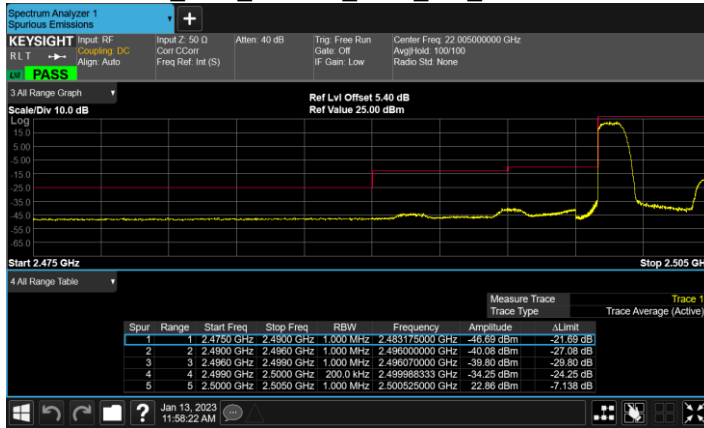
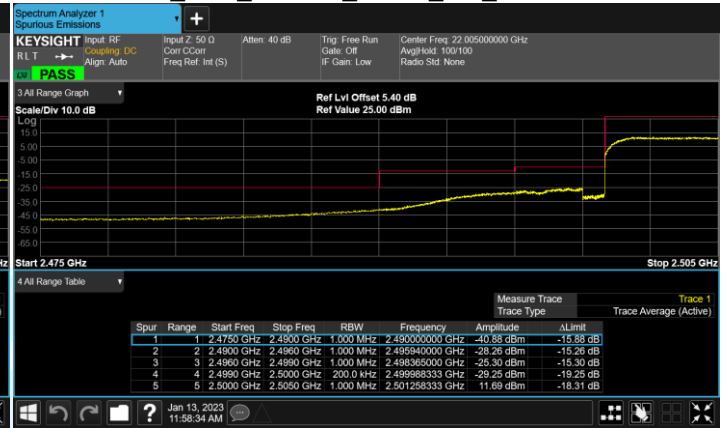


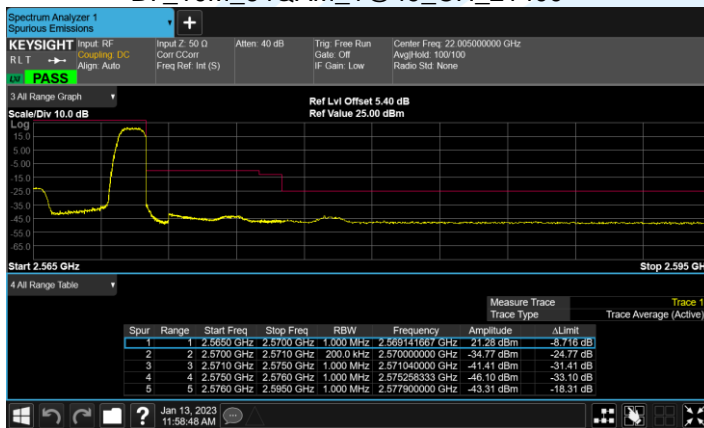
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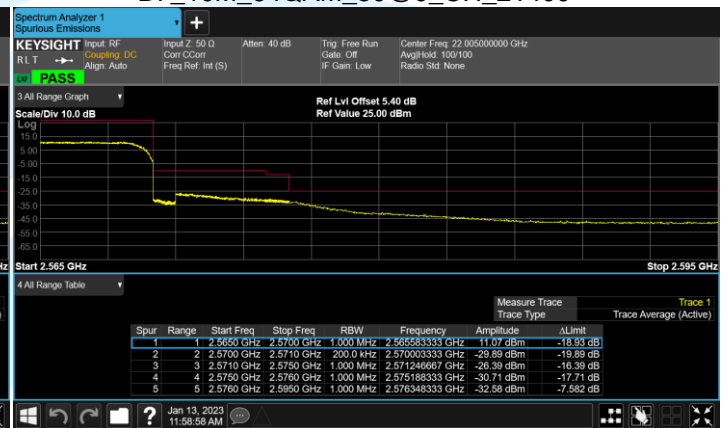
B7\_10M\_64QAM\_50@0\_CH\_20800



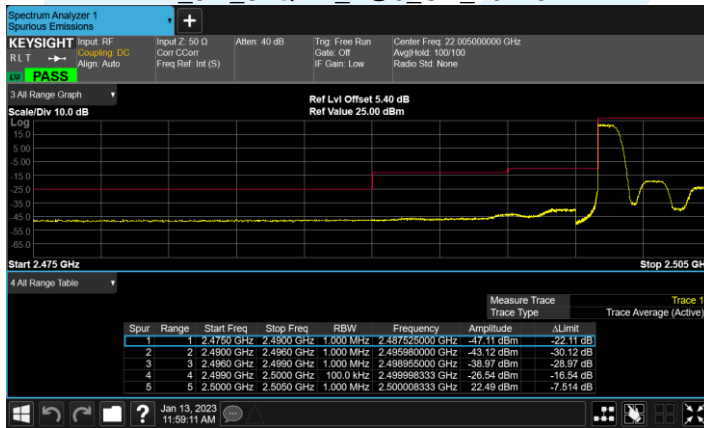
B7\_10M\_64QAM\_1@49\_CH\_21400



B7\_10M\_64QAM\_50@0\_CH\_21400



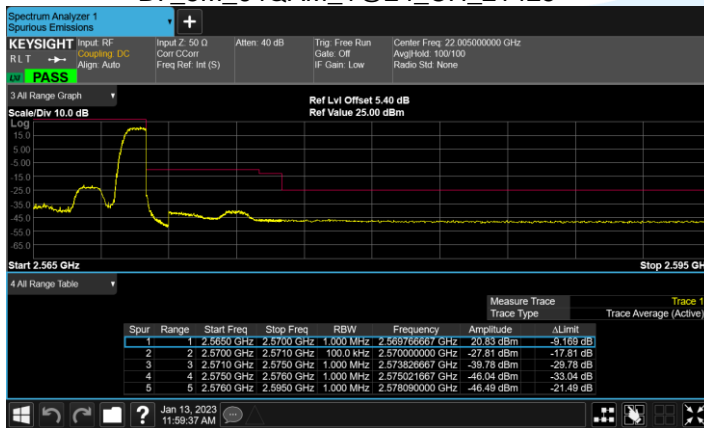
B7\_5M\_64QAM\_1@0\_CH\_20775



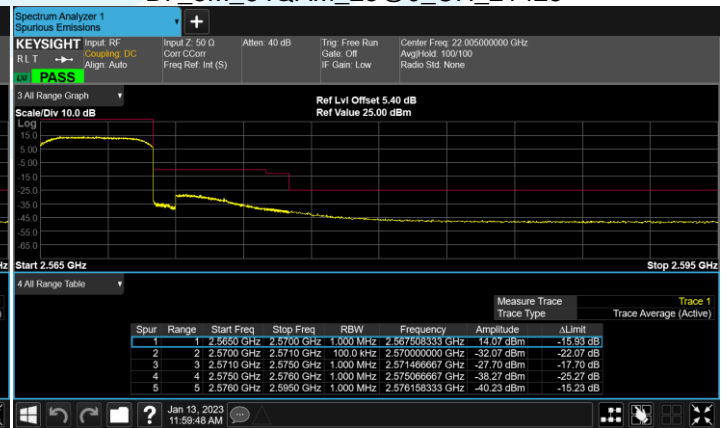
B7\_5M\_64QAM\_25@0\_CH\_20775



B7\_5M\_64QAM\_1@24\_CH\_21425



B7\_5M\_64QAM\_25@0\_CH\_21425



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E-mail: info@uttlab.com

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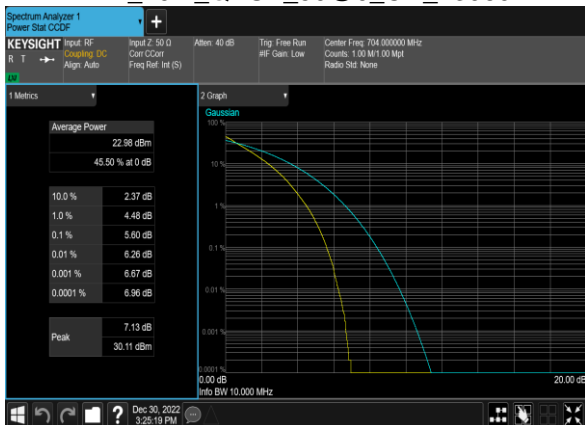
UTTR-RF-FCC4G-V1.1

