



Appendix H: Test Data for E-UTRA Band 5

Product Name: Smart POS

Test Model: WIZARPOS Q3 min

Environmental Conditions

Temperature:	23.8°C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Paddi Chen
Supervised by:	Nick Peng





H.1 Conducted Output Power Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	22.94	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	22.67	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	22.89	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	22.95	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	22.93	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	22.92	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	22.91	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	22.99	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	22.89	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	23.17	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	23.16	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	22.87	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	23.15	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	23.15	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	23.78	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	23.37	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	23.84	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	23.46	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	23.67	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	23.43	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	23.64	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	23.15	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	23.63	PASS
Band5	1.4MHz	16QAM	20525	3RB#1	22.96	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	23.75	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	22.88	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	22.94	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	22.39	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	23.33	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	23.42	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	23.11	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	23.15	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	22.62	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	22.49	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	23.41	PASS



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity



Band5	1.4MHz	16QAM	20643	3RB#0	22.83	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	23.53	PASS
Band5	1.4MHz	16QAM	20643	3RB#1	22.85	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	23.07	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	22.52	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	22.81	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	22.31	PASS
Band5	3MHz	QPSK	20415	1RB#0	23.49	PASS
Band5	3MHz	16QAM	20415	1RB#0	23.02	PASS
Band5	3MHz	QPSK	20415	1RB#8	23.50	PASS
Band5	3MHz	16QAM	20415	1RB#8	22.67	PASS
Band5	3MHz	QPSK	20415	1RB#14	23.36	PASS
Band5	3MHz	16QAM	20415	1RB#14	22.71	PASS
Band5	3MHz	QPSK	20415	8RB#0	22.86	PASS
Band5	3MHz	16QAM	20415	8RB#0	22.35	PASS
Band5	3MHz	QPSK	20415	8RB#4	22.84	PASS
Band5	3MHz	16QAM	20415	8RB#4	22.35	PASS
Band5	3MHz	QPSK	20415	8RB#7	22.66	PASS
Band5	3MHz	16QAM	20415	8RB#7	22.26	PASS
Band5	3MHz	QPSK	20415	15RB#0	22.42	PASS
Band5	3MHz	16QAM	20415	15RB#0	22.08	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.72	PASS
Band5	3MHz	16QAM	20525	1RB#0	22.25	PASS
Band5	3MHz	QPSK	20525	1RB#8	23.63	PASS
Band5	3MHz	16QAM	20525	1RB#8	23.18	PASS
Band5	3MHz	QPSK	20525	1RB#14	23.83	PASS
Band5	3MHz	16QAM	20525	1RB#14	23.25	PASS
Band5	3MHz	QPSK	20525	8RB#0	22.70	PASS
Band5	3MHz	16QAM	20525	8RB#0	22.36	PASS
Band5	3MHz	QPSK	20525	8RB#4	22.71	PASS
Band5	3MHz	16QAM	20525	8RB#4	22.37	PASS
Band5	3MHz	QPSK	20525	8RB#7	22.70	PASS
Band5	3MHz	16QAM	20525	8RB#7	22.36	PASS
Band5	3MHz	QPSK	20525	15RB#0	22.80	PASS
Band5	3MHz	16QAM	20525	15RB#0	21.98	PASS
Band5	3MHz	QPSK	20635	1RB#0	23.40	PASS
Band5	3MHz	16QAM	20635	1RB#0	23.63	PASS
Band5	3MHz	QPSK	20635	1RB#8	23.45	PASS
Band5	3MHz	16QAM	20635	1RB#8	23.54	PASS
Band5	3MHz	QPSK	20635	1RB#14	22.28	PASS





Band5	3MHz	16QAM	20635	1RB#14	22.11	PASS
Band5	3MHz	QPSK	20635	8RB#0	22.84	PASS
Band5	3MHz	16QAM	20635	8RB#0	22.35	PASS
Band5	3MHz	QPSK	20635	8RB#4	22.85	PASS
Band5	3MHz	16QAM	20635	8RB#4	22.30	PASS
Band5	3MHz	QPSK	20635	8RB#7	22.67	PASS
Band5	3MHz	16QAM	20635	8RB#7	22.16	PASS
Band5	3MHz	QPSK	20635	15RB#0	22.67	PASS
Band5	3MHz	16QAM	20635	15RB#0	22.17	PASS
Band5	5MHz	QPSK	20425	1RB#0	23.46	PASS
Band5	5MHz	16QAM	20425	1RB#0	22.42	PASS
Band5	5MHz	QPSK	20425	1RB#12	23.62	PASS
Band5	5MHz	16QAM	20425	1RB#12	22.29	PASS
Band5	5MHz	QPSK	20425	1RB#24	23.58	PASS
Band5	5MHz	16QAM	20425	1RB#24	22.33	PASS
Band5	5MHz	QPSK	20425	12RB#0	22.65	PASS
Band5	5MHz	16QAM	20425	12RB#0	22.13	PASS
Band5	5MHz	QPSK	20425	12RB#6	22.65	PASS
Band5	5MHz	16QAM	20425	12RB#6	22.14	PASS
Band5	5MHz	QPSK	20425	12RB#13	22.68	PASS
Band5	5MHz	16QAM	20425	12RB#13	22.04	PASS
Band5	5MHz	QPSK	20425	25RB#0	22.49	PASS
Band5	5MHz	16QAM	20425	25RB#0	22.20	PASS
Band5	5MHz	QPSK	20525	1RB#0	23.48	PASS
Band5	5MHz	16QAM	20525	1RB#0	23.40	PASS
Band5	5MHz	QPSK	20525	1RB#12	23.25	PASS
Band5	5MHz	16QAM	20525	1RB#12	23.43	PASS
Band5	5MHz	QPSK	20525	1RB#24	23.87	PASS
Band5	5MHz	16QAM	20525	1RB#24	23.14	PASS
Band5	5MHz	QPSK	20525	12RB#0	22.72	PASS
Band5	5MHz	16QAM	20525	12RB#0	22.14	PASS
Band5	5MHz	QPSK	20525	12RB#6	22.75	PASS
Band5	5MHz	16QAM	20525	12RB#6	22.15	PASS
Band5	5MHz	QPSK	20525	12RB#13	22.72	PASS
Band5	5MHz	16QAM	20525	12RB#13	22.37	PASS
Band5	5MHz	QPSK	20525	25RB#0	22.67	PASS
Band5	5MHz	16QAM	20525	25RB#0	22.19	PASS
Band5	5MHz	QPSK	20625	1RB#0	23.56	PASS
Band5	5MHz	16QAM	20625	1RB#0	22.95	PASS
Band5	5MHz	QPSK	20625	1RB#12	23.46	PASS





Band5	5MHz	16QAM	20625	1RB#12	22.88	PASS
Band5	5MHz	QPSK	20625	1RB#24	22.91	PASS
Band5	5MHz	16QAM	20625	1RB#24	22.38	PASS
Band5	5MHz	QPSK	20625	12RB#0	22.85	PASS
Band5	5MHz	16QAM	20625	12RB#0	22.19	PASS
Band5	5MHz	QPSK	20625	12RB#6	22.91	PASS
Band5	5MHz	16QAM	20625	12RB#6	22.14	PASS
Band5	5MHz	QPSK	20625	12RB#13	22.72	PASS
Band5	5MHz	16QAM	20625	12RB#13	22.03	PASS
Band5	5MHz	QPSK	20625	25RB#0	22.79	PASS
Band5	5MHz	16QAM	20625	25RB#0	22.24	PASS
Band5	10MHz	QPSK	20450	1RB#0	23.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	23.05	PASS
Band5	10MHz	QPSK	20450	1RB#24	23.52	PASS
Band5	10MHz	16QAM	20450	1RB#24	23.07	PASS
Band5	10MHz	QPSK	20450	1RB#49	23.40	PASS
Band5	10MHz	16QAM	20450	1RB#49	23.00	PASS
Band5	10MHz	QPSK	20450	25RB#0	22.62	PASS
Band5	10MHz	16QAM	20450	25RB#0	22.01	PASS
Band5	10MHz	QPSK	20450	25RB#12	22.59	PASS
Band5	10MHz	16QAM	20450	25RB#12	22.01	PASS
Band5	10MHz	QPSK	20450	25RB#25	22.49	PASS
Band5	10MHz	16QAM	20450	25RB#25	21.84	PASS
Band5	10MHz	QPSK	20450	50RB#0	22.65	PASS
Band5	10MHz	16QAM	20450	50RB#0	21.99	PASS
Band5	10MHz	QPSK	20525	1RB#0	23.47	PASS
Band5	10MHz	16QAM	20525	1RB#0	23.02	PASS
Band5	10MHz	QPSK	20525	1RB#24	23.68	PASS
Band5	10MHz	16QAM	20525	1RB#24	23.21	PASS
Band5	10MHz	QPSK	20525	1RB#49	23.57	PASS
Band5	10MHz	16QAM	20525	1RB#49	23.13	PASS
Band5	10MHz	QPSK	20525	25RB#0	22.62	PASS
Band5	10MHz	16QAM	20525	25RB#0	22.20	PASS
Band5	10MHz	QPSK	20525	25RB#12	22.69	PASS
Band5	10MHz	16QAM	20525	25RB#12	22.20	PASS
Band5	10MHz	QPSK	20525	25RB#25	22.65	PASS
Band5	10MHz	16QAM	20525	25RB#25	22.33	PASS
Band5	10MHz	QPSK	20525	50RB#0	22.67	PASS
Band5	10MHz	16QAM	20525	50RB#0	22.14	PASS
Band5	10MHz	QPSK	20600	1RB#0	23.61	PASS





Band5	10MHz	16QAM	20600	1RB#0	23.63	PASS
Band5	10MHz	QPSK	20600	1RB#24	23.54	PASS
Band5	10MHz	16QAM	20600	1RB#24	23.61	PASS
Band5	10MHz	QPSK	20600	1RB#49	23.11	PASS
Band5	10MHz	16QAM	20600	1RB#49	23.02	PASS
Band5	10MHz	QPSK	20600	25RB#0	22.64	PASS
Band5	10MHz	16QAM	20600	25RB#0	22.30	PASS
Band5	10MHz	QPSK	20600	25RB#12	22.69	PASS
Band5	10MHz	16QAM	20600	25RB#12	22.31	PASS
Band5	10MHz	QPSK	20600	25RB#25	22.82	PASS
Band5	10MHz	16QAM	20600	25RB#25	22.35	PASS
Band5	10MHz	QPSK	20600	50RB#0	22.80	PASS
Band5	10MHz	16QAM	20600	50RB#0	22.27	PASS





