

Appendix Test Data for DTS-SRD (Conducted Measurement)

Product Name: X03 Transmitter

Trade Mark: N/A

Test Model: X03

FCC ID: 2AKSOX0301

Environmental Conditions

Temperature:	25°C
Relative Humidity:	48%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

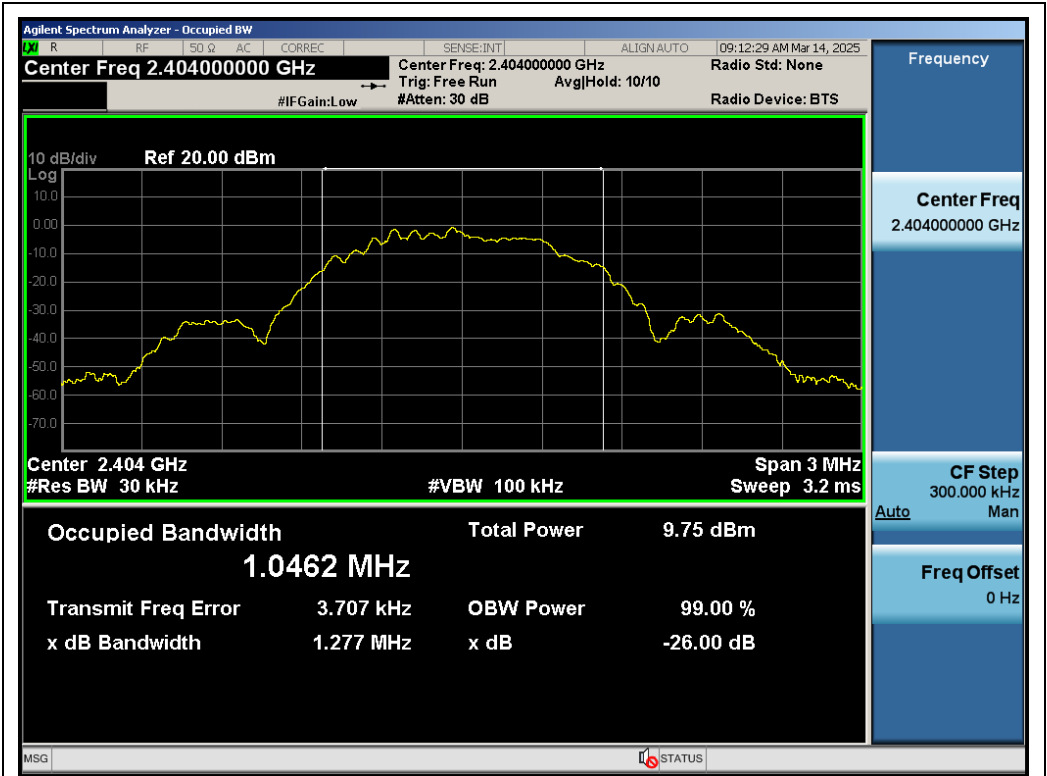
Appendix A: DTS Bandwidth & Occupied Channel Bandwidth

Test Result

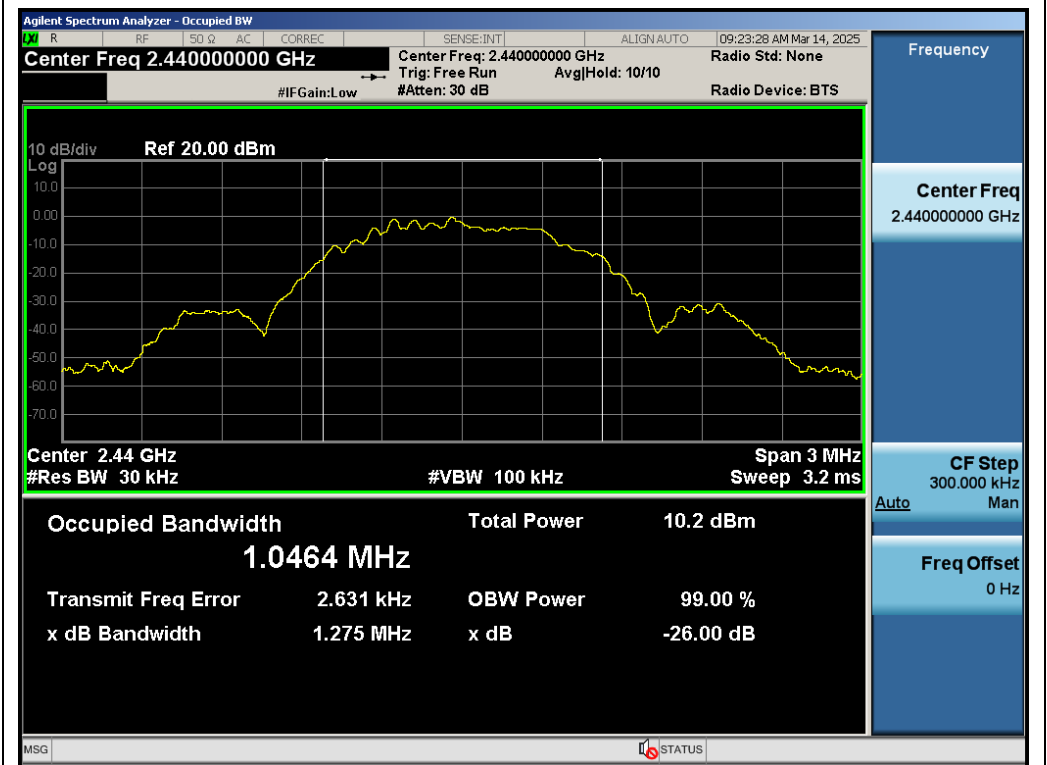
Test Mode	Test Frequency	Occupied Bandwidth (MHz)	DTS BW (MHz)	DTS BW Limits	Pass or Fail
GFSK	2404	1.046	0.714	≥ 0.5	Pass
	2440	1.046	0.716	≥ 0.5	Pass
	2478	1.047	0.717	≥ 0.5	Pass

Note: The factor had been edited in the "Input Correction" of the Spectrum Analyzer. Input compensation coefficient (dB) = Cable Loss (dB) + Attenuator attenuation value (dB)

