Appendix J: Test Data for E-UTRA Band 12

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

J.1 Conducted Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	23.78	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	23.38	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.69	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	23.38	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.67	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	23.36	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	23.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	22.30	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	23.76	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	22.69	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	23.68	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	23.05	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.97	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	22.11	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.58	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.34	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.74	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.36	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	23.64	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	22.74	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	23.61	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	22.76	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	23.83	PASS
Band12	1.4MHz	16QAM	23095	3RB#1	22.76	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	23.62	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	22.75	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.70	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	22.02	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.60	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	23.01	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.42	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	22.88	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.48	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	23.24	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	23.55	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	22.41	PASS

Band12	1.4MHz	QPSK	23173	3RB#1	23.55	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	22.29	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	23.54	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	22.42	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.66	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.89	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.53	PASS
Band12	3MHz	16QAM	23025	1RB#0	22.46	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.54	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.42	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.39	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.53	PASS
Band12	3MHz	QPSK	23025	8RB#0	22.69	PASS
Band12	3MHz	16QAM	23025	8RB#0	22.03	PASS
Band12	3MHz	QPSK	23025	8RB#4	22.70	PASS
Band12	3MHz	16QAM	23025	8RB#4	22.00	PASS
Band12	3MHz	QPSK	23025	8RB#7	22.61	PASS
Band12	3MHz	16QAM	23025	8RB#7	22.05	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.64	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.91	PASS
Band12	3MHz	QPSK	23095	1RB#0	23.46	PASS
Band12	3MHz	16QAM	23095	1RB#0	22.16	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.40	PASS
Band12	3MHz	16QAM	23095	1RB#8	22.12	PASS
Band12	3MHz	QPSK	23095	1RB#14	23.64	PASS
Band12	3MHz	16QAM	23095	1RB#14	22.44	PASS
Band12	3MHz	QPSK	23095	8RB#0	22.42	PASS
Band12	3MHz	16QAM	23095	8RB#0	21.75	PASS
Band12	3MHz	QPSK	23095	8RB#4	22.43	PASS
Band12	3MHz	16QAM	23095	8RB#4	21.75	PASS
Band12	3MHz	QPSK	23095	8RB#7	22.51	PASS
Band12	3MHz	16QAM	23095	8RB#7	21.80	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.42	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.42	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.50	PASS
Band12	3MHz	16QAM	23165	1RB#0	22.90	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.36	PASS
Band12	3MHz	16QAM	23165	1RB#8	22.72	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.25	PASS
Band12	3MHz	16QAM	23165	1RB#14	22.74	PASS
Band12	3MHz	QPSK	23165	8RB#0	22.51	PASS
Band12	3MHz	16QAM	23165	8RB#0	21.58	PASS

Band12	3MHz	QPSK	23165	8RB#4	22.24	PASS
Band12	3MHz	16QAM	23165	8RB#4	21.67	PASS
Band12	3MHz	QPSK	23165	8RB#7	22.39	PASS
Band12	3MHz	16QAM	23165	8RB#7	21.73	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.19	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.66	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.62	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.22	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.56	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.10	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.55	PASS
Band12	5MHz	16QAM	23035	1RB#24	22.00	PASS
Band12	5MHz	QPSK	23035	12RB#0	22.60	PASS
Band12	5MHz	16QAM	23035	12RB#0	21.74	PASS
Band12	5MHz	QPSK	23035	12RB#6	22.60	PASS
Band12	5MHz	16QAM	23035	12RB#6	21.85	PASS
Band12	5MHz	QPSK	23035	12RB#13	22.54	PASS
Band12	5MHz	16QAM	23035	12RB#13	21.75	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.68	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.78	PASS
Band12	5MHz	QPSK	23095	1RB#0	23.36	PASS
Band12	5MHz	16QAM	23095	1RB#0	22.78	PASS
Band12	5MHz	QPSK	23095	1RB#12	23.34	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.66	PASS
Band12	5MHz	QPSK	23095	1RB#24	23.30	PASS
Band12	5MHz	16QAM	23095	1RB#24	22.77	PASS
Band12	5MHz	QPSK	23095	12RB#0	22.56	PASS
Band12	5MHz	16QAM	23095	12RB#0	21.86	PASS
Band12	5MHz	QPSK	23095	12RB#6	22.42	PASS
Band12	5MHz	16QAM	23095	12RB#6	21.70	PASS
Band12	5MHz	QPSK	23095	12RB#13	22.49	PASS
Band12	5MHz	16QAM	23095	12RB#13	21.78	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.54	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.61	PASS
Band12	5MHz	QPSK	23155	1RB#0	23.29	PASS
Band12	5MHz	16QAM	23155	1RB#0	22.11	PASS
Band12	5MHz	QPSK	23155	1RB#12	23.20	PASS
Band12	5MHz	16QAM	23155	1RB#12	22.18	PASS
Band12	5MHz	QPSK	23155	1RB#24	23.10	PASS
Band12	5MHz	16QAM	23155	1RB#24	22.12	PASS
Band12	5MHz	QPSK	23155	12RB#0	22.45	PASS
Band12	5MHz	16QAM	23155	12RB#0	21.38	PASS

Band12	5MHz	QPSK	23155	12RB#6	22.45	PASS
Band12	5MHz	16QAM	23155	12RB#6	21.44	PASS
Band12	5MHz	QPSK	23155	12RB#13	22.48	PASS
Band12	5MHz	16QAM	23155	12RB#13	21.36	PASS
Band12	5MHz	QPSK	23155	25RB#0	22.43	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.52	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.46	PASS
Band12	10MHz	16QAM	23060	1RB#0	22.41	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.29	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.39	PASS
Band12	10MHz	QPSK	23060	1RB#49	23.25	PASS
Band12	10MHz	16QAM	23060	1RB#49	22.14	PASS
Band12	10MHz	QPSK	23060	25RB#0	22.66	PASS
Band12	10MHz	16QAM	23060	25RB#0	21.68	PASS
Band12	10MHz	QPSK	23060	25RB#12	22.69	PASS
Band12	10MHz	16QAM	23060	25RB#12	21.67	PASS
Band12	10MHz	QPSK	23060	25RB#25	22.44	PASS
Band12	10MHz	16QAM	23060	25RB#25	21.53	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.60	PASS
Band12	10MHz	16QAM	23060	50RB#0	21.60	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.67	PASS
Band12	10MHz	16QAM	23095	1RB#0	22.58	PASS
Band12	10MHz	QPSK	23095	1RB#24	23.54	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.35	PASS
Band12	10MHz	QPSK	23095	1RB#49	23.36	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.37	PASS
Band12	10MHz	QPSK	23095	25RB#0	22.49	PASS
Band12	10MHz	16QAM	23095	25RB#0	21.74	PASS
Band12	10MHz	QPSK	23095	25RB#12	22.50	PASS
Band12	10MHz	16QAM	23095	25RB#12	21.74	PASS
Band12	10MHz	QPSK	23095	25RB#25	22.57	PASS
Band12	10MHz	16QAM	23095	25RB#25	21.67	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.47	PASS
Band12	10MHz	16QAM	23095	50RB#0	21.61	PASS
Band12	10MHz	QPSK	23130	1RB#0	23.38	PASS
Band12	10MHz	16QAM	23130	1RB#0	23.20	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.17	PASS
Band12	10MHz	16QAM	23130	1RB#24	23.19	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.13	PASS
Band12	10MHz	16QAM	23130	1RB#49	23.05	PASS
Band12	10MHz	QPSK	23130	25RB#0	22.44	PASS
Band12	10MHz	16QAM	23130	25RB#0	21.63	PASS

Band12	10MHz	QPSK	23130	25RB#12	22.51	PASS
Band12	10MHz	16QAM	23130	25RB#12	21.63	PASS
Band12	10MHz	QPSK	23130	25RB#25	22.42	PASS
Band12	10MHz	16QAM	23130	25RB#25	21.63	PASS
Band12	10MHz	QPSK	23130	50RB#0	22.25	PASS
Band12	10MHz	16QAM	23130	50RB#0	21.55	PASS

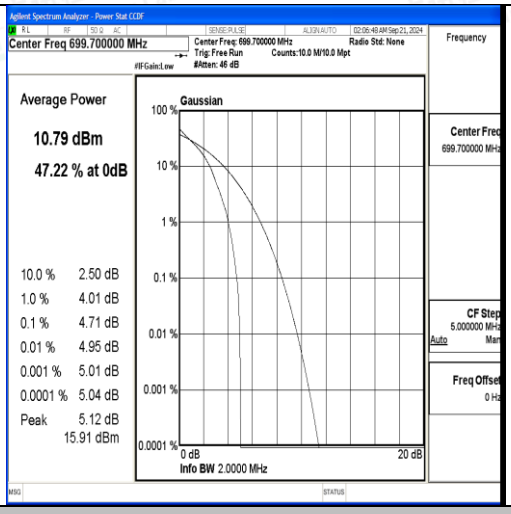
J.2 Peak-to-Average Ratio(CCDF)

