

Appendix for Band 12

Report No.: BCTC2407326662-6E

Applicant: Shenzhen Qichang Intelligent Technology Co., Ltd

Product Name: Smart phone

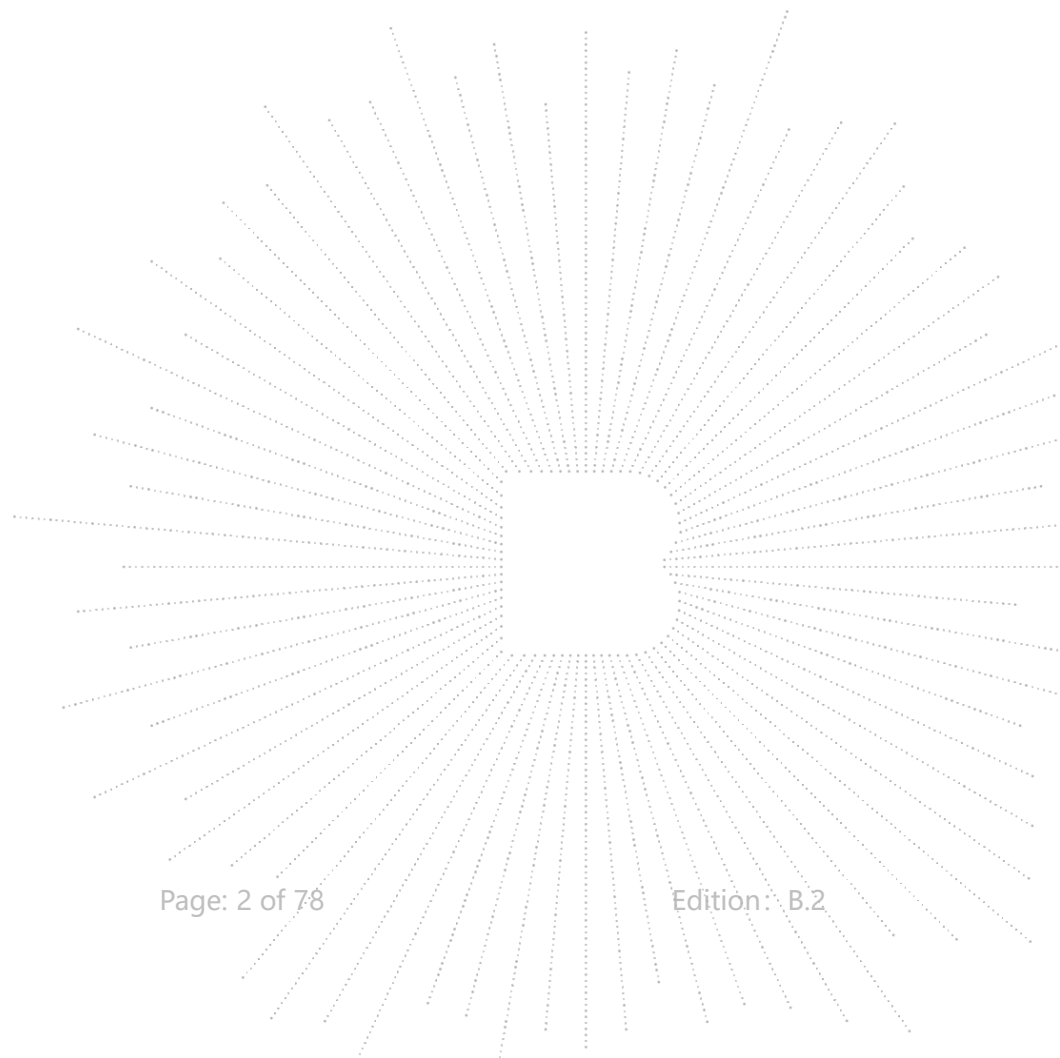
Test Model: S2

Tested Date: 2024-07-15 to 2024-08-12

Shenzhen BCTC Testing Co., Ltd.

Contents

Appendix 1. Effective Radiated Power and Effective Isotropic Radiated Power Measurement	3
Appendix 2. Frequency stability.....	8
Appendix 3. Peak-to-Average Ratio	16
Appendix 4. Occupied bandwidth	33
Appendix 5. Band edge	50
Appendix 6. Out-of-band emissions	62



Appendix 1. Effective Radiated Power and Effective Isotropic Radiated Power Measurement

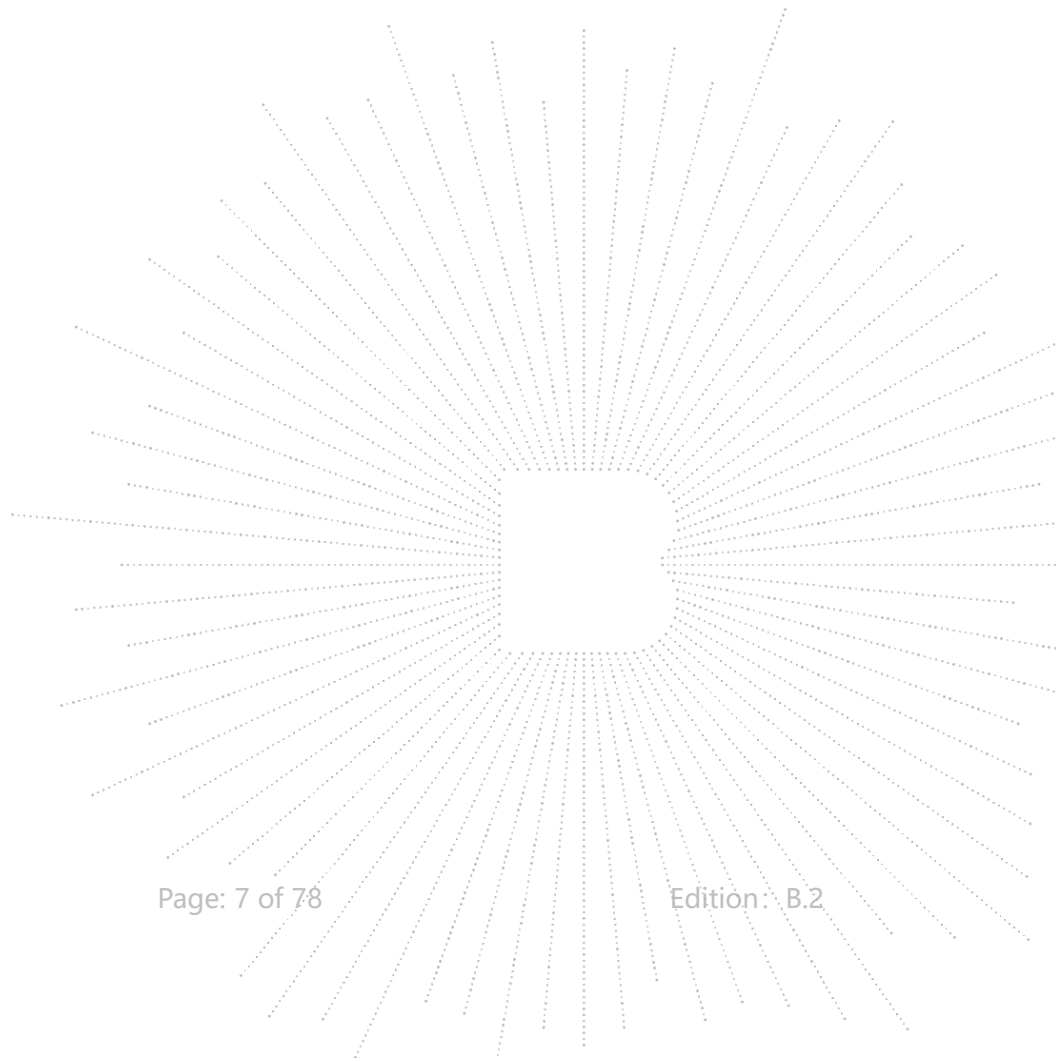
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Gain (dBm)	ERP (dBm)	Verdict
Band12	1.4	23017	1	#0	QPSK	23.48	-2.67	18.66	PASS
Band12	1.4	23017	1	#Mid	QPSK	23.61	-2.67	18.79	PASS
Band12	1.4	23017	1	#Max	QPSK	23.49	-2.67	18.67	PASS
Band12	1.4	23017	3	#0	QPSK	23.43	-2.67	18.61	PASS
Band12	1.4	23017	3	#Mid	QPSK	23.45	-2.67	18.63	PASS
Band12	1.4	23017	3	#Max	QPSK	23.47	-2.67	18.65	PASS
Band12	1.4	23017	6	#0	QPSK	22.39	-2.67	17.57	PASS
Band12	1.4	23017	1	#0	16QAM	22.49	-2.67	17.67	PASS
Band12	1.4	23017	1	#Mid	16QAM	22.57	-2.67	17.75	PASS
Band12	1.4	23017	1	#Max	16QAM	22.51	-2.67	17.69	PASS
Band12	1.4	23017	3	#0	16QAM	22.61	-2.67	17.79	PASS
Band12	1.4	23017	3	#Mid	16QAM	22.62	-2.67	17.80	PASS
Band12	1.4	23017	3	#Max	16QAM	22.59	-2.67	17.77	PASS
Band12	1.4	23017	6	#0	16QAM	21.63	-2.67	16.81	PASS
Band12	1.4	23095	1	#0	QPSK	23.41	-2.67	18.59	PASS
Band12	1.4	23095	1	#Mid	QPSK	23.58	-2.67	18.76	PASS
Band12	1.4	23095	1	#Max	QPSK	23.38	-2.67	18.56	PASS
Band12	1.4	23095	3	#0	QPSK	23.55	-2.67	18.73	PASS
Band12	1.4	23095	3	#Mid	QPSK	23.57	-2.67	18.75	PASS
Band12	1.4	23095	3	#Max	QPSK	23.57	-2.67	18.75	PASS
Band12	1.4	23095	6	#0	QPSK	22.48	-2.67	17.66	PASS
Band12	1.4	23095	1	#0	16QAM	22.62	-2.67	17.80	PASS
Band12	1.4	23095	1	#Mid	16QAM	22.75	-2.67	17.93	PASS
Band12	1.4	23095	1	#Max	16QAM	22.60	-2.67	17.78	PASS
Band12	1.4	23095	3	#0	16QAM	22.74	-2.67	17.92	PASS
Band12	1.4	23095	3	#Mid	16QAM	22.73	-2.67	17.91	PASS
Band12	1.4	23095	3	#Max	16QAM	22.75	-2.67	17.93	PASS
Band12	1.4	23095	6	#0	16QAM	21.68	-2.67	16.86	PASS
Band12	1.4	23173	1	#0	QPSK	23.52	-2.67	18.70	PASS
Band12	1.4	23173	1	#Mid	QPSK	23.62	-2.67	18.80	PASS
Band12	1.4	23173	1	#Max	QPSK	23.49	-2.67	18.67	PASS
Band12	1.4	23173	3	#0	QPSK	23.57	-2.67	18.75	PASS
Band12	1.4	23173	3	#Mid	QPSK	23.51	-2.67	18.69	PASS
Band12	1.4	23173	3	#Max	QPSK	23.48	-2.67	18.66	PASS
Band12	1.4	23173	6	#0	QPSK	22.46	-2.67	17.64	PASS

Band12	1.4	23173	1	#0	16QAM	22.31	-2.67	17.49	PASS
Band12	1.4	23173	1	#Mid	16QAM	22.39	-2.67	17.57	PASS
Band12	1.4	23173	1	#Max	16QAM	22.21	-2.67	17.39	PASS
Band12	1.4	23173	3	#0	16QAM	22.64	-2.67	17.82	PASS
Band12	1.4	23173	3	#Mid	16QAM	22.62	-2.67	17.80	PASS
Band12	1.4	23173	3	#Max	16QAM	22.62	-2.67	17.80	PASS
Band12	1.4	23173	6	#0	16QAM	21.70	-2.67	16.88	PASS
Band12	3	23025	1	#0	QPSK	23.45	-2.67	18.63	PASS
Band12	3	23025	1	#Mid	QPSK	23.90	-2.67	19.08	PASS
Band12	3	23025	1	#Max	QPSK	23.44	-2.67	18.62	PASS
Band12	3	23025	8	#0	QPSK	22.45	-2.67	17.63	PASS
Band12	3	23025	8	#Mid	QPSK	22.51	-2.67	17.69	PASS
Band12	3	23025	8	#Max	QPSK	22.48	-2.67	17.66	PASS
Band12	3	23025	15	#0	QPSK	22.44	-2.67	17.62	PASS
Band12	3	23025	1	#0	16QAM	22.88	-2.67	18.06	PASS
Band12	3	23025	1	#Mid	16QAM	23.22	-2.67	18.40	PASS
Band12	3	23025	1	#Max	16QAM	22.95	-2.67	18.13	PASS
Band12	3	23025	8	#0	16QAM	21.55	-2.67	16.73	PASS
Band12	3	23025	8	#Mid	16QAM	21.59	-2.67	16.77	PASS
Band12	3	23025	8	#Max	16QAM	21.56	-2.67	16.74	PASS
Band12	3	23025	15	#0	16QAM	21.52	-2.67	16.70	PASS
Band12	3	23095	1	#0	QPSK	23.54	-2.67	18.72	PASS
Band12	3	23095	1	#Mid	QPSK	23.68	-2.67	18.86	PASS
Band12	3	23095	1	#Max	QPSK	23.50	-2.67	18.68	PASS
Band12	3	23095	8	#0	QPSK	22.52	-2.67	17.70	PASS
Band12	3	23095	8	#Mid	QPSK	22.57	-2.67	17.75	PASS
Band12	3	23095	8	#Max	QPSK	22.57	-2.67	17.75	PASS
Band12	3	23095	15	#0	QPSK	22.53	-2.67	17.71	PASS
Band12	3	23095	1	#0	16QAM	22.75	-2.67	17.93	PASS
Band12	3	23095	1	#Mid	16QAM	22.98	-2.67	18.16	PASS
Band12	3	23095	1	#Max	16QAM	22.68	-2.67	17.86	PASS
Band12	3	23095	8	#0	16QAM	21.66	-2.67	16.84	PASS
Band12	3	23095	8	#Mid	16QAM	21.65	-2.67	16.83	PASS
Band12	3	23095	8	#Max	16QAM	21.63	-2.67	16.81	PASS
Band12	3	23095	15	#0	16QAM	21.57	-2.67	16.75	PASS
Band12	3	23165	1	#0	QPSK	23.64	-2.67	18.82	PASS
Band12	3	23165	1	#Mid	QPSK	23.80	-2.67	18.98	PASS
Band12	3	23165	1	#Max	QPSK	23.60	-2.67	18.78	PASS
Band12	3	23165	8	#0	QPSK	22.54	-2.67	17.72	PASS
Band12	3	23165	8	#Mid	QPSK	22.57	-2.67	17.75	PASS
Band12	3	23165	8	#Max	QPSK	22.55	-2.67	17.73	PASS
Band12	3	23165	15	#0	QPSK	22.56	-2.67	17.74	PASS

