Appendix-A LTE Band 12

Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	23.36	20.71	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.61	20.96	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.32	20.67	34.77	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.44	19.79	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	22.45	19.8	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	22.34	19.69	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	22.47	19.82	34.77	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.63	18.98	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.69	21.04	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.51	20.86	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	23.48	20.83	34.77	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.57	19.92	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.32	19.67	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.57	19.92	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	22.57	19.92	34.77	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	21.56	18.91	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.58	20.93	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.54	20.89	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.69	21.04	34.77	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.68	20.03	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	22.32	19.67	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	22.6	19.95	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	22.67	20.02	34.77	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.81	19.16	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.27	20.62	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.29	20.64	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.16	20.51	34.77	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.47	19.82	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#0	22.16	19.51	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.25	19.6	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.32	19.67	34.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.44	18.79	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#0	23.58	20.93	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.51	20.86	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#14	23.22	20.57	34.77	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.51	19.86	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#0	22.78	20.13	34.77	PASS

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Band12	3MHz	16QAM	23095	1RB#8	22.44	19.79	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#14	22.41	19.76	34.77	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.41	18.76	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.71	21.06	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.7	21.05	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.61	20.96	34.77	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.68	20.03	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#0	22.42	19.77	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#8	22.6	19.95	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#14	22.75	20.1	34.77	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.42	18.77	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.31	20.66	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.51	20.86	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.21	20.56	34.77	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.39	19.74	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.71	20.06	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.26	19.61	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	22.29	19.64	34.77	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.47	18.82	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#0	23.51	20.86	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#12	23.46	20.81	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#24	23.37	20.72	34.77	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.5	19.85	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#0	22.71	20.06	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.66	20.01	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#24	22.78	20.13	34.77	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.41	18.76	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#0	23.48	20.83	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#12	23.77	21.12	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#24	23.53	20.88	34.77	PASS
Band12	5MHz	QPSK	23155	25RB#0	22.59	19.94	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#0	22.34	19.69	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#12	22.43	19.78	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#24	22.64	19.99	34.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.41	18.76	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.36	20.71	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.7	21.05	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#49	23.37	20.72	34.77	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.46	19.81	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#0	22.65	20	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.35	19.7	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#49	22.42	19.77	34.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	21.54	18.89	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.25	20.6	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#24	23.56	20.91	34.77	PASS

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Band12	10MHz	QPSK	23095	1RB#49	23.5	20.85	34.77	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.51	19.86	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#0	22.33	19.68	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.45	19.8	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.5	19.85	34.77	PASS
Band12	10MHz	16QAM	23095	50RB#0	21.39	18.74	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#0	23.54	20.89	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.62	20.97	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.5	20.85	34.77	PASS
Band12	10MHz	QPSK	23130	50RB#0	22.59	19.94	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	22.53	19.88	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#24	22.59	19.94	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#49	22.51	19.86	34.77	PASS
Band12	10MHz	16QAM	23130	50RB#0	21.49	18.84	34.77	PASS

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Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	5.48	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	6.21	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.60	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	6.35	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	5.45	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	6.21	13	PASS

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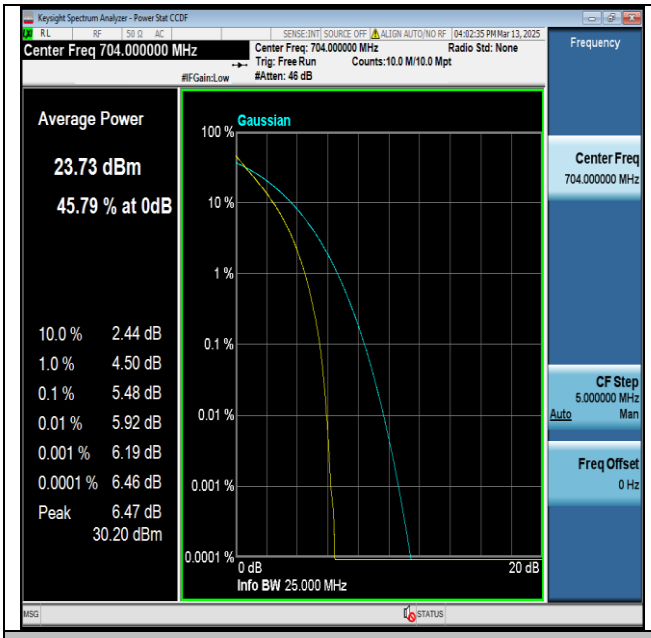
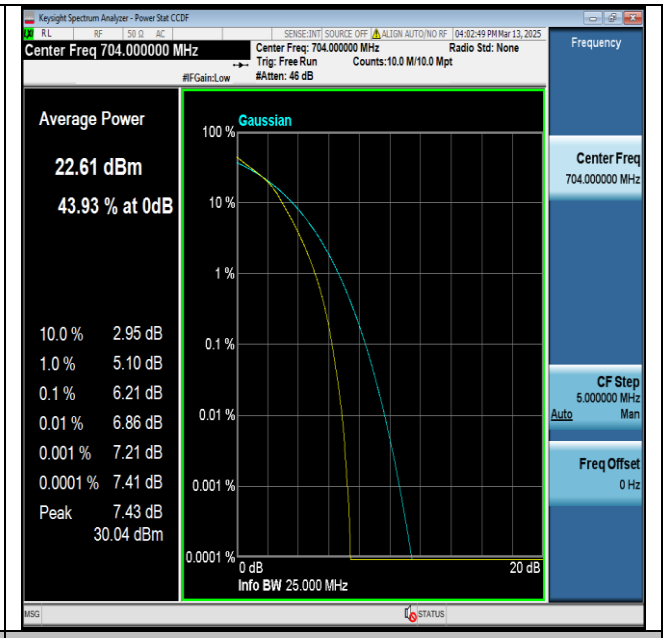
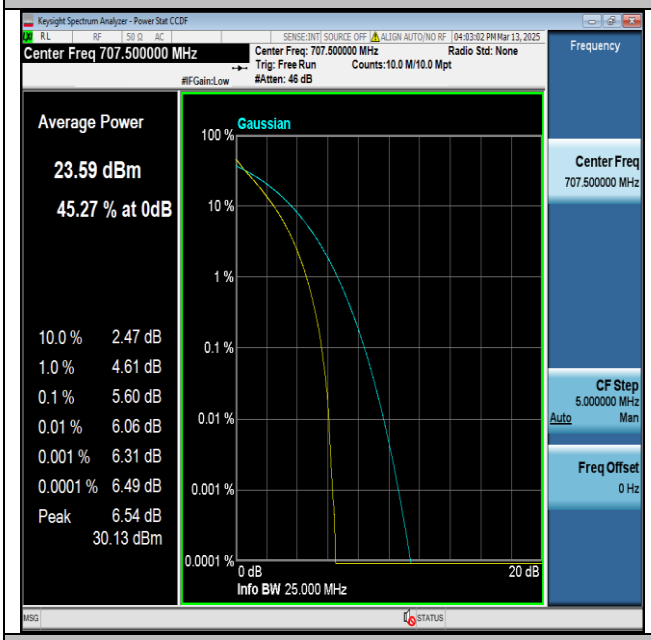
Test Graphs



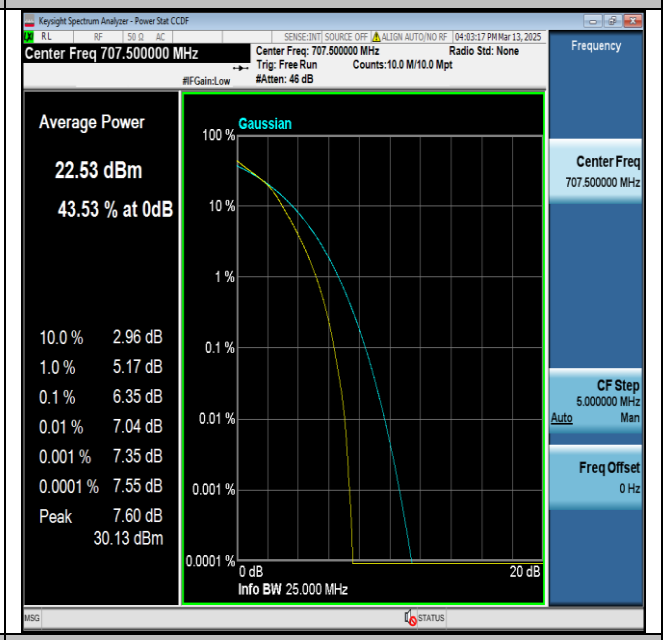
Band12-10MHz-QPSK-23060-50RB#0-PASS



Band12-10MHz-16QAM-23060-50RB#0-PASS



Band12-10MHz-QPSK-23095-50RB#0-PASS



Band12-10MHz-16QAM-23095-50RB#0-PASS

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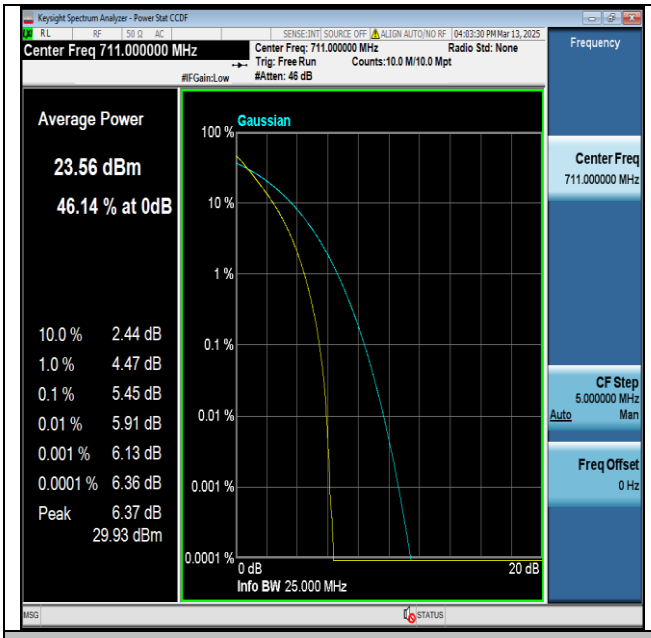
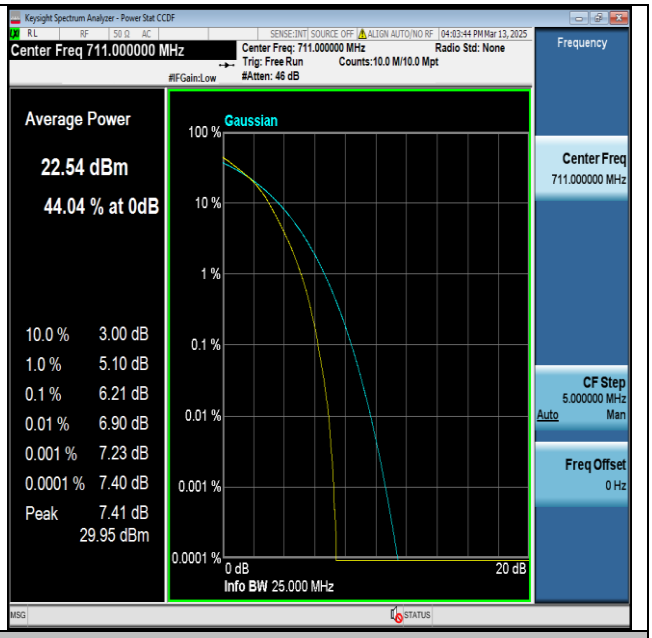


