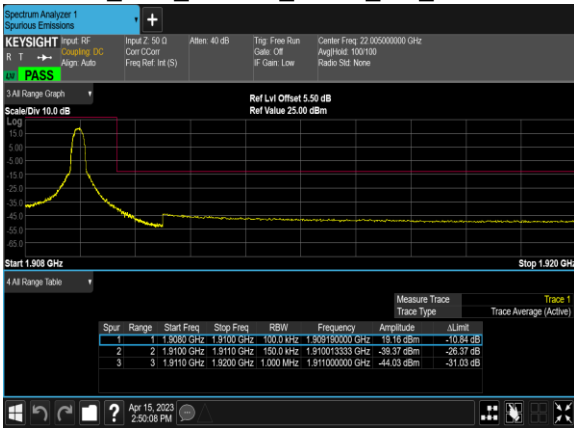
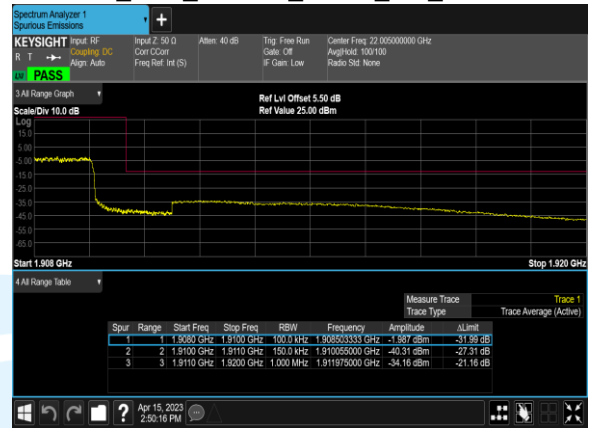


