



Appendix M: Test Data for E-UTRA Band 13

Product Name: AI SMART PHONE
Test Model: NM-D1001U

Environmental Conditions

Temperature:	23.6°C
Relative Humidity:	54.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Jerry Chu
Supervised by:	Paddi Chen





M.1 Conducted Output Power Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	24.05	PASS
Band13	5MHz	16QAM	23205	1RB#0	22.92	PASS
Band13	5MHz	QPSK	23205	1RB#12	24.05	PASS
Band13	5MHz	16QAM	23205	1RB#12	22.86	PASS
Band13	5MHz	QPSK	23205	1RB#24	24.08	PASS
Band13	5MHz	16QAM	23205	1RB#24	22.74	PASS
Band13	5MHz	QPSK	23205	12RB#0	23.06	PASS
Band13	5MHz	16QAM	23205	12RB#0	22.55	PASS
Band13	5MHz	QPSK	23205	12RB#6	23.28	PASS
Band13	5MHz	16QAM	23205	12RB#6	22.55	PASS
Band13	5MHz	QPSK	23205	12RB#13	23.10	PASS
Band13	5MHz	16QAM	23205	12RB#13	22.49	PASS
Band13	5MHz	QPSK	23205	25RB#0	23.23	PASS
Band13	5MHz	16QAM	23205	25RB#0	22.58	PASS
Band13	5MHz	QPSK	23230	1RB#0	23.79	PASS
Band13	5MHz	16QAM	23230	1RB#0	23.78	PASS
Band13	5MHz	QPSK	23230	1RB#12	23.69	PASS
Band13	5MHz	16QAM	23230	1RB#12	23.64	PASS
Band13	5MHz	QPSK	23230	1RB#24	23.53	PASS
Band13	5MHz	16QAM	23230	1RB#24	23.14	PASS
Band13	5MHz	QPSK	23230	12RB#0	23.14	PASS
Band13	5MHz	16QAM	23230	12RB#0	22.46	PASS
Band13	5MHz	QPSK	23230	12RB#6	23.11	PASS
Band13	5MHz	16QAM	23230	12RB#6	22.43	PASS
Band13	5MHz	QPSK	23230	12RB#13	23.06	PASS
Band13	5MHz	16QAM	23230	12RB#13	22.37	PASS
Band13	5MHz	QPSK	23230	25RB#0	23.11	PASS
Band13	5MHz	16QAM	23230	25RB#0	22.38	PASS
Band13	5MHz	QPSK	23255	1RB#0	23.87	PASS
Band13	5MHz	16QAM	23255	1RB#0	23.07	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.69	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.97	PASS
Band13	5MHz	QPSK	23255	1RB#24	23.47	PASS
Band13	5MHz	16QAM	23255	1RB#24	22.70	PASS
Band13	5MHz	QPSK	23255	12RB#0	23.06	PASS
Band13	5MHz	16QAM	23255	12RB#0	22.27	PASS
Band13	5MHz	QPSK	23255	12RB#6	23.06	PASS



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Scan code to check authenticity



Band13	5MHz	16QAM	23255	12RB#6	22.26	PASS
Band13	5MHz	QPSK	23255	12RB#13	22.85	PASS
Band13	5MHz	16QAM	23255	12RB#13	22.12	PASS
Band13	5MHz	QPSK	23255	25RB#0	22.99	PASS
Band13	5MHz	16QAM	23255	25RB#0	22.29	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.69	PASS
Band13	10MHz	16QAM	23230	1RB#0	23.03	PASS
Band13	10MHz	QPSK	23230	1RB#24	23.43	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.90	PASS
Band13	10MHz	QPSK	23230	1RB#49	22.96	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.47	PASS
Band13	10MHz	QPSK	23230	25RB#0	22.69	PASS
Band13	10MHz	16QAM	23230	25RB#0	21.89	PASS
Band13	10MHz	QPSK	23230	25RB#12	22.60	PASS
Band13	10MHz	16QAM	23230	25RB#12	22.15	PASS
Band13	10MHz	QPSK	23230	25RB#25	22.47	PASS
Band13	10MHz	16QAM	23230	25RB#25	21.85	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.55	PASS
Band13	10MHz	16QAM	23230	50RB#0	22.01	PASS





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

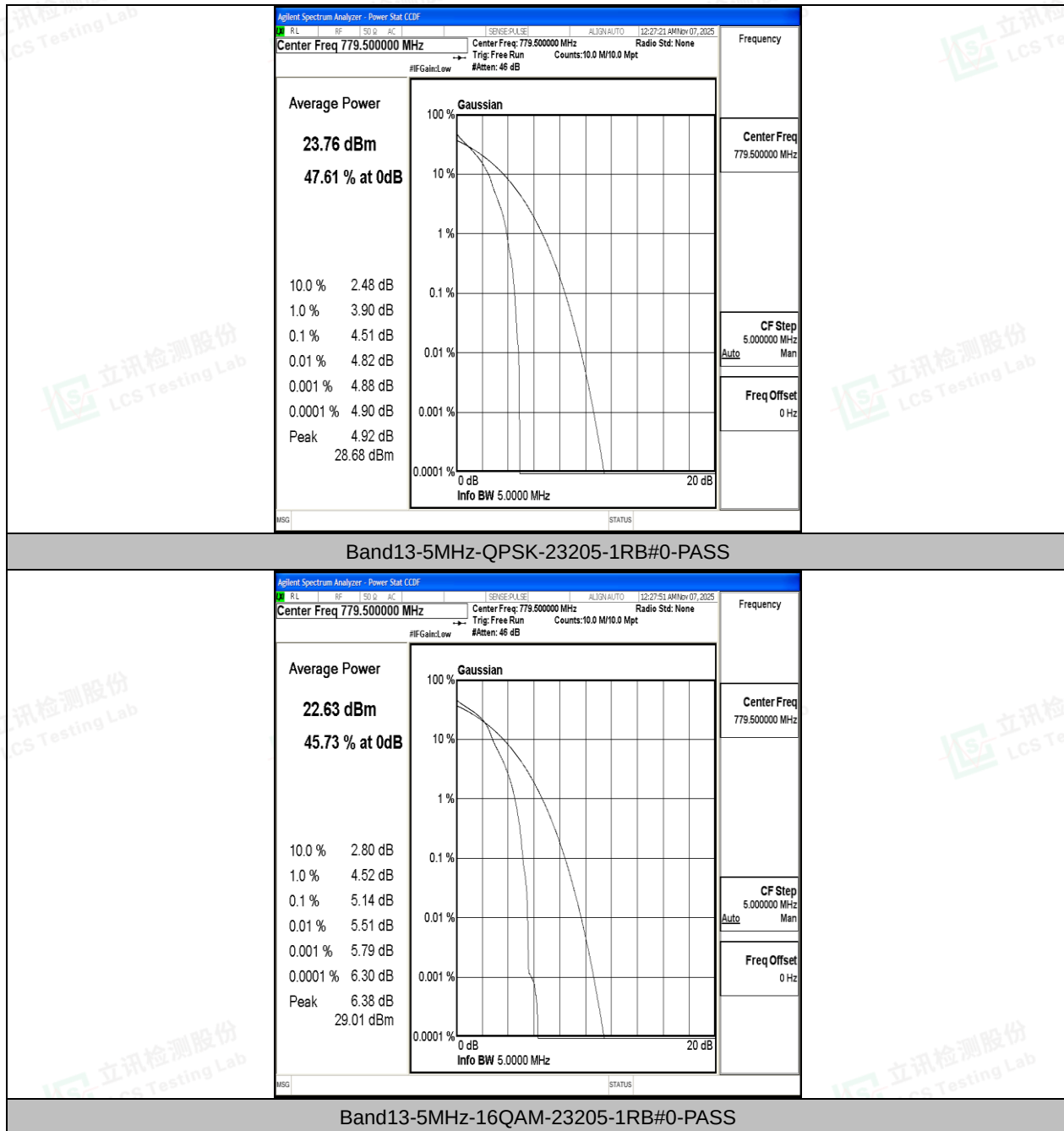
Test Result

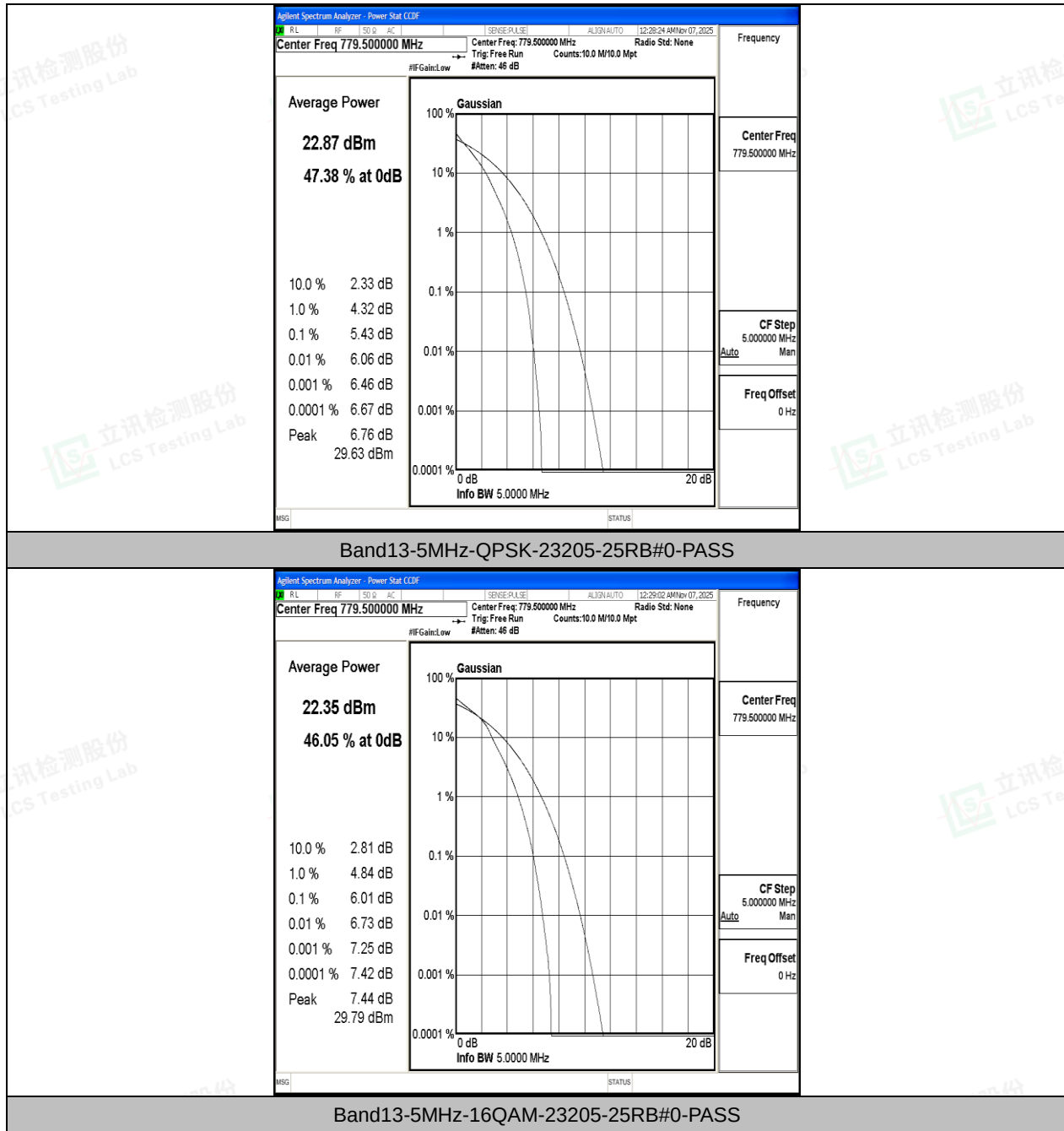
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	4.51	13	PASS
Band13	5MHz	16QAM	23205	1RB#0	5.14	13	PASS
Band13	5MHz	QPSK	23205	25RB#0	5.43	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	6.01	13	PASS
Band13	5MHz	QPSK	23230	1RB#0	4.68	13	PASS
Band13	5MHz	16QAM	23230	1RB#0	5.18	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.38	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	6.02	13	PASS
Band13	5MHz	QPSK	23255	1RB#0	4.67	13	PASS
Band13	5MHz	16QAM	23255	1RB#0	5.15	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	5.33	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	5.94	13	PASS
Band13	10MHz	QPSK	23230	1RB#0	4.47	13	PASS
Band13	10MHz	16QAM	23230	1RB#0	5.01	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.34	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	6.01	13	PASS