Test Result

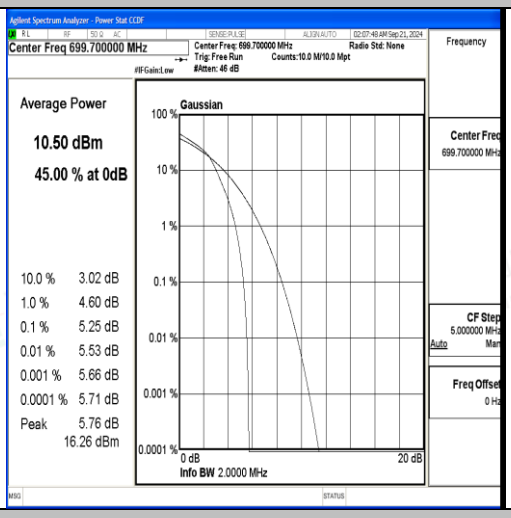
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	4.71	13	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	5.25	13	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	5.34	13	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	6.08	13	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	5.02	13	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	5.59	13	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	5.57	13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	6.31	13	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	4.55	13	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	5.15	13	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	5.16	13	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	5.89	13	PASS
Band12	3MHz	QPSK	23025	1RB#0	4.84	13	PASS
Band12	3MHz	16QAM	23025	1RB#0	5.74	13	PASS
Band12	3MHz	QPSK	23025	15RB#0	5.35	13	PASS
Band12	3MHz	16QAM	23025	15RB#0	6.14	13	PASS
Band12	3MHz	QPSK	23095	1RB#0	5.26	13	PASS
Band12	3MHz	16QAM	23095	1RB#0	6.17	13	PASS
Band12	3MHz	QPSK	23095	15RB#0	5.56	13	PASS
Band12	3MHz	16QAM	23095	15RB#0	6.31	13	PASS
Band12	3MHz	QPSK	23165	1RB#0	4.80	13	PASS
Band12	3MHz	16QAM	23165	1RB#0	5.57	13	PASS
Band12	3MHz	QPSK	23165	15RB#0	5.34	13	PASS
Band12	3MHz	16QAM	23165	15RB#0	6.13	13	PASS
Band12	5MHz	QPSK	23035	1RB#0	4.90	13	PASS
Band12	5MHz	16QAM	23035	1RB#0	5.69	13	PASS
Band12	5MHz	QPSK	23035	25RB#0	5.56	13	PASS
Band12	5MHz	16QAM	23035	25RB#0	6.22	13	PASS
Band12	5MHz	QPSK	23095	1RB#0	5.33	13	PASS
Band12	5MHz	16QAM	23095	1RB#0	6.10	13	PASS
Band12	5MHz	QPSK	23095	25RB#0	5.56	13	PASS
Band12	5MHz	16QAM	23095	25RB#0	6.25	13	PASS
Band12	5MHz	QPSK	23155	1RB#0	4.81	13	PASS
Band12	5MHz	16QAM	23155	1RB#0	5.62	13	PASS
Band12	5MHz	QPSK	23155	25RB#0	5.54	13	PASS

Band12	5MHz	16QAM	23155	25RB#0	6.21	13	PASS
Band12	10MHz	QPSK	23060	1RB#0	4.82	13	PASS
Band12	10MHz	16QAM	23060	1RB#0	5.49	13	PASS
Band12	10MHz	QPSK	23060	50RB#0	5.64	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	6.36	13	PASS
Band12	10MHz	QPSK	23095	1RB#0	4.96	13	PASS
Band12	10MHz	16QAM	23095	1RB#0	5.70	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.41	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	6.21	13	PASS
Band12	10MHz	QPSK	23130	1RB#0	5.23	13	PASS
Band12	10MHz	16QAM	23130	1RB#0	5.92	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	5.61	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	6.29	13	PASS

