

Appendix Q: Test Data for E-UTRA Band 38

Product Name: Smart Phone

Test Model: ULTRA S26

Environmental Conditions

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

Q.1 Conducted Output Power Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Power(dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	21.76	PASS
Band38	5MHz	QPSK	37775	1RB#12	21.84	PASS
Band38	5MHz	QPSK	37775	1RB#24	21.81	PASS
Band38	5MHz	QPSK	37775	12RB#0	20.88	PASS
Band38	5MHz	QPSK	37775	12RB#6	20.89	PASS
Band38	5MHz	QPSK	37775	12RB#13	21.01	PASS
Band38	5MHz	QPSK	37775	25RB#0	20.92	PASS
Band38	5MHz	16QAM	37775	1RB#0	21.23	PASS
Band38	5MHz	16QAM	37775	1RB#12	21.00	PASS
Band38	5MHz	16QAM	37775	1RB#24	21.16	PASS
Band38	5MHz	16QAM	37775	12RB#0	20.01	PASS
Band38	5MHz	16QAM	37775	12RB#6	19.88	PASS
Band38	5MHz	16QAM	37775	12RB#13	19.78	PASS
Band38	5MHz	16QAM	37775	25RB#0	19.93	PASS
Band38	5MHz	QPSK	38000	1RB#0	22.22	PASS
Band38	5MHz	QPSK	38000	1RB#12	21.92	PASS
Band38	5MHz	QPSK	38000	1RB#24	22.18	PASS
Band38	5MHz	QPSK	38000	12RB#0	21.25	PASS
Band38	5MHz	QPSK	38000	12RB#6	21.21	PASS
Band38	5MHz	QPSK	38000	12RB#13	21.20	PASS
Band38	5MHz	QPSK	38000	25RB#0	21.23	PASS
Band38	5MHz	16QAM	38000	1RB#0	21.57	PASS
Band38	5MHz	16QAM	38000	1RB#12	21.26	PASS
Band38	5MHz	16QAM	38000	1RB#24	21.40	PASS
Band38	5MHz	16QAM	38000	12RB#0	20.28	PASS
Band38	5MHz	16QAM	38000	12RB#6	20.21	PASS
Band38	5MHz	16QAM	38000	12RB#13	20.18	PASS
Band38	5MHz	16QAM	38000	25RB#0	20.19	PASS
Band38	5MHz	QPSK	38225	1RB#0	22.08	PASS
Band38	5MHz	QPSK	38225	1RB#12	22.10	PASS
Band38	5MHz	QPSK	38225	1RB#24	22.09	PASS
Band38	5MHz	QPSK	38225	12RB#0	21.00	PASS
Band38	5MHz	QPSK	38225	12RB#6	21.04	PASS
Band38	5MHz	QPSK	38225	12RB#13	21.10	PASS
Band38	5MHz	QPSK	38225	25RB#0	21.20	PASS
Band38	5MHz	16QAM	38225	1RB#0	21.50	PASS
Band38	5MHz	16QAM	38225	1RB#12	21.85	PASS

Band38	5MHz	16QAM	38225	1RB#24	21.39	PASS
Band38	5MHz	16QAM	38225	12RB#0	20.10	PASS
Band38	5MHz	16QAM	38225	12RB#6	20.12	PASS
Band38	5MHz	16QAM	38225	12RB#13	20.11	PASS
Band38	5MHz	16QAM	38225	25RB#0	20.18	PASS
Band38	10MHz	QPSK	37800	1RB#0	22.20	PASS
Band38	10MHz	QPSK	37800	1RB#24	22.14	PASS
Band38	10MHz	QPSK	37800	1RB#49	22.31	PASS
Band38	10MHz	QPSK	37800	25RB#0	21.13	PASS
Band38	10MHz	QPSK	37800	25RB#12	21.12	PASS
Band38	10MHz	QPSK	37800	25RB#25	21.12	PASS
Band38	10MHz	QPSK	37800	50RB#0	21.27	PASS
Band38	10MHz	16QAM	37800	1RB#0	21.14	PASS
Band38	10MHz	16QAM	37800	1RB#24	21.03	PASS
Band38	10MHz	16QAM	37800	1RB#49	21.40	PASS
Band38	10MHz	16QAM	37800	25RB#0	20.06	PASS
Band38	10MHz	16QAM	37800	25RB#12	20.13	PASS
Band38	10MHz	16QAM	37800	25RB#25	20.16	PASS
Band38	10MHz	16QAM	37800	50RB#0	20.25	PASS
Band38	10MHz	QPSK	38000	1RB#0	22.50	PASS
Band38	10MHz	QPSK	38000	1RB#24	21.96	PASS
Band38	10MHz	QPSK	38000	1RB#49	22.60	PASS
Band38	10MHz	QPSK	38000	25RB#0	21.32	PASS
Band38	10MHz	QPSK	38000	25RB#12	21.27	PASS
Band38	10MHz	QPSK	38000	25RB#25	21.42	PASS
Band38	10MHz	QPSK	38000	50RB#0	21.37	PASS
Band38	10MHz	16QAM	38000	1RB#0	21.54	PASS
Band38	10MHz	16QAM	38000	1RB#24	21.38	PASS
Band38	10MHz	16QAM	38000	1RB#49	21.67	PASS
Band38	10MHz	16QAM	38000	25RB#0	20.33	PASS
Band38	10MHz	16QAM	38000	25RB#12	20.36	PASS
Band38	10MHz	16QAM	38000	25RB#25	20.39	PASS
Band38	10MHz	16QAM	38000	50RB#0	20.33	PASS
Band38	10MHz	QPSK	38200	1RB#0	22.52	PASS
Band38	10MHz	QPSK	38200	1RB#24	21.93	PASS
Band38	10MHz	QPSK	38200	1RB#49	22.32	PASS
Band38	10MHz	QPSK	38200	25RB#0	21.15	PASS
Band38	10MHz	QPSK	38200	25RB#12	21.09	PASS
Band38	10MHz	QPSK	38200	25RB#25	21.19	PASS
Band38	10MHz	QPSK	38200	50RB#0	21.08	PASS
Band38	10MHz	16QAM	38200	1RB#0	21.87	PASS
Band38	10MHz	16QAM	38200	1RB#24	21.47	PASS
Band38	10MHz	16QAM	38200	1RB#49	21.68	PASS

Band38	10MHz	16QAM	38200	25RB#0	20.27	PASS
Band38	10MHz	16QAM	38200	25RB#12	20.10	PASS
Band38	10MHz	16QAM	38200	25RB#25	20.30	PASS
Band38	10MHz	16QAM	38200	50RB#0	20.14	PASS
Band38	15MHz	QPSK	37825	1RB#0	22.16	PASS
Band38	15MHz	QPSK	37825	1RB#38	22.06	PASS
Band38	15MHz	QPSK	37825	1RB#74	22.56	PASS
Band38	15MHz	QPSK	37825	38RB#0	21.00	PASS
Band38	15MHz	QPSK	37825	38RB#18	21.17	PASS
Band38	15MHz	QPSK	37825	38RB#37	21.08	PASS
Band38	15MHz	QPSK	37825	75RB#0	20.99	PASS
Band38	15MHz	16QAM	37825	1RB#0	21.26	PASS
Band38	15MHz	16QAM	37825	1RB#38	21.33	PASS
Band38	15MHz	16QAM	37825	1RB#74	21.57	PASS
Band38	15MHz	16QAM	37825	38RB#0	20.04	PASS
Band38	15MHz	16QAM	37825	38RB#18	20.28	PASS
Band38	15MHz	16QAM	37825	38RB#37	20.31	PASS
Band38	15MHz	16QAM	37825	75RB#0	20.13	PASS
Band38	15MHz	QPSK	38000	1RB#0	22.40	PASS
Band38	15MHz	QPSK	38000	1RB#38	21.98	PASS
Band38	15MHz	QPSK	38000	1RB#74	22.46	PASS
Band38	15MHz	QPSK	38000	38RB#0	21.14	PASS
Band38	15MHz	QPSK	38000	38RB#18	21.17	PASS
Band38	15MHz	QPSK	38000	38RB#37	21.35	PASS
Band38	15MHz	QPSK	38000	75RB#0	21.19	PASS
Band38	15MHz	16QAM	38000	1RB#0	21.46	PASS
Band38	15MHz	16QAM	38000	1RB#38	21.23	PASS
Band38	15MHz	16QAM	38000	1RB#74	21.61	PASS
Band38	15MHz	16QAM	38000	38RB#0	20.25	PASS
Band38	15MHz	16QAM	38000	38RB#18	20.27	PASS
Band38	15MHz	16QAM	38000	38RB#37	20.40	PASS
Band38	15MHz	16QAM	38000	75RB#0	20.20	PASS
Band38	15MHz	QPSK	38175	1RB#0	22.31	PASS
Band38	15MHz	QPSK	38175	1RB#38	22.15	PASS
Band38	15MHz	QPSK	38175	1RB#74	22.37	PASS
Band38	15MHz	QPSK	38175	38RB#0	21.18	PASS
Band38	15MHz	QPSK	38175	38RB#18	21.16	PASS
Band38	15MHz	QPSK	38175	38RB#37	21.17	PASS
Band38	15MHz	QPSK	38175	75RB#0	21.13	PASS
Band38	15MHz	16QAM	38175	1RB#0	21.91	PASS
Band38	15MHz	16QAM	38175	1RB#38	21.59	PASS
Band38	15MHz	16QAM	38175	1RB#74	21.82	PASS
Band38	15MHz	16QAM	38175	38RB#0	20.27	PASS

Band38	15MHz	16QAM	38175	38RB#18	20.22	PASS
Band38	15MHz	16QAM	38175	38RB#37	20.22	PASS
Band38	15MHz	16QAM	38175	75RB#0	20.24	PASS
Band38	20MHz	QPSK	37850	1RB#0	22.13	PASS
Band38	20MHz	QPSK	37850	1RB#49	22.05	PASS
Band38	20MHz	QPSK	37850	1RB#99	22.72	PASS
Band38	20MHz	QPSK	37850	50RB#0	21.03	PASS
Band38	20MHz	QPSK	37850	50RB#25	21.19	PASS
Band38	20MHz	QPSK	37850	50RB#50	21.43	PASS
Band38	20MHz	QPSK	37850	100RB#0	21.32	PASS
Band38	20MHz	16QAM	37850	1RB#0	21.36	PASS
Band38	20MHz	16QAM	37850	1RB#49	21.37	PASS
Band38	20MHz	16QAM	37850	1RB#99	22.00	PASS
Band38	20MHz	16QAM	37850	50RB#0	20.19	PASS
Band38	20MHz	16QAM	37850	50RB#25	20.25	PASS
Band38	20MHz	16QAM	37850	50RB#50	20.42	PASS
Band38	20MHz	16QAM	37850	100RB#0	20.16	PASS
Band38	20MHz	QPSK	38000	1RB#0	22.18	PASS
Band38	20MHz	QPSK	38000	1RB#49	21.96	PASS
Band38	20MHz	QPSK	38000	1RB#99	22.77	PASS
Band38	20MHz	QPSK	38000	50RB#0	21.23	PASS
Band38	20MHz	QPSK	38000	50RB#25	21.27	PASS
Band38	20MHz	QPSK	38000	50RB#50	21.41	PASS
Band38	20MHz	QPSK	38000	100RB#0	21.34	PASS
Band38	20MHz	16QAM	38000	1RB#0	21.54	PASS
Band38	20MHz	16QAM	38000	1RB#49	21.50	PASS
Band38	20MHz	16QAM	38000	1RB#99	21.86	PASS
Band38	20MHz	16QAM	38000	50RB#0	20.27	PASS
Band38	20MHz	16QAM	38000	50RB#25	20.37	PASS
Band38	20MHz	16QAM	38000	50RB#50	20.47	PASS
Band38	20MHz	16QAM	38000	100RB#0	20.31	PASS
Band38	20MHz	QPSK	38150	1RB#0	22.25	PASS
Band38	20MHz	QPSK	38150	1RB#49	22.14	PASS
Band38	20MHz	QPSK	38150	1RB#99	22.38	PASS
Band38	20MHz	QPSK	38150	50RB#0	21.13	PASS
Band38	20MHz	QPSK	38150	50RB#25	21.14	PASS
Band38	20MHz	QPSK	38150	50RB#50	21.13	PASS
Band38	20MHz	QPSK	38150	100RB#0	21.21	PASS
Band38	20MHz	16QAM	38150	1RB#0	21.14	PASS
Band38	20MHz	16QAM	38150	1RB#49	21.23	PASS
Band38	20MHz	16QAM	38150	1RB#99	21.09	PASS
Band38	20MHz	16QAM	38150	50RB#0	20.18	PASS
Band38	20MHz	16QAM	38150	50RB#25	20.22	PASS

Band38	20MHz	16QAM	38150	50RB#50	20.24	PASS
Band38	20MHz	16QAM	38150	100RB#0	20.15	PASS

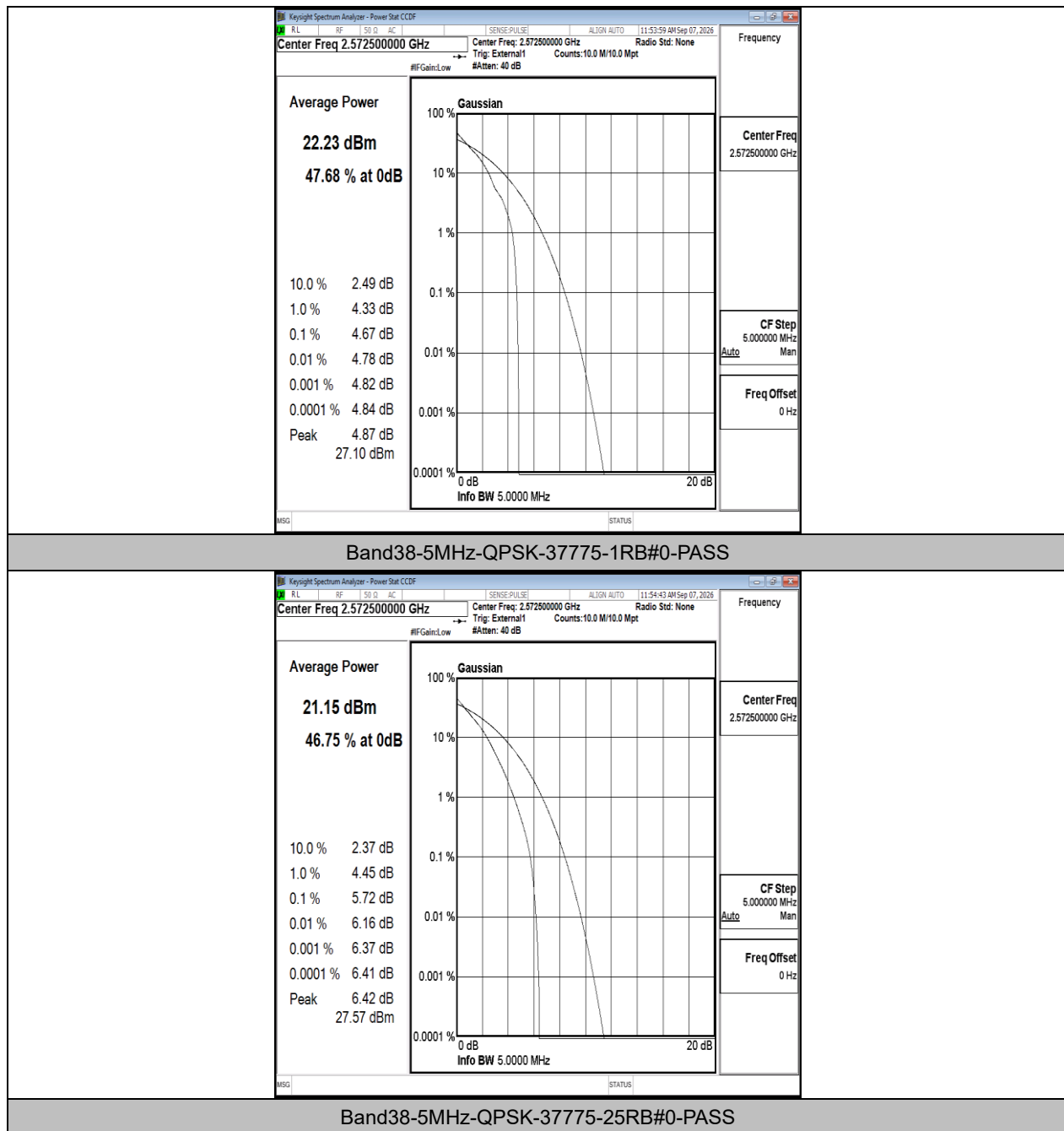
Q.2 Peak-to-Average Ratio(CCDF)

