



## Appendix F: Test Data for E-UTRA Band 13

Product Name: Pet GPS Tracker & Health Monitor

Test Model: C09

### Environmental Conditions

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



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



## F.1 Conducted Output Power Data

### Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	23.92	PASS
Band13	5MHz	16QAM	23205	1RB#0	22.90	PASS
Band13	5MHz	QPSK	23205	1RB#12	23.93	PASS
Band13	5MHz	16QAM	23205	1RB#12	22.97	PASS
Band13	5MHz	QPSK	23205	1RB#24	23.98	PASS
Band13	5MHz	16QAM	23205	1RB#24	22.95	PASS
Band13	5MHz	QPSK	23205	12RB#0	22.92	PASS
Band13	5MHz	16QAM	23205	12RB#0	22.14	PASS
Band13	5MHz	QPSK	23205	12RB#6	22.92	PASS
Band13	5MHz	16QAM	23205	12RB#6	22.15	PASS
Band13	5MHz	QPSK	23205	12RB#13	22.77	PASS
Band13	5MHz	16QAM	23205	12RB#13	22.09	PASS
Band13	5MHz	QPSK	23205	25RB#0	22.78	PASS
Band13	5MHz	16QAM	23205	25RB#0	22.21	PASS
Band13	5MHz	QPSK	23230	1RB#0	23.74	PASS
Band13	5MHz	16QAM	23230	1RB#0	22.42	PASS
Band13	5MHz	QPSK	23230	1RB#12	23.67	PASS
Band13	5MHz	16QAM	23230	1RB#12	22.46	PASS
Band13	5MHz	QPSK	23230	1RB#24	23.60	PASS
Band13	5MHz	16QAM	23230	1RB#24	22.27	PASS
Band13	5MHz	QPSK	23230	12RB#0	22.91	PASS
Band13	5MHz	16QAM	23230	12RB#0	22.18	PASS
Band13	5MHz	QPSK	23230	12RB#6	22.90	PASS
Band13	5MHz	16QAM	23230	12RB#6	22.17	PASS
Band13	5MHz	QPSK	23230	12RB#13	22.76	PASS
Band13	5MHz	16QAM	23230	12RB#13	22.11	PASS
Band13	5MHz	QPSK	23230	25RB#0	22.85	PASS
Band13	5MHz	16QAM	23230	25RB#0	22.18	PASS
Band13	5MHz	QPSK	23255	1RB#0	23.48	PASS
Band13	5MHz	16QAM	23255	1RB#0	23.31	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.27	PASS
Band13	5MHz	16QAM	23255	1RB#12	23.03	PASS
Band13	5MHz	QPSK	23255	1RB#24	23.44	PASS
Band13	5MHz	16QAM	23255	1RB#24	22.59	PASS
Band13	5MHz	QPSK	23255	12RB#0	22.77	PASS



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: 101, 201 Bldg A &amp; 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	16QAM	23255	12RB#0	22.10	PASS
Band13	5MHz	QPSK	23255	12RB#6	22.92	PASS
Band13	5MHz	16QAM	23255	12RB#6	22.10	PASS
Band13	5MHz	QPSK	23255	12RB#13	22.63	PASS
Band13	5MHz	16QAM	23255	12RB#13	22.00	PASS
Band13	5MHz	QPSK	23255	25RB#0	22.82	PASS
Band13	5MHz	16QAM	23255	25RB#0	21.93	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.21	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.52	PASS
Band13	10MHz	QPSK	23230	1RB#24	23.17	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.38	PASS
Band13	10MHz	QPSK	23230	1RB#49	22.80	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.17	PASS
Band13	10MHz	QPSK	23230	25RB#0	22.35	PASS
Band13	10MHz	16QAM	23230	25RB#0	21.63	PASS
Band13	10MHz	QPSK	23230	25RB#12	22.40	PASS
Band13	10MHz	16QAM	23230	25RB#12	21.63	PASS
Band13	10MHz	QPSK	23230	25RB#25	22.21	PASS
Band13	10MHz	16QAM	23230	25RB#25	21.50	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.25	PASS
Band13	10MHz	16QAM	23230	50RB#0	21.55	PASS





## F.2 Peak-to-Average Ratio(CCDF)

### Test Result

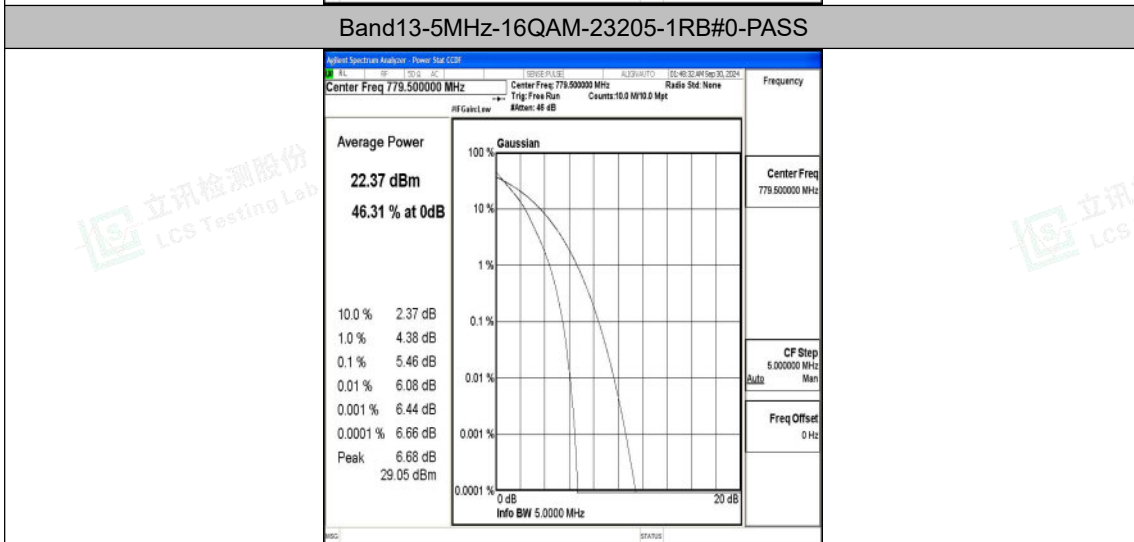
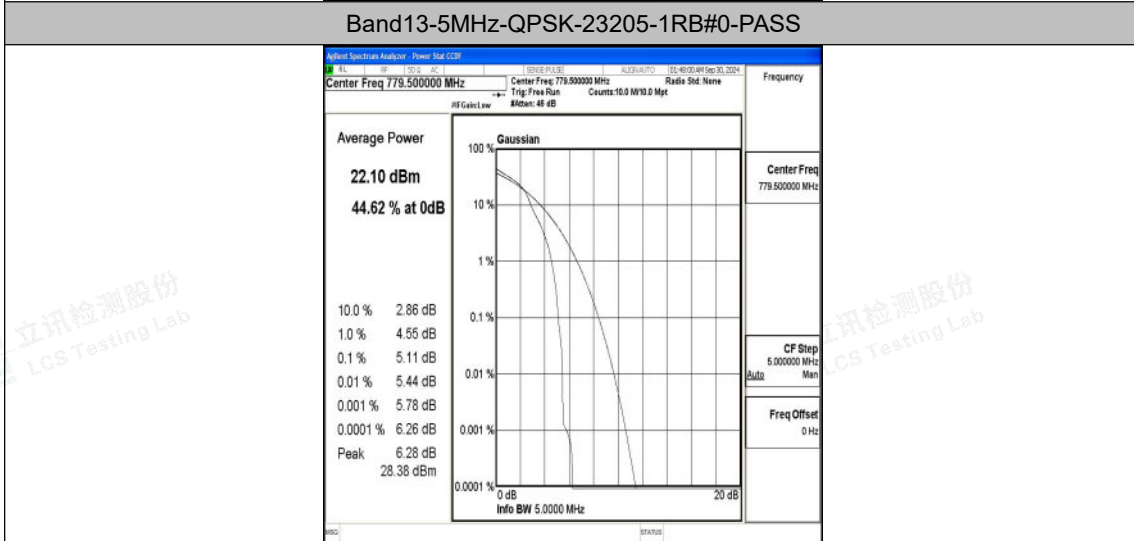
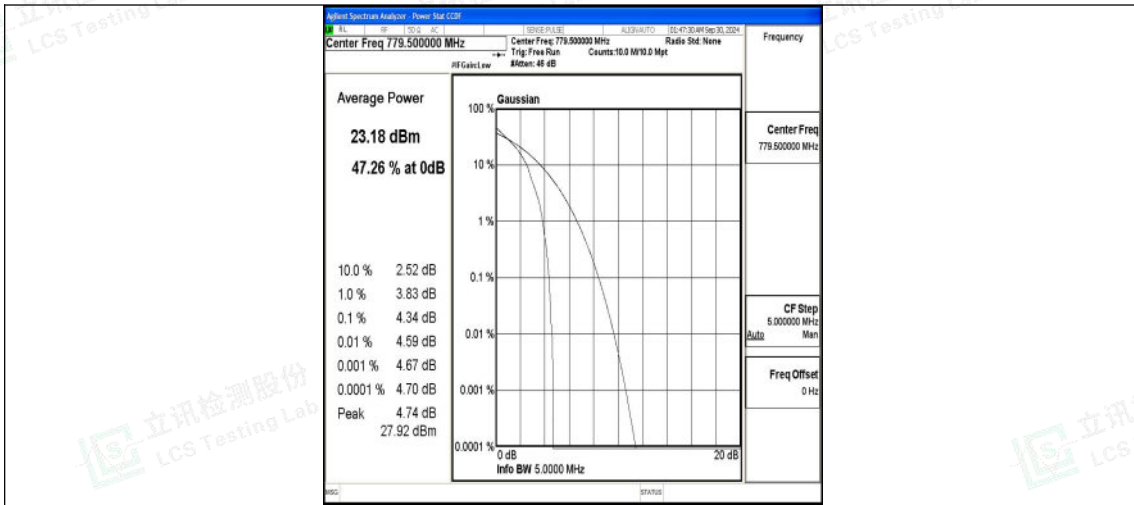
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	4.34	13	PASS
Band13	5MHz	16QAM	23205	1RB#0	5.11	13	PASS
Band13	5MHz	QPSK	23205	25RB#0	5.46	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	6.05	13	PASS
Band13	5MHz	QPSK	23230	1RB#0	4.66	13	PASS
Band13	5MHz	16QAM	23230	1RB#0	5.25	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.51	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	6.14	13	PASS
Band13	5MHz	QPSK	23255	1RB#0	4.81	13	PASS
Band13	5MHz	16QAM	23255	1RB#0	5.28	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	5.47	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	6.15	13	PASS
Band13	10MHz	QPSK	23230	1RB#0	4.39	13	PASS
Band13	10MHz	16QAM	23230	1RB#0	4.99	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.48	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	6.15	13	PASS

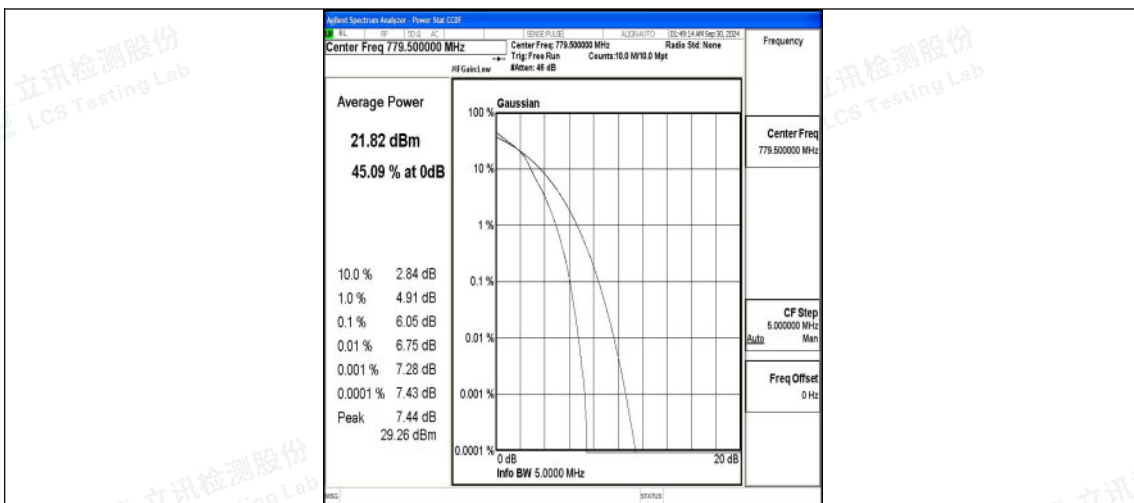


Shenzhen LCS Compliance Testing Laboratory Ltd.  
 Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China  
 Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
 Scan code to check authenticity

