

LTE Band7 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
Band7	5MHz	QPSK	20775	1RB#0	21.20	PASS
Band7	5MHz	QPSK	20775	1RB#12	21.34	PASS
Band7	5MHz	QPSK	20775	1RB#24	20.99	PASS
Band7	5MHz	QPSK	20775	12RB#0	19.96	PASS
Band7	5MHz	QPSK	20775	12RB#6	19.98	PASS
Band7	5MHz	QPSK	20775	12RB#13	20.07	PASS
Band7	5MHz	QPSK	20775	25RB#0	19.97	PASS
Band7	5MHz	QPSK	21100	1RB#0	21.14	PASS
Band7	5MHz	QPSK	21100	1RB#12	21.00	PASS
Band7	5MHz	QPSK	21100	1RB#24	21.08	PASS
Band7	5MHz	QPSK	21100	12RB#0	20.03	PASS
Band7	5MHz	QPSK	21100	12RB#6	20.02	PASS
Band7	5MHz	QPSK	21100	12RB#13	20.06	PASS
Band7	5MHz	QPSK	21100	25RB#0	19.95	PASS
Band7	5MHz	QPSK	21425	1RB#0	21.33	PASS
Band7	5MHz	QPSK	21425	1RB#12	21.21	PASS
Band7	5MHz	QPSK	21425	1RB#24	21.13	PASS
Band7	5MHz	QPSK	21425	12RB#0	20.24	PASS
Band7	5MHz	QPSK	21425	12RB#6	20.24	PASS
Band7	5MHz	QPSK	21425	12RB#13	20.07	PASS
Band7	5MHz	QPSK	21425	25RB#0	20.08	PASS
Band7	5MHz	16QAM	20775	1RB#0	20.23	PASS
Band7	5MHz	16QAM	20775	1RB#12	20.39	PASS
Band7	5MHz	16QAM	20775	1RB#24	20.05	PASS
Band7	5MHz	16QAM	20775	12RB#0	18.98	PASS
Band7	5MHz	16QAM	20775	12RB#6	18.99	PASS
Band7	5MHz	16QAM	20775	12RB#13	18.98	PASS
Band7	5MHz	16QAM	20775	25RB#0	19.10	PASS
Band7	5MHz	16QAM	21100	1RB#0	20.16	PASS
Band7	5MHz	16QAM	21100	1RB#12	20.04	PASS
Band7	5MHz	16QAM	21100	1RB#24	20.11	PASS
Band7	5MHz	16QAM	21100	12RB#0	19.03	PASS
Band7	5MHz	16QAM	21100	12RB#6	18.98	PASS

Band7	5MHz	16QAM	21100	12RB#13	19.14	PASS
Band7	5MHz	16QAM	21100	25RB#0	19.01	PASS
Band7	5MHz	16QAM	21425	1RB#0	20.31	PASS
Band7	5MHz	16QAM	21425	1RB#12	20.24	PASS
Band7	5MHz	16QAM	21425	1RB#24	20.16	PASS
Band7	5MHz	16QAM	21425	12RB#0	19.29	PASS
Band7	5MHz	16QAM	21425	12RB#6	19.31	PASS
Band7	5MHz	16QAM	21425	12RB#13	19.14	PASS
Band7	5MHz	16QAM	21425	25RB#0	19.10	PASS
Band7	10MHz	QPSK	20800	1RB#0	21.31	PASS
Band7	10MHz	QPSK	20800	1RB#24	21.13	PASS
Band7	10MHz	QPSK	20800	1RB#49	20.97	PASS
Band7	10MHz	QPSK	20800	25RB#0	20.07	PASS
Band7	10MHz	QPSK	20800	25RB#12	20.00	PASS
Band7	10MHz	QPSK	20800	25RB#25	19.96	PASS
Band7	10MHz	QPSK	20800	50RB#0	20.17	PASS
Band7	10MHz	QPSK	21100	1RB#0	21.27	PASS
Band7	10MHz	QPSK	21100	1RB#24	20.96	PASS
Band7	10MHz	QPSK	21100	1RB#49	21.12	PASS
Band7	10MHz	QPSK	21100	25RB#0	20.21	PASS
Band7	10MHz	QPSK	21100	25RB#12	20.18	PASS
Band7	10MHz	QPSK	21100	25RB#25	20.12	PASS
Band7	10MHz	QPSK	21100	50RB#0	20.14	PASS
Band7	10MHz	QPSK	21400	1RB#0	21.42	PASS
Band7	10MHz	QPSK	21400	1RB#24	21.23	PASS
Band7	10MHz	QPSK	21400	1RB#49	21.07	PASS
Band7	10MHz	QPSK	21400	25RB#0	20.32	PASS
Band7	10MHz	QPSK	21400	25RB#12	20.36	PASS
Band7	10MHz	QPSK	21400	25RB#25	20.18	PASS
Band7	10MHz	QPSK	21400	50RB#0	20.24	PASS
Band7	10MHz	16QAM	20800	1RB#0	20.27	PASS
Band7	10MHz	16QAM	20800	1RB#24	20.08	PASS
Band7	10MHz	16QAM	20800	1RB#49	20.05	PASS
Band7	10MHz	16QAM	20800	25RB#0	19.07	PASS
Band7	10MHz	16QAM	20800	25RB#12	19.14	PASS
Band7	10MHz	16QAM	20800	25RB#25	18.91	PASS
Band7	10MHz	16QAM	20800	50RB#0	19.01	PASS

