

## Appendix for Band 12

Product Name: 5G CPE  
Model No: S3

## Appendix A: Average Power Output Data

### Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	23.95	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	22.83	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.93	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	22.84	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.86	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	22.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	23.89	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	22.81	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	23.85	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	22.80	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	23.83	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	22.73	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.88	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.78	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.56	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.43	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.60	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.52	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	23.56	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	22.41	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	23.56	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	22.41	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	23.55	PASS
Band12	1.4MHz	16QAM	23095	3RB#1	22.41	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	23.57	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	22.39	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.66	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	21.63	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.44	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	22.45	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.49	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	22.49	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.36	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	22.38	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	23.39	PASS

Band12	1.4MHz	16QAM	23173	3RB#0	22.29	PASS
Band12	1.4MHz	QPSK	23173	3RB#1	23.46	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	22.29	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	23.36	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	22.20	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.49	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.49	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.95	PASS
Band12	3MHz	16QAM	23025	1RB#0	23.08	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.91	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.97	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.74	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.85	PASS
Band12	3MHz	QPSK	23025	8RB#0	23.00	PASS
Band12	3MHz	16QAM	23025	8RB#0	22.00	PASS
Band12	3MHz	QPSK	23025	8RB#4	22.97	PASS
Band12	3MHz	16QAM	23025	8RB#4	21.96	PASS
Band12	3MHz	QPSK	23025	8RB#7	22.89	PASS
Band12	3MHz	16QAM	23025	8RB#7	21.90	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.96	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.96	PASS
Band12	3MHz	QPSK	23095	1RB#0	23.75	PASS
Band12	3MHz	16QAM	23095	1RB#0	22.59	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.73	PASS
Band12	3MHz	16QAM	23095	1RB#8	22.59	PASS
Band12	3MHz	QPSK	23095	1RB#14	23.63	PASS
Band12	3MHz	16QAM	23095	1RB#14	22.47	PASS
Band12	3MHz	QPSK	23095	8RB#0	22.65	PASS
Band12	3MHz	16QAM	23095	8RB#0	21.68	PASS
Band12	3MHz	QPSK	23095	8RB#4	22.66	PASS
Band12	3MHz	16QAM	23095	8RB#4	21.65	PASS
Band12	3MHz	QPSK	23095	8RB#7	22.64	PASS
Band12	3MHz	16QAM	23095	8RB#7	21.66	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.66	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.62	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.56	PASS
Band12	3MHz	16QAM	23165	1RB#0	22.42	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.54	PASS
Band12	3MHz	16QAM	23165	1RB#8	22.40	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.44	PASS
Band12	3MHz	16QAM	23165	1RB#14	22.29	PASS
Band12	3MHz	QPSK	23165	8RB#0	22.60	PASS

Band12	3MHz	16QAM	23165	8RB#0	21.58	PASS
Band12	3MHz	QPSK	23165	8RB#4	22.62	PASS
Band12	3MHz	16QAM	23165	8RB#4	21.59	PASS
Band12	3MHz	QPSK	23165	8RB#7	22.52	PASS
Band12	3MHz	16QAM	23165	8RB#7	21.54	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.49	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.42	PASS
Band12	5MHz	QPSK	23035	1RB#0	24.04	PASS
Band12	5MHz	16QAM	23035	1RB#0	23.01	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.88	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.89	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	22.81	PASS
Band12	5MHz	QPSK	23035	12RB#0	23.01	PASS
Band12	5MHz	16QAM	23035	12RB#0	21.99	PASS
Band12	5MHz	QPSK	23035	12RB#6	23.04	PASS
Band12	5MHz	16QAM	23035	12RB#6	22.00	PASS
Band12	5MHz	QPSK	23035	12RB#13	22.81	PASS
Band12	5MHz	16QAM	23035	12RB#13	21.80	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.92	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.90	PASS
Band12	5MHz	QPSK	23095	1RB#0	23.71	PASS
Band12	5MHz	16QAM	23095	1RB#0	22.91	PASS
Band12	5MHz	QPSK	23095	1RB#12	23.68	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.82	PASS
Band12	5MHz	QPSK	23095	1RB#24	23.59	PASS
Band12	5MHz	16QAM	23095	1RB#24	22.74	PASS
Band12	5MHz	QPSK	23095	12RB#0	22.73	PASS
Band12	5MHz	16QAM	23095	12RB#0	21.77	PASS
Band12	5MHz	QPSK	23095	12RB#6	22.71	PASS
Band12	5MHz	16QAM	23095	12RB#6	21.78	PASS
Band12	5MHz	QPSK	23095	12RB#13	22.60	PASS
Band12	5MHz	16QAM	23095	12RB#13	21.69	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.70	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.68	PASS
Band12	5MHz	QPSK	23155	1RB#0	23.60	PASS
Band12	5MHz	16QAM	23155	1RB#0	22.57	PASS
Band12	5MHz	QPSK	23155	1RB#12	23.64	PASS
Band12	5MHz	16QAM	23155	1RB#12	22.61	PASS
Band12	5MHz	QPSK	23155	1RB#24	23.50	PASS
Band12	5MHz	16QAM	23155	1RB#24	22.47	PASS
Band12	5MHz	QPSK	23155	12RB#0	22.65	PASS

Band12	5MHz	16QAM	23155	12RB#0	21.68	PASS
Band12	5MHz	QPSK	23155	12RB#6	22.62	PASS
Band12	5MHz	16QAM	23155	12RB#6	21.67	PASS
Band12	5MHz	QPSK	23155	12RB#13	22.60	PASS
Band12	5MHz	16QAM	23155	12RB#13	21.57	PASS
Band12	5MHz	QPSK	23155	25RB#0	22.64	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.58	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.92	PASS
Band12	10MHz	16QAM	23060	1RB#0	23.00	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.67	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.69	PASS
Band12	10MHz	QPSK	23060	1RB#49	23.55	PASS
Band12	10MHz	16QAM	23060	1RB#49	22.63	PASS
Band12	10MHz	QPSK	23060	25RB#0	22.92	PASS
Band12	10MHz	16QAM	23060	25RB#0	21.88	PASS
Band12	10MHz	QPSK	23060	25RB#12	22.91	PASS
Band12	10MHz	16QAM	23060	25RB#12	21.88	PASS
Band12	10MHz	QPSK	23060	25RB#25	22.78	PASS
Band12	10MHz	16QAM	23060	25RB#25	21.70	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.88	PASS
Band12	10MHz	16QAM	23060	50RB#0	21.83	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.88	PASS
Band12	10MHz	16QAM	23095	1RB#0	22.73	PASS
Band12	10MHz	QPSK	23095	1RB#24	23.62	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.48	PASS
Band12	10MHz	QPSK	23095	1RB#49	23.64	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.40	PASS
Band12	10MHz	QPSK	23095	25RB#0	22.79	PASS
Band12	10MHz	16QAM	23095	25RB#0	21.82	PASS
Band12	10MHz	QPSK	23095	25RB#12	22.80	PASS
Band12	10MHz	16QAM	23095	25RB#12	21.76	PASS
Band12	10MHz	QPSK	23095	25RB#25	22.58	PASS
Band12	10MHz	16QAM	23095	25RB#25	21.60	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.77	PASS
Band12	10MHz	16QAM	23095	50RB#0	21.78	PASS
Band12	10MHz	QPSK	23130	1RB#0	23.64	PASS
Band12	10MHz	16QAM	23130	1RB#0	22.49	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.52	PASS
Band12	10MHz	16QAM	23130	1RB#24	22.41	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.44	PASS
Band12	10MHz	16QAM	23130	1RB#49	22.30	PASS
Band12	10MHz	QPSK	23130	25RB#0	22.77	PASS

Band12	10MHz	16QAM	23130	25RB#0	21.74	PASS
Band12	10MHz	QPSK	23130	25RB#12	22.76	PASS
Band12	10MHz	16QAM	23130	25RB#12	21.73	PASS
Band12	10MHz	QPSK	23130	25RB#25	22.63	PASS
Band12	10MHz	16QAM	23130	25RB#25	21.67	PASS
Band12	10MHz	QPSK	23130	50RB#0	22.59	PASS
Band12	10MHz	16QAM	23130	50RB#0	21.63	PASS

