

Appendix Test Data for BLE (Conducted Measurement)

Product Name: WIRELESS GAMING MOUSE

Trade Mark: MAD CATZ

Test Model: M.M.O. 7+

FCC ID: 2ASFYMM10NHINBL000

Environmental Conditions

Temperature:	24.6℃
Relative Humidity:	59%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth& Occupied Channel Bandwidth

Test Result

Test Mode	Test Channel (MHz)	99% Occupied Bandwidth	-6dB Bandwidth	Limits (MHz)	Pass or Fail
GFSK	2405	1.999	1.148	≥ 0.5	Pass
	2445	1.997	1.145	≥ 0.5	Pass
	2475	1.990	1.118	≥ 0.5	Pass

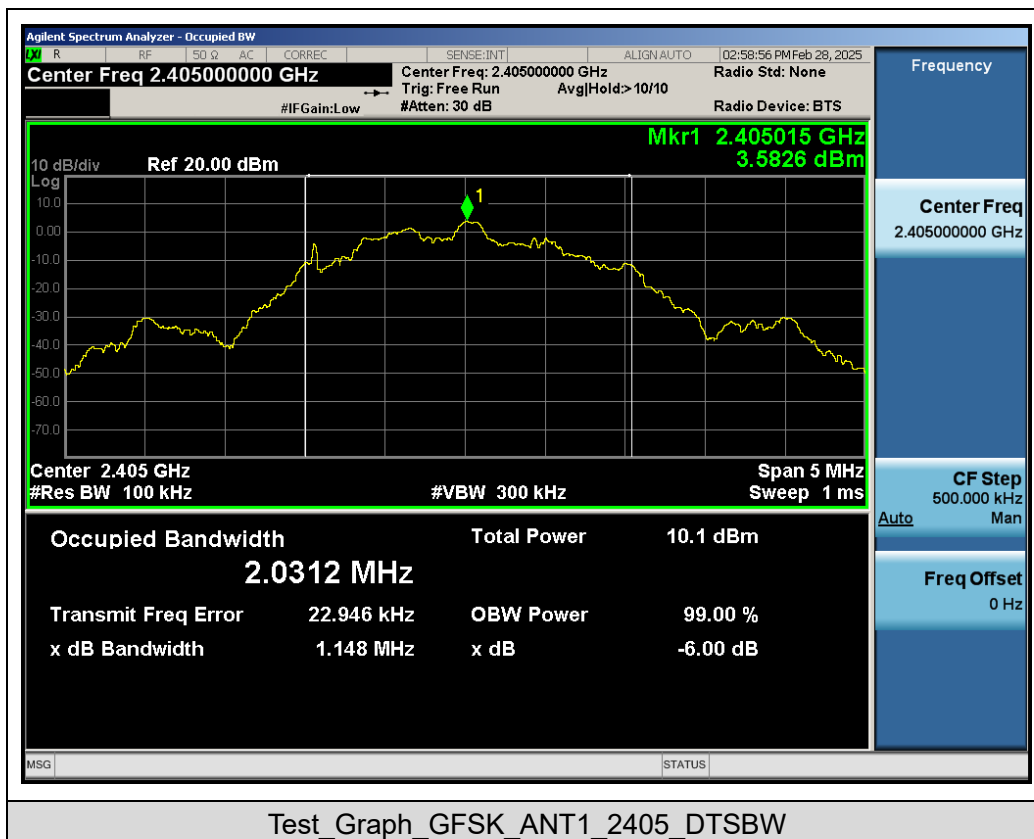
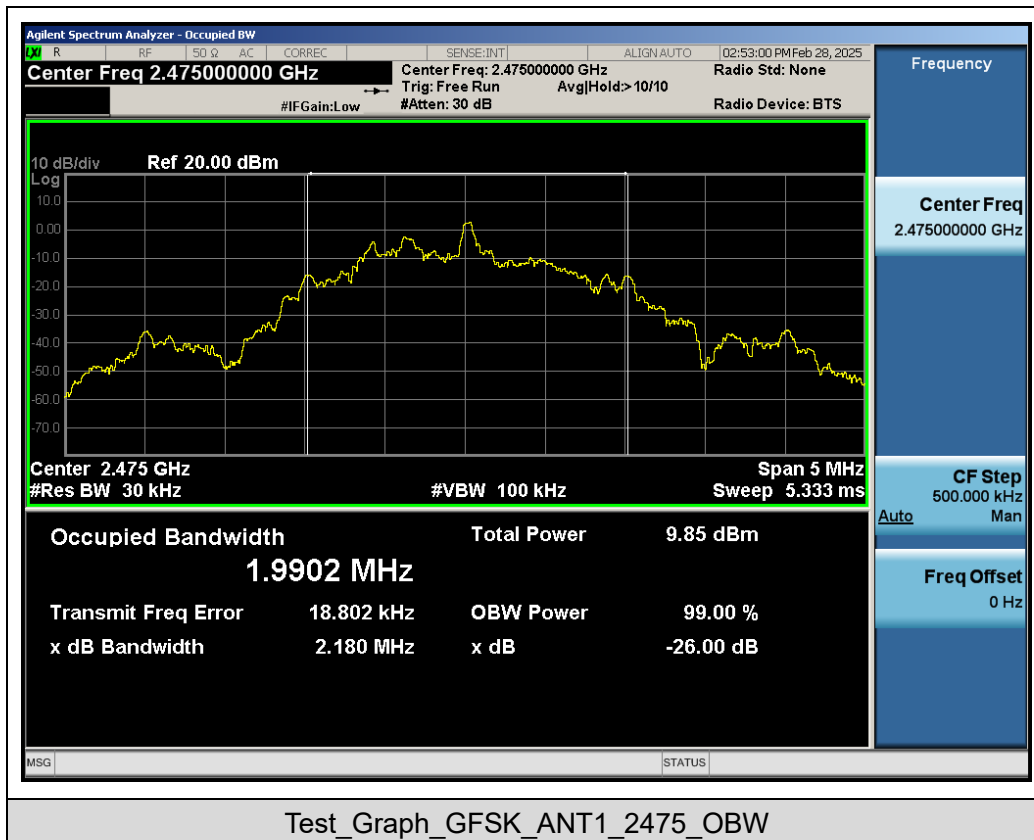
Test Graphs

