

Appendix Test Data for BT(BDR/EDR) (Conducted Measurement)

Product Name: Wireless Headphone

Trade Mark: soundcore

Test Model: A6611

FCC ID: 2AOKB-A6611RC

Environmental Conditions

Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

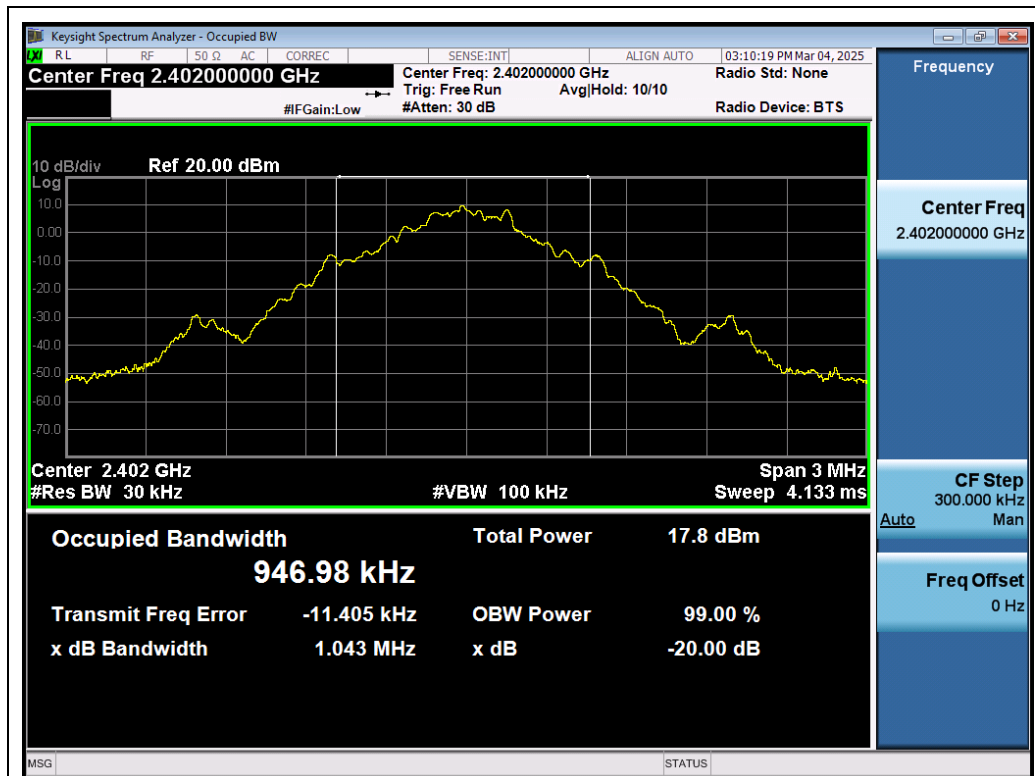
Appendix A: 20dB Emission Bandwidth & Occupied Channel

Bandwidth

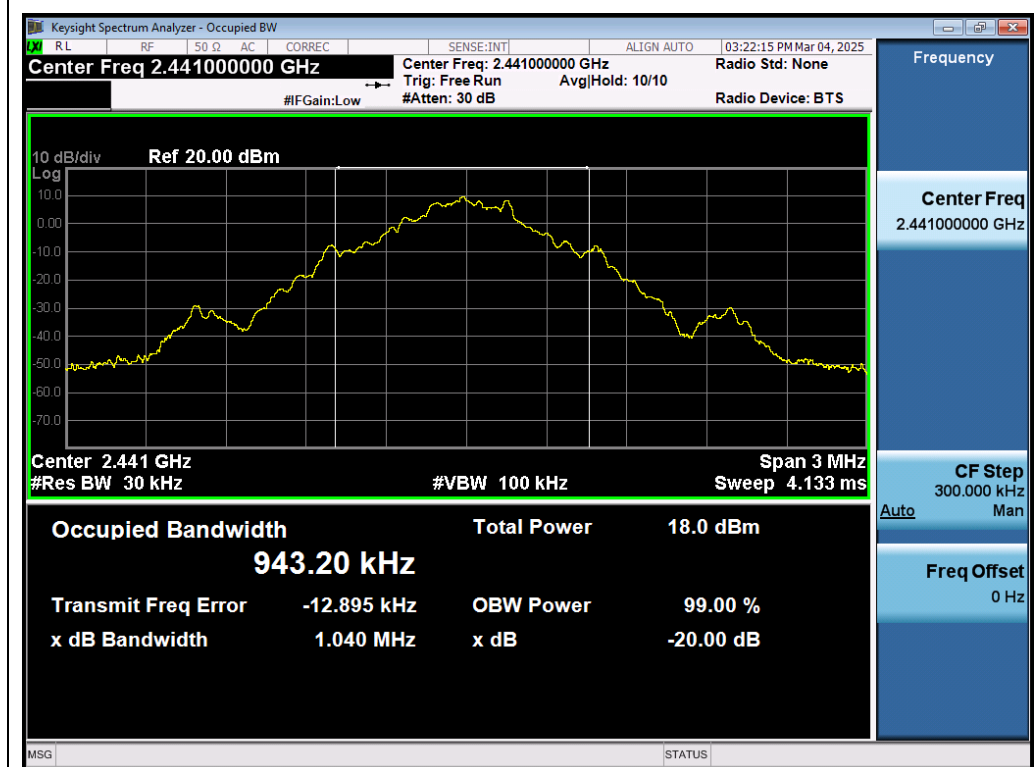
Test Result

Test Mode	Test Frequency	99% Occupied Bandwidth	-20dB Bandwidth	Limits	Pass or Fail
GFSK	2402	0.947	1.043	N/A	Pass
	2441	0.943	1.040	N/A	Pass
	2480	0.953	1.043	N/A	Pass
$\pi/4$ -DQPSK	2402	1.146	1.202	N/A	Pass
	2441	1.153	1.220	N/A	Pass
	2480	1.160	1.223	N/A	Pass
8DPSK	2402	1.153	1.245	N/A	Pass
	2441	1.161	1.249	N/A	Pass
	2480	1.169	1.254	N/A	Pass

