

Appendix A: Effective (Isotropic) Radiated Power

Test Result

Test Band: LTE CatM1 B12 _ 1.4MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		ERP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	21.67	21.62	21.63	-0.84	1.31	20.83	20.78	20.79	34.77	PASS
	1	2	21.48	21.47	21.70	-0.84	1.31	20.64	20.63	20.86	34.77	PASS
	1	5	21.43	21.45	21.53	-0.84	1.31	20.59	20.61	20.69	34.77	PASS
	3	0	20.26	20.74	20.99	-0.84	1.31	19.42	19.9	20.15	34.77	PASS
	3	2	20.44	20.86	20.88	-0.84	1.31	19.6	20.02	20.04	34.77	PASS
	3	3	20.33	20.87	20.87	-0.84	1.31	19.49	20.03	20.03	34.77	PASS
	6	0	20.46	20.83	20.61	-0.84	1.31	19.62	19.99	19.77	34.77	PASS
16QAM	1	0	20.85	21.14	20.63	-0.84	1.31	20.01	20.3	19.79	34.77	PASS
	1	2	20.47	20.65	20.77	-0.84	1.31	19.63	19.81	19.93	34.77	PASS
	1	5	20.46	20.49	20.75	-0.84	1.31	19.62	19.65	19.91	34.77	PASS
	3	0	20.52	20.85	20.78	-0.84	1.31	19.68	20.01	19.94	34.77	PASS
	3	2	20.09	20.71	20.85	-0.84	1.31	19.25	19.87	20.01	34.77	PASS
	3	3	20.18	20.79	20.87	-0.84	1.31	19.34	19.95	20.03	34.77	PASS
	6	0	20.06	20.27	20.79	-0.84	1.31	19.22	19.43	19.95	34.77	PASS

Test Band: LTE CatM1 B12 _ 3MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		ERP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	21.43	21.78	21.75	-0.84	1.31	20.59	20.94	20.91	34.77	PASS
	1	2	21.39	21.28	21.62	-0.84	1.31	20.55	20.44	20.78	34.77	PASS
	1	5	21.37	21.41	21.27	-0.84	1.31	20.53	20.57	20.43	34.77	PASS
	3	0	20.56	20.79	20.91	-0.84	1.31	19.72	19.95	20.07	34.77	PASS
	3	2	20.51	20.86	21.02	-0.84	1.31	19.67	20.02	20.18	34.77	PASS
	3	3	20.38	20.94	20.93	-0.84	1.31	19.54	20.1	20.09	34.77	PASS
	6	0	20.54	20.95	20.61	-0.84	1.31	19.7	20.11	19.77	34.77	PASS
16QAM	1	0	20.69	20.82	20.62	-0.84	1.31	19.85	19.98	19.78	34.77	PASS
	1	2	20.87	20.31	20.51	-0.84	1.31	20.03	19.47	19.67	34.77	PASS
	1	5	20.82	20.46	20.49	-0.84	1.31	19.98	19.62	19.65	34.77	PASS
	3	0	20.76	20.45	20.42	-0.84	1.31	19.92	19.61	19.58	34.77	PASS
	3	2	20.84	20.37	20.53	-0.84	1.31	20	19.53	19.69	34.77	PASS
	3	3	20.39	20.34	20.51	-0.84	1.31	19.55	19.5	19.67	34.77	PASS
	6	0	20.35	20.31	20.46	-0.84	1.31	19.51	19.47	19.62	34.77	PASS

