

Appendix for LTE Band 43

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
43(3700-3800)	5MHz	QPSK	44615	1RB#0	18.94	PASS
43(3700-3800)	5MHz	16QAM	44615	1RB#0	18.45	PASS
43(3700-3800)	5MHz	QPSK	44615	1RB#12	19.09	PASS
43(3700-3800)	5MHz	16QAM	44615	1RB#12	18.61	PASS
43(3700-3800)	5MHz	QPSK	44615	1RB#24	19.07	PASS
43(3700-3800)	5MHz	16QAM	44615	1RB#24	18.56	PASS
43(3700-3800)	5MHz	QPSK	44615	12RB#0	18.50	PASS
43(3700-3800)	5MHz	16QAM	44615	12RB#0	17.52	PASS
43(3700-3800)	5MHz	QPSK	44615	12RB#6	18.48	PASS
43(3700-3800)	5MHz	16QAM	44615	12RB#6	17.50	PASS
43(3700-3800)	5MHz	QPSK	44615	12RB#13	18.63	PASS
43(3700-3800)	5MHz	16QAM	44615	12RB#13	17.76	PASS
43(3700-3800)	5MHz	QPSK	44615	25RB#0	18.58	PASS
43(3700-3800)	5MHz	16QAM	44615	25RB#0	17.61	PASS
43(3700-3800)	5MHz	QPSK	45090	1RB#0	20.01	PASS
43(3700-3800)	5MHz	16QAM	45090	1RB#0	19.39	PASS
43(3700-3800)	5MHz	QPSK	45090	1RB#12	19.96	PASS
43(3700-3800)	5MHz	16QAM	45090	1RB#12	19.41	PASS
43(3700-3800)	5MHz	QPSK	45090	1RB#24	19.98	PASS
43(3700-3800)	5MHz	16QAM	45090	1RB#24	19.54	PASS
43(3700-3800)	5MHz	QPSK	45090	12RB#0	19.34	PASS
43(3700-3800)	5MHz	16QAM	45090	12RB#0	18.33	PASS
43(3700-3800)	5MHz	QPSK	45090	12RB#6	19.39	PASS
43(3700-3800)	5MHz	16QAM	45090	12RB#6	18.33	PASS
43(3700-3800)	5MHz	QPSK	45090	12RB#13	19.49	PASS
43(3700-3800)	5MHz	16QAM	45090	12RB#13	18.47	PASS
43(3700-3800)	5MHz	QPSK	45090	25RB#0	19.37	PASS
43(3700-3800)	5MHz	16QAM	45090	25RB#0	18.41	PASS
43(3700-3800)	5MHz	QPSK	45565	1RB#0	20.03	PASS
43(3700-3800)	5MHz	16QAM	45565	1RB#0	19.58	PASS
43(3700-3800)	5MHz	QPSK	45565	1RB#12	20.03	PASS
43(3700-3800)	5MHz	16QAM	45565	1RB#12	19.47	PASS
43(3700-3800)	5MHz	QPSK	45565	1RB#24	19.99	PASS
43(3700-3800)	5MHz	16QAM	45565	1RB#24	19.41	PASS
43(3700-3800)	5MHz	QPSK	45565	12RB#0	19.47	PASS
43(3700-3800)	5MHz	16QAM	45565	12RB#0	18.48	PASS

43(3700-3800)	5MHz	QPSK	45565	12RB#6	19.46	PASS
43(3700-3800)	5MHz	16QAM	45565	12RB#6	18.50	PASS
43(3700-3800)	5MHz	QPSK	45565	12RB#13	19.52	PASS
43(3700-3800)	5MHz	16QAM	45565	12RB#13	18.55	PASS
43(3700-3800)	5MHz	QPSK	45565	25RB#0	19.53	PASS
43(3700-3800)	5MHz	16QAM	45565	25RB#0	18.50	PASS
43(3700-3800)	10MHz	QPSK	44640	1RB#0	18.97	PASS
43(3700-3800)	10MHz	16QAM	44640	1RB#0	18.59	PASS
43(3700-3800)	10MHz	QPSK	44640	1RB#24	19.05	PASS
43(3700-3800)	10MHz	16QAM	44640	1RB#24	18.84	PASS
43(3700-3800)	10MHz	QPSK	44640	1RB#49	19.30	PASS
43(3700-3800)	10MHz	16QAM	44640	1RB#49	18.92	PASS
43(3700-3800)	10MHz	QPSK	44640	25RB#0	18.55	PASS
43(3700-3800)	10MHz	16QAM	44640	25RB#0	17.53	PASS
43(3700-3800)	10MHz	QPSK	44640	25RB#12	18.54	PASS
43(3700-3800)	10MHz	16QAM	44640	25RB#12	17.57	PASS
43(3700-3800)	10MHz	QPSK	44640	25RB#25	18.78	PASS
43(3700-3800)	10MHz	16QAM	44640	25RB#25	17.80	PASS
43(3700-3800)	10MHz	QPSK	44640	50RB#0	18.71	PASS
43(3700-3800)	10MHz	16QAM	44640	50RB#0	17.70	PASS
43(3700-3800)	10MHz	QPSK	45090	1RB#0	19.76	PASS
43(3700-3800)	10MHz	16QAM	45090	1RB#0	19.13	PASS
43(3700-3800)	10MHz	QPSK	45090	1RB#24	19.96	PASS
43(3700-3800)	10MHz	16QAM	45090	1RB#24	19.38	PASS
43(3700-3800)	10MHz	QPSK	45090	1RB#49	20.01	PASS
43(3700-3800)	10MHz	16QAM	45090	1RB#49	19.38	PASS
43(3700-3800)	10MHz	QPSK	45090	25RB#0	19.32	PASS
43(3700-3800)	10MHz	16QAM	45090	25RB#0	18.35	PASS
43(3700-3800)	10MHz	QPSK	45090	25RB#12	19.35	PASS
43(3700-3800)	10MHz	16QAM	45090	25RB#12	18.37	PASS
43(3700-3800)	10MHz	QPSK	45090	25RB#25	19.52	PASS
43(3700-3800)	10MHz	16QAM	45090	25RB#25	18.55	PASS
43(3700-3800)	10MHz	QPSK	45090	50RB#0	19.39	PASS
43(3700-3800)	10MHz	16QAM	45090	50RB#0	18.41	PASS
43(3700-3800)	10MHz	QPSK	45540	1RB#0	20.01	PASS
43(3700-3800)	10MHz	16QAM	45540	1RB#0	19.44	PASS
43(3700-3800)	10MHz	QPSK	45540	1RB#24	20.00	PASS
43(3700-3800)	10MHz	16QAM	45540	1RB#24	19.53	PASS
43(3700-3800)	10MHz	QPSK	45540	1RB#49	19.98	PASS
43(3700-3800)	10MHz	16QAM	45540	1RB#49	19.32	PASS
43(3700-3800)	10MHz	QPSK	45540	25RB#0	19.48	PASS
43(3700-3800)	10MHz	16QAM	45540	25RB#0	18.54	PASS

