



Shenzhen GUOREN Certification Technology Service Co., Ltd.

101#, Building K & Building T, The Second Industrial Zone, Jiazitang Community,
Fenghuang Street, Guangming District, Shenzhen, China

No.:GRCTR250502011-05

SMS Gateway

M/N:ACOM664L-64-EG91

FCC ID:2BLXD-ACOM664L

Applicant:Shenzhen ejoin technology co.,ltd.

Appendix for LTE Band 13



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Appendix A: Conducted Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	23.88	PASS
Band13	5MHz	QPSK	23205	1RB#12	24.05	PASS
Band13	5MHz	QPSK	23205	1RB#24	23.75	PASS
Band13	5MHz	QPSK	23205	12RB#0	22.90	PASS
Band13	5MHz	QPSK	23205	12RB#6	22.92	PASS
Band13	5MHz	QPSK	23205	12RB#13	22.87	PASS
Band13	5MHz	QPSK	23205	25RB#0	23.01	PASS
Band13	5MHz	16QAM	23205	1RB#0	22.77	PASS
Band13	5MHz	16QAM	23205	1RB#12	22.84	PASS
Band13	5MHz	16QAM	23205	1RB#24	22.64	PASS
Band13	5MHz	16QAM	23205	12RB#0	21.81	PASS
Band13	5MHz	16QAM	23205	12RB#6	21.81	PASS
Band13	5MHz	16QAM	23205	12RB#13	21.98	PASS
Band13	5MHz	16QAM	23205	25RB#0	21.89	PASS
Band13	5MHz	QPSK	23230	1RB#0	23.97	PASS
Band13	5MHz	QPSK	23230	1RB#12	23.80	PASS
Band13	5MHz	QPSK	23230	1RB#24	23.65	PASS
Band13	5MHz	QPSK	23230	12RB#0	22.72	PASS
Band13	5MHz	QPSK	23230	12RB#6	22.85	PASS
Band13	5MHz	QPSK	23230	12RB#13	22.79	PASS
Band13	5MHz	QPSK	23230	25RB#0	22.84	PASS
Band13	5MHz	16QAM	23230	1RB#0	23.31	PASS
Band13	5MHz	16QAM	23230	1RB#12	22.84	PASS
Band13	5MHz	16QAM	23230	1RB#24	22.59	PASS
Band13	5MHz	16QAM	23230	12RB#0	21.91	PASS
Band13	5MHz	16QAM	23230	12RB#6	21.92	PASS
Band13	5MHz	16QAM	23230	12RB#13	21.75	PASS
Band13	5MHz	16QAM	23230	25RB#0	21.81	PASS
Band13	5MHz	QPSK	23255	1RB#0	23.80	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.75	PASS
Band13	5MHz	QPSK	23255	1RB#24	23.61	PASS
Band13	5MHz	QPSK	23255	12RB#0	22.62	PASS
Band13	5MHz	QPSK	23255	12RB#6	22.64	PASS
Band13	5MHz	QPSK	23255	12RB#13	22.75	PASS



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Band13	5MHz	QPSK	23255	25RB#0	22.74	PASS
Band13	5MHz	16QAM	23255	1RB#0	22.78	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.71	PASS
Band13	5MHz	16QAM	23255	1RB#24	22.39	PASS
Band13	5MHz	16QAM	23255	12RB#0	21.57	PASS
Band13	5MHz	16QAM	23255	12RB#6	21.68	PASS
Band13	5MHz	16QAM	23255	12RB#13	21.67	PASS
Band13	5MHz	16QAM	23255	25RB#0	21.71	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.75	PASS
Band13	10MHz	QPSK	23230	1RB#24	23.79	PASS
Band13	10MHz	QPSK	23230	1RB#49	23.48	PASS
Band13	10MHz	QPSK	23230	25RB#0	22.92	PASS
Band13	10MHz	QPSK	23230	25RB#12	22.95	PASS
Band13	10MHz	QPSK	23230	25RB#25	22.84	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.76	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.79	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.82	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.55	PASS
Band13	10MHz	16QAM	23230	25RB#0	21.95	PASS
Band13	10MHz	16QAM	23230	25RB#12	21.96	PASS
Band13	10MHz	16QAM	23230	25RB#25	21.86	PASS