Band12-10MHz-QPSK-23130-50RB#0-PASS



Band12-10MHz-16QAM-23130-50RB#0-PASS

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26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.0879	1.256	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.0914	1.295	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.0908	1.286	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.0939	1.295	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.0909	1.264	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.0967	1.303	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.6900	2.936	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.6865	2.958	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.6944	2.945	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.6895	2.959	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.6863	2.920	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.6893	2.956	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.4821	4.914	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.4742	4.941	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.4831	4.962	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.4830	4.966	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.4769	4.940	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.4819	4.949	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.9744	9.816	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.9419	9.777	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.9866	9.819	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.9542	9.786	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.9414	9.781	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.9323	9.707	PASS

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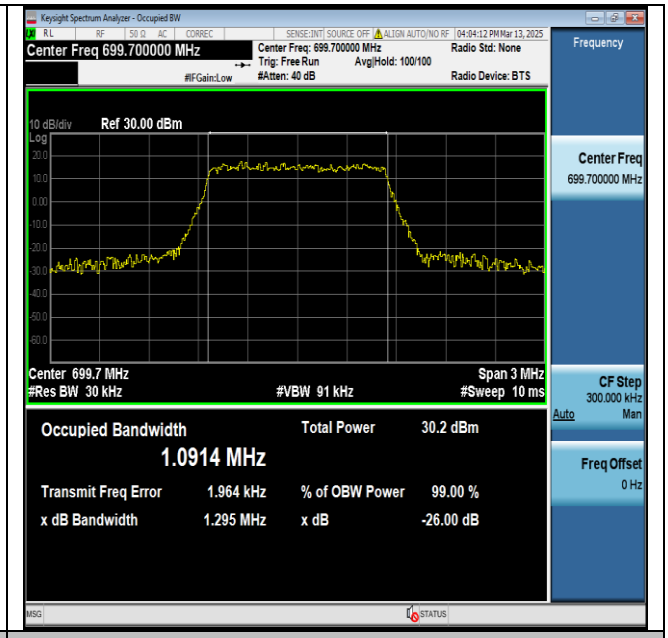
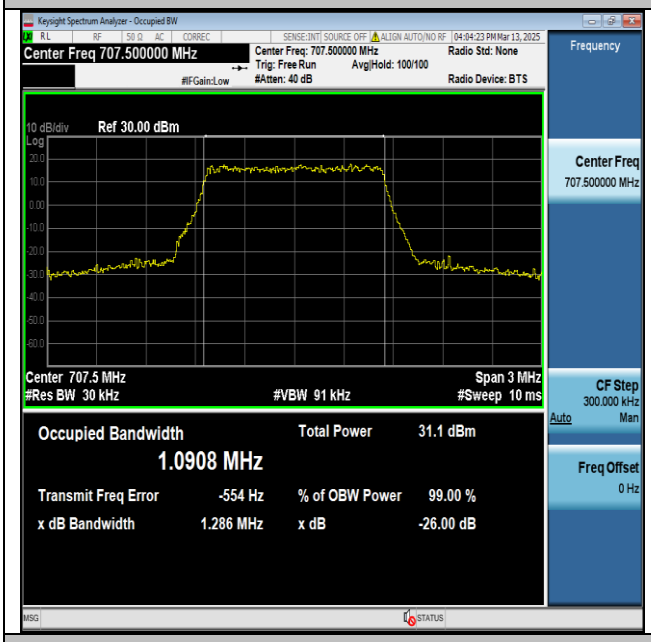
Test Graphs

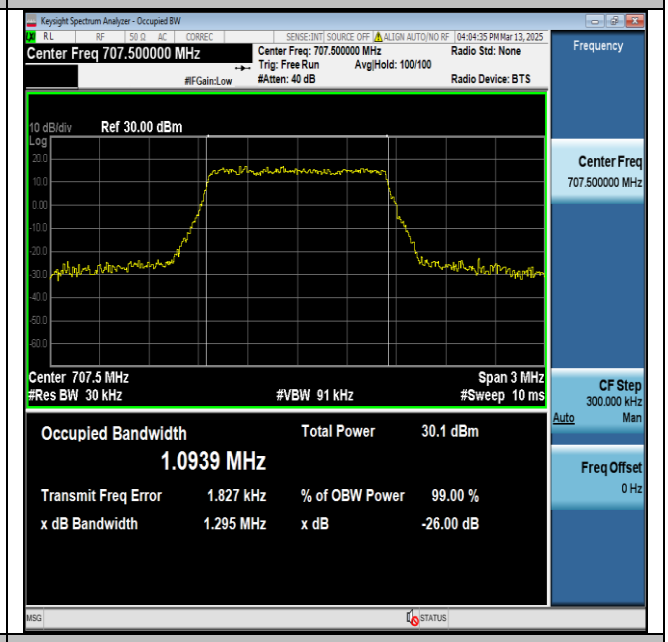
Band12-1.4MHz-QPSK-23017-6RB#0-PASS



Band12-1.4MHz-16QAM-23017-6RB#0-PASS



Band12-1.4MHz-QPSK-23095-6RB#0-PASS



Band12-1.4MHz-16QAM-23095-6RB#0-PASS

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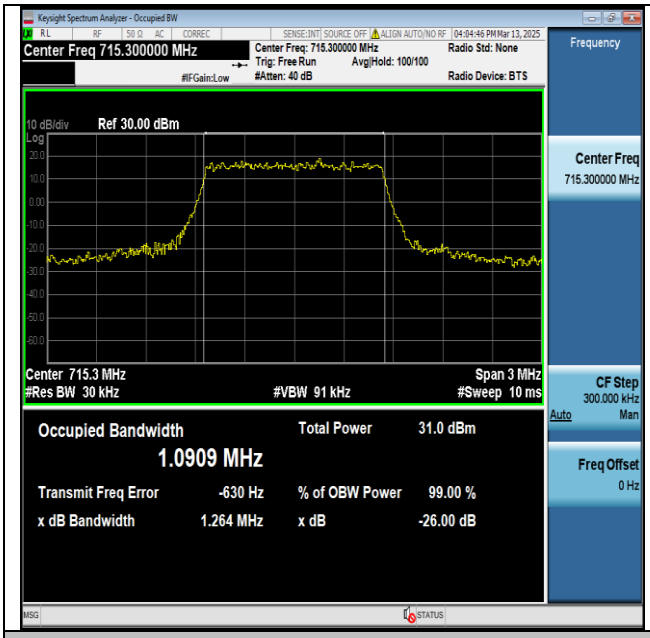
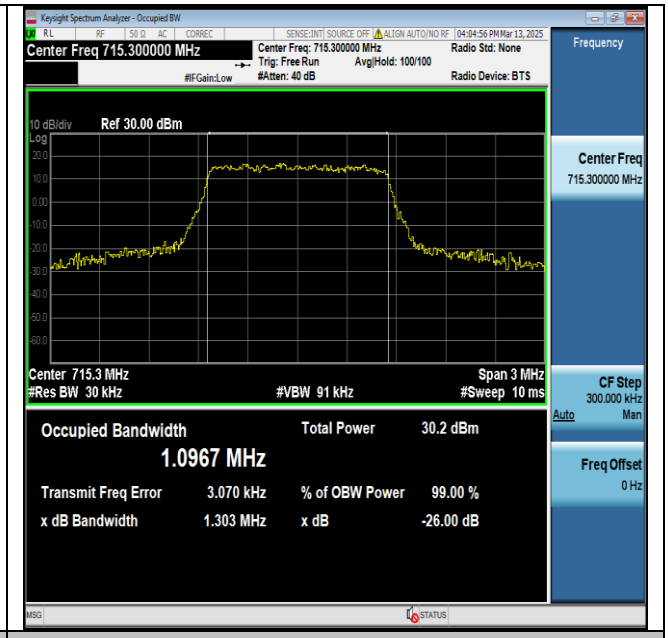
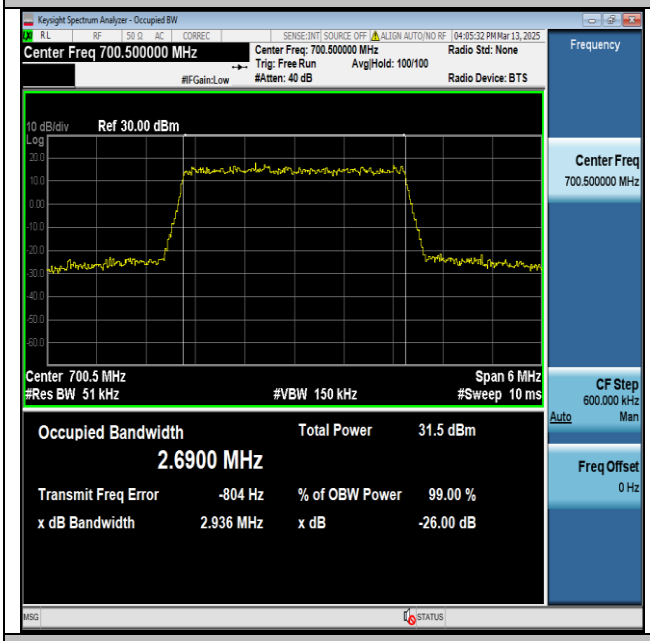