## A.5 LTE BAND 12

### Peak to Average Ratio

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
12	10.0	23060	704.0	QPSK	50@0	5.60	13	PASS
12	10.0	23060	704.0	16QAM	50@0	6.36	13	PASS
12	10.0	23060	704.0	64QAM	50@0	6.43	13	PASS
12	10.0	23095	707.5	QPSK	50@0	5.62	13	PASS
12	10.0	23095	707.5	16QAM	50@0	6.27	13	PASS
12	10.0	23095	707.5	64QAM	50@0	6.26	13	PASS
12	10.0	23130	711.0	QPSK	50@0	5.43	13	PASS
12	10.0	23130	711.0	16QAM	50@0	6.24	13	PASS
12	10.0	23130	711.0	64QAM	50@0	6.25	13	PASS

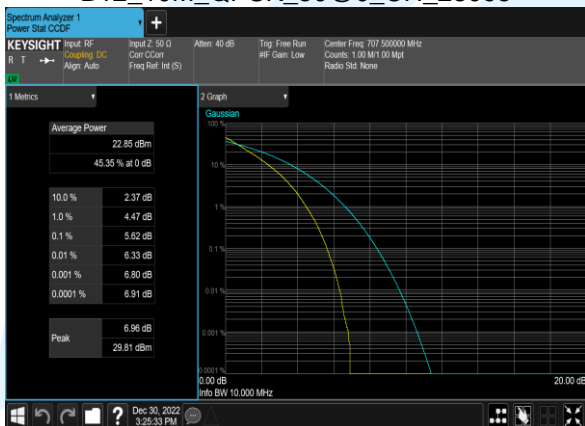
B12\_10M\_QPSK\_50@0\_CH\_23060



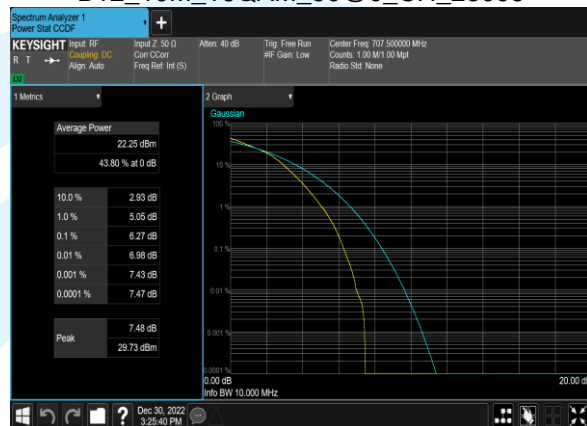
B12\_10M\_16QAM\_50@0\_CH\_23060



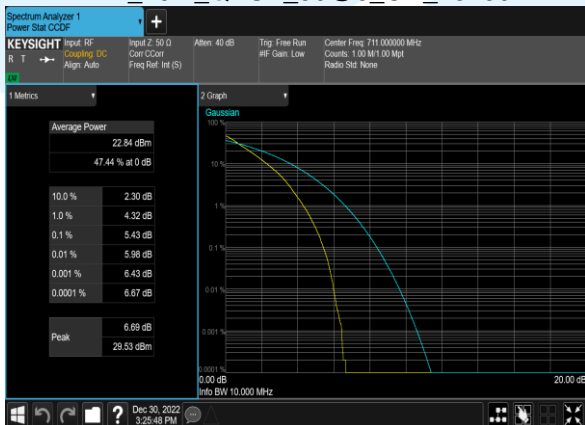
B12\_10M\_QPSK\_50@0\_CH\_23095



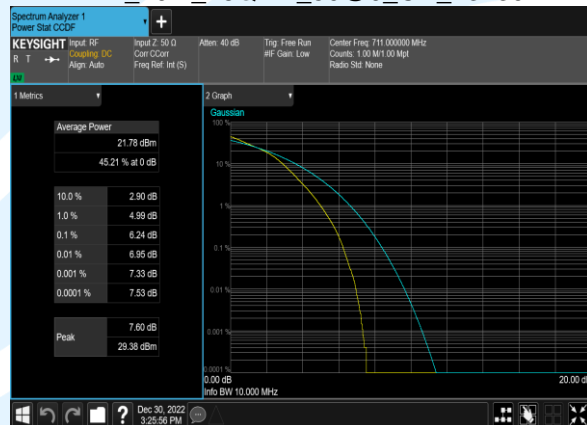
B12\_10M\_16QAM\_50@0\_CH\_23095



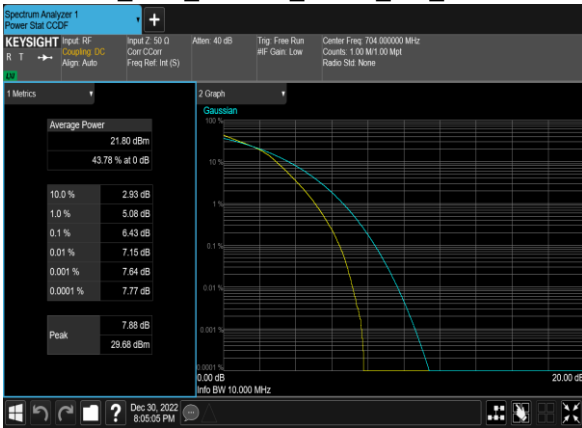
B12\_10M\_QPSK\_50@0\_CH\_23130



B12\_10M\_16QAM\_50@0\_CH\_23130



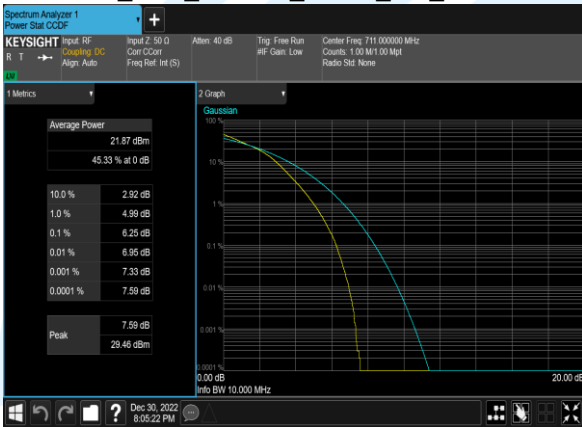
B12\_10M\_64QAM\_50@0\_CH\_23060



B12\_10M\_64QAM\_50@0\_CH\_23095



B12\_10M\_64QAM\_50@0\_CH\_23130



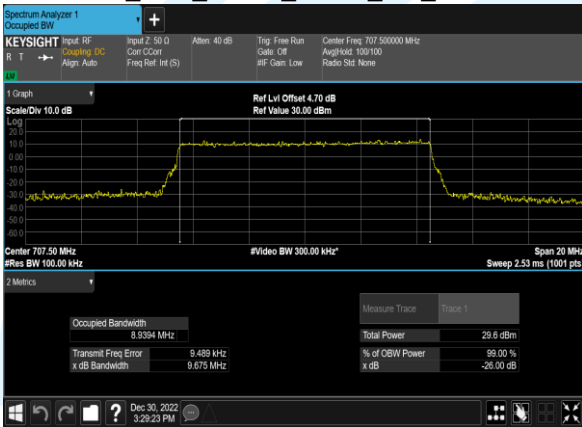
**Occupied Bandwidth**

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
12	10.0	23060	704.0	QPSK	50@0	8.9515	9.649
12	10.0	23060	704.0	16QAM	50@0	8.9439	9.725
12	10.0	23060	704.0	64QAM	50@0	8.9424	9.654
12	10.0	23095	707.5	QPSK	50@0	8.9394	9.675
12	10.0	23095	707.5	16QAM	50@0	8.9539	9.584
12	10.0	23095	707.5	64QAM	50@0	8.9663	9.699
12	10.0	23130	711.0	QPSK	50@0	8.9172	9.658
12	10.0	23130	711.0	16QAM	50@0	8.9366	9.667
12	10.0	23130	711.0	64QAM	50@0	8.9388	9.504
12	5.0	23035	701.5	QPSK	25@0	4.4515	4.861
12	5.0	23035	701.5	16QAM	25@0	4.4471	4.821
12	5.0	23035	701.5	64QAM	25@0	4.4495	4.893
12	5.0	23095	707.5	QPSK	25@0	4.4771	4.923
12	5.0	23095	707.5	16QAM	25@0	4.4772	4.897
12	5.0	23095	707.5	64QAM	25@0	4.4607	4.873
12	5.0	23155	713.5	QPSK	25@0	4.4533	4.853
12	5.0	23155	713.5	16QAM	25@0	4.4567	4.866
12	5.0	23155	713.5	64QAM	25@0	4.4494	4.832
12	3.0	23025	700.5	QPSK	15@0	2.6937	2.984
12	3.0	23025	700.5	16QAM	15@0	2.6797	2.956
12	3.0	23025	700.5	64QAM	15@0	2.6758	2.974
12	3.0	23095	707.5	QPSK	15@0	2.6862	2.939
12	3.0	23095	707.5	16QAM	15@0	2.6906	2.958
12	3.0	23095	707.5	64QAM	15@0	2.6872	2.966
12	3.0	23165	714.5	QPSK	15@0	2.6897	2.979
12	3.0	23165	714.5	16QAM	15@0	2.6837	2.982
12	3.0	23165	714.5	64QAM	15@0	2.6850	2.996
12	1.4	23017	699.7	QPSK	6@0	1.0777	1.208
12	1.4	23017	699.7	16QAM	6@0	1.0742	1.224
12	1.4	23017	699.7	64QAM	6@0	1.0838	1.234
12	1.4	23095	707.5	QPSK	6@0	1.0788	1.216
12	1.4	23095	707.5	16QAM	6@0	1.0768	1.216
12	1.4	23095	707.5	64QAM	6@0	1.0825	1.219
12	1.4	23173	715.3	QPSK	6@0	1.0812	1.220
12	1.4	23173	715.3	16QAM	6@0	1.0817	1.216
12	1.4	23173	715.3	64QAM	6@0	1.0766	1.220

