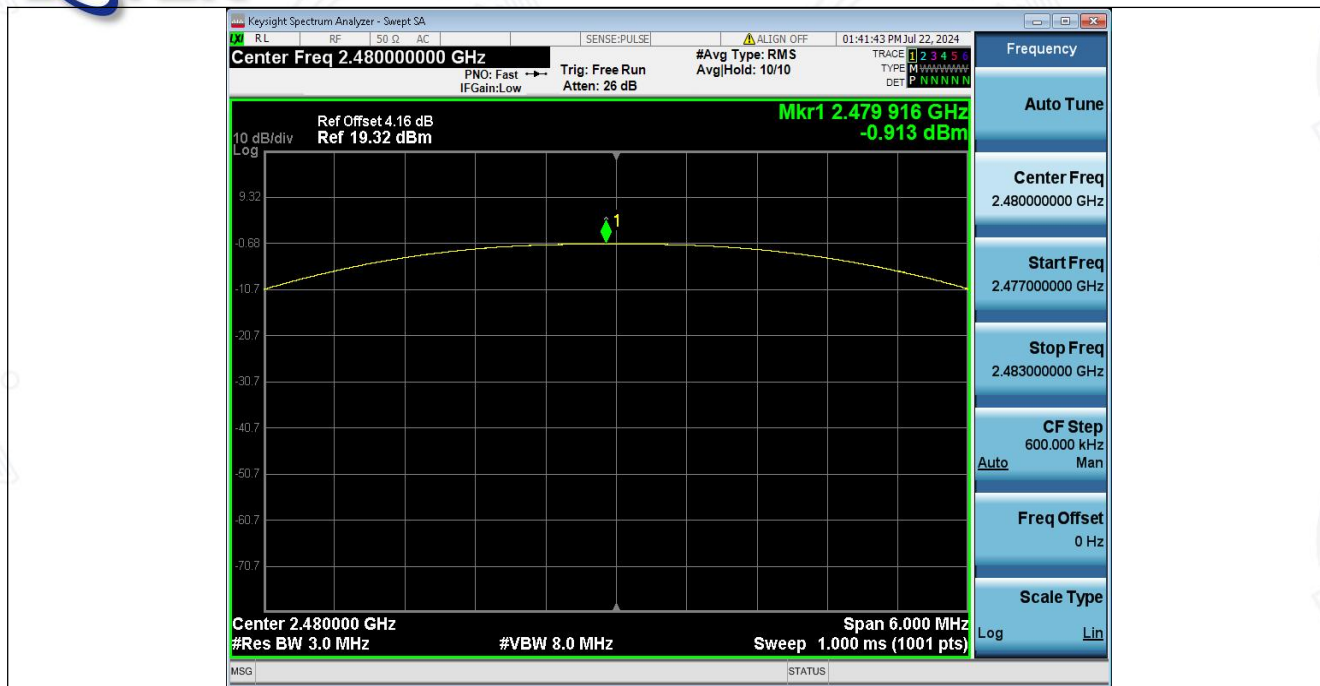


Peak_Output_Power_NVNT_ANT1_1Mbps_2440



Peak_Output_Power_NVNT_ANT1_1Mbps_2480

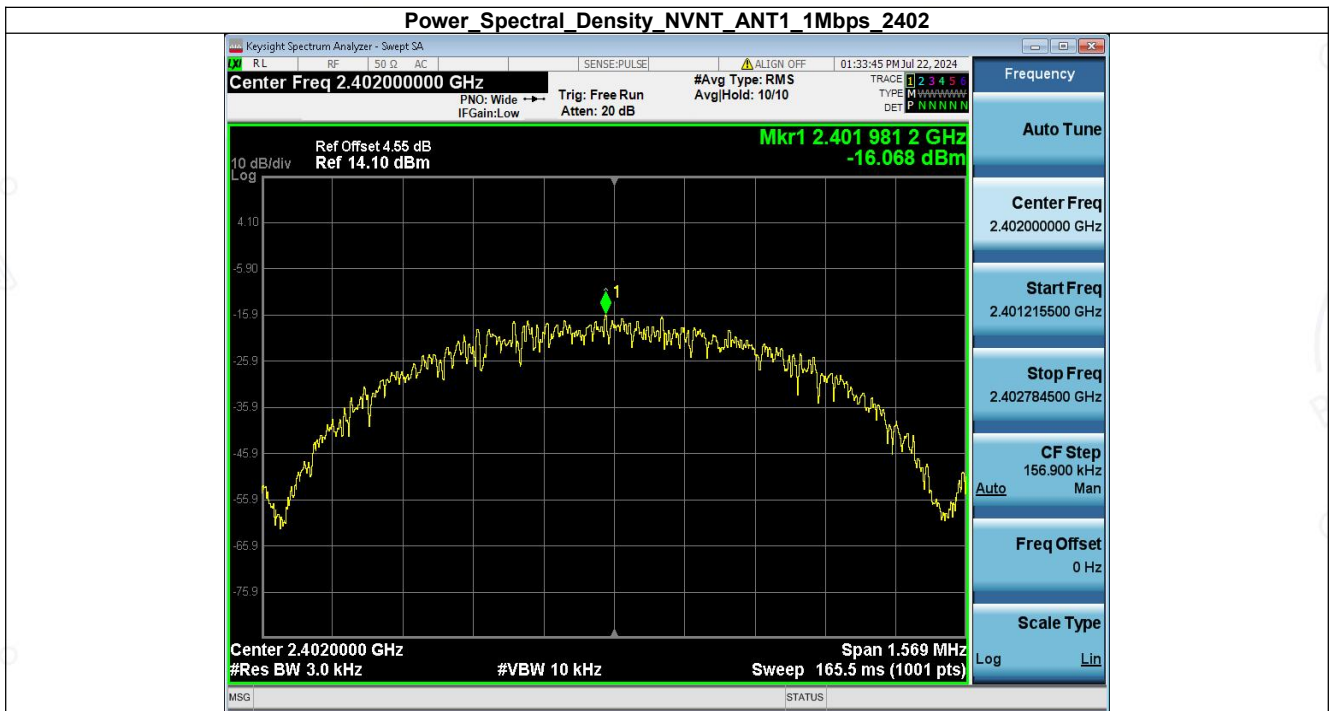




5. Power Spectral Density

Condition	Antenna	Rate	Frequency (MHz)	Power Spectral Density(dBm)	Limit(dBm/3kHz)	Result
NVNT	ANT1	1Mbps	2402.00	-16.07	8	Pass
NVNT	ANT1	1Mbps	2440.00	-15.90	8	Pass
NVNT	ANT1	1Mbps	2480.00	-16.60	8	Pass