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

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	4.97	13	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	5.30	13	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	5.76	13	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	6.34	13	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	4.74	13	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	5.64	13	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	5.53	13	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	6.08	13	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	3.73	13	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	3.49	13	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	4.21	13	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	4.97	13	PASS
Band5	3MHz	QPSK	20415	1RB#0	5.06	13	PASS
Band5	3MHz	16QAM	20415	1RB#0	5.76	13	PASS
Band5	3MHz	QPSK	20415	15RB#0	5.81	13	PASS
Band5	3MHz	16QAM	20415	15RB#0	6.52	13	PASS
Band5	3MHz	QPSK	20525	1RB#0	4.79	13	PASS
Band5	3MHz	16QAM	20525	1RB#0	5.74	13	PASS
Band5	3MHz	QPSK	20525	15RB#0	5.57	13	PASS
Band5	3MHz	16QAM	20525	15RB#0	6.22	13	PASS
Band5	3MHz	QPSK	20635	1RB#0	3.65	13	PASS
Band5	3MHz	16QAM	20635	1RB#0	3.66	13	PASS
Band5	3MHz	QPSK	20635	15RB#0	4.60	13	PASS
Band5	3MHz	16QAM	20635	15RB#0	5.27	13	PASS
Band5	5MHz	QPSK	20425	1RB#0	5.13	13	PASS
Band5	5MHz	16QAM	20425	1RB#0	5.84	13	PASS
Band5	5MHz	QPSK	20425	25RB#0	5.79	13	PASS
Band5	5MHz	16QAM	20425	25RB#0	6.40	13	PASS
Band5	5MHz	QPSK	20525	1RB#0	4.97	13	PASS
Band5	5MHz	16QAM	20525	1RB#0	5.44	13	PASS
Band5	5MHz	QPSK	20525	25RB#0	5.61	13	PASS
Band5	5MHz	16QAM	20525	25RB#0	6.28	13	PASS
Band5	5MHz	QPSK	20625	1RB#0	4.01	13	PASS
Band5	5MHz	16QAM	20625	1RB#0	4.49	13	PASS



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

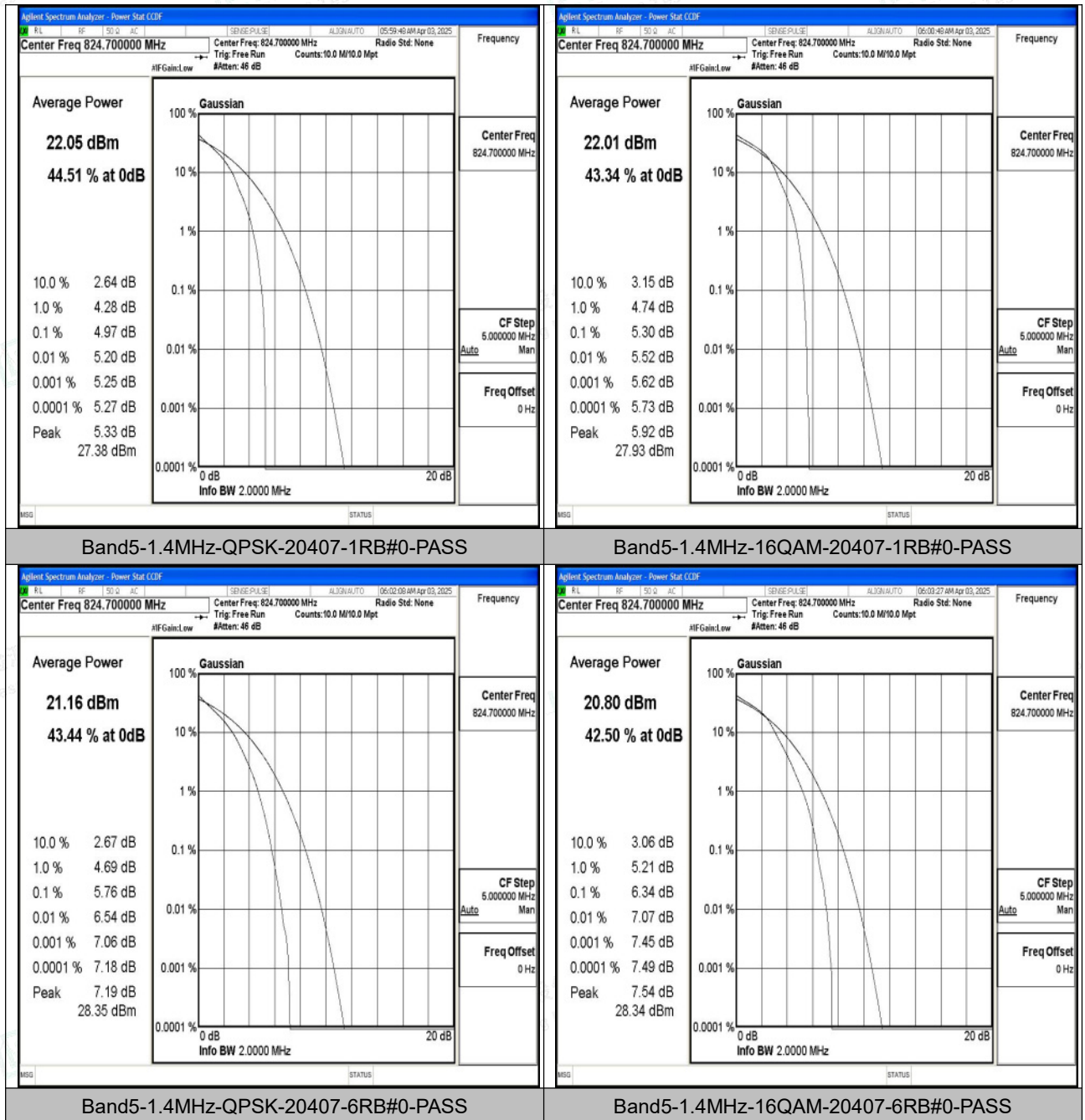


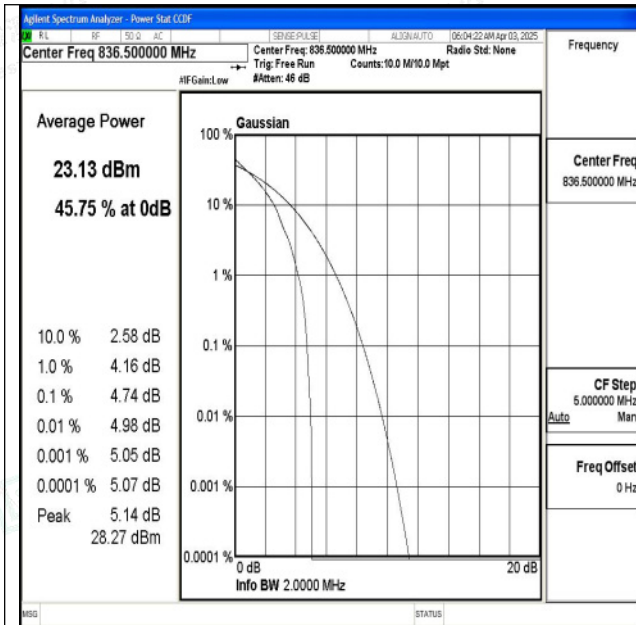
Band5	5MHz	QPSK	20625	25RB#0	5.25	13	PASS
Band5	5MHz	16QAM	20625	25RB#0	5.88	13	PASS
Band5	10MHz	QPSK	20450	1RB#0	5.16	13	PASS
Band5	10MHz	16QAM	20450	1RB#0	5.70	13	PASS
Band5	10MHz	QPSK	20450	50RB#0	5.68	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	6.37	13	PASS
Band5	10MHz	QPSK	20525	1RB#0	4.86	13	PASS
Band5	10MHz	16QAM	20525	1RB#0	5.84	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	5.64	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	6.31	13	PASS
Band5	10MHz	QPSK	20600	1RB#0	4.75	13	PASS
Band5	10MHz	16QAM	20600	1RB#0	4.88	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	5.33	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	5.96	13	PASS