Band7	10MHz	16QAM	21100	1RB#0	20.11	PASS
Band7	10MHz	16QAM	21100	1RB#24	19.89	PASS
Band7	10MHz	16QAM	21100	1RB#49	20.13	PASS
Band7	10MHz	16QAM	21100	25RB#0	19.18	PASS
Band7	10MHz	16QAM	21100	25RB#12	19.07	PASS
Band7	10MHz	16QAM	21100	25RB#25	19.10	PASS
Band7	10MHz	16QAM	21100	50RB#0	19.08	PASS
Band7	10MHz	16QAM	21400	1RB#0	20.23	PASS
Band7	10MHz	16QAM	21400	1RB#24	19.93	PASS
Band7	10MHz	16QAM	21400	1RB#49	20.14	PASS
Band7	10MHz	16QAM	21400	25RB#0	19.33	PASS
Band7	10MHz	16QAM	21400	25RB#12	19.39	PASS
Band7	10MHz	16QAM	21400	25RB#25	19.20	PASS
Band7	10MHz	16QAM	21400	50RB#0	19.19	PASS
Band7	15MHz	QPSK	20825	1RB#0	21.56	PASS
Band7	15MHz	QPSK	20825	1RB#38	20.92	PASS
Band7	15MHz	QPSK	20825	1RB#74	21.05	PASS
Band7	15MHz	QPSK	20825	38RB#0	20.40	PASS
Band7	15MHz	QPSK	20825	38RB#18	19.76	PASS
Band7	15MHz	QPSK	20825	38RB#37	20.03	PASS
Band7	15MHz	QPSK	20825	75RB#0	19.73	PASS
Band7	15MHz	QPSK	21100	1RB#0	21.41	PASS
Band7	15MHz	QPSK	21100	1RB#38	20.59	PASS
Band7	15MHz	QPSK	21100	1RB#74	21.08	PASS
Band7	15MHz	QPSK	21100	38RB#0	20.28	PASS
Band7	15MHz	QPSK	21100	38RB#18	19.71	PASS
Band7	15MHz	QPSK	21100	38RB#37	20.14	PASS
Band7	15MHz	QPSK	21100	75RB#0	19.85	PASS
Band7	15MHz	QPSK	21375	1RB#0	21.61	PASS
Band7	15MHz	QPSK	21375	1RB#38	20.91	PASS
Band7	15MHz	QPSK	21375	1RB#74	20.95	PASS
Band7	15MHz	QPSK	21375	38RB#0	20.46	PASS
Band7	15MHz	QPSK	21375	38RB#18	19.89	PASS
Band7	15MHz	QPSK	21375	38RB#37	20.13	PASS
Band7	15MHz	QPSK	21375	75RB#0	20.03	PASS
Band7	15MHz	16QAM	20825	1RB#0	20.50	PASS
Band7	15MHz	16QAM	20825	1RB#38	19.92	PASS

Band7	15MHz	16QAM	20825	1RB#74	20.11	PASS
Band7	15MHz	16QAM	20825	38RB#0	20.32	PASS
Band7	15MHz	16QAM	20825	38RB#18	19.75	PASS
Band7	15MHz	16QAM	20825	38RB#37	20.07	PASS
Band7	15MHz	16QAM	20825	75RB#0	18.77	PASS
Band7	15MHz	16QAM	21100	1RB#0	20.34	PASS
Band7	15MHz	16QAM	21100	1RB#38	19.67	PASS
Band7	15MHz	16QAM	21100	1RB#74	20.14	PASS
Band7	15MHz	16QAM	21100	38RB#0	20.31	PASS
Band7	15MHz	16QAM	21100	38RB#18	19.70	PASS
Band7	15MHz	16QAM	21100	38RB#37	20.12	PASS
Band7	15MHz	16QAM	21100	75RB#0	18.84	PASS
Band7	15MHz	16QAM	21375	1RB#0	20.45	PASS
Band7	15MHz	16QAM	21375	1RB#38	19.94	PASS
Band7	15MHz	16QAM	21375	1RB#74	20.21	PASS
Band7	15MHz	16QAM	21375	38RB#0	20.38	PASS
Band7	15MHz	16QAM	21375	38RB#18	19.92	PASS
Band7	15MHz	16QAM	21375	38RB#37	20.29	PASS
Band7	15MHz	16QAM	21375	75RB#0	19.05	PASS
Band7	20MHz	QPSK	20850	1RB#0	21.97	PASS
Band7	20MHz	QPSK	20850	1RB#49	21.03	PASS
Band7	20MHz	QPSK	20850	1RB#99	21.44	PASS
Band7	20MHz	QPSK	20850	50RB#0	20.19	PASS
Band7	20MHz	QPSK	20850	50RB#25	20.07	PASS
Band7	20MHz	QPSK	20850	50RB#50	19.92	PASS
Band7	20MHz	QPSK	20850	100RB#0	19.98	PASS
Band7	20MHz	QPSK	21100	1RB#0	21.64	PASS
Band7	20MHz	QPSK	21100	1RB#49	20.70	PASS
Band7	20MHz	QPSK	21100	1RB#99	21.41	PASS
Band7	20MHz	QPSK	21100	50RB#0	20.07	PASS
Band7	20MHz	QPSK	21100	50RB#25	20.08	PASS
Band7	20MHz	QPSK	21100	50RB#50	20.00	PASS
Band7	20MHz	QPSK	21100	100RB#0	20.07	PASS
Band7	20MHz	QPSK	21350	1RB#0	21.85	PASS
Band7	20MHz	QPSK	21350	1RB#49	20.87	PASS
Band7	20MHz	QPSK	21350	1RB#99	21.29	PASS
Band7	20MHz	QPSK	21350	50RB#0	20.39	PASS