Power_Spectral_Density_NVNT_ANT1_1Mbps_2402

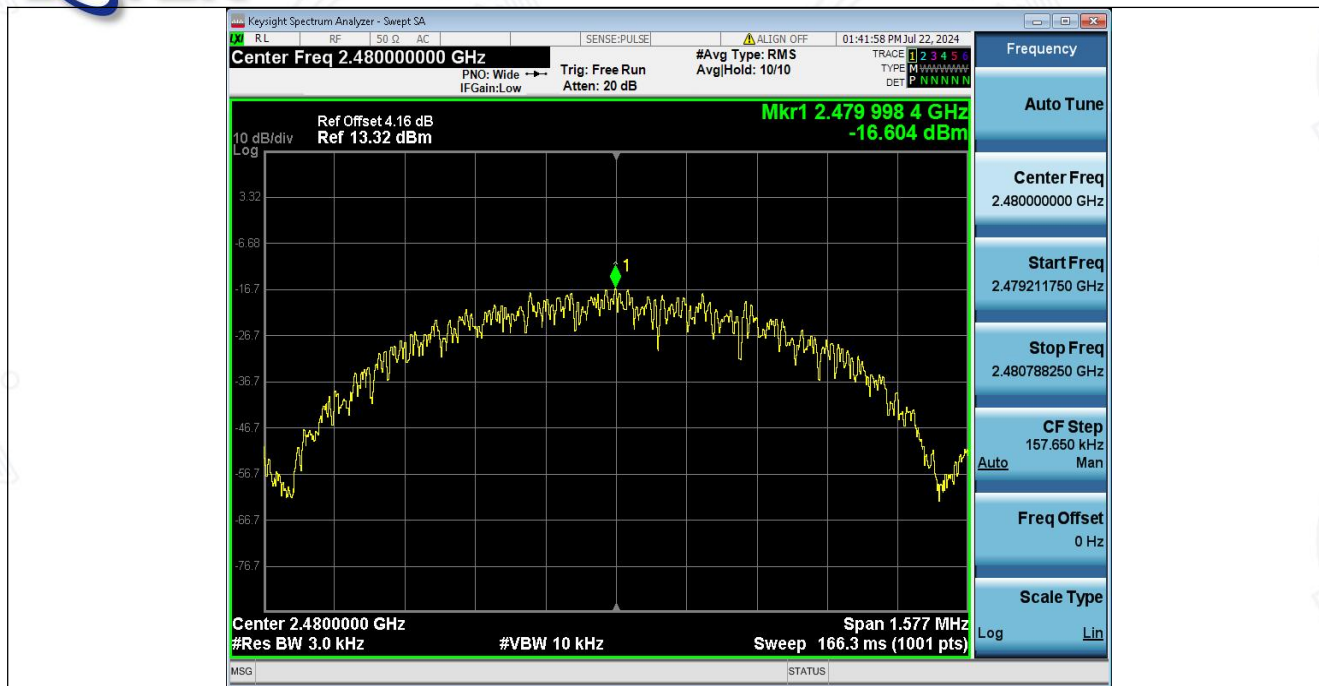


Power_Spectral_Density_NVNT_ANT1_1Mbps_2440



Power_Spectral_Density_NVNT_ANT1_1Mbps_2480





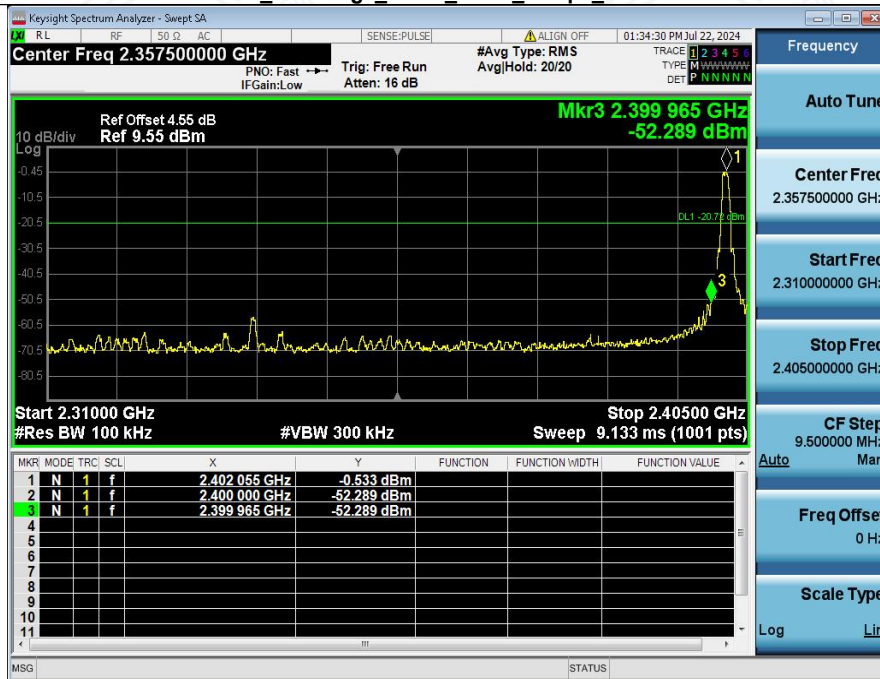
6. Bandedge

Condition	Antenna	Rate	TX_Frequency (MHz)	Max. Mark Frequency (MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	1Mbps	2402.00	2399.965	-52.289	-20.720	Pass
NVNT	ANT1	1Mbps	2480.00	2483.525	-55.010	-21.023	Pass