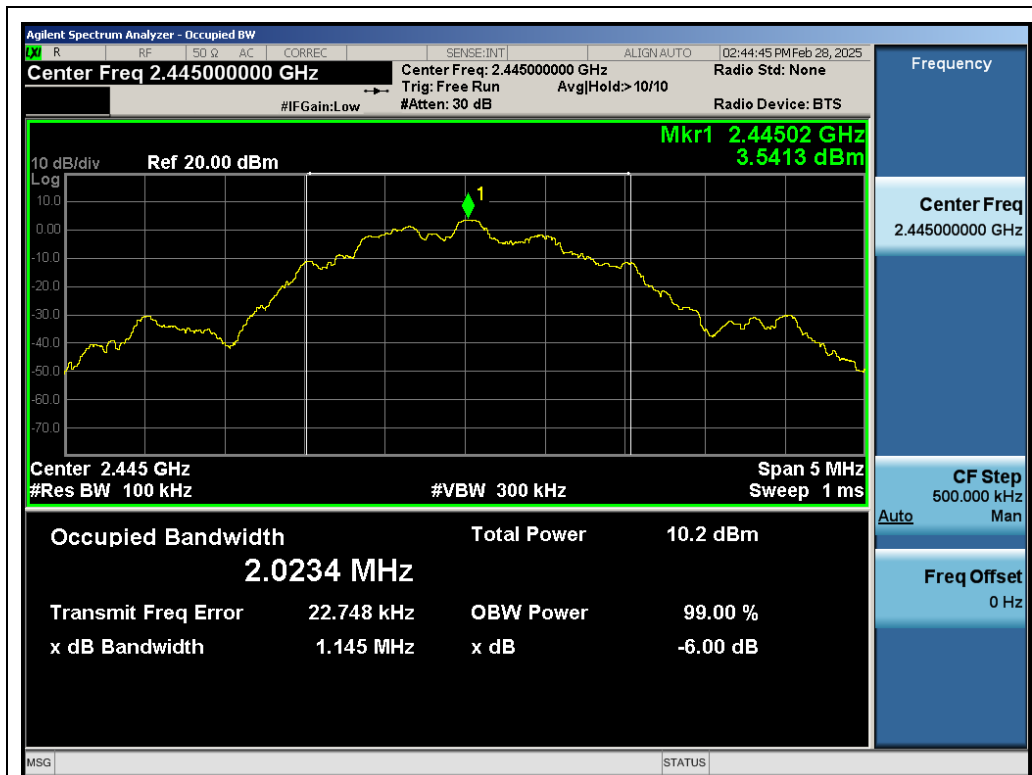


Test_Graph_GFSK_ANT1_2405_OBW

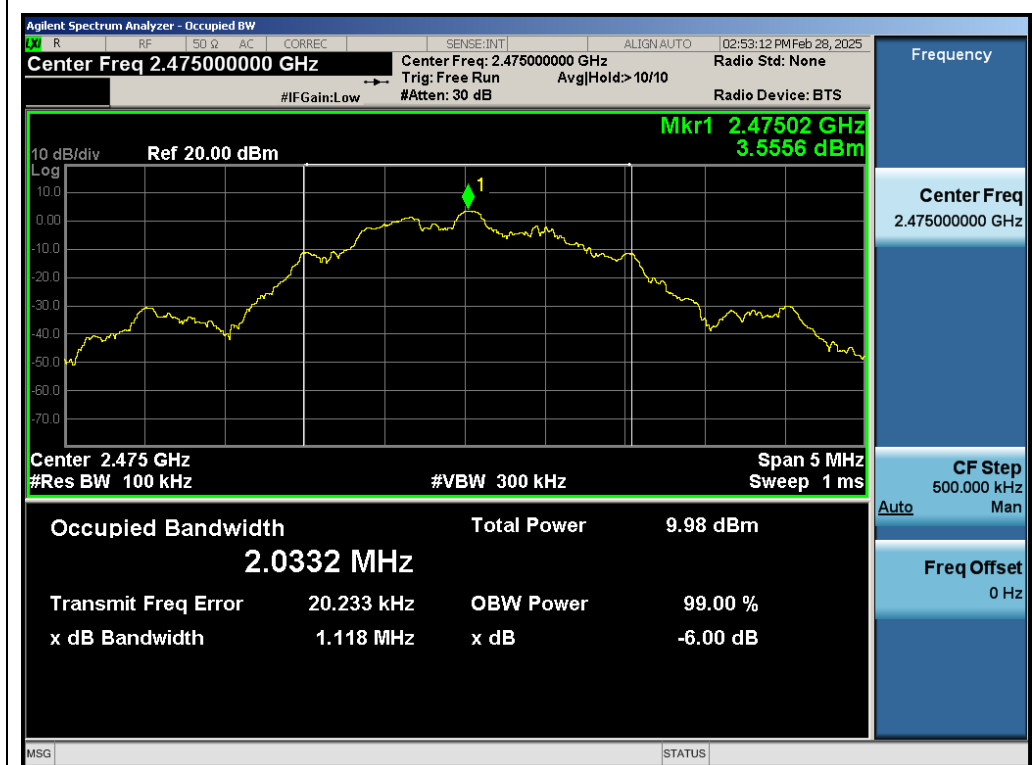


Test_Graph_GFSK_ANT1_2445_OBW





Test_Graph_GFSK_ANT1_2445_DTSBW



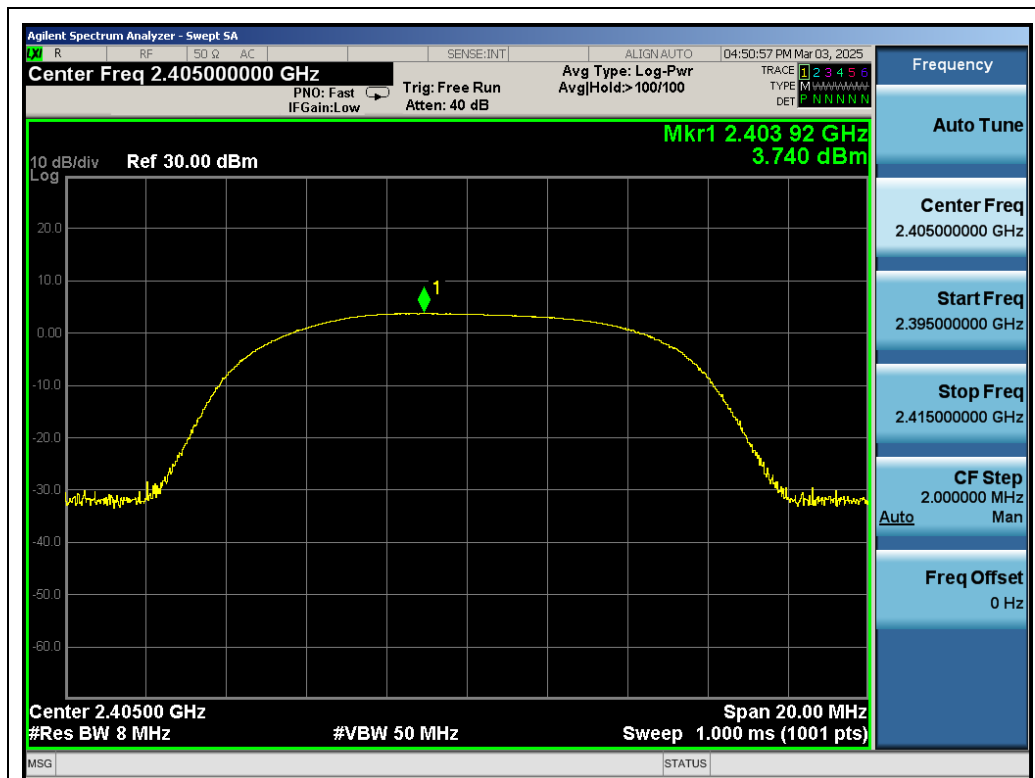
Test_Graph_GFSK_ANT1_2475_DTSBW

Appendix B: Maximum peak conducted output power

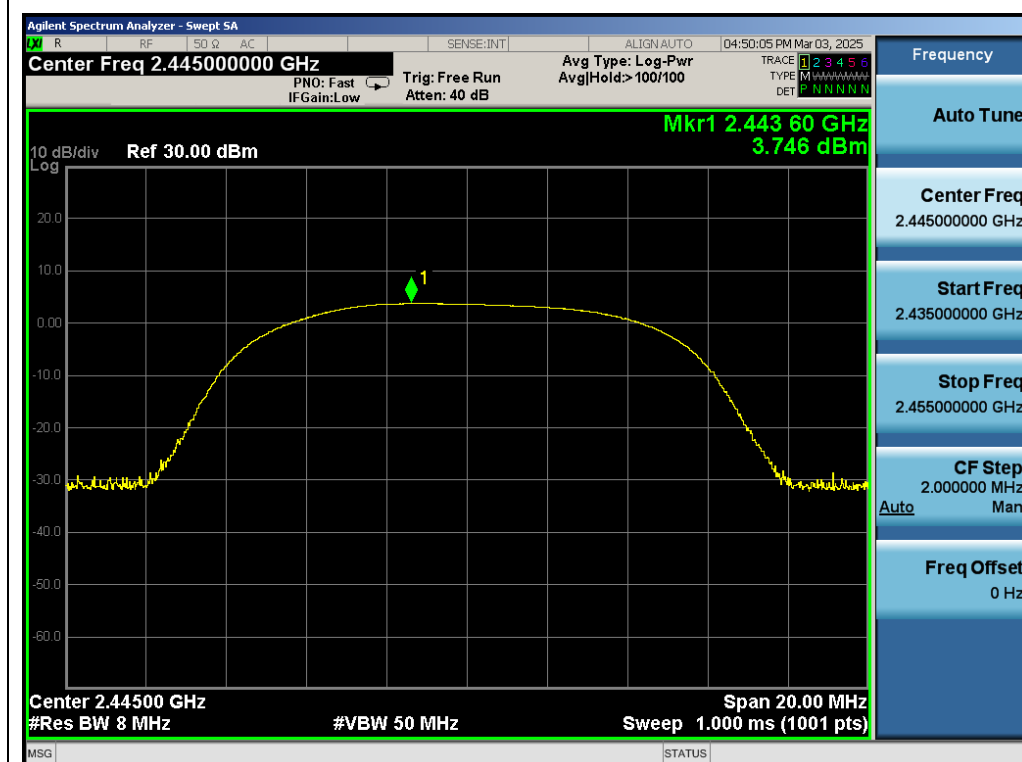
Test Result Peak

Test Mode	Test Channel (MHz)	Peak Power (dBm)	Limits (dBm)	Pass or Fail
