

Appendix for Band 7

Product Name: 4G Vehicle GPS Tracker

Model No: JM-VL01

Appendix A: Average Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	23.32	PASS
Band7	5MHz	QPSK	20775	1RB#12	23.49	PASS
Band7	5MHz	QPSK	20775	1RB#24	23.36	PASS
Band7	5MHz	QPSK	20775	12RB#0	22.05	PASS
Band7	5MHz	QPSK	20775	12RB#6	22.05	PASS
Band7	5MHz	QPSK	20775	12RB#13	22.08	PASS
Band7	5MHz	QPSK	20775	25RB#0	22.05	PASS
Band7	5MHz	QPSK	21100	1RB#0	23.36	PASS
Band7	5MHz	QPSK	21100	1RB#12	23.17	PASS
Band7	5MHz	QPSK	21100	1RB#24	23.35	PASS
Band7	5MHz	QPSK	21100	12RB#0	22.22	PASS
Band7	5MHz	QPSK	21100	12RB#6	22.10	PASS
Band7	5MHz	QPSK	21100	12RB#13	22.24	PASS
Band7	5MHz	QPSK	21100	25RB#0	22.01	PASS
Band7	5MHz	QPSK	21425	1RB#0	23.52	PASS
Band7	5MHz	QPSK	21425	1RB#12	23.48	PASS
Band7	5MHz	QPSK	21425	1RB#24	23.09	PASS
Band7	5MHz	QPSK	21425	12RB#0	22.44	PASS
Band7	5MHz	QPSK	21425	12RB#6	22.52	PASS
Band7	5MHz	QPSK	21425	12RB#13	22.36	PASS
Band7	5MHz	QPSK	21425	25RB#0	22.43	PASS
Band7	5MHz	16QAM	20775	1RB#0	21.57	PASS
Band7	5MHz	16QAM	20775	1RB#12	21.53	PASS
Band7	5MHz	16QAM	20775	1RB#24	21.63	PASS
Band7	5MHz	16QAM	20775	12RB#0	21.18	PASS

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Band7	5MHz	16QAM	20775	12RB#6	21.15	PASS
Band7	5MHz	16QAM	20775	12RB#13	21.17	PASS
Band7	5MHz	16QAM	20775	25RB#0	21.34	PASS
Band7	5MHz	16QAM	21100	1RB#0	21.56	PASS
Band7	5MHz	16QAM	21100	1RB#12	21.64	PASS
Band7	5MHz	16QAM	21100	1RB#24	21.66	PASS
Band7	5MHz	16QAM	21100	12RB#0	21.23	PASS
Band7	5MHz	16QAM	21100	12RB#6	21.23	PASS
Band7	5MHz	16QAM	21100	12RB#13	21.28	PASS
Band7	5MHz	16QAM	21100	25RB#0	21.34	PASS
Band7	5MHz	16QAM	21425	1RB#0	21.85	PASS
Band7	5MHz	16QAM	21425	1RB#12	21.80	PASS
Band7	5MHz	16QAM	21425	1RB#24	21.91	PASS
Band7	5MHz	16QAM	21425	12RB#0	21.45	PASS
Band7	5MHz	16QAM	21425	12RB#6	21.61	PASS
Band7	5MHz	16QAM	21425	12RB#13	21.46	PASS
Band7	5MHz	16QAM	21425	25RB#0	21.69	PASS
Band7	10MHz	QPSK	20800	1RB#0	23.14	PASS
Band7	10MHz	QPSK	20800	1RB#24	23.22	PASS
Band7	10MHz	QPSK	20800	1RB#49	23.15	PASS
Band7	10MHz	QPSK	20800	25RB#0	22.21	PASS
Band7	10MHz	QPSK	20800	25RB#12	22.18	PASS
Band7	10MHz	QPSK	20800	25RB#25	22.08	PASS
Band7	10MHz	QPSK	20800	50RB#0	22.22	PASS
Band7	10MHz	QPSK	21100	1RB#0	22.95	PASS
Band7	10MHz	QPSK	21100	1RB#24	22.95	PASS
Band7	10MHz	QPSK	21100	1RB#49	23.15	PASS
Band7	10MHz	QPSK	21100	25RB#0	22.14	PASS
Band7	10MHz	QPSK	21100	25RB#12	22.15	PASS
Band7	10MHz	QPSK	21100	25RB#25	22.25	PASS
Band7	10MHz	QPSK	21100	50RB#0	22.11	PASS
Band7	10MHz	QPSK	21400	1RB#0	23.16	PASS
Band7	10MHz	QPSK	21400	1RB#24	23.11	PASS
Band7	10MHz	QPSK	21400	1RB#49	23.14	PASS
Band7	10MHz	QPSK	21400	25RB#0	22.24	PASS
Band7	10MHz	QPSK	21400	25RB#12	22.33	PASS
Band7	10MHz	QPSK	21400	25RB#25	22.40	PASS

Band7	10MHz	QPSK	21400	50RB#0	22.31	PASS
Band7	10MHz	16QAM	20800	1RB#0	21.63	PASS
Band7	10MHz	16QAM	20800	1RB#24	21.69	PASS
Band7	10MHz	16QAM	20800	1RB#49	21.70	PASS
Band7	10MHz	16QAM	20800	25RB#0	21.33	PASS
Band7	10MHz	16QAM	20800	25RB#12	21.33	PASS
Band7	10MHz	16QAM	20800	25RB#25	21.38	PASS
Band7	10MHz	16QAM	20800	50RB#0	21.30	PASS
Band7	10MHz	16QAM	21100	1RB#0	21.89	PASS
Band7	10MHz	16QAM	21100	1RB#24	21.90	PASS
Band7	10MHz	16QAM	21100	1RB#49	21.95	PASS
Band7	10MHz	16QAM	21100	25RB#0	21.24	PASS
Band7	10MHz	16QAM	21100	25RB#12	21.25	PASS
Band7	10MHz	16QAM	21100	25RB#25	21.27	PASS
Band7	10MHz	16QAM	21100	50RB#0	21.35	PASS
Band7	10MHz	16QAM	21400	1RB#0	22.06	PASS
Band7	10MHz	16QAM	21400	1RB#24	22.11	PASS
Band7	10MHz	16QAM	21400	1RB#49	22.19	PASS
Band7	10MHz	16QAM	21400	25RB#0	21.47	PASS
Band7	10MHz	16QAM	21400	25RB#12	21.39	PASS
Band7	10MHz	16QAM	21400	25RB#25	21.47	PASS
Band7	10MHz	16QAM	21400	50RB#0	21.48	PASS
Band7	15MHz	QPSK	20825	1RB#0	22.92	PASS
Band7	15MHz	QPSK	20825	1RB#38	22.87	PASS
Band7	15MHz	QPSK	20825	1RB#74	22.79	PASS
Band7	15MHz	QPSK	20825	38RB#0	22.11	PASS
Band7	15MHz	QPSK	20825	38RB#18	22.23	PASS
Band7	15MHz	QPSK	20825	38RB#37	22.04	PASS
Band7	15MHz	QPSK	20825	75RB#0	22.23	PASS
Band7	15MHz	QPSK	21100	1RB#0	22.98	PASS
Band7	15MHz	QPSK	21100	1RB#38	23.01	PASS
Band7	15MHz	QPSK	21100	1RB#74	23.18	PASS
Band7	15MHz	QPSK	21100	38RB#0	21.87	PASS
Band7	15MHz	QPSK	21100	38RB#18	21.85	PASS
Band7	15MHz	QPSK	21100	38RB#37	21.93	PASS
Band7	15MHz	QPSK	21100	75RB#0	22.11	PASS
Band7	15MHz	QPSK	21375	1RB#0	23.22	PASS

Band7	15MHz	QPSK	21375	1RB#38	23.22	PASS
Band7	15MHz	QPSK	21375	1RB#74	23.13	PASS
Band7	15MHz	QPSK	21375	38RB#0	22.10	PASS
Band7	15MHz	QPSK	21375	38RB#18	22.12	PASS
Band7	15MHz	QPSK	21375	38RB#37	22.31	PASS
Band7	15MHz	QPSK	21375	75RB#0	22.26	PASS
Band7	15MHz	16QAM	20825	1RB#0	22.14	PASS
Band7	15MHz	16QAM	20825	1RB#38	22.12	PASS
Band7	15MHz	16QAM	20825	1RB#74	22.14	PASS
Band7	15MHz	16QAM	20825	38RB#0	22.14	PASS
Band7	15MHz	16QAM	20825	38RB#18	22.15	PASS
Band7	15MHz	16QAM	20825	38RB#37	22.27	PASS
Band7	15MHz	16QAM	20825	75RB#0	21.28	PASS
Band7	15MHz	16QAM	21100	1RB#0	21.86	PASS
Band7	15MHz	16QAM	21100	1RB#38	21.86	PASS
Band7	15MHz	16QAM	21100	1RB#74	22.00	PASS
Band7	15MHz	16QAM	21100	38RB#0	21.87	PASS
Band7	15MHz	16QAM	21100	38RB#18	21.87	PASS
Band7	15MHz	16QAM	21100	38RB#37	21.91	PASS
Band7	15MHz	16QAM	21100	75RB#0	21.31	PASS
Band7	15MHz	16QAM	21375	1RB#0	22.17	PASS
Band7	15MHz	16QAM	21375	1RB#38	22.18	PASS
Band7	15MHz	16QAM	21375	1RB#74	22.28	PASS
Band7	15MHz	16QAM	21375	38RB#0	22.10	PASS
Band7	15MHz	16QAM	21375	38RB#18	22.14	PASS
Band7	15MHz	16QAM	21375	38RB#37	22.25	PASS
Band7	15MHz	16QAM	21375	75RB#0	21.45	PASS
Band7	20MHz	QPSK	20850	1RB#0	23.23	PASS
Band7	20MHz	QPSK	20850	1RB#49	23.14	PASS
Band7	20MHz	QPSK	20850	1RB#99	23.05	PASS
Band7	20MHz	QPSK	20850	50RB#0	22.06	PASS
Band7	20MHz	QPSK	20850	50RB#25	22.10	PASS
Band7	20MHz	QPSK	20850	50RB#50	22.16	PASS
Band7	20MHz	QPSK	20850	100RB#0	22.13	PASS
Band7	20MHz	QPSK	21100	1RB#0	23.32	PASS
Band7	20MHz	QPSK	21100	1RB#49	23.43	PASS
Band7	20MHz	QPSK	21100	1RB#99	23.54	PASS

