

Appendix for LTE Band 42

Product Name: 5G Indoor CPE

Model No: TITAN 5000

Appendix A: Average Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
42(3450-3550)	5MHz	QPSK	42115	1RB#0	20.46	PASS
42(3450-3550)	5MHz	16QAM	42115	1RB#0	19.85	PASS
42(3450-3550)	5MHz	QPSK	42115	1RB#12	20.58	PASS
42(3450-3550)	5MHz	16QAM	42115	1RB#12	19.94	PASS
42(3450-3550)	5MHz	QPSK	42115	1RB#24	20.51	PASS
42(3450-3550)	5MHz	16QAM	42115	1RB#24	19.87	PASS
42(3450-3550)	5MHz	QPSK	42115	12RB#0	20.05	PASS
42(3450-3550)	5MHz	16QAM	42115	12RB#0	19.08	PASS
42(3450-3550)	5MHz	QPSK	42115	12RB#6	20.05	PASS
42(3450-3550)	5MHz	16QAM	42115	12RB#6	19.10	PASS
42(3450-3550)	5MHz	QPSK	42115	12RB#13	20.06	PASS
42(3450-3550)	5MHz	16QAM	42115	12RB#13	19.14	PASS
42(3450-3550)	5MHz	QPSK	42115	25RB#0	20.07	PASS
42(3450-3550)	5MHz	16QAM	42115	25RB#0	19.07	PASS
42(3450-3550)	5MHz	QPSK	42590	1RB#0	20.29	PASS
42(3450-3550)	5MHz	16QAM	42590	1RB#0	19.79	PASS
42(3450-3550)	5MHz	QPSK	42590	1RB#12	20.33	PASS
42(3450-3550)	5MHz	16QAM	42590	1RB#12	19.69	PASS
42(3450-3550)	5MHz	QPSK	42590	1RB#24	20.24	PASS
42(3450-3550)	5MHz	16QAM	42590	1RB#24	19.69	PASS
42(3450-3550)	5MHz	QPSK	42590	12RB#0	19.78	PASS
42(3450-3550)	5MHz	16QAM	42590	12RB#0	18.78	PASS
42(3450-3550)	5MHz	QPSK	42590	12RB#6	19.78	PASS
42(3450-3550)	5MHz	16QAM	42590	12RB#6	18.75	PASS
42(3450-3550)	5MHz	QPSK	42590	12RB#13	19.81	PASS
42(3450-3550)	5MHz	16QAM	42590	12RB#13	18.74	PASS
42(3450-3550)	5MHz	QPSK	42590	25RB#0	19.76	PASS
42(3450-3550)	5MHz	16QAM	42590	25RB#0	18.84	PASS
42(3450-3550)	5MHz	QPSK	43065	1RB#0	19.97	PASS
42(3450-3550)	5MHz	16QAM	43065	1RB#0	19.37	PASS
42(3450-3550)	5MHz	QPSK	43065	1RB#12	19.94	PASS
42(3450-3550)	5MHz	16QAM	43065	1RB#12	19.38	PASS
42(3450-3550)	5MHz	QPSK	43065	1RB#24	19.92	PASS
42(3450-3550)	5MHz	16QAM	43065	1RB#24	19.20	PASS
42(3450-3550)	5MHz	QPSK	43065	12RB#0	19.41	PASS

42(3450-3550)	5MHz	16QAM	43065	12RB#0	18.46	PASS
42(3450-3550)	5MHz	QPSK	43065	12RB#6	19.44	PASS
42(3450-3550)	5MHz	16QAM	43065	12RB#6	18.60	PASS
42(3450-3550)	5MHz	QPSK	43065	12RB#13	19.44	PASS
42(3450-3550)	5MHz	16QAM	43065	12RB#13	18.42	PASS
42(3450-3550)	5MHz	QPSK	43065	25RB#0	19.44	PASS
42(3450-3550)	5MHz	16QAM	43065	25RB#0	18.51	PASS
42(3450-3550)	10MHz	QPSK	42140	1RB#0	20.52	PASS
42(3450-3550)	10MHz	16QAM	42140	1RB#0	20.01	PASS
42(3450-3550)	10MHz	QPSK	42140	1RB#24	20.44	PASS
42(3450-3550)	10MHz	16QAM	42140	1RB#24	20.12	PASS
42(3450-3550)	10MHz	QPSK	42140	1RB#49	20.40	PASS
42(3450-3550)	10MHz	16QAM	42140	1RB#49	19.94	PASS
42(3450-3550)	10MHz	QPSK	42140	25RB#0	20.00	PASS
42(3450-3550)	10MHz	16QAM	42140	25RB#0	19.02	PASS
42(3450-3550)	10MHz	QPSK	42140	25RB#12	20.02	PASS
42(3450-3550)	10MHz	16QAM	42140	25RB#12	19.06	PASS
42(3450-3550)	10MHz	QPSK	42140	25RB#25	19.93	PASS
42(3450-3550)	10MHz	16QAM	42140	25RB#25	18.99	PASS
42(3450-3550)	10MHz	QPSK	42140	50RB#0	19.99	PASS
42(3450-3550)	10MHz	16QAM	42140	50RB#0	18.97	PASS
42(3450-3550)	10MHz	QPSK	42590	1RB#0	20.18	PASS
42(3450-3550)	10MHz	16QAM	42590	1RB#0	19.71	PASS
42(3450-3550)	10MHz	QPSK	42590	1RB#24	20.19	PASS
42(3450-3550)	10MHz	16QAM	42590	1RB#24	19.71	PASS
42(3450-3550)	10MHz	QPSK	42590	1RB#49	20.18	PASS
42(3450-3550)	10MHz	16QAM	42590	1RB#49	19.60	PASS
42(3450-3550)	10MHz	QPSK	42590	25RB#0	19.81	PASS
42(3450-3550)	10MHz	16QAM	42590	25RB#0	18.79	PASS
42(3450-3550)	10MHz	QPSK	42590	25RB#12	19.84	PASS
42(3450-3550)	10MHz	16QAM	42590	25RB#12	18.85	PASS
42(3450-3550)	10MHz	QPSK	42590	25RB#25	19.76	PASS
42(3450-3550)	10MHz	16QAM	42590	25RB#25	18.77	PASS
42(3450-3550)	10MHz	QPSK	42590	50RB#0	19.79	PASS
42(3450-3550)	10MHz	16QAM	42590	50RB#0	18.82	PASS
42(3450-3550)	10MHz	QPSK	43040	1RB#0	19.96	PASS
42(3450-3550)	10MHz	16QAM	43040	1RB#0	19.42	PASS
42(3450-3550)	10MHz	QPSK	43040	1RB#24	19.92	PASS
42(3450-3550)	10MHz	16QAM	43040	1RB#24	19.37	PASS
42(3450-3550)	10MHz	QPSK	43040	1RB#49	19.83	PASS
42(3450-3550)	10MHz	16QAM	43040	1RB#49	19.35	PASS
42(3450-3550)	10MHz	QPSK	43040	25RB#0	19.51	PASS