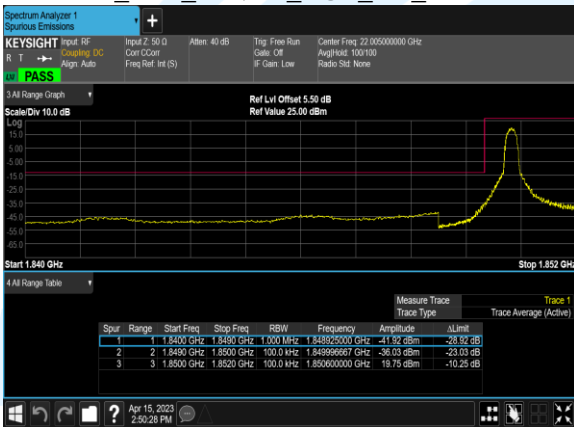
B2_15M_64QAM_1@74_CH_19125



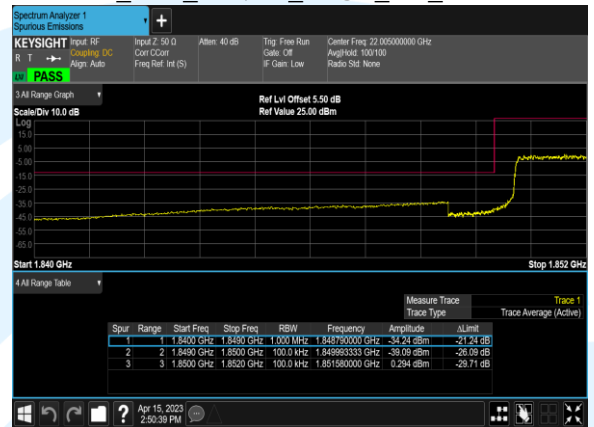
B2_15M_64QAM_75@0_CH_19125



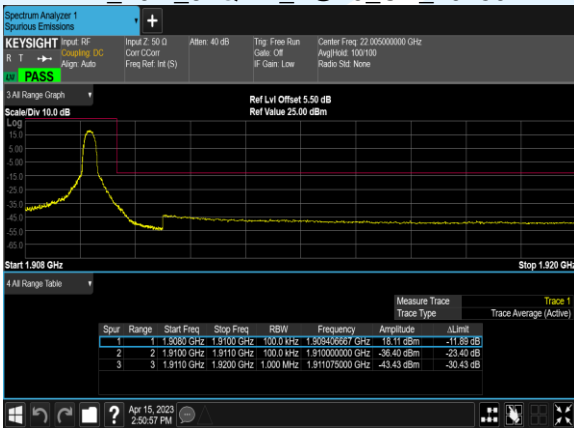
B2_10M_64QAM_1@0_CH_18650



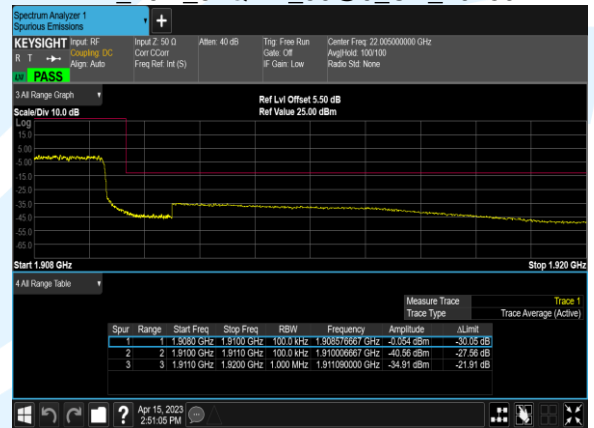
B2_10M_64QAM_50@0_CH_18650



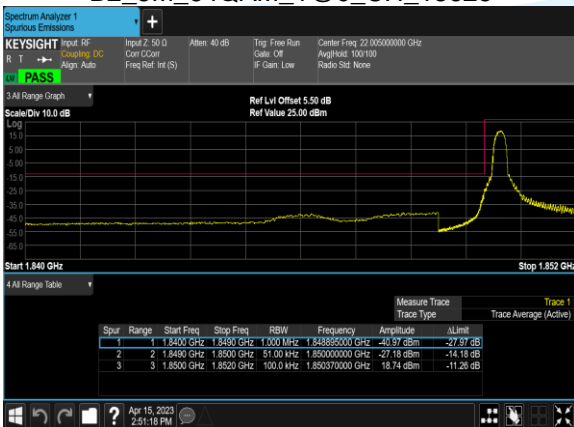
B2_10M_64QAM_1@49_CH_19150



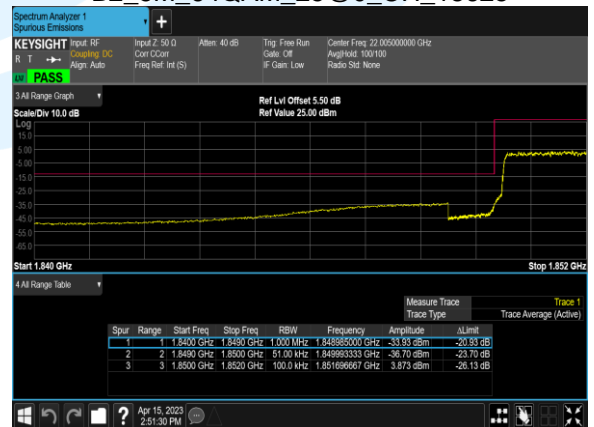
B2_10M_64QAM_50@0_CH_19150



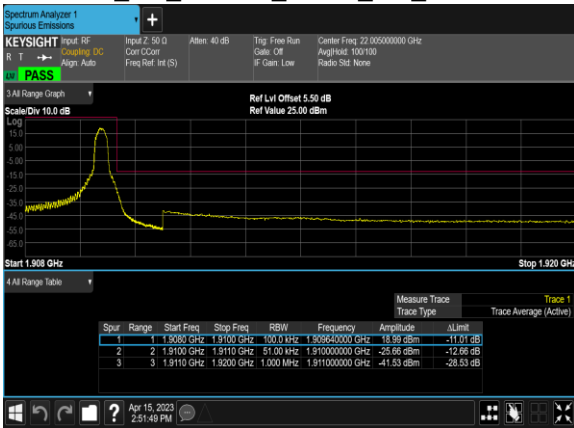
B2_5M_64QAM_1@0_CH_18625



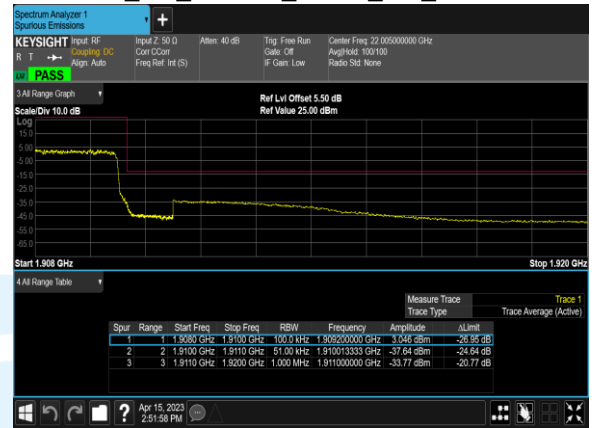
B2_5M_64QAM_25@0_CH_18625



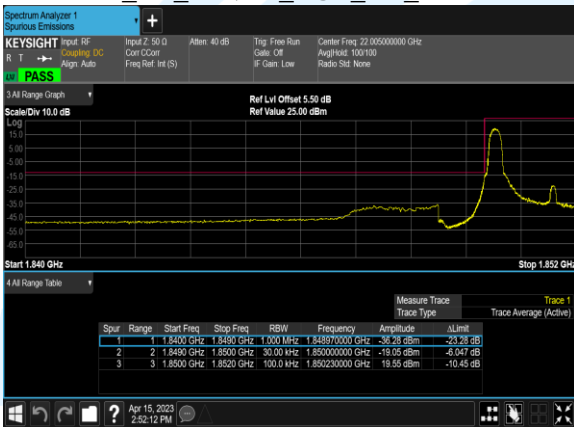
B2_5M_64QAM_1@24_CH_19175



B2_5M_64QAM_25@0_CH_19175



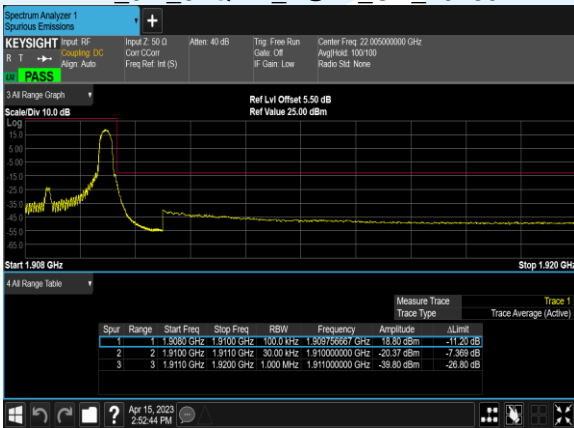
B2_3M_64QAM_1@0_CH_18615



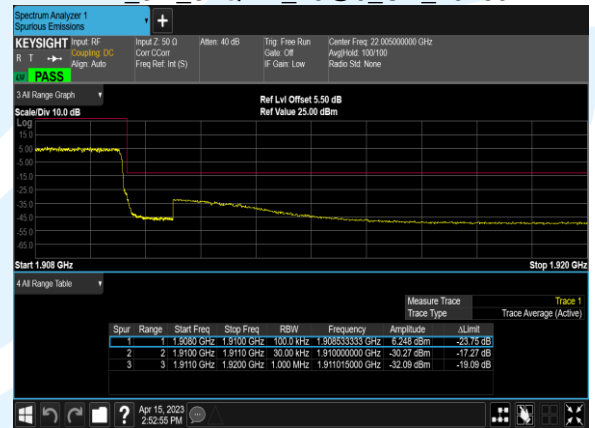
B2_3M_64QAM_15@0_CH_18615



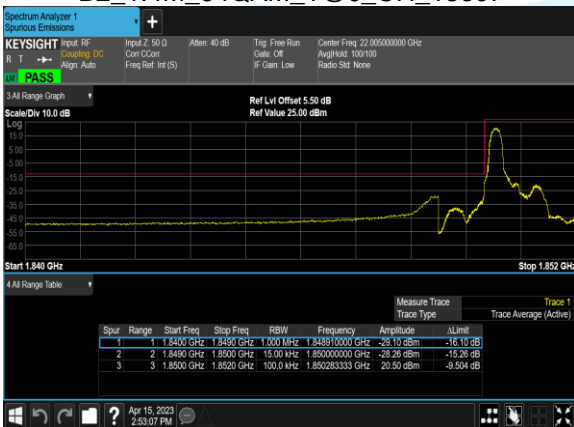
B2_3M_64QAM_1@14_CH_19185



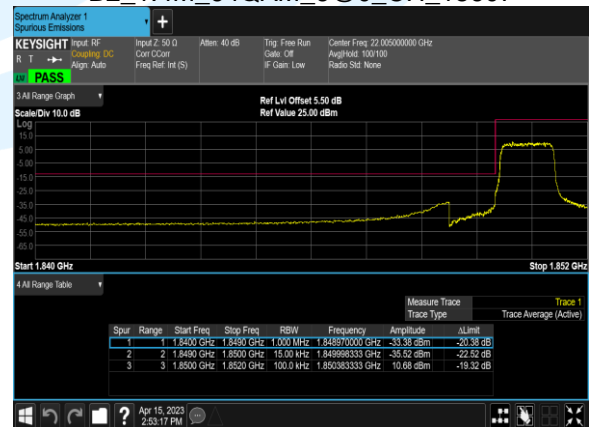
B2_3M_64QAM_15@0_CH_19185



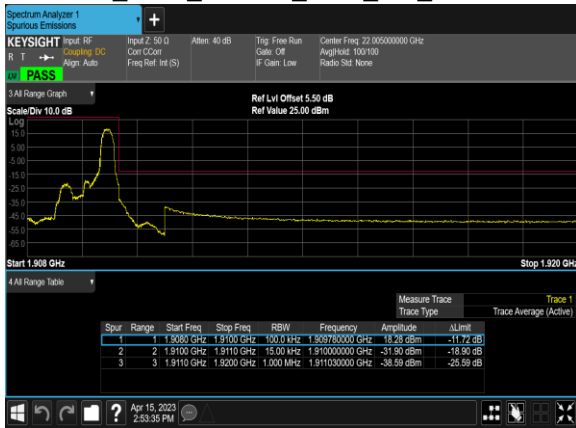
B2_1.4M_64QAM_1@0_CH_18607



B2_1.4M_64QAM_6@0_CH_18607



B2_1.4M_64QAM_1@5_CH_19193



B2_1.4M_64QAM_6@0_CH_19193



Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-RF-FCC4G-V1.1

A.2 LTE BAND 4

Peak to Average Ratio

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
4	20.0	20050	1720.0	QPSK	100@0	5.77	13	PASS
4	20.0	20050	1720.0	16QAM	100@0	6.48	13	PASS
4	20.0	20175	1732.5	QPSK	100@0	5.68	13	PASS
4	20.0	20175	1732.5	16QAM	100@0	6.36	13	PASS
4	20.0	20300	1745.0	QPSK	100@0	5.58	13	PASS
4	20.0	20300	1745.0	16QAM	100@0	6.19	13	PASS
4	15.0	20025	1717.5	QPSK	75@0	5.50	13	PASS
4	15.0	20025	1717.5	16QAM	75@0	6.25	13	PASS
4	15.0	20175	1732.5	QPSK	75@0	5.47	13	PASS
4	15.0	20175	1732.5	16QAM	75@0	6.20	13	PASS
4	15.0	20325	1747.5	QPSK	75@0	5.31	13	PASS
4	15.0	20325	1747.5	16QAM	75@0	6.06	13	PASS
