

Appendix for LTE Band 17

Applicant: UCLOUDLINK (SINGAPORE) PTE.LTD

**Address: 80 ROBINSON ROAD #02-00
SINGAPORE(068898)**

Product Name: LTE Module

Model: GLMM24A01

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1. Appendix A: Conducted Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band17	5MHz	QPSK	23755	1RB#0	25.52	PASS
Band17	5MHz	16QAM	23755	1RB#0	24.37	PASS
Band17	5MHz	QPSK	23755	1RB#12	25.25	PASS
Band17	5MHz	16QAM	23755	1RB#12	24.17	PASS
Band17	5MHz	QPSK	23755	1RB#24	25.58	PASS
Band17	5MHz	16QAM	23755	1RB#24	24.50	PASS
Band17	5MHz	QPSK	23755	12RB#0	24.07	PASS
Band17	5MHz	16QAM	23755	12RB#0	24.10	PASS
Band17	5MHz	QPSK	23755	12RB#6	24.08	PASS
Band17	5MHz	16QAM	23755	12RB#6	24.06	PASS
Band17	5MHz	QPSK	23755	12RB#13	24.52	PASS
Band17	5MHz	16QAM	23755	12RB#13	24.49	PASS
Band17	5MHz	QPSK	23755	25RB#0	24.27	PASS
Band17	5MHz	16QAM	23755	25RB#0	23.29	PASS
Band17	5MHz	QPSK	23790	1RB#0	25.49	PASS
Band17	5MHz	16QAM	23790	1RB#0	24.28	PASS
Band17	5MHz	QPSK	23790	1RB#12	25.41	PASS
Band17	5MHz	16QAM	23790	1RB#12	24.28	PASS
Band17	5MHz	QPSK	23790	1RB#24	25.21	PASS
Band17	5MHz	16QAM	23790	1RB#24	24.18	PASS
Band17	5MHz	QPSK	23790	12RB#0	24.44	PASS
Band17	5MHz	16QAM	23790	12RB#0	24.40	PASS
Band17	5MHz	QPSK	23790	12RB#6	24.37	PASS
Band17	5MHz	16QAM	23790	12RB#6	24.37	PASS
Band17	5MHz	QPSK	23790	12RB#13	24.32	PASS
Band17	5MHz	16QAM	23790	12RB#13	24.33	PASS
Band17	5MHz	QPSK	23790	25RB#0	24.20	PASS
Band17	5MHz	16QAM	23790	25RB#0	23.22	PASS
Band17	5MHz	QPSK	23825	1RB#0	25.31	PASS
Band17	5MHz	16QAM	23825	1RB#0	24.30	PASS
Band17	5MHz	QPSK	23825	1RB#12	24.45	PASS
Band17	5MHz	16QAM	23825	1RB#12	24.04	PASS
Band17	5MHz	QPSK	23825	1RB#24	24.93	PASS
Band17	5MHz	16QAM	23825	1RB#24	24.08	PASS
Band17	5MHz	QPSK	23825	12RB#0	24.53	PASS
Band17	5MHz	16QAM	23825	12RB#0	24.49	PASS
Band17	5MHz	QPSK	23825	12RB#6	24.46	PASS
Band17	5MHz	16QAM	23825	12RB#6	24.46	PASS

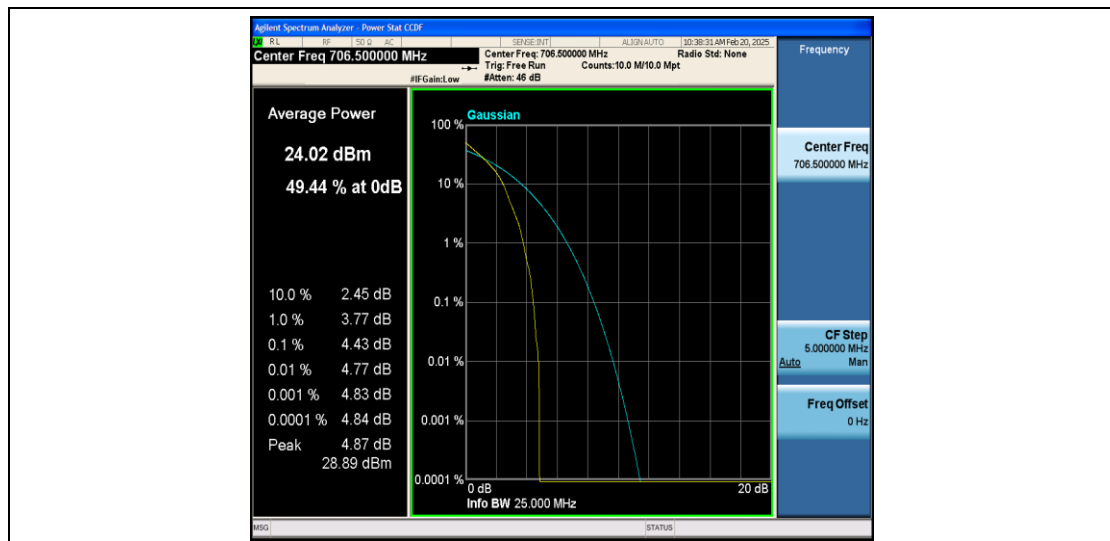
Band17	5MHz	QPSK	23825	12RB#13	24.22	PASS
Band17	5MHz	16QAM	23825	12RB#13	24.26	PASS
Band17	5MHz	QPSK	23825	25RB#0	24.29	PASS
Band17	5MHz	16QAM	23825	25RB#0	23.28	PASS
Band17	10MHz	QPSK	23780	1RB#0	25.26	PASS
Band17	10MHz	16QAM	23780	1RB#0	23.92	PASS
Band17	10MHz	QPSK	23780	1RB#24	25.42	PASS
Band17	10MHz	16QAM	23780	1RB#24	24.13	PASS
Band17	10MHz	QPSK	23780	1RB#49	23.56	PASS
Band17	10MHz	16QAM	23780	1RB#49	24.08	PASS
Band17	10MHz	QPSK	23780	25RB#0	24.01	PASS
Band17	10MHz	16QAM	23780	25RB#0	23.99	PASS
Band17	10MHz	QPSK	23780	25RB#12	23.99	PASS
Band17	10MHz	16QAM	23780	25RB#12	23.98	PASS
Band17	10MHz	QPSK	23780	25RB#25	24.32	PASS
Band17	10MHz	16QAM	23780	25RB#25	24.28	PASS
Band17	10MHz	QPSK	23780	50RB#0	23.99	PASS
Band17	10MHz	QPSK	23790	1RB#0	25.48	PASS
Band17	10MHz	16QAM	23790	1RB#0	24.05	PASS
Band17	10MHz	QPSK	23790	1RB#24	25.80	PASS
Band17	10MHz	16QAM	23790	1RB#24	24.45	PASS
Band17	10MHz	QPSK	23790	1RB#49	23.26	PASS
Band17	10MHz	16QAM	23790	1RB#49	24.09	PASS
Band17	10MHz	QPSK	23790	25RB#0	23.95	PASS
Band17	10MHz	16QAM	23790	25RB#0	23.89	PASS
Band17	10MHz	QPSK	23790	25RB#12	23.82	PASS
Band17	10MHz	16QAM	23790	25RB#12	23.86	PASS
Band17	10MHz	QPSK	23790	25RB#25	24.47	PASS
Band17	10MHz	16QAM	23790	25RB#25	24.40	PASS
Band17	10MHz	QPSK	23790	50RB#0	24.09	PASS
Band17	10MHz	QPSK	23800	1RB#0	25.24	PASS
Band17	10MHz	16QAM	23800	1RB#0	23.97	PASS
Band17	10MHz	QPSK	23800	1RB#24	25.59	PASS
Band17	10MHz	16QAM	23800	1RB#24	24.55	PASS
Band17	10MHz	QPSK	23800	1RB#49	23.58	PASS
Band17	10MHz	16QAM	23800	1RB#49	24.05	PASS
Band17	10MHz	QPSK	23800	25RB#0	23.99	PASS
Band17	10MHz	16QAM	23800	25RB#0	24.08	PASS
Band17	10MHz	QPSK	23800	25RB#12	24.05	PASS
Band17	10MHz	16QAM	23800	25RB#12	24.02	PASS
Band17	10MHz	QPSK	23800	25RB#25	24.38	PASS
Band17	10MHz	16QAM	23800	25RB#25	24.37	PASS
Band17	10MHz	QPSK	23800	50RB#0	24.07	PASS

