

Appendix for Band 38

Product Name: Rugged Phone
Model No: MDT661

Appendix A: Average Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	23.55	PASS
Band38	5MHz	QPSK	37775	1RB#12	23.63	PASS
Band38	5MHz	QPSK	37775	1RB#24	23.54	PASS
Band38	5MHz	QPSK	37775	12RB#0	22.54	PASS
Band38	5MHz	QPSK	37775	12RB#6	22.54	PASS
Band38	5MHz	QPSK	37775	12RB#13	22.52	PASS
Band38	5MHz	QPSK	37775	25RB#0	22.48	PASS
Band38	5MHz	QPSK	38000	1RB#0	23.49	PASS
Band38	5MHz	QPSK	38000	1RB#12	23.60	PASS
Band38	5MHz	QPSK	38000	1RB#24	23.54	PASS
Band38	5MHz	QPSK	38000	12RB#0	22.49	PASS
Band38	5MHz	QPSK	38000	12RB#6	22.50	PASS
Band38	5MHz	QPSK	38000	12RB#13	22.48	PASS
Band38	5MHz	QPSK	38000	25RB#0	22.47	PASS
Band38	5MHz	QPSK	38225	1RB#0	23.66	PASS
Band38	5MHz	QPSK	38225	1RB#12	23.70	PASS
Band38	5MHz	QPSK	38225	1RB#24	23.62	PASS
Band38	5MHz	QPSK	38225	12RB#0	22.66	PASS
Band38	5MHz	QPSK	38225	12RB#6	22.65	PASS
Band38	5MHz	QPSK	38225	12RB#13	22.64	PASS
Band38	5MHz	QPSK	38225	25RB#0	22.66	PASS
Band38	5MHz	16QAM	37775	1RB#0	22.43	PASS
Band38	5MHz	16QAM	37775	1RB#12	22.49	PASS
Band38	5MHz	16QAM	37775	1RB#24	22.39	PASS
Band38	5MHz	16QAM	37775	12RB#0	21.48	PASS
Band38	5MHz	16QAM	37775	12RB#6	21.48	PASS
Band38	5MHz	16QAM	37775	12RB#13	21.44	PASS
Band38	5MHz	16QAM	37775	25RB#0	21.52	PASS
Band38	5MHz	16QAM	38000	1RB#0	22.42	PASS
Band38	5MHz	16QAM	38000	1RB#12	22.53	PASS

Band38	5MHz	16QAM	38000	1RB#24	22.49	PASS
Band38	5MHz	16QAM	38000	12RB#0	21.48	PASS
Band38	5MHz	16QAM	38000	12RB#6	21.46	PASS
Band38	5MHz	16QAM	38000	12RB#13	21.52	PASS
Band38	5MHz	16QAM	38000	25RB#0	21.44	PASS
Band38	5MHz	16QAM	38225	1RB#0	22.49	PASS
Band38	5MHz	16QAM	38225	1RB#12	22.54	PASS
Band38	5MHz	16QAM	38225	1RB#24	22.45	PASS
Band38	5MHz	16QAM	38225	12RB#0	21.71	PASS
Band38	5MHz	16QAM	38225	12RB#6	21.72	PASS
Band38	5MHz	16QAM	38225	12RB#13	21.69	PASS
Band38	5MHz	16QAM	38225	25RB#0	21.77	PASS
Band38	10MHz	QPSK	37800	1RB#0	23.63	PASS
Band38	10MHz	QPSK	37800	1RB#24	23.84	PASS
Band38	10MHz	QPSK	37800	1RB#49	23.58	PASS
Band38	10MHz	QPSK	37800	25RB#0	22.58	PASS
Band38	10MHz	QPSK	37800	25RB#12	22.61	PASS
Band38	10MHz	QPSK	37800	25RB#25	22.56	PASS
Band38	10MHz	QPSK	37800	50RB#0	22.56	PASS
Band38	10MHz	QPSK	38000	1RB#0	23.62	PASS
Band38	10MHz	QPSK	38000	1RB#24	23.93	PASS
Band38	10MHz	QPSK	38000	1RB#49	23.73	PASS
Band38	10MHz	QPSK	38000	25RB#0	22.59	PASS
Band38	10MHz	QPSK	38000	25RB#12	22.58	PASS
Band38	10MHz	QPSK	38000	25RB#25	22.57	PASS
Band38	10MHz	QPSK	38000	50RB#0	22.56	PASS
Band38	10MHz	QPSK	38200	1RB#0	23.78	PASS
Band38	10MHz	QPSK	38200	1RB#24	23.97	PASS
Band38	10MHz	QPSK	38200	1RB#49	23.69	PASS
Band38	10MHz	QPSK	38200	25RB#0	22.83	PASS
Band38	10MHz	QPSK	38200	25RB#12	22.81	PASS
Band38	10MHz	QPSK	38200	25RB#25	22.73	PASS
Band38	10MHz	QPSK	38200	50RB#0	22.76	PASS
Band38	10MHz	16QAM	37800	1RB#0	22.57	PASS
Band38	10MHz	16QAM	37800	1RB#24	22.76	PASS
Band38	10MHz	16QAM	37800	1RB#49	22.49	PASS

Band38	10MHz	16QAM	37800	25RB#0	21.58	PASS
Band38	10MHz	16QAM	37800	25RB#12	21.57	PASS
Band38	10MHz	16QAM	37800	25RB#25	21.53	PASS
Band38	10MHz	16QAM	37800	50RB#0	21.54	PASS
Band38	10MHz	16QAM	38000	1RB#0	22.29	PASS
Band38	10MHz	16QAM	38000	1RB#24	22.58	PASS
Band38	10MHz	16QAM	38000	1RB#49	22.40	PASS
Band38	10MHz	16QAM	38000	25RB#0	21.57	PASS
Band38	10MHz	16QAM	38000	25RB#12	21.55	PASS
Band38	10MHz	16QAM	38000	25RB#25	21.57	PASS
Band38	10MHz	16QAM	38000	50RB#0	21.57	PASS
Band38	10MHz	16QAM	38200	1RB#0	22.55	PASS
Band38	10MHz	16QAM	38200	1RB#24	22.70	PASS
Band38	10MHz	16QAM	38200	1RB#49	22.39	PASS
Band38	10MHz	16QAM	38200	25RB#0	21.91	PASS
Band38	10MHz	16QAM	38200	25RB#12	21.88	PASS
Band38	10MHz	16QAM	38200	25RB#25	21.83	PASS
Band38	10MHz	16QAM	38200	50RB#0	21.83	PASS
Band38	15MHz	QPSK	37825	1RB#0	23.61	PASS
Band38	15MHz	QPSK	37825	1RB#38	23.62	PASS
Band38	15MHz	QPSK	37825	1RB#74	23.38	PASS
Band38	15MHz	QPSK	37825	38RB#0	22.53	PASS
Band38	15MHz	QPSK	37825	38RB#18	22.56	PASS
Band38	15MHz	QPSK	37825	38RB#37	22.32	PASS
Band38	15MHz	QPSK	37825	75RB#0	22.71	PASS
Band38	15MHz	QPSK	38000	1RB#0	23.45	PASS
Band38	15MHz	QPSK	38000	1RB#38	23.63	PASS
Band38	15MHz	QPSK	38000	1RB#74	23.56	PASS
Band38	15MHz	QPSK	38000	38RB#0	22.46	PASS
Band38	15MHz	QPSK	38000	38RB#18	22.63	PASS
Band38	15MHz	QPSK	38000	38RB#37	22.62	PASS
Band38	15MHz	QPSK	38000	75RB#0	22.74	PASS
Band38	15MHz	QPSK	38175	1RB#0	23.73	PASS
Band38	15MHz	QPSK	38175	1RB#38	23.76	PASS
Band38	15MHz	QPSK	38175	1RB#74	23.56	PASS
Band38	15MHz	QPSK	38175	38RB#0	22.46	PASS

Band38	15MHz	QPSK	38175	38RB#18	22.50	PASS
Band38	15MHz	QPSK	38175	38RB#37	22.31	PASS
Band38	15MHz	QPSK	38175	75RB#0	22.89	PASS
Band38	15MHz	16QAM	37825	1RB#0	22.50	PASS
Band38	15MHz	16QAM	37825	1RB#38	22.53	PASS
Band38	15MHz	16QAM	37825	1RB#74	22.28	PASS
Band38	15MHz	16QAM	37825	38RB#0	22.54	PASS
Band38	15MHz	16QAM	37825	38RB#18	22.53	PASS
Band38	15MHz	16QAM	37825	38RB#37	22.34	PASS
Band38	15MHz	16QAM	37825	75RB#0	21.60	PASS
Band38	15MHz	16QAM	38000	1RB#0	22.46	PASS
Band38	15MHz	16QAM	38000	1RB#38	22.61	PASS
Band38	15MHz	16QAM	38000	1RB#74	22.59	PASS
Band38	15MHz	16QAM	38000	38RB#0	22.47	PASS
Band38	15MHz	16QAM	38000	38RB#18	22.60	PASS
Band38	15MHz	16QAM	38000	38RB#37	22.61	PASS
Band38	15MHz	16QAM	38000	75RB#0	21.68	PASS
Band38	15MHz	16QAM	38175	1RB#0	22.47	PASS
Band38	15MHz	16QAM	38175	1RB#38	22.49	PASS
Band38	15MHz	16QAM	38175	1RB#74	22.30	PASS
Band38	15MHz	16QAM	38175	38RB#0	22.46	PASS
Band38	15MHz	16QAM	38175	38RB#18	22.48	PASS
Band38	15MHz	16QAM	38175	38RB#37	22.31	PASS
Band38	15MHz	16QAM	38175	75RB#0	21.86	PASS
Band38	20MHz	QPSK	37850	1RB#0	23.52	PASS
Band38	20MHz	QPSK	37850	1RB#49	23.90	PASS
Band38	20MHz	QPSK	37850	1RB#99	23.31	PASS
Band38	20MHz	QPSK	37850	50RB#0	22.59	PASS
Band38	20MHz	QPSK	37850	50RB#25	22.59	PASS
Band38	20MHz	QPSK	37850	50RB#50	22.37	PASS
Band38	20MHz	QPSK	37850	100RB#0	22.51	PASS
Band38	20MHz	QPSK	38000	1RB#0	23.42	PASS
Band38	20MHz	QPSK	38000	1RB#49	23.92	PASS
Band38	20MHz	QPSK	38000	1RB#99	23.54	PASS
Band38	20MHz	QPSK	38000	50RB#0	22.55	PASS
Band38	20MHz	QPSK	38000	50RB#25	22.52	PASS

Band38	20MHz	QPSK	38000	50RB#50	22.52	PASS
Band38	20MHz	QPSK	38000	100RB#0	22.57	PASS
Band38	20MHz	QPSK	38150	1RB#0	23.48	PASS
Band38	20MHz	QPSK	38150	1RB#49	24.03	PASS
Band38	20MHz	QPSK	38150	1RB#99	23.39	PASS
Band38	20MHz	QPSK	38150	50RB#0	22.77	PASS
Band38	20MHz	QPSK	38150	50RB#25	22.79	PASS
Band38	20MHz	QPSK	38150	50RB#50	22.69	PASS
Band38	20MHz	QPSK	38150	100RB#0	22.77	PASS
Band38	20MHz	16QAM	37850	1RB#0	22.32	PASS
Band38	20MHz	16QAM	37850	1RB#49	22.68	PASS
Band38	20MHz	16QAM	37850	1RB#99	22.06	PASS
Band38	20MHz	16QAM	37850	50RB#0	21.58	PASS
Band38	20MHz	16QAM	37850	50RB#25	21.61	PASS
Band38	20MHz	16QAM	37850	50RB#50	21.32	PASS
Band38	20MHz	16QAM	37850	100RB#0	21.54	PASS
Band38	20MHz	16QAM	38000	1RB#0	22.34	PASS
Band38	20MHz	16QAM	38000	1RB#49	22.89	PASS
Band38	20MHz	16QAM	38000	1RB#99	22.58	PASS
Band38	20MHz	16QAM	38000	50RB#0	21.53	PASS
Band38	20MHz	16QAM	38000	50RB#25	21.52	PASS
Band38	20MHz	16QAM	38000	50RB#50	21.63	PASS
Band38	20MHz	16QAM	38000	100RB#0	21.57	PASS
Band38	20MHz	16QAM	38150	1RB#0	22.28	PASS
Band38	20MHz	16QAM	38150	1RB#49	22.83	PASS
Band38	20MHz	16QAM	38150	1RB#99	22.19	PASS
Band38	20MHz	16QAM	38150	50RB#0	21.87	PASS
Band38	20MHz	16QAM	38150	50RB#25	21.85	PASS
Band38	20MHz	16QAM	38150	50RB#50	21.75	PASS
Band38	20MHz	16QAM	38150	100RB#0	21.78	PASS

