



Appendix J: Test Data for E-UTRA Band 13

Product Name: NFC Android Reader

Test Model: FX335

Environmental Conditions

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



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J.1 Conducted Output Power Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	21.89	PASS
Band13	5MHz	QPSK	23205	1RB#12	22.65	PASS
Band13	5MHz	QPSK	23205	1RB#24	22.77	PASS
Band13	5MHz	QPSK	23205	12RB#0	21.92	PASS
Band13	5MHz	QPSK	23205	12RB#6	21.93	PASS
Band13	5MHz	QPSK	23205	12RB#13	21.82	PASS
Band13	5MHz	QPSK	23205	25RB#0	21.89	PASS
Band13	5MHz	QPSK	23230	1RB#0	22.95	PASS
Band13	5MHz	QPSK	23230	1RB#12	22.87	PASS
Band13	5MHz	QPSK	23230	1RB#24	22.76	PASS
Band13	5MHz	QPSK	23230	12RB#0	21.93	PASS
Band13	5MHz	QPSK	23230	12RB#6	21.93	PASS
Band13	5MHz	QPSK	23230	12RB#13	21.90	PASS
Band13	5MHz	QPSK	23230	25RB#0	21.92	PASS
Band13	5MHz	QPSK	23255	1RB#0	22.76	PASS
Band13	5MHz	QPSK	23255	1RB#12	22.62	PASS
Band13	5MHz	QPSK	23255	1RB#24	22.45	PASS
Band13	5MHz	QPSK	23255	12RB#0	21.90	PASS
Band13	5MHz	QPSK	23255	12RB#6	21.92	PASS
Band13	5MHz	QPSK	23255	12RB#13	21.86	PASS
Band13	5MHz	QPSK	23255	25RB#0	21.85	PASS
Band13	5MHz	16QAM	23205	1RB#0	22.51	PASS
Band13	5MHz	16QAM	23205	1RB#12	22.11	PASS
Band13	5MHz	16QAM	23205	1RB#24	22.25	PASS
Band13	5MHz	16QAM	23205	12RB#0	21.25	PASS
Band13	5MHz	16QAM	23205	12RB#6	21.26	PASS
Band13	5MHz	16QAM	23205	12RB#13	21.29	PASS
Band13	5MHz	16QAM	23205	25RB#0	21.32	PASS
Band13	5MHz	16QAM	23230	1RB#0	21.69	PASS
Band13	5MHz	16QAM	23230	1RB#12	21.59	PASS





Band13	5MHz	16QAM	23230	1RB#24	21.55	PASS
Band13	5MHz	16QAM	23230	12RB#0	21.33	PASS
Band13	5MHz	16QAM	23230	12RB#6	21.33	PASS
Band13	5MHz	16QAM	23230	12RB#13	21.37	PASS
Band13	5MHz	16QAM	23230	25RB#0	21.33	PASS
Band13	5MHz	16QAM	23255	1RB#0	22.55	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.43	PASS
Band13	5MHz	16QAM	23255	1RB#24	21.85	PASS
Band13	5MHz	16QAM	23255	12RB#0	21.26	PASS
Band13	5MHz	16QAM	23255	12RB#6	21.17	PASS
Band13	5MHz	16QAM	23255	12RB#13	21.15	PASS
Band13	5MHz	16QAM	23255	25RB#0	21.25	PASS
Band13	10MHz	QPSK	23230	1RB#0	22.81	PASS
Band13	10MHz	QPSK	23230	1RB#24	22.74	PASS
Band13	10MHz	QPSK	23230	1RB#49	22.37	PASS
Band13	10MHz	QPSK	23230	25RB#0	22.03	PASS
Band13	10MHz	QPSK	23230	25RB#12	22.03	PASS
Band13	10MHz	QPSK	23230	25RB#25	21.89	PASS
Band13	10MHz	QPSK	23230	50RB#0	21.93	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.32	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.32	PASS
Band13	10MHz	16QAM	23230	1RB#49	21.99	PASS
Band13	10MHz	16QAM	23230	25RB#0	21.40	PASS
Band13	10MHz	16QAM	23230	25RB#12	21.40	PASS
Band13	10MHz	16QAM	23230	25RB#25	21.17	PASS
Band13	10MHz	16QAM	23230	50RB#0	21.31	PASS





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

Test Result

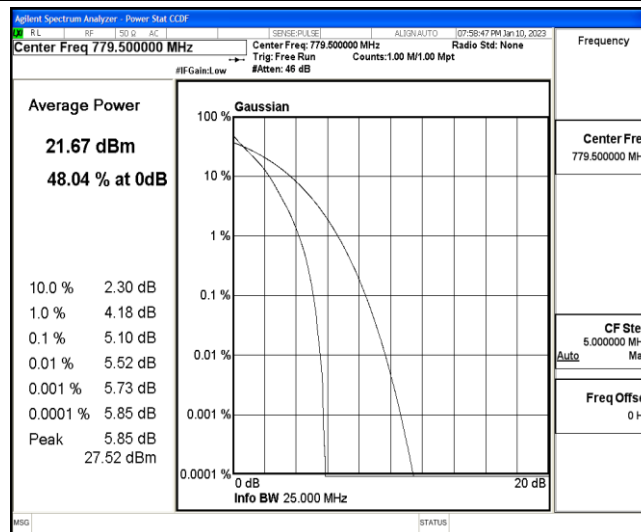
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	5.10	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.16	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	5.05	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	5.68	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	5.74	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	5.76	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.15	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	5.76	13	PASS