GFSK	2405	3.740	≤ 30	Pass
	2445	3.746	≤ 30	Pass
	2475	3.714	≤ 30	Pass

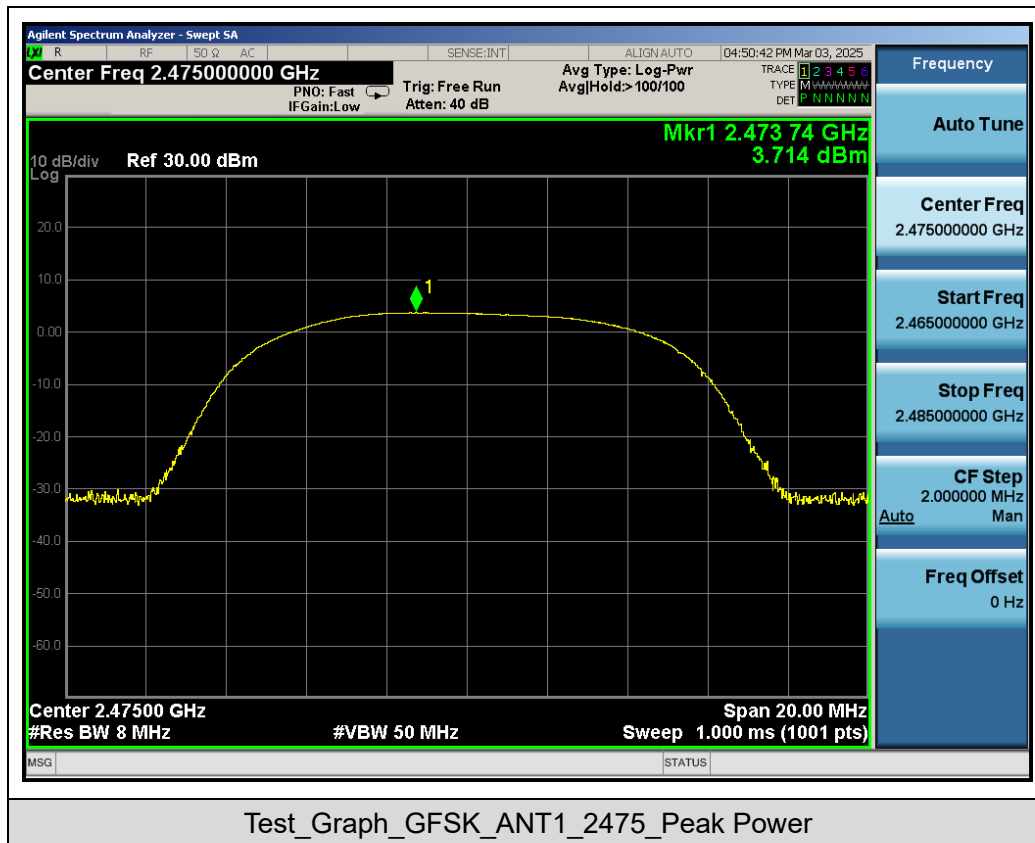
Test Graphs Peak



Test_Graph_GFSK_ANT1_2405_Peak Power



Test_Graph_GFSK_ANT1_2445_Peak Power



Appendix C: Maximum peak power spectral density

Test Result

Test Mode	Test Channel (MHz)	Power density (dBm/3kHz)	Limit (dBm/3kHz)	Pass or Fail
GFSK	2405	-11.545	≤ 8	Pass
	2445	-11.787	≤ 8	Pass
	2475	-11.187	≤ 8	Pass