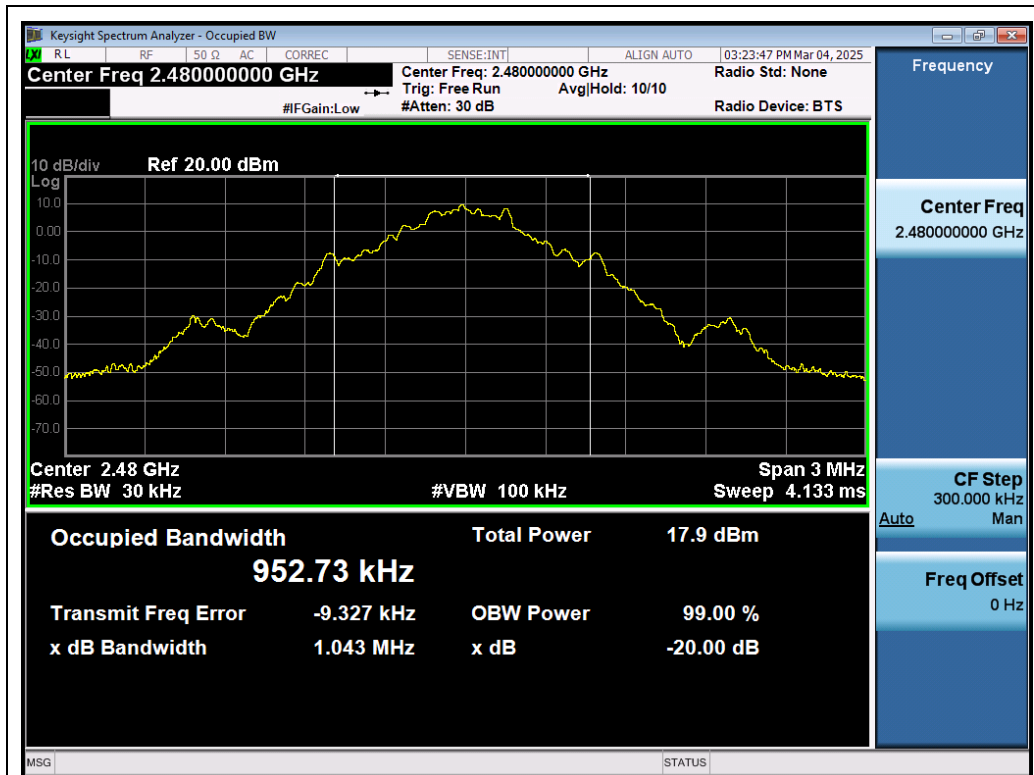
Test Graphs



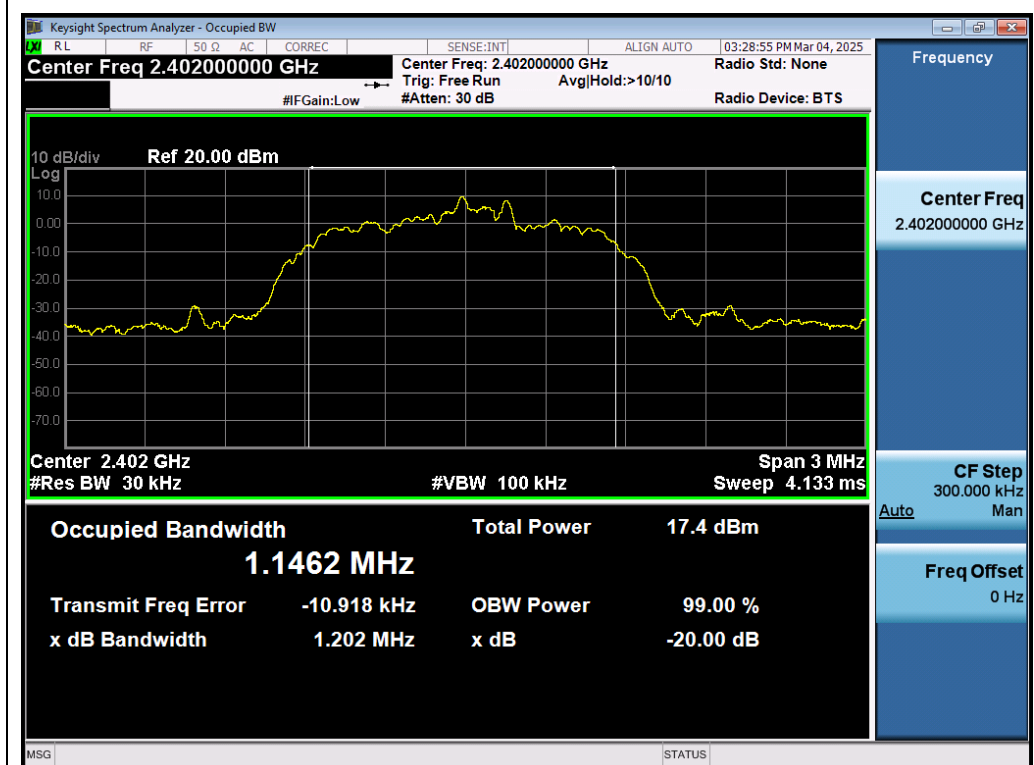
Test_Graph_BR_ANT1_2402_1Mbps_OBW



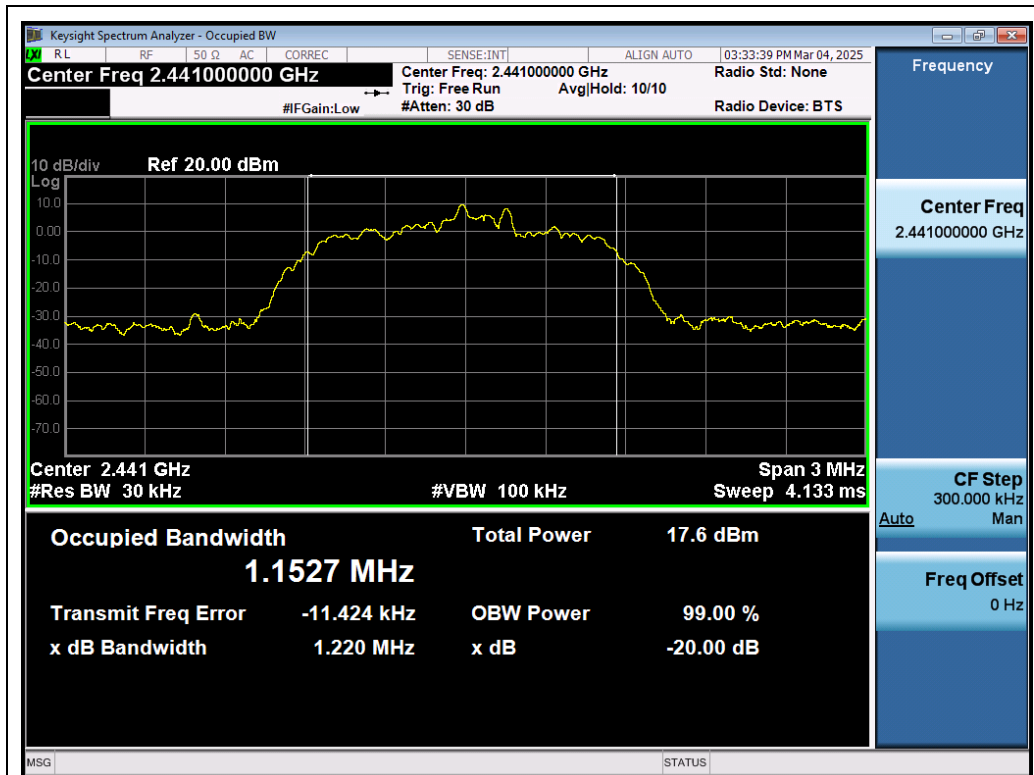
Test_Graph_BR_ANT1_2441_1Mbps_OBW



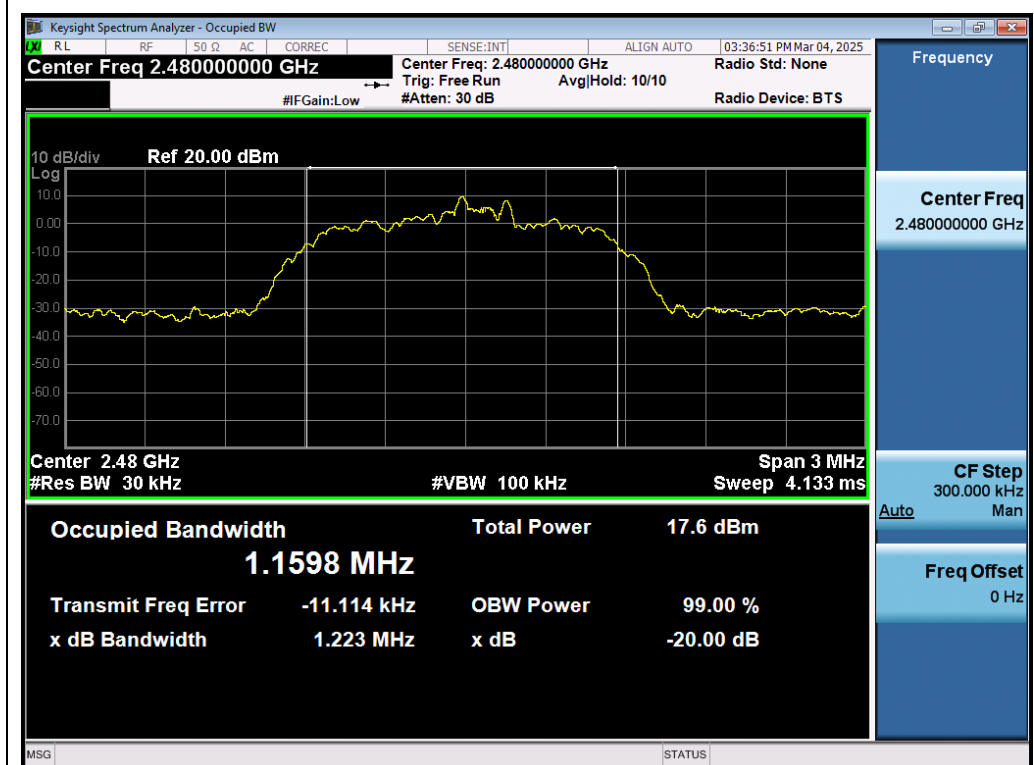
Test_Graph_BR_ANT1_2480_1Mbps_OBW



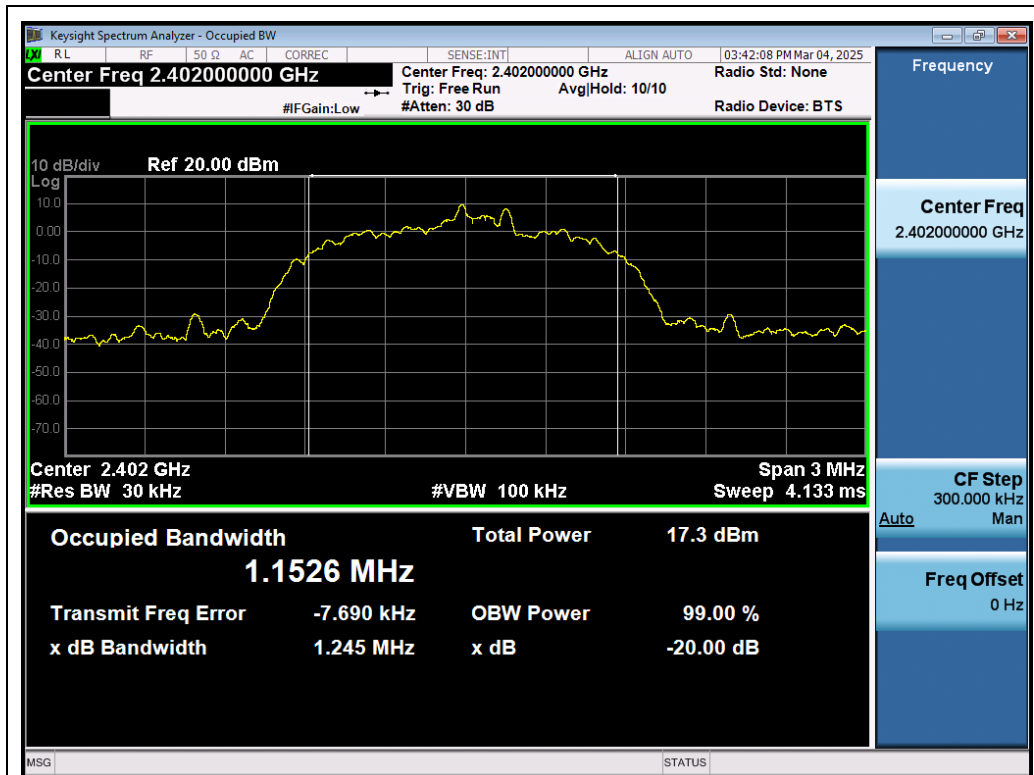
Test_Graph_EDR_ANT1_2402_2Mbps_OBW



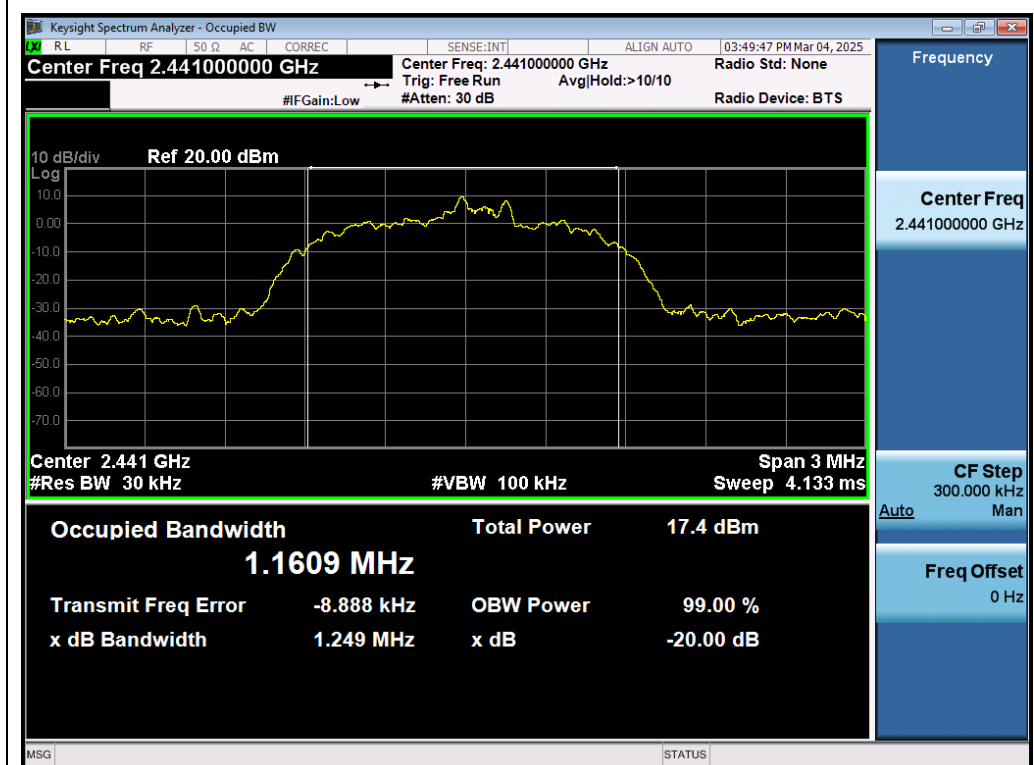
Test_Graph_EDR_ANT1_2441_2Mbps_OBW



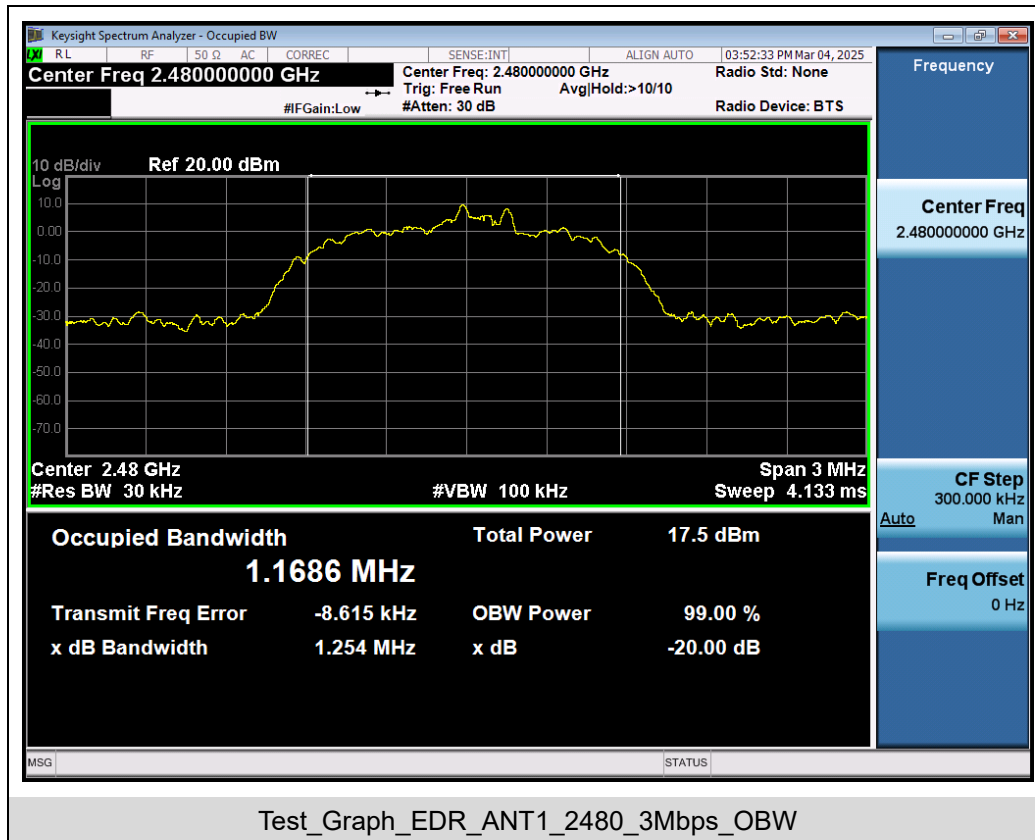
Test_Graph_EDR_ANT1_2480_2Mbps_OBW



Test_Graph_EDR_ANT1_2402_3Mbps_OBW



Test_Graph_EDR_ANT1_2441_3Mbps_OBW

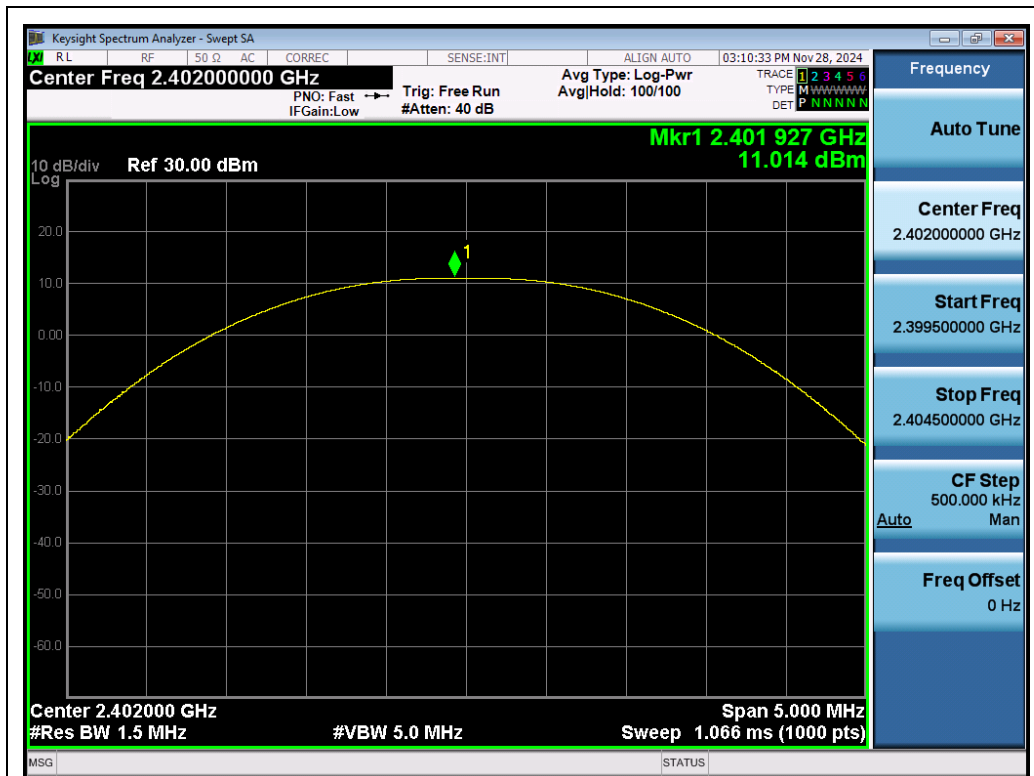


Appendix B: Maximum peak conducted output power

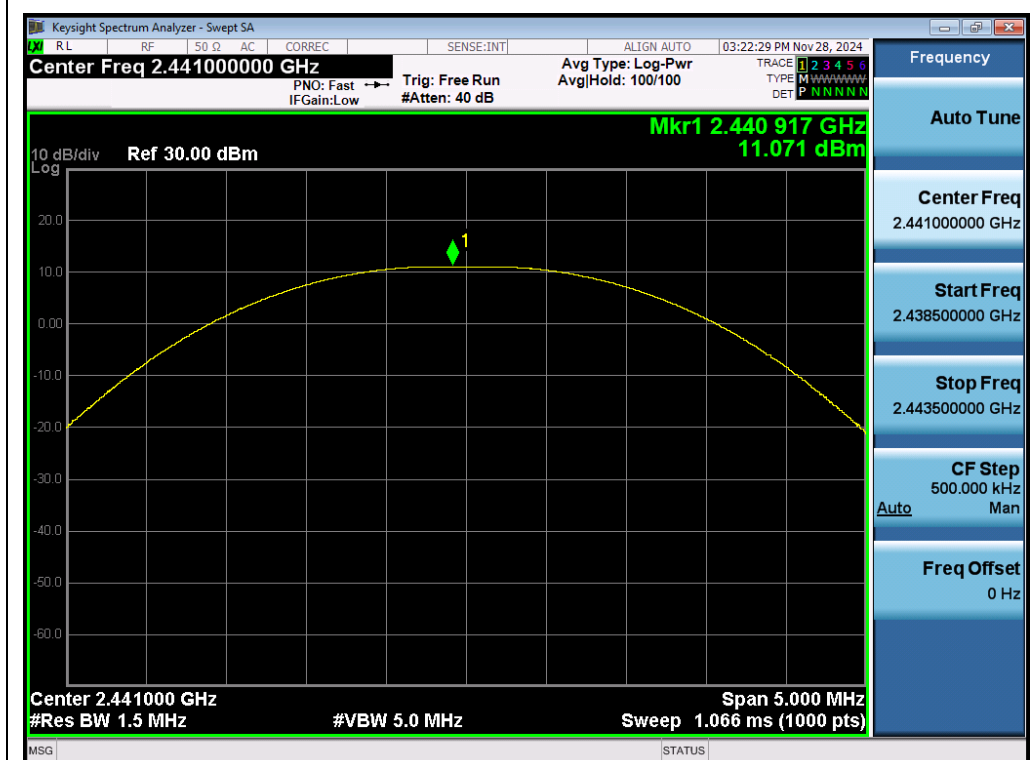
Test Result

Test Mode	Test Frequency (MHz)	Peak Power (dBm)	Limits (dBm)	Pass or Fail
GFSK	2402	11.014	≤ 21	Pass
	2441	11.071	≤ 21	Pass
	2480	10.908	≤ 21	Pass
π /4-DQPSK	2402	11.040	≤ 21	Pass
	2441	11.079	≤ 21	Pass
	2480	10.896	≤ 21	Pass
8DPSK	2402	11.028	≤ 21	Pass
	2441	11.027	≤ 21	Pass
	2480	10.877	≤ 21	Pass

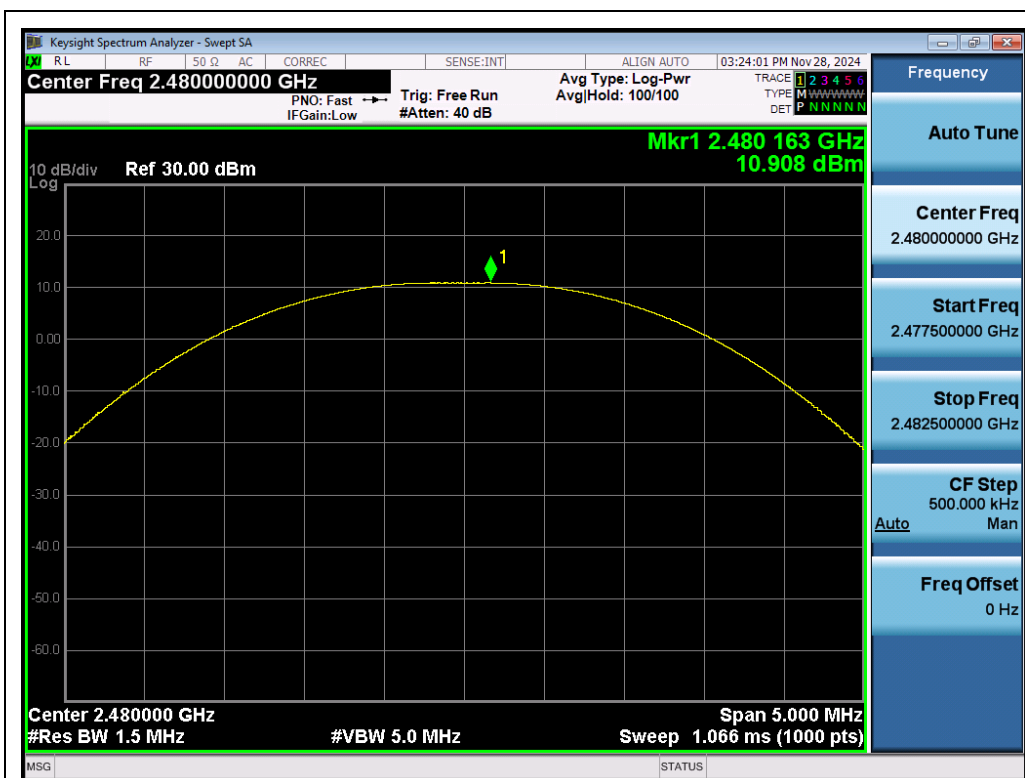
Test Graphs



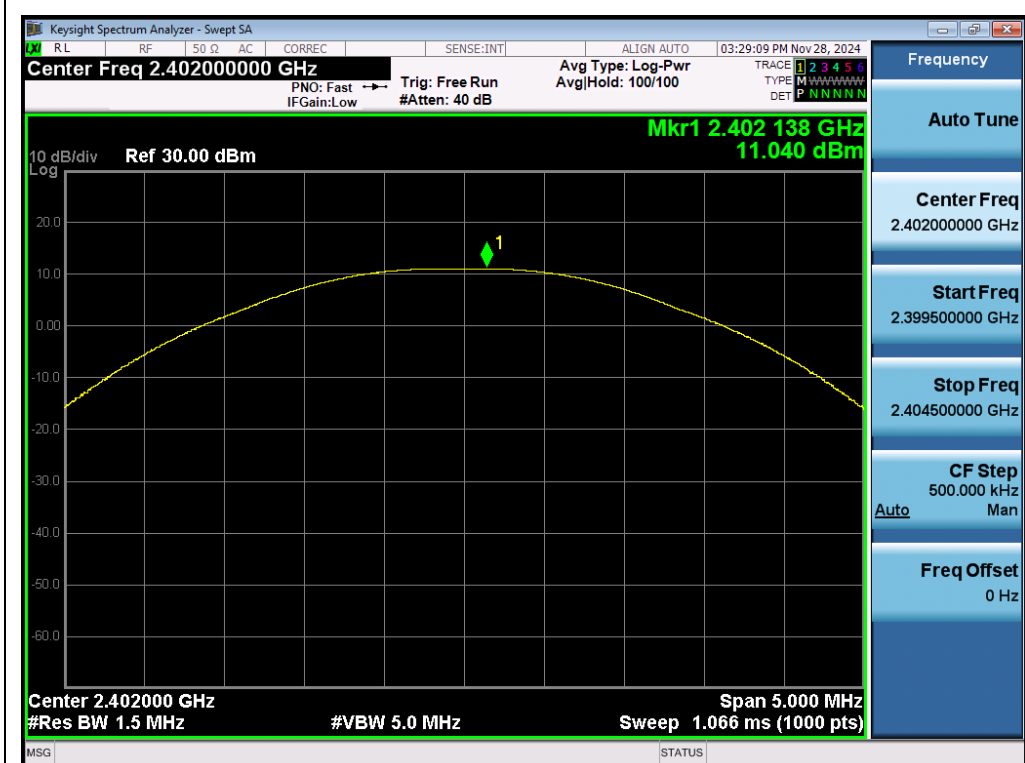
Test_Graph_BR_ANT1_2402_1Mbps_Peak Power



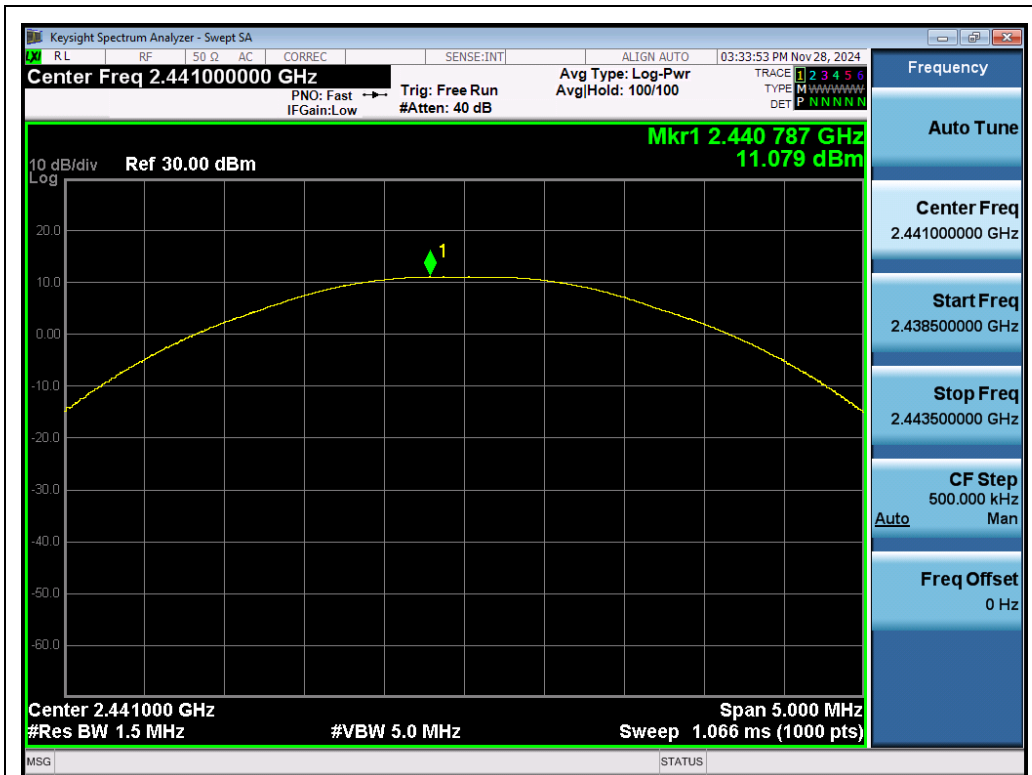
Test_Graph_BR_ANT1_2441_1Mbps_Peak Power



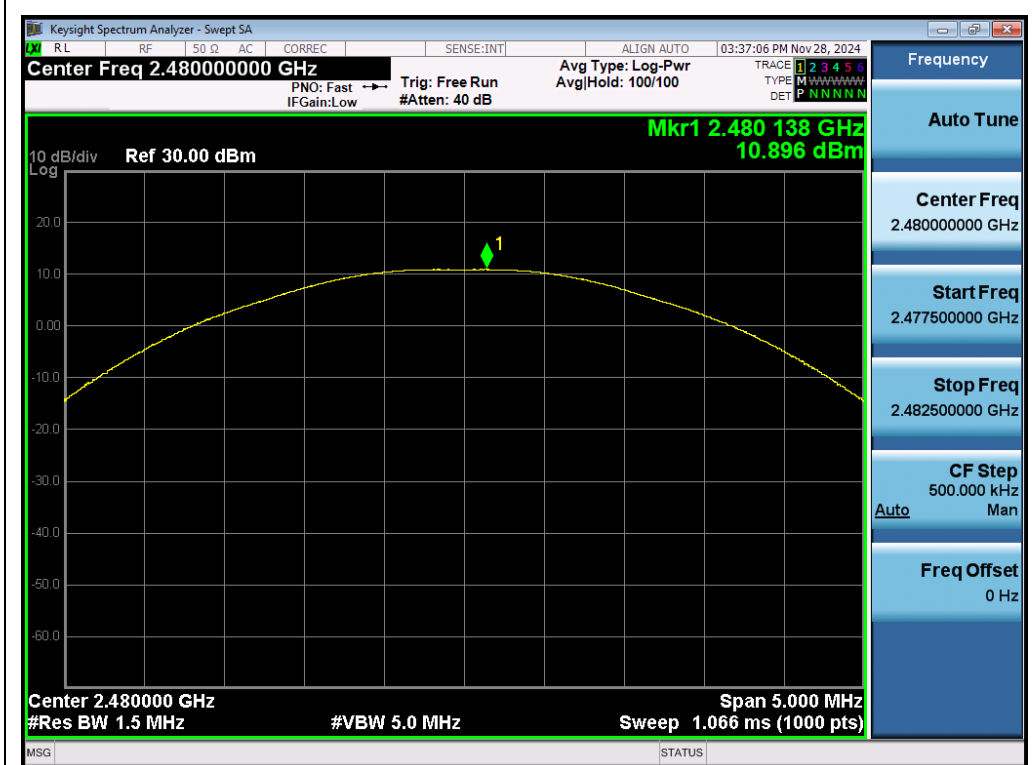
Test_Graph_BR_ANT1_2480_1Mbps_Peak Power



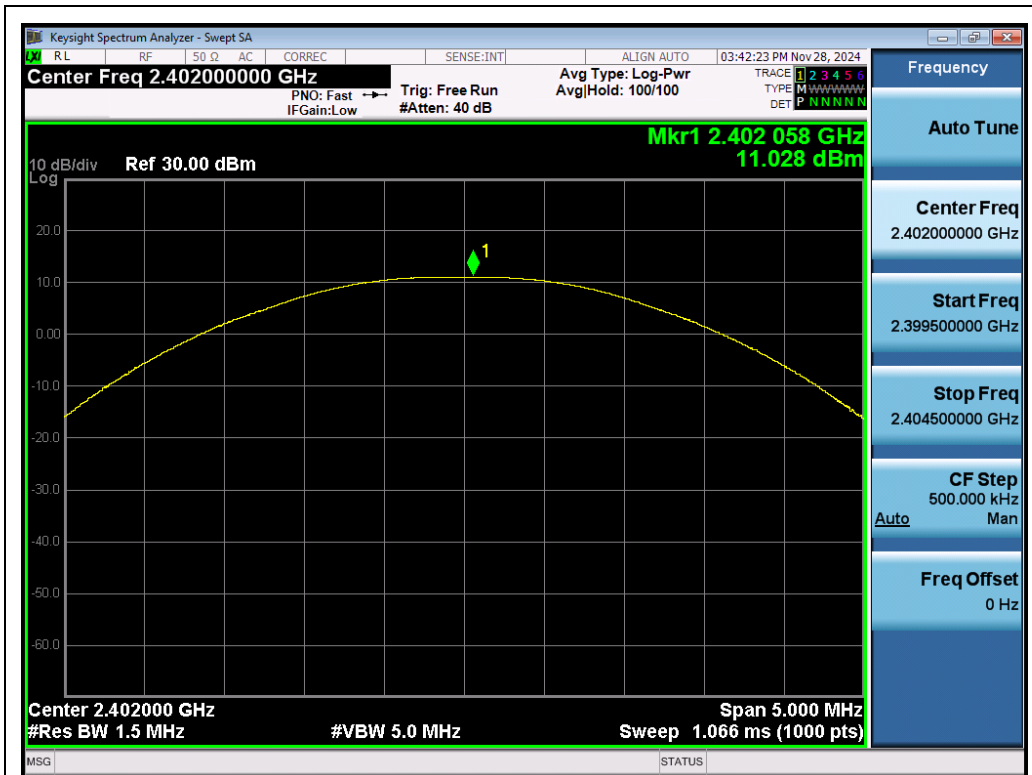
Test_Graph_EDR_ANT1_2402_2Mbps_Peak Power



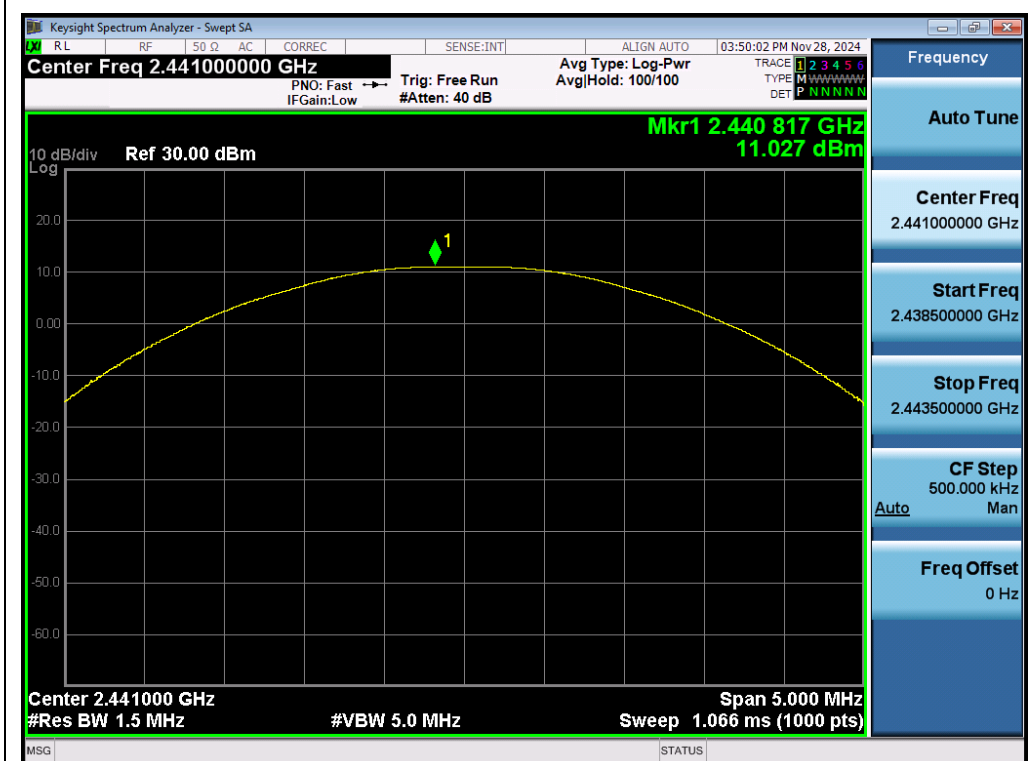
Test_Graph_EDR_ANT1_2441_2Mbps_Peak Power