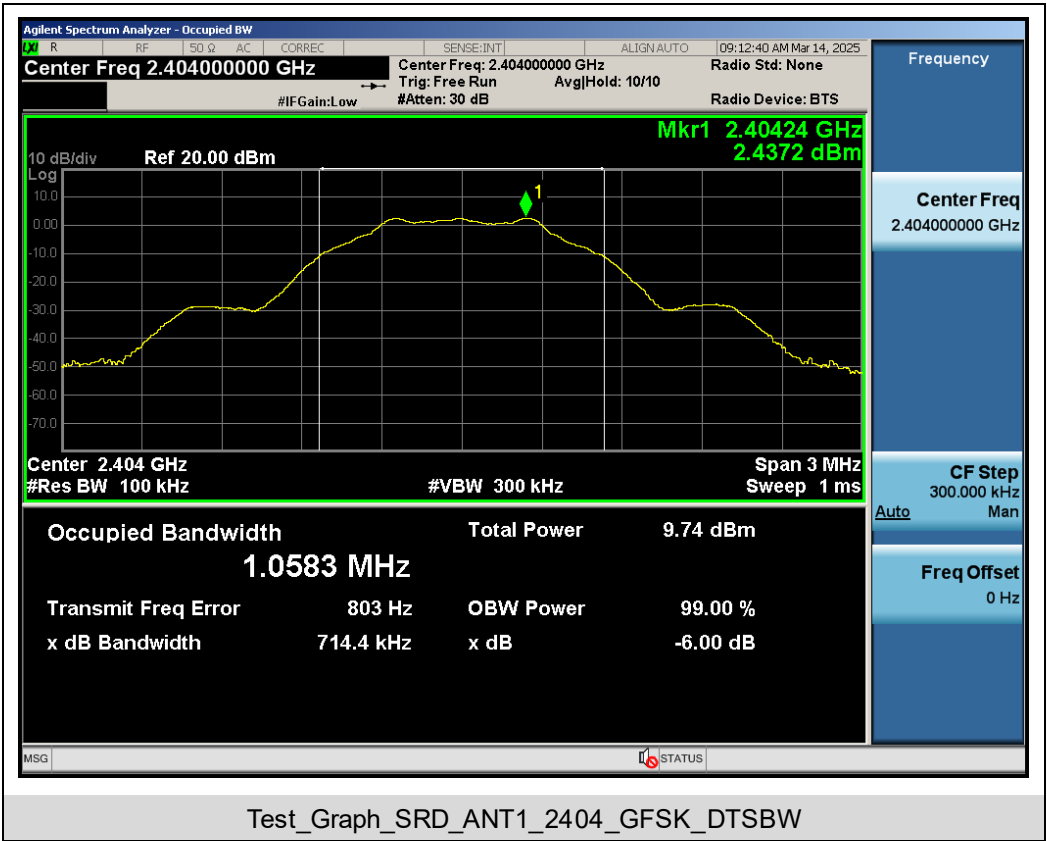
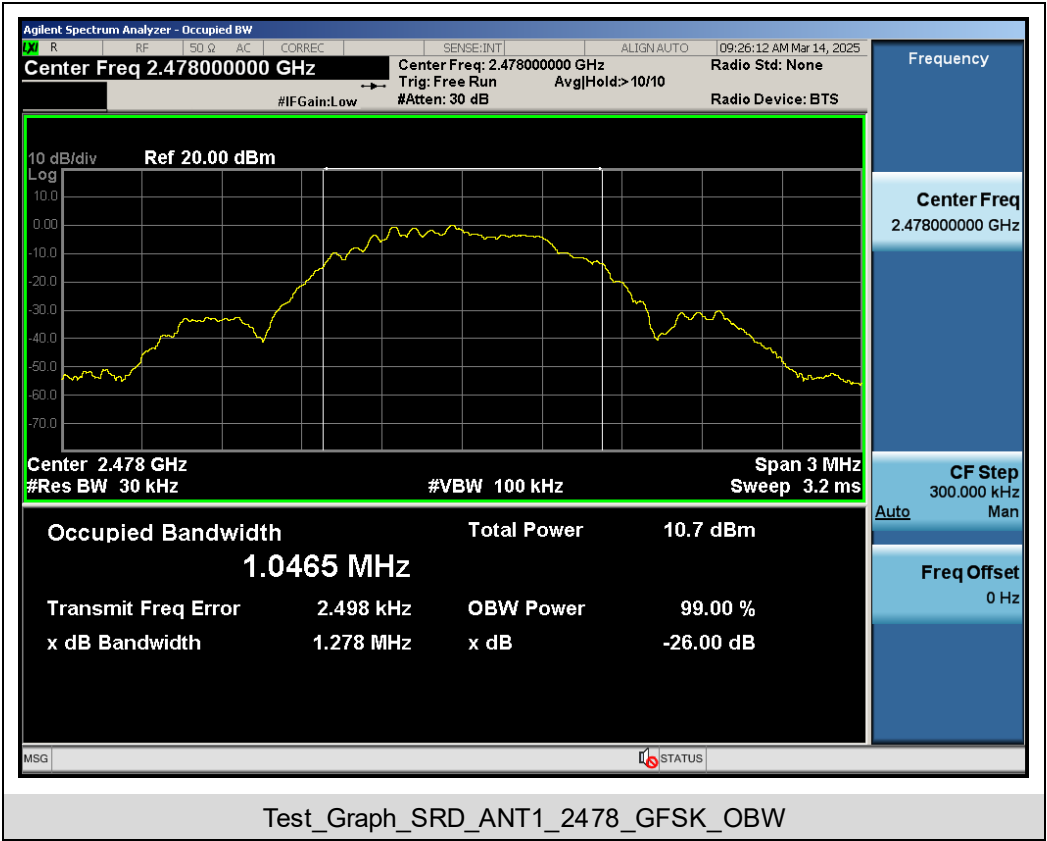
Test Graphs

