

Test Data for E-UTRA Band 13

EUT: <u>Tablet PC</u> Test Model: <u>ST11</u>
Ambient Condition: <u>25 °C</u> , <u>45 %RH</u> , <u>101.325 kPa</u>
Test Engineer: <u>Jack Zhou</u>

Contents

Appendix A: Effective (Isotropic) Radiated Power Output Data.....	3
Test Result.....	3
Appendix B: Peak-to-Average Ratio(CCDF).....	5
Test Result.....	5
Test Graphs	6
Appendix C: 26dB Bandwidth and Occupied Bandwidth	10
Test Result.....	10
Test Graphs	11
Appendix D: Band Edge	13
Test Result.....	13
Test Graphs	13
Appendix E: Conducted Spurious Emission.....	19
Test Result.....	19
Test Graphs	20
Appendix F: Frequency Stability.....	30
Test Result.....	30

Appendix A: Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	23.87	20.25	PASS
Band13	5MHz	16QAM	23205	1RB#0	22.81	19.19	PASS
Band13	5MHz	QPSK	23205	1RB#12	24.03	20.41	PASS
Band13	5MHz	16QAM	23205	1RB#12	22.91	19.29	PASS
Band13	5MHz	QPSK	23205	1RB#24	23.90	20.28	PASS
Band13	5MHz	16QAM	23205	1RB#24	22.81	19.19	PASS
Band13	5MHz	QPSK	23205	12RB#0	22.77	19.15	PASS
Band13	5MHz	16QAM	23205	12RB#0	21.71	18.09	PASS
Band13	5MHz	QPSK	23205	12RB#6	22.80	19.18	PASS
Band13	5MHz	16QAM	23205	12RB#6	21.69	18.07	PASS
Band13	5MHz	QPSK	23205	12RB#13	22.77	19.15	PASS
Band13	5MHz	16QAM	23205	12RB#13	21.79	18.17	PASS
Band13	5MHz	QPSK	23205	25RB#0	22.81	19.19	PASS
Band13	5MHz	16QAM	23205	25RB#0	21.83	18.21	PASS
Band13	5MHz	QPSK	23230	1RB#0	23.85	20.23	PASS
Band13	5MHz	16QAM	23230	1RB#0	22.91	19.29	PASS
Band13	5MHz	QPSK	23230	1RB#12	23.99	20.37	PASS
Band13	5MHz	16QAM	23230	1RB#12	23.03	19.41	PASS
Band13	5MHz	QPSK	23230	1RB#24	23.85	20.23	PASS
Band13	5MHz	16QAM	23230	1RB#24	23.02	19.40	PASS
Band13	5MHz	QPSK	23230	12RB#0	22.97	19.35	PASS
Band13	5MHz	16QAM	23230	12RB#0	22.01	18.39	PASS
Band13	5MHz	QPSK	23230	12RB#6	23.01	19.39	PASS
Band13	5MHz	16QAM	23230	12RB#6	22.02	18.40	PASS
Band13	5MHz	QPSK	23230	12RB#13	22.88	19.26	PASS
Band13	5MHz	16QAM	23230	12RB#13	21.90	18.28	PASS
Band13	5MHz	QPSK	23230	25RB#0	22.95	19.33	PASS
Band13	5MHz	16QAM	23230	25RB#0	21.92	18.30	PASS
Band13	5MHz	QPSK	23255	1RB#0	23.87	20.25	PASS
Band13	5MHz	16QAM	23255	1RB#0	22.79	19.17	PASS
Band13	5MHz	QPSK	23255	1RB#12	24.00	20.38	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.90	19.28	PASS
Band13	5MHz	QPSK	23255	1RB#24	23.86	20.24	PASS
Band13	5MHz	16QAM	23255	1RB#24	22.75	19.13	PASS
Band13	5MHz	QPSK	23255	12RB#0	22.93	19.31	PASS
Band13	5MHz	16QAM	23255	12RB#0	21.94	18.32	PASS

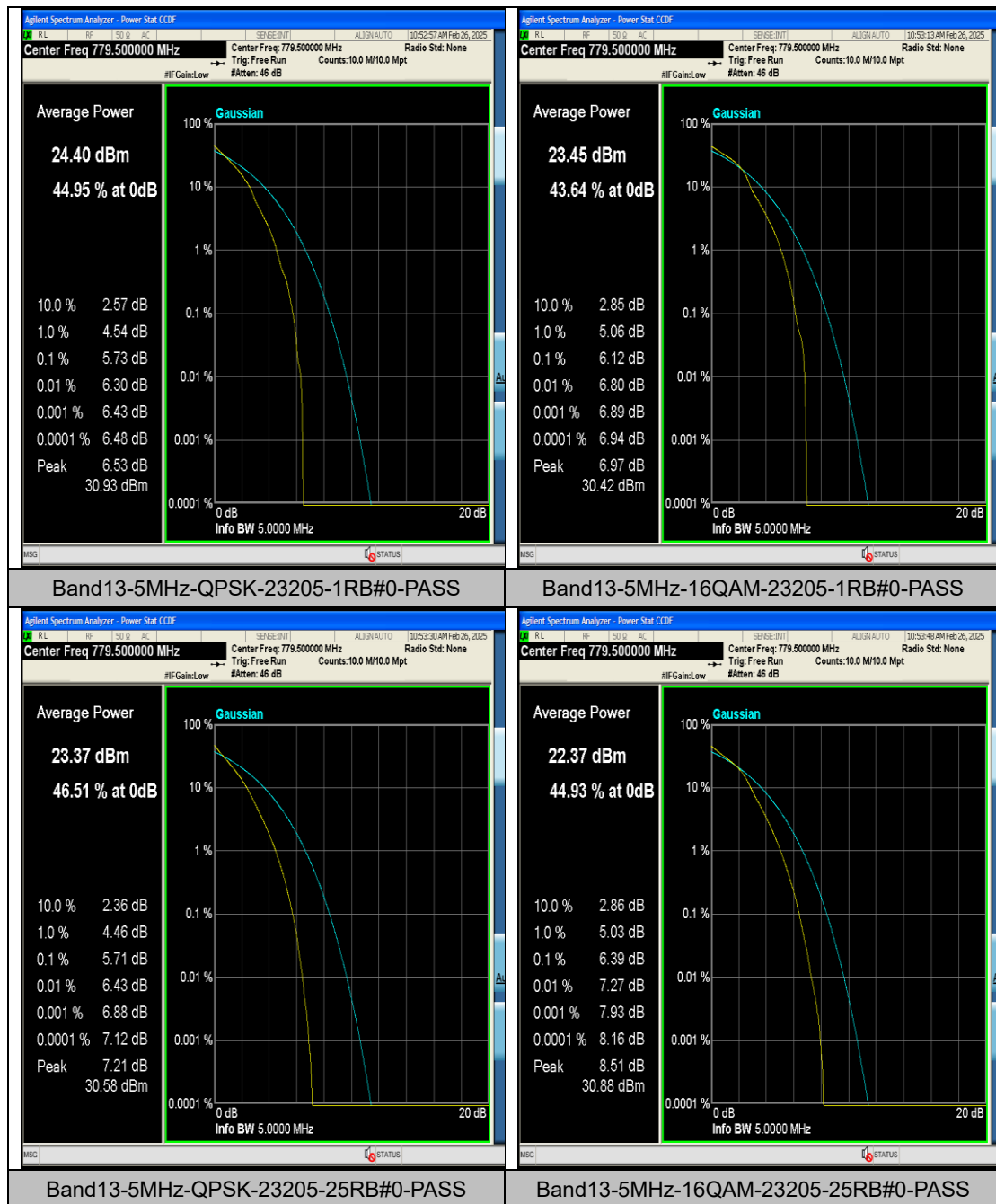
Band13	5MHz	QPSK	23255	12RB#6	22.95	19.33	PASS
Band13	5MHz	16QAM	23255	12RB#6	21.95	18.33	PASS
Band13	5MHz	QPSK	23255	12RB#13	22.96	19.34	PASS
Band13	5MHz	16QAM	23255	12RB#13	21.95	18.33	PASS
Band13	5MHz	QPSK	23255	25RB#0	23.02	19.40	PASS
Band13	5MHz	16QAM	23255	25RB#0	21.97	18.35	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.90	20.28	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.90	19.28	PASS
Band13	10MHz	QPSK	23230	1RB#24	24.04	20.42	PASS
Band13	10MHz	16QAM	23230	1RB#24	23.03	19.41	PASS
Band13	10MHz	QPSK	23230	1RB#49	23.93	20.31	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.88	19.26	PASS
Band13	10MHz	QPSK	23230	25RB#0	23.02	19.40	PASS
Band13	10MHz	16QAM	23230	25RB#0	21.99	18.37	PASS
Band13	10MHz	QPSK	23230	25RB#12	22.96	19.34	PASS
Band13	10MHz	16QAM	23230	25RB#12	22.00	18.38	PASS
Band13	10MHz	QPSK	23230	25RB#25	22.98	19.36	PASS
Band13	10MHz	16QAM	23230	25RB#25	21.97	18.35	PASS
Band13	10MHz	QPSK	23230	50RB#0	23.01	19.39	PASS
Band13	10MHz	16QAM	23230	50RB#0	21.98	18.36	PASS

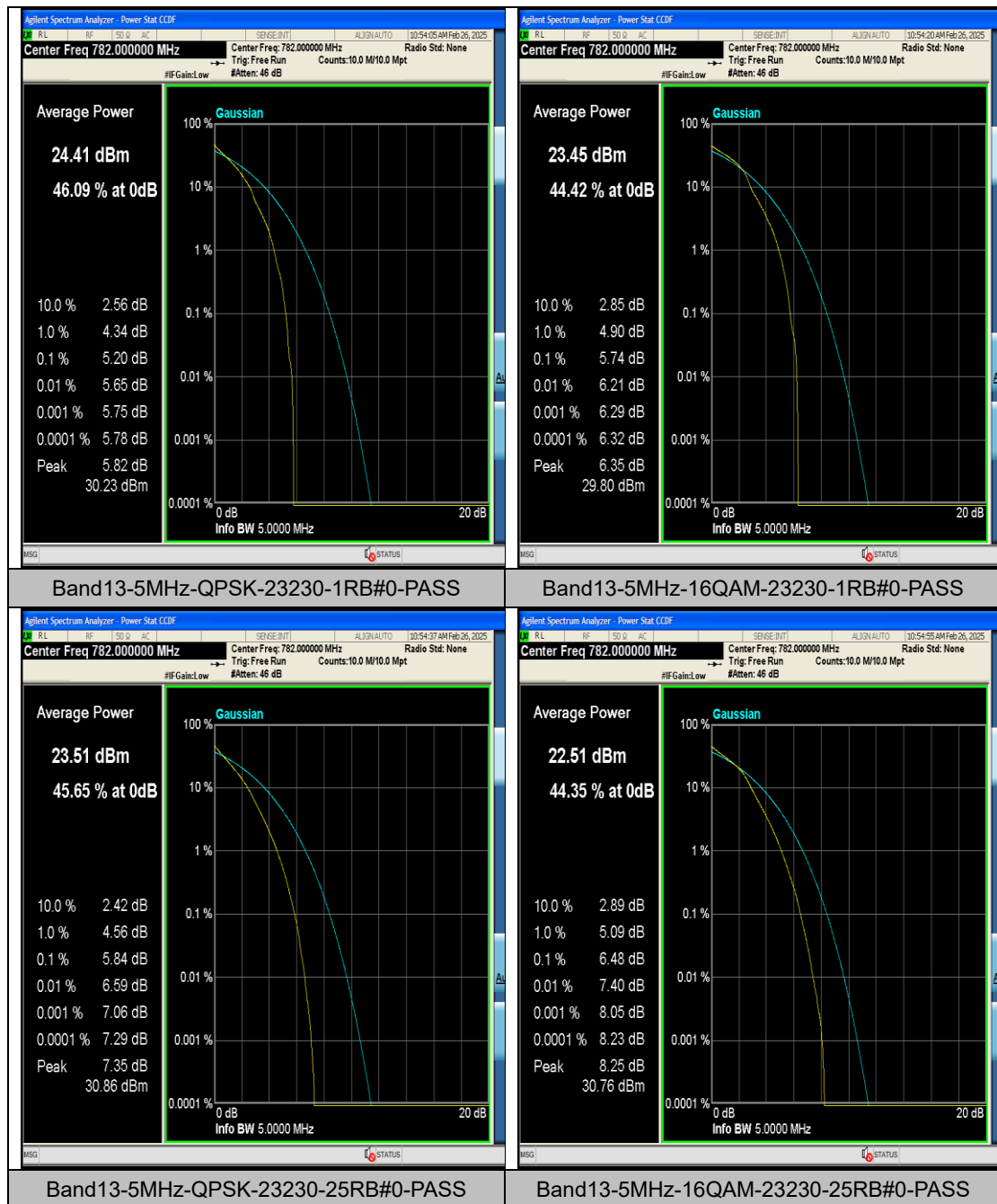
Appendix B: Peak-to-Average Ratio(CCDF)

