



Appendix K: Test Data for E-UTRA Band 17

Product Name: Smart Phone

Test Model: HPPL67A

Environmental Conditions

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





K.1 Conducted Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band17	5MHz	QPSK	23755	1RB#0	23.38	PASS
Band17	5MHz	16QAM	23755	1RB#0	22.96	PASS
Band17	5MHz	QPSK	23755	1RB#12	23.45	PASS
Band17	5MHz	16QAM	23755	1RB#12	22.81	PASS
Band17	5MHz	QPSK	23755	1RB#24	23.34	PASS
Band17	5MHz	16QAM	23755	1RB#24	22.90	PASS
Band17	5MHz	QPSK	23755	12RB#0	22.62	PASS
Band17	5MHz	16QAM	23755	12RB#0	21.90	PASS
Band17	5MHz	QPSK	23755	12RB#6	22.61	PASS
Band17	5MHz	16QAM	23755	12RB#6	21.81	PASS
Band17	5MHz	QPSK	23755	12RB#13	22.61	PASS
Band17	5MHz	16QAM	23755	12RB#13	21.72	PASS
Band17	5MHz	QPSK	23755	25RB#0	22.67	PASS
Band17	5MHz	16QAM	23755	25RB#0	21.58	PASS
Band17	5MHz	QPSK	23790	1RB#0	23.40	PASS
Band17	5MHz	16QAM	23790	1RB#0	22.21	PASS
Band17	5MHz	QPSK	23790	1RB#12	23.41	PASS
Band17	5MHz	16QAM	23790	1RB#12	22.03	PASS
Band17	5MHz	QPSK	23790	1RB#24	23.39	PASS
Band17	5MHz	16QAM	23790	1RB#24	22.04	PASS
Band17	5MHz	QPSK	23790	12RB#0	22.63	PASS
Band17	5MHz	16QAM	23790	12RB#0	21.60	PASS
Band17	5MHz	QPSK	23790	12RB#6	22.48	PASS
Band17	5MHz	16QAM	23790	12RB#6	21.66	PASS
Band17	5MHz	QPSK	23790	12RB#13	22.51	PASS
Band17	5MHz	16QAM	23790	12RB#13	21.73	PASS
Band17	5MHz	QPSK	23790	25RB#0	22.61	PASS
Band17	5MHz	16QAM	23790	25RB#0	21.77	PASS
Band17	5MHz	QPSK	23825	1RB#0	23.50	PASS
Band17	5MHz	16QAM	23825	1RB#0	22.04	PASS
Band17	5MHz	QPSK	23825	1RB#12	23.47	PASS
Band17	5MHz	16QAM	23825	1RB#12	22.10	PASS
Band17	5MHz	QPSK	23825	1RB#24	23.38	PASS
Band17	5MHz	16QAM	23825	1RB#24	21.94	PASS
Band17	5MHz	QPSK	23825	12RB#0	22.59	PASS
Band17	5MHz	16QAM	23825	12RB#0	21.67	PASS
Band17	5MHz	QPSK	23825	12RB#6	22.58	PASS



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 Scan code to check authenticity



Band17	5MHz	16QAM	23825	12RB#6	21.70	PASS
Band17	5MHz	QPSK	23825	12RB#13	22.62	PASS
Band17	5MHz	16QAM	23825	12RB#13	21.75	PASS
Band17	5MHz	QPSK	23825	25RB#0	22.48	PASS
Band17	5MHz	16QAM	23825	25RB#0	21.80	PASS
Band17	10MHz	QPSK	23780	1RB#0	23.35	PASS
Band17	10MHz	16QAM	23780	1RB#0	22.31	PASS
Band17	10MHz	QPSK	23780	1RB#24	23.11	PASS
Band17	10MHz	16QAM	23780	1RB#24	22.16	PASS
Band17	10MHz	QPSK	23780	1RB#49	23.18	PASS
Band17	10MHz	16QAM	23780	1RB#49	22.60	PASS
Band17	10MHz	QPSK	23780	25RB#0	22.55	PASS
Band17	10MHz	16QAM	23780	25RB#0	21.54	PASS
Band17	10MHz	QPSK	23780	25RB#12	22.36	PASS
Band17	10MHz	16QAM	23780	25RB#12	21.54	PASS
Band17	10MHz	QPSK	23780	25RB#25	22.49	PASS
Band17	10MHz	16QAM	23780	25RB#25	21.45	PASS
Band17	10MHz	QPSK	23780	50RB#0	22.48	PASS
Band17	10MHz	16QAM	23780	50RB#0	21.58	PASS
Band17	10MHz	QPSK	23790	1RB#0	23.60	PASS
Band17	10MHz	16QAM	23790	1RB#0	22.50	PASS
Band17	10MHz	QPSK	23790	1RB#24	23.43	PASS
Band17	10MHz	16QAM	23790	1RB#24	22.49	PASS
Band17	10MHz	QPSK	23790	1RB#49	23.47	PASS
Band17	10MHz	16QAM	23790	1RB#49	22.33	PASS
Band17	10MHz	QPSK	23790	25RB#0	22.43	PASS
Band17	10MHz	16QAM	23790	25RB#0	21.68	PASS
Band17	10MHz	QPSK	23790	25RB#12	22.44	PASS
Band17	10MHz	16QAM	23790	25RB#12	21.69	PASS
Band17	10MHz	QPSK	23790	25RB#25	22.33	PASS
Band17	10MHz	16QAM	23790	25RB#25	21.75	PASS
Band17	10MHz	QPSK	23790	50RB#0	22.68	PASS
Band17	10MHz	16QAM	23790	50RB#0	21.58	PASS
Band17	10MHz	QPSK	23800	1RB#0	23.29	PASS
Band17	10MHz	16QAM	23800	1RB#0	23.20	PASS
Band17	10MHz	QPSK	23800	1RB#24	23.17	PASS
Band17	10MHz	16QAM	23800	1RB#24	23.21	PASS
Band17	10MHz	QPSK	23800	1RB#49	23.16	PASS
Band17	10MHz	16QAM	23800	1RB#49	23.06	PASS
Band17	10MHz	QPSK	23800	25RB#0	22.32	PASS
Band17	10MHz	16QAM	23800	25RB#0	21.65	PASS
Band17	10MHz	QPSK	23800	25RB#12	22.26	PASS
Band17	10MHz	16QAM	23800	25RB#12	21.66	PASS



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Band17	10MHz	QPSK	23800	25RB#25	22.28	PASS
Band17	10MHz	16QAM	23800	25RB#25	21.65	PASS
Band17	10MHz	QPSK	23800	50RB#0	22.45	PASS
Band17	10MHz	16QAM	23800	50RB#0	21.57	PASS





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

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band17	5MHz	QPSK	23755	1RB#0	5.24	13	PASS
Band17	5MHz	16QAM	23755	1RB#0	5.95	13	PASS
Band17	5MHz	QPSK	23755	25RB#0	5.64	13	PASS
Band17	5MHz	16QAM	23755	25RB#0	6.35	13	PASS
Band17	5MHz	QPSK	23790	1RB#0	5.06	13	PASS
Band17	5MHz	16QAM	23790	1RB#0	5.87	13	PASS
Band17	5MHz	QPSK	23790	25RB#0	5.50	13	PASS
Band17	5MHz	16QAM	23790	25RB#0	6.16	13	PASS
Band17	5MHz	QPSK	23825	1RB#0	4.74	13	PASS
Band17	5MHz	16QAM	23825	1RB#0	5.50	13	PASS
Band17	5MHz	QPSK	23825	25RB#0	5.53	13	PASS
Band17	5MHz	16QAM	23825	25RB#0	6.25	13	PASS
Band17	10MHz	QPSK	23780	1RB#0	5.19	13	PASS
Band17	10MHz	16QAM	23780	1RB#0	5.96	13	PASS
Band17	10MHz	QPSK	23780	50RB#0	5.47	13	PASS
Band17	10MHz	16QAM	23780	50RB#0	6.24	13	PASS
Band17	10MHz	QPSK	23790	1RB#0	5.07	13	PASS
Band17	10MHz	16QAM	23790	1RB#0	6.14	13	PASS
Band17	10MHz	QPSK	23790	50RB#0	5.53	13	PASS
Band17	10MHz	16QAM	23790	50RB#0	6.29	13	PASS
Band17	10MHz	QPSK	23800	1RB#0	5.15	13	PASS
Band17	10MHz	16QAM	23800	1RB#0	5.70	13	PASS
Band17	10MHz	QPSK	23800	50RB#0	5.59	13	PASS
Band17	10MHz	16QAM	23800	50RB#0	6.31	13	PASS



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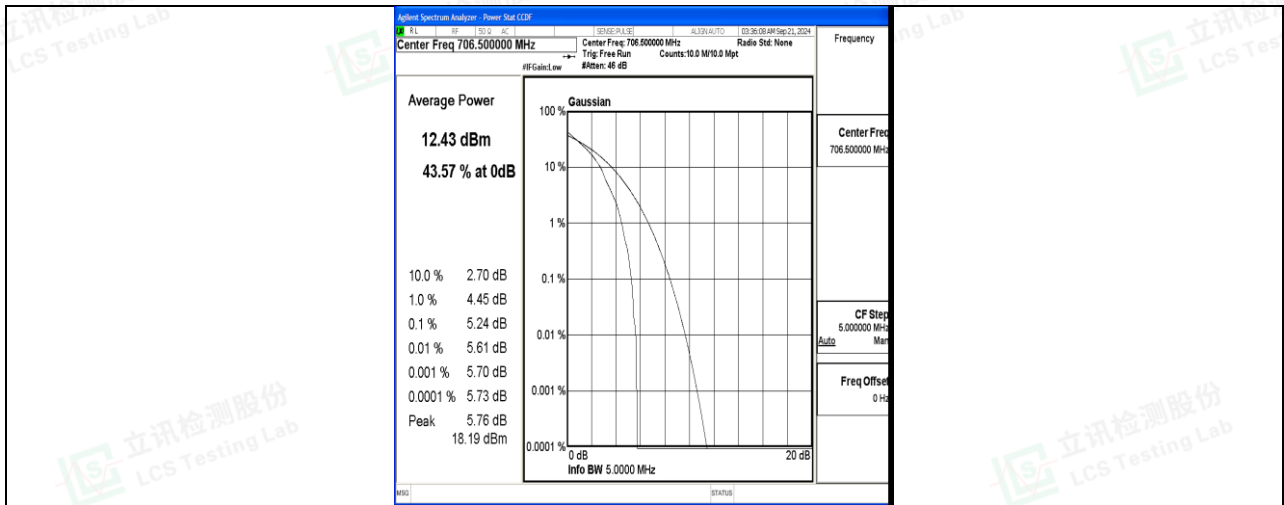
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Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