Band12	3	23165	1	#0	16QAM	22.48	-2.67	17.66	PASS
Band12	3	23165	1	#Mid	16QAM	22.74	-2.67	17.92	PASS
Band12	3	23165	1	#Max	16QAM	22.35	-2.67	17.53	PASS
Band12	3	23165	8	#0	16QAM	21.64	-2.67	16.82	PASS
Band12	3	23165	8	#Mid	16QAM	21.63	-2.67	16.81	PASS
Band12	3	23165	8	#Max	16QAM	21.59	-2.67	16.77	PASS
Band12	3	23165	15	#0	16QAM	21.66	-2.67	16.84	PASS
Band12	5	23035	1	#0	QPSK	23.34	-2.67	18.52	PASS
Band12	5	23035	1	#Mid	QPSK	23.74	-2.67	18.92	PASS
Band12	5	23035	1	#Max	QPSK	23.41	-2.67	18.59	PASS
Band12	5	23035	12	#0	QPSK	22.45	-2.67	17.63	PASS
Band12	5	23035	12	#Mid	QPSK	22.48	-2.67	17.66	PASS
Band12	5	23035	12	#Max	QPSK	22.35	-2.67	17.53	PASS
Band12	5	23035	25	#0	QPSK	22.41	-2.67	17.59	PASS
Band12	5	23035	1	#0	16QAM	22.83	-2.67	18.01	PASS
Band12	5	23035	1	#Mid	16QAM	23.32	-2.67	18.50	PASS
Band12	5	23035	1	#Max	16QAM	22.97	-2.67	18.15	PASS
Band12	5	23035	12	#0	16QAM	21.53	-2.67	16.71	PASS
Band12	5	23035	12	#Mid	16QAM	21.50	-2.67	16.68	PASS
Band12	5	23035	12	#Max	16QAM	21.40	-2.67	16.58	PASS
Band12	5	23035	25	#0	16QAM	21.42	-2.67	16.60	PASS
Band12	5	23095	1	#0	QPSK	23.33	-2.67	18.51	PASS
Band12	5	23095	1	#Mid	QPSK	23.68	-2.67	18.86	PASS
Band12	5	23095	1	#Max	QPSK	23.35	-2.67	18.53	PASS
Band12	5	23095	12	#0	QPSK	22.37	-2.67	17.55	PASS
Band12	5	23095	12	#Mid	QPSK	22.52	-2.67	17.70	PASS
Band12	5	23095	12	#Max	QPSK	22.53	-2.67	17.71	PASS
Band12	5	23095	25	#0	QPSK	22.46	-2.67	17.64	PASS
Band12	5	23095	1	#0	16QAM	22.66	-2.67	17.84	PASS
Band12	5	23095	1	#Mid	16QAM	23.00	-2.67	18.18	PASS
Band12	5	23095	1	#Max	16QAM	22.65	-2.67	17.83	PASS
Band12	5	23095	12	#0	16QAM	21.47	-2.67	16.65	PASS
Band12	5	23095	12	#Mid	16QAM	21.62	-2.67	16.80	PASS
Band12	5	23095	12	#Max	16QAM	21.62	-2.67	16.80	PASS
Band12	5	23095	25	#0	16QAM	0.00	-2.67	-4.82	PASS
Band12	5	23155	1	#0	QPSK	23.33	-2.67	18.51	PASS
Band12	5	23155	1	#Mid	QPSK	23.73	-2.67	18.91	PASS
Band12	5	23155	1	#Max	QPSK	23.28	-2.67	18.46	PASS
Band12	5	23155	12	#0	QPSK	22.61	-2.67	17.79	PASS
Band12	5	23155	12	#Mid	QPSK	22.55	-2.67	17.73	PASS
Band12	5	23155	12	#Max	QPSK	22.38	-2.67	17.56	PASS
Band12	5	23155	25	#0	QPSK	22.52	-2.67	17.70	PASS

Band12	5	23155	1	#0	16QAM	22.65	-2.67	17.83	PASS
Band12	5	23155	1	#Mid	16QAM	23.18	-2.67	18.36	PASS
Band12	5	23155	1	#Max	16QAM	22.63	-2.67	17.81	PASS
Band12	5	23155	12	#0	16QAM	21.67	-2.67	16.85	PASS
Band12	5	23155	12	#Mid	16QAM	21.58	-2.67	16.76	PASS
Band12	5	23155	12	#Max	16QAM	21.47	-2.67	16.65	PASS
Band12	5	23155	25	#0	16QAM	21.57	-2.67	16.75	PASS
Band12	10	23060	1	#0	QPSK	23.28	-2.67	18.46	PASS
Band12	10	23060	1	#Mid	QPSK	23.59	-2.67	18.77	PASS
Band12	10	23060	1	#Max	QPSK	23.39	-2.67	18.57	PASS
Band12	10	23060	25	#0	QPSK	22.66	-2.67	17.84	PASS
Band12	10	23060	25	#Mid	QPSK	22.53	-2.67	17.71	PASS
Band12	10	23060	25	#Max	QPSK	22.71	-2.67	17.89	PASS
Band12	10	23060	50	#0	QPSK	22.67	-2.67	17.85	PASS
Band12	10	23060	1	#0	16QAM	22.73	-2.67	17.91	PASS
Band12	10	23060	1	#Mid	16QAM	23.01	-2.67	18.19	PASS
Band12	10	23060	1	#Max	16QAM	22.79	-2.67	17.97	PASS
Band12	10	23060	25	#0	16QAM	21.76	-2.67	16.94	PASS
Band12	10	23060	25	#Mid	16QAM	21.61	-2.67	16.79	PASS
Band12	10	23060	25	#Max	16QAM	21.79	-2.67	16.97	PASS
Band12	10	23060	50	#0	16QAM	21.75	-2.67	16.93	PASS
Band12	10	23095	1	#0	QPSK	23.41	-2.67	18.59	PASS
Band12	10	23095	1	#Mid	QPSK	23.64	-2.67	18.82	PASS
Band12	10	23095	1	#Max	QPSK	23.49	-2.67	18.67	PASS
Band12	10	23095	25	#0	QPSK	22.45	-2.67	17.63	PASS
Band12	10	23095	25	#Mid	QPSK	22.50	-2.67	17.68	PASS
Band12	10	23095	25	#Max	QPSK	22.53	-2.67	17.71	PASS
Band12	10	23095	50	#0	QPSK	22.52	-2.67	17.70	PASS
Band12	10	23095	1	#0	16QAM	22.62	-2.67	17.80	PASS
Band12	10	23095	1	#Mid	16QAM	22.77	-2.67	17.95	PASS
Band12	10	23095	1	#Max	16QAM	22.63	-2.67	17.81	PASS
Band12	10	23095	25	#0	16QAM	21.49	-2.67	16.67	PASS
Band12	10	23095	25	#Mid	16QAM	21.60	-2.67	16.78	PASS
Band12	10	23095	25	#Max	16QAM	21.61	-2.67	16.79	PASS
Band12	10	23095	50	#0	16QAM	21.58	-2.67	16.76	PASS
Band12	10	23130	1	#0	QPSK	23.50	-2.67	18.68	PASS
Band12	10	23130	1	#Mid	QPSK	23.71	-2.67	18.89	PASS
Band12	10	23130	1	#Max	QPSK	23.48	-2.67	18.66	PASS
Band12	10	23130	25	#0	QPSK	22.42	-2.67	17.60	PASS
Band12	10	23130	25	#Mid	QPSK	22.51	-2.67	17.69	PASS
Band12	10	23130	25	#Max	QPSK	22.36	-2.67	17.54	PASS
Band12	10	23130	50	#0	QPSK	22.39	-2.67	17.57	PASS

Band12	10	23130	1	#0	16QAM	22.29	-2.67	17.47	PASS
Band12	10	23130	1	#Mid	16QAM	22.49	-2.67	17.67	PASS
Band12	10	23130	1	#Max	16QAM	22.25	-2.67	17.43	PASS
Band12	10	23130	25	#0	16QAM	21.49	-2.67	16.67	PASS
Band12	10	23130	25	#Mid	16QAM	21.56	-2.67	16.74	PASS
Band12	10	23130	25	#Max	16QAM	21.43	-2.67	16.61	PASS
Band12	10	23130	50	#0	16QAM	21.47	-2.67	16.65	PASS



Appendix 2. Frequency stability

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Voltage (Vdc)	Temperatue (C)	Result (Hz)	Result (ppm)	Verdict
Band12	1.4	23017	6	#0	QPSK	LV	NT	-8.50	-0.012	PASS
Band12	1.4	23017	6	#0	QPSK	NV	NT	-12.13	-0.017	PASS
Band12	1.4	23017	6	#0	QPSK	HV	NT	-9.68	-0.014	PASS
Band12	1.4	23017	6	#0	16QAM	LV	NT	-9.94	-0.014	PASS
Band12	1.4	23017	6	#0	16QAM	NV	NT	-7.94	-0.011	PASS
Band12	1.4	23017	6	#0	16QAM	HV	NT	-9.64	-0.014	PASS
Band12	1.4	23095	6	#0	QPSK	LV	NT	-7.28	-0.010	PASS
Band12	1.4	23095	6	#0	QPSK	NV	NT	-7.40	-0.010	PASS
Band12	1.4	23095	6	#0	QPSK	HV	NT	-9.56	-0.014	PASS
Band12	1.4	23095	6	#0	16QAM	LV	NT	-7.72	-0.011	PASS
Band12	1.4	23095	6	#0	16QAM	NV	NT	-8.21	-0.012	PASS
Band12	1.4	23095	6	#0	16QAM	HV	NT	-6.57	-0.009	PASS
Band12	1.4	23173	6	#0	QPSK	LV	NT	-7.54	-0.011	PASS
Band12	1.4	23173	6	#0	QPSK	NV	NT	-9.07	-0.013	PASS
Band12	1.4	23173	6	#0	QPSK	HV	NT	-6.84	-0.010	PASS
Band12	1.4	23173	6	#0	16QAM	LV	NT	-8.33	-0.012	PASS
Band12	1.4	23173	6	#0	16QAM	NV	NT	-7.72	-0.011	PASS
Band12	1.4	23173	6	#0	16QAM	HV	NT	-7.84	-0.011	PASS
Band12	3	23025	15	#0	QPSK	LV	NT	-9.27	-0.013	PASS
Band12	3	23025	15	#0	QPSK	NV	NT	-11.04	-0.016	PASS
Band12	3	23025	15	#0	QPSK	HV	NT	-9.57	-0.014	PASS
Band12	3	23025	15	#0	16QAM	LV	NT	-10.93	-0.016	PASS
Band12	3	23025	15	#0	16QAM	NV	NT	-9.07	-0.013	PASS
Band12	3	23025	15	#0	16QAM	HV	NT	-9.16	-0.013	PASS
Band12	3	23095	15	#0	QPSK	LV	NT	-8.54	-0.012	PASS
Band12	3	23095	15	#0	QPSK	NV	NT	-13.48	-0.019	PASS
Band12	3	23095	15	#0	QPSK	HV	NT	-10.89	-0.015	PASS
Band12	3	23095	15	#0	16QAM	LV	NT	-8.94	-0.013	PASS
Band12	3	23095	15	#0	16QAM	NV	NT	-7.45	-0.011	PASS
Band12	3	23095	15	#0	16QAM	HV	NT	-7.45	-0.011	PASS
Band12	3	23165	15	#0	QPSK	LV	NT	-1.40	-0.002	PASS
Band12	3	23165	15	#0	QPSK	NV	NT	-8.08	-0.011	PASS
Band12	3	23165	15	#0	QPSK	HV	NT	-10.66	-0.015	PASS
Band12	3	23165	15	#0	16QAM	LV	NT	-10.80	-0.015	PASS
Band12	3	23165	15	#0	16QAM	NV	NT	-9.14	-0.013	PASS
Band12	3	23165	15	#0	16QAM	HV	NT	-11.36	-0.016	PASS
Band12	5	23035	25	#0	QPSK	LV	NT	-8.34	-0.012	PASS

Band12	5	23035	25	#0	QPSK	NV	NT	-6.68	-0.010	PASS
Band12	5	23035	25	#0	QPSK	HV	NT	-8.60	-0.012	PASS
Band12	5	23035	25	#0	16QAM	LV	NT	-7.37	-0.011	PASS
Band12	5	23035	25	#0	16QAM	NV	NT	-8.78	-0.013	PASS
Band12	5	23035	25	#0	16QAM	HV	NT	-6.41	-0.009	PASS
Band12	5	23095	25	#0	QPSK	LV	NT	-9.18	-0.013	PASS
Band12	5	23095	25	#0	QPSK	NV	NT	-8.07	-0.011	PASS
Band12	5	23095	25	#0	QPSK	HV	NT	5.89	0.008	PASS
Band12	5	23095	25	#0	16QAM	LV	NT	-6.75	-0.010	PASS
Band12	5	23095	25	#0	16QAM	NV	NT	-7.02	-0.010	PASS
Band12	5	23095	25	#0	16QAM	HV	NT	-5.55	-0.008	PASS
Band12	5	23155	25	#0	QPSK	LV	NT	-10.24	-0.014	PASS
Band12	5	23155	25	#0	QPSK	NV	NT	-9.27	-0.013	PASS
Band12	5	23155	25	#0	QPSK	HV	NT	-7.68	-0.011	PASS
Band12	5	23155	25	#0	16QAM	LV	NT	-9.86	-0.014	PASS
Band12	5	23155	25	#0	16QAM	NV	NT	-8.35	-0.012	PASS
Band12	5	23155	25	#0	16QAM	HV	NT	-6.61	-0.009	PASS
Band12	10	23060	50	#0	QPSK	LV	NT	-8.30	-0.012	PASS
Band12	10	23060	50	#0	QPSK	NV	NT	-6.90	-0.010	PASS
Band12	10	23060	50	#0	QPSK	HV	NT	-8.03	-0.011	PASS
Band12	10	23060	50	#0	16QAM	LV	NT	-3.63	-0.005	PASS
Band12	10	23060	50	#0	16QAM	NV	NT	-5.54	-0.008	PASS
Band12	10	23060	50	#0	16QAM	HV	NT	-5.74	-0.008	PASS
Band12	10	23095	50	#0	QPSK	LV	NT	-7.01	-0.010	PASS
Band12	10	23095	50	#0	QPSK	NV	NT	-5.78	-0.008	PASS
Band12	10	23095	50	#0	QPSK	HV	NT	-8.13	-0.011	PASS
Band12	10	23095	50	#0	16QAM	LV	NT	2.55	0.004	PASS
Band12	10	23095	50	#0	16QAM	NV	NT	-9.97	-0.014	PASS
Band12	10	23095	50	#0	16QAM	HV	NT	-8.27	-0.012	PASS
Band12	10	23130	50	#0	QPSK	LV	NT	-6.64	-0.009	PASS
Band12	10	23130	50	#0	QPSK	NV	NT	-9.13	-0.013	PASS
Band12	10	23130	50	#0	QPSK	HV	NT	-8.57	-0.012	PASS
Band12	10	23130	50	#0	16QAM	LV	NT	-7.07	-0.010	PASS
Band12	10	23130	50	#0	16QAM	NV	NT	-7.37	-0.010	PASS
Band12	10	23130	50	#0	16QAM	HV	NT	-7.20	-0.010	PASS

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Voltage (Vdc)	Temperature (C)	Result (Hz)	Result (ppm)	Verdict
Band12	1.4	23017	6	#0	QPSK	NV	-30	-5.01	-0.007	PASS
Band12	1.4	23017	6	#0	QPSK	NV	-20	-12.16	-0.017	PASS
Band12	1.4	23017	6	#0	QPSK	NV	-10	-10.39	-0.015	PASS
Band12	1.4	23017	6	#0	QPSK	NV	0	-10.81	-0.015	PASS