Band7	20MHz	QPSK	21100	50RB#0	22.09	PASS
Band7	20MHz	QPSK	21100	50RB#25	22.19	PASS
Band7	20MHz	QPSK	21100	50RB#50	22.36	PASS
Band7	20MHz	QPSK	21100	100RB#0	22.20	PASS
Band7	20MHz	QPSK	21350	1RB#0	23.48	PASS
Band7	20MHz	QPSK	21350	1RB#49	23.46	PASS
Band7	20MHz	QPSK	21350	1RB#99	23.62	PASS
Band7	20MHz	QPSK	21350	50RB#0	22.27	PASS
Band7	20MHz	QPSK	21350	50RB#25	22.26	PASS
Band7	20MHz	QPSK	21350	50RB#50	22.43	PASS
Band7	20MHz	QPSK	21350	100RB#0	22.35	PASS
Band7	20MHz	16QAM	20850	1RB#0	22.66	PASS
Band7	20MHz	16QAM	20850	1RB#49	22.69	PASS
Band7	20MHz	16QAM	20850	1RB#99	22.53	PASS
Band7	20MHz	16QAM	20850	50RB#0	21.20	PASS
Band7	20MHz	16QAM	20850	50RB#25	21.27	PASS
Band7	20MHz	16QAM	20850	50RB#50	21.29	PASS
Band7	20MHz	16QAM	20850	100RB#0	21.35	PASS
Band7	20MHz	16QAM	21100	1RB#0	21.56	PASS
Band7	20MHz	16QAM	21100	1RB#49	21.76	PASS
Band7	20MHz	16QAM	21100	1RB#99	21.90	PASS
Band7	20MHz	16QAM	21100	50RB#0	21.37	PASS
Band7	20MHz	16QAM	21100	50RB#25	21.39	PASS
Band7	20MHz	16QAM	21100	50RB#50	21.43	PASS
Band7	20MHz	16QAM	21100	100RB#0	21.28	PASS
Band7	20MHz	16QAM	21350	1RB#0	22.13	PASS
Band7	20MHz	16QAM	21350	1RB#49	22.05	PASS
Band7	20MHz	16QAM	21350	1RB#99	22.20	PASS
Band7	20MHz	16QAM	21350	50RB#0	21.51	PASS
Band7	20MHz	16QAM	21350	50RB#25	21.50	PASS
Band7	20MHz	16QAM	21350	50RB#50	21.72	PASS
Band7	20MHz	16QAM	21350	100RB#0	21.47	PASS

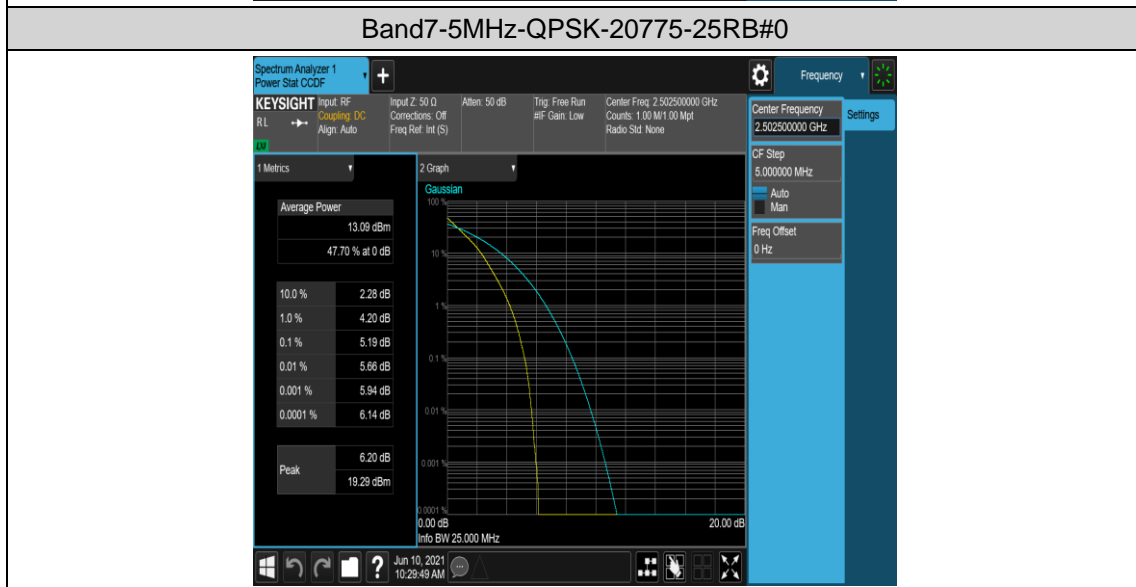
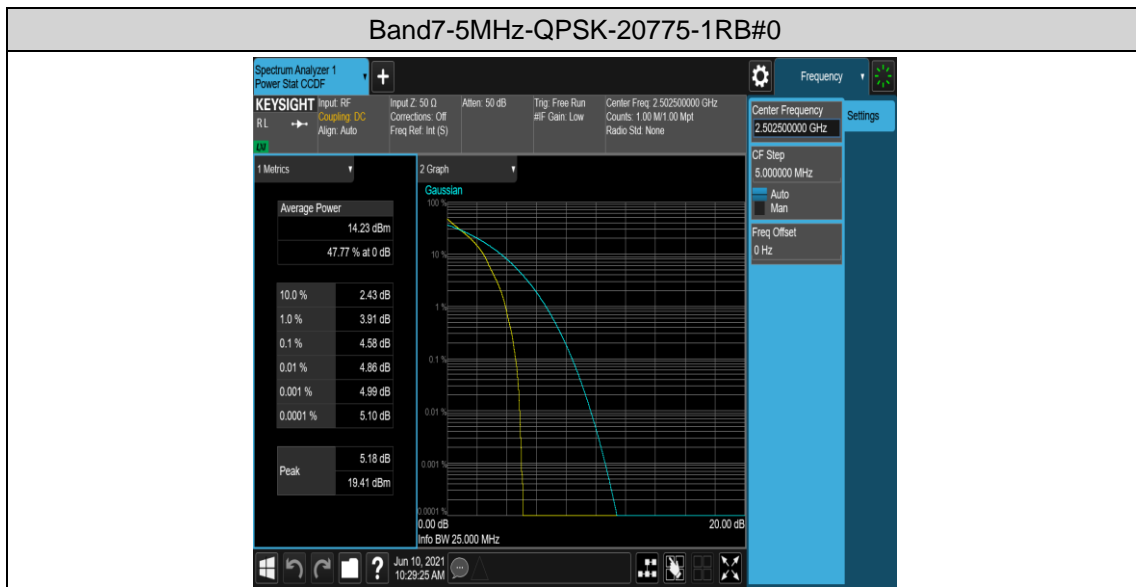
Appendix B: Peak-to-Average Ratio(CCDF)

