

LTE Band41 Test Data

Project No. : ENS2111040057W00207R

Company: : Micro-Star Int'l Co.,Ltd.

EUT : Tablet

Model Number : MS-ND52-Gen2

Number of Samples : 1

Sample Number : 1#

Tested By : Tracy Hu

Reviewed By : Joe Xia

Appendix A: Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band41	5MHz	QPSK	39675	1RB#0	21.58	PASS
Band41	5MHz	QPSK	39675	1RB#12	21.78	PASS
Band41	5MHz	QPSK	39675	1RB#24	21.76	PASS
Band41	5MHz	QPSK	39675	12RB#0	20.69	PASS
Band41	5MHz	QPSK	39675	12RB#6	20.47	PASS
Band41	5MHz	QPSK	39675	12RB#13	20.72	PASS
Band41	5MHz	QPSK	39675	25RB#0	20.72	PASS
Band41	5MHz	QPSK	40620	1RB#0	22.15	PASS
Band41	5MHz	QPSK	40620	1RB#12	22.21	PASS
Band41	5MHz	QPSK	40620	1RB#24	22.13	PASS
Band41	5MHz	QPSK	40620	12RB#0	21.09	PASS
Band41	5MHz	QPSK	40620	12RB#6	21.02	PASS
Band41	5MHz	QPSK	40620	12RB#13	21.12	PASS
Band41	5MHz	QPSK	40620	25RB#0	21.17	PASS
Band41	5MHz	QPSK	41565	1RB#0	21.97	PASS
Band41	5MHz	QPSK	41565	1RB#12	22.16	PASS
Band41	5MHz	QPSK	41565	1RB#24	21.96	PASS
Band41	5MHz	QPSK	41565	12RB#0	21.00	PASS
Band41	5MHz	QPSK	41565	12RB#6	21.00	PASS
Band41	5MHz	QPSK	41565	12RB#13	20.95	PASS
Band41	5MHz	QPSK	41565	25RB#0	20.89	PASS
Band41	5MHz	16QAM	39675	1RB#0	20.47	PASS
Band41	5MHz	16QAM	39675	1RB#12	20.57	PASS
Band41	5MHz	16QAM	39675	1RB#24	20.47	PASS
Band41	5MHz	16QAM	39675	12RB#0	19.48	PASS
Band41	5MHz	16QAM	39675	12RB#6	19.48	PASS
Band41	5MHz	16QAM	39675	12RB#13	19.46	PASS
Band41	5MHz	16QAM	39675	25RB#0	19.53	PASS
Band41	5MHz	16QAM	40620	1RB#0	21.10	PASS
Band41	5MHz	16QAM	40620	1RB#12	21.21	PASS
Band41	5MHz	16QAM	40620	1RB#24	21.01	PASS
Band41	5MHz	16QAM	40620	12RB#0	20.12	PASS
Band41	5MHz	16QAM	40620	12RB#6	20.13	PASS

Band41	5MHz	16QAM	40620	12RB#13	20.15	PASS
Band41	5MHz	16QAM	40620	25RB#0	20.19	PASS
Band41	5MHz	16QAM	41565	1RB#0	21.03	PASS
Band41	5MHz	16QAM	41565	1RB#12	20.96	PASS
Band41	5MHz	16QAM	41565	1RB#24	20.90	PASS
Band41	5MHz	16QAM	41565	12RB#0	20.07	PASS
Band41	5MHz	16QAM	41565	12RB#6	20.05	PASS
Band41	5MHz	16QAM	41565	12RB#13	19.92	PASS
Band41	5MHz	16QAM	41565	25RB#0	19.87	PASS
Band41	10MHz	QPSK	39700	1RB#0	21.81	PASS
Band41	10MHz	QPSK	39700	1RB#24	21.63	PASS
Band41	10MHz	QPSK	39700	1RB#49	21.73	PASS
Band41	10MHz	QPSK	39700	25RB#0	20.59	PASS
Band41	10MHz	QPSK	39700	25RB#12	20.74	PASS
Band41	10MHz	QPSK	39700	25RB#25	20.69	PASS
Band41	10MHz	QPSK	39700	50RB#0	20.81	PASS
Band41	10MHz	QPSK	40620	1RB#0	22.33	PASS
Band41	10MHz	QPSK	40620	1RB#24	22.19	PASS
Band41	10MHz	QPSK	40620	1RB#49	22.48	PASS
Band41	10MHz	QPSK	40620	25RB#0	21.28	PASS
Band41	10MHz	QPSK	40620	25RB#12	21.29	PASS
Band41	10MHz	QPSK	40620	25RB#25	21.20	PASS
Band41	10MHz	QPSK	40620	50RB#0	21.22	PASS
Band41	10MHz	QPSK	41540	1RB#0	22.49	PASS
Band41	10MHz	QPSK	41540	1RB#24	22.03	PASS
Band41	10MHz	QPSK	41540	1RB#49	22.14	PASS
Band41	10MHz	QPSK	41540	25RB#0	21.13	PASS
Band41	10MHz	QPSK	41540	25RB#12	21.14	PASS
Band41	10MHz	QPSK	41540	25RB#25	20.98	PASS
Band41	10MHz	QPSK	41540	50RB#0	21.10	PASS
Band41	10MHz	16QAM	39700	1RB#0	20.79	PASS
Band41	10MHz	16QAM	39700	1RB#24	20.65	PASS
Band41	10MHz	16QAM	39700	1RB#49	20.65	PASS
Band41	10MHz	16QAM	39700	25RB#0	19.65	PASS
Band41	10MHz	16QAM	39700	25RB#12	19.60	PASS
Band41	10MHz	16QAM	39700	25RB#25	19.65	PASS
Band41	10MHz	16QAM	39700	50RB#0	19.74	PASS

Band41	10MHz	16QAM	40620	1RB#0	21.31	PASS
Band41	10MHz	16QAM	40620	1RB#24	21.19	PASS
Band41	10MHz	16QAM	40620	1RB#49	21.32	PASS
Band41	10MHz	16QAM	40620	25RB#0	20.27	PASS
Band41	10MHz	16QAM	40620	25RB#12	20.27	PASS
Band41	10MHz	16QAM	40620	25RB#25	20.26	PASS
Band41	10MHz	16QAM	40620	50RB#0	20.19	PASS
Band41	10MHz	16QAM	41540	1RB#0	21.32	PASS
Band41	10MHz	16QAM	41540	1RB#24	20.83	PASS
Band41	10MHz	16QAM	41540	1RB#49	20.99	PASS
Band41	10MHz	16QAM	41540	25RB#0	20.12	PASS
Band41	10MHz	16QAM	41540	25RB#12	20.10	PASS
Band41	10MHz	16QAM	41540	25RB#25	19.97	PASS
Band41	10MHz	16QAM	41540	50RB#0	20.04	PASS
Band41	15MHz	QPSK	39725	1RB#0	22.21	PASS
Band41	15MHz	QPSK	39725	1RB#38	21.75	PASS
Band41	15MHz	QPSK	39725	1RB#74	21.92	PASS
Band41	15MHz	QPSK	39725	38RB#0	21.01	PASS
Band41	15MHz	QPSK	39725	38RB#18	20.75	PASS
Band41	15MHz	QPSK	39725	38RB#37	20.92	PASS
Band41	15MHz	QPSK	39725	75RB#0	20.80	PASS
Band41	15MHz	QPSK	40620	1RB#0	22.52	PASS
Band41	15MHz	QPSK	40620	1RB#38	21.98	PASS
Band41	15MHz	QPSK	40620	1RB#74	22.44	PASS
Band41	15MHz	QPSK	40620	38RB#0	22.02	PASS
Band41	15MHz	QPSK	40620	38RB#18	21.17	PASS
Band41	15MHz	QPSK	40620	38RB#37	21.41	PASS
Band41	15MHz	QPSK	40620	75RB#0	21.17	PASS
Band41	15MHz	QPSK	41515	1RB#0	22.61	PASS
Band41	15MHz	QPSK	41515	1RB#38	21.86	PASS
Band41	15MHz	QPSK	41515	1RB#74	22.04	PASS
Band41	15MHz	QPSK	41515	38RB#0	21.57	PASS
Band41	15MHz	QPSK	41515	38RB#18	20.82	PASS
Band41	15MHz	QPSK	41515	38RB#37	21.54	PASS
Band41	15MHz	QPSK	41515	75RB#0	21.00	PASS
Band41	15MHz	16QAM	39725	1RB#0	21.02	PASS
Band41	15MHz	16QAM	39725	1RB#38	20.58	PASS

Band41	15MHz	16QAM	39725	1RB#74	20.66	PASS
Band41	15MHz	16QAM	39725	38RB#0	21.11	PASS
Band41	15MHz	16QAM	39725	38RB#18	20.79	PASS
Band41	15MHz	16QAM	39725	38RB#37	20.93	PASS
Band41	15MHz	16QAM	39725	75RB#0	19.65	PASS
Band41	15MHz	16QAM	40620	1RB#0	21.86	PASS
Band41	15MHz	16QAM	40620	1RB#38	21.14	PASS
Band41	15MHz	16QAM	40620	1RB#74	21.37	PASS
Band41	15MHz	16QAM	40620	38RB#0	21.69	PASS
Band41	15MHz	16QAM	40620	38RB#18	21.12	PASS
Band41	15MHz	16QAM	40620	38RB#37	21.38	PASS
Band41	15MHz	16QAM	40620	75RB#0	20.23	PASS
Band41	15MHz	16QAM	41515	1RB#0	21.42	PASS
Band41	15MHz	16QAM	41515	1RB#38	20.87	PASS
Band41	15MHz	16QAM	41515	1RB#74	21.21	PASS
Band41	15MHz	16QAM	41515	38RB#0	21.52	PASS
Band41	15MHz	16QAM	41515	38RB#18	20.95	PASS
Band41	15MHz	16QAM	41515	38RB#37	21.45	PASS
Band41	15MHz	16QAM	41515	75RB#0	20.04	PASS
Band41	20MHz	QPSK	39750	1RB#0	22.32	PASS
Band41	20MHz	QPSK	39750	1RB#49	21.40	PASS
Band41	20MHz	QPSK	39750	1RB#99	21.92	PASS
Band41	20MHz	QPSK	39750	50RB#0	20.88	PASS
Band41	20MHz	QPSK	39750	50RB#25	20.88	PASS
Band41	20MHz	QPSK	39750	50RB#50	20.79	PASS
Band41	20MHz	QPSK	39750	100RB#0	20.80	PASS
Band41	20MHz	QPSK	40620	1RB#0	22.91	PASS
Band41	20MHz	QPSK	40620	1RB#49	22.21	PASS
Band41	20MHz	QPSK	40620	1RB#99	22.49	PASS
Band41	20MHz	QPSK	40620	50RB#0	21.55	PASS
Band41	20MHz	QPSK	40620	50RB#25	21.48	PASS
Band41	20MHz	QPSK	40620	50RB#50	21.34	PASS
Band41	20MHz	QPSK	40620	100RB#0	21.35	PASS
Band41	20MHz	QPSK	41490	1RB#0	22.69	PASS
Band41	20MHz	QPSK	41490	1RB#49	21.98	PASS
Band41	20MHz	QPSK	41490	1RB#99	22.35	PASS
Band41	20MHz	QPSK	41490	50RB#0	21.30	PASS

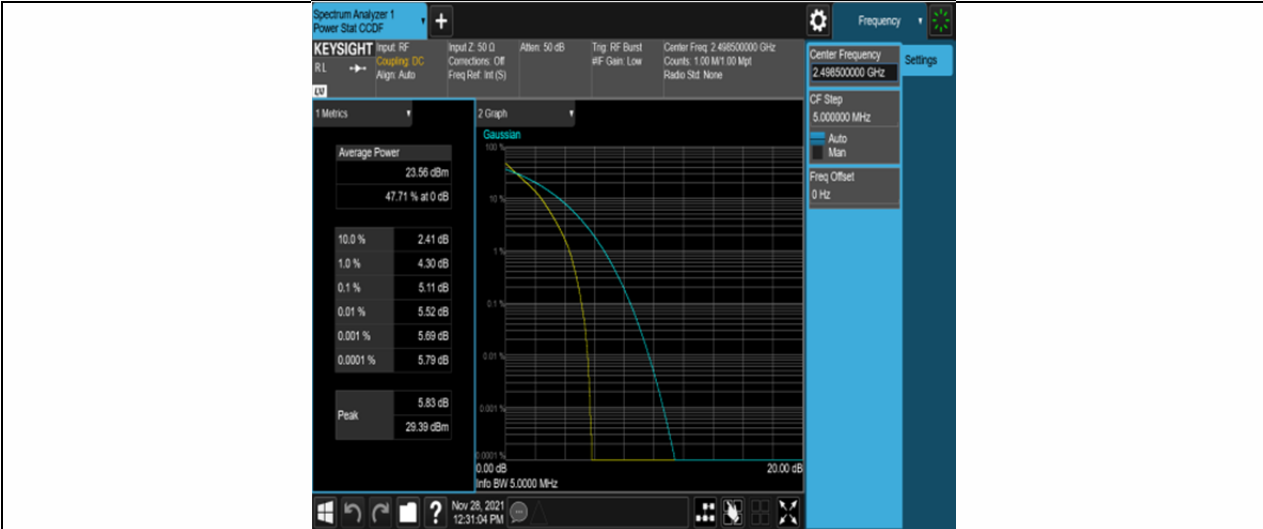
Band41	20MHz	QPSK	41490	50RB#25	21.23	PASS
Band41	20MHz	QPSK	41490	50RB#50	21.09	PASS
Band41	20MHz	QPSK	41490	100RB#0	21.15	PASS
Band41	20MHz	16QAM	39750	1RB#0	21.21	PASS
Band41	20MHz	16QAM	39750	1RB#49	20.34	PASS
Band41	20MHz	16QAM	39750	1RB#99	20.91	PASS
Band41	20MHz	16QAM	39750	50RB#0	19.82	PASS
Band41	20MHz	16QAM	39750	50RB#25	19.79	PASS
Band41	20MHz	16QAM	39750	50RB#50	19.77	PASS
Band41	20MHz	16QAM	39750	100RB#0	19.74	PASS
Band41	20MHz	16QAM	40620	1RB#0	22.04	PASS
Band41	20MHz	16QAM	40620	1RB#49	21.12	PASS
Band41	20MHz	16QAM	40620	1RB#99	21.41	PASS
Band41	20MHz	16QAM	40620	50RB#0	20.54	PASS
Band41	20MHz	16QAM	40620	50RB#25	20.46	PASS
Band41	20MHz	16QAM	40620	50RB#50	20.15	PASS
Band41	20MHz	16QAM	40620	100RB#0	20.32	PASS
Band41	20MHz	16QAM	41490	1RB#0	21.68	PASS
Band41	20MHz	16QAM	41490	1RB#49	21.02	PASS
Band41	20MHz	16QAM	41490	1RB#99	21.41	PASS
Band41	20MHz	16QAM	41490	50RB#0	20.28	PASS
Band41	20MHz	16QAM	41490	50RB#25	20.17	PASS
Band41	20MHz	16QAM	41490	50RB#50	20.12	PASS
Band41	20MHz	16QAM	41490	100RB#0	20.16	PASS

