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.:GRCTR250502026-04

Pet locator

M/N:HW-PET10

FCC ID:2AQSK-HW-PET10

Applicant:HuiZhou BoShiJie Technology CO.,Ltd

Appendix for LTE Band 12

Appendix A: Conducted Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	24.11	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.84	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.67	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	23.63	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	23.52	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	23.61	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.57	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	23.02	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	22.73	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	22.56	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	22.47	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	22.48	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	22.44	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.68	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	24.39	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	24.33	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	24.34	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	24.16	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	24.08	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	23.46	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.83	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.96	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.87	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	23.06	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	22.80	PASS
Band12	1.4MHz	16QAM	23095	3RB#1	22.00	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	22.66	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	21.69	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.26	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.13	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	22.88	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	22.98	PASS
Band12	1.4MHz	QPSK	23173	3RB#1	22.97	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	22.91	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	21.97	PASS

Band12	1.4MHz	16QAM	23173	1RB#0	21.92	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	21.95	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	21.70	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	21.70	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	21.79	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	21.65	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	20.83	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.32	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.29	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.05	PASS
Band12	3MHz	QPSK	23025	8RB#0	22.35	PASS
Band12	3MHz	QPSK	23025	8RB#4	22.47	PASS
Band12	3MHz	QPSK	23025	8RB#7	22.13	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.23	PASS
Band12	3MHz	16QAM	23025	1RB#0	22.33	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.33	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.03	PASS
Band12	3MHz	16QAM	23025	8RB#0	21.48	PASS
Band12	3MHz	16QAM	23025	8RB#4	21.52	PASS
Band12	3MHz	16QAM	23025	8RB#7	21.28	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.31	PASS
Band12	3MHz	QPSK	23095	1RB#0	24.00	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.69	PASS
Band12	3MHz	QPSK	23095	1RB#14	24.36	PASS
Band12	3MHz	QPSK	23095	8RB#0	22.62	PASS
Band12	3MHz	QPSK	23095	8RB#4	22.55	PASS
Band12	3MHz	QPSK	23095	8RB#7	23.06	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.73	PASS
Band12	3MHz	16QAM	23095	1RB#0	22.39	PASS
Band12	3MHz	16QAM	23095	1RB#8	22.19	PASS
Band12	3MHz	16QAM	23095	1RB#14	23.04	PASS
Band12	3MHz	16QAM	23095	8RB#0	21.54	PASS
Band12	3MHz	16QAM	23095	8RB#4	21.56	PASS
Band12	3MHz	16QAM	23095	8RB#7	21.92	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.76	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.69	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.45	PASS
Band12	3MHz	QPSK	23165	1RB#14	22.88	PASS
Band12	3MHz	QPSK	23165	8RB#0	22.11	PASS
Band12	3MHz	QPSK	23165	8RB#4	22.24	PASS

Band12	3MHz	QPSK	23165	8RB#7	22.02	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.09	PASS
Band12	3MHz	16QAM	23165	1RB#0	22.40	PASS
Band12	3MHz	16QAM	23165	1RB#8	22.43	PASS
Band12	3MHz	16QAM	23165	1RB#14	21.65	PASS
Band12	3MHz	16QAM	23165	8RB#0	21.13	PASS
Band12	3MHz	16QAM	23165	8RB#4	21.17	PASS
Band12	3MHz	16QAM	23165	8RB#7	20.90	PASS
Band12	3MHz	16QAM	23165	15RB#0	20.93	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.68	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.60	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.24	PASS
Band12	5MHz	QPSK	23035	12RB#0	22.30	PASS
Band12	5MHz	QPSK	23035	12RB#6	22.33	PASS
Band12	5MHz	QPSK	23035	12RB#13	22.18	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.28	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.18	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.16	PASS
Band12	5MHz	16QAM	23035	1RB#24	21.85	PASS
Band12	5MHz	16QAM	23035	12RB#0	21.43	PASS
Band12	5MHz	16QAM	23035	12RB#6	21.39	PASS
Band12	5MHz	16QAM	23035	12RB#13	21.18	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.20	PASS
Band12	5MHz	QPSK	23095	1RB#0	24.04	PASS
Band12	5MHz	QPSK	23095	1RB#12	23.63	PASS
Band12	5MHz	QPSK	23095	1RB#24	24.86	PASS
Band12	5MHz	QPSK	23095	12RB#0	22.61	PASS
Band12	5MHz	QPSK	23095	12RB#6	22.45	PASS
Band12	5MHz	QPSK	23095	12RB#13	23.17	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.86	PASS
Band12	5MHz	16QAM	23095	1RB#0	22.60	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.53	PASS
Band12	5MHz	16QAM	23095	1RB#24	23.89	PASS
Band12	5MHz	16QAM	23095	12RB#0	21.38	PASS
Band12	5MHz	16QAM	23095	12RB#6	21.43	PASS
Band12	5MHz	16QAM	23095	12RB#13	22.12	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.66	PASS
Band12	5MHz	QPSK	23155	1RB#0	24.48	PASS
Band12	5MHz	QPSK	23155	1RB#12	24.21	PASS
Band12	5MHz	QPSK	23155	1RB#24	22.89	PASS

