

Appendix Test Data for BLE (Conducted Measurement)

Product Name: AI Nutrition Scale

Trade Mark: MAXBUD

Test Model: MBNC251W

FCC ID: 2BN4O-MBNC251W

Environmental Conditions

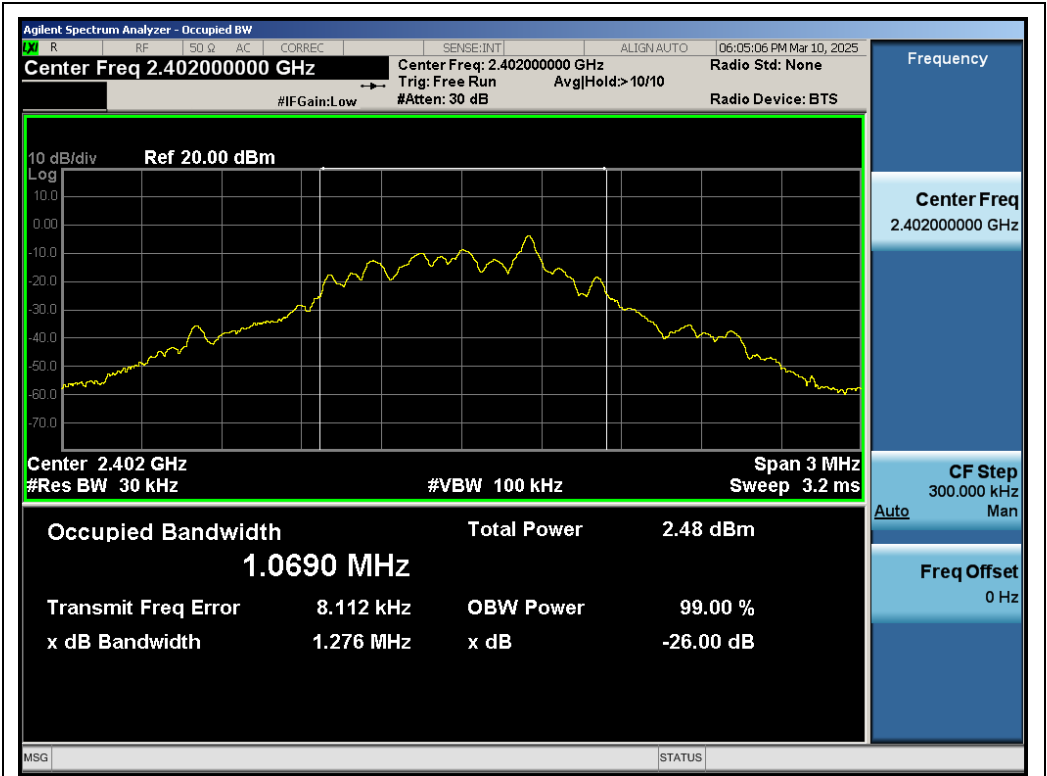
Temperature:	24.8°C
Relative Humidity:	59%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

Appendix A: DTS Bandwidth & Occupied Channel Bandwidth

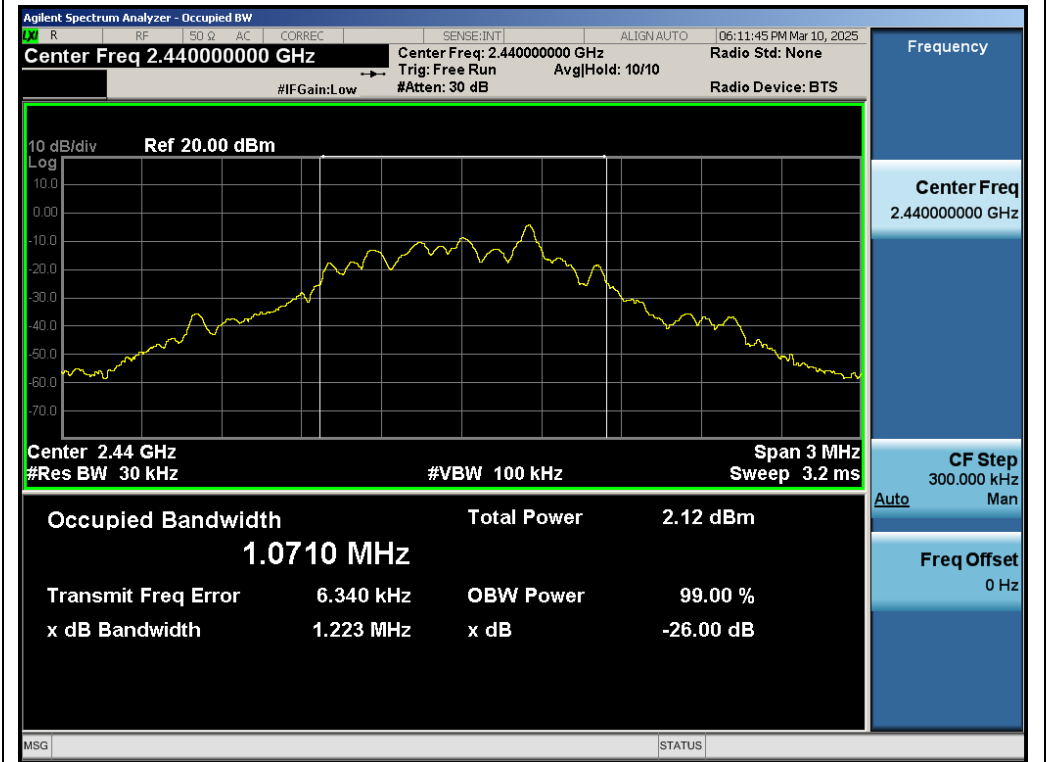
Test Result

Test Mode	Test Frequency	Occupied Bandwidth (MHz)	DTS BW (MHz)	DTS BW Limits	Pass or Fail
GFSK_1Mbps	2402	1.069	0.732	≥ 0.5	Pass
	2440	1.071	0.734	≥ 0.5	Pass
	2480	1.066	0.723	≥ 0.5	Pass

