

Appendix for LTE BAND 5

Product Name: Smart Phone

Model No: Neo

Appendix A: Average Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	20.52	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	19.71	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	20.71	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	19.90	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	20.59	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	19.71	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	20.67	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	19.56	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	20.65	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	19.57	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	20.66	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	19.56	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	19.60	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	18.53	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	20.62	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	19.81	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	20.74	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	20.02	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	20.61	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	19.82	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	20.74	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	19.67	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	20.72	PASS
Band5	1.4MHz	16QAM	20525	3RB#1	19.66	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	20.77	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	19.59	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	19.69	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	18.70	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	20.76	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	19.90	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	20.84	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	20.16	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	20.79	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	19.88	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	20.89	PASS
Band5	1.4MHz	16QAM	20643	3RB#0	19.76	PASS

Band5	1.4MHz	QPSK	20643	3RB#1	20.89	PASS
Band5	1.4MHz	16QAM	20643	3RB#1	19.77	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	20.89	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	19.72	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	19.79	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	18.89	PASS
Band5	3MHz	QPSK	20415	1RB#0	20.60	PASS
Band5	3MHz	16QAM	20415	1RB#0	19.78	PASS
Band5	3MHz	QPSK	20415	1RB#8	20.51	PASS
Band5	3MHz	16QAM	20415	1RB#8	19.67	PASS
Band5	3MHz	QPSK	20415	1RB#14	20.53	PASS
Band5	3MHz	16QAM	20415	1RB#14	19.73	PASS
Band5	3MHz	QPSK	20415	8RB#0	19.56	PASS
Band5	3MHz	16QAM	20415	8RB#0	18.65	PASS
Band5	3MHz	QPSK	20415	8RB#4	19.58	PASS
Band5	3MHz	16QAM	20415	8RB#4	18.64	PASS
Band5	3MHz	QPSK	20415	8RB#7	19.57	PASS
Band5	3MHz	16QAM	20415	8RB#7	18.56	PASS
Band5	3MHz	QPSK	20415	15RB#0	19.54	PASS
Band5	3MHz	16QAM	20415	15RB#0	18.58	PASS
Band5	3MHz	QPSK	20525	1RB#0	20.58	PASS
Band5	3MHz	16QAM	20525	1RB#0	19.85	PASS
Band5	3MHz	QPSK	20525	1RB#8	20.67	PASS
Band5	3MHz	16QAM	20525	1RB#8	19.77	PASS
Band5	3MHz	QPSK	20525	1RB#14	20.68	PASS
Band5	3MHz	16QAM	20525	1RB#14	19.87	PASS
Band5	3MHz	QPSK	20525	8RB#0	19.66	PASS
Band5	3MHz	16QAM	20525	8RB#0	18.76	PASS
Band5	3MHz	QPSK	20525	8RB#4	19.65	PASS
Band5	3MHz	16QAM	20525	8RB#4	18.76	PASS
Band5	3MHz	QPSK	20525	8RB#7	19.72	PASS
Band5	3MHz	16QAM	20525	8RB#7	18.76	PASS
Band5	3MHz	QPSK	20525	15RB#0	19.66	PASS
Band5	3MHz	16QAM	20525	15RB#0	18.72	PASS
Band5	3MHz	QPSK	20635	1RB#0	20.82	PASS
Band5	3MHz	16QAM	20635	1RB#0	20.03	PASS
Band5	3MHz	QPSK	20635	1RB#8	20.83	PASS
Band5	3MHz	16QAM	20635	1RB#8	19.95	PASS
Band5	3MHz	QPSK	20635	1RB#14	20.74	PASS
Band5	3MHz	16QAM	20635	1RB#14	19.94	PASS
Band5	3MHz	QPSK	20635	8RB#0	19.84	PASS
Band5	3MHz	16QAM	20635	8RB#0	18.91	PASS

Band5	3MHz	QPSK	20635	8RB#4	19.80	PASS
Band5	3MHz	16QAM	20635	8RB#4	18.96	PASS
Band5	3MHz	QPSK	20635	8RB#7	19.83	PASS
Band5	3MHz	16QAM	20635	8RB#7	18.88	PASS
Band5	3MHz	QPSK	20635	15RB#0	19.82	PASS
Band5	3MHz	16QAM	20635	15RB#0	18.85	PASS
Band5	5MHz	QPSK	20425	1RB#0	20.57	PASS
Band5	5MHz	16QAM	20425	1RB#0	19.55	PASS
Band5	5MHz	QPSK	20425	1RB#12	20.65	PASS
Band5	5MHz	16QAM	20425	1RB#12	19.73	PASS
Band5	5MHz	QPSK	20425	1RB#24	20.60	PASS
Band5	5MHz	16QAM	20425	1RB#24	19.60	PASS
Band5	5MHz	QPSK	20425	12RB#0	19.56	PASS
Band5	5MHz	16QAM	20425	12RB#0	18.56	PASS
Band5	5MHz	QPSK	20425	12RB#6	19.58	PASS
Band5	5MHz	16QAM	20425	12RB#6	18.56	PASS
Band5	5MHz	QPSK	20425	12RB#13	19.65	PASS
Band5	5MHz	16QAM	20425	12RB#13	18.62	PASS
Band5	5MHz	QPSK	20425	25RB#0	19.64	PASS
Band5	5MHz	16QAM	20425	25RB#0	18.62	PASS
Band5	5MHz	QPSK	20525	1RB#0	20.66	PASS
Band5	5MHz	16QAM	20525	1RB#0	19.88	PASS
Band5	5MHz	QPSK	20525	1RB#12	20.77	PASS
Band5	5MHz	16QAM	20525	1RB#12	20.03	PASS
Band5	5MHz	QPSK	20525	1RB#24	20.67	PASS
Band5	5MHz	16QAM	20525	1RB#24	19.91	PASS
Band5	5MHz	QPSK	20525	12RB#0	19.69	PASS
Band5	5MHz	16QAM	20525	12RB#0	18.73	PASS
Band5	5MHz	QPSK	20525	12RB#6	19.71	PASS
Band5	5MHz	16QAM	20525	12RB#6	18.75	PASS
Band5	5MHz	QPSK	20525	12RB#13	19.77	PASS
Band5	5MHz	16QAM	20525	12RB#13	18.79	PASS
Band5	5MHz	QPSK	20525	25RB#0	19.76	PASS
Band5	5MHz	16QAM	20525	25RB#0	18.72	PASS
Band5	5MHz	QPSK	20625	1RB#0	20.81	PASS
Band5	5MHz	16QAM	20625	1RB#0	19.81	PASS
Band5	5MHz	QPSK	20625	1RB#12	20.88	PASS
Band5	5MHz	16QAM	20625	1RB#12	19.95	PASS
Band5	5MHz	QPSK	20625	1RB#24	20.76	PASS
Band5	5MHz	16QAM	20625	1RB#24	19.79	PASS
Band5	5MHz	QPSK	20625	12RB#0	19.82	PASS
Band5	5MHz	16QAM	20625	12RB#0	18.81	PASS

