

Appendix for Band 12

Product Name: Smart Phone

Model No: F91 5G

Appendix A: Average Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	24.48	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	24.48	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	24.52	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	24.58	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	24.58	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	24.57	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	23.62	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	24.48	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	24.43	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	24.41	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	24.57	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	24.58	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	24.59	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	23.52	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	24.35	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	24.33	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	24.36	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	24.46	PASS
Band12	1.4MHz	QPSK	23173	3RB#1	24.48	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	24.49	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	23.53	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	23.49	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	23.52	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	23.44	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	23.45	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	23.43	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	23.43	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	22.62	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	23.43	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	23.43	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	23.43	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	23.38	PASS

Band12	1.4MHz	16QAM	23095	3RB#1	23.39	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	23.39	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	22.38	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	23.26	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	23.26	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	23.27	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	23.39	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	23.40	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	23.42	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	22.51	PASS
Band12	3MHz	QPSK	23025	1RB#0	24.70	PASS
Band12	3MHz	QPSK	23025	1RB#8	24.69	PASS
Band12	3MHz	QPSK	23025	1RB#14	24.67	PASS
Band12	3MHz	QPSK	23025	8RB#0	23.58	PASS
Band12	3MHz	QPSK	23025	8RB#4	23.59	PASS
Band12	3MHz	QPSK	23025	8RB#7	23.61	PASS
Band12	3MHz	QPSK	23025	15RB#0	23.61	PASS
Band12	3MHz	QPSK	23095	1RB#0	24.52	PASS
Band12	3MHz	QPSK	23095	1RB#8	24.49	PASS
Band12	3MHz	QPSK	23095	1RB#14	24.46	PASS
Band12	3MHz	QPSK	23095	8RB#0	23.52	PASS
Band12	3MHz	QPSK	23095	8RB#4	23.52	PASS
Band12	3MHz	QPSK	23095	8RB#7	23.55	PASS
Band12	3MHz	QPSK	23095	15RB#0	23.52	PASS
Band12	3MHz	QPSK	23165	1RB#0	24.40	PASS
Band12	3MHz	QPSK	23165	1RB#8	24.38	PASS
Band12	3MHz	QPSK	23165	1RB#14	24.37	PASS
Band12	3MHz	QPSK	23165	8RB#0	23.52	PASS
Band12	3MHz	QPSK	23165	8RB#4	23.53	PASS
Band12	3MHz	QPSK	23165	8RB#7	23.49	PASS
Band12	3MHz	QPSK	23165	15RB#0	23.49	PASS
Band12	3MHz	16QAM	23025	1RB#0	23.68	PASS
Band12	3MHz	16QAM	23025	1RB#8	23.71	PASS
Band12	3MHz	16QAM	23025	1RB#14	23.65	PASS
Band12	3MHz	16QAM	23025	8RB#0	22.65	PASS
Band12	3MHz	16QAM	23025	8RB#4	22.64	PASS
Band12	3MHz	16QAM	23025	8RB#7	22.62	PASS

Band12	3MHz	16QAM	23025	15RB#0	22.62	PASS
Band12	3MHz	16QAM	23095	1RB#0	23.48	PASS
Band12	3MHz	16QAM	23095	1RB#8	23.42	PASS
Band12	3MHz	16QAM	23095	1RB#14	23.34	PASS
Band12	3MHz	16QAM	23095	8RB#0	22.50	PASS
Band12	3MHz	16QAM	23095	8RB#4	22.49	PASS
Band12	3MHz	16QAM	23095	8RB#7	22.52	PASS
Band12	3MHz	16QAM	23095	15RB#0	22.43	PASS
Band12	3MHz	16QAM	23165	1RB#0	23.20	PASS
Band12	3MHz	16QAM	23165	1RB#8	23.27	PASS
Band12	3MHz	16QAM	23165	1RB#14	23.31	PASS
Band12	3MHz	16QAM	23165	8RB#0	22.54	PASS
Band12	3MHz	16QAM	23165	8RB#4	22.52	PASS
Band12	3MHz	16QAM	23165	8RB#7	22.52	PASS
Band12	3MHz	16QAM	23165	15RB#0	22.44	PASS
Band12	5MHz	QPSK	23035	1RB#0	24.84	PASS
Band12	5MHz	QPSK	23035	1RB#12	24.79	PASS
Band12	5MHz	QPSK	23035	1RB#24	24.74	PASS
Band12	5MHz	QPSK	23035	12RB#0	23.68	PASS
Band12	5MHz	QPSK	23035	12RB#6	23.67	PASS
Band12	5MHz	QPSK	23035	12RB#13	23.54	PASS
Band12	5MHz	QPSK	23035	25RB#0	23.60	PASS
Band12	5MHz	QPSK	23095	1RB#0	24.67	PASS
Band12	5MHz	QPSK	23095	1RB#12	24.66	PASS
Band12	5MHz	QPSK	23095	1RB#24	24.63	PASS
Band12	5MHz	QPSK	23095	12RB#0	23.47	PASS
Band12	5MHz	QPSK	23095	12RB#6	23.47	PASS
Band12	5MHz	QPSK	23095	12RB#13	23.56	PASS
Band12	5MHz	QPSK	23095	25RB#0	23.54	PASS
Band12	5MHz	QPSK	23155	1RB#0	24.64	PASS
Band12	5MHz	QPSK	23155	1RB#12	24.64	PASS
Band12	5MHz	QPSK	23155	1RB#24	24.68	PASS
Band12	5MHz	QPSK	23155	12RB#0	23.66	PASS
Band12	5MHz	QPSK	23155	12RB#6	23.64	PASS
Band12	5MHz	QPSK	23155	12RB#13	23.49	PASS
Band12	5MHz	QPSK	23155	25RB#0	23.61	PASS
Band12	5MHz	16QAM	23035	1RB#0	23.58	PASS

Band12	5MHz	16QAM	23035	1RB#12	23.56	PASS
Band12	5MHz	16QAM	23035	1RB#24	23.55	PASS
Band12	5MHz	16QAM	23035	12RB#0	22.63	PASS
Band12	5MHz	16QAM	23035	12RB#6	22.68	PASS
Band12	5MHz	16QAM	23035	12RB#13	22.50	PASS
Band12	5MHz	16QAM	23035	25RB#0	22.63	PASS
Band12	5MHz	16QAM	23095	1RB#0	23.59	PASS
Band12	5MHz	16QAM	23095	1RB#12	23.60	PASS
Band12	5MHz	16QAM	23095	1RB#24	23.58	PASS
Band12	5MHz	16QAM	23095	12RB#0	22.54	PASS
Band12	5MHz	16QAM	23095	12RB#6	22.53	PASS
Band12	5MHz	16QAM	23095	12RB#13	22.65	PASS
Band12	5MHz	16QAM	23095	25RB#0	22.54	PASS
Band12	5MHz	16QAM	23155	1RB#0	23.47	PASS
Band12	5MHz	16QAM	23155	1RB#12	23.43	PASS
Band12	5MHz	16QAM	23155	1RB#24	23.47	PASS
Band12	5MHz	16QAM	23155	12RB#0	22.60	PASS
Band12	5MHz	16QAM	23155	12RB#6	22.60	PASS
Band12	5MHz	16QAM	23155	12RB#13	22.46	PASS
Band12	5MHz	16QAM	23155	25RB#0	22.54	PASS
Band12	10MHz	QPSK	23060	1RB#0	24.83	PASS
Band12	10MHz	QPSK	23060	1RB#24	24.68	PASS
Band12	10MHz	QPSK	23060	1RB#49	24.62	PASS
Band12	10MHz	QPSK	23060	25RB#0	23.75	PASS
Band12	10MHz	QPSK	23060	25RB#12	23.74	PASS
Band12	10MHz	QPSK	23060	25RB#25	23.73	PASS
Band12	10MHz	QPSK	23060	50RB#0	23.74	PASS
Band12	10MHz	QPSK	23095	1RB#0	24.60	PASS
Band12	10MHz	QPSK	23095	1RB#24	24.53	PASS
Band12	10MHz	QPSK	23095	1RB#49	24.54	PASS
Band12	10MHz	QPSK	23095	25RB#0	23.54	PASS
Band12	10MHz	QPSK	23095	25RB#12	23.55	PASS
Band12	10MHz	QPSK	23095	25RB#25	23.61	PASS
Band12	10MHz	QPSK	23095	50RB#0	23.55	PASS
Band12	10MHz	QPSK	23130	1RB#0	24.43	PASS
Band12	10MHz	QPSK	23130	1RB#24	24.41	PASS
Band12	10MHz	QPSK	23130	1RB#49	24.41	PASS

Band12	10MHz	QPSK	23130	25RB#0	23.38	PASS
Band12	10MHz	QPSK	23130	25RB#12	23.37	PASS
Band12	10MHz	QPSK	23130	25RB#25	23.34	PASS
Band12	10MHz	QPSK	23130	50RB#0	23.37	PASS
Band12	10MHz	16QAM	23060	1RB#0	23.72	PASS
Band12	10MHz	16QAM	23060	1RB#24	23.66	PASS
Band12	10MHz	16QAM	23060	1RB#49	23.60	PASS
Band12	10MHz	16QAM	23060	25RB#0	22.74	PASS
Band12	10MHz	16QAM	23060	25RB#12	22.72	PASS
Band12	10MHz	16QAM	23060	25RB#25	22.70	PASS
Band12	10MHz	16QAM	23060	50RB#0	22.72	PASS
Band12	10MHz	16QAM	23095	1RB#0	23.46	PASS
Band12	10MHz	16QAM	23095	1RB#24	23.41	PASS
Band12	10MHz	16QAM	23095	1RB#49	23.43	PASS
Band12	10MHz	16QAM	23095	25RB#0	22.55	PASS
Band12	10MHz	16QAM	23095	25RB#12	22.55	PASS
Band12	10MHz	16QAM	23095	25RB#25	22.61	PASS
Band12	10MHz	16QAM	23095	50RB#0	22.57	PASS
Band12	10MHz	16QAM	23130	1RB#0	23.28	PASS
Band12	10MHz	16QAM	23130	1RB#24	23.24	PASS
Band12	10MHz	16QAM	23130	1RB#49	23.29	PASS
Band12	10MHz	16QAM	23130	25RB#0	22.45	PASS
Band12	10MHz	16QAM	23130	25RB#12	22.44	PASS
Band12	10MHz	16QAM	23130	25RB#25	22.35	PASS
Band12	10MHz	16QAM	23130	50RB#0	22.40	PASS

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

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	3.74	13	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	4.53	13	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	3.30	13	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	4.05	13	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	3.27	13	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	3.76	13	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	4.64	13	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	5.41	13	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	4.31	13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	4.80	13	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	4.33	13	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	4.63	13	PASS
Band12	3MHz	QPSK	23025	1RB#0	3.71	13	PASS
Band12	3MHz	QPSK	23025	15RB#0	4.72	13	PASS
Band12	3MHz	QPSK	23095	1RB#0	3.40	13	PASS
Band12	3MHz	QPSK	23095	15RB#0	4.06	13	PASS
Band12	3MHz	QPSK	23165	1RB#0	3.86	13	PASS
Band12	3MHz	QPSK	23165	15RB#0	4.21	13	PASS
Band12	3MHz	16QAM	23025	1RB#0	4.68	13	PASS
Band12	3MHz	16QAM	23025	15RB#0	5.59	13	PASS
Band12	3MHz	16QAM	23095	1RB#0	4.24	13	PASS
Band12	3MHz	16QAM	23095	15RB#0	4.90	13	PASS
Band12	3MHz	16QAM	23165	1RB#0	4.82	13	PASS
Band12	3MHz	16QAM	23165	15RB#0	5.14	13	PASS
Band12	5MHz	QPSK	23035	1RB#0	3.71	13	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.78	13	PASS
Band12	5MHz	QPSK	23095	1RB#0	3.55	13	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.09	13	PASS
Band12	5MHz	QPSK	23155	1RB#0	3.78	13	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.47	13	PASS
Band12	5MHz	16QAM	23035	1RB#0	4.53	13	PASS
Band12	5MHz	16QAM	23035	25RB#0	5.63	13	PASS
Band12	5MHz	16QAM	23095	1RB#0	4.33	13	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.94	13	PASS
Band12	5MHz	16QAM	23155	1RB#0	4.63	13	PASS

Band12	5MHz	16QAM	23155	25RB#0	5.36	13	PASS
Band12	10MHz	QPSK	23060	1RB#0	3.70	13	PASS
Band12	10MHz	QPSK	23060	50RB#0	4.58	13	PASS
Band12	10MHz	QPSK	23095	1RB#0	4.02	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	4.62	13	PASS
Band12	10MHz	QPSK	23130	1RB#0	3.30	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	4.50	13	PASS
Band12	10MHz	16QAM	23060	1RB#0	4.63	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	5.45	13	PASS
Band12	10MHz	16QAM	23095	1RB#0	4.86	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	5.42	13	PASS
Band12	10MHz	16QAM	23130	1RB#0	4.27	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	5.41	13	PASS