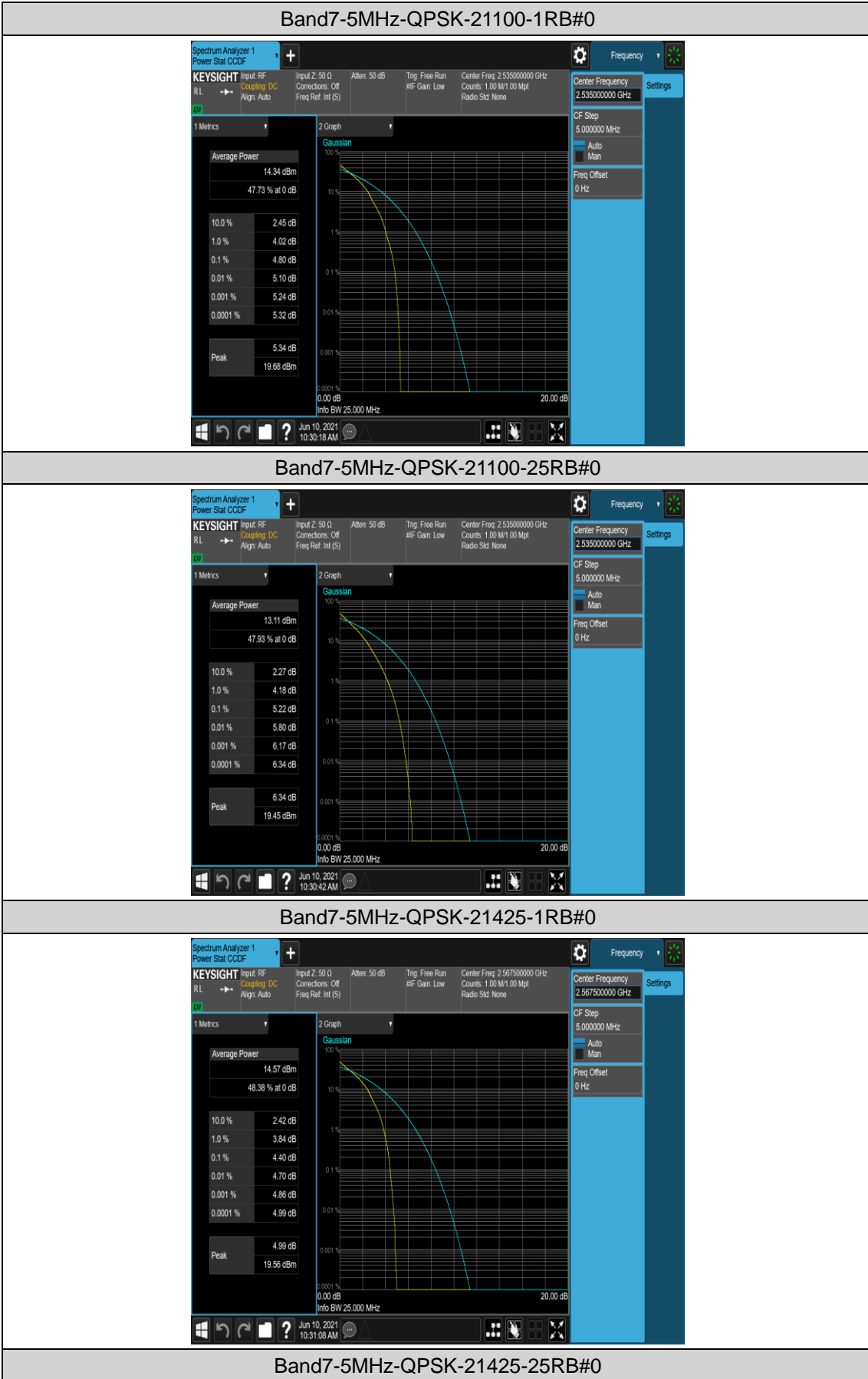
Test Result

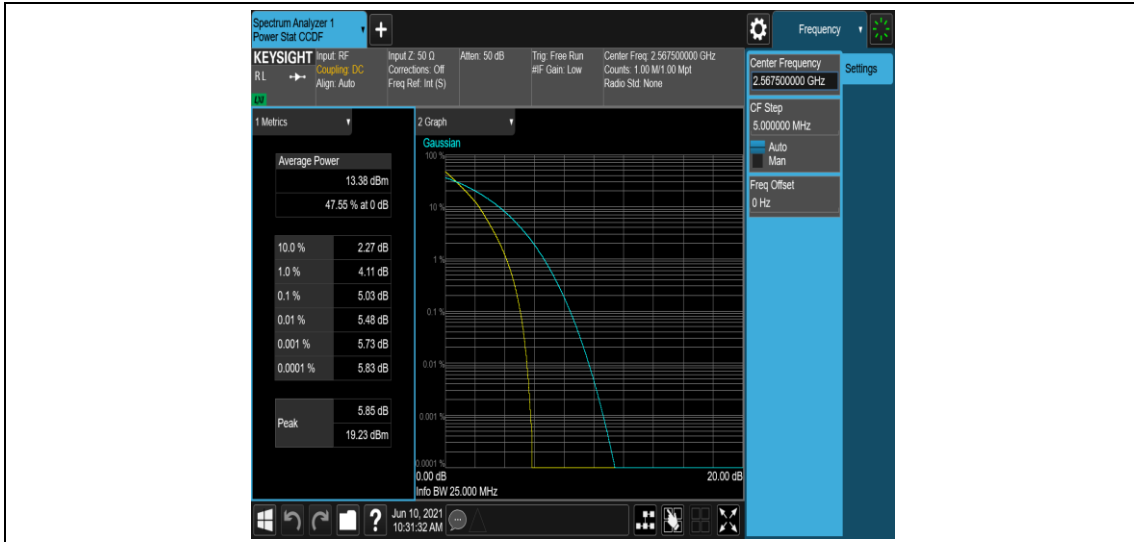
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	4.58	13	PASS
Band7	5MHz	QPSK	20775	25RB#0	5.19	13	PASS
Band7	5MHz	QPSK	21100	1RB#0	4.80	13	PASS
Band7	5MHz	QPSK	21100	25RB#0	5.22	13	PASS
Band7	5MHz	QPSK	21425	1RB#0	4.40	13	PASS
Band7	5MHz	QPSK	21425	25RB#0	5.03	13	PASS
Band7	5MHz	16QAM	20775	1RB#0	5.49	13	PASS
Band7	5MHz	16QAM	20775	25RB#0	5.85	13	PASS
Band7	5MHz	16QAM	21100	1RB#0	5.49	13	PASS
Band7	5MHz	16QAM	21100	25RB#0	5.89	13	PASS
Band7	5MHz	16QAM	21425	1RB#0	5.43	13	PASS
Band7	5MHz	16QAM	21425	25RB#0	5.71	13	PASS
Band7	10MHz	QPSK	20800	1RB#0	4.61	13	PASS
Band7	10MHz	QPSK	20800	50RB#0	5.32	13	PASS
Band7	10MHz	QPSK	21100	1RB#0	4.74	13	PASS
Band7	10MHz	QPSK	21100	50RB#0	5.17	13	PASS
Band7	10MHz	QPSK	21400	1RB#0	4.70	13	PASS
Band7	10MHz	QPSK	21400	50RB#0	5.07	13	PASS
Band7	10MHz	16QAM	20800	1RB#0	5.61	13	PASS
Band7	10MHz	16QAM	20800	50RB#0	6.01	13	PASS
Band7	10MHz	16QAM	21100	1RB#0	5.66	13	PASS
Band7	10MHz	16QAM	21100	50RB#0	5.92	13	PASS
Band7	10MHz	16QAM	21400	1RB#0	5.62	13	PASS
Band7	10MHz	16QAM	21400	50RB#0	5.81	13	PASS
Band7	15MHz	QPSK	20825	1RB#0	4.67	13	PASS
Band7	15MHz	QPSK	20825	75RB#0	5.64	13	PASS
Band7	15MHz	QPSK	21100	1RB#0	4.76	13	PASS
Band7	15MHz	QPSK	21100	75RB#0	5.49	13	PASS
Band7	15MHz	QPSK	21375	1RB#0	4.55	13	PASS
Band7	15MHz	QPSK	21375	75RB#0	5.31	13	PASS
Band7	15MHz	16QAM	20825	1RB#0	5.40	13	PASS
Band7	15MHz	16QAM	20825	75RB#0	6.12	13	PASS
Band7	15MHz	16QAM	21100	1RB#0	5.75	13	PASS
Band7	15MHz	16QAM	21100	75RB#0	5.99	13	PASS
Band7	15MHz	16QAM	21375	1RB#0	5.57	13	PASS

Band7	15MHz	16QAM	21375	75RB#0	5.91	13	PASS
Band7	20MHz	QPSK	20850	1RB#0	4.37	13	PASS
Band7	20MHz	QPSK	20850	100RB#0	5.48	13	PASS
Band7	20MHz	QPSK	21100	1RB#0	4.84	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.34	13	PASS
Band7	20MHz	QPSK	21350	1RB#0	4.29	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.19	13	PASS
Band7	20MHz	16QAM	20850	1RB#0	5.34	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	6.13	13	PASS
Band7	20MHz	16QAM	21100	1RB#0	5.61	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	5.99	13	PASS
Band7	20MHz	16QAM	21350	1RB#0	5.43	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	5.96	13	PASS

Test Graphs







Band7-5MHz-16QAM-20775-1RB#0



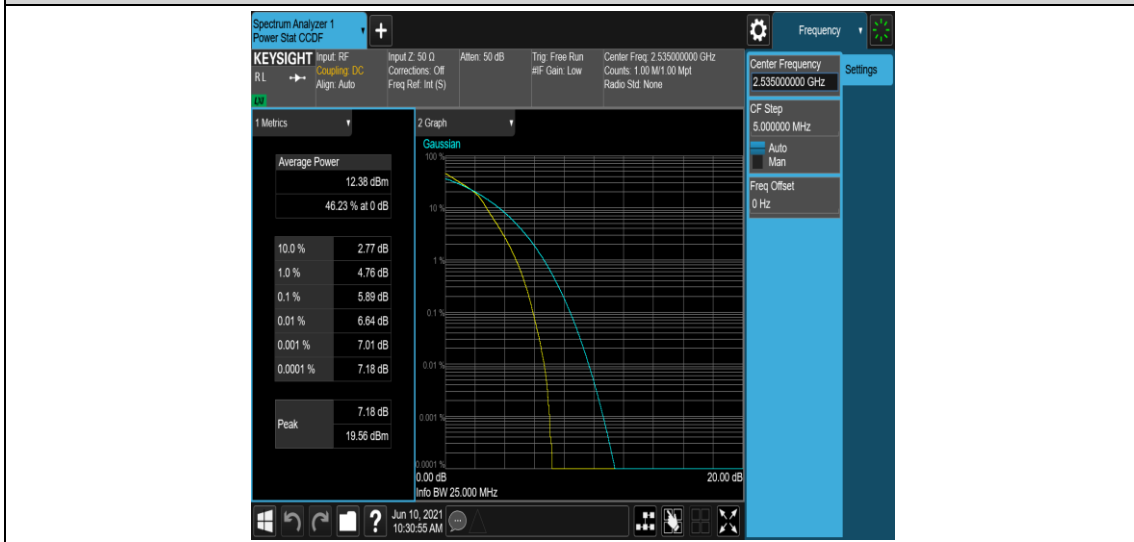
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Band7-5MHz-16QAM-21100-1RB#0



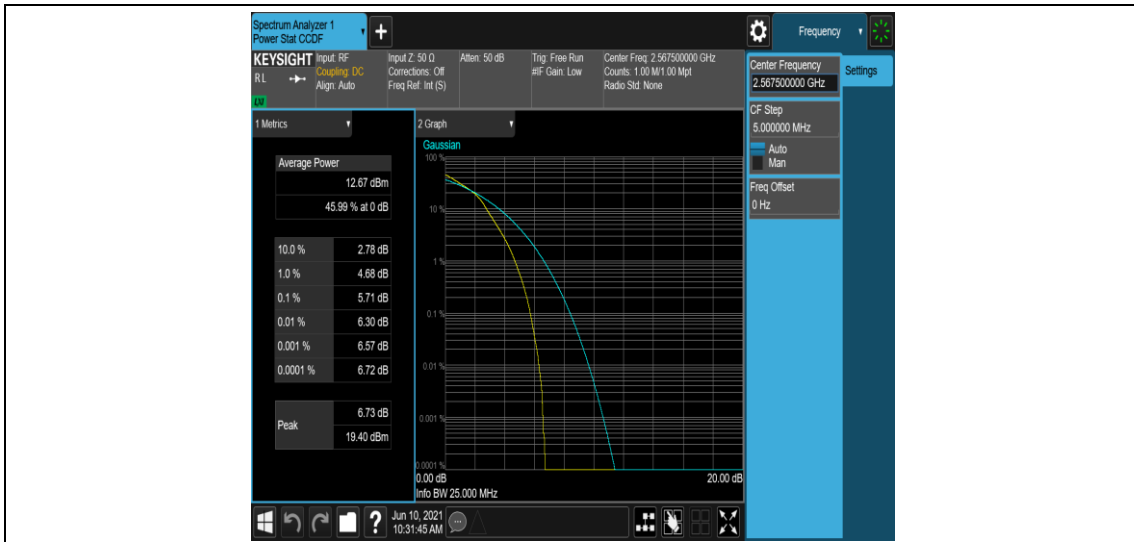
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Band7-5MHz-16QAM-21425-1RB#0



