

FCC LTE Band Test Data

FCC ID : 2BFI8-TIQMINIM5

Company: : Jinan Ant Zhonglian Information Technology Co., Ltd.

EUT : TIQ mini M5

Model Number : TIQ mini M5

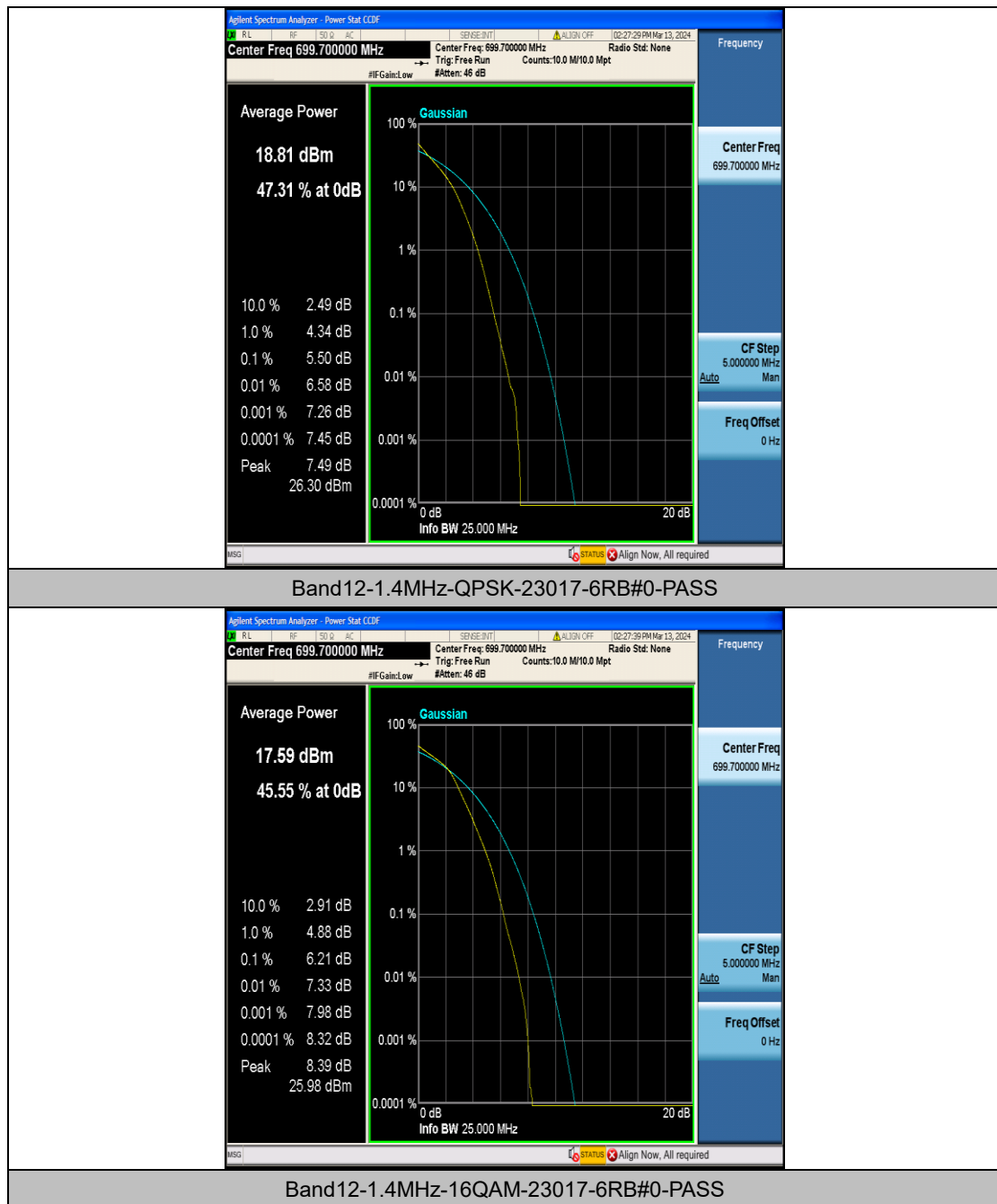
Reviewed By : Eric Wang

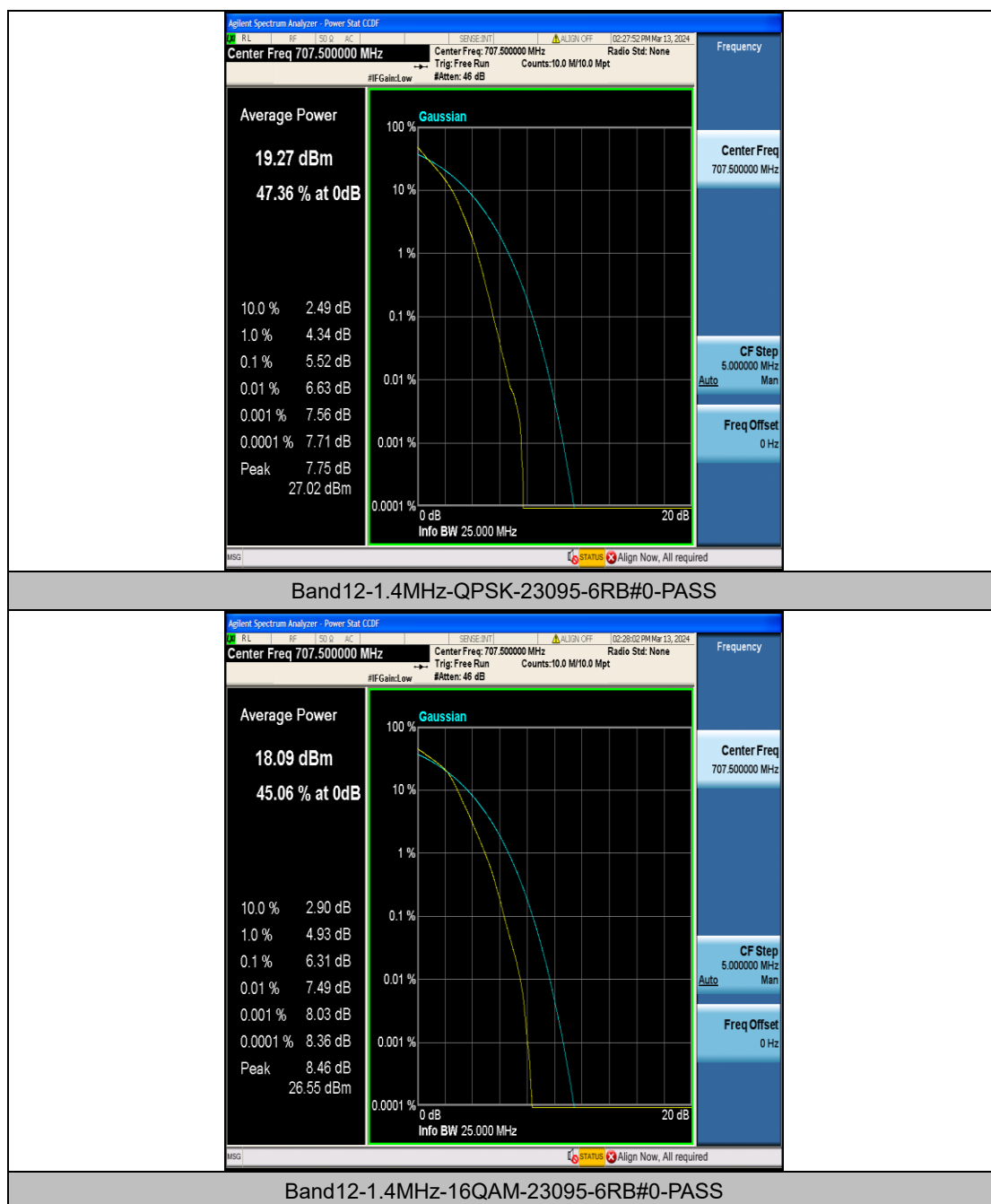
Appendix B: Peak-to-Average Ratio(CCDF)

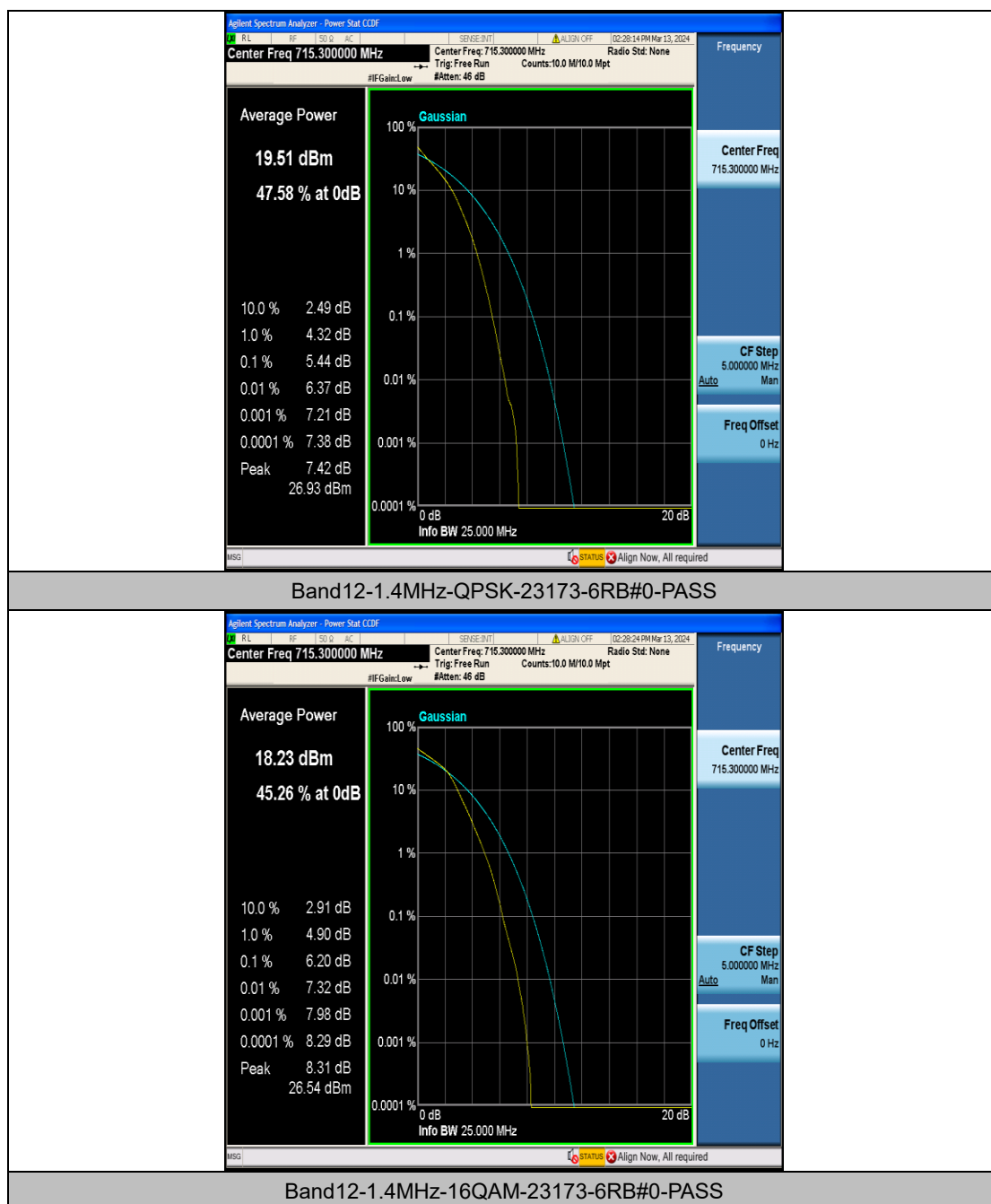
Test Result

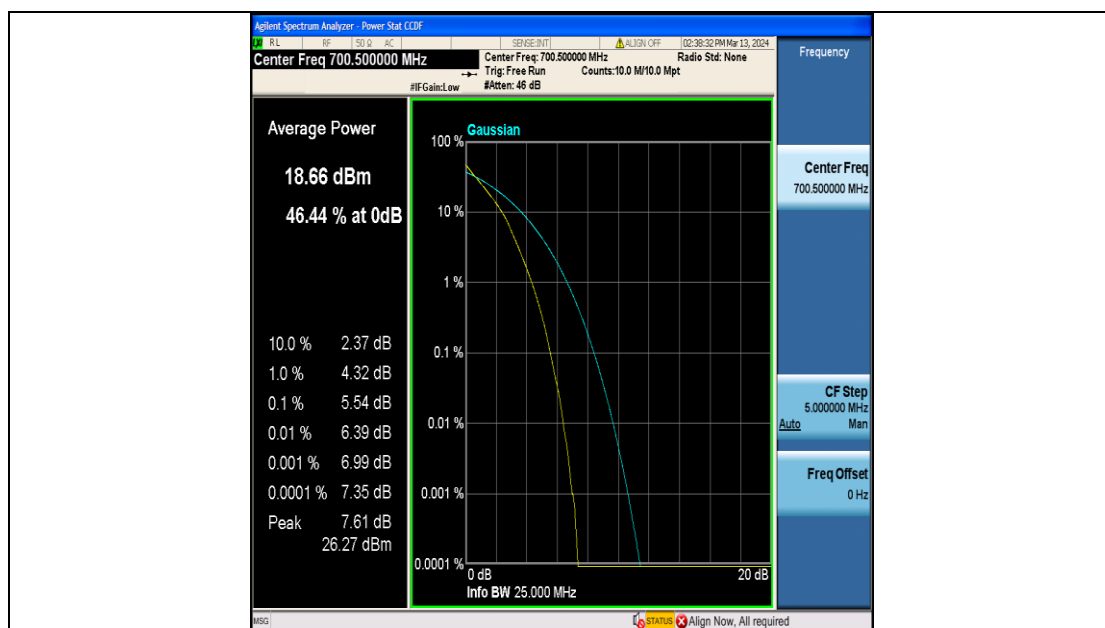
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	5.50	13	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	6.21	13	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	5.52	13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	6.31	13	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	5.44	13	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	6.20	13	PASS
Band12	3MHz	QPSK	23025	15RB#0	5.54	13	PASS
Band12	3MHz	16QAM	23025	15RB#0	6.22	13	PASS
Band12	3MHz	QPSK	23095	15RB#0	5.56	13	PASS
Band12	3MHz	16QAM	23095	15RB#0	6.29	13	PASS
Band12	3MHz	QPSK	23165	15RB#0	5.53	13	PASS
Band12	3MHz	16QAM	23165	15RB#0	6.28	13	PASS
Band12	5MHz	QPSK	23035	25RB#0	5.65	13	PASS
Band12	5MHz	16QAM	23035	25RB#0	6.26	13	PASS
Band12	5MHz	QPSK	23095	25RB#0	5.63	13	PASS
Band12	5MHz	16QAM	23095	25RB#0	6.27	13	PASS
Band12	5MHz	QPSK	23155	25RB#0	5.66	13	PASS
Band12	5MHz	16QAM	23155	25RB#0	6.28	13	PASS
Band12	10MHz	QPSK	23060	50RB#0	5.60	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	6.32	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.59	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	6.29	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	5.66	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	6.37	13	PASS