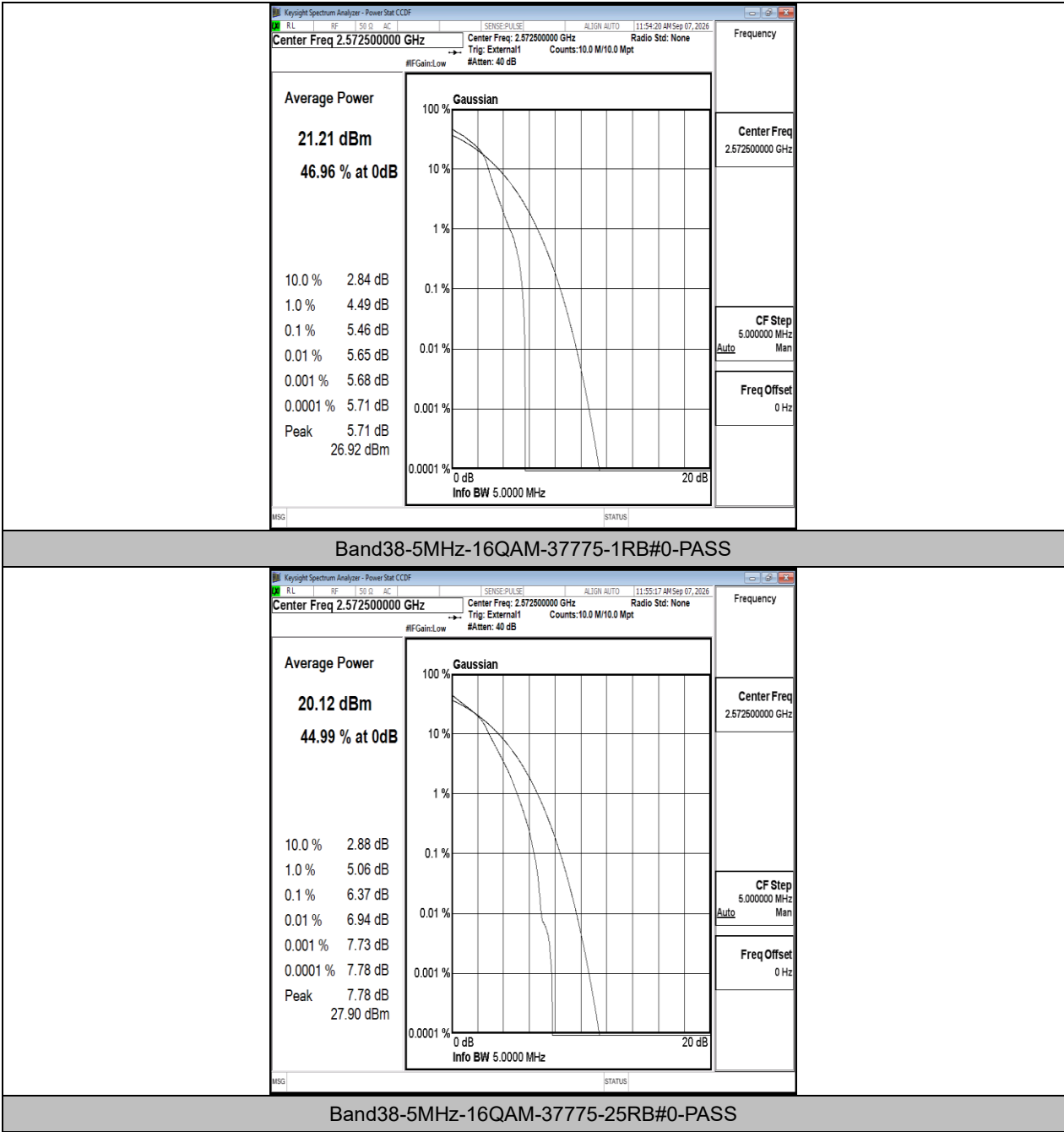
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	4.67	13	PASS
Band38	5MHz	QPSK	37775	25RB#0	5.72	13	PASS
Band38	5MHz	16QAM	37775	1RB#0	5.46	13	PASS
Band38	5MHz	16QAM	37775	25RB#0	6.37	13	PASS
Band38	5MHz	QPSK	38000	1RB#0	4.95	13	PASS
Band38	5MHz	QPSK	38000	25RB#0	5.88	13	PASS
Band38	5MHz	16QAM	38000	1RB#0	5.67	13	PASS
Band38	5MHz	16QAM	38000	25RB#0	6.51	13	PASS
Band38	5MHz	QPSK	38225	1RB#0	5.09	13	PASS
Band38	5MHz	QPSK	38225	25RB#0	5.93	13	PASS
Band38	5MHz	16QAM	38225	1RB#0	5.78	13	PASS
Band38	5MHz	16QAM	38225	25RB#0	6.56	13	PASS
Band38	10MHz	QPSK	37800	1RB#0	5.35	13	PASS
Band38	10MHz	QPSK	37800	50RB#0	5.57	13	PASS
Band38	10MHz	16QAM	37800	1RB#0	5.74	13	PASS
Band38	10MHz	16QAM	37800	50RB#0	6.32	13	PASS
Band38	10MHz	QPSK	38000	1RB#0	5.69	13	PASS
Band38	10MHz	QPSK	38000	50RB#0	5.67	13	PASS
Band38	10MHz	16QAM	38000	1RB#0	6.01	13	PASS
Band38	10MHz	16QAM	38000	50RB#0	6.45	13	PASS
Band38	10MHz	QPSK	38200	1RB#0	5.83	13	PASS
Band38	10MHz	QPSK	38200	50RB#0	5.73	13	PASS
Band38	10MHz	16QAM	38200	1RB#0	6.14	13	PASS
Band38	10MHz	16QAM	38200	50RB#0	6.50	13	PASS
Band38	15MHz	QPSK	37825	1RB#0	5.29	13	PASS
Band38	15MHz	QPSK	37825	75RB#0	5.85	13	PASS
Band38	15MHz	16QAM	37825	1RB#0	5.70	13	PASS
Band38	15MHz	16QAM	37825	75RB#0	6.42	13	PASS
Band38	15MHz	QPSK	38000	1RB#0	5.67	13	PASS
Band38	15MHz	QPSK	38000	75RB#0	5.91	13	PASS
Band38	15MHz	16QAM	38000	1RB#0	5.98	13	PASS
Band38	15MHz	16QAM	38000	75RB#0	6.50	13	PASS
Band38	15MHz	QPSK	38175	1RB#0	5.87	13	PASS
Band38	15MHz	QPSK	38175	75RB#0	5.96	13	PASS
Band38	15MHz	16QAM	38175	1RB#0	6.21	13	PASS
Band38	15MHz	16QAM	38175	75RB#0	6.54	13	PASS
Band38	20MHz	QPSK	37850	1RB#0	4.75	13	PASS
Band38	20MHz	QPSK	37850	100RB#0	5.47	13	PASS

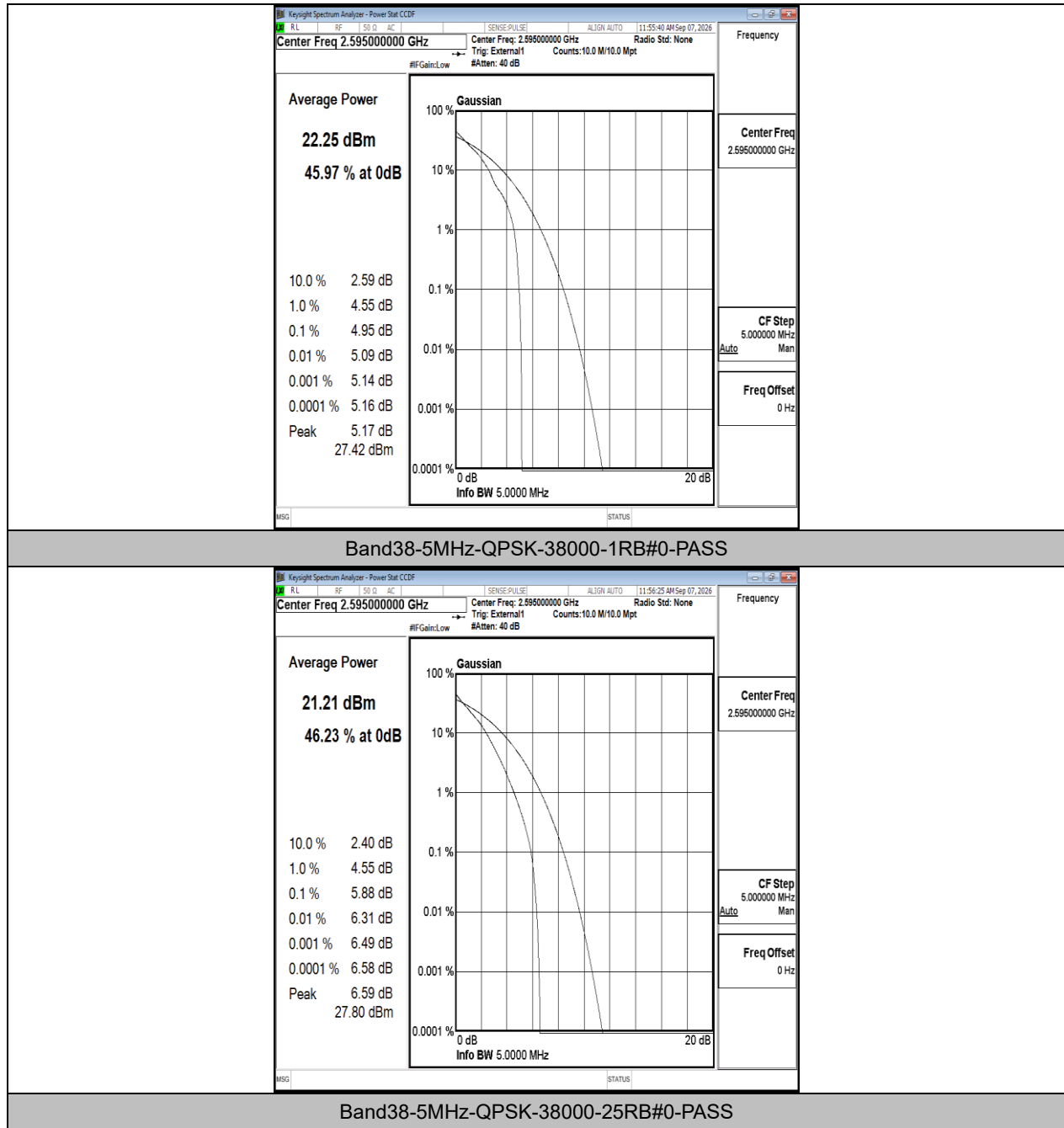
Band38	20MHz	16QAM	37850	1RB#0	5.27	13	PASS
Band38	20MHz	16QAM	37850	100RB#0	6.29	13	PASS
Band38	20MHz	QPSK	38000	1RB#0	4.96	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	5.45	13	PASS
Band38	20MHz	16QAM	38000	1RB#0	5.54	13	PASS
Band38	20MHz	16QAM	38000	100RB#0	6.32	13	PASS
Band38	20MHz	QPSK	38150	1RB#0	5.11	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	5.47	13	PASS
Band38	20MHz	16QAM	38150	1RB#0	5.73	13	PASS
Band38	20MHz	16QAM	38150	100RB#0	6.33	13	PASS