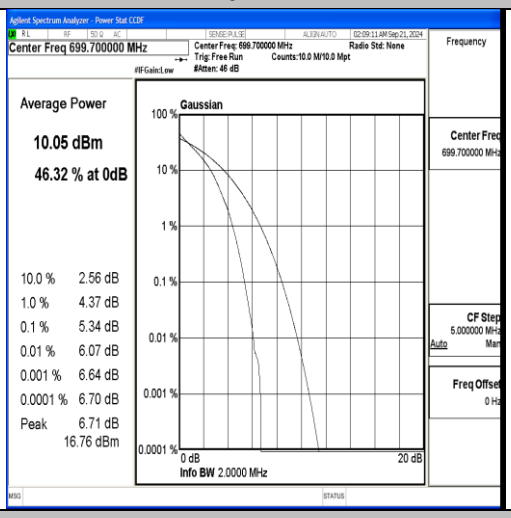
Test Graphs



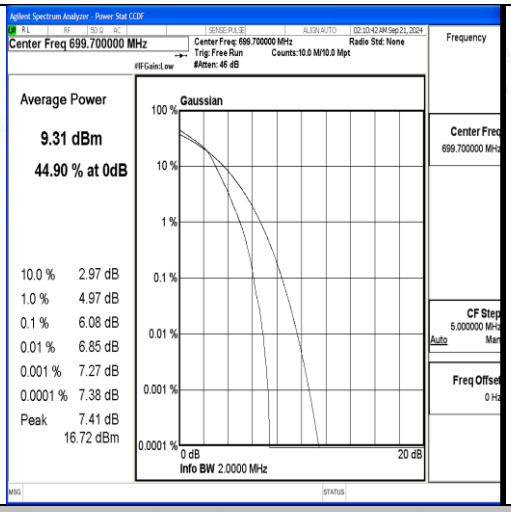
Band12-1.4MHz-QPSK-23017-1RB#0-PASS



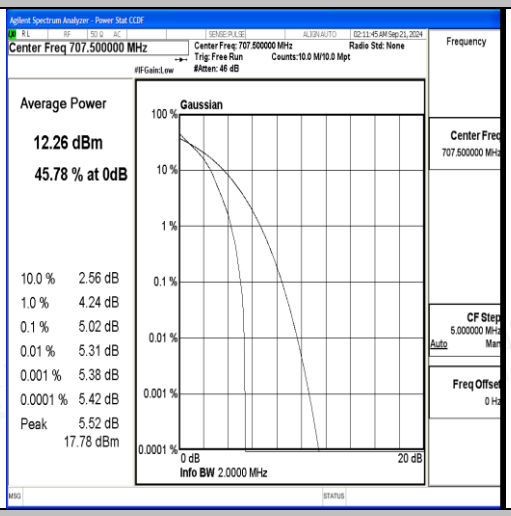
Band12-1.4MHz-16QAM-23017-1RB#0-PASS



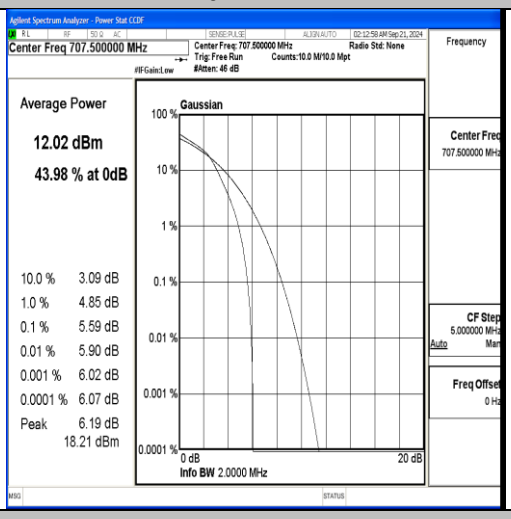
Band12-1.4MHz-QPSK-23017-6RB#0-PASS



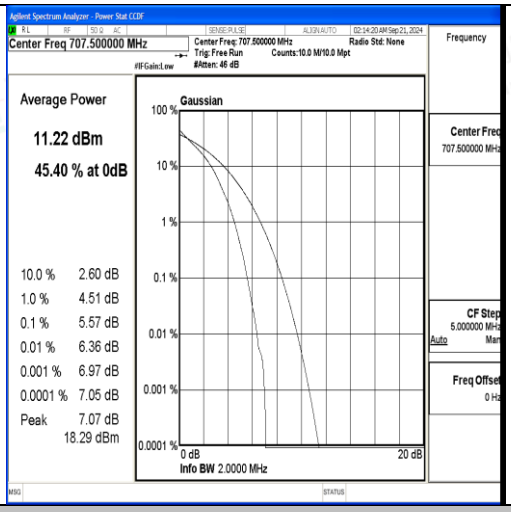
Band12-1.4MHz-16QAM-23017-6RB#0-PASS



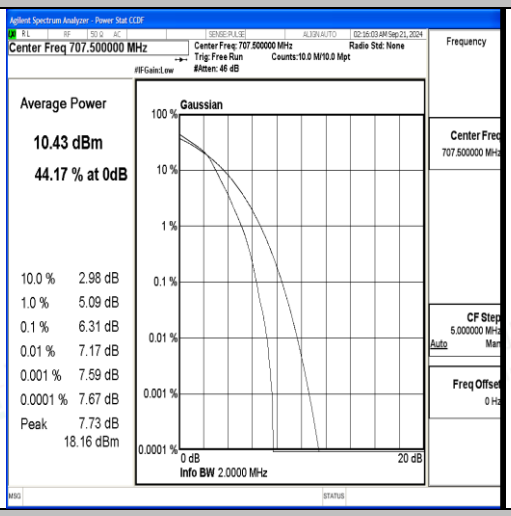
Band12-1.4MHz-QPSK-23095-1RB#0-PASS



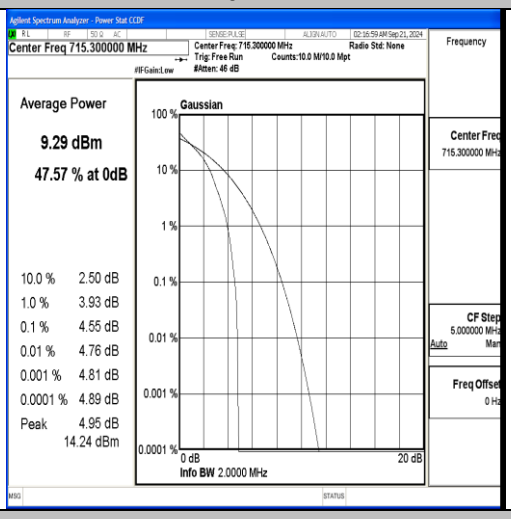
Band12-1.4MHz-16QAM-23095-1RB#0-PASS



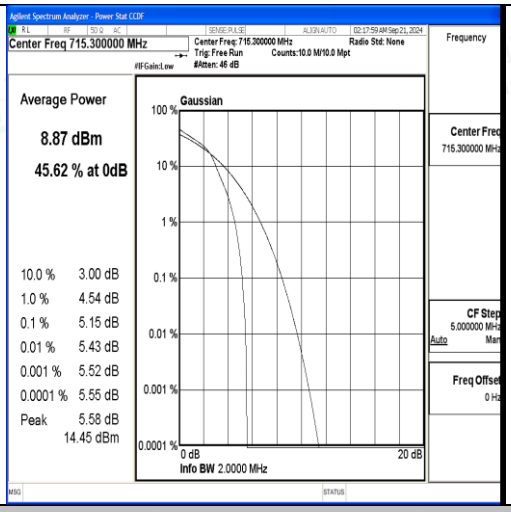
Band12-1.4MHz-QPSK-23095-6RB#0-PASS



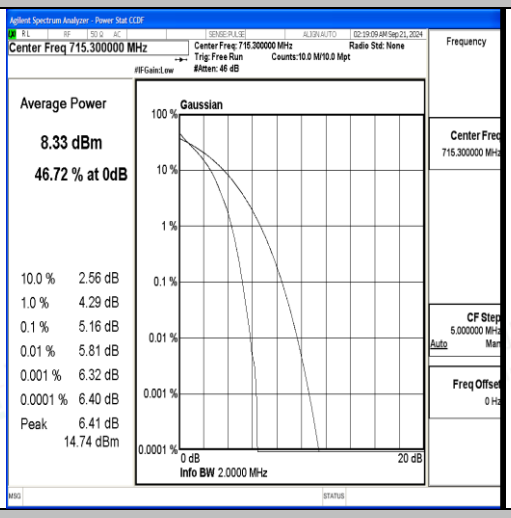
Band12-1.4MHz-16QAM-23095-6RB#0-PASS



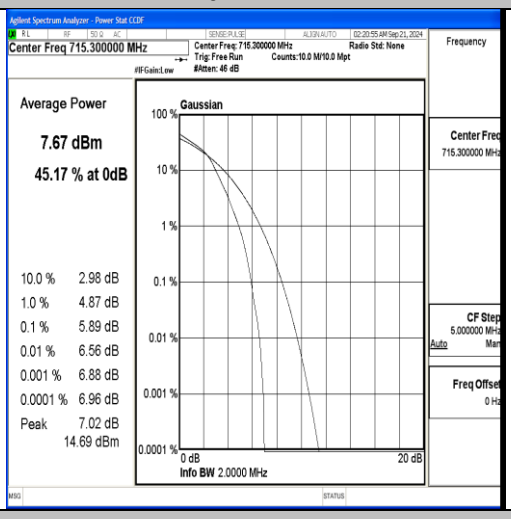
Band12-1.4MHz-QPSK-23173-1RB#0-PASS



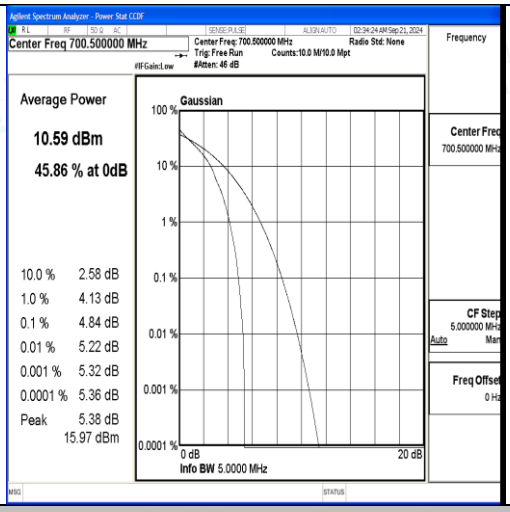
Band12-1.4MHz-16QAM-23173-1RB#0-PASS



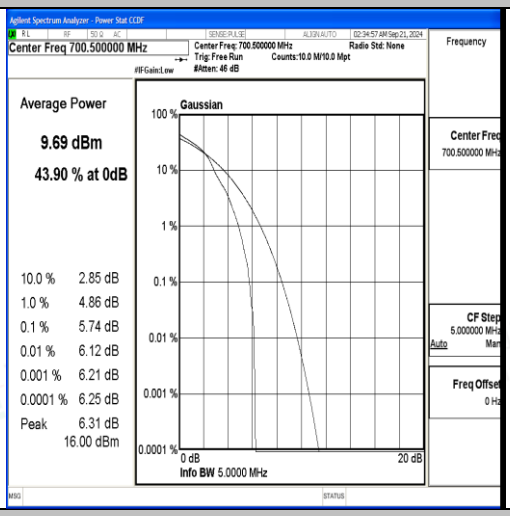
Band12-1.4MHz-QPSK-23173-6RB#0-PASS



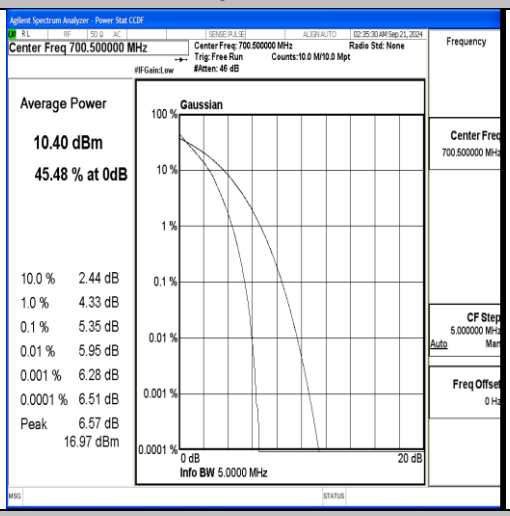
Band12-1.4MHz-16QAM-23173-6RB#0-PASS



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



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



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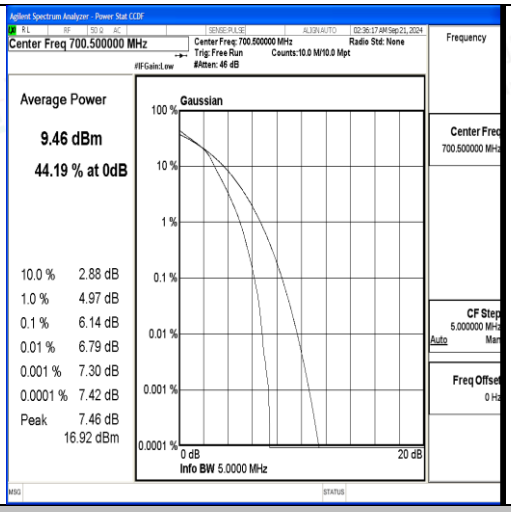