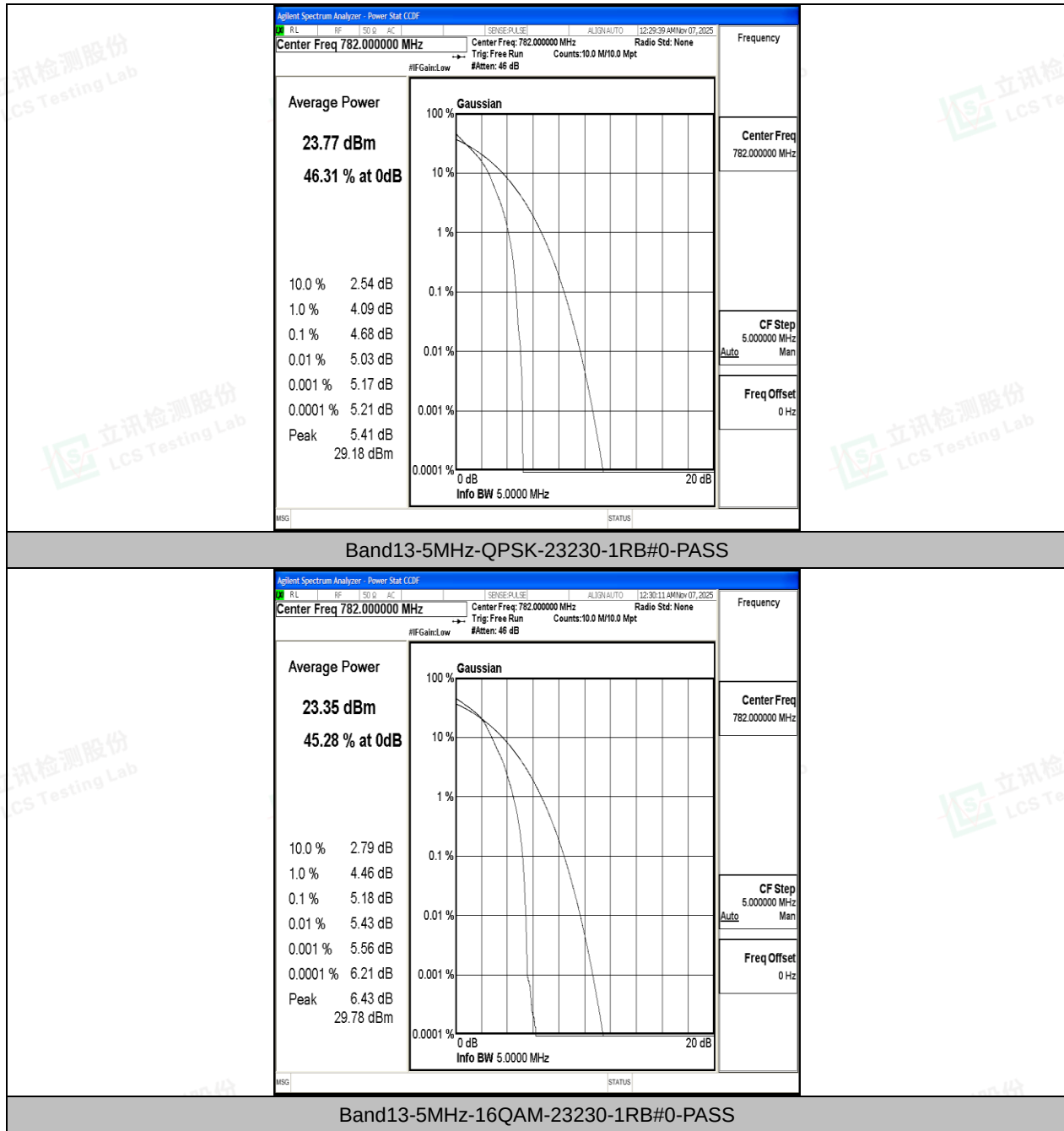


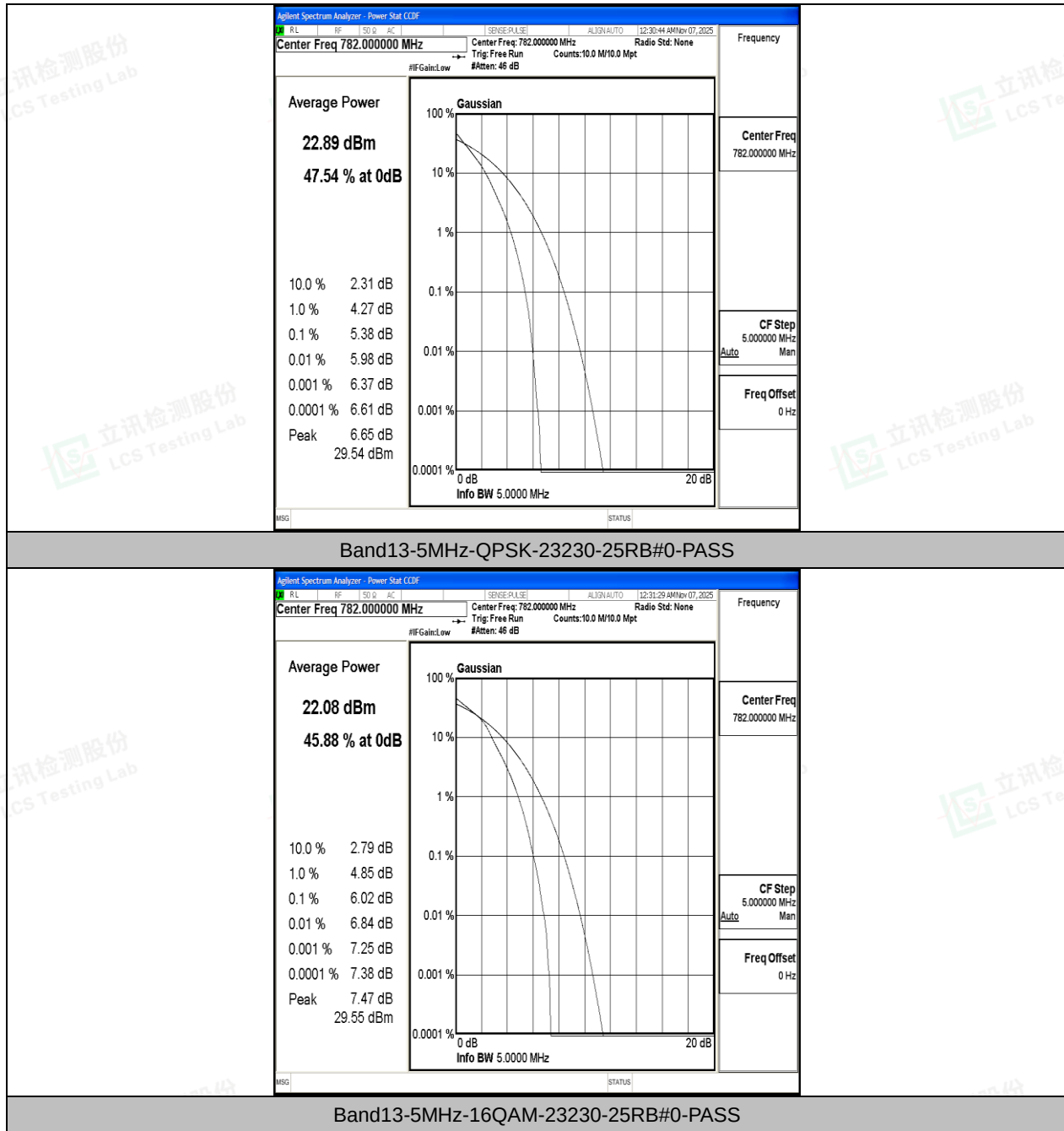


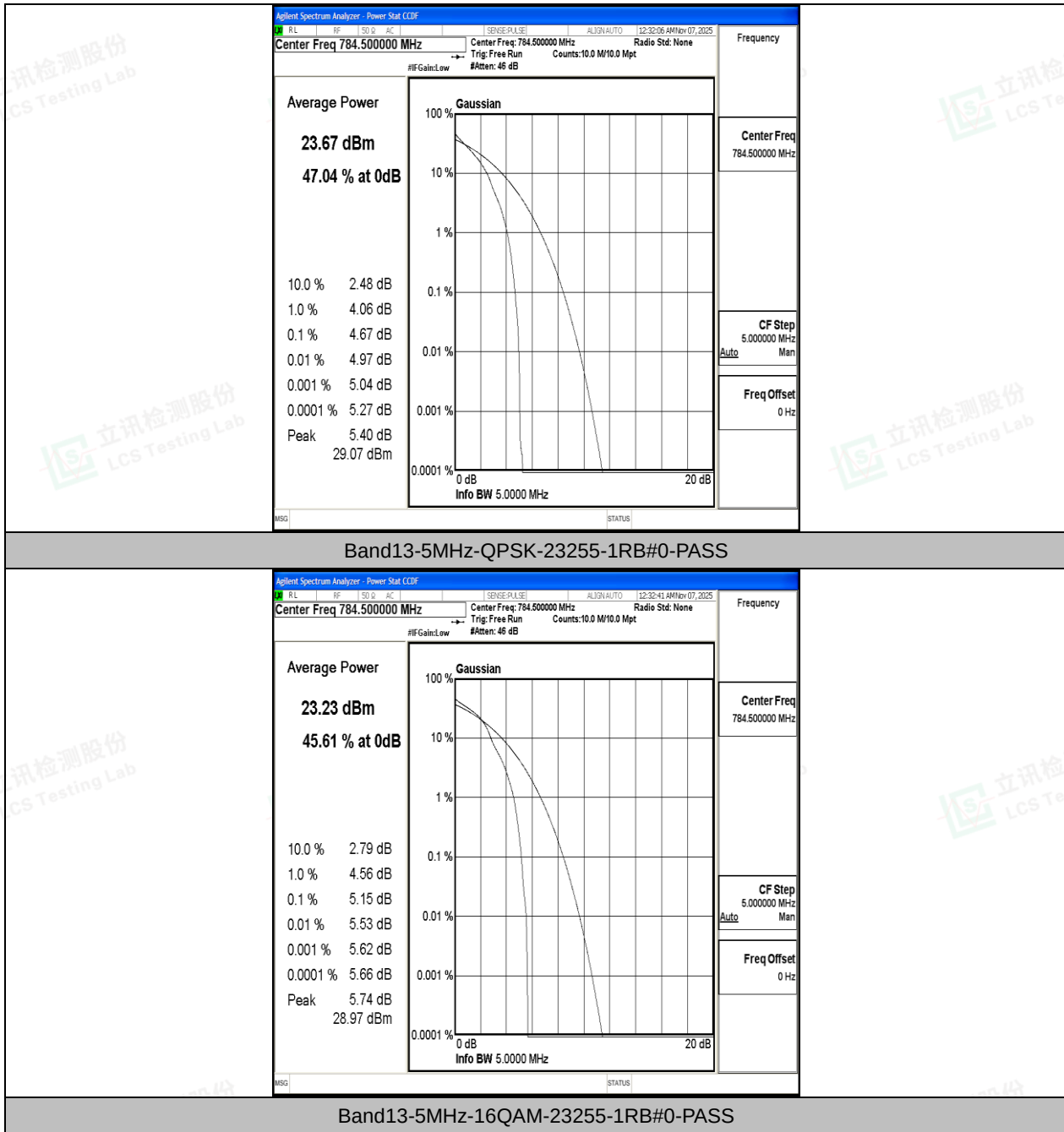
Test Graphs

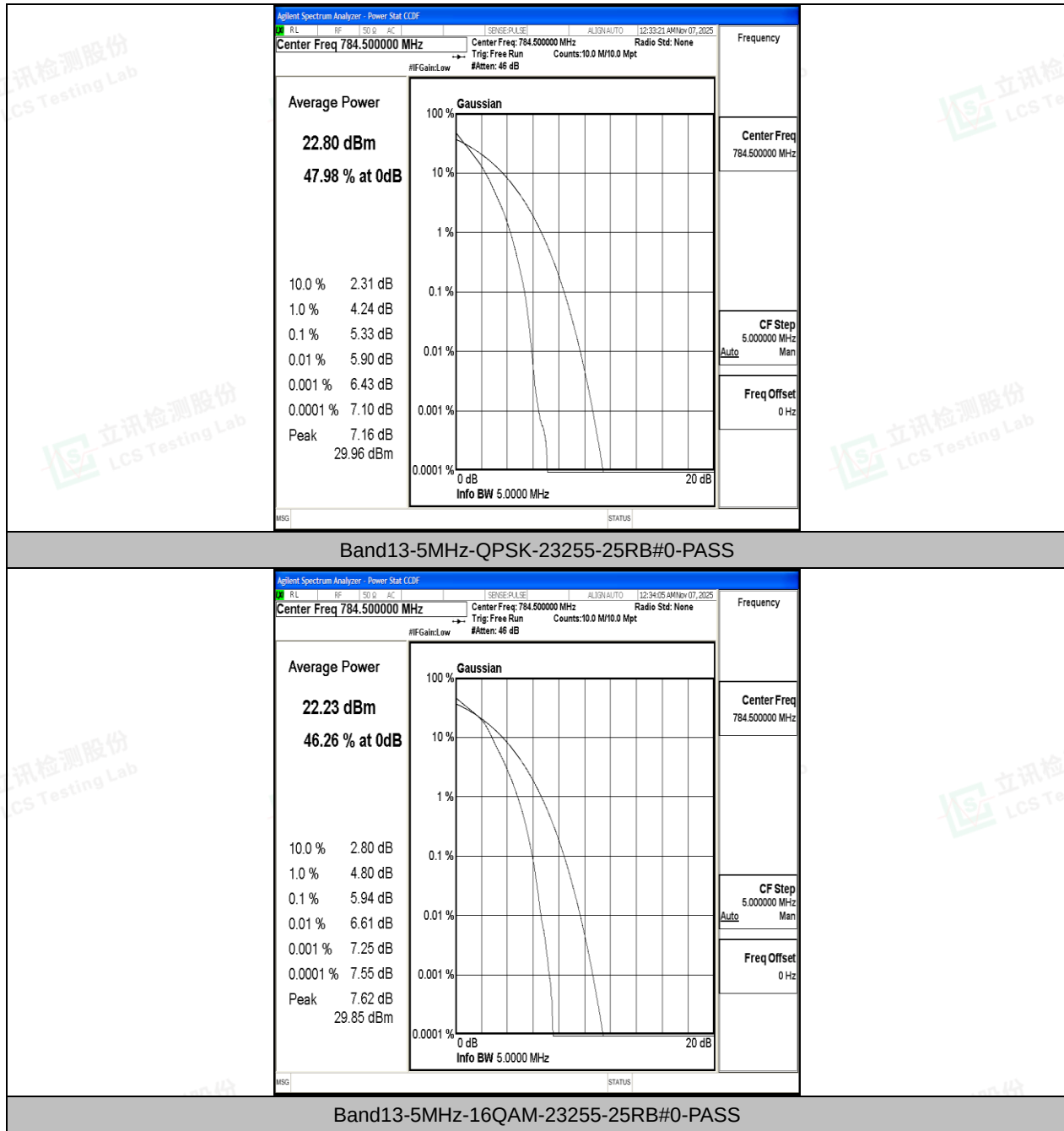


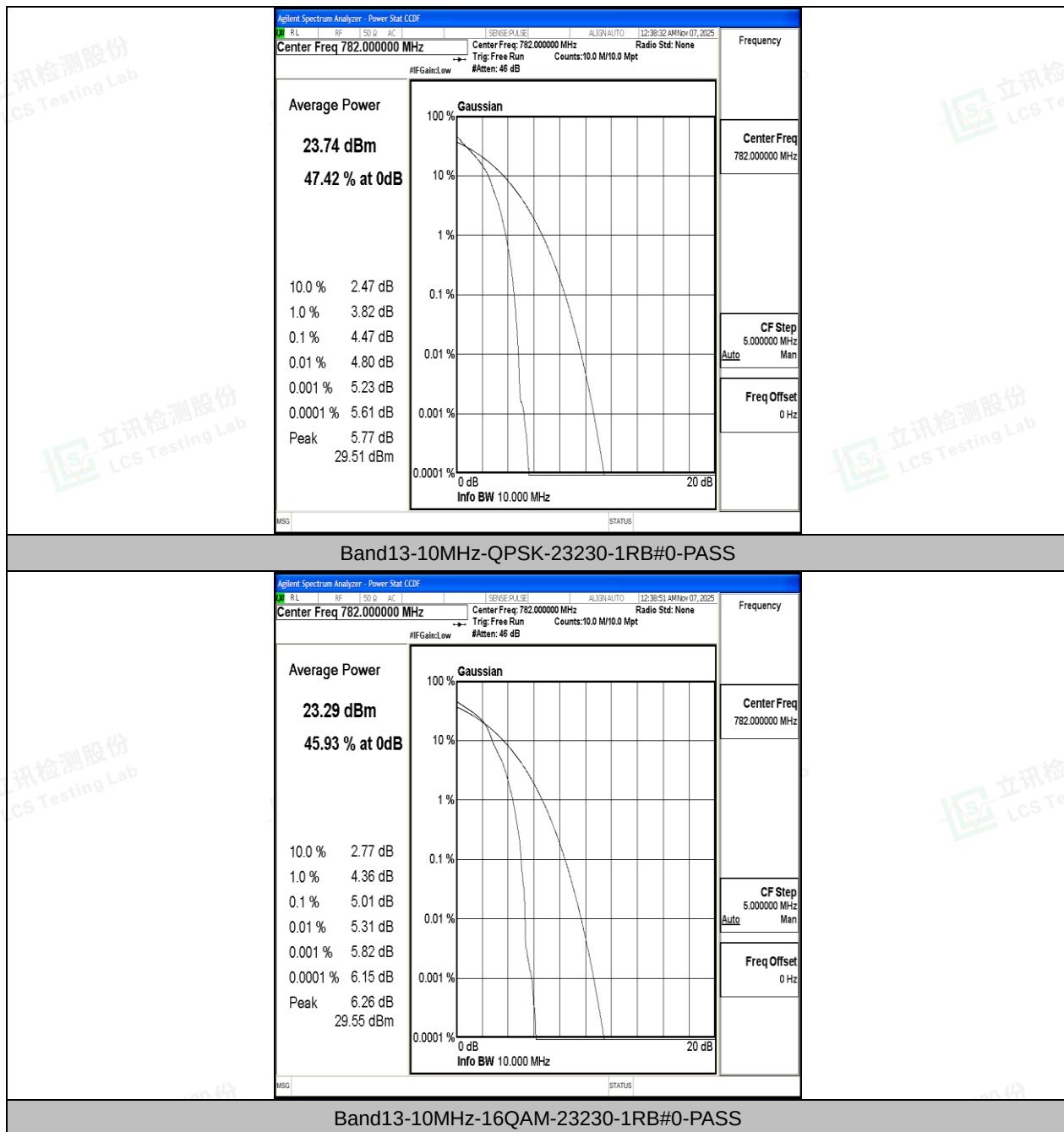


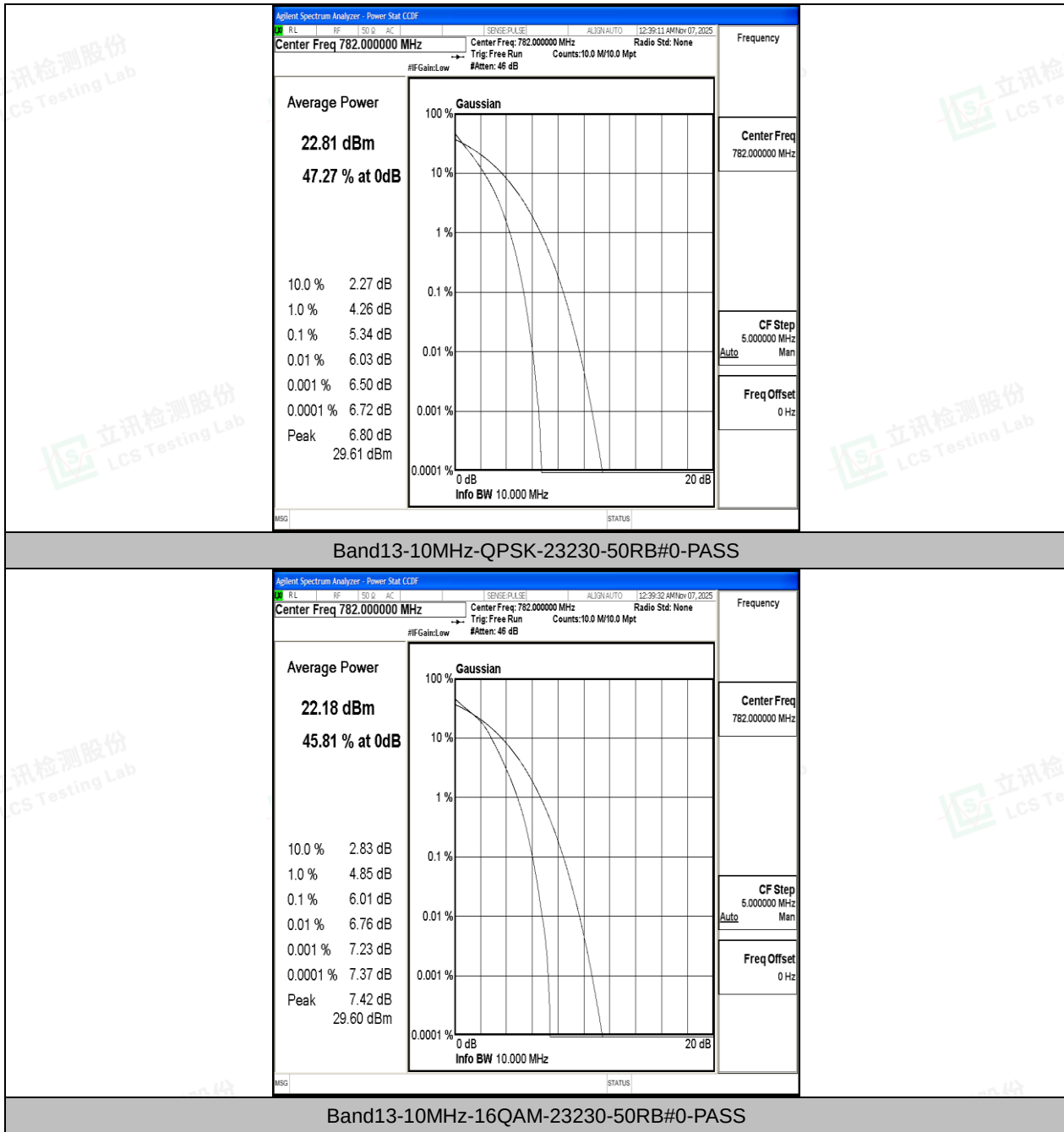














M.3 26dB Bandwidth and Occupied Bandwidth

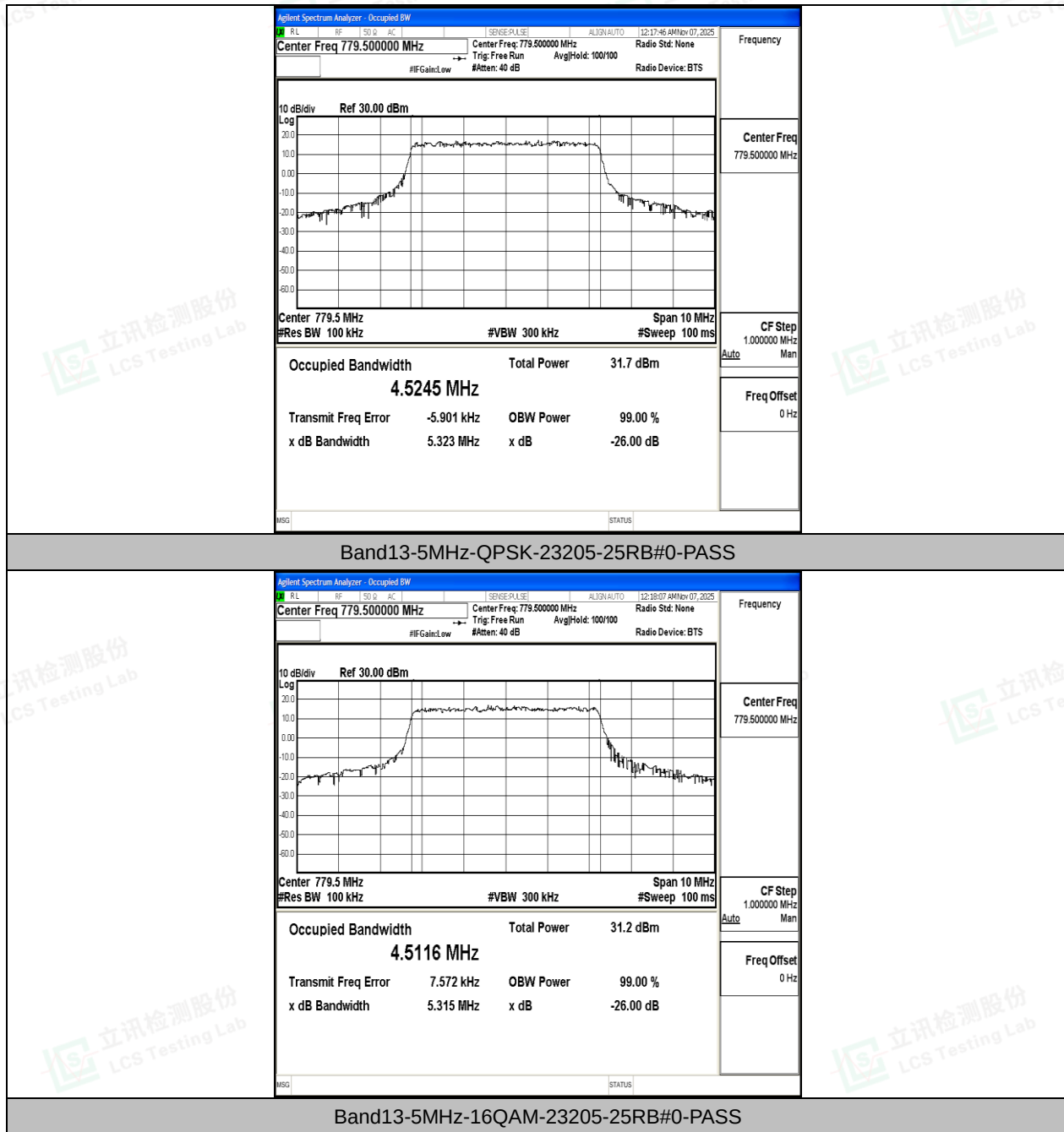
Test Result

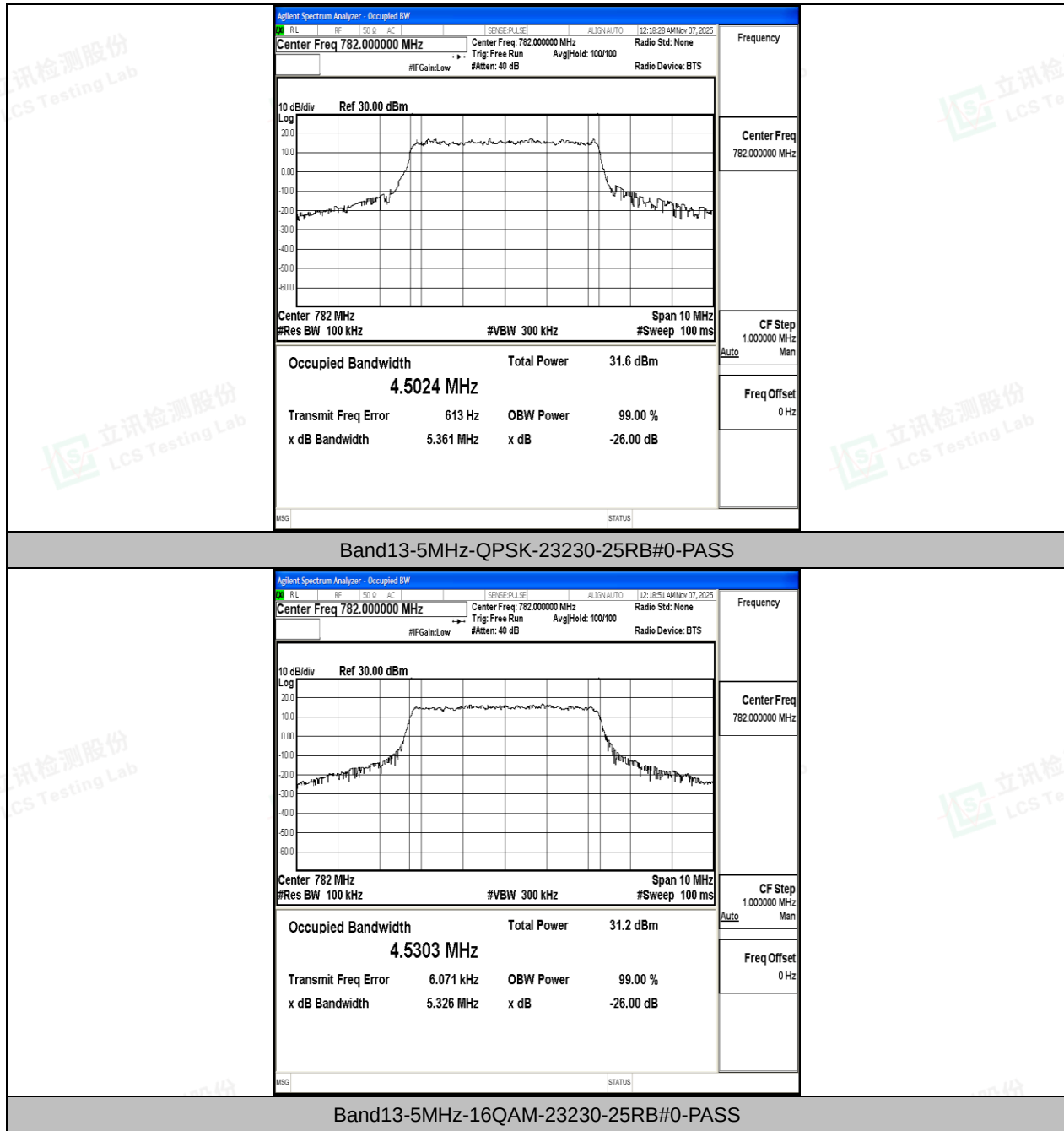
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.5245	5.323	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5116	5.315	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5024	5.361	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5303	5.326	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5183	5.166	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5218	5.404	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9788	10.10	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.9810	10.08	PASS