Band7	20MHz	QPSK	21350	50RB#25	20.39	PASS
Band7	20MHz	QPSK	21350	50RB#50	20.08	PASS
Band7	20MHz	QPSK	21350	100RB#0	20.23	PASS
Band7	20MHz	16QAM	20850	1RB#0	20.73	PASS
Band7	20MHz	16QAM	20850	1RB#49	19.77	PASS
Band7	20MHz	16QAM	20850	1RB#99	20.13	PASS
Band7	20MHz	16QAM	20850	50RB#0	19.18	PASS
Band7	20MHz	16QAM	20850	50RB#25	19.01	PASS
Band7	20MHz	16QAM	20850	50RB#50	18.86	PASS
Band7	20MHz	16QAM	20850	100RB#0	18.97	PASS
Band7	20MHz	16QAM	21100	1RB#0	20.57	PASS
Band7	20MHz	16QAM	21100	1RB#49	19.57	PASS
Band7	20MHz	16QAM	21100	1RB#99	20.34	PASS
Band7	20MHz	16QAM	21100	50RB#0	19.05	PASS
Band7	20MHz	16QAM	21100	50RB#25	19.00	PASS
Band7	20MHz	16QAM	21100	50RB#50	18.97	PASS
Band7	20MHz	16QAM	21100	100RB#0	19.05	PASS
Band7	20MHz	16QAM	21350	1RB#0	20.87	PASS
Band7	20MHz	16QAM	21350	1RB#49	20.02	PASS
Band7	20MHz	16QAM	21350	1RB#99	20.10	PASS
Band7	20MHz	16QAM	21350	50RB#0	19.39	PASS
Band7	20MHz	16QAM	21350	50RB#25	19.38	PASS
Band7	20MHz	16QAM	21350	50RB#50	19.09	PASS
Band7	20MHz	16QAM	21350	100RB#0	19.19	PASS

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

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.76	13	PASS
Band7	5MHz	QPSK	21100	25RB#0	5.14	13	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.85	13	PASS
Band7	5MHz	16QAM	20775	25RB#0	5.58	13	PASS
Band7	5MHz	16QAM	21100	25RB#0	5.92	13	PASS
Band7	5MHz	16QAM	21425	25RB#0	5.64	13	PASS
Band7	10MHz	QPSK	20800	50RB#0	4.60	13	PASS
Band7	10MHz	QPSK	21100	50RB#0	4.68	13	PASS
Band7	10MHz	QPSK	21400	50RB#0	4.62	13	PASS
Band7	10MHz	16QAM	20800	50RB#0	5.96	13	PASS
Band7	10MHz	16QAM	21100	50RB#0	6.09	13	PASS
Band7	10MHz	16QAM	21400	50RB#0	5.97	13	PASS
Band7	15MHz	QPSK	20825	75RB#0	5.79	13	PASS
Band7	15MHz	QPSK	21100	75RB#0	5.75	13	PASS
Band7	15MHz	QPSK	21375	75RB#0	5.77	13	PASS
Band7	15MHz	16QAM	20825	75RB#0	6.71	13	PASS
Band7	15MHz	16QAM	21100	75RB#0	6.78	13	PASS
Band7	15MHz	16QAM	21375	75RB#0	6.78	13	PASS
Band7	20MHz	QPSK	20850	100RB#0	6.45	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	6.48	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	7.05	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	7.14	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	7.19	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	7.05	13	PASS