4	10.0	20000	1715.0	QPSK	50@0	5.72	13	PASS
4	10.0	20000	1715.0	16QAM	50@0	6.40	13	PASS
4	10.0	20175	1732.5	QPSK	50@0	5.61	13	PASS
4	10.0	20175	1732.5	16QAM	50@0	6.35	13	PASS
4	10.0	20350	1750.0	QPSK	50@0	5.52	13	PASS
4	10.0	20350	1750.0	16QAM	50@0	6.22	13	PASS
4	5.0	19975	1712.5	QPSK	25@0	5.69	13	PASS
4	5.0	19975	1712.5	16QAM	25@0	6.34	13	PASS
4	5.0	20175	1732.5	QPSK	25@0	5.61	13	PASS
4	5.0	20175	1732.5	16QAM	25@0	6.29	13	PASS
4	5.0	20375	1752.5	QPSK	25@0	5.48	13	PASS
4	5.0	20375	1752.5	16QAM	25@0	6.12	13	PASS
4	3.0	19965	1711.5	QPSK	15@0	5.68	13	PASS
4	3.0	19965	1711.5	16QAM	15@0	6.44	13	PASS
4	3.0	20175	1732.5	QPSK	15@0	5.51	13	PASS
4	3.0	20175	1732.5	16QAM	15@0	6.33	13	PASS
4	3.0	20385	1753.5	QPSK	15@0	5.54	13	PASS
4	3.0	20385	1753.5	16QAM	15@0	6.23	13	PASS
4	1.4	19957	1710.7	QPSK	6@0	5.59	13	PASS
4	1.4	19957	1710.7	16QAM	6@0	6.32	13	PASS
4	1.4	20175	1732.5	QPSK	6@0	5.61	13	PASS
4	1.4	20175	1732.5	16QAM	6@0	6.37	13	PASS
4	1.4	20393	1754.3	QPSK	6@0	5.47	13	PASS
4	1.4	20393	1754.3	16QAM	6@0	6.22	13	PASS
4	20.0	20050	1720.0	64QAM	100@0	6.49	13	PASS
4	20.0	20175	1732.5	64QAM	100@0	6.36	13	PASS
4	20.0	20300	1745.0	64QAM	100@0	6.22	13	PASS
4	15.0	20025	1717.5	64QAM	75@0	6.25	13	PASS
4	15.0	20175	1732.5	64QAM	75@0	6.23	13	PASS
4	15.0	20325	1747.5	64QAM	75@0	6.07	13	PASS
4	10.0	20000	1715.0	64QAM	50@0	6.42	13	PASS
4	10.0	20175	1732.5	64QAM	50@0	6.35	13	PASS
4	10.0	20350	1750.0	64QAM	50@0	6.23	13	PASS
4	5.0	19975	1712.5	64QAM	25@0	6.33	13	PASS
4	5.0	20175	1732.5	64QAM	25@0	6.29	13	PASS
4	5.0	20375	1752.5	64QAM	25@0	6.16	13	PASS
4	3.0	19965	1711.5	64QAM	15@0	6.42	13	PASS
4	3.0	20175	1732.5	64QAM	15@0	6.36	13	PASS
4	3.0	20385	1753.5	64QAM	15@0	6.26	13	PASS
4	1.4	19957	1710.7	64QAM	6@0	6.40	13	PASS
4	1.4	20175	1732.5	64QAM	6@0	6.45	13	PASS
4	1.4	20393	1754.3	64QAM	6@0	6.23	13	PASS