Band12	5MHz	QPSK	23155	12RB#0	22.79	PASS
Band12	5MHz	QPSK	23155	12RB#6	22.86	PASS
Band12	5MHz	QPSK	23155	12RB#13	22.00	PASS
Band12	5MHz	QPSK	23155	25RB#0	22.47	PASS
Band12	5MHz	16QAM	23155	1RB#0	23.31	PASS
Band12	5MHz	16QAM	23155	1RB#12	23.19	PASS
Band12	5MHz	16QAM	23155	1RB#24	21.88	PASS
Band12	5MHz	16QAM	23155	12RB#0	21.76	PASS
Band12	5MHz	16QAM	23155	12RB#6	21.83	PASS
Band12	5MHz	16QAM	23155	12RB#13	20.92	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.41	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.88	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.79	PASS
Band12	10MHz	QPSK	23060	1RB#49	24.85	PASS
Band12	10MHz	QPSK	23060	25RB#0	22.36	PASS
Band12	10MHz	QPSK	23060	25RB#12	22.30	PASS
Band12	10MHz	QPSK	23060	25RB#25	22.65	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.56	PASS
Band12	10MHz	16QAM	23060	1RB#0	22.76	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.71	PASS
Band12	10MHz	16QAM	23060	1RB#49	23.71	PASS
Band12	10MHz	16QAM	23060	25RB#0	21.26	PASS
Band12	10MHz	16QAM	23060	25RB#12	21.35	PASS
Band12	10MHz	16QAM	23060	25RB#25	21.58	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.75	PASS
Band12	10MHz	QPSK	23095	1RB#24	23.40	PASS
Band12	10MHz	QPSK	23095	1RB#49	24.51	PASS
Band12	10MHz	QPSK	23095	25RB#0	22.25	PASS
Band12	10MHz	QPSK	23095	25RB#12	22.31	PASS
Band12	10MHz	QPSK	23095	25RB#25	23.35	PASS
Band12	10MHz	QPSK	23095	50RB#0	23.10	PASS
Band12	10MHz	16QAM	23095	1RB#0	22.11	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.12	PASS
Band12	10MHz	16QAM	23095	1RB#49	23.12	PASS
Band12	10MHz	16QAM	23095	25RB#0	21.14	PASS
Band12	10MHz	16QAM	23095	25RB#12	21.17	PASS
Band12	10MHz	16QAM	23095	25RB#25	22.19	PASS
Band12	10MHz	QPSK	23130	1RB#0	24.17	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.83	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.33	PASS

Band12	10MHz	QPSK	23130	25RB#0	23.08	PASS
Band12	10MHz	QPSK	23130	25RB#12	23.19	PASS
Band12	10MHz	QPSK	23130	25RB#25	22.72	PASS
Band12	10MHz	QPSK	23130	50RB#0	23.39	PASS
Band12	10MHz	16QAM	23130	1RB#0	22.71	PASS
Band12	10MHz	16QAM	23130	1RB#24	22.64	PASS
Band12	10MHz	16QAM	23130	1RB#49	22.12	PASS
Band12	10MHz	16QAM	23130	25RB#0	22.11	PASS
Band12	10MHz	16QAM	23130	25RB#12	22.17	PASS
Band12	10MHz	16QAM	23130	25RB#25	21.79	PASS