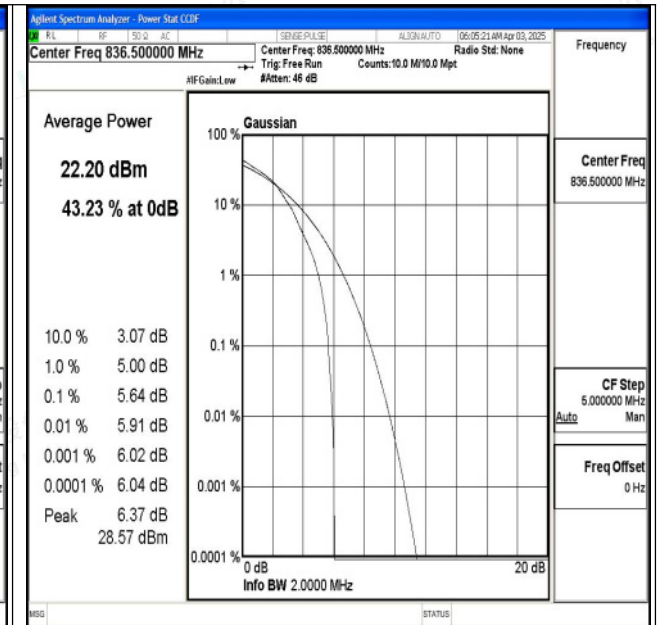


Test Graphs

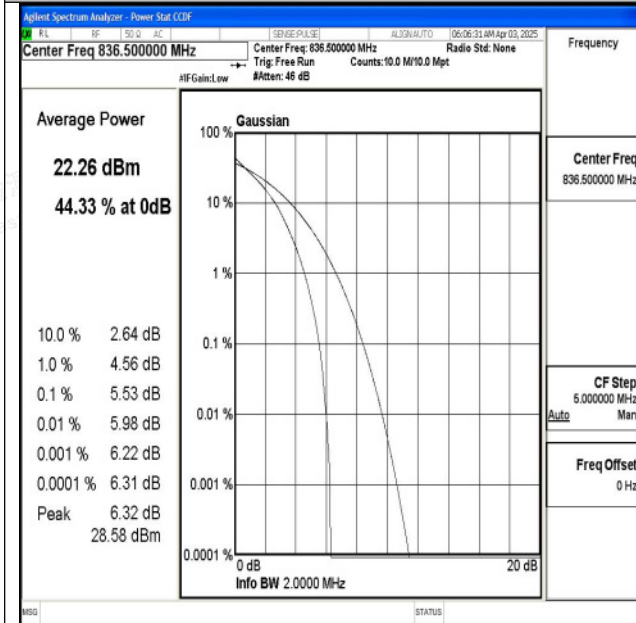




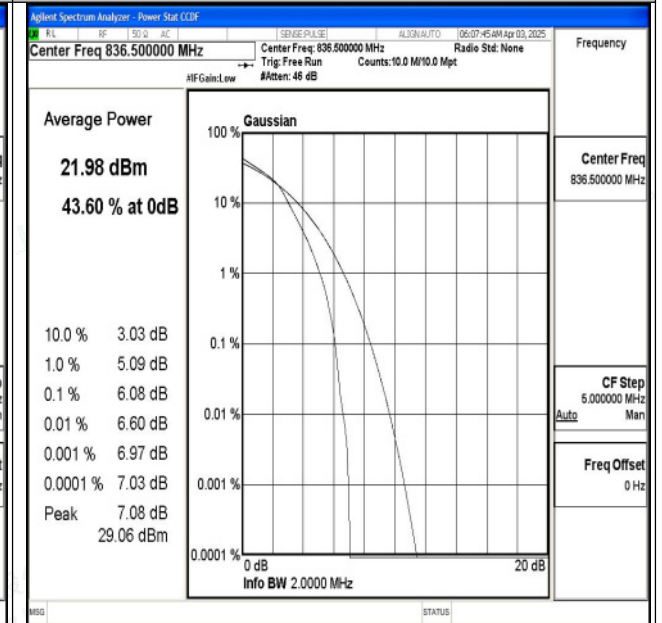
Band5-1.4MHz-QPSK-20525-1RB#0-PASS



Band5-1.4MHz-16QAM-20525-1RB#0-PASS

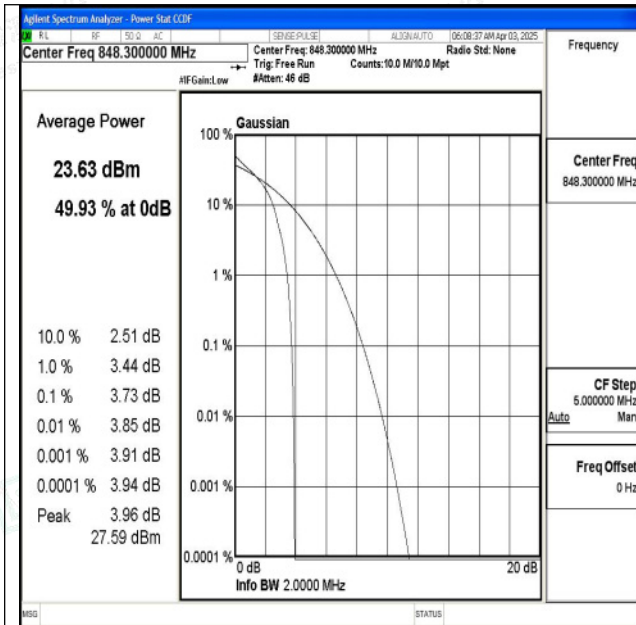


Band5-1.4MHz-QPSK-20525-6RB#0-PASS

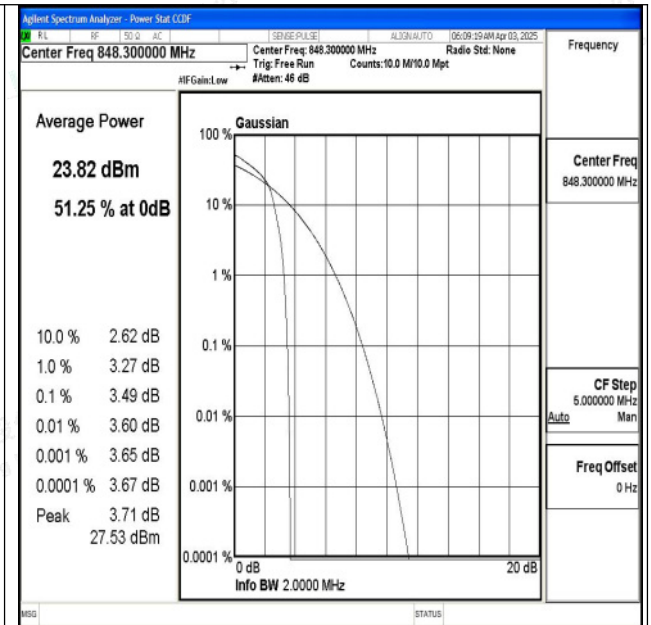


Band5-1.4MHz-16QAM-20525-6RB#0-PASS

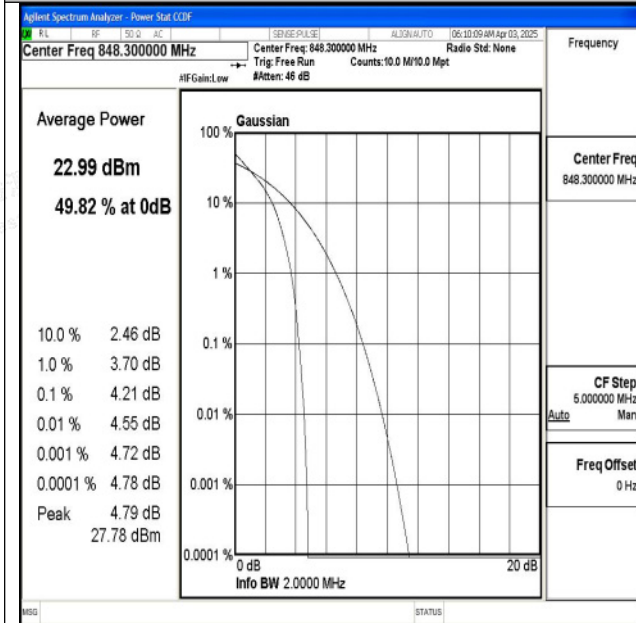




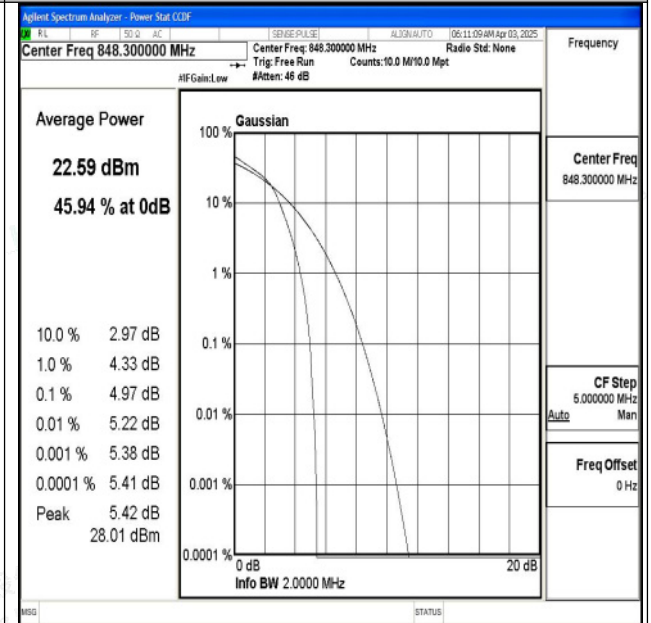
Band5-1.4MHz-QPSK-20643-1RB#0-PASS