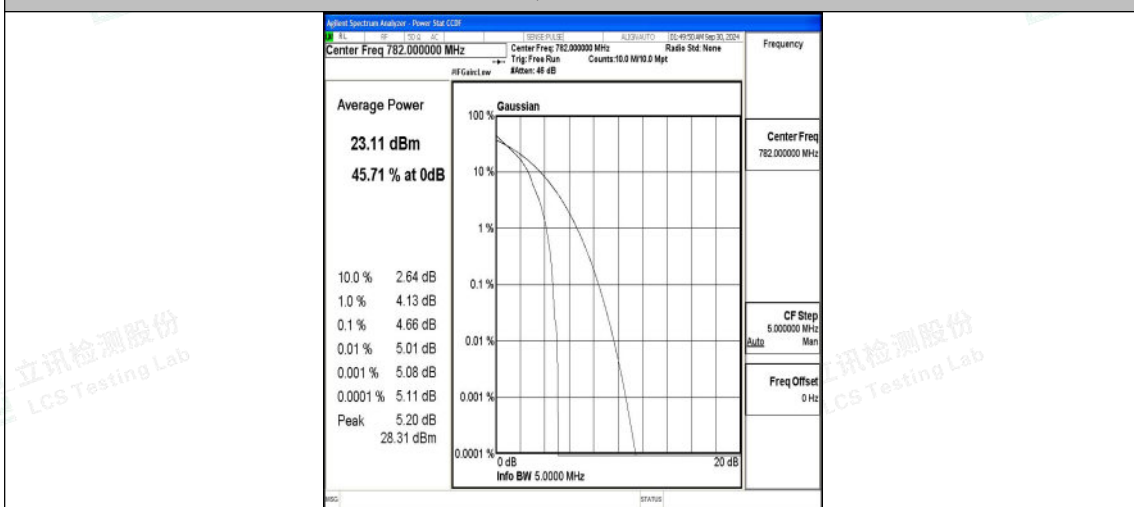


### Test Graphs

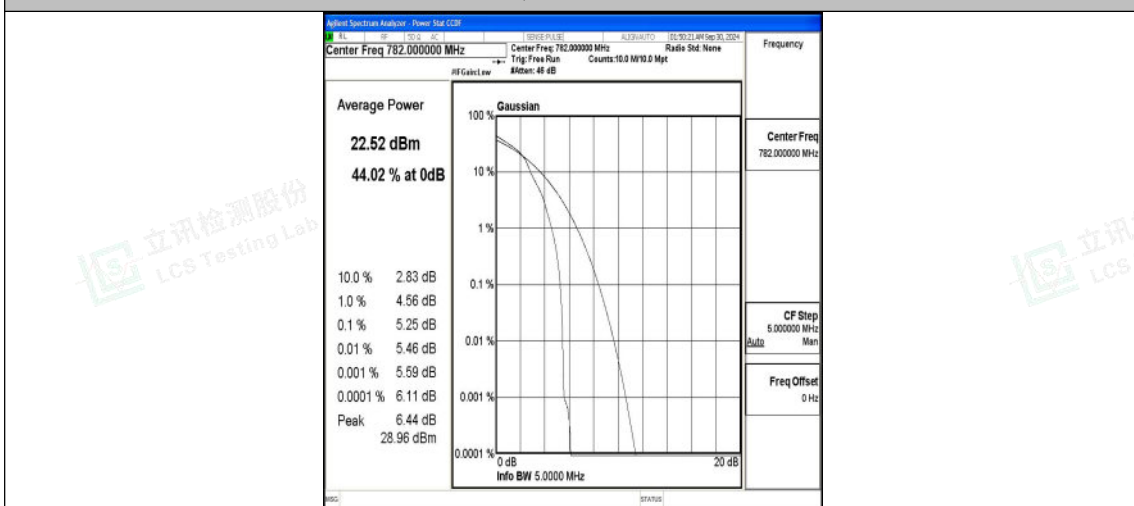




Band13-5MHz-16QAM-23205-25RB#0-PASS



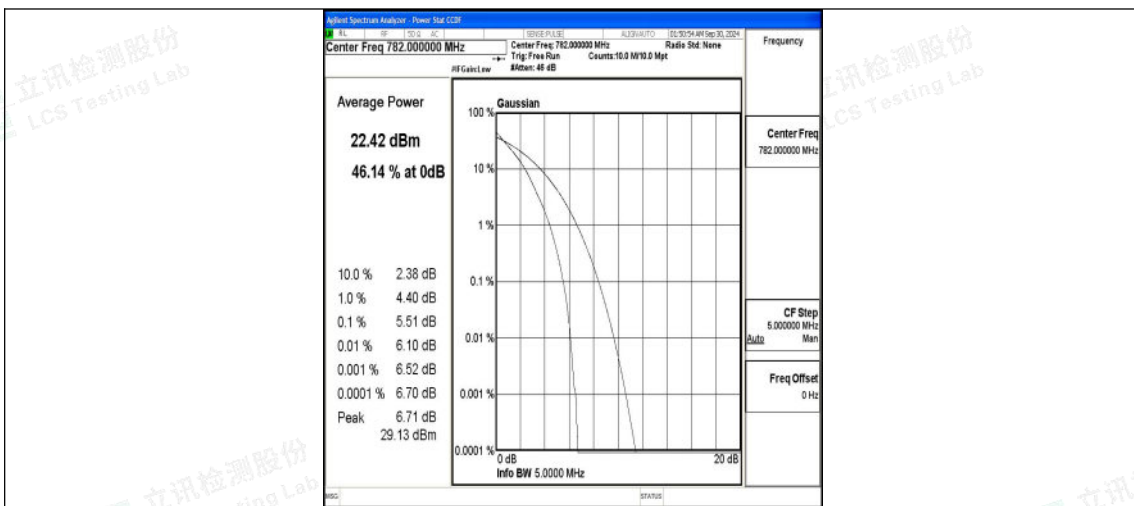
Band13-5MHz-QPSK-23230-1RB#0-PASS



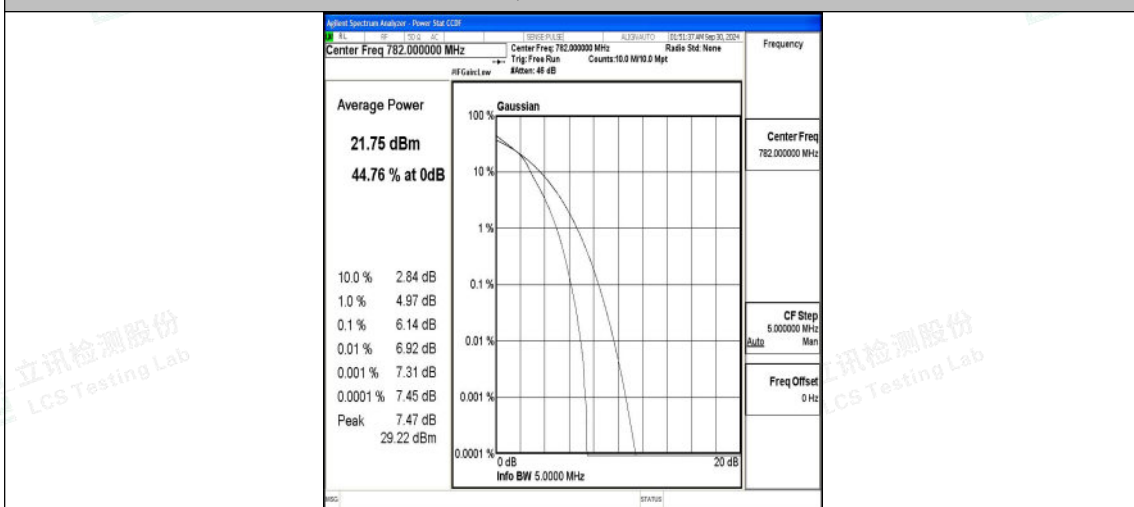
Band13-5MHz-16QAM-23230-1RB#0-PASS



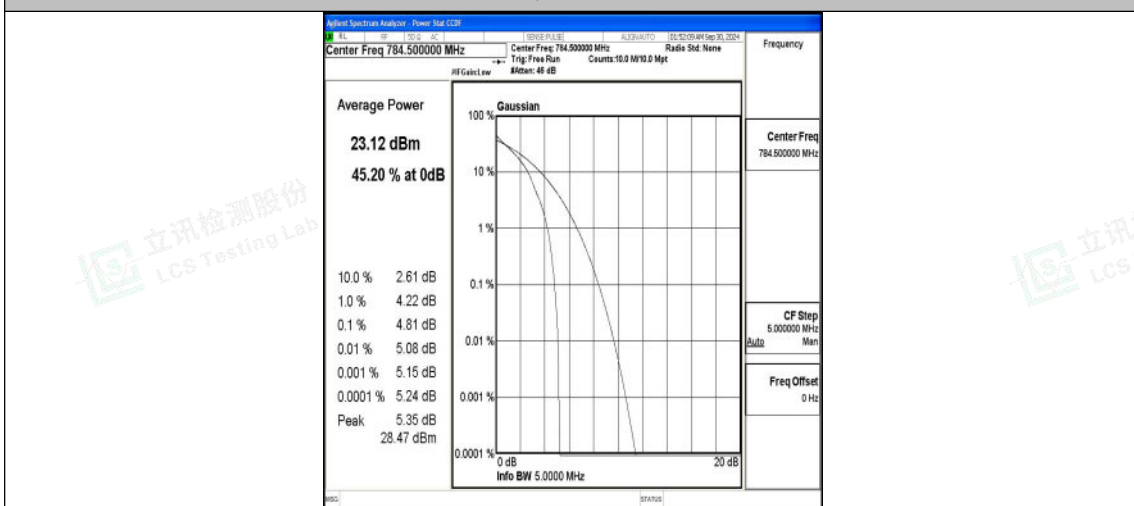




Band13-5MHz-QPSK-23230-25RB#0-PASS

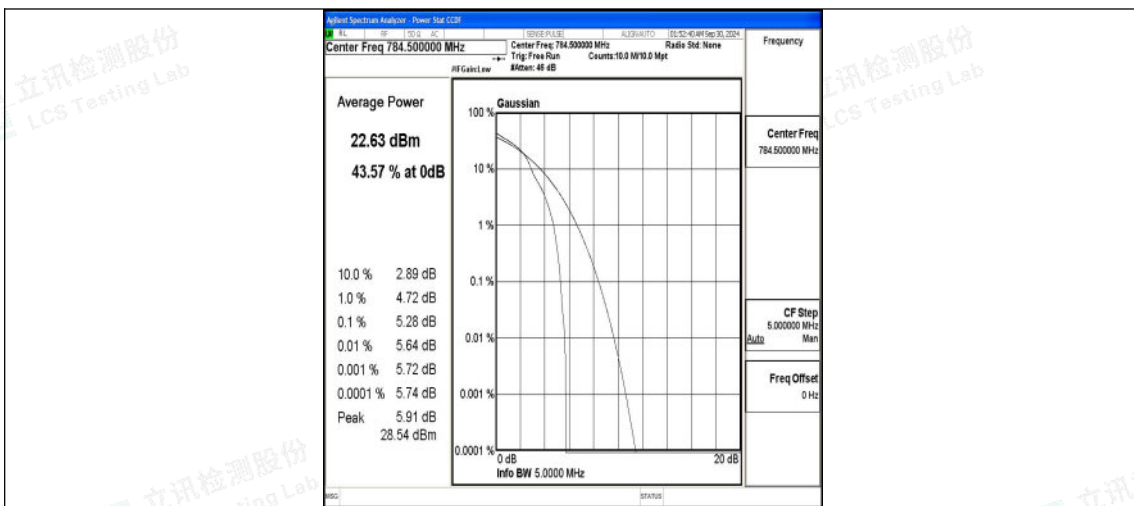


Band13-5MHz-16QAM-23230-25RB#0-PASS

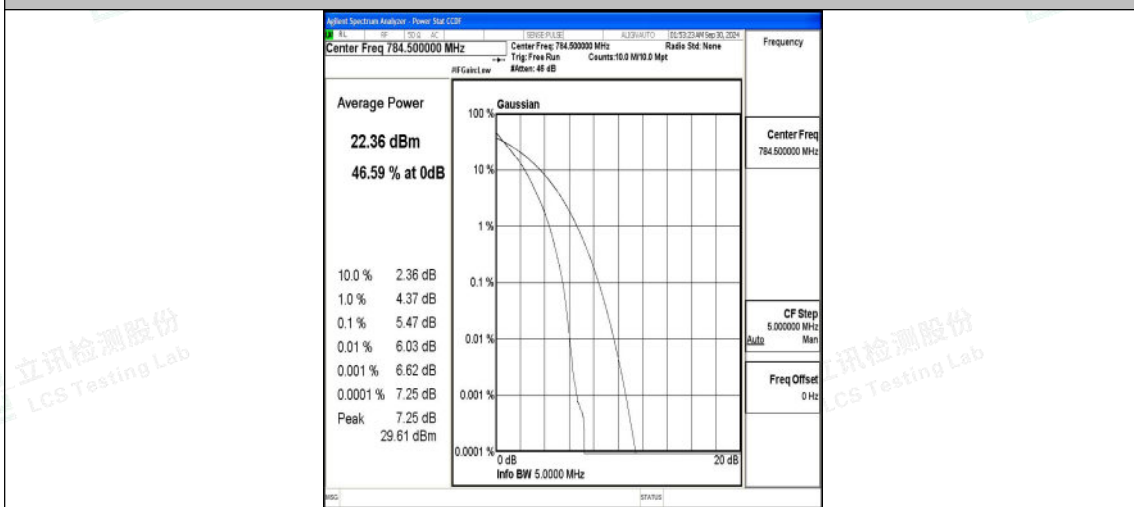


Band13-5MHz-QPSK-23255-1RB#0-PASS

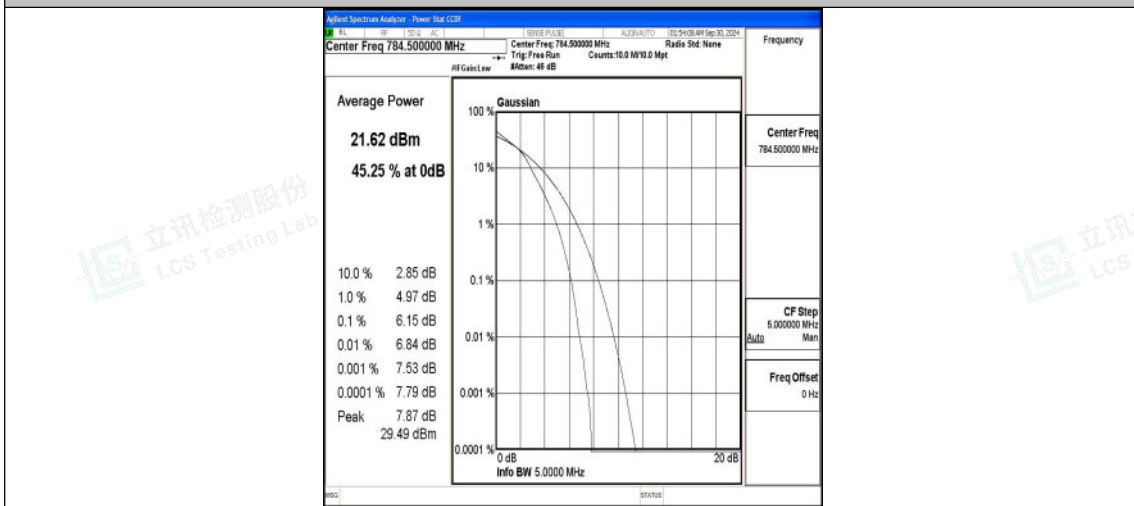




Band13-5MHz-16QAM-23255-1RB#0-PASS



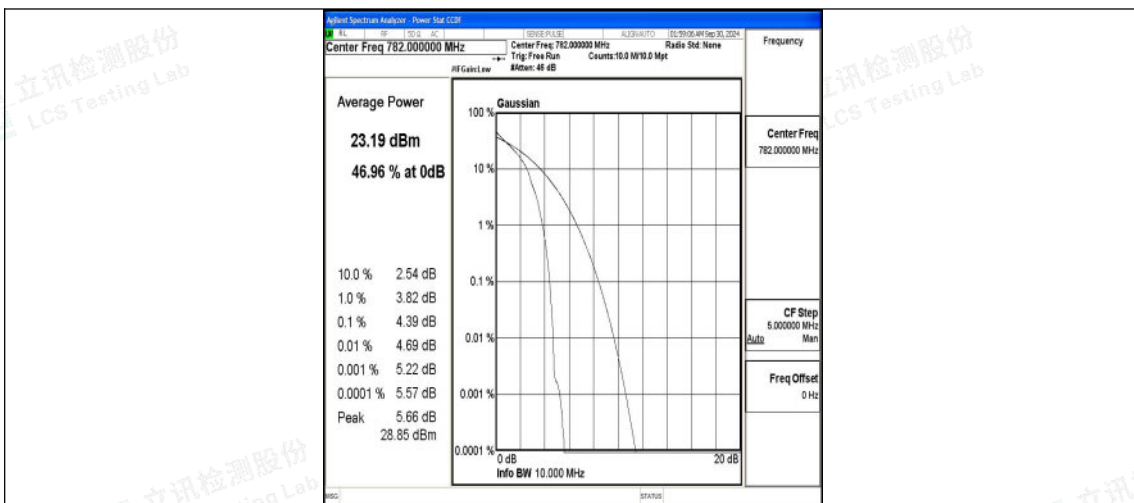
Band13-5MHz-QPSK-23255-25RB#0-PASS



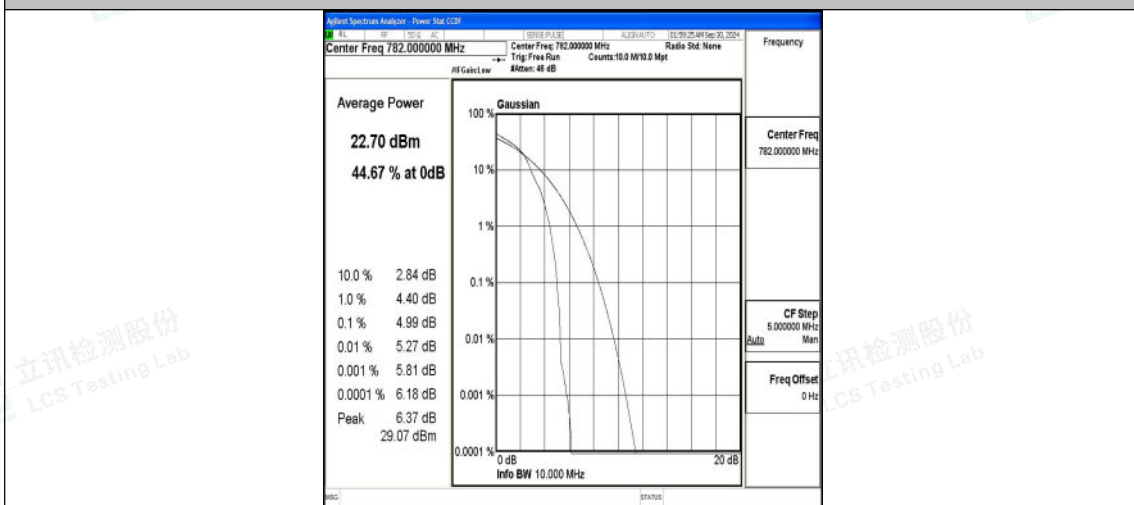
Band13-5MHz-16QAM-23255-25RB#0-PASS



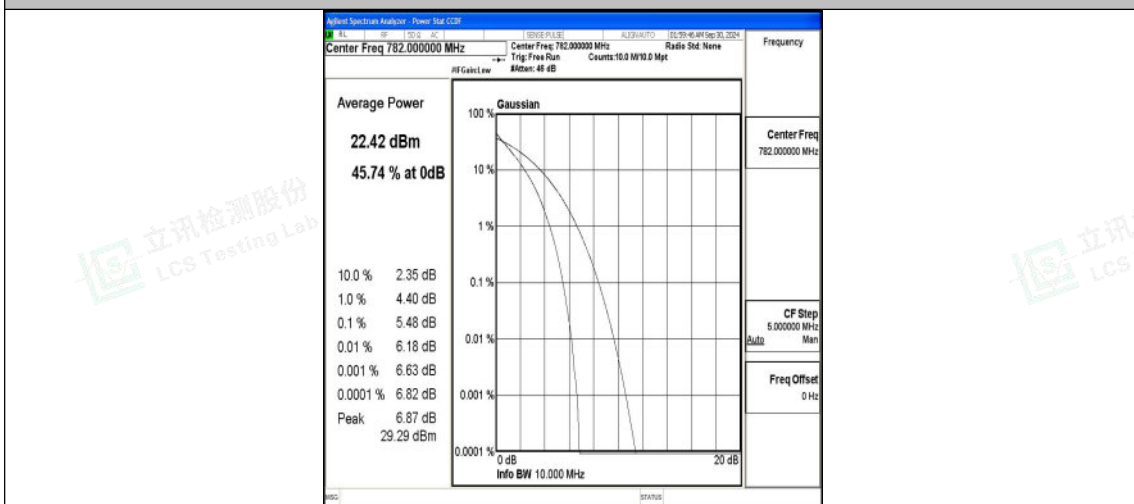




Band13-10MHz-QPSK-23230-1RB#0-PASS

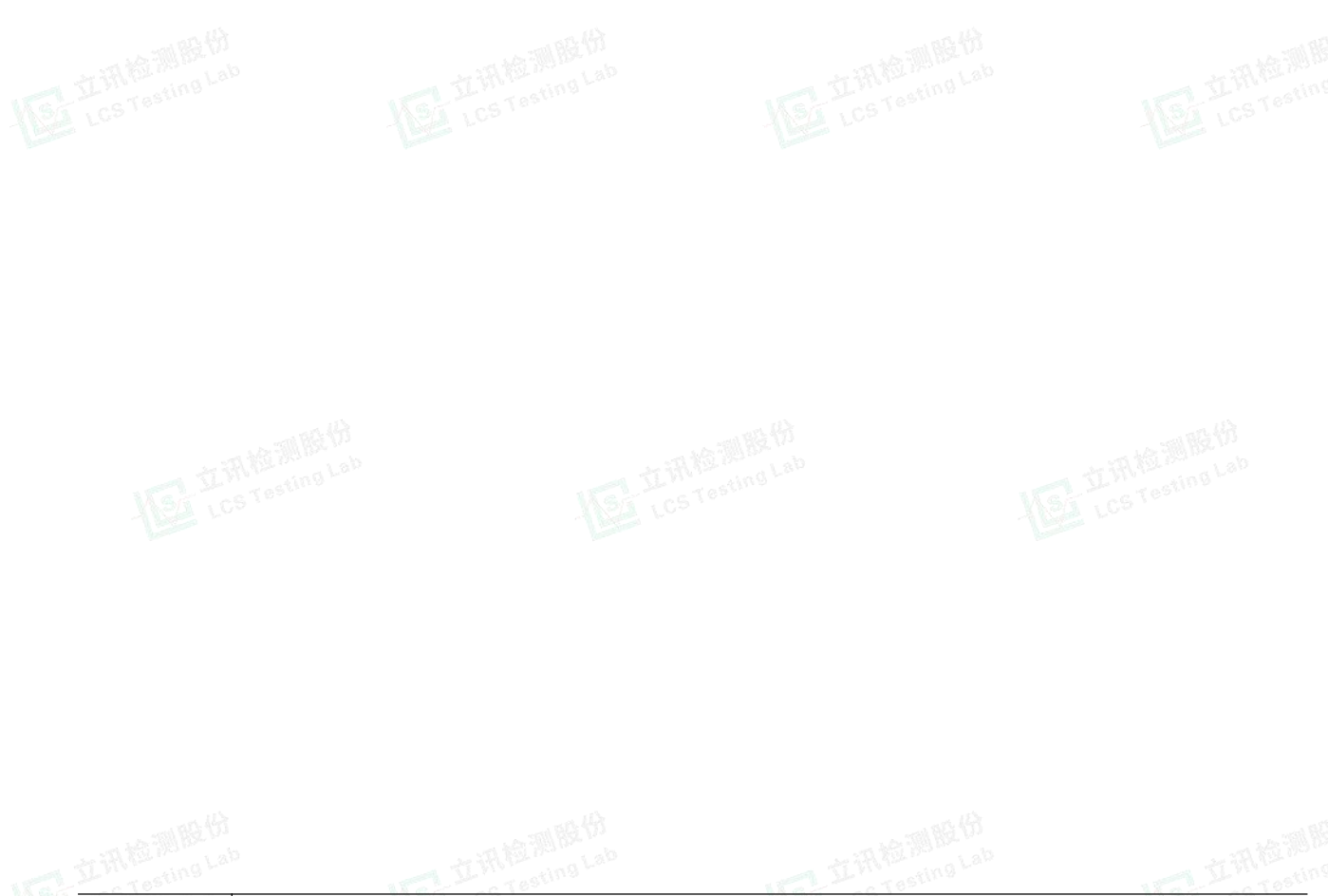
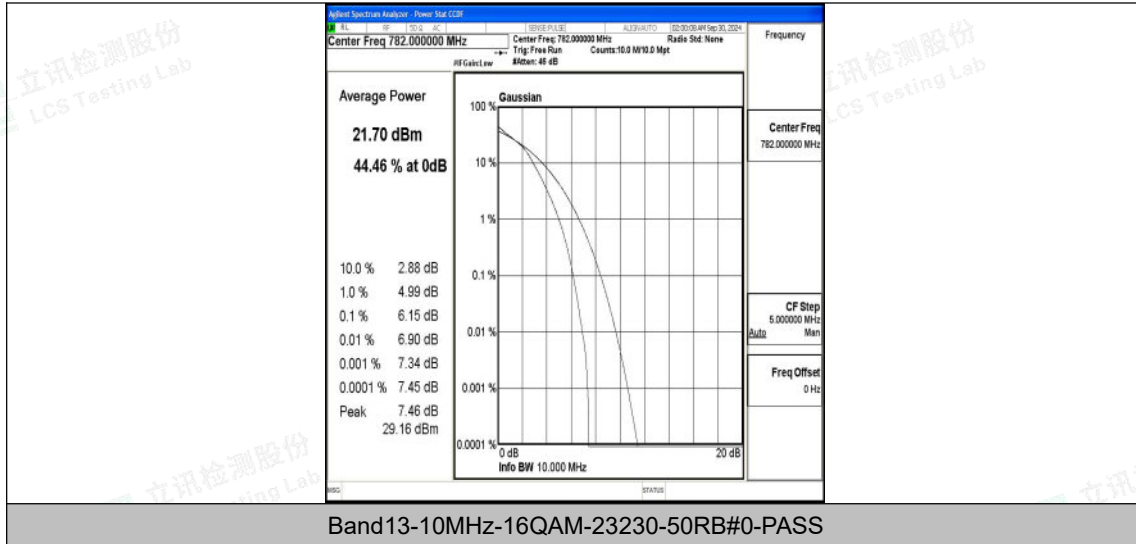


Band13-10MHz-16QAM-23230-1RB#0-PASS



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







### F.3 26dB Bandwidth and Occupied Bandwidth

#### Test Result

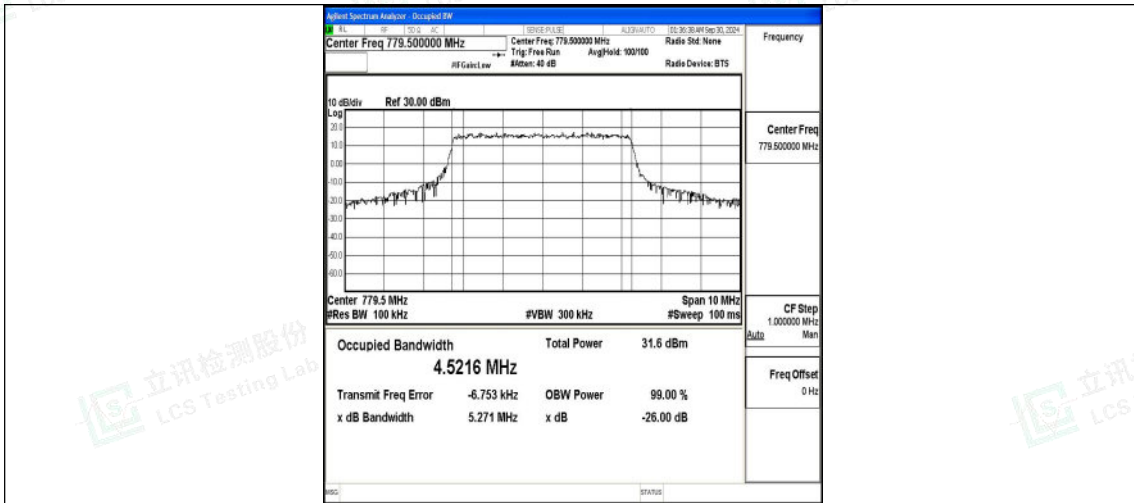
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.5216	5.271	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5320	5.291	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5196	5.413	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5237	5.350	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5168	5.151	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5309	5.426	PASS