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

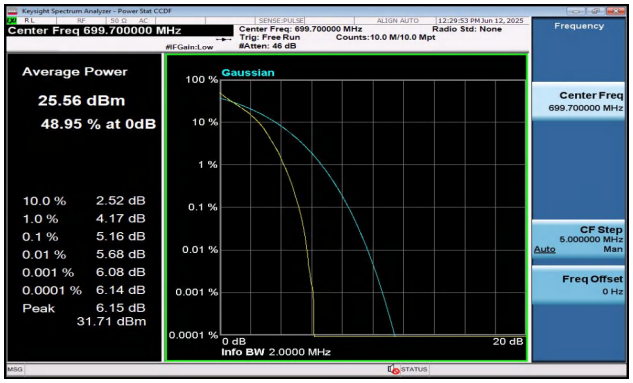
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	4.58	13	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	5.16	13	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	5.48	13	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	5.81	13	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	5.54	13	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	5.92	13	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	6.28	13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	6.80	13	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	5.00	13	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	5.68	13	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	5.98	13	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	6.43	13	PASS
Band12	3MHz	QPSK	23025	1RB#0	4.46	13	PASS
Band12	3MHz	QPSK	23025	15RB#0	5.33	13	PASS
Band12	3MHz	16QAM	23025	1RB#0	5.42	13	PASS
Band12	3MHz	16QAM	23025	15RB#0	6.06	13	PASS
Band12	3MHz	QPSK	23095	1RB#0	5.56	13	PASS
Band12	3MHz	QPSK	23095	15RB#0	5.78	13	PASS
Band12	3MHz	16QAM	23095	1RB#0	6.49	13	PASS
Band12	3MHz	16QAM	23095	15RB#0	6.49	13	PASS
Band12	3MHz	QPSK	23165	1RB#0	4.79	13	PASS
Band12	3MHz	QPSK	23165	15RB#0	5.74	13	PASS
Band12	3MHz	16QAM	23165	1RB#0	5.44	13	PASS
Band12	3MHz	16QAM	23165	15RB#0	6.46	13	PASS
Band12	5MHz	QPSK	23035	1RB#0	4.13	13	PASS
Band12	5MHz	QPSK	23035	25RB#0	5.43	13	PASS
Band12	5MHz	16QAM	23035	1RB#0	5.29	13	PASS
Band12	5MHz	16QAM	23035	25RB#0	6.15	13	PASS
Band12	5MHz	QPSK	23095	1RB#0	5.18	13	PASS
Band12	5MHz	QPSK	23095	25RB#0	5.86	13	PASS
Band12	5MHz	16QAM	23095	1RB#0	6.09	13	PASS
Band12	5MHz	16QAM	23095	25RB#0	6.48	13	PASS
Band12	5MHz	QPSK	23155	1RB#0	4.76	13	PASS

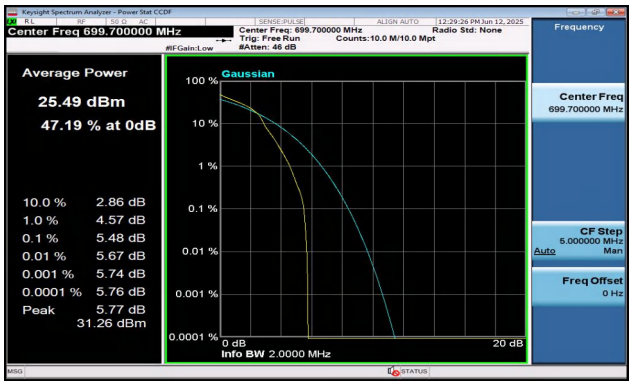
Band12	5MHz	QPSK	23155	25RB#0	5.54	13	PASS
Band12	5MHz	16QAM	23155	1RB#0	5.57	13	PASS
Band12	5MHz	16QAM	23155	25RB#0	6.13	13	PASS
Band12	10MHz	QPSK	23060	1RB#0	4.34	13	PASS
Band12	10MHz	QPSK	23060	50RB#0	5.60	13	PASS
Band12	10MHz	16QAM	23060	1RB#0	5.14	13	PASS
Band12	10MHz	QPSK	23095	1RB#0	4.75	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.57	13	PASS
Band12	10MHz	16QAM	23095	1RB#0	5.86	13	PASS
Band12	10MHz	QPSK	23130	1RB#0	5.52	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	5.43	13	PASS
Band12	10MHz	16QAM	23130	1RB#0	6.29	13	PASS

