

B4 5M QPSK 1@0 CH 19975



B4 5M 16QAM 1@0 CH 19975



B4 5M QPSK 1@0 CH 20175



B4 5M 16QAM 1@0 CH 20175



B4 5M QPSK 1@0 CH 20375



B4 5M 16QAM 1@0 CH 20375



B4 3M QPSK 1@0 CH 19965



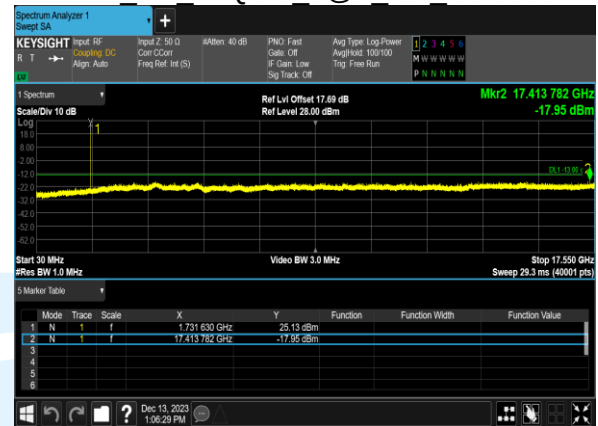
B4 3M 16QAM 1@0 CH 19965



B4 3M QPSK 1@0 CH 20175



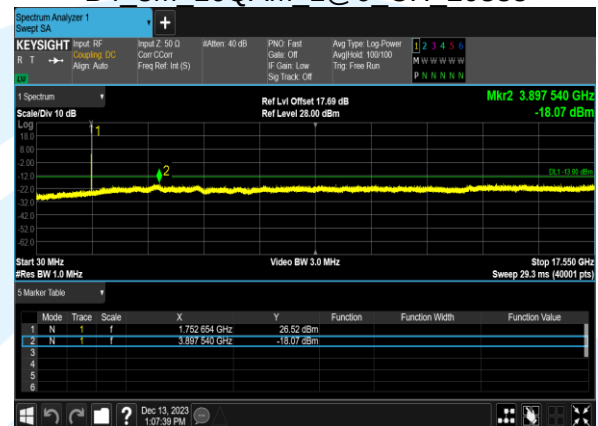
B4 3M 16QAM 1@0 CH 20175



B4 3M QPSK 1@0 CH 20385



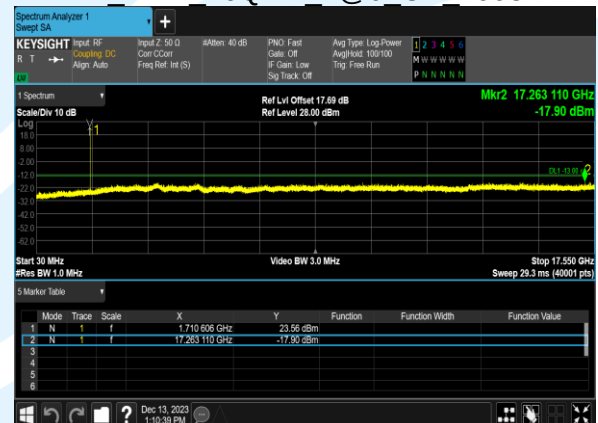
B4 3M 16QAM 1@0 CH 20385



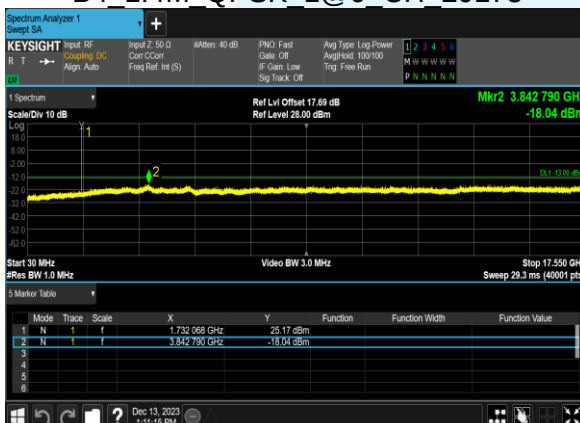
B4 1.4M QPSK 1@0 CH 19957



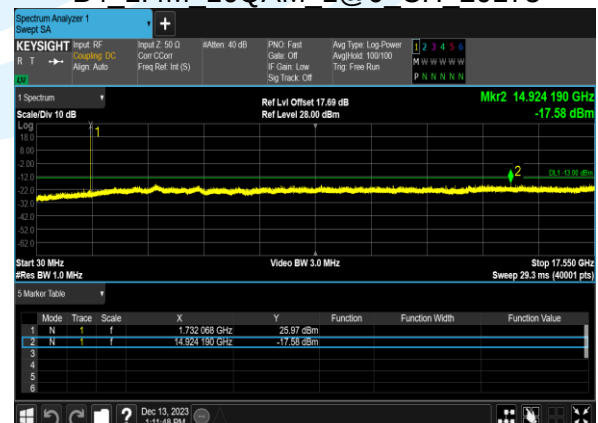
B4 1.4M 16QAM 1@0 CH 19957



B4 1.4M QPSK 1@0 CH 20175



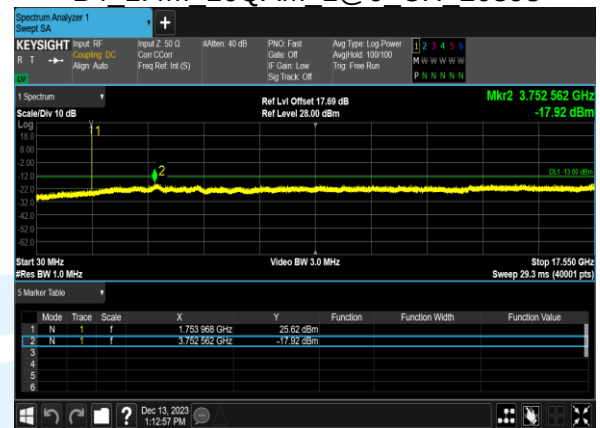
B4 1.4M 16QAM 1@0 CH 20175



B4 1.4M QPSK 1@0 CH 20393



B4 1.4M 16QAM 1@0 CH 20393

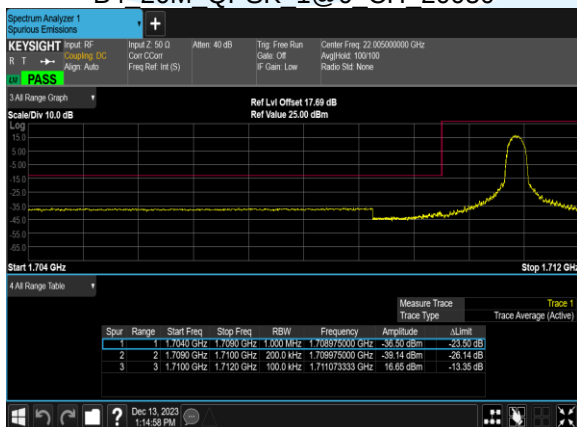


Conducted Band Edge

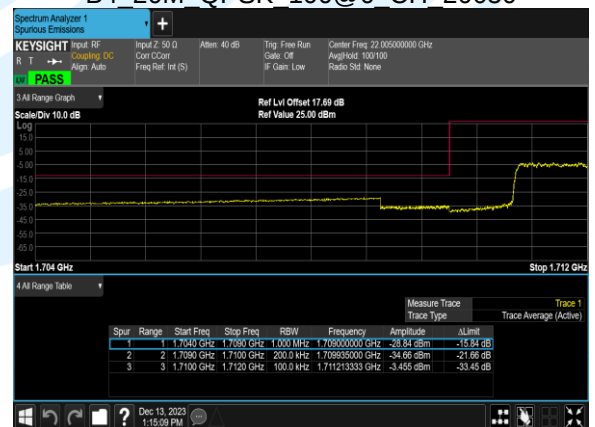
Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Result	Verdict
4	20.0	20050	1720.0	QPSK	1@0	see graph	PASS
4	20.0	20050	1720.0	QPSK	100@0	see graph	PASS
4	20.0	20050	1720.0	16QAM	1@0	see graph	PASS
4	20.0	20050	1720.0	16QAM	100@0	see graph	PASS
4	20.0	20300	1745.0	QPSK	1@99	see graph	PASS
4	20.0	20300	1745.0	QPSK	100@0	see graph	PASS
4	20.0	20300	1745.0	16QAM	1@99	see graph	PASS
4	20.0	20300	1745.0	16QAM	100@0	see graph	PASS
4	15.0	20025	1717.5	QPSK	1@0	see graph	PASS
4	15.0	20025	1717.5	QPSK	75@0	see graph	PASS
4	15.0	20025	1717.5	16QAM	1@0	see graph	PASS
4	15.0	20025	1717.5	16QAM	75@0	see graph	PASS
4	15.0	20325	1747.5	QPSK	1@74	see graph	PASS
4	15.0	20325	1747.5	QPSK	75@0	see graph	PASS
4	15.0	20325	1747.5	16QAM	1@74	see graph	PASS
4	15.0	20325	1747.5	16QAM	75@0	see graph	PASS
4	10.0	20000	1715.0	QPSK	1@0	see graph	PASS
4	10.0	20000	1715.0	QPSK	50@0	see graph	PASS
4	10.0	20000	1715.0	16QAM	1@0	see graph	PASS
4	10.0	20000	1715.0	16QAM	50@0	see graph	PASS
4	10.0	20350	1750.0	QPSK	1@49	see graph	PASS