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

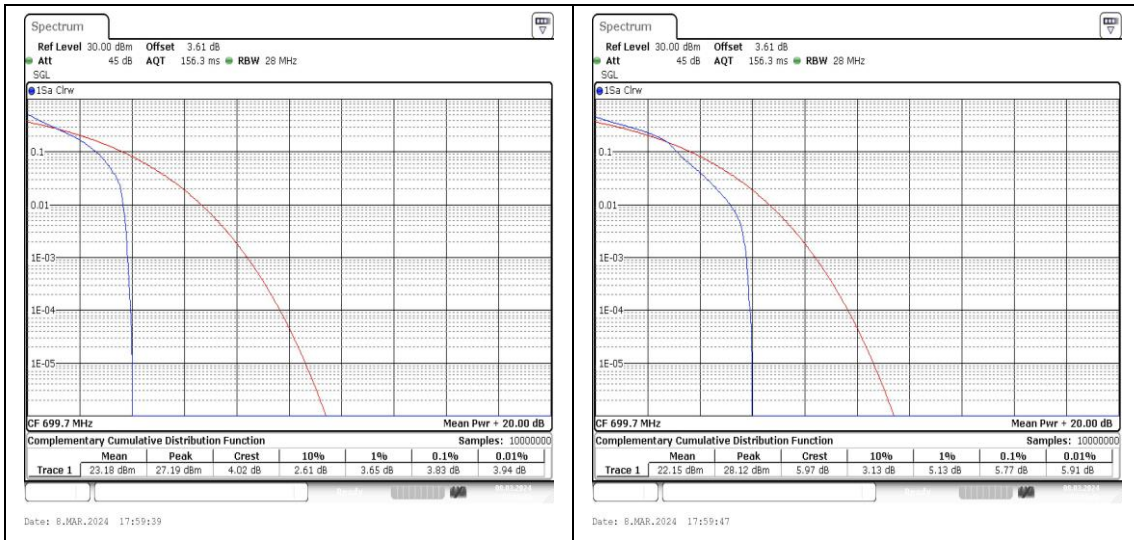
### Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	3.83	13	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	5.77	13	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	5.28	13	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	6.12	13	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	3.77	13	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	5.59	13	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	5.19	13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	6.03	13	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	3.74	13	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	5.57	13	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	5.07	13	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	5.94	13	PASS
Band12	3MHz	QPSK	23025	1RB#0	3.62	13	PASS
Band12	3MHz	16QAM	23025	1RB#0	5.45	13	PASS
Band12	3MHz	QPSK	23025	15RB#0	5.16	13	PASS
Band12	3MHz	16QAM	23025	15RB#0	6.06	13	PASS
Band12	3MHz	QPSK	23095	1RB#0	3.57	13	PASS
Band12	3MHz	16QAM	23095	1RB#0	5.51	13	PASS
Band12	3MHz	QPSK	23095	15RB#0	5.04	13	PASS
Band12	3MHz	16QAM	23095	15RB#0	5.91	13	PASS
Band12	3MHz	QPSK	23165	1RB#0	3.59	13	PASS
Band12	3MHz	16QAM	23165	1RB#0	5.48	13	PASS
Band12	3MHz	QPSK	23165	15RB#0	4.99	13	PASS
Band12	3MHz	16QAM	23165	15RB#0	5.91	13	PASS
Band12	5MHz	QPSK	23035	1RB#0	3.62	13	PASS
Band12	5MHz	16QAM	23035	1RB#0	5.48	13	PASS
Band12	5MHz	QPSK	23035	25RB#0	5.22	13	PASS
Band12	5MHz	16QAM	23035	25RB#0	6.03	13	PASS
Band12	5MHz	QPSK	23095	1RB#0	3.59	13	PASS
Band12	5MHz	16QAM	23095	1RB#0	5.36	13	PASS
Band12	5MHz	QPSK	23095	25RB#0	5.13	13	PASS
Band12	5MHz	16QAM	23095	25RB#0	5.88	13	PASS
Band12	5MHz	QPSK	23155	1RB#0	3.57	13	PASS
Band12	5MHz	16QAM	23155	1RB#0	5.28	13	PASS
Band12	5MHz	QPSK	23155	25RB#0	5.07	13	PASS
Band12	5MHz	16QAM	23155	25RB#0	5.91	13	PASS

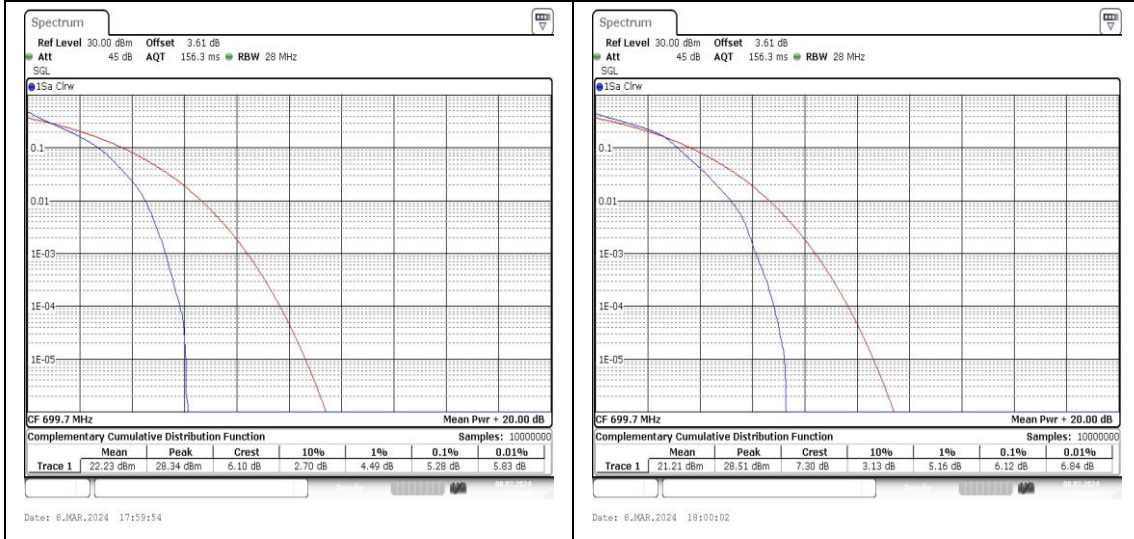
Band12	10MHz	QPSK	23060	1RB#0	3.54	13	PASS
Band12	10MHz	16QAM	23060	1RB#0	5.42	13	PASS
Band12	10MHz	QPSK	23060	50RB#0	5.10	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	5.94	13	PASS
Band12	10MHz	QPSK	23095	1RB#0	3.59	13	PASS
Band12	10MHz	16QAM	23095	1RB#0	5.57	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.01	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	5.88	13	PASS
Band12	10MHz	QPSK	23130	1RB#0	3.51	13	PASS
Band12	10MHz	16QAM	23130	1RB#0	5.45	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	4.90	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	5.83	13	PASS