2. Appendix B: Peak-to-Average Ratio(CCDF)

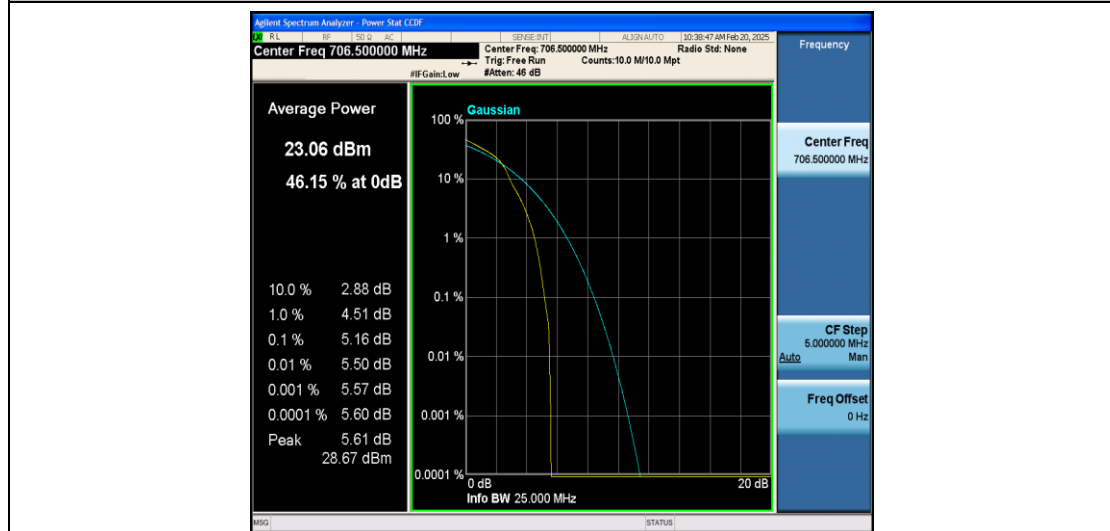
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band17	5MHz	QPSK	23755	1RB#0	4.43	13	PASS
Band17	5MHz	16QAM	23755	1RB#0	5.16	13	PASS
Band17	5MHz	QPSK	23755	25RB#0	5.32	13	PASS
Band17	5MHz	16QAM	23755	25RB#0	6.10	13	PASS
Band17	5MHz	QPSK	23790	1RB#0	4.99	13	PASS
Band17	5MHz	16QAM	23790	1RB#0	5.68	13	PASS
Band17	5MHz	QPSK	23790	25RB#0	5.29	13	PASS
Band17	5MHz	16QAM	23790	25RB#0	6.21	13	PASS
Band17	5MHz	QPSK	23825	1RB#0	4.02	13	PASS
Band17	5MHz	16QAM	23825	1RB#0	4.90	13	PASS
Band17	5MHz	QPSK	23825	25RB#0	4.53	13	PASS
Band17	5MHz	16QAM	23825	25RB#0	5.40	13	PASS
Band17	10MHz	QPSK	23780	1RB#0	4.41	13	PASS
Band17	10MHz	16QAM	23780	1RB#0	5.23	13	PASS
Band17	10MHz	QPSK	23790	1RB#0	4.60	13	PASS
Band17	10MHz	16QAM	23790	1RB#0	5.70	13	PASS
Band17	10MHz	QPSK	23800	1RB#0	4.96	13	PASS
Band17	10MHz	16QAM	23800	1RB#0	5.85	13	PASS
Band17	10MHz	QPSK	23780	50RB#0	5.24	13	PASS
Band17	10MHz	QPSK	23790	50RB#0	5.08	13	PASS
Band17	10MHz	QPSK	23800	50RB#0	5.02	13	PASS