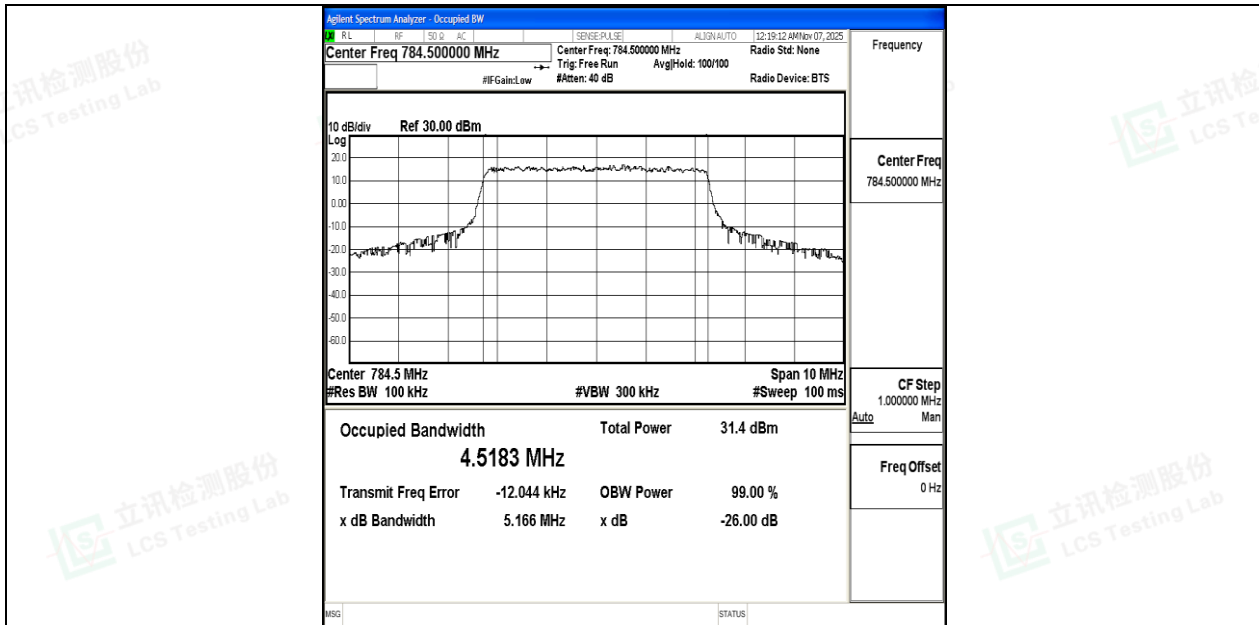




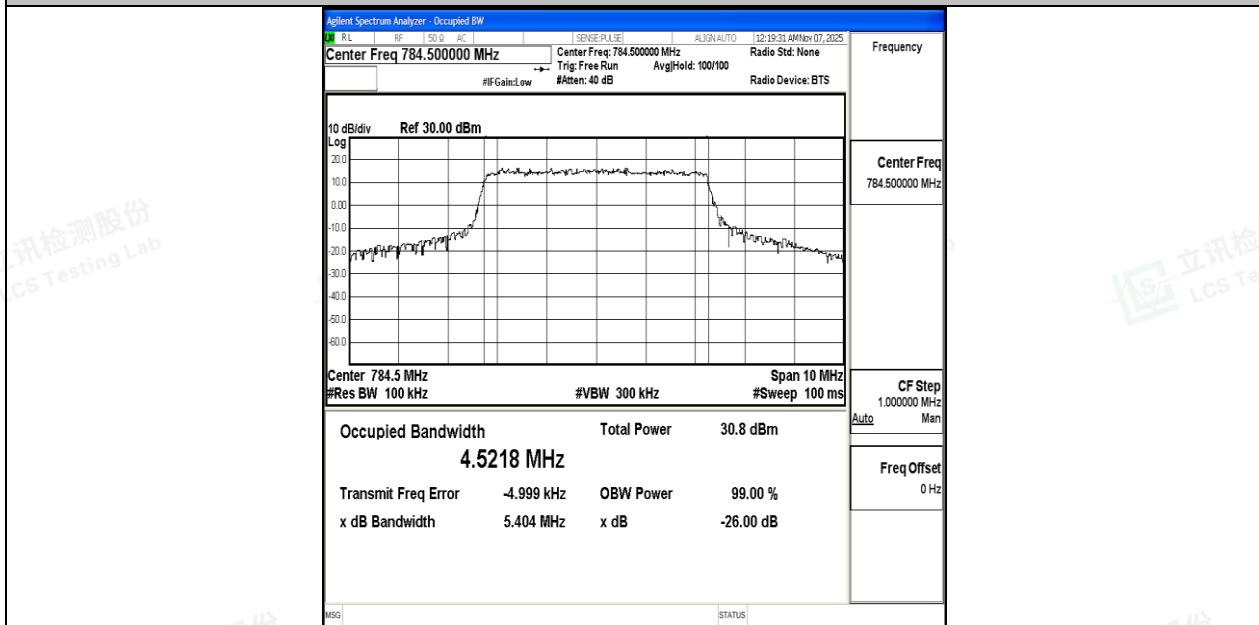
Test Graphs





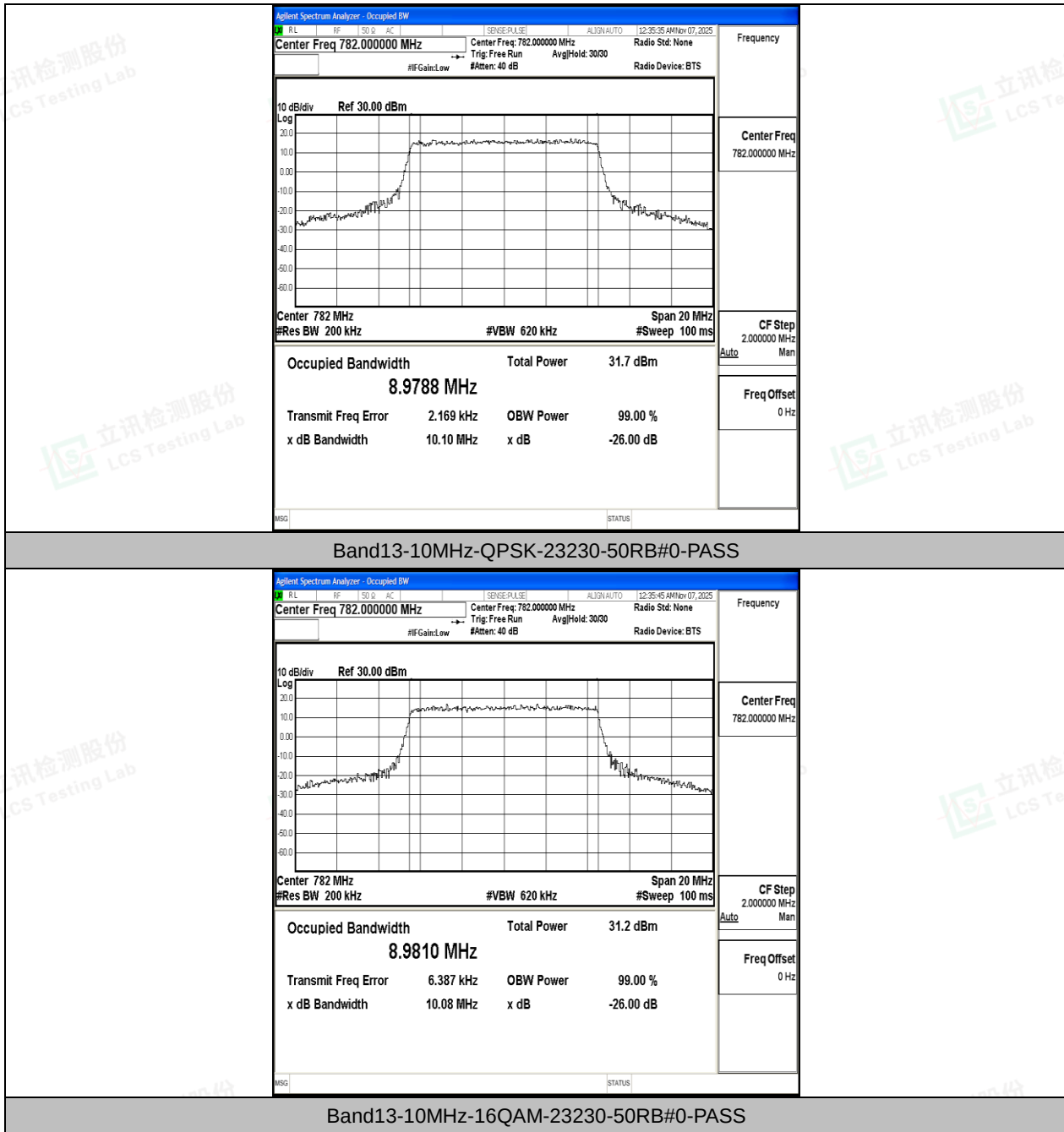


Band13-5MHz-QPSK-23255-25RB#0-PASS



Band13-5MHz-16QAM-23255-25RB#0-PASS





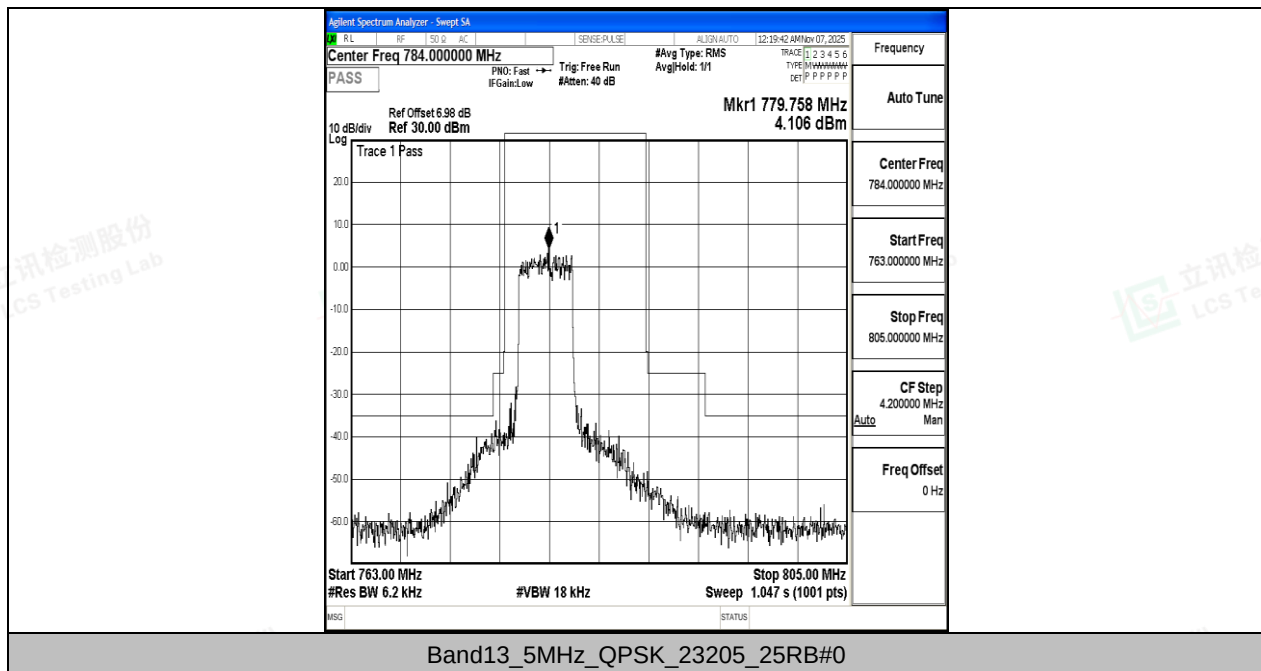


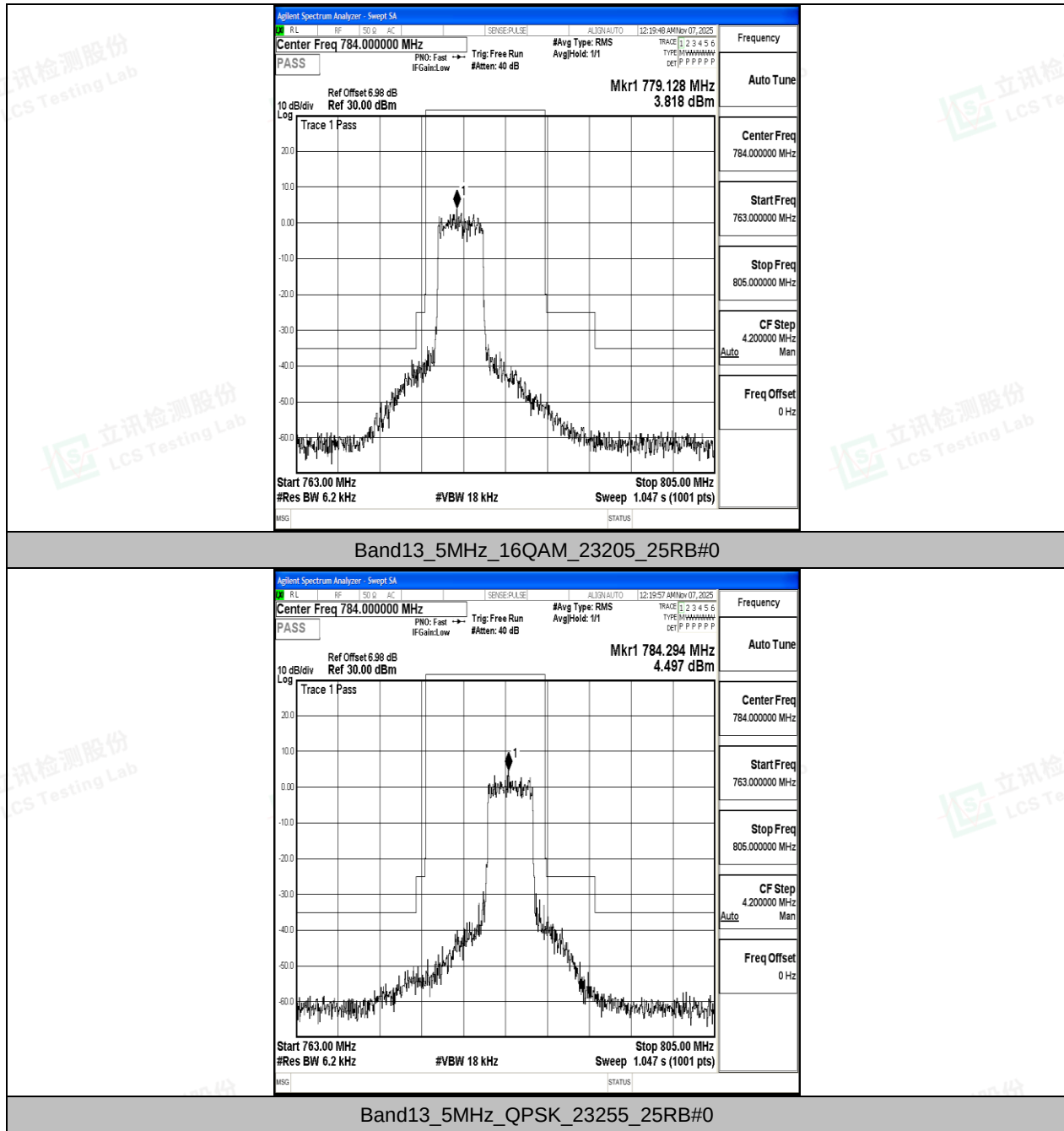
M.4 Band Edge

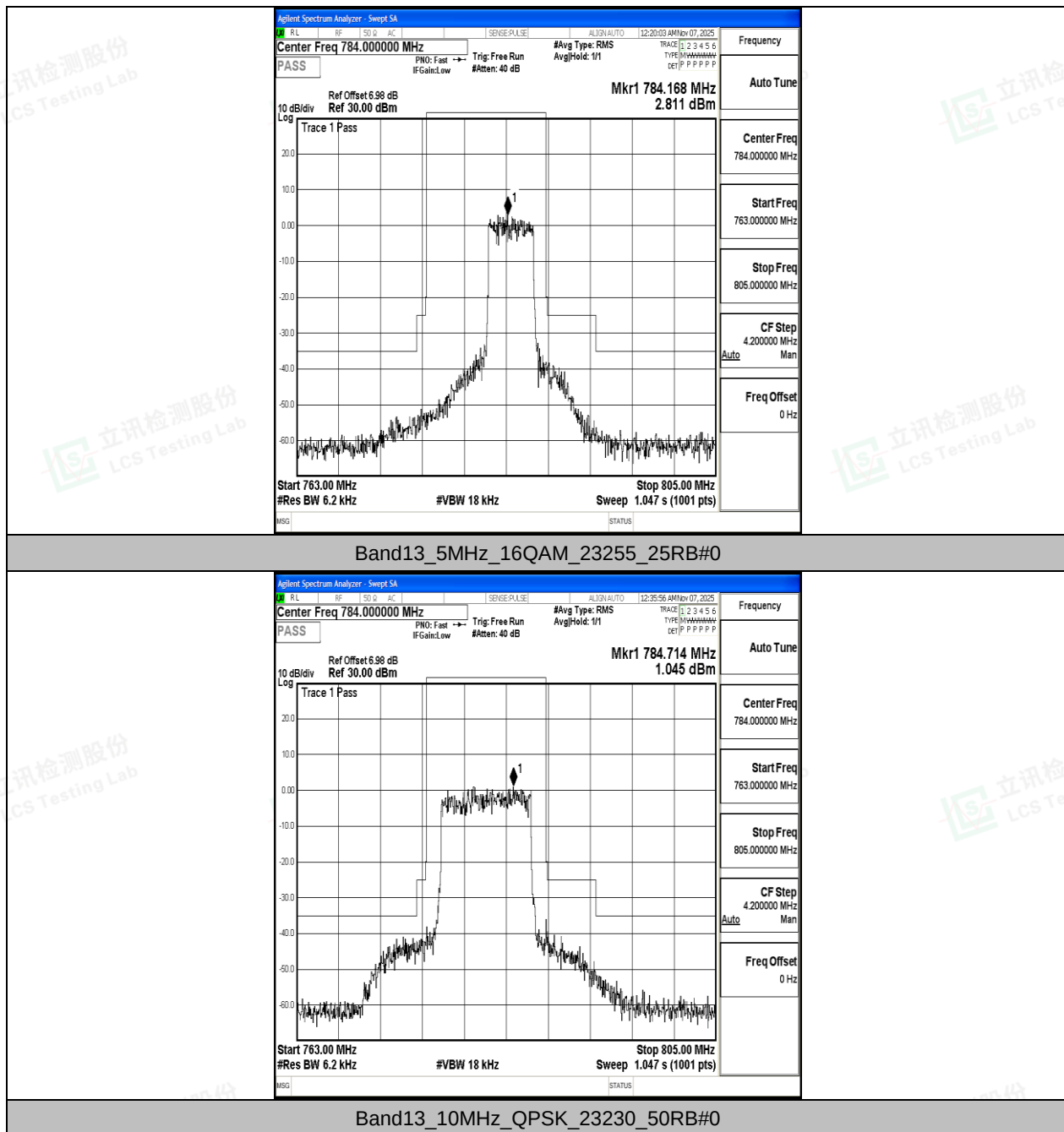
Test Result

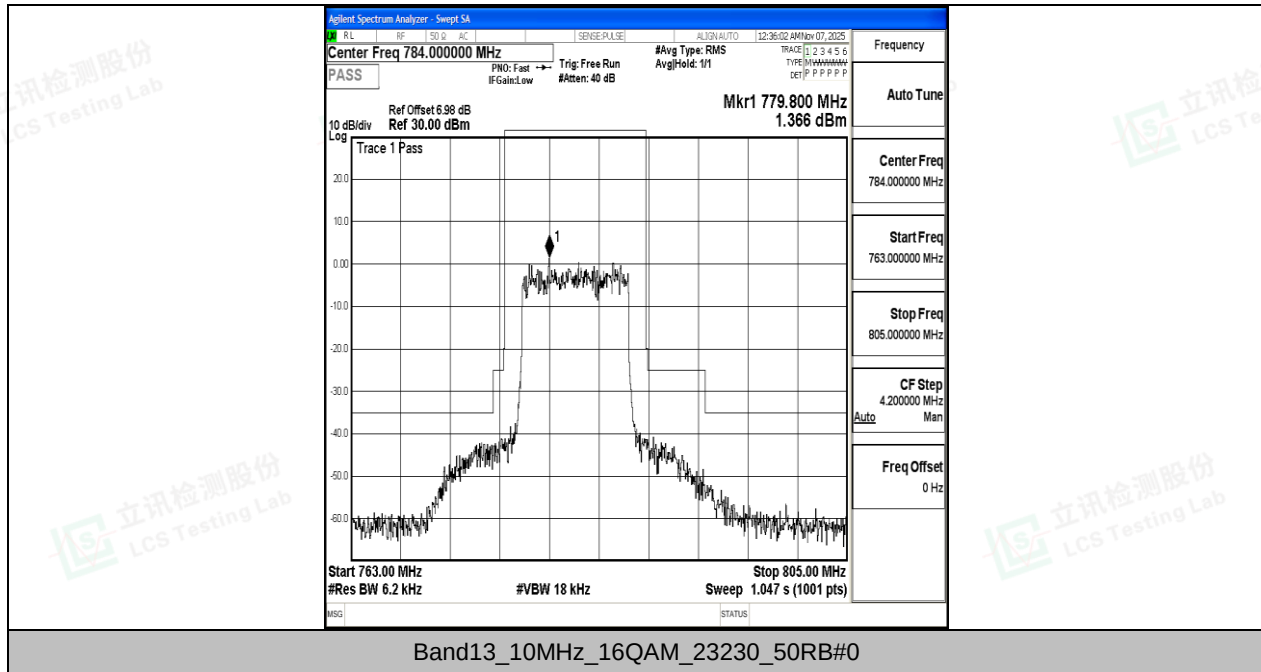
Band	Bandwidth	Modulation	Channel	RB Configuration	Peak Frequency	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	774.93	-39.24	PASS
Band13	5MHz	16QAM	23205	25RB#0	774.63	-38.33	PASS
Band13	5MHz	QPSK	23255	25RB#0	788.24	-36.25	PASS
Band13	5MHz	16QAM	23255	25RB#0	788.28	-38.27	PASS
Band13	10MHz	QPSK	23230	50RB#0	773.71	-40.97	PASS
Band13	10MHz	16QAM	23230	50RB#0	774.09	-42.04	PASS

Test Graphs











M.5 Conducted Spurious Emission

Test Result

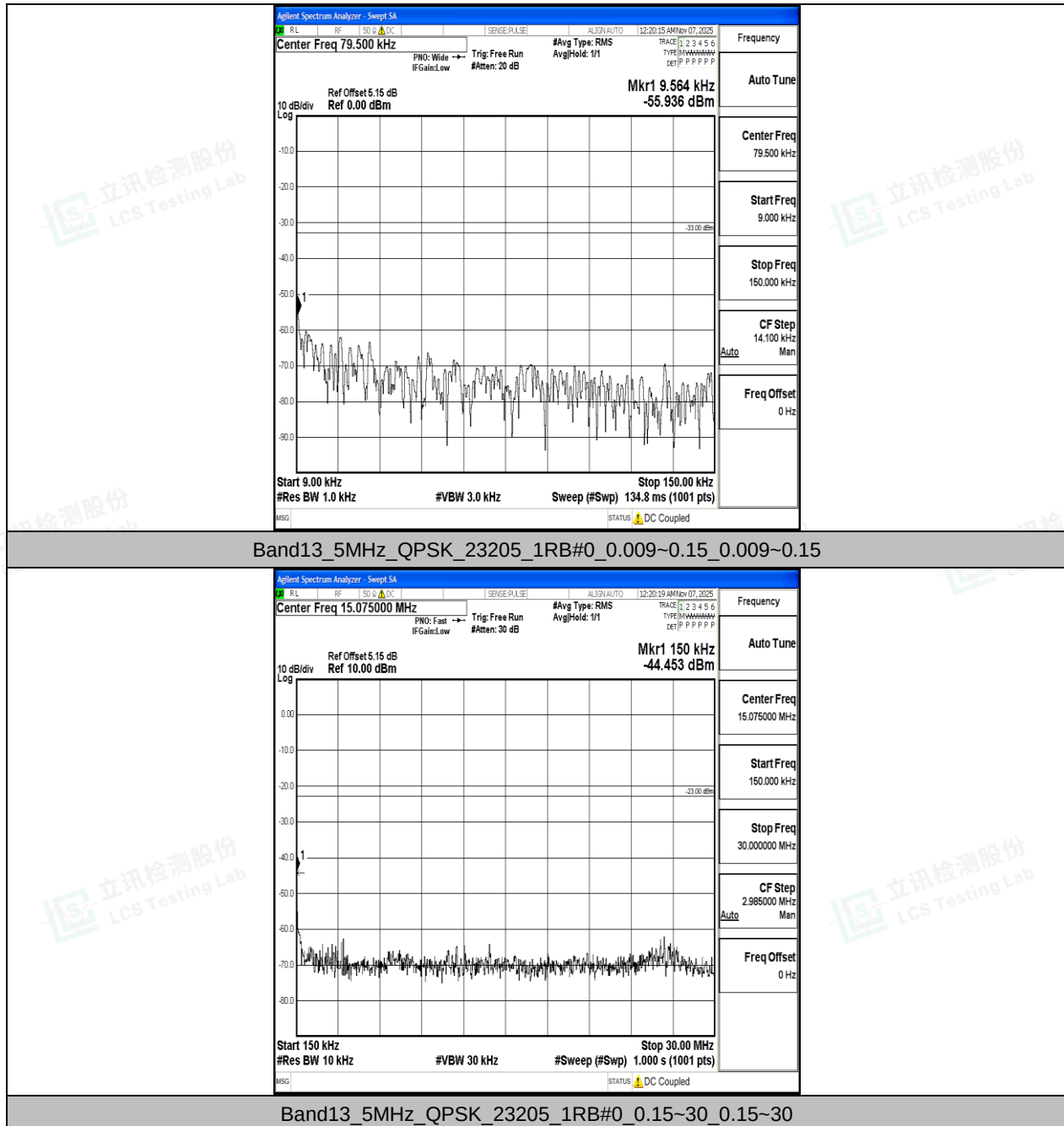
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	0.009~0.15	-55.94	PASS
Band13	5MHz	QPSK	23205	1RB#0	0.15~30	-44.45	PASS
Band13	5MHz	QPSK	23205	1RB#0	30~1000	-48.58	PASS
Band13	5MHz	QPSK	23205	1RB#0	1000~3000	-37.28	PASS
Band13	5MHz	QPSK	23205	1RB#0	3000~10000	-35.07	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.009~0.15	-57.91	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.15~30	-46.96	PASS
Band13	5MHz	16QAM	23205	1RB#0	30~1000	-46.91	PASS
Band13	5MHz	16QAM	23205	1RB#0	1000~3000	-37.82	PASS
Band13	5MHz	16QAM	23205	1RB#0	3000~10000	-35.17	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.009~0.15	-57.48	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.15~30	-45.78	PASS