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

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	4.49	13	PASS
Band13	5MHz	QPSK	23205	25RB#0	5.15	13	PASS
Band13	5MHz	16QAM	23205	1RB#0	5.41	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	5.95	13	PASS
Band13	5MHz	QPSK	23230	1RB#0	4.47	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.21	13	PASS
Band13	5MHz	16QAM	23230	1RB#0	5.33	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	5.98	13	PASS
Band13	5MHz	QPSK	23255	1RB#0	4.56	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	5.24	13	PASS
Band13	5MHz	16QAM	23255	1RB#0	5.40	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	6.03	13	PASS
Band13	10MHz	QPSK	23230	1RB#0	4.46	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.16	13	PASS
Band13	10MHz	16QAM	23230	1RB#0	5.34	13	PASS

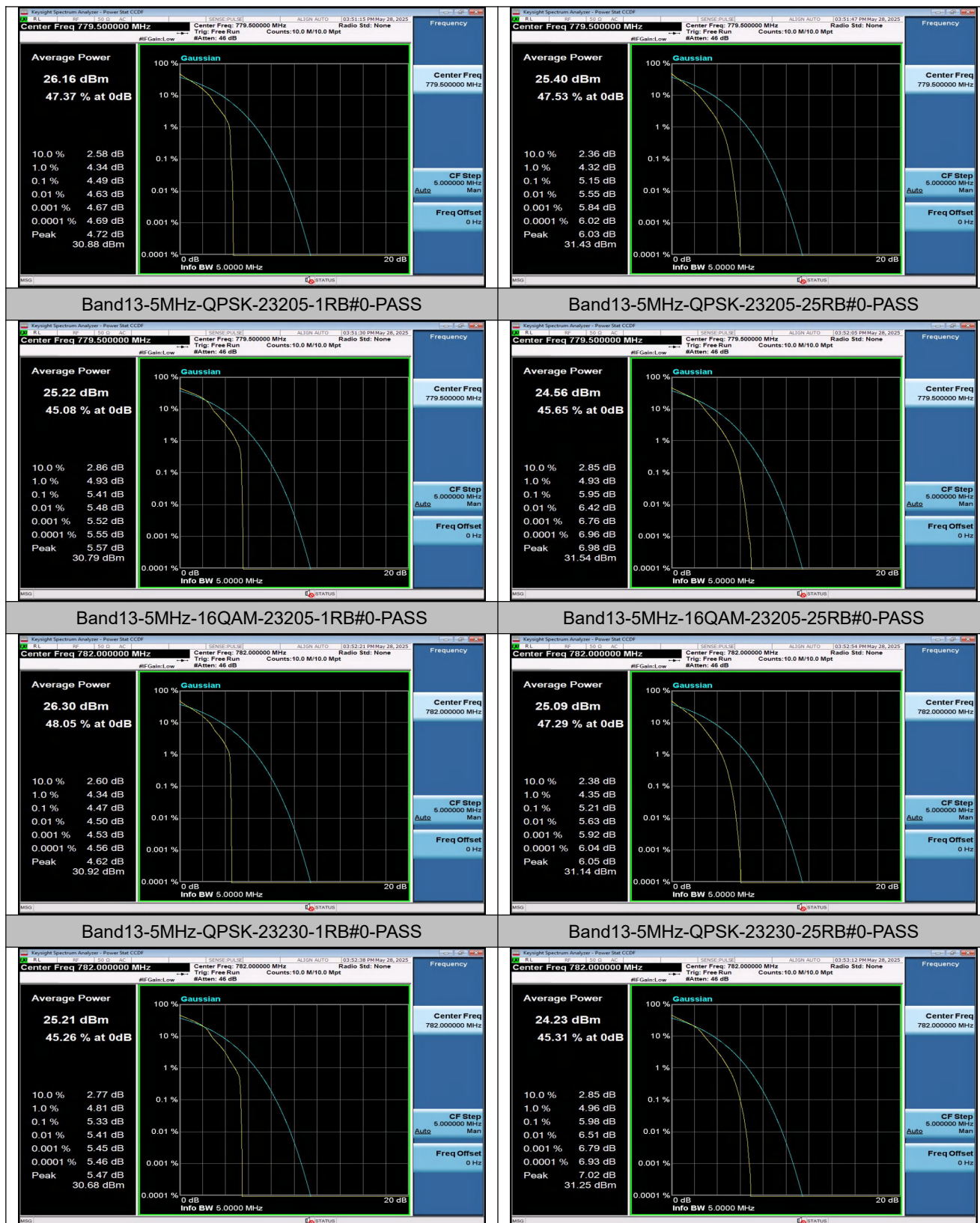


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Test Graphs





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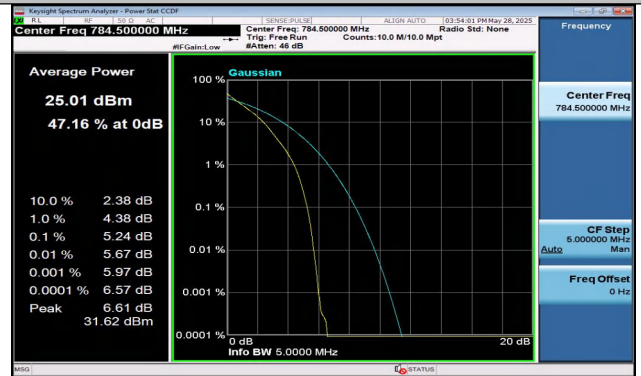
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Band13-5MHz-16QAM-23230-1RB#0-PASS



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



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



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



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



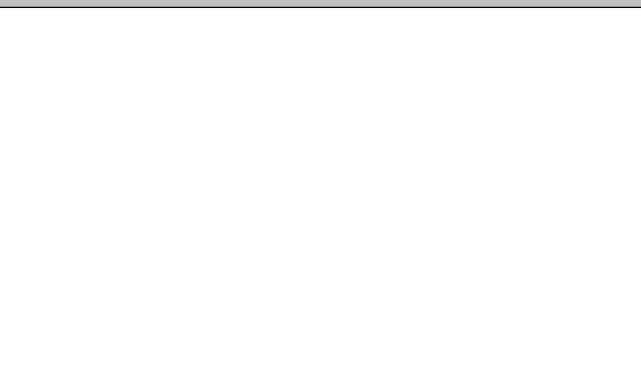
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Band13-10MHz-QPSK-23230-1RB#0-PASS



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



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



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Appendix C: 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	4.4951	4.962	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5015	5.028	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5038	5.018	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5071	5.006	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5140	4.993	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5064	4.990	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9708	9.885	PASS
Band13	10MHz	16QAM	23230	27RB#0	5.0002	5.888	PASS