Band5-1.4MHz-16QAM-20643-1RB#0-PASS

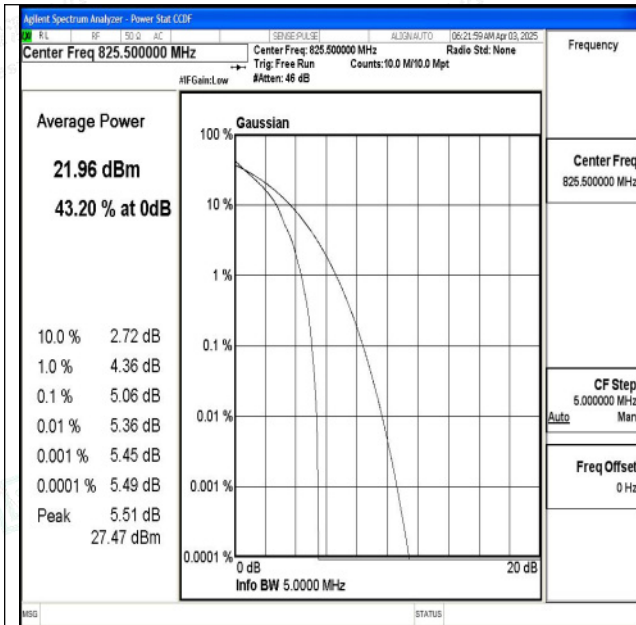


Band5-1.4MHz-QPSK-20643-6RB#0-PASS

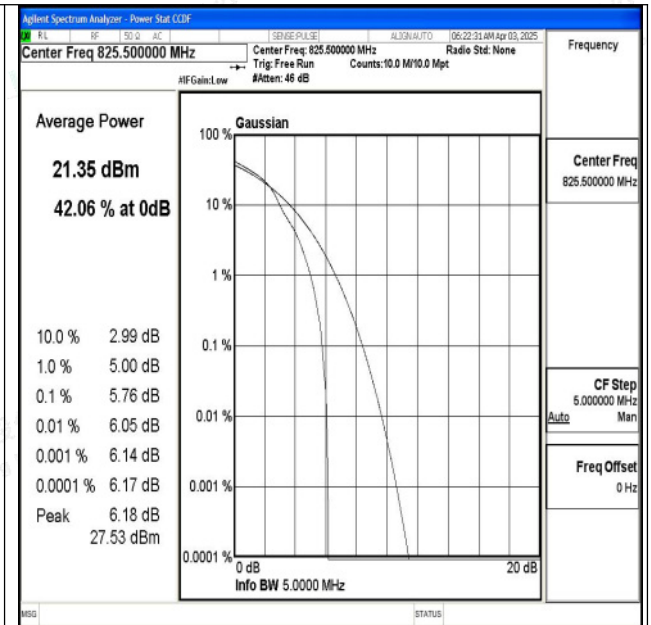


Band5-1.4MHz-16QAM-20643-6RB#0-PASS

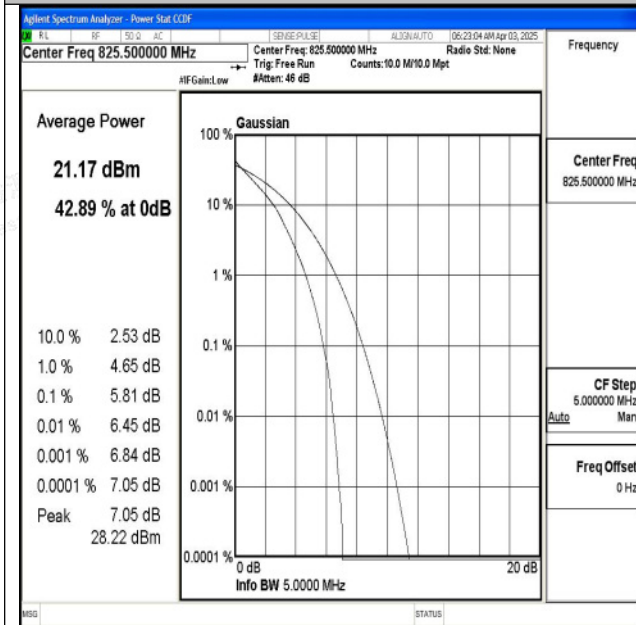




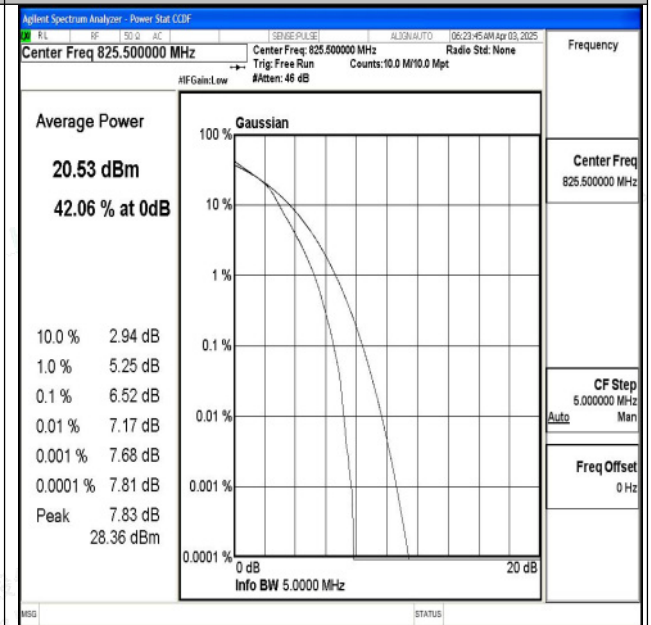
Band5-3MHz-QPSK-20415-1RB#0-PASS



Band5-3MHz-16QAM-20415-1RB#0-PASS

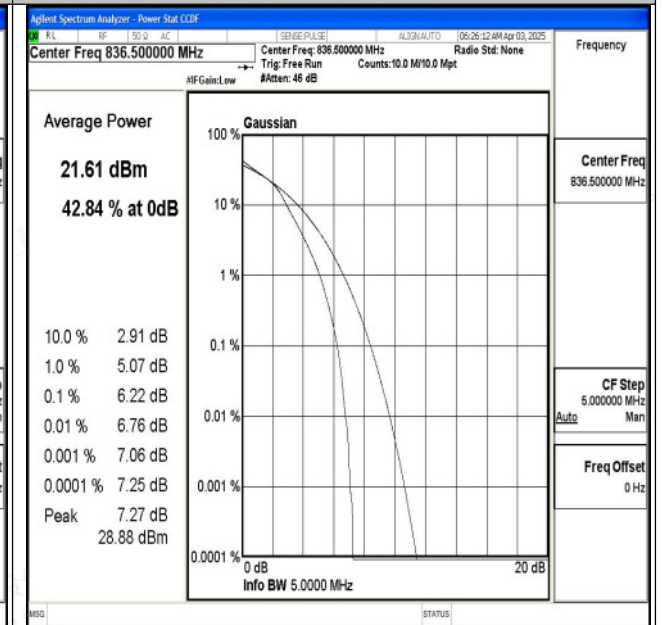
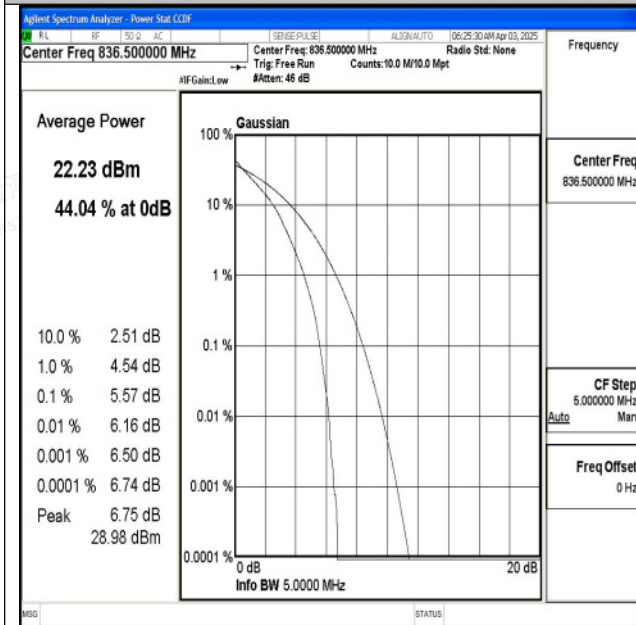
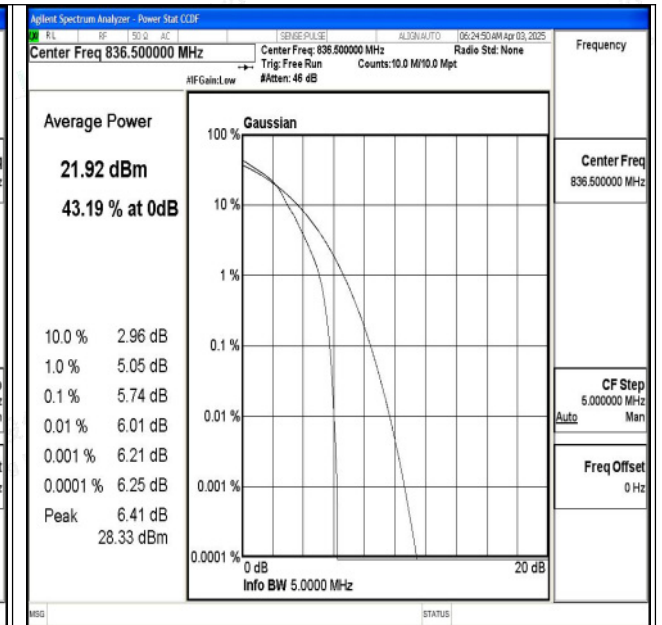
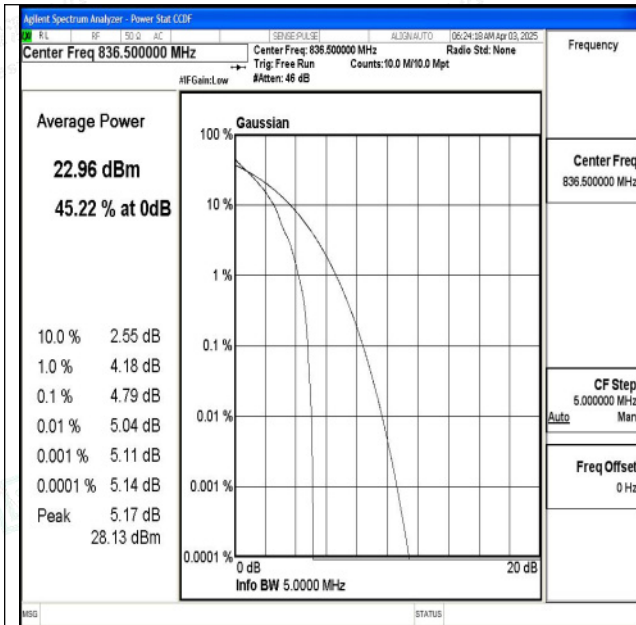