1_Reference_Level_NVNT_ANT1_1Mbps_2402

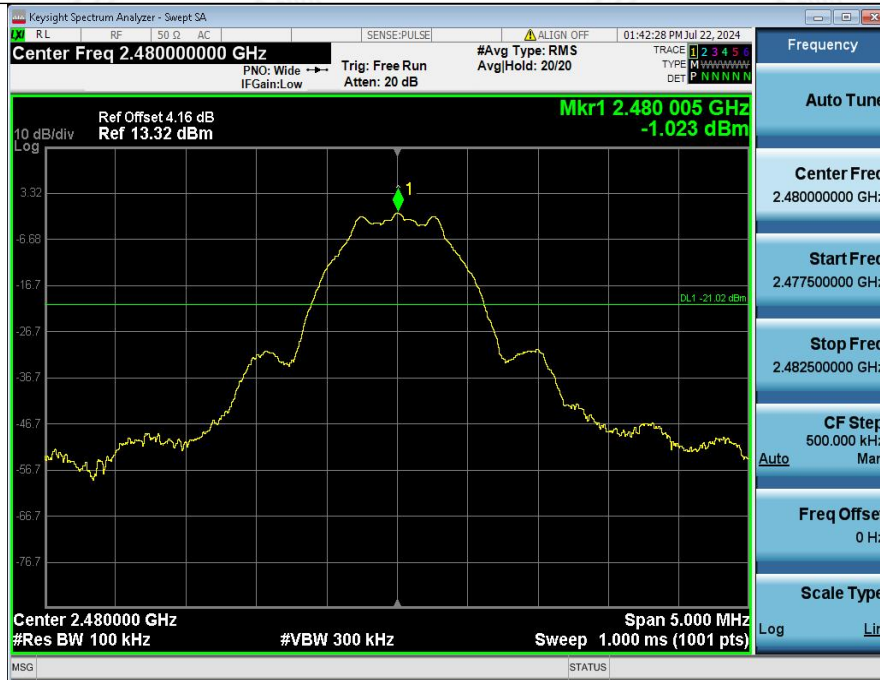


2_Bandedge_NVNT_ANT1_1Mbps_2402

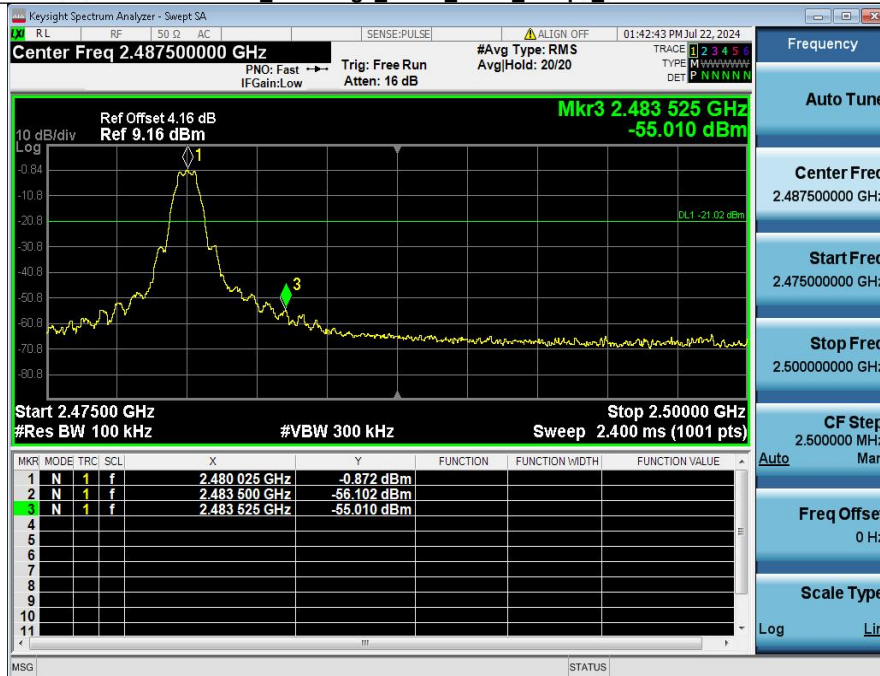


1_Reference_Level_NVNT_ANT1_1Mbps_2480





2_Bandedge_NVNT_ANT1_1Mbps_2480