Test Band: LTE CatM1 B12 _ 5MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		ERP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	21.38	21.74	21.45	-0.84	1.31	20.54	20.9	20.61	34.77	PASS
	1	2	21.46	21.55	21.75	-0.84	1.31	20.62	20.71	20.91	34.77	PASS
	1	5	20.96	21.18	21.46	-0.84	1.31	20.12	20.34	20.62	34.77	PASS
	3	0	20.18	20.77	20.87	-0.84	1.31	19.34	19.93	20.03	34.77	PASS
	3	2	20.33	20.76	20.96	-0.84	1.31	19.49	19.92	20.12	34.77	PASS
	3	3	20.45	20.78	20.93	-0.84	1.31	19.61	19.94	20.09	34.77	PASS
	6	0	20.63	20.99	20.65	-0.84	1.31	19.79	20.15	19.81	34.77	PASS
16QAM	1	0	21.14	21.19	20.46	-0.84	1.31	20.3	20.35	19.62	34.77	PASS
	1	2	20.67	20.25	21.07	-0.84	1.31	19.83	19.41	20.23	34.77	PASS
	1	5	20.78	20.59	20.79	-0.84	1.31	19.94	19.75	19.95	34.77	PASS
	3	0	20.88	20.41	20.89	-0.84	1.31	20.04	19.57	20.05	34.77	PASS
	3	2	20.72	20.49	20.78	-0.84	1.31	19.88	19.65	19.94	34.77	PASS
	3	3	20.36	20.61	20.77	-0.84	1.31	19.52	19.77	19.93	34.77	PASS
	6	0	20.32	20.44	20.62	-0.84	1.31	19.48	19.6	19.78	34.77	PASS

Test Band: LTE CatM1 B12 _ 10MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		ERP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	21.32	21.91	21.55	-0.84	1.31	20.48	21.07	20.71	34.77	PASS
	1	2	21.46	21.59	21.79	-0.84	1.31	20.62	20.75	20.95	34.77	PASS
	1	5	21.28	21.58	21.51	-0.84	1.31	20.44	20.74	20.67	34.77	PASS
	3	0	20.26	20.85	20.73	-0.84	1.31	19.42	20.01	19.89	34.77	PASS
	3	2	20.43	20.87	20.97	-0.84	1.31	19.59	20.03	20.13	34.77	PASS
	3	3	20.44	20.81	20.88	-0.84	1.31	19.6	19.97	20.04	34.77	PASS
	6	0	20.63	20.88	20.59	-0.84	1.31	19.79	20.04	19.75	34.77	PASS
16QAM	1	0	21.17	20.47	20.37	-0.84	1.31	20.33	19.63	19.53	34.77	PASS
	1	2	21.12	20.84	21.21	-0.84	1.31	20.28	20	20.37	34.77	PASS
	1	5	20.94	20.45	21.05	-0.84	1.31	20.1	19.61	20.21	34.77	PASS
	3	0	20.47	20.83	21.09	-0.84	1.31	19.63	19.99	20.25	34.77	PASS
	3	2	20.42	20.45	20.83	-0.84	1.31	19.58	19.61	19.99	34.77	PASS
	3	3	20.36	20.61	20.89	-0.84	1.31	19.52	19.77	20.05	34.77	PASS
	6	0	20.12	20.37	20.47	-0.84	1.31	19.28	19.53	19.63	34.77	PASS

Note:

- 1) dBd = dBi - 2.15
- 2) EIRP = Conducted output power + Antenna gain (dBi)
- 3) ERP = Conducted output power + Antenna gain (dBd)