43(3700-3800)	10MHz	QPSK	45540	25RB#12	19.52	PASS
43(3700-3800)	10MHz	16QAM	45540	25RB#12	18.45	PASS
43(3700-3800)	10MHz	QPSK	45540	25RB#25	19.54	PASS
43(3700-3800)	10MHz	16QAM	45540	25RB#25	18.54	PASS
43(3700-3800)	10MHz	QPSK	45540	50RB#0	19.55	PASS
43(3700-3800)	10MHz	16QAM	45540	50RB#0	18.59	PASS
43(3700-3800)	15MHz	QPSK	44665	1RB#0	18.84	PASS
43(3700-3800)	15MHz	16QAM	44665	1RB#0	18.42	PASS
43(3700-3800)	15MHz	QPSK	44665	1RB#38	19.13	PASS
43(3700-3800)	15MHz	16QAM	44665	1RB#38	18.65	PASS
43(3700-3800)	15MHz	QPSK	44665	1RB#74	19.31	PASS
43(3700-3800)	15MHz	16QAM	44665	1RB#74	18.95	PASS
43(3700-3800)	15MHz	QPSK	44665	38RB#0	18.61	PASS
43(3700-3800)	15MHz	16QAM	44665	38RB#0	18.64	PASS
43(3700-3800)	15MHz	QPSK	44665	38RB#18	18.63	PASS
43(3700-3800)	15MHz	16QAM	44665	38RB#18	18.57	PASS
43(3700-3800)	15MHz	QPSK	44665	38RB#37	18.57	PASS
43(3700-3800)	15MHz	16QAM	44665	38RB#37	18.58	PASS
43(3700-3800)	15MHz	QPSK	44665	75RB#0	18.60	PASS
43(3700-3800)	15MHz	16QAM	44665	75RB#0	17.60	PASS
43(3700-3800)	15MHz	QPSK	45090	1RB#0	19.58	PASS
43(3700-3800)	15MHz	16QAM	45090	1RB#0	19.02	PASS
43(3700-3800)	15MHz	QPSK	45090	1RB#38	19.78	PASS
43(3700-3800)	15MHz	16QAM	45090	1RB#38	19.22	PASS
43(3700-3800)	15MHz	QPSK	45090	1RB#74	19.80	PASS
43(3700-3800)	15MHz	16QAM	45090	1RB#74	19.27	PASS
43(3700-3800)	15MHz	QPSK	45090	38RB#0	19.27	PASS
43(3700-3800)	15MHz	16QAM	45090	38RB#0	19.28	PASS
43(3700-3800)	15MHz	QPSK	45090	38RB#18	19.25	PASS
43(3700-3800)	15MHz	16QAM	45090	38RB#18	19.28	PASS
43(3700-3800)	15MHz	QPSK	45090	38RB#37	19.25	PASS
43(3700-3800)	15MHz	16QAM	45090	38RB#37	19.29	PASS
43(3700-3800)	15MHz	QPSK	45090	75RB#0	19.25	PASS
43(3700-3800)	15MHz	16QAM	45090	75RB#0	18.31	PASS
43(3700-3800)	15MHz	QPSK	45515	1RB#0	19.76	PASS
43(3700-3800)	15MHz	16QAM	45515	1RB#0	19.33	PASS
43(3700-3800)	15MHz	QPSK	45515	1RB#38	19.91	PASS
43(3700-3800)	15MHz	16QAM	45515	1RB#38	19.54	PASS
43(3700-3800)	15MHz	QPSK	45515	1RB#74	19.84	PASS
43(3700-3800)	15MHz	16QAM	45515	1RB#74	19.36	PASS
43(3700-3800)	15MHz	QPSK	45515	38RB#0	19.37	PASS
43(3700-3800)	15MHz	16QAM	45515	38RB#0	19.39	PASS

43(3700-3800)	15MHz	QPSK	45515	38RB#18	19.39	PASS
43(3700-3800)	15MHz	16QAM	45515	38RB#18	19.31	PASS
43(3700-3800)	15MHz	QPSK	45515	38RB#37	19.34	PASS
43(3700-3800)	15MHz	16QAM	45515	38RB#37	19.37	PASS
43(3700-3800)	15MHz	QPSK	45515	75RB#0	19.30	PASS
43(3700-3800)	15MHz	16QAM	45515	75RB#0	18.41	PASS
43(3700-3800)	20MHz	QPSK	44690	1RB#0	18.78	PASS
43(3700-3800)	20MHz	16QAM	44690	1RB#0	18.42	PASS
43(3700-3800)	20MHz	QPSK	44690	1RB#49	19.16	PASS
43(3700-3800)	20MHz	16QAM	44690	1RB#49	18.59	PASS
43(3700-3800)	20MHz	QPSK	44690	1RB#99	19.48	PASS
43(3700-3800)	20MHz	16QAM	44690	1RB#99	18.79	PASS
43(3700-3800)	20MHz	QPSK	44690	50RB#0	18.50	PASS
43(3700-3800)	20MHz	16QAM	44690	50RB#0	17.45	PASS
43(3700-3800)	20MHz	QPSK	44690	50RB#25	18.47	PASS
43(3700-3800)	20MHz	16QAM	44690	50RB#25	17.48	PASS
43(3700-3800)	20MHz	QPSK	44690	50RB#50	18.92	PASS
43(3700-3800)	20MHz	16QAM	44690	50RB#50	17.89	PASS
43(3700-3800)	20MHz	QPSK	44690	100RB#0	18.67	PASS
43(3700-3800)	20MHz	16QAM	44690	100RB#0	17.71	PASS
43(3700-3800)	20MHz	QPSK	45090	1RB#0	19.44	PASS
43(3700-3800)	20MHz	16QAM	45090	1RB#0	19.15	PASS
43(3700-3800)	20MHz	QPSK	45090	1RB#49	19.69	PASS
43(3700-3800)	20MHz	16QAM	45090	1RB#49	19.53	PASS
43(3700-3800)	20MHz	QPSK	45090	1RB#99	19.81	PASS
43(3700-3800)	20MHz	16QAM	45090	1RB#99	19.33	PASS
43(3700-3800)	20MHz	QPSK	45090	50RB#0	19.14	PASS
43(3700-3800)	20MHz	16QAM	45090	50RB#0	18.18	PASS
43(3700-3800)	20MHz	QPSK	45090	50RB#25	19.17	PASS
43(3700-3800)	20MHz	16QAM	45090	50RB#25	18.15	PASS
43(3700-3800)	20MHz	QPSK	45090	50RB#50	19.45	PASS
43(3700-3800)	20MHz	16QAM	45090	50RB#50	18.38	PASS
43(3700-3800)	20MHz	QPSK	45090	100RB#0	19.23	PASS
43(3700-3800)	20MHz	16QAM	45090	100RB#0	18.30	PASS
43(3700-3800)	20MHz	QPSK	45490	1RB#0	19.67	PASS
43(3700-3800)	20MHz	16QAM	45490	1RB#0	19.15	PASS
43(3700-3800)	20MHz	QPSK	45490	1RB#49	19.85	PASS
43(3700-3800)	20MHz	16QAM	45490	1RB#49	19.23	PASS
43(3700-3800)	20MHz	QPSK	45490	1RB#99	19.73	PASS
43(3700-3800)	20MHz	16QAM	45490	1RB#99	19.18	PASS
43(3700-3800)	20MHz	QPSK	45490	50RB#0	19.27	PASS
43(3700-3800)	20MHz	16QAM	45490	50RB#0	18.28	PASS

43(3700-3800)	20MHz	QPSK	45490	50RB#25	19.27	PASS
43(3700-3800)	20MHz	16QAM	45490	50RB#25	18.30	PASS
43(3700-3800)	20MHz	QPSK	45490	50RB#50	19.41	PASS
43(3700-3800)	20MHz	16QAM	45490	50RB#50	18.43	PASS
43(3700-3800)	20MHz	QPSK	45490	100RB#0	19.31	PASS
43(3700-3800)	20MHz	16QAM	45490	100RB#0	18.35	PASS