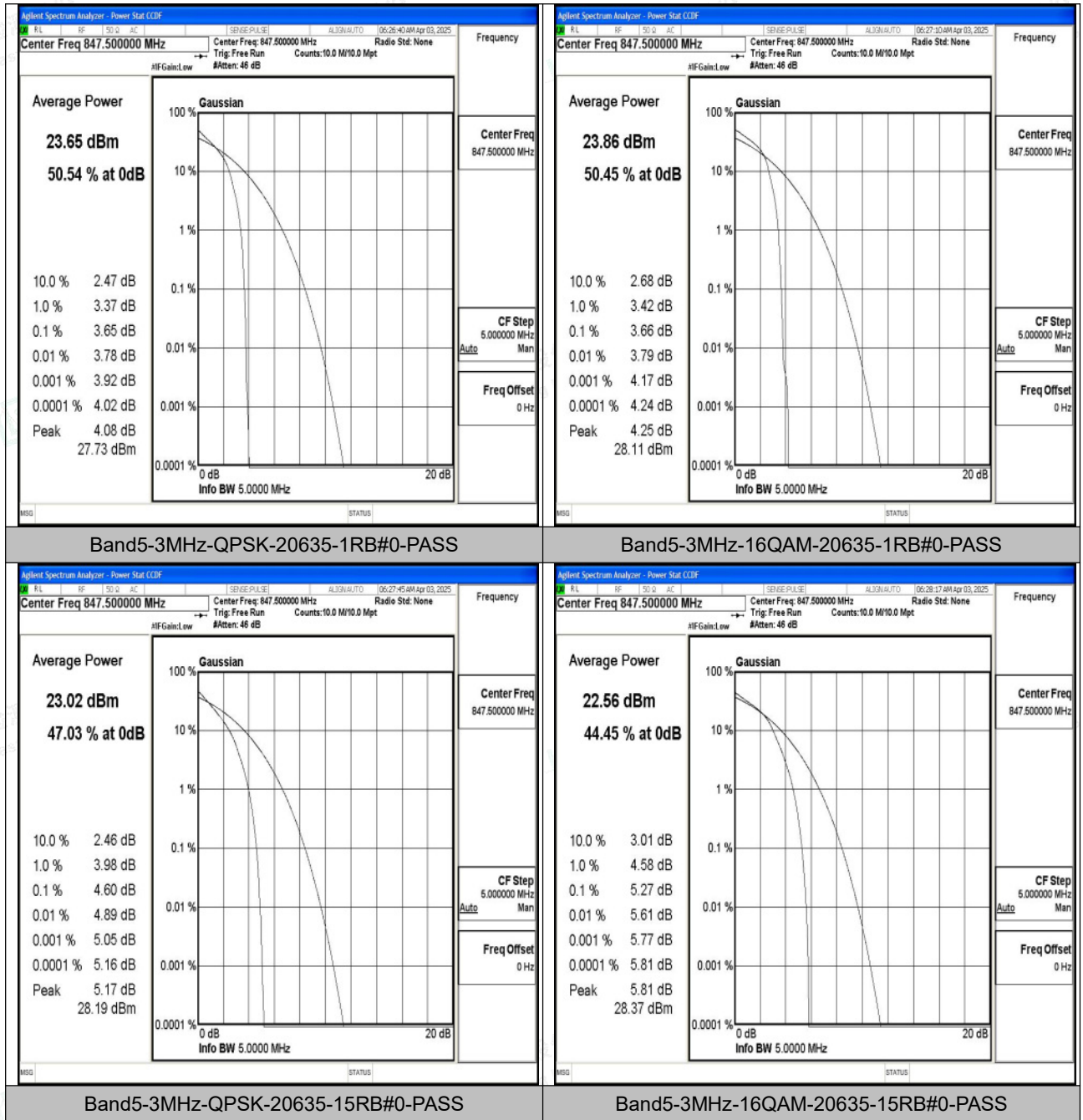
Band5-3MHz-QPSK-20415-15RB#0-PASS

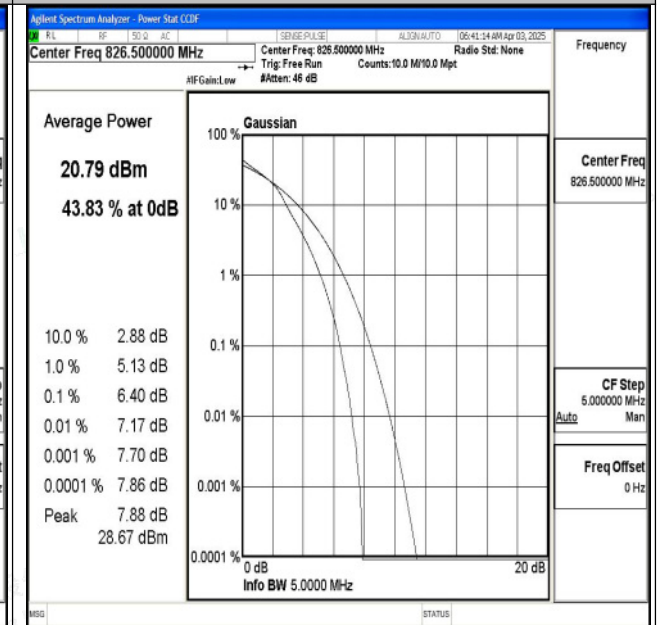
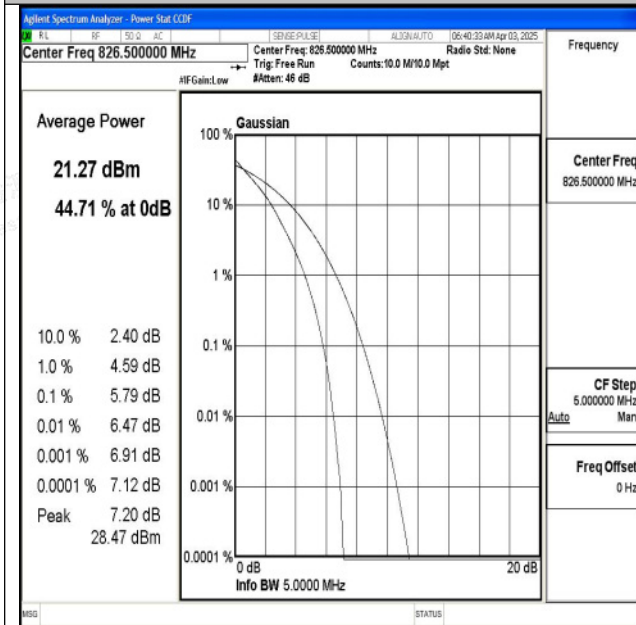
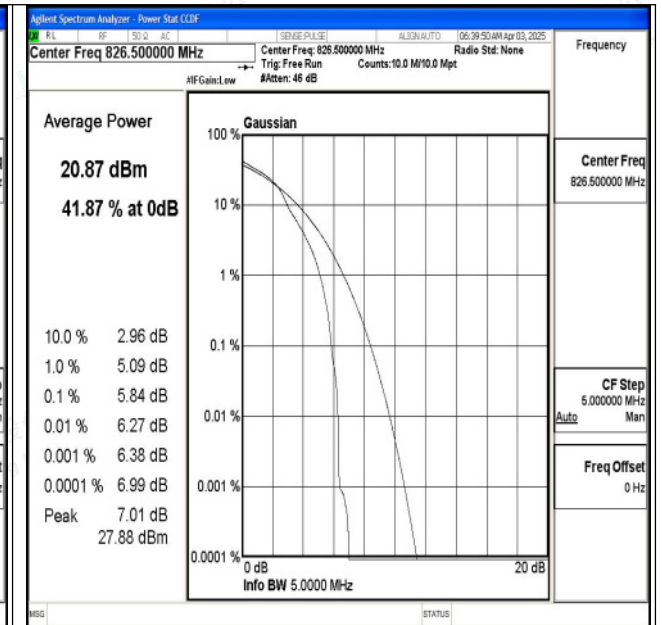
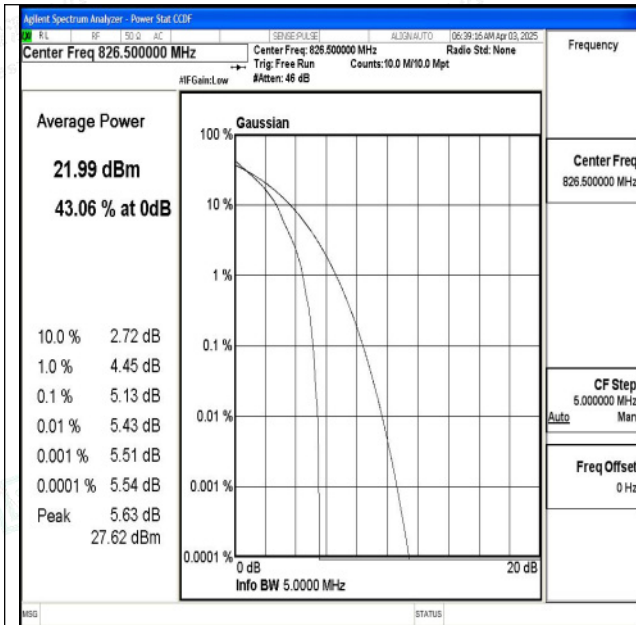