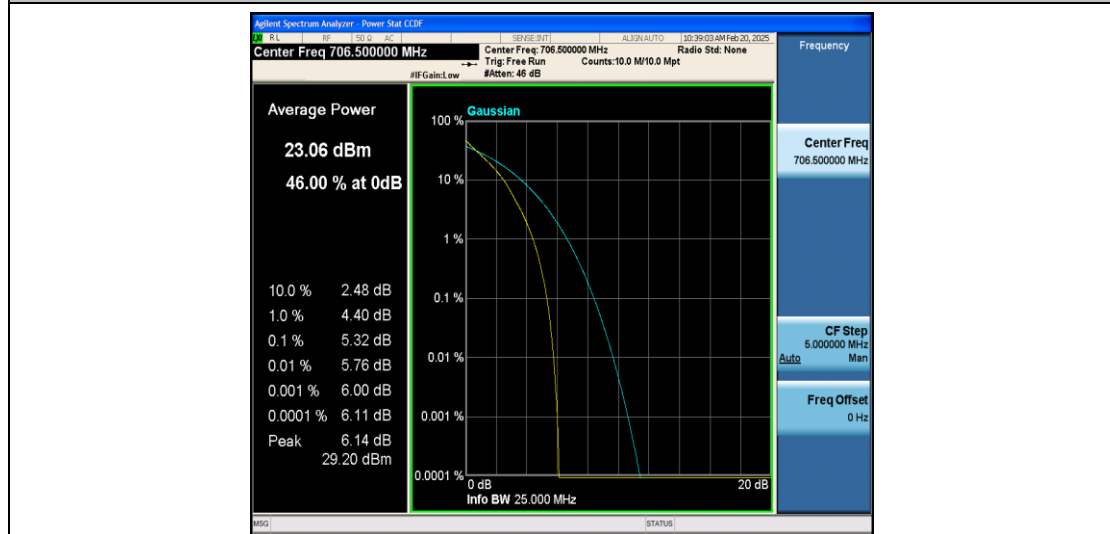
Test Graphs



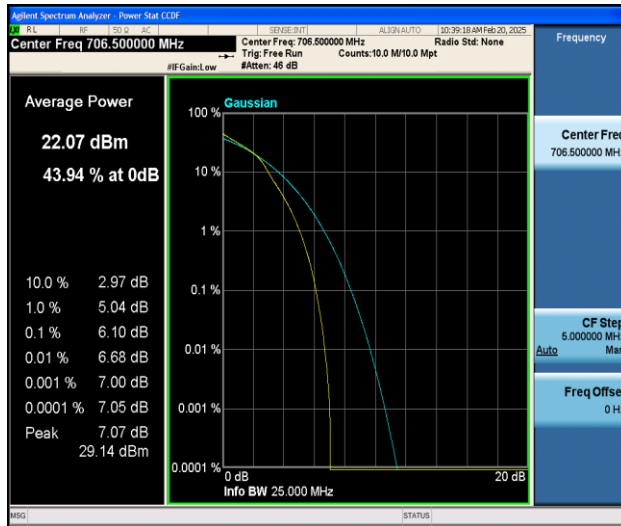
Band17-5MHz-QPSK-23755-1RB#0-PASS



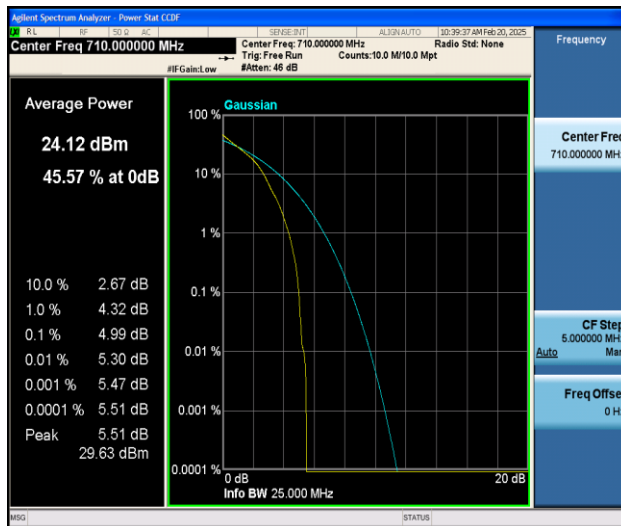
Band17-5MHz-16QAM-23755-1RB#0-PASS



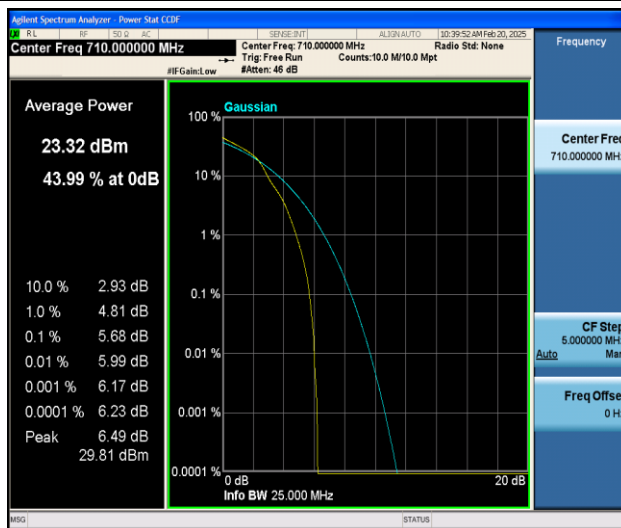
Band17-5MHz-QPSK-23755-25RB#0-PASS



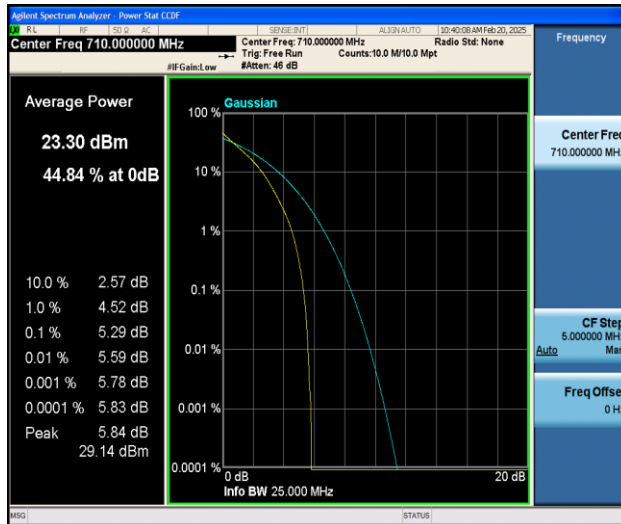
Band17-5MHz-16QAM-23755-25RB#0-PASS



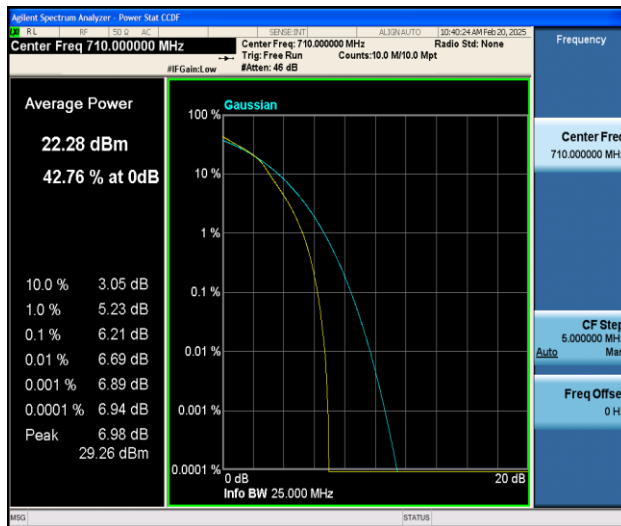
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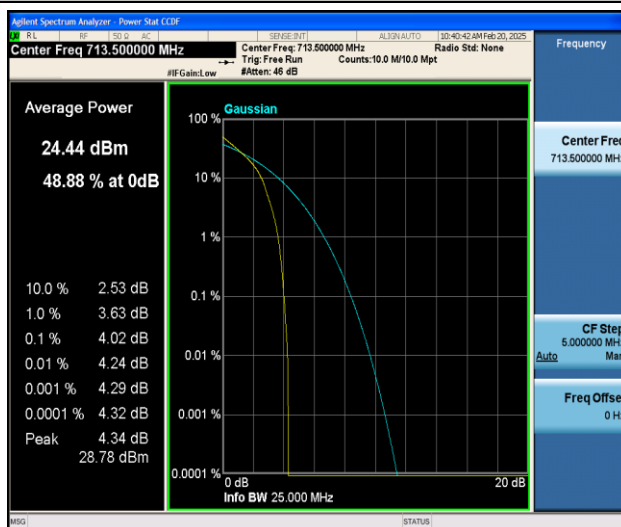
Band17-5MHz-16QAM-23790-1RB#0-PASS



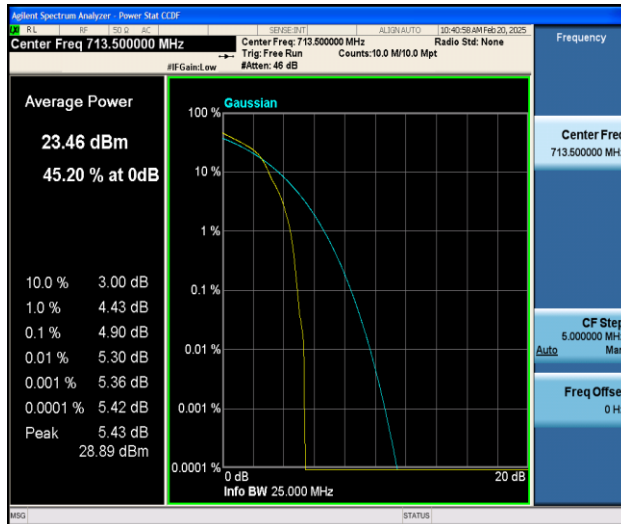
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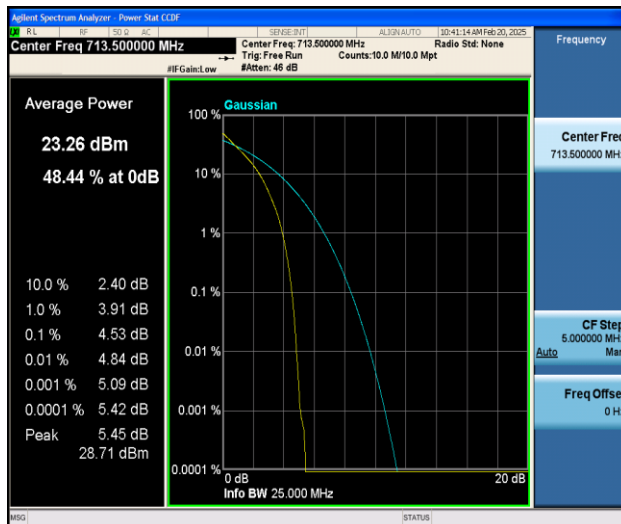
Band17-5MHz-16QAM-23790-25RB#0-PASS



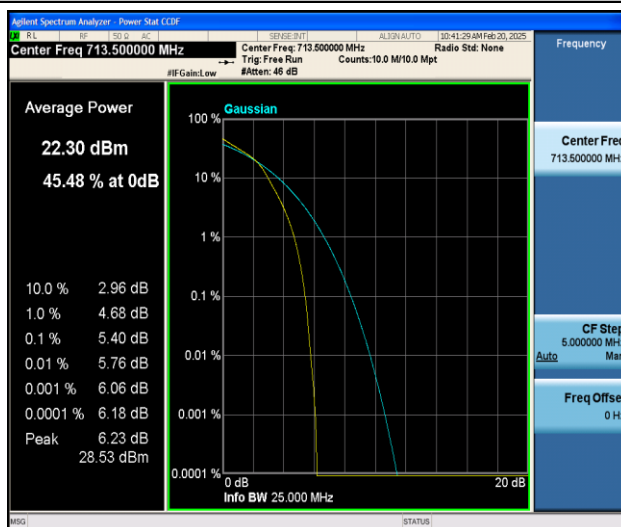
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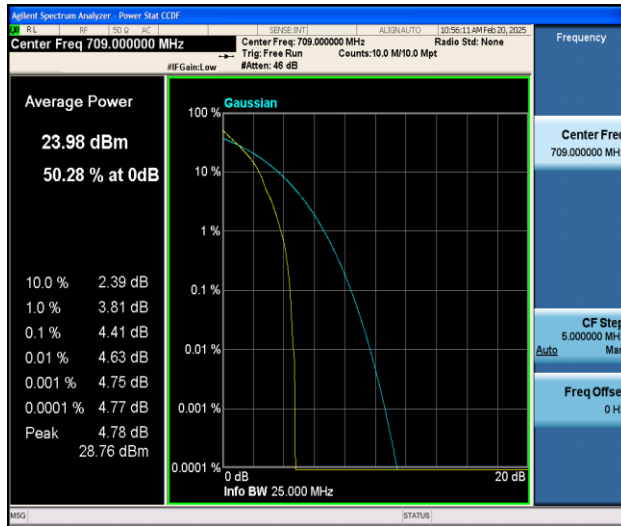
Band17-5MHz-16QAM-23825-1RB#0-PASS



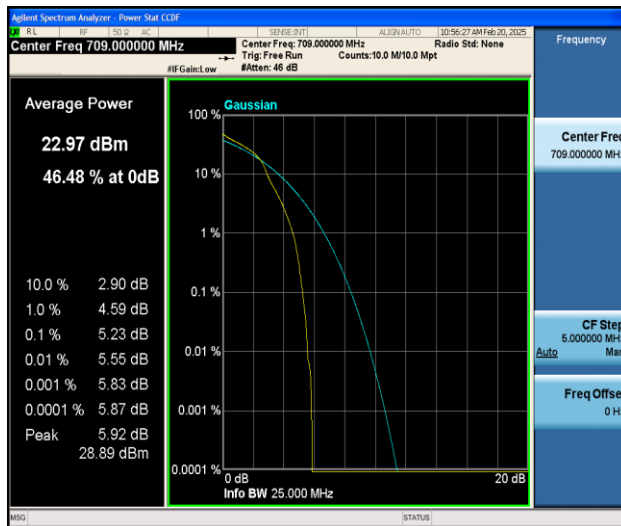
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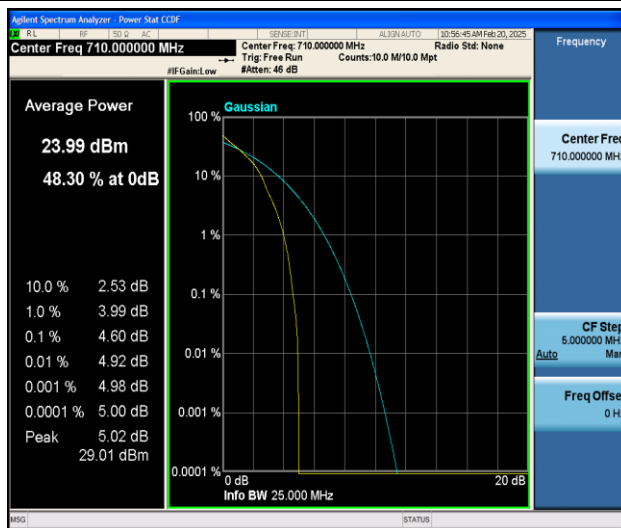
Band17-5MHz-16QAM-23825-25RB#0-PASS