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

Test Result

Band	Bandwidth	Channel	Modulation	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band12	1.4MHz	23017	QPSK	1	0	Low	9.95	<=13	PASS
Band12	1.4MHz	23017	QPSK	6	0	Low	10.71	<=13	PASS
Band12	1.4MHz	23095	QPSK	1	0	Low	9.34	<=13	PASS
Band12	1.4MHz	23095	QPSK	6	0	Low	10.62	<=13	PASS
Band12	1.4MHz	23173	QPSK	1	0	High	8.81	<=13	PASS
Band12	1.4MHz	23173	QPSK	6	0	High	11.07	<=13	PASS
Band12	1.4MHz	23017	16QAM	1	0	Low	11.68	<=13	PASS
Band12	1.4MHz	23017	16QAM	6	0	Low	10.26	<=13	PASS
Band12	1.4MHz	23095	16QAM	1	0	Low	11.20	<=13	PASS
Band12	1.4MHz	23095	16QAM	6	0	Low	9.10	<=13	PASS
Band12	1.4MHz	23173	16QAM	1	0	High	9.70	<=13	PASS
Band12	1.4MHz	23173	16QAM	6	0	High	11.53	<=13	PASS
Band12	3MHz	23025	QPSK	1	0	Low	8.61	<=13	PASS
Band12	3MHz	23025	QPSK	6	0	Low	9.22	<=13	PASS
Band12	3MHz	23095	QPSK	1	0	Low	8.28	<=13	PASS
Band12	3MHz	23095	QPSK	6	0	Low	10.39	<=13	PASS
Band12	3MHz	23165	QPSK	1	0	High	9.01	<=13	PASS
Band12	3MHz	23165	QPSK	6	0	High	9.98	<=13	PASS
Band12	3MHz	23025	16QAM	1	0	Low	10.20	<=13	PASS
Band12	3MHz	23025	16QAM	6	0	Low	9.03	<=13	PASS
Band12	3MHz	23095	16QAM	1	0	Low	12.08	<=13	PASS
Band12	3MHz	23095	16QAM	6	0	Low	9.69	<=13	PASS
Band12	3MHz	23165	16QAM	1	0	High	9.14	<=13	PASS
Band12	3MHz	23165	16QAM	6	0	High	8.75	<=13	PASS
Band12	5MHz	23035	QPSK	1	0	Low	8.70	<=13	PASS
Band12	5MHz	23035	QPSK	6	0	Low	8.57	<=13	PASS
Band12	5MHz	23095	QPSK	1	0	Low	7.95	<=13	PASS
Band12	5MHz	23095	QPSK	6	0	Low	8.69	<=13	PASS
Band12	5MHz	23155	QPSK	1	0	High	12.96	<=13	PASS
Band12	5MHz	23155	QPSK	6	0	High	8.98	<=13	PASS
Band12	5MHz	23035	16QAM	1	0	Low	8.69	<=13	PASS
Band12	5MHz	23035	16QAM	6	0	Low	12.30	<=13	PASS
Band12	5MHz	23095	16QAM	1	0	Low	11.02	<=13	PASS
Band12	5MHz	23095	16QAM	6	0	Low	9.55	<=13	PASS
Band12	5MHz	23155	16QAM	1	0	High	8.76	<=13	PASS
Band12	5MHz	23155	16QAM	6	0	High	9.27	<=13	PASS
Band12	10MHz	23060	QPSK	1	0	Low	8.97	<=13	PASS

Band12	10MHz	23060	QPSK	6	0	Low	9.43	<=13	PASS
Band12	10MHz	23095	QPSK	1	0	Low	8.57	<=13	PASS
Band12	10MHz	23095	QPSK	6	0	Low	11.00	<=13	PASS
Band12	10MHz	23130	QPSK	1	0	High	9.34	<=13	PASS
Band12	10MHz	23130	QPSK	6	0	High	10.83	<=13	PASS
Band12	10MHz	23060	16QAM	1	0	Low	10.91	<=13	PASS
Band12	10MHz	23060	16QAM	6	0	Low	9.32	<=13	PASS
Band12	10MHz	23095	16QAM	1	0	Low	11.41	<=13	PASS
Band12	10MHz	23095	16QAM	6	0	Low	11.19	<=13	PASS
Band12	10MHz	23130	16QAM	1	0	High	8.96	<=13	PASS
Band12	10MHz	23130	16QAM	6	0	High	9.15	<=13	PASS

Test Graphs



Band12-1.4MHz-QPSK-23017-1-0-Low-9.95-13-PASS



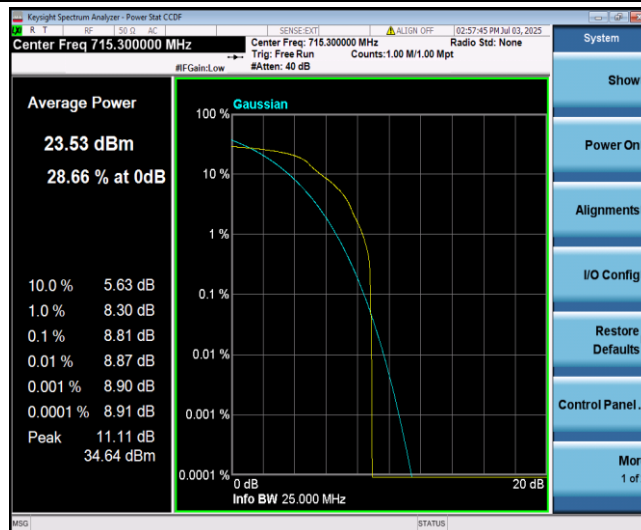
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Band12-1.4MHz-QPSK-23095-1-0-Low-9.34-13-PASS