Test Graphs

B4_20M_QPSK_100@0_CH_20050



B4_20M_16QAM_100@0_CH_20050



B4_20M_QPSK_100@0_CH_20175



B4_20M_16QAM_100@0_CH_20175



B4_20M_QPSK_100@0_CH_20300



B4_20M_16QAM_100@0_CH_20300



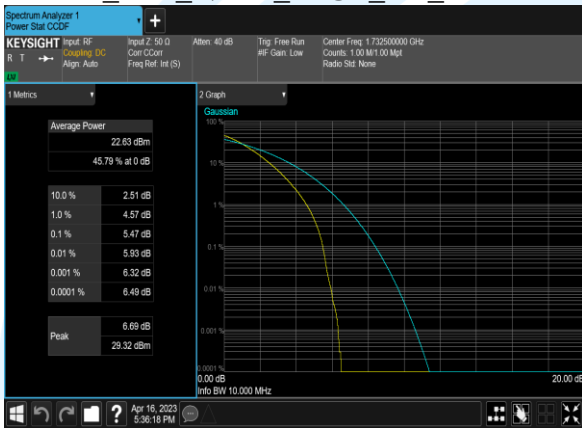
B4_15M_QPSK_75@0_CH_20025



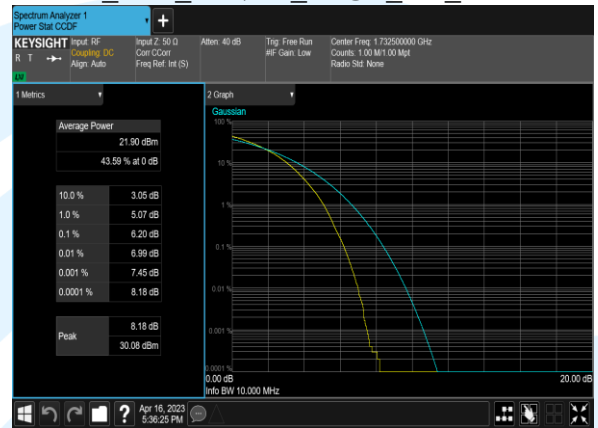
B4_15M_16QAM_75@0_CH_20025



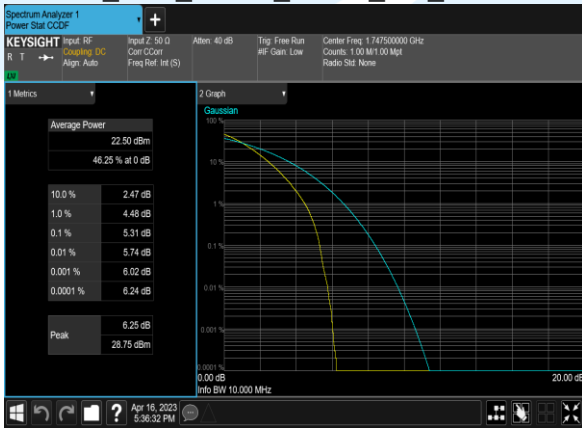
B4_15M_QPSK_75@0_CH_20175



B4_15M_16QAM_75@0_CH_20175



B4_15M_QPSK_75@0_CH_20325



B4_15M_16QAM_75@0_CH_20325



B4_10M_QPSK_50@0_CH_20000



B4_10M_16QAM_50@0_CH_20000



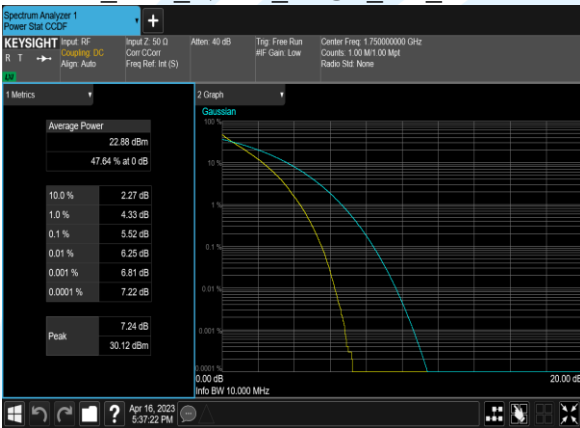
B4_10M_QPSK_50@0_CH_20175



B4_10M_16QAM_50@0_CH_20175



B4_10M_QPSK_50@0_CH_20350



B4_10M_16QAM_50@0_CH_20350



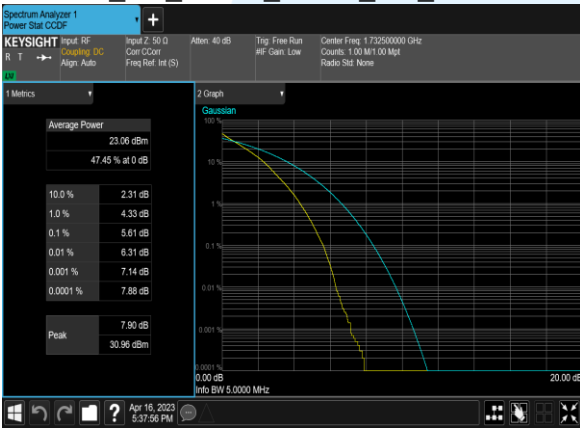
B4_5M_QPSK_25@0_CH_19975



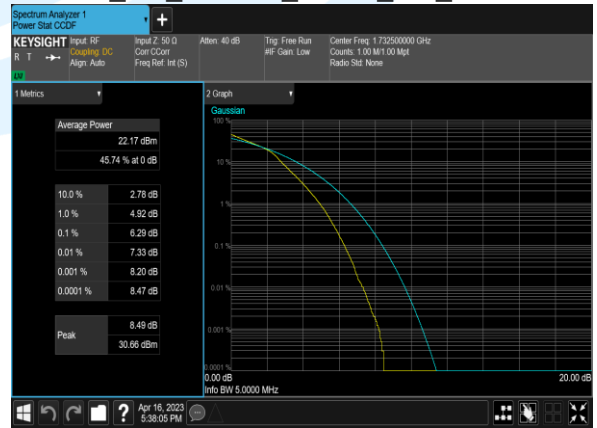
B4_5M_16QAM_25@0_CH_19975



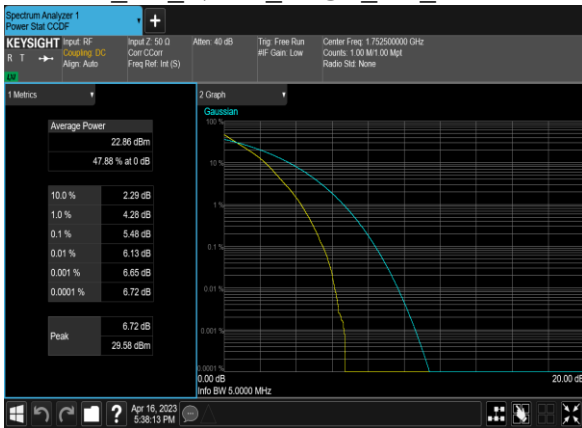
B4_5M_QPSK_25@0_CH_20175



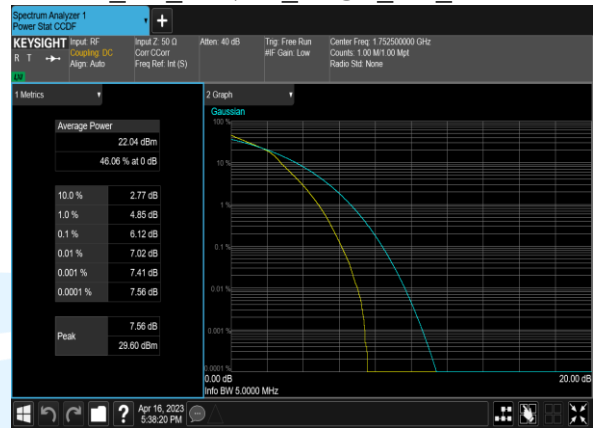
B4_5M_16QAM_25@0_CH_20175



B4_5M_QPSK_25@0_CH_20375



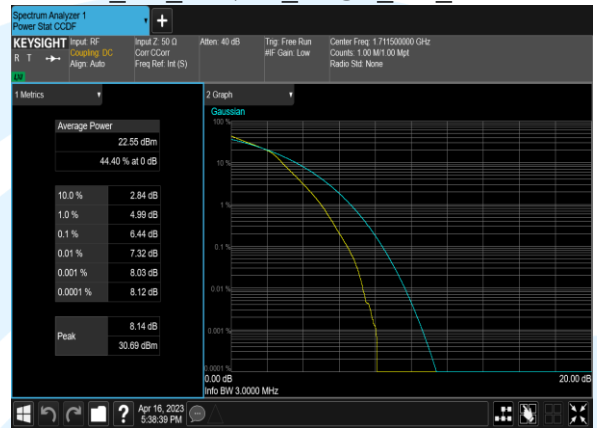
B4_5M_16QAM_25@0_CH_20375



B4_3M_QPSK_15@0_CH_19965



B4_3M_16QAM_15@0_CH_19965



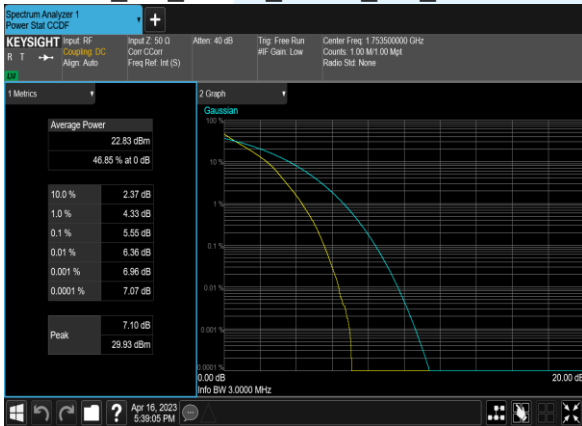
B4_3M_QPSK_15@0_CH_20175



B4_3M_16QAM_15@0_CH_20175



B4_3M_QPSK_15@0_CH_20385



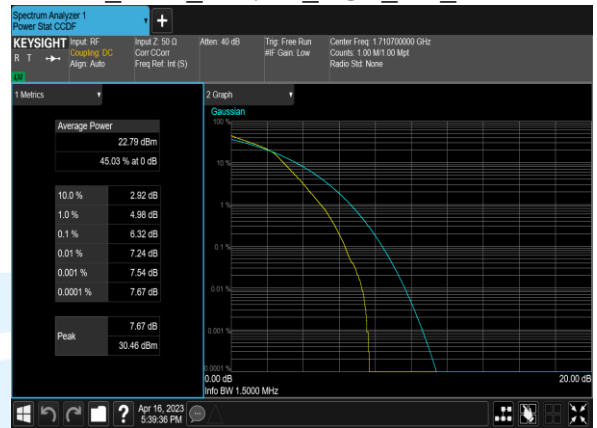
B4_3M_16QAM_15@0_CH_20385



B4_1.4M_QPSK_6@0_CH_19957



B4_1.4M_16QAM_6@0_CH_19957



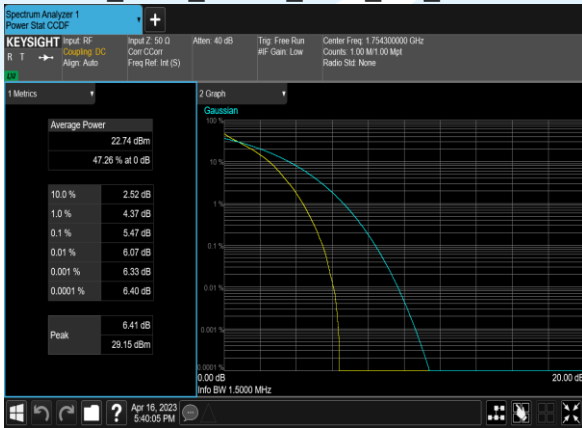
B4_1.4M_QPSK_6@0_CH_20175



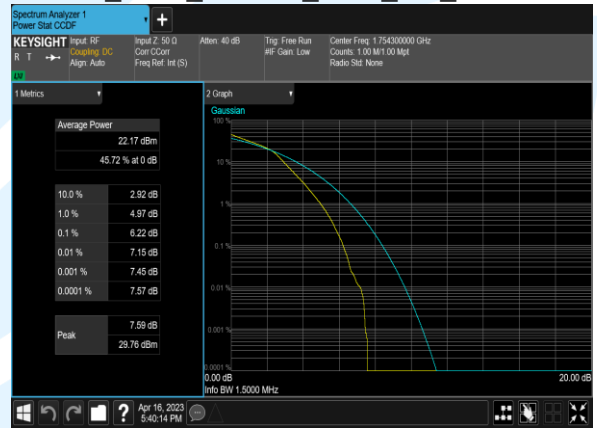
B4_1.4M_16QAM_6@0_CH_20175



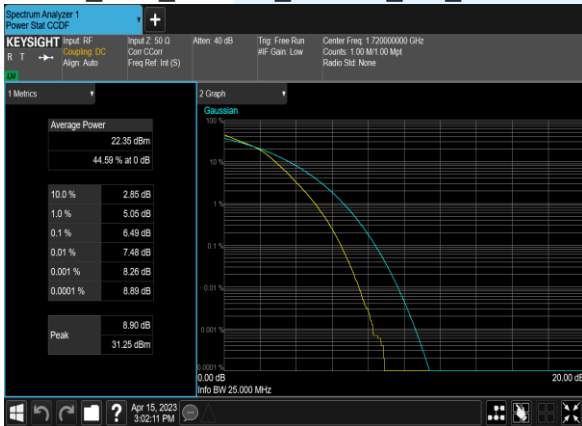
B4_1.4M_QPSK_6@0_CH_20393



B4_1.4M_16QAM_6@0_CH_20393



B4_20M_64QAM_100@0_CH_20050