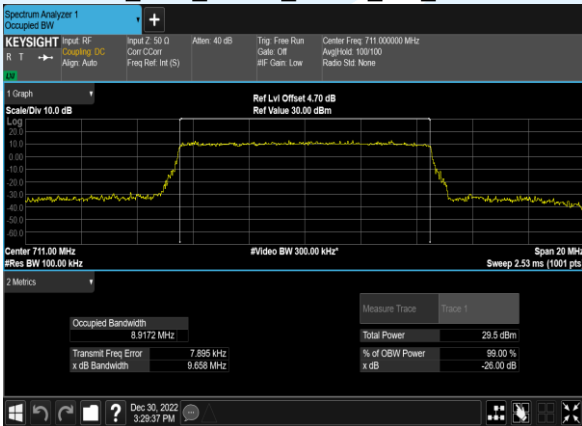
B12\_10M\_QPSK\_50@0\_CH\_23060



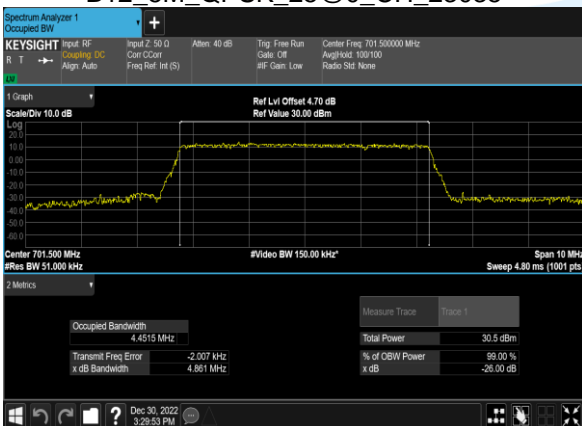
B12\_10M\_QPSK\_50@0\_CH\_23095



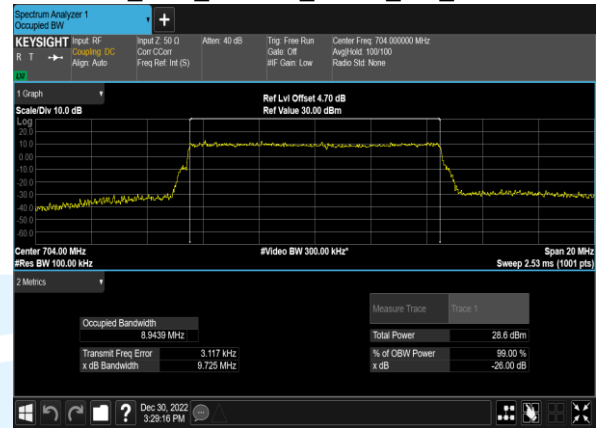
B12\_10M\_QPSK\_50@0\_CH\_23130



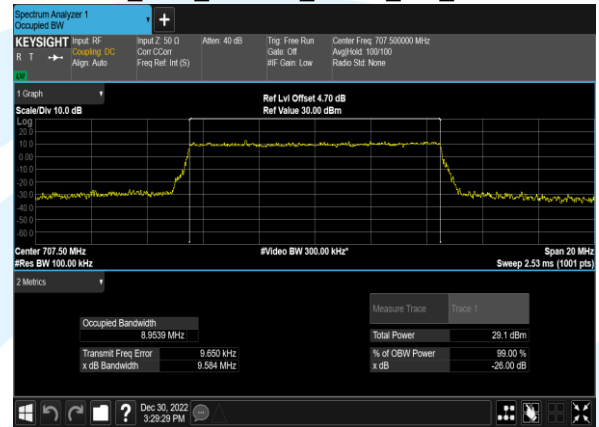
B12\_5M\_QPSK\_25@0\_CH\_23035



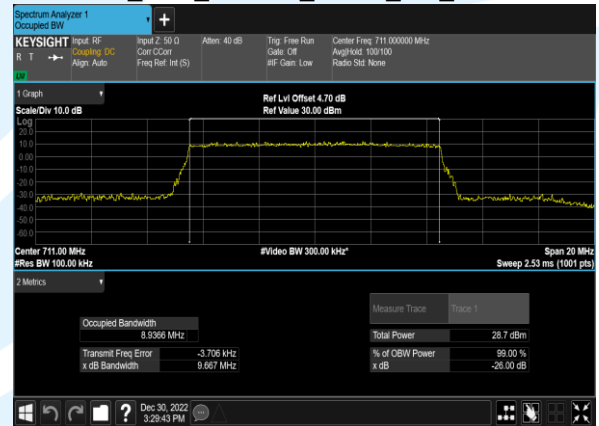
B12\_10M\_16QAM\_50@0\_CH\_23060



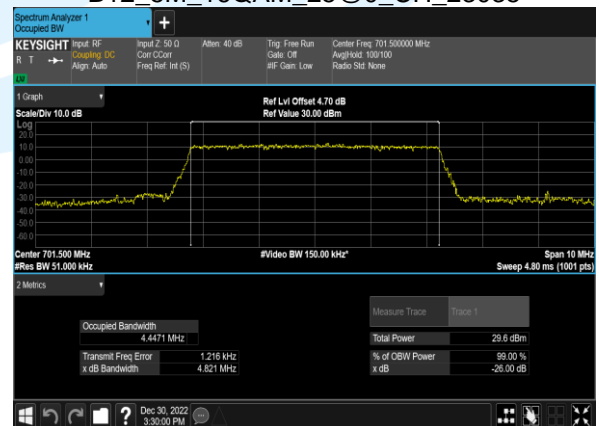
B12\_10M\_16QAM\_50@0\_CH\_23095