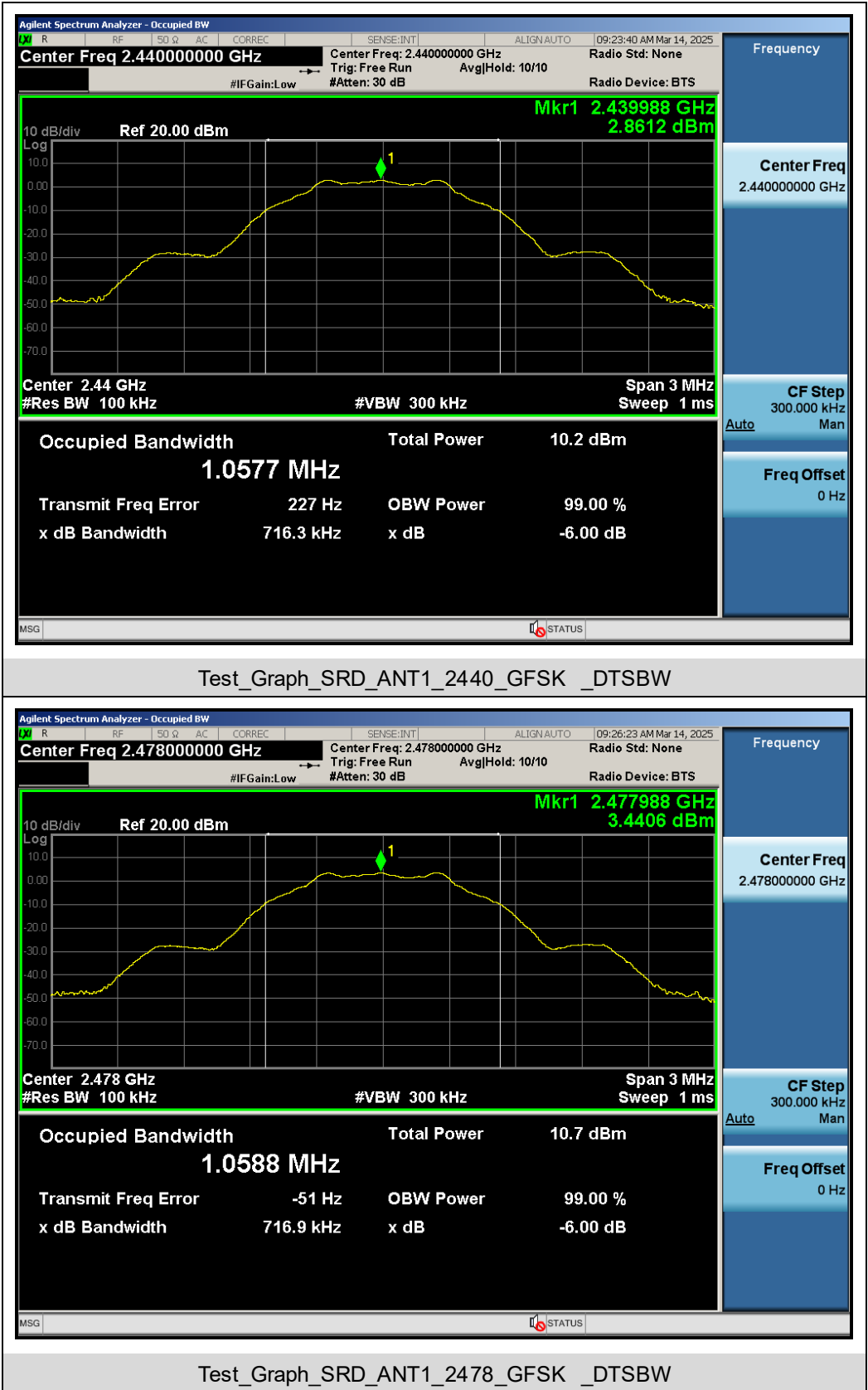


Test_Graph_SRD_ANT1_2404_GFSK_OBW



Test_Graph_SRD_ANT1_2440_GFSK_OBW





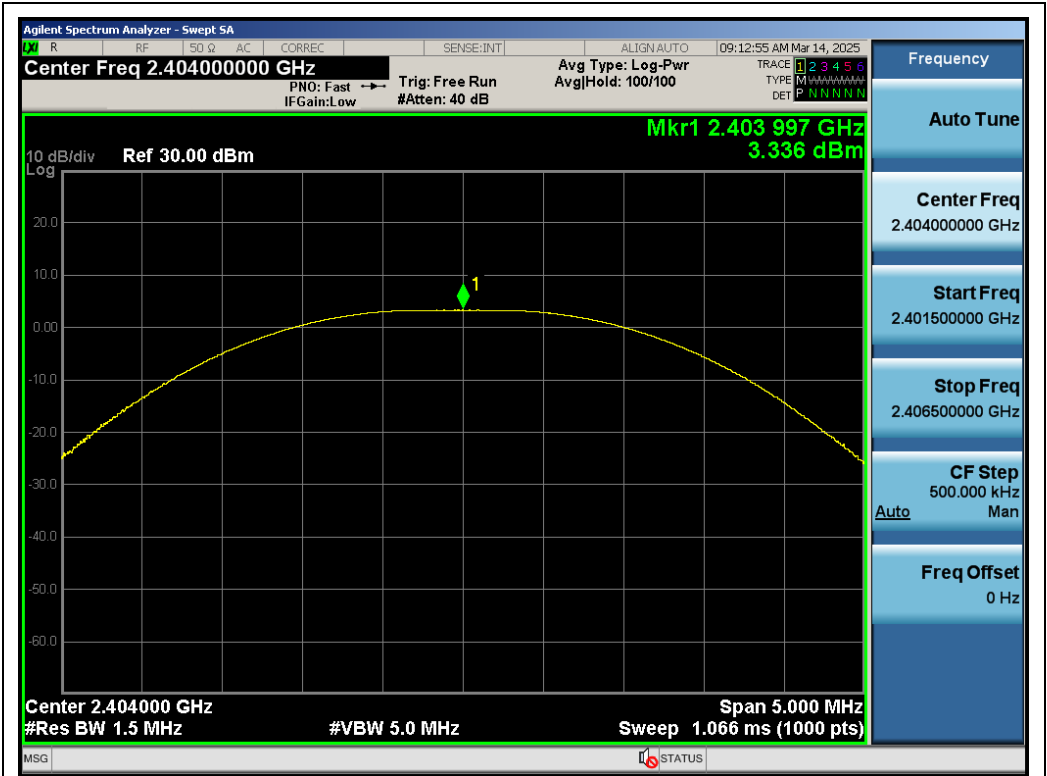
Appendix B: Maximum peak conducted output power

Test Result Peak

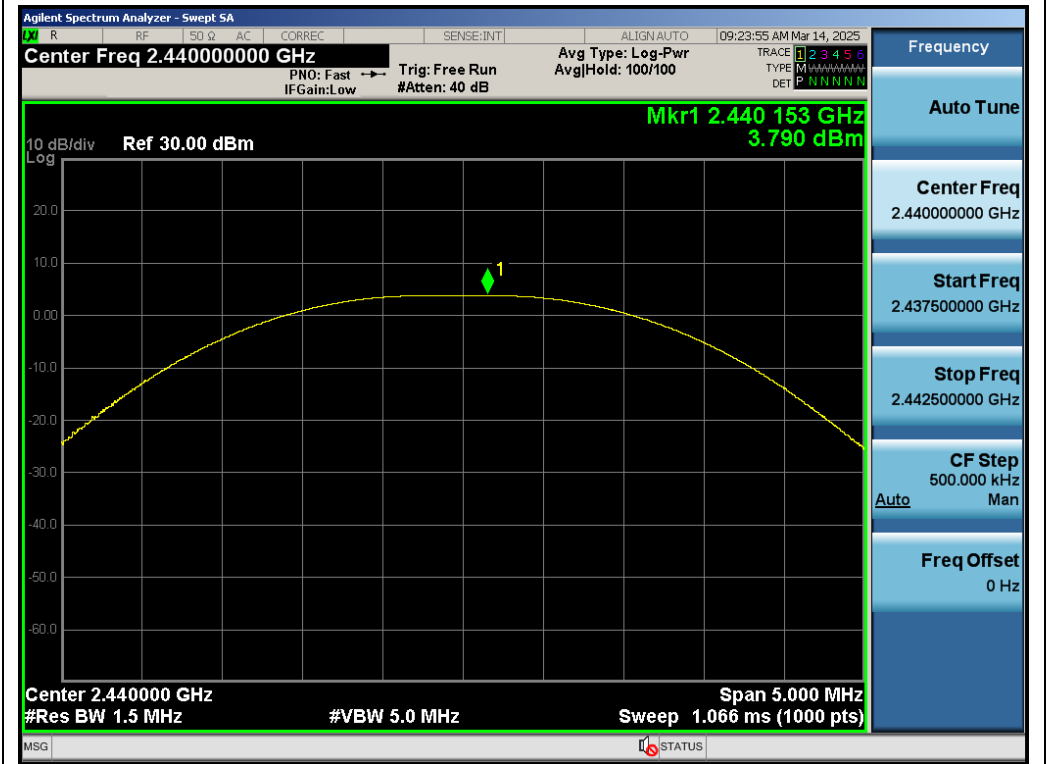
Test Mode	Test Frequency (MHz)	Peak Power (dBm)	Limits (dBm)	Pass or Fail
GFSK	2404	3.336	≤ 30	Pass
	2440	3.790	≤ 30	Pass
	2478	4.278	≤ 30	Pass

Note: The factor had been edited in the "Input Correction" of the Spectrum Analyzer. Input compensation coefficient (dB) = Cable Loss (dB) + Attenuator attenuation value (dB)