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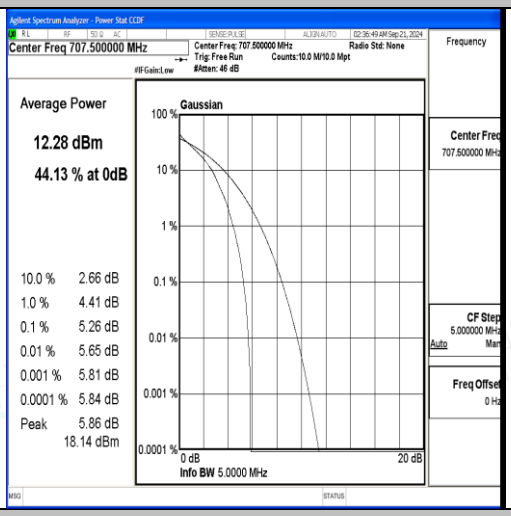
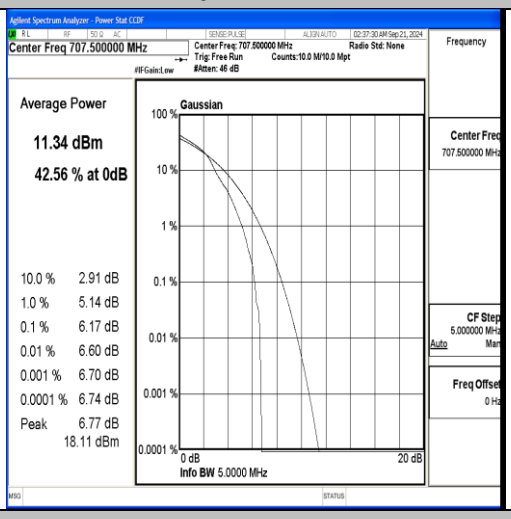


Band12-3MHz-QPSK-23095-1RB#0-PASS



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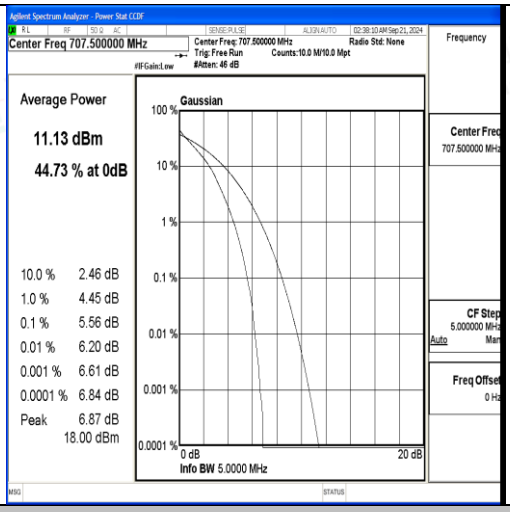

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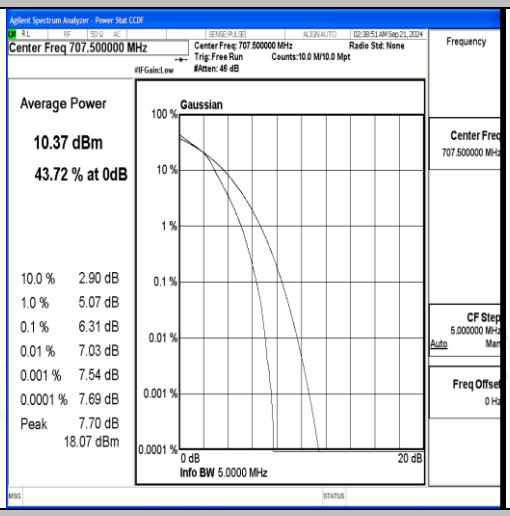
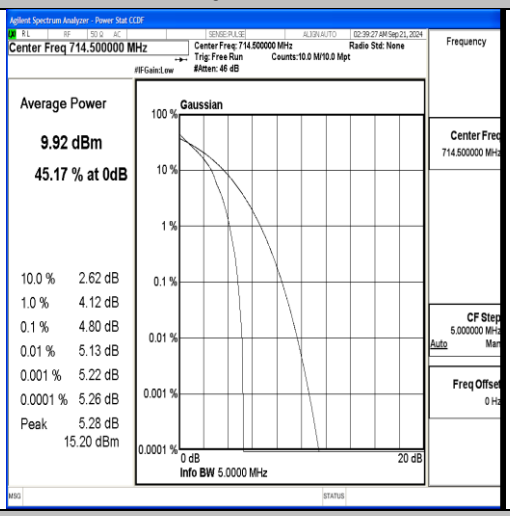
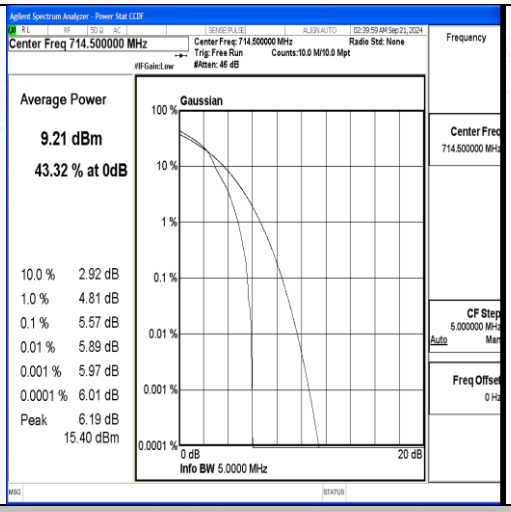


Band12-3MHz-16QAM-23095-15RB#0-PASS



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



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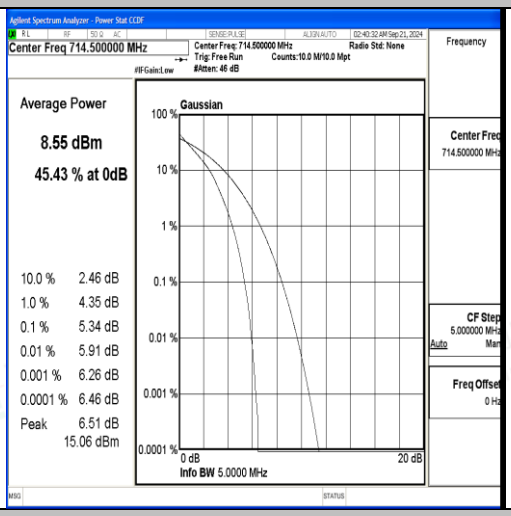

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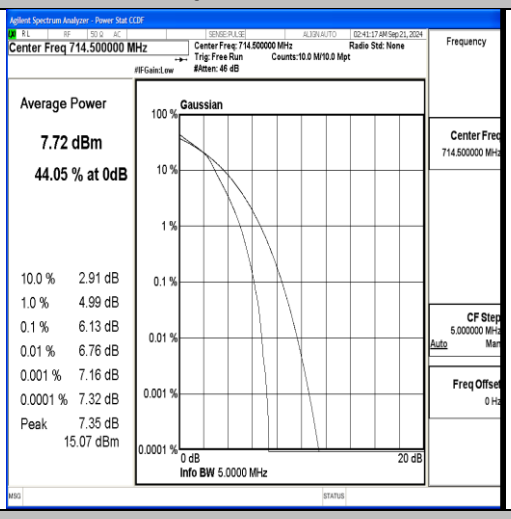

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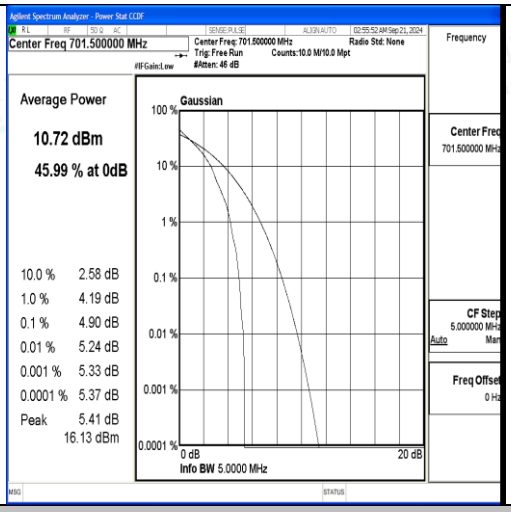

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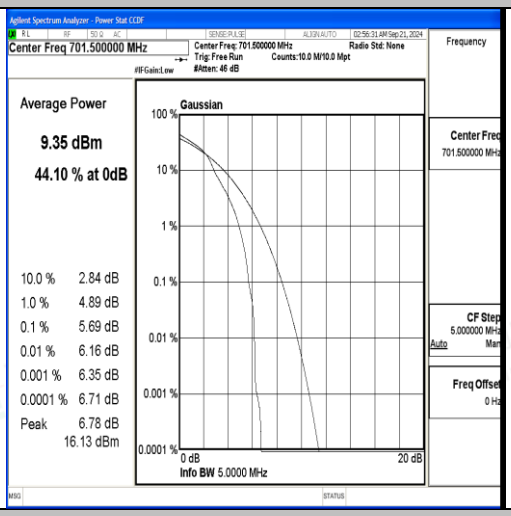