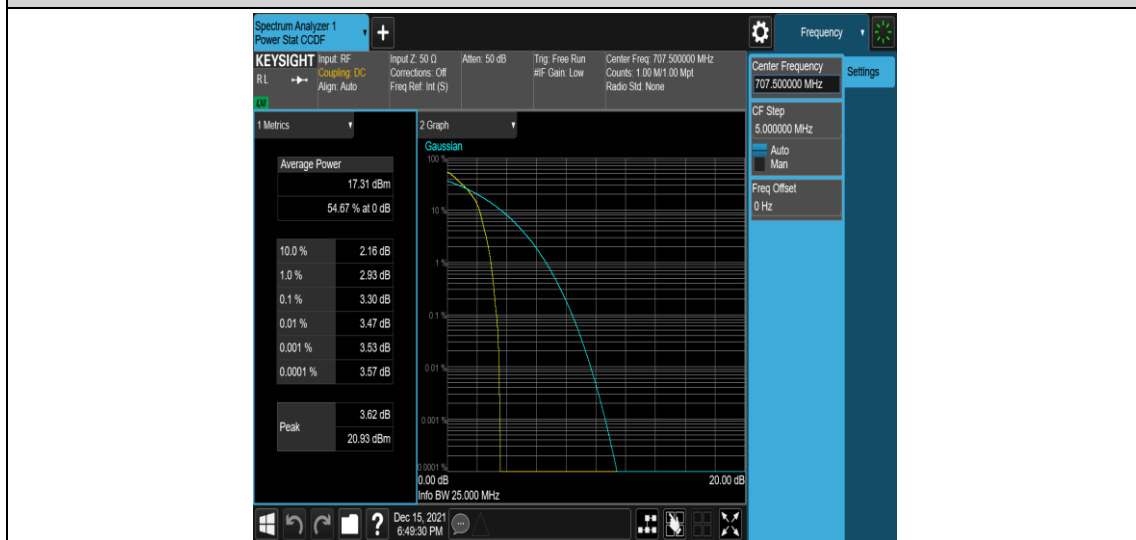
Test Graphs

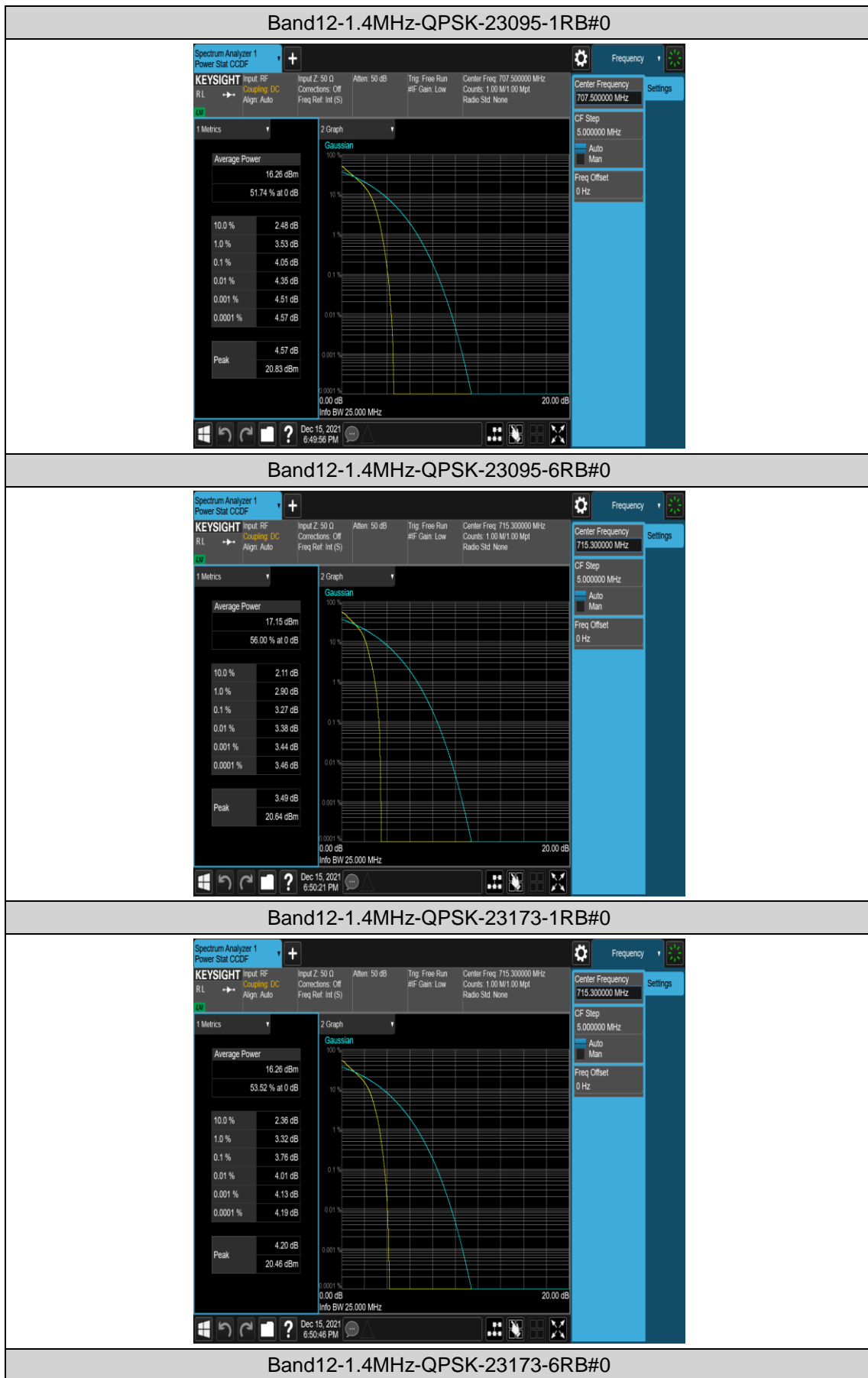


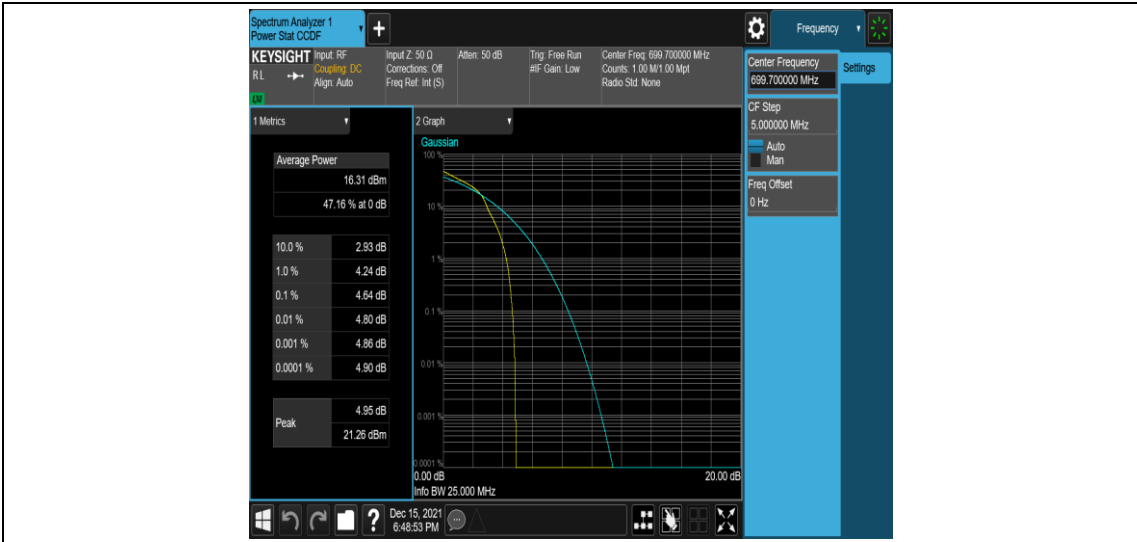
Band12-1.4MHz-QPSK-23017-1RB#0



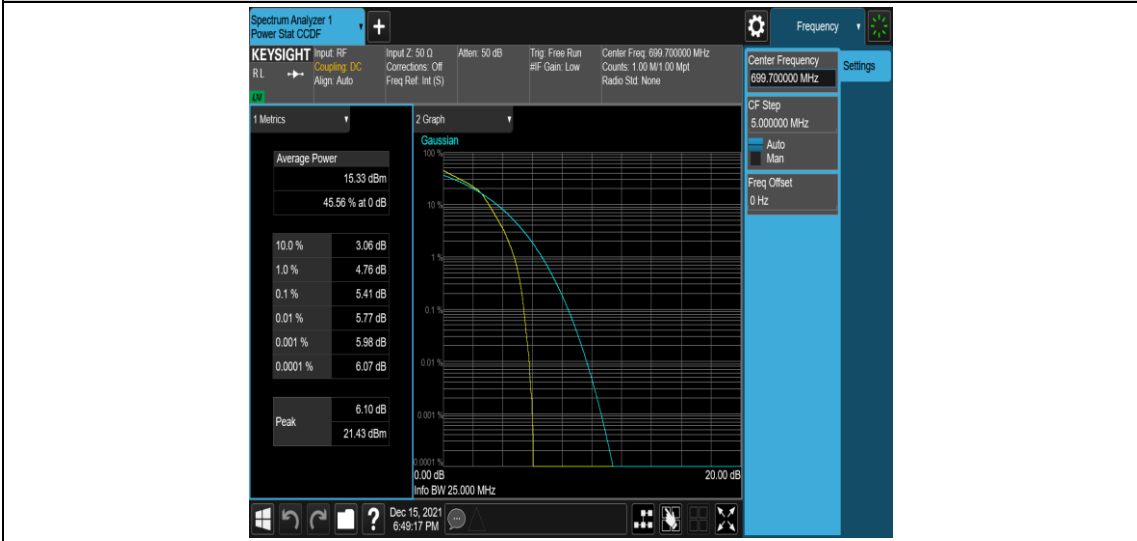
Band12-1.4MHz-QPSK-23017-6RB#0



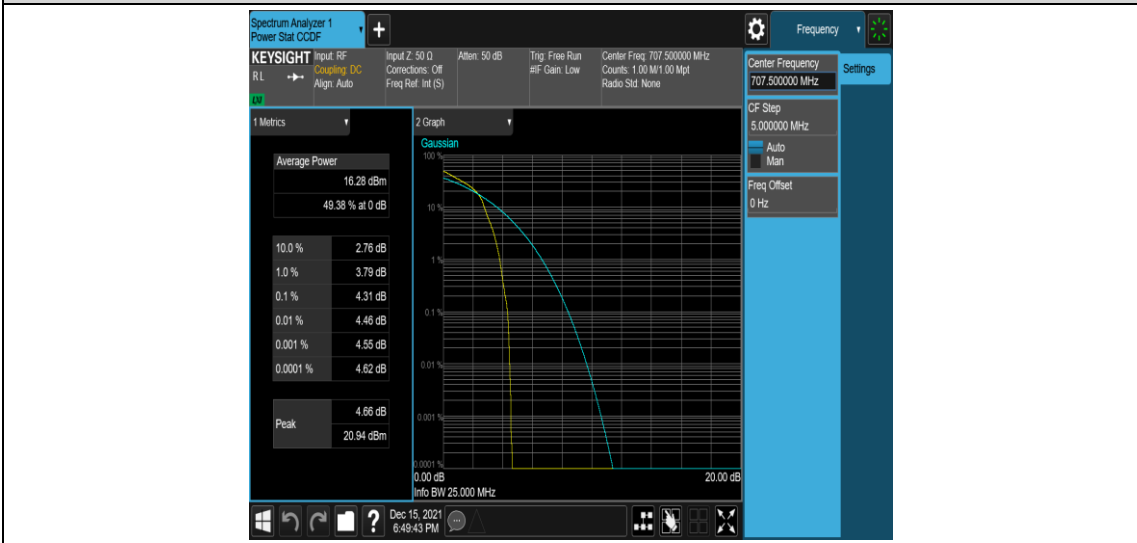




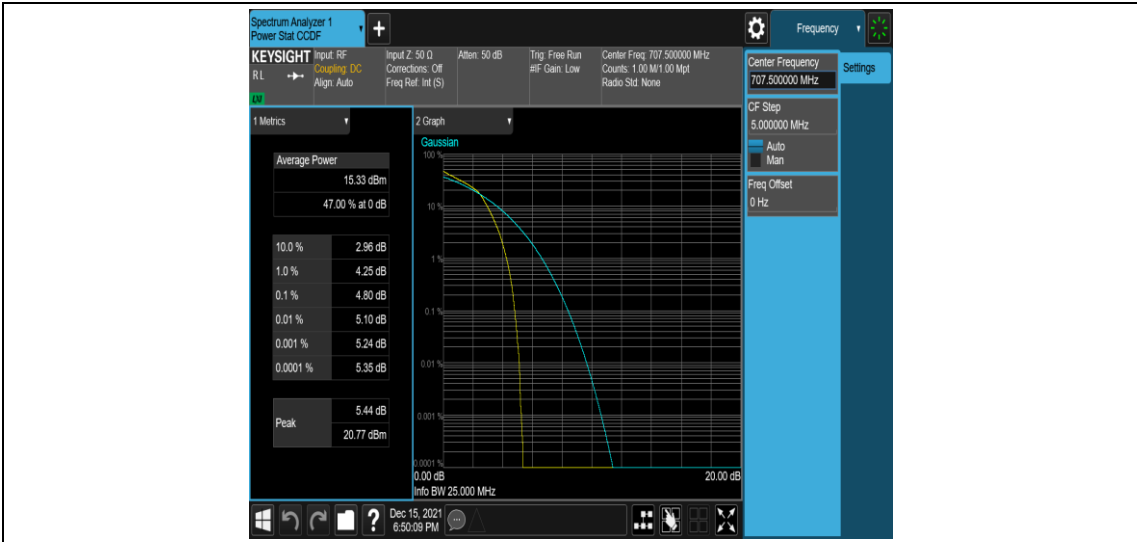
Band12-1.4MHz-16QAM-23017-1RB#0



Band12-1.4MHz-16QAM-23017-6RB#0



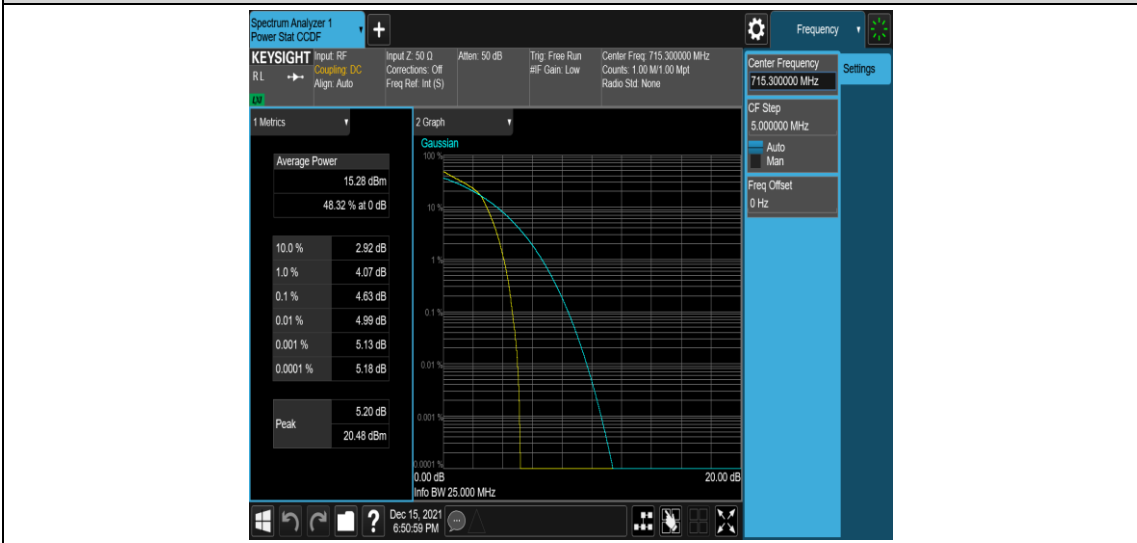
Band12-1.4MHz-16QAM-23095-1RB#0



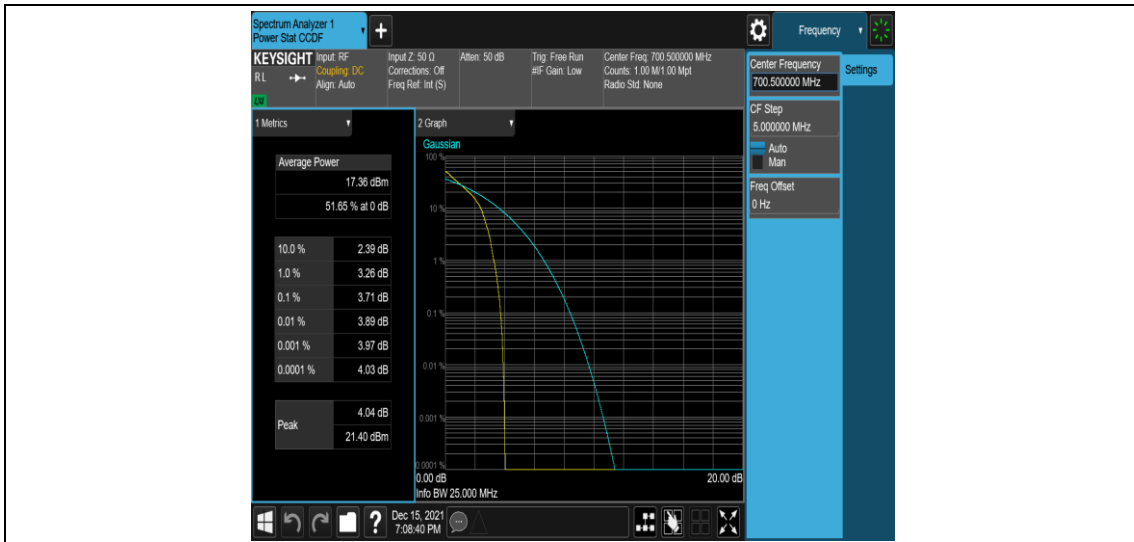