Band5	5MHz	QPSK	20625	12RB#6	19.87	PASS
Band5	5MHz	16QAM	20625	12RB#6	18.85	PASS
Band5	5MHz	QPSK	20625	12RB#13	19.83	PASS
Band5	5MHz	16QAM	20625	12RB#13	18.82	PASS
Band5	5MHz	QPSK	20625	25RB#0	19.84	PASS
Band5	5MHz	16QAM	20625	25RB#0	18.82	PASS
Band5	10MHz	QPSK	20450	1RB#0	20.55	PASS
Band5	10MHz	16QAM	20450	1RB#0	19.79	PASS
Band5	10MHz	QPSK	20450	1RB#24	20.75	PASS
Band5	10MHz	16QAM	20450	1RB#24	19.89	PASS
Band5	10MHz	QPSK	20450	1RB#49	20.62	PASS
Band5	10MHz	16QAM	20450	1RB#49	19.85	PASS
Band5	10MHz	QPSK	20450	25RB#0	19.65	PASS
Band5	10MHz	16QAM	20450	25RB#0	18.70	PASS
Band5	10MHz	QPSK	20450	25RB#12	19.63	PASS
Band5	10MHz	16QAM	20450	25RB#12	18.67	PASS
Band5	10MHz	QPSK	20450	25RB#25	19.74	PASS
Band5	10MHz	16QAM	20450	25RB#25	18.76	PASS
Band5	10MHz	QPSK	20450	50RB#0	19.70	PASS
Band5	10MHz	16QAM	20450	50RB#0	18.72	PASS
Band5	10MHz	QPSK	20525	1RB#0	20.63	PASS
Band5	10MHz	16QAM	20525	1RB#0	19.82	PASS
Band5	10MHz	QPSK	20525	1RB#24	20.66	PASS
Band5	10MHz	16QAM	20525	1RB#24	19.86	PASS
Band5	10MHz	QPSK	20525	1RB#49	20.76	PASS
Band5	10MHz	16QAM	20525	1RB#49	19.91	PASS
Band5	10MHz	QPSK	20525	25RB#0	19.73	PASS
Band5	10MHz	16QAM	20525	25RB#0	18.76	PASS
Band5	10MHz	QPSK	20525	25RB#12	19.78	PASS
Band5	10MHz	16QAM	20525	25RB#12	18.78	PASS
Band5	10MHz	QPSK	20525	25RB#25	19.79	PASS
Band5	10MHz	16QAM	20525	25RB#25	18.79	PASS
Band5	10MHz	QPSK	20525	50RB#0	19.78	PASS
Band5	10MHz	16QAM	20525	50RB#0	18.80	PASS
Band5	10MHz	QPSK	20600	1RB#0	20.78	PASS
Band5	10MHz	16QAM	20600	1RB#0	19.98	PASS
Band5	10MHz	QPSK	20600	1RB#24	20.98	PASS
Band5	10MHz	16QAM	20600	1RB#24	20.14	PASS
Band5	10MHz	QPSK	20600	1RB#49	20.80	PASS
Band5	10MHz	16QAM	20600	1RB#49	19.95	PASS
Band5	10MHz	QPSK	20600	25RB#0	19.90	PASS
Band5	10MHz	16QAM	20600	25RB#0	18.93	PASS

Band5	10MHz	QPSK	20600	25RB#12	19.94	PASS
Band5	10MHz	16QAM	20600	25RB#12	18.96	PASS
Band5	10MHz	QPSK	20600	25RB#25	19.90	PASS
Band5	10MHz	16QAM	20600	25RB#25	18.94	PASS
Band5	10MHz	QPSK	20600	50RB#0	19.91	PASS
Band5	10MHz	16QAM	20600	50RB#0	18.92	PASS

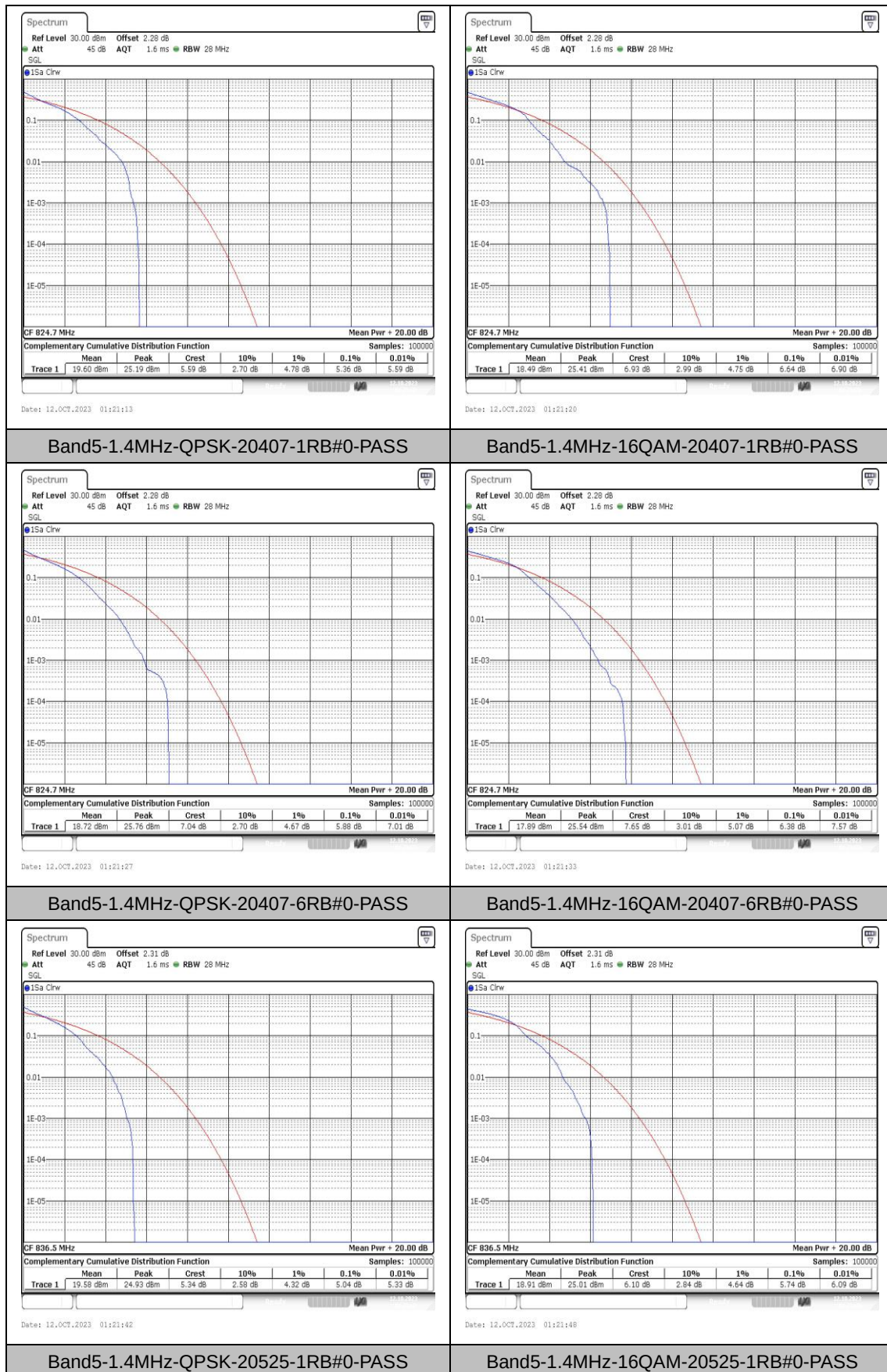
Appendix B: Peak-to-Average Ratio(CCDF)