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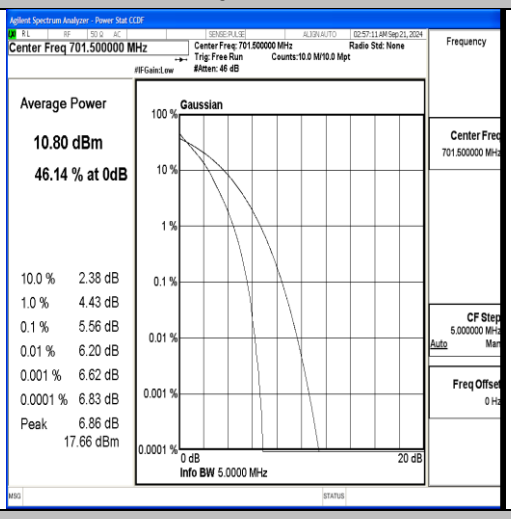

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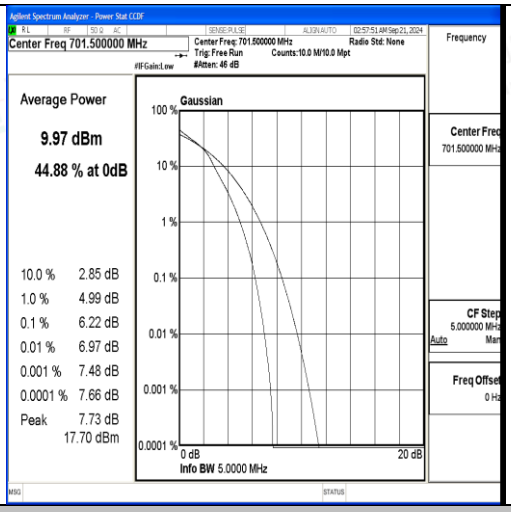
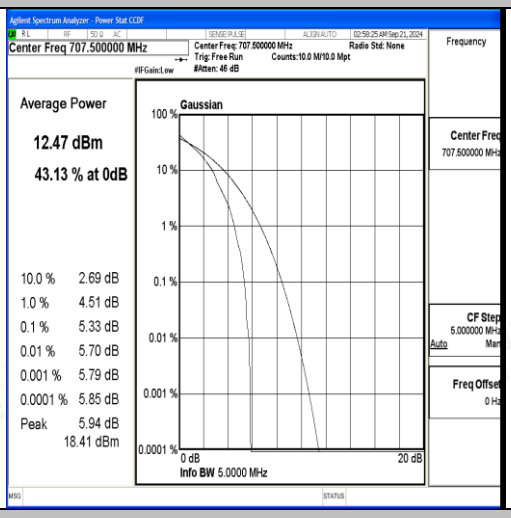
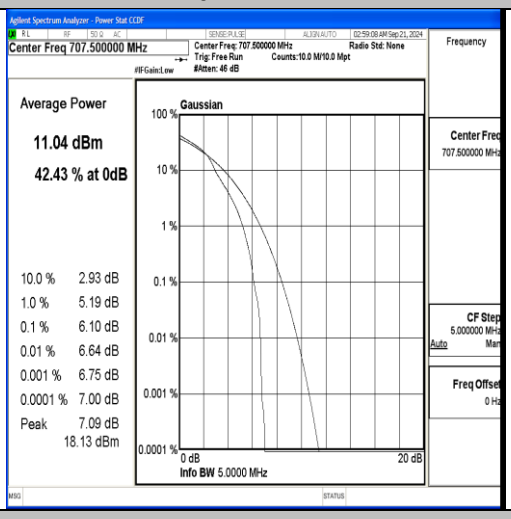


Band12-5MHz-16QAM-23035-25RB#0-PASS



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



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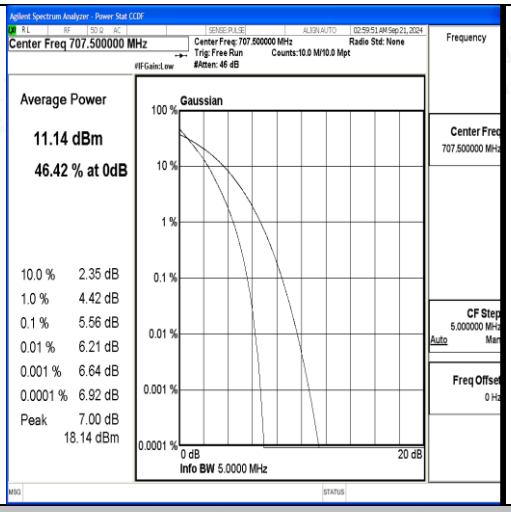

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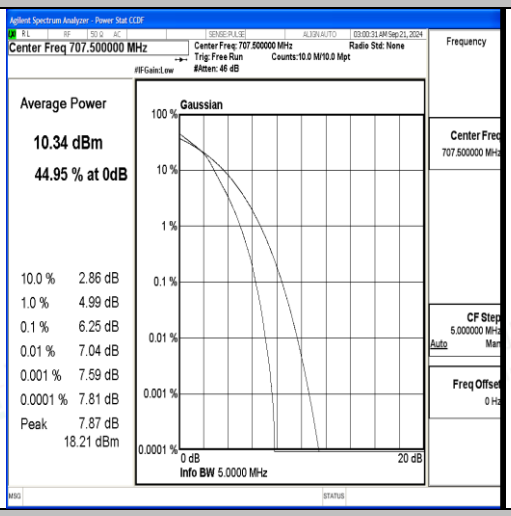

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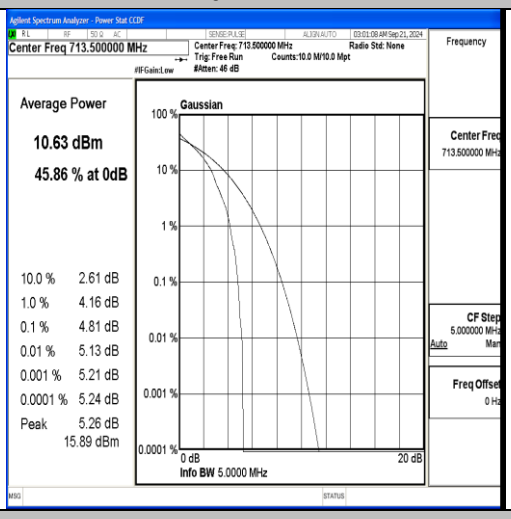
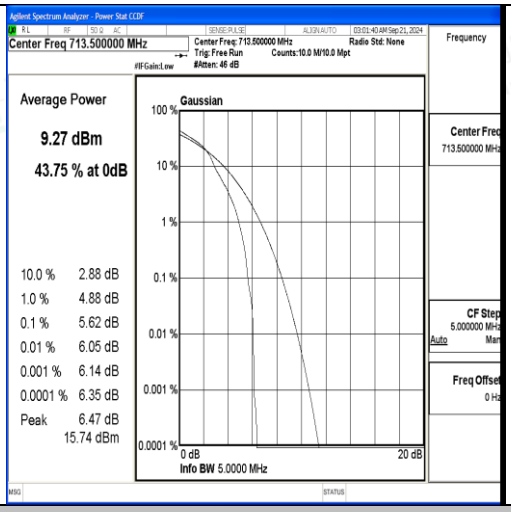


Band12-5MHz-QPSK-23155-1RB#0-PASS



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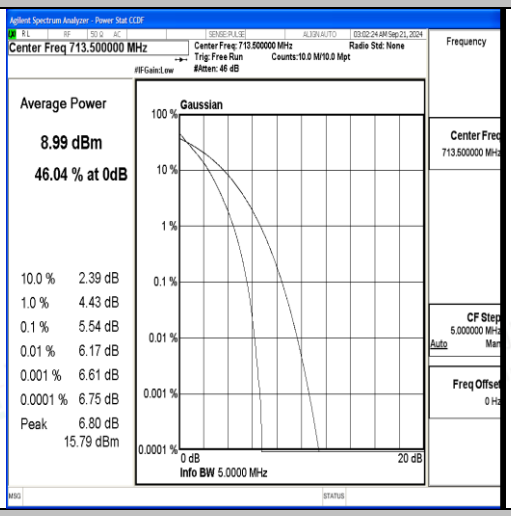