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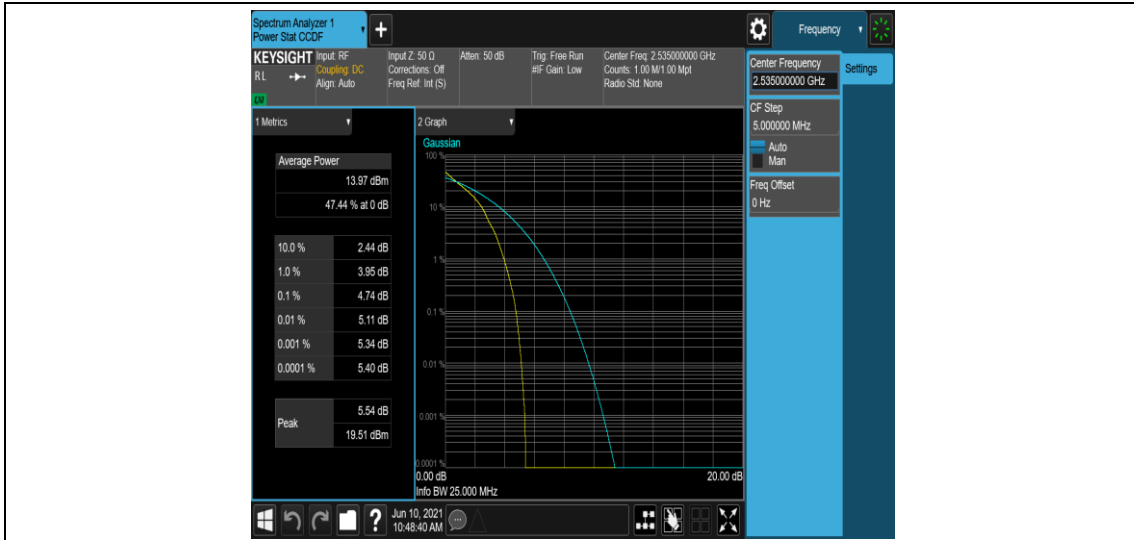
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Band7-10MHz-QPSK-20800-50RB#0



Band7-10MHz-QPSK-21100-1RB#0



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



Band7-10MHz-QPSK-21400-1RB#0



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



Band7-10MHz-16QAM-20800-1RB#0



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Band7-10MHz-16QAM-21100-1RB#0



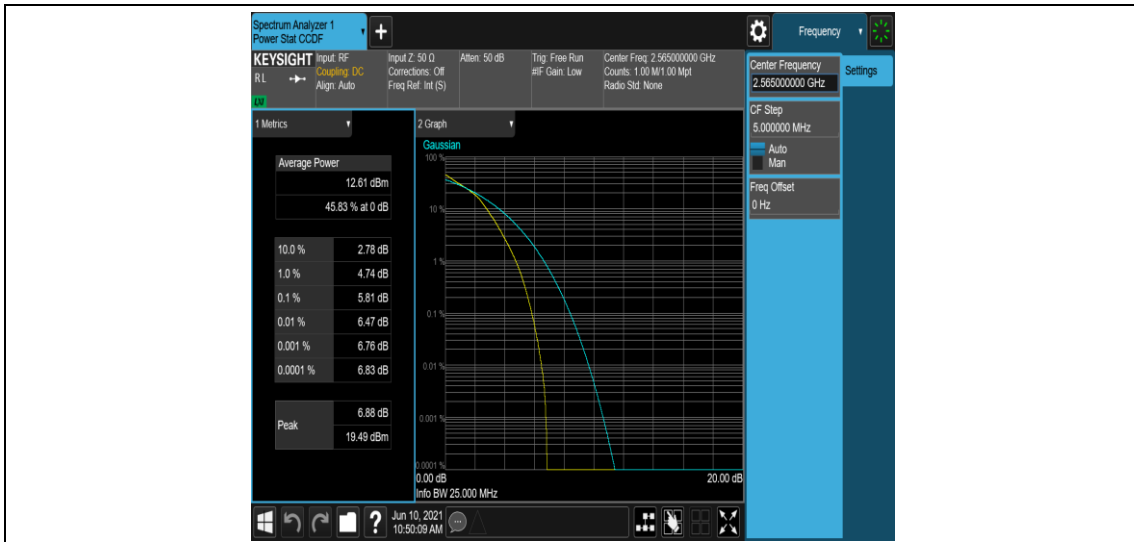
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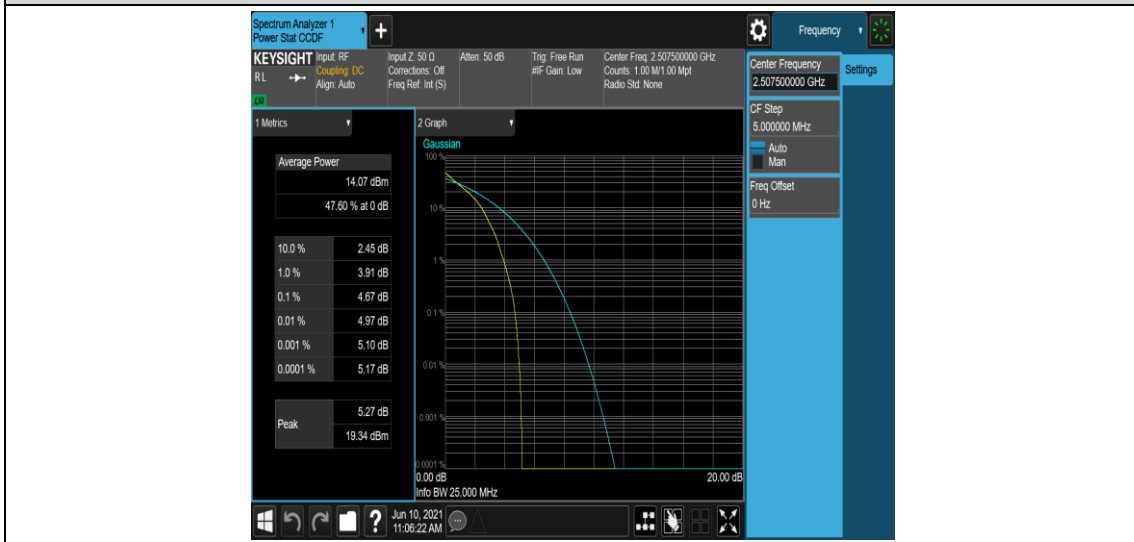
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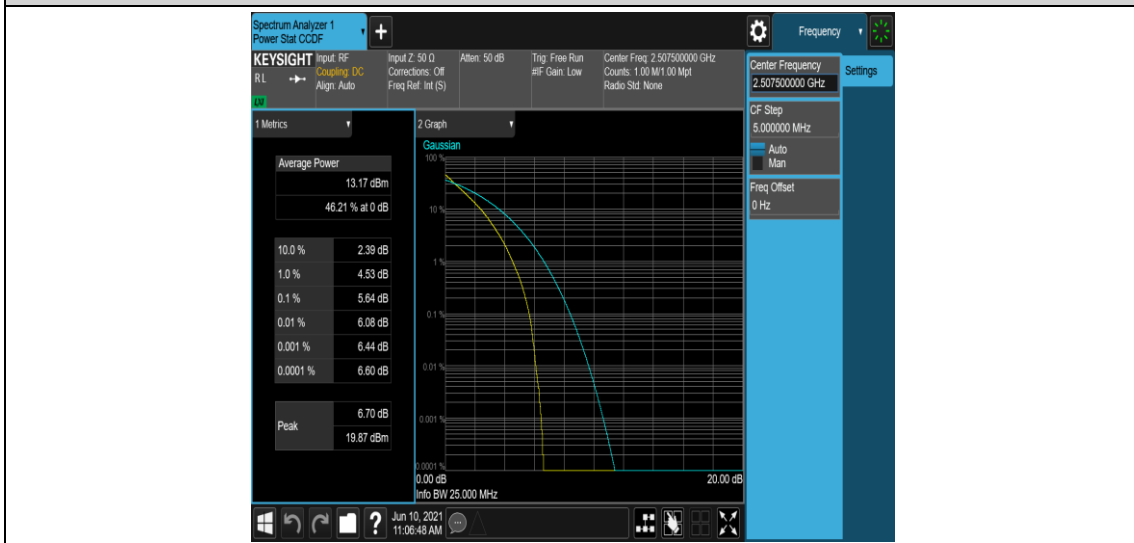
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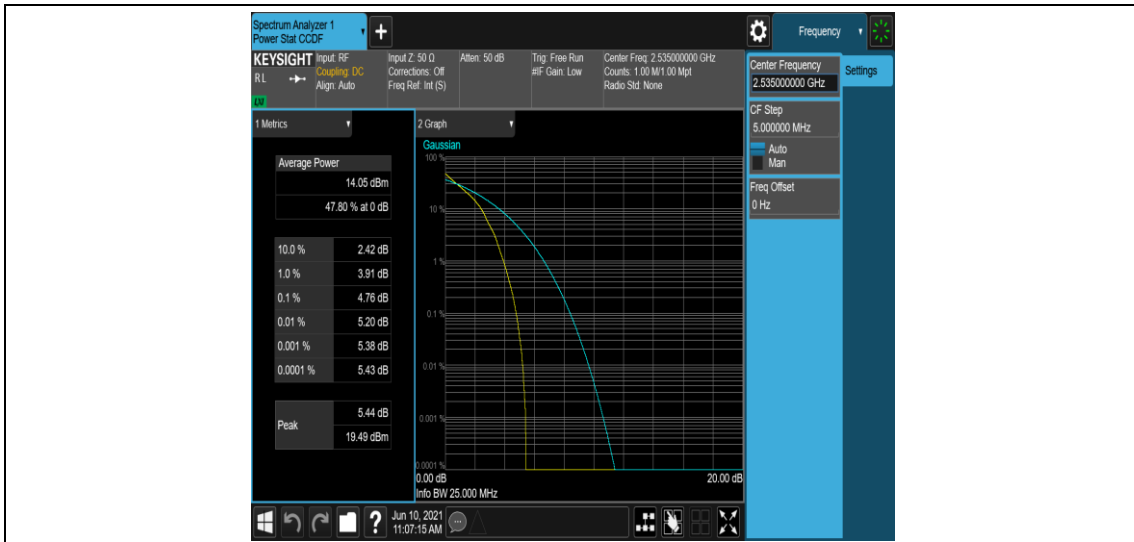
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Band7-15MHz-QPSK-20825-75RB#0