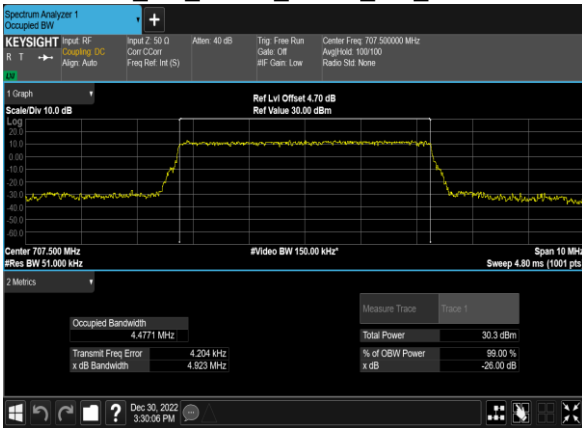
B12\_10M\_16QAM\_50@0\_CH\_23130



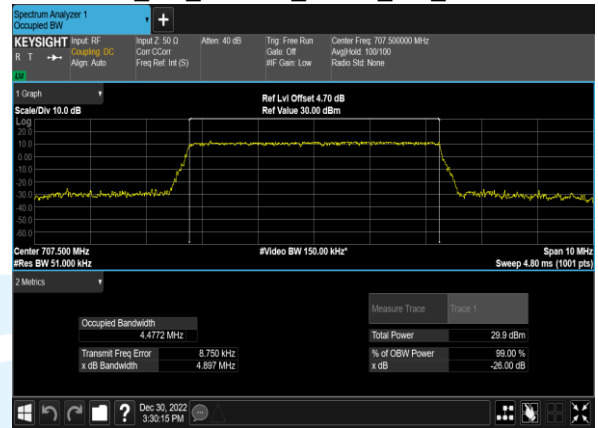
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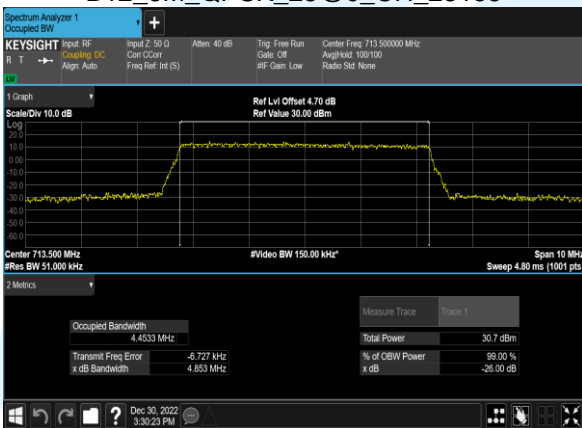
B12\_5M\_QPSK\_25@0\_CH\_23095



B12\_5M\_16QAM\_25@0\_CH\_23095



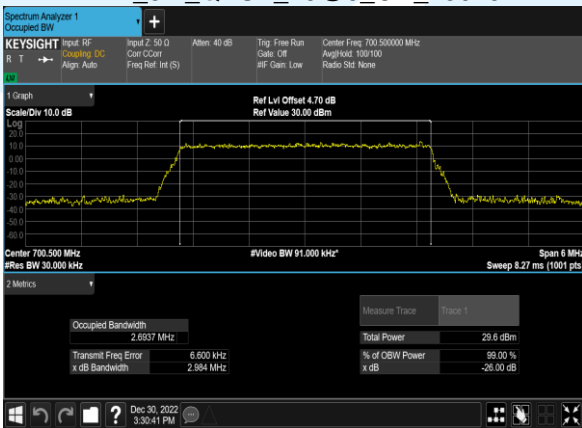
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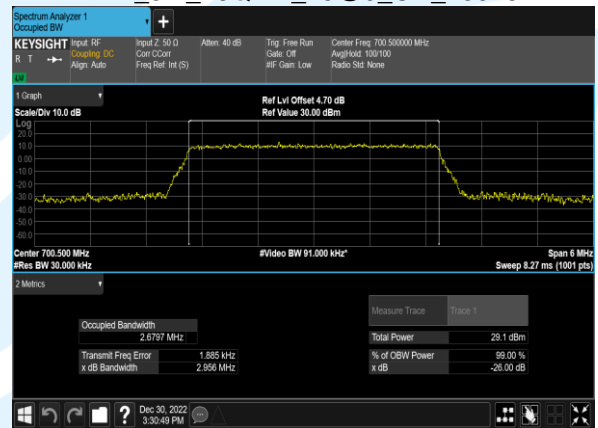
B12\_5M\_16QAM\_25@0\_CH\_23155