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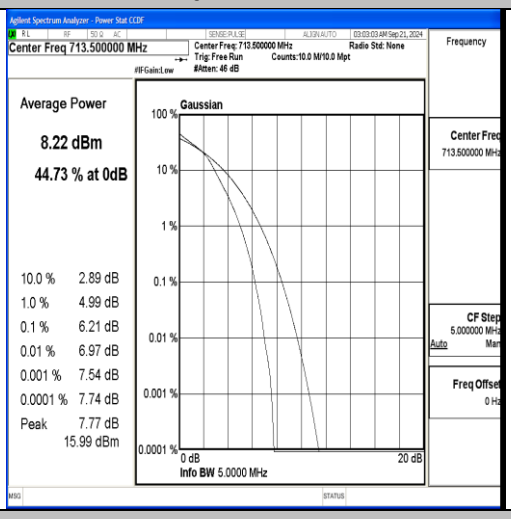

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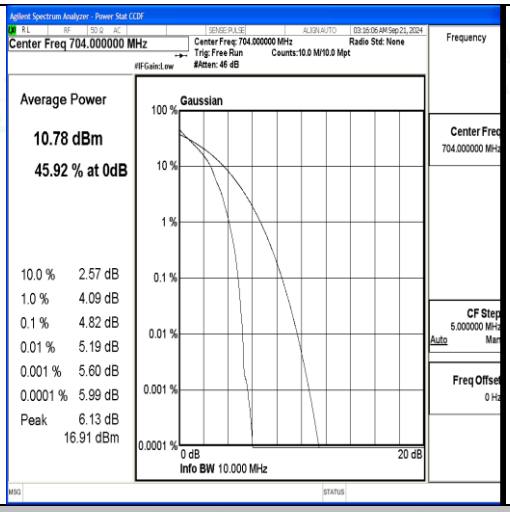
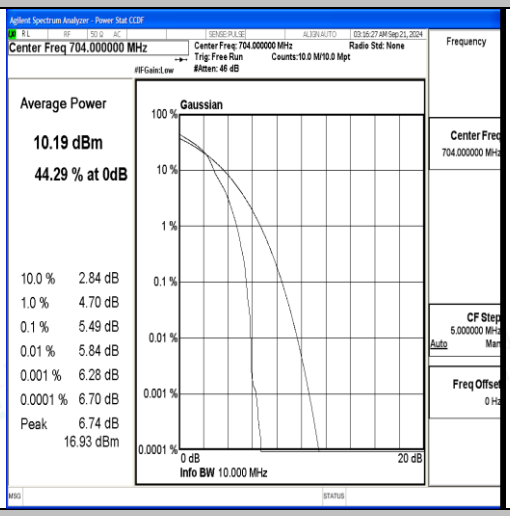
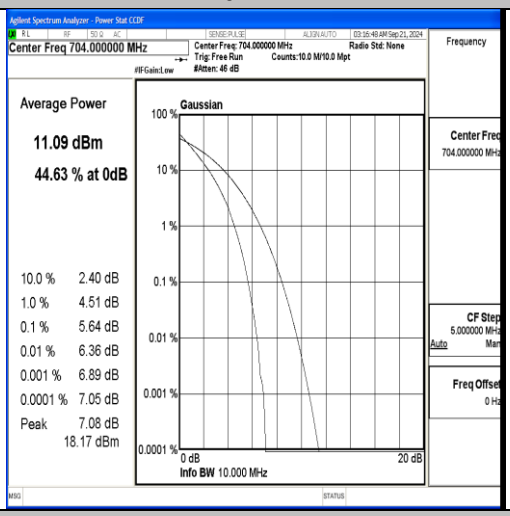


Band12-10MHz-QPSK-23060-1RB#0-PASS



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



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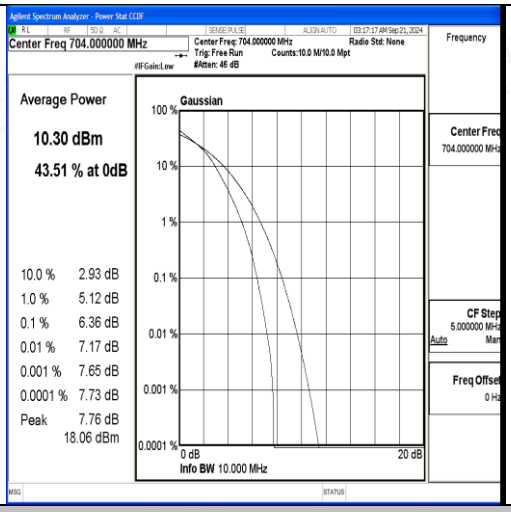

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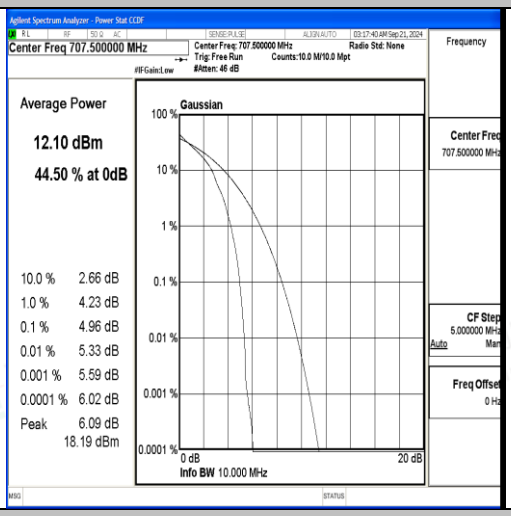

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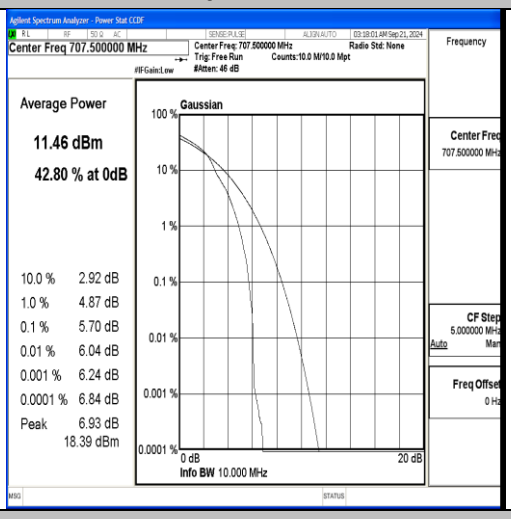

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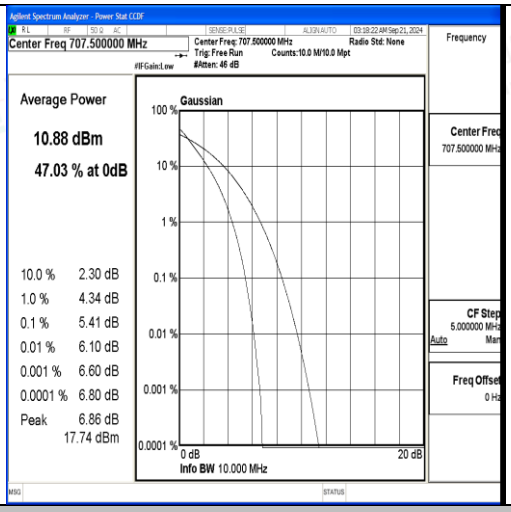

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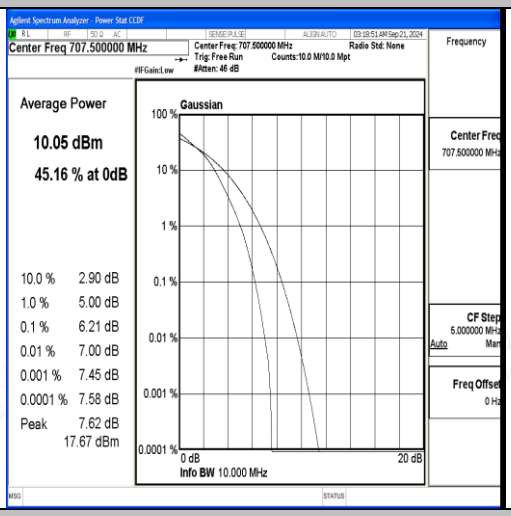
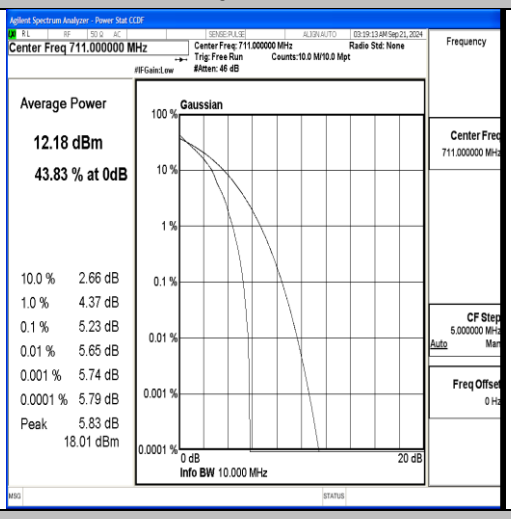
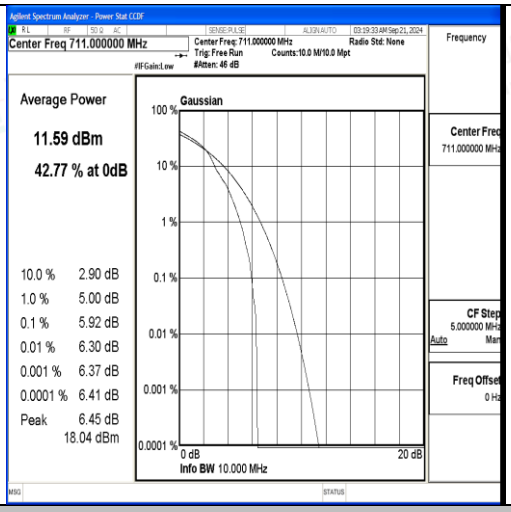