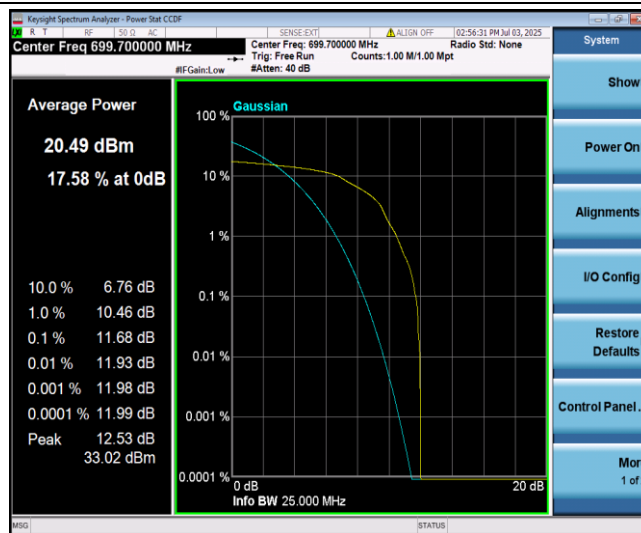
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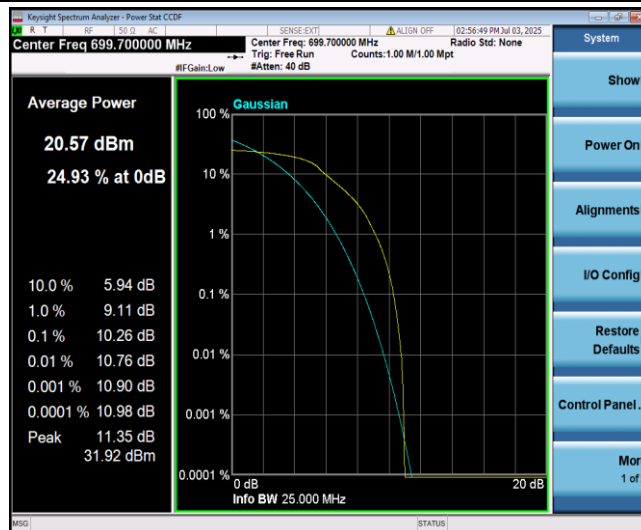
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Band12-1.4MHz-QPSK-23173-6-0-High-11.07-<=13-PASS



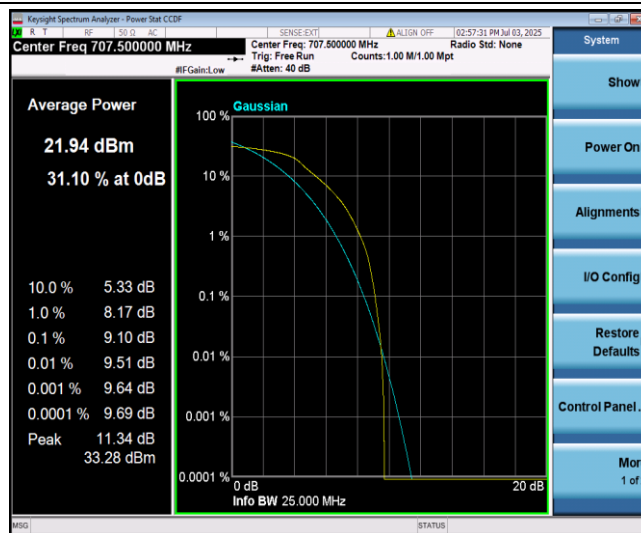
Band12-1.4MHz-16QAM-23017-1-0-Low-11.68-<=13-PASS