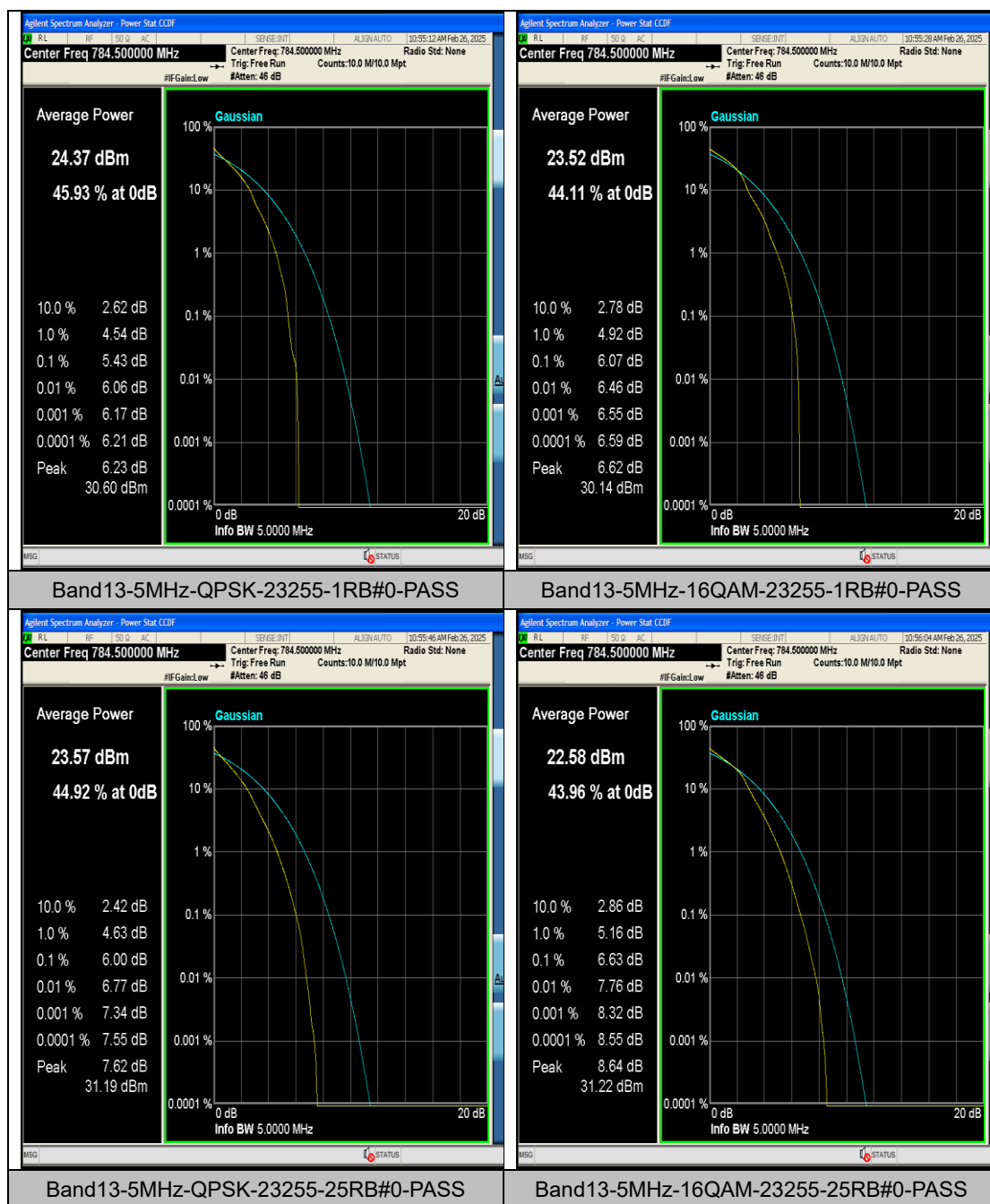
Test Result

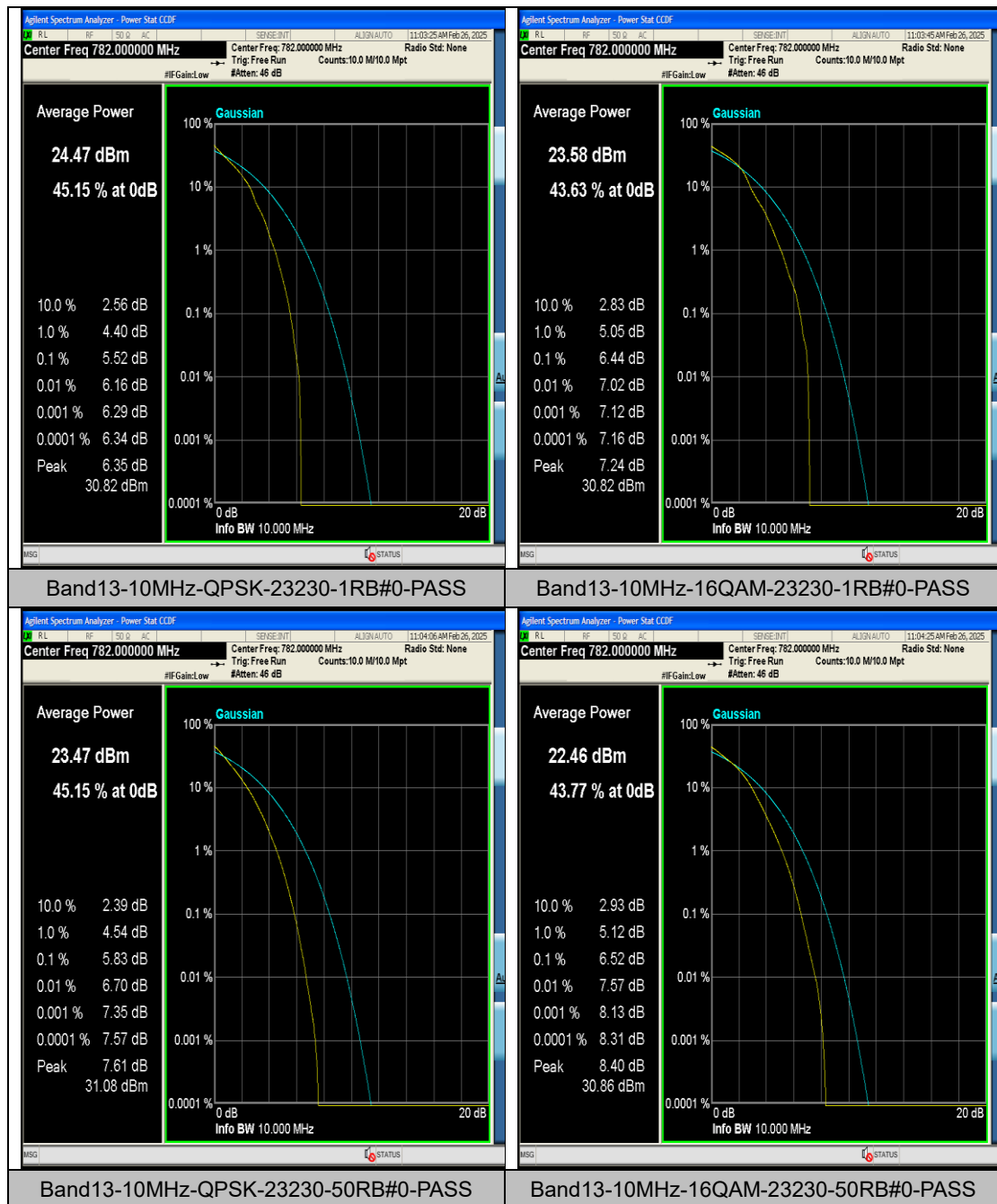
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	5.73	13	PASS
Band13	5MHz	16QAM	23205	1RB#0	6.12	13	PASS
Band13	5MHz	QPSK	23205	25RB#0	5.71	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	6.39	13	PASS
Band13	5MHz	QPSK	23230	1RB#0	5.20	13	PASS
Band13	5MHz	16QAM	23230	1RB#0	5.74	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.84	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	6.48	13	PASS
Band13	5MHz	QPSK	23255	1RB#0	5.43	13	PASS
Band13	5MHz	16QAM	23255	1RB#0	6.07	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	6.00	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	6.63	13	PASS
Band13	10MHz	QPSK	23230	1RB#0	5.52	13	PASS
Band13	10MHz	16QAM	23230	1RB#0	6.44	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.83	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	6.52	13	PASS