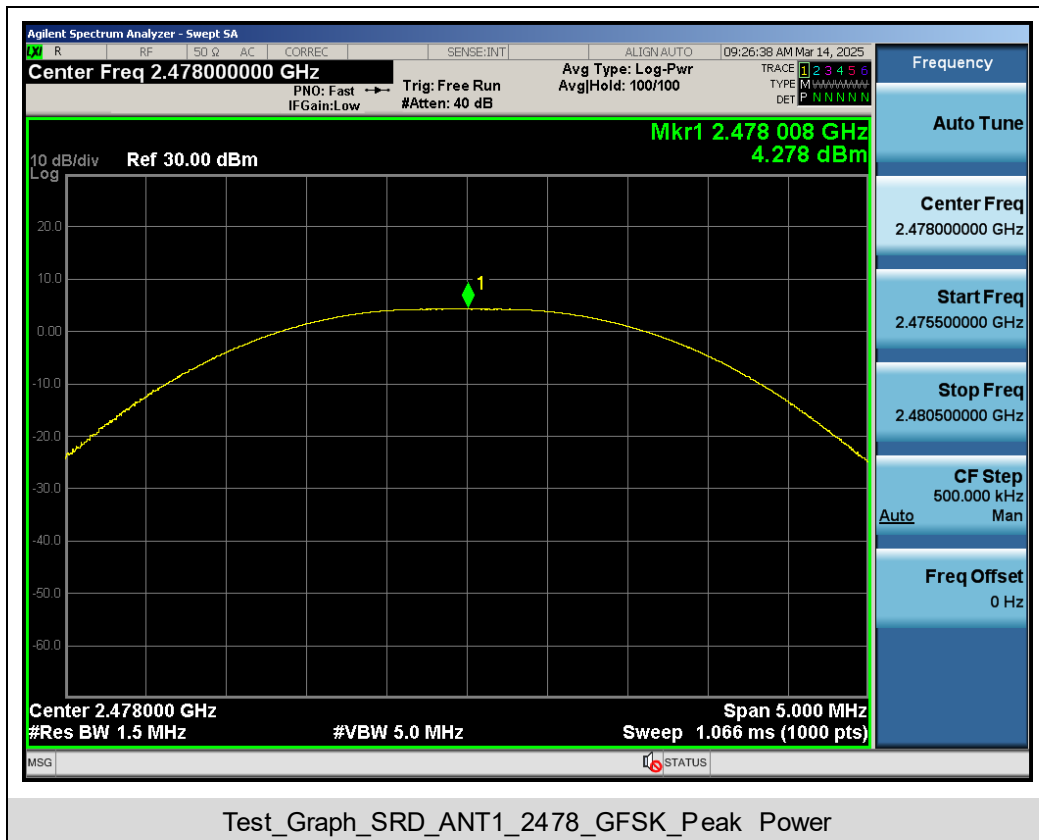
Test Graphs Peak



Test_Graph_SRD_ANT1_2404_GFSK_Peak Power



Test_Graph_SRD_ANT1_2440_GFSK_Peak Power



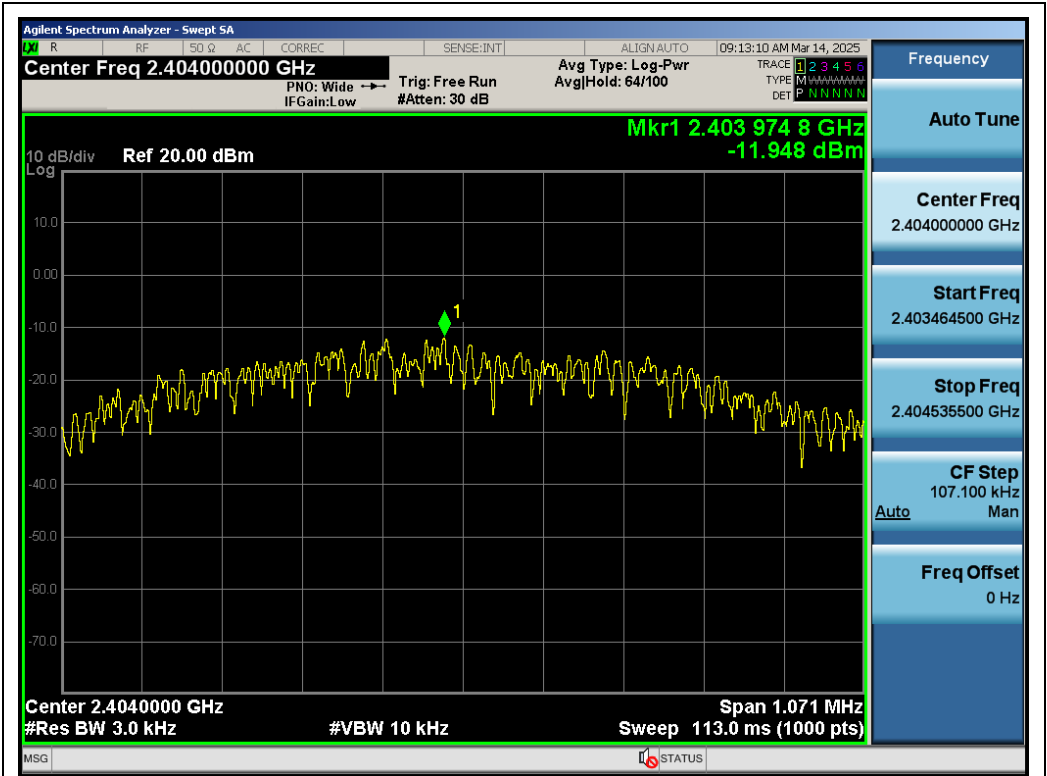
Appendix C: Maximum peak power spectral density

Test Result

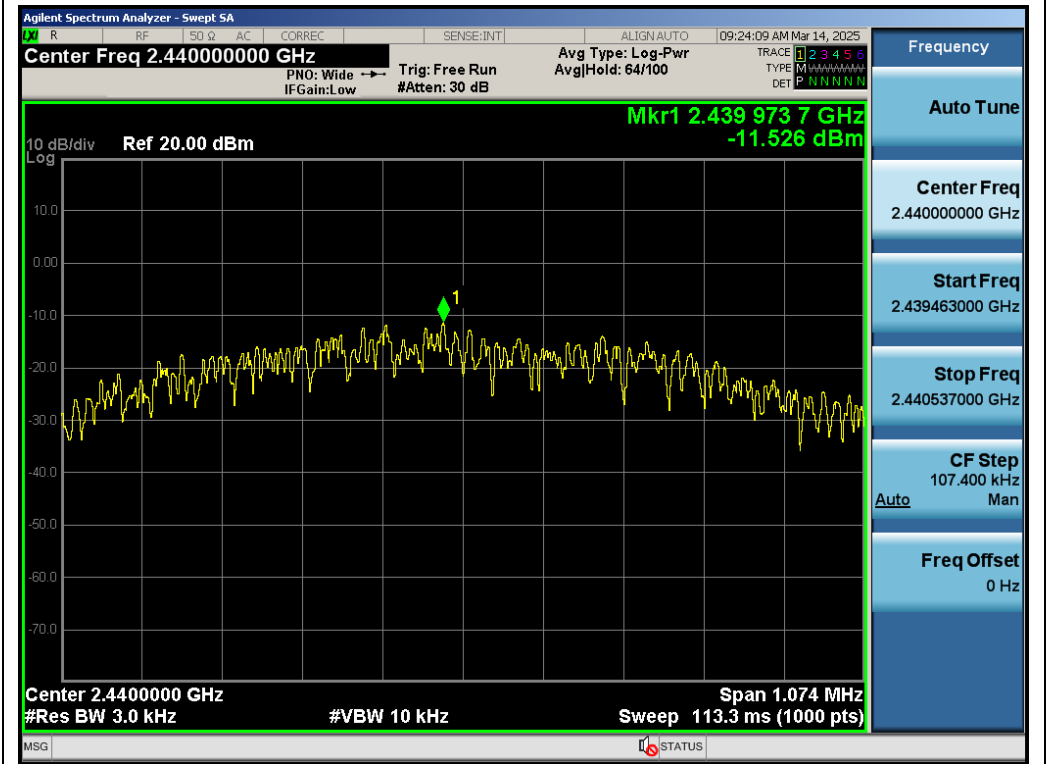
Test Mode	Test Frequency (MHz)	Power density (dBm/3kHz)	Limit (dBm/3kHz)	Pass or Fail
GFSK	2404	-11.948	≤ 8	Pass
	2440	-11.526	≤ 8	Pass
	2478	-10.997	≤ 8	Pass

Note: The factor had been edited in the "Input Correction" of the Spectrum Analyzer. Input compensation coefficient (dB) = Cable Loss (dB) + Attenuator attenuation value (dB)