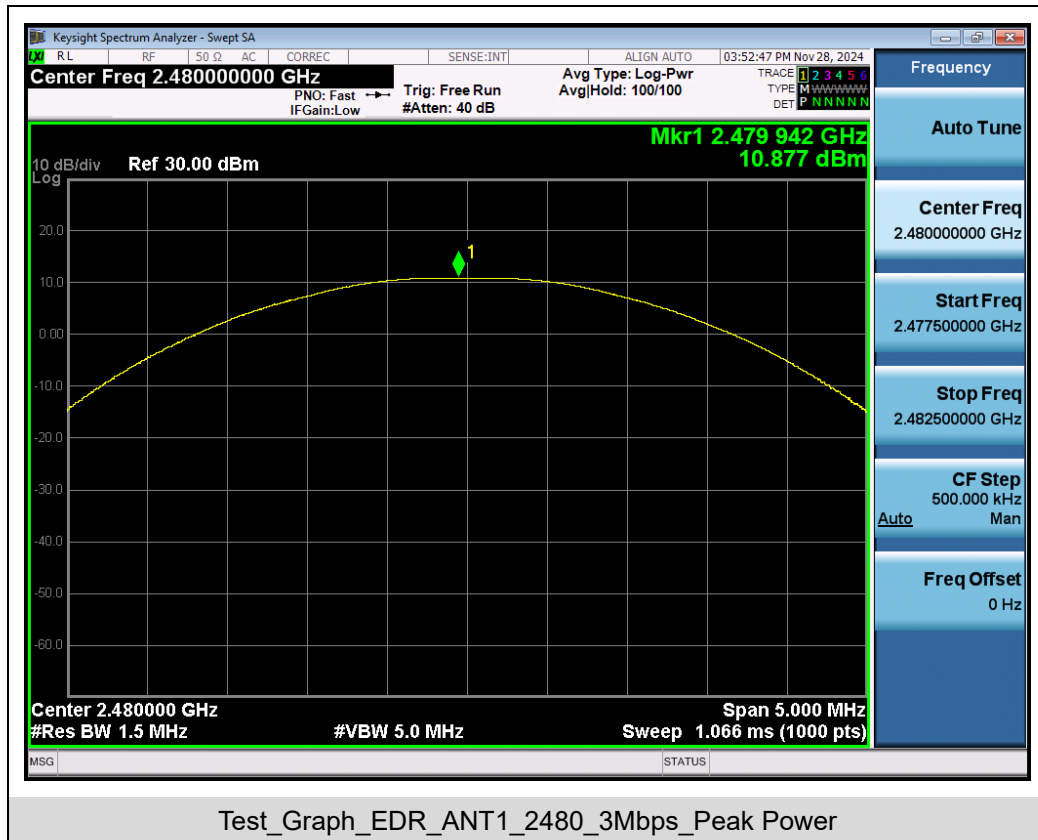
Test_Graph_EDR_ANT1_2480_2Mbps_Peak Power



Test_Graph_EDR_ANT1_2402_3Mbps_Peak Power



Test_Graph_EDR_ANT1_2441_3Mbps_Peak Power



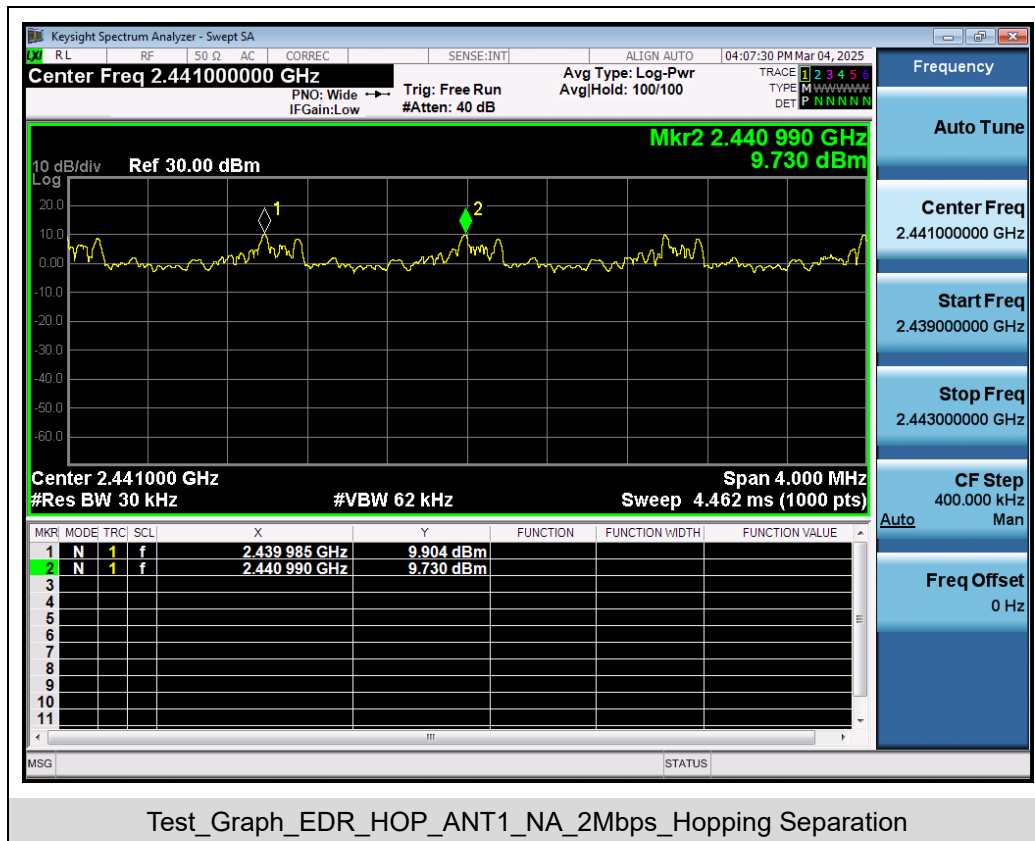
Appendix C: Carrier frequency separation

Test Result

Test Mode	Channel Separation (MHz)	Limits (MHz)	Pass or Fail
π /4-DQPSK	1.005	0.836	Pass

Remark:For this test item, only the 2DH5 rate mode corresponding to the maximum power π /4-DQPSK modulation is recorded.

Test Graphs



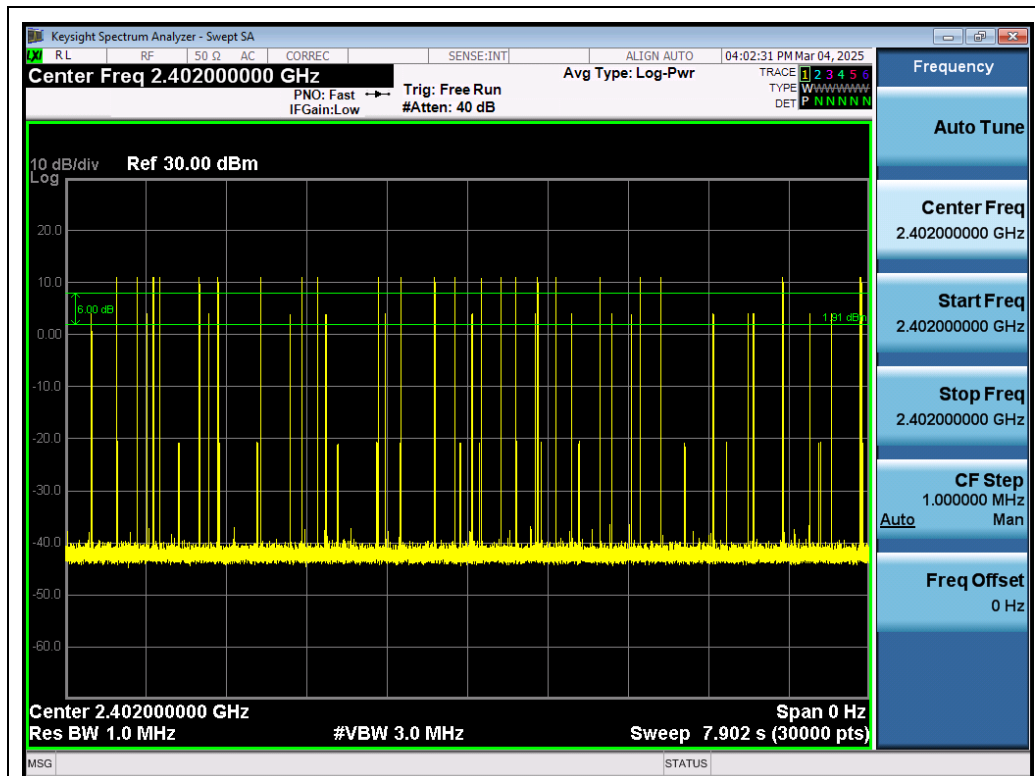
Appendix D: Time of occupancy

Test Result

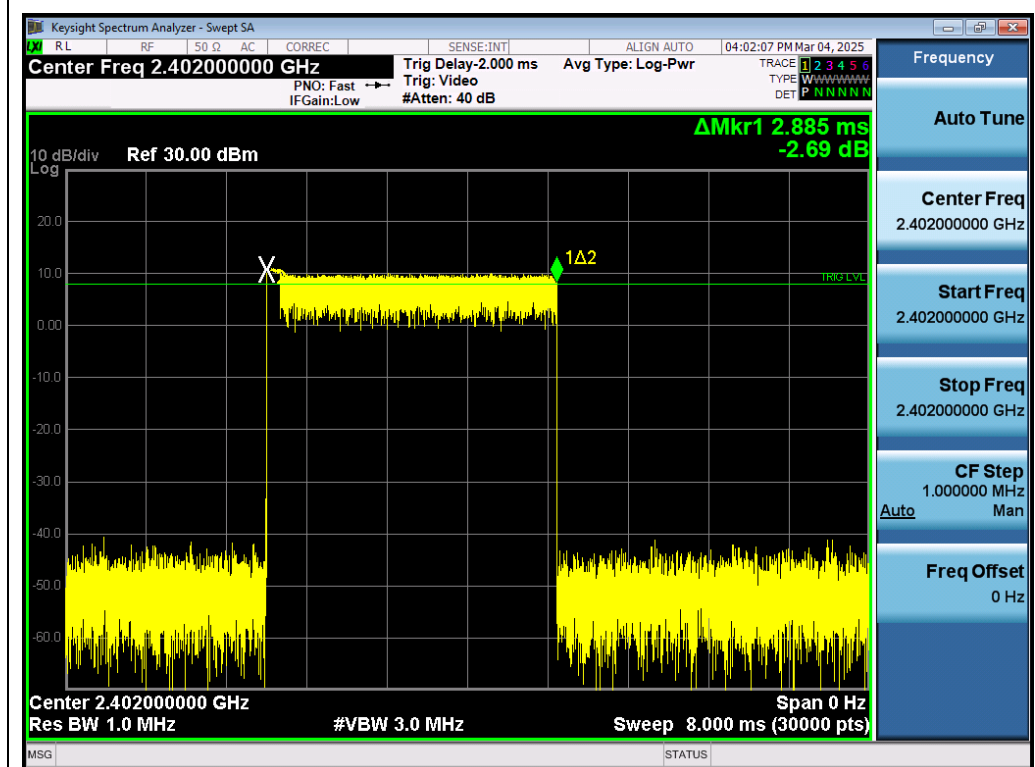
Channel	Time of Pulse for 2DH5 (ms)	Number of hops in the period specified in the requirements	Dwell Time (ms)	Limit (ms)	Pass or Fail
2402	2.885	24.0*4	276.960	400	Pass
2441	2.885	25.0*4	288.500	400	Pass
2480	2.885	18.0*4	207.720	400	Pass

Remark:For this test item, only the 2DH5 rate mode corresponding to the maximum power $\pi/4$ -DQPSK modulation is recorded.

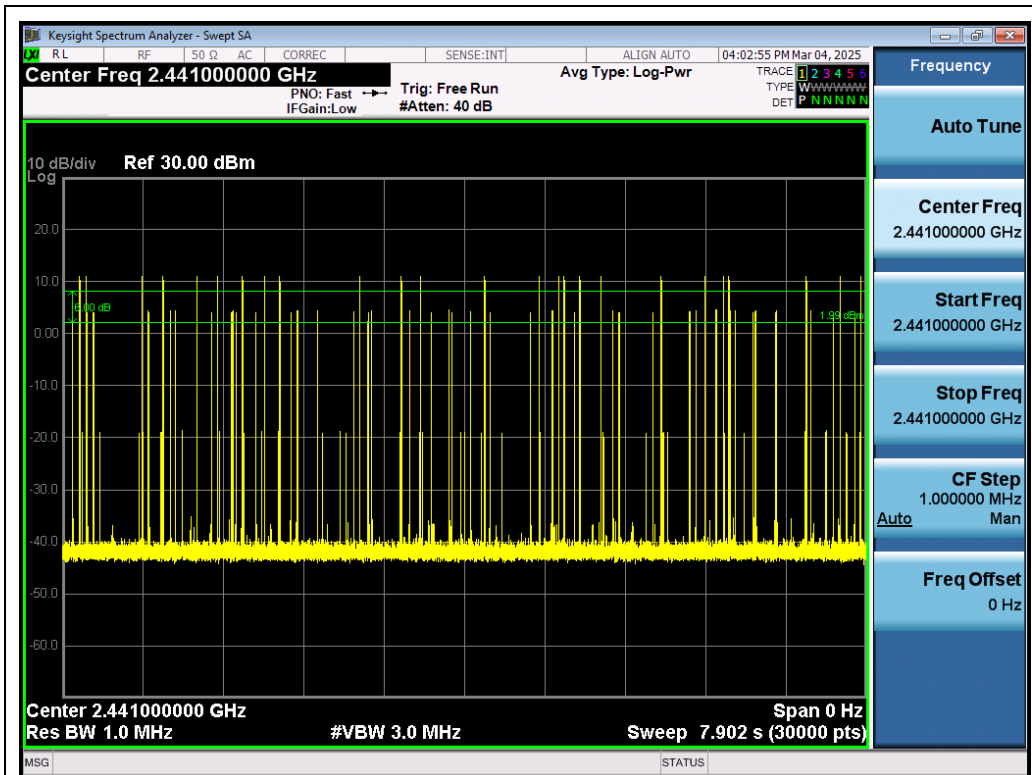
Test Graphs



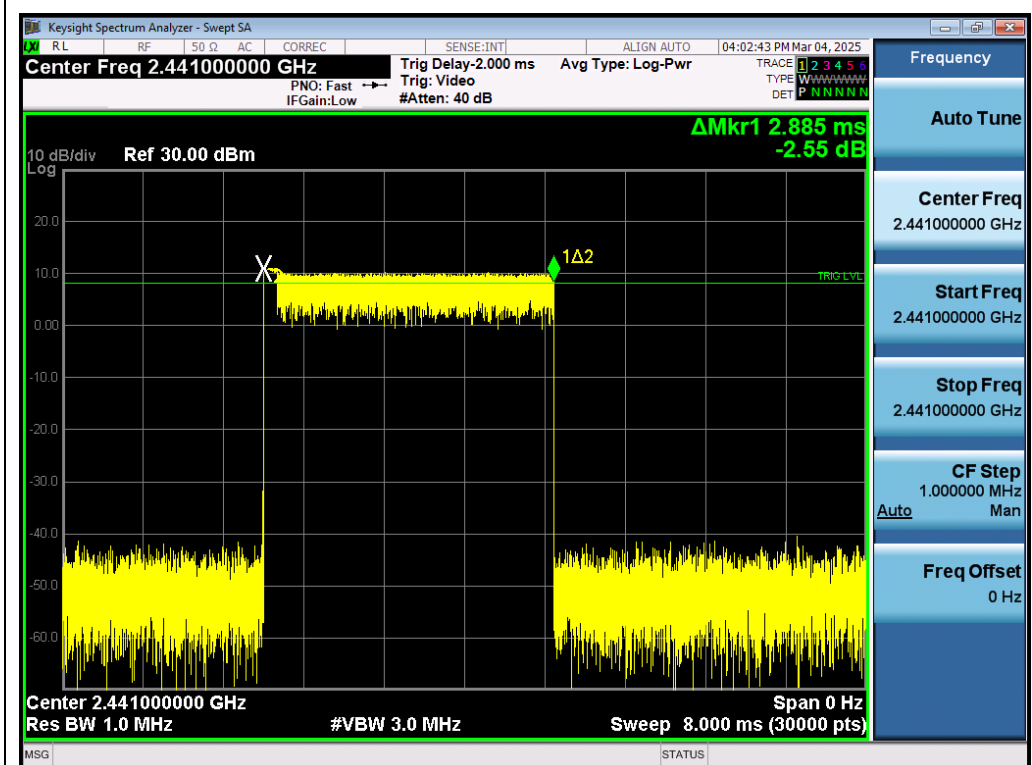
Test_Graph_EDR_HOP_ANT1_NA_2Mbps_2402_Number of Busrt



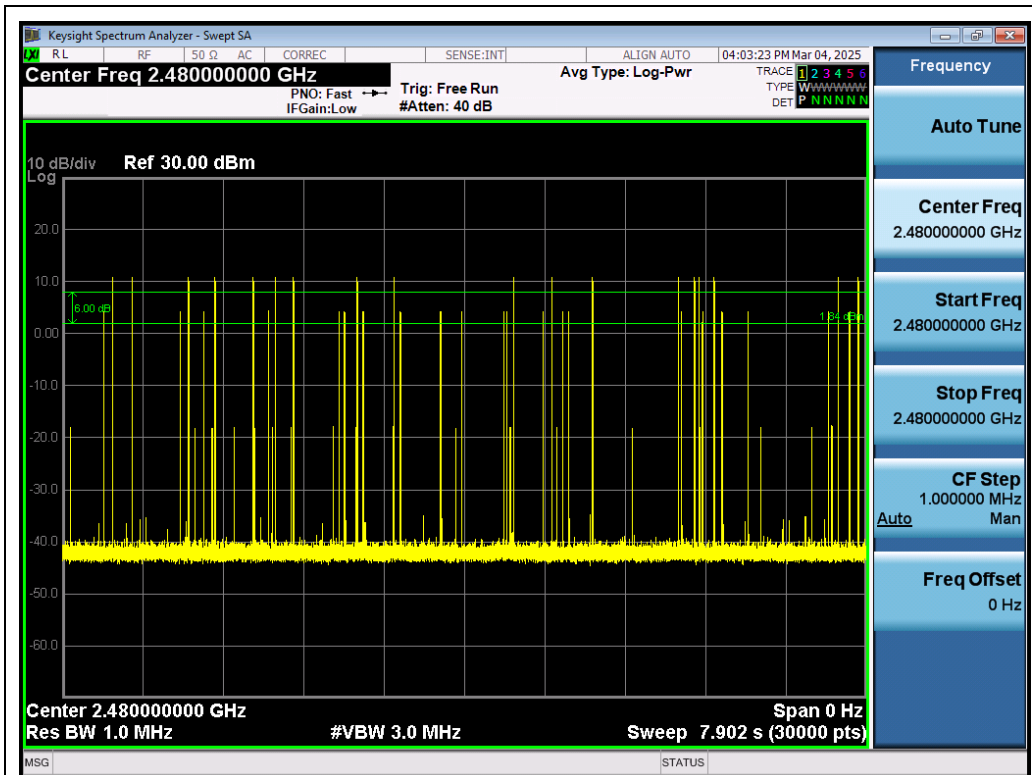
Test_Graph_EDR_HOP_ANT1_NA_2Mbps_2402_Time per Burst



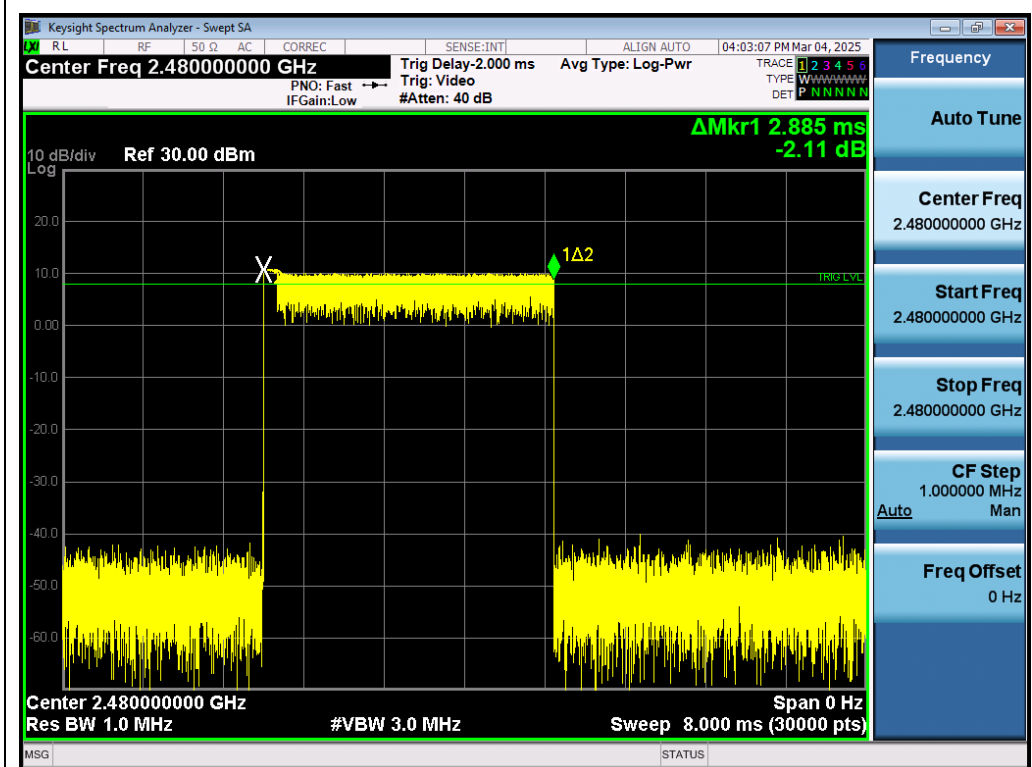
Test_Graph_EDR_HOP_ANT1_NA_2Mbps_2441_Number of Burst



Test_Graph_EDR_HOP_ANT1_NA_2Mbps_2441_Time per Burst



Test_Graph_EDR_HOP_ANT1_NA_2Mbps_2480_Number of Burst



Test_Graph_EDR_HOP_ANT1_NA_2Mbps_2480_Time per Burst

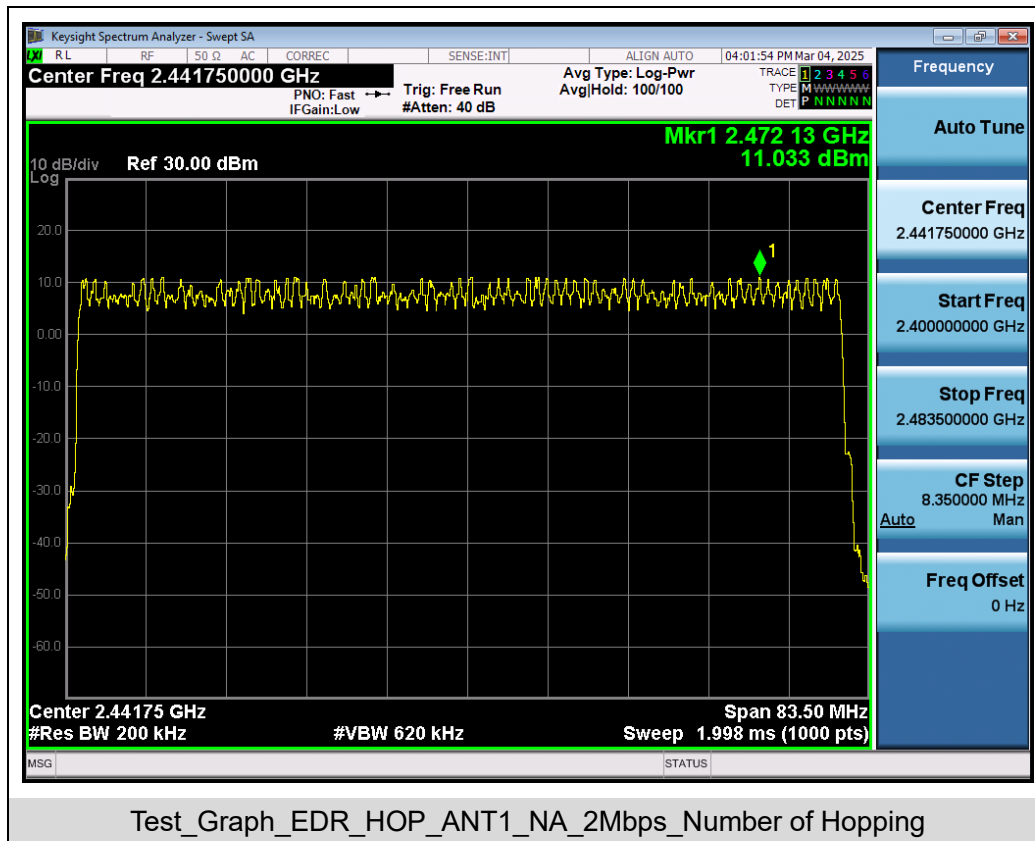
Appendix E: Number of hopping channels

Test Result

Test Mode	Number of Hopping Frequency	Limits	Pass or Fail
π /4-DQPSK Hopping	79	≥ 15	Pass

Remark:For this test item, only the 2DH5 rate mode corresponding to the maximum power π /4-DQPSK modulation is recorded.