4	10.0	20350	1750.0	QPSK	50@0	see graph	PASS
4	10.0	20350	1750.0	16QAM	1@49	see graph	PASS
4	10.0	20350	1750.0	16QAM	50@0	see graph	PASS
4	5.0	19975	1712.5	QPSK	1@0	see graph	PASS
4	5.0	19975	1712.5	QPSK	25@0	see graph	PASS
4	5.0	19975	1712.5	16QAM	1@0	see graph	PASS
4	5.0	19975	1712.5	16QAM	25@0	see graph	PASS
4	5.0	20375	1752.5	QPSK	1@24	see graph	PASS
4	5.0	20375	1752.5	QPSK	25@0	see graph	PASS
4	5.0	20375	1752.5	16QAM	1@24	see graph	PASS
4	5.0	20375	1752.5	16QAM	25@0	see graph	PASS
4	3.0	19965	1711.5	QPSK	1@0	see graph	PASS
4	3.0	19965	1711.5	QPSK	15@0	see graph	PASS
4	3.0	19965	1711.5	16QAM	1@0	see graph	PASS
4	3.0	19965	1711.5	16QAM	15@0	see graph	PASS
4	3.0	20385	1753.5	QPSK	1@14	see graph	PASS
4	3.0	20385	1753.5	QPSK	15@0	see graph	PASS
4	3.0	20385	1753.5	16QAM	1@14	see graph	PASS
4	3.0	20385	1753.5	16QAM	15@0	see graph	PASS
4	1.4	19957	1710.7	QPSK	1@0	see graph	PASS
4	1.4	19957	1710.7	QPSK	6@0	see graph	PASS
4	1.4	19957	1710.7	16QAM	1@0	see graph	PASS
4	1.4	19957	1710.7	16QAM	6@0	see graph	PASS
4	1.4	20393	1754.3	QPSK	1@5	see graph	PASS
4	1.4	20393	1754.3	QPSK	6@0	see graph	PASS
4	1.4	20393	1754.3	16QAM	1@5	see graph	PASS
4	1.4	20393	1754.3	16QAM	6@0	see graph	PASS

Test Graphs

B4 20M QPSK 1@0 CH 20050



B4 20M QPSK 100@0 CH 20050



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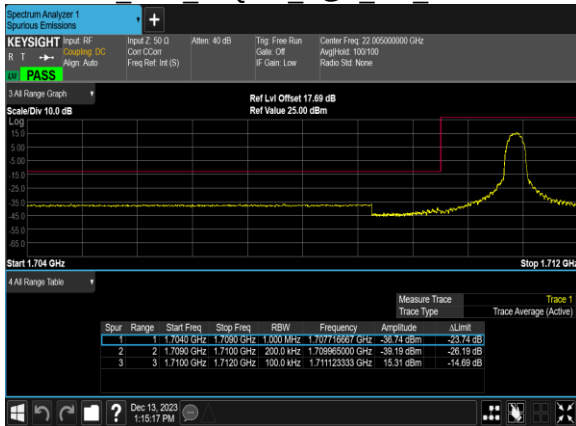
Fax: +86-755-28230886

E-mail: info@uttlab.com

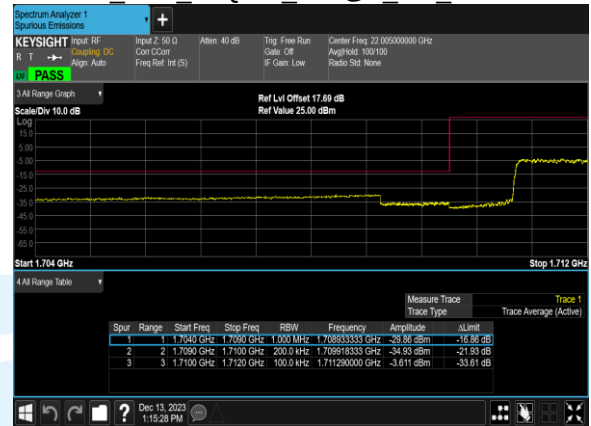
<http://www.uttlab.com>

UTTR-RF-FCC4G-V1.1

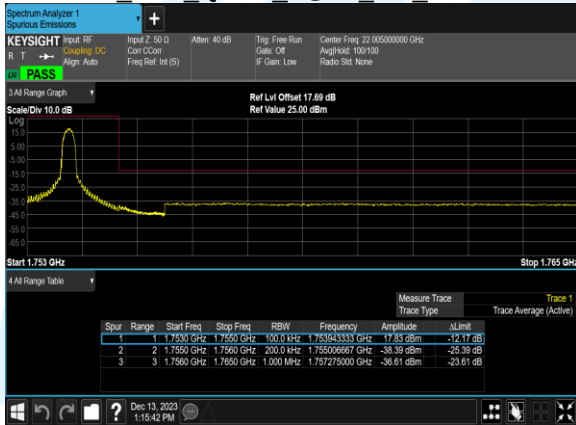
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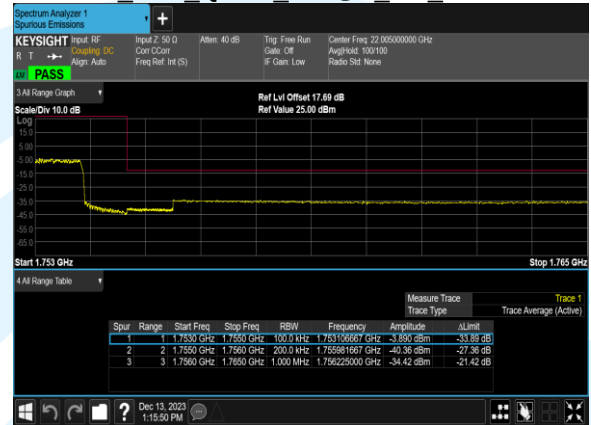
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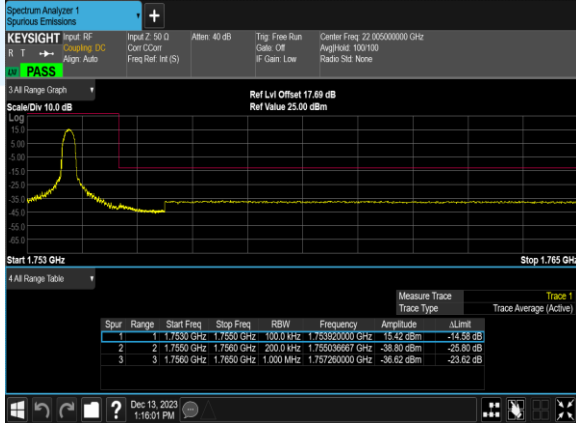
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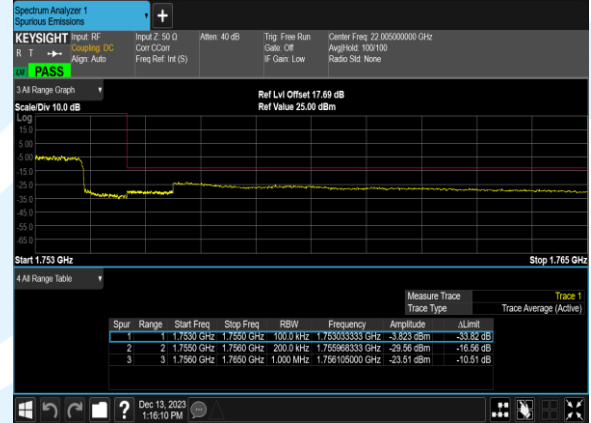
B4 20M QPSK 100@0 CH 20300