Test Graphs

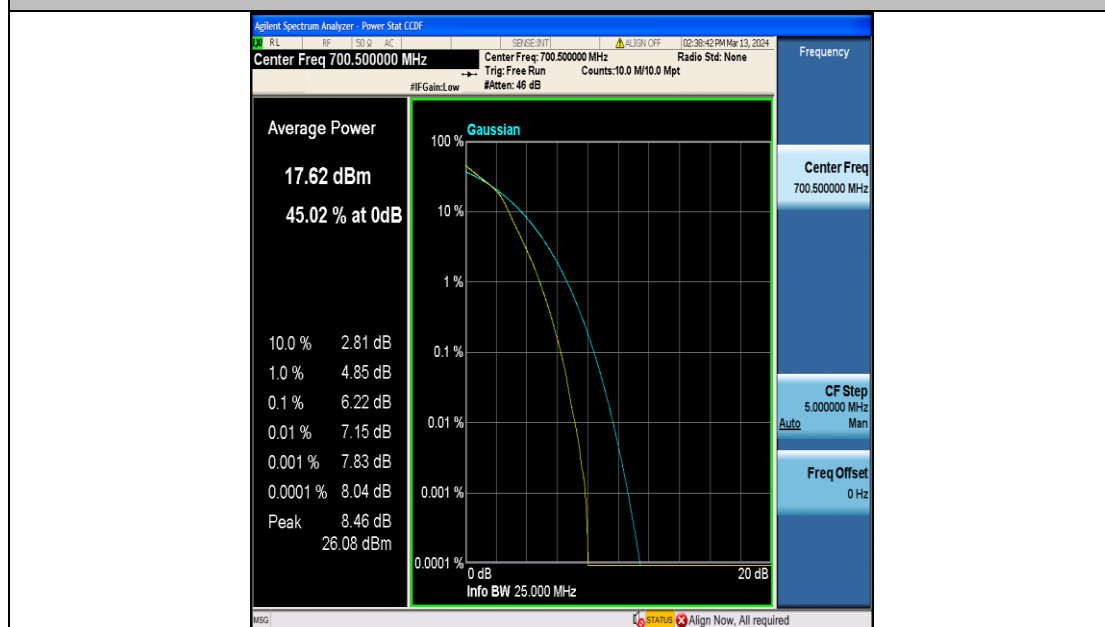




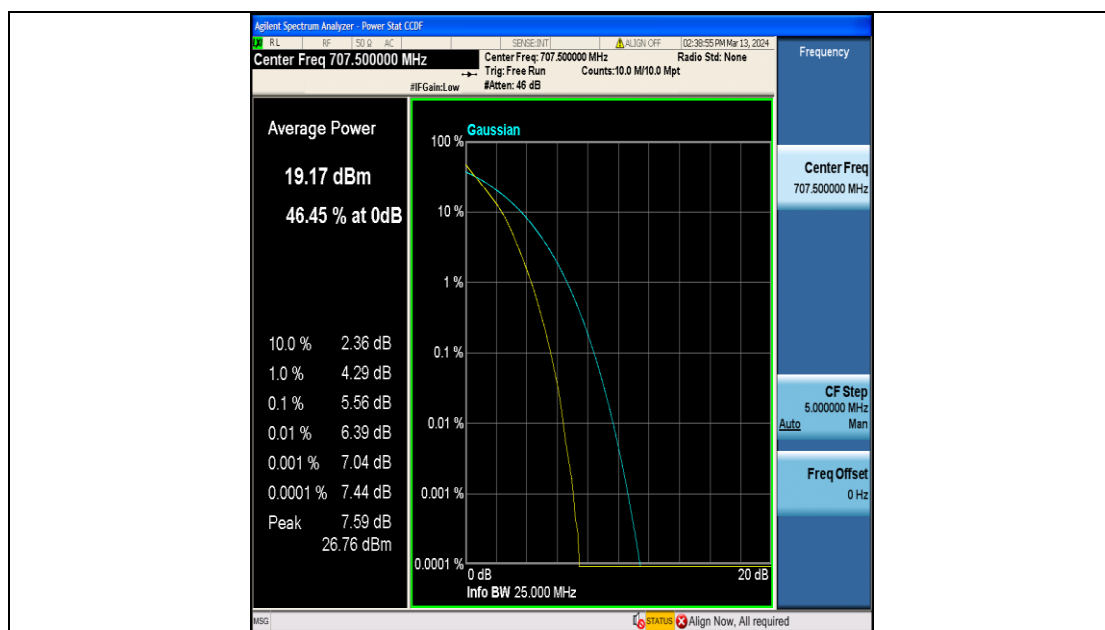




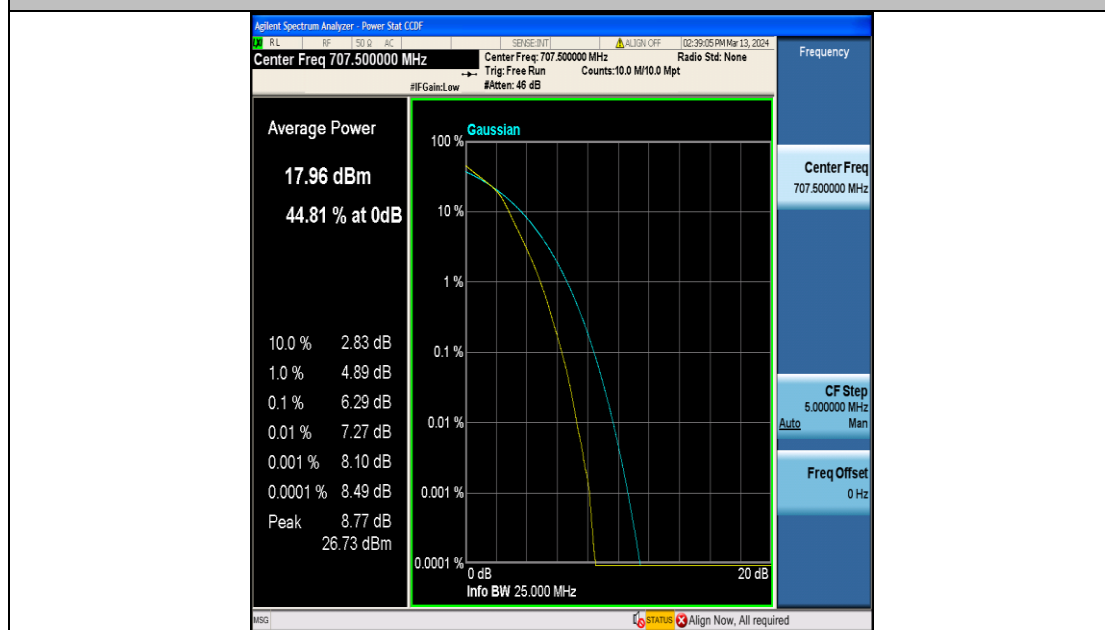
Band12-3MHz-QPSK-23025-15RB#0-PASS



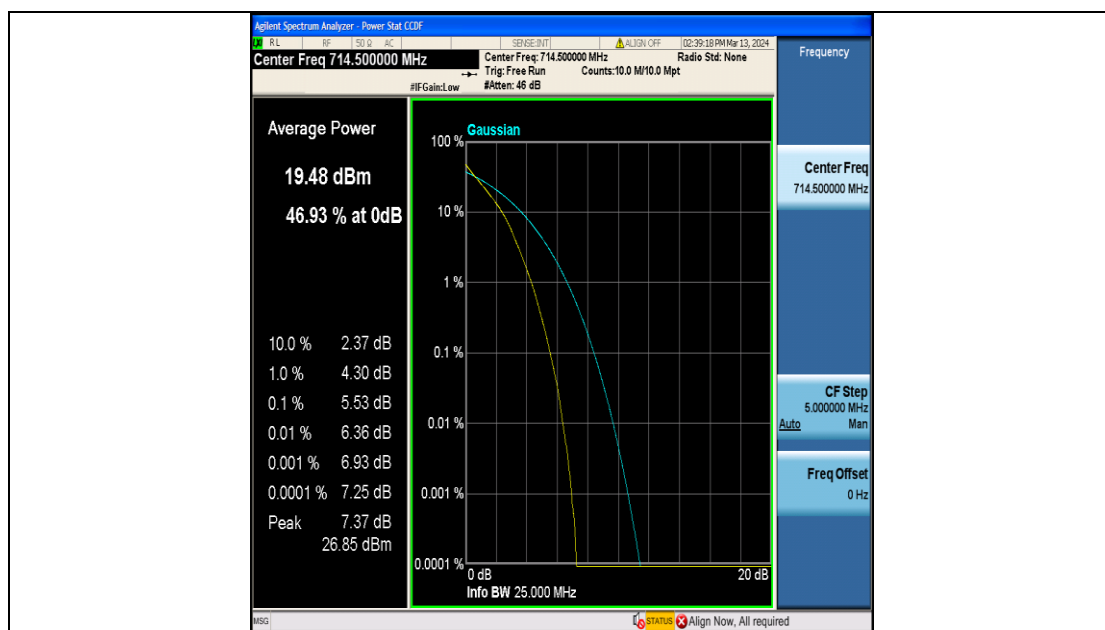
Band12-3MHz-16QAM-23025-15RB#0-PASS



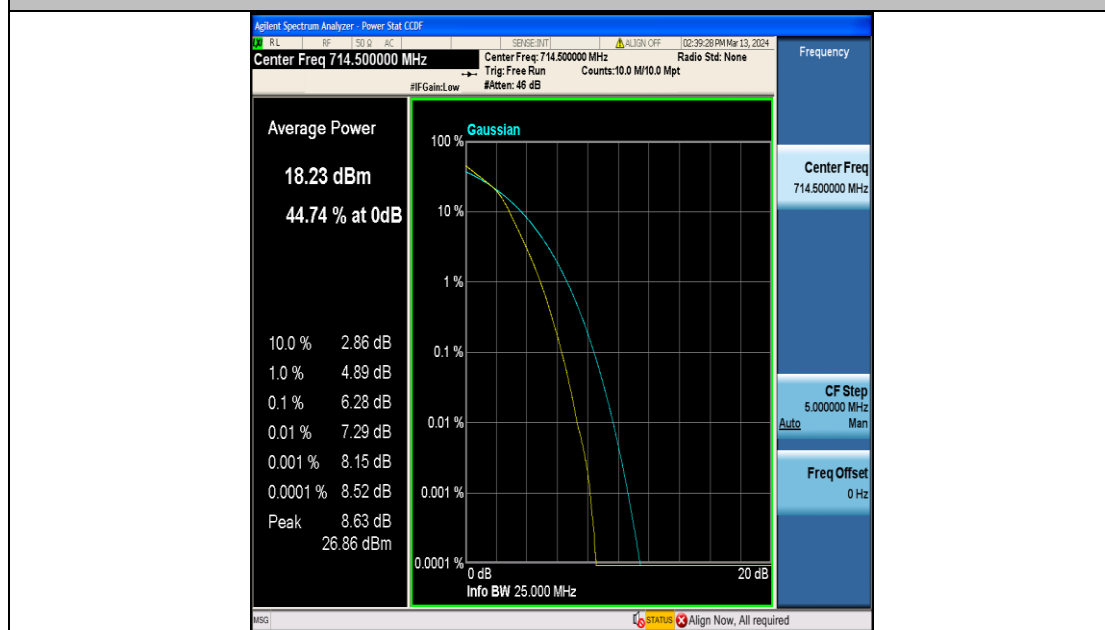
Band12-3MHz-QPSK-23095-15RB#0-PASS



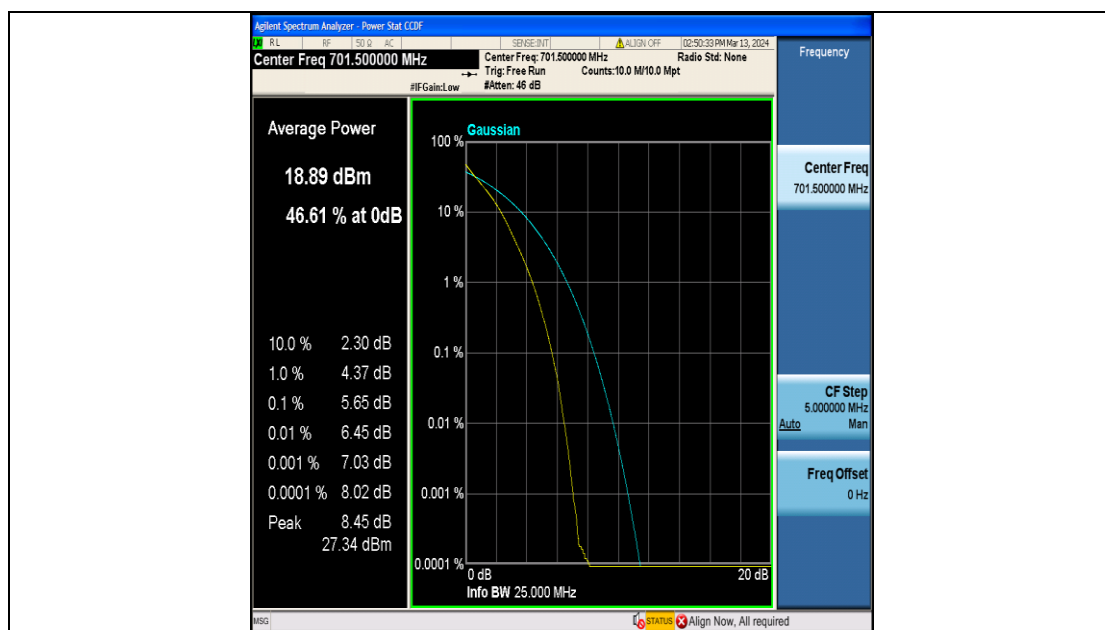
Band12-3MHz-16QAM-23095-15RB#0-PASS



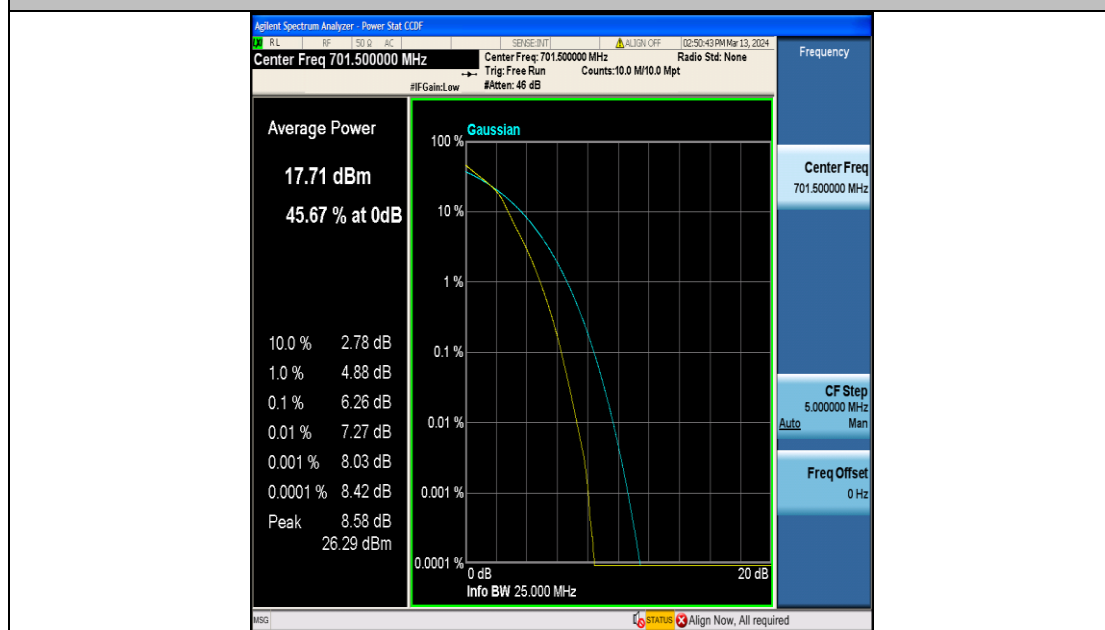
Band12-3MHz-QPSK-23165-15RB#0-PASS



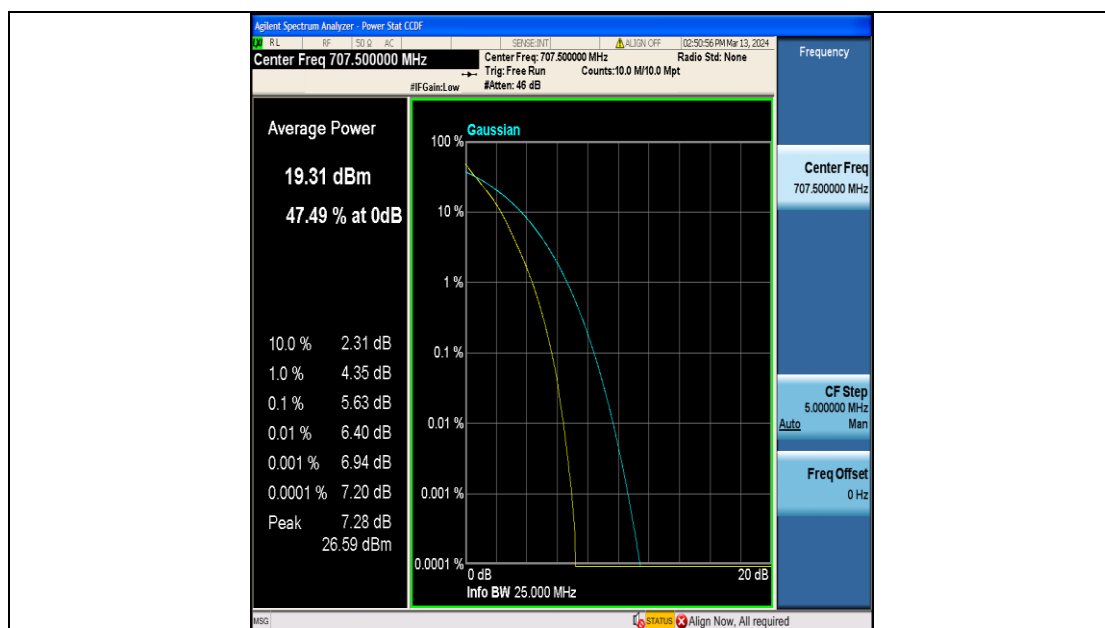
Band12-3MHz-16QAM-23165-15RB#0-PASS



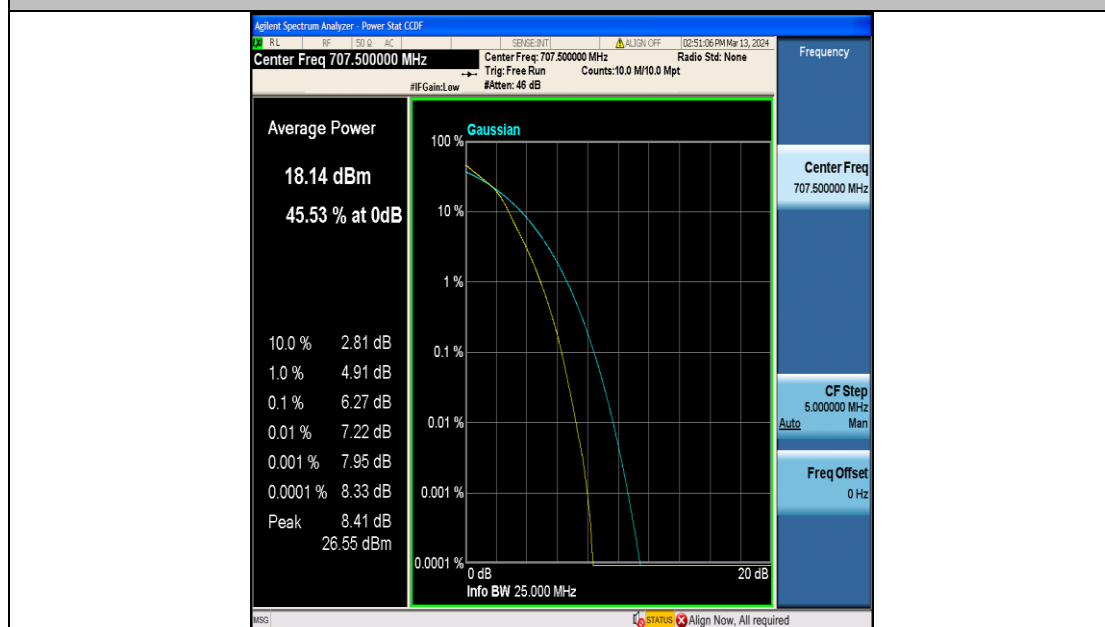
Band12-5MHz-QPSK-23035-25RB#0-PASS



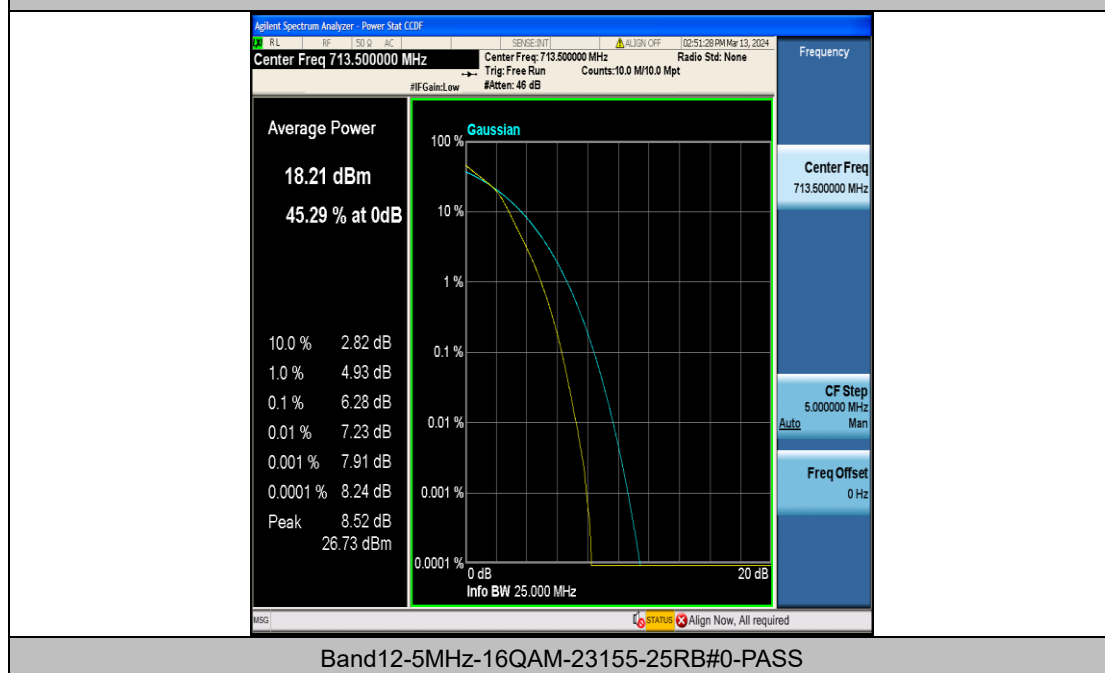
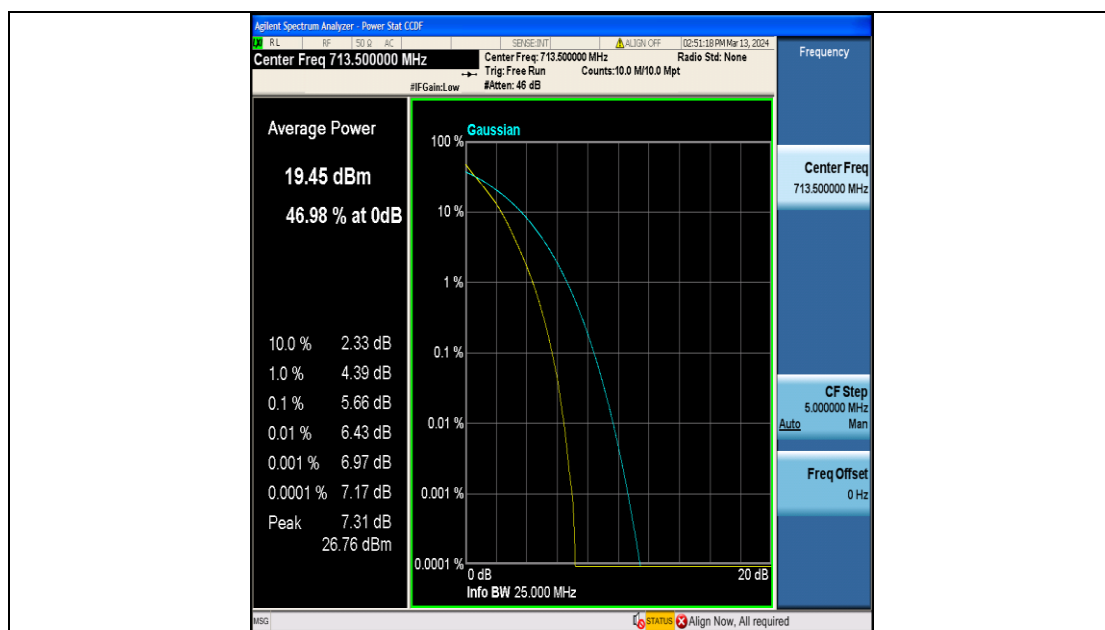
Band12-5MHz-16QAM-23035-25RB#0-PASS