Band7-15MHz-QPSK-21100-1RB#0



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



Band7-15MHz-QPSK-21375-1RB#0



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



Band7-15MHz-16QAM-20825-1RB#0



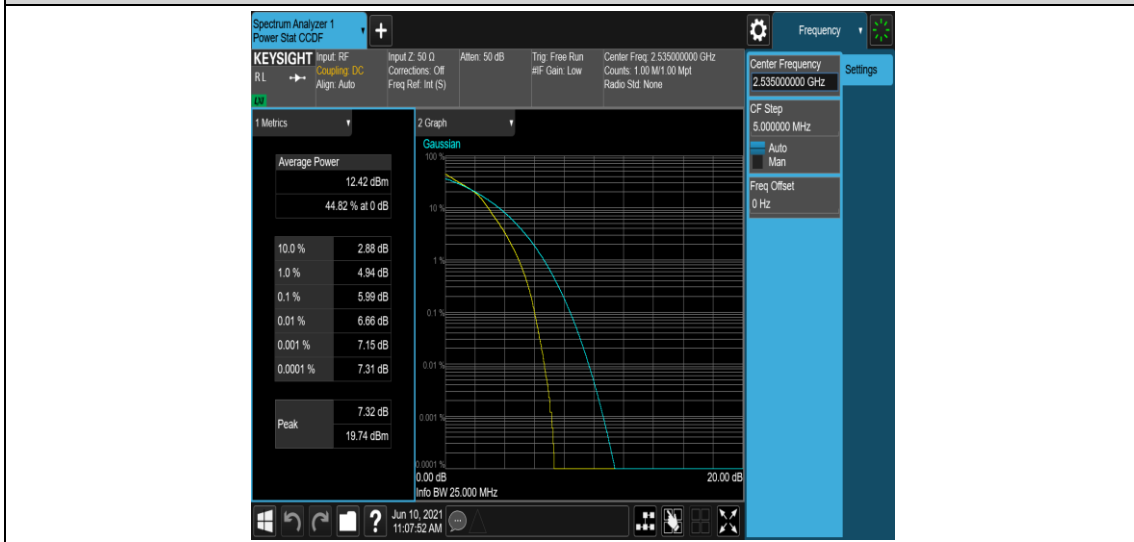
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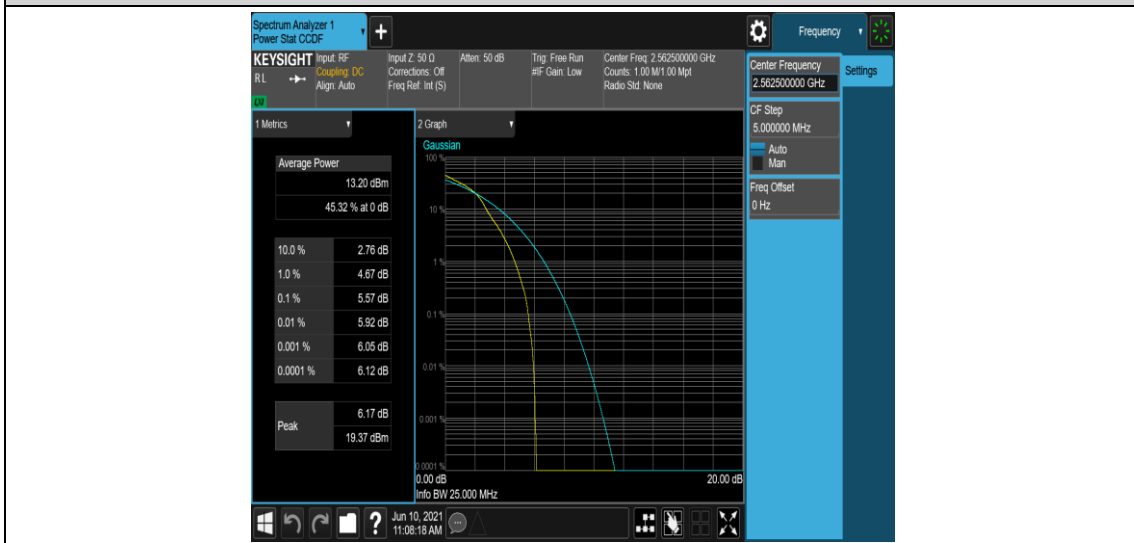
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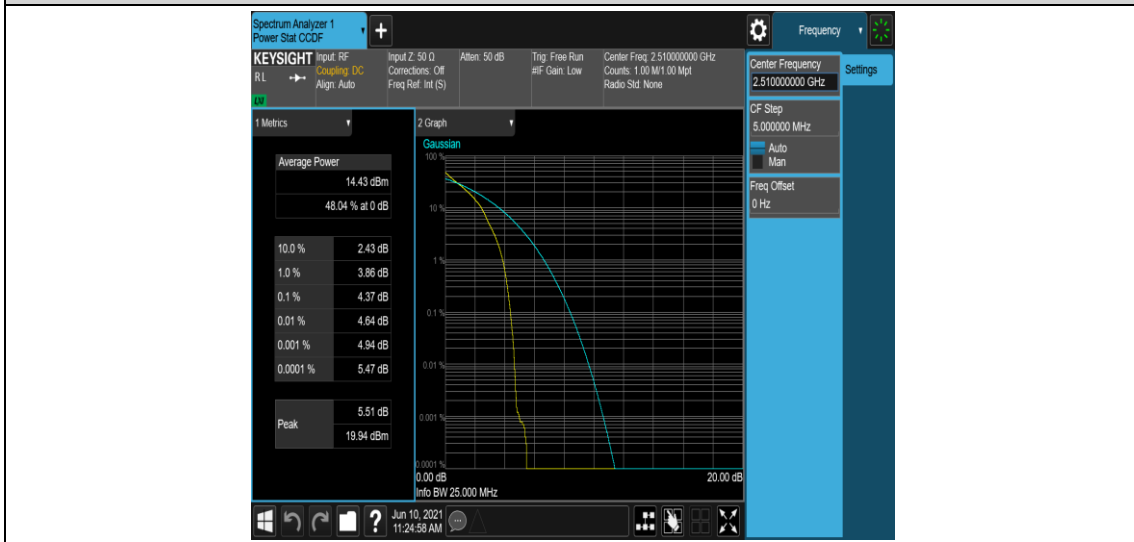
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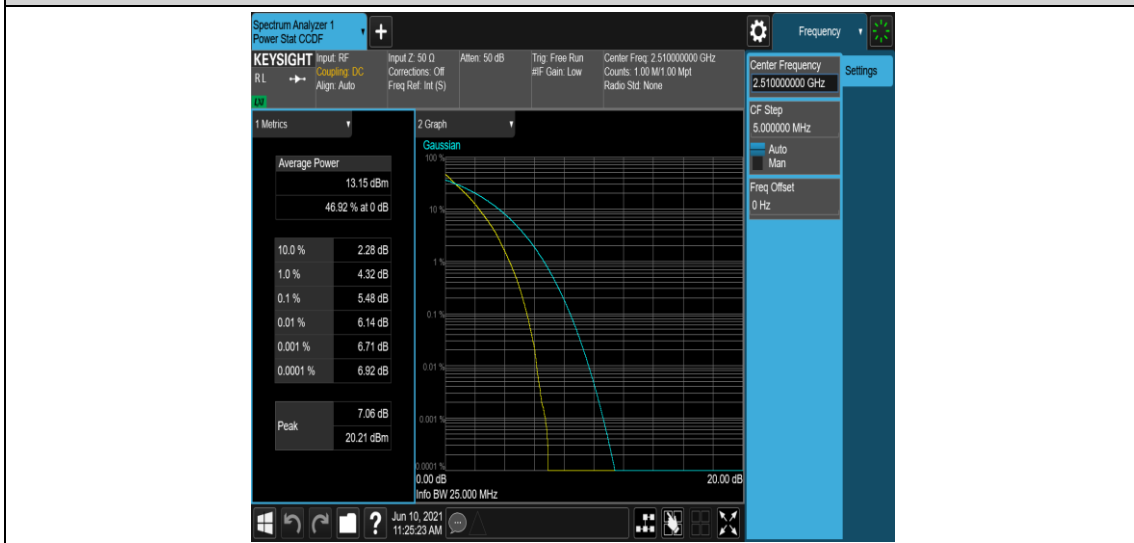