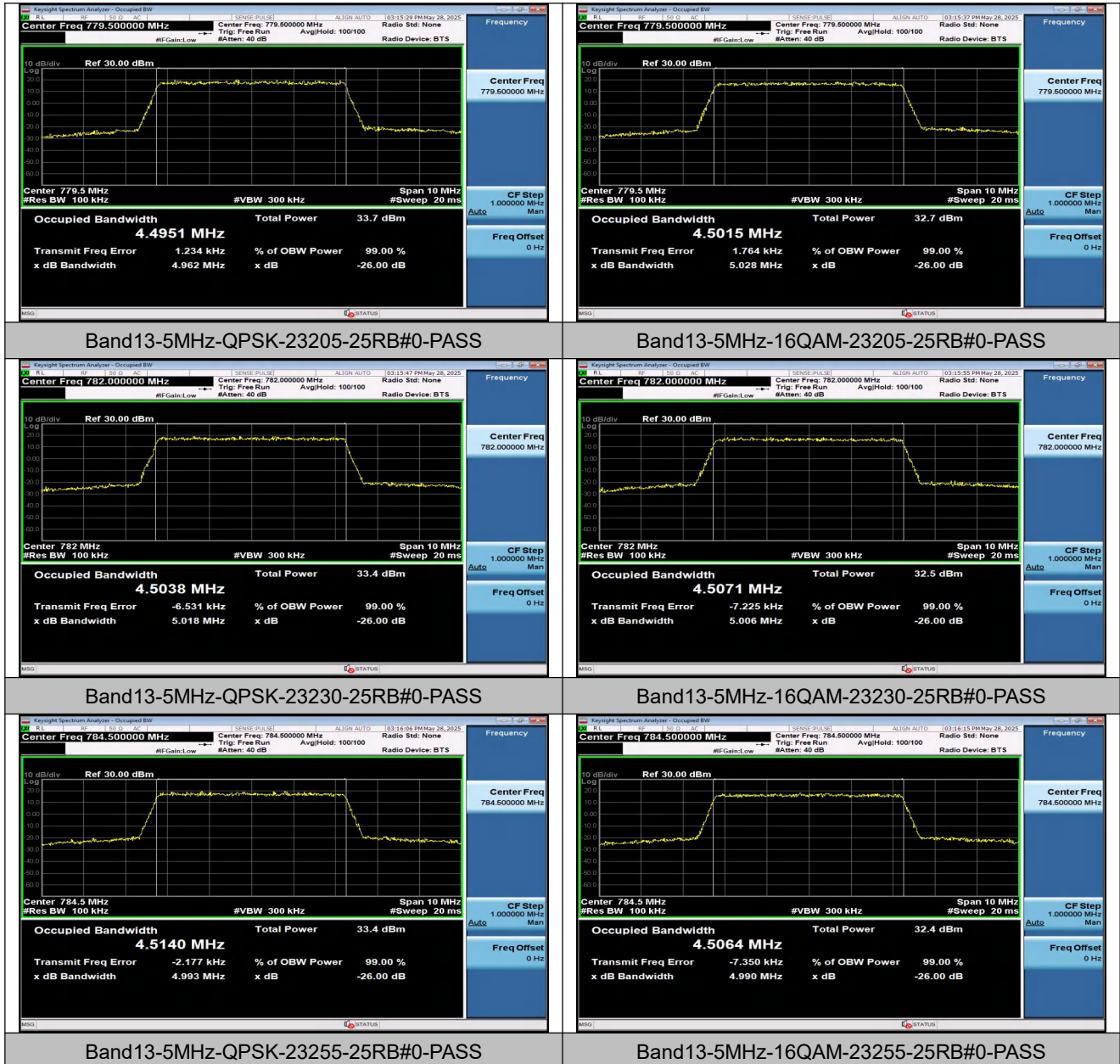


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Test Graphs

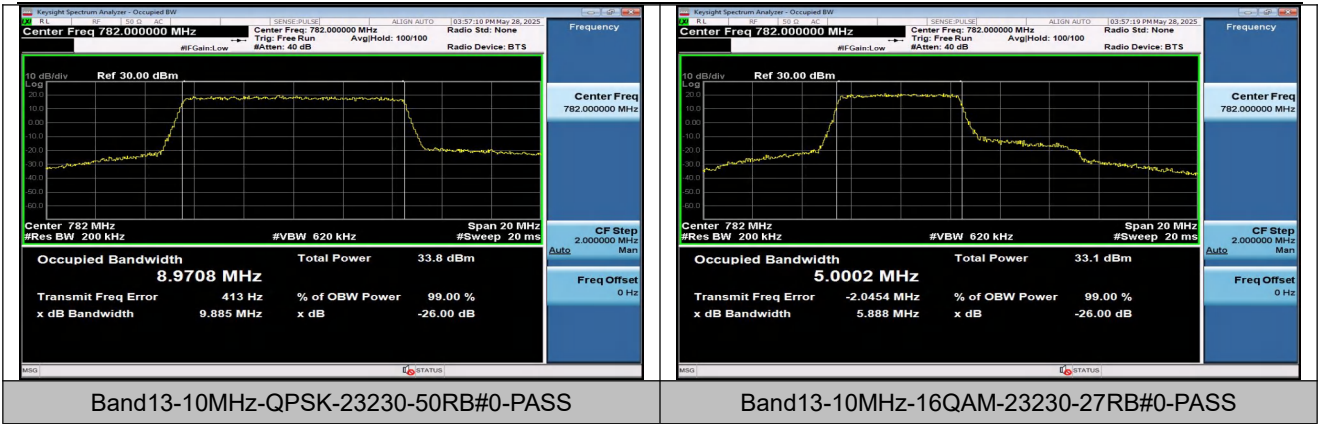




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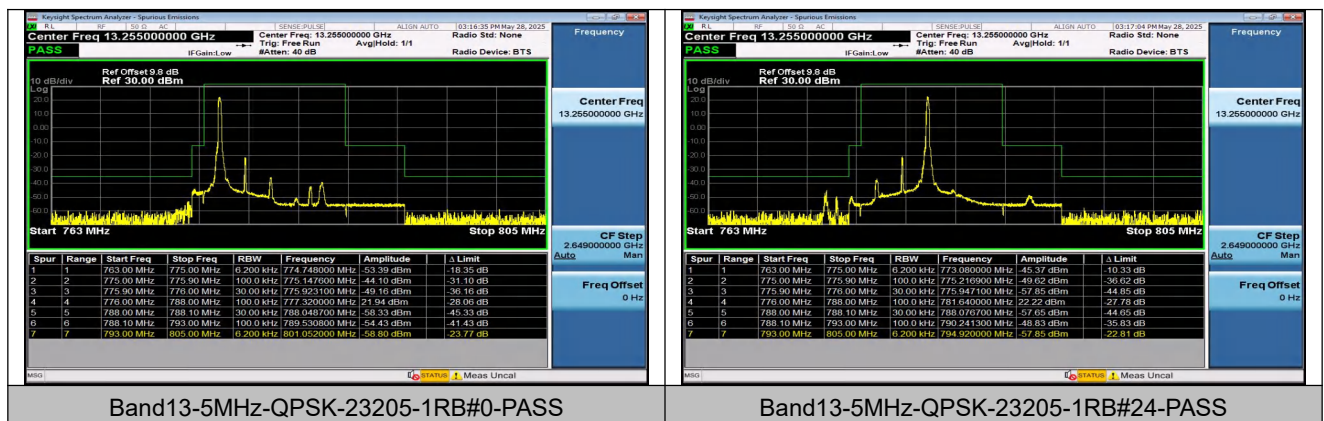
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Appendix D: Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	-53.39	PASS
Band13	5MHz	QPSK	23205	1RB#24	-45.37	PASS
Band13	5MHz	QPSK	23205	25RB#0	-43.34	PASS
Band13	5MHz	16QAM	23205	1RB#0	-54.36	PASS
Band13	5MHz	16QAM	23205	1RB#24	-46.99	PASS
Band13	5MHz	16QAM	23205	25RB#0	-43.73	PASS
Band13	5MHz	QPSK	23255	1RB#0	-55.79	PASS
Band13	5MHz	QPSK	23255	1RB#24	-52.82	PASS
Band13	5MHz	QPSK	23255	25RB#0	-51.90	PASS
Band13	5MHz	16QAM	23255	1RB#0	-56.10	PASS
Band13	5MHz	16QAM	23255	1RB#24	-56.97	PASS
Band13	5MHz	16QAM	23255	25RB#0	-53.03	PASS
Band13	10MHz	QPSK	23230	1RB#0	-46.88	PASS
Band13	10MHz	QPSK	23230	1RB#49	-56.74	PASS
Band13	10MHz	QPSK	23230	50RB#0	-44.15	PASS
Band13	10MHz	16QAM	23230	1RB#0	-49.55	PASS
Band13	10MHz	16QAM	23230	1RB#49	-56.75	PASS