Test Graphs







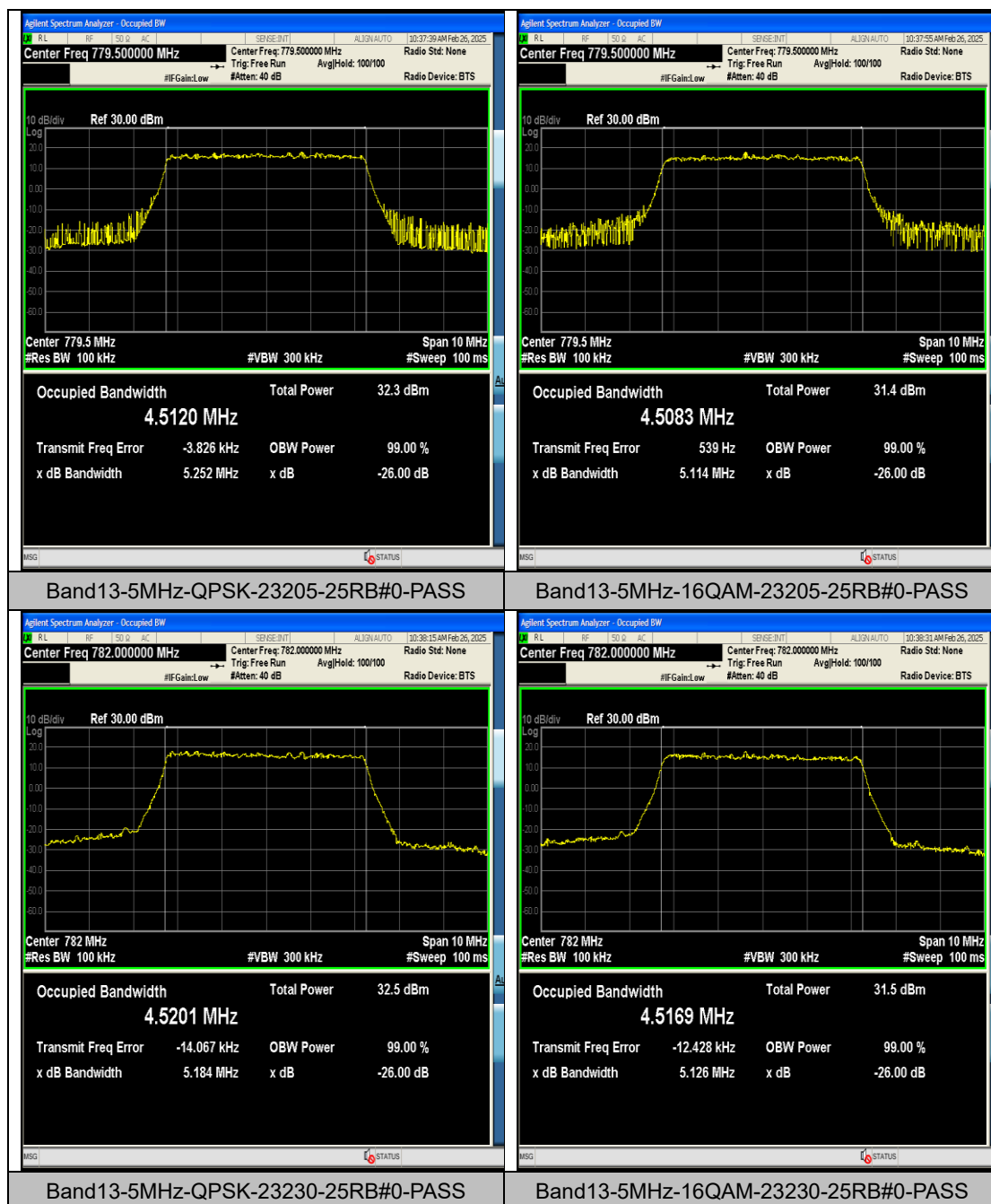


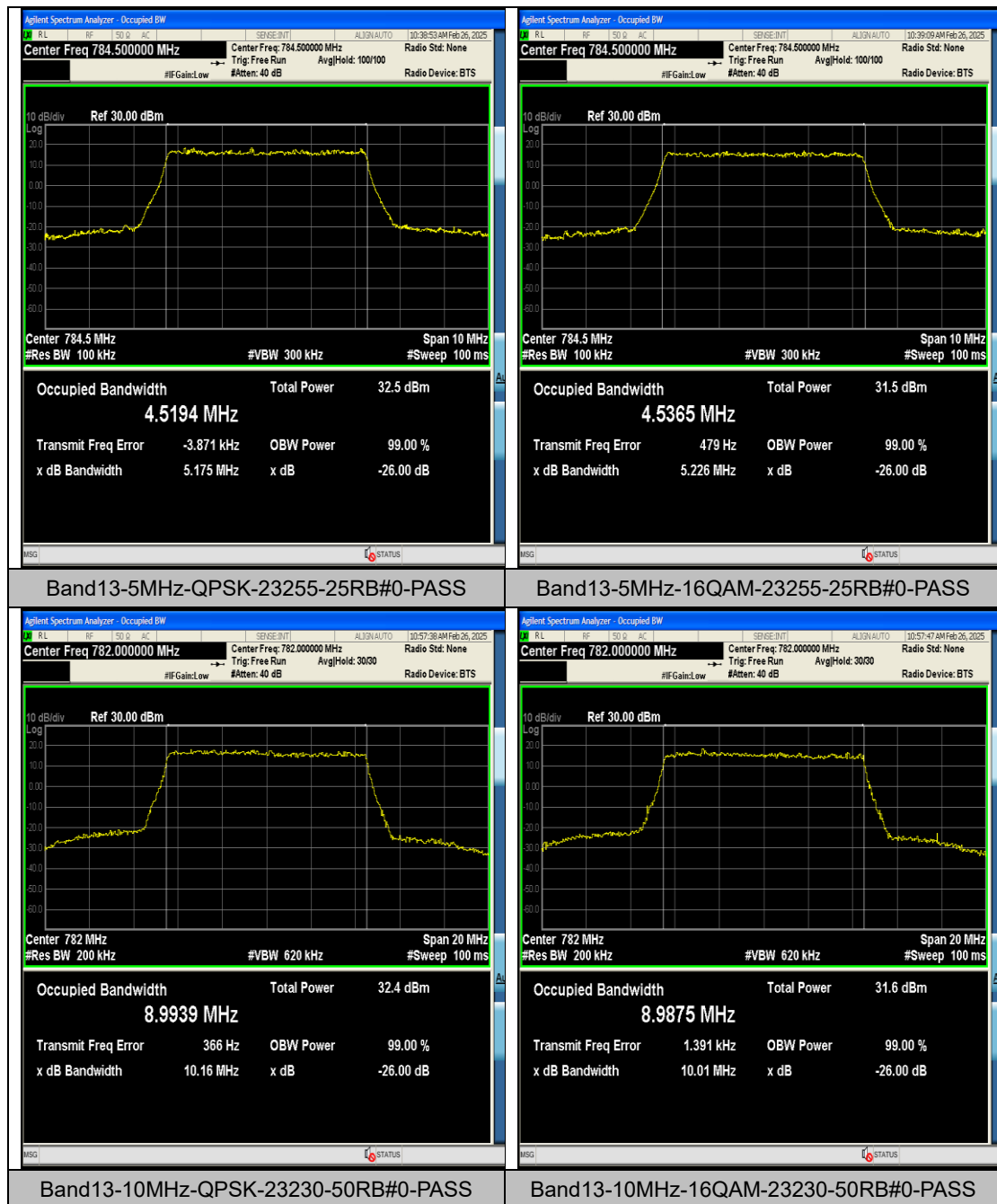
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.5120	5.252	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5083	5.114	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5201	5.184	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5169	5.126	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5194	5.175	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5365	5.226	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9939	10.16	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.9875	10.01	PASS