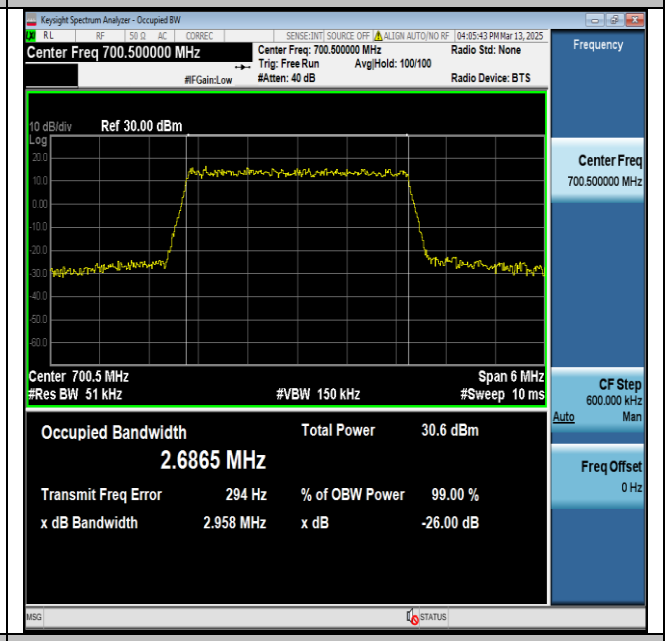
Band12-1.4MHz-QPSK-23173-6RB#0-PASS



Band12-1.4MHz-16QAM-23173-6RB#0-PASS



Band12-3MHz-QPSK-23025-15RB#0-PASS



Band12-3MHz-16QAM-23025-15RB#0-PASS

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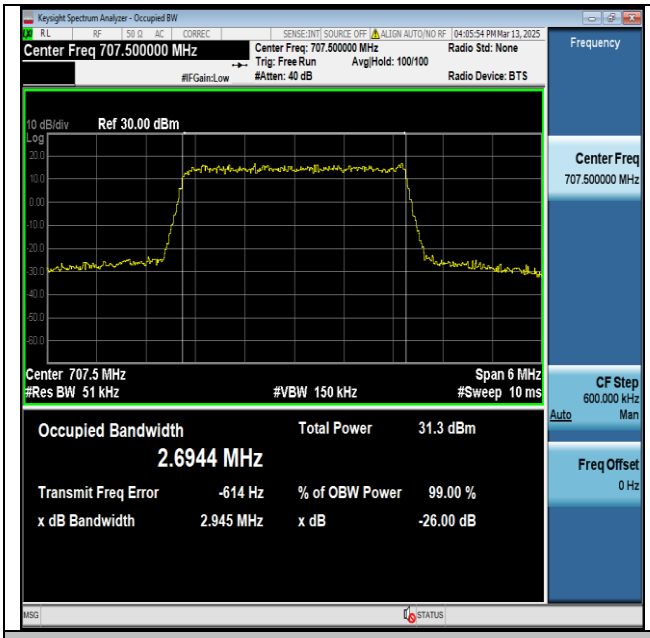

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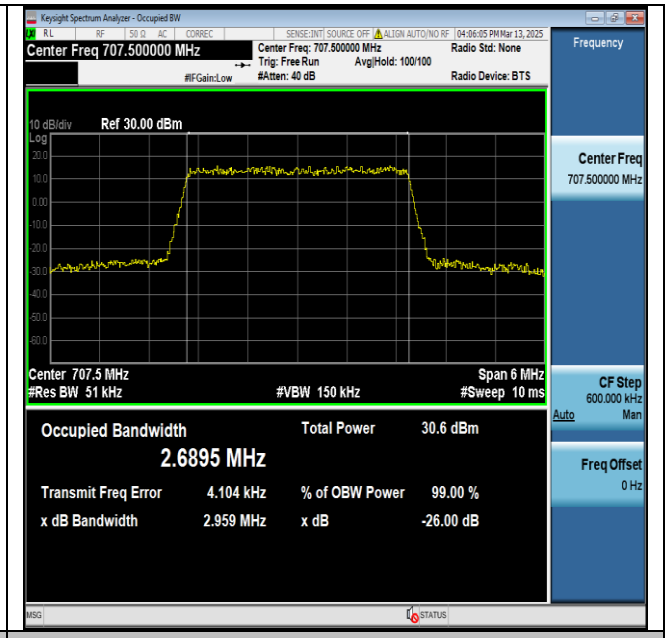

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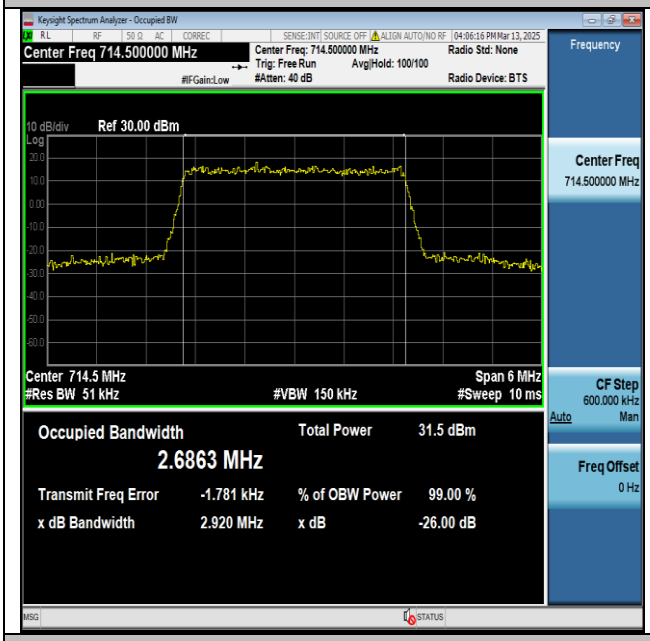
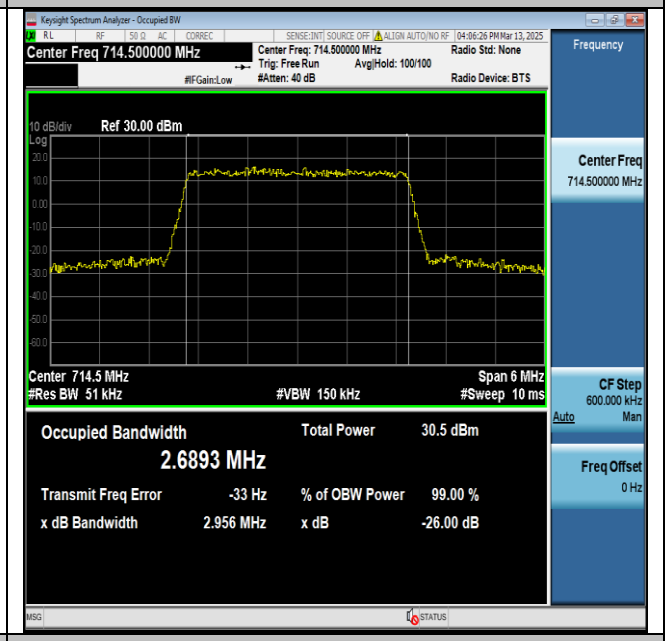


Band12-3MHz-QPSK-23165-15RB#0-PASS



Band12-3MHz-16QAM-23165-15RB#0-PASS

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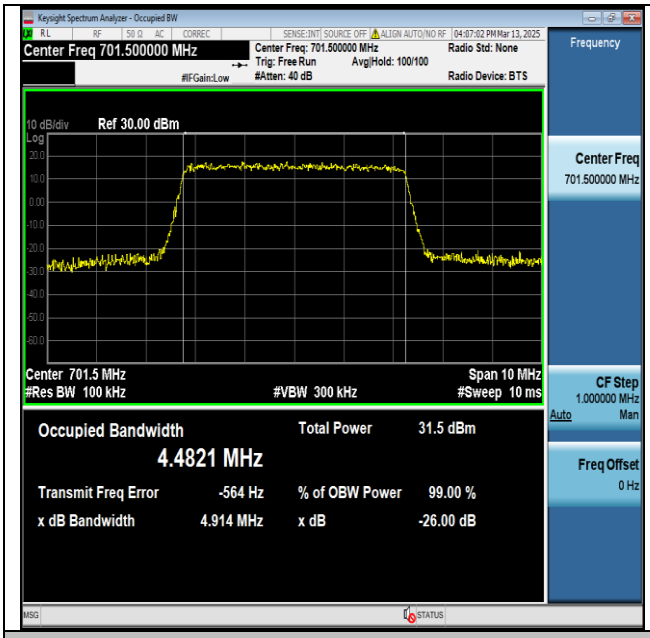
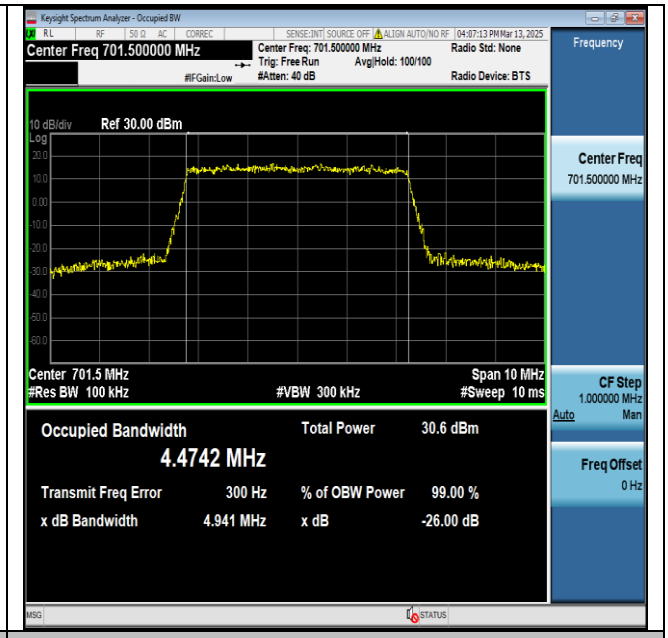