Band13	10MHz	QPSK	23230	50RB#0	9.0028	10.11	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.9921	10.06	PASS



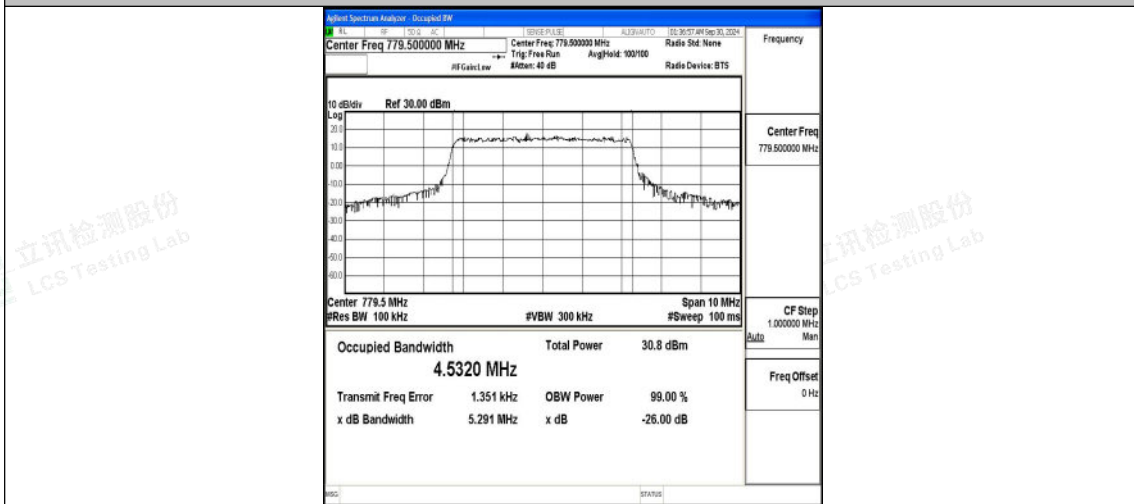
Shenzhen LCS Compliance Testing Laboratory Ltd.  
 Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China  
 Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
 Scan code to check authenticity



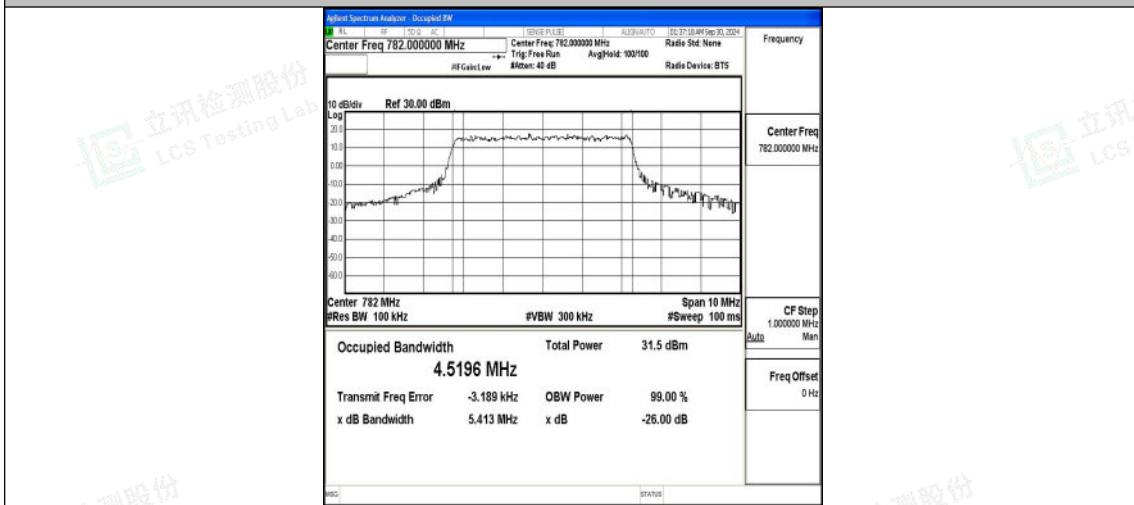
### Test Graphs



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



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



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



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









### F.4 Band Edge

#### Test Result

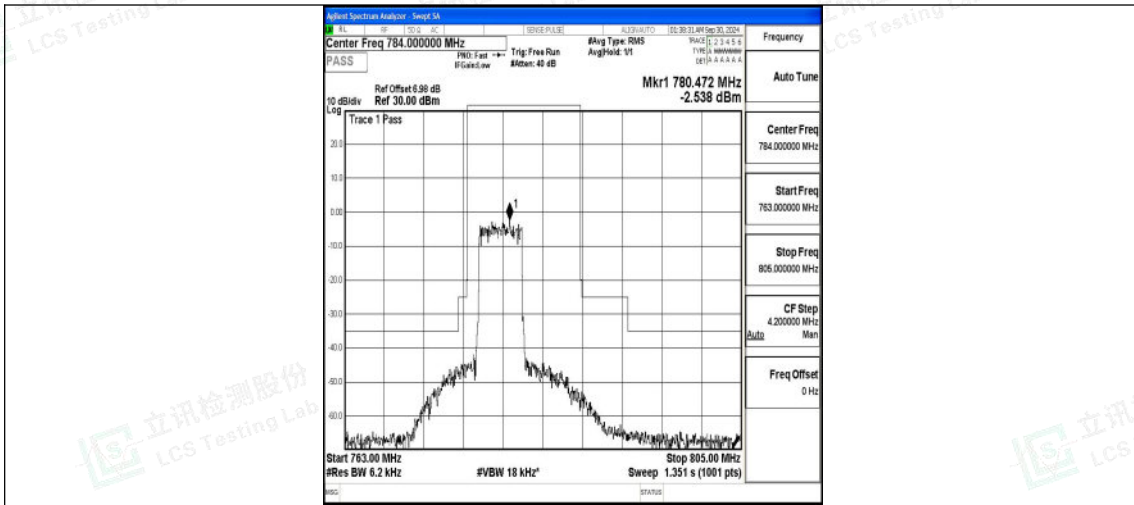
Band	Bandwidth	Modulation	Channel	RB Configuration	Peak Frequency	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	774.89	-45.46	PASS
Band13	5MHz	16QAM	23205	25RB#0	774.84	-46.81	PASS
Band13	5MHz	QPSK	23255	25RB#0	788.49	-45.89	PASS
Band13	5MHz	16QAM	23255	25RB#0	788.49	-46.20	PASS
Band13	10MHz	QPSK	23230	50RB#0	774.93	-47.33	PASS
Band13	10MHz	16QAM	23230	50RB#0	774.89	-48.13	PASS



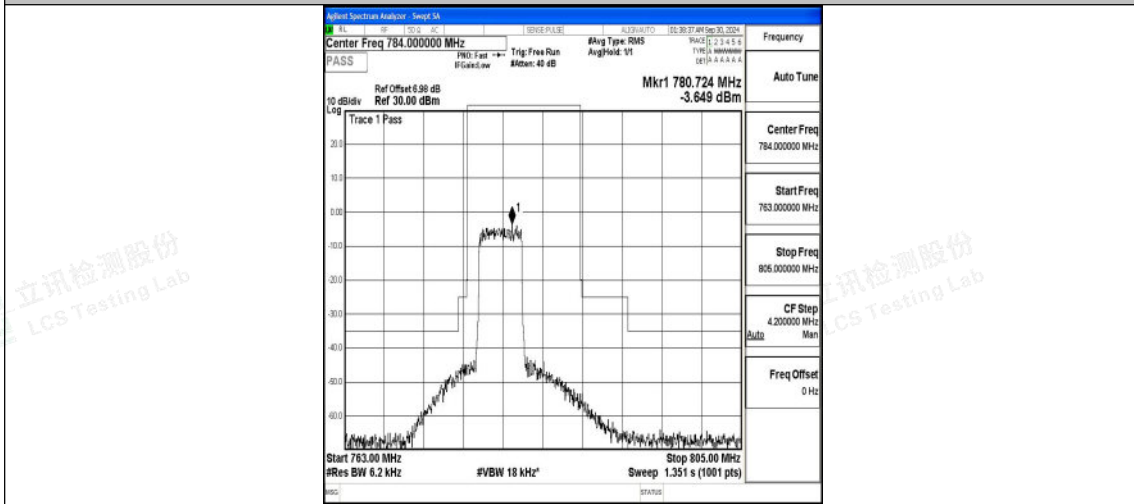
Shenzhen LCS Compliance Testing Laboratory Ltd.  
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China  
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
Scan code to check authenticity