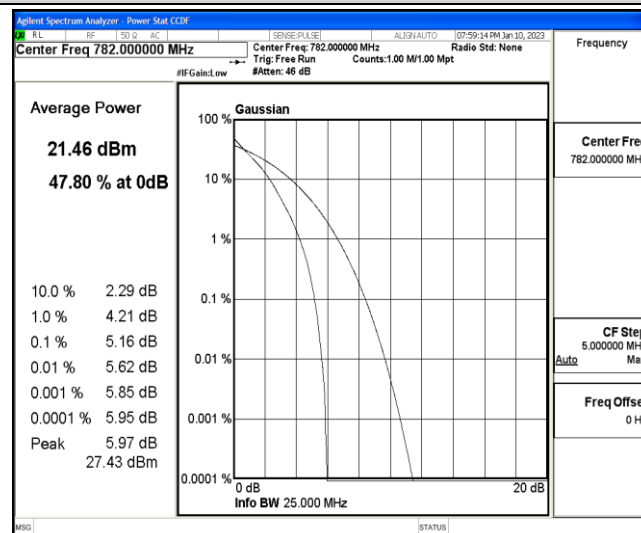


Test Graphs

Band13-5MHz-QPSK-23205-25RB#0

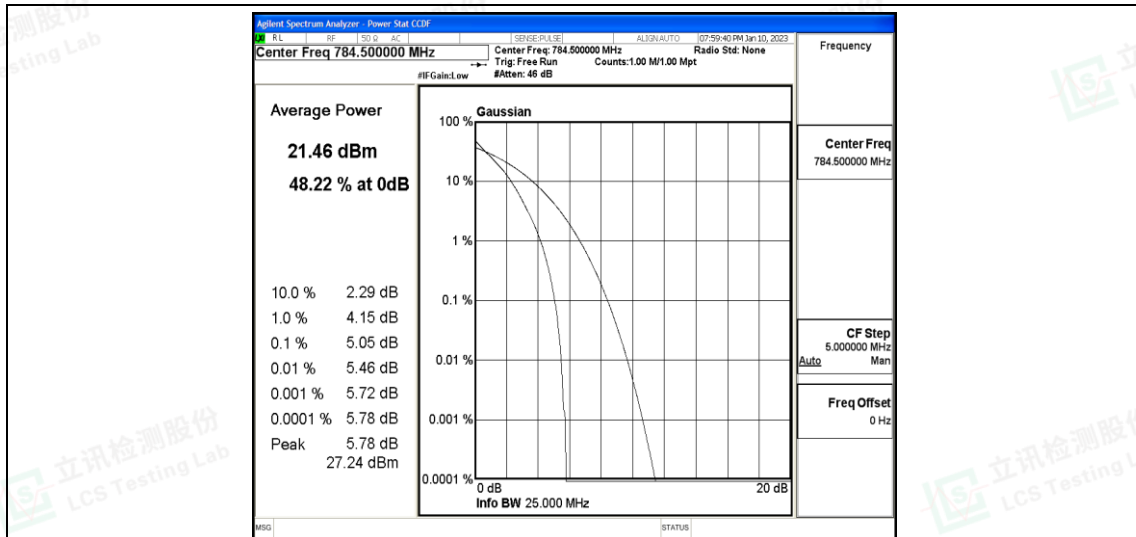


Band13-5MHz-QPSK-23230-25RB#0

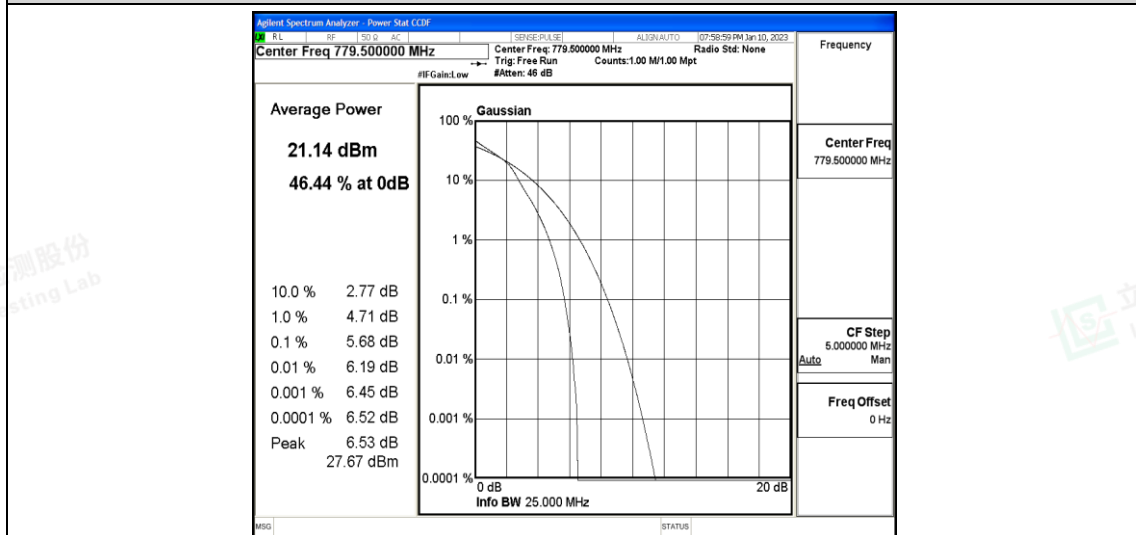


Band13-5MHz-QPSK-23255-25RB#0

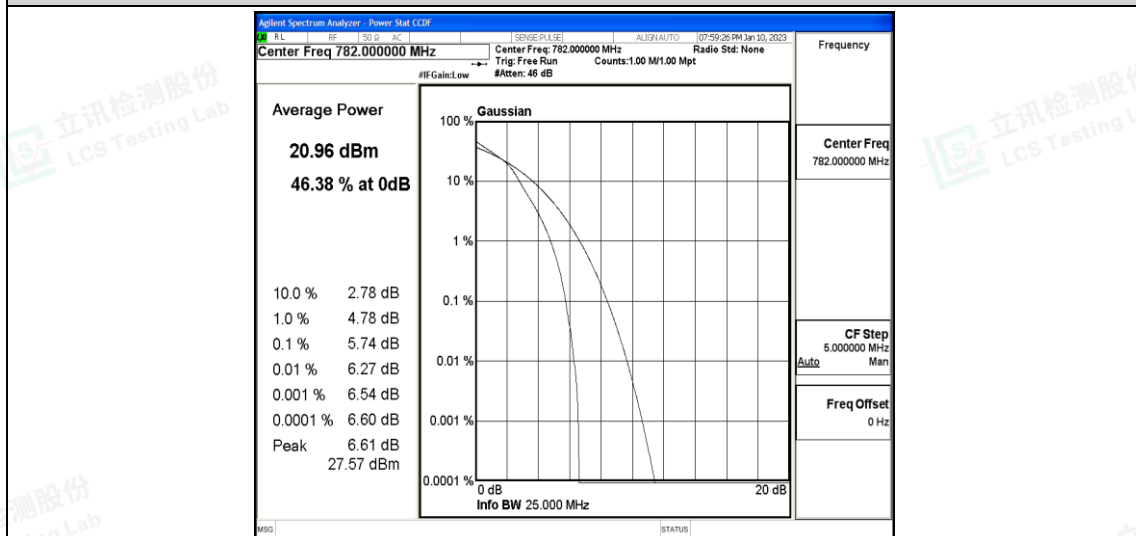




Band13-5MHz-16QAM-23205-25RB#0

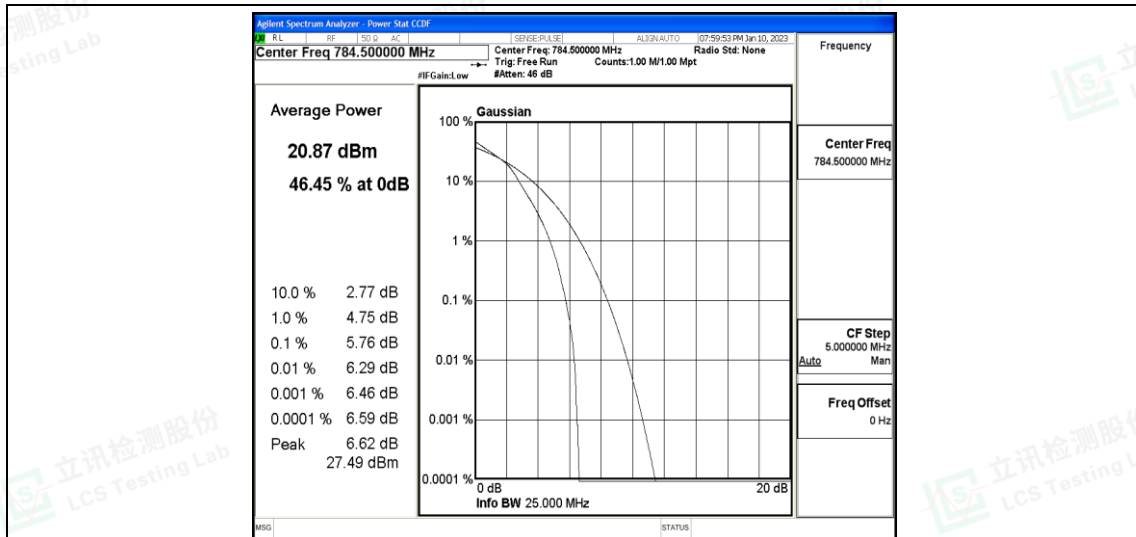


Band13-5MHz-16QAM-23230-25RB#0

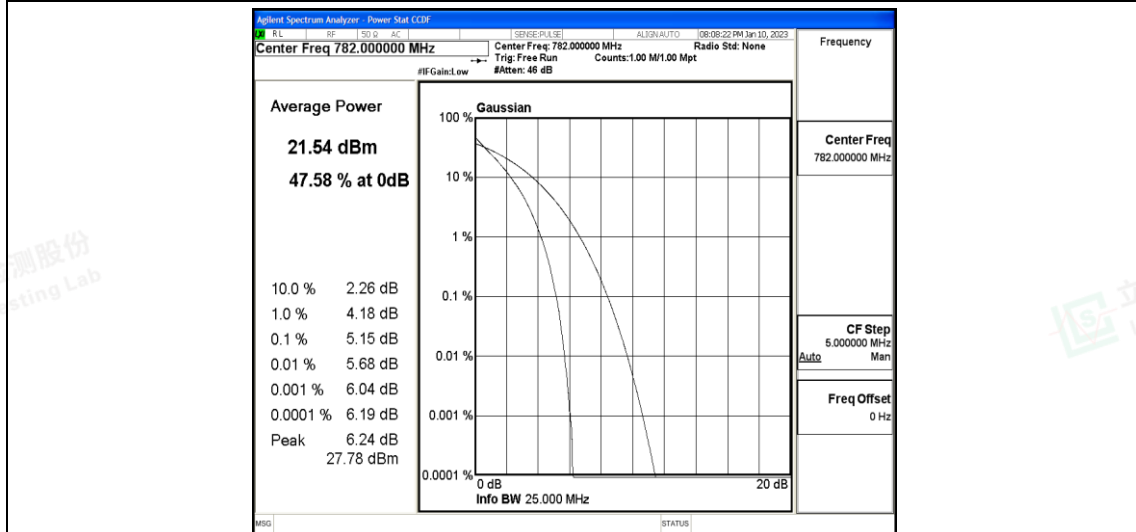


Band13-5MHz-16QAM-23255-25RB#0

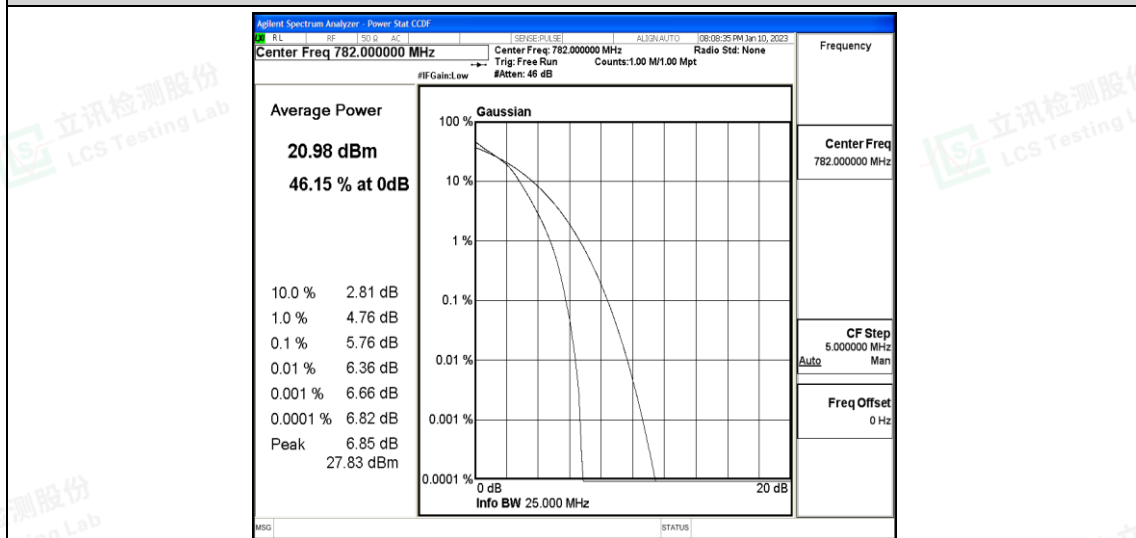




Band13-10MHz-QPSK-23230-50RB#0



Band13-10MHz-16QAM-23230-50RB#0





J.3 26dB Bandwidth and Occupied Bandwidth

Test Result

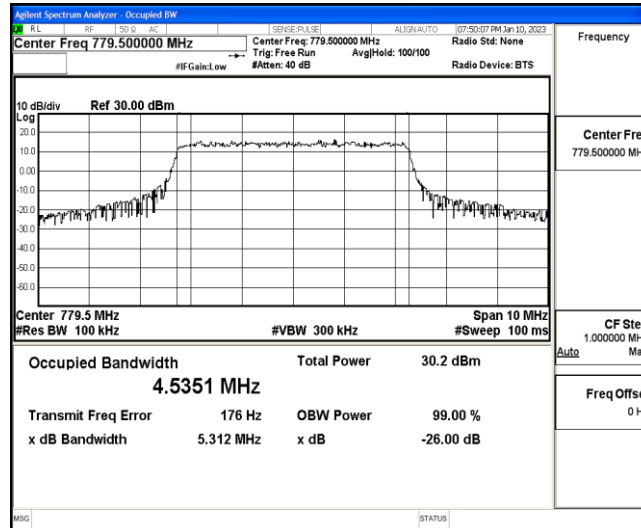
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.5351	5.312	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5421	5.189	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5118	5.404	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5330	5.324	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5207	5.214	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5285	5.280	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9896	10.04	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.9751	10.10	PASS