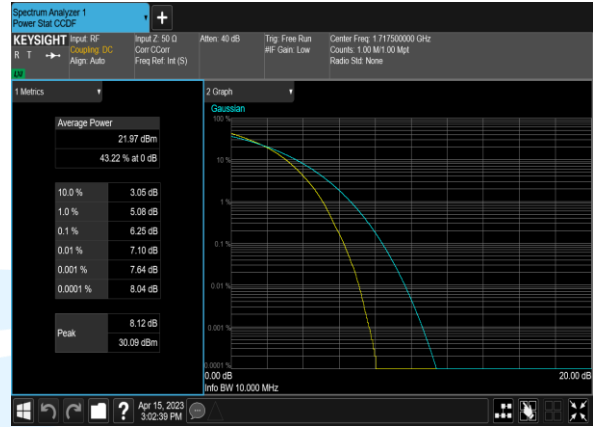
B4_20M_64QAM_100@0_CH_20175



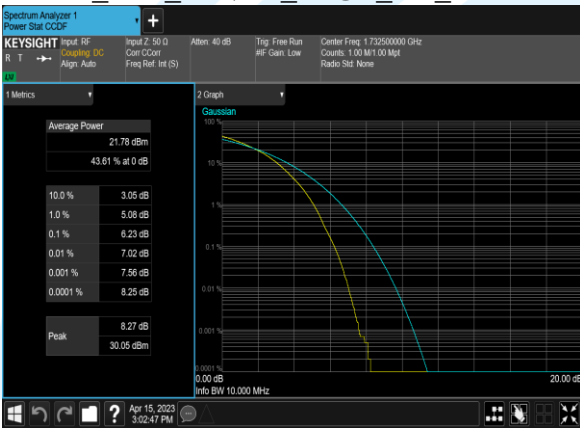
B4_20M_64QAM_100@0_CH_20300



B4_15M_64QAM_75@0_CH_20025



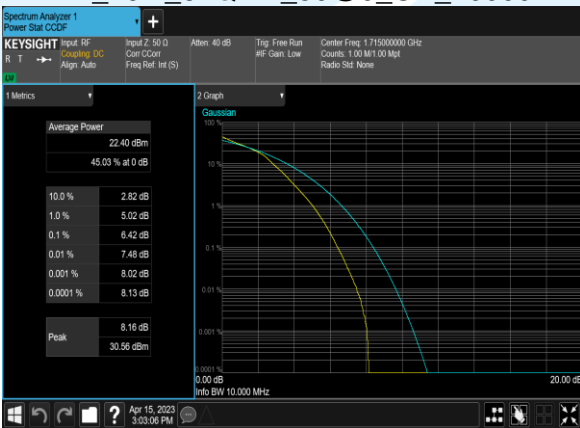
B4_15M_64QAM_75@0_CH_20175



B4_15M_64QAM_75@0_CH_20325



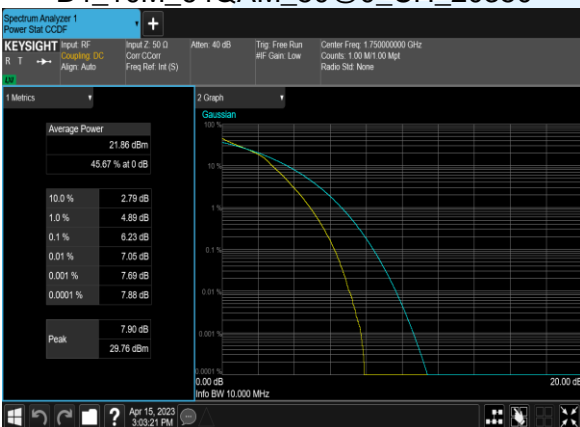
B4_10M_64QAM_50@0_CH_20000



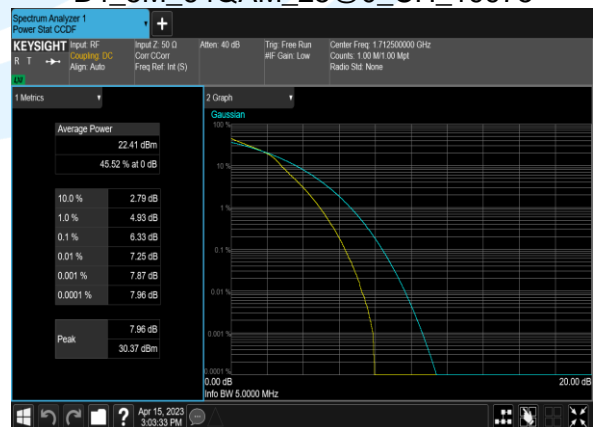
B4_10M_64QAM_50@0_CH_20175



B4_10M_64QAM_50@0_CH_20350



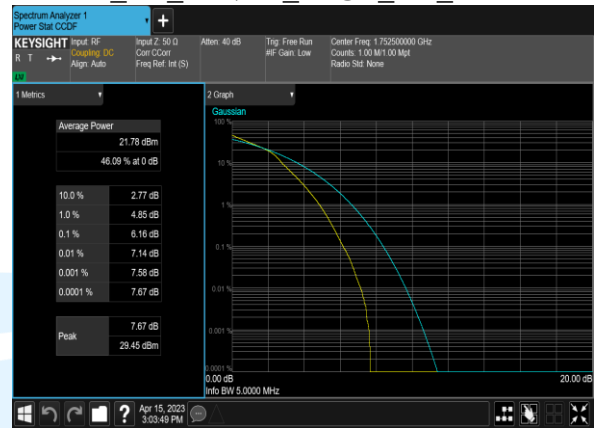
B4_5M_64QAM_25@0_CH_19975



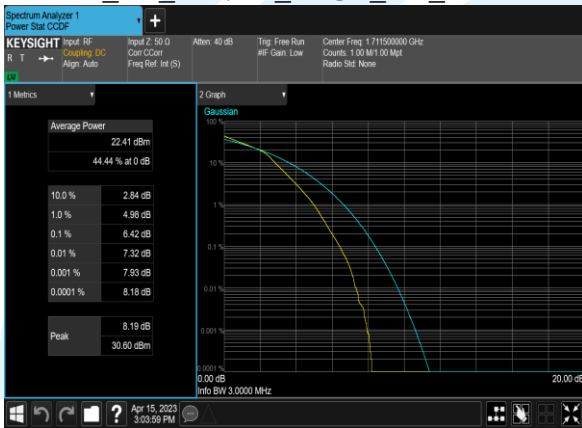
B4_5M_64QAM_25@0_CH_20175



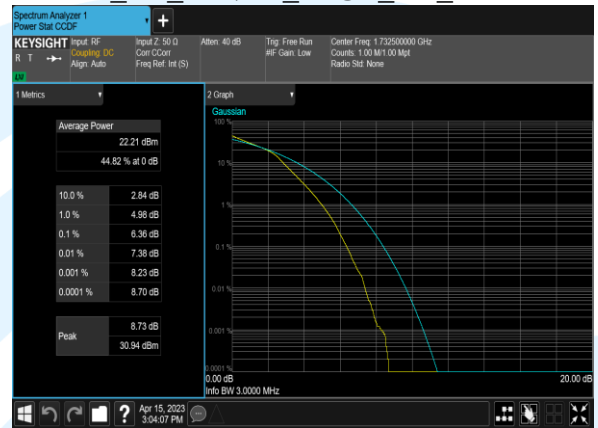
B4_5M_64QAM_25@0_CH_20375



B4_3M_64QAM_15@0_CH_19965



B4_3M_64QAM_15@0_CH_20175



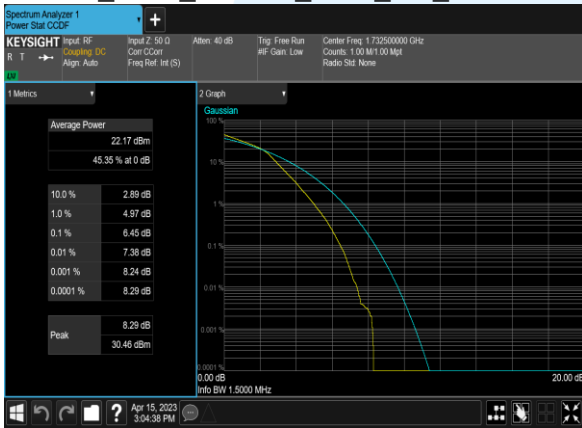
B4_3M_64QAM_15@0_CH_20385



B4_1.4M_64QAM_6@0_CH_19957



B4_1.4M_64QAM_6@0_CH_20175



B4_1.4M_64QAM_6@0_CH_20393

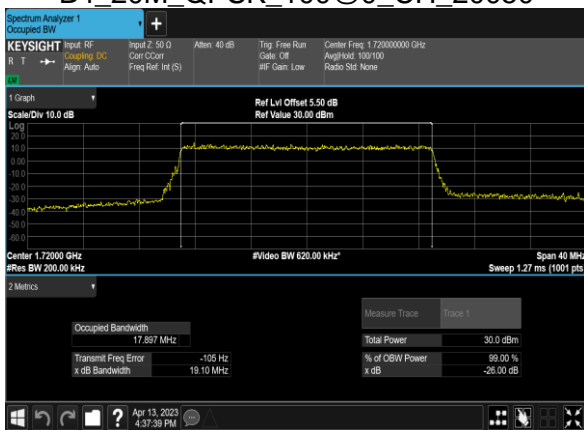


Occupied Bandwidth

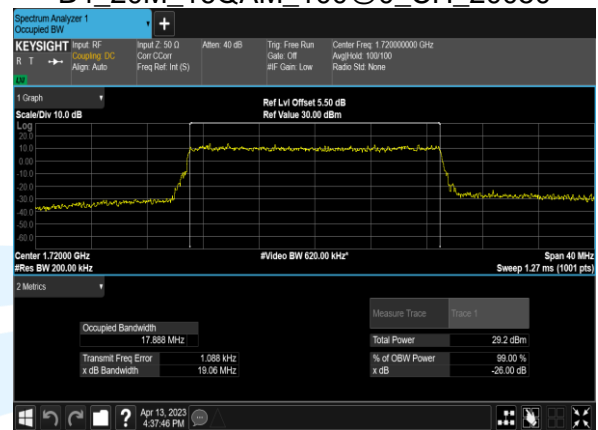
Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
4	20.0	20050	1720.0	QPSK	100@0	17.897	19.10
4	20.0	20050	1720.0	16QAM	100@0	17.888	19.06
4	20.0	20175	1732.5	QPSK	100@0	17.912	18.69
4	20.0	20175	1732.5	16QAM	100@0	17.881	18.92
4	20.0	20300	1745.0	QPSK	100@0	17.895	19.26
4	20.0	20300	1745.0	16QAM	100@0	17.847	18.97
4	15.0	20025	1717.5	QPSK	75@0	13.414	14.52
4	15.0	20025	1717.5	16QAM	75@0	13.453	14.40
4	15.0	20175	1732.5	QPSK	75@0	13.398	14.37
4	15.0	20175	1732.5	16QAM	75@0	13.381	14.35
4	15.0	20325	1747.5	QPSK	75@0	13.414	14.57
4	15.0	20325	1747.5	16QAM	75@0	13.397	14.35
4	10.0	20000	1715.0	QPSK	50@0	8.9329	9.580
4	10.0	20000	1715.0	16QAM	50@0	8.9360	9.681
4	10.0	20175	1732.5	QPSK	50@0	8.9340	9.590
