



Appendix H: Test Data for E-UTRA Band 13

Product Name: Smartphone

Test Model: ZG65

Environmental Conditions

Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Nick Peng
Supervised by:	Ling Zhu





H.1 Conducted Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	23.05	PASS
Band13	5MHz	16QAM	23205	1RB#0	21.96	PASS
Band13	5MHz	QPSK	23205	1RB#12	23.17	PASS
Band13	5MHz	16QAM	23205	1RB#12	22.06	PASS
Band13	5MHz	QPSK	23205	1RB#24	23.01	PASS
Band13	5MHz	16QAM	23205	1RB#24	22.00	PASS
Band13	5MHz	QPSK	23205	12RB#0	22.10	PASS
Band13	5MHz	16QAM	23205	12RB#0	21.08	PASS
Band13	5MHz	QPSK	23205	12RB#6	22.13	PASS
Band13	5MHz	16QAM	23205	12RB#6	21.05	PASS
Band13	5MHz	QPSK	23205	12RB#13	22.09	PASS
Band13	5MHz	16QAM	23205	12RB#13	21.04	PASS
Band13	5MHz	QPSK	23205	25RB#0	22.08	PASS
Band13	5MHz	16QAM	23205	25RB#0	21.08	PASS
Band13	5MHz	QPSK	23230	1RB#0	23.01	PASS
Band13	5MHz	16QAM	23230	1RB#0	22.13	PASS
Band13	5MHz	QPSK	23230	1RB#12	23.14	PASS
Band13	5MHz	16QAM	23230	1RB#12	22.29	PASS
Band13	5MHz	QPSK	23230	1RB#24	23.01	PASS
Band13	5MHz	16QAM	23230	1RB#24	22.12	PASS
Band13	5MHz	QPSK	23230	12RB#0	22.06	PASS
Band13	5MHz	16QAM	23230	12RB#0	21.05	PASS
Band13	5MHz	QPSK	23230	12RB#6	22.05	PASS
Band13	5MHz	16QAM	23230	12RB#6	21.05	PASS
Band13	5MHz	QPSK	23230	12RB#13	22.07	PASS
Band13	5MHz	16QAM	23230	12RB#13	21.14	PASS
Band13	5MHz	QPSK	23230	25RB#0	22.05	PASS
Band13	5MHz	16QAM	23230	25RB#0	21.07	PASS
Band13	5MHz	QPSK	23255	1RB#0	23.05	PASS
Band13	5MHz	16QAM	23255	1RB#0	22.03	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.18	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.11	PASS
Band13	5MHz	QPSK	23255	1RB#24	22.94	PASS
Band13	5MHz	16QAM	23255	1RB#24	21.86	PASS
Band13	5MHz	QPSK	23255	12RB#0	21.97	PASS
Band13	5MHz	16QAM	23255	12RB#0	20.96	PASS



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 Scan code to check authenticity



Band13	5MHz	QPSK	23255	12RB#6	21.96	PASS
Band13	5MHz	16QAM	23255	12RB#6	20.96	PASS
Band13	5MHz	QPSK	23255	12RB#13	21.87	PASS
Band13	5MHz	16QAM	23255	12RB#13	20.88	PASS
Band13	5MHz	QPSK	23255	25RB#0	21.99	PASS
Band13	5MHz	16QAM	23255	25RB#0	20.98	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.08	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.19	PASS
Band13	10MHz	QPSK	23230	1RB#24	23.15	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.34	PASS
Band13	10MHz	QPSK	23230	1RB#49	22.96	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.03	PASS
Band13	10MHz	QPSK	23230	25RB#0	22.16	PASS
Band13	10MHz	16QAM	23230	25RB#0	21.12	PASS
Band13	10MHz	QPSK	23230	25RB#12	22.14	PASS
Band13	10MHz	16QAM	23230	25RB#12	21.14	PASS
Band13	10MHz	QPSK	23230	25RB#25	22.08	PASS
Band13	10MHz	16QAM	23230	25RB#25	21.06	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.08	PASS
Band13	10MHz	16QAM	23230	50RB#0	21.07	PASS



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

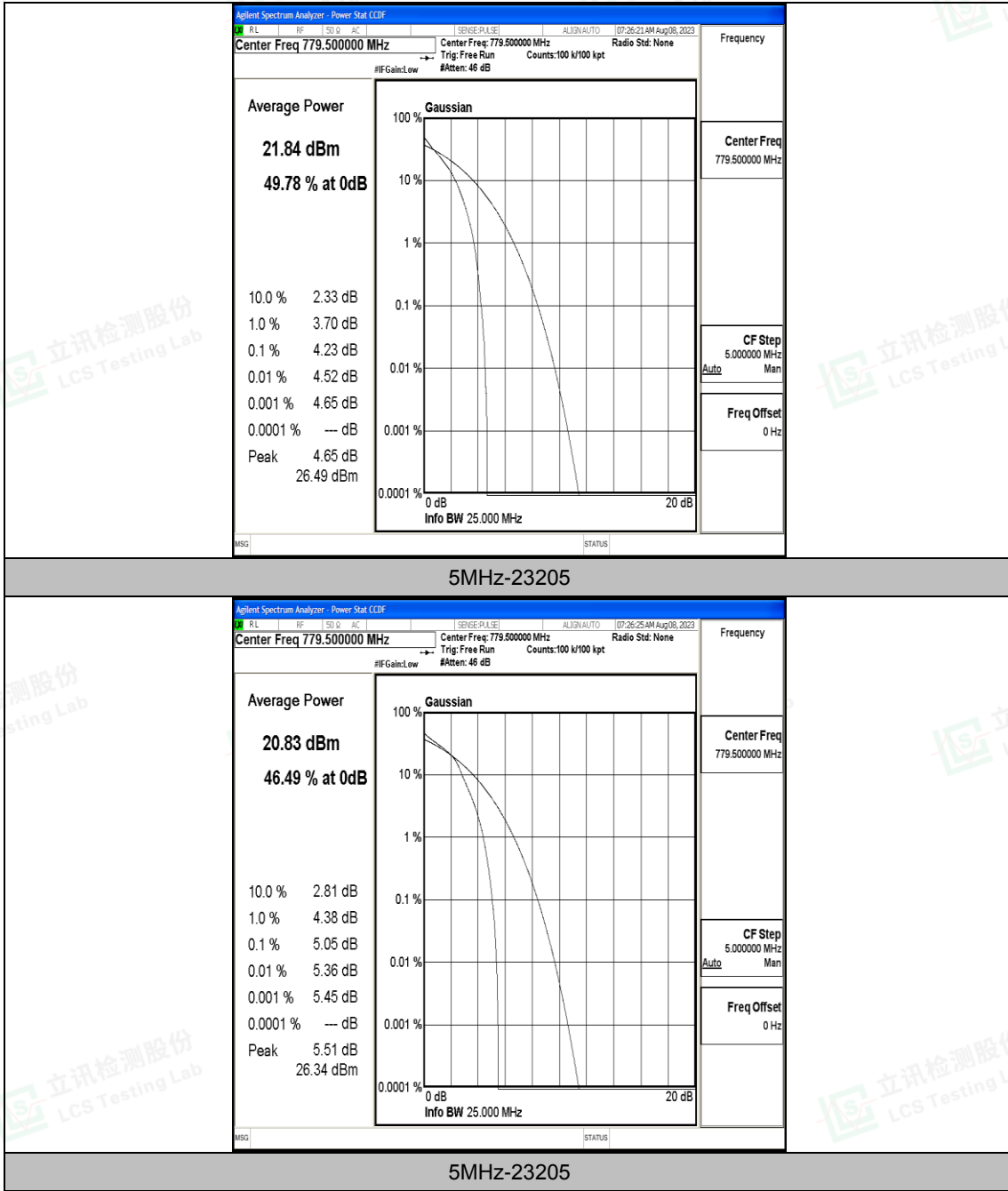
Test Result

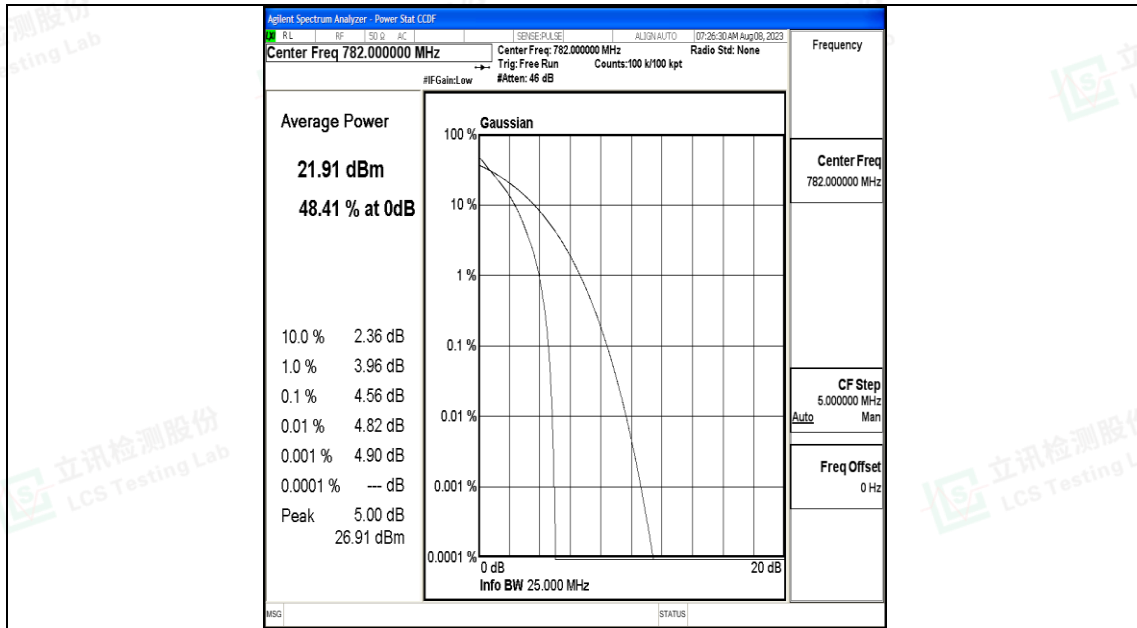
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.23	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	5.05	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.56	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	5.40	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.50	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	5.30	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	4.44	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	5.23	13	PASS



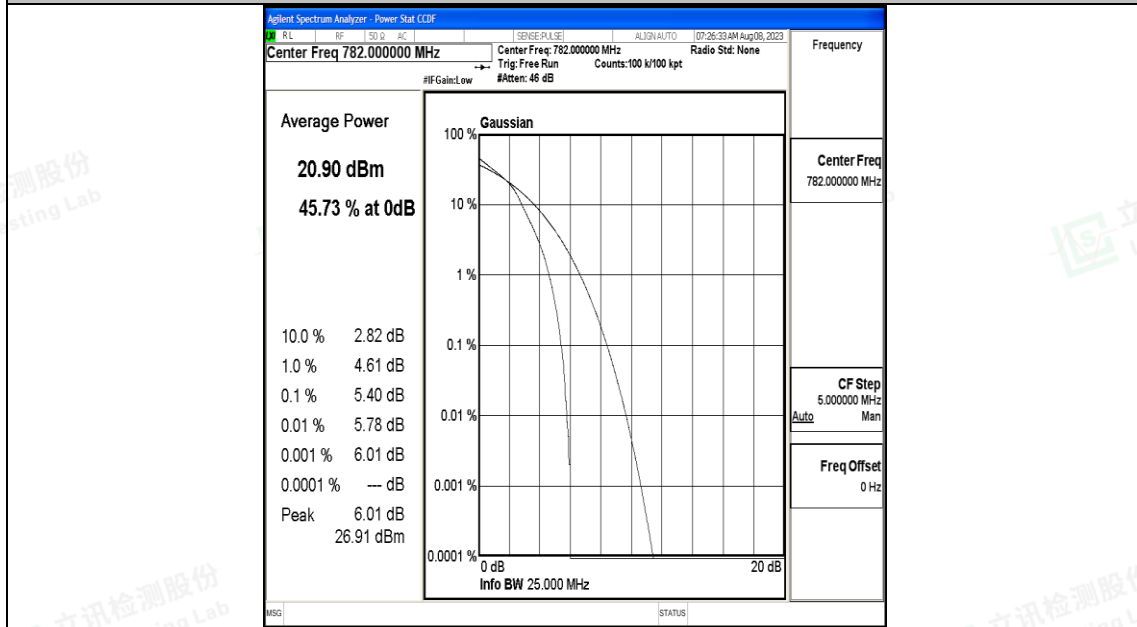


Test Graphs



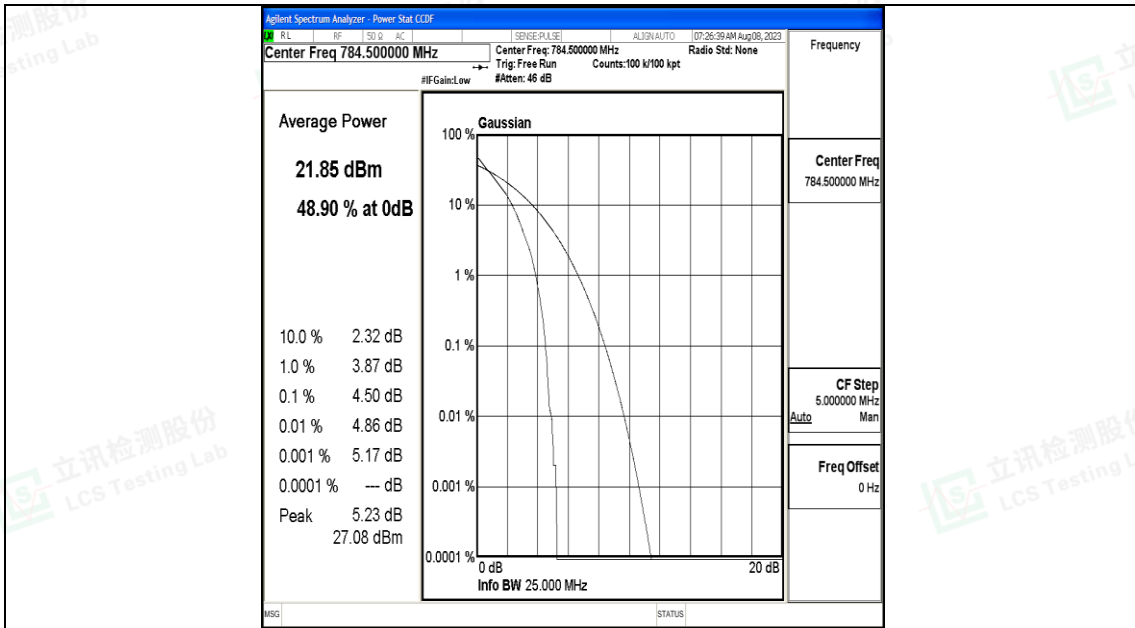


5MHz-23230

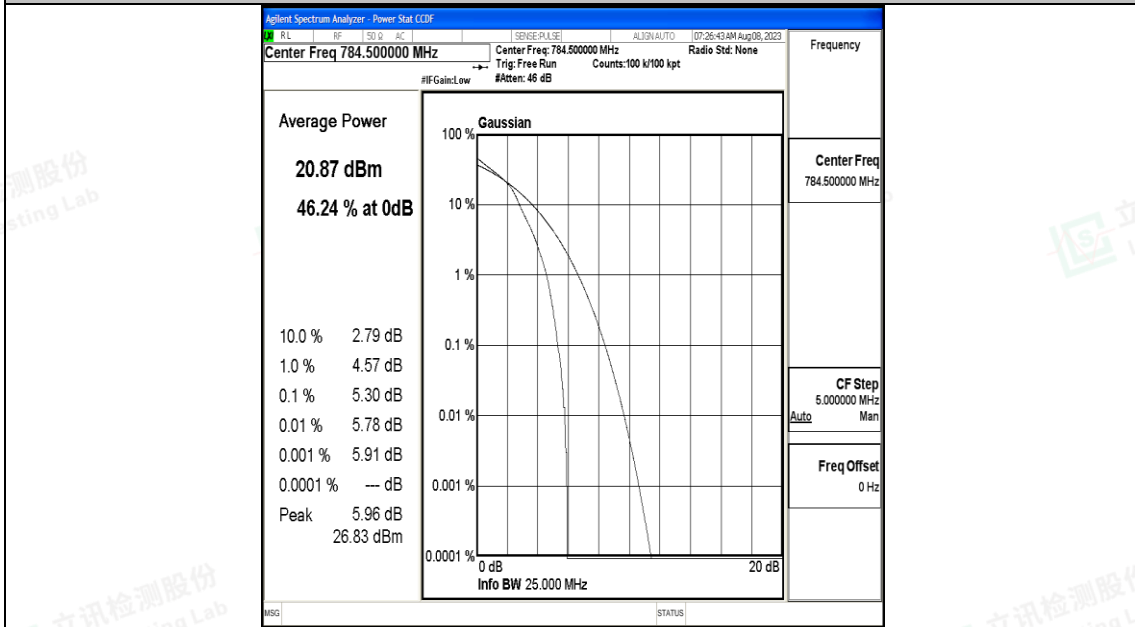


5MHz-23230



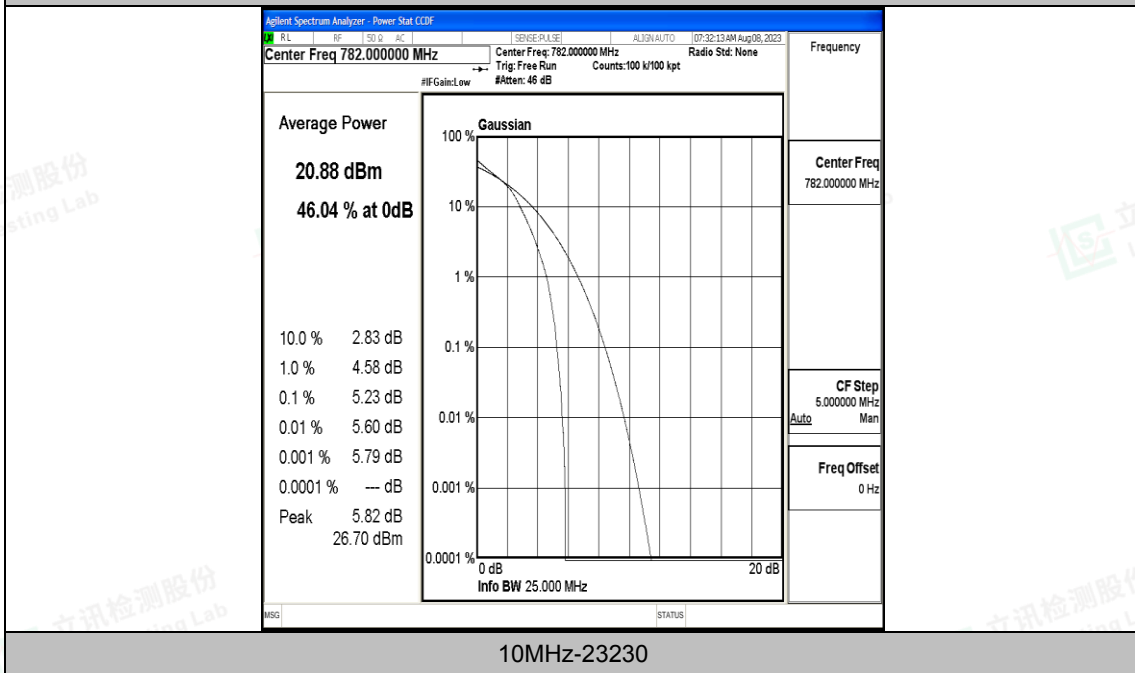
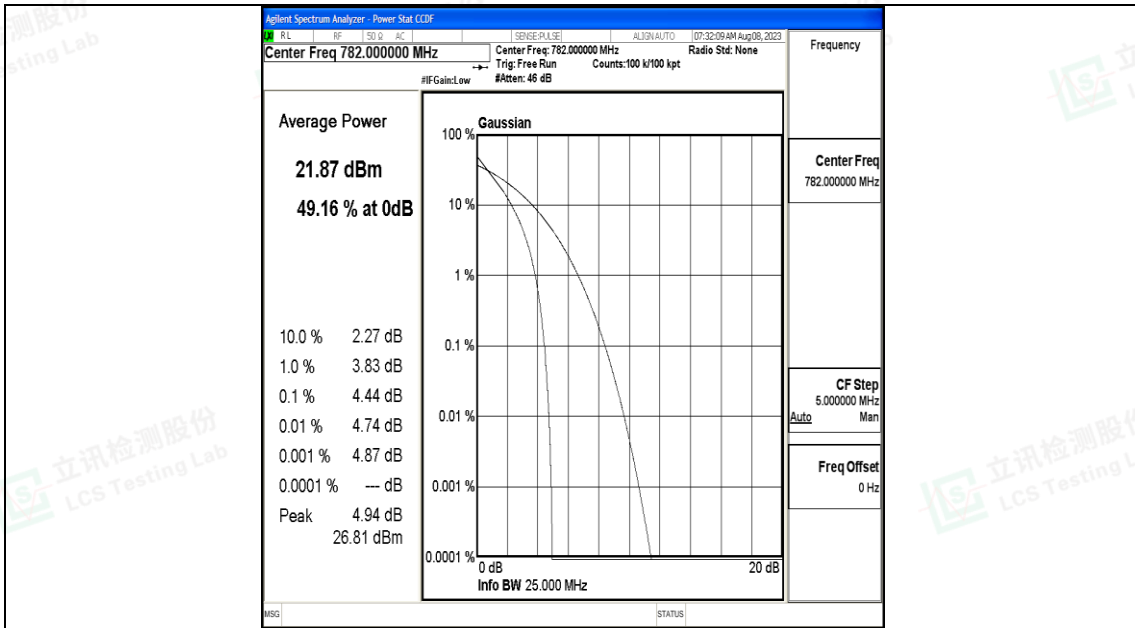