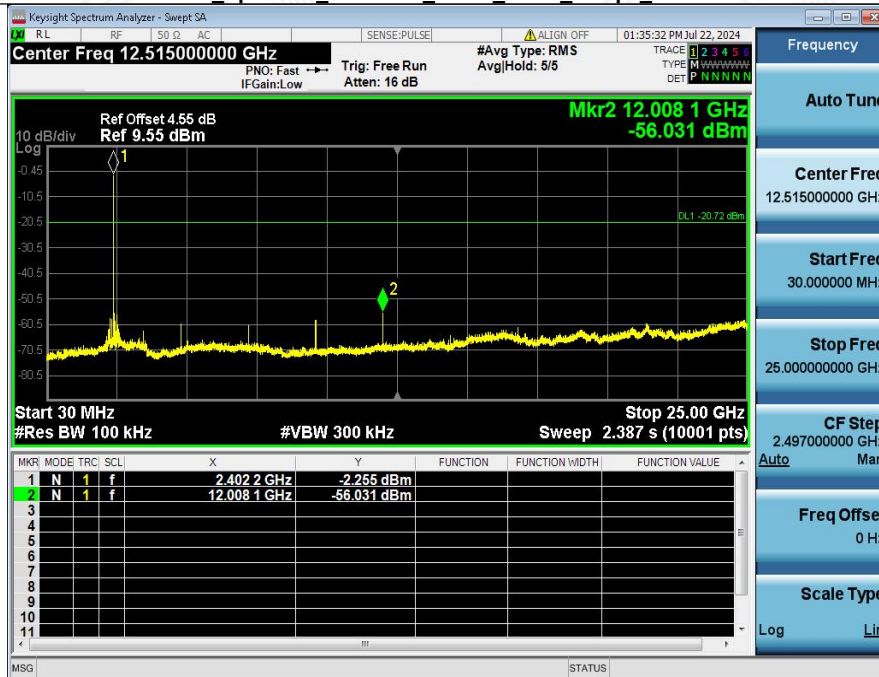
7. Spurious Emission

Condition	Antenna	Rate	TX_Frequency(MHz)	Spurious MAX.Value(dBm)	Limit	Result
NVNT	ANT1	1Mbps	2402.00	-56.031	-20.720	Pass
NVNT	ANT1	1Mbps	2440.00	-53.290	-20.678	Pass
NVNT	ANT1	1Mbps	2480.00	-57.260	-21.023	Pass