4	10.0	20175	1732.5	16QAM	50@0	8.9258	9.628
4	10.0	20350	1750.0	QPSK	50@0	8.9256	9.536
4	10.0	20350	1750.0	16QAM	50@0	8.9361	9.603
4	5.0	19975	1712.5	QPSK	25@0	4.4664	4.867
4	5.0	19975	1712.5	16QAM	25@0	4.4554	4.801
4	5.0	20175	1732.5	QPSK	25@0	4.4582	4.851
4	5.0	20175	1732.5	16QAM	25@0	4.4698	4.860
4	5.0	20375	1752.5	QPSK	25@0	4.4496	4.882
4	5.0	20375	1752.5	16QAM	25@0	4.4661	4.873
4	3.0	19965	1711.5	QPSK	15@0	2.6842	2.967
4	3.0	19965	1711.5	16QAM	15@0	2.6775	2.970
4	3.0	20175	1732.5	QPSK	15@0	2.6949	2.976
4	3.0	20175	1732.5	16QAM	15@0	2.6845	2.959
4	3.0	20385	1753.5	QPSK	15@0	2.6877	2.950
4	3.0	20385	1753.5	16QAM	15@0	2.6853	2.967
4	1.4	19957	1710.7	QPSK	6@0	1.0767	1.224
4	1.4	19957	1710.7	16QAM	6@0	1.0845	1.225
4	1.4	20175	1732.5	QPSK	6@0	1.0796	1.212
4	1.4	20175	1732.5	16QAM	6@0	1.0757	1.222
4	1.4	20393	1754.3	QPSK	6@0	1.0776	1.219
4	1.4	20393	1754.3	16QAM	6@0	1.0793	1.216
4	20.0	20050	1720.0	64QAM	100@0	17.894	19.18
4	20.0	20175	1732.5	64QAM	100@0	17.922	19.13
4	20.0	20300	1745.0	64QAM	100@0	17.886	18.96
4	15.0	20025	1717.5	64QAM	75@0	13.401	14.41
4	15.0	20175	1732.5	64QAM	75@0	13.397	14.40
4	15.0	20325	1747.5	64QAM	75@0	13.383	14.36
4	10.0	20000	1715.0	64QAM	50@0	8.9360	9.675
4	10.0	20175	1732.5	64QAM	50@0	8.9395	9.669
4	10.0	20350	1750.0	64QAM	50@0	8.9464	9.640
4	5.0	19975	1712.5	64QAM	25@0	4.4556	4.852
4	5.0	20175	1732.5	64QAM	25@0	4.4692	4.860
4	5.0	20375	1752.5	64QAM	25@0	4.4621	4.883
4	3.0	19965	1711.5	64QAM	15@0	2.6858	2.969
4	3.0	20175	1732.5	64QAM	15@0	2.6887	2.970
4	3.0	20385	1753.5	64QAM	15@0	2.6826	2.970
4	1.4	19957	1710.7	64QAM	6@0	1.0801	1.224
4	1.4	20175	1732.5	64QAM	6@0	1.0765	1.221
4	1.4	20393	1754.3	64QAM	6@0	1.0796	1.228