5MHz-23255



5MHz-23255







H.3 26dB Bandwidth and Occupied Bandwidth

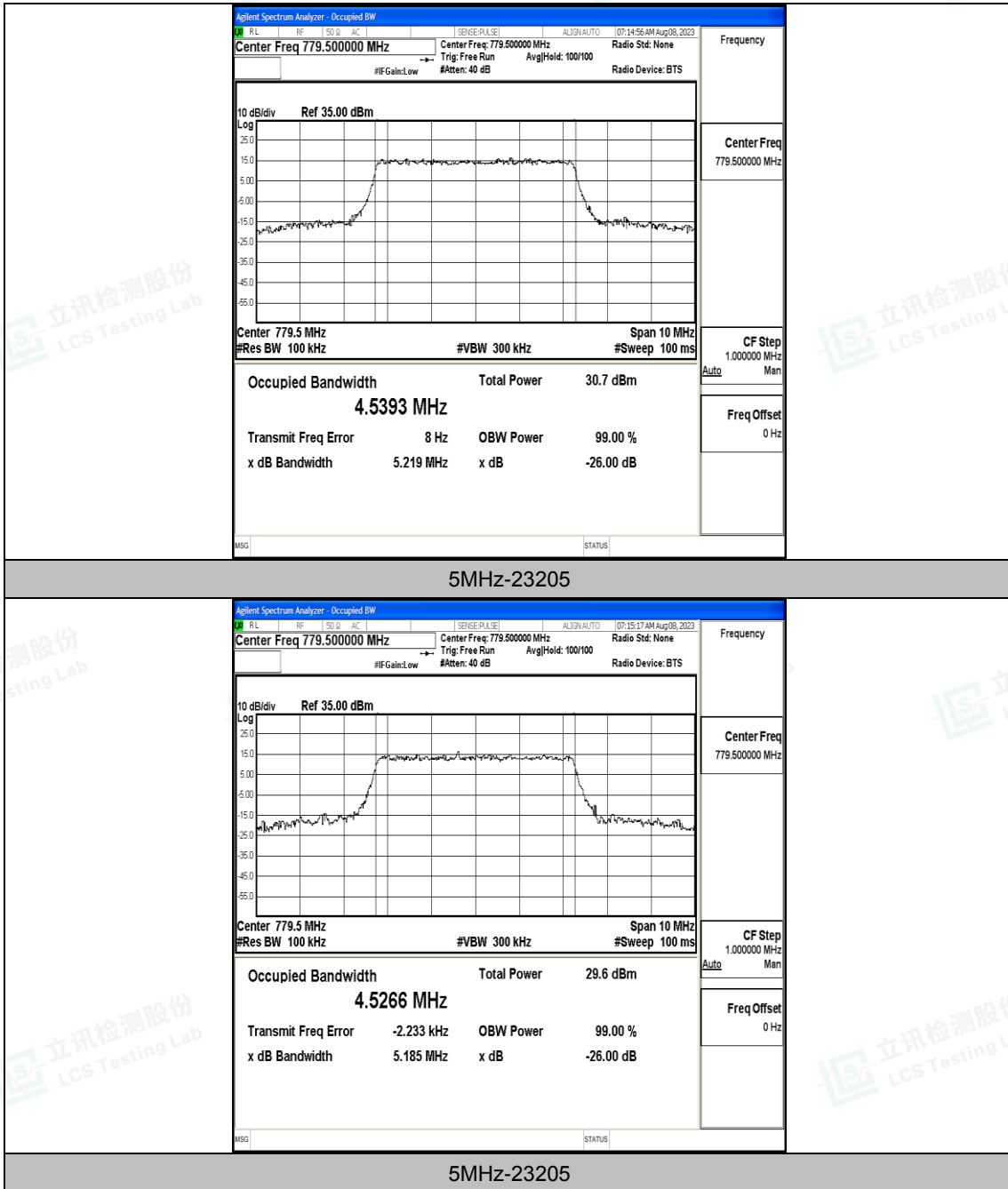
Test Result

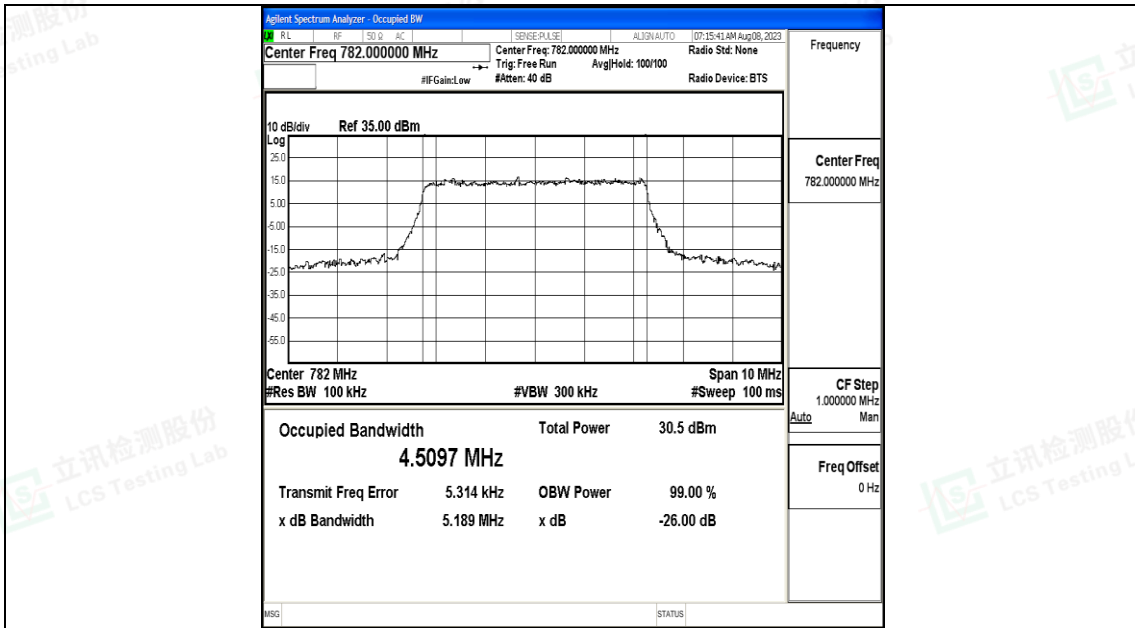
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.5393	5.219	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5266	5.185	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5097	5.189	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5241	5.226	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5113	5.198	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5236	5.113	PASS
Band13	10MHz	QPSK	23230	50RB#0	9.0105	10.14	PASS
Band13	10MHz	16QAM	23230	50RB#0	9.0074	10.08	PASS



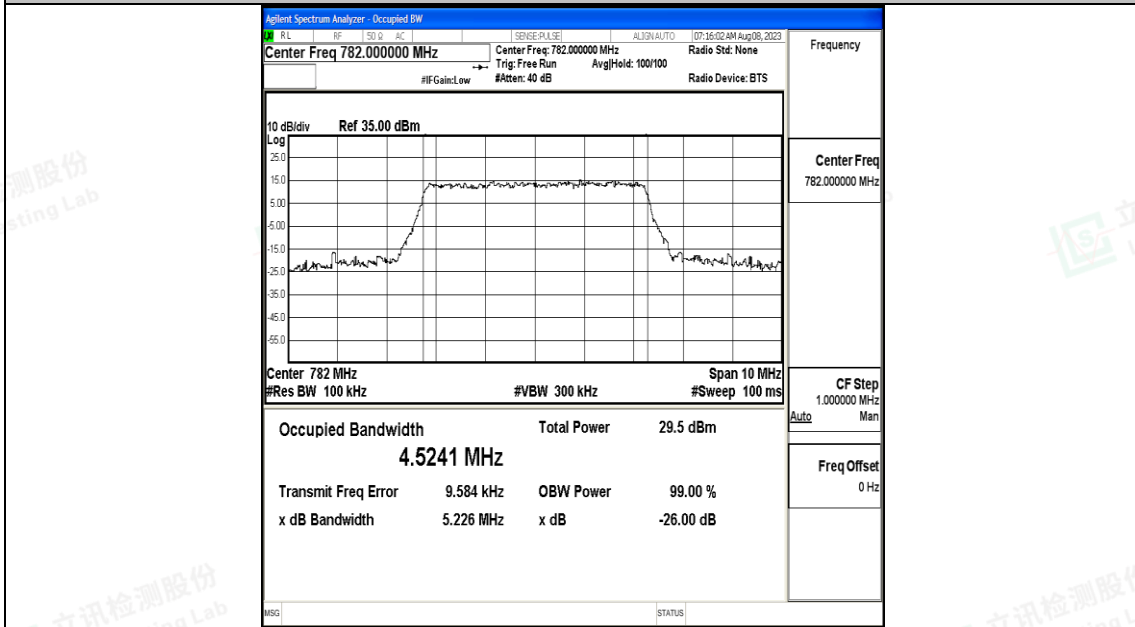


Test Graphs



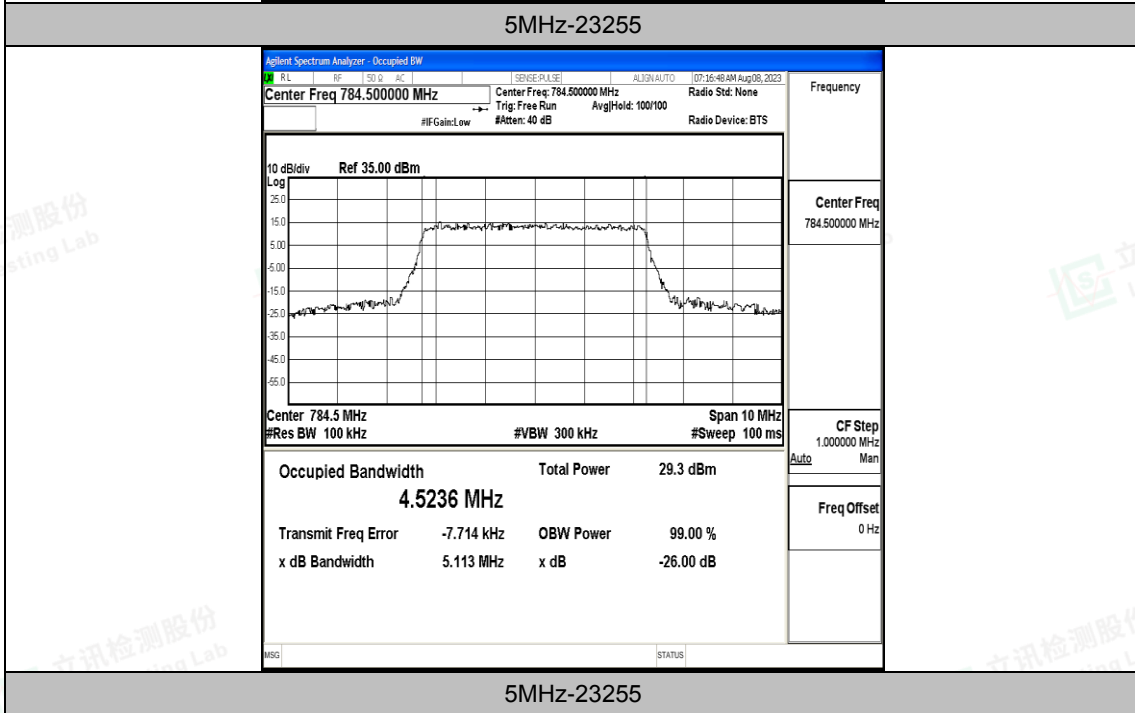
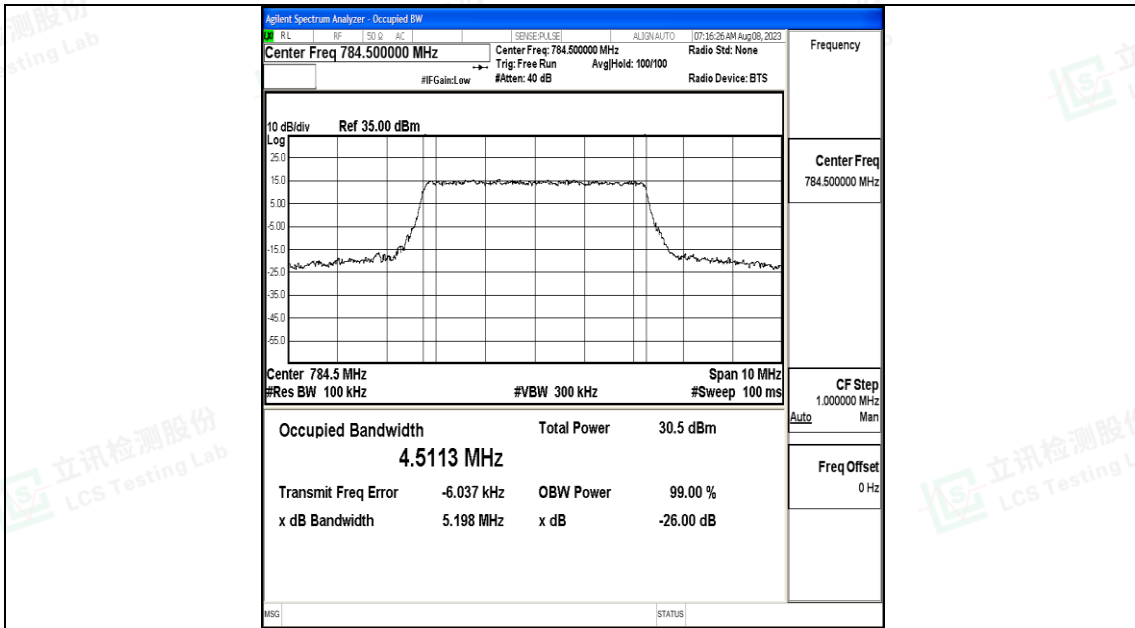


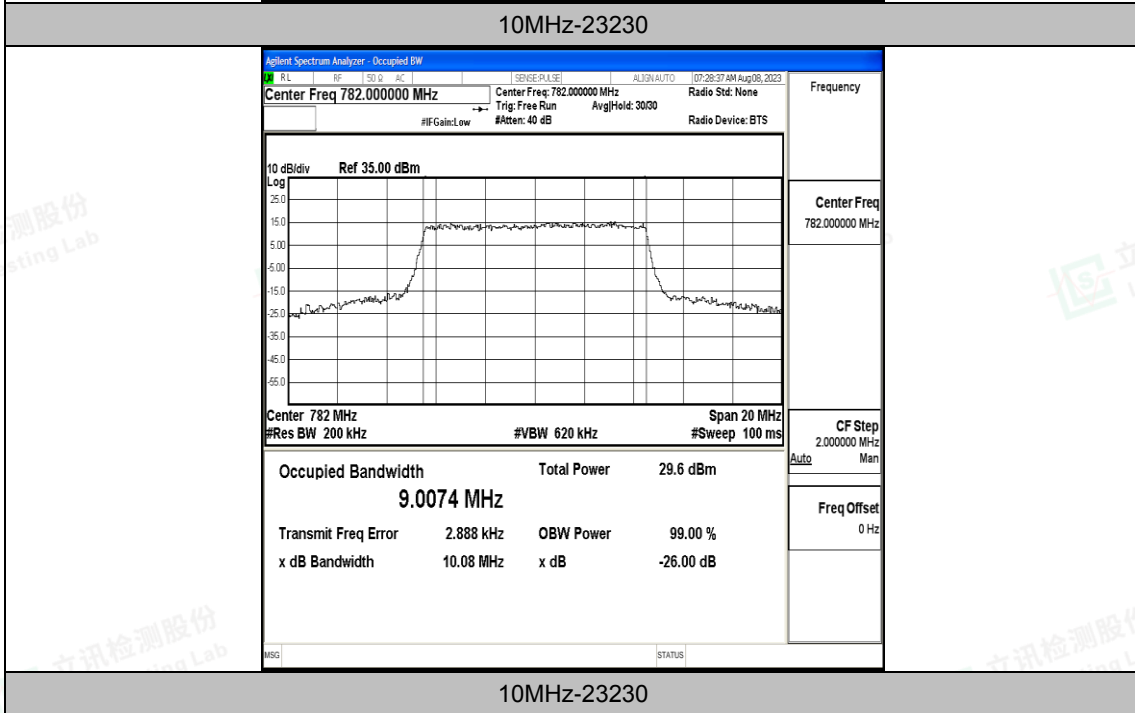
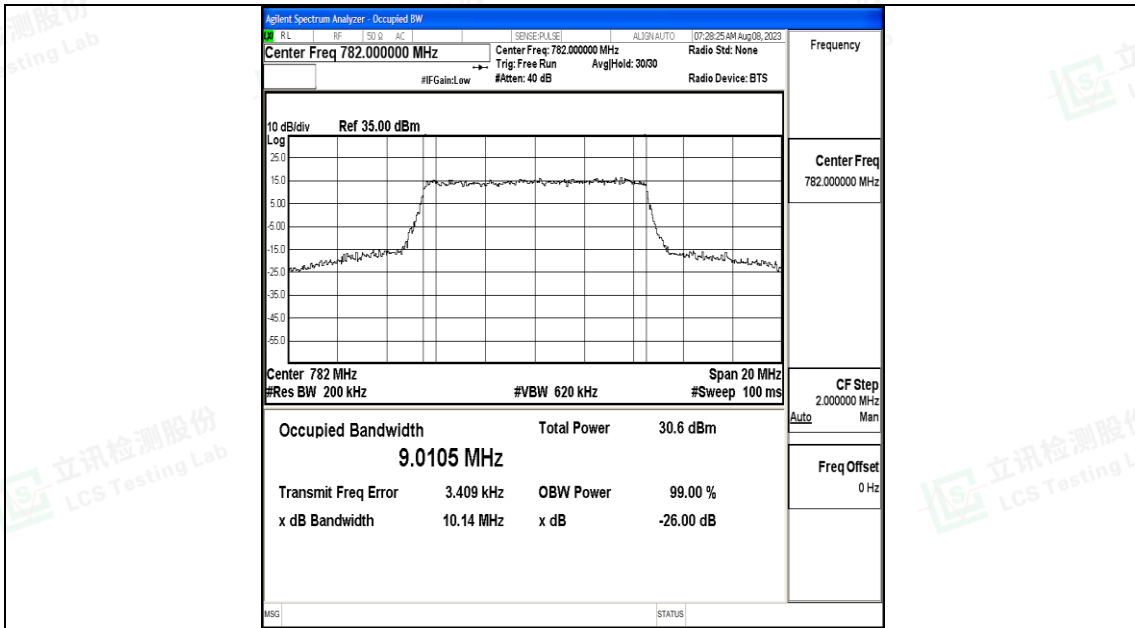
5MHz-23230



