

Appendix

Test Data

for BTEK240821001AE

Start date	2024/9/20	Finish date	2024/9/20
Temperature	22.5℃	Humidity	57%
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

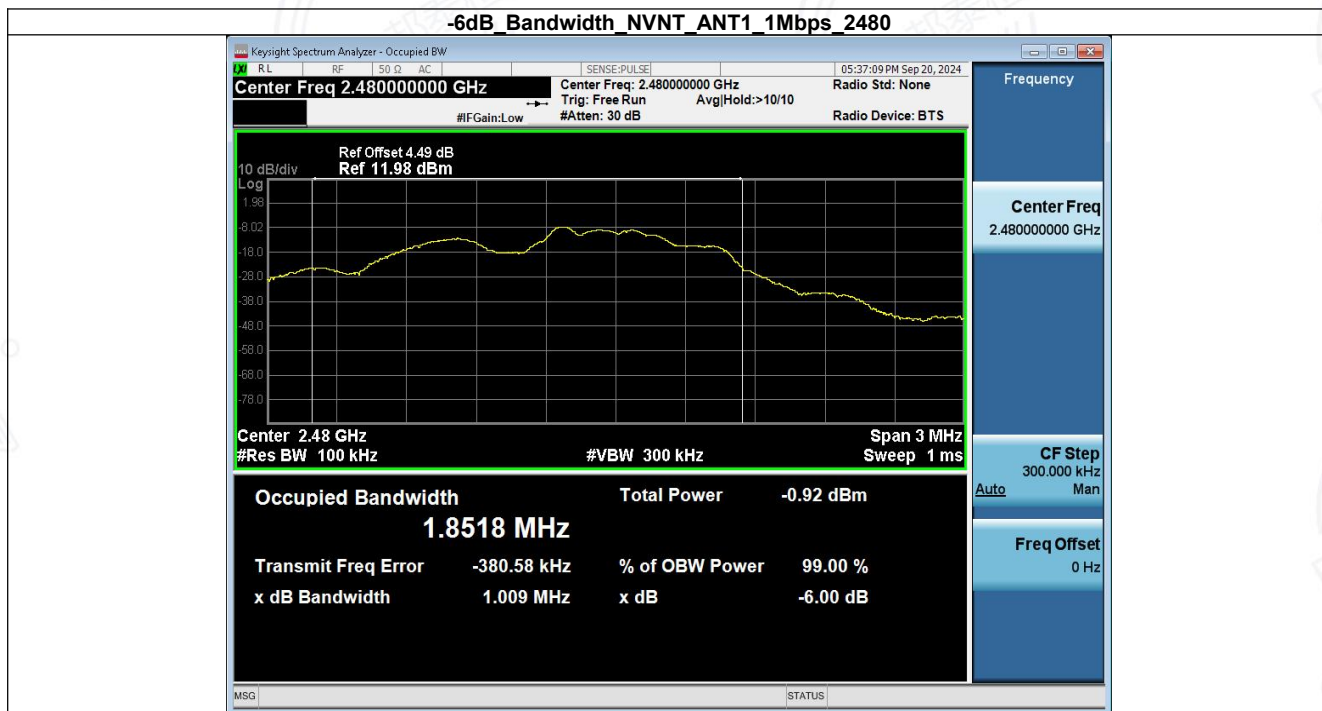
Condition	Antenna	Rate	Frequency (MHz)	-6dB BW(kHz)	limit(kHz)	Result
NVNT	ANT1	1Mbps	2402.00	946.93	500	Pass
NVNT	ANT1	1Mbps	2440.00	988.41	500	Pass
NVNT	ANT1	1Mbps	2480.00	1008.58	500	Pass

-6dB_Bandwidth_NVNT_ANT1_1Mbps_2402



-6dB_Bandwidth_NVNT_ANT1_1Mbps_2440





2. 99% Occupied Bandwidth

Condition	Antenna	Rate	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	1Mbps	2402.00	1.492
NVNT	ANT1	1Mbps	2440.00	1.621
NVNT	ANT1	1Mbps	2480.00	1.695