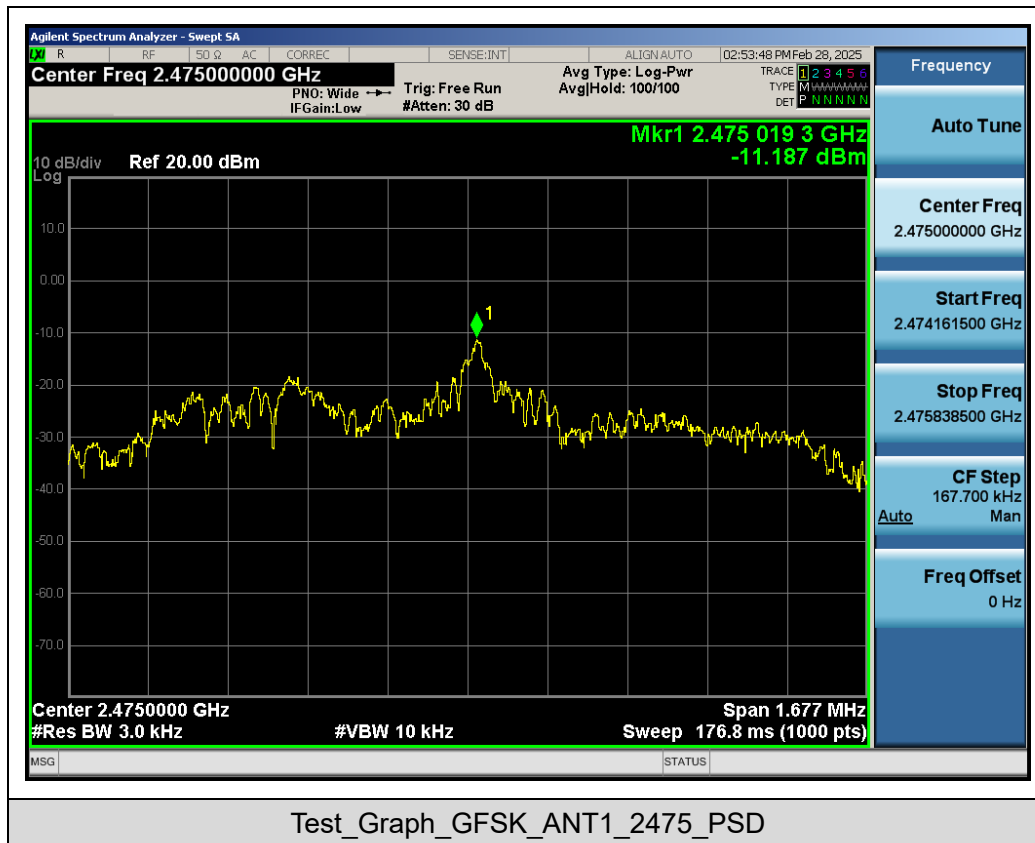
Test Graphs



Test_Graph_GFSK_ANT1_2405_PSD



Test_Graph_GFSK_ANT1_2445_PSD

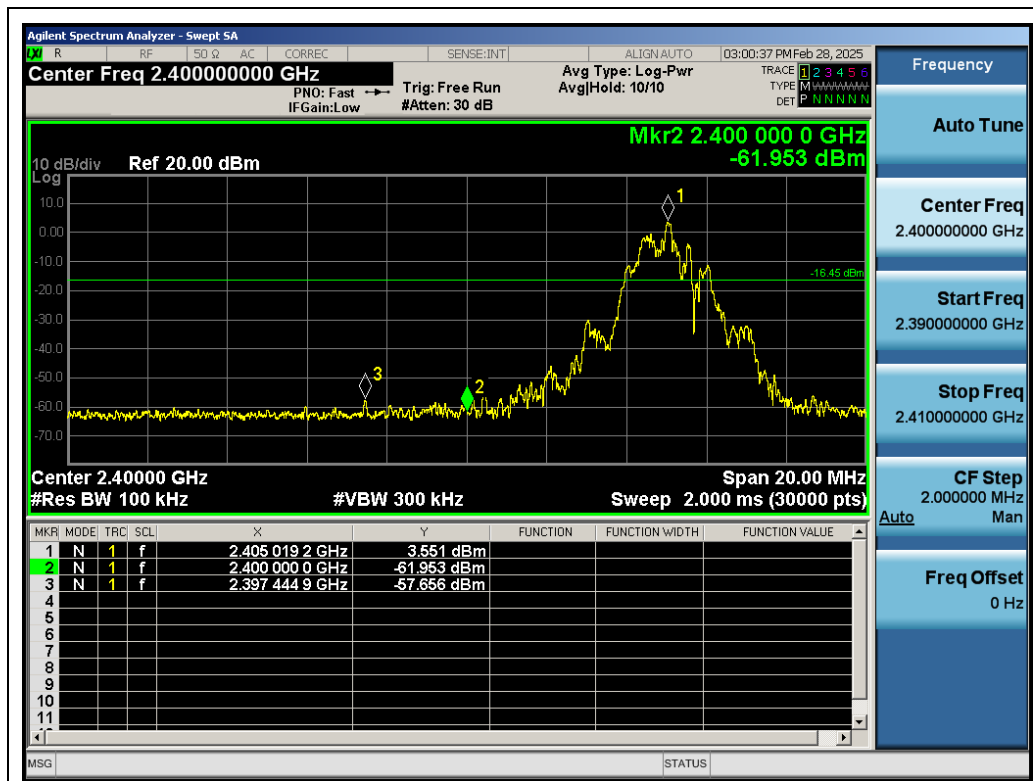


Appendix D: Band edge measurements

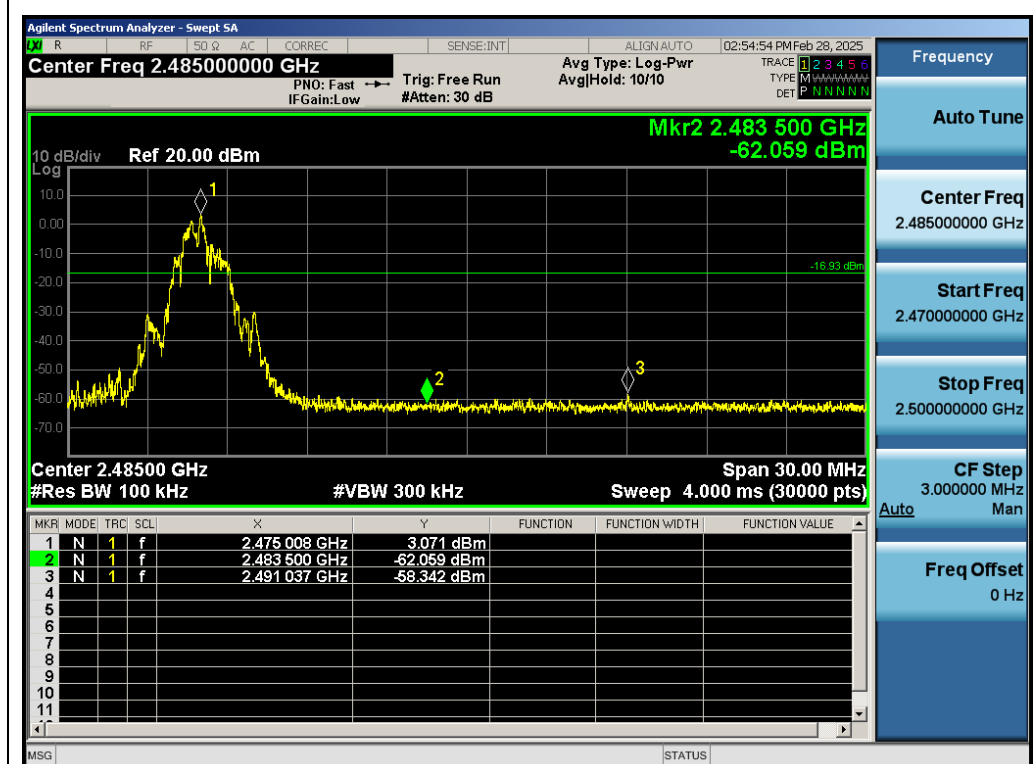
Test Result

Test Mode	Antenna	Ch. Name	Frequency [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
2.4G	Ant1	Low	2405	3.551	-61.953	≤ -16.45	PASS
2.4G	Ant1	High	2475	3.071	-62.059	≤ -16.93	PASS