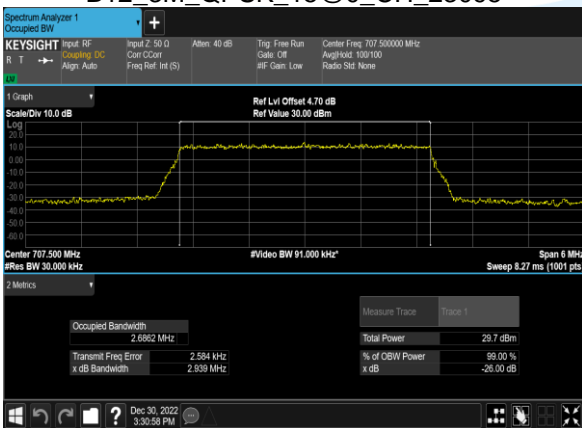
B12\_3M\_QPSK\_15@0\_CH\_23025



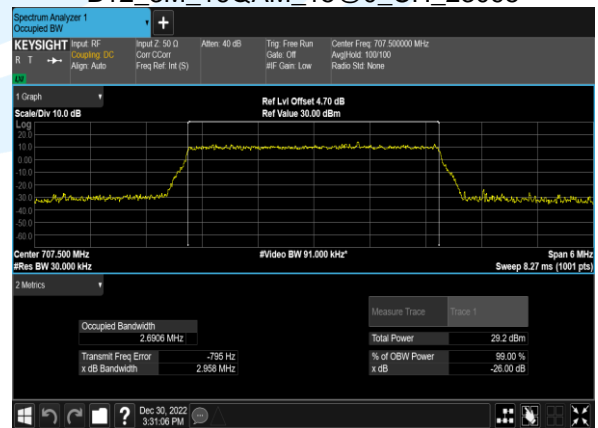
B12\_3M\_16QAM\_15@0\_CH\_23025



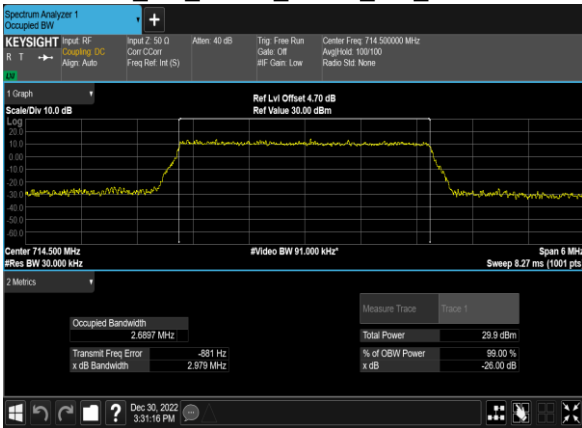
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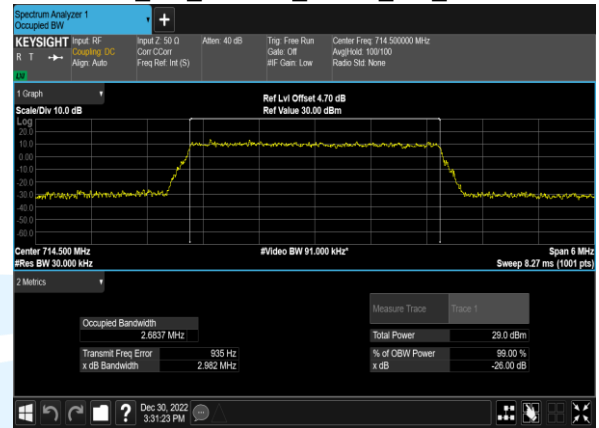
B12\_3M\_16QAM\_15@0\_CH\_23095



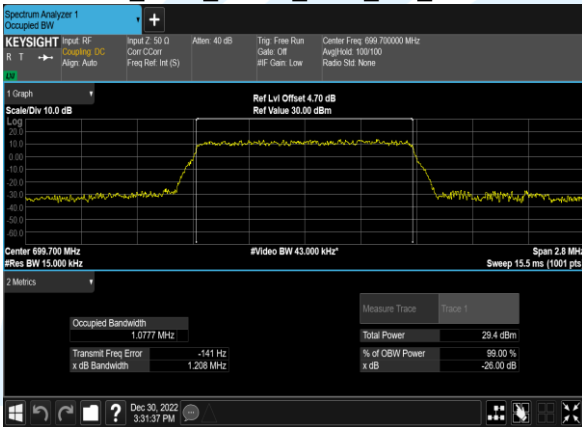
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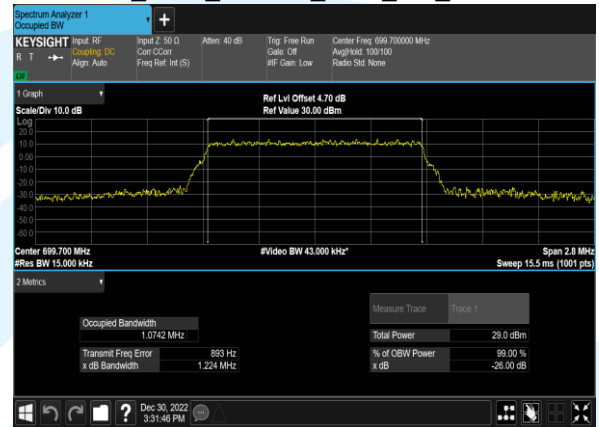
B12\_3M\_16QAM\_15@0\_CH\_23165



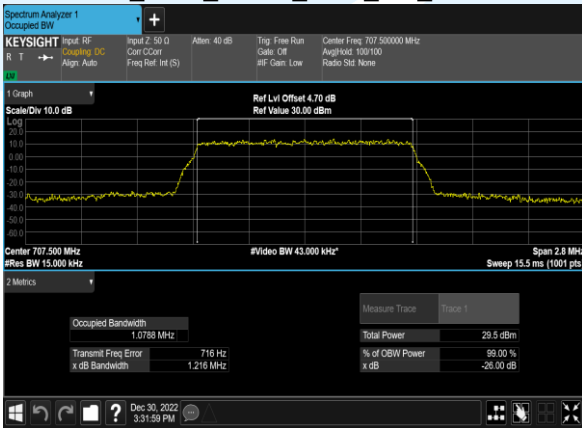
B12\_1.4M\_QPSK\_6@0\_CH\_23017



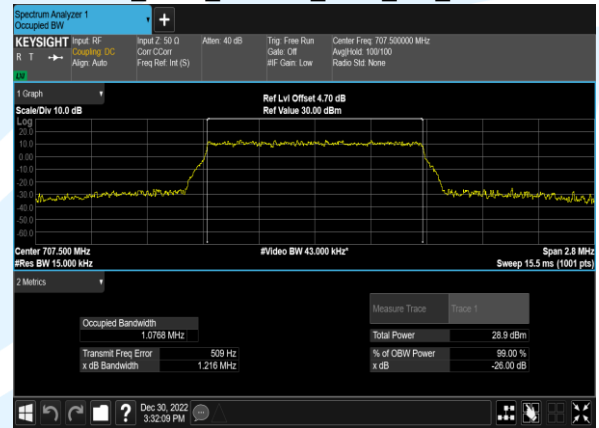
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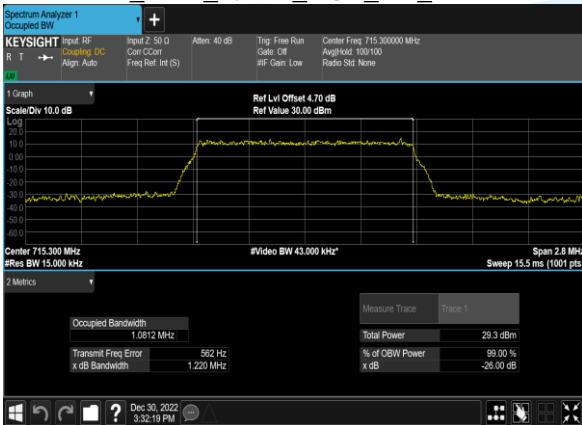
B12\_1.4M\_QPSK\_6@0\_CH\_23095