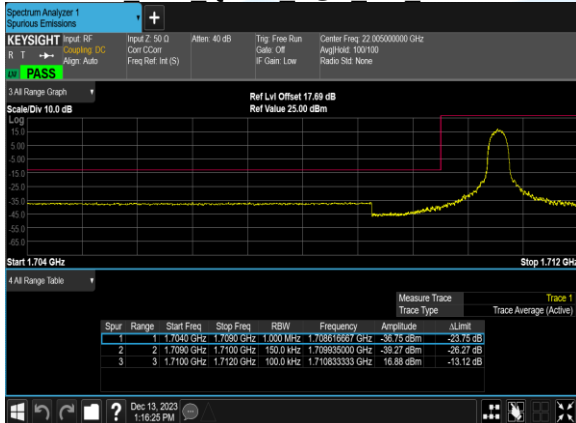
B4 20M 16QAM 1@99 CH 20300



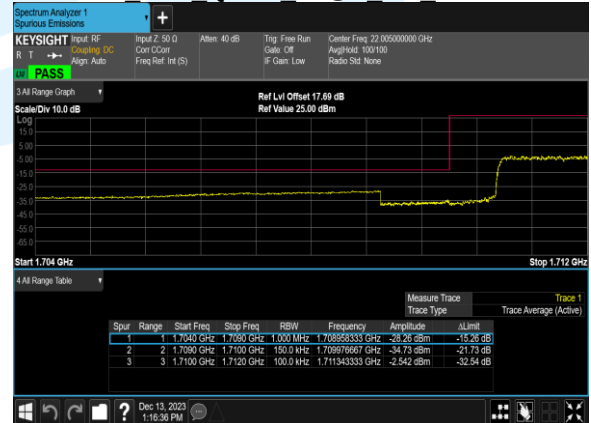
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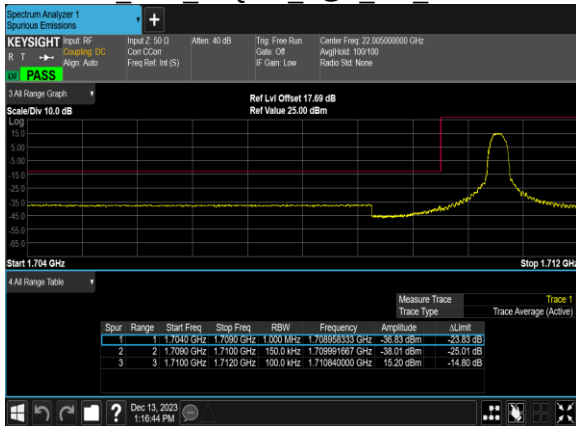
B4 15M QPSK 1@0 CH 20025