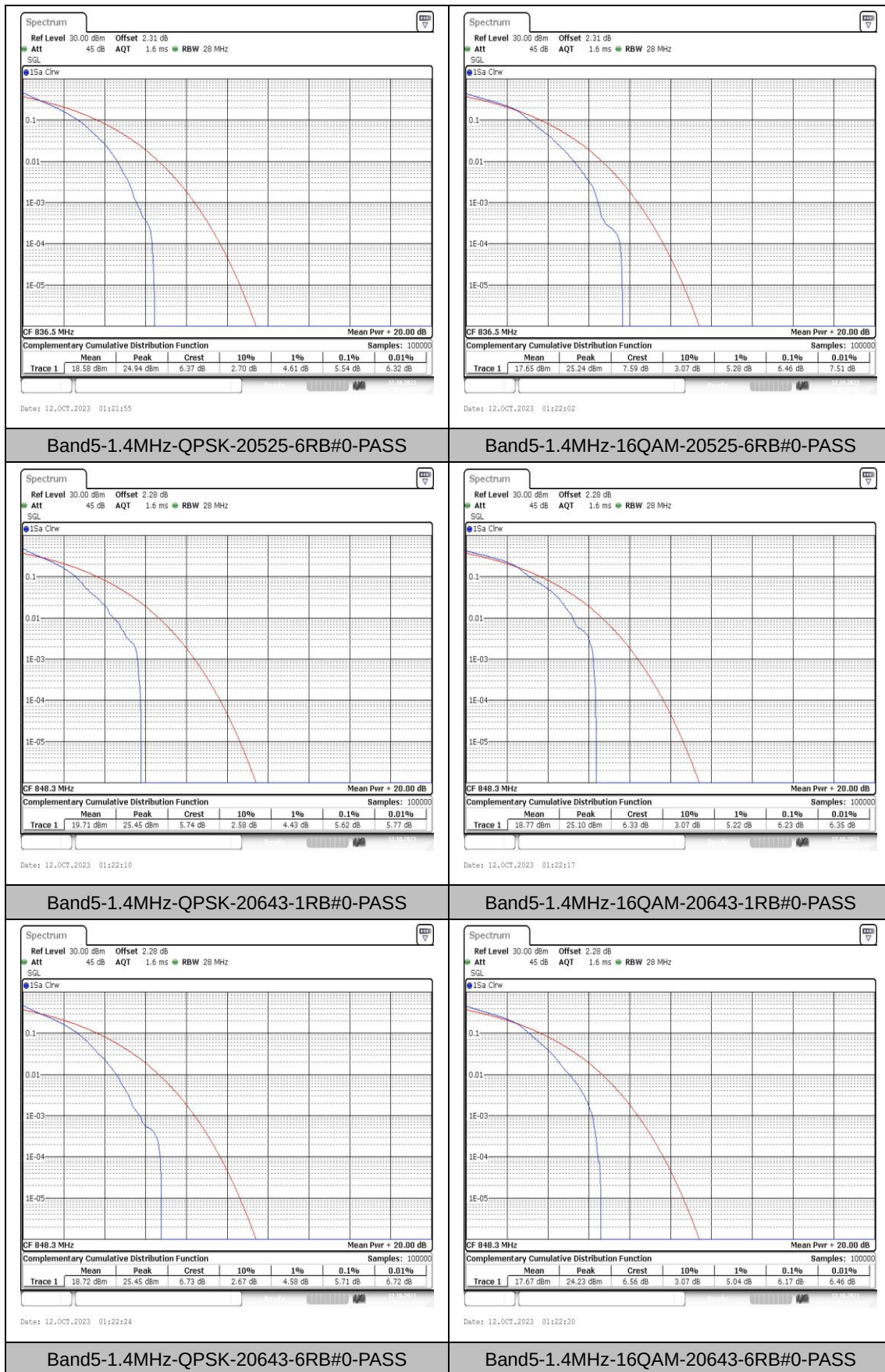
Test Result

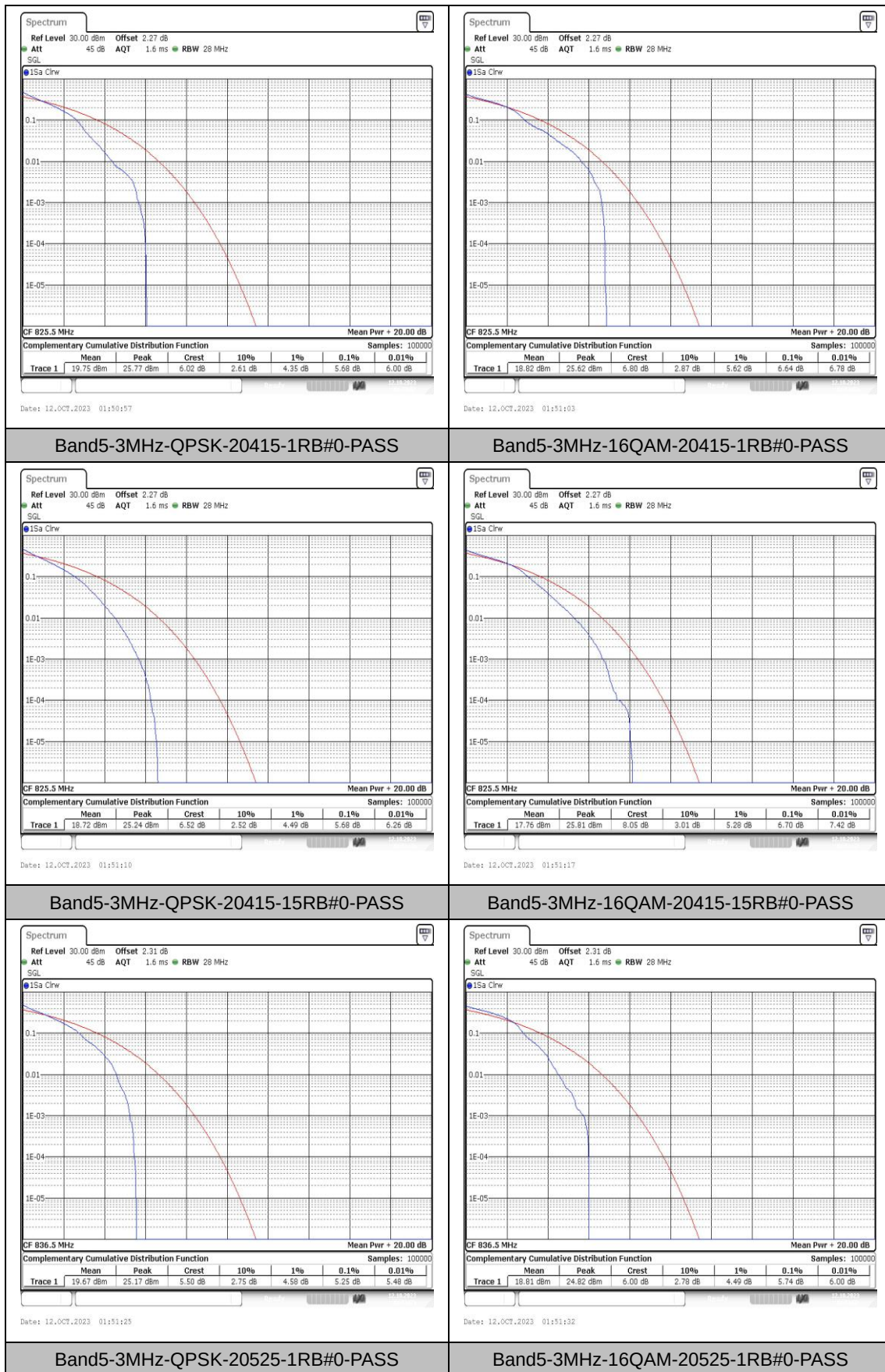
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	5.36	13	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	6.64	13	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	5.88	13	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	6.38	13	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	5.04	13	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	5.74	13	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	5.54	13	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	6.46	13	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	5.62	13	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	6.23	13	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	5.71	13	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	6.17	13	PASS
Band5	3MHz	QPSK	20415	1RB#0	5.68	13	PASS
Band5	3MHz	16QAM	20415	1RB#0	6.64	13	PASS
Band5	3MHz	QPSK	20415	15RB#0	5.68	13	PASS
Band5	3MHz	16QAM	20415	15RB#0	6.70	13	PASS
Band5	3MHz	QPSK	20525	1RB#0	5.25	13	PASS
Band5	3MHz	16QAM	20525	1RB#0	5.74	13	PASS
Band5	3MHz	QPSK	20525	15RB#0	5.65	13	PASS
Band5	3MHz	16QAM	20525	15RB#0	6.26	13	PASS
Band5	3MHz	QPSK	20635	1RB#0	5.13	13	PASS
Band5	3MHz	16QAM	20635	1RB#0	5.74	13	PASS
Band5	3MHz	QPSK	20635	15RB#0	5.77	13	PASS
Band5	3MHz	16QAM	20635	15RB#0	6.23	13	PASS
Band5	5MHz	QPSK	20425	1RB#0	5.51	13	PASS
Band5	5MHz	16QAM	20425	1RB#0	6.20	13	PASS
Band5	5MHz	QPSK	20425	25RB#0	5.83	13	PASS
Band5	5MHz	16QAM	20425	25RB#0	6.55	13	PASS
Band5	5MHz	QPSK	20525	1RB#0	5.30	13	PASS
Band5	5MHz	16QAM	20525	1RB#0	5.48	13	PASS
Band5	5MHz	QPSK	20525	25RB#0	5.74	13	PASS
Band5	5MHz	16QAM	20525	25RB#0	6.38	13	PASS
Band5	5MHz	QPSK	20625	1RB#0	5.83	13	PASS
Band5	5MHz	16QAM	20625	1RB#0	6.17	13	PASS
Band5	5MHz	QPSK	20625	25RB#0	5.68	13	PASS
Band5	5MHz	16QAM	20625	25RB#0	6.35	13	PASS