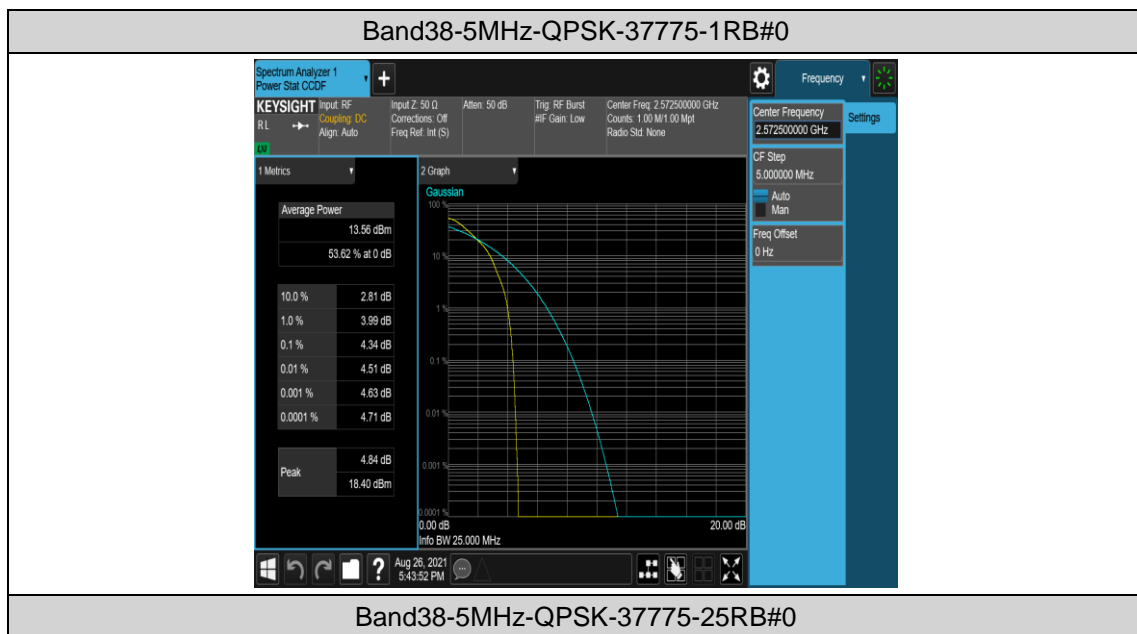
Appendix B: Peak-to-Average Ratio(CCDF)

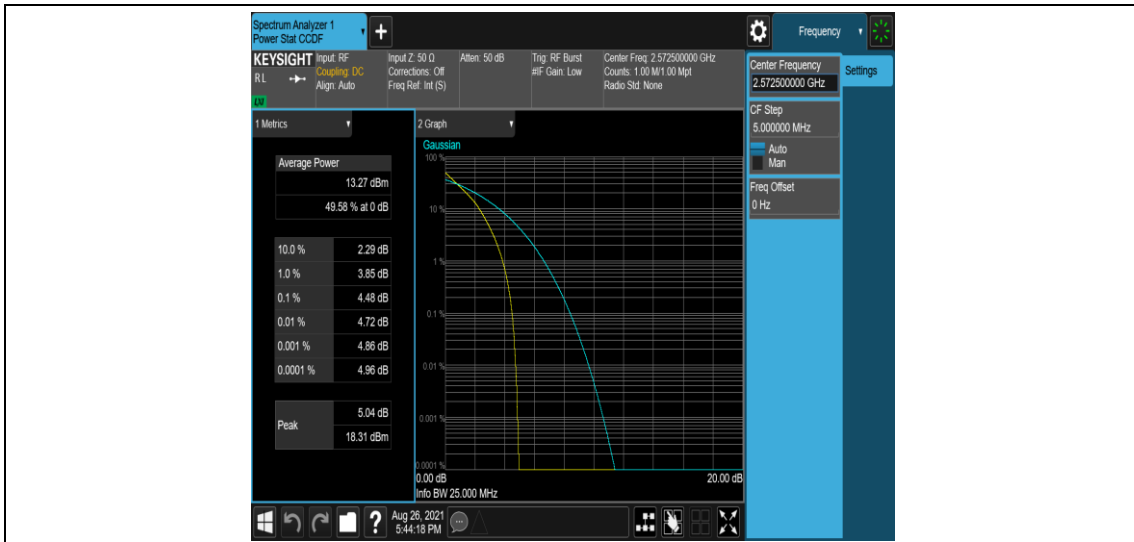
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	4.34	13	PASS
Band38	5MHz	QPSK	37775	25RB#0	4.48	13	PASS
Band38	5MHz	QPSK	38000	1RB#0	3.43	13	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.09	13	PASS
Band38	5MHz	QPSK	38225	1RB#0	4.61	13	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.89	13	PASS
Band38	5MHz	16QAM	37775	1RB#0	5.48	13	PASS
Band38	5MHz	16QAM	37775	25RB#0	5.59	13	PASS
Band38	5MHz	16QAM	38000	1RB#0	4.48	13	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.95	13	PASS
Band38	5MHz	16QAM	38225	1RB#0	5.25	13	PASS
Band38	5MHz	16QAM	38225	25RB#0	6.31	13	PASS
Band38	10MHz	QPSK	37800	1RB#0	3.89	13	PASS
Band38	10MHz	QPSK	37800	50RB#0	4.27	13	PASS
Band38	10MHz	QPSK	38000	1RB#0	3.71	13	PASS
Band38	10MHz	QPSK	38000	50RB#0	3.98	13	PASS
Band38	10MHz	QPSK	38200	1RB#0	4.28	13	PASS
Band38	10MHz	QPSK	38200	50RB#0	4.79	13	PASS
Band38	10MHz	16QAM	37800	1RB#0	5.06	13	PASS
Band38	10MHz	16QAM	37800	50RB#0	5.15	13	PASS
Band38	10MHz	16QAM	38000	1RB#0	4.39	13	PASS
Band38	10MHz	16QAM	38000	50RB#0	4.89	13	PASS
Band38	10MHz	16QAM	38200	1RB#0	5.41	13	PASS
Band38	10MHz	16QAM	38200	50RB#0	5.58	13	PASS
Band38	15MHz	QPSK	37825	1RB#0	4.11	13	PASS
Band38	15MHz	QPSK	37825	75RB#0	4.42	13	PASS
Band38	15MHz	QPSK	38000	1RB#0	3.50	13	PASS
Band38	15MHz	QPSK	38000	75RB#0	4.22	13	PASS
Band38	15MHz	QPSK	38175	1RB#0	4.29	13	PASS
Band38	15MHz	QPSK	38175	75RB#0	4.97	13	PASS
Band38	15MHz	16QAM	37825	1RB#0	4.67	13	PASS
Band38	15MHz	16QAM	37825	75RB#0	5.26	13	PASS
Band38	15MHz	16QAM	38000	1RB#0	4.61	13	PASS
Band38	15MHz	16QAM	38000	75RB#0	5.08	13	PASS

Band38	15MHz	16QAM	38175	1RB#0	5.17	13	PASS
Band38	15MHz	16QAM	38175	75RB#0	5.75	13	PASS
Band38	20MHz	QPSK	37850	1RB#0	3.88	13	PASS
Band38	20MHz	QPSK	37850	100RB#0	4.58	13	PASS
Band38	20MHz	QPSK	38000	1RB#0	3.58	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	4.50	13	PASS
Band38	20MHz	QPSK	38150	1RB#0	3.46	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	5.00	13	PASS
Band38	20MHz	16QAM	37850	1RB#0	5.03	13	PASS
Band38	20MHz	16QAM	37850	100RB#0	5.37	13	PASS
Band38	20MHz	16QAM	38000	1RB#0	4.56	13	PASS
Band38	20MHz	16QAM	38000	100RB#0	5.30	13	PASS
Band38	20MHz	16QAM	38150	1RB#0	4.62	13	PASS
Band38	20MHz	16QAM	38150	100RB#0	5.73	13	PASS