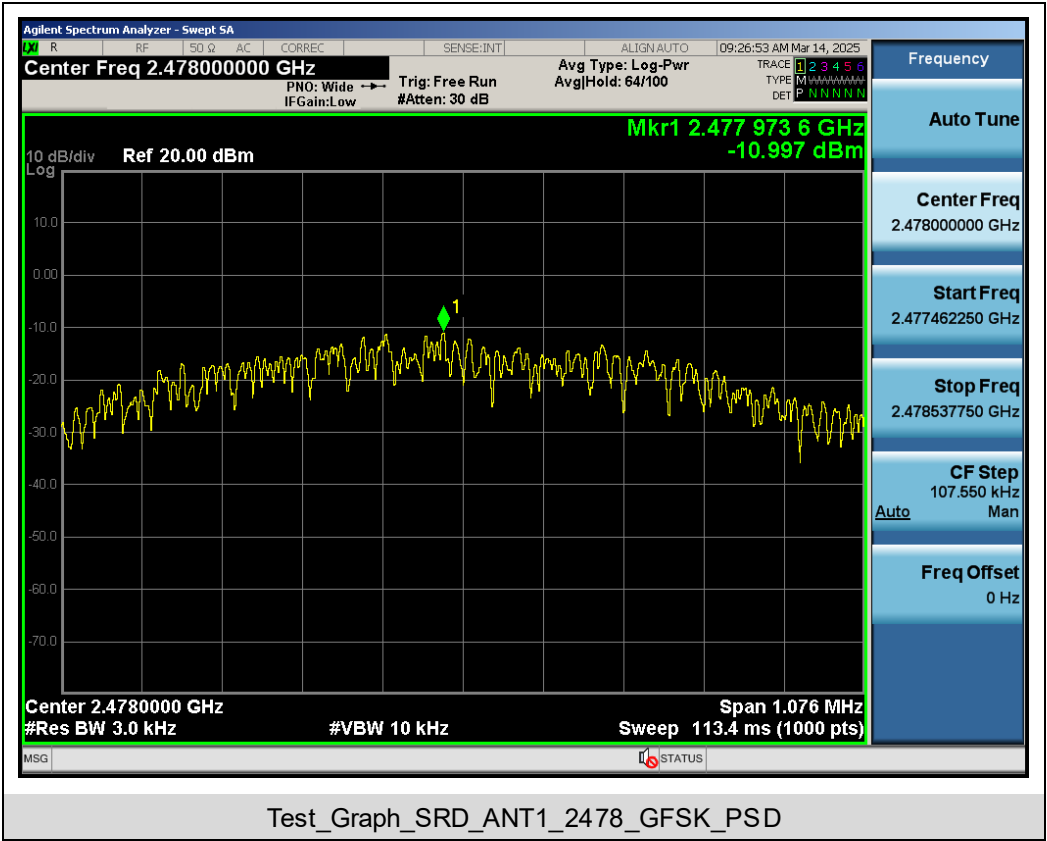
Test Graphs



Test_Graph_SRD_ANT1_2404_GFSK_PSD



Test_Graph_SRD_ANT1_2440_GFSK_PSD



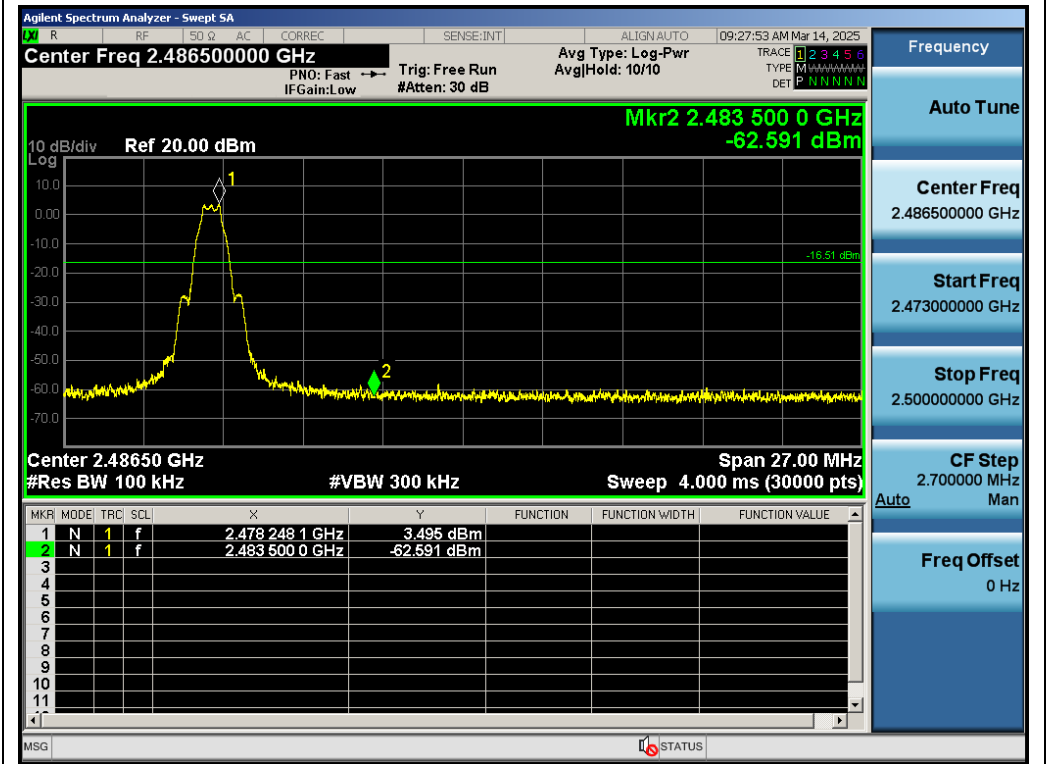
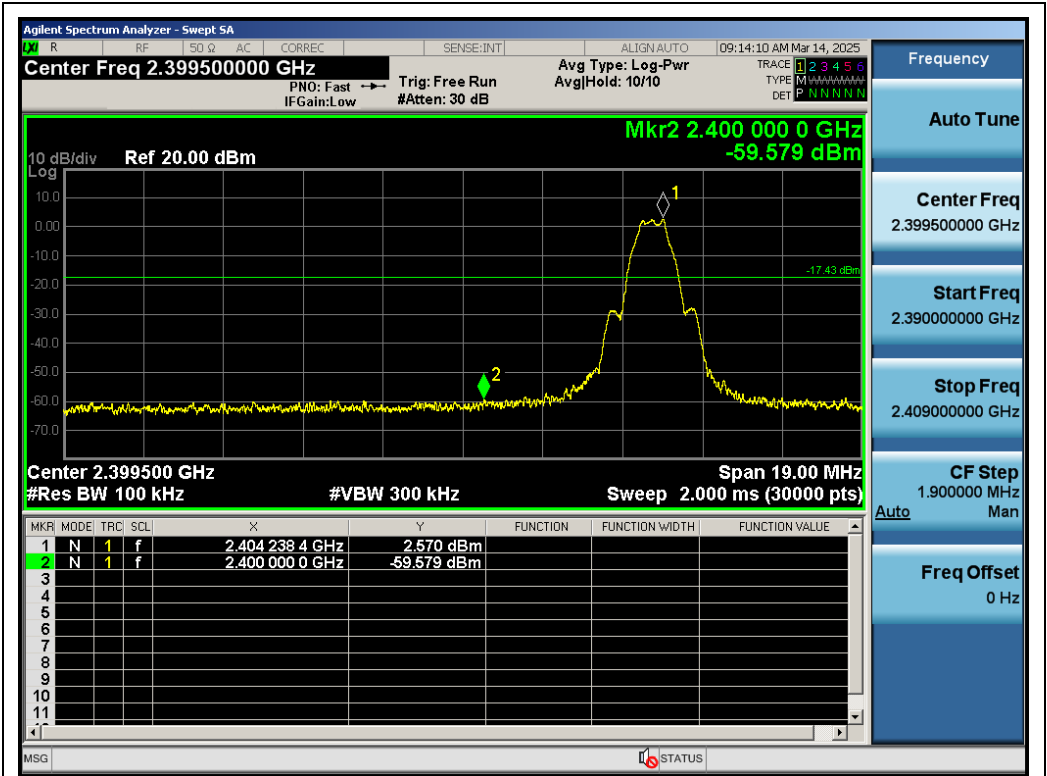
Appendix D: Band edge measurements