5MHz-23230







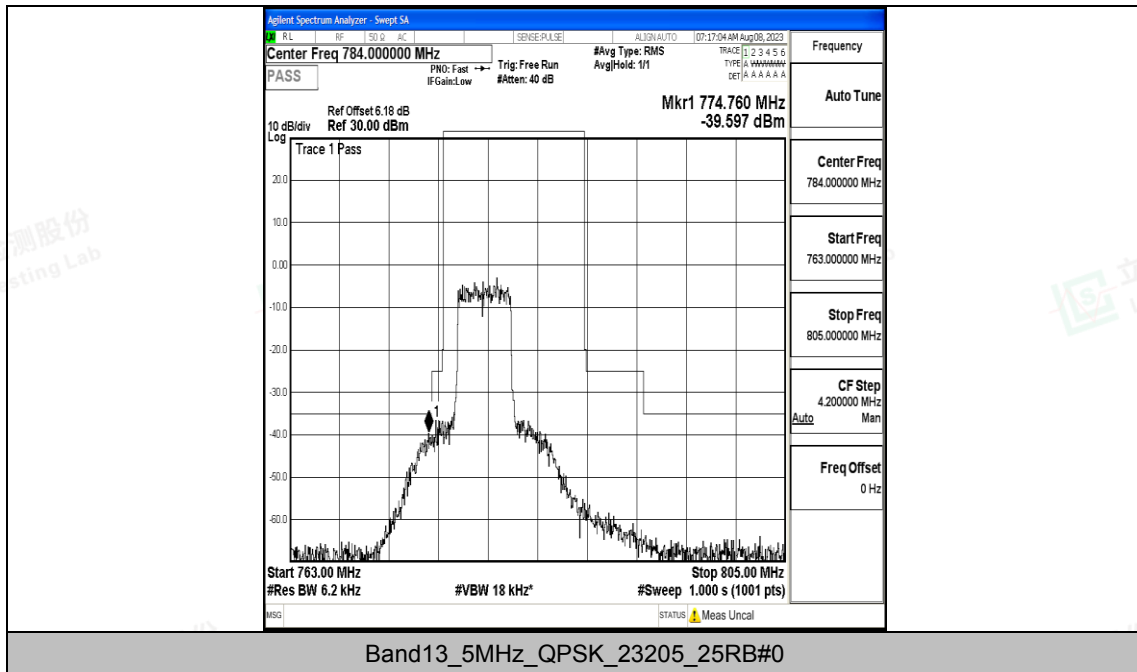


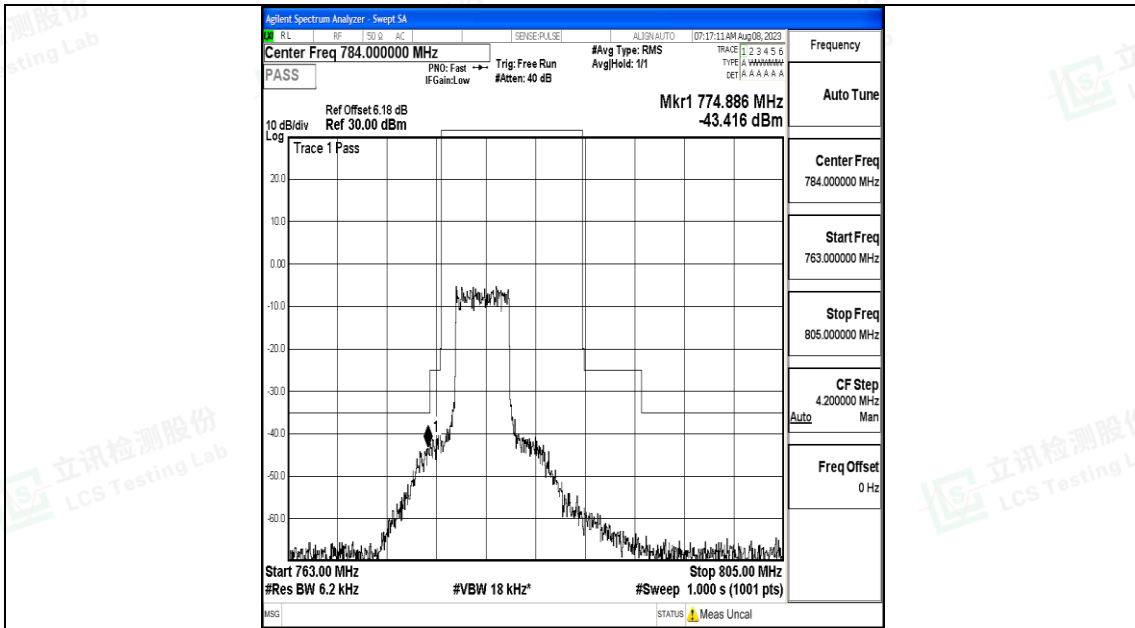
H.4 Band Edge

Test Result

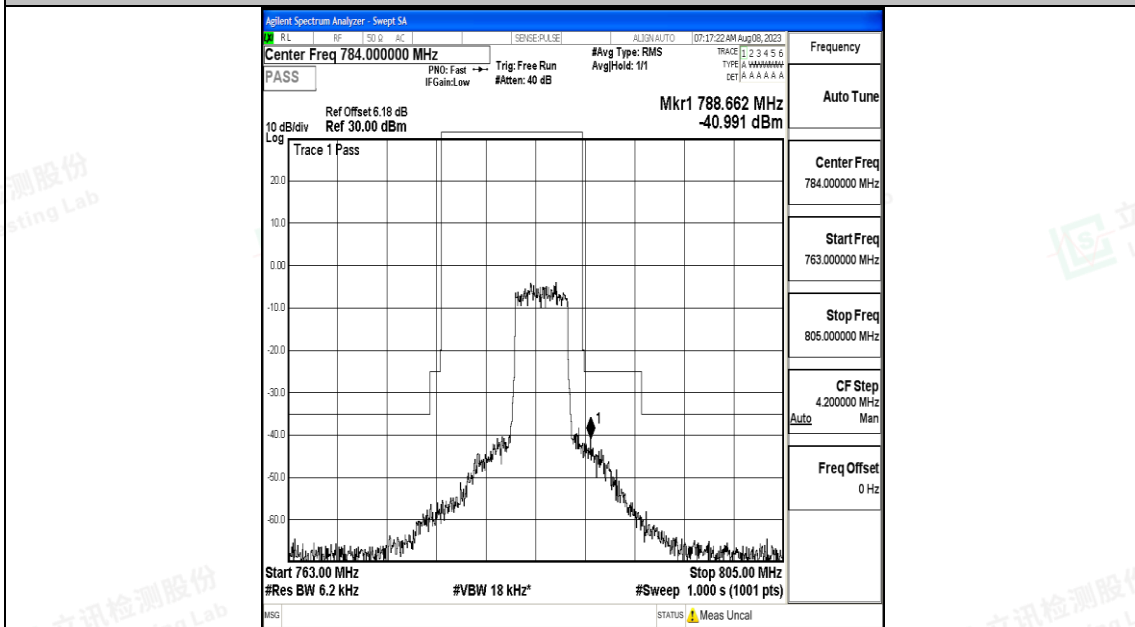
Band	Bandwidth	Modulation	Channel	RB Configuration	Peak Frequency	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	774.76	-39.60	PASS
Band13	5MHz	16QAM	23205	25RB#0	774.89	-43.42	PASS
Band13	5MHz	QPSK	23255	25RB#0	788.66	-40.99	PASS
Band13	5MHz	16QAM	23255	25RB#0	788.12	-42.90	PASS
Band13	10MHz	QPSK	23230	50RB#0	774.84	-42.63	PASS
Band13	10MHz	16QAM	23230	50RB#0	774.76	-45.24	PASS

Test Graphs



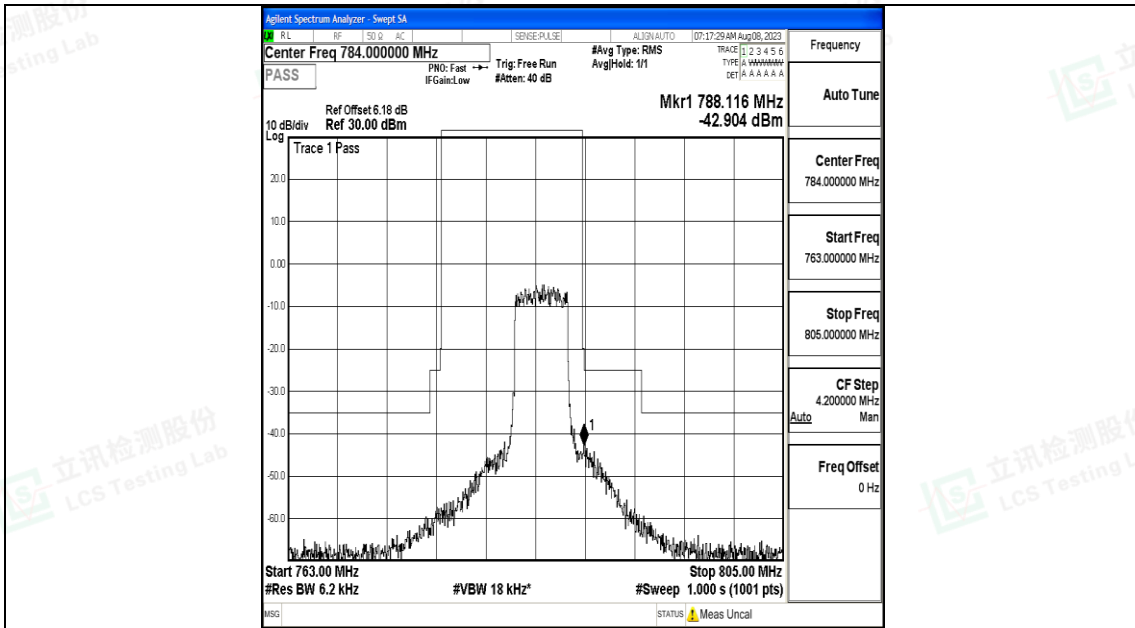


Band13_5MHz_16QAM_23205_25RB#0

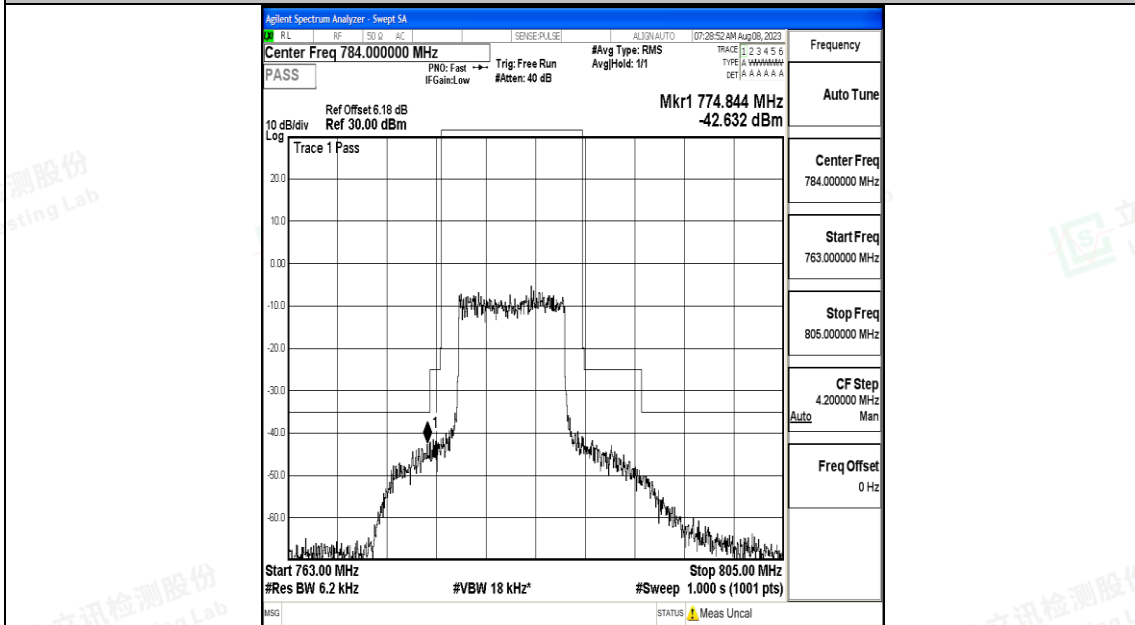


Band13_5MHz_QPSK_23255_25RB#0



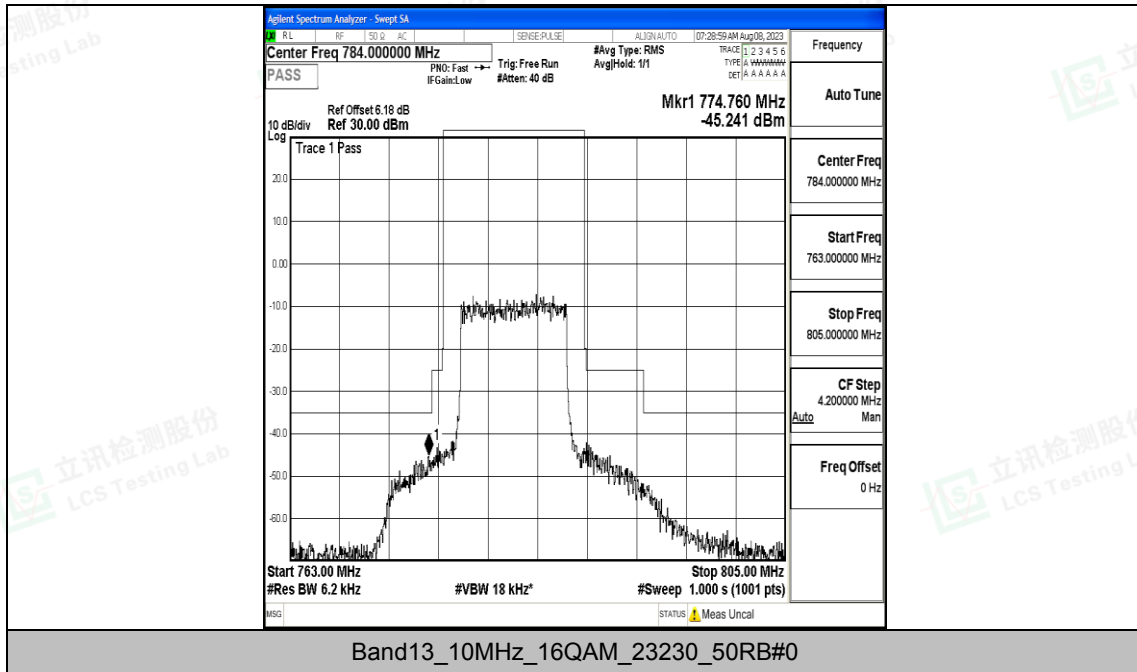


Band13_5MHz_16QAM_23255_25RB#0



Band13_10MHz_QPSK_23230_50RB#0





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 Scan code to check authenticity



H.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	-58.13	PASS
Band13	5MHz	QPSK	23205	1RB#0	0.15~30	-51.54	PASS
Band13	5MHz	QPSK	23205	1RB#0	30~1000	-62.75	PASS
Band13	5MHz	QPSK	23205	1RB#0	1000~3000	-42.88	PASS
Band13	5MHz	QPSK	23205	1RB#0	3000~10000	-44.41	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.009~0.15	-59.69	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.15~30	-50.74	PASS
Band13	5MHz	16QAM	23205	1RB#0	30~1000	-62.73	PASS
Band13	5MHz	16QAM	23205	1RB#0	1000~3000	-43.33	PASS
Band13	5MHz	16QAM	23205	1RB#0	3000~10000	-44.27	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.009~0.15	-55.49	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.15~30	-52.13	PASS
Band13	5MHz	QPSK	23230	1RB#0	30~1000	-62.80	PASS
Band13	5MHz	QPSK	23230	1RB#0	1000~3000	-44.00	PASS
Band13	5MHz	QPSK	23230	1RB#0	3000~10000	-44.15	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.009~0.15	-59.02	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.15~30	-54.29	PASS
Band13	5MHz	16QAM	23230	1RB#0	30~1000	-63.05	PASS
Band13	5MHz	16QAM	23230	1RB#0	1000~3000	-45.28	PASS
Band13	5MHz	16QAM	23230	1RB#0	3000~10000	-44.27	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.009~0.15	-55.93	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.15~30	-51.95	PASS
Band13	5MHz	QPSK	23255	1RB#0	30~1000	-62.87	PASS
Band13	5MHz	QPSK	23255	1RB#0	1000~3000	-43.80	PASS
Band13	5MHz	QPSK	23255	1RB#0	3000~10000	-44.01	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.009~0.15	-57.10	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.15~30	-52.65	PASS
Band13	5MHz	16QAM	23255	1RB#0	30~1000	-62.72	PASS
Band13	5MHz	16QAM	23255	1RB#0	1000~3000	-44.45	PASS
Band13	5MHz	16QAM	23255	1RB#0	3000~10000	-44.08	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.009~0.15	-58.43	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.15~30	-55.88	PASS
Band13	10MHz	QPSK	23230	1RB#0	30~1000	-62.91	PASS
Band13	10MHz	QPSK	23230	1RB#0	1000~3000	-43.62	PASS
Band13	10MHz	QPSK	23230	1RB#0	3000~10000	-43.81	PASS