B4 15M QPSK 75@0 CH 20025



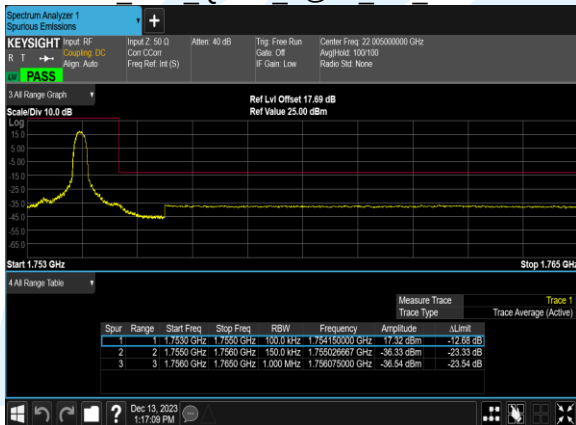
B4 15M 16QAM 1@0 CH 20025



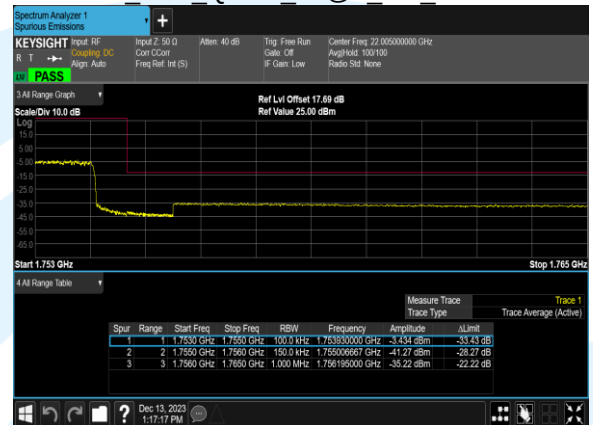
B4 15M 16QAM 75@0 CH 20025



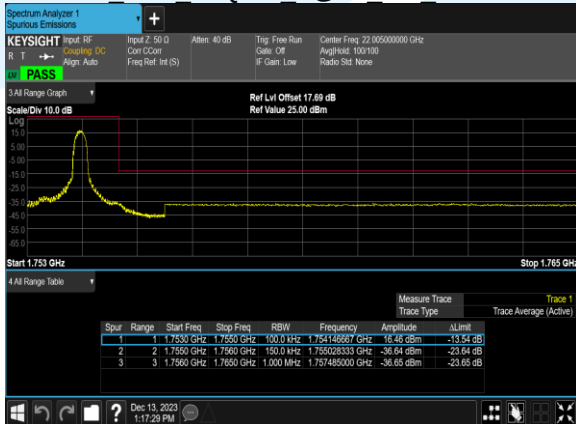
B4 15M QPSK 1@74 CH 20325



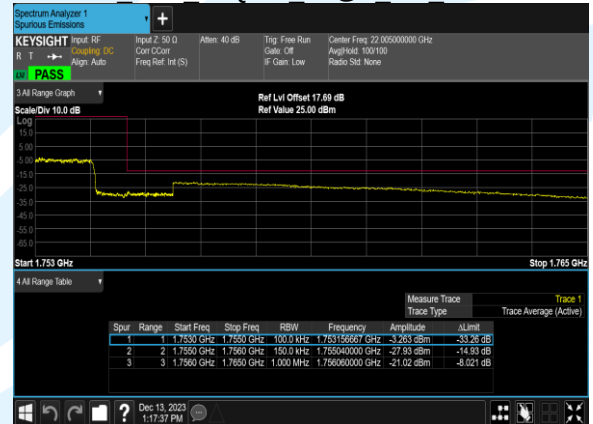
B4 15M QPSK 75@0 CH 20325



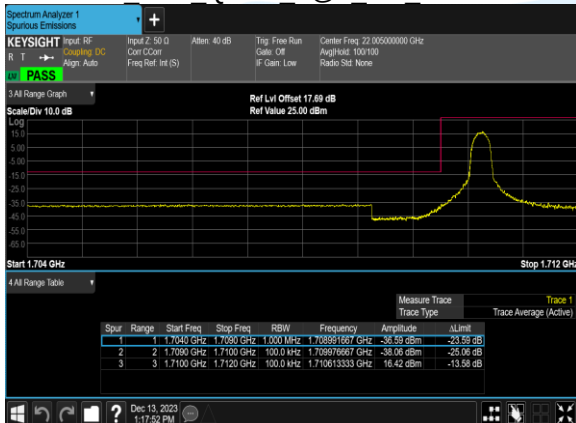
B4 15M 16QAM 1@74 CH 20325



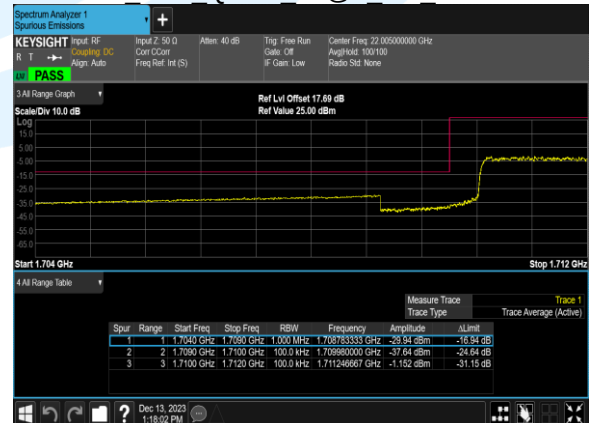
B4 15M 16QAM 75@0 CH 20325



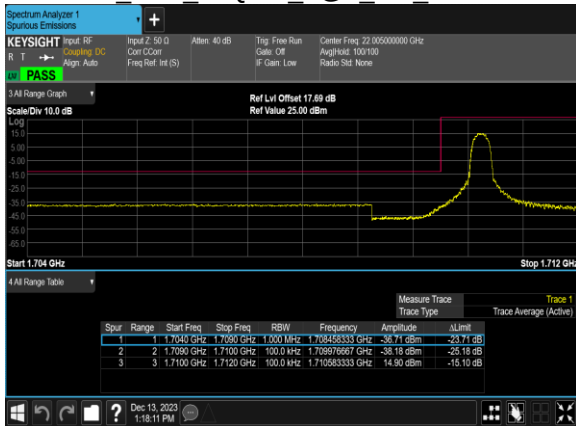
B4 10M QPSK 1@0 CH 20000



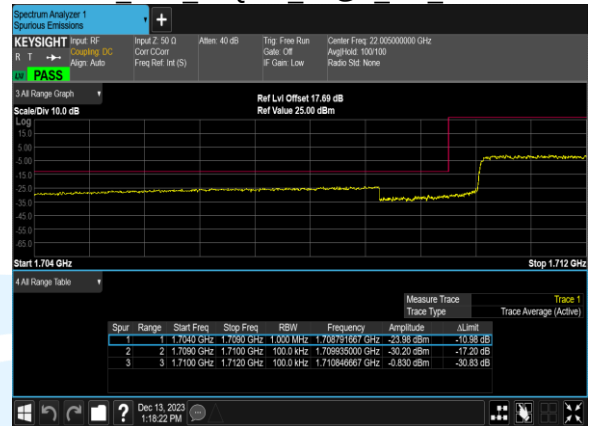
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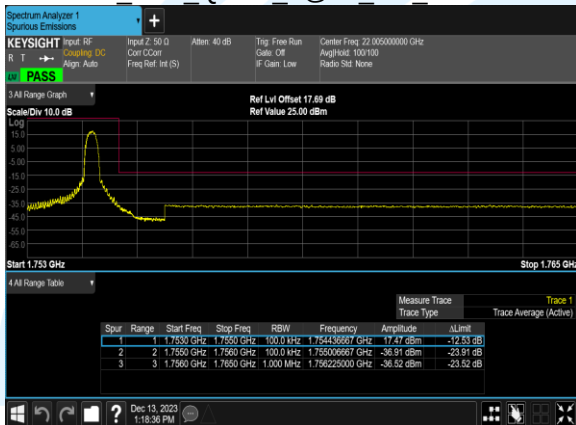
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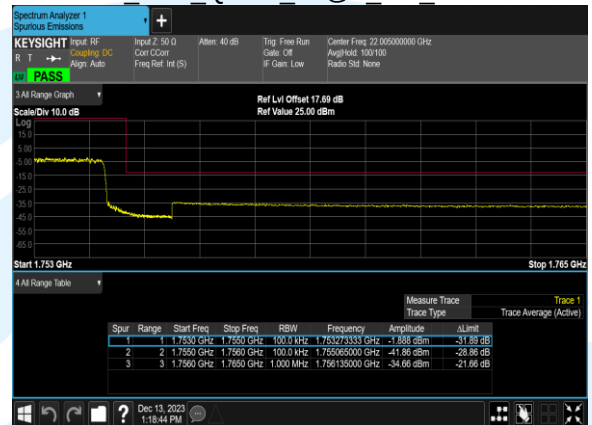
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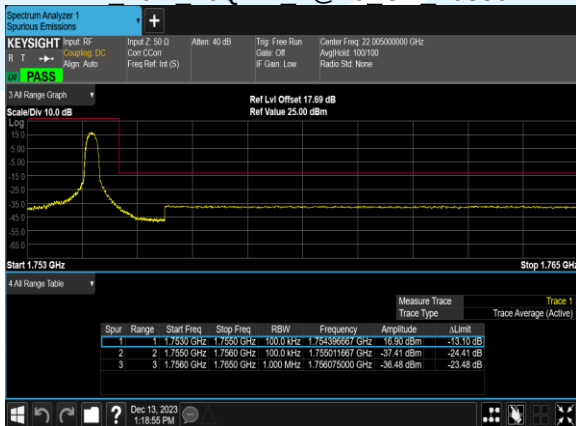
B4 10M QPSK 1@49 CH 20350



