



Appendix E: Test Data for E-UTRA Band 13

Product Name: 4G Battery Camera

Test Model: SP1-4G

Environmental Conditions

Temperature:	24.1°C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Sean Huang
Supervised by:	Nick Peng



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E.1 Conducted Output Power Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	23.74	PASS
Band13	5MHz	16QAM	23205	1RB#0	22.60	PASS
Band13	5MHz	QPSK	23205	1RB#12	23.77	PASS
Band13	5MHz	16QAM	23205	1RB#12	22.61	PASS
Band13	5MHz	QPSK	23205	1RB#24	23.70	PASS
Band13	5MHz	16QAM	23205	1RB#24	22.55	PASS
Band13	5MHz	QPSK	23205	12RB#0	22.93	PASS
Band13	5MHz	16QAM	23205	12RB#0	22.17	PASS
Band13	5MHz	QPSK	23205	12RB#6	22.79	PASS
Band13	5MHz	16QAM	23205	12RB#6	22.18	PASS
Band13	5MHz	QPSK	23205	12RB#13	22.63	PASS
Band13	5MHz	16QAM	23205	12RB#13	22.21	PASS
Band13	5MHz	QPSK	23205	25RB#0	22.76	PASS
Band13	5MHz	16QAM	23205	25RB#0	22.29	PASS
Band13	5MHz	QPSK	23230	1RB#0	23.48	PASS
Band13	5MHz	16QAM	23230	1RB#0	23.40	PASS
Band13	5MHz	QPSK	23230	1RB#12	23.41	PASS
Band13	5MHz	16QAM	23230	1RB#12	23.29	PASS
Band13	5MHz	QPSK	23230	1RB#24	23.32	PASS
Band13	5MHz	16QAM	23230	1RB#24	23.31	PASS
Band13	5MHz	QPSK	23230	12RB#0	22.67	PASS
Band13	5MHz	16QAM	23230	12RB#0	22.28	PASS
Band13	5MHz	QPSK	23230	12RB#6	22.94	PASS
Band13	5MHz	16QAM	23230	12RB#6	22.29	PASS
Band13	5MHz	QPSK	23230	12RB#13	22.61	PASS
Band13	5MHz	16QAM	23230	12RB#13	22.22	PASS
Band13	5MHz	QPSK	23230	25RB#0	22.74	PASS
Band13	5MHz	16QAM	23230	25RB#0	22.23	PASS
Band13	5MHz	QPSK	23255	1RB#0	23.55	PASS
Band13	5MHz	16QAM	23255	1RB#0	22.82	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.40	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.67	PASS
Band13	5MHz	QPSK	23255	1RB#24	23.11	PASS
Band13	5MHz	16QAM	23255	1RB#24	22.43	PASS
Band13	5MHz	QPSK	23255	12RB#0	22.66	PASS



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Band13	5MHz	16QAM	23255	12RB#0	22.12	PASS
Band13	5MHz	QPSK	23255	12RB#6	22.67	PASS
Band13	5MHz	16QAM	23255	12RB#6	22.14	PASS
Band13	5MHz	QPSK	23255	12RB#13	22.60	PASS
Band13	5MHz	16QAM	23255	12RB#13	22.08	PASS
Band13	5MHz	QPSK	23255	25RB#0	22.58	PASS
Band13	5MHz	16QAM	23255	25RB#0	22.10	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.19	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.51	PASS
Band13	10MHz	QPSK	23230	1RB#24	23.05	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.45	PASS
Band13	10MHz	QPSK	23230	1RB#49	22.61	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.19	PASS
Band13	10MHz	QPSK	23230	25RB#0	22.28	PASS
Band13	10MHz	16QAM	23230	25RB#0	21.58	PASS
Band13	10MHz	QPSK	23230	25RB#12	22.28	PASS
Band13	10MHz	16QAM	23230	25RB#12	21.52	PASS
Band13	10MHz	QPSK	23230	25RB#25	22.11	PASS
Band13	10MHz	16QAM	23230	25RB#25	21.44	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.14	PASS
Band13	10MHz	16QAM	23230	50RB#0	21.60	PASS





