

Appendix R: Test Data for E-UTRA Band 41

Product Name: Smart Phone

Test Model: ULTRA S25

Environmental Conditions

Temperature:	24.3°C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

R.1 Conducted Output Power Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Power(dBm)	Verdict
Band41(2535-2655)	5MHz	QPSK	40065	1RB#0	24.32	PASS
Band41(2535-2655)	5MHz	QPSK	40065	1RB#12	24.17	PASS
Band41(2535-2655)	5MHz	QPSK	40065	1RB#24	24.37	PASS
Band41(2535-2655)	5MHz	QPSK	40065	12RB#0	23.90	PASS
Band41(2535-2655)	5MHz	QPSK	40065	12RB#6	23.94	PASS
Band41(2535-2655)	5MHz	QPSK	40065	12RB#13	23.84	PASS
Band41(2535-2655)	5MHz	QPSK	40065	25RB#0	23.94	PASS
Band41(2535-2655)	5MHz	16QAM	40065	1RB#0	24.10	PASS
Band41(2535-2655)	5MHz	16QAM	40065	1RB#12	23.79	PASS
Band41(2535-2655)	5MHz	16QAM	40065	1RB#24	23.97	PASS
Band41(2535-2655)	5MHz	16QAM	40065	12RB#0	22.58	PASS
Band41(2535-2655)	5MHz	16QAM	40065	12RB#6	22.49	PASS
Band41(2535-2655)	5MHz	16QAM	40065	12RB#13	22.49	PASS
Band41(2535-2655)	5MHz	16QAM	40065	25RB#0	22.64	PASS
Band41(2535-2655)	5MHz	QPSK	40640	1RB#0	24.31	PASS
Band41(2535-2655)	5MHz	QPSK	40640	1RB#12	24.35	PASS
Band41(2535-2655)	5MHz	QPSK	40640	1RB#24	24.56	PASS
Band41(2535-2655)	5MHz	QPSK	40640	12RB#0	24.02	PASS
Band41(2535-2655)	5MHz	QPSK	40640	12RB#6	23.99	PASS
Band41(2535-2655)	5MHz	QPSK	40640	12RB#13	24.11	PASS
Band41(2535-2655)	5MHz	QPSK	40640	25RB#0	24.06	PASS
Band41(2535-2655)	5MHz	16QAM	40640	1RB#0	24.40	PASS
Band41(2535-2655)	5MHz	16QAM	40640	1RB#12	23.80	PASS
Band41(2535-2655)	5MHz	16QAM	40640	1RB#24	24.51	PASS
Band41(2535-2655)	5MHz	16QAM	40640	12RB#0	22.63	PASS
Band41(2535-2655)	5MHz	16QAM	40640	12RB#6	22.78	PASS
Band41(2535-2655)	5MHz	16QAM	40640	12RB#13	22.73	PASS
Band41(2535-2655)	5MHz	16QAM	40640	25RB#0	22.72	PASS
Band41(2535-2655)	5MHz	QPSK	41215	1RB#0	24.30	PASS
Band41(2535-2655)	5MHz	QPSK	41215	1RB#12	24.13	PASS
Band41(2535-2655)	5MHz	QPSK	41215	1RB#24	24.22	PASS
Band41(2535-2655)	5MHz	QPSK	41215	12RB#0	23.95	PASS
Band41(2535-2655)	5MHz	QPSK	41215	12RB#6	23.97	PASS
Band41(2535-2655)	5MHz	QPSK	41215	12RB#13	23.89	PASS
Band41(2535-2655)	5MHz	QPSK	41215	25RB#0	23.86	PASS
Band41(2535-2655)	5MHz	16QAM	41215	1RB#0	24.77	PASS

Band41(2535-2655)	5MHz	16QAM	41215	1RB#12	23.80	PASS
Band41(2535-2655)	5MHz	16QAM	41215	1RB#24	24.54	PASS
Band41(2535-2655)	5MHz	16QAM	41215	12RB#0	22.44	PASS
Band41(2535-2655)	5MHz	16QAM	41215	12RB#6	22.46	PASS
Band41(2535-2655)	5MHz	16QAM	41215	12RB#13	22.38	PASS
Band41(2535-2655)	5MHz	16QAM	41215	25RB#0	22.51	PASS
Band41(2535-2655)	10MHz	QPSK	40090	1RB#0	24.89	PASS
Band41(2535-2655)	10MHz	QPSK	40090	1RB#24	24.64	PASS
Band41(2535-2655)	10MHz	QPSK	40090	1RB#49	24.82	PASS
Band41(2535-2655)	10MHz	QPSK	40090	25RB#0	24.17	PASS
Band41(2535-2655)	10MHz	QPSK	40090	25RB#12	24.27	PASS
Band41(2535-2655)	10MHz	QPSK	40090	25RB#25	24.28	PASS
Band41(2535-2655)	10MHz	QPSK	40090	50RB#0	24.28	PASS
Band41(2535-2655)	10MHz	16QAM	40090	1RB#0	24.55	PASS
Band41(2535-2655)	10MHz	16QAM	40090	1RB#24	24.77	PASS
Band41(2535-2655)	10MHz	16QAM	40090	1RB#49	24.47	PASS
Band41(2535-2655)	10MHz	16QAM	40090	25RB#0	22.85	PASS
Band41(2535-2655)	10MHz	16QAM	40090	25RB#12	22.83	PASS
Band41(2535-2655)	10MHz	16QAM	40090	25RB#25	22.83	PASS
Band41(2535-2655)	10MHz	16QAM	40090	50RB#0	22.80	PASS
Band41(2535-2655)	10MHz	QPSK	40640	1RB#0	24.77	PASS
Band41(2535-2655)	10MHz	QPSK	40640	1RB#24	24.98	PASS
Band41(2535-2655)	10MHz	QPSK	40640	1RB#49	25.10	PASS
Band41(2535-2655)	10MHz	QPSK	40640	25RB#0	24.41	PASS
Band41(2535-2655)	10MHz	QPSK	40640	25RB#12	24.53	PASS
Band41(2535-2655)	10MHz	QPSK	40640	25RB#25	24.67	PASS
Band41(2535-2655)	10MHz	QPSK	40640	50RB#0	24.56	PASS
Band41(2535-2655)	10MHz	16QAM	40640	1RB#0	24.19	PASS
Band41(2535-2655)	10MHz	16QAM	40640	1RB#24	24.82	PASS
Band41(2535-2655)	10MHz	16QAM	40640	1RB#49	24.38	PASS
Band41(2535-2655)	10MHz	16QAM	40640	25RB#0	23.33	PASS
Band41(2535-2655)	10MHz	16QAM	40640	25RB#12	23.21	PASS
Band41(2535-2655)	10MHz	16QAM	40640	25RB#25	23.51	PASS
Band41(2535-2655)	10MHz	16QAM	40640	50RB#0	23.12	PASS
Band41(2535-2655)	10MHz	QPSK	41190	1RB#0	24.96	PASS
Band41(2535-2655)	10MHz	QPSK	41190	1RB#24	24.81	PASS
Band41(2535-2655)	10MHz	QPSK	41190	1RB#49	24.82	PASS
Band41(2535-2655)	10MHz	QPSK	41190	25RB#0	24.49	PASS
Band41(2535-2655)	10MHz	QPSK	41190	25RB#12	24.27	PASS
Band41(2535-2655)	10MHz	QPSK	41190	25RB#25	24.36	PASS
Band41(2535-2655)	10MHz	QPSK	41190	50RB#0	24.31	PASS

Band41(2535-2655)	10MHz	16QAM	41190	1RB#0	24.79	PASS
Band41(2535-2655)	10MHz	16QAM	41190	1RB#24	24.12	PASS
Band41(2535-2655)	10MHz	16QAM	41190	1RB#49	24.61	PASS
Band41(2535-2655)	10MHz	16QAM	41190	25RB#0	23.19	PASS
Band41(2535-2655)	10MHz	16QAM	41190	25RB#12	22.96	PASS
Band41(2535-2655)	10MHz	16QAM	41190	25RB#25	23.06	PASS
Band41(2535-2655)	10MHz	16QAM	41190	50RB#0	23.10	PASS
Band41(2535-2655)	15MHz	QPSK	40115	1RB#0	24.81	PASS
Band41(2535-2655)	15MHz	QPSK	40115	1RB#38	24.61	PASS
Band41(2535-2655)	15MHz	QPSK	40115	1RB#74	24.72	PASS
Band41(2535-2655)	15MHz	QPSK	40115	38RB#0	24.19	PASS
Band41(2535-2655)	15MHz	QPSK	40115	38RB#18	24.23	PASS
Band41(2535-2655)	15MHz	QPSK	40115	38RB#37	24.20	PASS
Band41(2535-2655)	15MHz	QPSK	40115	75RB#0	24.16	PASS
Band41(2535-2655)	15MHz	16QAM	40115	1RB#0	24.56	PASS
Band41(2535-2655)	15MHz	16QAM	40115	1RB#38	24.75	PASS
Band41(2535-2655)	15MHz	16QAM	40115	1RB#74	24.33	PASS
Band41(2535-2655)	15MHz	16QAM	40115	38RB#0	22.77	PASS
Band41(2535-2655)	15MHz	16QAM	40115	38RB#18	22.77	PASS
Band41(2535-2655)	15MHz	16QAM	40115	38RB#37	22.74	PASS
Band41(2535-2655)	15MHz	16QAM	40115	75RB#0	22.86	PASS
Band41(2535-2655)	15MHz	QPSK	40640	1RB#0	24.75	PASS
Band41(2535-2655)	15MHz	QPSK	40640	1RB#38	25.13	PASS
Band41(2535-2655)	15MHz	QPSK	40640	1RB#74	25.27	PASS
Band41(2535-2655)	15MHz	QPSK	40640	38RB#0	24.39	PASS
Band41(2535-2655)	15MHz	QPSK	40640	38RB#18	24.46	PASS
Band41(2535-2655)	15MHz	QPSK	40640	38RB#37	24.59	PASS
Band41(2535-2655)	15MHz	QPSK	40640	75RB#0	24.52	PASS
Band41(2535-2655)	15MHz	16QAM	40640	1RB#0	23.48	PASS
Band41(2535-2655)	15MHz	16QAM	40640	1RB#38	24.71	PASS
Band41(2535-2655)	15MHz	16QAM	40640	1RB#74	23.94	PASS
Band41(2535-2655)	15MHz	16QAM	40640	38RB#0	22.99	PASS
Band41(2535-2655)	15MHz	16QAM	40640	38RB#18	23.13	PASS
Band41(2535-2655)	15MHz	16QAM	40640	38RB#37	23.29	PASS
Band41(2535-2655)	15MHz	16QAM	40640	75RB#0	23.25	PASS
Band41(2535-2655)	15MHz	QPSK	41165	1RB#0	25.28	PASS
Band41(2535-2655)	15MHz	QPSK	41165	1RB#38	25.04	PASS
Band41(2535-2655)	15MHz	QPSK	41165	1RB#74	24.89	PASS
Band41(2535-2655)	15MHz	QPSK	41165	38RB#0	24.46	PASS
Band41(2535-2655)	15MHz	QPSK	41165	38RB#18	24.34	PASS
Band41(2535-2655)	15MHz	QPSK	41165	38RB#37	24.24	PASS

Band41(2535-2655)	15MHz	QPSK	41165	75RB#0	24.36	PASS
Band41(2535-2655)	15MHz	16QAM	41165	1RB#0	24.90	PASS
Band41(2535-2655)	15MHz	16QAM	41165	1RB#38	24.35	PASS
Band41(2535-2655)	15MHz	16QAM	41165	1RB#74	24.50	PASS
Band41(2535-2655)	15MHz	16QAM	41165	38RB#0	23.05	PASS
Band41(2535-2655)	15MHz	16QAM	41165	38RB#18	23.06	PASS
Band41(2535-2655)	15MHz	16QAM	41165	38RB#37	22.98	PASS
Band41(2535-2655)	15MHz	16QAM	41165	75RB#0	23.01	PASS
Band41(2535-2655)	20MHz	QPSK	40140	1RB#0	24.87	PASS
Band41(2535-2655)	20MHz	QPSK	40140	1RB#49	24.57	PASS
Band41(2535-2655)	20MHz	QPSK	40140	1RB#99	24.53	PASS
Band41(2535-2655)	20MHz	QPSK	40140	50RB#0	24.28	PASS
Band41(2535-2655)	20MHz	QPSK	40140	50RB#25	24.07	PASS
Band41(2535-2655)	20MHz	QPSK	40140	50RB#50	24.02	PASS
Band41(2535-2655)	20MHz	QPSK	40140	100RB#0	24.08	PASS
Band41(2535-2655)	20MHz	16QAM	40140	1RB#0	24.67	PASS
Band41(2535-2655)	20MHz	16QAM	40140	1RB#49	23.82	PASS
Band41(2535-2655)	20MHz	16QAM	40140	1RB#99	24.50	PASS
Band41(2535-2655)	20MHz	16QAM	40140	50RB#0	22.91	PASS
Band41(2535-2655)	20MHz	16QAM	40140	50RB#25	22.85	PASS
Band41(2535-2655)	20MHz	16QAM	40140	50RB#50	22.79	PASS
Band41(2535-2655)	20MHz	16QAM	40140	100RB#0	22.82	PASS
Band41(2535-2655)	20MHz	QPSK	40640	1RB#0	24.81	PASS
Band41(2535-2655)	20MHz	QPSK	40640	1RB#49	25.02	PASS
Band41(2535-2655)	20MHz	QPSK	40640	1RB#99	25.35	PASS
Band41(2535-2655)	20MHz	QPSK	40640	50RB#0	24.35	PASS
Band41(2535-2655)	20MHz	QPSK	40640	50RB#25	24.60	PASS
Band41(2535-2655)	20MHz	QPSK	40640	50RB#50	24.59	PASS
Band41(2535-2655)	20MHz	QPSK	40640	100RB#0	24.46	PASS
Band41(2535-2655)	20MHz	16QAM	40640	1RB#0	24.27	PASS
Band41(2535-2655)	20MHz	16QAM	40640	1RB#49	24.29	PASS
Band41(2535-2655)	20MHz	16QAM	40640	1RB#99	24.76	PASS
Band41(2535-2655)	20MHz	16QAM	40640	50RB#0	23.03	PASS
Band41(2535-2655)	20MHz	16QAM	40640	50RB#25	23.24	PASS
Band41(2535-2655)	20MHz	16QAM	40640	50RB#50	23.35	PASS
Band41(2535-2655)	20MHz	16QAM	40640	100RB#0	23.20	PASS
Band41(2535-2655)	20MHz	QPSK	41140	1RB#0	25.03	PASS
Band41(2535-2655)	20MHz	QPSK	41140	1RB#49	25.09	PASS
Band41(2535-2655)	20MHz	QPSK	41140	1RB#99	24.83	PASS
Band41(2535-2655)	20MHz	QPSK	41140	50RB#0	24.38	PASS
Band41(2535-2655)	20MHz	QPSK	41140	50RB#25	24.13	PASS