Test Graphs

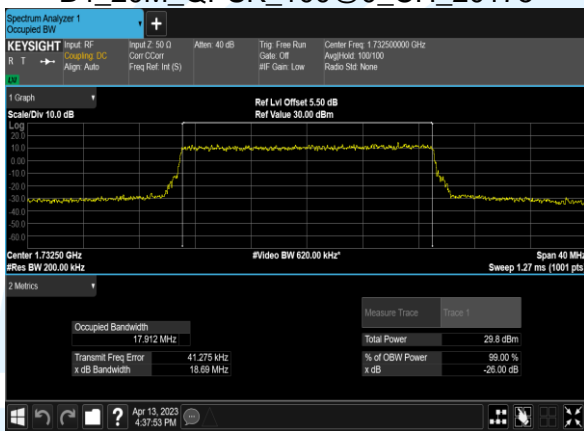
B4_20M_QPSK_100@0_CH_20050



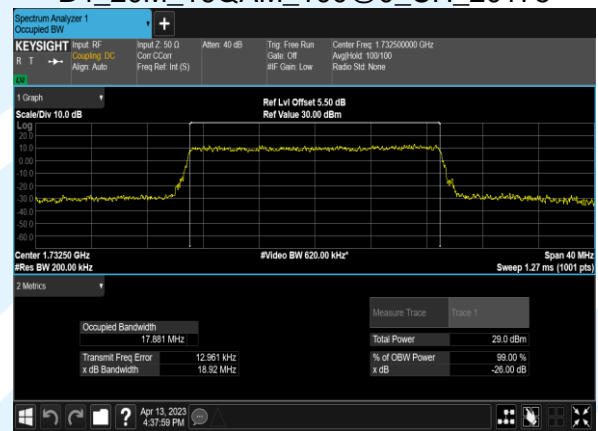
B4_20M_16QAM_100@0_CH_20050



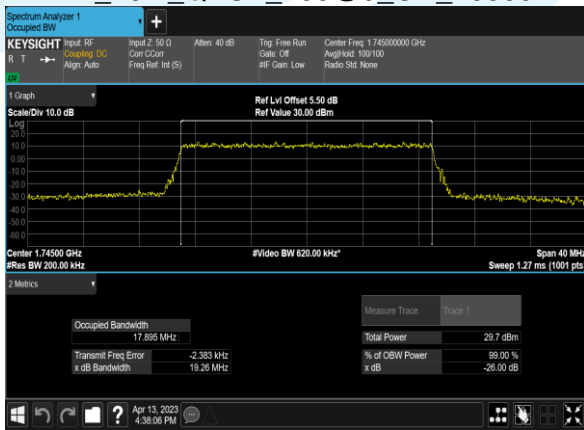
B4_20M_QPSK_100@0_CH_20175



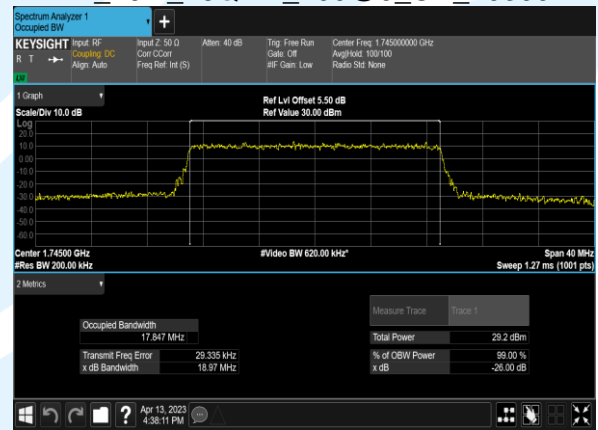
B4_20M_16QAM_100@0_CH_20175



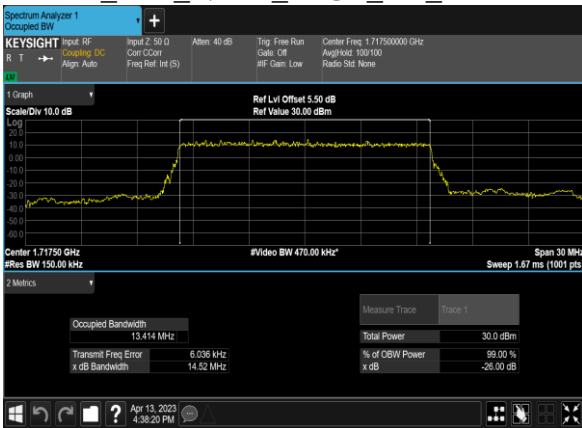
B4_20M_QPSK_100@0_CH_20300



B4_20M_16QAM_100@0_CH_20300



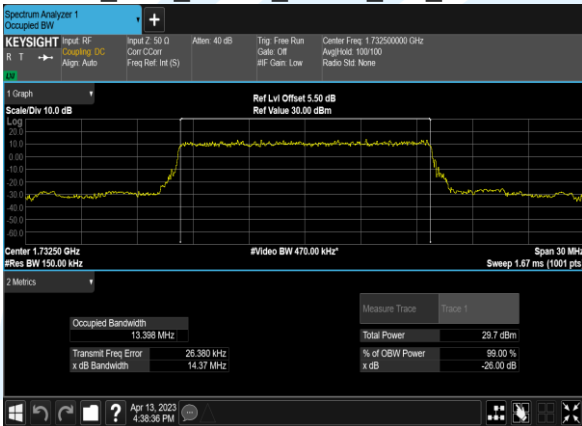
B4_15M_QPSK_75@0_CH_20025



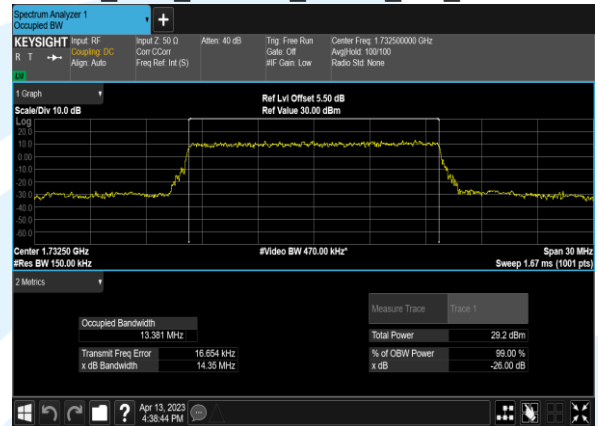
B4_15M_16QAM_75@0_CH_20025



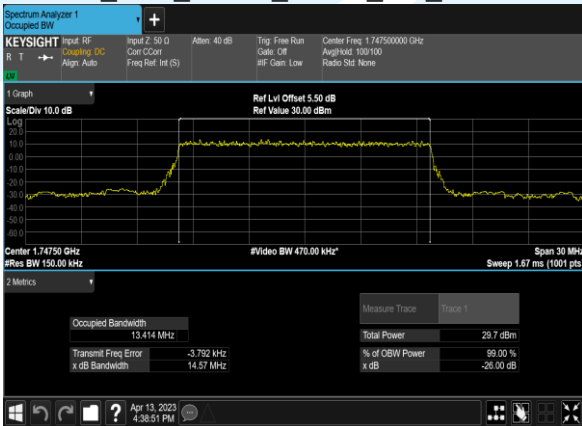
B4_15M_QPSK_75@0_CH_20175



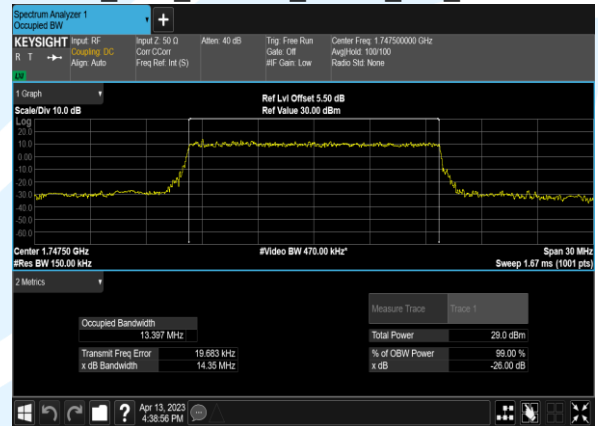
B4_15M_16QAM_75@0_CH_20175