Band12-1.4MHz-16QAM-23095-6RB#0



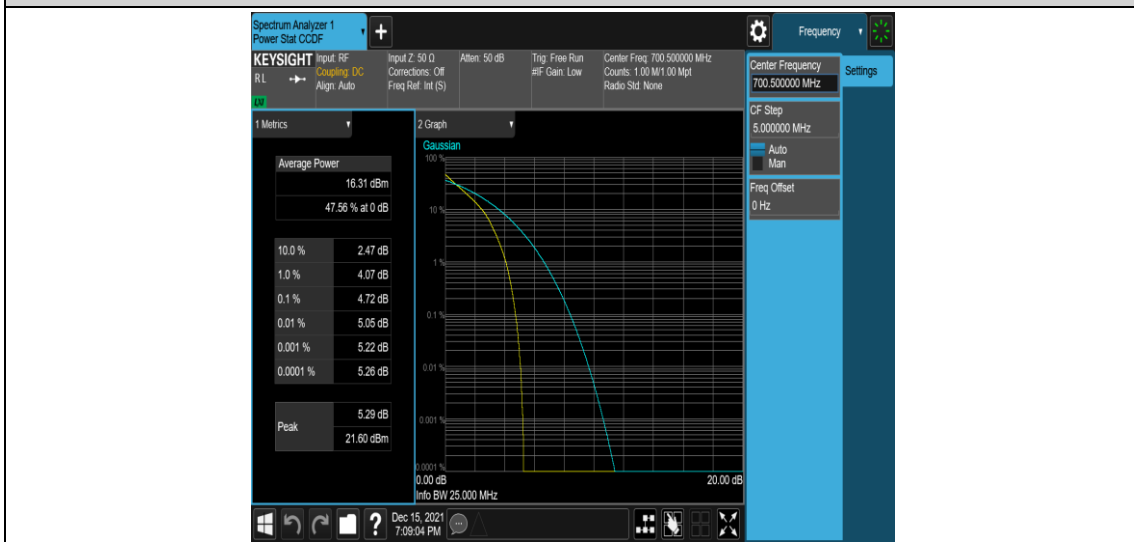
Band12-1.4MHz-16QAM-23173-1RB#0



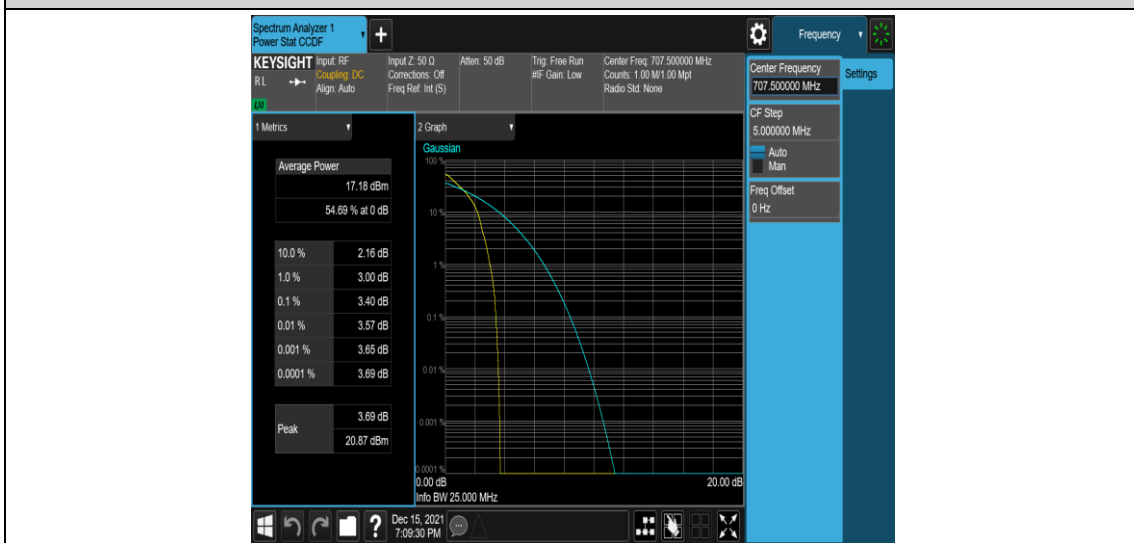
Band12-1.4MHz-16QAM-23173-6RB#0



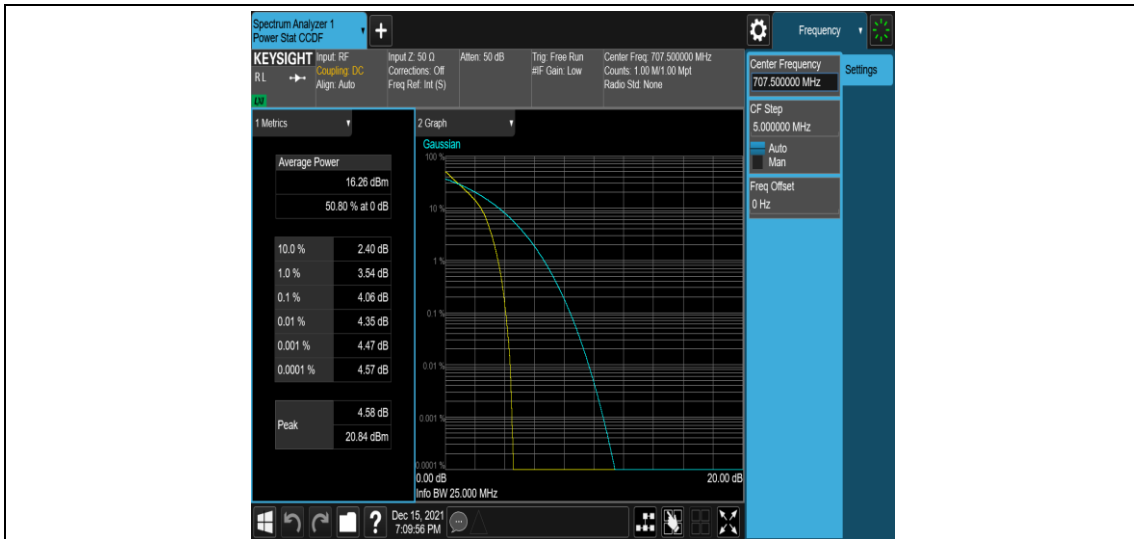
Band12-3MHz-QPSK-23025-1RB#0



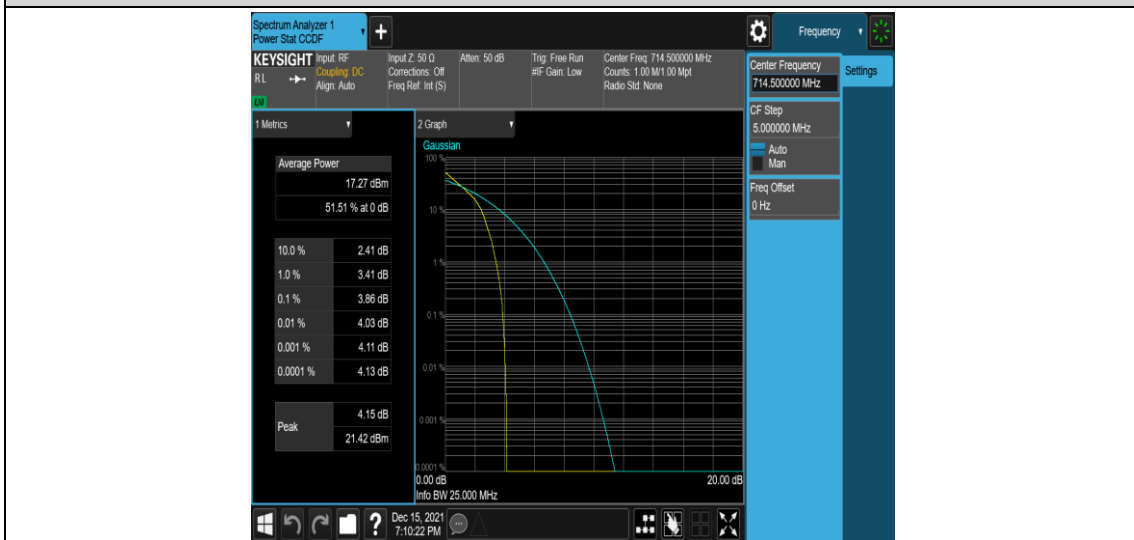
Band12-3MHz-QPSK-23025-15RB#0



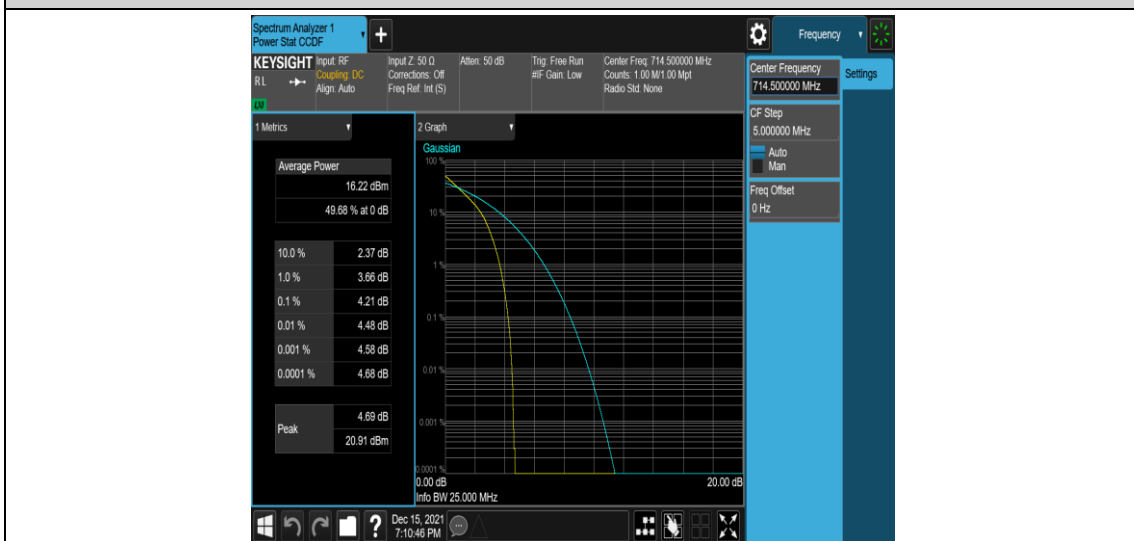
Band12-3MHz-QPSK-23095-1RB#0



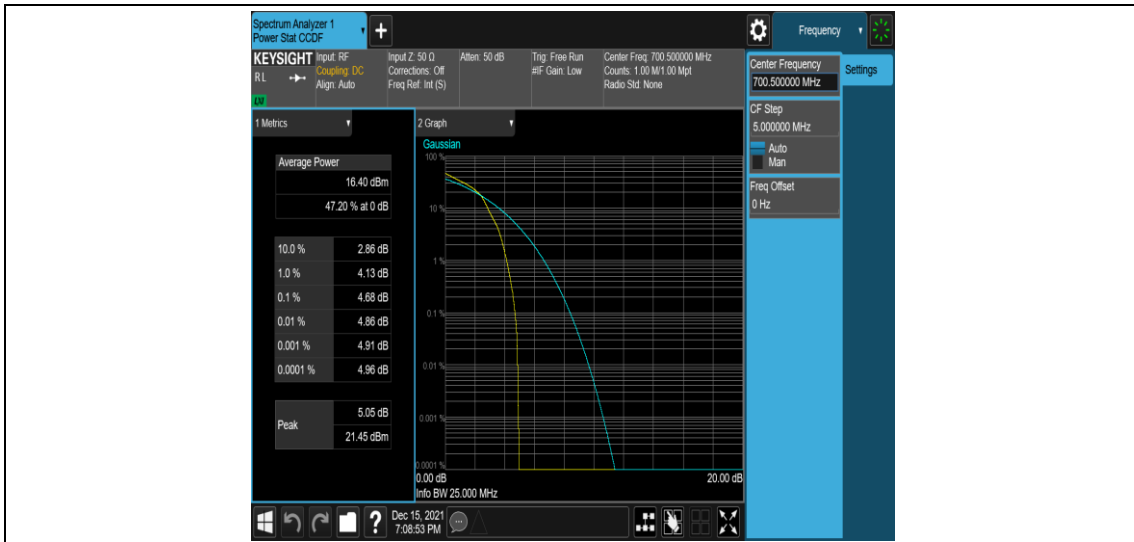
Band12-3MHz-QPSK-23095-15RB#0



Band12-3MHz-QPSK-23165-1RB#0