Test Graphs



Test_Graph_GFSK_ANT1_2405_Lower Band Edge Emissions



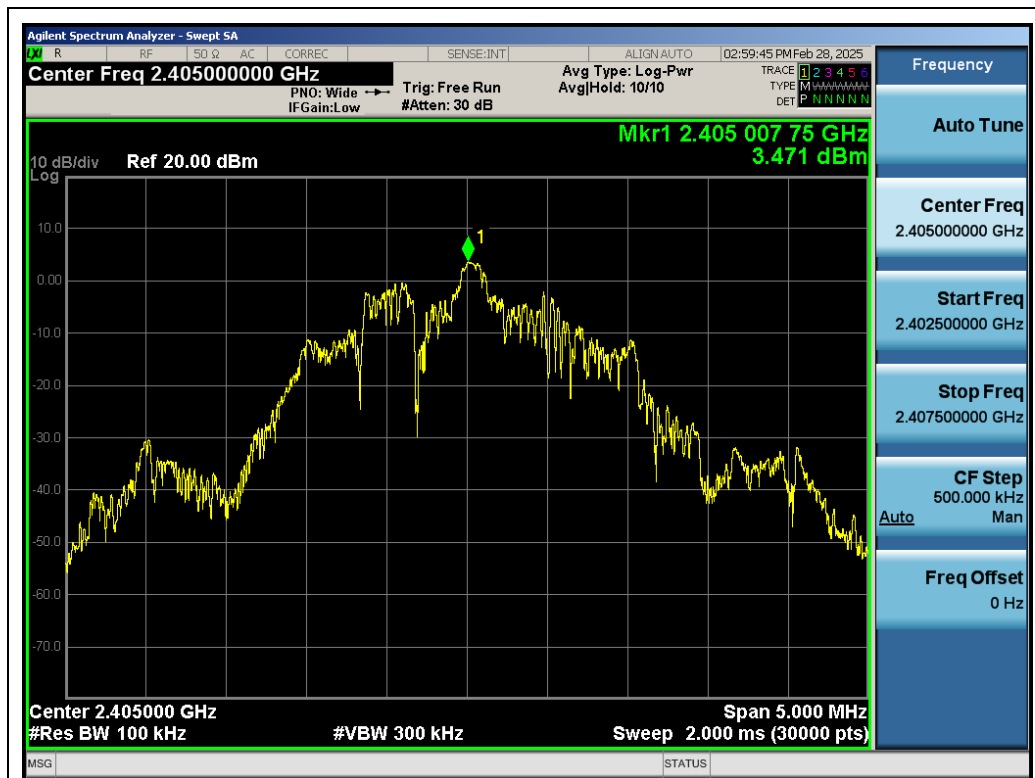
Test_Graph_GFSK_ANT1_2475_Higher Band Edge Emissions

Appendix F: Conducted Spurious Emission

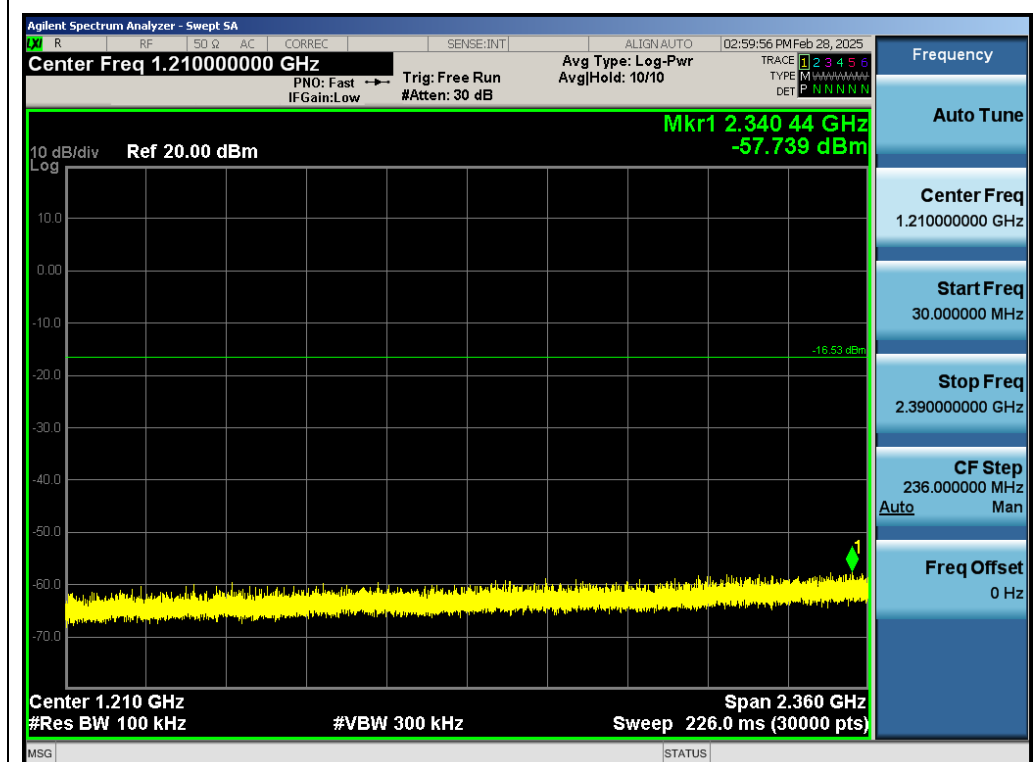
Test Result

Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
2.4G	Ant1	2405	0~Reference	3.471	3.471	---	PASS
2.4G	Ant1	2405	30~1000	3.471	-57.739	≤-16.53	PASS
2.4G	Ant1	2405	1000~26500	3.471	-48.751	≤-16.53	PASS
2.4G	Ant1	2445	0~Reference	3.516	3.516	---	PASS
2.4G	Ant1	2445	30~1000	3.516	-56.143	≤-16.48	PASS
2.4G	Ant1	2445	1000~26500	3.516	-44.866	≤-16.48	PASS
2.4G	Ant1	2475	0~Reference	3.494	3.494	---	PASS
2.4G	Ant1	2475	30~1000	3.494	-56.475	≤-16.51	PASS
2.4G	Ant1	2475	1000~26500	3.494	-42.522	≤-16.51	PASS