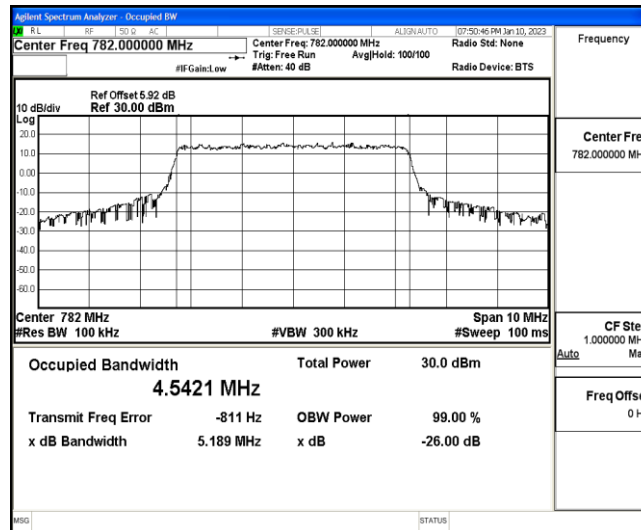


Test Graphs

Band13-5MHz-QPSK-23205-25RB#0

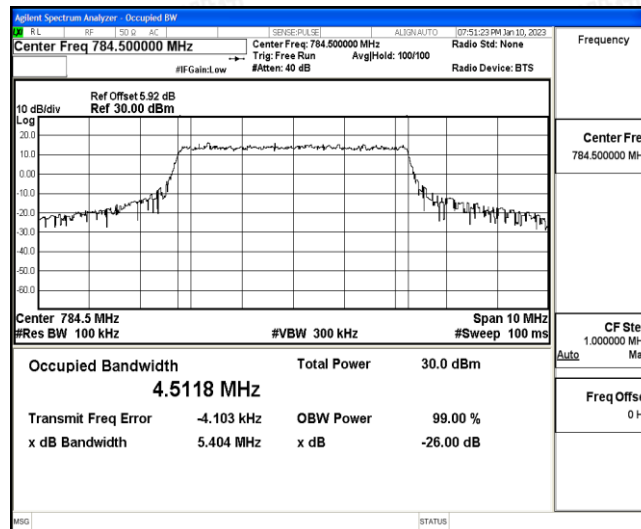


Band13-5MHz-QPSK-23230-25RB#0

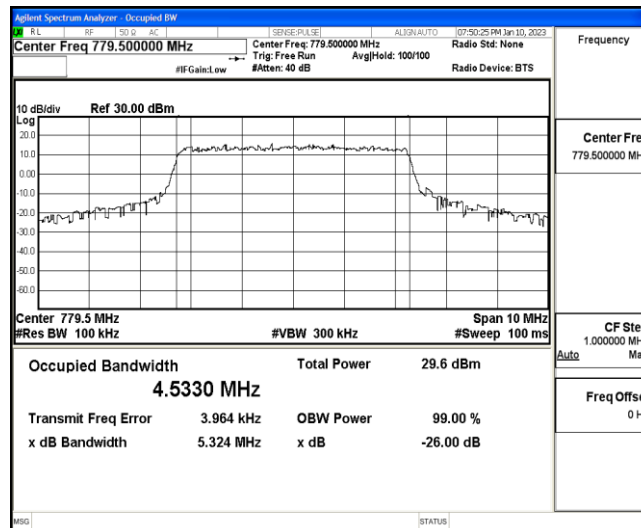


Band13-5MHz-QPSK-23255-25RB#0

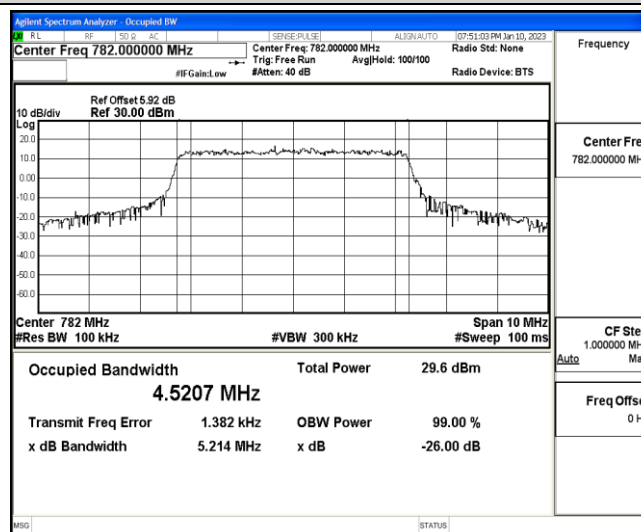




Band13-5MHz-16QAM-23205-25RB#0

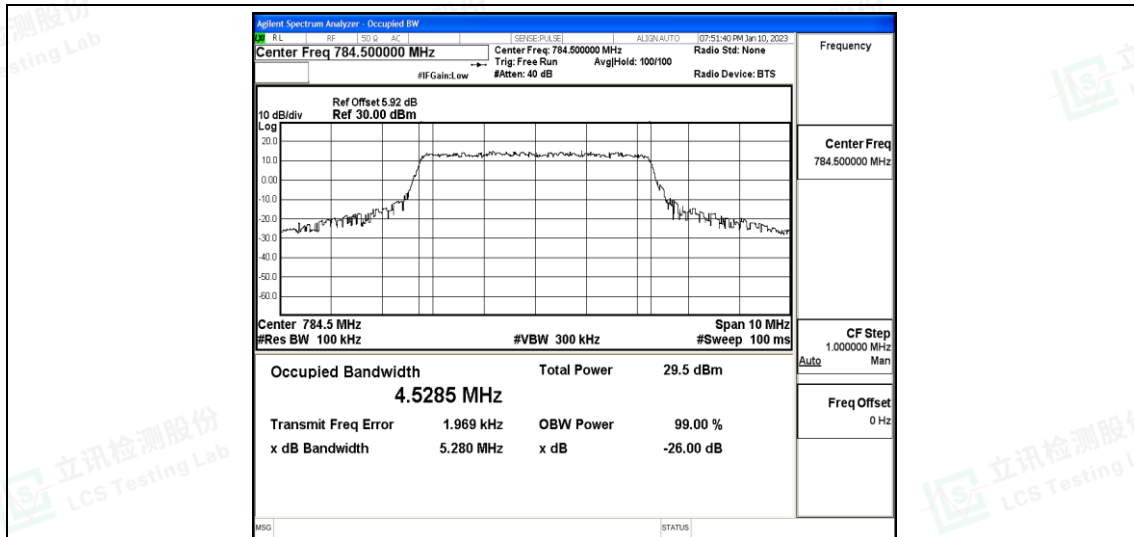


Band13-5MHz-16QAM-23230-25RB#0

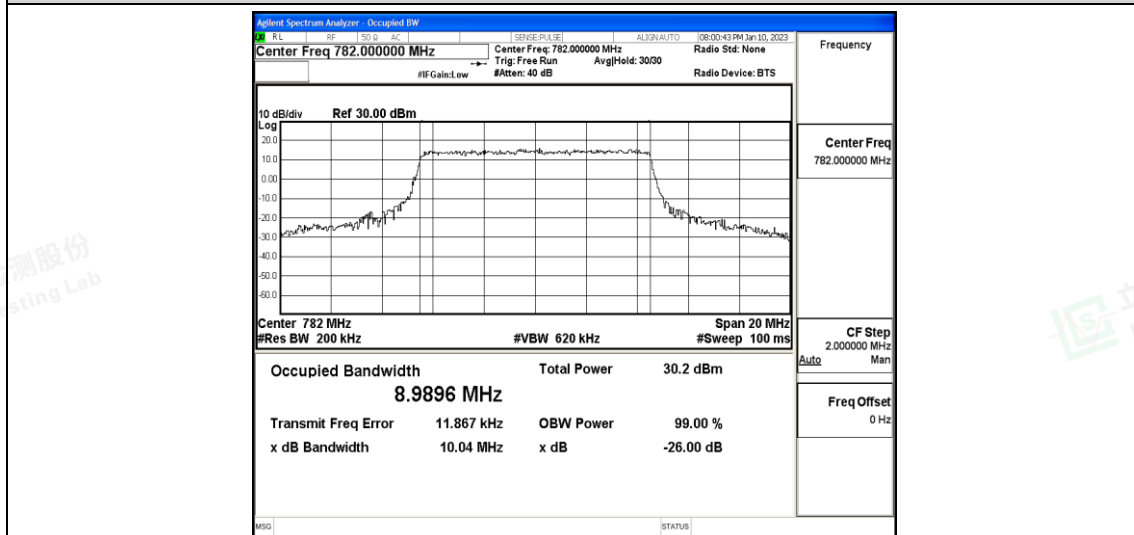


Band13-5MHz-16QAM-23255-25RB#0

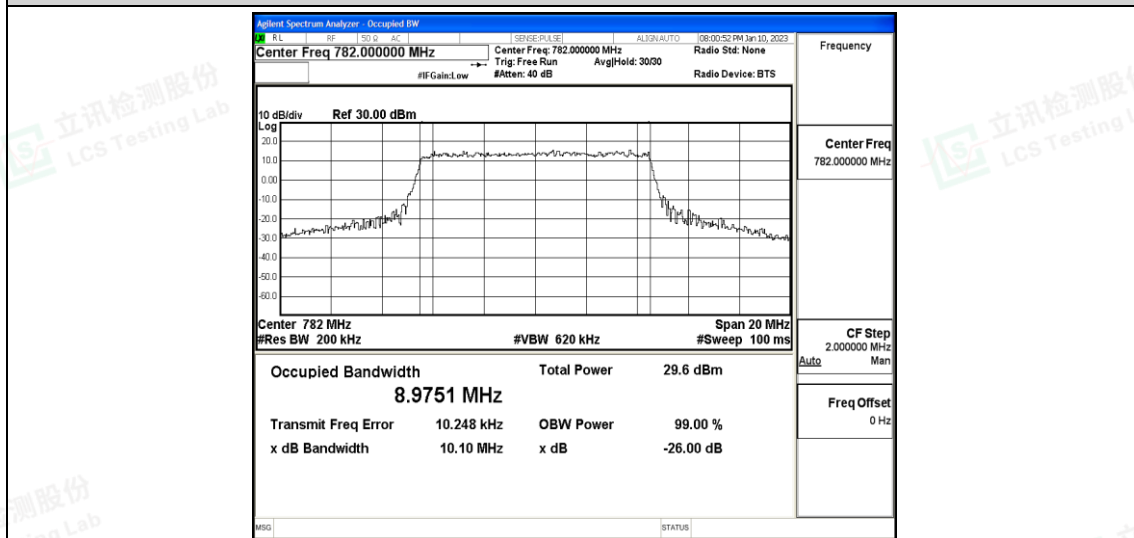




Band13-10MHz-QPSK-23230-50RB#0



Band13-10MHz-16QAM-23230-50RB#0



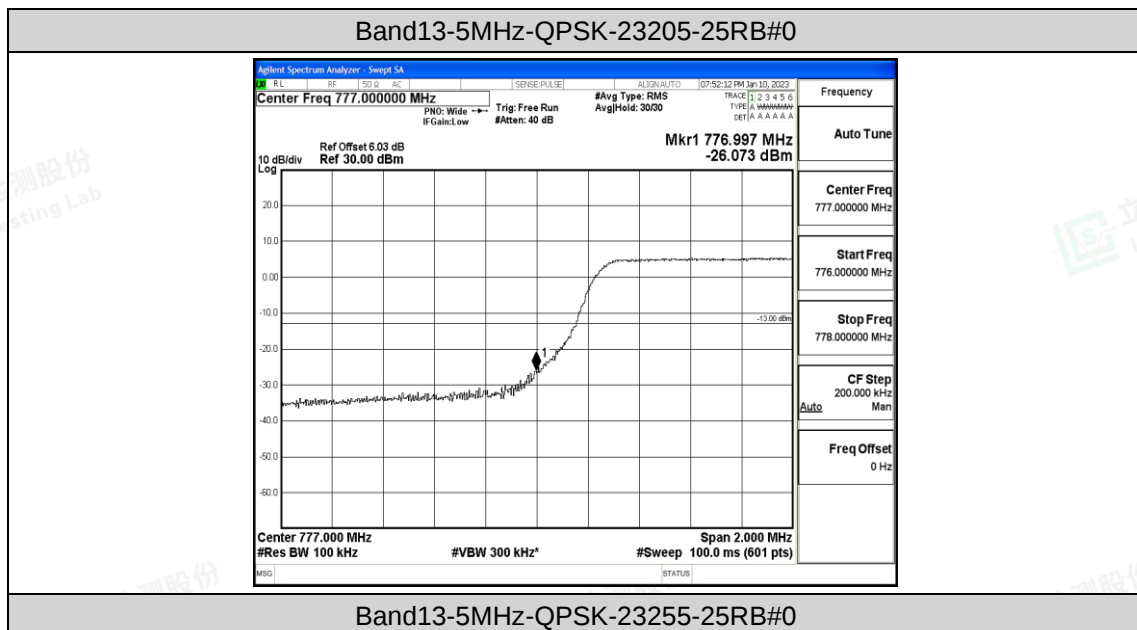


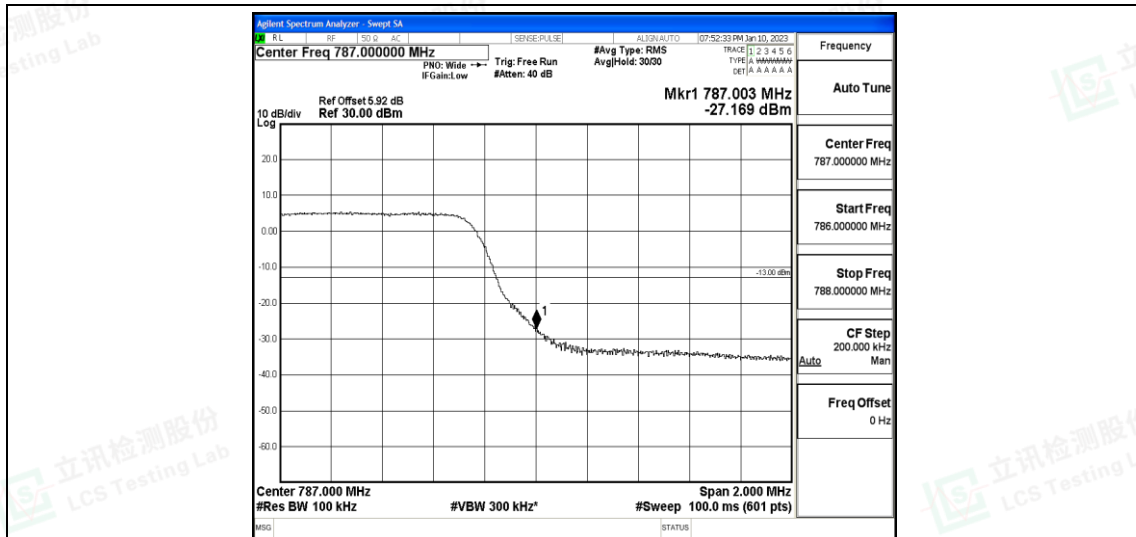
J.4 Band Edge

Test Result

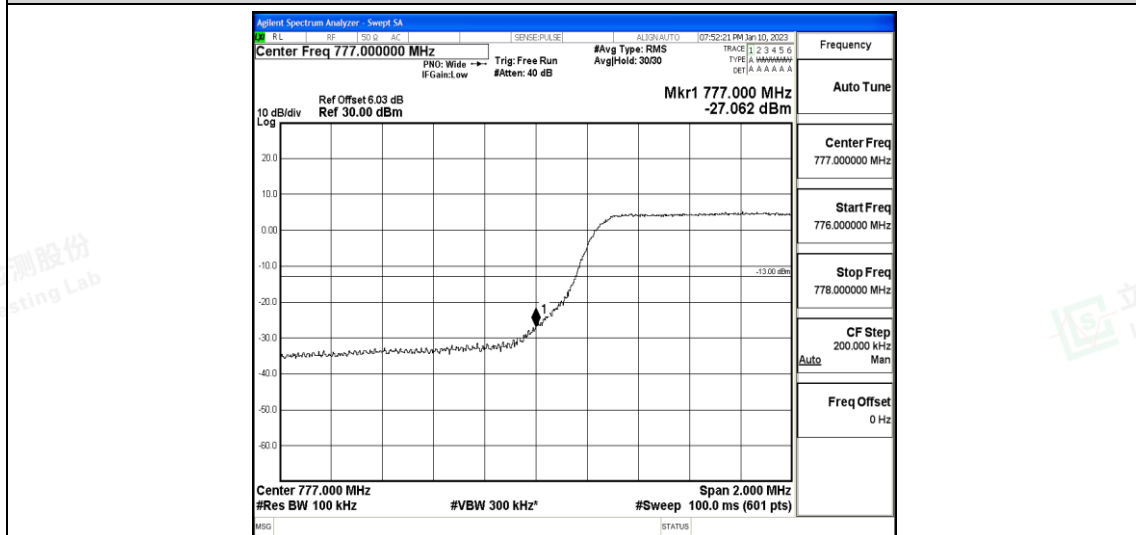
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	-26.07	PASS
Band13	5MHz	QPSK	23255	25RB#0	-27.17	PASS
Band13	5MHz	16QAM	23205	25RB#0	-27.06	PASS
Band13	5MHz	16QAM	23255	25RB#0	-25.61	PASS
Band13	10MHz	QPSK	23230	50RB#0	-28.55,-30.93	PASS
Band13	10MHz	16QAM	23230	50RB#0	-30.41,-31.13	PASS