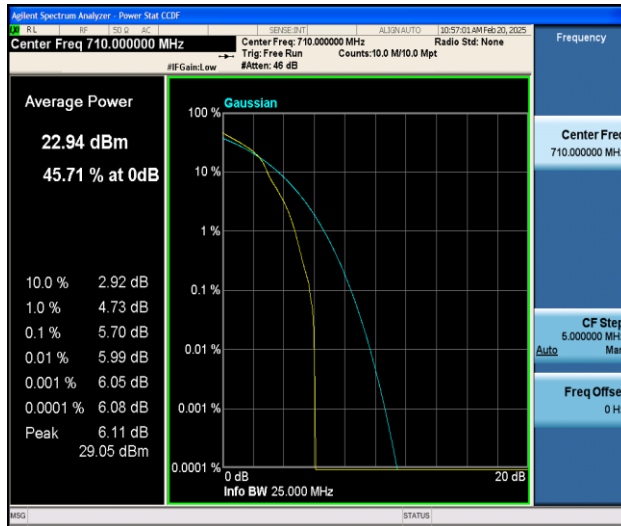
Band17-10MHz-QPSK-23780-1RB#0-PASS



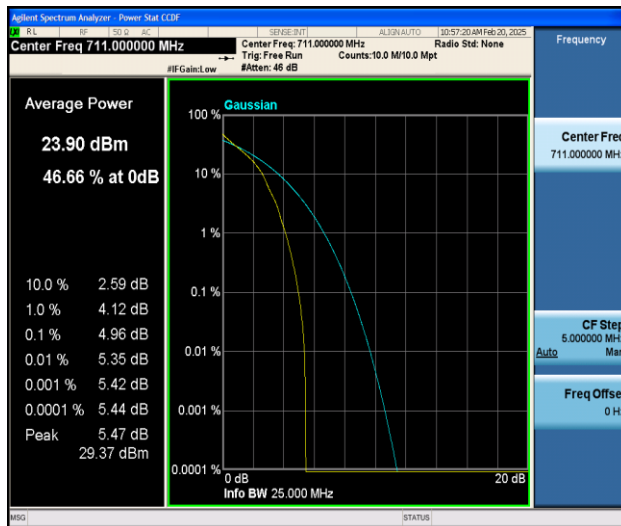
Band17-10MHz-16QAM-23780-1RB#0-PASS



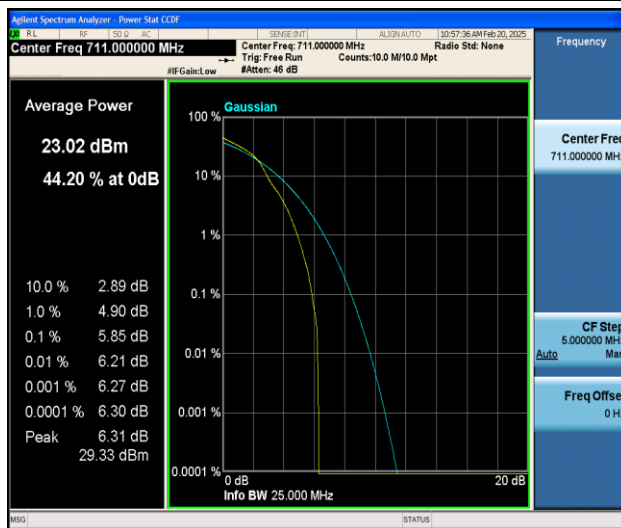
Band17-10MHz-QPSK-23790-1RB#0-PASS



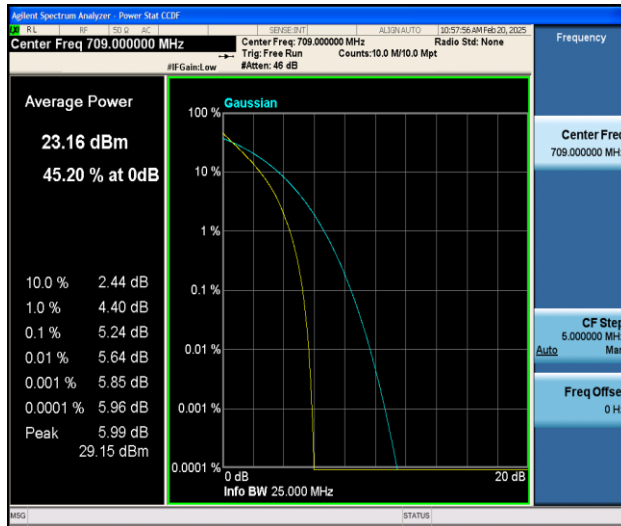
Band17-10MHz-16QAM-23790-1RB#0-PASS



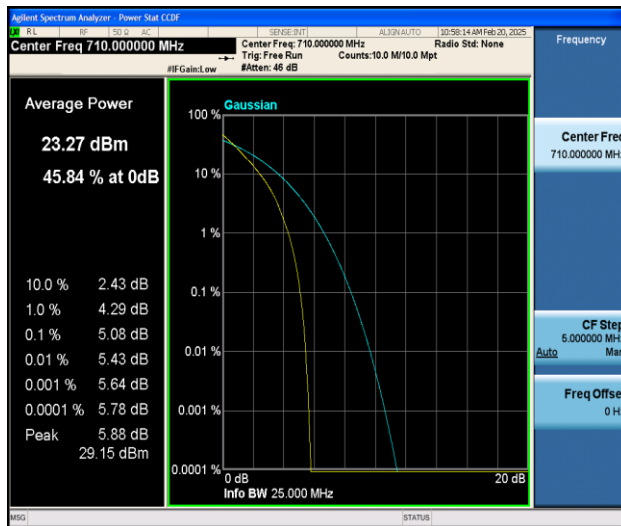
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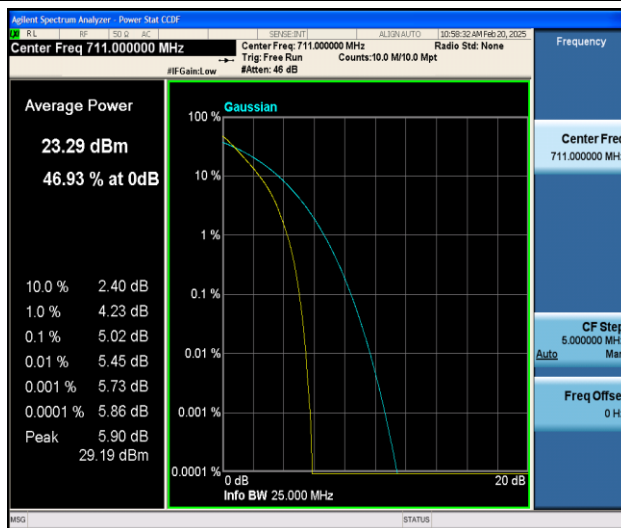
Band17-10MHz-16QAM-23800-1RB#0-PASS



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



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



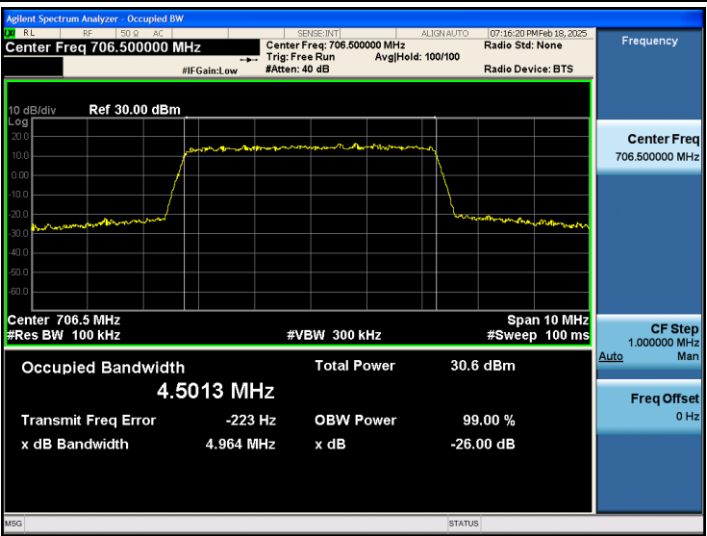
Band17-10MHz-QPSK-23800-50RB#0-PASS

3. Appendix C: 26dB Bandwidth and Occupied Bandwidth

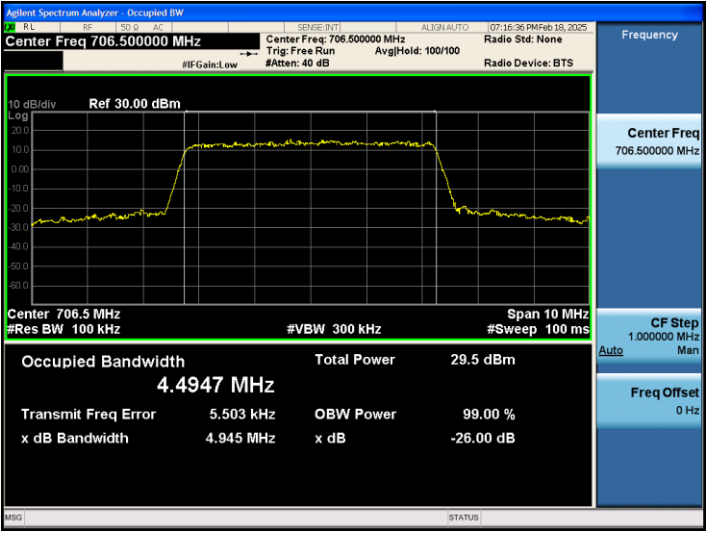
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band17	5MHz	QPSK	23755	25RB#0	4.5013	4.964	PASS
Band17	5MHz	16QAM	23755	25RB#0	4.4947	4.945	PASS
Band17	5MHz	QPSK	23790	25RB#0	4.5029	4.938	PASS
Band17	5MHz	16QAM	23790	25RB#0	4.5114	4.981	PASS
Band17	5MHz	QPSK	23825	25RB#0	4.5164	4.992	PASS
Band17	5MHz	16QAM	23825	25RB#0	4.5333	5.014	PASS
Band17	10MHz	QPSK	23780	50RB#0	8.9963	9.874	PASS
Band17	10MHz	QPSK	23790	50RB#0	8.9930	9.819	PASS
Band17	10MHz	QPSK	23800	50RB#0	8.9778	9.848	PASS