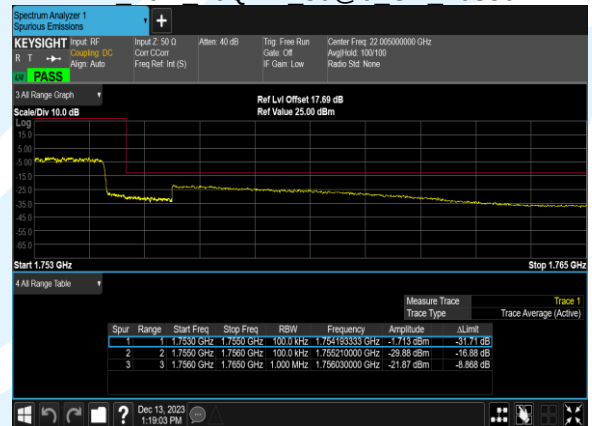
B4 10M QPSK 50@0 CH 20350



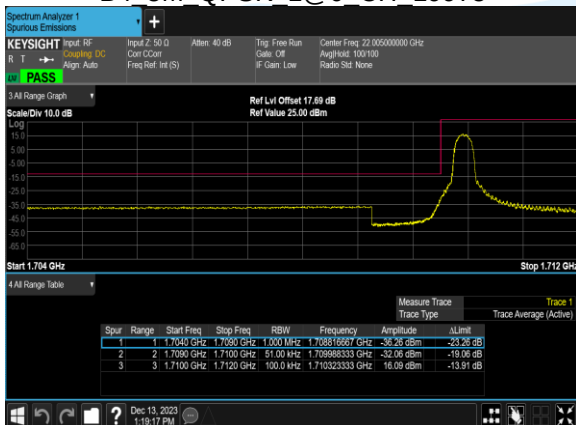
B4 10M 16QAM 1@49 CH 20350



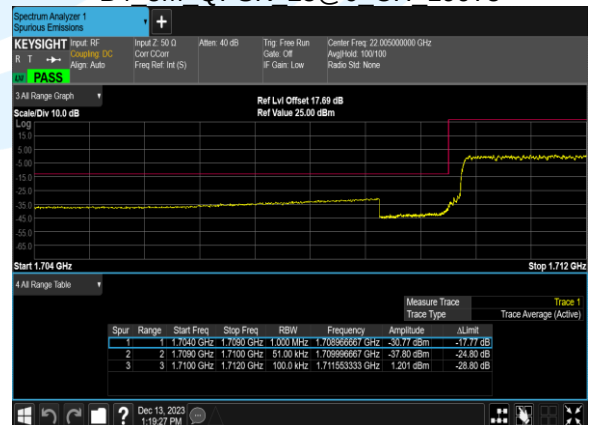
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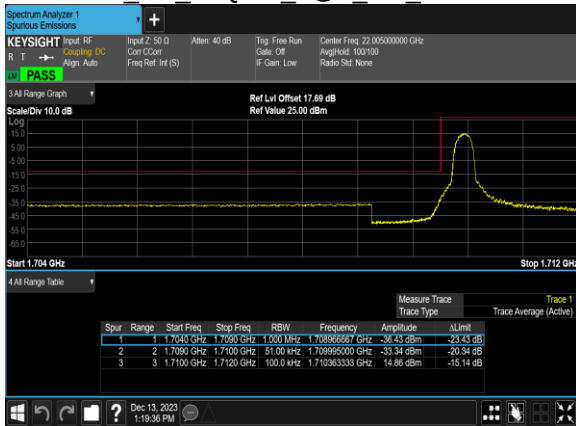
B4 5M QPSK 1@0 CH 19975



B4 5M QPSK 25@0 CH 19975



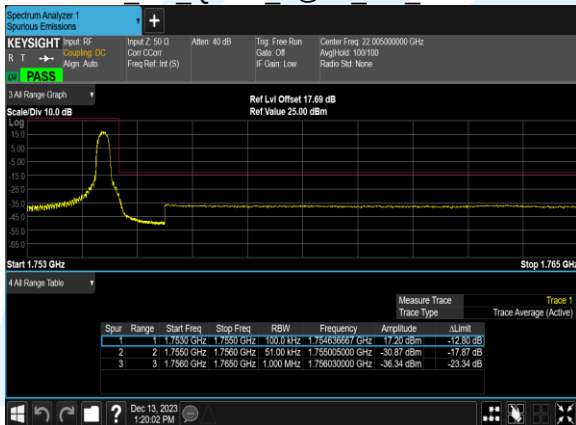
B4 5M 16QAM 1@0 CH 19975



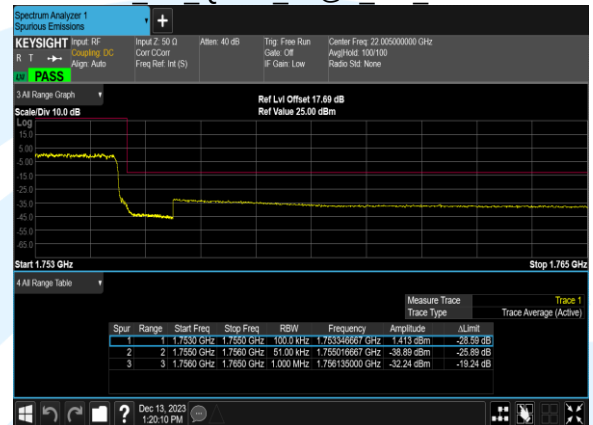
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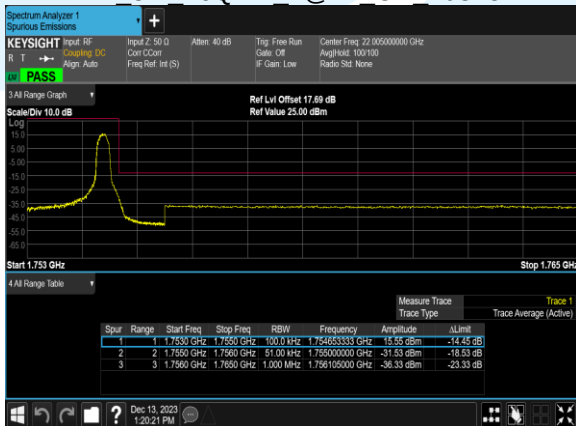
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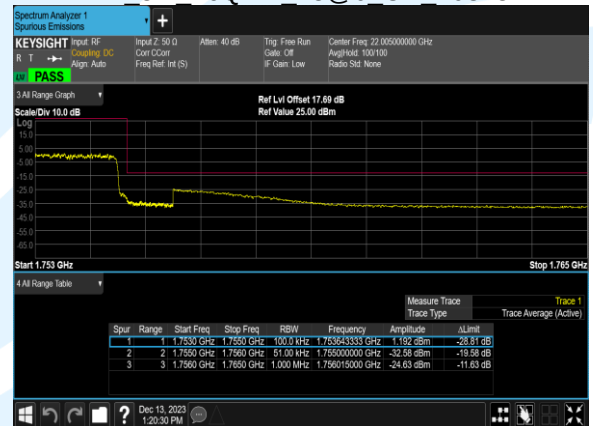
B4 5M QPSK 25@0 CH 20375



