

Appendix C: Test Data for CatM1 Band 4

Product Name: GPS 4G Tracker Scout BLE (CATM)

Test Model: GPS 4G Tracker Scout BLE (CATM)

Environmental Conditions

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

C.1 Conducted Output Power Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Conducted Power(dBm)	Verdict
Band4	1.4MHz	QPSK	19957	1	0	Low	23.27	PASS
Band4	1.4MHz	16QAM	19957	1	0	Low	21.66	PASS
Band4	1.4MHz	QPSK	19957	1	5	Low	23.25	PASS
Band4	1.4MHz	16QAM	19957	1	5	Low	21.49	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	22.24	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	21.67	PASS
Band4	1.4MHz	QPSK	20175	1	5	Low	22.41	PASS
Band4	1.4MHz	16QAM	20175	1	5	Low	21.57	PASS
Band4	1.4MHz	QPSK	20175	6	0	Low	20.69	PASS
Band4	1.4MHz	16QAM	20175	6	0	Low	20.04	PASS
Band4	1.4MHz	QPSK	20393	1	0	High	22.72	PASS
Band4	1.4MHz	QPSK	19957	6	0	Low	20.24	PASS
Band4	1.4MHz	16QAM	19957	6	0	Low	20.02	PASS
Band4	1.4MHz	16QAM	20393	1	0	High	21.95	PASS
Band4	1.4MHz	QPSK	20393	1	5	High	22.67	PASS
Band4	1.4MHz	16QAM	20393	1	5	High	21.92	PASS
Band4	1.4MHz	QPSK	20393	6	0	High	20.98	PASS
Band4	1.4MHz	16QAM	20393	6	0	High	20.43	PASS
Band4	3MHz	QPSK	19965	1	0	Low	22.30	PASS
Band4	3MHz	16QAM	19965	1	0	Low	21.49	PASS
Band4	3MHz	QPSK	19965	1	5	Low	22.21	PASS
Band4	3MHz	16QAM	19965	1	5	Low	21.39	PASS
Band4	3MHz	QPSK	19965	6	0	Low	20.10	PASS
Band4	3MHz	16QAM	19965	6	0	Low	19.90	PASS
Band4	3MHz	QPSK	20175	1	0	Low	22.47	PASS
Band4	3MHz	16QAM	20175	1	0	Low	21.59	PASS
Band4	3MHz	QPSK	20175	1	5	Low	22.43	PASS
Band4	3MHz	16QAM	20175	1	5	Low	21.57	PASS
Band4	3MHz	QPSK	20175	6	0	Low	20.43	PASS
Band4	3MHz	16QAM	20175	6	0	Low	20.00	PASS
Band4	3MHz	QPSK	20385	1	0	High	22.69	PASS
Band4	3MHz	16QAM	20385	1	0	High	21.86	PASS
Band4	3MHz	QPSK	20385	1	5	High	22.59	PASS
Band4	3MHz	16QAM	20385	1	5	High	21.81	PASS
Band4	3MHz	QPSK	20385	6	0	High	20.83	PASS

Band4	3MHz	16QAM	20385	6	0	High	20.36	PASS
Band4	5MHz	QPSK	19975	1	0	Low	22.59	PASS
Band4	5MHz	16QAM	19975	1	0	Low	22.71	PASS
Band4	5MHz	QPSK	19975	1	5	Low	22.59	PASS
Band4	5MHz	16QAM	19975	1	5	Low	22.65	PASS
Band4	5MHz	QPSK	19975	6	0	Low	21.78	PASS
Band4	5MHz	16QAM	19975	6	0	Low	20.38	PASS
Band4	5MHz	QPSK	20175	1	0	Low	22.93	PASS
Band4	5MHz	16QAM	20175	1	0	Low	23.02	PASS
Band4	5MHz	QPSK	20175	1	5	Low	23.06	PASS
Band4	5MHz	16QAM	20175	1	5	Low	23.05	PASS
Band4	5MHz	QPSK	20175	6	0	Low	21.98	PASS
Band4	5MHz	16QAM	20175	6	0	Low	20.43	PASS
Band4	5MHz	QPSK	20375	1	0	High	23.25	PASS
Band4	5MHz	16QAM	20375	1	0	High	23.29	PASS
Band4	5MHz	QPSK	20375	1	5	High	23.43	PASS
Band4	5MHz	16QAM	20375	1	5	High	23.38	PASS
Band4	5MHz	QPSK	20375	6	0	High	22.31	PASS
Band4	5MHz	16QAM	20375	6	0	High	20.58	PASS
Band4	10MHz	QPSK	20000	1	0	Low	22.61	PASS
Band4	10MHz	16QAM	20000	1	0	Low	22.74	PASS
Band4	10MHz	QPSK	20000	1	5	Low	22.63	PASS
Band4	10MHz	16QAM	20000	1	5	Low	22.71	PASS
Band4	10MHz	QPSK	20000	6	0	Low	21.72	PASS
Band4	10MHz	16QAM	20000	6	0	Low	20.26	PASS
Band4	10MHz	QPSK	20175	1	0	Low	22.80	PASS
Band4	10MHz	16QAM	20175	1	0	Low	22.95	PASS
Band4	10MHz	QPSK	20175	1	5	Low	22.97	PASS
Band4	10MHz	16QAM	20175	1	5	Low	23.00	PASS
Band4	10MHz	QPSK	20175	6	0	Low	21.88	PASS
Band4	10MHz	16QAM	20175	6	0	Low	20.47	PASS
Band4	10MHz	QPSK	20350	1	0	High	23.42	PASS
Band4	10MHz	16QAM	20350	1	0	High	23.25	PASS
Band4	10MHz	QPSK	20350	1	5	High	23.28	PASS
Band4	10MHz	16QAM	20350	1	5	High	23.27	PASS
Band4	10MHz	QPSK	20350	6	0	High	22.07	PASS
Band4	10MHz	16QAM	20350	6	0	High	20.42	PASS
Band4	15MHz	QPSK	20025	1	0	Low	23.18	PASS
Band4	15MHz	16QAM	20025	1	0	Low	23.28	PASS
Band4	15MHz	QPSK	20025	1	5	Low	23.19	PASS
Band4	15MHz	16QAM	20025	1	5	Low	23.19	PASS

Band4	15MHz	QPSK	20025	6	0	Low	23.04	PASS
Band4	15MHz	16QAM	20025	6	0	Low	22.17	PASS
Band4	15MHz	QPSK	20175	1	0	Low	22.81	PASS
Band4	15MHz	16QAM	20175	1	0	Low	22.95	PASS
Band4	15MHz	QPSK	20175	1	5	Low	22.94	PASS
Band4	15MHz	16QAM	20175	1	5	Low	22.96	PASS
Band4	15MHz	QPSK	20175	6	0	Low	22.84	PASS
Band4	15MHz	16QAM	20175	6	0	Low	22.22	PASS
Band4	15MHz	QPSK	20325	1	0	High	23.40	PASS
Band4	15MHz	16QAM	20325	1	0	High	23.19	PASS
Band4	15MHz	QPSK	20325	1	5	High	23.25	PASS
Band4	15MHz	16QAM	20325	1	5	High	23.27	PASS
Band4	15MHz	QPSK	20325	6	0	High	23.12	PASS
Band4	15MHz	16QAM	20325	6	0	High	22.19	PASS
Band4	20MHz	QPSK	20050	1	0	Low	22.58	PASS
Band4	20MHz	16QAM	20050	1	0	Low	22.72	PASS
Band4	20MHz	QPSK	20050	1	5	Low	22.61	PASS
Band4	20MHz	16QAM	20050	1	5	Low	22.68	PASS
Band4	20MHz	QPSK	20050	6	0	Low	22.51	PASS
Band4	20MHz	16QAM	20050	6	0	Low	22.21	PASS
Band4	20MHz	QPSK	20175	1	0	Low	22.66	PASS
Band4	20MHz	16QAM	20175	1	0	Low	22.78	PASS
Band4	20MHz	QPSK	20175	1	5	Low	22.84	PASS
Band4	20MHz	16QAM	20175	1	5	Low	22.85	PASS
Band4	20MHz	QPSK	20175	6	0	Low	22.72	PASS
Band4	20MHz	16QAM	20175	6	0	Low	22.14	PASS
Band4	20MHz	QPSK	20300	1	0	High	23.08	PASS
Band4	20MHz	16QAM	20300	1	0	High	23.19	PASS
Band4	20MHz	QPSK	20300	1	5	High	23.23	PASS
Band4	20MHz	16QAM	20300	1	5	High	23.27	PASS
Band4	20MHz	QPSK	20300	6	0	High	23.14	PASS
Band4	20MHz	16QAM	20300	6	0	High	22.25	PASS