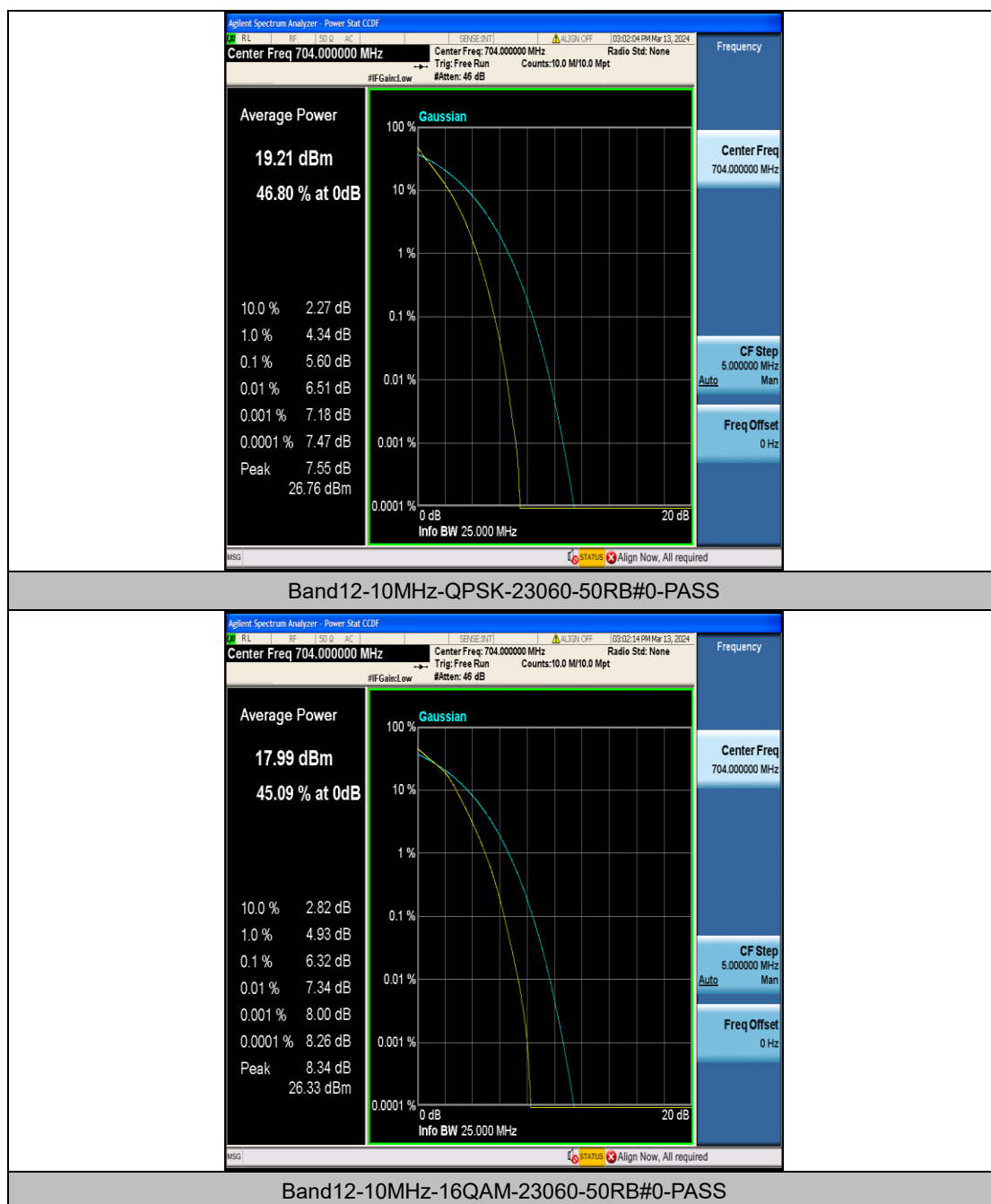


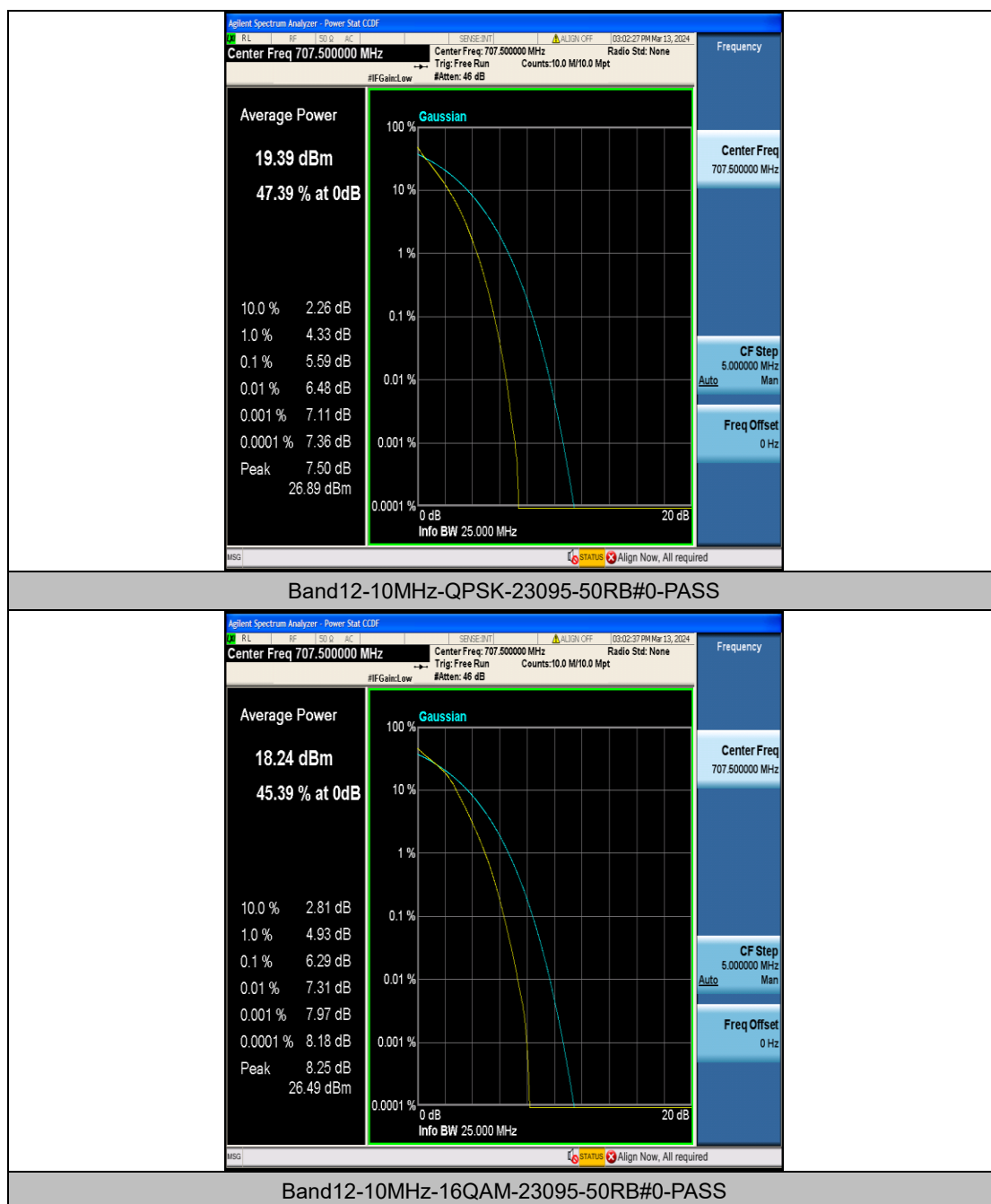
Band12-5MHz-QPSK-23095-25RB#0-PASS

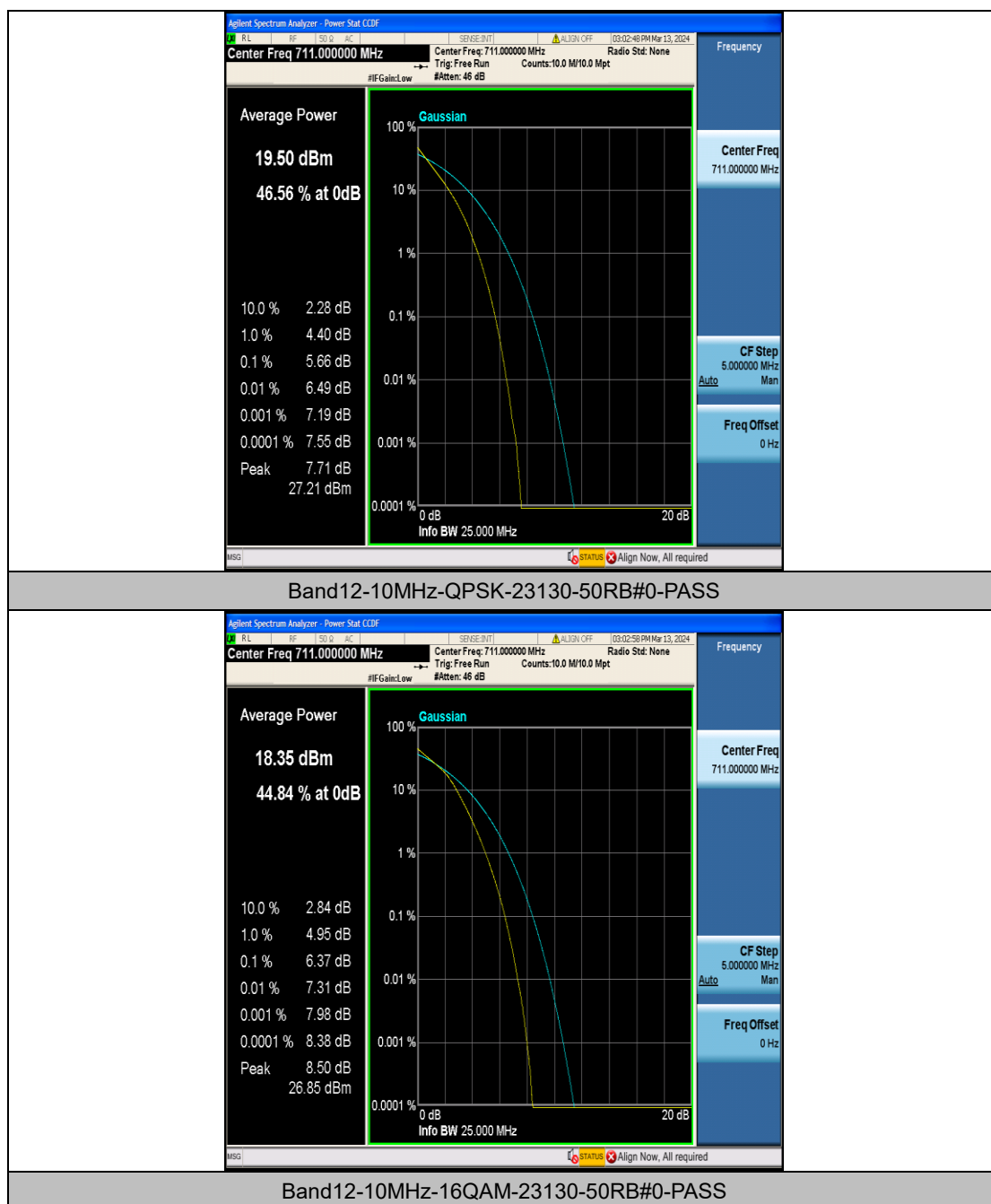


Band12-5MHz-16QAM-23095-25RB#0-PASS







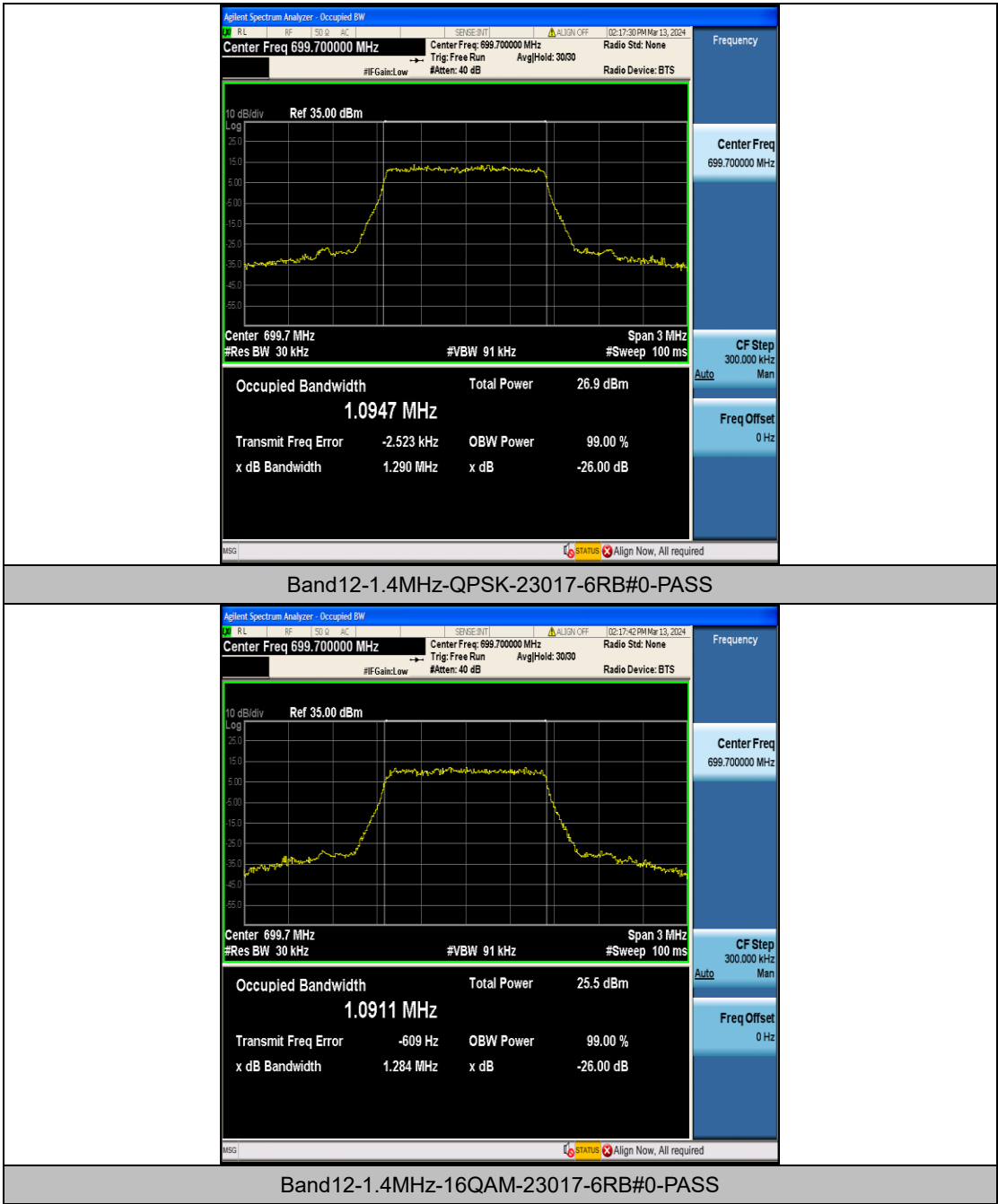


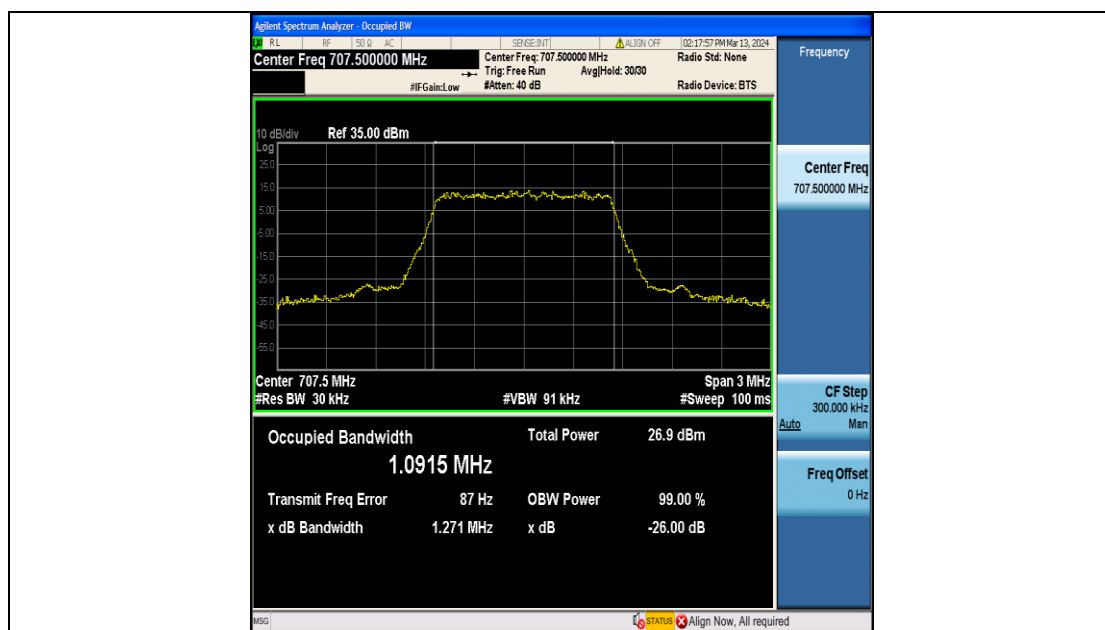
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

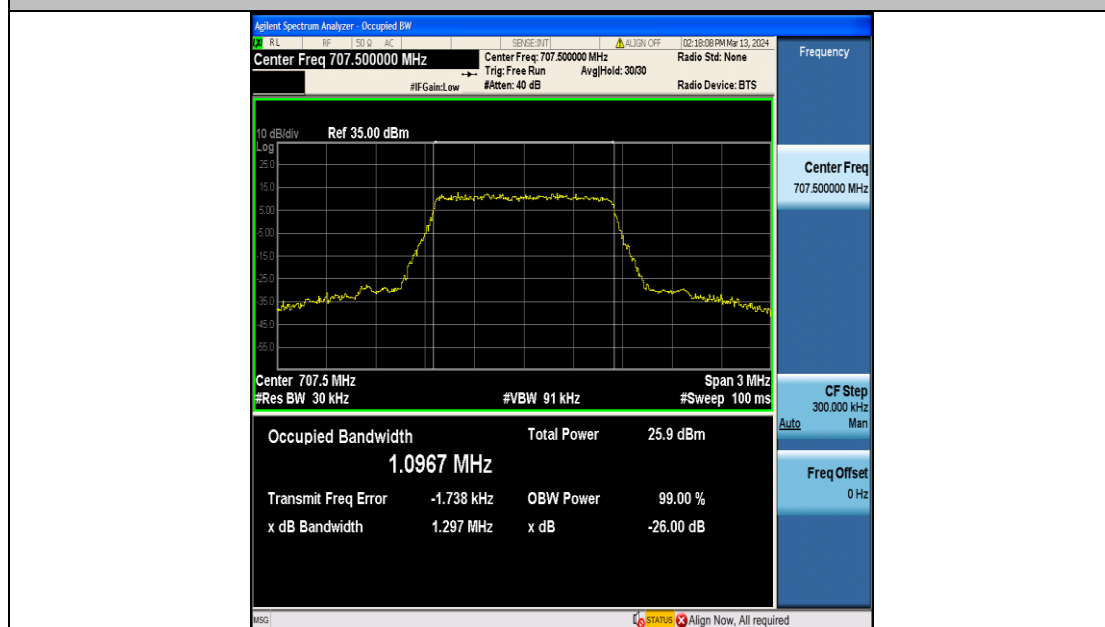
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.0947	1.290	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.0911	1.284	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.0915	1.271	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.0967	1.297	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.0925	1.277	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.0970	1.307	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.6851	2.880	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.6791	2.909	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.6882	2.901	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.6742	2.913	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.6920	2.896	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.6774	2.893	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.5282	5.590	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.5181	5.132	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.5231	5.189	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.5158	5.106	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.5287	5.197	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.5201	5.125	PASS
Band12	10MHz	QPSK	23060	50RB#0	9.0112	10.11	PASS
Band12	10MHz	16QAM	23060	50RB#0	9.0036	10.06	PASS
Band12	10MHz	QPSK	23095	50RB#0	9.0201	10.13	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.9981	10.05	PASS
Band12	10MHz	QPSK	23130	50RB#0	9.0167	10.12	PASS
Band12	10MHz	16QAM	23130	50RB#0	9.0040	10.17	PASS