Band12	1.4	23017	6	#0	QPSK	NV	10	-11.22	-0.016	PASS
Band12	1.4	23017	6	#0	QPSK	NV	20	-8.85	-0.013	PASS
Band12	1.4	23017	6	#0	QPSK	NV	30	-11.37	-0.016	PASS
Band12	1.4	23017	6	#0	QPSK	NV	40	-9.88	-0.014	PASS
Band12	1.4	23017	6	#0	QPSK	NV	50	-11.89	-0.017	PASS
Band12	1.4	23017	6	#0	16QAM	NV	-30	-10.53	-0.015	PASS
Band12	1.4	23017	6	#0	16QAM	NV	-20	-10.00	-0.014	PASS
Band12	1.4	23017	6	#0	16QAM	NV	-10	-10.91	-0.016	PASS
Band12	1.4	23017	6	#0	16QAM	NV	0	-10.30	-0.015	PASS
Band12	1.4	23017	6	#0	16QAM	NV	10	-9.01	-0.013	PASS
Band12	1.4	23017	6	#0	16QAM	NV	20	-13.55	-0.019	PASS
Band12	1.4	23017	6	#0	16QAM	NV	30	-10.87	-0.016	PASS
Band12	1.4	23017	6	#0	16QAM	NV	40	-8.65	-0.012	PASS
Band12	1.4	23017	6	#0	16QAM	NV	50	-10.33	-0.015	PASS
Band12	1.4	23095	6	#0	QPSK	NV	-30	-7.91	-0.011	PASS
Band12	1.4	23095	6	#0	QPSK	NV	-20	-8.24	-0.012	PASS
Band12	1.4	23095	6	#0	QPSK	NV	-10	-7.38	-0.010	PASS
Band12	1.4	23095	6	#0	QPSK	NV	0	-7.00	-0.010	PASS
Band12	1.4	23095	6	#0	QPSK	NV	10	-8.85	-0.013	PASS
Band12	1.4	23095	6	#0	QPSK	NV	20	-10.37	-0.015	PASS
Band12	1.4	23095	6	#0	QPSK	NV	30	-6.61	-0.009	PASS
Band12	1.4	23095	6	#0	QPSK	NV	40	-7.57	-0.011	PASS
Band12	1.4	23095	6	#0	QPSK	NV	50	-8.71	-0.012	PASS
Band12	1.4	23095	6	#0	16QAM	NV	-30	-6.77	-0.010	PASS
Band12	1.4	23095	6	#0	16QAM	NV	-20	-7.97	-0.011	PASS
Band12	1.4	23095	6	#0	16QAM	NV	-10	-4.55	-0.006	PASS
Band12	1.4	23095	6	#0	16QAM	NV	0	-6.38	-0.009	PASS
Band12	1.4	23095	6	#0	16QAM	NV	10	-5.36	-0.008	PASS
Band12	1.4	23095	6	#0	16QAM	NV	20	-7.14	-0.010	PASS
Band12	1.4	23095	6	#0	16QAM	NV	30	-6.31	-0.009	PASS
Band12	1.4	23095	6	#0	16QAM	NV	40	-7.70	-0.011	PASS
Band12	1.4	23095	6	#0	16QAM	NV	50	-4.66	-0.007	PASS
Band12	1.4	23173	6	#0	QPSK	NV	-30	-6.91	-0.010	PASS
Band12	1.4	23173	6	#0	QPSK	NV	-20	-7.72	-0.011	PASS
Band12	1.4	23173	6	#0	QPSK	NV	-10	-8.81	-0.012	PASS
Band12	1.4	23173	6	#0	QPSK	NV	0	-10.24	-0.014	PASS
Band12	1.4	23173	6	#0	QPSK	NV	10	-5.31	-0.007	PASS
Band12	1.4	23173	6	#0	QPSK	NV	20	-6.14	-0.009	PASS
Band12	1.4	23173	6	#0	QPSK	NV	30	-6.91	-0.010	PASS
Band12	1.4	23173	6	#0	QPSK	NV	40	-5.45	-0.008	PASS
Band12	1.4	23173	6	#0	QPSK	NV	50	-7.77	-0.011	PASS
Band12	1.4	23173	6	#0	16QAM	NV	-30	-7.98	-0.011	PASS

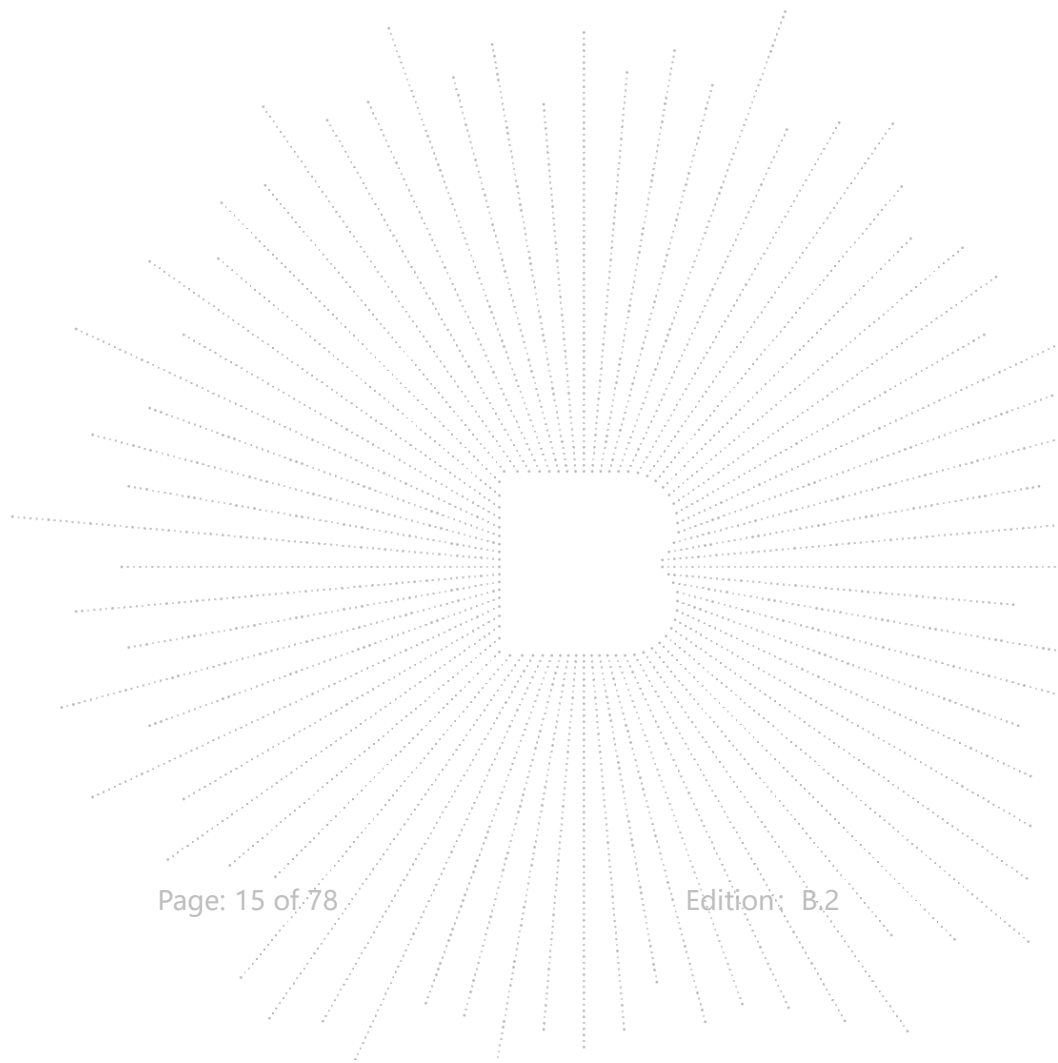
Band12	1.4	23173	6	#0	16QAM	NV	-20	-6.41	-0.009	PASS
Band12	1.4	23173	6	#0	16QAM	NV	-10	-8.13	-0.011	PASS
Band12	1.4	23173	6	#0	16QAM	NV	0	-4.13	-0.006	PASS
Band12	1.4	23173	6	#0	16QAM	NV	10	-4.11	-0.006	PASS
Band12	1.4	23173	6	#0	16QAM	NV	20	-3.88	-0.005	PASS
Band12	1.4	23173	6	#0	16QAM	NV	30	-5.79	-0.008	PASS
Band12	1.4	23173	6	#0	16QAM	NV	40	-5.79	-0.008	PASS
Band12	1.4	23173	6	#0	16QAM	NV	50	-4.63	-0.006	PASS
Band12	3	23025	15	#0	QPSK	NV	-30	-4.31	-0.006	PASS
Band12	3	23025	15	#0	QPSK	NV	-20	-4.11	-0.006	PASS
Band12	3	23025	15	#0	QPSK	NV	-10	-7.62	-0.011	PASS
Band12	3	23025	15	#0	QPSK	NV	0	-8.85	-0.013	PASS
Band12	3	23025	15	#0	QPSK	NV	10	-7.64	-0.011	PASS
Band12	3	23025	15	#0	QPSK	NV	20	-7.48	-0.011	PASS
Band12	3	23025	15	#0	QPSK	NV	30	-8.55	-0.012	PASS
Band12	3	23025	15	#0	QPSK	NV	40	-6.59	-0.009	PASS
Band12	3	23025	15	#0	QPSK	NV	50	-3.45	-0.005	PASS
Band12	3	23025	15	#0	16QAM	NV	-30	-3.23	-0.005	PASS
Band12	3	23025	15	#0	16QAM	NV	-20	-3.33	-0.005	PASS
Band12	3	23025	15	#0	16QAM	NV	-10	-6.42	-0.009	PASS
Band12	3	23025	15	#0	16QAM	NV	0	-5.25	-0.007	PASS
Band12	3	23025	15	#0	16QAM	NV	10	-6.29	-0.009	PASS
Band12	3	23025	15	#0	16QAM	NV	20	-6.17	-0.009	PASS
Band12	3	23025	15	#0	16QAM	NV	30	-5.87	-0.008	PASS
Band12	3	23025	15	#0	16QAM	NV	40	-4.03	-0.006	PASS
Band12	3	23025	15	#0	16QAM	NV	50	-8.37	-0.012	PASS
Band12	3	23095	15	#0	QPSK	NV	-30	-10.81	-0.015	PASS
Band12	3	23095	15	#0	QPSK	NV	-20	-10.77	-0.015	PASS
Band12	3	23095	15	#0	QPSK	NV	-10	-10.39	-0.015	PASS
Band12	3	23095	15	#0	QPSK	NV	0	-9.37	-0.013	PASS
Band12	3	23095	15	#0	QPSK	NV	10	-8.93	-0.013	PASS
Band12	3	23095	15	#0	QPSK	NV	20	-8.51	-0.012	PASS
Band12	3	23095	15	#0	QPSK	NV	30	-11.89	-0.017	PASS
Band12	3	23095	15	#0	QPSK	NV	40	-9.56	-0.014	PASS
Band12	3	23095	15	#0	QPSK	NV	50	-9.16	-0.013	PASS
Band12	3	23095	15	#0	16QAM	NV	-30	-8.81	-0.012	PASS
Band12	3	23095	15	#0	16QAM	NV	-20	-6.59	-0.009	PASS
Band12	3	23095	15	#0	16QAM	NV	-10	-9.28	-0.013	PASS
Band12	3	23095	15	#0	16QAM	NV	0	-8.05	-0.011	PASS
Band12	3	23095	15	#0	16QAM	NV	10	-9.00	-0.013	PASS
Band12	3	23095	15	#0	16QAM	NV	20	-7.82	-0.011	PASS
Band12	3	23095	15	#0	16QAM	NV	30	-9.26	-0.013	PASS

Band12	3	23095	15	#0	16QAM	NV	40	-6.64	-0.009	PASS
Band12	3	23095	15	#0	16QAM	NV	50	-8.31	-0.012	PASS
Band12	3	23165	15	#0	QPSK	NV	-30	-5.46	-0.008	PASS
Band12	3	23165	15	#0	QPSK	NV	-20	-6.19	-0.009	PASS
Band12	3	23165	15	#0	QPSK	NV	-10	-7.37	-0.010	PASS
Band12	3	23165	15	#0	QPSK	NV	0	-10.64	-0.015	PASS
Band12	3	23165	15	#0	QPSK	NV	10	-7.84	-0.011	PASS
Band12	3	23165	15	#0	QPSK	NV	20	-9.61	-0.013	PASS
Band12	3	23165	15	#0	QPSK	NV	30	-10.37	-0.015	PASS
Band12	3	23165	15	#0	QPSK	NV	40	-8.11	-0.011	PASS
Band12	3	23165	15	#0	QPSK	NV	50	-8.44	-0.012	PASS
Band12	3	23165	15	#0	16QAM	NV	-30	-8.74	-0.012	PASS
Band12	3	23165	15	#0	16QAM	NV	-20	-4.88	-0.007	PASS
Band12	3	23165	15	#0	16QAM	NV	-10	-5.88	-0.008	PASS
Band12	3	23165	15	#0	16QAM	NV	0	-5.52	-0.008	PASS
Band12	3	23165	15	#0	16QAM	NV	10	-7.81	-0.011	PASS
Band12	3	23165	15	#0	16QAM	NV	20	-9.41	-0.013	PASS
Band12	3	23165	15	#0	16QAM	NV	30	-6.28	-0.009	PASS
Band12	3	23165	15	#0	16QAM	NV	40	-5.09	-0.007	PASS
Band12	3	23165	15	#0	16QAM	NV	50	-3.92	-0.005	PASS
Band12	5	23035	25	#0	QPSK	NV	-30	-6.92	-0.010	PASS
Band12	5	23035	25	#0	QPSK	NV	-20	-7.02	-0.010	PASS
Band12	5	23035	25	#0	QPSK	NV	-10	-8.00	-0.011	PASS
Band12	5	23035	25	#0	QPSK	NV	0	0.64	0.001	PASS
Band12	5	23035	25	#0	QPSK	NV	10	-3.50	-0.005	PASS
Band12	5	23035	25	#0	QPSK	NV	20	-5.99	-0.009	PASS
Band12	5	23035	25	#0	QPSK	NV	30	-8.01	-0.011	PASS
Band12	5	23035	25	#0	QPSK	NV	40	-8.44	-0.012	PASS
Band12	5	23035	25	#0	QPSK	NV	50	-8.40	-0.012	PASS
Band12	5	23035	25	#0	16QAM	NV	-30	-7.94	-0.011	PASS
Band12	5	23035	25	#0	16QAM	NV	-20	-8.23	-0.012	PASS
Band12	5	23035	25	#0	16QAM	NV	-10	-3.53	-0.005	PASS
Band12	5	23035	25	#0	16QAM	NV	0	-6.82	-0.010	PASS
Band12	5	23035	25	#0	16QAM	NV	10	-6.92	-0.010	PASS
Band12	5	23035	25	#0	16QAM	NV	20	-5.98	-0.009	PASS
Band12	5	23035	25	#0	16QAM	NV	30	-5.74	-0.008	PASS
Band12	5	23035	25	#0	16QAM	NV	40	-6.07	-0.009	PASS
Band12	5	23035	25	#0	16QAM	NV	50	-8.55	-0.012	PASS
Band12	5	23095	25	#0	QPSK	NV	-30	-7.00	-0.010	PASS
Band12	5	23095	25	#0	QPSK	NV	-20	-6.71	-0.009	PASS
Band12	5	23095	25	#0	QPSK	NV	-10	-6.35	-0.009	PASS
Band12	5	23095	25	#0	QPSK	NV	0	-6.94	-0.010	PASS