Band13	5MHz	QPSK	23230	1RB#0	30~1000	-46.89	PASS
Band13	5MHz	QPSK	23230	1RB#0	1000~3000	-36.33	PASS
Band13	5MHz	QPSK	23230	1RB#0	3000~10000	-35.65	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.009~0.15	-59.55	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.15~30	-46.02	PASS
Band13	5MHz	16QAM	23230	1RB#0	30~1000	-48.43	PASS
Band13	5MHz	16QAM	23230	1RB#0	1000~3000	-36.12	PASS
Band13	5MHz	16QAM	23230	1RB#0	3000~10000	-34.97	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.009~0.15	-54.59	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.15~30	-44.30	PASS
Band13	5MHz	QPSK	23255	1RB#0	30~1000	-46.97	PASS
Band13	5MHz	QPSK	23255	1RB#0	1000~3000	-36.34	PASS
Band13	5MHz	QPSK	23255	1RB#0	3000~10000	-34.52	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.009~0.15	-55.20	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.15~30	-47.20	PASS
Band13	5MHz	16QAM	23255	1RB#0	30~1000	-41.28	PASS
Band13	5MHz	16QAM	23255	1RB#0	1000~3000	-35.70	PASS
Band13	5MHz	16QAM	23255	1RB#0	3000~10000	-35.88	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.009~0.15	-57.92	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.15~30	-47.57	PASS
Band13	10MHz	QPSK	23230	1RB#0	30~1000	-52.57	PASS
Band13	10MHz	QPSK	23230	1RB#0	1000~3000	-35.69	PASS
Band13	10MHz	QPSK	23230	1RB#0	3000~10000	-35.28	PASS
Band13	10MHz	16QAM	23230	1RB#0	0.009~0.15	-55.47	PASS



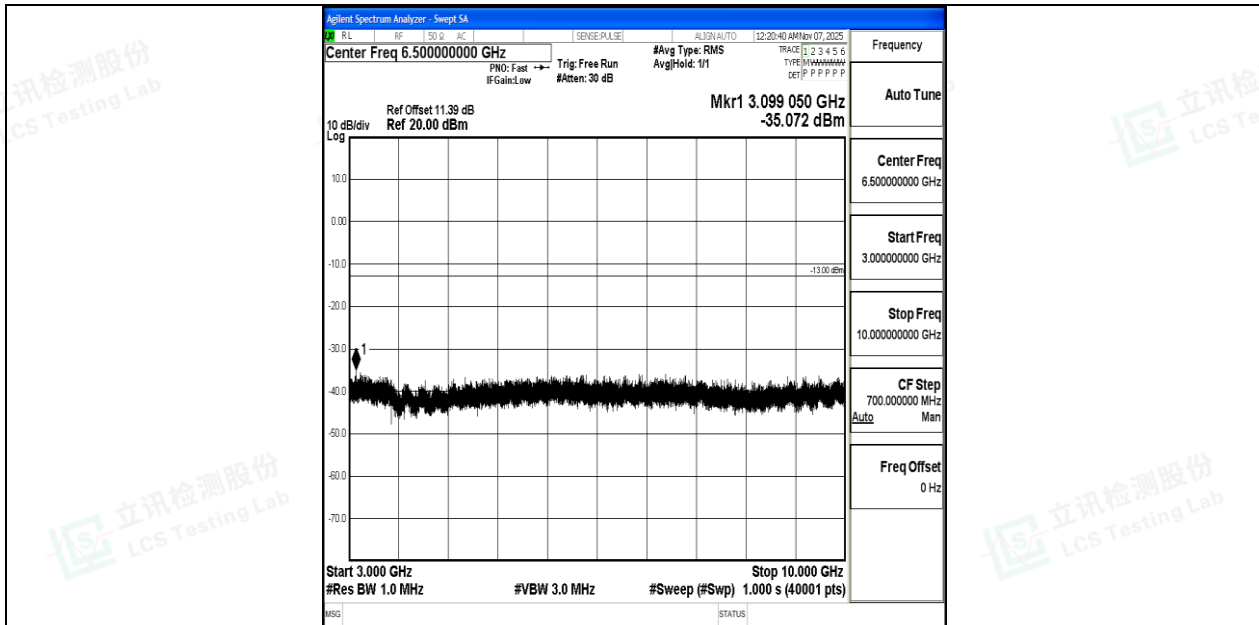


Band13	10MHz	16QAM	23230	1RB#0	0.15~30	-47.41	PASS
Band13	10MHz	16QAM	23230	1RB#0	30~1000	-52.20	PASS
Band13	10MHz	16QAM	23230	1RB#0	1000~3000	-36.79	PASS
Band13	10MHz	16QAM	23230	1RB#0	3000~10000	-34.38	PASS