Test Graphs



Band7-5MHz-QPSK-20775-25RB#0



Band7-5MHz-QPSK-21100-25RB#0



Band7-5MHz-QPSK-21425-25RB#0



Band7-5MHz-16QAM-20775-25RB#0



Band7-5MHz-16QAM-21100-25RB#0



Band7-5MHz-16QAM-21425-25RB#0



Band7-10MHz-QPSK-20800-50RB#0



Band7-10MHz-QPSK-21100-50RB#0



Band7-10MHz-QPSK-21400-50RB#0



Band7-10MHz-16QAM-20800-50RB#0



Band7-10MHz-16QAM-21100-50RB#0



Band7-10MHz-16QAM-21400-50RB#0



Band7-15MHz-QPSK-20825-75RB#0



Band7-15MHz-QPSK-21100-75RB#0



Band7-15MHz-QPSK-21375-75RB#0



Band7-15MHz-16QAM-20825-75RB#0



Band7-15MHz-16QAM-21100-75RB#0



Band7-15MHz-16QAM-21375-75RB#0



Band7-20MHz-QPSK-20850-100RB#0



Band7-20MHz-QPSK-21100-100RB#0



Band7-20MHz-QPSK-21350-100RB#0



Band7-20MHz-16QAM-20850-100RB#0



Band7-20MHz-16QAM-21100-100RB#0



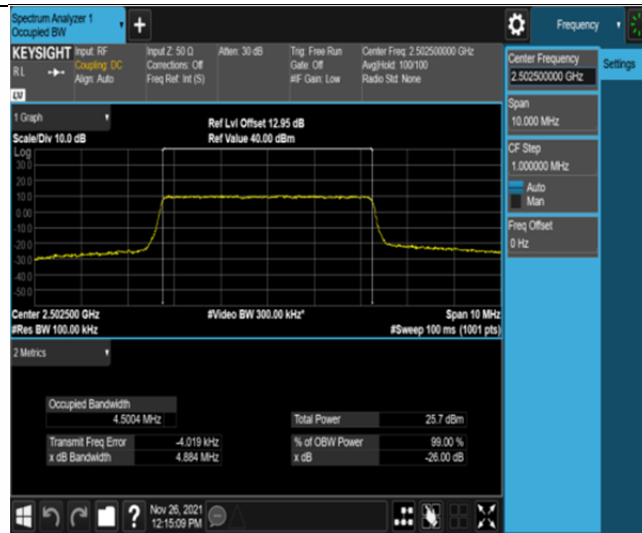
Band7-20MHz-16QAM-21350-100RB#0

Appendix C: 26dB Bandwidth and Occupied Bandwidth

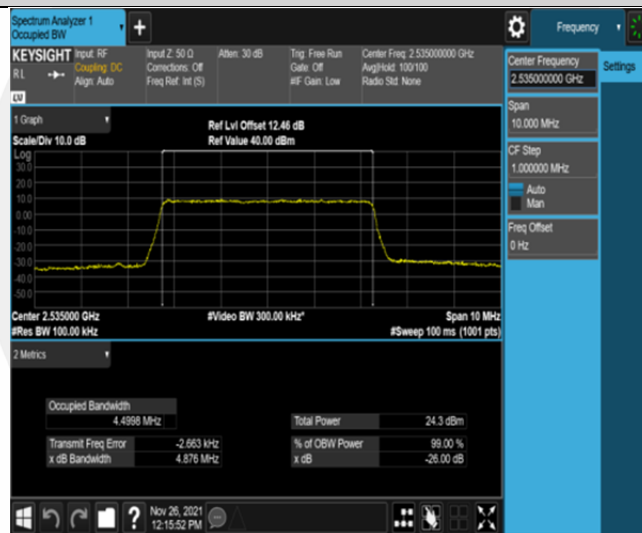
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.5004	4.884	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.4998	4.876	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.5002	4.872	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.5077	4.840	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.5075	4.845	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.4986	4.883	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.9860	9.577	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.9729	9.552	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.9927	9.556	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.9751	9.564	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.9659	9.527	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.9841	9.534	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.509	14.34	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.494	14.32	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.476	14.33	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.480	14.31	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.479	14.28	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.470	14.31	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.960	19.04	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.998	19.01	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.945	18.99	PASS
Band7	20MHz	16QAM	20850	100RB#0	17.952	19.02	PASS
Band7	20MHz	16QAM	21100	100RB#0	17.975	19.02	PASS
Band7	20MHz	16QAM	21350	100RB#0	17.960	18.98	PASS

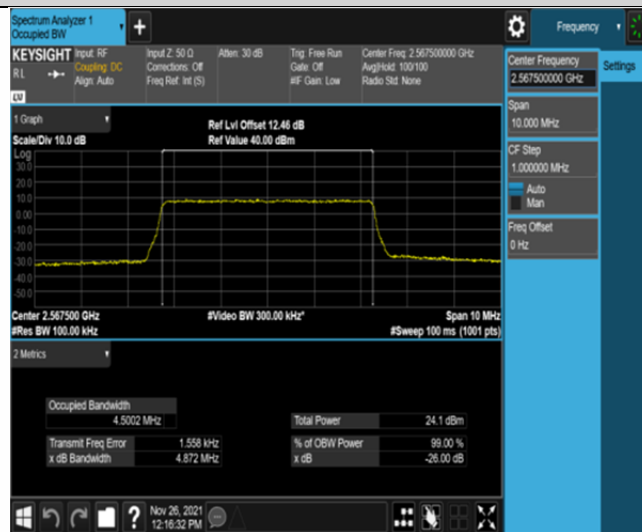
Test Graphs



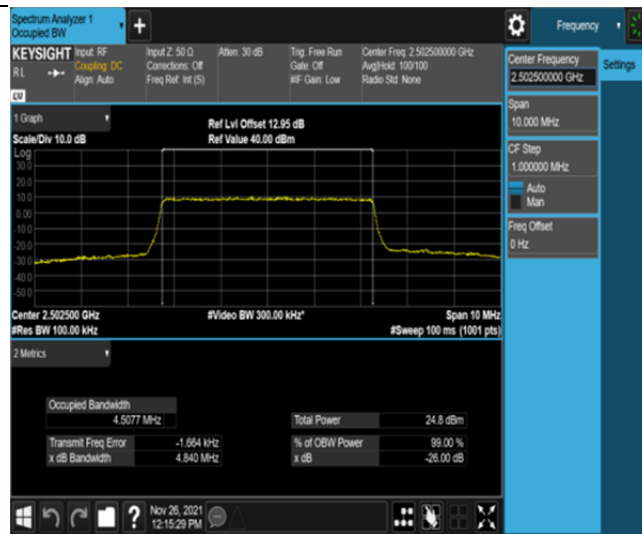
Band7-5MHz-QPSK-20775-25RB#0



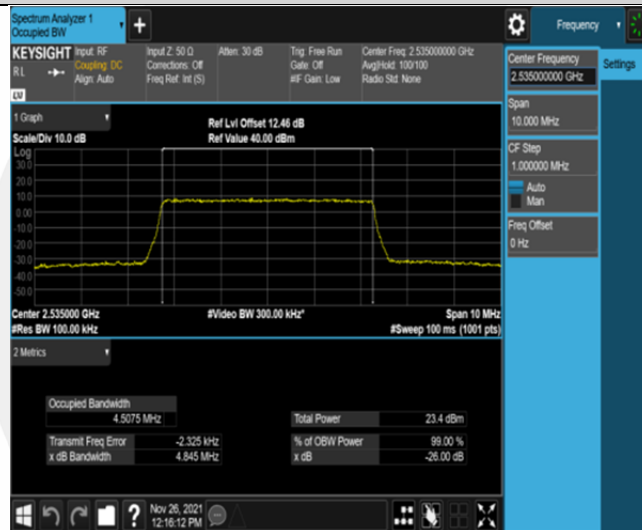
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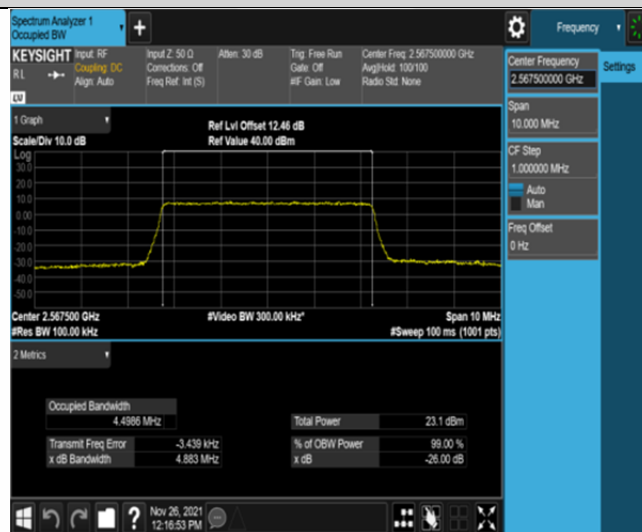
Band7-5MHz-QPSK-21425-25RB#0