42(3450-3550)	10MHz	16QAM	43040	25RB#0	18.48	PASS
42(3450-3550)	10MHz	QPSK	43040	25RB#12	19.48	PASS
42(3450-3550)	10MHz	16QAM	43040	25RB#12	18.53	PASS
42(3450-3550)	10MHz	QPSK	43040	25RB#25	19.48	PASS
42(3450-3550)	10MHz	16QAM	43040	25RB#25	18.49	PASS
42(3450-3550)	10MHz	QPSK	43040	50RB#0	19.53	PASS
42(3450-3550)	10MHz	16QAM	43040	50RB#0	18.51	PASS
42(3450-3550)	15MHz	QPSK	42165	1RB#0	20.25	PASS
42(3450-3550)	15MHz	16QAM	42165	1RB#0	19.77	PASS
42(3450-3550)	15MHz	QPSK	42165	1RB#38	20.28	PASS
42(3450-3550)	15MHz	16QAM	42165	1RB#38	19.82	PASS
42(3450-3550)	15MHz	QPSK	42165	1RB#74	20.20	PASS
42(3450-3550)	15MHz	16QAM	42165	1RB#74	19.70	PASS
42(3450-3550)	15MHz	QPSK	42165	38RB#0	19.88	PASS
42(3450-3550)	15MHz	16QAM	42165	38RB#0	19.83	PASS
42(3450-3550)	15MHz	QPSK	42165	38RB#18	19.83	PASS
42(3450-3550)	15MHz	16QAM	42165	38RB#18	19.88	PASS
42(3450-3550)	15MHz	QPSK	42165	38RB#37	19.82	PASS
42(3450-3550)	15MHz	16QAM	42165	38RB#37	19.83	PASS
42(3450-3550)	15MHz	QPSK	42165	75RB#0	19.87	PASS
42(3450-3550)	15MHz	16QAM	42165	75RB#0	18.84	PASS
42(3450-3550)	15MHz	QPSK	42590	1RB#0	20.08	PASS
42(3450-3550)	15MHz	16QAM	42590	1RB#0	19.62	PASS
42(3450-3550)	15MHz	QPSK	42590	1RB#38	20.07	PASS
42(3450-3550)	15MHz	16QAM	42590	1RB#38	19.69	PASS
42(3450-3550)	15MHz	QPSK	42590	1RB#74	19.97	PASS
42(3450-3550)	15MHz	16QAM	42590	1RB#74	19.39	PASS
42(3450-3550)	15MHz	QPSK	42590	38RB#0	19.67	PASS
42(3450-3550)	15MHz	16QAM	42590	38RB#0	19.67	PASS
42(3450-3550)	15MHz	QPSK	42590	38RB#18	19.65	PASS
42(3450-3550)	15MHz	16QAM	42590	38RB#18	19.64	PASS
42(3450-3550)	15MHz	QPSK	42590	38RB#37	19.63	PASS
42(3450-3550)	15MHz	16QAM	42590	38RB#37	19.63	PASS
42(3450-3550)	15MHz	QPSK	42590	75RB#0	19.67	PASS
42(3450-3550)	15MHz	16QAM	42590	75RB#0	18.65	PASS
42(3450-3550)	15MHz	QPSK	43015	1RB#0	19.94	PASS
42(3450-3550)	15MHz	16QAM	43015	1RB#0	19.45	PASS
42(3450-3550)	15MHz	QPSK	43015	1RB#38	19.86	PASS
42(3450-3550)	15MHz	16QAM	43015	1RB#38	19.34	PASS
42(3450-3550)	15MHz	QPSK	43015	1RB#74	19.63	PASS
42(3450-3550)	15MHz	16QAM	43015	1RB#74	19.20	PASS
42(3450-3550)	15MHz	QPSK	43015	38RB#0	19.35	PASS

42(3450-3550)	15MHz	16QAM	43015	38RB#0	19.36	PASS
42(3450-3550)	15MHz	QPSK	43015	38RB#18	19.36	PASS
42(3450-3550)	15MHz	16QAM	43015	38RB#18	19.32	PASS
42(3450-3550)	15MHz	QPSK	43015	38RB#37	19.32	PASS
42(3450-3550)	15MHz	16QAM	43015	38RB#37	19.34	PASS
42(3450-3550)	15MHz	QPSK	43015	75RB#0	19.32	PASS
42(3450-3550)	15MHz	16QAM	43015	75RB#0	18.38	PASS
42(3450-3550)	20MHz	QPSK	42190	1RB#0	20.31	PASS
42(3450-3550)	20MHz	16QAM	42190	1RB#0	19.66	PASS
42(3450-3550)	20MHz	QPSK	42190	1RB#49	20.33	PASS
42(3450-3550)	20MHz	16QAM	42190	1RB#49	19.66	PASS
42(3450-3550)	20MHz	QPSK	42190	1RB#99	20.15	PASS
42(3450-3550)	20MHz	16QAM	42190	1RB#99	19.73	PASS
42(3450-3550)	20MHz	QPSK	42190	50RB#0	19.88	PASS
42(3450-3550)	20MHz	16QAM	42190	50RB#0	18.88	PASS
42(3450-3550)	20MHz	QPSK	42190	50RB#25	19.88	PASS
42(3450-3550)	20MHz	16QAM	42190	50RB#25	18.88	PASS
42(3450-3550)	20MHz	QPSK	42190	50RB#50	19.77	PASS
42(3450-3550)	20MHz	16QAM	42190	50RB#50	18.74	PASS
42(3450-3550)	20MHz	QPSK	42190	100RB#0	19.82	PASS
42(3450-3550)	20MHz	16QAM	42190	100RB#0	18.87	PASS
42(3450-3550)	20MHz	QPSK	42590	1RB#0	20.09	PASS
42(3450-3550)	20MHz	16QAM	42590	1RB#0	19.65	PASS
42(3450-3550)	20MHz	QPSK	42590	1RB#49	20.23	PASS
42(3450-3550)	20MHz	16QAM	42590	1RB#49	19.55	PASS
42(3450-3550)	20MHz	QPSK	42590	1RB#99	19.97	PASS
42(3450-3550)	20MHz	16QAM	42590	1RB#99	19.53	PASS
42(3450-3550)	20MHz	QPSK	42590	50RB#0	19.72	PASS
42(3450-3550)	20MHz	16QAM	42590	50RB#0	18.72	PASS
42(3450-3550)	20MHz	QPSK	42590	50RB#25	19.72	PASS
42(3450-3550)	20MHz	16QAM	42590	50RB#25	18.75	PASS
42(3450-3550)	20MHz	QPSK	42590	50RB#50	19.65	PASS
42(3450-3550)	20MHz	16QAM	42590	50RB#50	18.66	PASS
42(3450-3550)	20MHz	QPSK	42590	100RB#0	19.65	PASS
42(3450-3550)	20MHz	16QAM	42590	100RB#0	18.69	PASS
42(3450-3550)	20MHz	QPSK	42990	1RB#0	20.01	PASS
42(3450-3550)	20MHz	16QAM	42990	1RB#0	19.56	PASS
42(3450-3550)	20MHz	QPSK	42990	1RB#49	19.81	PASS
42(3450-3550)	20MHz	16QAM	42990	1RB#49	19.29	PASS
42(3450-3550)	20MHz	QPSK	42990	1RB#99	19.63	PASS
42(3450-3550)	20MHz	16QAM	42990	1RB#99	19.22	PASS
42(3450-3550)	20MHz	QPSK	42990	50RB#0	19.47	PASS

42(3450-3550)	20MHz	16QAM	42990	50RB#0	18.54	PASS
42(3450-3550)	20MHz	QPSK	42990	50RB#25	19.47	PASS
42(3450-3550)	20MHz	16QAM	42990	50RB#25	18.49	PASS
42(3450-3550)	20MHz	QPSK	42990	50RB#50	19.38	PASS
42(3450-3550)	20MHz	16QAM	42990	50RB#50	18.40	PASS
42(3450-3550)	20MHz	QPSK	42990	100RB#0	19.46	PASS
42(3450-3550)	20MHz	16QAM	42990	100RB#0	18.48	PASS

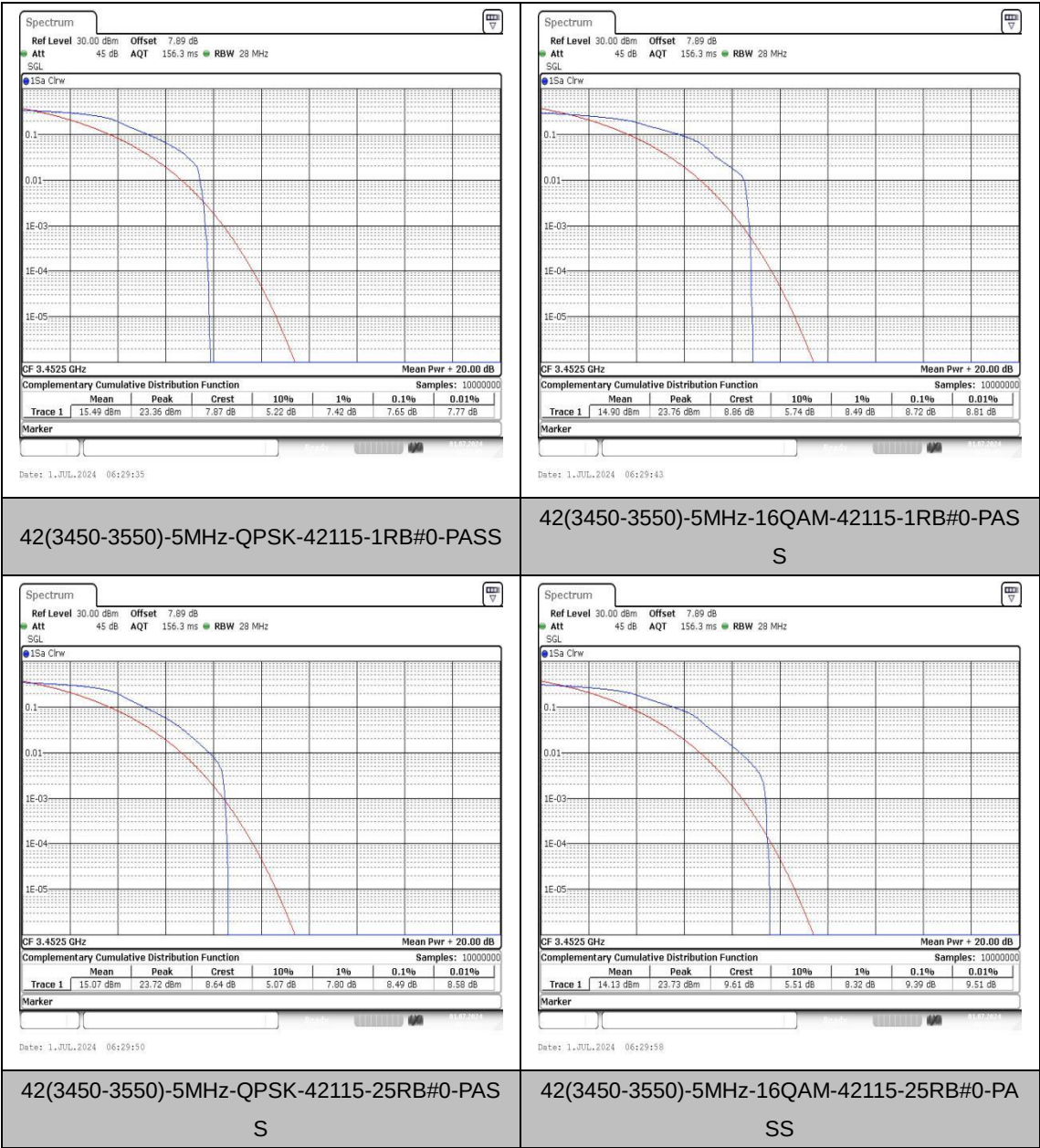
Appendix B: Peak-to-Average Ratio(CCDF)

