



Appendix Test Data for Wi-Fi 2.4G (Conducted Measurement)

Product Name: bird feeder camera

Trade Mark: /

Test Model: V11-WNQ-01

FCC ID: 2BVEK-V11WNQ01

Environmental Conditions

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

Appendix A: DTS Bandwidth

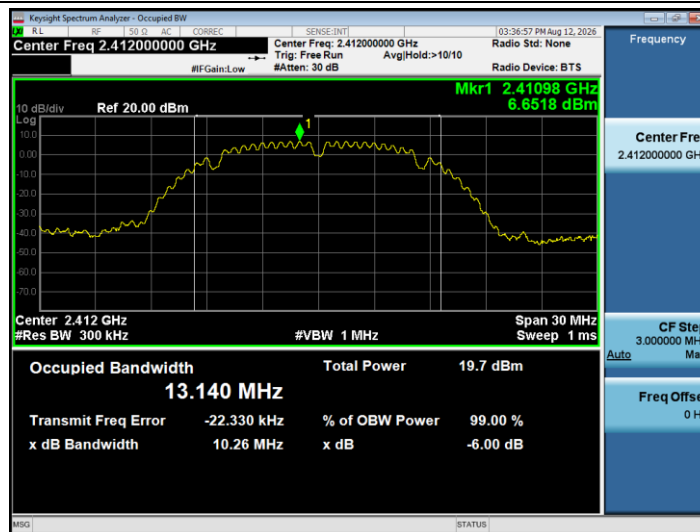
Test Result

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	Limit [MHz]	Verdict
11b	Ant1	2412	10.265	≥0.500	PASS
	Ant1	2437	10.265	≥0.500	PASS
	Ant1	2462	10.267	≥0.500	PASS
11g	Ant1	2412	16.466	≥0.500	PASS
	Ant1	2437	16.461	≥0.500	PASS
	Ant1	2462	16.502	≥0.500	PASS
11n20	Ant1	2412	17.819	≥0.500	PASS
	Ant1	2437	17.811	≥0.500	PASS
	Ant1	2462	17.847	≥0.500	PASS