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

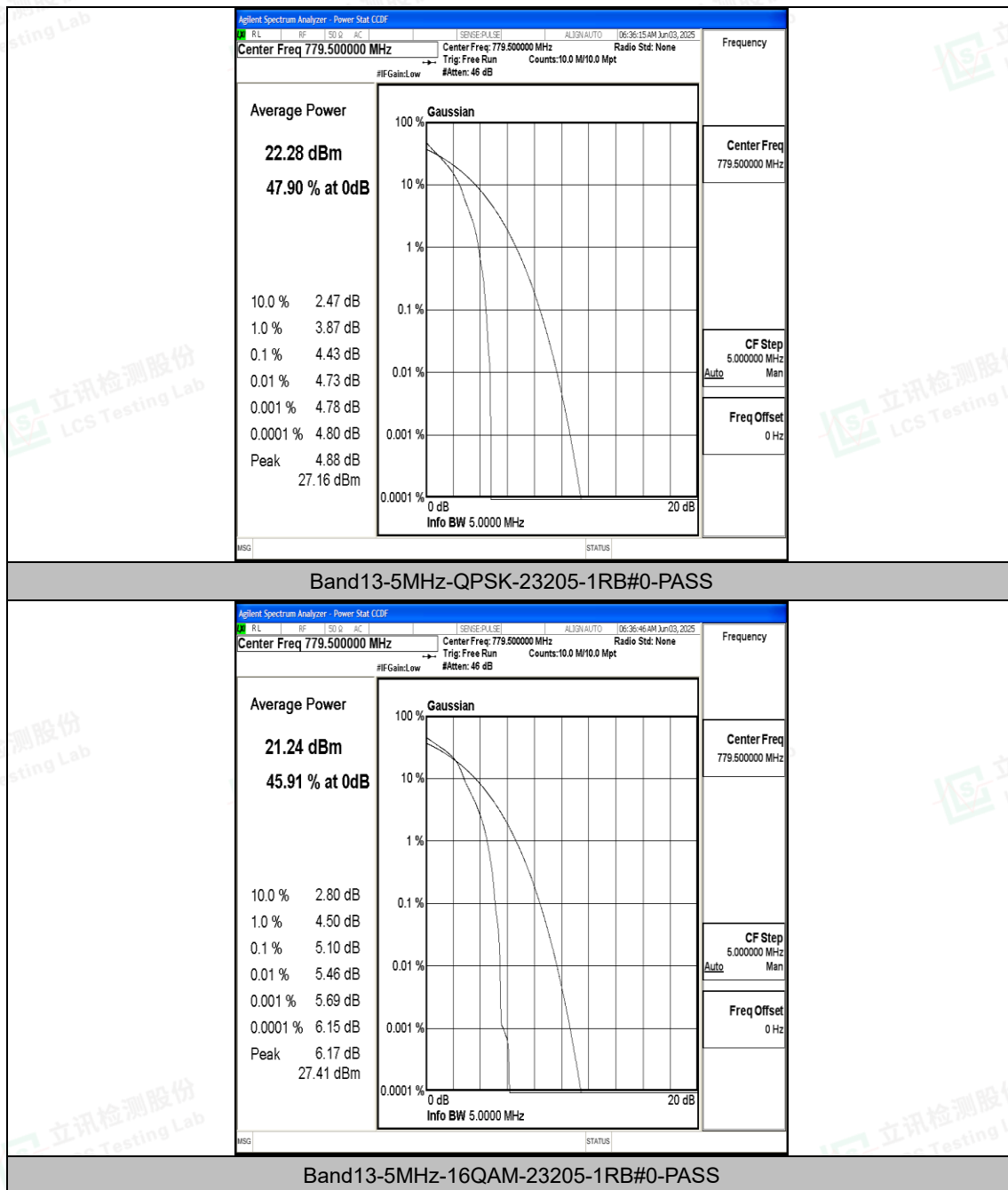
Test Result

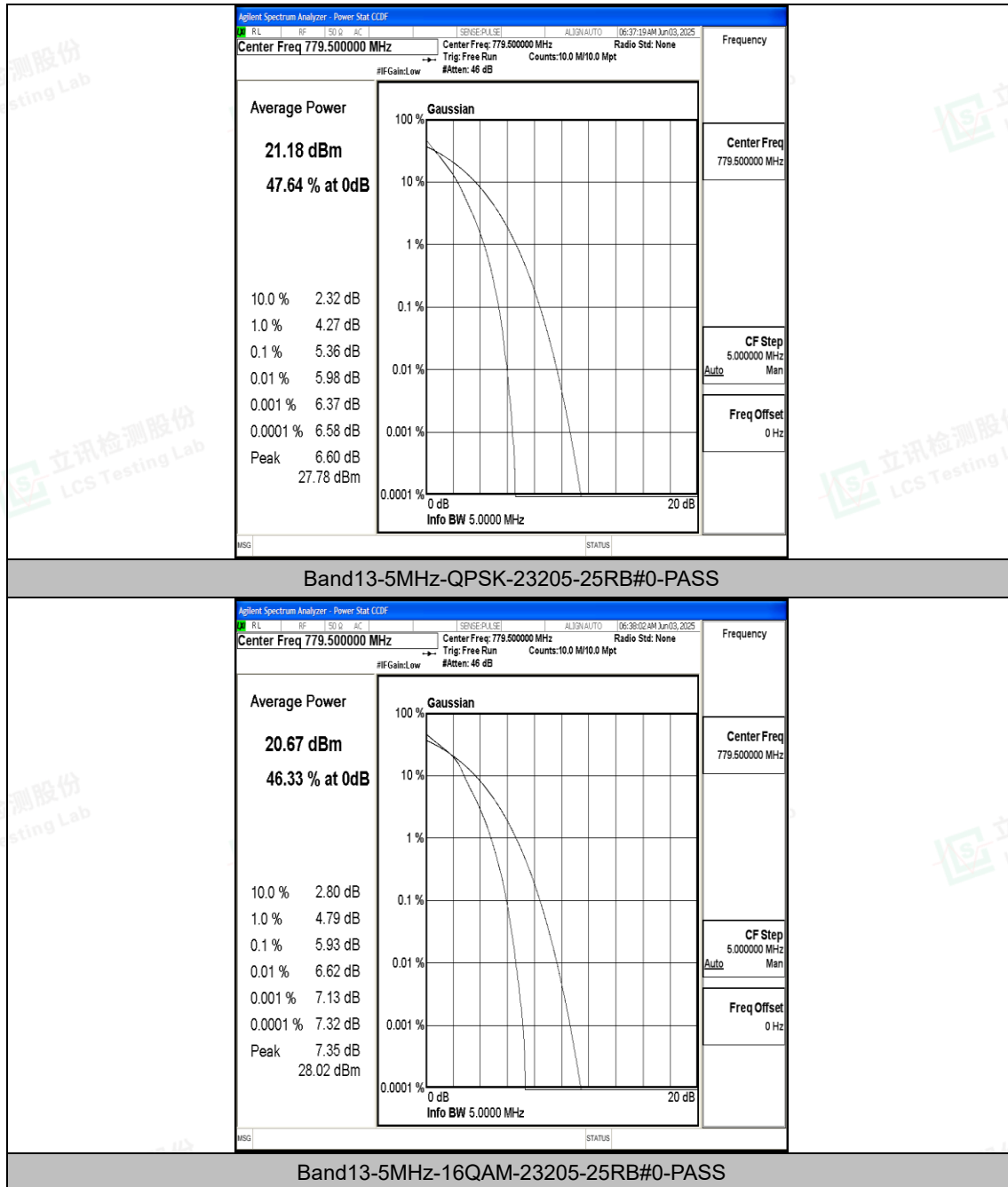
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	4.43	13	PASS
Band13	5MHz	16QAM	23205	1RB#0	5.10	13	PASS
Band13	5MHz	QPSK	23205	25RB#0	5.36	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	5.93	13	PASS
Band13	5MHz	QPSK	23230	1RB#0	4.57	13	PASS
Band13	5MHz	16QAM	23230	1RB#0	5.10	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.34	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	5.96	13	PASS
Band13	5MHz	QPSK	23255	1RB#0	4.60	13	PASS
Band13	5MHz	16QAM	23255	1RB#0	5.13	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	5.34	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	5.96	13	PASS
Band13	10MHz	QPSK	23230	1RB#0	4.42	13	PASS
Band13	10MHz	16QAM	23230	1RB#0	4.95	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.36	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	5.98	13	PASS