Test Graphs

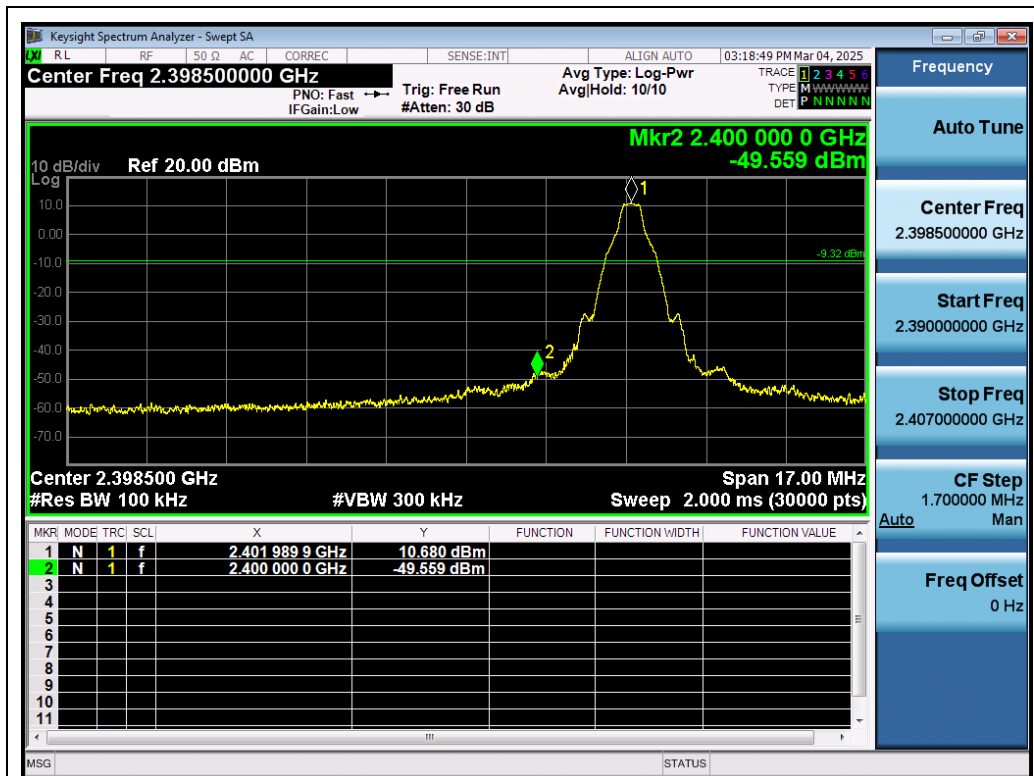


Appendix F: Band edge measurements

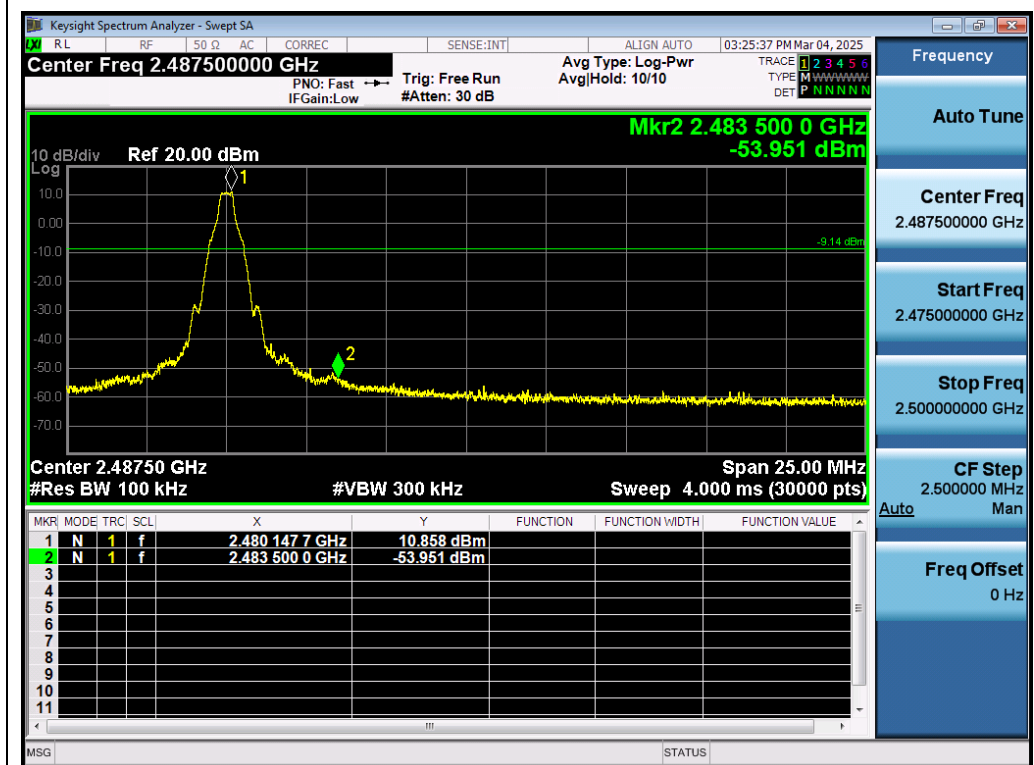
Test Result

Test Mode	Ch.Name	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
GFSK	Low	2402	10.680	-49.559	≤ -9.32	Pass
GFSK	High	2480	10.858	-53.951	≤ -9.14	Pass
GFSK	Low	Hop_2402	10.693	-50.129	≤ -9.31	Pass
GFSK	High	Hop_2480	10.851	-56.671	≤ -9.15	Pass
$\pi/4$ -DQPSK	Low	2402	10.769	-47.666	≤ -9.23	Pass
$\pi/4$ -DQPSK	High	2480	10.715	-54.963	≤ -9.29	Pass
$\pi/4$ -DQPSK	Low	Hop_2402	10.752	-49.344	≤ -9.25	Pass
$\pi/4$ -DQPSK	High	Hop_2480	10.577	-58.192	≤ -9.42	Pass
8DPSK	Low	2402	10.814	-46.911	≤ -9.19	Pass
8DPSK	High	2480	10.853	-54.551	≤ -9.15	Pass
8DPSK	Low	Hop_2402	10.627	-49.990	≤ -9.37	Pass
8DPSK	High	Hop_2480	10.675	-57.898	≤ -9.32	Pass

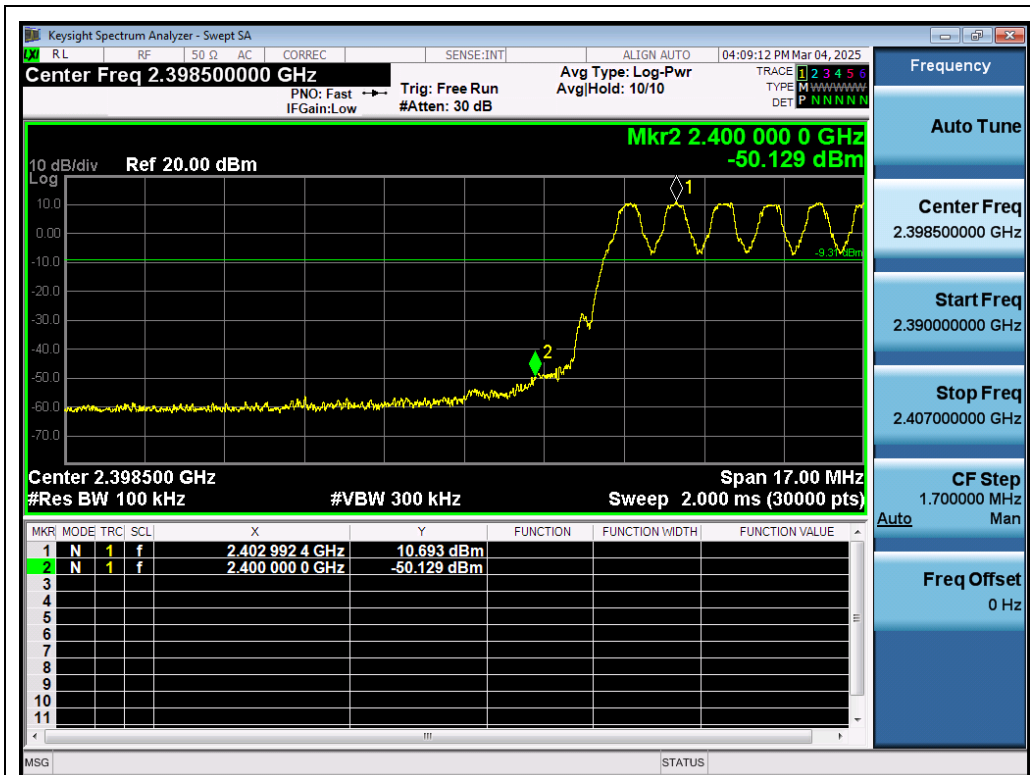
Test Graphs



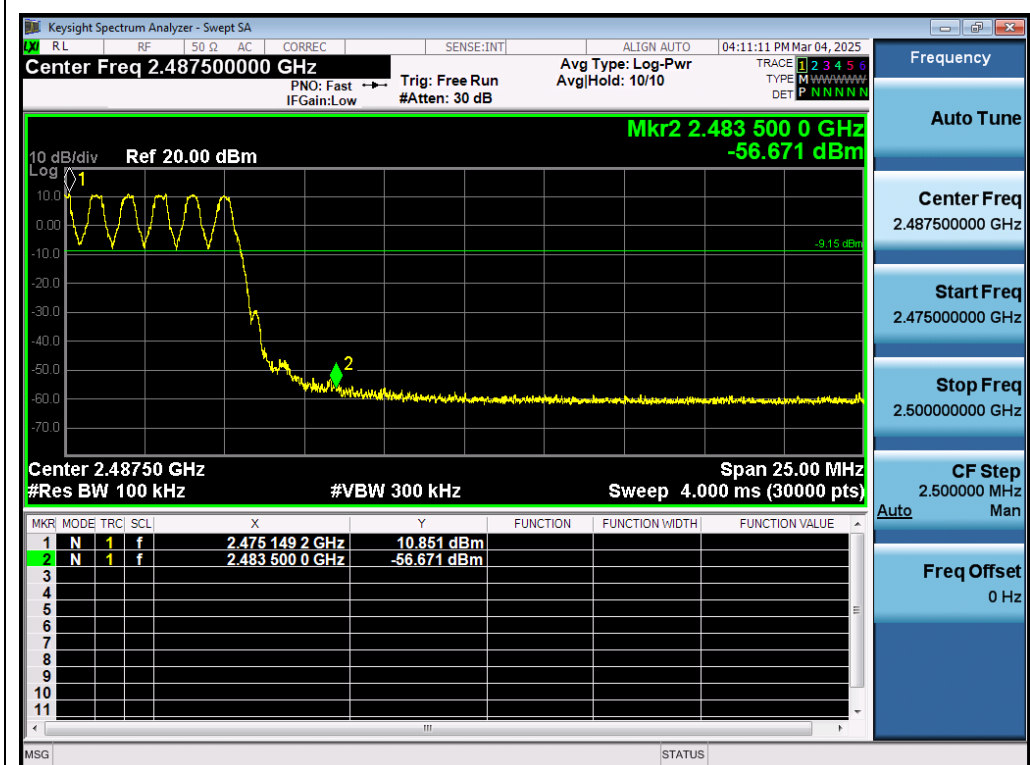
Test_Graph_BR_ANT1_2402_1Mbps_Lower Band Edge Emissions



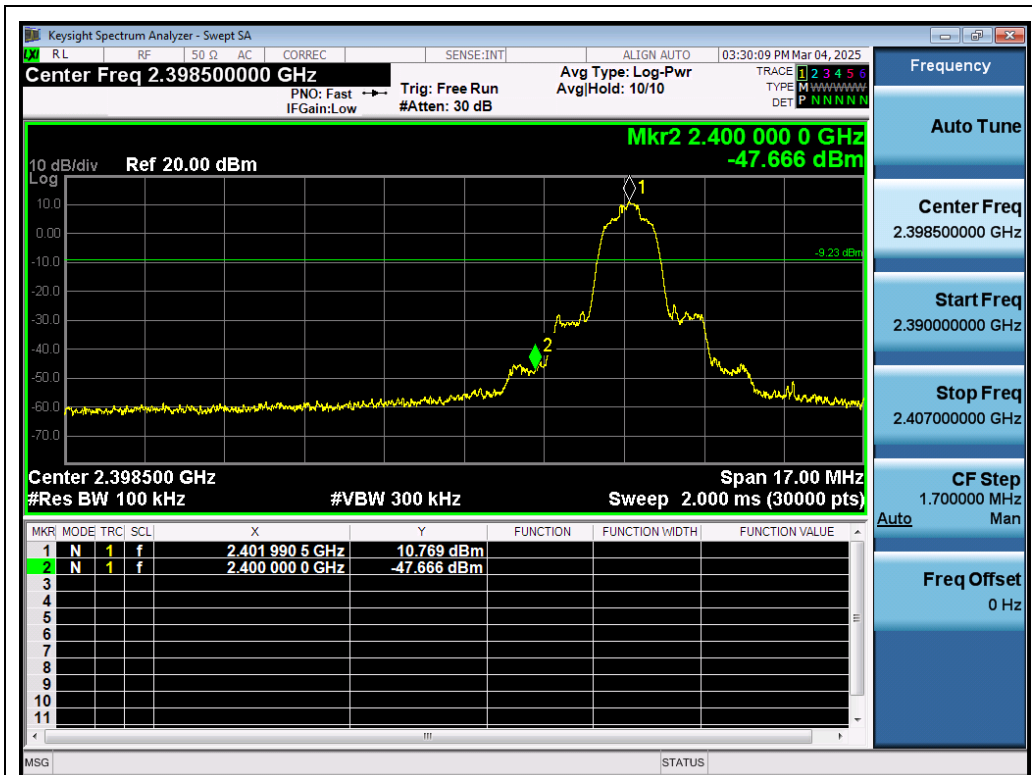
Test_Graph_BR_ANT1_2480_1Mbps_Higher Band Edge Emissions



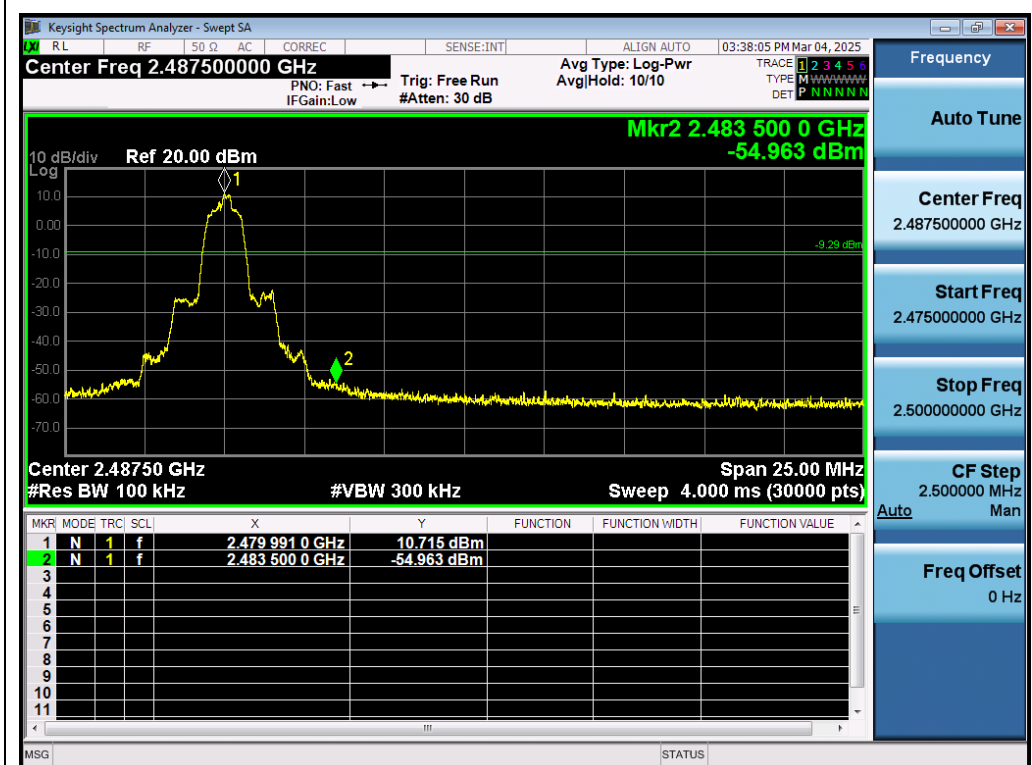
Test_Graph_BR_HOP_ANT1_NA_1Mbps_Lower Band Edge Emissions



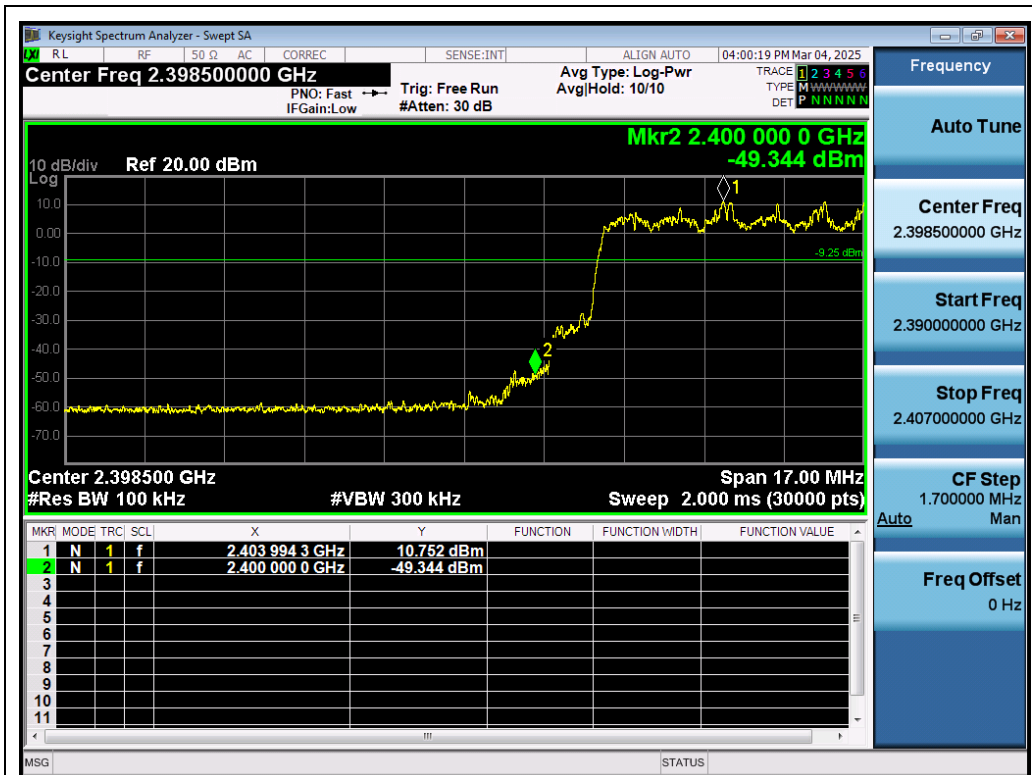
Test_Graph_BR_HOP_ANT1_NA_1Mbps_Higher Band Edge Emissions