Band12-1.4MHz-16QAM-23017-6-0-Low-10.26-<=13-PASS



Band12-1.4MHz-16QAM-23095-1-0-Low-11.20-<=13-PASS



Band12-1.4MHz-16QAM-23095-6-0-Low-9.10-<=13-PASS



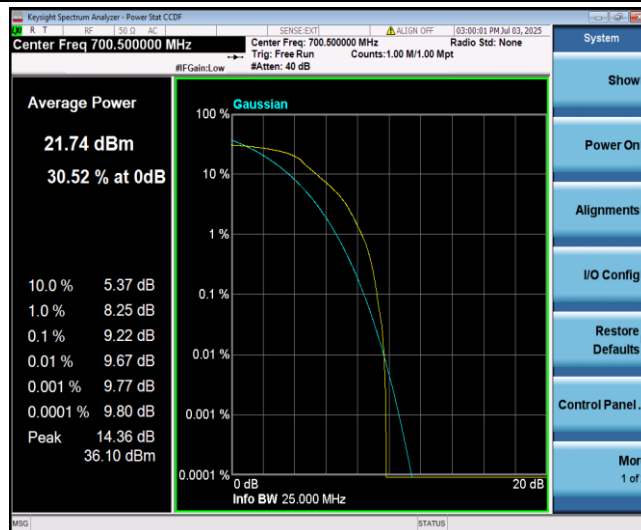
Band12-1.4MHz-16QAM-23173-1-0-High-9.70-<=13-PASS



Band12-1.4MHz-16QAM-23173-6-0-High-11.53-<=13-PASS



Band12-3MHz-QPSK-23025-1-0-Low-8.61-<=13-PASS



Band12-3MHz-QPSK-23025-6-0-Low-9.22-<=13-PASS



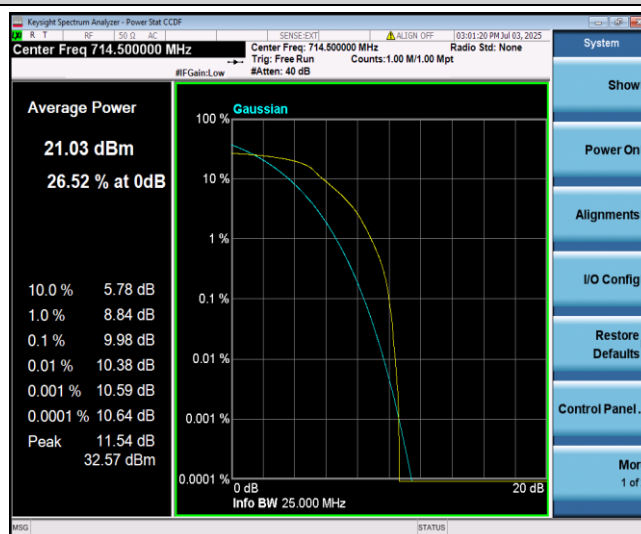
Band12-3MHz-QPSK-23095-1-0-Low-8.28-<=13-PASS



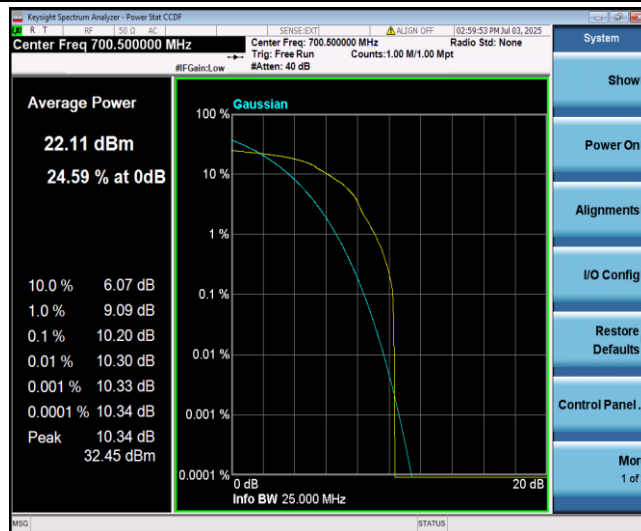
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Band12-3MHz-QPSK-23165-1-0-High-9.01-=<=13-PASS