Test Graphs





Band38-5MHz-QPSK-38000-1RB#0



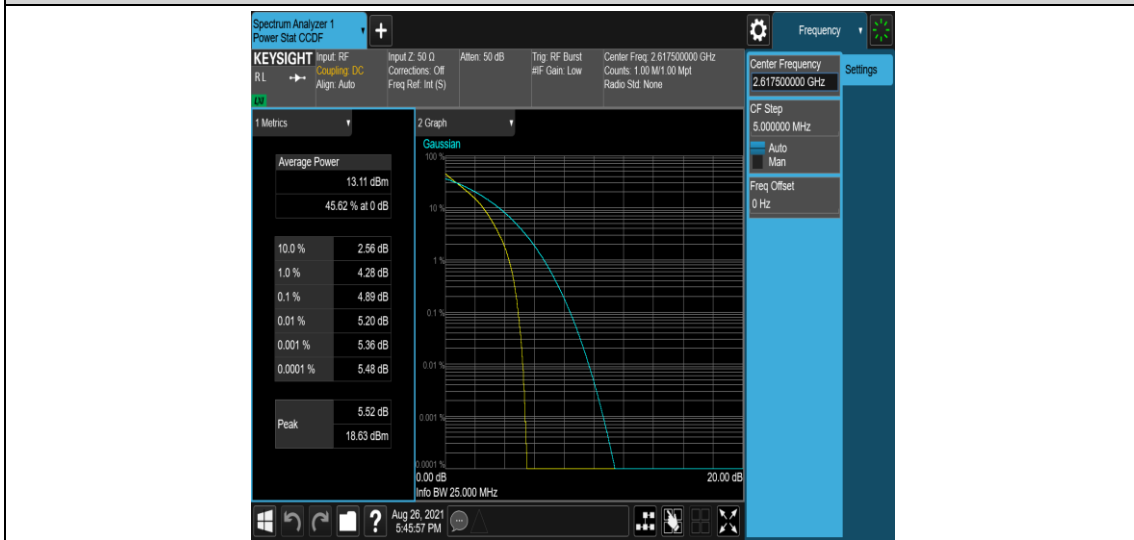
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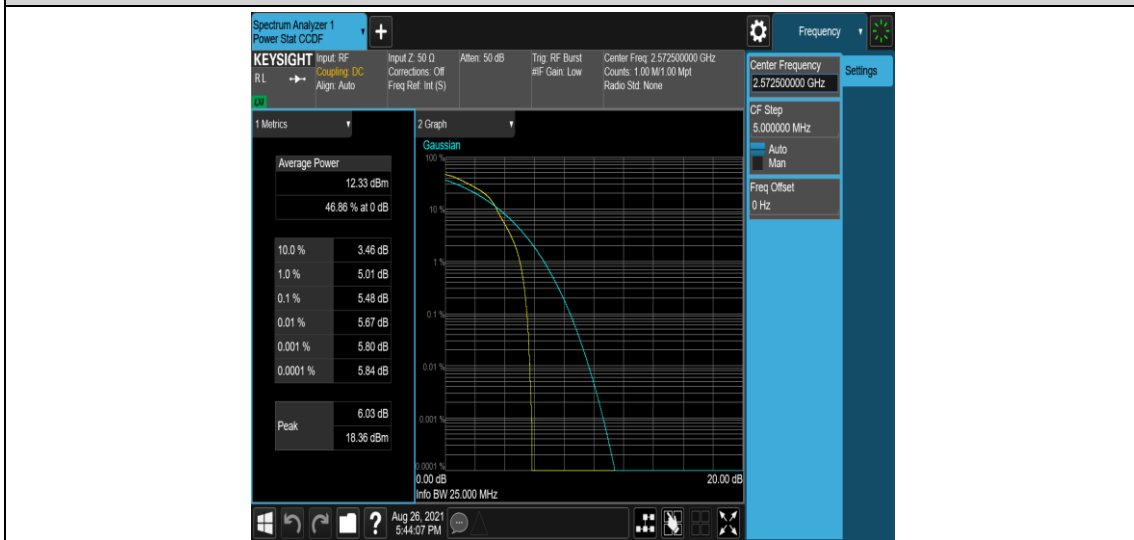
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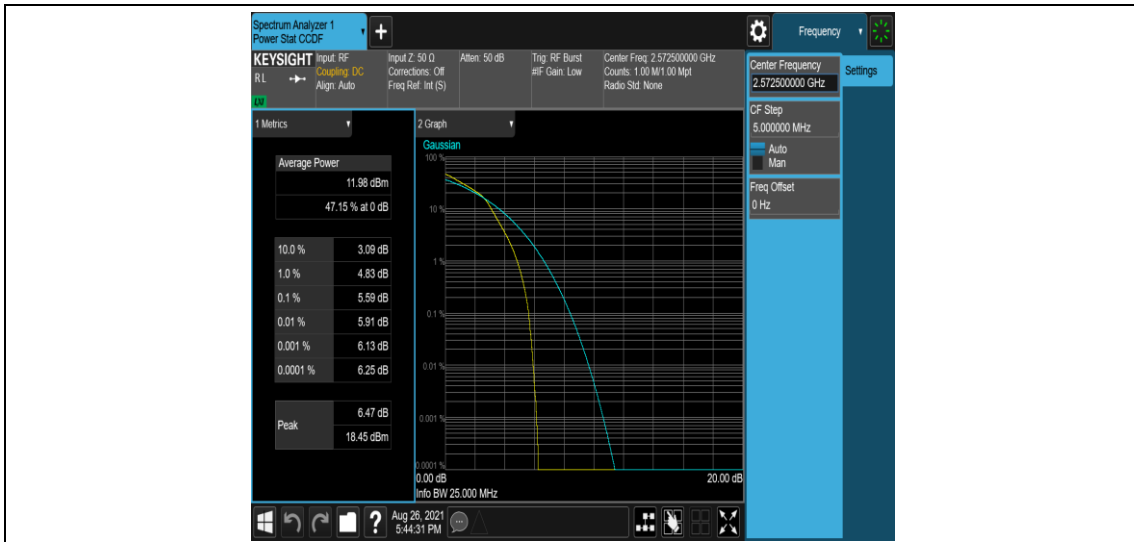
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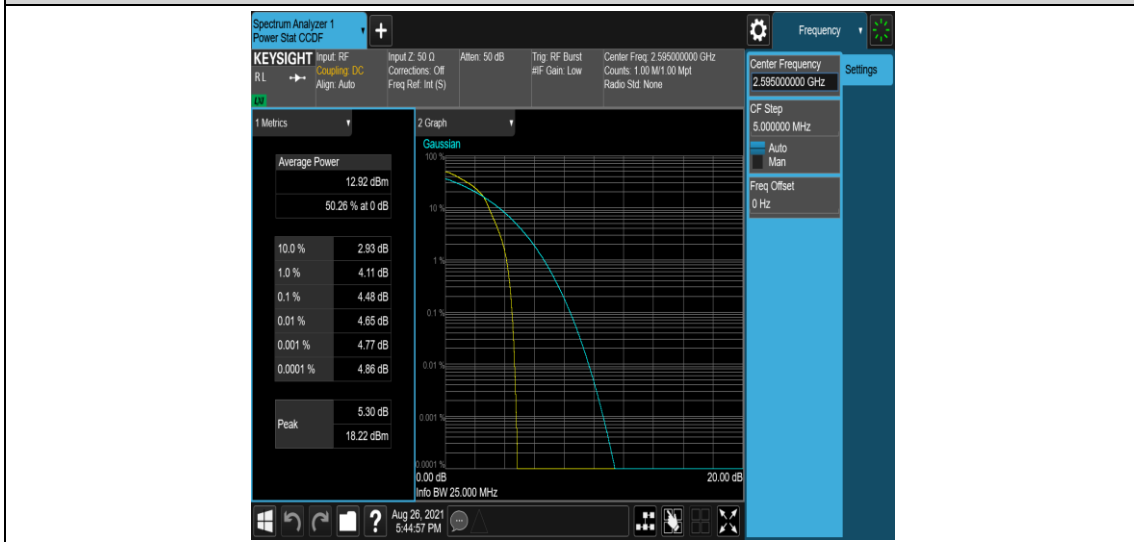
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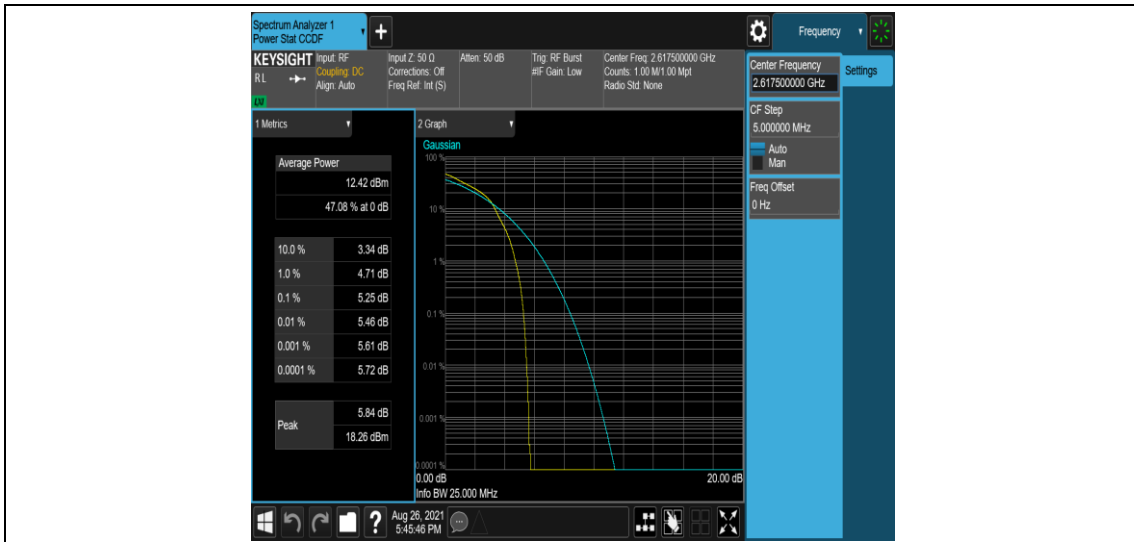
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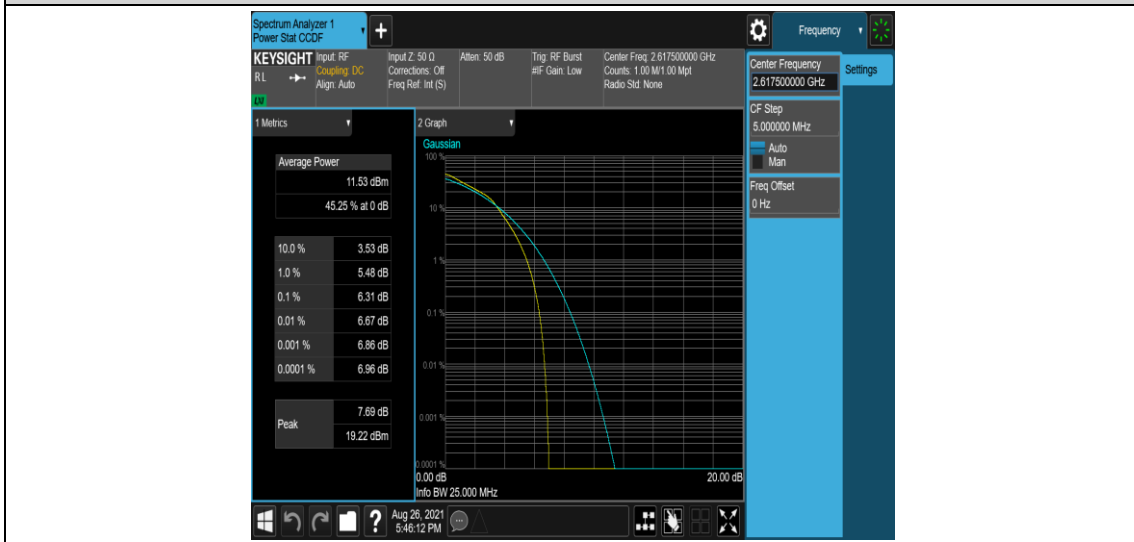
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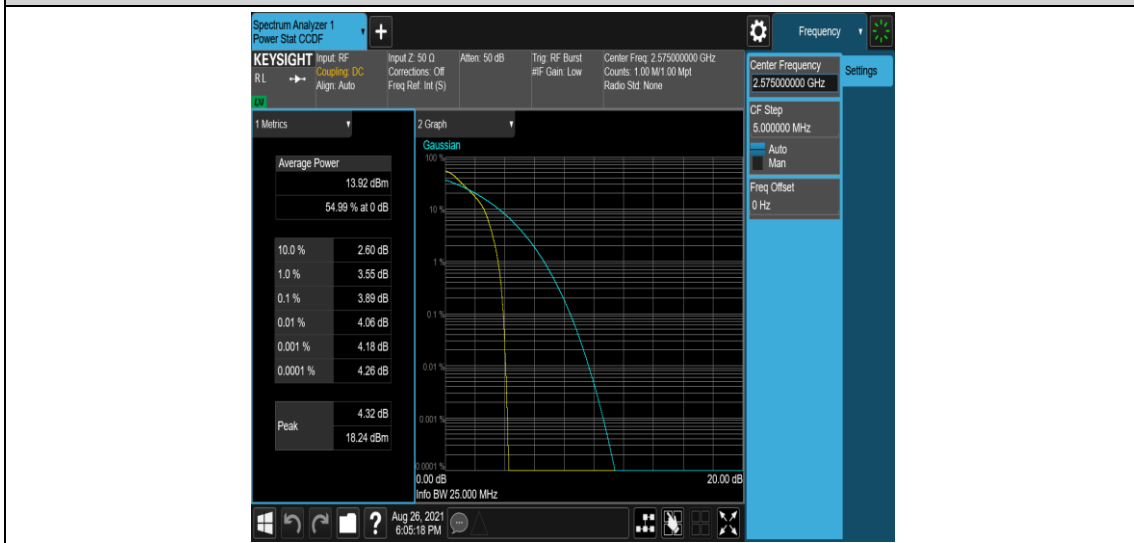
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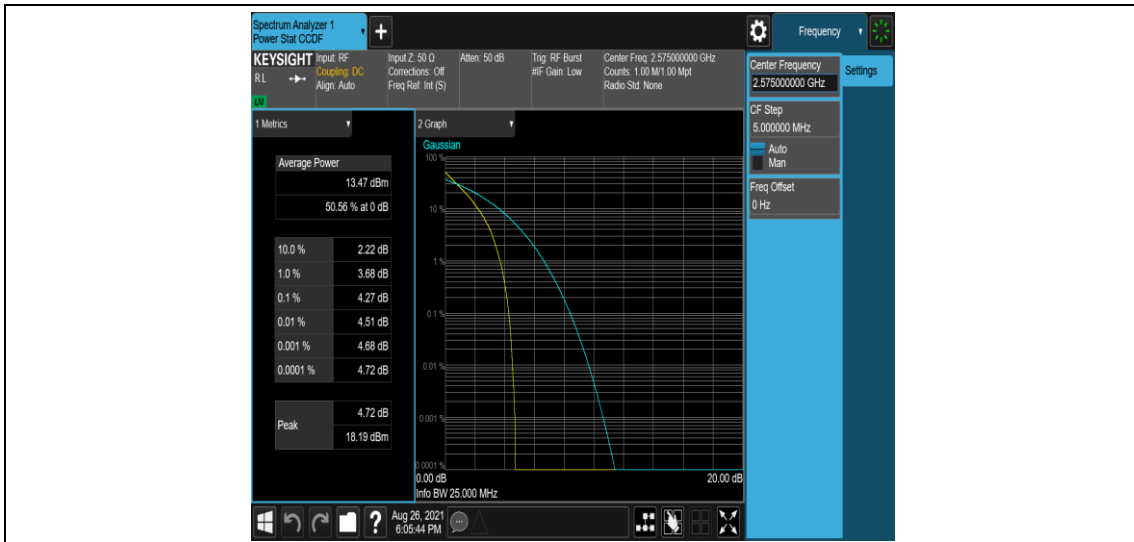
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Band38-10MHz-QPSK-37800-1RB#0