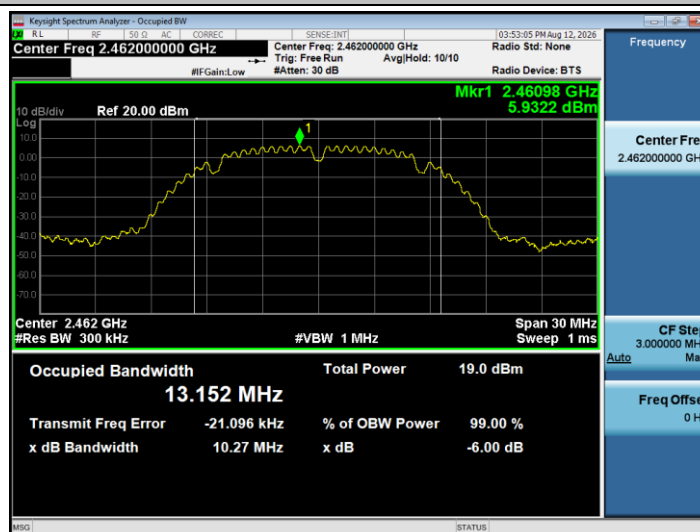
Test Graphs



11b_Ant1_2412

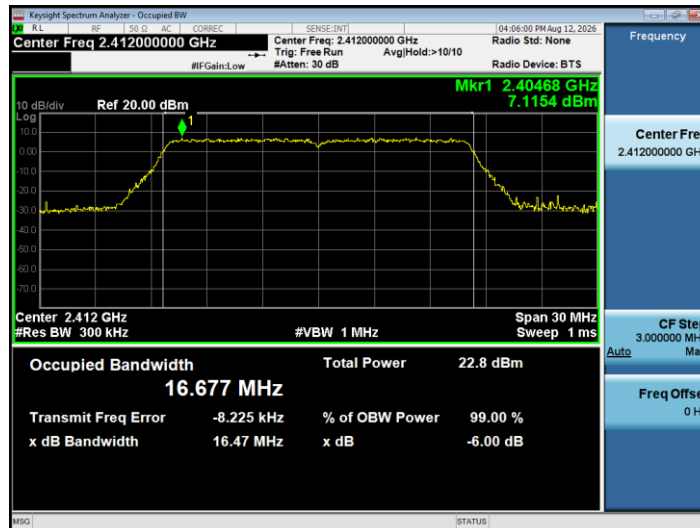


11b_Ant1_2437

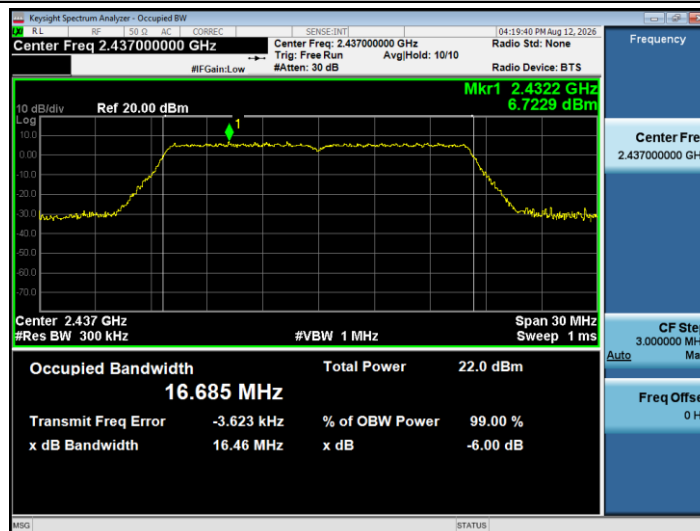


11b_Ant1_2462

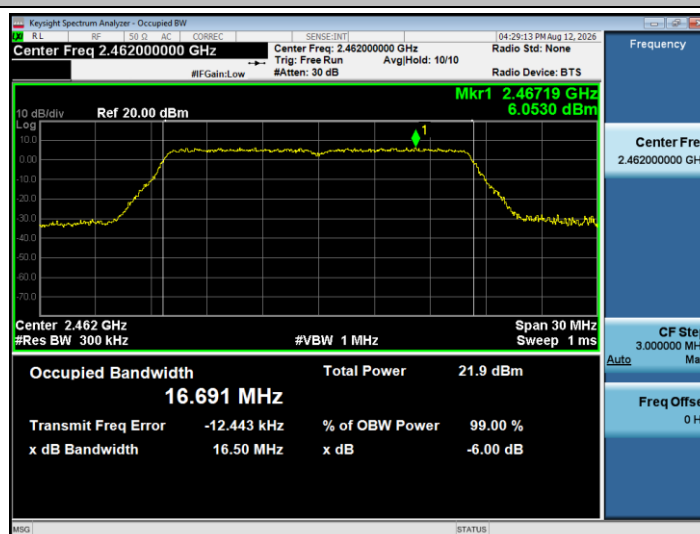




11g_Ant1_2412

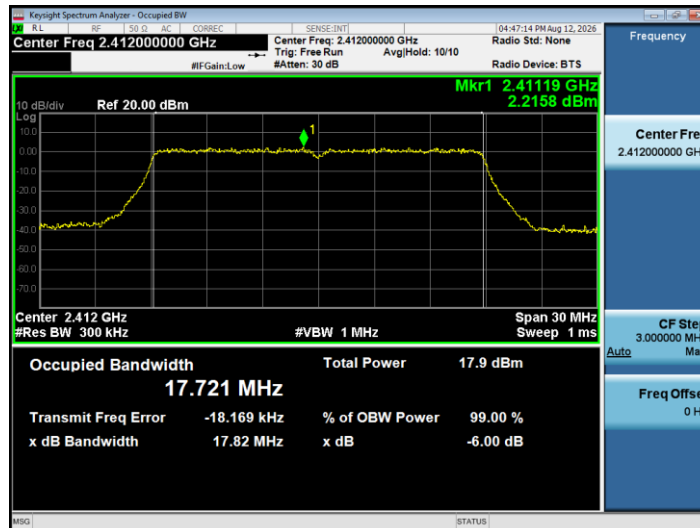


11g_Ant1_2437

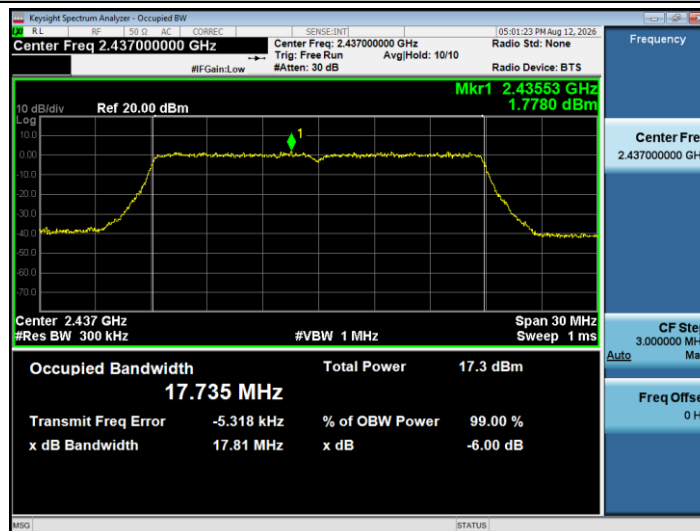


11g_Ant1_2462

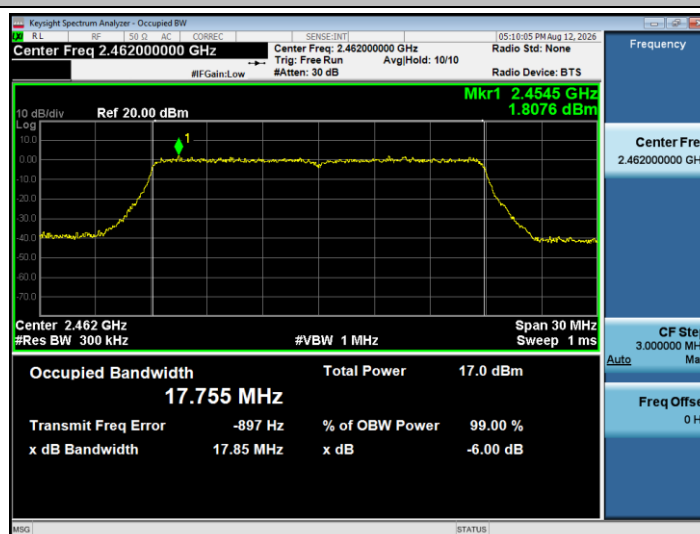




11n20_Ant1_2412



11n20_Ant1_2437



11n20_Ant1_2462





Appendix B: Occupied Channel Bandwidth

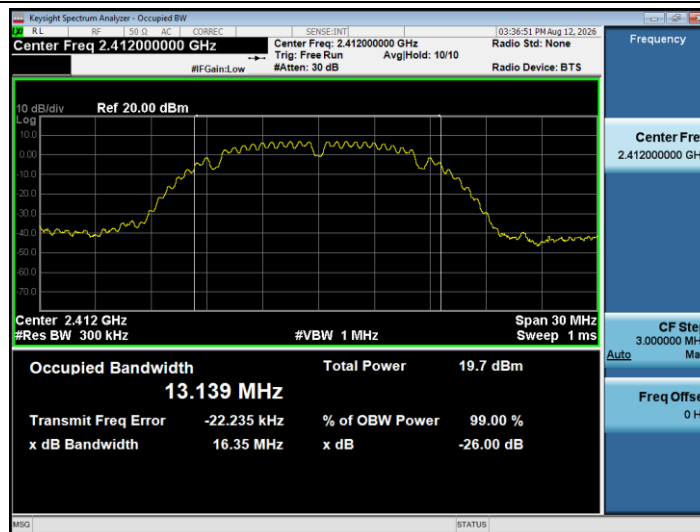
Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	-26dB EBW [MHz]	Limit [MHz]	Verdict
11b	Ant1	2412	13.139	16.347	---	---
	Ant1	2437	13.152	16.354	---	---
	Ant1	2462	13.153	16.356	---	---
11g	Ant1	2412	16.678	19.868	---	---
	Ant1	2437	16.703	19.782	---	---
	Ant1	2462	16.703	19.826	---	---
11n20	Ant1	2412	17.731	20.011	---	---
	Ant1	2437	17.749	19.954	---	---
	Ant1	2462	17.729	20.075	---	---