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

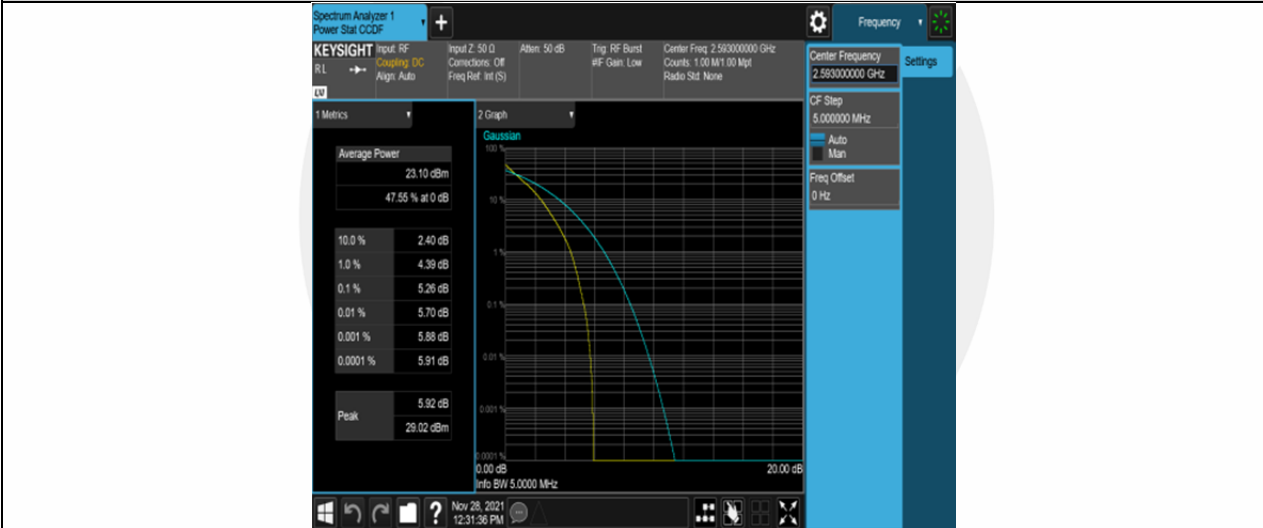
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band41	5MHz	QPSK	39675	25RB#0	5.11	13	PASS
Band41	5MHz	QPSK	40620	25RB#0	5.26	13	PASS
Band41	5MHz	QPSK	41565	25RB#0	5.00	13	PASS
Band41	5MHz	16QAM	39675	25RB#0	5.93	13	PASS
Band41	5MHz	16QAM	40620	25RB#0	6.09	13	PASS
Band41	5MHz	16QAM	41565	25RB#0	5.85	13	PASS
Band41	10MHz	QPSK	39700	50RB#0	4.80	13	PASS
Band41	10MHz	QPSK	40620	50RB#0	4.71	13	PASS
Band41	10MHz	QPSK	41540	50RB#0	4.71	13	PASS
Band41	10MHz	16QAM	39700	50RB#0	6.17	13	PASS
Band41	10MHz	16QAM	40620	50RB#0	6.13	13	PASS
Band41	10MHz	16QAM	41540	50RB#0	6.10	13	PASS
Band41	15MHz	QPSK	39725	75RB#0	5.73	13	PASS
Band41	15MHz	QPSK	40620	75RB#0	5.74	13	PASS
Band41	15MHz	QPSK	41515	75RB#0	5.74	13	PASS
Band41	15MHz	16QAM	39725	75RB#0	6.90	13	PASS
Band41	15MHz	16QAM	40620	75RB#0	6.89	13	PASS
Band41	15MHz	16QAM	41515	75RB#0	6.88	13	PASS
Band41	20MHz	QPSK	39750	100RB#0	6.45	13	PASS
Band41	20MHz	QPSK	40620	100RB#0	6.44	13	PASS
Band41	20MHz	QPSK	41490	100RB#0	6.45	13	PASS
Band41	20MHz	16QAM	39750	100RB#0	6.94	13	PASS
Band41	20MHz	16QAM	40620	100RB#0	6.94	13	PASS
Band41	20MHz	16QAM	41490	100RB#0	6.93	13	PASS

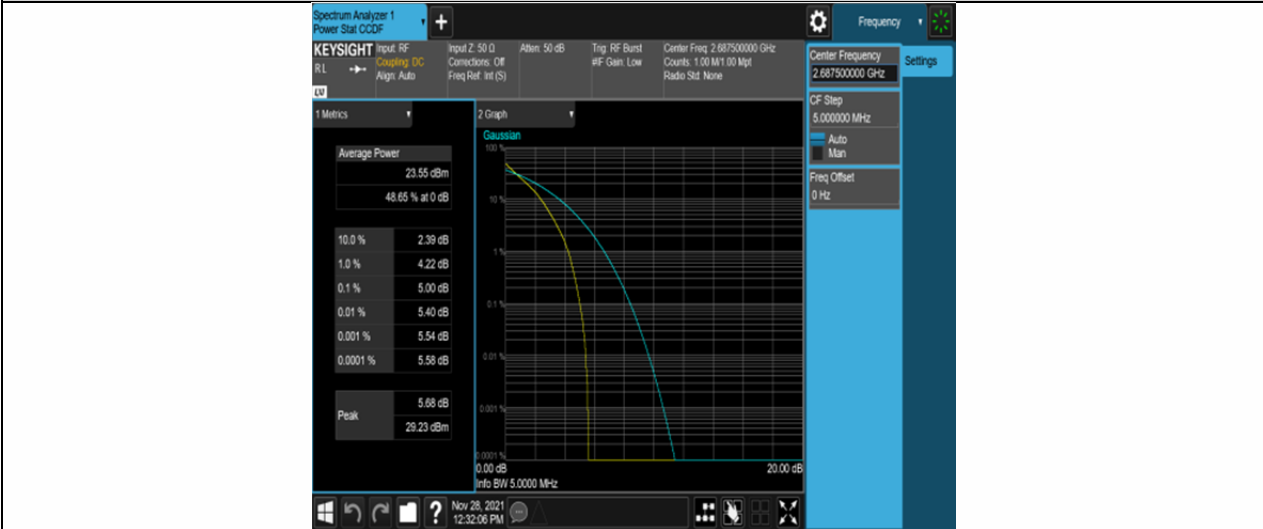
Test Graphs



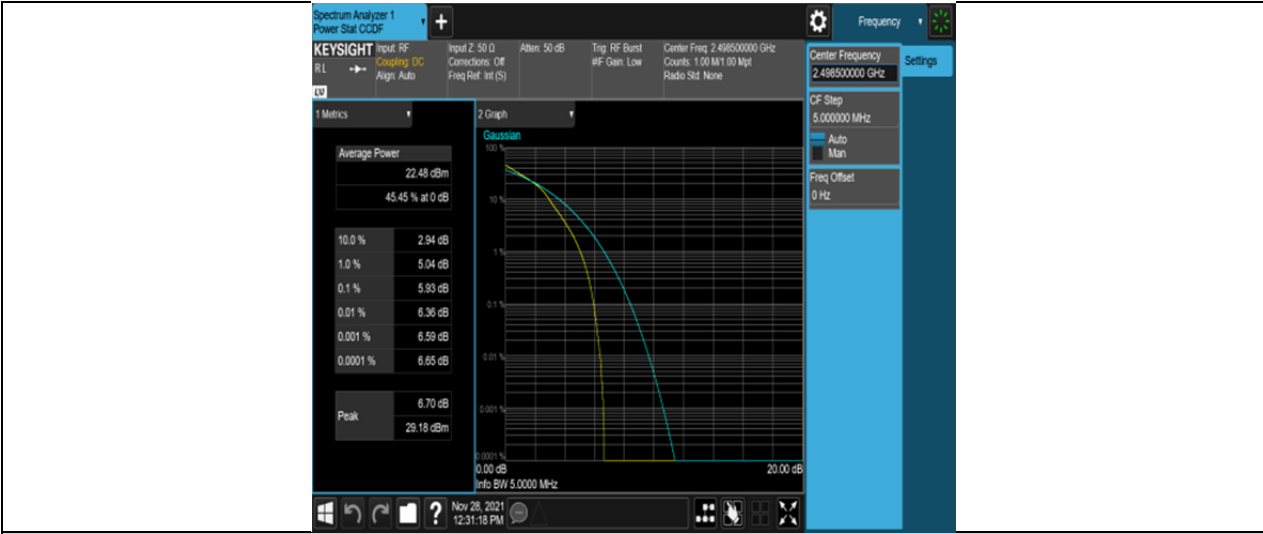
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Band41-5MHz-QPSK-40620-25RB#0



Band41-5MHz-QPSK-41565-25RB#0



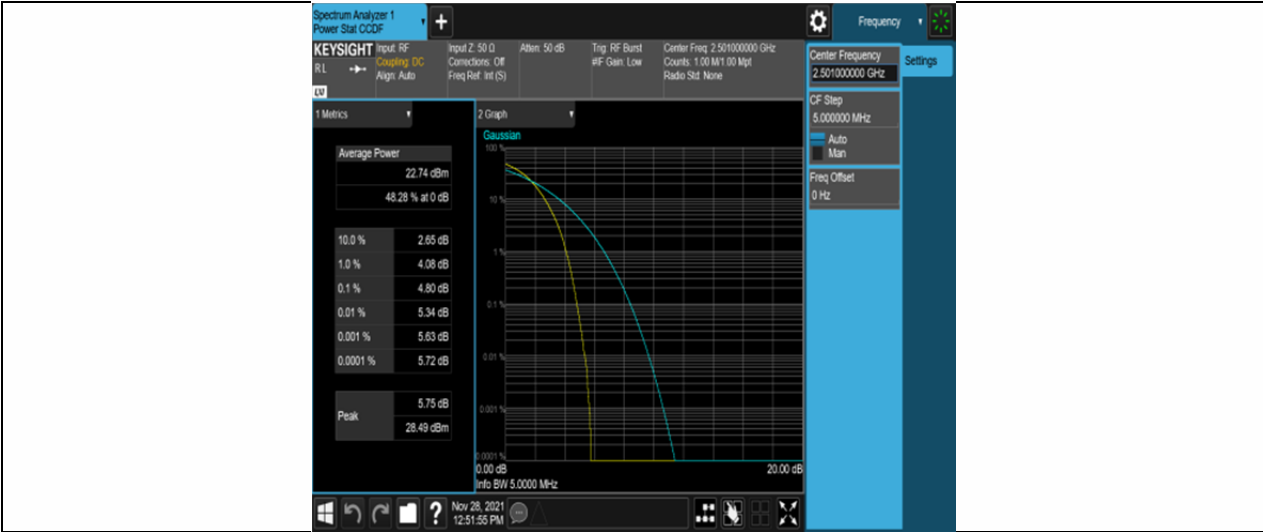
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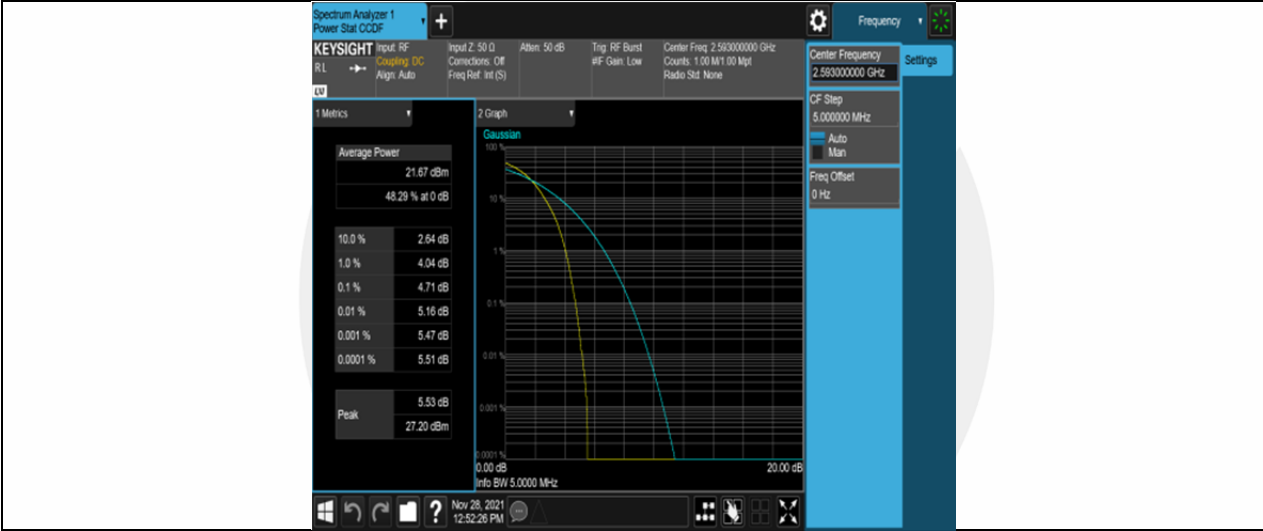
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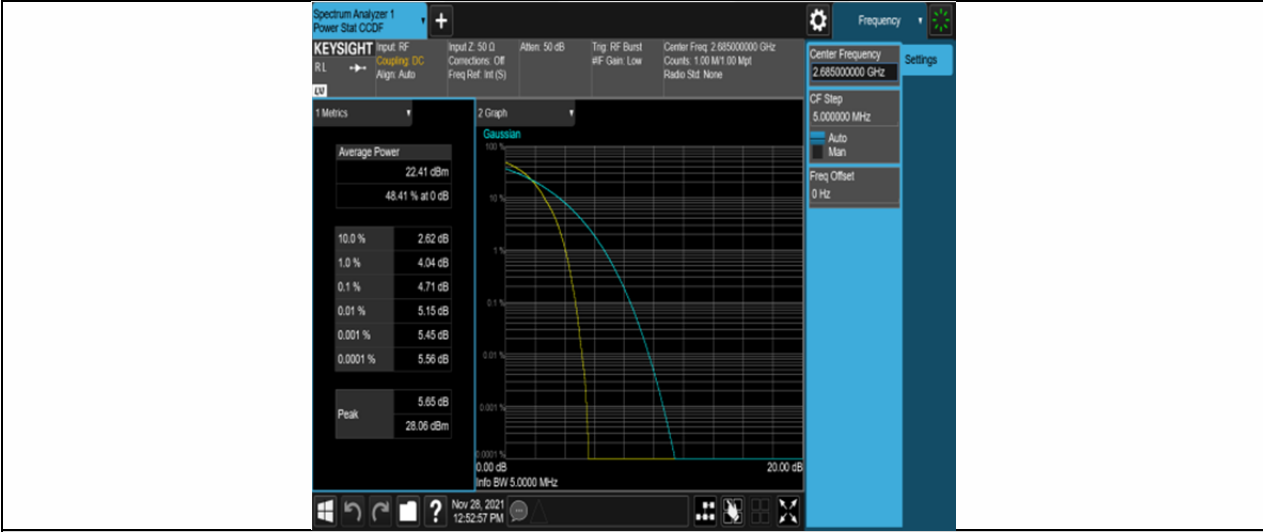
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Band41-10MHz-QPSK-39700-50RB#0