Band38-10MHz-QPSK-37800-50RB#0



Band38-10MHz-QPSK-38000-1RB#0



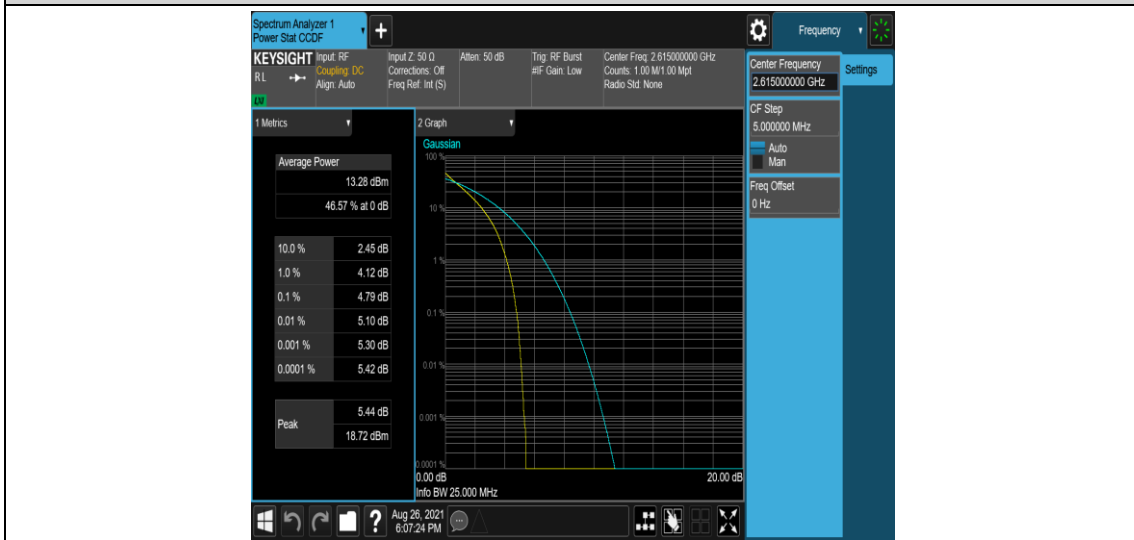
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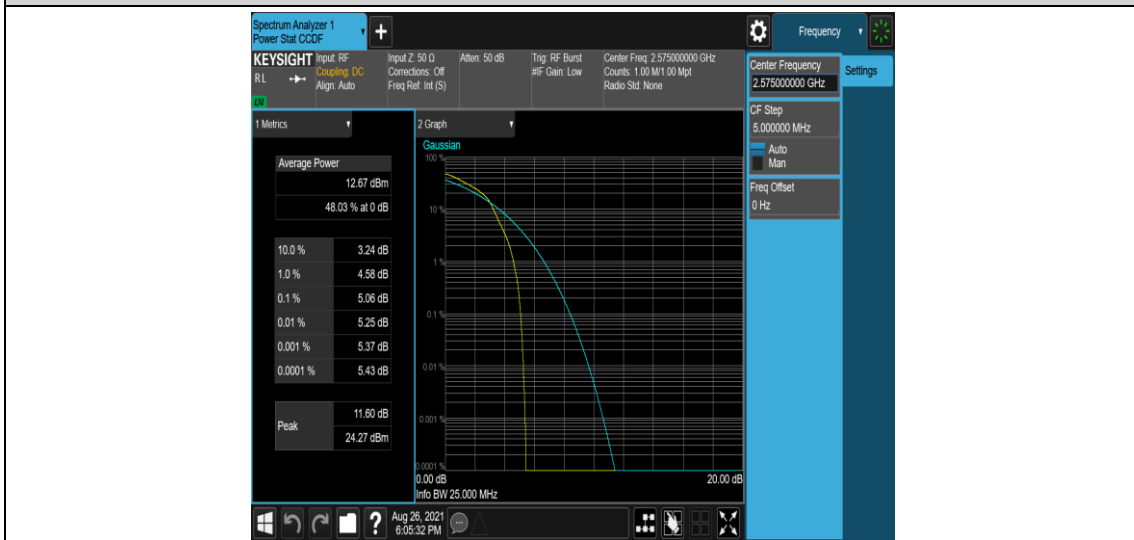
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Band38-10MHz-16QAM-37800-1RB#0



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Band38-10MHz-16QAM-38000-1RB#0



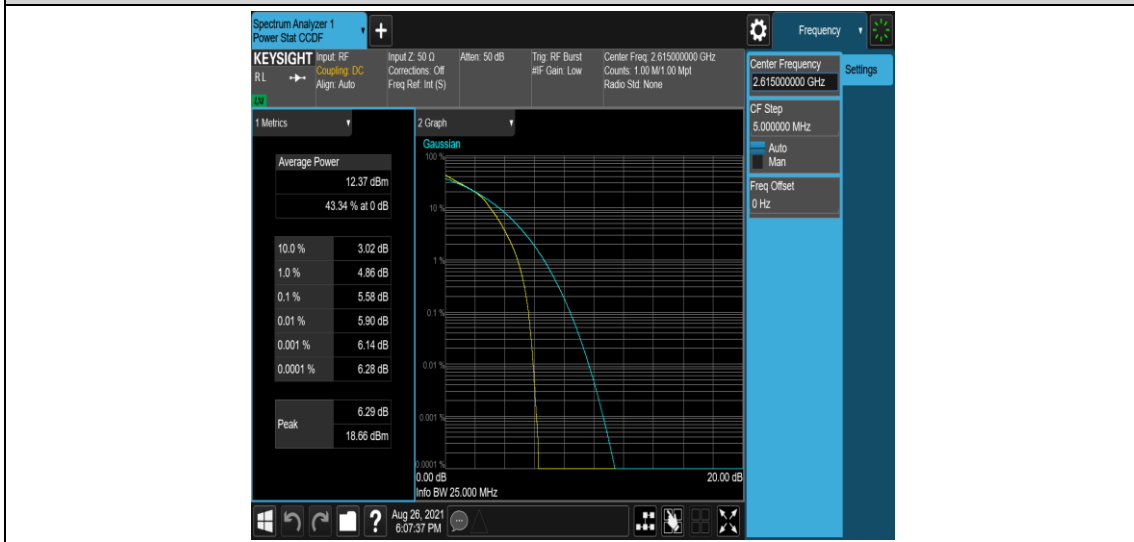
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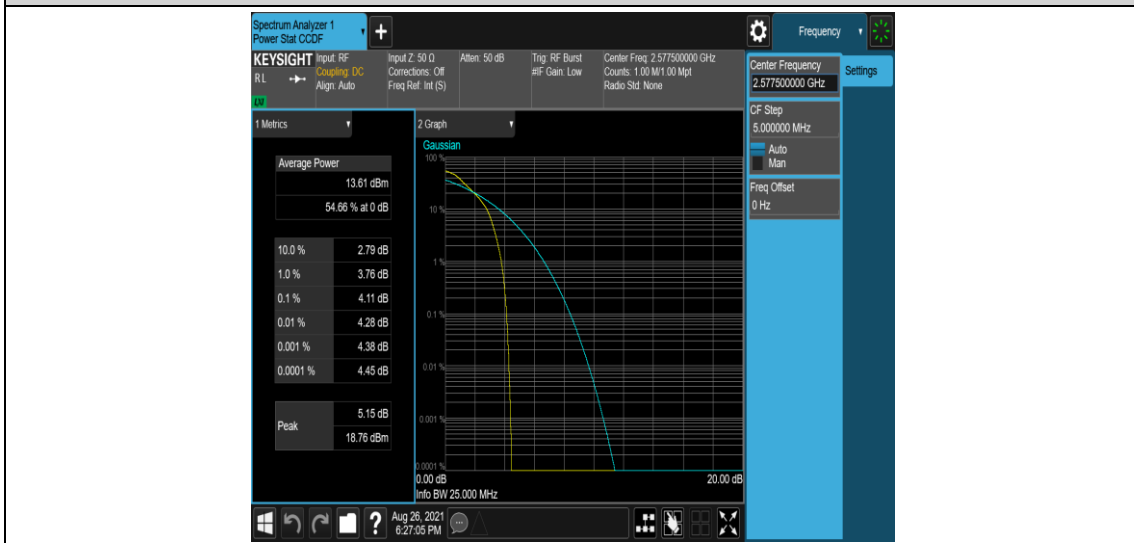
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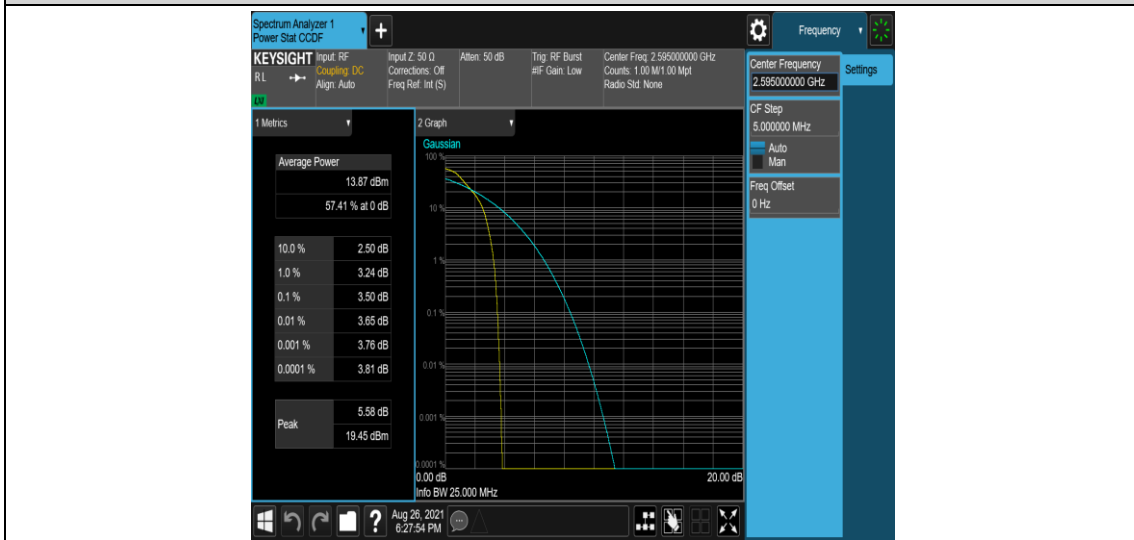
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Band38-15MHz-QPSK-38000-75RB#0