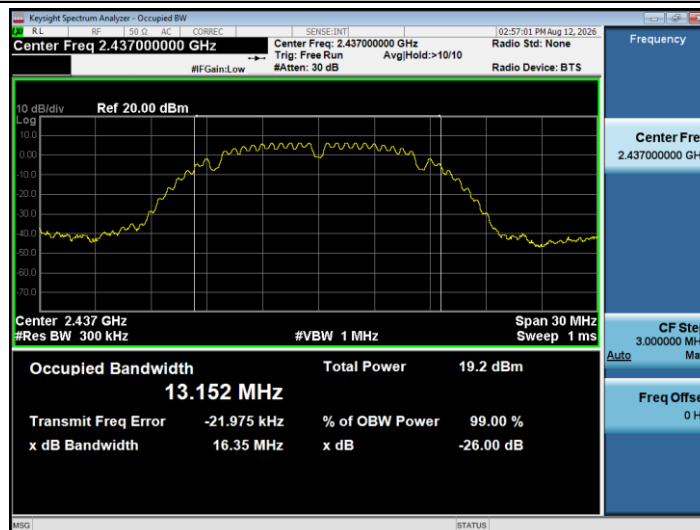




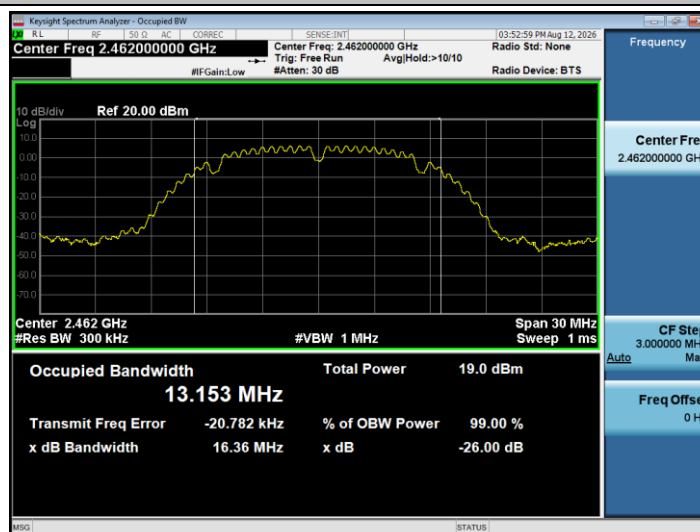
Test Graphs



11b_Ant1_2412

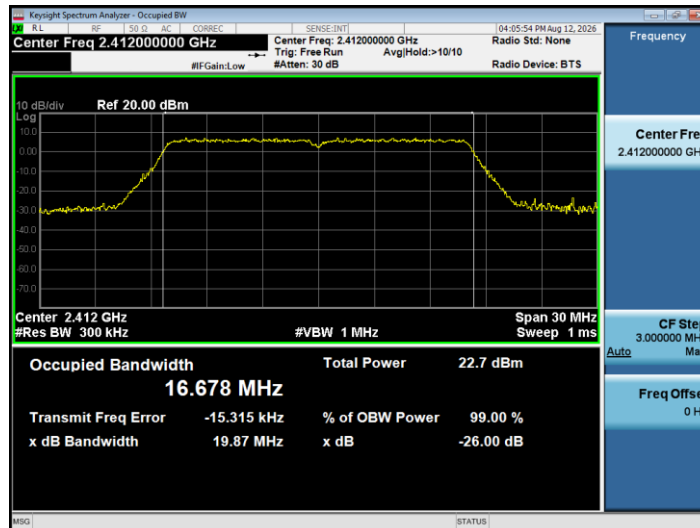


11b_Ant1_2437

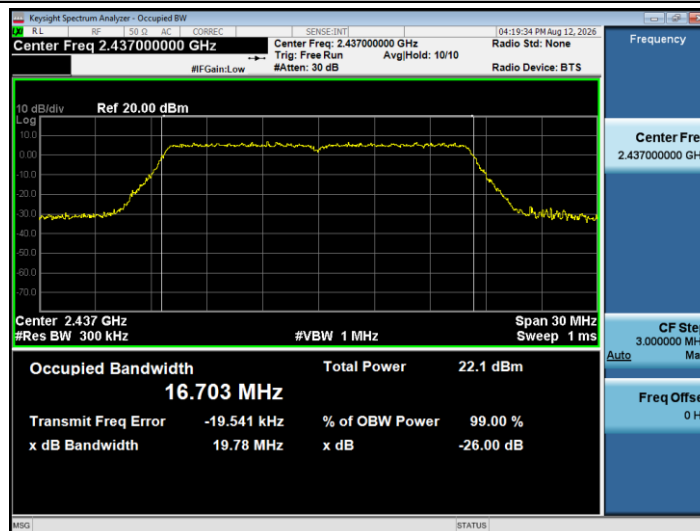


11b_Ant1_2462

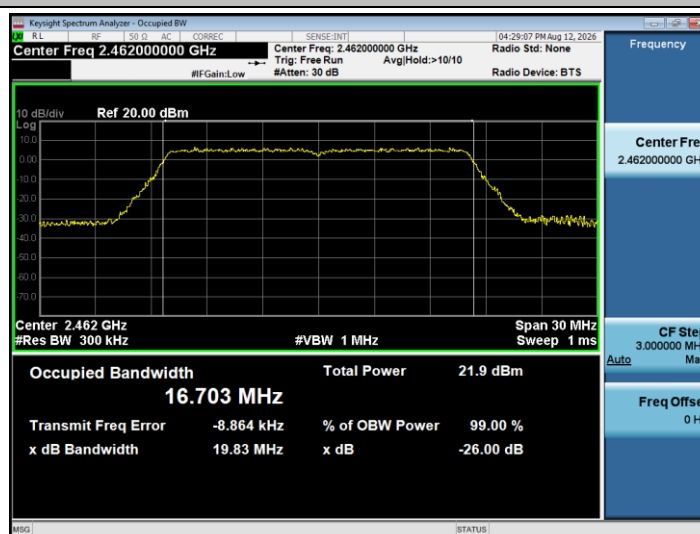




11g_Ant1_2412

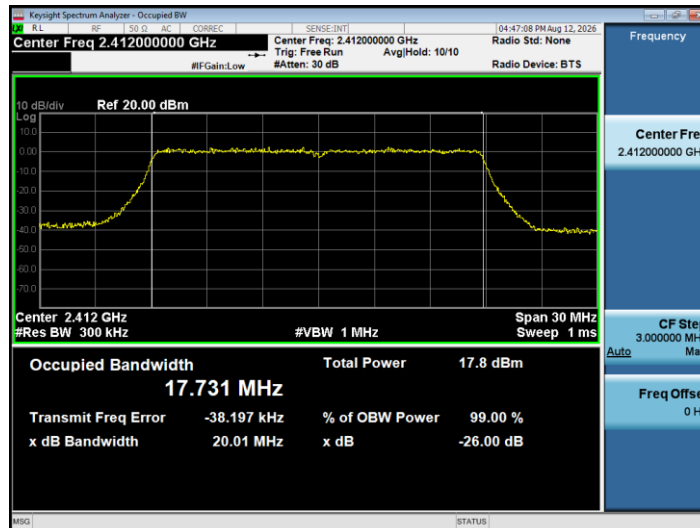


11g_Ant1_2437

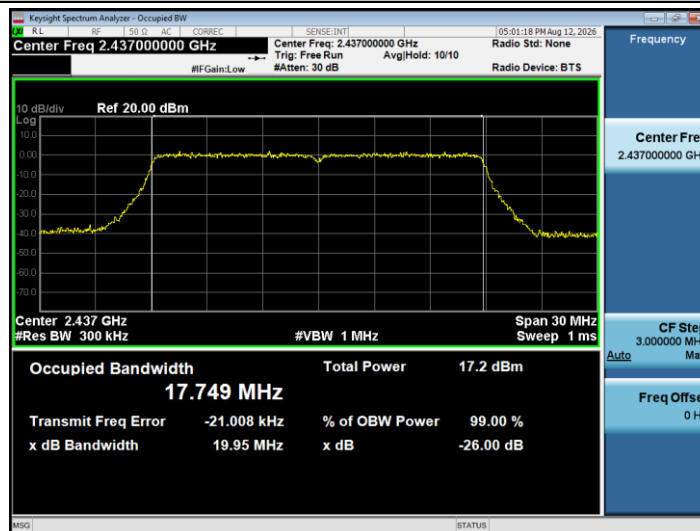


11g_Ant1_2462

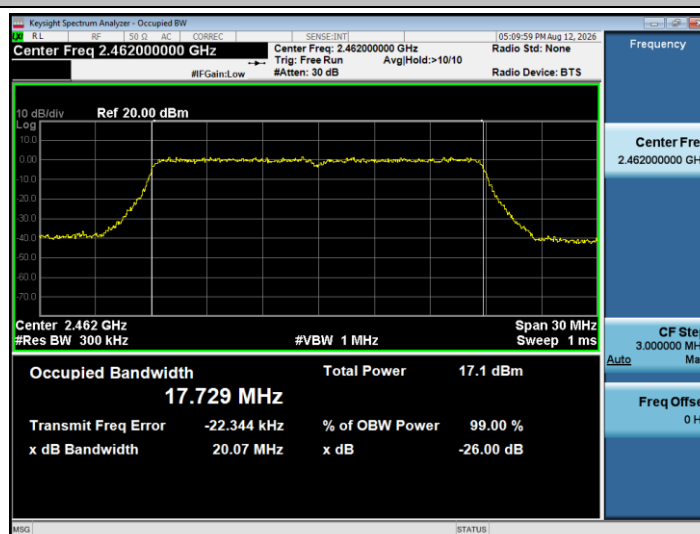




11n20_Ant1_2412



11n20_Ant1_2437



11n20_Ant1_2462





Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Frequency [MHz]	Conducted Average Power [dBm]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
11b	Ant1	2412	15.80	18.43	≤30.00	PASS
	Ant1	2437	15.35	17.99	≤30.00	PASS
	Ant1	2462	15.06	17.71	≤30.00	PASS
11g	Ant1	2412	15.45	23.62	≤30.00	PASS
	Ant1	2437	14.87	23.00	≤30.00	PASS
	Ant1	2462	14.60	22.73	≤30.00	PASS
11n20	Ant1	2412	9.76	18.54	≤30.00	PASS
	Ant1	2437	9.36	18.15	≤30.00	PASS
	Ant1	2462	9.11	17.94	≤30.00	PASS

Note: All reported power levels include compensation for cable loss and external attenuation, applied using the power meter's offset function.





Appendix D: Maximum peak power spectral density

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11b	Ant1	2412	-7.352	≤8.000	PASS
	Ant1	2437	-7.752	≤8.000	PASS
	Ant1	2462	-8.134	≤8.000	PASS
11g	Ant1	2412	-8.725	≤8.000	PASS
	Ant1	2437	-9.019	≤8.000	PASS
	Ant1	2462	-9.416	≤8.000	PASS
11n20	Ant1	2412	-14.731	≤8.000	PASS
	Ant1	2437	-14.789	≤8.000	PASS
	Ant1	2462	-15.518	≤8.000	PASS

Note: All reported measurement levels include compensation for cable loss and external attenuation, applied using the spectrum analyzer's input correction function.