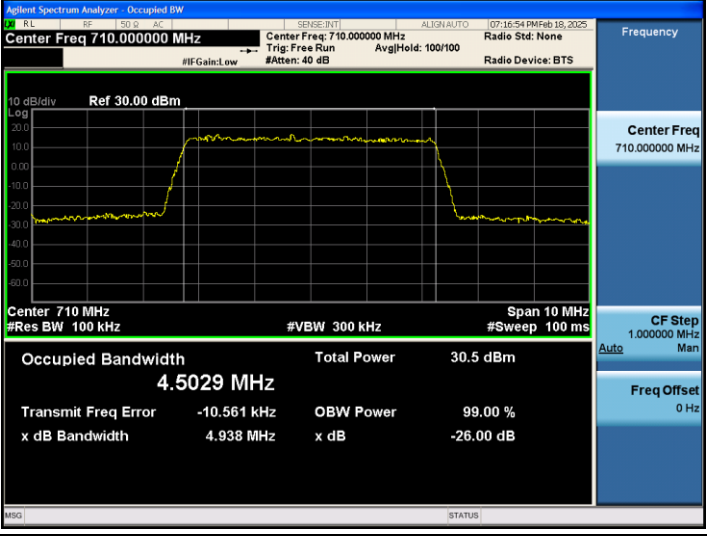
Test Graphs



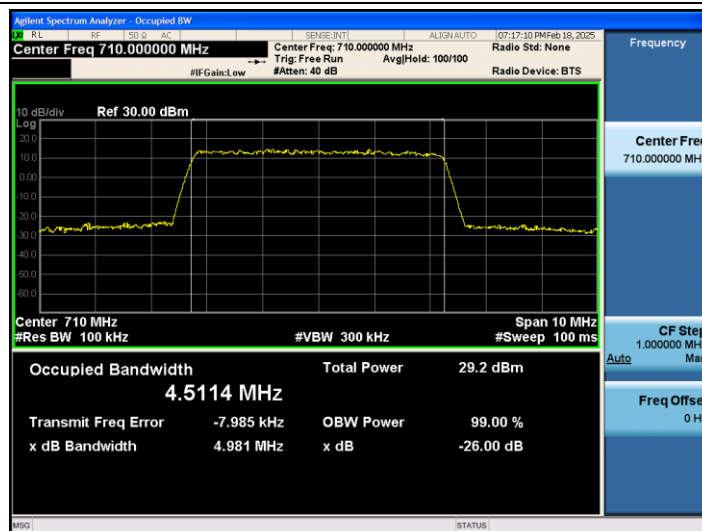
Band17-5MHz-QPSK-23755-25RB#0-PASS



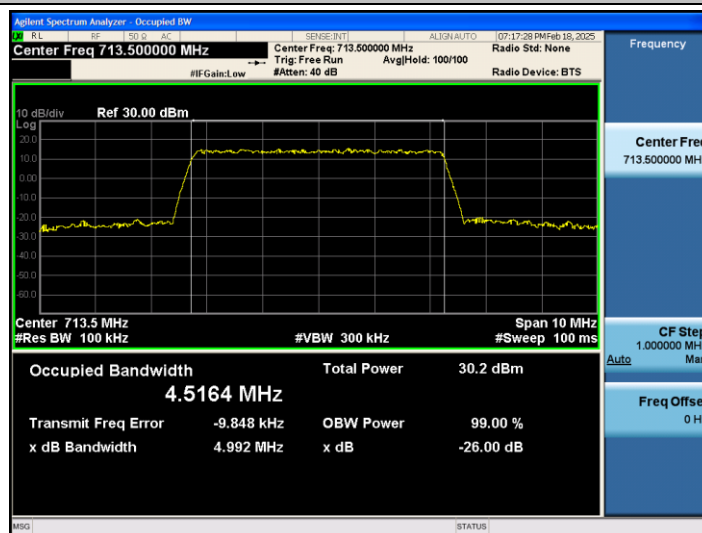
Band17-5MHz-16QAM-23755-25RB#0-PASS



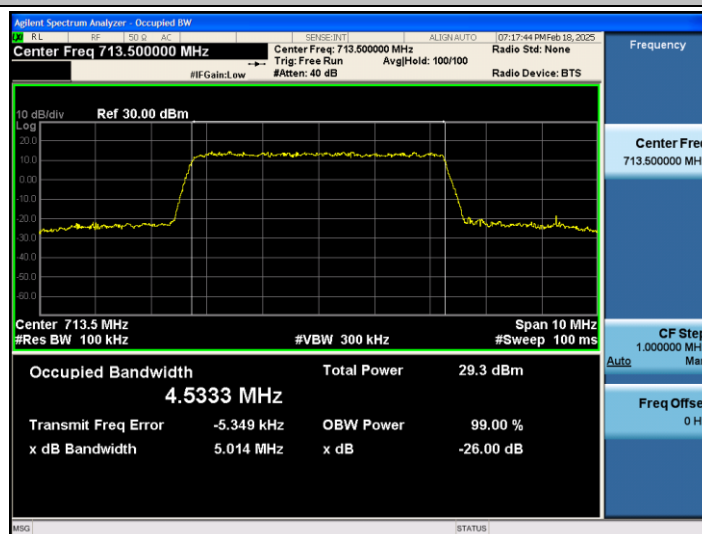
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Band17-5MHz-16QAM-23790-25RB#0-PASS