Band12	5	23095	25	#0	QPSK	NV	10	-8.41	-0.012	PASS
Band12	5	23095	25	#0	QPSK	NV	20	-6.37	-0.009	PASS
Band12	5	23095	25	#0	QPSK	NV	30	-5.76	-0.008	PASS
Band12	5	23095	25	#0	QPSK	NV	40	-4.25	-0.006	PASS
Band12	5	23095	25	#0	QPSK	NV	50	-7.70	-0.011	PASS
Band12	5	23095	25	#0	16QAM	NV	-30	-6.34	-0.009	PASS
Band12	5	23095	25	#0	16QAM	NV	-20	-7.50	-0.011	PASS
Band12	5	23095	25	#0	16QAM	NV	-10	-7.82	-0.011	PASS
Band12	5	23095	25	#0	16QAM	NV	0	-3.58	-0.005	PASS
Band12	5	23095	25	#0	16QAM	NV	10	-6.42	-0.009	PASS
Band12	5	23095	25	#0	16QAM	NV	20	-6.47	-0.009	PASS
Band12	5	23095	25	#0	16QAM	NV	30	-6.14	-0.009	PASS
Band12	5	23095	25	#0	16QAM	NV	40	-7.08	-0.010	PASS
Band12	5	23095	25	#0	16QAM	NV	50	-4.31	-0.006	PASS
Band12	5	23155	25	#0	QPSK	NV	-30	0.00	0.000	PASS
Band12	5	23155	25	#0	QPSK	NV	-20	-6.52	-0.009	PASS
Band12	5	23155	25	#0	QPSK	NV	-10	-10.57	-0.015	PASS
Band12	5	23155	25	#0	QPSK	NV	0	-9.01	-0.013	PASS
Band12	5	23155	25	#0	QPSK	NV	10	-8.55	-0.012	PASS
Band12	5	23155	25	#0	QPSK	NV	20	-8.21	-0.012	PASS
Band12	5	23155	25	#0	QPSK	NV	30	-10.10	-0.014	PASS
Band12	5	23155	25	#0	QPSK	NV	40	-9.80	-0.014	PASS
Band12	5	23155	25	#0	QPSK	NV	50	-6.14	-0.009	PASS
Band12	5	23155	25	#0	16QAM	NV	-30	-10.97	-0.015	PASS
Band12	5	23155	25	#0	16QAM	NV	-20	-9.14	-0.013	PASS
Band12	5	23155	25	#0	16QAM	NV	-10	-8.41	-0.012	PASS
Band12	5	23155	25	#0	16QAM	NV	0	-7.20	-0.010	PASS
Band12	5	23155	25	#0	16QAM	NV	10	-7.51	-0.011	PASS
Band12	5	23155	25	#0	16QAM	NV	20	-7.84	-0.011	PASS
Band12	5	23155	25	#0	16QAM	NV	30	-4.73	-0.007	PASS
Band12	5	23155	25	#0	16QAM	NV	40	-8.35	-0.012	PASS
Band12	5	23155	25	#0	16QAM	NV	50	-6.12	-0.009	PASS
Band12	10	23060	50	#0	QPSK	NV	-30	-7.47	-0.011	PASS
Band12	10	23060	50	#0	QPSK	NV	-20	-7.85	-0.011	PASS
Band12	10	23060	50	#0	QPSK	NV	-10	-7.20	-0.010	PASS
Band12	10	23060	50	#0	QPSK	NV	0	-8.58	-0.012	PASS
Band12	10	23060	50	#0	QPSK	NV	10	-6.44	-0.009	PASS
Band12	10	23060	50	#0	QPSK	NV	20	-5.36	-0.008	PASS
Band12	10	23060	50	#0	QPSK	NV	30	-6.78	-0.010	PASS
Band12	10	23060	50	#0	QPSK	NV	40	-5.52	-0.008	PASS
Band12	10	23060	50	#0	QPSK	NV	50	-8.74	-0.012	PASS
Band12	10	23060	50	#0	16QAM	NV	-30	-7.40	-0.011	PASS

Band12	10	23060	50	#0	16QAM	NV	-20	-5.55	-0.008	PASS
Band12	10	23060	50	#0	16QAM	NV	-10	-5.61	-0.008	PASS
Band12	10	23060	50	#0	16QAM	NV	0	-7.20	-0.010	PASS
Band12	10	23060	50	#0	16QAM	NV	10	-6.05	-0.009	PASS
Band12	10	23060	50	#0	16QAM	NV	20	-3.99	-0.006	PASS
Band12	10	23060	50	#0	16QAM	NV	30	-4.29	-0.006	PASS
Band12	10	23060	50	#0	16QAM	NV	40	-8.18	-0.012	PASS
Band12	10	23060	50	#0	16QAM	NV	50	-6.57	-0.009	PASS
Band12	10	23095	50	#0	QPSK	NV	-30	-6.71	-0.009	PASS
Band12	10	23095	50	#0	QPSK	NV	-20	-4.79	-0.007	PASS
Band12	10	23095	50	#0	QPSK	NV	-10	-5.34	-0.008	PASS
Band12	10	23095	50	#0	QPSK	NV	0	-6.02	-0.009	PASS
Band12	10	23095	50	#0	QPSK	NV	10	-5.81	-0.008	PASS
Band12	10	23095	50	#0	QPSK	NV	20	-8.40	-0.012	PASS
Band12	10	23095	50	#0	QPSK	NV	30	-6.39	-0.009	PASS
Band12	10	23095	50	#0	QPSK	NV	40	-5.44	-0.008	PASS
Band12	10	23095	50	#0	QPSK	NV	50	-4.13	-0.006	PASS
Band12	10	23095	50	#0	16QAM	NV	-30	-3.65	-0.005	PASS
Band12	10	23095	50	#0	16QAM	NV	-20	-5.06	-0.007	PASS
Band12	10	23095	50	#0	16QAM	NV	-10	-6.14	-0.009	PASS
Band12	10	23095	50	#0	16QAM	NV	0	-5.65	-0.008	PASS
Band12	10	23095	50	#0	16QAM	NV	10	-5.28	-0.007	PASS
Band12	10	23095	50	#0	16QAM	NV	20	-4.12	-0.006	PASS
Band12	10	23095	50	#0	16QAM	NV	30	-7.32	-0.010	PASS
Band12	10	23095	50	#0	16QAM	NV	40	-5.76	-0.008	PASS
Band12	10	23095	50	#0	16QAM	NV	50	-4.51	-0.006	PASS
Band12	10	23130	50	#0	QPSK	NV	-30	-4.62	-0.006	PASS
Band12	10	23130	50	#0	QPSK	NV	-20	-7.30	-0.010	PASS
Band12	10	23130	50	#0	QPSK	NV	-10	-4.32	-0.006	PASS
Band12	10	23130	50	#0	QPSK	NV	0	-5.69	-0.008	PASS
Band12	10	23130	50	#0	QPSK	NV	10	-7.27	-0.010	PASS
Band12	10	23130	50	#0	QPSK	NV	20	-3.98	-0.006	PASS
Band12	10	23130	50	#0	QPSK	NV	30	-5.66	-0.008	PASS
Band12	10	23130	50	#0	QPSK	NV	40	-6.01	-0.008	PASS
Band12	10	23130	50	#0	QPSK	NV	50	-5.25	-0.007	PASS
Band12	10	23130	50	#0	16QAM	NV	-30	-8.84	-0.012	PASS
Band12	10	23130	50	#0	16QAM	NV	-20	-7.30	-0.010	PASS
Band12	10	23130	50	#0	16QAM	NV	-10	-4.43	-0.006	PASS
Band12	10	23130	50	#0	16QAM	NV	0	-5.29	-0.007	PASS
Band12	10	23130	50	#0	16QAM	NV	10	-5.91	-0.008	PASS
Band12	10	23130	50	#0	16QAM	NV	20	-6.31	-0.009	PASS
Band12	10	23130	50	#0	16QAM	NV	30	-6.65	-0.009	PASS

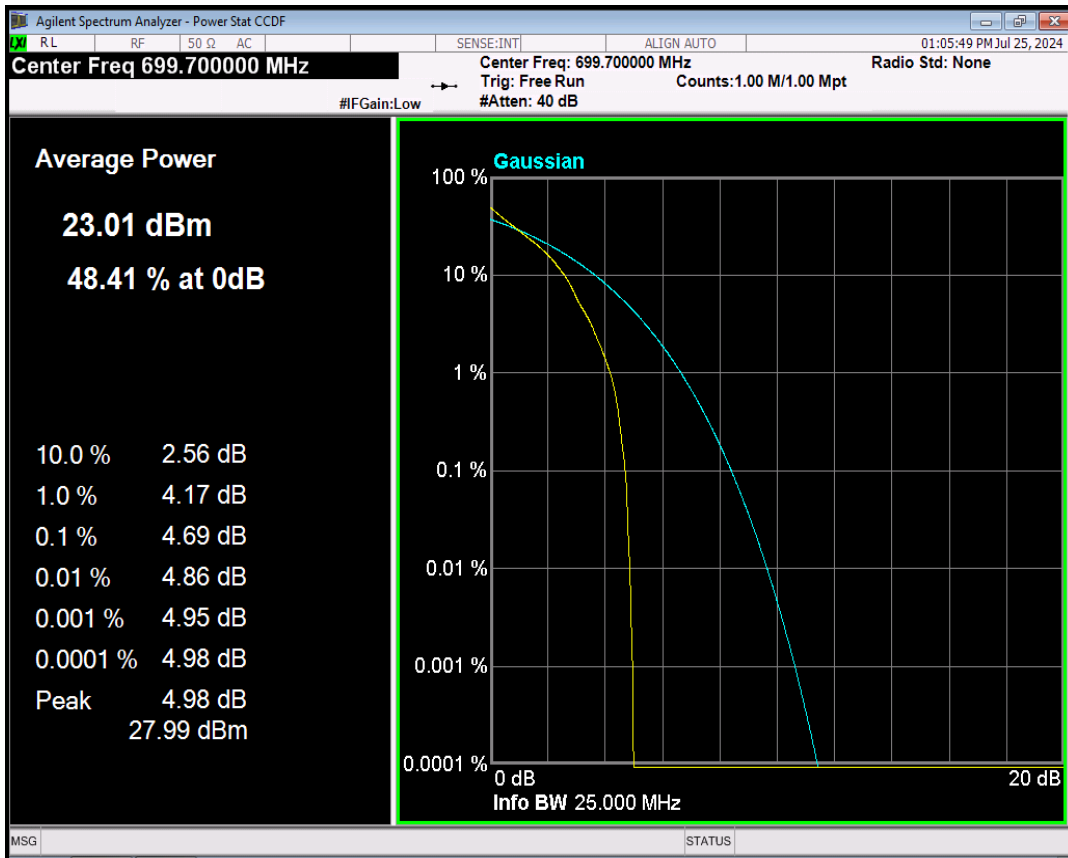
Band12	10	23130	50	#0	16QAM	NV	40	-5.49	-0.008	PASS
Band12	10	23130	50	#0	16QAM	NV	50	-6.12	-0.009	PASS



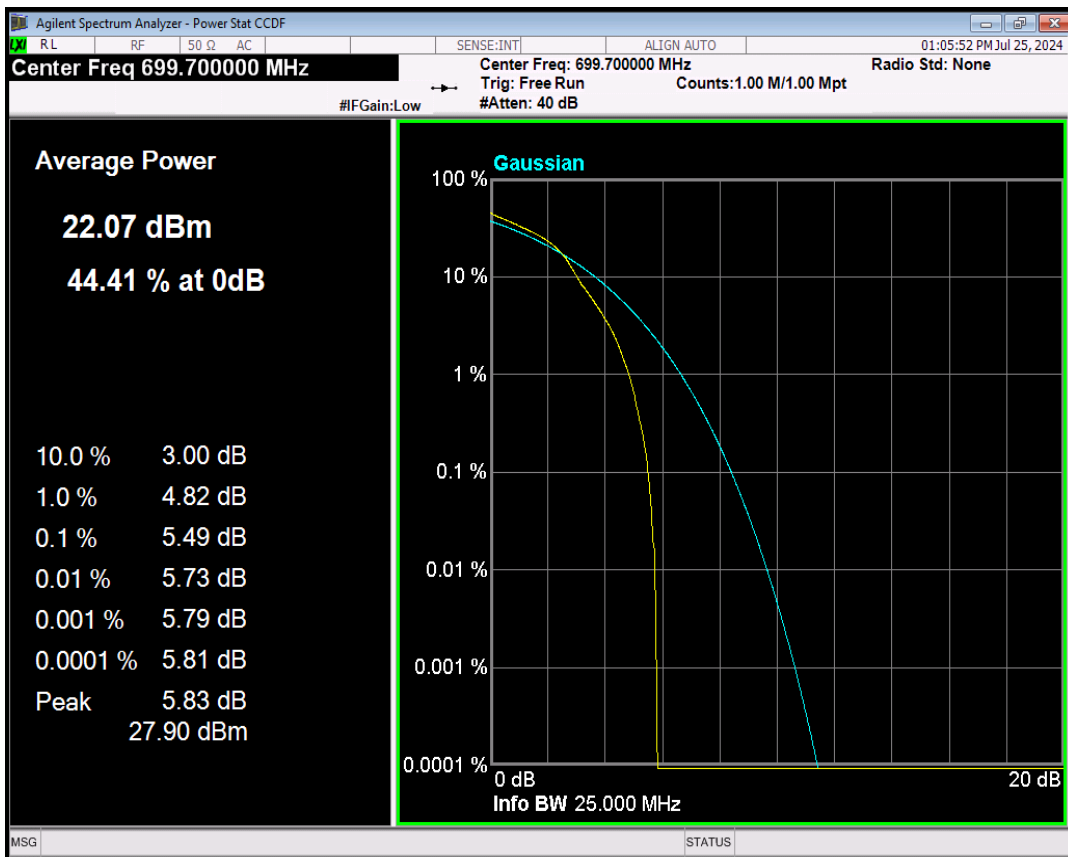
Appendix 3. Peak-to-Average Ratio

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Result (dB)	high Limit (dB)	Verdict
Band12	1.4	23017	1	#0	QPSK	4.69	13	PASS
Band12	1.4	23017	1	#0	16QAM	5.49	13	PASS
Band12	1.4	23095	1	#0	QPSK	4.52	13	PASS
Band12	1.4	23095	1	#0	16QAM	5.41	13	PASS
Band12	1.4	23173	1	#0	QPSK	4.72	13	PASS
Band12	1.4	23173	1	#0	16QAM	5.59	13	PASS
Band12	3	23025	1	#0	QPSK	4.57	13	PASS
Band12	3	23025	1	#0	16QAM	5.46	13	PASS
Band12	3	23095	1	#0	QPSK	4.85	13	PASS
Band12	3	23095	1	#0	16QAM	5.93	13	PASS
Band12	3	23165	1	#0	QPSK	5.12	13	PASS
Band12	3	23165	1	#0	16QAM	5.83	13	PASS
Band12	5	23035	1	#0	QPSK	4.71	13	PASS
Band12	5	23035	1	#0	16QAM	5.37	13	PASS
Band12	5	23095	1	#0	QPSK	5.23	13	PASS
Band12	5	23095	1	#0	16QAM	5.86	13	PASS
Band12	5	23155	1	#0	QPSK	4.66	13	PASS
Band12	5	23155	1	#0	16QAM	5.40	13	PASS
Band12	10	23060	1	#0	QPSK	4.51	13	PASS
Band12	10	23060	1	#0	16QAM	5.36	13	PASS
Band12	10	23095	1	#0	QPSK	5.60	13	PASS
Band12	10	23095	1	#0	16QAM	6.73	13	PASS
Band12	10	23130	1	#0	QPSK	4.51	13	PASS
Band12	10	23130	1	#0	16QAM	5.32	13	PASS