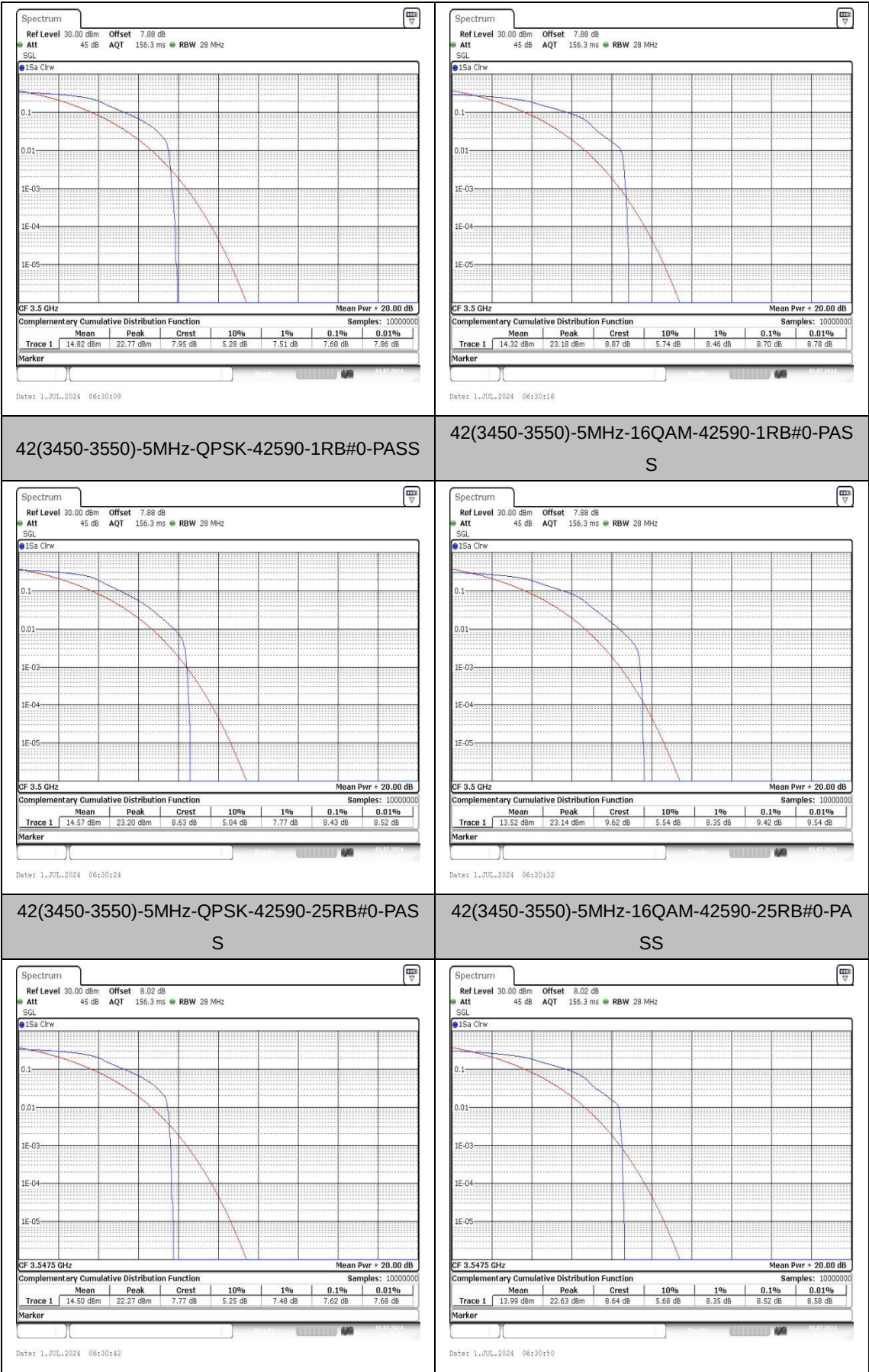
Test Result

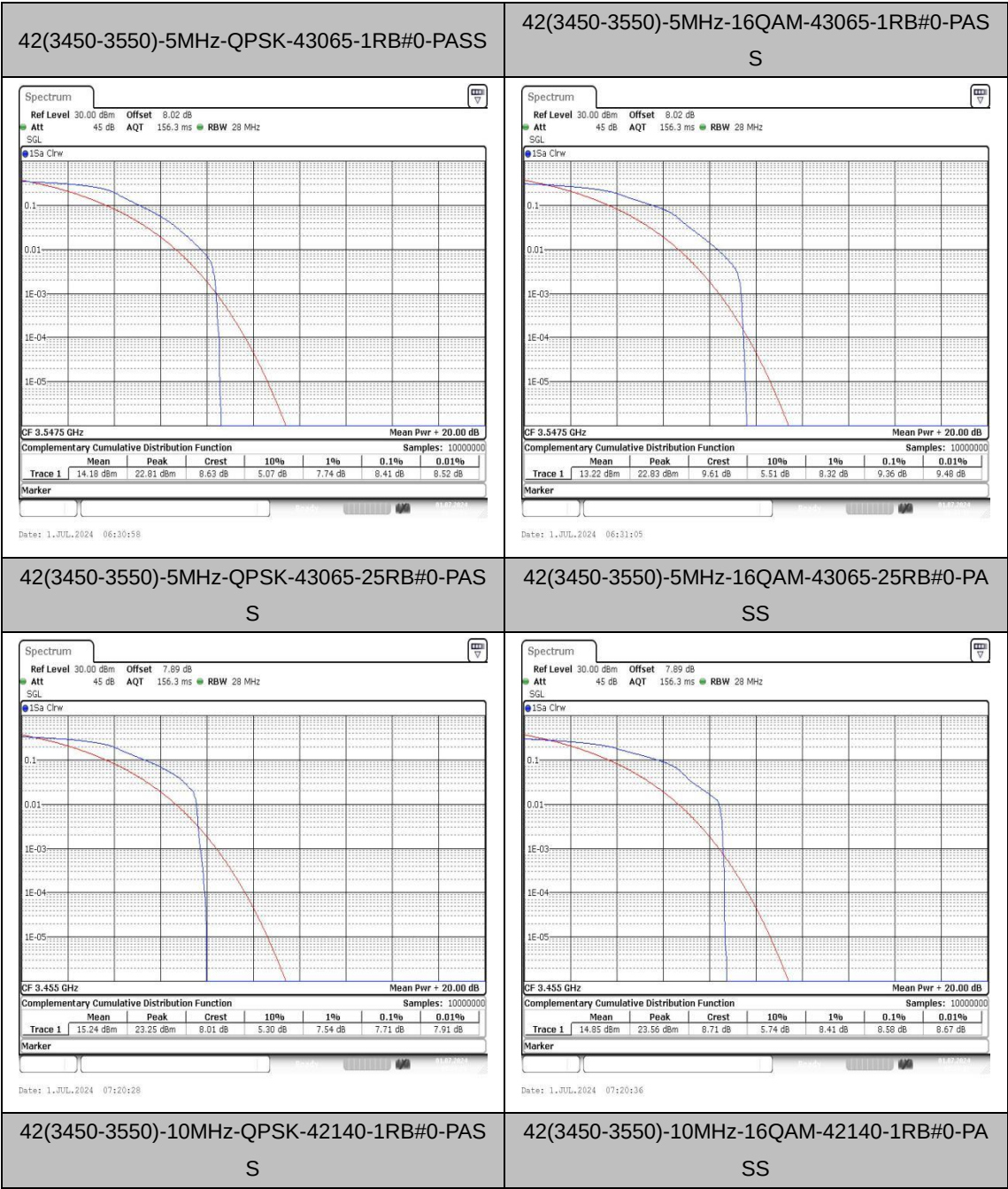
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
42(3450-3550)	5MHz	QPSK	42115	1RB#0	7.65	13	PASS
42(3450-3550)	5MHz	16QAM	42115	1RB#0	8.72	13	PASS
42(3450-3550)	5MHz	QPSK	42115	25RB#0	8.49	13	PASS
42(3450-3550)	5MHz	16QAM	42115	25RB#0	9.39	13	PASS
42(3450-3550)	5MHz	QPSK	42590	1RB#0	7.68	13	PASS
42(3450-3550)	5MHz	16QAM	42590	1RB#0	8.70	13	PASS
42(3450-3550)	5MHz	QPSK	42590	25RB#0	8.43	13	PASS
42(3450-3550)	5MHz	16QAM	42590	25RB#0	9.42	13	PASS
42(3450-3550)	5MHz	QPSK	43065	1RB#0	7.62	13	PASS
42(3450-3550)	5MHz	16QAM	43065	1RB#0	8.52	13	PASS
42(3450-3550)	5MHz	QPSK	43065	25RB#0	8.41	13	PASS
42(3450-3550)	5MHz	16QAM	43065	25RB#0	9.36	13	PASS
42(3450-3550)	10MHz	QPSK	42140	1RB#0	7.71	13	PASS
42(3450-3550)	10MHz	16QAM	42140	1RB#0	8.58	13	PASS
42(3450-3550)	10MHz	QPSK	42140	50RB#0	8.55	13	PASS
42(3450-3550)	10MHz	16QAM	42140	50RB#0	9.45	13	PASS
42(3450-3550)	10MHz	QPSK	42590	1RB#0	7.71	13	PASS
42(3450-3550)	10MHz	16QAM	42590	1RB#0	8.64	13	PASS
42(3450-3550)	10MHz	QPSK	42590	50RB#0	8.49	13	PASS
42(3450-3550)	10MHz	16QAM	42590	50RB#0	9.48	13	PASS
42(3450-3550)	10MHz	QPSK	43040	1RB#0	7.65	13	PASS
42(3450-3550)	10MHz	16QAM	43040	1RB#0	8.58	13	PASS
42(3450-3550)	10MHz	QPSK	43040	50RB#0	8.41	13	PASS