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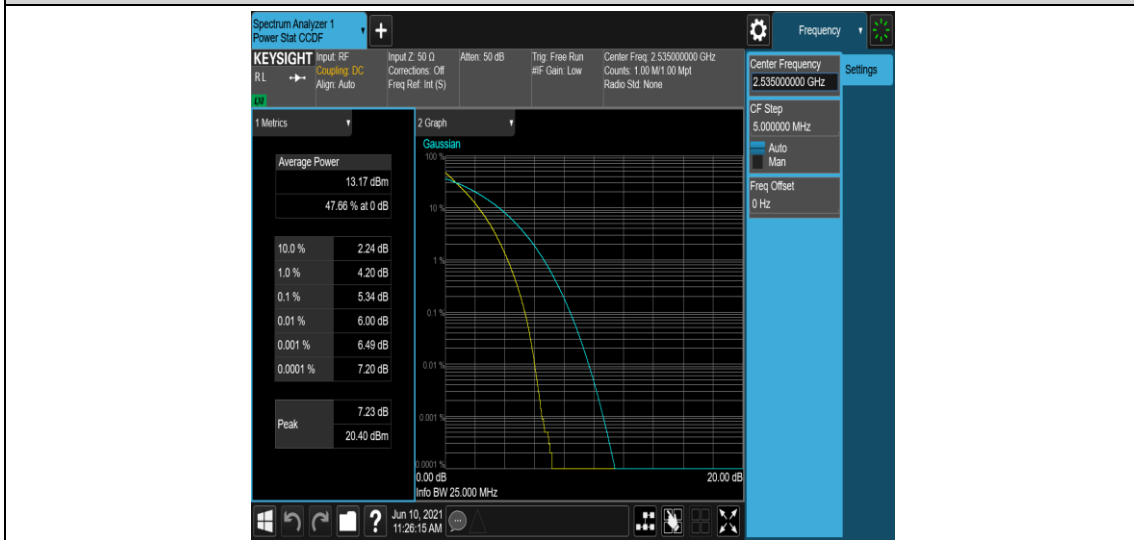
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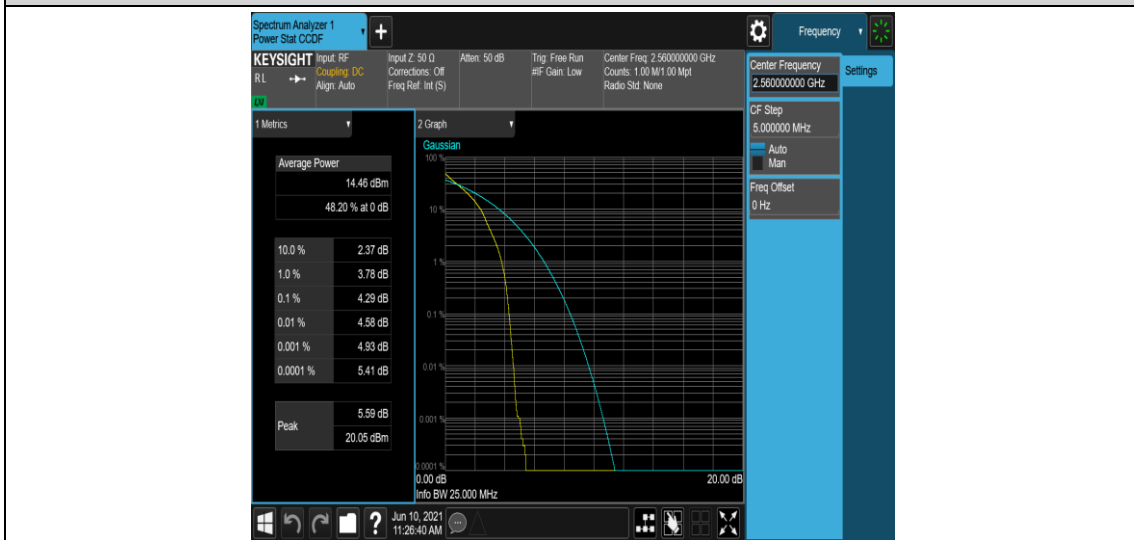
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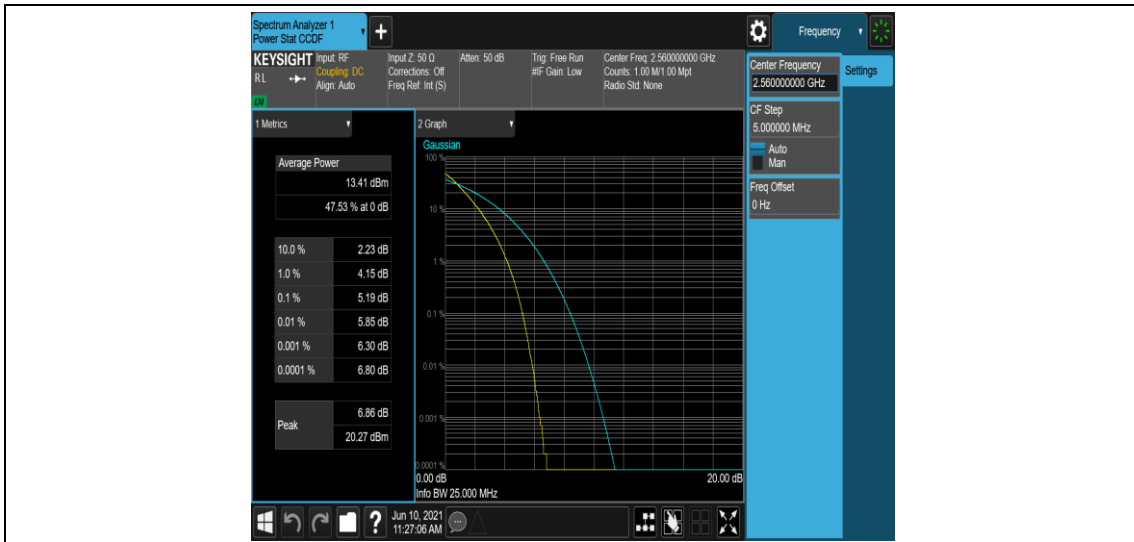
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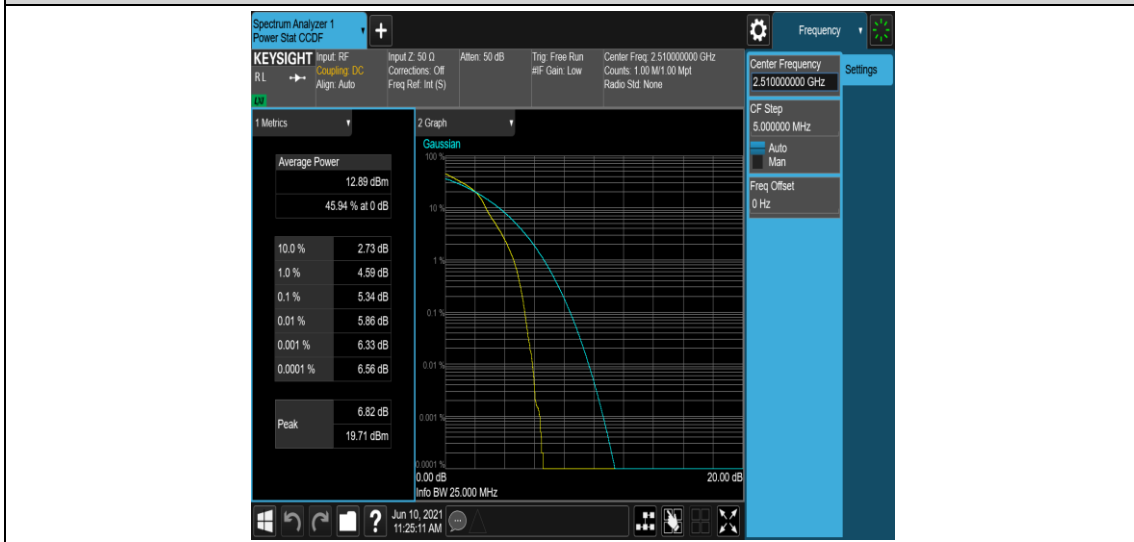
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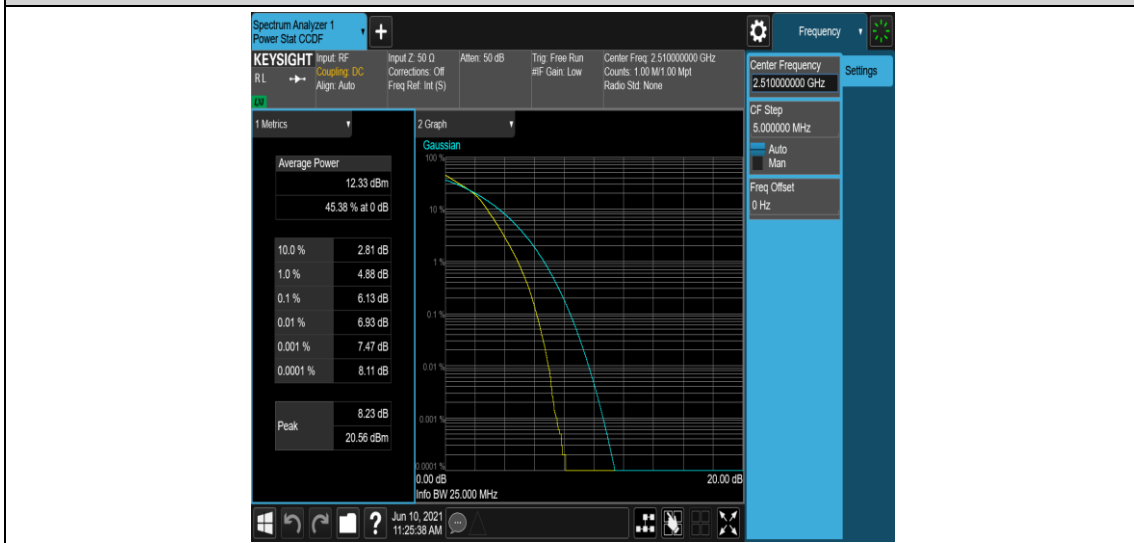
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Band7-20MHz-16QAM-20850-1RB#0