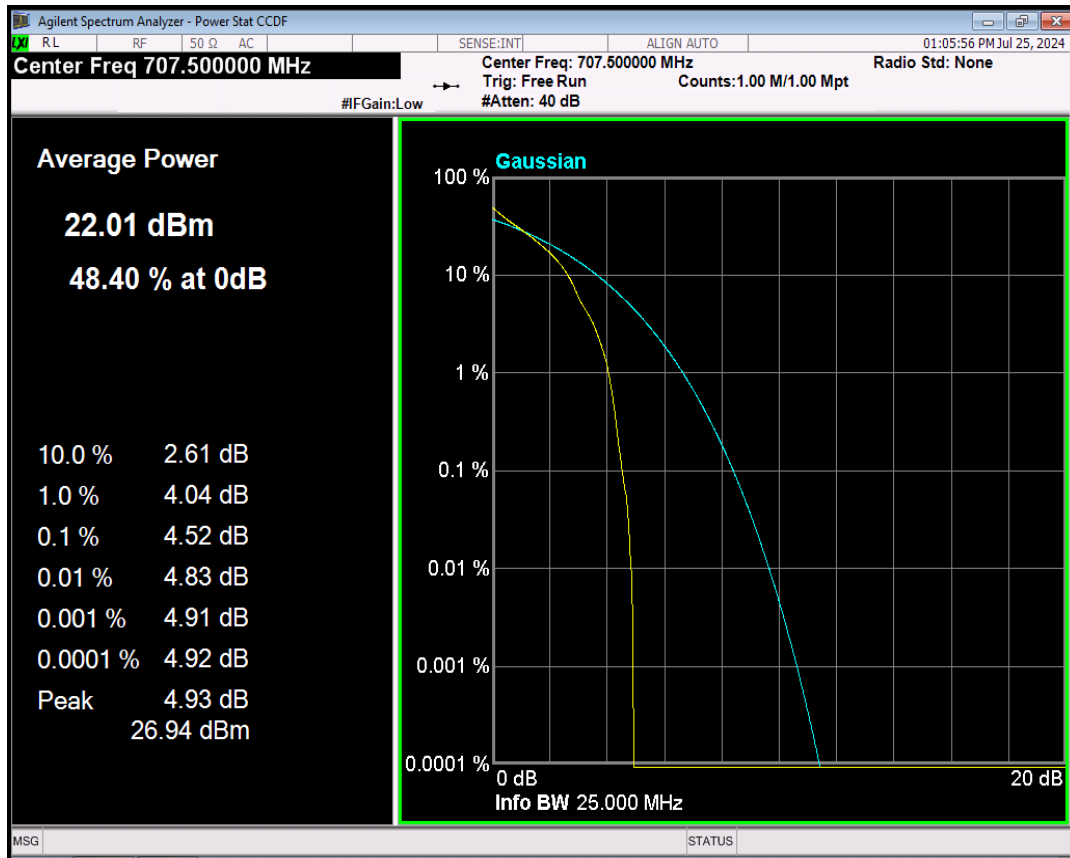
Band12 QPSK BW=1.4MHz Channel=23017 RB Size=1 Position=#0



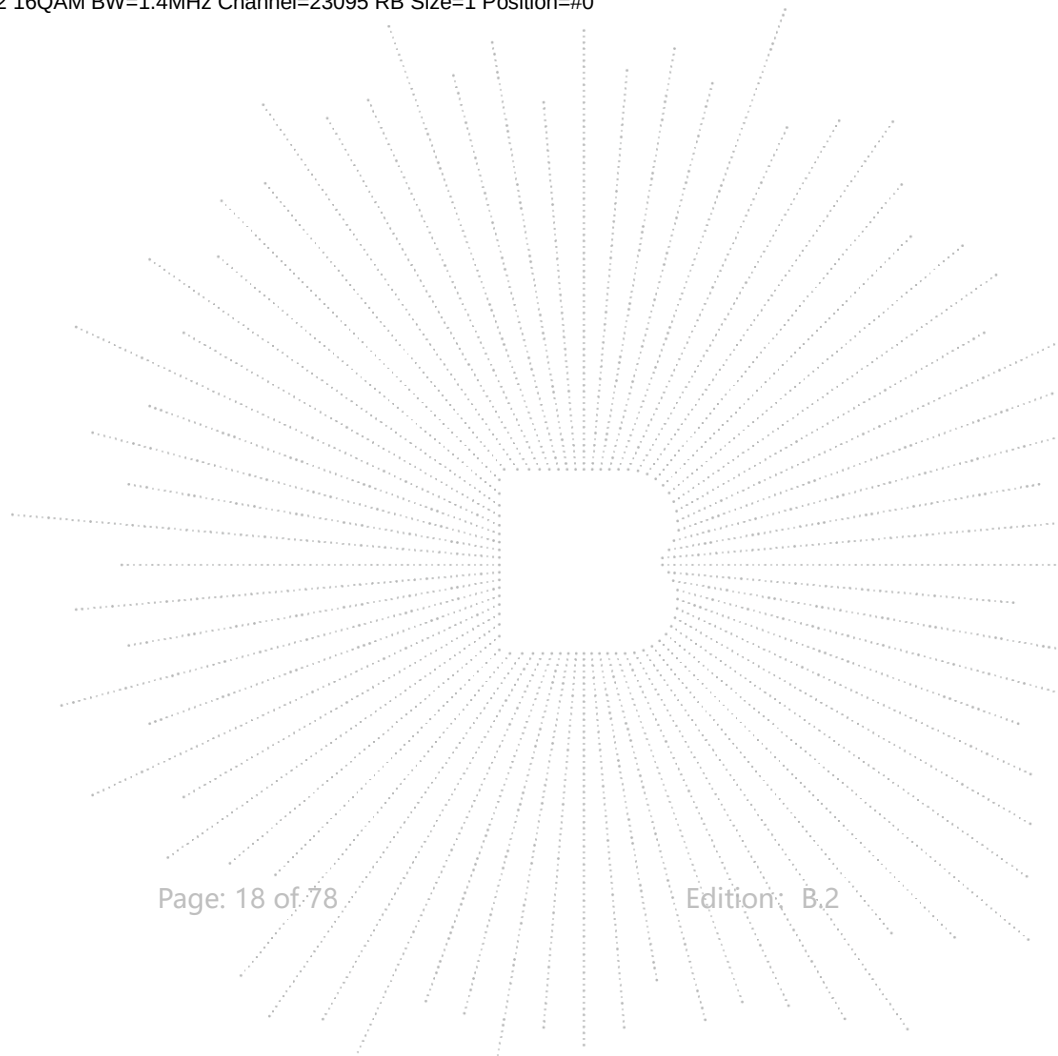
Band12 16QAM BW=1.4MHz Channel=23017 RB Size=1 Position=#0

