

Appendix Q: Test Data for E-UTRA Band 38

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

Q.1 Conducted Output Power Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Power(dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	23.97	PASS
Band38	5MHz	QPSK	37775	1RB#12	24.33	PASS
Band38	5MHz	QPSK	37775	1RB#24	23.91	PASS
Band38	5MHz	QPSK	37775	12RB#0	23.07	PASS
Band38	5MHz	QPSK	37775	12RB#6	23.14	PASS
Band38	5MHz	QPSK	37775	12RB#13	22.97	PASS
Band38	5MHz	QPSK	37775	25RB#0	23.06	PASS
Band38	5MHz	16QAM	37775	1RB#0	23.28	PASS
Band38	5MHz	16QAM	37775	1RB#12	23.62	PASS
Band38	5MHz	16QAM	37775	1RB#24	23.23	PASS
Band38	5MHz	16QAM	37775	12RB#0	22.07	PASS
Band38	5MHz	16QAM	37775	12RB#6	22.13	PASS
Band38	5MHz	16QAM	37775	12RB#13	22.05	PASS
Band38	5MHz	16QAM	37775	25RB#0	22.05	PASS
Band38	5MHz	QPSK	38000	1RB#0	23.90	PASS
Band38	5MHz	QPSK	38000	1RB#12	24.15	PASS
Band38	5MHz	QPSK	38000	1RB#24	23.94	PASS
Band38	5MHz	QPSK	38000	12RB#0	23.00	PASS
Band38	5MHz	QPSK	38000	12RB#6	23.06	PASS
Band38	5MHz	QPSK	38000	12RB#13	23.01	PASS
Band38	5MHz	QPSK	38000	25RB#0	22.98	PASS
Band38	5MHz	16QAM	38000	1RB#0	23.12	PASS
Band38	5MHz	16QAM	38000	1RB#12	23.50	PASS
Band38	5MHz	16QAM	38000	1RB#24	23.15	PASS
Band38	5MHz	16QAM	38000	12RB#0	21.87	PASS
Band38	5MHz	16QAM	38000	12RB#6	21.97	PASS
Band38	5MHz	16QAM	38000	12RB#13	21.96	PASS
Band38	5MHz	16QAM	38000	25RB#0	21.98	PASS
Band38	5MHz	QPSK	38225	1RB#0	23.98	PASS
Band38	5MHz	QPSK	38225	1RB#12	24.28	PASS
Band38	5MHz	QPSK	38225	1RB#24	23.98	PASS
Band38	5MHz	QPSK	38225	12RB#0	23.06	PASS
Band38	5MHz	QPSK	38225	12RB#6	23.11	PASS
Band38	5MHz	QPSK	38225	12RB#13	23.05	PASS
Band38	5MHz	QPSK	38225	25RB#0	23.08	PASS
Band38	5MHz	16QAM	38225	1RB#0	23.32	PASS
Band38	5MHz	16QAM	38225	1RB#12	23.86	PASS
Band38	5MHz	16QAM	38225	1RB#24	23.33	PASS

Band38	5MHz	16QAM	38225	12RB#0	21.99	PASS
Band38	5MHz	16QAM	38225	12RB#6	22.12	PASS
Band38	5MHz	16QAM	38225	12RB#13	21.98	PASS
Band38	5MHz	16QAM	38225	25RB#0	22.02	PASS
Band38	10MHz	QPSK	37800	1RB#0	22.17	PASS
Band38	10MHz	QPSK	37800	1RB#24	22.03	PASS
Band38	10MHz	QPSK	37800	1RB#49	22.39	PASS
Band38	10MHz	QPSK	37800	25RB#0	21.21	PASS
Band38	10MHz	QPSK	37800	25RB#12	21.20	PASS
Band38	10MHz	QPSK	37800	25RB#25	21.28	PASS
Band38	10MHz	QPSK	37800	50RB#0	21.26	PASS
Band38	10MHz	16QAM	37800	1RB#0	21.59	PASS
Band38	10MHz	16QAM	37800	1RB#24	21.64	PASS
Band38	10MHz	16QAM	37800	1RB#49	21.83	PASS
Band38	10MHz	16QAM	37800	25RB#0	20.33	PASS
Band38	10MHz	16QAM	37800	25RB#12	20.28	PASS
Band38	10MHz	16QAM	37800	25RB#25	20.34	PASS
Band38	10MHz	16QAM	37800	50RB#0	20.22	PASS
Band38	10MHz	QPSK	38000	1RB#0	22.61	PASS
Band38	10MHz	QPSK	38000	1RB#24	22.37	PASS
Band38	10MHz	QPSK	38000	1RB#49	22.76	PASS
Band38	10MHz	QPSK	38000	25RB#0	21.46	PASS
Band38	10MHz	QPSK	38000	25RB#12	21.41	PASS
Band38	10MHz	QPSK	38000	25RB#25	21.53	PASS
Band38	10MHz	QPSK	38000	50RB#0	21.52	PASS
Band38	10MHz	16QAM	38000	1RB#0	21.69	PASS
Band38	10MHz	16QAM	38000	1RB#24	21.40	PASS
Band38	10MHz	16QAM	38000	1RB#49	21.69	PASS
Band38	10MHz	16QAM	38000	25RB#0	20.52	PASS
Band38	10MHz	16QAM	38000	25RB#12	20.51	PASS
Band38	10MHz	16QAM	38000	25RB#25	20.58	PASS
Band38	10MHz	16QAM	38000	50RB#0	20.48	PASS
Band38	10MHz	QPSK	38200	1RB#0	22.62	PASS
Band38	10MHz	QPSK	38200	1RB#24	22.09	PASS
Band38	10MHz	QPSK	38200	1RB#49	22.55	PASS
Band38	10MHz	QPSK	38200	25RB#0	21.30	PASS
Band38	10MHz	QPSK	38200	25RB#12	21.26	PASS
Band38	10MHz	QPSK	38200	25RB#25	21.38	PASS
Band38	10MHz	QPSK	38200	50RB#0	21.37	PASS
Band38	10MHz	16QAM	38200	1RB#0	21.68	PASS
Band38	10MHz	16QAM	38200	1RB#24	21.40	PASS
Band38	10MHz	16QAM	38200	1RB#49	21.57	PASS
Band38	10MHz	16QAM	38200	25RB#0	20.39	PASS

Band38	10MHz	16QAM	38200	25RB#12	20.29	PASS
Band38	10MHz	16QAM	38200	25RB#25	20.39	PASS
Band38	10MHz	16QAM	38200	50RB#0	20.32	PASS
Band38	15MHz	QPSK	37825	1RB#0	22.38	PASS
Band38	15MHz	QPSK	37825	1RB#38	22.01	PASS
Band38	15MHz	QPSK	37825	1RB#74	22.61	PASS
Band38	15MHz	QPSK	37825	38RB#0	21.14	PASS
Band38	15MHz	QPSK	37825	38RB#18	21.17	PASS
Band38	15MHz	QPSK	37825	38RB#37	21.24	PASS
Band38	15MHz	QPSK	37825	75RB#0	21.21	PASS
Band38	15MHz	16QAM	37825	1RB#0	21.28	PASS
Band38	15MHz	16QAM	37825	1RB#38	21.33	PASS
Band38	15MHz	16QAM	37825	1RB#74	21.70	PASS
Band38	15MHz	16QAM	37825	38RB#0	20.20	PASS
Band38	15MHz	16QAM	37825	38RB#18	20.21	PASS
Band38	15MHz	16QAM	37825	38RB#37	20.34	PASS
Band38	15MHz	16QAM	37825	75RB#0	20.28	PASS
Band38	15MHz	QPSK	38000	1RB#0	22.52	PASS
Band38	15MHz	QPSK	38000	1RB#38	22.17	PASS
Band38	15MHz	QPSK	38000	1RB#74	22.63	PASS
Band38	15MHz	QPSK	38000	38RB#0	21.27	PASS
Band38	15MHz	QPSK	38000	38RB#18	21.31	PASS
Band38	15MHz	QPSK	38000	38RB#37	21.43	PASS
Band38	15MHz	QPSK	38000	75RB#0	21.30	PASS
Band38	15MHz	16QAM	38000	1RB#0	21.52	PASS
Band38	15MHz	16QAM	38000	1RB#38	21.32	PASS
Band38	15MHz	16QAM	38000	1RB#74	21.78	PASS
Band38	15MHz	16QAM	38000	38RB#0	20.29	PASS
Band38	15MHz	16QAM	38000	38RB#18	20.40	PASS
Band38	15MHz	16QAM	38000	38RB#37	20.59	PASS
Band38	15MHz	16QAM	38000	75RB#0	20.29	PASS
Band38	15MHz	QPSK	38175	1RB#0	22.47	PASS
Band38	15MHz	QPSK	38175	1RB#38	22.09	PASS
Band38	15MHz	QPSK	38175	1RB#74	22.52	PASS
Band38	15MHz	QPSK	38175	38RB#0	21.23	PASS
Band38	15MHz	QPSK	38175	38RB#18	21.21	PASS
Band38	15MHz	QPSK	38175	38RB#37	21.18	PASS
Band38	15MHz	QPSK	38175	75RB#0	21.25	PASS
Band38	15MHz	16QAM	38175	1RB#0	21.92	PASS
Band38	15MHz	16QAM	38175	1RB#38	21.48	PASS
Band38	15MHz	16QAM	38175	1RB#74	21.72	PASS
Band38	15MHz	16QAM	38175	38RB#0	20.23	PASS
Band38	15MHz	16QAM	38175	38RB#18	20.28	PASS

Band38	15MHz	16QAM	38175	38RB#37	20.27	PASS
Band38	15MHz	16QAM	38175	75RB#0	20.30	PASS
Band38	20MHz	QPSK	37850	1RB#0	21.95	PASS
Band38	20MHz	QPSK	37850	1RB#49	22.05	PASS
Band38	20MHz	QPSK	37850	1RB#99	22.54	PASS
Band38	20MHz	QPSK	37850	50RB#0	21.01	PASS
Band38	20MHz	QPSK	37850	50RB#25	21.04	PASS
Band38	20MHz	QPSK	37850	50RB#50	21.22	PASS
Band38	20MHz	QPSK	37850	100RB#0	21.08	PASS
Band38	20MHz	16QAM	37850	1RB#0	20.73	PASS
Band38	20MHz	16QAM	37850	1RB#49	21.17	PASS
Band38	20MHz	16QAM	37850	1RB#99	21.32	PASS
Band38	20MHz	16QAM	37850	50RB#0	19.92	PASS
Band38	20MHz	16QAM	37850	50RB#25	20.15	PASS
Band38	20MHz	16QAM	37850	50RB#50	20.32	PASS
Band38	20MHz	16QAM	37850	100RB#0	20.10	PASS
Band38	20MHz	QPSK	38000	1RB#0	22.15	PASS
Band38	20MHz	QPSK	38000	1RB#49	22.14	PASS
Band38	20MHz	QPSK	38000	1RB#99	22.43	PASS
Band38	20MHz	QPSK	38000	50RB#0	20.99	PASS
Band38	20MHz	QPSK	38000	50RB#25	21.05	PASS
Band38	20MHz	QPSK	38000	50RB#50	21.25	PASS
Band38	20MHz	QPSK	38000	100RB#0	21.10	PASS
Band38	20MHz	16QAM	38000	1RB#0	21.02	PASS
Band38	20MHz	16QAM	38000	1RB#49	21.30	PASS
Band38	20MHz	16QAM	38000	1RB#99	21.47	PASS
Band38	20MHz	16QAM	38000	50RB#0	19.98	PASS
Band38	20MHz	16QAM	38000	50RB#25	20.03	PASS
Band38	20MHz	16QAM	38000	50RB#50	20.21	PASS
Band38	20MHz	16QAM	38000	100RB#0	20.12	PASS
Band38	20MHz	QPSK	38150	1RB#0	22.02	PASS
Band38	20MHz	QPSK	38150	1RB#49	21.82	PASS
Band38	20MHz	QPSK	38150	1RB#99	22.29	PASS
Band38	20MHz	QPSK	38150	50RB#0	21.04	PASS
Band38	20MHz	QPSK	38150	50RB#25	20.99	PASS
Band38	20MHz	QPSK	38150	50RB#50	21.05	PASS
Band38	20MHz	QPSK	38150	100RB#0	21.06	PASS
Band38	20MHz	16QAM	38150	1RB#0	21.30	PASS
Band38	20MHz	16QAM	38150	1RB#49	21.27	PASS
Band38	20MHz	16QAM	38150	1RB#99	21.39	PASS
Band38	20MHz	16QAM	38150	50RB#0	20.03	PASS
Band38	20MHz	16QAM	38150	50RB#25	20.10	PASS
Band38	20MHz	16QAM	38150	50RB#50	20.08	PASS

Band38	20MHz	16QAM	38150	100RB#0	20.03	PASS
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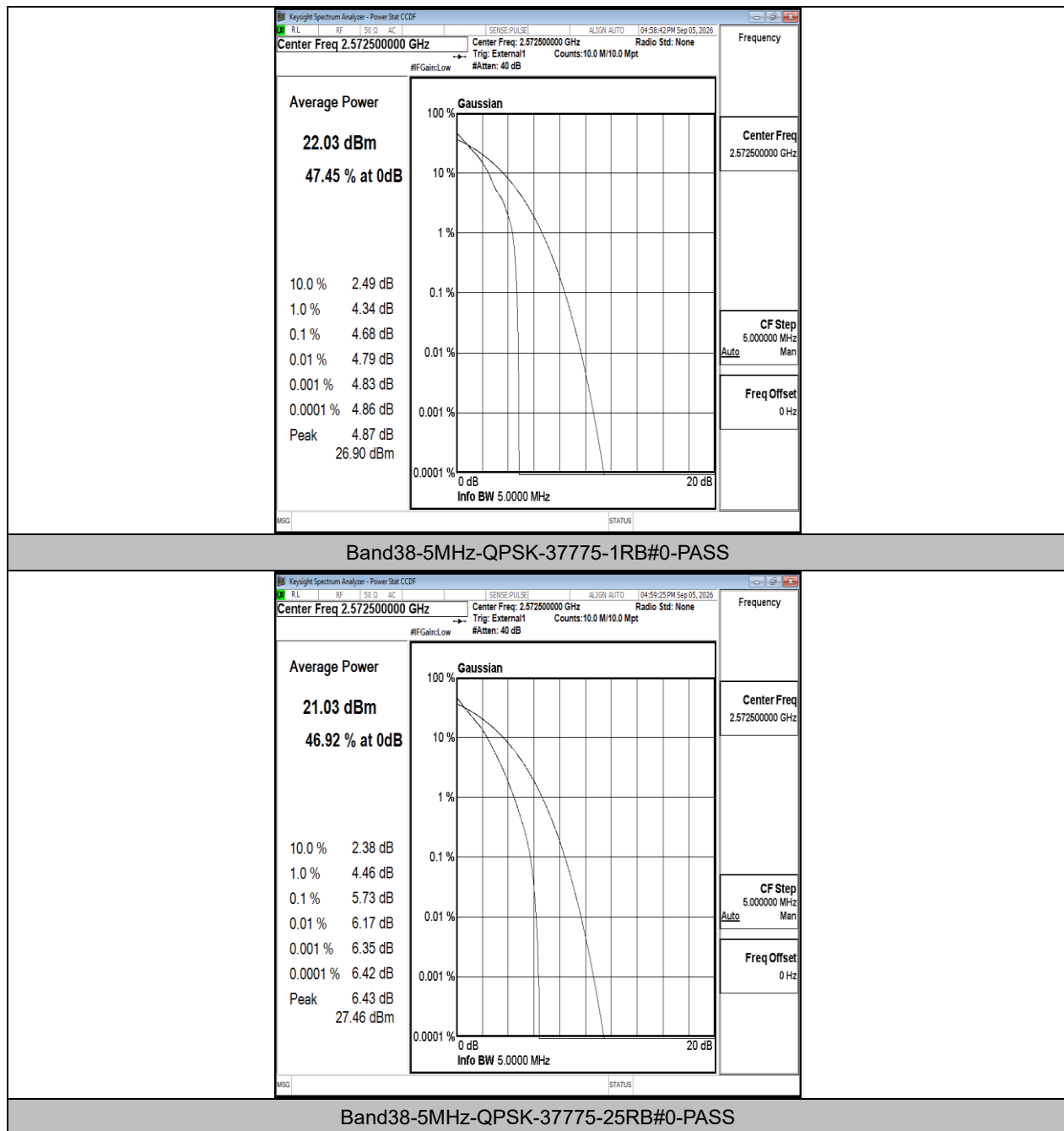
Q.2 Peak-to-Average Ratio(CCDF)