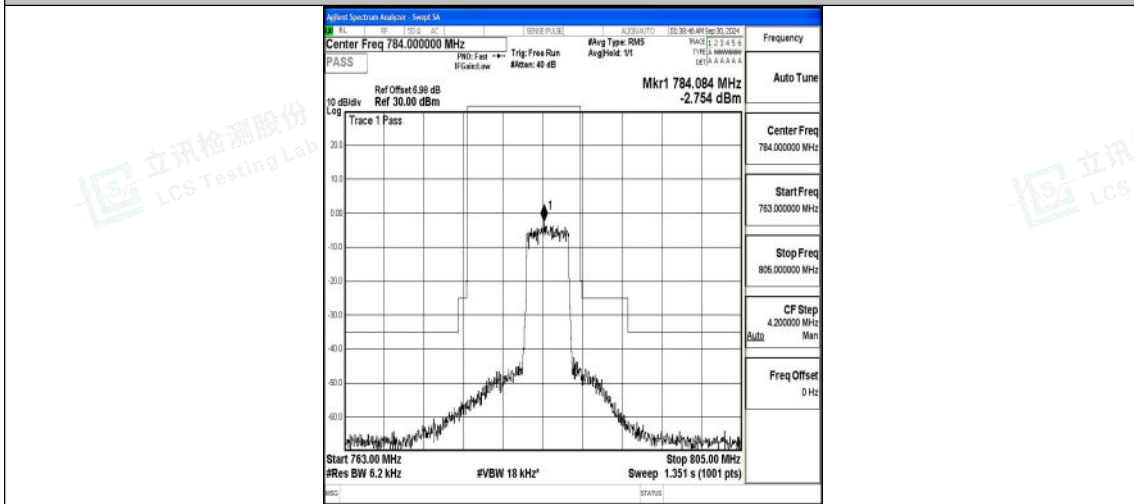
### Test Graphs



Band13\_5MHz\_QPSK\_23205\_25RB#0

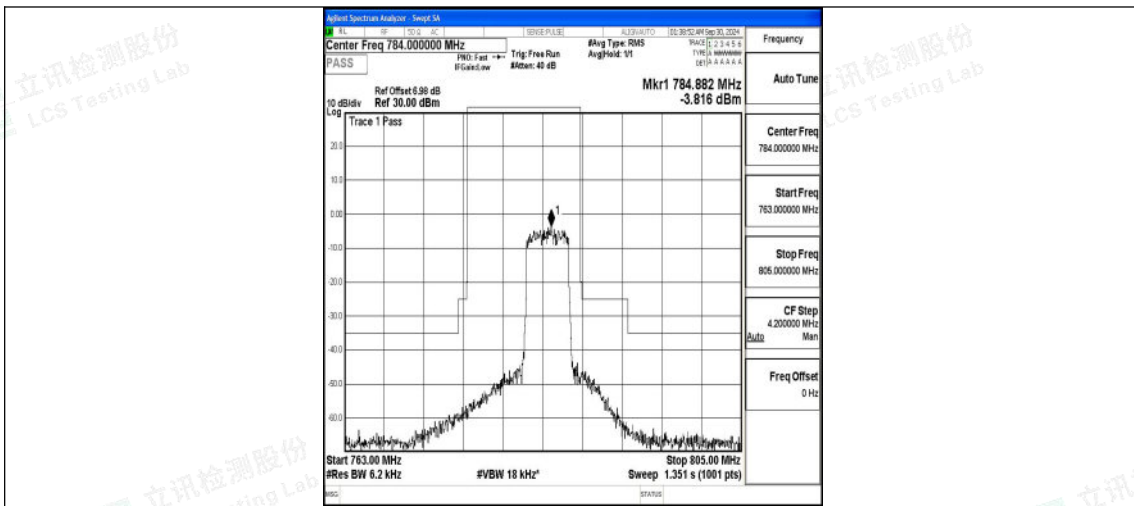


Band13\_5MHz\_16QAM\_23205\_25RB#0

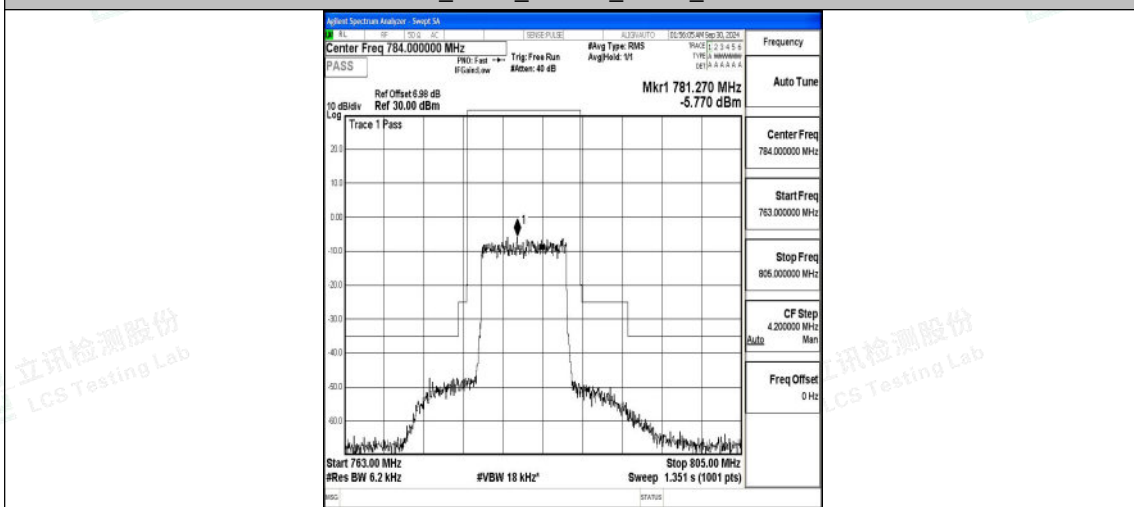


Band13\_5MHz\_QPSK\_23255\_25RB#0

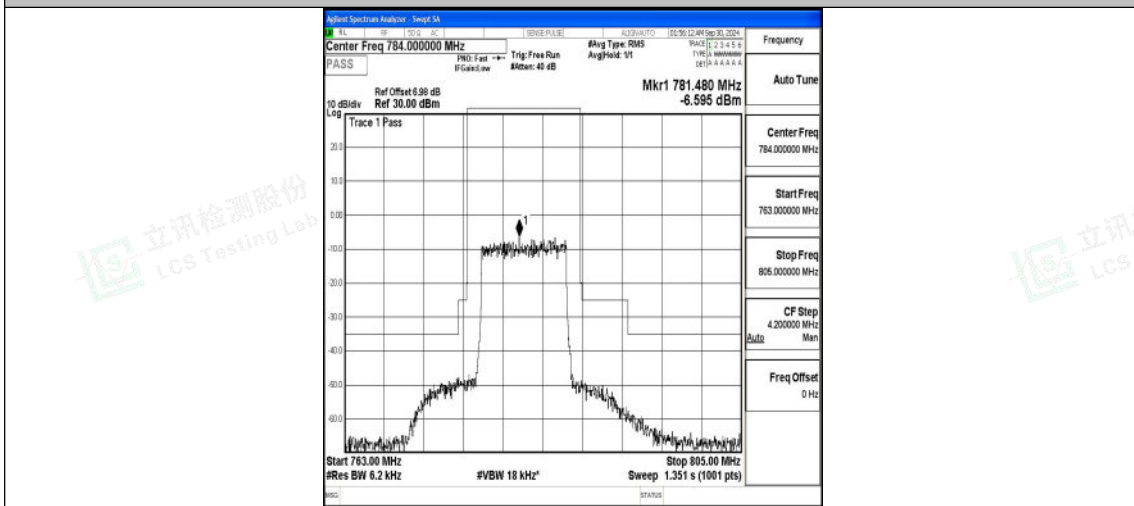




Band13\_5MHz\_16QAM\_23255\_25RB#0



Band13\_10MHz\_QPSK\_23230\_50RB#0



Band13\_10MHz\_16QAM\_23230\_50RB#0





## F.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	-55.44	PASS
Band13	5MHz	QPSK	23205	1RB#0	0.15~30	-52.21	PASS
Band13	5MHz	QPSK	23205	1RB#0	30~1000	-60.81	PASS
Band13	5MHz	QPSK	23205	1RB#0	1000~3000	-41.68	PASS
Band13	5MHz	QPSK	23205	1RB#0	3000~10000	-43.76	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.009~0.15	-58.77	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.15~30	-52.94	PASS
Band13	5MHz	16QAM	23205	1RB#0	30~1000	-61.28	PASS
Band13	5MHz	16QAM	23205	1RB#0	1000~3000	-41.57	PASS
Band13	5MHz	16QAM	23205	1RB#0	3000~10000	-44.22	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.009~0.15	-58.71	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.15~30	-53.95	PASS
Band13	5MHz	QPSK	23230	1RB#0	30~1000	-61.85	PASS
Band13	5MHz	QPSK	23230	1RB#0	1000~3000	-41.61	PASS
Band13	5MHz	QPSK	23230	1RB#0	3000~10000	-44.15	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.009~0.15	-57.76	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.15~30	-52.00	PASS
Band13	5MHz	16QAM	23230	1RB#0	30~1000	-61.90	PASS
Band13	5MHz	16QAM	23230	1RB#0	1000~3000	-42.23	PASS
Band13	5MHz	16QAM	23230	1RB#0	3000~10000	-44.00	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.009~0.15	-58.26	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.15~30	-53.99	PASS
Band13	5MHz	QPSK	23255	1RB#0	30~1000	-61.14	PASS
Band13	5MHz	QPSK	23255	1RB#0	1000~3000	-41.32	PASS
Band13	5MHz	QPSK	23255	1RB#0	3000~10000	-44.16	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.009~0.15	-58.85	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.15~30	-53.69	PASS
Band13	5MHz	16QAM	23255	1RB#0	30~1000	-60.26	PASS
Band13	5MHz	16QAM	23255	1RB#0	1000~3000	-41.64	PASS
Band13	5MHz	16QAM	23255	1RB#0	3000~10000	-44.01	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.009~0.15	-54.77	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.15~30	-53.57	PASS
Band13	10MHz	QPSK	23230	1RB#0	30~1000	-62.10	PASS
Band13	10MHz	QPSK	23230	1RB#0	1000~3000	-41.19	PASS



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: 101, 201 Bldg A &amp; 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



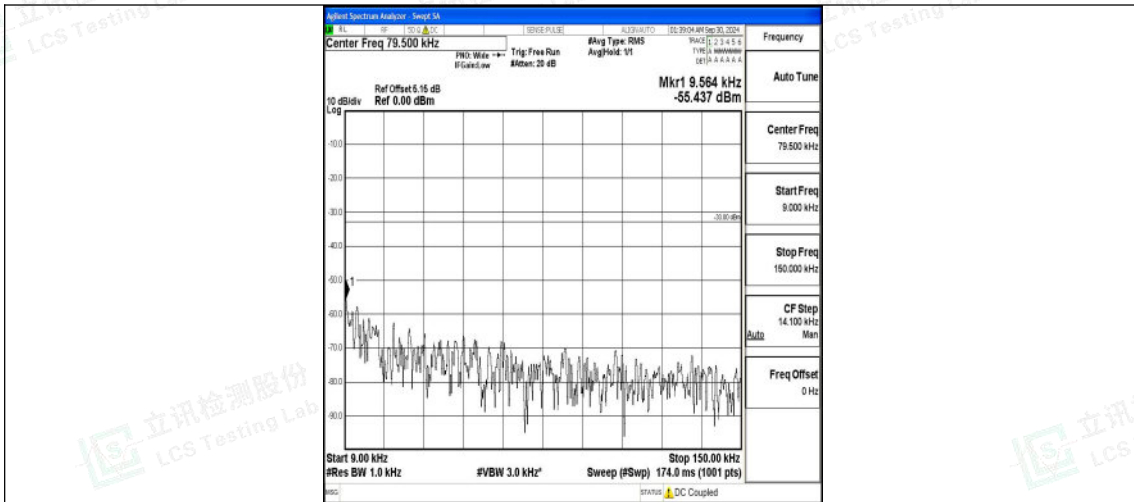
Band13	10MHz	QPSK	23230	1RB#0	3000~10000	-43.85	PASS
Band13	10MHz	16QAM	23230	1RB#0	0.009~0.15	-58.12	PASS
Band13	10MHz	16QAM	23230	1RB#0	0.15~30	-51.33	PASS
Band13	10MHz	16QAM	23230	1RB#0	30~1000	-62.04	PASS
Band13	10MHz	16QAM	23230	1RB#0	1000~3000	-40.30	PASS
Band13	10MHz	16QAM	23230	1RB#0	3000~10000	-44.28	PASS



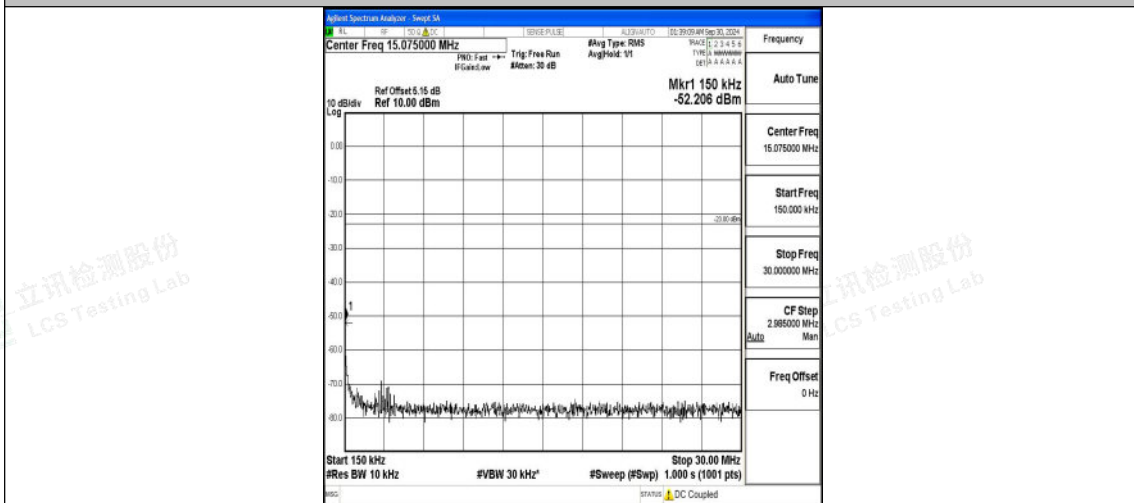
Shenzhen LCS Compliance Testing Laboratory Ltd.  
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China  
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
Scan code to check authenticity



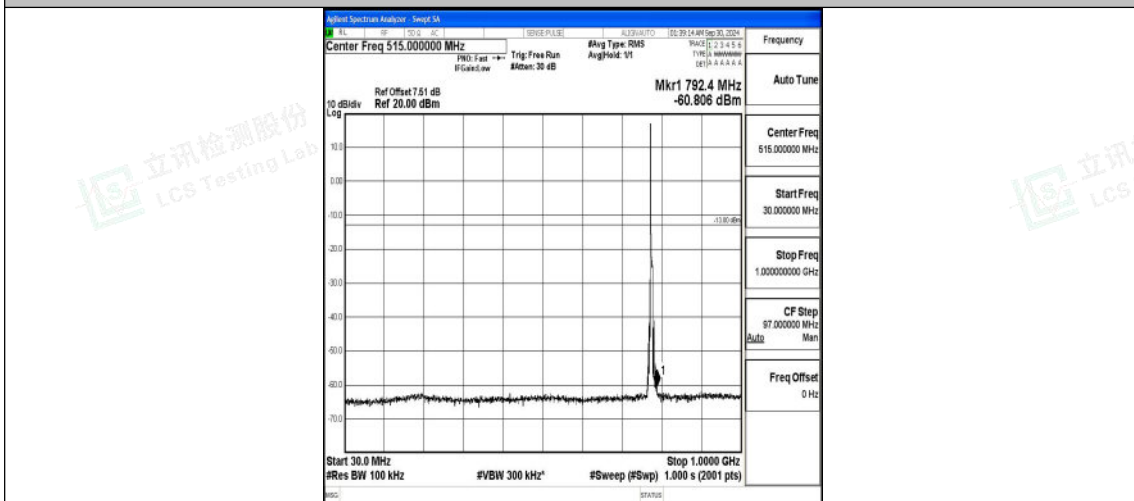
### Test Graphs



Band13\_5MHz\_QPSK\_23205\_1RB#0\_0.009~0.15\_0.009~0.15



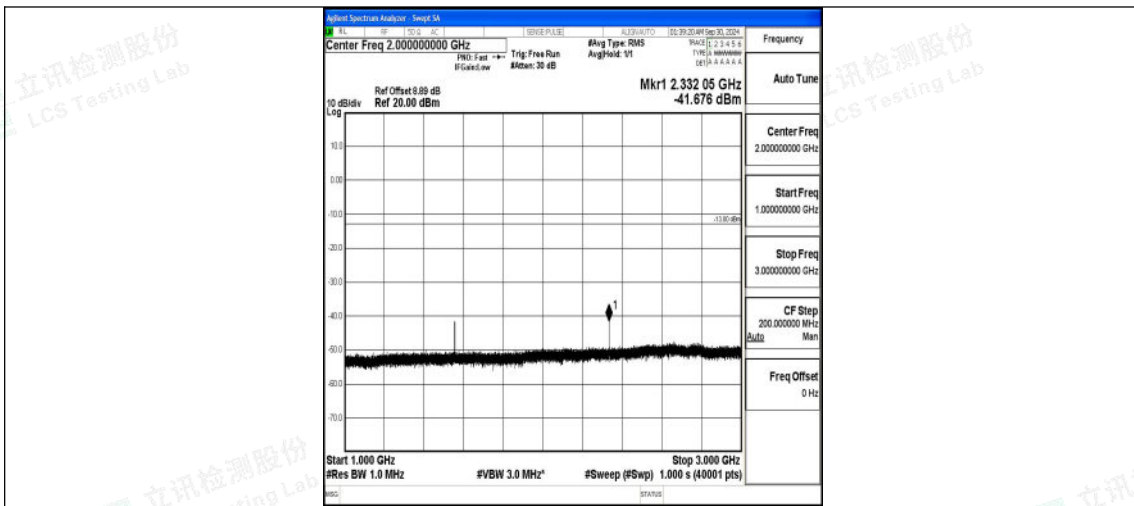
Band13\_5MHz\_QPSK\_23205\_1RB#0\_0.15~30\_0.15~30