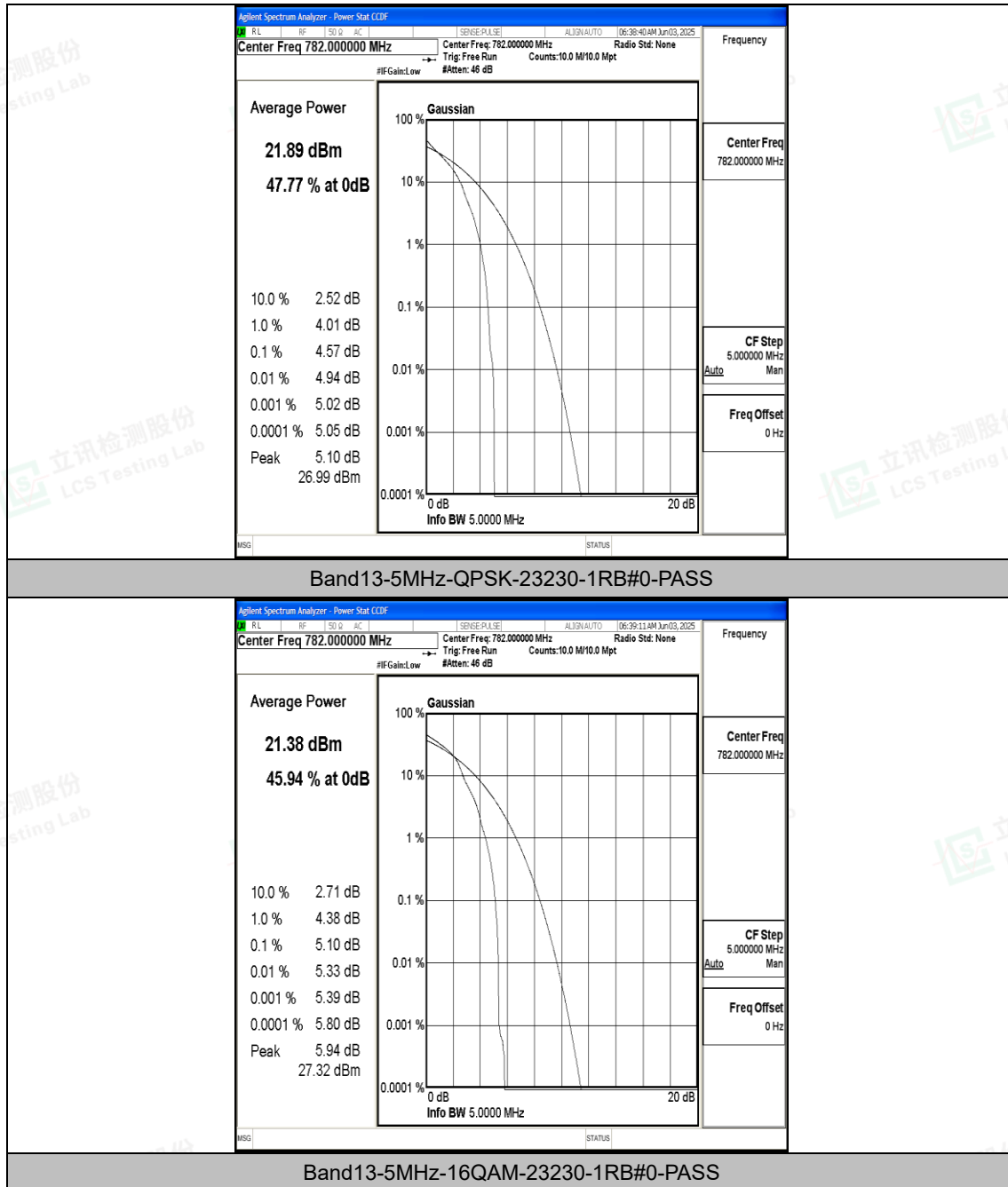


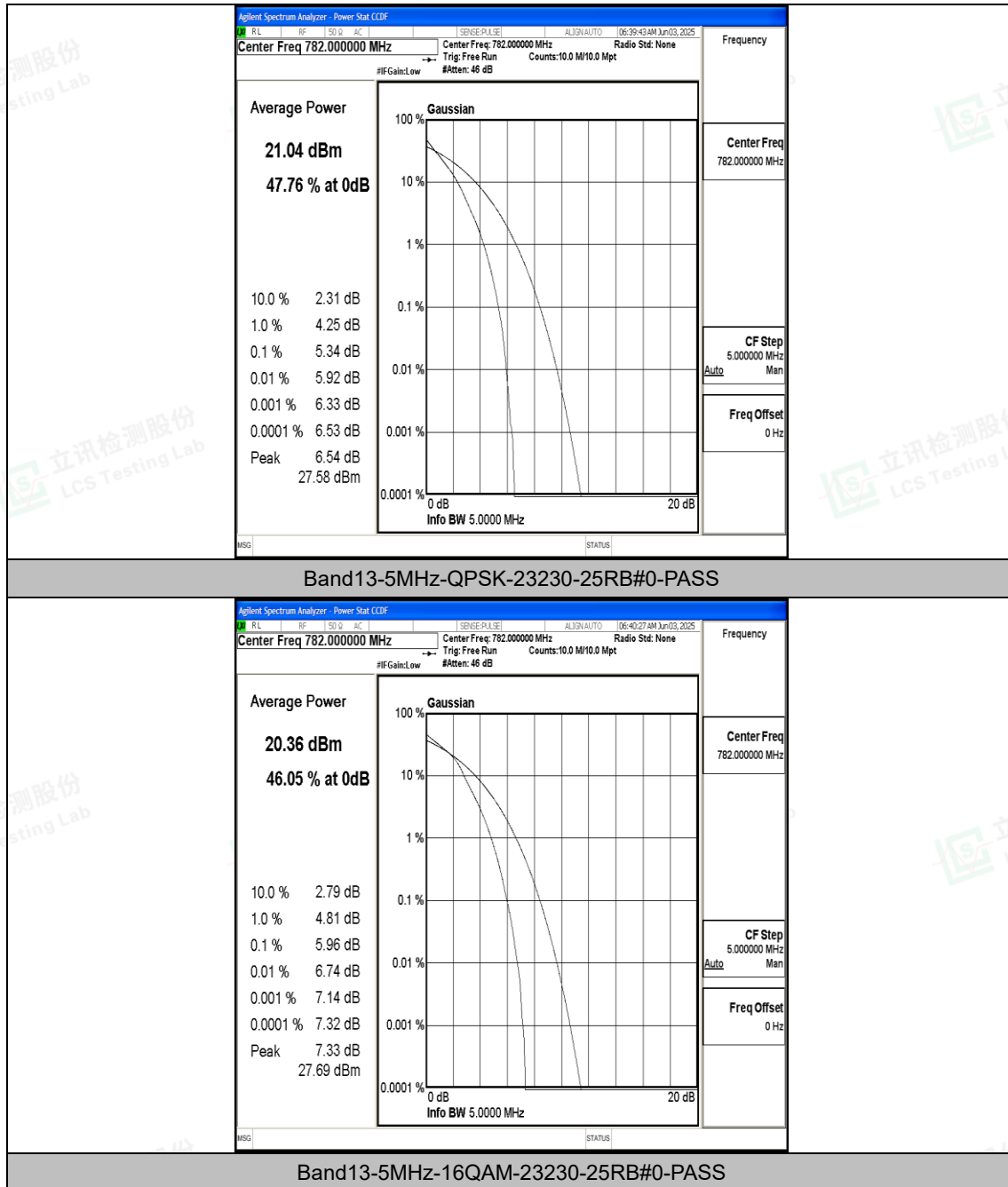


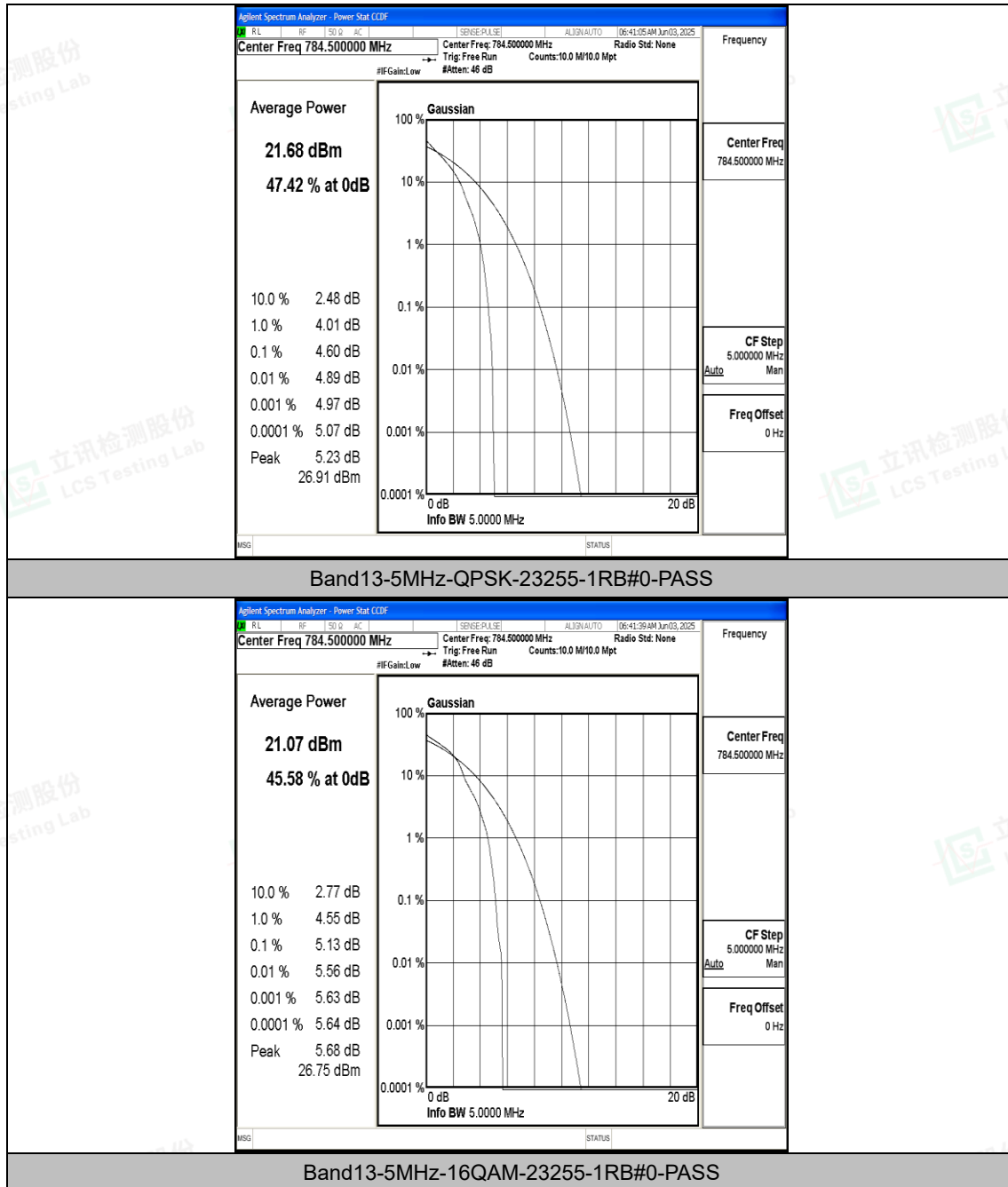
Test Graphs

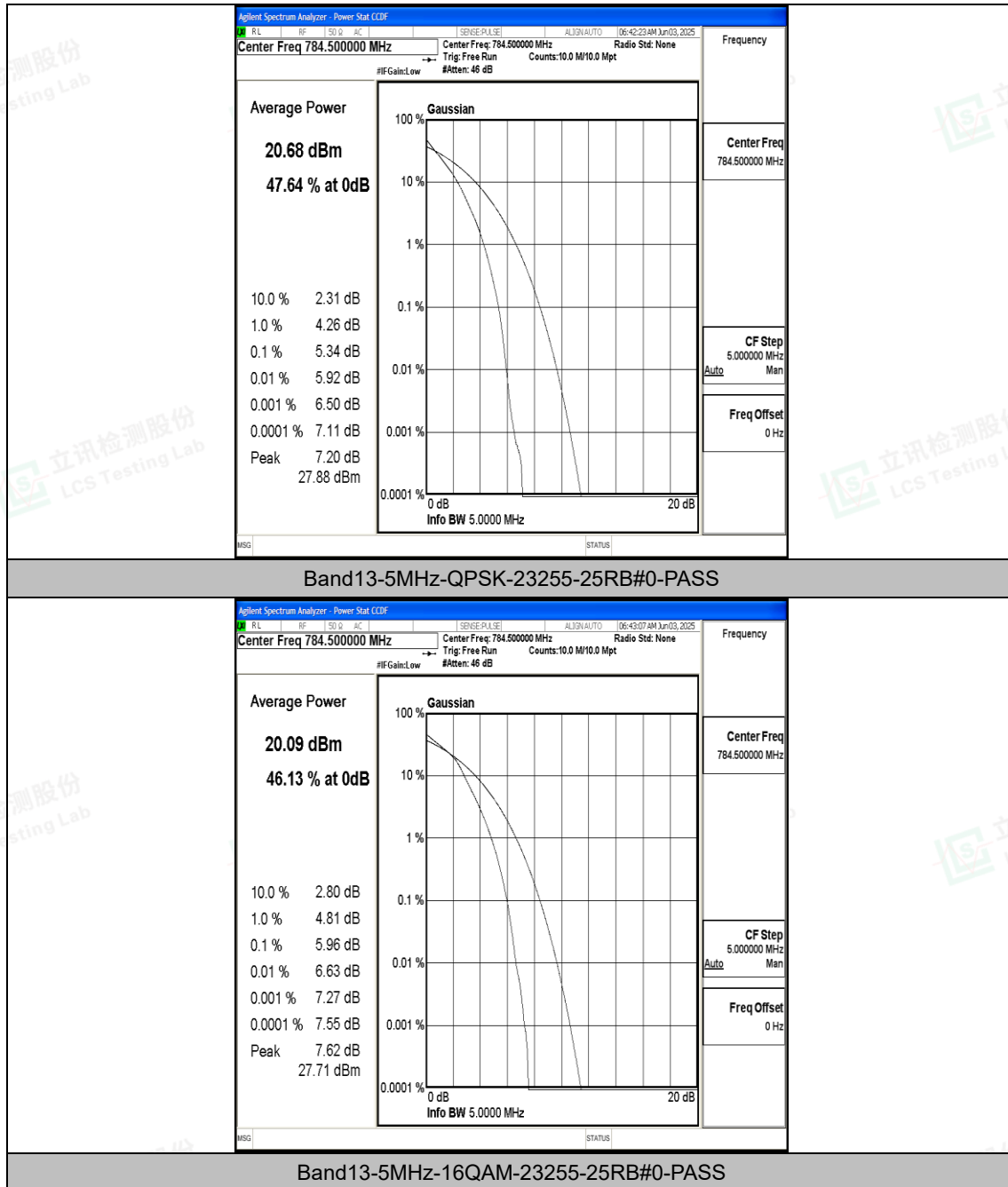


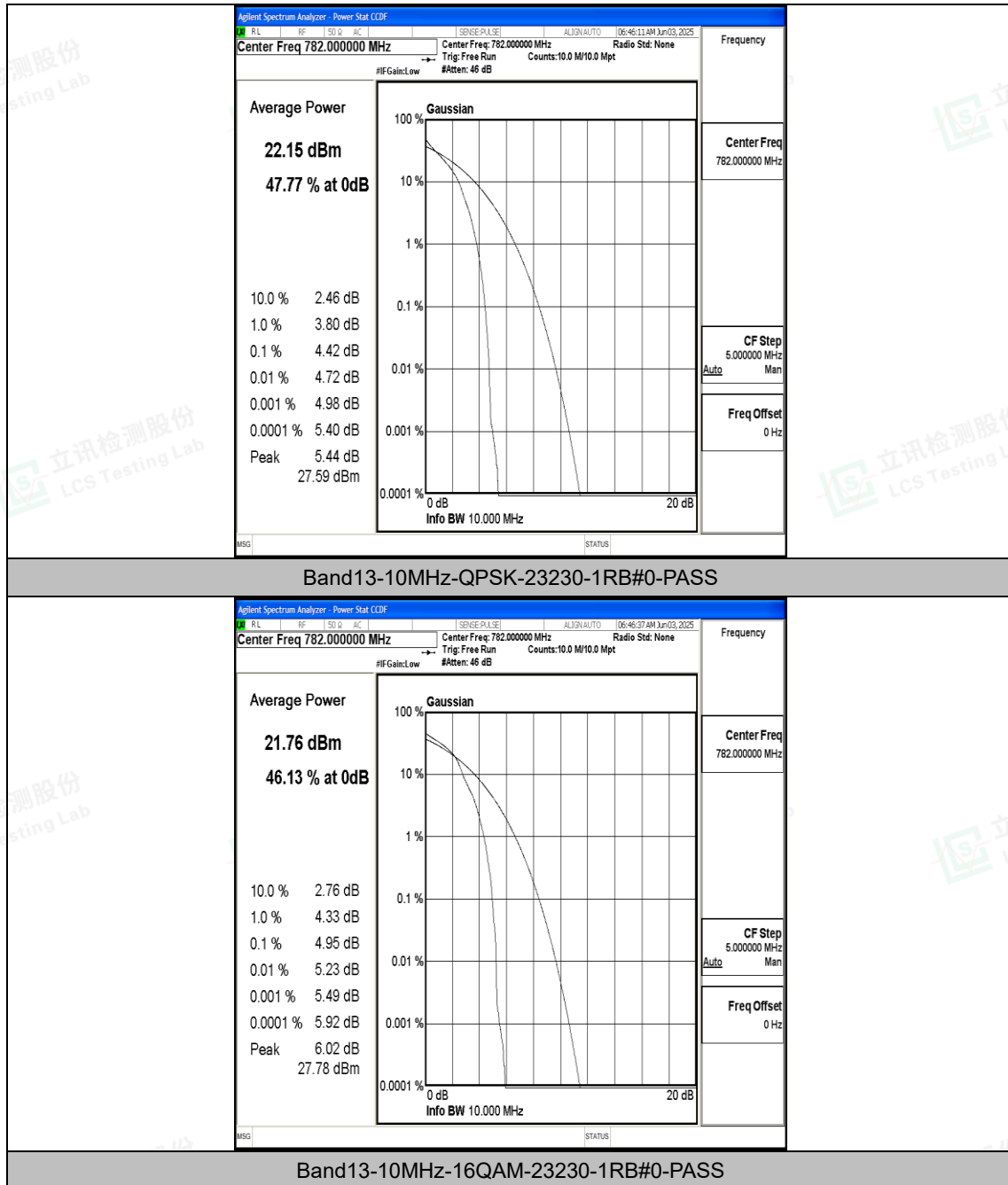


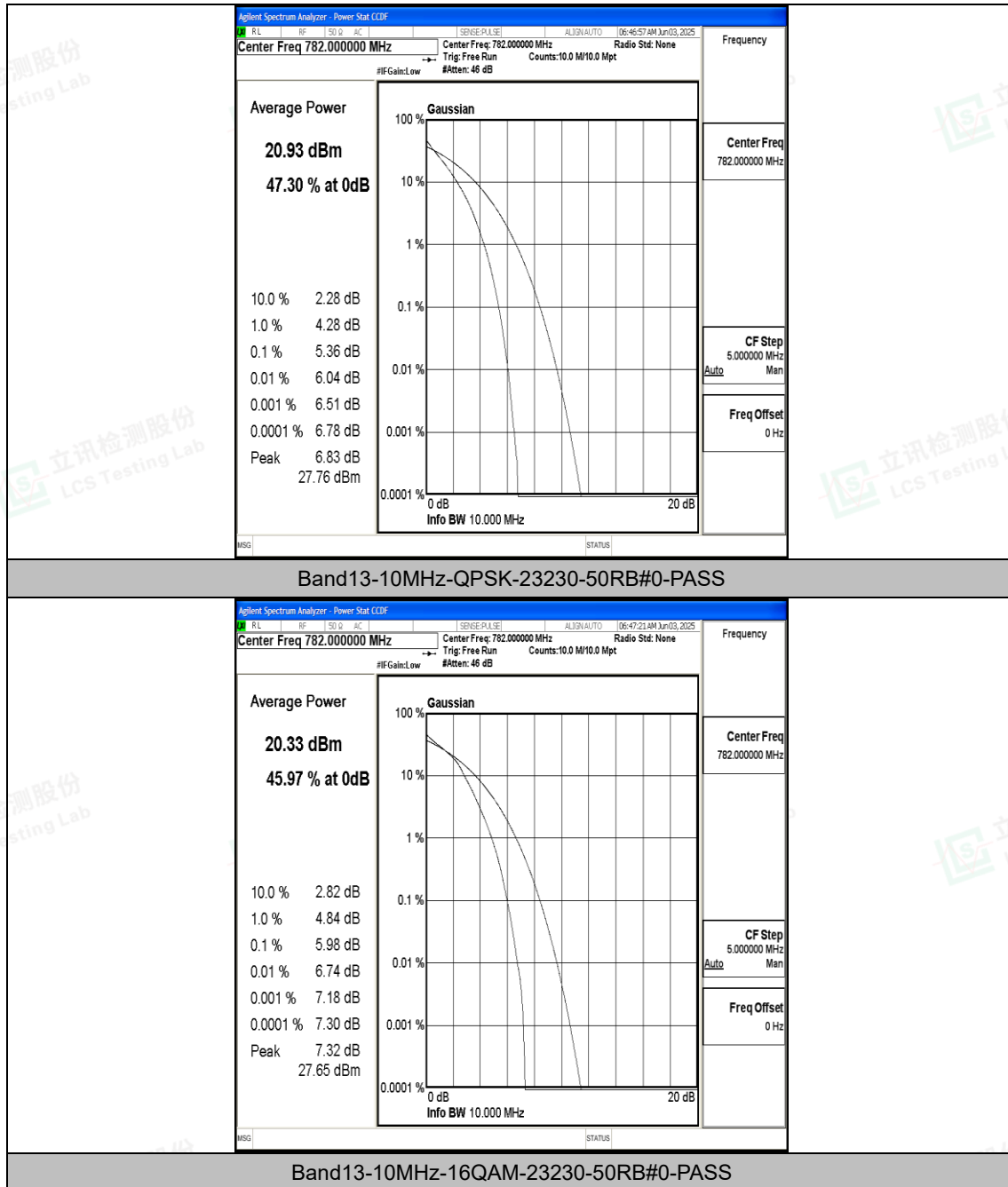














E.3 26dB Bandwidth and Occupied Bandwidth