Test Graphs

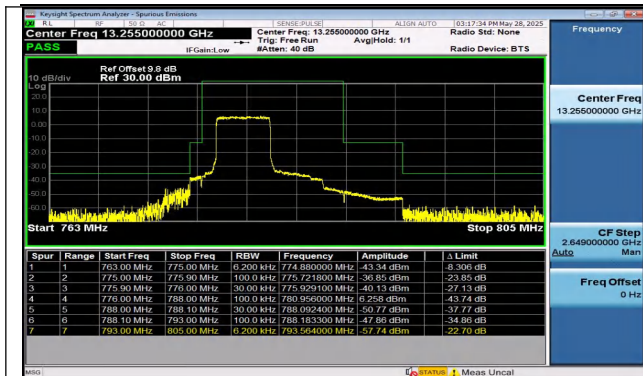




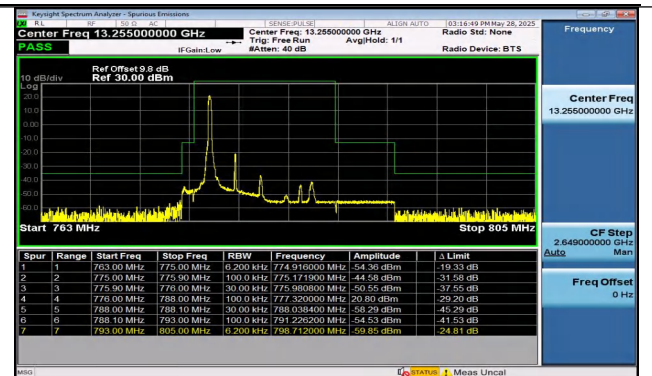
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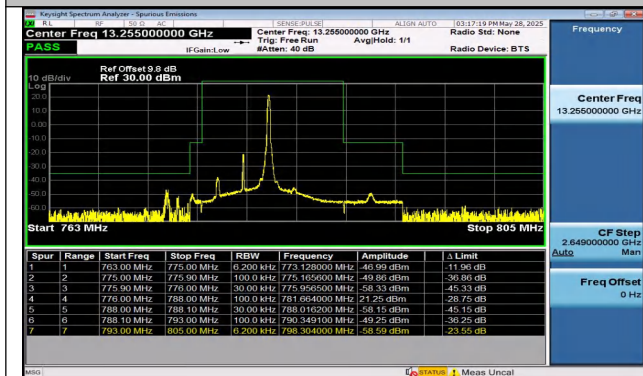
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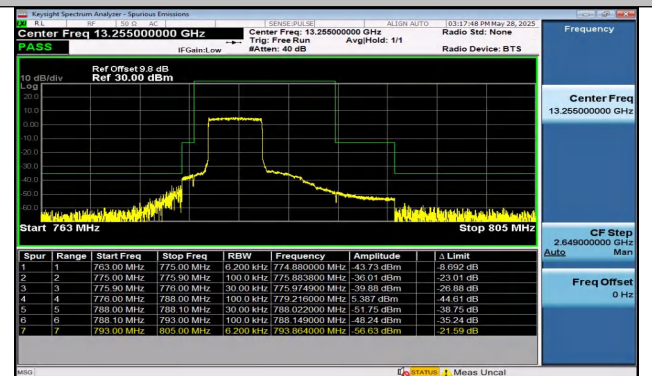
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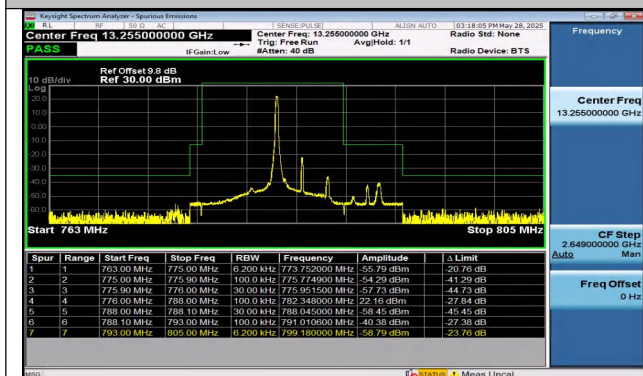