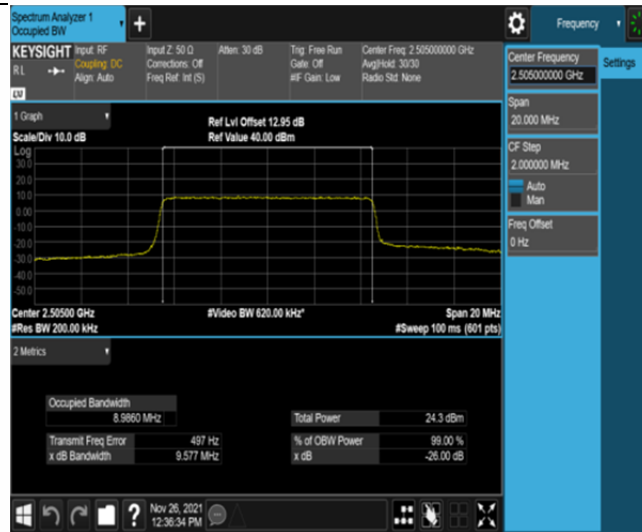
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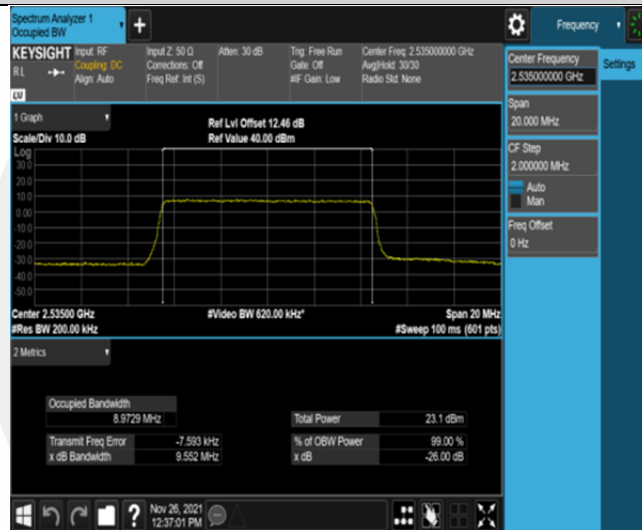
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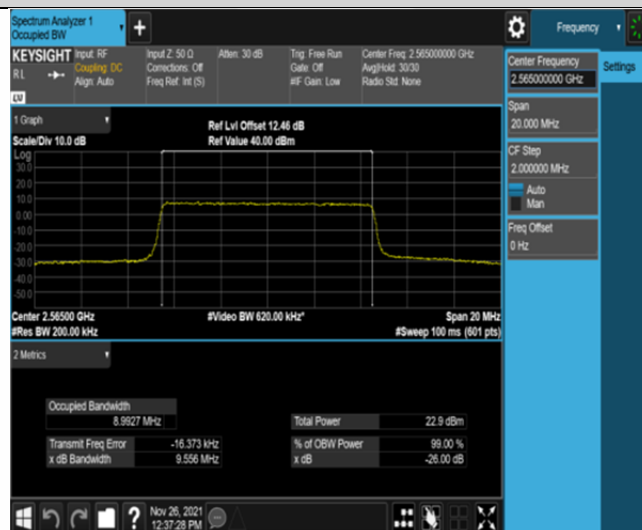
Band7-5MHz-16QAM-21425-25RB#0