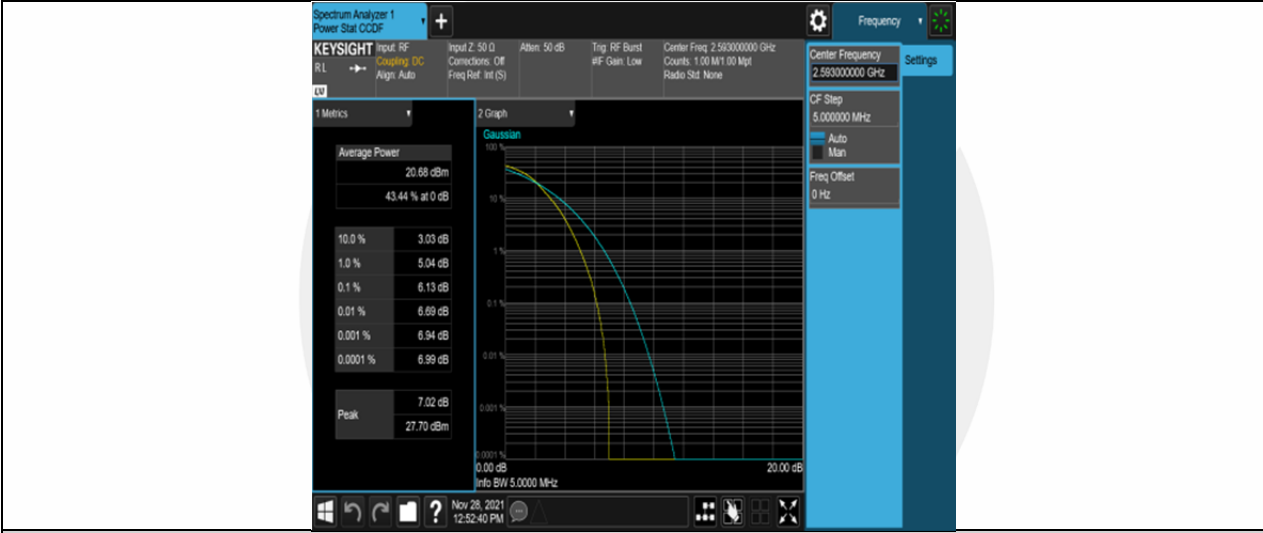
Band41-10MHz-QPSK-40620-50RB#0



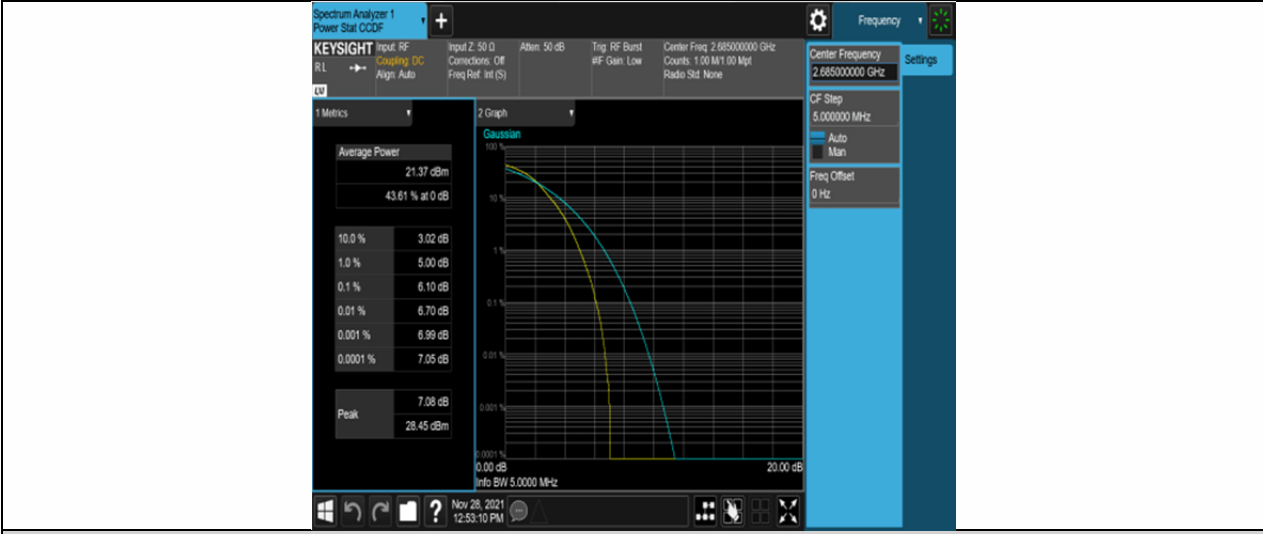
Band41-10MHz-QPSK-41540-50RB#0



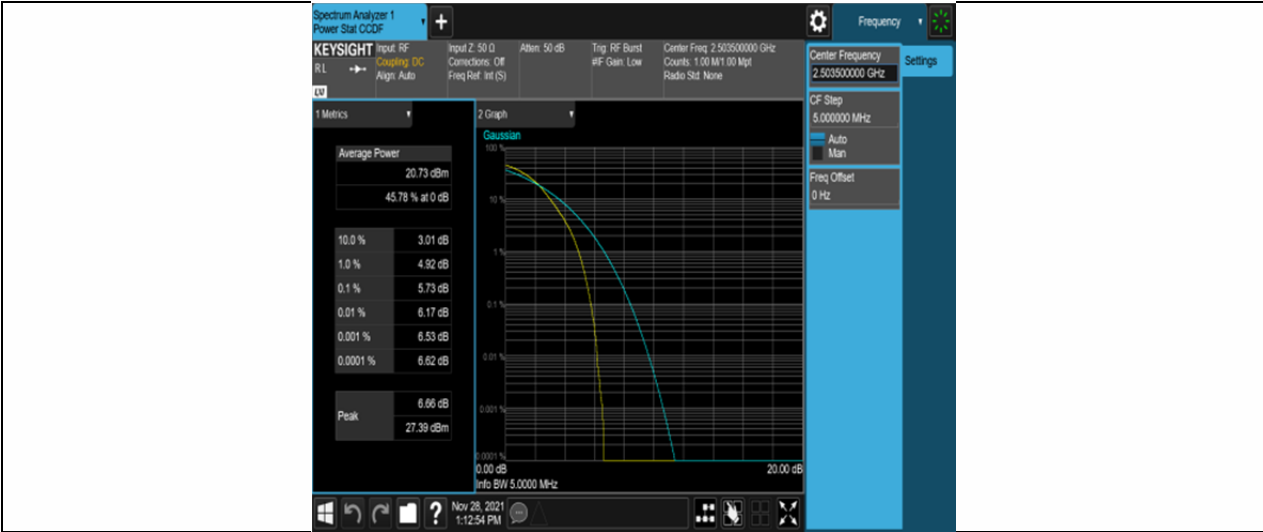
Band41-10MHz-16QAM-39700-50RB#0



Band41-10MHz-16QAM-40620-50RB#0



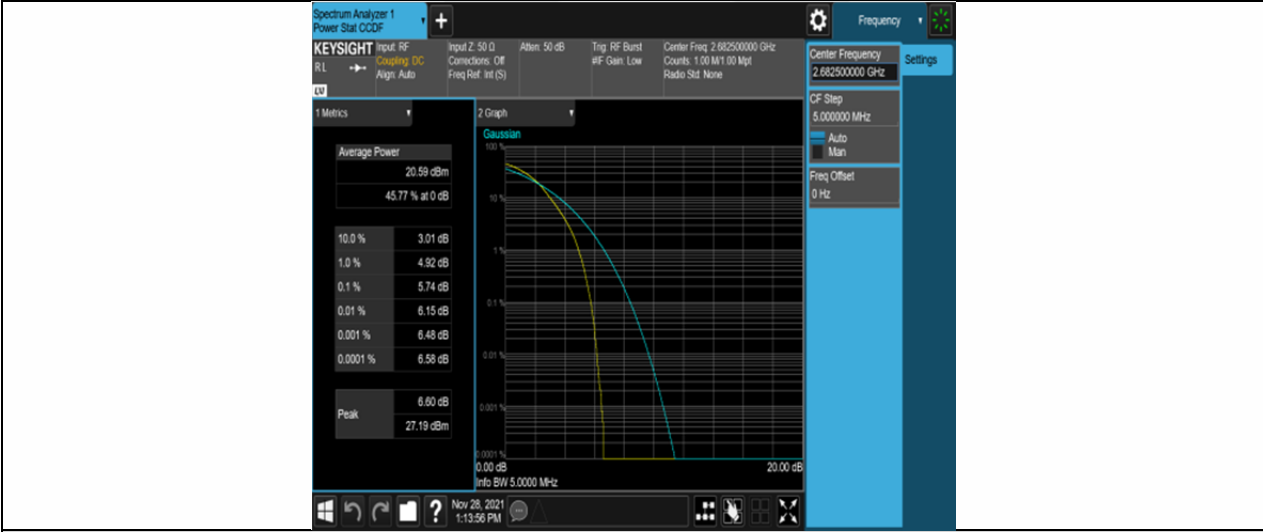
Band41-10MHz-16QAM-41540-50RB#0



Band41-15MHz-QPSK-39725-75RB#0



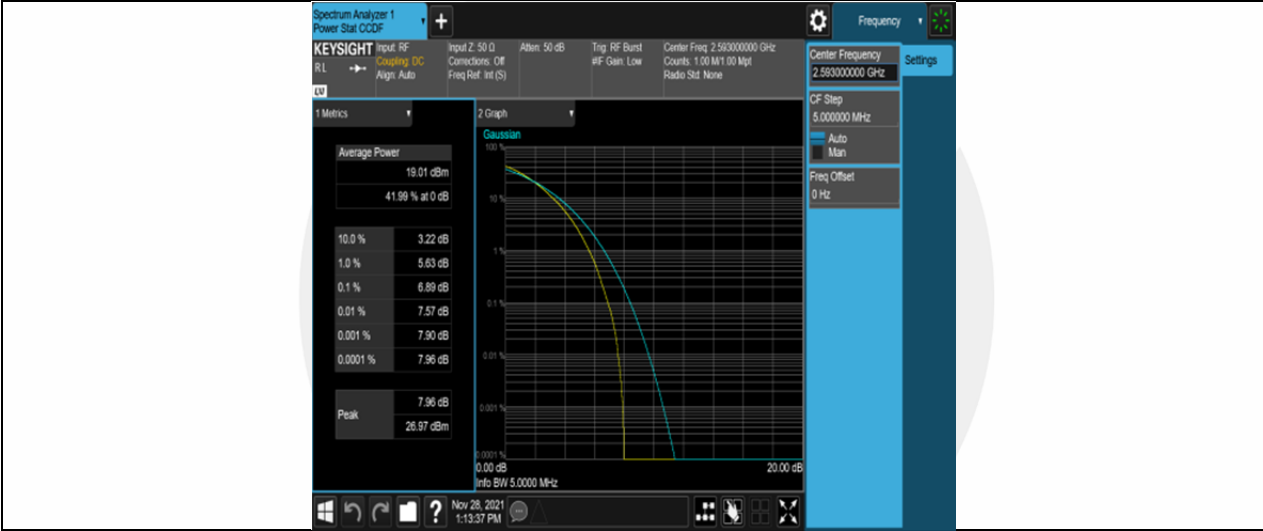
Band41-15MHz-QPSK-40620-75RB#0



Band41-15MHz-QPSK-41515-75RB#0



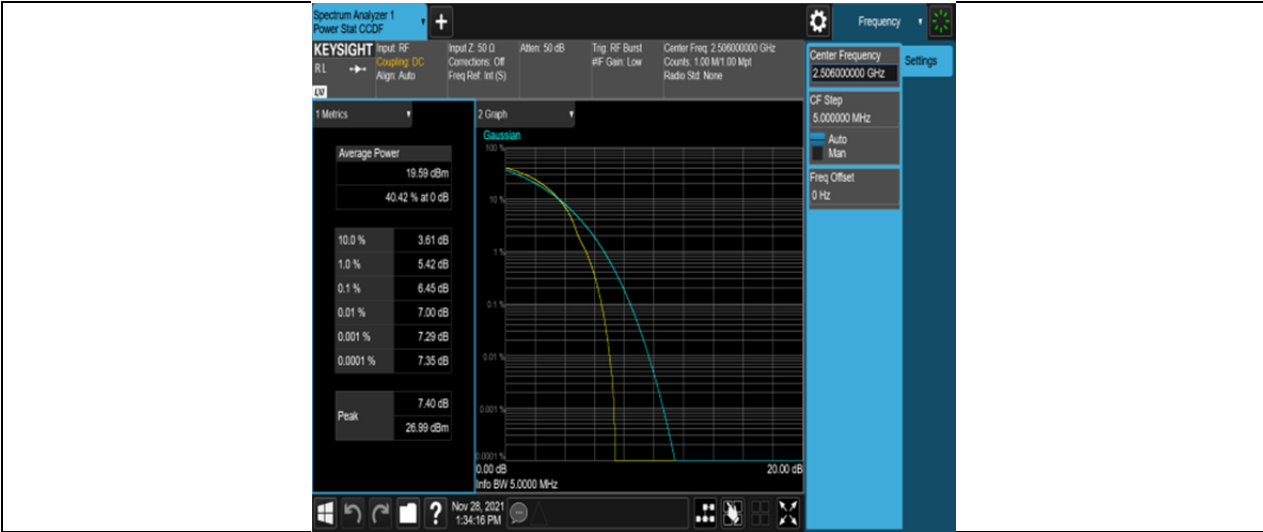
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Band41-15MHz-16QAM-40620-75RB#0



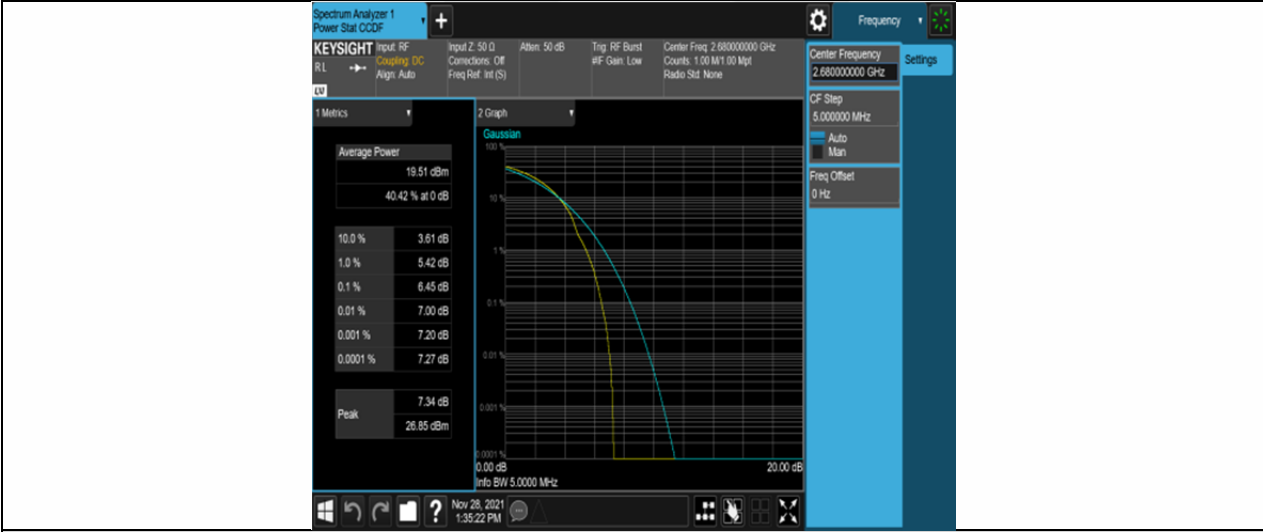
Band41-15MHz-16QAM-41515-75RB#0



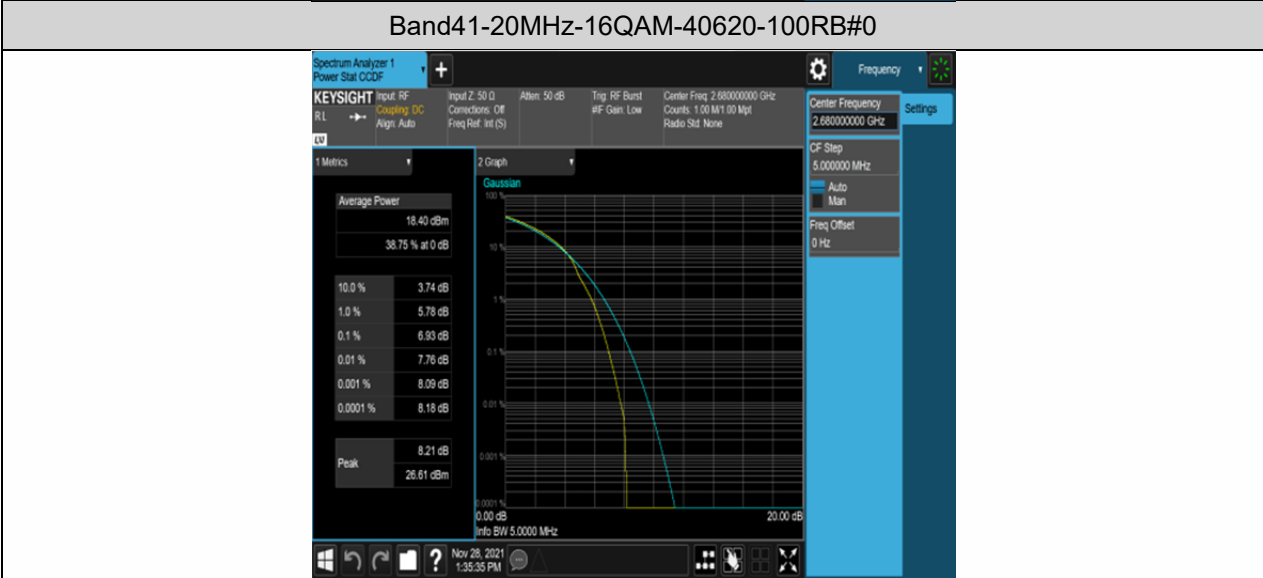
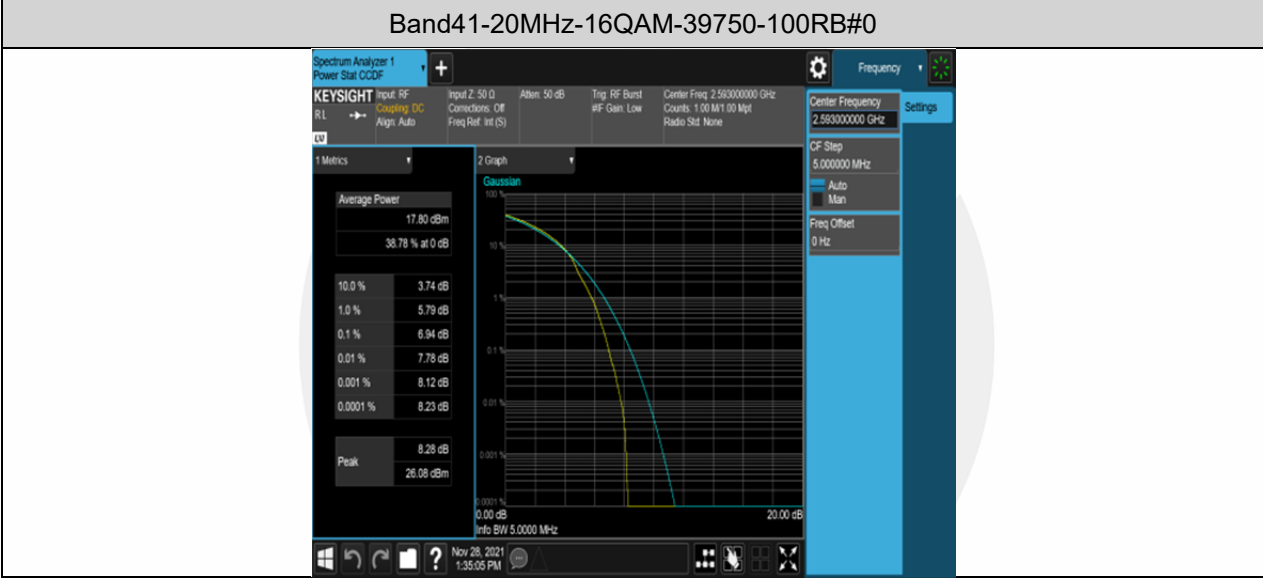
Band41-20MHz-QPSK-39750-100RB#0