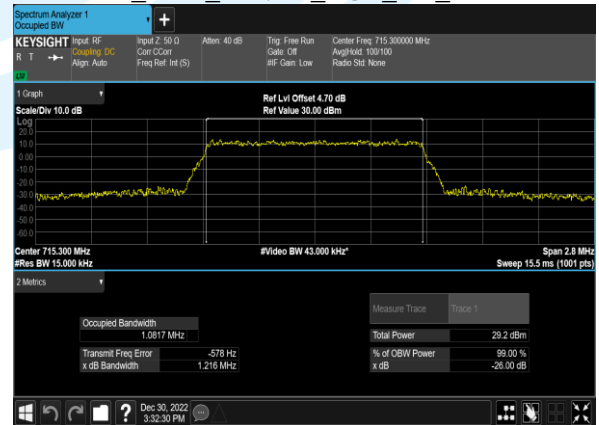
B12\_1.4M\_16QAM\_6@0\_CH\_23095



B12\_1.4M\_QPSK\_6@0\_CH\_23173

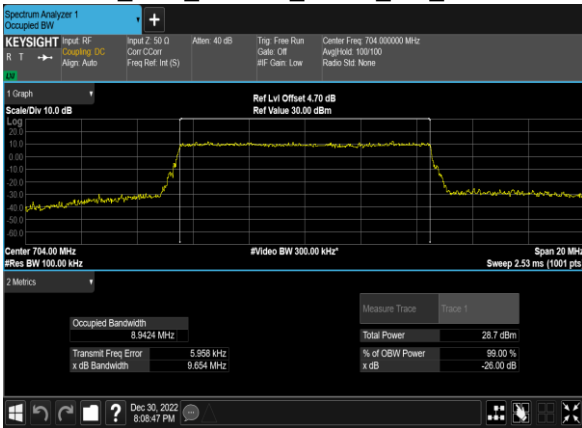


B12\_1.4M\_16QAM\_6@0\_CH\_23173

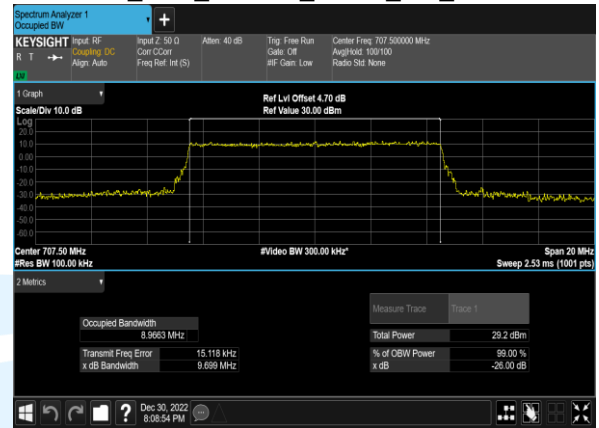




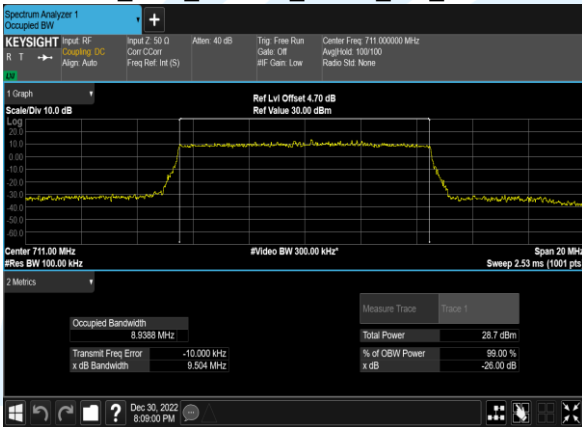
B12\_10M\_64QAM\_50@0\_CH\_23060



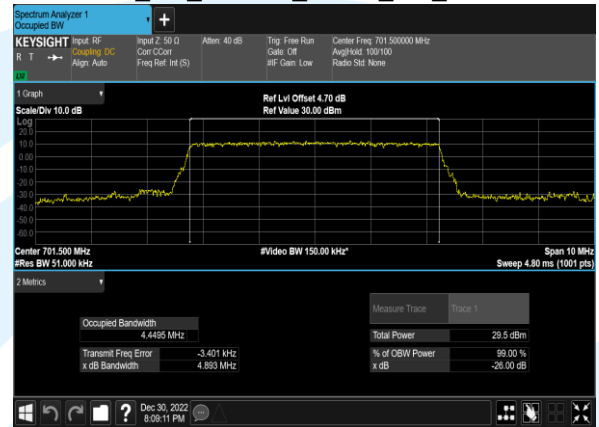
B12\_10M\_64QAM\_50@0\_CH\_23095



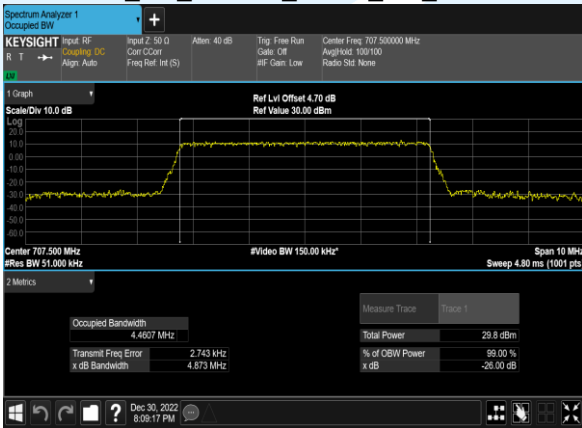
B12\_10M\_64QAM\_50@0\_CH\_23130



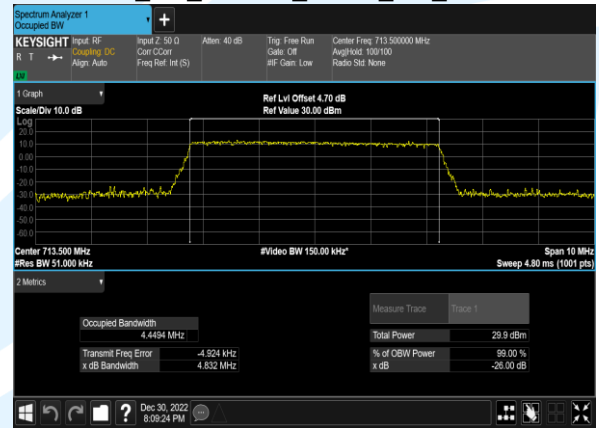
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B12\_5M\_64QAM\_25@0\_CH\_23095