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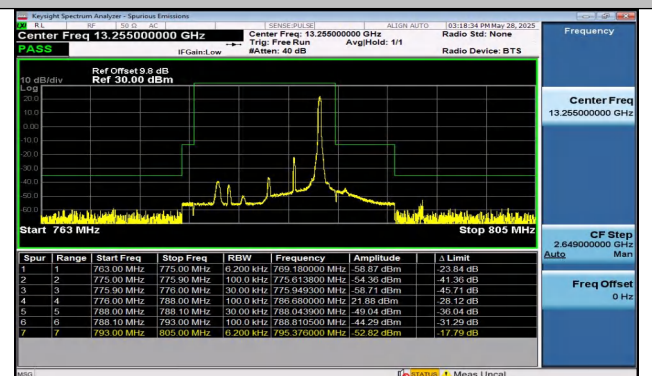
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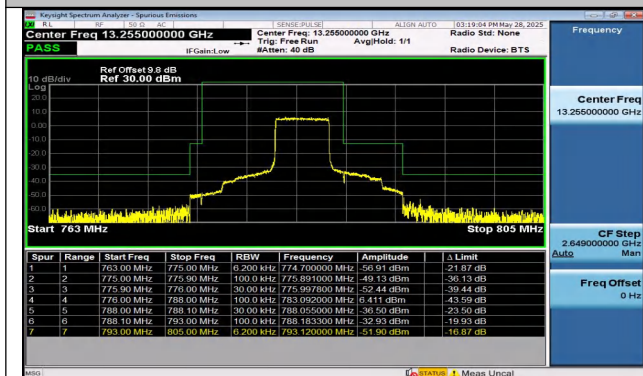
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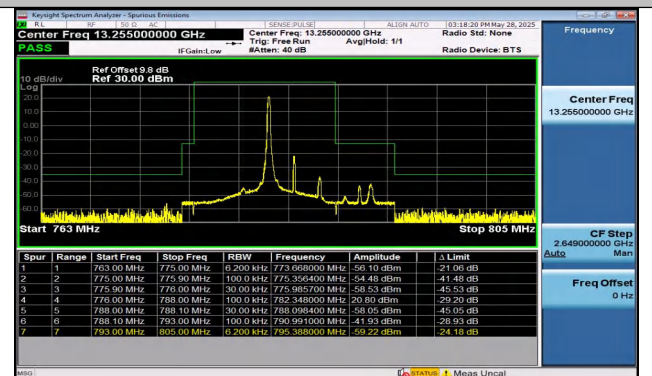
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Band13-5MHz-QPSK-23255-1RB#24-PASS