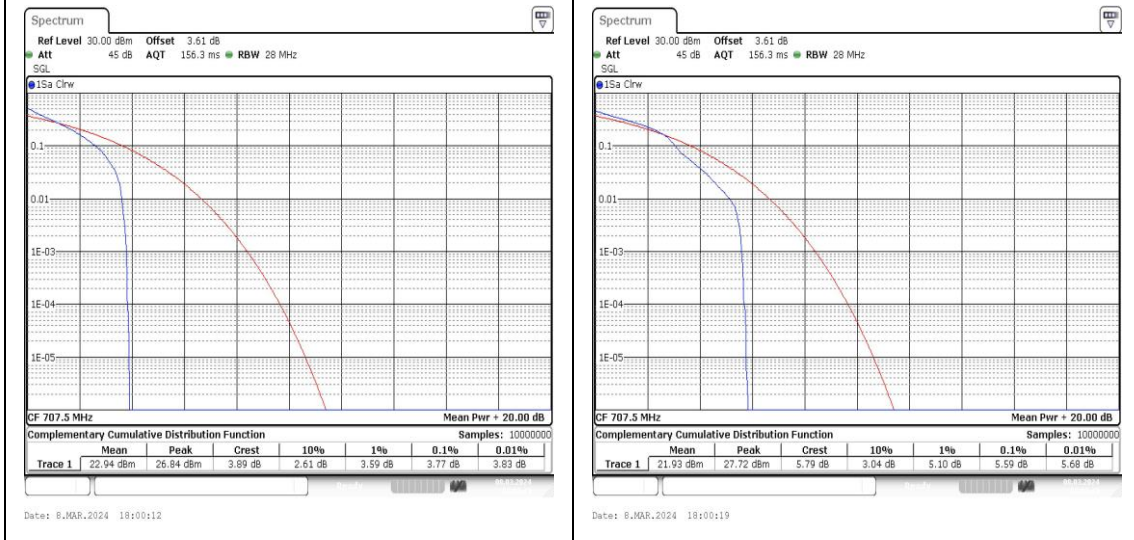
### Test Graphs



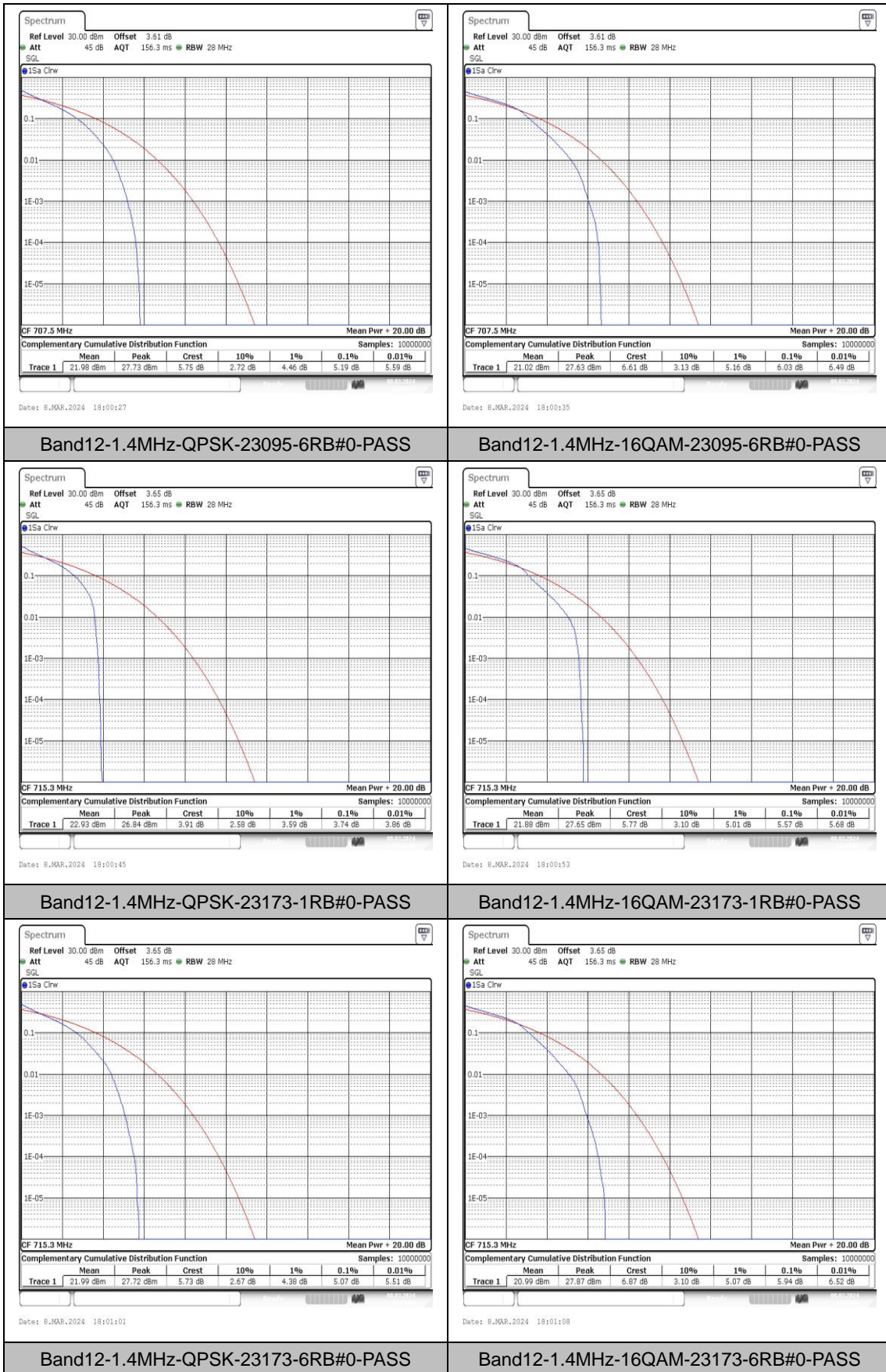
**Band12-1.4MHz-QPSK-23017-1RB#0-PASS**      **Band12-1.4MHz-16QAM-23017-1RB#0-PASS**