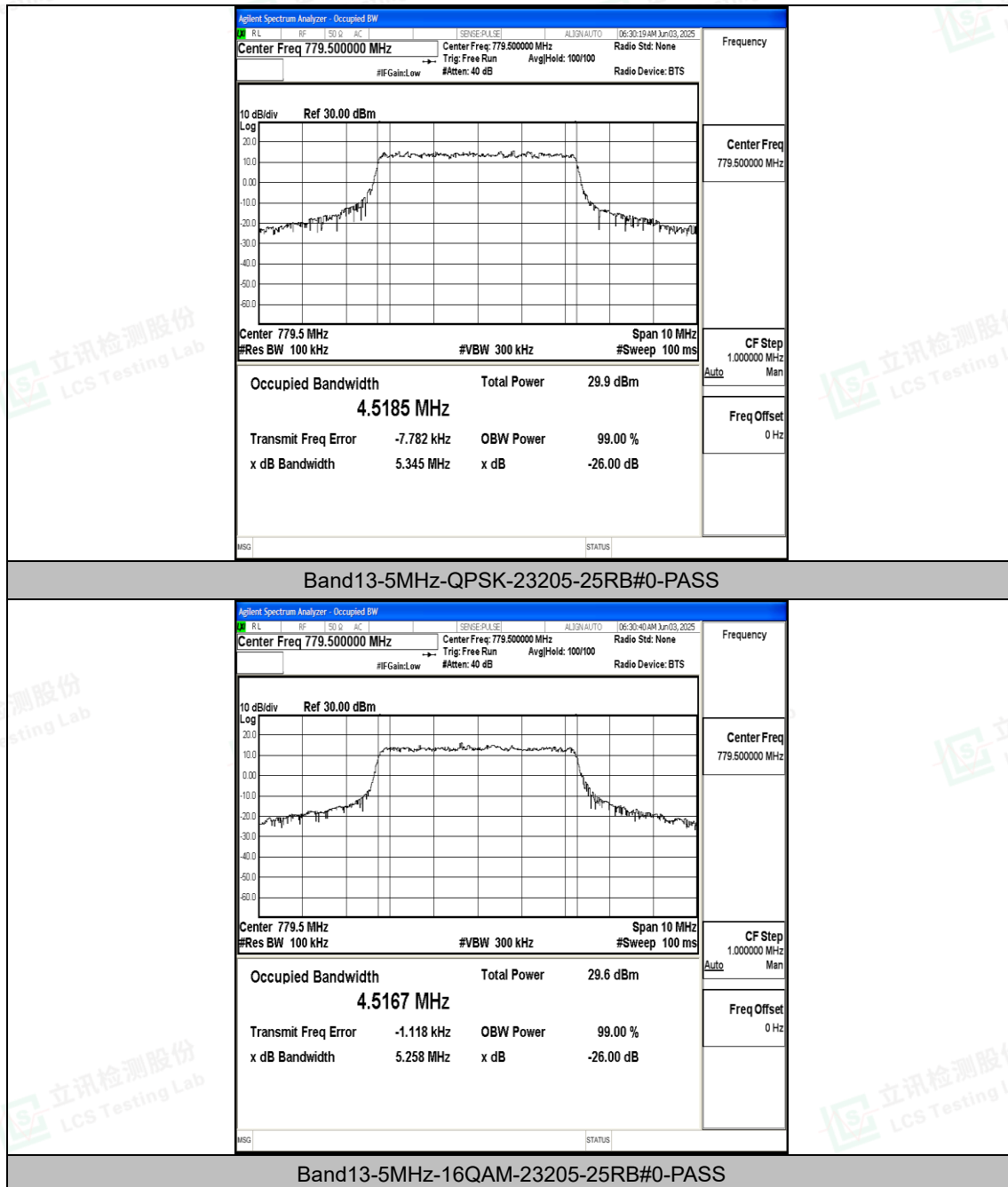
Test Result

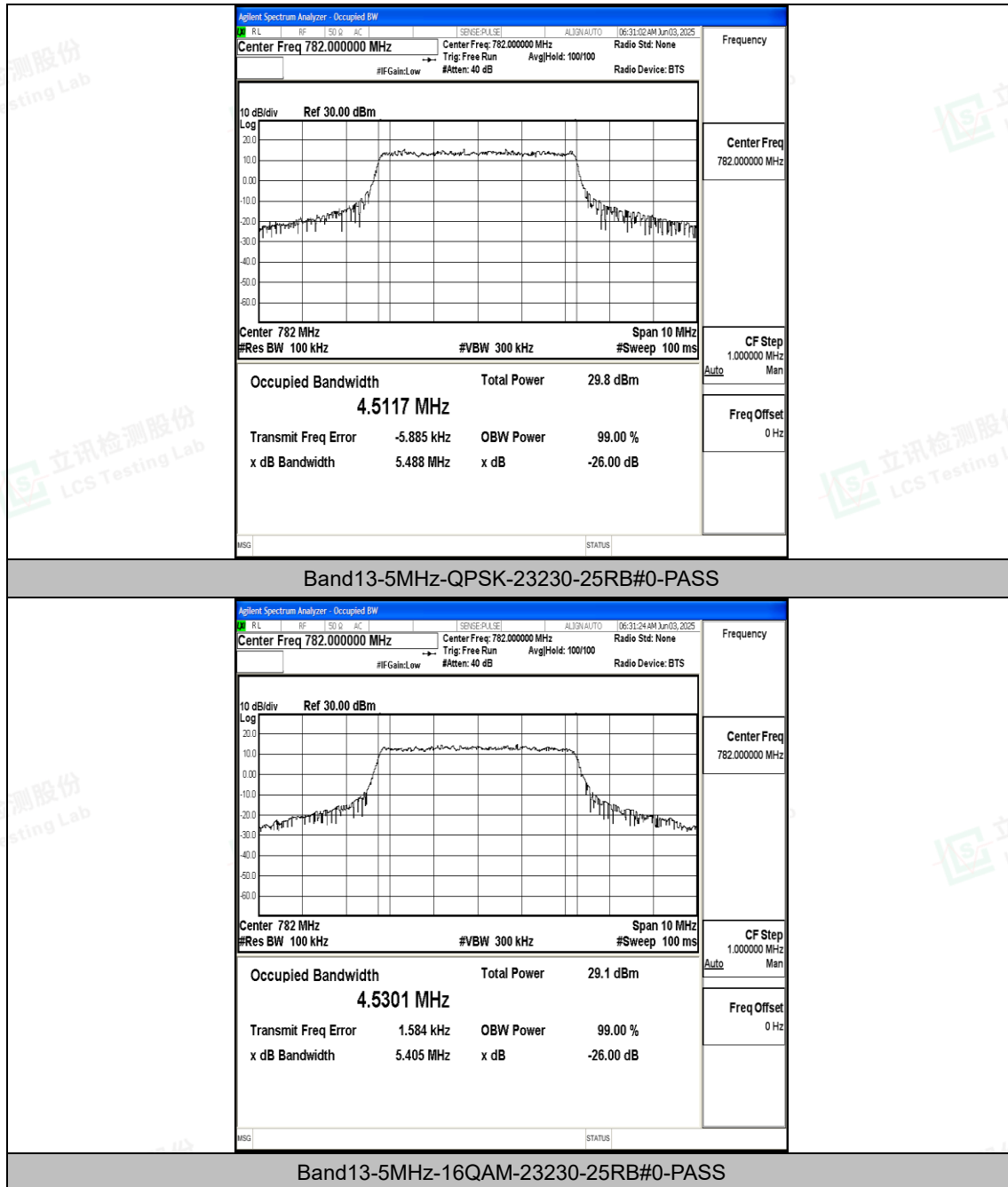
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.5185	5.345	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5167	5.258	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5117	5.488	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5301	5.405	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5159	5.278	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5431	5.414	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9839	10.06	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.9940	10.19	PASS