Band12-5MHz-QPSK-23035-25RB#0-PASS



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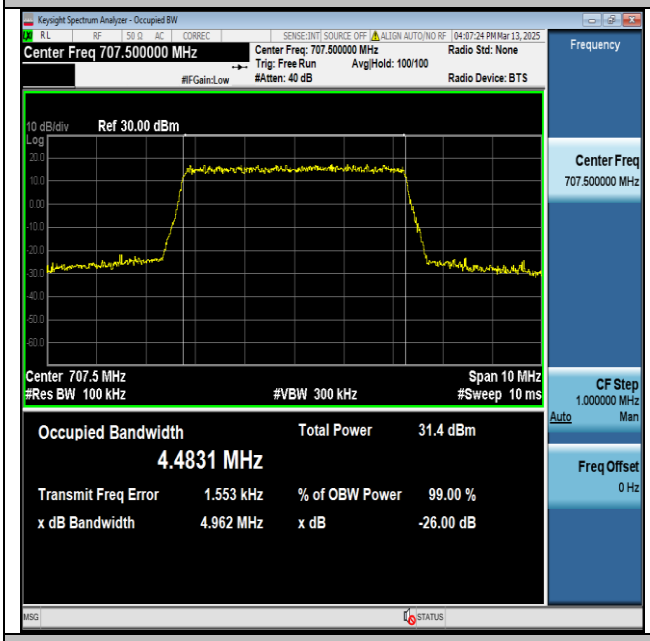
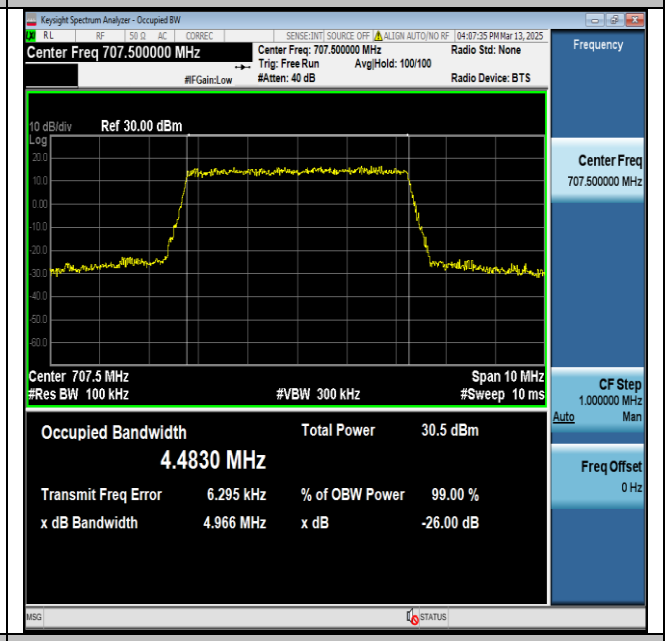


Band12-5MHz-QPSK-23095-25RB#0-PASS



Band12-5MHz-16QAM-23095-25RB#0-PASS

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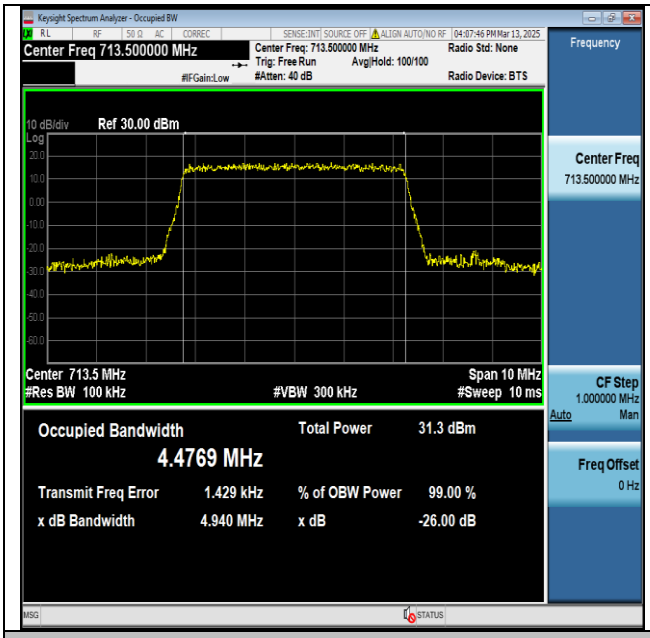
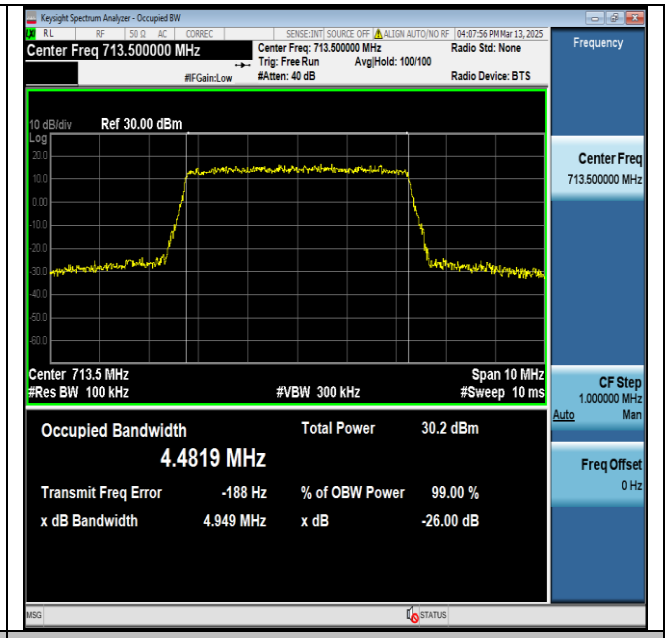
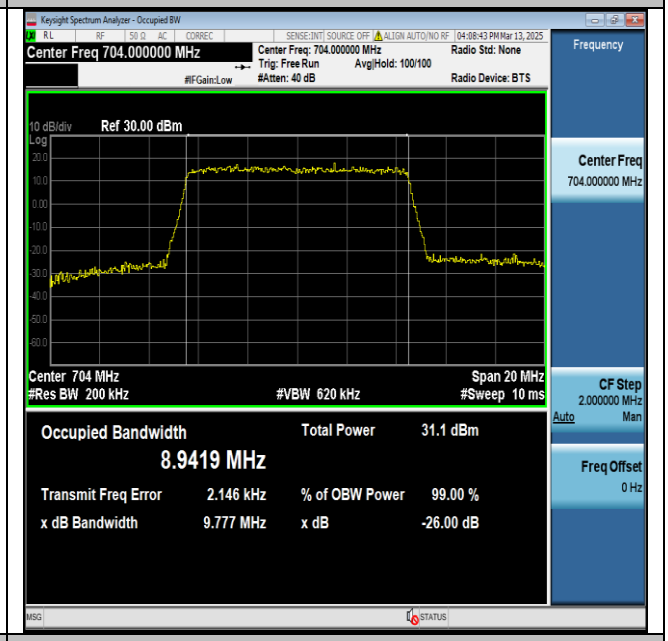


Band12-5MHz-QPSK-23155-25RB#0-PASS



Band12-5MHz-16QAM-23155-25RB#0-PASS

Band12-10MHz-QPSK-23060-50RB#0-PASS



Band12-10MHz-16QAM-23060-50RB#0-PASS

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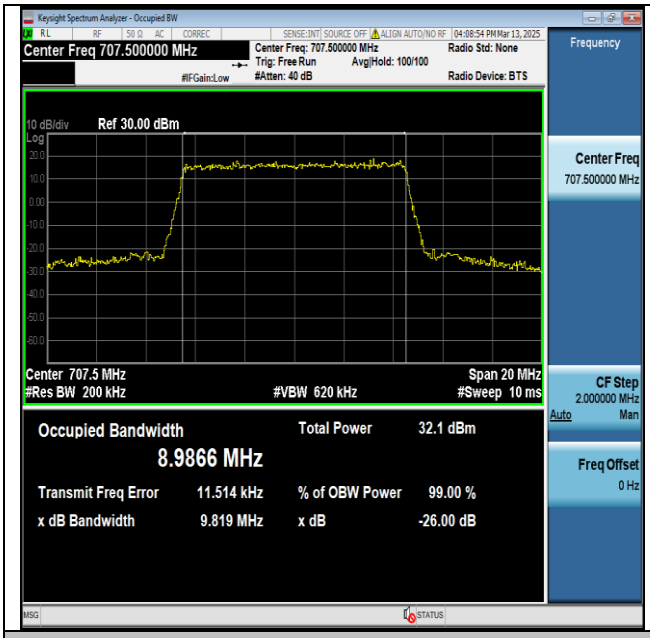
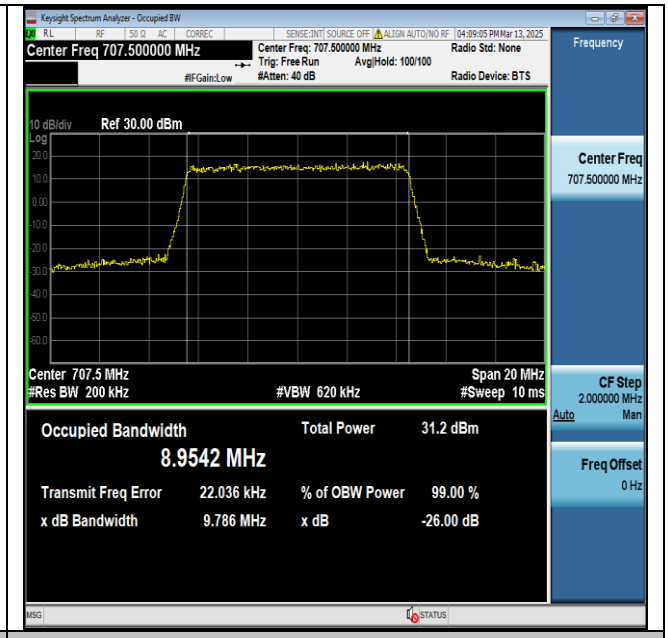
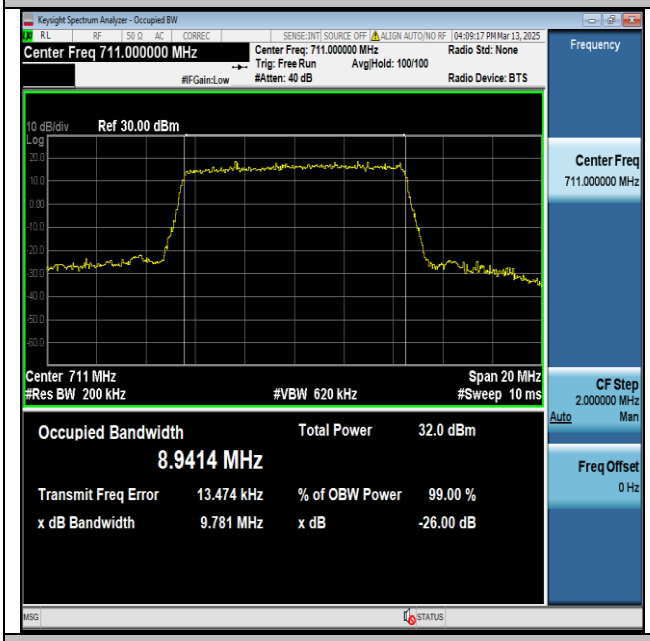