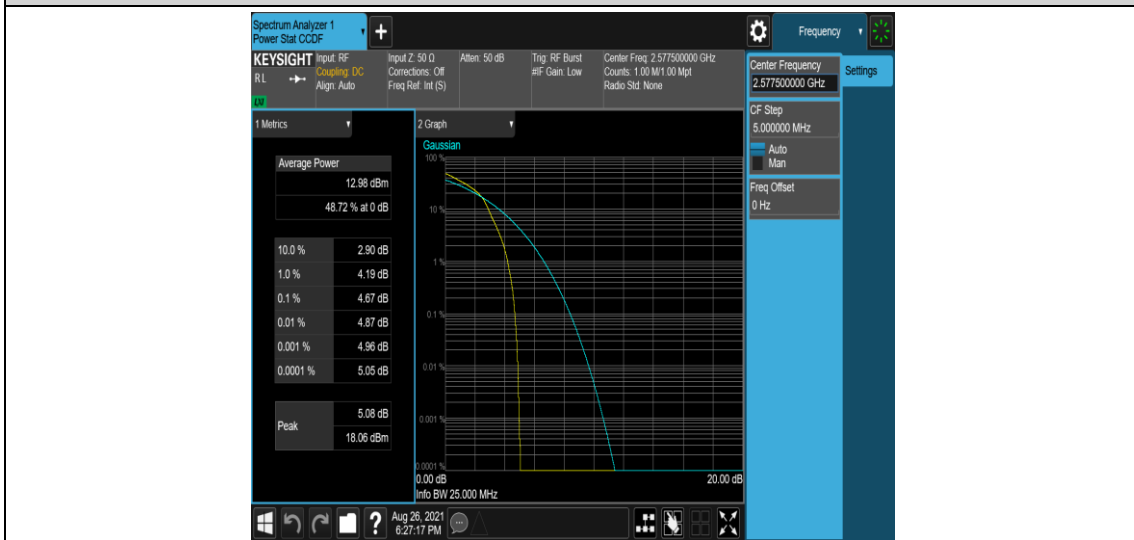
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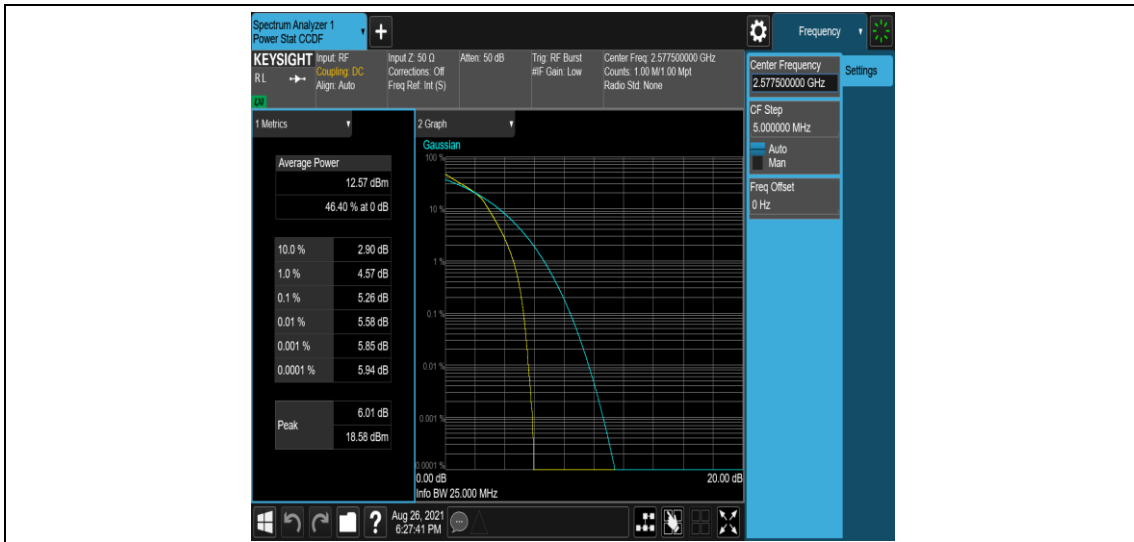
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Band38-15MHz-16QAM-37825-1RB#0



Band38-15MHz-16QAM-37825-75RB#0



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Band38-15MHz-16QAM-38000-75RB#0



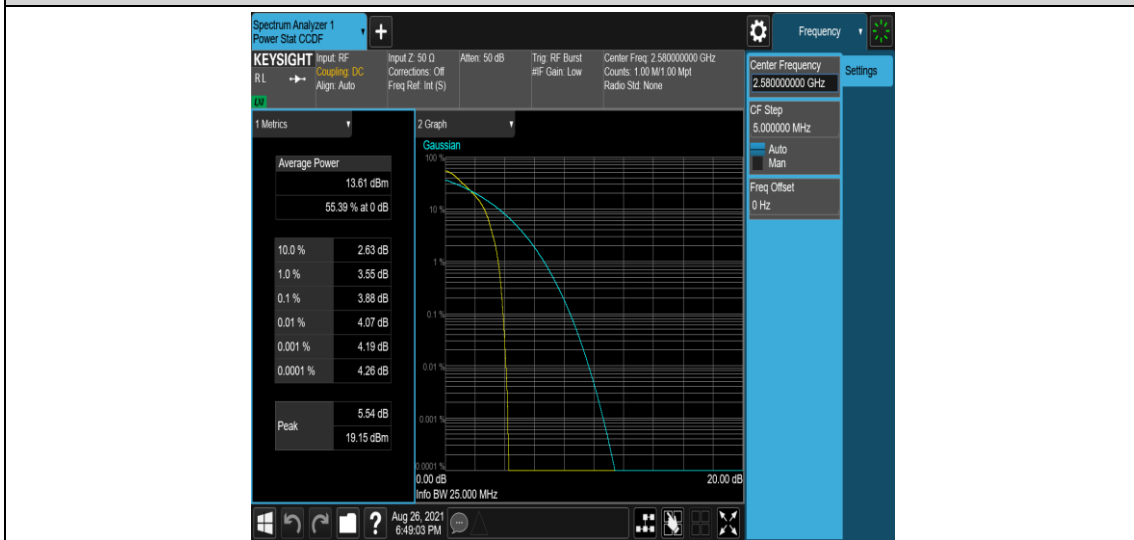
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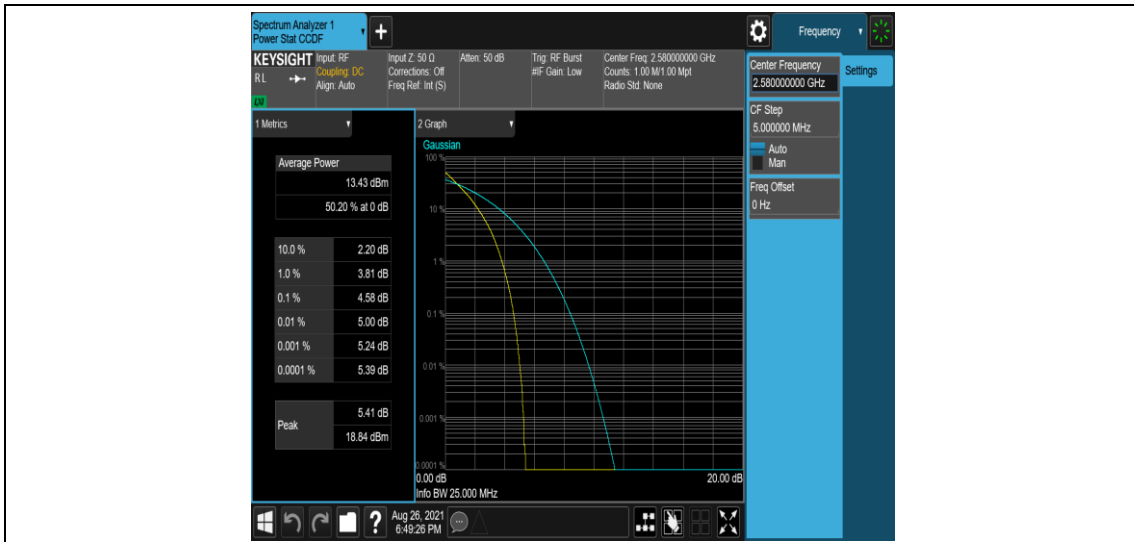
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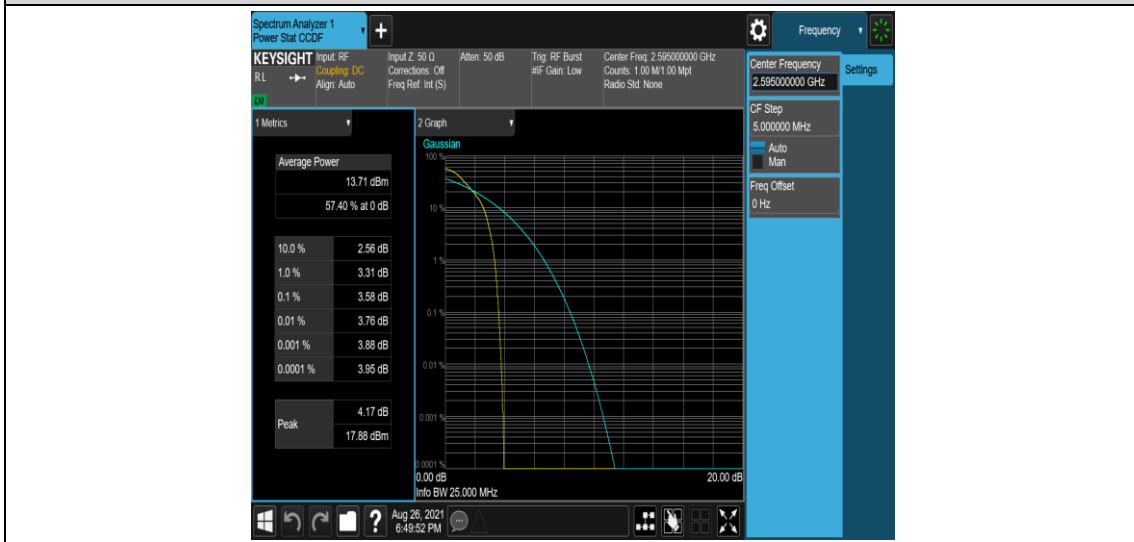
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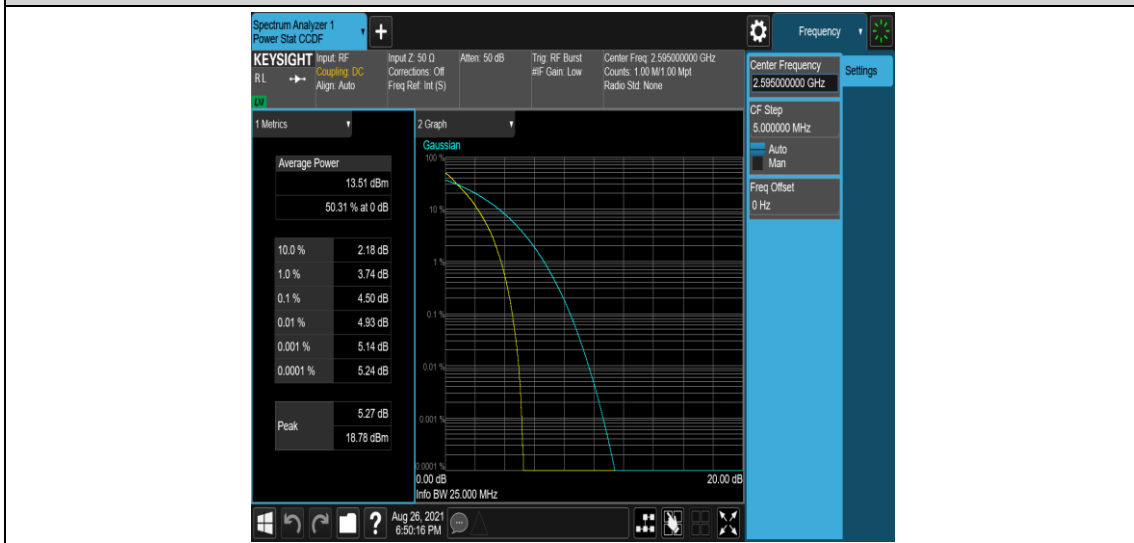
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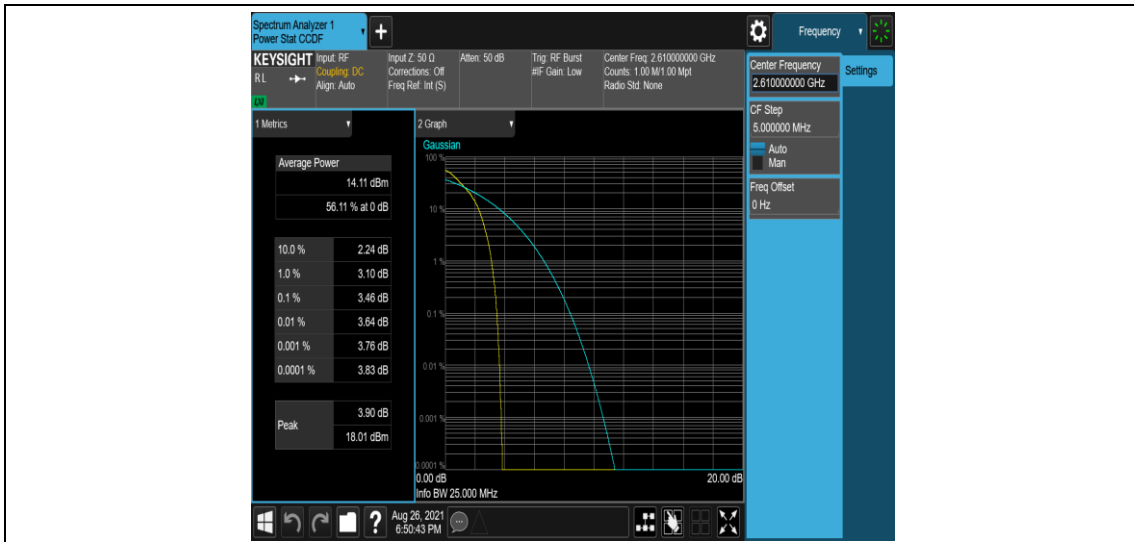
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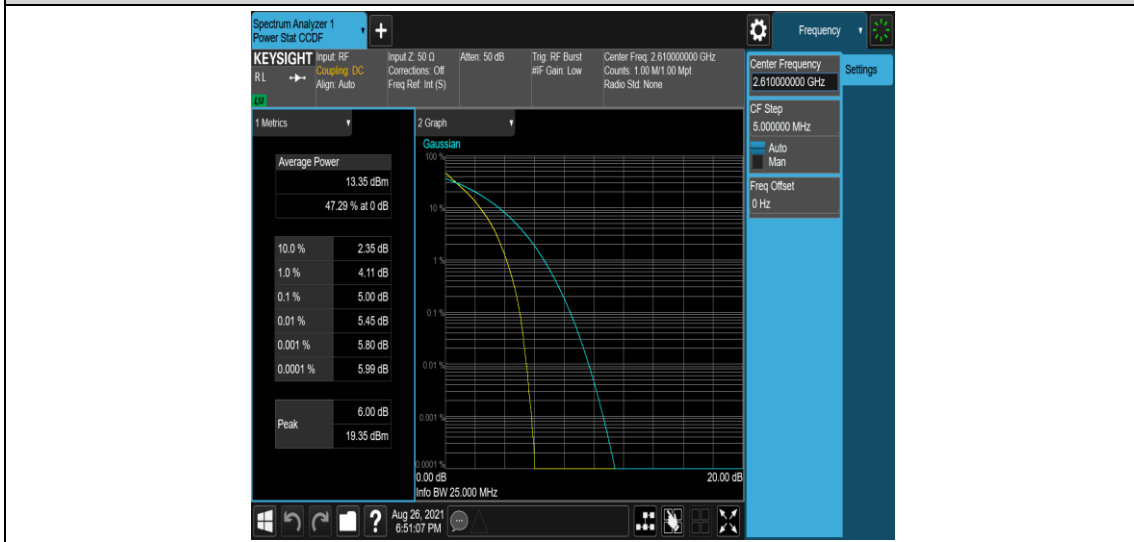
Band38-20MHz-QPSK-38000-100RB#0