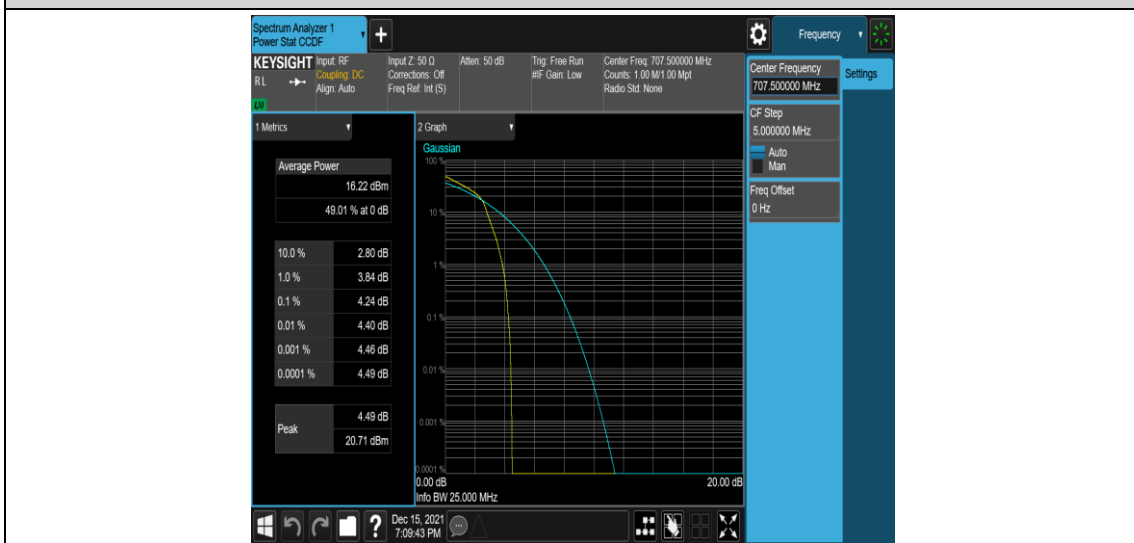
Band12-3MHz-QPSK-23165-15RB#0



Band12-3MHz-16QAM-23025-1RB#0



Band12-3MHz-16QAM-23025-15RB#0



Band12-3MHz-16QAM-23095-1RB#0



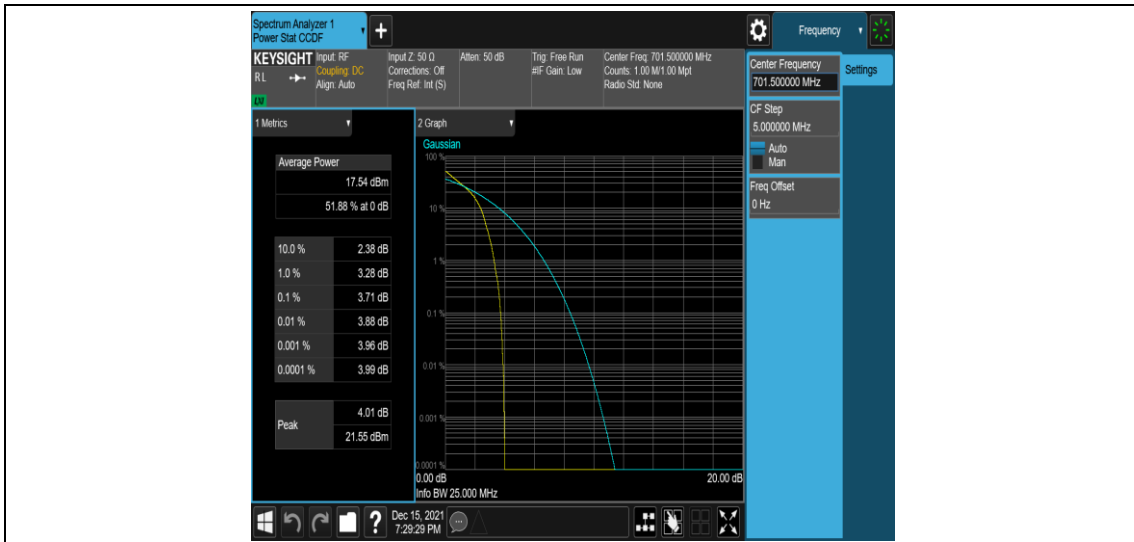
Band12-3MHz-16QAM-23095-15RB#0



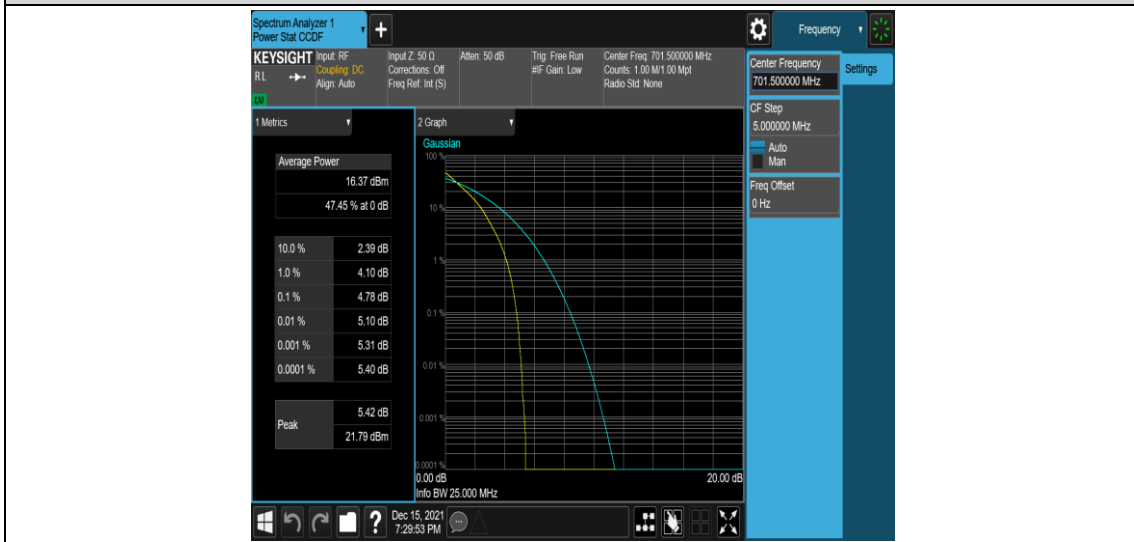
Band12-3MHz-16QAM-23165-1RB#0



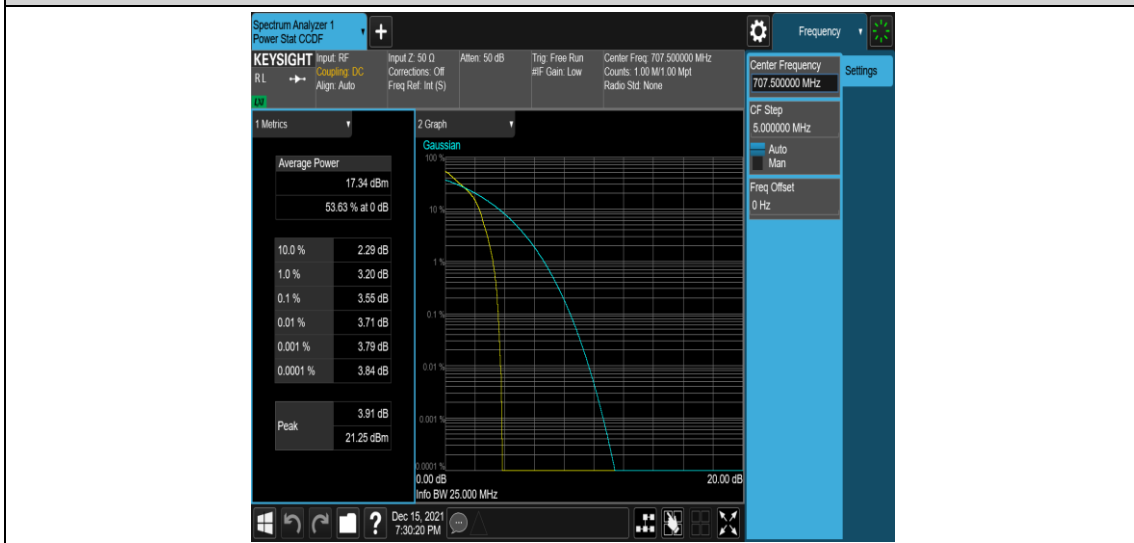
Band12-3MHz-16QAM-23165-15RB#0



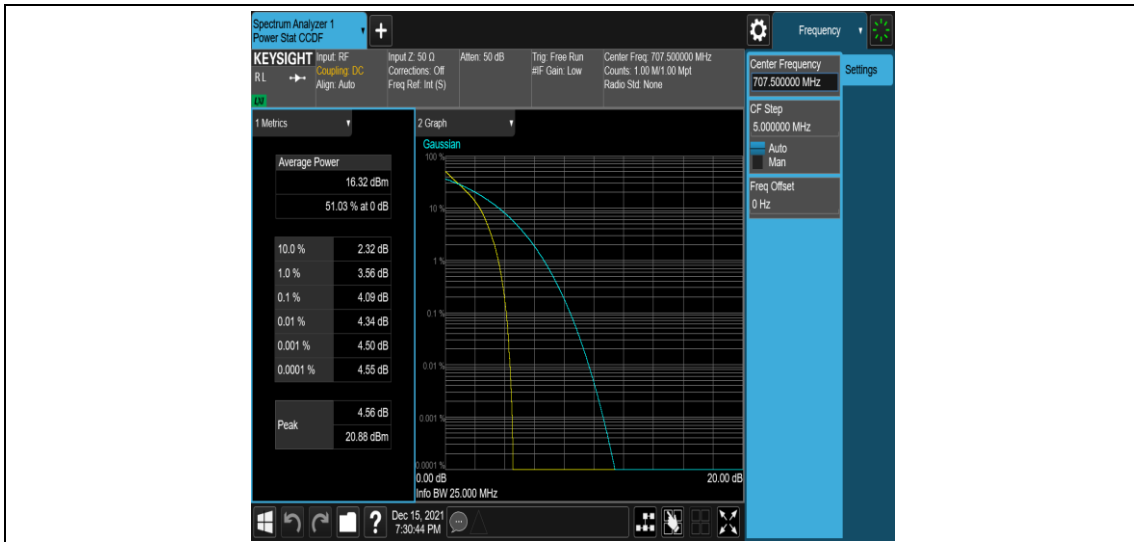
Band12-5MHz-QPSK-23035-1RB#0



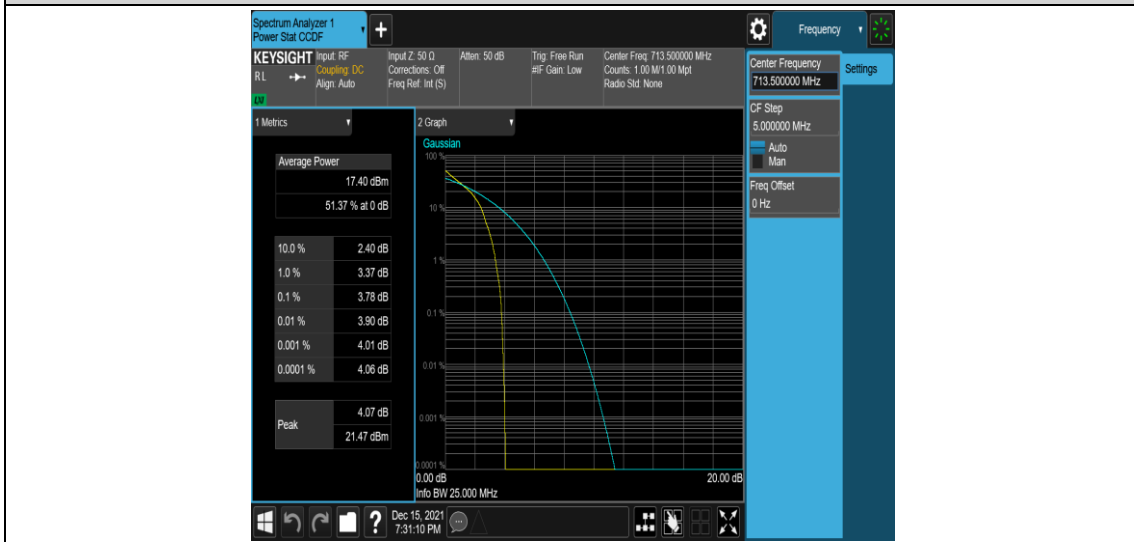
Band12-5MHz-QPSK-23035-25RB#0