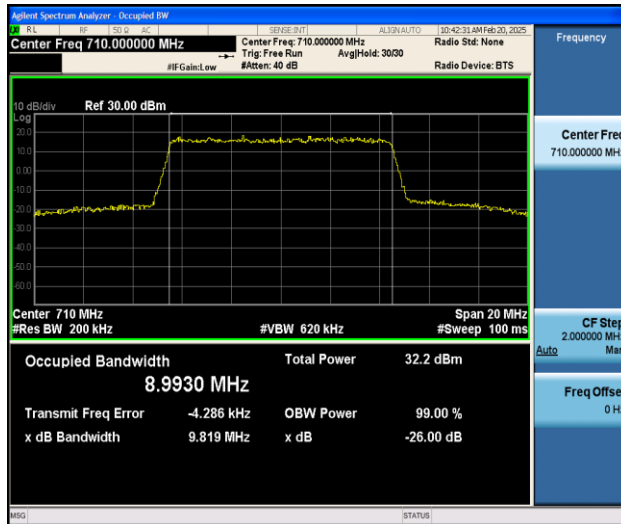
Band17-5MHz-QPSK-23825-25RB#0-PASS



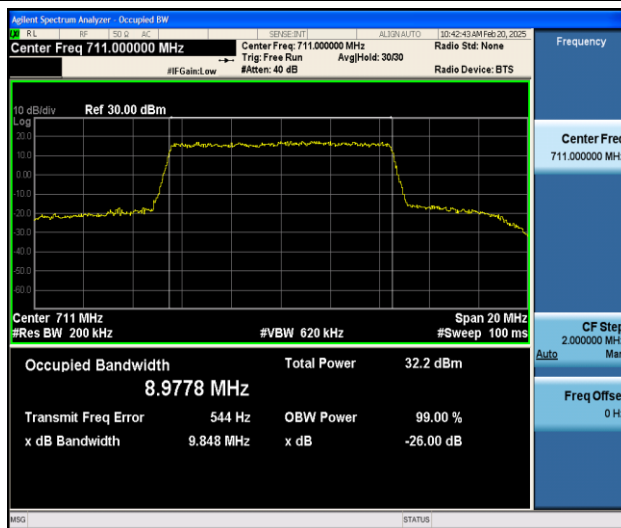
Band17-5MHz-16QAM-23825-25RB#0-PASS



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



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



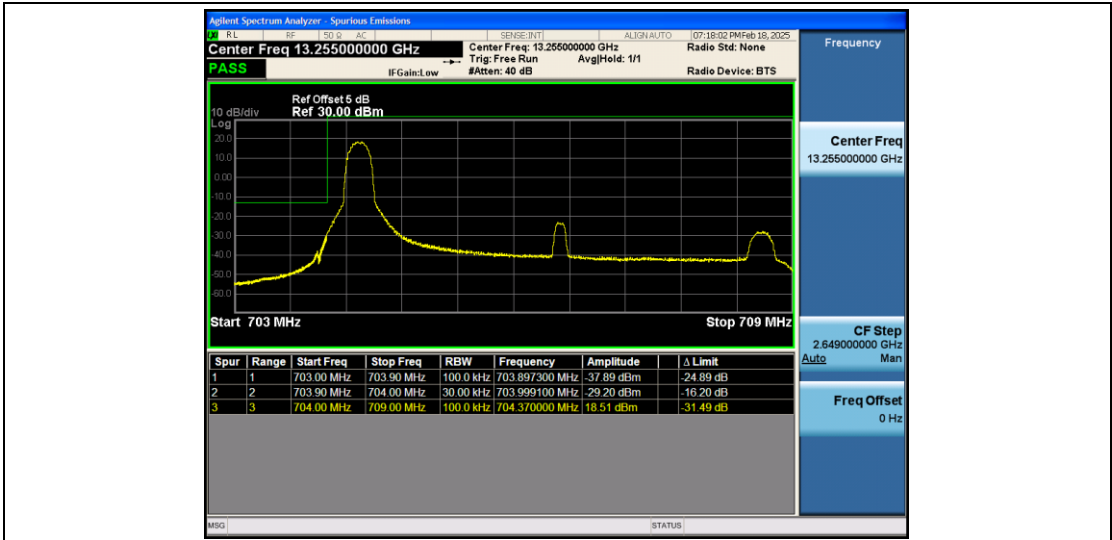
Band17-10MHz-QPSK-23800-50RB#0-PASS

4. Appendix D: Band Edge

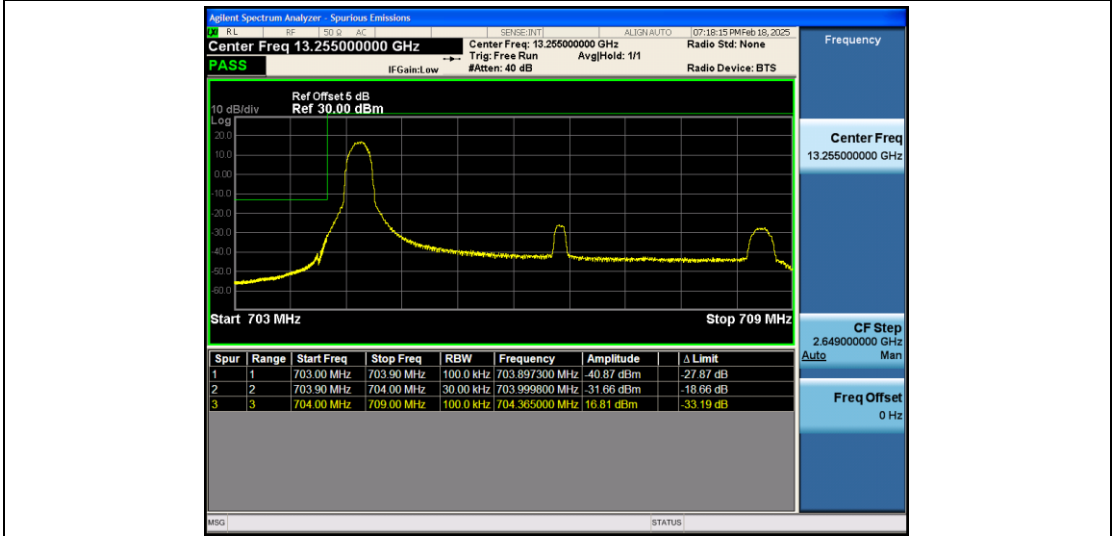
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band17	5MHz	QPSK	23755	1RB#0	-29.20	PASS
Band17	5MHz	16QAM	23755	1RB#0	-31.66	PASS
Band17	5MHz	QPSK	23755	1RB#24	-46.96	PASS
Band17	5MHz	16QAM	23755	1RB#24	-48.06	PASS
Band17	5MHz	QPSK	23755	25RB#0	-34.27	PASS
Band17	5MHz	16QAM	23755	25RB#0	-34.83	PASS
Band17	5MHz	QPSK	23825	1RB#0	-45.03	PASS
Band17	5MHz	16QAM	23825	1RB#0	-48.10	PASS
Band17	5MHz	QPSK	23825	1RB#24	-27.35	PASS
Band17	5MHz	16QAM	23825	1RB#24	-28.49	PASS
Band17	5MHz	QPSK	23825	25RB#0	-34.30	PASS
Band17	5MHz	16QAM	23825	25RB#0	-34.55	PASS
Band17	10MHz	QPSK	23780	1RB#0	-34.84	PASS
Band17	10MHz	16QAM	23780	1RB#0	-34.46	PASS
Band17	10MHz	QPSK	23780	1RB#49	-50.54	PASS
Band17	10MHz	16QAM	23780	1RB#49	-50.56	PASS
Band17	10MHz	QPSK	23800	1RB#0	-51.14	PASS
Band17	10MHz	16QAM	23800	1RB#0	-52.11	PASS
Band17	10MHz	QPSK	23800	1RB#49	-34.02	PASS
Band17	10MHz	16QAM	23800	1RB#49	-35.67	PASS
Band17	10MHz	QPSK	23780	50RB#0	-32.94	PASS
Band17	10MHz	QPSK	23800	50RB#0	-30.83	PASS