Test Graphs

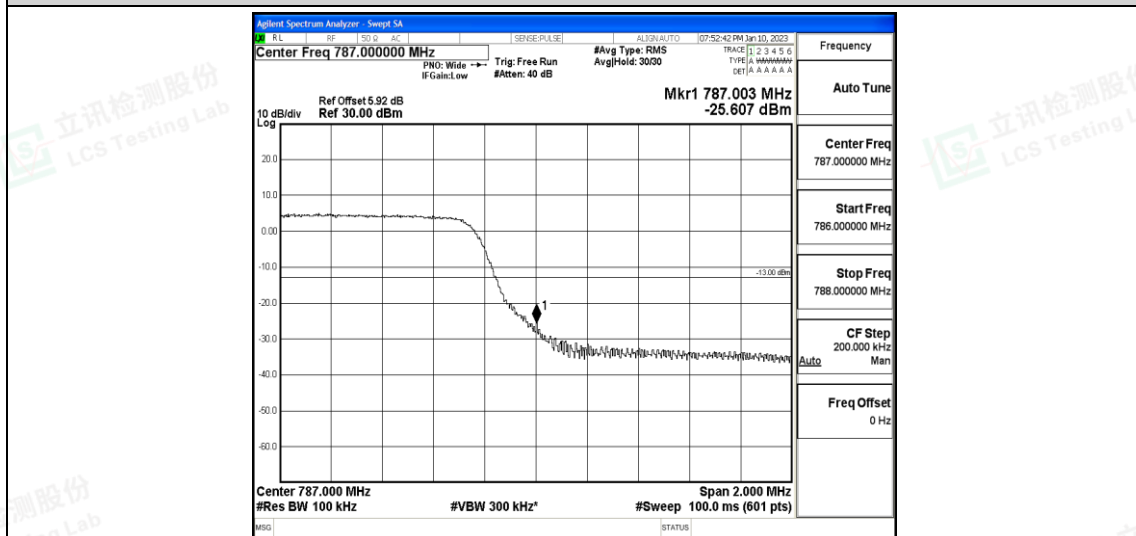




Band13-5MHz-16QAM-23205-25RB#0

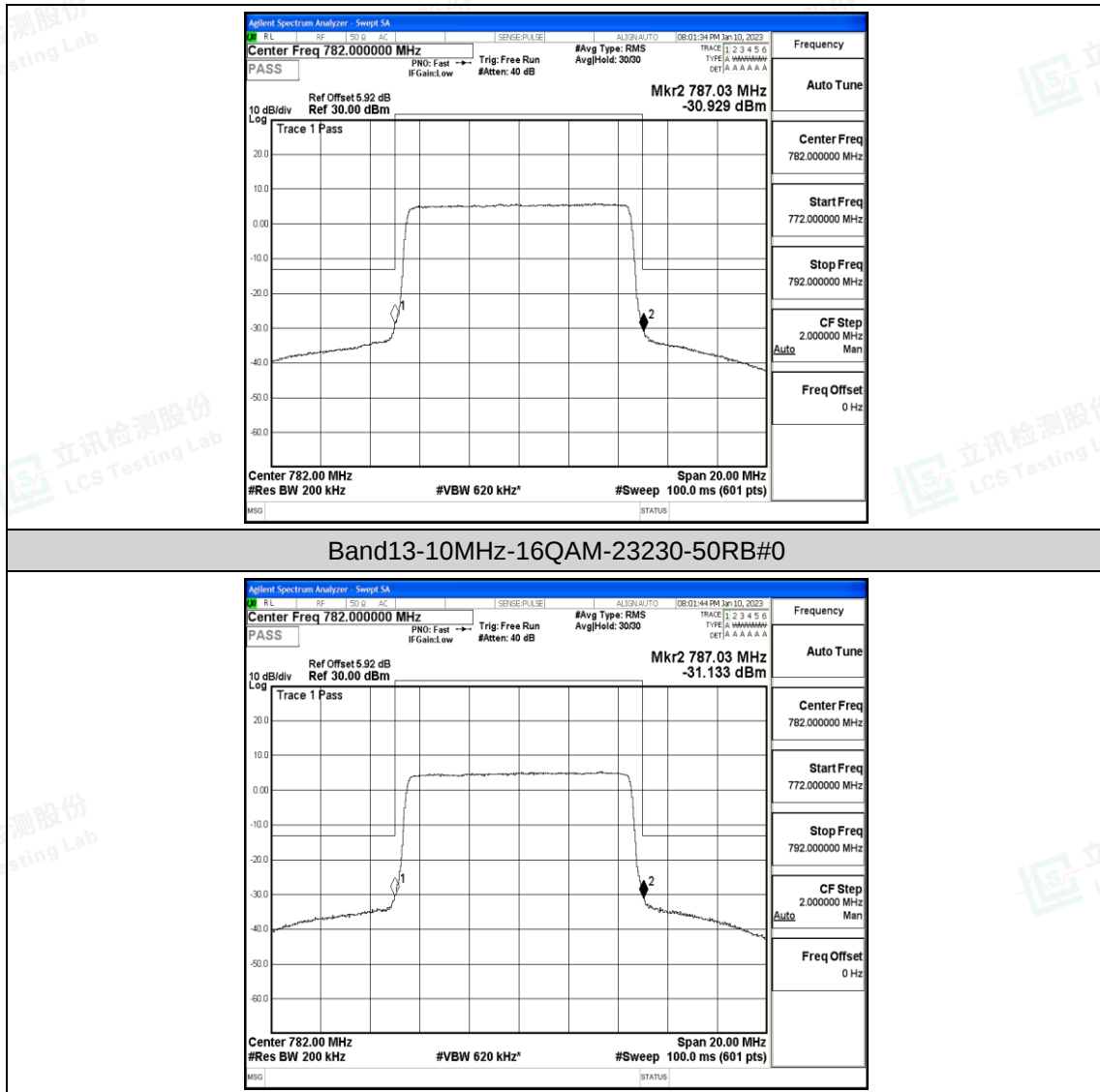


Band13-5MHz-16QAM-23255-25RB#0



Band13-10MHz-QPSK-23230-50RB#0







J.5 Conducted Spurious Emission

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	Range1:0.009~0.15MHz	-54.18	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range2:0.15~30MHz	-50.73	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range3:30~1000MHz	-41.26	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range5:763~775MHz	-60.95	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range6:793~805MHz	-60.19	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range4:1000~10000MHz	-45.03	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range7:1559~1610MHz	-64.11	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range1:0.009~0.15MHz	-56.12	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range2:0.15~30MHz	-50.92	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range3:30~1000MHz	-40.45	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range5:763~775MHz	-60.75	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range6:793~805MHz	-60.04	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range4:1000~10000MHz	-44.92	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range7:1559~1610MHz	-64.17	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range1:0.009~0.15MHz	-54.5	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range2:0.15~30MHz	-51.97	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range3:30~1000MHz	-41.21	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range5:763~775MHz	-59.35	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range6:793~805MHz	-60.36	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range4:1000~10000MHz	-44.95	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range7:1559~1610MHz	-64.05	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range1:0.009~0.15MHz	-53.74	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range2:0.15~30MHz	-51.3	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range3:30~1000MHz	-40.47	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range5:763~775MHz	-60.02	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range6:793~805MHz	-59.96	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range4:1000~10000MHz	-44.96	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range7:1559~1610MHz	-64.18	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range1:0.009~0.15MHz	-55.36	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range2:0.15~30MHz	-51.62	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range3:30~1000MHz	-41.51	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range5:763~775MHz	-60.46	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range6:793~805MHz	-60.17	PASS



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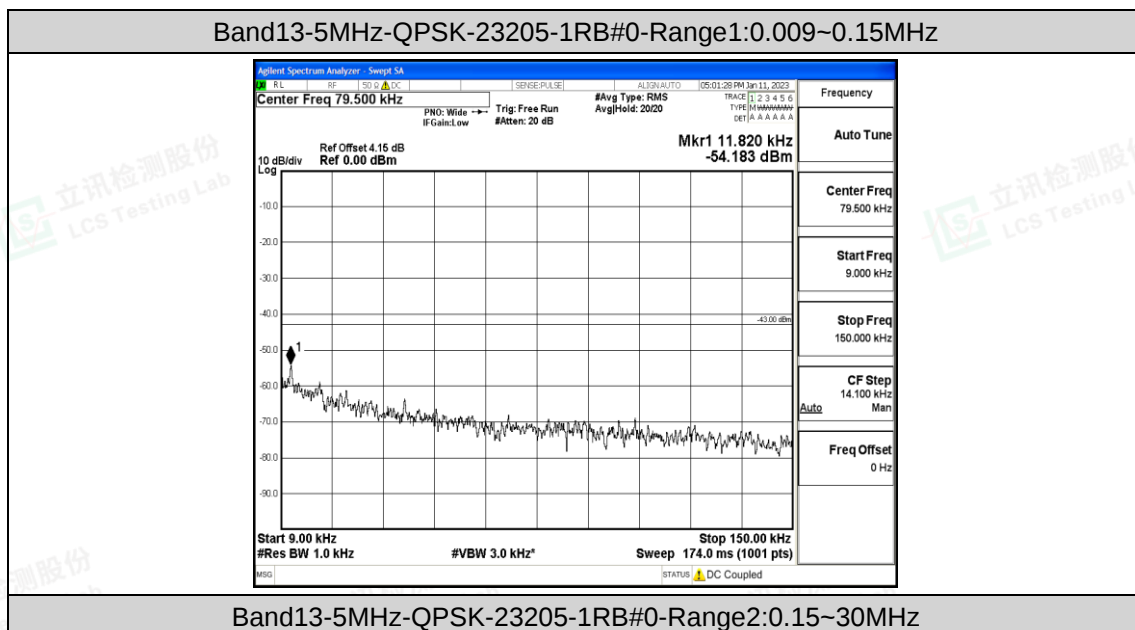
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Scan code to check authenticity



Band13	5MHz	16QAM	23230	1RB#0	Range4:1000~10000MHz	-44.91	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range7:1559~1610MHz	-64.1	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range1:0.009~0.15MHz	-52.27	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range2:0.15~30MHz	-51.17	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range3:30~1000MHz	-40.88	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range5:763~775MHz	-60.82	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range6:793~805MHz	-60.85	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range4:1000~10000MHz	-45	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range7:1559~1610MHz	-64.11	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range1:0.009~0.15MHz	-54.26	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range2:0.15~30MHz	-52.04	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range3:30~1000MHz	-40.75	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range5:763~775MHz	-47.57	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range6:793~805MHz	-54.85	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range4:1000~10000MHz	-44.99	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range7:1559~1610MHz	-62.39	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range1:0.009~0.15MHz	-55.75	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range2:0.15~30MHz	-51.74	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range3:30~1000MHz	-40.66	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range5:763~775MHz	-45.94	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range6:793~805MHz	-54.06	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range4:1000~10000MHz	-44.81	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range7:1559~1610MHz	-61.92	PASS