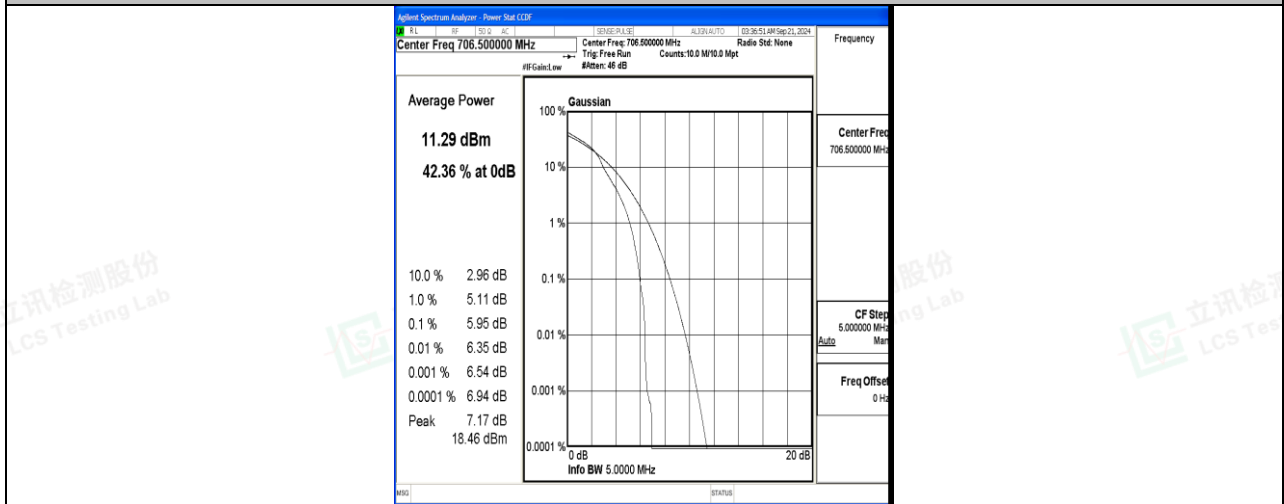
Scan code to check authenticity



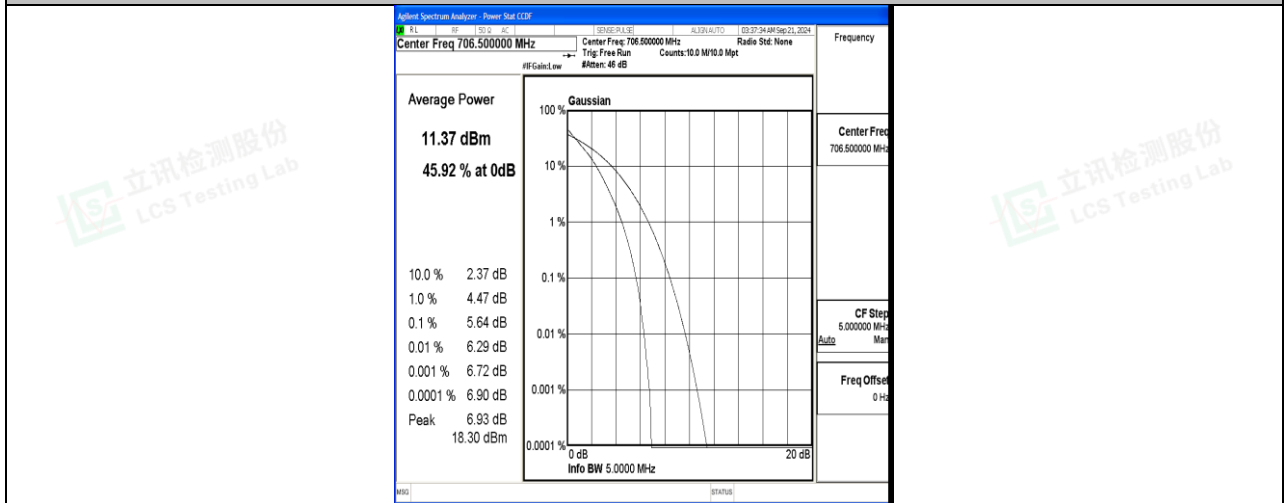
Test Graphs



Band17-5MHz-QPSK-23755-1RB#0-PASS

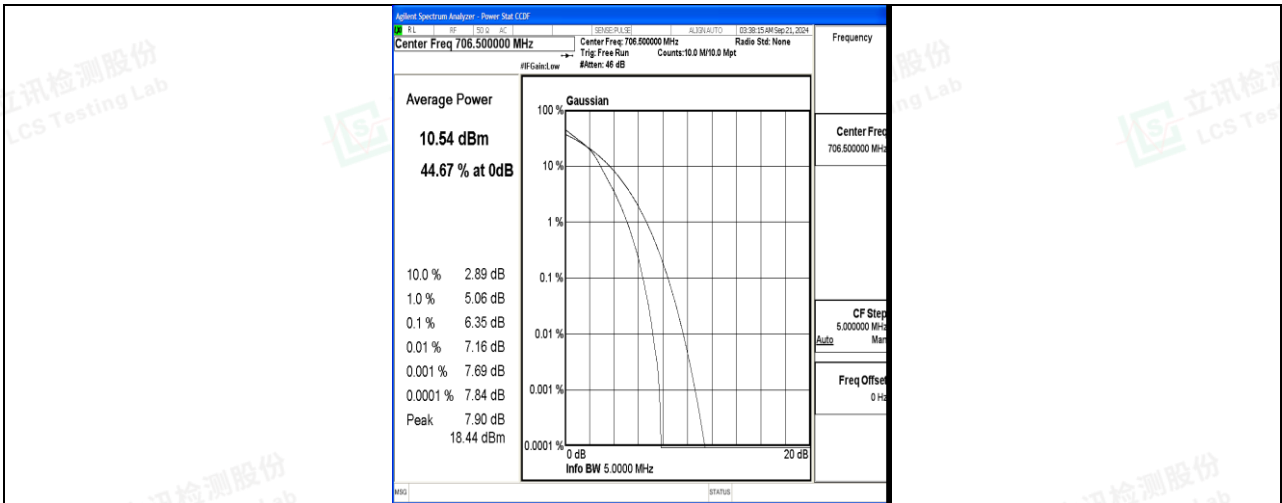


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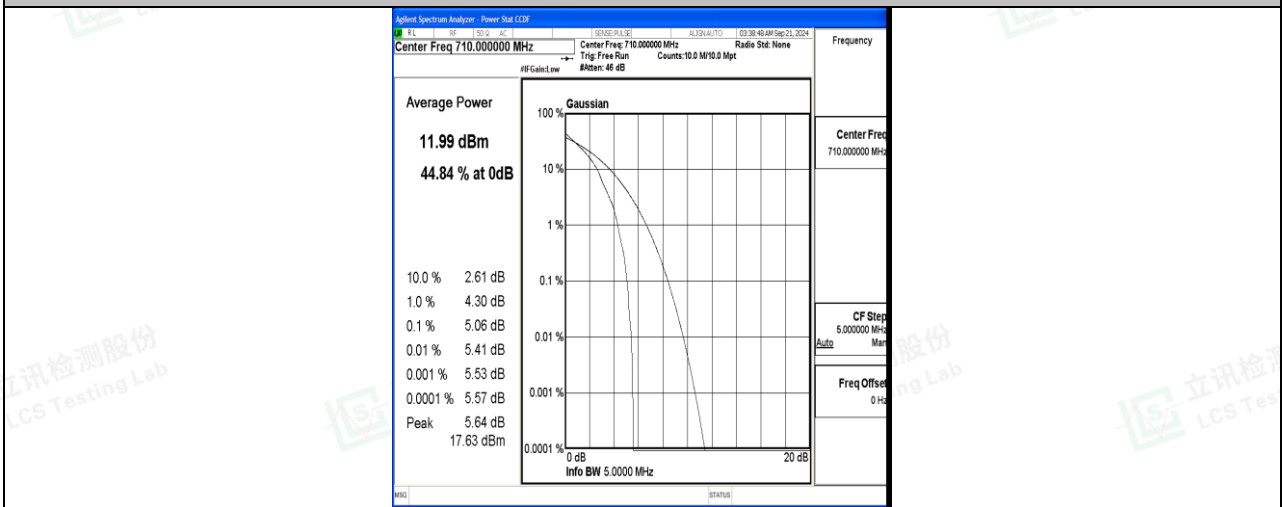


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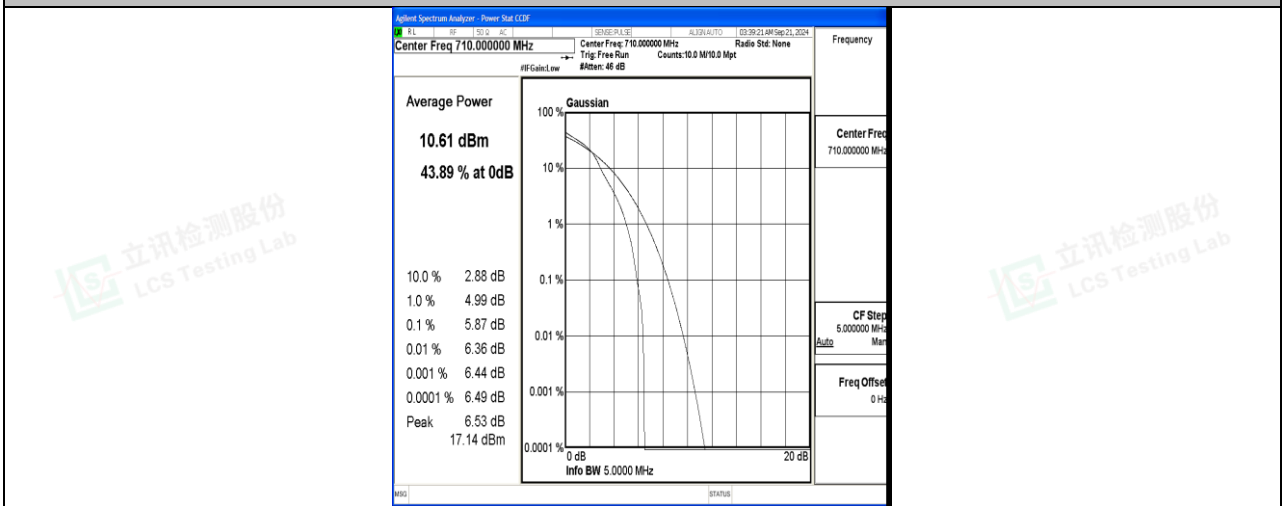




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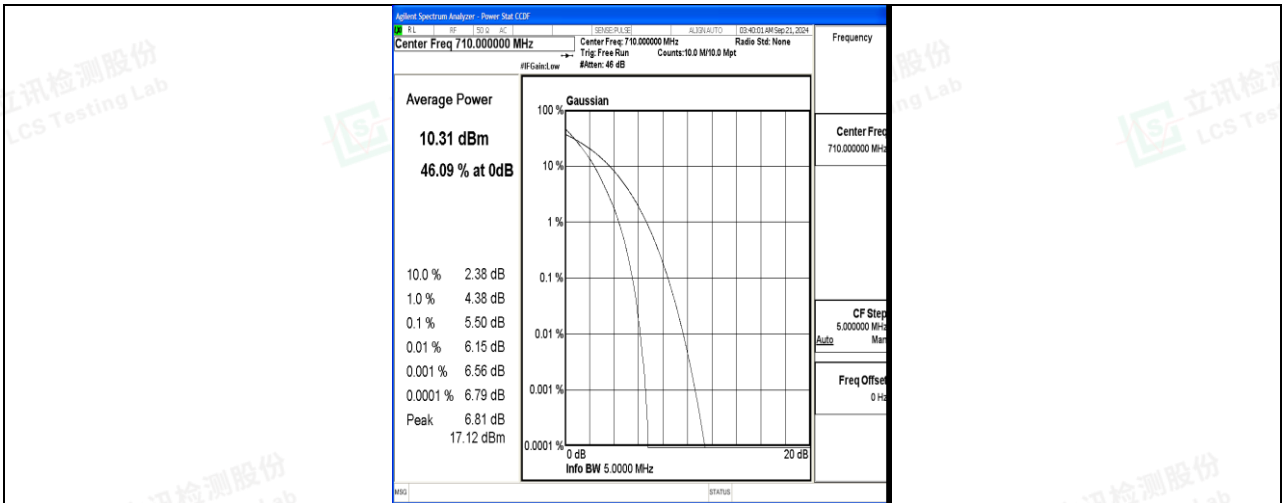


Band17-5MHz-QPSK-23790-1RB#0-PASS

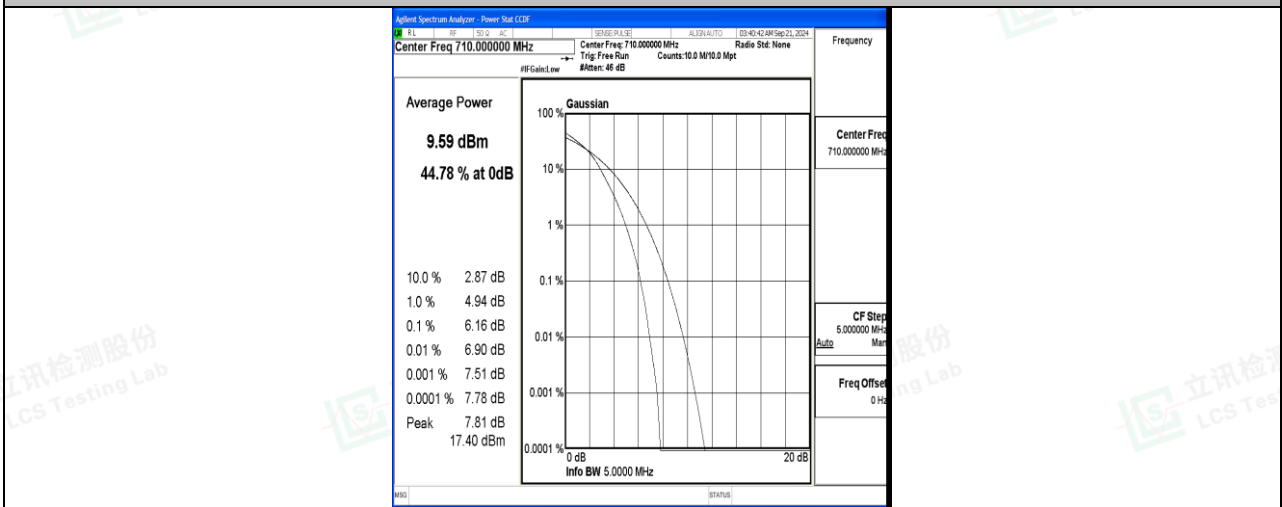


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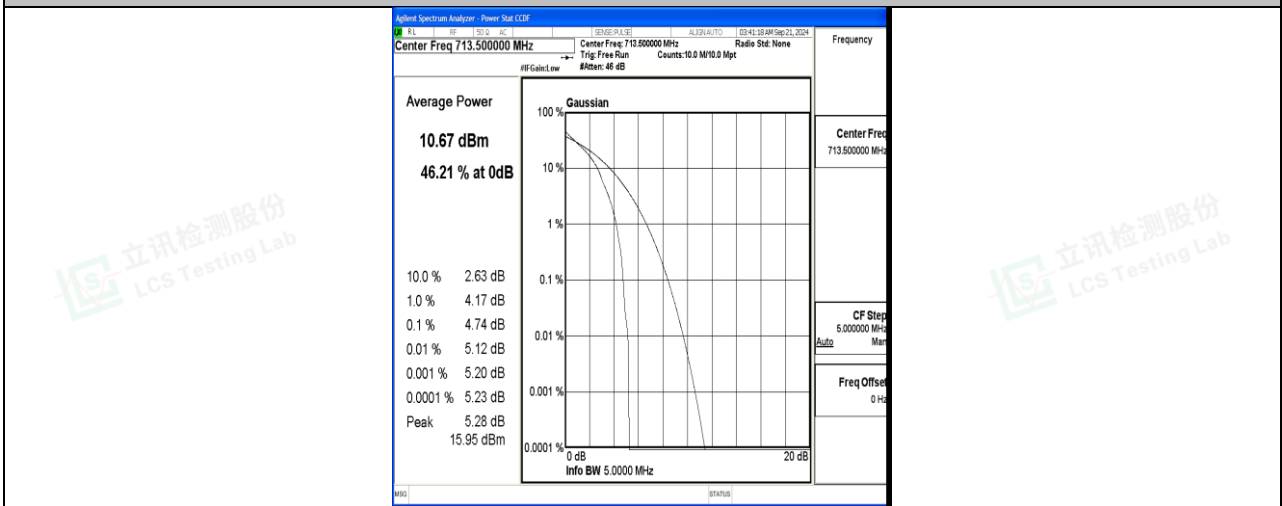




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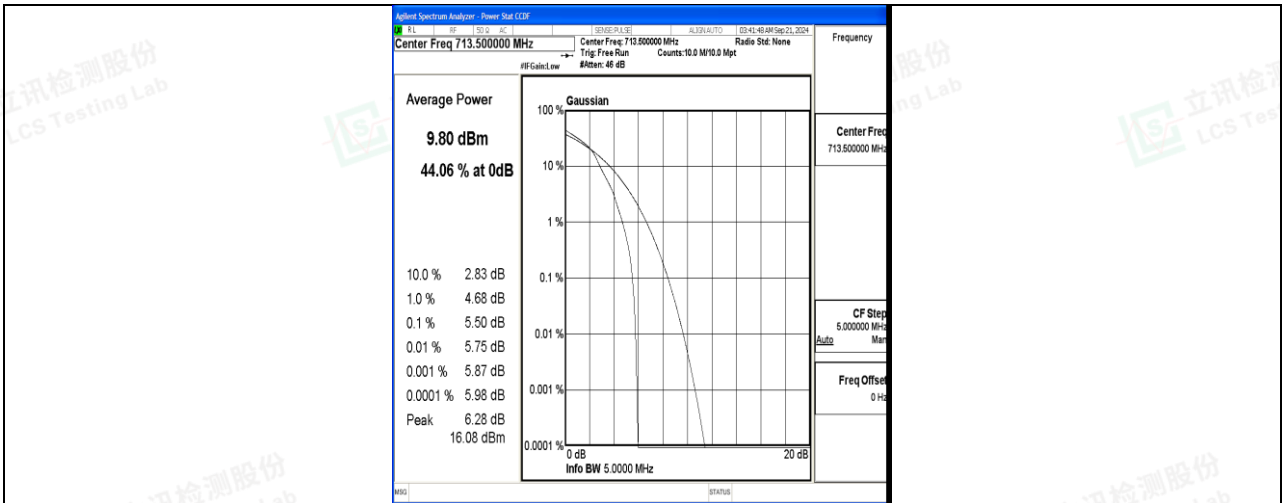


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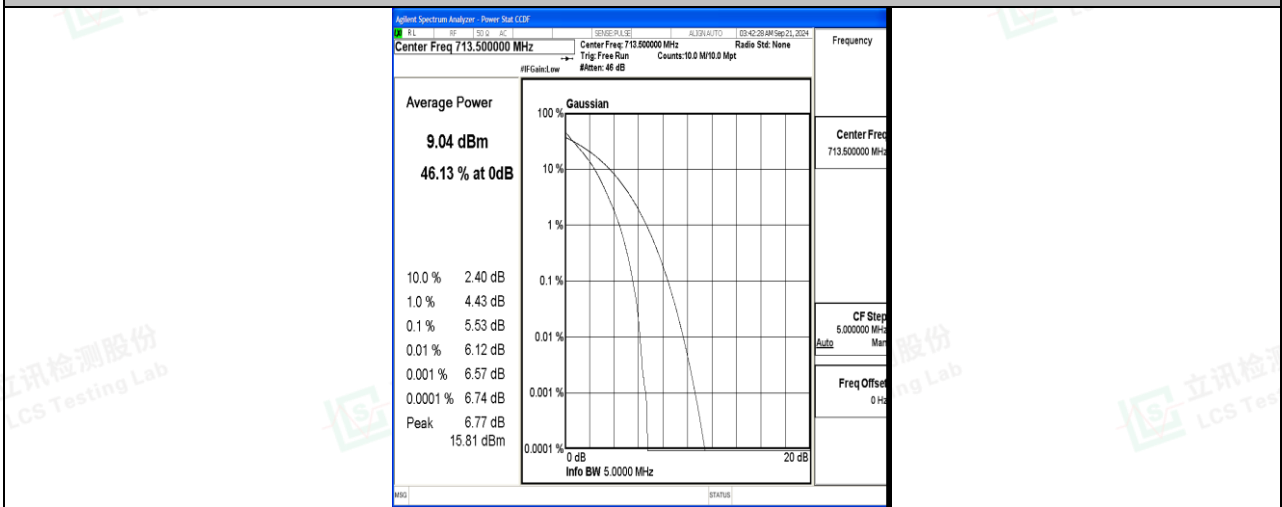