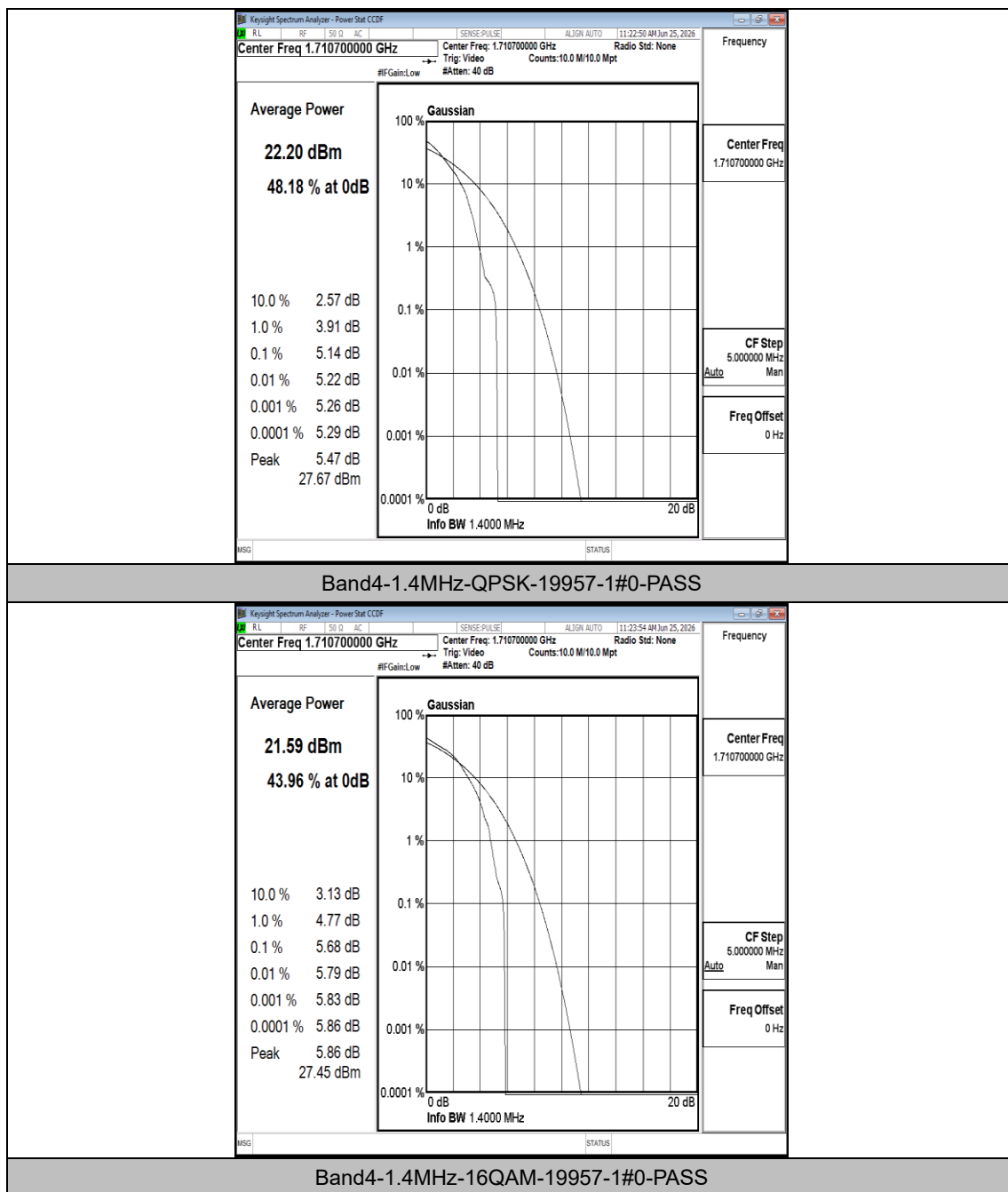
C.2 Peak-to-Average Ratio(CCDF) for M1

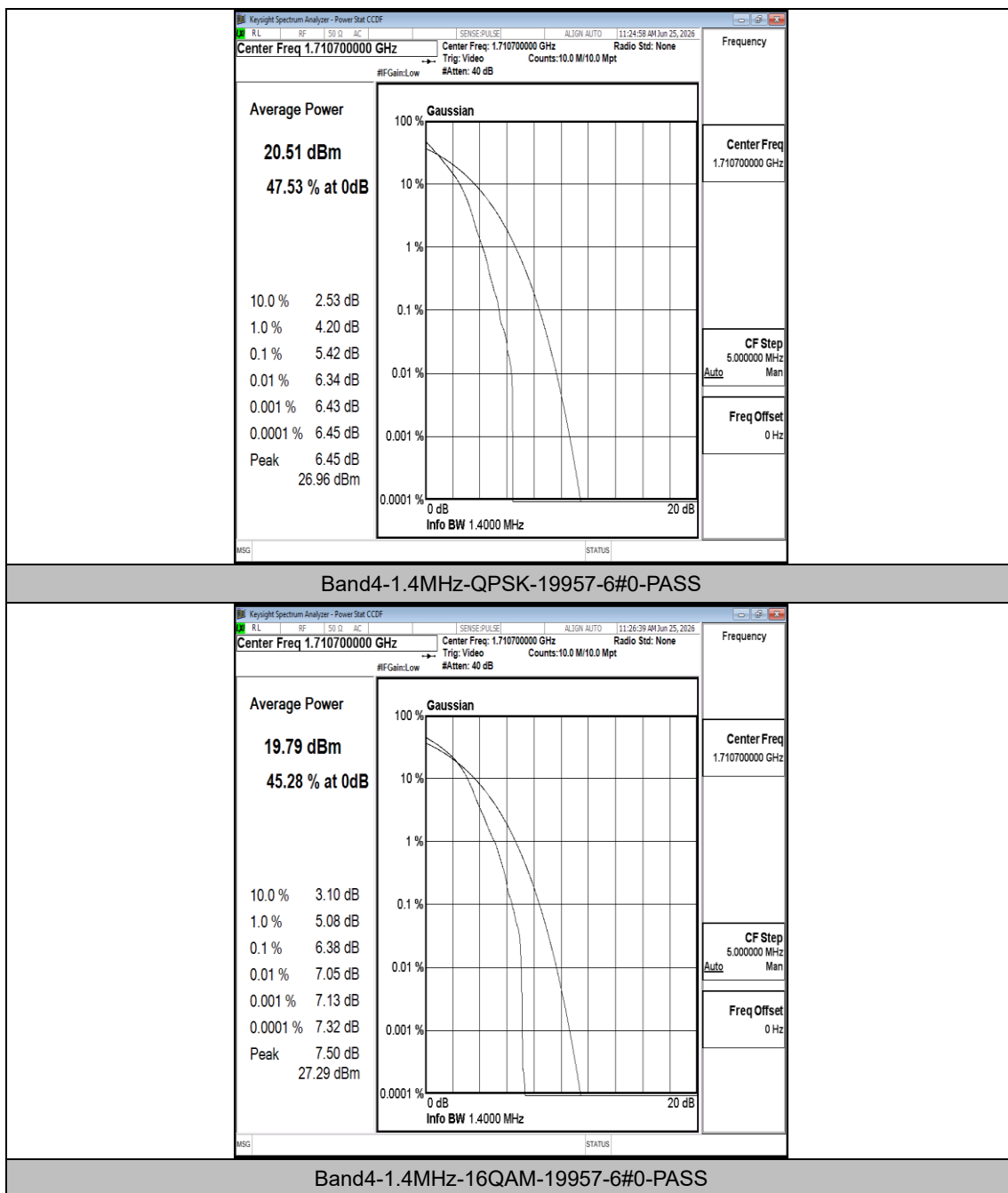
Test Result

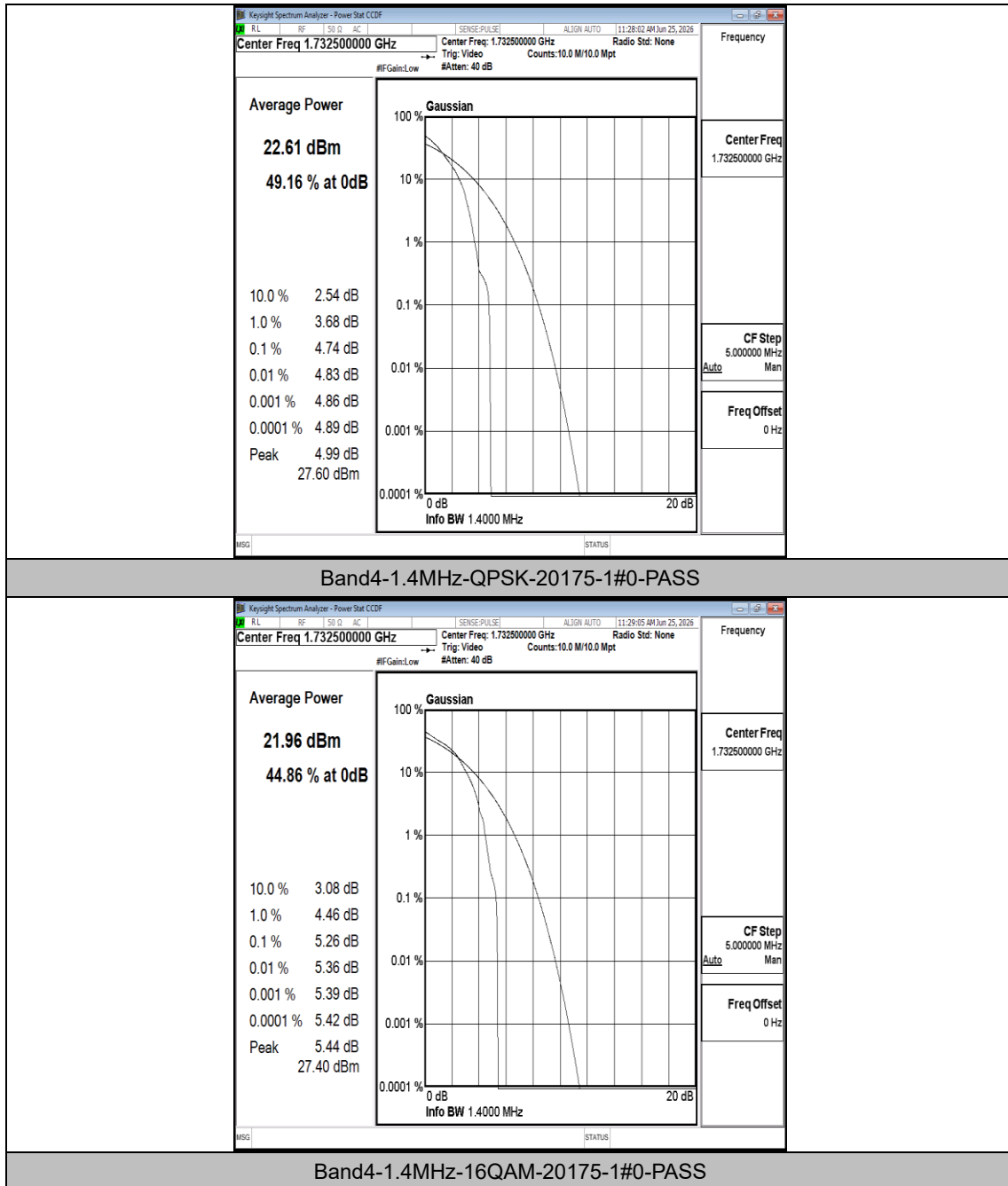
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band4	1.4MHz	QPSK	19957	1	0	Low	5.14	<=13	PASS
Band4	1.4MHz	16QAM	19957	1	0	Low	5.68	<=13	PASS
Band4	1.4MHz	QPSK	19957	6	0	Low	5.42	<=13	PASS
Band4	1.4MHz	16QAM	19957	6	0	Low	6.38	<=13	PASS
Band4	1.4MHz	QPSK	20175	1	0	Low	4.74	<=13	PASS
Band4	1.4MHz	16QAM	20175	1	0	Low	5.26	<=13	PASS
Band4	1.4MHz	QPSK	20175	6	0	Low	5.29	<=13	PASS
Band4	1.4MHz	16QAM	20175	6	0	Low	6.16	<=13	PASS
Band4	1.4MHz	QPSK	20393	1	5	High	4.67	<=13	PASS
Band4	1.4MHz	16QAM	20393	1	5	High	5.10	<=13	PASS
Band4	1.4MHz	QPSK	20393	6	0	High	5.19	<=13	PASS
Band4	1.4MHz	16QAM	20393	6	0	High	6.06	<=13	PASS
Band4	3MHz	QPSK	19965	1	0	Low	5.03	<=13	PASS
Band4	3MHz	16QAM	19965	1	0	Low	5.61	<=13	PASS
Band4	3MHz	QPSK	19965	6	0	Low	6.40	<=13	PASS
Band4	3MHz	16QAM	19965	6	0	Low	6.15	<=13	PASS
Band4	3MHz	QPSK	20175	1	0	Low	4.66	<=13	PASS
Band4	3MHz	16QAM	20175	1	0	Low	5.21	<=13	PASS
Band4	3MHz	QPSK	20175	6	0	Low	6.33	<=13	PASS
Band4	3MHz	16QAM	20175	6	0	Low	6.01	<=13	PASS
Band4	3MHz	QPSK	20385	1	5	High	4.80	<=13	PASS
Band4	3MHz	16QAM	20385	1	5	High	5.04	<=13	PASS
Band4	3MHz	QPSK	20385	6	0	High	5.16	<=13	PASS
Band4	3MHz	16QAM	20385	6	0	High	5.92	<=13	PASS
Band4	5MHz	QPSK	19975	1	0	Low	4.68	<=13	PASS
Band4	5MHz	16QAM	19975	1	0	Low	4.86	<=13	PASS
Band4	5MHz	QPSK	19975	6	0	Low	5.14	<=13	PASS
Band4	5MHz	16QAM	19975	6	0	Low	7.17	<=13	PASS
Band4	5MHz	QPSK	20175	1	0	Low	4.28	<=13	PASS
Band4	5MHz	16QAM	20175	1	0	Low	4.43	<=13	PASS
Band4	5MHz	QPSK	20175	6	0	Low	4.84	<=13	PASS
Band4	5MHz	16QAM	20175	6	0	Low	7.05	<=13	PASS
Band4	5MHz	QPSK	20375	1	5	High	4.13	<=13	PASS
Band4	5MHz	16QAM	20375	1	5	High	4.35	<=13	PASS
Band4	5MHz	QPSK	20375	6	0	High	4.66	<=13	PASS

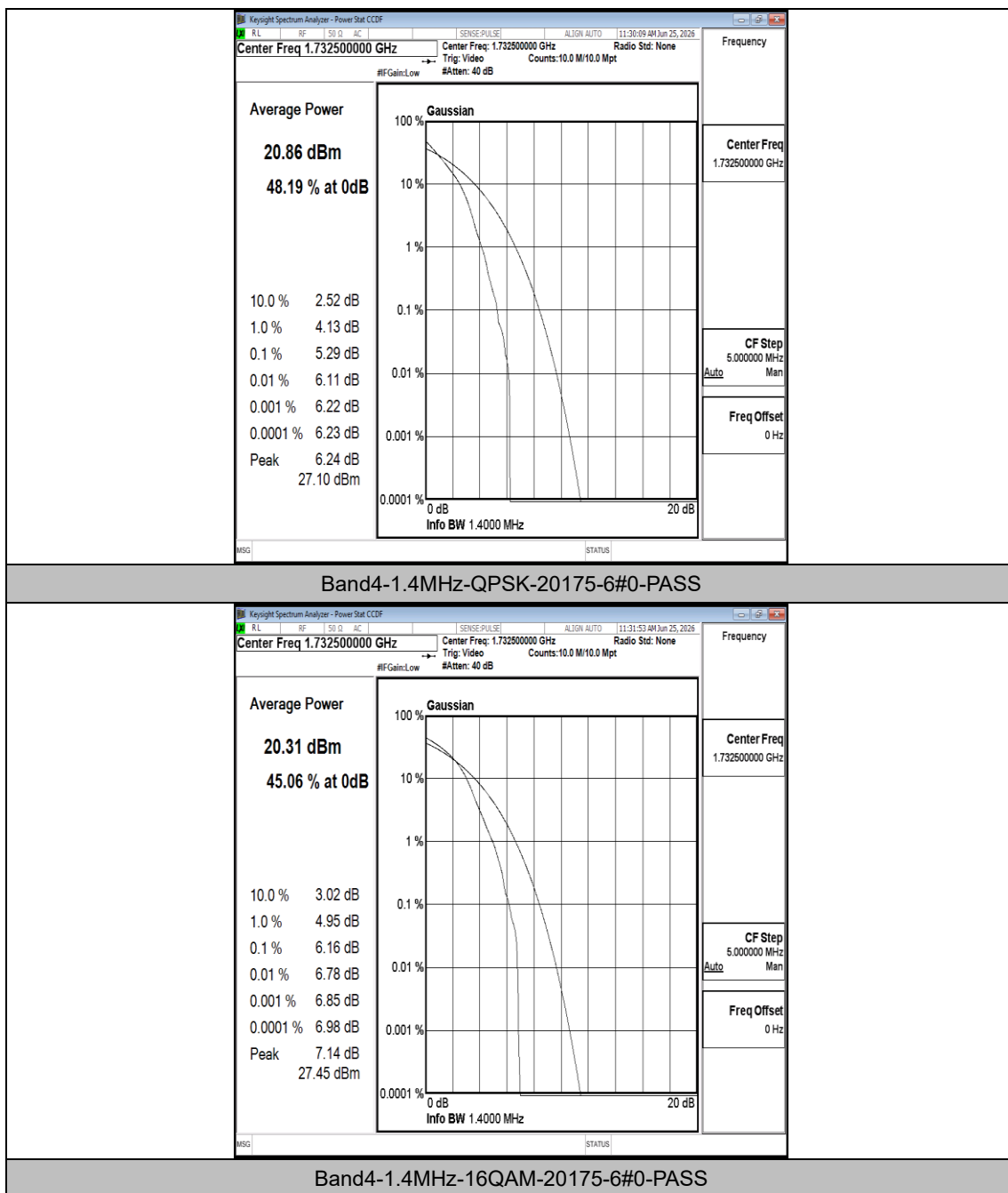
Band4	5MHz	16QAM	20375	6	0	High	6.91	<=13	PASS
Band4	10MHz	QPSK	20000	1	0	Low	4.67	<=13	PASS
Band4	10MHz	16QAM	20000	1	0	Low	4.79	<=13	PASS
Band4	10MHz	QPSK	20000	6	0	Low	5.09	<=13	PASS
Band4	10MHz	16QAM	20000	6	0	Low	7.28	<=13	PASS
Band4	10MHz	QPSK	20175	1	0	Low	4.29	<=13	PASS
Band4	10MHz	16QAM	20175	1	0	Low	4.36	<=13	PASS
Band4	10MHz	QPSK	20175	6	0	Low	4.78	<=13	PASS
Band4	10MHz	16QAM	20175	6	0	Low	6.90	<=13	PASS
Band4	10MHz	QPSK	20350	1	5	High	4.14	<=13	PASS
Band4	10MHz	16QAM	20350	1	5	High	4.27	<=13	PASS
Band4	10MHz	QPSK	20350	6	0	High	4.53	<=13	PASS
Band4	10MHz	16QAM	20350	6	0	High	6.56	<=13	PASS
Band4	15MHz	QPSK	20025	1	0	Low	4.66	<=13	PASS
Band4	15MHz	16QAM	20025	1	0	Low	4.80	<=13	PASS
Band4	15MHz	QPSK	20025	6	0	Low	4.68	<=13	PASS
Band4	15MHz	16QAM	20025	6	0	Low	6.37	<=13	PASS
Band4	15MHz	QPSK	20175	1	0	Low	4.23	<=13	PASS
Band4	15MHz	16QAM	20175	1	0	Low	4.42	<=13	PASS
Band4	15MHz	QPSK	20175	6	0	Low	4.27	<=13	PASS
Band4	15MHz	16QAM	20175	6	0	Low	6.01	<=13	PASS
Band4	15MHz	QPSK	20325	1	5	High	4.96	<=13	PASS
Band4	15MHz	16QAM	20325	1	5	High	4.25	<=13	PASS
Band4	15MHz	QPSK	20325	6	0	High	4.02	<=13	PASS
Band4	15MHz	16QAM	20325	6	0	High	5.84	<=13	PASS
Band4	20MHz	QPSK	20050	1	0	Low	4.68	<=13	PASS
Band4	20MHz	16QAM	20050	1	0	Low	4.80	<=13	PASS
Band4	20MHz	QPSK	20050	6	0	Low	4.87	<=13	PASS
Band4	20MHz	16QAM	20050	6	0	Low	6.29	<=13	PASS
Band4	20MHz	QPSK	20175	1	0	Low	4.37	<=13	PASS
Band4	20MHz	16QAM	20175	1	0	Low	4.43	<=13	PASS
Band4	20MHz	QPSK	20175	6	0	Low	4.57	<=13	PASS
Band4	20MHz	16QAM	20175	6	0	Low	6.05	<=13	PASS
Band4	20MHz	QPSK	20300	1	5	High	4.60	<=13	PASS
Band4	20MHz	16QAM	20300	1	5	High	4.33	<=13	PASS
Band4	20MHz	QPSK	20300	6	0	High	4.42	<=13	PASS
Band4	20MHz	16QAM	20300	6	0	High	5.90	<=13	PASS