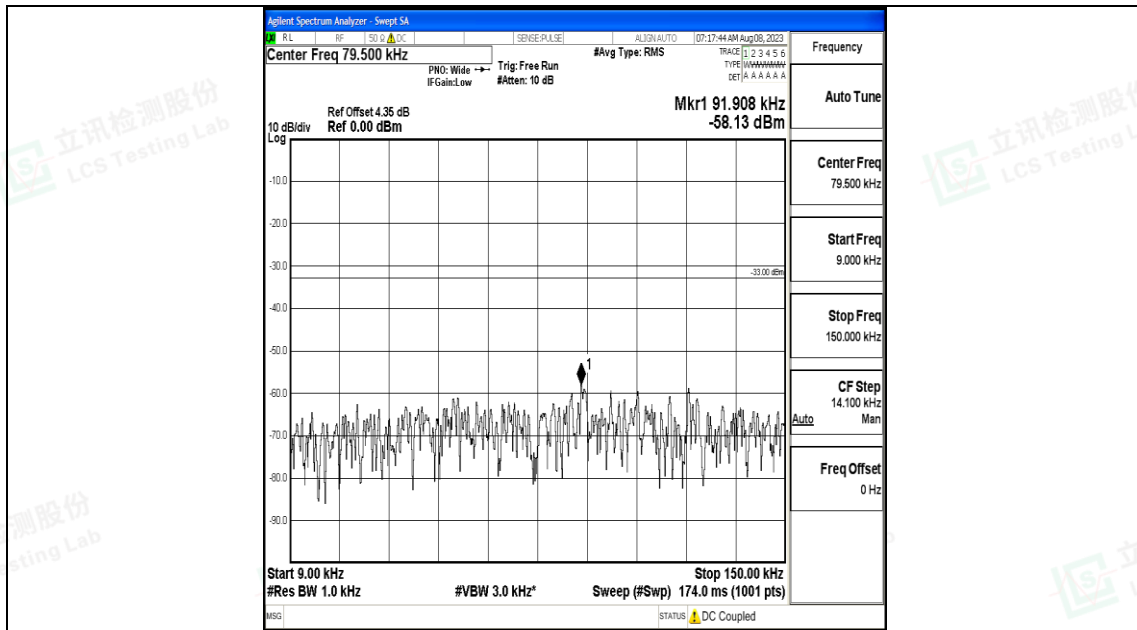


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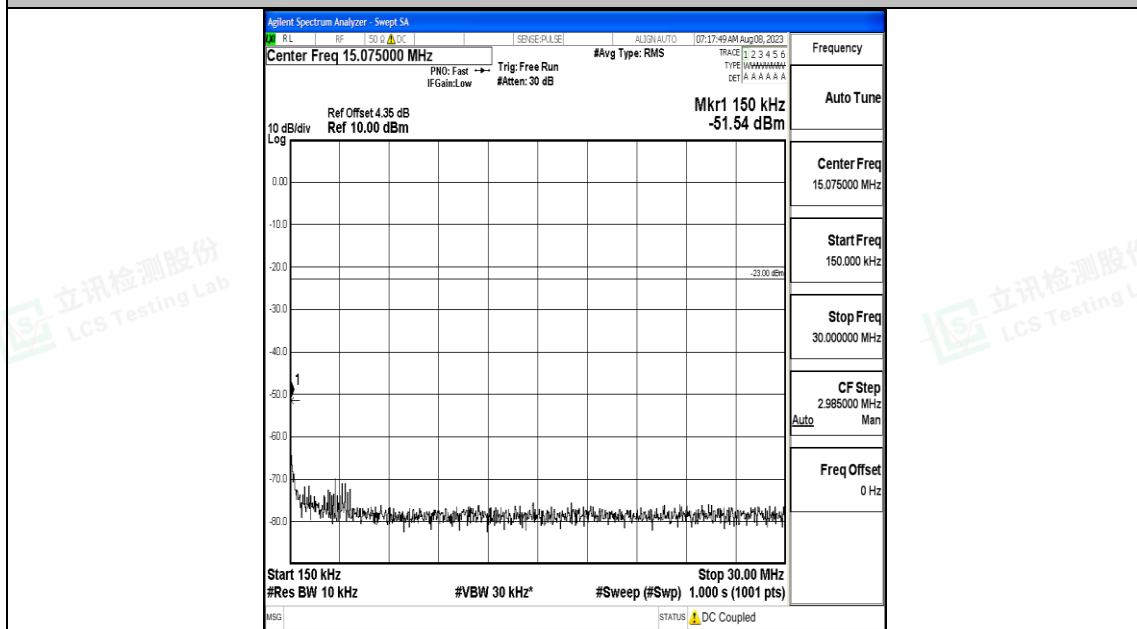


Band13	10MHz	16QAM	23230	1RB#0	0.009~0.15	-58.87	PASS
Band13	10MHz	16QAM	23230	1RB#0	0.15~30	-50.04	PASS
Band13	10MHz	16QAM	23230	1RB#0	30~1000	-62.96	PASS
Band13	10MHz	16QAM	23230	1RB#0	1000~3000	-44.98	PASS
Band13	10MHz	16QAM	23230	1RB#0	3000~10000	-44.38	PASS

Test Graphs

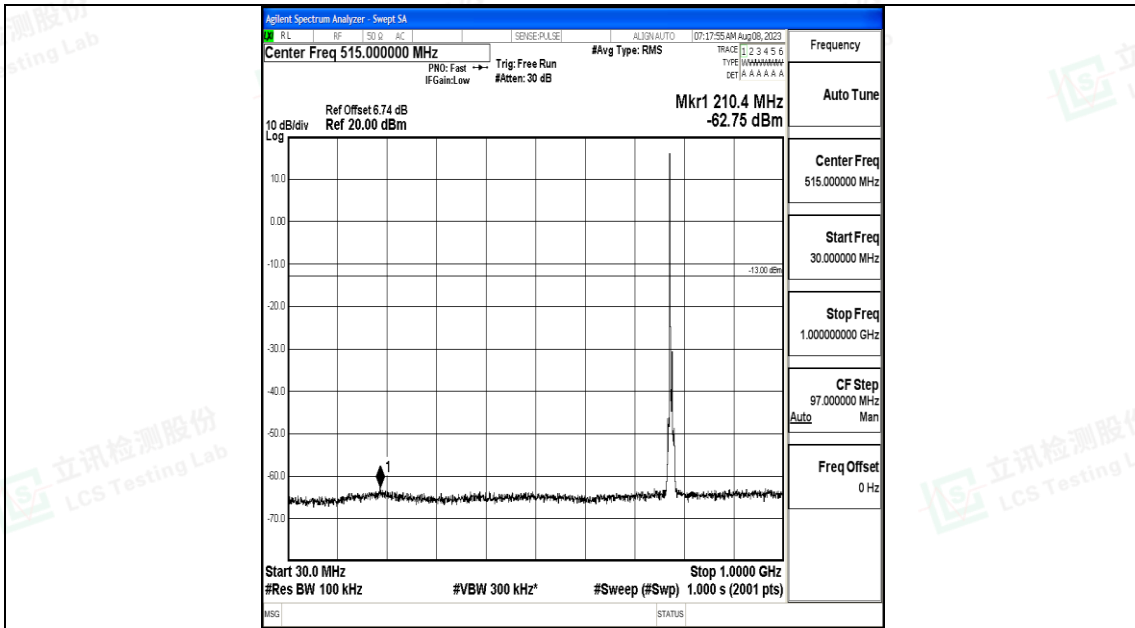


Band13_5MHz_QPSK_23205_1RB#0_0.009~0.15_0.009~0.15

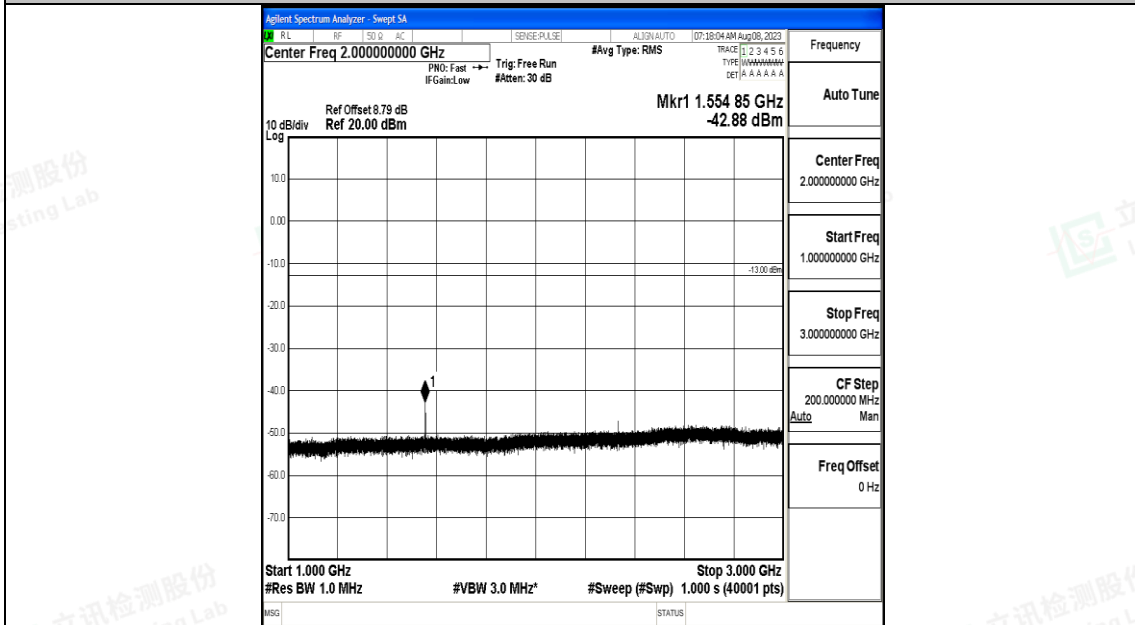


Band13_5MHz_QPSK_23205_1RB#0_0.15~30_0.15~30



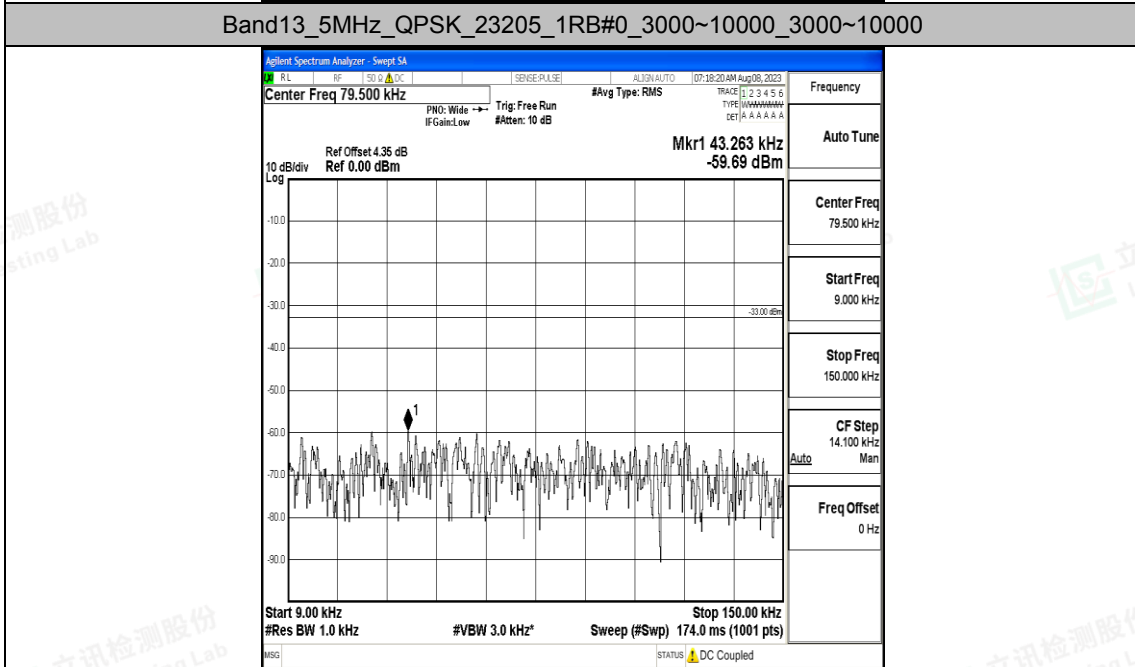
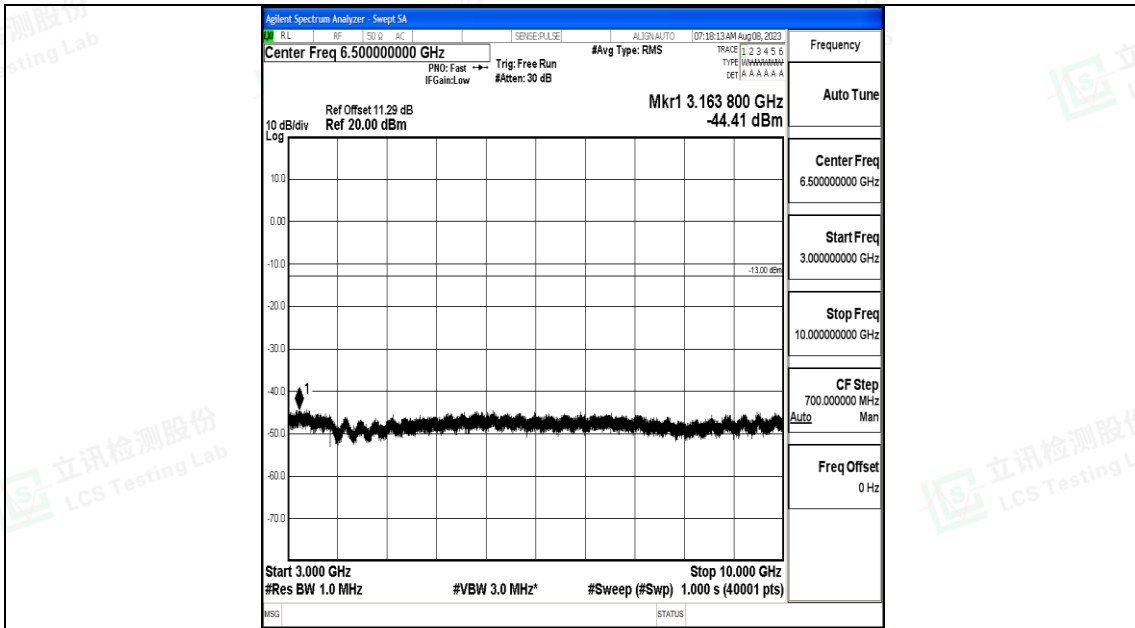


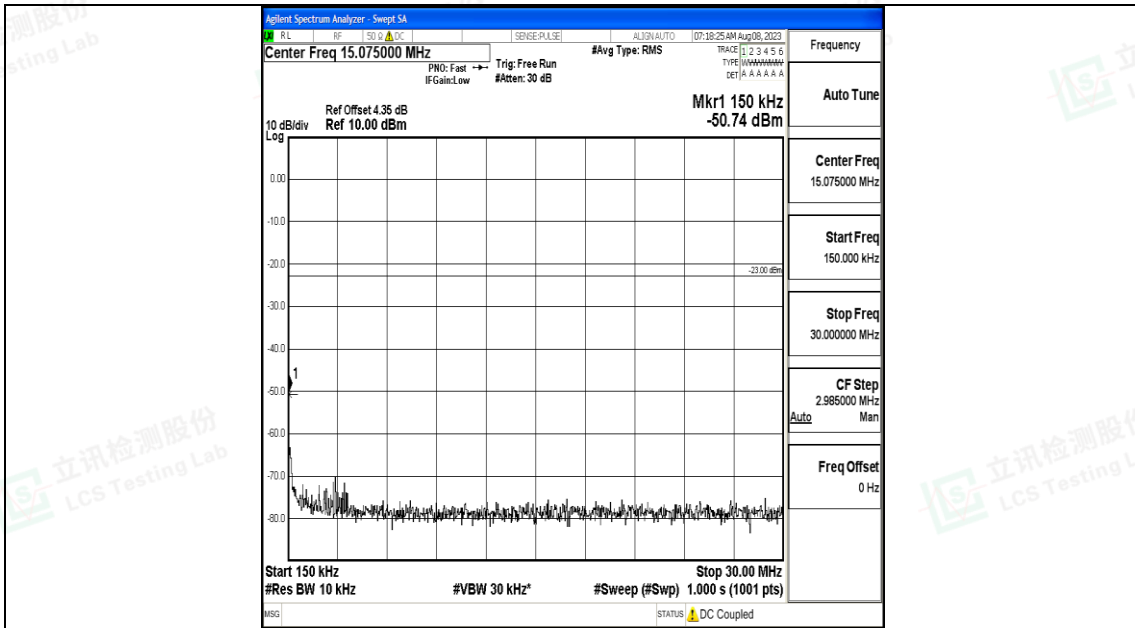
Band13_5MHz_QPSK_23205_1RB#0_30~1000_30~1000



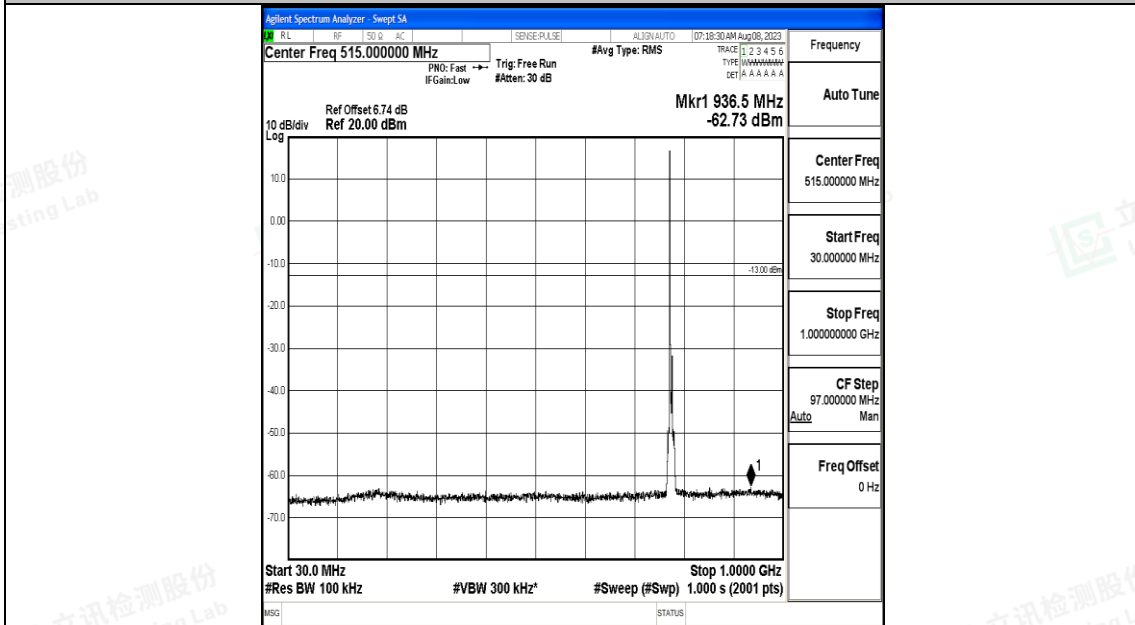
Band13_5MHz_QPSK_23205_1RB#0_1000~3000_1000~3000