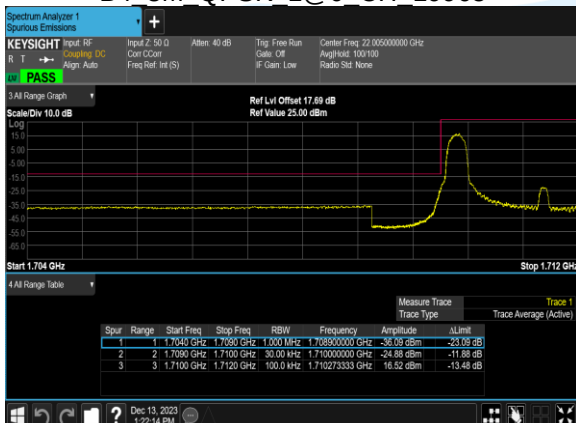
B4 5M 16QAM 1@24 CH 20375



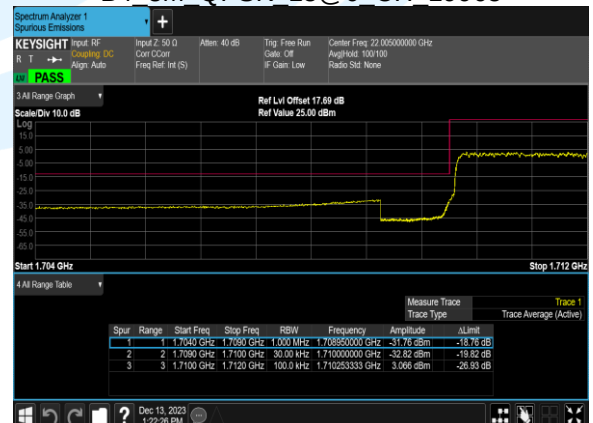
B4 5M 16QAM 25@0 CH 20375



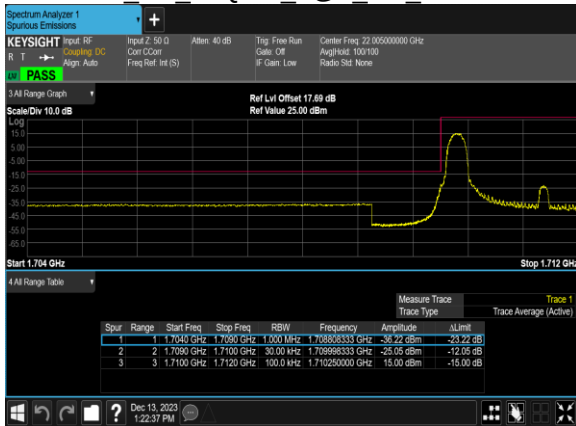
B4 3M QPSK 1@0 CH 19965



B4 3M QPSK 15@0 CH 19965



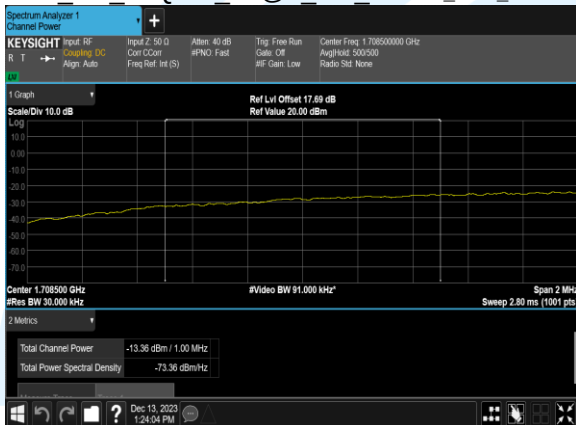
B4 3M 16QAM 1@0 CH 19965



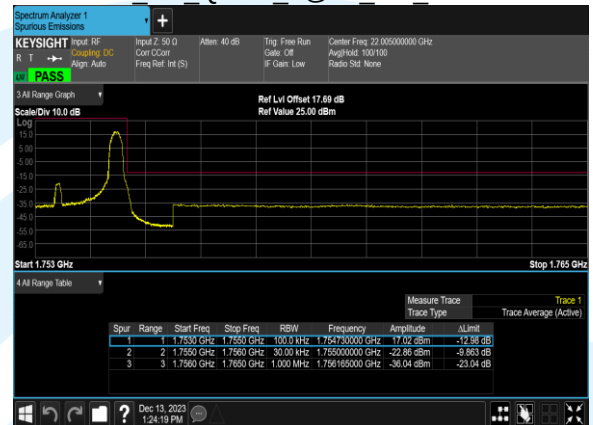
B4 3M 16QAM 15@0 CH 19965



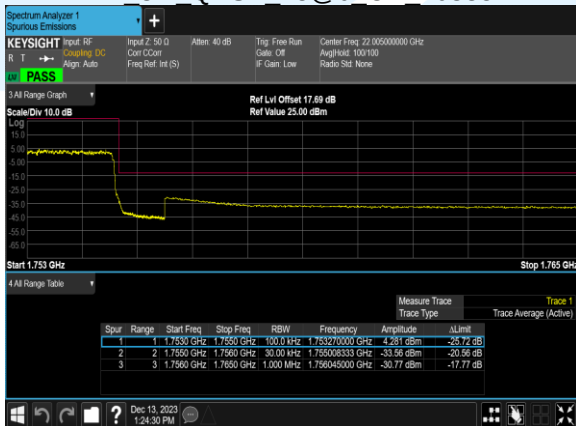
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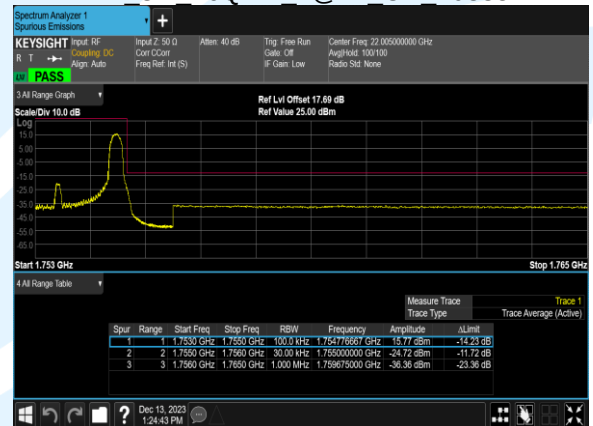
B4 3M QPSK 1@14 CH 20385



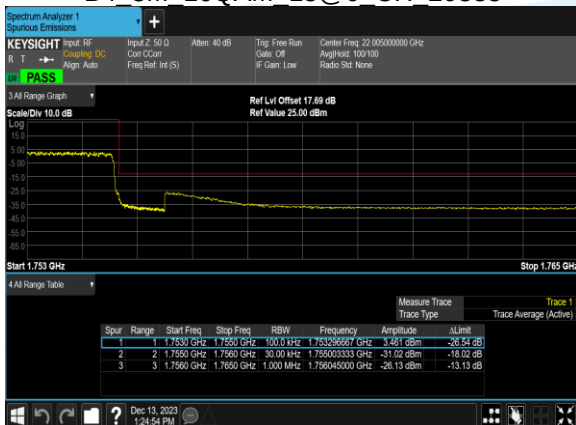
B4 3M QPSK 15@0 CH 20385



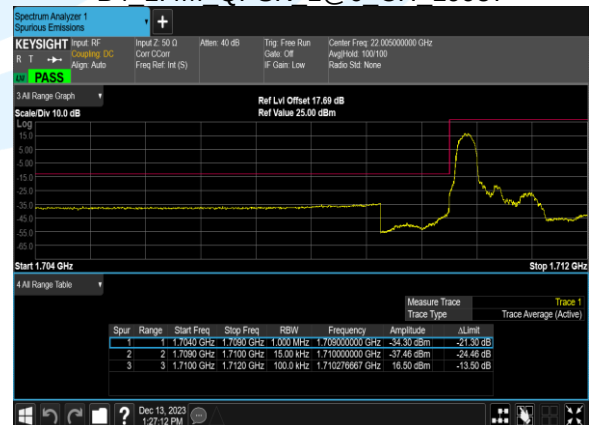
B4 3M 16QAM 1@14 CH 20385



B4 3M 16QAM 15@0 CH 20385



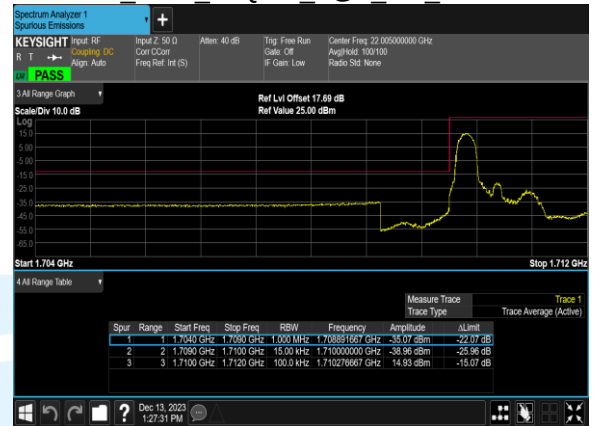
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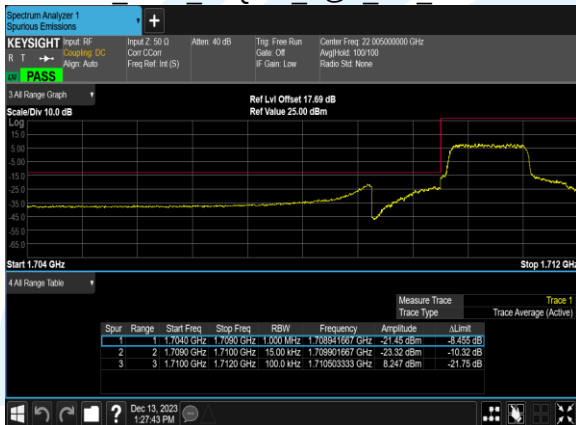
B4 1.4M QPSK 6@0 CH 19957