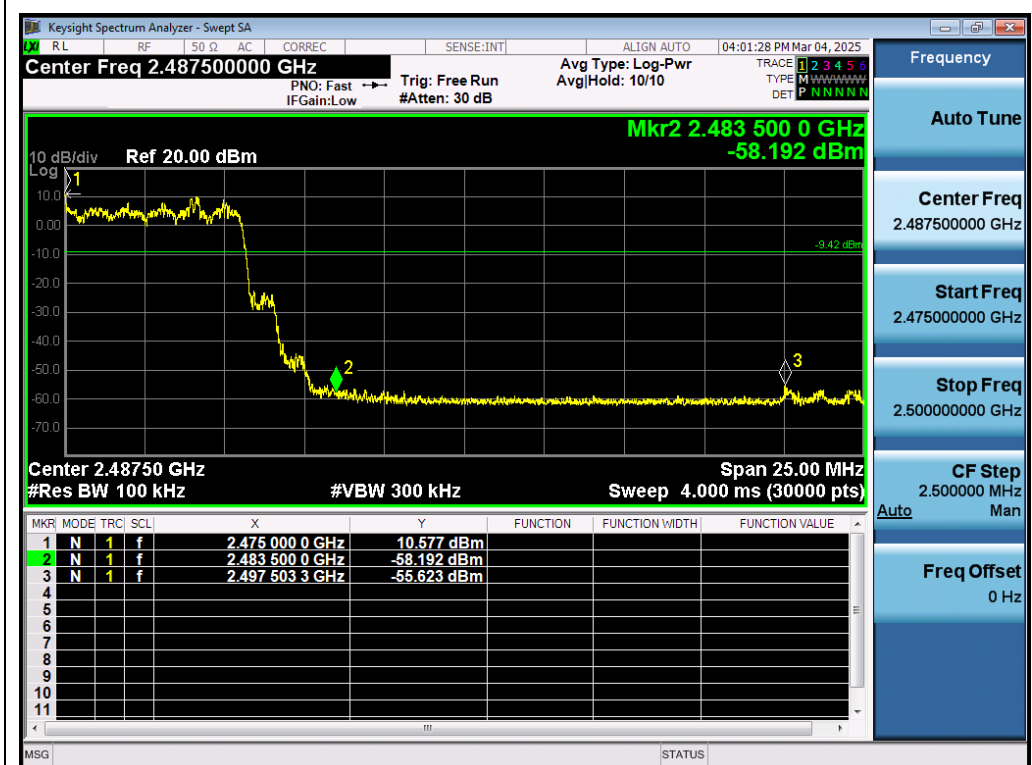
Test_Graph_EDR_ANT1_2402_2Mbps_Lower Band Edge Emissions



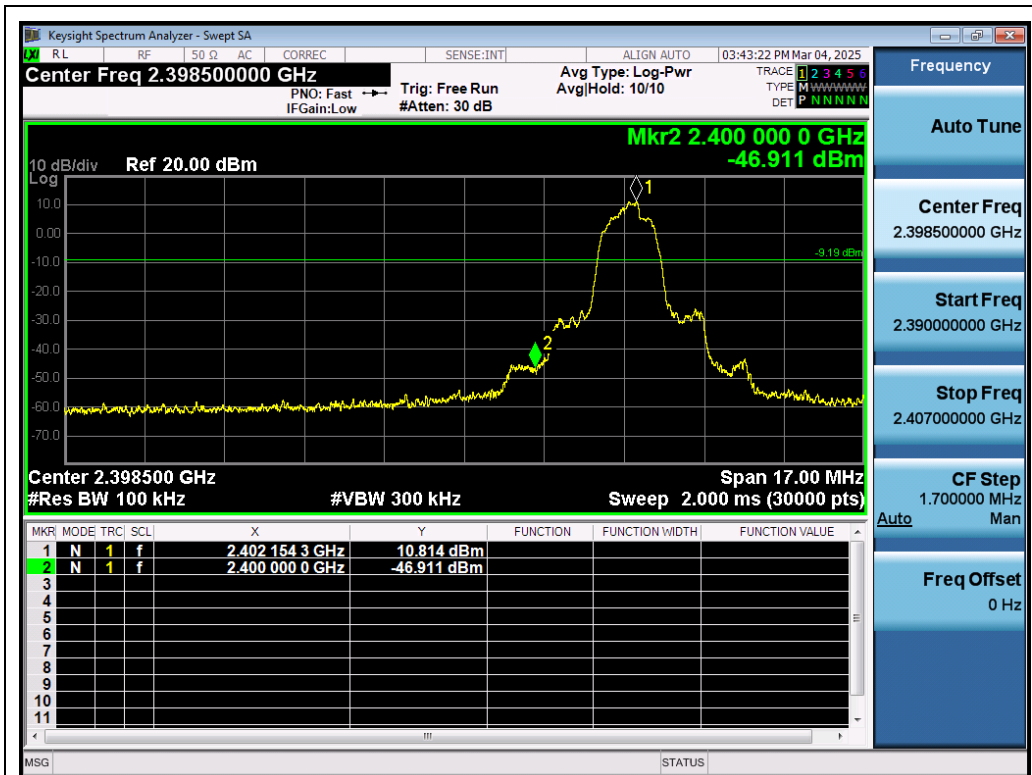
Test_Graph_EDR_ANT1_2480_2Mbps_Higher Band Edge Emissions



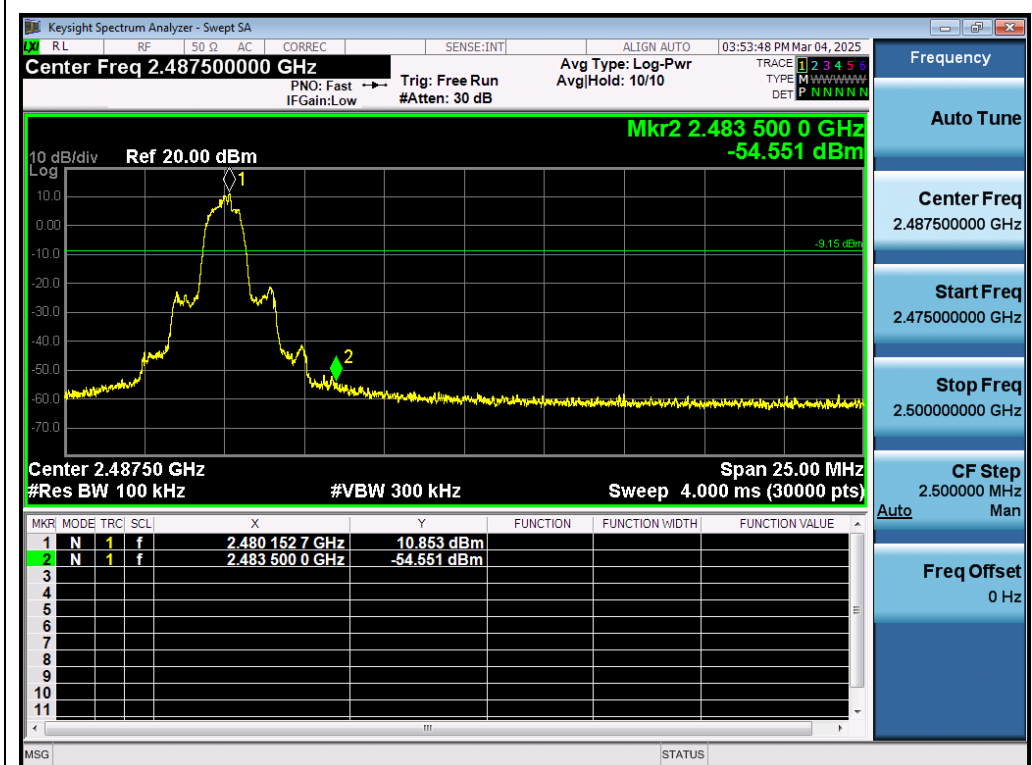
Test_Graph_EDR_HOP_ANT1_NA_2Mbps_Lower Band Edge Emissions



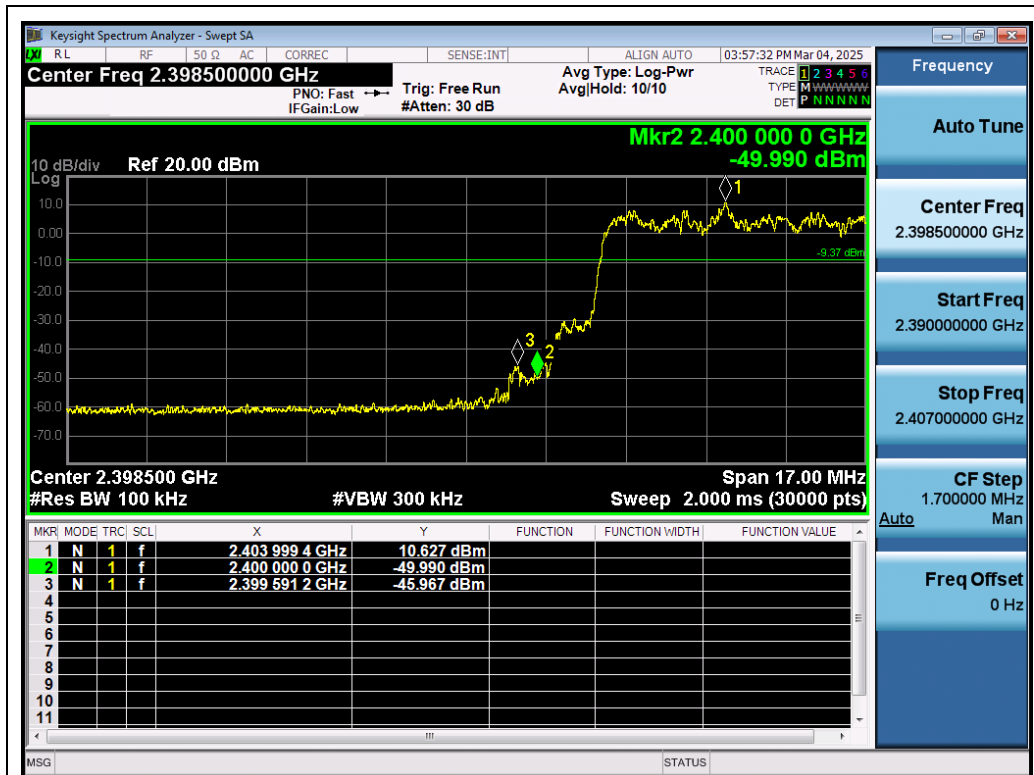
Test_Graph_EDR_HOP_ANT1_NA_2Mbps_Higher Band Edge Emissions



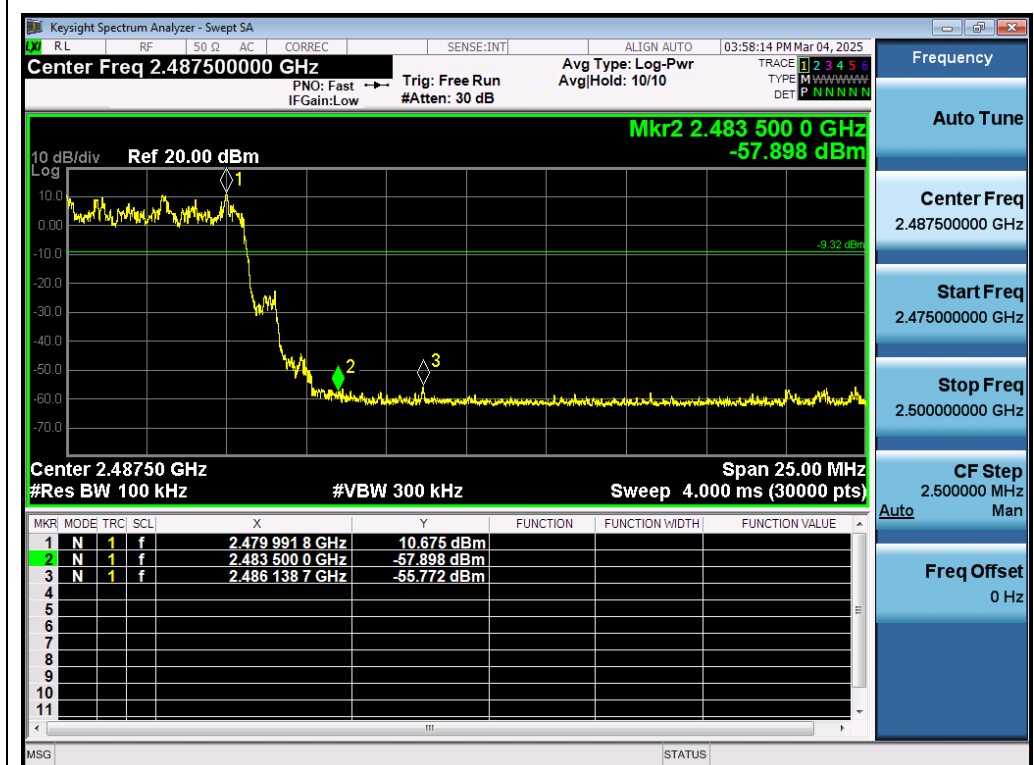
Test_Graph_EDR_ANT1_2402_3Mbps_Lower Band Edge Emissions



Test_Graph_EDR_ANT1_2480_3Mbps_Higher Band Edge Emissions



Test_Graph_EDR_HOP_ANT1_NA_3Mbps_Lower Band Edge Emissions



Test_Graph_EDR_HOP_ANT1_NA_3Mbps_Higher Band Edge Emissions

Appendix G: Conducted Spurious Emission

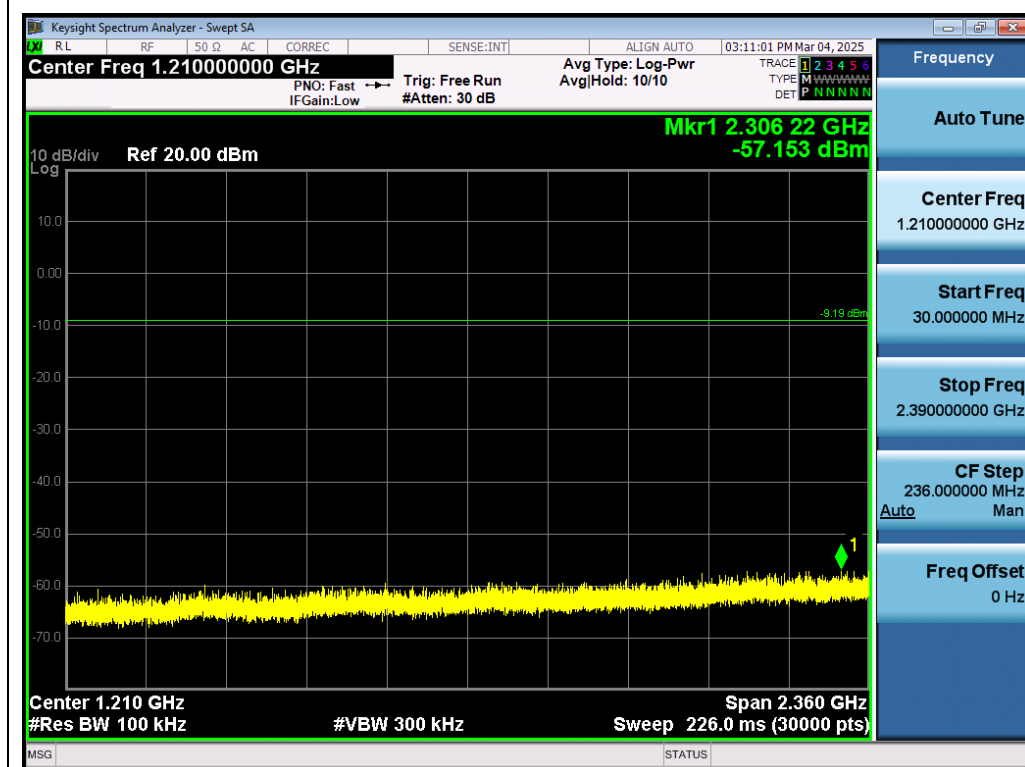
Test Result

Test Mode	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
GFSK	2402	0~Reference	10.807	10.807	---	Pass
GFSK	2402	30~2390	10.807	-57.153	≤ -9.19	Pass
GFSK	2402	2483.5~25000	10.807	-47.633	≤ -9.19	Pass
GFSK	2441	0~Reference	10.873	10.873	---	Pass
GFSK	2441	30~2400	10.873	-56.843	≤ -9.13	Pass
GFSK	2441	2483.5~25000	10.873	-47.611	≤ -9.13	Pass
GFSK	2480	0~Reference	10.849	10.849	---	Pass
GFSK	2480	30~2400	10.849	-56.152	≤ -9.15	Pass
GFSK	2480	2500~25000	10.849	-47.472	≤ -9.15	Pass
$\pi/4$ -DQPSK	2402	0~Reference	10.772	10.772	---	Pass
$\pi/4$ -DQPSK	2402	30~2390	10.772	-56.275	≤ -9.23	Pass
$\pi/4$ -DQPSK	2402	2483.5~25000	10.772	-48.052	≤ -9.23	Pass
$\pi/4$ -DQPSK	2441	0~Reference	10.717	10.717	---	Pass
$\pi/4$ -DQPSK	2441	30~2400	10.717	-55.715	≤ -9.28	Pass
$\pi/4$ -DQPSK	2441	2483.5~25000	10.717	-46.593	≤ -9.28	Pass
$\pi/4$ -DQPSK	2480	0~Reference	10.719	10.719	---	Pass
$\pi/4$ -DQPSK	2480	30~2400	10.719	-56.338	≤ -9.28	Pass
$\pi/4$ -DQPSK	2480	2500~25000	10.719	-47.418	≤ -9.28	Pass
8DPSK	2402	0~Reference	10.815	10.815	---	Pass
8DPSK	2402	30~2390	10.815	-56.670	≤ -9.19	Pass
8DPSK	2402	2483.5~25000	10.815	-47.463	≤ -9.19	Pass
8DPSK	2441	0~Reference	10.845	10.845	---	Pass
8DPSK	2441	30~2400	10.845	-56.442	≤ -9.15	Pass
8DPSK	2441	2483.5~25000	10.845	-47.244	≤ -9.15	Pass
8DPSK	2480	0~Reference	10.587	10.587	---	Pass
8DPSK	2480	30~2400	10.587	-56.562	≤ -9.41	Pass
8DPSK	2480	2500~25000	10.587	-47.108	≤ -9.41	Pass

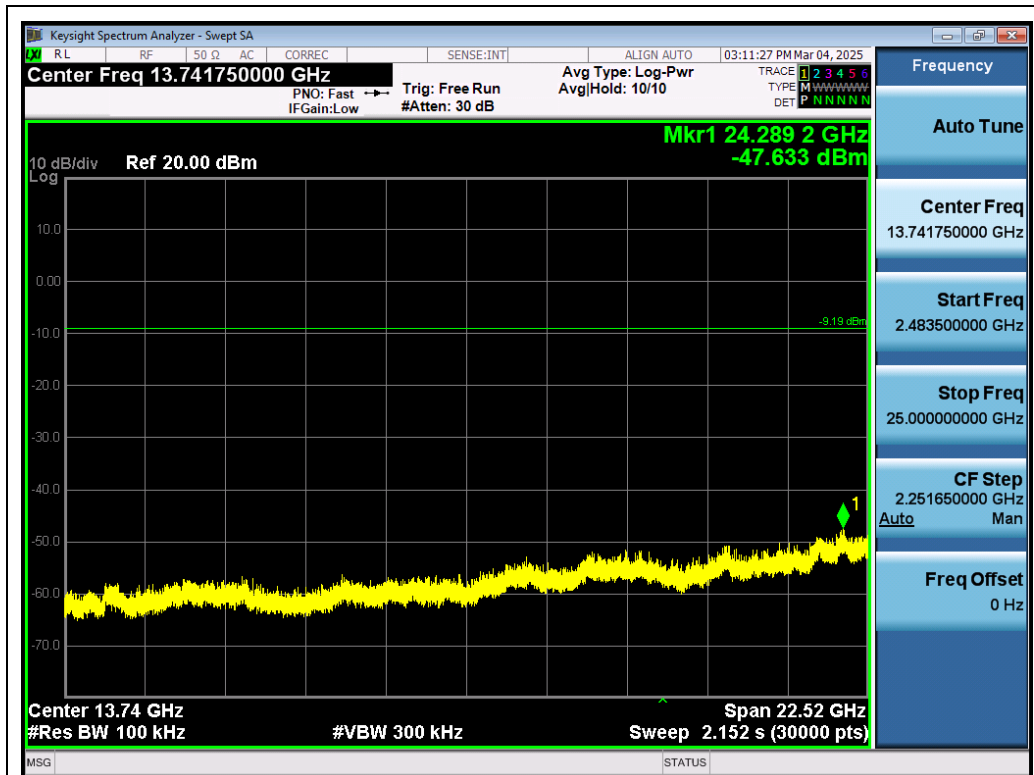
Test Graphs



Test_Graph_BR_ANT1_2402_1Mbps_Reference Level



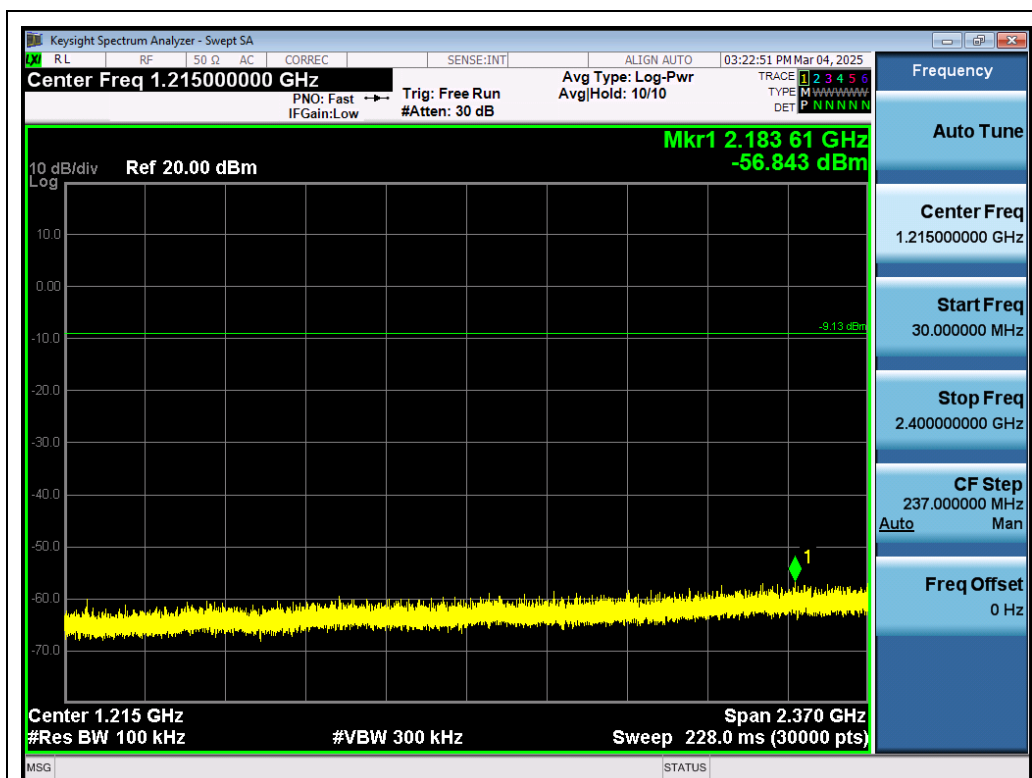
Test_Graph_BR_ANT1_2402_1Mbps_Lower Band Emissions