Band12-3MHz-QPSK-23165-6-0-High-9.98-=<=13-PASS



Band12-3MHz-16QAM-23025-1-0-Low-10.20-<=13-PASS



Band12-3MHz-16QAM-23025-6-0-Low-9.03-<=13-PASS



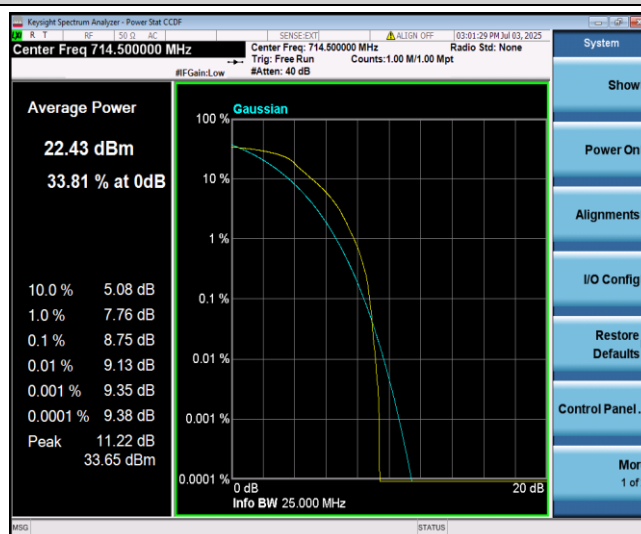
Band12-3MHz-16QAM-23095-1-0-Low-12.08-<=13-PASS



Band12-3MHz-16QAM-23095-6-0-Low-9.69-≤13-PASS



Band12-3MHz-16QAM-23165-1-0-High-9.14-≤13-PASS



Band12-3MHz-16QAM-23165-6-0-High-8.75-≤13-PASS



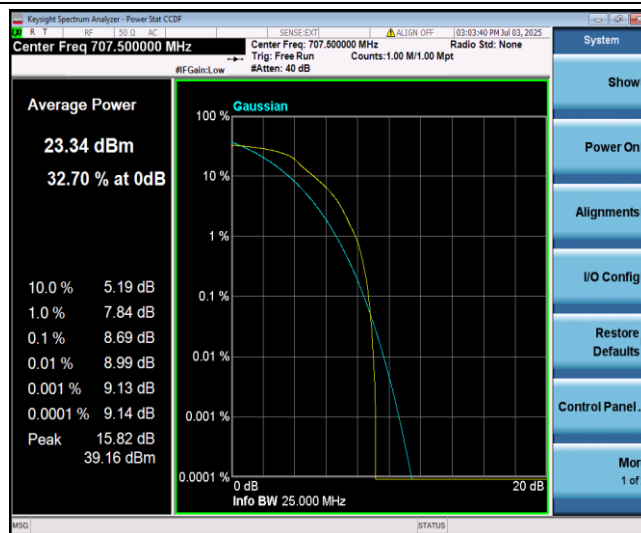
Band12-5MHz-QPSK-23035-1-0-Low-8.70-=<=13-PASS



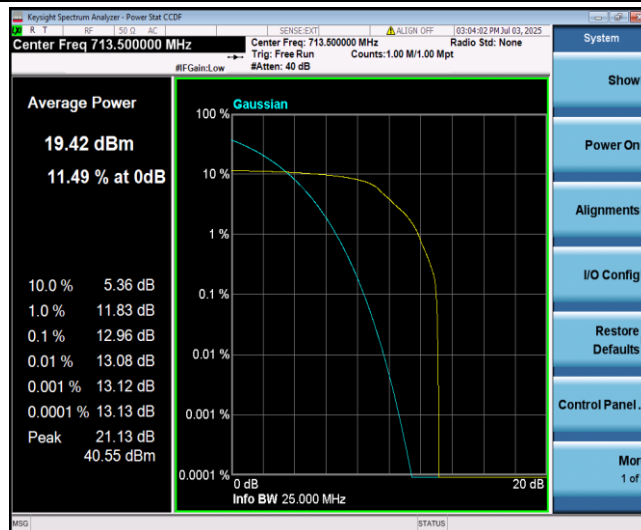
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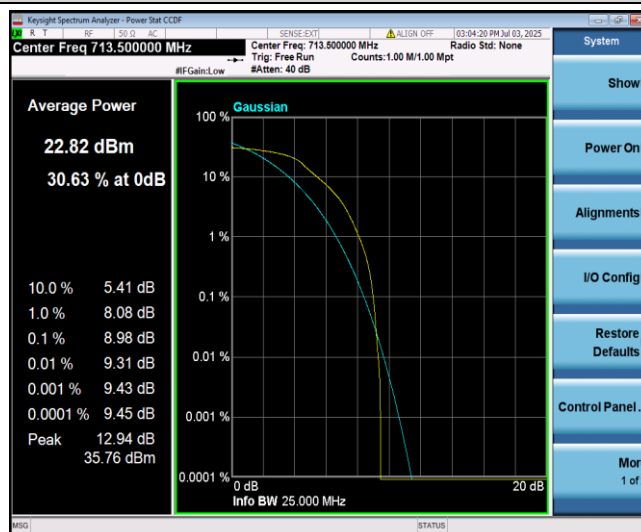
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Band12-5MHz-QPSK-23095-6-0-Low-8.69-<=13-PASS