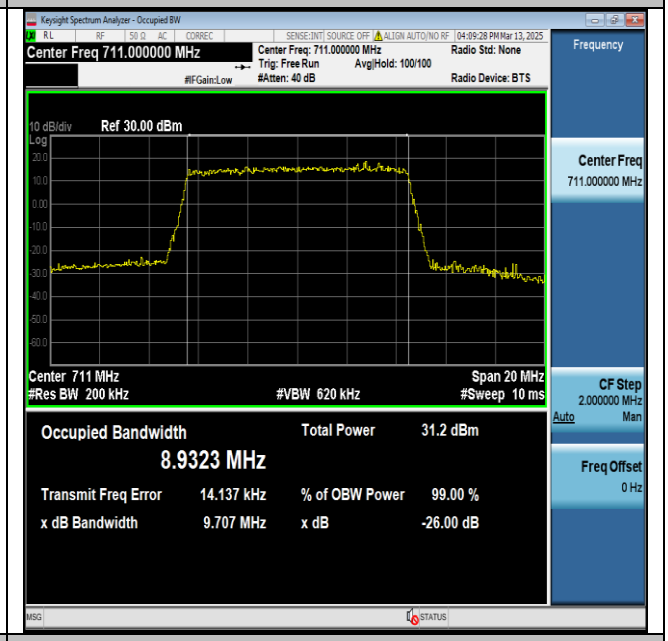
Band12-10MHz-QPSK-23095-50RB#0-PASS



Band12-10MHz-16QAM-23095-50RB#0-PASS



Band12-10MHz-QPSK-23130-50RB#0-PASS



Band12-10MHz-16QAM-23130-50RB#0-PASS

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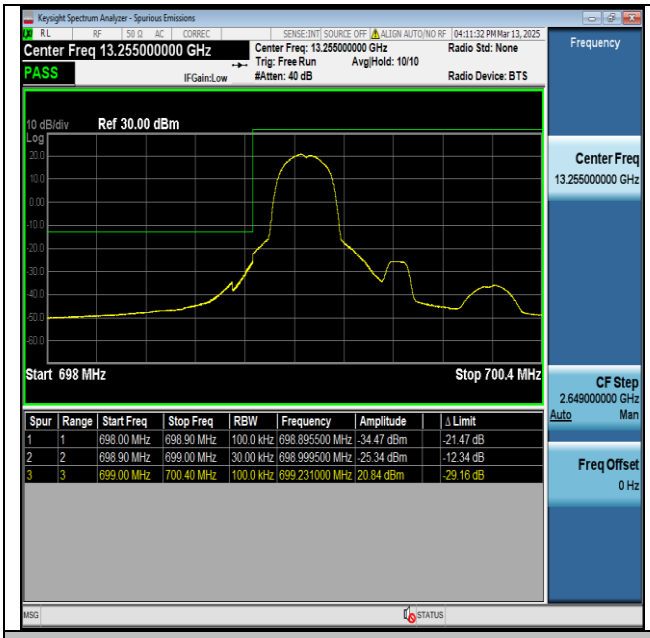
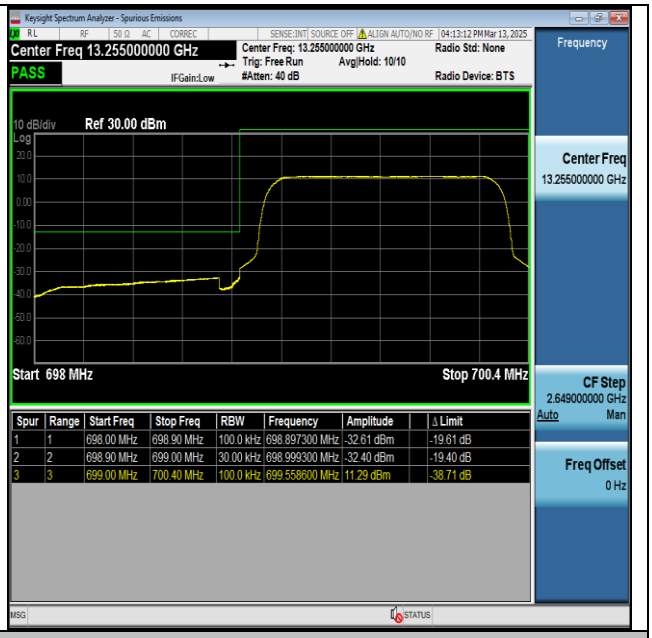
Band Edge

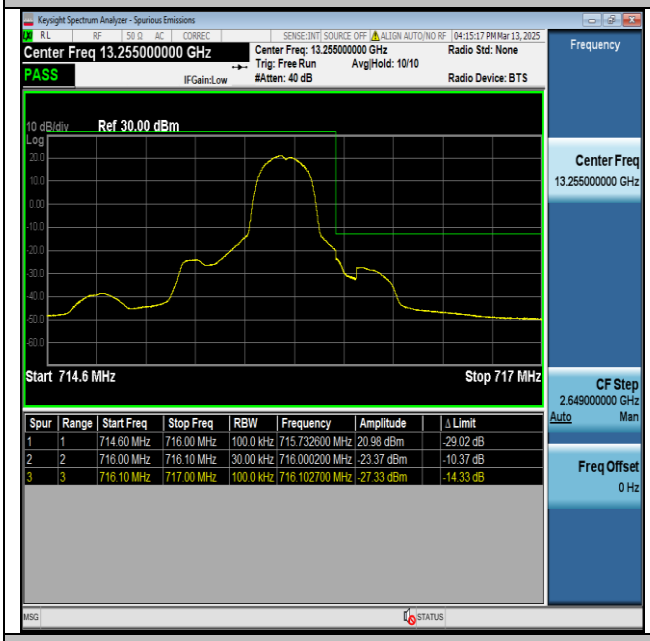
Test Graphs



Band12-1.4MHz-QPSK-23017-1RB#0-PASS



Band12-1.4MHz-QPSK-23017-6RB#0-PASS



Band12-1.4MHz-QPSK-23173-1RB#5-PASS

Band12-1.4MHz-QPSK-23173-6RB#0-PASS

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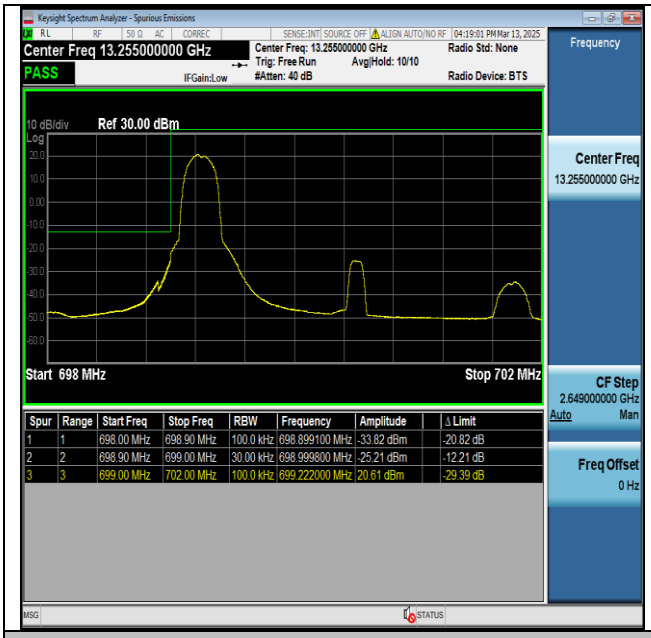
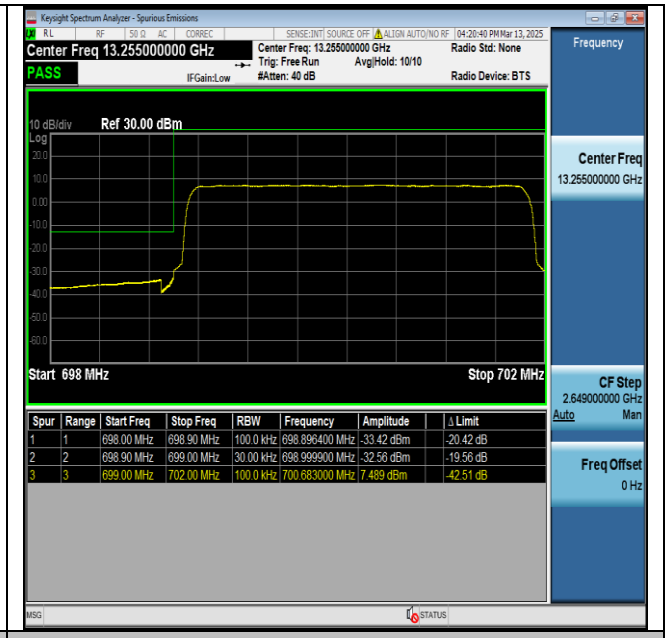
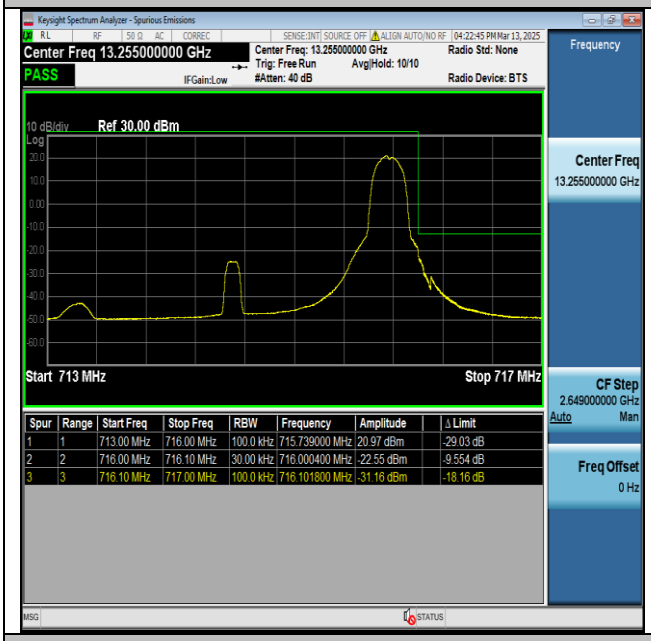