Test Graphs

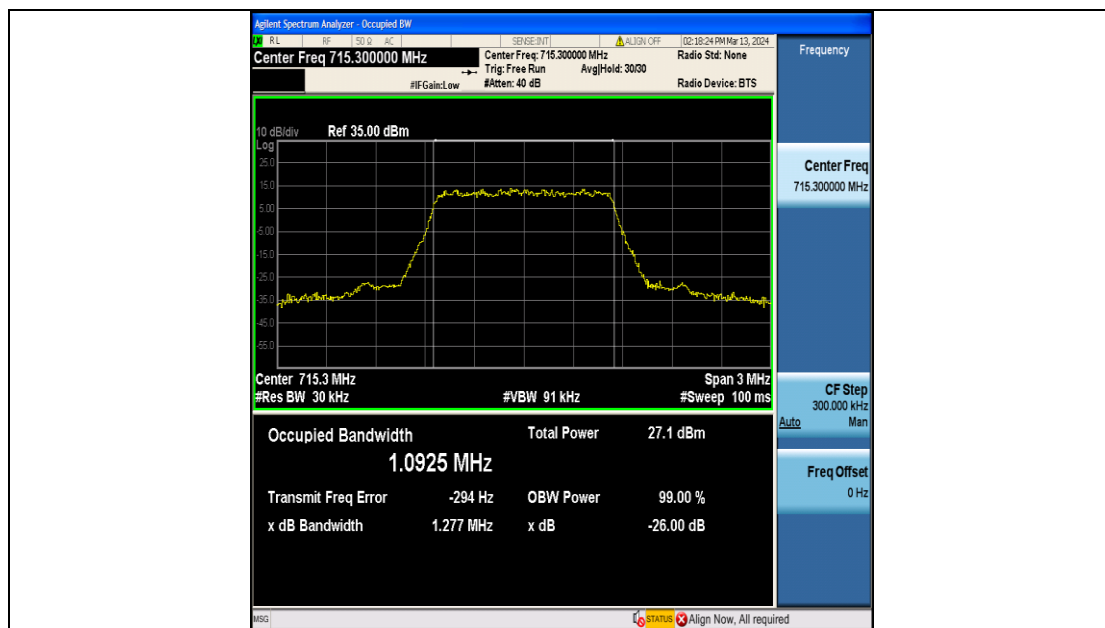




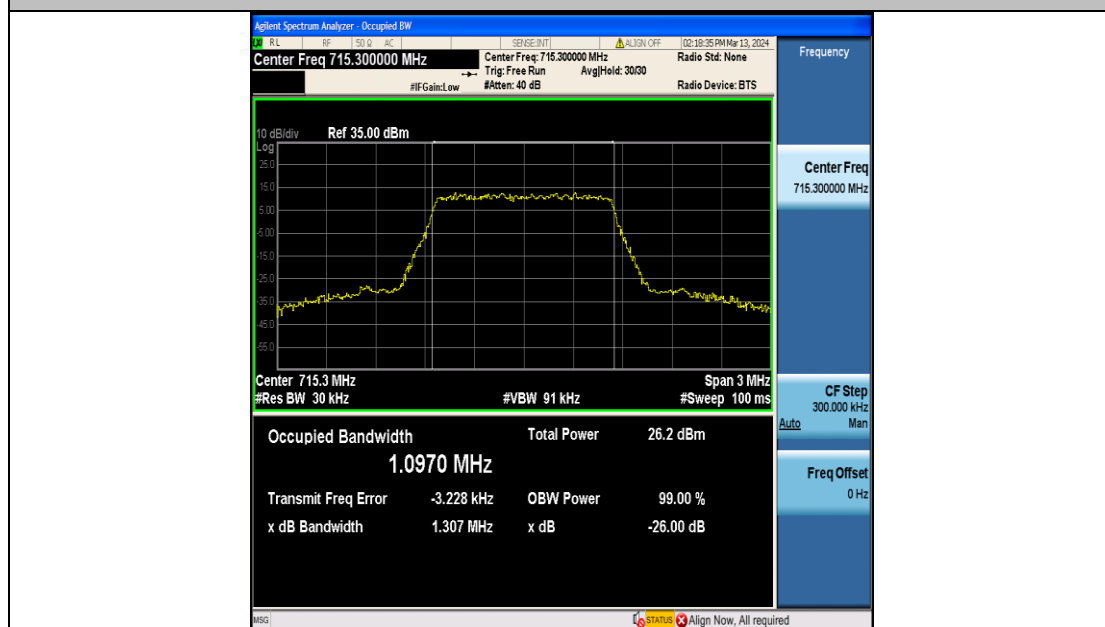
Band12-1.4MHz-QPSK-23095-6RB#0-PASS



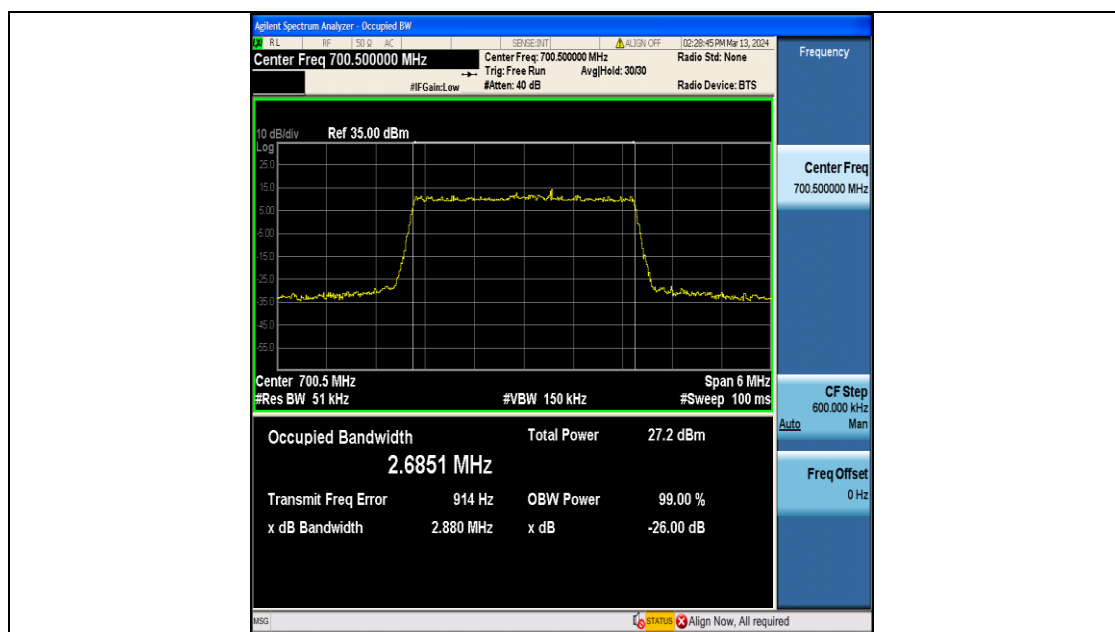
Band12-1.4MHz-16QAM-23095-6RB#0-PASS



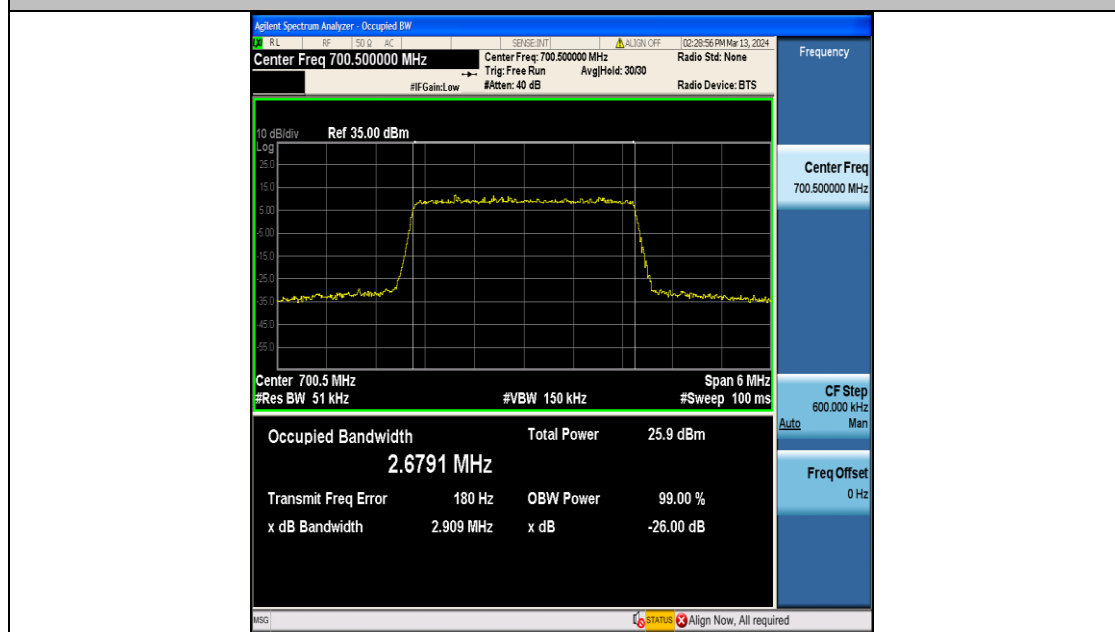
Band12-1.4MHz-QPSK-23173-6RB#0-PASS



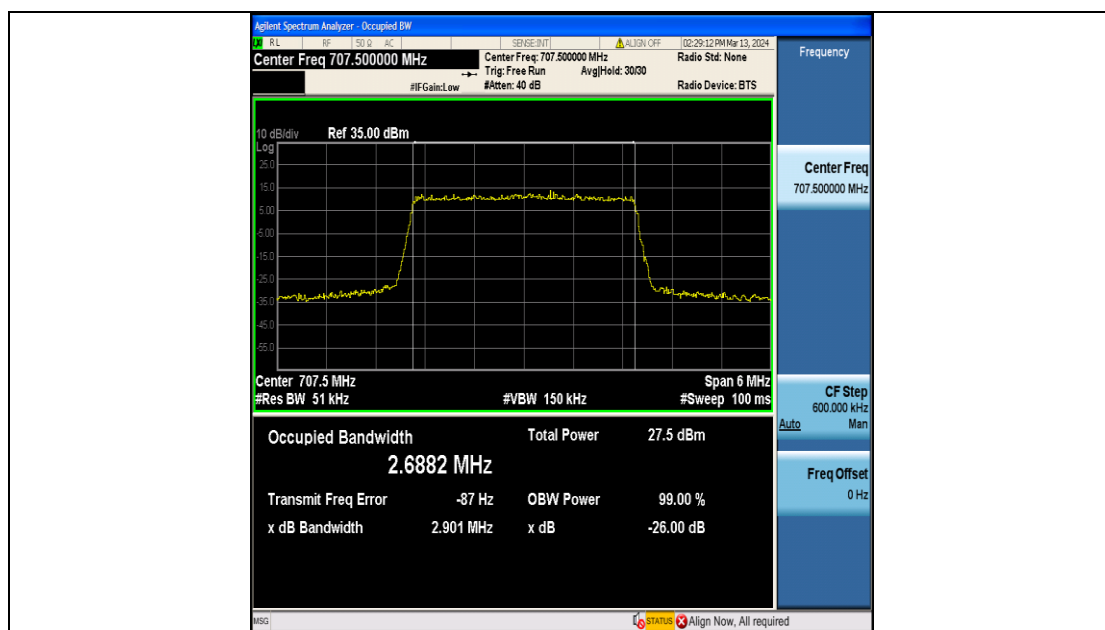
Band12-1.4MHz-16QAM-23173-6RB#0-PASS



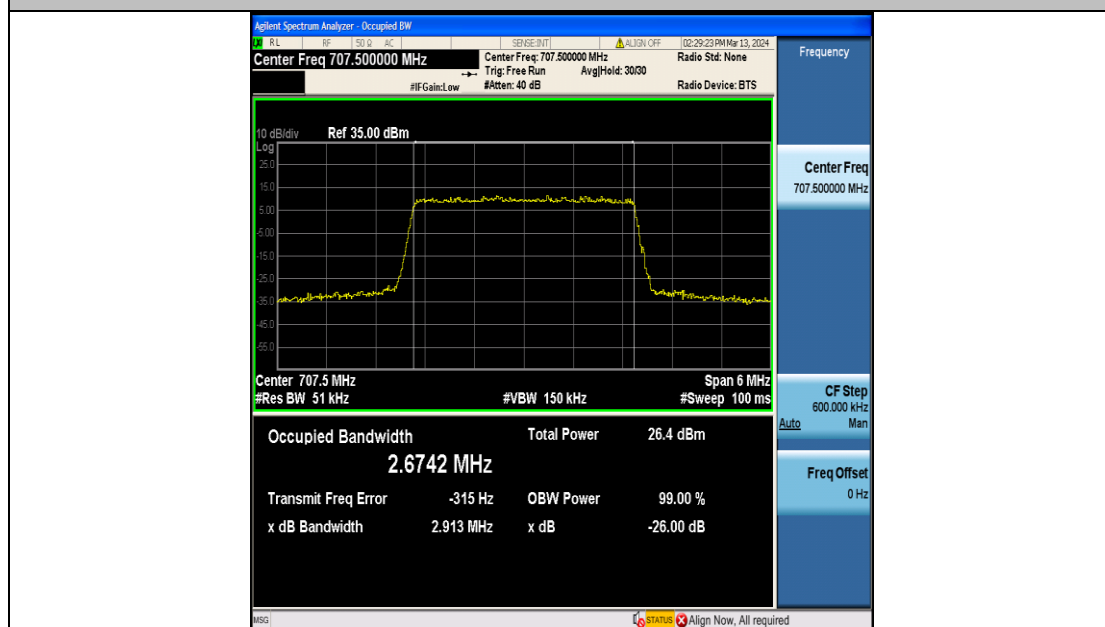
Band12-3MHz-QPSK-23025-15RB#0-PASS



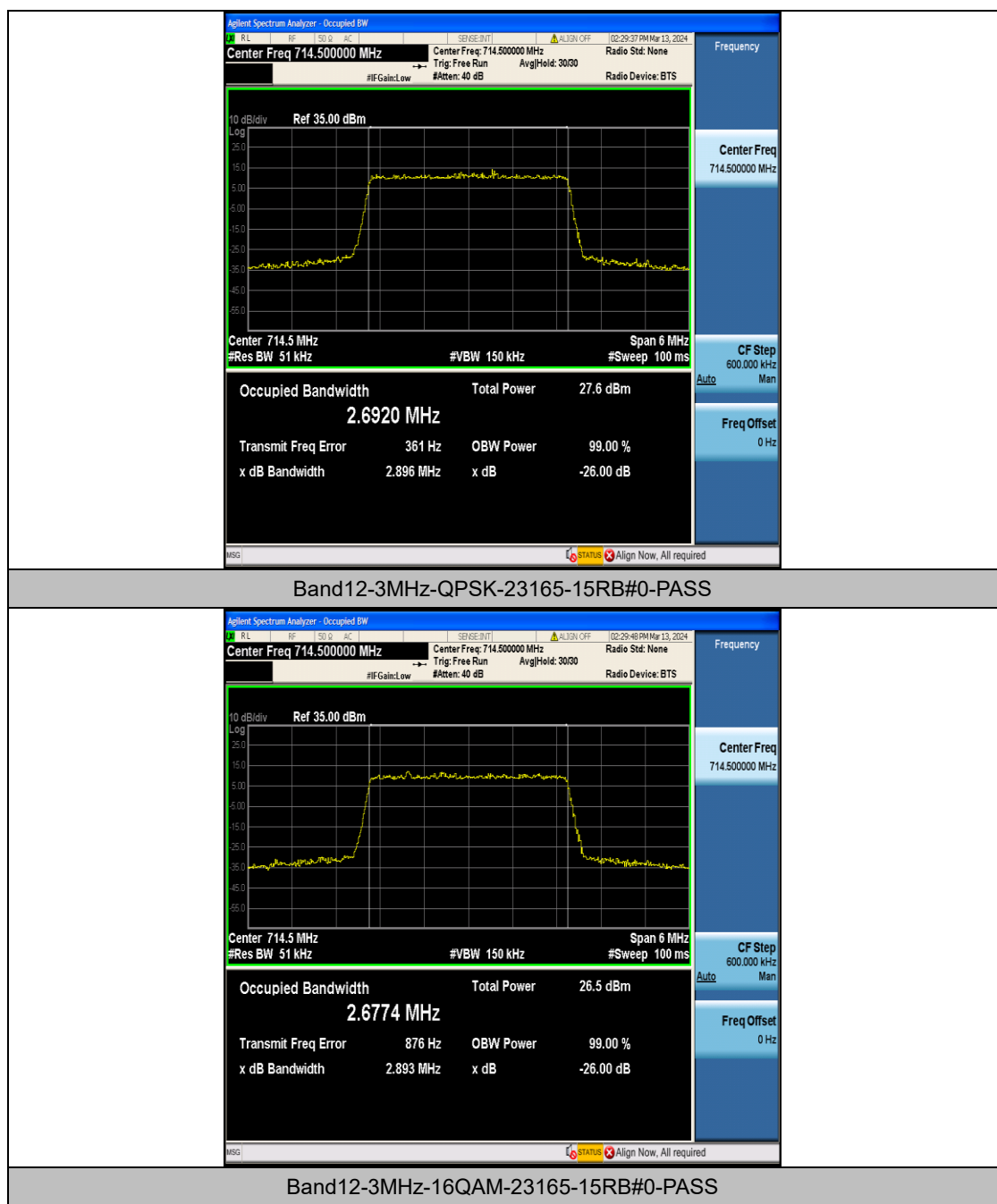
Band12-3MHz-16QAM-23025-15RB#0-PASS

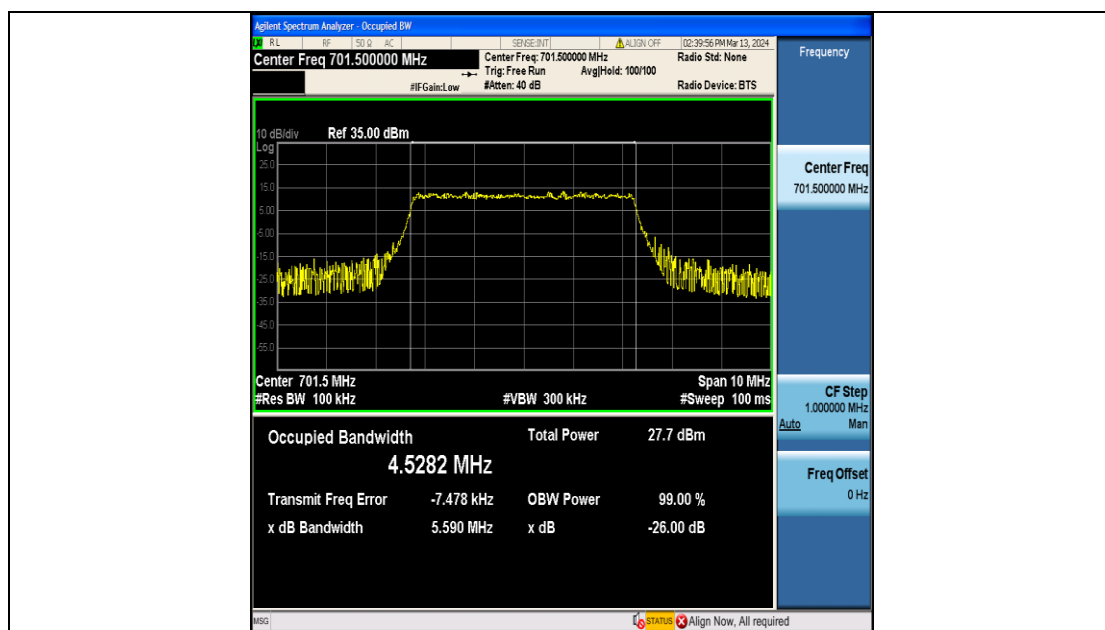


Band12-3MHz-QPSK-23095-15RB#0-PASS

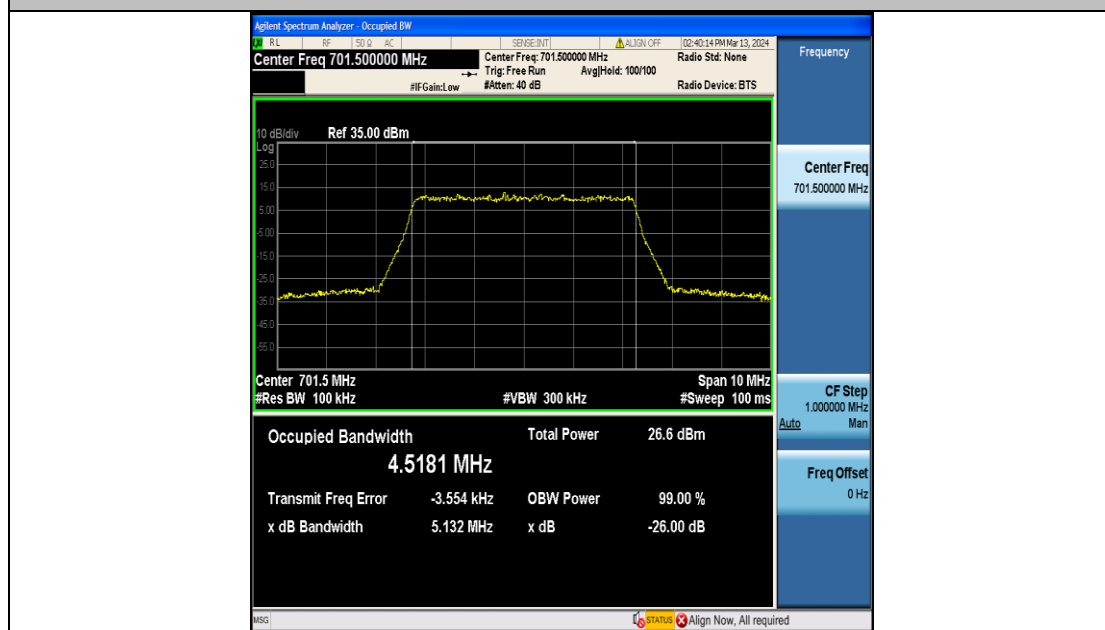


Band12-3MHz-16QAM-23095-15RB#0-PASS





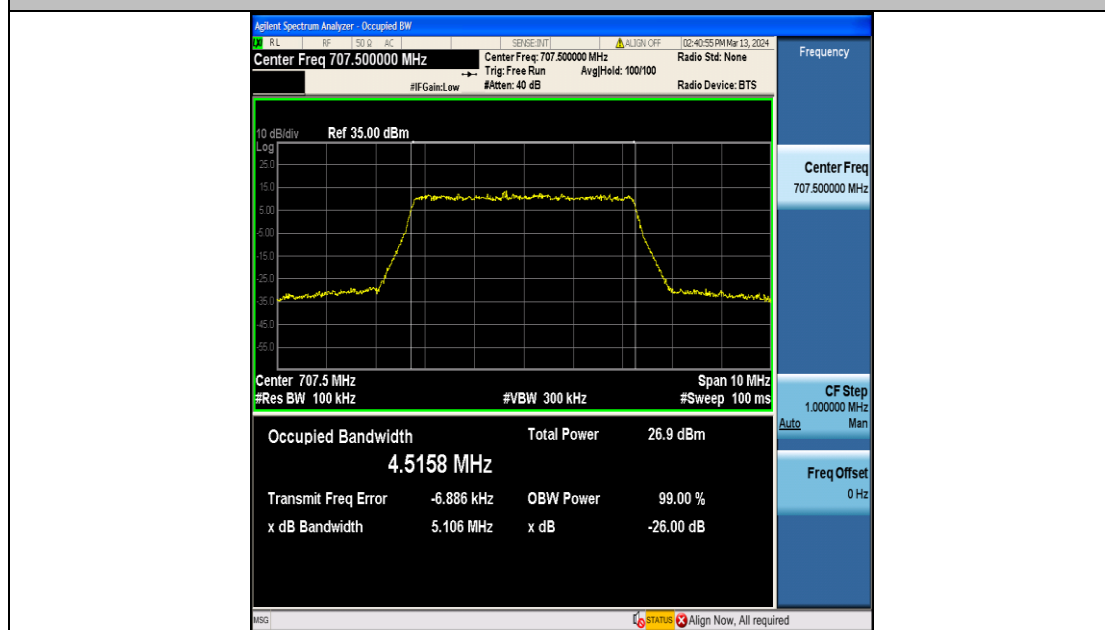
Band12-5MHz-QPSK-23035-25RB#0-PASS



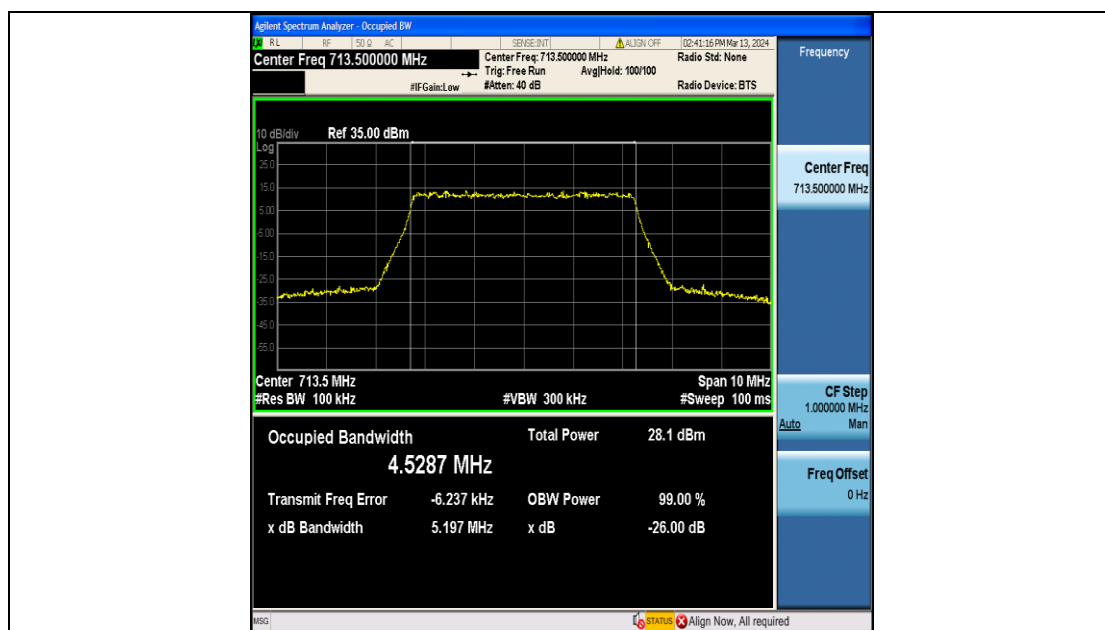
Band12-5MHz-16QAM-23035-25RB#0-PASS



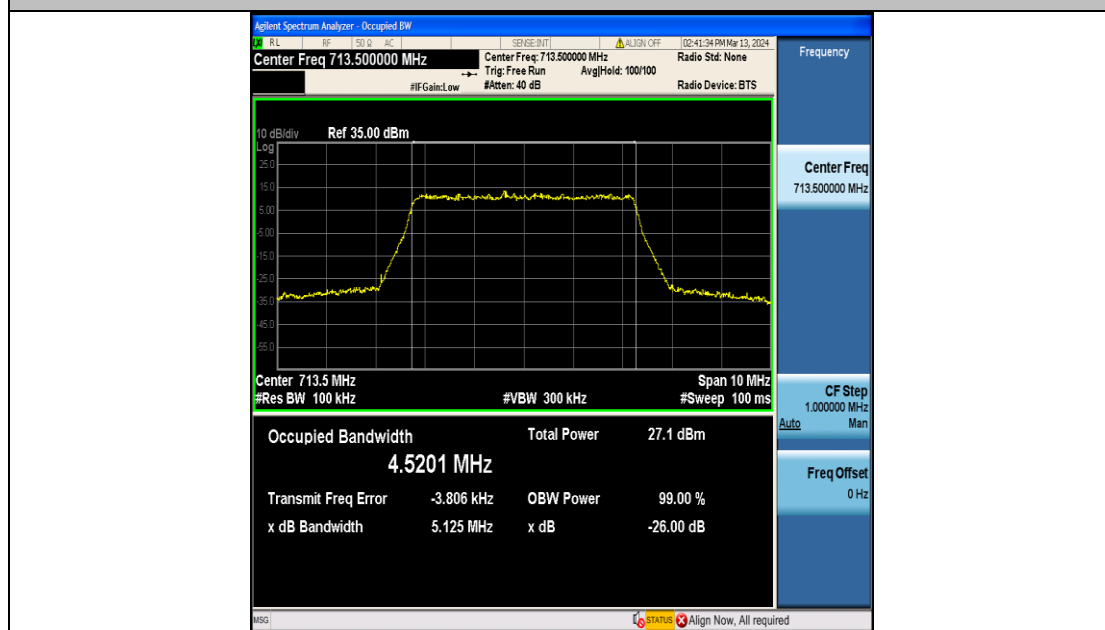
Band12-5MHz-QPSK-23095-25RB#0-PASS



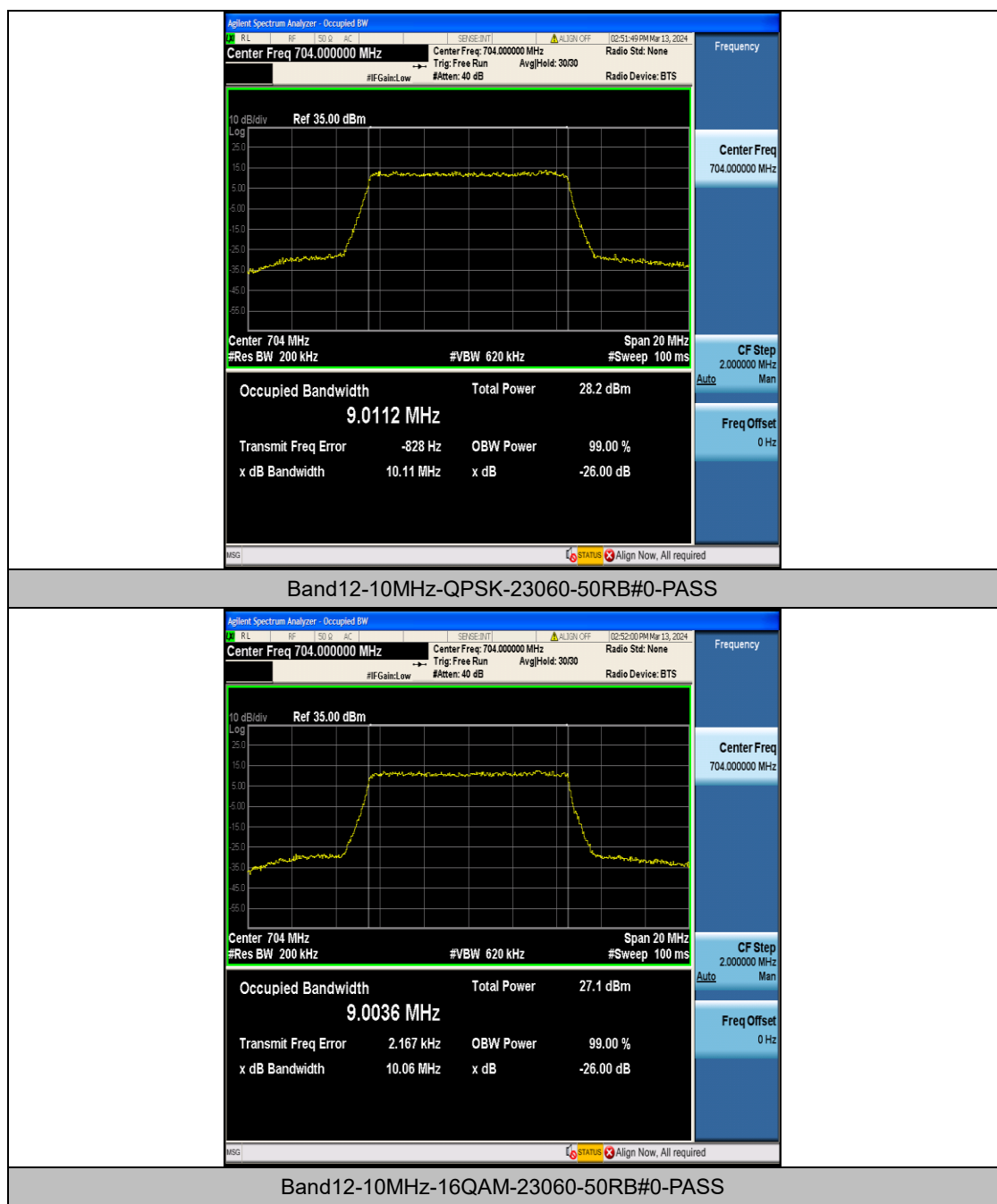
Band12-5MHz-16QAM-23095-25RB#0-PASS

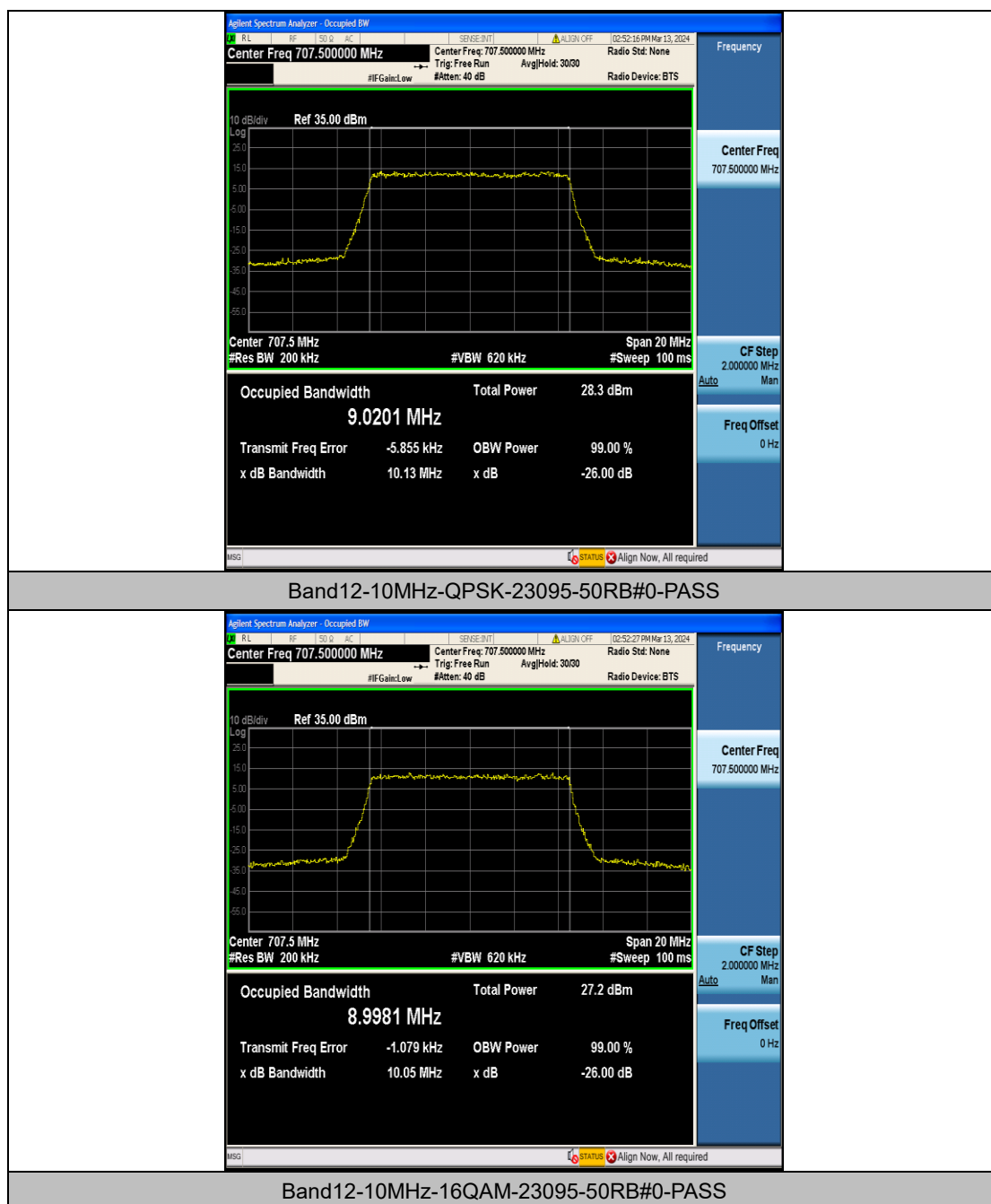