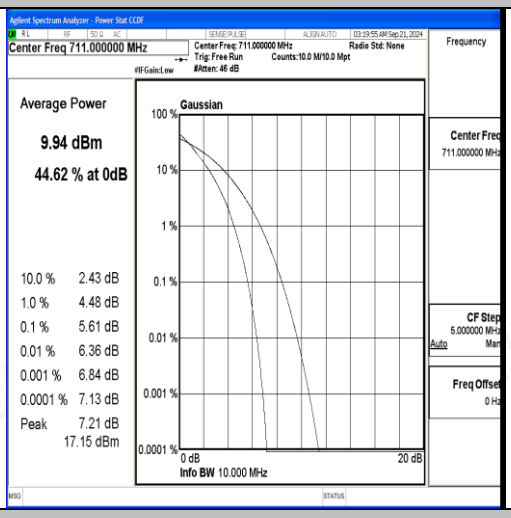
Band12-10MHz-16QAM-23095-50RB#0-PASS



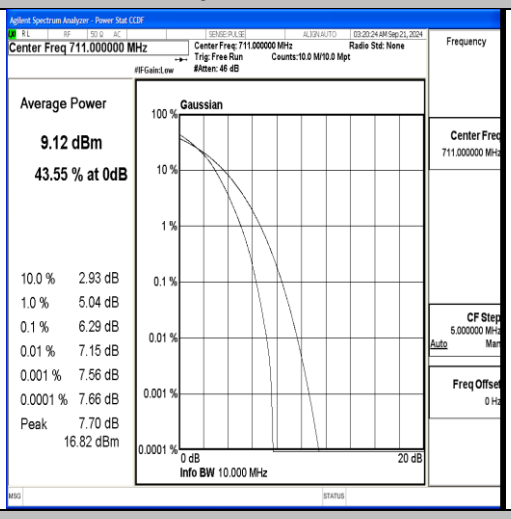
Band12-10MHz-QPSK-23130-1RB#0-PASS



Band12-10MHz-16QAM-23130-1RB#0-PASS



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



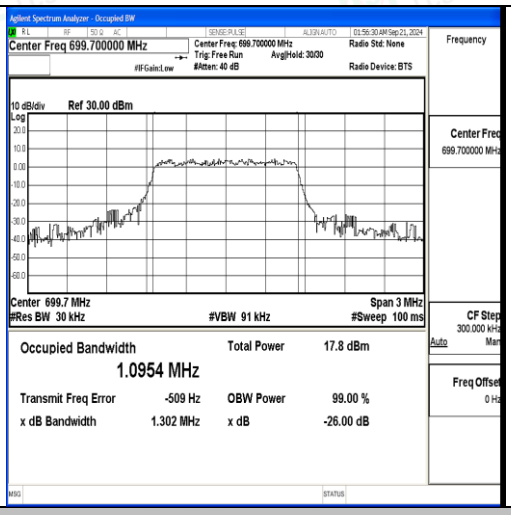
Band12-10MHz-16QAM-23130-50RB#0-PASS

J.3 26dB Bandwidth and Occupied Bandwidth

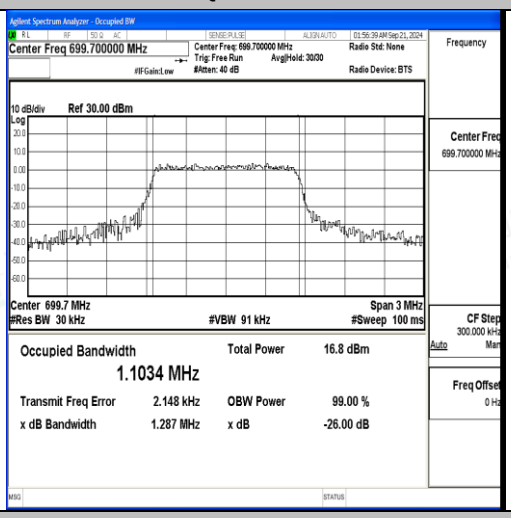
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.0954	1.302	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.1034	1.287	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.0934	1.302	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.1074	1.289	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.0961	1.282	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.1005	1.327	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.7096	3.056	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.6940	3.118	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.7088	3.097	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.7034	3.080	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.7020	3.093	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.7048	3.116	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.5227	5.266	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.5135	5.253	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.5071	5.248	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.5151	5.177	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.5360	5.457	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.5290	5.398	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.9896	9.948	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.9898	10.04	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.9364	10.02	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.9635	9.888	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.9964	9.948	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.9848	9.929	PASS