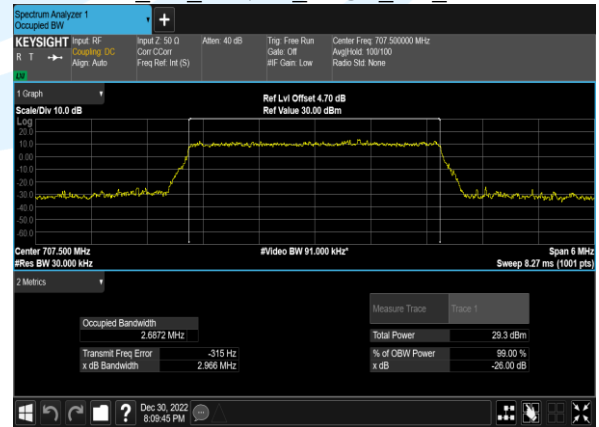
B12\_5M\_64QAM\_25@0\_CH\_23155



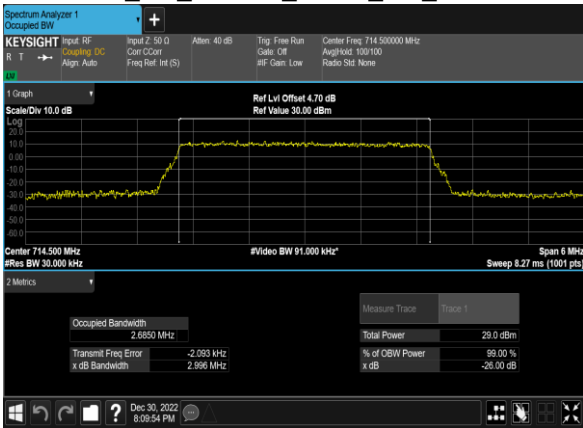
B12\_3M\_64QAM\_15@0\_CH\_23025



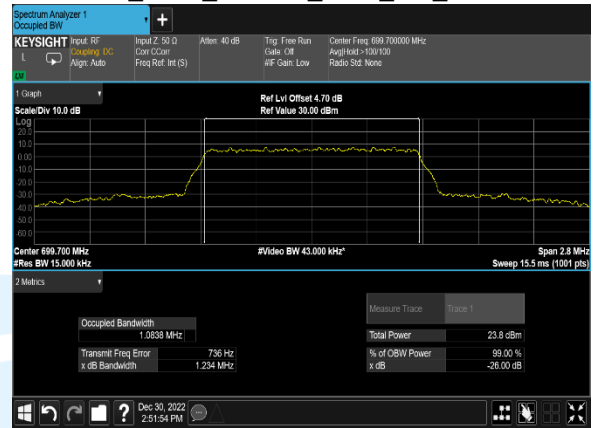
B12\_3M\_64QAM\_15@0\_CH\_23095



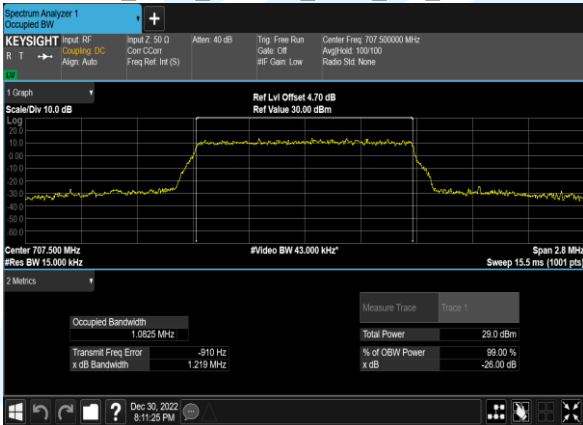
B12\_3M\_64QAM\_15@0\_CH\_23165



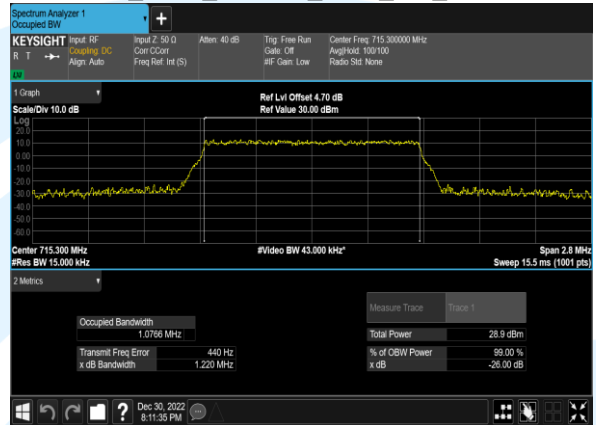
B12\_1.4M\_64QAM\_6@0\_CH\_23017



B12\_1.4M\_64QAM\_6@0\_CH\_23095



B12\_1.4M\_64QAM\_6@0\_CH\_23173



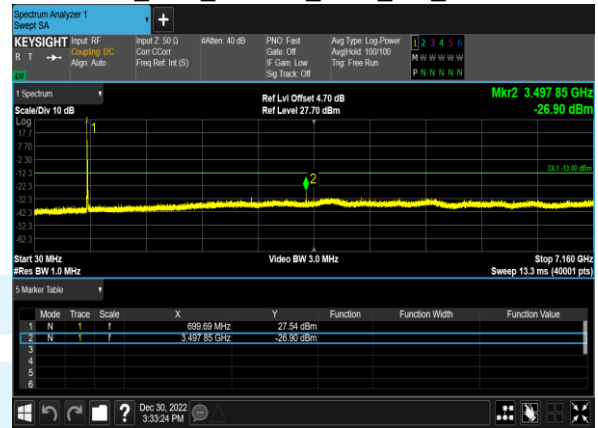
**Conducted Spurious Emissions**

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Result (dBm)	Limit (dBm)	Verdict
12	10.0	23060	704.0	QPSK	1@0	-25.66	-13	PASS
12	10.0	23060	704.0	16QAM	1@0	-26.9	-13	PASS
12	10.0	23060	704.0	64QAM	1@0	-25.96	-13	PASS
12	10.0	23095	707.5	QPSK	1@0	-26.75	-13	PASS
12	10.0	23095	707.5	16QAM	1@0	-22.92	-13	PASS
12	10.0	23095	707.5	64QAM	1@0	-27.11	-13	PASS
12	10.0	23130	711.0	QPSK	1@0	-26.62	-13	PASS
12	10.0	23130	711.0	16QAM	1@0	-28.57	-13	PASS
12	10.0	23130	711.0	64QAM	1@0	-28.18	-13	PASS
12	5.0	23035	701.5	QPSK	1@0	-25.46	-13	PASS
12	5.0	23035	701.5	16QAM	1@0	-26.68	-13	PASS
12	5.0	23035	701.5	64QAM	1@0	-24.87	-13	PASS
12	5.0	23095	707.5	QPSK	1@0	-26.08	-13	PASS
12	5.0	23095	707.5	16QAM	1@0	-26.81	-13	PASS
12	5.0	23095	707.5	64QAM	1@0	-28.52	-13	PASS
12	5.0	23155	713.5	QPSK	1@0	-24.5	-13	PASS
12	5.0	23155	713.5	16QAM	1@0	-27.42	-13	PASS
12	5.0	23155	713.5	64QAM	1@0	-25.2	-13	PASS
12	3.0	23025	700.5	QPSK	1@0	-27.24	-13	PASS
12	3.0	23025	700.5	16QAM	1@0	-26.67	-13	PASS
12	3.0	23025	700.5	64QAM	1@0	-26.29	-13	PASS
12	3.0	23095	707.5	QPSK	1@0	-27.61	-13	PASS
12	3.0	23095	707.5	16QAM	1@0	-25.87	-13	PASS
12	3.0	23095	707.5	64QAM	1@0	-24.43	-13	PASS
12	3.0	23165	714.5	QPSK	1@0	-27.04	-13	PASS
12	3.0	23165	714.5	16QAM	1@0	-26.35	-13	PASS
12	3.0	23165	714.5	64QAM	1@0	-25.68	-13	PASS
12	1.4	23017	699.7	QPSK	1@0	-26.43	-13	PASS
12	1.4	23017	699.7	16QAM	1@0	-26.77	-13	PASS
12	1.4	23017	699.7	64QAM	1@0	-26.18	-13	PASS
12	1.4	23095	707.5	QPSK	1@0	-28.28	-13	PASS
12	1.4	23095	707.5	16QAM	1@0	-27.49	-13	PASS
12	1.4	23095	707.5	64QAM	1@0	-29.79	-13	PASS
12	1.4	23173	715.3	QPSK	1@0	-27.51	-13	PASS
12	1.4	23173	715.3	16QAM	1@0	-27.42	-13	PASS
12	1.4	23173	715.3	64QAM	1@0	-25.08	-13	PASS