Test Result

Test Mode	Ch. Name	Frequency [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
GFSK	Low	2404	2.570	-59.579	≤ -17.43	Pass
GFSK	High	2478	3.495	-62.591	≤ -16.51	Pass

Note: The factor had been edited in the "Input Correction" of the Spectrum Analyzer. Input compensation coefficient (dB) = Cable Loss (dB) + Attenuator attenuation value (dB)

Test Graphs



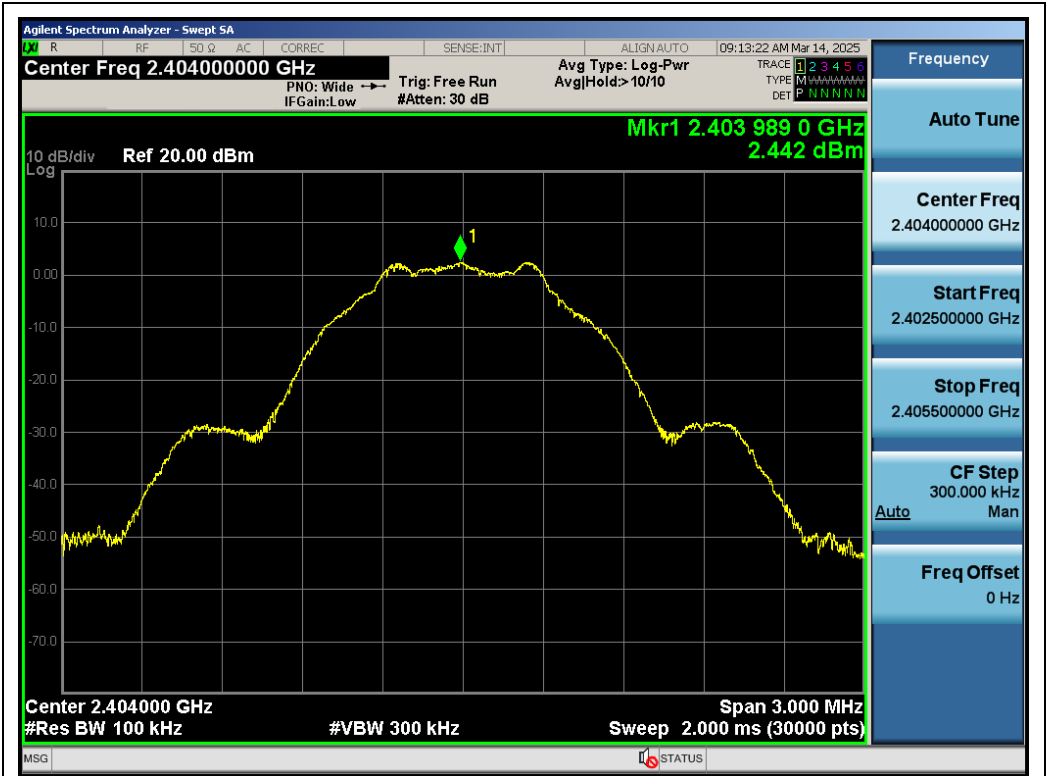
Appendix E: Conducted Spurious Emission

Test Result

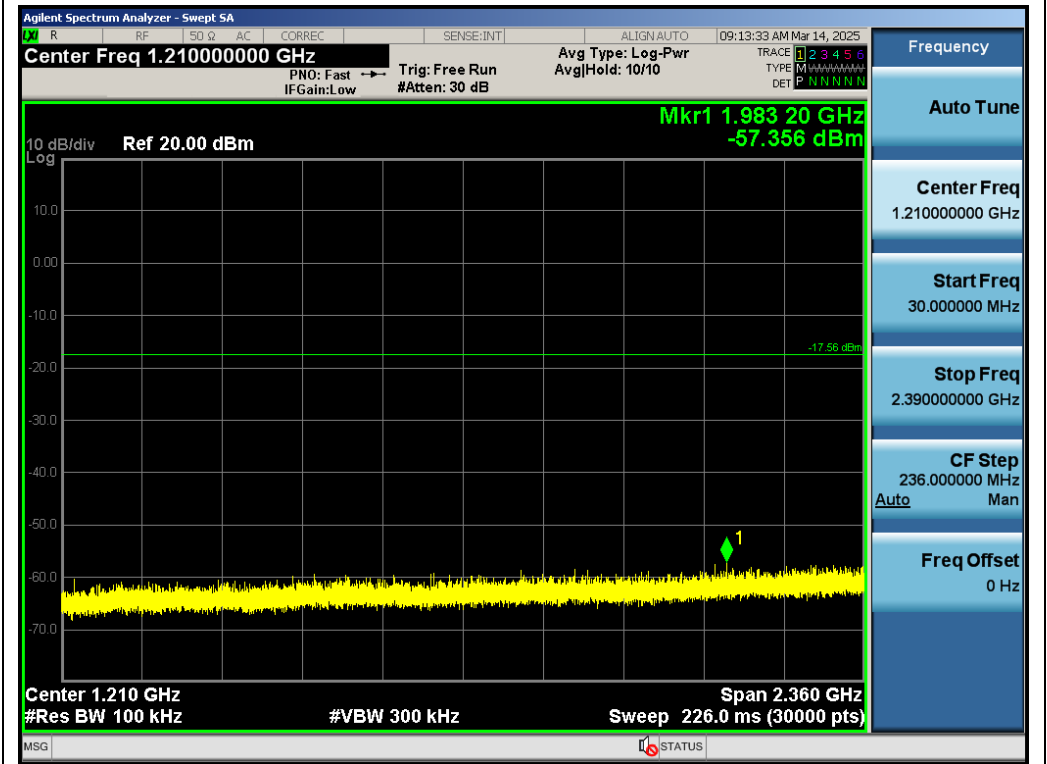
Test Mode	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
GFSK	2404	0~Reference	2.442	2.442	---	Pass
GFSK	2404	30~2390	2.442	-57.356	≤-17.56	Pass
GFSK	2404	2483.5~25000	2.442	-49.101	≤-17.56	Pass
GFSK	2440	0~Reference	2.857	2.857	---	Pass
GFSK	2440	30~2400	2.857	-41.727	≤-17.14	Pass
GFSK	2440	2483.5~25000	2.857	-49.357	≤-17.14	Pass
GFSK	2478	0~Reference	3.425	3.425	---	Pass
GFSK	2478	30~2400	3.425	-42.891	≤-16.58	Pass
GFSK	2478	2500~26500	3.425	-48.835	≤-16.58	Pass

Note: The factor had been edited in the "Input Correction" of the Spectrum Analyzer. Input compensation coefficient (dB) = Cable Loss (dB) + Attenuator attenuation value (dB)