Test Graphs



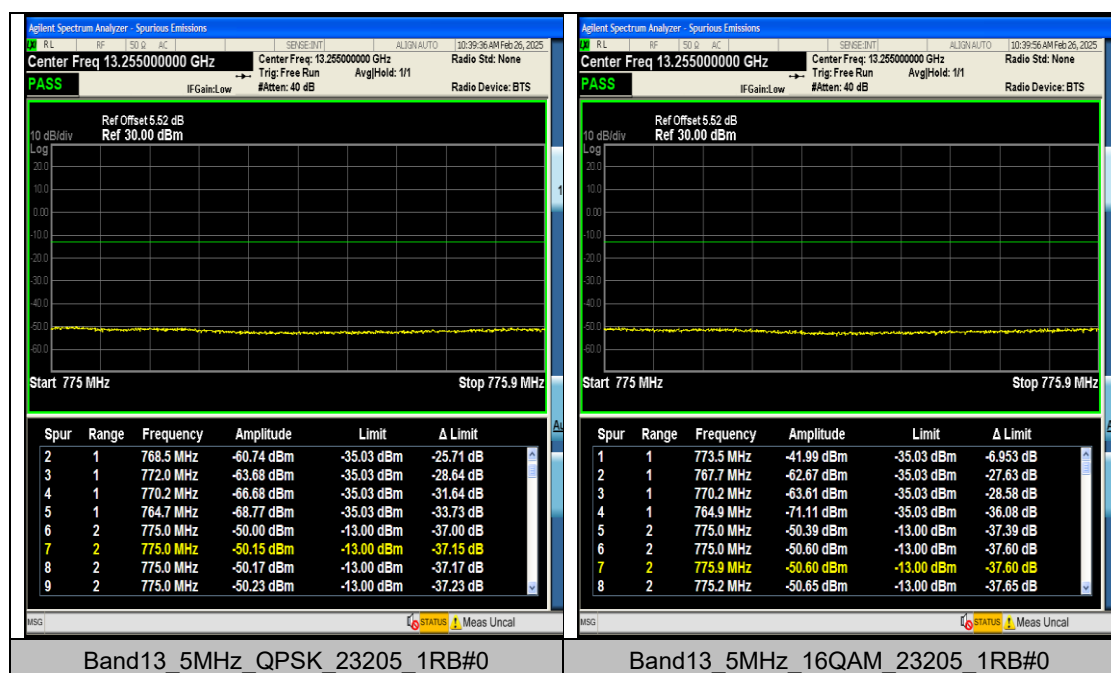


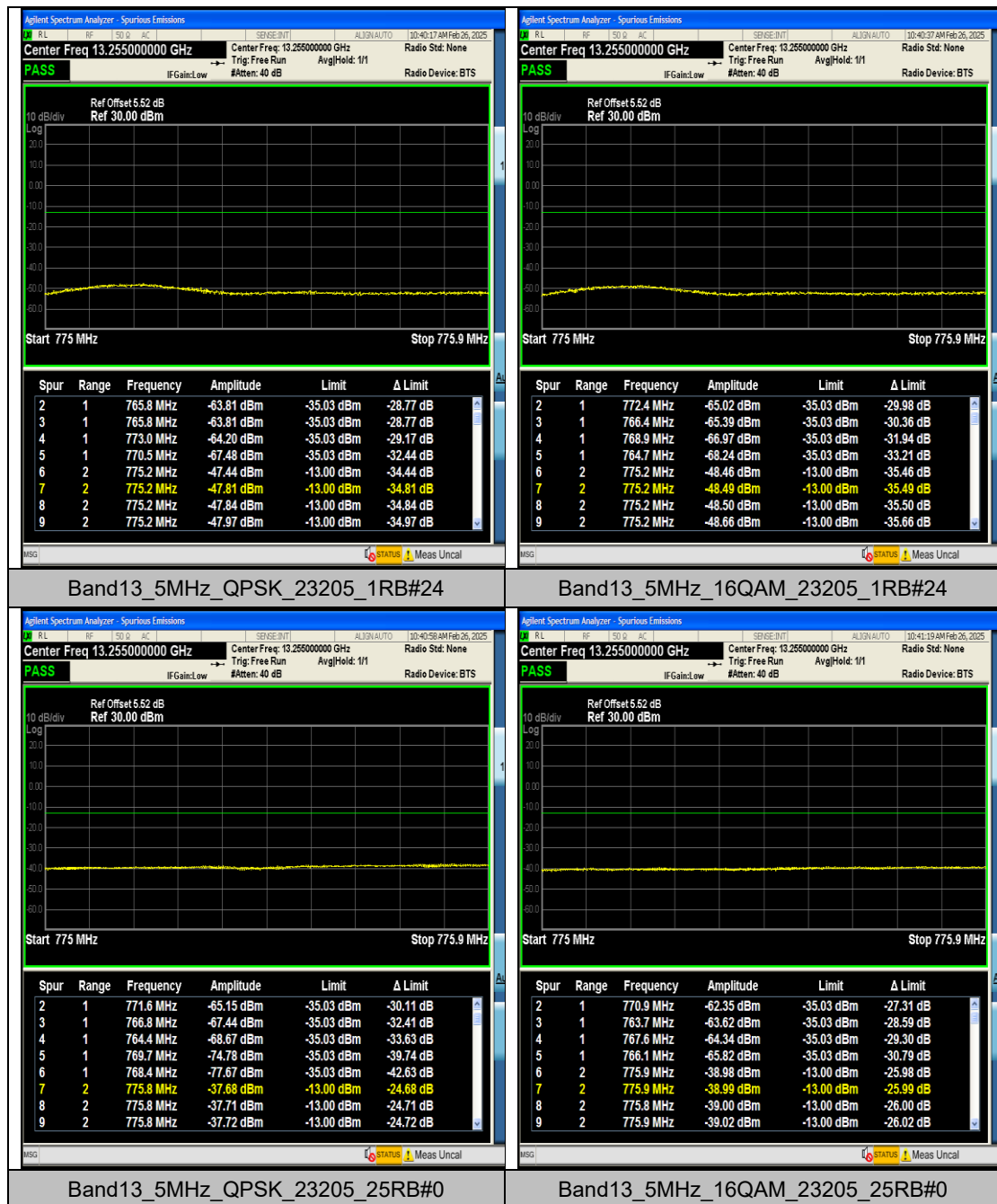
Appendix D: Band Edge

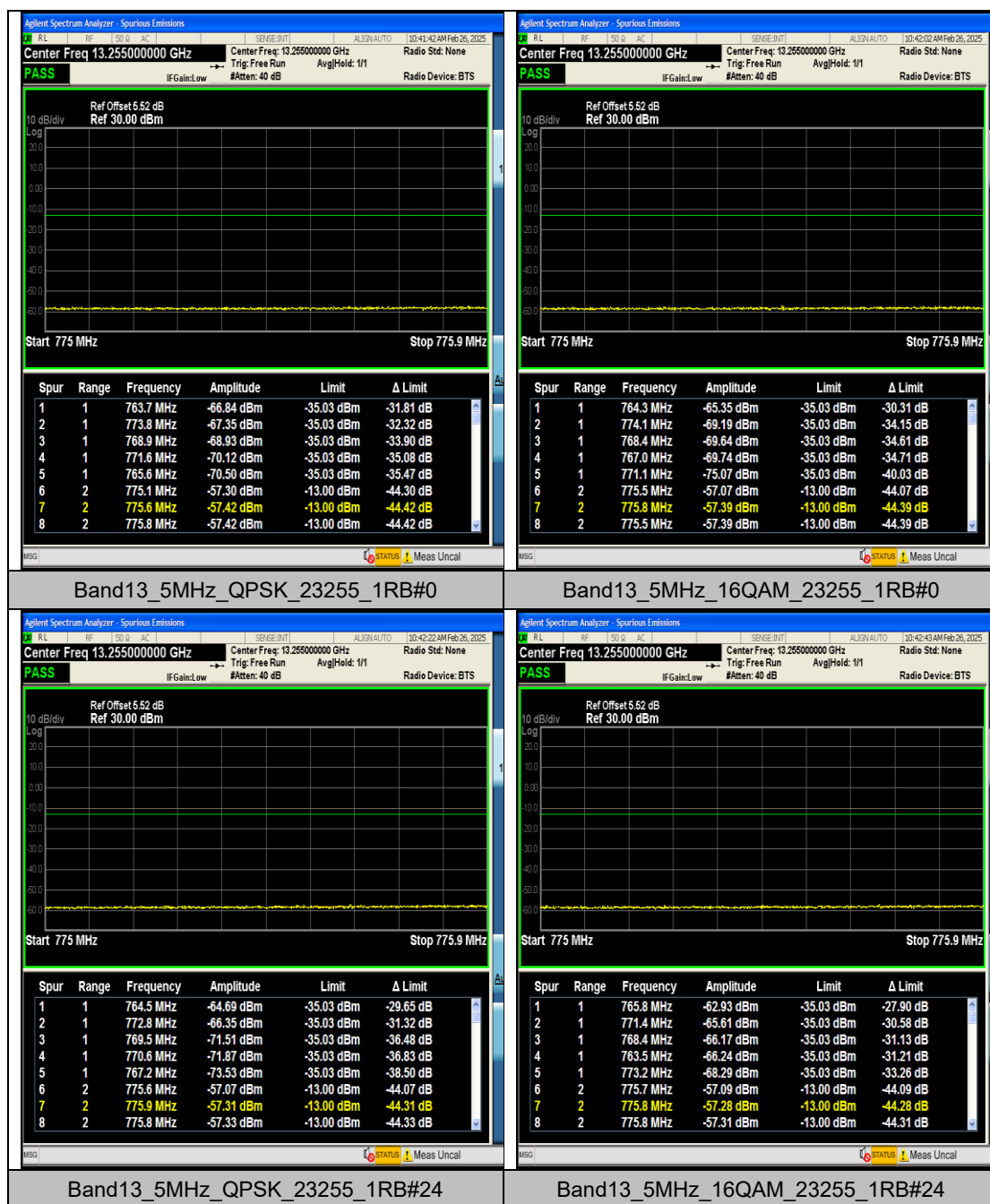
Test Result

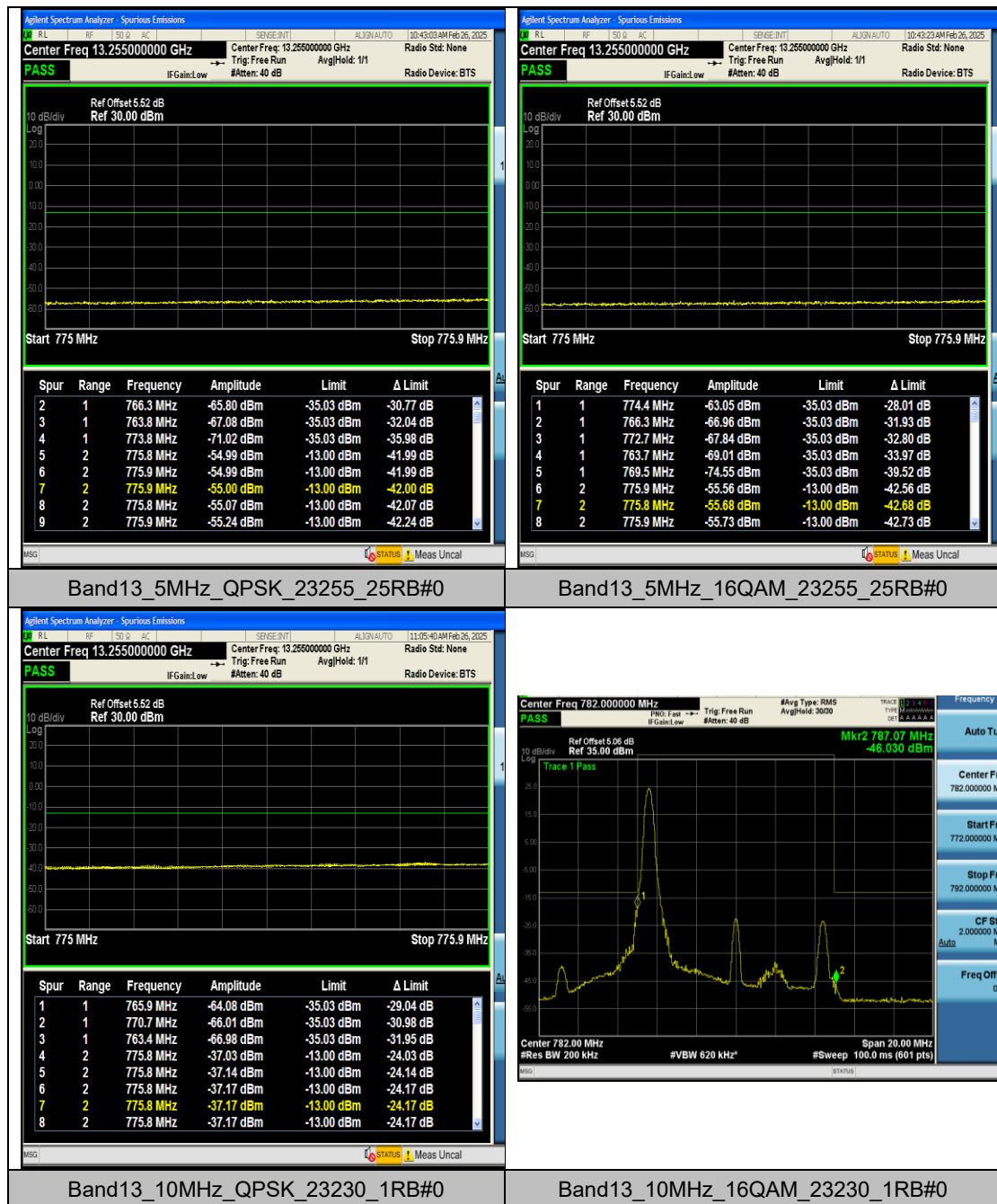
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	-46.40	PASS
Band13	5MHz	16QAM	23205	1RB#0	-41.99	PASS
Band13	5MHz	QPSK	23205	1RB#24	-62.64	PASS
Band13	5MHz	16QAM	23205	1RB#24	-63.71	PASS
Band13	5MHz	QPSK	23205	25RB#0	-40.22	PASS
Band13	5MHz	16QAM	23205	25RB#0	-51.37	PASS
Band13	5MHz	QPSK	23255	1RB#0	-66.84	PASS
Band13	5MHz	16QAM	23255	1RB#0	-65.35	PASS
Band13	5MHz	QPSK	23255	1RB#24	-64.69	PASS
Band13	5MHz	16QAM	23255	1RB#24	-62.93	PASS
Band13	5MHz	QPSK	23255	25RB#0	-65.32	PASS
Band13	5MHz	16QAM	23255	25RB#0	-63.05	PASS
Band13	10MHz	QPSK	23230	1RB#0	-37.03	PASS
Band13	10MHz	16QAM	23230	1RB#0	-16.58,-46.97	PASS
Band13	10MHz	16QAM	23230	1RB#0	-64.86	PASS_Final1
Band13	10MHz	QPSK	23230	1RB#49	-64.49	PASS
Band13	10MHz	16QAM	23230	1RB#49	-61.99	PASS
Band13	10MHz	QPSK	23230	50RB#0	-40.02	PASS
Band13	10MHz	16QAM	23230	50RB#0	-37.19	PASS