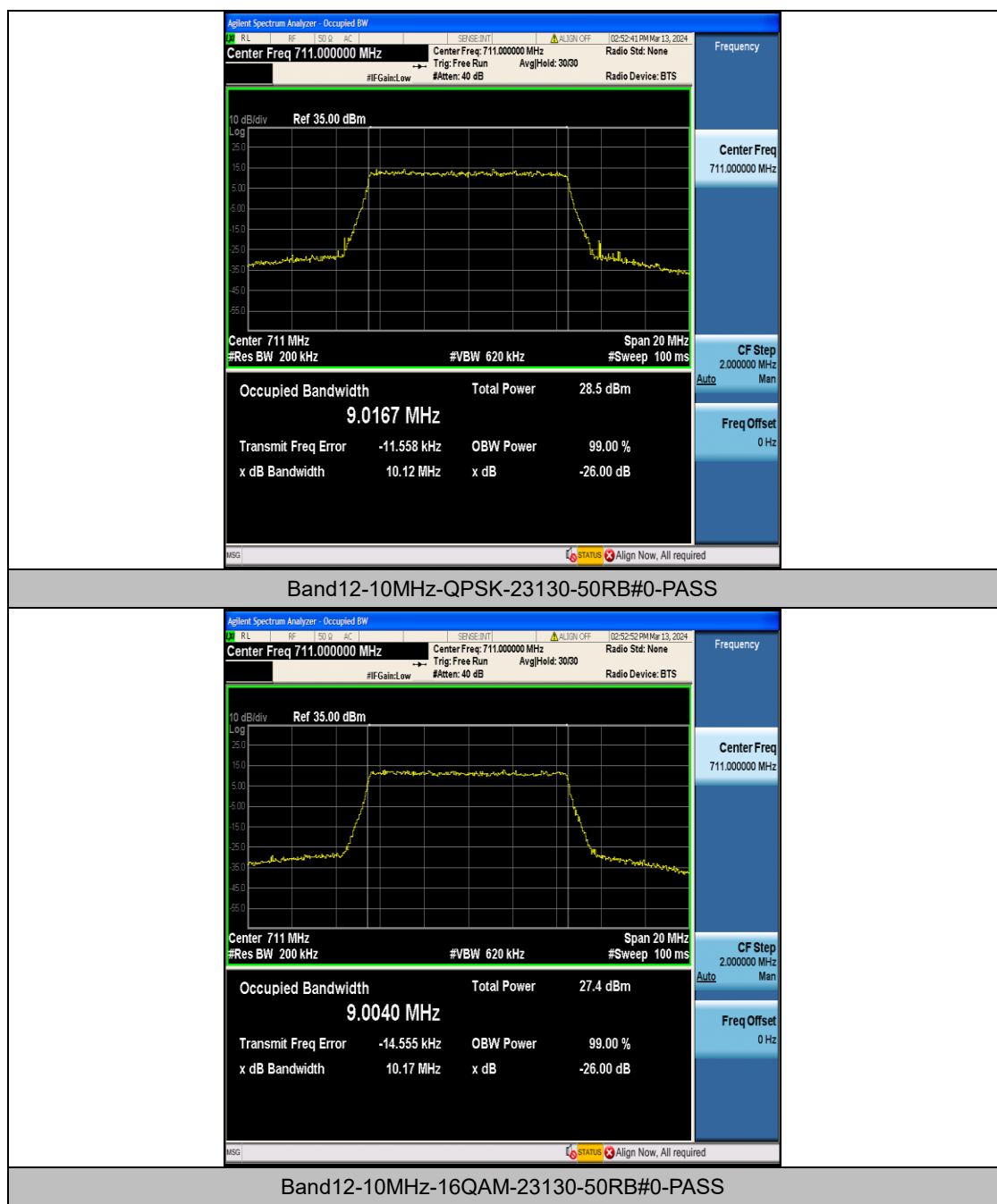
Band12-5MHz-QPSK-23155-25RB#0-PASS



Band12-5MHz-16QAM-23155-25RB#0-PASS





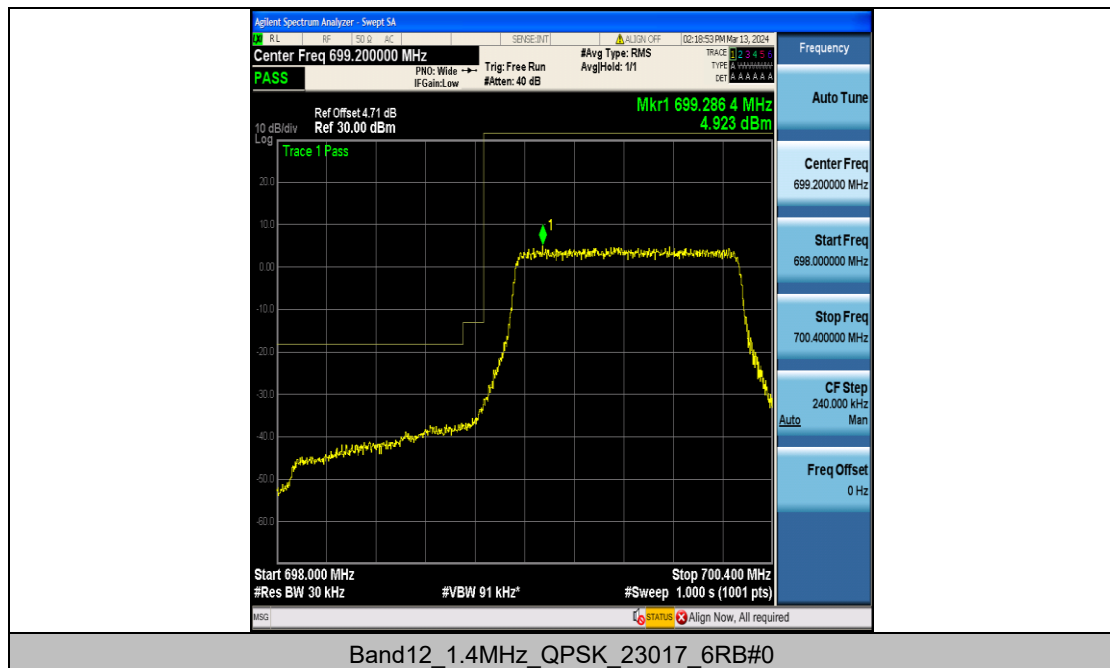


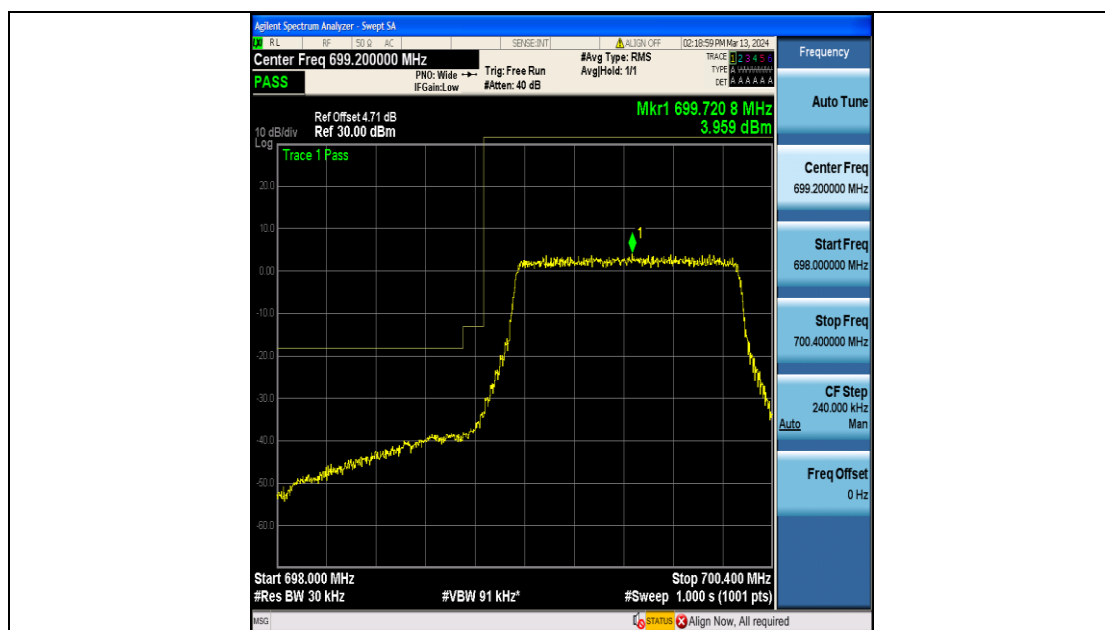
Appendix D: Band Edge

Test Result

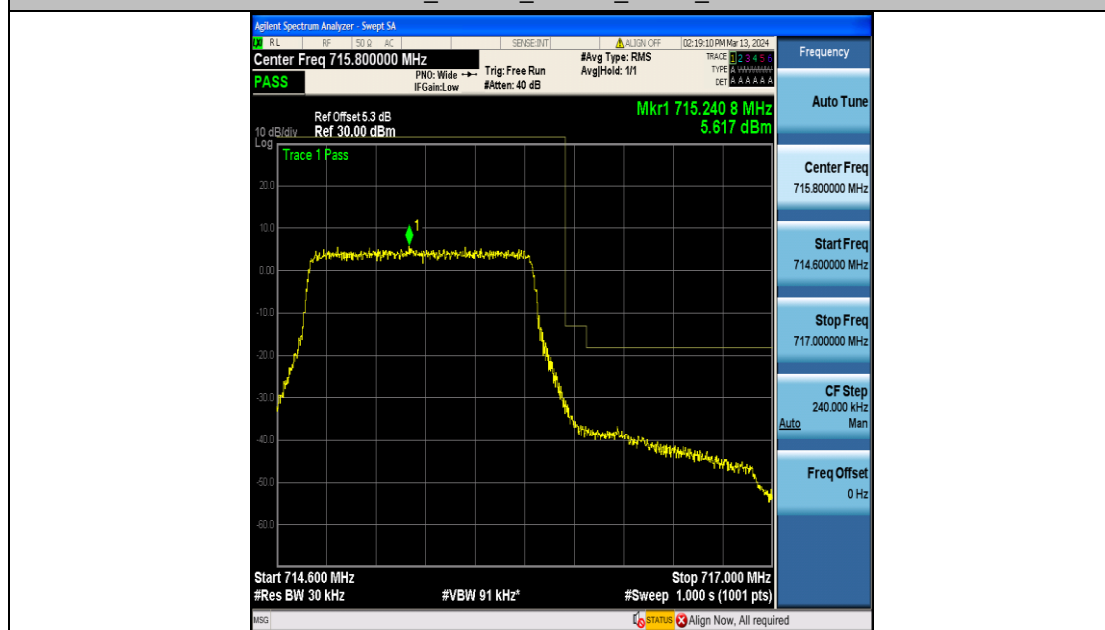
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	-36.86	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	-38.24	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	-36.74	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	-37.75	PASS
Band12	3MHz	QPSK	23025	15RB#0	-39.62	PASS
Band12	3MHz	16QAM	23025	15RB#0	-40.70	PASS
Band12	3MHz	QPSK	23165	15RB#0	-39.65	PASS
Band12	3MHz	16QAM	23165	15RB#0	-39.88	PASS
Band12	5MHz	QPSK	23035	25RB#0	-35.23	PASS
Band12	5MHz	16QAM	23035	25RB#0	-36.73	PASS
Band12	5MHz	QPSK	23155	25RB#0	-34.87	PASS
Band12	5MHz	16QAM	23155	25RB#0	-35.54	PASS
Band12	10MHz	QPSK	23060	50RB#0	-39.35	PASS
Band12	10MHz	16QAM	23060	50RB#0	-41.83	PASS
Band12	10MHz	QPSK	23130	50RB#0	-40.72	PASS
Band12	10MHz	16QAM	23130	50RB#0	-41.81	PASS