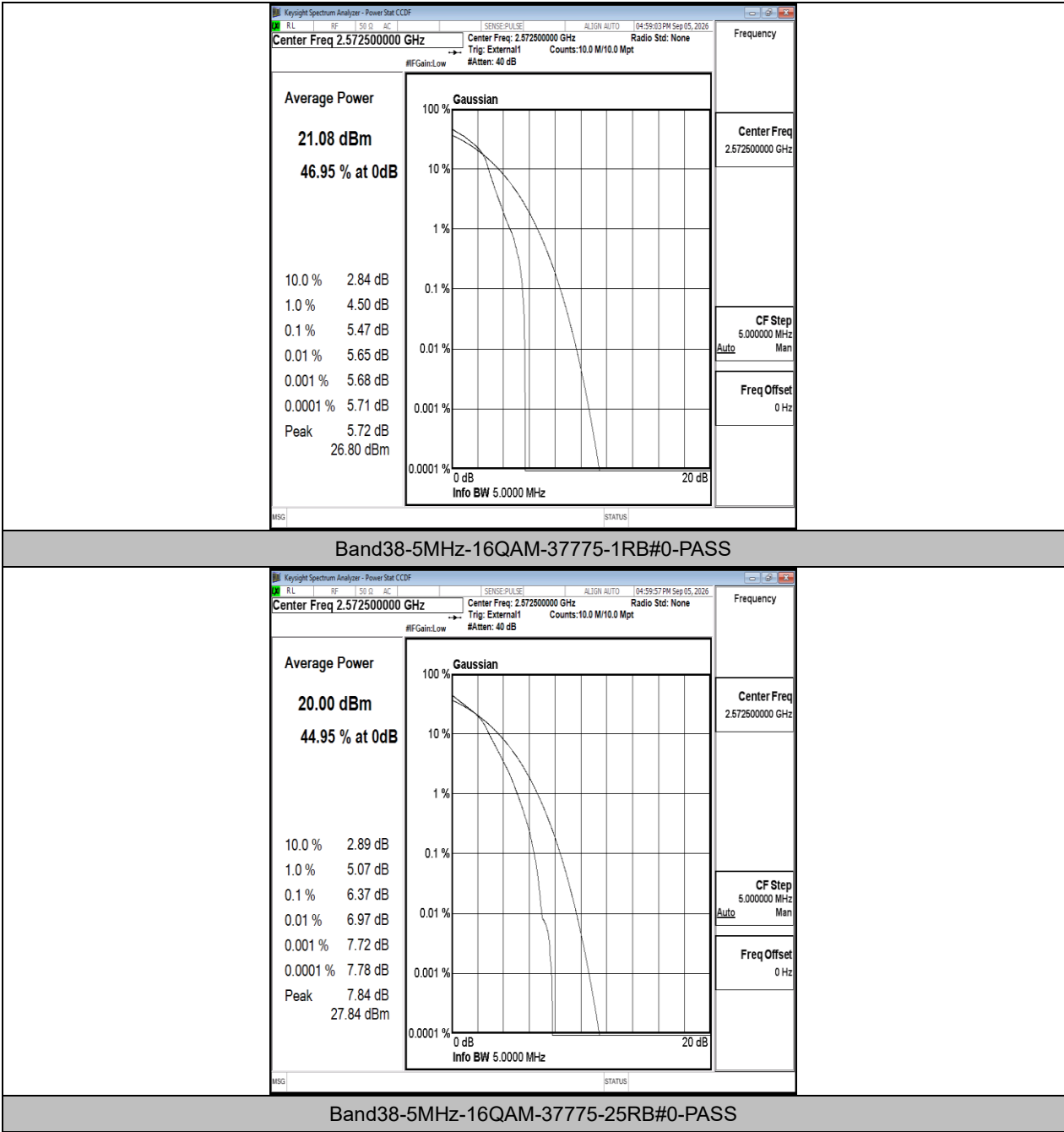
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	4.68	13	PASS
Band38	5MHz	QPSK	37775	25RB#0	5.73	13	PASS
Band38	5MHz	16QAM	37775	1RB#0	5.47	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	5.87	13	PASS
Band38	5MHz	16QAM	38000	1RB#0	5.67	13	PASS
Band38	5MHz	16QAM	38000	25RB#0	6.52	13	PASS
Band38	5MHz	QPSK	38225	1RB#0	5.07	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	6.57	13	PASS
Band38	10MHz	QPSK	37800	1RB#0	5.36	13	PASS
Band38	10MHz	QPSK	37800	50RB#0	5.55	13	PASS
Band38	10MHz	16QAM	37800	1RB#0	5.77	13	PASS
Band38	10MHz	16QAM	37800	50RB#0	6.29	13	PASS
Band38	10MHz	QPSK	38000	1RB#0	5.69	13	PASS
Band38	10MHz	QPSK	38000	50RB#0	5.66	13	PASS
Band38	10MHz	16QAM	38000	1RB#0	6.00	13	PASS
Band38	10MHz	16QAM	38000	50RB#0	6.43	13	PASS
Band38	10MHz	QPSK	38200	1RB#0	5.80	13	PASS
Band38	10MHz	QPSK	38200	50RB#0	5.73	13	PASS
Band38	10MHz	16QAM	38200	1RB#0	6.12	13	PASS
Band38	10MHz	16QAM	38200	50RB#0	6.51	13	PASS
Band38	15MHz	QPSK	37825	1RB#0	5.13	13	PASS
Band38	15MHz	QPSK	37825	75RB#0	5.81	13	PASS
Band38	15MHz	16QAM	37825	1RB#0	5.64	13	PASS
Band38	15MHz	16QAM	37825	75RB#0	6.41	13	PASS
Band38	15MHz	QPSK	38000	1RB#0	5.49	13	PASS
Band38	15MHz	QPSK	38000	75RB#0	5.89	13	PASS
Band38	15MHz	16QAM	38000	1RB#0	5.90	13	PASS
Band38	15MHz	16QAM	38000	75RB#0	6.47	13	PASS
Band38	15MHz	QPSK	38175	1RB#0	5.64	13	PASS
Band38	15MHz	QPSK	38175	75RB#0	5.92	13	PASS
Band38	15MHz	16QAM	38175	1RB#0	6.06	13	PASS
Band38	15MHz	16QAM	38175	75RB#0	6.51	13	PASS
Band38	20MHz	QPSK	37850	1RB#0	4.74	13	PASS
Band38	20MHz	QPSK	37850	100RB#0	5.47	13	PASS

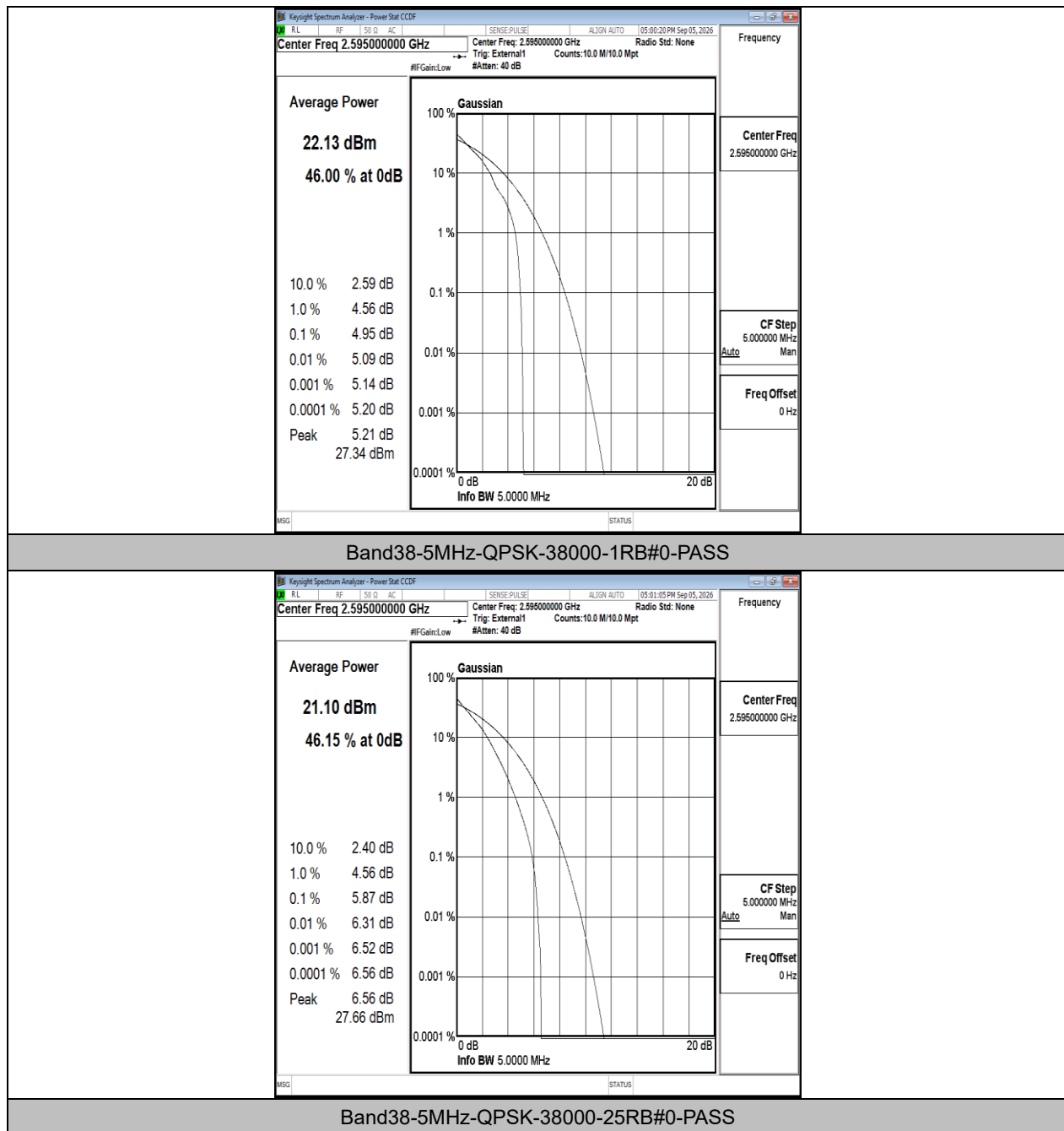
Band38	20MHz	16QAM	37850	1RB#0	5.29	13	PASS
Band38	20MHz	16QAM	37850	100RB#0	6.28	13	PASS
Band38	20MHz	QPSK	38000	1RB#0	4.97	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	5.45	13	PASS
Band38	20MHz	16QAM	38000	1RB#0	5.56	13	PASS
Band38	20MHz	16QAM	38000	100RB#0	6.31	13	PASS
Band38	20MHz	QPSK	38150	1RB#0	5.06	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	5.47	13	PASS
Band38	20MHz	16QAM	38150	1RB#0	5.74	13	PASS
Band38	20MHz	16QAM	38150	100RB#0	6.33	13	PASS