42(3450-3550)	10MHz	16QAM	43040	50RB#0	9.36	13	PASS
42(3450-3550)	15MHz	QPSK	42165	1RB#0	7.71	13	PASS
42(3450-3550)	15MHz	16QAM	42165	1RB#0	8.78	13	PASS
42(3450-3550)	15MHz	QPSK	42165	75RB#0	8.58	13	PASS
42(3450-3550)	15MHz	16QAM	42165	75RB#0	9.51	13	PASS
42(3450-3550)	15MHz	QPSK	42590	1RB#0	7.71	13	PASS
42(3450-3550)	15MHz	16QAM	42590	1RB#0	8.67	13	PASS
42(3450-3550)	15MHz	QPSK	42590	75RB#0	8.61	13	PASS
42(3450-3550)	15MHz	16QAM	42590	75RB#0	9.51	13	PASS
42(3450-3550)	15MHz	QPSK	43015	1RB#0	7.68	13	PASS
42(3450-3550)	15MHz	16QAM	43015	1RB#0	8.61	13	PASS

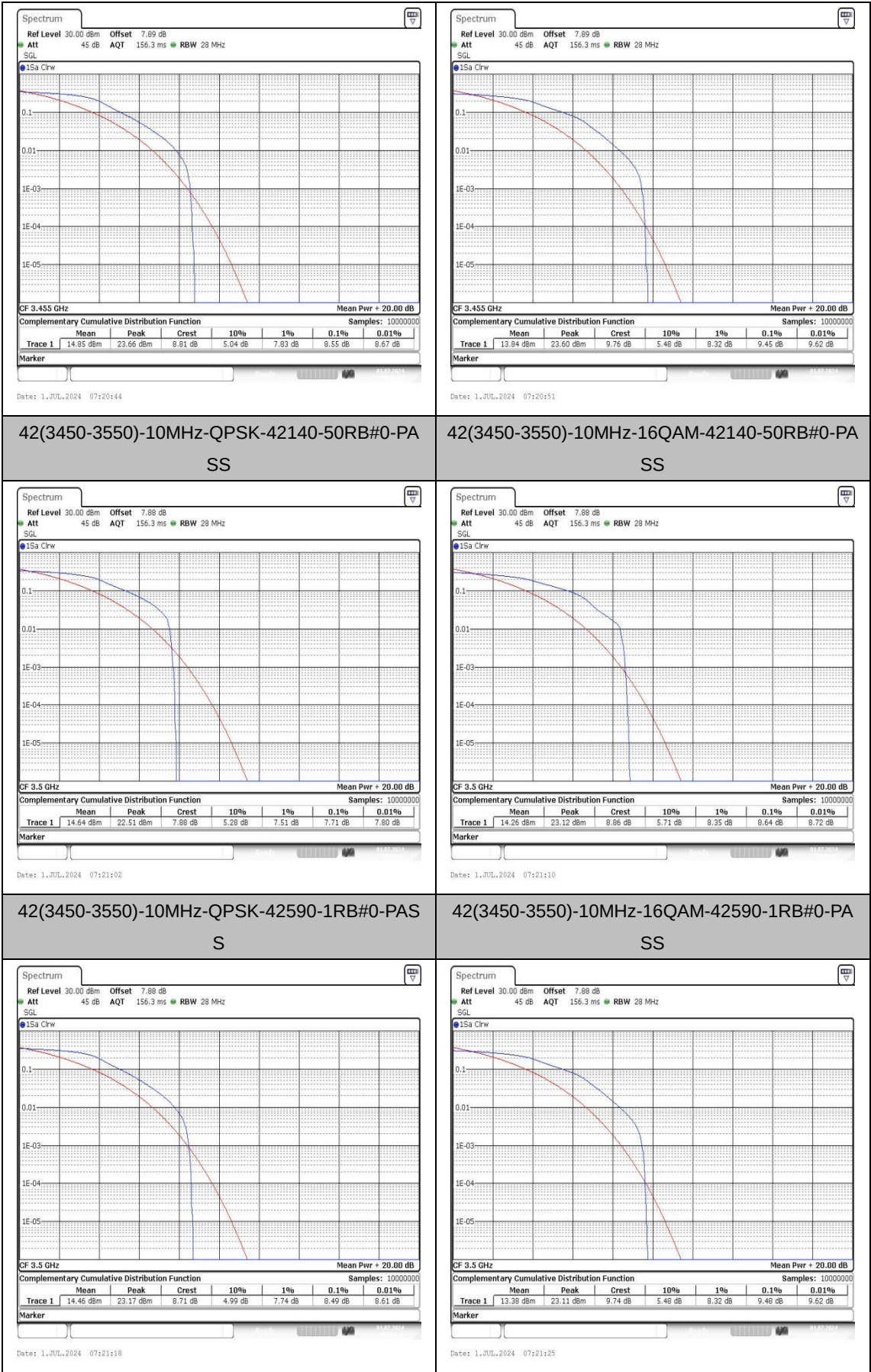
42(3450-3550)	15MHz	QPSK	43015	75RB#0	8.58	13	PASS
42(3450-3550)	15MHz	16QAM	43015	75RB#0	9.42	13	PASS
42(3450-3550)	20MHz	QPSK	42190	1RB#0	7.74	13	PASS
42(3450-3550)	20MHz	16QAM	42190	1RB#0	8.70	13	PASS
42(3450-3550)	20MHz	QPSK	42190	100RB#0	8.55	13	PASS
42(3450-3550)	20MHz	16QAM	42190	100RB#0	9.51	13	PASS
42(3450-3550)	20MHz	QPSK	42590	1RB#0	7.59	13	PASS
42(3450-3550)	20MHz	16QAM	42590	1RB#0	8.61	13	PASS
42(3450-3550)	20MHz	QPSK	42590	100RB#0	8.52	13	PASS
42(3450-3550)	20MHz	16QAM	42590	100RB#0	9.45	13	PASS
42(3450-3550)	20MHz	QPSK	42990	1RB#0	7.65	13	PASS
42(3450-3550)	20MHz	16QAM	42990	1RB#0	8.61	13	PASS
42(3450-3550)	20MHz	QPSK	42990	100RB#0	8.46	13	PASS
42(3450-3550)	20MHz	16QAM	42990	100RB#0	9.48	13	PASS