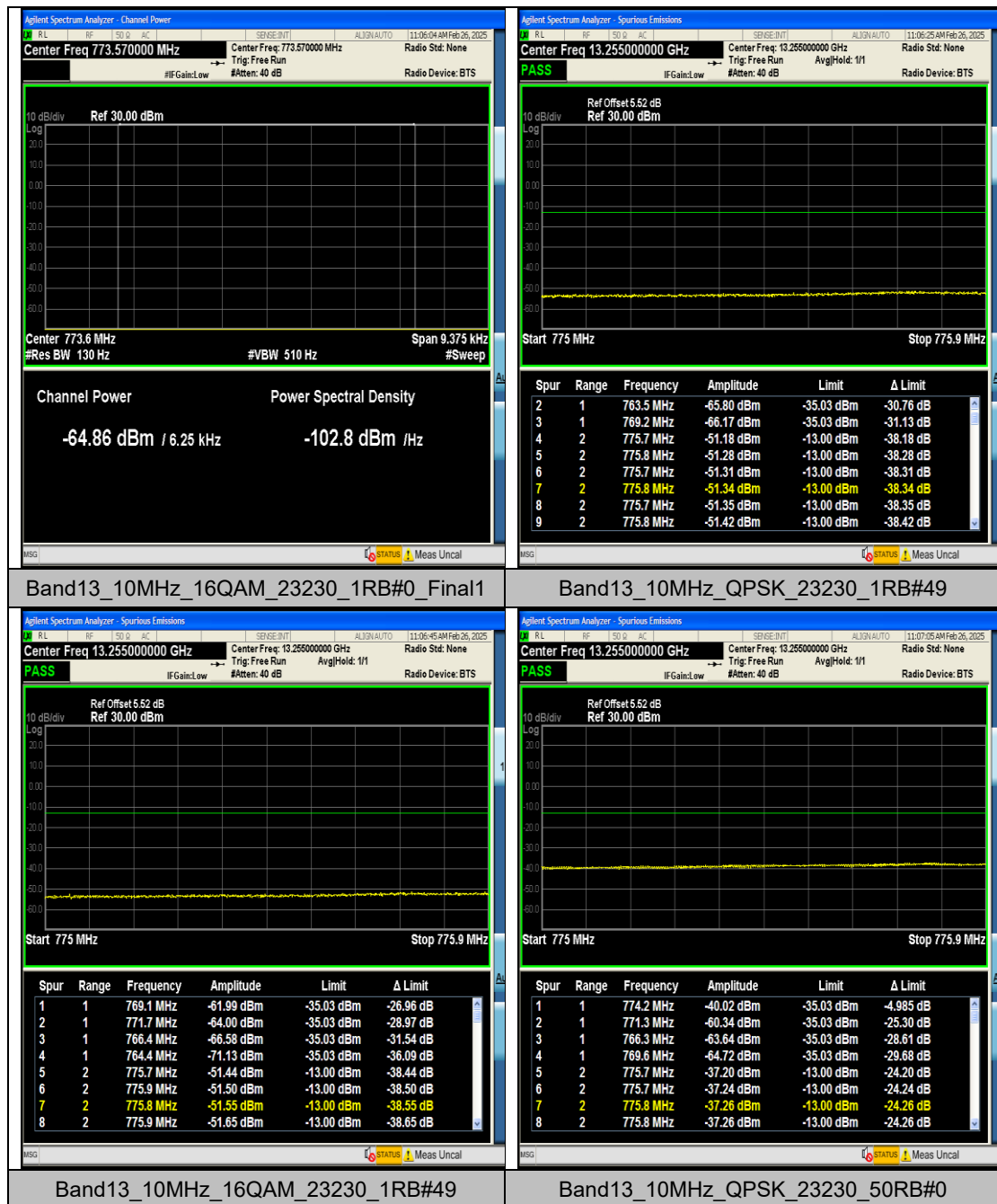
Test Graphs

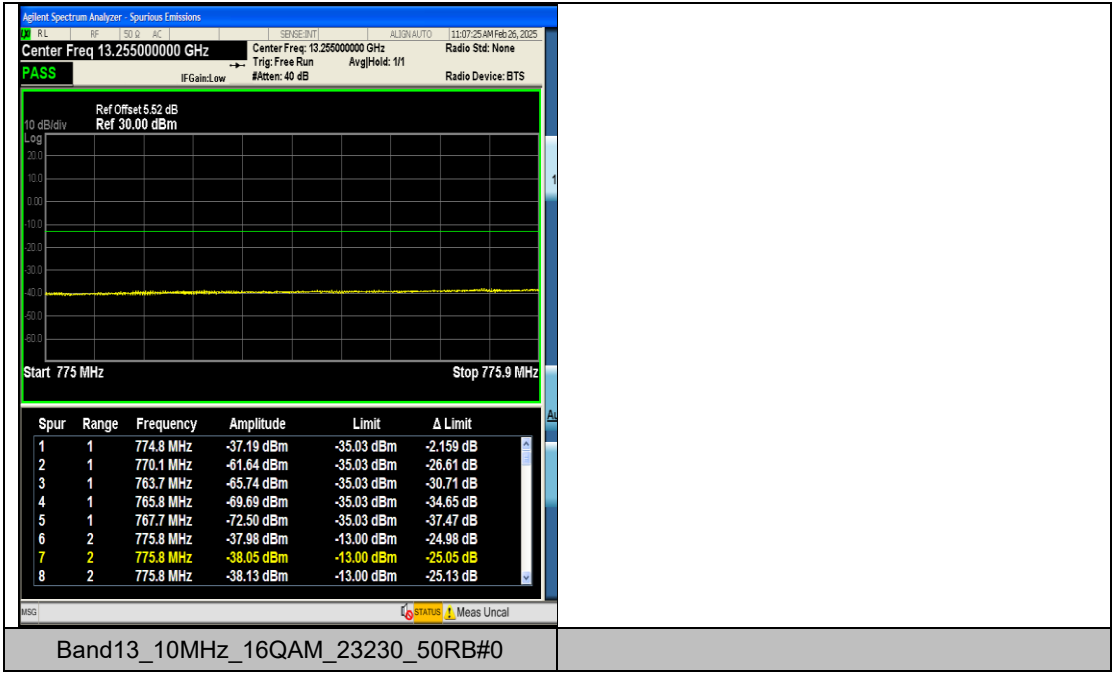












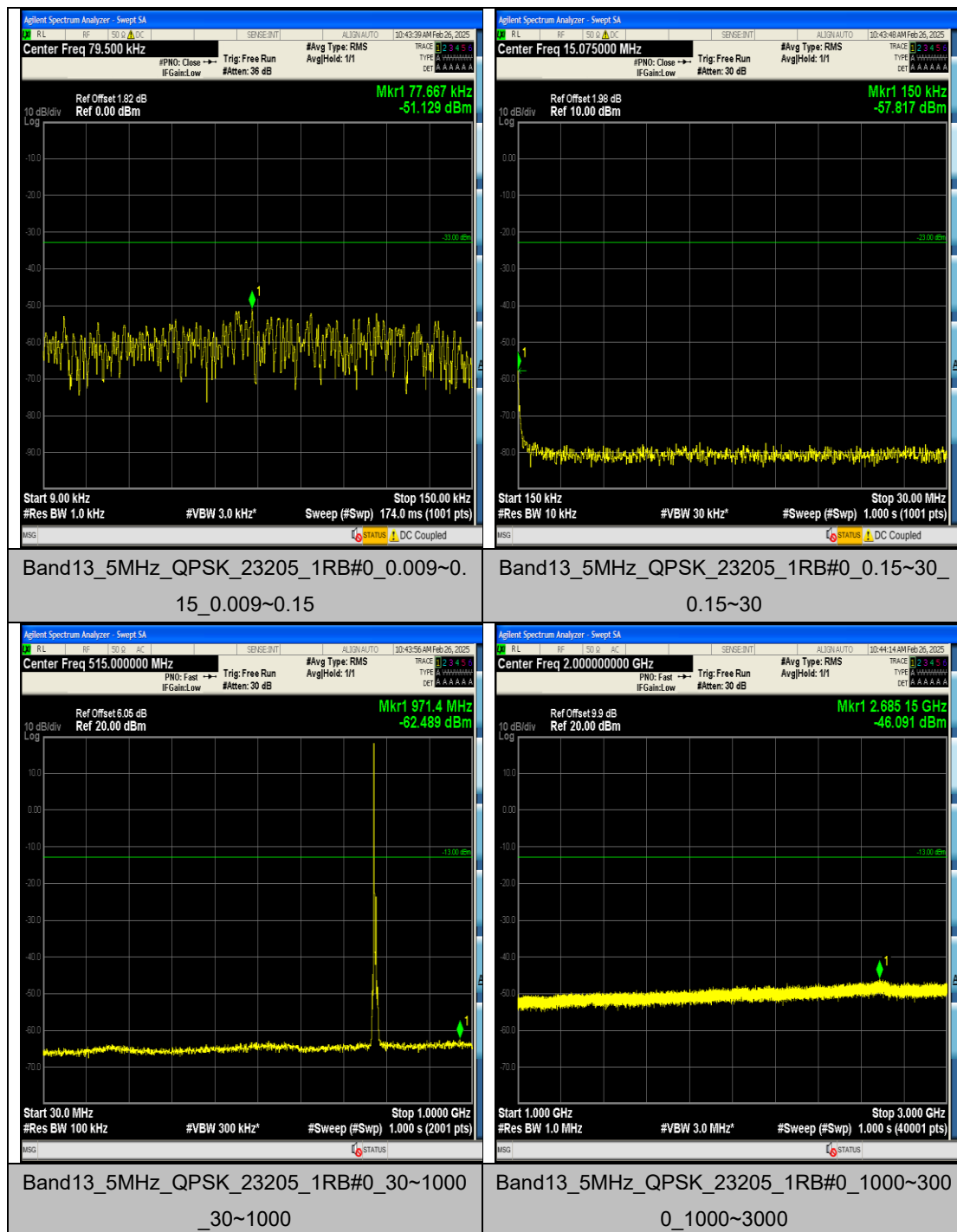
Appendix E: Conducted Spurious Emission

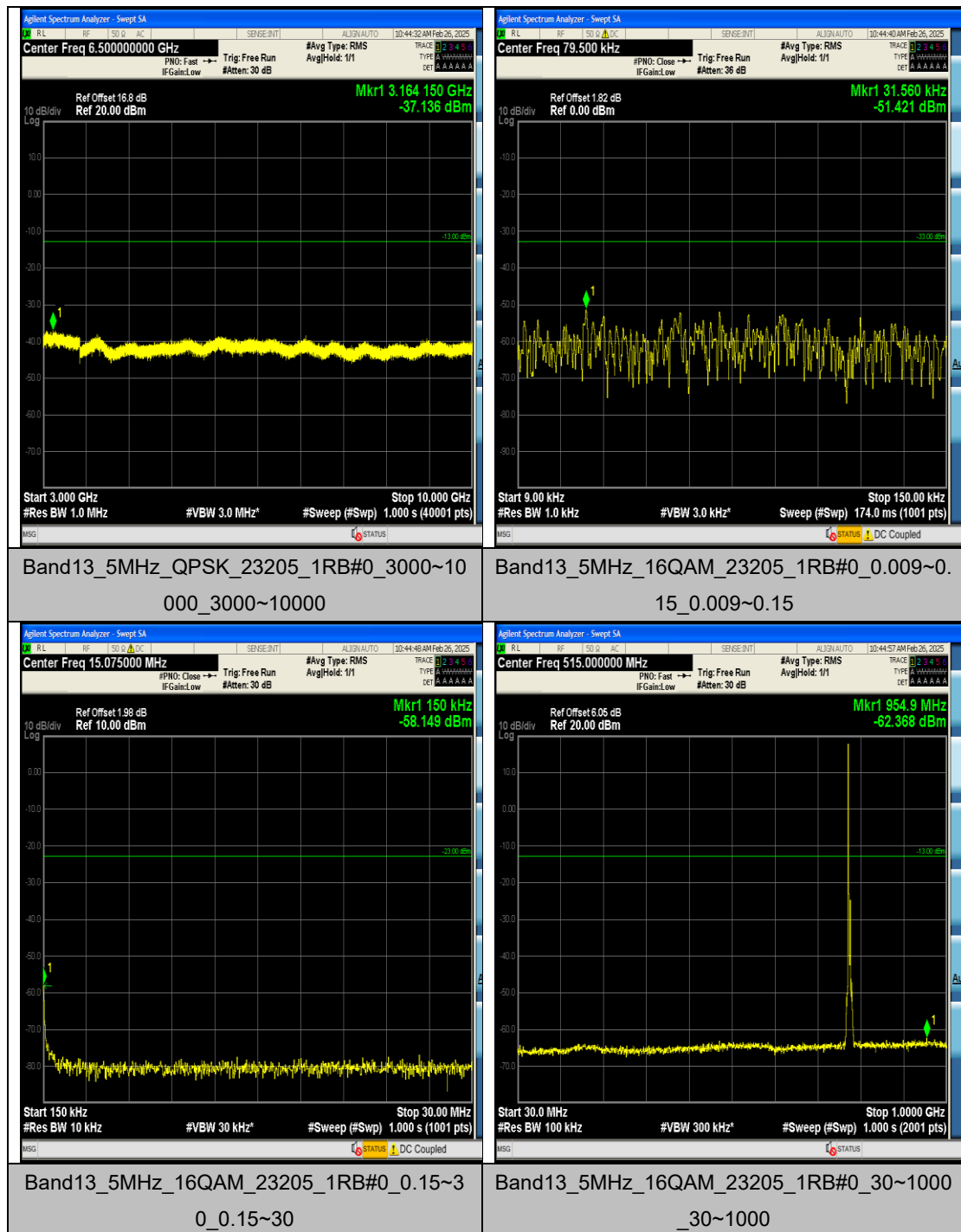
Test Result

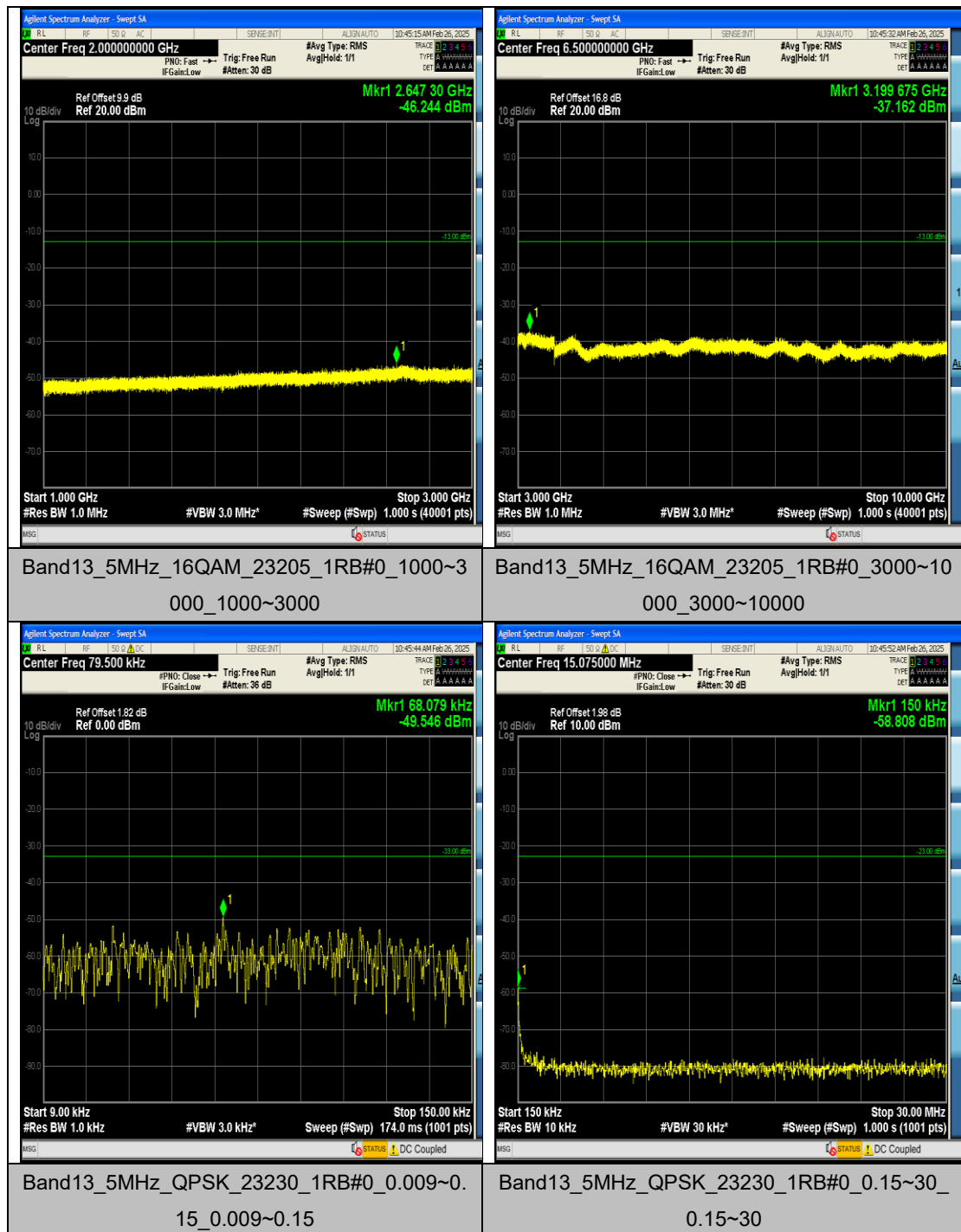
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	0.009~0.15	-51.13	PASS
Band13	5MHz	QPSK	23205	1RB#0	0.15~30	-57.82	PASS
Band13	5MHz	QPSK	23205	1RB#0	30~1000	-62.49	PASS
Band13	5MHz	QPSK	23205	1RB#0	1000~3000	-46.09	PASS
Band13	5MHz	QPSK	23205	1RB#0	3000~10000	-37.14	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.009~0.15	-51.42	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.15~30	-58.15	PASS
Band13	5MHz	16QAM	23205	1RB#0	30~1000	-62.37	PASS
Band13	5MHz	16QAM	23205	1RB#0	1000~3000	-46.24	PASS
Band13	5MHz	16QAM	23205	1RB#0	3000~10000	-37.16	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.009~0.15	-49.55	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.15~30	-58.81	PASS
Band13	5MHz	QPSK	23230	1RB#0	30~1000	-62.66	PASS
Band13	5MHz	QPSK	23230	1RB#0	1000~3000	-46.23	PASS
Band13	5MHz	QPSK	23230	1RB#0	3000~10000	-37.19	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.009~0.15	-51.58	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.15~30	-59.03	PASS
Band13	5MHz	16QAM	23230	1RB#0	30~1000	-62.97	PASS
Band13	5MHz	16QAM	23230	1RB#0	1000~3000	-46.18	PASS
Band13	5MHz	16QAM	23230	1RB#0	3000~10000	-36.85	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.009~0.15	-51.19	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.15~30	-58.90	PASS
Band13	5MHz	QPSK	23255	1RB#0	30~1000	-62.30	PASS
Band13	5MHz	QPSK	23255	1RB#0	1000~3000	-45.95	PASS
Band13	5MHz	QPSK	23255	1RB#0	3000~10000	-37.27	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.009~0.15	-49.97	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.15~30	-56.55	PASS
Band13	5MHz	16QAM	23255	1RB#0	30~1000	-62.83	PASS
Band13	5MHz	16QAM	23255	1RB#0	1000~3000	-46.01	PASS
Band13	5MHz	16QAM	23255	1RB#0	3000~10000	-36.53	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.009~0.15	-50.68	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.15~30	-58.02	PASS
Band13	10MHz	QPSK	23230	1RB#0	30~1000	-62.52	PASS
Band13	10MHz	QPSK	23230	1RB#0	1000~3000	-45.85	PASS
Band13	10MHz	QPSK	23230	1RB#0	3000~10000	-37.27	PASS
Band13	10MHz	16QAM	23230	1RB#0	0.009~0.15	-51.02	PASS