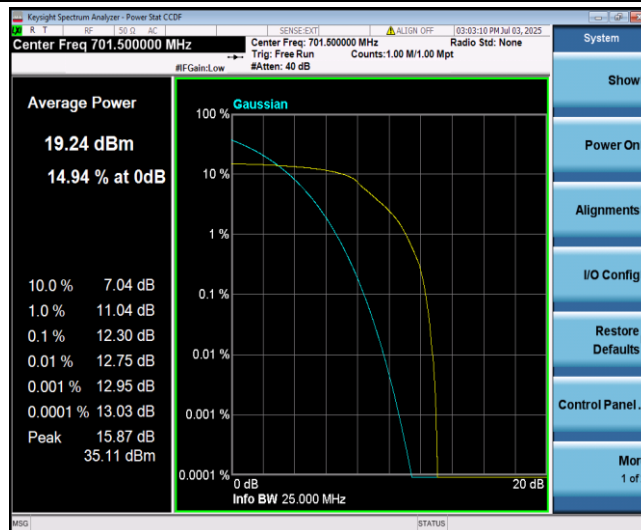
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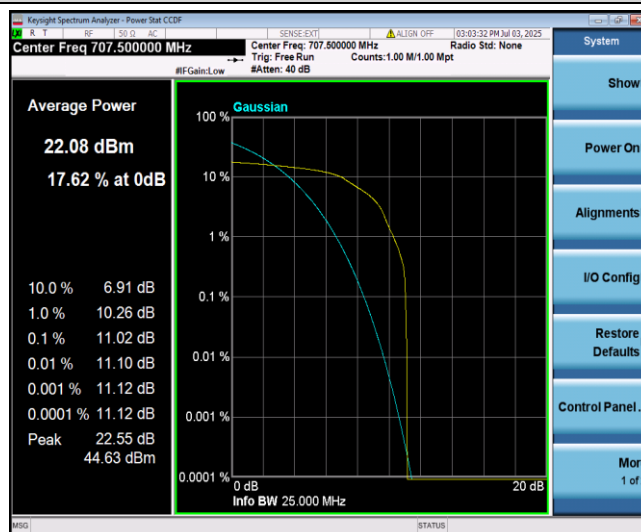
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Band12-5MHz-16QAM-23035-1-0-Low-8.69-<=13-PASS



Band12-5MHz-16QAM-23035-6-0-Low-12.30-<=13-PASS



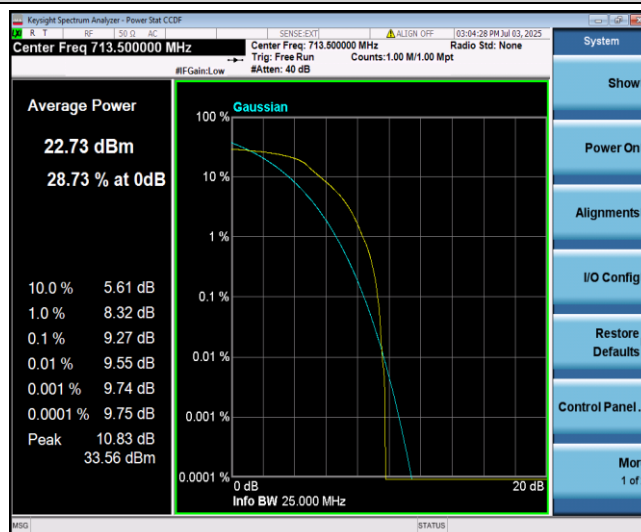
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Band12-5MHz-16QAM-23095-6-0-Low-9.55-<=13-PASS