Test Graphs

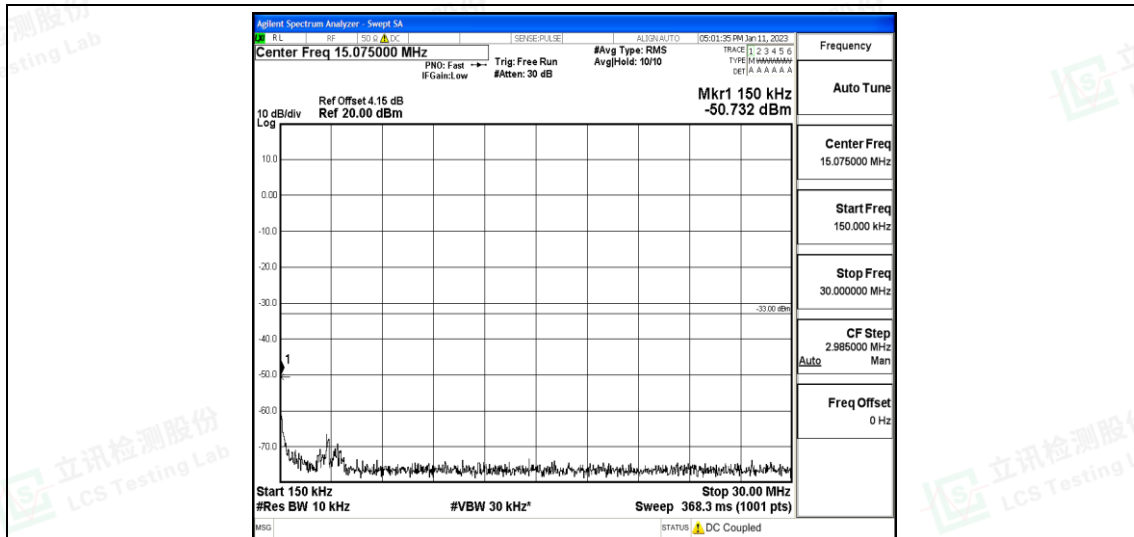


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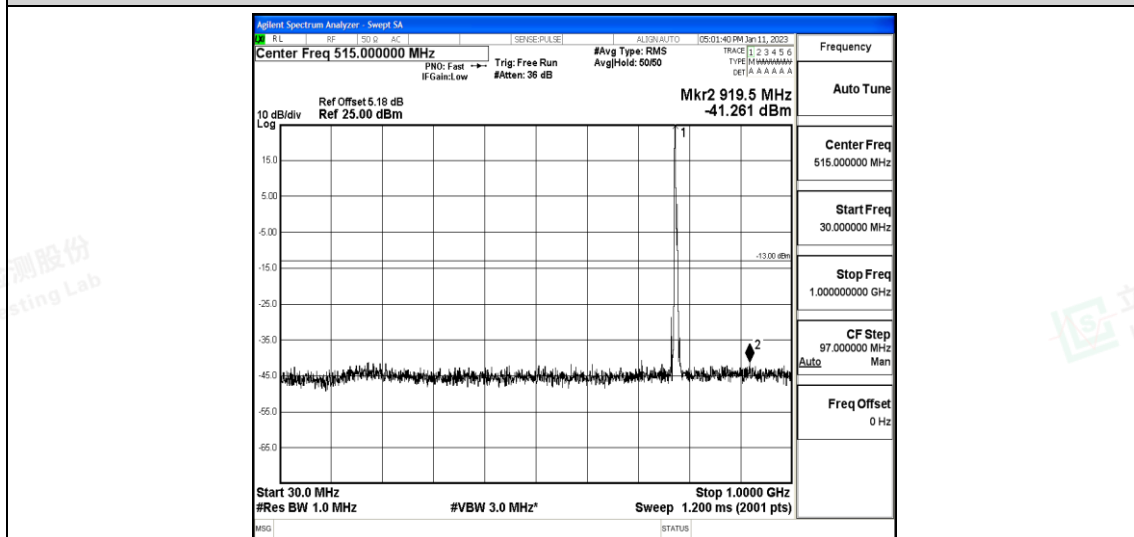
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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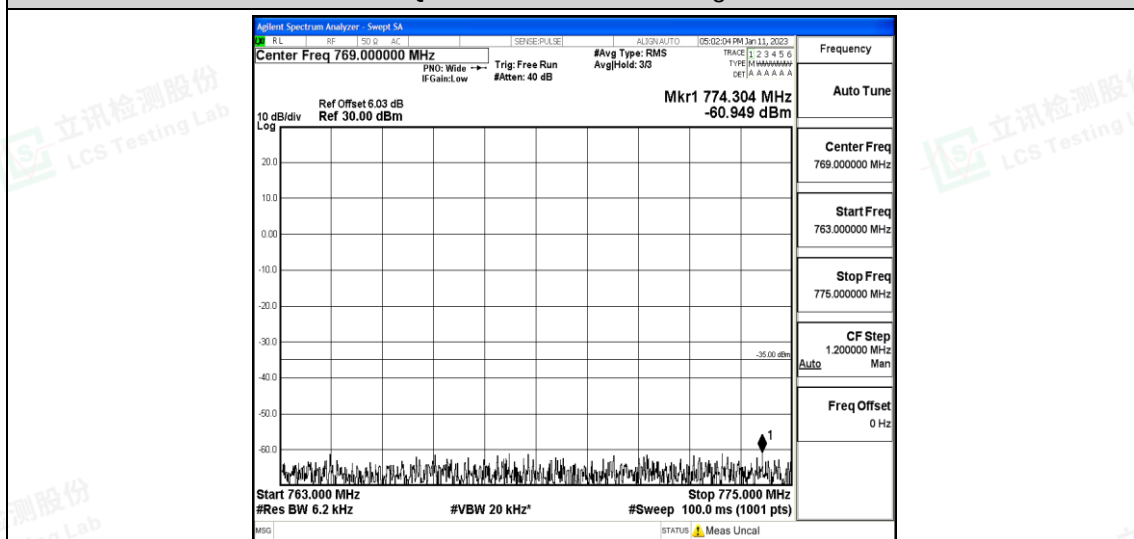
Scan code to check authenticity