99%_Occupied_Bandwidth_NVNT_ANT1_1Mbps_2402



99%_Occupied_Bandwidth_NVNT_ANT1_1Mbps_2440

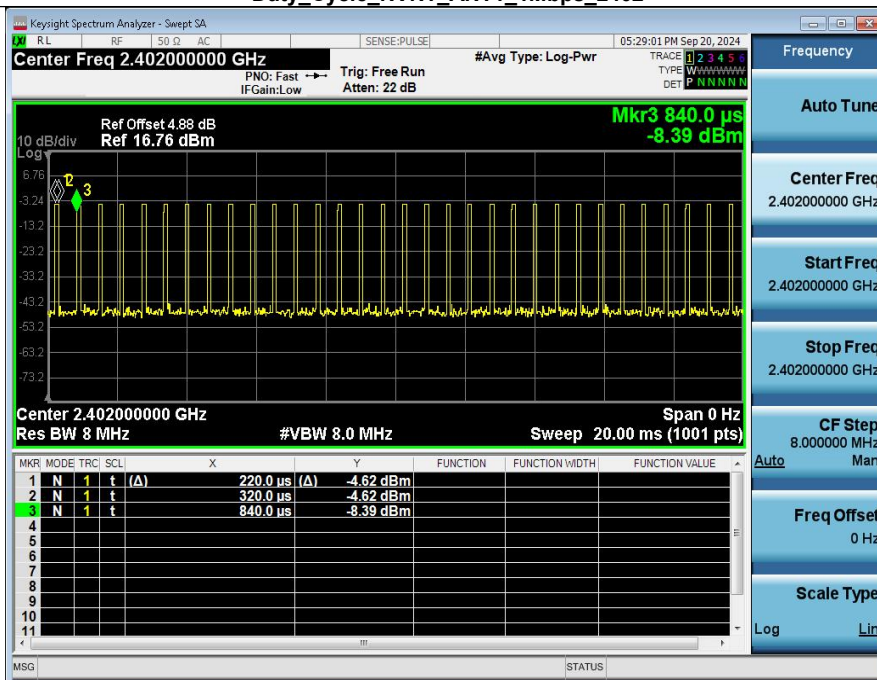




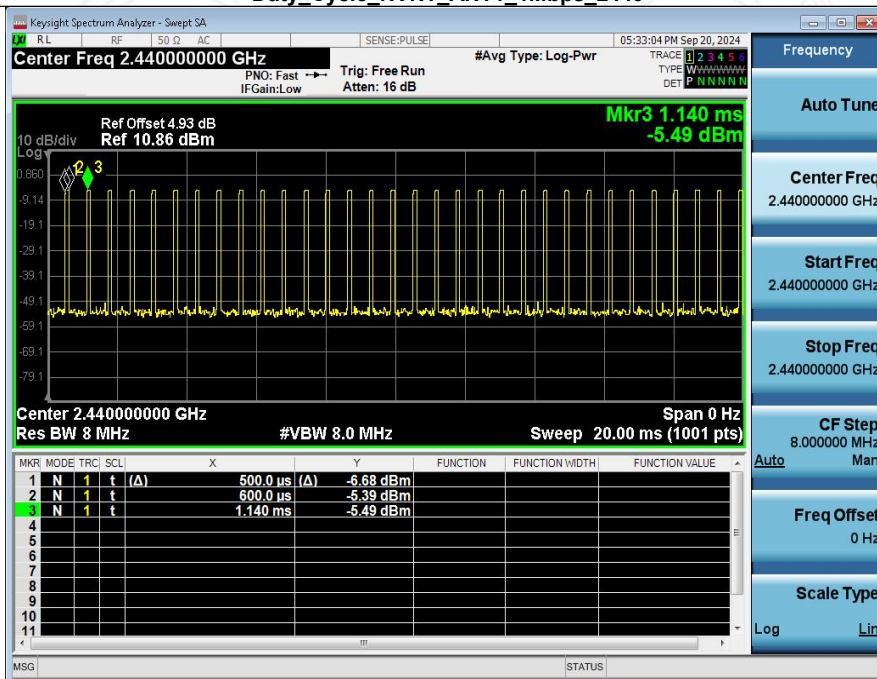
3. Duty Cycle

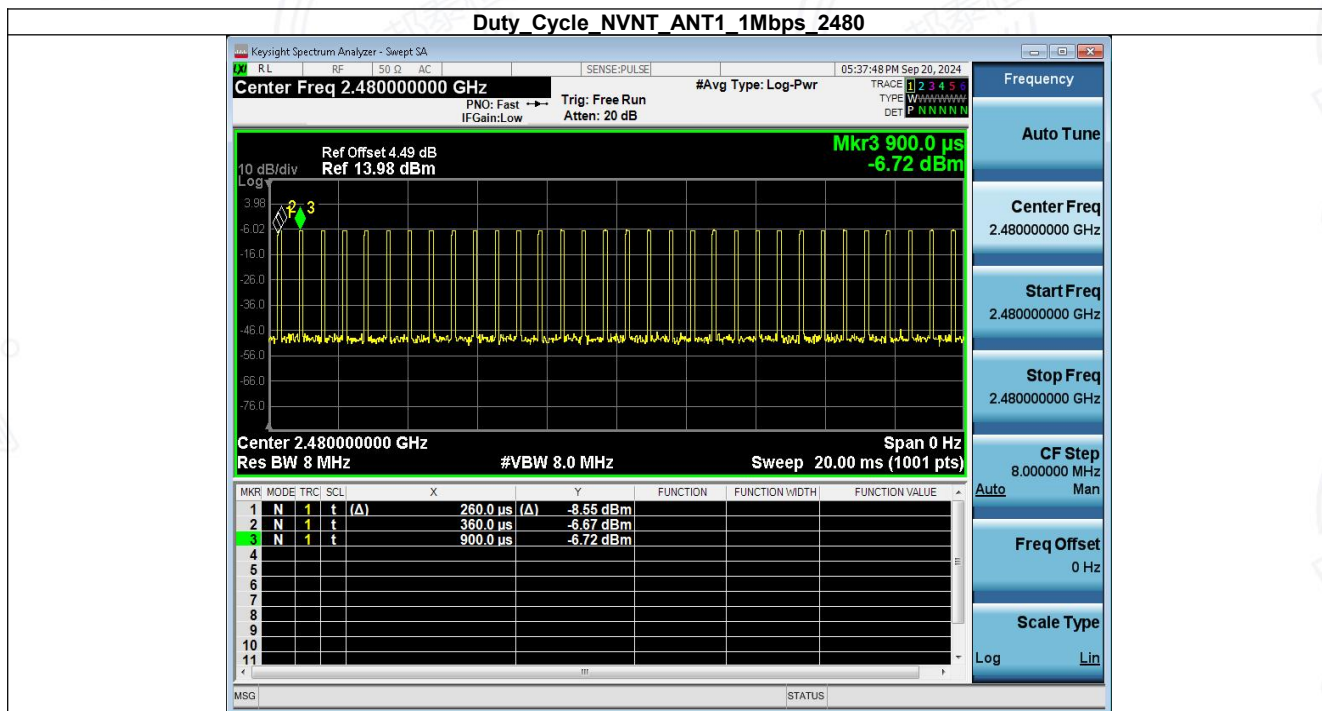
Condition	Antenna	Rate	Frequency (MHz)	Dutycycle(%)	Duty_factor
NVNT	ANT1	1Mbps	2402.00	16.13	7.92
NVNT	ANT1	1Mbps	2440.00	15.63	8.06
NVNT	ANT1	1Mbps	2480.00	15.63	8.06

Duty_Cycle_NVNT_ANT1_1Mbps_2402



Duty_Cycle_NVNT_ANT1_1Mbps_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	-4.67	0.34	1000	Pass
NVNT	ANT1	1Mbps	2440.00	-5.33	0.29	1000	Pass
NVNT	ANT1	1Mbps	2480.00	-6.62	0.22	1000	Pass

Peak_Output_Power_NVNT_ANT1_1Mbps_2402



Peak_Output_Power_NVNT_ANT1_1Mbps_2440





5. Power Spectral Density

Condition	Antenna	Rate	Frequency (MHz)	Power Spectral Density(dBm)	Limit(dBm/3kHz)	Result
NVNT	ANT1	1Mbps	2402.00	-24.78	8	Pass
NVNT	ANT1	1Mbps	2440.00	-25.44	8	Pass
NVNT	ANT1	1Mbps	2480.00	-26.45	8	Pass