Band41(2535-2655)	20MHz	QPSK	41140	50RB#50	23.98	PASS
Band41(2535-2655)	20MHz	QPSK	41140	100RB#0	24.23	PASS
Band41(2535-2655)	20MHz	16QAM	41140	1RB#0	24.42	PASS
Band41(2535-2655)	20MHz	16QAM	41140	1RB#49	24.18	PASS
Band41(2535-2655)	20MHz	16QAM	41140	1RB#99	23.95	PASS
Band41(2535-2655)	20MHz	16QAM	41140	50RB#0	23.01	PASS
Band41(2535-2655)	20MHz	16QAM	41140	50RB#25	22.76	PASS
Band41(2535-2655)	20MHz	16QAM	41140	50RB#50	22.73	PASS
Band41(2535-2655)	20MHz	16QAM	41140	100RB#0	22.70	PASS

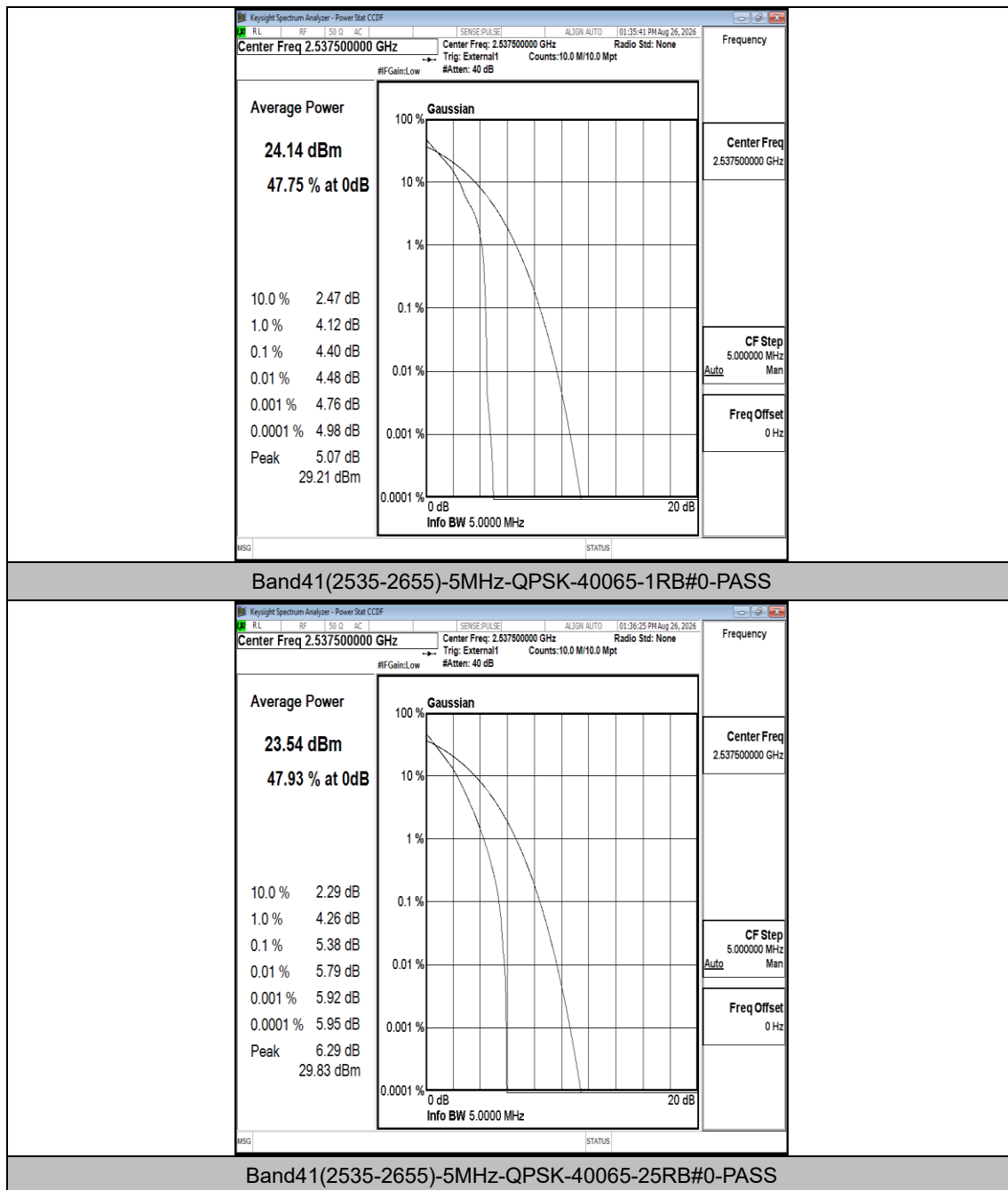
R.2 Peak-to-Average Ratio(CCDF)

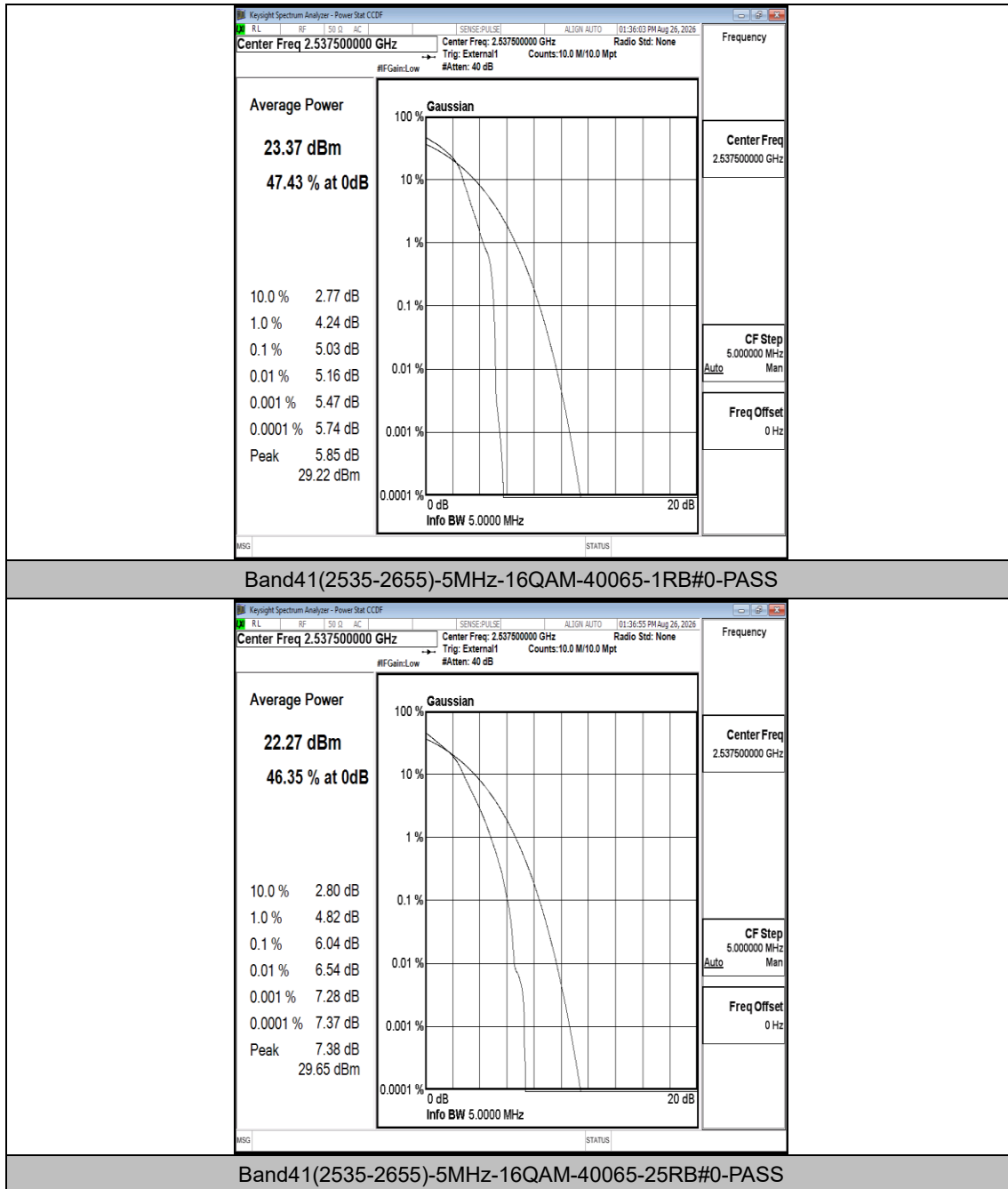
Test Result

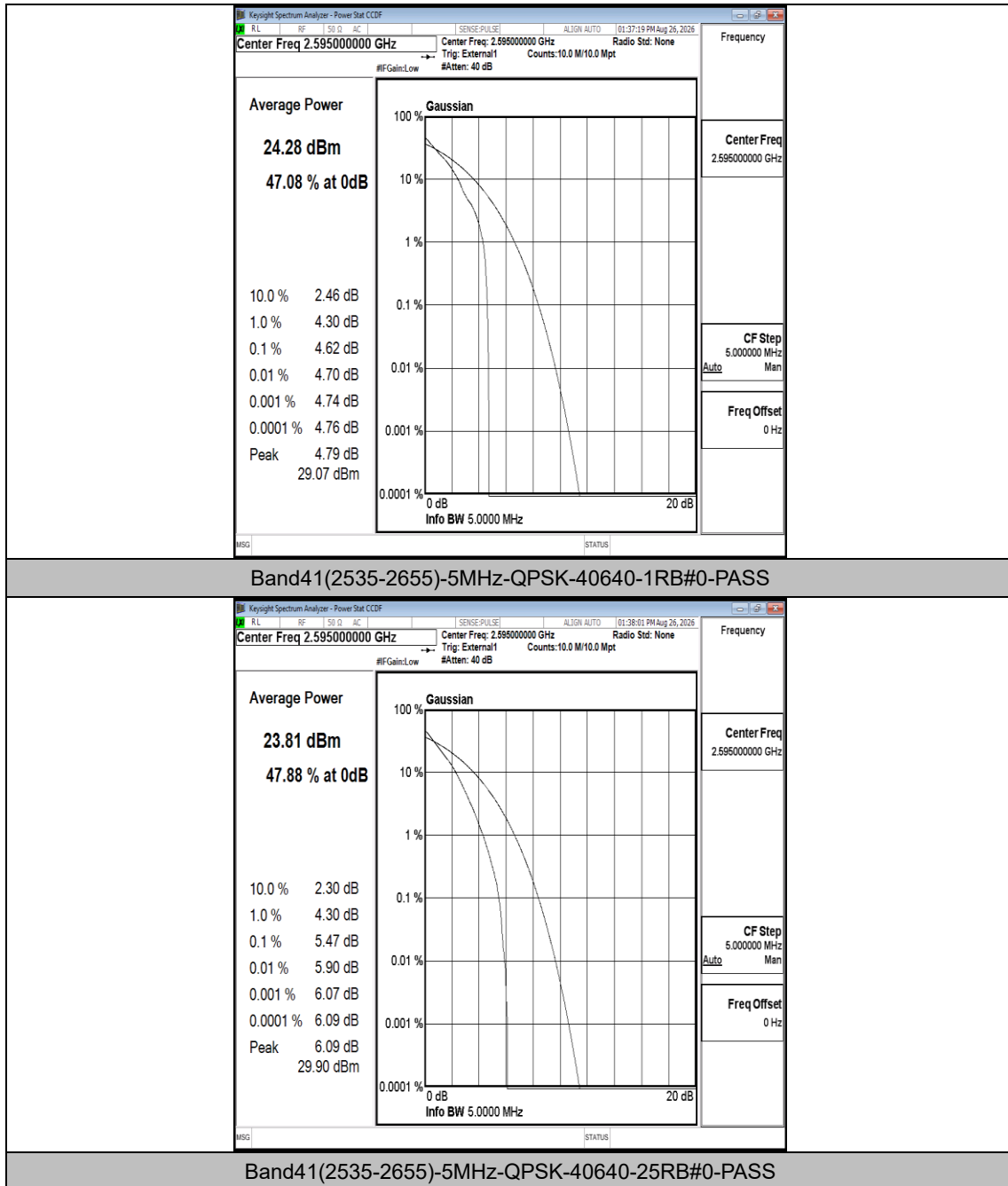
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band41(2535-2655)	5MHz	QPSK	40065	1RB#0	4.40	13	PASS
Band41(2535-2655)	5MHz	QPSK	40065	25RB#0	5.38	13	PASS
Band41(2535-2655)	5MHz	16QAM	40065	1RB#0	5.03	13	PASS
Band41(2535-2655)	5MHz	16QAM	40065	25RB#0	6.04	13	PASS
Band41(2535-2655)	5MHz	QPSK	40640	1RB#0	4.62	13	PASS
Band41(2535-2655)	5MHz	QPSK	40640	25RB#0	5.47	13	PASS
Band41(2535-2655)	5MHz	16QAM	40640	1RB#0	5.24	13	PASS
Band41(2535-2655)	5MHz	16QAM	40640	25RB#0	6.10	13	PASS
Band41(2535-2655)	5MHz	QPSK	41215	1RB#0	4.40	13	PASS
Band41(2535-2655)	5MHz	QPSK	41215	25RB#0	5.38	13	PASS
Band41(2535-2655)	5MHz	16QAM	41215	1RB#0	5.05	13	PASS
Band41(2535-2655)	5MHz	16QAM	41215	25RB#0	6.06	13	PASS
Band41(2535-2655)	10MHz	QPSK	40090	1RB#0	4.64	13	PASS
Band41(2535-2655)	10MHz	QPSK	40090	50RB#0	5.34	13	PASS
Band41(2535-2655)	10MHz	16QAM	40090	1RB#0	5.13	13	PASS
Band41(2535-2655)	10MHz	16QAM	40090	50RB#0	6.01	13	PASS
Band41(2535-2655)	10MHz	QPSK	40640	1RB#0	5.08	13	PASS
Band41(2535-2655)	10MHz	QPSK	40640	50RB#0	5.42	13	PASS
Band41(2535-2655)	10MHz	16QAM	40640	1RB#0	5.50	13	PASS
Band41(2535-2655)	10MHz	16QAM	40640	50RB#0	6.07	13	PASS
Band41(2535-2655)	10MHz	QPSK	41190	1RB#0	4.43	13	PASS
Band41(2535-2655)	10MHz	QPSK	41190	50RB#0	5.30	13	PASS
Band41(2535-2655)	10MHz	16QAM	41190	1RB#0	4.97	13	PASS
Band41(2535-2655)	10MHz	16QAM	41190	50RB#0	6.02	13	PASS
Band41(2535-2655)	15MHz	QPSK	40115	1RB#0	4.64	13	PASS
Band41(2535-2655)	15MHz	QPSK	40115	75RB#0	5.53	13	PASS
Band41(2535-2655)	15MHz	16QAM	40115	1RB#0	5.10	13	PASS
Band41(2535-2655)	15MHz	16QAM	40115	75RB#0	6.13	13	PASS
Band41(2535-2655)	15MHz	QPSK	40640	1RB#0	5.14	13	PASS
Band41(2535-2655)	15MHz	QPSK	40640	75RB#0	5.61	13	PASS
Band41(2535-2655)	15MHz	16QAM	40640	1RB#0	5.50	13	PASS
Band41(2535-2655)	15MHz	16QAM	40640	75RB#0	6.17	13	PASS
Band41(2535-2655)	15MHz	QPSK	41165	1RB#0	4.48	13	PASS
Band41(2535-2655)	15MHz	QPSK	41165	75RB#0	5.47	13	PASS
Band41(2535-2655)	15MHz	16QAM	41165	1RB#0	5.08	13	PASS