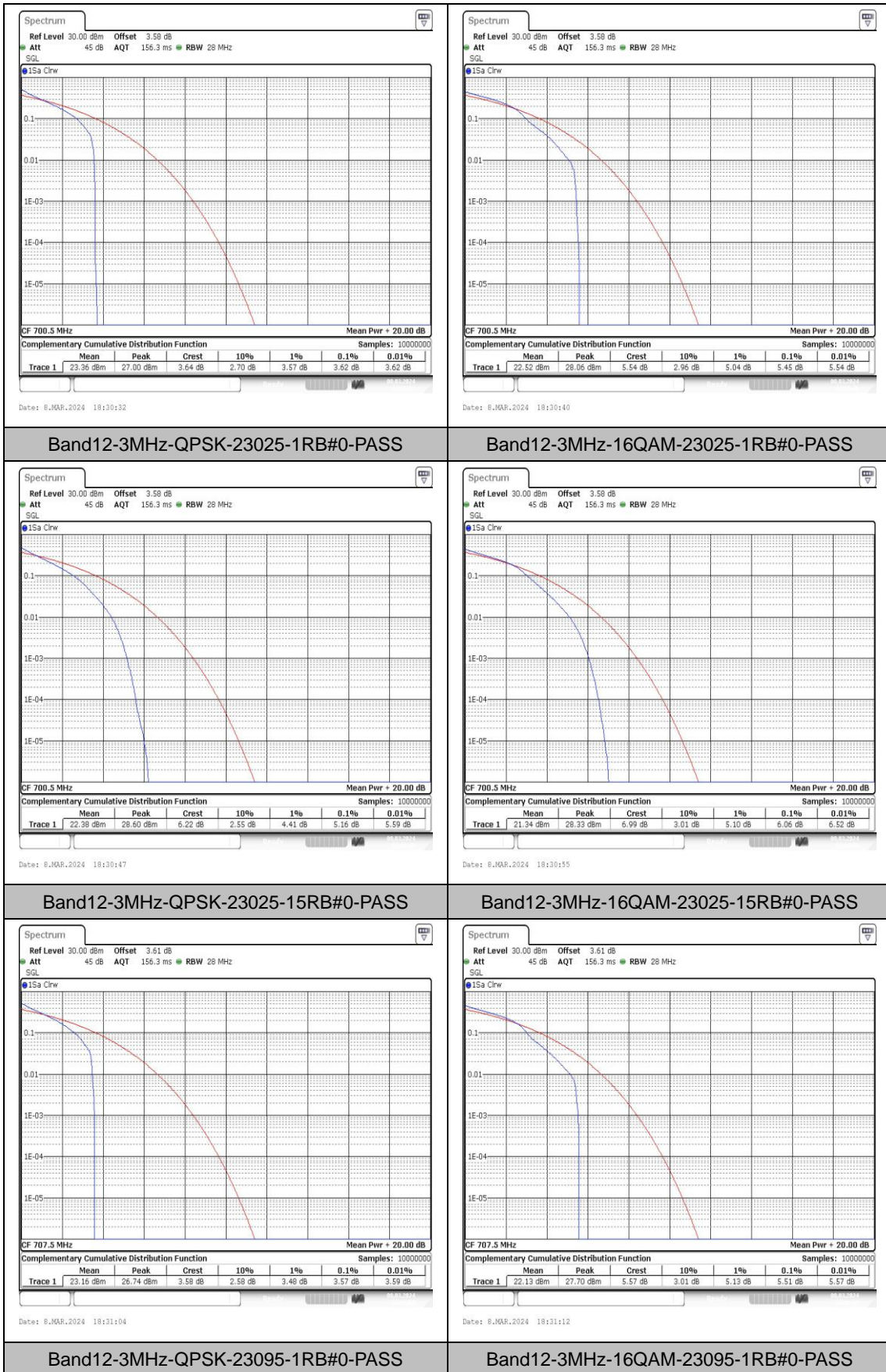


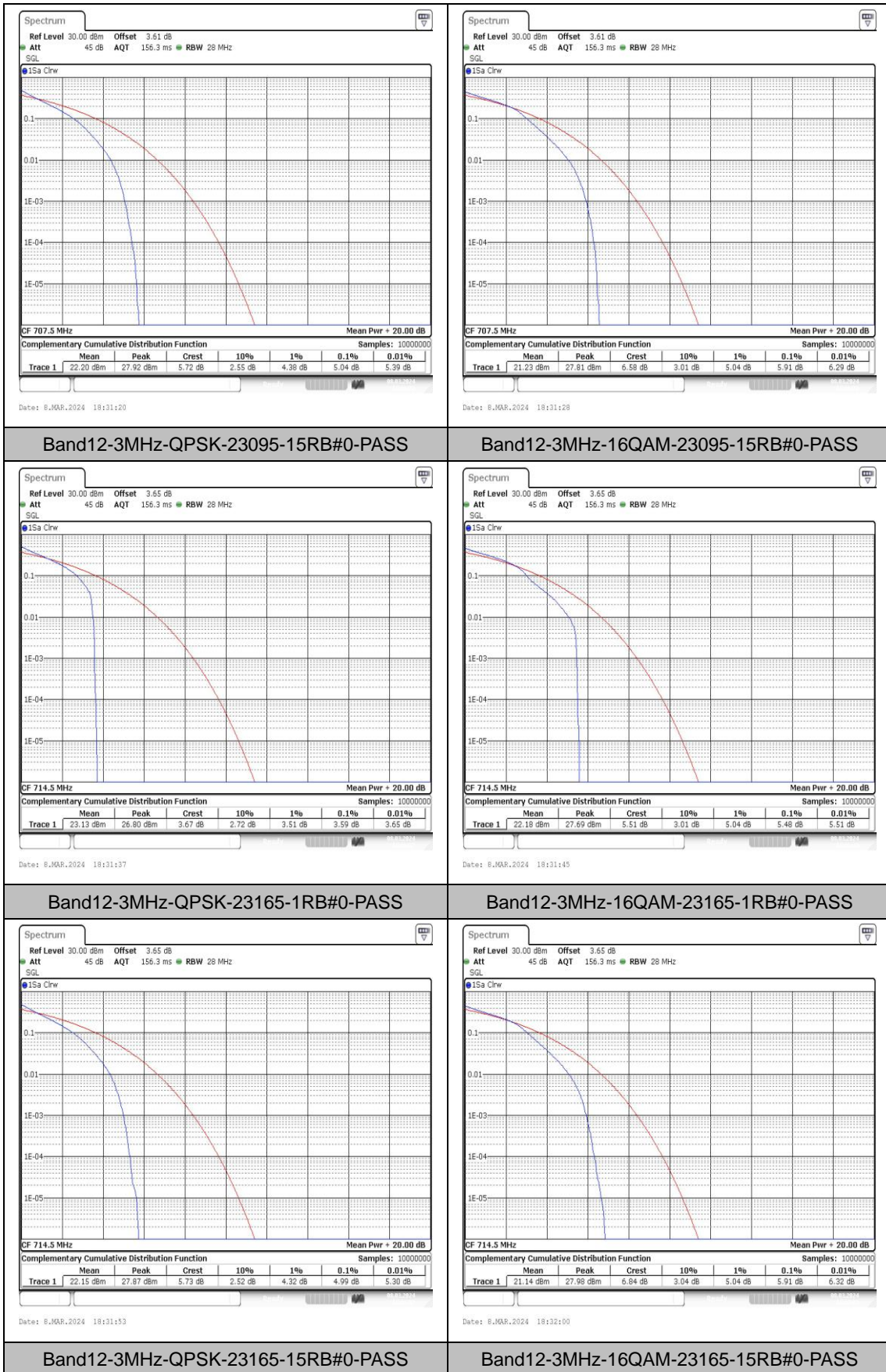
**Band12-1.4MHz-QPSK-23017-6RB#0-PASS**      **Band12-1.4MHz-16QAM-23017-6RB#0-PASS**