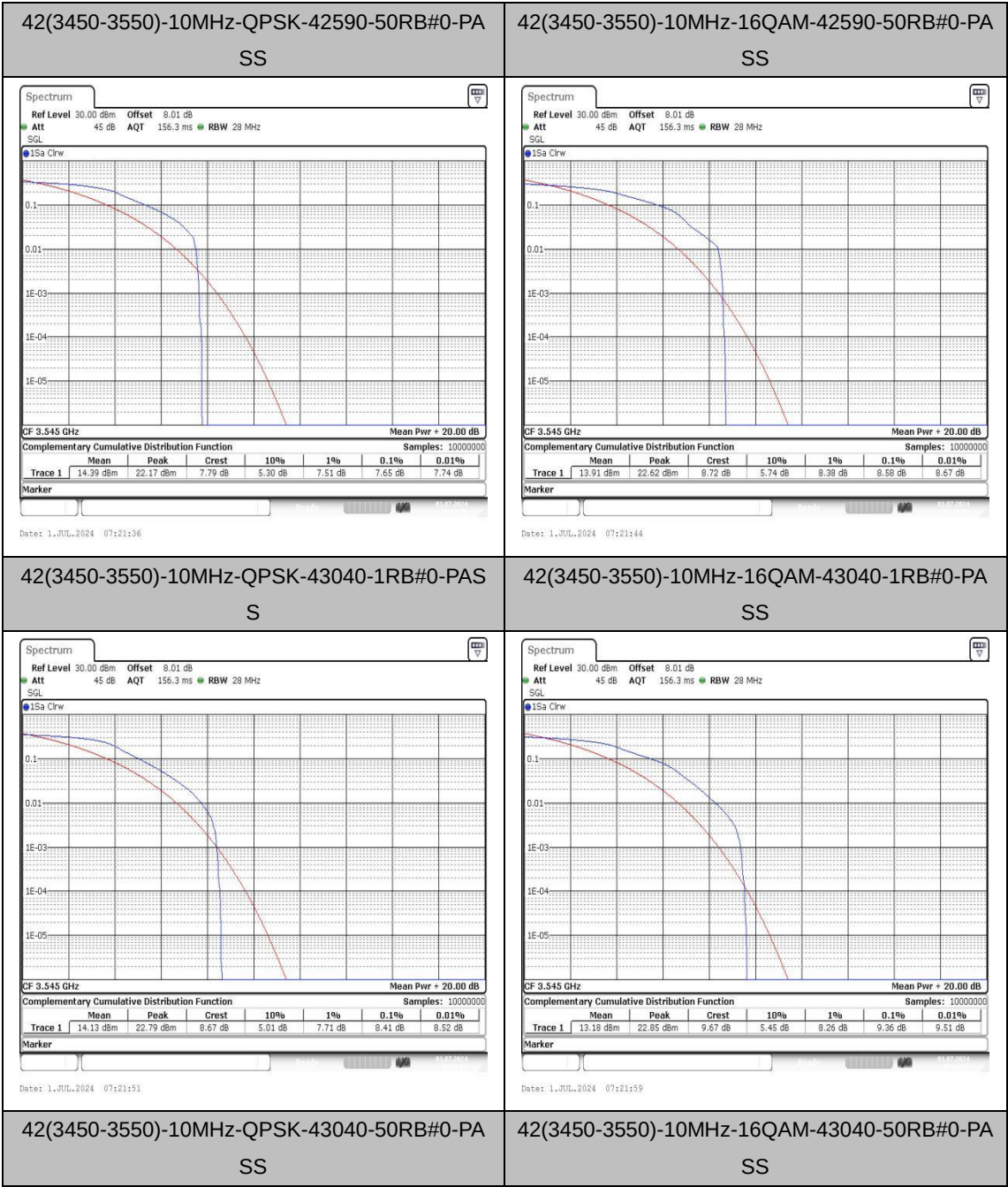
Test Graphs

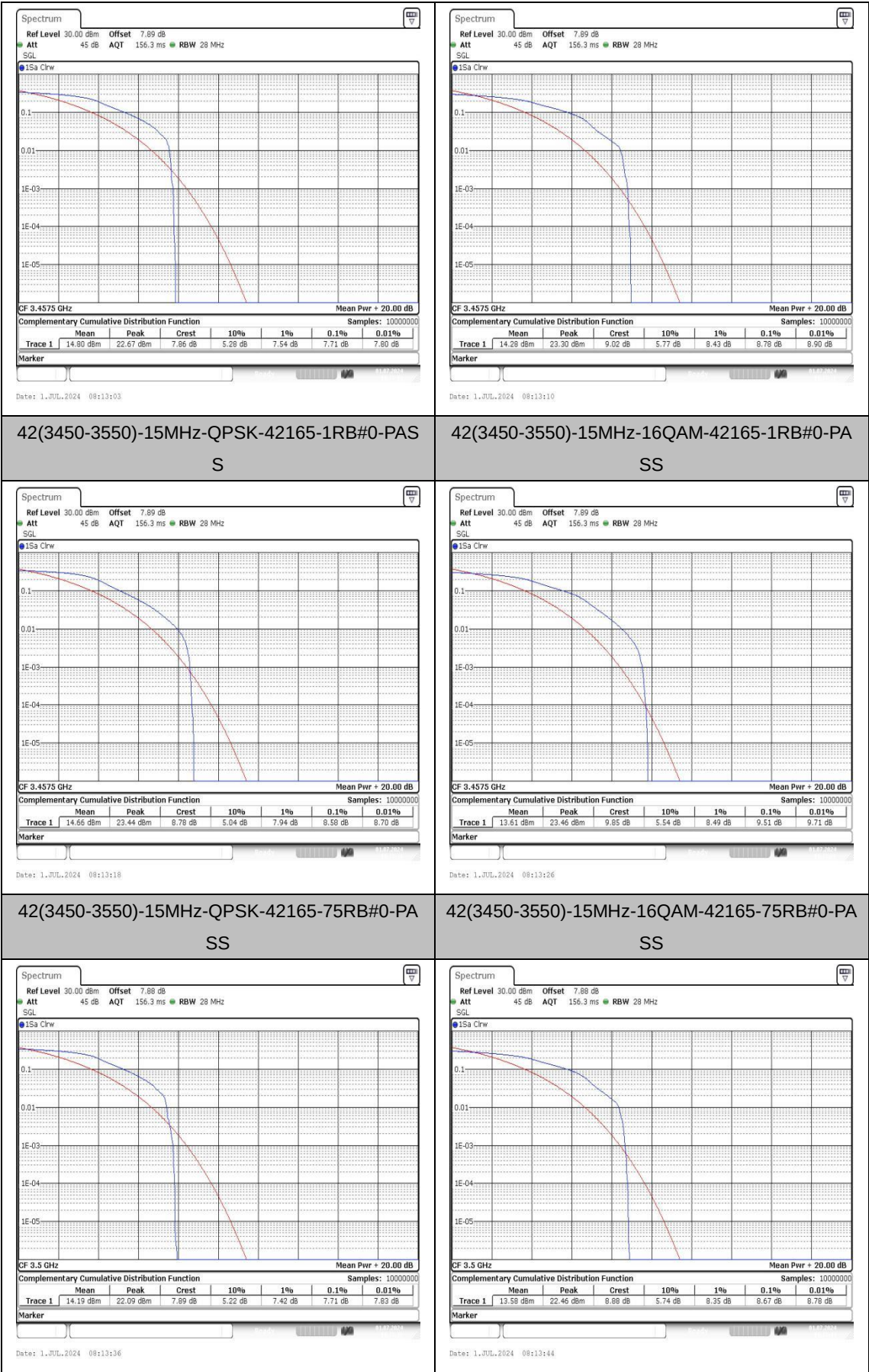


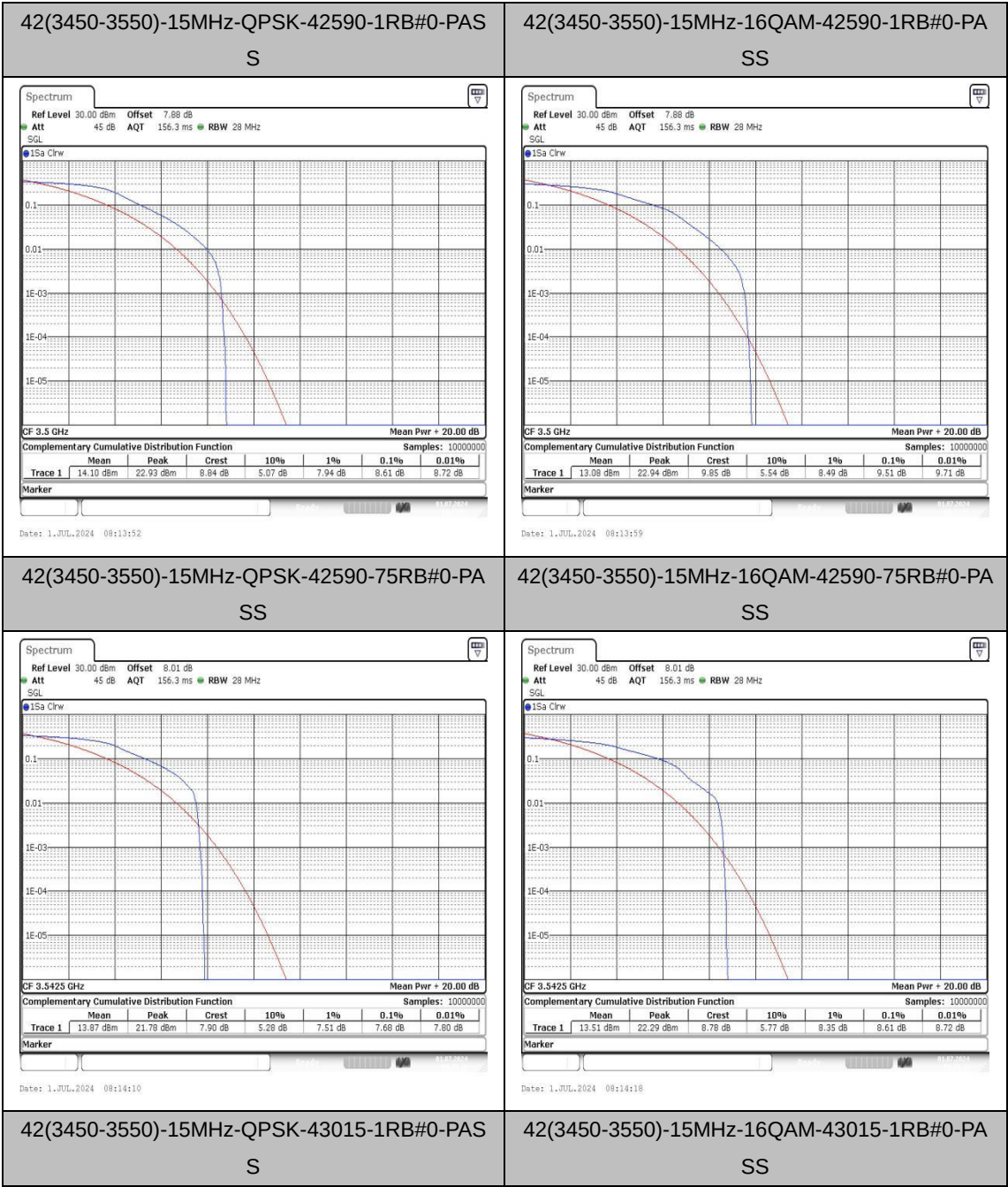


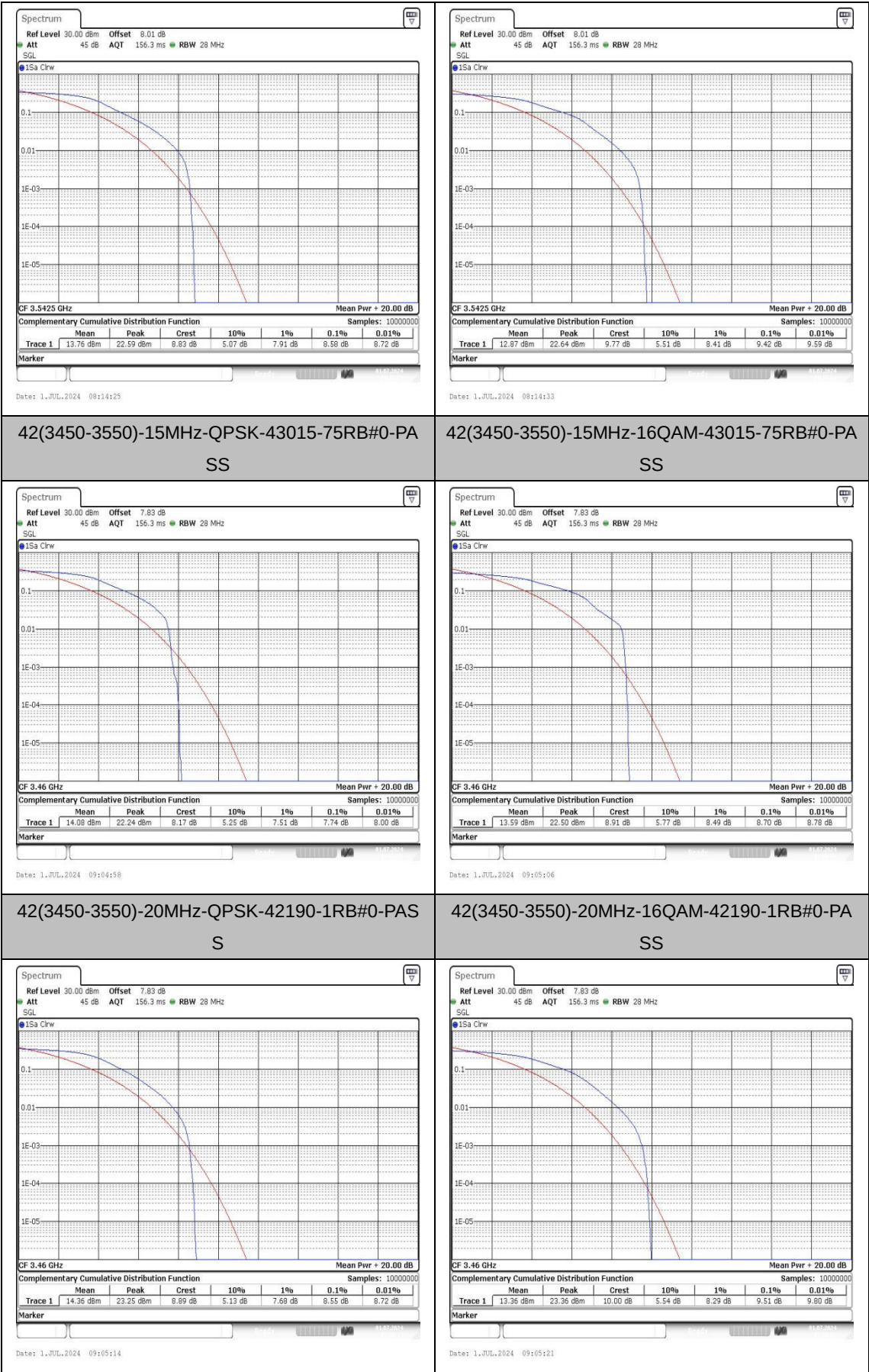


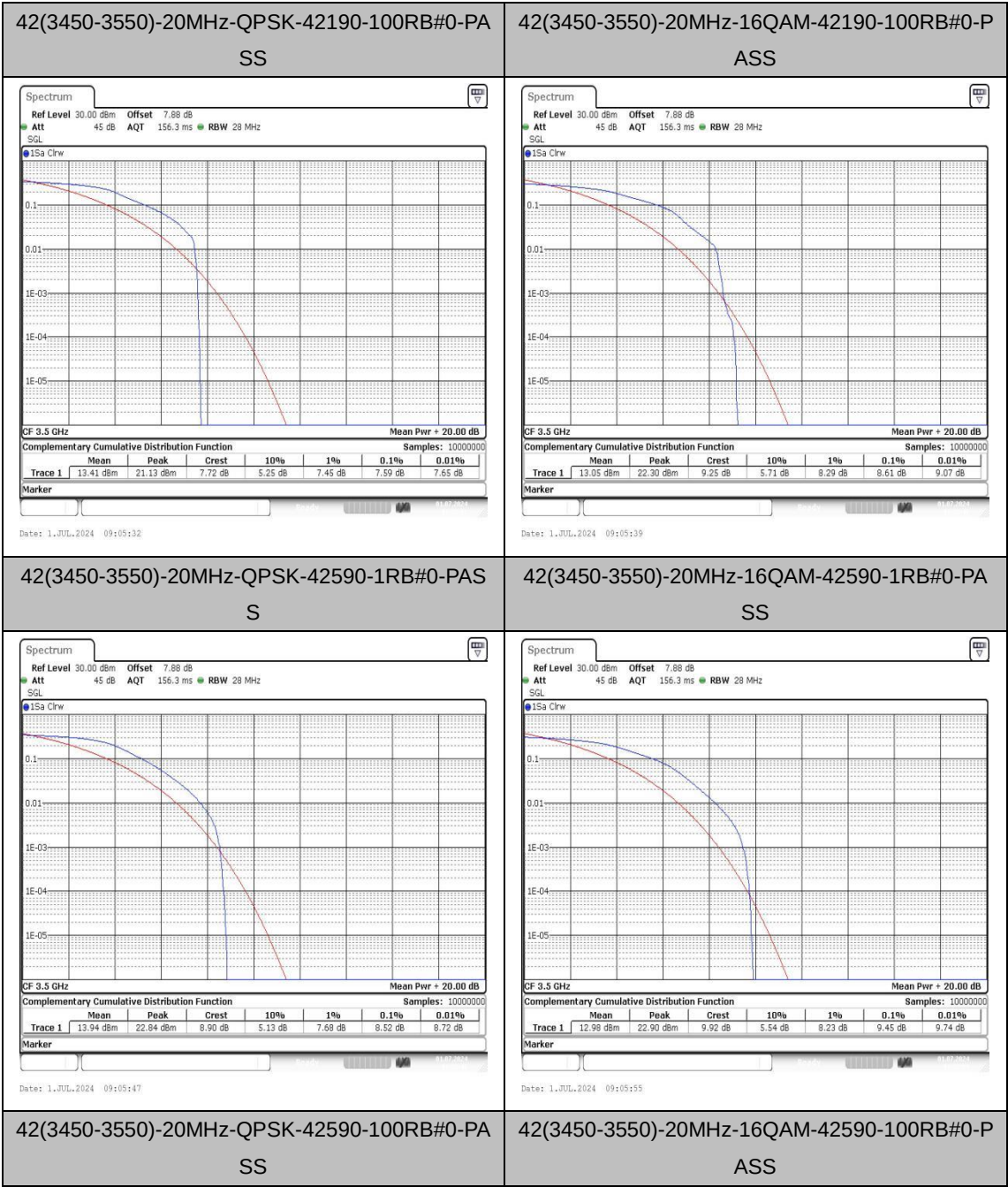


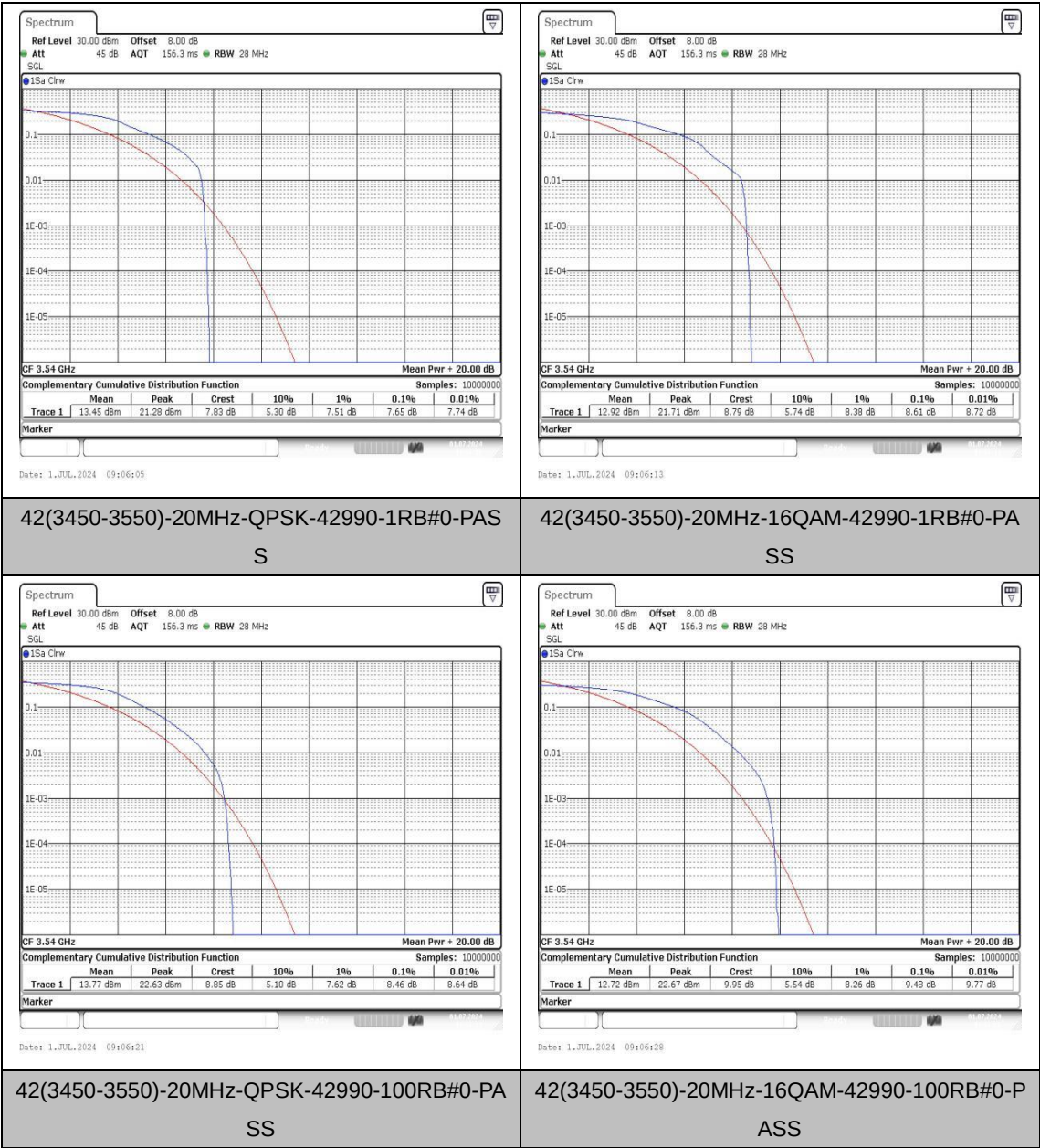










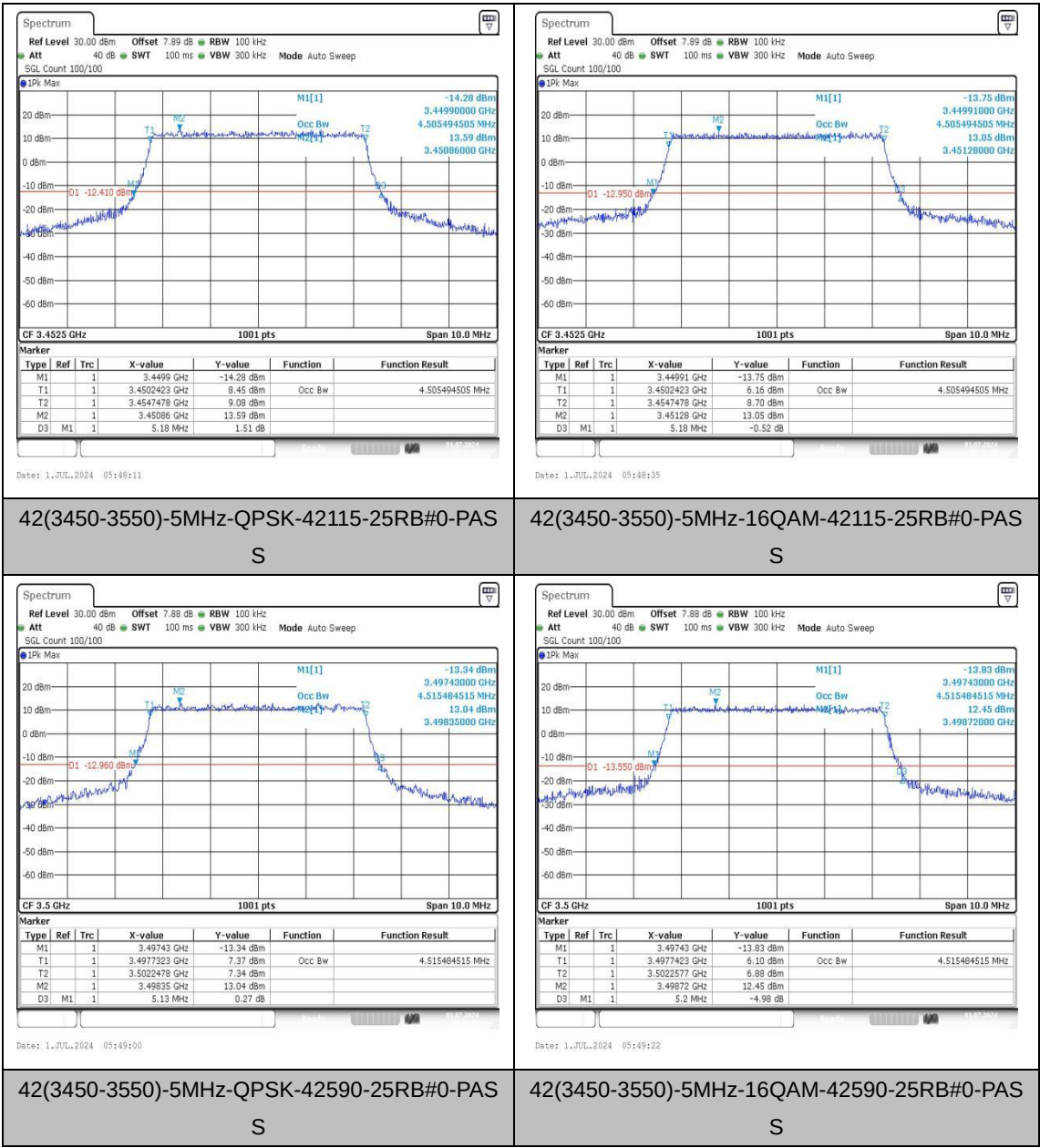


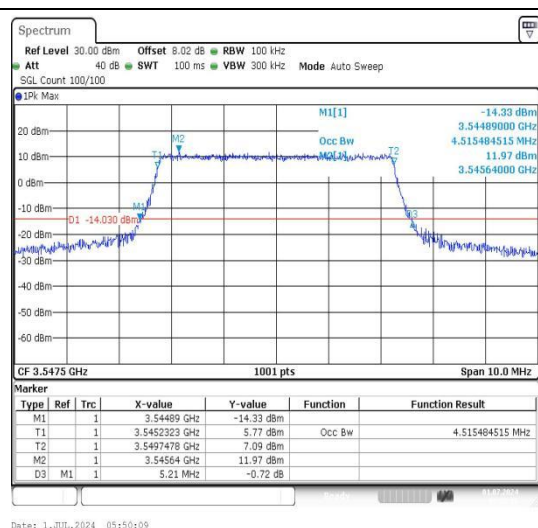
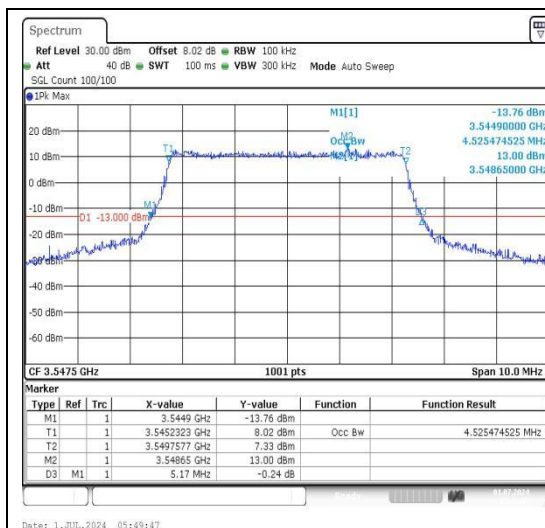
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
42(3450-3550)	5MHz	QPSK	42115	25RB#0	4.505	5.18	PASS