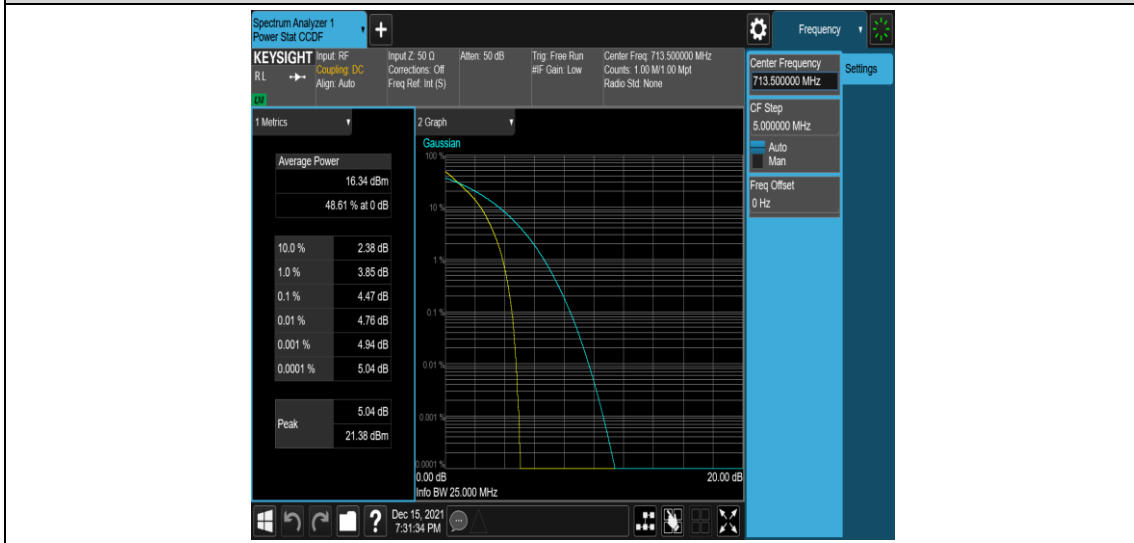
Band12-5MHz-QPSK-23095-1RB#0



Band12-5MHz-QPSK-23095-25RB#0



Band12-5MHz-QPSK-23155-1RB#0



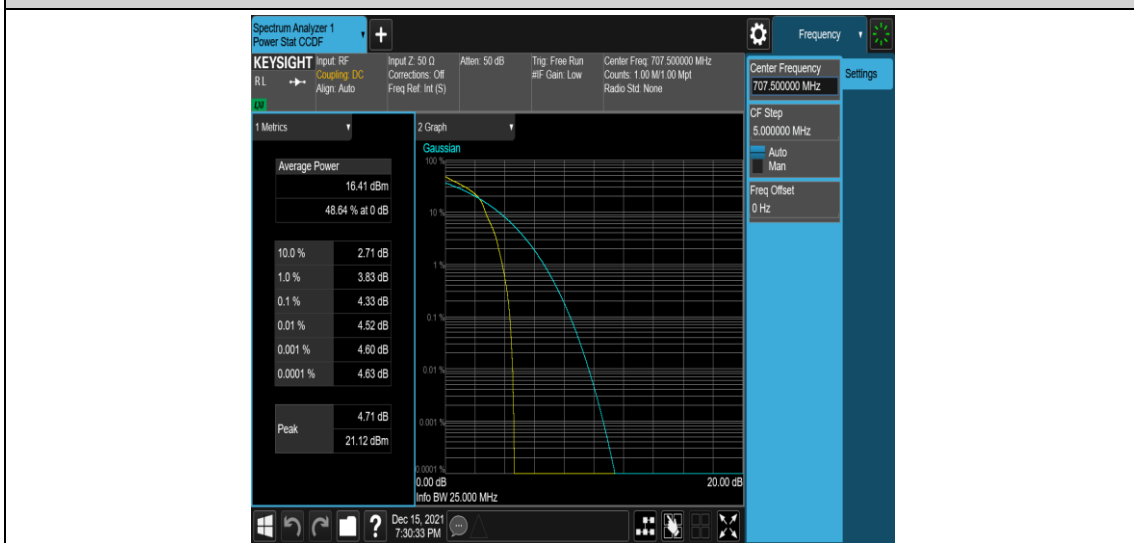
Band12-5MHz-QPSK-23155-25RB#0



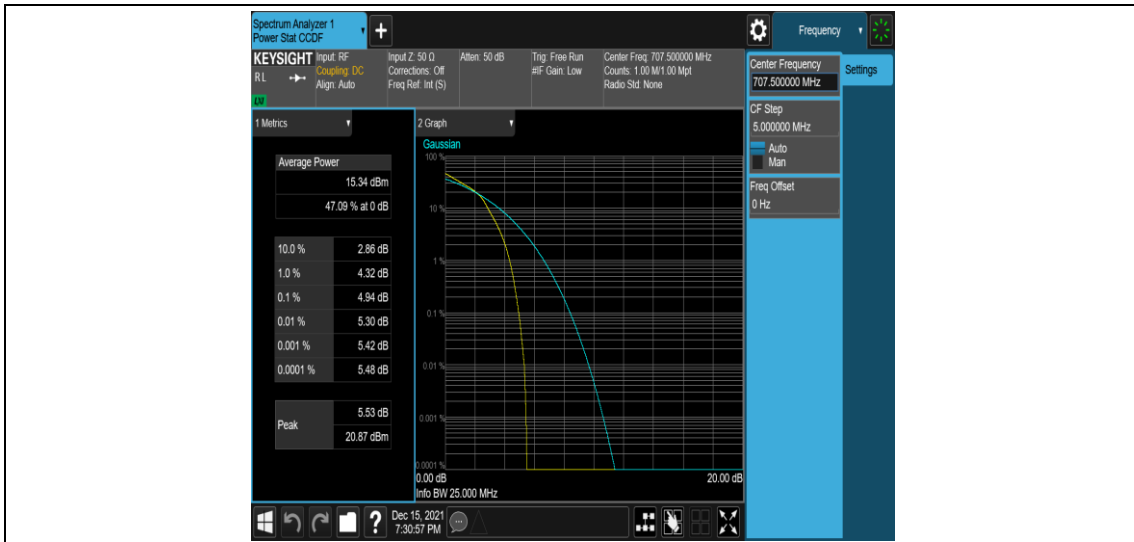
Band12-5MHz-16QAM-23035-1RB#0



Band12-5MHz-16QAM-23035-25RB#0



Band12-5MHz-16QAM-23095-1RB#0



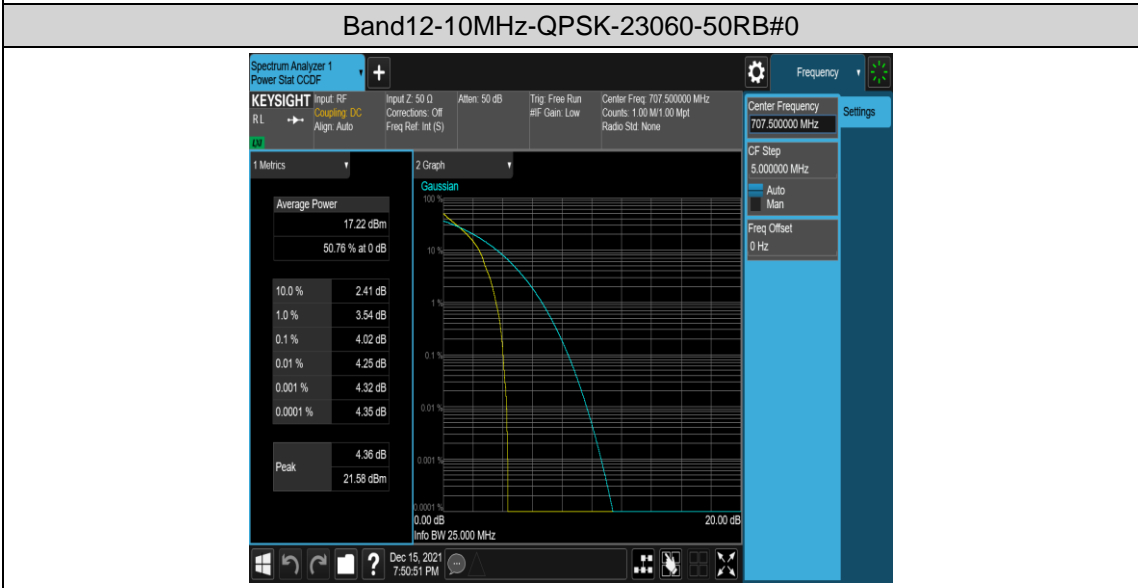
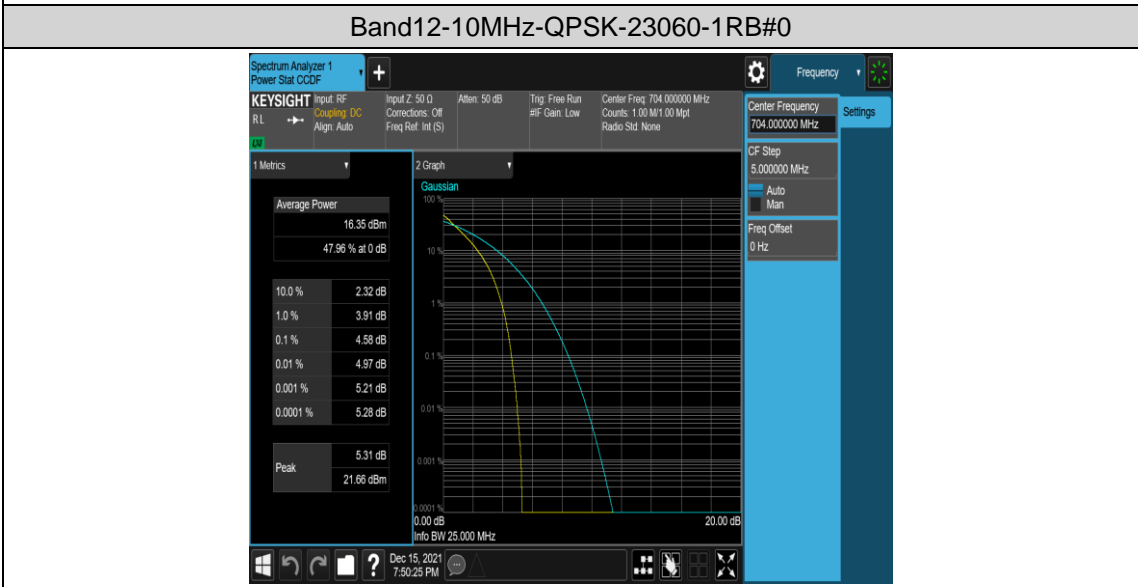
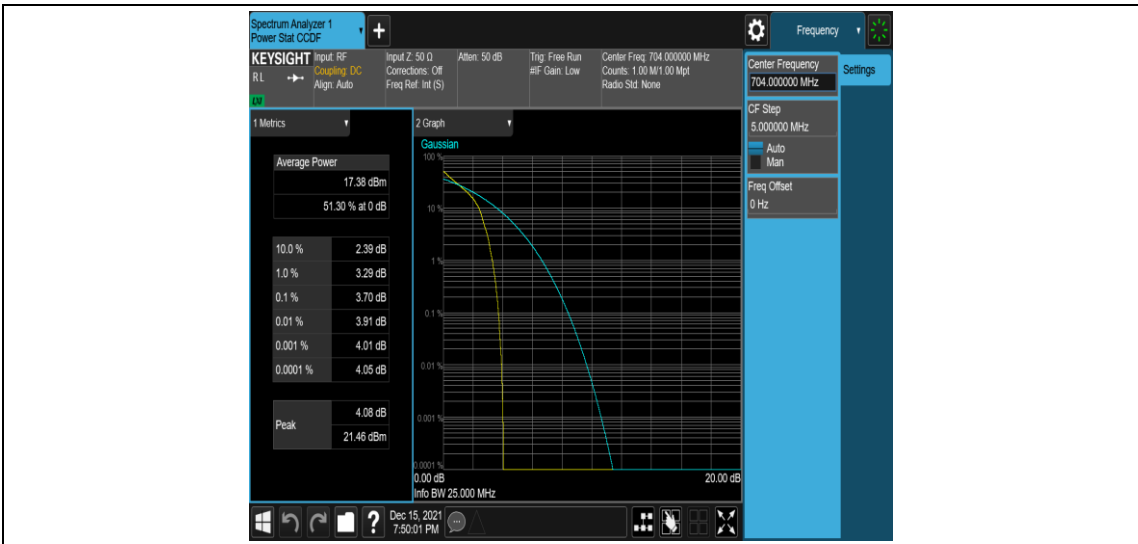
Band12-5MHz-16QAM-23095-25RB#0