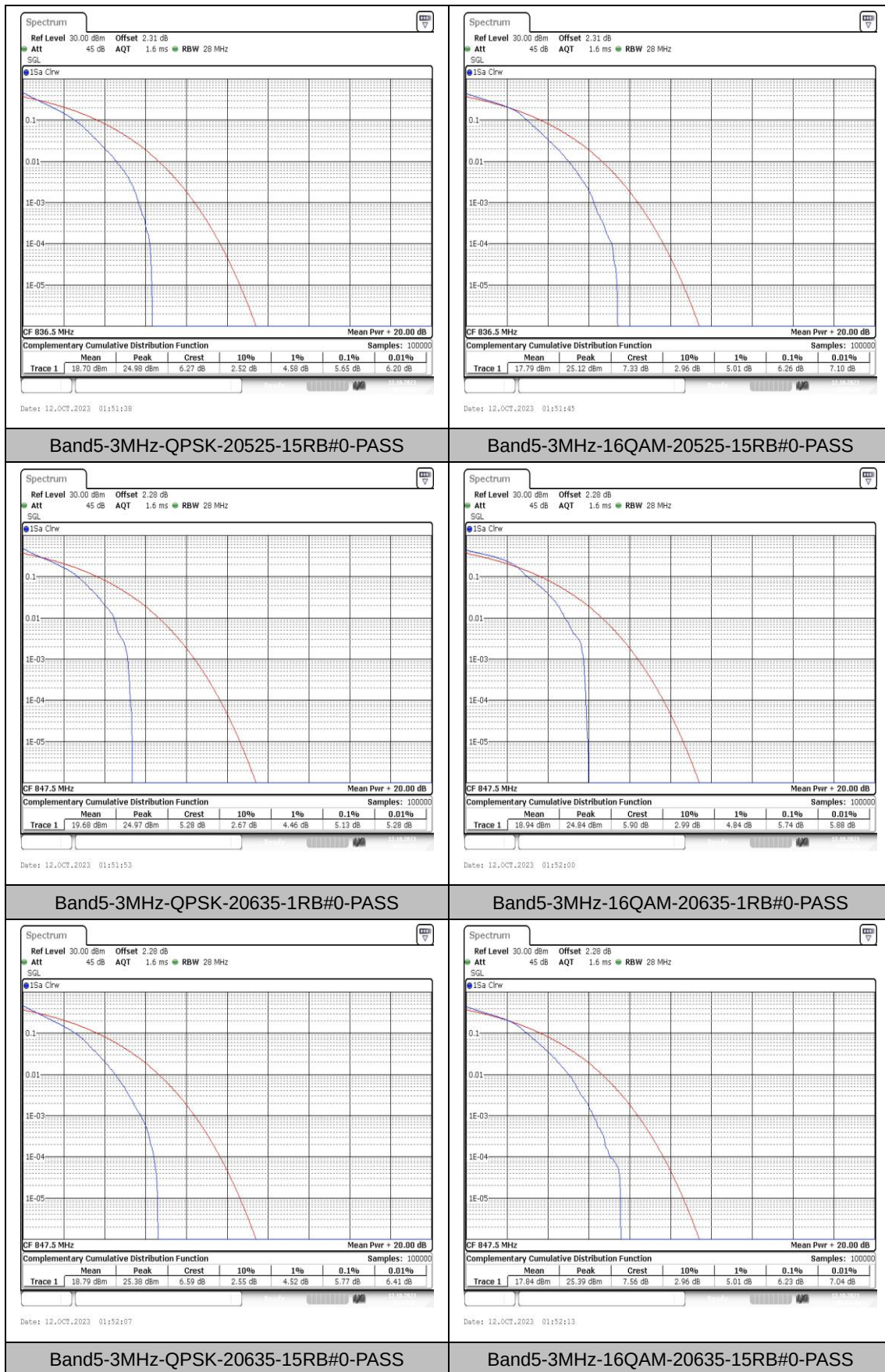
Band5	10MHz	QPSK	20450	1RB#0	5.30	13	PASS
Band5	10MHz	16QAM	20450	1RB#0	6.29	13	PASS
Band5	10MHz	QPSK	20450	50RB#0	5.74	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	6.41	13	PASS
Band5	10MHz	QPSK	20525	1RB#0	5.45	13	PASS
Band5	10MHz	16QAM	20525	1RB#0	5.86	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	5.68	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	6.46	13	PASS
Band5	10MHz	QPSK	20600	1RB#0	5.42	13	PASS
Band5	10MHz	16QAM	20600	1RB#0	6.35	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	5.74	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	6.58	13	PASS