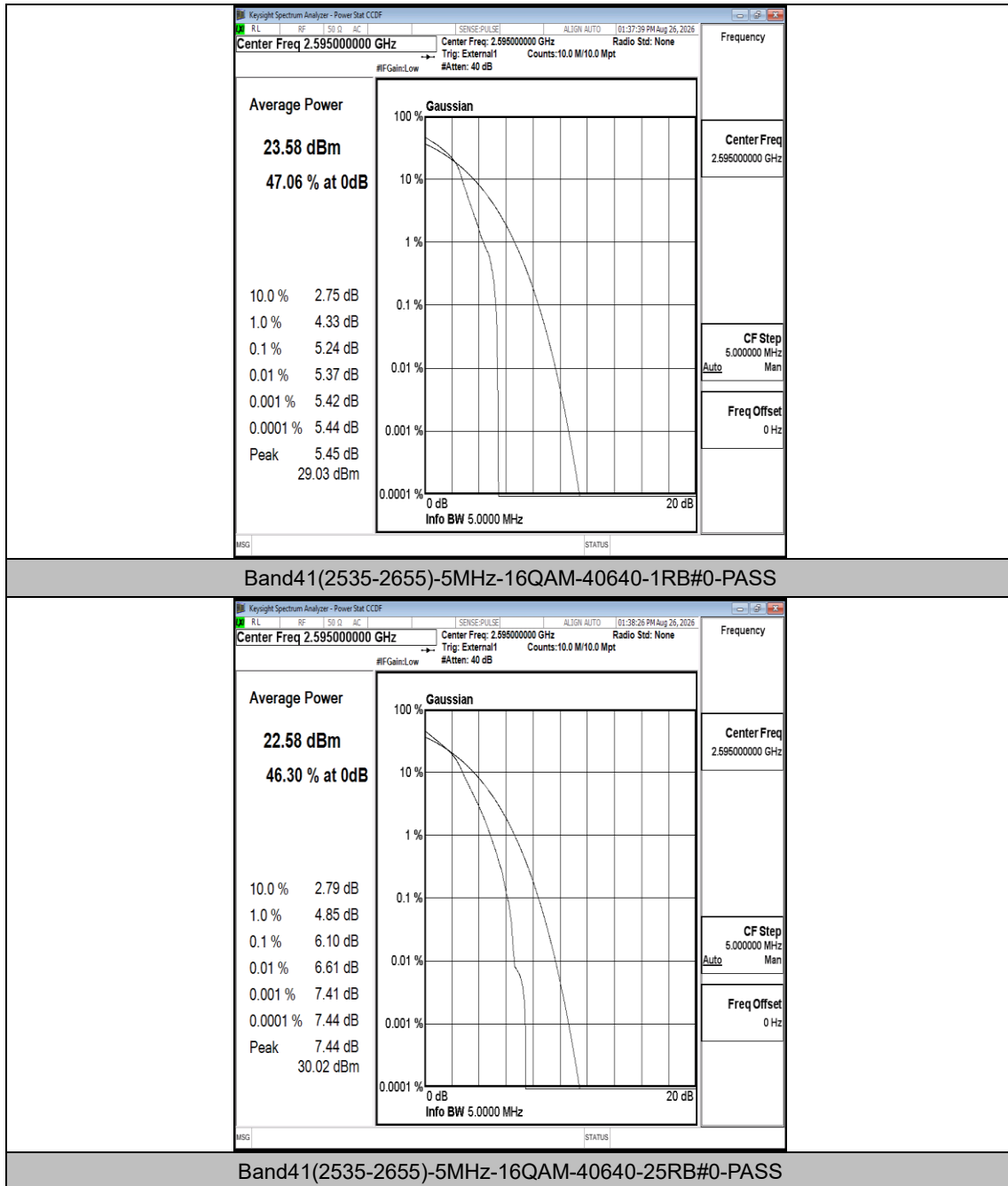
Band41(2535-2655)	15MHz	16QAM	41165	75RB#0	6.07	13	PASS
Band41(2535-2655)	20MHz	QPSK	40140	1RB#0	4.34	13	PASS
Band41(2535-2655)	20MHz	QPSK	40140	100RB#0	5.26	13	PASS
Band41(2535-2655)	20MHz	16QAM	40140	1RB#0	4.61	13	PASS
Band41(2535-2655)	20MHz	16QAM	40140	100RB#0	5.99	13	PASS
Band41(2535-2655)	20MHz	QPSK	40640	1RB#0	4.71	13	PASS
Band41(2535-2655)	20MHz	QPSK	40640	100RB#0	5.29	13	PASS
Band41(2535-2655)	20MHz	16QAM	40640	1RB#0	4.97	13	PASS
Band41(2535-2655)	20MHz	16QAM	40640	100RB#0	6.00	13	PASS
Band41(2535-2655)	20MHz	QPSK	41140	1RB#0	4.27	13	PASS
Band41(2535-2655)	20MHz	QPSK	41140	100RB#0	5.22	13	PASS
Band41(2535-2655)	20MHz	16QAM	41140	1RB#0	4.32	13	PASS
Band41(2535-2655)	20MHz	16QAM	41140	100RB#0	6.05	13	PASS