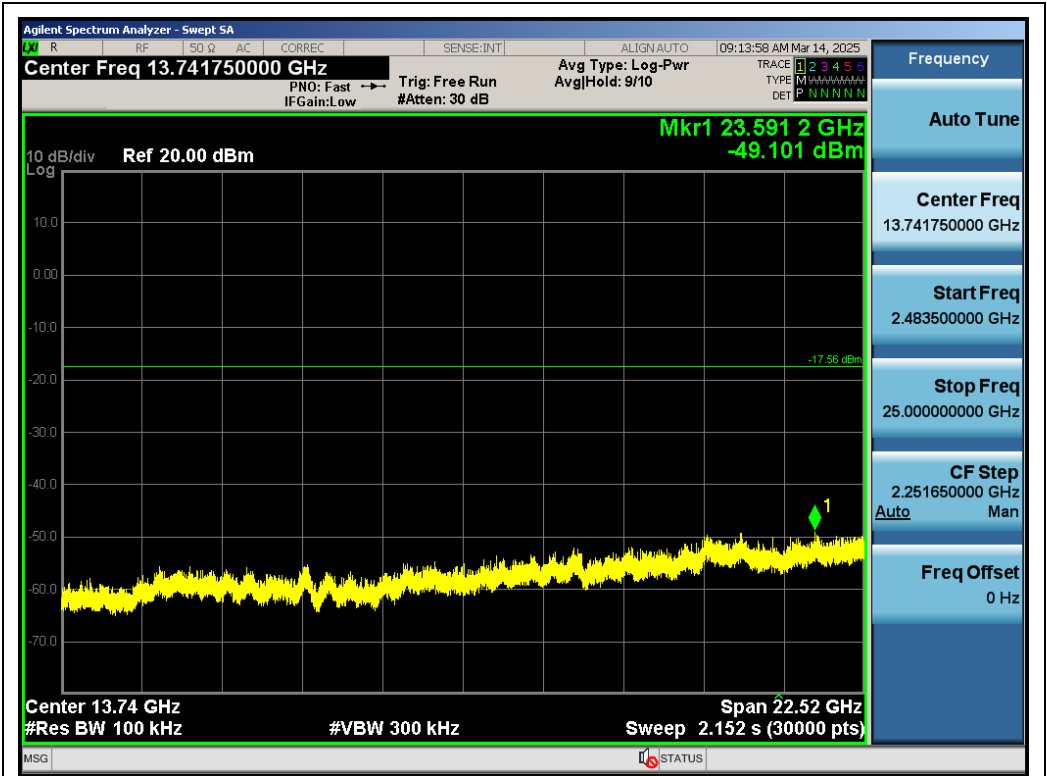
Test Graphs



Test_Graph_SRD_ANT1_2404_GFSK_Reference Level



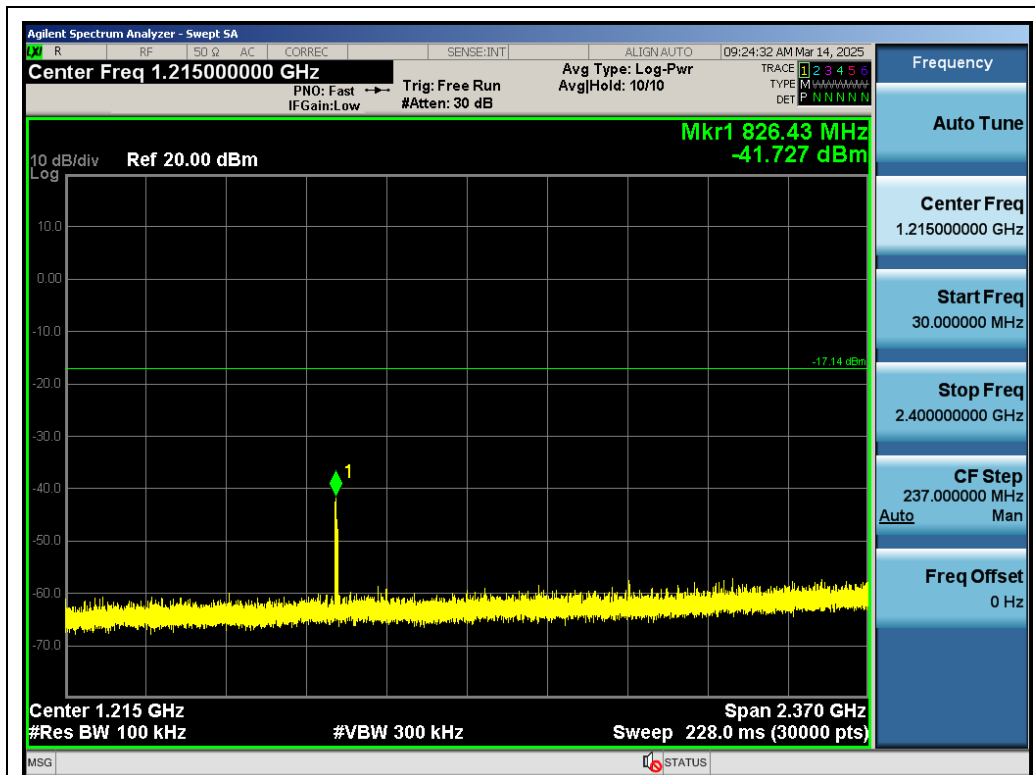
Test_Graph_SRD_ANT1_2404_GFSK_Lower Band Emissions



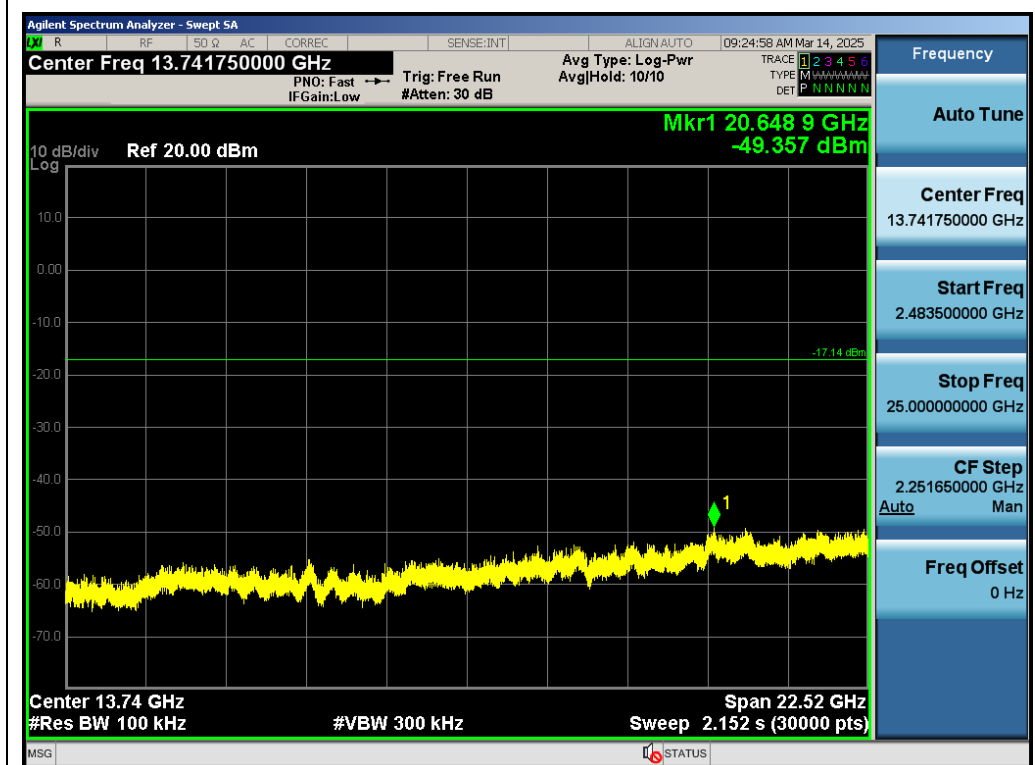
Test_Graph_SRD_ANT1_2404_GFSK_Higher Band Emissions