42(3450-3550)	5MHz	16QAM	42115	25RB#0	4.505	5.18	PASS
42(3450-3550)	5MHz	QPSK	42590	25RB#0	4.515	5.13	PASS
42(3450-3550)	5MHz	16QAM	42590	25RB#0	4.515	5.20	PASS
42(3450-3550)	5MHz	QPSK	43065	25RB#0	4.525	5.17	PASS
42(3450-3550)	5MHz	16QAM	43065	25RB#0	4.515	5.21	PASS
42(3450-3550)	10MHz	QPSK	42140	50RB#0	8.985	10.07	PASS
42(3450-3550)	10MHz	16QAM	42140	50RB#0	8.985	10.03	PASS
42(3450-3550)	10MHz	QPSK	42590	50RB#0	8.985	10.03	PASS
42(3450-3550)	10MHz	16QAM	42590	50RB#0	9.018	10.07	PASS
42(3450-3550)	10MHz	QPSK	43040	50RB#0	8.985	10.00	PASS
42(3450-3550)	10MHz	16QAM	43040	50RB#0	8.985	10.13	PASS
42(3450-3550)	15MHz	QPSK	42165	75RB#0	13.478	15.00	PASS
42(3450-3550)	15MHz	16QAM	42165	75RB#0	13.478	15.05	PASS
42(3450-3550)	15MHz	QPSK	42590	75RB#0	13.478	14.90	PASS
42(3450-3550)	15MHz	16QAM	42590	75RB#0	13.527	14.85	PASS
42(3450-3550)	15MHz	QPSK	43015	75RB#0	13.478	15.15	PASS
42(3450-3550)	15MHz	16QAM	43015	75RB#0	13.478	15.00	PASS
42(3450-3550)	20MHz	QPSK	42190	100RB#0	18.037	20.00	PASS
42(3450-3550)	20MHz	16QAM	42190	100RB#0	18.037	20.13	PASS