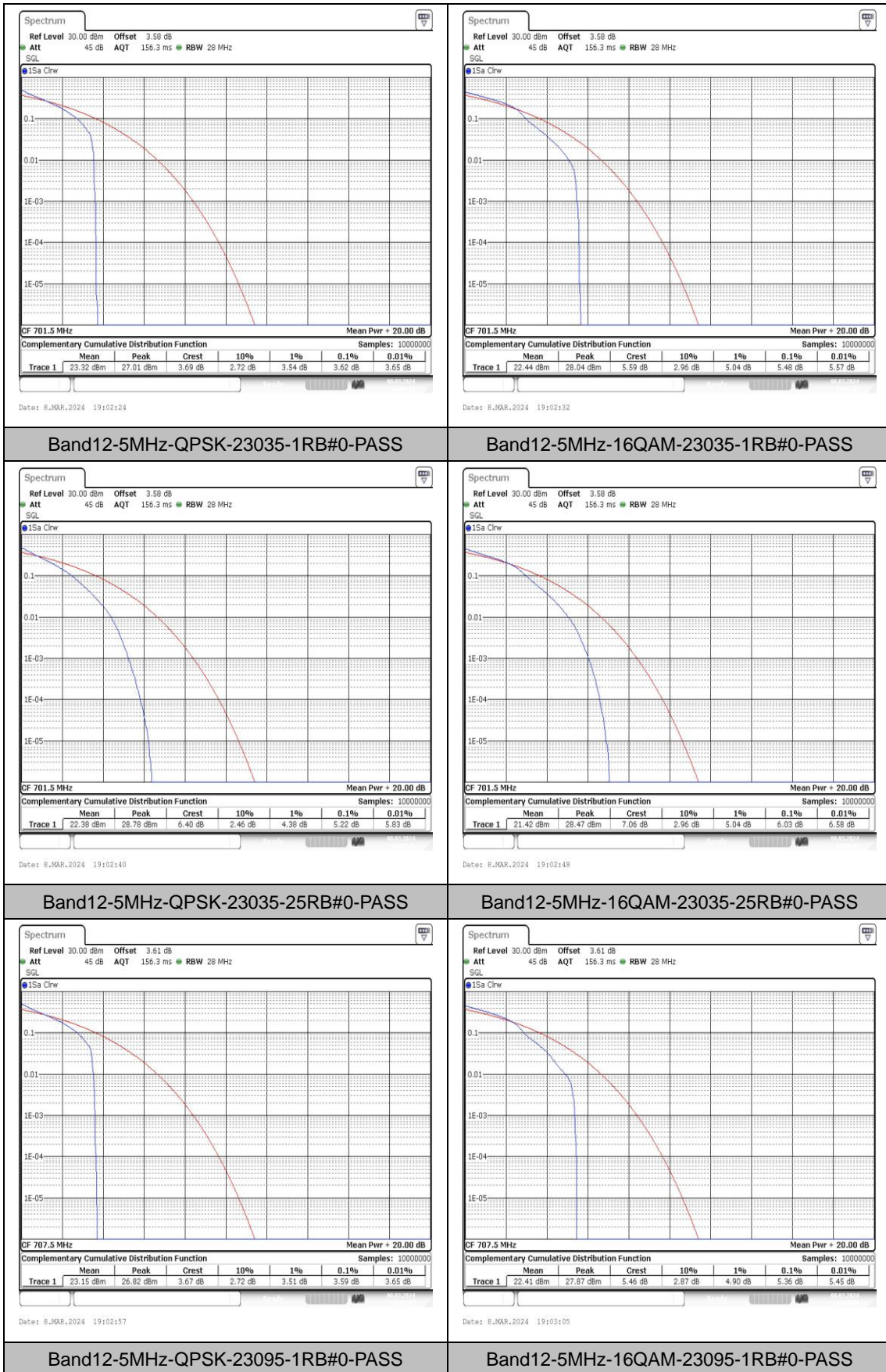


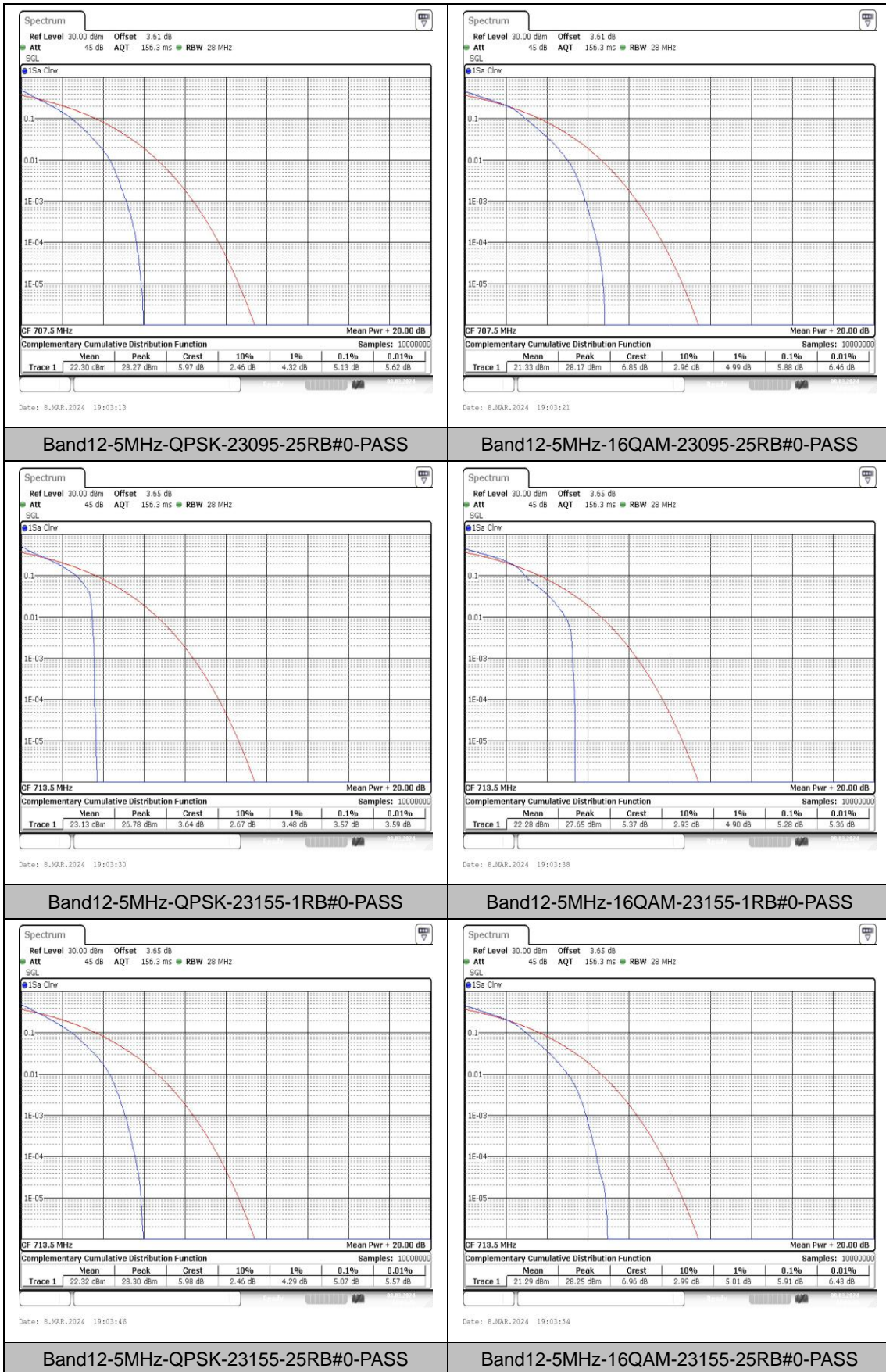
**Band12-1.4MHz-QPSK-23095-1RB#0-PASS**      **Band12-1.4MHz-16QAM-23095-1RB#0-PASS**