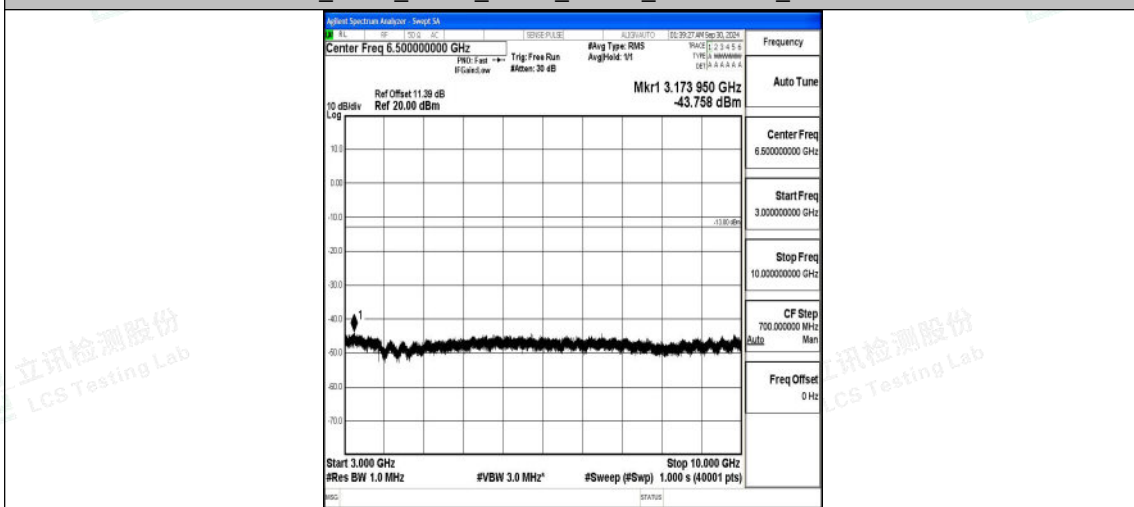
Band13\_5MHz\_QPSK\_23205\_1RB#0\_30~1000\_30~1000