Band13-5MHz-QPSK-23205-1RB#0-Range3:30~1000MHz

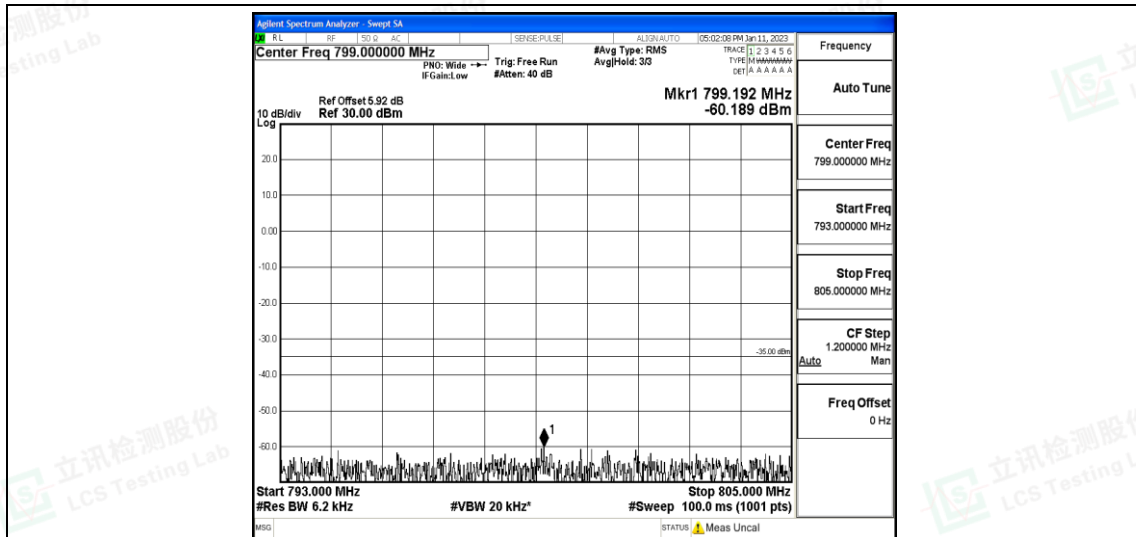


Band13-5MHz-QPSK-23205-1RB#0-Range5:763~775MHz

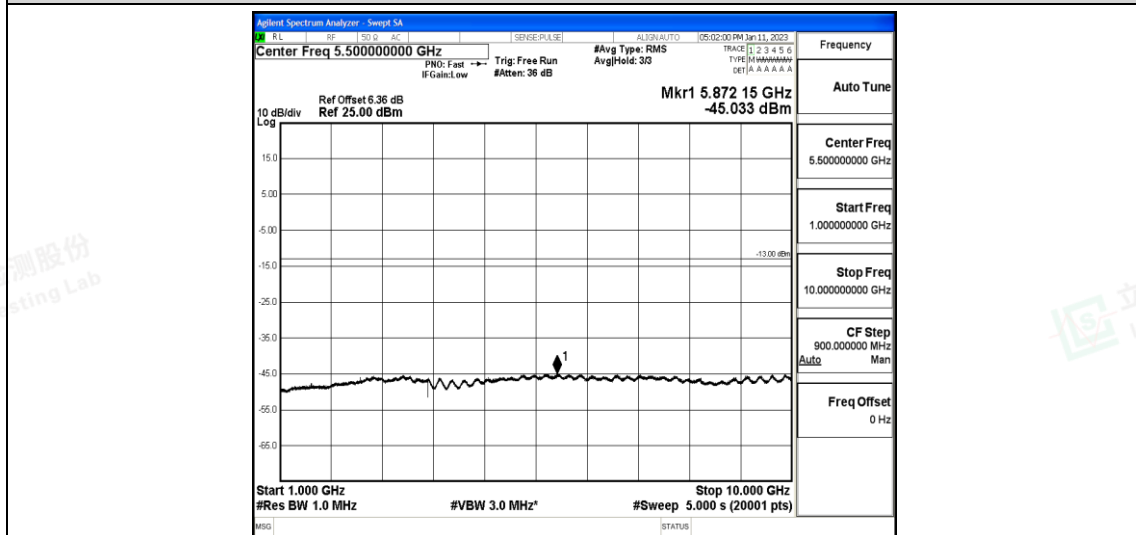


Band13-5MHz-QPSK-23205-1RB#0-Range6:793~805MHz

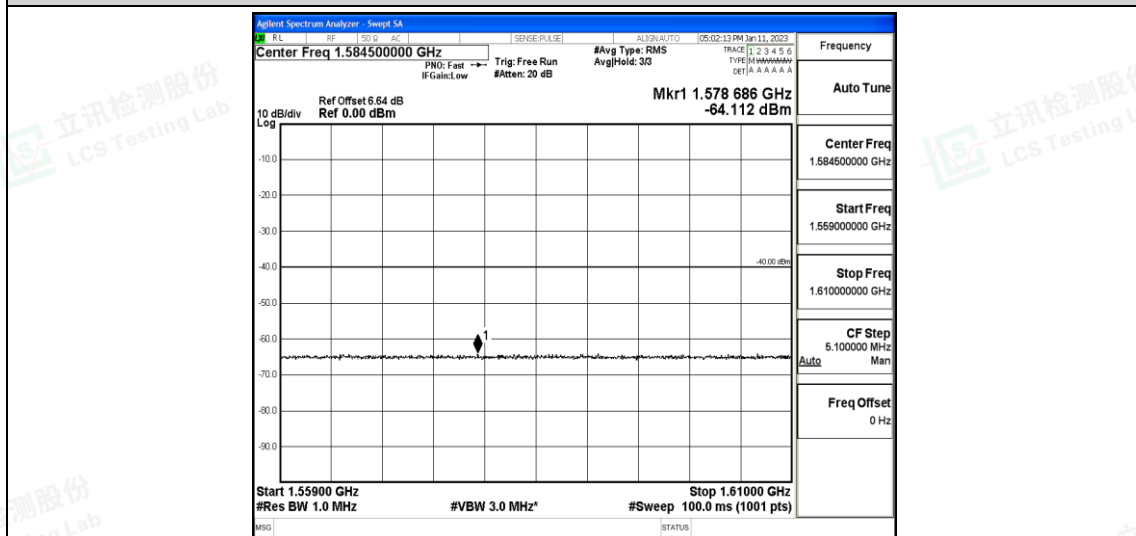




Band13-5MHz-QPSK-23205-1RB#0-Range4:1000~10000MHz

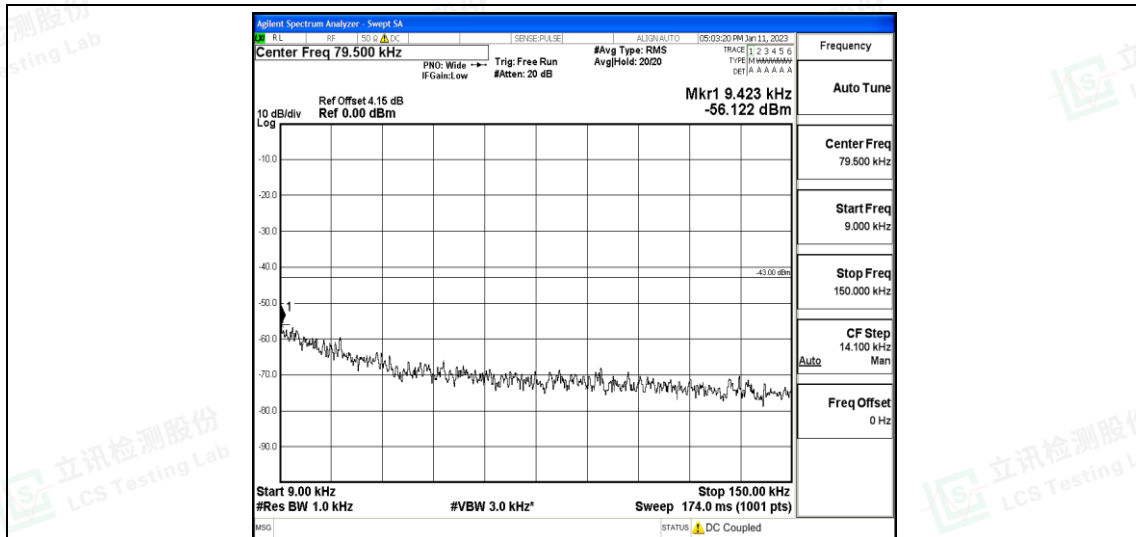


Band13-5MHz-QPSK-23205-1RB#0-Range7:1559~1610MHz

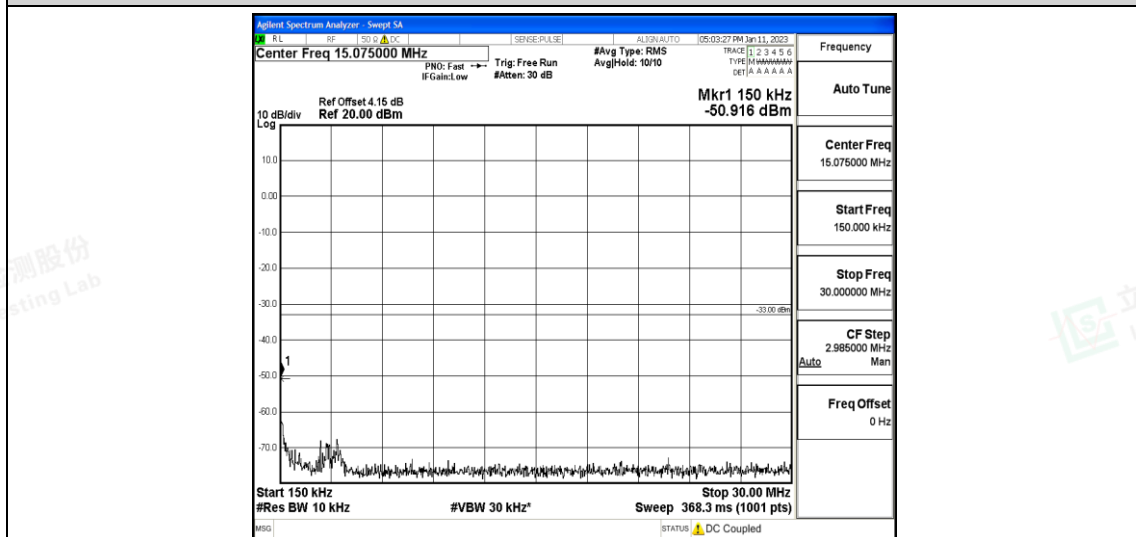


Band13-5MHz-QPSK-23230-1RB#0-Range1:0.009~0.15MHz

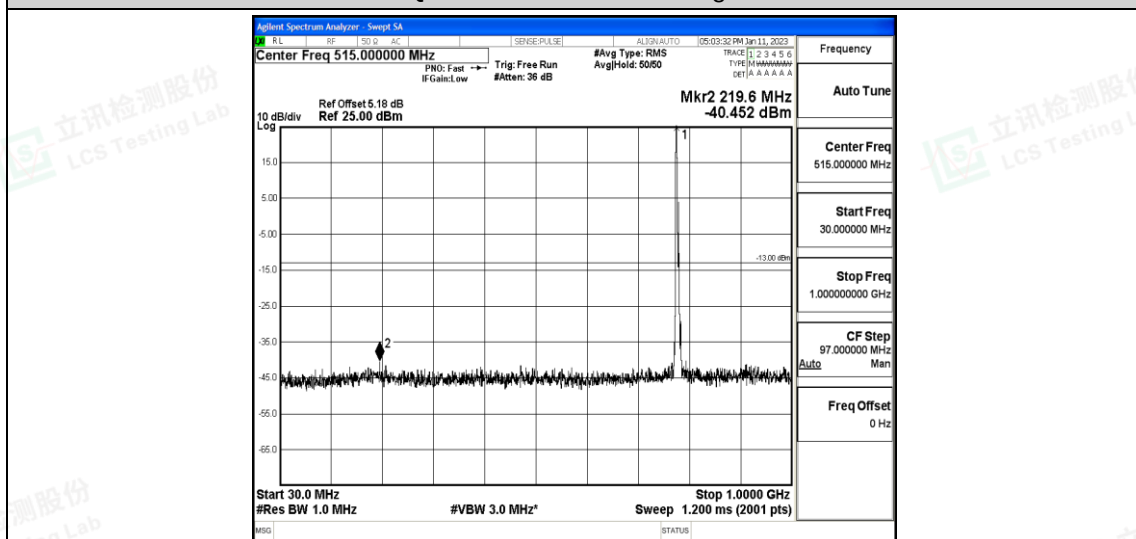




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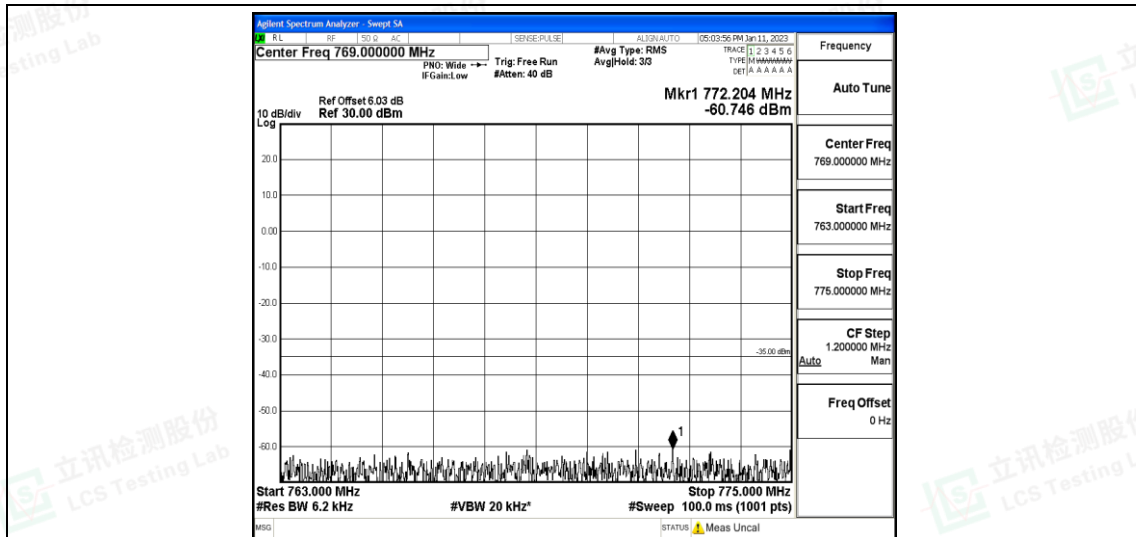