Test Graphs

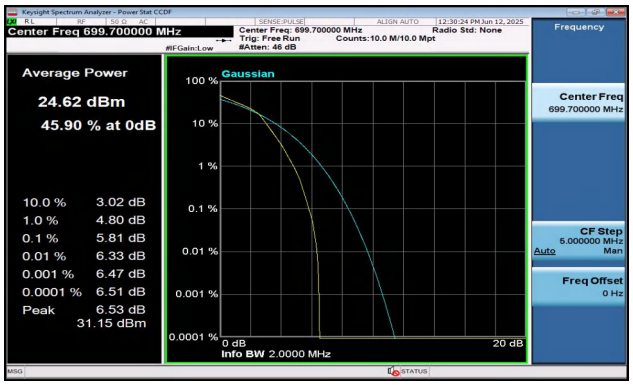
Band12-1.4MHz-QPSK-23017-1RB#0-PASS



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

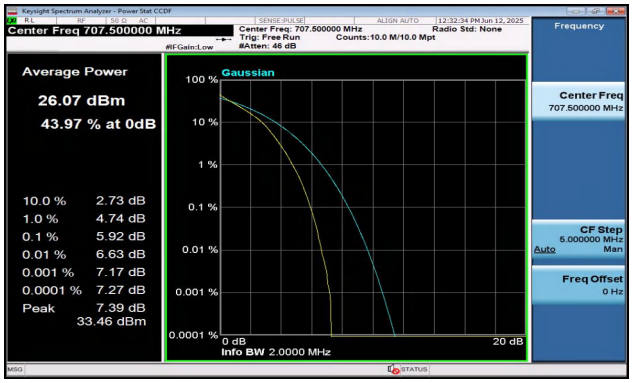


Band12-1.4MHz-16QAM-23017-1RB#0-PASS

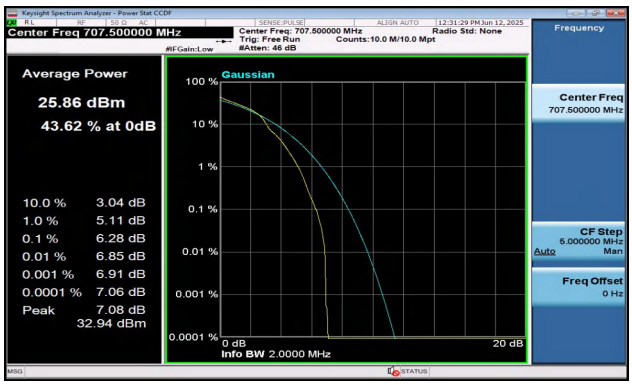


Band12-1.4MHz-16QAM-23017-6RB#0-PASS

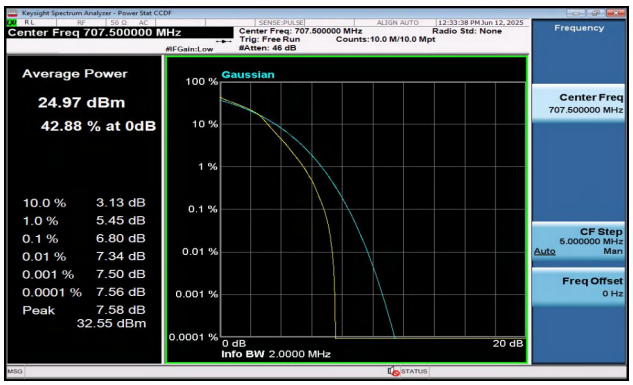
Band12-1.4MHz-QPSK-23095-1RB#0-PASS



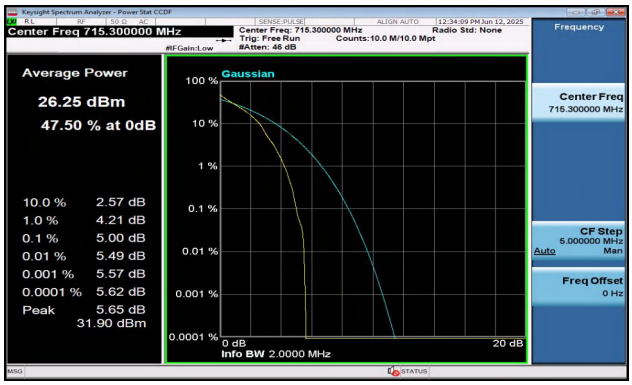
Band12-1.4MHz-QPSK-23095-6RB#0-PASS



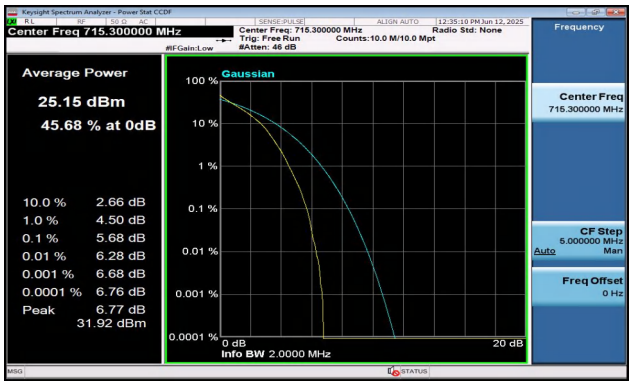