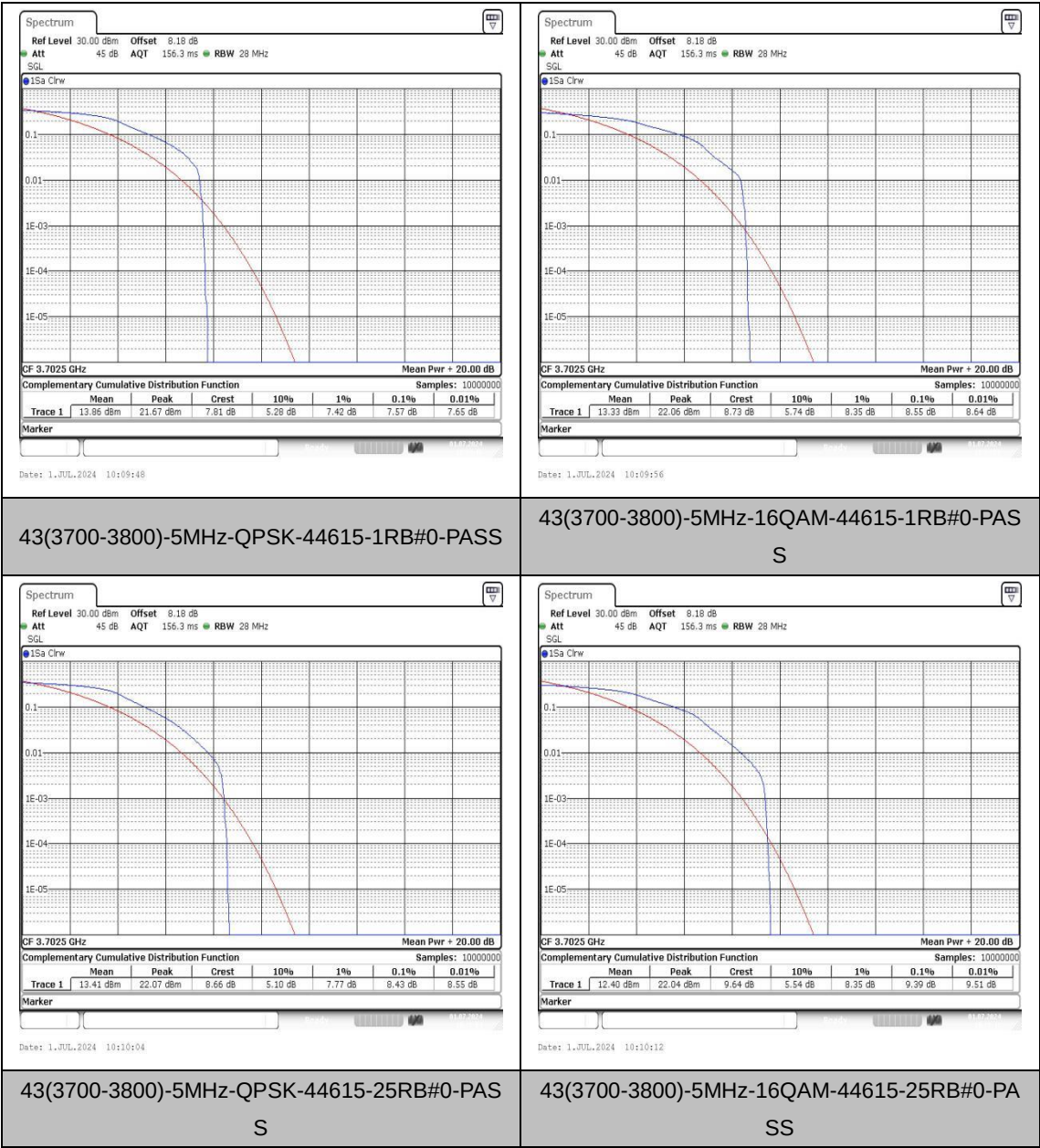
Appendix B: Peak-to-Average Ratio(CCDF)