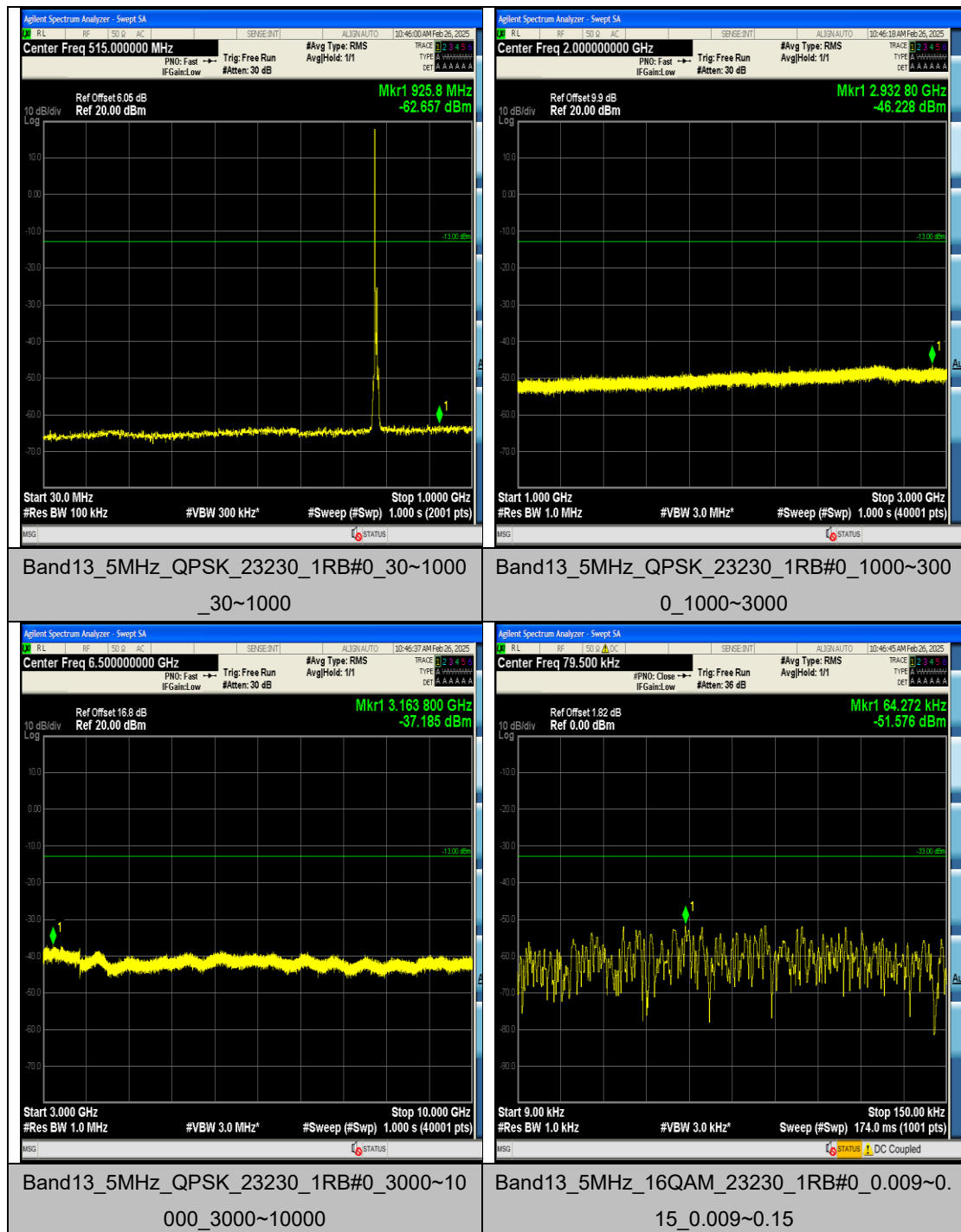
Band13	10MHz	16QAM	23230	1RB#0	0.15~30	-57.89	PASS
Band13	10MHz	16QAM	23230	1RB#0	30~1000	-62.70	PASS
Band13	10MHz	16QAM	23230	1RB#0	1000~3000	-46.07	PASS
Band13	10MHz	16QAM	23230	1RB#0	3000~10000	-37.18	PASS