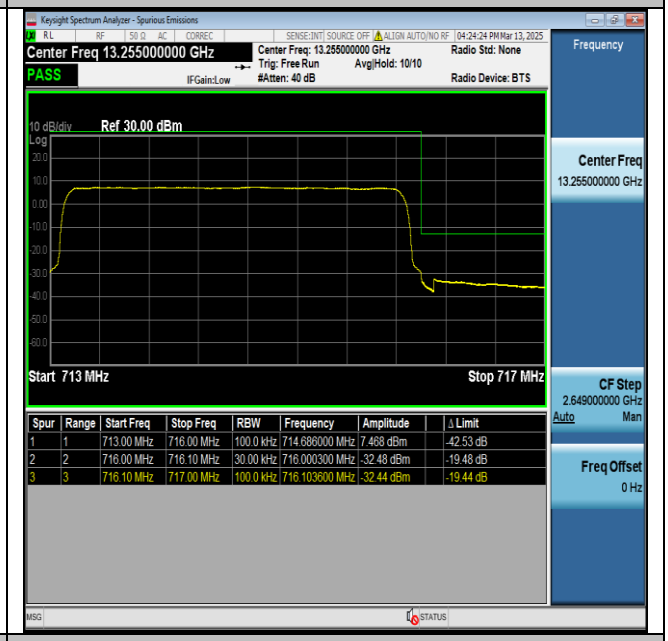
Band12-3MHz-QPSK-23025-1RB#0-PASS



Band12-3MHz-QPSK-23025-15RB#0-PASS



Band12-3MHz-QPSK-23165-1RB#14-PASS



Band12-3MHz-QPSK-23165-15RB#0-PASS

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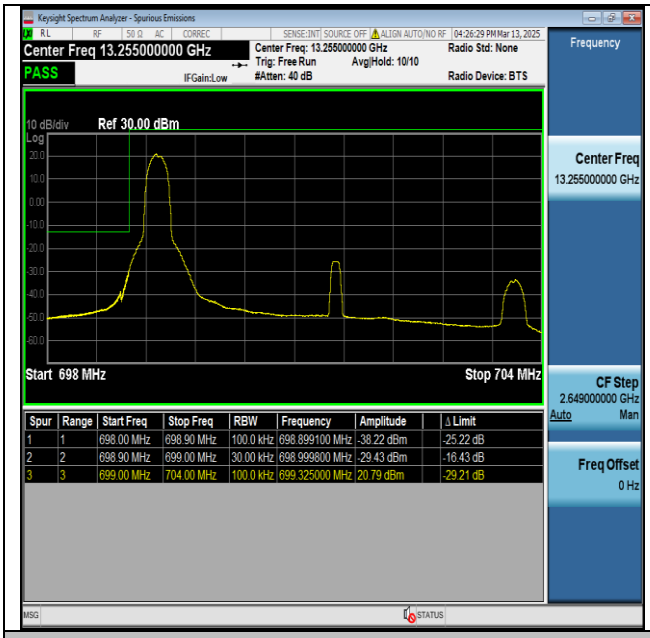
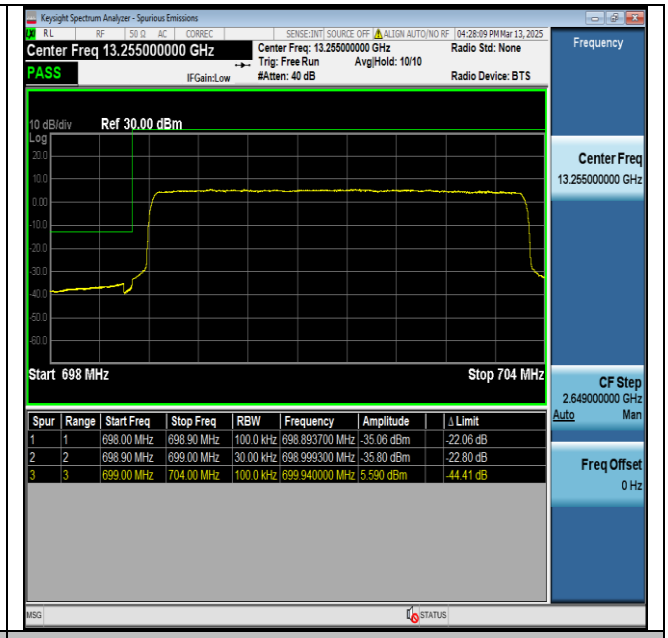
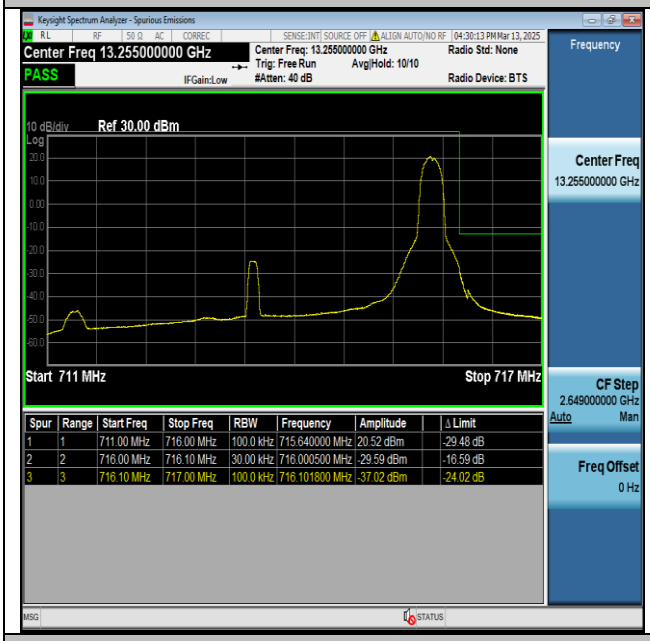


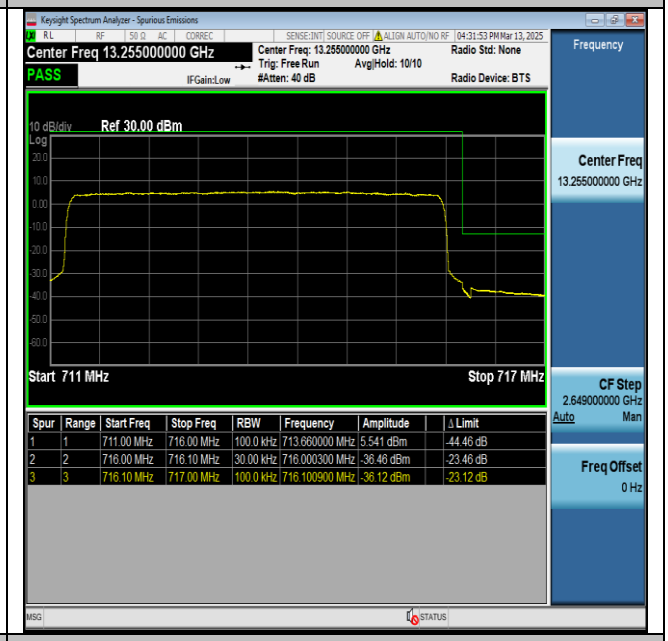
Band12-5MHz-QPSK-23035-1RB#0-PASS



Band12-5MHz-QPSK-23035-25RB#0-PASS



Band12-5MHz-QPSK-23155-1RB#24-PASS



Band12-5MHz-QPSK-23155-25RB#0-PASS

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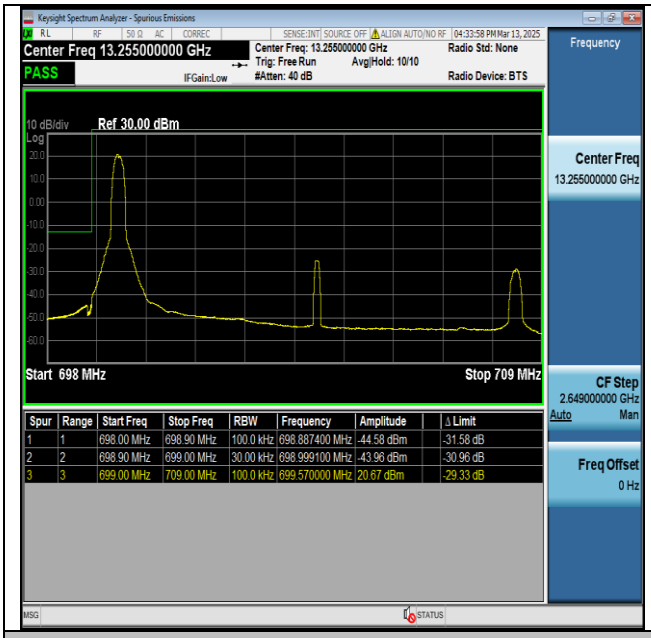
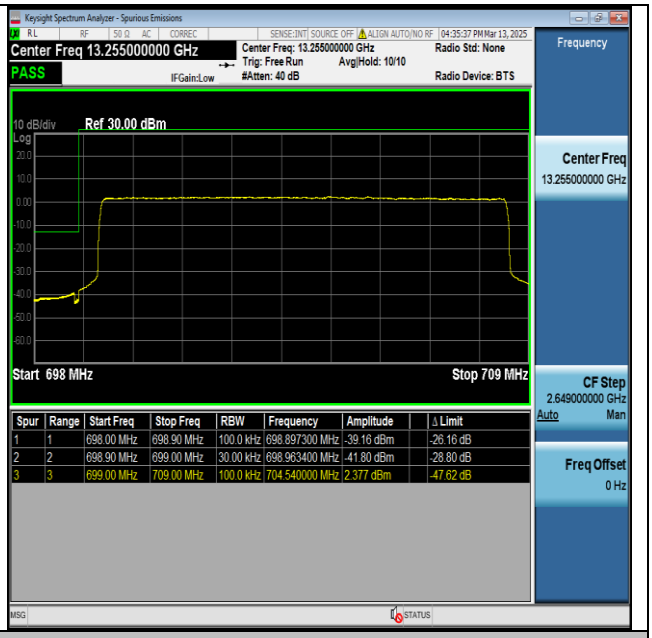


Band12-10MHz-QPSK-23060-1RB#0-PASS



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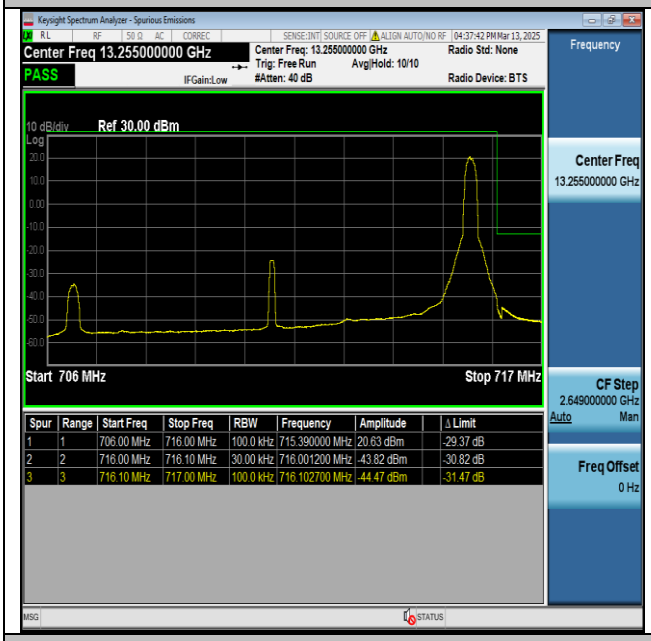
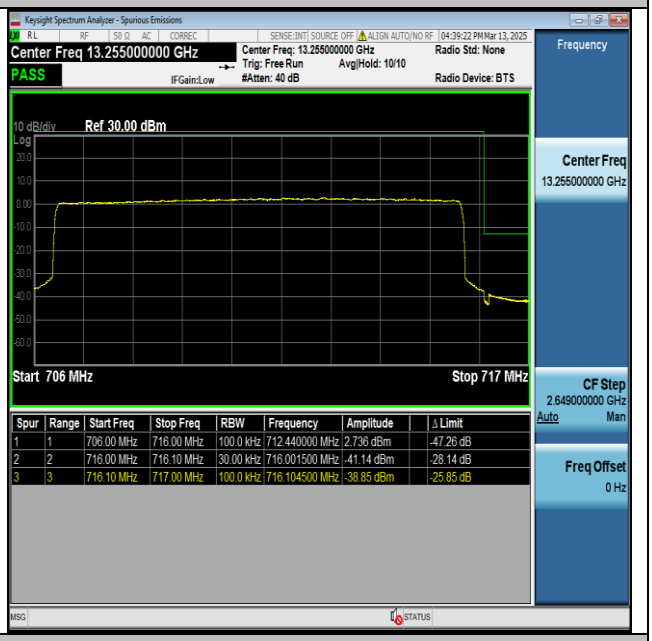