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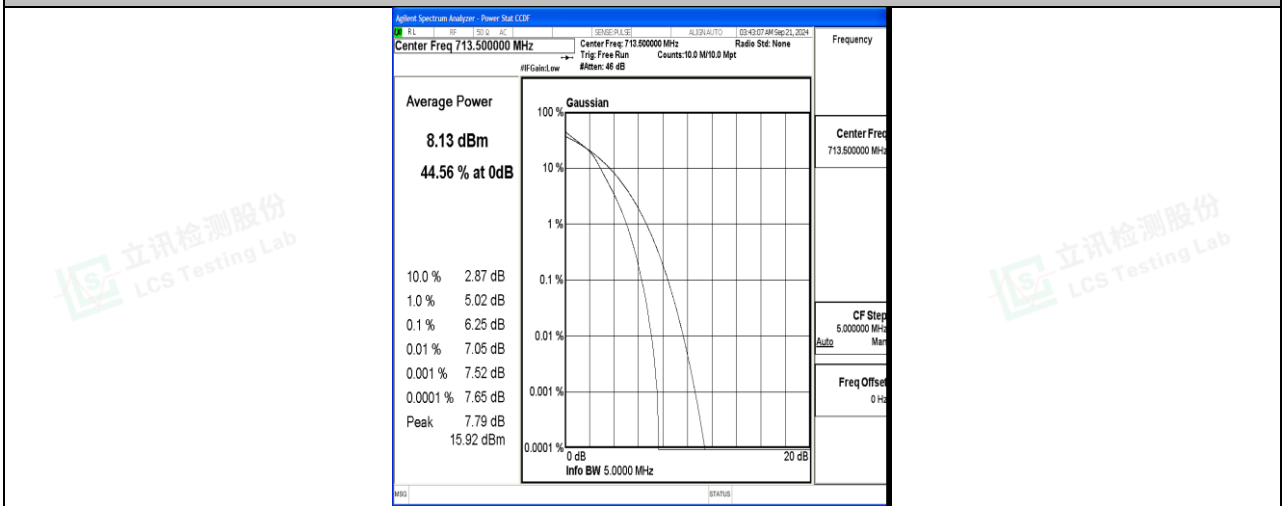




Band17-5MHz-16QAM-23825-1RB#0-PASS

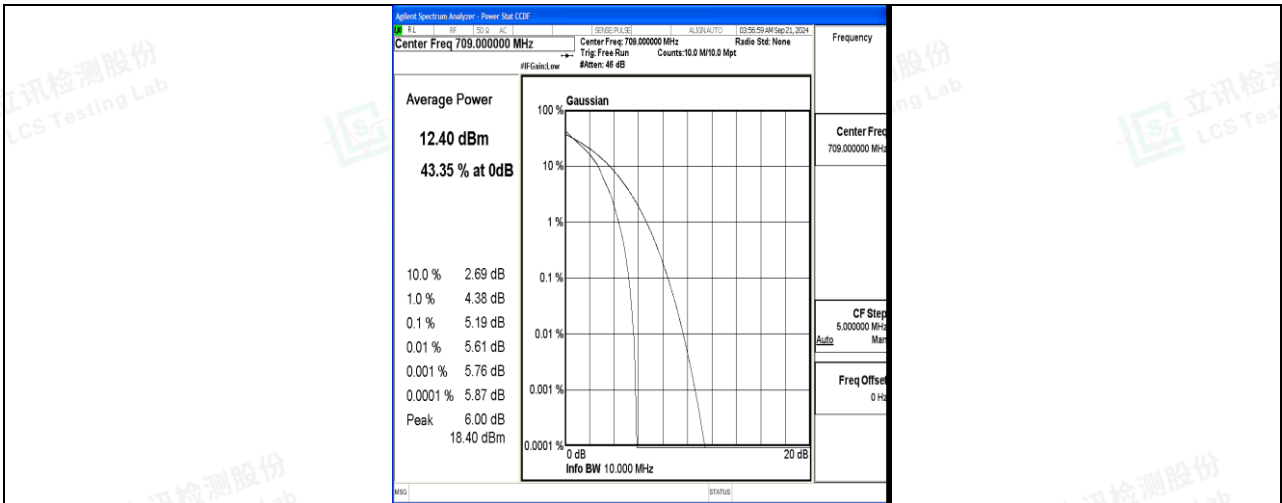


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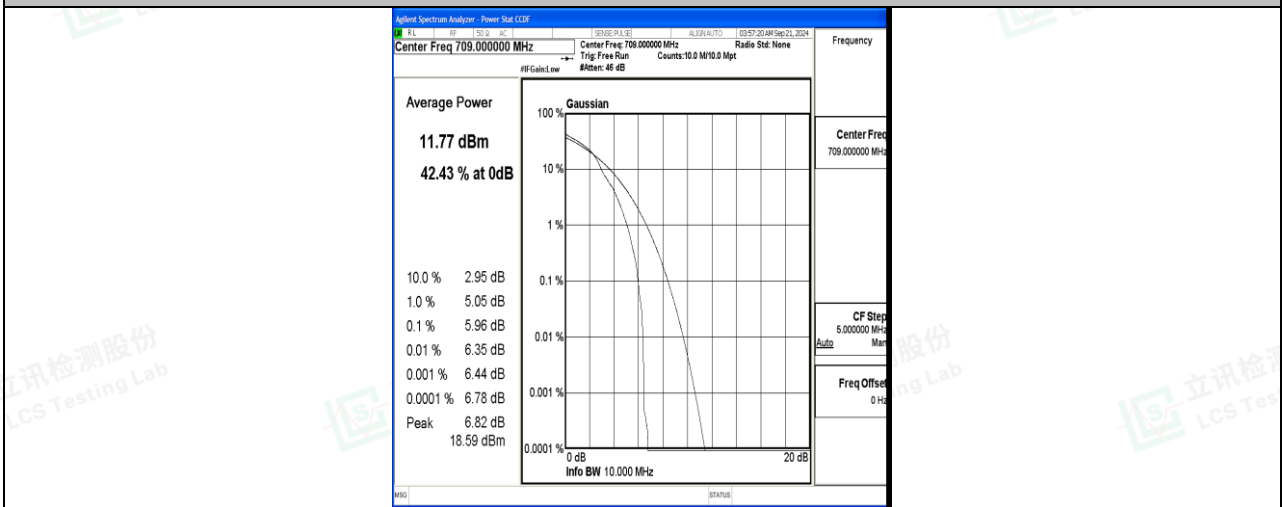


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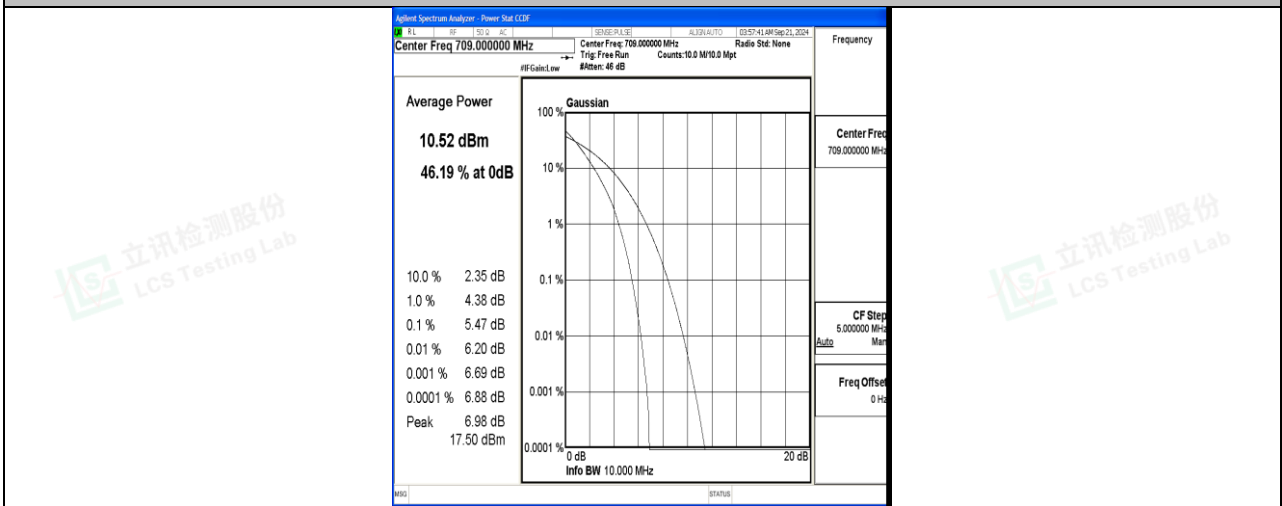




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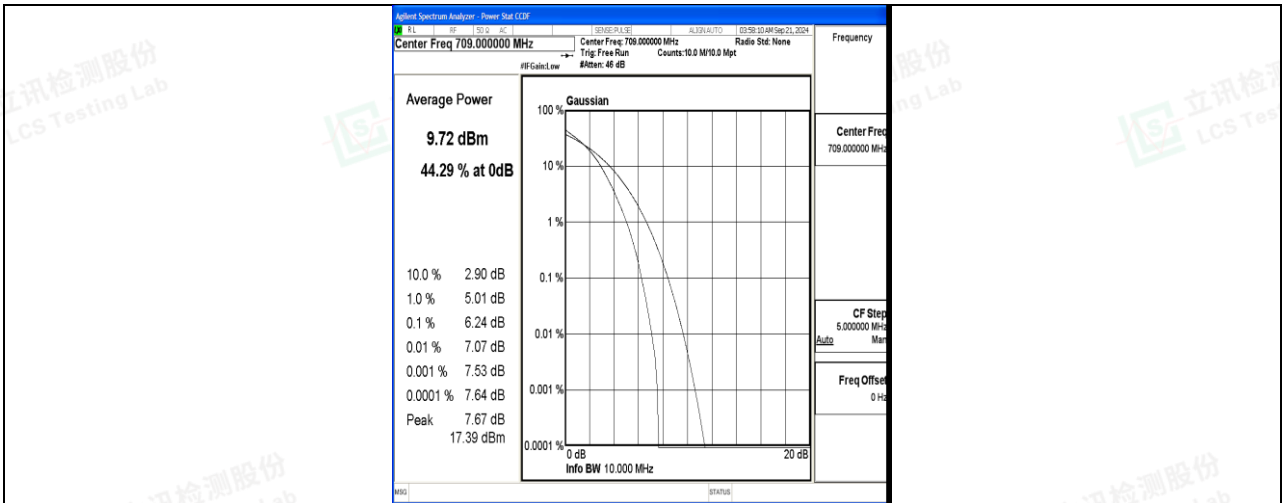