Band41-20MHz-QPSK-40620-100RB#0



Band41-20MHz-QPSK-41490-100RB#0

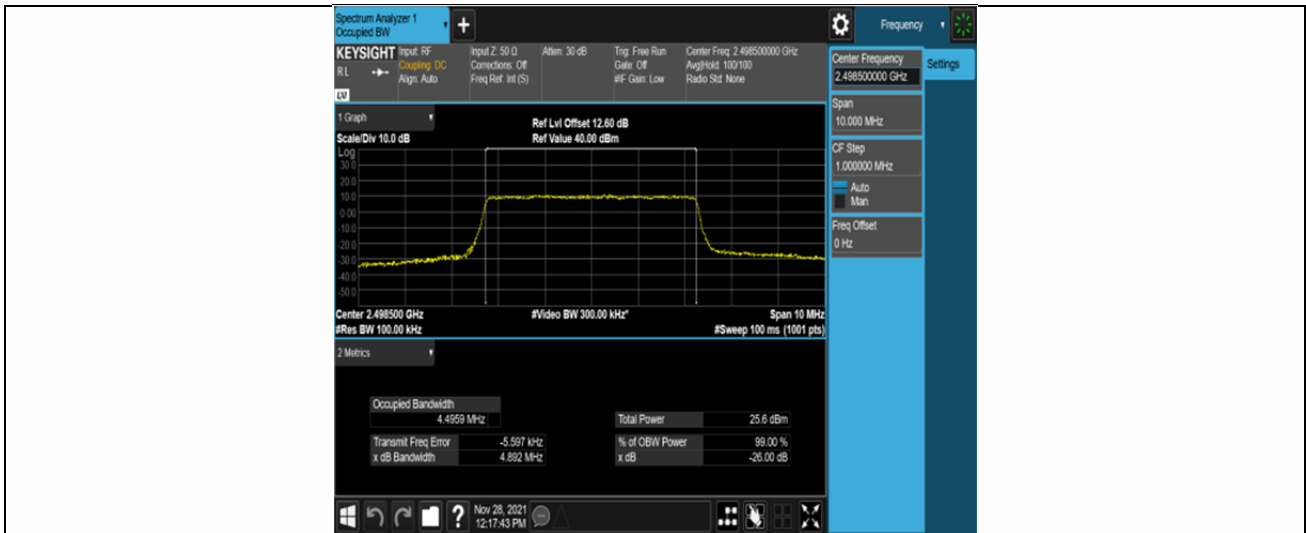


Appendix C: 26dB Bandwidth and Occupied Bandwidth

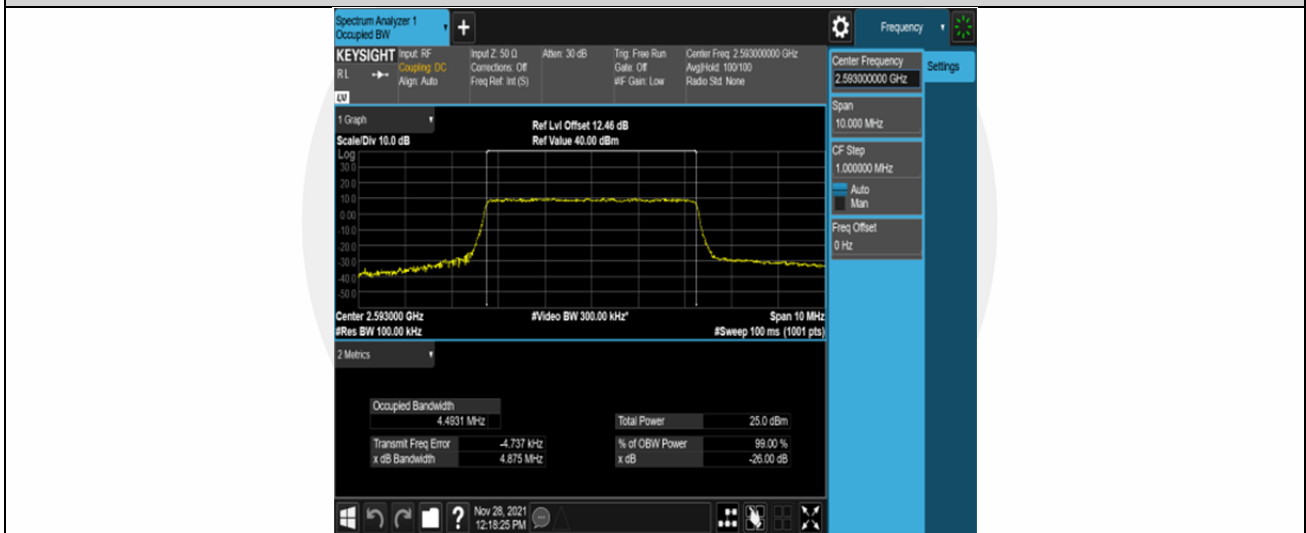
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band41	5MHz	QPSK	39675	25RB#0	4.4959	4.892	PASS
Band41	5MHz	QPSK	40620	25RB#0	4.4931	4.875	PASS
Band41	5MHz	QPSK	41565	25RB#0	4.4938	4.881	PASS
Band41	5MHz	16QAM	39675	25RB#0	4.4869	4.824	PASS
Band41	5MHz	16QAM	40620	25RB#0	4.4924	4.844	PASS
Band41	5MHz	16QAM	41565	25RB#0	4.4917	4.835	PASS
Band41	10MHz	QPSK	39700	50RB#0	8.9649	9.515	PASS
Band41	10MHz	QPSK	40620	50RB#0	8.9611	9.516	PASS
Band41	10MHz	QPSK	41540	50RB#0	8.9620	9.532	PASS
Band41	10MHz	16QAM	39700	50RB#0	8.9655	9.517	PASS
Band41	10MHz	16QAM	40620	50RB#0	8.9678	9.524	PASS
Band41	10MHz	16QAM	41540	50RB#0	8.9776	9.510	PASS
Band41	15MHz	QPSK	39725	75RB#0	13.470	14.29	PASS
Band41	15MHz	QPSK	40620	75RB#0	13.470	14.30	PASS
Band41	15MHz	QPSK	41515	75RB#0	13.475	14.30	PASS
Band41	15MHz	16QAM	39725	75RB#0	13.463	14.26	PASS
Band41	15MHz	16QAM	40620	75RB#0	13.465	14.26	PASS
Band41	15MHz	16QAM	41515	75RB#0	13.470	14.27	PASS
Band41	20MHz	QPSK	39750	100RB#0	17.924	18.94	PASS
Band41	20MHz	QPSK	40620	100RB#0	17.935	18.99	PASS
Band41	20MHz	QPSK	41490	100RB#0	17.929	18.99	PASS
Band41	20MHz	16QAM	39750	100RB#0	17.921	18.95	PASS
Band41	20MHz	16QAM	40620	100RB#0	17.914	18.98	PASS
Band41	20MHz	16QAM	41490	100RB#0	17.918	18.97	PASS

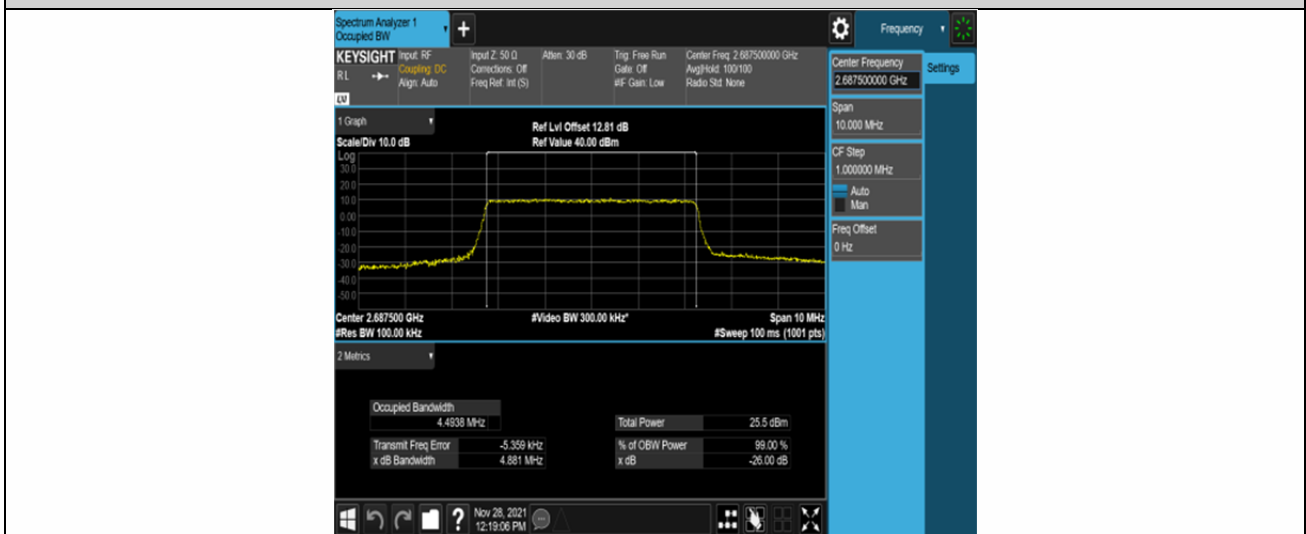
Test Graphs



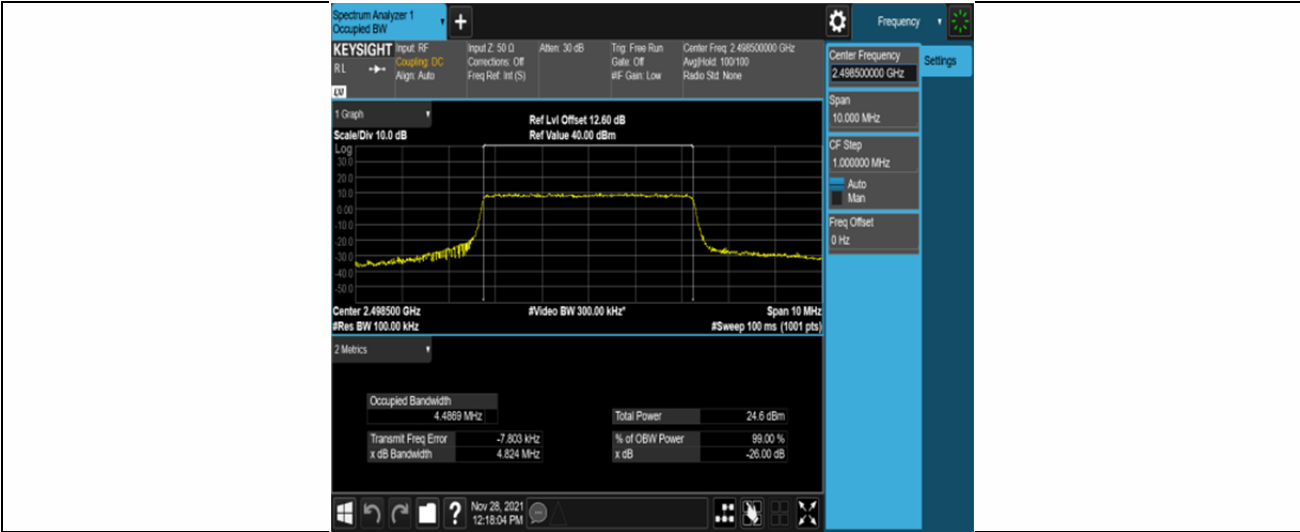
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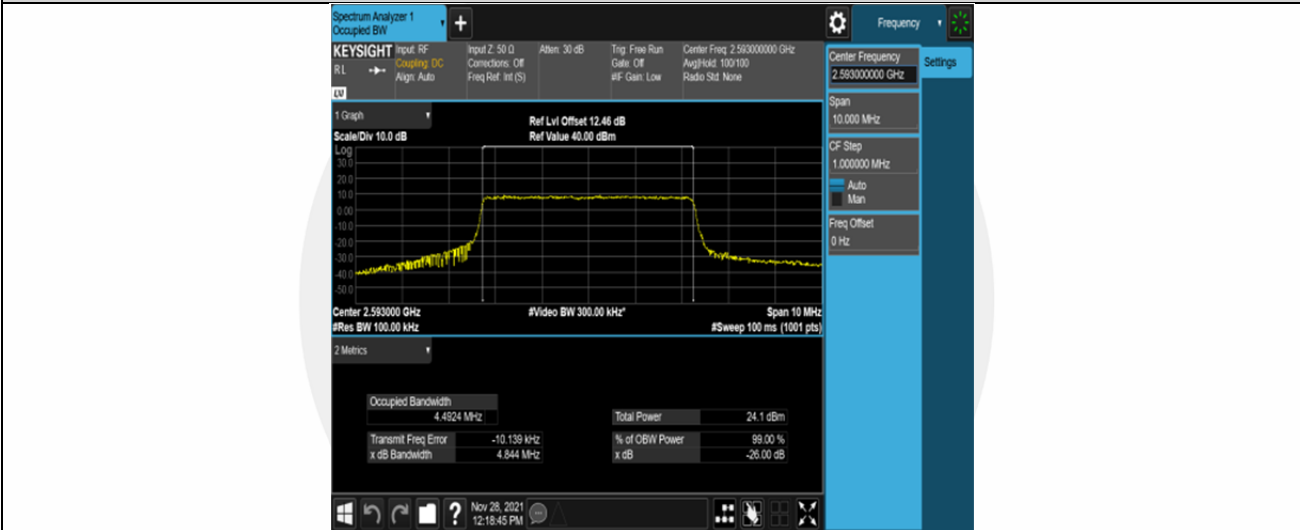
Band41-5MHz-QPSK-40620-25RB#0