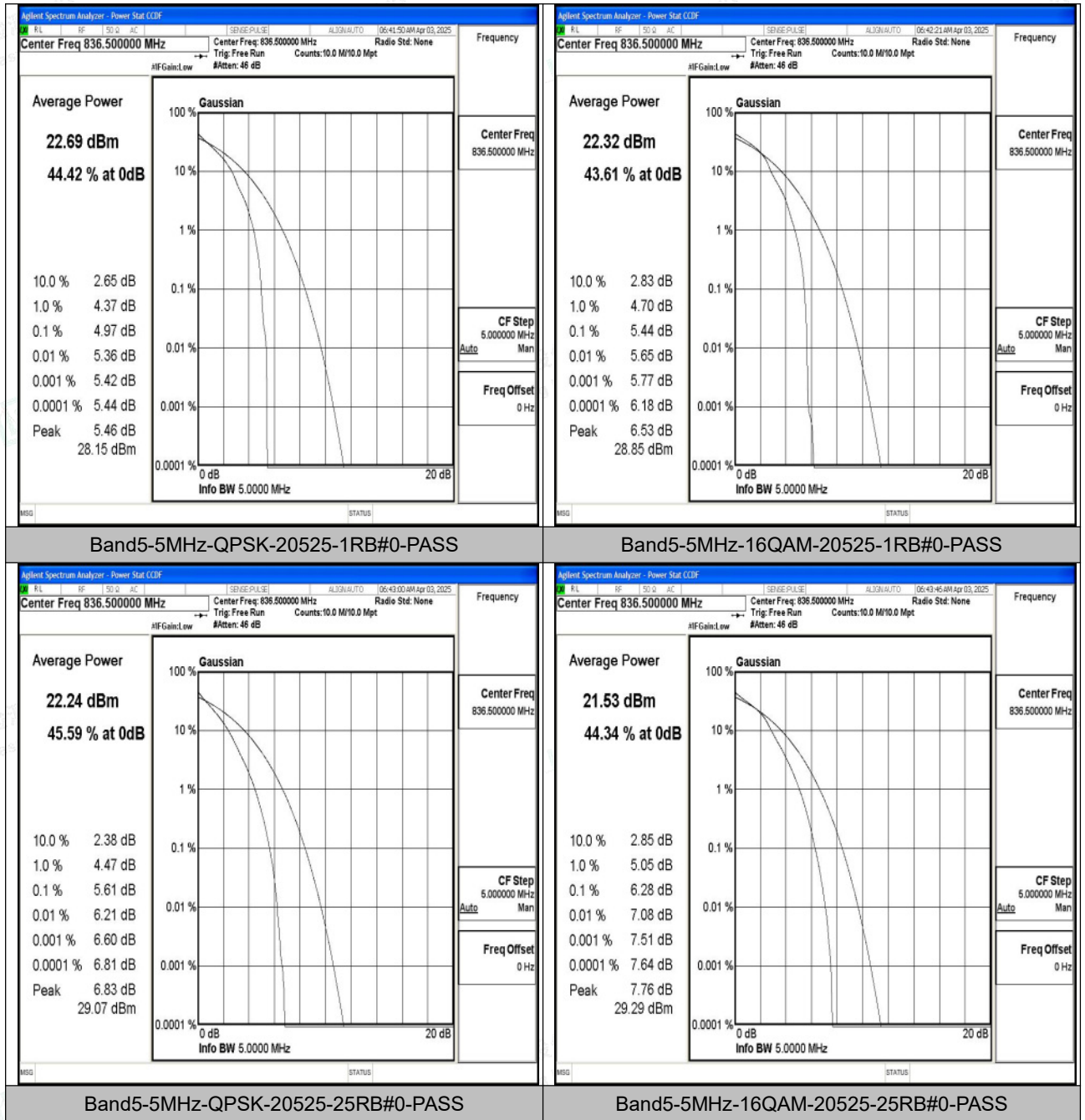
Band5-3MHz-16QAM-20415-15RB#0-PASS

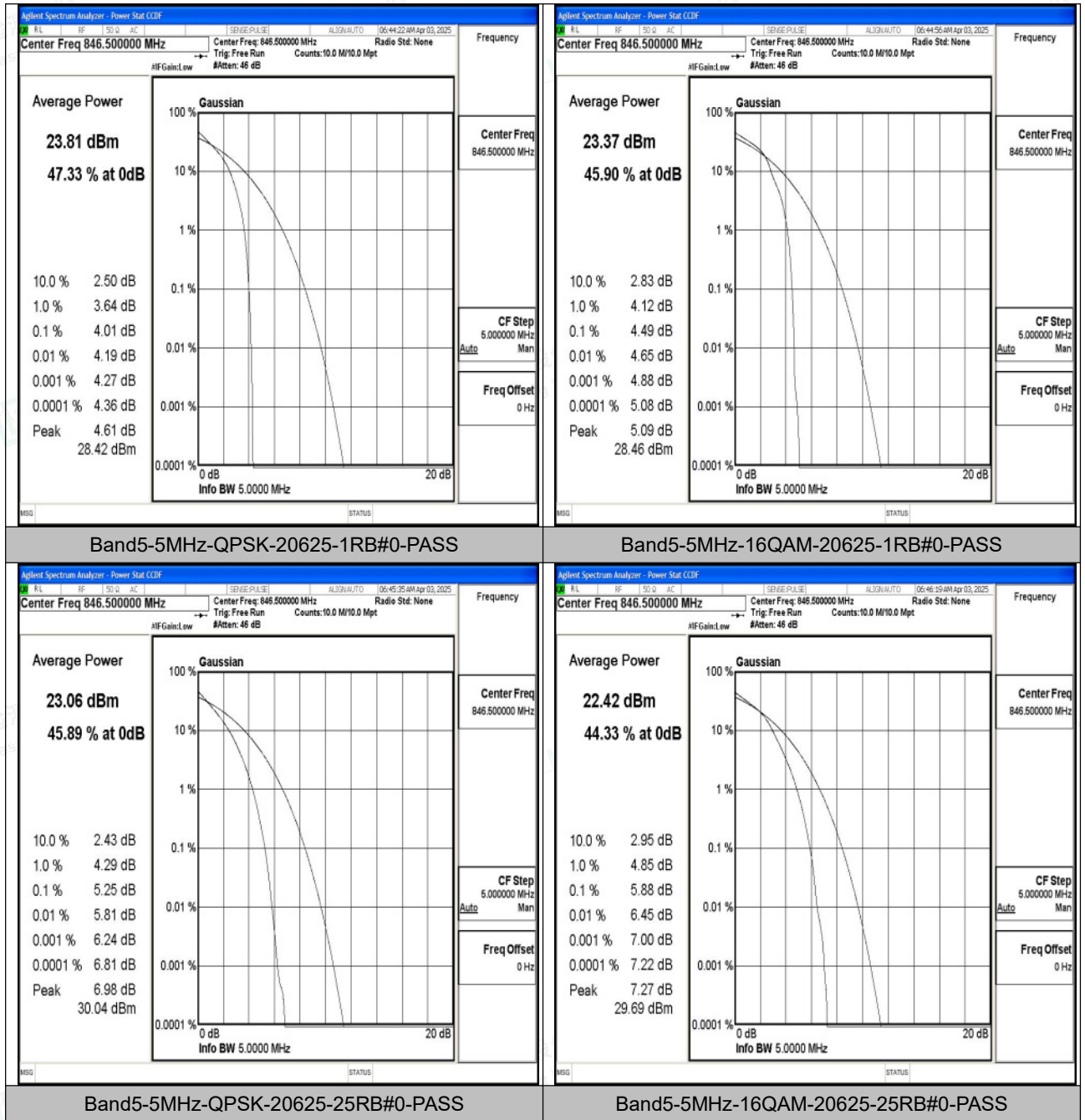


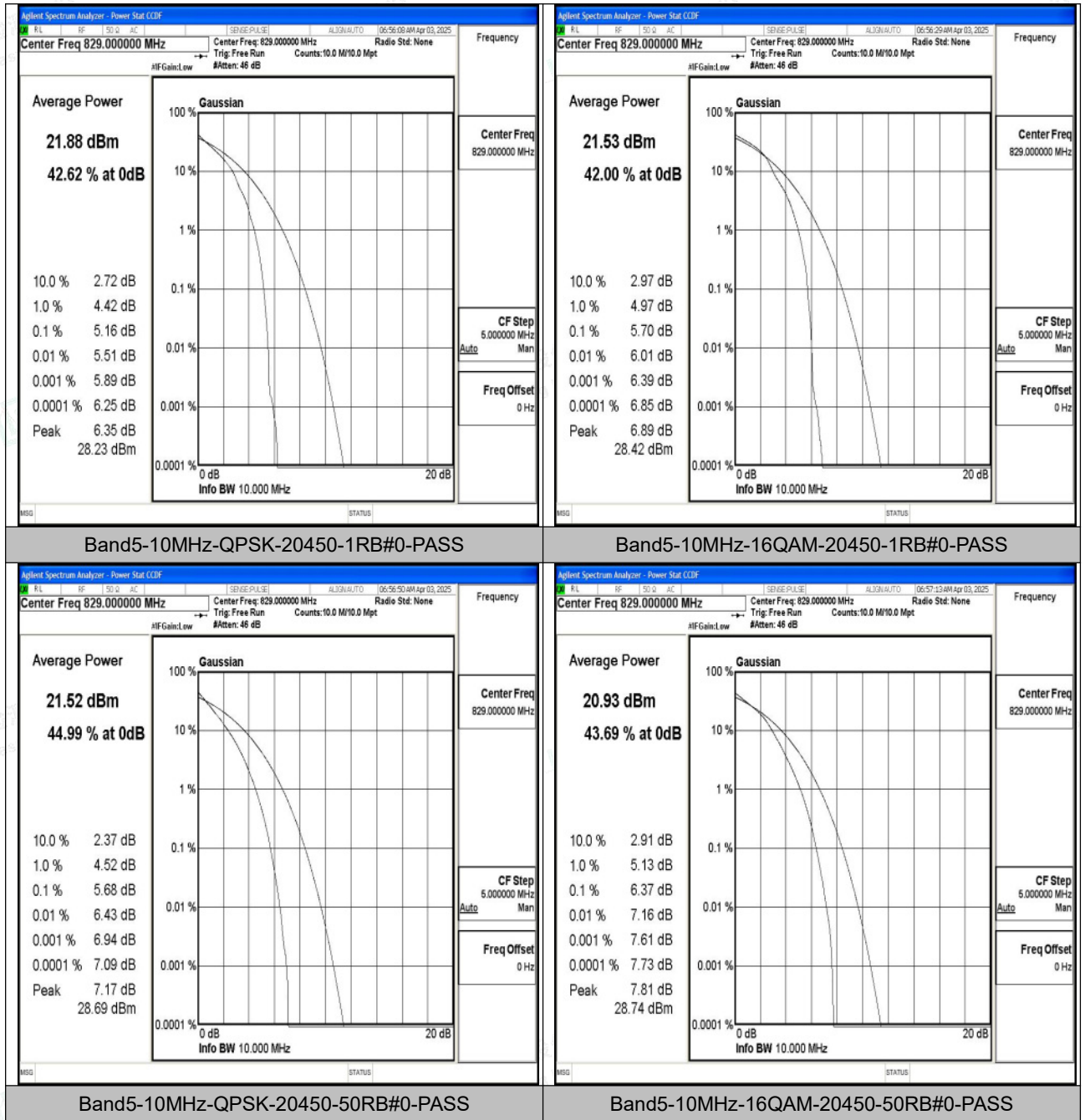


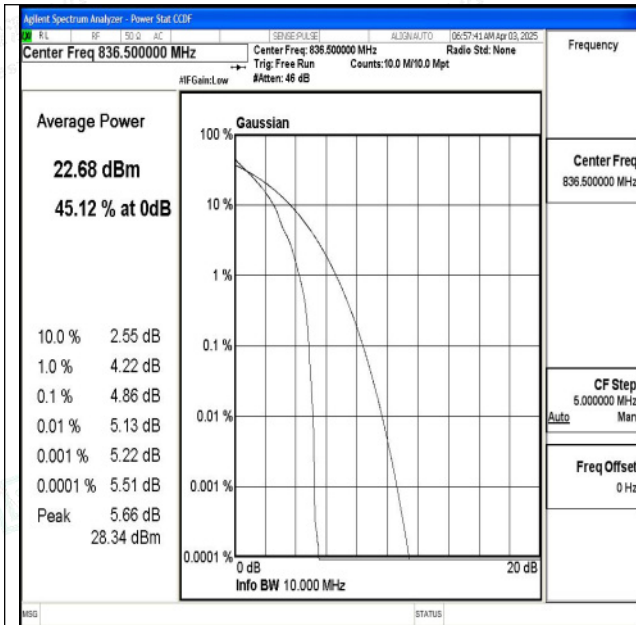




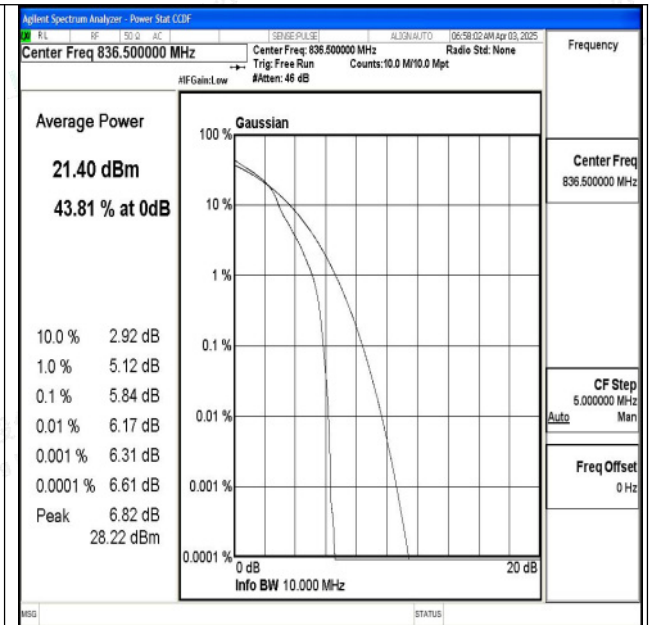




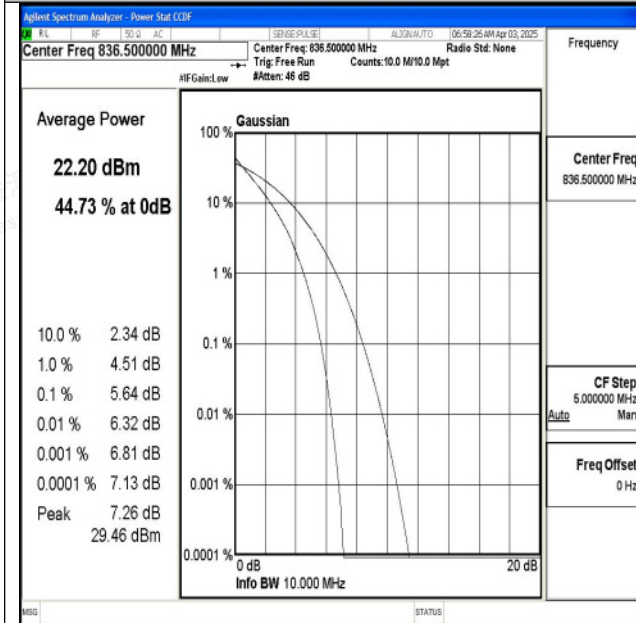




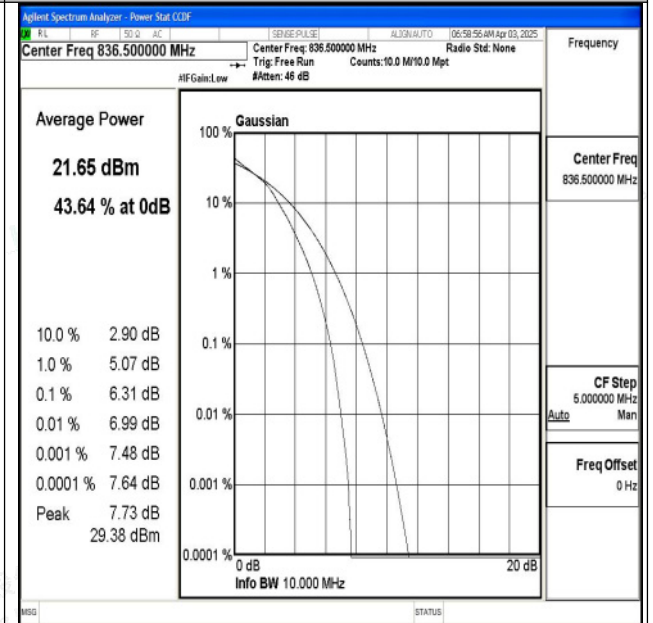
Band5-10MHz-QPSK-20525-1RB#0-PASS



Band5-10MHz-16QAM-20525-1RB#0-PASS

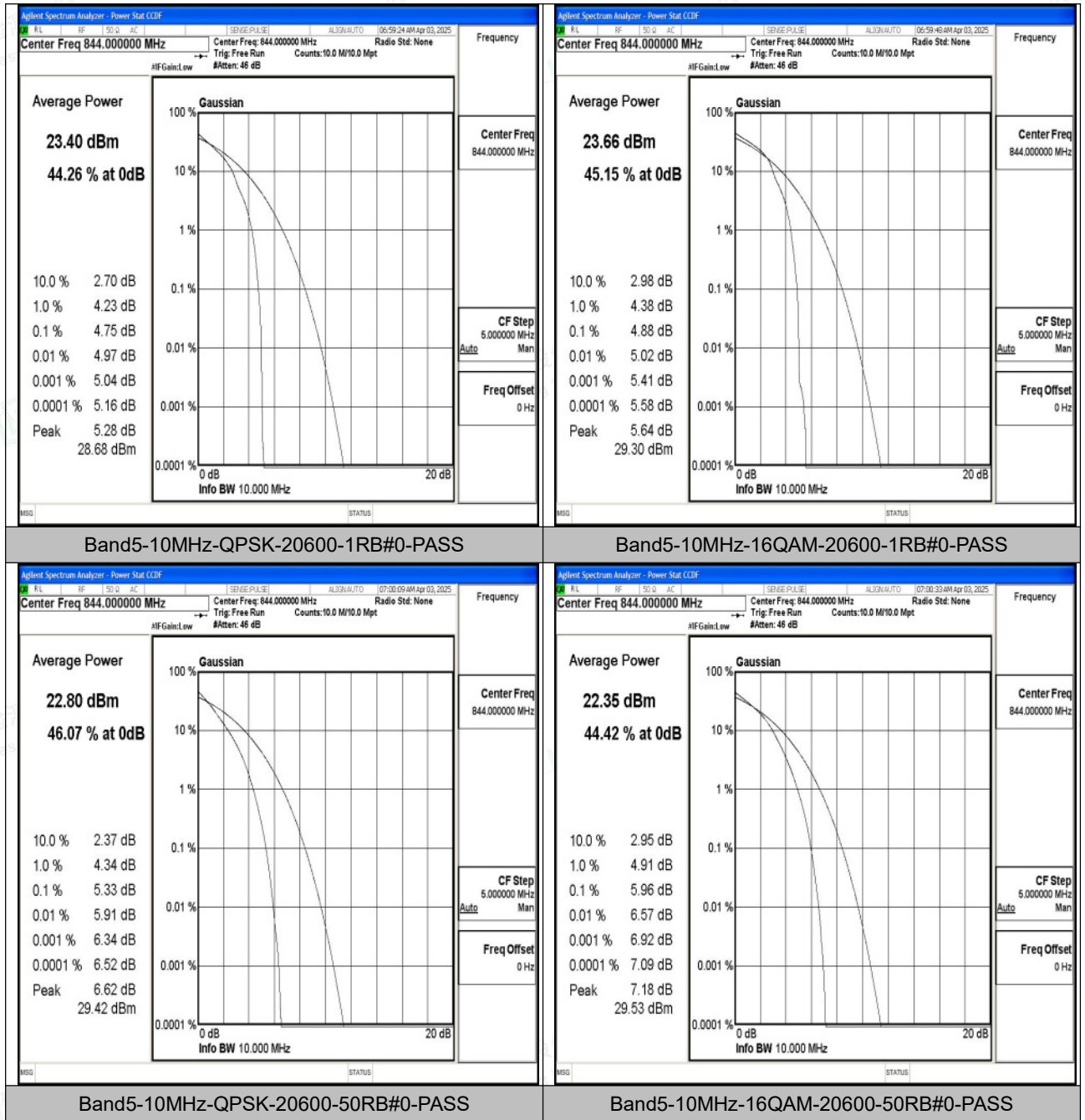


Band5-10MHz-QPSK-20525-50RB#0-PASS



Band5-10MHz-16QAM-20525-50RB#0-PASS







H.3 26dB Bandwidth and Occupied Bandwidth

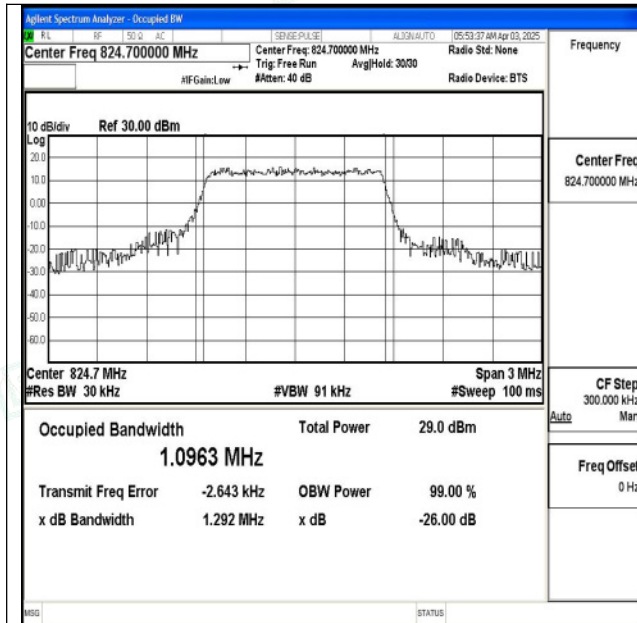
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.0963	1.292	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.1038	1.282	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.1038	1.309	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.0987	1.261	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.0970	1.252	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.0954	1.365	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.7686	3.410	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.7560	3.305	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.7592	3.436	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.7599	3.507	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.7552	3.292	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.7667	3.812	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.5200	5.264	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.5133	5.206	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.5144	5.430	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.5288	5.463	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.5252	5.449	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.5412	5.374	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.9834	10.03	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.9773	9.883	PASS
Band5	10MHz	QPSK	20525	50RB#0	9.0149	10.12	PASS
Band5	10MHz	16QAM	20525	50RB#0	9.0219	10.20	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.9565	9.894	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.9710	10.05	PASS