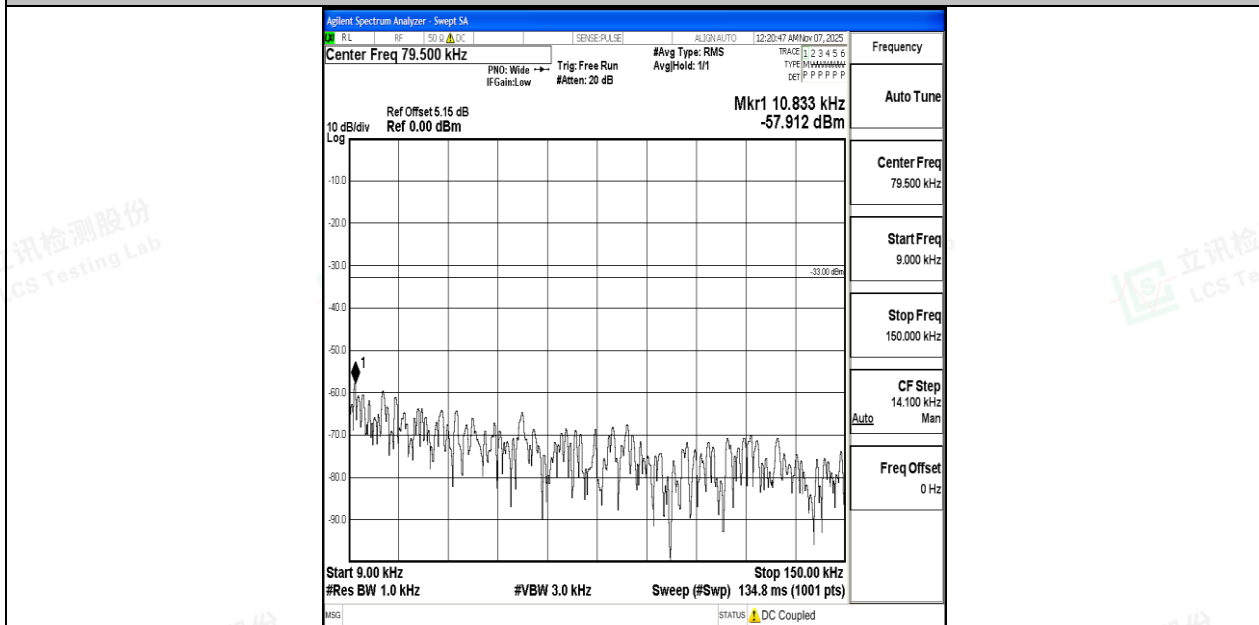
Test Graphs





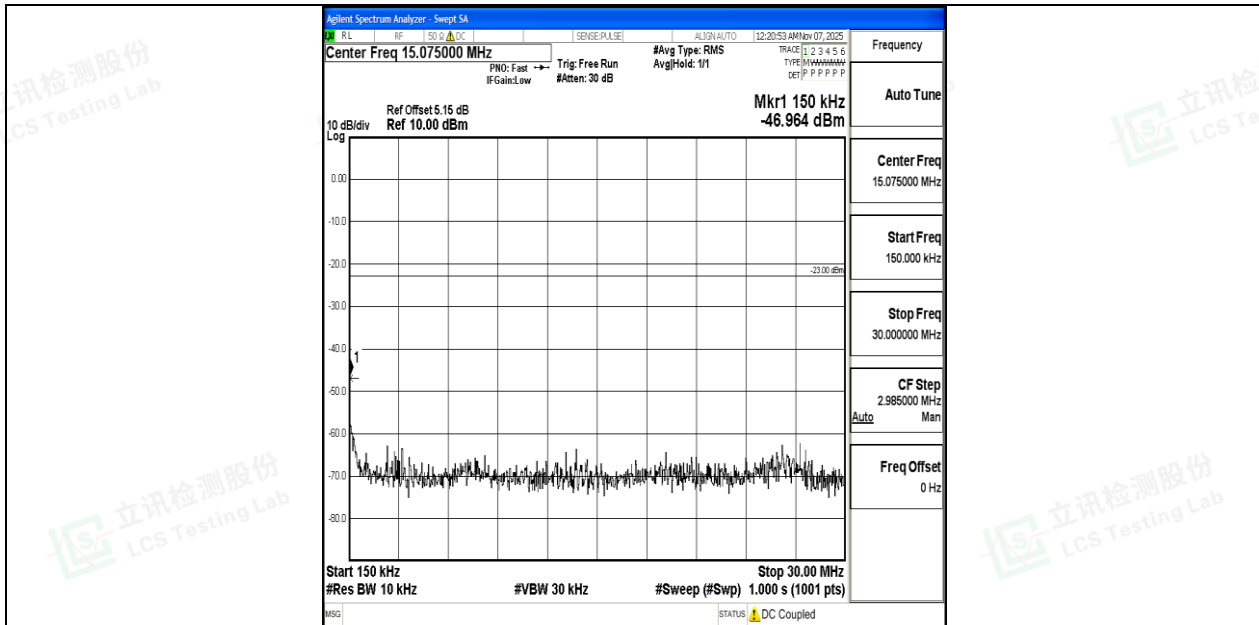


Band13_5MHz_QPSK_23205_1RB#0_3000~10000_3000~10000

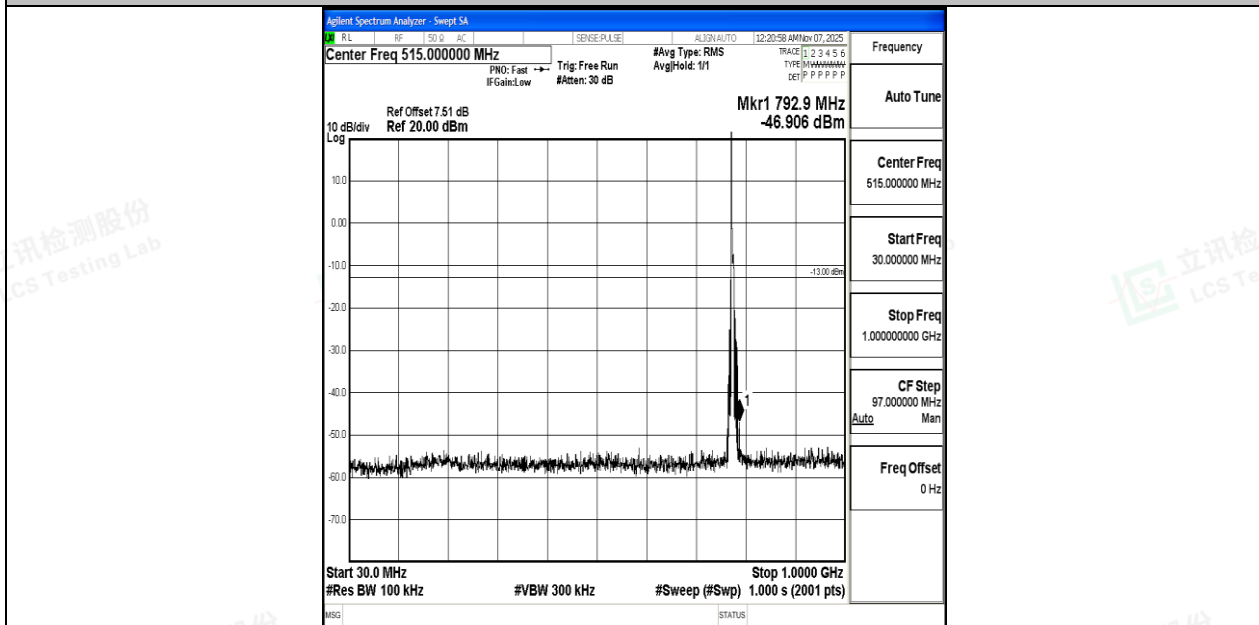


Band13_5MHz_16QAM_23205_1RB#0_0.009~0.15_0.009~0.15



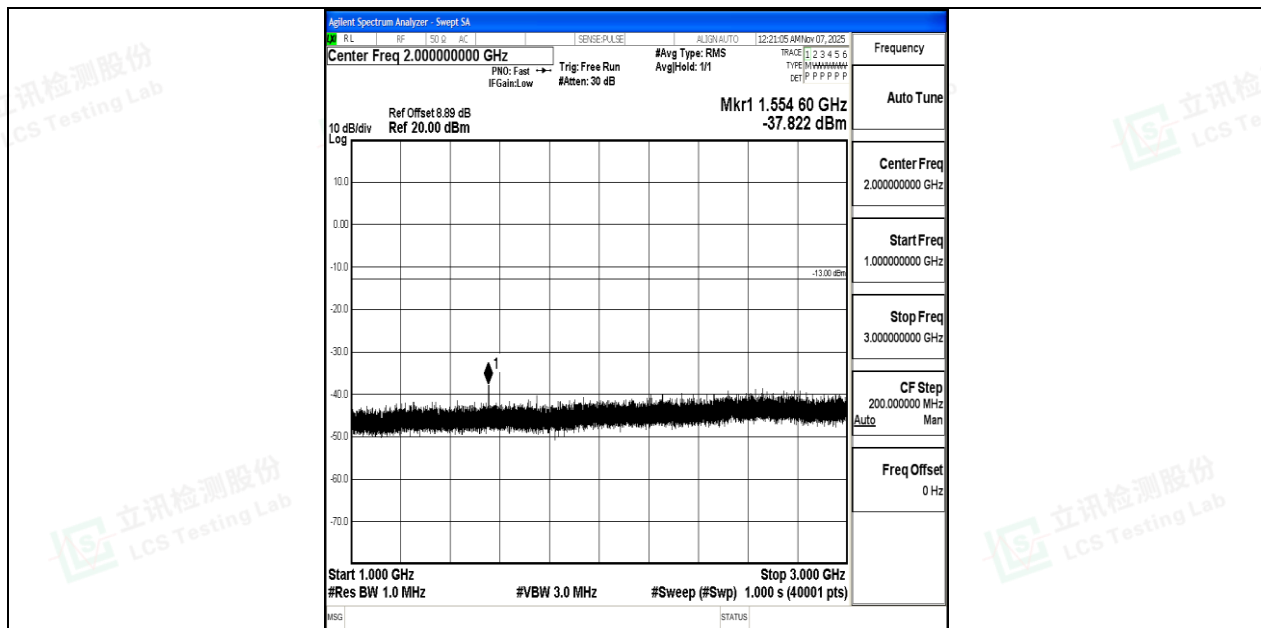


Band13_5MHz_16QAM_23205_1RB#0_0.15~30_0.15~30

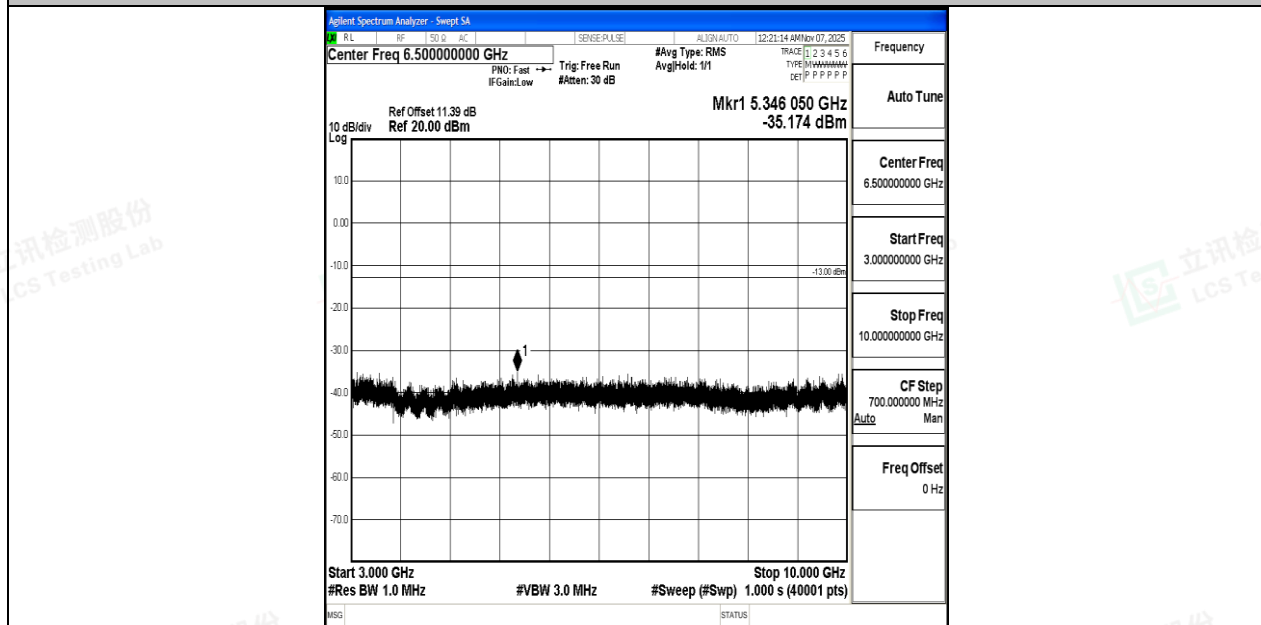


Band13_5MHz_16QAM_23205_1RB#0_30~1000_30~1000



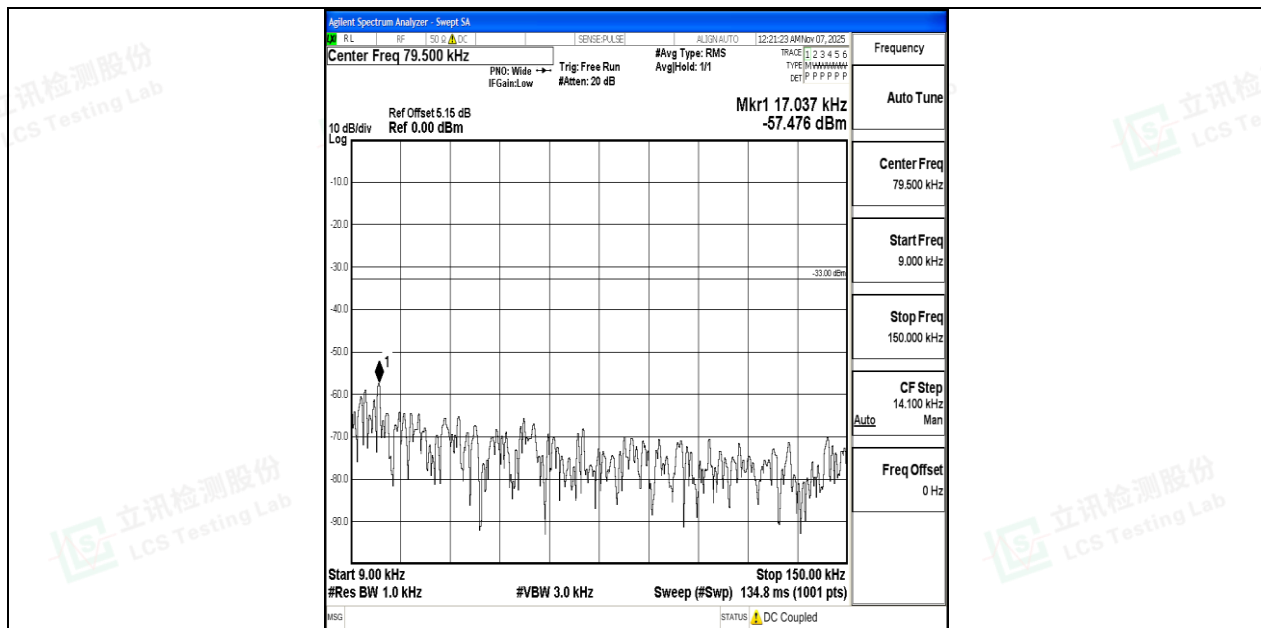


Band13_5MHz_16QAM_23205_1RB#0_1000~3000_1000~3000

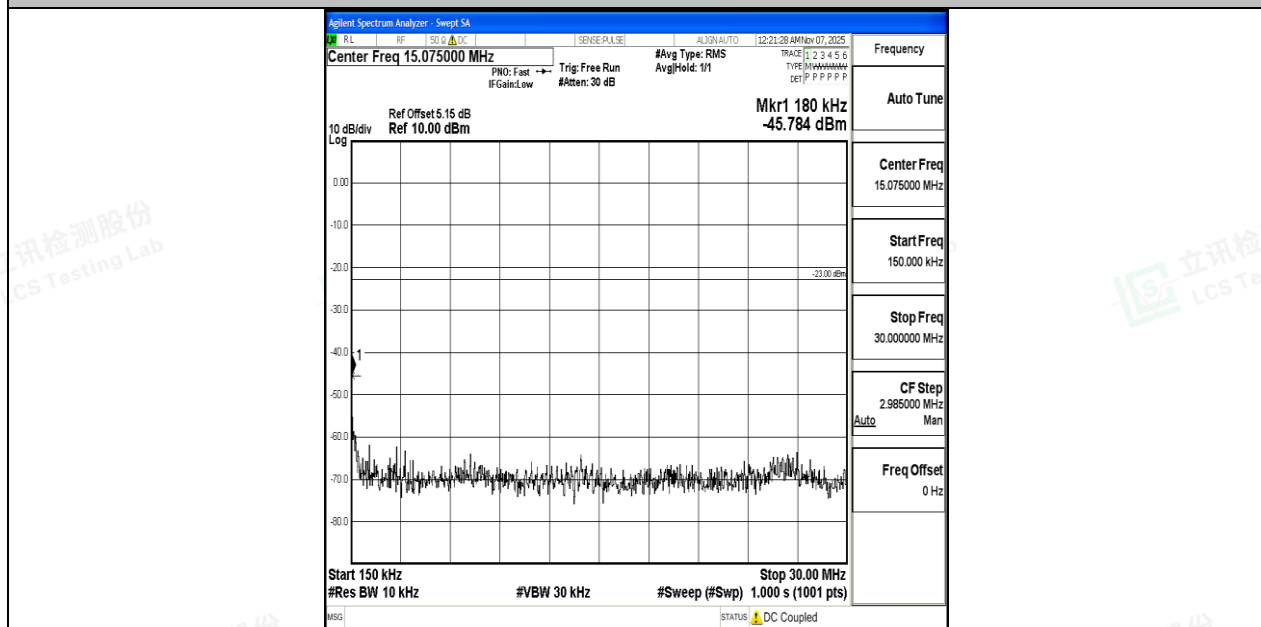


Band13_5MHz_16QAM_23205_1RB#0_3000~10000_3000~10000