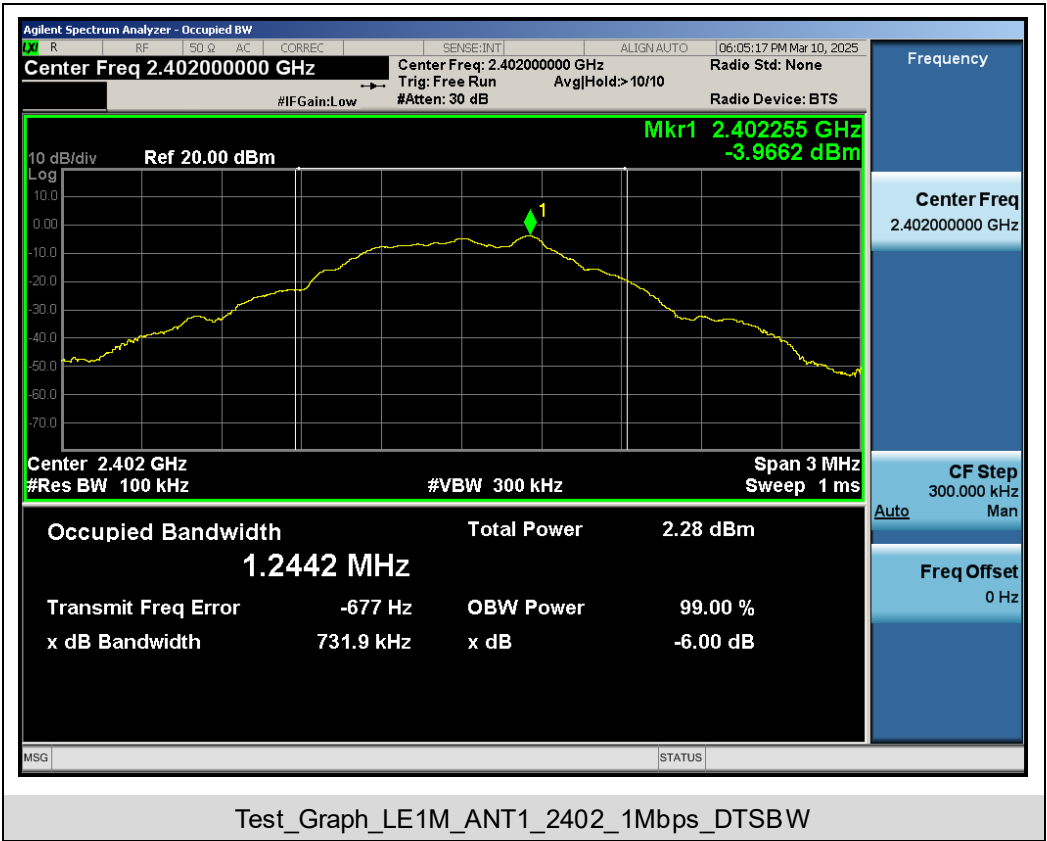
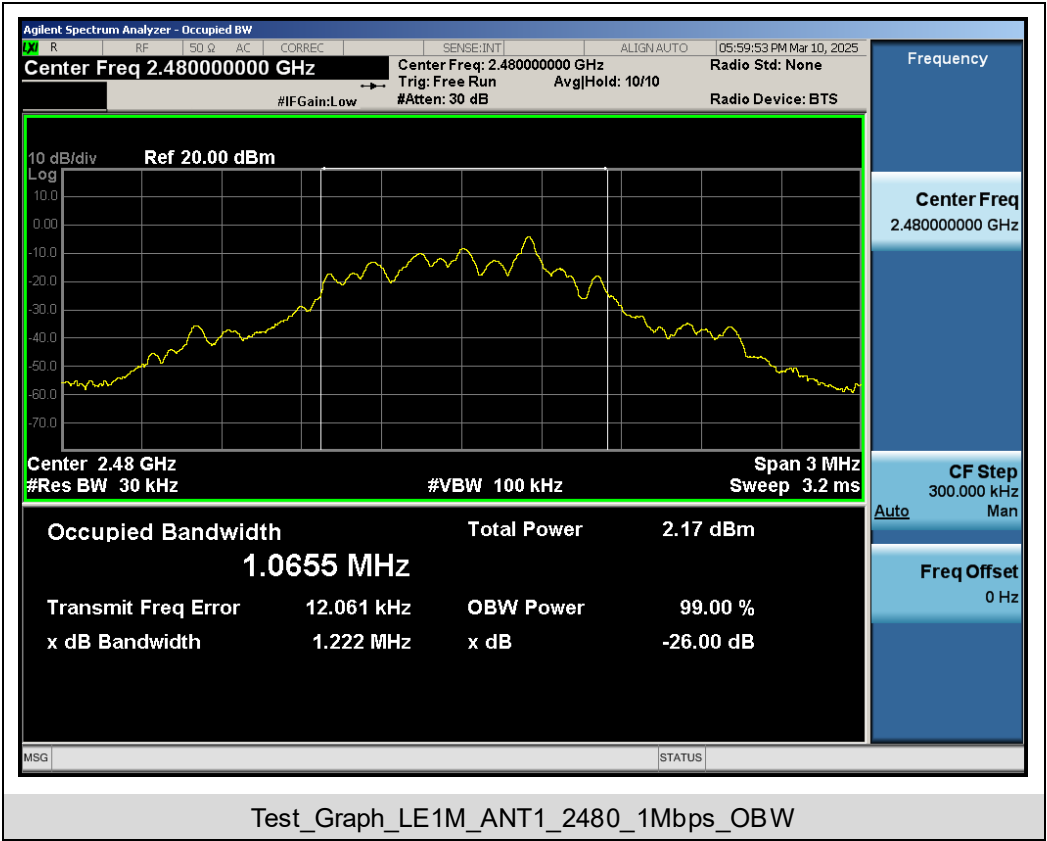
Test Graphs