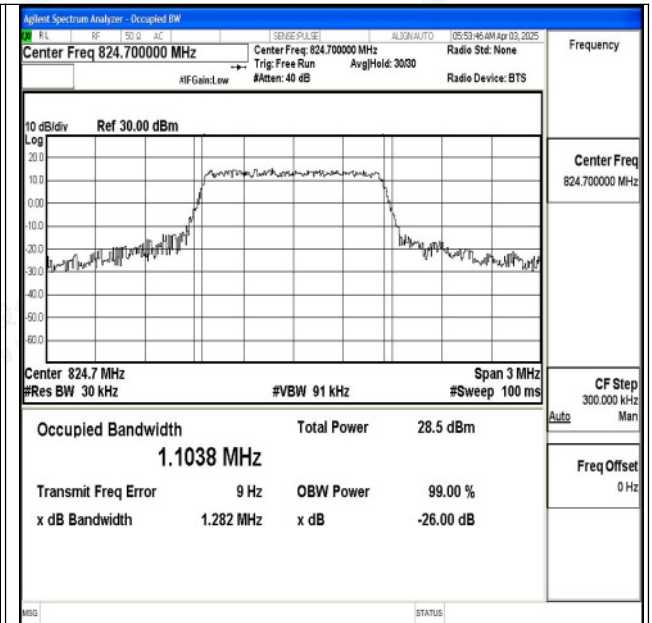




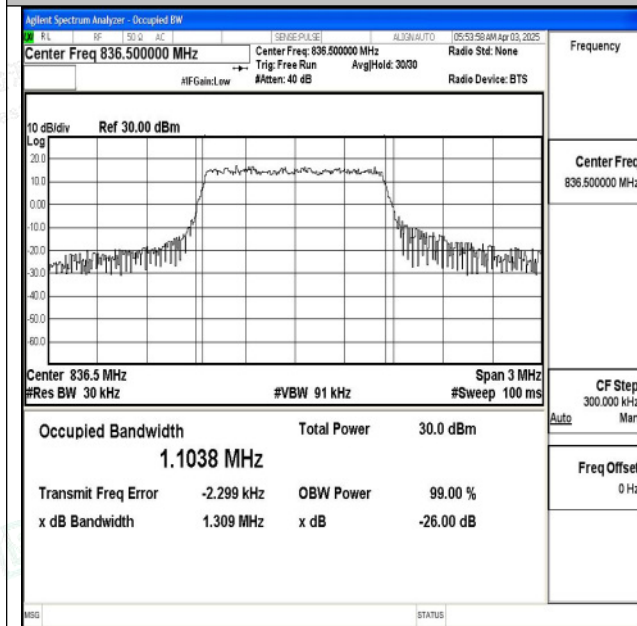
Test Graphs



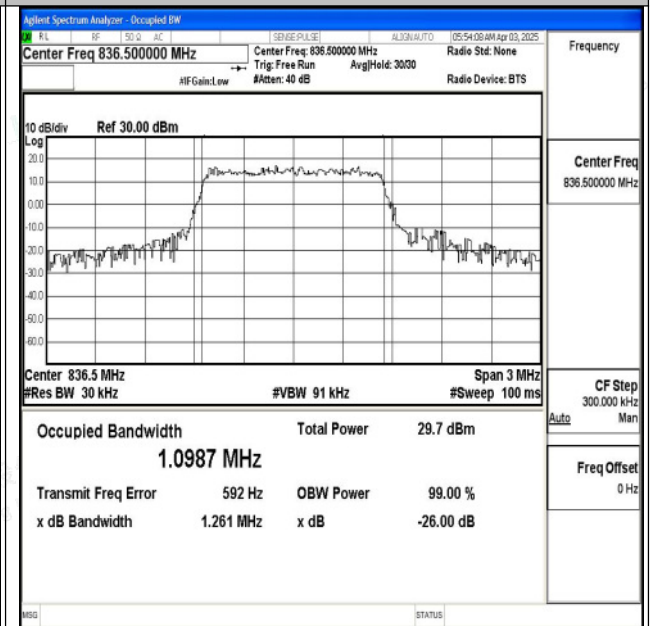
Band5-1.4MHz-QPSK-20407-6RB#0-PASS



Band5-1.4MHz-16QAM-20407-6RB#0-PASS

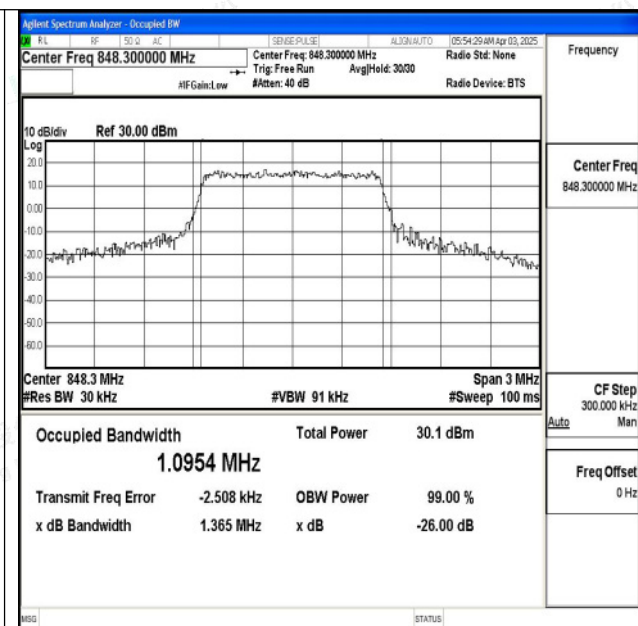


Band5-1.4MHz-QPSK-20525-6RB#0-PASS

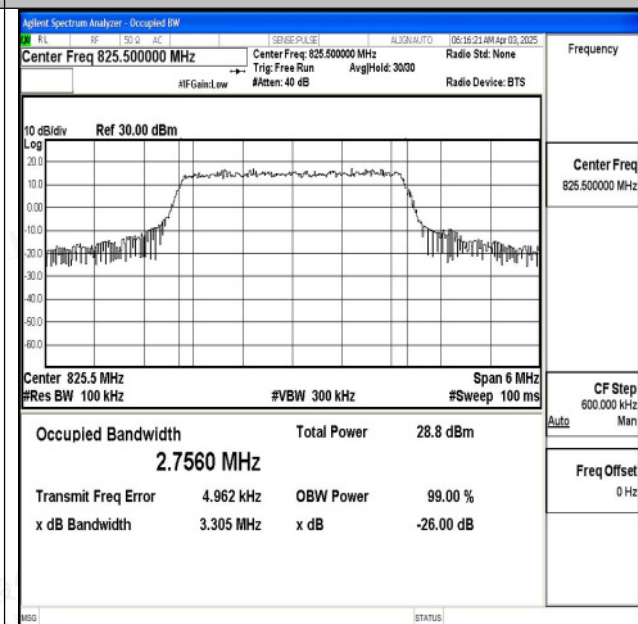


Band5-1.4MHz-16QAM-20525-6RB#0-PASS

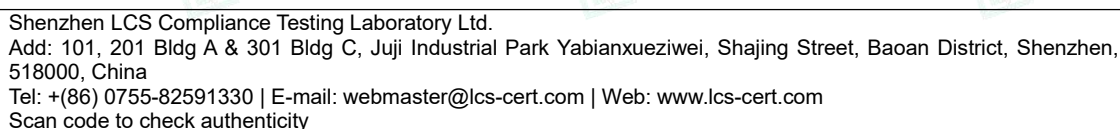


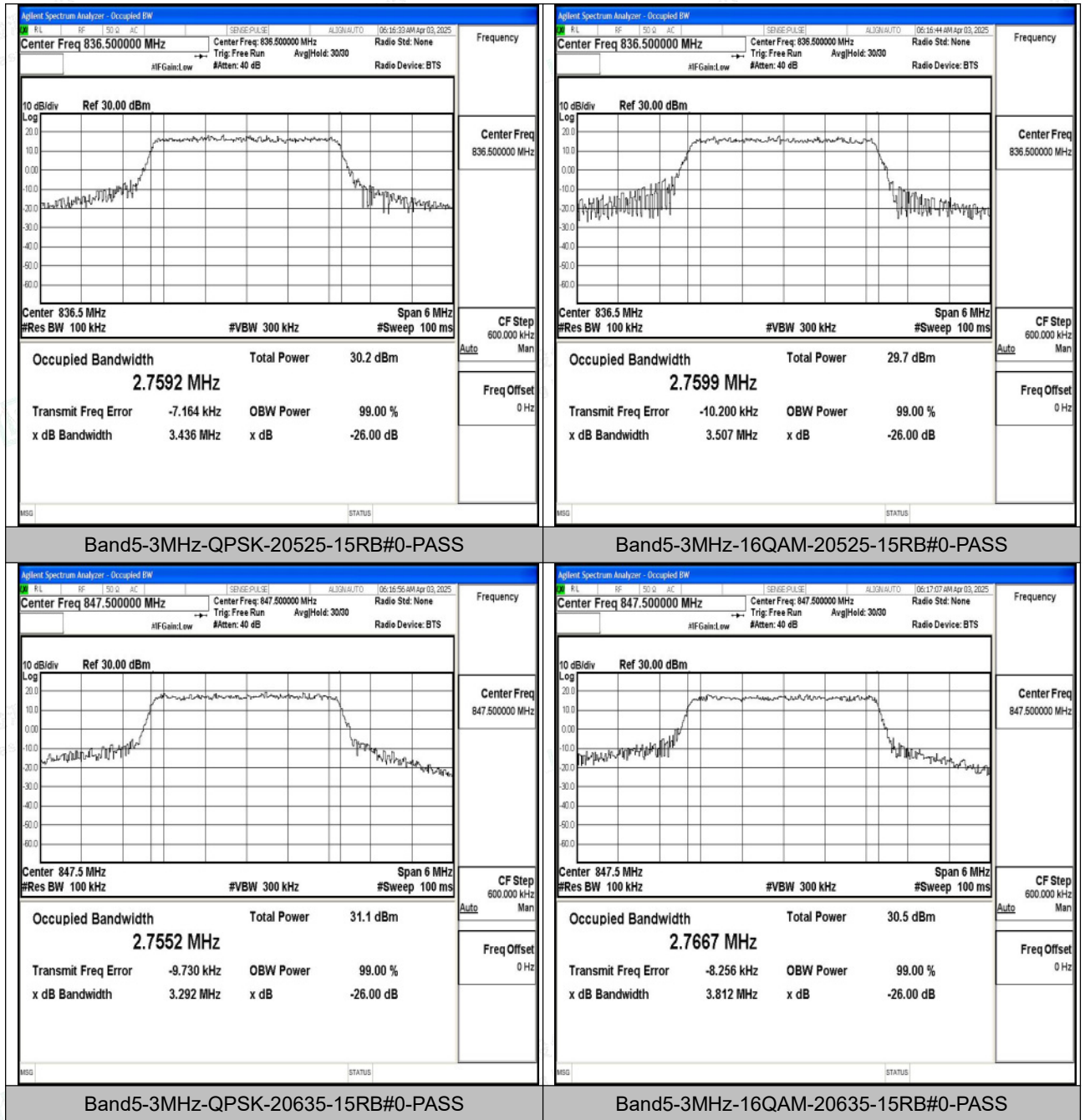


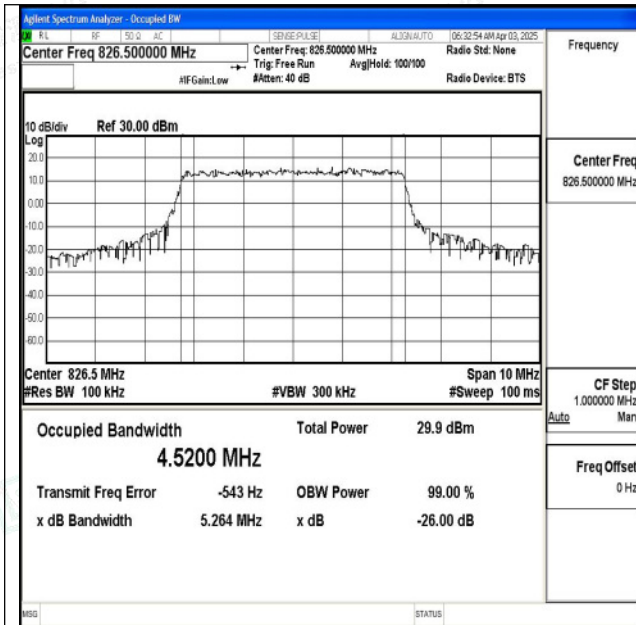
Band5-1.4MHz-16QAM-20643-6RB#0-PASS



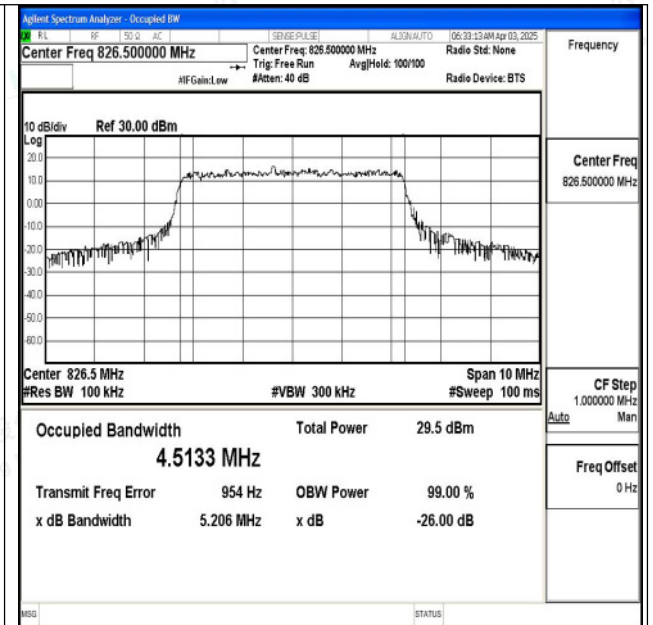
Band5-3MHz-16QAM-20415-15RB#0-PASS



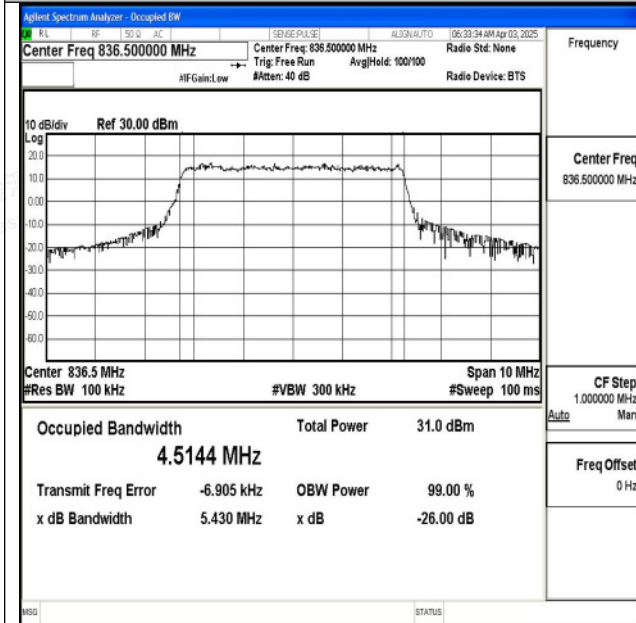




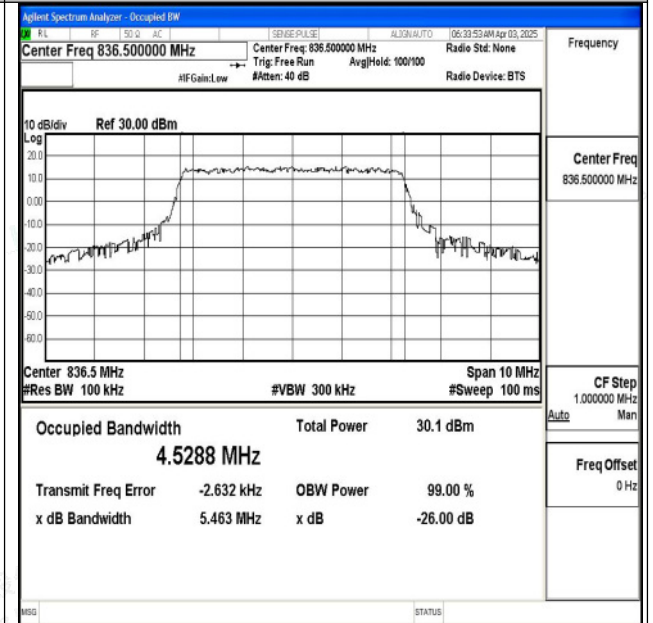
Band5-5MHz-QPSK-20425-25RB#0-PASS



Band5-5MHz-16QAM-20425-25RB#0-PASS



Band5-5MHz-QPSK-20525-25RB#0-PASS



Band5-5MHz-16QAM-20525-25RB#0-PASS