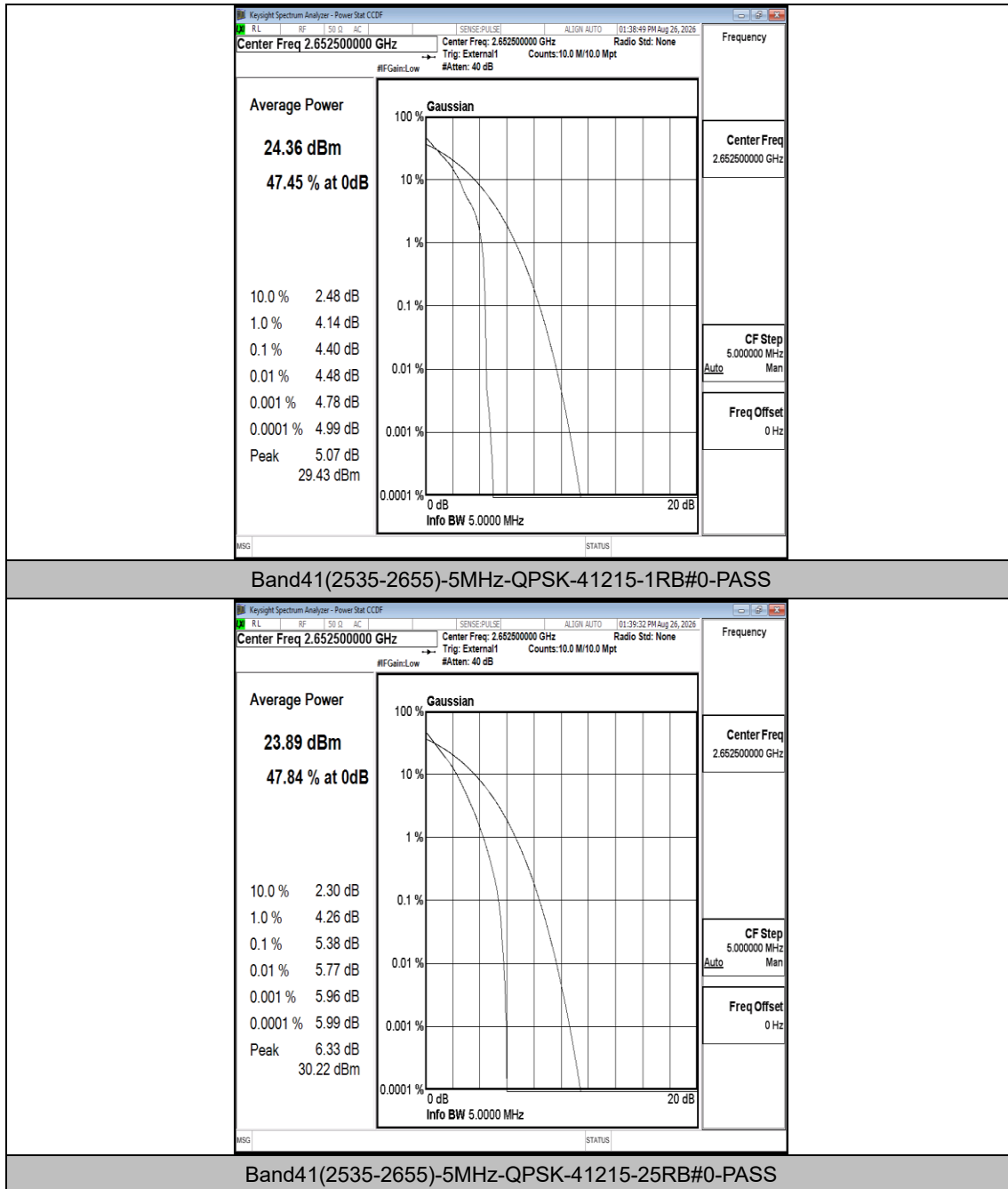
Test Graphs

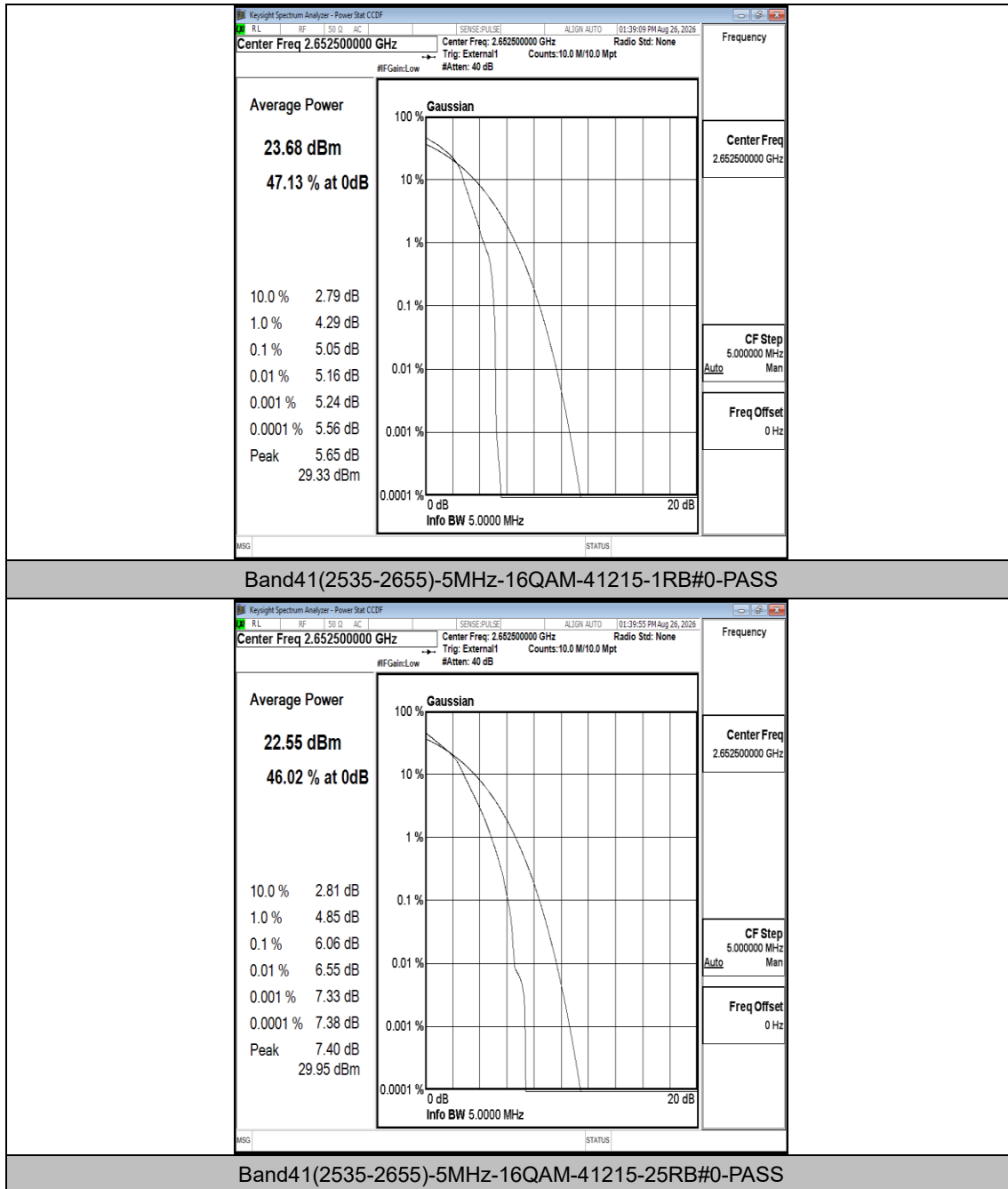


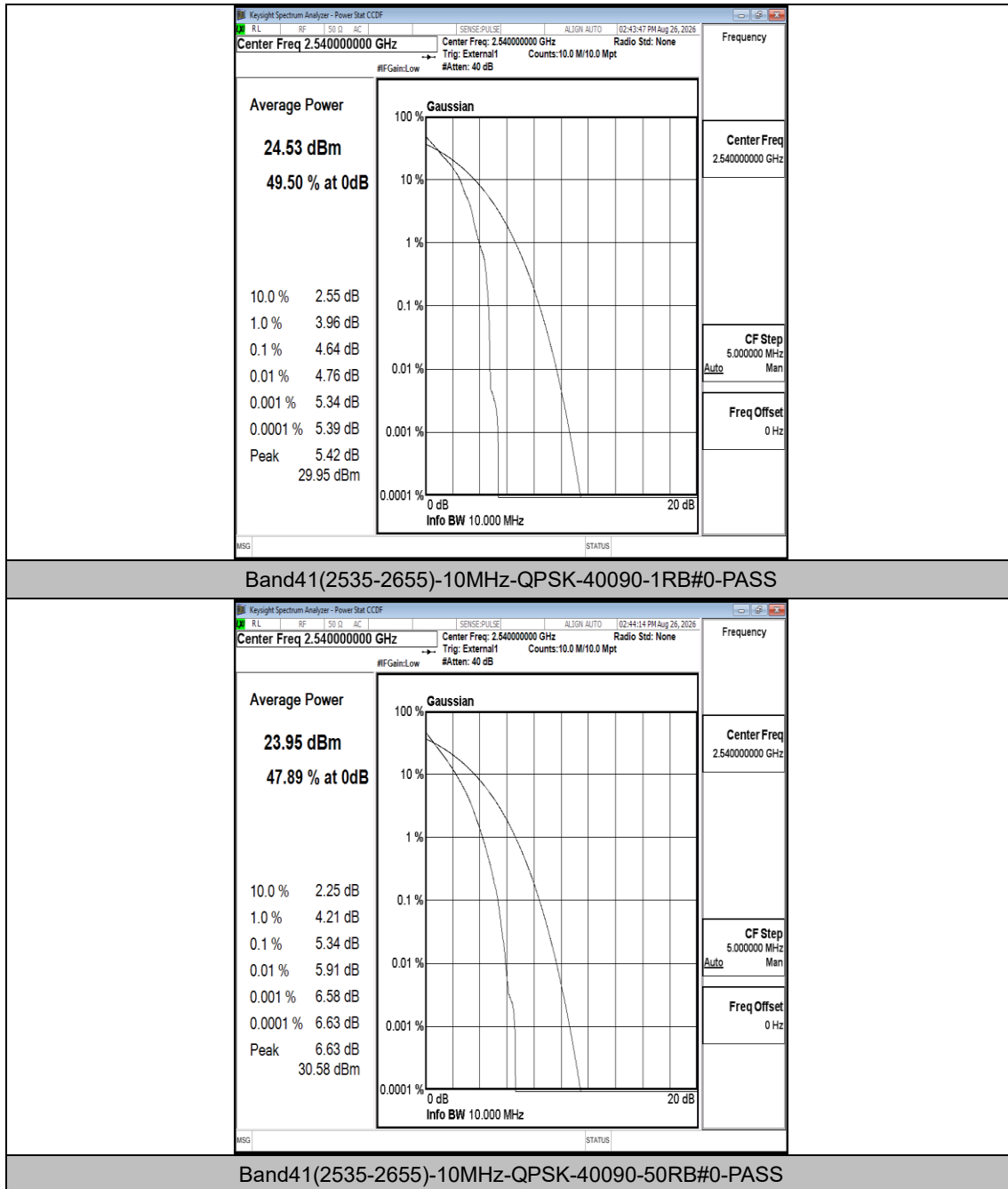


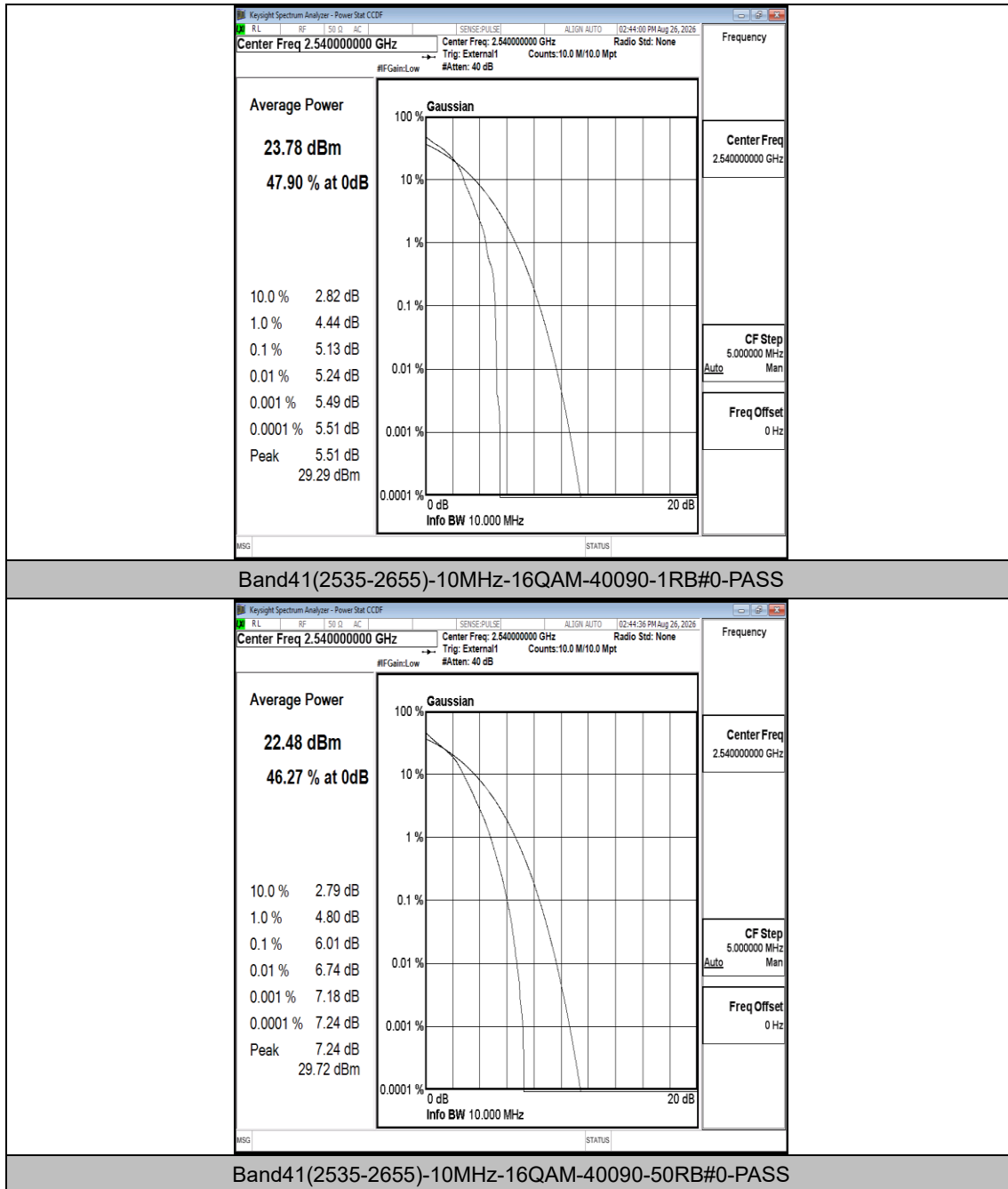


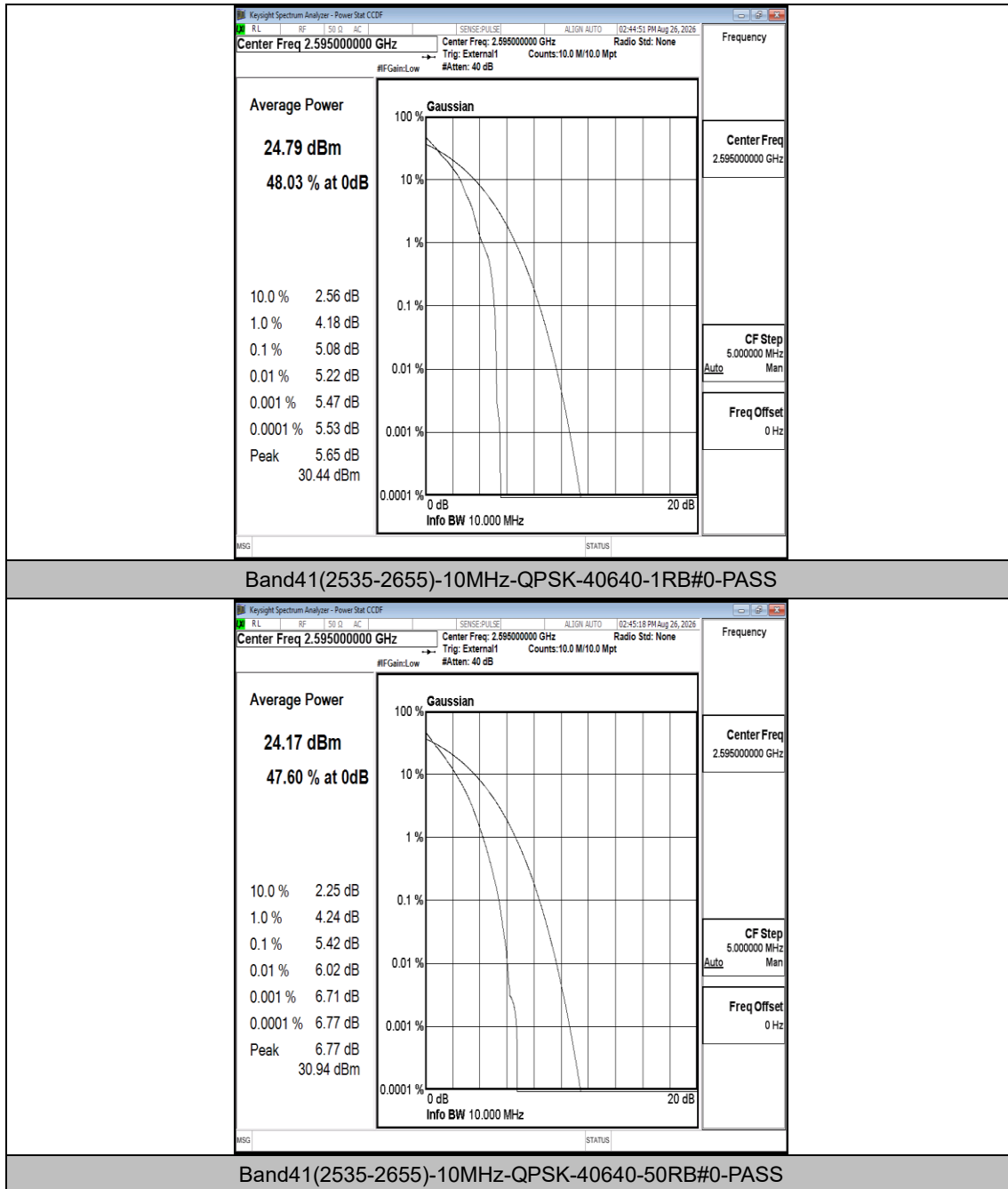


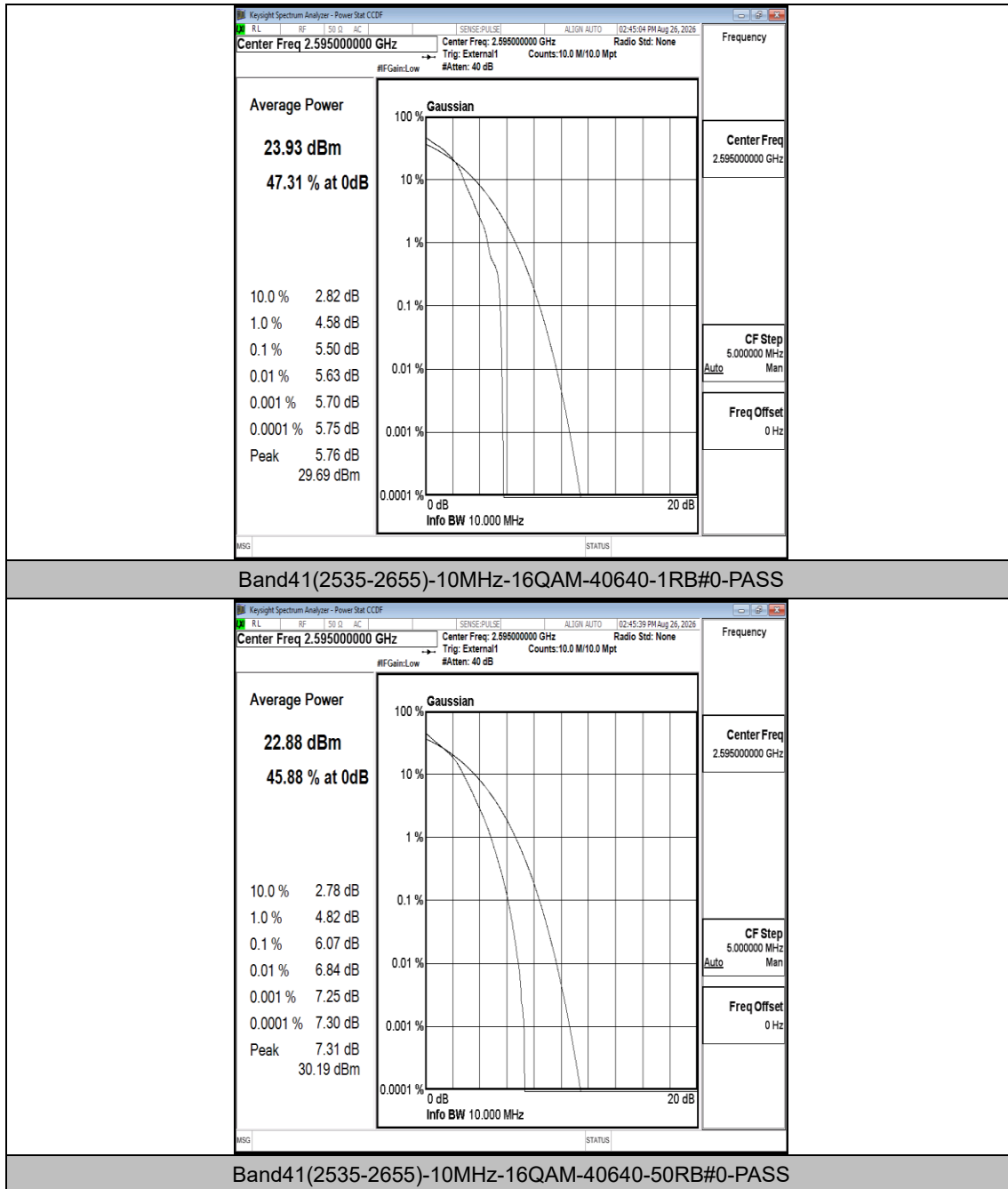


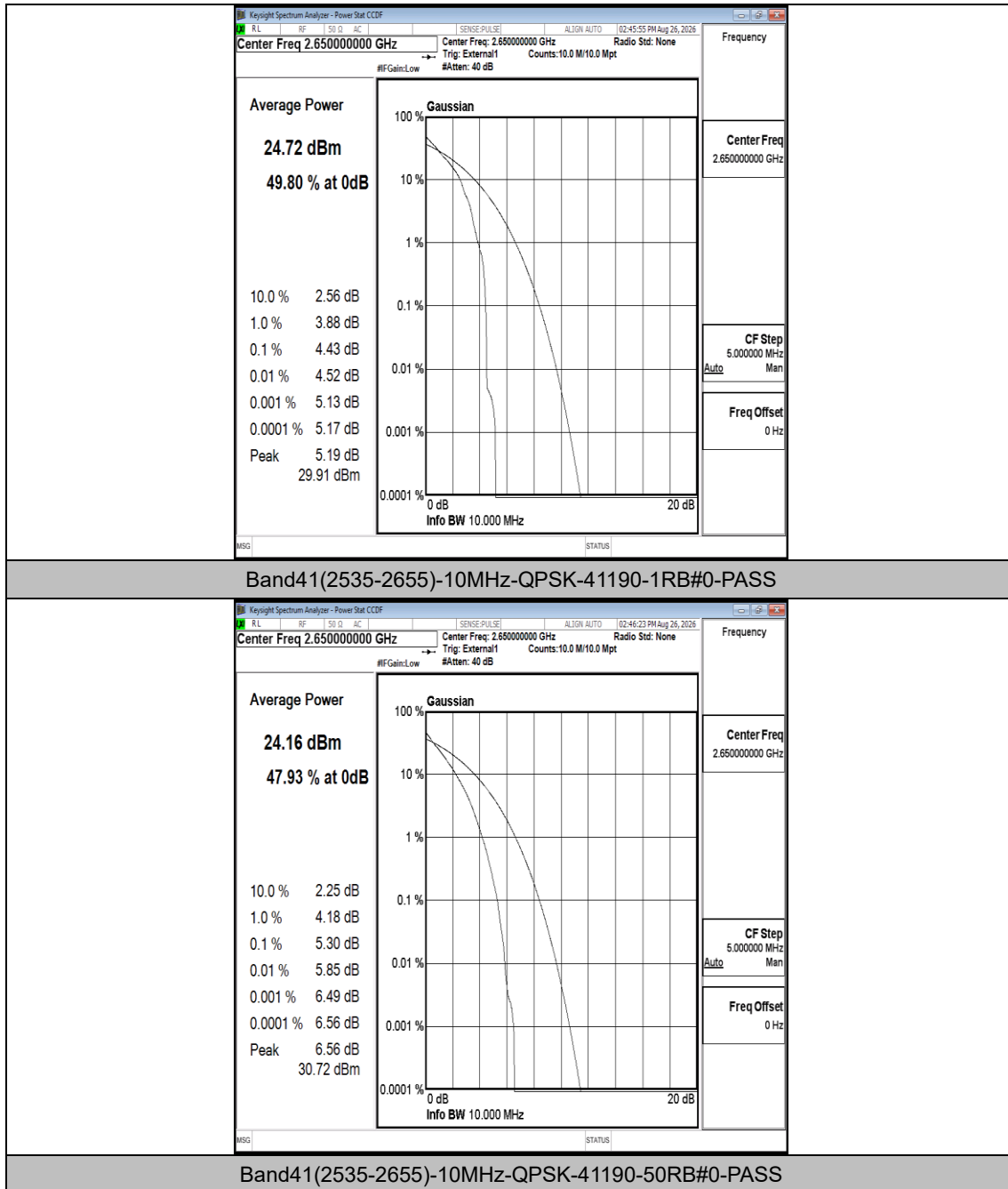


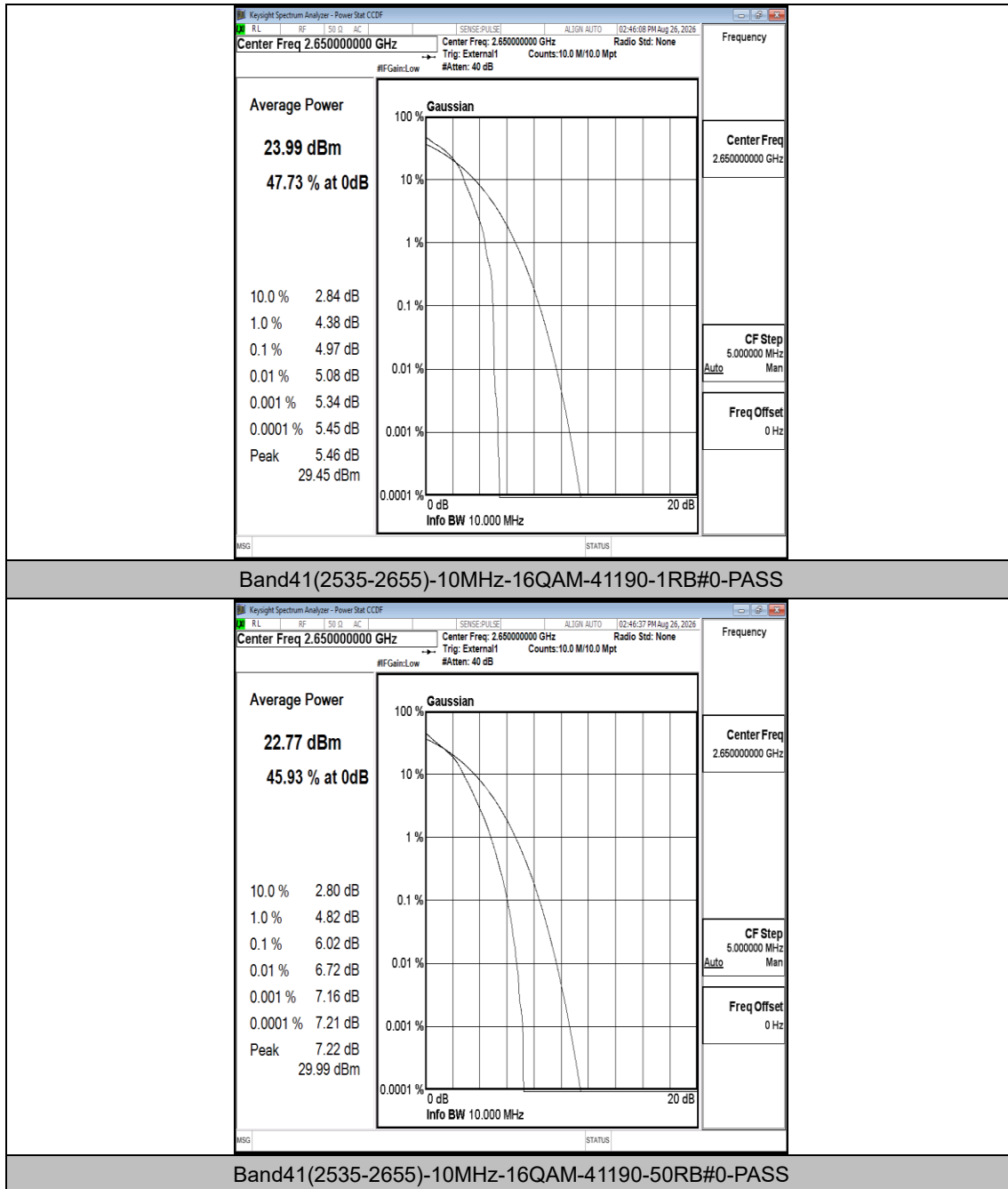


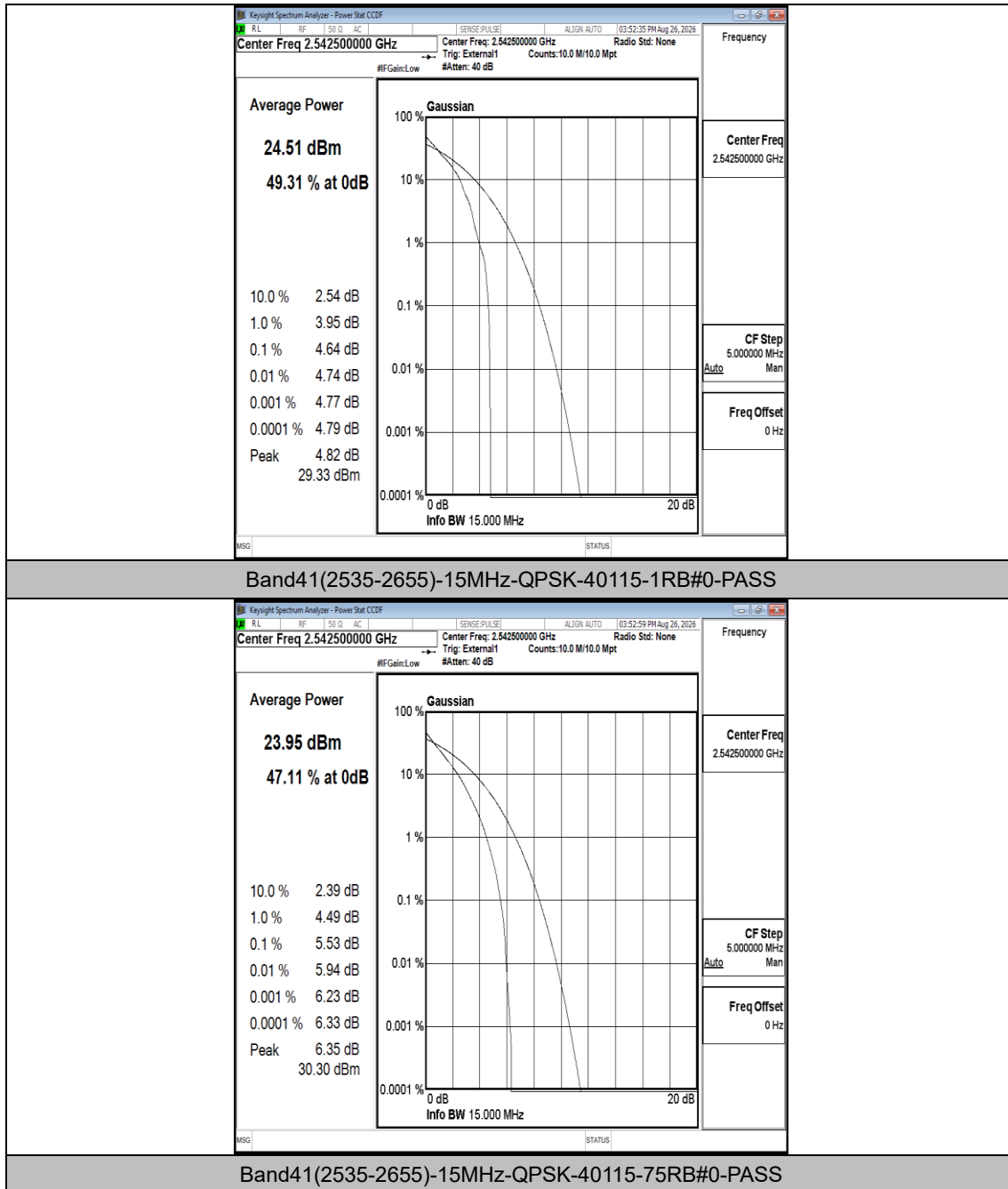


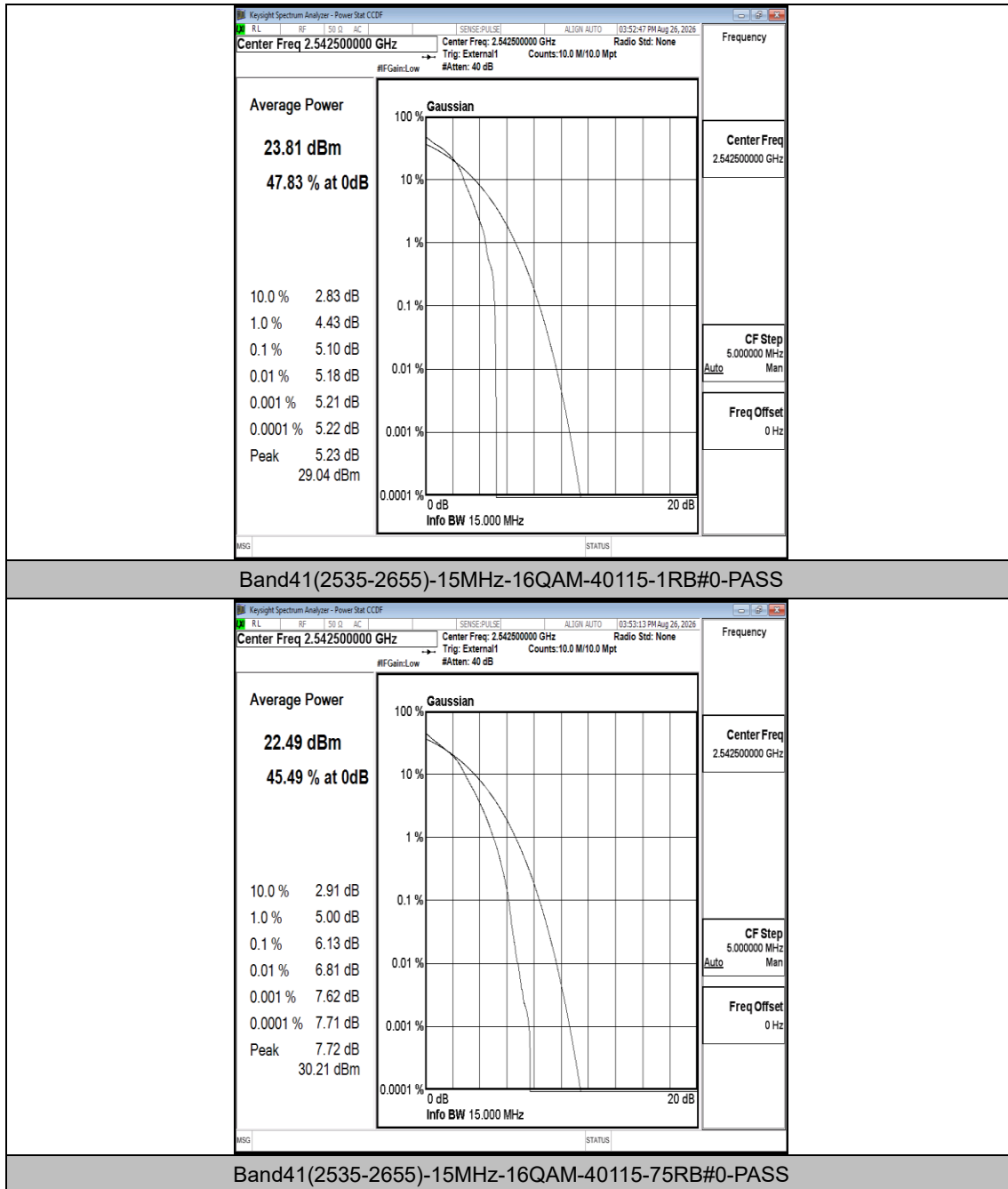


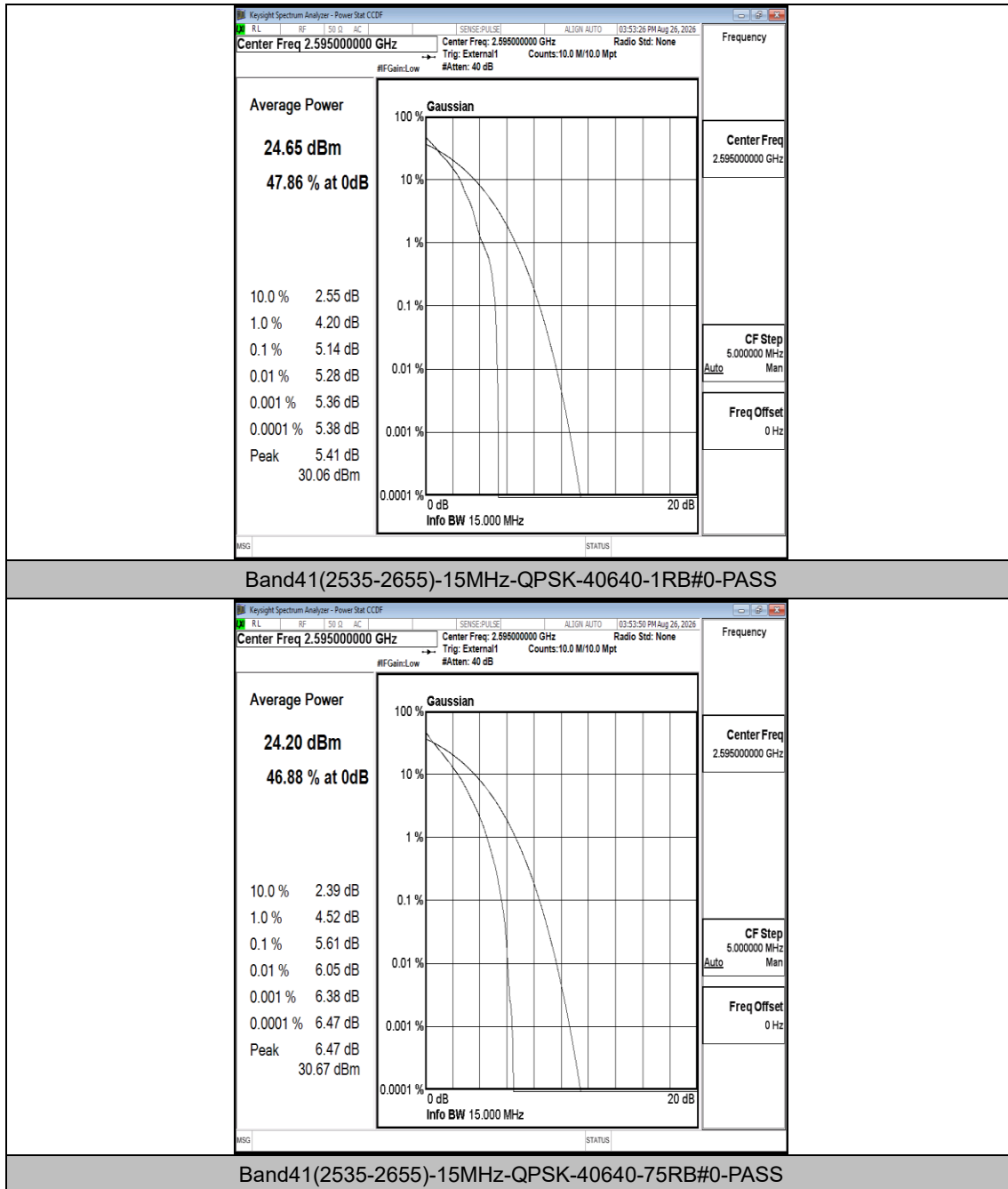