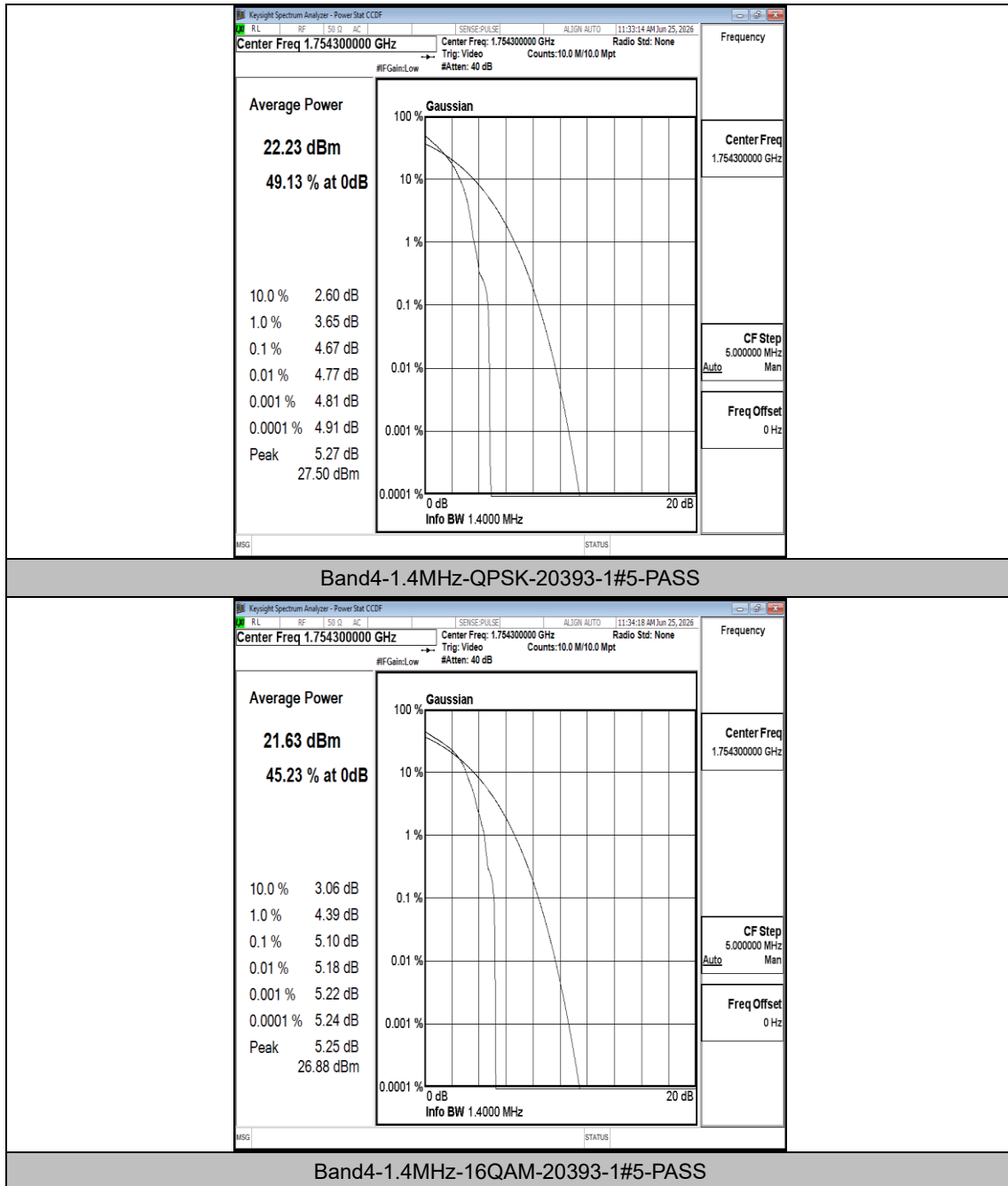
Test Graphs

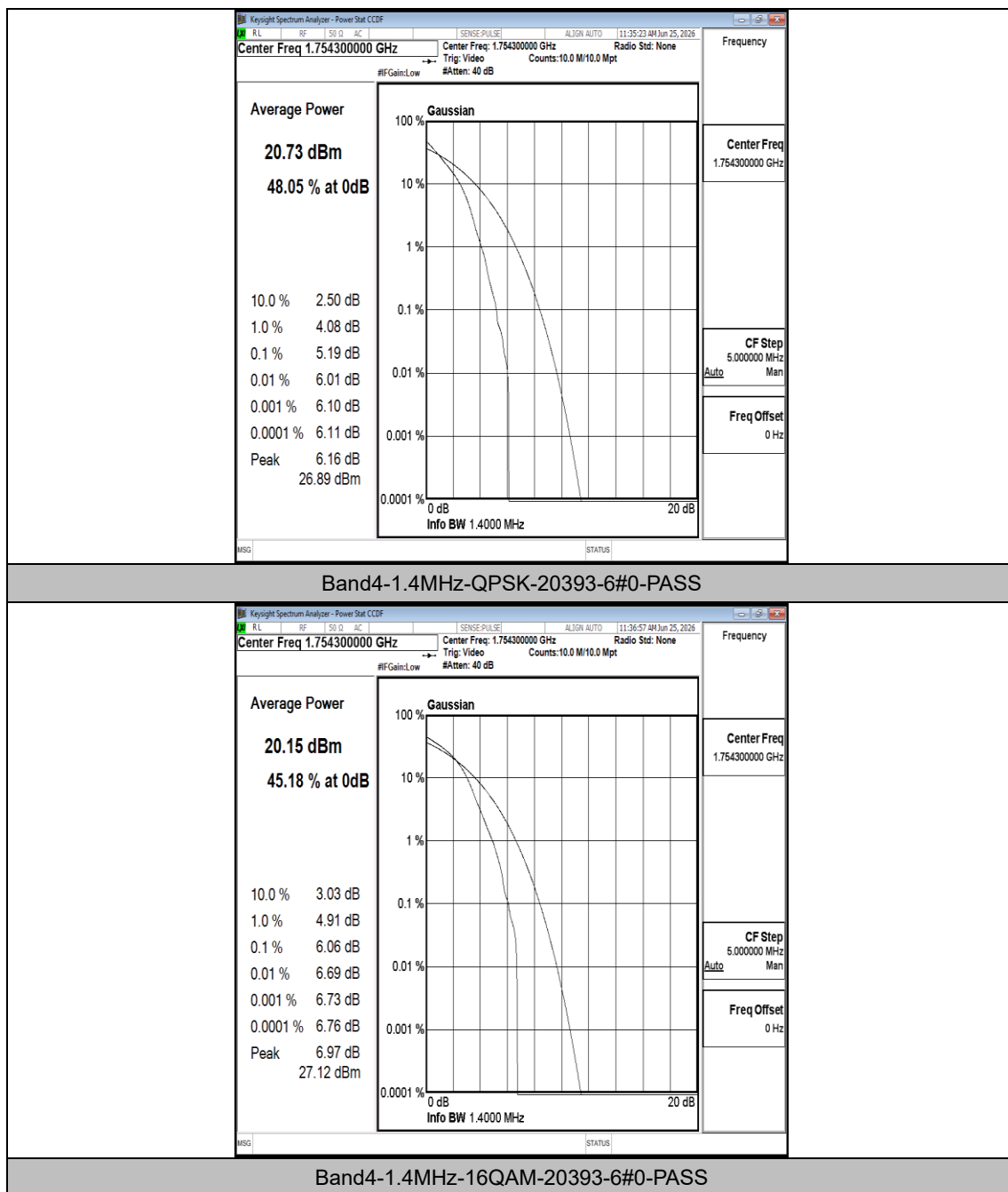


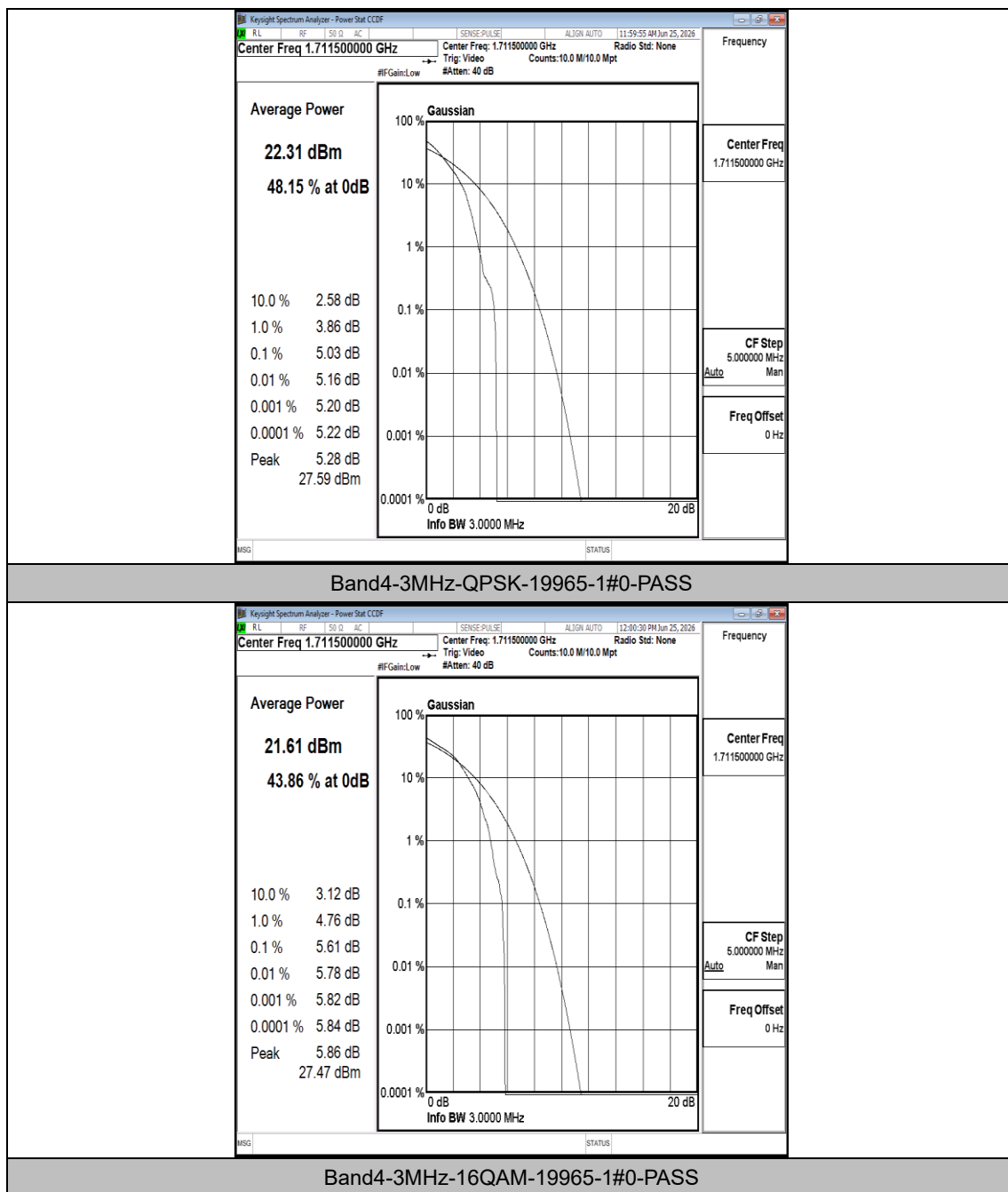


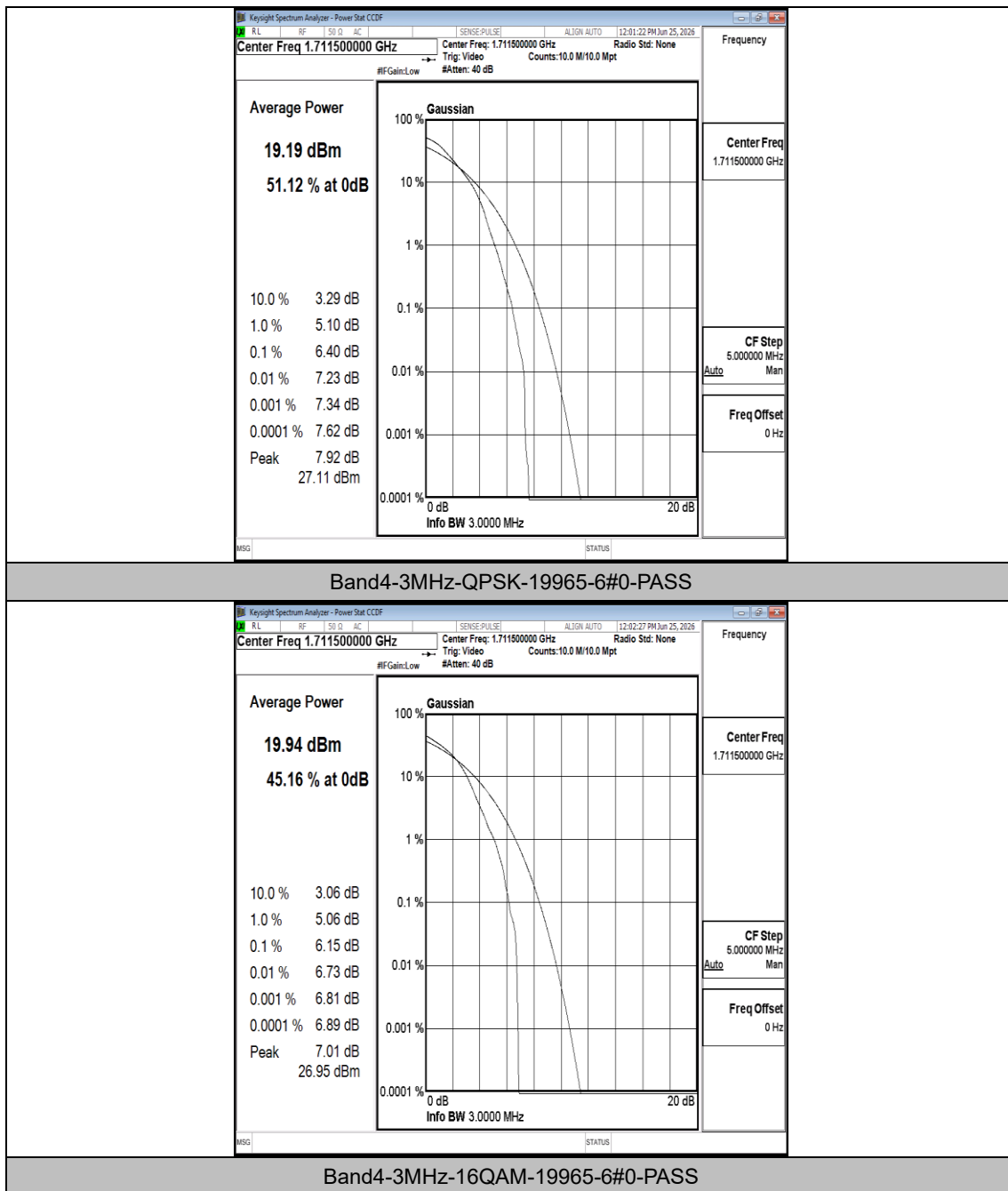


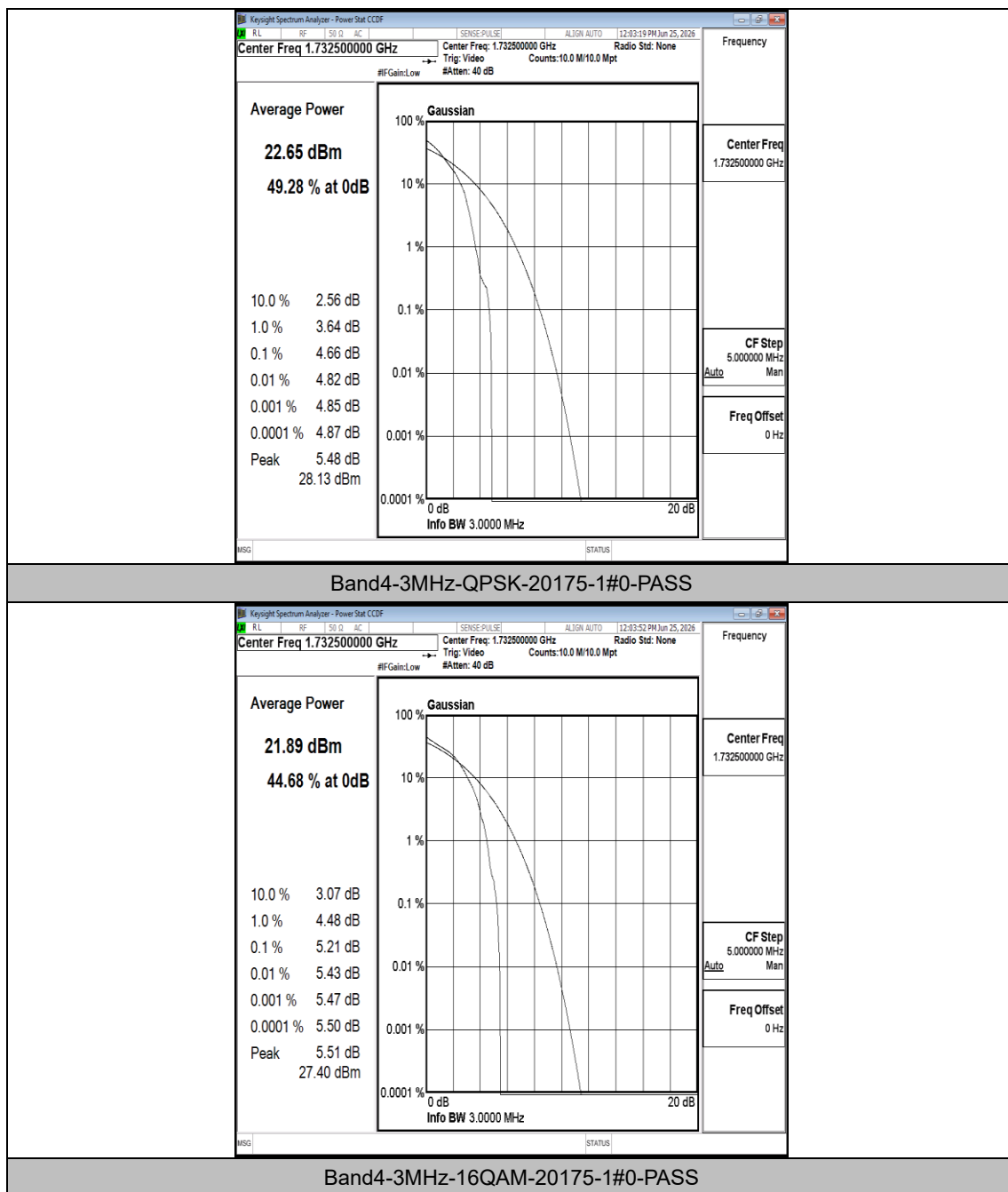


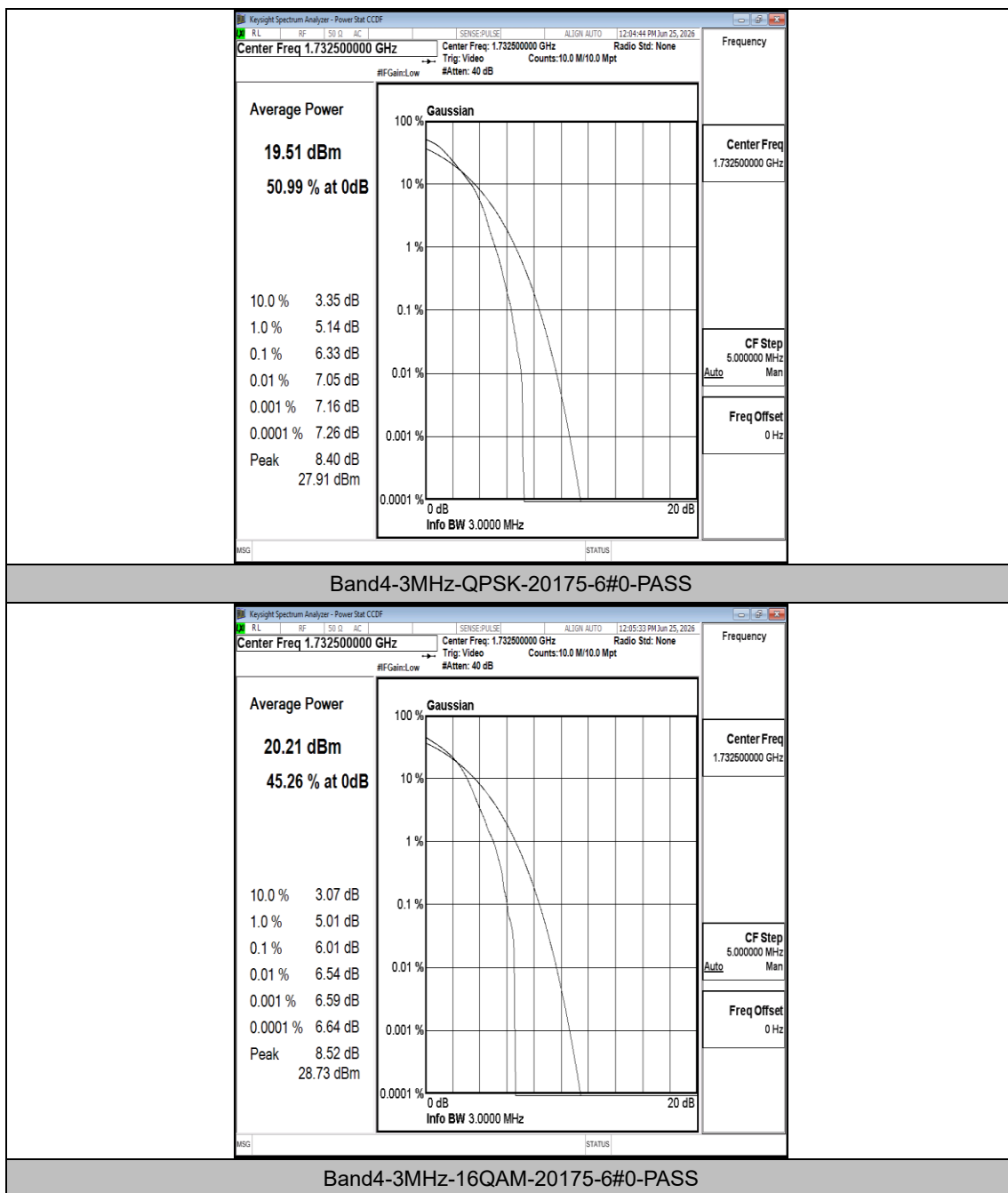


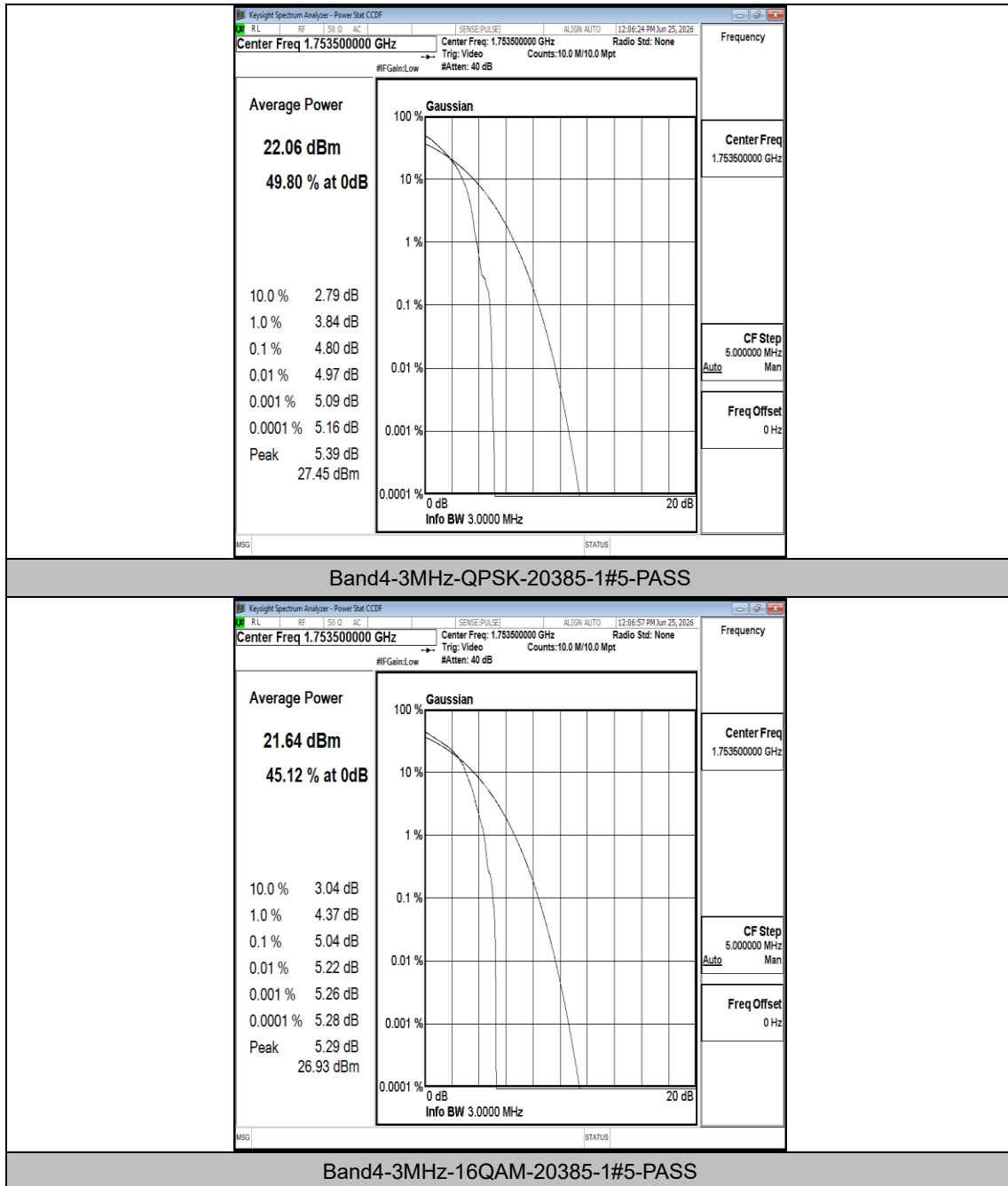


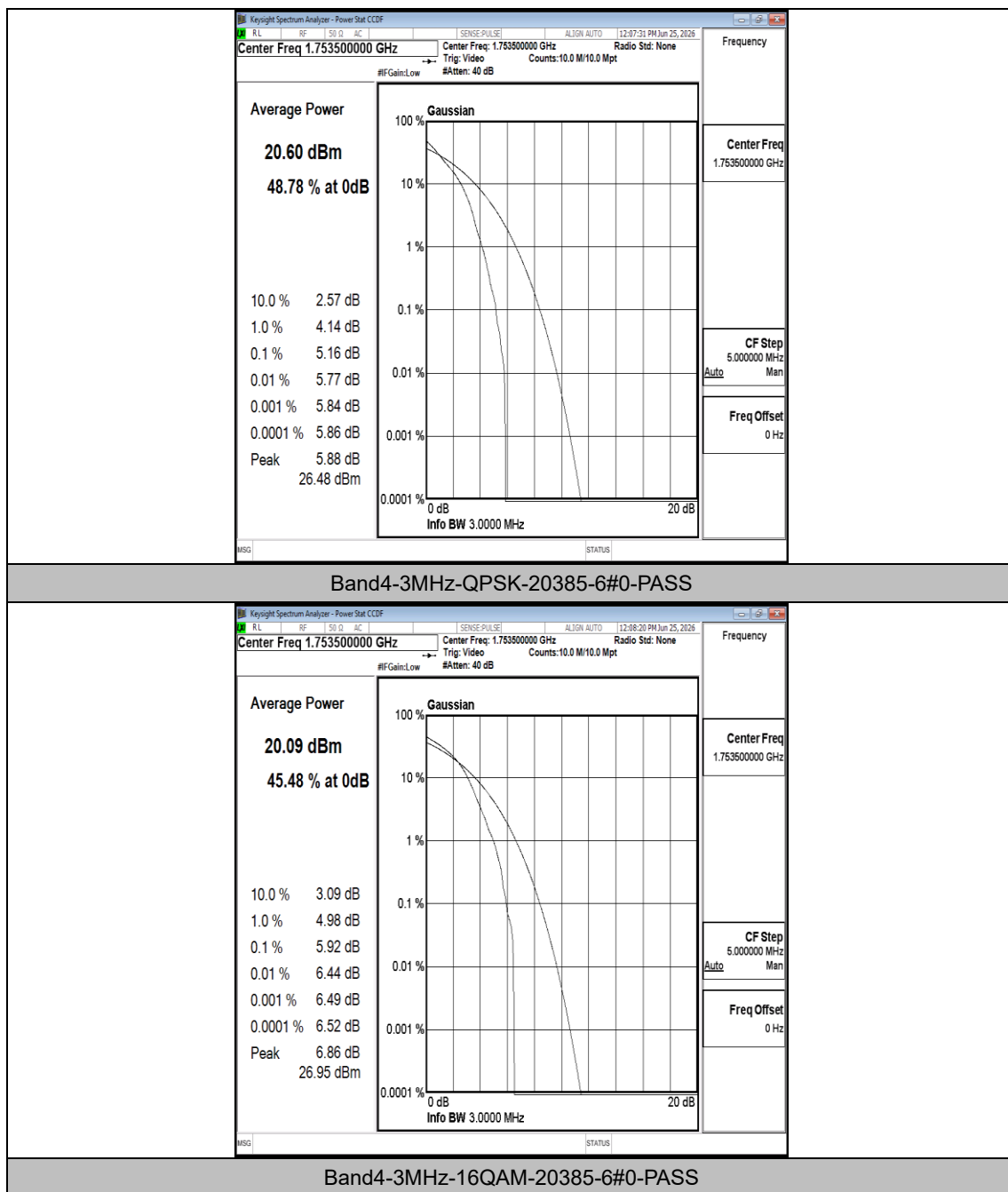


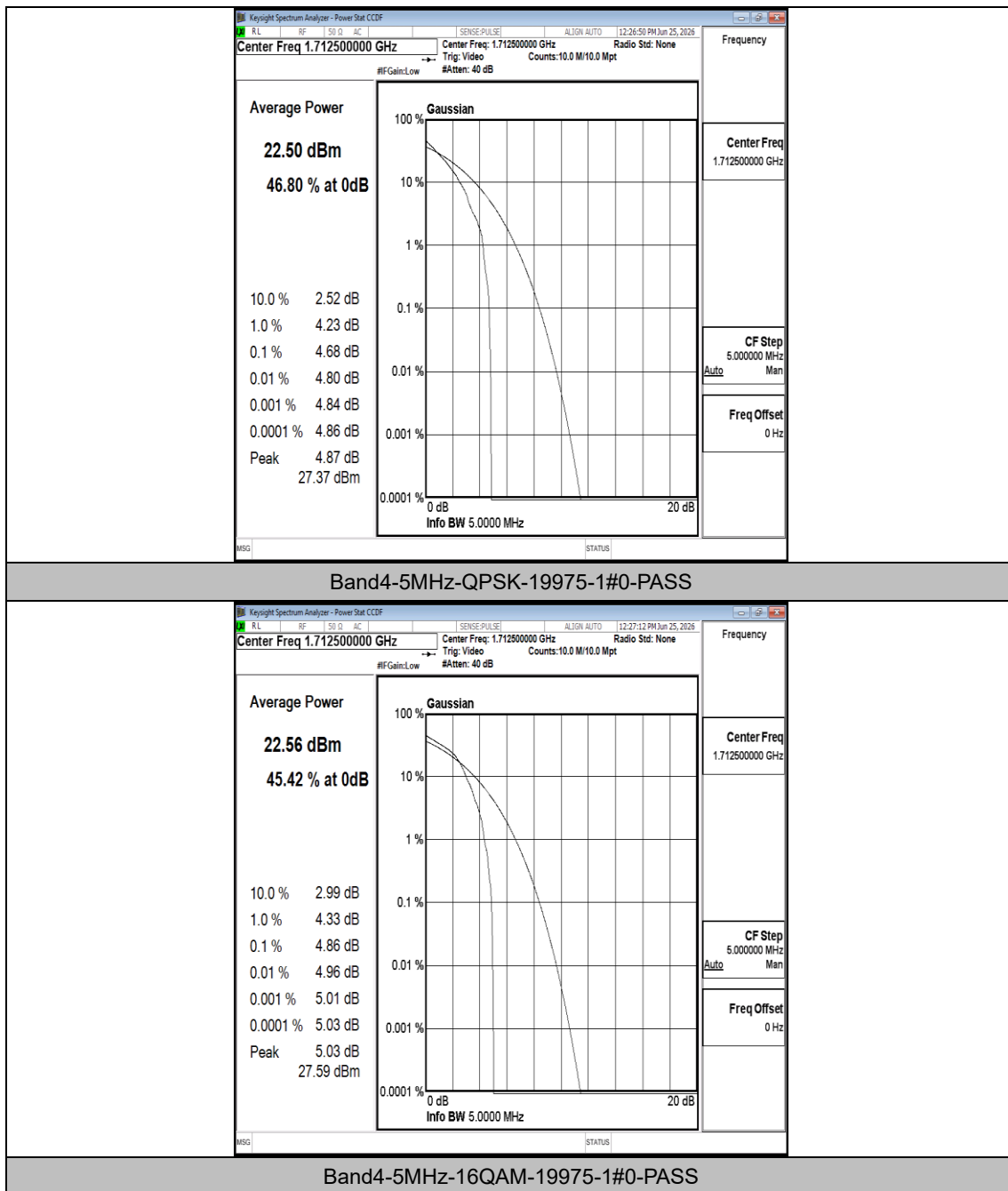


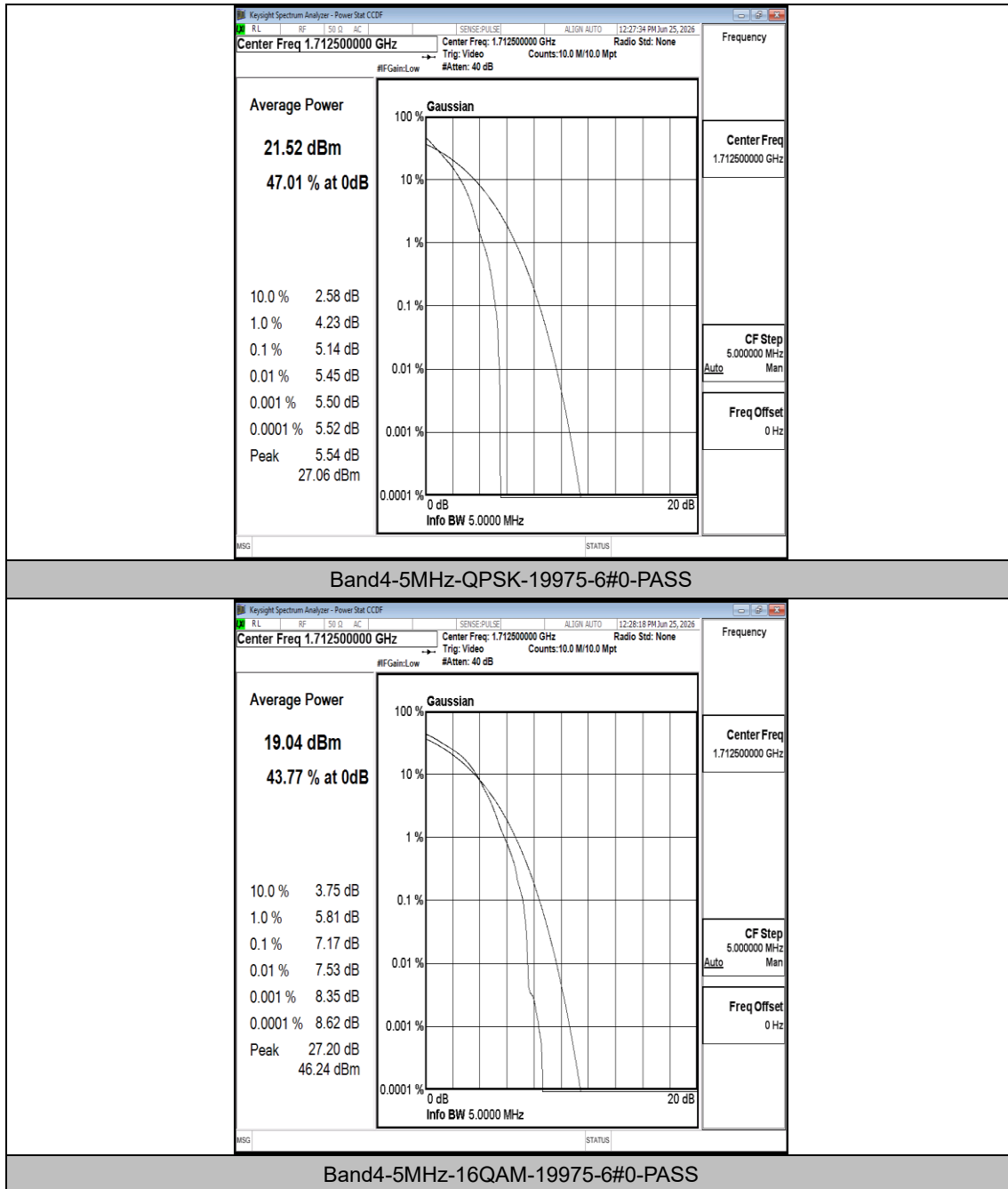


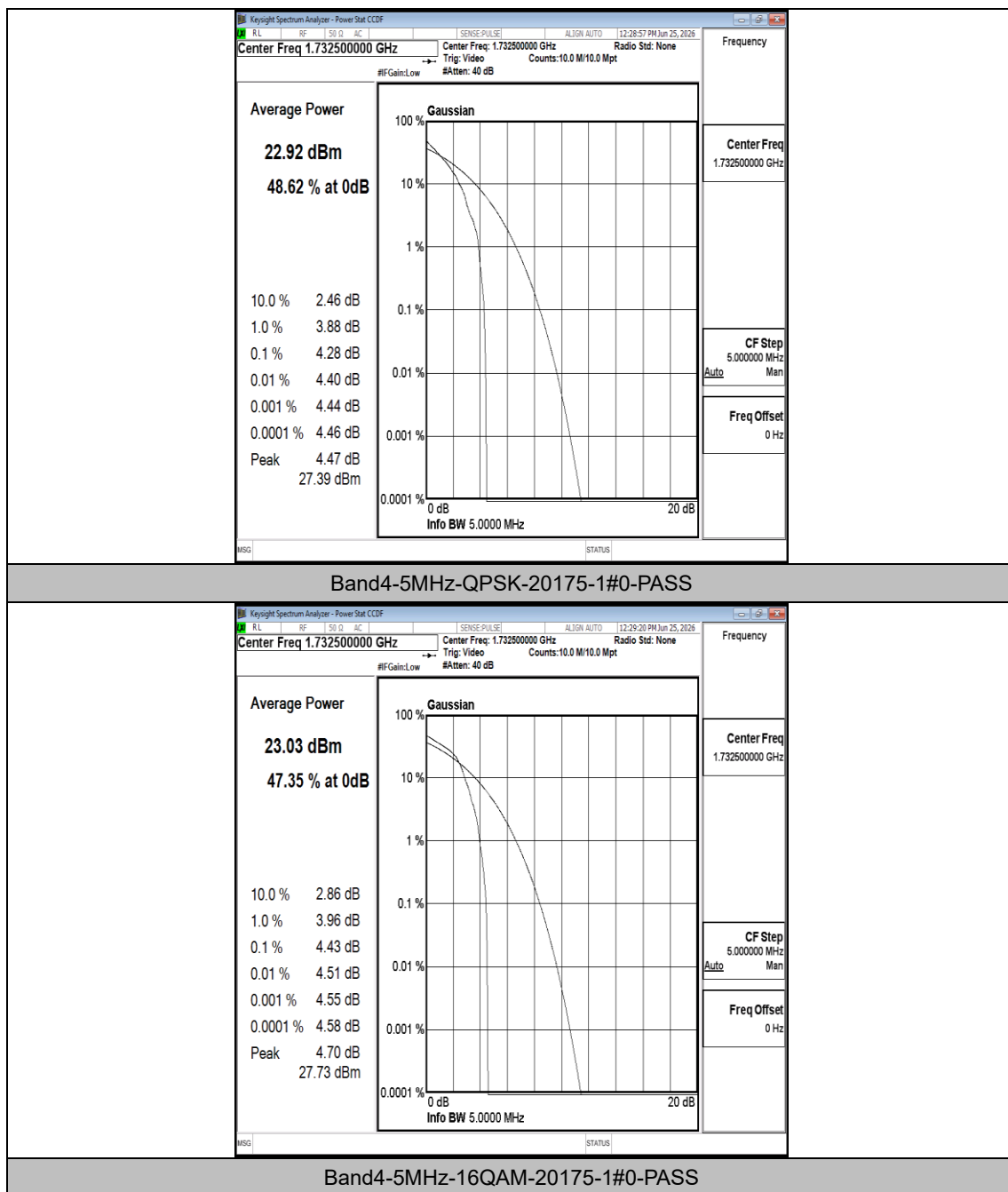


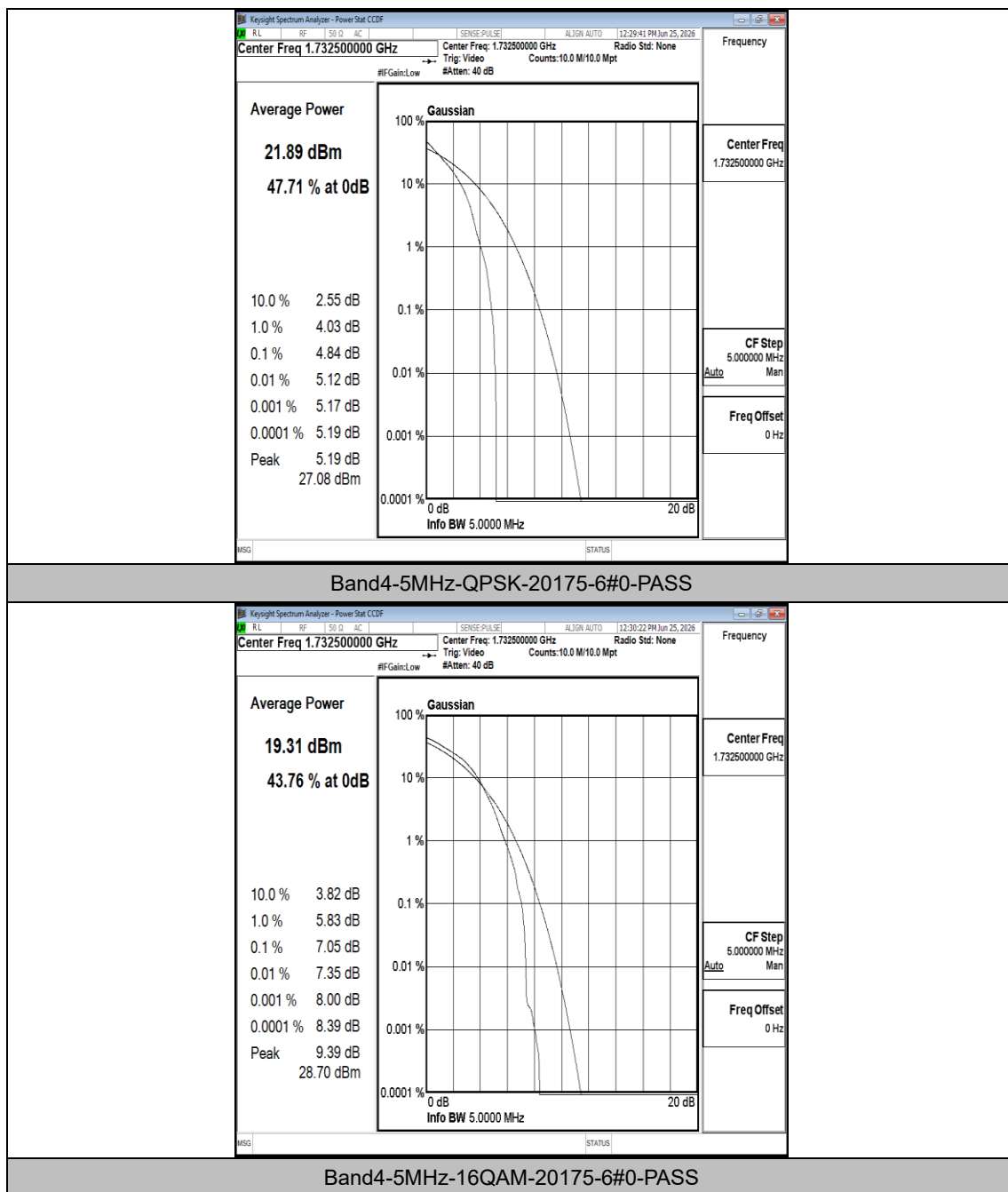


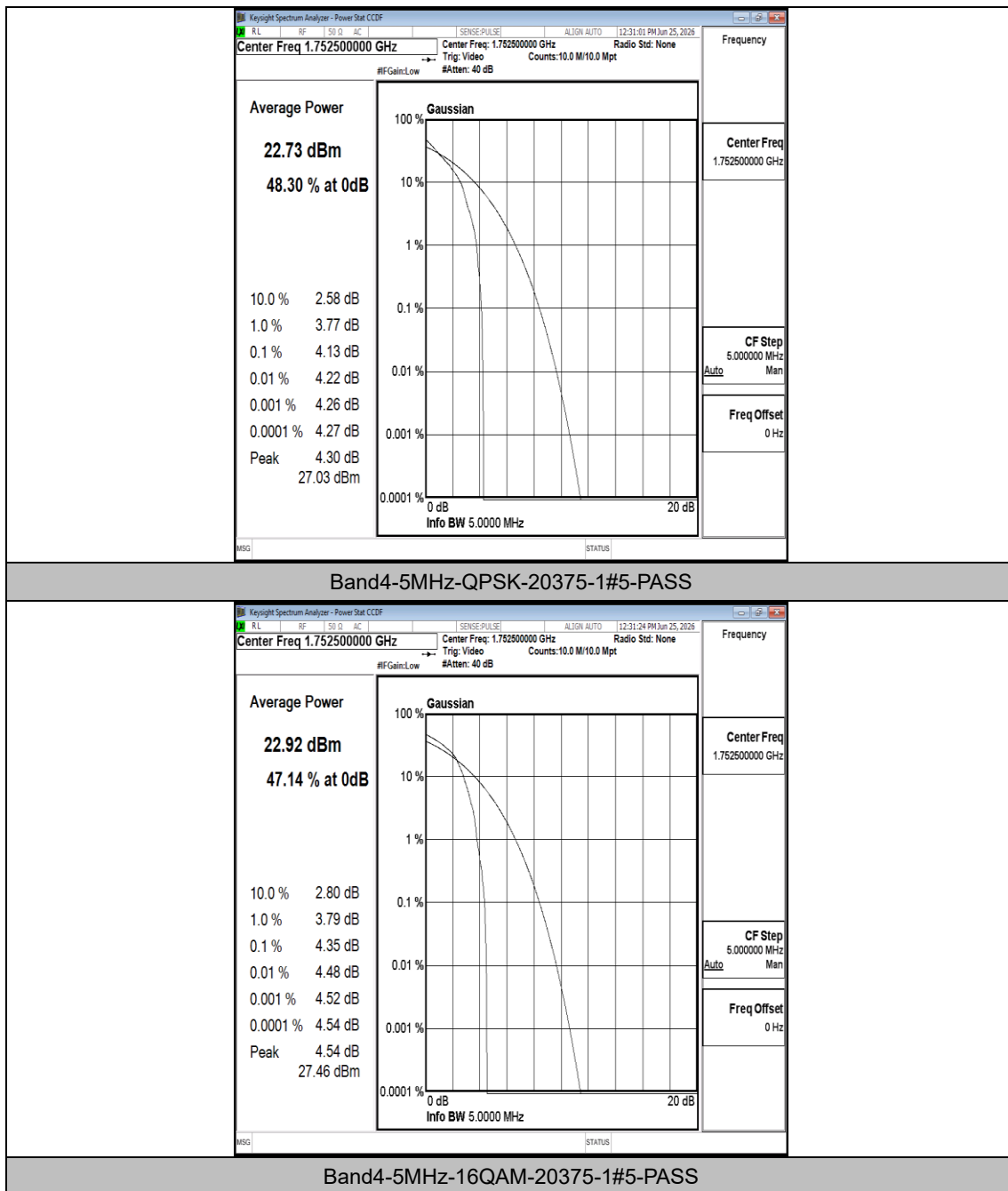