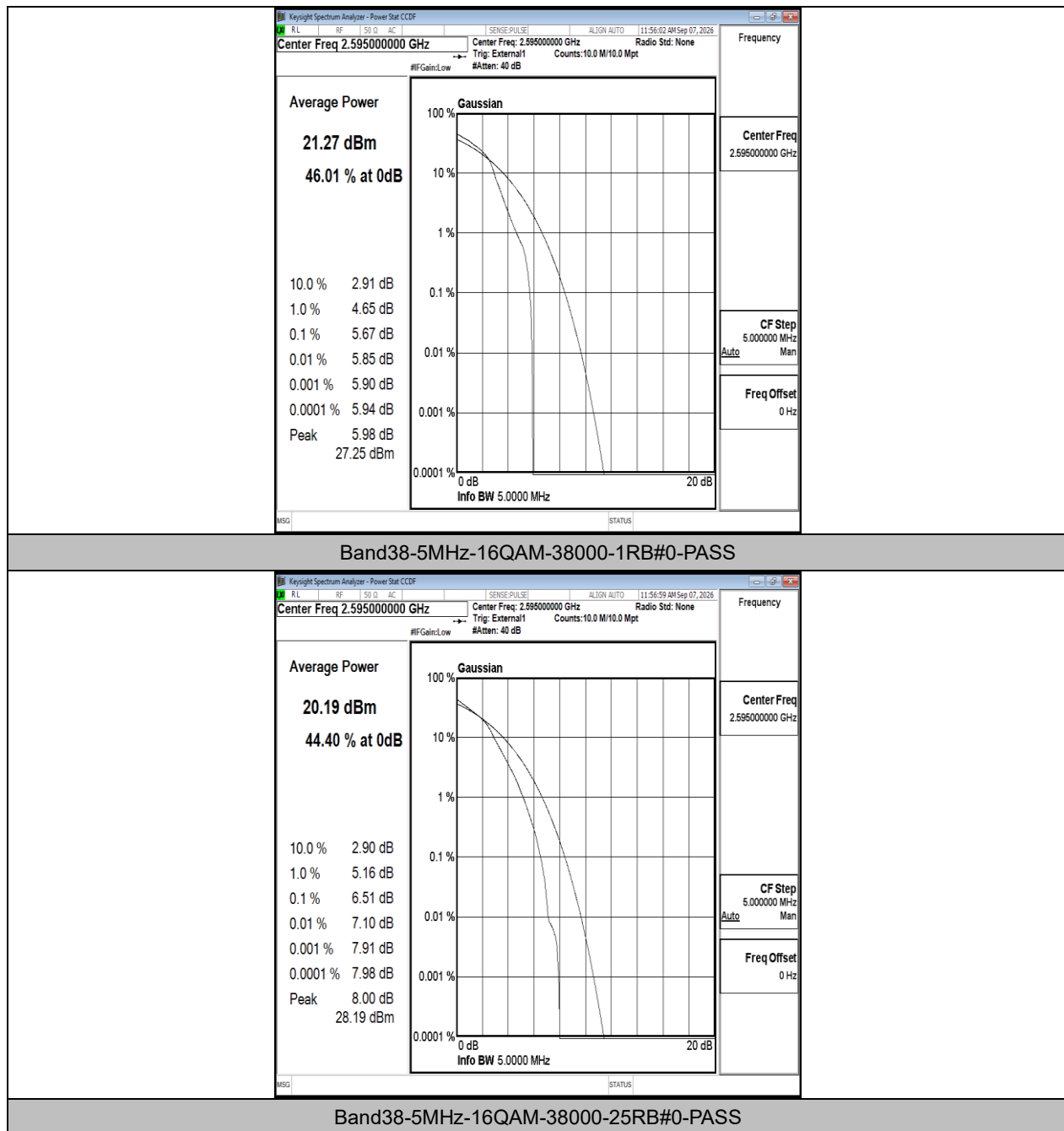
Test Graphs

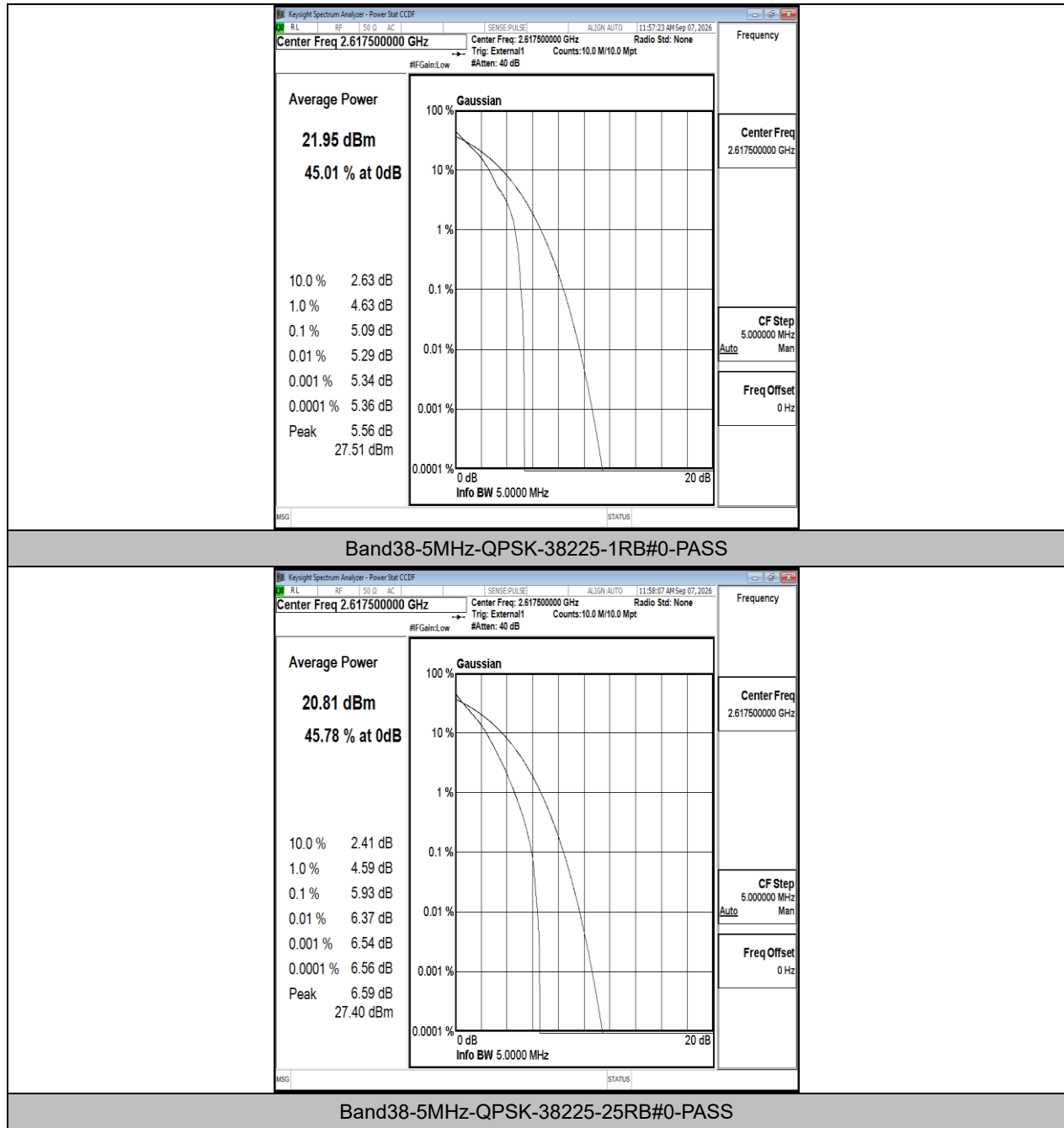


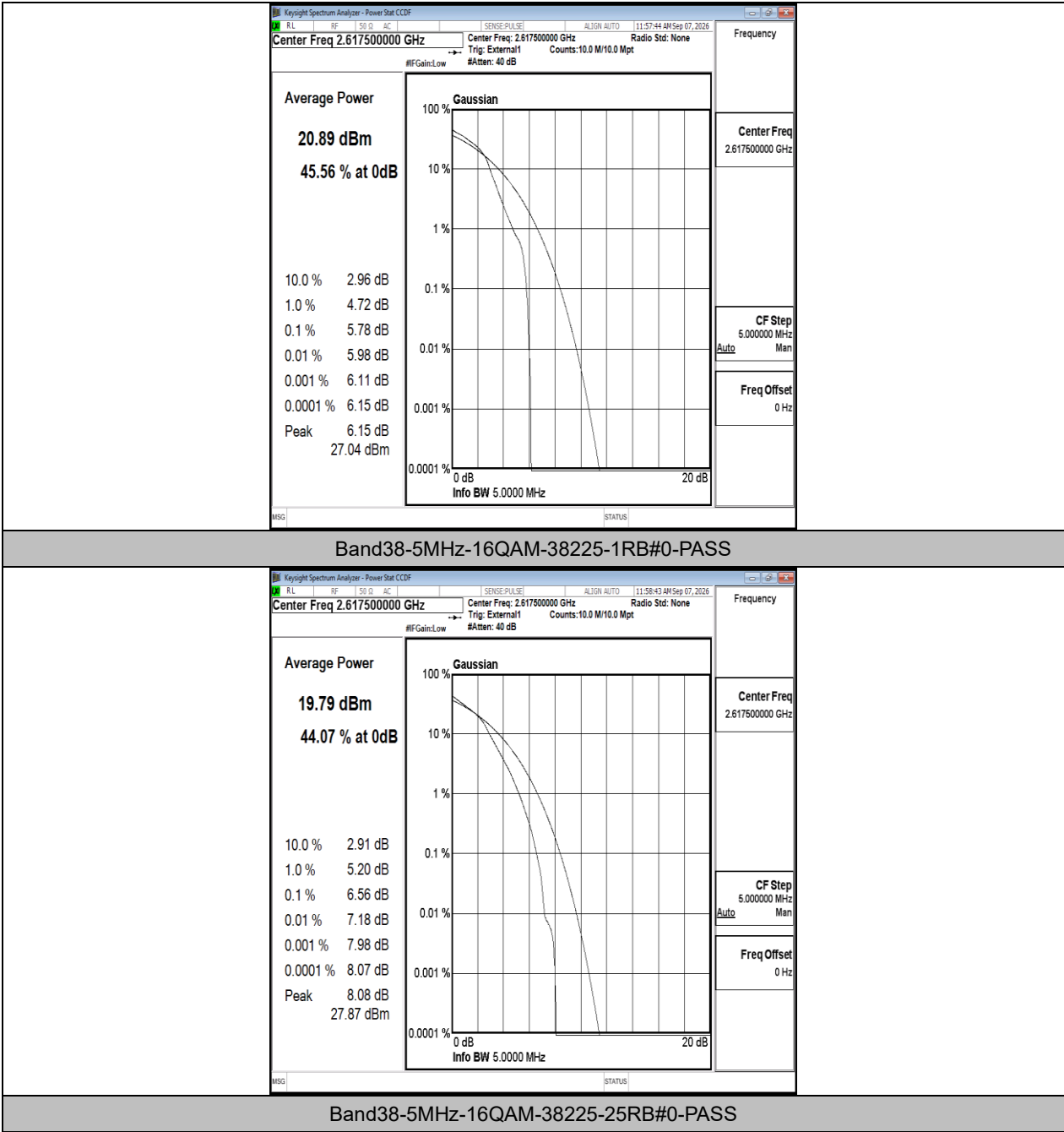


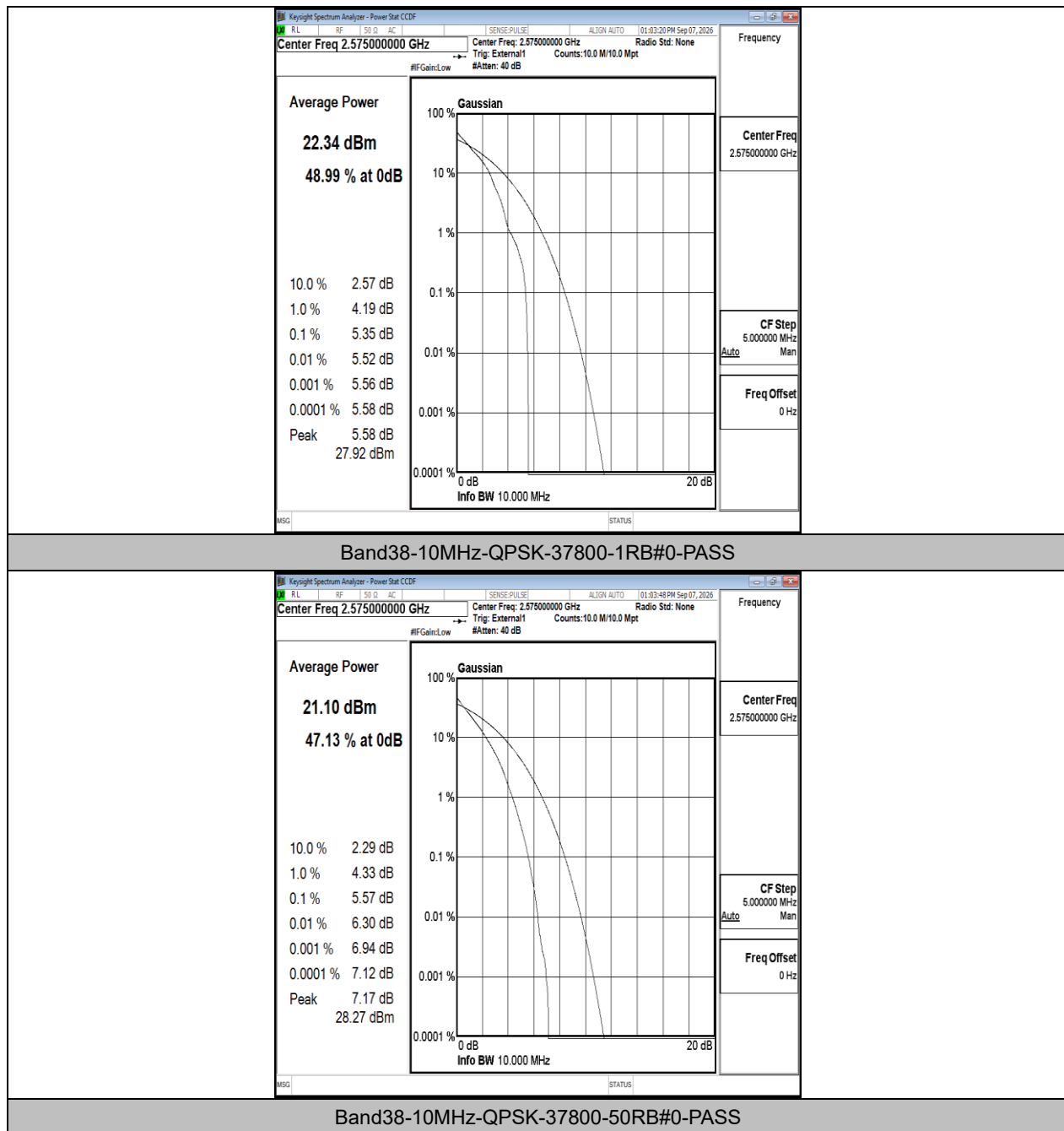
Band38-5MHz-16QAM-37775-25RB#0-PASS

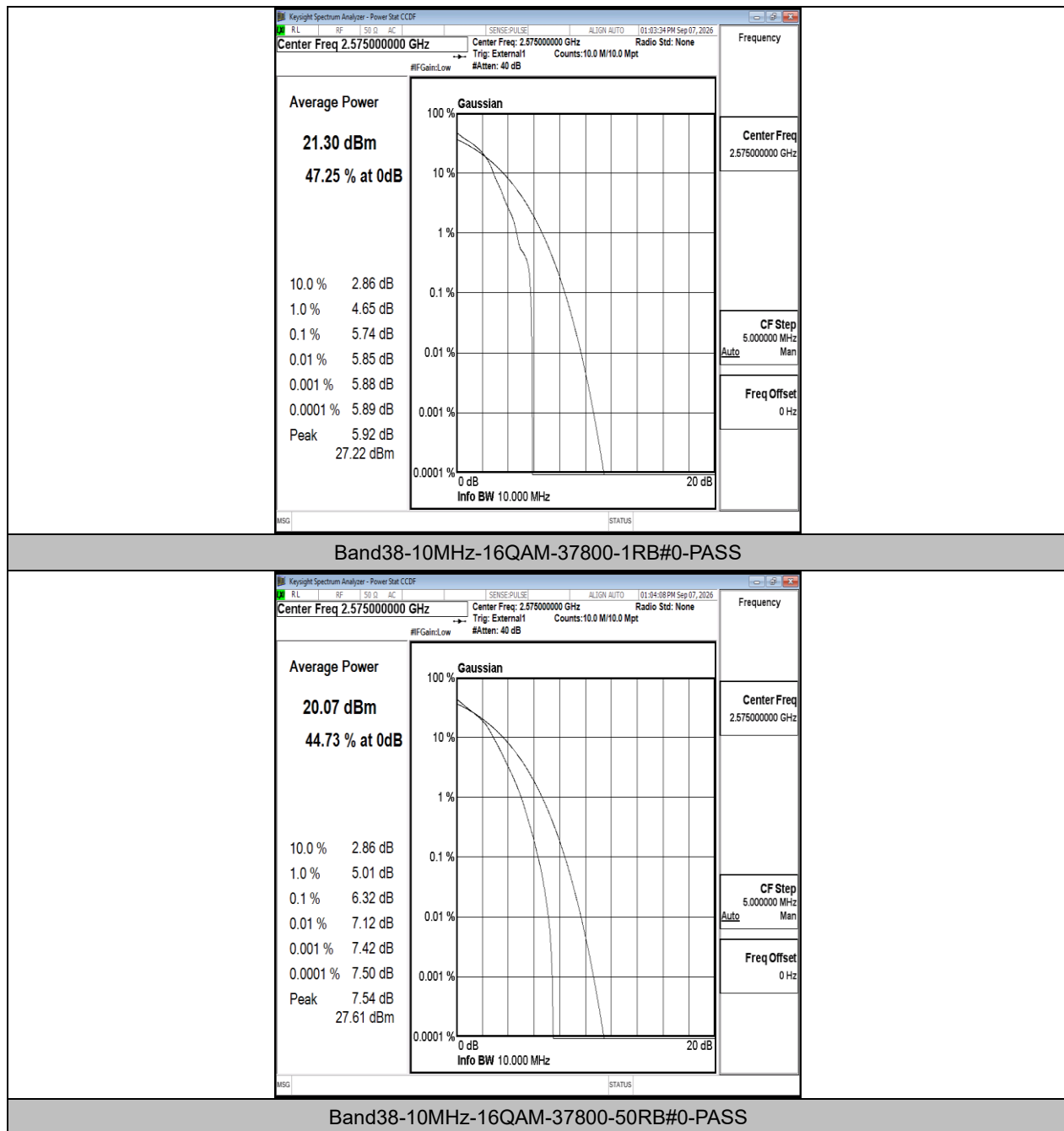


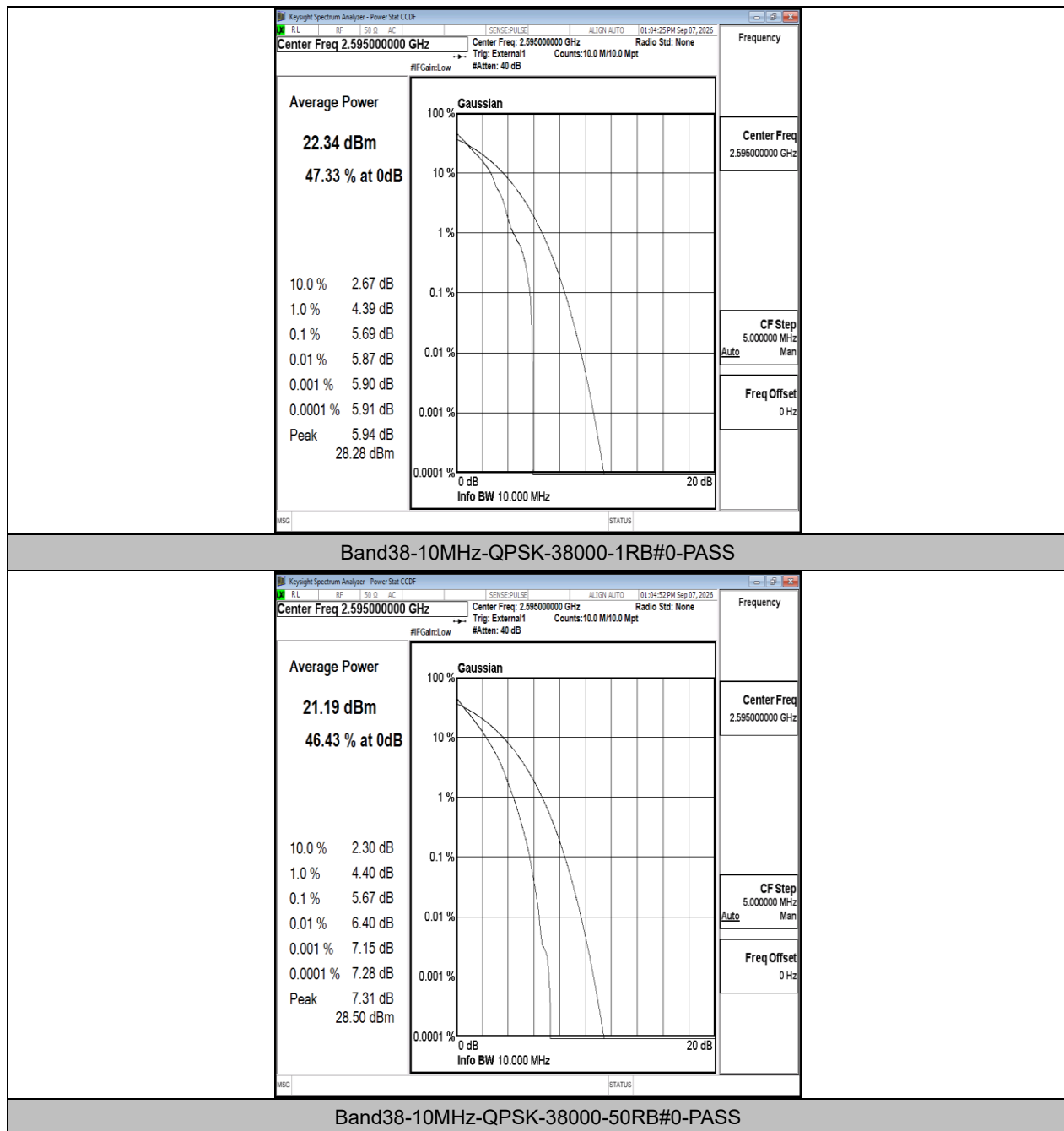


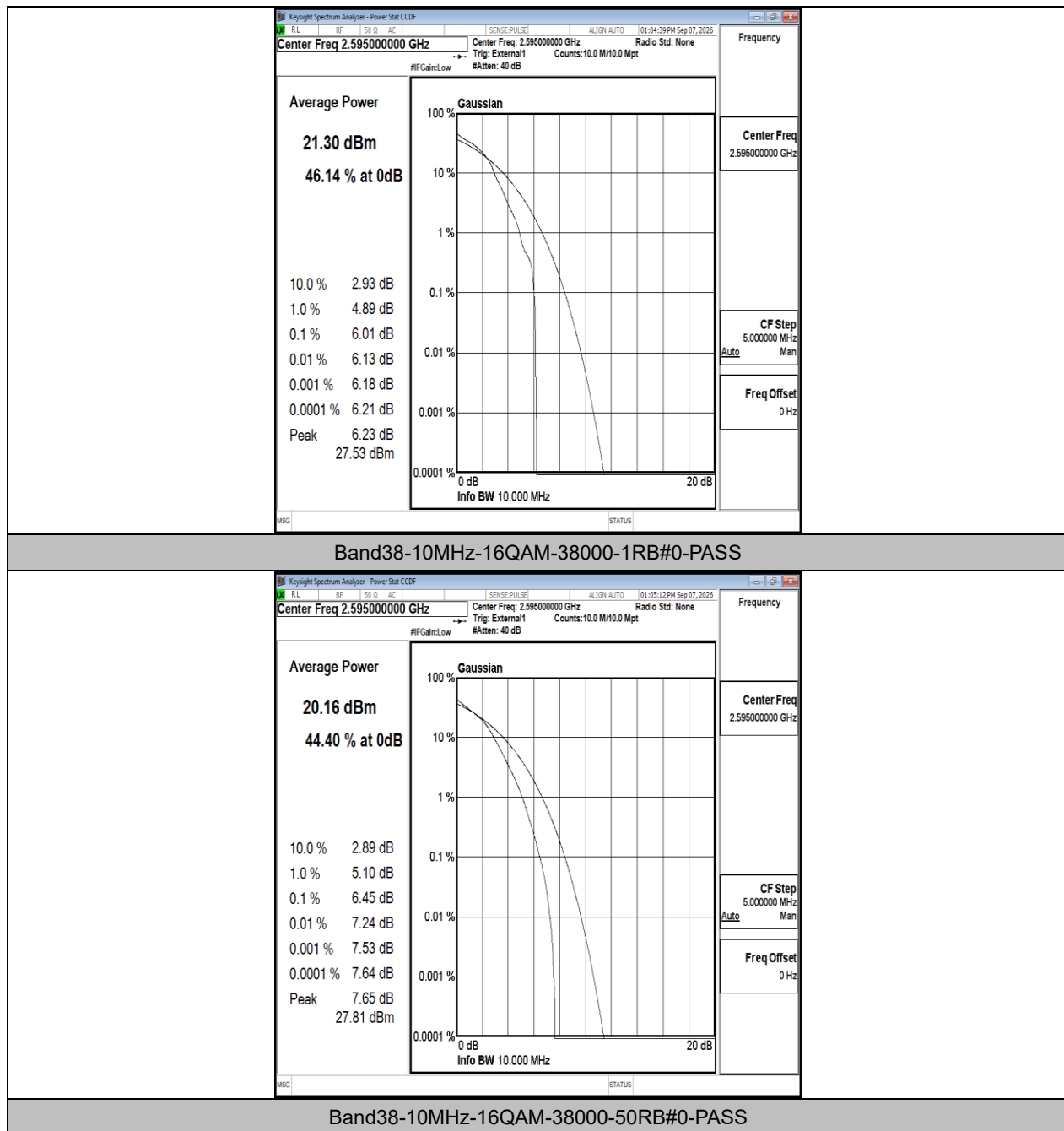


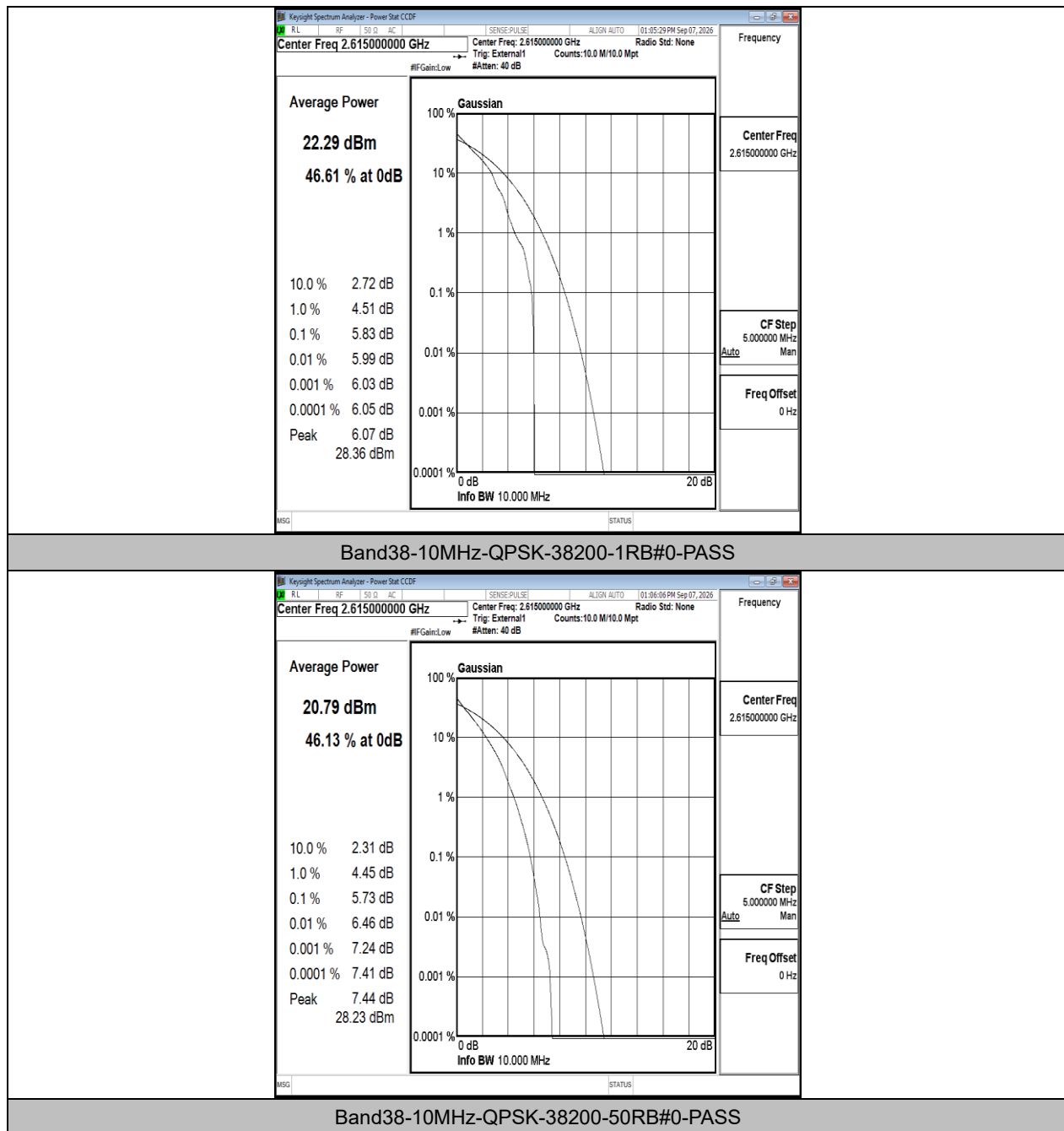


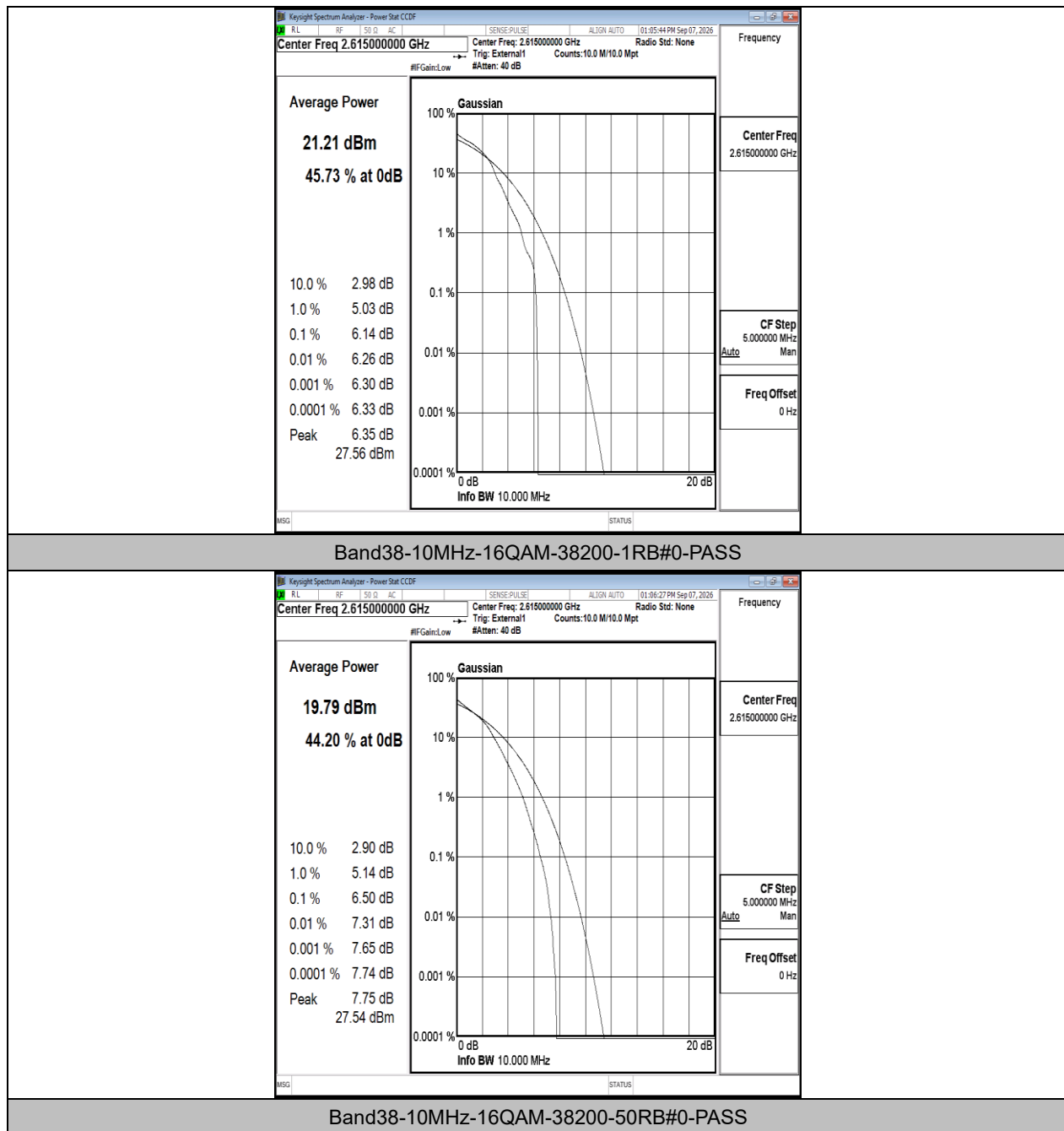


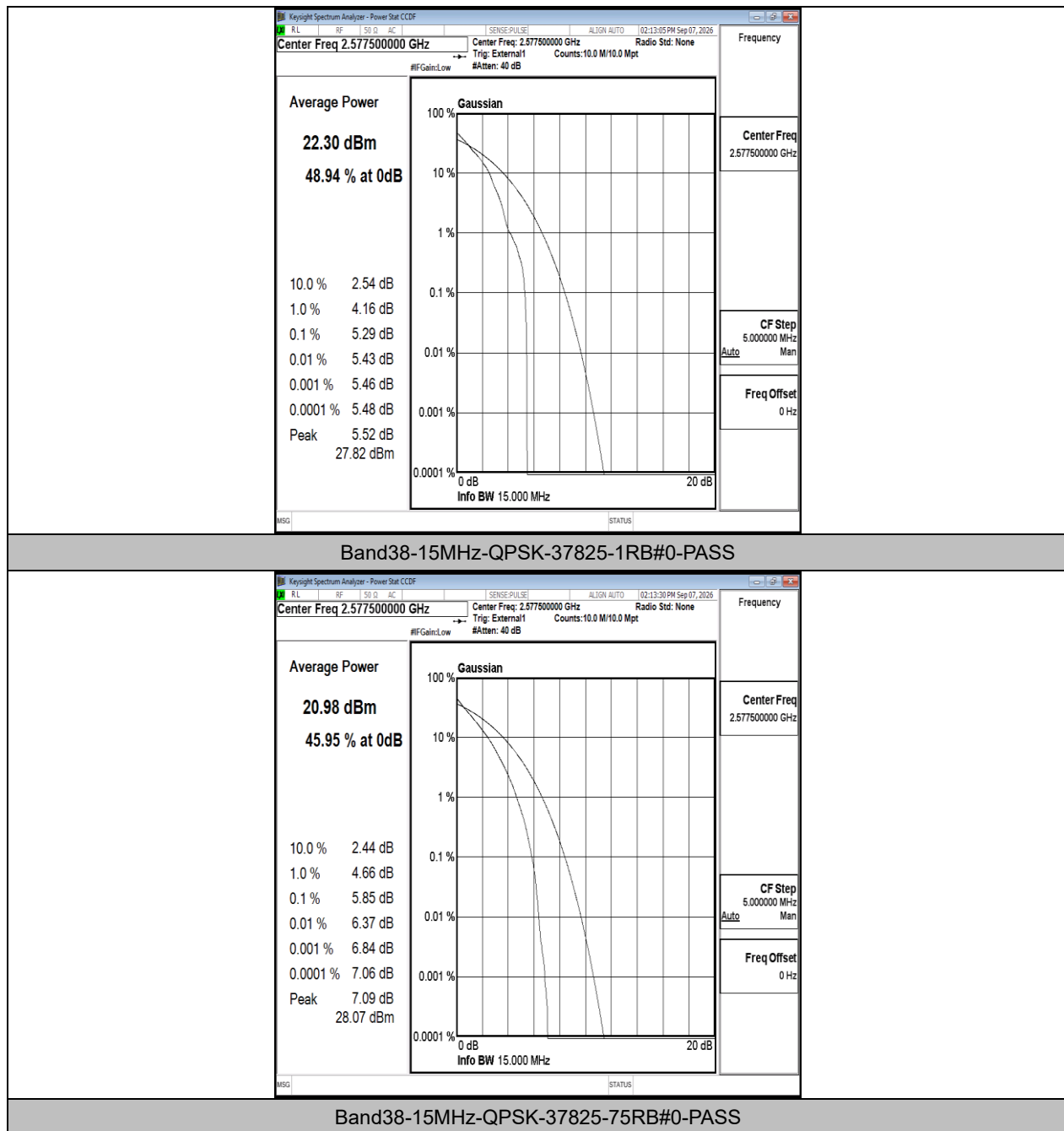


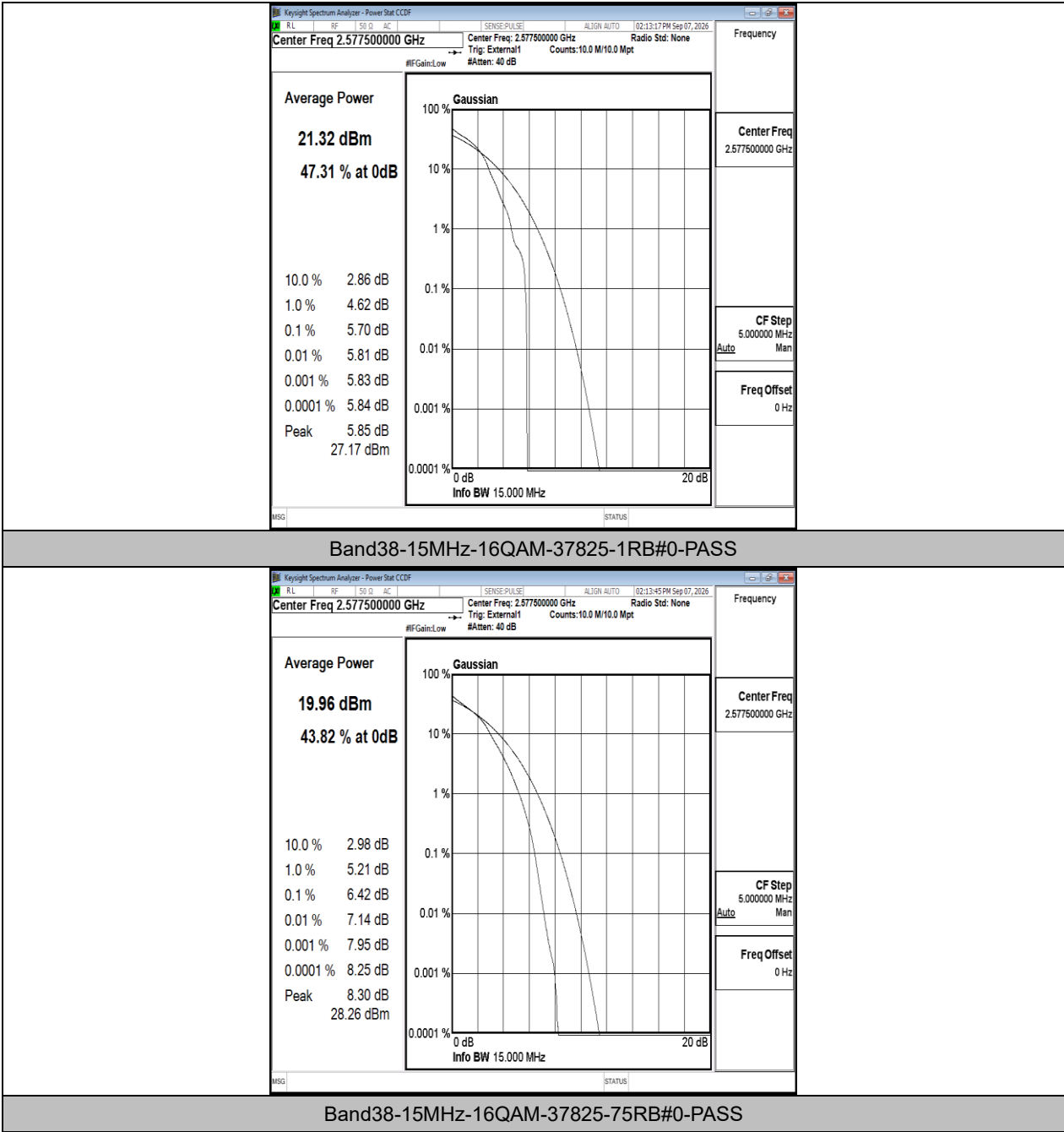