Test Graphs





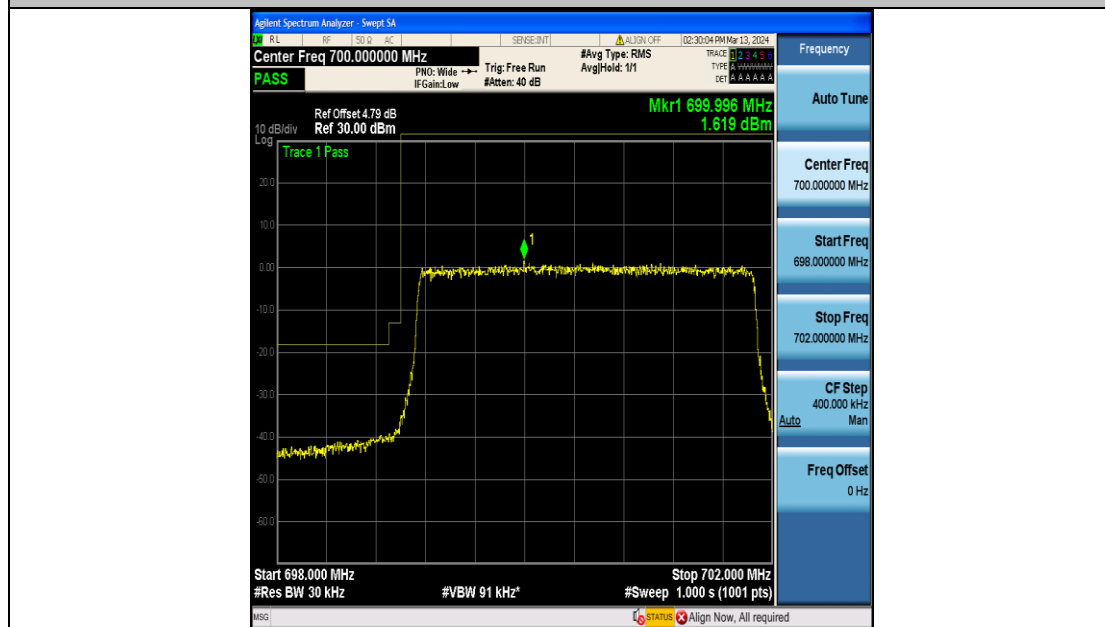
Band12_1.4MHz_16QAM_23017_6RB#0



Band12_1.4MHz_QPSK_23173_6RB#0



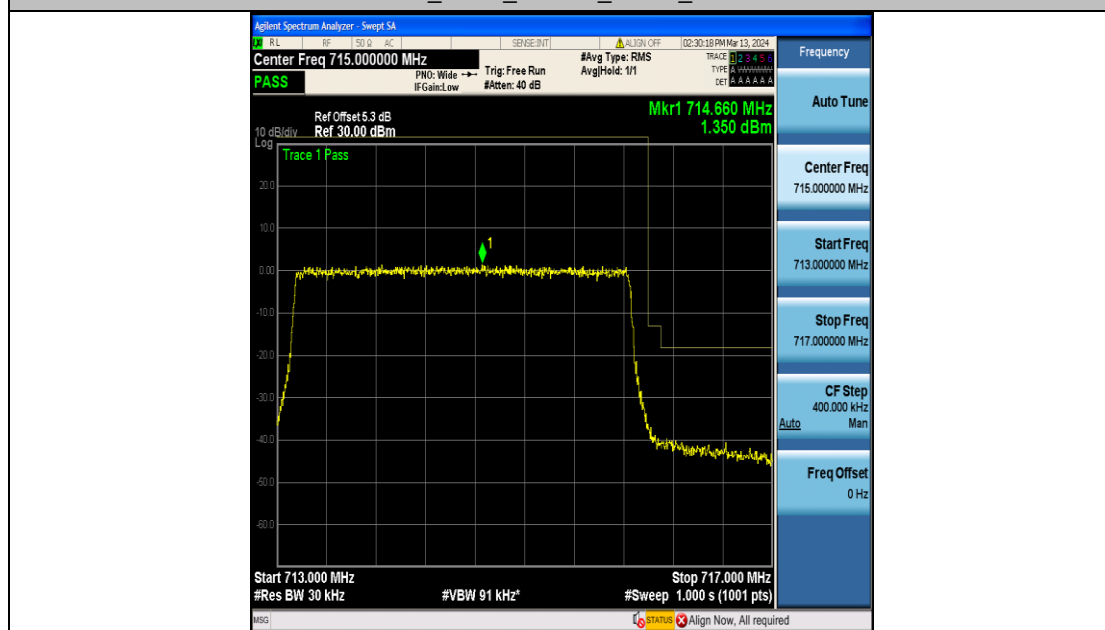
Band12_1.4MHz_16QAM_23173_6RB#0



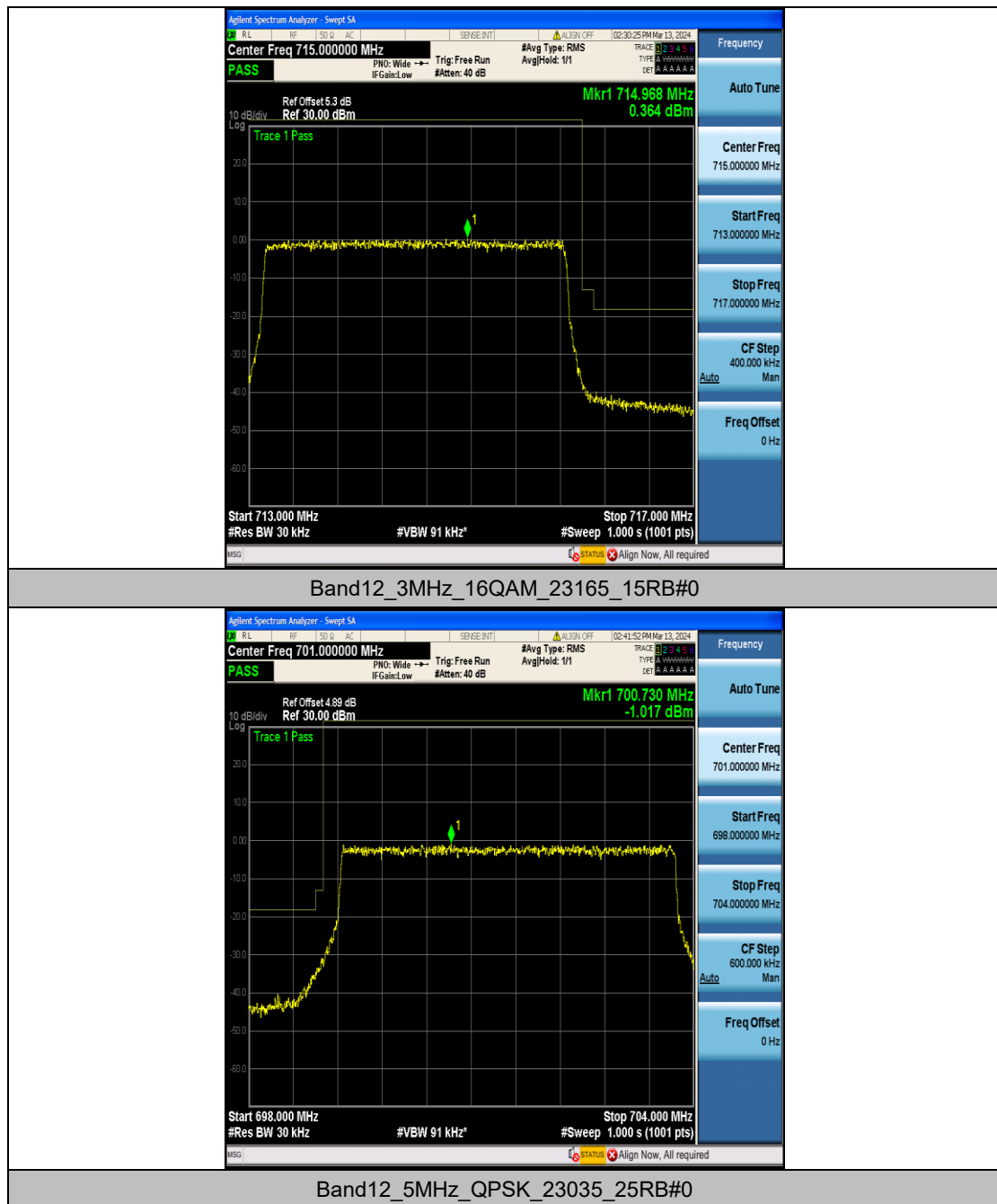
Band12_3MHz_QPSK_23025_15RB#0

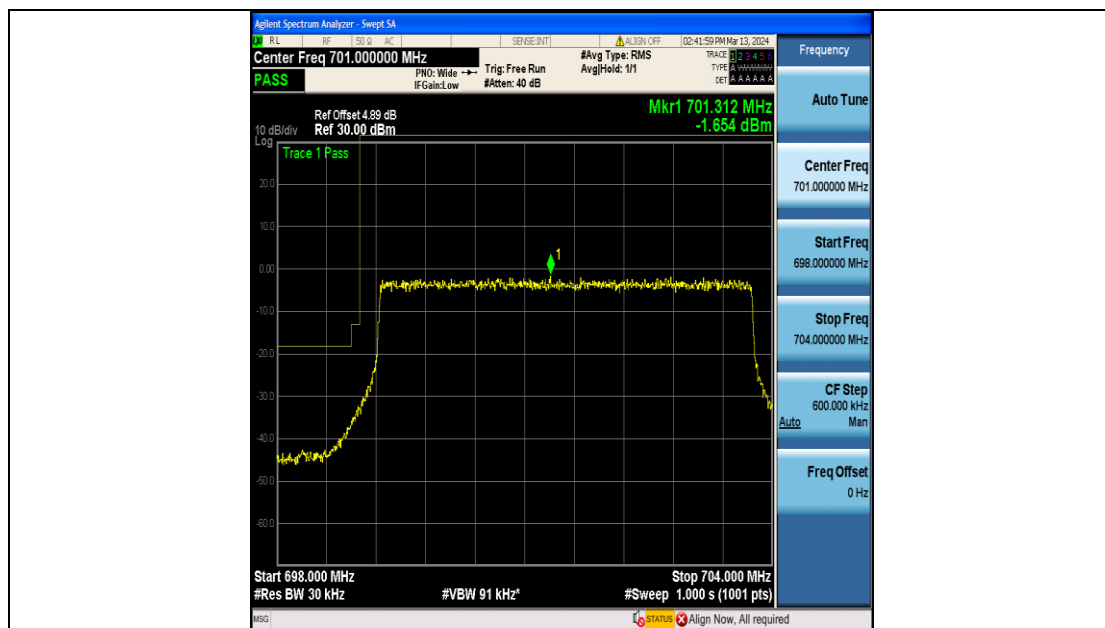


Band12_3MHz_16QAM_23025_15RB#0

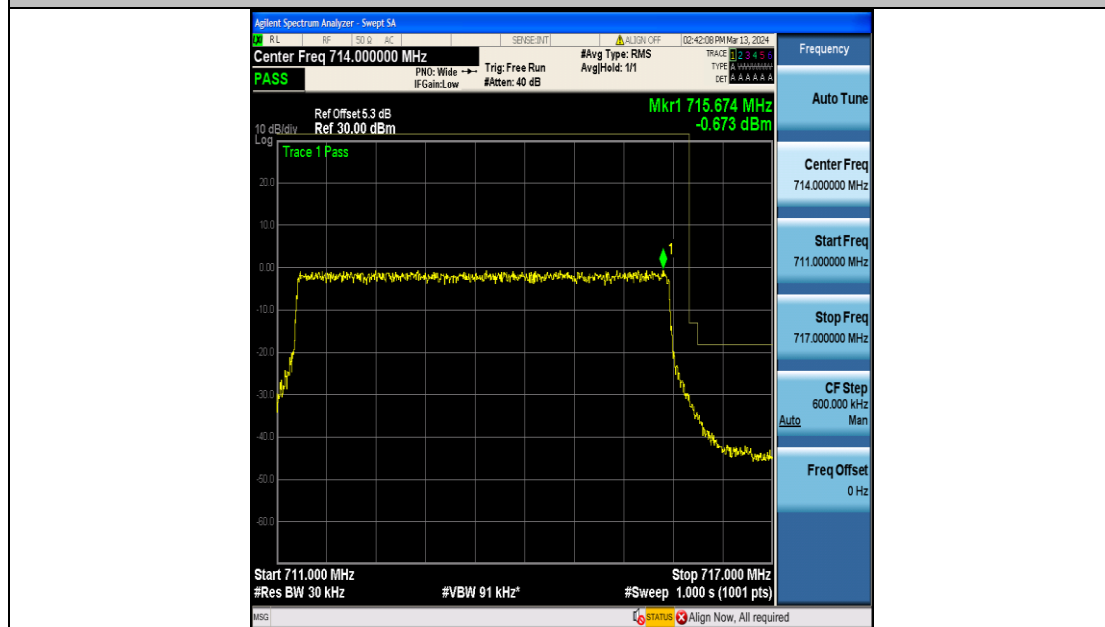


Band12_3MHz_QPSK_23165_15RB#0

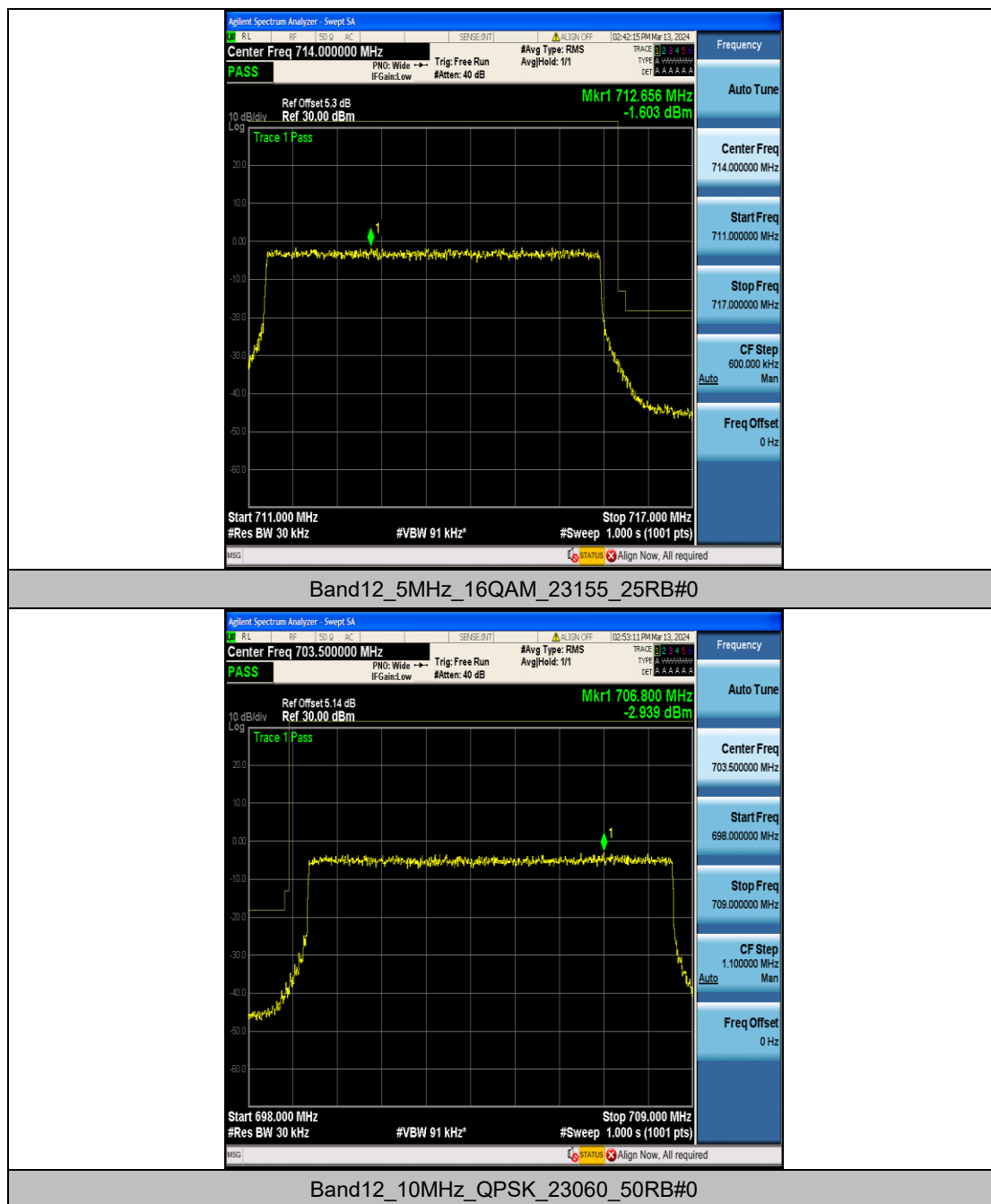


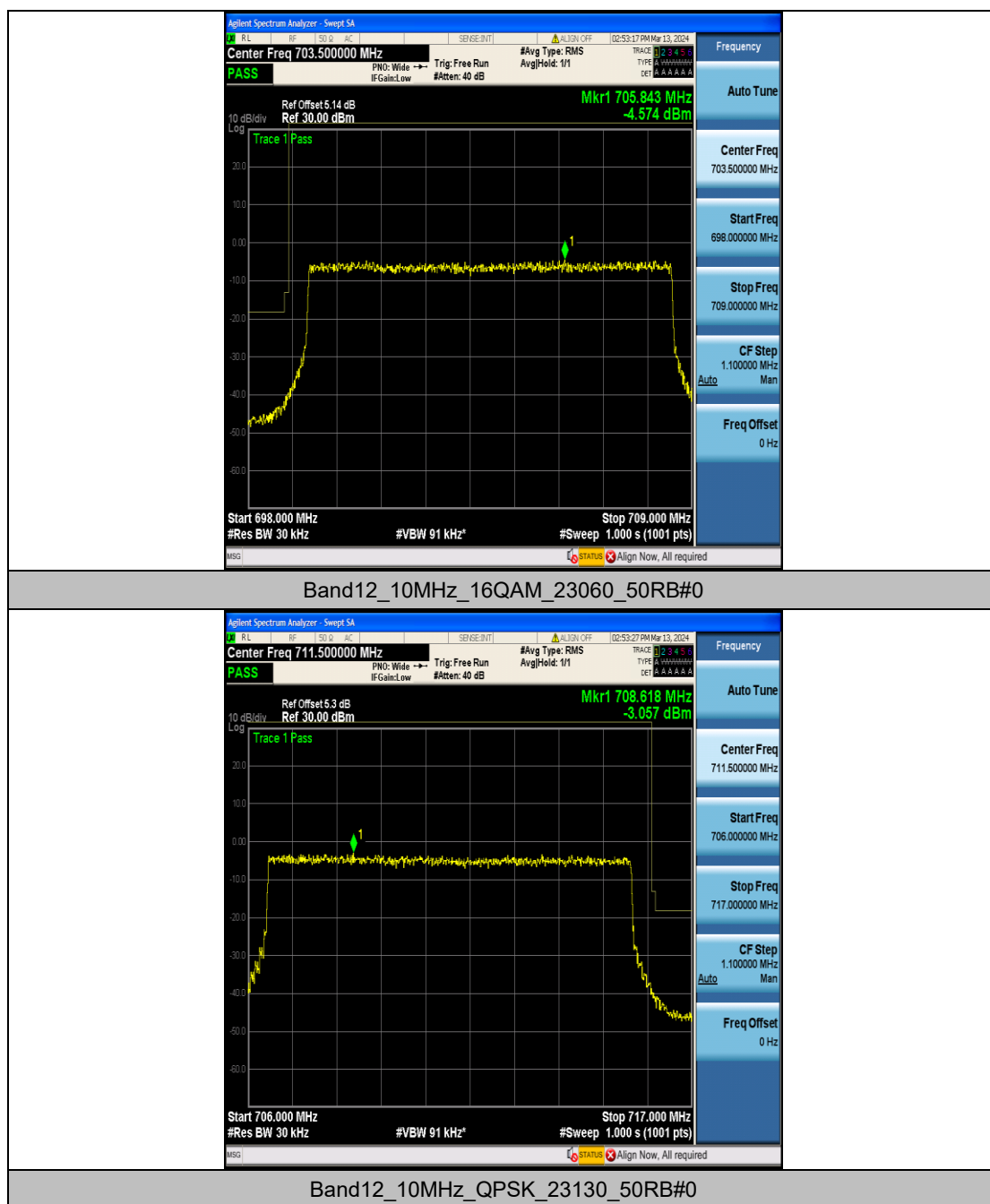


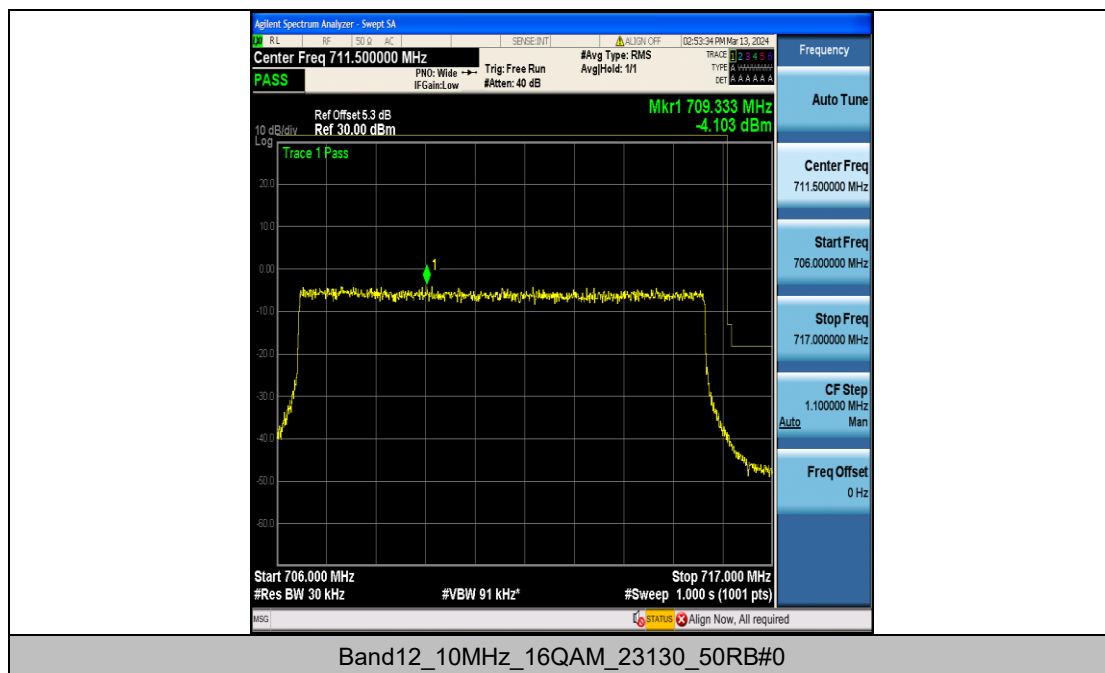
Band12_5MHz_16QAM_23035_25RB#0



Band12_5MHz_QPSK_23155_25RB#0







Appendix E: Conducted Spurious Emission

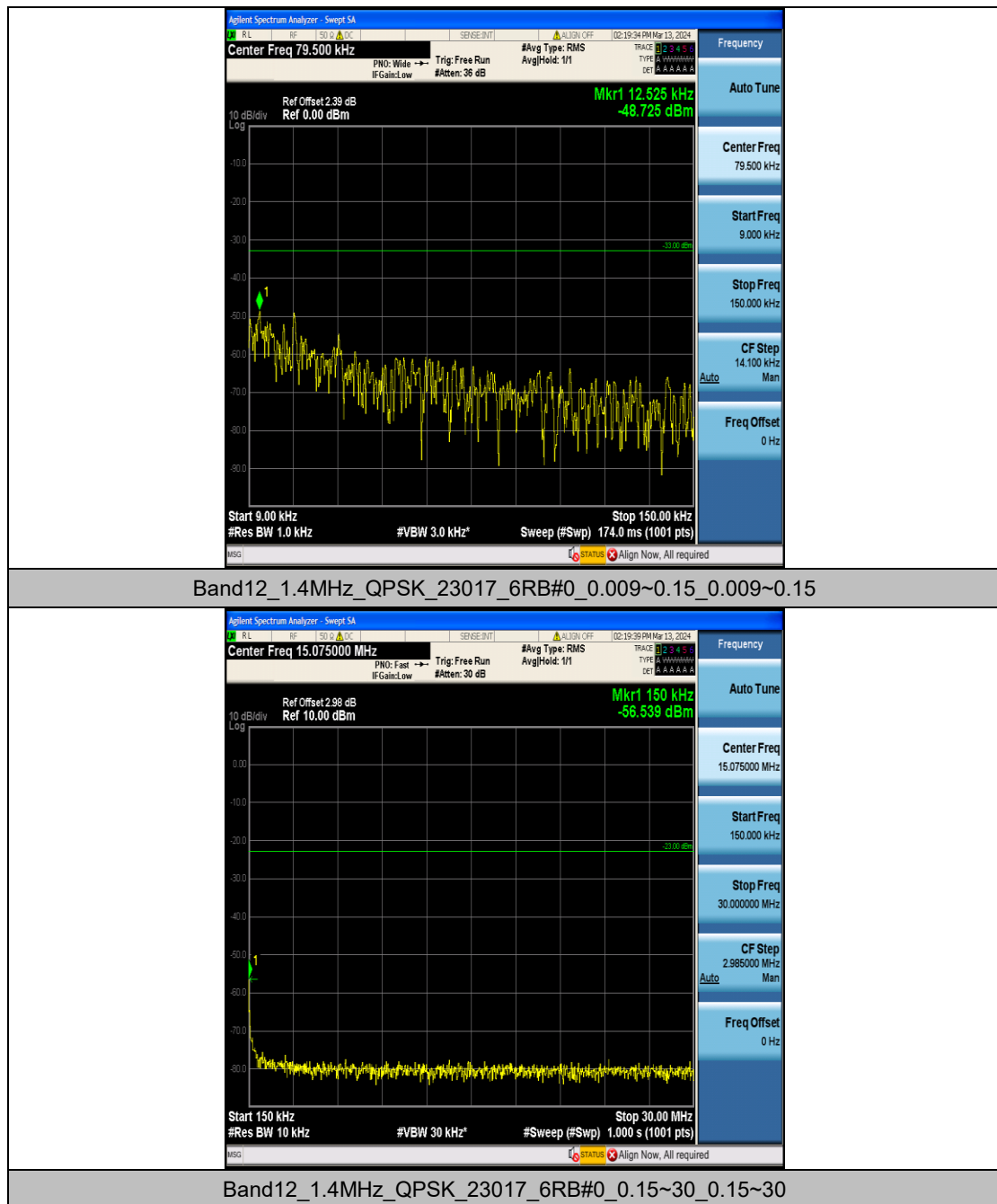
Test Result

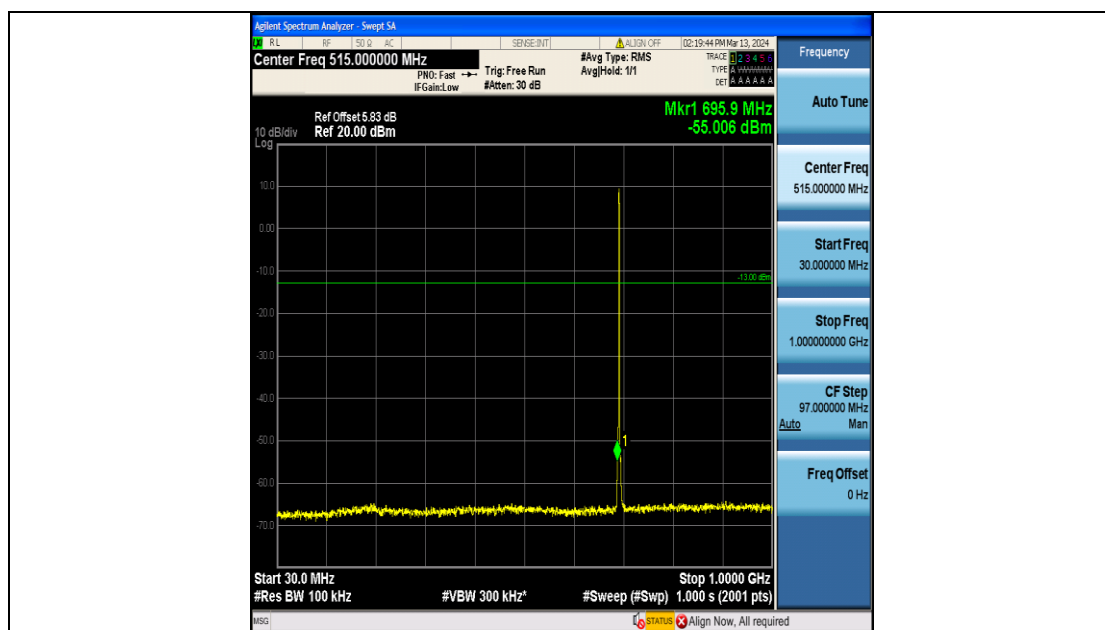
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	0.009~0.15	-48.73	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	0.15~30	-56.54	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	30~1000	-55.01	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	1000~3000	-51.25	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	3000~10000	-50.36	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	0.009~0.15	-45.82	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	0.15~30	-59.40	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	30~1000	-55.93	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1000~3000	-51.48	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	3000~10000	-49.97	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	0.009~0.15	-46.07	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	0.15~30	-58.14	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	30~1000	-56.68	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1000~3000	-51.81	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	3000~10000	-50.84	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	0.009~0.15	-47.57	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	0.15~30	-59.67	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	30~1000	-56.55	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1000~3000	-52.13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	3000~10000	-50.62	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	0.009~0.15	-48.07	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	0.15~30	-58.52	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	30~1000	-56.10	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1000~3000	-51.26	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	3000~10000	-50.12	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	0.009~0.15	-48.64	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	0.15~30	-60.47	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	30~1000	-55.82	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1000~3000	-52.36	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	3000~10000	-49.92	PASS
Band12	3MHz	QPSK	23025	15RB#0	0.009~0.15	-47.69	PASS
Band12	3MHz	QPSK	23025	15RB#0	0.15~30	-58.08	PASS
Band12	3MHz	QPSK	23025	15RB#0	30~1000	-60.67	PASS
Band12	3MHz	QPSK	23025	15RB#0	1000~3000	-52.36	PASS
Band12	3MHz	QPSK	23025	15RB#0	3000~10000	-50.32	PASS
Band12	3MHz	16QAM	23025	15RB#0	0.009~0.15	-49.52	PASS

Band12	3MHz	16QAM	23025	15RB#0	0.15~30	-57.79	PASS
Band12	3MHz	16QAM	23025	15RB#0	30~1000	-60.18	PASS
Band12	3MHz	16QAM	23025	15RB#0	1000~3000	-52.47	PASS
Band12	3MHz	16QAM	23025	15RB#0	3000~10000	-50.36	PASS
Band12	3MHz	QPSK	23095	15RB#0	0.009~0.15	-49.22	PASS
Band12	3MHz	QPSK	23095	15RB#0	0.15~30	-55.98	PASS
Band12	3MHz	QPSK	23095	15RB#0	30~1000	-61.31	PASS
Band12	3MHz	QPSK	23095	15RB#0	1000~3000	-52.74	PASS
Band12	3MHz	QPSK	23095	15RB#0	3000~10000	-50.58	PASS
Band12	3MHz	16QAM	23095	15RB#0	0.009~0.15	-47.14	PASS
Band12	3MHz	16QAM	23095	15RB#0	0.15~30	-60.35	PASS
Band12	3MHz	16QAM	23095	15RB#0	30~1000	-61.62	PASS