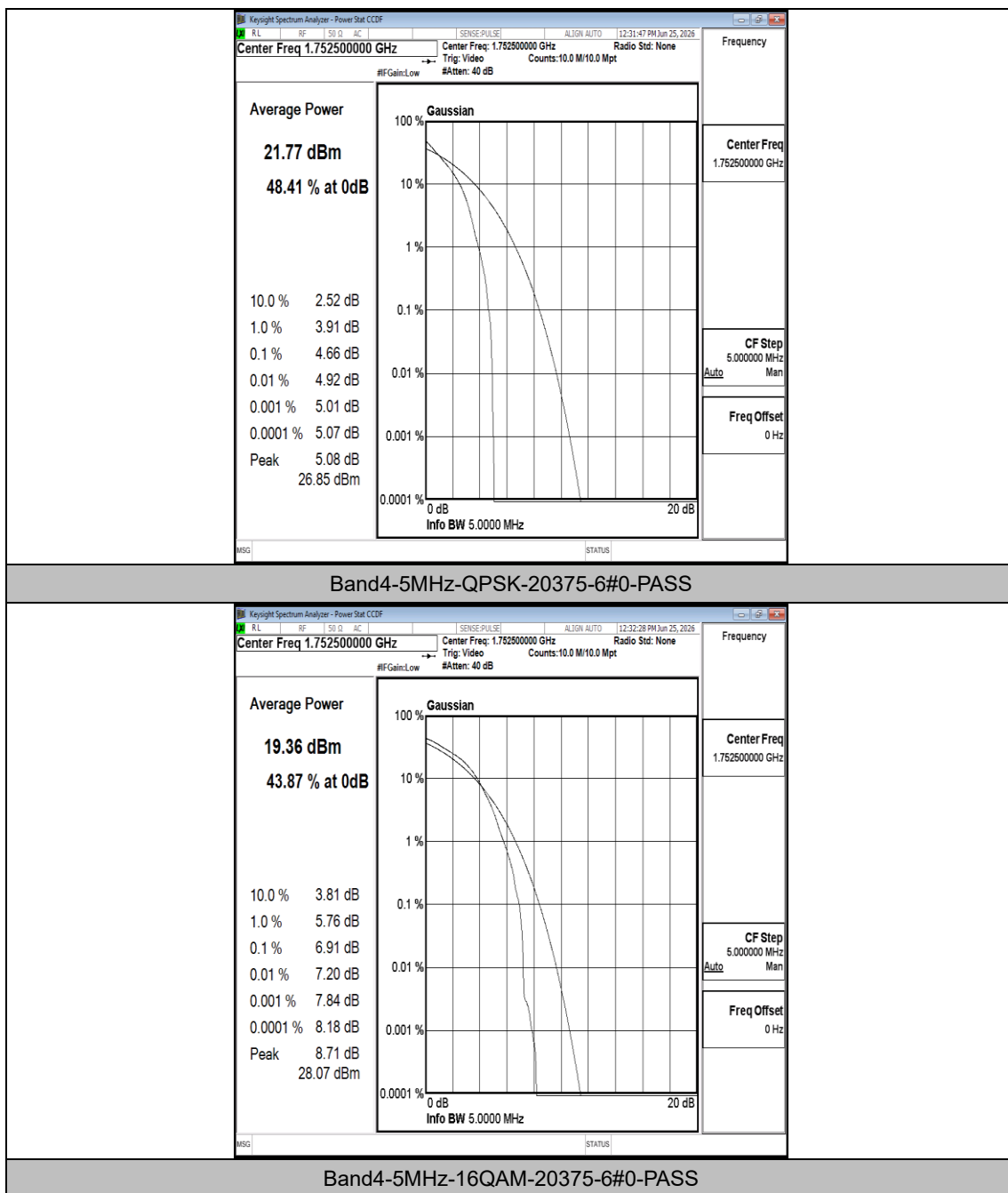


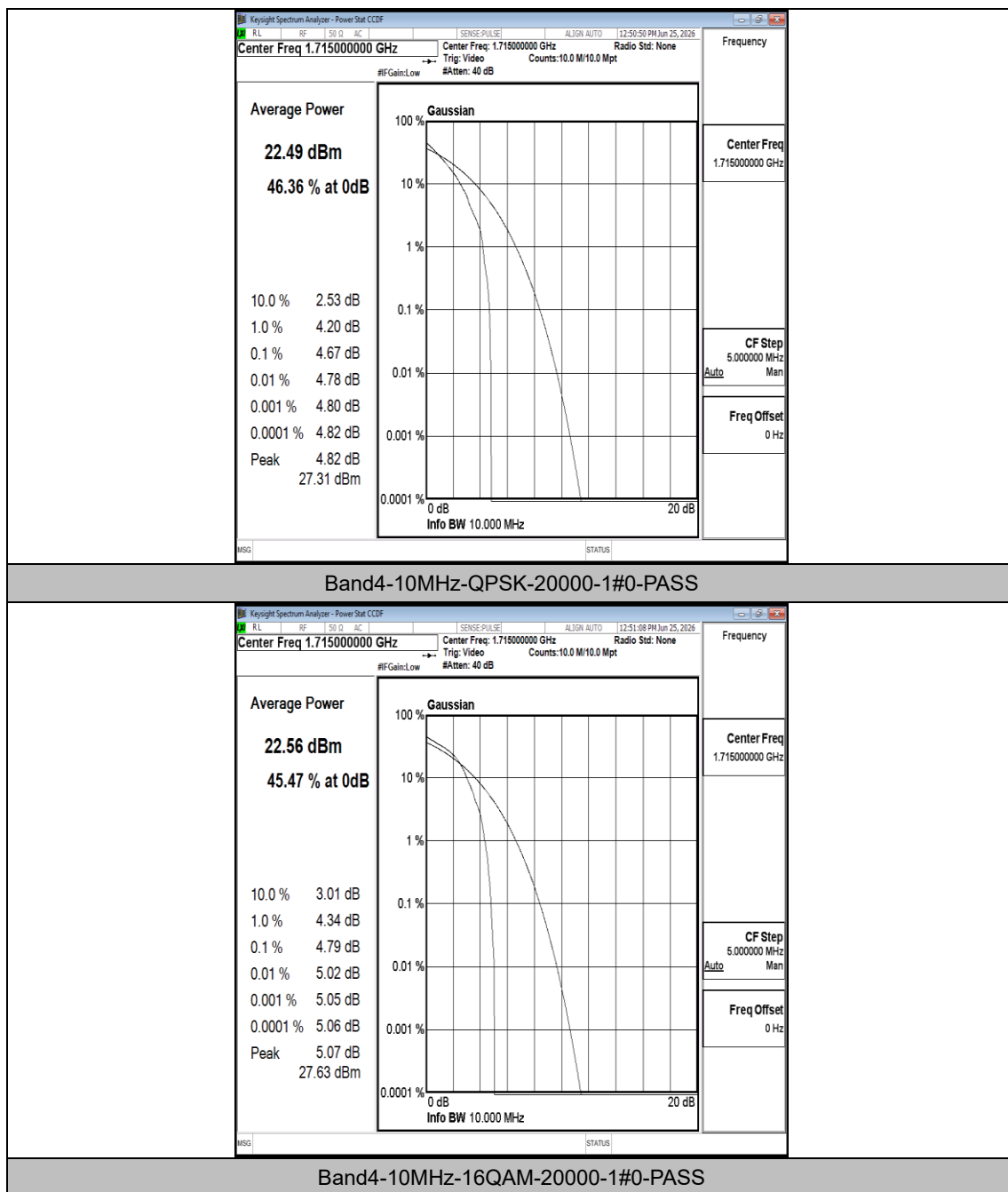


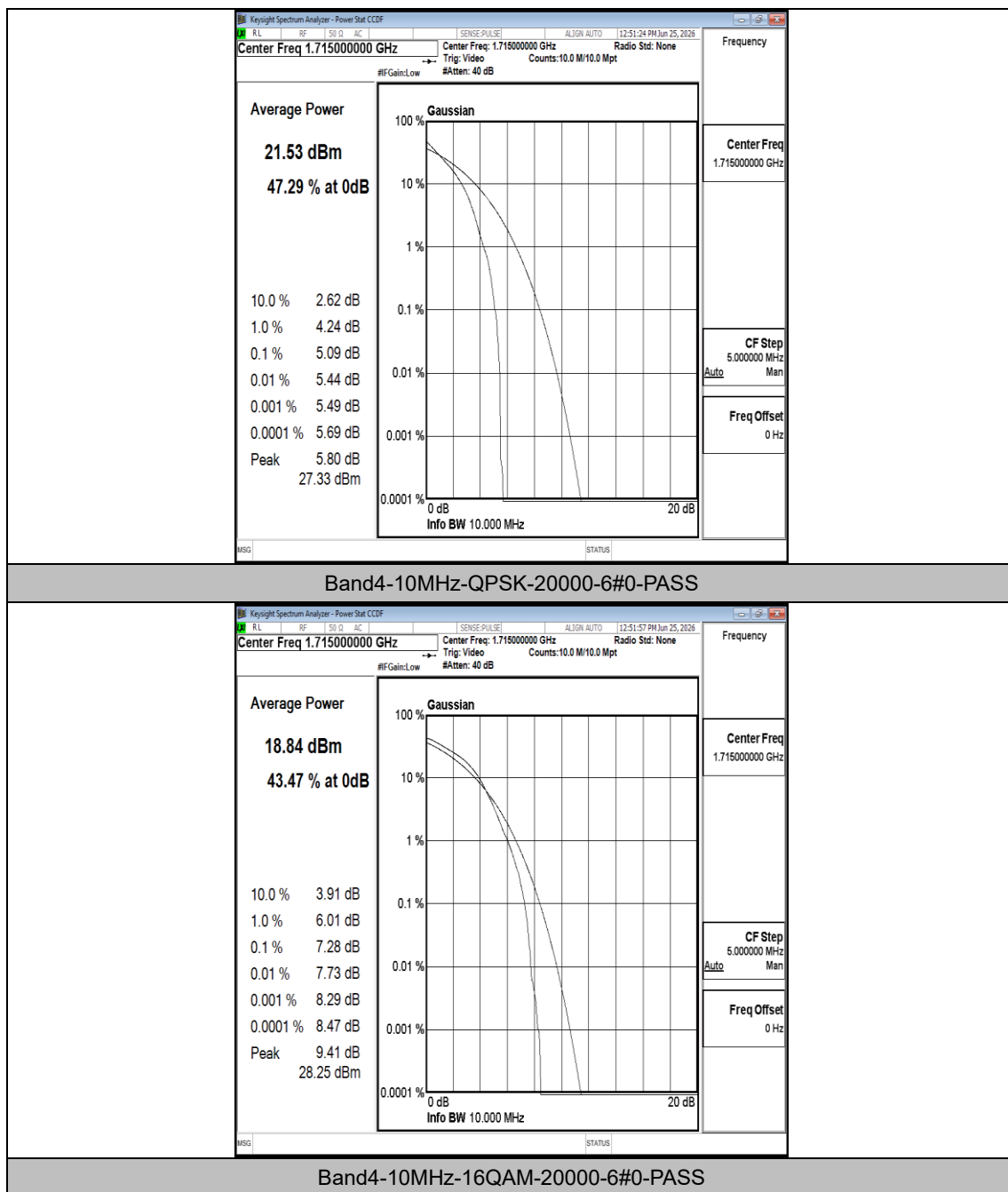


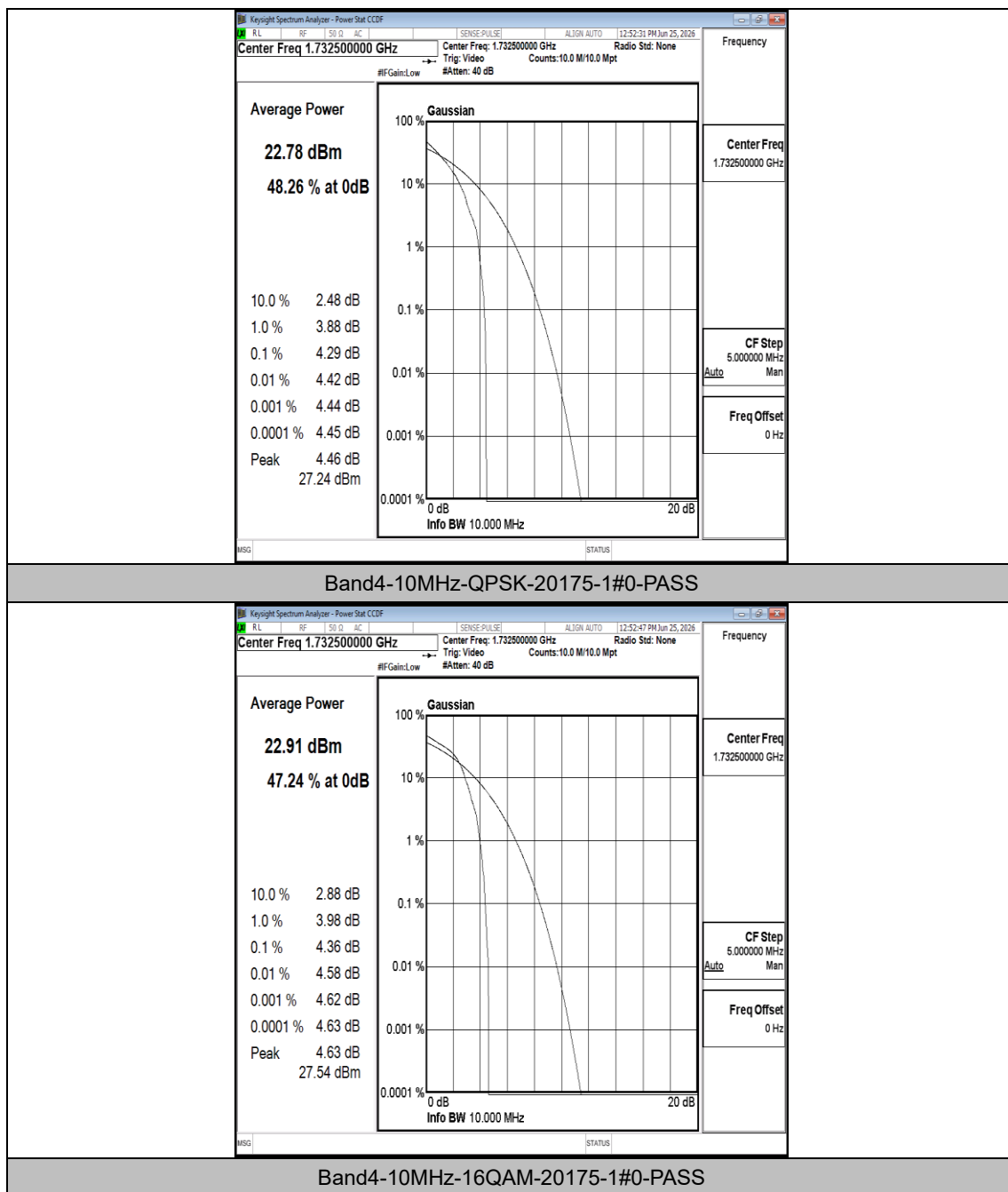


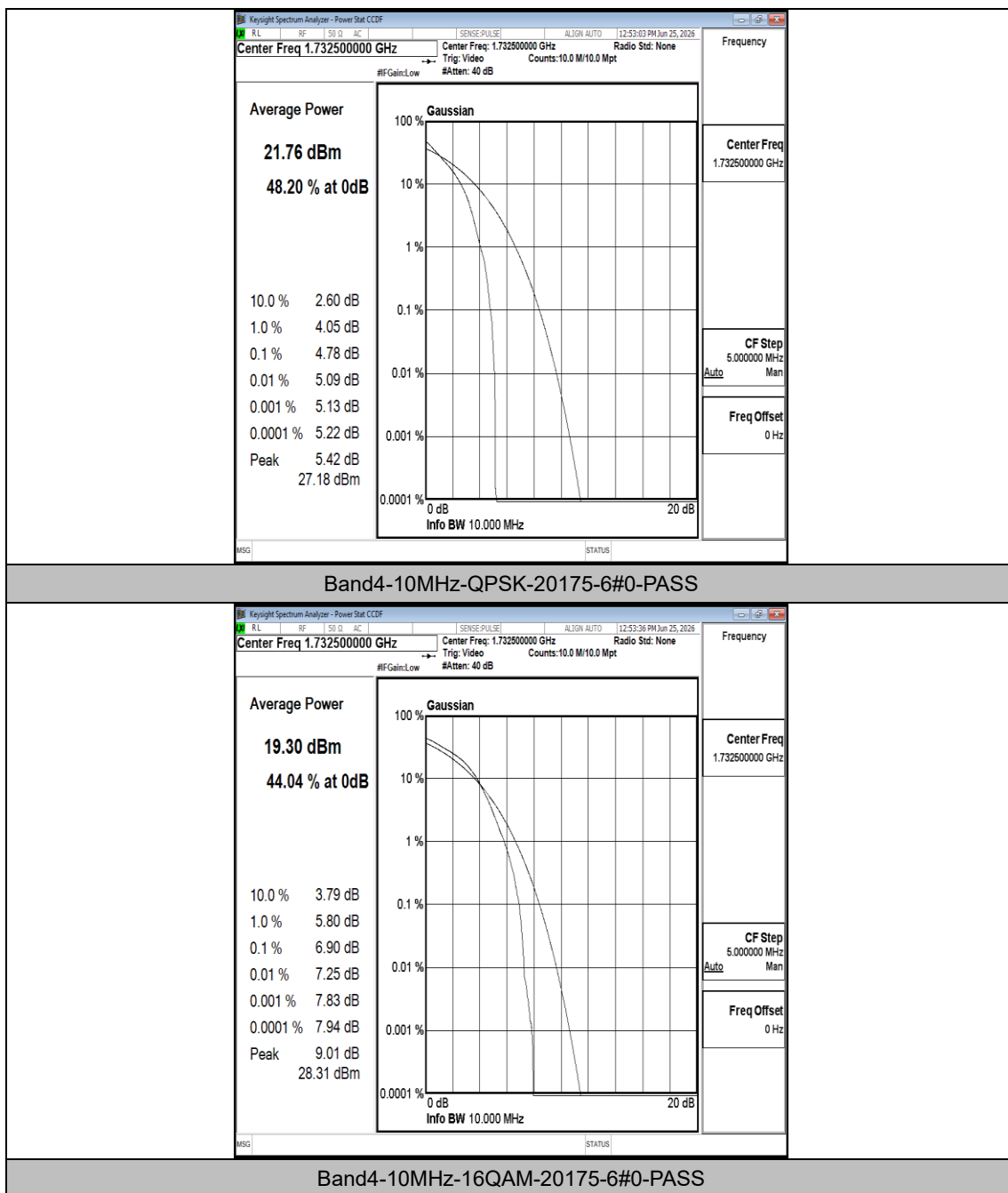


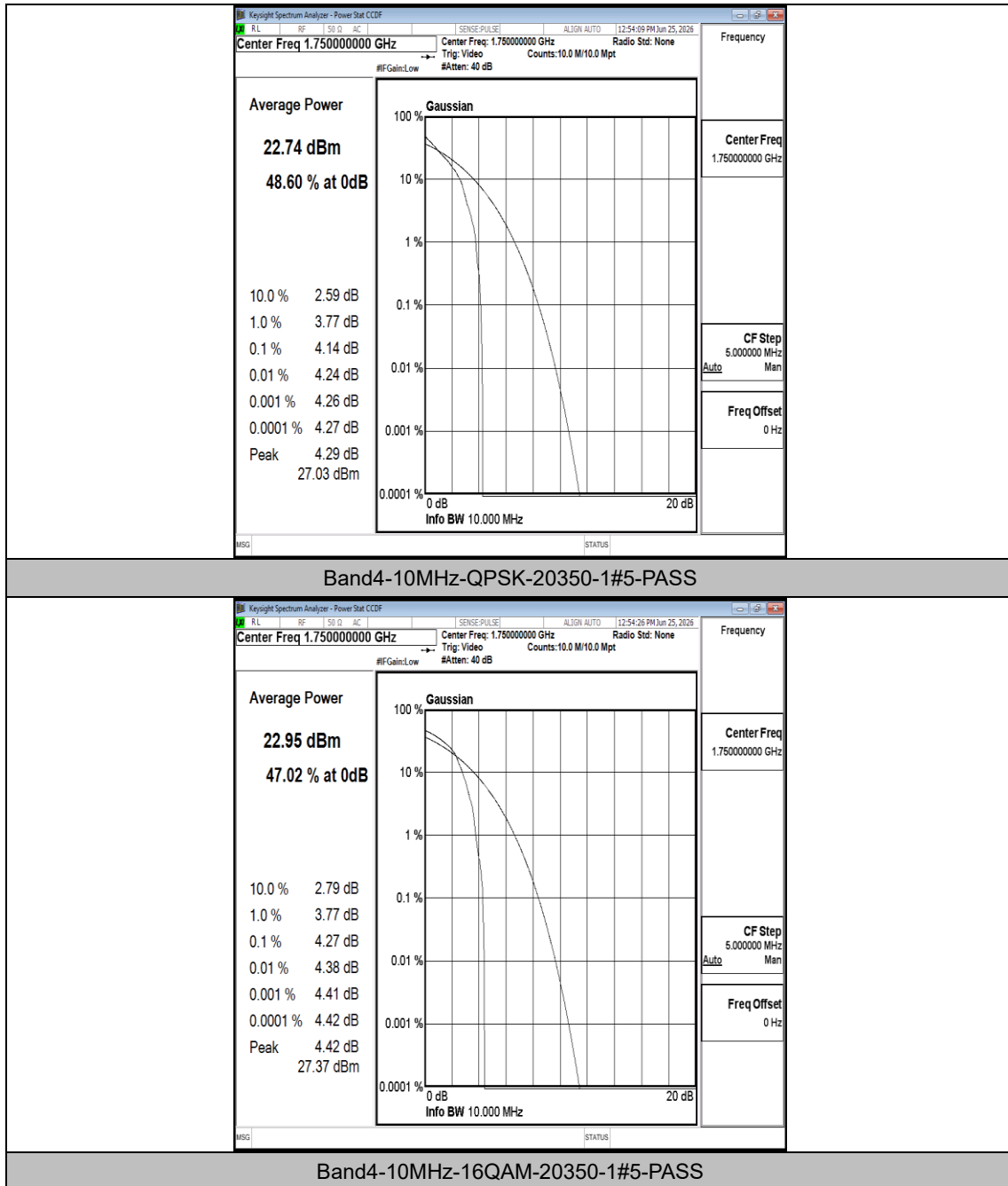


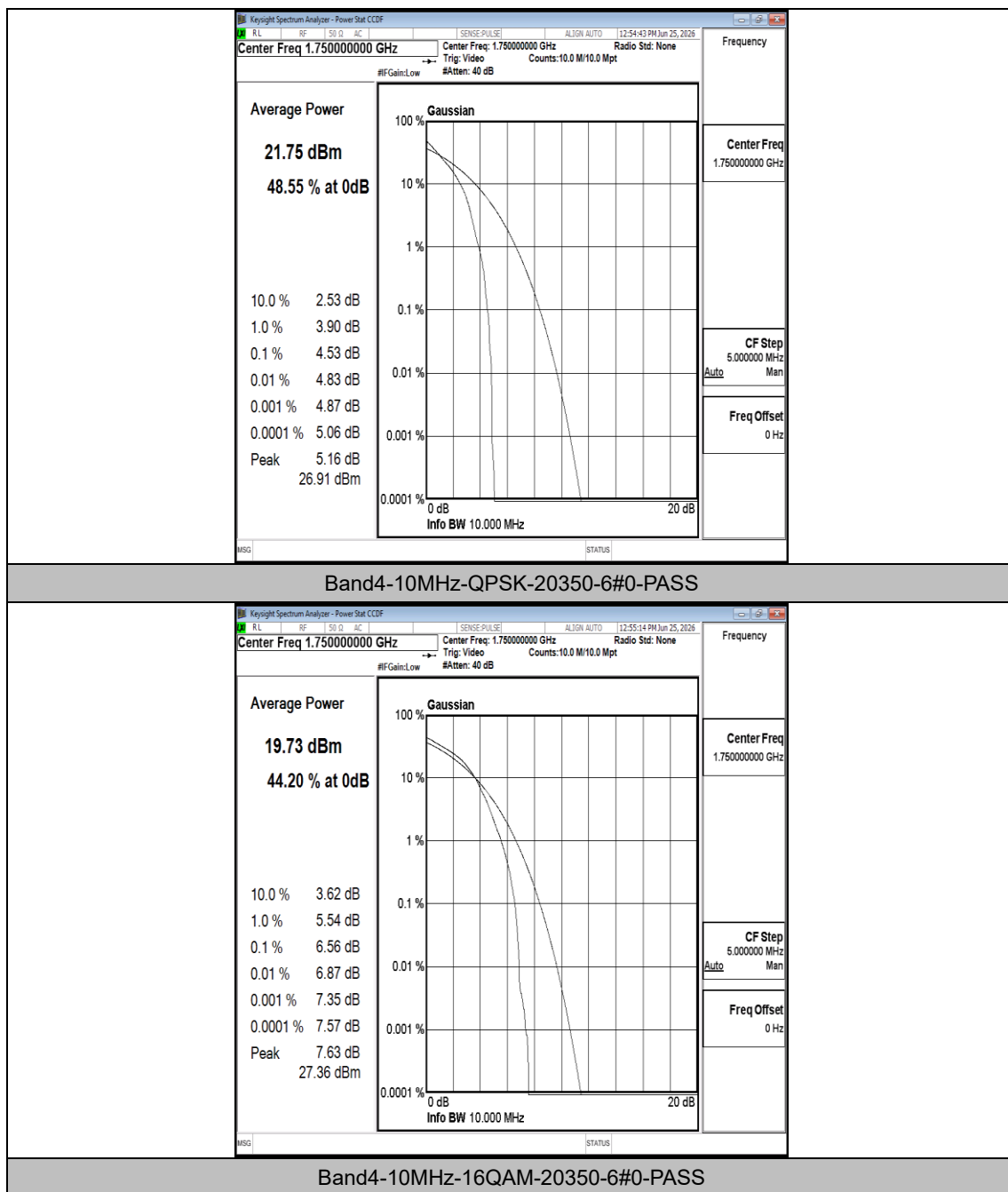


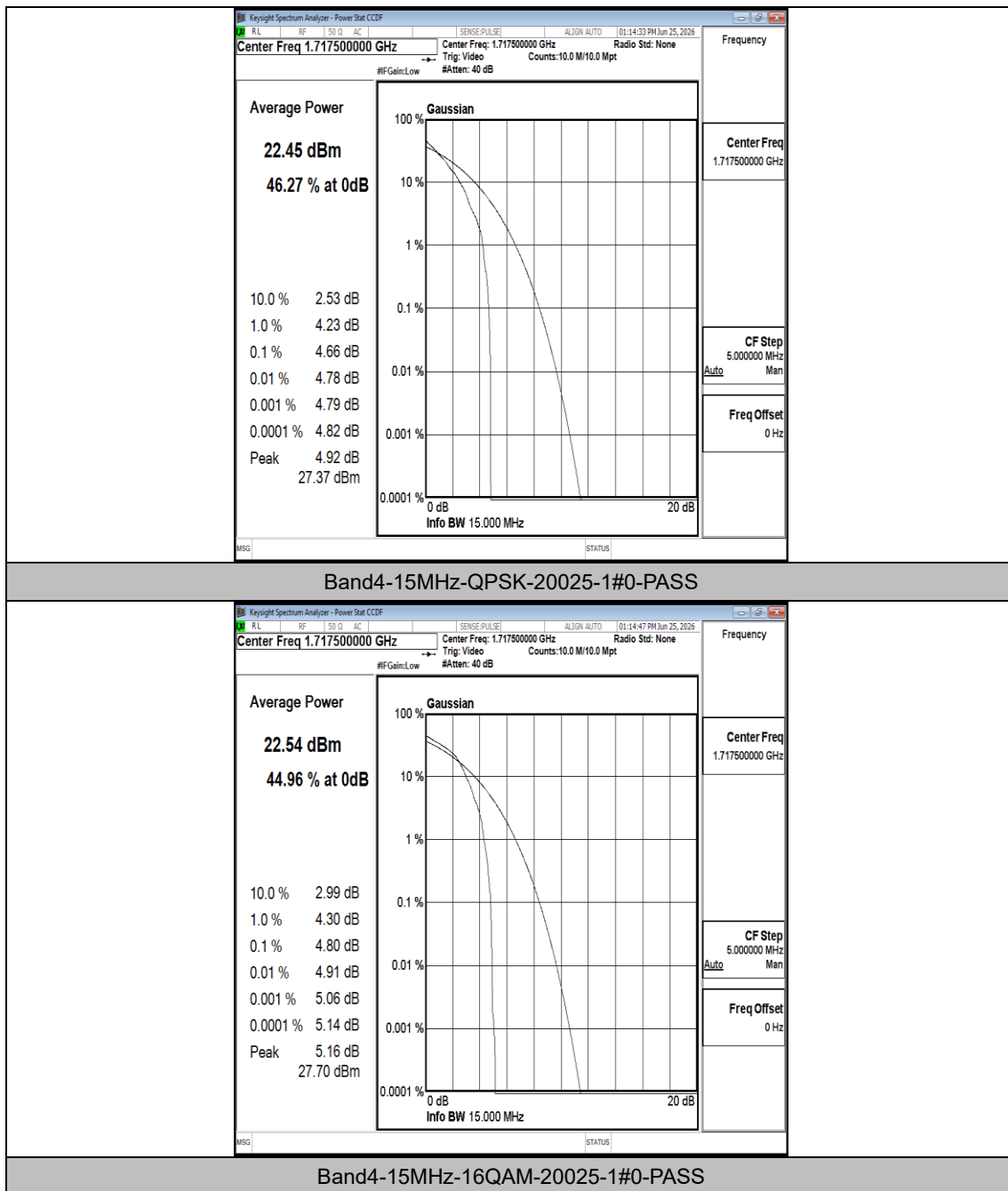


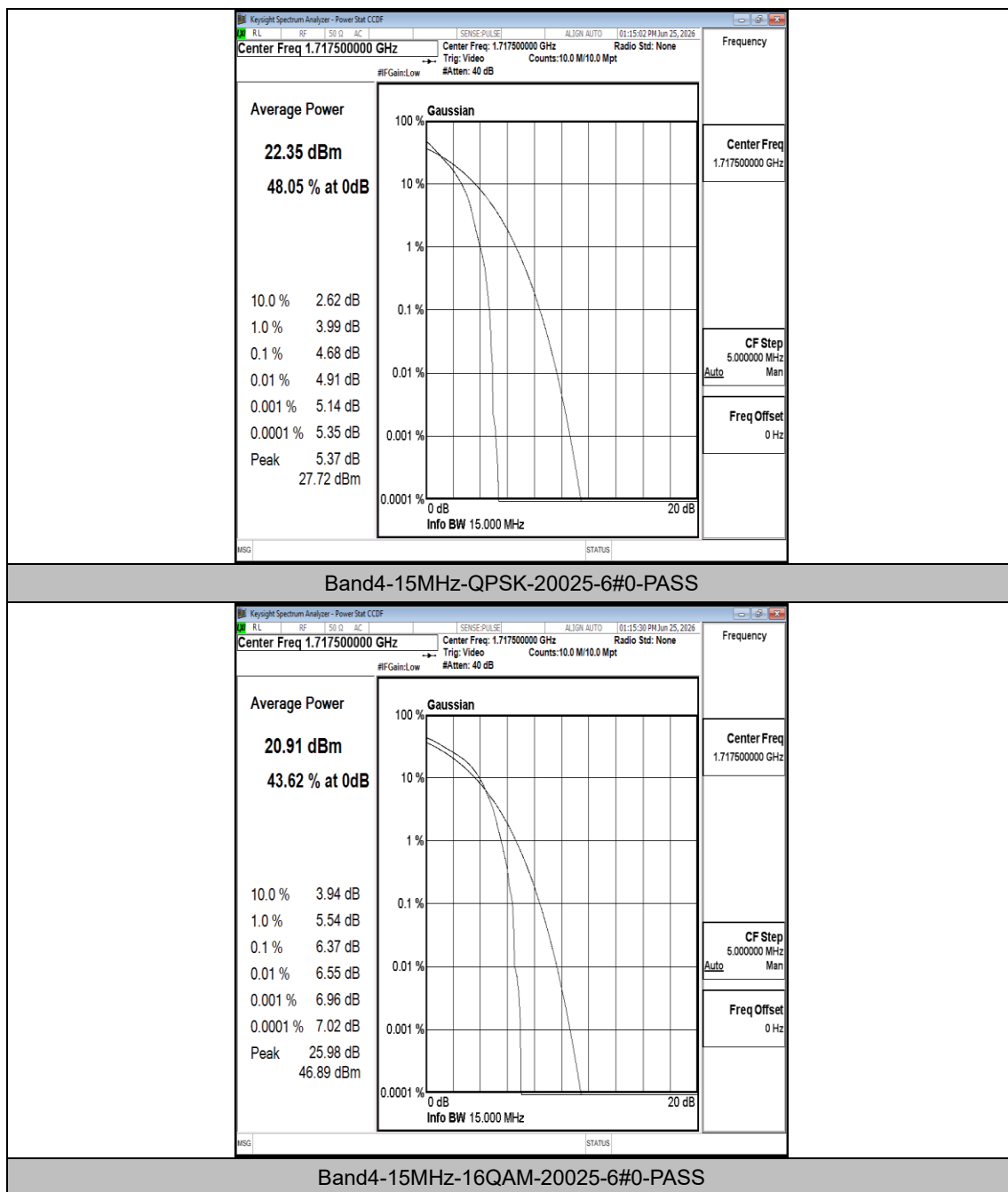


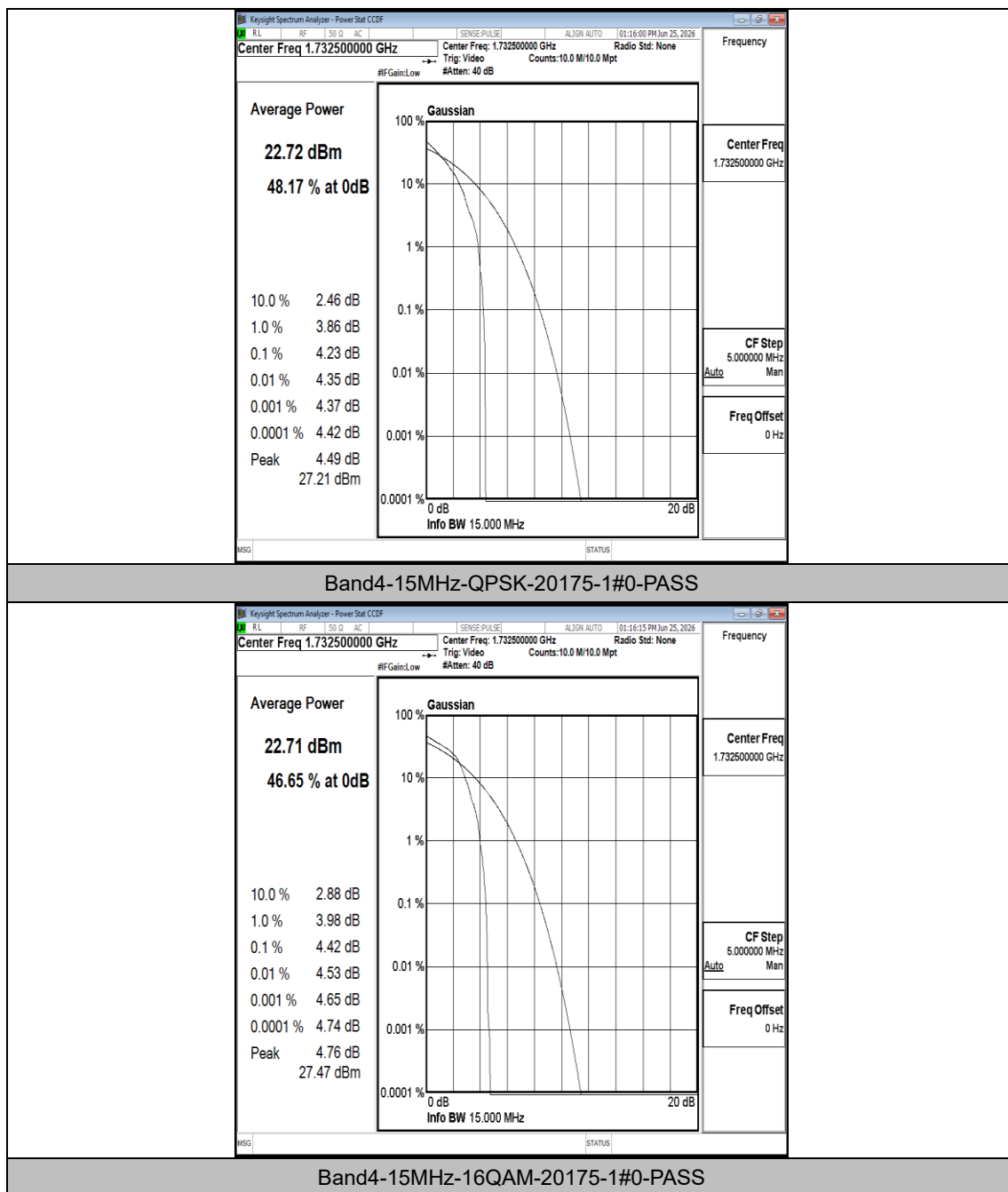


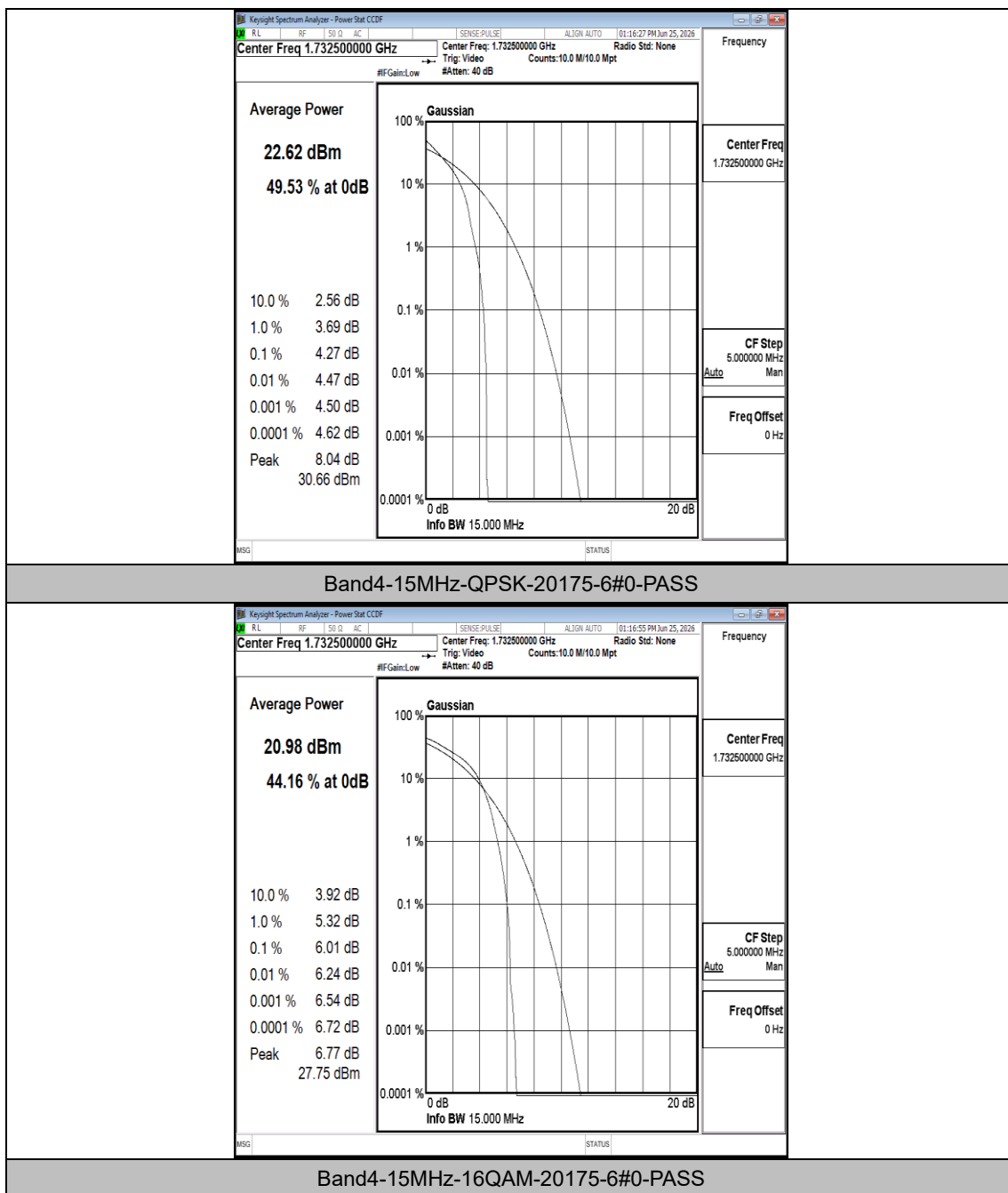


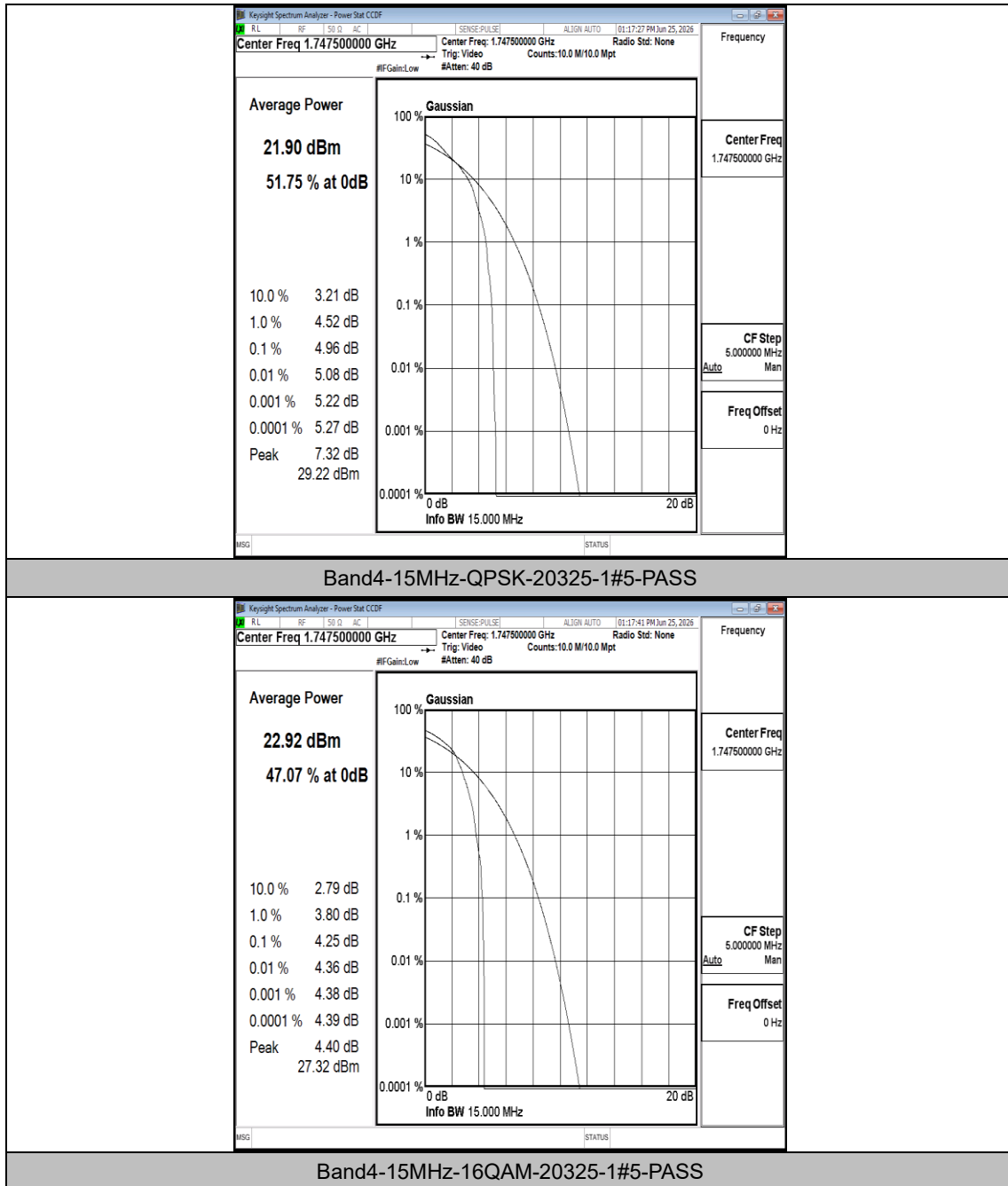