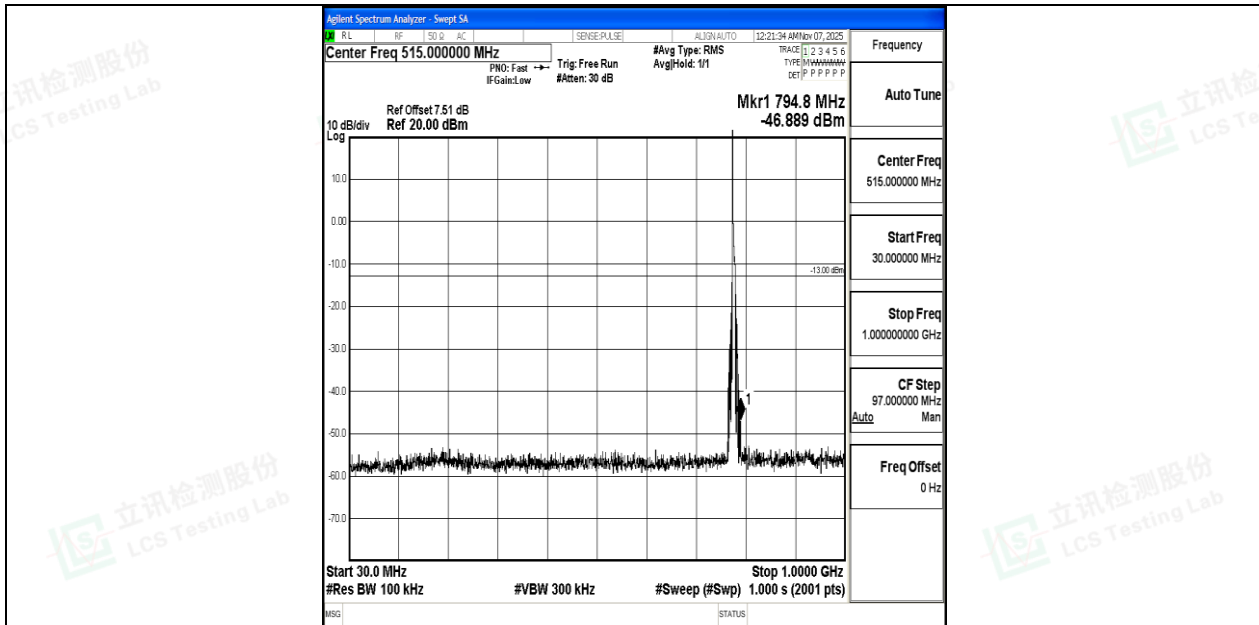


Band13_5MHz_QPSK_23230_1RB#0_0.009~0.15_0.009~0.15

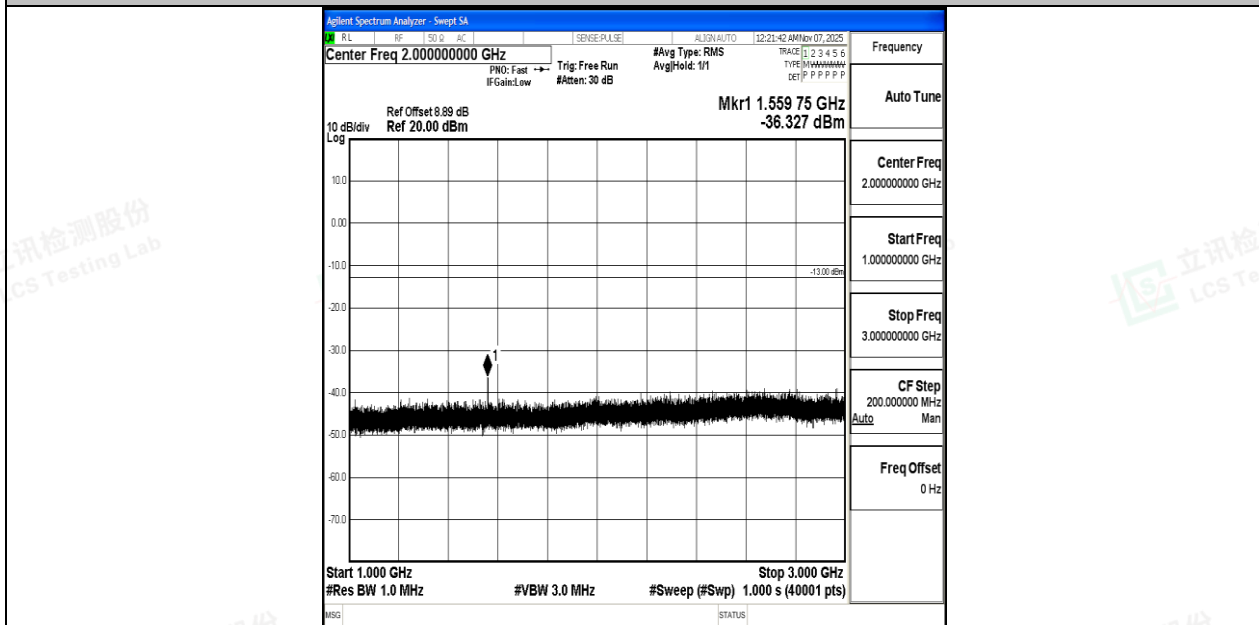


Band13_5MHz_QPSK_23230_1RB#0_0.15~30_0.15~30



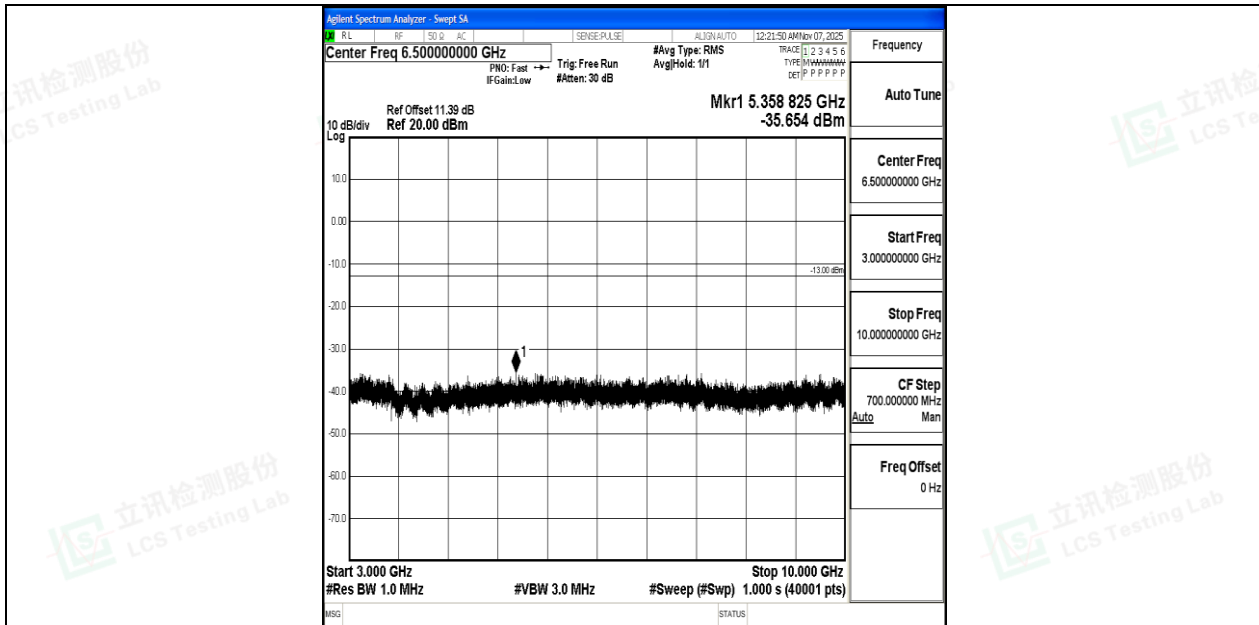


Band13_5MHz_QPSK_23230_1RB#0_30~1000_30~1000

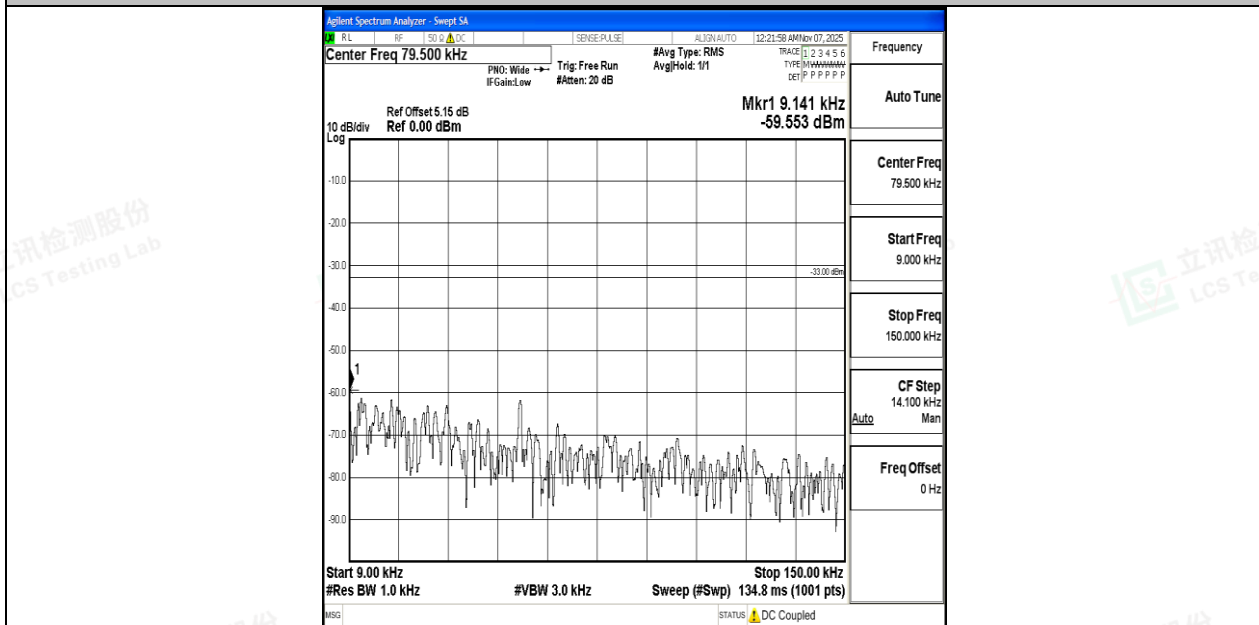


Band13_5MHz_QPSK_23230_1RB#0_1000~3000_1000~3000



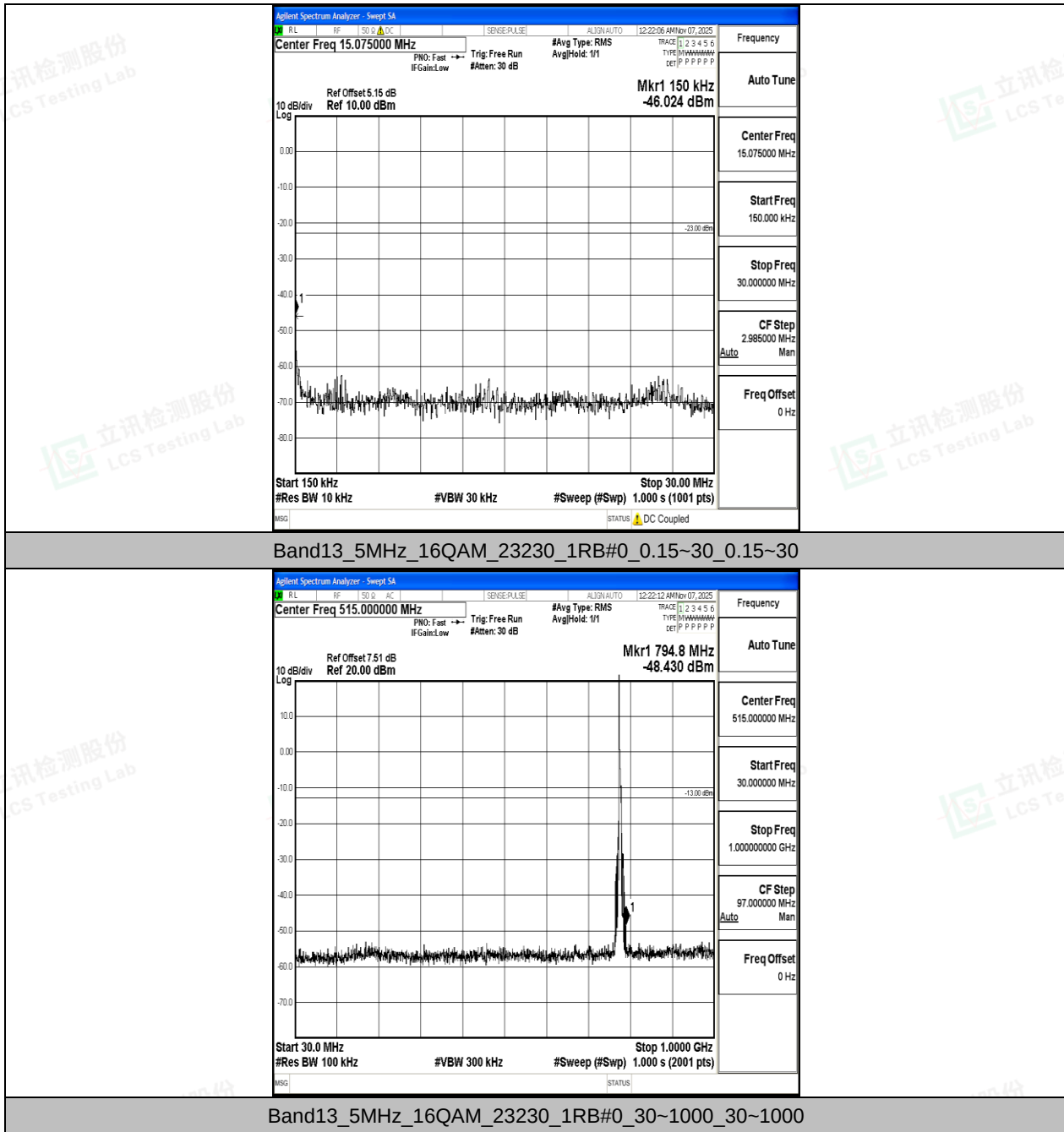


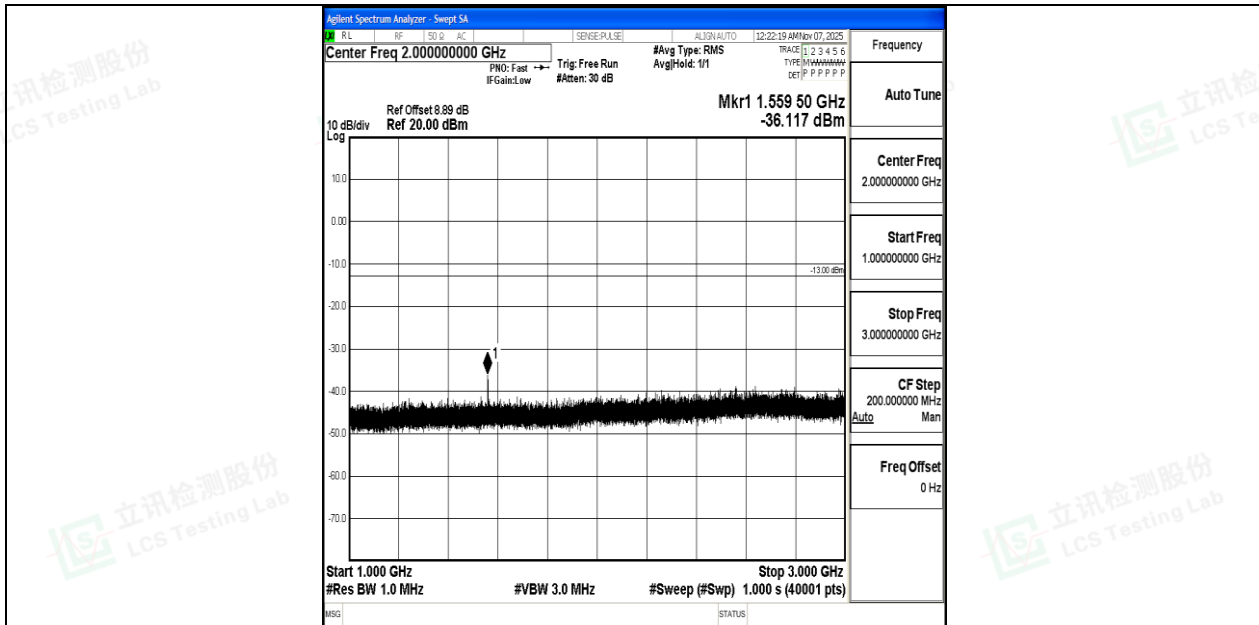
Band13_5MHz_QPSK_23230_1RB#0_3000~10000_3000~10000



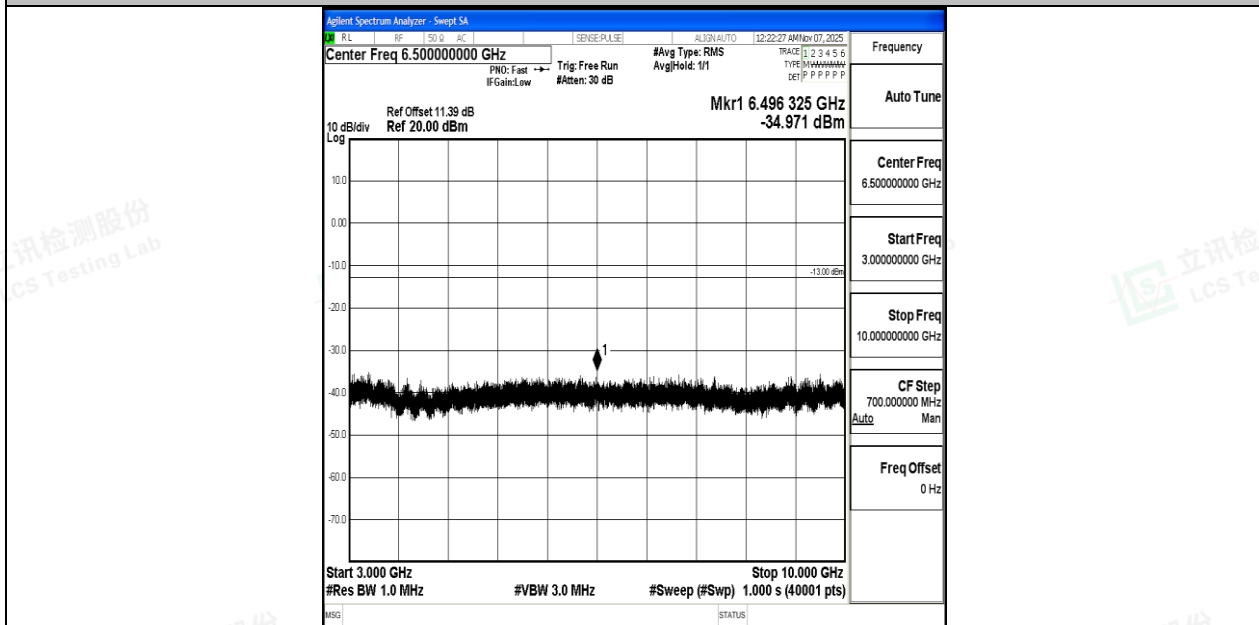
Band13_5MHz_16QAM_23230_1RB#0_0.009~0.15_0.009~0.15