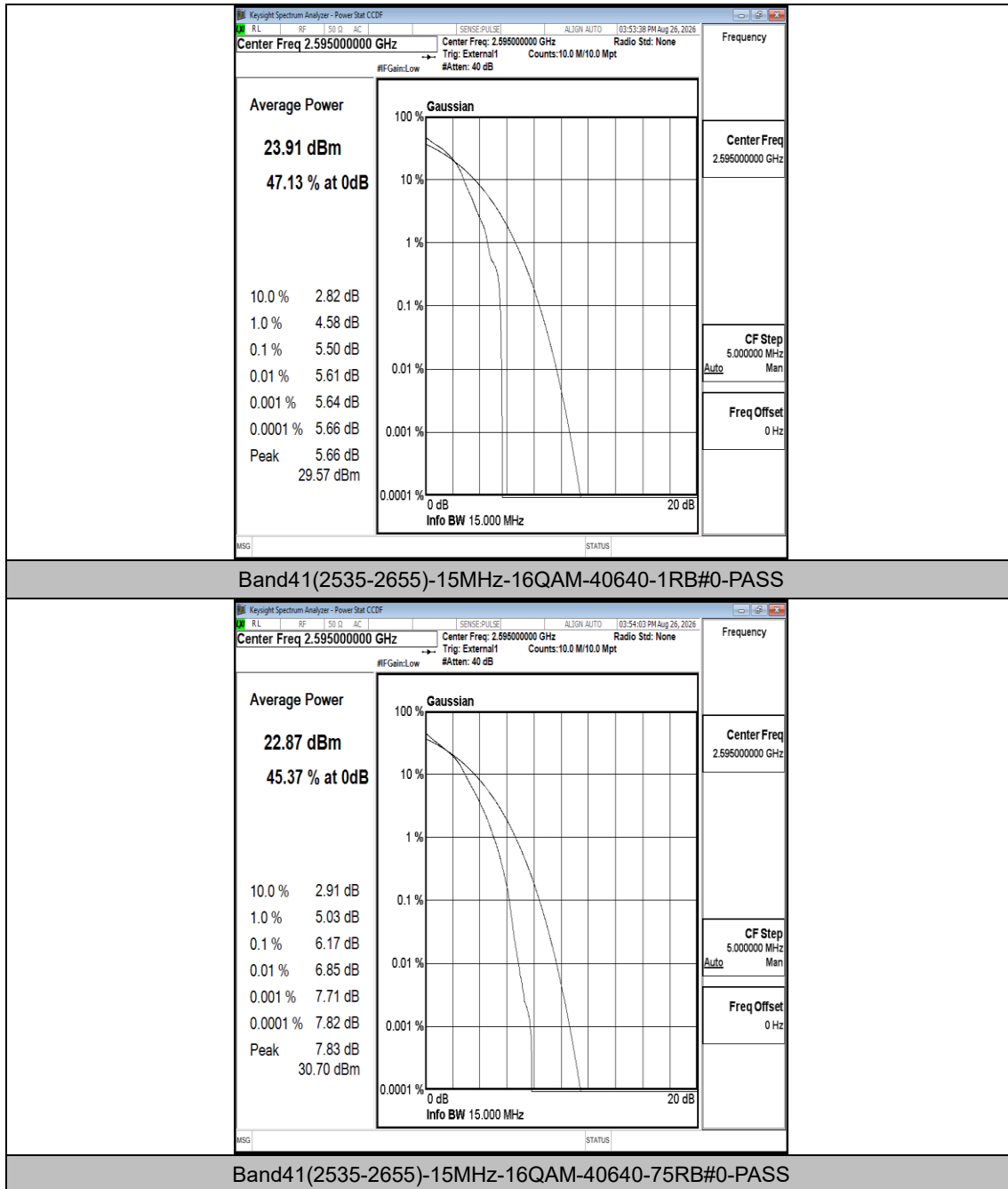


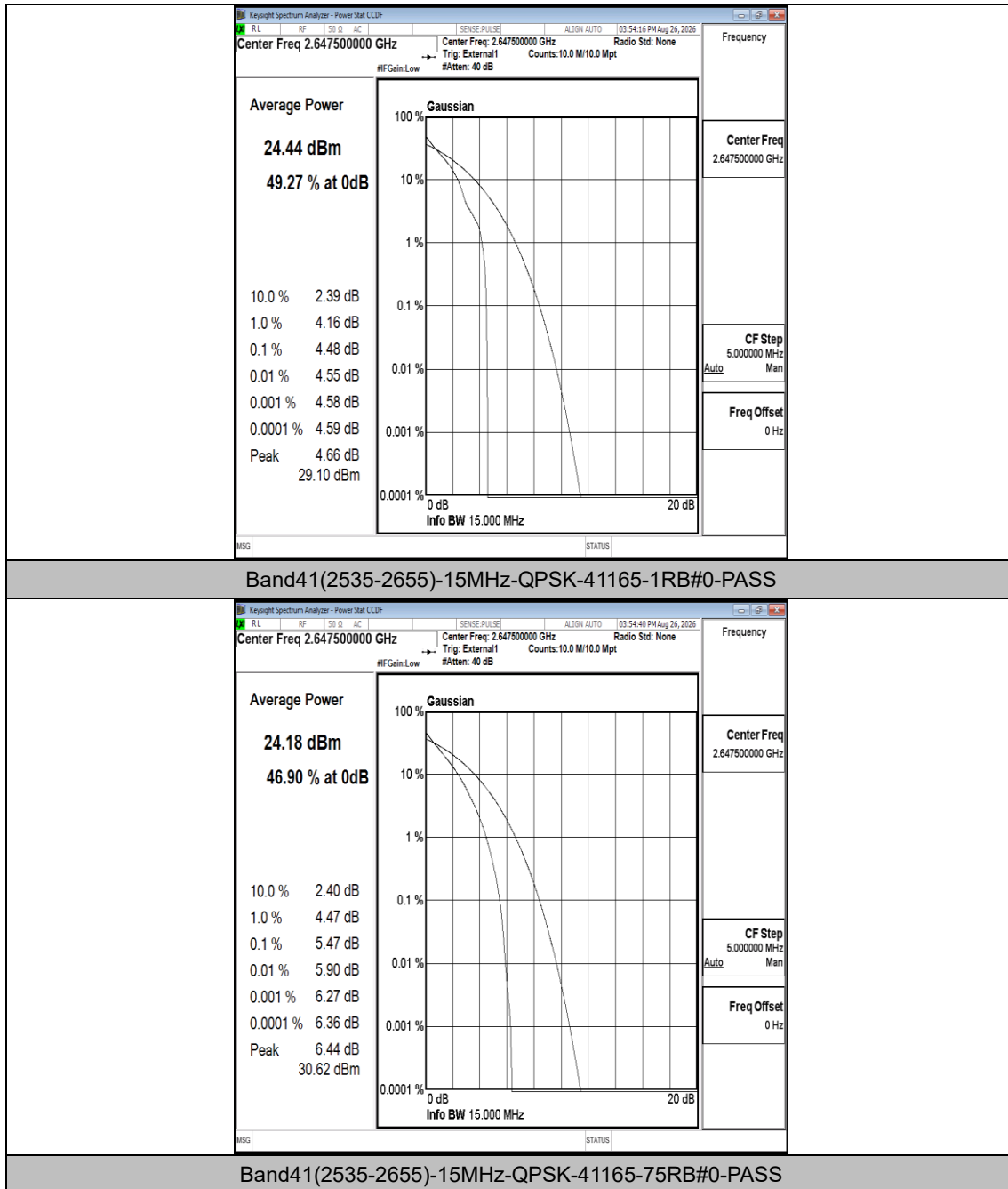


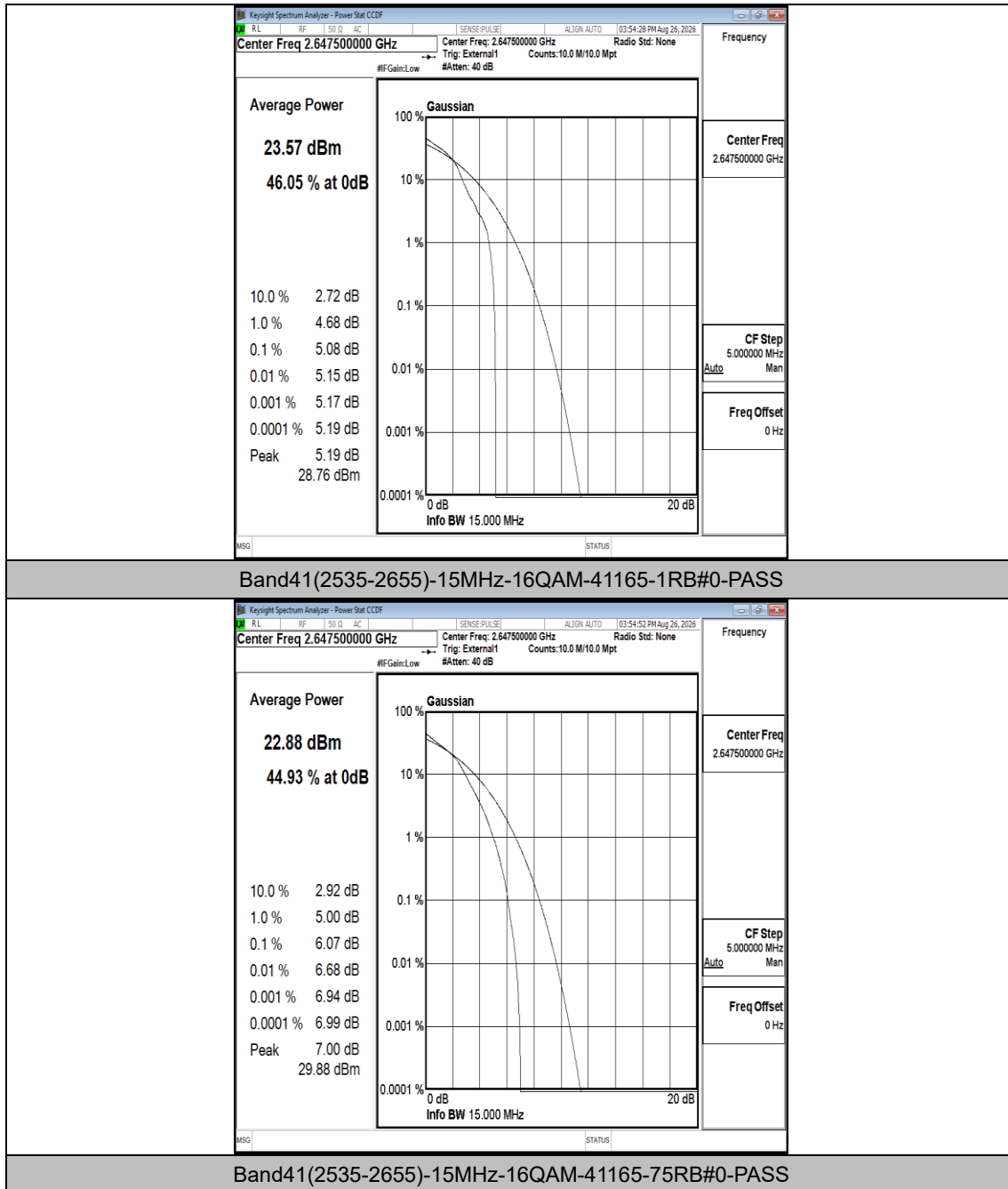


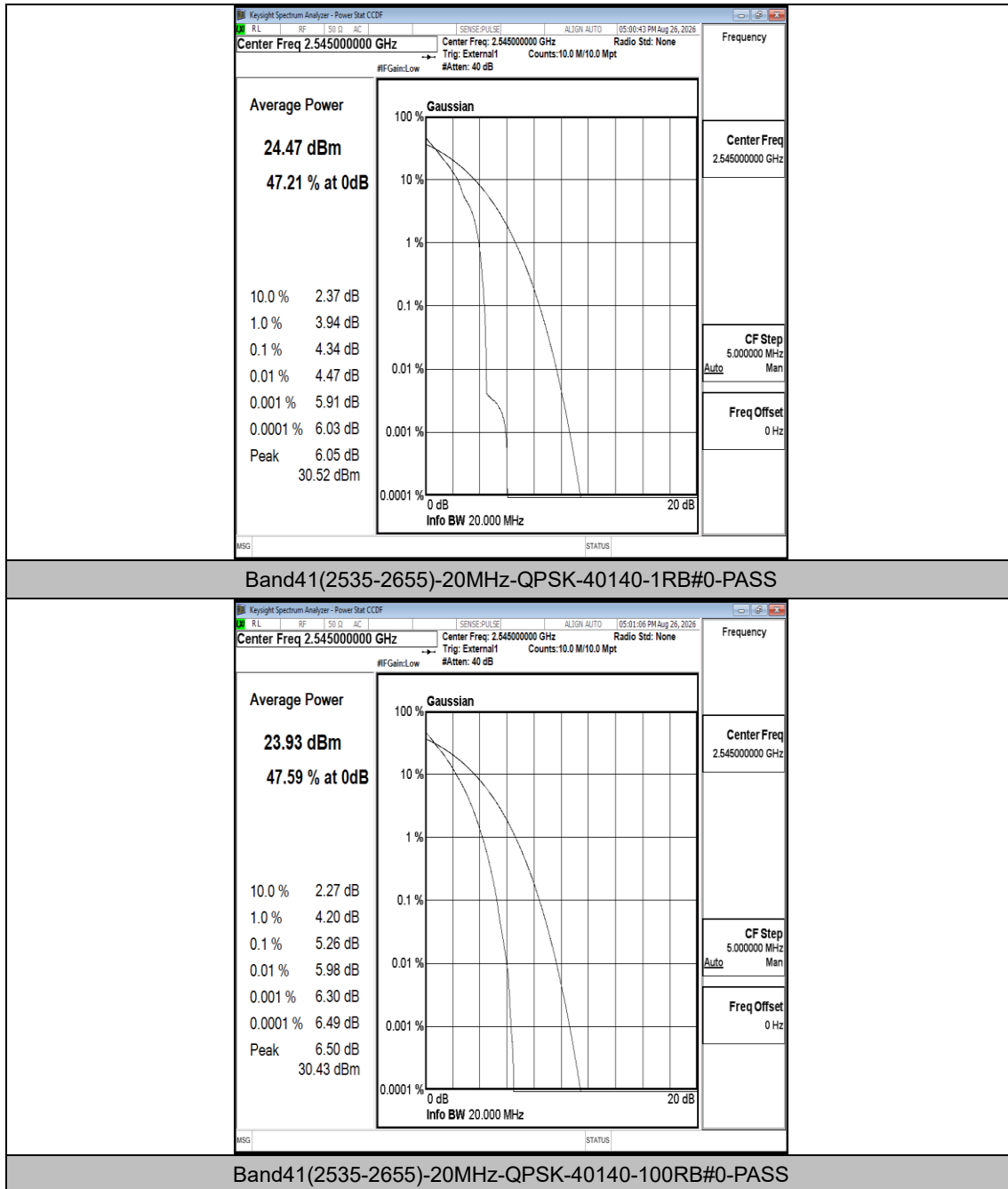


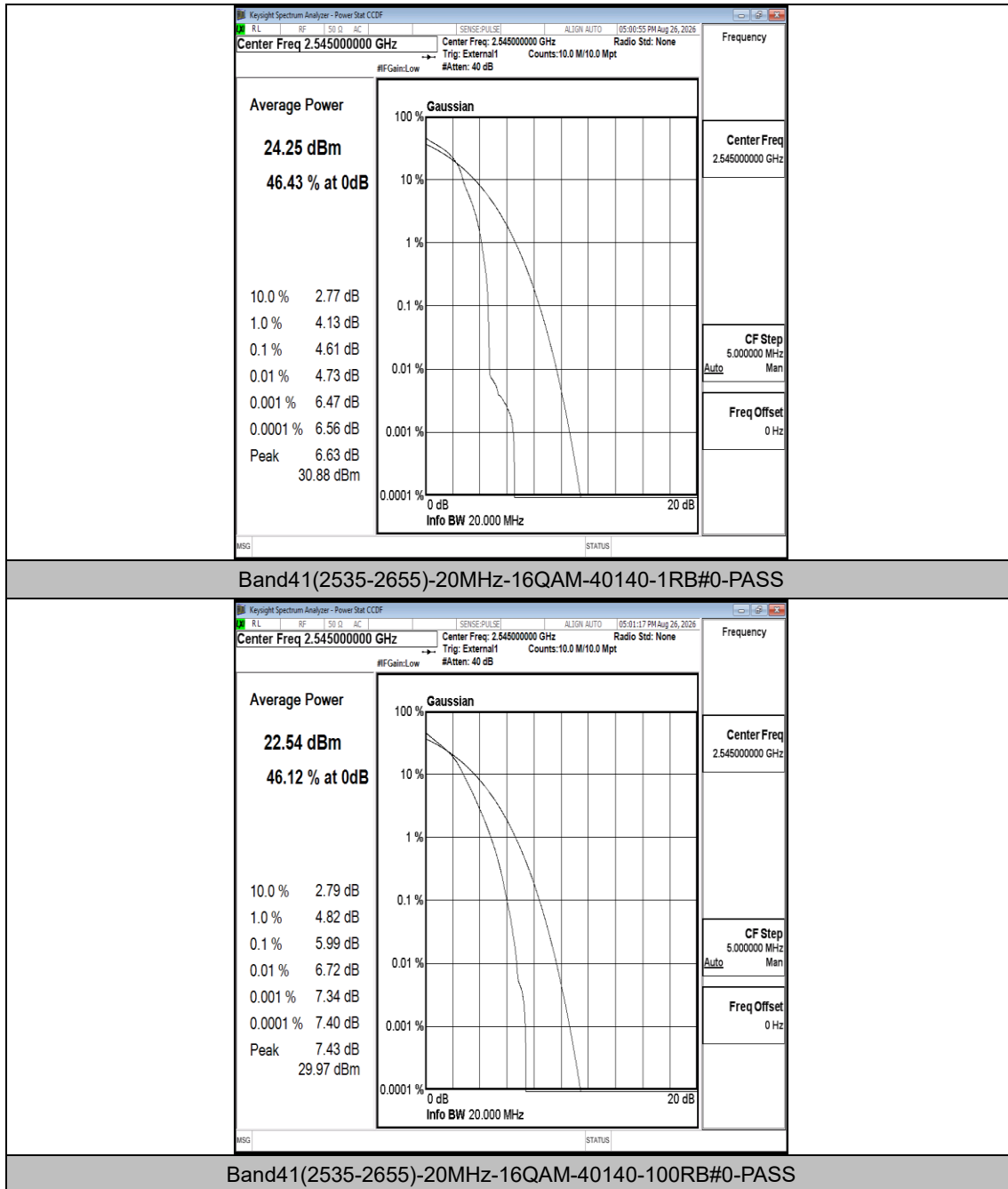


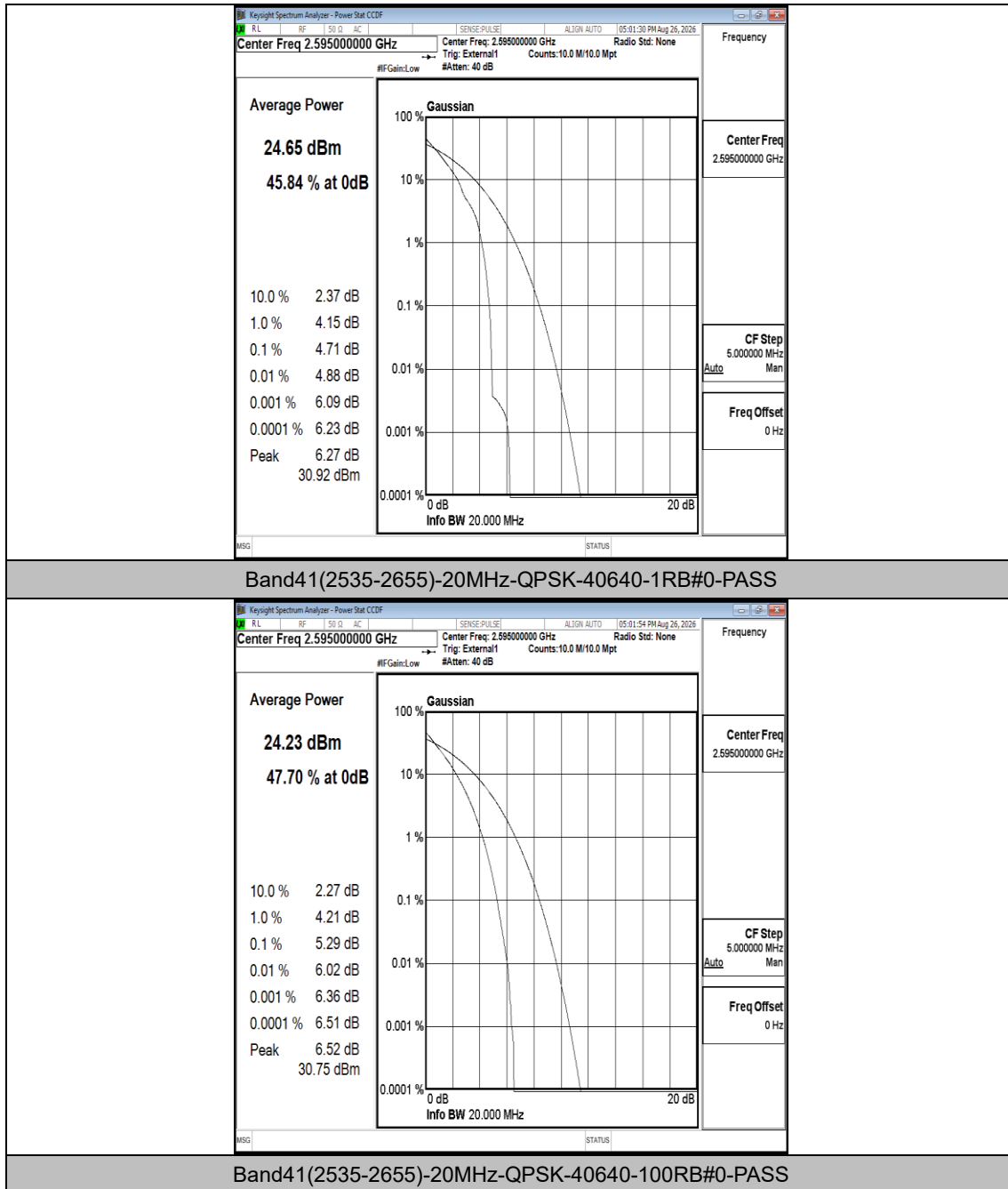


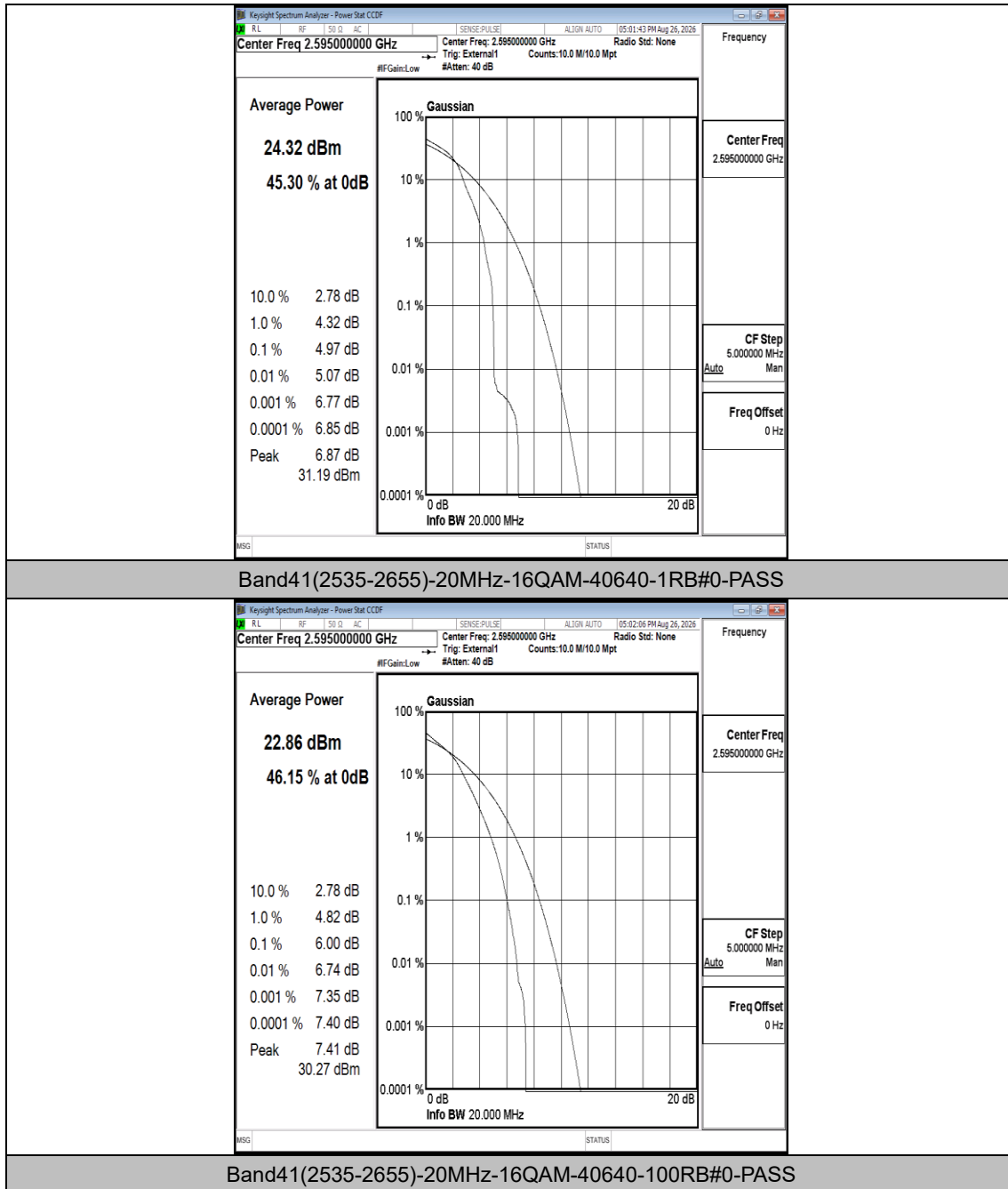


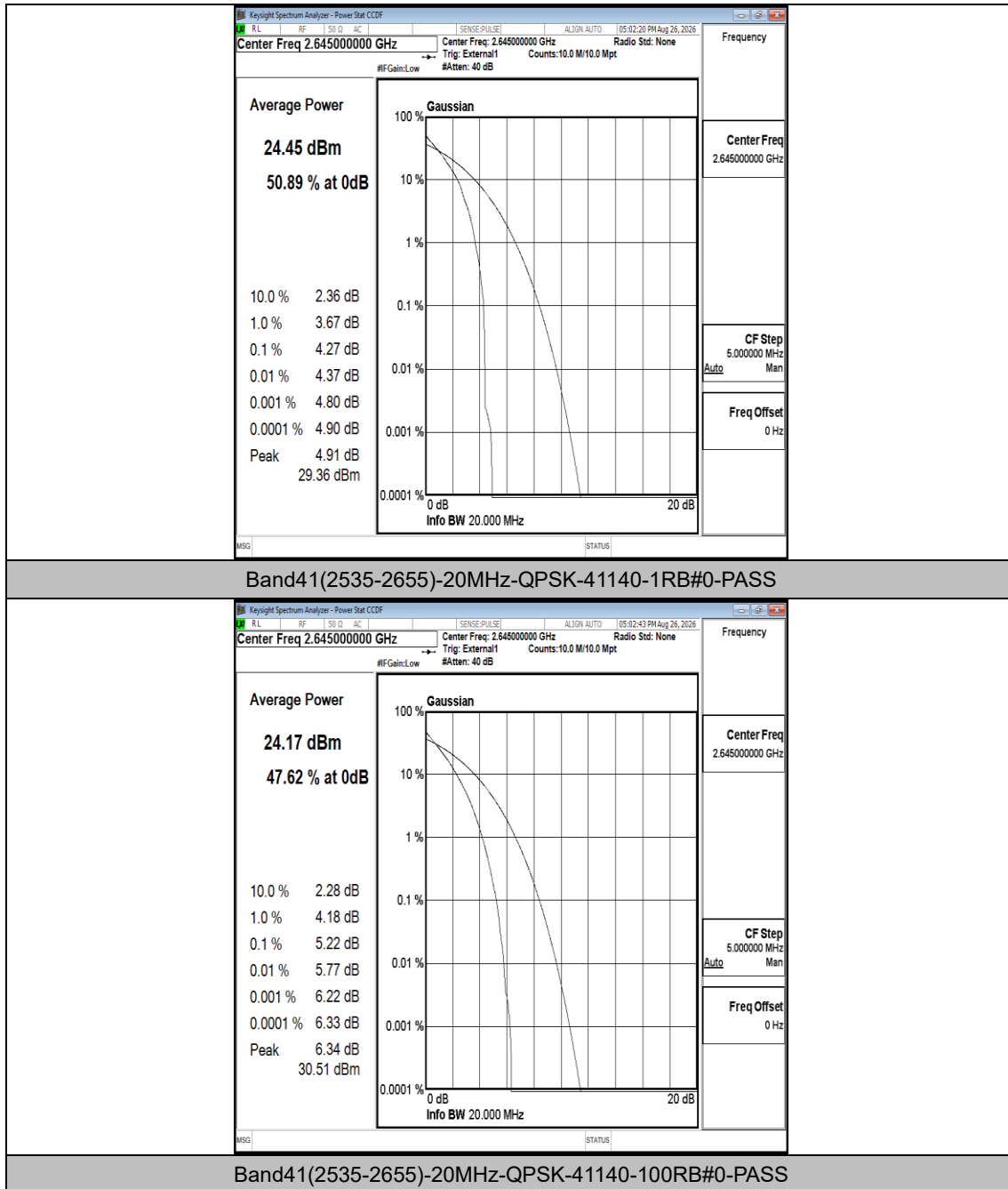


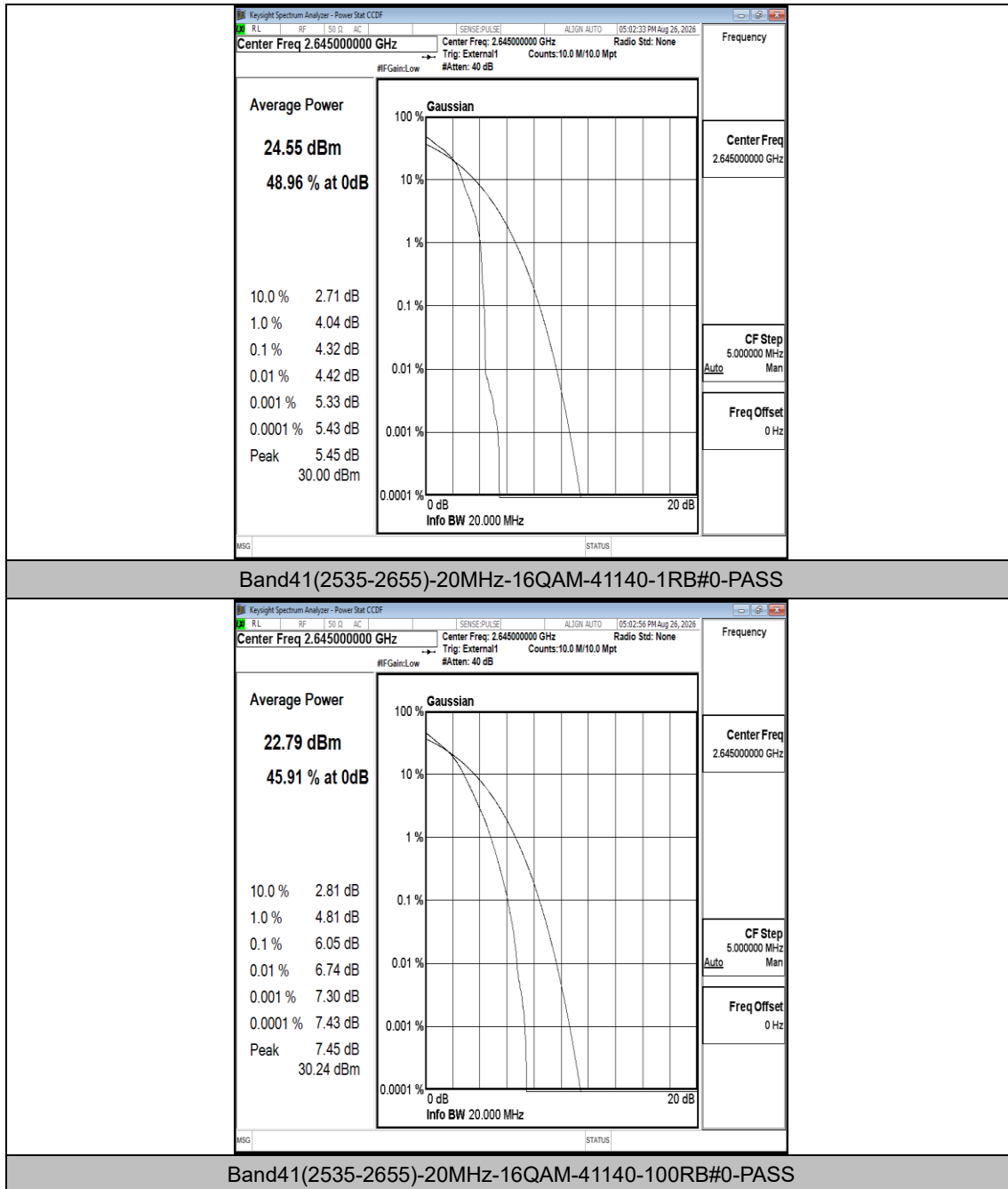












R.3 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band41(2535-2655)	5MHz	QPSK	40065	25RB#0	4.5028	5.093	PASS