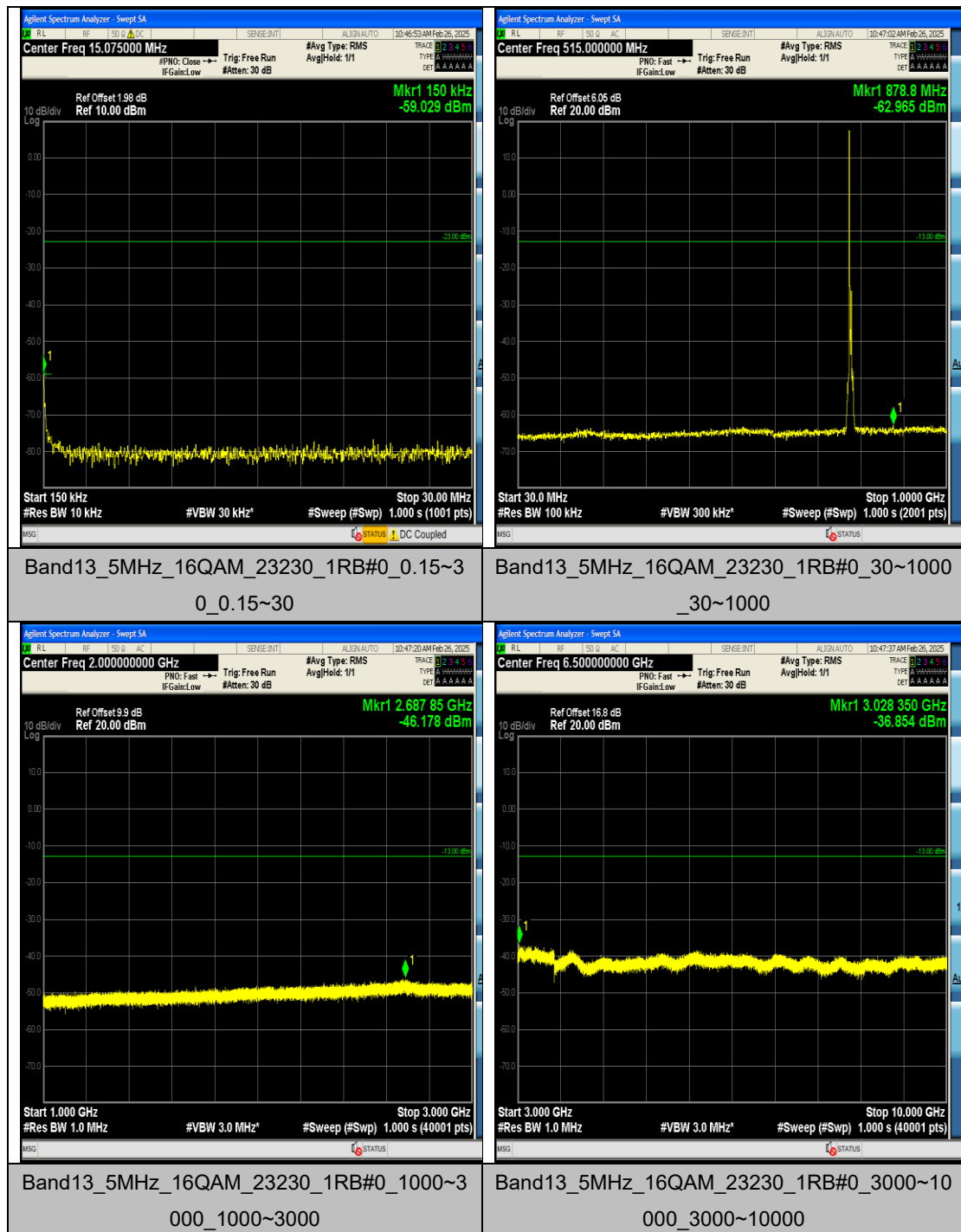
Test Graphs

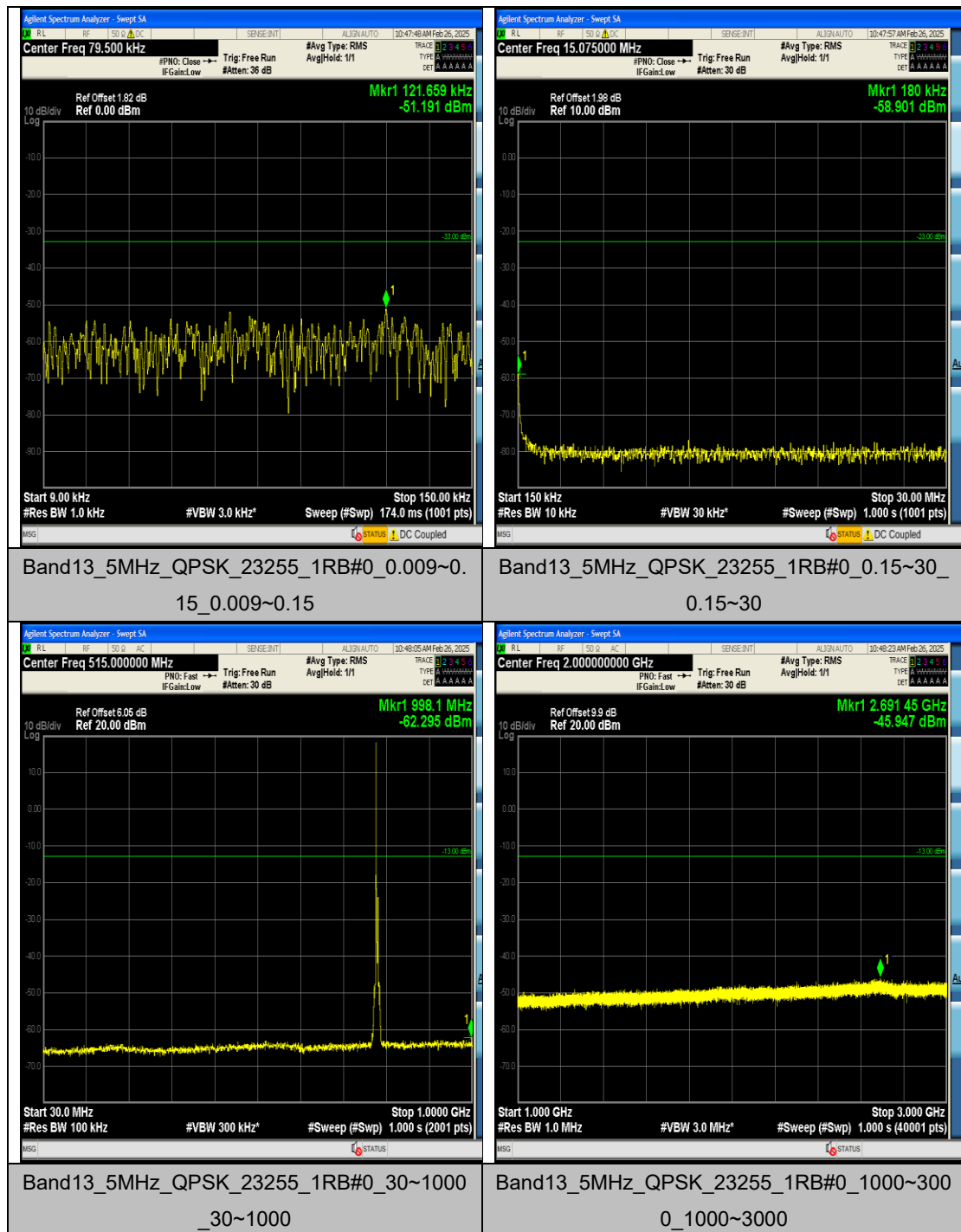


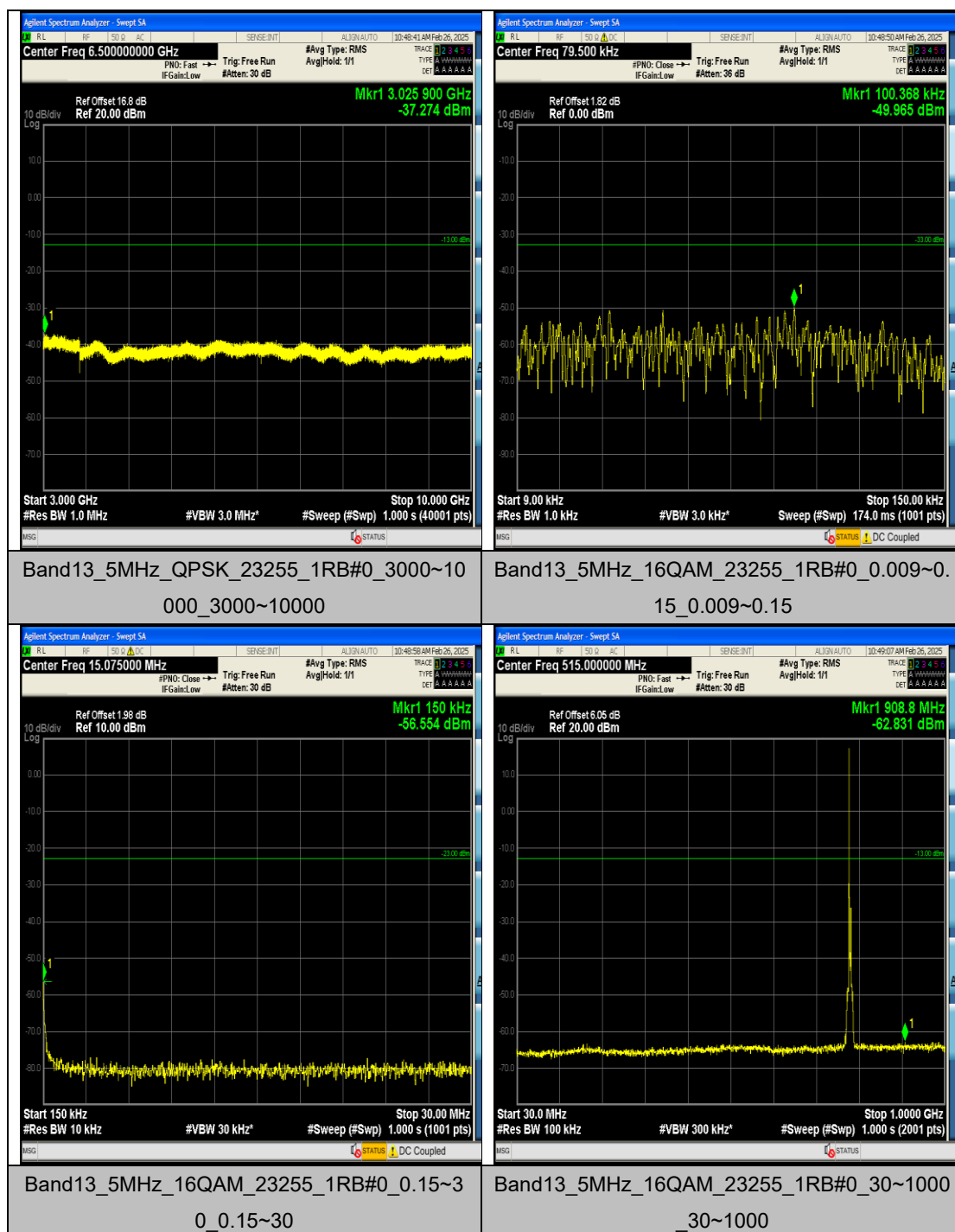


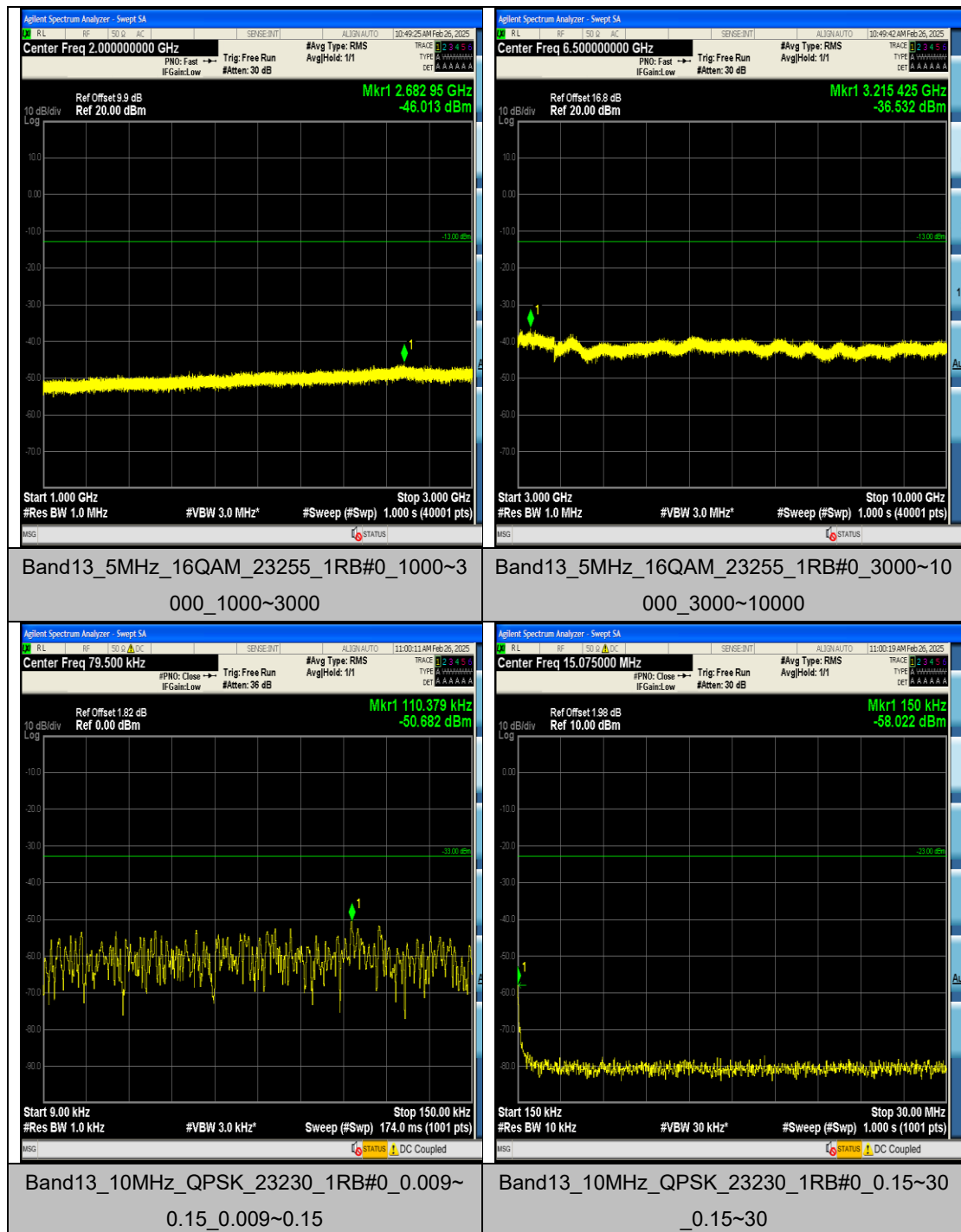


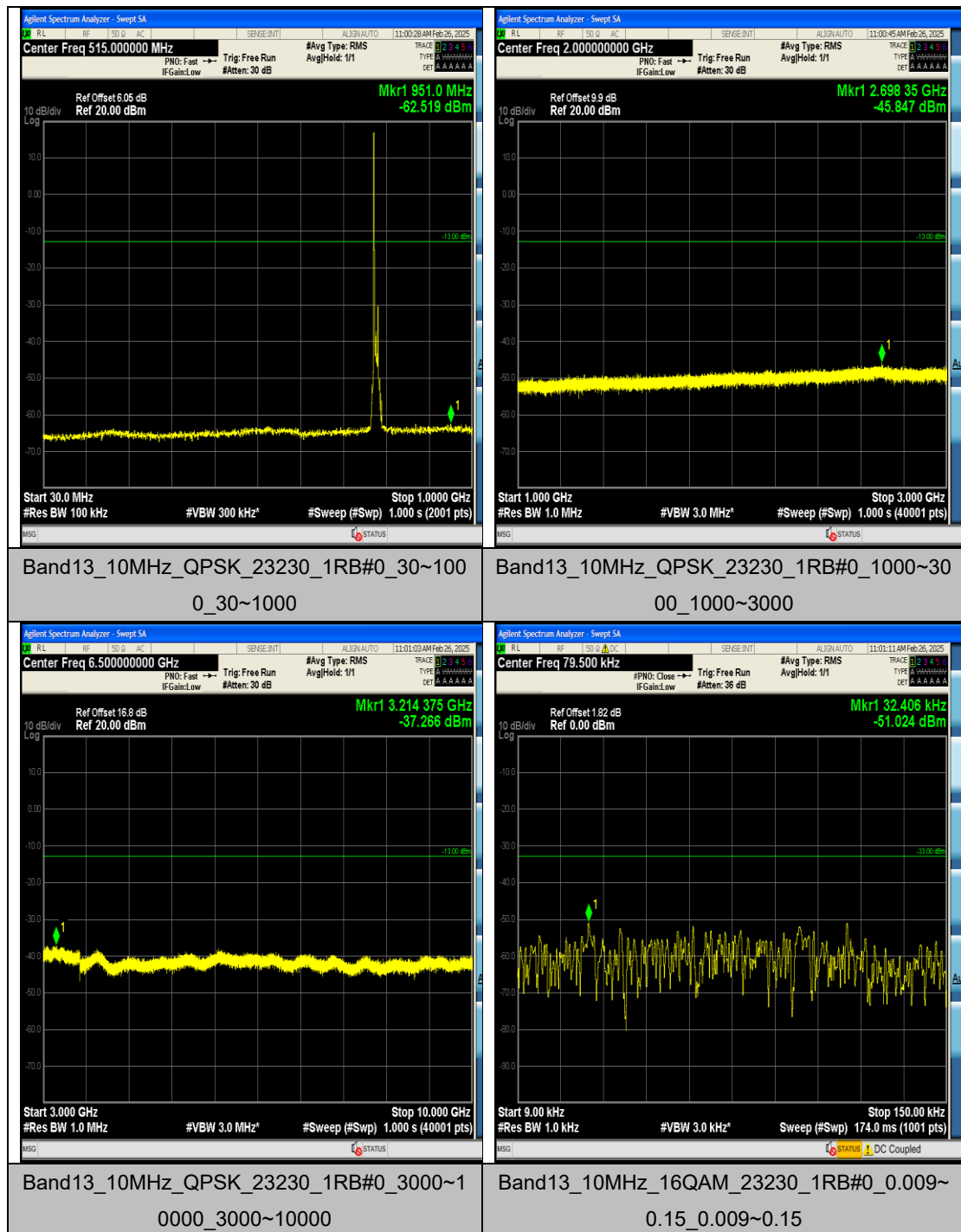


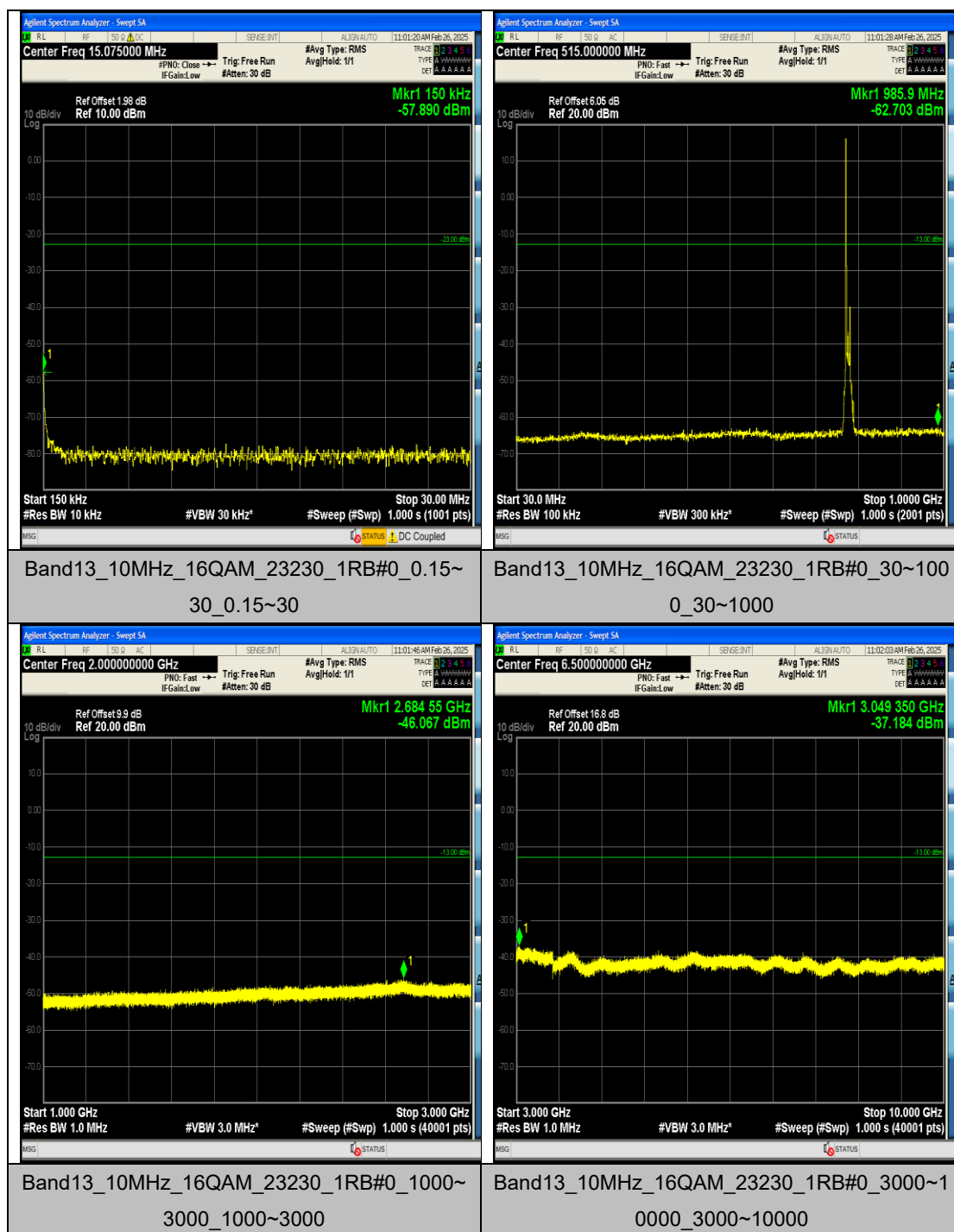












Appendix F: Frequency Stability

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
BandName	Bandwidth	Modulation	Channel	RBcfg	VolValue	TempValue	ValueHz	ValuePpm	Limit	Verdict

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	NV	-30	-12.01	-0.015407	±2.5	PASS
Band13	5MHz	QPSK	23205	25RB#0	NV	-20	-12.34	-0.015831	±2.5	PASS
Band13	5MHz	QPSK	23205	25RB#0	NV	-10	-11.11	-0.014253	±2.5	PASS
Band13	5MHz	QPSK	23205	25RB#0	NV	0	-8.62	-0.011058	±2.5	PASS
Band13	5MHz	QPSK	23205	25RB#0	NV	10	-9.20	-0.011802	±2.5	PASS
Band13	5MHz	QPSK	23205	25RB#0	NV	20	-5.84	-0.007492	±2.5	PASS
Band13	5MHz	QPSK	23205	25RB#0	NV	30	-9.38	-0.012033	±2.5	PASS
Band13	5MHz	QPSK	23205	25RB#0	NV	40	-6.63	-0.008505	±2.5	PASS
Band13	5MHz	QPSK	23205	25RB#0	NV	50	-12.70	-0.016292	±2.5	PASS
Band13	5MHz	16QAM	23205	25RB#0	NV	-30	-7.81	-0.010019	±2.5	PASS
Band13	5MHz	16QAM	23205	25RB#0	NV	-20	-9.64	-0.012367	±2.5	PASS
Band13	5MHz	16QAM	23205	25RB#0	NV	-10	1.61	0.002065	±2.5	PASS
Band13	5MHz	16QAM	23205	25RB#0	NV	0	-8.83	-0.011328	±2.5	PASS
Band13	5MHz	16QAM	23205	25RB#0	NV	10	-2.22	-0.002848	±2.5	PASS
Band13	5MHz	16QAM	23205	25RB#0	NV	20	-8.41	-0.010789	±2.5	PASS
Band13	5MHz	16QAM	23205	25RB#0	NV	30	-8.02	-0.010289	±2.5	PASS
Band13	5MHz	16QAM	23205	25RB#0	NV	40	-8.58	-0.011007	±2.5	PASS
Band13	5MHz	16QAM	23205	25RB#0	NV	50	-13.04	-0.016729	±2.5	PASS
Band13	5MHz	QPSK	23230	25RB#0	NV	-30	-8.85	-0.011317	±2.5	PASS
Band13	5MHz	QPSK	23230	25RB#0	NV	-20	-6.47	-0.008274	±2.5	PASS
Band13	5MHz	QPSK	23230	25RB#0	NV	-10	-8.65	-0.011061	±2.5	PASS
Band13	5MHz	QPSK	23230	25RB#0	NV	0	-9.51	-0.012161	±2.5	PASS
Band13	5MHz	QPSK	23230	25RB#0	NV	10	-11.91	-0.015230	±2.5	PASS
Band13	5MHz	QPSK	23230	25RB#0	NV	20	-2.32	-0.002967	±2.5	PASS
Band13	5MHz	QPSK	23230	25RB#0	NV	30	-8.22	-0.010512	±2.5	PASS
Band13	5MHz	QPSK	23230	25RB#0	NV	40	-11.64	-0.014885	±2.5	PASS
Band13	5MHz	QPSK	23230	25RB#0	NV	50	-8.90	-0.011381	±2.5	PASS
Band13	5MHz	16QAM	23230	25RB#0	NV	-30	-7.69	-0.009834	±2.5	PASS

Band13	5MHz	16QAM	23230	25RB#0	NV	-20	-5.91	-0.007558	±2.5	PASS
Band13	5MHz	16QAM	23230	25RB#0	NV	-10	-6.83	-0.008734	±2.5	PASS
Band13	5MHz	16QAM	23230	25RB#0	NV	0	-9.64	-0.012327	±2.5	PASS
Band13	5MHz	16QAM	23230	25RB#0	NV	10	-12.12	-0.015499	±2.5	PASS
Band13	5MHz	16QAM	23230	25RB#0	NV	20	-7.30	-0.009335	±2.5	PASS
Band13	5MHz	16QAM	23230	25RB#0	NV	30	-6.28	-0.008031	±2.5	PASS