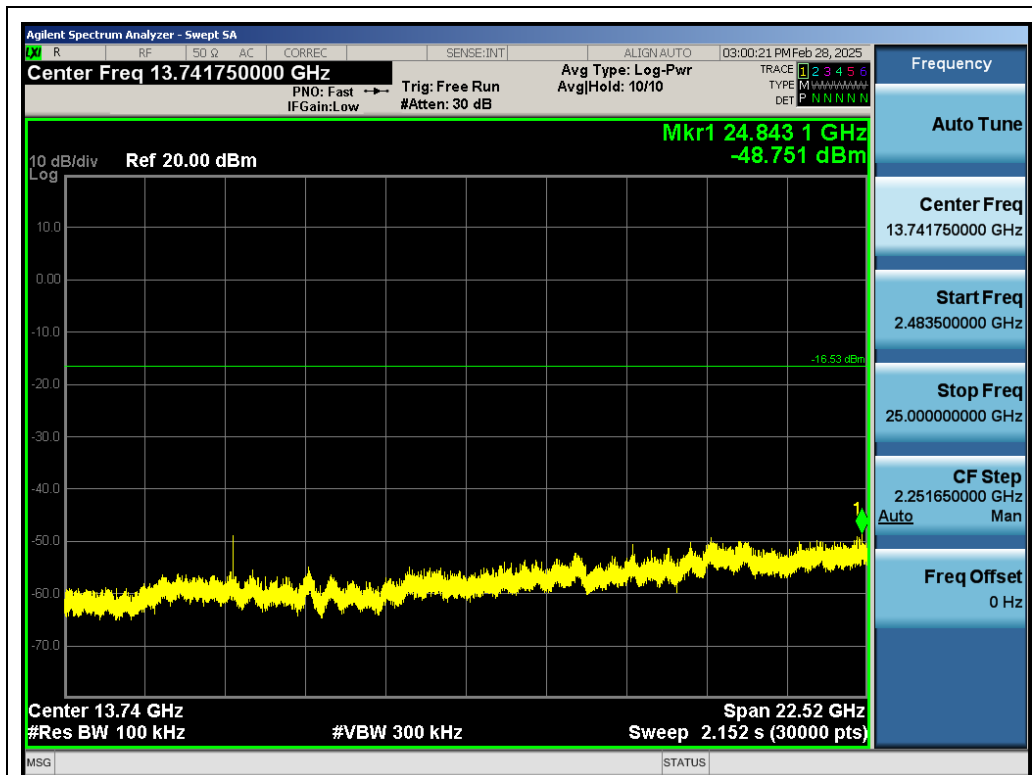
Test Graphs



Test_Graph_GFSK_ANT1_2405_Reference Level



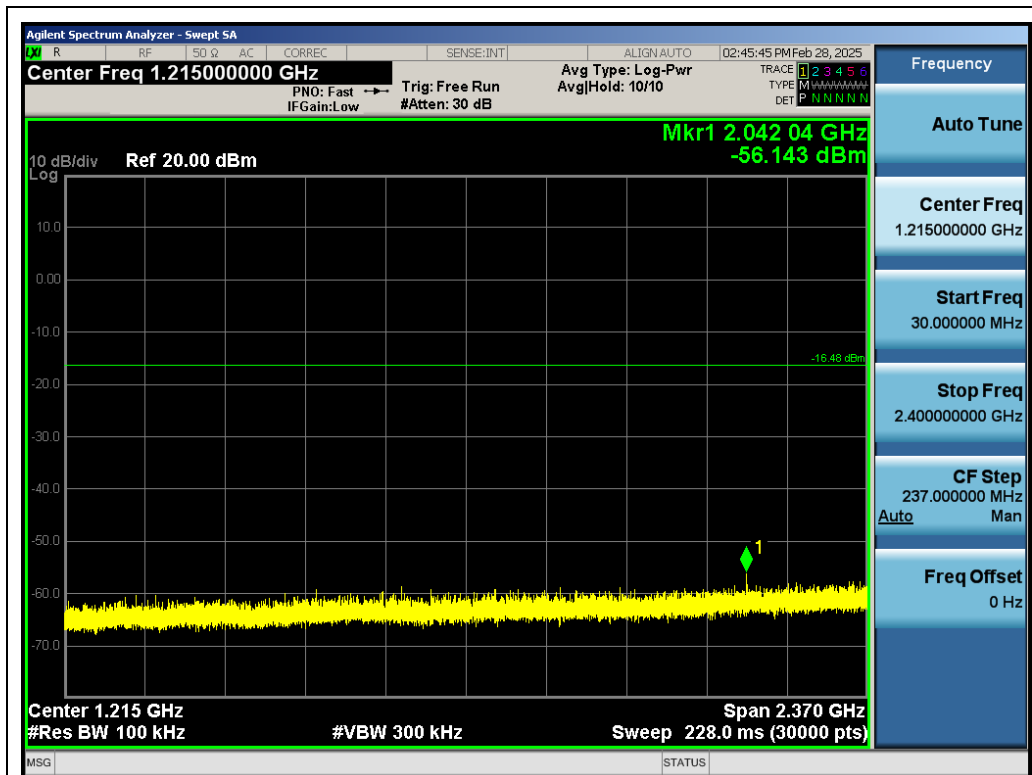
Test_Graph_GFSK_ANT1_2405_Lower Band Emissions



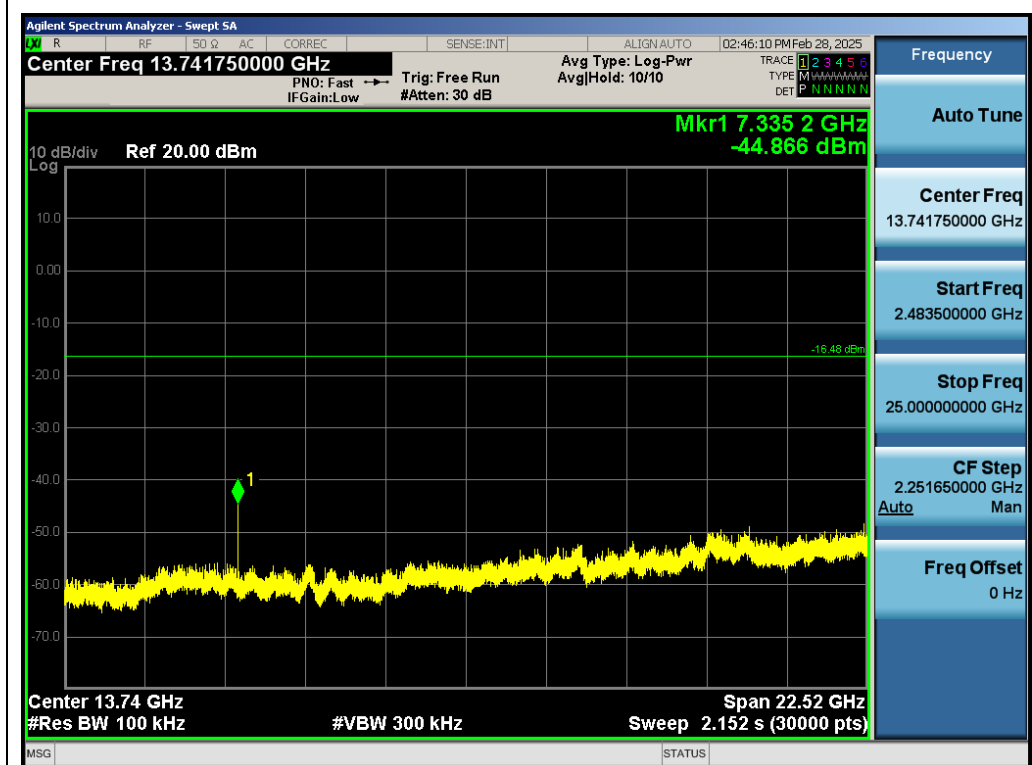
Test_Graph_GFSK_ANT1_2405_Higher Band Emissions