Band41(2535-2655)	5MHz	16QAM	40065	25RB#0	4.4924	5.012	PASS
Band41(2535-2655)	5MHz	QPSK	40640	25RB#0	4.4977	4.990	PASS
Band41(2535-2655)	5MHz	16QAM	40640	25RB#0	4.4930	4.973	PASS
Band41(2535-2655)	5MHz	QPSK	41215	25RB#0	4.5024	5.087	PASS
Band41(2535-2655)	5MHz	16QAM	41215	25RB#0	4.4970	5.066	PASS
Band41(2535-2655)	10MHz	QPSK	40090	50RB#0	8.9991	10.58	PASS
Band41(2535-2655)	10MHz	16QAM	40090	50RB#0	8.9914	10.26	PASS
Band41(2535-2655)	10MHz	QPSK	40640	50RB#0	8.9948	10.52	PASS
Band41(2535-2655)	10MHz	16QAM	40640	50RB#0	8.9931	10.47	PASS
Band41(2535-2655)	10MHz	QPSK	41190	50RB#0	9.0008	10.81	PASS
Band41(2535-2655)	10MHz	16QAM	41190	50RB#0	8.9863	9.995	PASS
Band41(2535-2655)	15MHz	QPSK	40115	75RB#0	13.495	15.63	PASS
Band41(2535-2655)	15MHz	16QAM	40115	75RB#0	13.480	15.24	PASS
Band41(2535-2655)	15MHz	QPSK	40640	75RB#0	13.514	15.39	PASS
Band41(2535-2655)	15MHz	16QAM	40640	75RB#0	13.510	15.29	PASS
Band41(2535-2655)	15MHz	QPSK	41165	75RB#0	13.463	15.34	PASS
Band41(2535-2655)	15MHz	16QAM	41165	75RB#0	13.520	15.36	PASS
Band41(2535-2655)	20MHz	QPSK	40140	100RB#0	17.951	19.61	PASS
Band41(2535-2655)	20MHz	16QAM	40140	100RB#0	17.918	20.44	PASS
Band41(2535-2655)	20MHz	QPSK	40640	100RB#0	17.930	19.71	PASS
Band41(2535-2655)	20MHz	16QAM	40640	100RB#0	17.937	20.35	PASS
Band41(2535-2655)	20MHz	QPSK	41140	100RB#0	17.992	19.68	PASS
Band41(2535-2655)	20MHz	16QAM	41140	100RB#0	17.935	19.62	PASS

Test Graphs