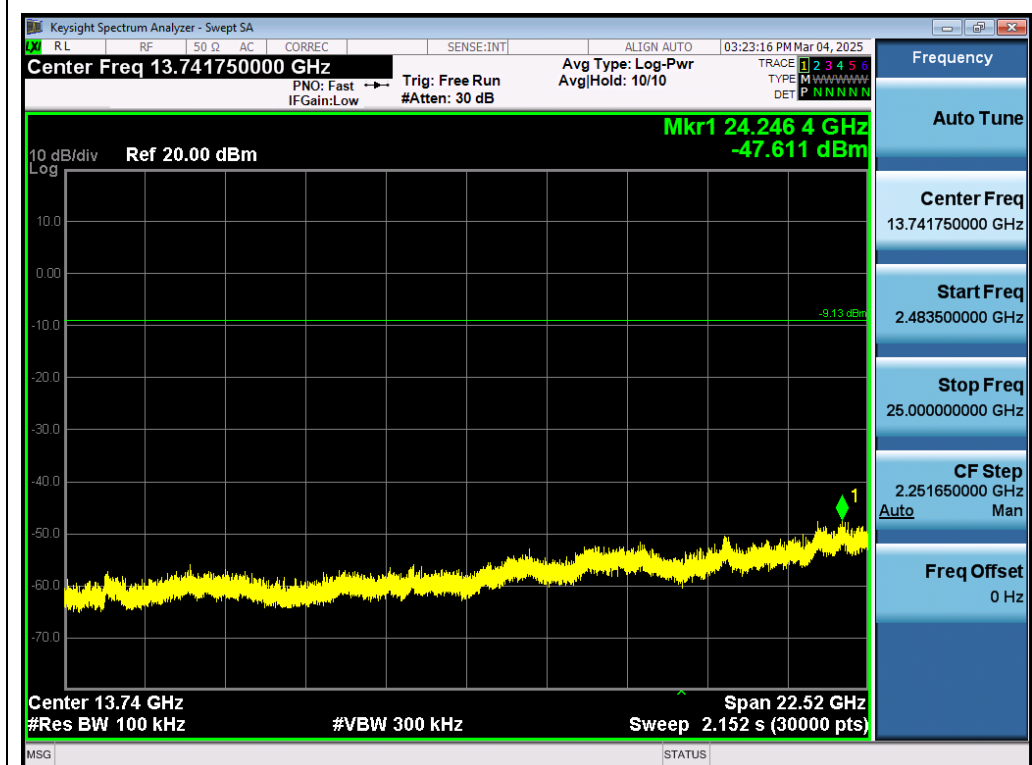
Test_Graph_BR_ANT1_2402_1Mbps_Higher Band Emissions



Test_Graph_BR_ANT1_2441_1Mbps_Reference Level



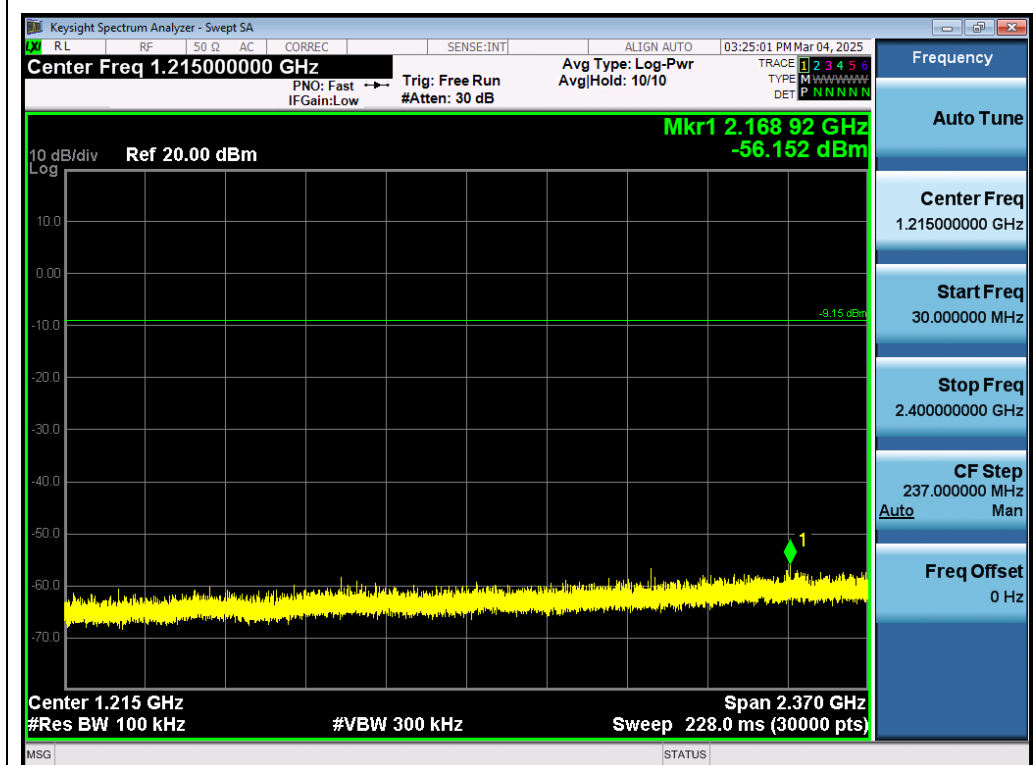
Test_Graph_BR_ANT1_2441_1Mbps_Lower Band Emissions



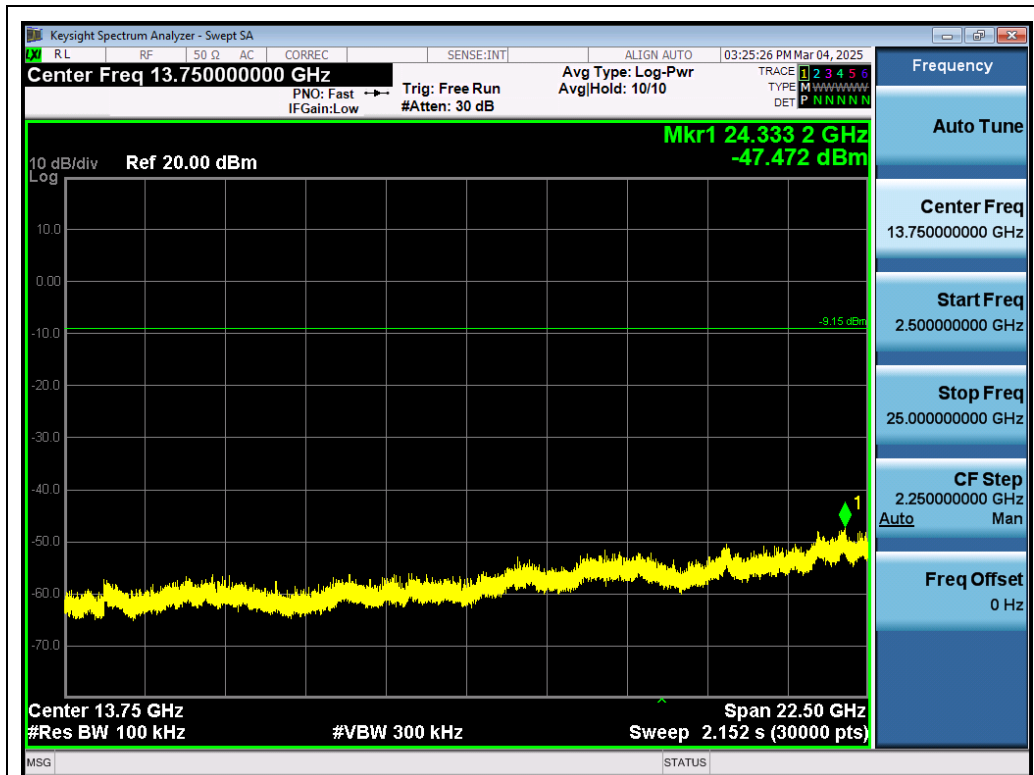
Test_Graph_BR_ANT1_2441_1Mbps_Higher Band Emissions



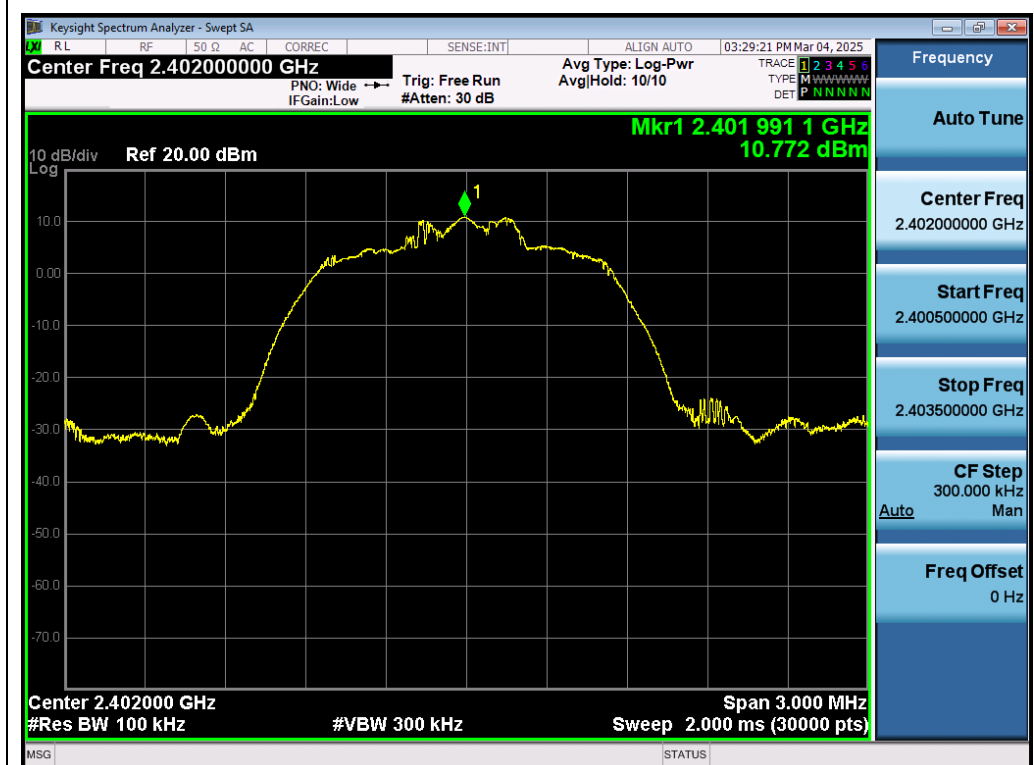
Test_Graph_BR_ANT1_2480_1Mbps_Reference Level



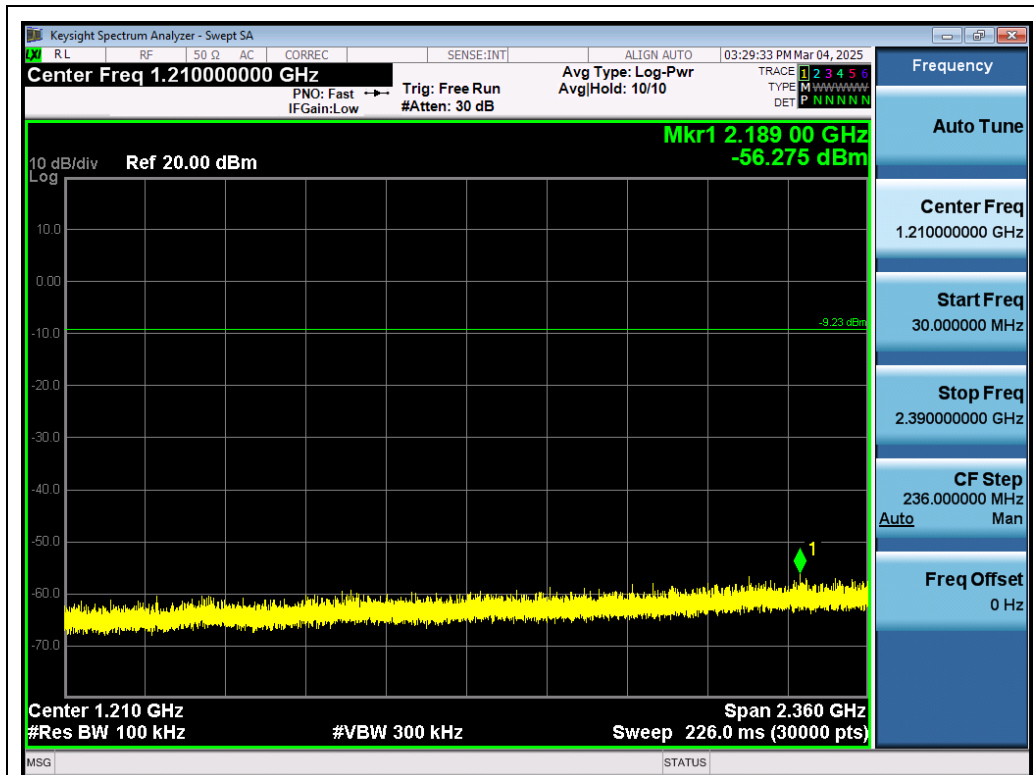
Test_Graph_BR_ANT1_2480_1Mbps_Lower Band Emissions



Test_Graph_BR_ANT1_2480_1Mbps_Higher Band Emissions



Test_Graph_EDR_ANT1_2402_2Mbps_Reference Level



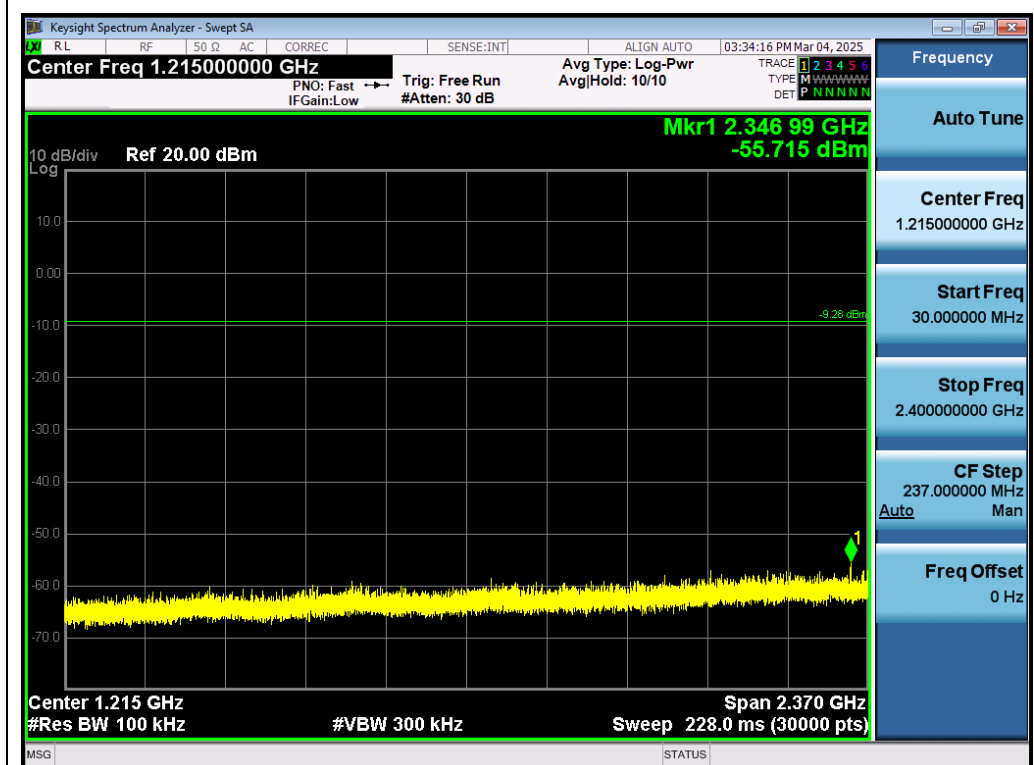
Test_Graph_EDR_ANT1_2402_2Mbps_Lower Band Emissions



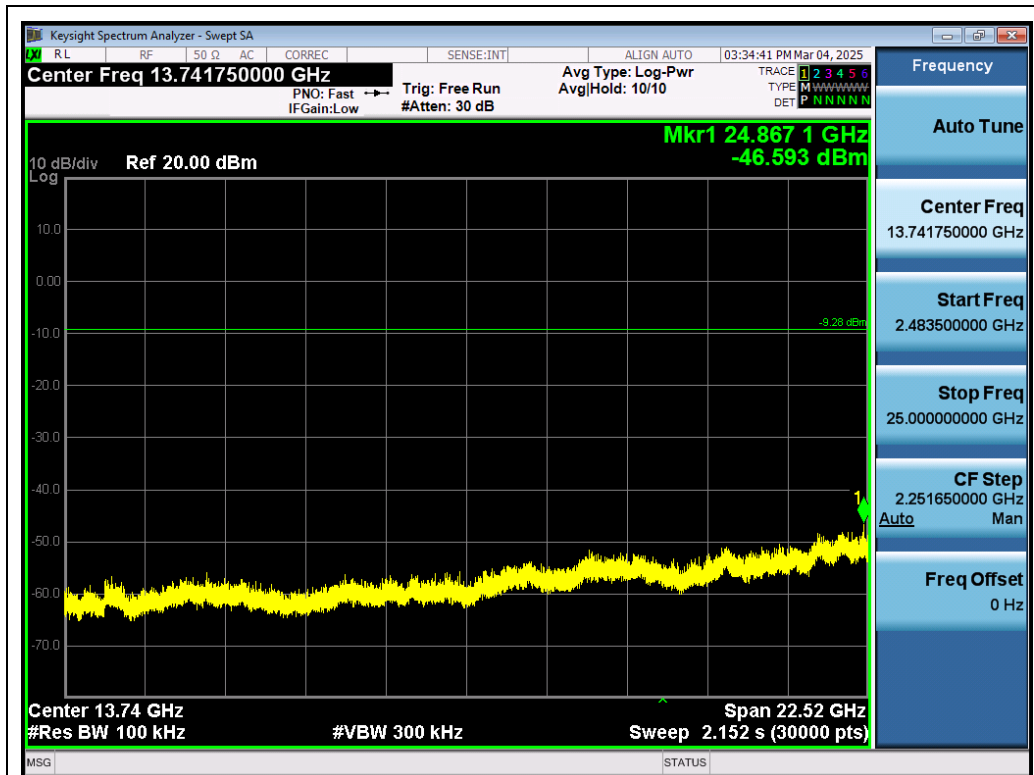
Test_Graph_EDR_ANT1_2402_2Mbps_Higher Band Emissions



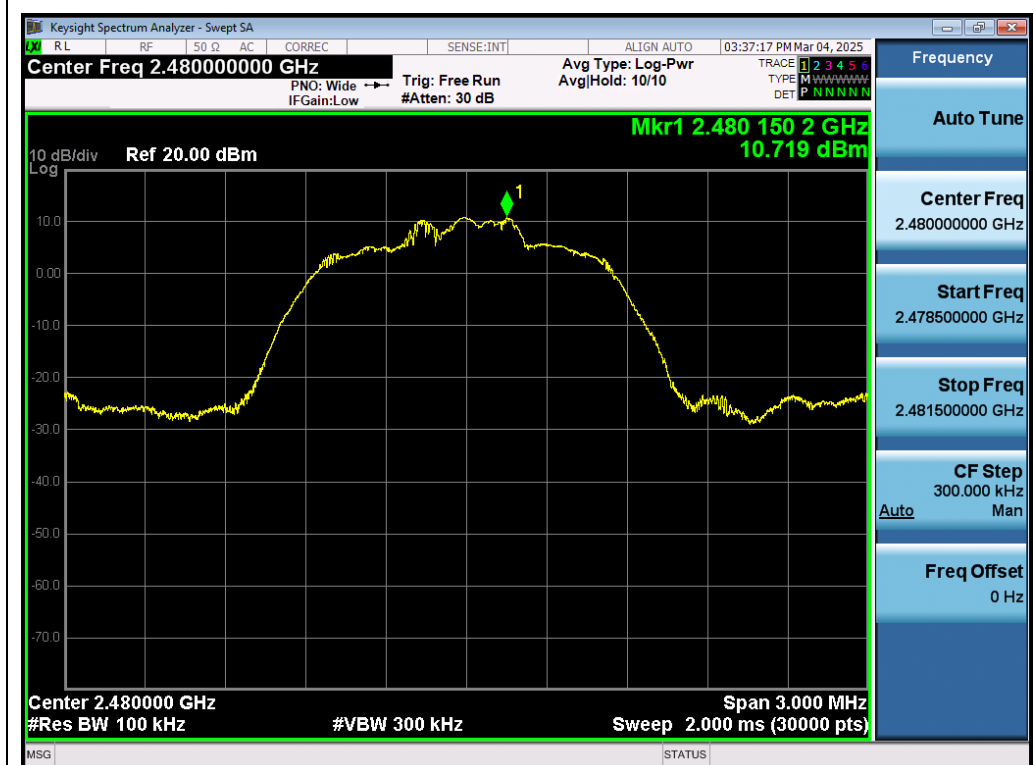
Test_Graph_EDR_ANT1_2441_2Mbps_Reference Level



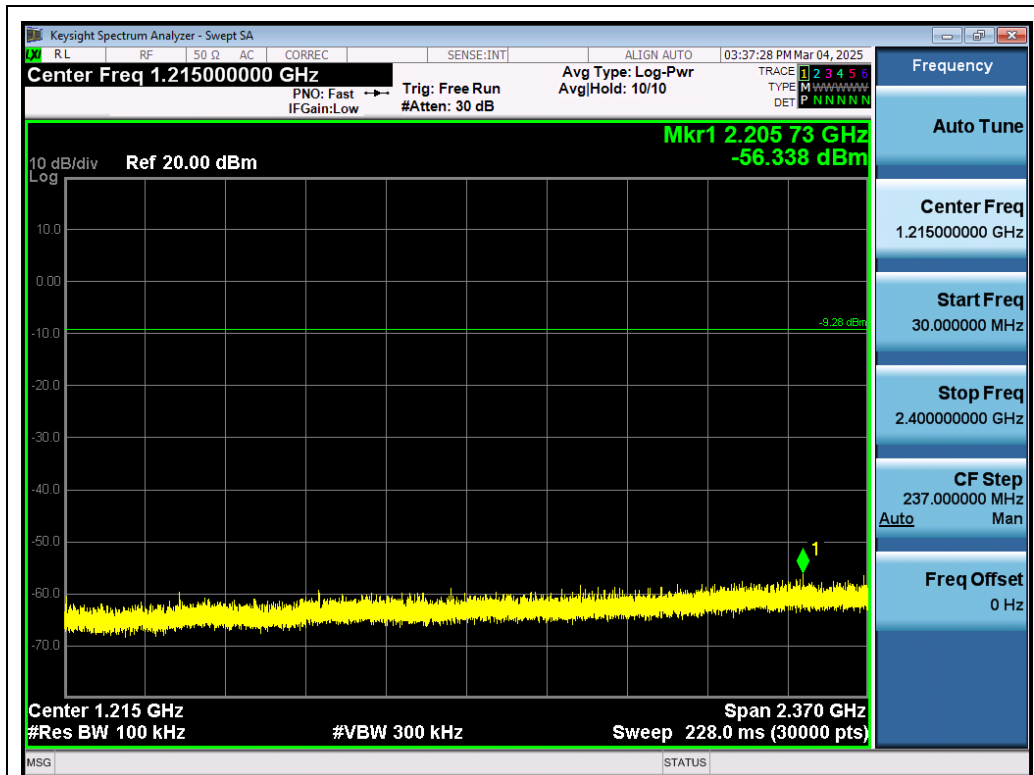
Test_Graph_EDR_ANT1_2441_2Mbps_Lower Band Emissions