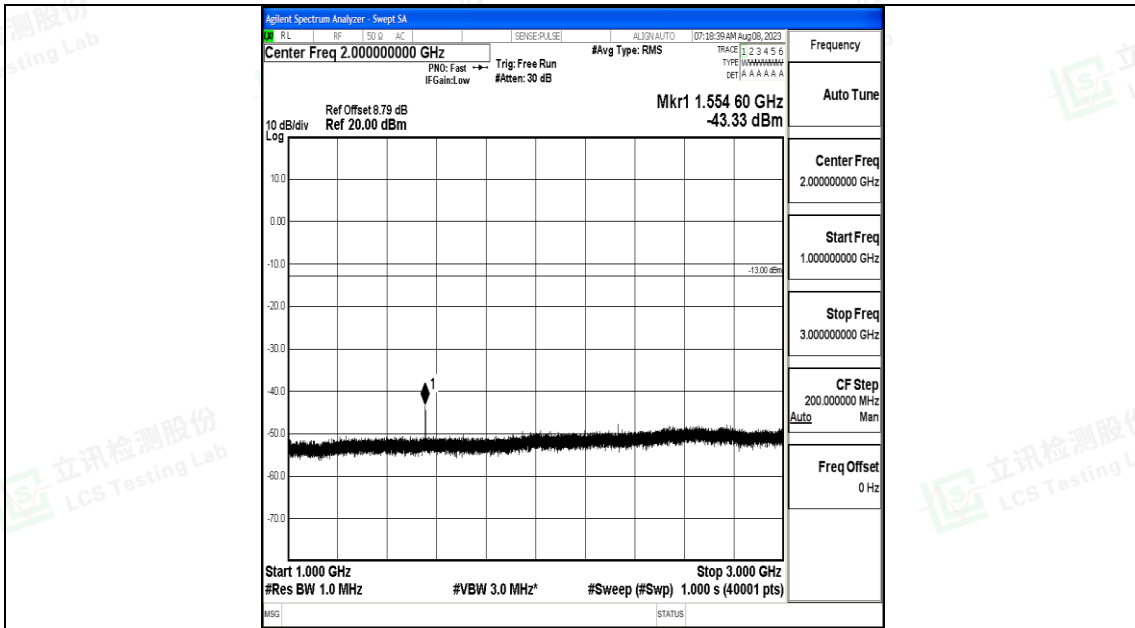


Band13_5MHz_16QAM_23205_1RB#0_0.15~30_0.15~30

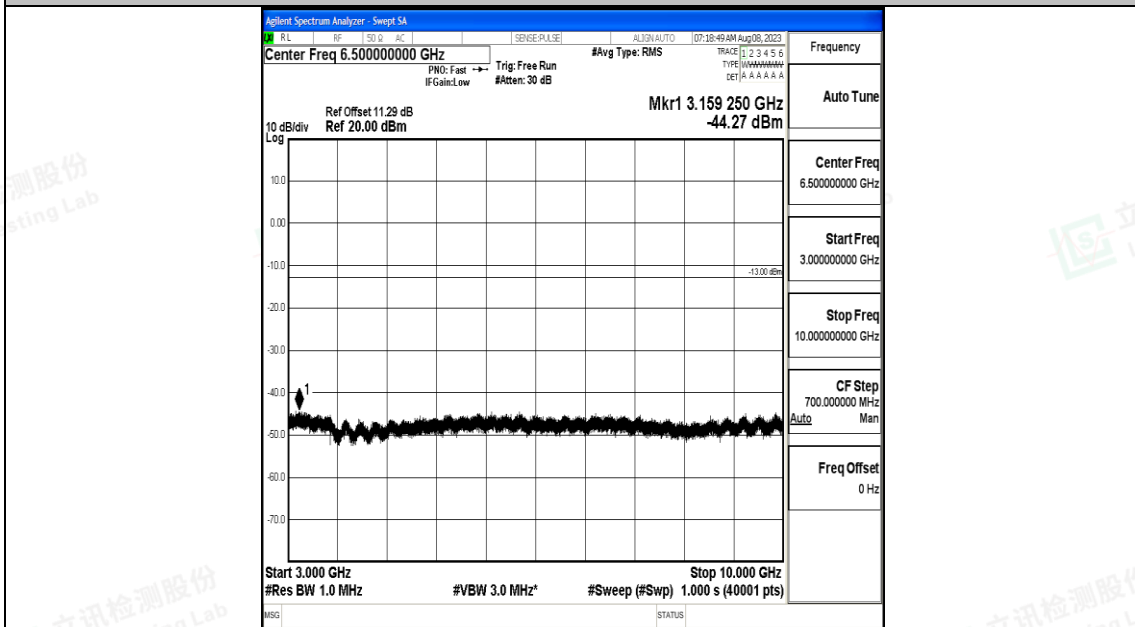


Band13_5MHz_16QAM_23205_1RB#0_30~1000_30~1000



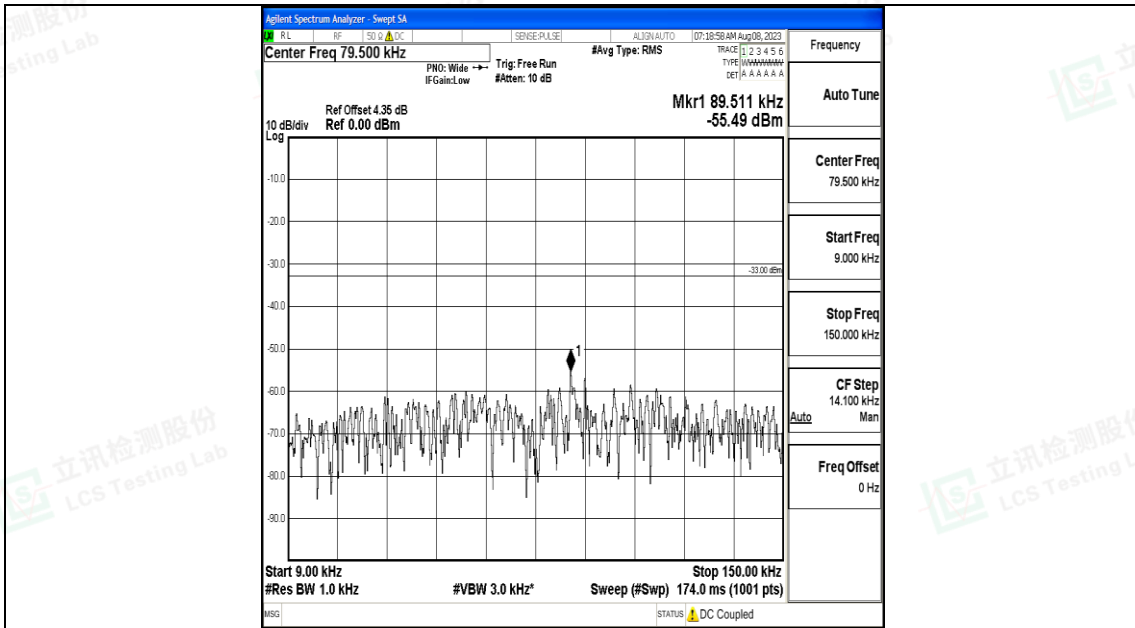


Band13_5MHz_16QAM_23205_1RB#0_1000~3000_1000~3000

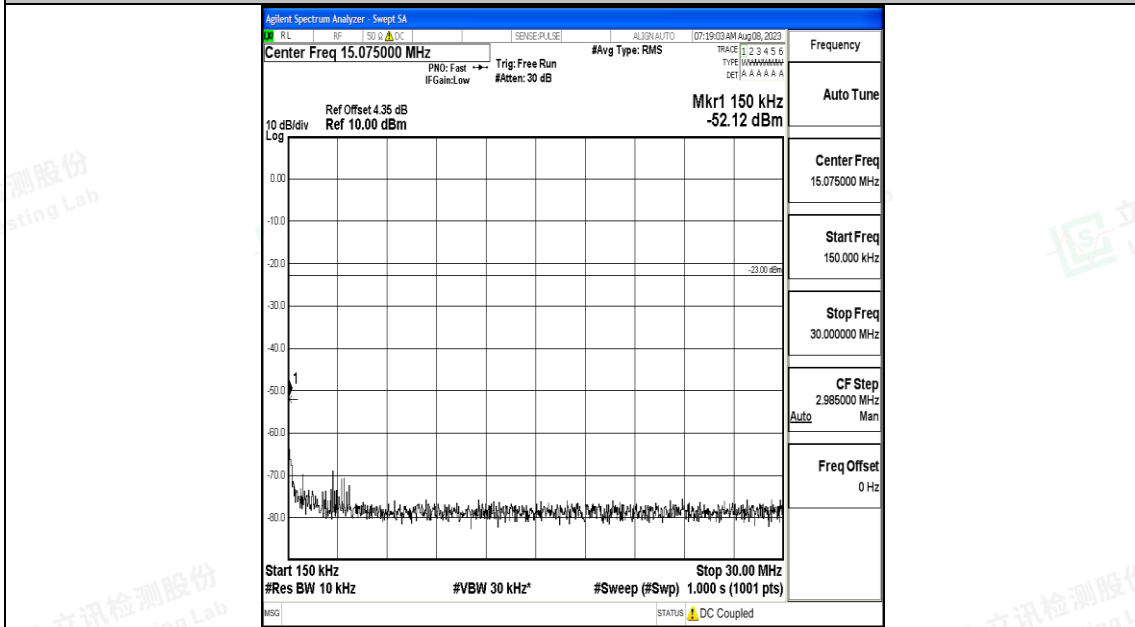


Band13_5MHz_16QAM_23205_1RB#0_3000~10000_3000~10000



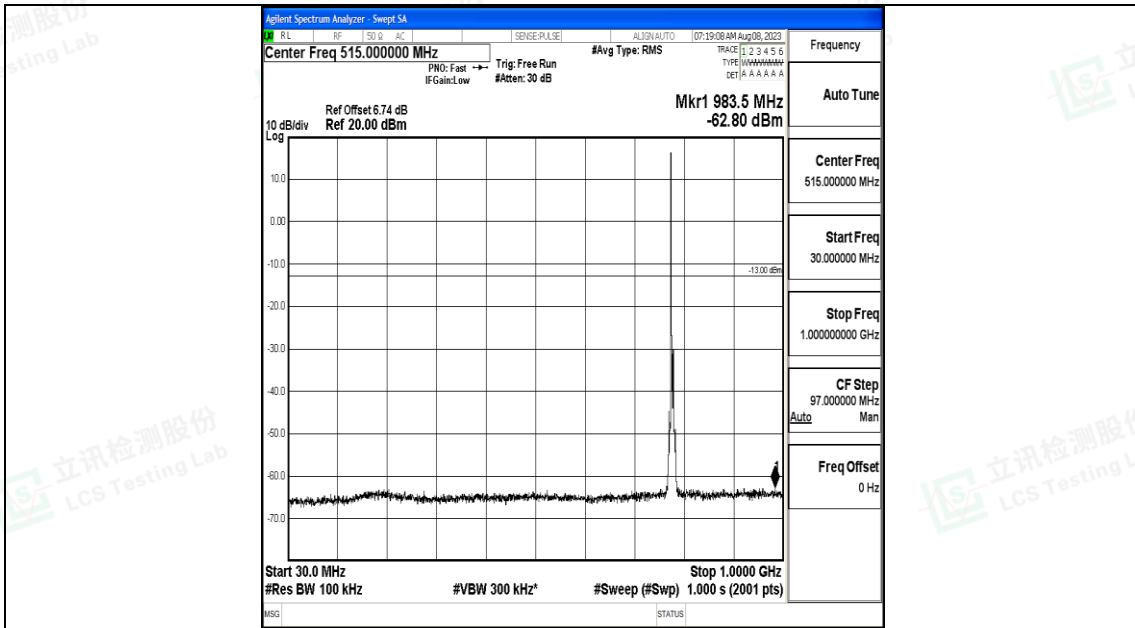


Band13_5MHz_QPSK_23230_1RB#0_0.009~0.15_0.009~0.15

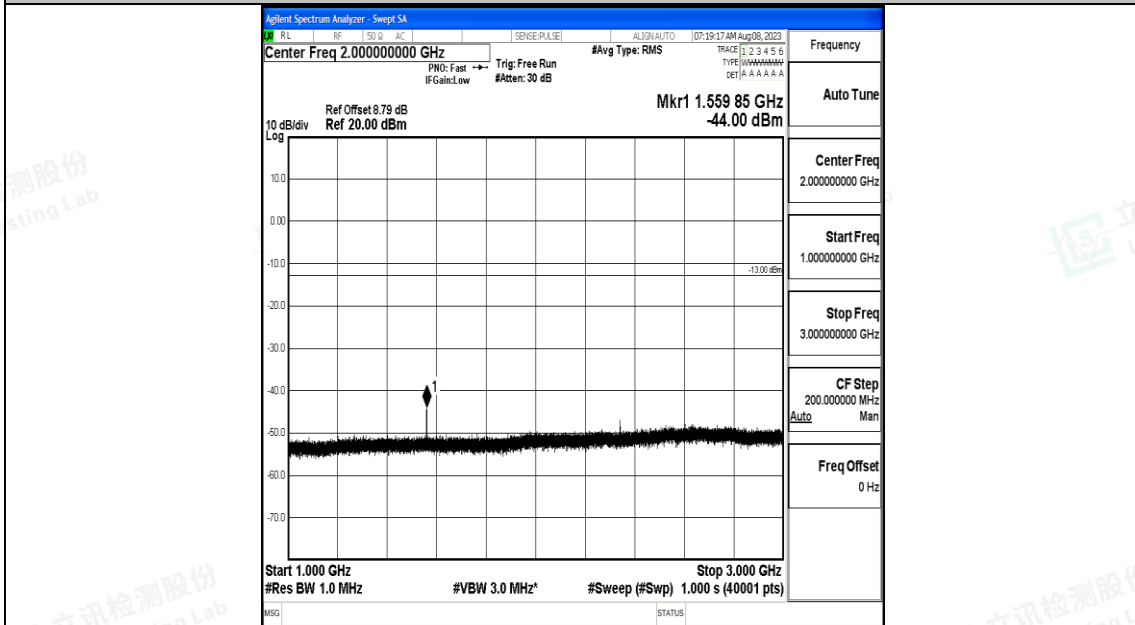


Band13_5MHz_QPSK_23230_1RB#0_0.15~30_0.15~30



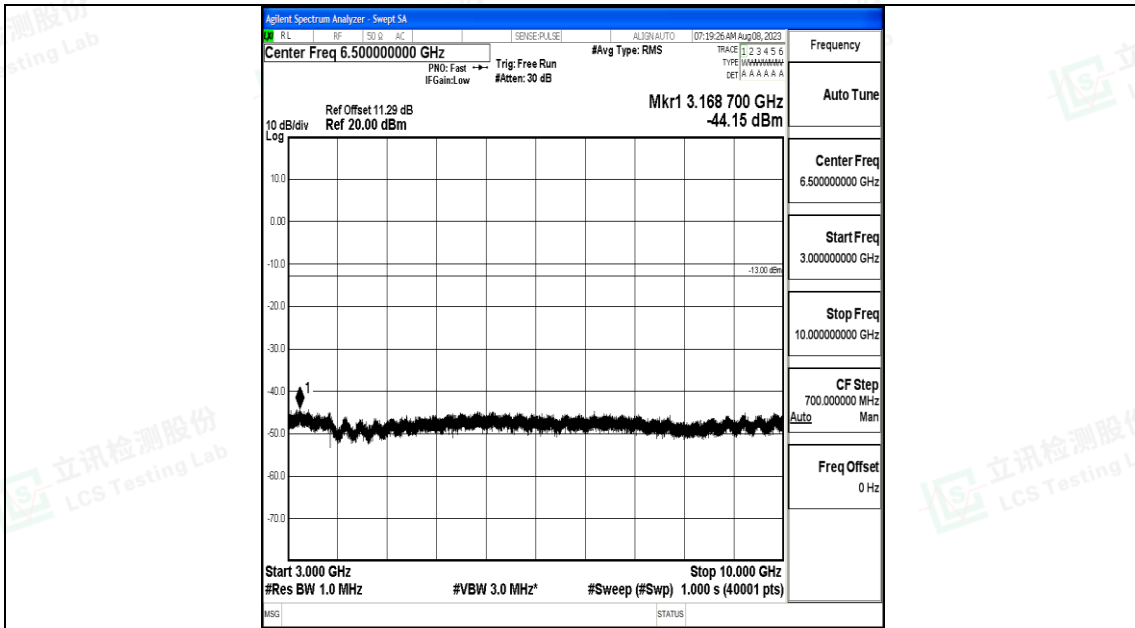


Band13_5MHz_QPSK_23230_1RB#0_30~1000_30~1000

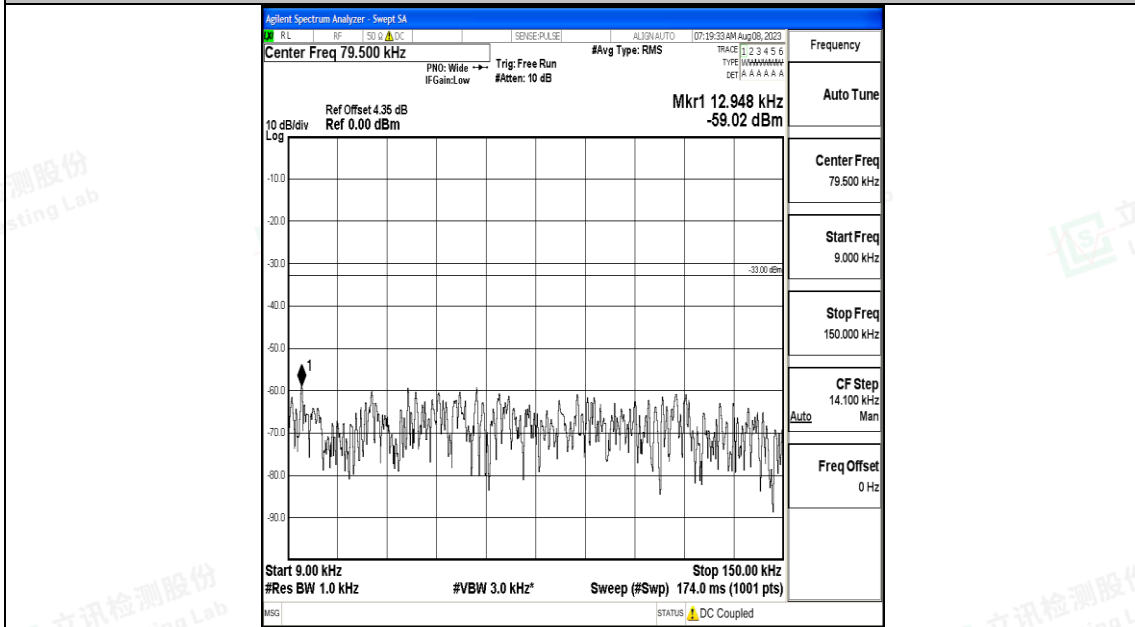


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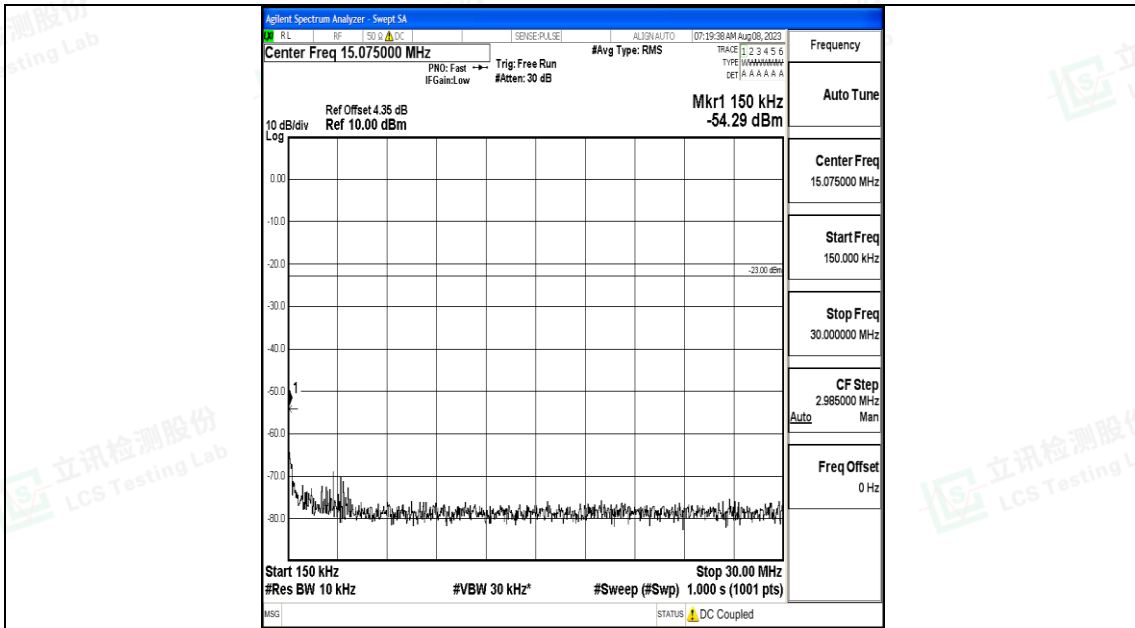