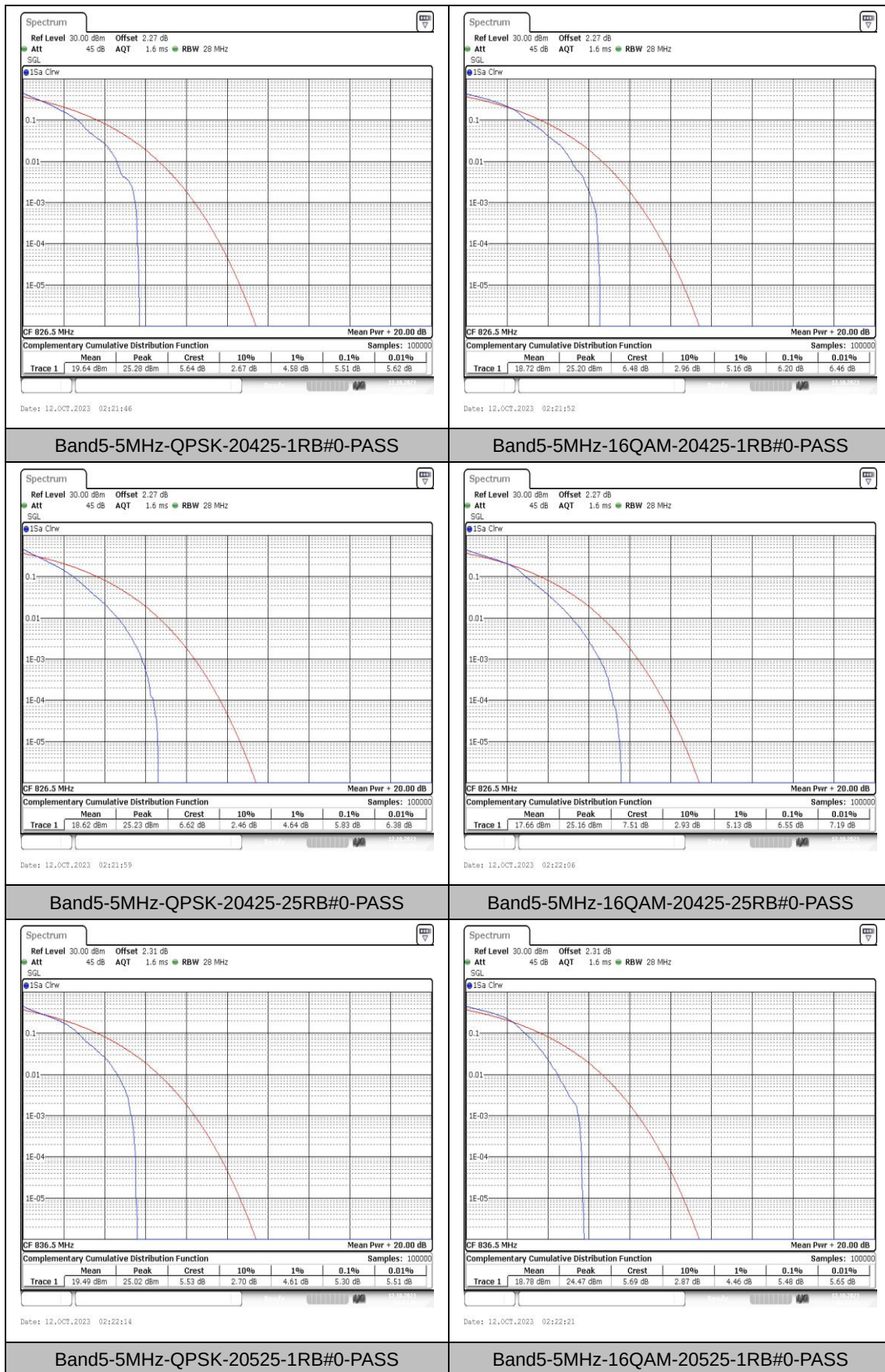
Test Graphs

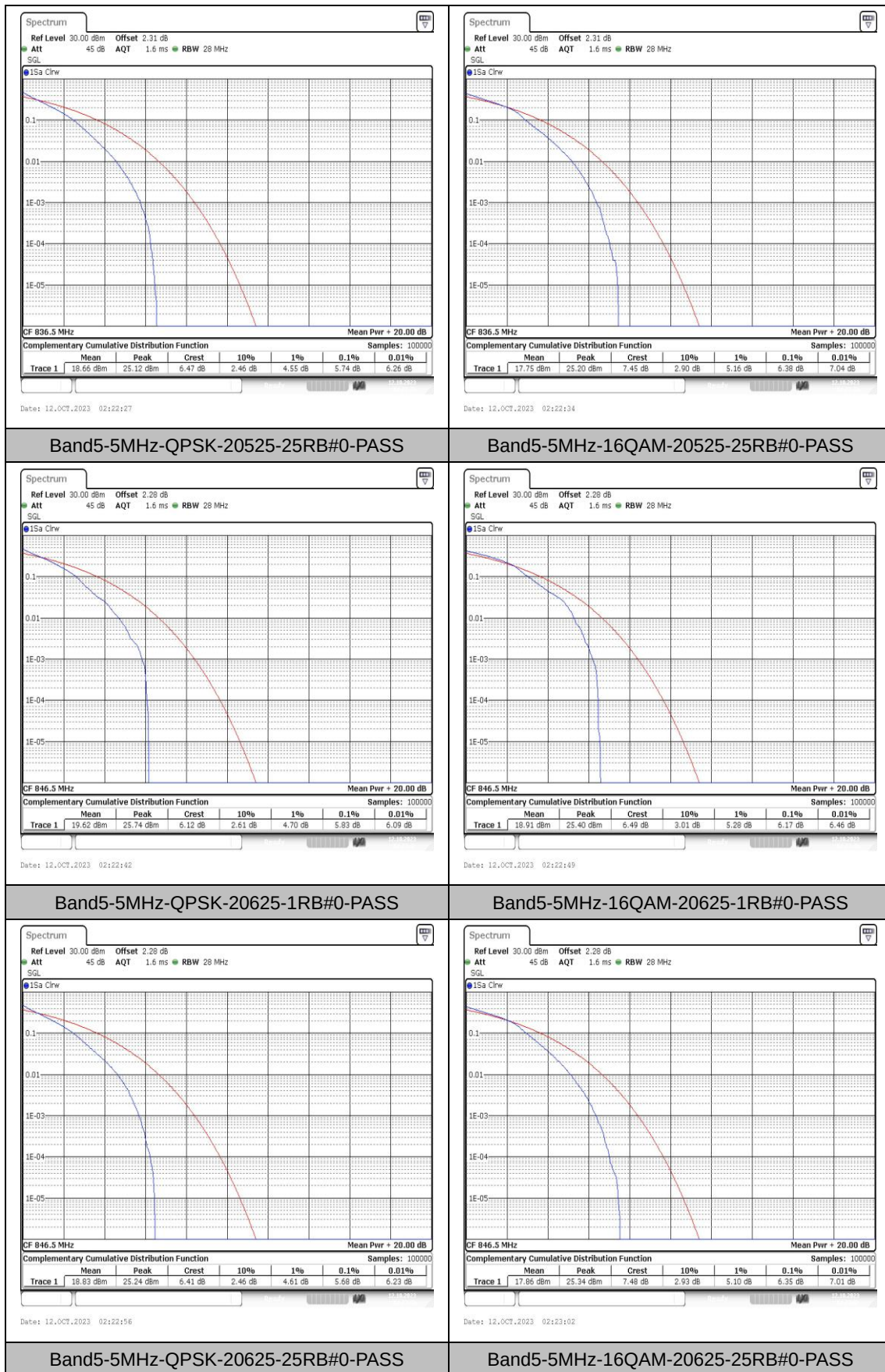