Band13-5MHz-QPSK-23230-1RB#0-Range3:30~1000MHz

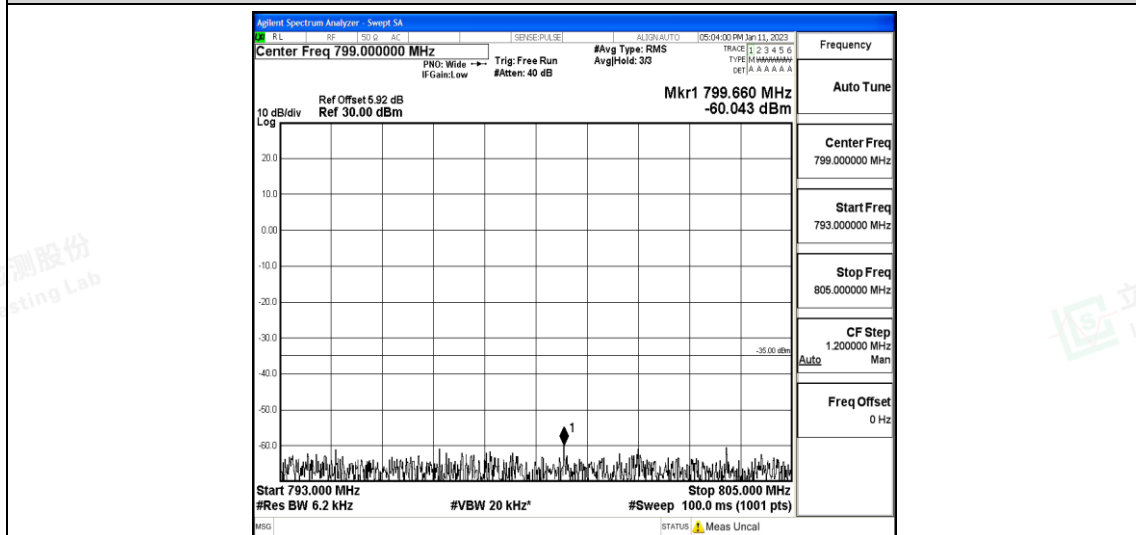


Band13-5MHz-QPSK-23230-1RB#0-Range5:763~775MHz

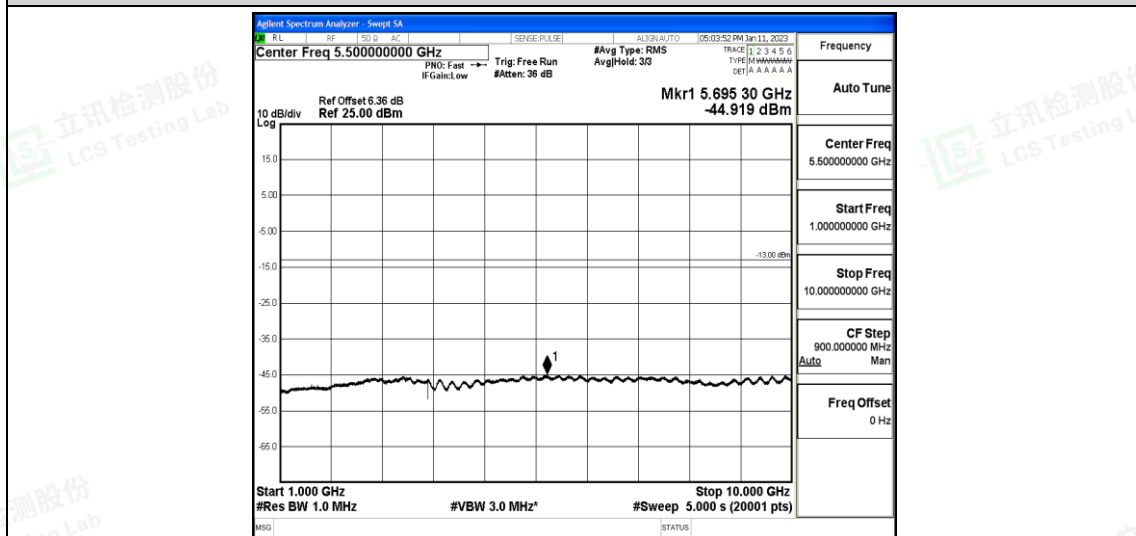




Band13-5MHz-QPSK-23230-1RB#0-Range6:793~805MHz

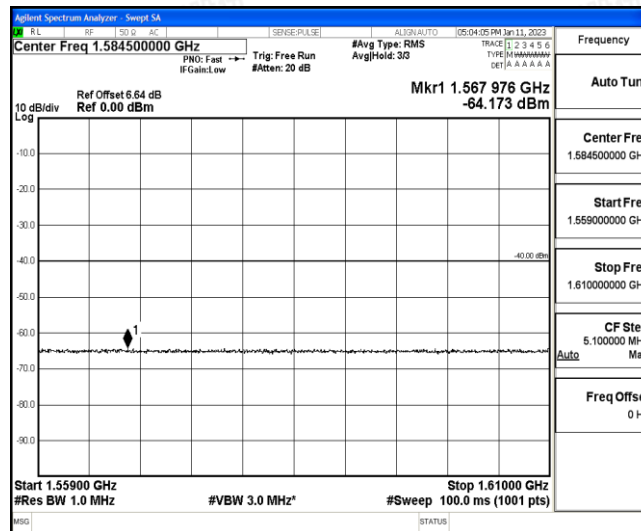


Band13-5MHz-QPSK-23230-1RB#0-Range4:1000~10000MHz

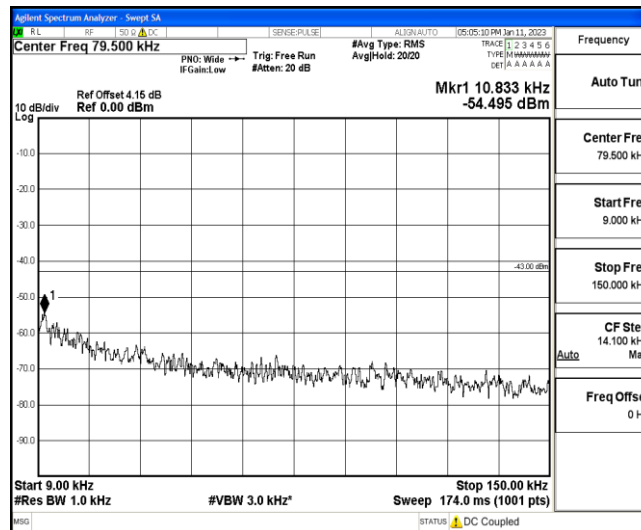


Band13-5MHz-QPSK-23230-1RB#0-Range7:1559~1610MHz

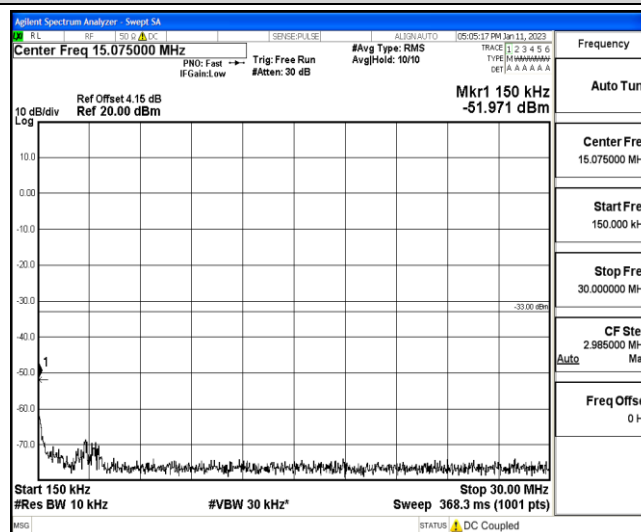




Band13-5MHz-QPSK-23255-1RB#0-Range1:0.009~0.15MHz



Band13-5MHz-QPSK-23255-1RB#0-Range2:0.15~30MHz



Band13-5MHz-QPSK-23255-1RB#0-Range3:30~1000MHz

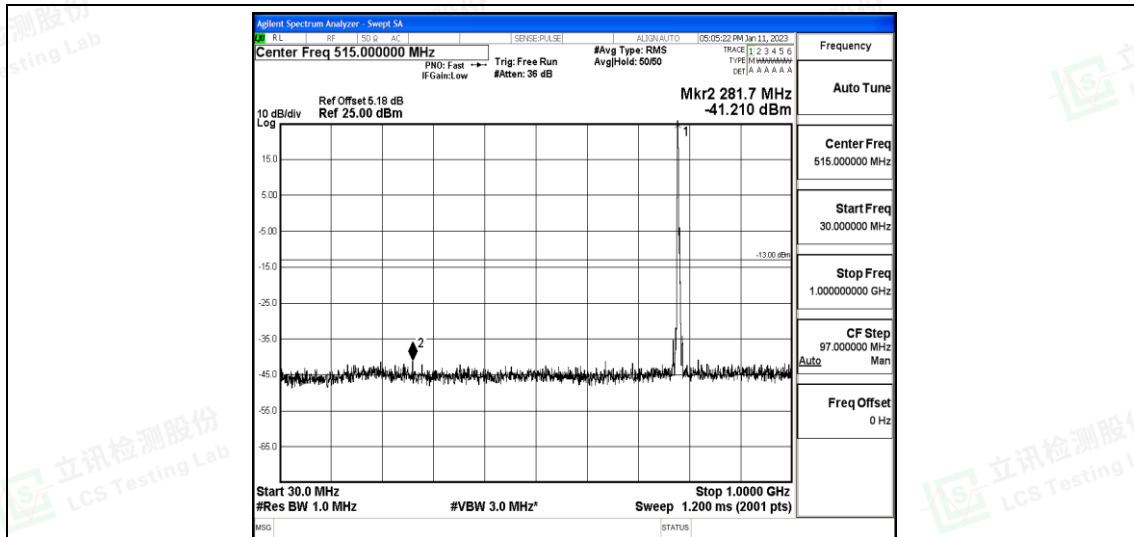


Shenzhen LCS Compliance Testing Laboratory Ltd.

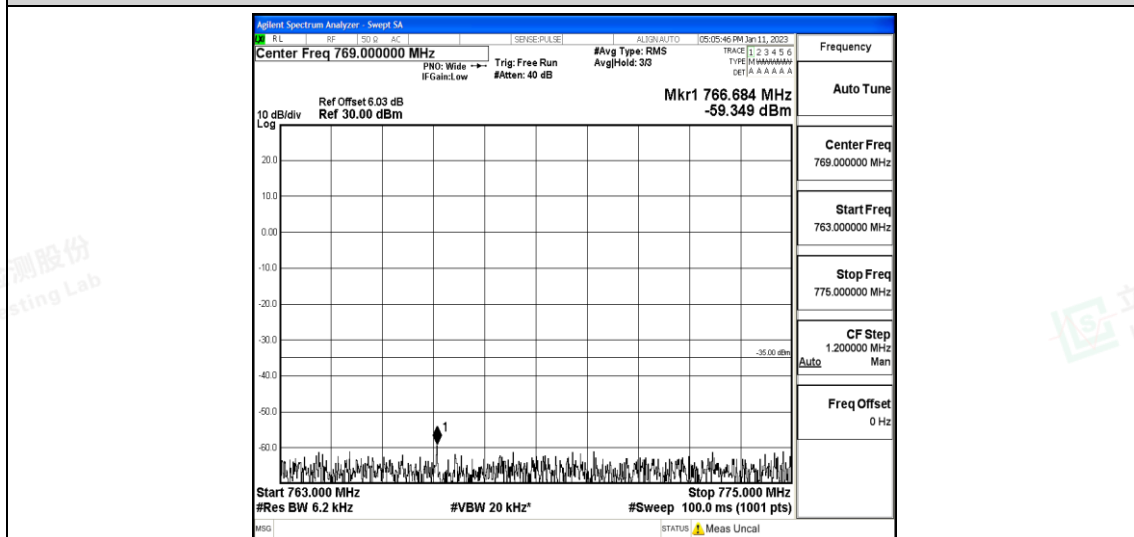
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