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



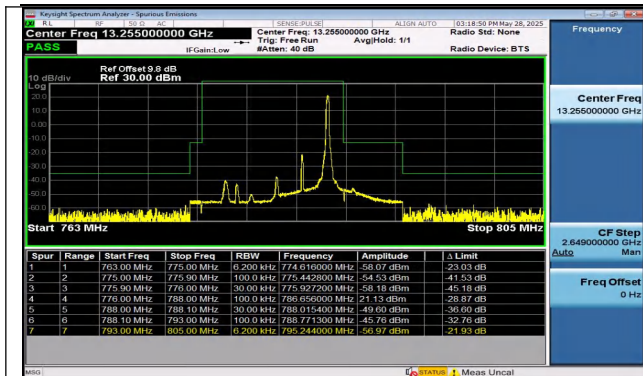
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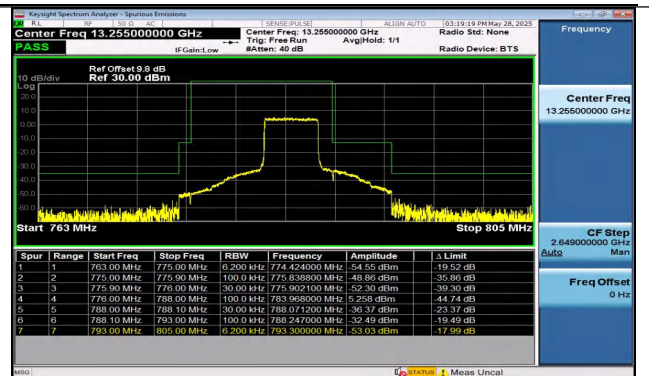
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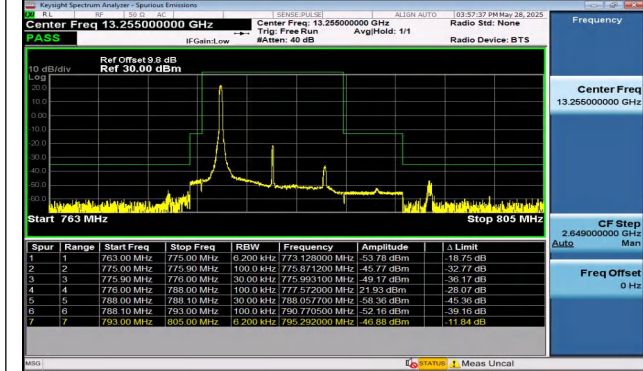
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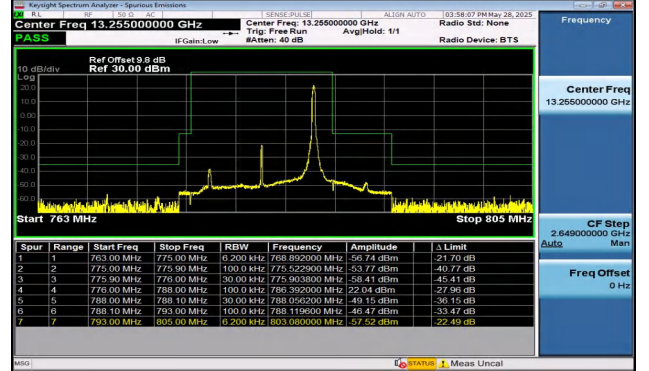
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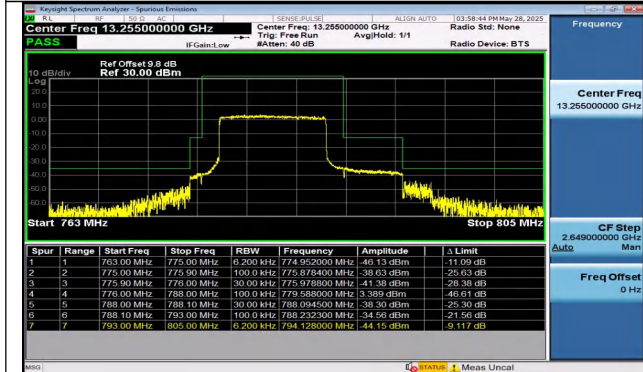
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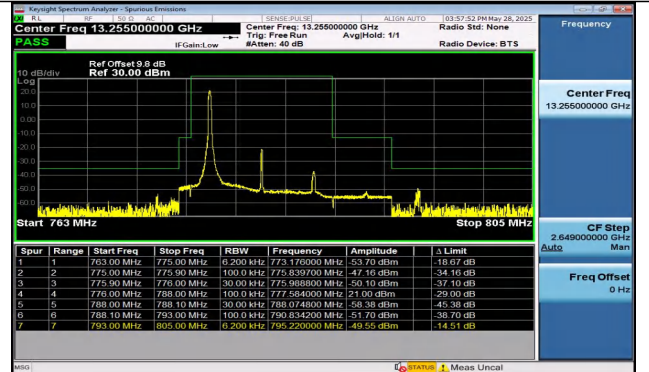
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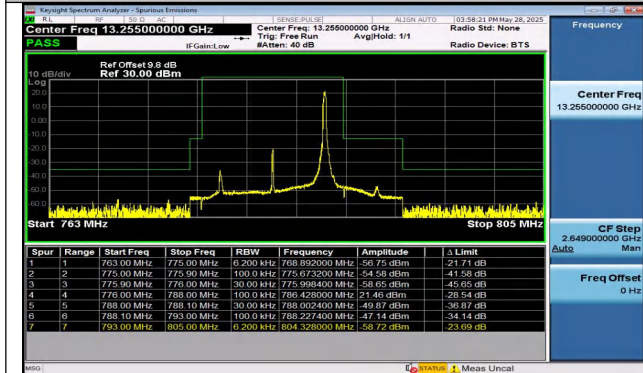
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Band13-10MHz-QPSK-23230-50RB#0-PASS



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



Band13-10MHz-16QAM-23230-1RB#49-PASS