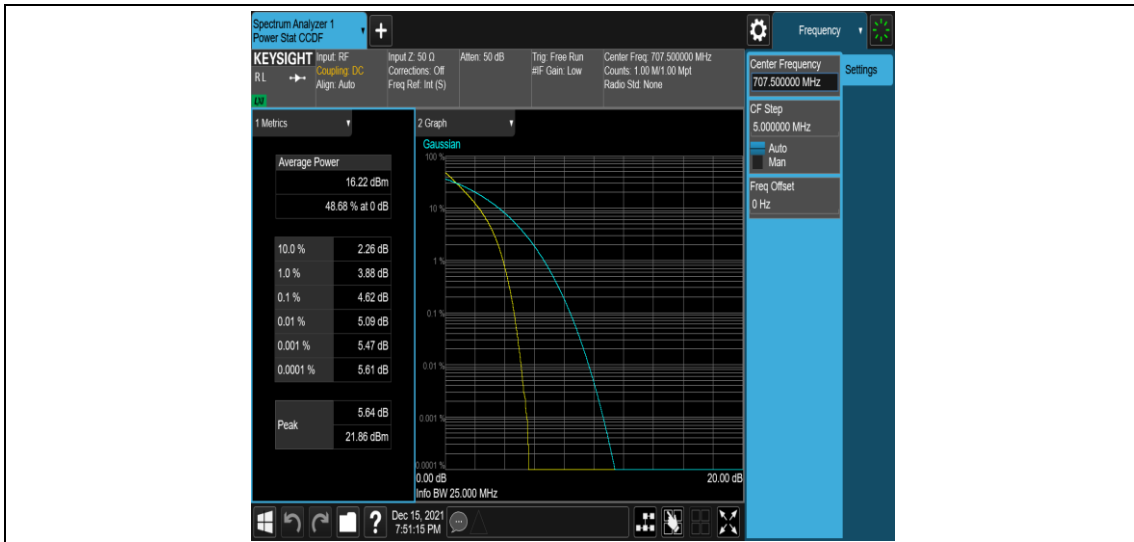


Band12-5MHz-16QAM-23155-1RB#0

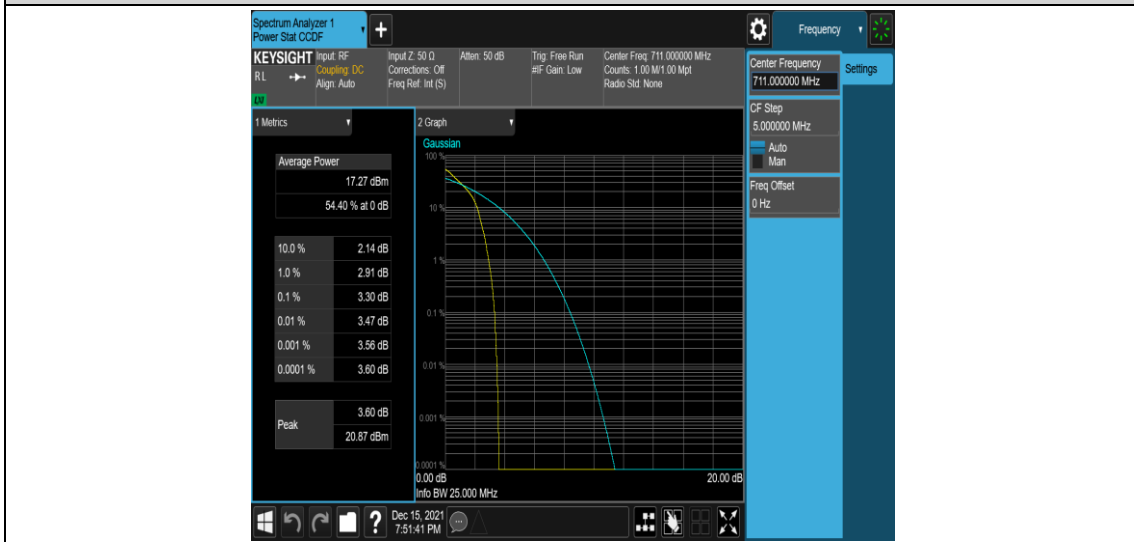


Band12-5MHz-16QAM-23155-25RB#0

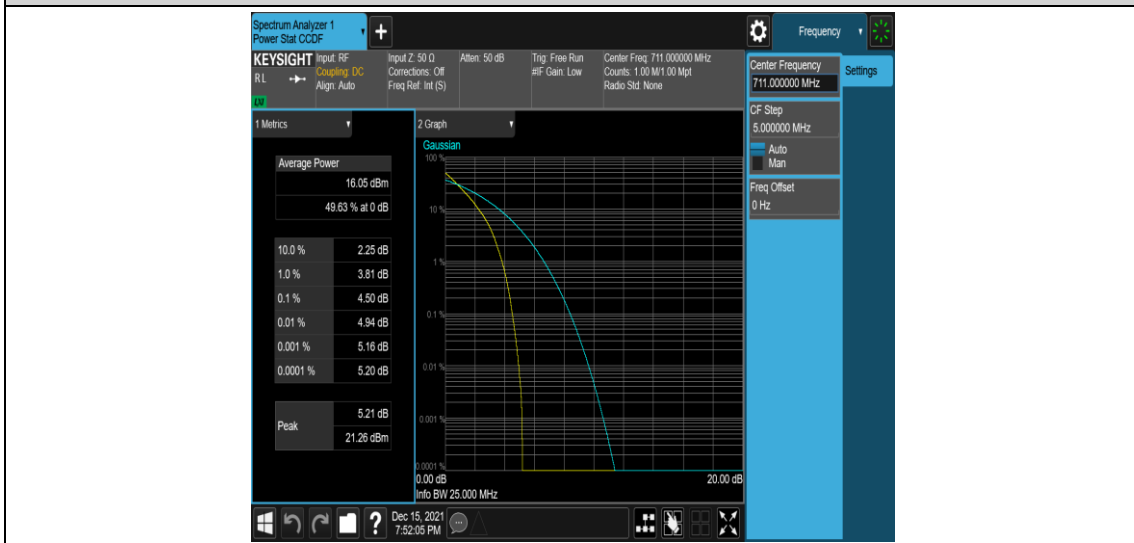




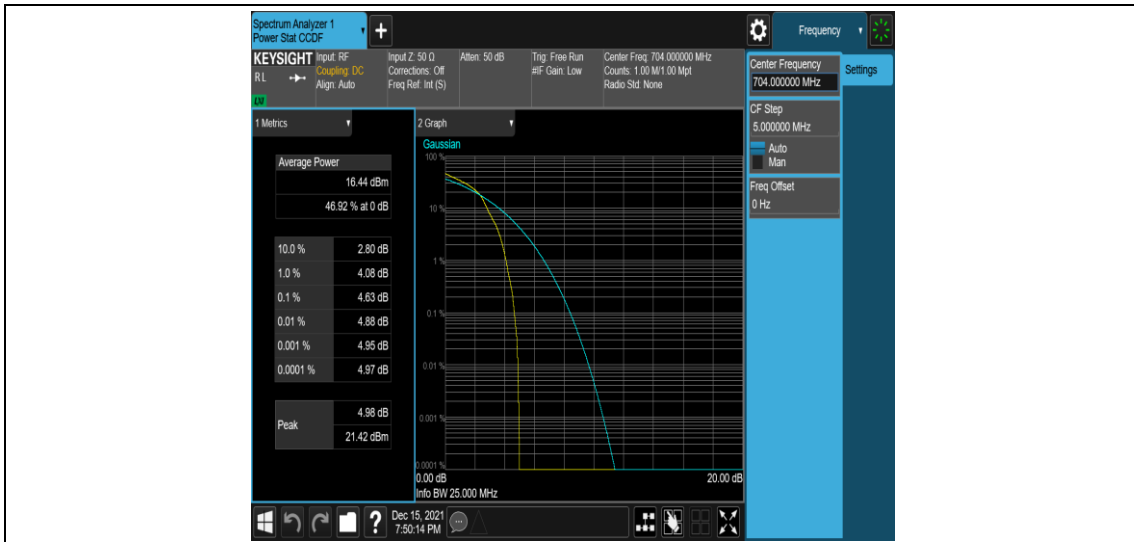
Band12-10MHz-QPSK-23095-50RB#0



Band12-10MHz-QPSK-23130-1RB#0



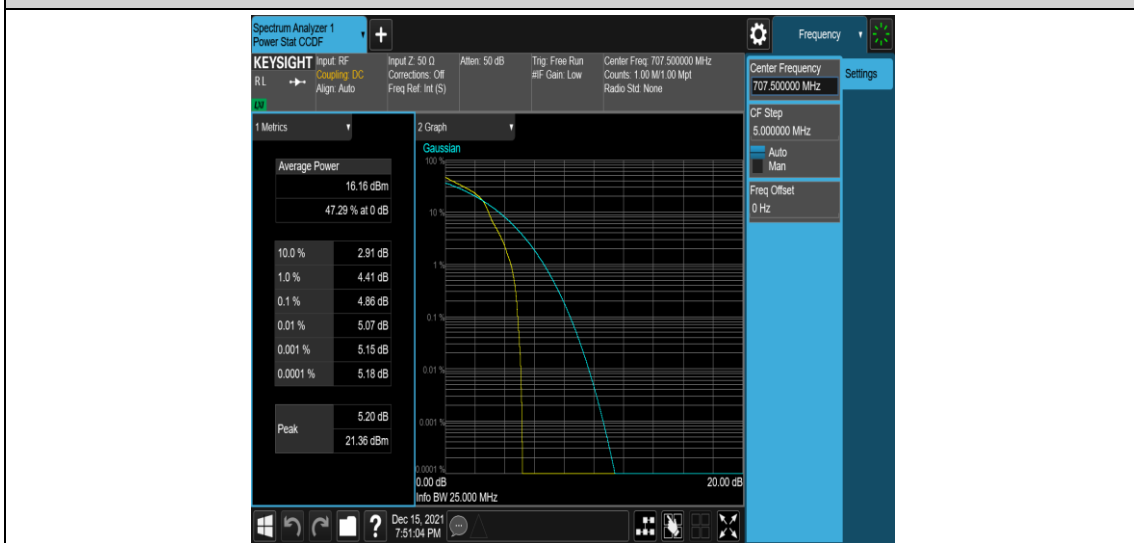
Band12-10MHz-QPSK-23130-50RB#0



Band12-10MHz-16QAM-23060-1RB#0



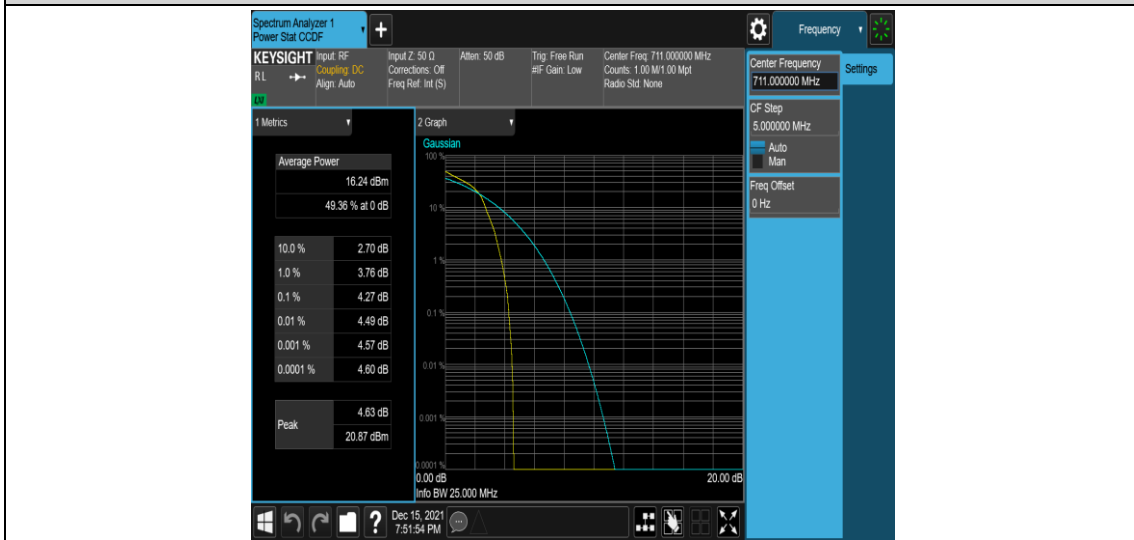
Band12-10MHz-16QAM-23060-50RB#0



Band12-10MHz-16QAM-23095-1RB#0



Band12-10MHz-16QAM-23095-50RB#0



Band12-10MHz-16QAM-23130-1RB#0



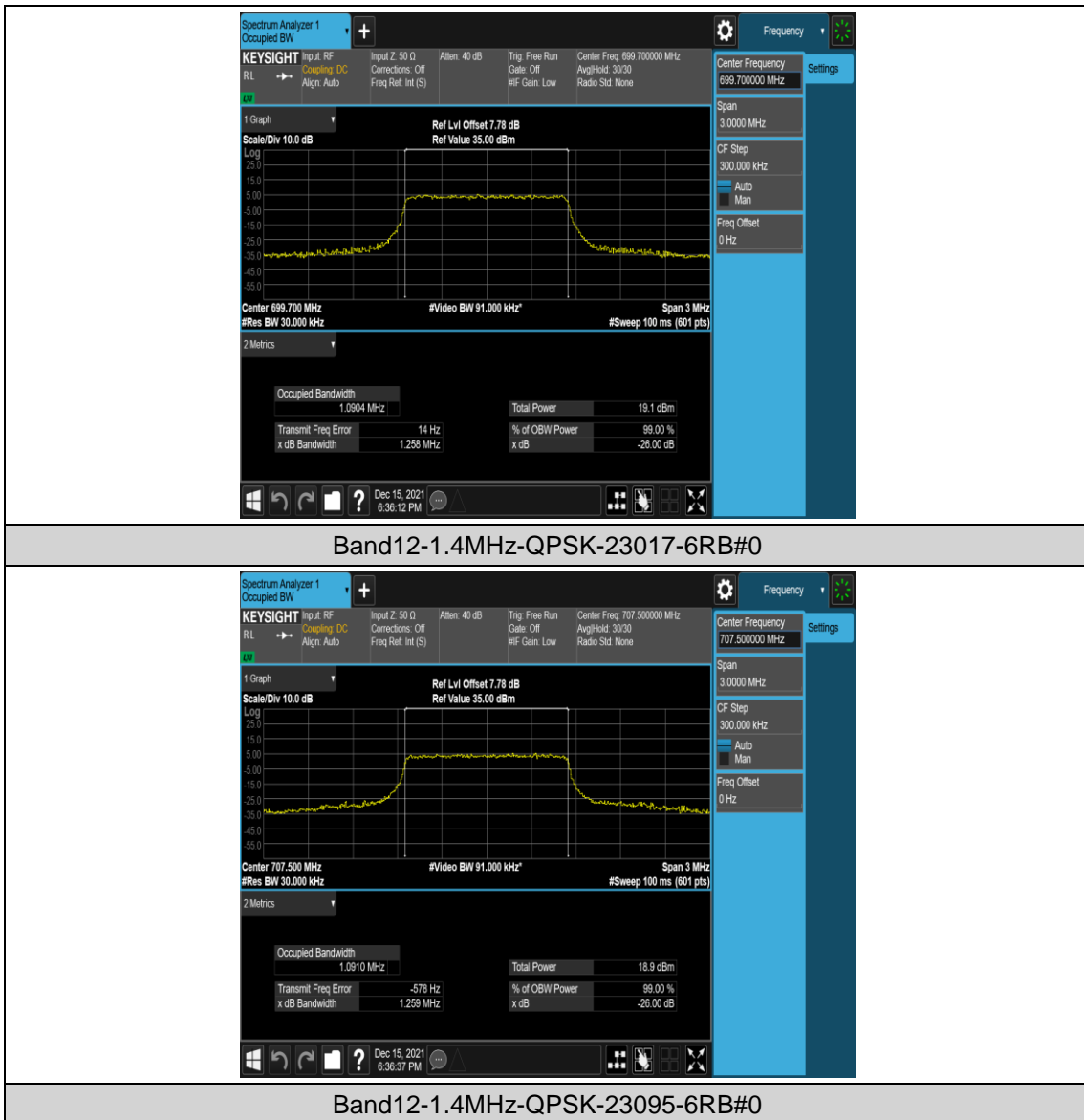
Band12-10MHz-16QAM-23130-50RB#0

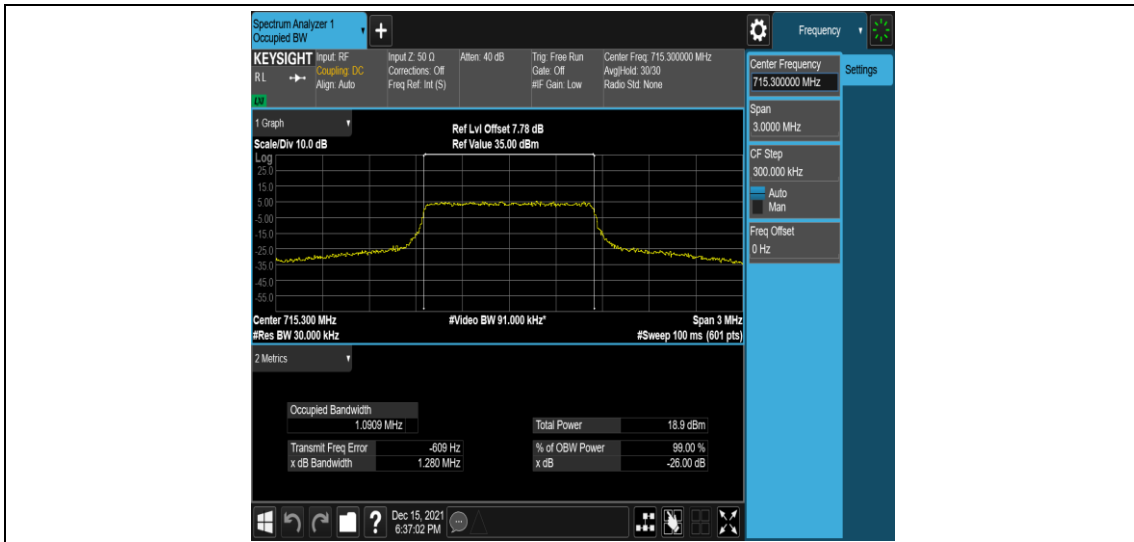
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

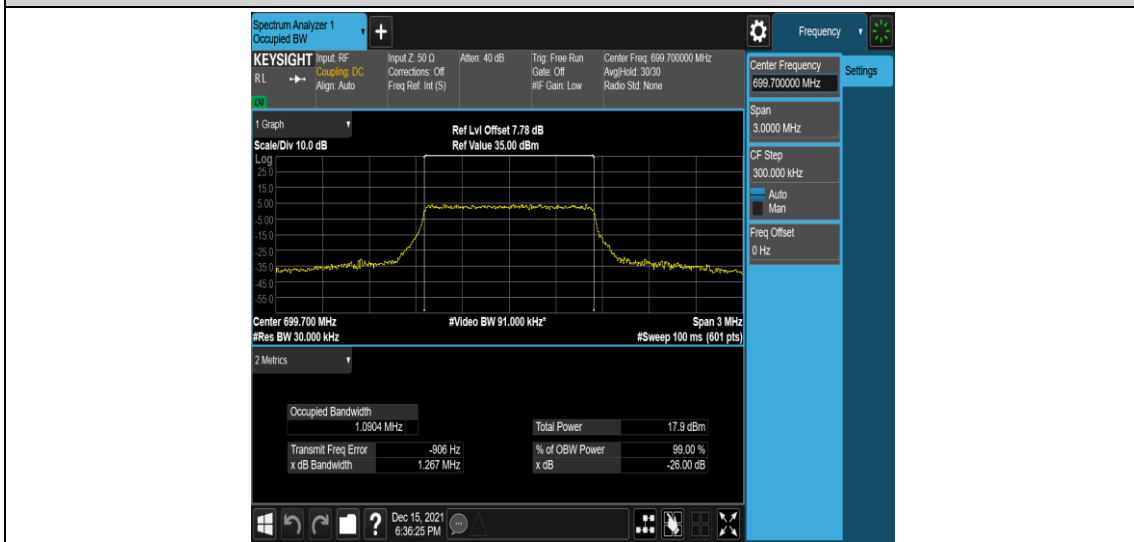
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.0904	1.258	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.0910	1.259	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.0909	1.280	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.0904	1.267	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.0888	1.236	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.0910	1.279	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.6937	2.864	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.6988	2.875	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.6935	2.864	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.6885	2.858	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.6897	2.889	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.6909	2.868	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.4934	4.840	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.4989	4.847	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.4954	4.821	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.5004	4.807	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.5018	4.853	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.5062	4.828	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.9831	9.541	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.9976	9.532	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.9697	9.524	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.9822	9.511	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.9798	9.500	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.9544	9.499	PASS