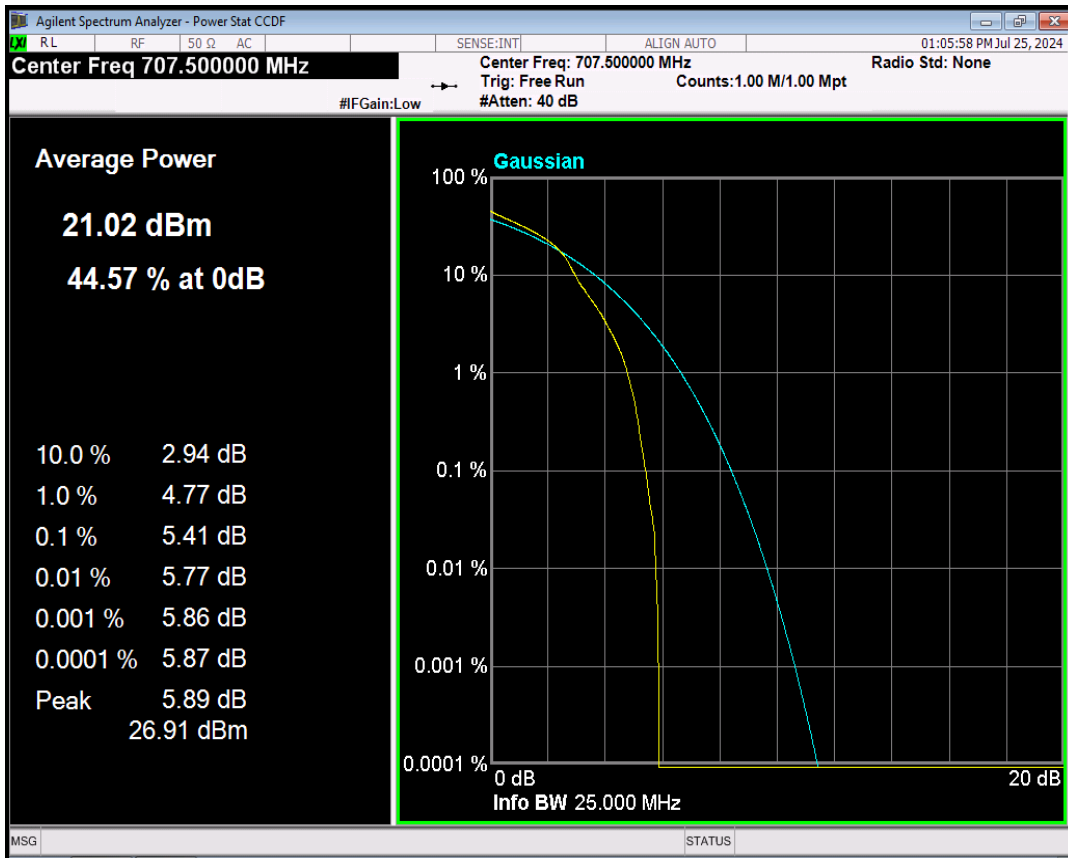


Band12 QPSK BW=1.4MHz Channel=23095 RB Size=1 Position=#0

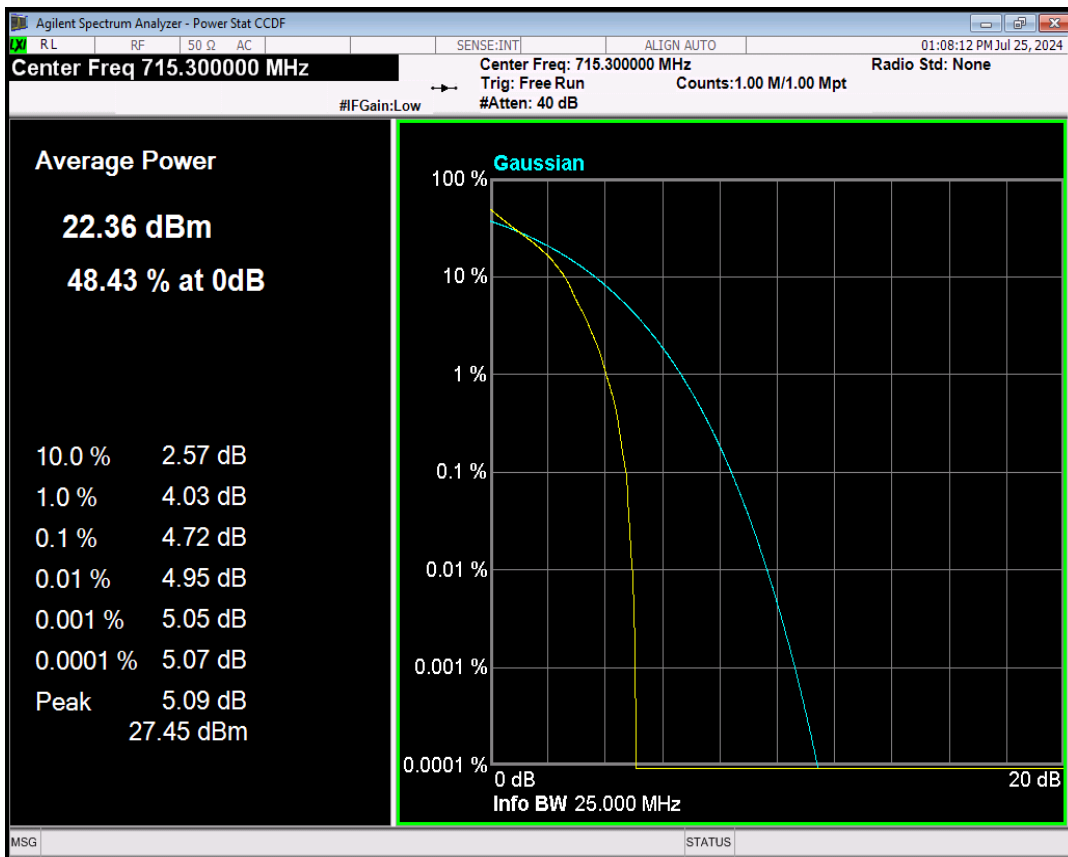


Band12 16QAM BW=1.4MHz Channel=23095 RB Size=1 Position=#0

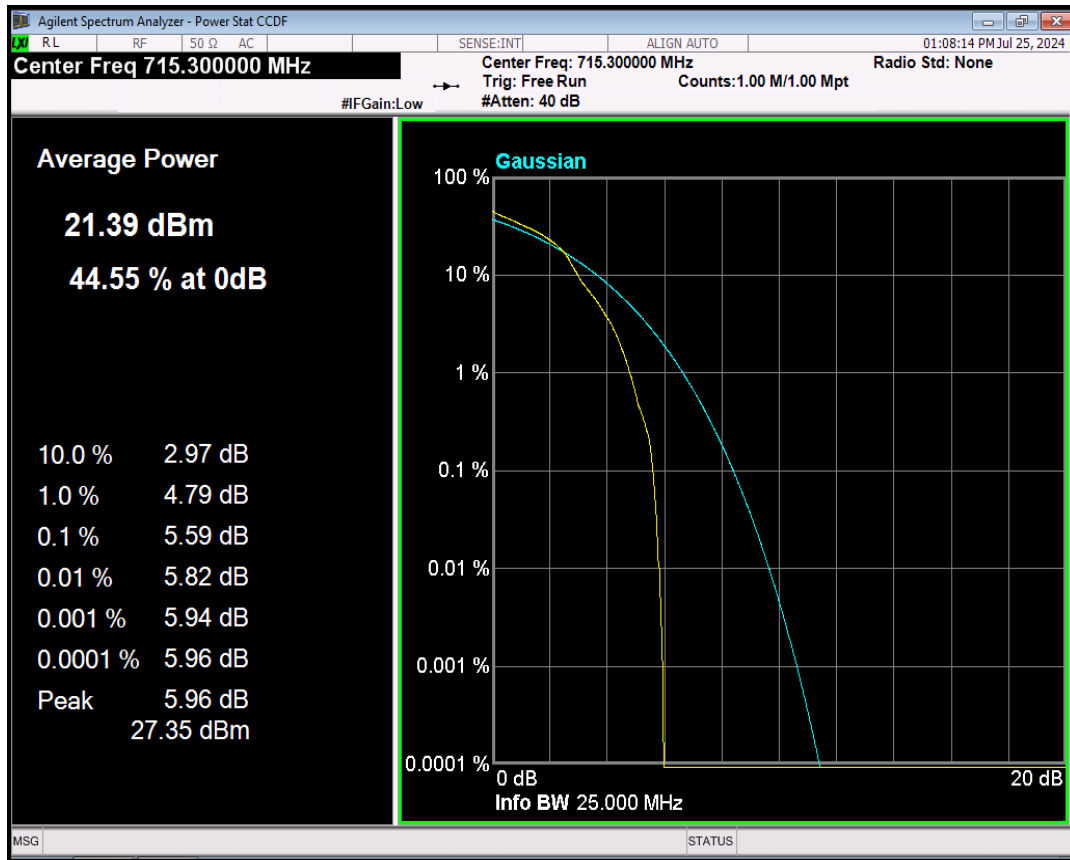




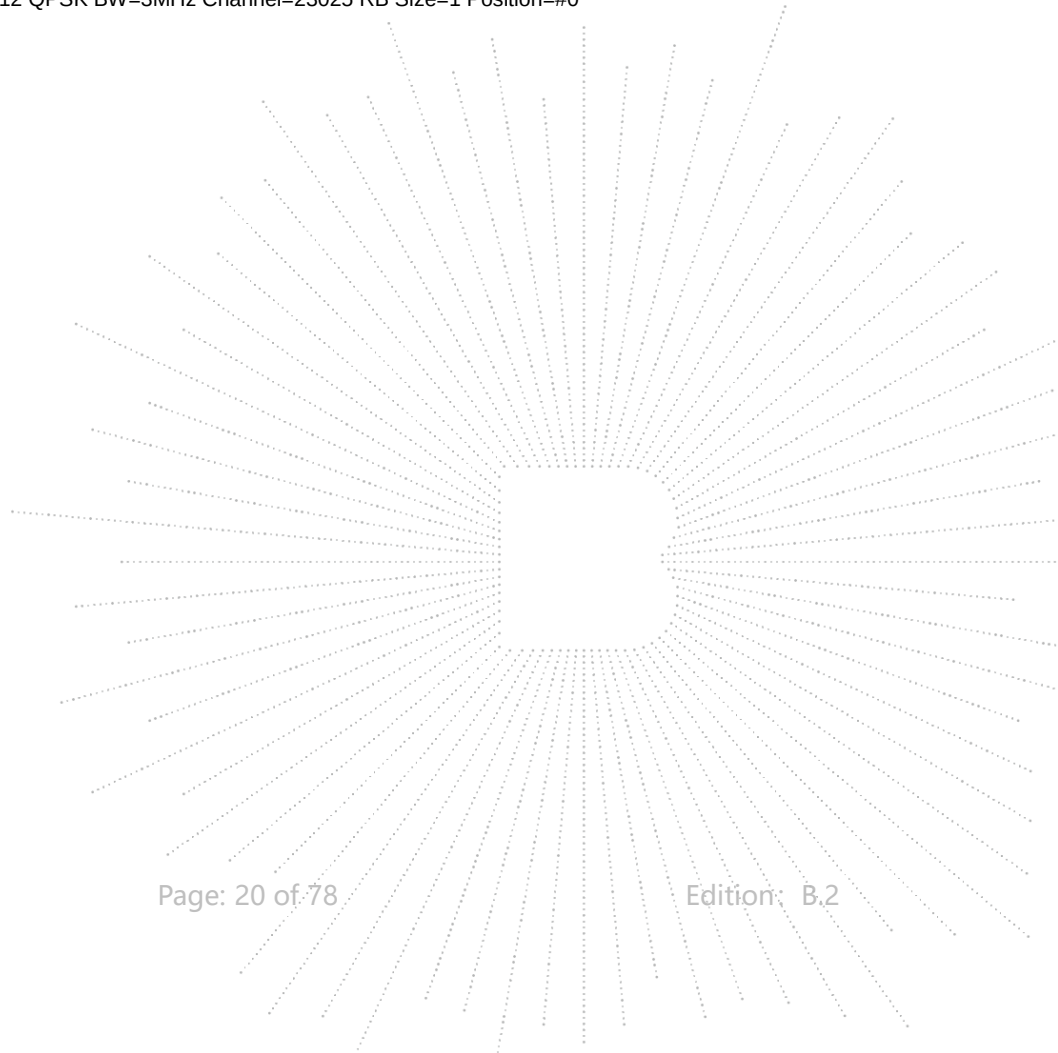
Band12 QPSK BW=1.4MHz Channel=23173 RB Size=1 Position=#0

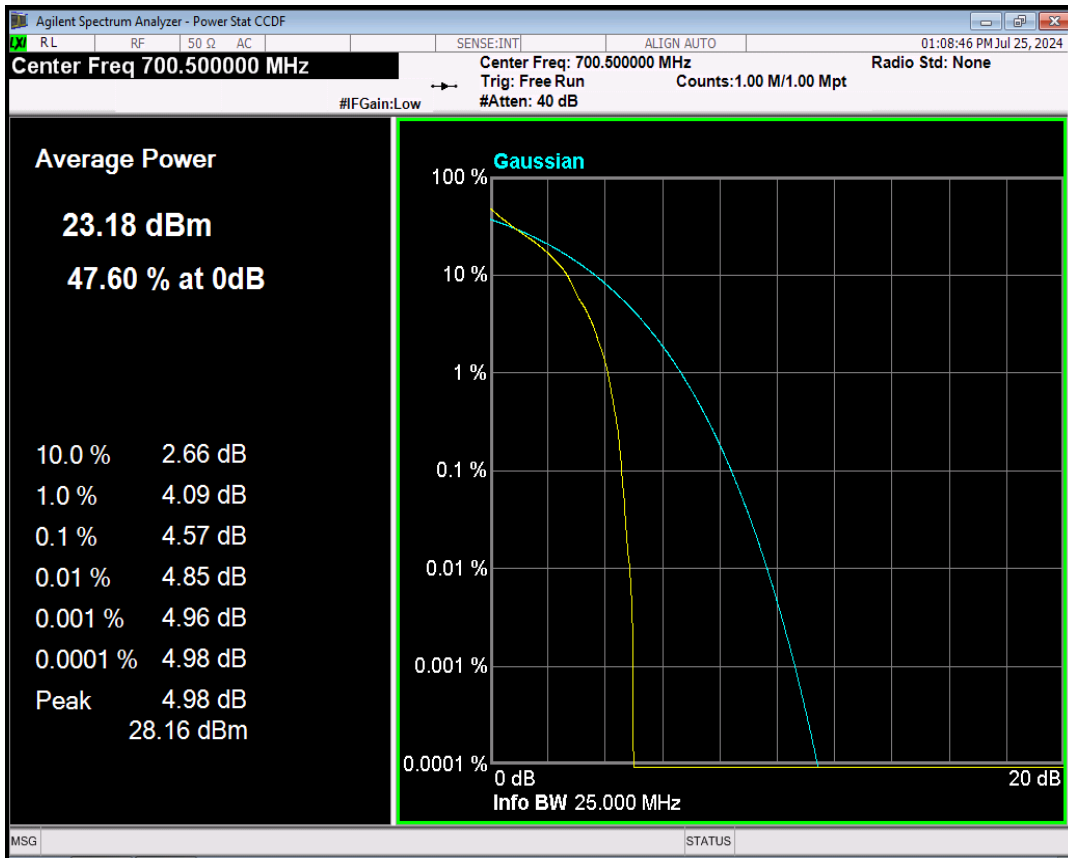


Band12 16QAM BW=1.4MHz Channel=23173 RB Size=1 Position=#0

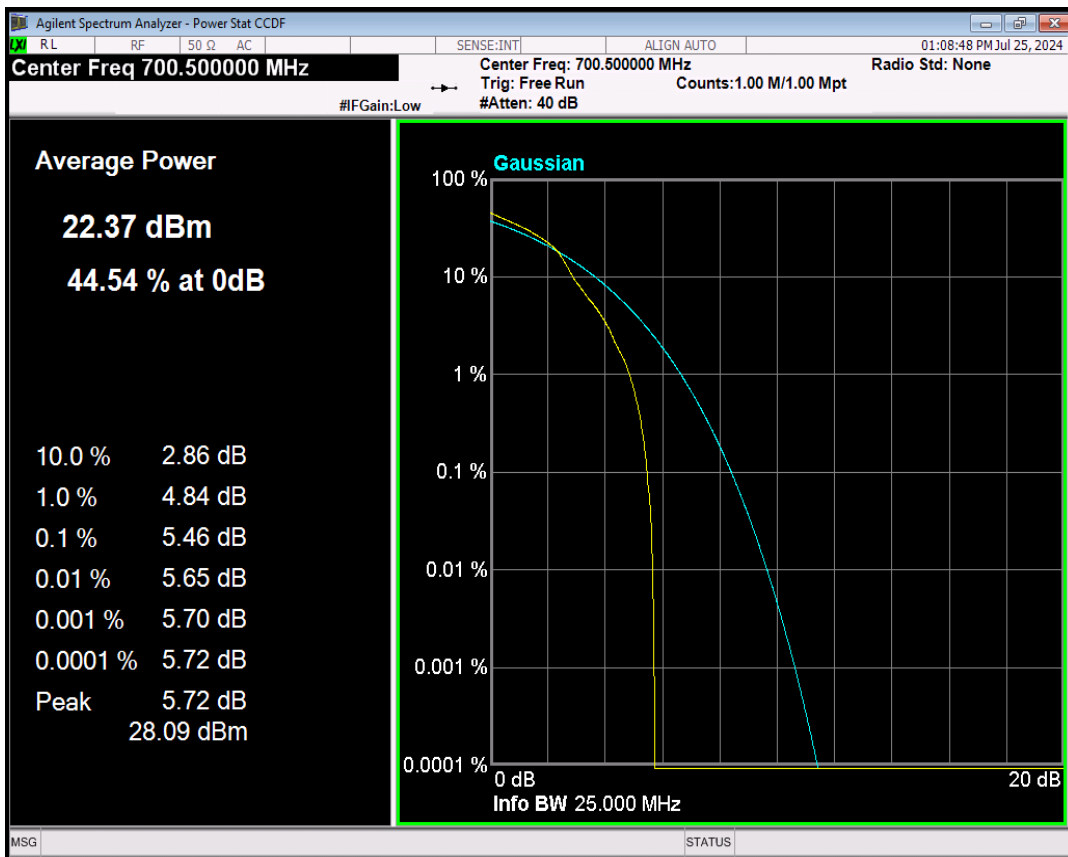


Band12 QPSK BW=3MHz Channel=23025 RB Size=1 Position=#0

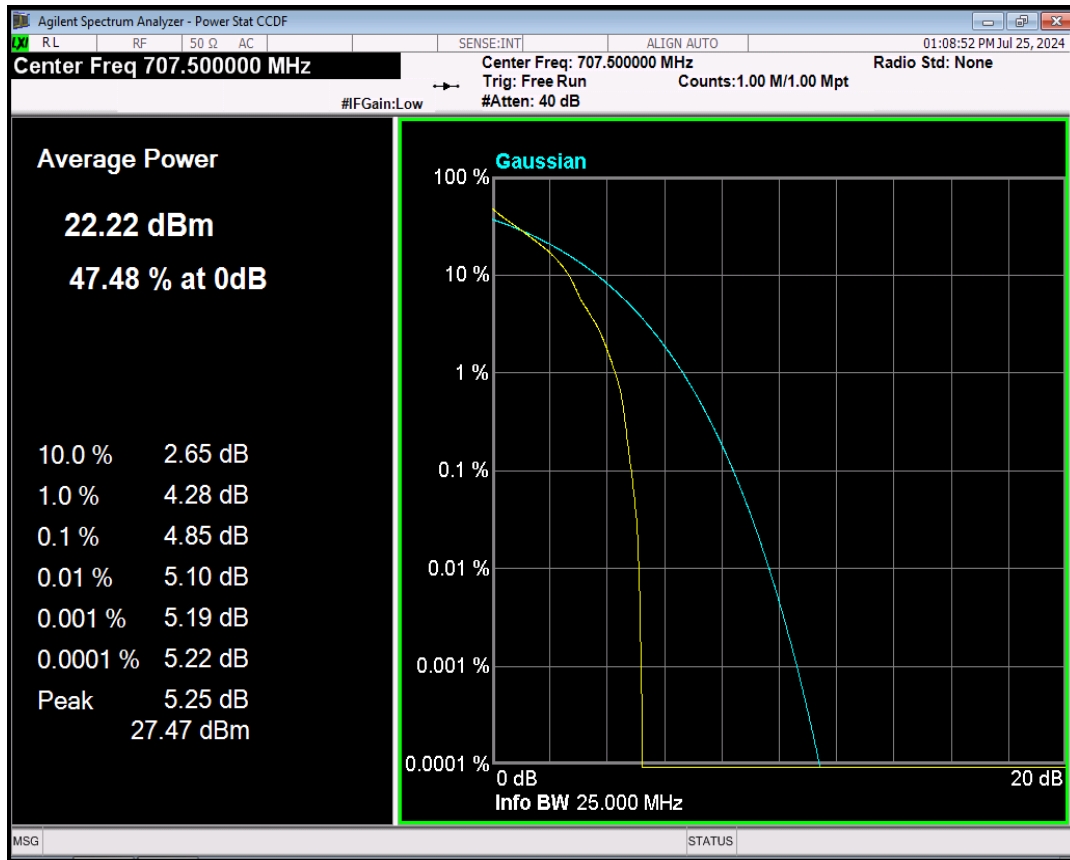




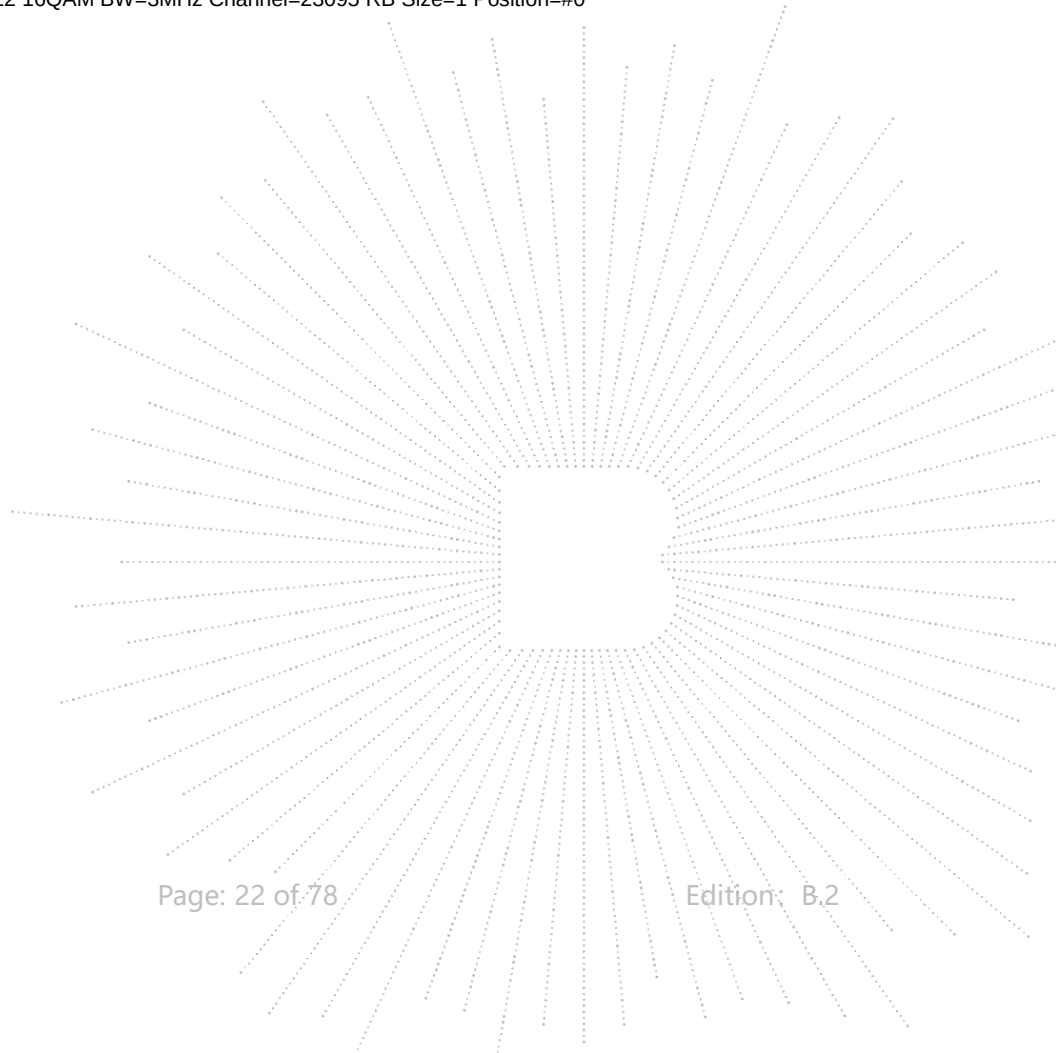
Band12 16QAM BW=3MHz Channel=23025 RB Size=1 Position=#0