1_Reference_Level_NVNT_ANT1_1Mbps_2402

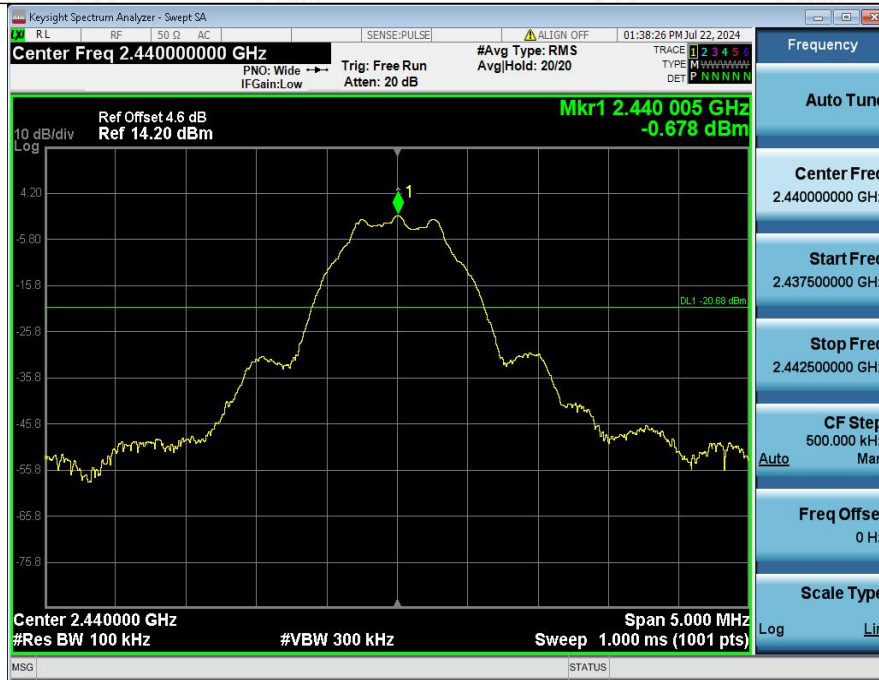


2_Spurious Emission_NVNT_ANT1_1Mbps_2402

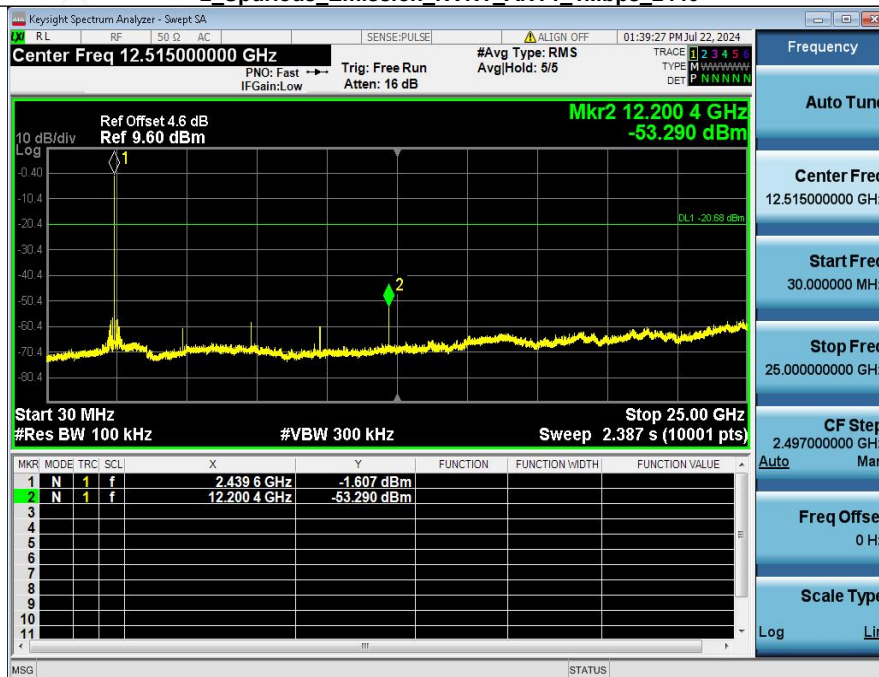


1_Reference_Level_NVNT_ANT1_1Mbps_2440



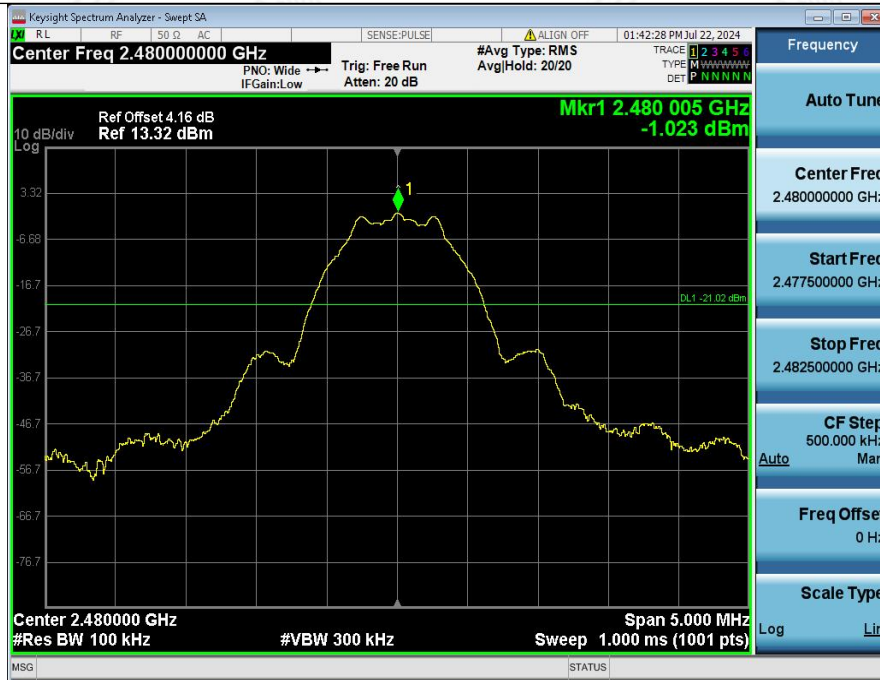


2_Spurious_Emission_NVNT_ANT1_1Mbps_2440



1_Reference_Level_NVNT_ANT1_1Mbps_2480





2_Spurious_Emission_NVNT_ANT1_1Mbps_2480