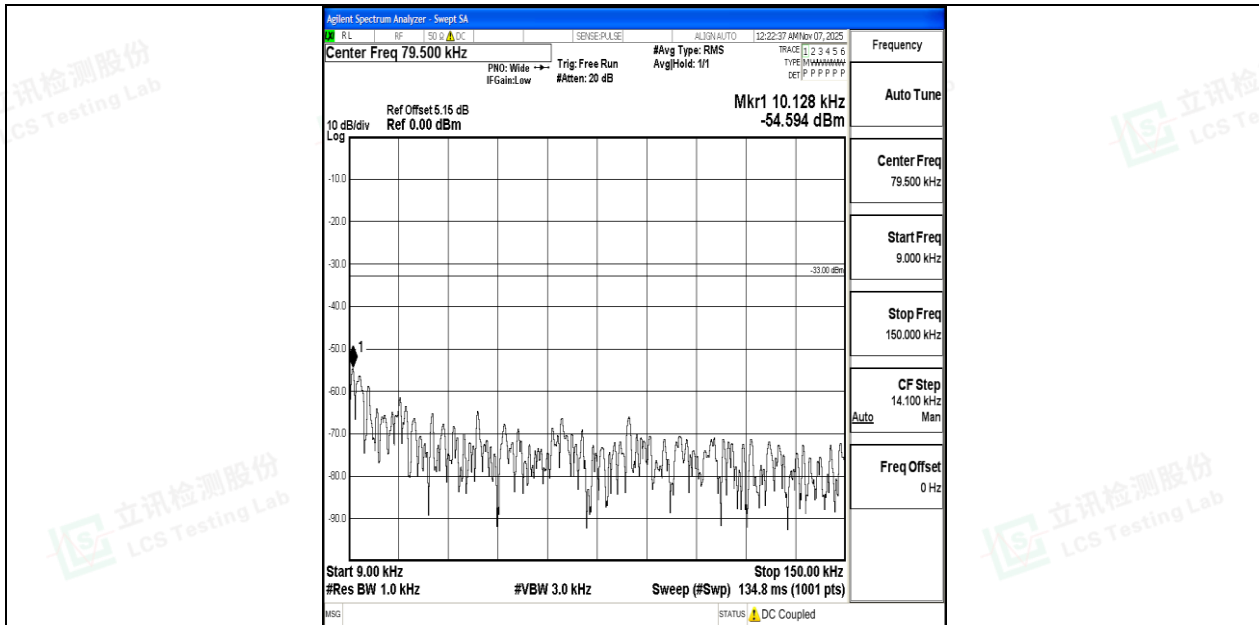


Band13_5MHz_16QAM_23230_1RB#0_1000~3000_1000~3000

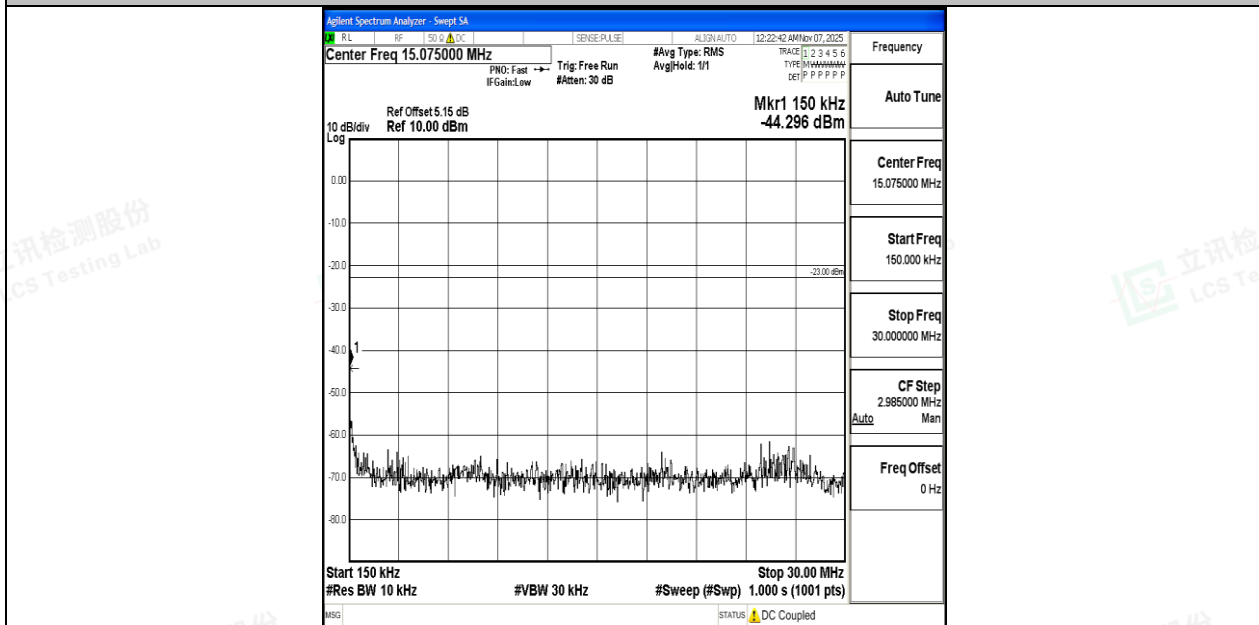


Band13_5MHz_16QAM_23230_1RB#0_3000~10000_3000~10000



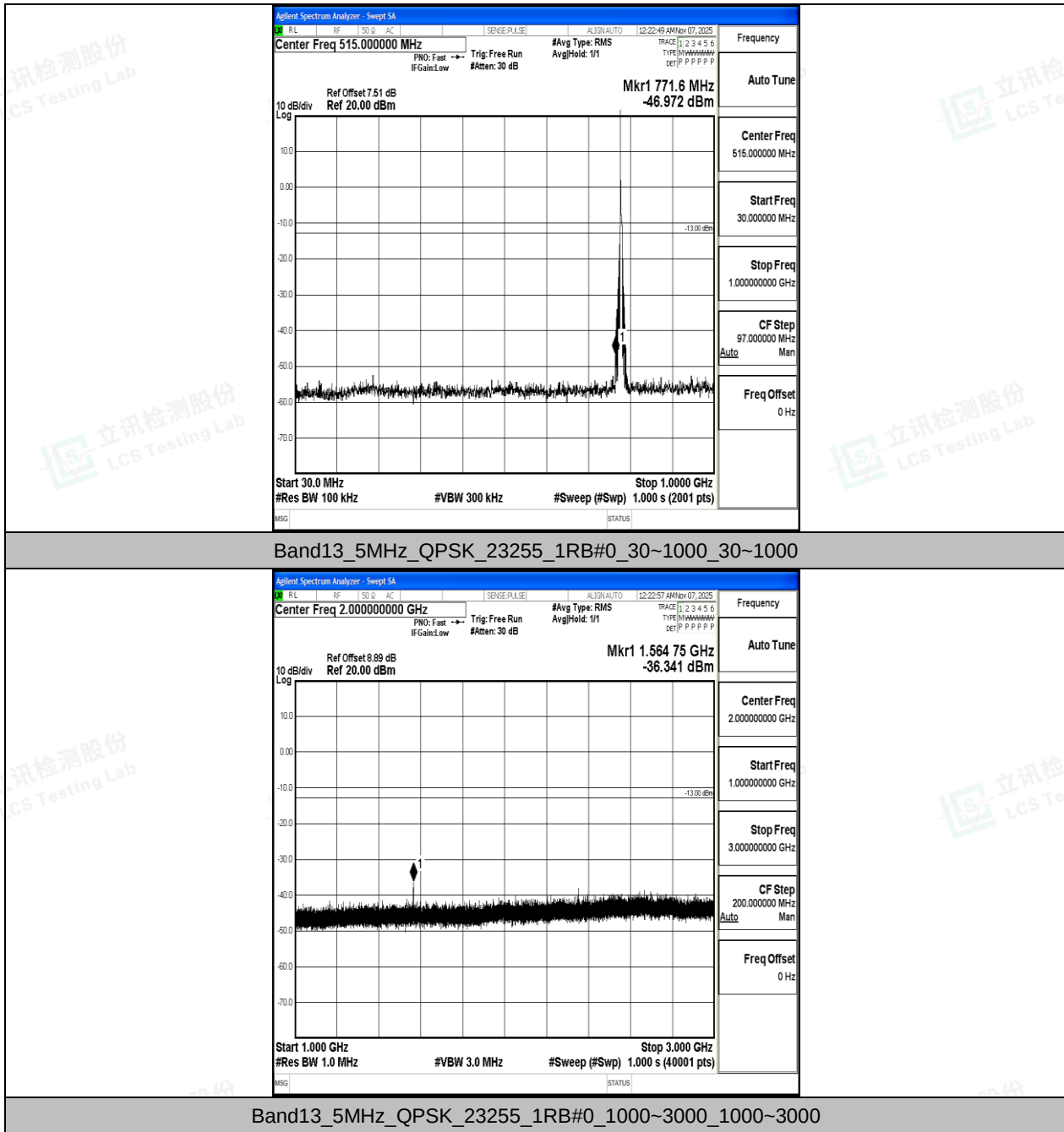


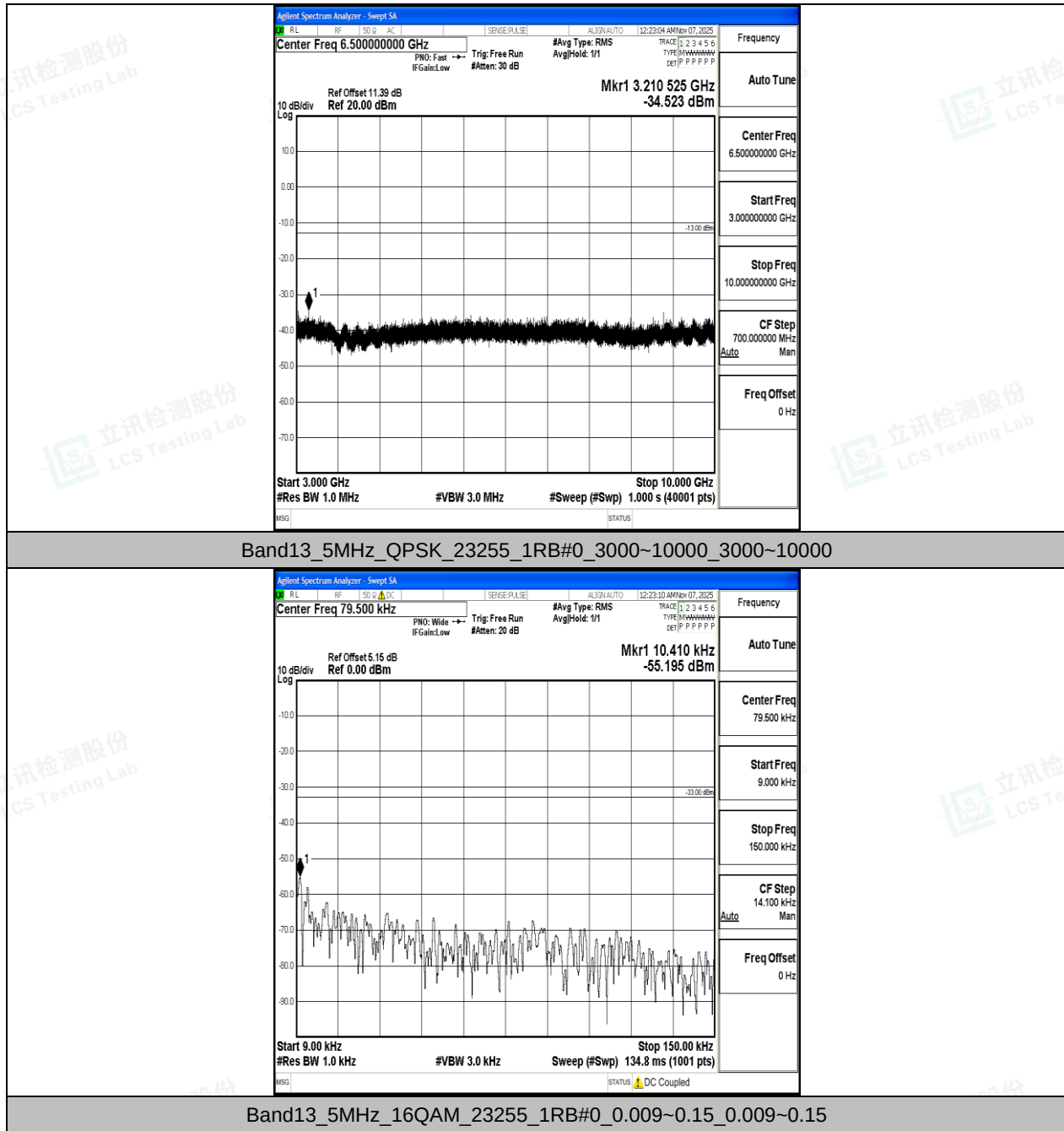
Band13_5MHz_QPSK_23255_1RB#0_0.009~0.15_0.009~0.15

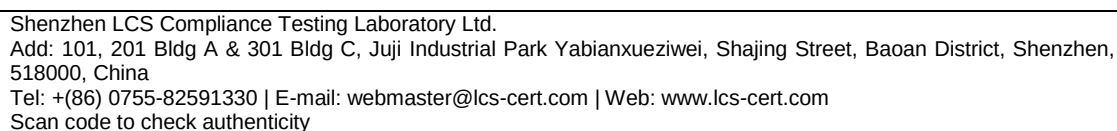
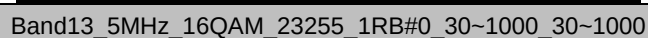
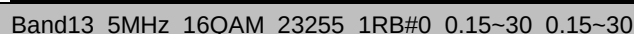
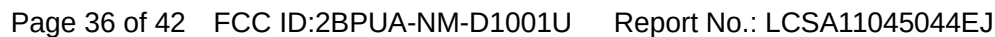


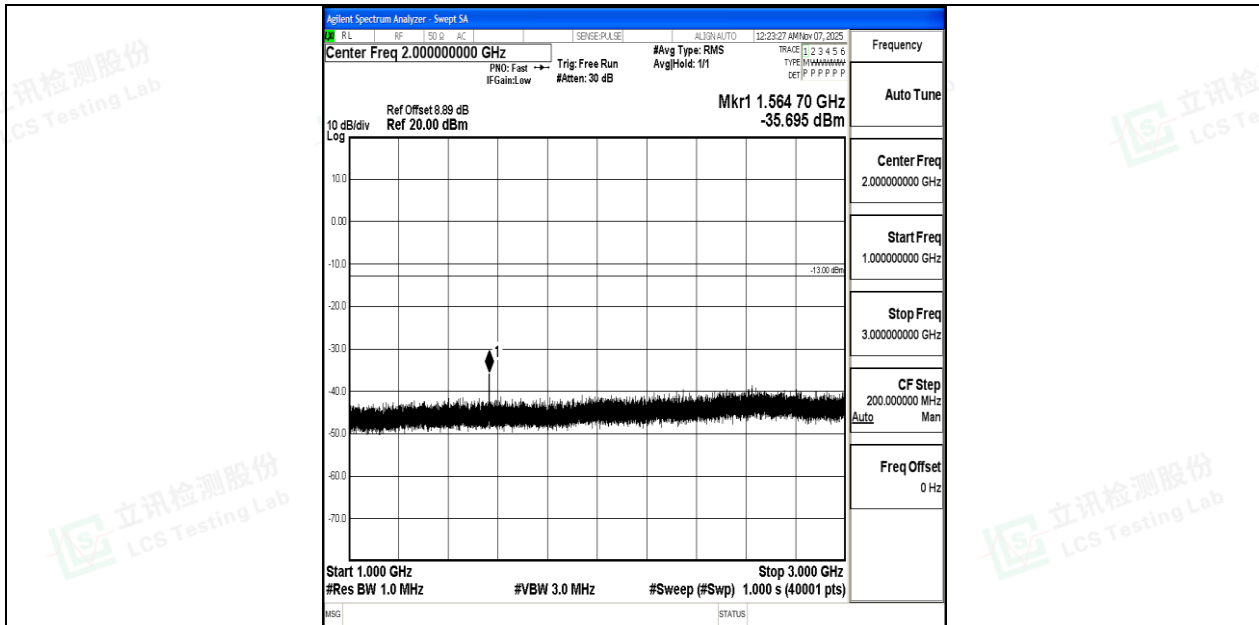
Band13_5MHz_QPSK_23255_1RB#0_0.15~30_0.15~30



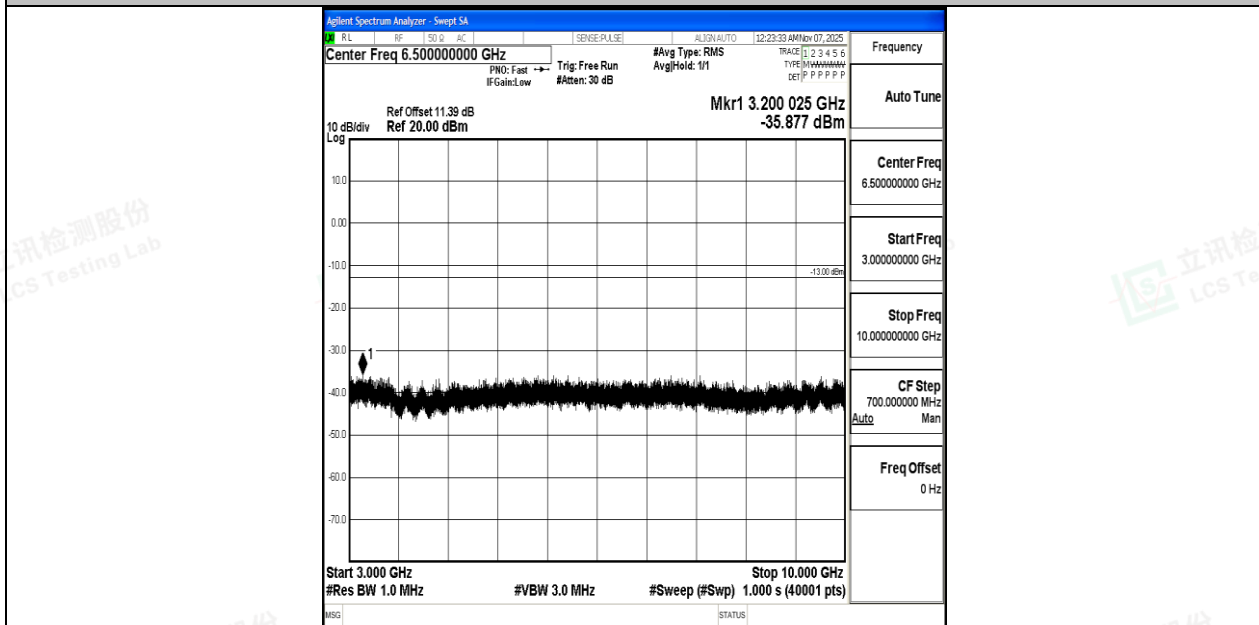








Band13_5MHz_16QAM_23255_1RB#0_1000~3000_1000~3000



Band13_5MHz_16QAM_23255_1RB#0_3000~10000_3000~10000

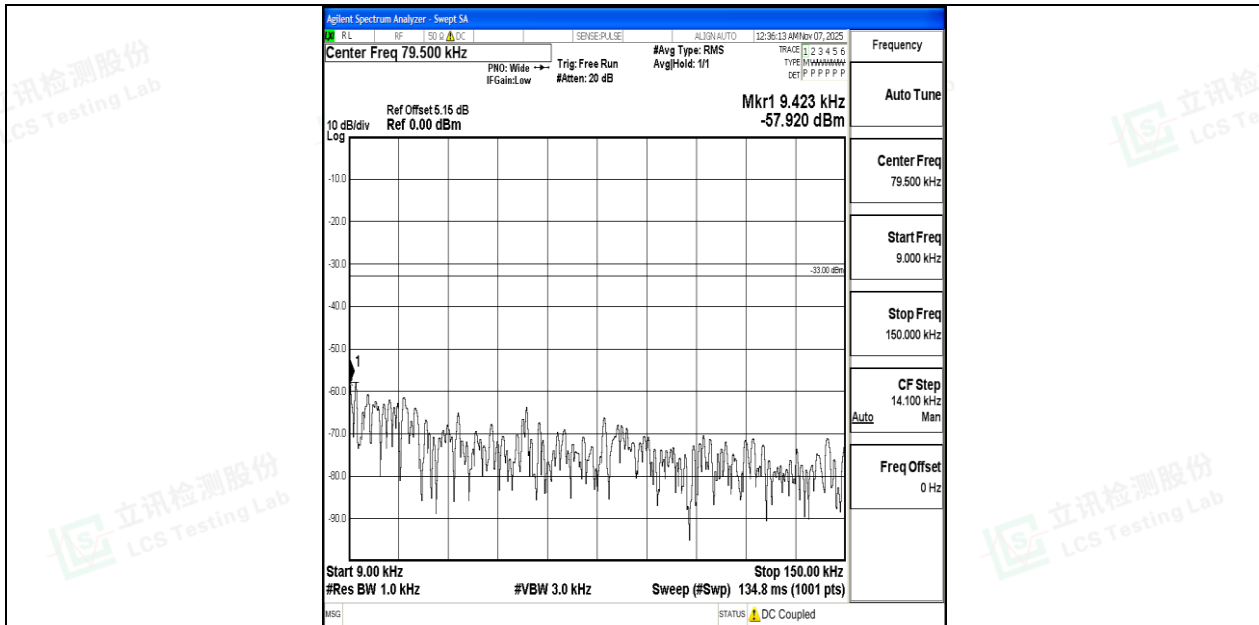


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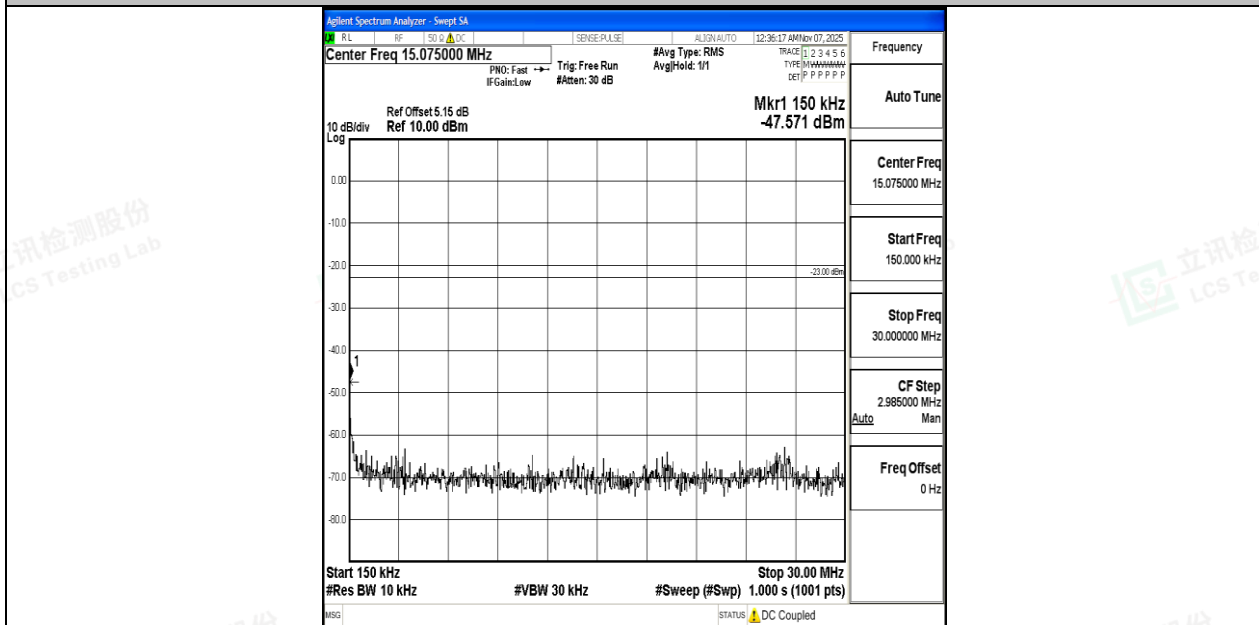
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