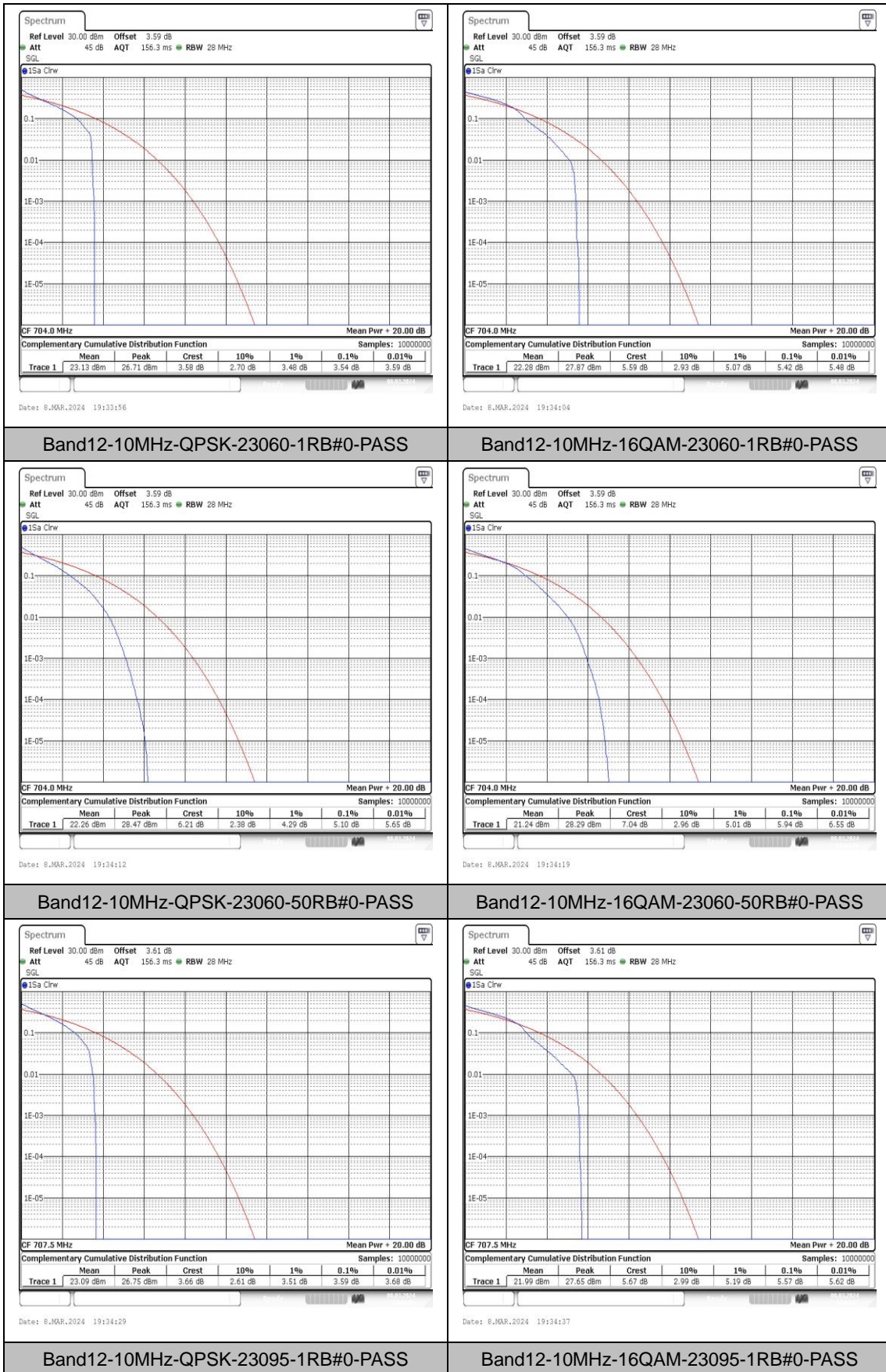


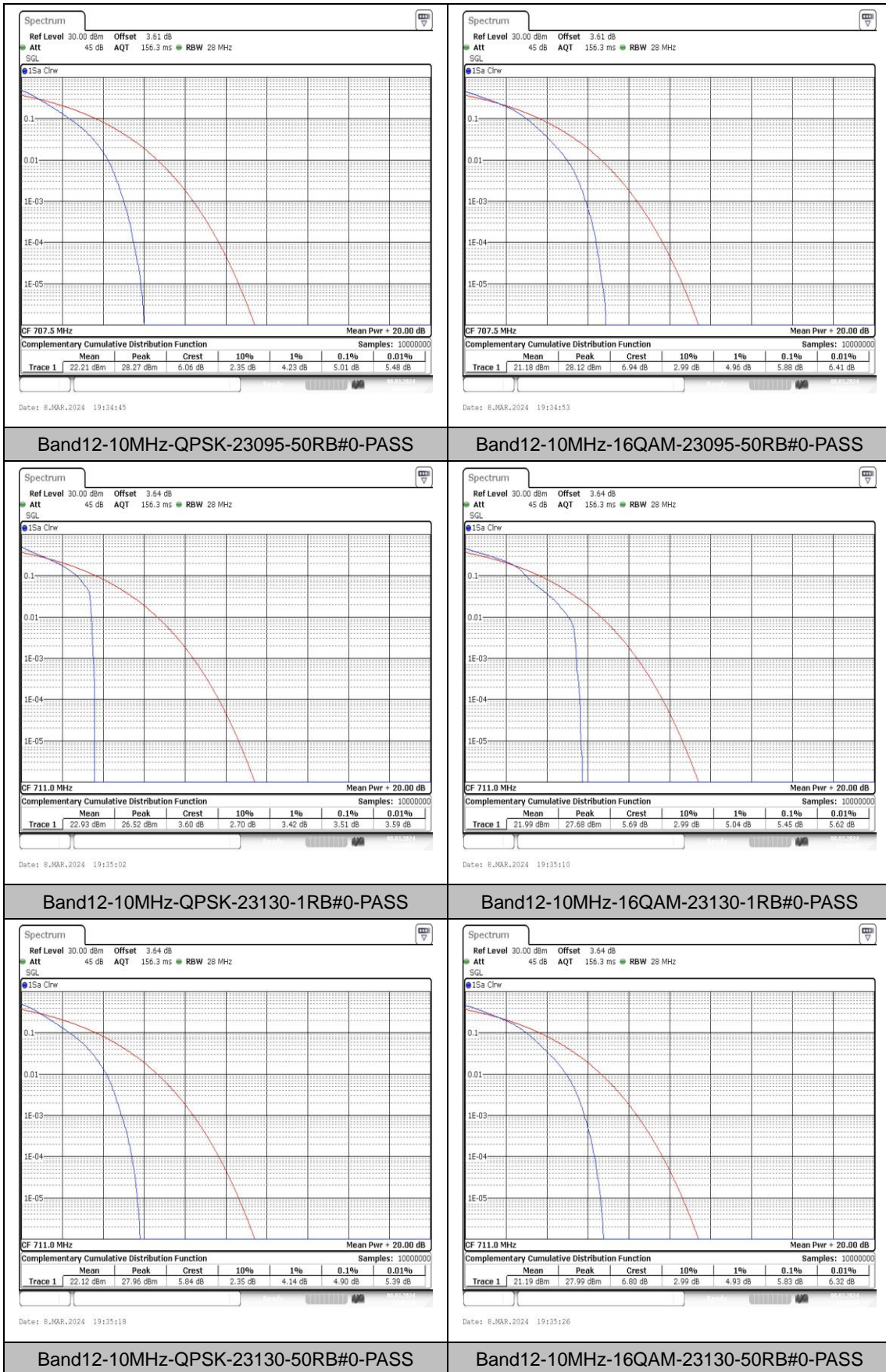














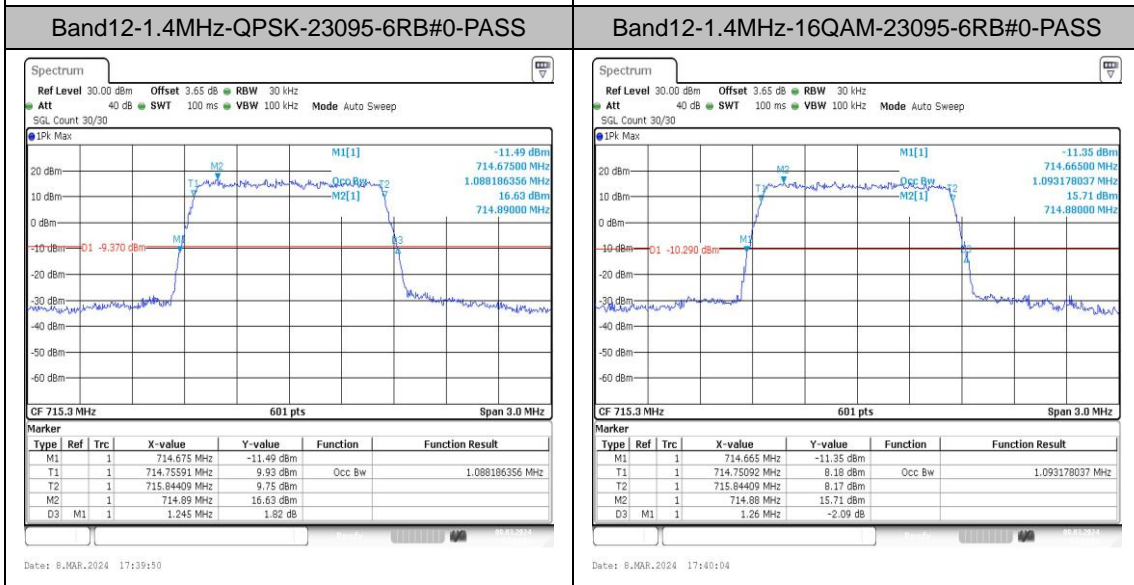
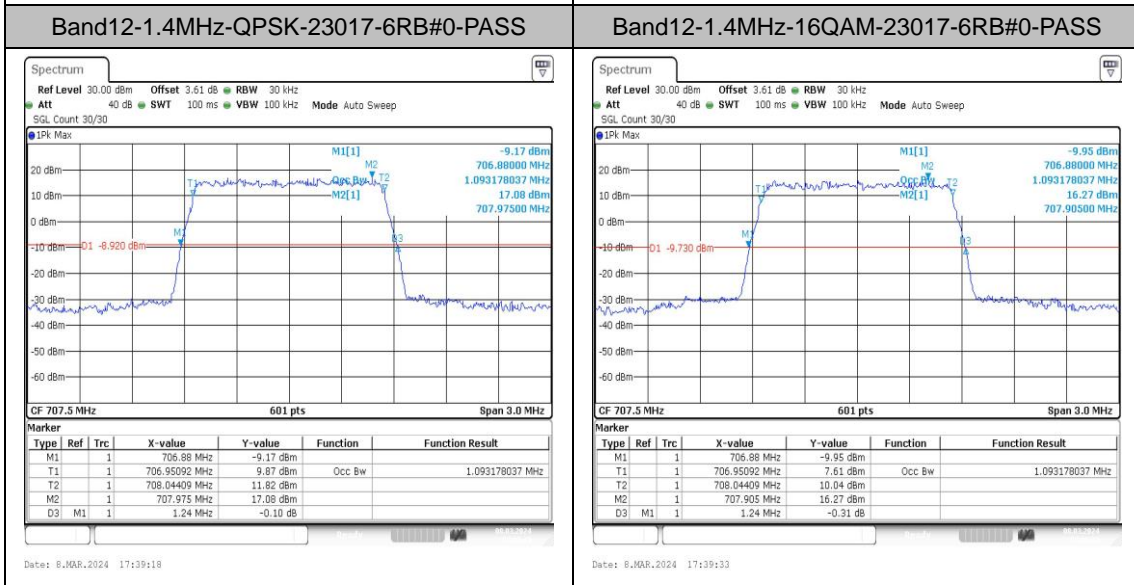
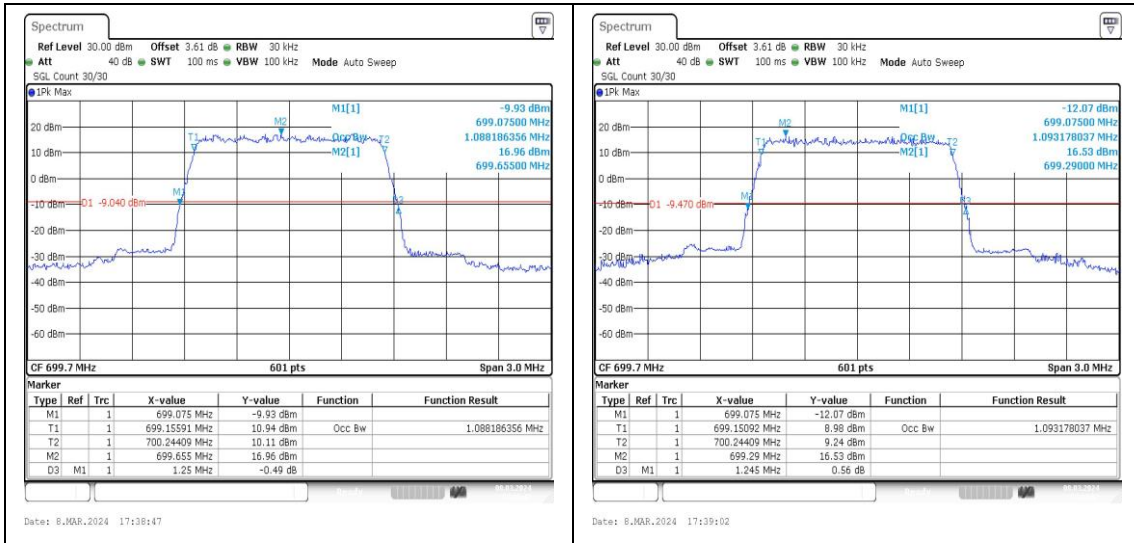