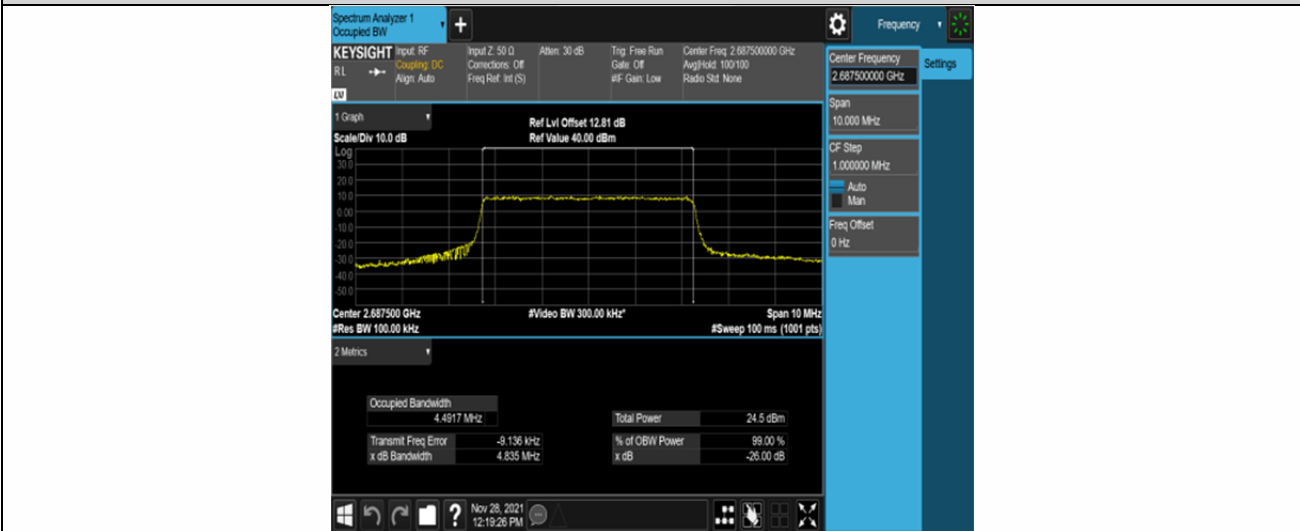
Band41-5MHz-QPSK-41565-25RB#0



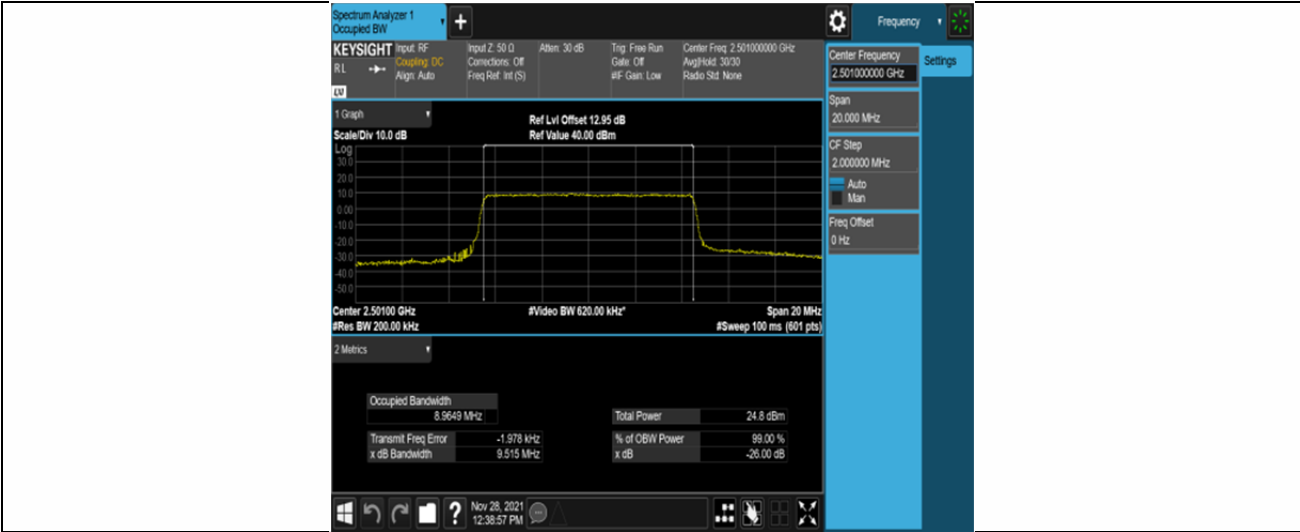
Band41-5MHz-16QAM-39675-25RB#0



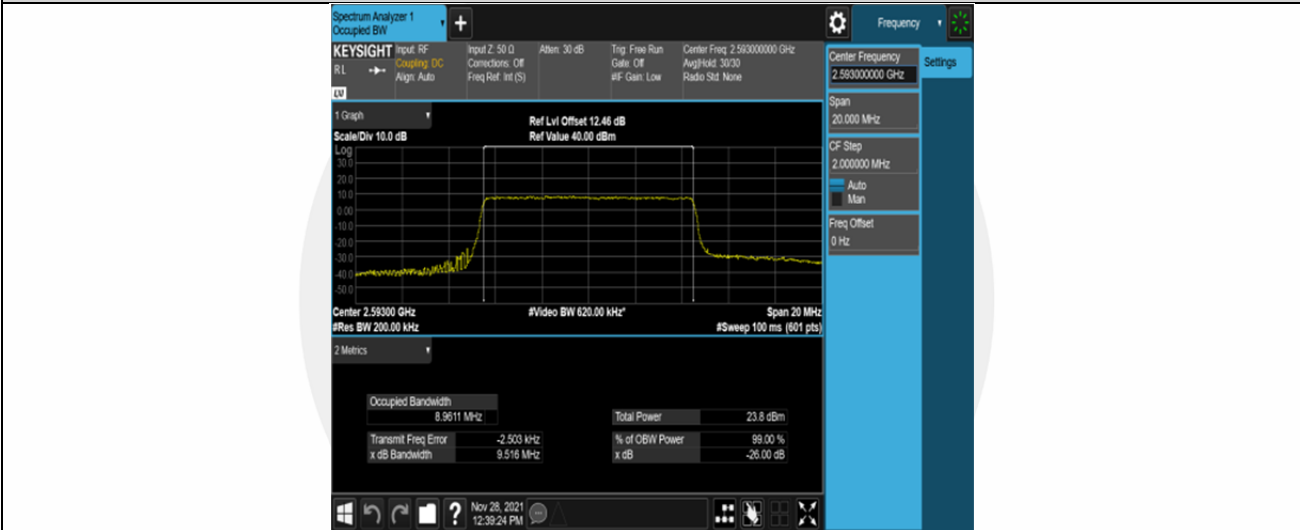
Band41-5MHz-16QAM-40620-25RB#0



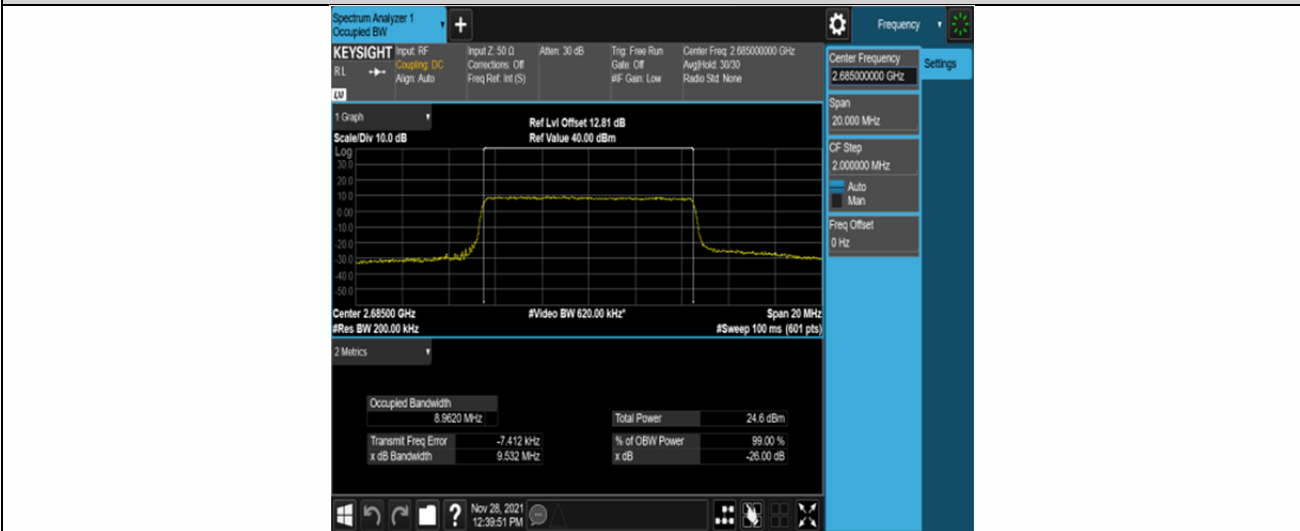
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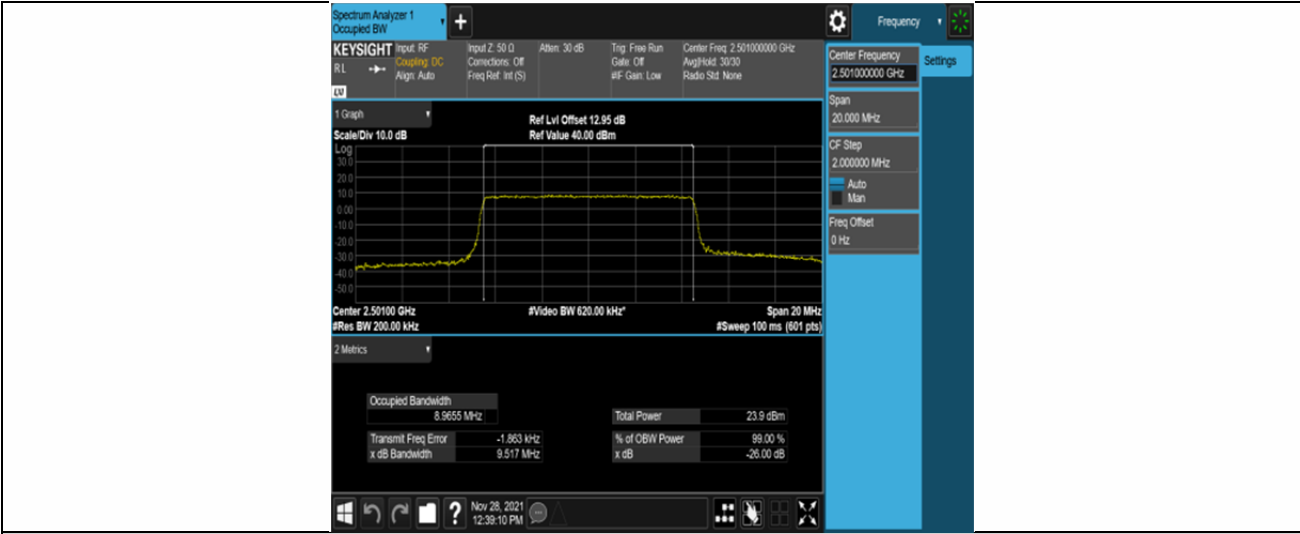
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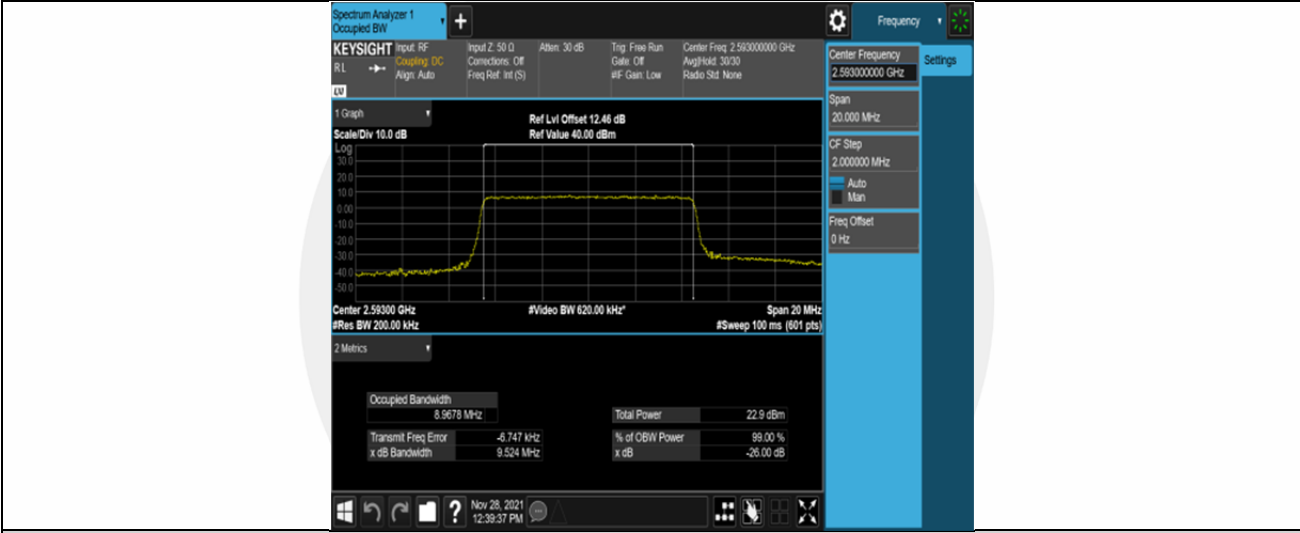