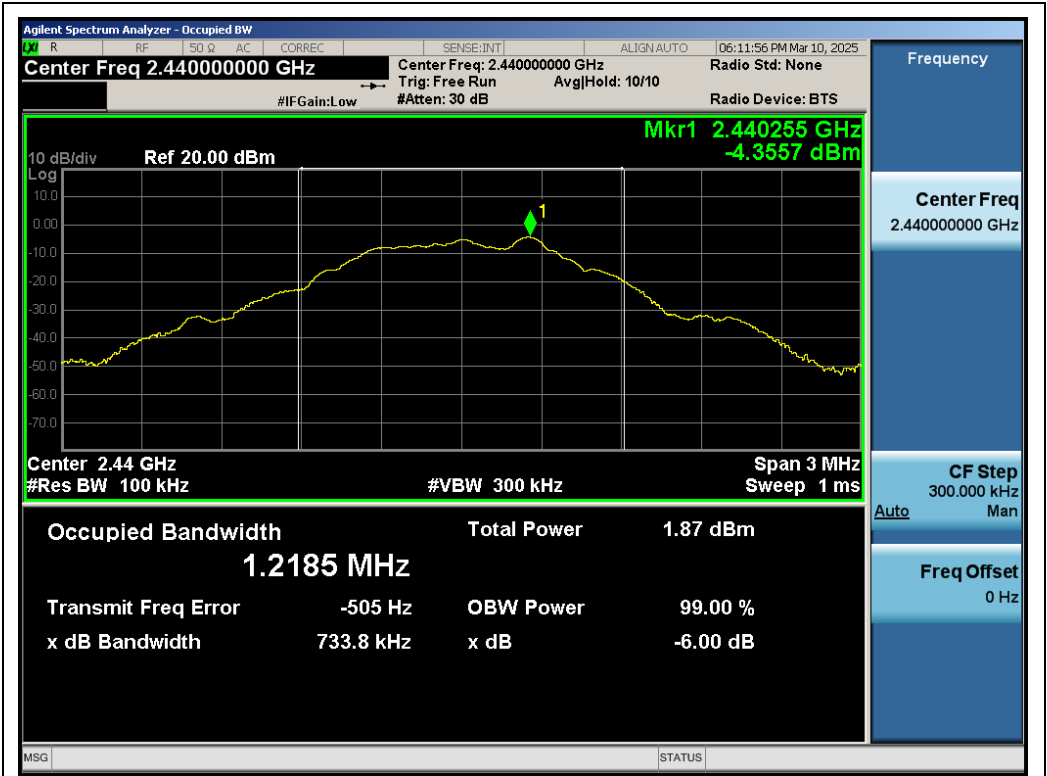


Test_Graph_LE1M_ANT1_2402_1Mbps_OBW

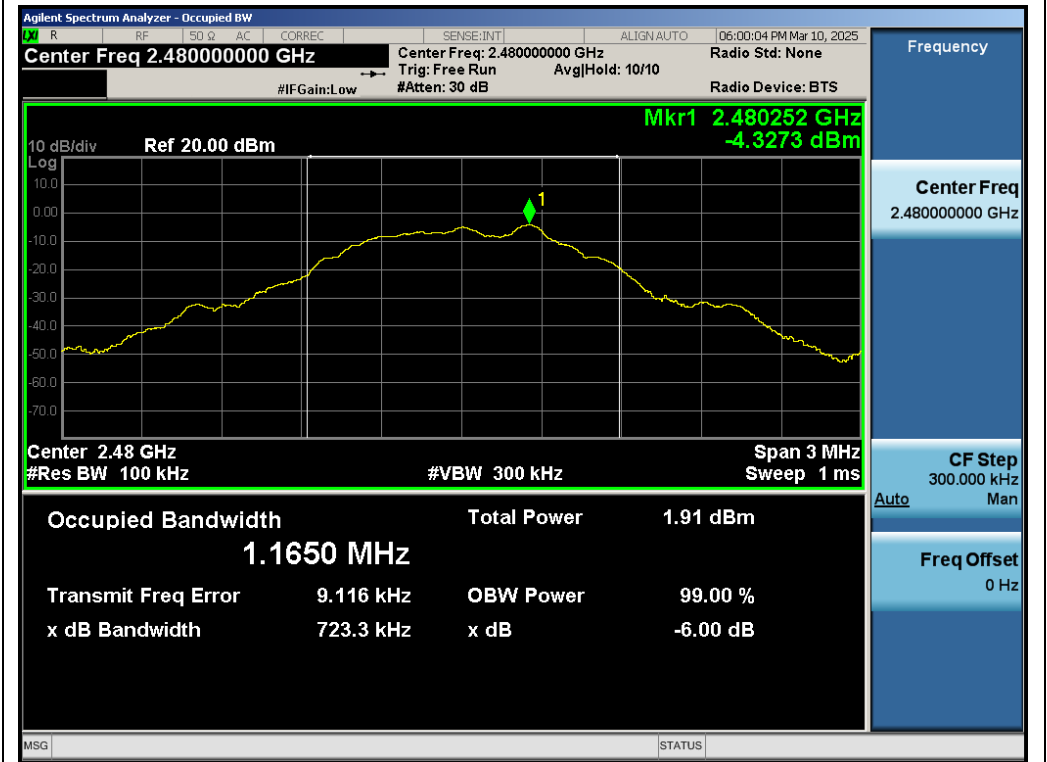


Test_Graph_LE1M_ANT1_2440_1Mbps_OBW





Test_Graph_LE1M_ANT1_2440_1Mbps_DTSBW



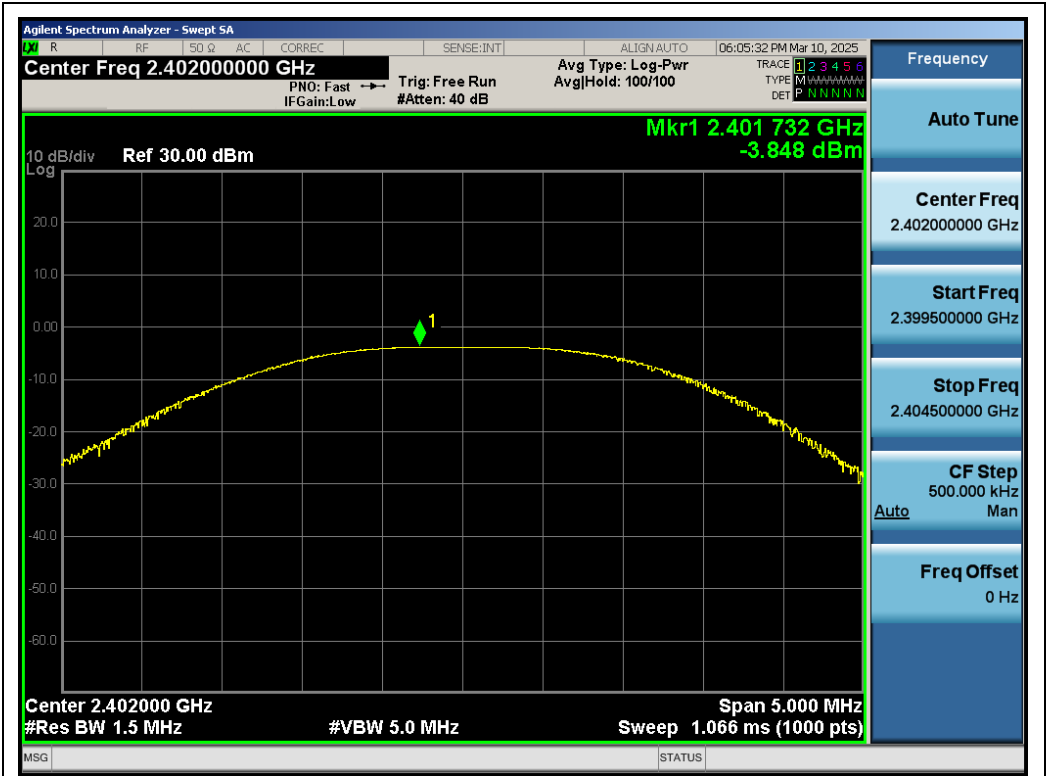
Test_Graph_LE1M_ANT1_2480_1Mbps_DTSBW

Appendix B: Maximum peak conducted output power

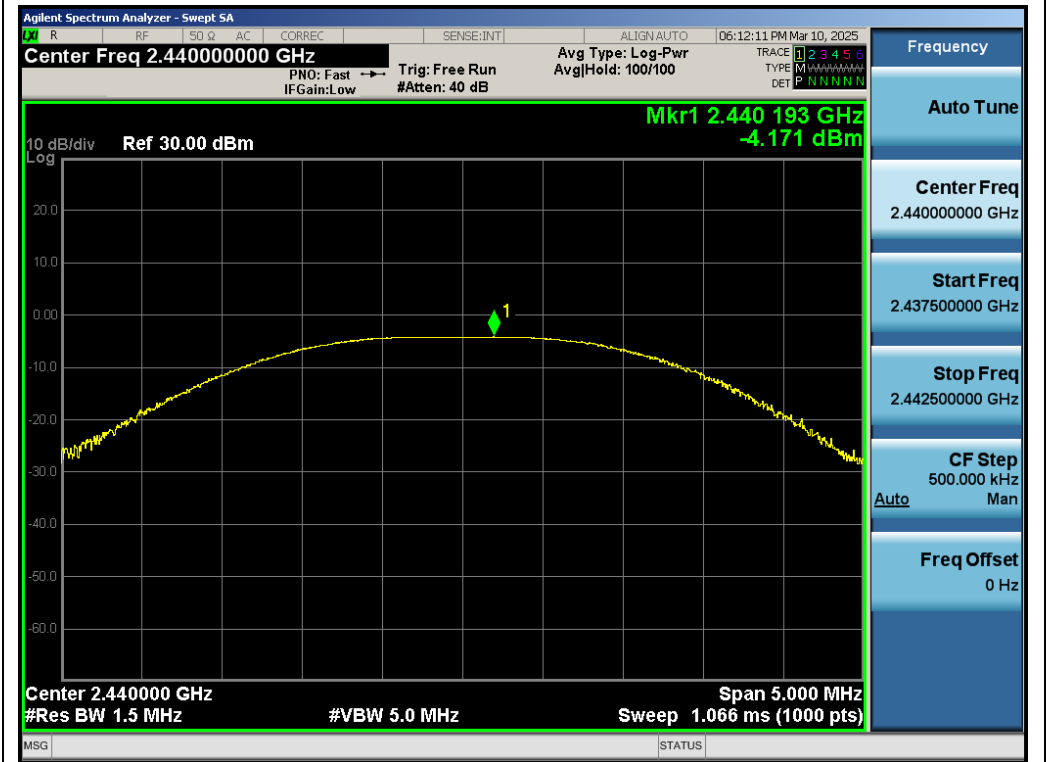
Test Result Peak

Test Mode	Test Frequency (MHz)	Peak Power (dBm)	Limits (dBm)	Pass or Fail
GFSK_1Mbps	2402	-3.848	≤ 30	Pass
	2440	-4.171	≤ 30	Pass
	2480	-4.240	≤ 30	Pass