Band12	3MHz	16QAM	23095	15RB#0	1000~3000	-52.52	PASS
Band12	3MHz	16QAM	23095	15RB#0	3000~10000	-50.33	PASS
Band12	3MHz	QPSK	23165	15RB#0	0.009~0.15	-47.82	PASS
Band12	3MHz	QPSK	23165	15RB#0	0.15~30	-56.70	PASS
Band12	3MHz	QPSK	23165	15RB#0	30~1000	-62.05	PASS
Band12	3MHz	QPSK	23165	15RB#0	1000~3000	-52.50	PASS
Band12	3MHz	QPSK	23165	15RB#0	3000~10000	-50.26	PASS
Band12	3MHz	16QAM	23165	15RB#0	0.009~0.15	-45.91	PASS
Band12	3MHz	16QAM	23165	15RB#0	0.15~30	-57.40	PASS
Band12	3MHz	16QAM	23165	15RB#0	30~1000	-63.17	PASS
Band12	3MHz	16QAM	23165	15RB#0	1000~3000	-52.72	PASS
Band12	3MHz	16QAM	23165	15RB#0	3000~10000	-50.42	PASS
Band12	5MHz	QPSK	23035	25RB#0	0.009~0.15	-47.51	PASS
Band12	5MHz	QPSK	23035	25RB#0	0.15~30	-60.93	PASS
Band12	5MHz	QPSK	23035	25RB#0	30~1000	-49.58	PASS
Band12	5MHz	QPSK	23035	25RB#0	1000~3000	-52.18	PASS
Band12	5MHz	QPSK	23035	25RB#0	3000~10000	-49.66	PASS
Band12	5MHz	16QAM	23035	25RB#0	0.009~0.15	-46.29	PASS
Band12	5MHz	16QAM	23035	25RB#0	0.15~30	-58.64	PASS
Band12	5MHz	16QAM	23035	25RB#0	30~1000	-64.33	PASS
Band12	5MHz	16QAM	23035	25RB#0	1000~3000	-52.19	PASS
Band12	5MHz	16QAM	23035	25RB#0	3000~10000	-50.43	PASS
Band12	5MHz	QPSK	23095	25RB#0	0.009~0.15	-47.44	PASS
Band12	5MHz	QPSK	23095	25RB#0	0.15~30	-58.42	PASS
Band12	5MHz	QPSK	23095	25RB#0	30~1000	-64.19	PASS
Band12	5MHz	QPSK	23095	25RB#0	1000~3000	-52.26	PASS
Band12	5MHz	QPSK	23095	25RB#0	3000~10000	-50.71	PASS
Band12	5MHz	16QAM	23095	25RB#0	0.009~0.15	-46.26	PASS
Band12	5MHz	16QAM	23095	25RB#0	0.15~30	-59.37	PASS
Band12	5MHz	16QAM	23095	25RB#0	30~1000	-64.22	PASS
Band12	5MHz	16QAM	23095	25RB#0	1000~3000	-52.22	PASS

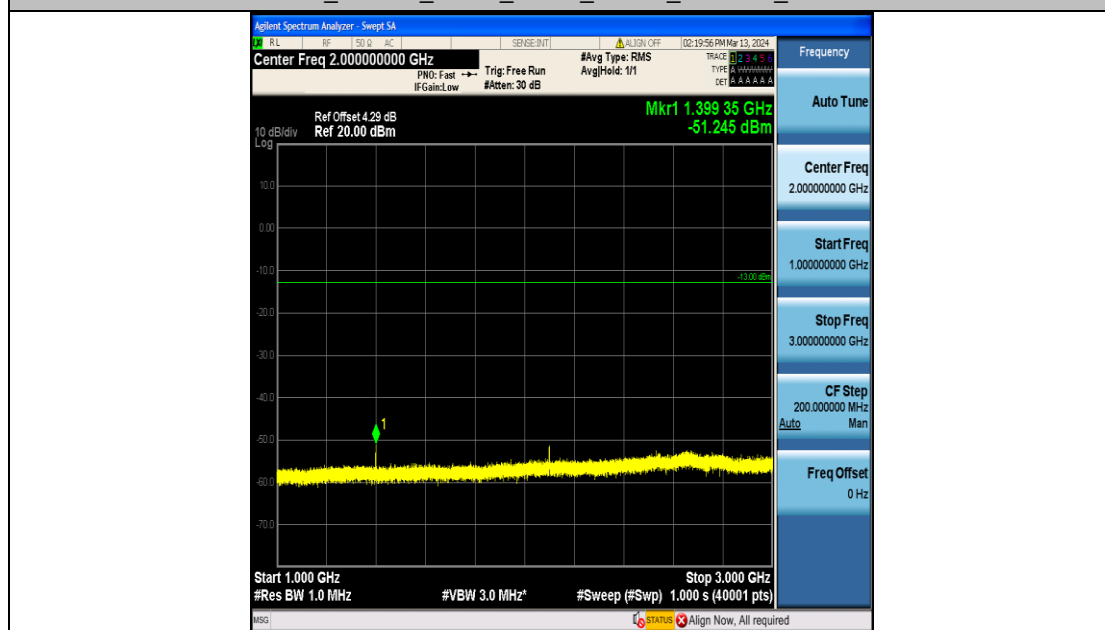
Band12	5MHz	16QAM	23095	25RB#0	3000~10000	-50.63	PASS
Band12	5MHz	QPSK	23155	25RB#0	0.009~0.15	-46.24	PASS
Band12	5MHz	QPSK	23155	25RB#0	0.15~30	-61.08	PASS
Band12	5MHz	QPSK	23155	25RB#0	30~1000	-64.19	PASS
Band12	5MHz	QPSK	23155	25RB#0	1000~3000	-51.34	PASS
Band12	5MHz	QPSK	23155	25RB#0	3000~10000	-50.26	PASS
Band12	5MHz	16QAM	23155	25RB#0	0.009~0.15	-47.27	PASS
Band12	5MHz	16QAM	23155	25RB#0	0.15~30	-59.35	PASS
Band12	5MHz	16QAM	23155	25RB#0	30~1000	-64.40	PASS
Band12	5MHz	16QAM	23155	25RB#0	1000~3000	-52.49	PASS
Band12	5MHz	16QAM	23155	25RB#0	3000~10000	-50.26	PASS
Band12	10MHz	QPSK	23060	50RB#0	0.009~0.15	-46.08	PASS
Band12	10MHz	QPSK	23060	50RB#0	0.15~30	-58.72	PASS
Band12	10MHz	QPSK	23060	50RB#0	30~1000	-63.85	PASS
Band12	10MHz	QPSK	23060	50RB#0	1000~3000	-52.41	PASS
Band12	10MHz	QPSK	23060	50RB#0	3000~10000	-50.48	PASS
Band12	10MHz	16QAM	23060	50RB#0	0.009~0.15	-46.15	PASS
Band12	10MHz	16QAM	23060	50RB#0	0.15~30	-58.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	30~1000	-64.22	PASS
Band12	10MHz	16QAM	23060	50RB#0	1000~3000	-52.12	PASS
Band12	10MHz	16QAM	23060	50RB#0	3000~10000	-50.02	PASS
Band12	10MHz	QPSK	23095	50RB#0	0.009~0.15	-47.59	PASS
Band12	10MHz	QPSK	23095	50RB#0	0.15~30	-58.23	PASS
Band12	10MHz	QPSK	23095	50RB#0	30~1000	-64.18	PASS
Band12	10MHz	QPSK	23095	50RB#0	1000~3000	-52.68	PASS
Band12	10MHz	QPSK	23095	50RB#0	3000~10000	-50.28	PASS
Band12	10MHz	16QAM	23095	50RB#0	0.009~0.15	-48.35	PASS
Band12	10MHz	16QAM	23095	50RB#0	0.15~30	-59.72	PASS
Band12	10MHz	16QAM	23095	50RB#0	30~1000	-64.54	PASS
Band12	10MHz	16QAM	23095	50RB#0	1000~3000	-52.29	PASS
Band12	10MHz	16QAM	23095	50RB#0	3000~10000	-50.27	PASS
Band12	10MHz	QPSK	23130	50RB#0	0.009~0.15	-47.10	PASS
Band12	10MHz	QPSK	23130	50RB#0	0.15~30	-57.77	PASS
Band12	10MHz	QPSK	23130	50RB#0	30~1000	-64.44	PASS
Band12	10MHz	QPSK	23130	50RB#0	1000~3000	-51.70	PASS
Band12	10MHz	QPSK	23130	50RB#0	3000~10000	-50.30	PASS
Band12	10MHz	16QAM	23130	50RB#0	0.009~0.15	-44.74	PASS
Band12	10MHz	16QAM	23130	50RB#0	0.15~30	-57.99	PASS
Band12	10MHz	16QAM	23130	50RB#0	30~1000	-64.17	PASS
Band12	10MHz	16QAM	23130	50RB#0	1000~3000	-52.35	PASS
Band12	10MHz	16QAM	23130	50RB#0	3000~10000	-49.92	PASS