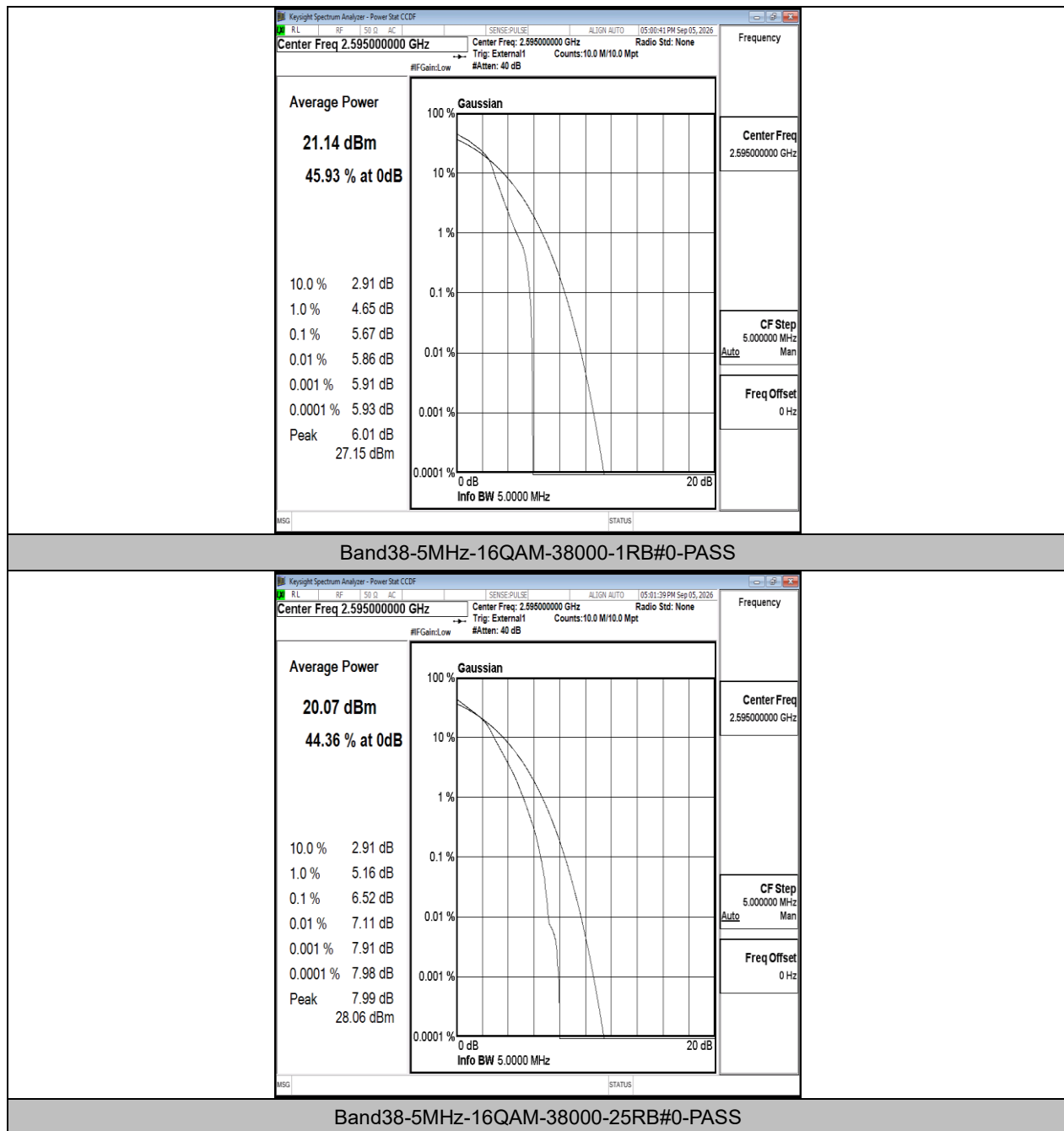
Test Graphs

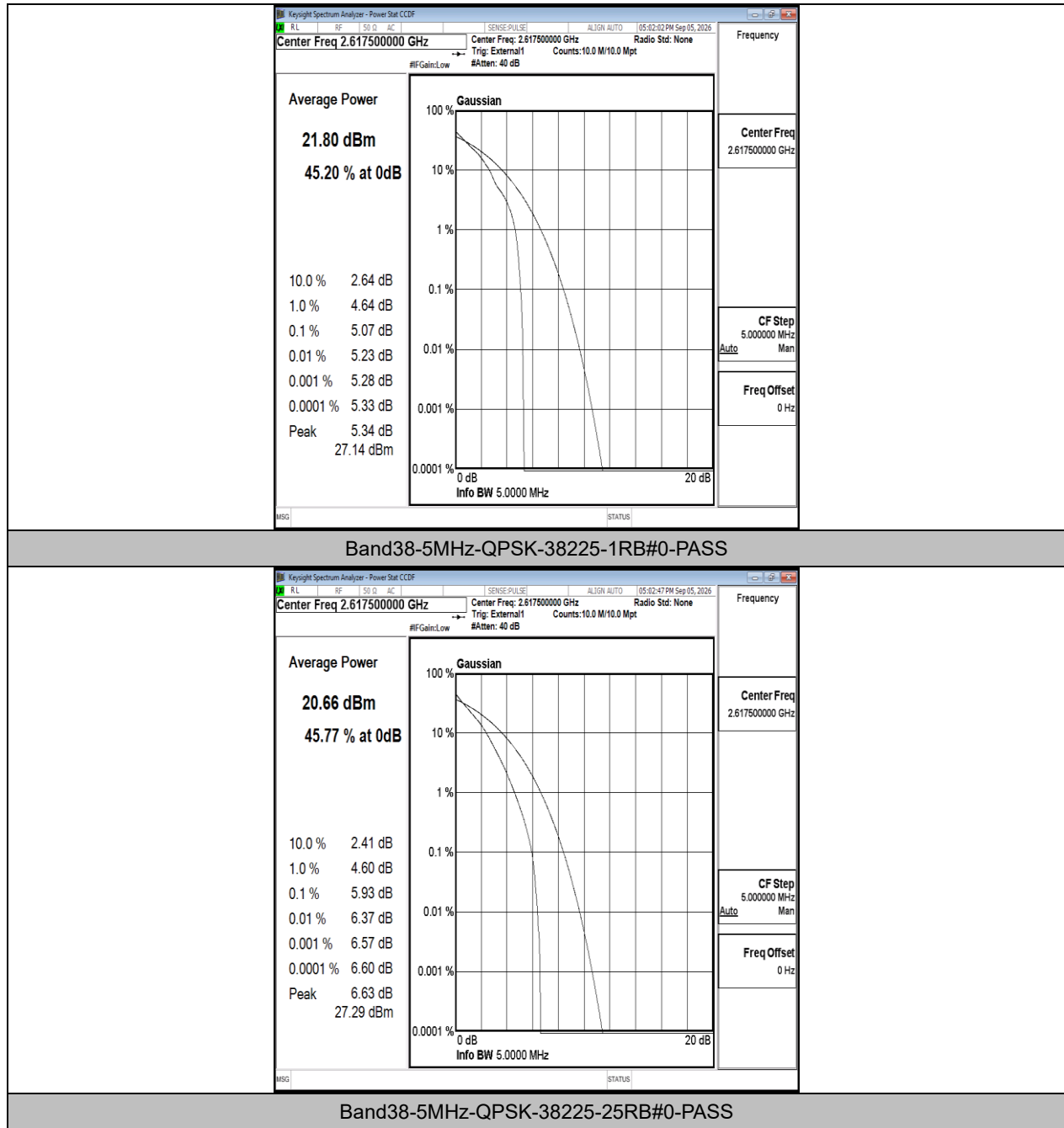


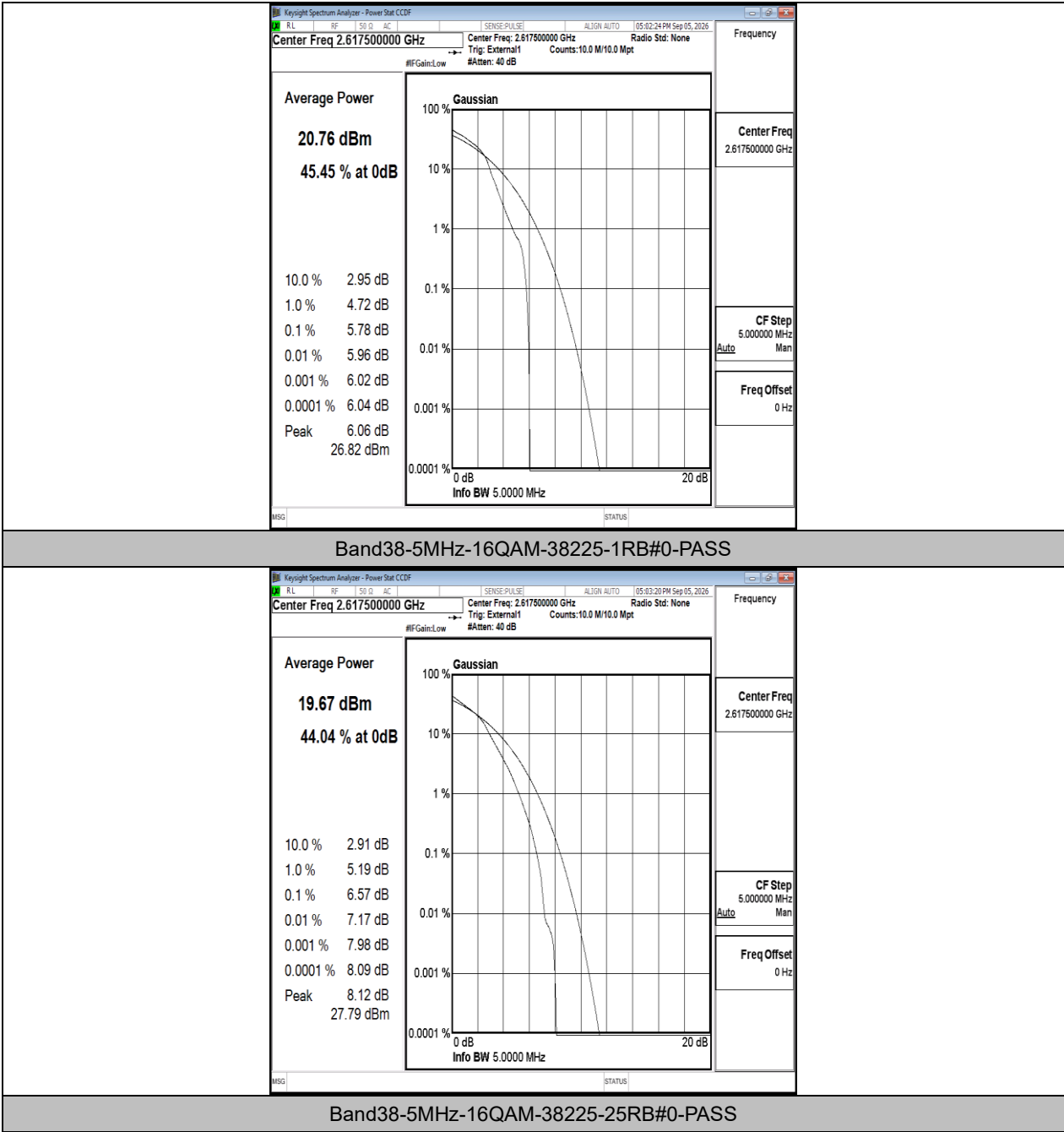


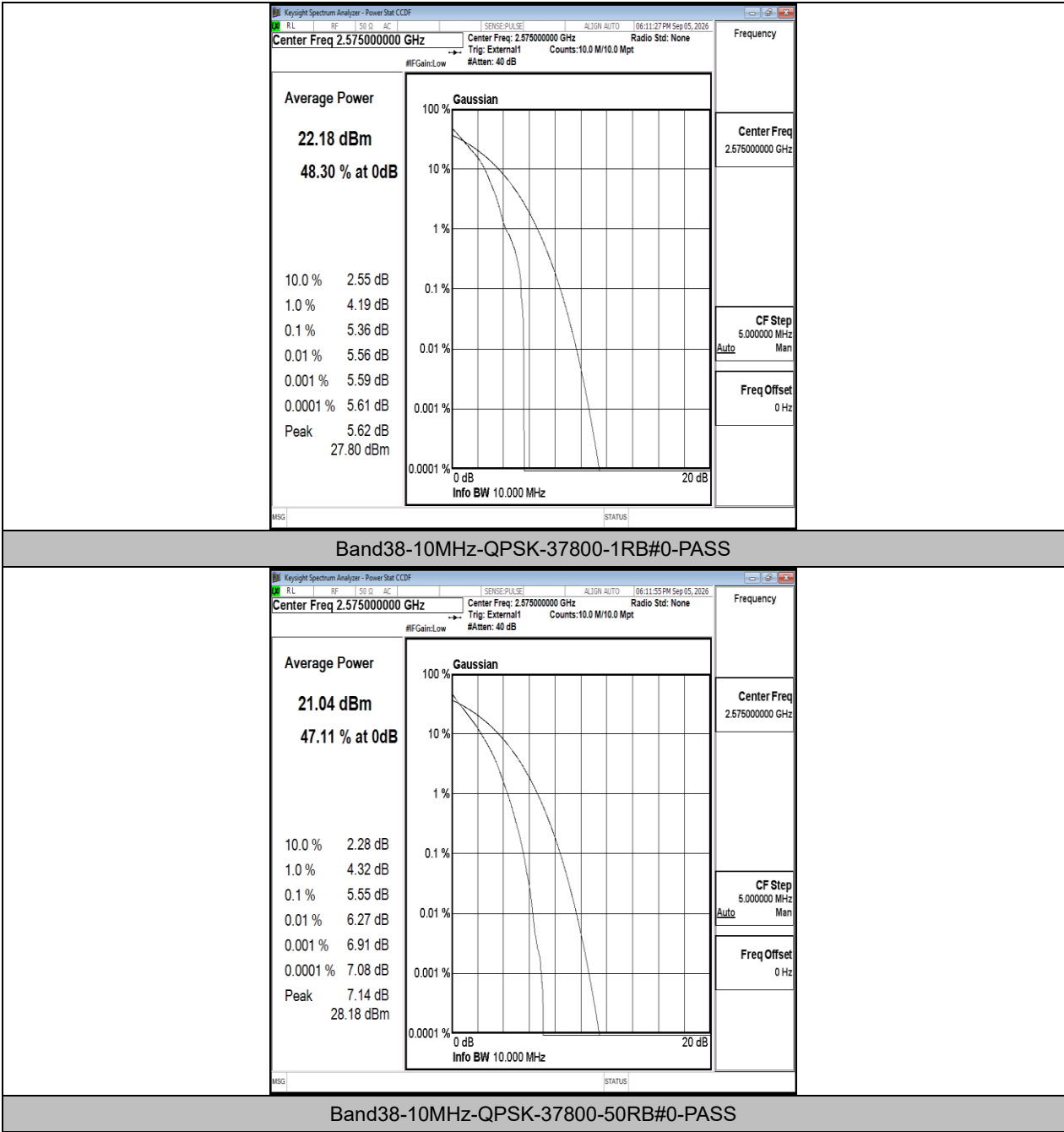
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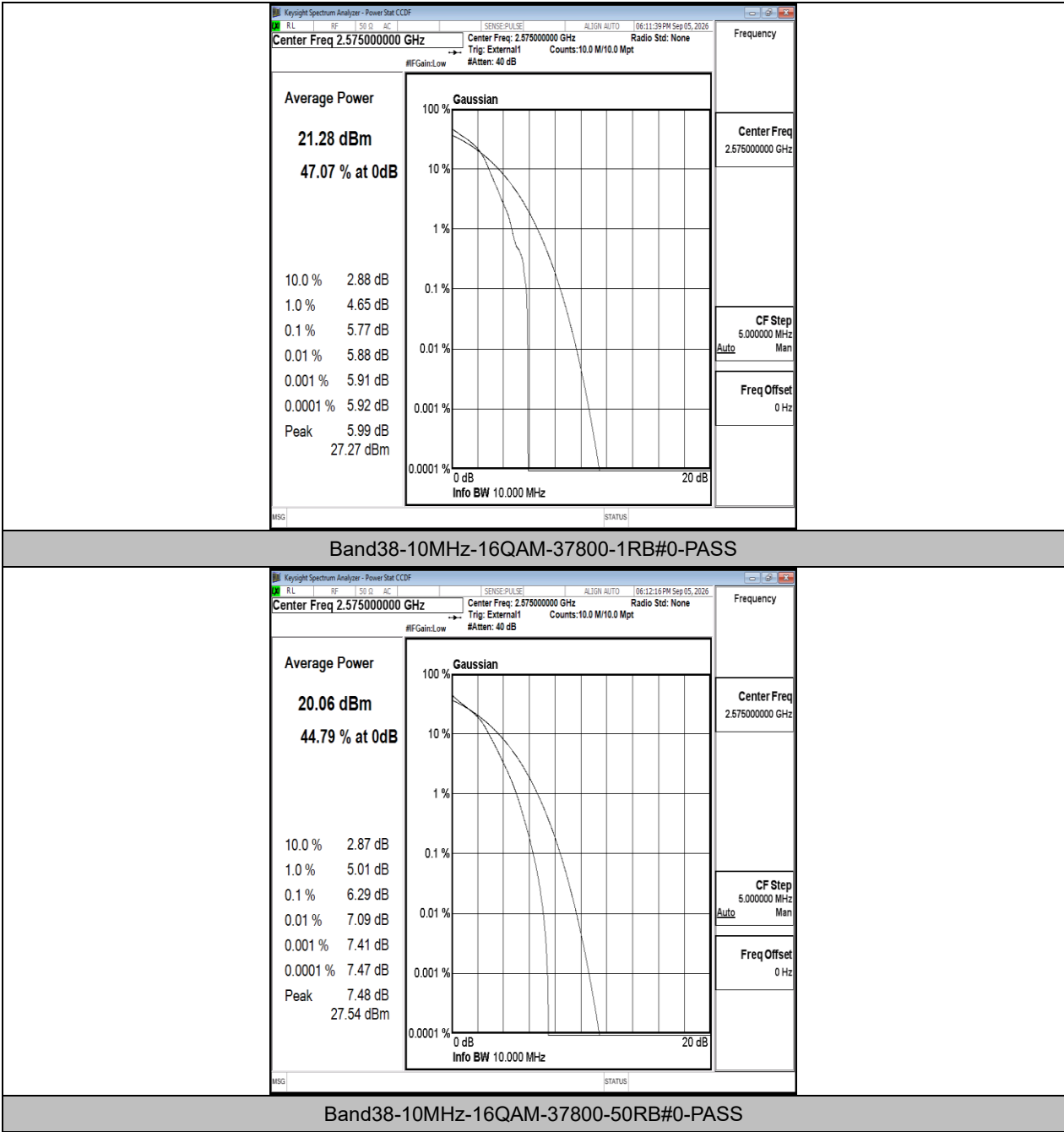