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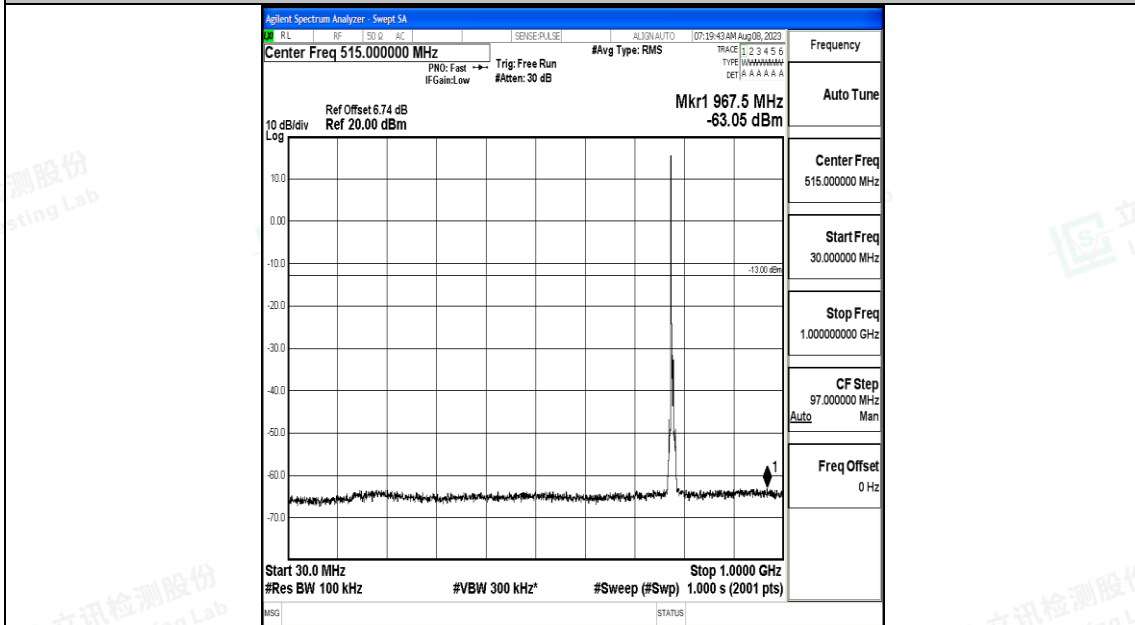