Band17-10MHz-16QAM-23780-1RB#0-PASS

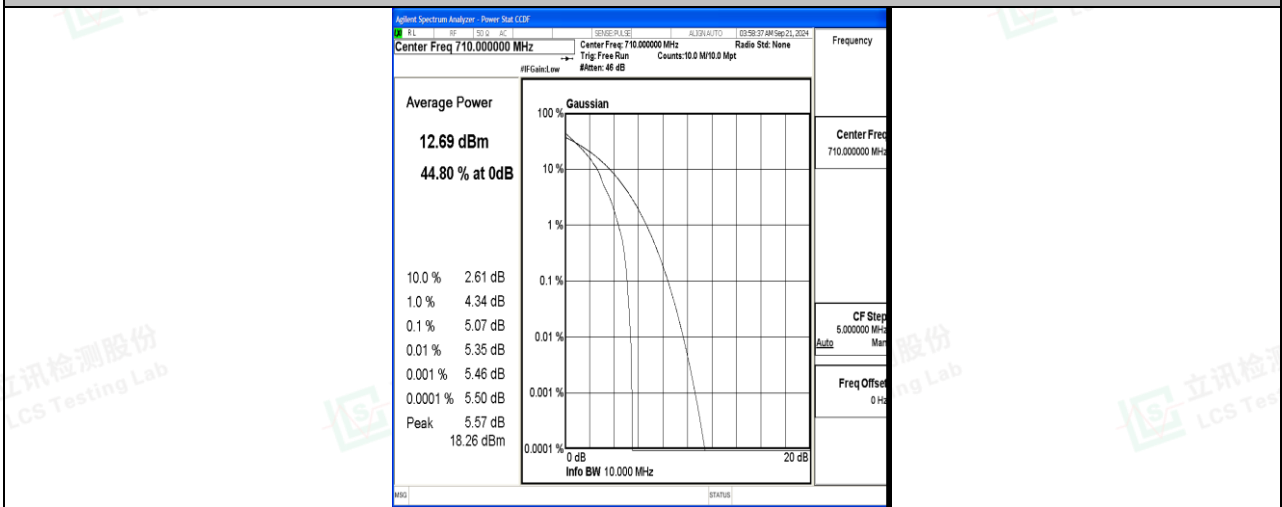


Band17-10MHz-QPSK-23780-50RB#0-PASS

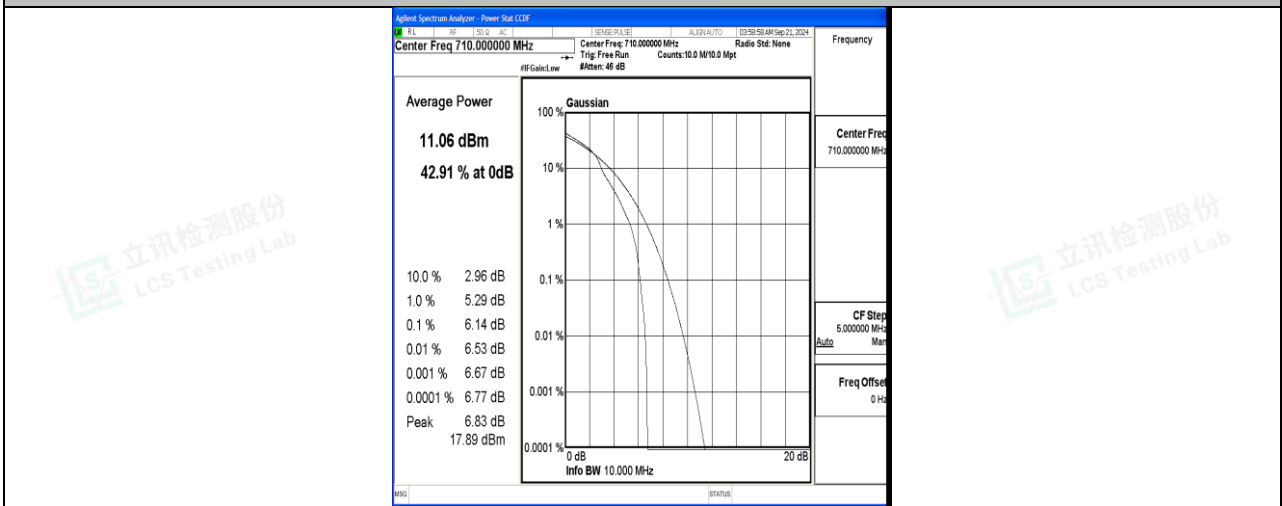




Band17-10MHz-16QAM-23780-50RB#0-PASS

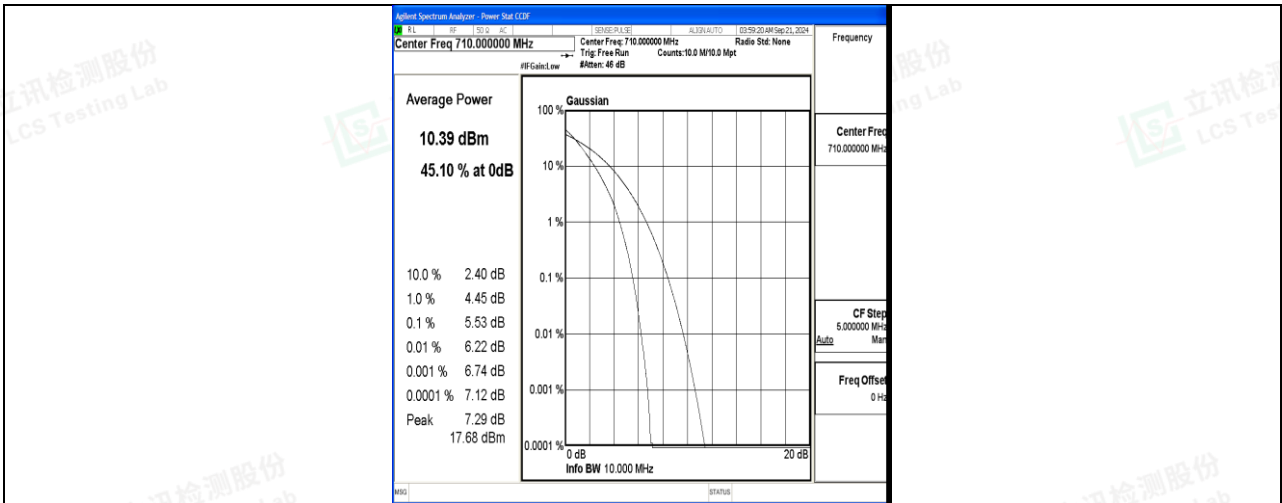


Band17-10MHz-QPSK-23790-1RB#0-PASS

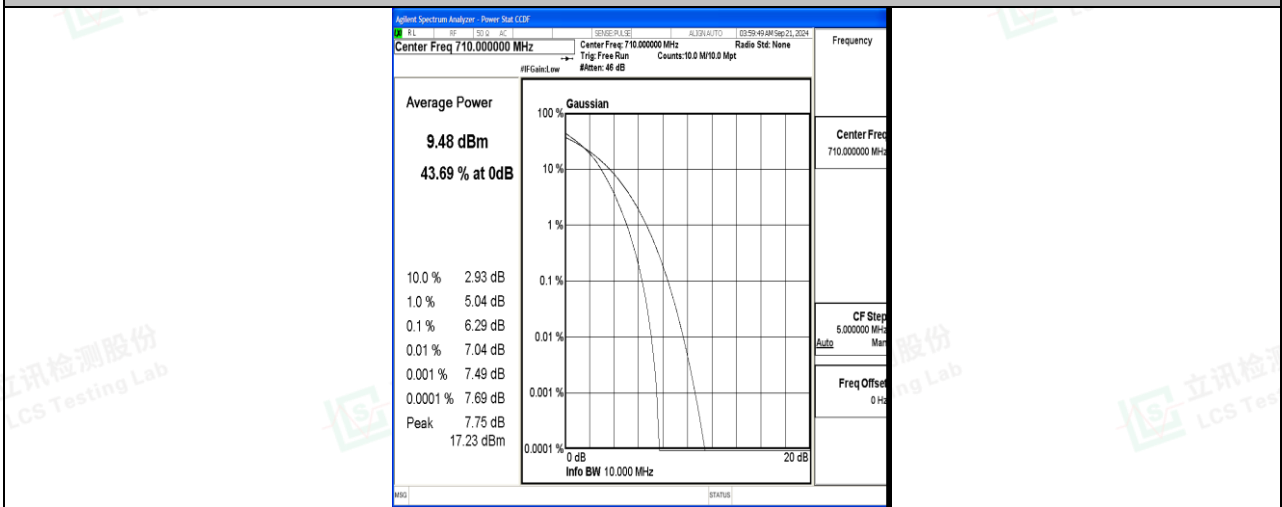


Band17-10MHz-16QAM-23790-1RB#0-PASS

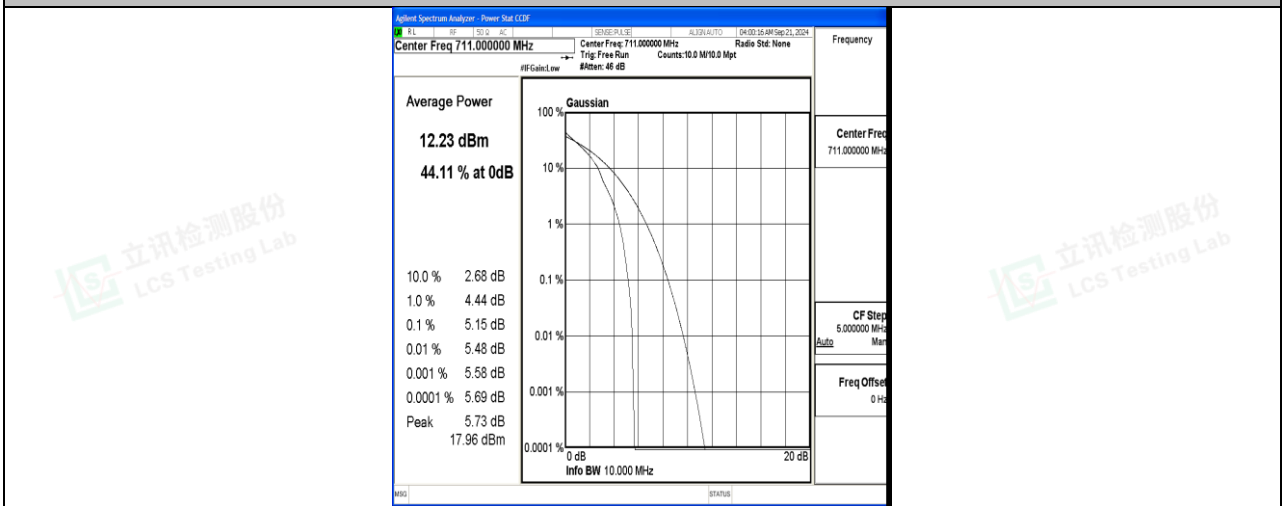




Band17-10MHz-QPSK-23790-50RB#0-PASS

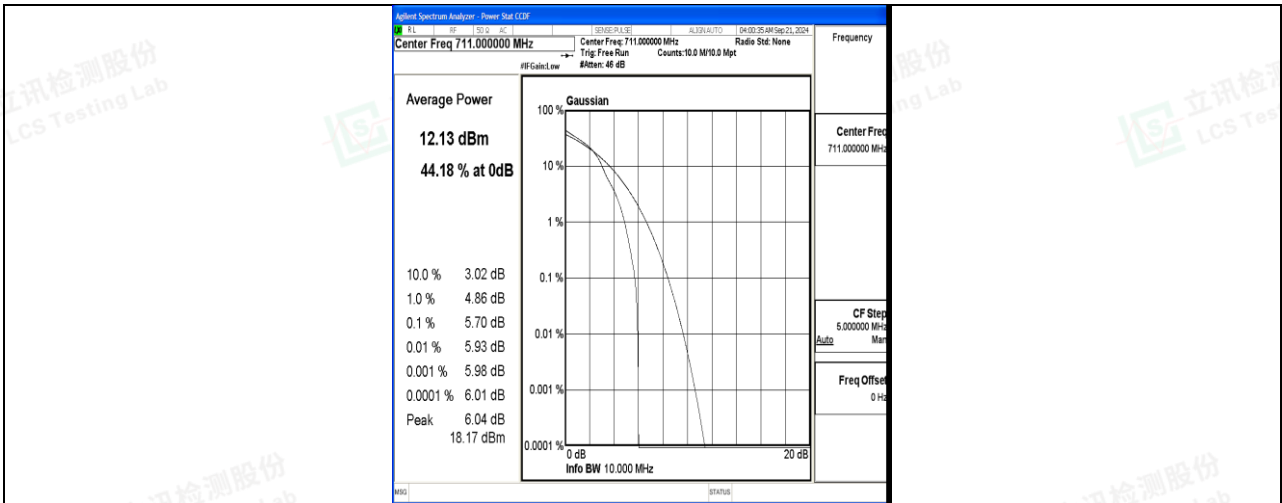


Band17-10MHz-16QAM-23790-50RB#0-PASS

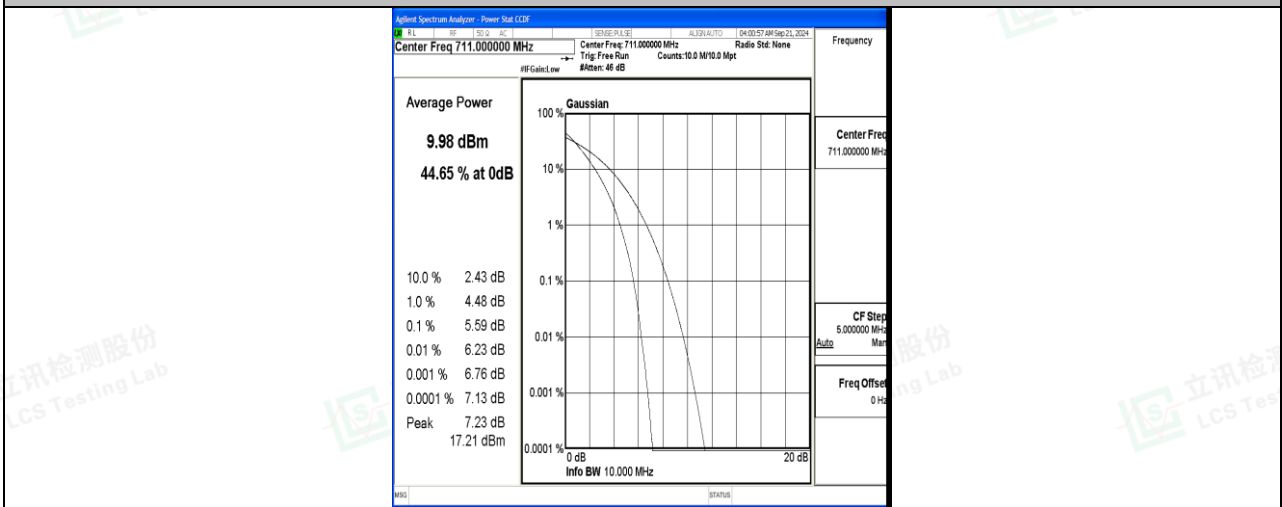


Band17-10MHz-QPSK-23800-1RB#0-PASS

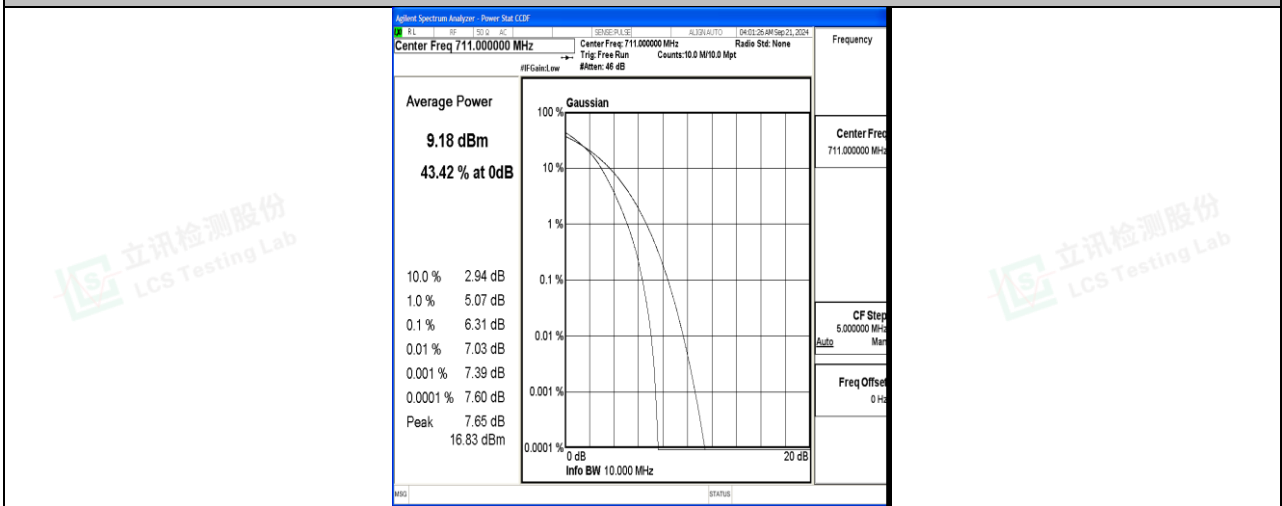




Band17-10MHz-16QAM-23800-1RB#0-PASS



Band17-10MHz-QPSK-23800-50RB#0-PASS



Band17-10MHz-16QAM-23800-50RB#0-PASS





K.3 26dB Bandwidth and Occupied Bandwidth

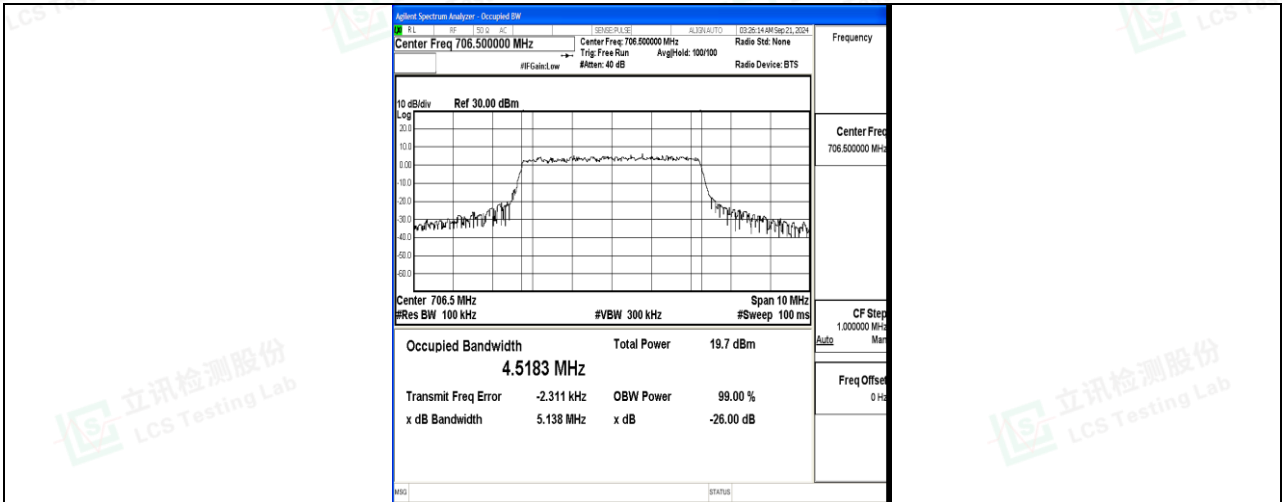
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band17	5MHz	QPSK	23755	25RB#0	4.5183	5.138	PASS
Band17	5MHz	16QAM	23755	25RB#0	4.5182	5.183	PASS
Band17	5MHz	QPSK	23790	25RB#0	4.5140	5.229	PASS
Band17	5MHz	16QAM	23790	25RB#0	4.5062	5.212	PASS
Band17	5MHz	QPSK	23825	25RB#0	4.5291	5.431	PASS
Band17	5MHz	16QAM	23825	25RB#0	4.5454	5.408	PASS
Band17	10MHz	QPSK	23780	50RB#0	8.9526	10.02	PASS
Band17	10MHz	16QAM	23780	50RB#0	8.9720	9.904	PASS
Band17	10MHz	QPSK	23790	50RB#0	8.9684	9.958	PASS
Band17	10MHz	16QAM	23790	50RB#0	8.9706	10.49	PASS
Band17	10MHz	QPSK	23800	50RB#0	8.9734	9.854	PASS
Band17	10MHz	16QAM	23800	50RB#0	8.9892	9.959	PASS