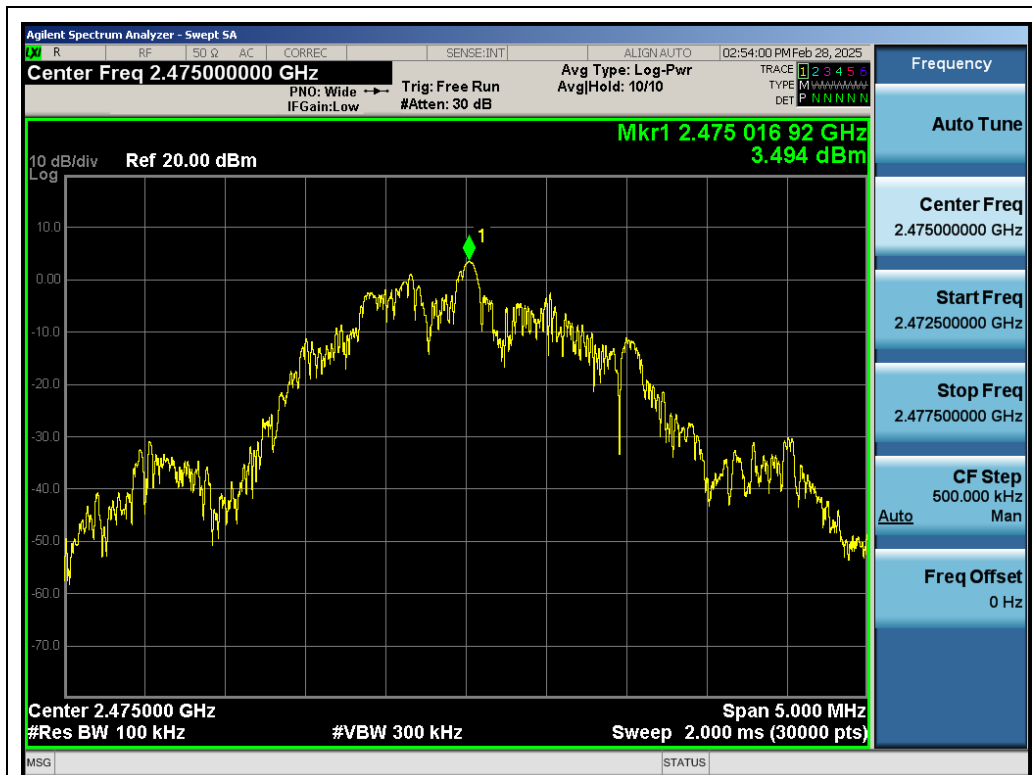
Test_Graph_GFSK_ANT1_2445_Reference Level



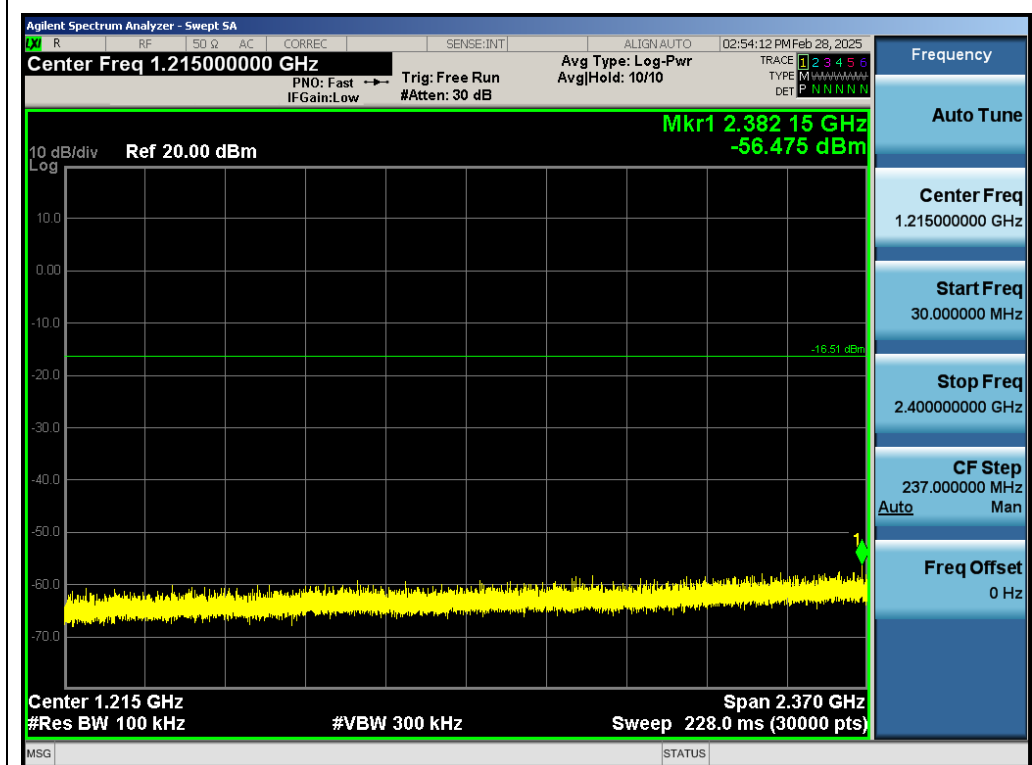
Test_Graph_GFSK_ANT1_2445_Lower Band Emissions



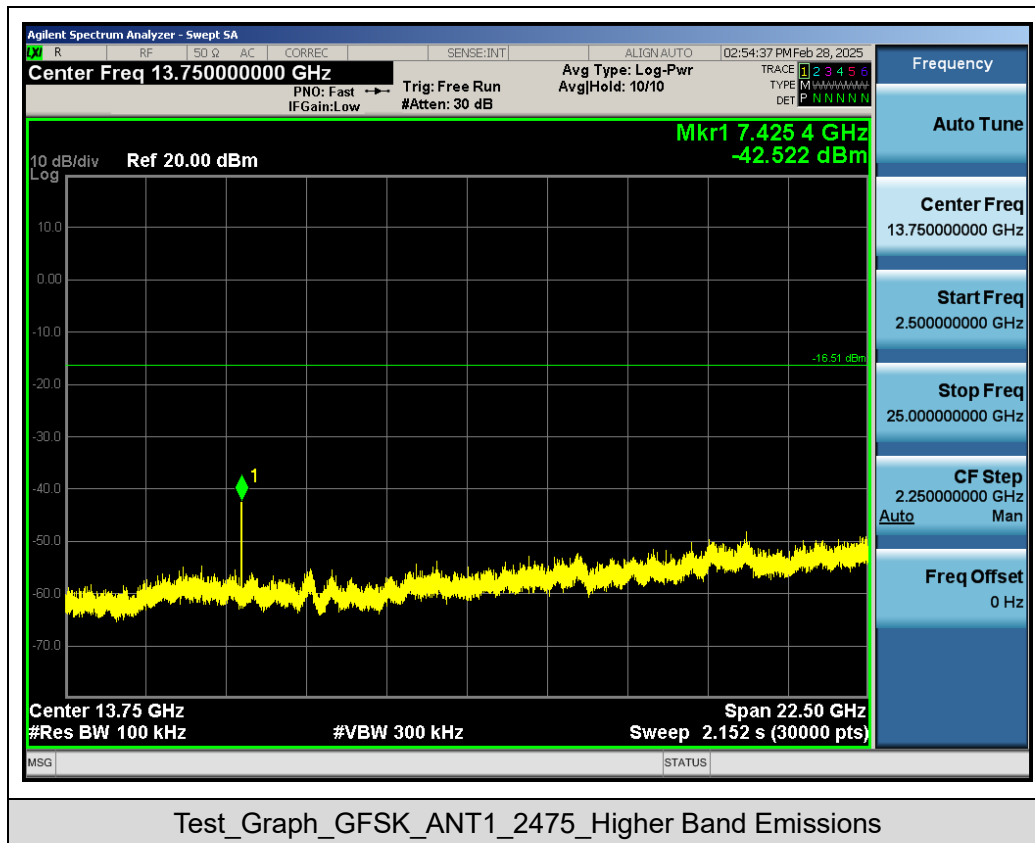
Test_Graph_GFSK_ANT1_2445_Higher Band Emissions