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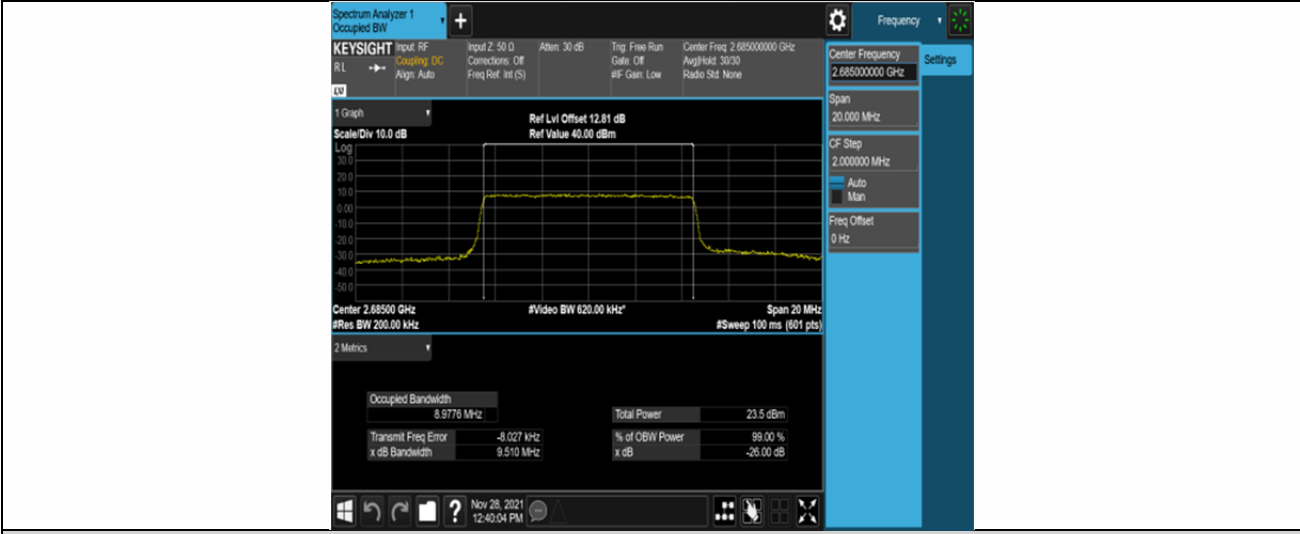
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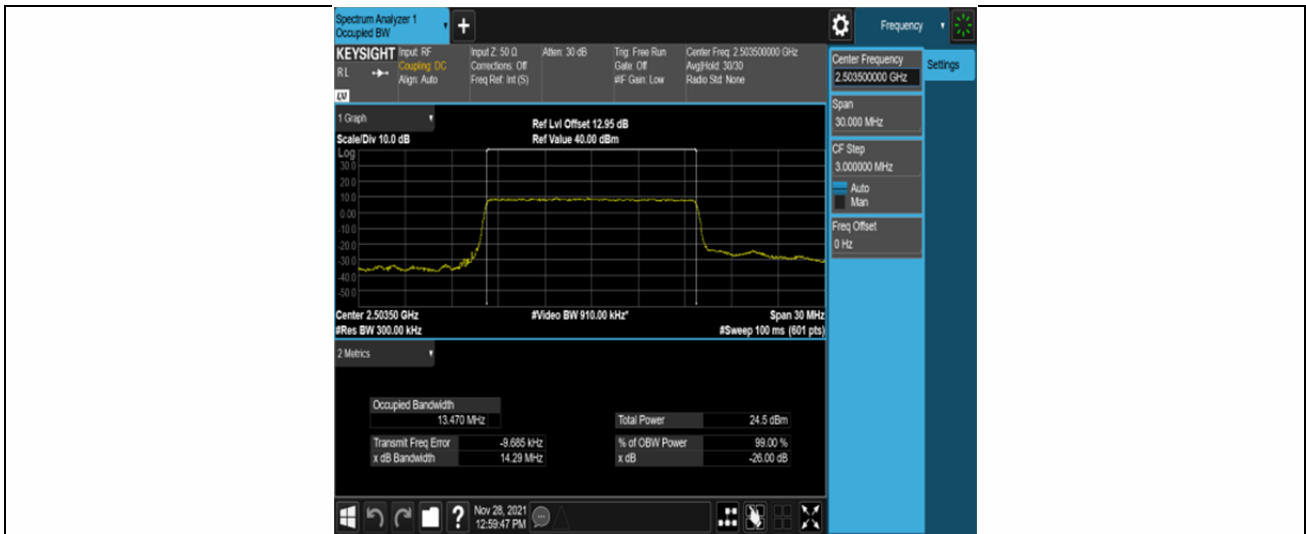
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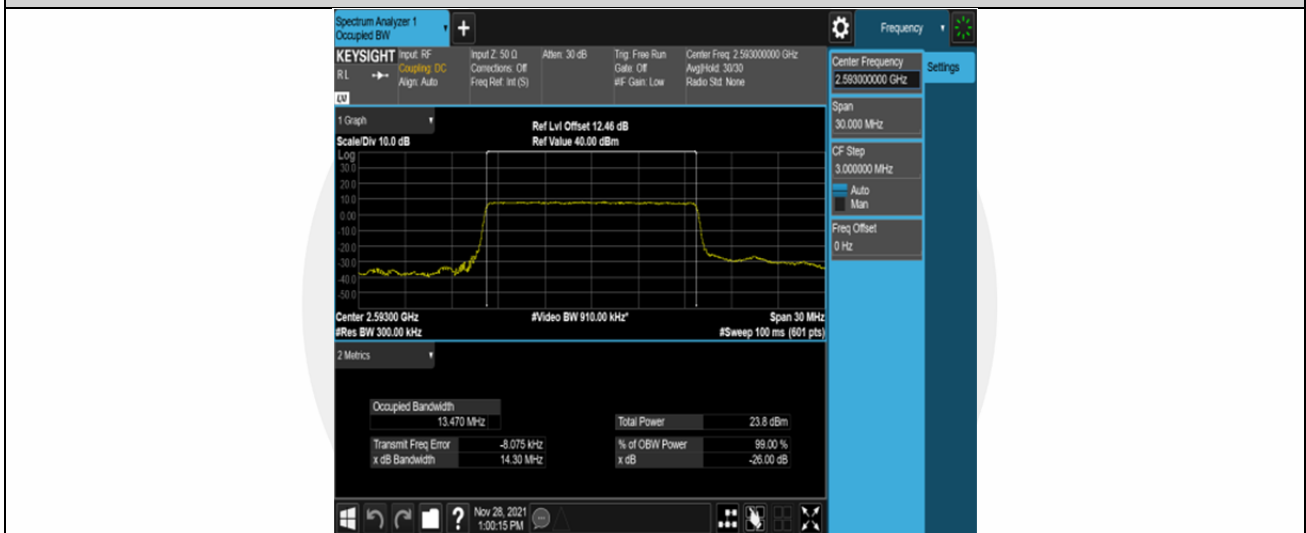
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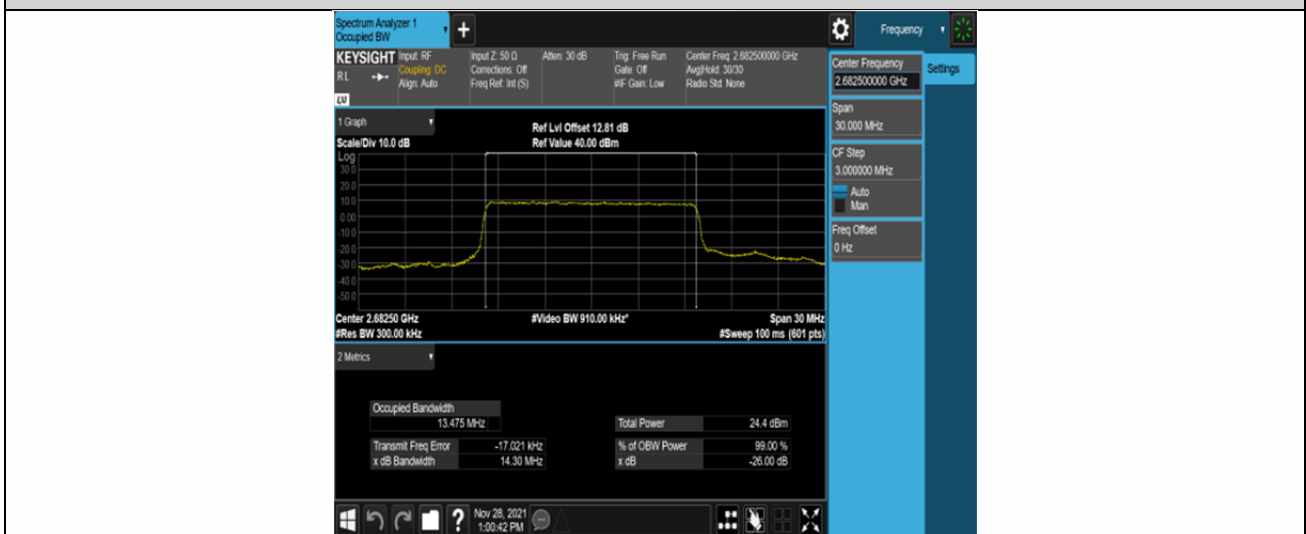
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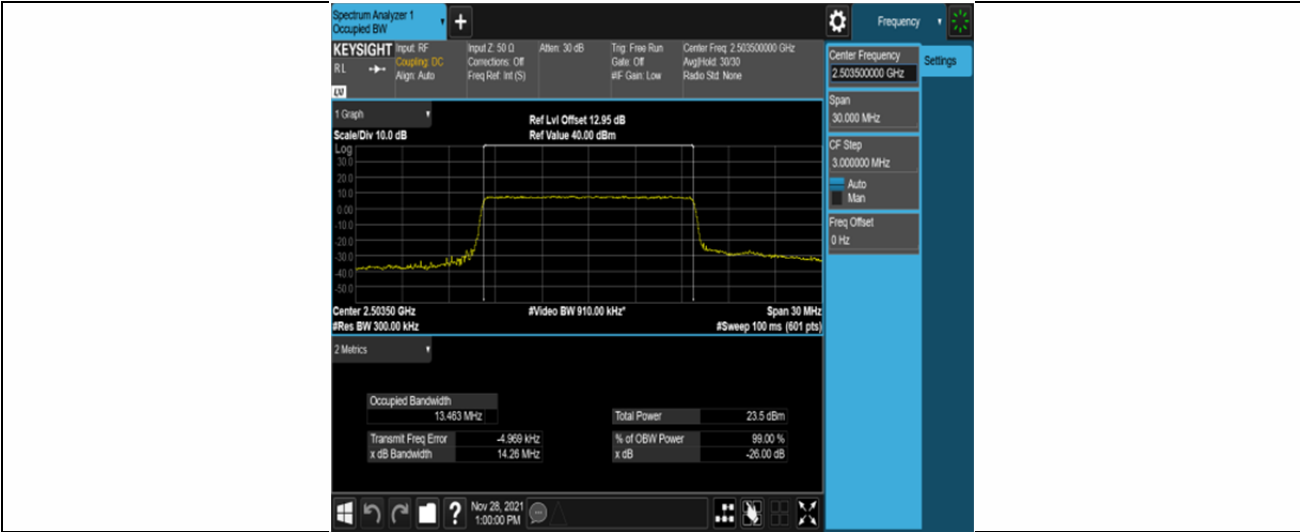
Band41-15MHz-QPSK-39725-75RB#0