B12\_10M\_QPSK\_1@0\_CH\_23060



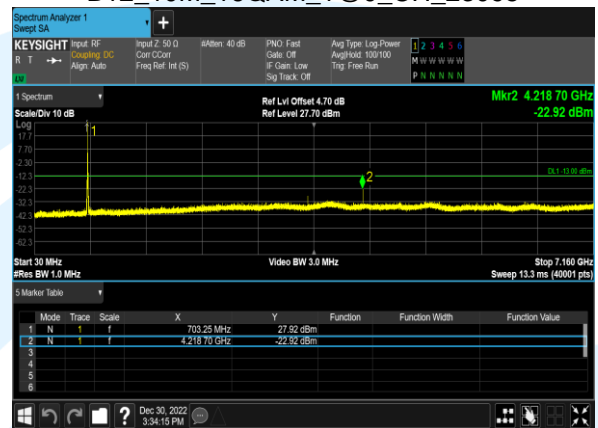
B12\_10M\_16QAM\_1@0\_CH\_23060



B12\_10M\_QPSK\_1@0\_CH\_23095



B12\_10M\_16QAM\_1@0\_CH\_23095



B12\_10M\_QPSK\_1@0\_CH\_23130



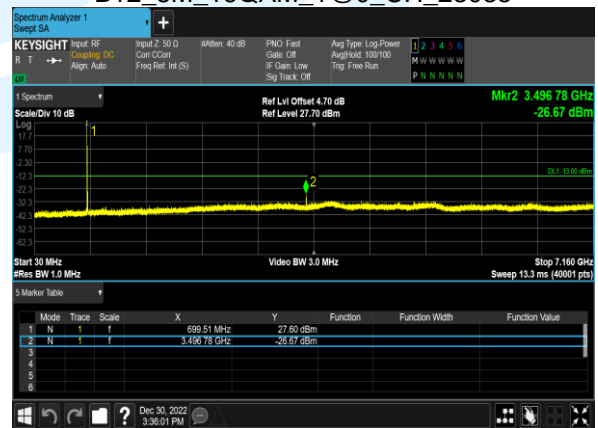
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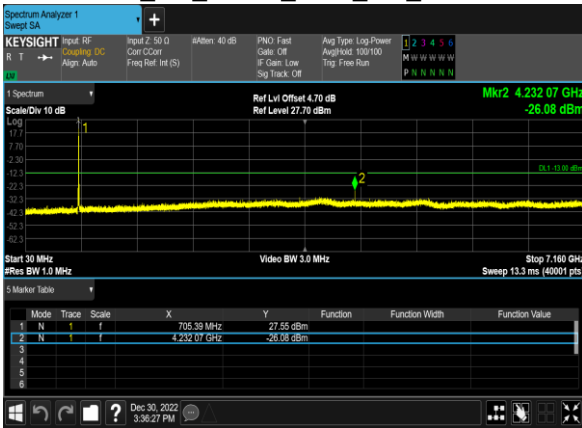
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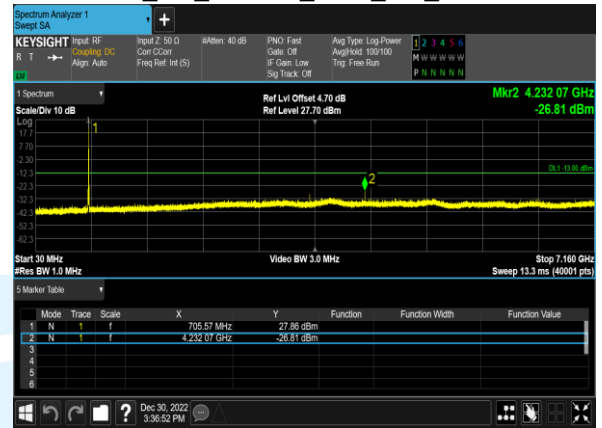
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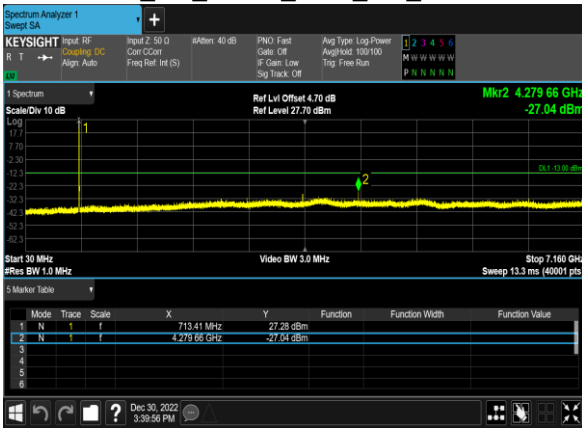
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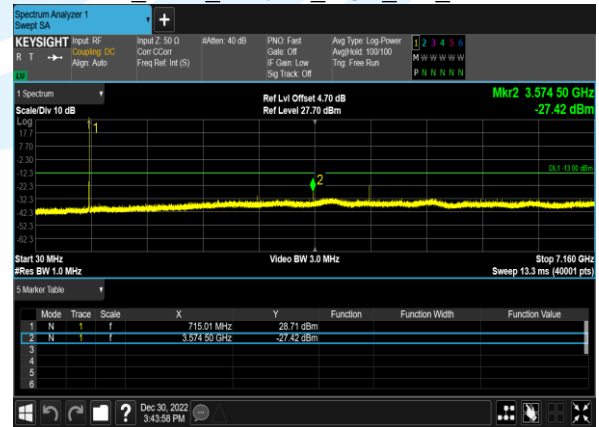
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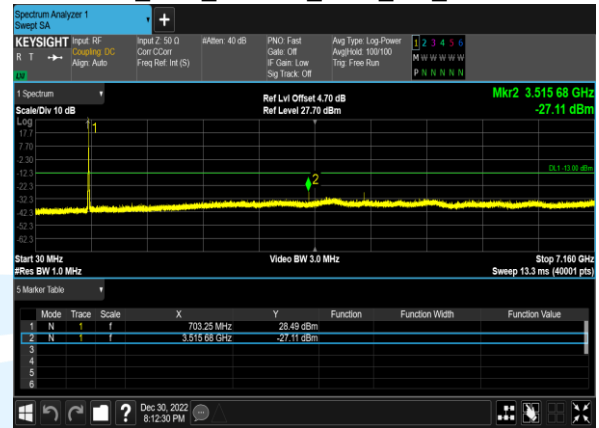
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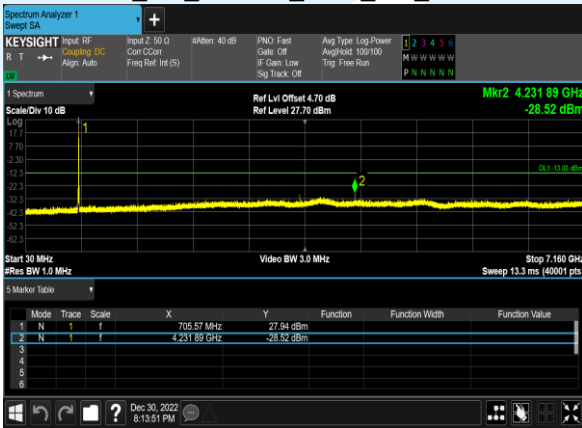
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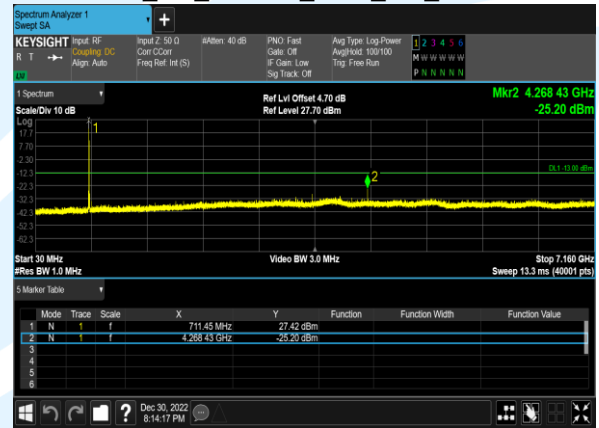
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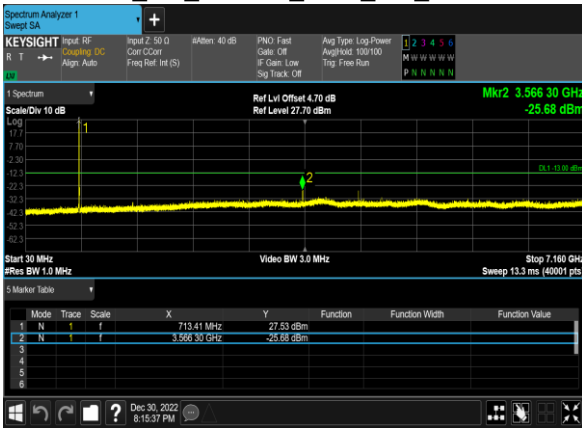


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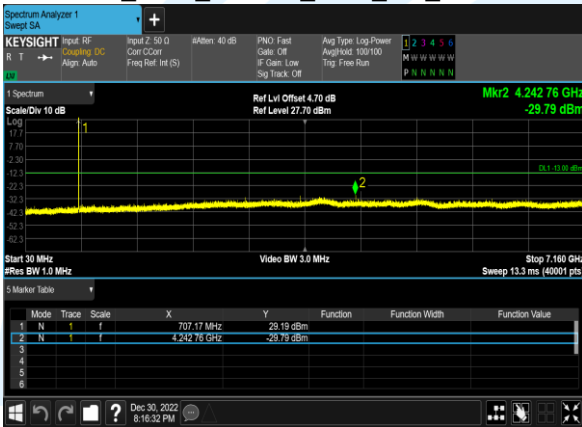
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B12\_1.4M\_64QAM\_1@0\_CH\_23173