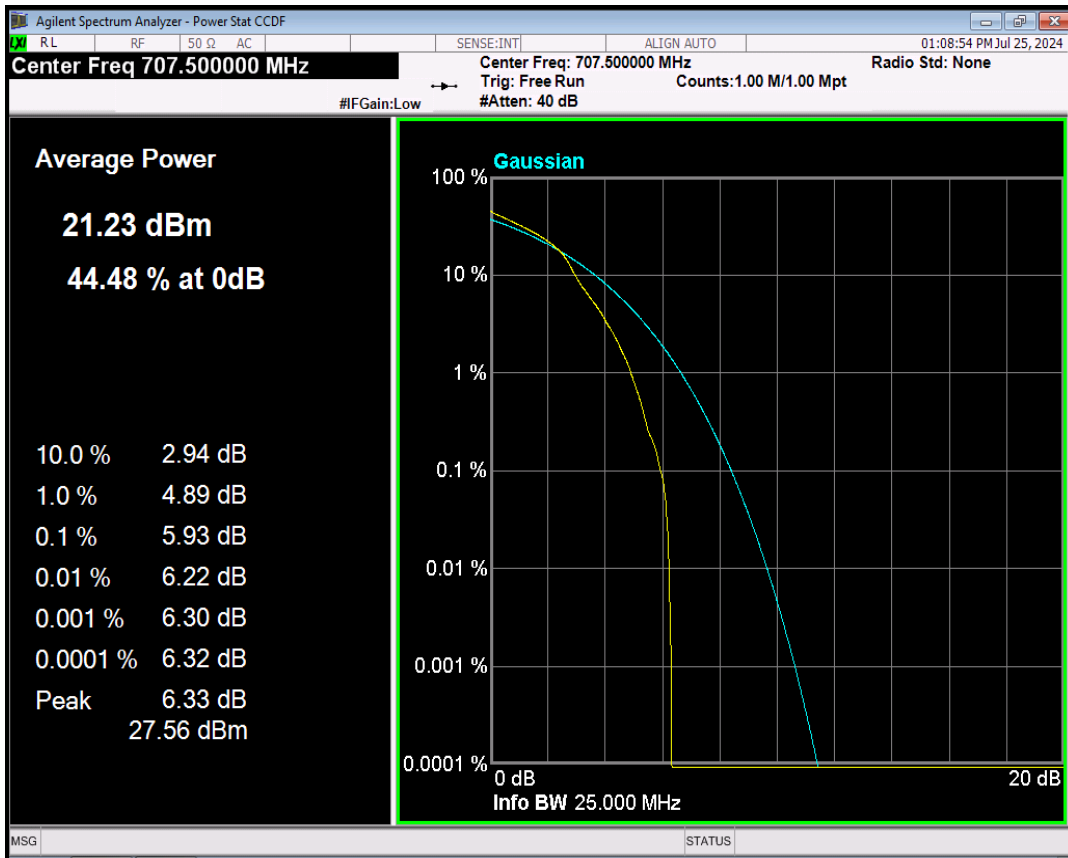


Band12 QPSK BW=3MHz Channel=23095 RB Size=1 Position=#0

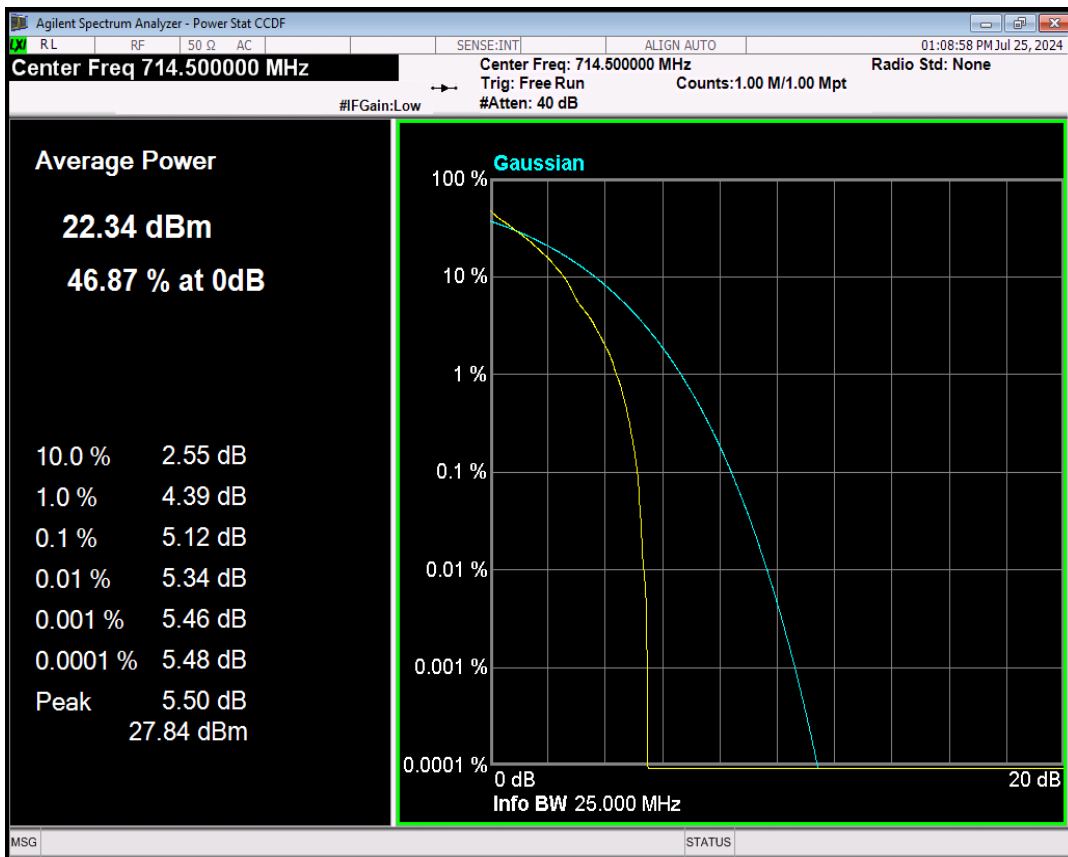


Band12 16QAM BW=3MHz Channel=23095 RB Size=1 Position=#0

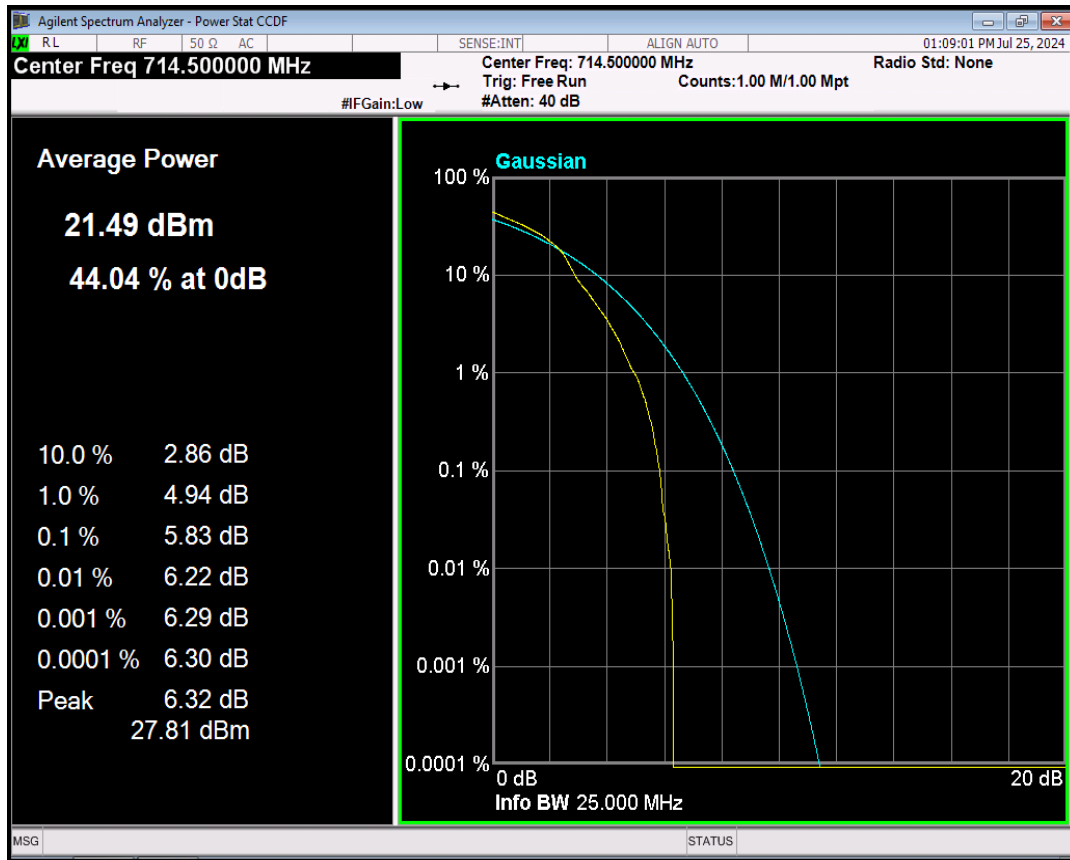




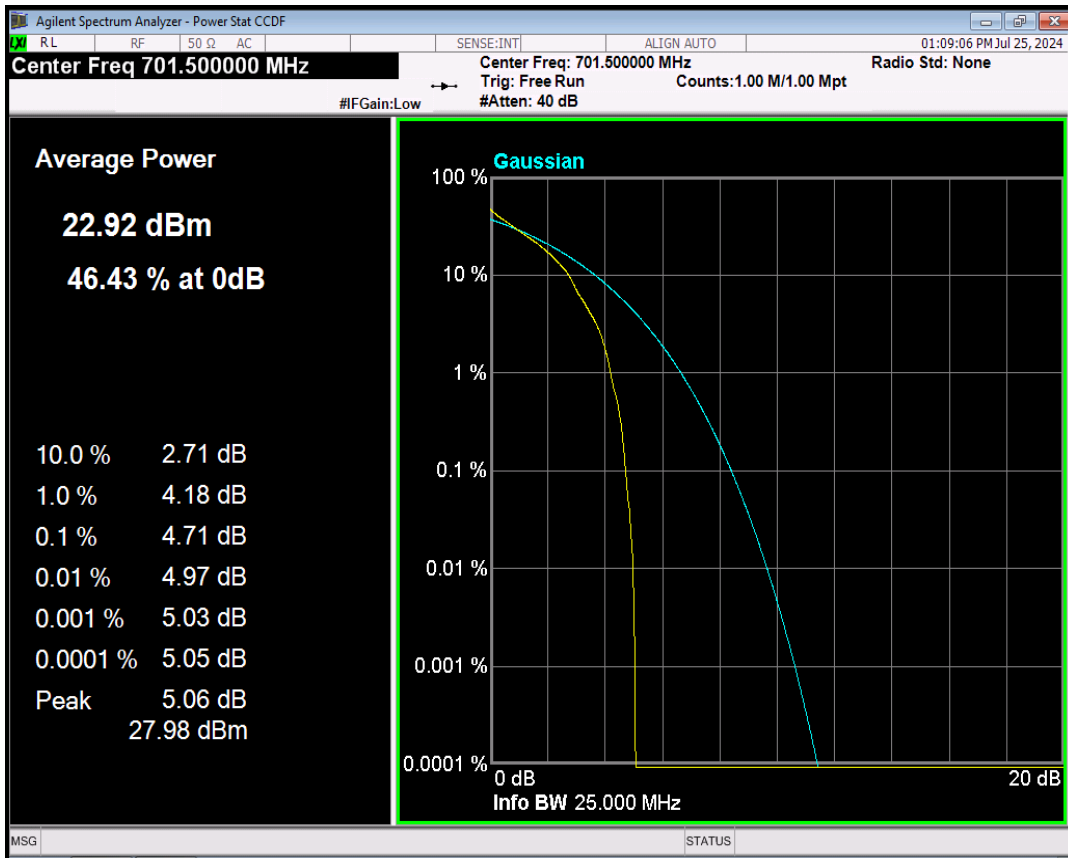
Band12 QPSK BW=3MHz Channel=23165 RB Size=1 Position=#0



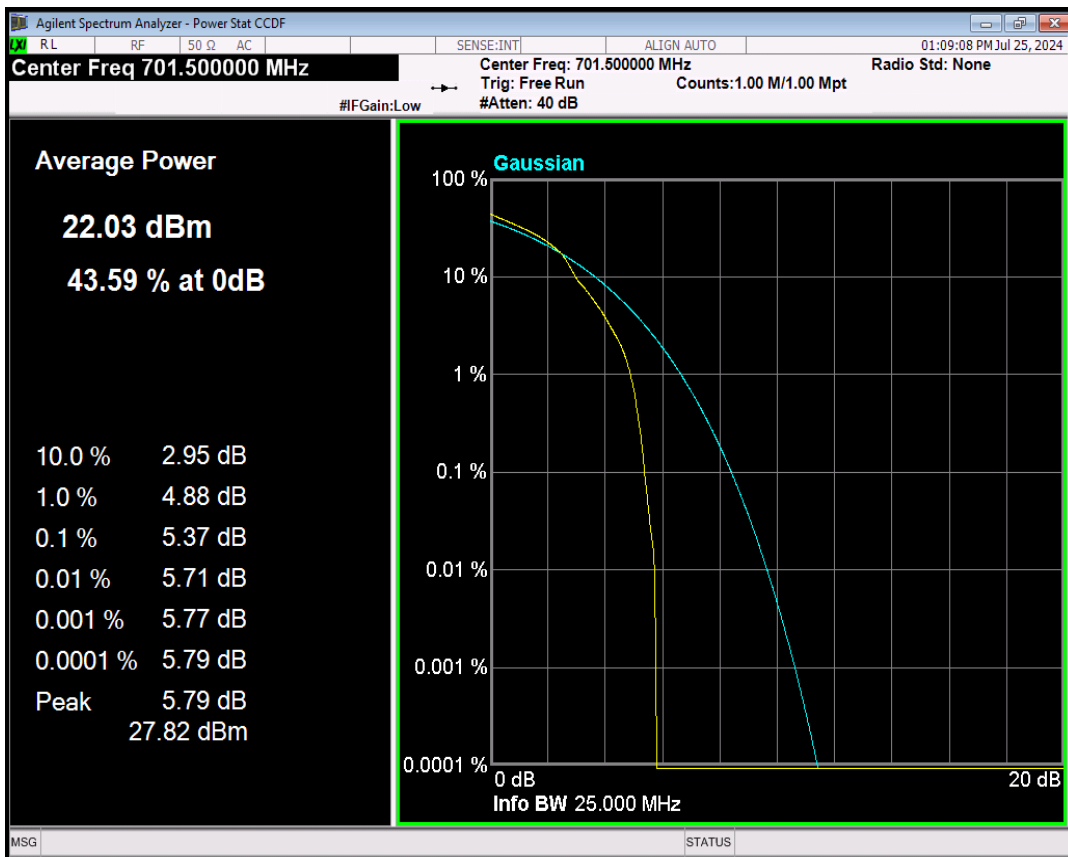
Band12 16QAM BW=3MHz Channel=23165 RB Size=1 Position=#0