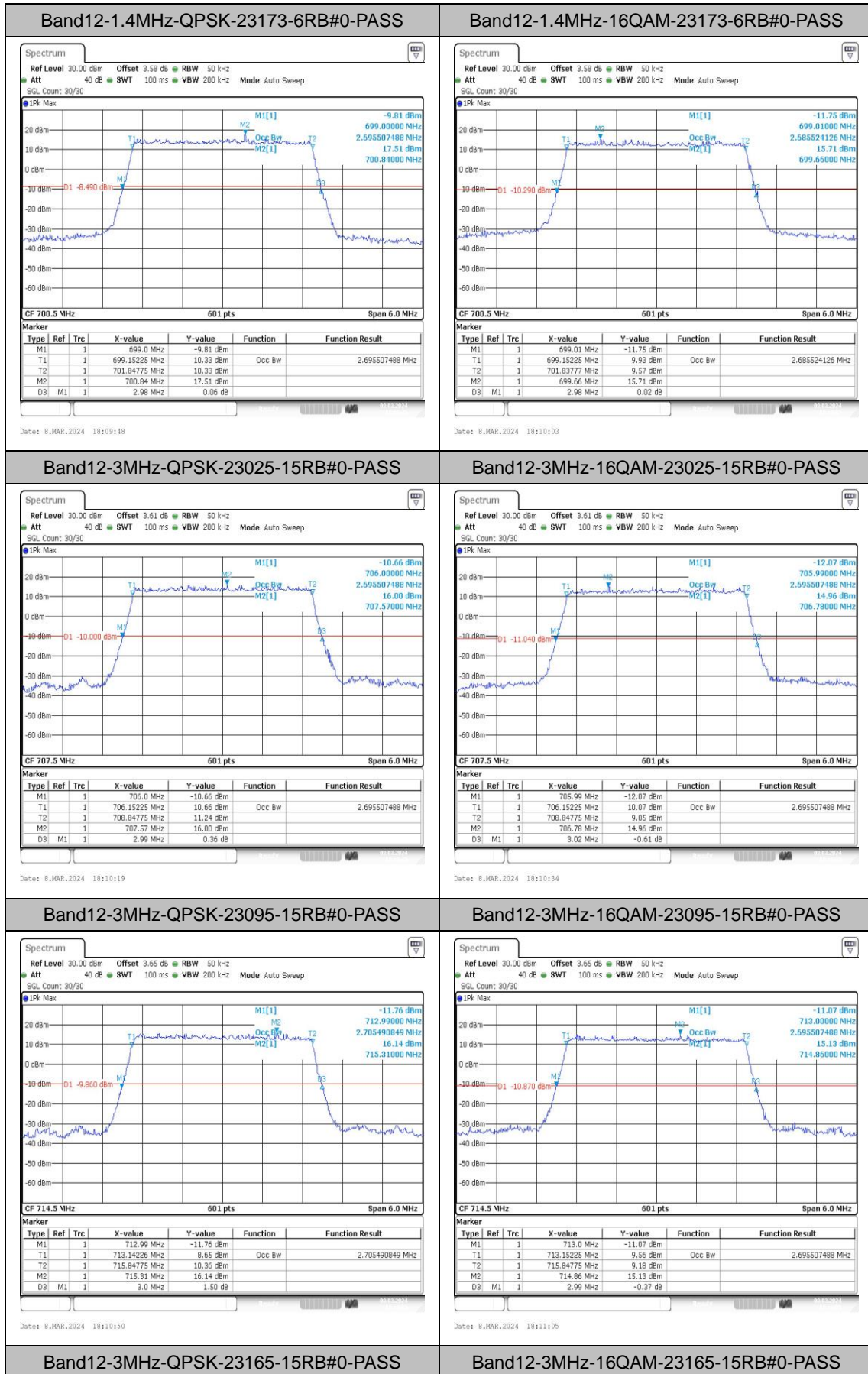
## Appendix C: 26dB Bandwidth and Occupied Bandwidth