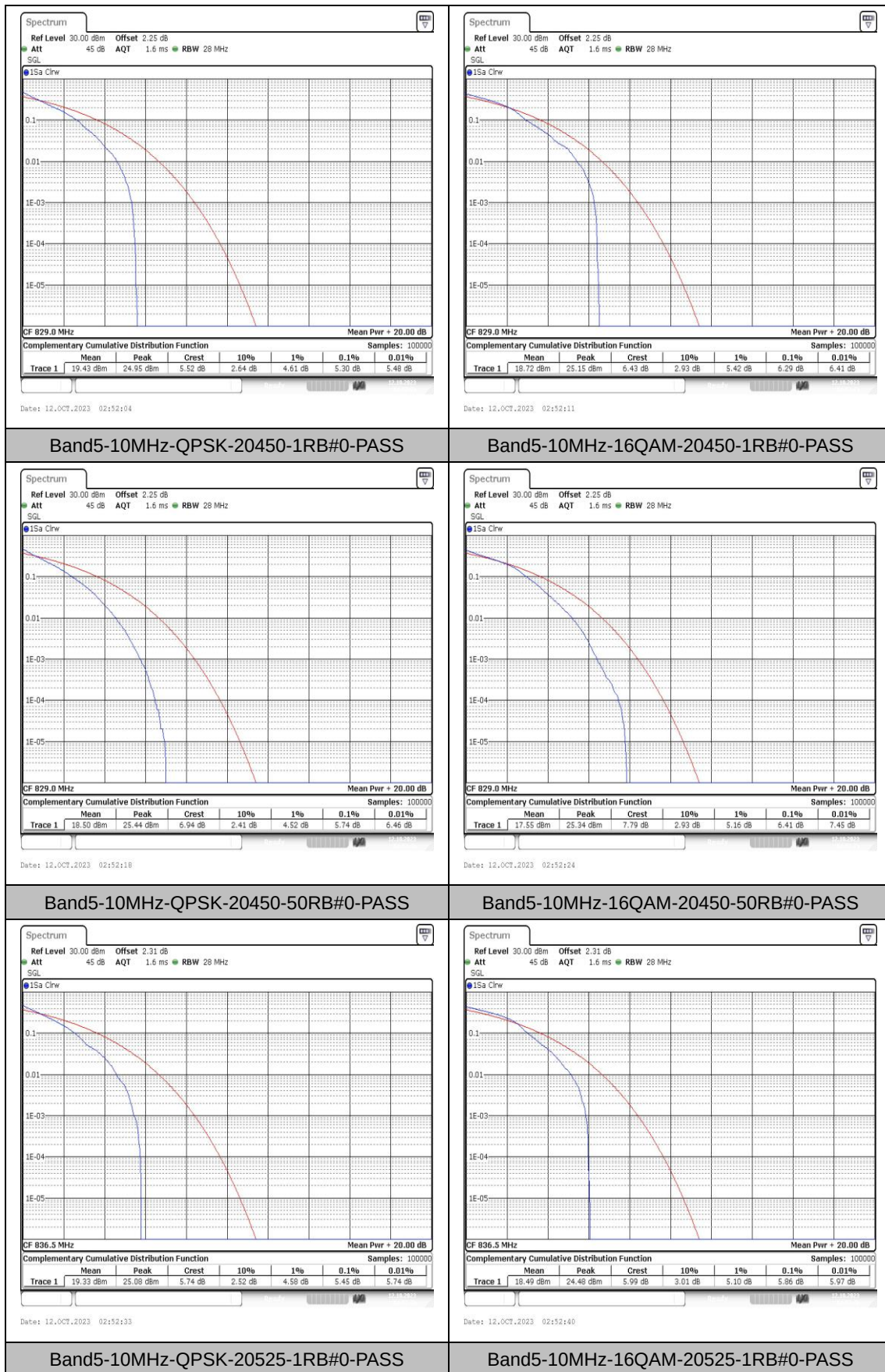


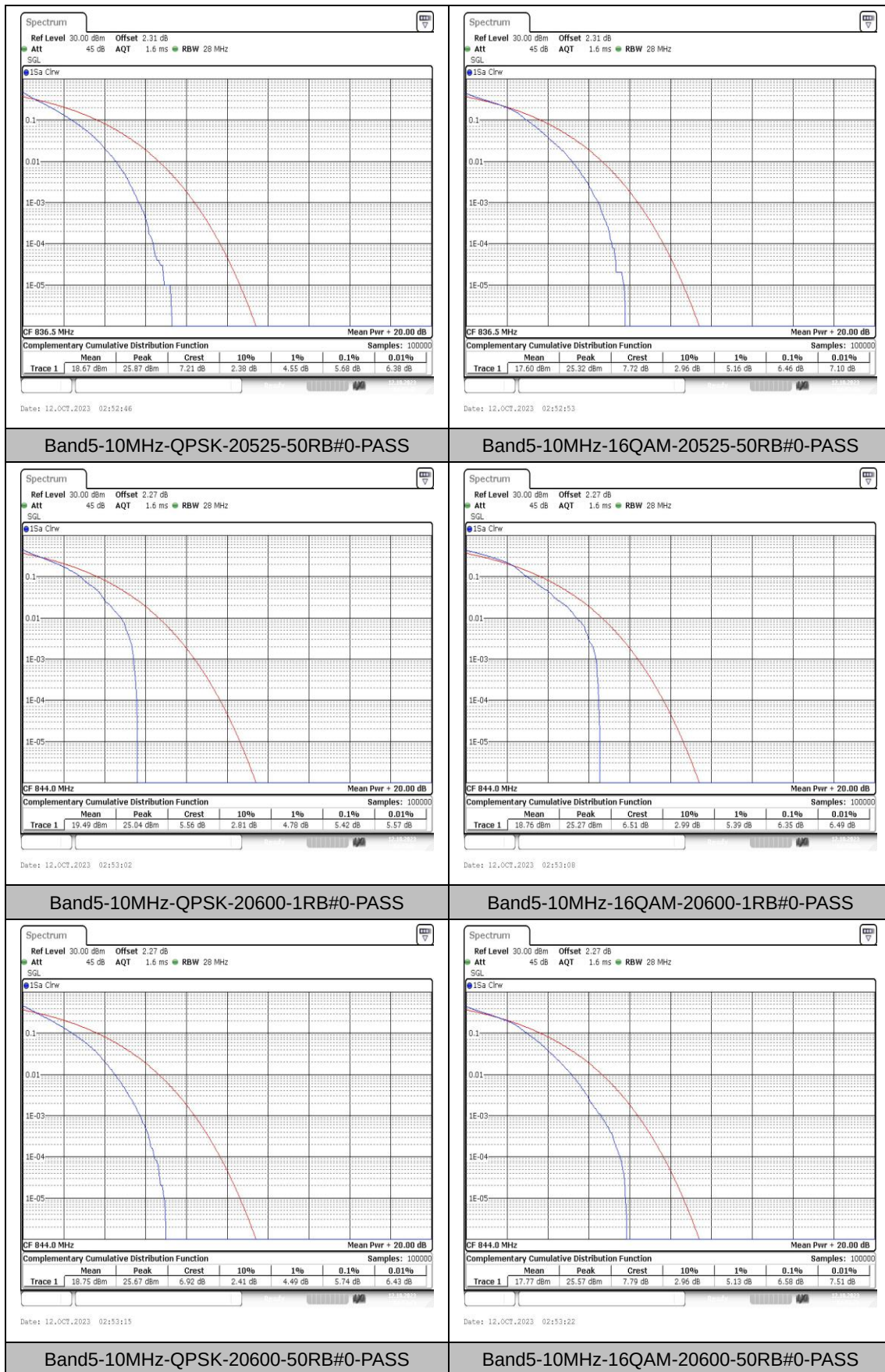










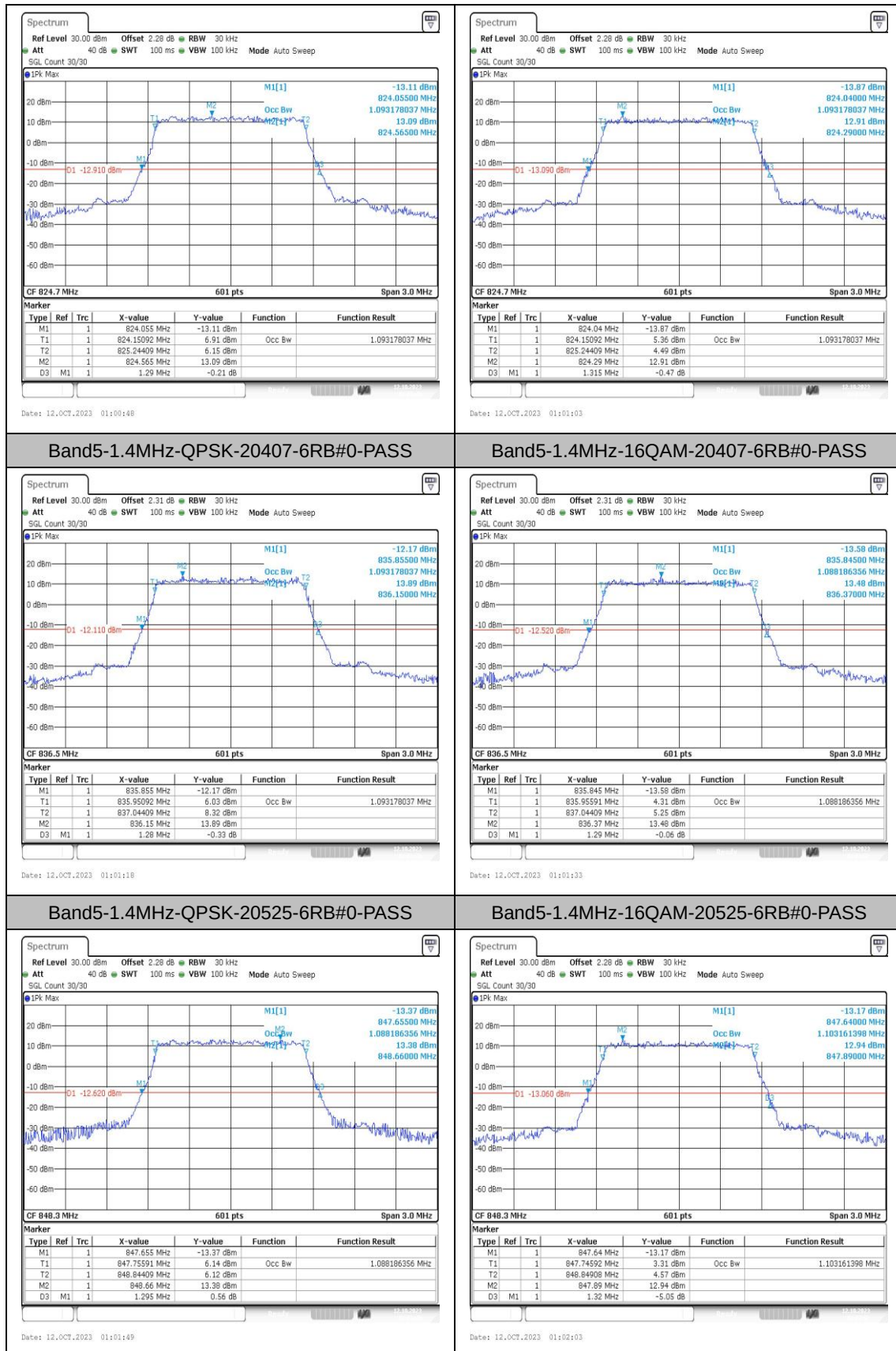