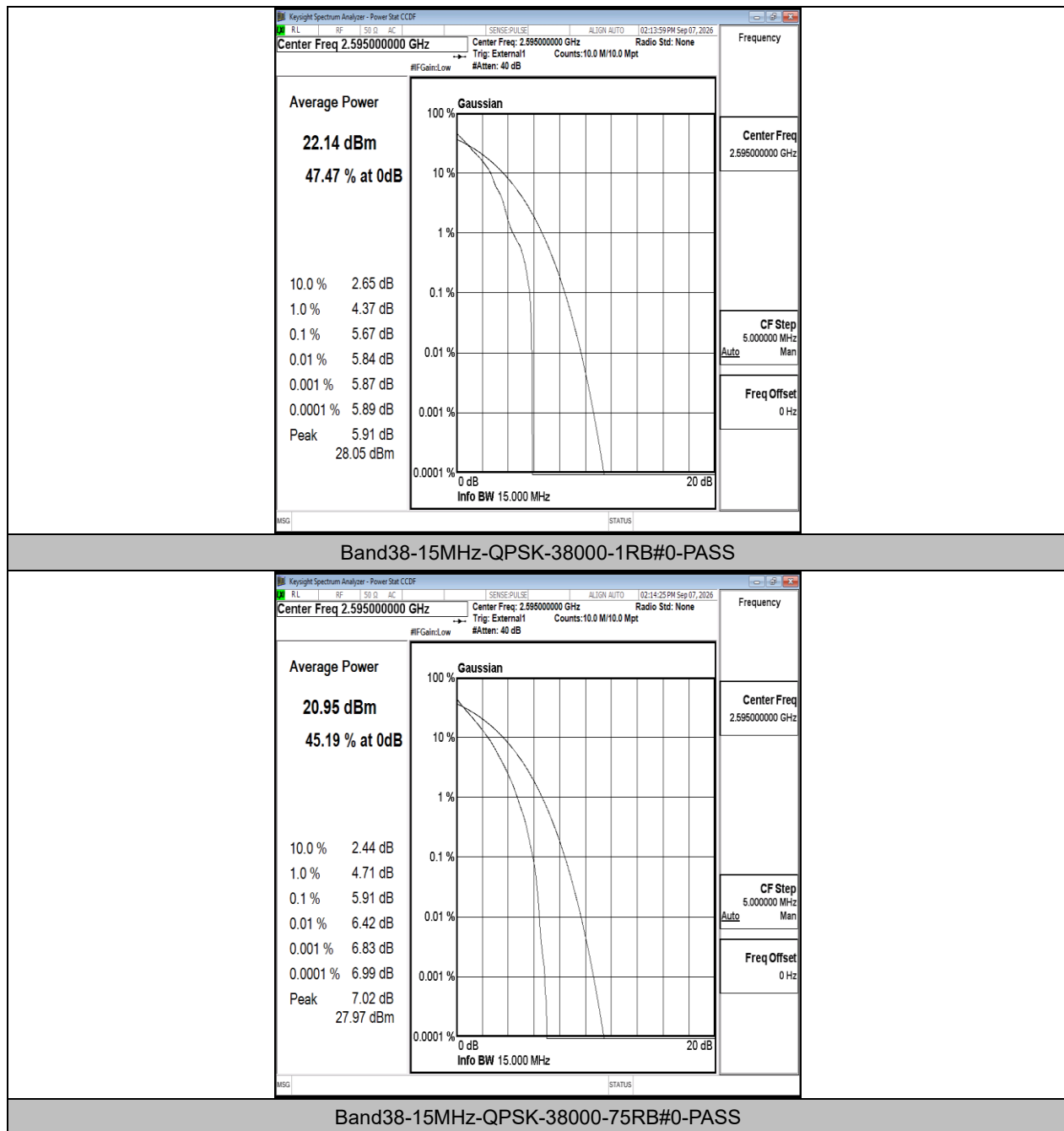


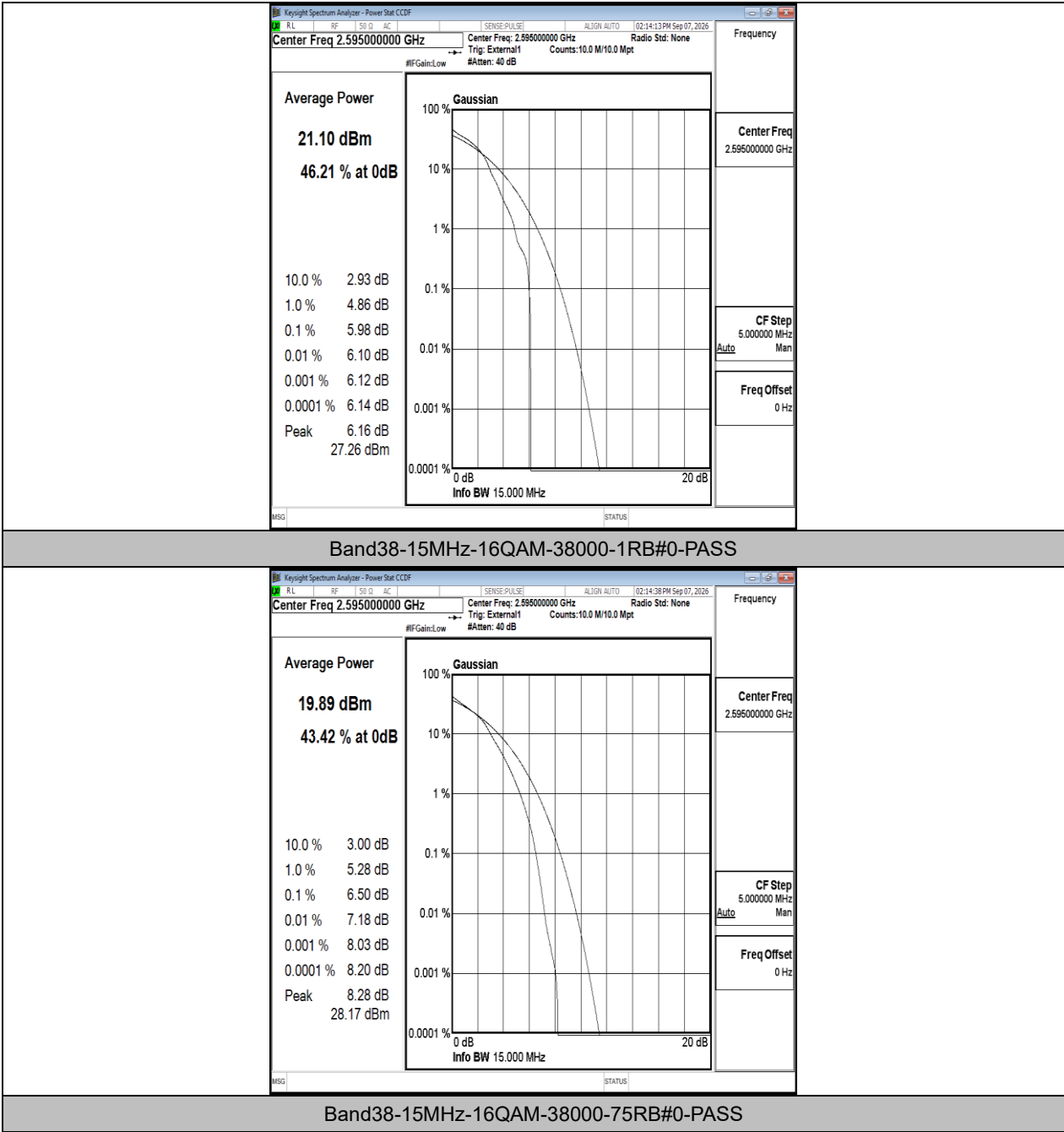


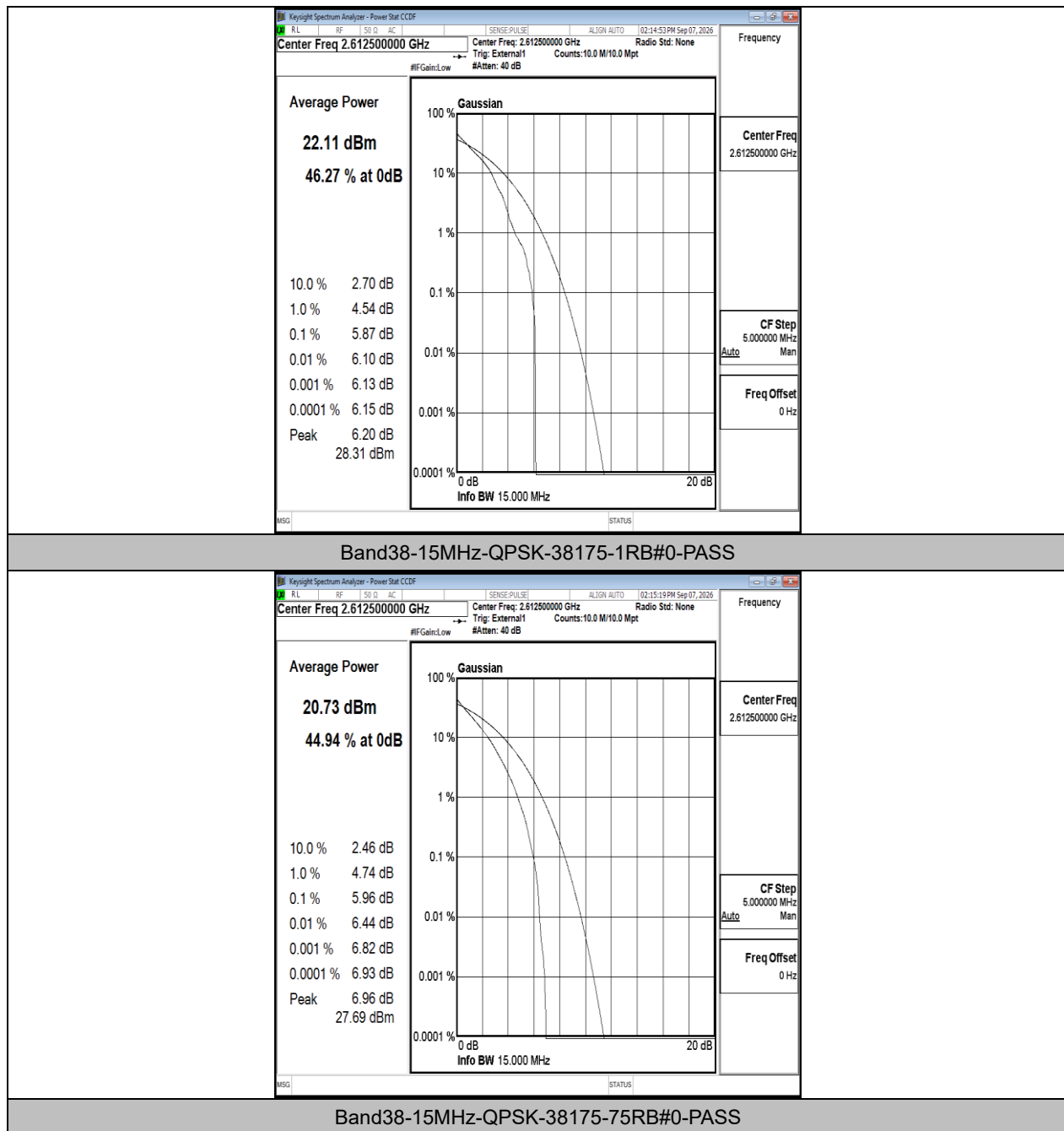


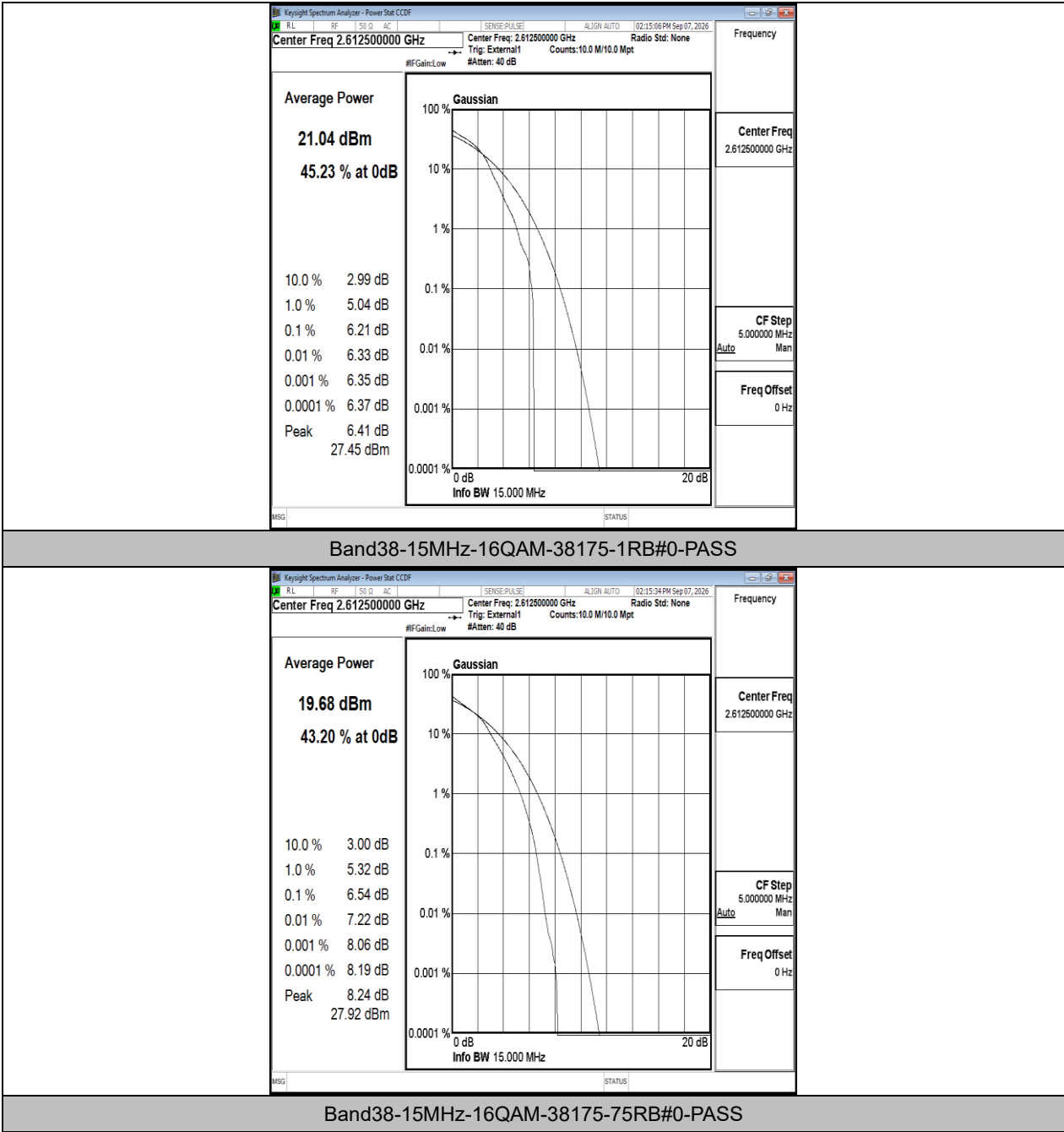


Band38-15MHz-16QAM-37825-75RB#0-PASS

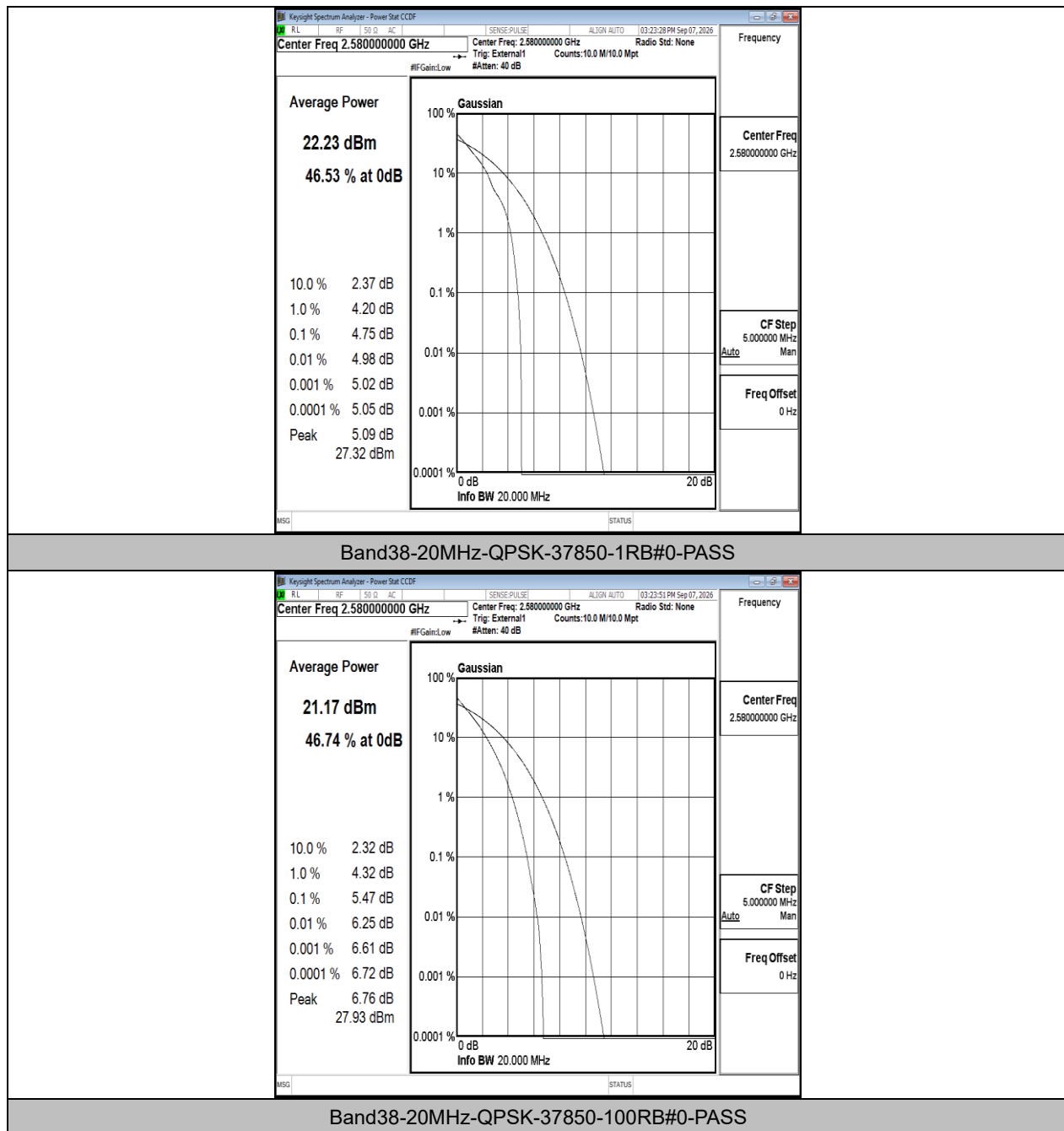


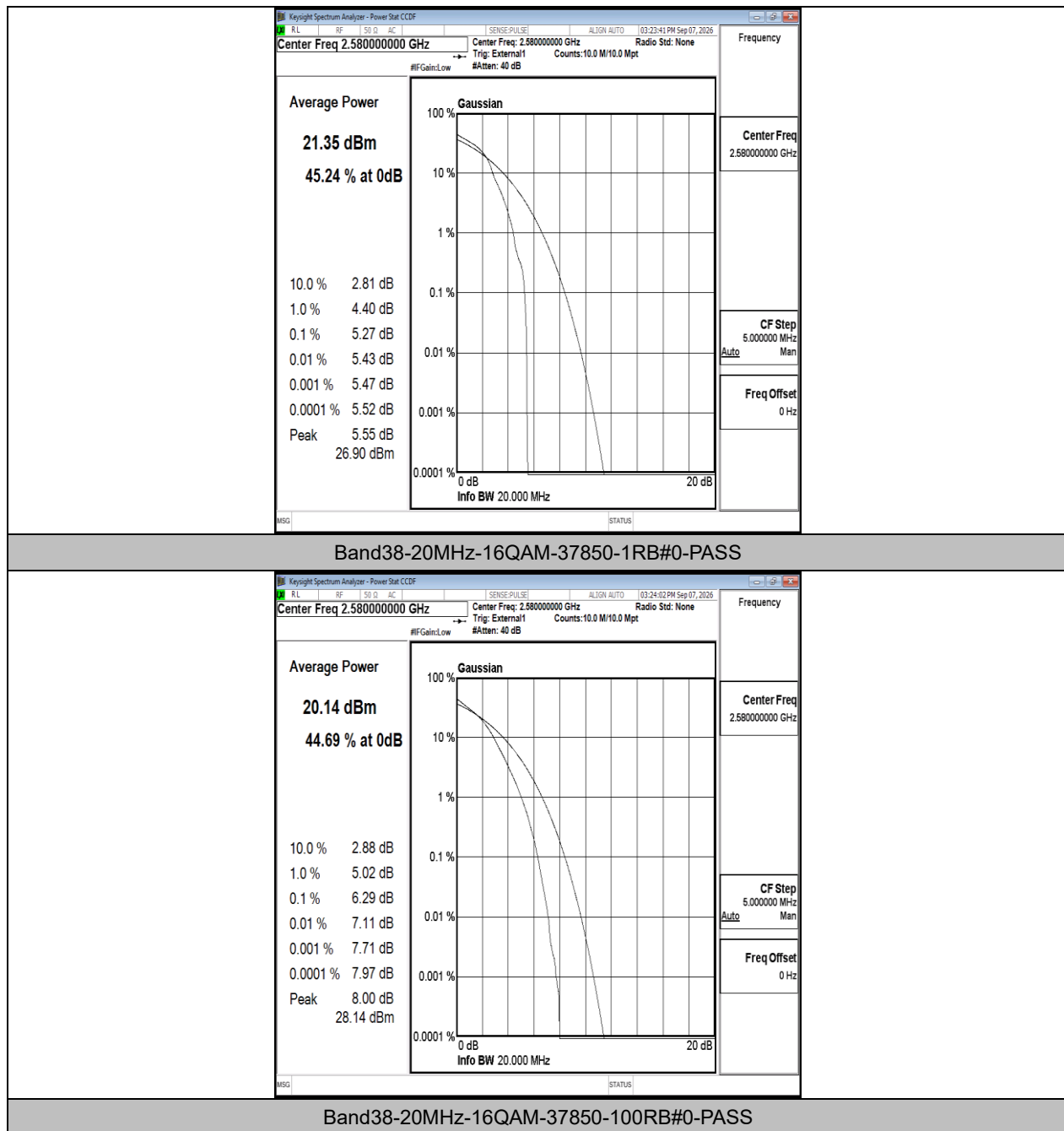


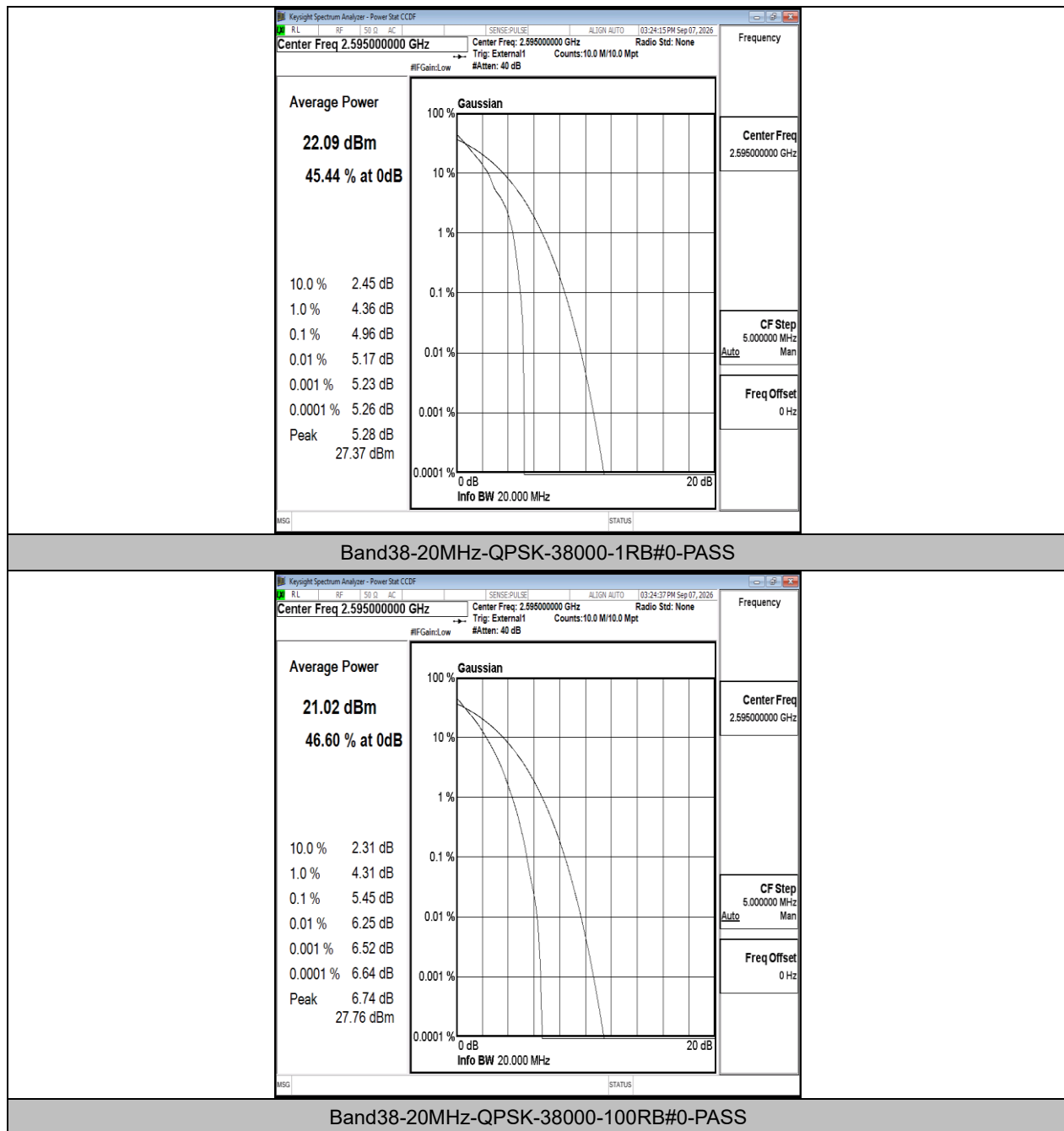


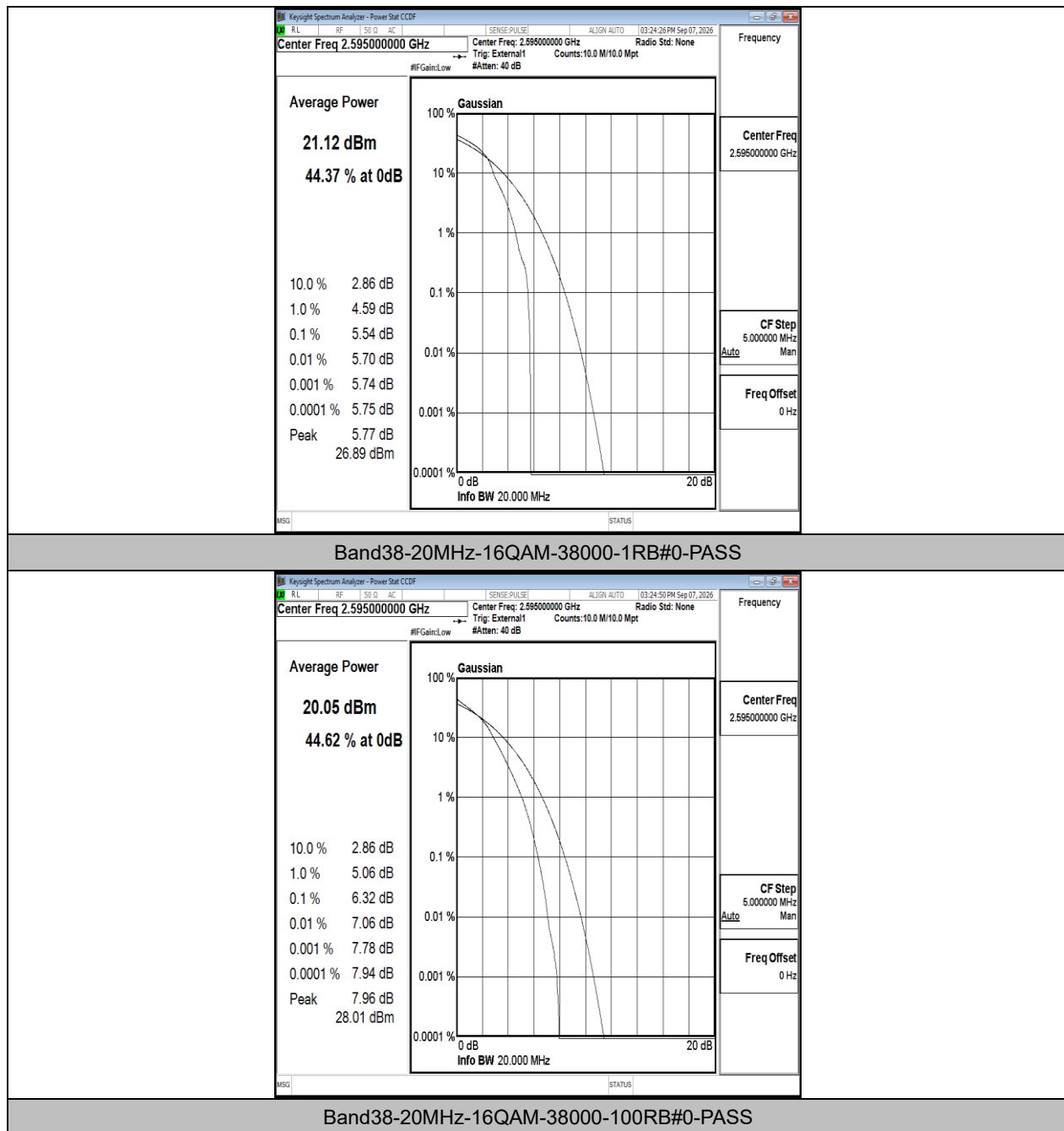


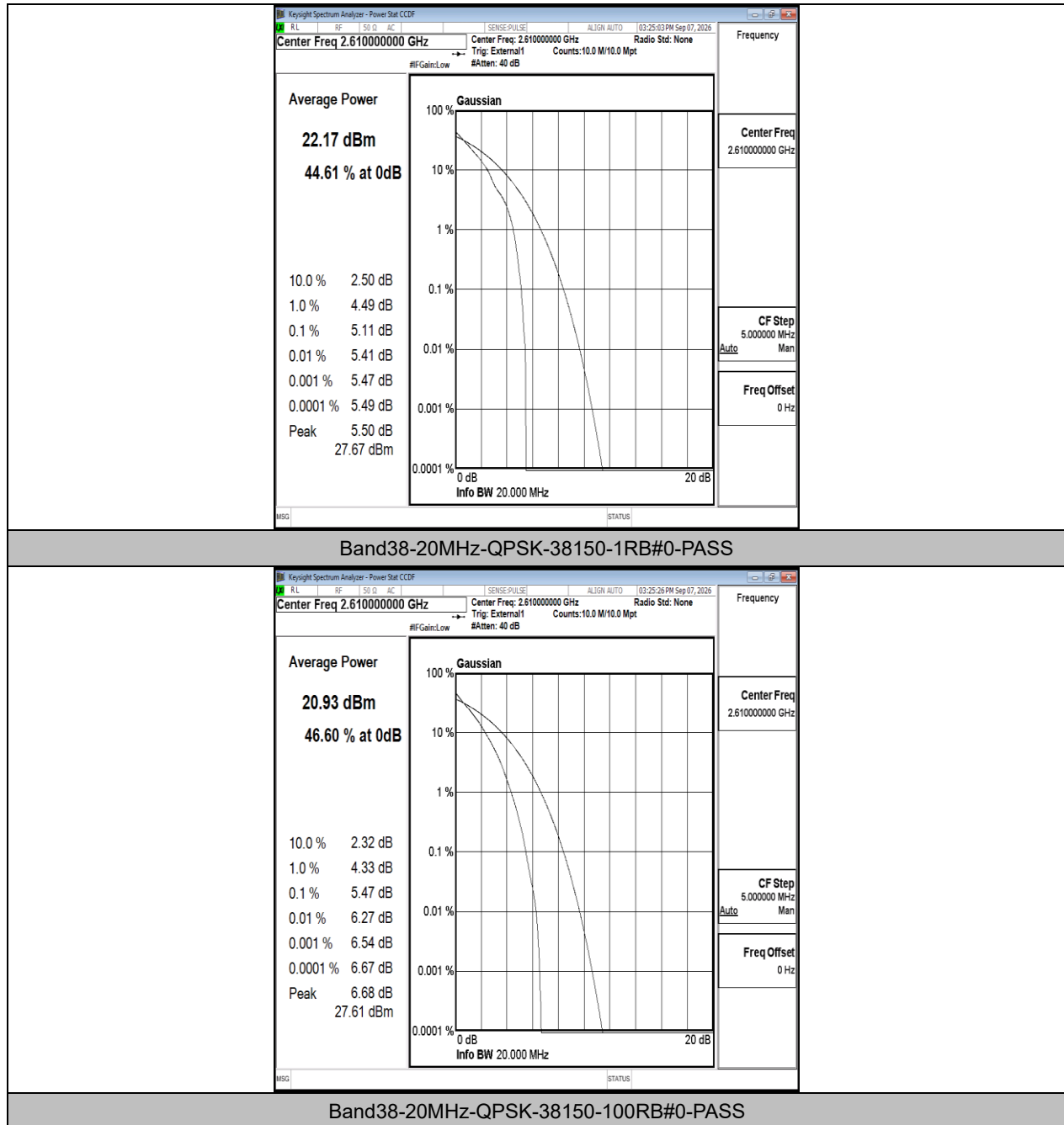
Band38-15MHz-16QAM-38175-75RB#0-PASS

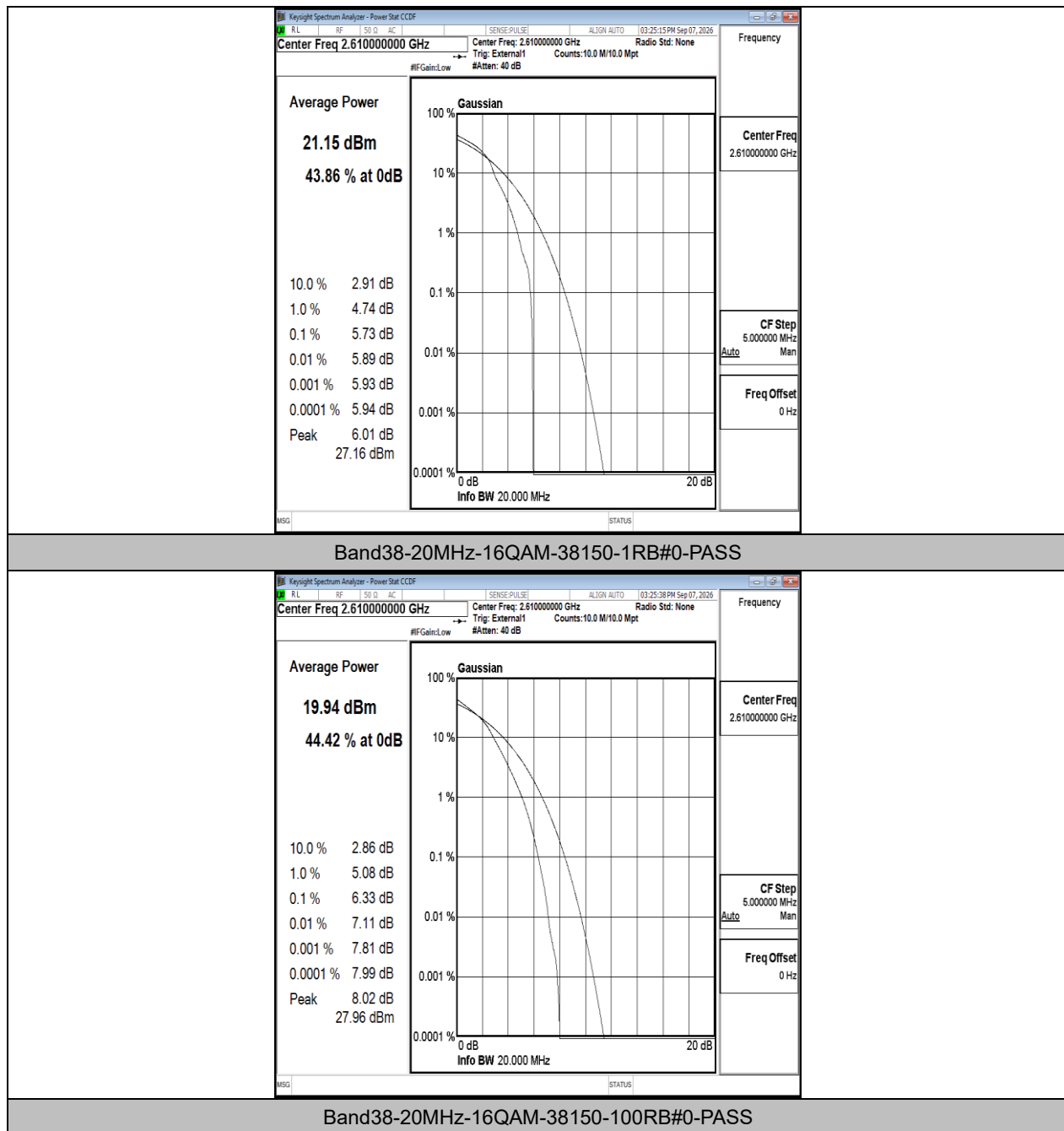










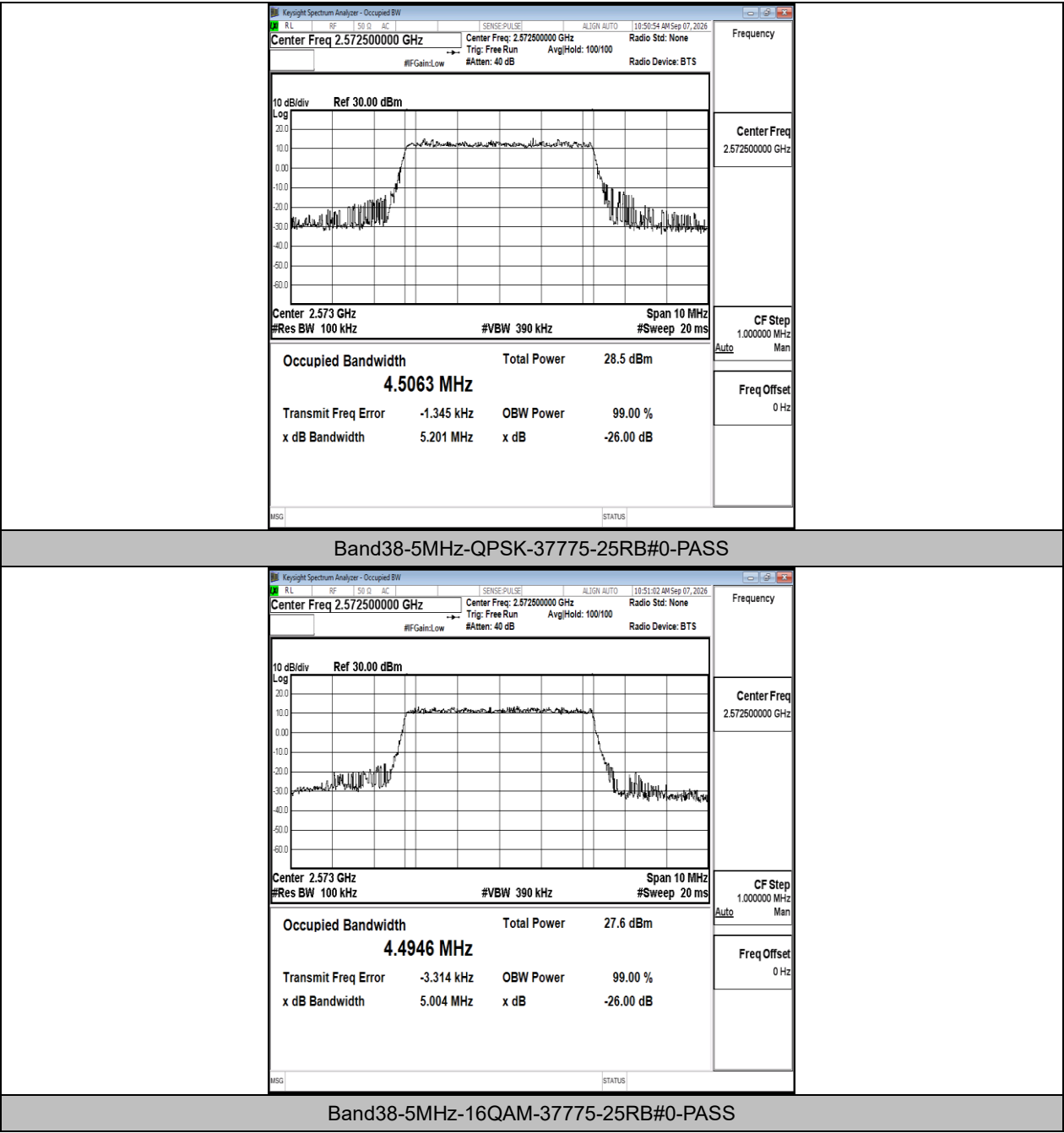