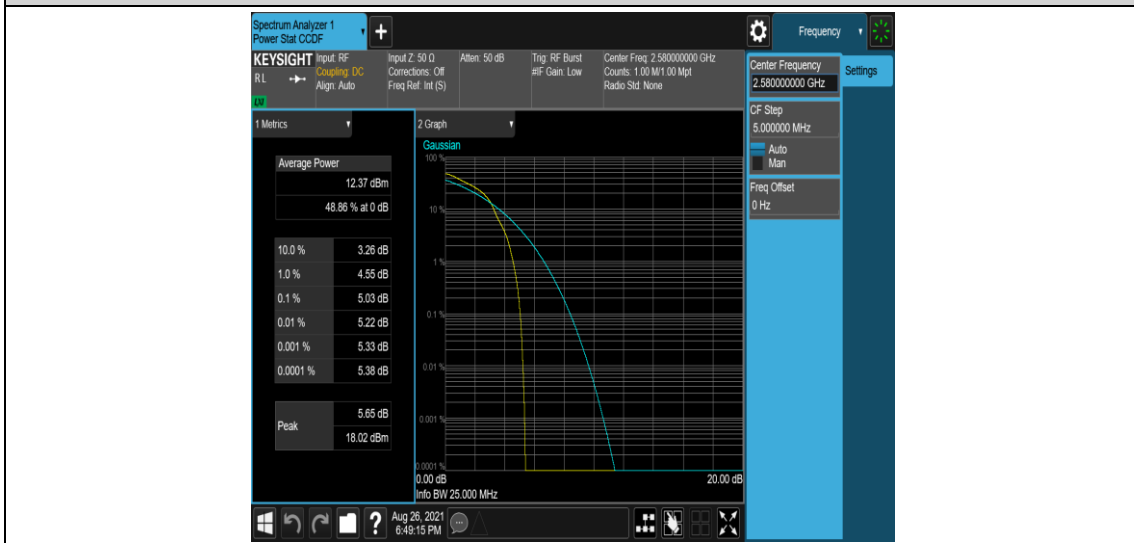
Band38-20MHz-QPSK-38150-1RB#0



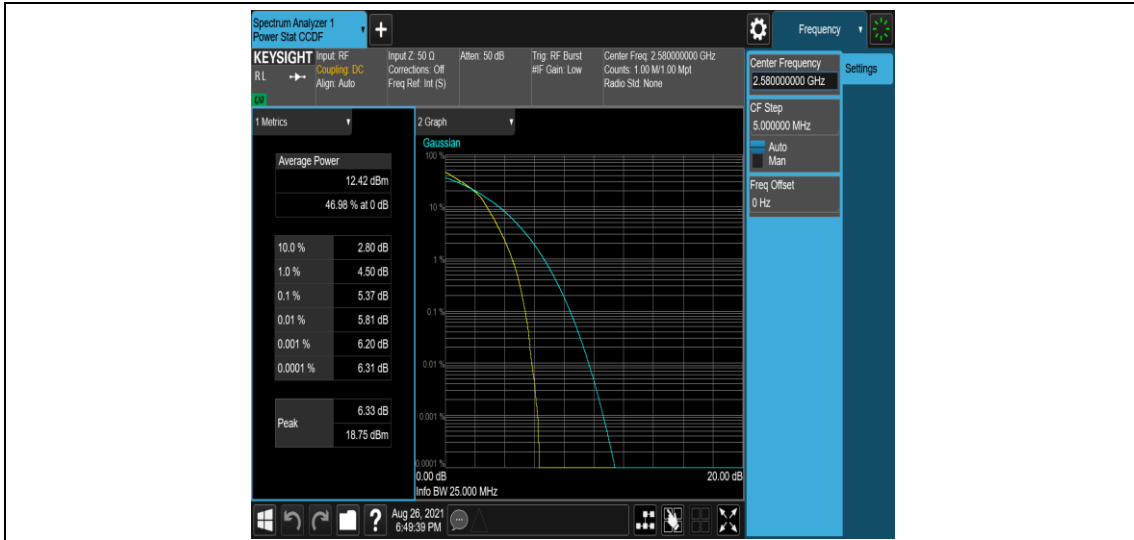
Band38-20MHz-QPSK-38150-100RB#0



Band38-20MHz-16QAM-37850-1RB#0



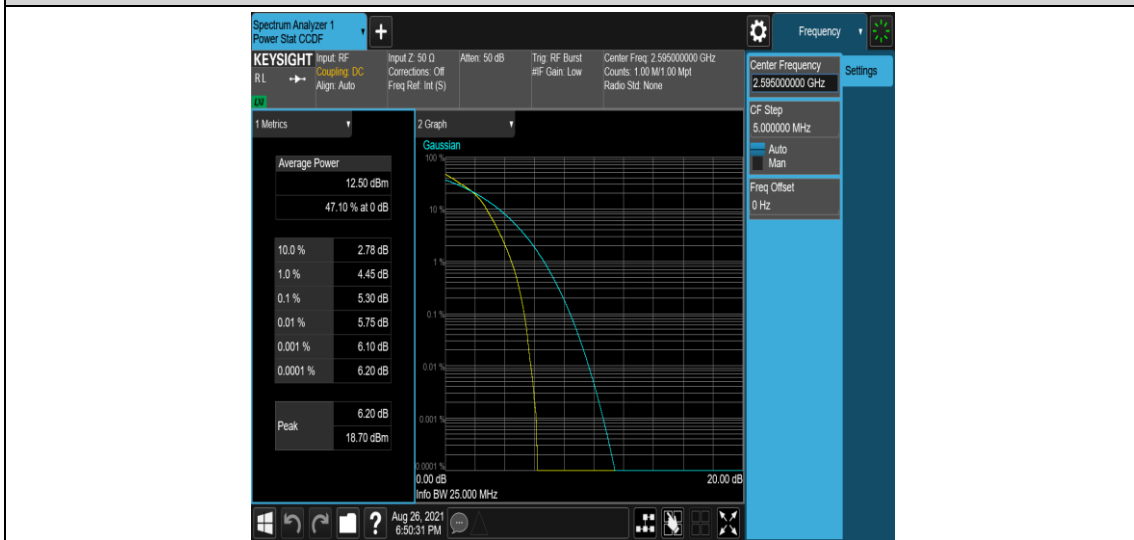
Band38-20MHz-16QAM-37850-100RB#0



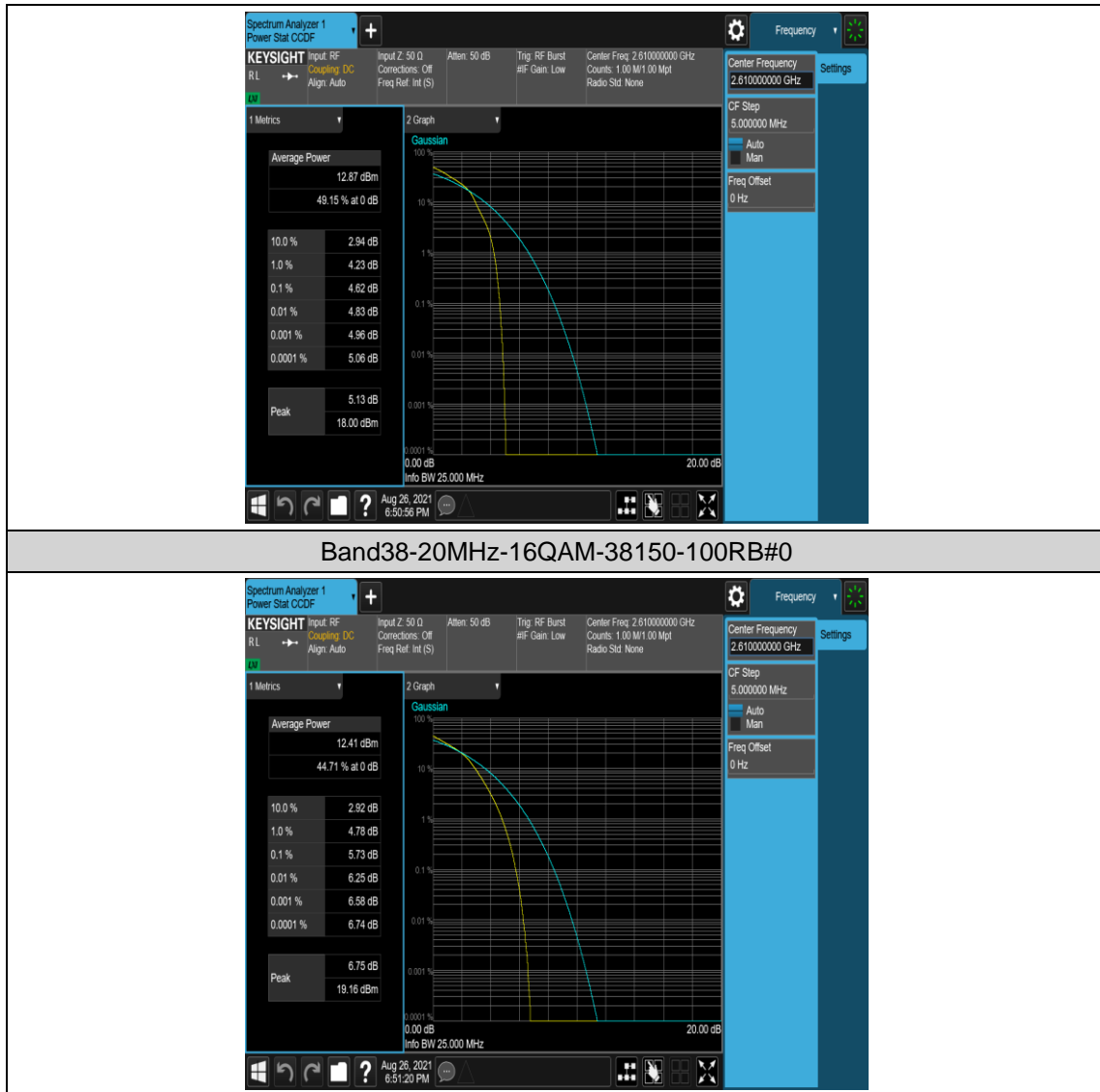
Band38-20MHz-16QAM-38000-1RB#0



Band38-20MHz-16QAM-38000-100RB#0



Band38-20MHz-16QAM-38150-1RB#0

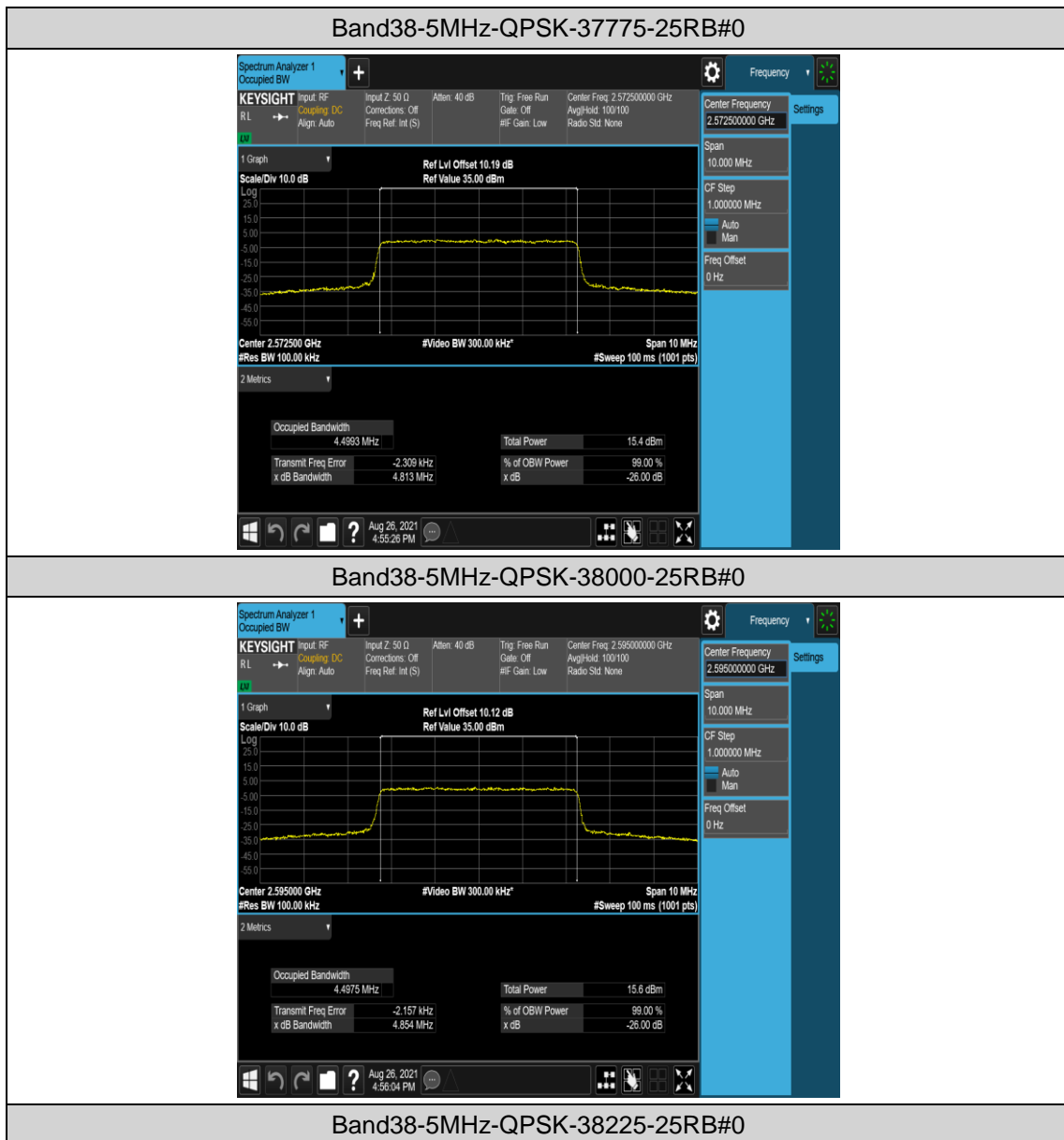


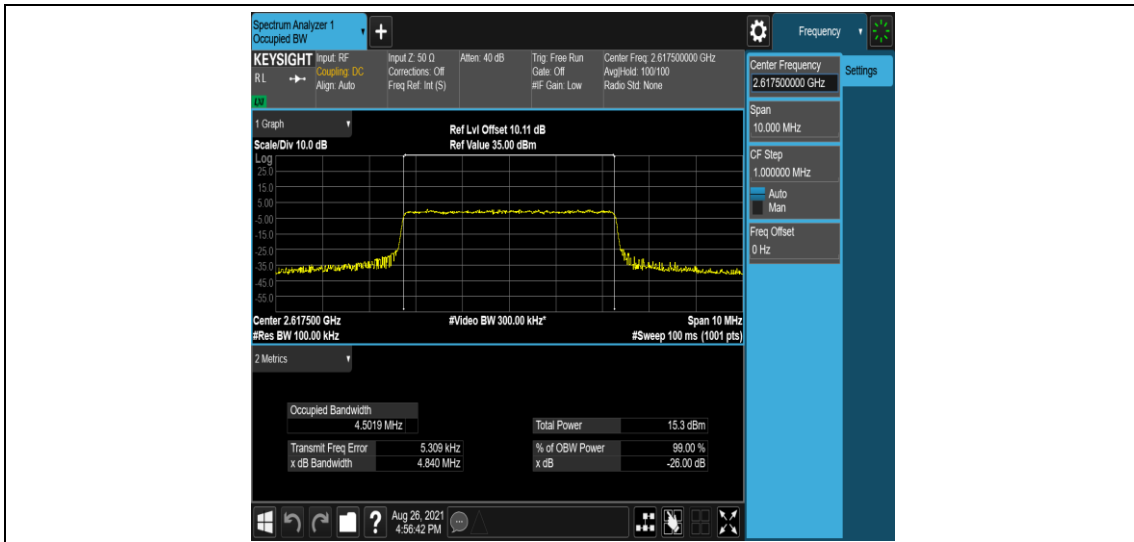
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

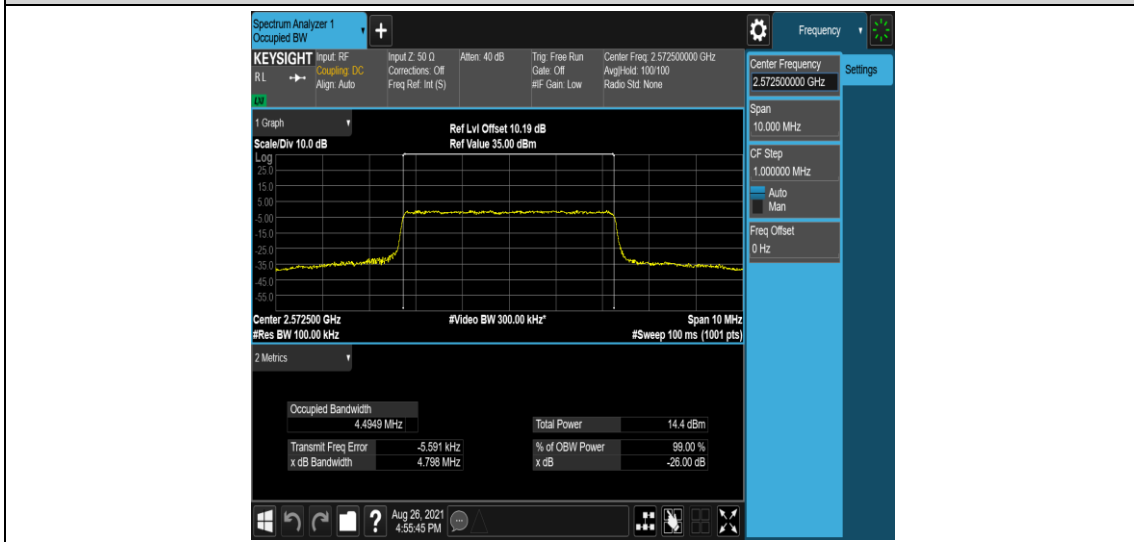
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	4.4993	4.813	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.4975	4.854	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.5019	4.840	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.4949	4.798	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.4892	4.820	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.4955	4.789	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.9876	9.530	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.9863	9.531	PASS
Band38	10MHz	QPSK	38200	50RB#0	9.0030	9.493	PASS
Band38	10MHz	16QAM	37800	50RB#0	8.9896	9.529	PASS
Band38	10MHz	16QAM	38000	50RB#0	8.9836	9.526	PASS
Band38	10MHz	16QAM	38200	50RB#0	8.9794	9.506	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.494	14.32	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.490	14.31	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.482	14.25	PASS
Band38	15MHz	16QAM	37825	75RB#0	13.467	14.30	PASS
Band38	15MHz	16QAM	38000	75RB#0	13.477	14.27	PASS
Band38	15MHz	16QAM	38175	75RB#0	13.459	14.23	PASS
Band38	20MHz	QPSK	37850	100RB#0	17.942	18.99	PASS
Band38	20MHz	QPSK	38000	100RB#0	17.969	18.98	PASS
Band38	20MHz	QPSK	38150	100RB#0	17.945	18.97	PASS
Band38	20MHz	16QAM	37850	100RB#0	17.943	18.94	PASS
Band38	20MHz	16QAM	38000	100RB#0	17.942	18.97	PASS
Band38	20MHz	16QAM	38150	100RB#0	17.959	18.93	PASS