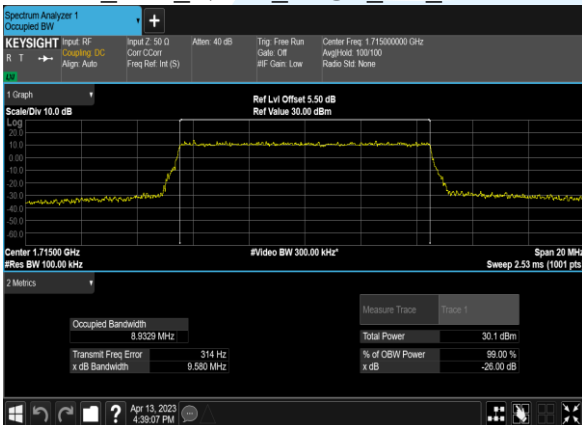
B4_15M_QPSK_75@0_CH_20325



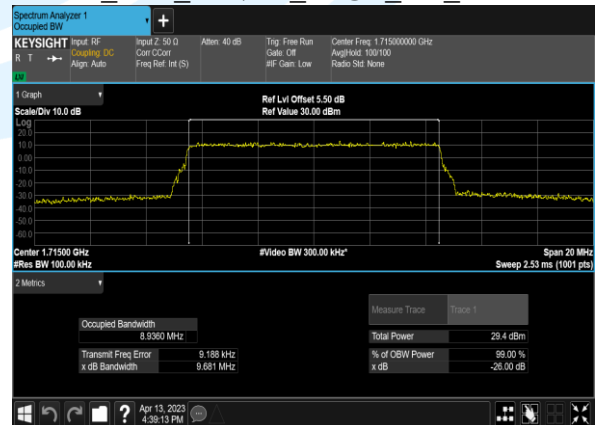
B4_15M_16QAM_75@0_CH_20325



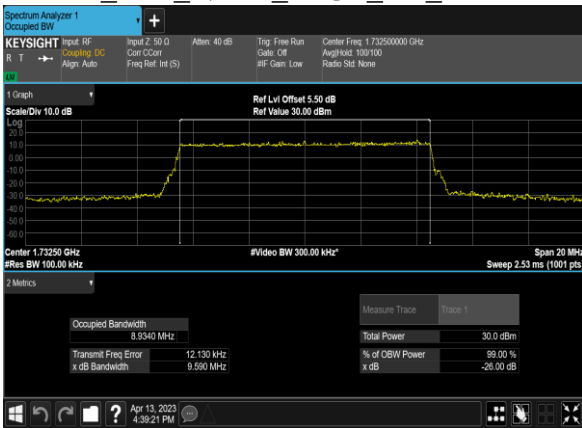
B4_10M_QPSK_50@0_CH_20000



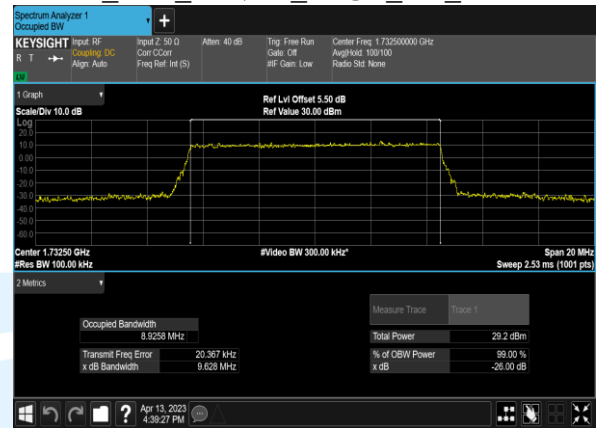
B4_10M_16QAM_50@0_CH_20000



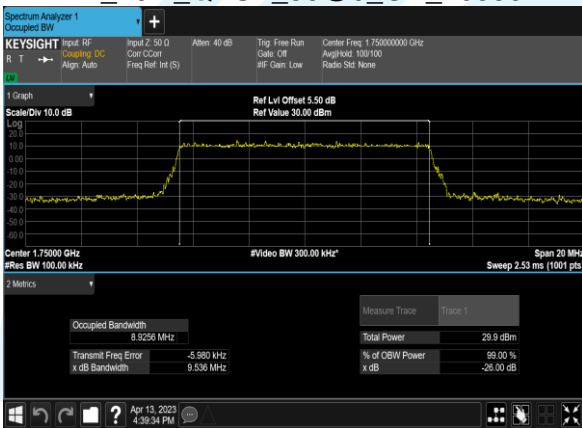
B4_10M_QPSK_50@0_CH_20175



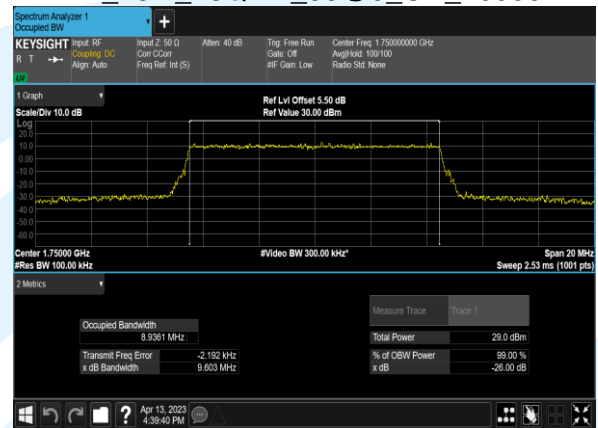
B4_10M_16QAM_50@0_CH_20175



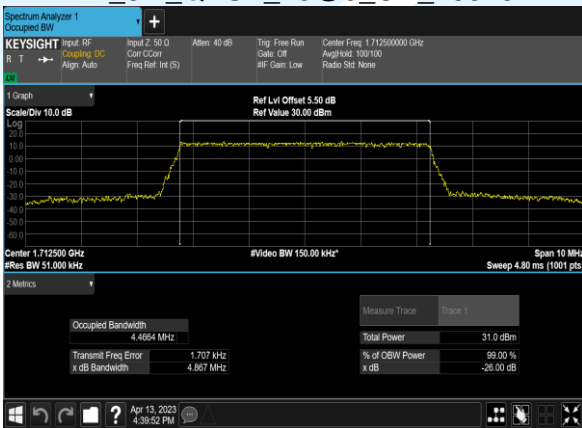
B4_10M_QPSK_50@0_CH_20350



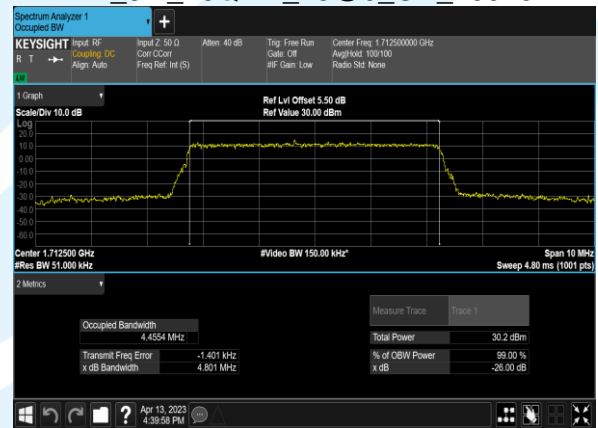
B4_10M_16QAM_50@0_CH_20350



B4_5M_QPSK_25@0_CH_19975



B4_5M_16QAM_25@0_CH_19975



B4_5M_QPSK_25@0_CH_20175



B4_5M_16QAM_25@0_CH_20175