Band13_5MHz_16QAM_23230_1RB#0_0.009~0.15_0.009~0.15



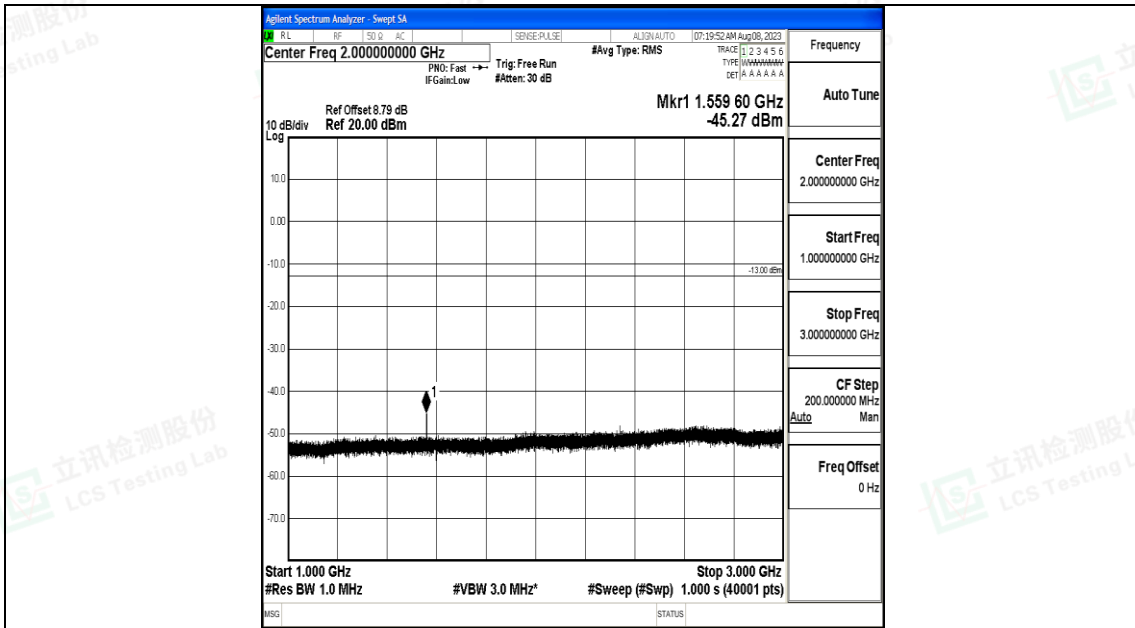


Band13_5MHz_16QAM_23230_1RB#0_0.15~30_0.15~30

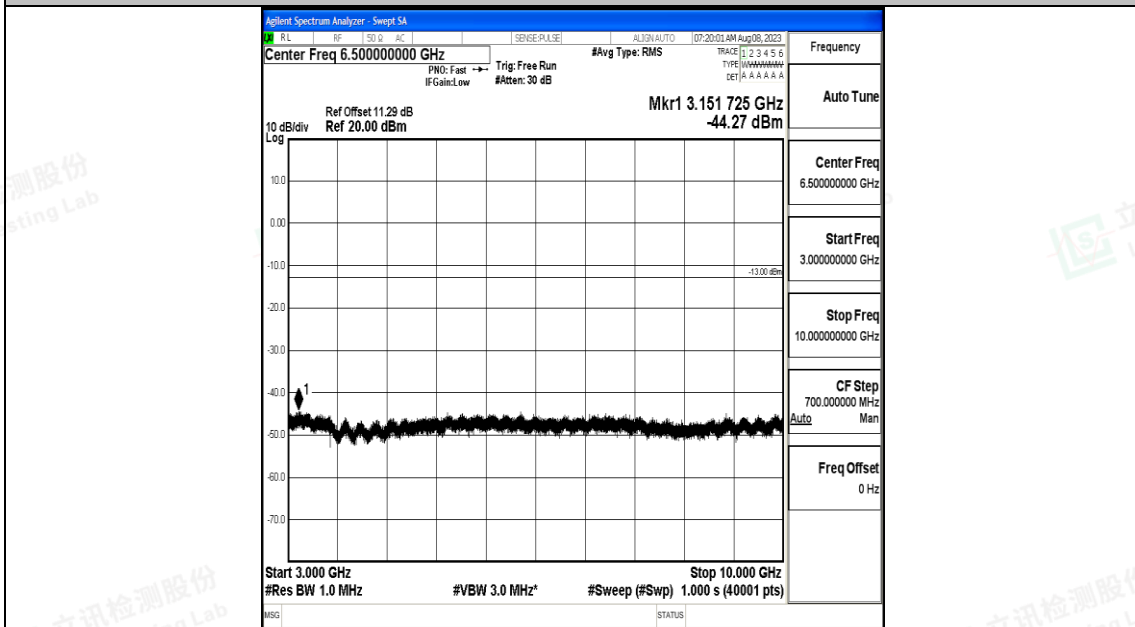


Band13_5MHz_16QAM_23230_1RB#0_30~1000_30~1000



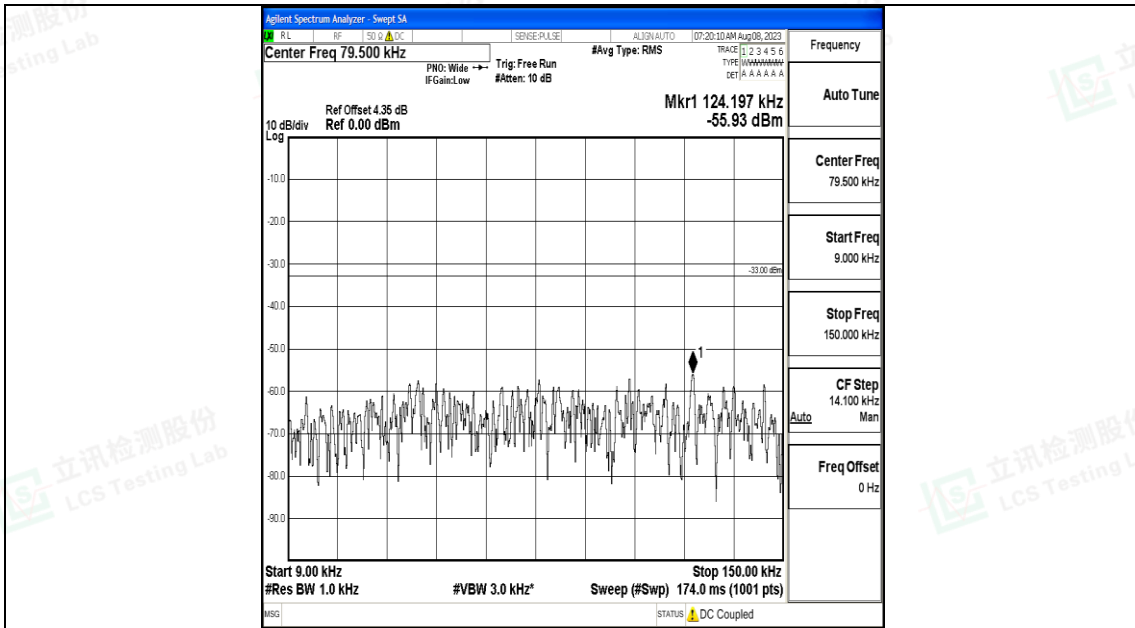


Band13_5MHz_16QAM_23230_1RB#0_1000~3000_1000~3000

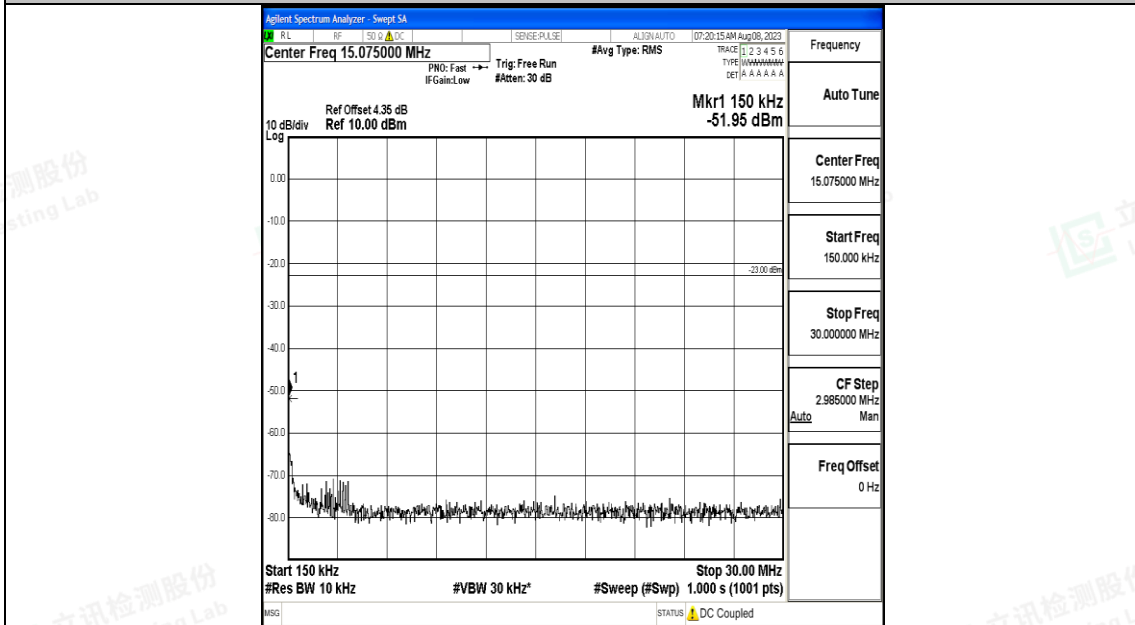


Band13_5MHz_16QAM_23230_1RB#0_3000~10000_3000~10000



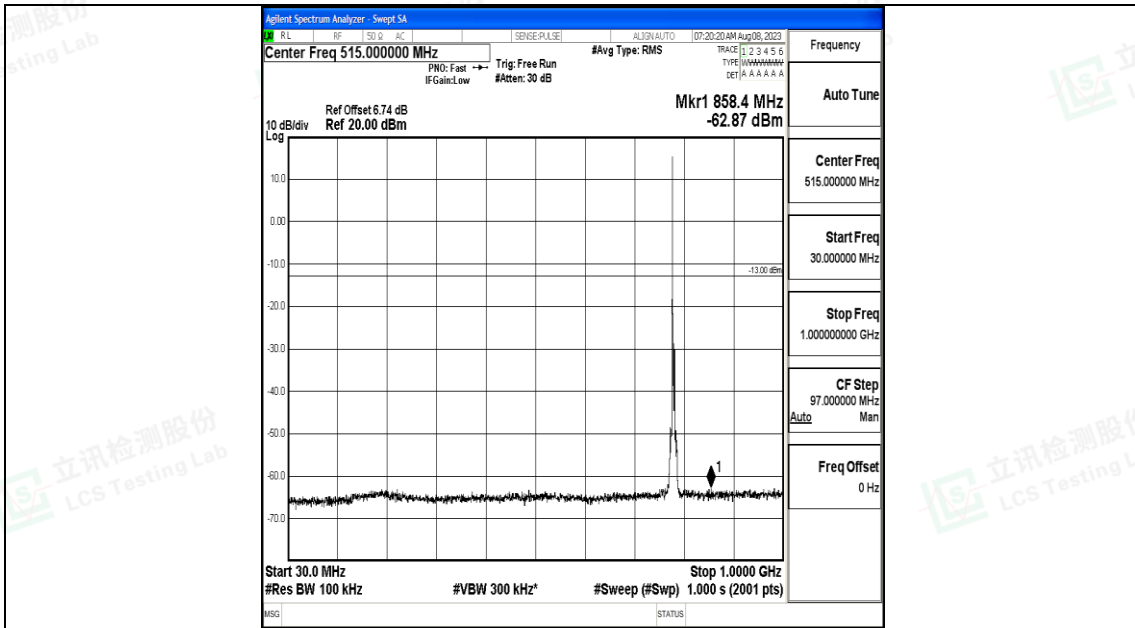


Band13_5MHz_QPSK_23255_1RB#0_0.009~0.15_0.009~0.15

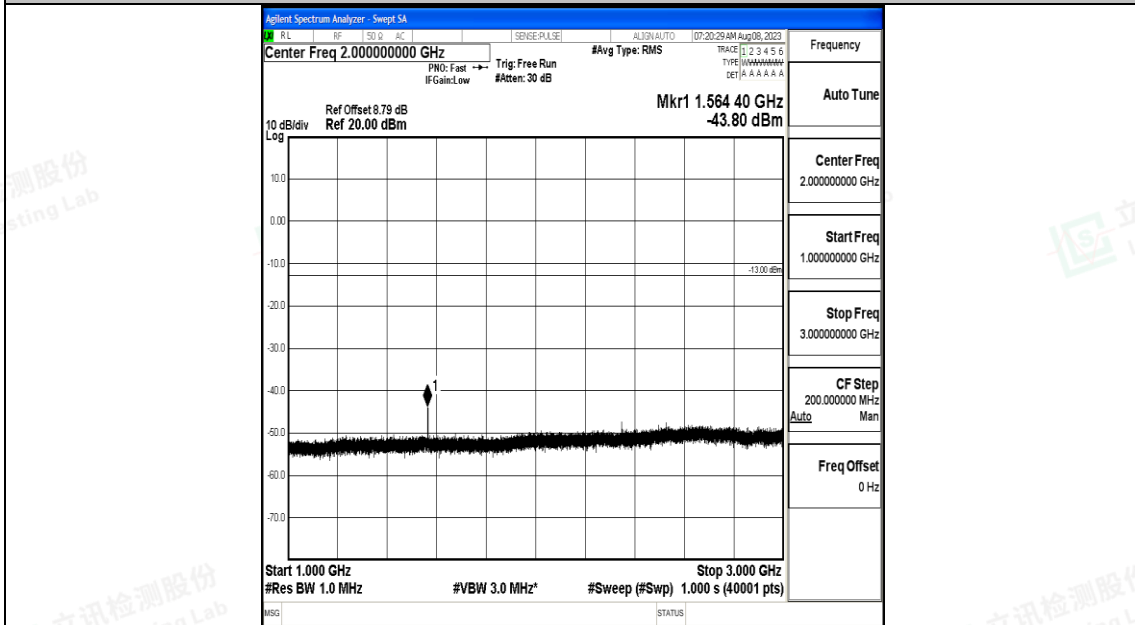


Band13_5MHz_QPSK_23255_1RB#0_0.15~30_0.15~30



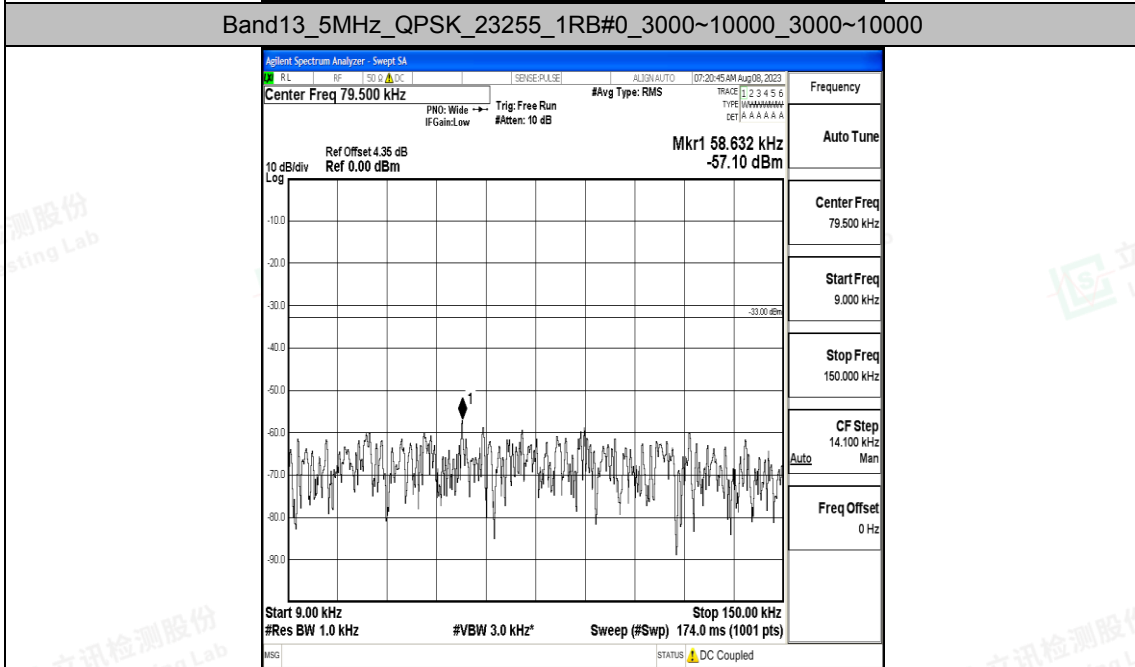
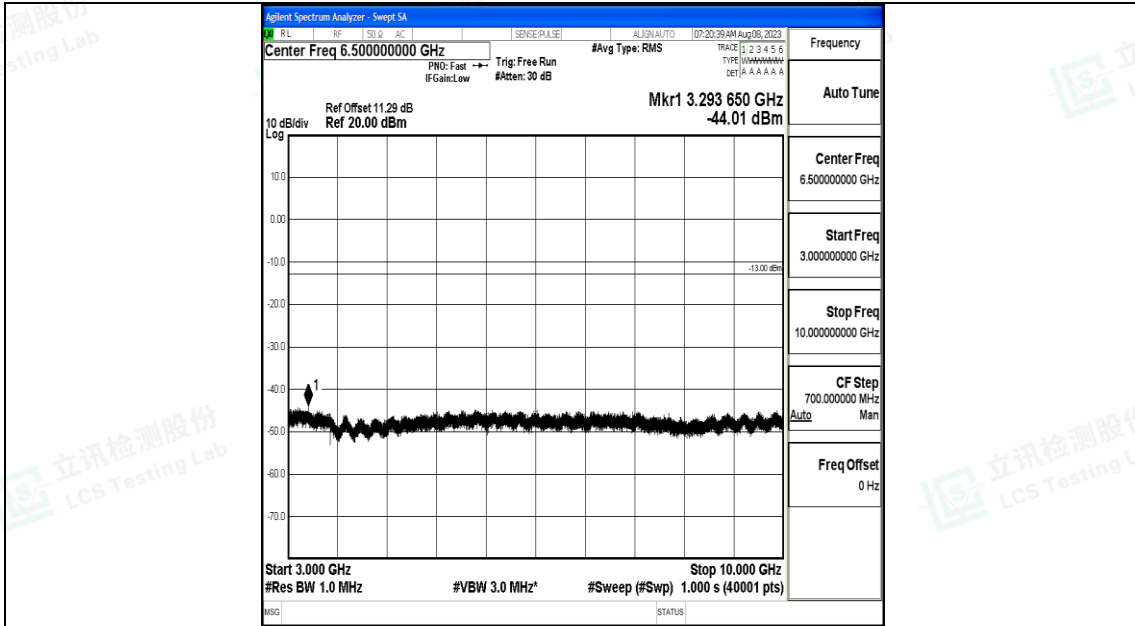


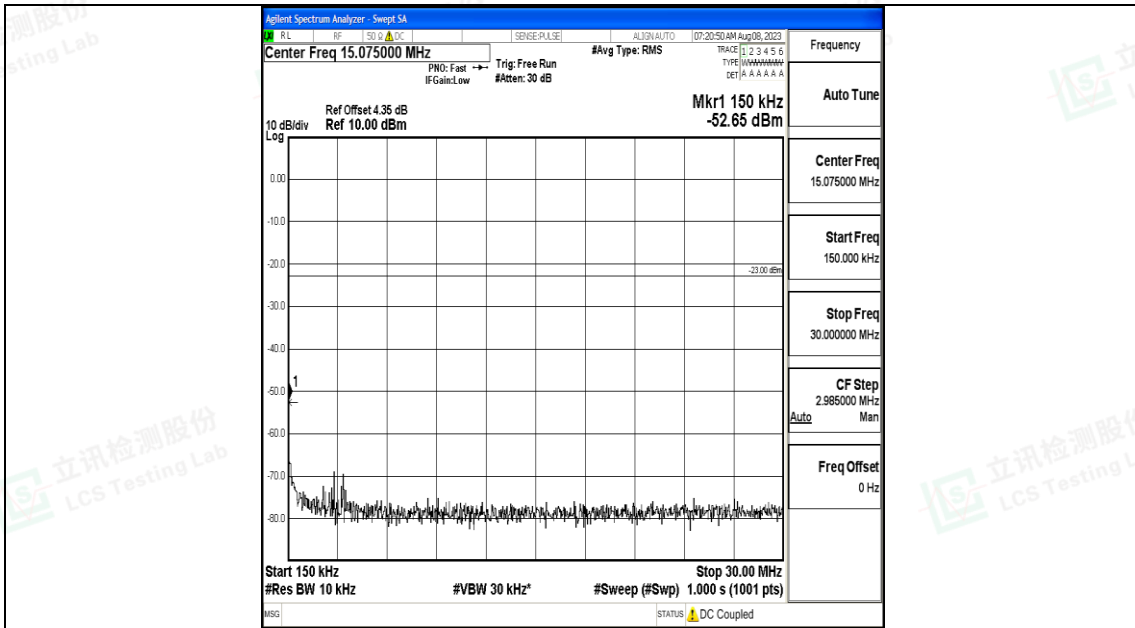
Band13_5MHz_QPSK_23255_1RB#0_30~1000_30~1000



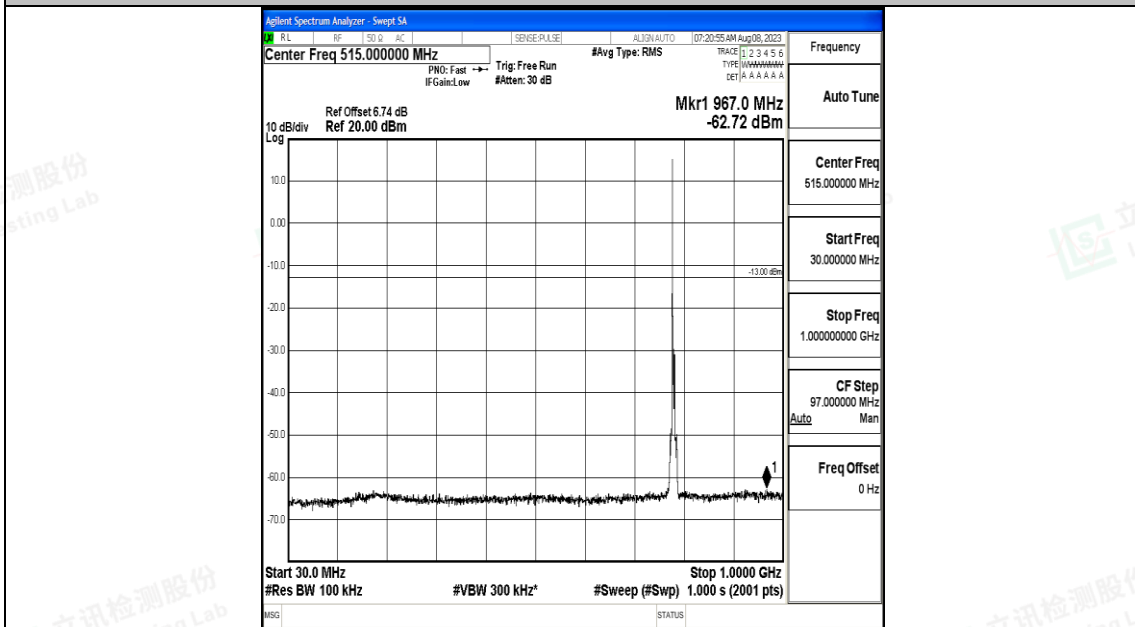
Band13_5MHz_QPSK_23255_1RB#0_1000~3000_1000~3000