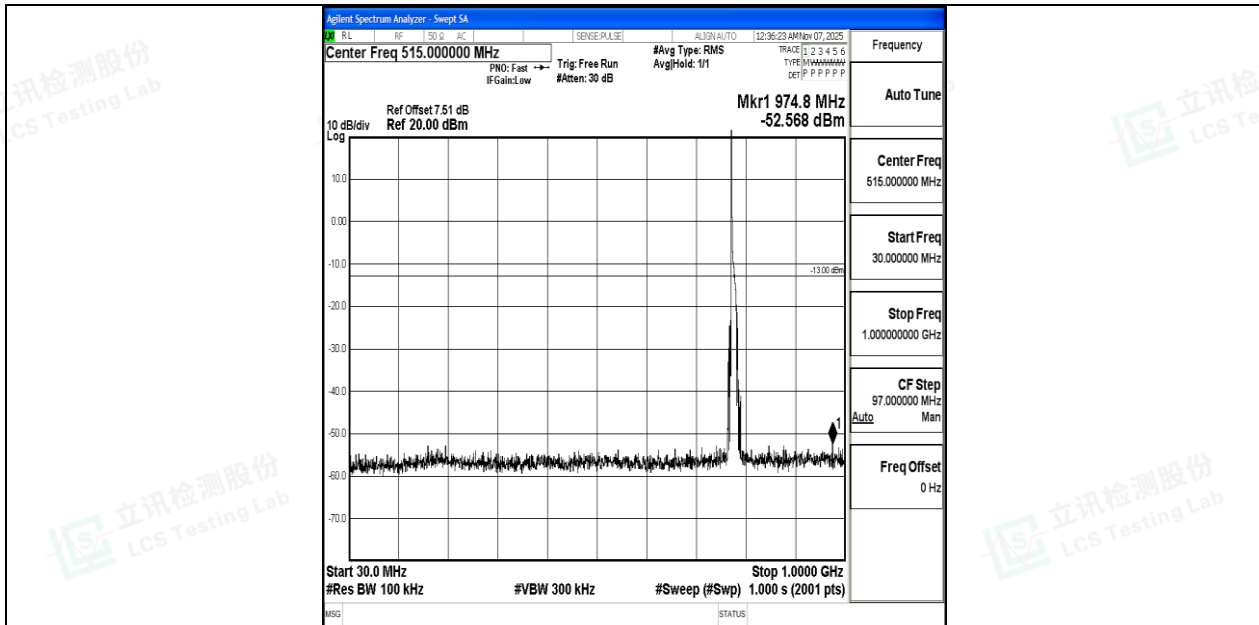


Band13_10MHz_QPSK_23230_1RB#0_0.009~0.15_0.009~0.15

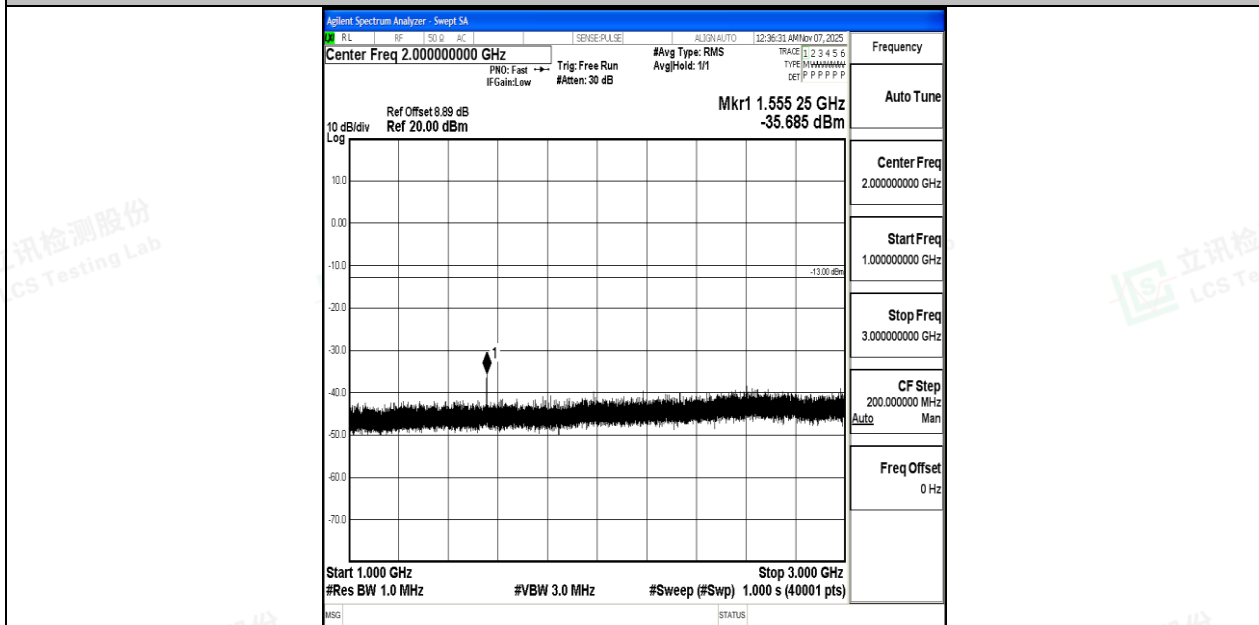


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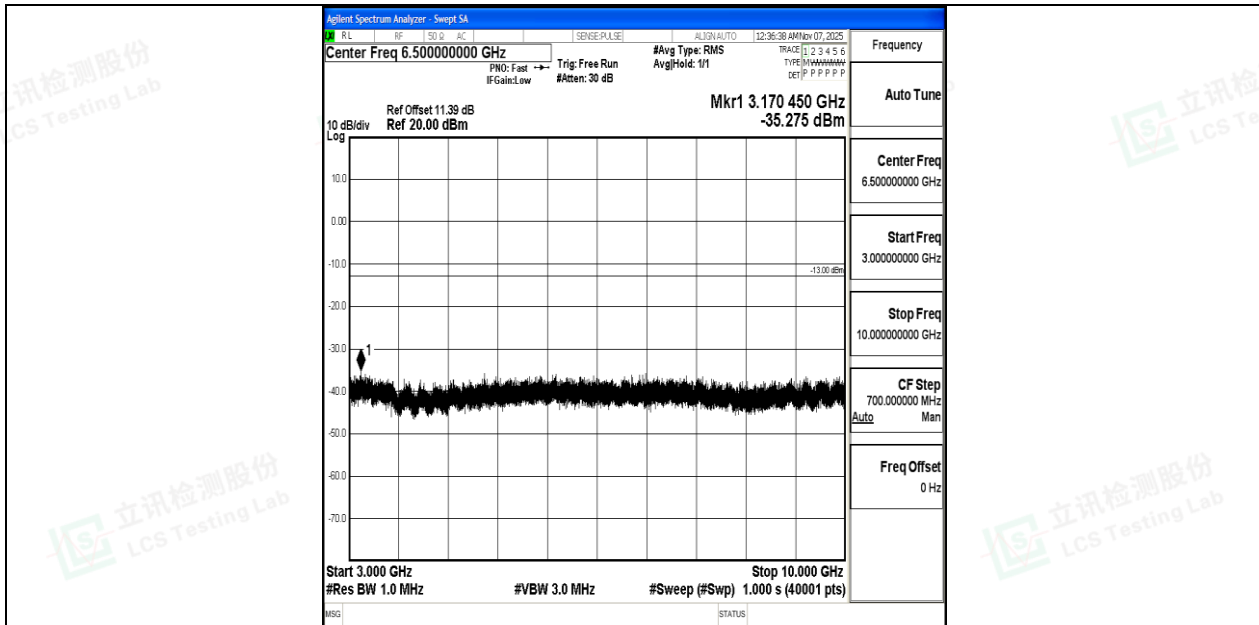


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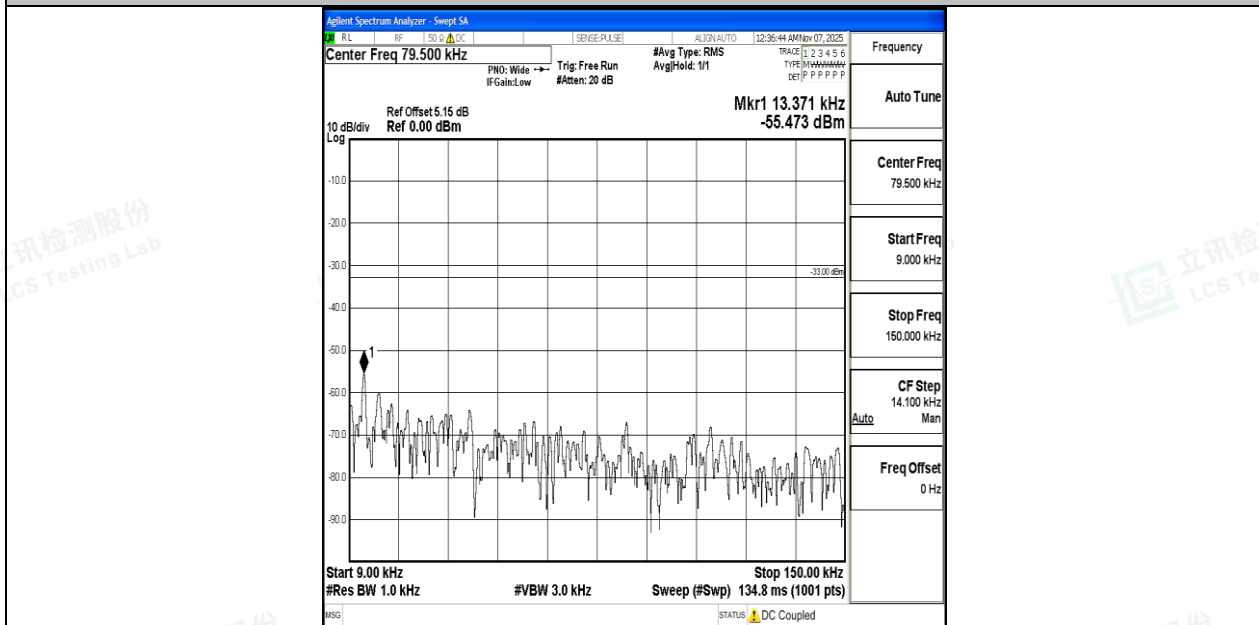


Band13_10MHz_QPSK_23230_1RB#0_1000~3000_1000~3000



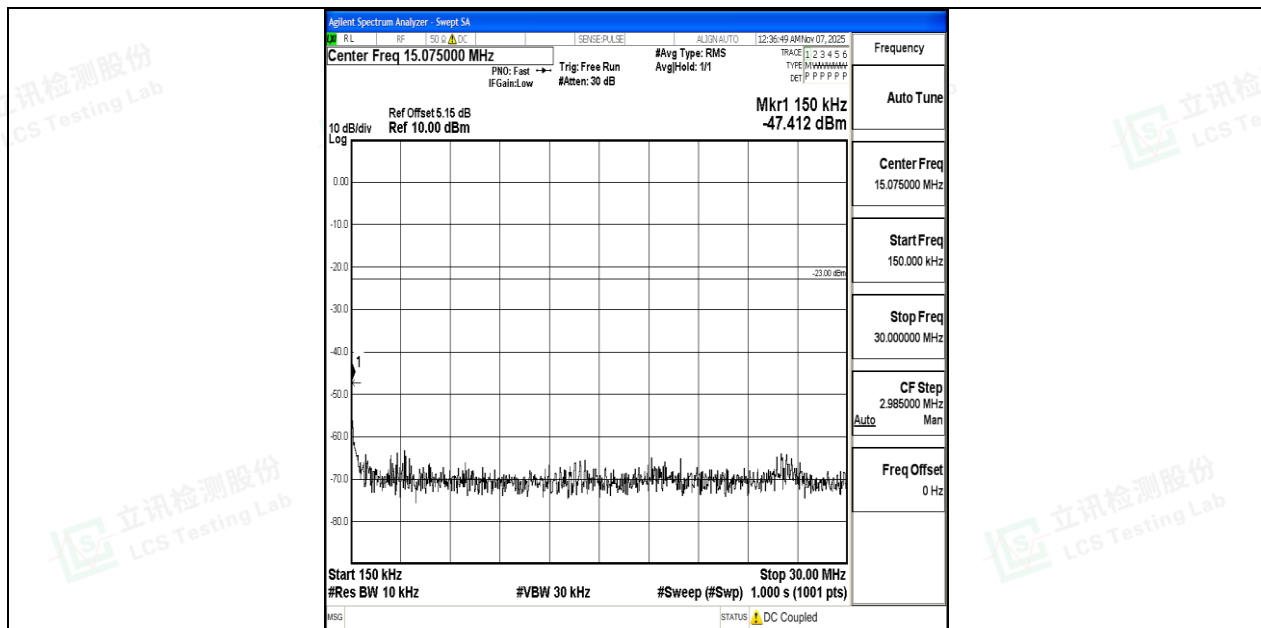


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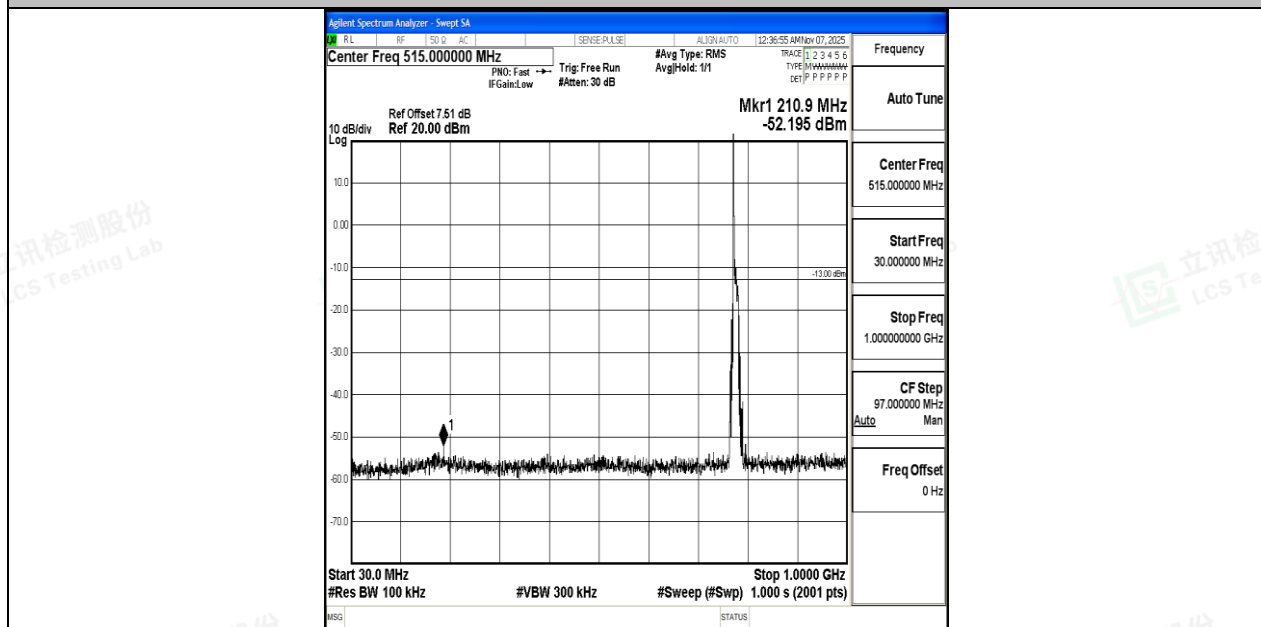


Band13_10MHz_16QAM_23230_1RB#0_0.009~0.15_0.009~0.15



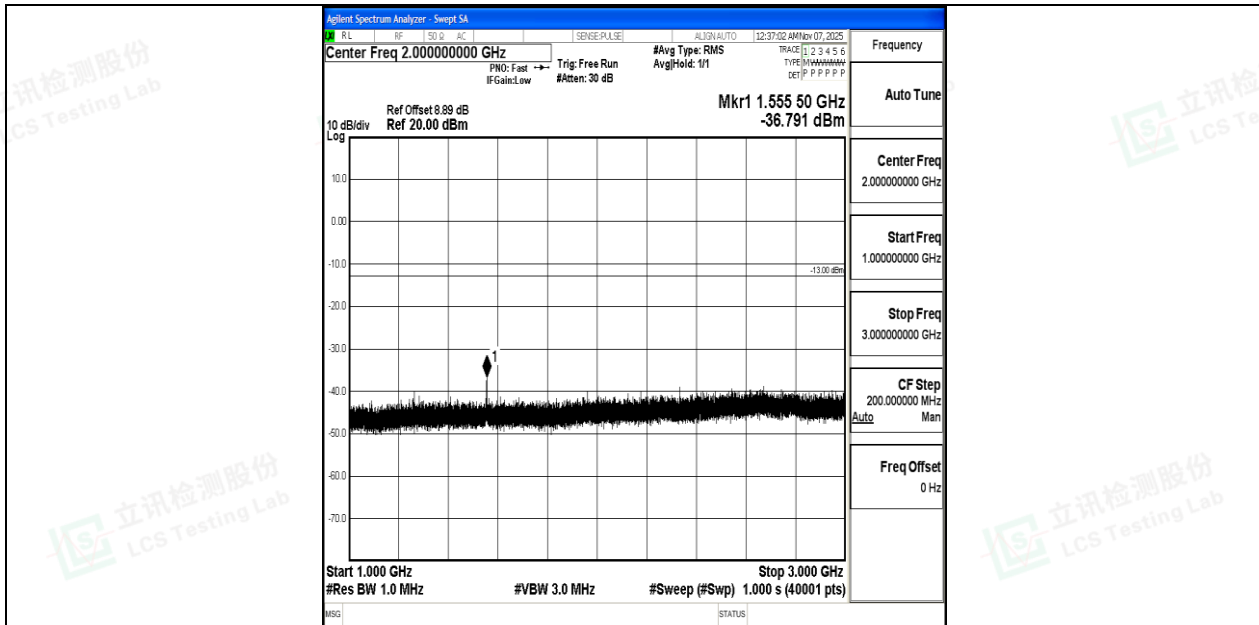


Band13_10MHz_16QAM_23230_1RB#0_0.15~30_0.15~30

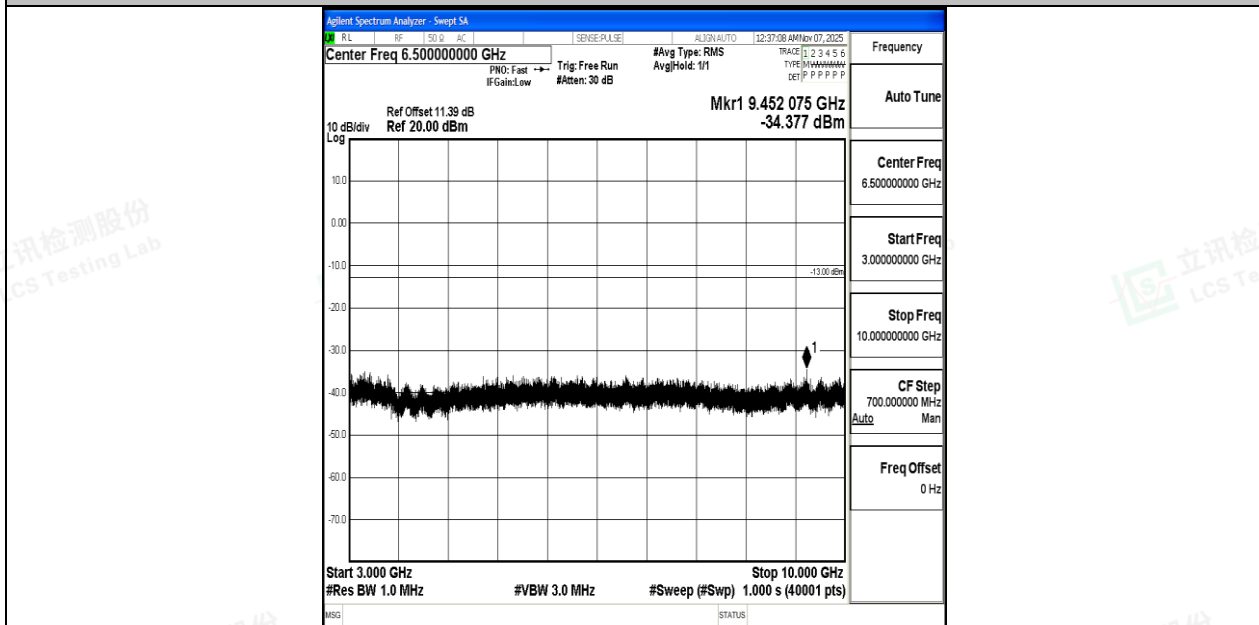


Band13_10MHz_16QAM_23230_1RB#0_30~1000_30~1000





Band13_10MHz_16QAM_23230_1RB#0_1000~3000_1000~3000



Band13_10MHz_16QAM_23230_1RB#0_3000~10000_3000~10000