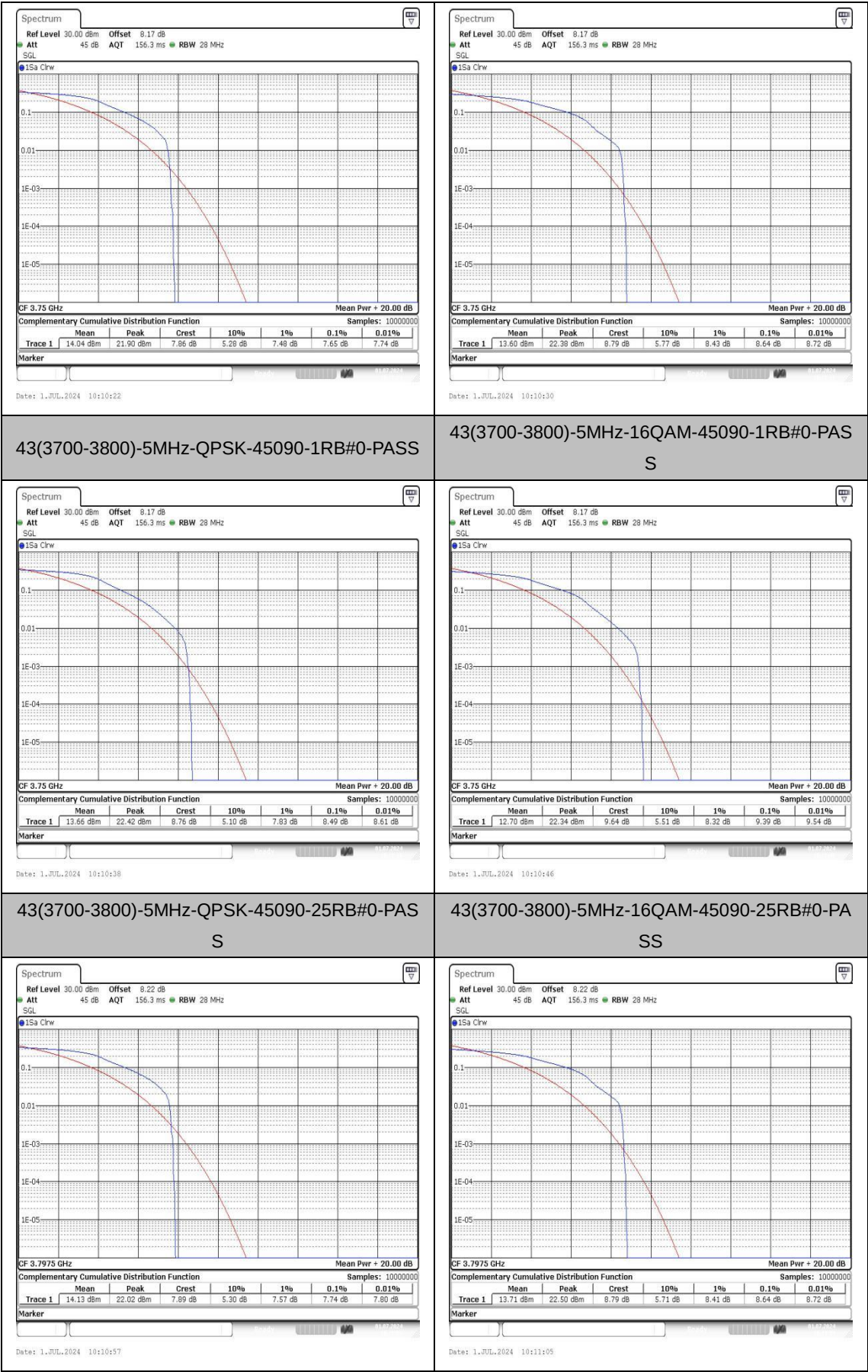
Test Result

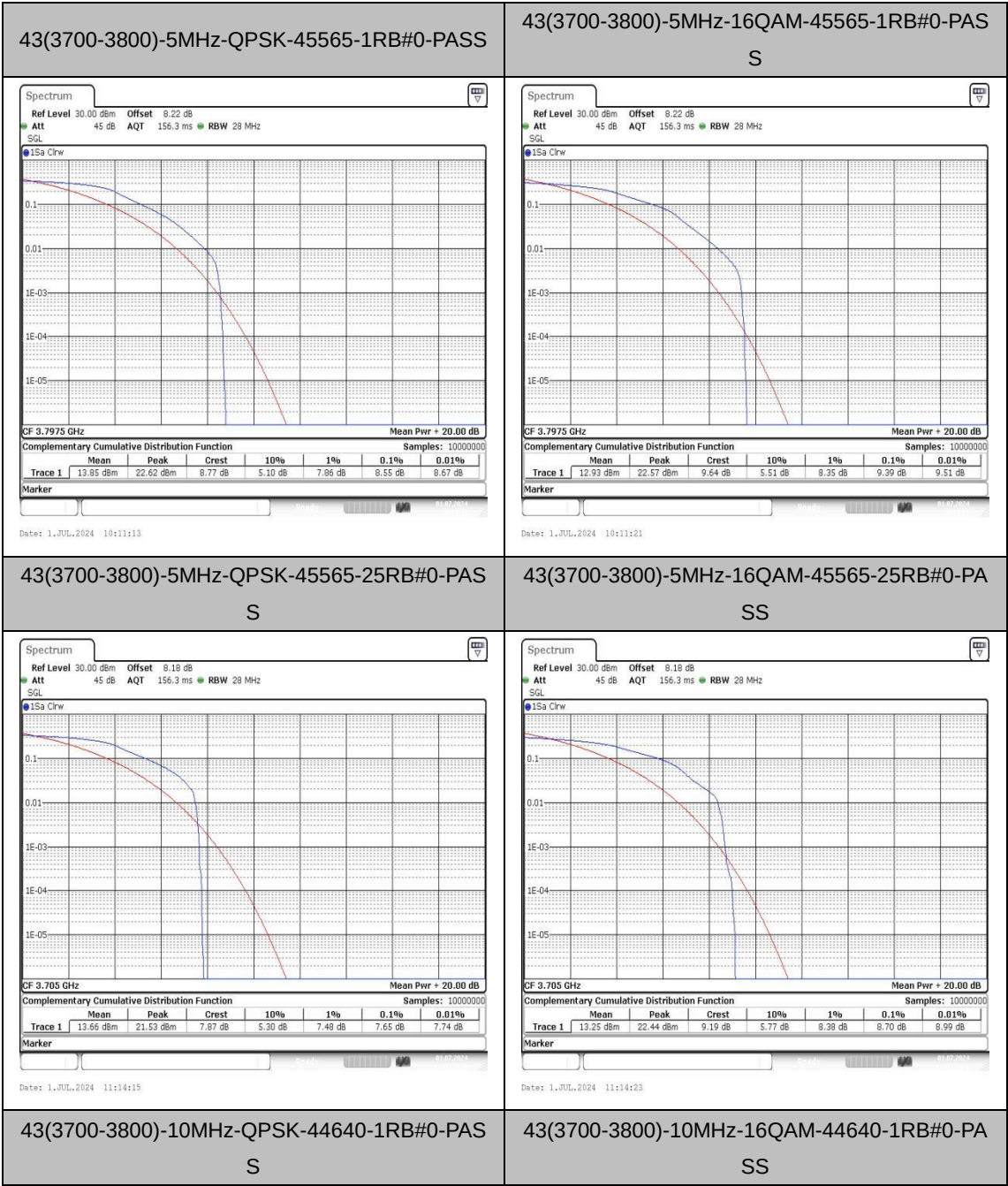
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
43(3700-3800)	5MHz	QPSK	44615	1RB#0	7.57	13	PASS
43(3700-3800)	5MHz	16QAM	44615	1RB#0	8.55	13	PASS
43(3700-3800)	5MHz	QPSK	44615	25RB#0	8.43	13	PASS
43(3700-3800)	5MHz	16QAM	44615	25RB#0	9.39	13	PASS
43(3700-3800)	5MHz	QPSK	45090	1RB#0	7.65	13	PASS
43(3700-3800)	5MHz	16QAM	45090	1RB#0	8.64	13	PASS
43(3700-3800)	5MHz	QPSK	45090	25RB#0	8.49	13	PASS
43(3700-3800)	5MHz	16QAM	45090	25RB#0	9.39	13	PASS
43(3700-3800)	5MHz	QPSK	45565	1RB#0	7.74	13	PASS
43(3700-3800)	5MHz	16QAM	45565	1RB#0	8.64	13	PASS
43(3700-3800)	5MHz	QPSK	45565	25RB#0	8.55	13	PASS
43(3700-3800)	5MHz	16QAM	45565	25RB#0	9.39	13	PASS
43(3700-3800)	10MHz	QPSK	44640	1RB#0	7.65	13	PASS
43(3700-3800)	10MHz	16QAM	44640	1RB#0	8.70	13	PASS
43(3700-3800)	10MHz	QPSK	44640	50RB#0	8.38	13	PASS
43(3700-3800)	10MHz	16QAM	44640	50RB#0	9.36	13	PASS
43(3700-3800)	10MHz	QPSK	45090	1RB#0	7.68	13	PASS
43(3700-3800)	10MHz	16QAM	45090	1RB#0	8.64	13	PASS
43(3700-3800)	10MHz	QPSK	45090	50RB#0	8.46	13	PASS
43(3700-3800)	10MHz	16QAM	45090	50RB#0	9.42	13	PASS
43(3700-3800)	10MHz	QPSK	45540	1RB#0	7.71	13	PASS
43(3700-3800)	10MHz	16QAM	45540	1RB#0	8.67	13	PASS
43(3700-3800)	10MHz	QPSK	45540	50RB#0	8.49	13	PASS
43(3700-3800)	10MHz	16QAM	45540	50RB#0	9.48	13	PASS
43(3700-3800)	15MHz	QPSK	44665	1RB#0	7.88	13	PASS
43(3700-3800)	15MHz	16QAM	44665	1RB#0	8.49	13	PASS
43(3700-3800)	15MHz	QPSK	44665	75RB#0	8.52	13	PASS
43(3700-3800)	15MHz	16QAM	44665	75RB#0	9.45	13	PASS
43(3700-3800)	15MHz	QPSK	45090	1RB#0	7.68	13	PASS
43(3700-3800)	15MHz	16QAM	45090	1RB#0	8.67	13	PASS
43(3700-3800)	15MHz	QPSK	45090	75RB#0	8.64	13	PASS
43(3700-3800)	15MHz	16QAM	45090	75RB#0	9.54	13	PASS
43(3700-3800)	15MHz	QPSK	45515	1RB#0	7.68	13	PASS
43(3700-3800)	15MHz	16QAM	45515	1RB#0	8.64	13	PASS
43(3700-3800)	15MHz	QPSK	45515	75RB#0	8.67	13	PASS