Power_Spectral_Density_NVNT_ANT1_1Mbps_2402



Power_Spectral_Density_NVNT_ANT1_1Mbps_2440





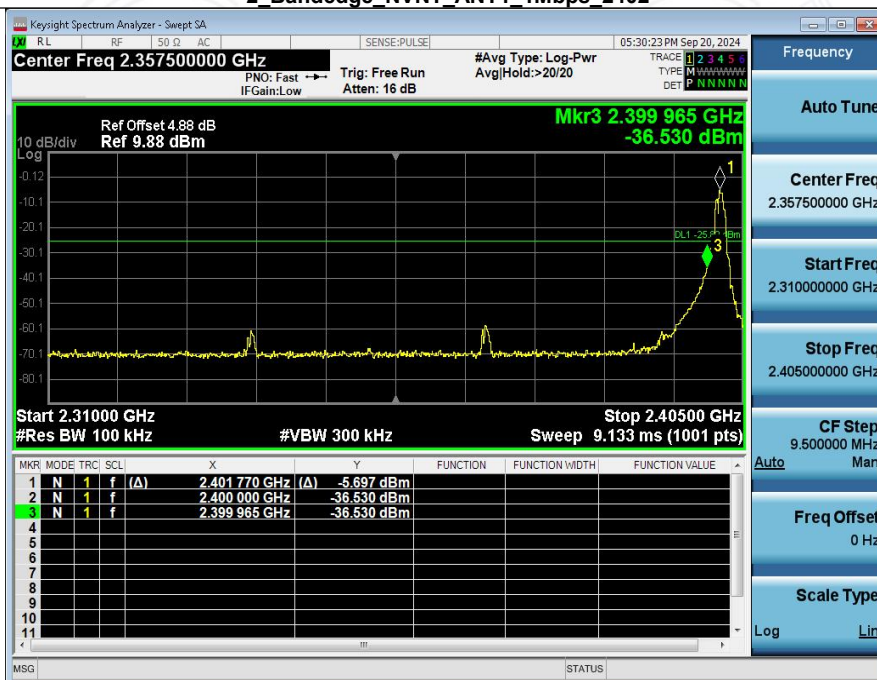
6. Bandedge

Condition	Antenna	Rate	TX_Frequency (MHz)	Max. Mark Frequency (MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	1Mbps	2402.00	2399.965	-36.530	-25.818	Pass
NVNT	ANT1	1Mbps	2480.00	2487.800	-61.331	-27.782	Pass