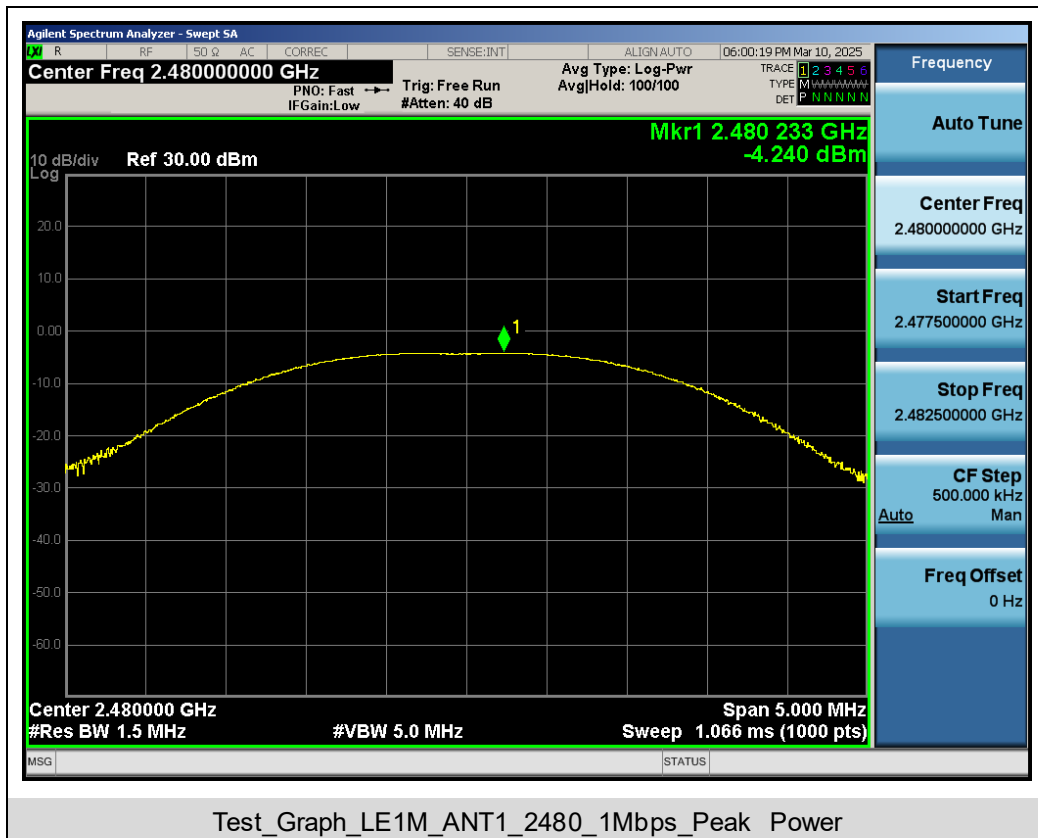
Test Graphs Peak



Test_Graph_LE1M_ANT1_2402_1Mbps_Peak Power



Test_Graph_LE1M_ANT1_2440_1Mbps_Peak Power

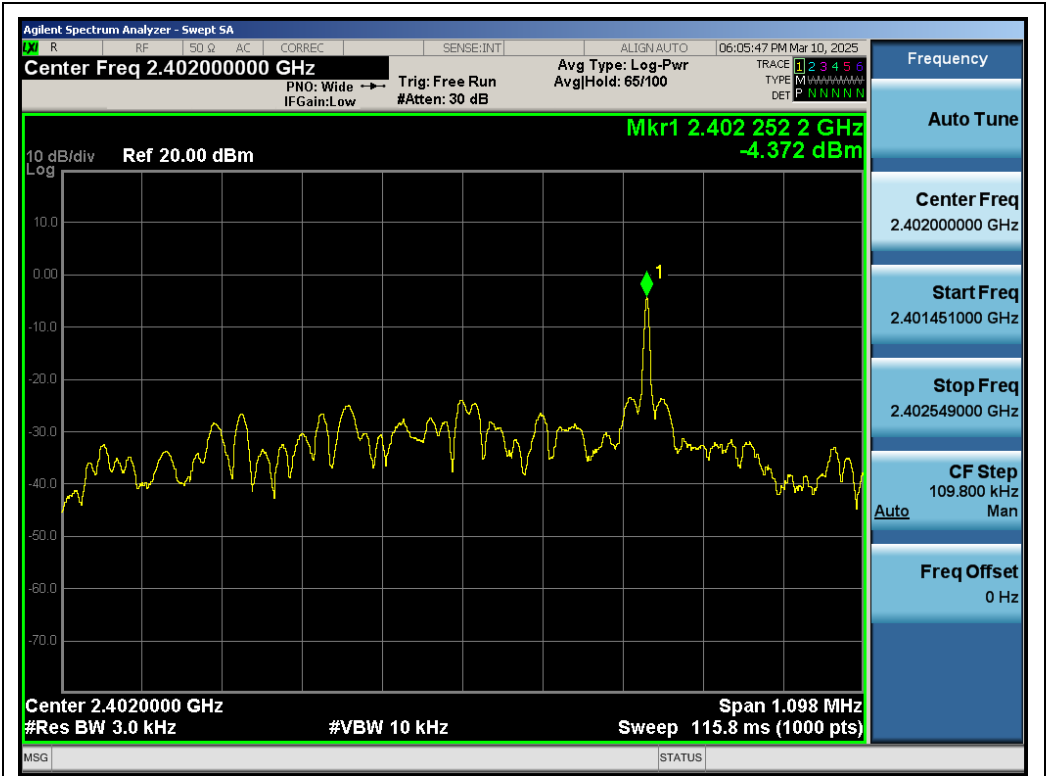


Appendix C: Maximum peak power spectral density

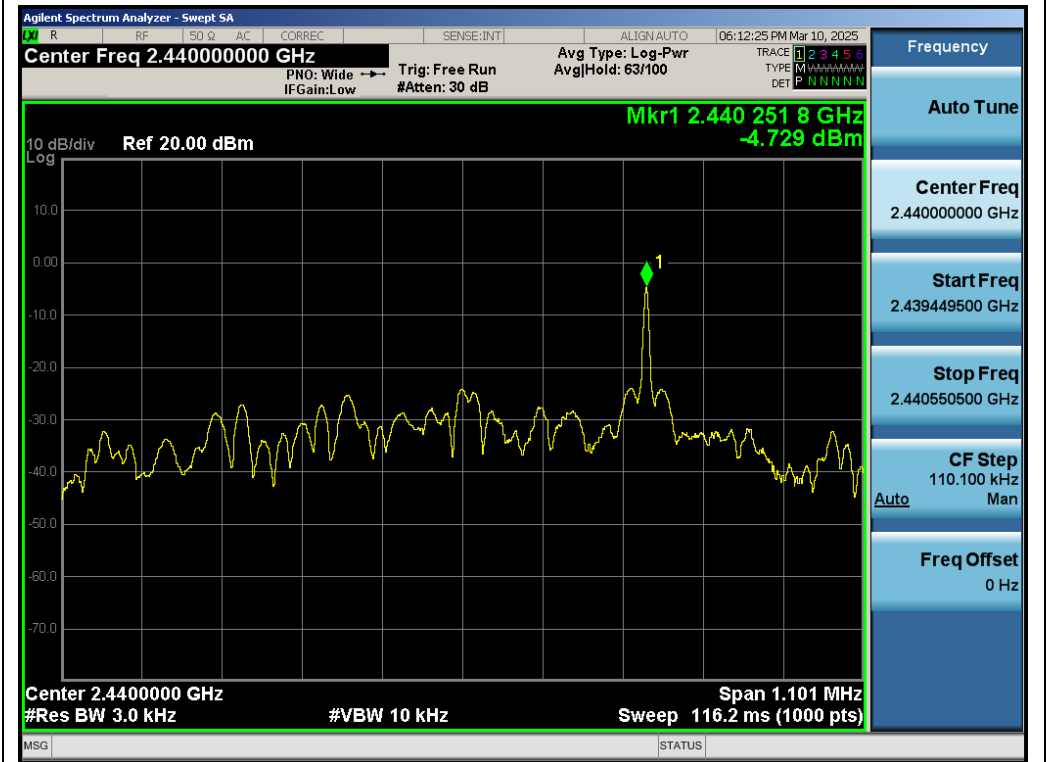
Test Result

Test Mode	Test Frequency (MHz)	Power density (dBm/3kHz)	Limit (dBm/3kHz)	Pass or Fail
GFSK_1Mbps	2402	-4.372	≤ 8	Pass
	2440	-4.729	≤ 8	Pass
	2480	-4.703	≤ 8	Pass