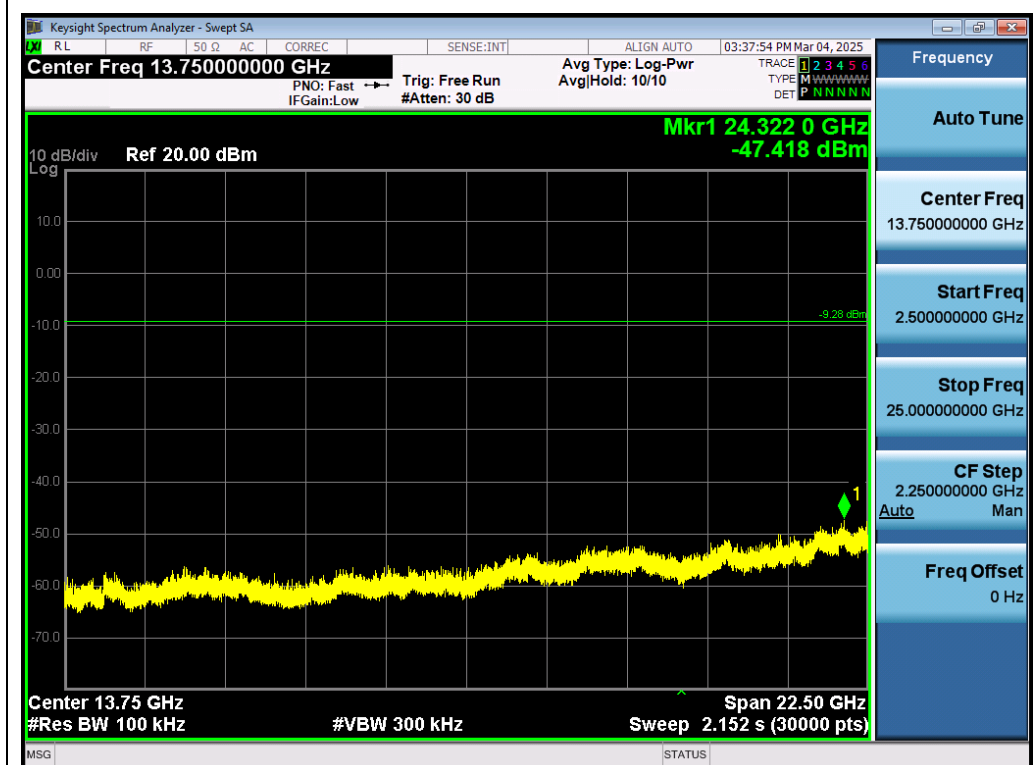
Test_Graph_EDR_ANT1_2441_2Mbps_Higher Band Emissions



Test_Graph_EDR_ANT1_2480_2Mbps_Reference Level



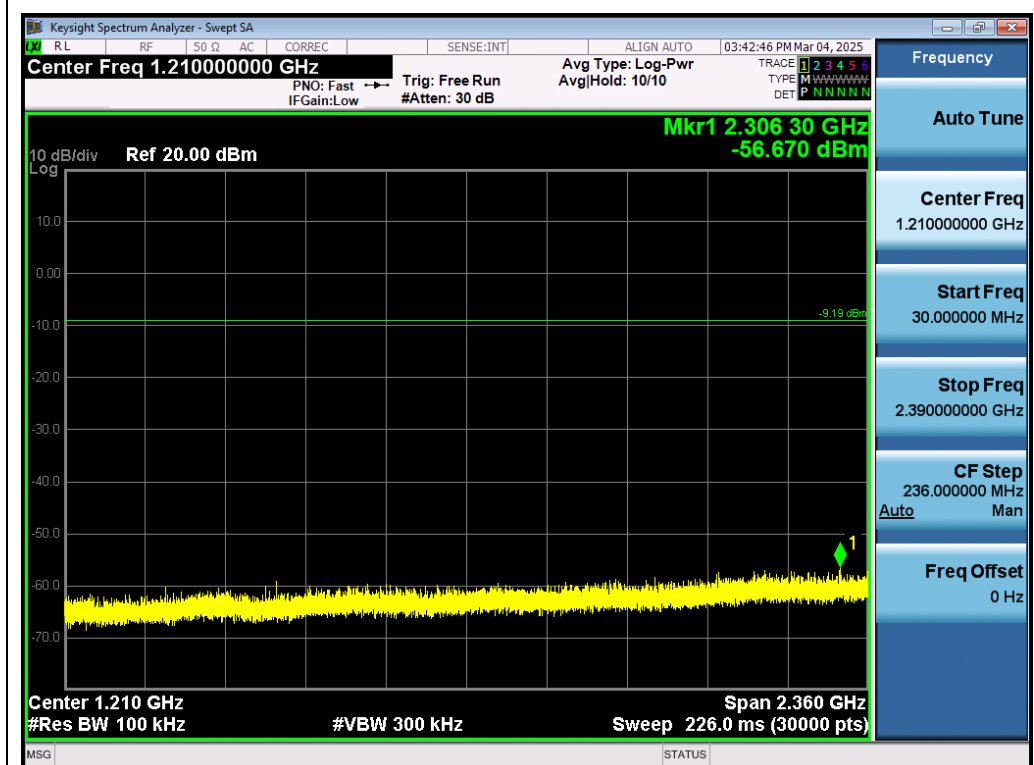
Test_Graph_EDR_ANT1_2480_2Mbps_Lower Band Emissions



Test_Graph_EDR_ANT1_2480_2Mbps_Higher Band Emissions



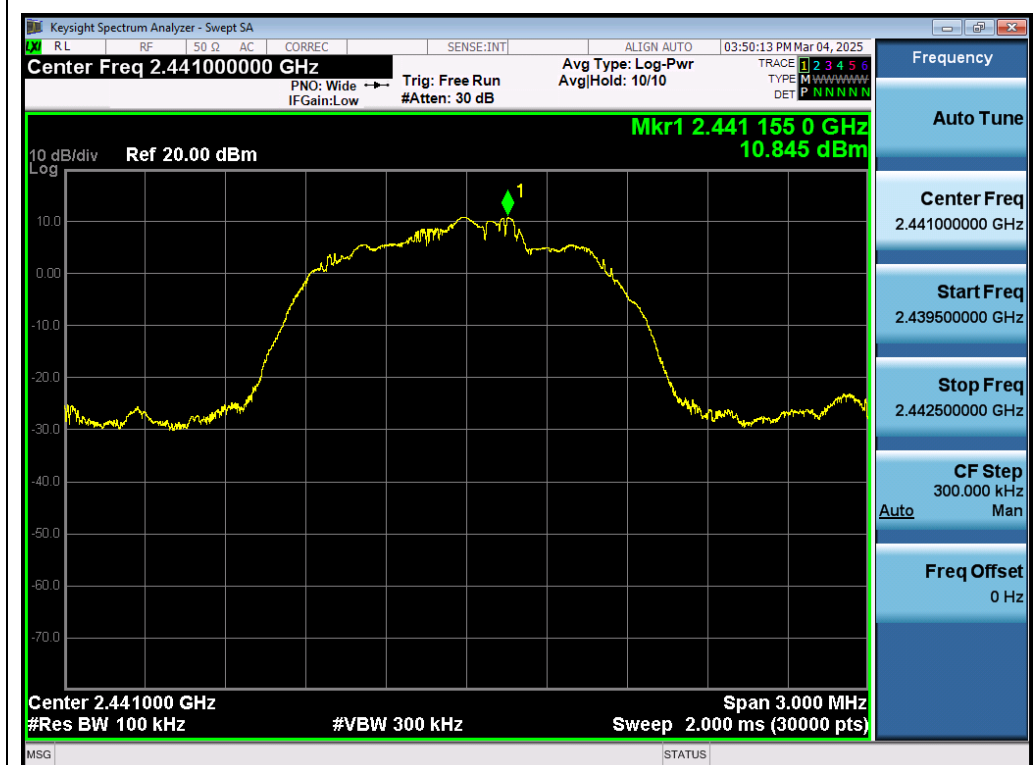
Test_Graph_EDR_ANT1_2402_3Mbps_Reference Level



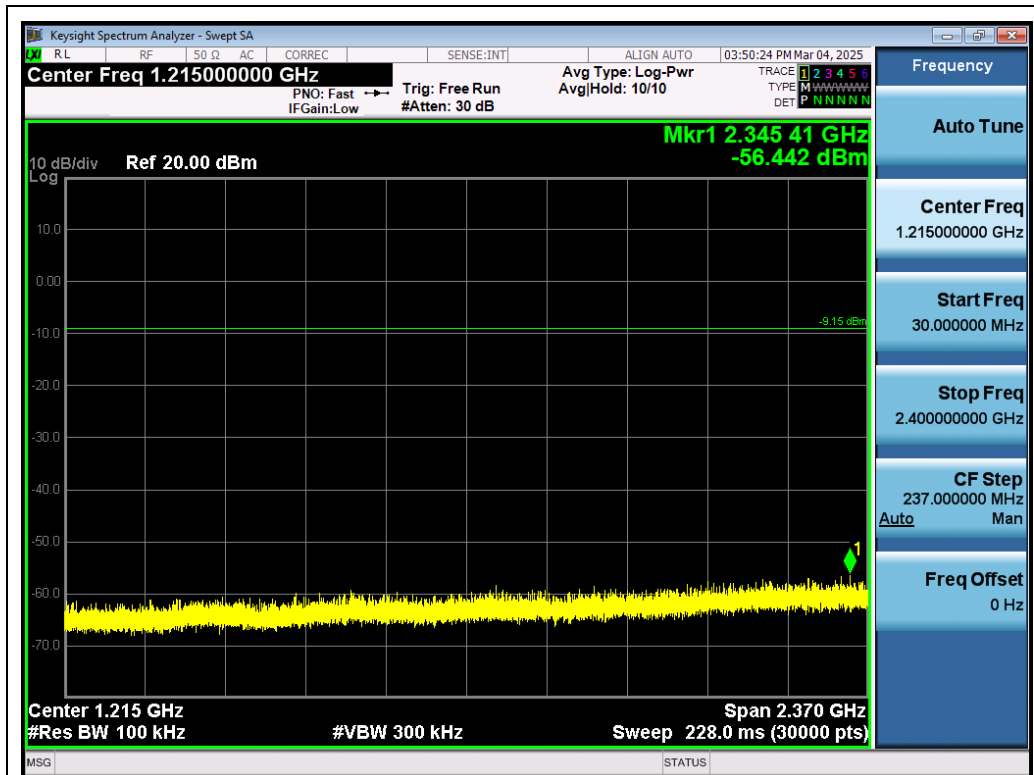
Test_Graph_EDR_ANT1_2402_3Mbps_Lower Band Emissions



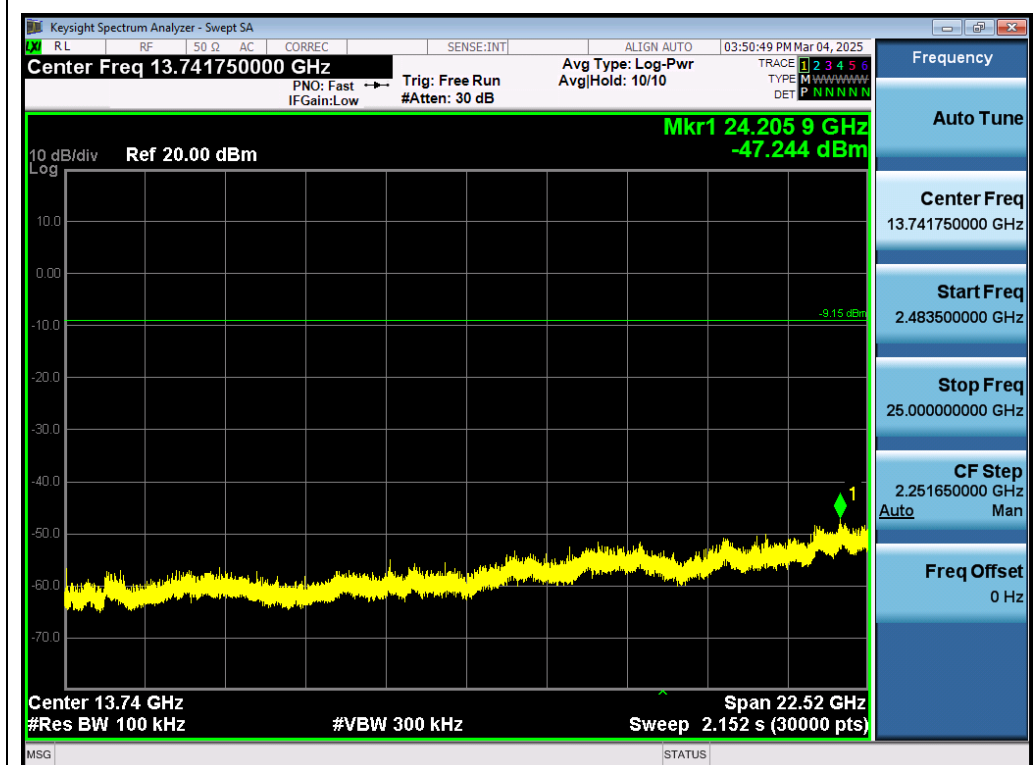
Test_Graph_EDR_ANT1_2402_3Mbps_Higher Band Emissions



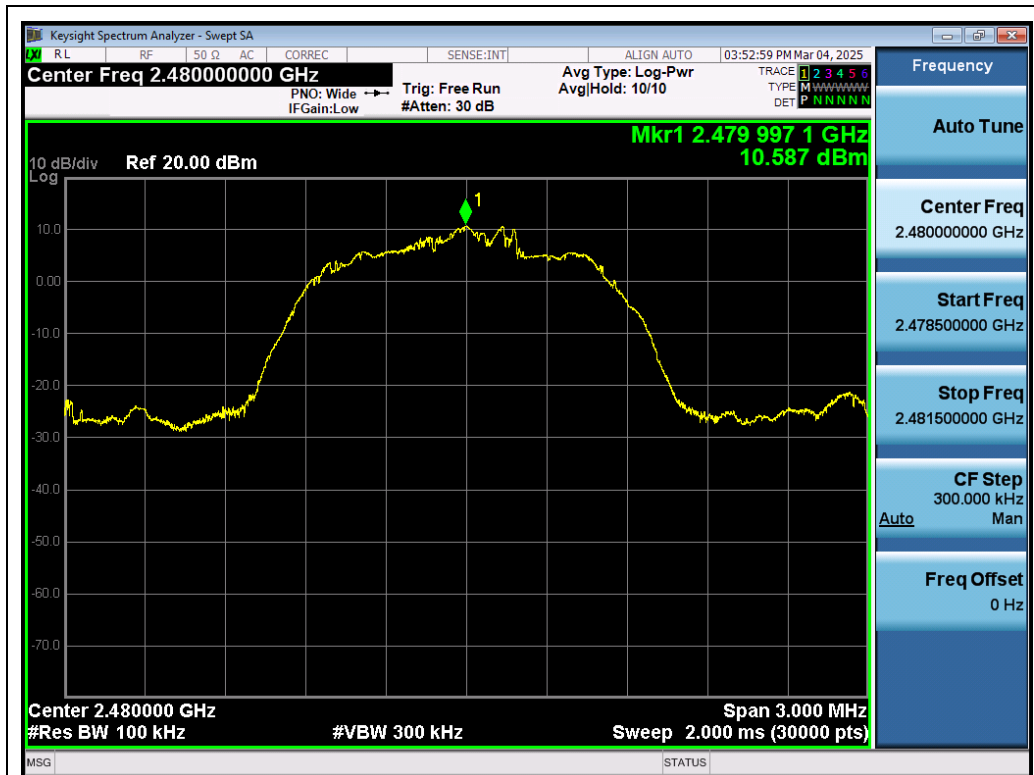
Test_Graph_EDR_ANT1_2441_3Mbps_Reference Level



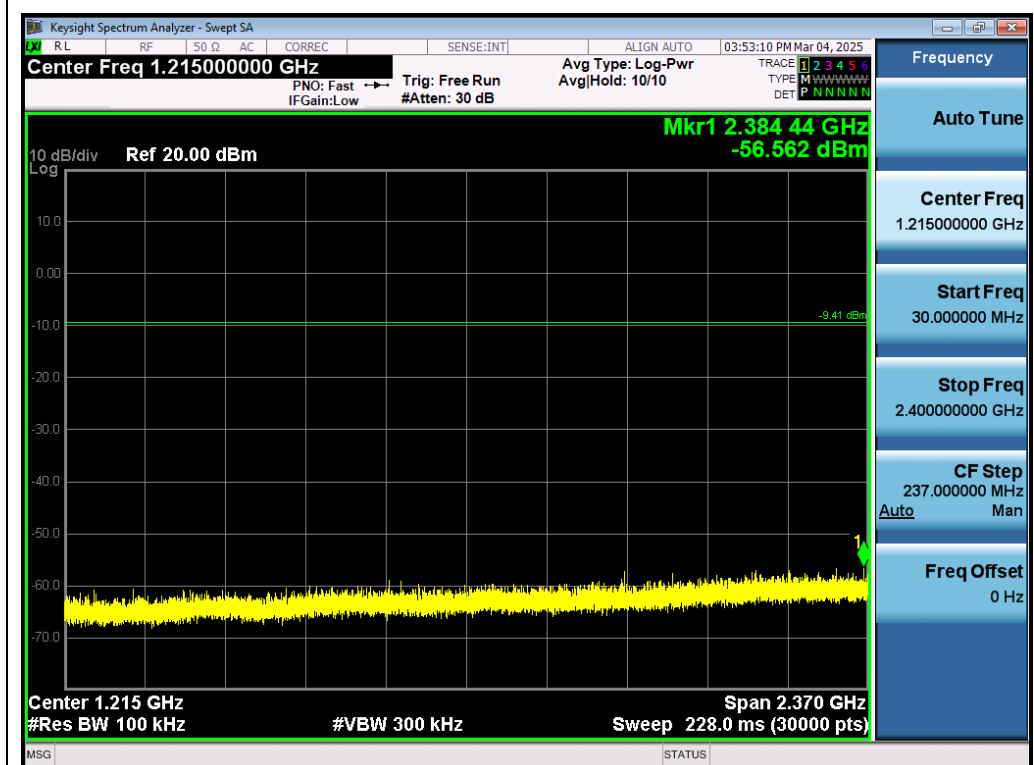
Test_Graph_EDR_ANT1_2441_3Mbps_Lower Band Emissions



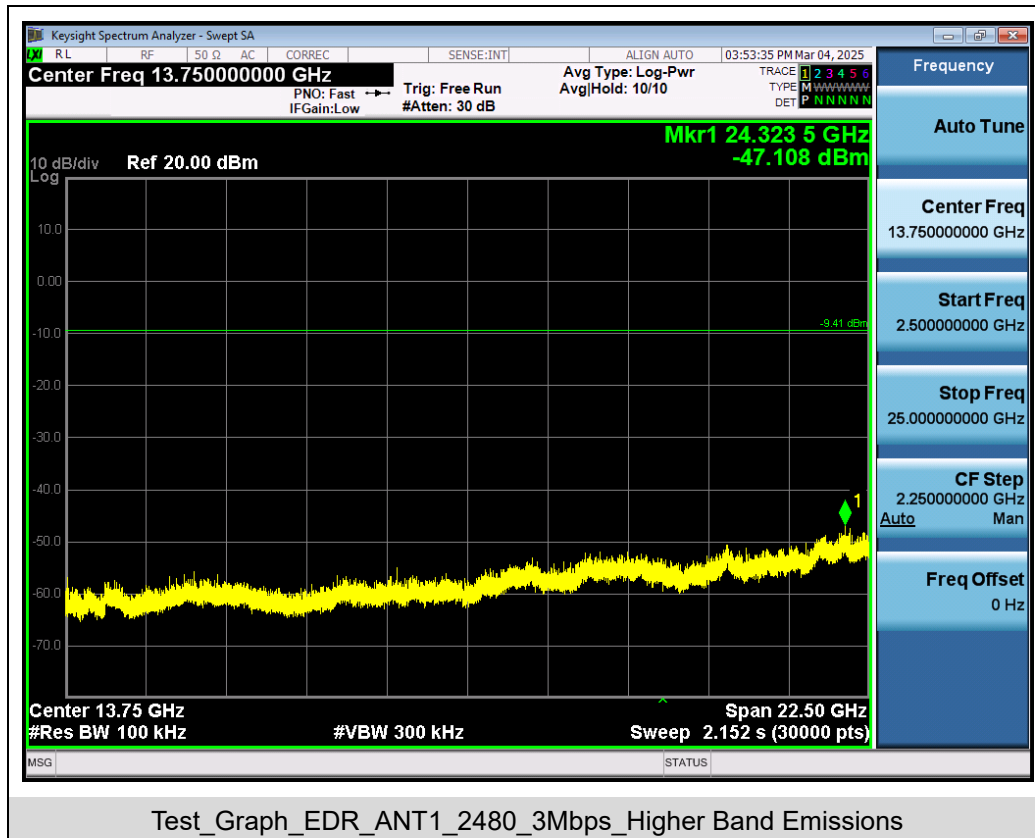
Test_Graph_EDR_ANT1_2441_3Mbps_Higher Band Emissions