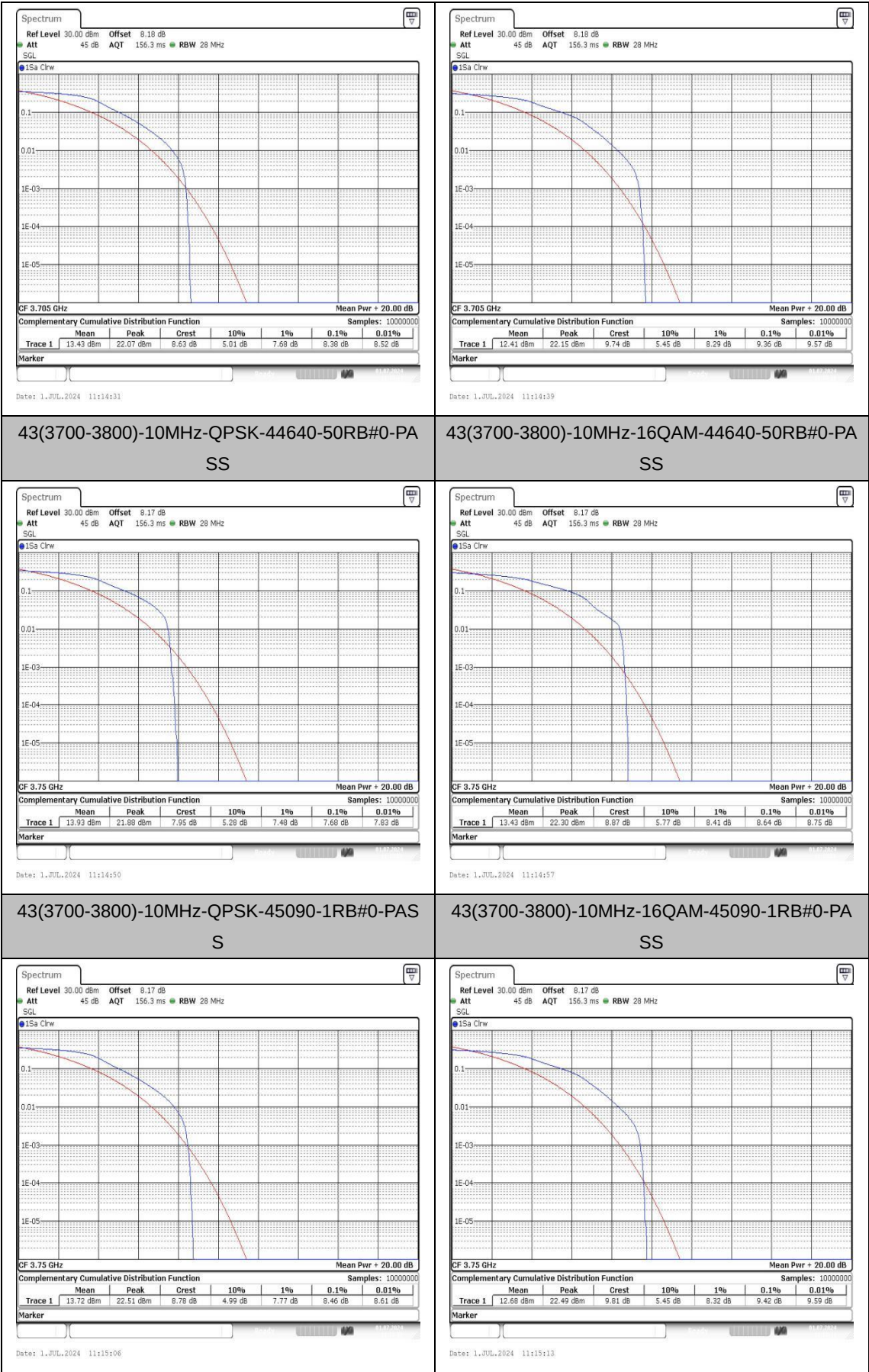
43(3700-3800)	15MHz	16QAM	45515	75RB#0	9.57	13	PASS
43(3700-3800)	20MHz	QPSK	44690	1RB#0	7.57	13	PASS
43(3700-3800)	20MHz	16QAM	44690	1RB#0	8.93	13	PASS
43(3700-3800)	20MHz	QPSK	44690	100RB#0	8.49	13	PASS
43(3700-3800)	20MHz	16QAM	44690	100RB#0	9.42	13	PASS
43(3700-3800)	20MHz	QPSK	45090	1RB#0	7.59	13	PASS
43(3700-3800)	20MHz	16QAM	45090	1RB#0	8.70	13	PASS
43(3700-3800)	20MHz	QPSK	45090	100RB#0	8.49	13	PASS
43(3700-3800)	20MHz	16QAM	45090	100RB#0	9.45	13	PASS
43(3700-3800)	20MHz	QPSK	45490	1RB#0	7.68	13	PASS
43(3700-3800)	20MHz	16QAM	45490	1RB#0	8.67	13	PASS
43(3700-3800)	20MHz	QPSK	45490	100RB#0	8.49	13	PASS
43(3700-3800)	20MHz	16QAM	45490	100RB#0	9.45	13	PASS