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



Band7-20MHz-16QAM-21100-1RB#0



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



Band7-20MHz-16QAM-21350-1RB#0



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

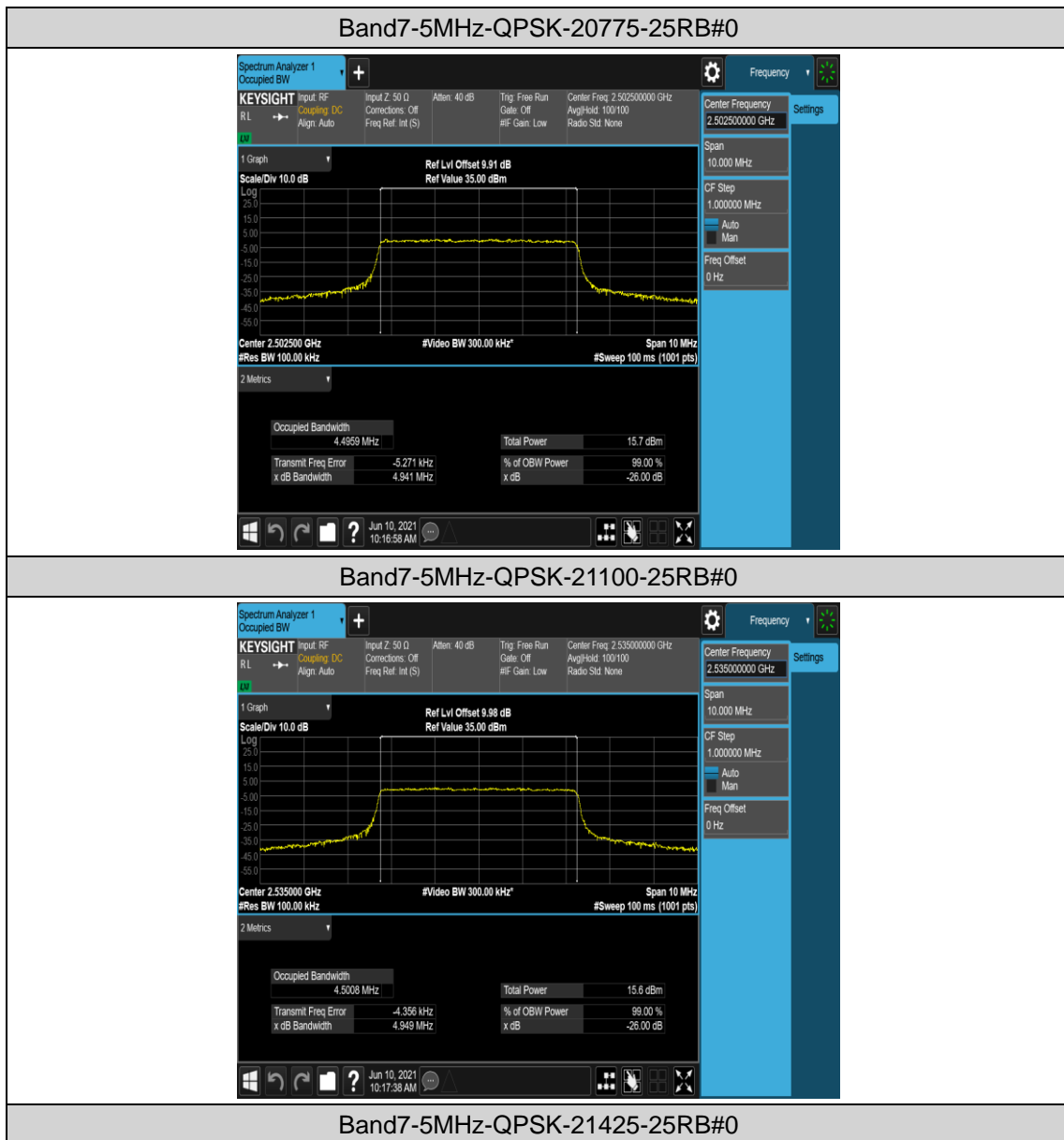


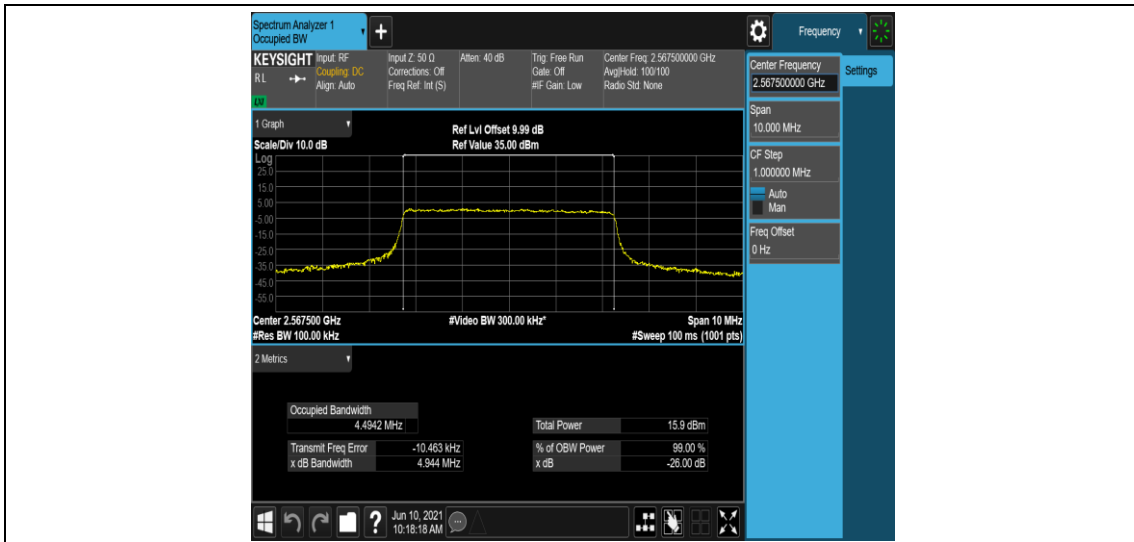
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

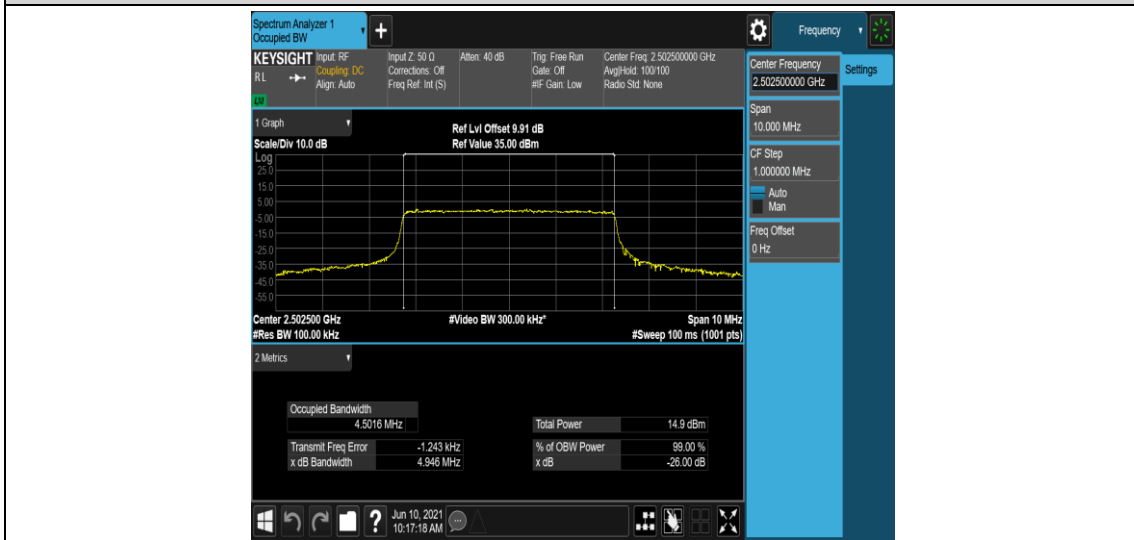
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.4959	4.941	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.5008	4.949	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.4942	4.944	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.5016	4.946	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.5031	4.922	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.4971	4.880	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.9867	9.565	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.9718	9.568	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.9718	9.589	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.9797	9.596	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.9648	9.553	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.9612	9.560	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.482	14.29	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.447	14.30	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.429	14.30	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.453	14.30	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.436	14.28	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.423	14.29	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.998	19.01	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.915	19.02	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.915	18.98	PASS
Band7	20MHz	16QAM	20850	100RB#0	17.968	19.02	PASS
Band7	20MHz	16QAM	21100	100RB#0	17.924	18.96	PASS
Band7	20MHz	16QAM	21350	100RB#0	17.915	18.98	PASS