Band13	5MHz	16QAM	23230	25RB#0	NV	40	-8.44	-0.010793	±2.5	PASS
Band13	5MHz	16QAM	23230	25RB#0	NV	50	-3.72	-0.004757	±2.5	PASS
Band13	5MHz	QPSK	23255	25RB#0	NV	-30	-8.81	-0.011230	±2.5	PASS
Band13	5MHz	QPSK	23255	25RB#0	NV	-20	-6.32	-0.008056	±2.5	PASS
Band13	5MHz	QPSK	23255	25RB#0	NV	-10	-6.48	-0.008260	±2.5	PASS
Band13	5MHz	QPSK	23255	25RB#0	NV	0	-6.70	-0.008540	±2.5	PASS
Band13	5MHz	QPSK	23255	25RB#0	NV	10	-8.62	-0.010988	±2.5	PASS
Band13	5MHz	QPSK	23255	25RB#0	NV	20	-9.32	-0.011880	±2.5	PASS
Band13	5MHz	QPSK	23255	25RB#0	NV	30	-9.78	-0.012467	±2.5	PASS
Band13	5MHz	QPSK	23255	25RB#0	NV	40	-5.90	-0.007521	±2.5	PASS
Band13	5MHz	QPSK	23255	25RB#0	NV	50	-10.84	-0.013818	±2.5	PASS
Band13	5MHz	16QAM	23255	25RB#0	NV	-30	-8.18	-0.010427	±2.5	PASS
Band13	5MHz	16QAM	23255	25RB#0	NV	-20	-9.88	-0.012594	±2.5	PASS
Band13	5MHz	16QAM	23255	25RB#0	NV	-10	-12.67	-0.016150	±2.5	PASS
Band13	5MHz	16QAM	23255	25RB#0	NV	0	-12.23	-0.015590	±2.5	PASS
Band13	5MHz	16QAM	23255	25RB#0	NV	10	-12.09	-0.015411	±2.5	PASS
Band13	5MHz	16QAM	23255	25RB#0	NV	20	-7.48	-0.009535	±2.5	PASS
Band13	5MHz	16QAM	23255	25RB#0	NV	30	-7.03	-0.008961	±2.5	PASS
Band13	5MHz	16QAM	23255	25RB#0	NV	40	-7.65	-0.009751	±2.5	PASS
Band13	5MHz	16QAM	23255	25RB#0	NV	50	-14.46	-0.018432	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-30	-7.00	-0.008951	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-20	-7.10	-0.009079	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-10	-7.22	-0.009233	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	0	-7.50	-0.009591	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	10	-6.39	-0.008171	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	20	-11.34	-0.014501	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	30	-10.09	-0.012903	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	40	-6.90	-0.008824	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	50	-6.68	-0.008542	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	-30	-11.77	-0.015051	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	-20	-15.69	-0.020064	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	-10	-6.22	-0.007954	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	0	-6.91	-0.008836	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	10	-2.68	-0.003427	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	20	-3.40	-0.004348	±2.5	PASS

Band13	10MHz	16QAM	23230	50RB#0	NV	30	-3.75	-0.004795	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	40	-4.89	-0.006253	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	50	-9.96	-0.012737	±2.5	PASS