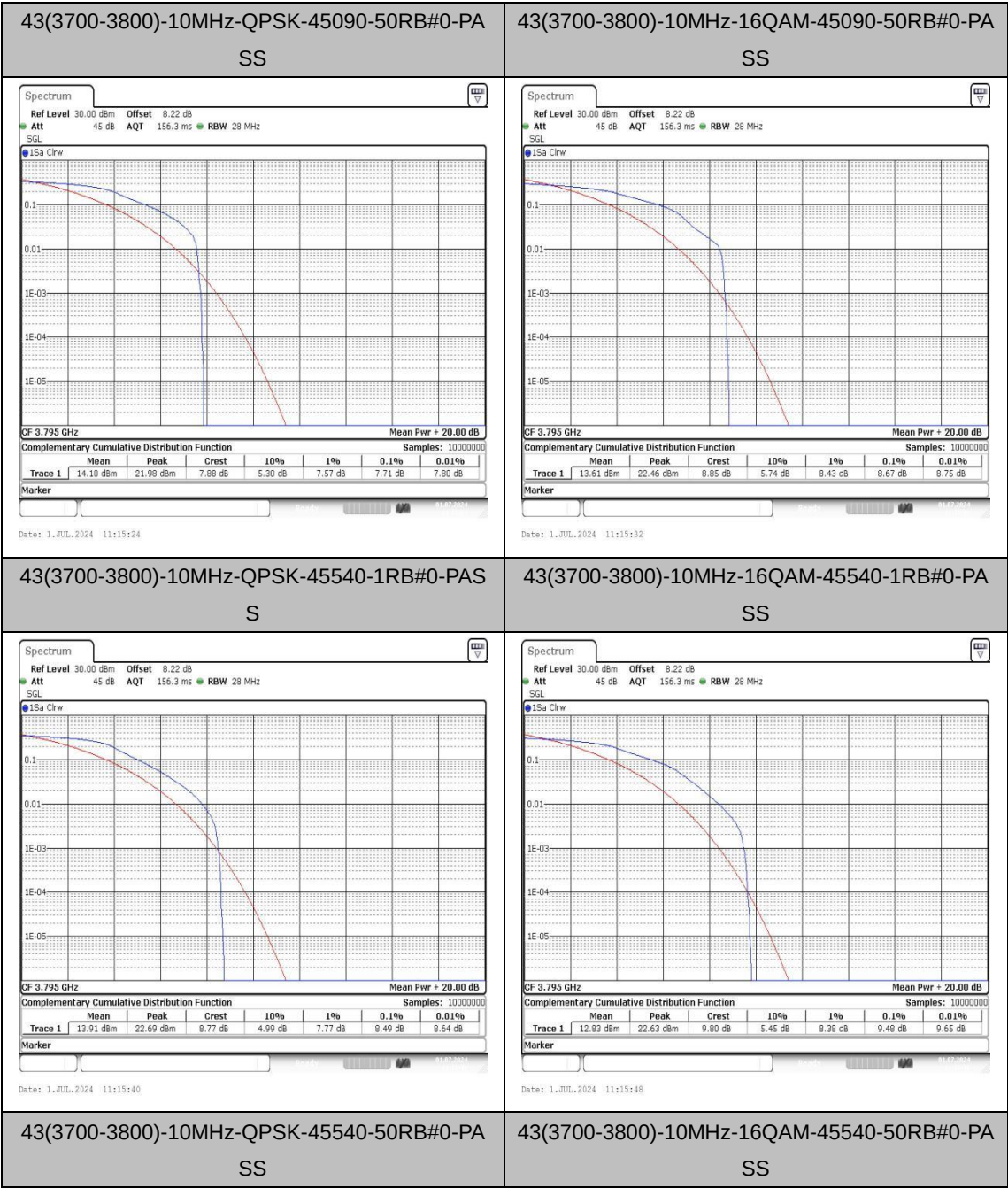
Test Graphs

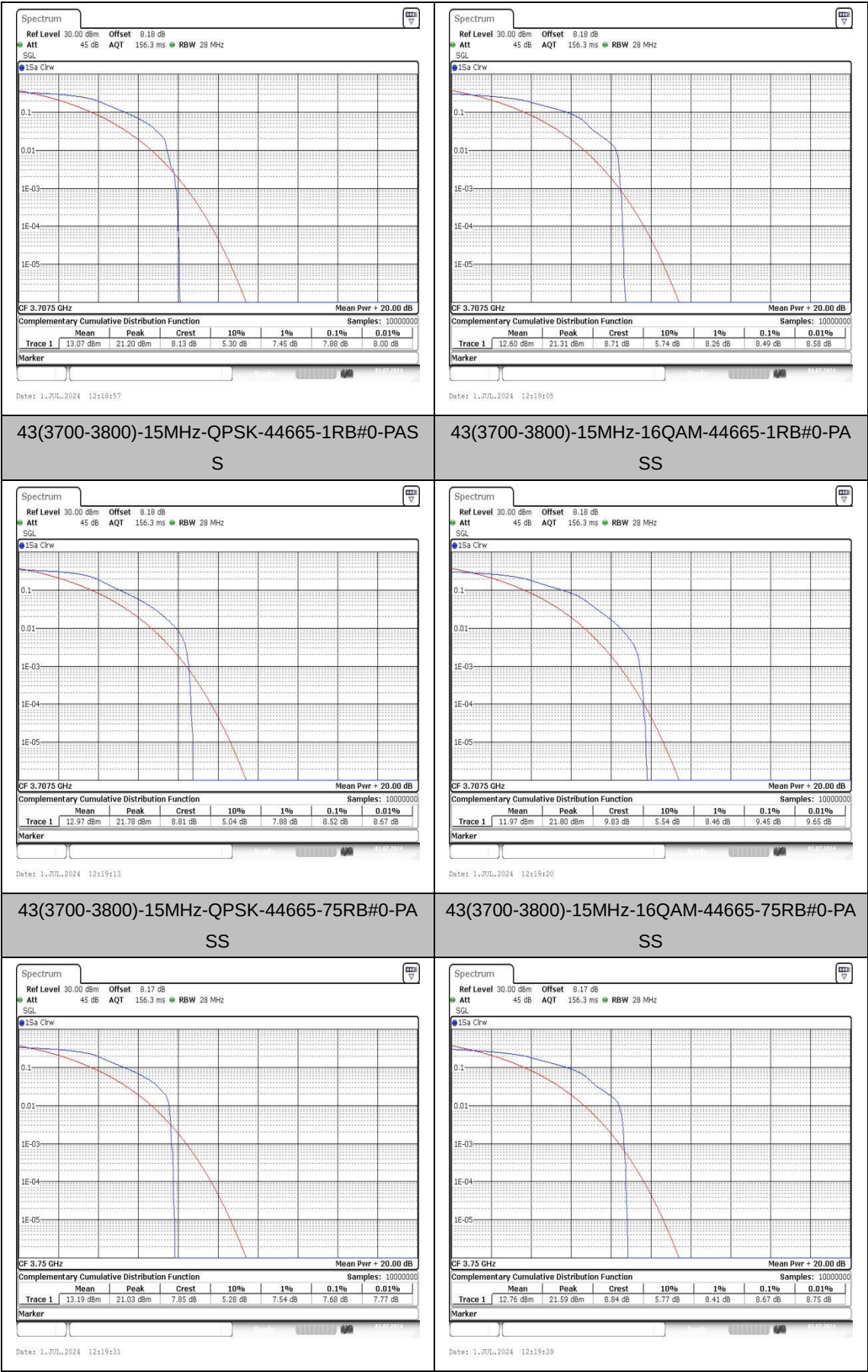


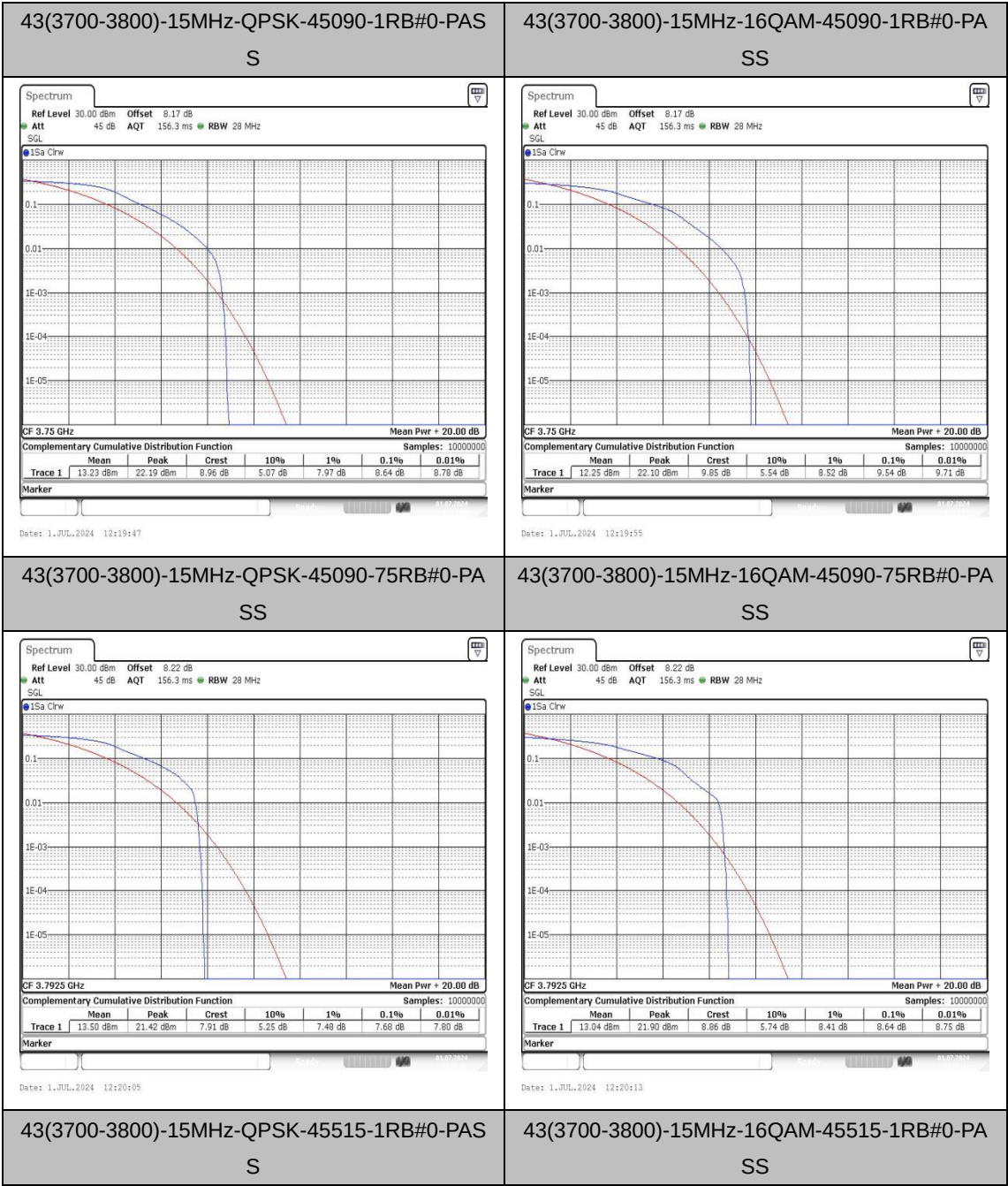


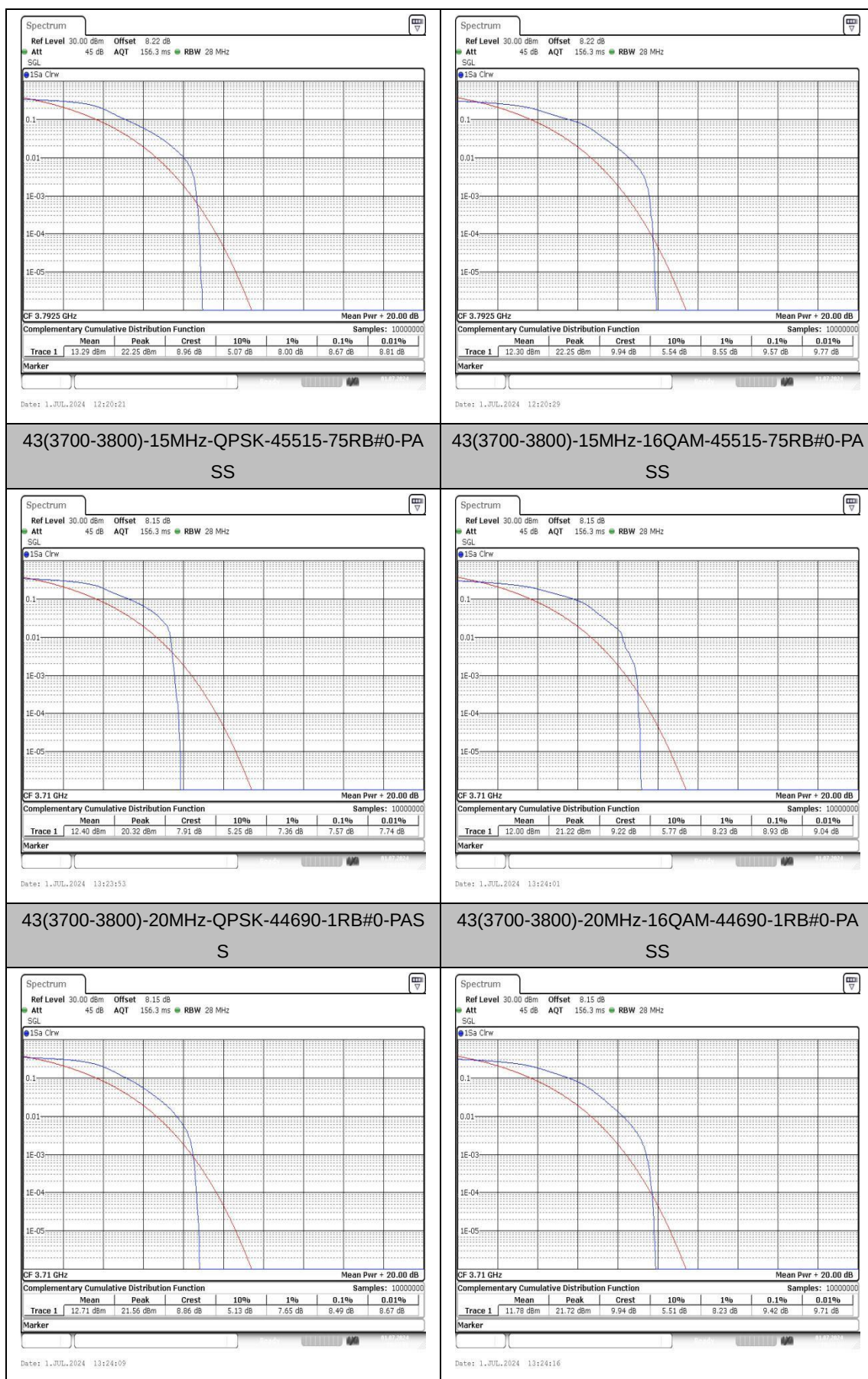


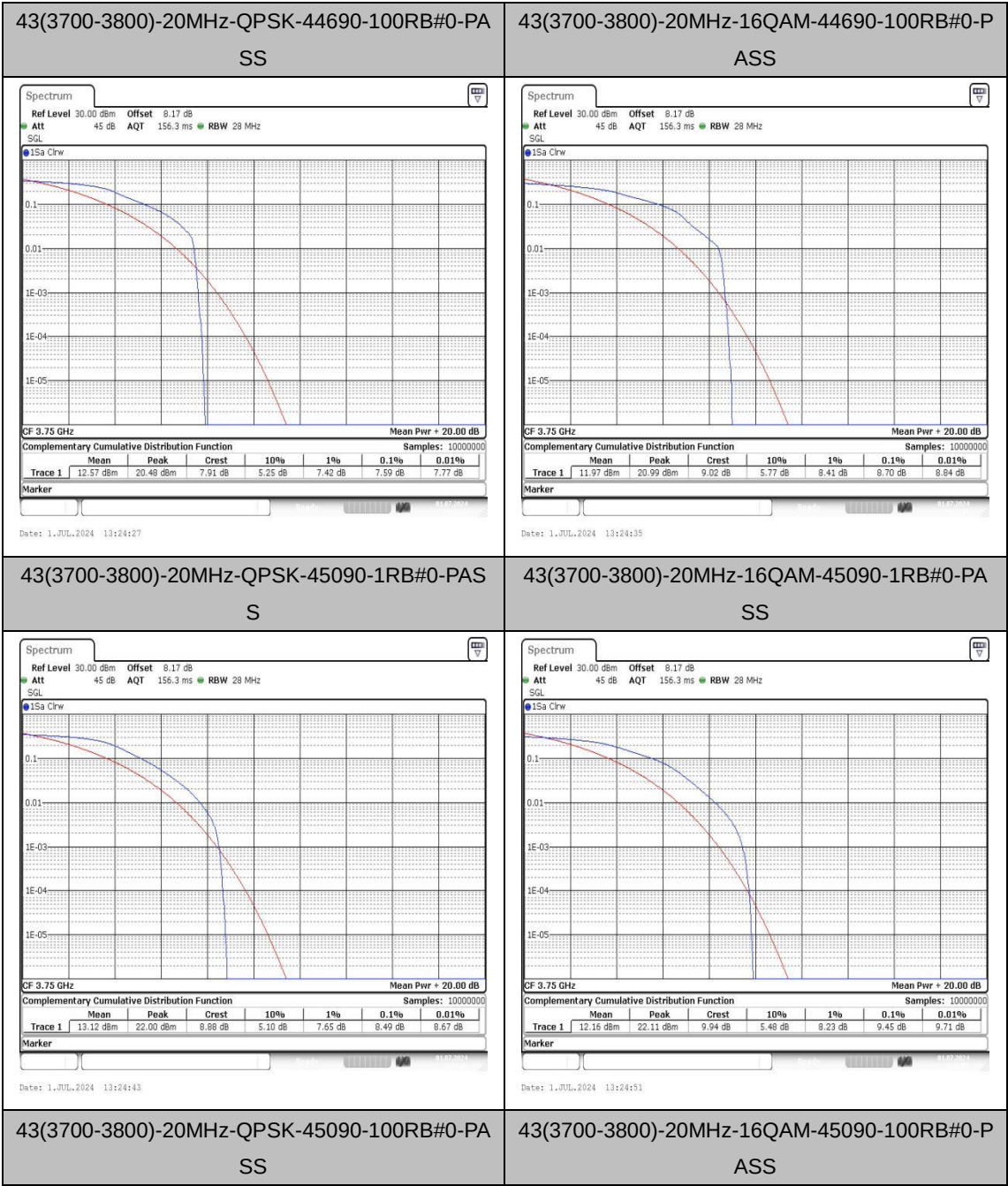


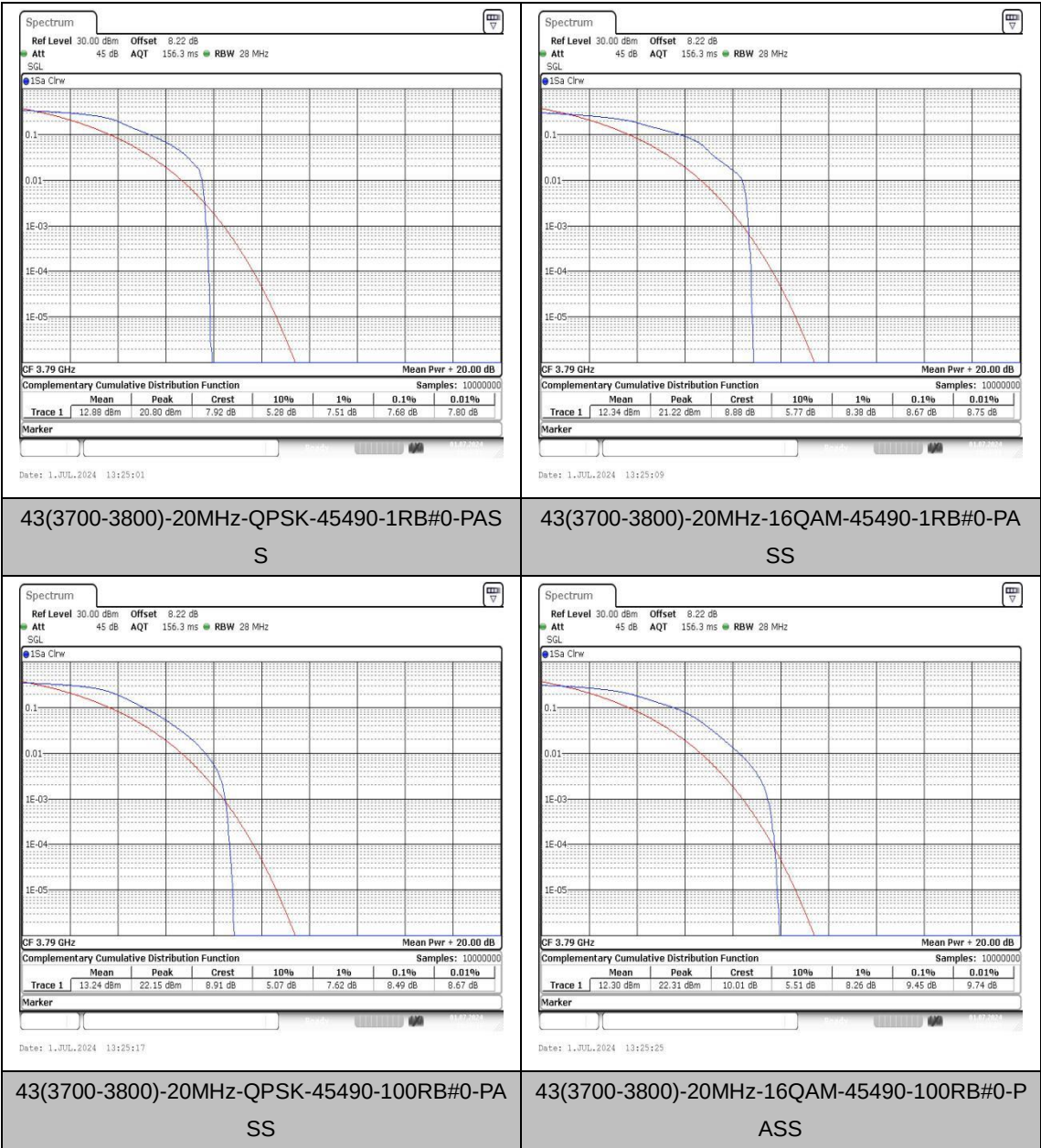












Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
43(3700-3800)	5MHz	QPSK	44615	25RB#0	4.505	5.15	PASS
43(3700-3800)	5MHz	16QAM	44615	25RB#0	4.515	5.22	PASS
43(3700-3800)	5MHz	QPSK	45090	25RB#0	4.525	5.23	PASS
43(3700-3800)	5MHz	16QAM	45090	25RB#0	4.525	5.14	PASS