Test_Graph_EDR_ANT1_2480_3Mbps_Reference Level



Test_Graph_EDR_ANT1_2480_3Mbps_Lower Band Emissions

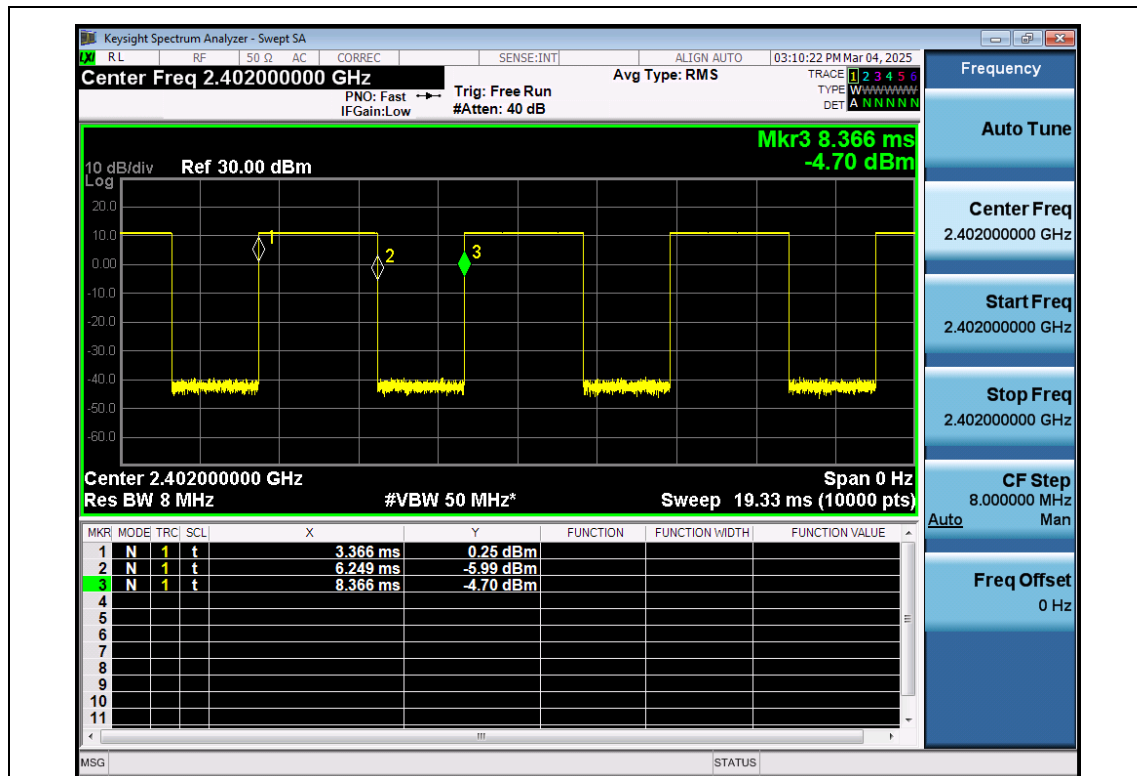


Appendix H: Duty Cycle

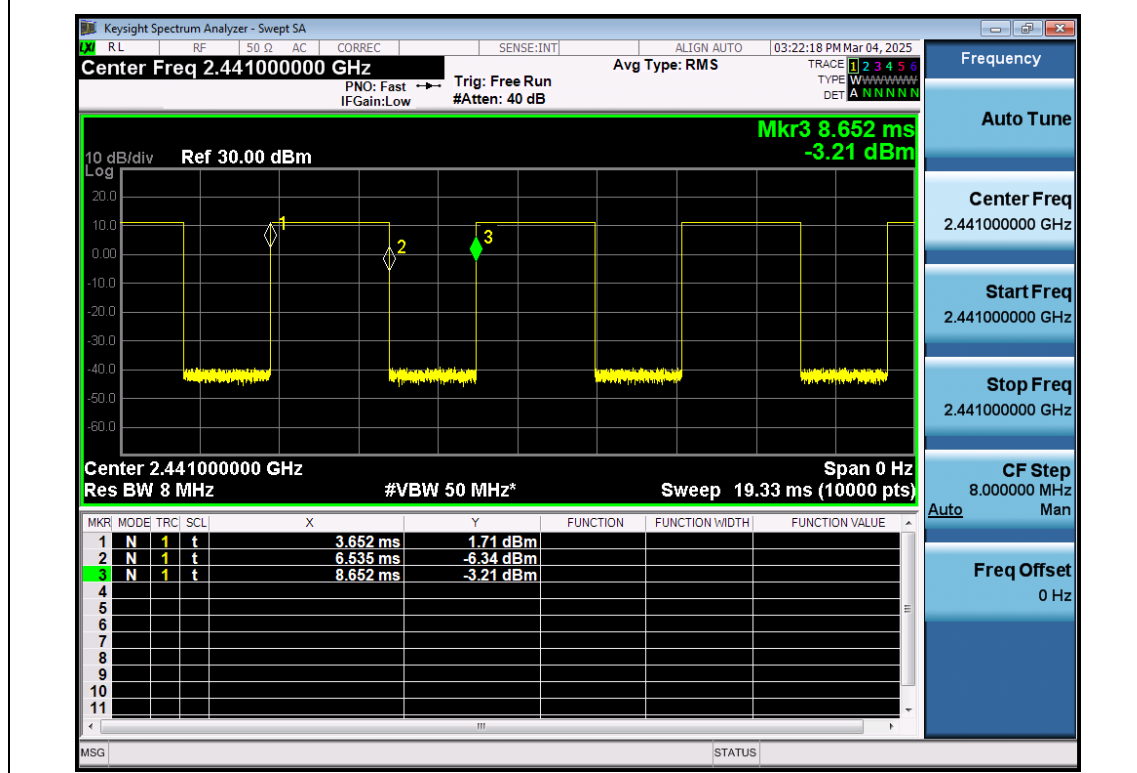
Test Result

Test Mode	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor [dB]
GFSK	2402	2.88	5.00	57.66	2.37
GFSK	2441	2.88	5.00	57.66	2.37
GFSK	2480	2.89	5.00	57.69	2.37
$\pi/4$ -DQPSK	2402	3.41	5.53	61.78	2.08
$\pi/4$ -DQPSK	2441	2.89	5.00	57.79	2.37
$\pi/4$ -DQPSK	2480	3.04	5.15	59.04	2.29
8DPSK	2402	2.89	5.00	57.79	2.37
8DPSK	2441	2.89	5.00	57.82	2.37
8DPSK	2480	2.89	5.00	57.80	2.37

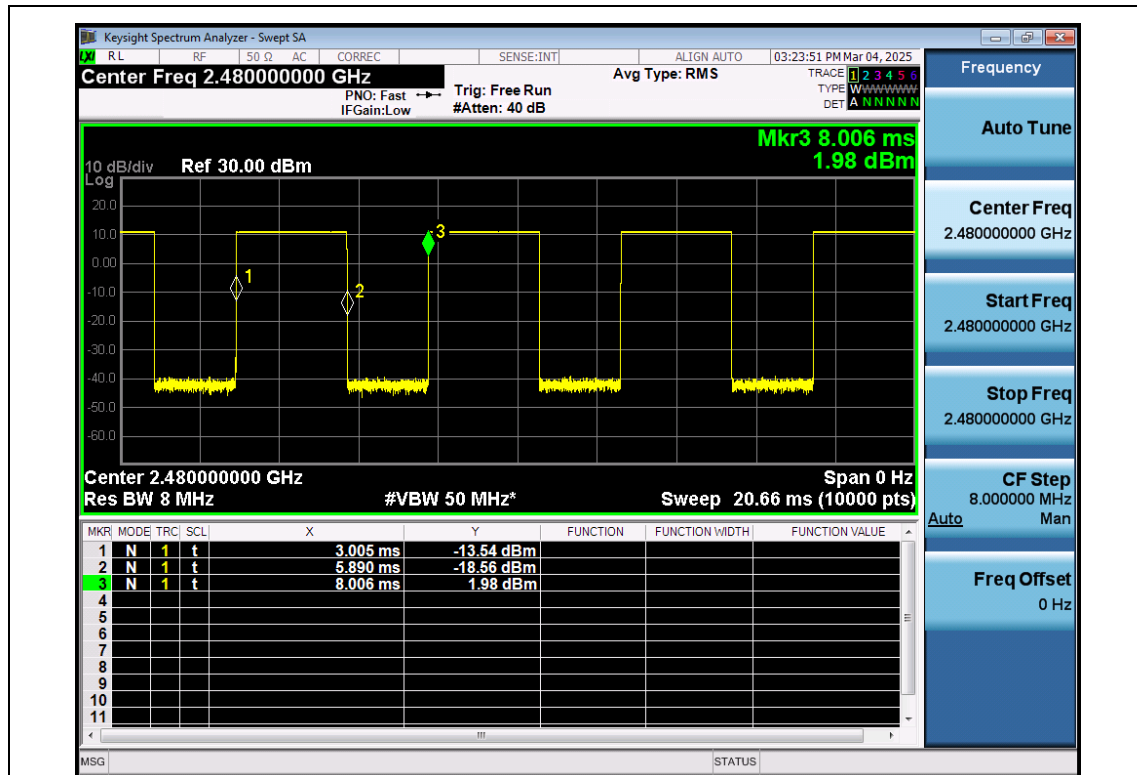
Test Graphs



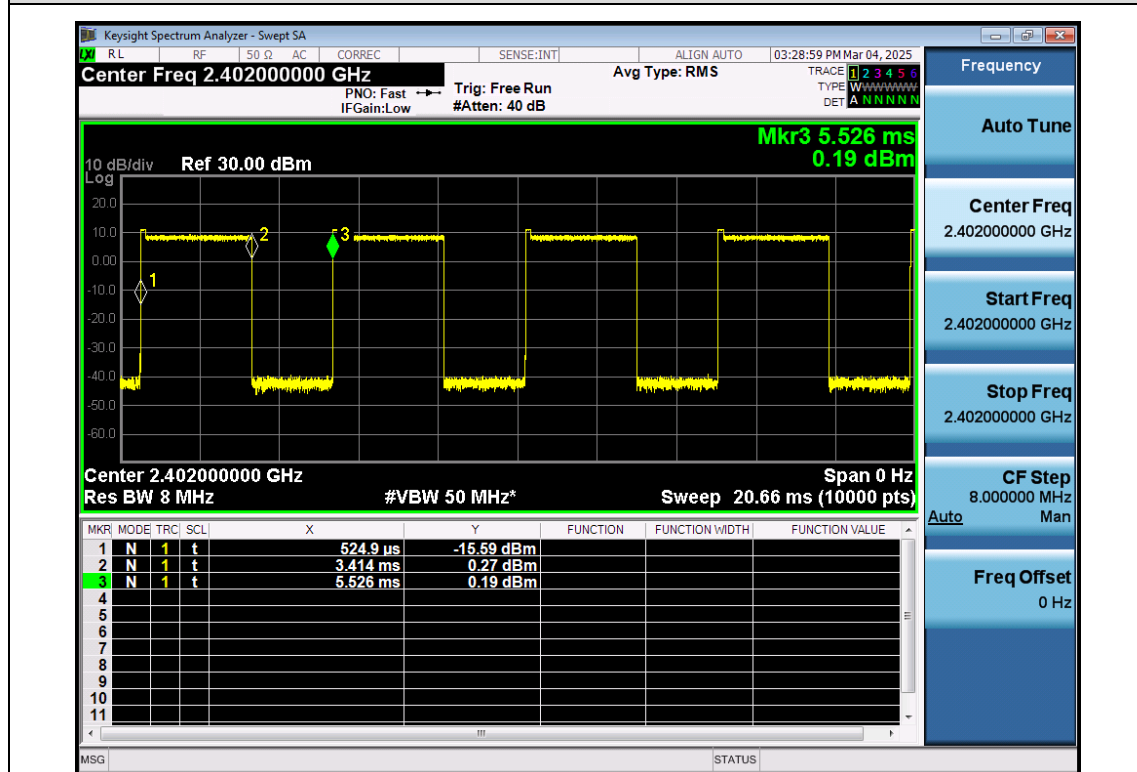
BR-GFSK-ANT1-2402



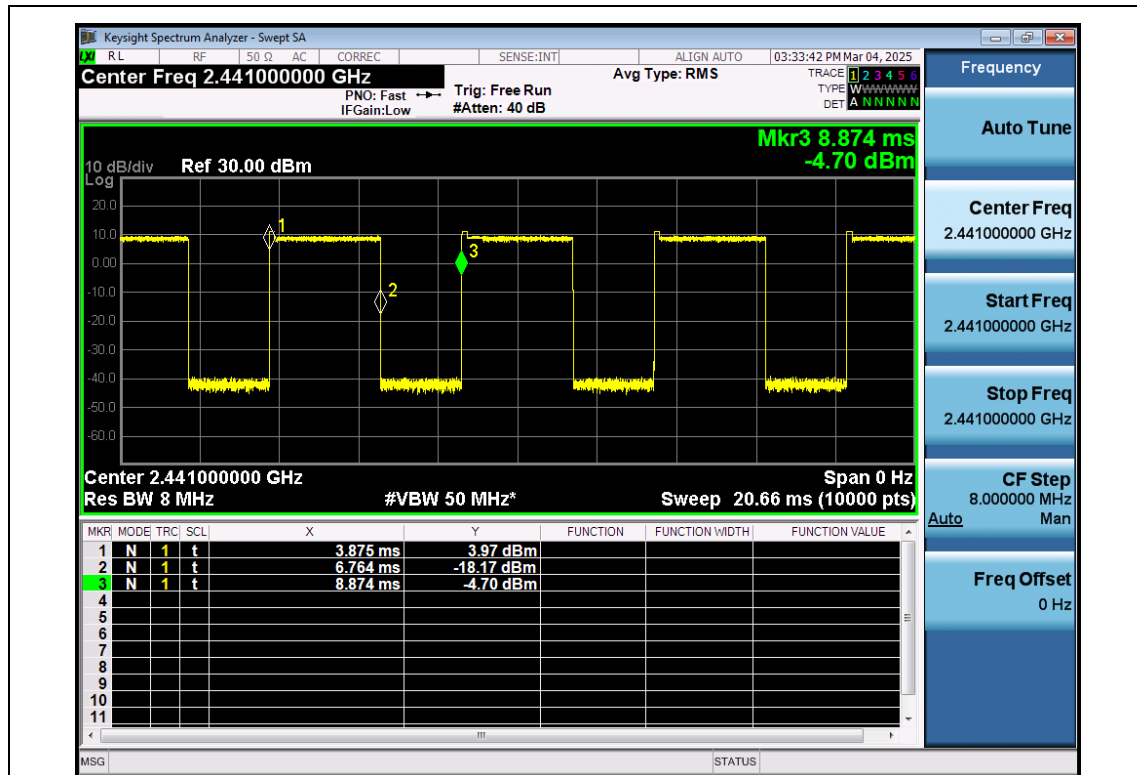
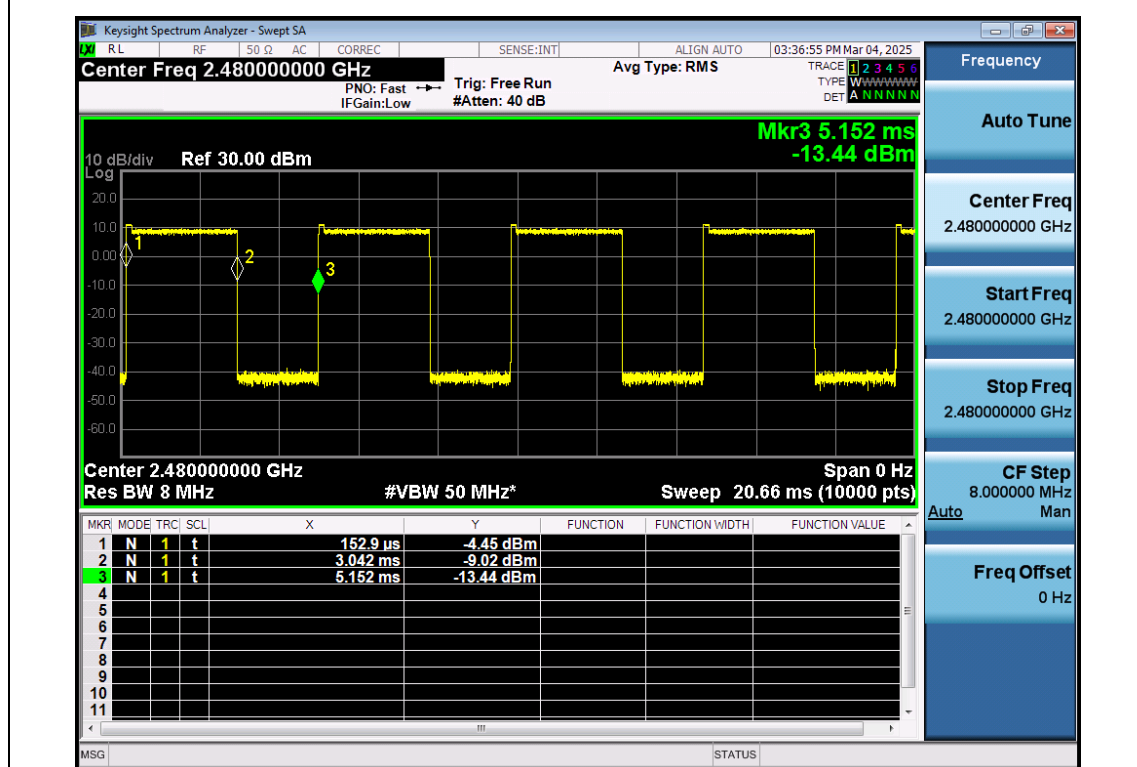
BR-GFSK-ANT1-2441

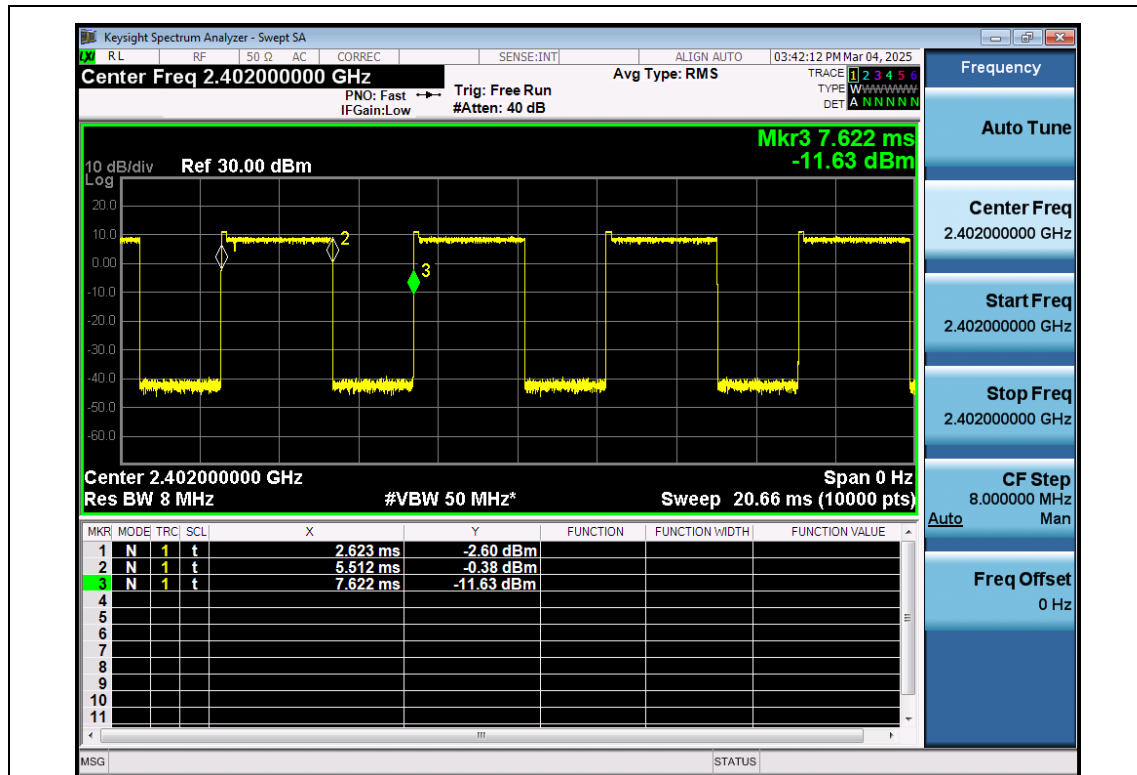


BR-GFSK-ANT1-2480

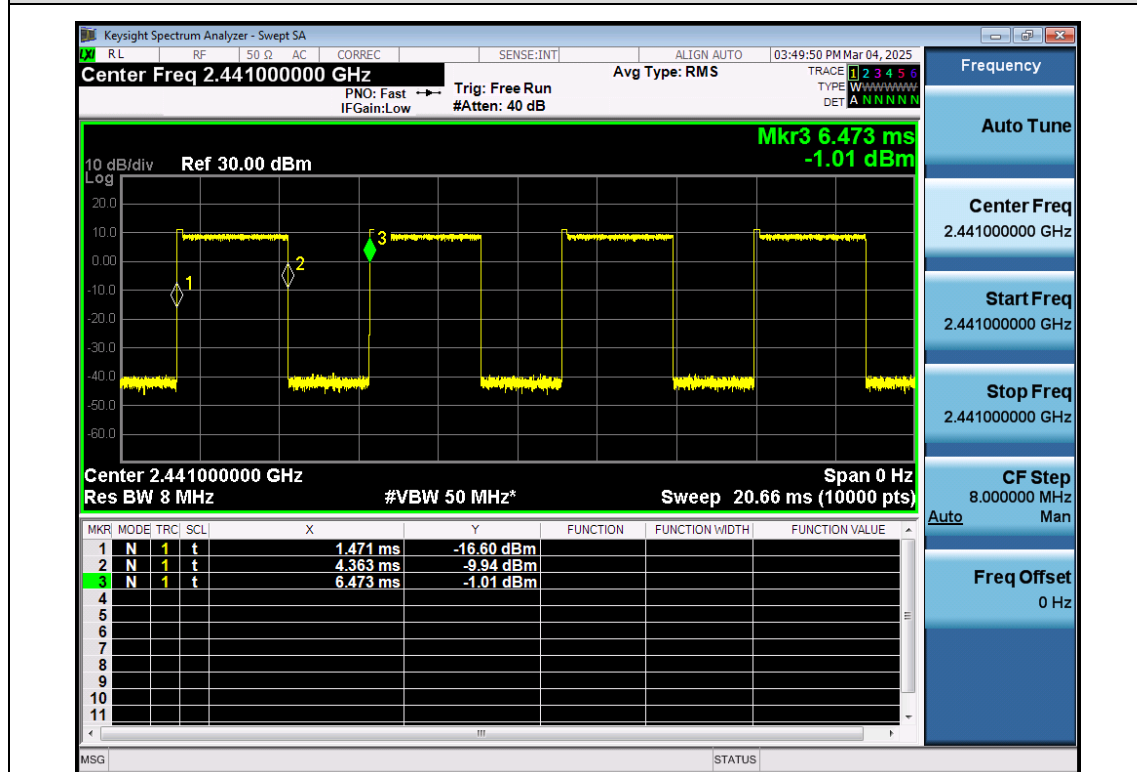


EDR-π /4-DQPSK-ANT1-2402

EDR- π /4-DQPSK-ANT1-2441EDR- π /4-DQPSK-ANT1-2480



EDR--8DPSK-ANT1-2402



EDR-8DPSK-ANT1-2441