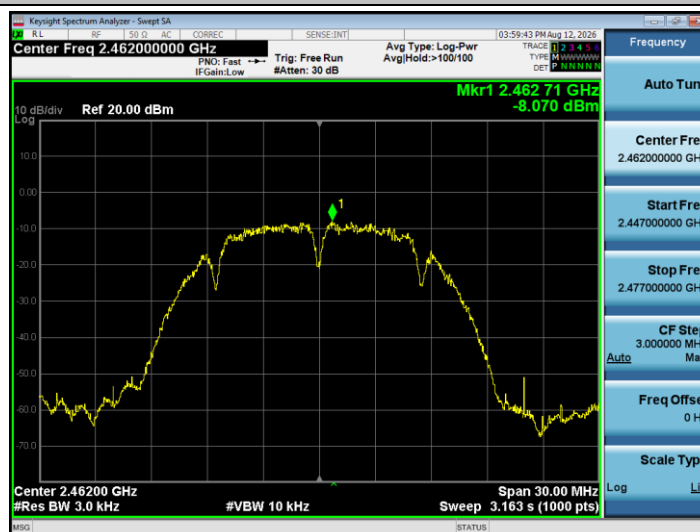
Test Graphs



11b_Ant1_2412

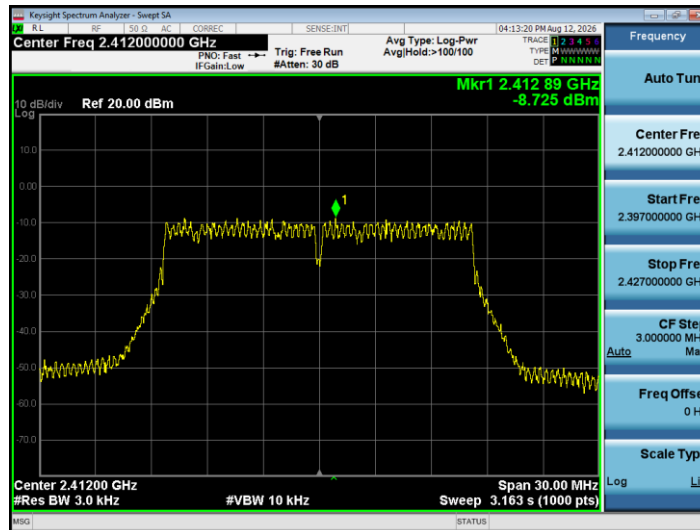


11b_Ant1_2437

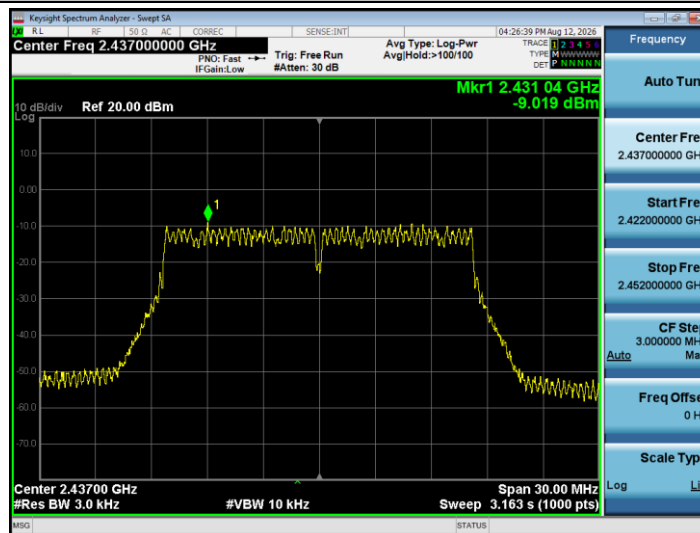


11b_Ant1_2462

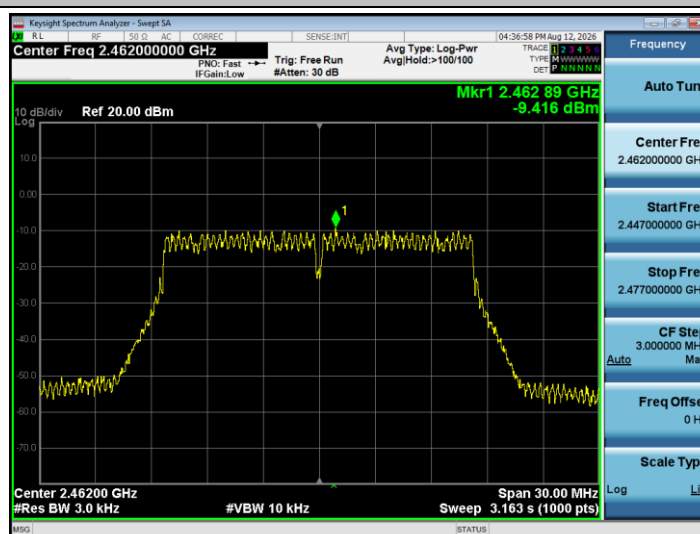




11g_Ant1_2412

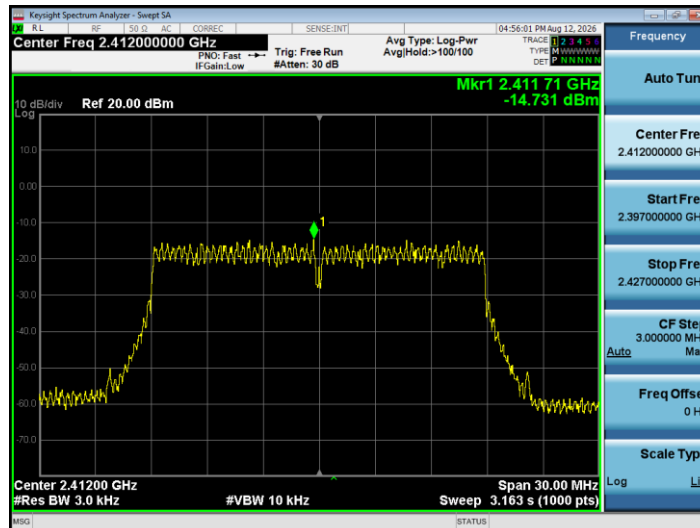


11g_Ant1_2437

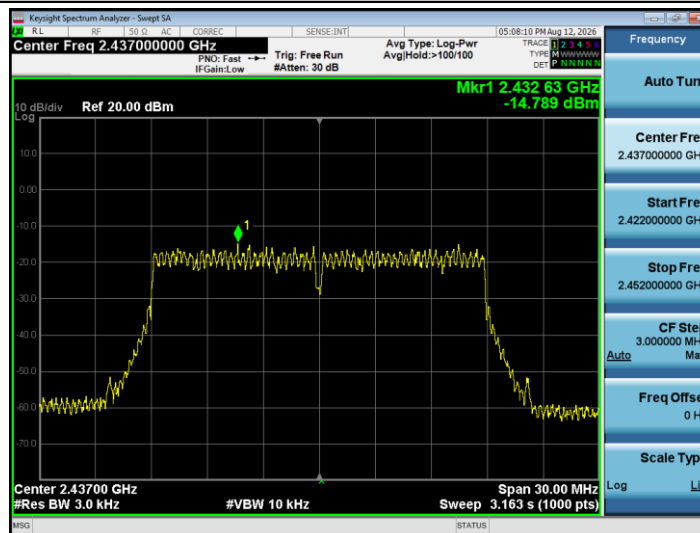


11g_Ant1_2462

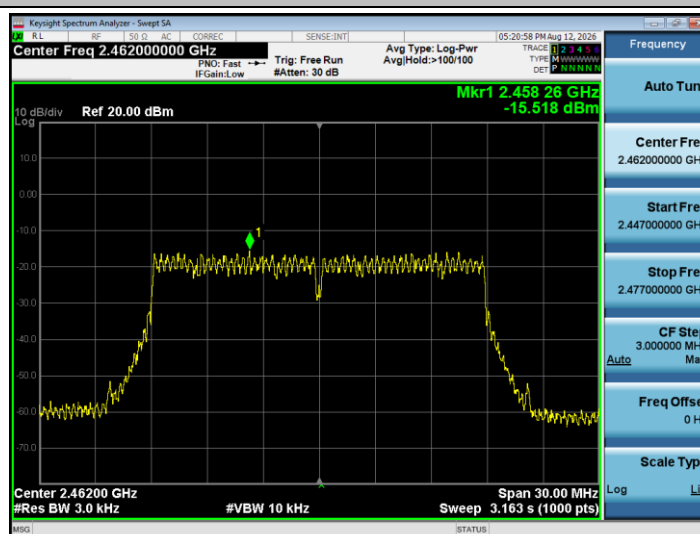




11n20_Ant1_2412



11n20_Ant1_2437



11n20_Ant1_2462





Appendix E: Band edge measurements

Test Result

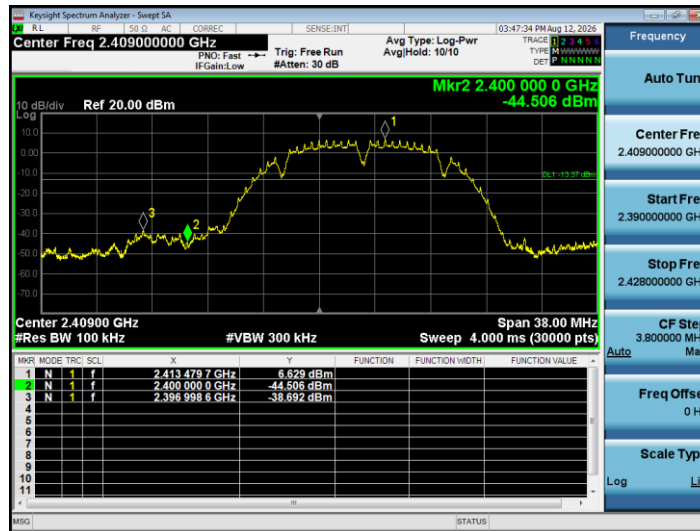
Test Mode	Antenna	Ch. Name	Frequency [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11b	Ant1	Low	2412	6.63	-38.69	≤ -13.37	PASS
	Ant1	High	2462	5.83	-50.21	≤ -14.17	PASS
11g	Ant1	Low	2412	3.91	-35.75	≤ -16.09	PASS
	Ant1	High	2462	3.10	-45.91	≤ -16.90	PASS
11n20	Ant1	Low	2412	-1.49	-43.35	≤ -21.49	PASS
	Ant1	High	2462	-2.22	-51.65	≤ -22.22	PASS

Note: All reported measurement levels include compensation for cable loss and external attenuation, applied using the spectrum analyzer's input correction function.