Test Graphs

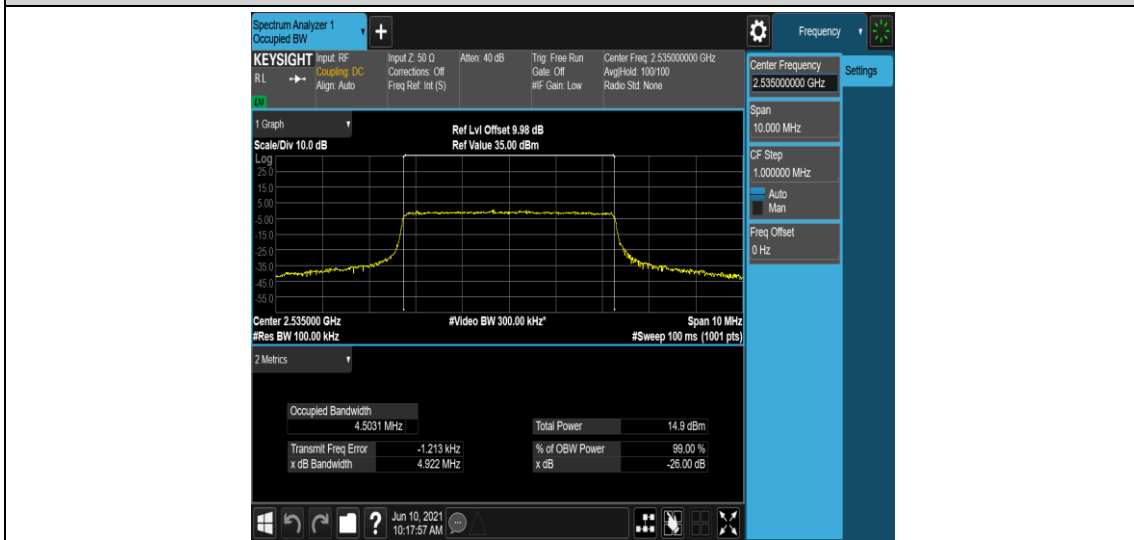




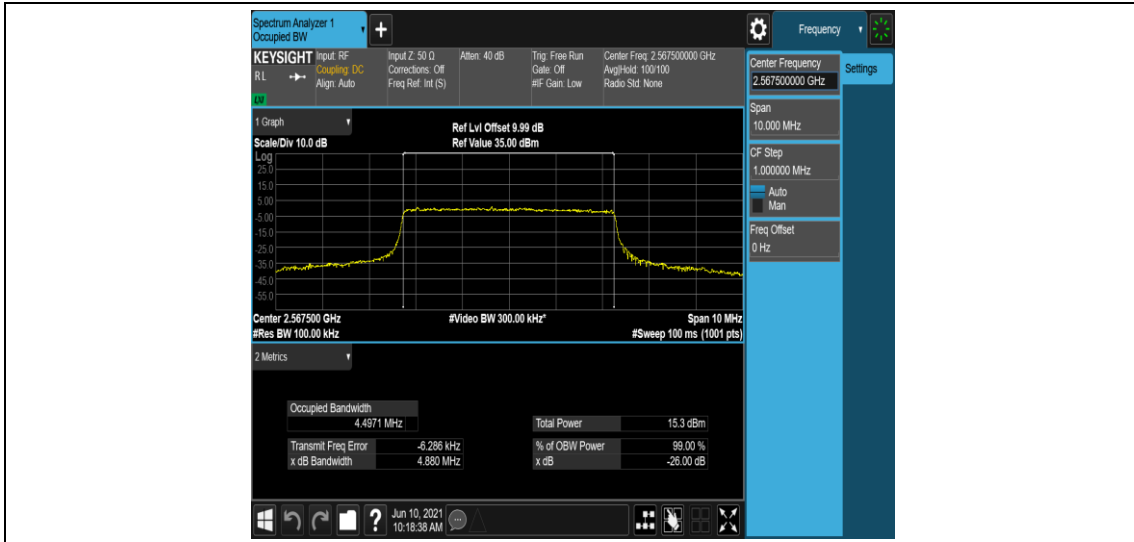
Band7-5MHz-16QAM-20775-25RB#0



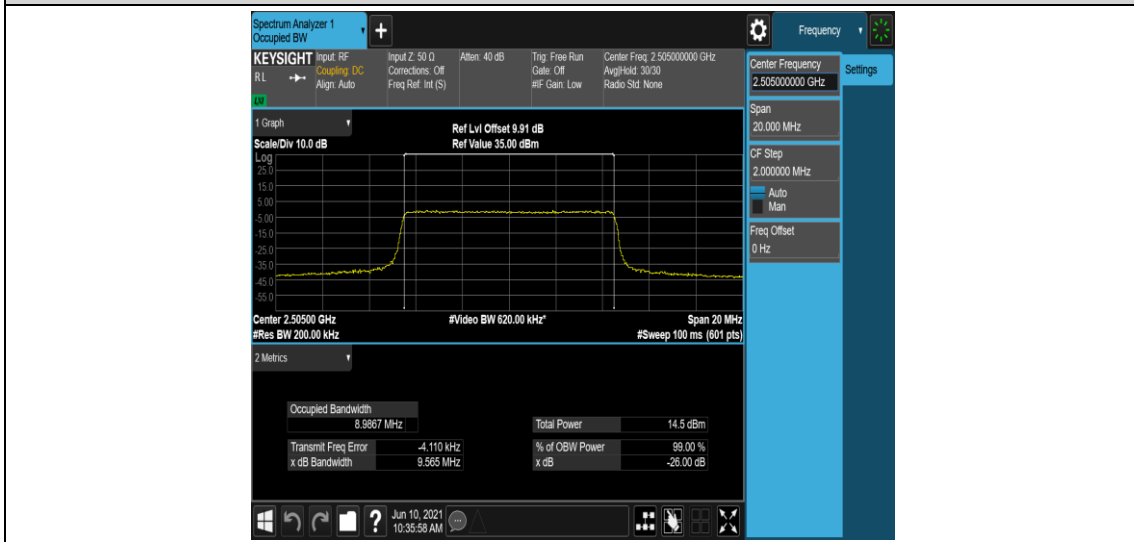
Band7-5MHz-16QAM-21100-25RB#0



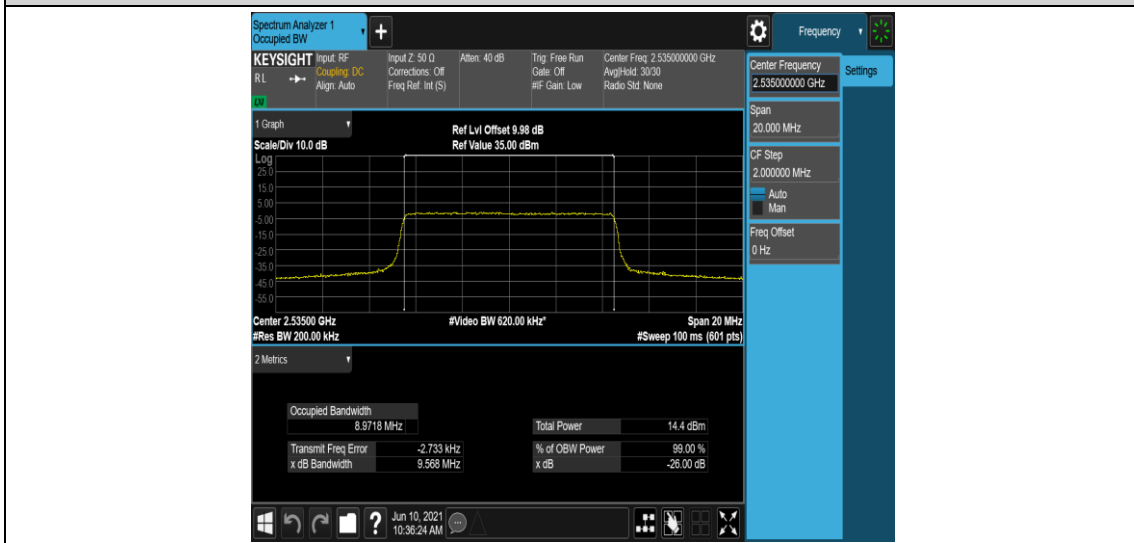
Band7-5MHz-16QAM-21425-25RB#0



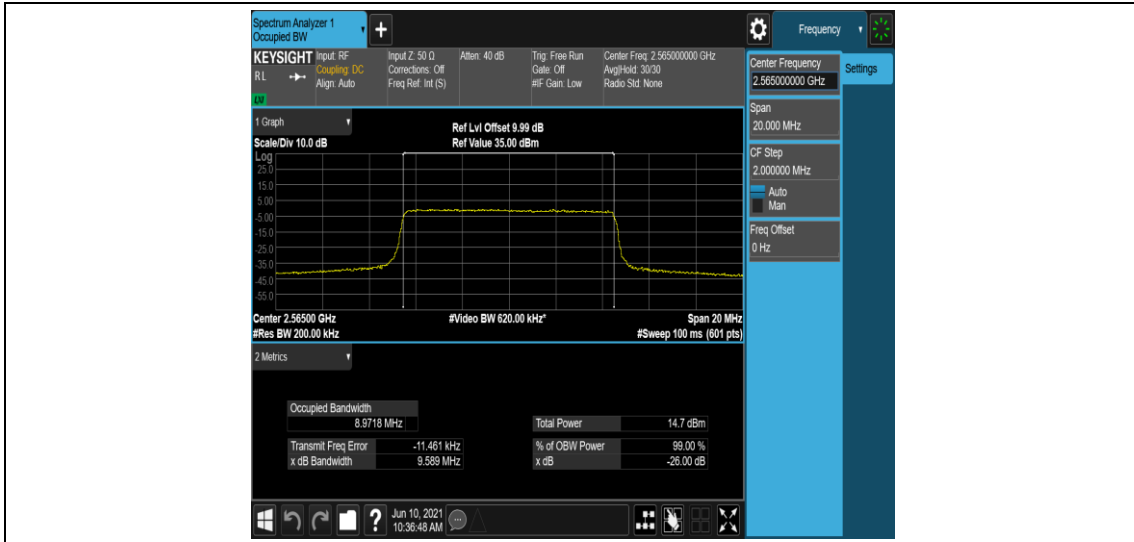
Band7-10MHz-QPSK-20800-50RB#0



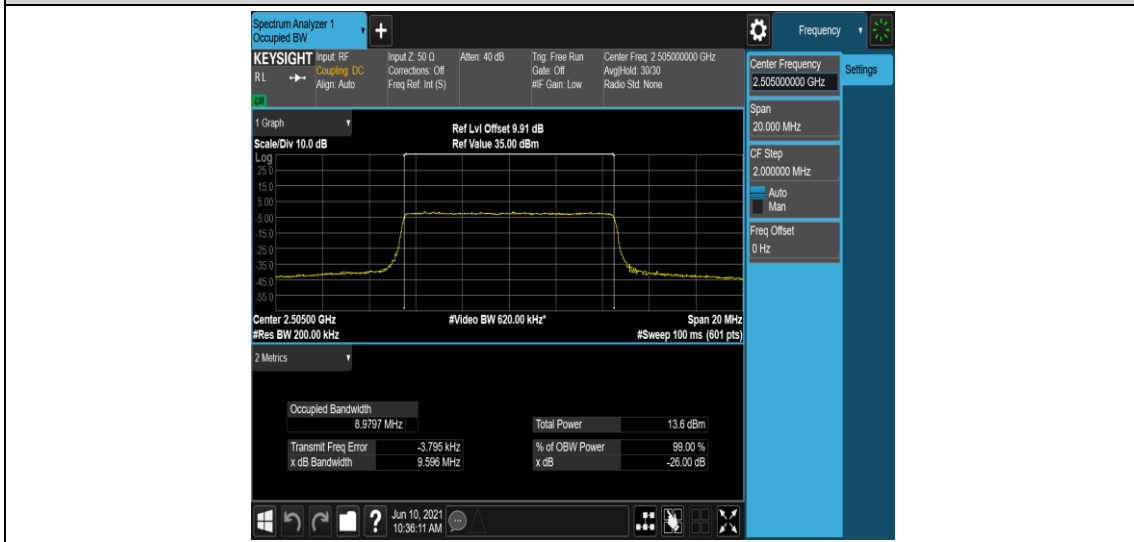
Band7-10MHz-QPSK-21100-50RB#0



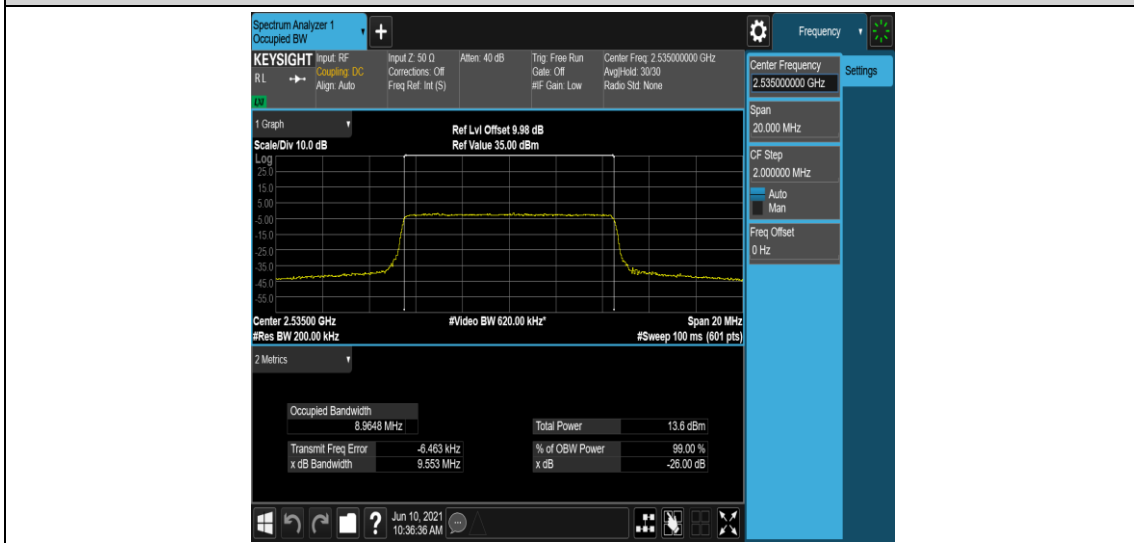
Band7-10MHz-QPSK-21400-50RB#0



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



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



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