42(3450-3550)	20MHz	QPSK	42590	100RB#0	17.97	20.13	PASS
42(3450-3550)	20MHz	16QAM	42590	100RB#0	17.97	21.67	PASS
42(3450-3550)	20MHz	QPSK	42990	100RB#0	18.037	20.07	PASS
42(3450-3550)	20MHz	16QAM	42990	100RB#0	18.037	19.93	PASS

Test Graphs



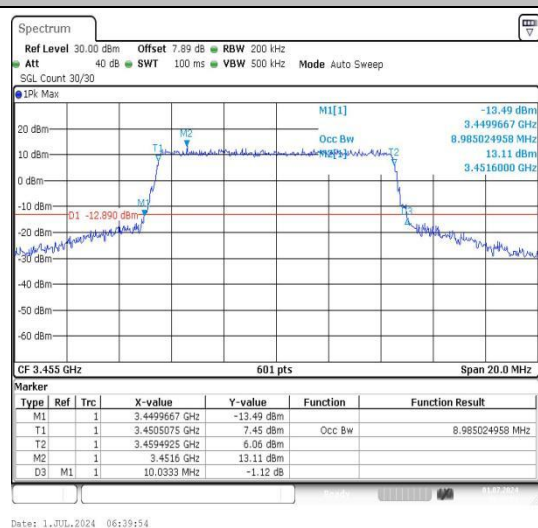
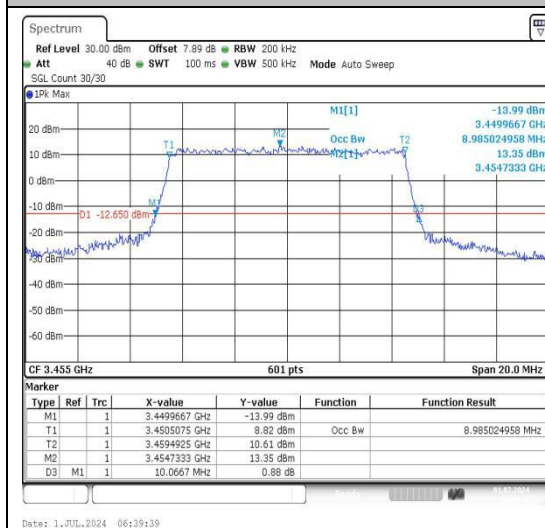


42(3450-3550)-5MHz-QPSK-43065-25RB#0-PAS

S

42(3450-3550)-5MHz-16QAM-43065-25RB#0-PAS

S



42(3450-3550)-10MHz-QPSK-42140-50RB#0-PA

SS

42(3450-3550)-10MHz-16QAM-42140-50RB#0-PA

SS