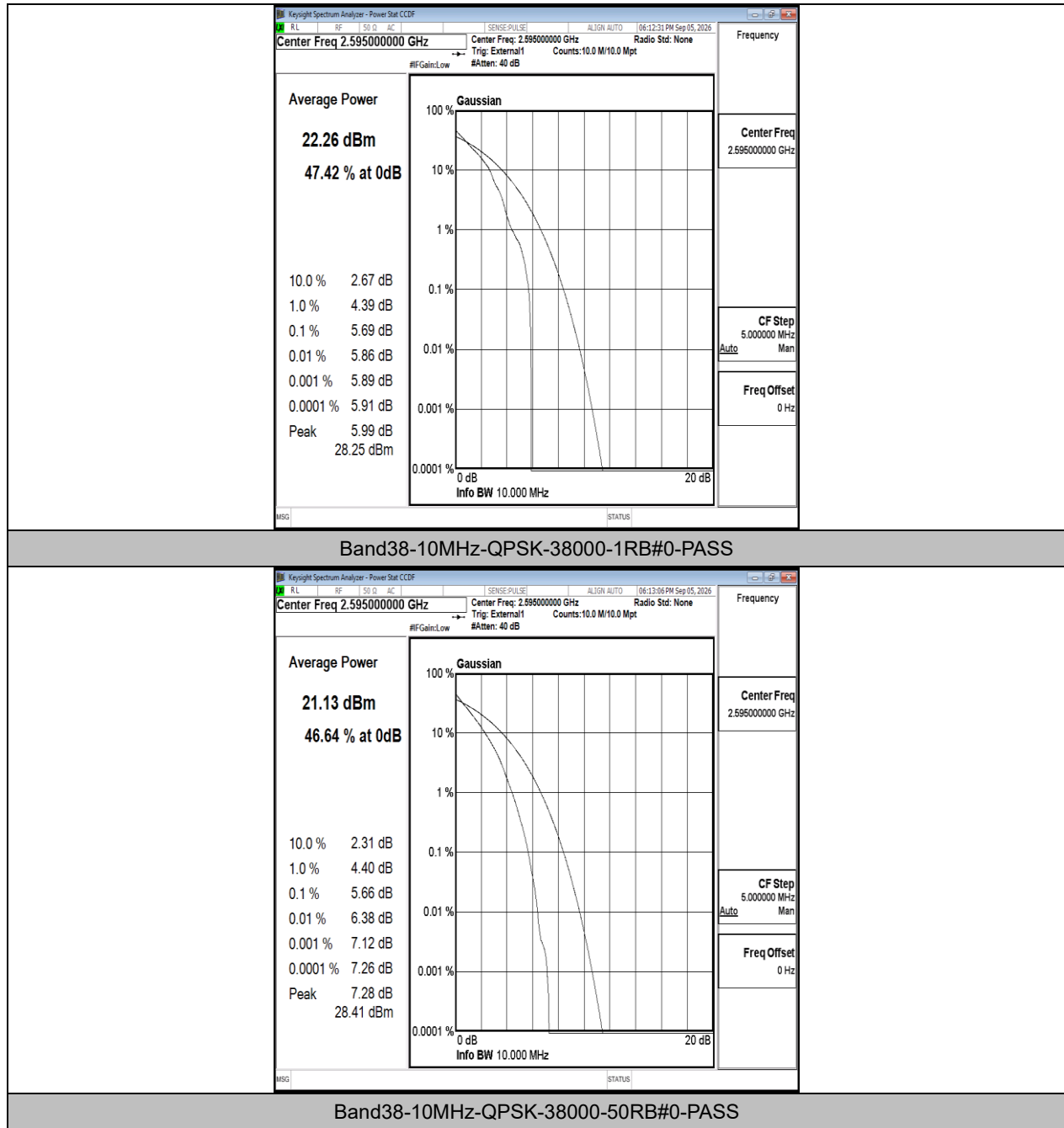


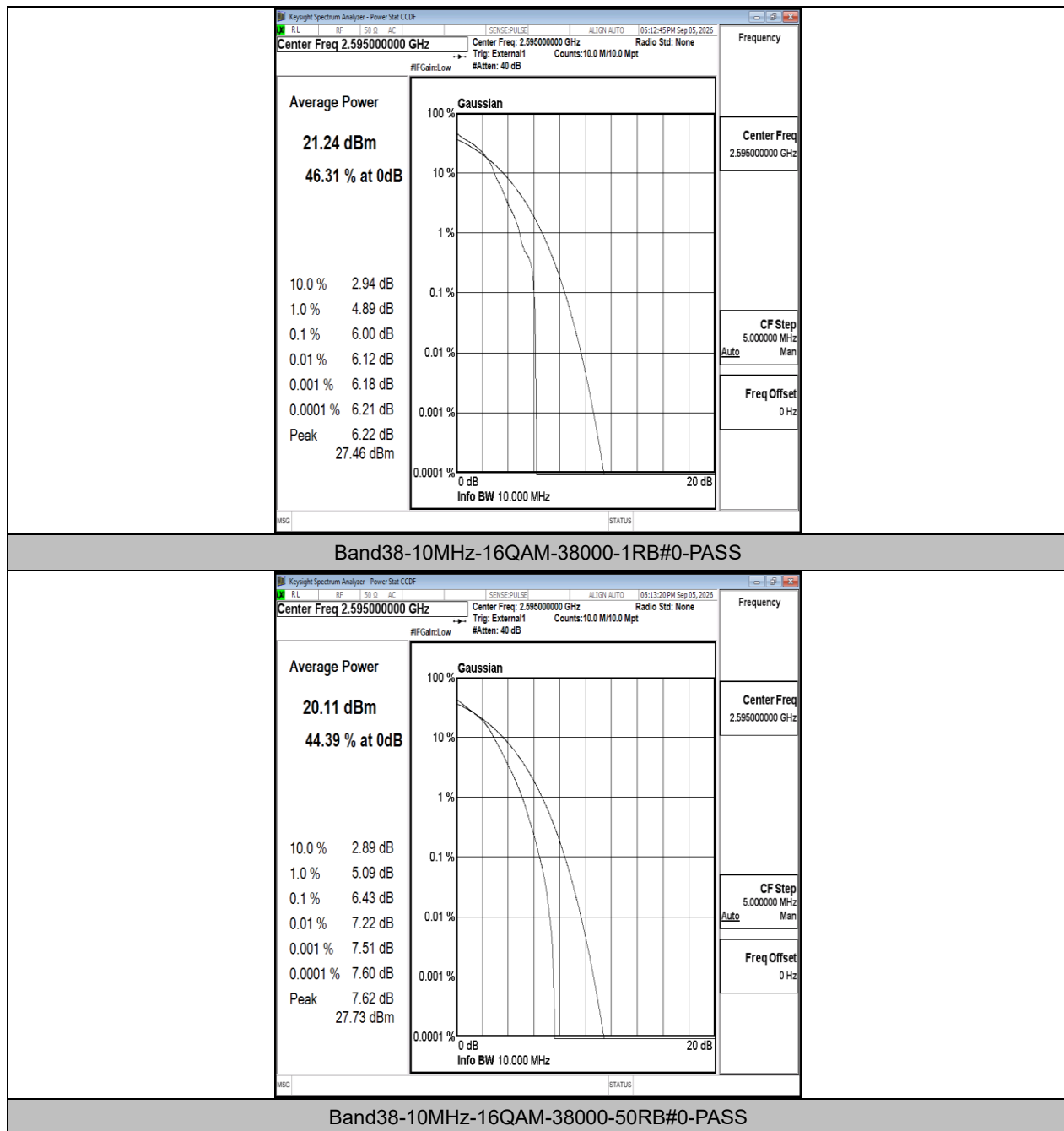


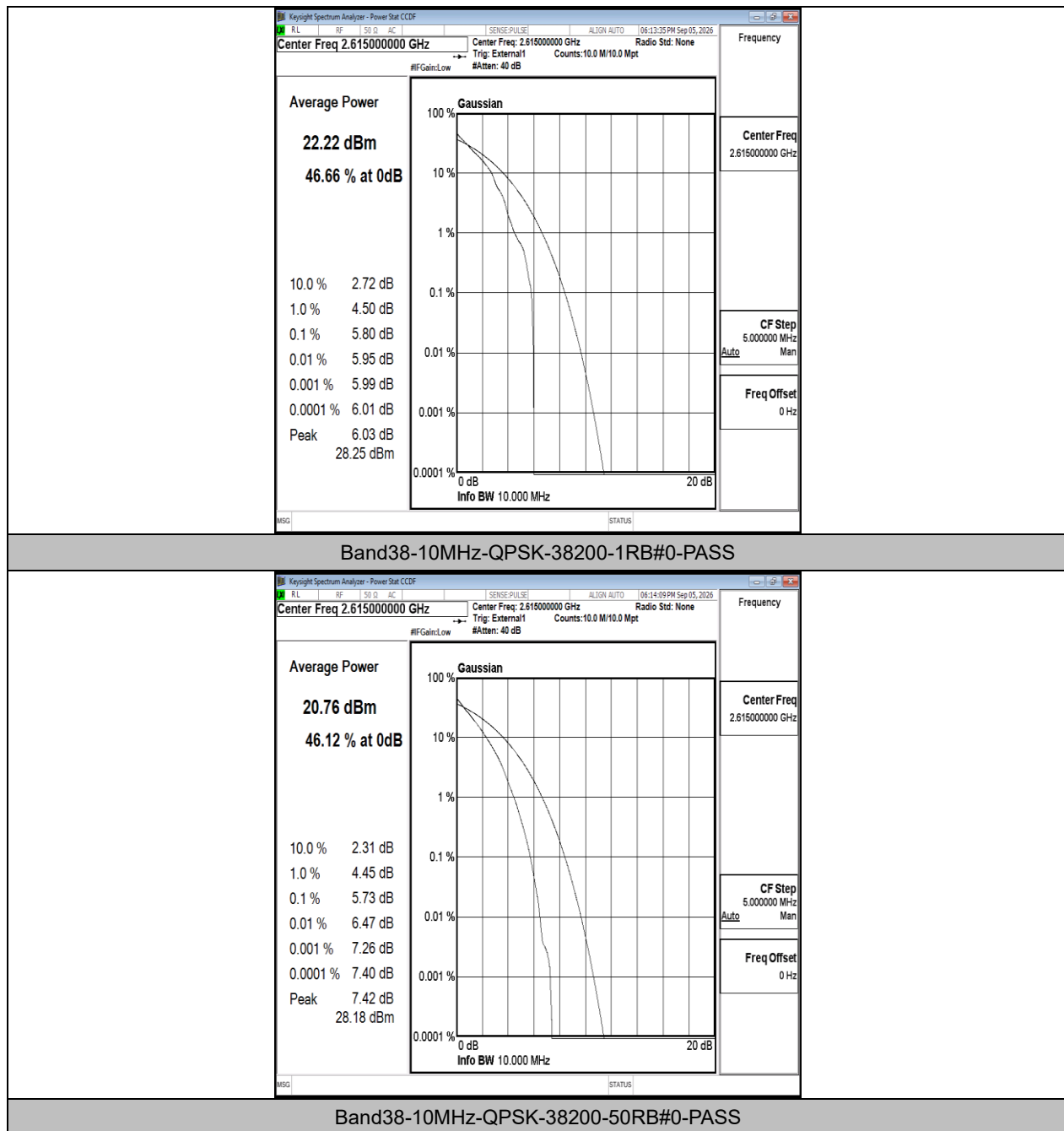


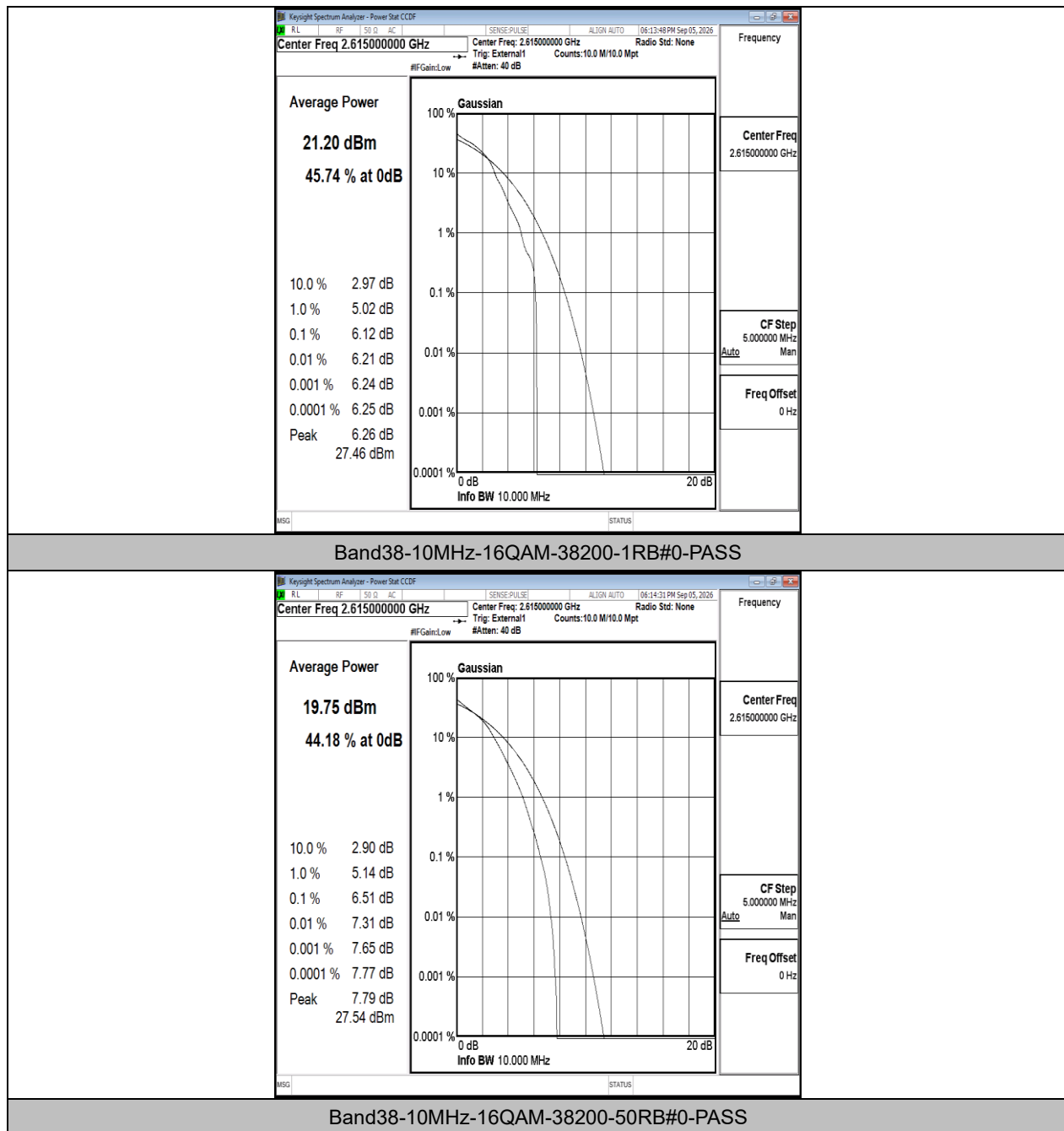


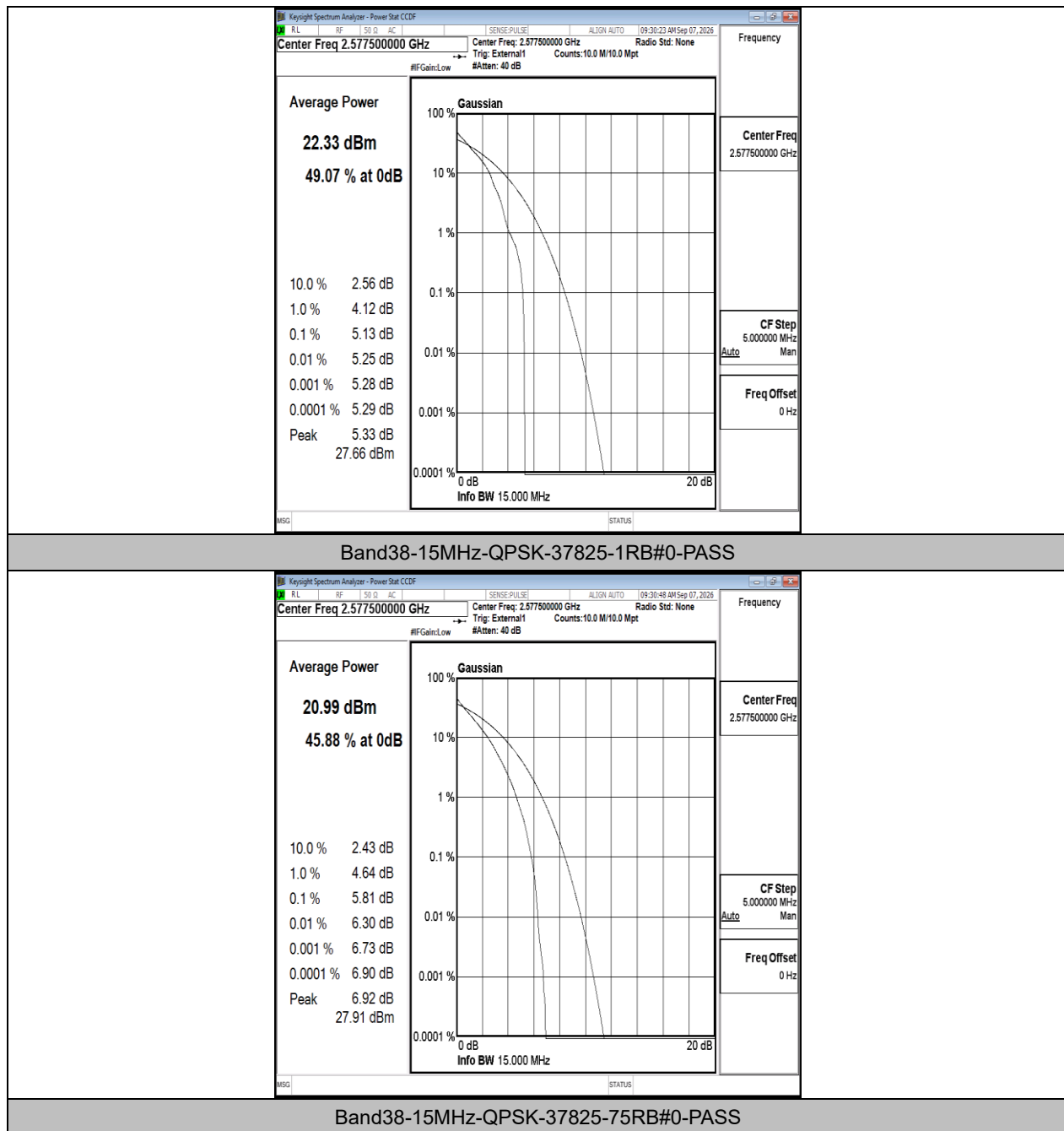


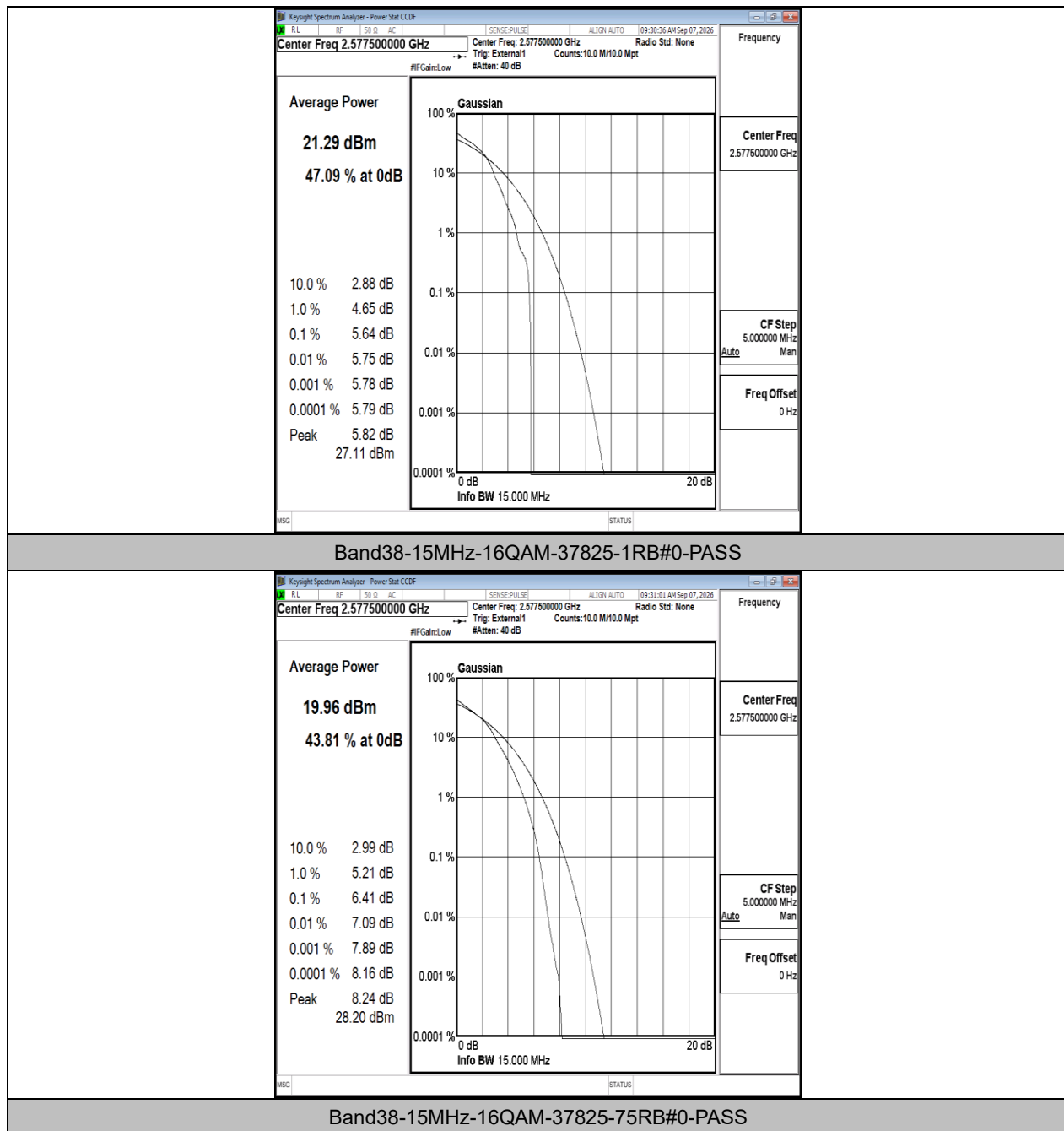


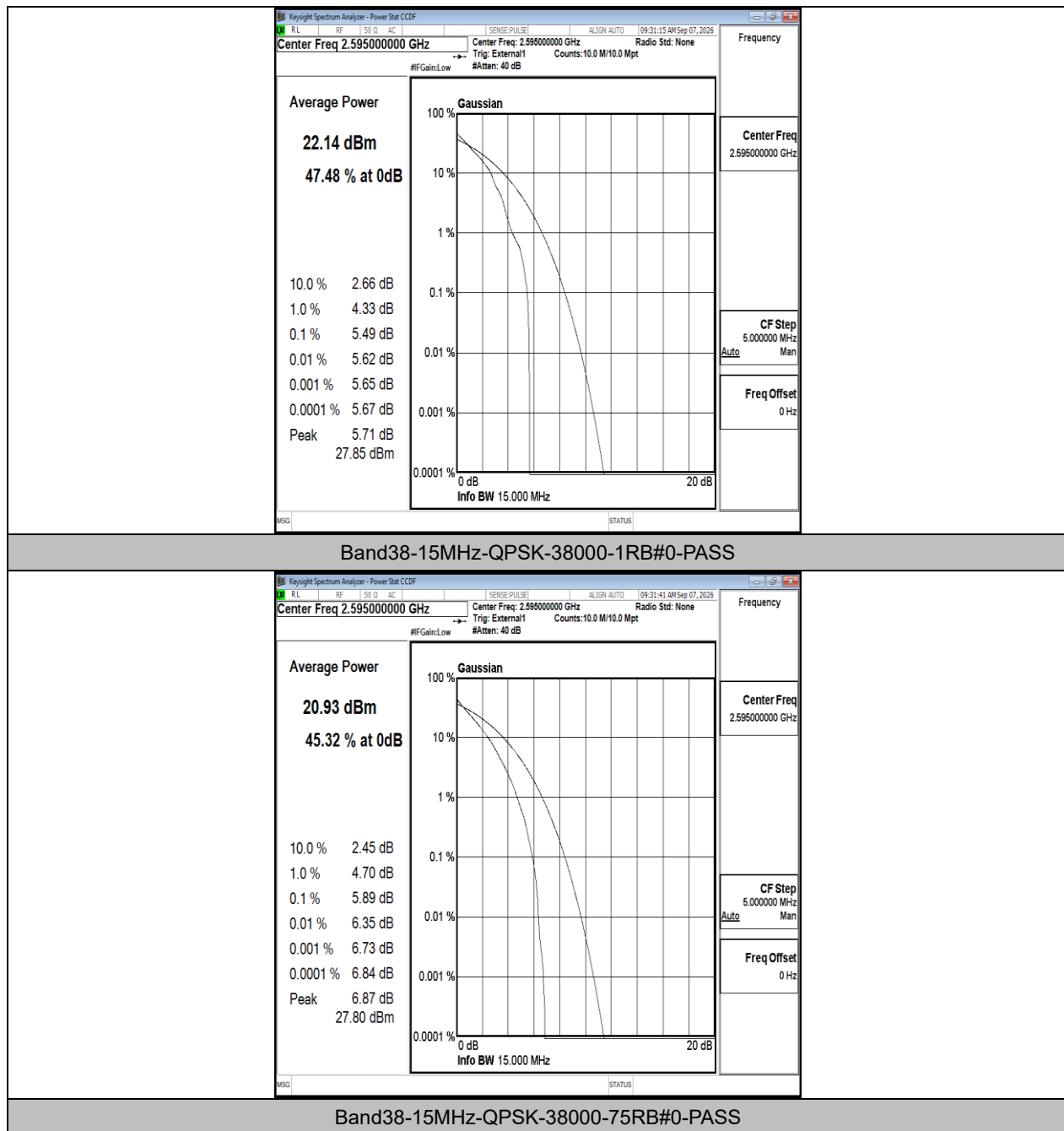


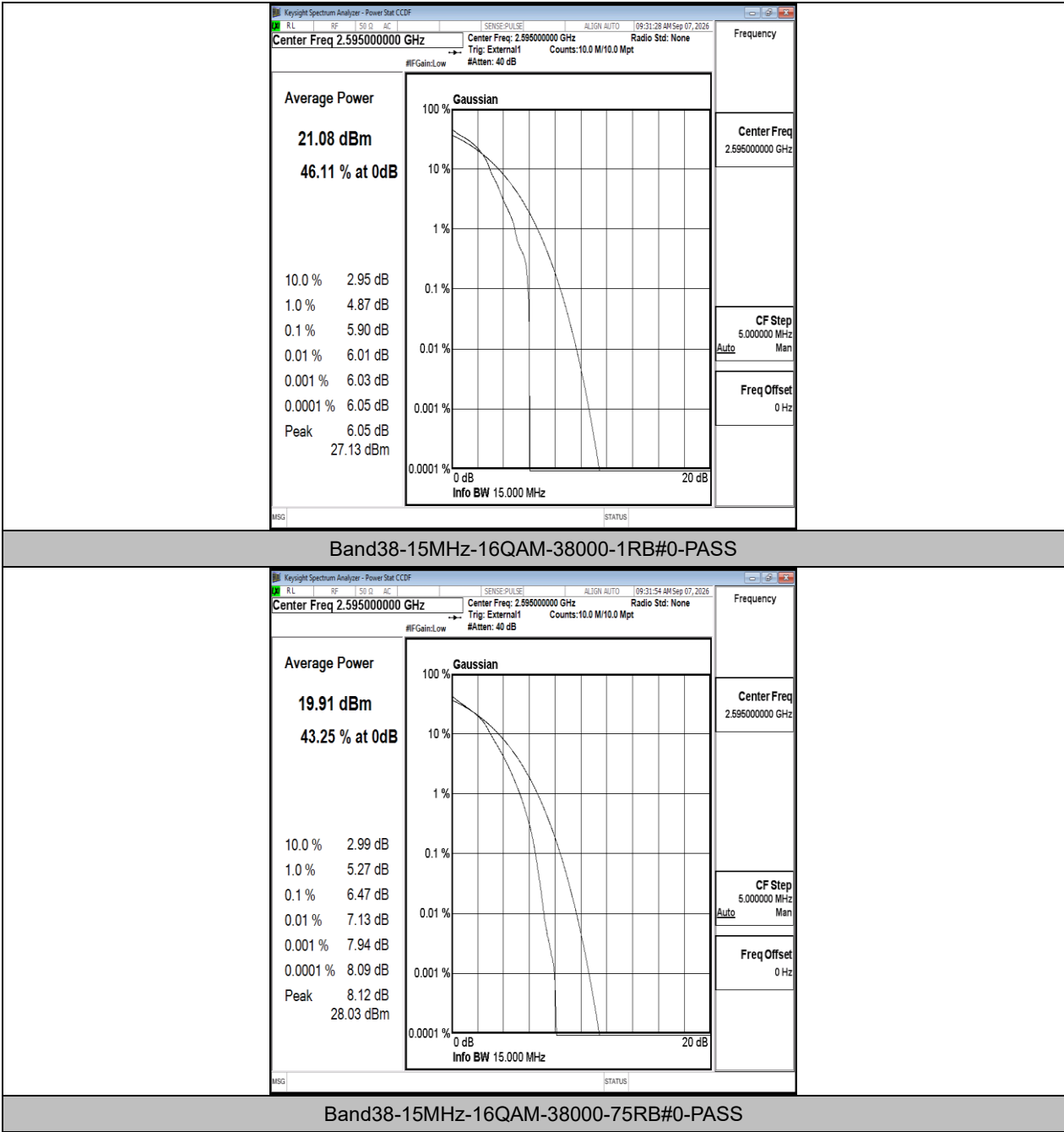


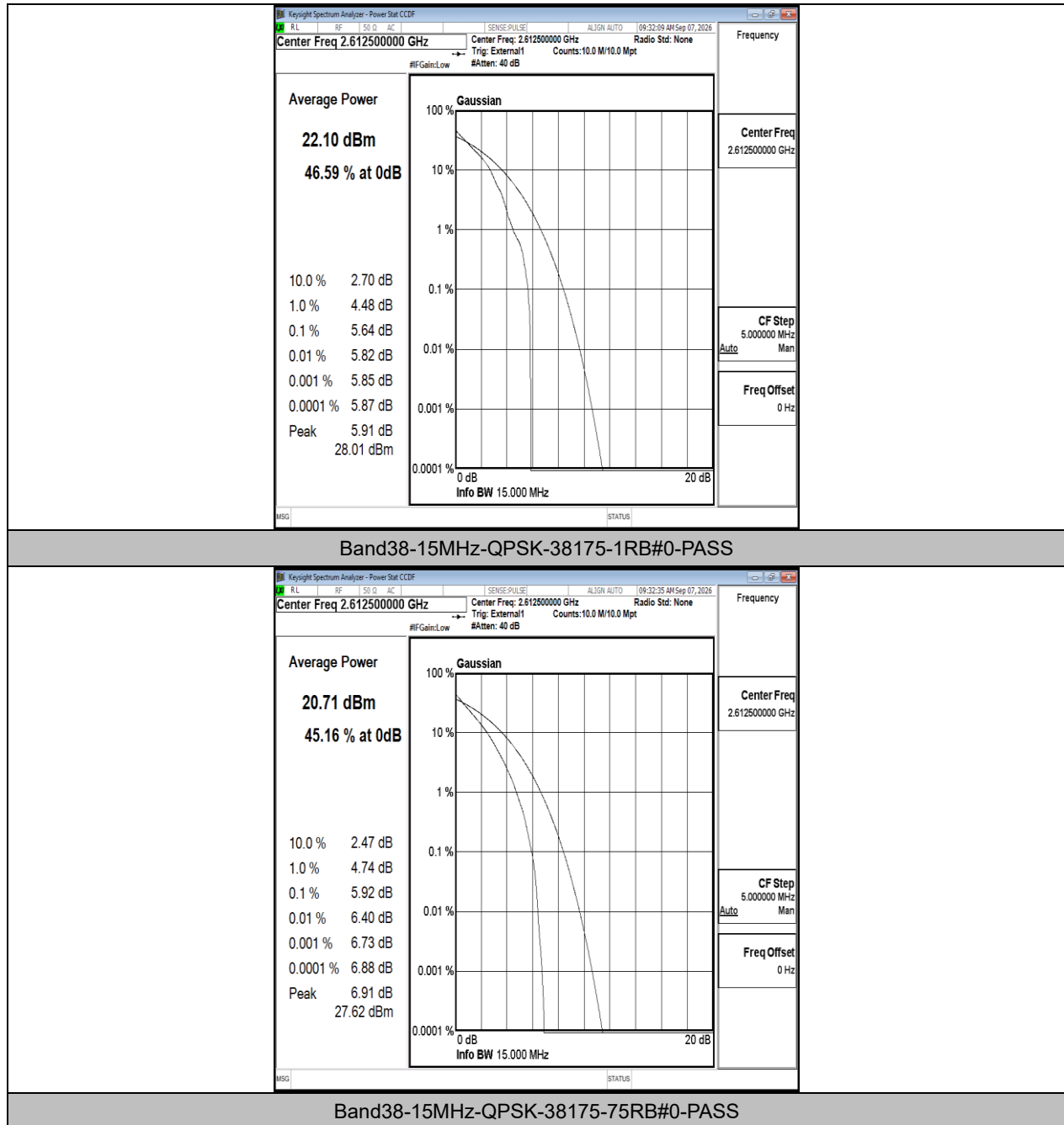


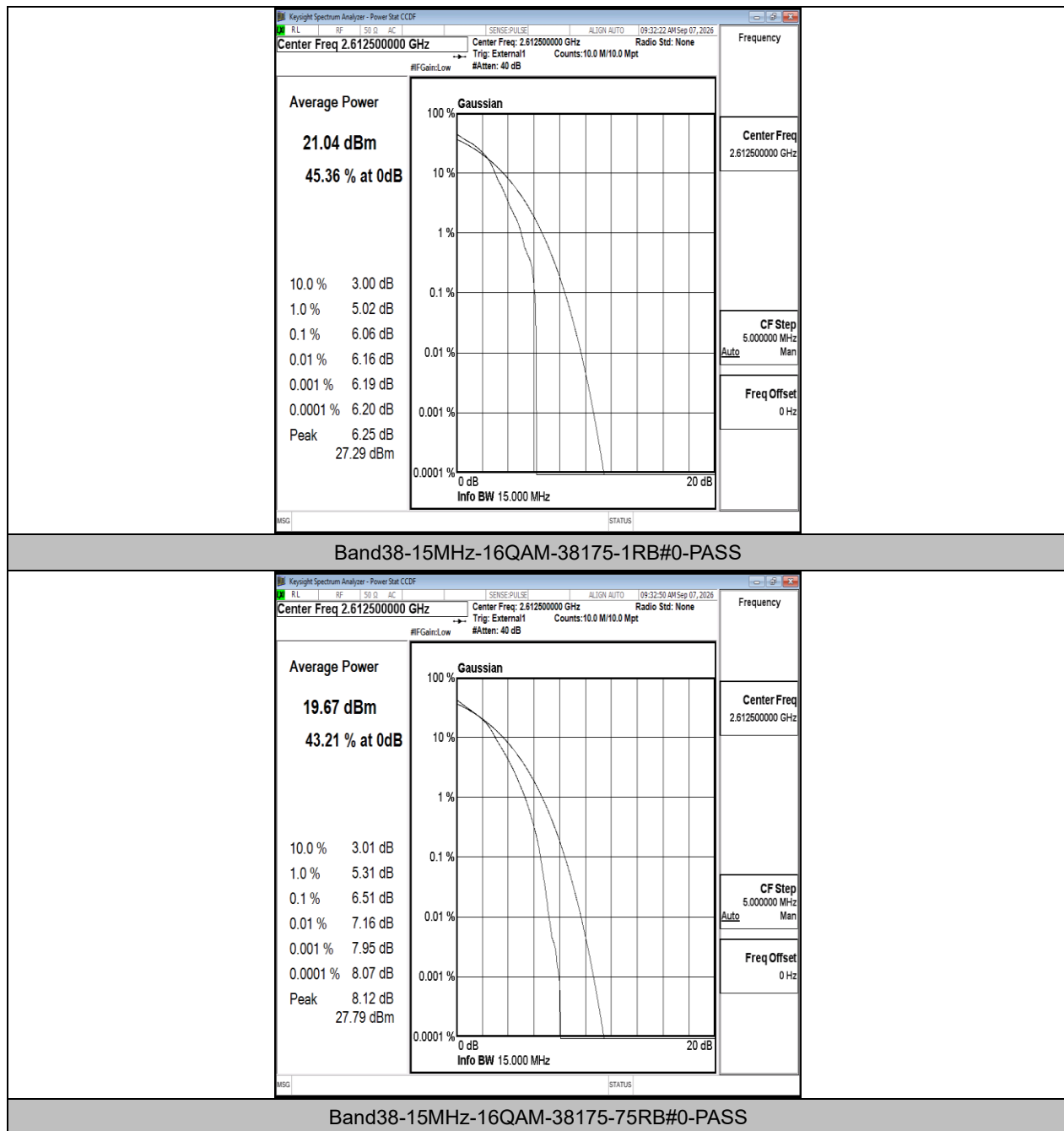


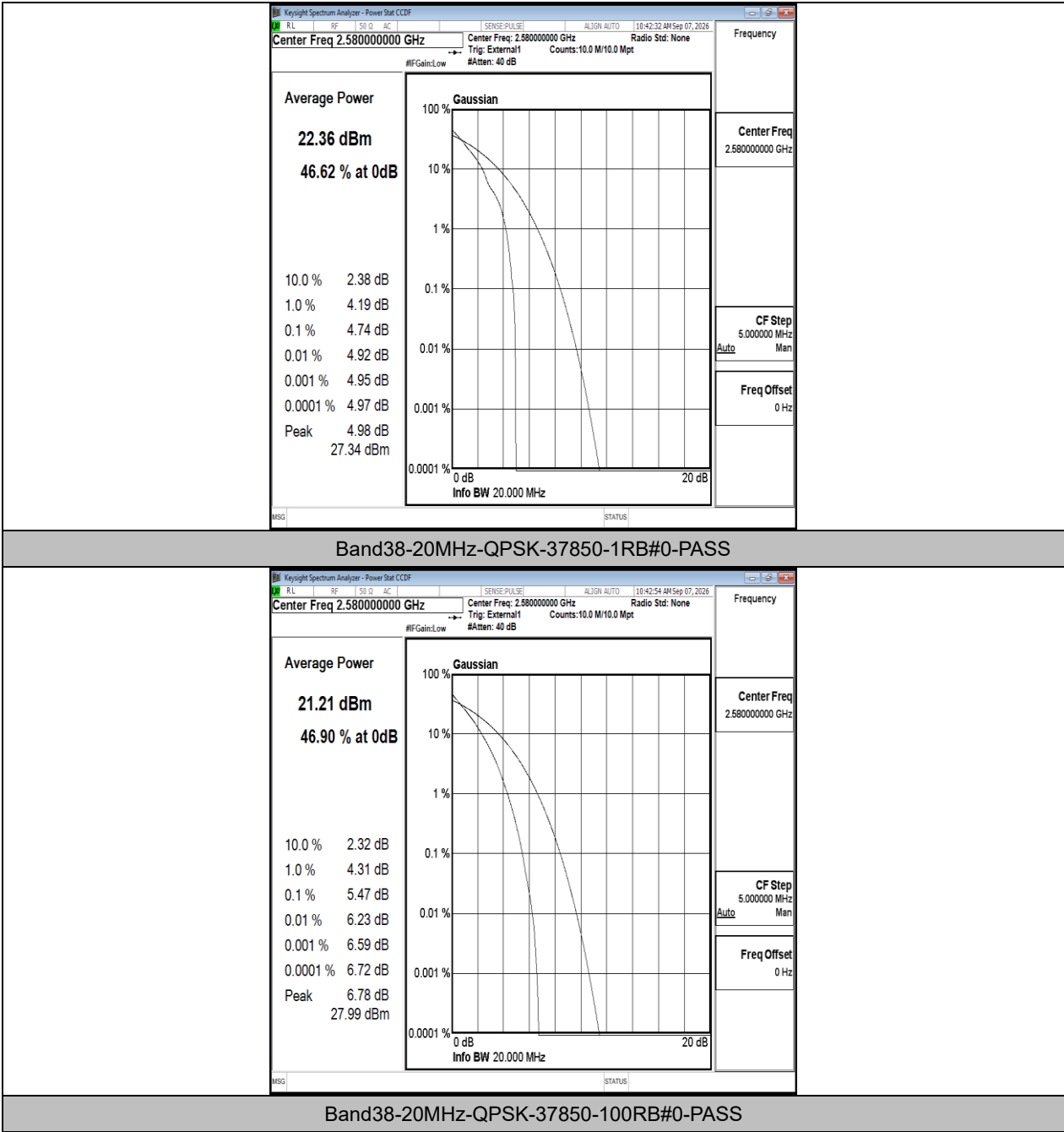




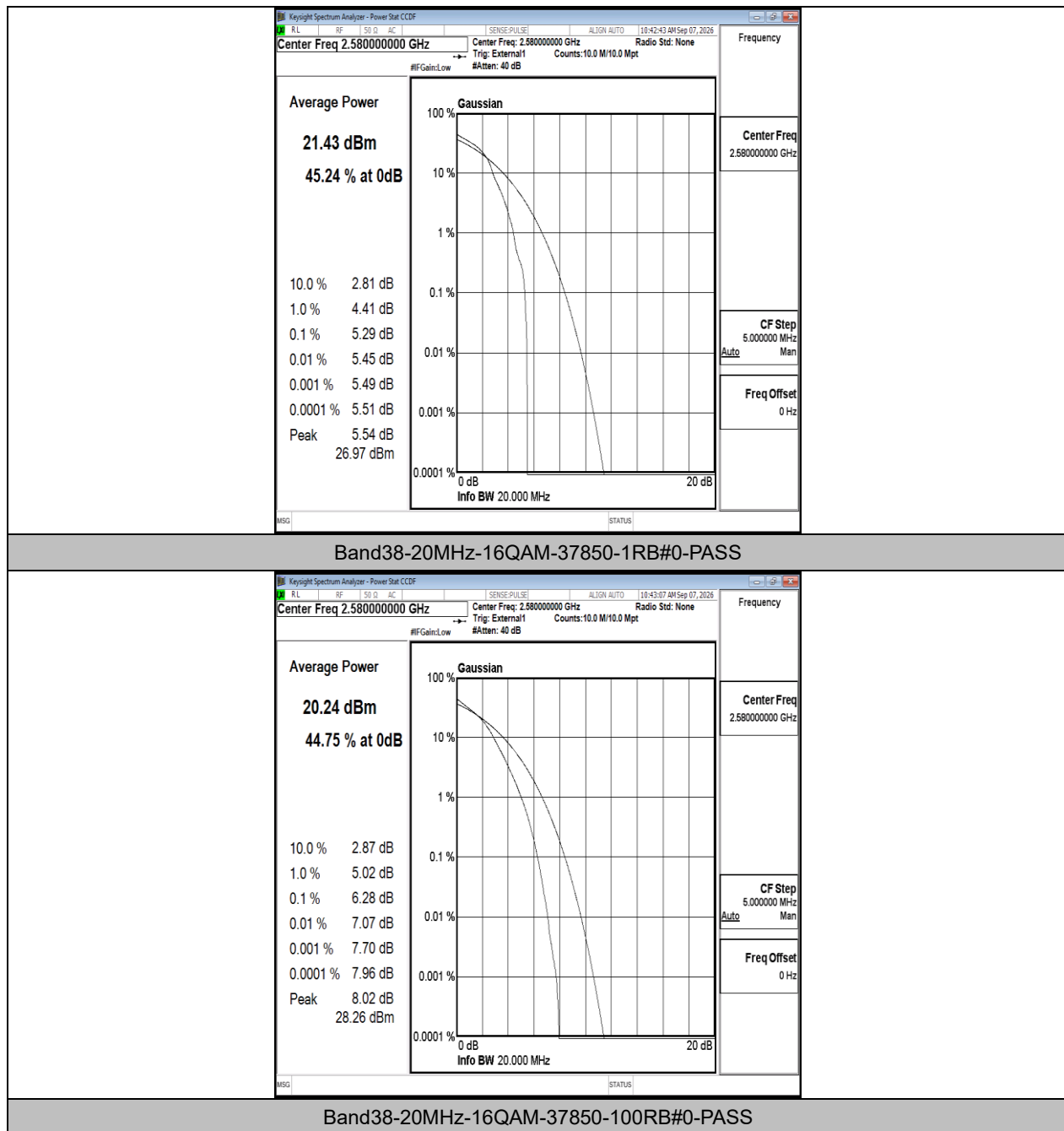


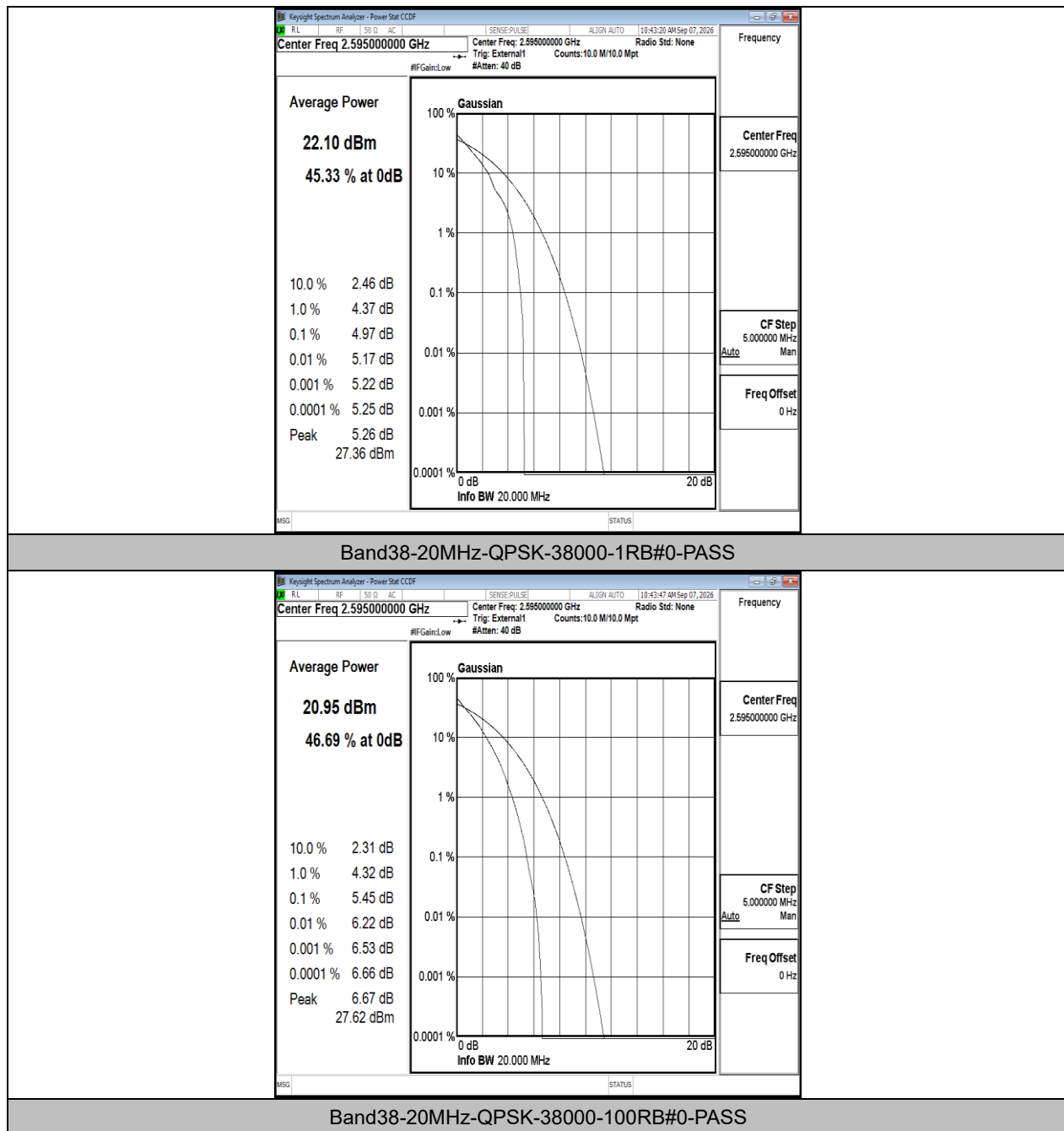


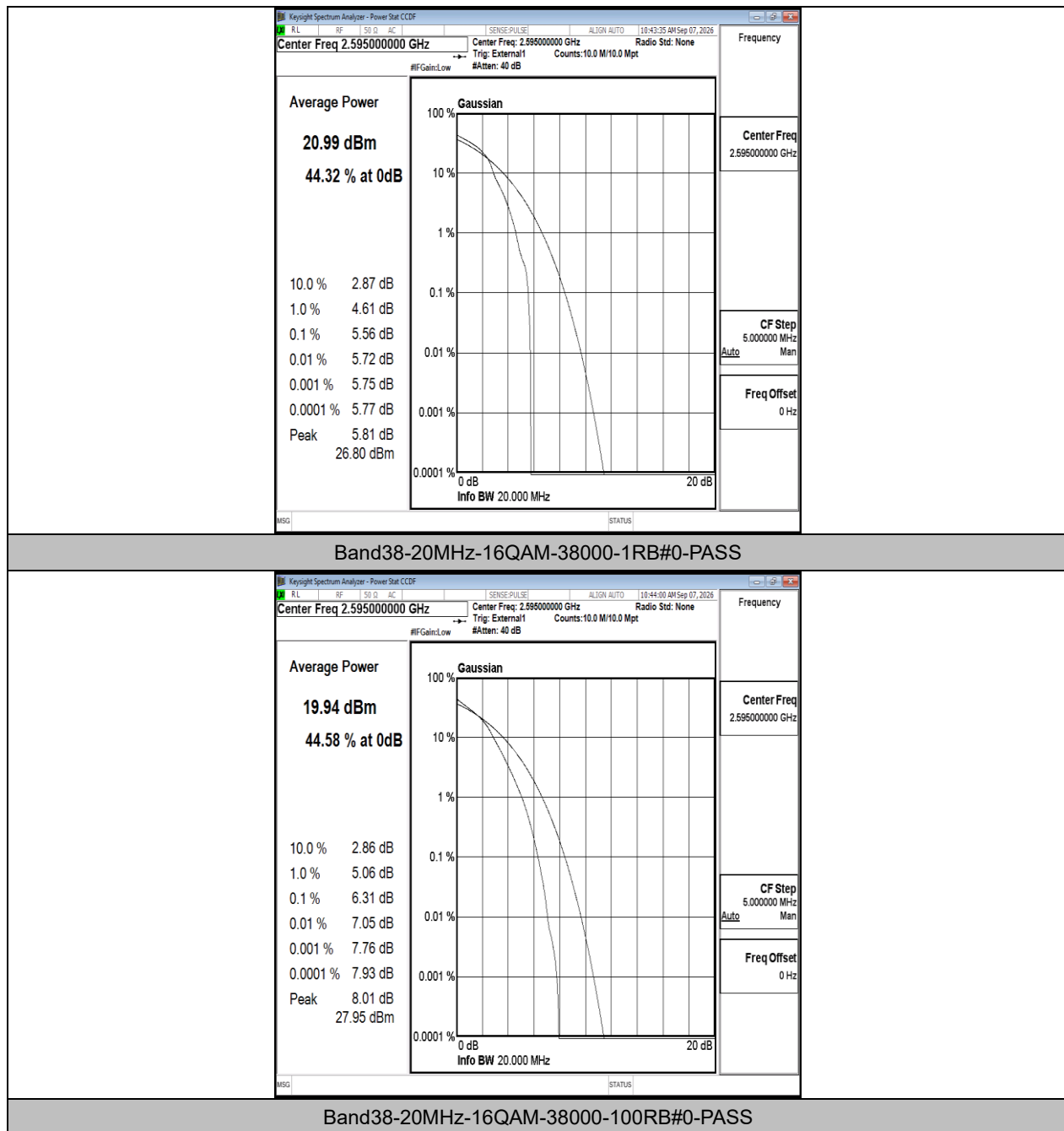


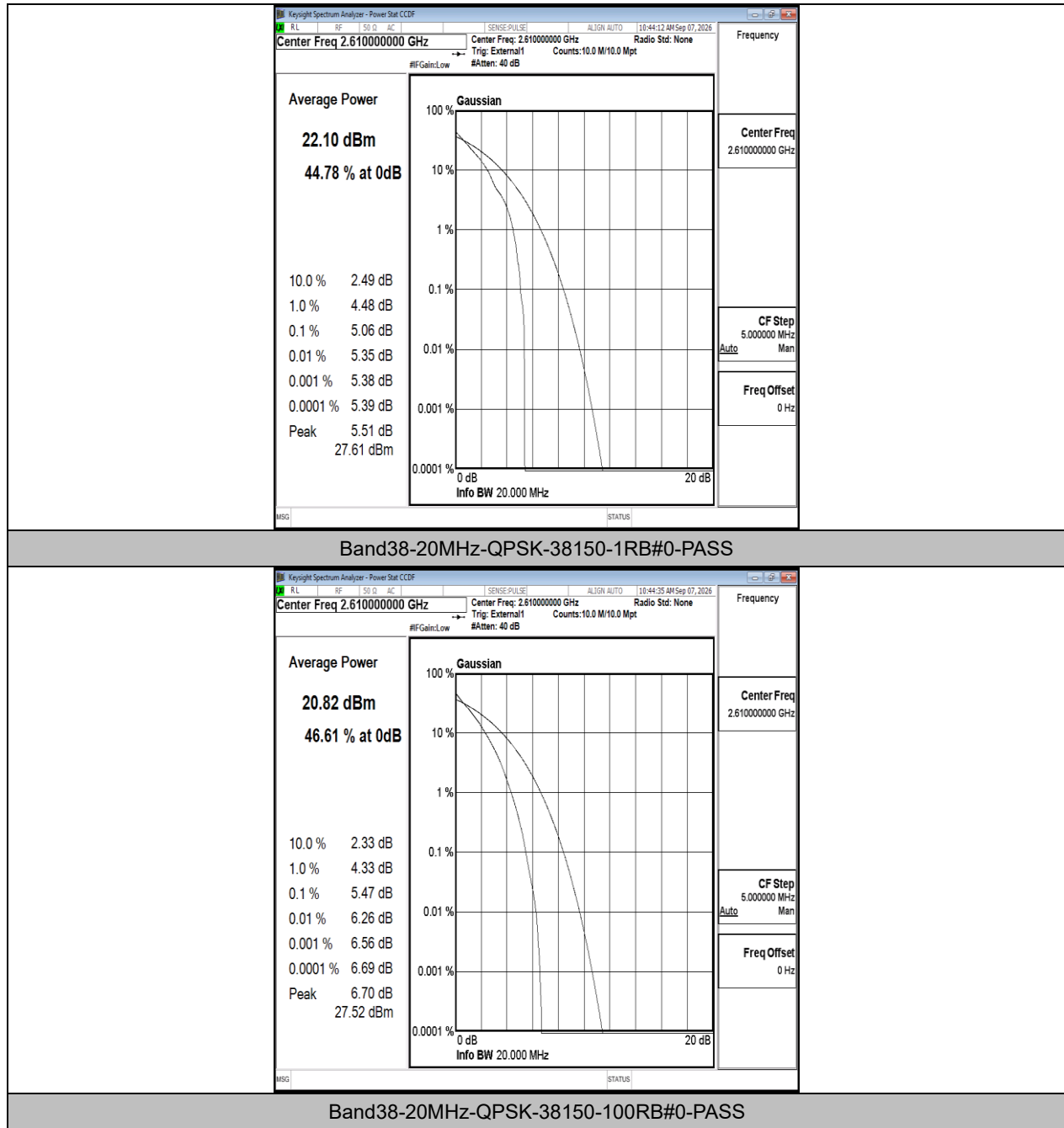