Band12-10MHz-QPSK-23130-1RB#49-PASS



Band12-10MHz-QPSK-23130-50RB#0-PASS

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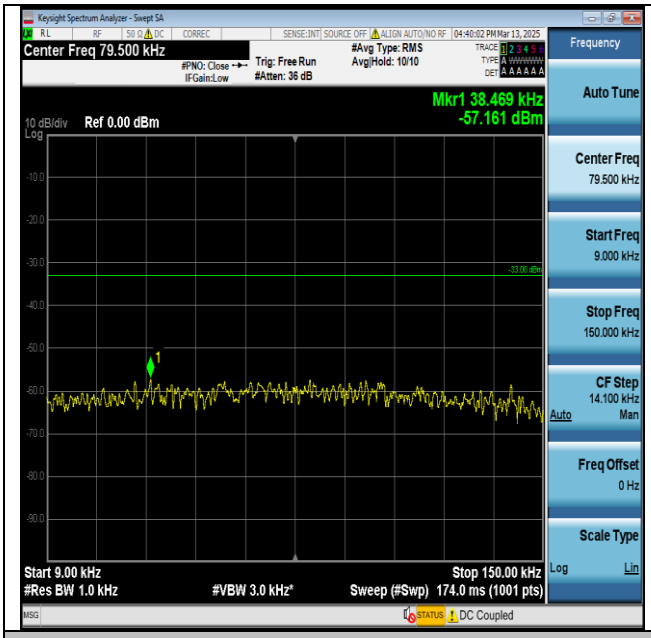
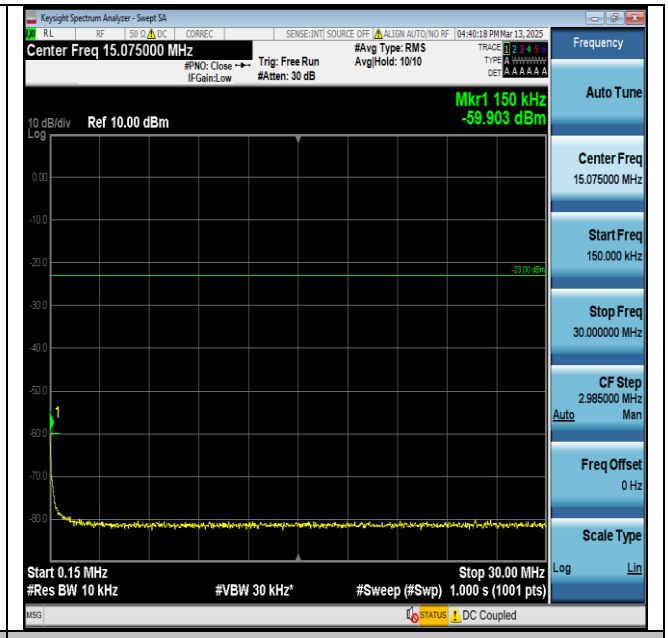
Conducted Spurious Emission

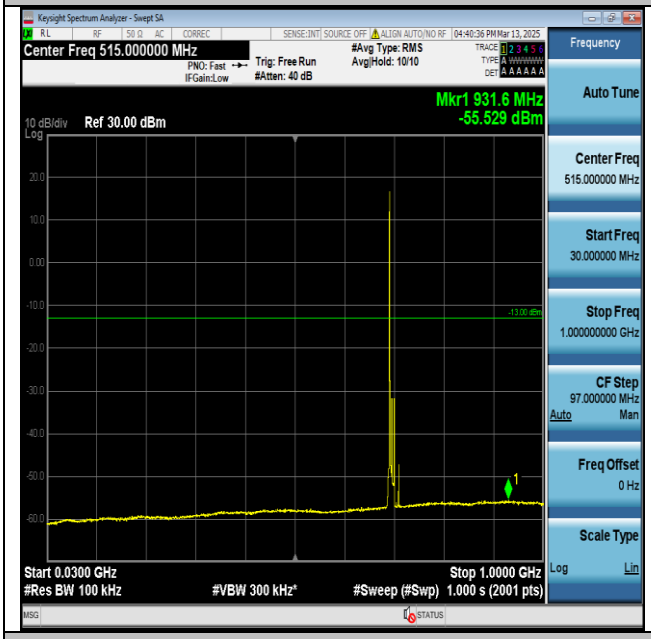
Test Graphs



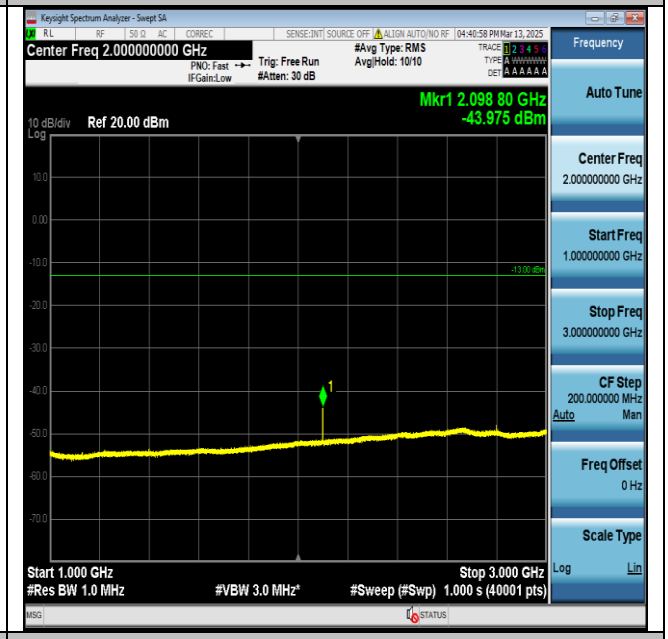
Band12-10MHz-QPSK-23060-1RB#0-0.009~0.15-PASS



Band12-10MHz-QPSK-23060-1RB#0-0.15~30-PASS



Band12-10MHz-QPSK-23060-1RB#0-30~1000-PASS



Band12-10MHz-QPSK-23060-1RB#0-1000~3000-PASS

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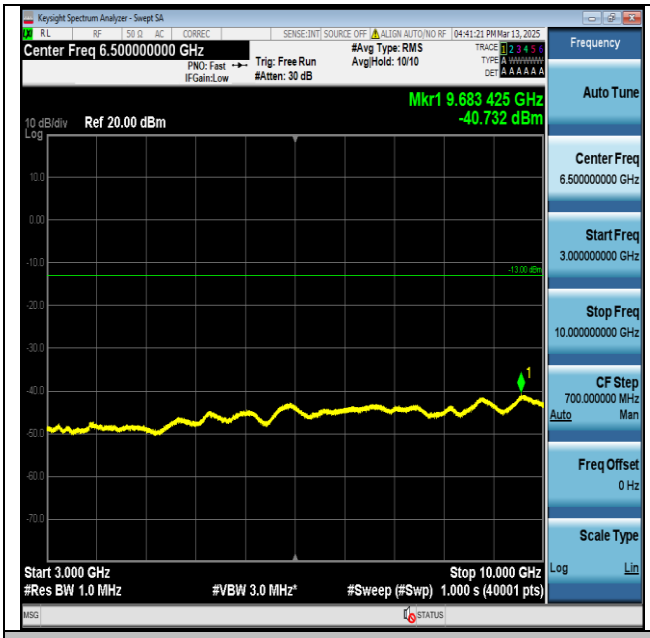
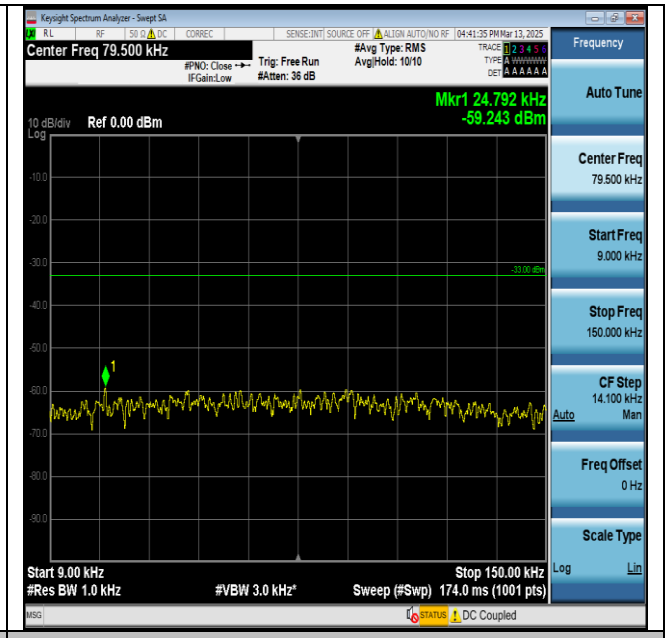
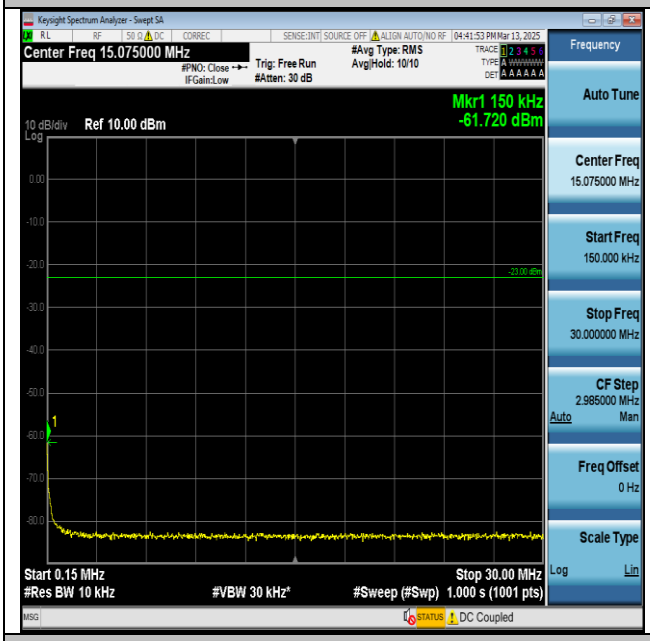