1_Reference_Level_NVNT_ANT1_1Mbps_2402



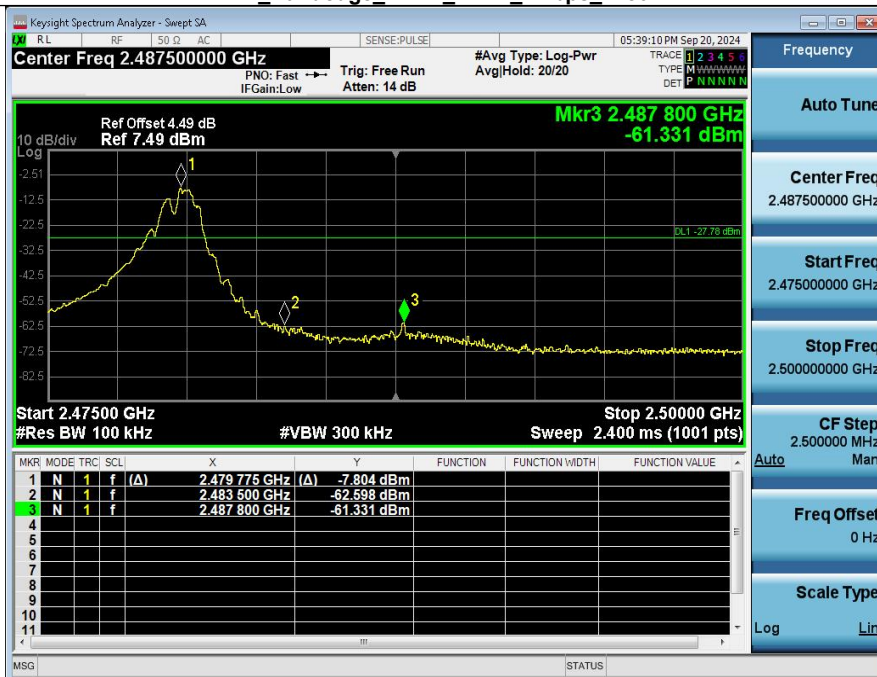
2_Bandedge_NVNT_ANT1_1Mbps_2402



1 Reference_Level_NVNT_ANT1_1Mbps_2480



2_Bandedge_NVNT_ANT1_1Mbps_2480



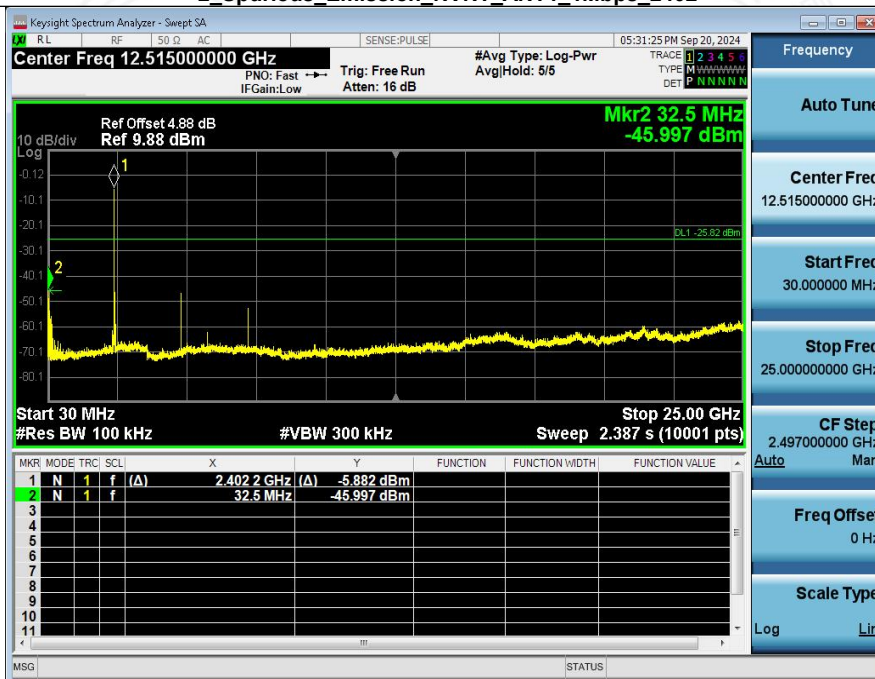
7. Spurious Emission

Condition	Antenna	Rate	TX_Frequency(MHz)	Spurious MAX.Value(dBm)	Limit	Result
NVNT	ANT1	1Mbps	2402.00	-45.997	-25.818	Pass
NVNT	ANT1	1Mbps	2440.00	-46.724	-26.615	Pass
NVNT	ANT1	1Mbps	2480.00	-46.546	-27.782	Pass

1_Reference_Level_NVNT_ANT1_1Mbps_2402



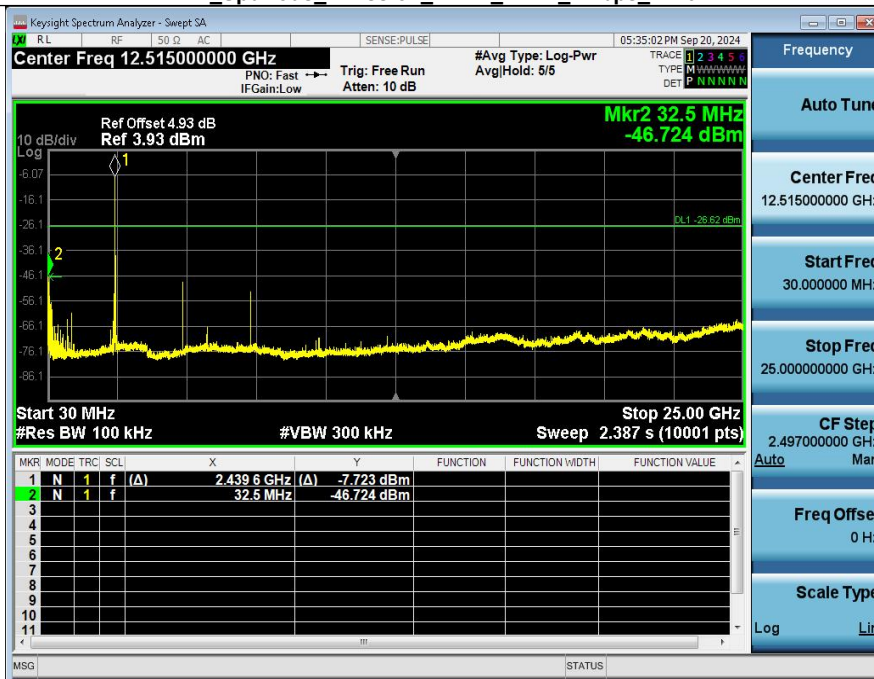
2_Spurious_Emission_NVNT_ANT1_1Mbps_2402



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