Test_Graph_GFSK_ANT1_2475_Reference Level



Test_Graph_GFSK_ANT1_2475_Lower Band Emissions

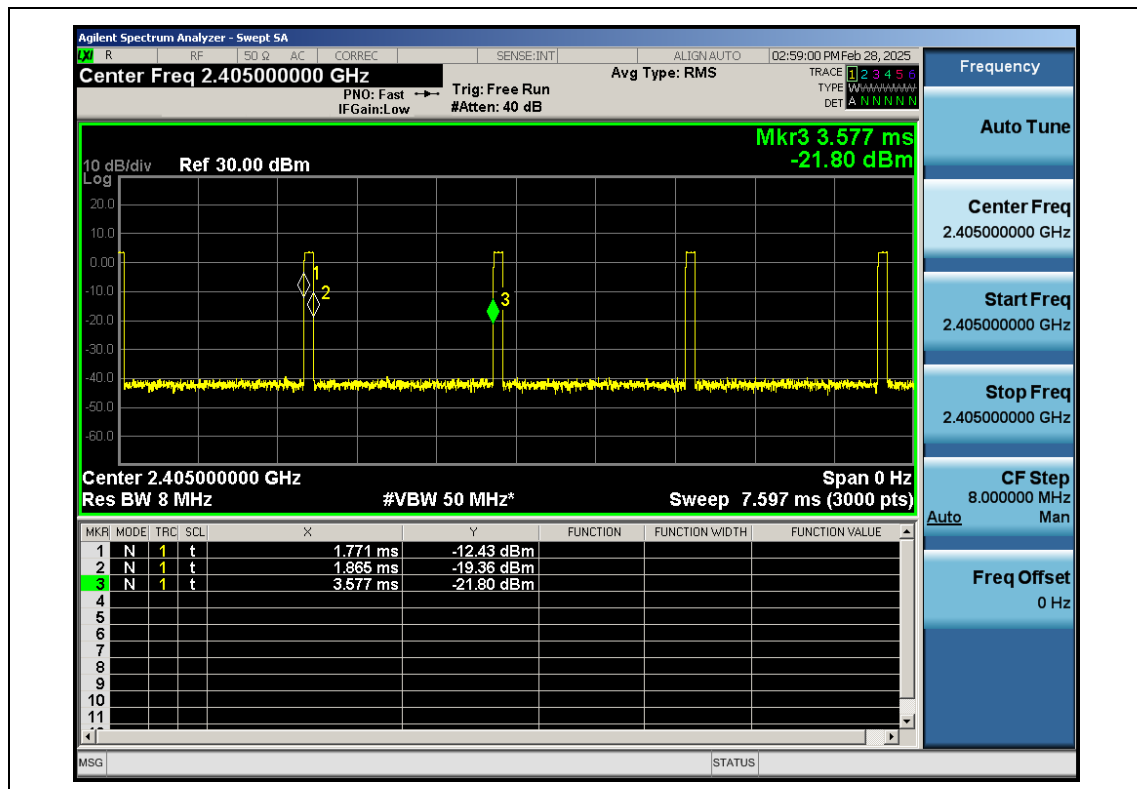


Appendix G: Duty Cycle

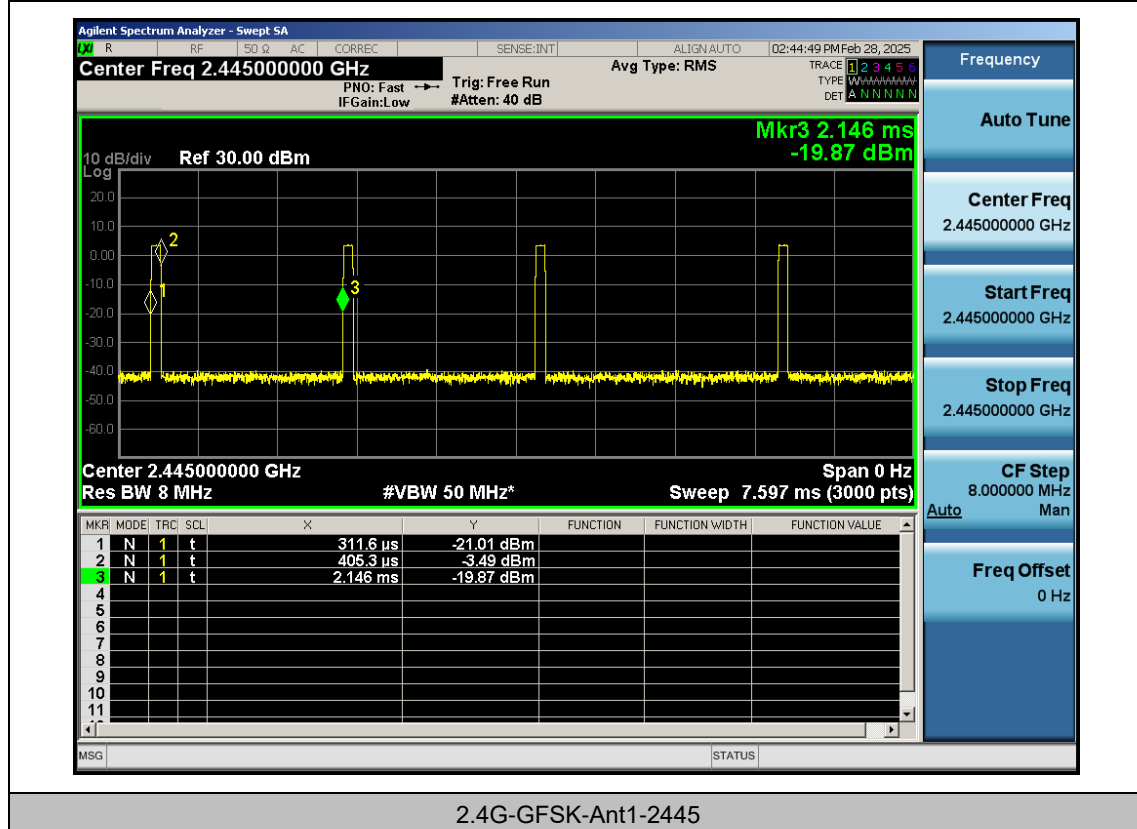
Test Result

Test Mode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor [dB]
2.4G	Ant1	2405	0.094	1.806	5.20	12.84
2.4G	Ant1	2445	0.094	1.834	5.11	12.92
2.4G	Ant1	2475	0.094	1.833	5.13	12.90

Test Graphs



2.4G-GFSK-Ant1-2405



2.4G-GFSK-Ant1-2445