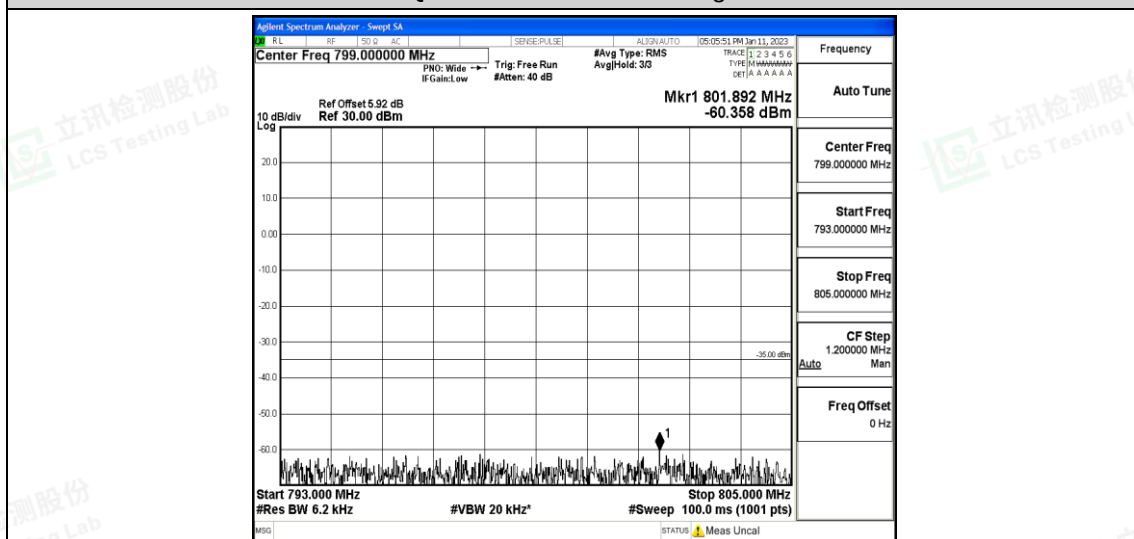
Scan code to check authenticity



Band13-5MHz-QPSK-23255-1RB#0-Range5:763~775MHz

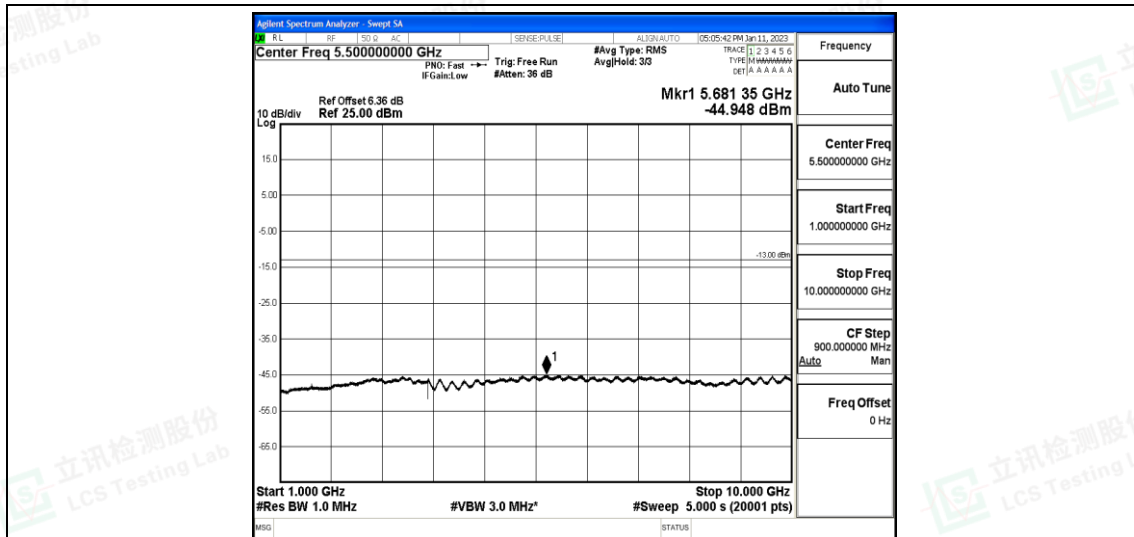


Band13-5MHz-QPSK-23255-1RB#0-Range6:793~805MHz

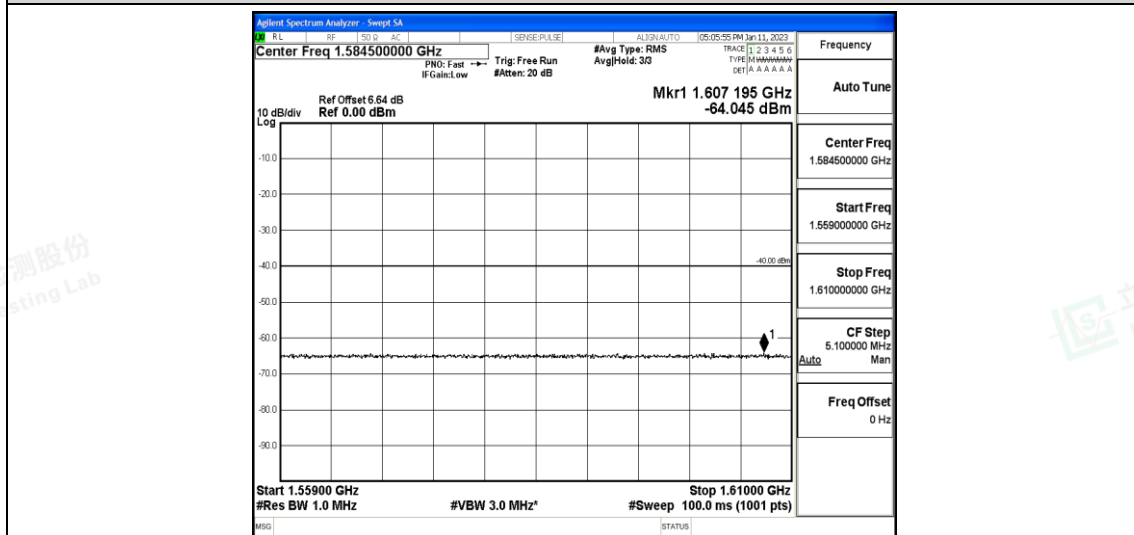


Band13-5MHz-QPSK-23255-1RB#0-Range4:1000~10000MHz

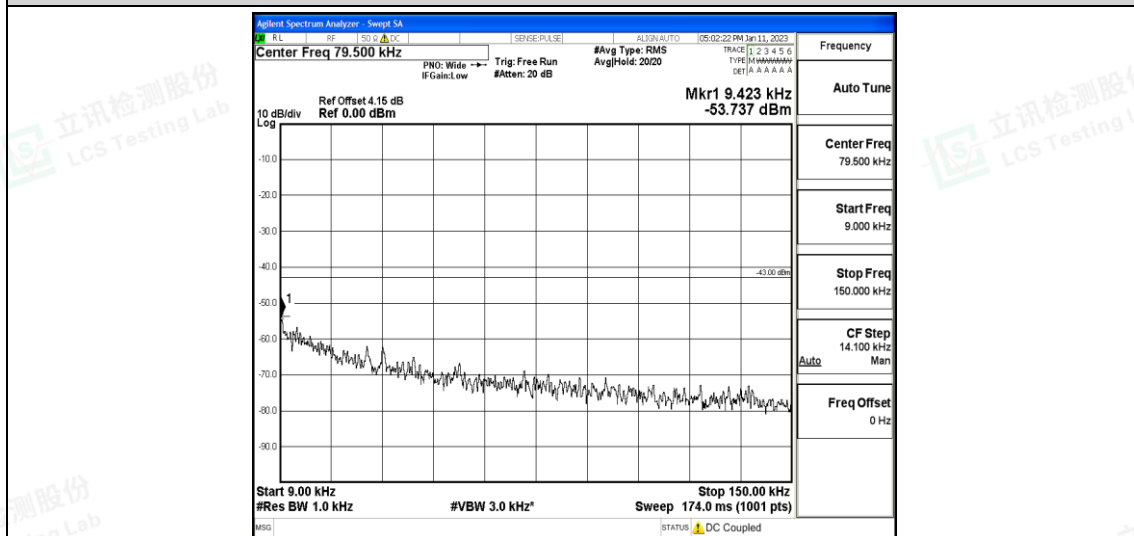




Band13-5MHz-QPSK-23255-1RB#0-Range7:1559~1610MHz

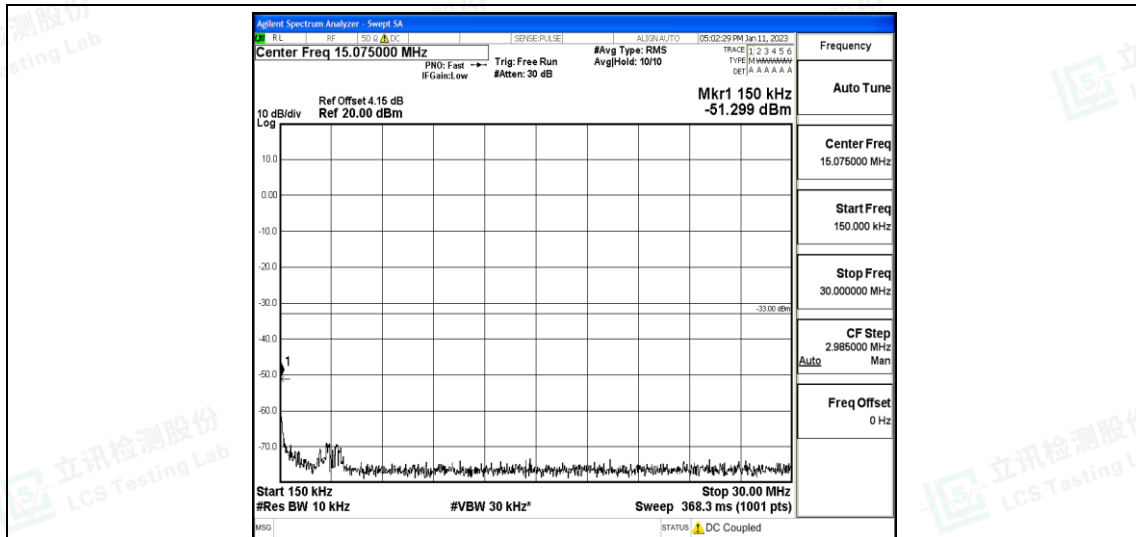


Band13-5MHz-16QAM-23205-1RB#0-Range1:0.009~0.15MHz

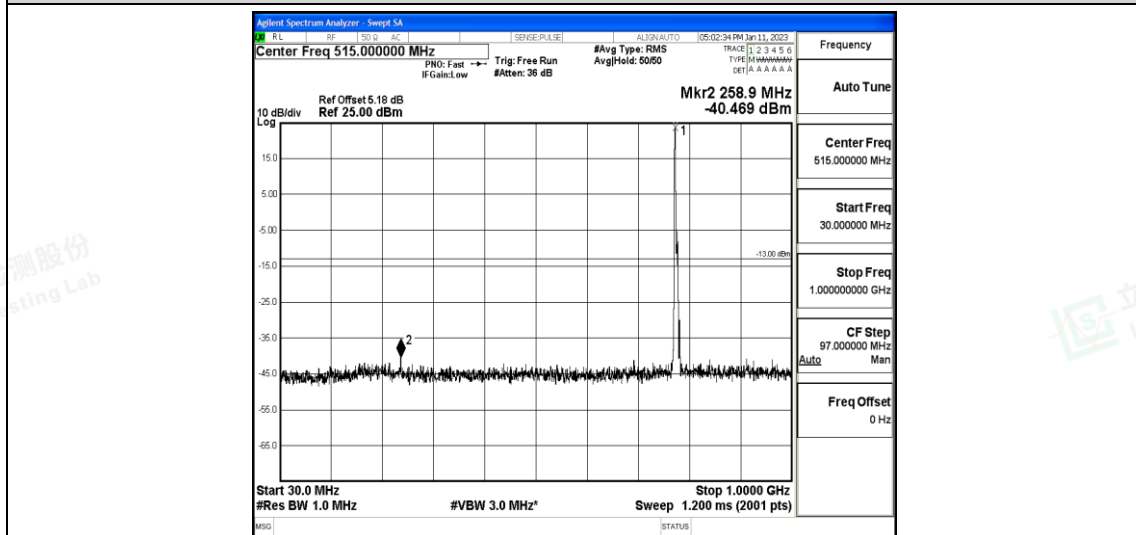


Band13-5MHz-16QAM-23205-1RB#0-Range2:0.15~30MHz

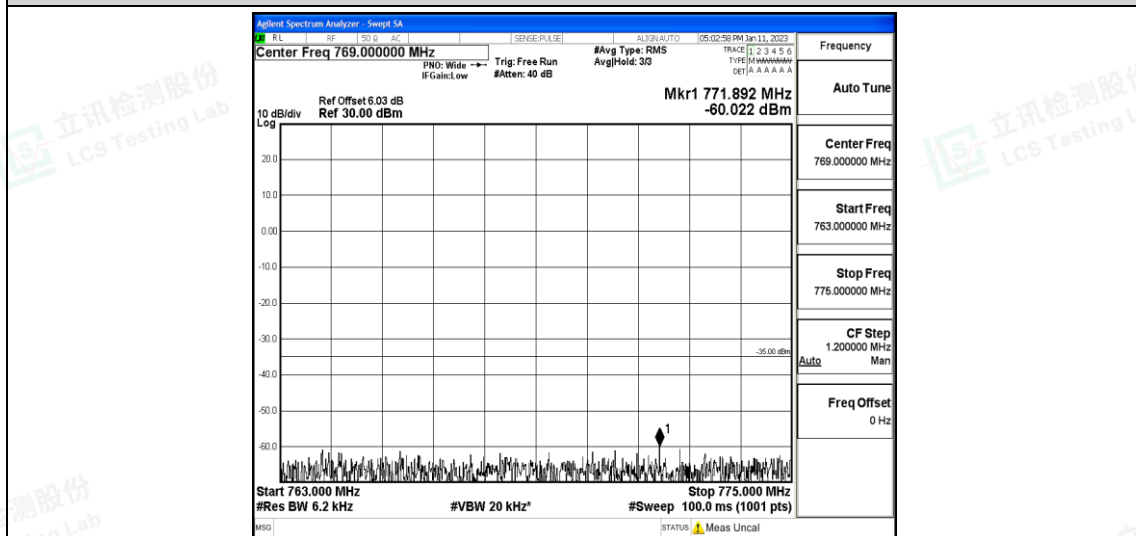




Band13-5MHz-16QAM-23205-1RB#0-Range3:30~1000MHz

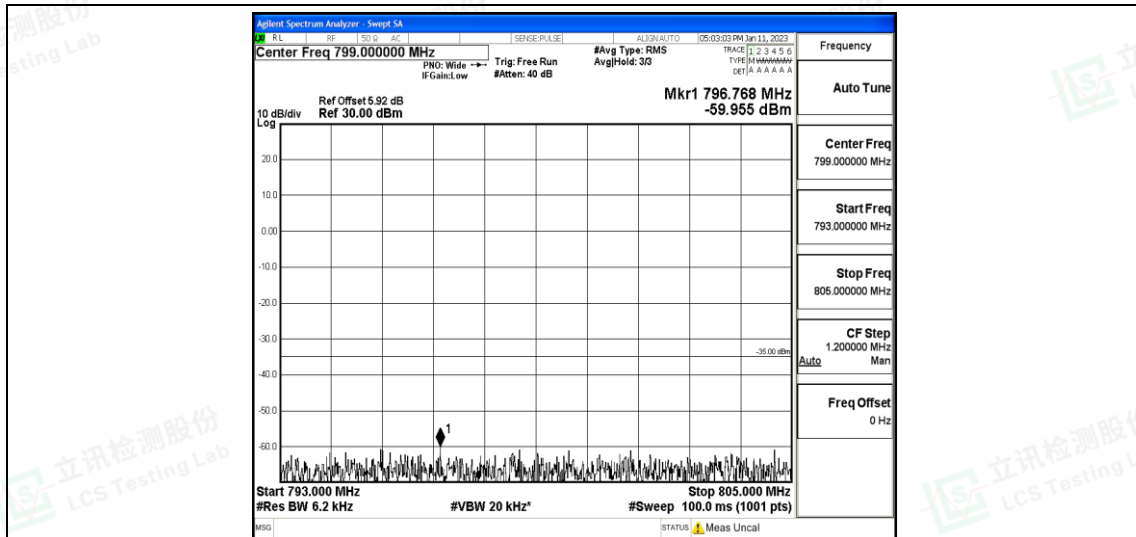


Band13-5MHz-16QAM-23205-1RB#0-Range5:763~775MHz

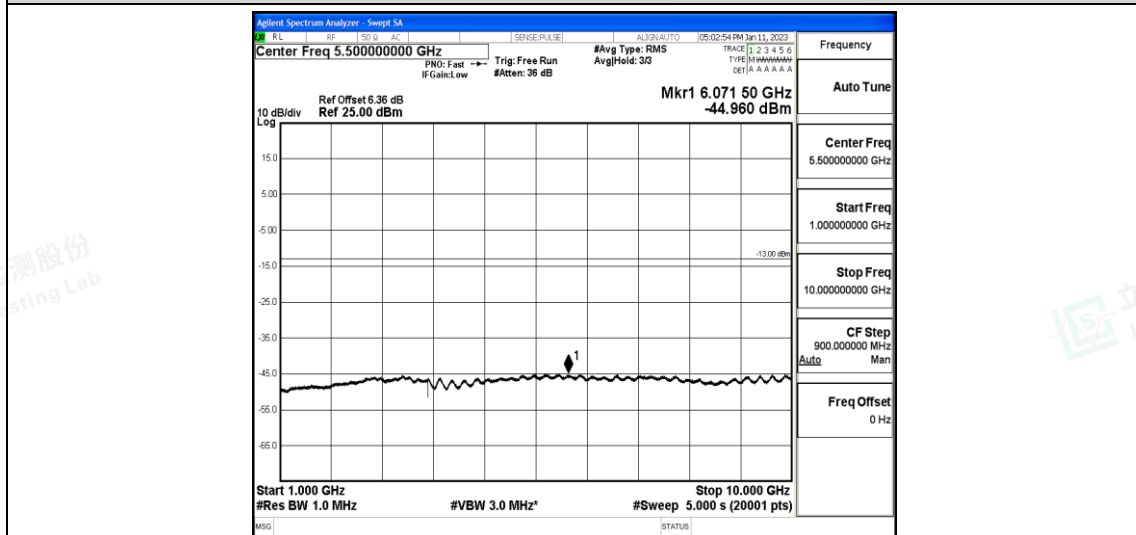


Band13-5MHz-16QAM-23205-1RB#0-Range6:793~805MHz

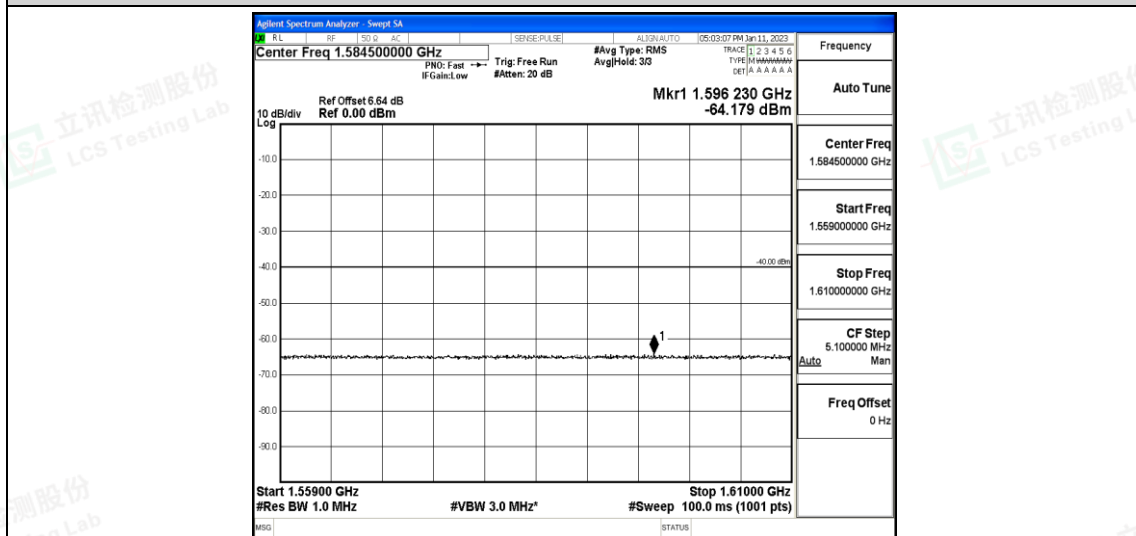




Band13-5MHz-16QAM-23205-1RB#0-Range4:1000~10000MHz



Band13-5MHz-16QAM-23205-1RB#0-Range7:1559~1610MHz



Band13-5MHz-16QAM-23230-1RB#0-Range1:0.009~0.15MHz