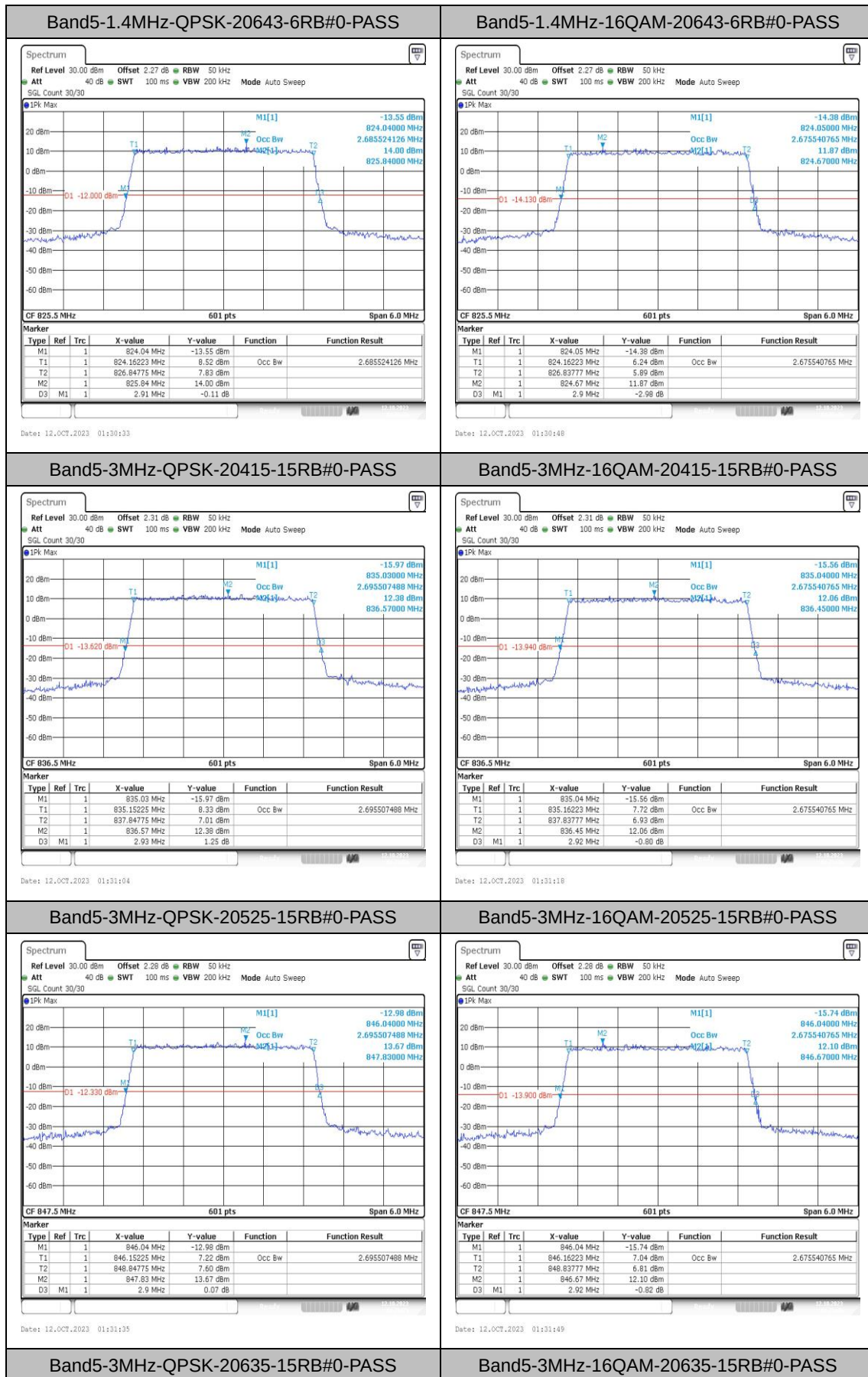
Appendix C: 26dB Bandwidth and Occupied Bandwidth