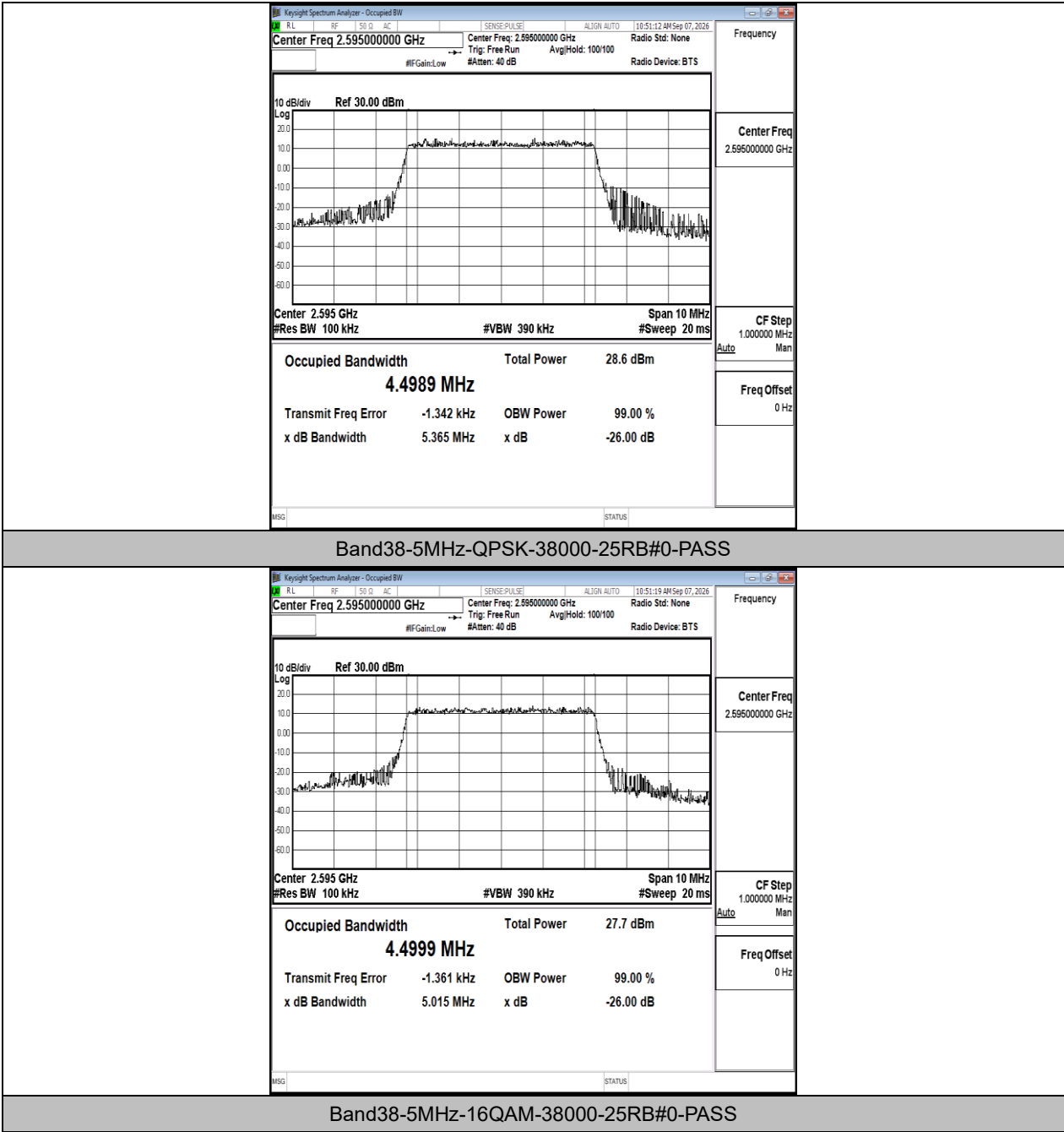
Q.3 26dB Bandwidth and Occupied Bandwidth

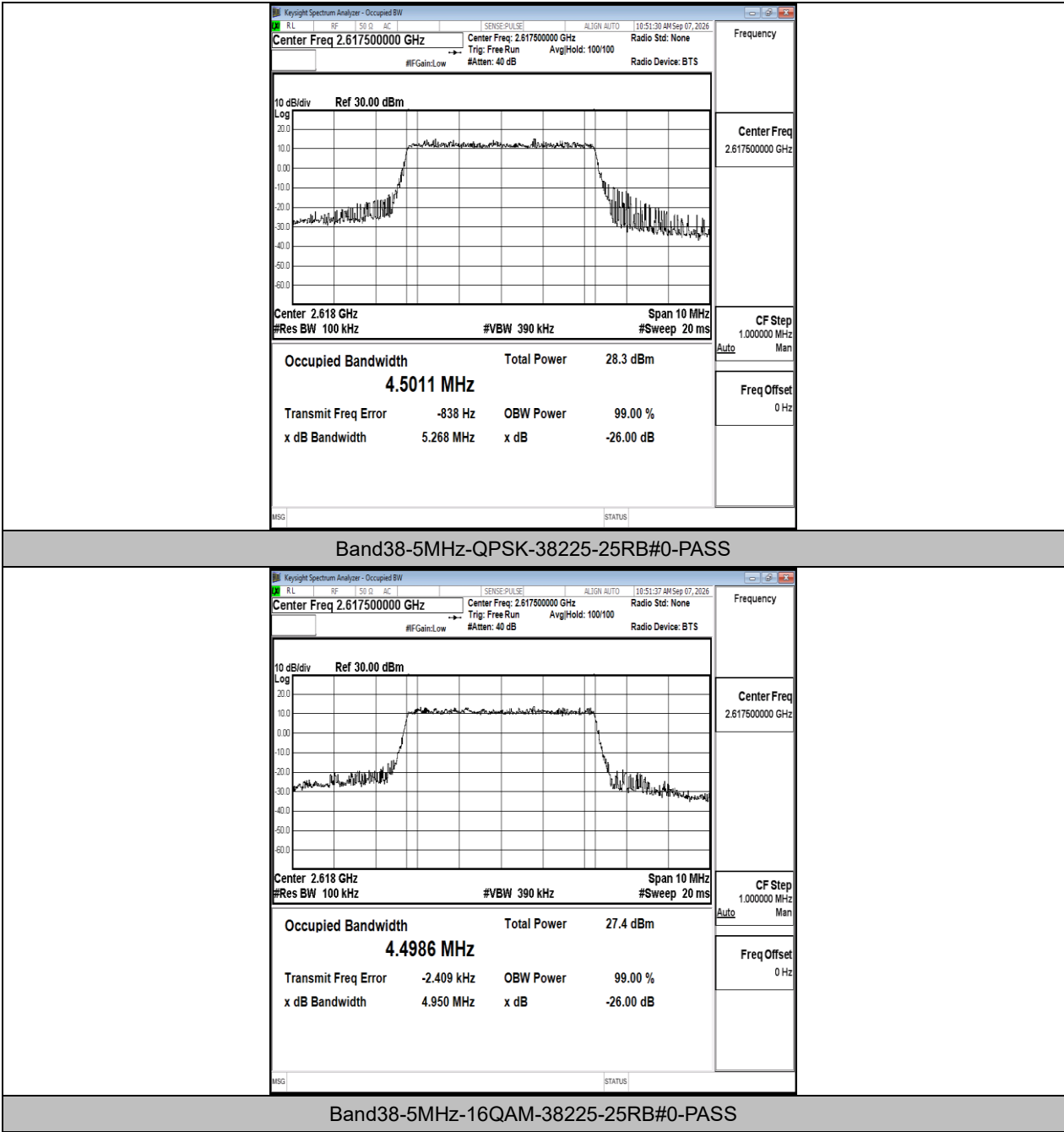
Test Result

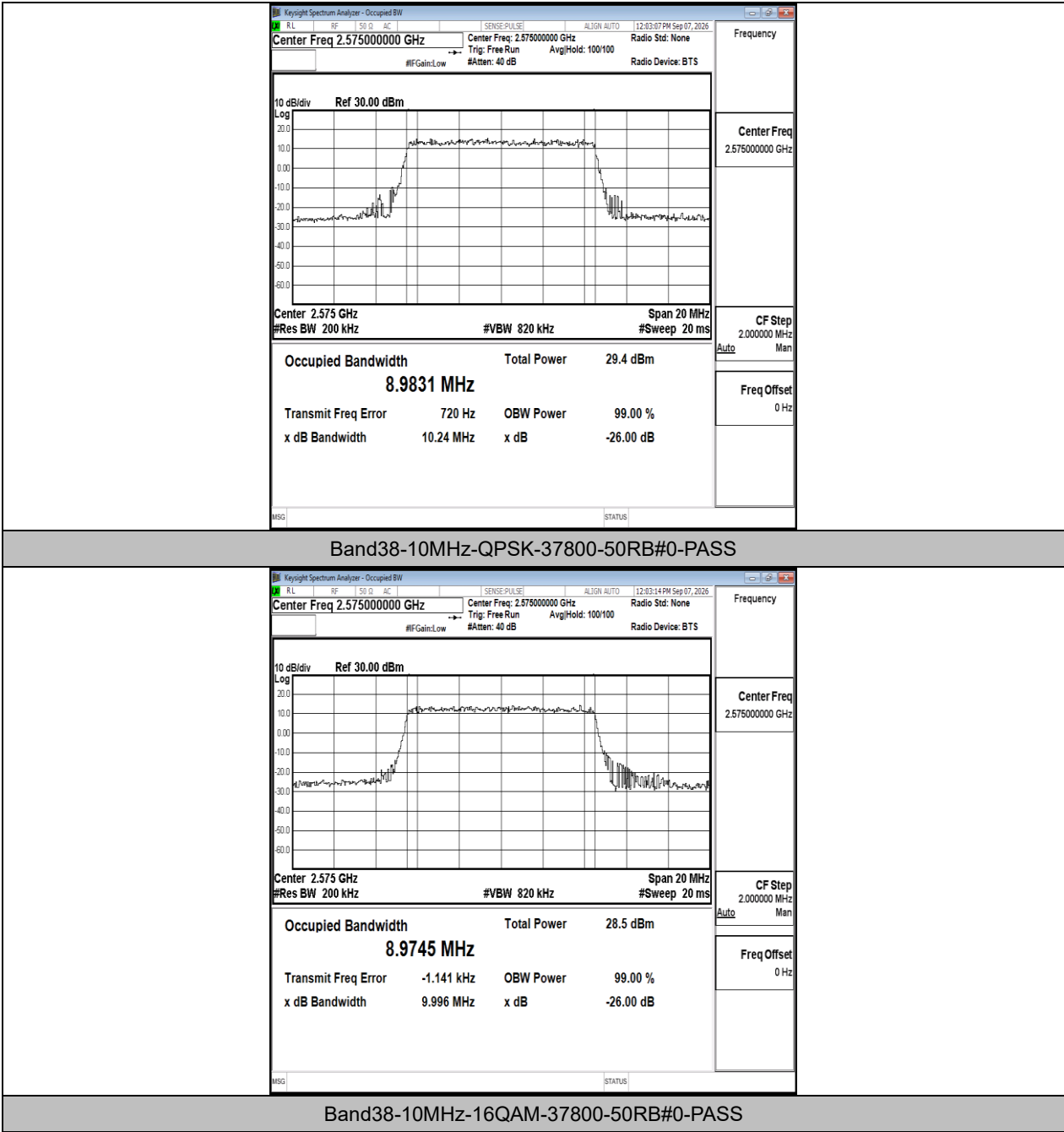
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	4.5063	5.201	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.4946	5.004	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.4989	5.365	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.4999	5.015	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.5011	5.268	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.4986	4.950	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.9831	10.24	PASS
Band38	10MHz	16QAM	37800	50RB#0	8.9745	9.996	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.9736	10.27	PASS
Band38	10MHz	16QAM	38000	50RB#0	8.9852	9.883	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.9781	9.940	PASS
Band38	10MHz	16QAM	38200	50RB#0	8.9747	9.931	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.508	15.27	PASS
Band38	15MHz	16QAM	37825	75RB#0	13.504	14.84	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.501	14.95	PASS
Band38	15MHz	16QAM	38000	75RB#0	13.466	15.70	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.464	15.61	PASS
Band38	15MHz	16QAM	38175	75RB#0	13.477	15.20	PASS
Band38	20MHz	QPSK	37850	100RB#0	18.010	20.05	PASS
Band38	20MHz	16QAM	37850	100RB#0	17.951	20.17	PASS
Band38	20MHz	QPSK	38000	100RB#0	17.958	20.94	PASS
Band38	20MHz	16QAM	38000	100RB#0	17.926	19.46	PASS
Band38	20MHz	QPSK	38150	100RB#0	17.966	20.42	PASS
Band38	20MHz	16QAM	38150	100RB#0	17.923	20.04	PASS