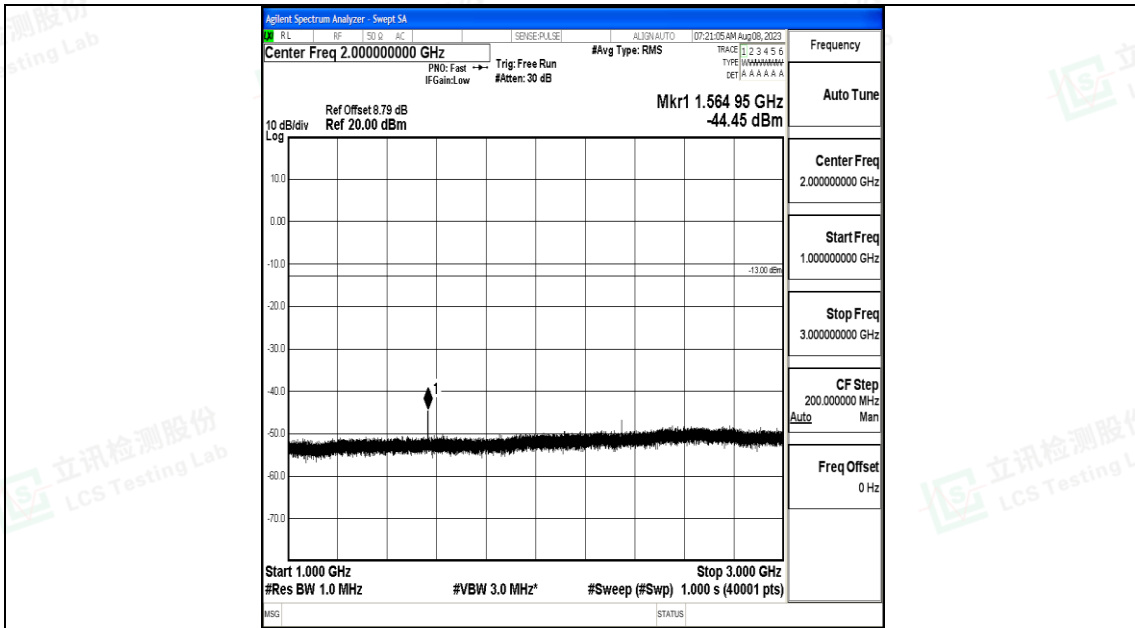


Band13_5MHz_16QAM_23255_1RB#0_0.15~30_0.15~30

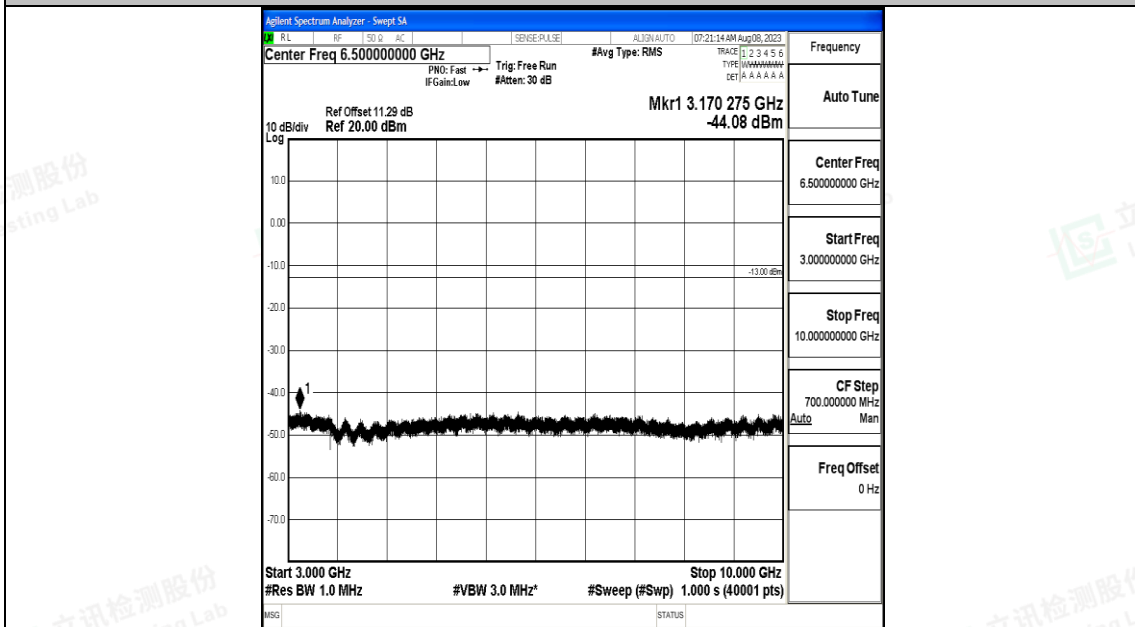


Band13_5MHz_16QAM_23255_1RB#0_30~1000_30~1000



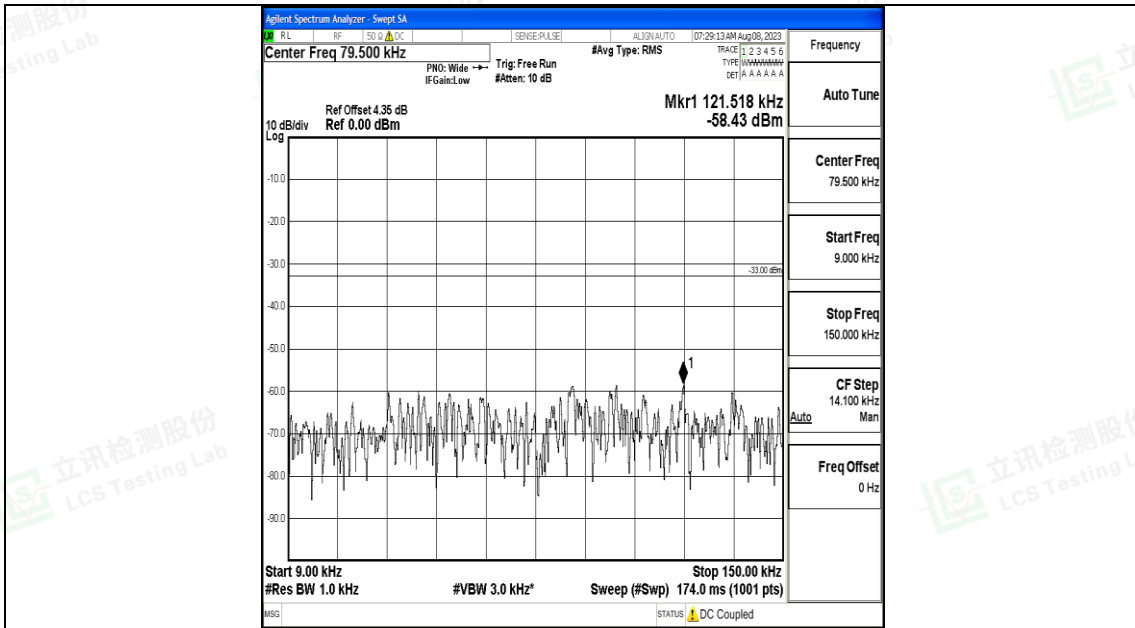


Band13_5MHz_16QAM_23255_1RB#0_1000~3000_1000~3000

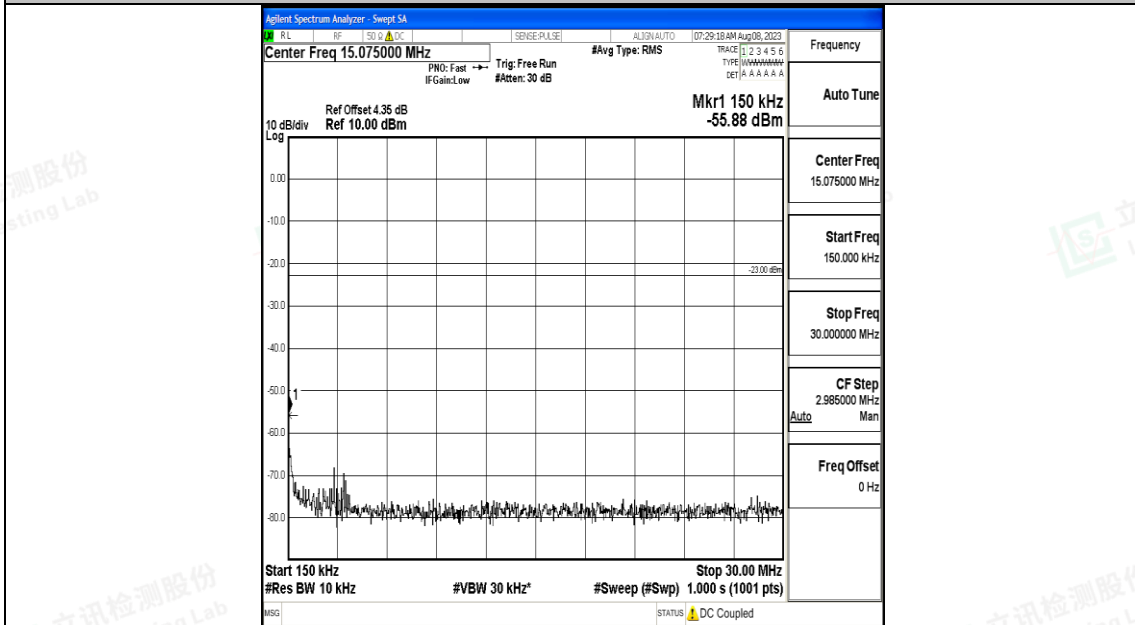


Band13_5MHz_16QAM_23255_1RB#0_3000~10000_3000~10000



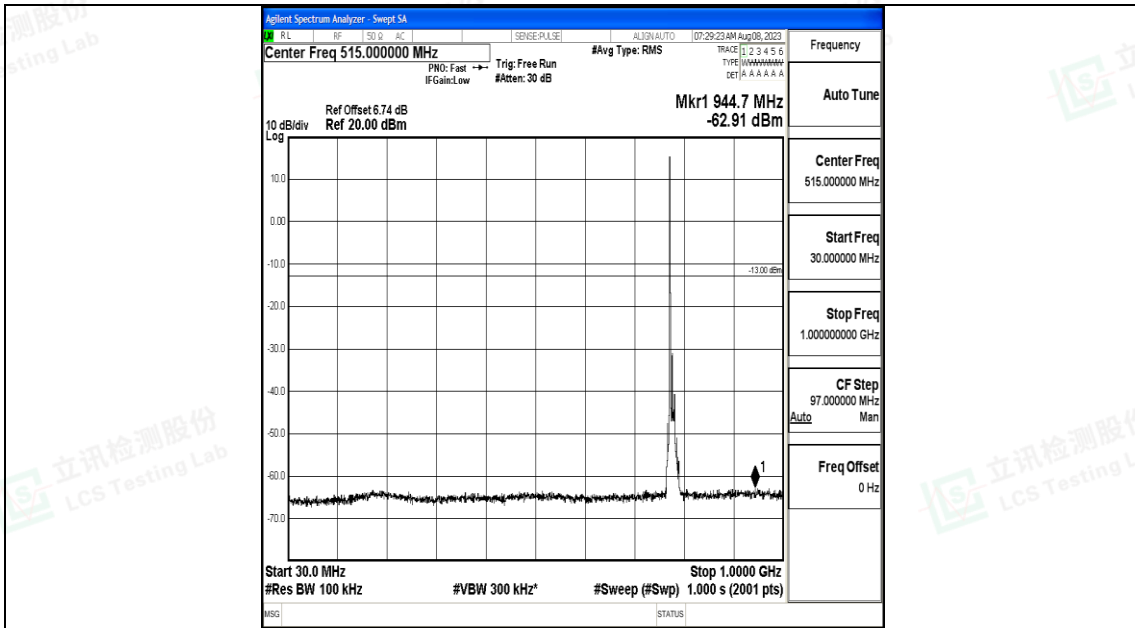


Band13_10MHz_QPSK_23230_1RB#0_0.009~0.15_0.009~0.15

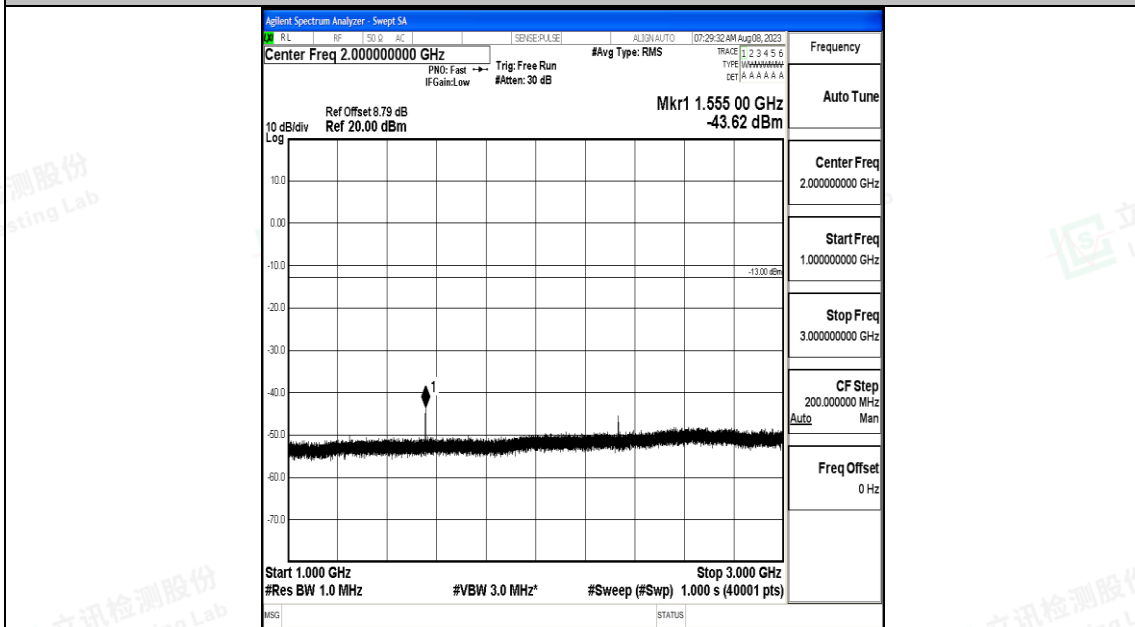


Band13_10MHz_QPSK_23230_1RB#0_0.15~30_0.15~30



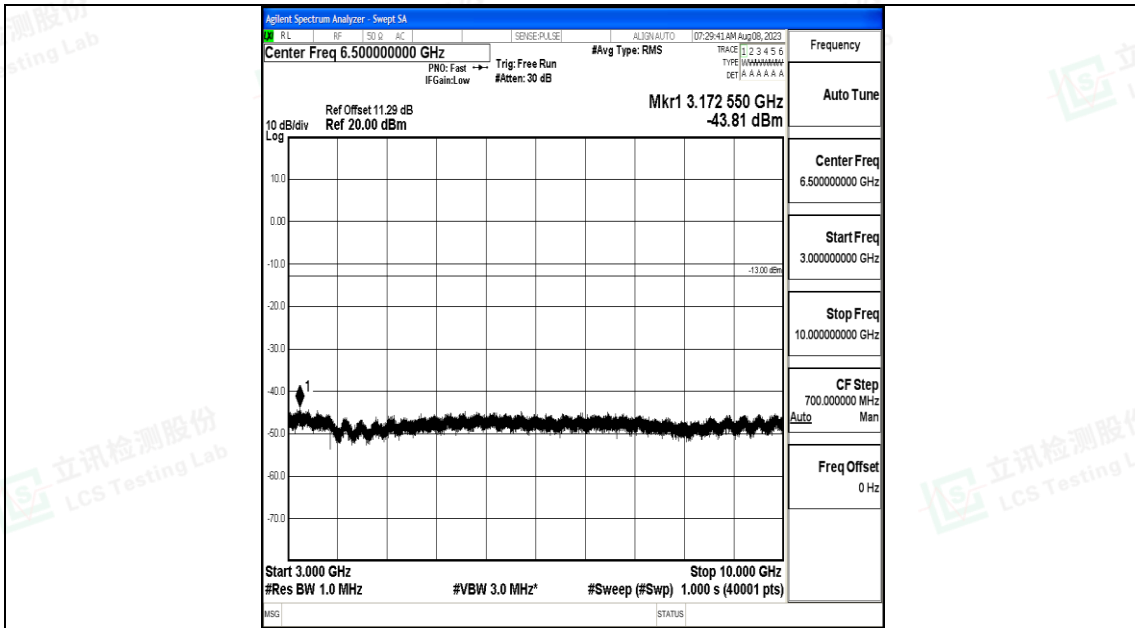


Band13_10MHz_QPSK_23230_1RB#0_30~1000_30~1000

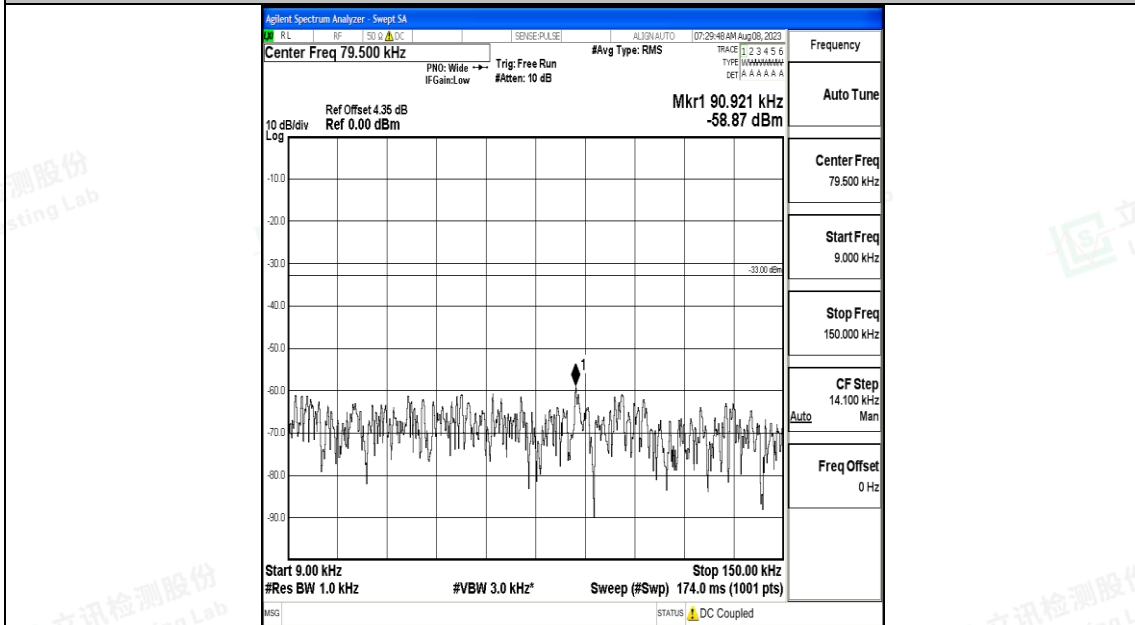


Band13_10MHz_QPSK_23230_1RB#0_1000~3000_1000~3000



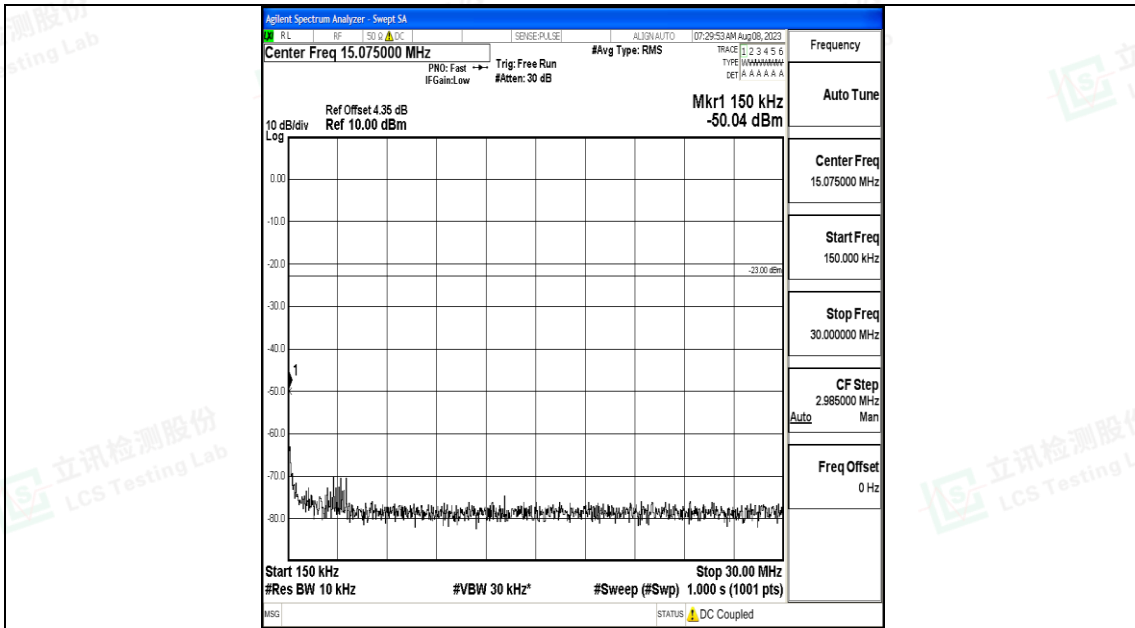


Band13_10MHz_QPSK_23230_1RB#0_3000~10000_3000~10000

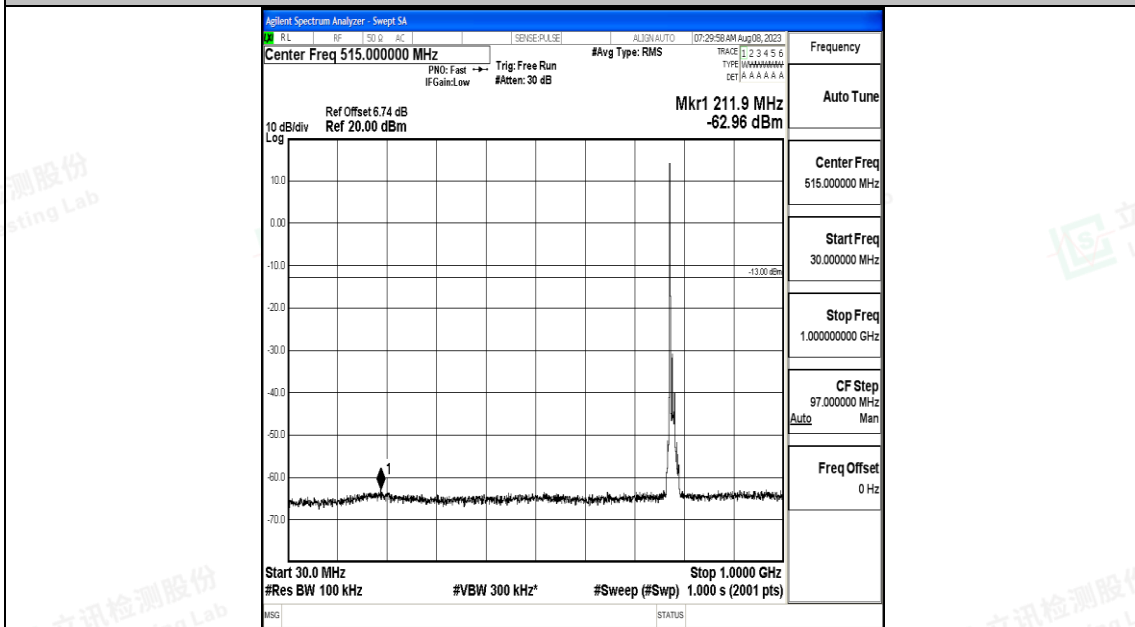


Band13_10MHz_16QAM_23230_1RB#0_0.009~0.15_0.009~0.15



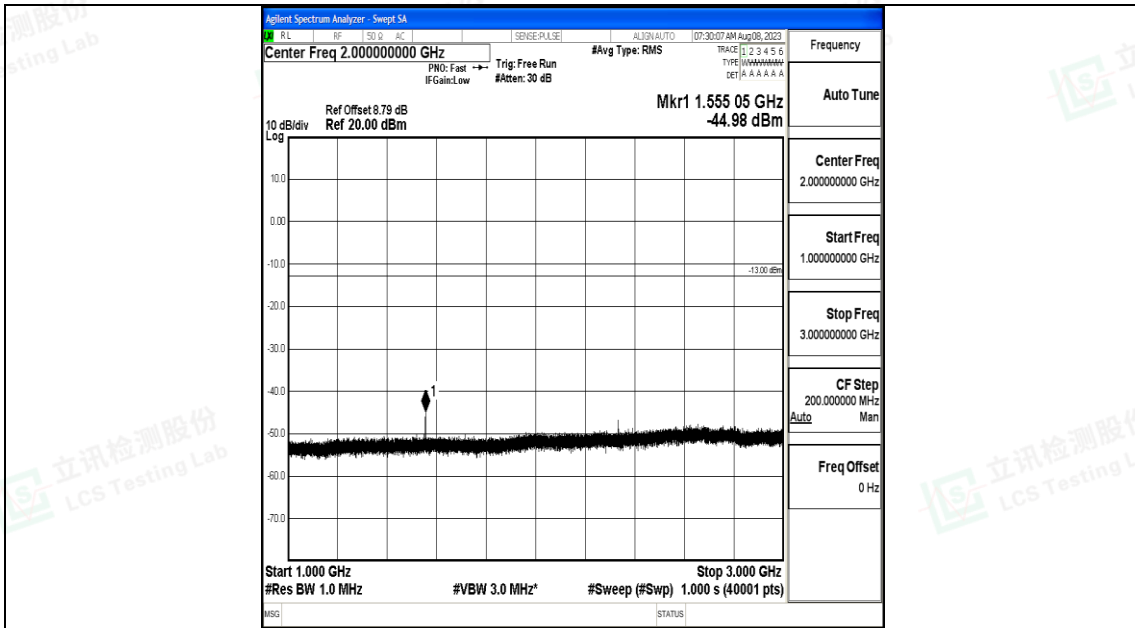


Band13_10MHz_16QAM_23230_1RB#0_0.15~30_0.15~30

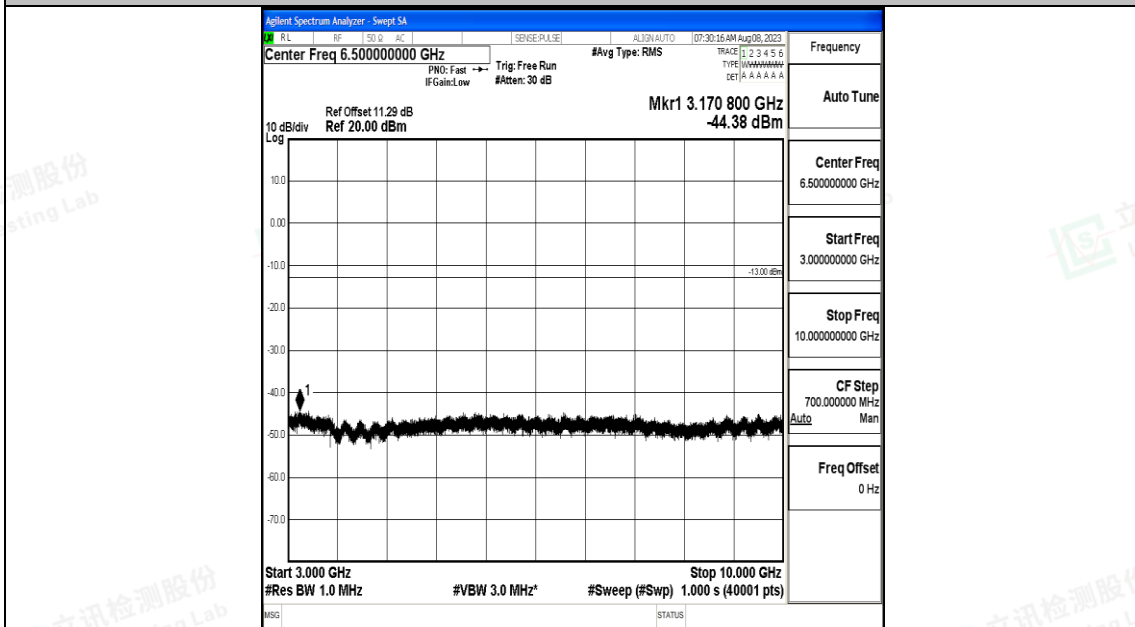


Band13_10MHz_16QAM_23230_1RB#0_30~1000_30~1000





Band13_10MHz_16QAM_23230_1RB#0_1000~3000_1000~3000



Band13_10MHz_16QAM_23230_1RB#0_3000~10000_3000~10000