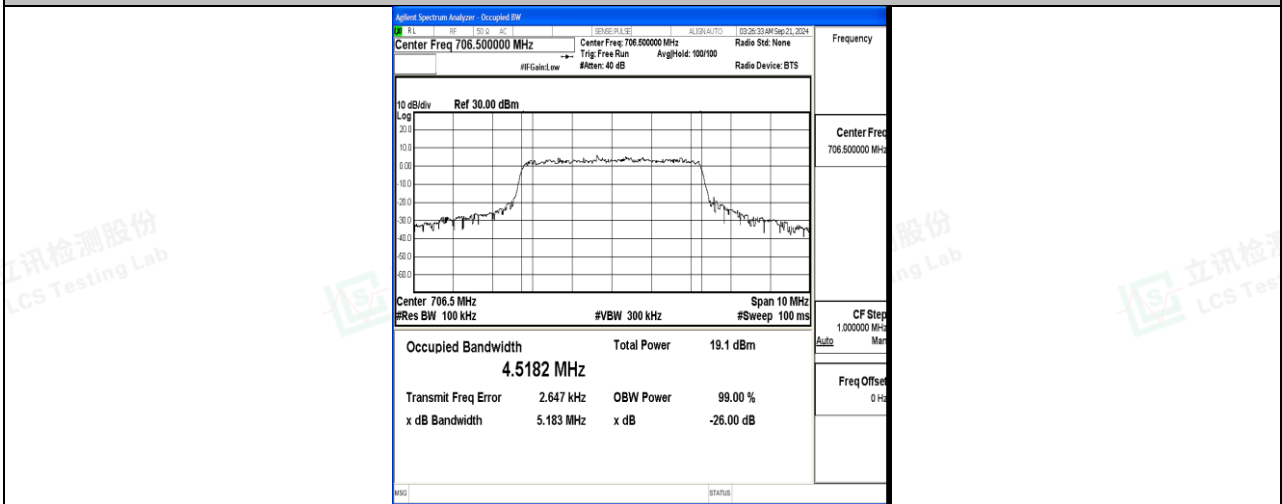




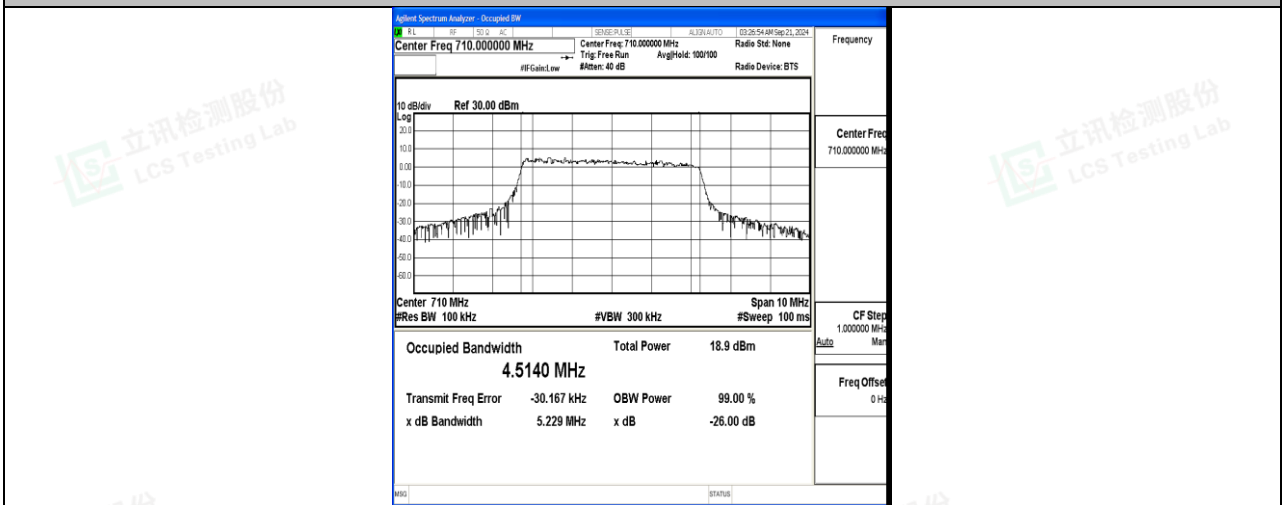
Test Graphs



Band17-5MHz-QPSK-23755-25RB#0-PASS

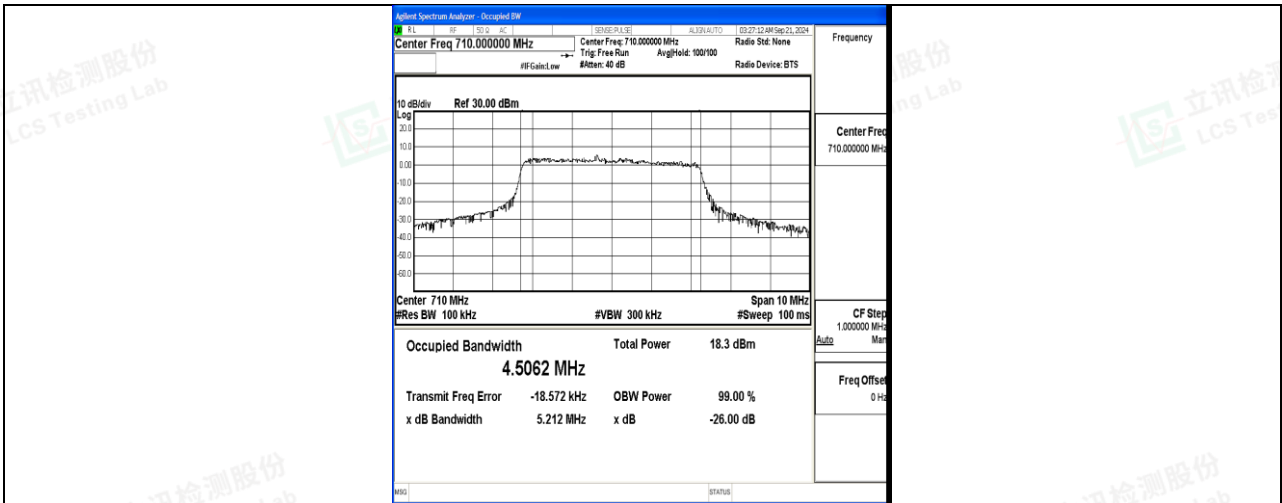


Band17-5MHz-16QAM-23755-25RB#0-PASS

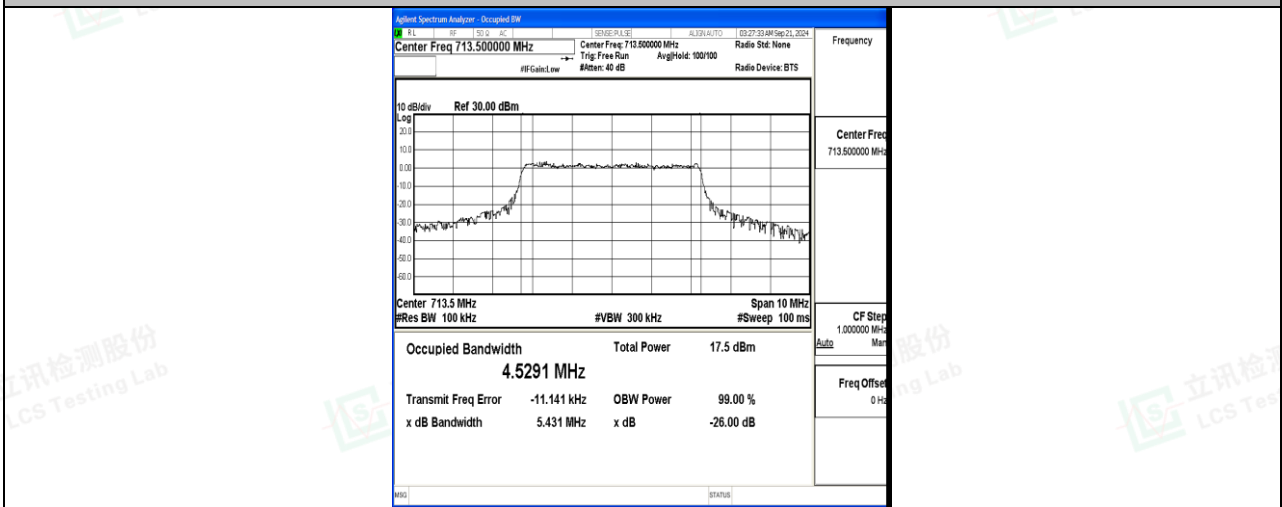


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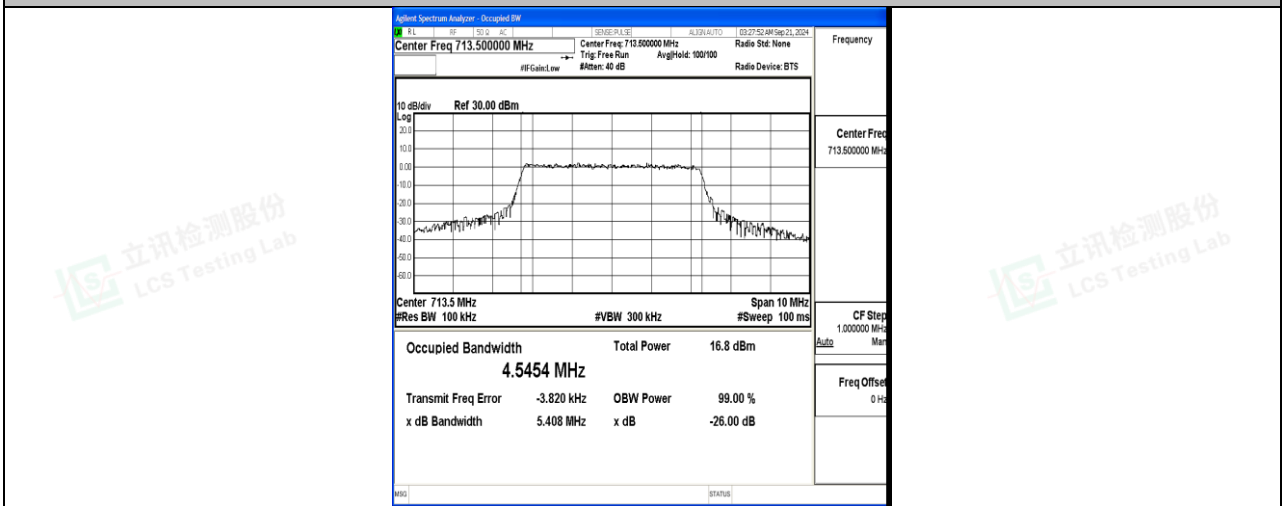




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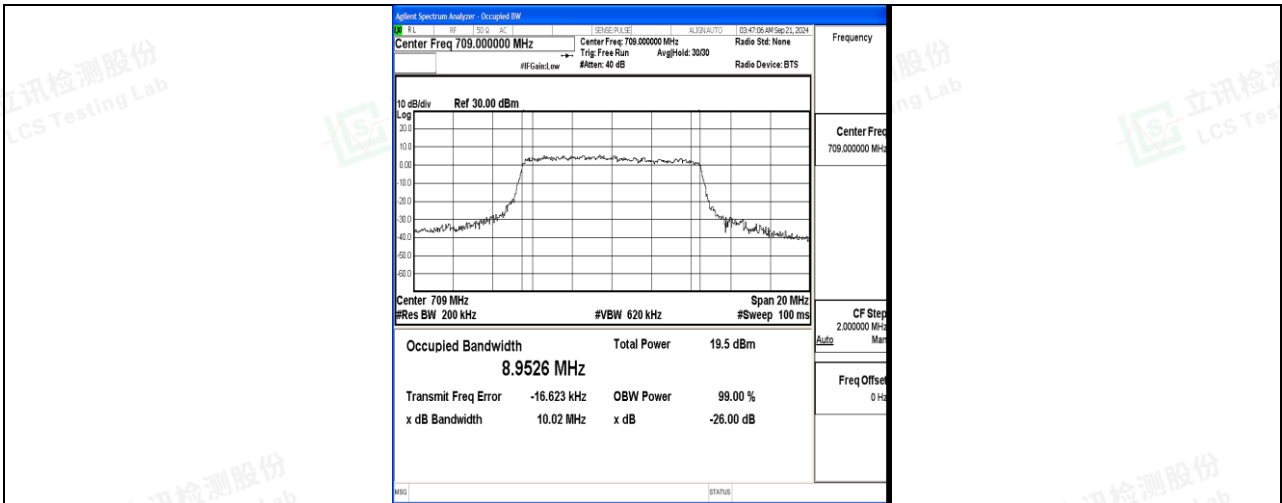