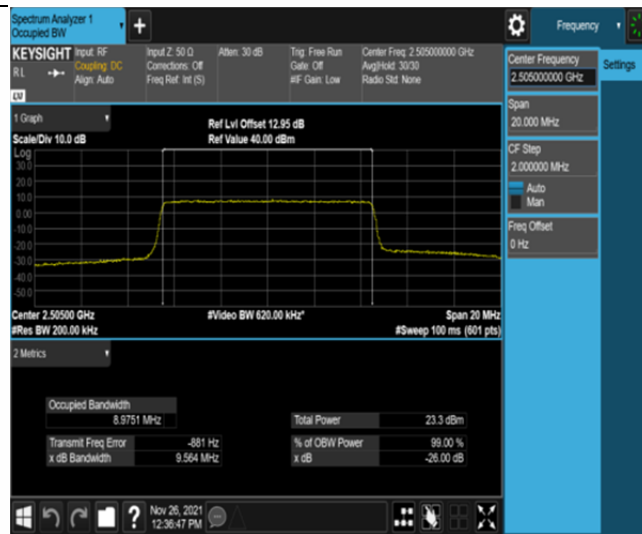
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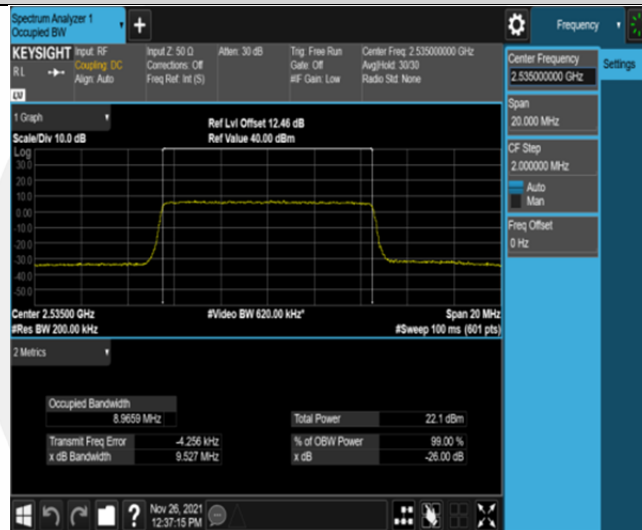
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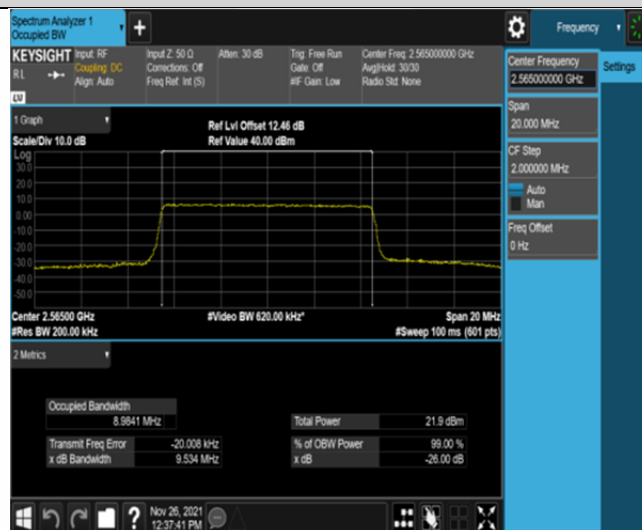
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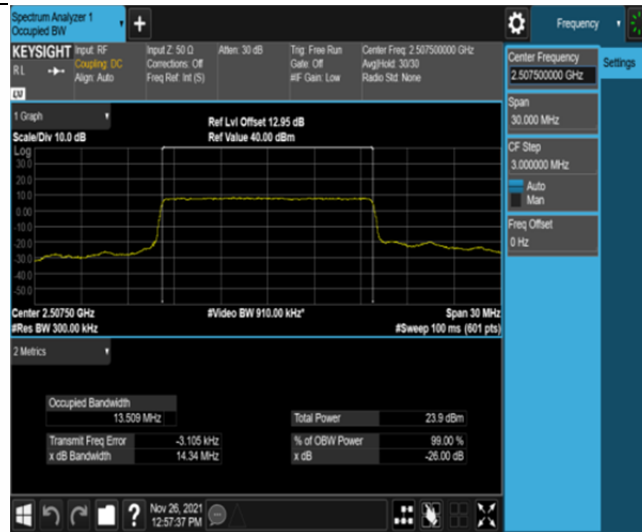
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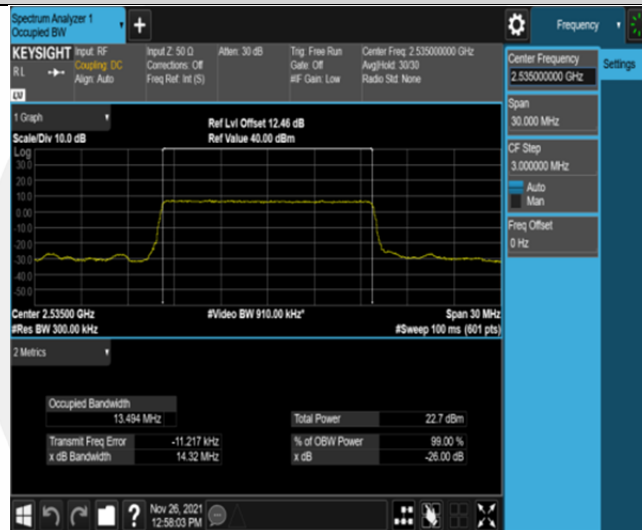
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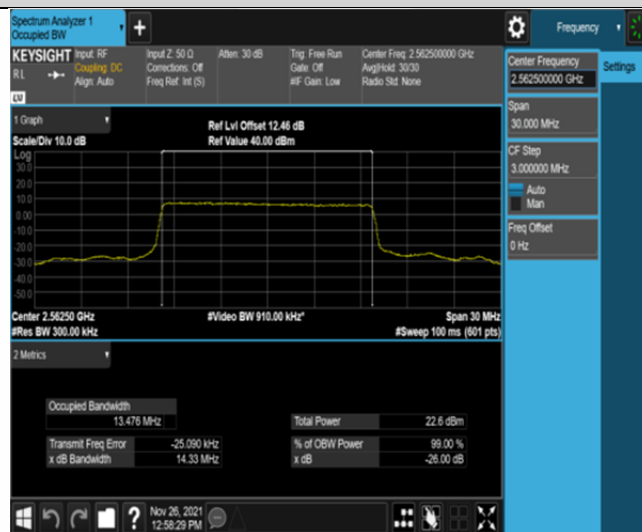
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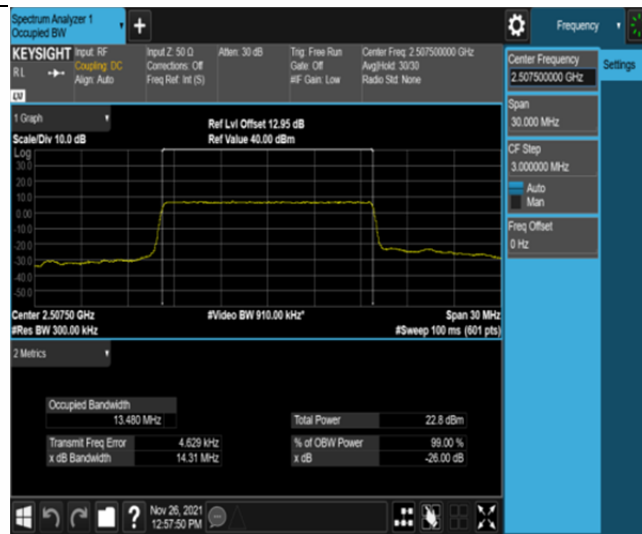
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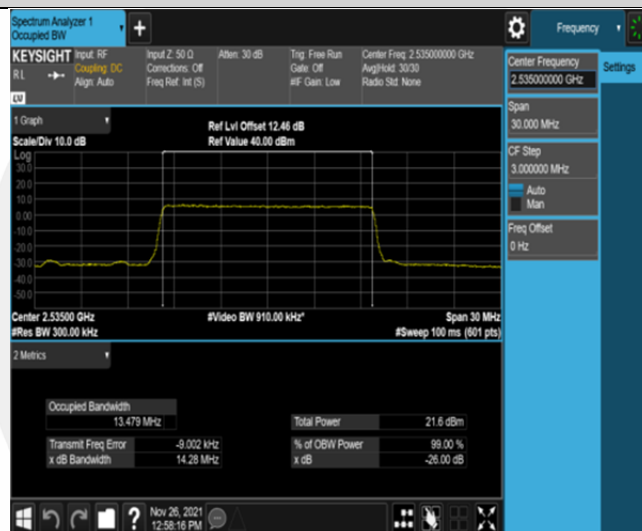
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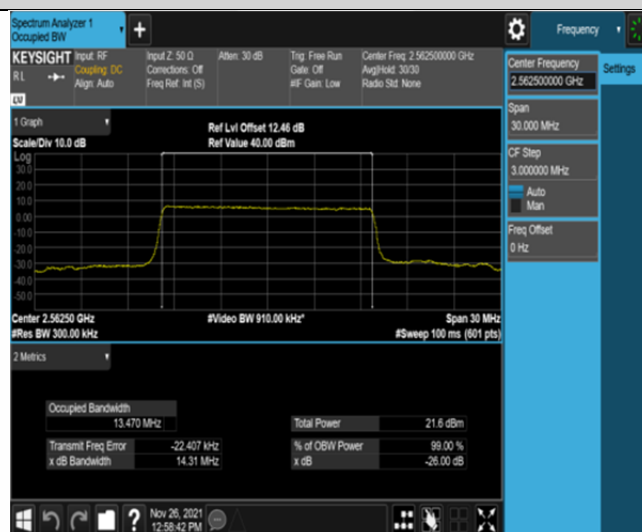
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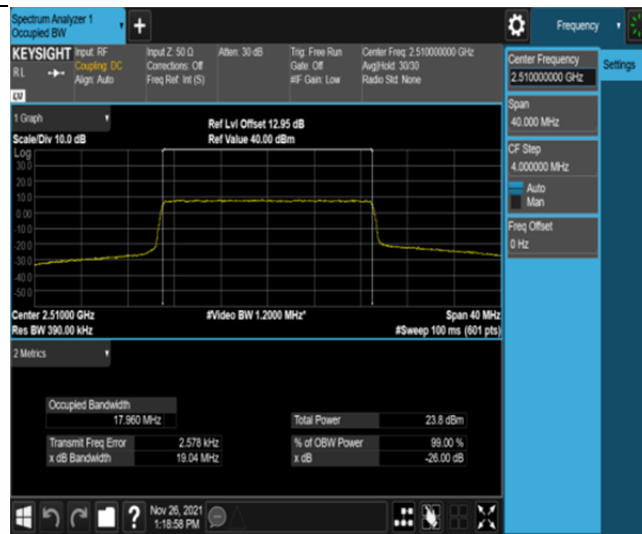
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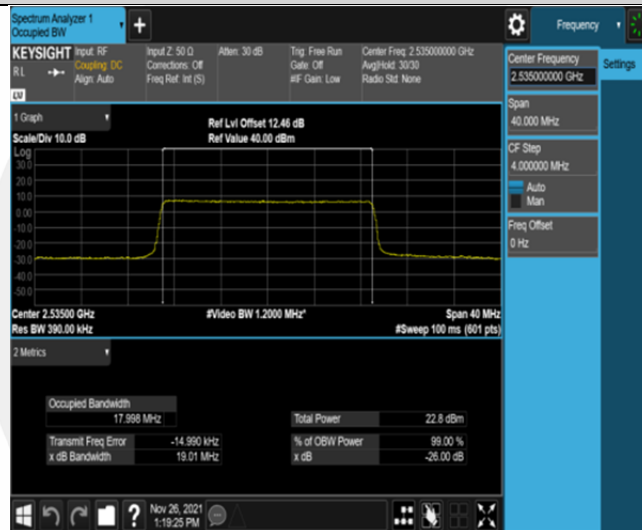
Band7-15MHz-16QAM-21100-75RB#0