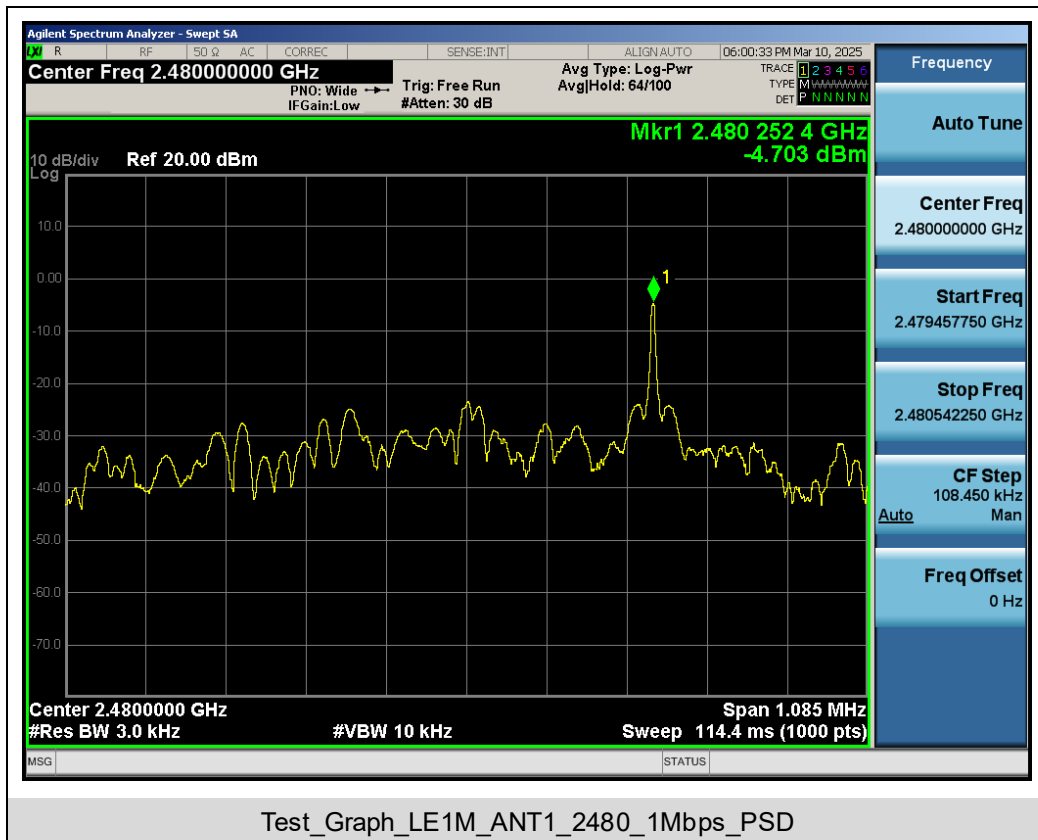
Test Graphs



Test_Graph_LE1M_ANT1_2402_1Mbps_PSD



Test_Graph_LE1M_ANT1_2440_1Mbps_PSD

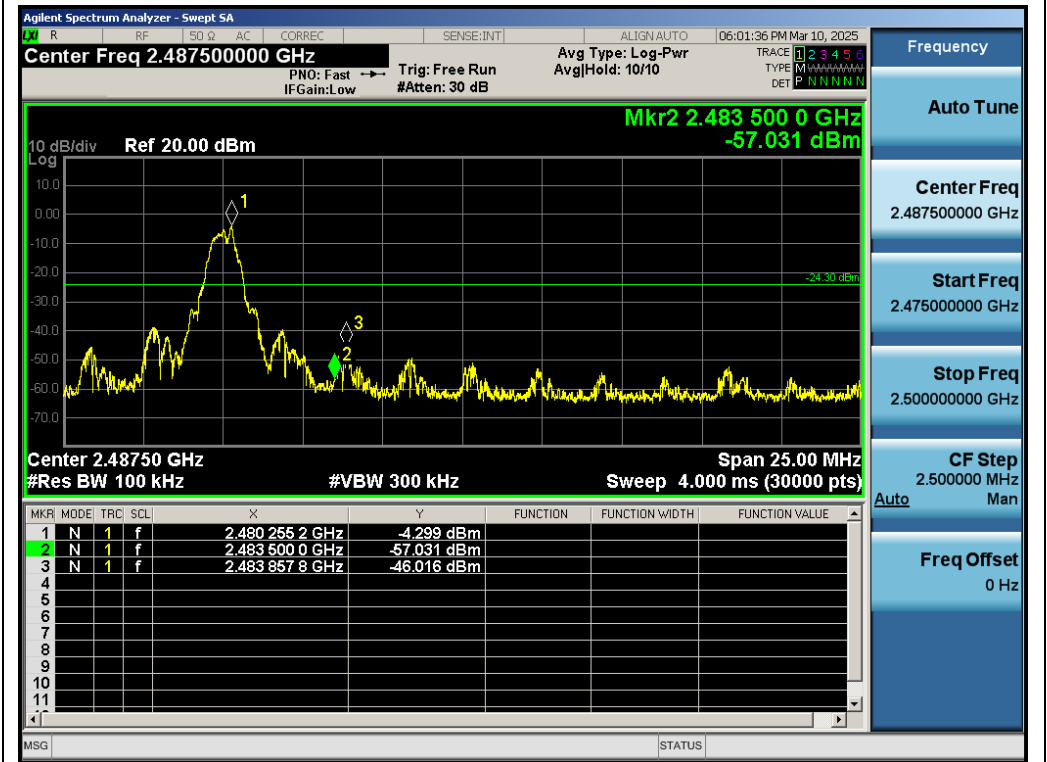
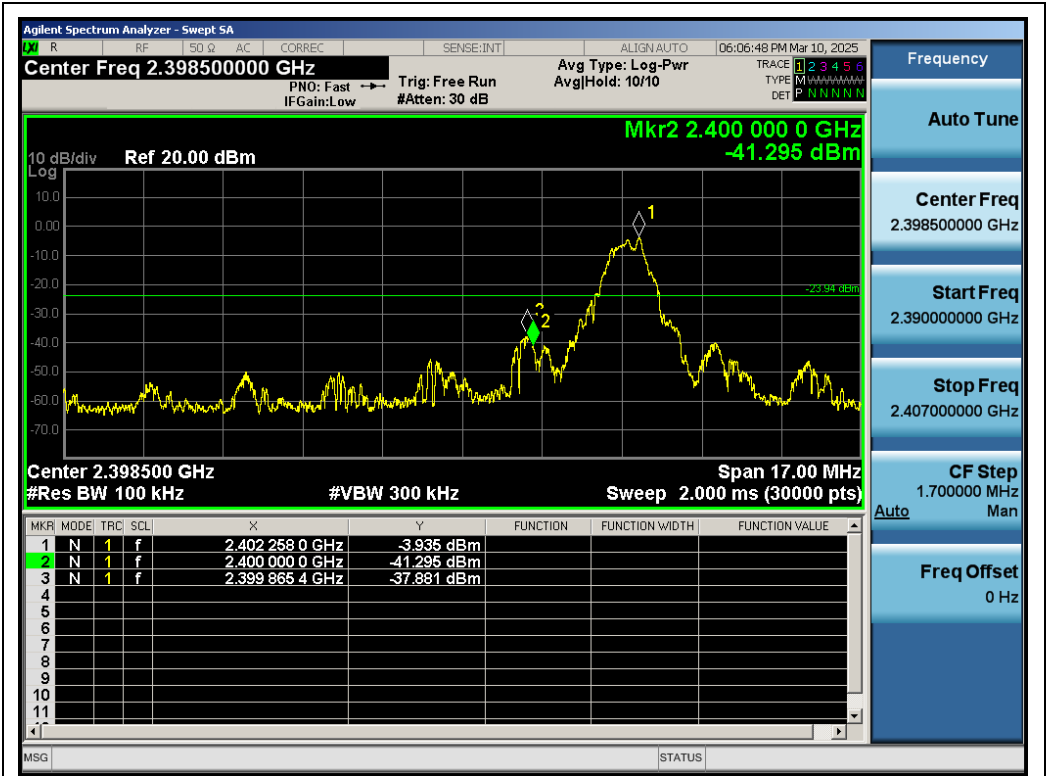


Appendix D: Band edge measurements

Test Result

Test Mode	Ch. Name	Frequency [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
GFSK_1Mbps	Low	2402	-3.935	-41.295	≤ -23.94	Pass
GFSK_1Mbps	High	2480	-4.299	-57.031	≤ -24.30	Pass

Test Graphs



Appendix E: Conducted Spurious Emission

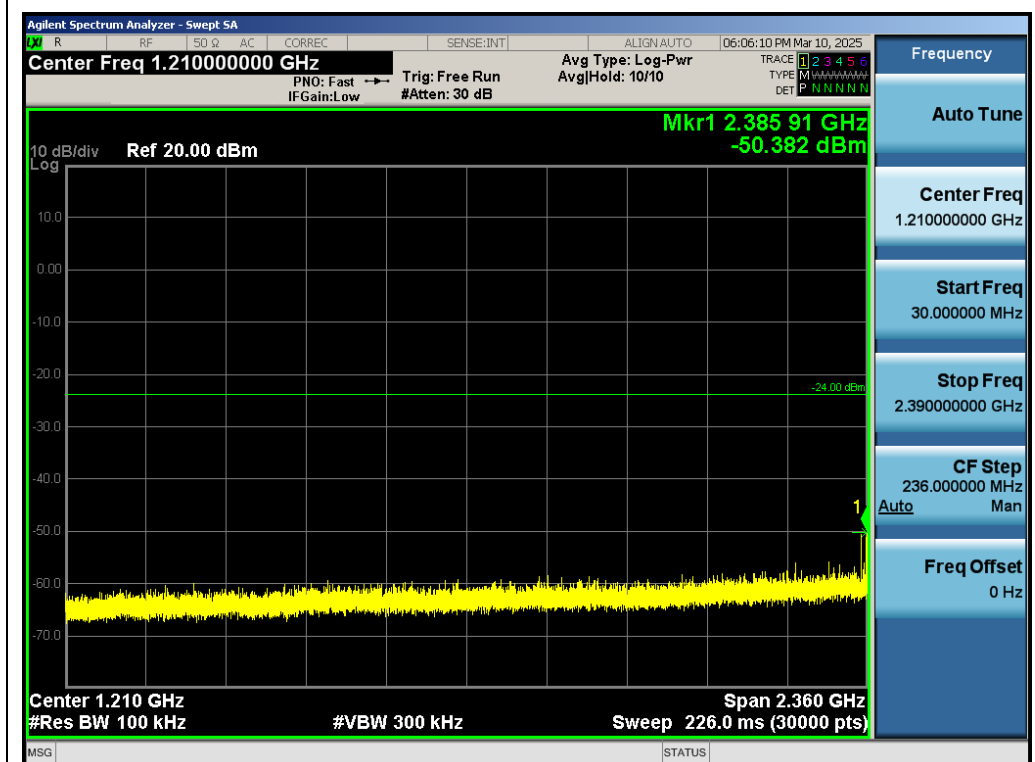
Test Result

Test Mode	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
GFSK_1Mbps	2402	0~Reference	-3.996	-3.996	---	Pass
GFSK_1Mbps	2402	30~2390	-3.996	-50.382	≤-24.00	Pass
GFSK_1Mbps	2402	2483.5~25000	-3.996	-42.417	≤-24.00	Pass
GFSK_1Mbps	2440	0~Reference	-4.357	-4.357	---	Pass
GFSK_1Mbps	2440	30~2400	-4.357	-54.998	≤-24.36	Pass
GFSK_1Mbps	2440	2483.5~25000	-4.357	-42.701	≤-24.36	Pass
GFSK_1Mbps	2480	0~Reference	-4.348	-4.348	---	Pass
GFSK_1Mbps	2480	30~2400	-4.348	-55.539	≤-24.35	Pass
GFSK_1Mbps	2480	2500~26500	-4.348	-42.243	≤-24.35	Pass