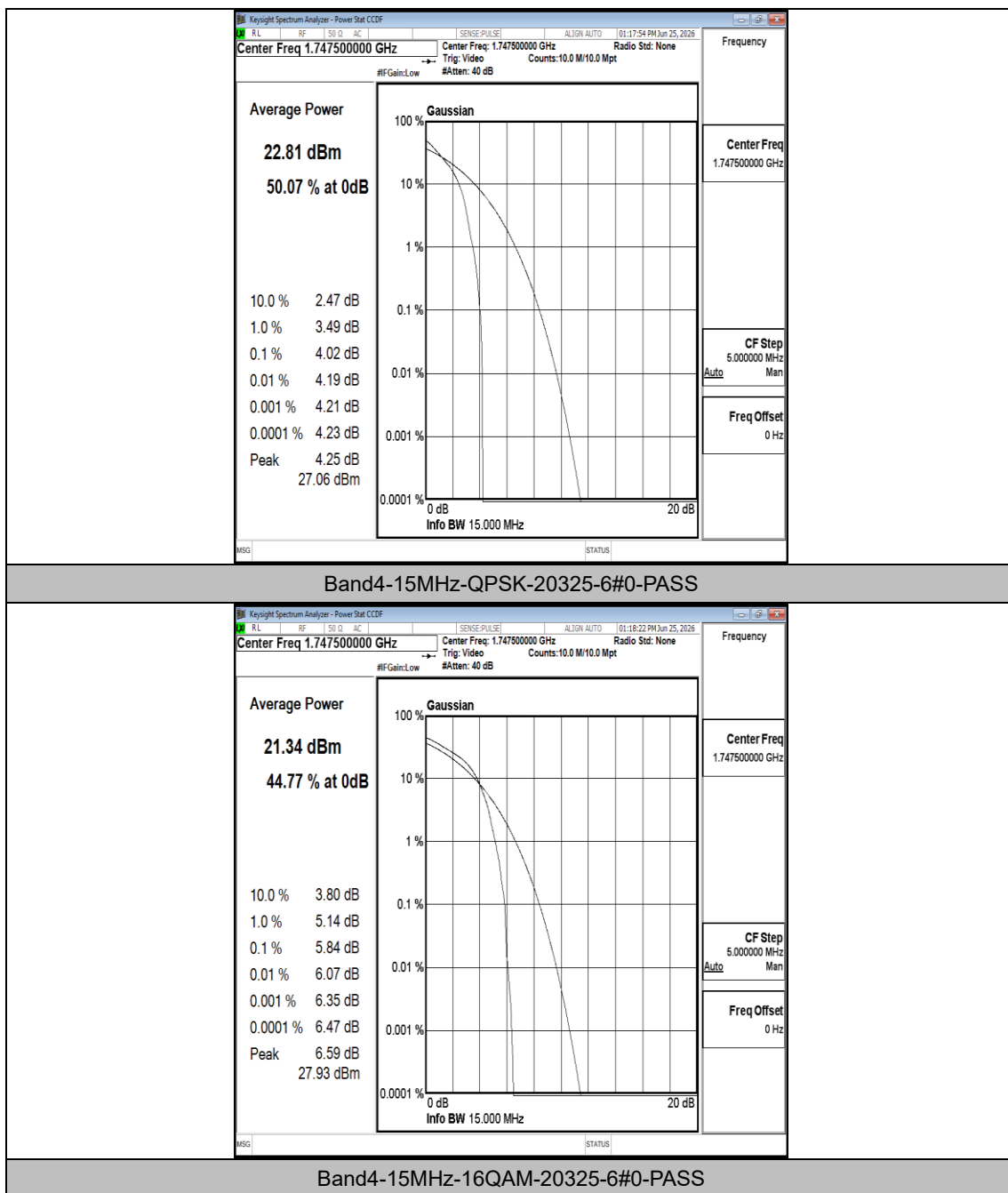


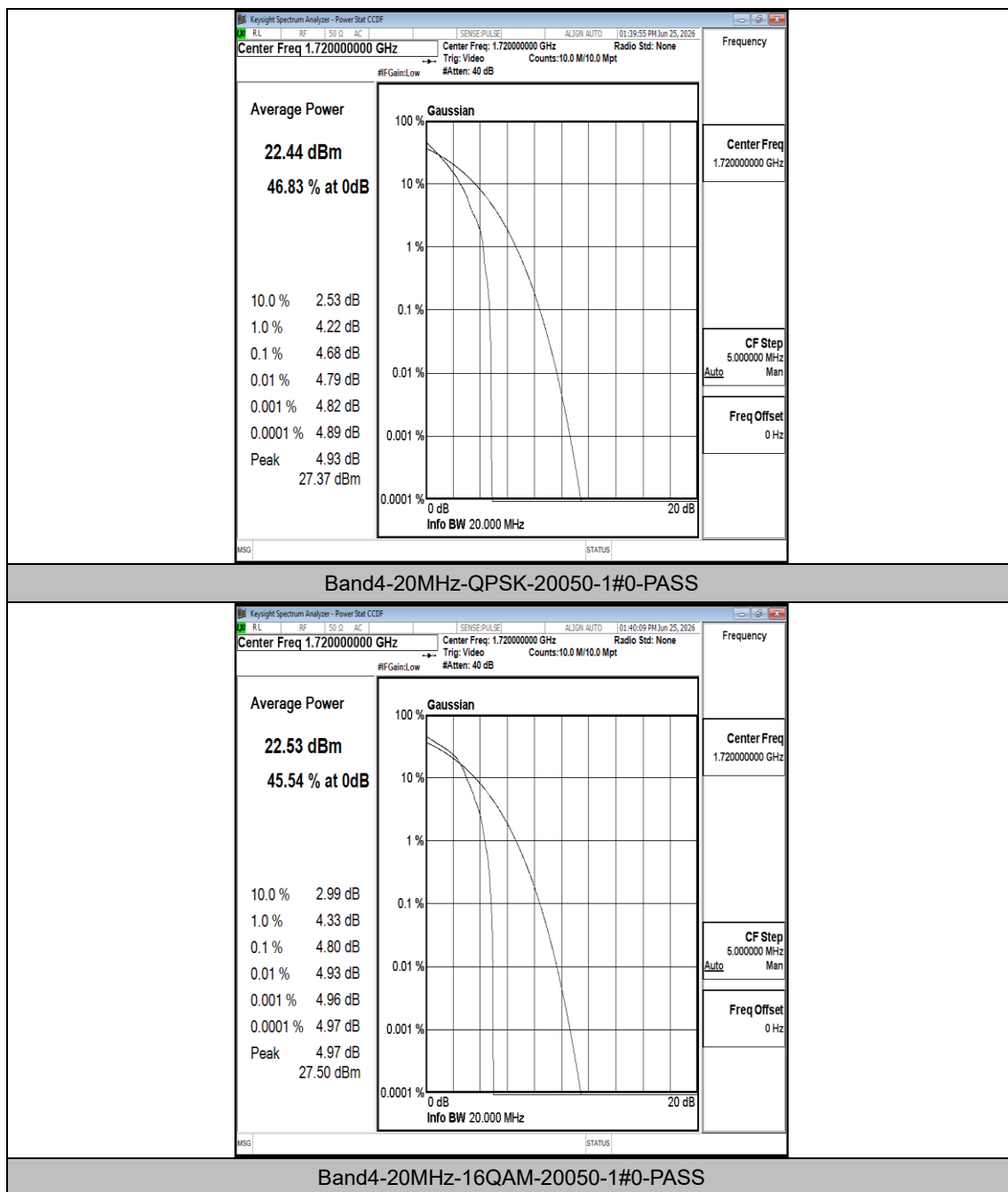


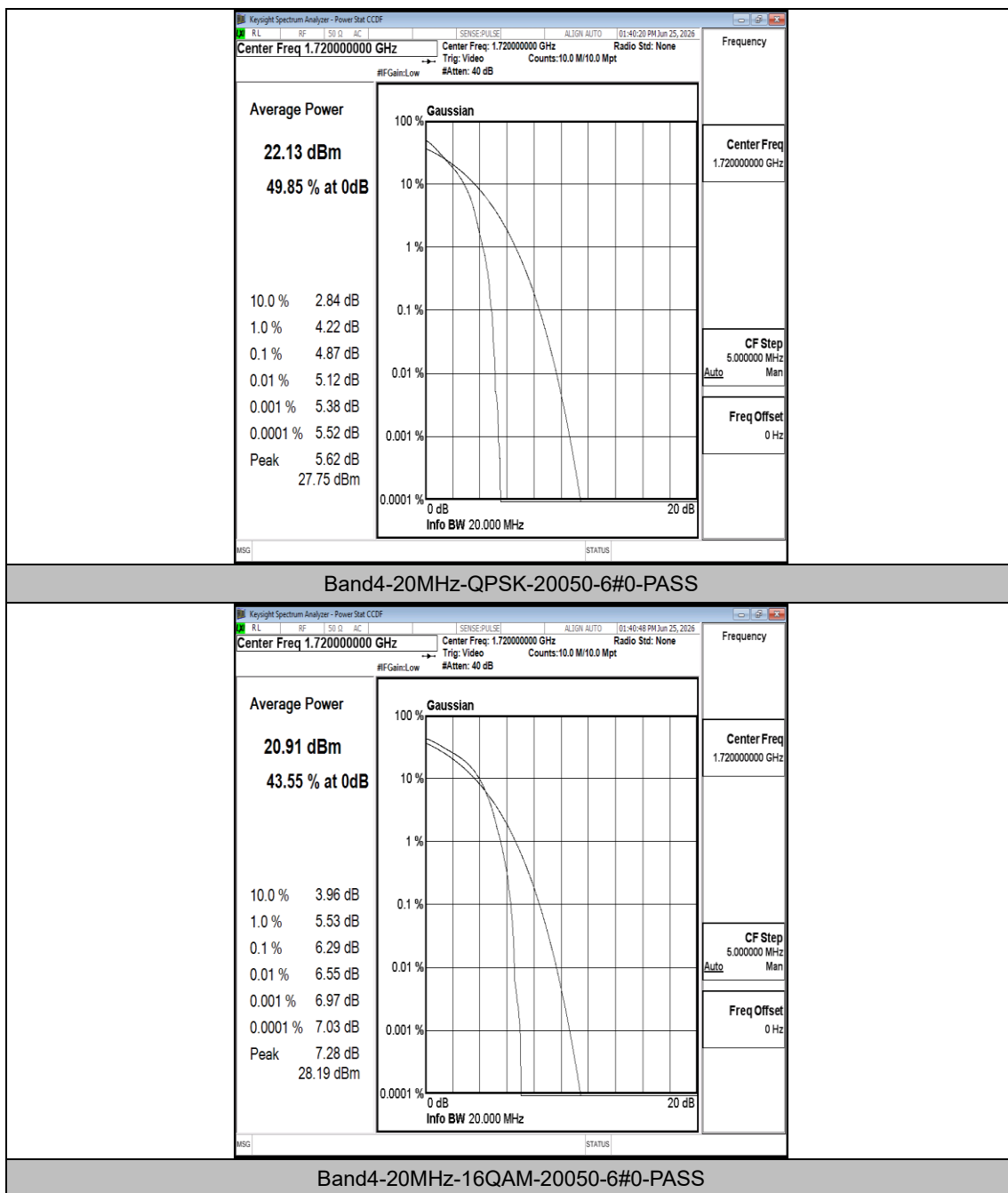


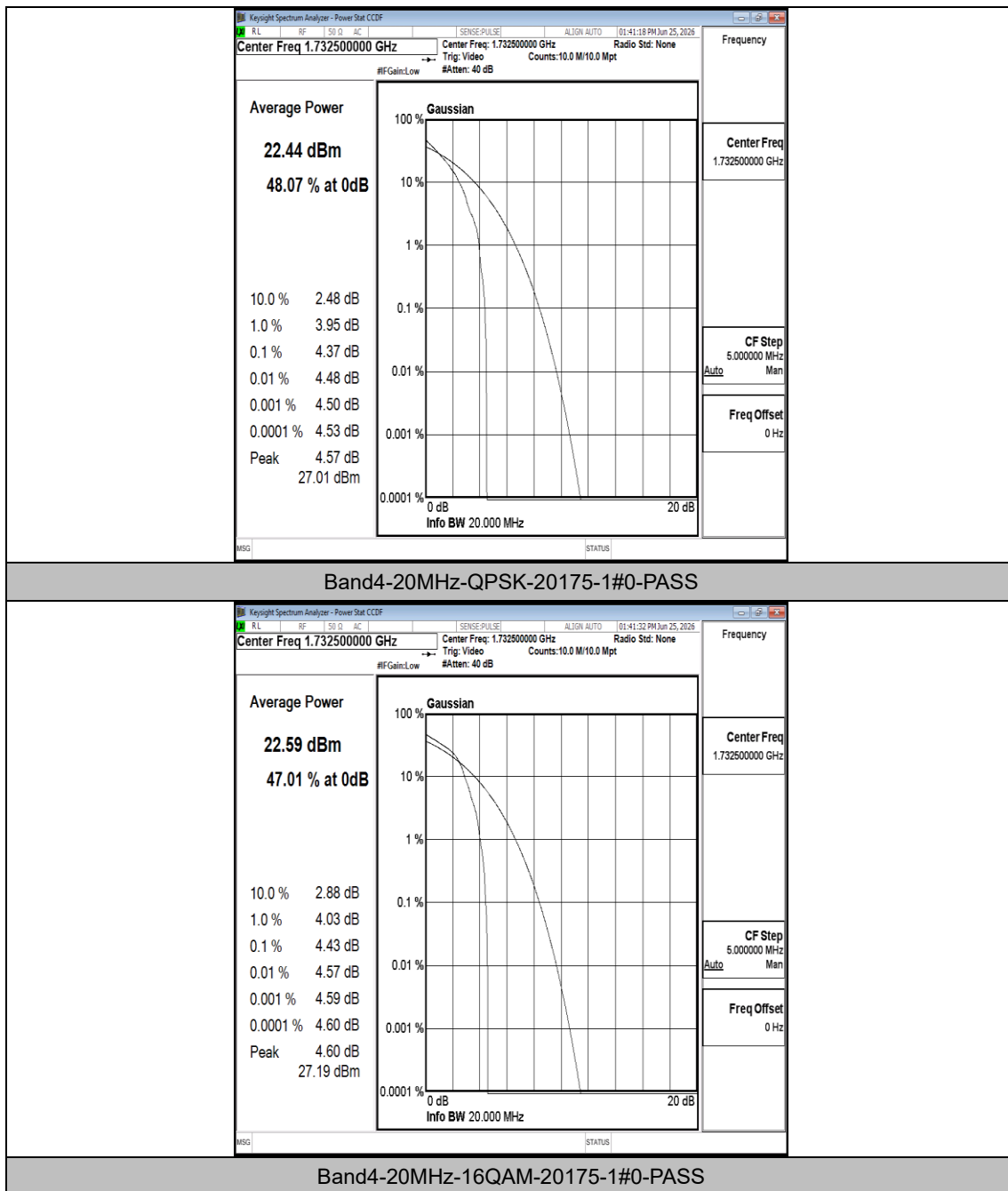


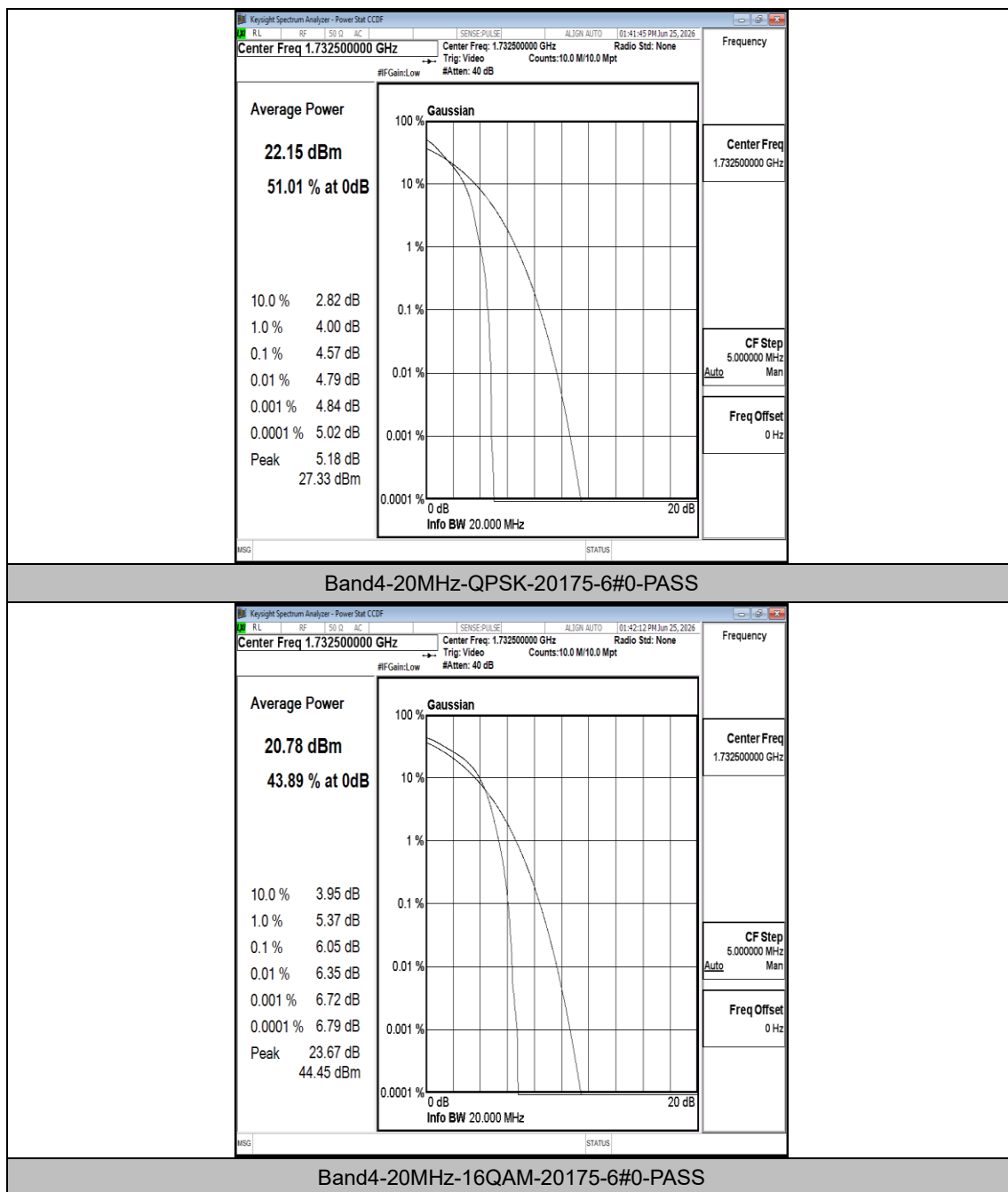


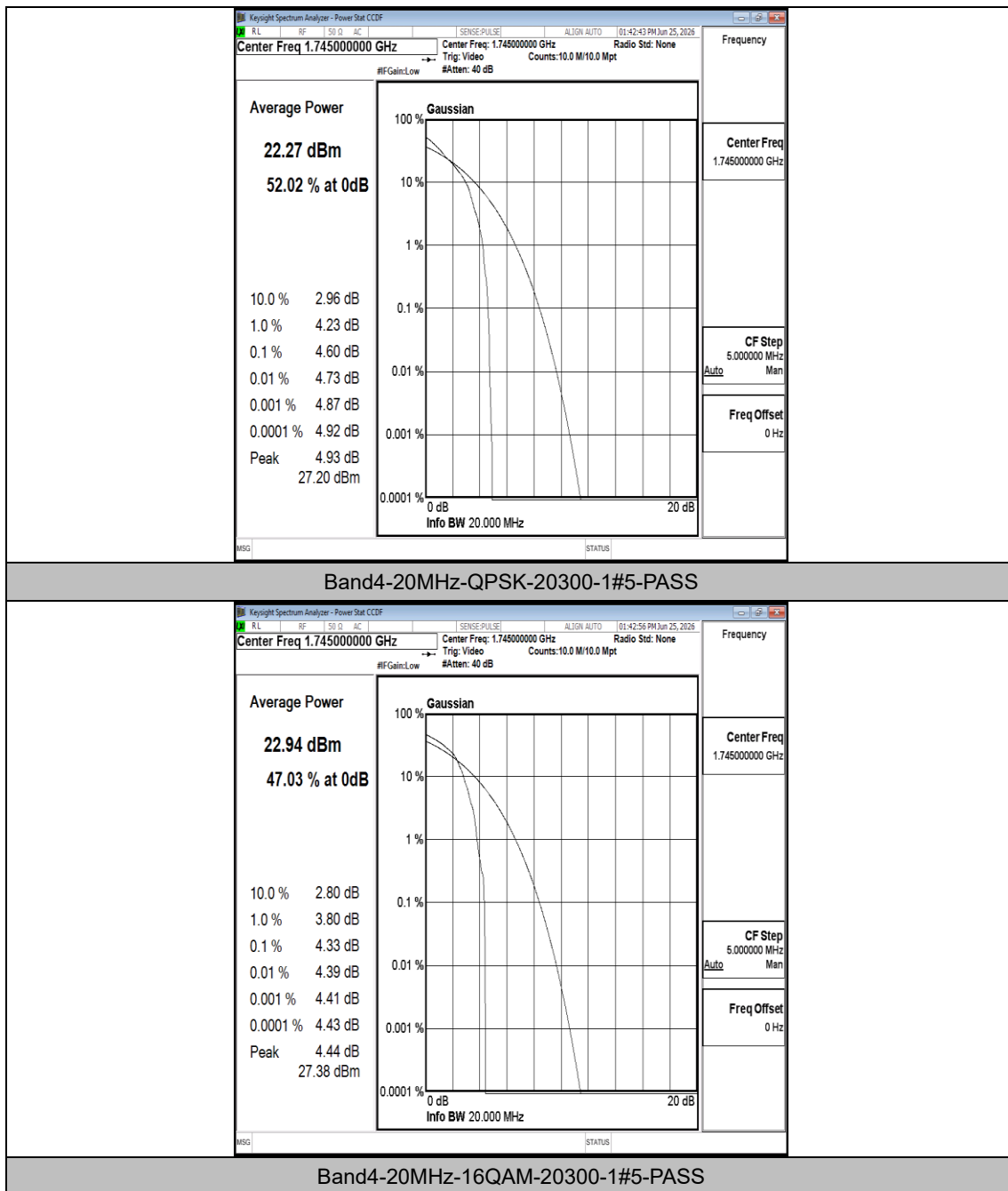


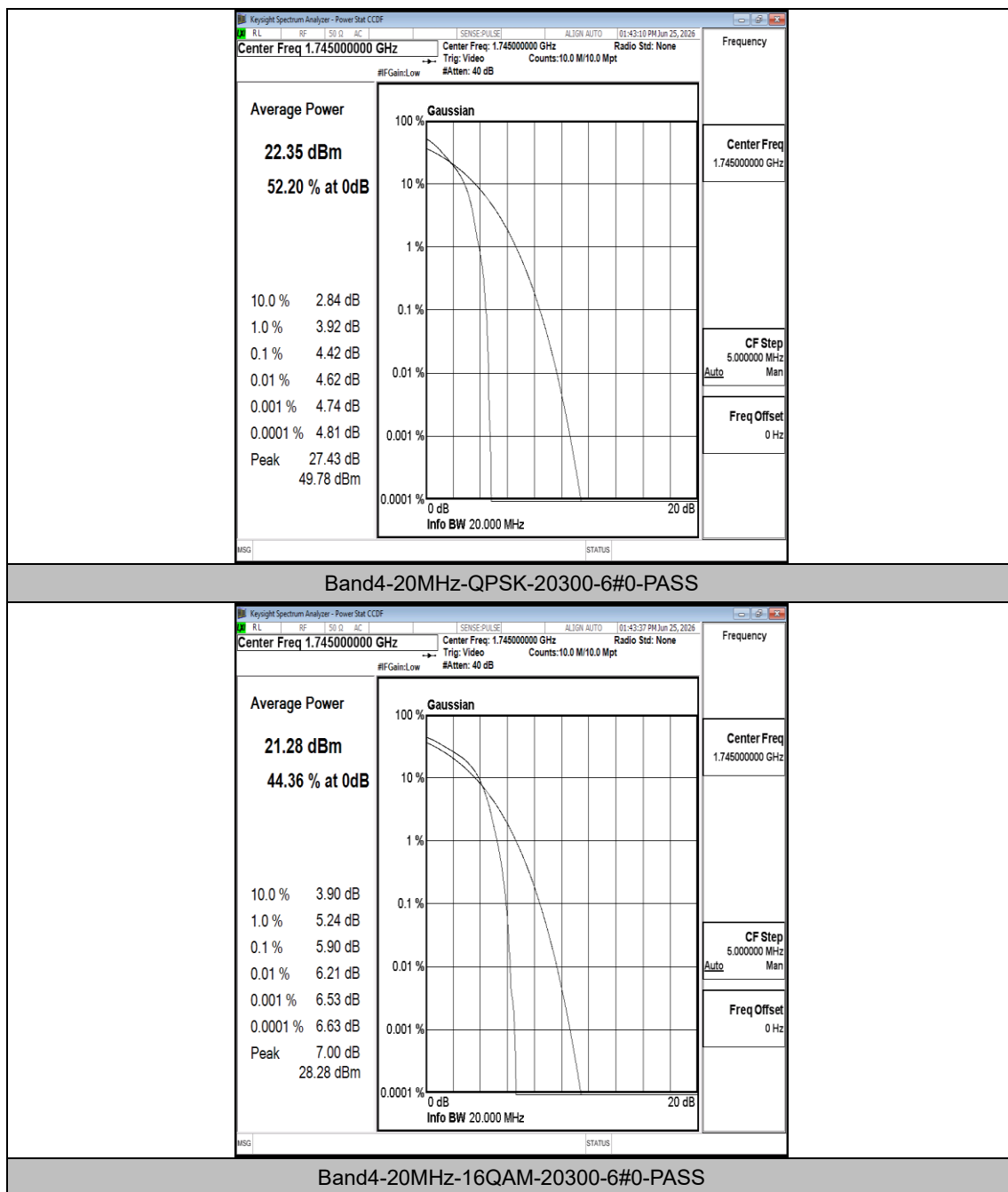












C.3 26dB Bandwidth and Occupied Bandwidth for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band4	1.4MHz	QPSK	19957	6	0	Low	1.0932	1.296	PASS
Band4	1.4MHz	16QAM	19957	6	0	Low	1.0880	1.312	PASS
Band4	1.4MHz	QPSK	20175	6	0	Low	1.0929	1.303	PASS