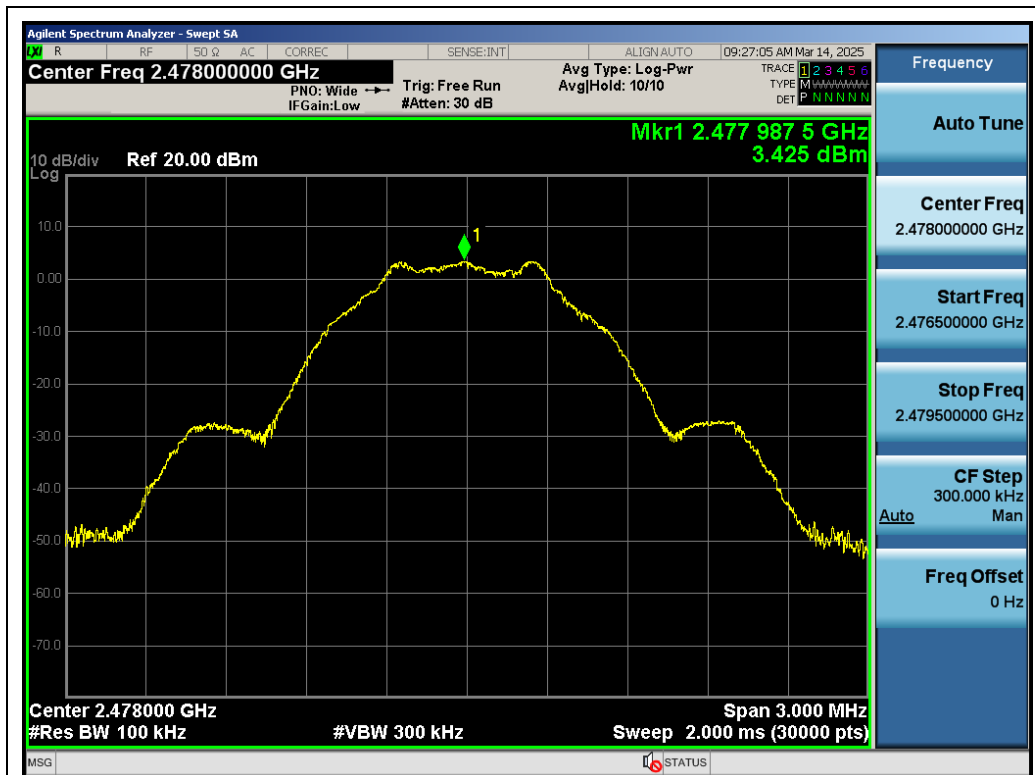
Test_Graph_SRD_ANT1_2440_GFSK_Reference Level



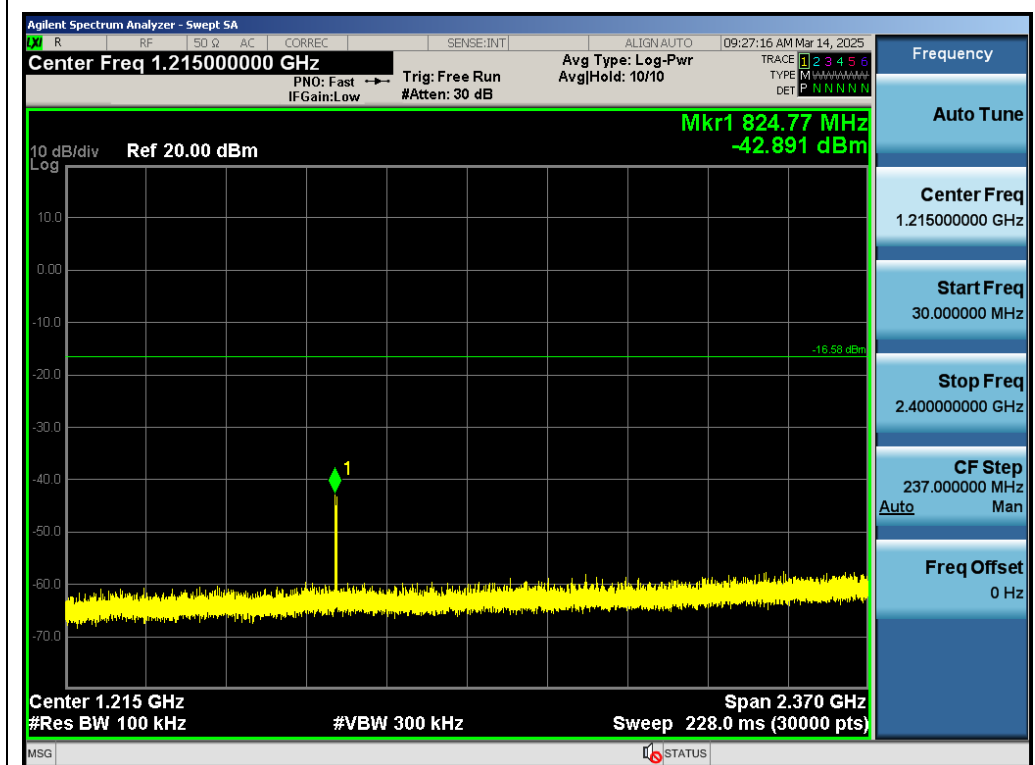
Test_Graph_SRD_ANT1_2440_GFSK_Lower Band Emissions



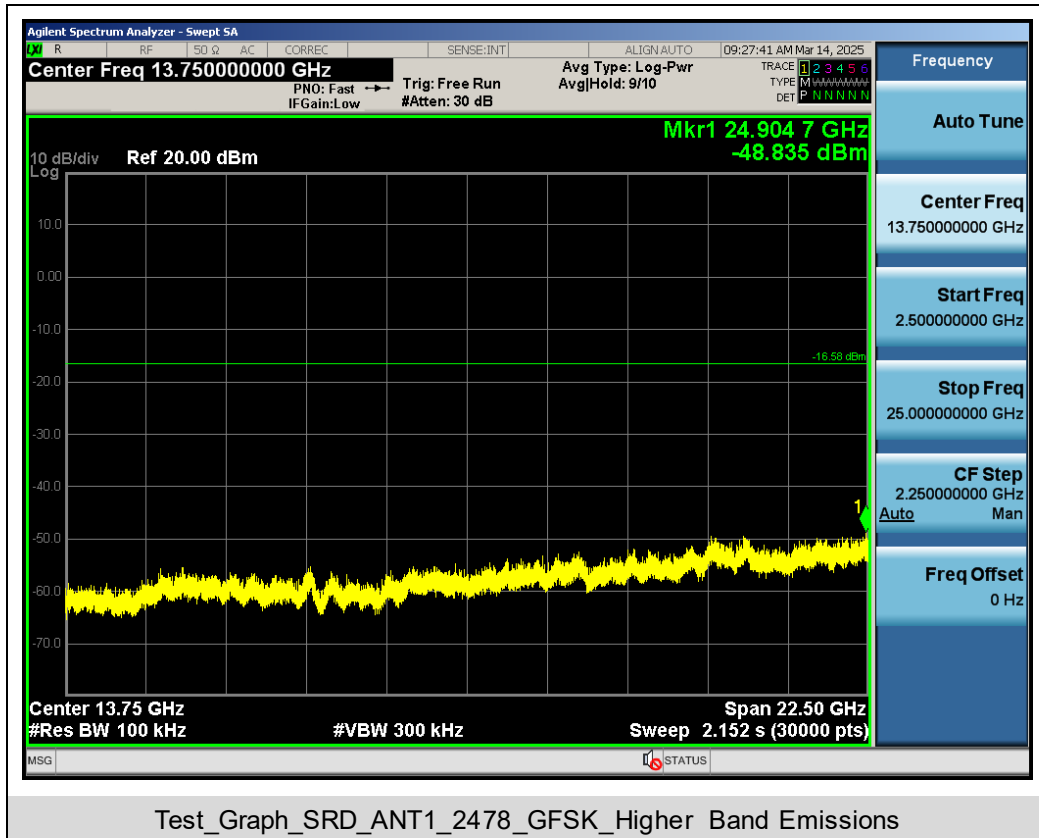
Test_Graph_SRD_ANT1_2440_GFSK_Higher Band Emissions



Test_Graph_SRD_ANT1_2478_GFSK_Reference Level



Test_Graph_SRD_ANT1_2478_GFSK_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	2404	0.38	0.62	60.75	2.16
GFSK	2440	0.38	0.62	60.74	2.17
GFSK	2478	0.38	0.63	60.67	2.17

Note: The factor had been edited in the “Input Correction” of the Spectrum Analyzer. Input compensation coefficient (dB) = Cable Loss (dB) + Attenuator attenuation value (dB)

Test Graphs