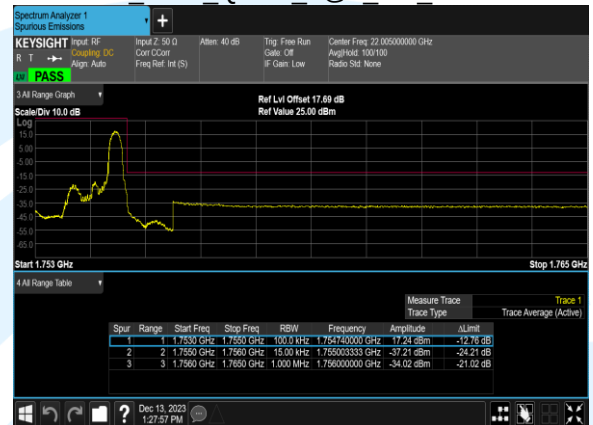
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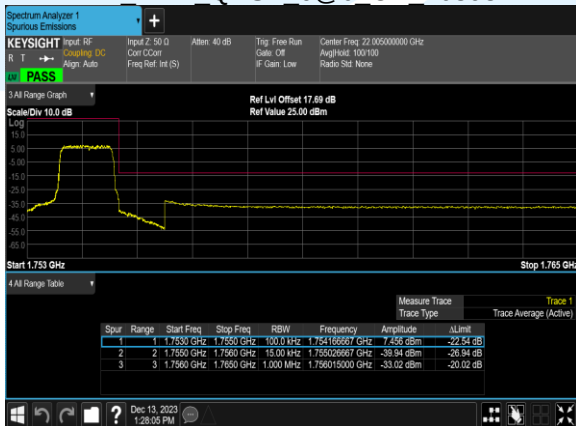
B4 1.4M 16QAM 6@0 CH 19957



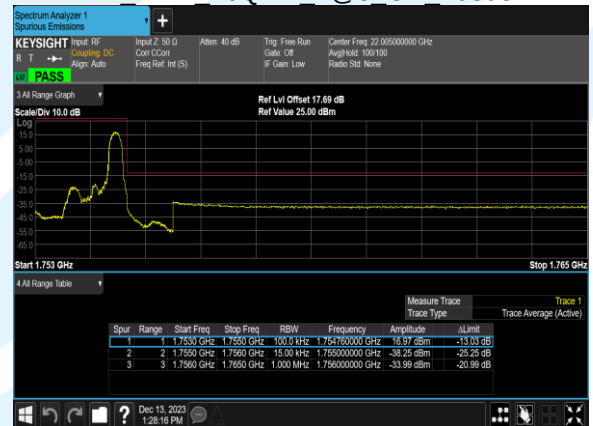
B4 1.4M QPSK 1@5 CH 20393



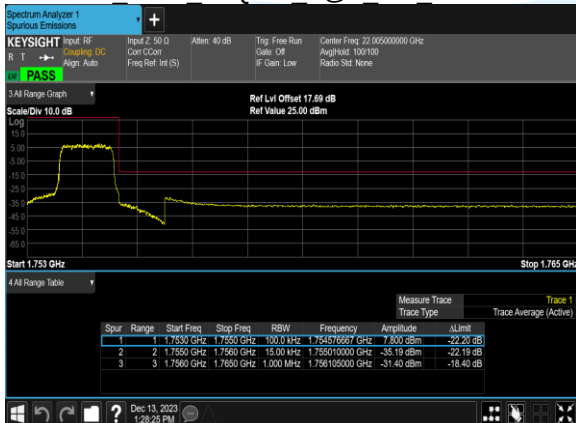
B4 1.4M QPSK 6@0 CH 20393



B4 1.4M 16QAM 1@5 CH 20393



B4 1.4M 16QAM 6@0 CH 20393



A.3 LTE BAND 5

Peak to Average Ratio

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
5	10.0	20450	829.0	QPSK	50@0	5.53	13	PASS
5	10.0	20450	829.0	16QAM	50@0	6.26	13	PASS
5	10.0	20525	836.5	QPSK	50@0	5.74	13	PASS
5	10.0	20525	836.5	16QAM	50@0	6.47	13	PASS
5	10.0	20600	844.0	QPSK	50@0	5.58	13	PASS
5	10.0	20600	844.0	16QAM	50@0	6.28	13	PASS
5	5.0	20425	826.5	QPSK	25@0	5.33	13	PASS
5	5.0	20425	826.5	16QAM	25@0	5.90	13	PASS
5	5.0	20525	836.5	QPSK	25@0	5.73	13	PASS
5	5.0	20525	836.5	16QAM	25@0	6.39	13	PASS
5	5.0	20625	846.5	QPSK	25@0	5.50	13	PASS
5	5.0	20625	846.5	16QAM	25@0	6.18	13	PASS
5	3.0	20415	825.5	QPSK	15@0	5.38	13	PASS
5	3.0	20415	825.5	16QAM	15@0	6.00	13	PASS
5	3.0	20525	836.5	QPSK	15@0	5.77	13	PASS
5	3.0	20525	836.5	16QAM	15@0	6.47	13	PASS
5	3.0	20635	847.5	QPSK	15@0	5.50	13	PASS
5	3.0	20635	847.5	16QAM	15@0	6.26	13	PASS
5	1.4	20407	824.7	QPSK	6@0	5.37	13	PASS
5	1.4	20407	824.7	16QAM	6@0	6.02	13	PASS
5	1.4	20525	836.5	QPSK	6@0	5.70	13	PASS
5	1.4	20525	836.5	16QAM	6@0	6.48	13	PASS
5	1.4	20643	848.3	QPSK	6@0	5.56	13	PASS
5	1.4	20643	848.3	16QAM	6@0	6.26	13	PASS