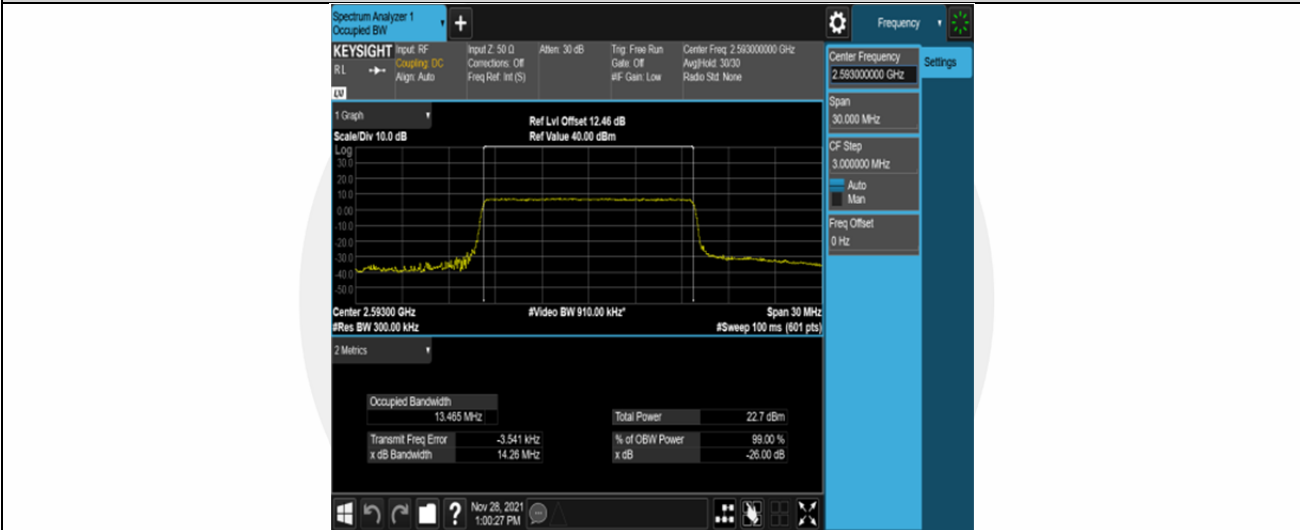
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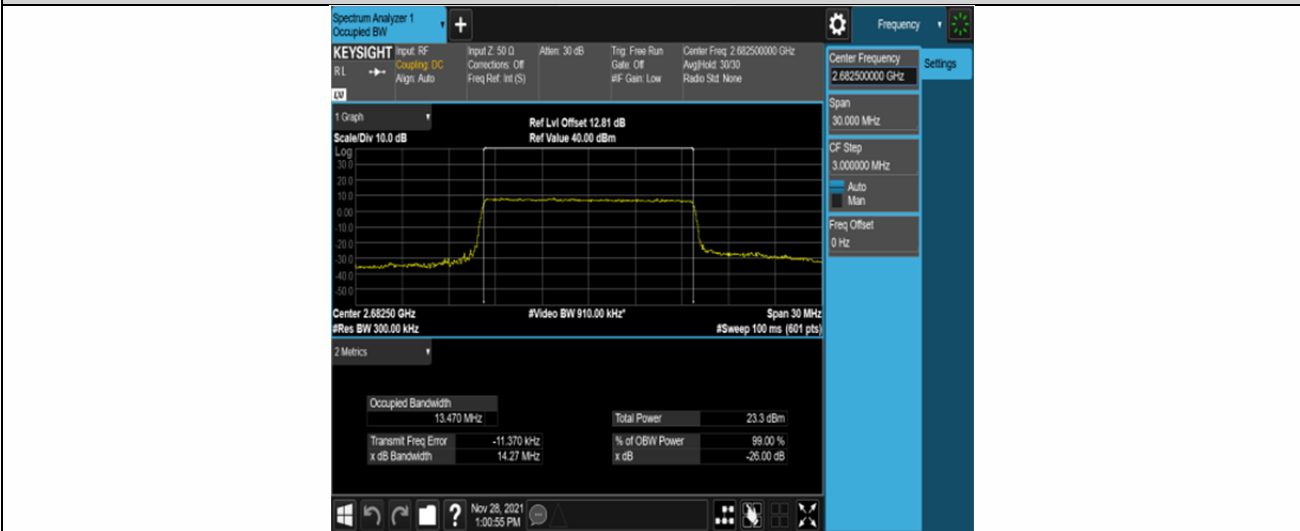
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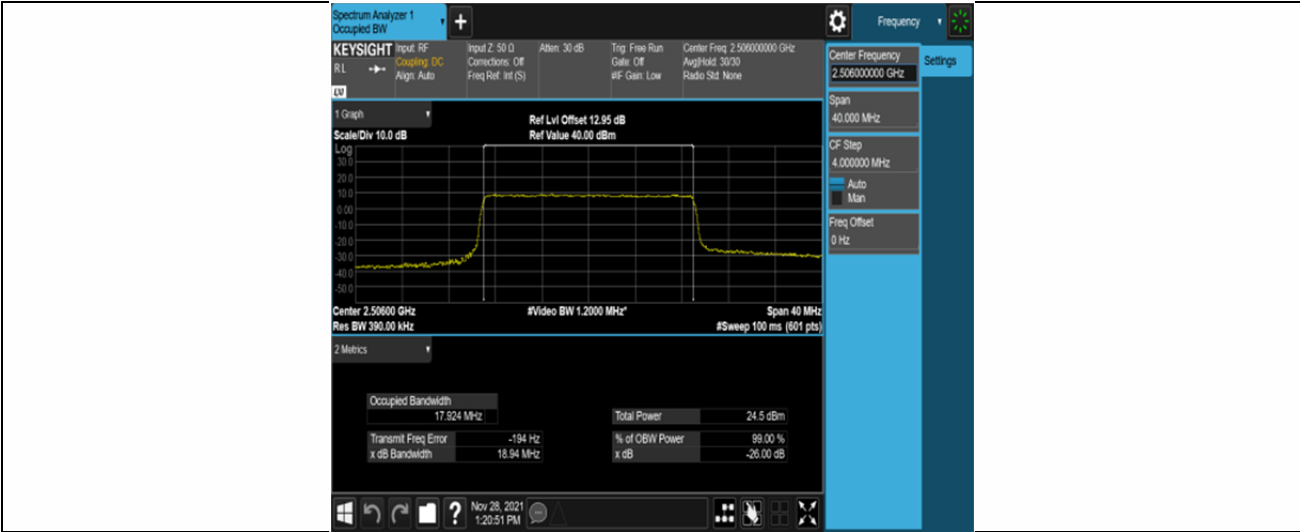
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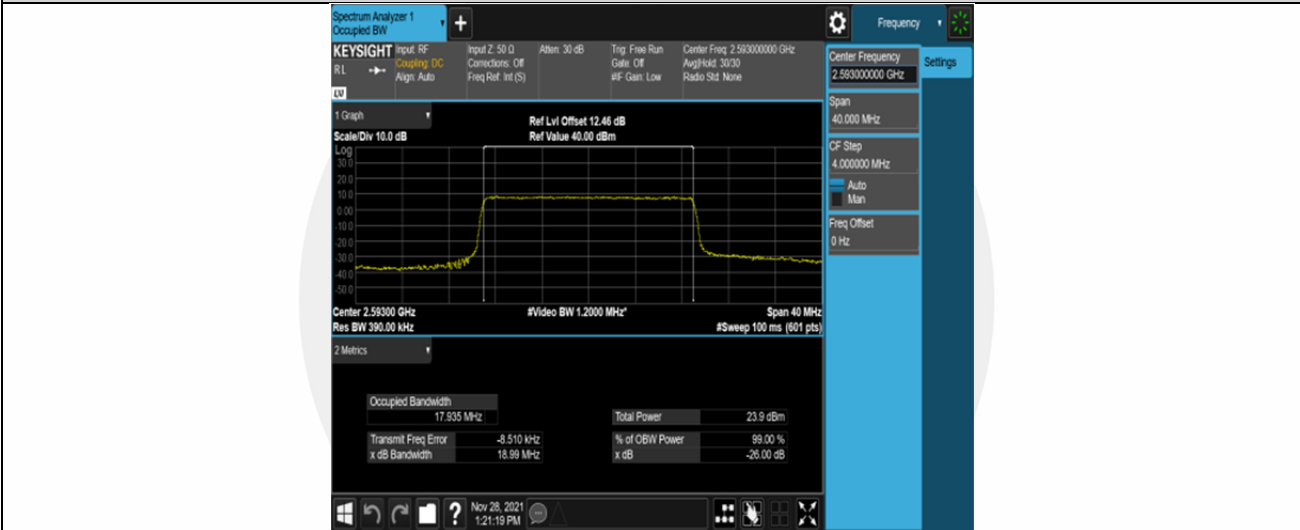
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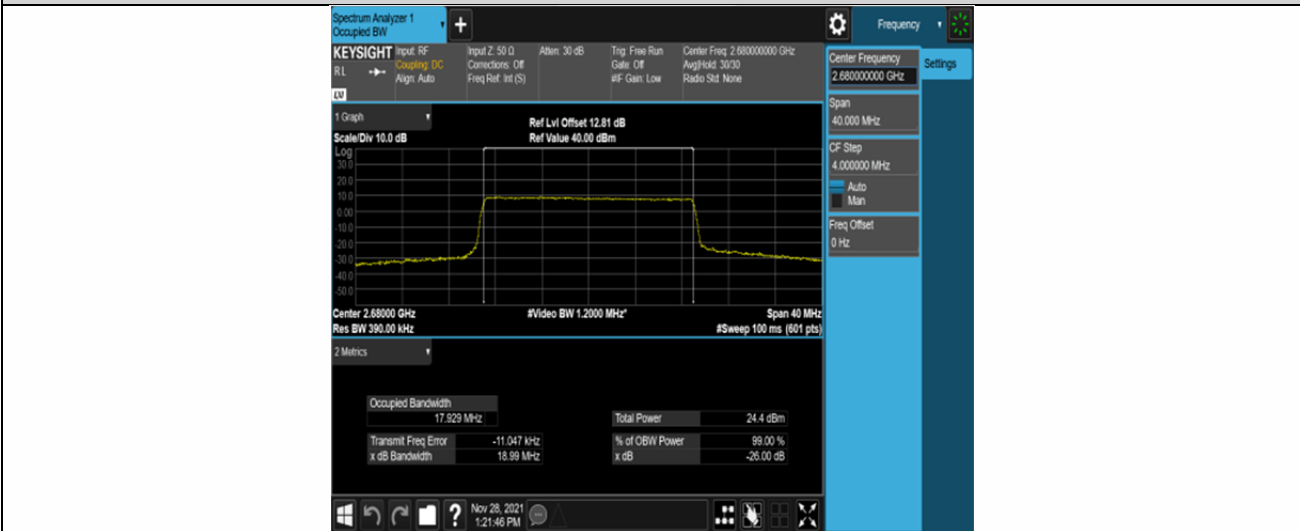
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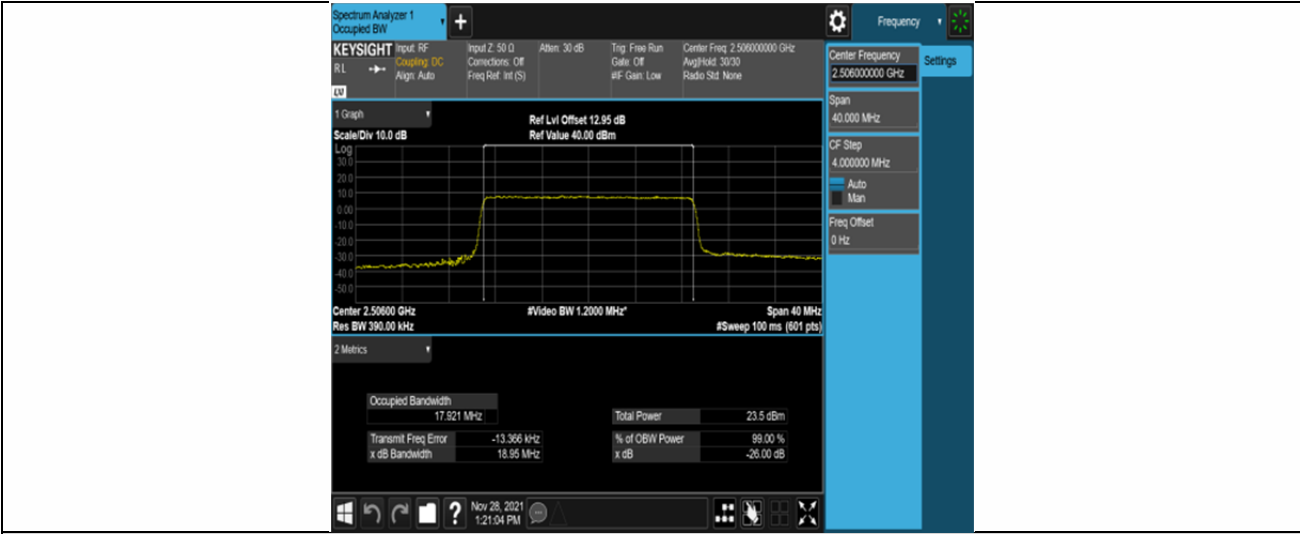
Band41-20MHz-QPSK-39750-100RB#0