Band12-1.4MHz-16QAM-23095-1RB#0-PASS



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

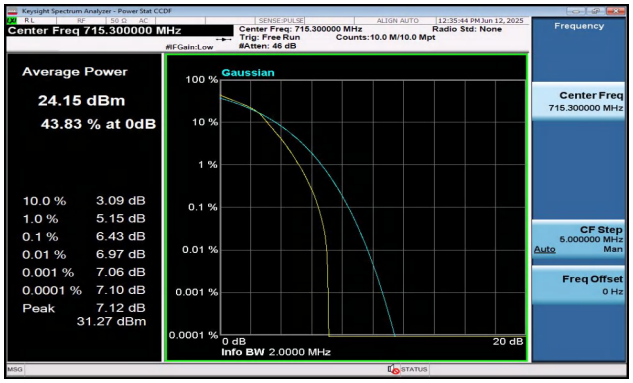


Band12-1.4MHz-QPSK-23173-1RB#0-PASS

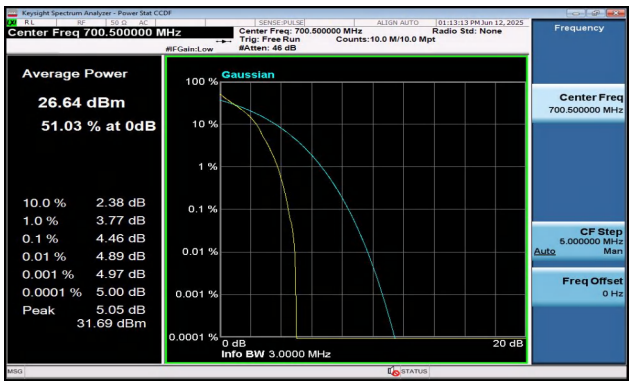


Band12-1.4MHz-QPSK-23173-6RB#0-PASS

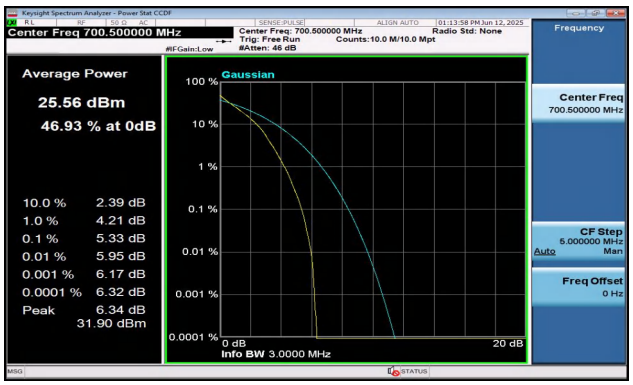
Band12-1.4MHz-16QAM-23173-1RB#0-PASS



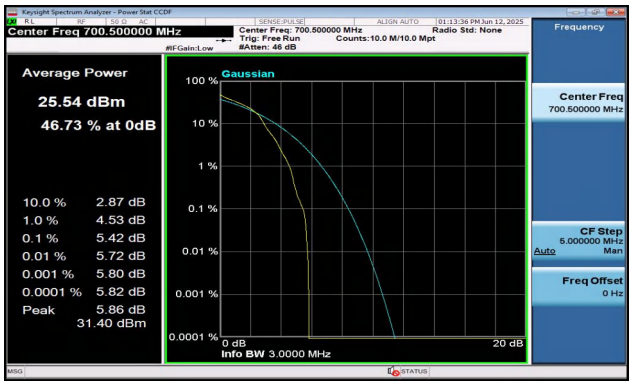
Band12-1.4MHz-16QAM-23173-6RB#0-PASS



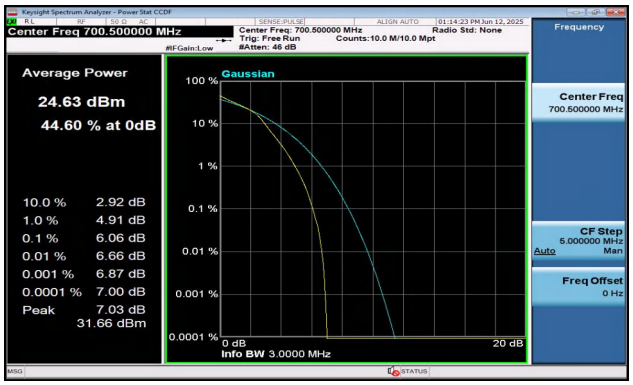
Band12-3MHz-QPSK-23025-1RB#0-PASS