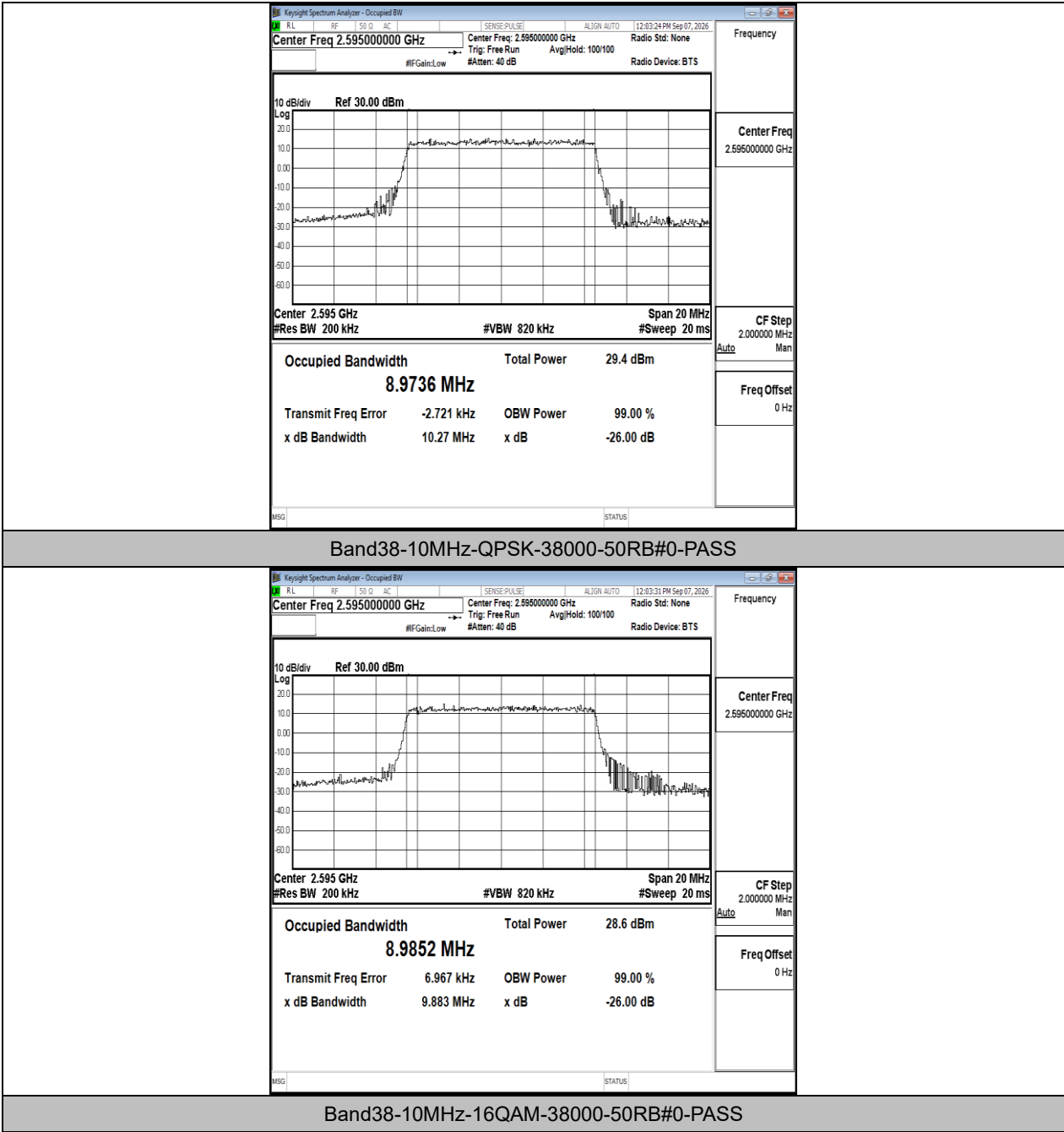
Test Graphs

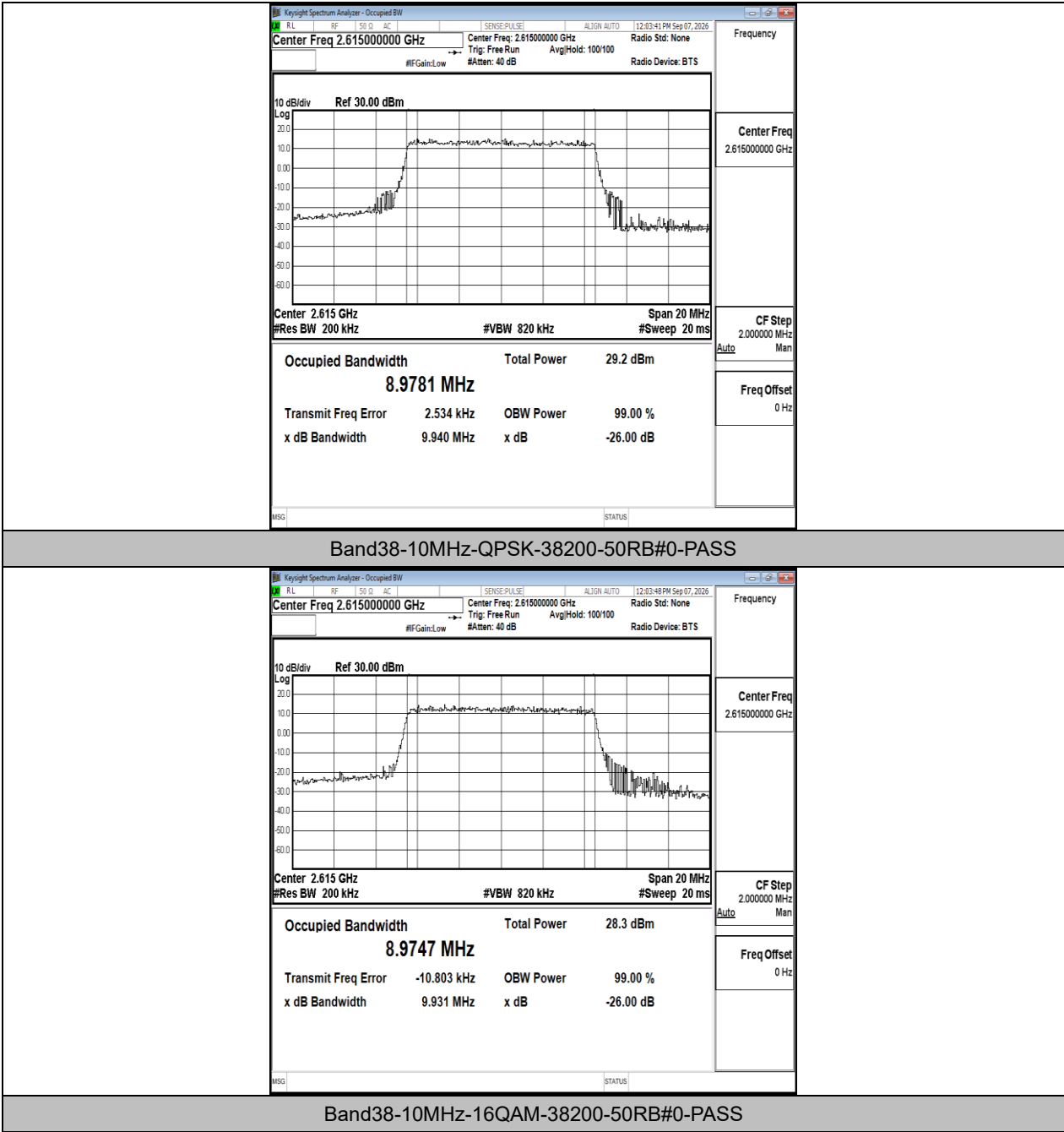


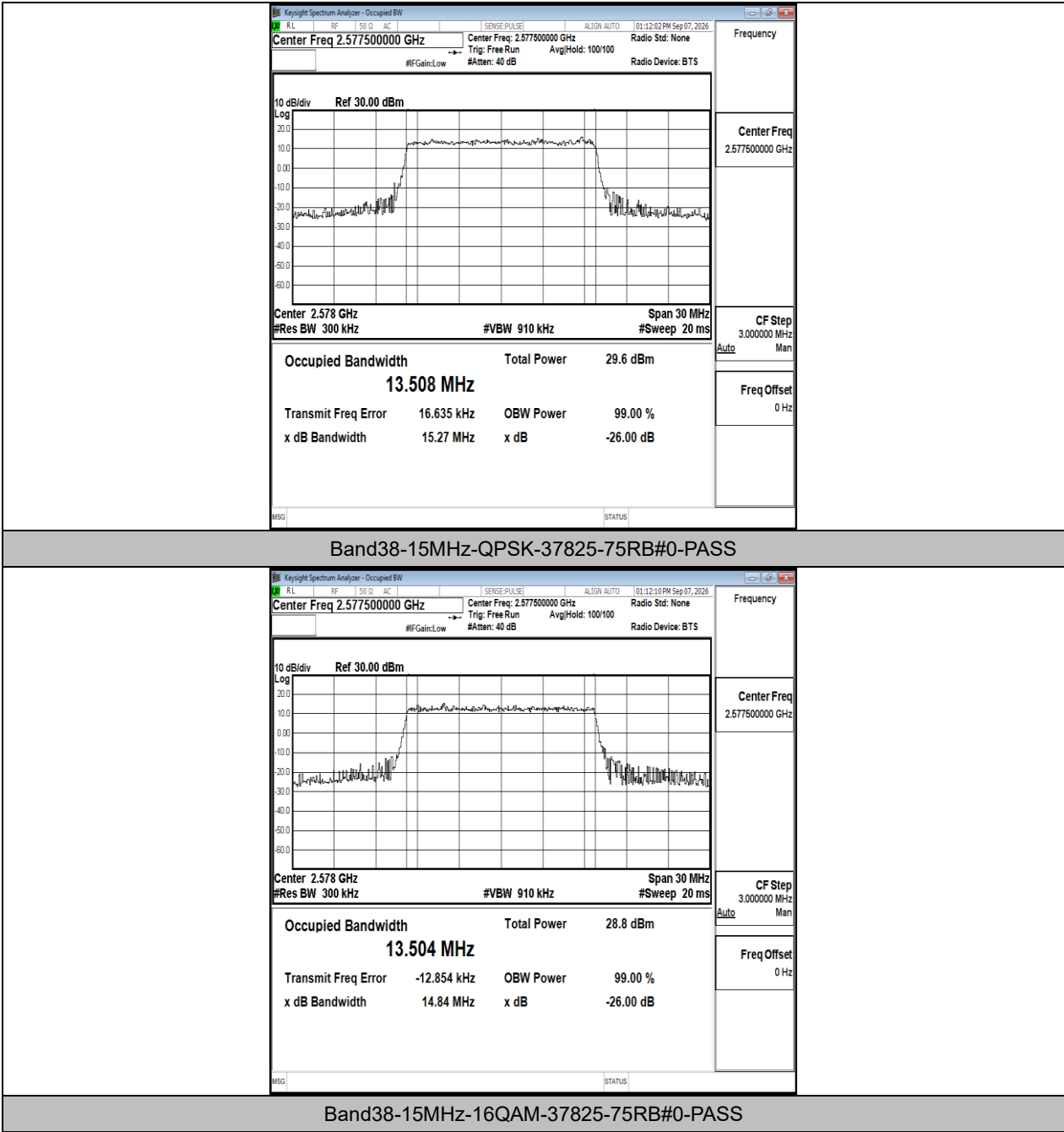


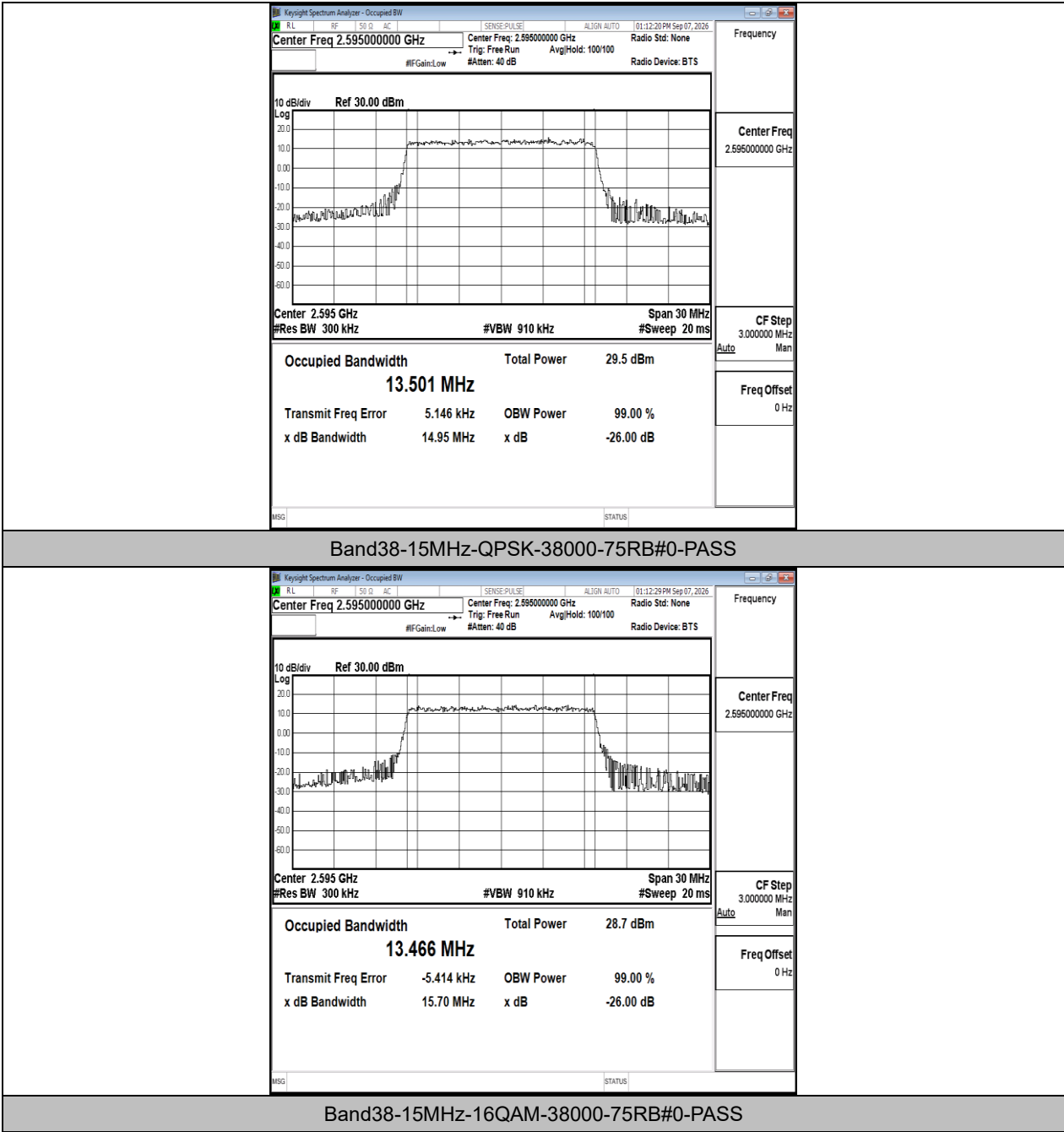












Frequency

Center Freq

2.595000000 GHz

CF Step

3.000000 MHz

Auto

Man

Freq Offset

0 Hz

MSG

STATUS

Band38-15MHz-16QAM-38000-75RB#0-PASS