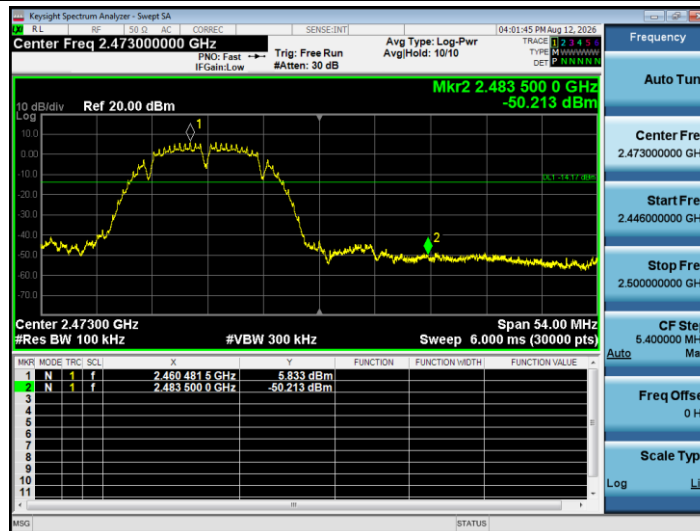




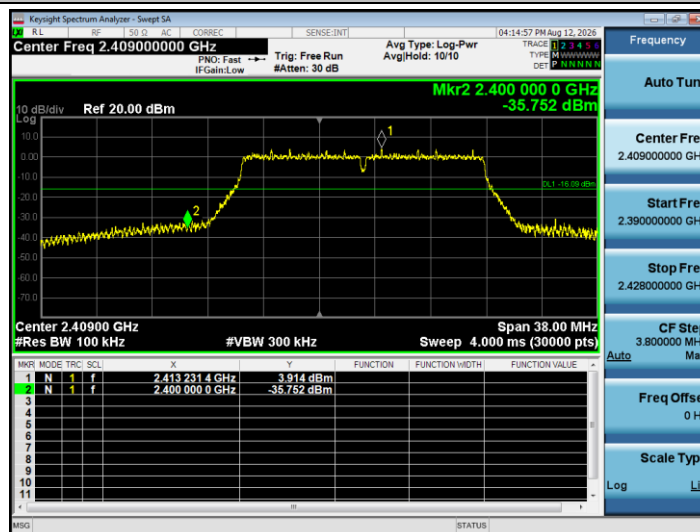
Test Graphs



11b_Ant1_2412_Low

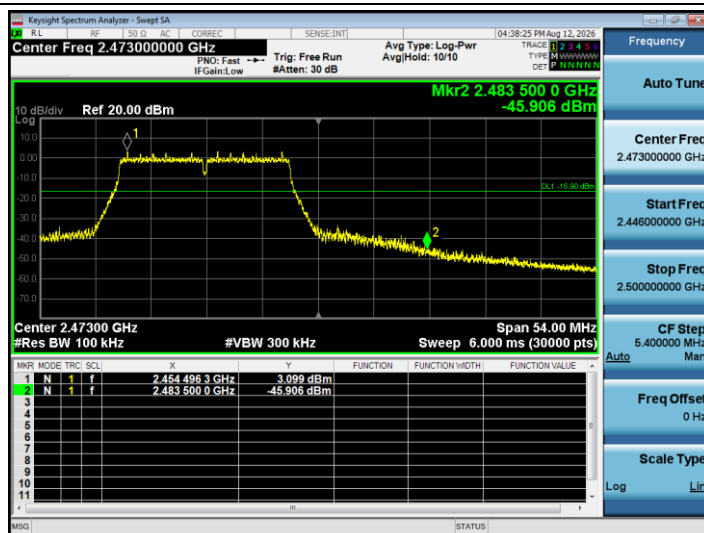


11b_Ant1_2462_High

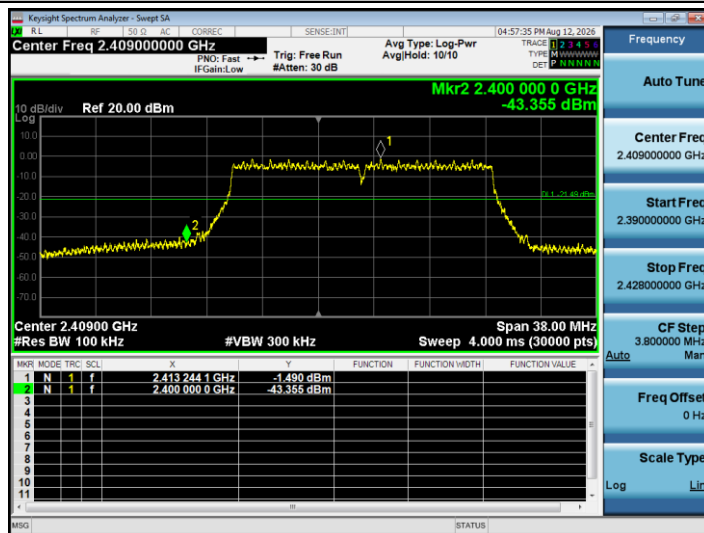


11g_Ant1_2412_Low

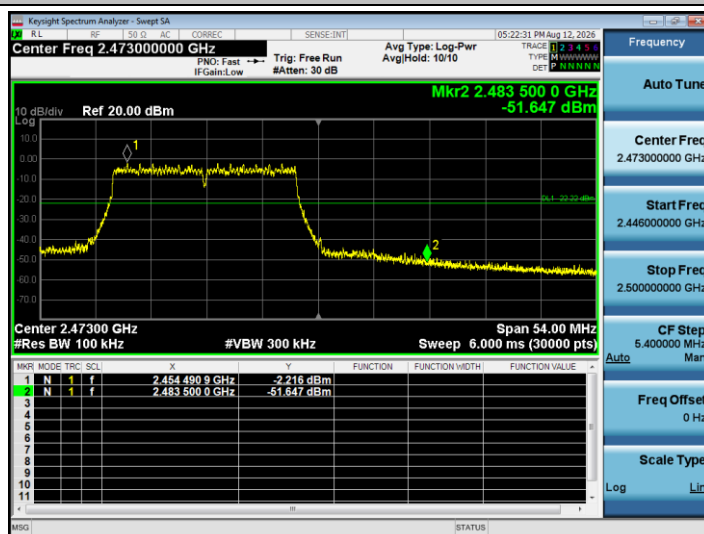




11g_Ant1_2462_High



11n20_Ant1_2412_Low



11n20_Ant1_2462_High





Appendix F: Conducted Spurious Emission

Test Result

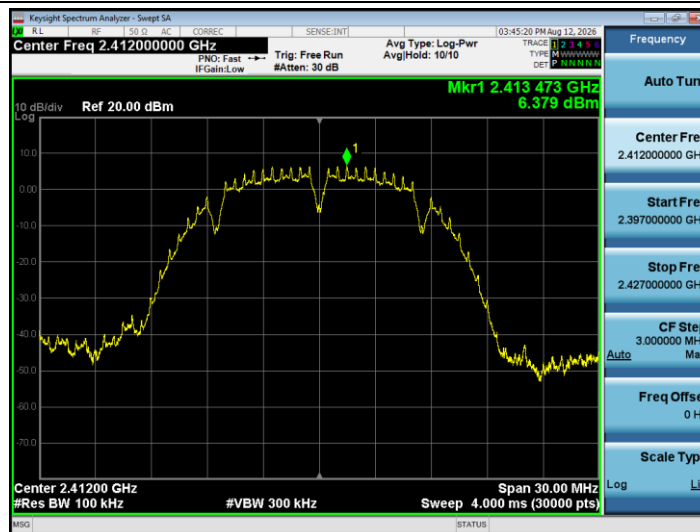
Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
11b	Ant1	2412	0~Reference	6.38	6.38	---	PASS
	Ant1	2412	30~1000	6.38	-59.36	≤-13.62	PASS
	Ant1	2412	1000~26500	6.38	-45.92	≤-13.62	PASS
	Ant1	2437	0~Reference	6.00	6.00	---	PASS
	Ant1	2437	30~1000	6.00	-59.40	≤-14.00	PASS
	Ant1	2437	1000~26500	6.00	-47.75	≤-14.00	PASS
	Ant1	2462	0~Reference	5.62	5.62	---	PASS
	Ant1	2462	30~1000	5.62	-59.47	≤-14.38	PASS
	Ant1	2462	1000~26500	5.62	-47.90	≤-14.38	PASS
11g	Ant1	2412	0~Reference	3.88	3.88	---	PASS
	Ant1	2412	30~1000	3.88	-59.78	≤-16.12	PASS
	Ant1	2412	1000~26500	3.88	-40.96	≤-16.12	PASS
	Ant1	2437	0~Reference	3.21	3.21	---	PASS
	Ant1	2437	30~1000	3.21	-59.66	≤-16.79	PASS
	Ant1	2437	1000~26500	3.21	-47.49	≤-16.79	PASS
	Ant1	2462	0~Reference	2.99	2.99	---	PASS
	Ant1	2462	30~1000	2.99	-59.33	≤-17.01	PASS
	Ant1	2462	1000~26500	2.99	-48.45	≤-17.01	PASS
11n20	Ant1	2412	0~Reference	-1.60	-1.60	---	PASS
	Ant1	2412	30~1000	-1.60	-59.23	≤-21.60	PASS
	Ant1	2412	1000~26500	-1.60	-47.69	≤-21.60	PASS
	Ant1	2437	0~Reference	-2.12	-2.12	---	PASS
	Ant1	2437	30~1000	-2.12	-59.60	≤-22.12	PASS
	Ant1	2437	1000~26500	-2.12	-48.31	≤-22.12	PASS
	Ant1	2462	0~Reference	-2.33	-2.33	---	PASS
	Ant1	2462	30~1000	-2.33	-59.39	≤-22.33	PASS
	Ant1	2462	1000~26500	-2.33	-48.06	≤-22.33	PASS

Note: All reported measurement levels include compensation for cable loss and external attenuation, applied using the spectrum analyzer's input correction function.