Band17-5MHz-QPSK-23825-25RB#0-PASS

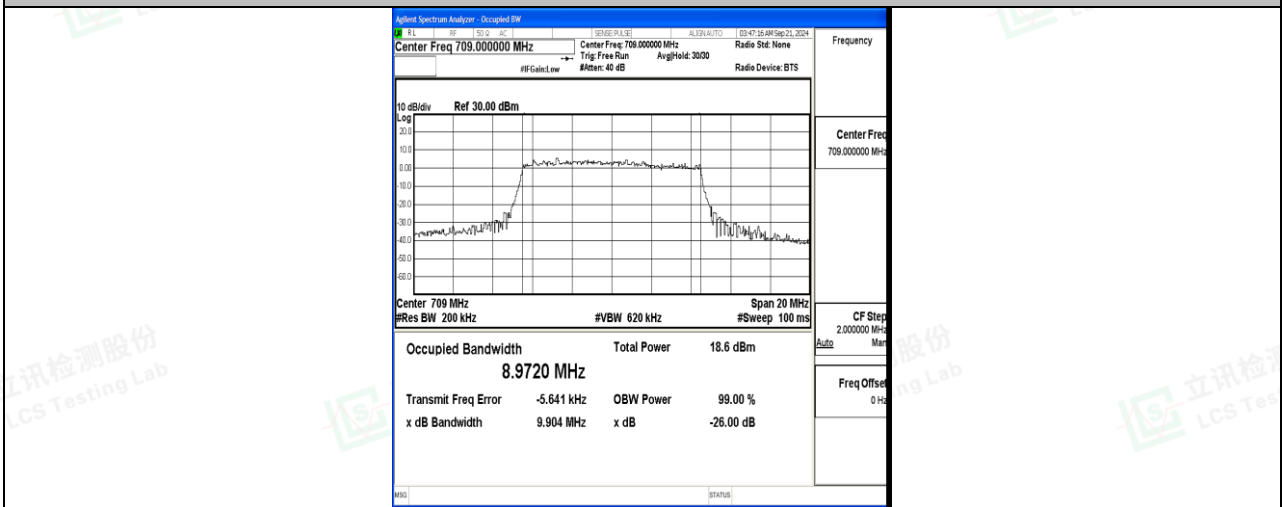


Band17-5MHz-16QAM-23825-25RB#0-PASS

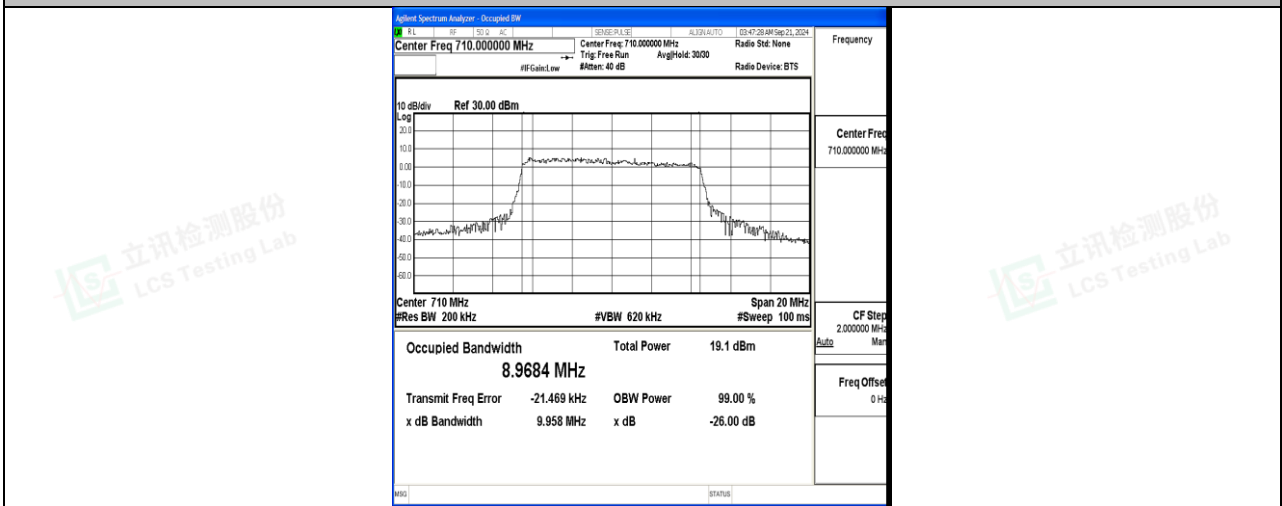




Band17-10MHz-QPSK-23780-50RB#0-PASS

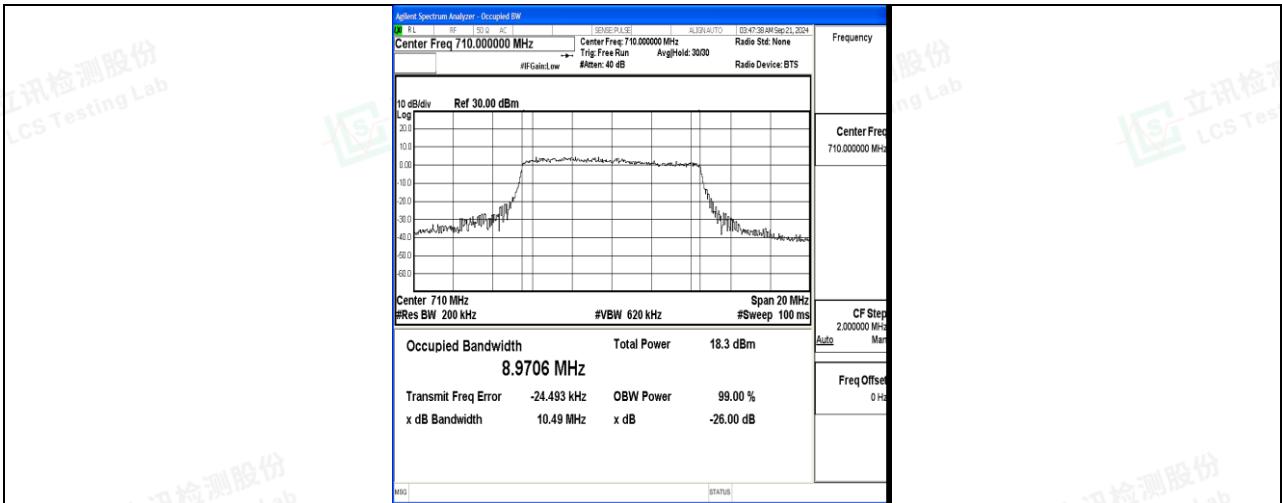


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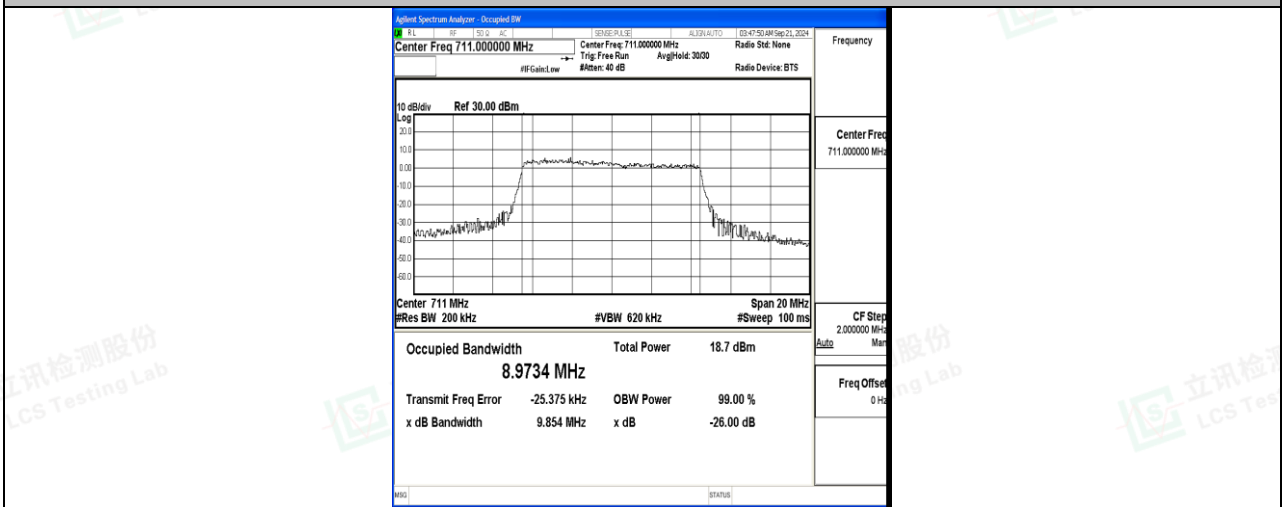


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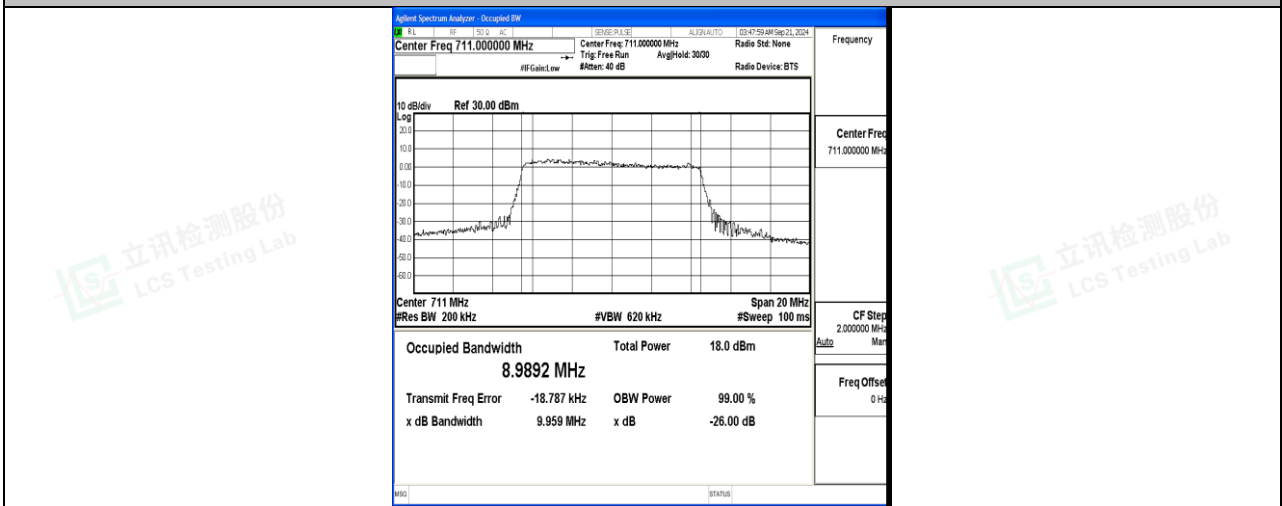




Band17-10MHz-16QAM-23790-50RB#0-PASS



Band17-10MHz-QPSK-23800-50RB#0-PASS



Band17-10MHz-16QAM-23800-50RB#0-PASS



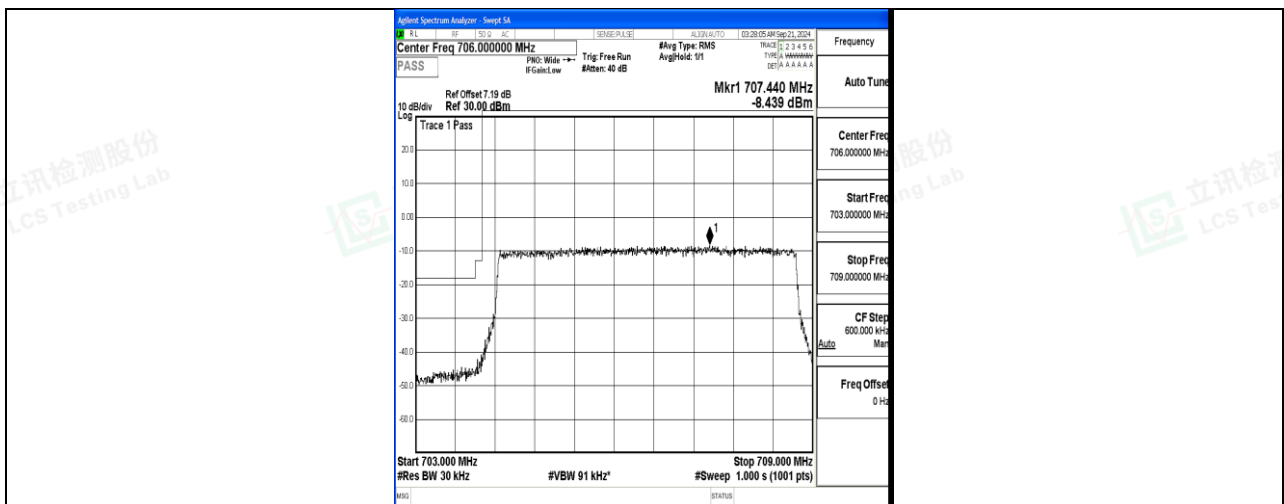


K.4 Band Edge

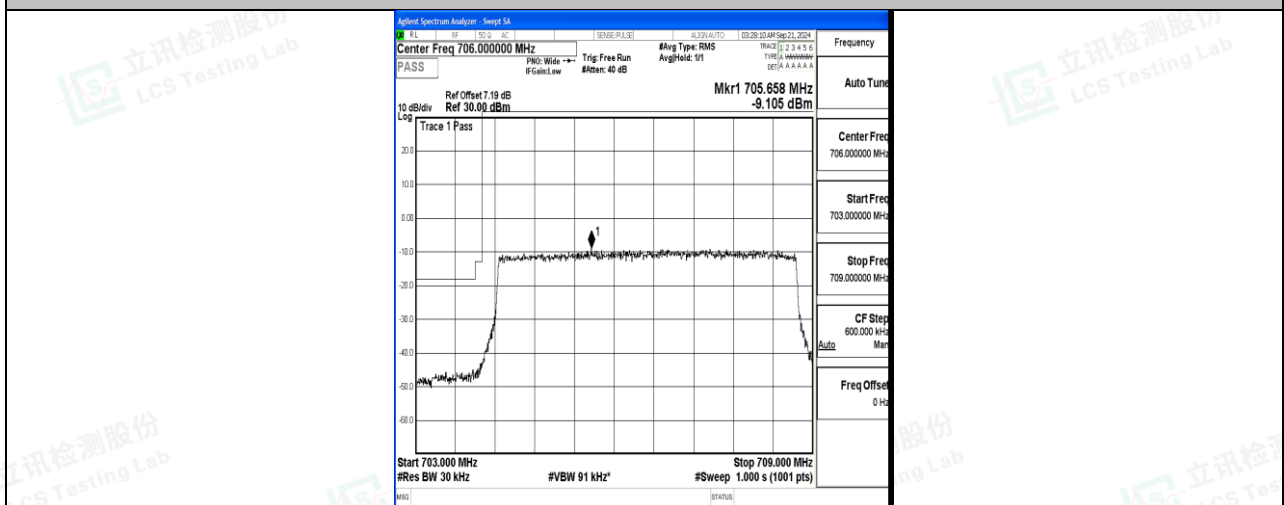
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Peak Frequency	Result(dBm)	Verdict
Band17	5MHz	QPSK	23755	25RB#0	703.70	-44.61	PASS
Band17	5MHz	16QAM	23755	25RB#0	703.88	-44.89	PASS
Band17	5MHz	QPSK	23825	25RB#0	716.11	-49.71	PASS
Band17	5MHz	16QAM	23825	25RB#0	716.15	-48.33	PASS
Band17	10MHz	QPSK	23780	50RB#0	703.86	-49.37	PASS
Band17	10MHz	16QAM	23780	50RB#0	703.68	-50.18	PASS
Band17	10MHz	QPSK	23800	50RB#0	716.13	-52.88	PASS
Band17	10MHz	16QAM	23800	50RB#0	716.23	-53.74	PASS