Test Graphs

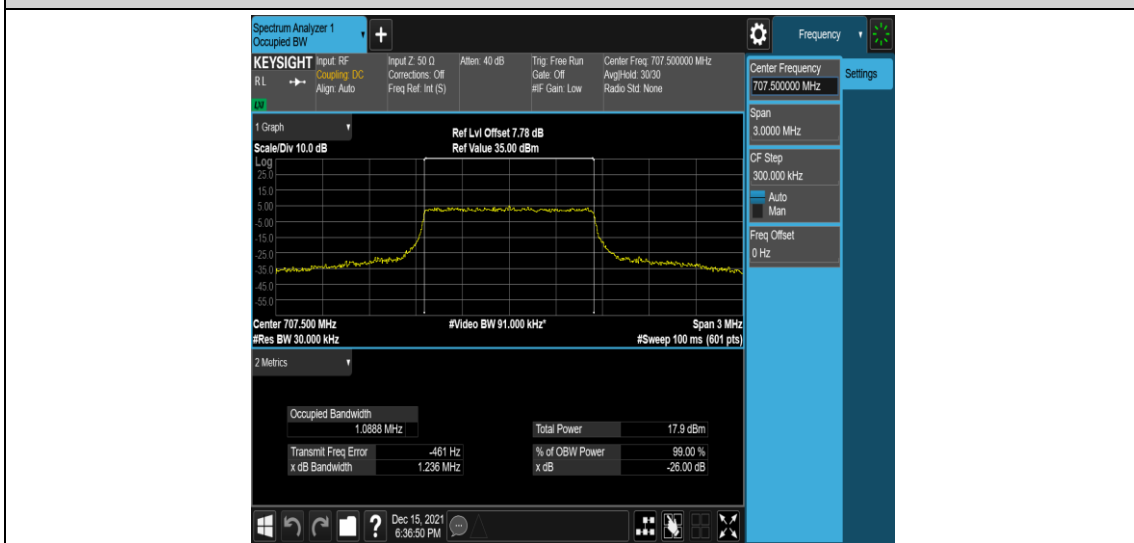




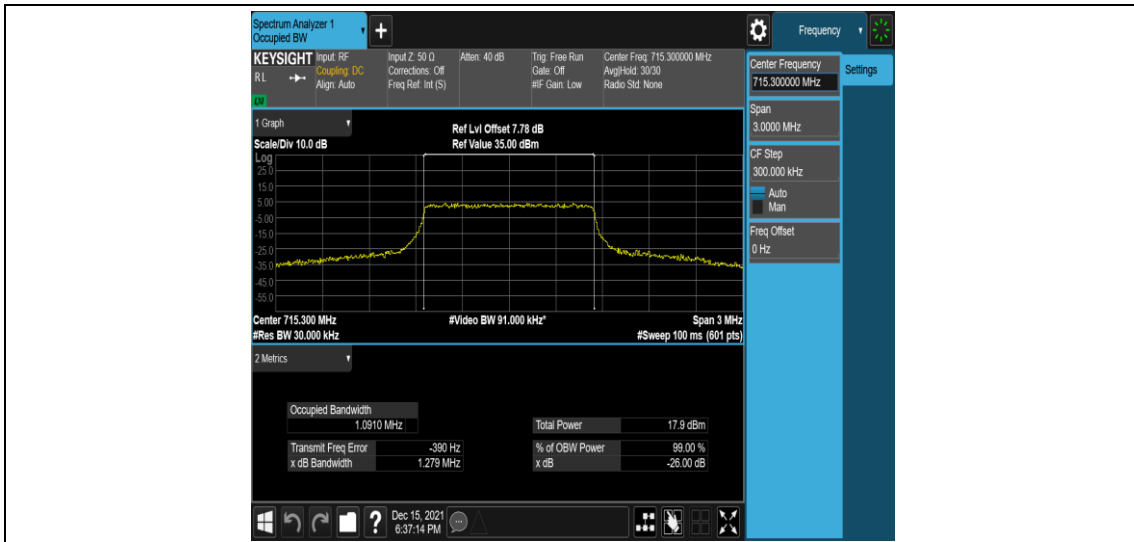
Band12-1.4MHz-QPSK-23173-6RB#0



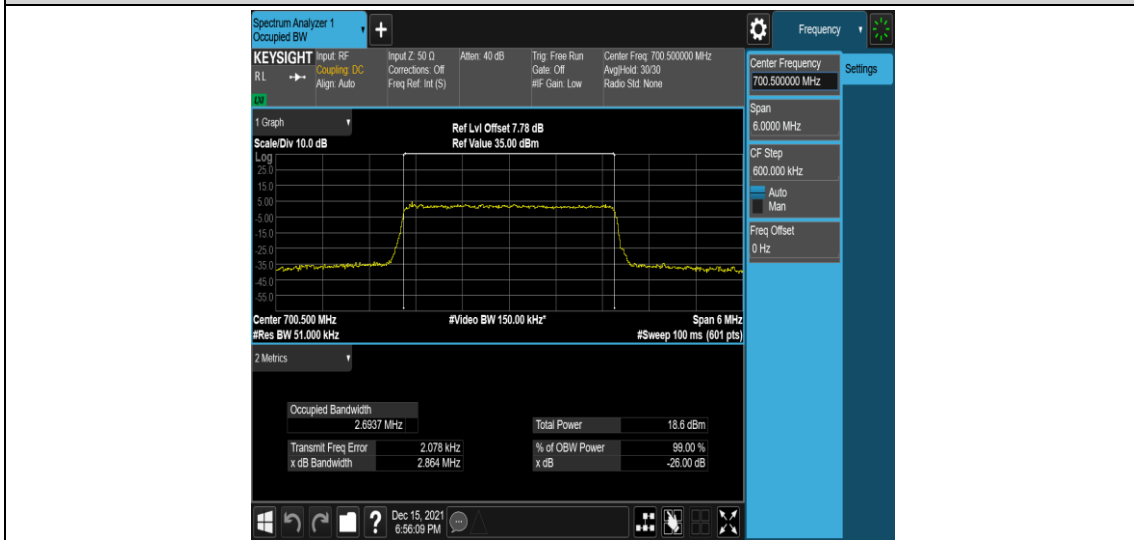
Band12-1.4MHz-16QAM-23017-6RB#0



Band12-1.4MHz-16QAM-23095-6RB#0



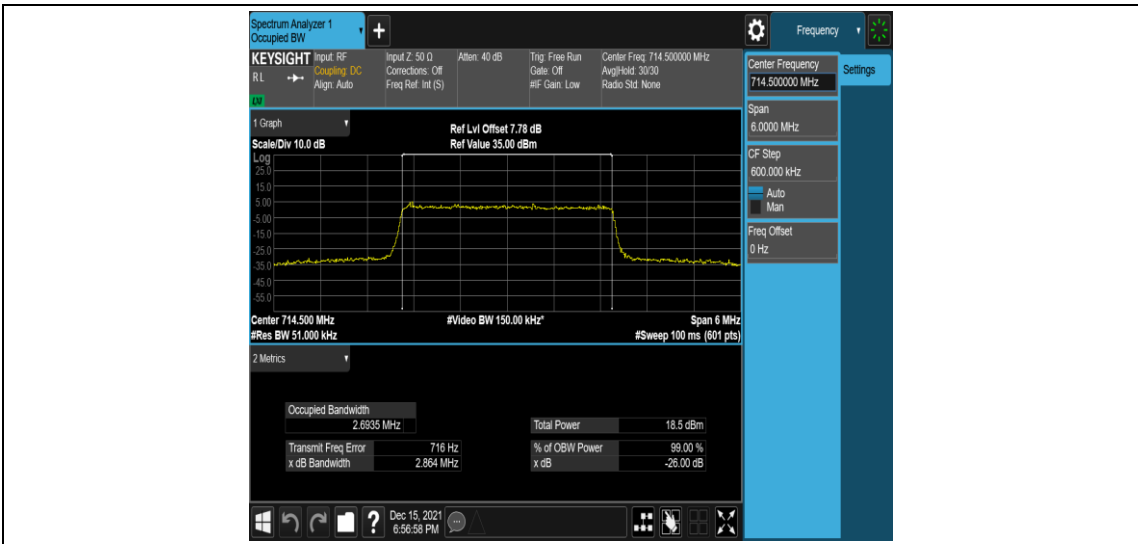
Band12-1.4MHz-16QAM-23173-6RB#0



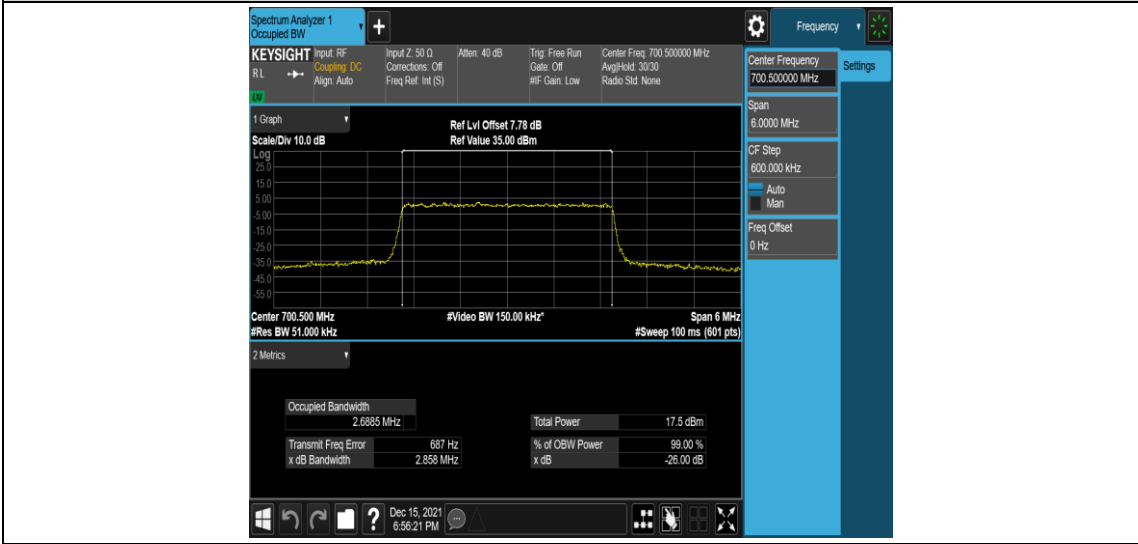
Band12-3MHz-QPSK-23025-15RB#0



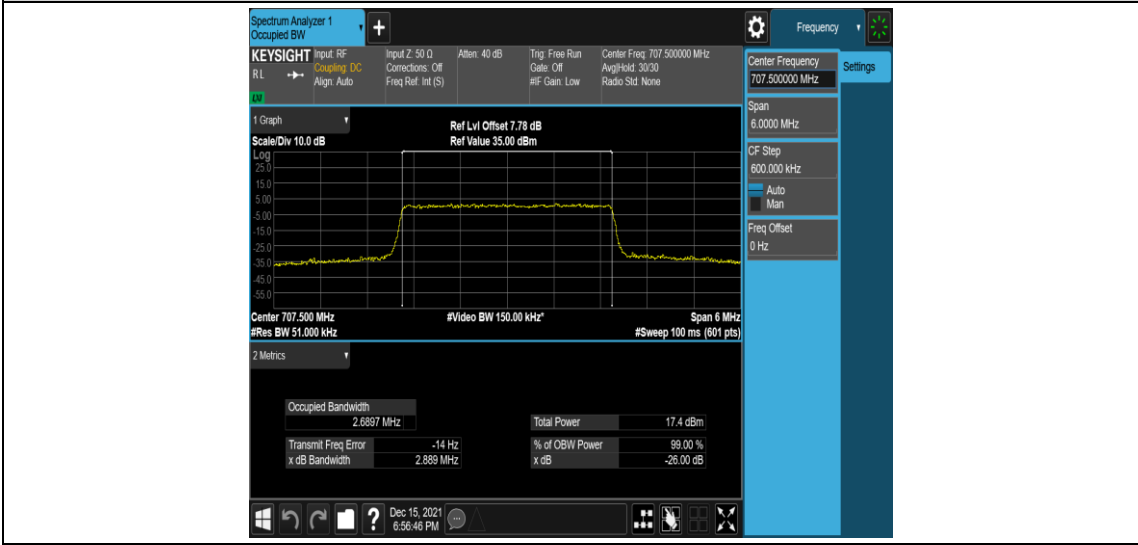
Band12-3MHz-QPSK-23095-15RB#0



Band12-3MHz-QPSK-23165-15RB#0



Band12-3MHz-16QAM-23025-15RB#0



Band12-3MHz-16QAM-23095-15RB#0