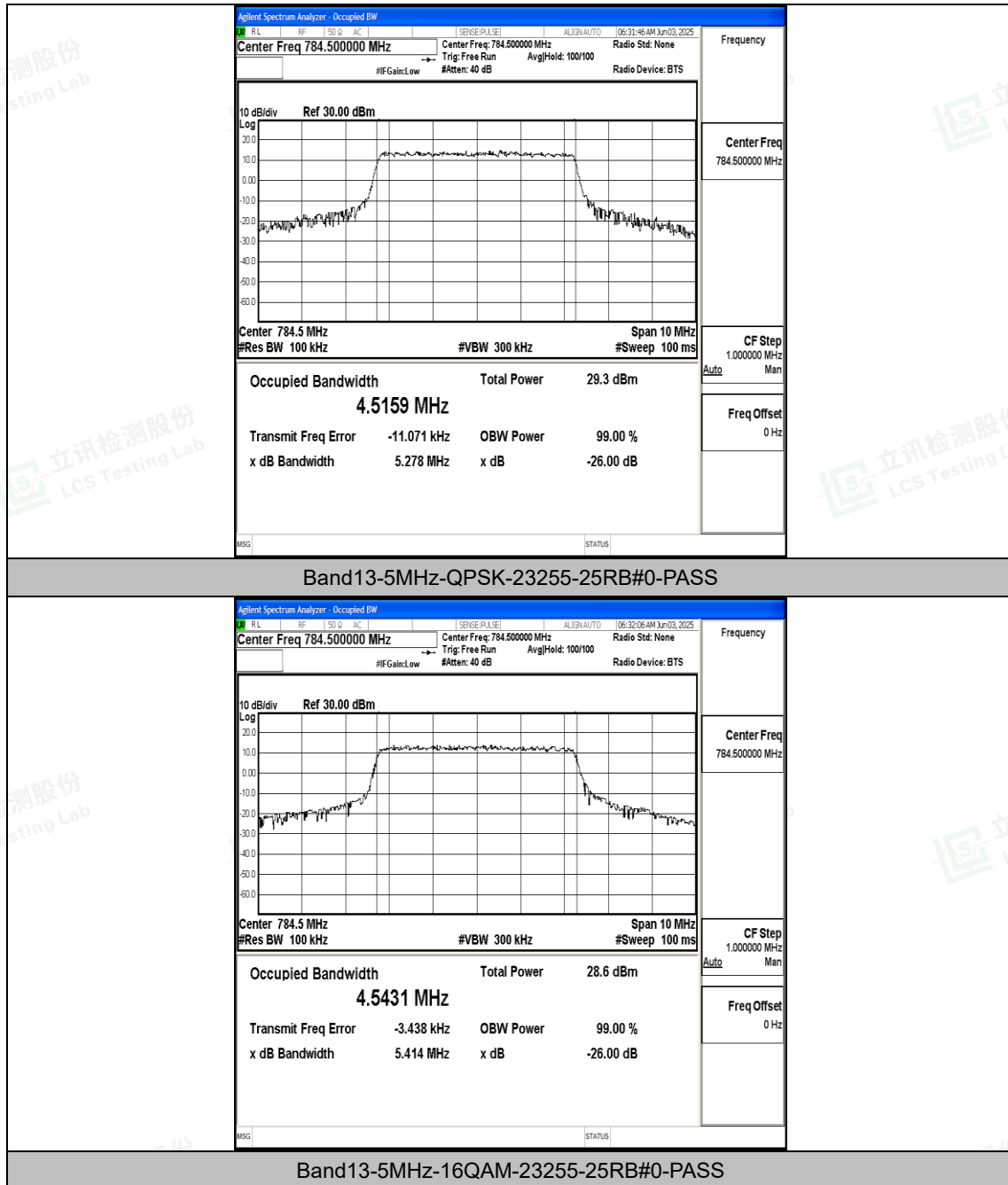


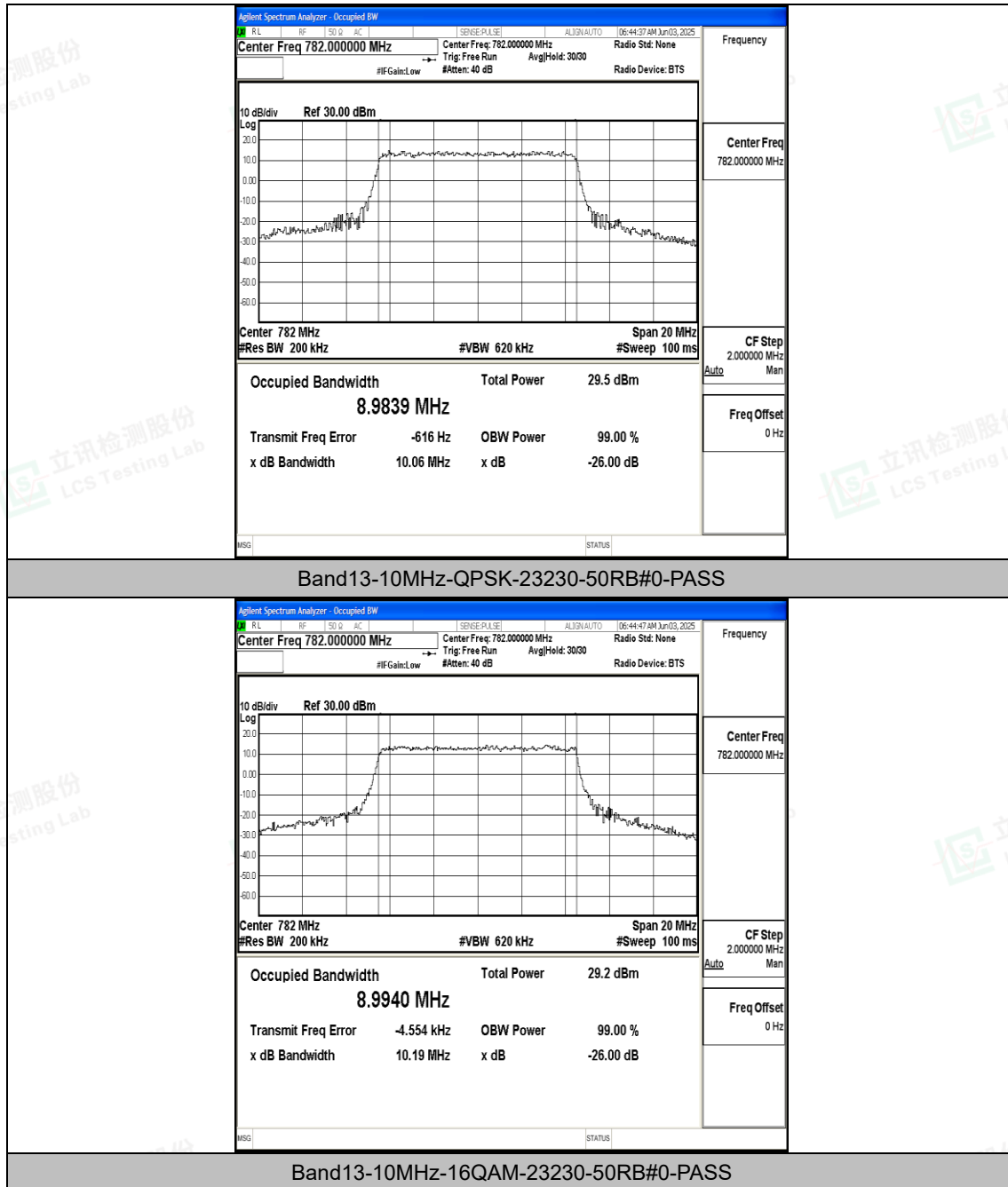


Test Graphs











E.4 Band Edge

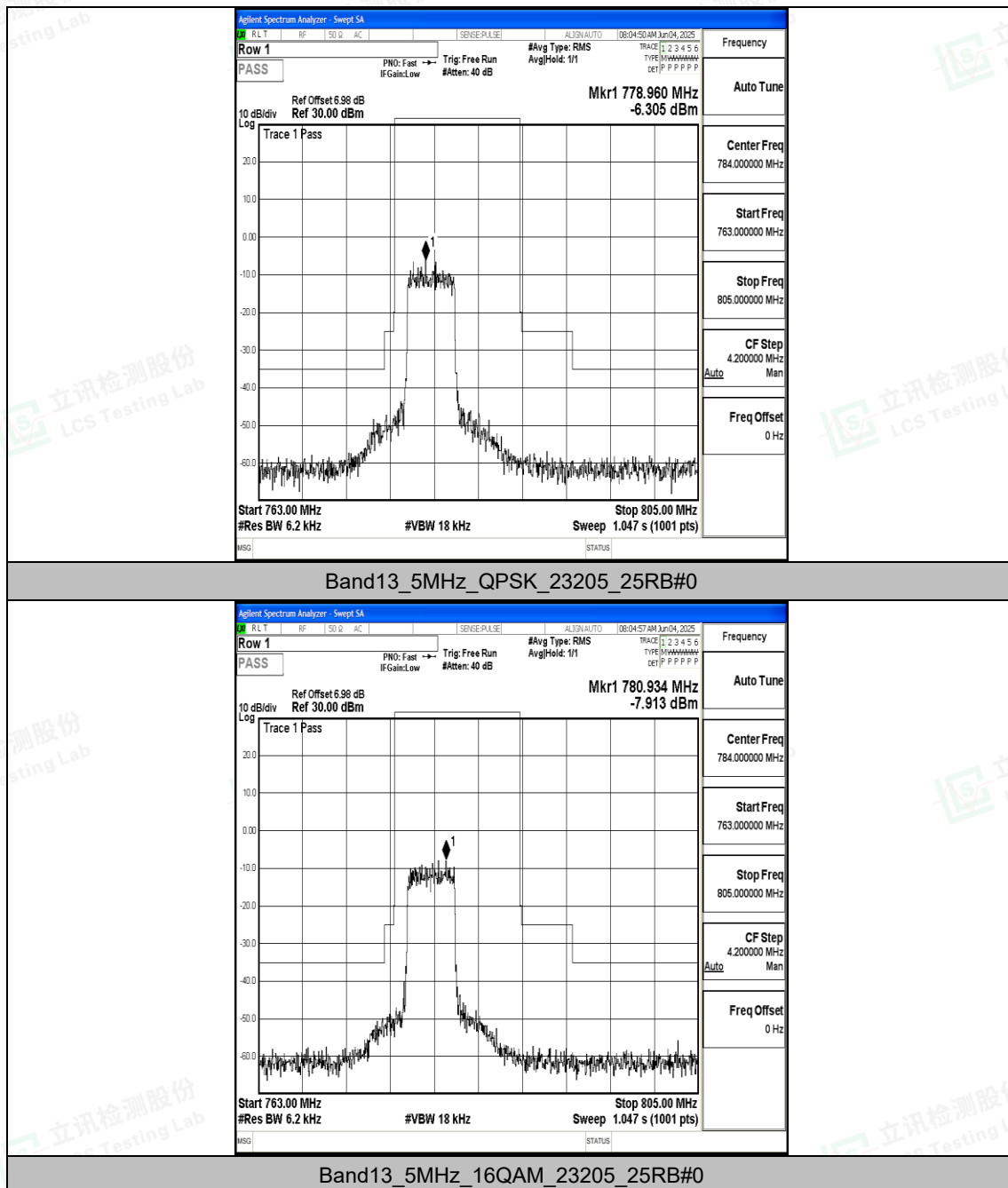
Test Result

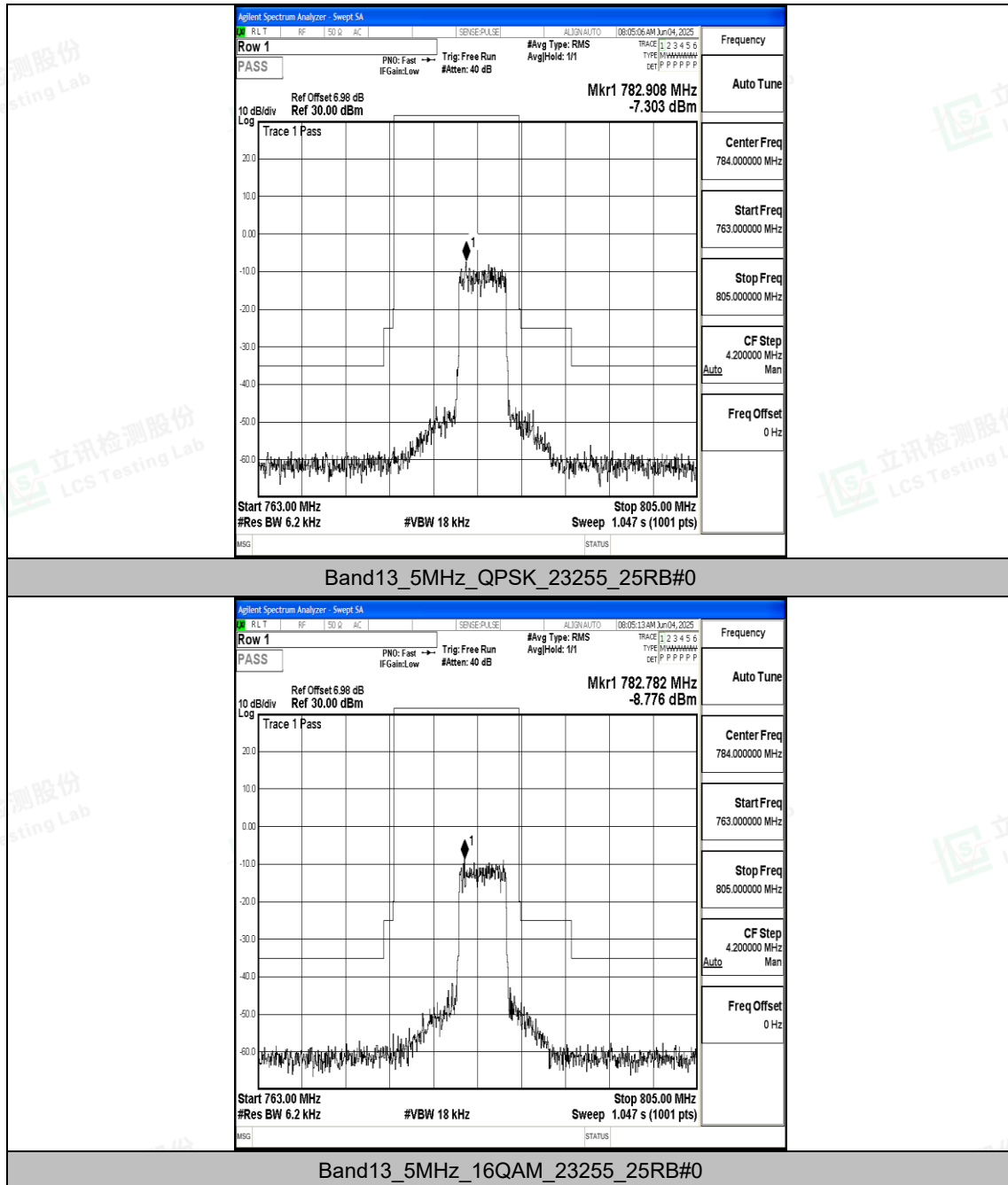
Band	Bandwidth	Modulation	Channel	RB Configuration	Peak Frenquency	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	774.00	-48.43	PASS
Band13	5MHz	16QAM	23205	25RB#0	774.89	-49.85	PASS
Band13	5MHz	QPSK	23255	25RB#0	794.79	-56.18	PASS
Band13	5MHz	16QAM	23255	25RB#0	788.20	-46.79	PASS
Band13	10MHz	QPSK	23230	50RB#0	772.74	-49.90	PASS
Band13	10MHz	16QAM	23230	50RB#0	774.76	-50.85	PASS