Test Graphs

B5 10M QPSK 50@0 CH 20450



B5 10M 16QAM 50@0 CH 20450



B5 10M QPSK 50@0 CH 20525



B5 10M 16QAM 50@0 CH 20525



B5 10M QPSK 50@0 CH 20600



B5 10M 16QAM 50@0 CH 20600



B5 5M QPSK 25@0 CH 20425



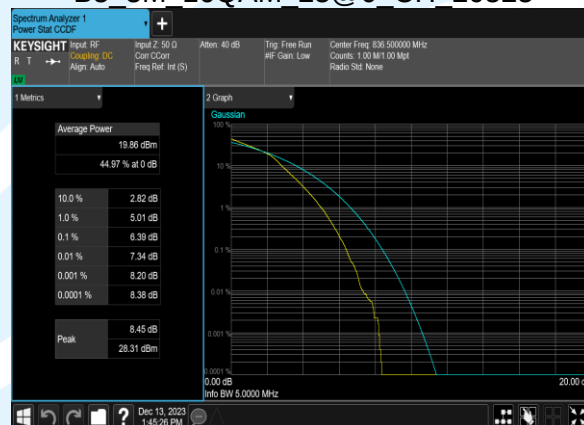
B5 5M 16QAM 25@0 CH 20425



B5 5M QPSK 25@0 CH 20525



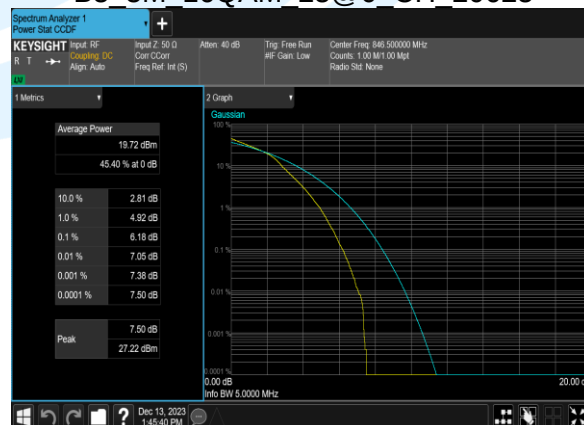
B5 5M 16QAM 25@0 CH 20525



B5 5M QPSK 25@0 CH 20625



B5 5M 16QAM 25@0 CH 20625



B5_3M_QPSK_15@0_CH_20415



B5_3M_16QAM_15@0_CH_20415



B5_3M_QPSK_15@0_CH_20525



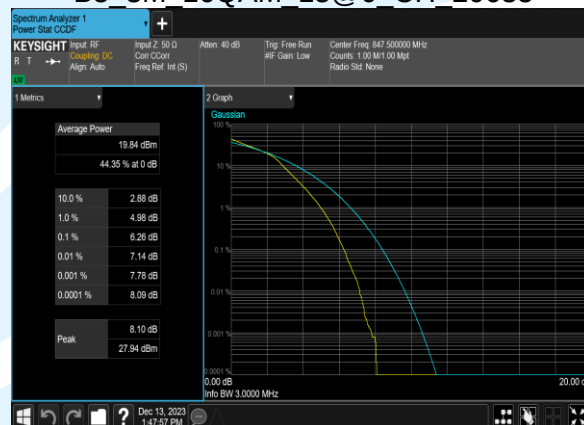
B5_3M_16QAM_15@0_CH_20525



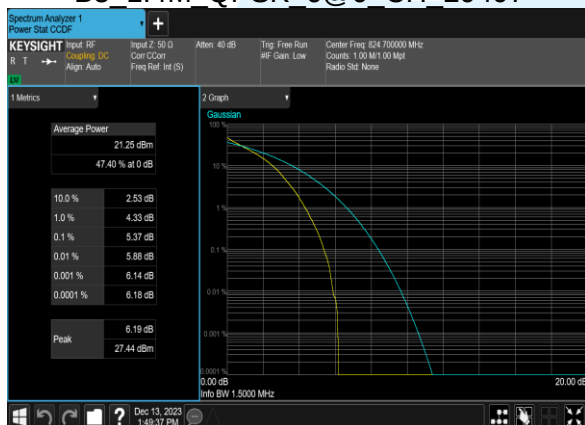
B5_3M_QPSK_15@0_CH_20635



B5_3M_16QAM_15@0_CH_20635



B5_1.4M_QPSK_6@0_CH_20407



B5_1.4M_16QAM_6@0_CH_20407



B5 1.4M QPSK 6@0 CH 20525



B5 1.4M 16QAM 6@0 CH 20525



B5 1.4M QPSK 6@0 CH 20643



B5 1.4M 16QAM 6@0 CH 20643

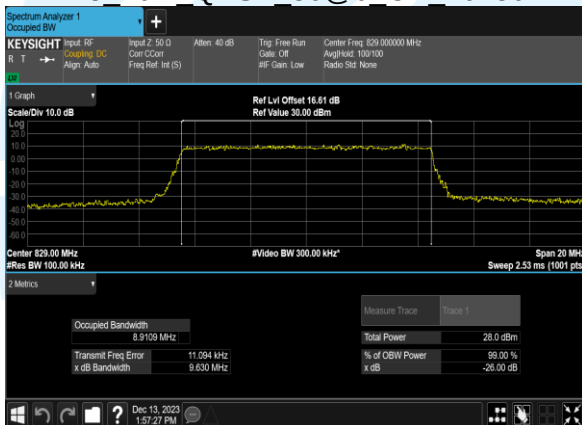


Occupied Bandwidth

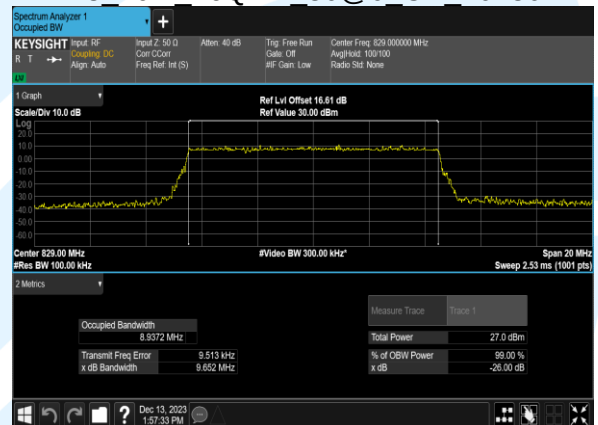
Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
5	10.0	20450	829.0	QPSK	50@0	8.9109	9.630
5	10.0	20450	829.0	16QAM	50@0	8.9372	9.652
5	10.0	20525	836.5	QPSK	50@0	8.9537	9.595
5	10.0	20525	836.5	16QAM	50@0	8.9441	9.583
5	10.0	20600	844.0	QPSK	50@0	8.9298	9.666
5	10.0	20600	844.0	16QAM	50@0	8.9207	9.633
5	5.0	20425	826.5	QPSK	25@0	4.4660	4.896
5	5.0	20425	826.5	16QAM	25@0	4.4548	4.798
5	5.0	20525	836.5	QPSK	25@0	4.4542	4.877
5	5.0	20525	836.5	16QAM	25@0	4.4613	4.883
5	5.0	20625	846.5	QPSK	25@0	4.4510	4.851
5	5.0	20625	846.5	16QAM	25@0	4.4586	4.890
5	3.0	20415	825.5	QPSK	15@0	2.6852	2.943
5	3.0	20415	825.5	16QAM	15@0	2.6859	2.984
5	3.0	20525	836.5	QPSK	15@0	2.6736	2.965
5	3.0	20635	847.5	QPSK	15@0	2.6907	2.981
5	3.0	20635	847.5	16QAM	15@0	2.6860	2.949
5	1.4	20407	824.7	QPSK	6@0	1.0806	1.214
5	1.4	20407	824.7	16QAM	6@0	1.0809	1.226
5	1.4	20525	836.5	QPSK	6@0	1.0810	1.221
5	1.4	20525	836.5	16QAM	6@0	1.0770	1.213
5	1.4	20643	848.3	QPSK	6@0	1.0783	1.214
5	1.4	20643	848.3	16QAM	6@0	1.0760	1.213

Test Graphs

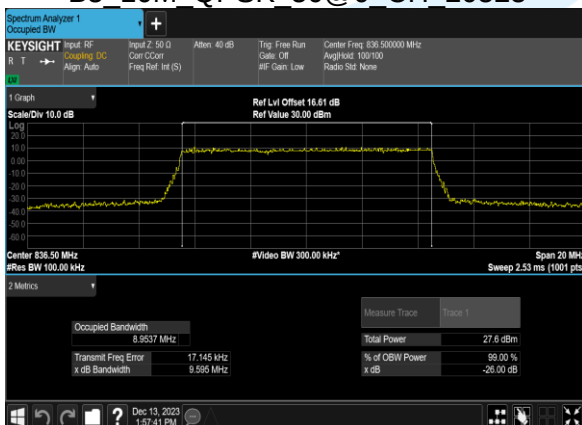
B5 10M QPSK 50@0 CH 20450



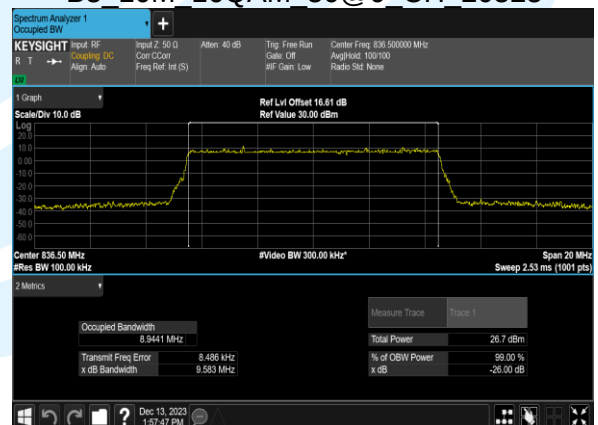
B5 10M 16QAM 50@0 CH 20450



B5 10M QPSK 50@0 CH 20525



B5 10M 16QAM 50@0 CH 20525



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