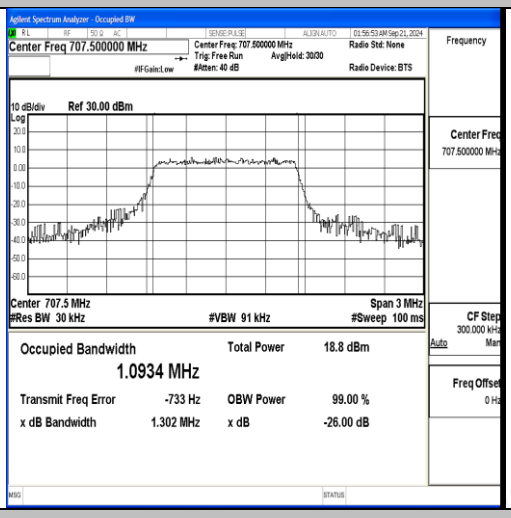
Test Graphs



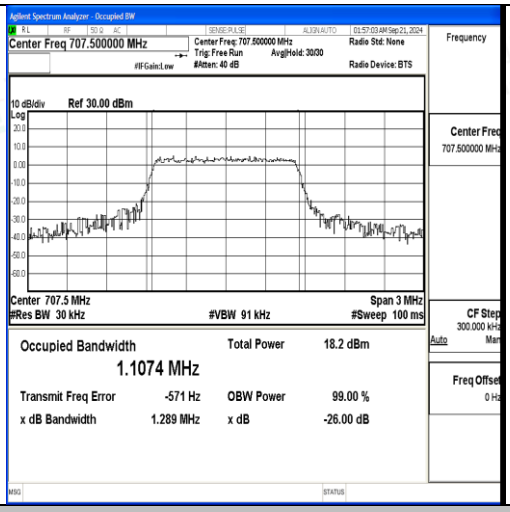
Band12-1.4MHz-QPSK-23017-6RB#0-PASS



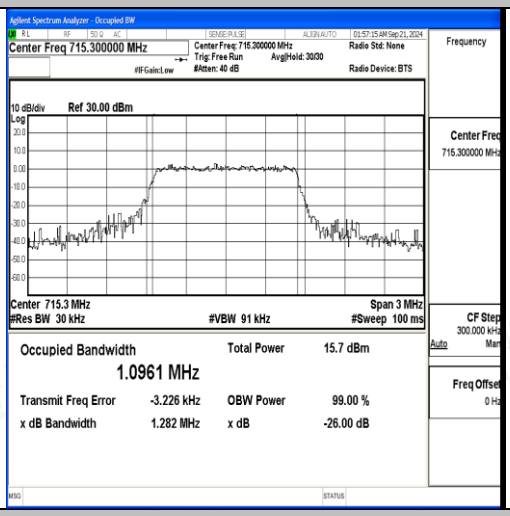
Band12-1.4MHz-16QAM-23017-6RB#0-PASS



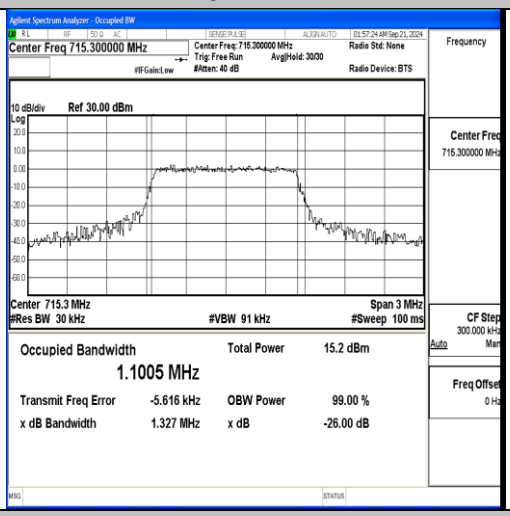
Band12-1.4MHz-QPSK-23095-6RB#0-PASS



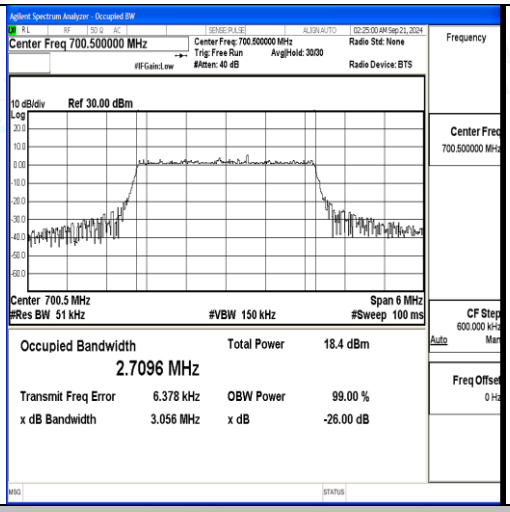
Band12-1.4MHz-16QAM-23095-6RB#0-PASS



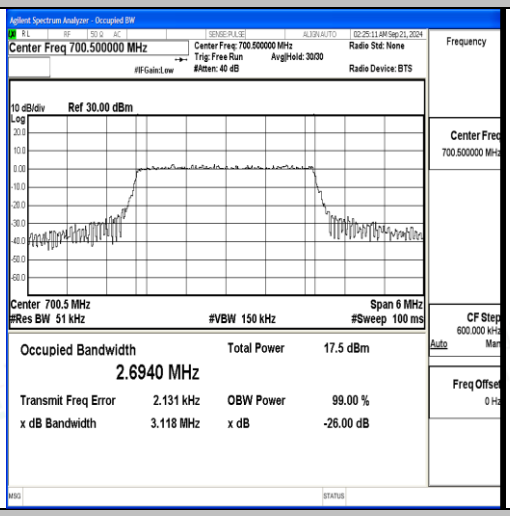
Band12-1.4MHz-QPSK-23173-6RB#0-PASS



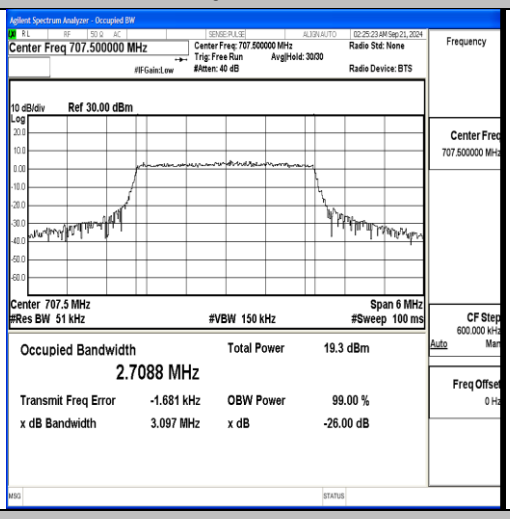
Band12-1.4MHz-16QAM-23173-6RB#0-PASS



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



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



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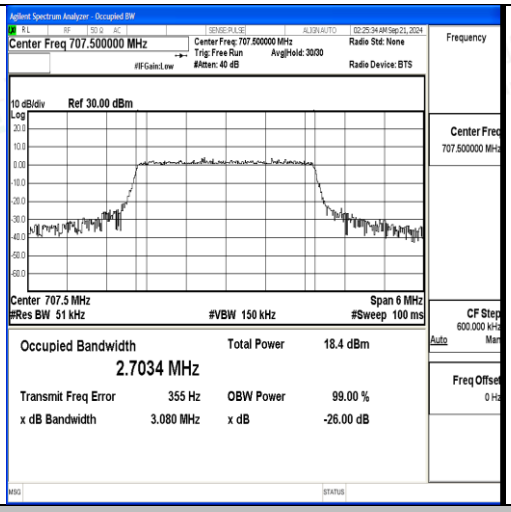
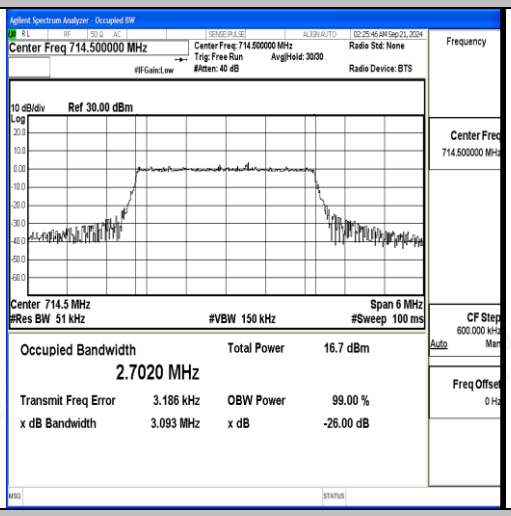


Band12-3MHz-16QAM-23095-15RB#0-PASS



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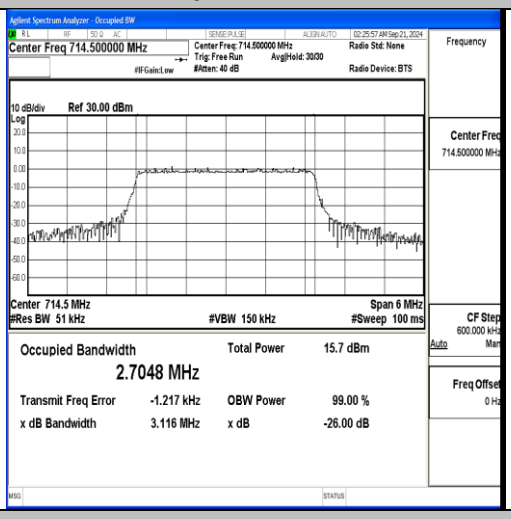

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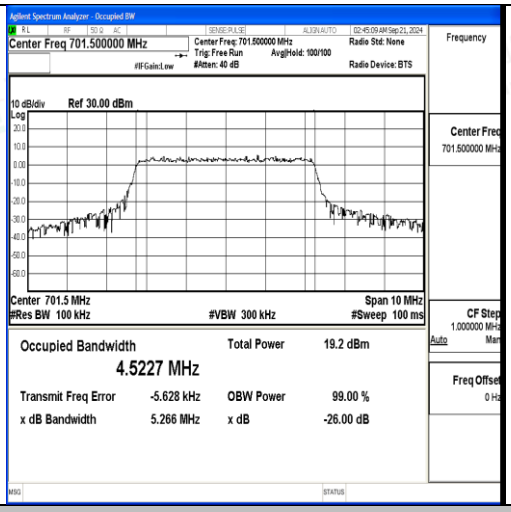

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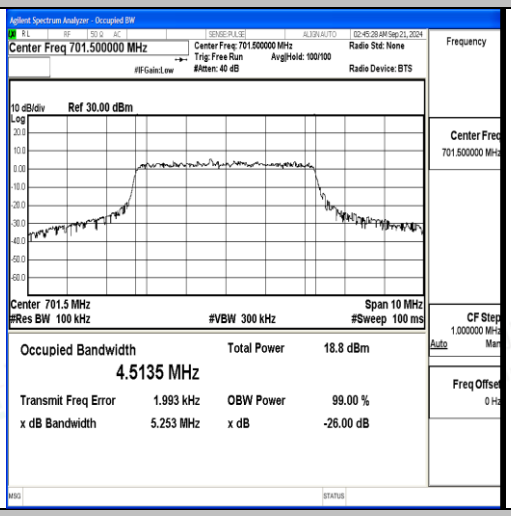

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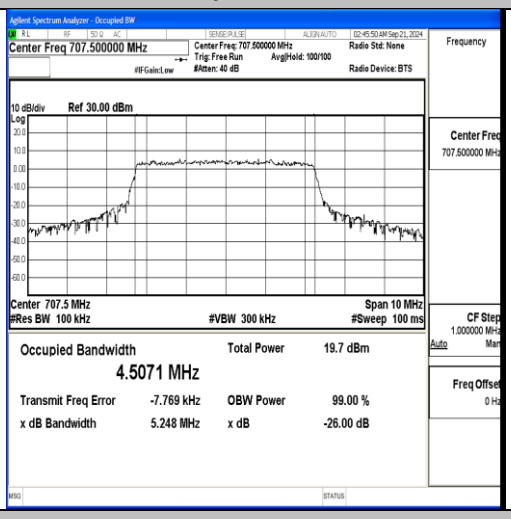

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