Band12-5MHz-16QAM-23155-1-0-High-8.76-<=13-PASS



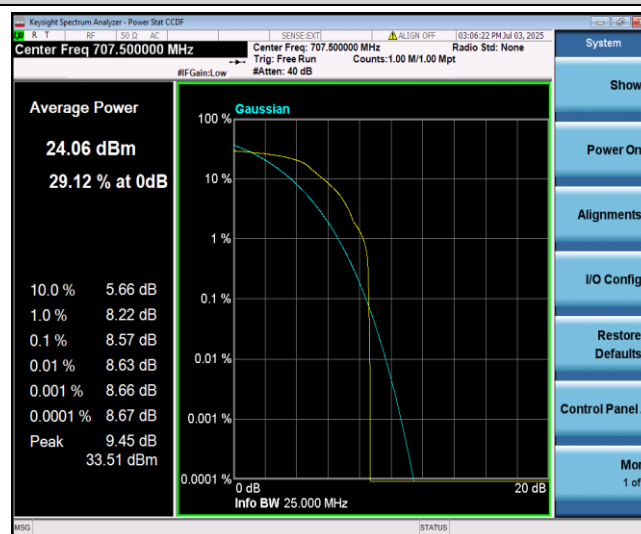
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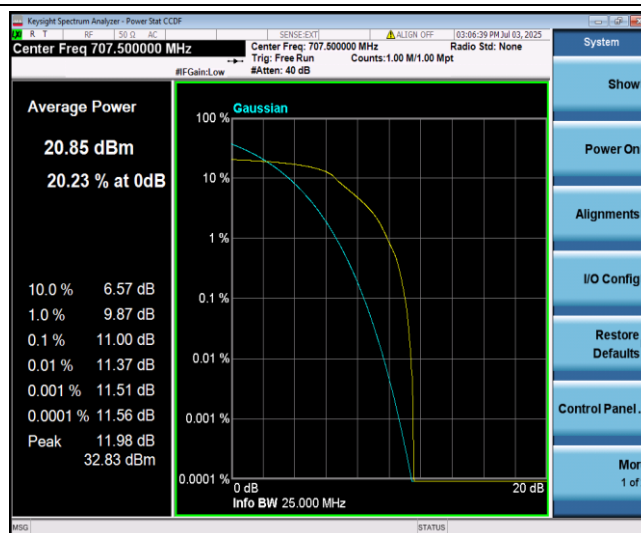
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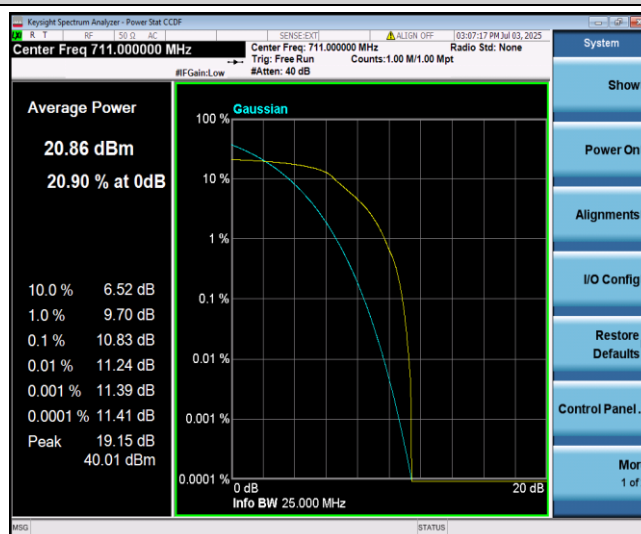
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Band12-10MHz-QPSK-23130-1-0-High-9.34-<=13-PASS



Band12-10MHz-QPSK-23130-6-0-High-10.83-<=13-PASS