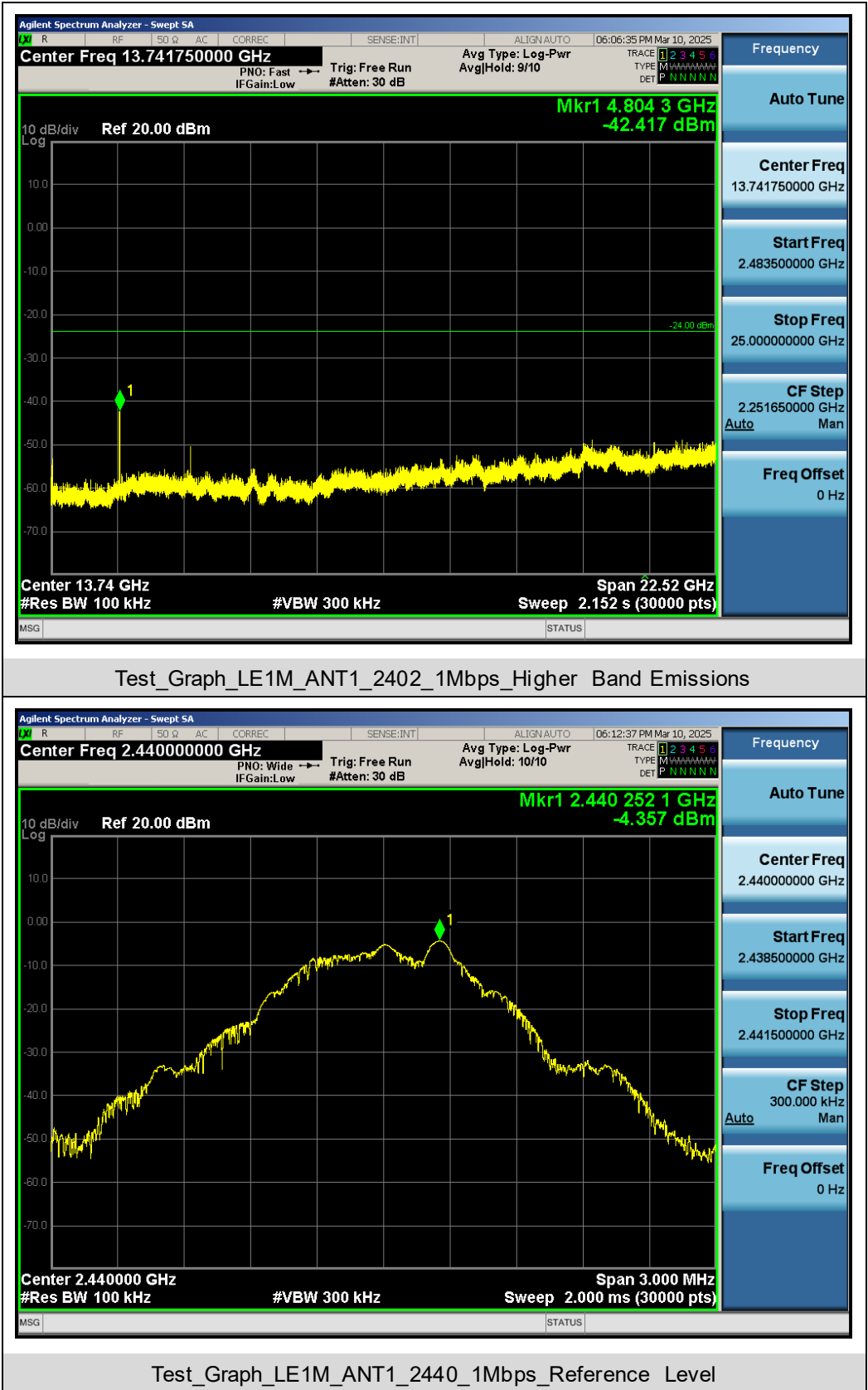
Test Graphs

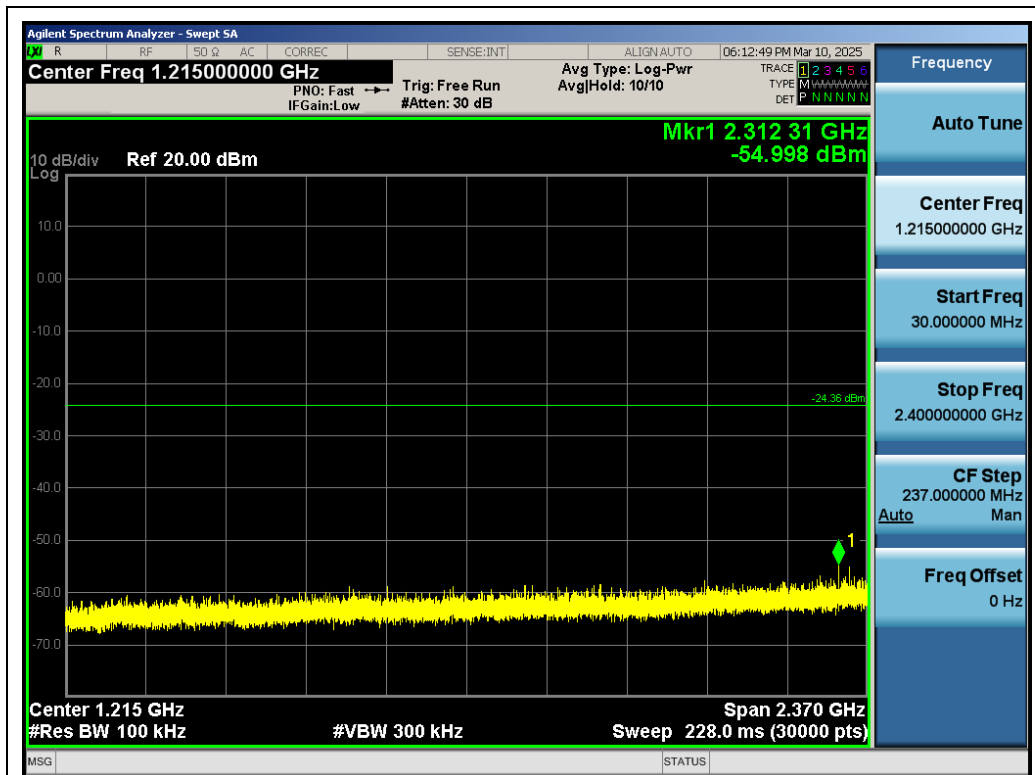


Test_Graph_LE1M_ANT1_2402_1Mbps_Reference Level



Test_Graph_LE1M_ANT1_2402_1Mbps_Lower Band Emissions

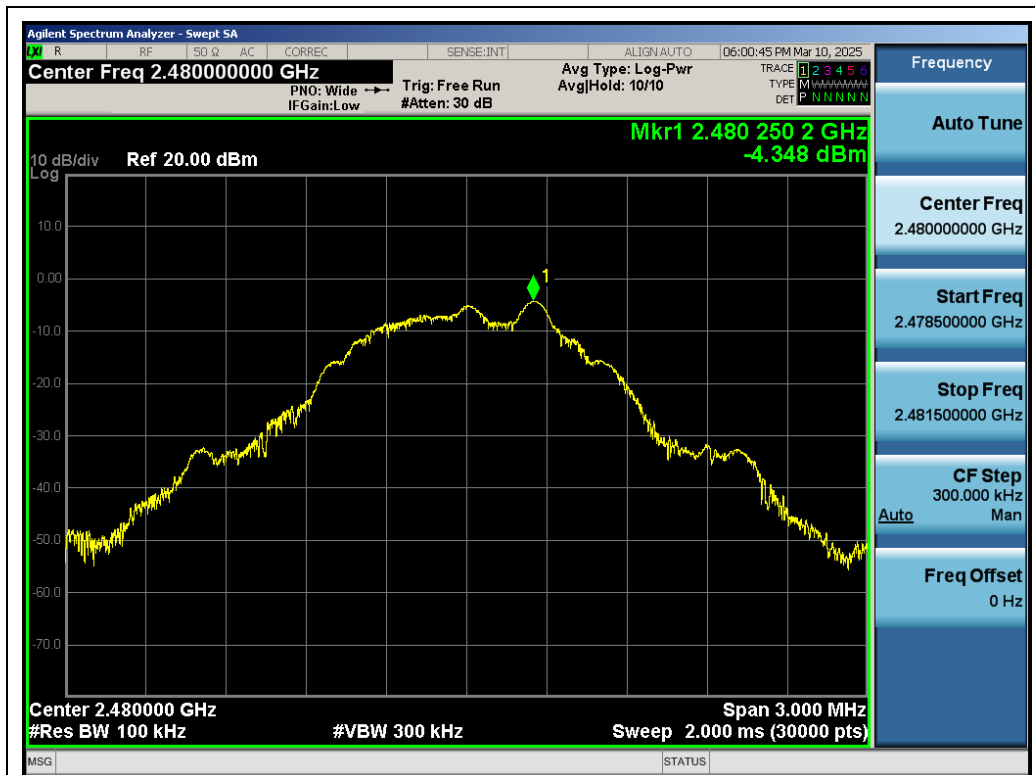




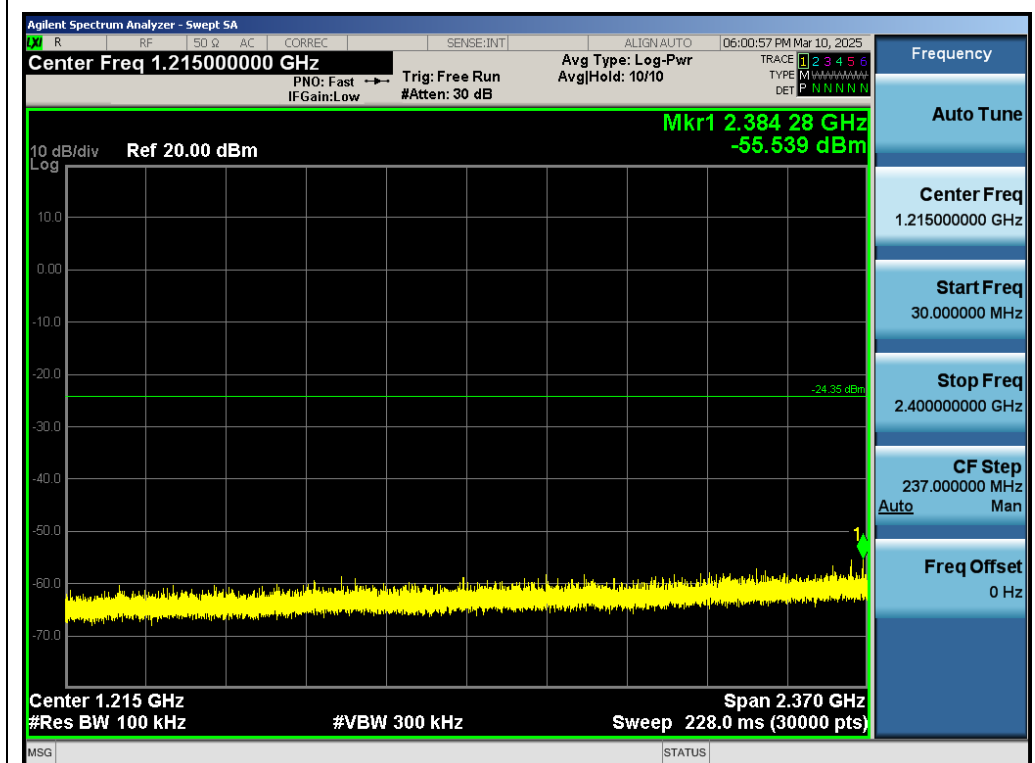
Test_Graph_LE1M_ANT1_2440_1Mbps_Lower Band Emissions



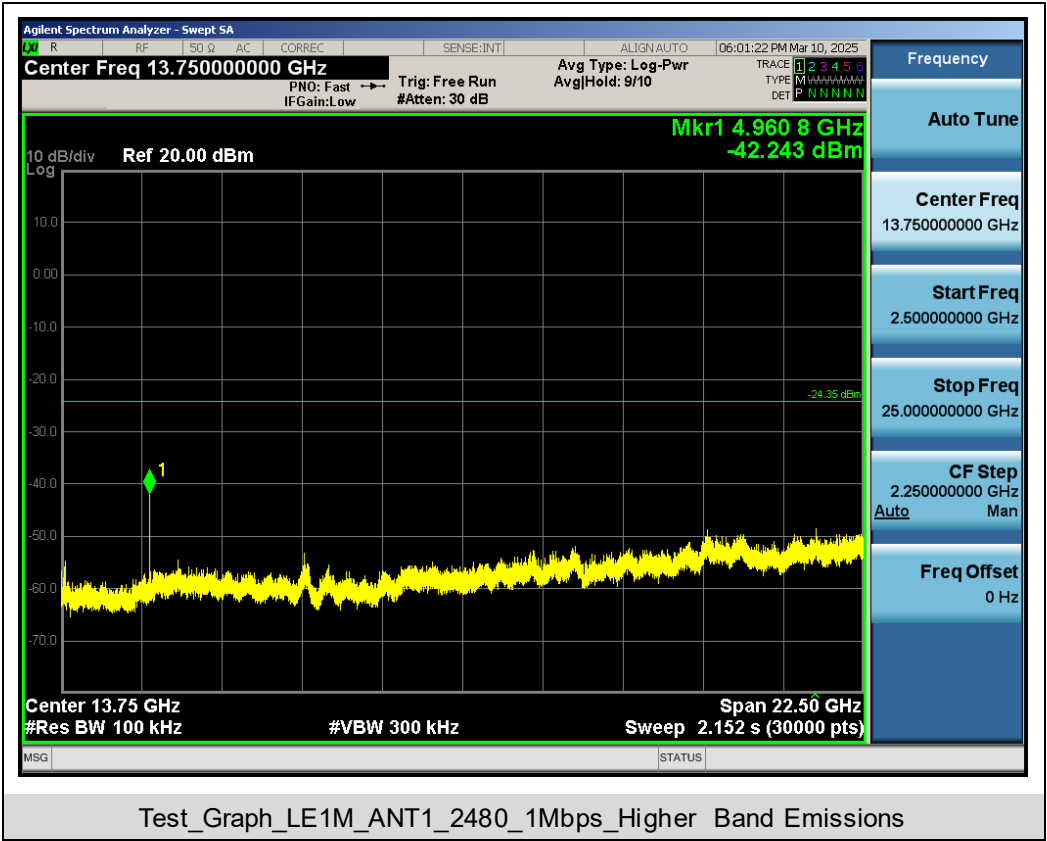
Test_Graph_LE1M_ANT1_2440_1Mbps_Higher Band Emissions



Test_Graph_LE1M_ANT1_2480_1Mbps_Reference Level



Test_Graph_LE1M_ANT1_2480_1Mbps_Lower Band Emissions



Appendix F: Duty Cycle

Test Result

Test Mode	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor [dB]
GFSK_1Mbps	2402	0.442	0.625	70.74	1.5
GFSK_1Mbps	2440	0.442	0.625	70.73	1.5
GFSK_1Mbps	2480	0.442	0.625	70.73	1.5

Test Graphs