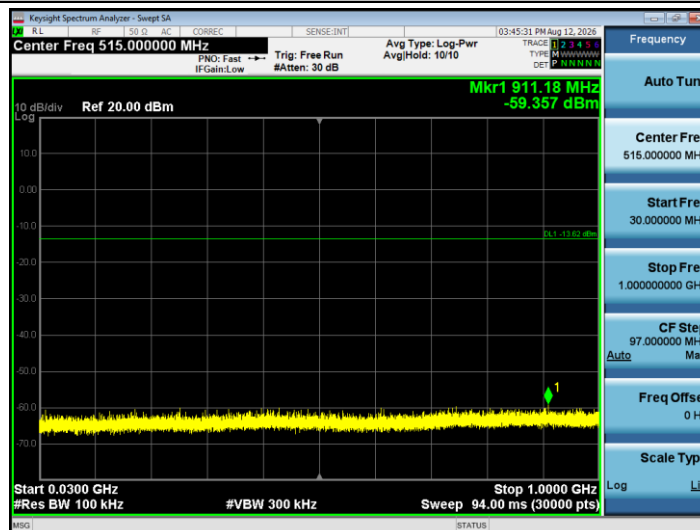




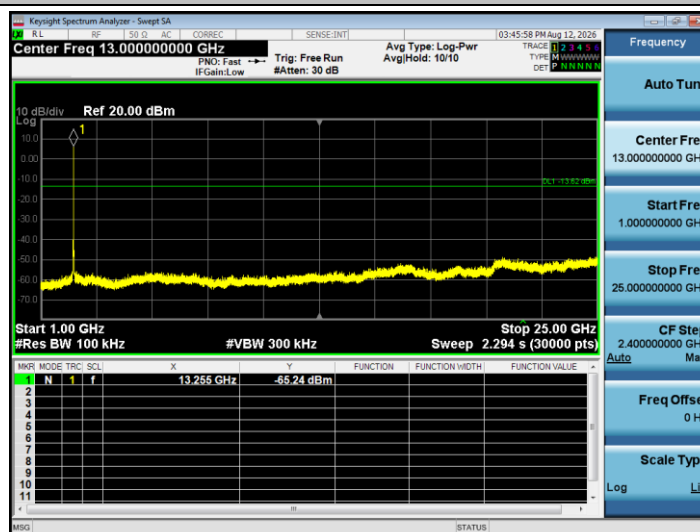
Test Graphs



11b_Ant1_2412

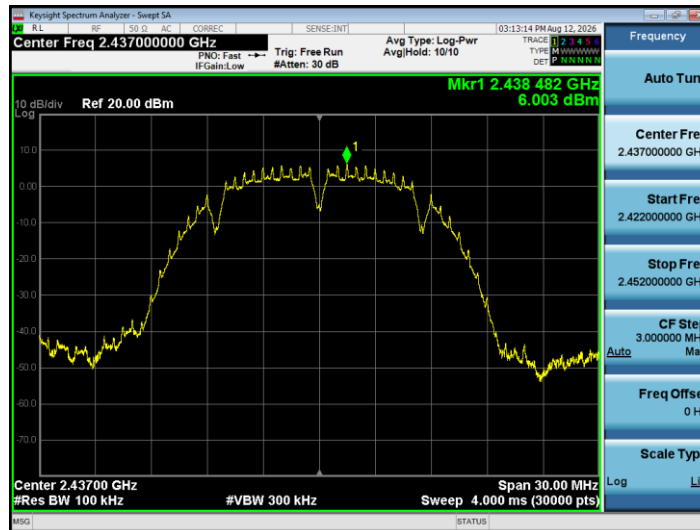


11b_Ant1_2412

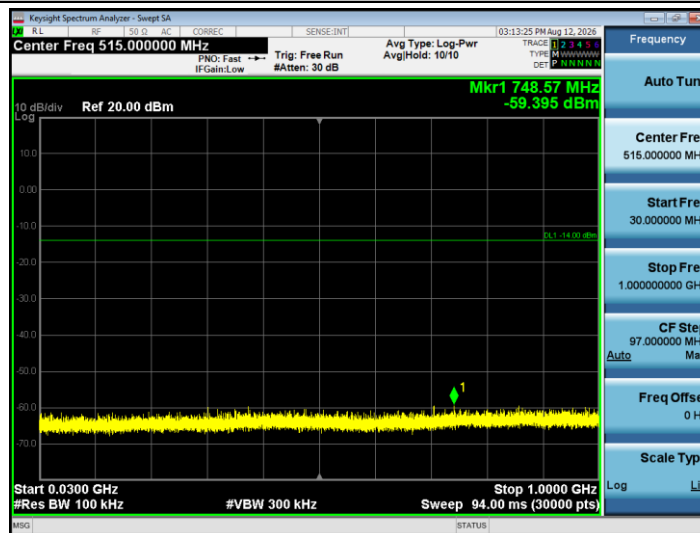


11b_Ant1_2412

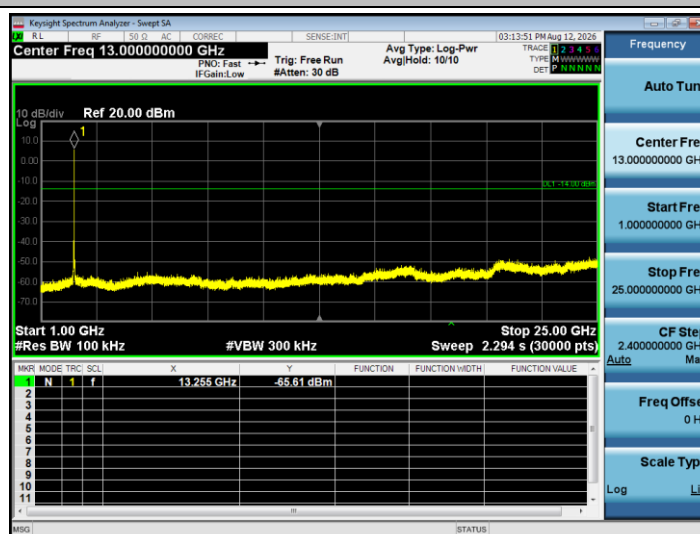




11b_Ant1_2437

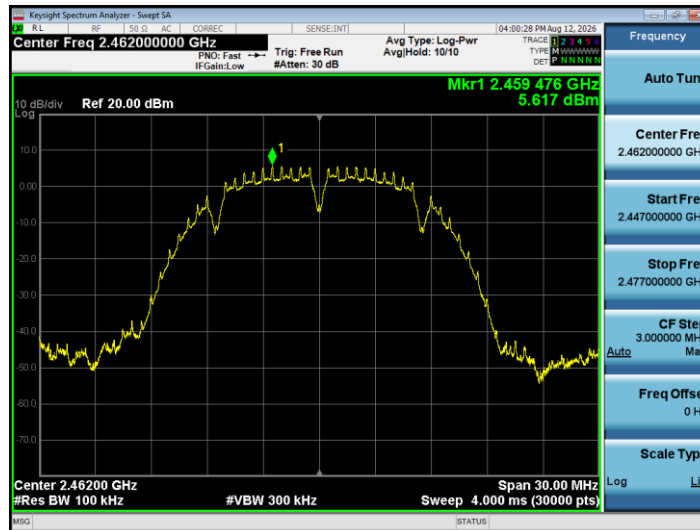


11b_Ant1_2437

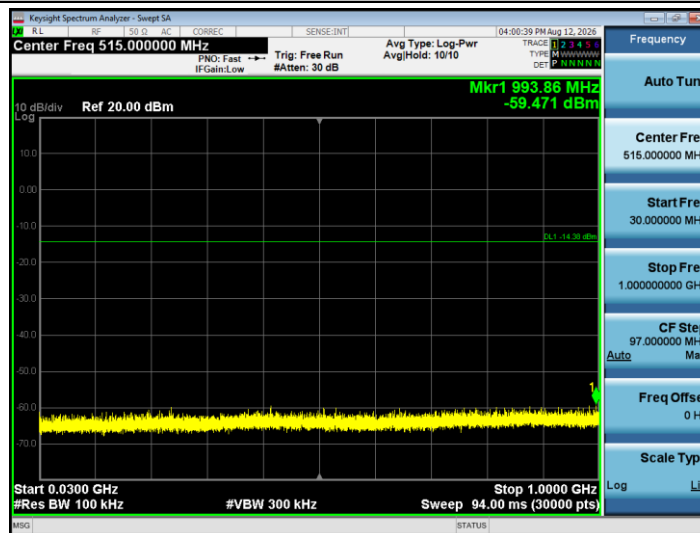


11b_Ant1_2437

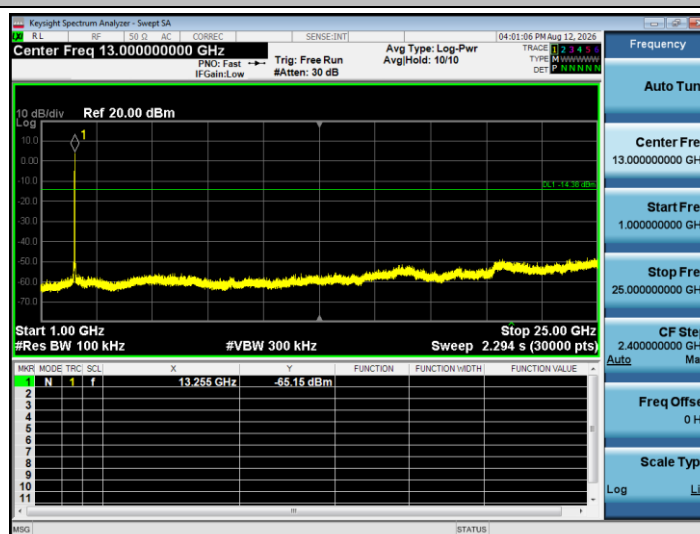




11b_Ant1_2462

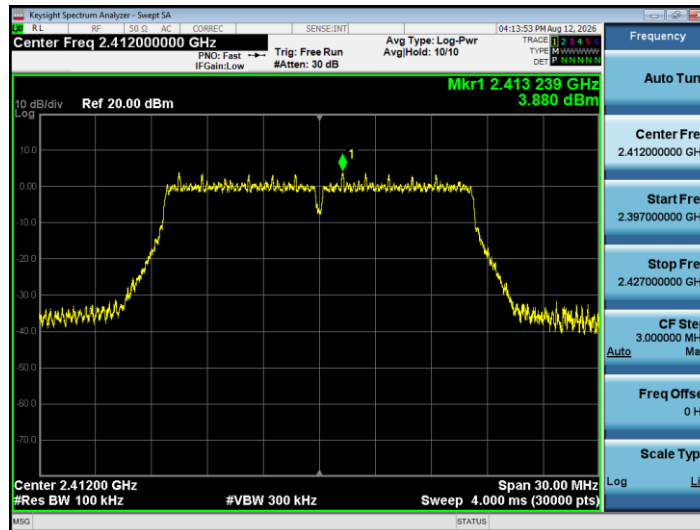


11b_Ant1_2462

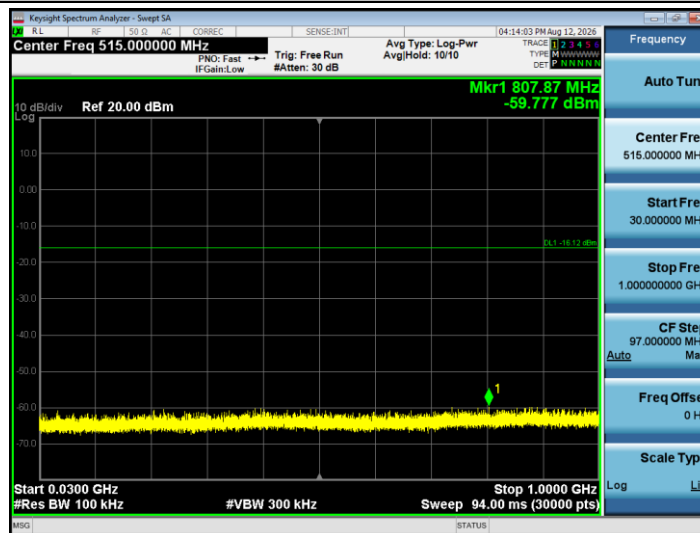


11b_Ant1_2462

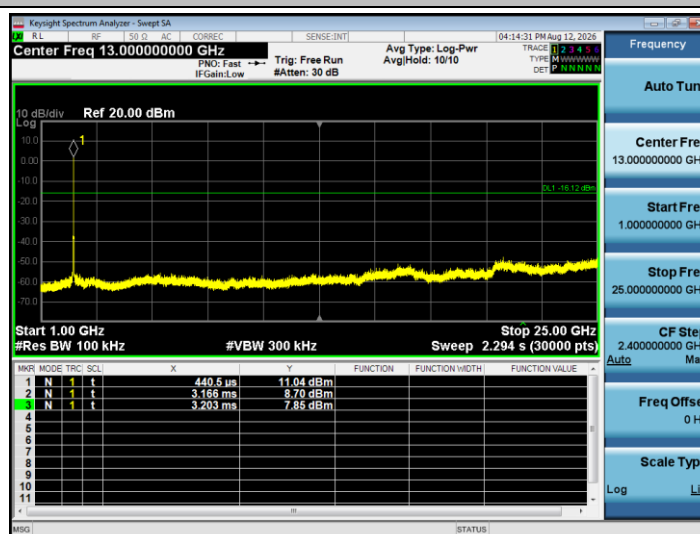




11g_Ant1_2412

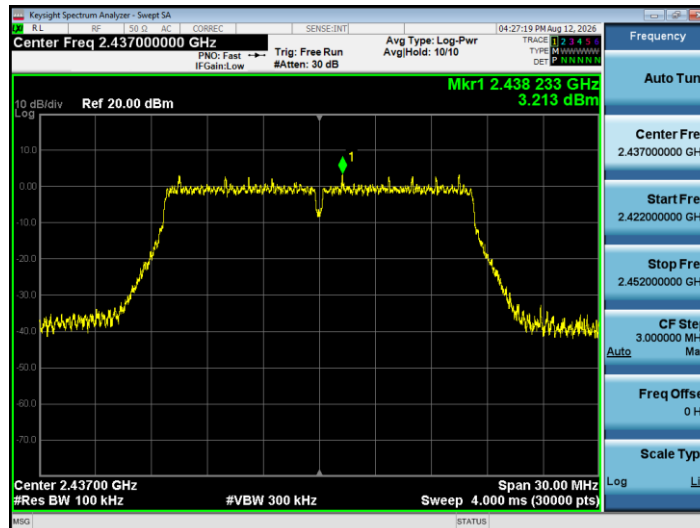


11g_Ant1_2412

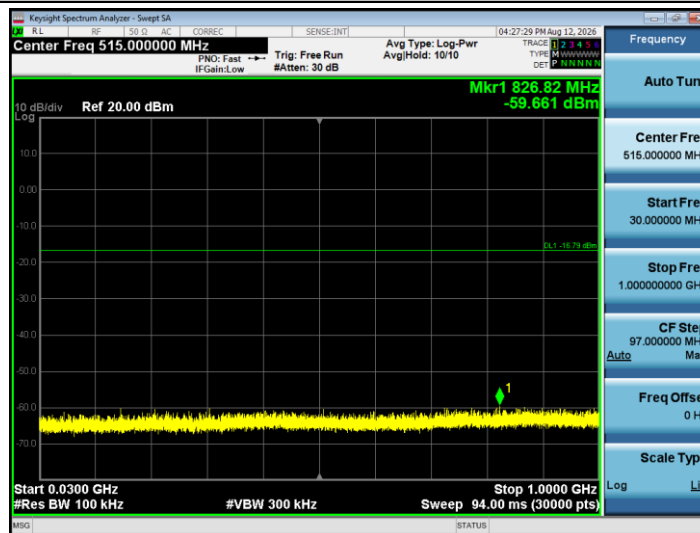


11g_Ant1_2412