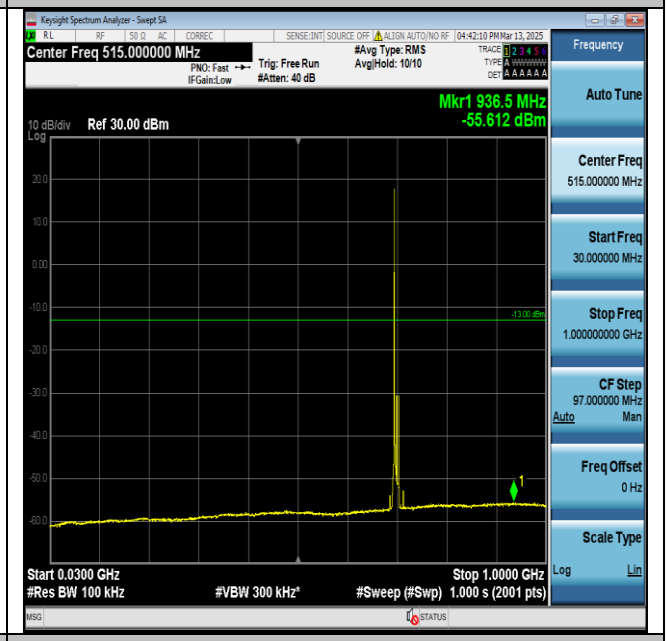
Band12-10MHz-QPSK-23060-1RB#0-3000~10000-PASS



Band12-10MHz-QPSK-23095-1RB#0-0.009~0.15-PASS



Band12-10MHz-QPSK-23095-1RB#0-0.15~30-PASS



Band12-10MHz-QPSK-23095-1RB#0-30~1000-PASS

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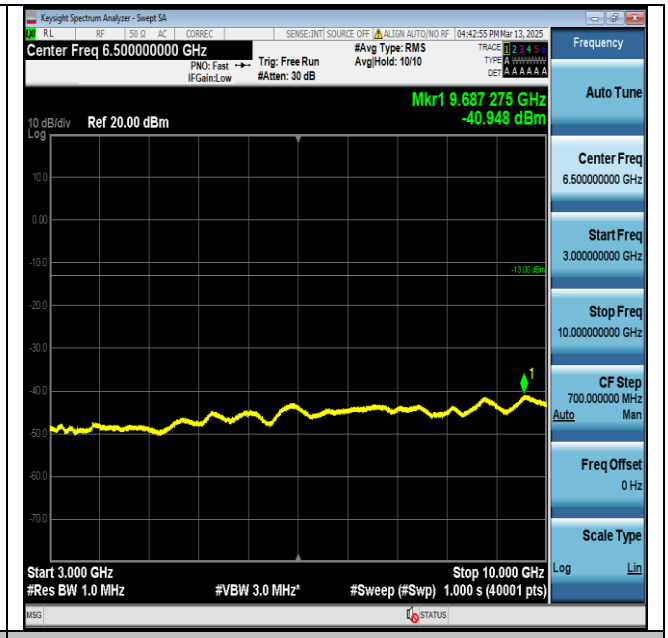
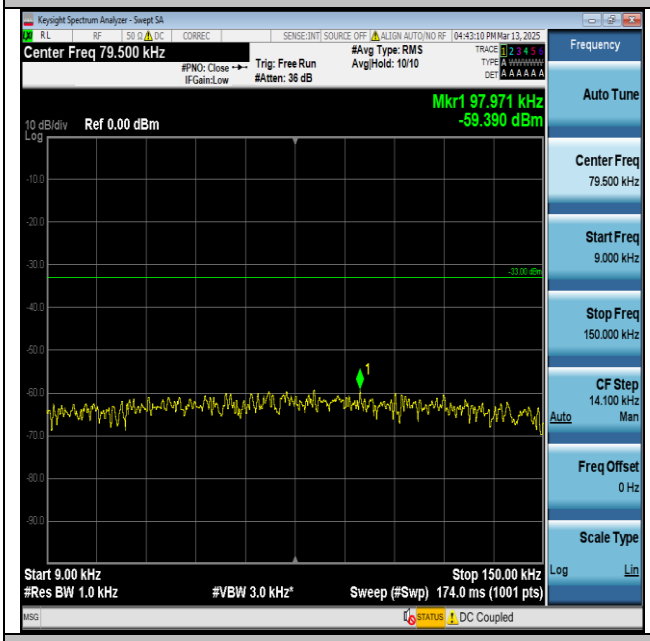
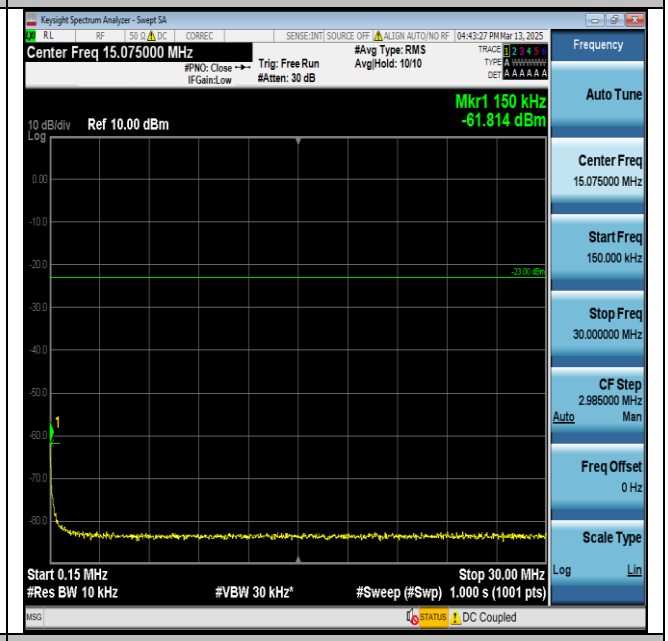
Band12-10MHz-QPSK-23095-1RB#0-1000~3000-PASS



Band12-10MHz-QPSK-23095-1RB#0-3000~10000-PASS



Band12-10MHz-QPSK-23130-1RB#0-0.009~0.15-PASS



Band12-10MHz-QPSK-23130-1RB#0-0.15~30-PASS

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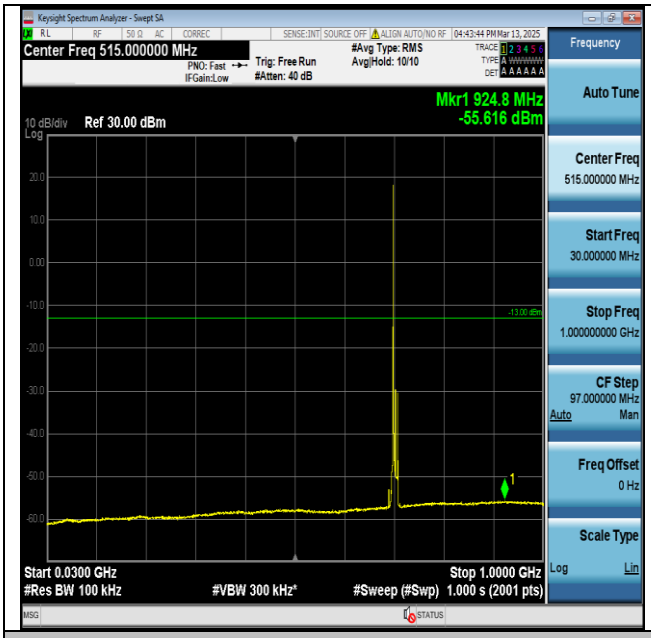
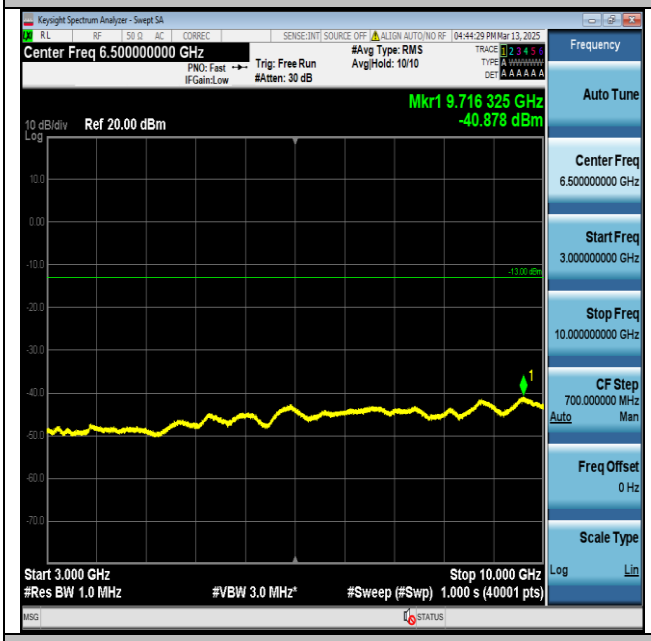


Band12-10MHz-QPSK-23130-1RB#0-30~1000-PASS

Band12-10MHz-QPSK-23130-1RB#0-1000~3000-PASS



Band12-10MHz-QPSK-23130-1RB#0-3000~10000-PASS

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Frequency Stability

Test Result

Voltage									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Verdict
Band12	10MHz	QPSK	23095	100RB#0	VN	NT	-0.60	-0.000848	PASS
Band12	10MHz	QPSK	23095	100RB#0	VL	NT	0.50	0.000707	PASS
Band12	10MHz	QPSK	23095	100RB#0	VH	NT	-0.30	-0.000424	PASS

Temperature									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Verdict
Band12	10MHz	QPSK	23095	100RB#0	NV	-30	1.00	0.001413	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	-20	-0.60	-0.000848	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	-10	-0.70	-0.000989	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	0	-1.10	-0.001555	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	10	-0.10	-0.000141	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	20	-0.10	-0.000141	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	30	-1.20	-0.001696	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	40	0.10	0.000141	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	50	0.20	0.000283	PASS

~The End~

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