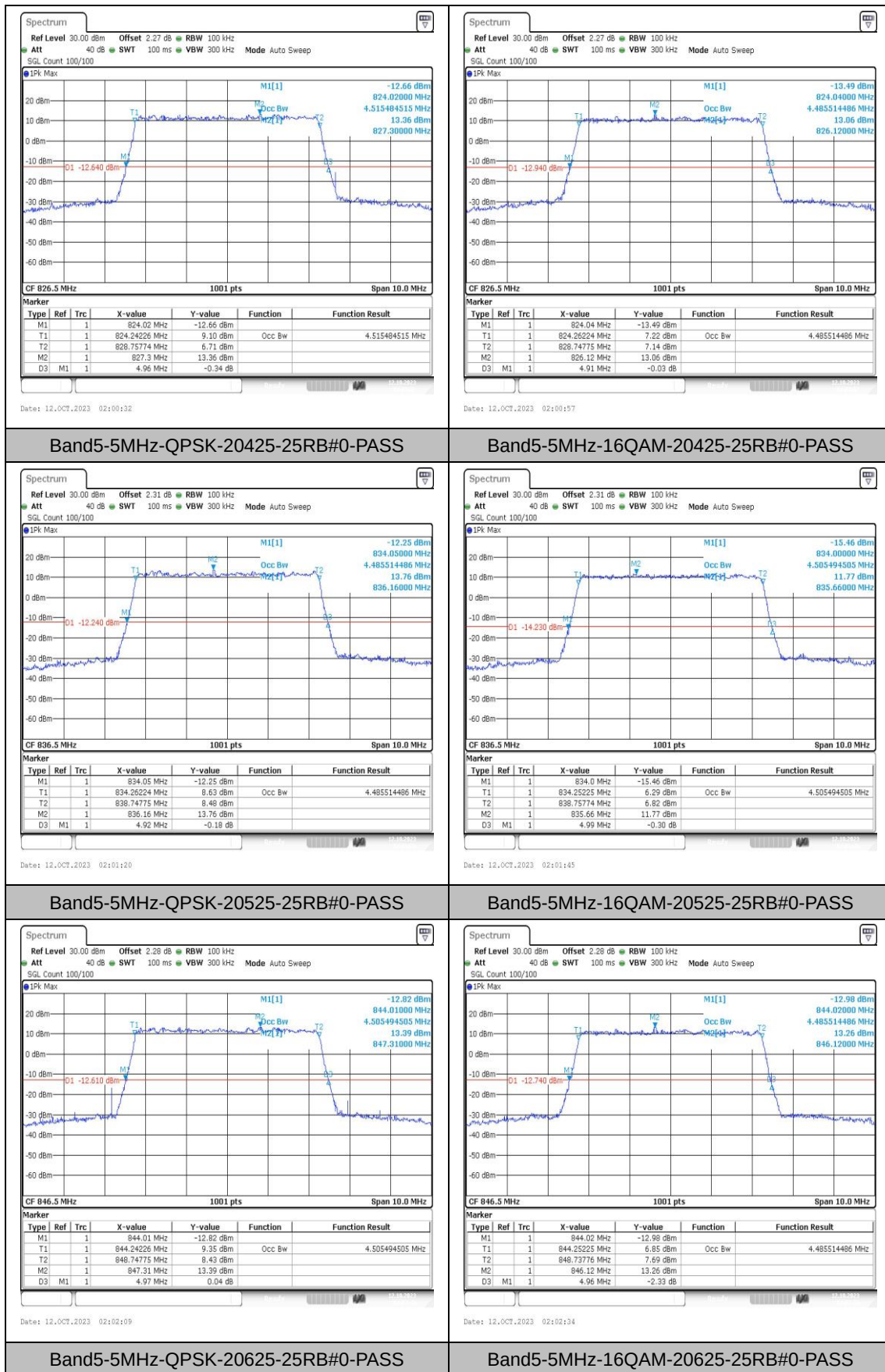
Test Result

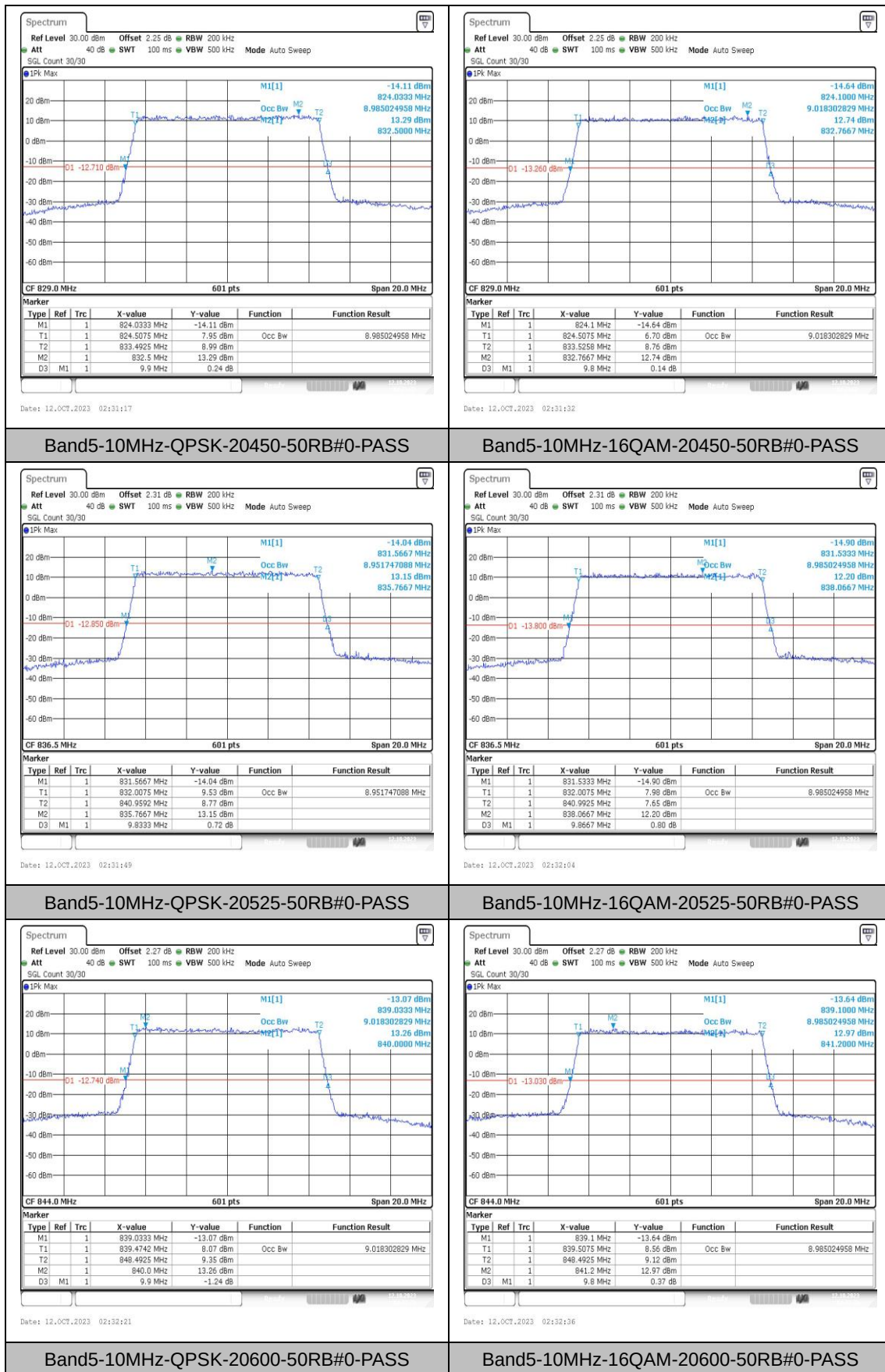
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.093	1.29	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.093	1.31	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.093	1.28	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.088	1.29	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.088	1.29	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.103	1.32	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.686	2.91	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.676	2.90	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.696	2.93	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.676	2.92	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.696	2.90	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.676	2.92	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.515	4.96	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.486	4.91	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.486	4.92	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.505	4.99	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.505	4.97	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.486	4.96	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.985	9.90	PASS
Band5	10MHz	16QAM	20450	50RB#0	9.018	9.80	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.952	9.83	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.985	9.87	PASS
Band5	10MHz	QPSK	20600	50RB#0	9.018	9.90	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.985	9.80	PASS

Test Graphs









Appendix D: Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	-28.28	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	-30.19	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	-40.37	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	-42.50	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	-35.42	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	-35.49	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	-41.60	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	-43.09	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	-28.88	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	-28.88	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	-35.21	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	-36.45	PASS
Band5	3MHz	QPSK	20415	1RB#0	-26.67	PASS
Band5	3MHz	16QAM	20415	1RB#0	-26.80	PASS
Band5	3MHz	QPSK	20415	1RB#14	-45.51	PASS
Band5	3MHz	16QAM	20415	1RB#14	-45.94	PASS
Band5	3MHz	QPSK	20415	15RB#0	-36.18	PASS
Band5	3MHz	16QAM	20415	15RB#0	-37.32	PASS
Band5	3MHz	QPSK	20635	1RB#0	-47.09	PASS
Band5	3MHz	16QAM	20635	1RB#0	-48.92	PASS
Band5	3MHz	QPSK	20635	1RB#14	-25.80	PASS
Band5	3MHz	16QAM	20635	1RB#14	-25.72	PASS
Band5	3MHz	QPSK	20635	15RB#0	-37.33	PASS
Band5	3MHz	16QAM	20635	15RB#0	-38.70	PASS
Band5	5MHz	QPSK	20425	1RB#0	-23.39	PASS
Band5	5MHz	16QAM	20425	1RB#0	-24.41	PASS
Band5	5MHz	QPSK	20425	1RB#24	-46.36	PASS
Band5	5MHz	16QAM	20425	1RB#24	-47.77	PASS
Band5	5MHz	QPSK	20425	25RB#0	-35.49	PASS
Band5	5MHz	16QAM	20425	25RB#0	-36.53	PASS
Band5	5MHz	QPSK	20625	1RB#0	-50.91	PASS
Band5	5MHz	16QAM	20625	1RB#0	-51.64	PASS
Band5	5MHz	QPSK	20625	1RB#24	-22.92	PASS
Band5	5MHz	16QAM	20625	1RB#24	-24.20	PASS
Band5	5MHz	QPSK	20625	25RB#0	-35.05	PASS

Band5	5MHz	16QAM	20625	25RB#0	-37.04	PASS
Band5	10MHz	QPSK	20450	1RB#0	-26.47	PASS
Band5	10MHz	16QAM	20450	1RB#0	-26.25	PASS
Band5	10MHz	QPSK	20450	1RB#49	-50.95	PASS
Band5	10MHz	16QAM	20450	1RB#49	-51.81	PASS
Band5	10MHz	QPSK	20450	50RB#0	-36.73	PASS
Band5	10MHz	16QAM	20450	50RB#0	-39.32	PASS
Band5	10MHz	QPSK	20600	1RB#0	-51.61	PASS
Band5	10MHz	16QAM	20600	1RB#0	-51.87	PASS
Band5	10MHz	QPSK	20600	1RB#49	-25.44	PASS
Band5	10MHz	16QAM	20600	1RB#49	-25.03	PASS
Band5	10MHz	QPSK	20600	50RB#0	-38.15	PASS
Band5	10MHz	16QAM	20600	50RB#0	-38.56	PASS

Test Graphs