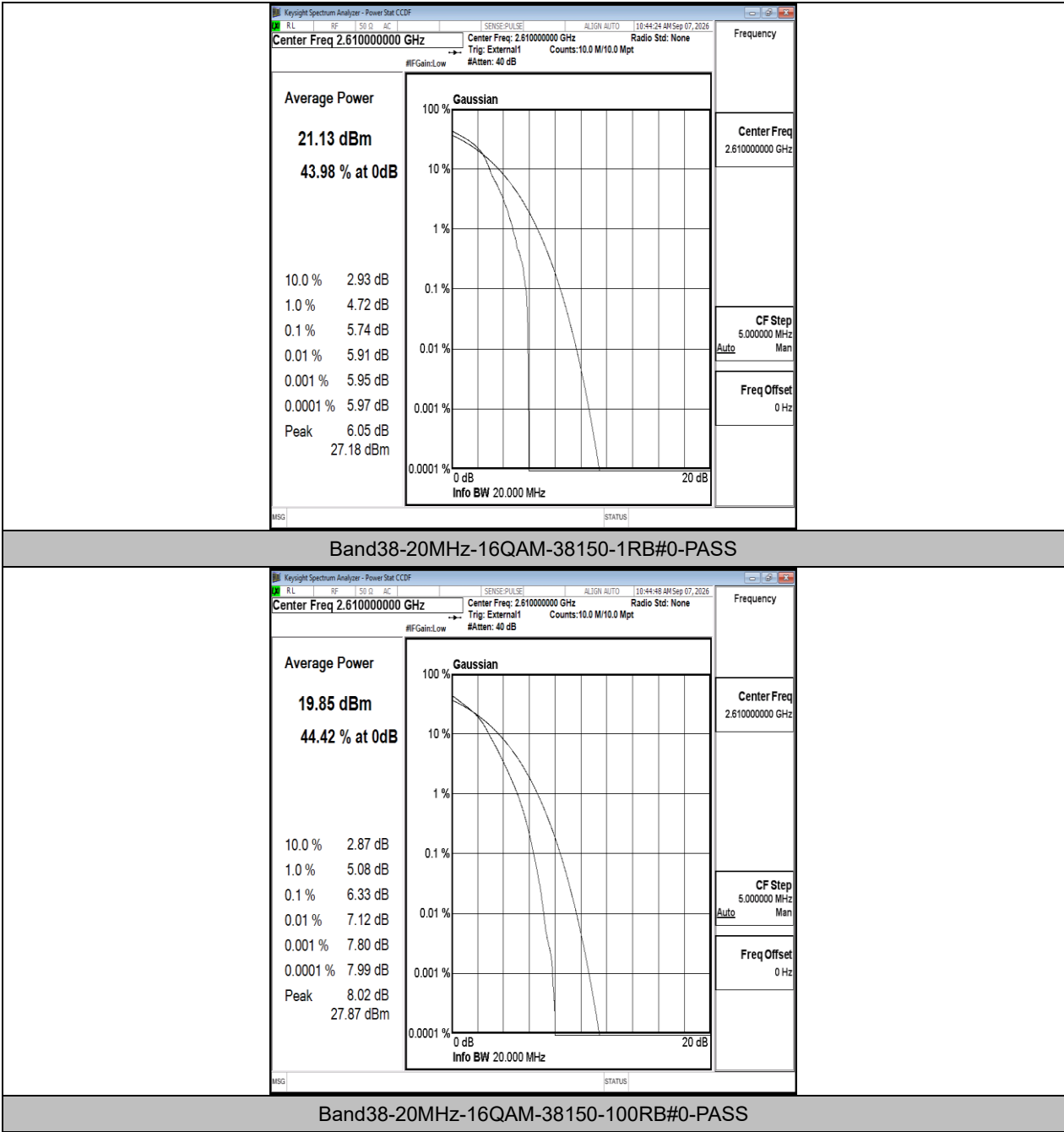
Band38-20MHz-QPSK-37850-100RB#0-PASS









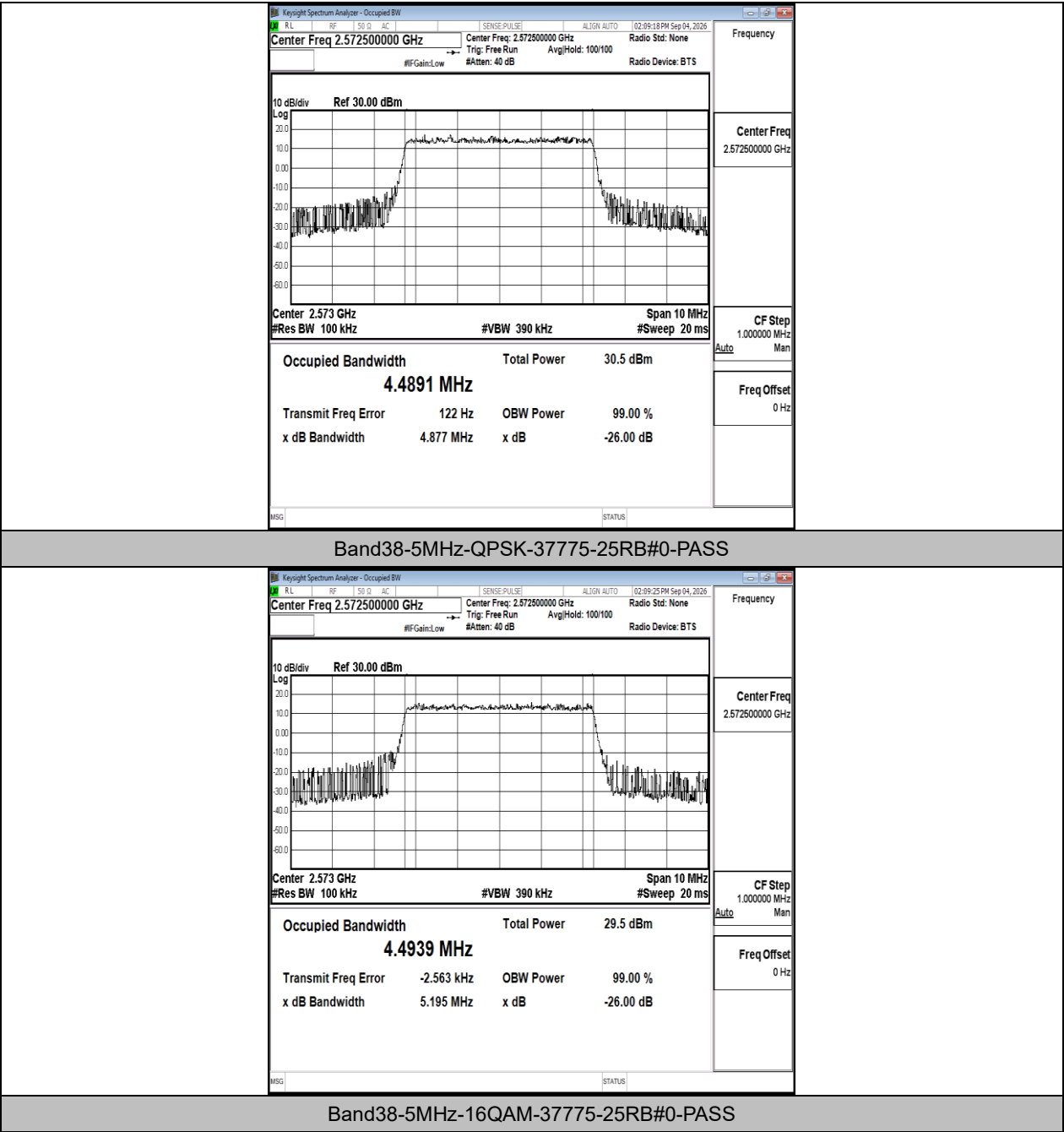


Q.3 26dB Bandwidth and Occupied Bandwidth

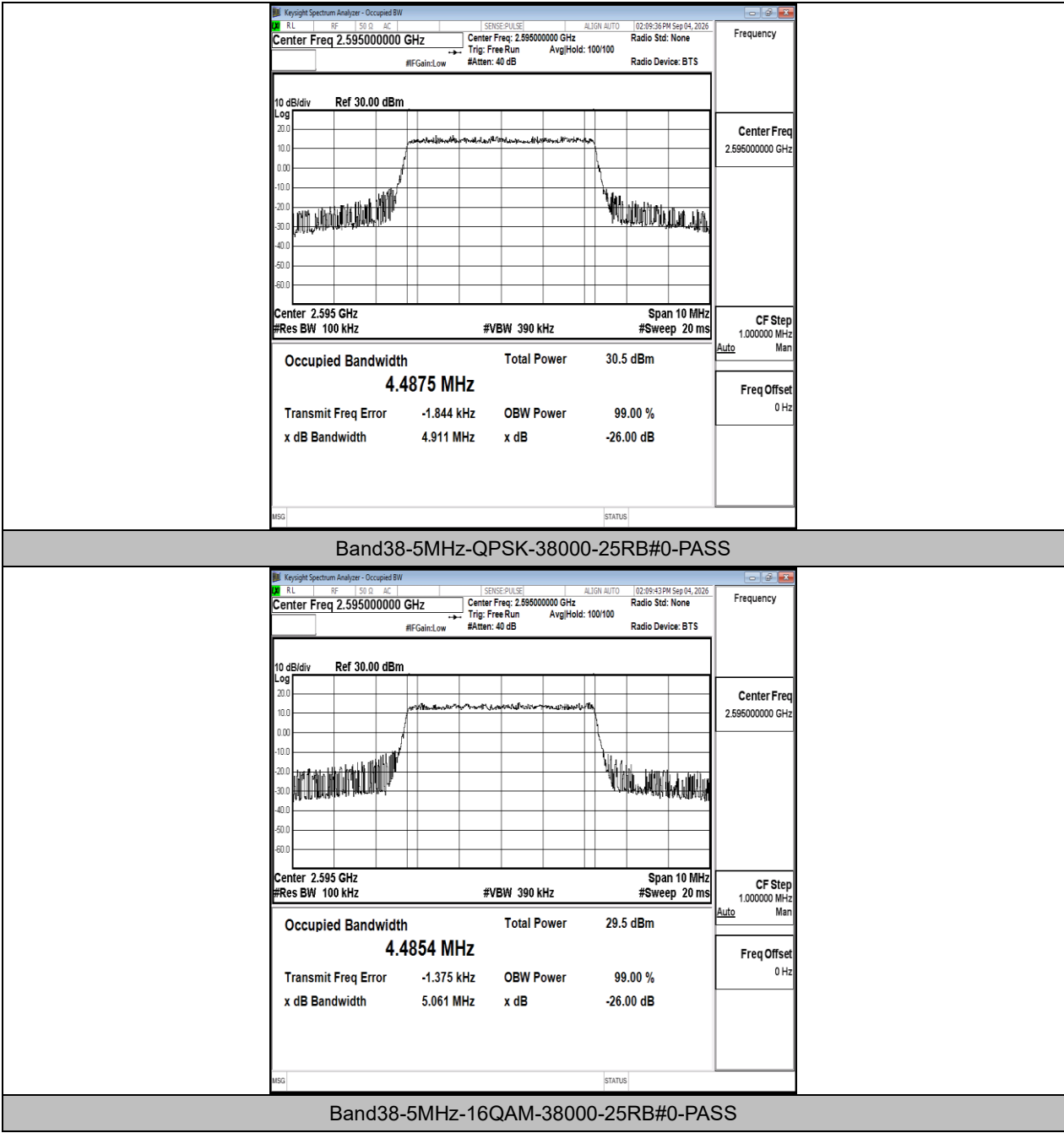
Test Result

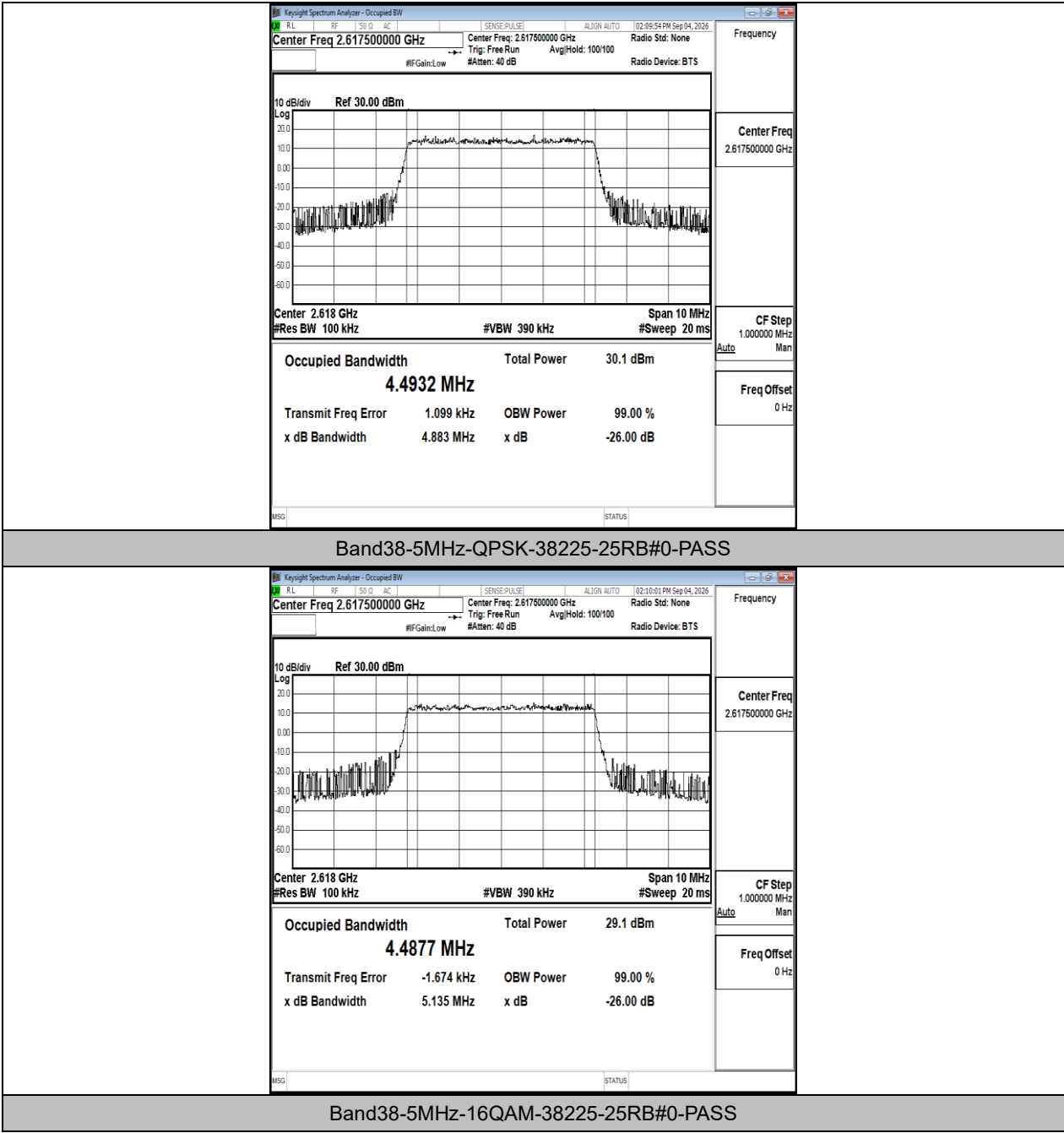
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	4.4891	4.877	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.4939	5.195	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.4875	4.911	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.4854	5.061	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.4932	4.883	