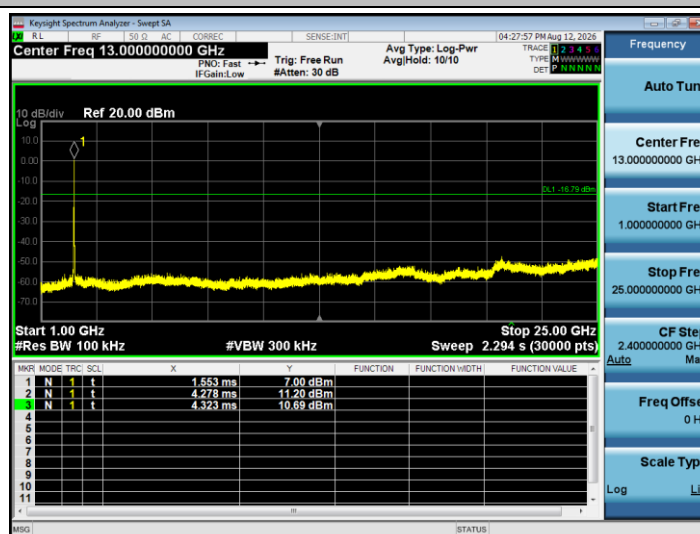




11g_Ant1_2437

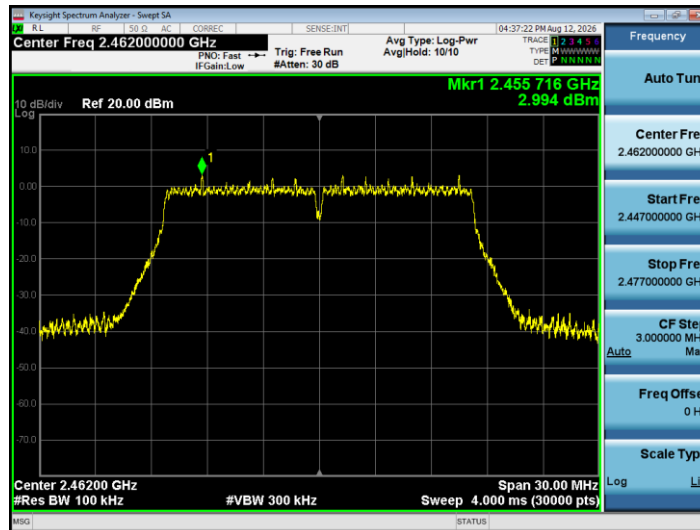


11g_Ant1_2437

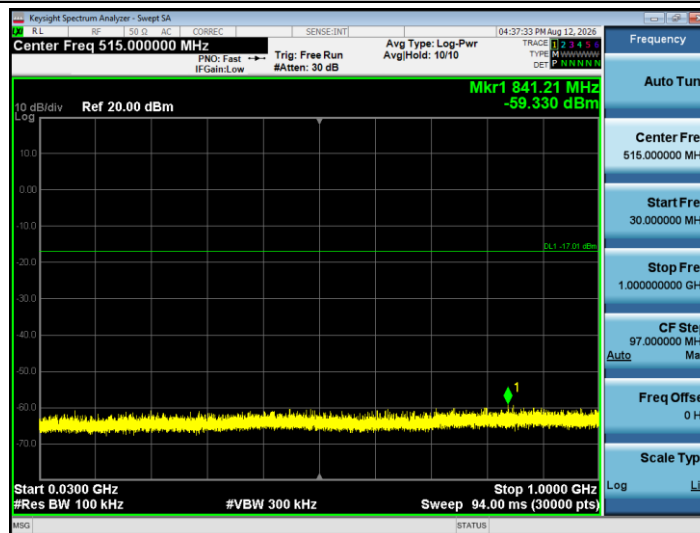


11g_Ant1_2437

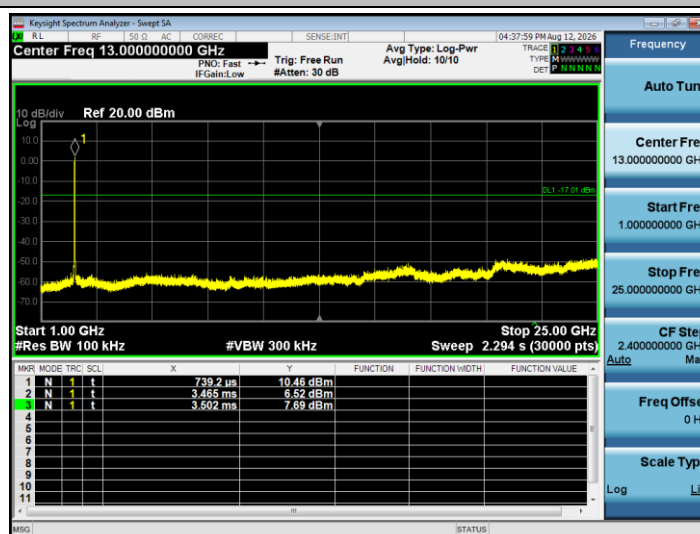




11g_Ant1_2462

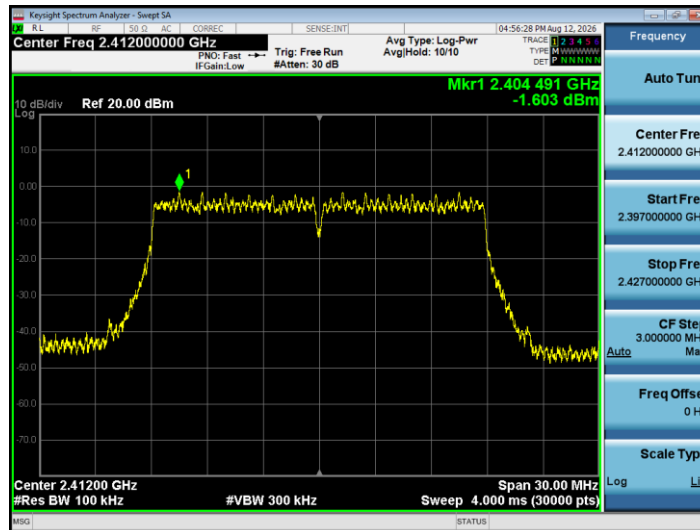


11g_Ant1_2462

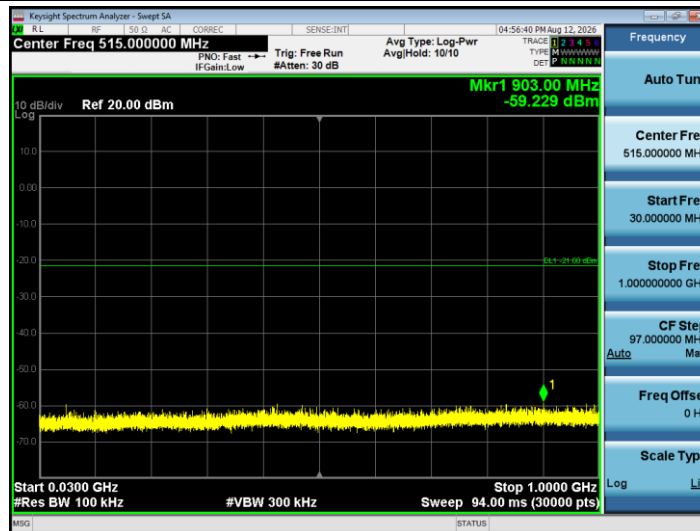


11g_Ant1_2462

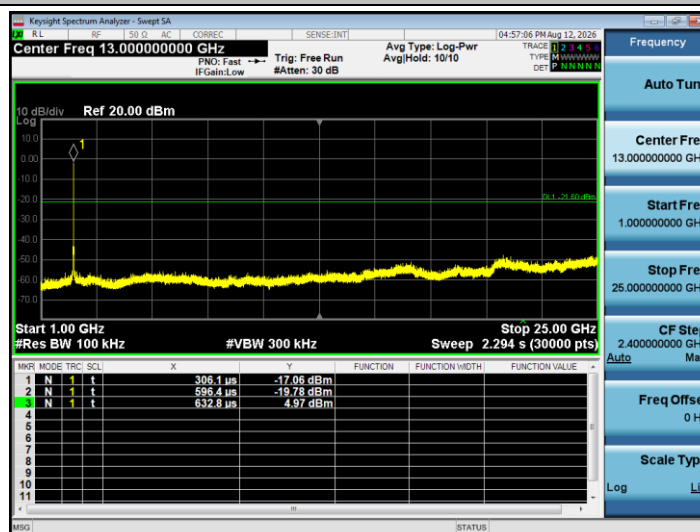




11n20_Ant1_2412

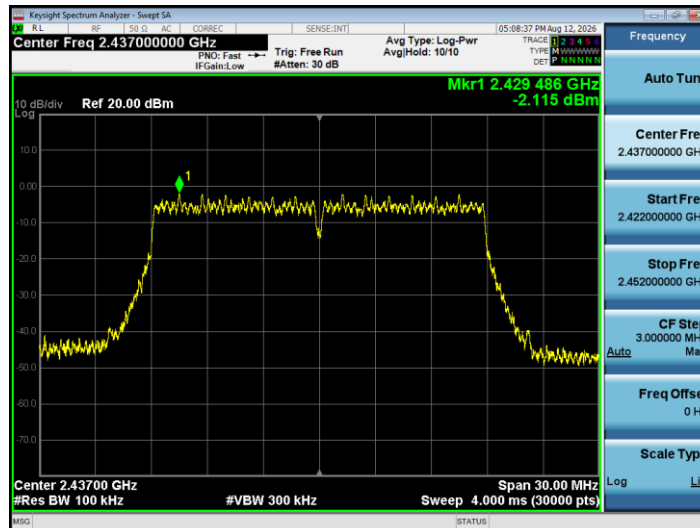


11n20_Ant1_2412

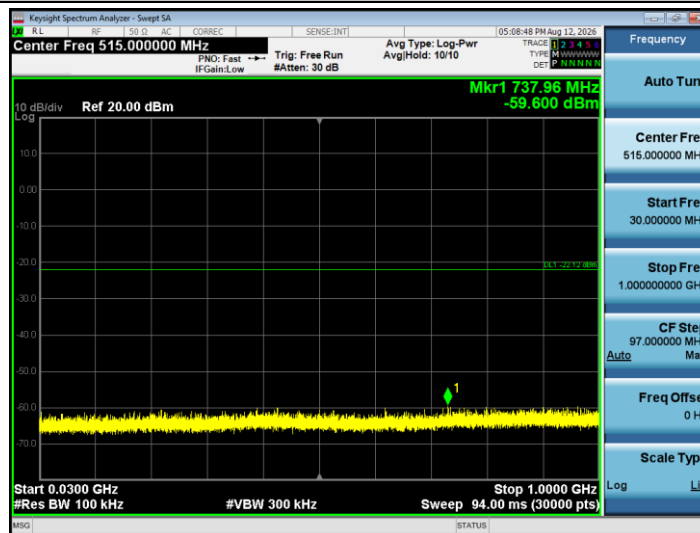


11n20_Ant1_2412

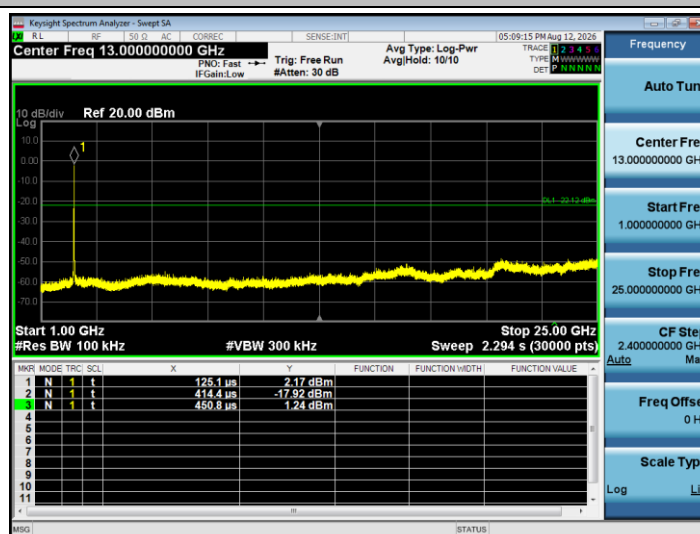




11n20_Ant1_2437

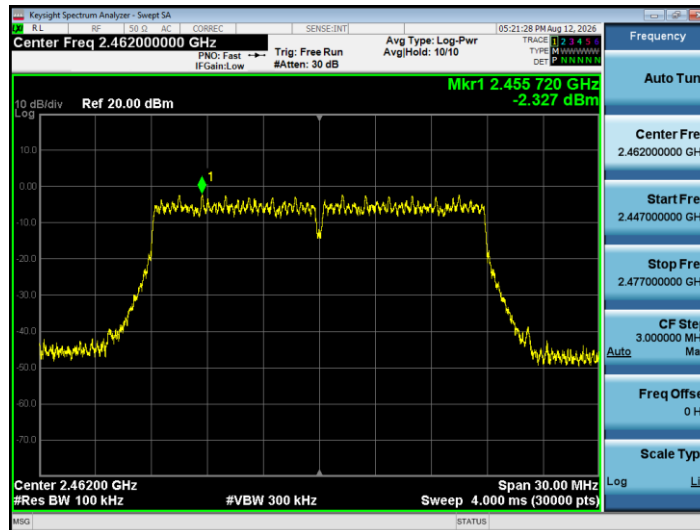


11n20_Ant1_2437

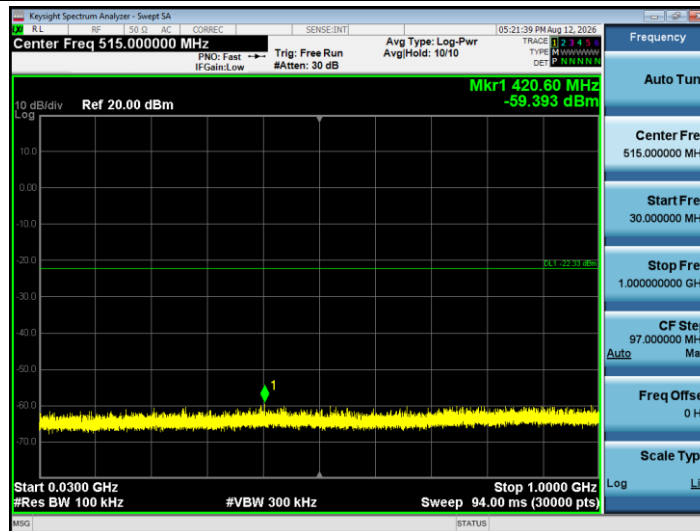


11n20_Ant1_2437

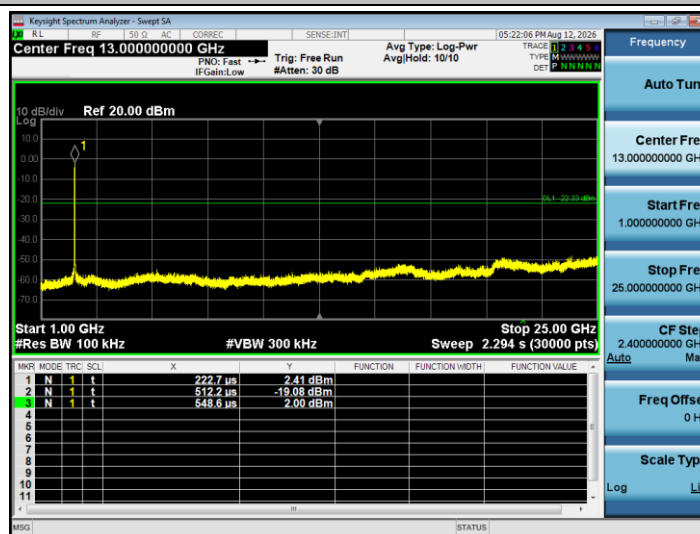