Test Graphs

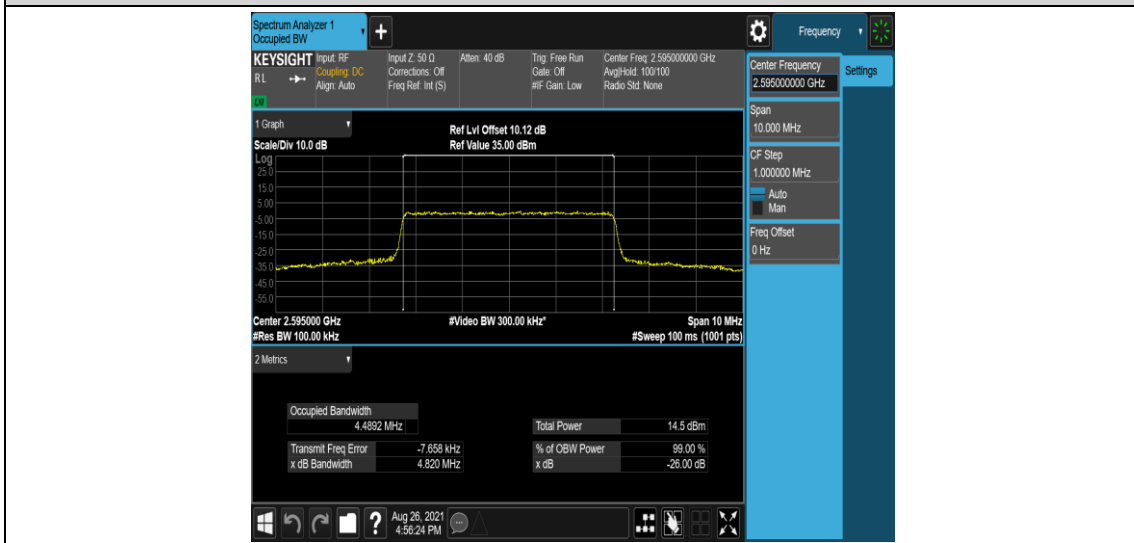




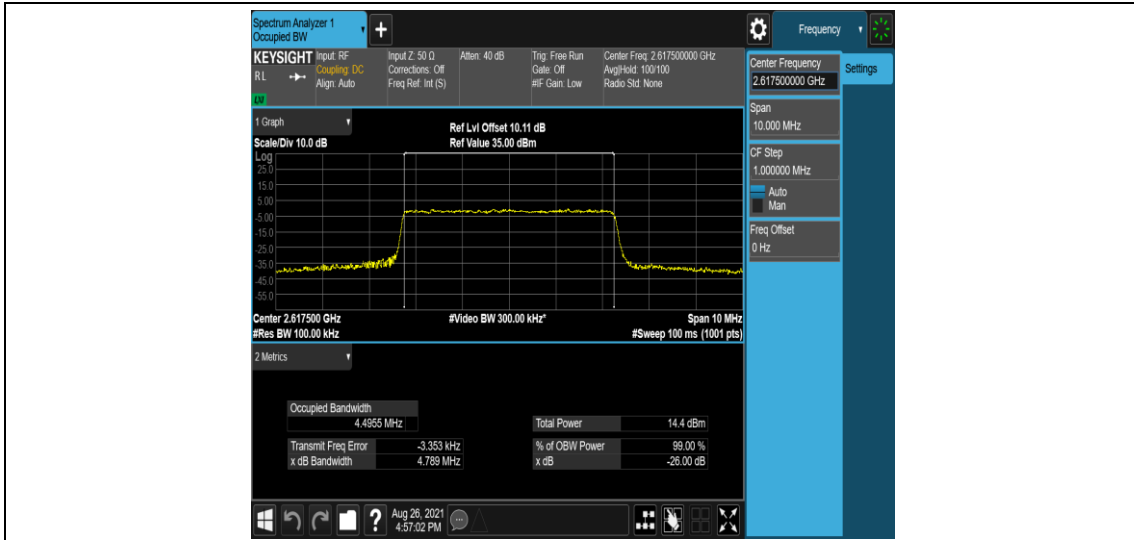
Band38-5MHz-16QAM-37775-25RB#0



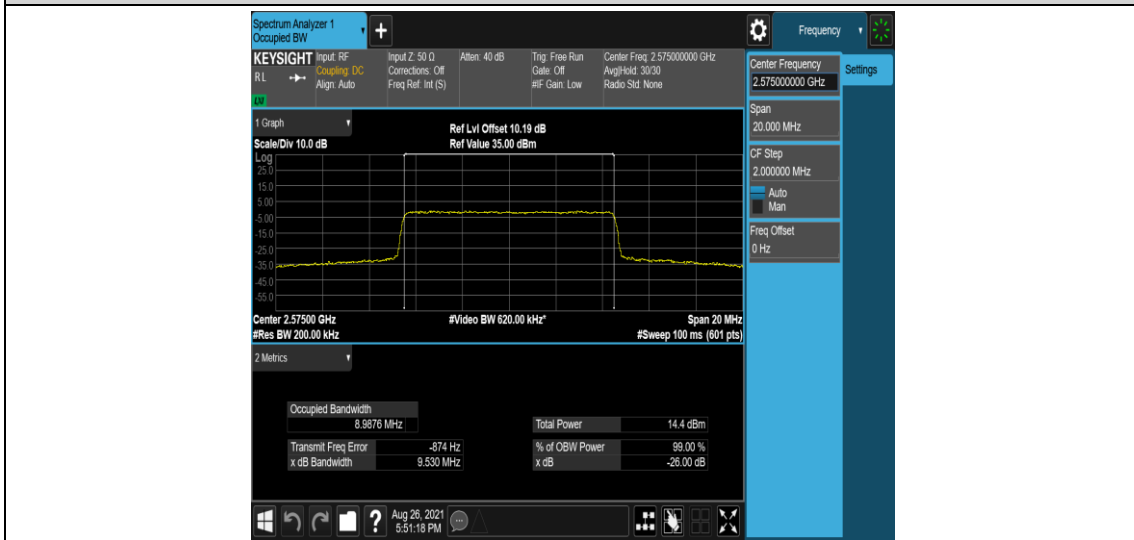
Band38-5MHz-16QAM-38000-25RB#0



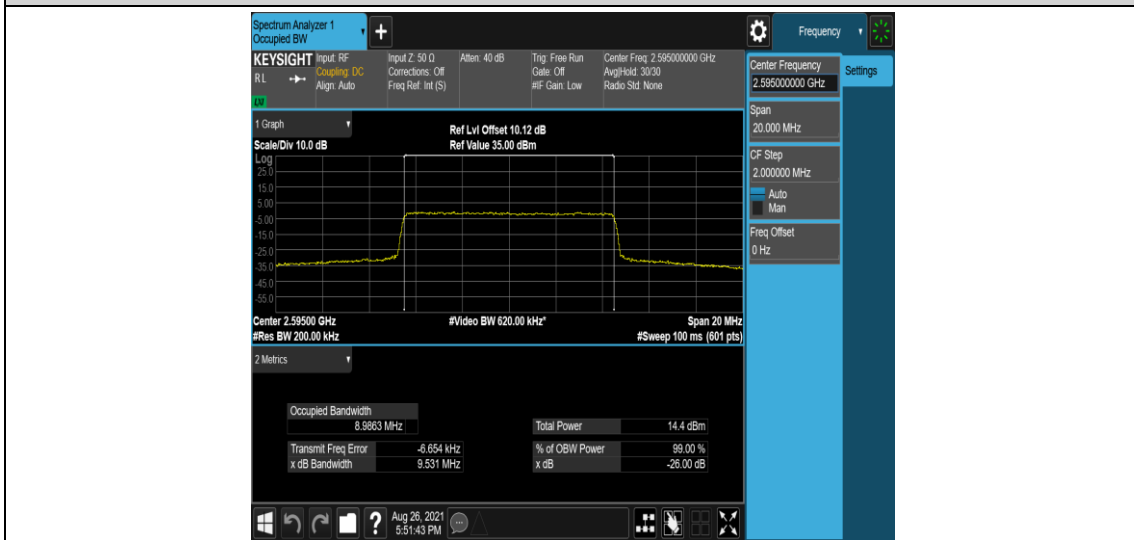
Band38-5MHz-16QAM-38225-25RB#0



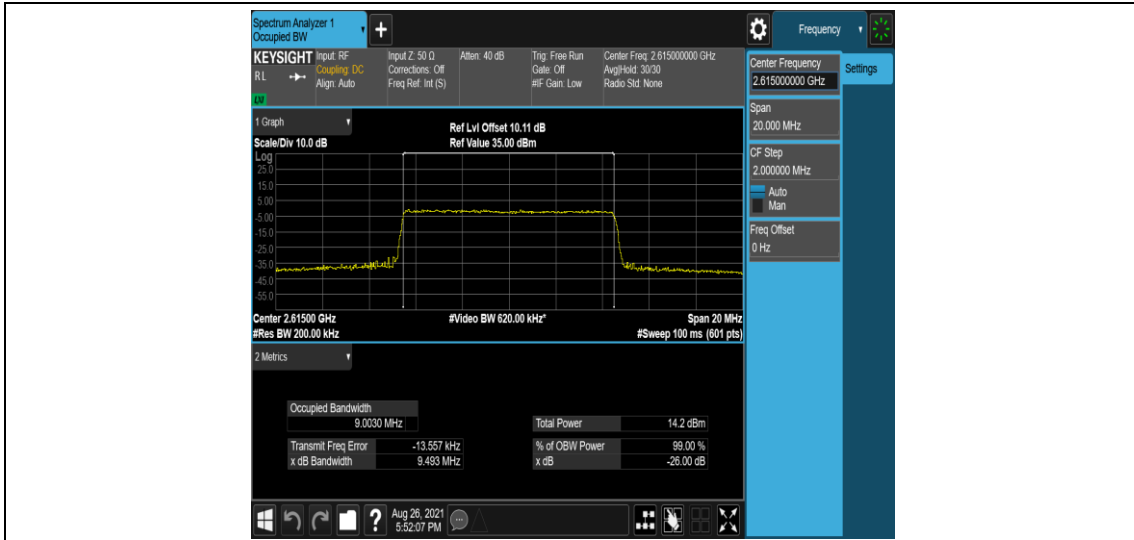
Band38-10MHz-QPSK-37800-50RB#0



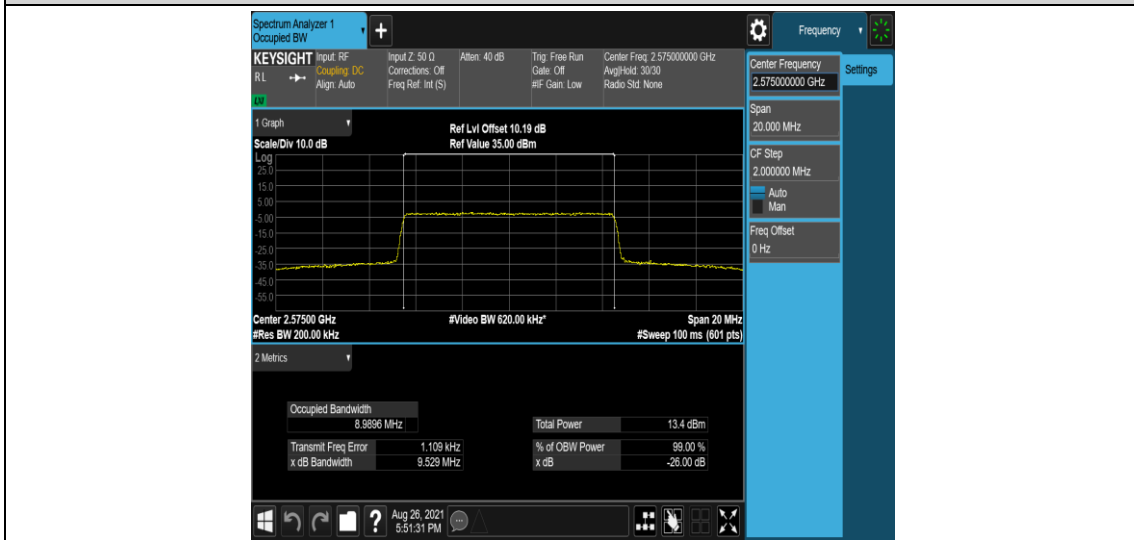
Band38-10MHz-QPSK-38000-50RB#0



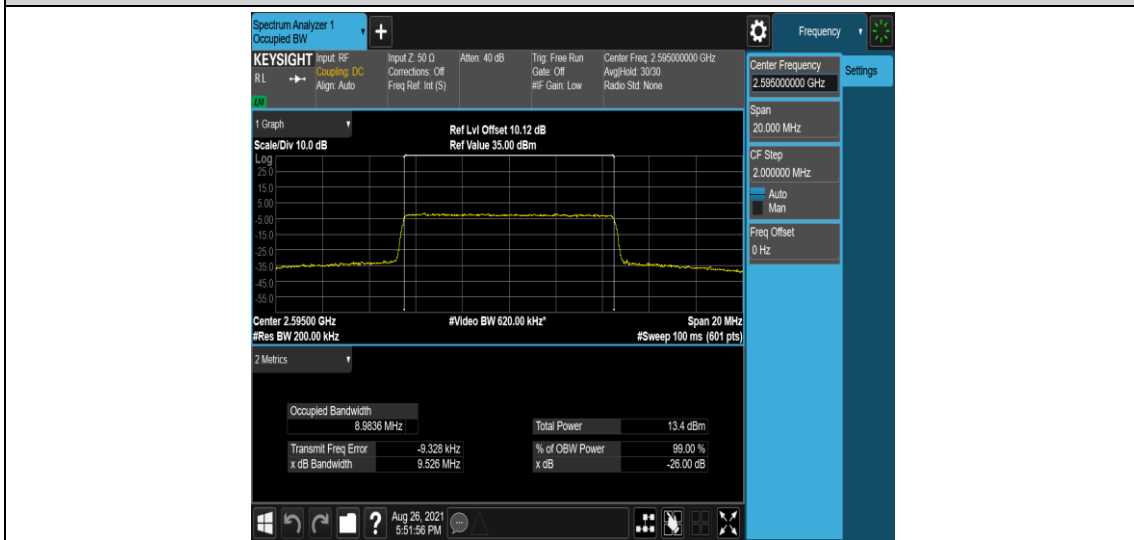
Band38-10MHz-QPSK-38200-50RB#0



Band38-10MHz-16QAM-37800-50RB#0



Band38-10MHz-16QAM-38000-50RB#0



Band38-10MHz-16QAM-38200-50RB#0