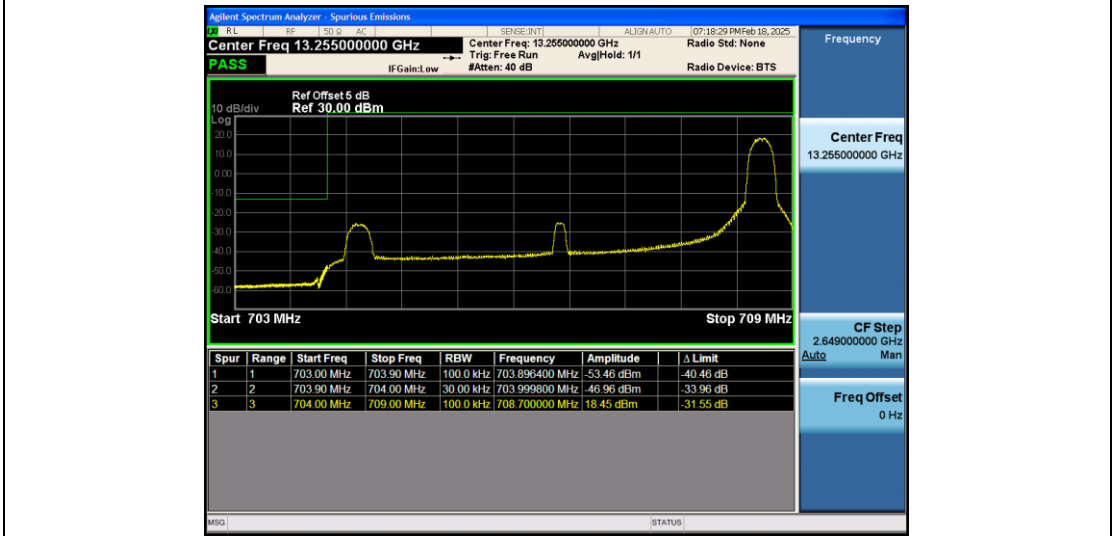
Test Graphs



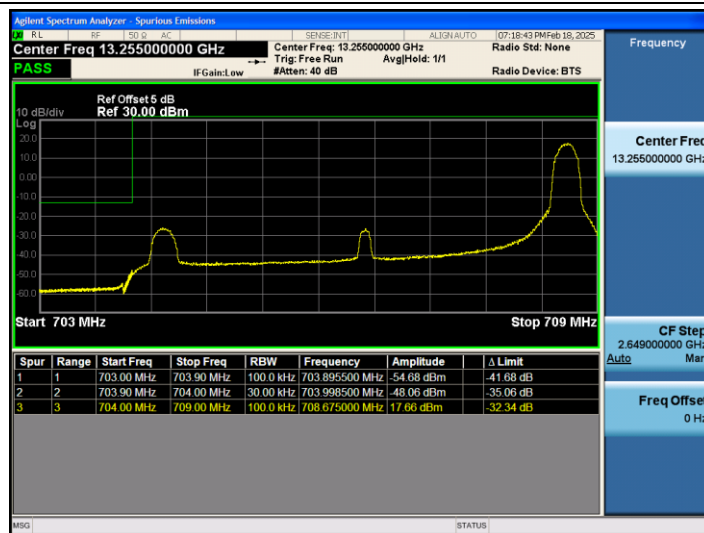
Band17_5MHz_QPSK_23755_1RB#0



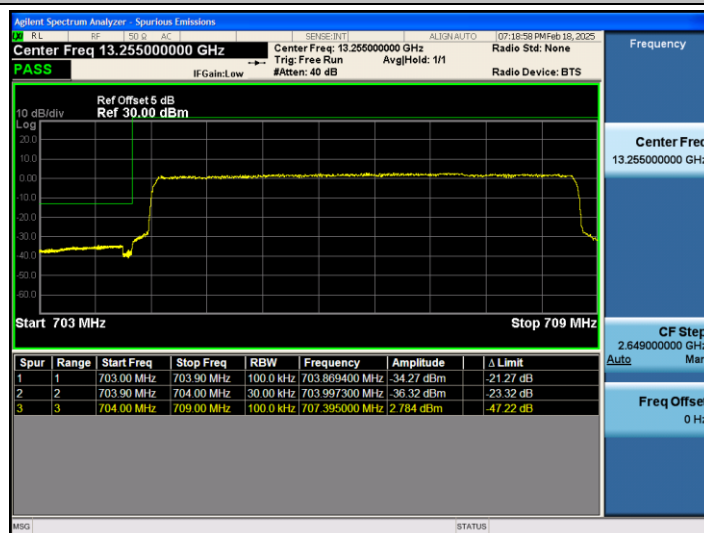
Band17_5MHz_16QAM_23755_1RB#0



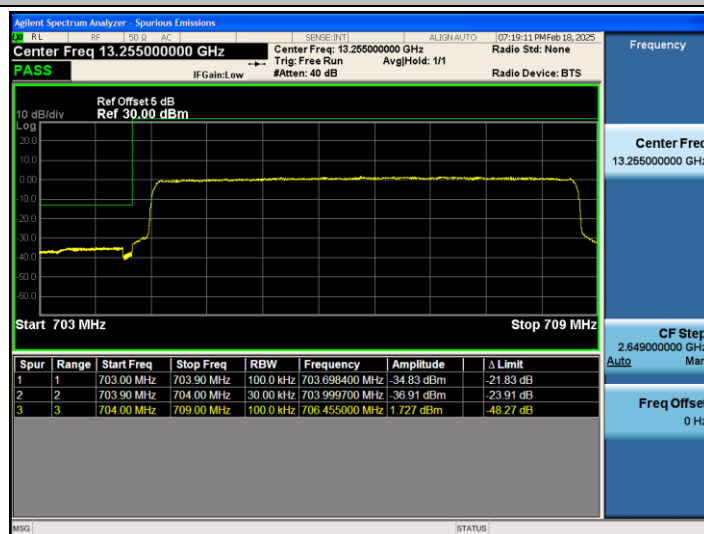
Band17_5MHz_QPSK_23755_1RB#24



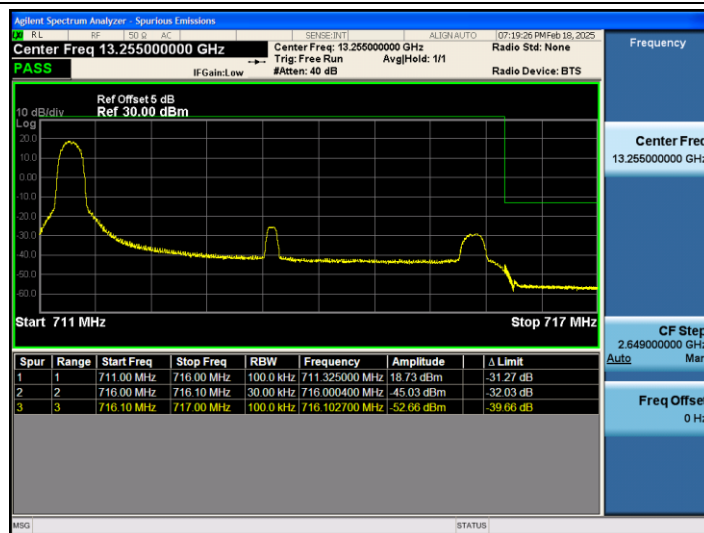
Band17_5MHz_16QAM_23755_1RB#24



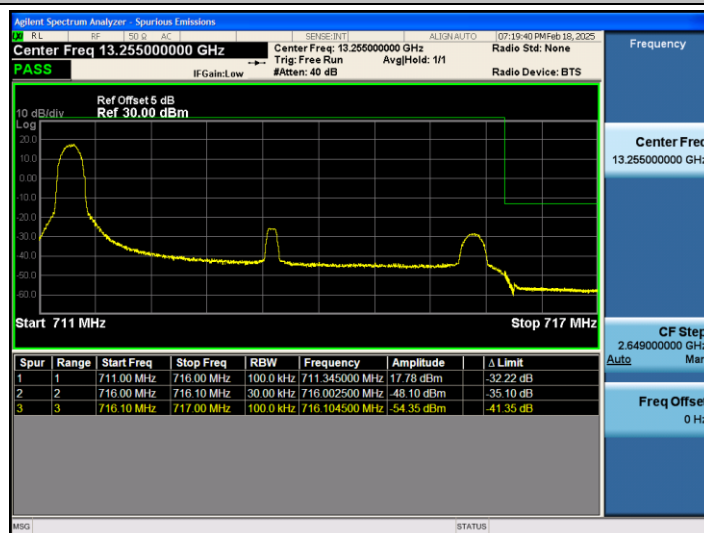
Band17_5MHz_QPSK_23755_25RB#0



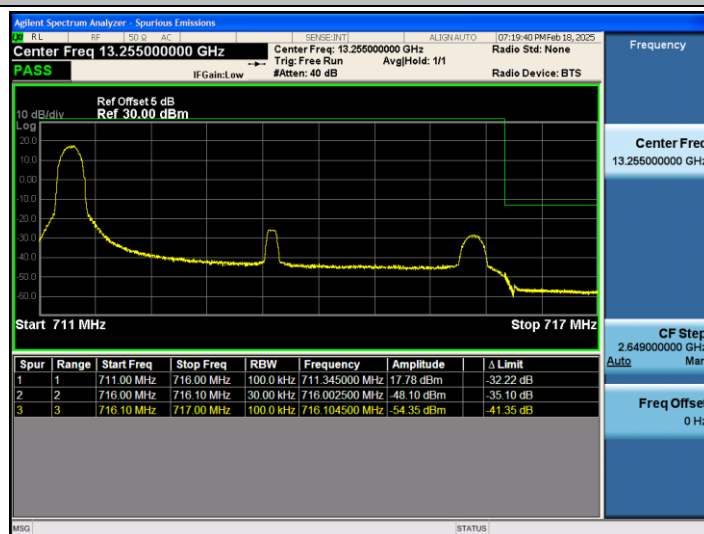
Band17_5MHz_16QAM_23755_25RB#0



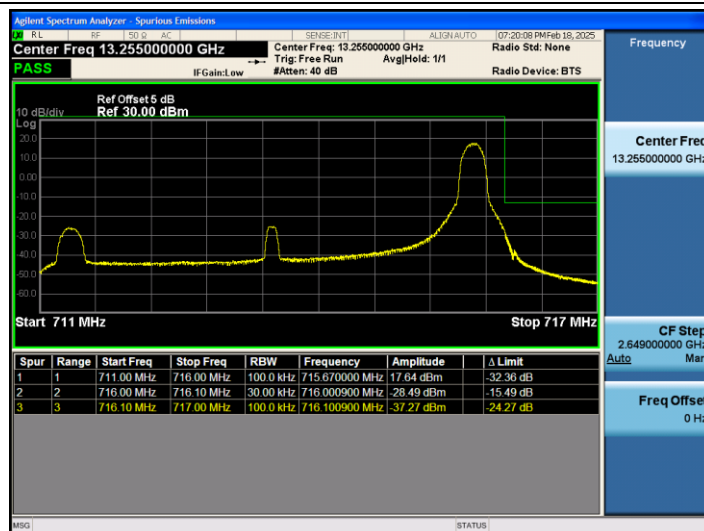
Band17_5MHz_QPSK_23825_1RB#0



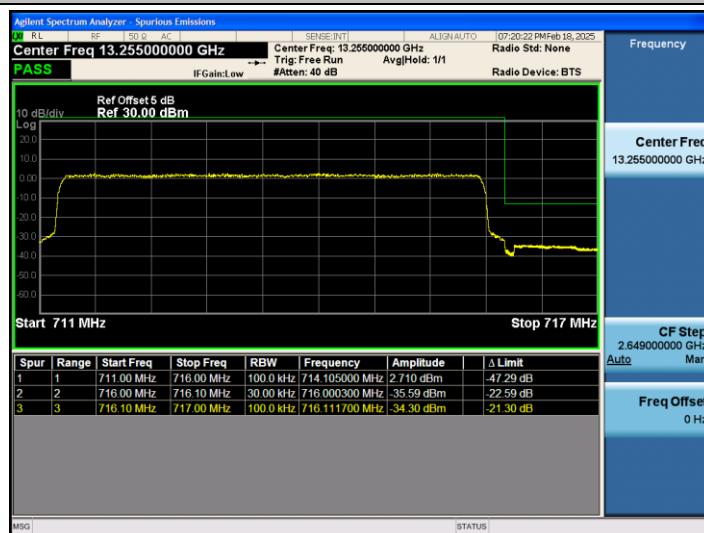
Band17_5MHz_16QAM_23825_1RB#0



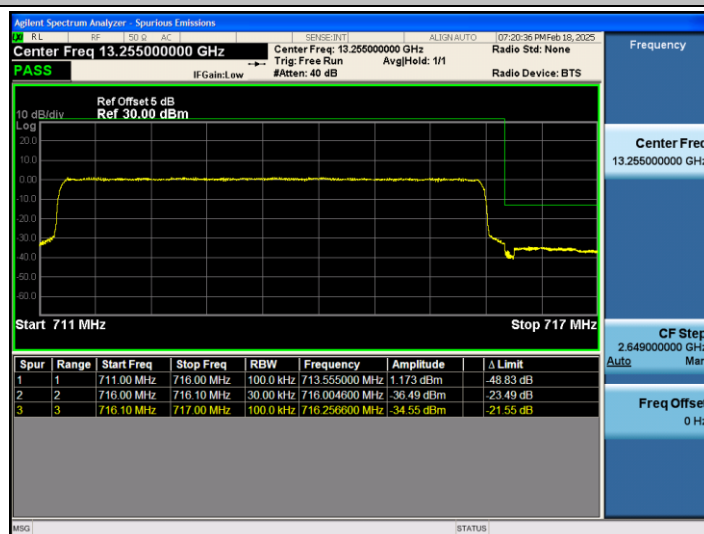
Band17_5MHz_QPSK_23825_1RB#24



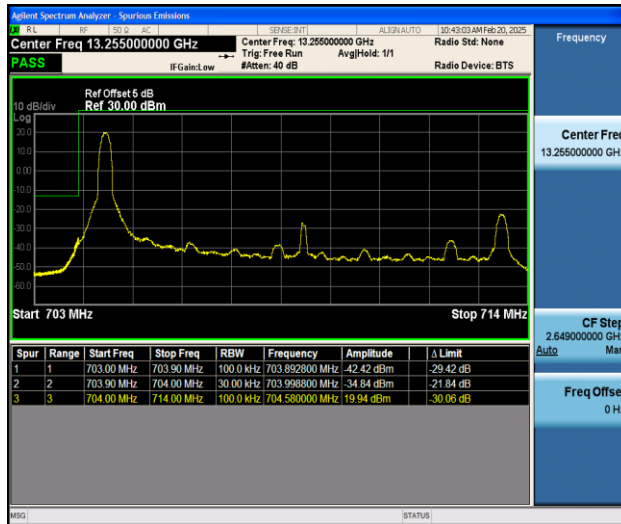