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.4877	5.135	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.9810	10.16	PASS
Band38	10MHz	16QAM	37800	50RB#0	8.9884	10.03	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.9827	10.18	PASS
Band38	10MHz	16QAM	38000	50RB#0	8.9825	10.03	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.9808	10.01	PASS
Band38	10MHz	16QAM	38200	50RB#0	8.9773	9.937	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.524	14.97	PASS
Band38	15MHz	16QAM	37825	75RB#0	13.490	15.11	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.492	15.20	PASS
Band38	15MHz	16QAM	38000	75RB#0	13.483	15.13	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.474	15.11	PASS
Band38	15MHz	16QAM	38175	75RB#0	13.487	15.34	PASS
Band38	20MHz	QPSK	37850	100RB#0	17.981	20.66	PASS
Band38	20MHz	16QAM	37850	100RB#0	17.942	19.88	PASS
Band38	20MHz	QPSK	38000	100RB#0	18.001	20.19	PASS
Band38	20MHz	16QAM	38000	100RB#0	17.929	19.62	PASS
Band38	20MHz	QPSK	38150	100RB#0	17.950	20.16	PASS
Band38	20MHz	16QAM	38150	100RB#0	17.906	20.01	PASS

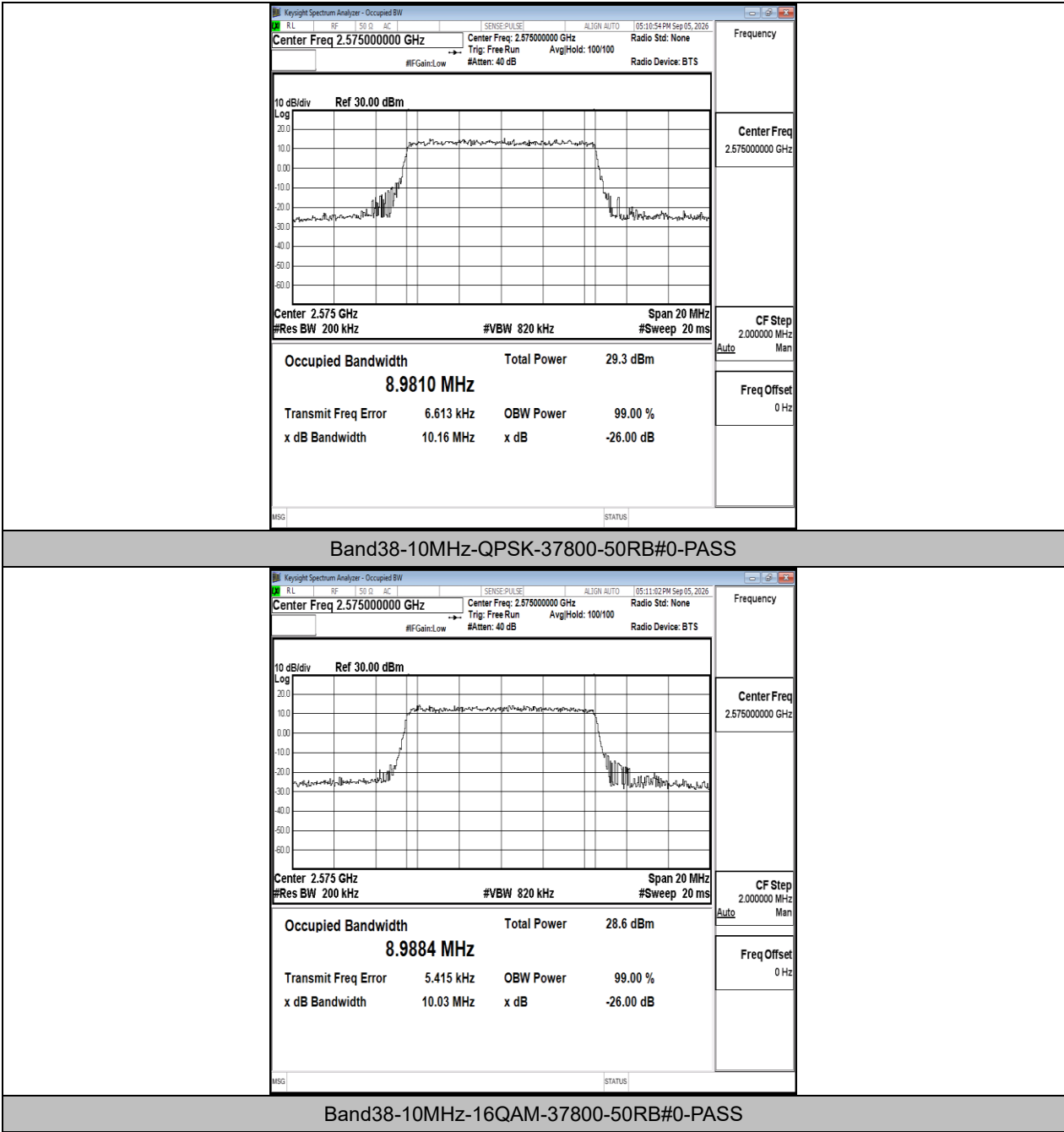
Test Graphs



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







Band38-10MHz-QPSK-37800-50RB#0-PASS

KeySight Spectrum Analyzer - Occupied BW

R.L.