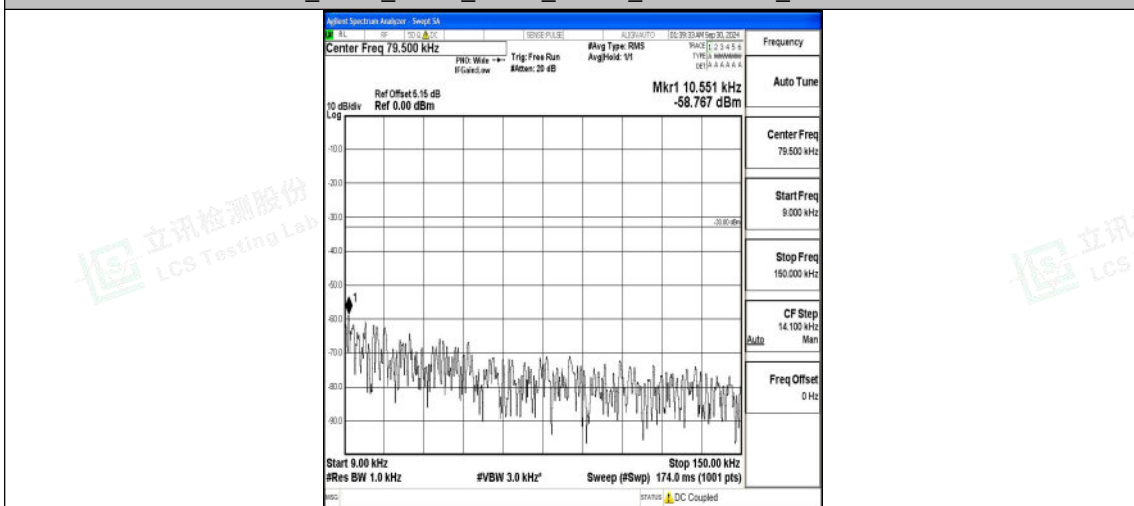




Band13\_5MHz\_QPSK\_23205\_1RB#0\_1000~3000\_1000~3000

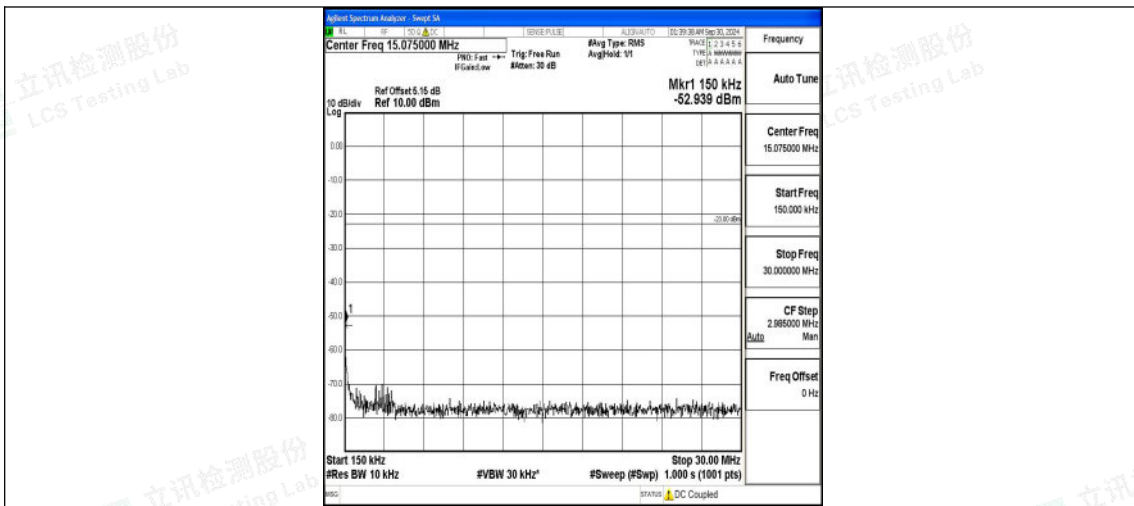


Band13\_5MHz\_QPSK\_23205\_1RB#0\_3000~10000\_3000~10000

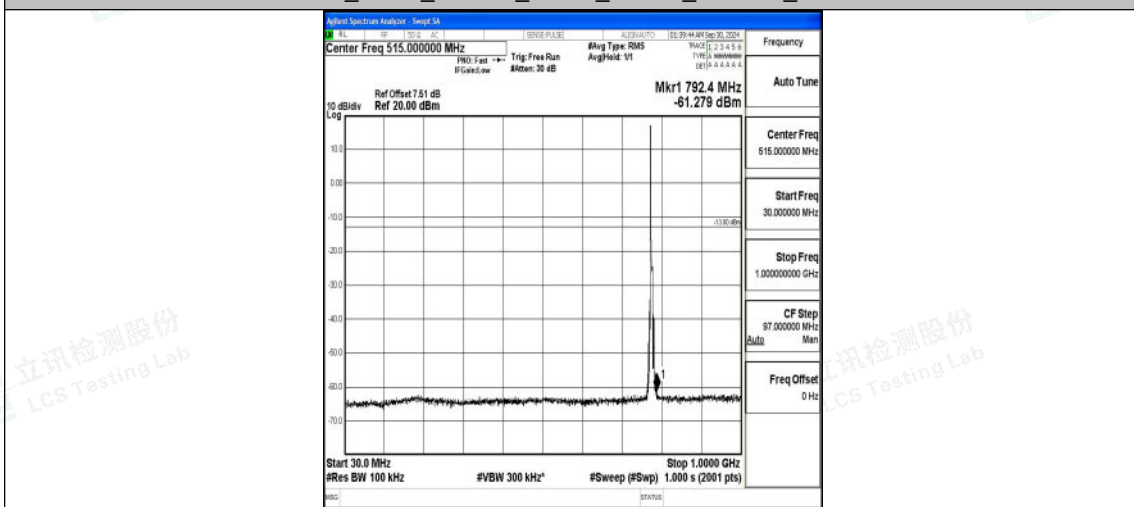


Band13\_5MHz\_16QAM\_23205\_1RB#0\_0.009~0.15\_0.009~0.15

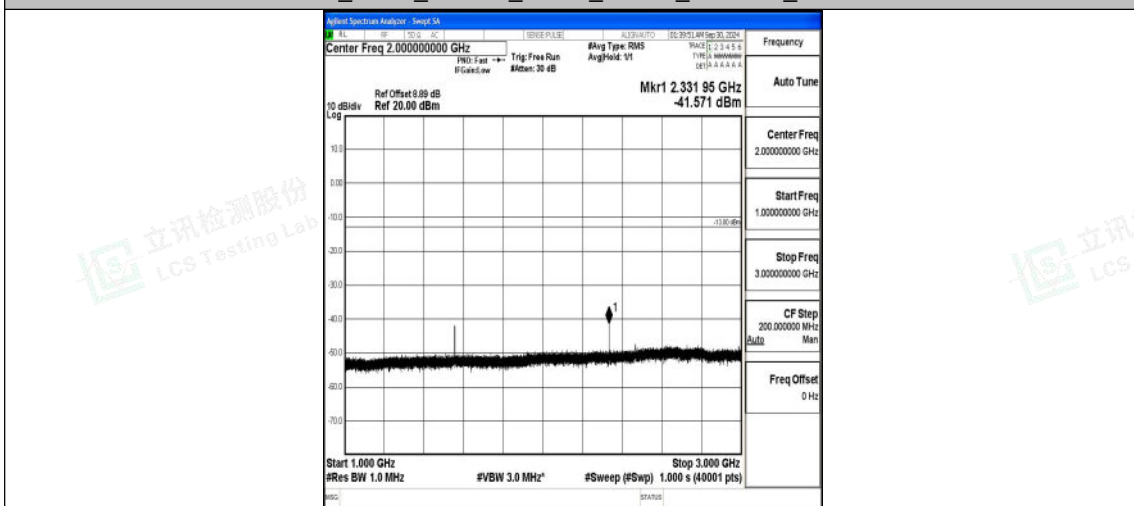




Band13\_5MHz\_16QAM\_23205\_1RB#0\_0.15~30\_0.15~30

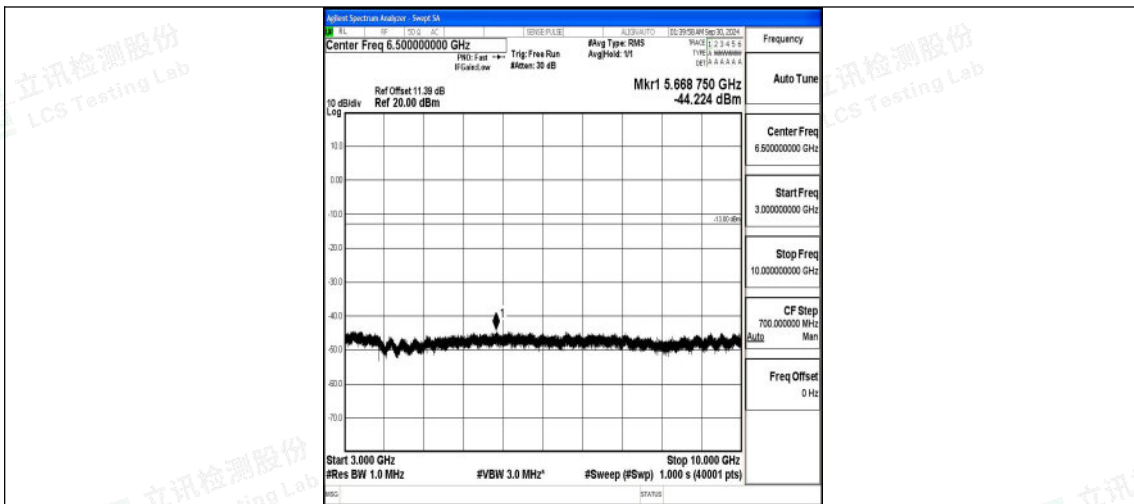


Band13\_5MHz\_16QAM\_23205\_1RB#0\_30~1000\_30~1000

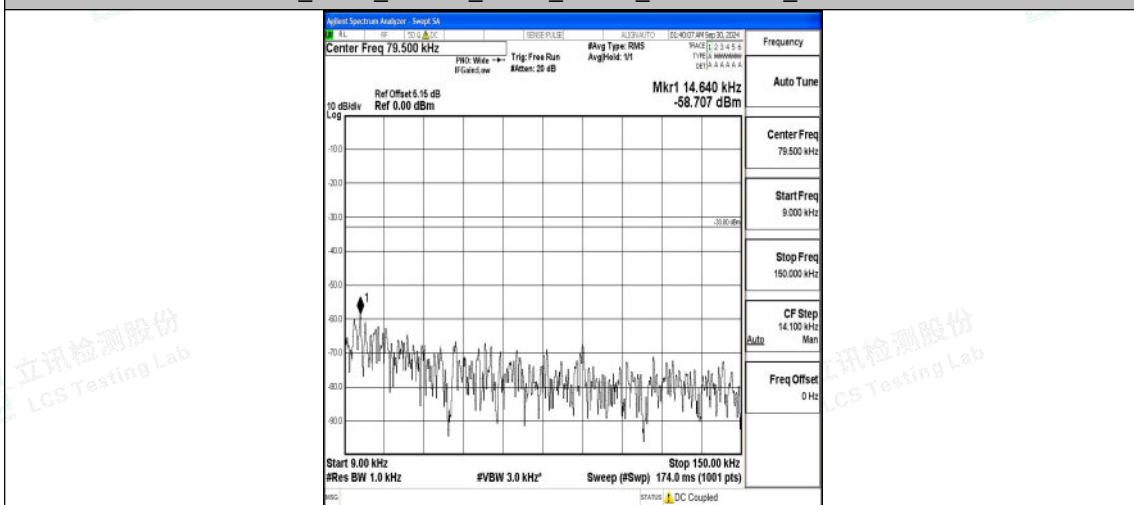


Band13\_5MHz\_16QAM\_23205\_1RB#0\_1000~3000\_1000~3000

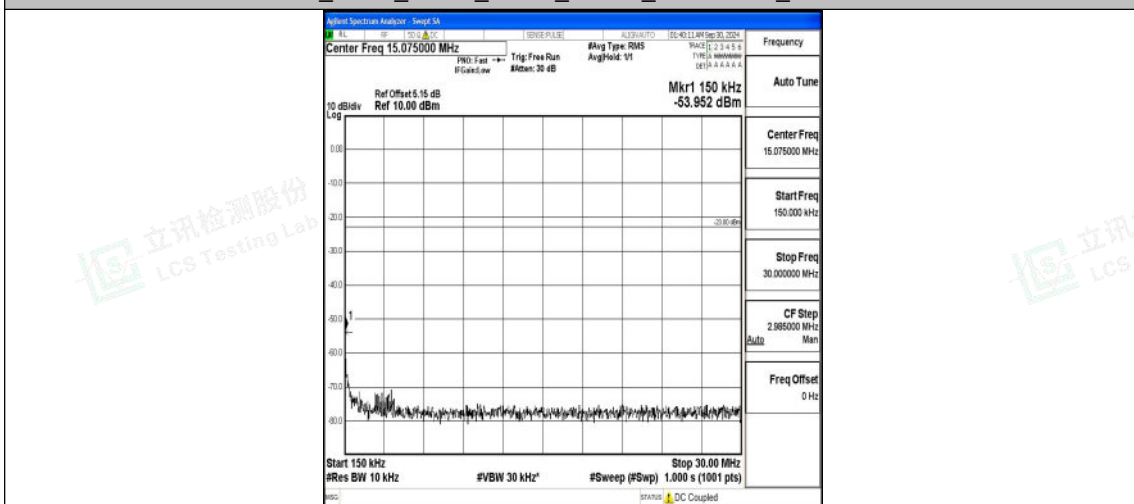




Band13\_5MHz\_16QAM\_23205\_1RB#0\_3000~10000\_3000~10000

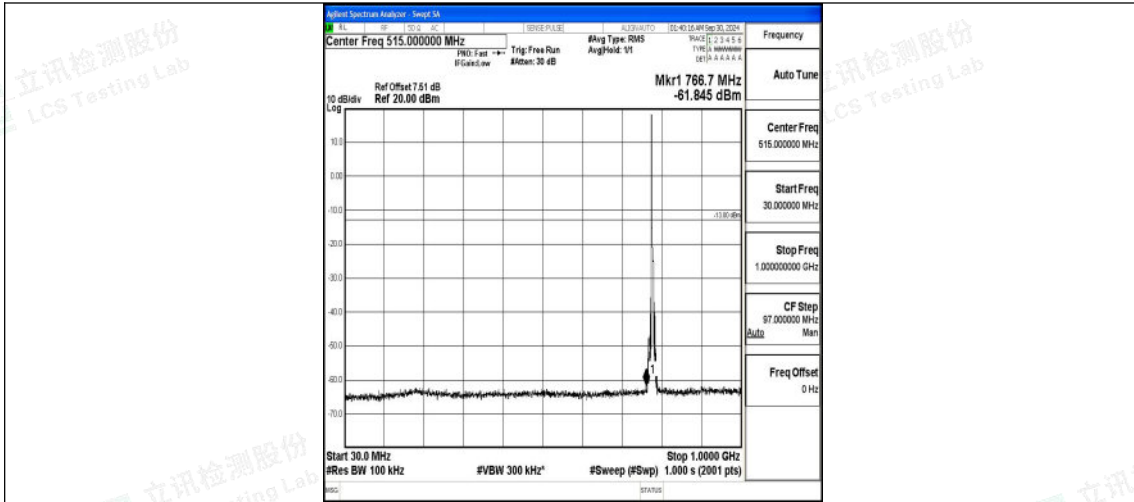


Band13\_5MHz\_QPSK\_23230\_1RB#0\_0.009~0.15\_0.009~0.15

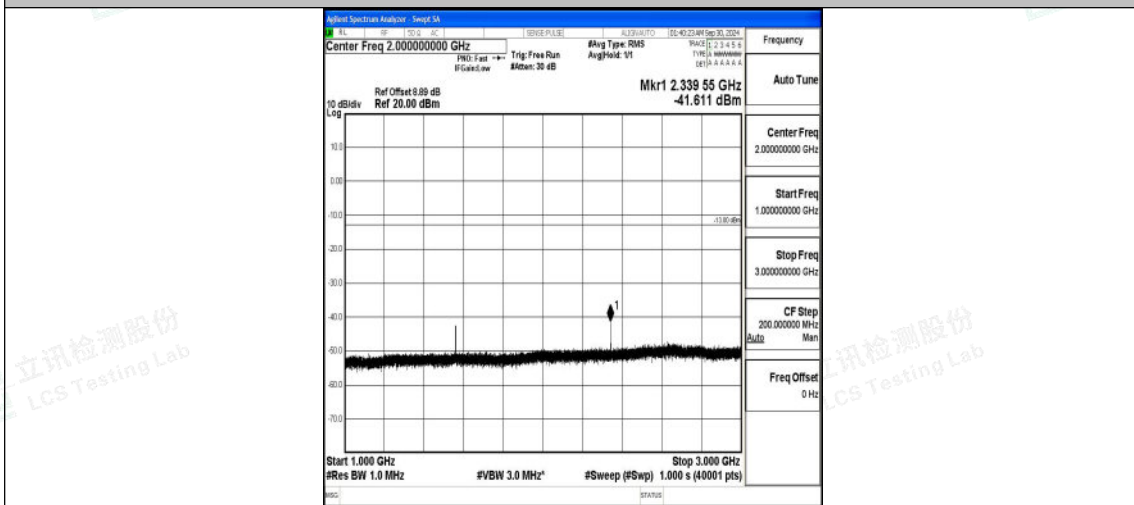


Band13\_5MHz\_QPSK\_23230\_1RB#0\_0.15~30\_0.15~30

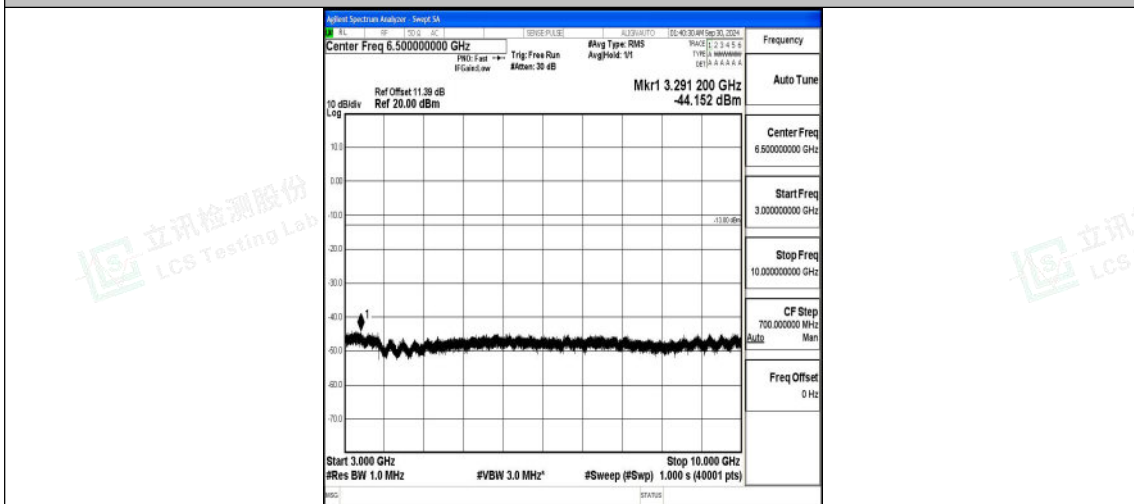




Band13\_5MHz\_QPSK\_23230\_1RB#0\_30~1000\_30~1000

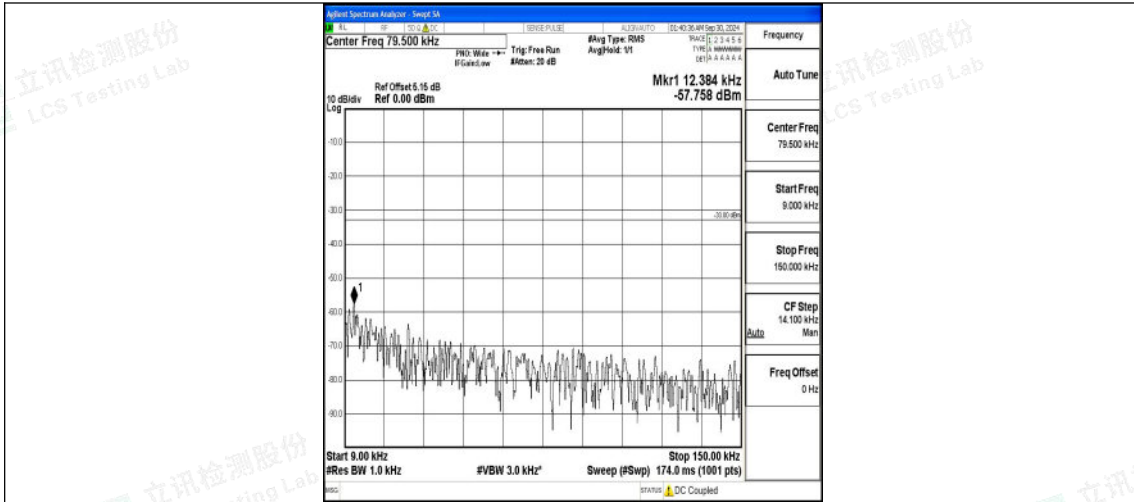


Band13\_5MHz\_QPSK\_23230\_1RB#0\_1000~3000\_1000~3000

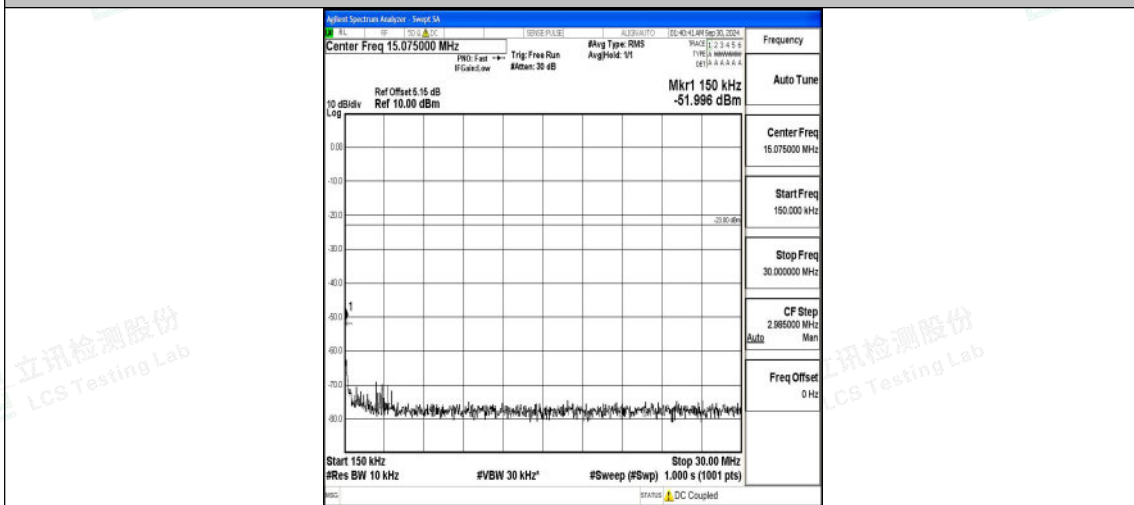


Band13\_5MHz\_QPSK\_23230\_1RB#0\_3000~10000\_3000~10000

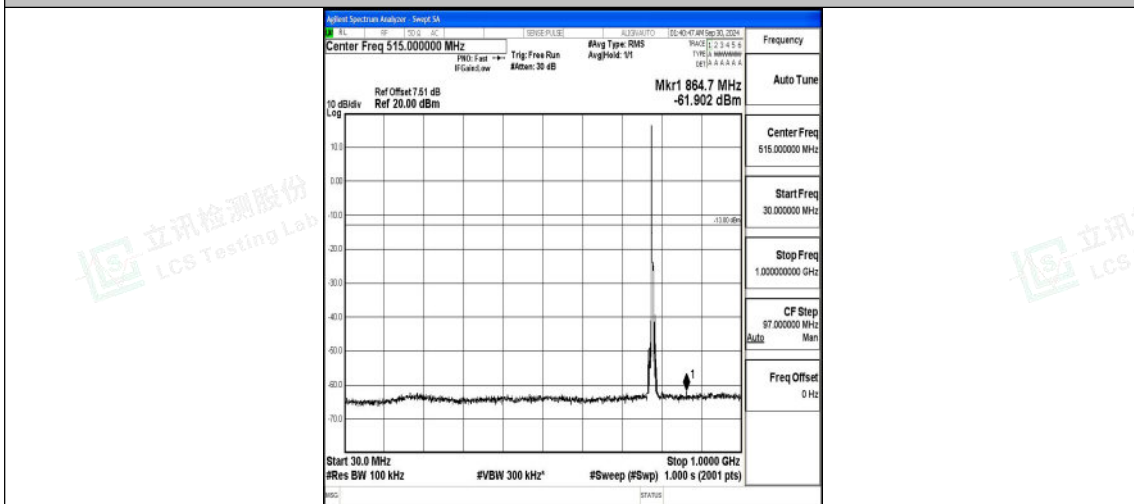




Band13\_5MHz\_16QAM\_23230\_1RB#0\_0.009~0.15\_0.009~0.15



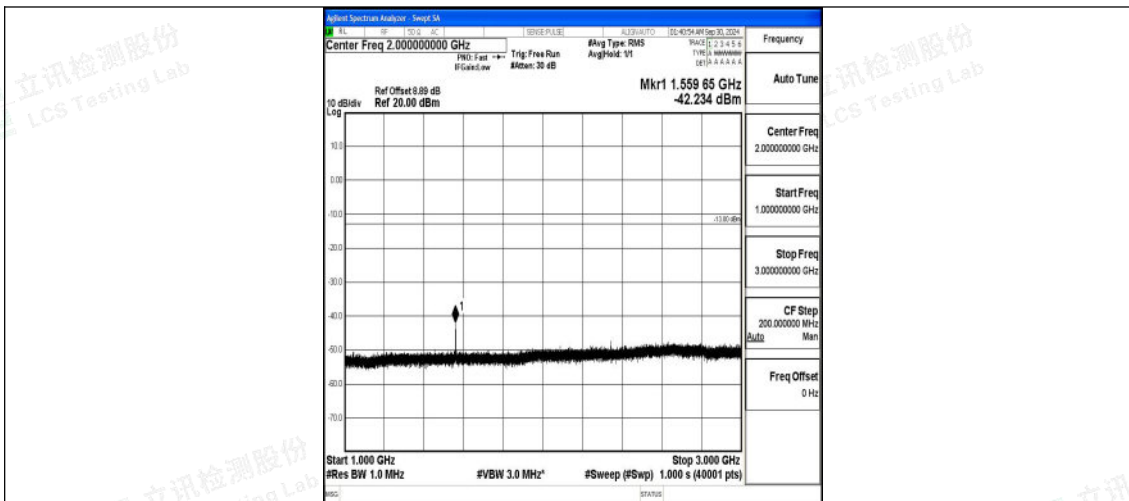
Band13\_5MHz\_16QAM\_23230\_1RB#0\_0.15~30\_0.15~30



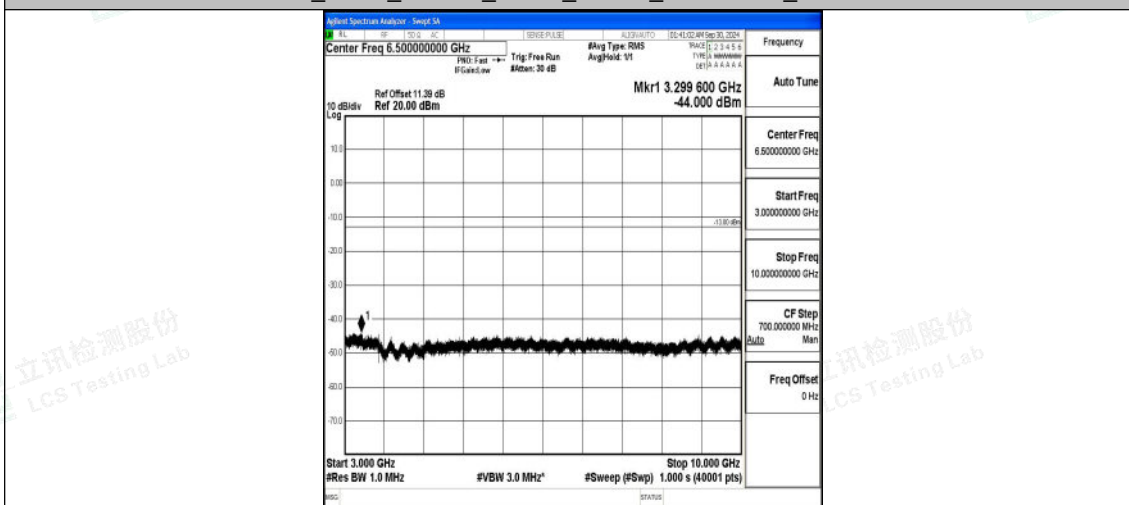
Band13\_5MHz\_16QAM\_23230\_1RB#0\_30~1000\_30~1000



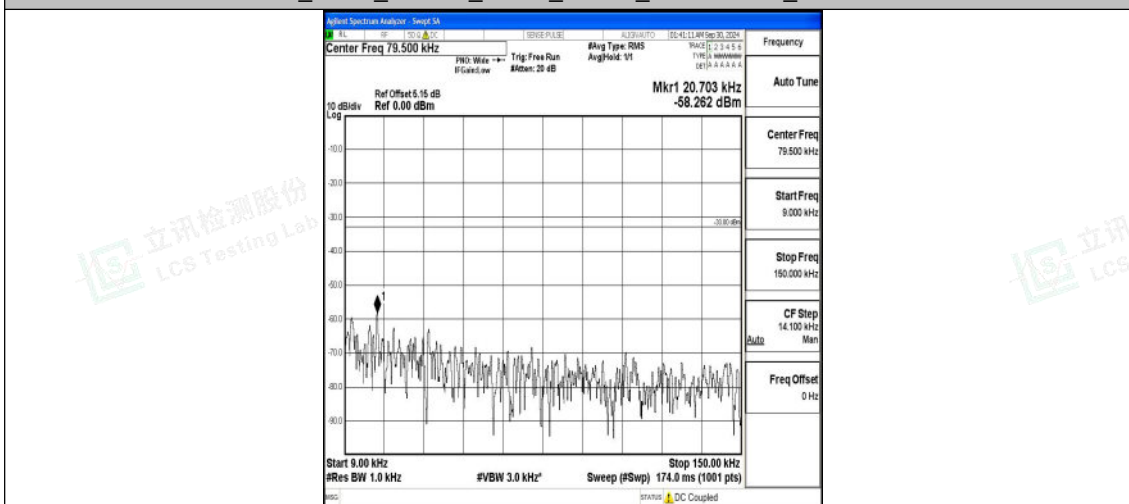




Band13\_5MHz\_16QAM\_23230\_1RB#0\_1000~3000\_1000~3000



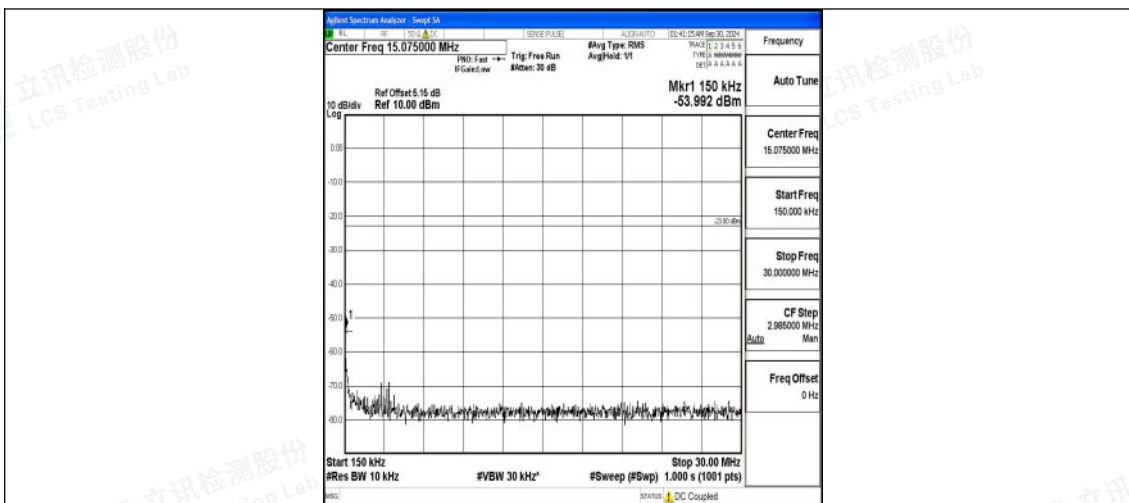
Band13\_5MHz\_16QAM\_23230\_1RB#0\_3000~10000\_3000~10000