Test Graphs

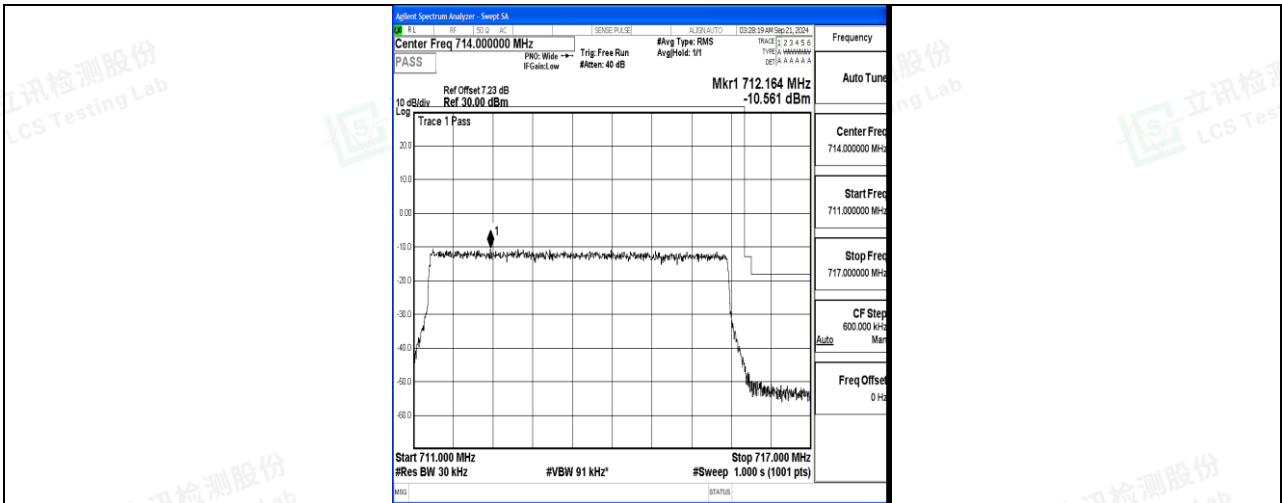


Band17_5MHz_QPSK_23755_25RB#0

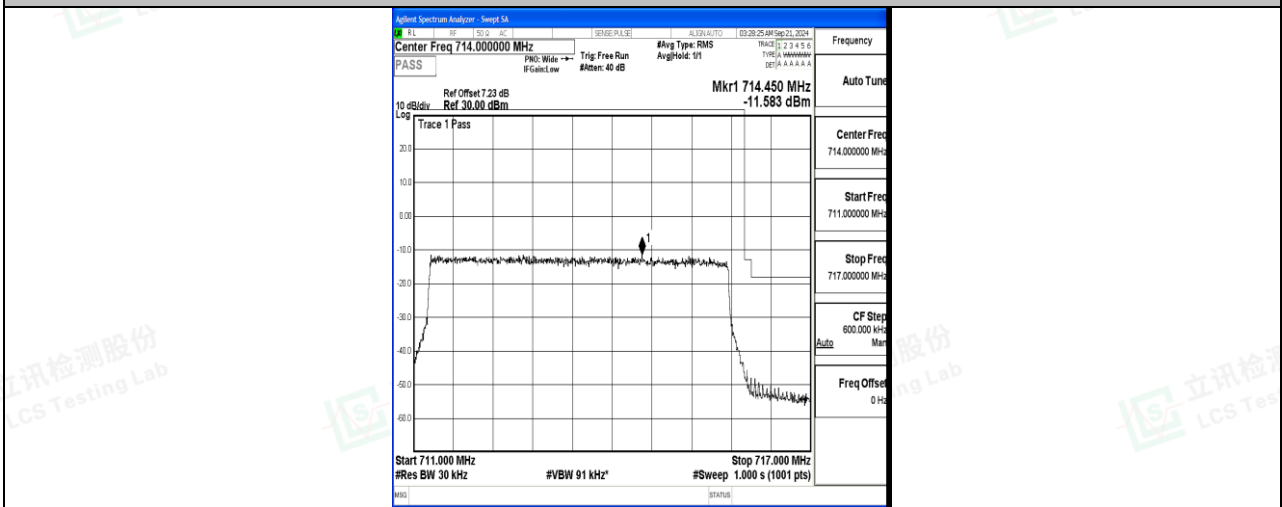


Band17_5MHz_16QAM_23755_25RB#0

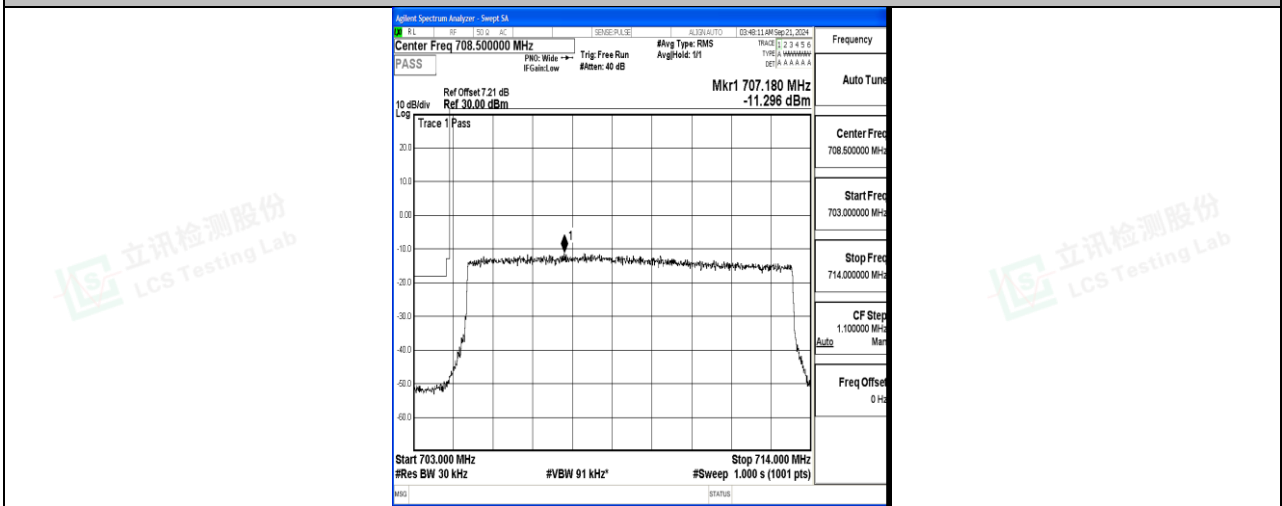




Band17_5MHz_QPSK_23825_25RB#0

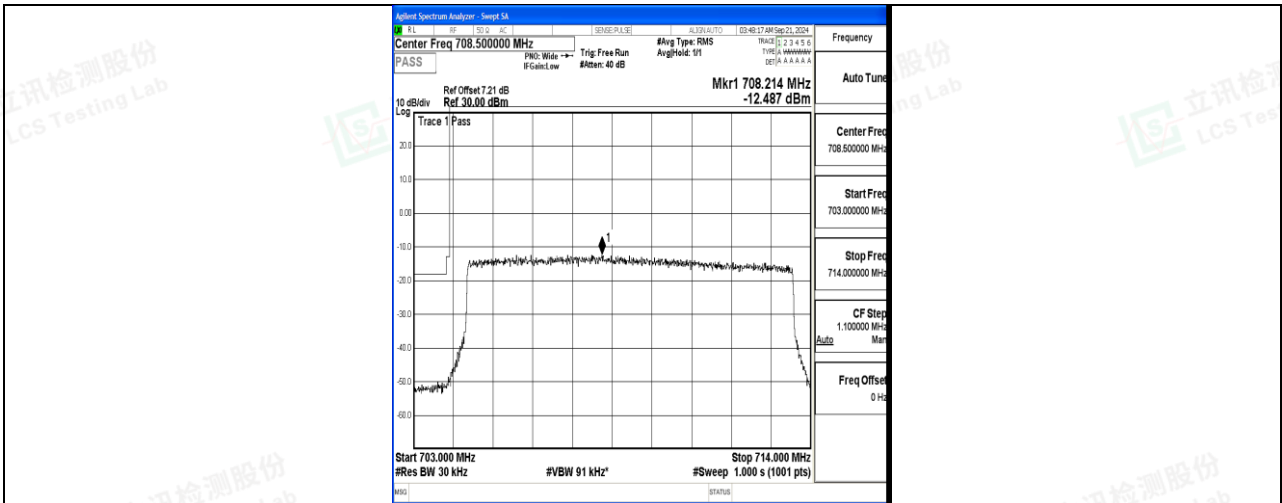


Band17_5MHz_16QAM_23825_25RB#0

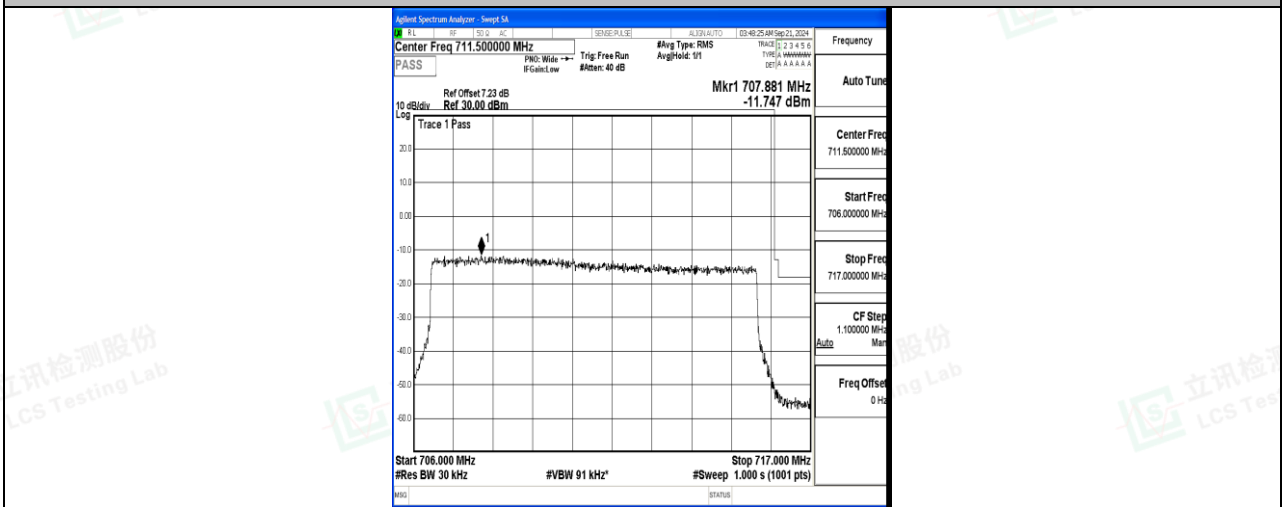


Band17_10MHz_QPSK_23780_50RB#0

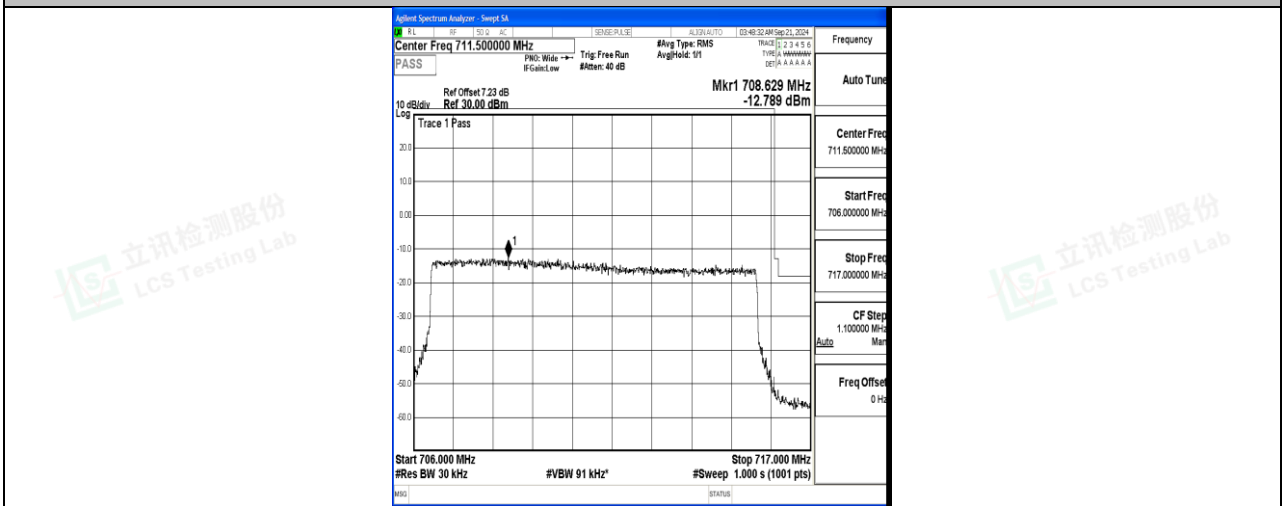




Band17_10MHz_16QAM_23780_50RB#0



Band17_10MHz_QPSK_23800_50RB#0



Band17_10MHz_16QAM_23800_50RB#0





K.5 Conducted Spurious Emission

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band17	5MHz	QPSK	23755	1RB#0	0.009~0.15	-59.97	PASS
Band17	5MHz	QPSK	23755	1RB#0	0.15~30	-51.82	PASS
Band17	5MHz	QPSK	23755	1RB#0	30~1000	-62.25	PASS
Band17	5MHz	QPSK	23755	1RB#0	1000~3000	-47.87	PASS
Band17	5MHz	QPSK	23755	1RB#0	3000~10000	-43.81	PASS
Band17	5MHz	16QAM	23755	1RB#0	0.009~0.15	-60.81	PASS
Band17	5MHz	16QAM	23755	1RB#0	0.15~30	-53.83	PASS
Band17	5MHz	16QAM	23755	1RB#0	30~1000	-62.13	PASS
Band17	5MHz	16QAM	23755	1RB#0	1000~3000	-47.58	PASS
Band17	5MHz	16QAM	23755	1RB#0	3000~10000	-44.24	PASS
Band17	5MHz	QPSK	23790	1RB#0	0.009~0.15	-53.57	PASS
Band17	5MHz	QPSK	23790	1RB#0	0.15~30	-51.18	PASS
Band17	5MHz	QPSK	23790	1RB#0	30~1000	-61.87	PASS
Band17	5MHz	QPSK	23790	1RB#0	1000~3000	-48.04	PASS
Band17	5MHz	QPSK	23790	1RB#0	3000~10000	-44.23	PASS
Band17	5MHz	16QAM	23790	1RB#0	0.009~0.15	-59.55	PASS
Band17	5MHz	16QAM	23790	1RB#0	0.15~30	-52.59	PASS
Band17	5MHz	16QAM	23790	1RB#0	30~1000	-62.32	PASS
Band17	5MHz	16QAM	23790	1RB#0	1000~3000	-47.62	PASS
Band17	5MHz	16QAM	23790	1RB#0	3000~10000	-44.18	PASS
Band17	5MHz	QPSK	23825	1RB#0	0.009~0.15	-57.60	PASS
Band17	5MHz	QPSK	23825	1RB#0	0.15~30	-52.27	PASS
Band17	5MHz	QPSK	23825	1RB#0	30~1000	-62.16	PASS
Band17	5MHz	QPSK	23825	1RB#0	1000~3000	-47.94	PASS
Band17	5MHz	QPSK	23825	1RB#0	3000~10000	-44.14	PASS
Band17	5MHz	16QAM	23825	1RB#0	0.009~0.15	-58.32	PASS
Band17	5MHz	16QAM	23825	1RB#0	0.15~30	-53.02	PASS
Band17	5MHz	16QAM	23825	1RB#0	30~1000	-62.36	PASS
Band17	5MHz	16QAM	23825	1RB#0	1000~3000	-47.82	PASS
Band17	5MHz	16QAM	23825	1RB#0	3000~10000	-43.90	PASS
Band17	10MHz	QPSK	23780	1RB#0	0.009~0.15	-56.56	PASS
Band17	10MHz	QPSK	23780	1RB#0	0.15~30	-52.04	PASS
Band17	10MHz	QPSK	23780	1RB#0	30~1000	-62.42	PASS
Band17	10MHz	QPSK	23780	1RB#0	1000~3000	-47.54	PASS
Band17	10MHz	QPSK	23780	1RB#0	3000~10000	-44.17	PASS
Band17	10MHz	16QAM	23780	1RB#0	0.009~0.15	-57.15	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

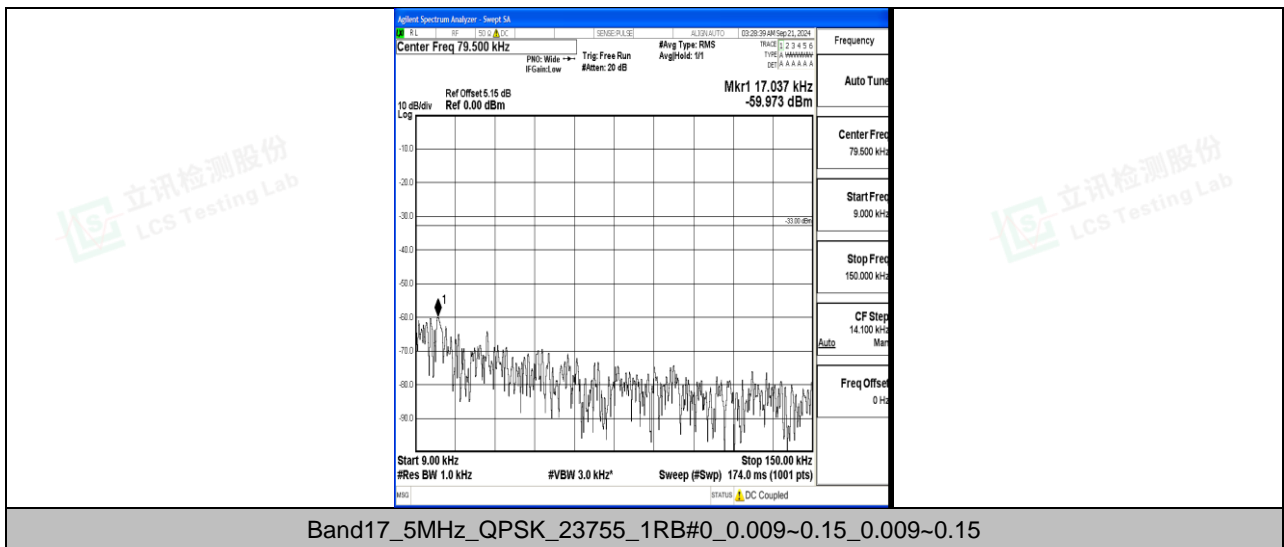
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