Test Graphs

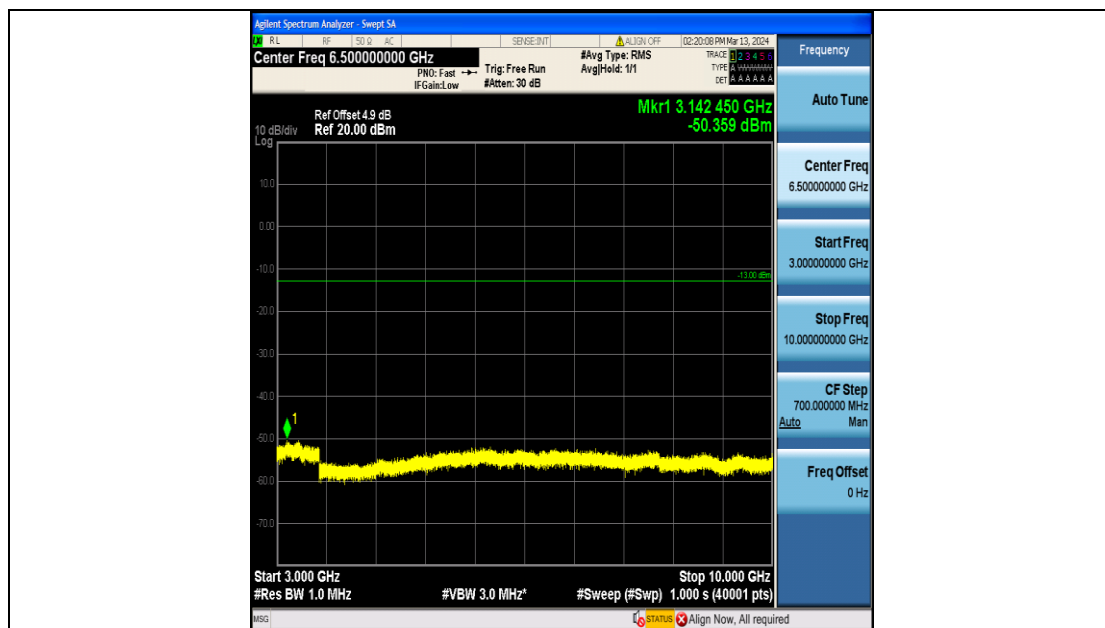




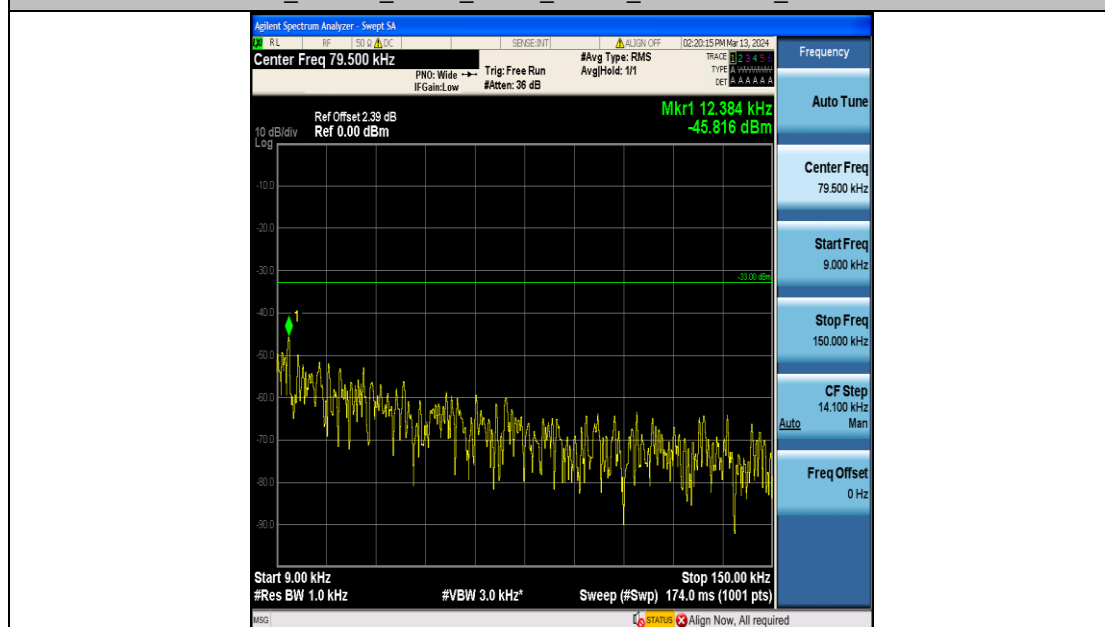
Band12_1.4MHz_QPSK_23017_6RB#0_30~1000_30~1000



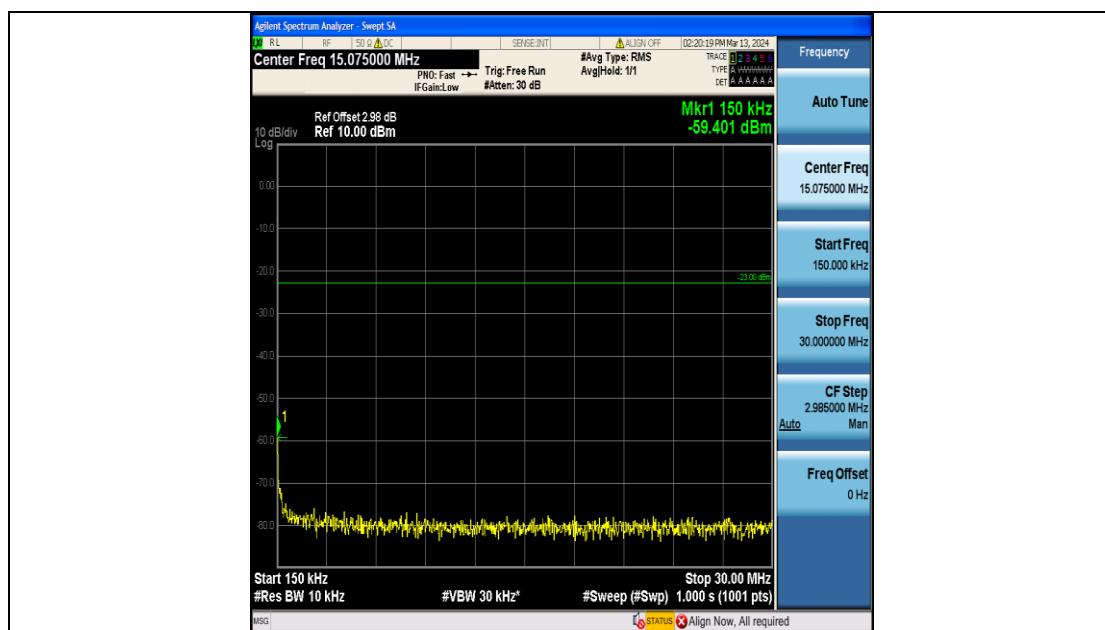
Band12_1.4MHz_QPSK_23017_6RB#0_1000~3000_1000~3000



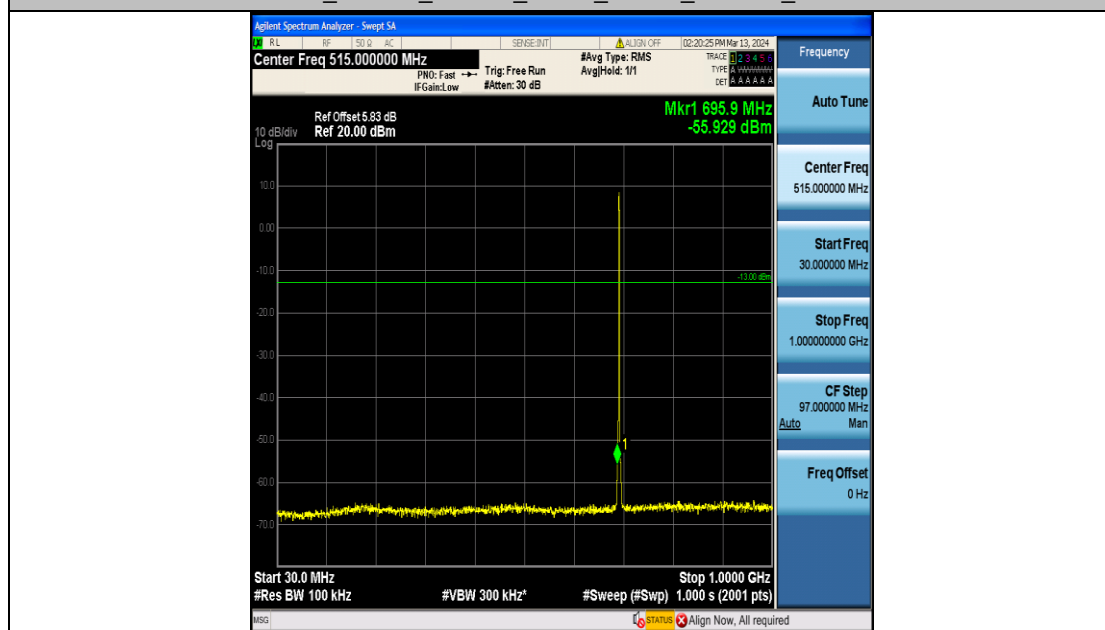
Band12_1.4MHz_QPSK_23017_6RB#0_3000~10000_3000~10000



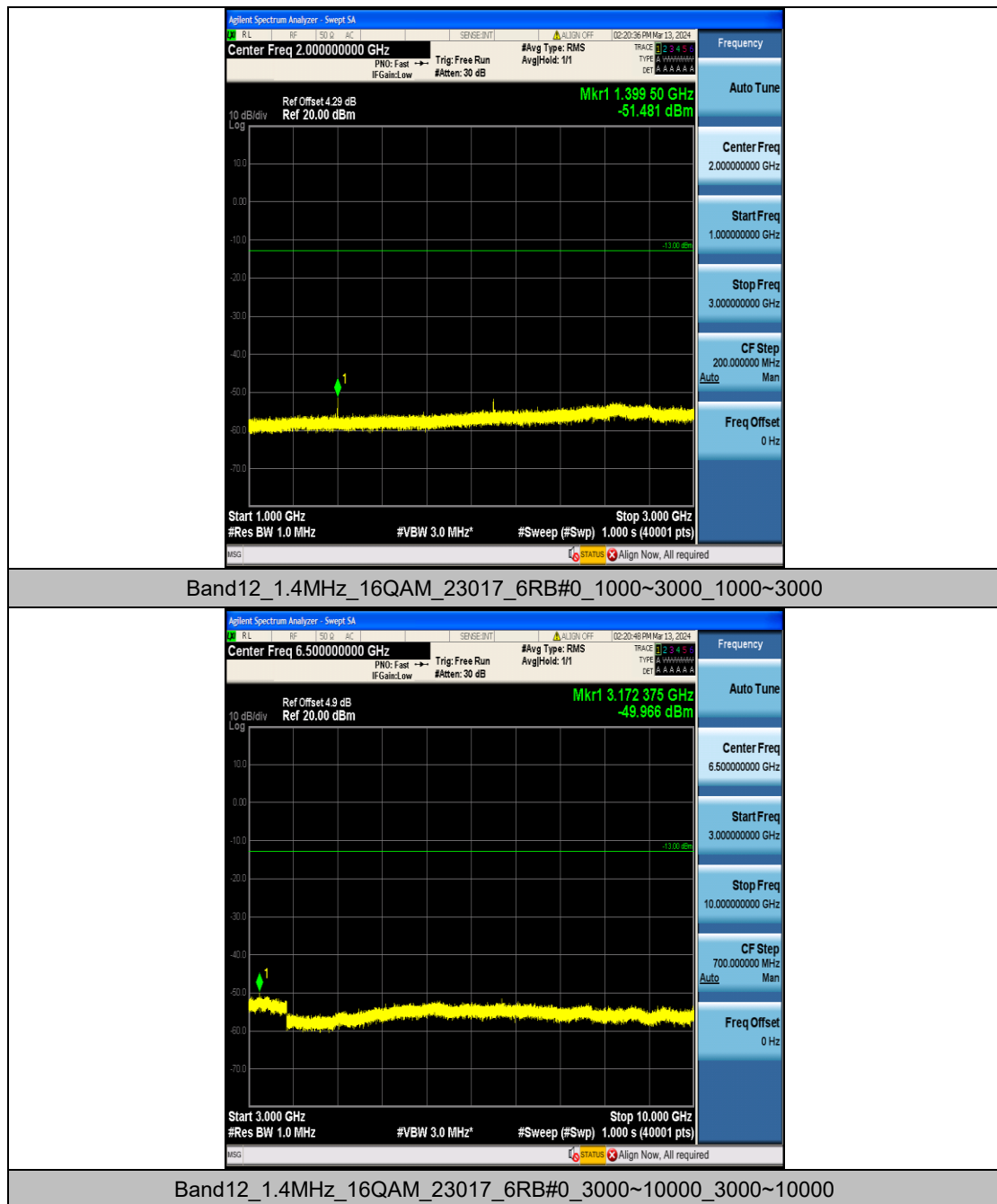
Band12_1.4MHz_16QAM_23017_6RB#0_0.009~0.15_0.009~0.15

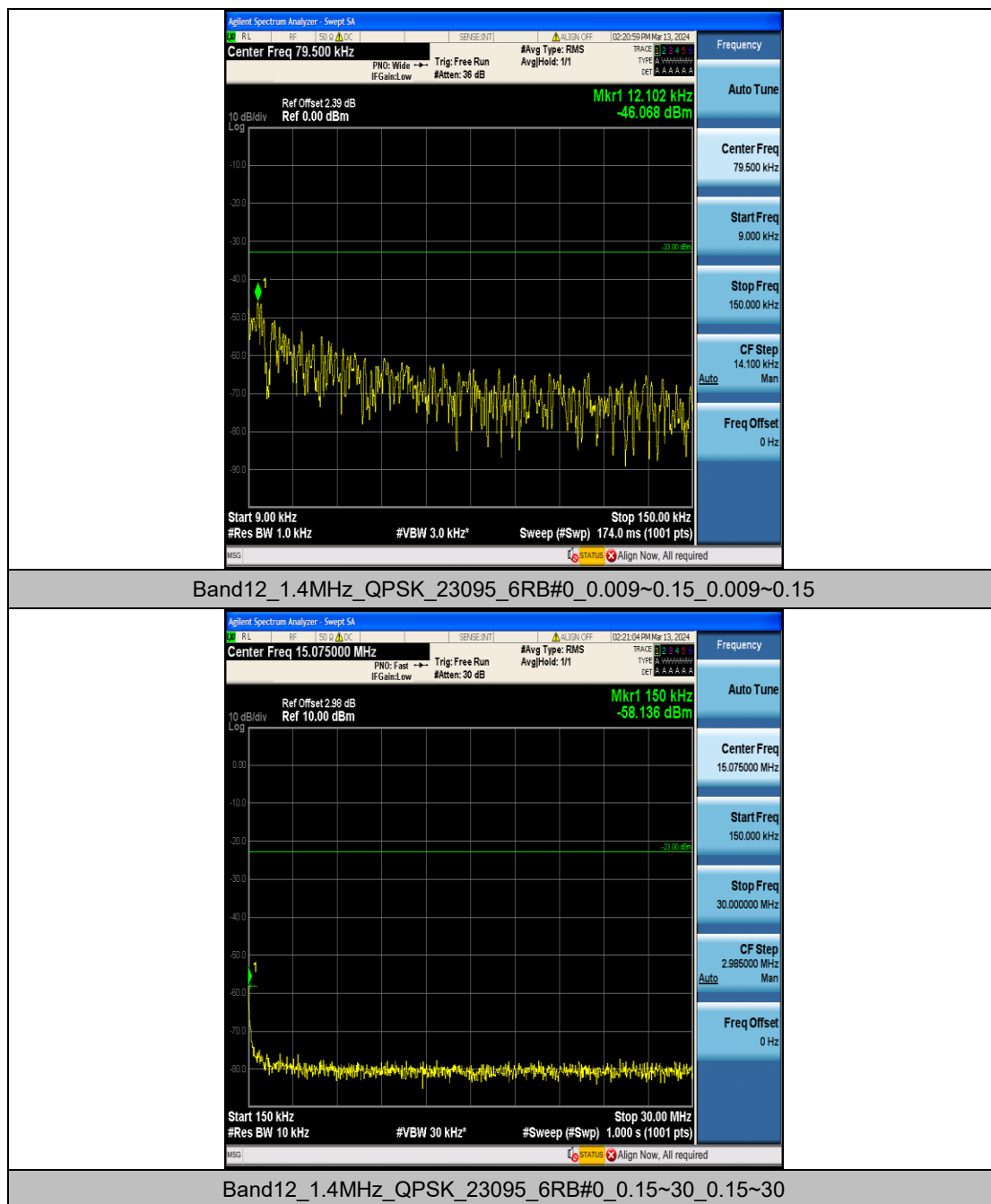


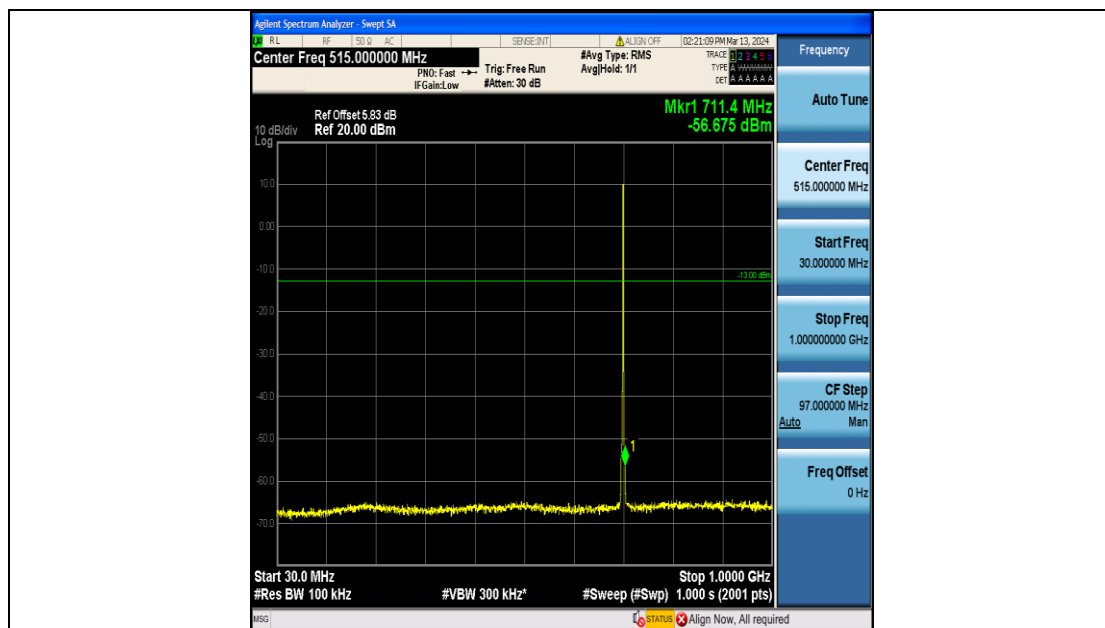
Band12_1.4MHz_16QAM_23017_6RB#0_0.15~30_0.15~30



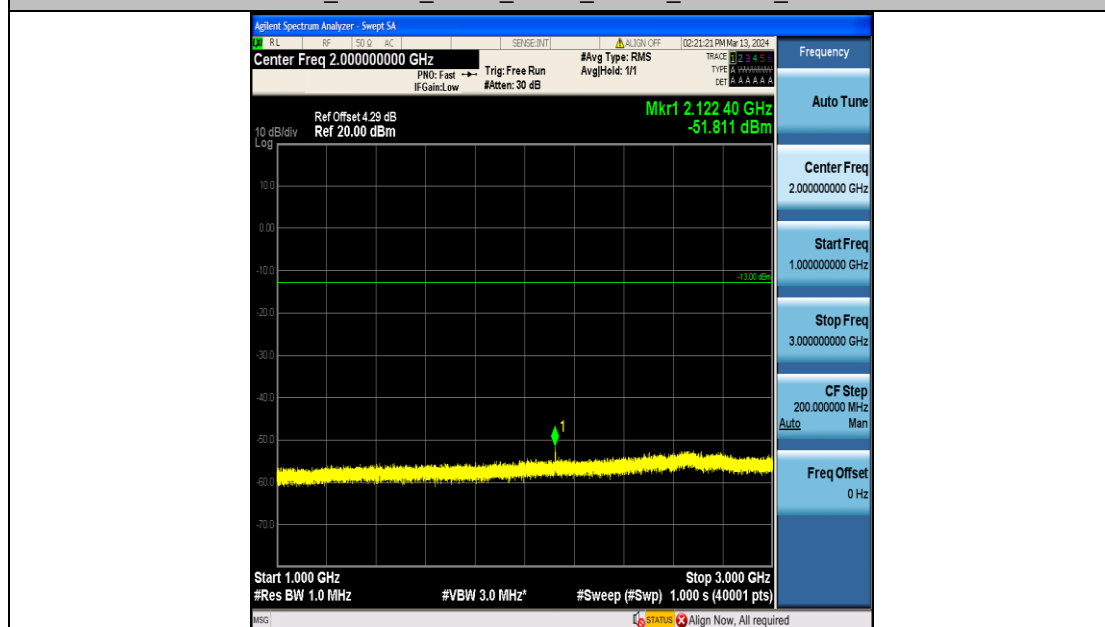
Band12_1.4MHz_16QAM_23017_6RB#0_30~1000_30~1000







Band12_1.4MHz_QPSK_23095_6RB#0_30~1000_30~1000



Band12_1.4MHz_QPSK_23095_6RB#0_1000~3000_1000~3000