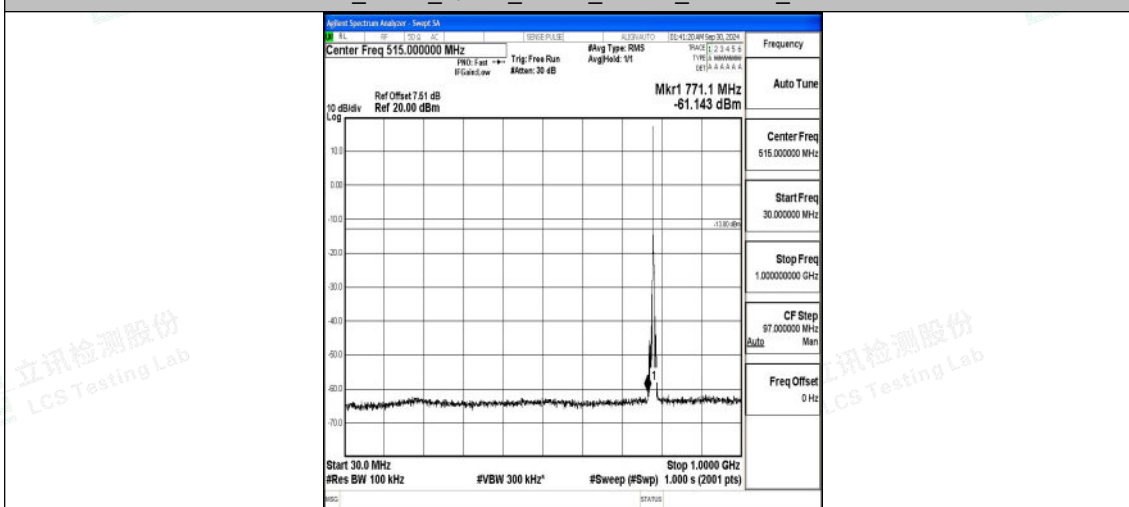
Band13\_5MHz\_QPSK\_23255\_1RB#0\_0.009~0.15\_0.009~0.15