Band4	1.4MHz	16QAM	20175	6	0	Low	1.0865	1.300	PASS
Band4	1.4MHz	QPSK	20393	6	0	High	1.0911	1.295	PASS
Band4	1.4MHz	16QAM	20393	6	0	High	1.0881	1.301	PASS
Band4	3MHz	QPSK	19965	6	0	Low	1.1083	1.333	PASS
Band4	3MHz	16QAM	19965	6	0	Low	1.1215	1.396	PASS
Band4	3MHz	QPSK	20175	6	0	Low	1.1166	1.336	PASS
Band4	3MHz	16QAM	20175	6	0	Low	1.1162	1.366	PASS
Band4	3MHz	QPSK	20385	6	0	High	1.1084	1.321	PASS
Band4	3MHz	16QAM	20385	6	0	High	1.1155	1.379	PASS
Band4	5MHz	QPSK	19975	6	0	Low	1.1846	1.457	PASS
Band4	5MHz	16QAM	19975	6	0	Low	1.1729	1.492	PASS
Band4	5MHz	QPSK	20175	6	0	Low	1.1893	1.441	PASS
Band4	5MHz	16QAM	20175	6	0	Low	1.1779	1.487	PASS
Band4	5MHz	QPSK	20375	6	0	High	1.1895	1.433	PASS
Band4	5MHz	16QAM	20375	6	0	High	1.1779	1.512	PASS
Band4	10MHz	QPSK	20000	6	0	Low	1.3384	1.757	PASS
Band4	10MHz	16QAM	20000	6	0	Low	1.3367	1.960	PASS
Band4	10MHz	QPSK	20175	6	0	Low	1.3422	1.727	PASS
Band4	10MHz	16QAM	20175	6	0	Low	1.3365	2.063	PASS
Band4	10MHz	QPSK	20350	6	0	High	1.3657	1.867	PASS
Band4	10MHz	16QAM	20350	6	0	High	1.3272	2.052	PASS
Band4	15MHz	QPSK	20025	6	0	Low	2.0741	3.668	PASS
Band4	15MHz	16QAM	20025	6	0	Low	1.5218	2.468	PASS
Band4	15MHz	QPSK	20175	6	0	Low	1.5179	2.336	PASS
Band4	15MHz	16QAM	20175	6	0	Low	1.5299	2.534	PASS
Band4	15MHz	QPSK	20325	6	0	High	1.5236	2.437	PASS
Band4	15MHz	16QAM	20325	6	0	High	1.5370	2.450	PASS
Band4	20MHz	QPSK	20050	6	0	Low	2.8099	4.473	PASS
Band4	20MHz	16QAM	20050	6	0	Low	1.9612	2.930	PASS
Band4	20MHz	QPSK	20175	6	0	Low	1.9016	2.722	PASS
Band4	20MHz	16QAM	20175	6	0	Low	1.9830	2.987	PASS

Band4	20MHz	QPSK	20300	6	0	High	1.8943	2.783	PASS
Band4	20MHz	16QAM	20300	6	0	High	1.9893	2.948	PASS

Test Graphs