Band17_5MHz_16QAM_23825_1RB#24



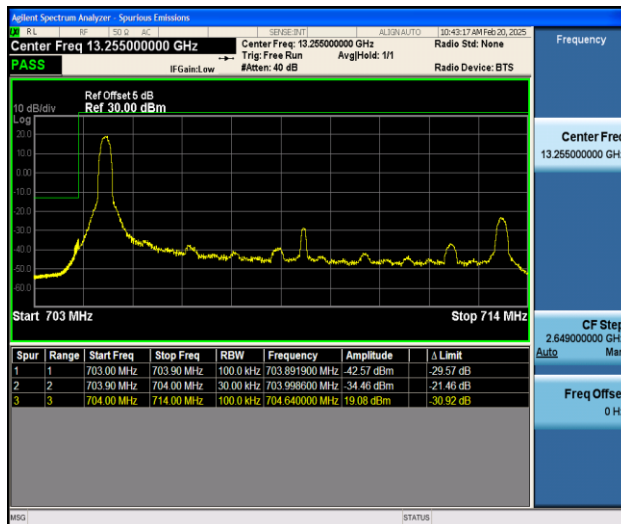
Band17_5MHz_QPSK_23825_25RB#0



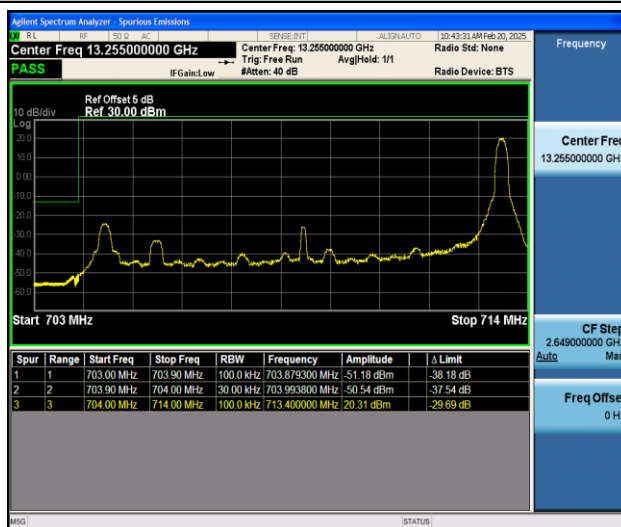
Band17_5MHz_16QAM_23825_25RB#0



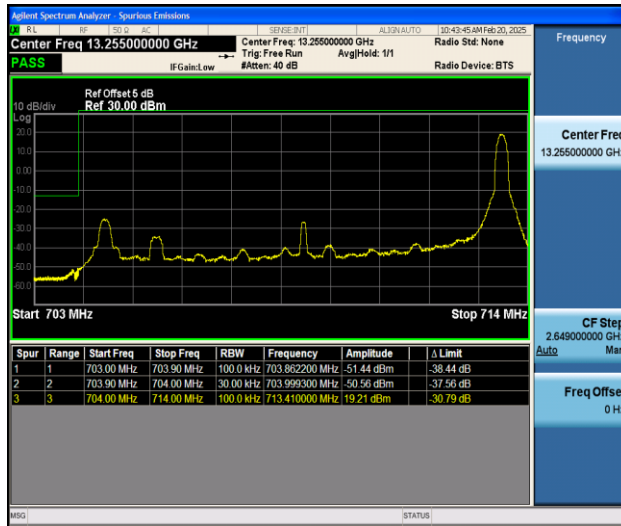
Band17_10MHz_QPSK_23780_1RB#0



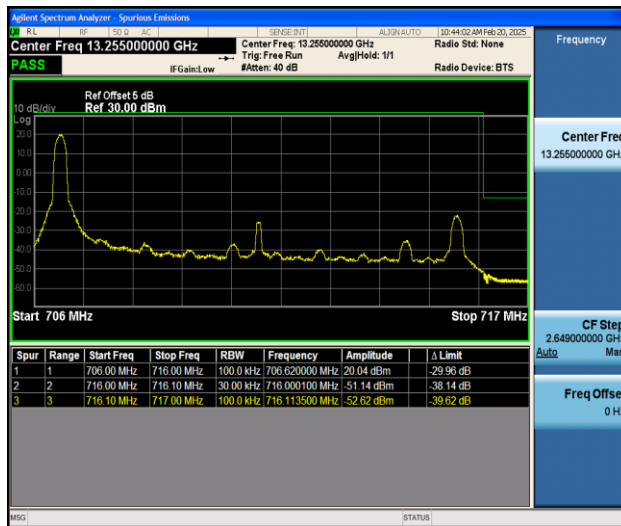
Band17_10MHz_16QAM_23780_1RB#0



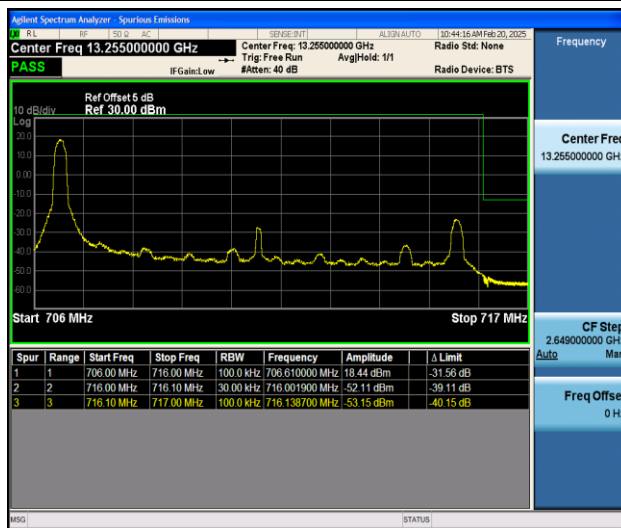
Band17_10MHz_QPSK_23780_1RB#49



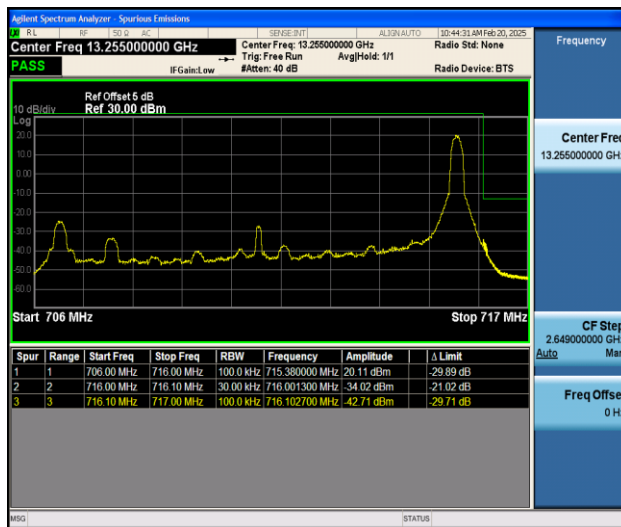
Band17_10MHz_16QAM_23780_1RB#49



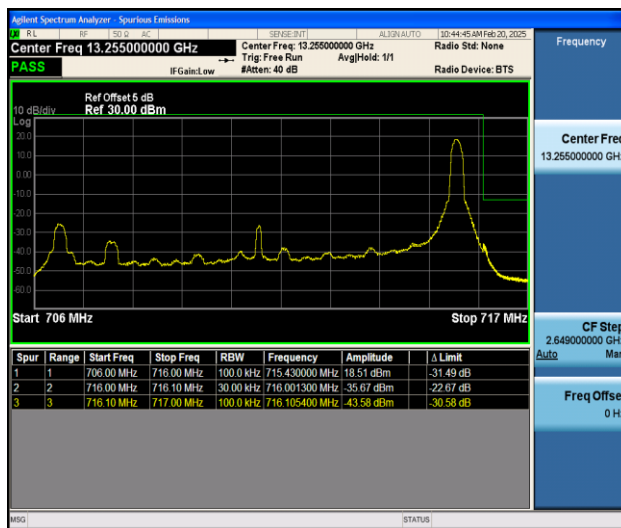
Band17_10MHz_QPSK_23800_1RB#0



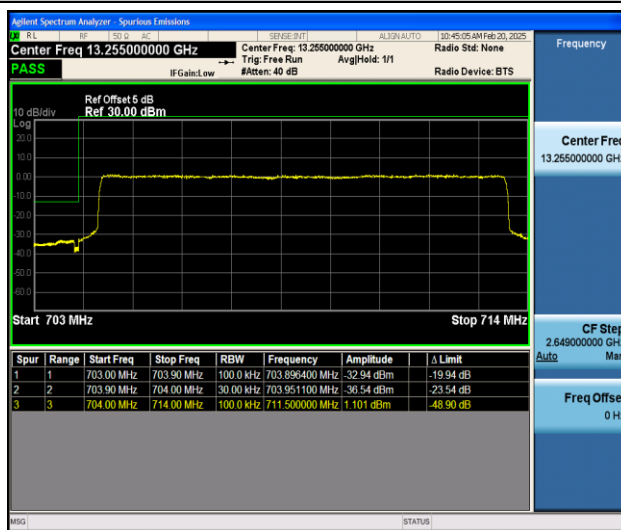
Band17_10MHz_16QAM_23800_1RB#0



Band17_10MHz_QPSK_23800_1RB#49



Band17_10MHz_16QAM_23800_1RB#49



Band17_10MHz_QPSK_23780_50RB#0