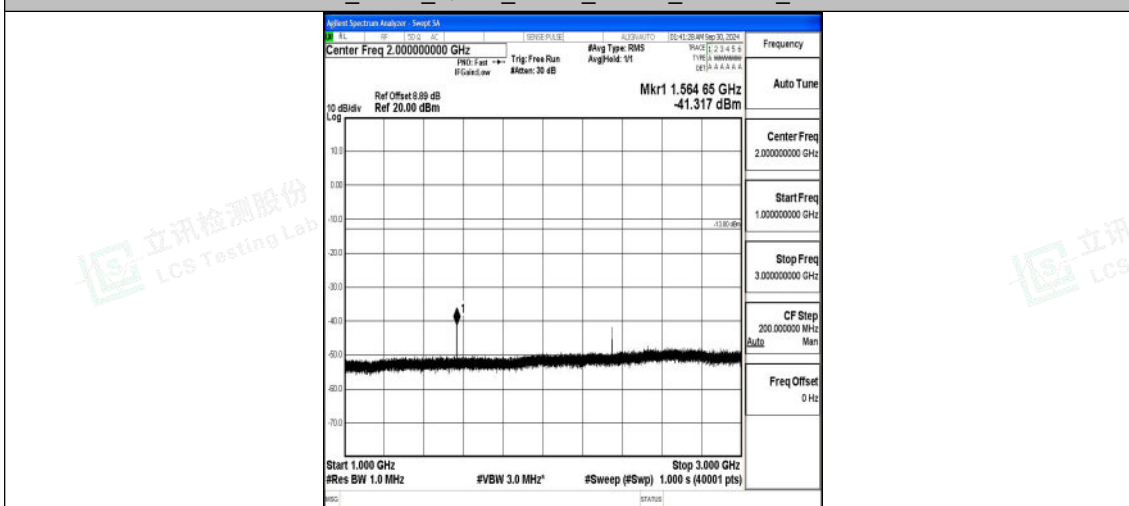




Band13\_5MHz\_QPSK\_23255\_1RB#0\_0.15~30\_0.15~30

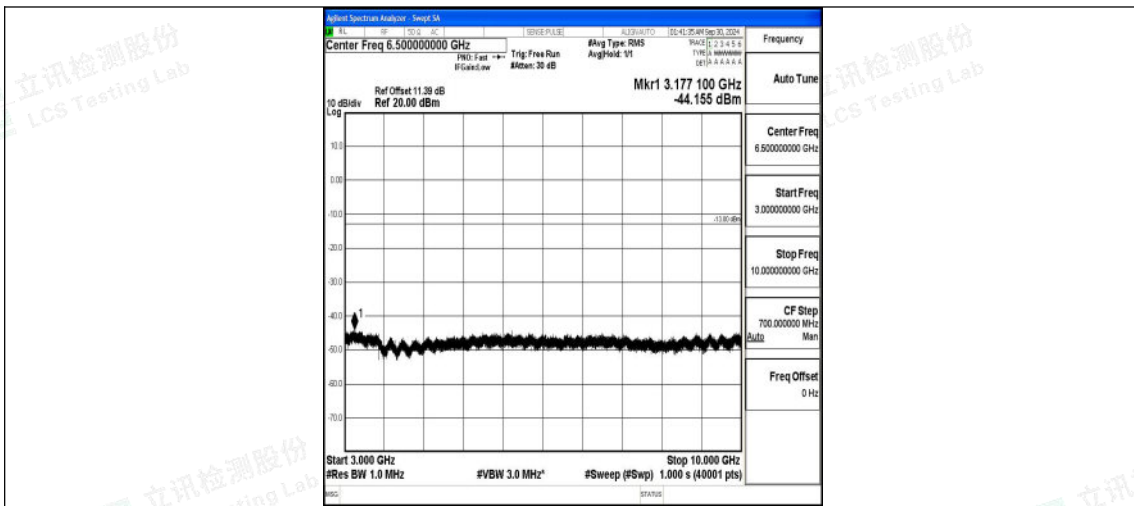


Band13\_5MHz\_QPSK\_23255\_1RB#0\_30~1000\_30~1000

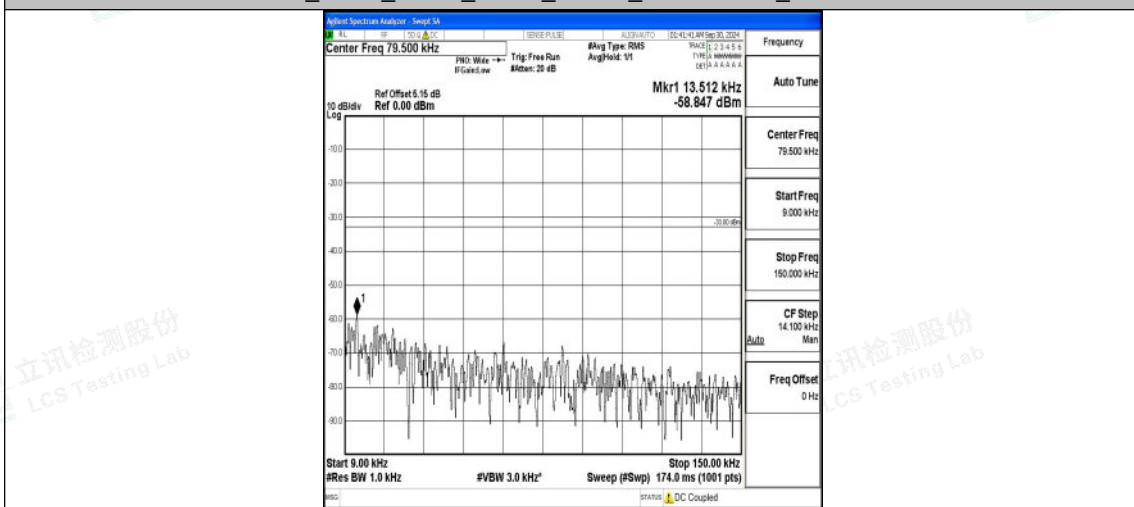


Band13\_5MHz\_QPSK\_23255\_1RB#0\_1000~3000\_1000~3000

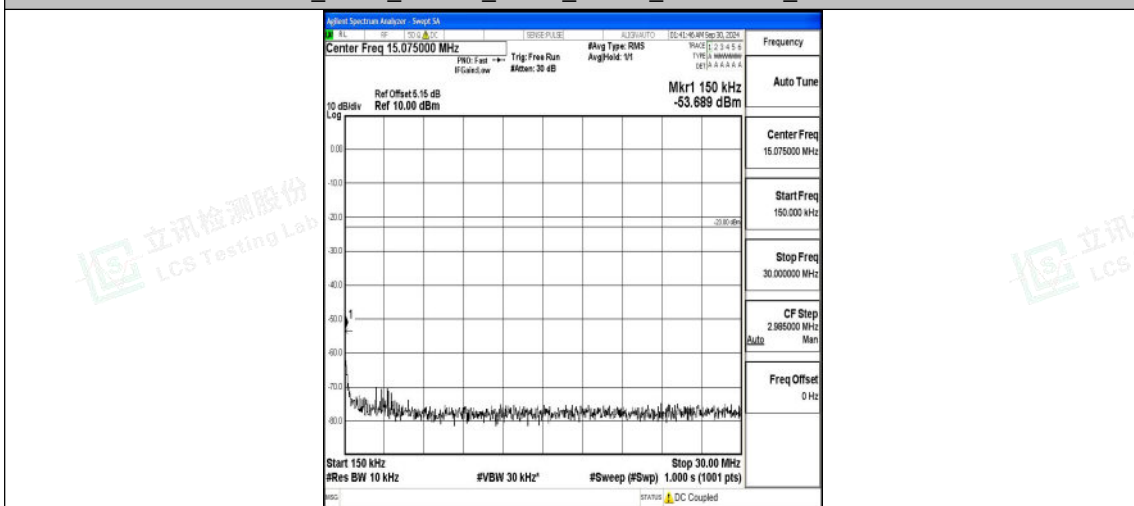




Band13\_5MHz\_QPSK\_23255\_1RB#0\_3000~10000\_3000~10000

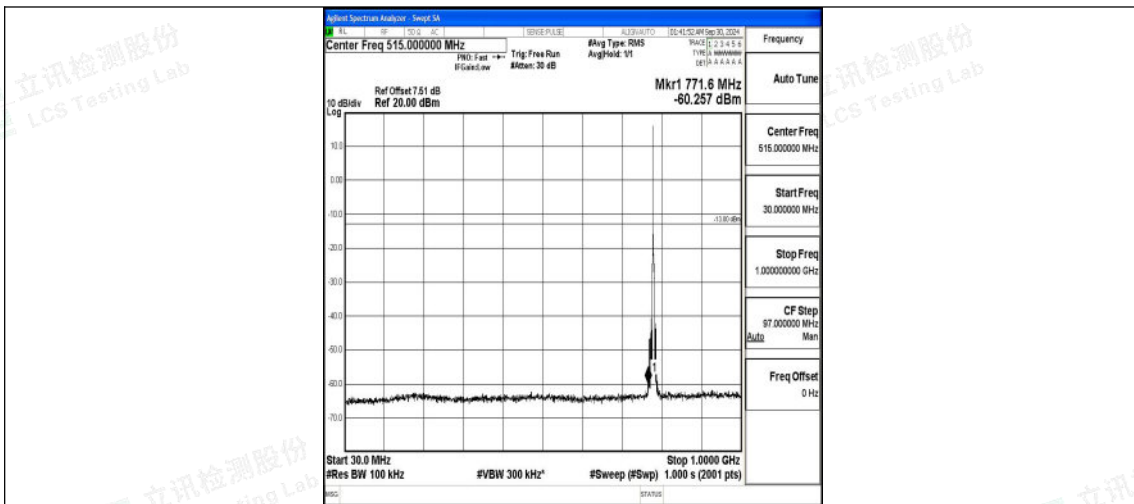


Band13\_5MHz\_16QAM\_23255\_1RB#0\_0.009~0.15\_0.009~0.15

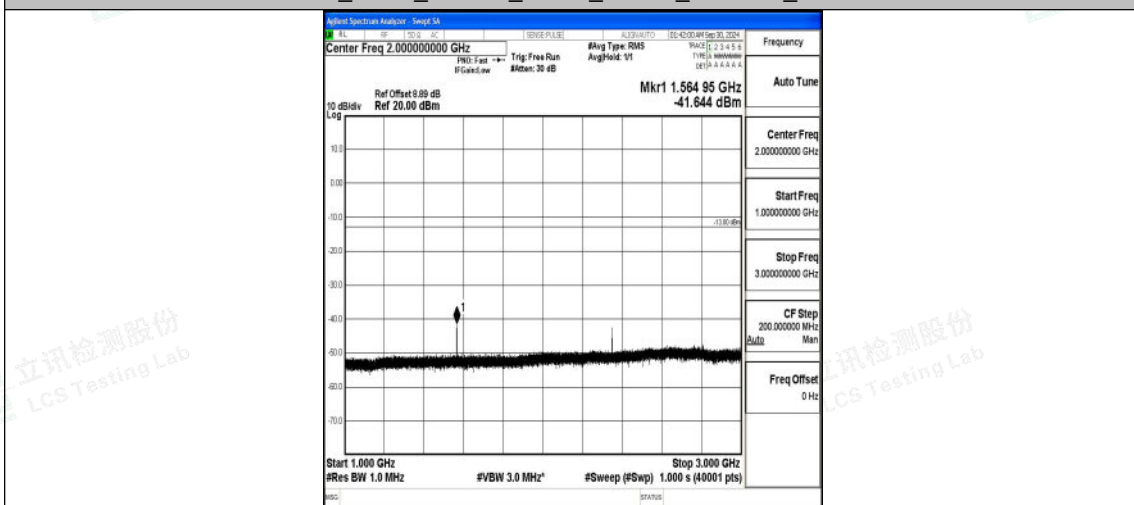


Band13\_5MHz\_16QAM\_23255\_1RB#0\_0.15~30\_0.15~30

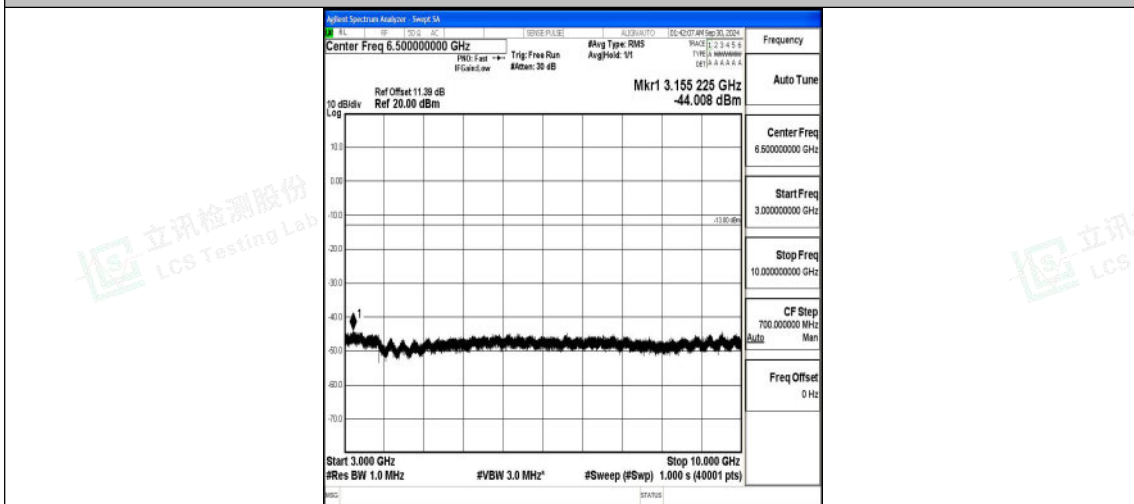




Band13\_5MHz\_16QAM\_23255\_1RB#0\_30~1000\_30~1000

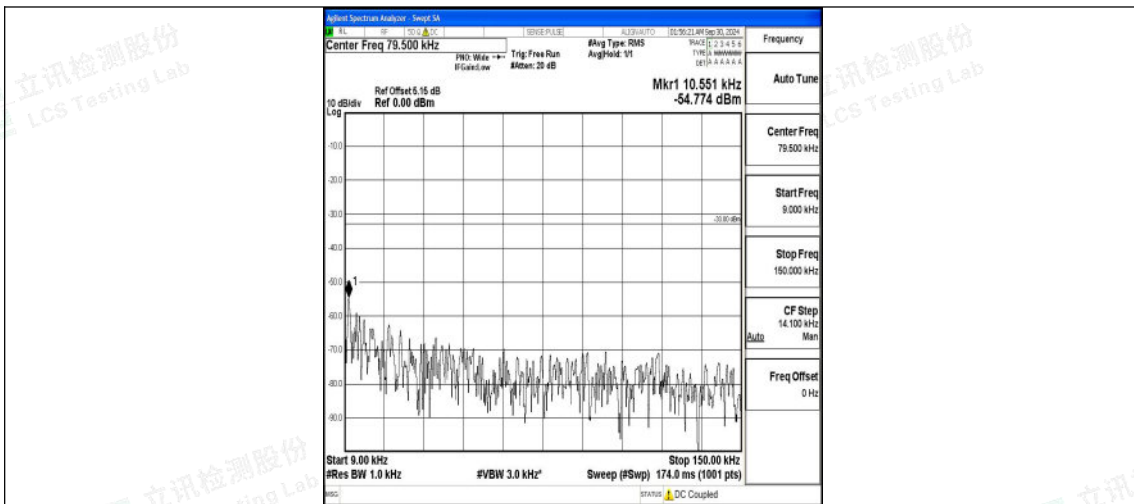


Band13\_5MHz\_16QAM\_23255\_1RB#0\_1000~3000\_1000~3000

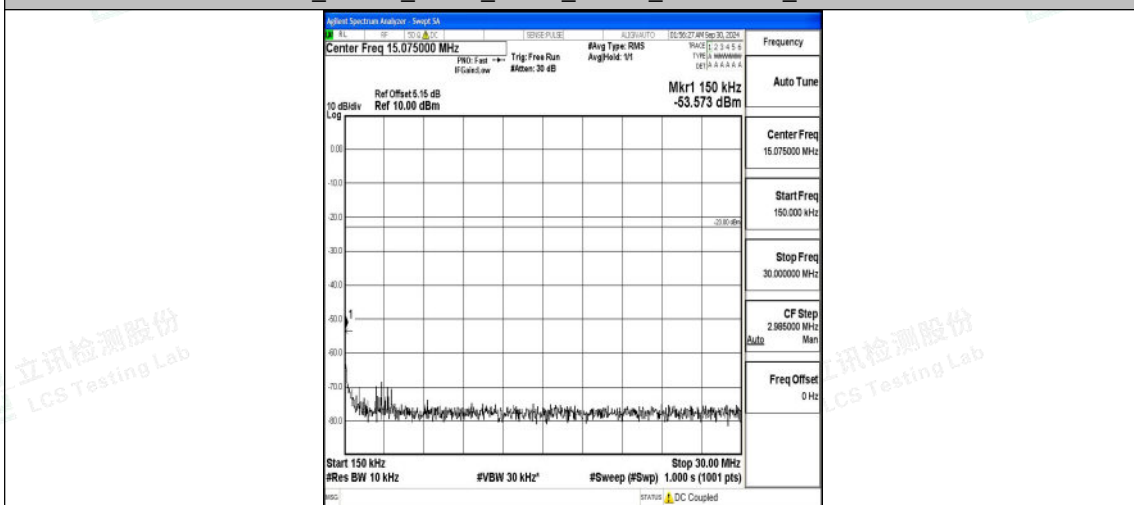


Band13\_5MHz\_16QAM\_23255\_1RB#0\_3000~10000\_3000~10000

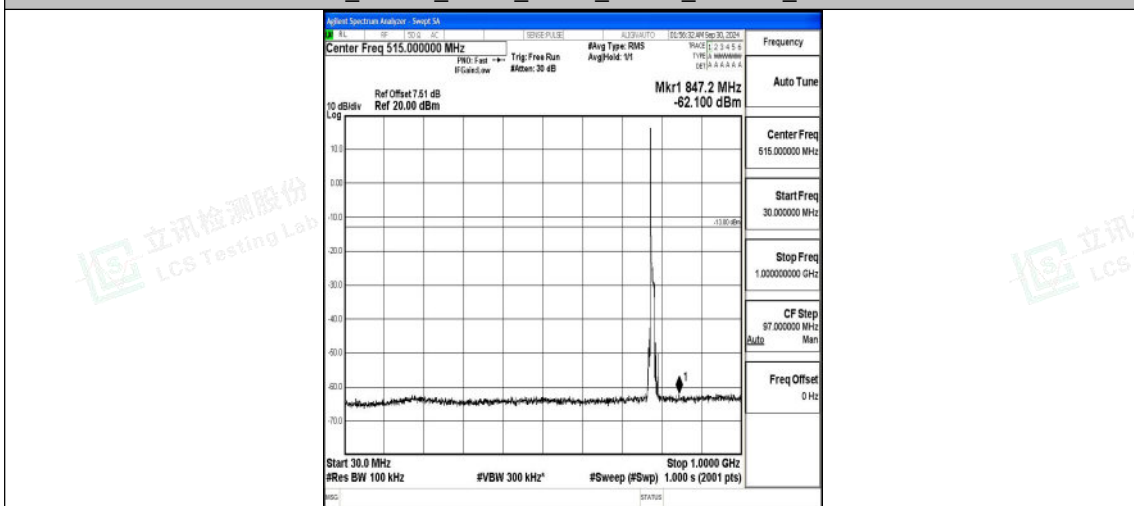




Band13\_10MHz\_QPSK\_23230\_1RB#0\_0.009~0.15\_0.009~0.15

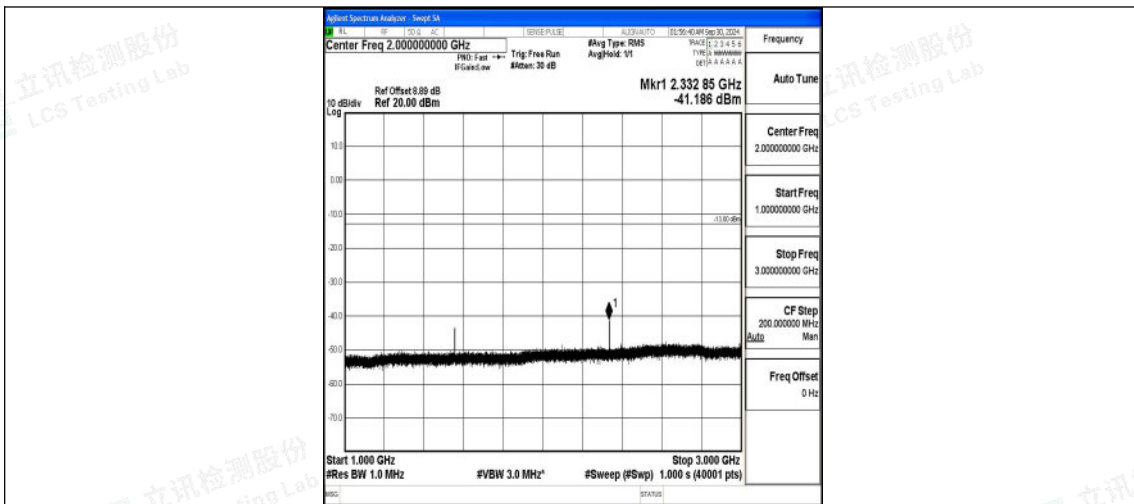


Band13\_10MHz\_QPSK\_23230\_1RB#0\_0.15~30\_0.15~30

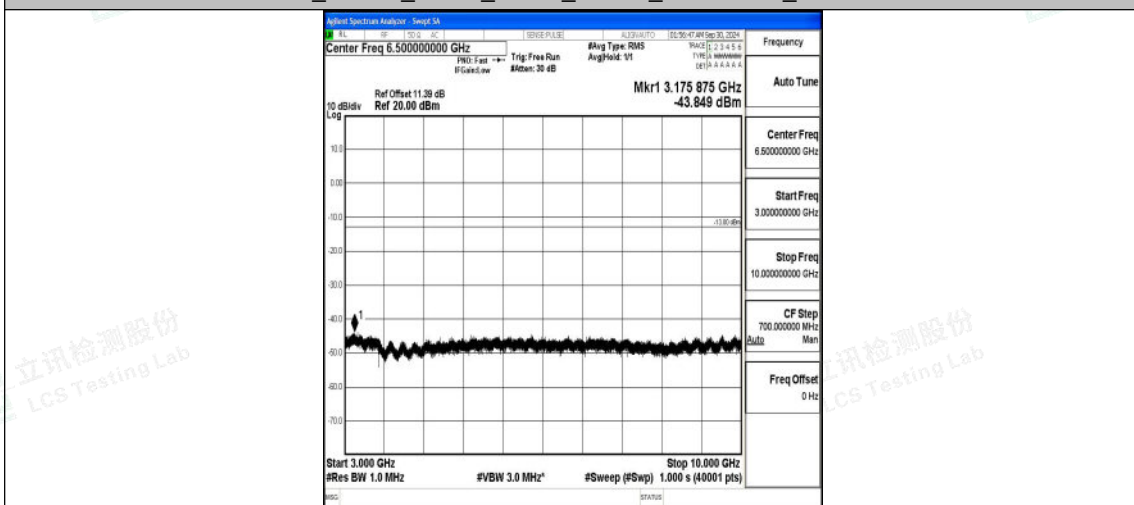


Band13\_10MHz\_QPSK\_23230\_1RB#0\_30~1000\_30~1000

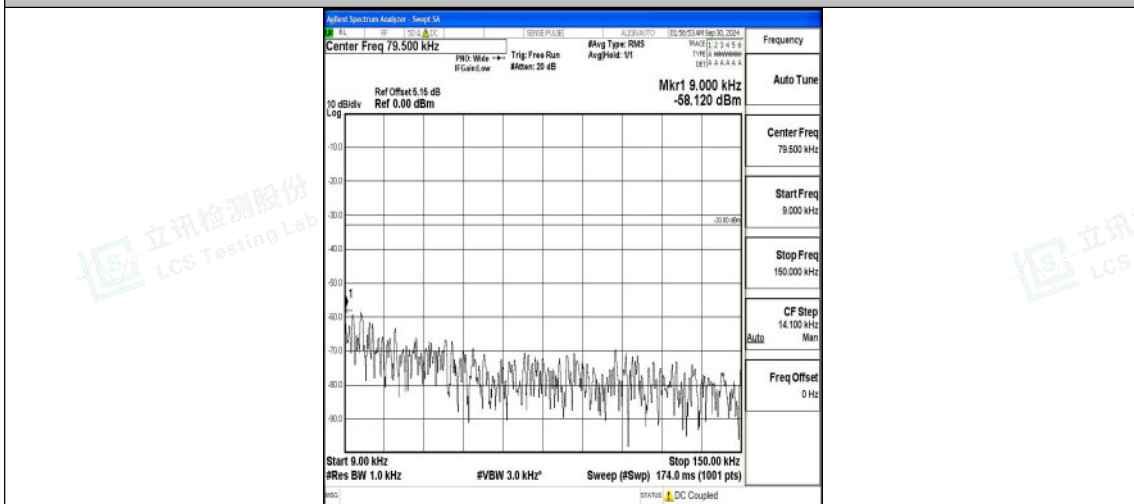




Band13\_10MHz\_QPSK\_23230\_1RB#0\_1000~3000\_1000~3000



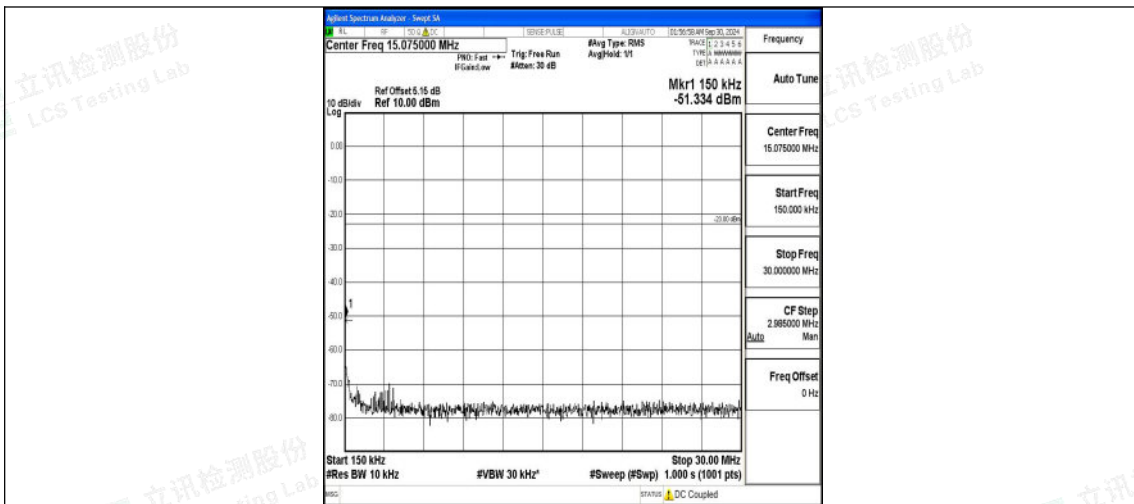
Band13\_10MHz\_QPSK\_23230\_1RB#0\_3000~10000\_3000~10000



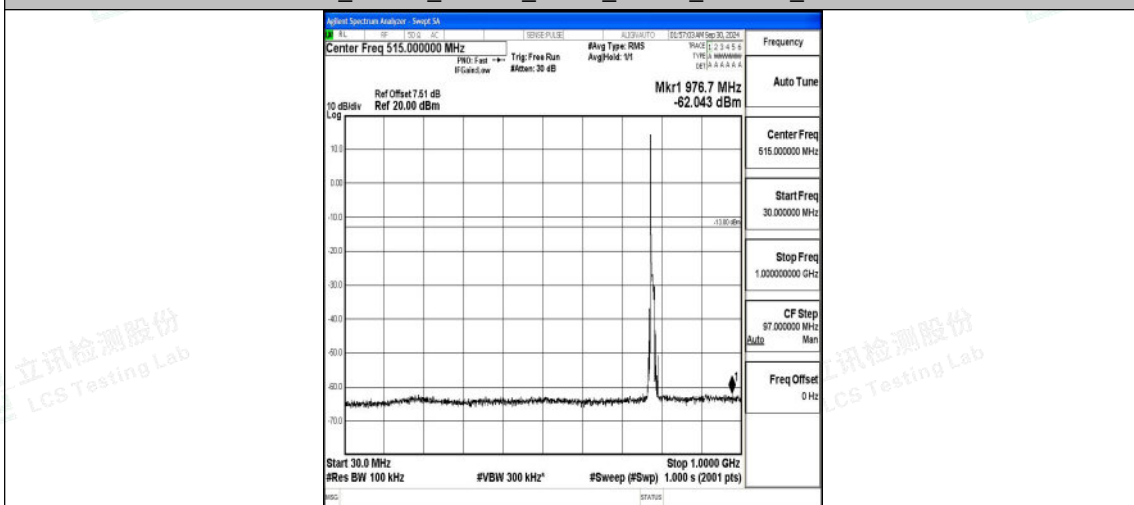
Band13\_10MHz\_16QAM\_23230\_1RB#0\_0.009~0.15\_0.009~0.15



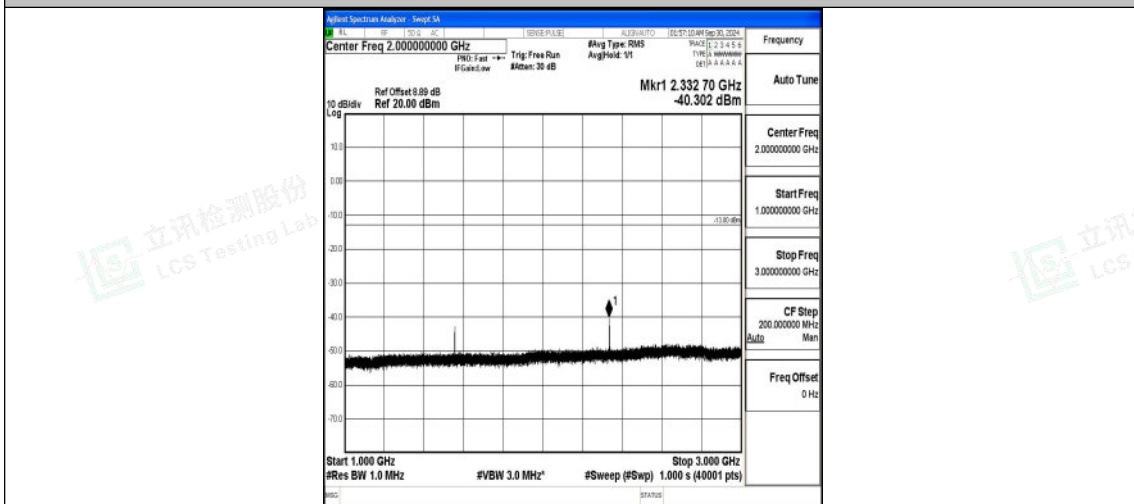




Band13\_10MHz\_16QAM\_23230\_1RB#0\_0.15~30\_0.15~30



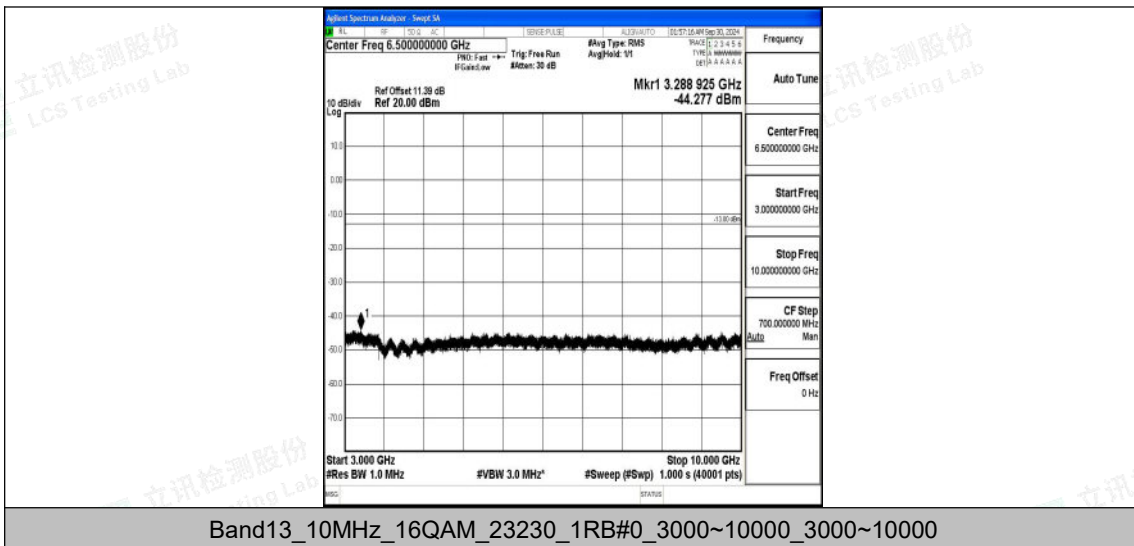
Band13\_10MHz\_16QAM\_23230\_1RB#0\_30~1000\_30~1000



Band13\_10MHz\_16QAM\_23230\_1RB#0\_1000~3000\_1000~3000







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