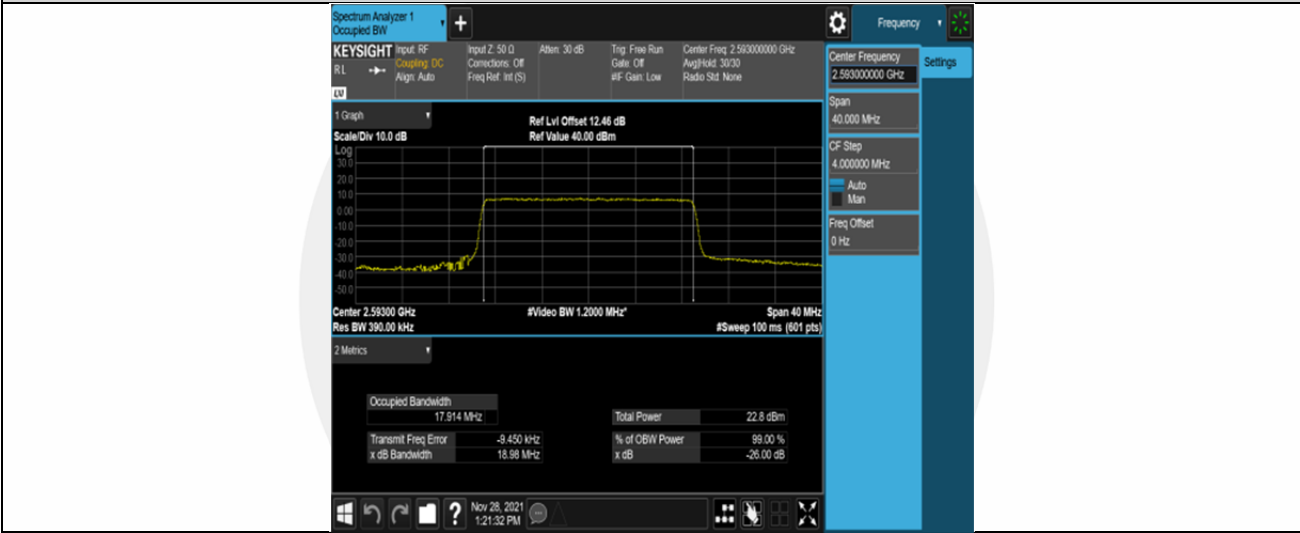
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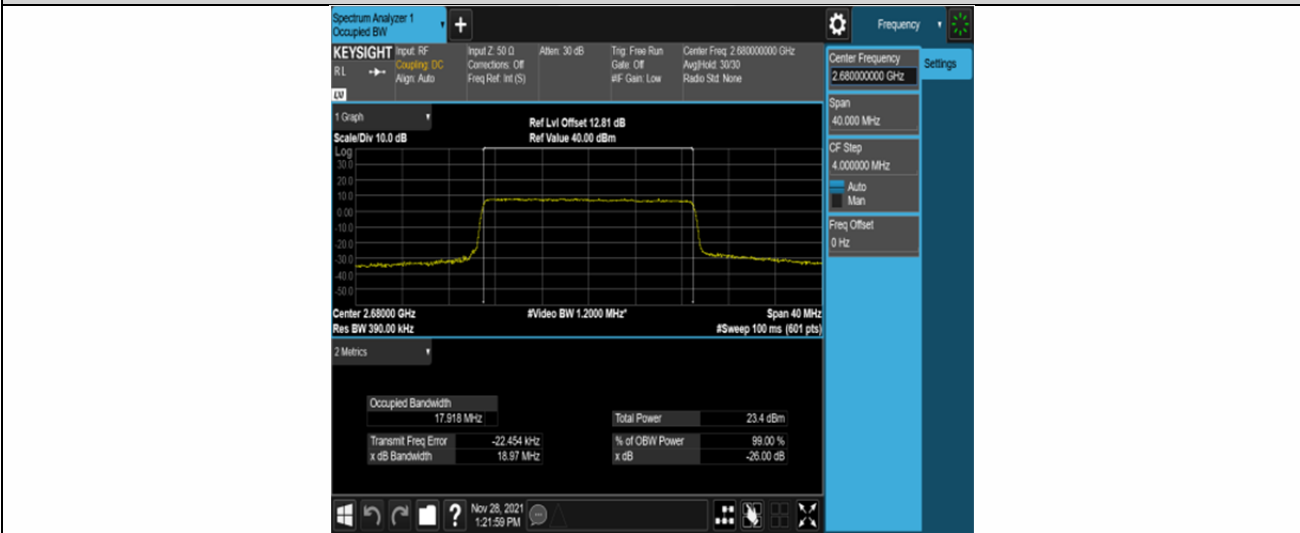
Band41-20MHz-QPSK-41490-100RB#0



Band41-20MHz-16QAM-39750-100RB#0



Band41-20MHz-16QAM-40620-100RB#0



Band41-20MHz-16QAM-41490-100RB#0

Appendix D: Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Config.	Result (dBm)	Verdict
Band41	5MHz	QPSK	39675	25RB#0	-47.81,-37.56,-28.54	PASS
Band41	5MHz	QPSK	41565	25RB#0	-27.28,-31.83,-44.95,-45.92	PASS
Band41	5MHz	16QAM	39675	25RB#0	-49.10,-38.89,-29.23	PASS
Band41	5MHz	16QAM	41565	25RB#0	-28.52,-34.84,-45.95,-46.92	PASS
Band41	10MHz	QPSK	39700	50RB#0	-46.21,-37.58,-33.75	PASS
Band41	10MHz	QPSK	41540	50RB#0	-28.99,-29.23,-33.99,-43.44	PASS
Band41	10MHz	16QAM	39700	50RB#0	-45.92,-39.91,-31.66	PASS
Band41	10MHz	16QAM	41540	50RB#0	-30.51,-32.31,-37.65,-43.93	PASS
Band41	15MHz	QPSK	39725	75RB#0	-44.67,-39.92,-31.97	PASS
Band41	15MHz	QPSK	41515	75RB#0	-26.28,-28.70,-31.14,-41.86	PASS
Band41	15MHz	16QAM	39725	75RB#0	-43.22,-39.66,-34.67	PASS
Band41	15MHz	16QAM	41515	75RB#0	-29.75,-29.91,-32.14,-42.02	PASS
Band41	20MHz	QPSK	39750	100RB#0	-47.19,-37.86,-35.58	PASS
Band41	20MHz	QPSK	41490	100RB#0	-28.16,-30.23,-33.46,-44.30	PASS
Band41	20MHz	16QAM	39750	100RB#0	-47.63,-38.27,-33.47	PASS
Band41	20MHz	16QAM	41490	100RB#0	-32.38,-32.36,-35.19,-43.79	PASS