43(3700-3800)	5MHz	QPSK	45565	25RB#0	4.505	5.14	PASS
43(3700-3800)	5MHz	16QAM	45565	25RB#0	4.515	5.20	PASS
43(3700-3800)	10MHz	QPSK	44640	50RB#0	8.985	10.03	PASS
43(3700-3800)	10MHz	16QAM	44640	50RB#0	9.018	10.07	PASS
43(3700-3800)	10MHz	QPSK	45090	50RB#0	9.018	10.10	PASS
43(3700-3800)	10MHz	16QAM	45090	50RB#0	8.985	10.20	PASS
43(3700-3800)	10MHz	QPSK	45540	50RB#0	8.985	10.17	PASS
43(3700-3800)	10MHz	16QAM	45540	50RB#0	8.985	10.10	PASS
43(3700-3800)	15MHz	QPSK	44665	75RB#0	13.478	15.05	PASS
43(3700-3800)	15MHz	16QAM	44665	75RB#0	13.478	15.05	PASS
43(3700-3800)	15MHz	QPSK	45090	75RB#0	13.478	15.10	PASS
43(3700-3800)	15MHz	16QAM	45090	75RB#0	13.478	15.00	PASS
43(3700-3800)	15MHz	QPSK	45515	75RB#0	13.478	15.15	PASS
43(3700-3800)	15MHz	16QAM	45515	75RB#0	13.478	15.00	PASS
43(3700-3800)	20MHz	QPSK	44690	100RB#0	17.97	20.00	PASS
43(3700-3800)	20MHz	16QAM	44690	100RB#0	18.037	20.07	PASS
43(3700-3800)	20MHz	QPSK	45090	100RB#0	18.037	19.93	PASS
43(3700-3800)	20MHz	16QAM	45090	100RB#0	18.037	20.40	PASS
43(3700-3800)	20MHz	QPSK	45490	100RB#0	17.97	20.07	PASS
43(3700-3800)	20MHz	16QAM	45490	100RB#0	17.97	20.07	PASS

Test Graphs