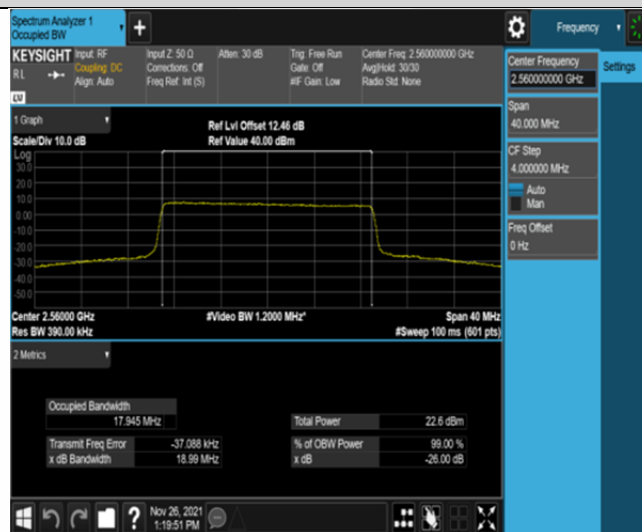
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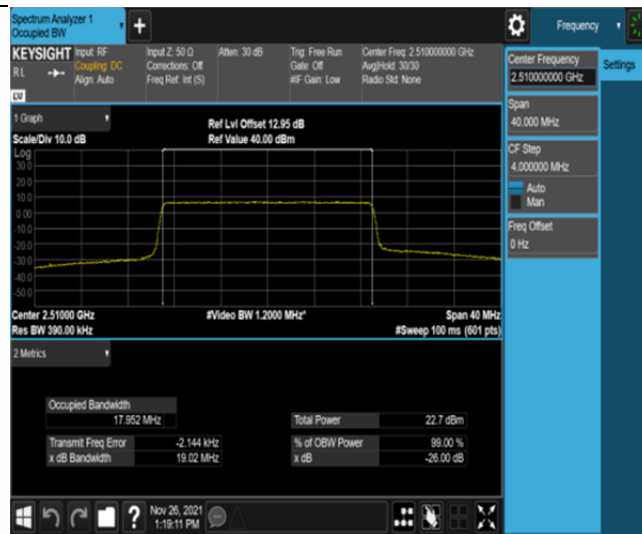
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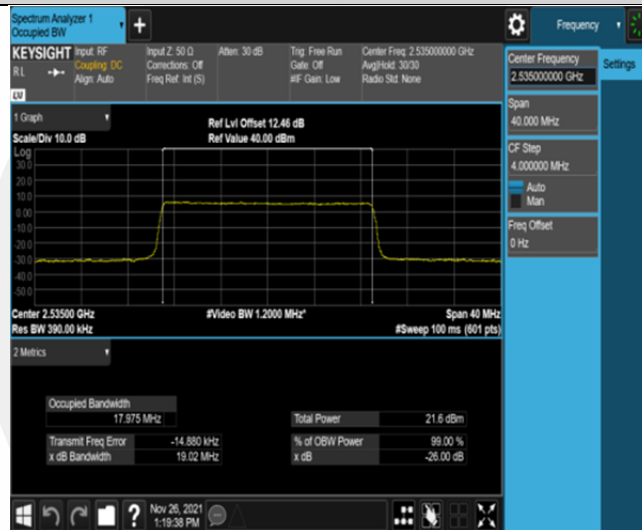
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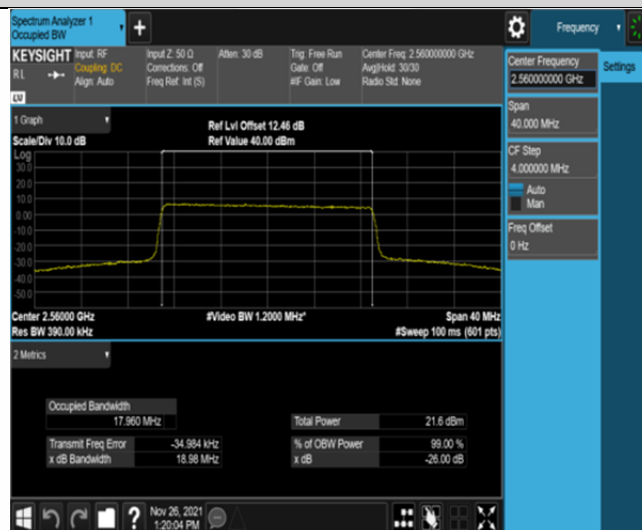
Band7-20MHz-QPSK-21350-100RB#0