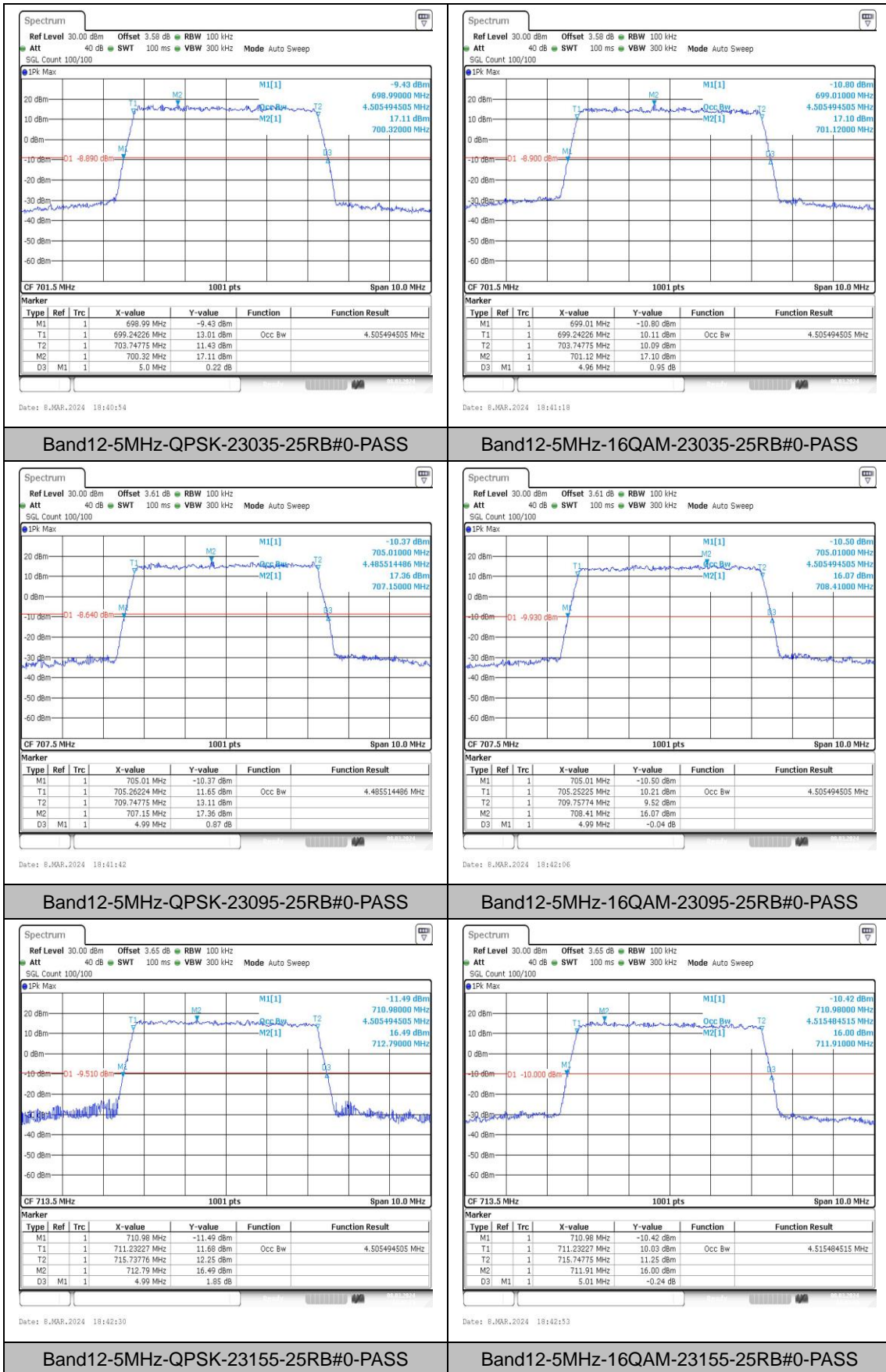
### Test Result

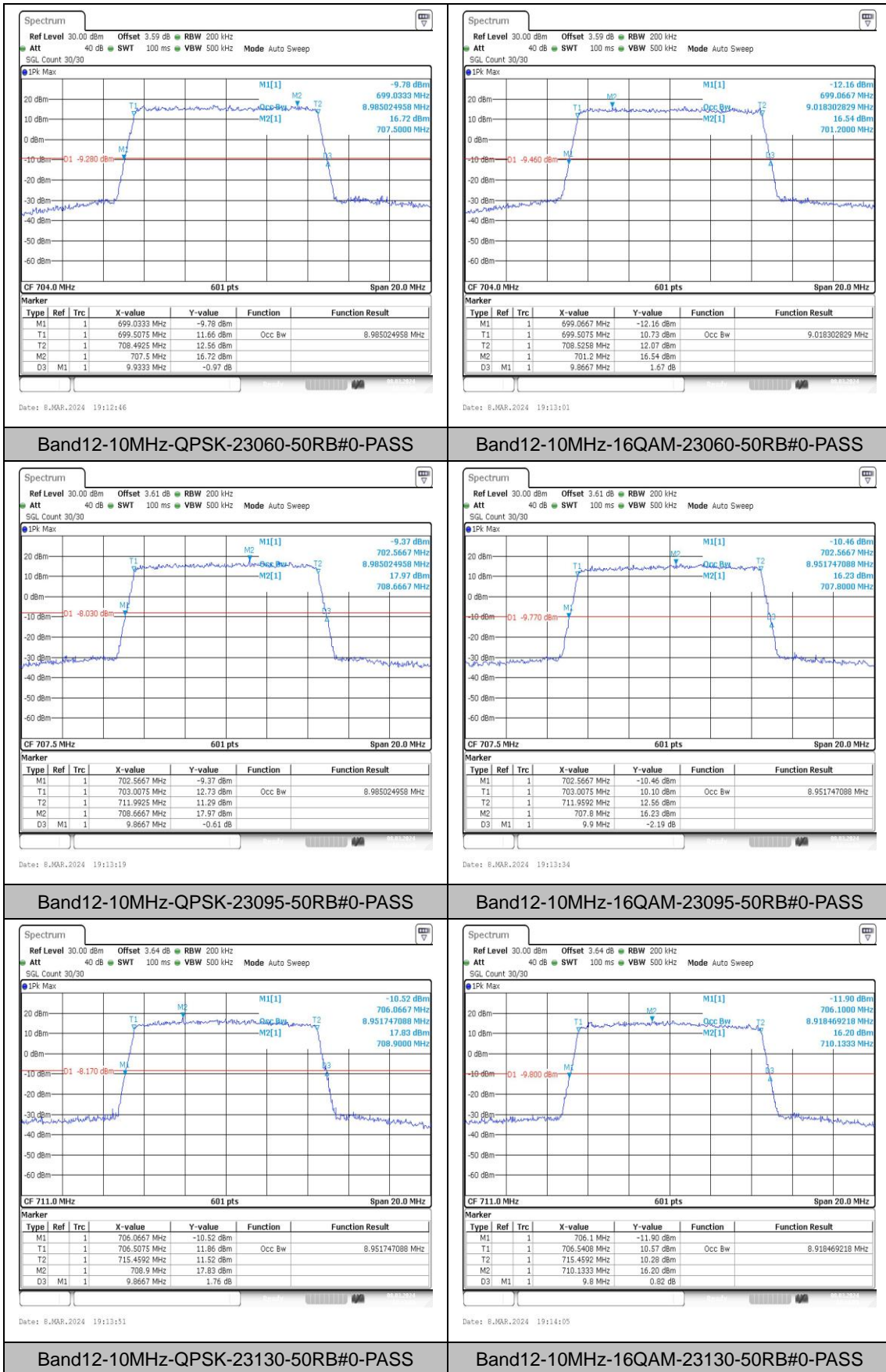
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.088	1.25	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.093	1.25	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.093	1.24	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.093	1.24	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.088	1.25	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.093	1.26	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.696	2.98	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.686	2.98	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.696	2.99	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.696	3.02	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.705	3.00	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.696	2.99	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.505	5.00	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.505	4.96	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.486	4.99	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.505	4.99	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.505	4.99	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.515	5.01	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.985	9.93	PASS
Band12	10MHz	16QAM	23060	50RB#0	9.018	9.87	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.985	9.87	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.952	9.90	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.952	9.87	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.918	9.80	PASS

### Test Graphs











## Appendix D: Band Edge

### Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	PASS
Band12	3MHz	QPSK	23025	1RB#0	PASS
Band12	3MHz	16QAM	23025	1RB#0	PASS
Band12	3MHz	QPSK	23025	1RB#14	PASS
Band12	3MHz	16QAM	23025	1RB#14	PASS
Band12	3MHz	QPSK	23025	15RB#0	PASS
Band12	3MHz	16QAM	23025	15RB#0	PASS
Band12	3MHz	QPSK	23165	1RB#0	PASS
Band12	3MHz	16QAM	23165	1RB#0	PASS
Band12	3MHz	QPSK	23165	1RB#14	PASS
Band12	3MHz	16QAM	23165	1RB#14	PASS
Band12	3MHz	QPSK	23165	15RB#0	PASS
Band12	3MHz	16QAM	23165	15RB#0	PASS
Band12	5MHz	QPSK	23035	1RB#0	PASS
Band12	5MHz	16QAM	23035	1RB#0	PASS
Band12	5MHz	QPSK	23035	1RB#24	PASS
Band12	5MHz	16QAM	23035	1RB#24	PASS
Band12	5MHz	QPSK	23035	25RB#0	PASS
Band12	5MHz	16QAM	23035	25RB#0	PASS
Band12	5MHz	QPSK	23155	1RB#0	PASS
Band12	5MHz	16QAM	23155	1RB#0	PASS
Band12	5MHz	QPSK	23155	1RB#24	PASS
Band12	5MHz	16QAM	23155	1RB#24	PASS
Band12	5MHz	QPSK	23155	25RB#0	PASS
Band12	5MHz	16QAM	23155	25RB#0	PASS



Band12	10MHz	QPSK	23060	1RB#0	PASS
Band12	10MHz	16QAM	23060	1RB#0	PASS
Band12	10MHz	QPSK	23060	1RB#49	PASS
Band12	10MHz	16QAM	23060	1RB#49	PASS
Band12	10MHz	QPSK	23060	50RB#0	PASS
Band12	10MHz	16QAM	23060	50RB#0	PASS
Band12	10MHz	QPSK	23130	1RB#0	PASS
Band12	10MHz	16QAM	23130	1RB#0	PASS
Band12	10MHz	QPSK	23130	1RB#49	PASS
Band12	10MHz	16QAM	23130	1RB#49	PASS
Band12	10MHz	QPSK	23130	50RB#0	PASS
Band12	10MHz	16QAM	23130	50RB#0	PASS

### Test Graphs