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

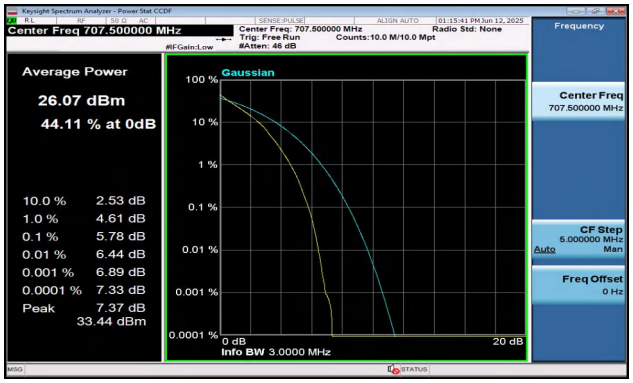


Band12-3MHz-16QAM-23025-1RB#0-PASS



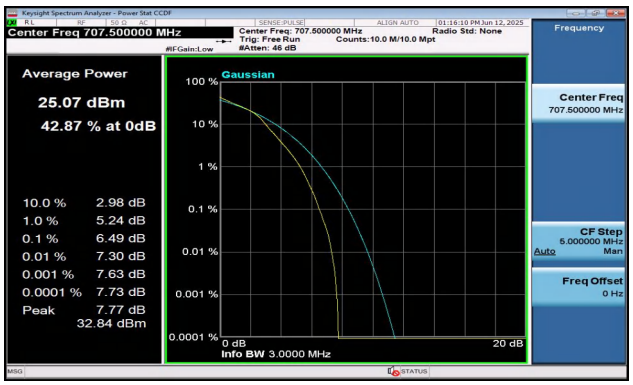
Band12-3MHz-16QAM-23025-15RB#0-PASS

Band12-3MHz-QPSK-23095-1RB#0-PASS

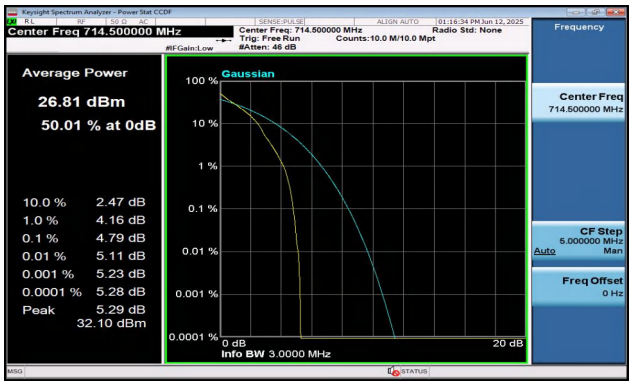


Band12-3MHz-QPSK-23095-15RB#0-PASS

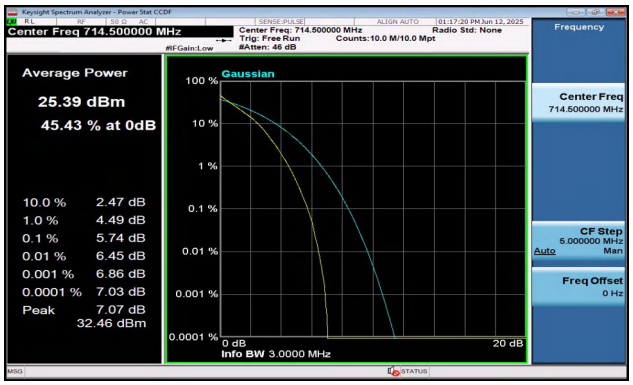
Band12-3MHz-16QAM-23095-1RB#0-PASS



Band12-3MHz-16QAM-23095-15RB#0-PASS

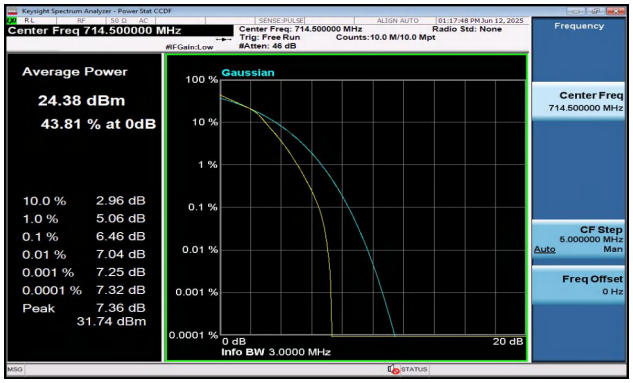