Band7-20MHz-16QAM-20850-100RB#0



Band7-20MHz-16QAM-21100-100RB#0



Band7-20MHz-16QAM-21350-100RB#0

Appendix D: Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Config.	Result (dBm)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	-43.96,-39.32,-29.47,-23.41	PASS
Band7	5MHz	QPSK	21425	25RB#0	-26.68,-31.67,-41.10,-42.04	PASS
Band7	5MHz	16QAM	20775	25RB#0	-45.08,-40.99,-31.93,-25.41	PASS
Band7	5MHz	16QAM	21425	25RB#0	-27.76,-33.92,-42.10,-43.44	PASS
Band7	10MHz	QPSK	20800	50RB#0	-44.21,-32.10,-29.60,-25.60	PASS
Band7	10MHz	QPSK	21400	50RB#0	-26.62,-29.24,-33.46,-42.11	PASS
Band7	10MHz	16QAM	20800	50RB#0	-44.14,-34.37,-31.77,-27.82	PASS
Band7	10MHz	16QAM	21400	50RB#0	-29.04,-31.43,-35.46,-42.59	PASS
Band7	15MHz	QPSK	20825	75RB#0	-35.59,-30.21,-28.68,-24.95	PASS
Band7	15MHz	QPSK	21375	75RB#0	-24.64,-26.82,-29.37,-45.30	PASS
Band7	15MHz	16QAM	20825	75RB#0	-38.10,-32.80,-31.59,-28.62	PASS
Band7	15MHz	16QAM	21375	75RB#0	-28.09,-29.65,-31.81,-45.52	PASS
Band7	20MHz	QPSK	20850	100RB#0	-33.57,-30.13,-28.29,-25.86	PASS
Band7	20MHz	QPSK	21350	100RB#0	-25.38,-27.23,-30.34,-47.33	PASS
Band7	20MHz	16QAM	20850	100RB#0	-35.92,-32.78,-31.33,-28.73	PASS
Band7	20MHz	16QAM	21350	100RB#0	-28.48,-30.12,-32.66,-47.63	PASS