11n20_Ant1_2462



11n20_Ant1_2462



11n20_Ant1_2462







Appendix G: Duty Cycle

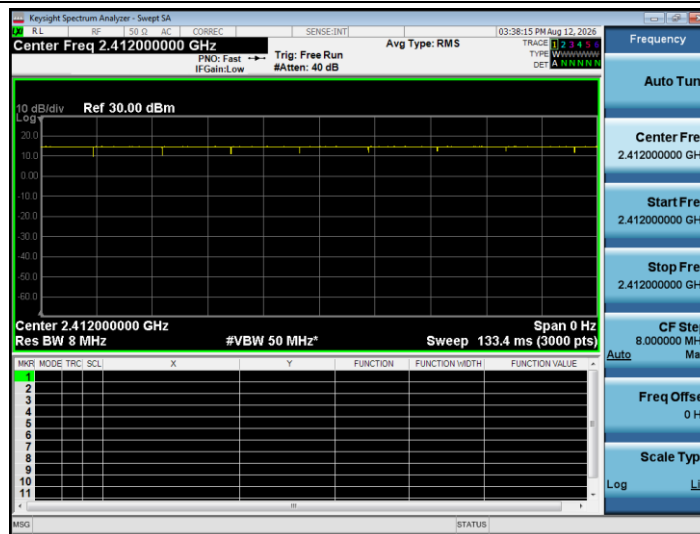
Test Result

Test Mode	Antenna	Frequency [MHz]	Duty Cycle [%]	Duty Cycle Factor [dB]
11b	Ant1	2412	100.00	0.00
	Ant1	2437	100.00	0.00
	Ant1	2462	100.00	0.00
11g	Ant1	2412	99.00	0.04
	Ant1	2437	98.00	0.09
	Ant1	2462	99.00	0.04
11n20	Ant1	2412	89.00	0.51
	Ant1	2437	89.00	0.51
	Ant1	2462	89.00	0.51

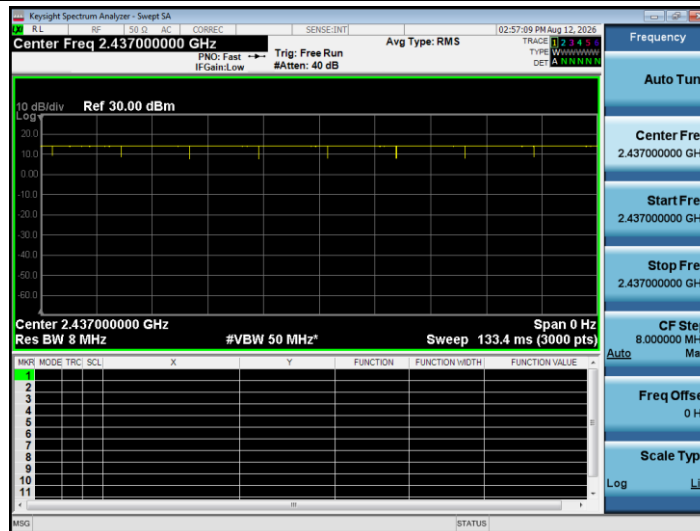




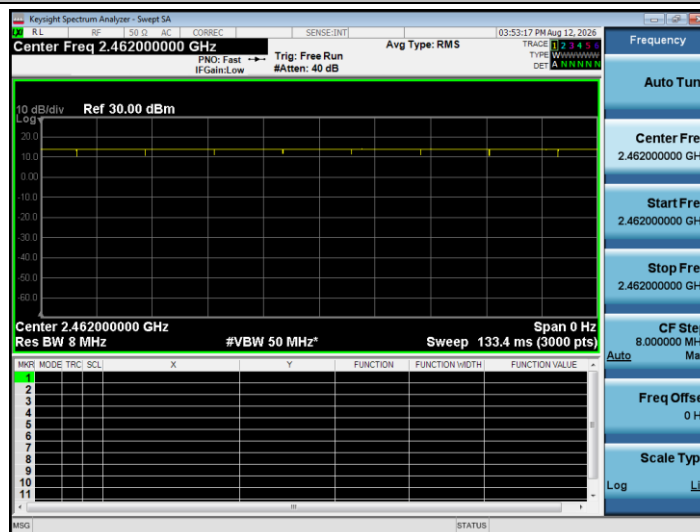
Test Graphs



11b_Ant1_2412

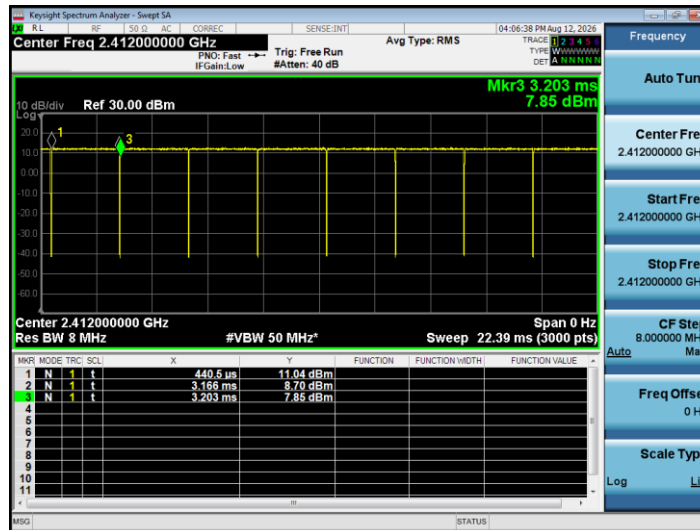


11b_Ant1_2437

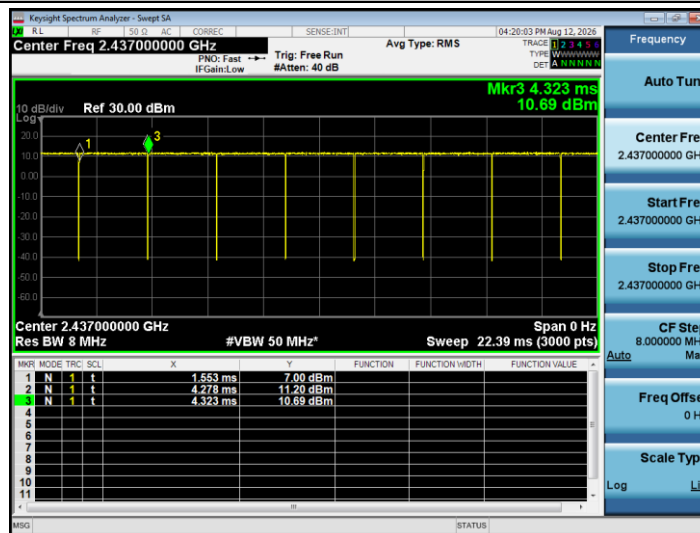


11b_Ant1_2462

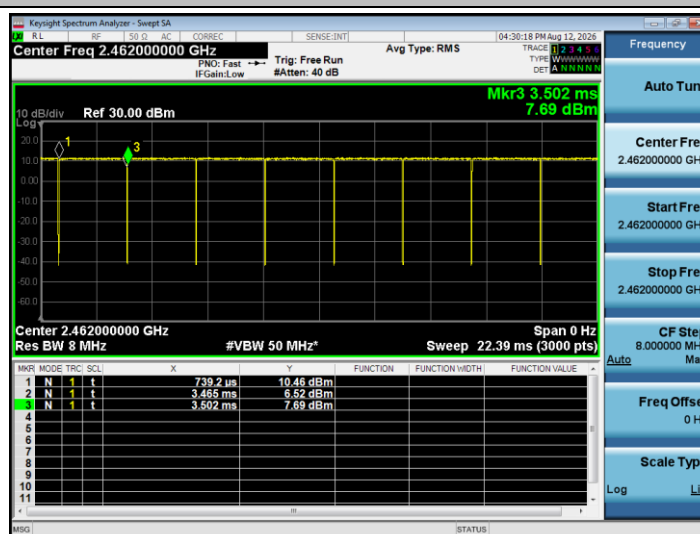




11g_Ant1_2412



11g_Ant1_2437



11g_Ant1_2462