Band12-3MHz-QPSK-23165-1RB#0-PASS



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

Band12-3MHz-16QAM-23165-1RB#0-PASS



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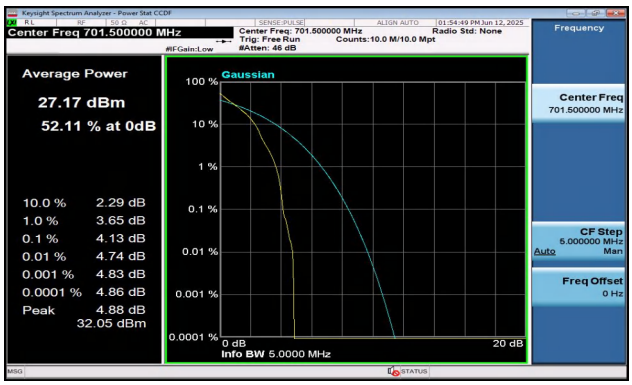

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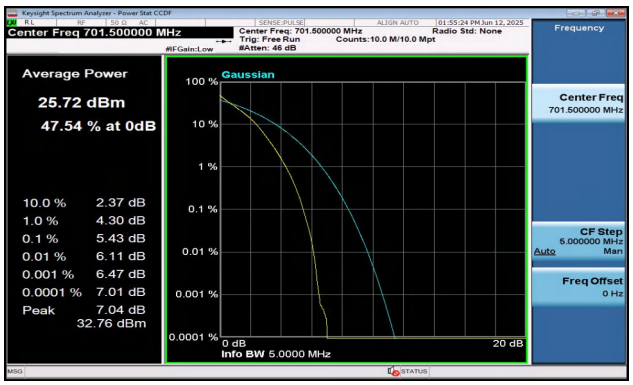

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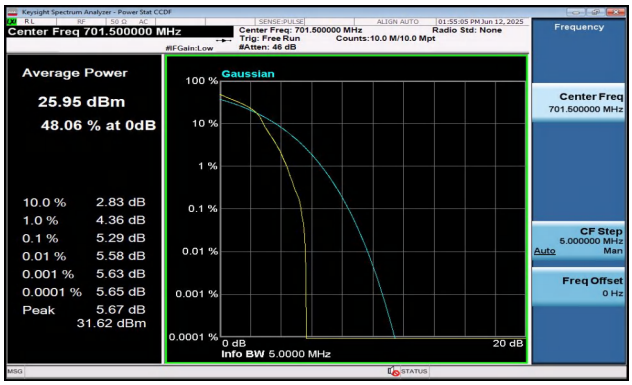

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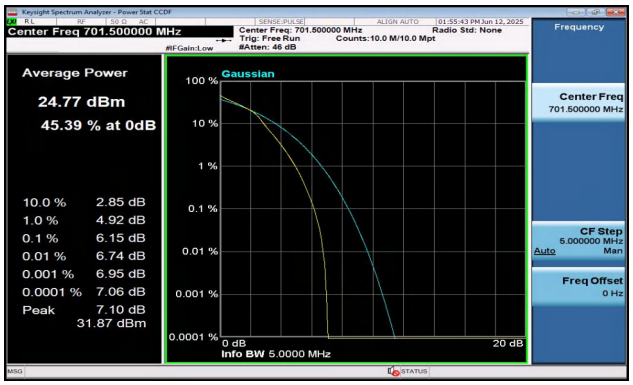