RF

50 Q

AC

SENSE: PULSE

ALIGN: AUTO

05:11:02 PM Sep 05, 2026

Center Freq: 2.575000000 GHz

Center Freq: 2.575000000 GHz

Radio Std: None

#IF Gain: Low

Trig: Free Run

Avg/Hold: 100/100

#Atten: 40 dB

Radio Device: BTS

10 dB/div

Ref 30.00 dBm

Log

Center 2.575 GHz

#Res BW 200 kHz

#VBW 820 kHz

Span 20 MHz

#Sweep 20 ms

Occupied Bandwidth

Total Power

28.6 dBm

8.9884 MHz

Transmit Freq Error

5.415 kHz

OBW Power

99.00 %

x dB Bandwidth

10.03 MHz

x dB

-26.00 dB

MSG

STATUS

Frequency

Center Freq

2.575000000 GHz

CF Step

2.000000 MHz

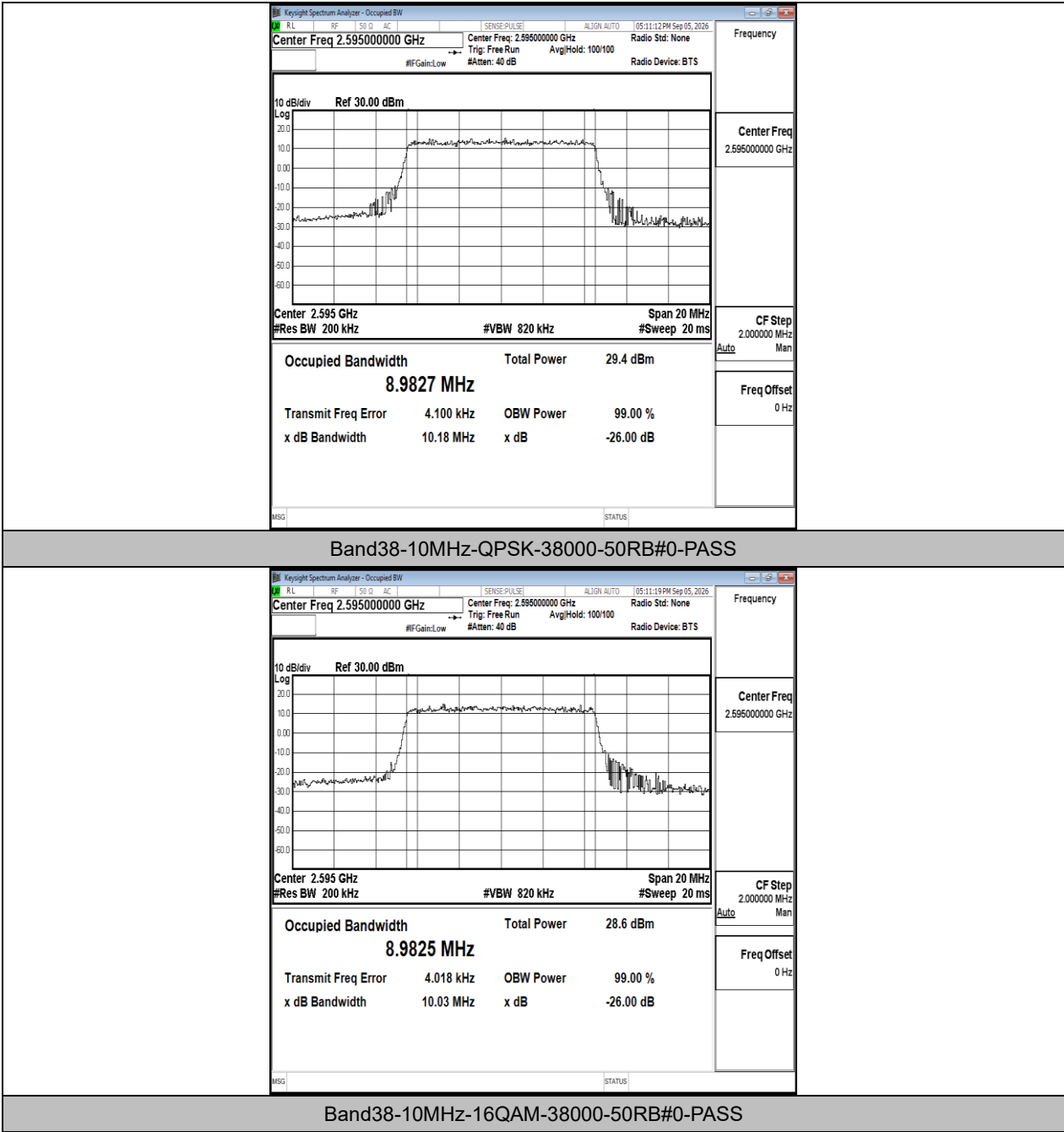
Auto

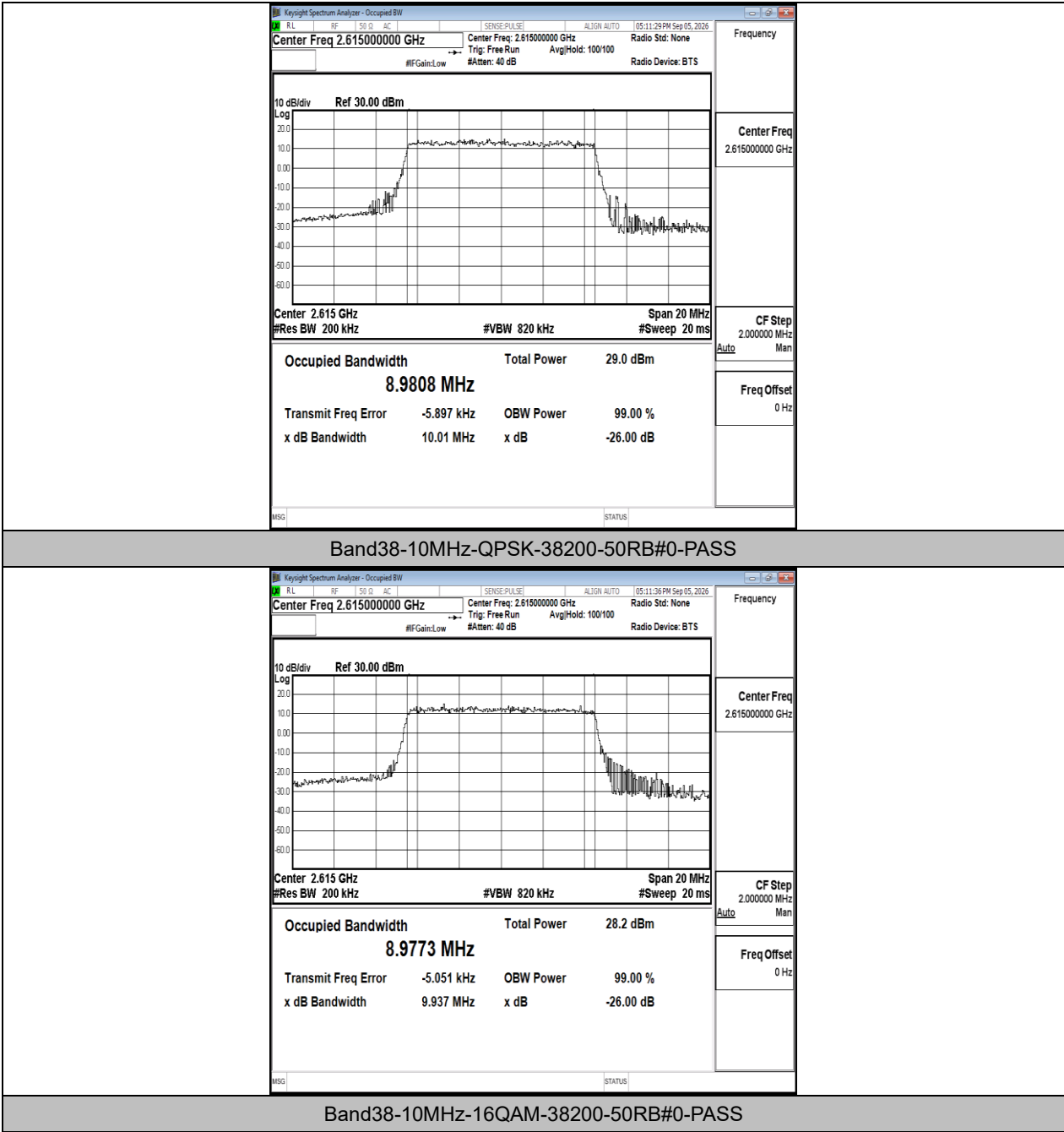
Man

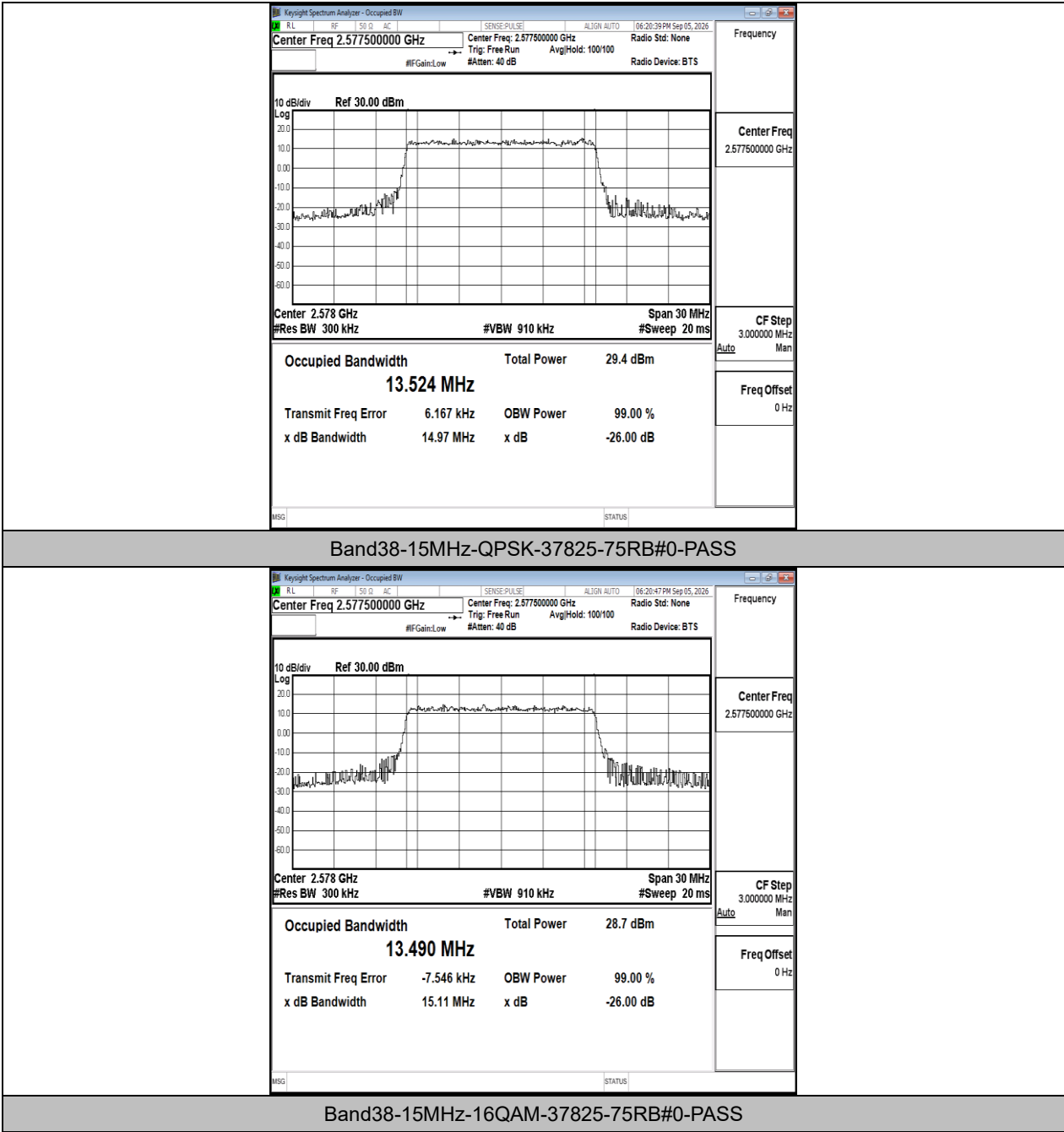
Freq Offset

0 Hz

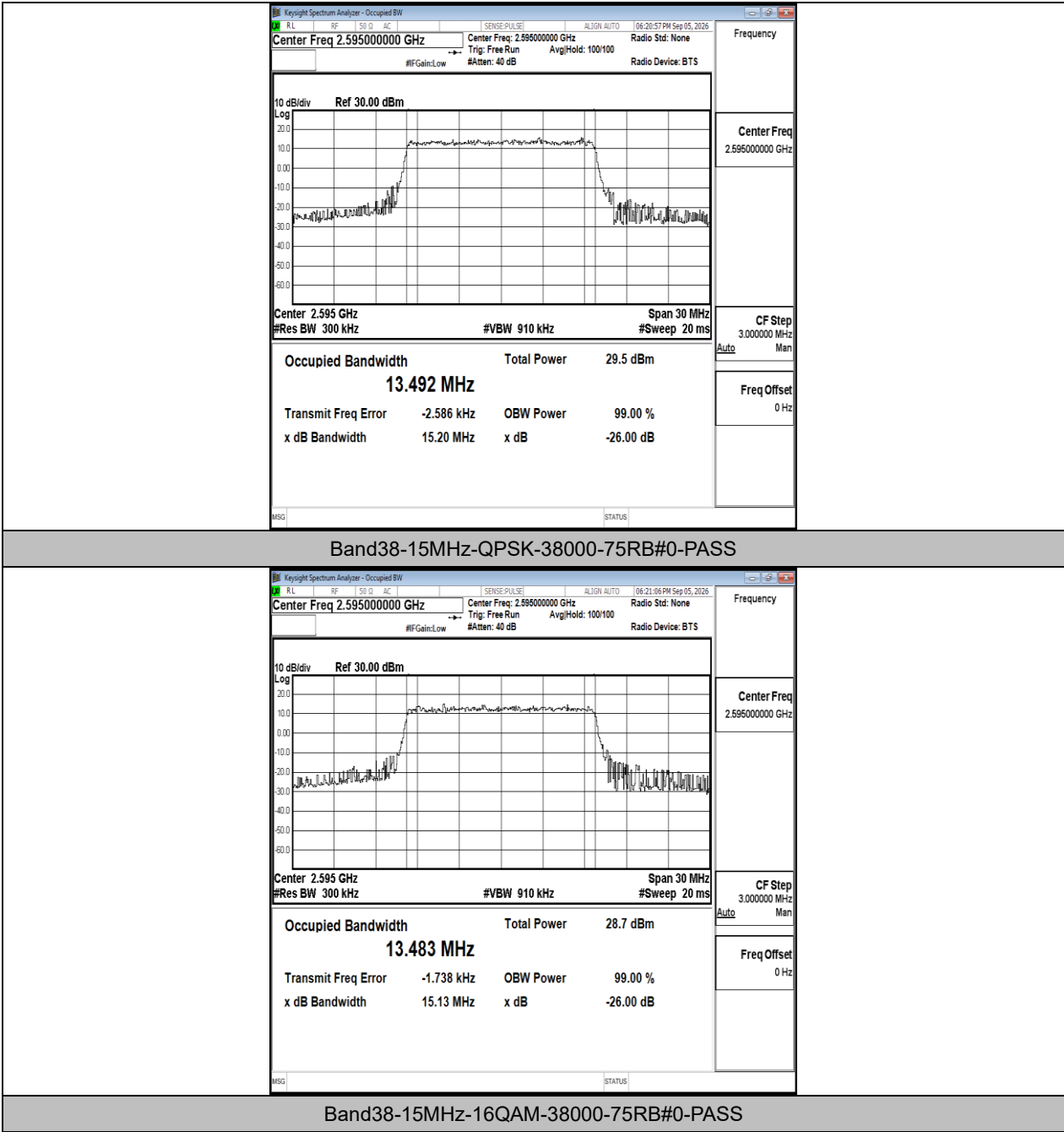
Band38-10MHz-16QAM-37800-50RB#0-PASS

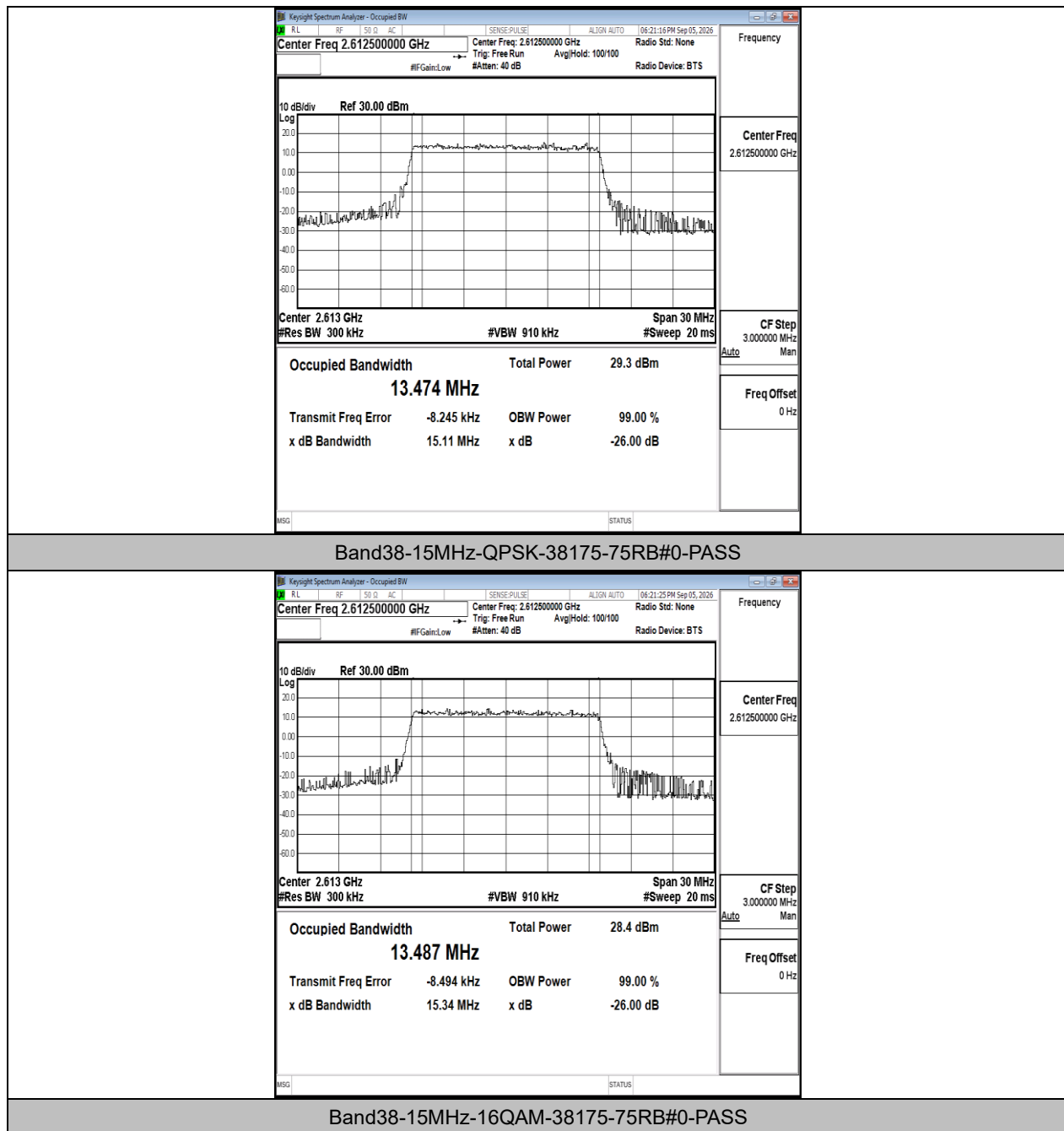


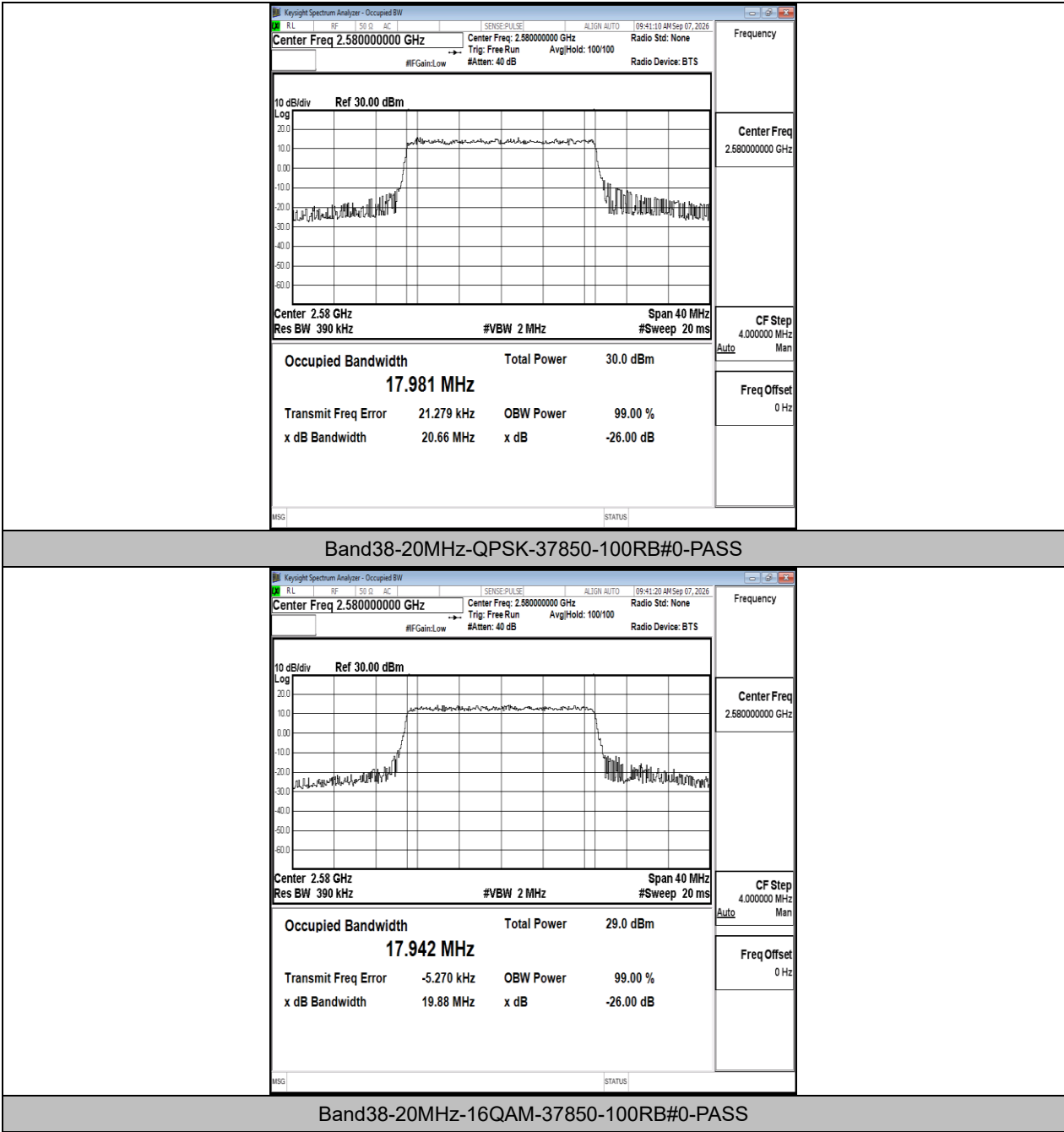


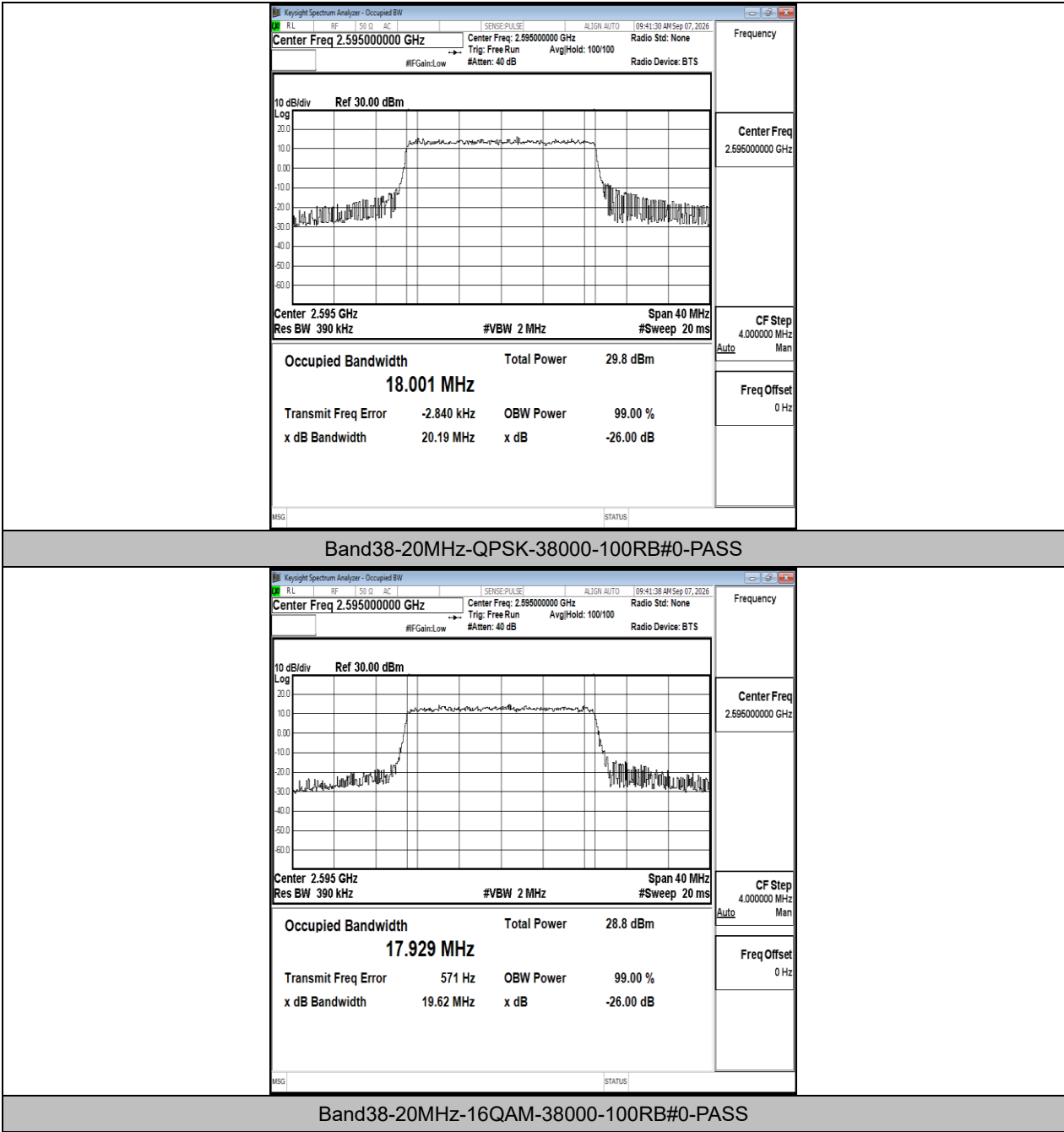


Band38-15MHz-16QAM-37825-75RB#0-PASS









Frequency

Center Freq

2.595000000 GHz

CF Step

4.000000 MHz

Auto

Man

Freq Offset

0 Hz

MSG

STATUS

Band38-20MHz-16QAM-38000-100RB#0-PASS