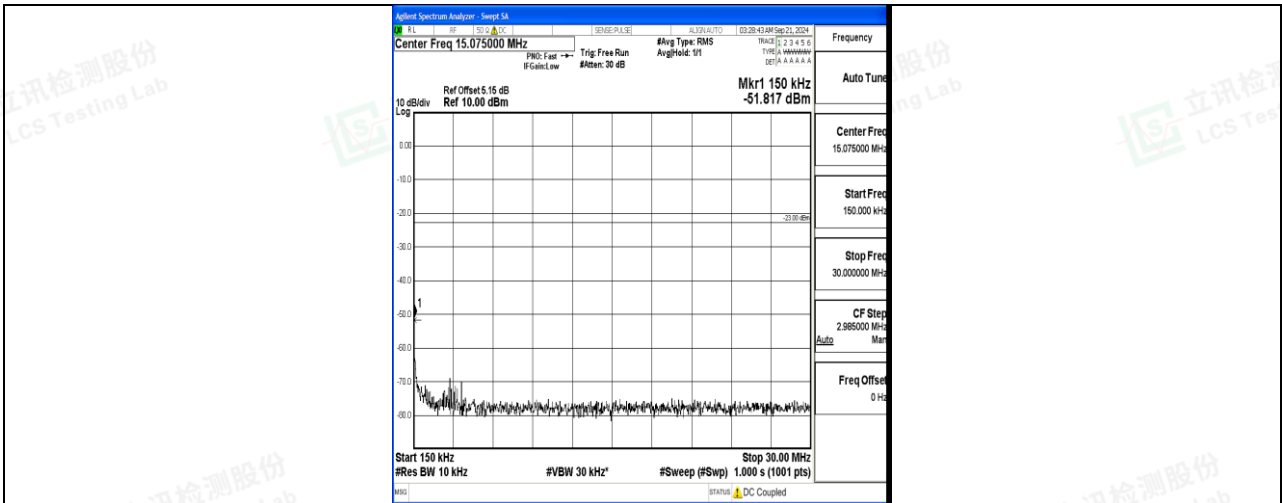
Scan code to check authenticity



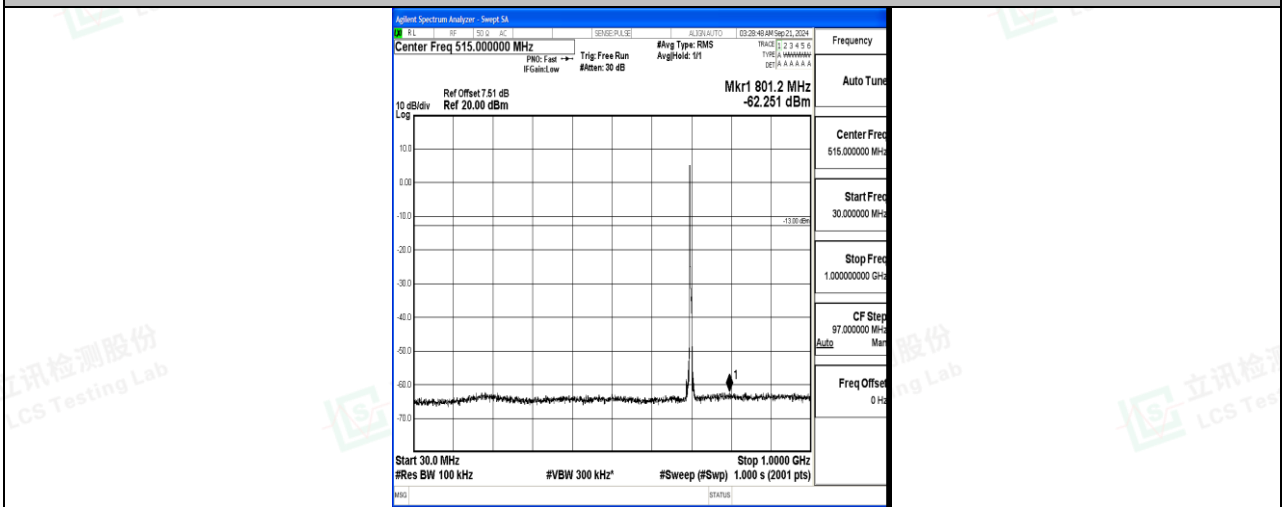
Band17	10MHz	16QAM	23780	1RB#0	0.15~30	-53.81	PASS
Band17	10MHz	16QAM	23780	1RB#0	30~1000	-62.18	PASS
Band17	10MHz	16QAM	23780	1RB#0	1000~3000	-48.09	PASS
Band17	10MHz	16QAM	23780	1RB#0	3000~10000	-44.01	PASS
Band17	10MHz	QPSK	23790	1RB#0	0.009~0.15	-56.79	PASS
Band17	10MHz	QPSK	23790	1RB#0	0.15~30	-51.66	PASS
Band17	10MHz	QPSK	23790	1RB#0	30~1000	-62.26	PASS
Band17	10MHz	QPSK	23790	1RB#0	1000~3000	-47.80	PASS
Band17	10MHz	QPSK	23790	1RB#0	3000~10000	-44.28	PASS
Band17	10MHz	16QAM	23790	1RB#0	0.009~0.15	-60.50	PASS
Band17	10MHz	16QAM	23790	1RB#0	0.15~30	-52.29	PASS
Band17	10MHz	16QAM	23790	1RB#0	30~1000	-62.00	PASS
Band17	10MHz	16QAM	23790	1RB#0	1000~3000	-47.65	PASS
Band17	10MHz	16QAM	23790	1RB#0	3000~10000	-44.05	PASS
Band17	10MHz	QPSK	23800	1RB#0	0.009~0.15	-58.85	PASS
Band17	10MHz	QPSK	23800	1RB#0	0.15~30	-53.00	PASS
Band17	10MHz	QPSK	23800	1RB#0	30~1000	-62.21	PASS
Band17	10MHz	QPSK	23800	1RB#0	1000~3000	-47.70	PASS
Band17	10MHz	QPSK	23800	1RB#0	3000~10000	-43.77	PASS
Band17	10MHz	16QAM	23800	1RB#0	0.009~0.15	-55.54	PASS
Band17	10MHz	16QAM	23800	1RB#0	0.15~30	-52.39	PASS
Band17	10MHz	16QAM	23800	1RB#0	30~1000	-62.34	PASS
Band17	10MHz	16QAM	23800	1RB#0	1000~3000	-48.24	PASS
Band17	10MHz	16QAM	23800	1RB#0	3000~10000	-44.26	PASS

Test Graphs

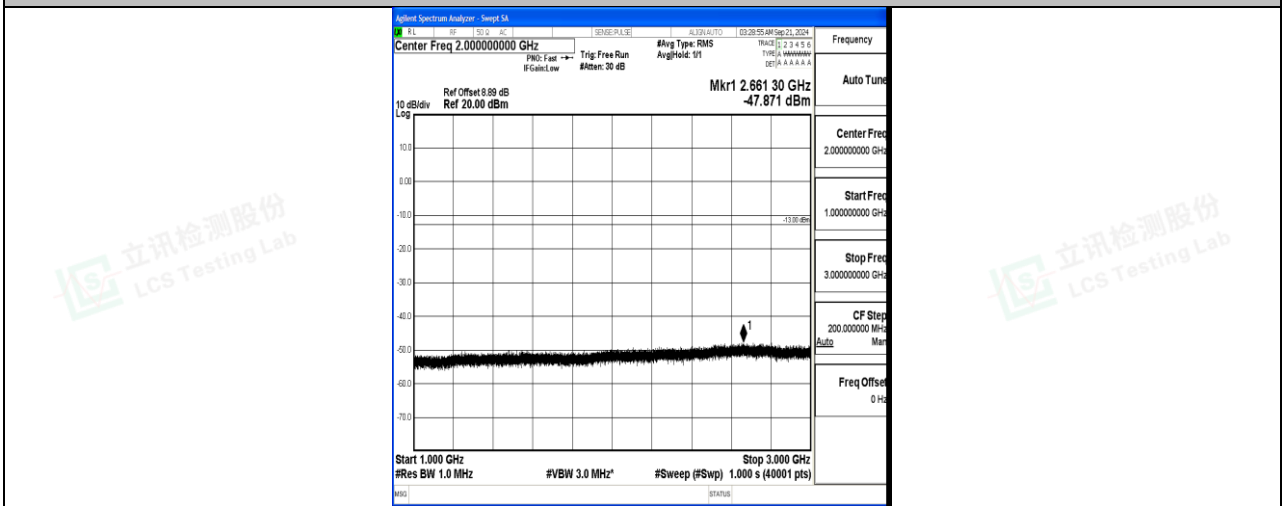




Band17_5MHz_QPSK_23755_1RB#0_0.15~30_0.15~30

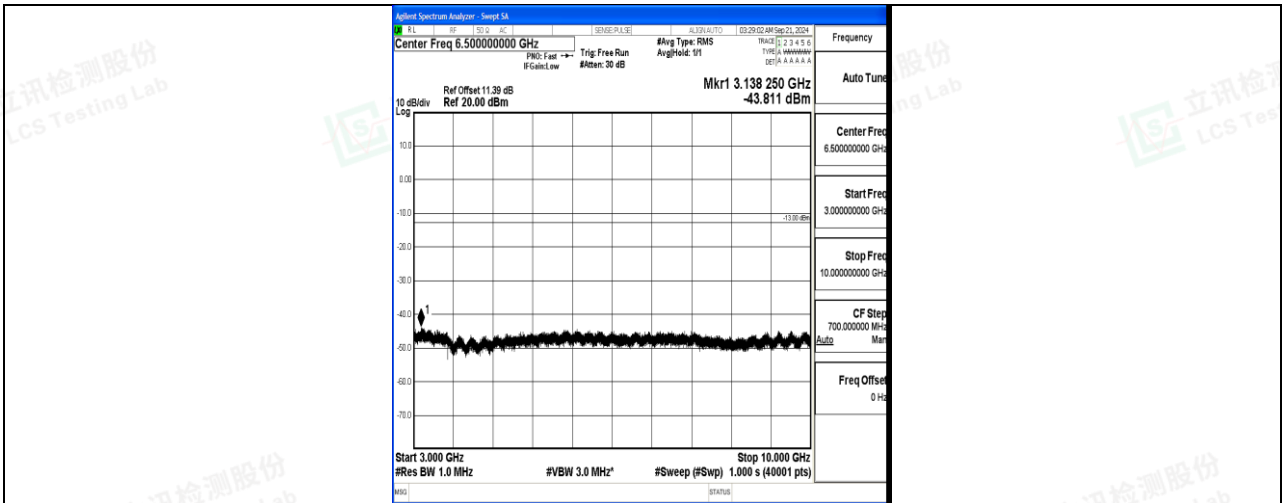


Band17_5MHz_QPSK_23755_1RB#0_30~1000_30~1000

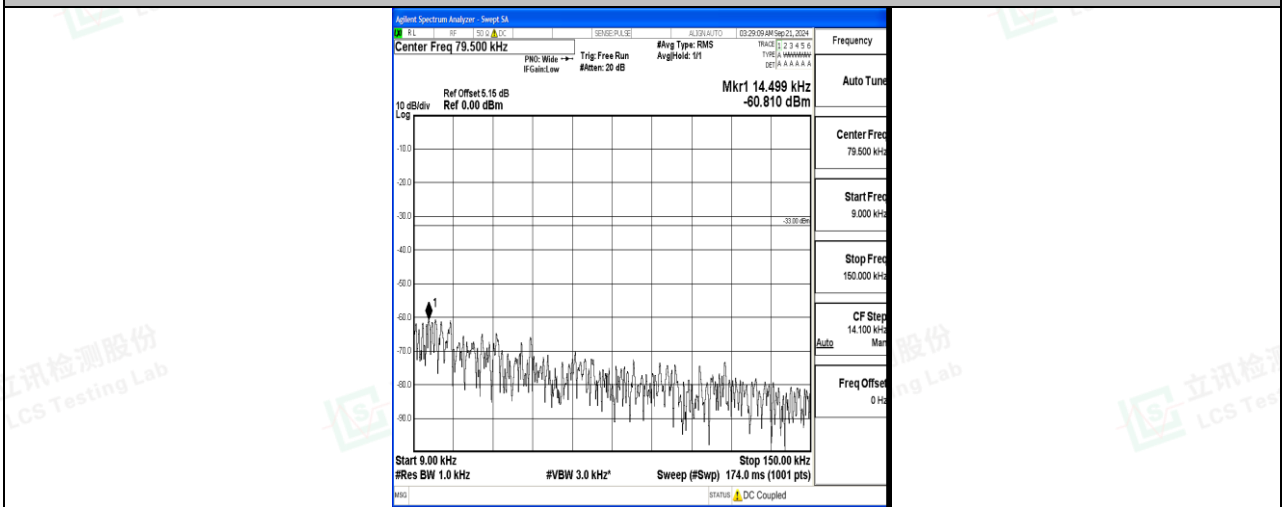


Band17_5MHz_QPSK_23755_1RB#0_1000~3000_1000~3000

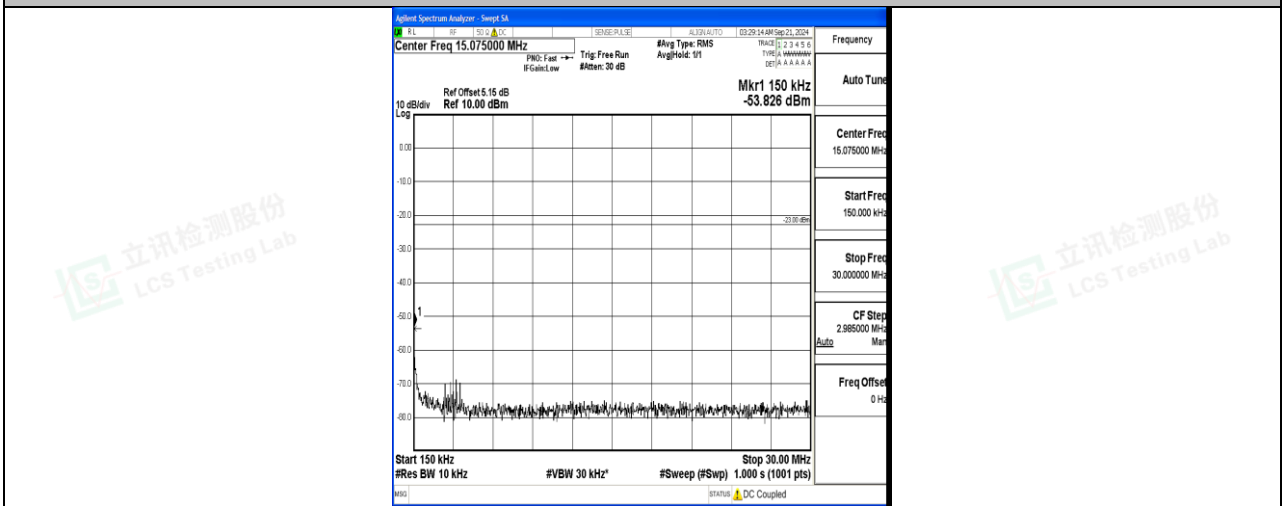




Band17_5MHz_QPSK_23755_1RB#0_3000~10000_3000~10000



Band17_5MHz_16QAM_23755_1RB#0_0.009~0.15_0.009~0.15



Band17_5MHz_16QAM_23755_1RB#0_0.15~30_0.15~30