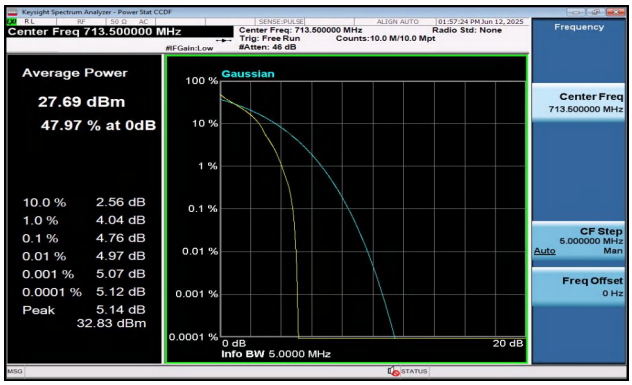
Band12-5MHz-16QAM-23035-25RB#0-PASS

Band12-5MHz-QPSK-23095-1RB#0-PASS

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

Band12-5MHz-16QAM-23095-1RB#0-PASS

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



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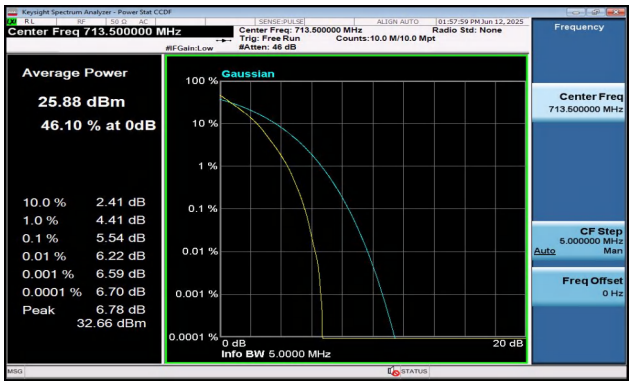

Band12-5MHz-QPSK-23155-25RB#0-PASS

Band12-5MHz-16QAM-23155-1RB#0-PASS

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

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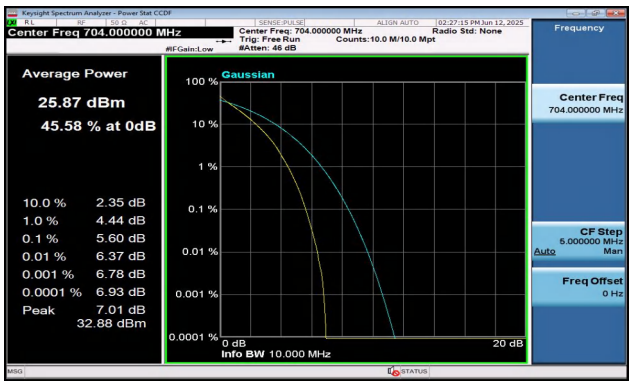

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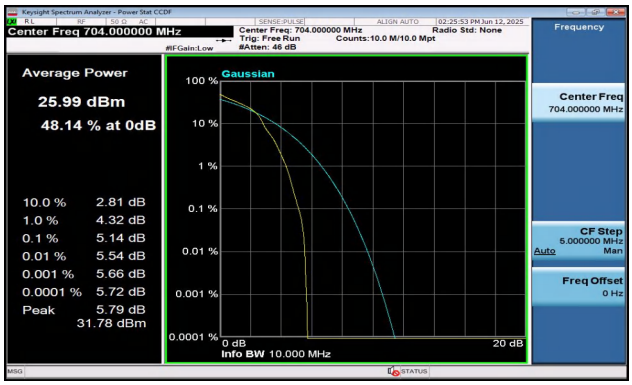
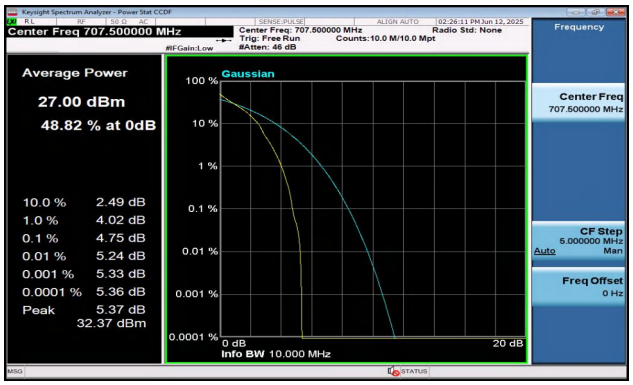


Band12-10MHz-16QAM-23060-1RB#0-PASS



Band12-10MHz-QPSK-23095-1RB#0-PASS

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

Band12-10MHz-16QAM-23095-1RB#0-PASS