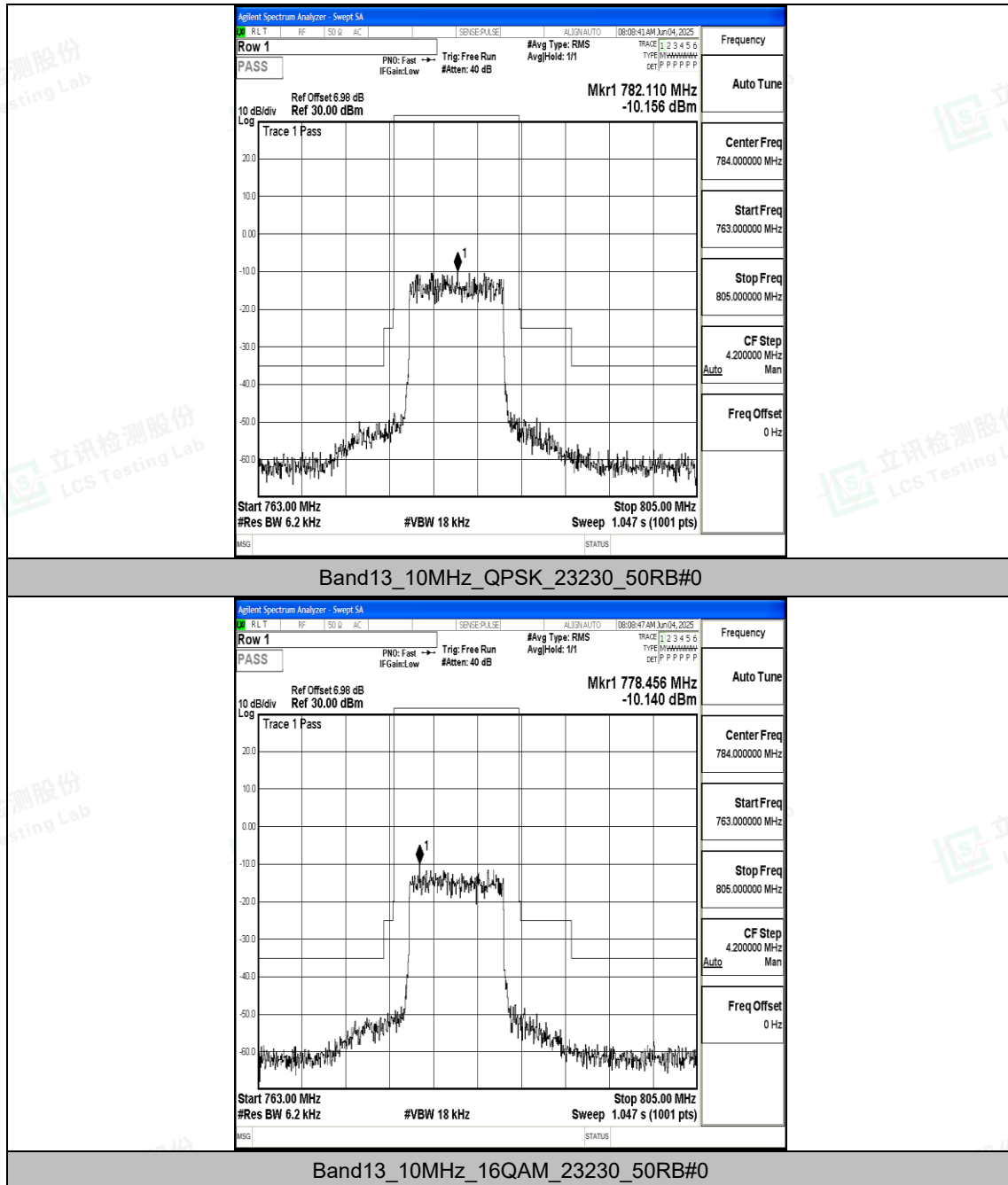




Test Graphs









E.5 Conducted Spurious Emission

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	0.009~0.15	-56.07	PASS
Band13	5MHz	QPSK	23205	1RB#0	0.15~30	-46.81	PASS
Band13	5MHz	QPSK	23205	1RB#0	30~1000	-53.07	PASS
Band13	5MHz	QPSK	23205	1RB#0	1000~3000	-39.04	PASS
Band13	5MHz	QPSK	23205	1RB#0	3000~10000	-35.02	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.009~0.15	-57.54	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.15~30	-49.53	PASS
Band13	5MHz	16QAM	23205	1RB#0	30~1000	-53.37	PASS
Band13	5MHz	16QAM	23205	1RB#0	1000~3000	-39.39	PASS
Band13	5MHz	16QAM	23205	1RB#0	3000~10000	-35.27	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.009~0.15	-57.19	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.15~30	-47.30	PASS
Band13	5MHz	QPSK	23230	1RB#0	30~1000	-52.94	PASS
Band13	5MHz	QPSK	23230	1RB#0	1000~3000	-38.84	PASS
Band13	5MHz	QPSK	23230	1RB#0	3000~10000	-35.27	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.009~0.15	-56.01	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.15~30	-44.62	PASS
Band13	5MHz	16QAM	23230	1RB#0	30~1000	-52.78	PASS
Band13	5MHz	16QAM	23230	1RB#0	1000~3000	-39.14	PASS
Band13	5MHz	16QAM	23230	1RB#0	3000~10000	-35.56	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.009~0.15	-58.47	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.15~30	-45.39	PASS
Band13	5MHz	QPSK	23255	1RB#0	30~1000	-53.20	PASS
Band13	5MHz	QPSK	23255	1RB#0	1000~3000	-39.48	PASS
Band13	5MHz	QPSK	23255	1RB#0	3000~10000	-35.49	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.009~0.15	-60.69	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.15~30	-42.96	PASS
Band13	5MHz	16QAM	23255	1RB#0	30~1000	-52.39	PASS
Band13	5MHz	16QAM	23255	1RB#0	1000~3000	-38.16	PASS
Band13	5MHz	16QAM	23255	1RB#0	3000~10000	-35.65	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.009~0.15	-54.86	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.15~30	-47.81	PASS
Band13	10MHz	QPSK	23230	1RB#0	30~1000	-52.35	PASS
Band13	10MHz	QPSK	23230	1RB#0	1000~3000	-37.72	PASS



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Band13	10MHz	QPSK	23230	1RB#0	3000~10000	-34.84	PASS
Band13	10MHz	16QAM	23230	1RB#0	0.009~0.15	-55.58	PASS
Band13	10MHz	16QAM	23230	1RB#0	0.15~30	-43.92	PASS
Band13	10MHz	16QAM	23230	1RB#0	30~1000	-52.67	PASS
Band13	10MHz	16QAM	23230	1RB#0	1000~3000	-38.41	PASS
Band13	10MHz	16QAM	23230	1RB#0	3000~10000	-35.07	PASS





Test Graphs