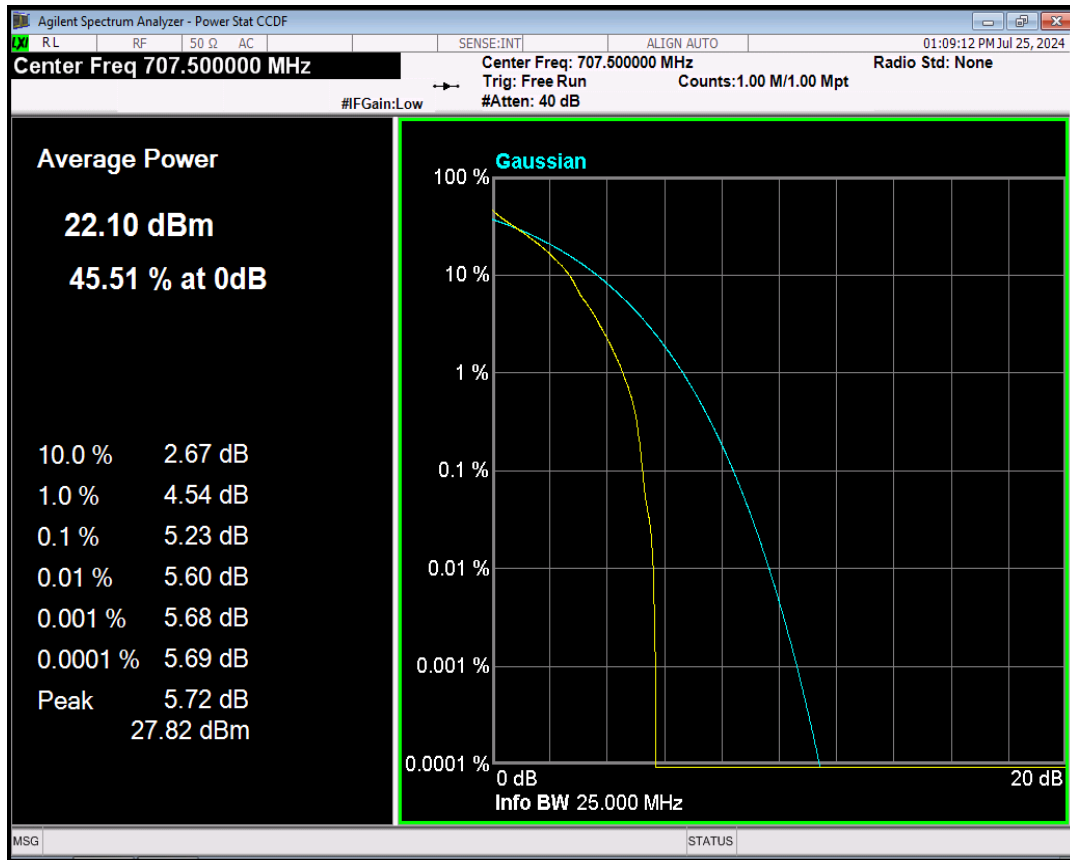
Band12 QPSK BW=5MHz Channel=23035 RB Size=1 Position=#0



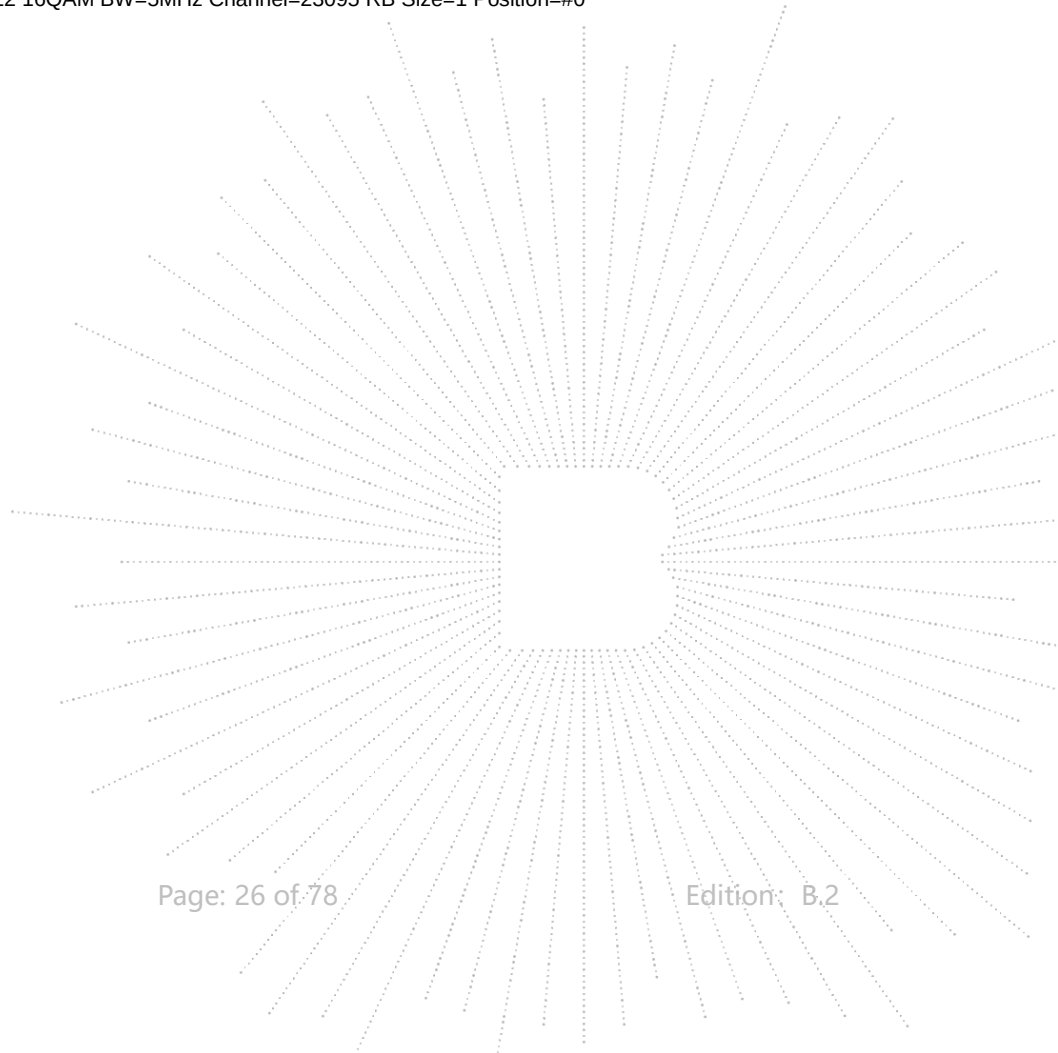
Band12 16QAM BW=5MHz Channel=23035 RB Size=1 Position=#0

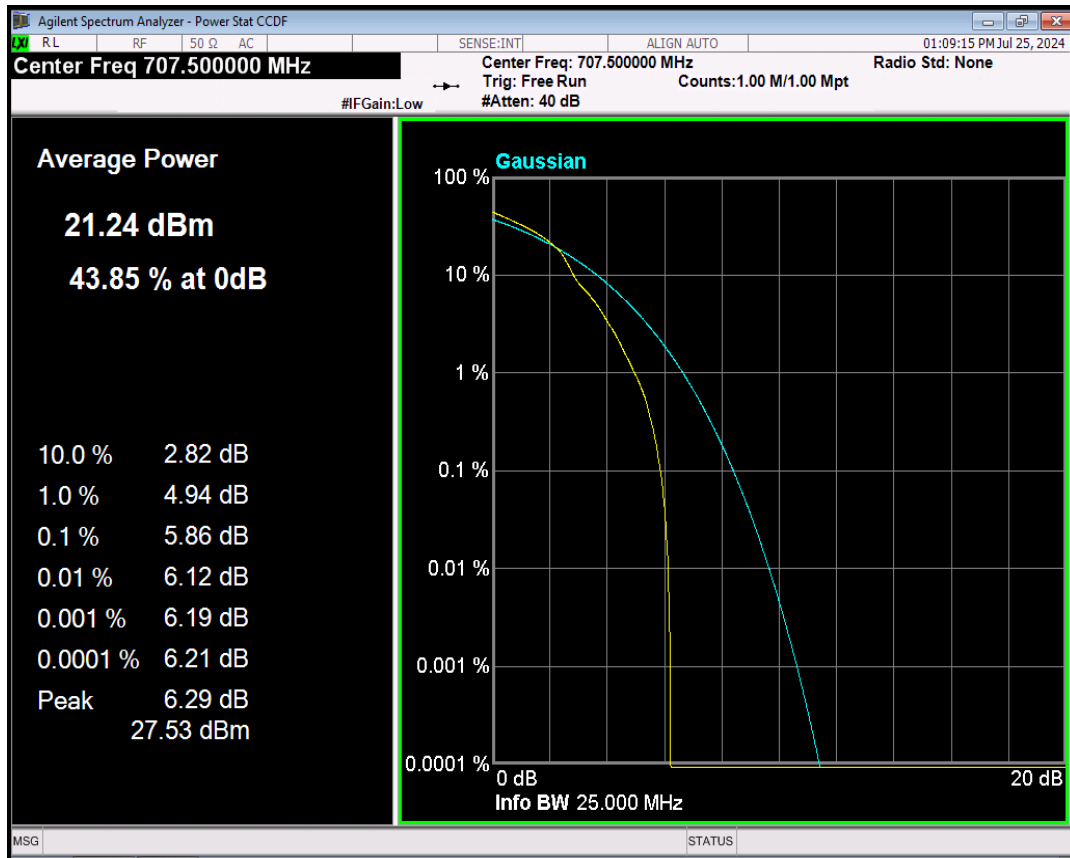


Band12 QPSK BW=5MHz Channel=23095 RB Size=1 Position=#0

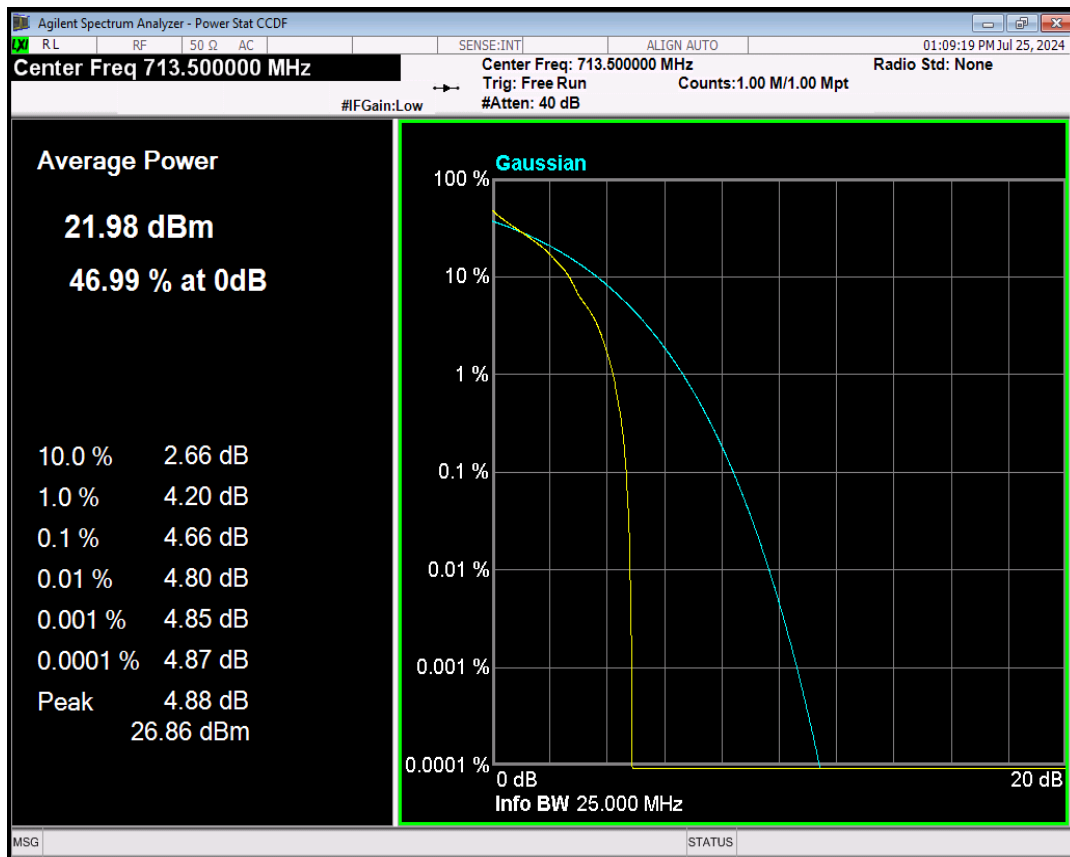


Band12 16QAM BW=5MHz Channel=23095 RB Size=1 Position=#0

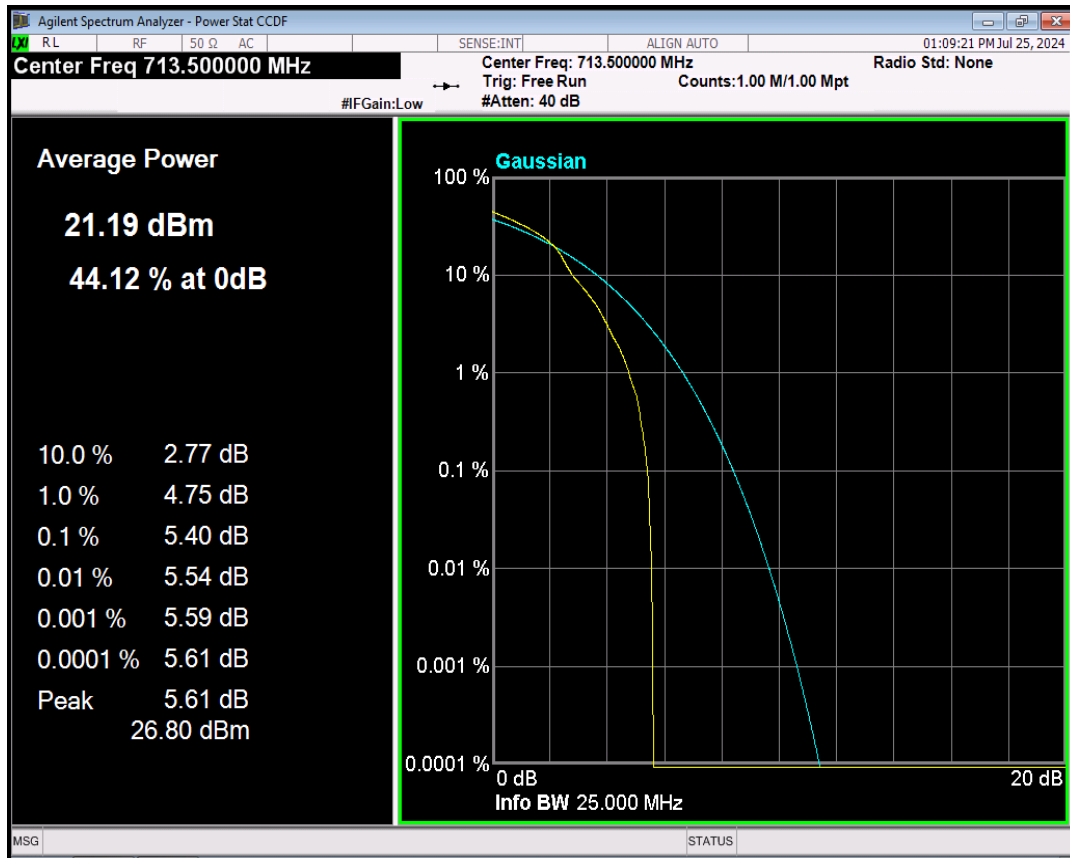




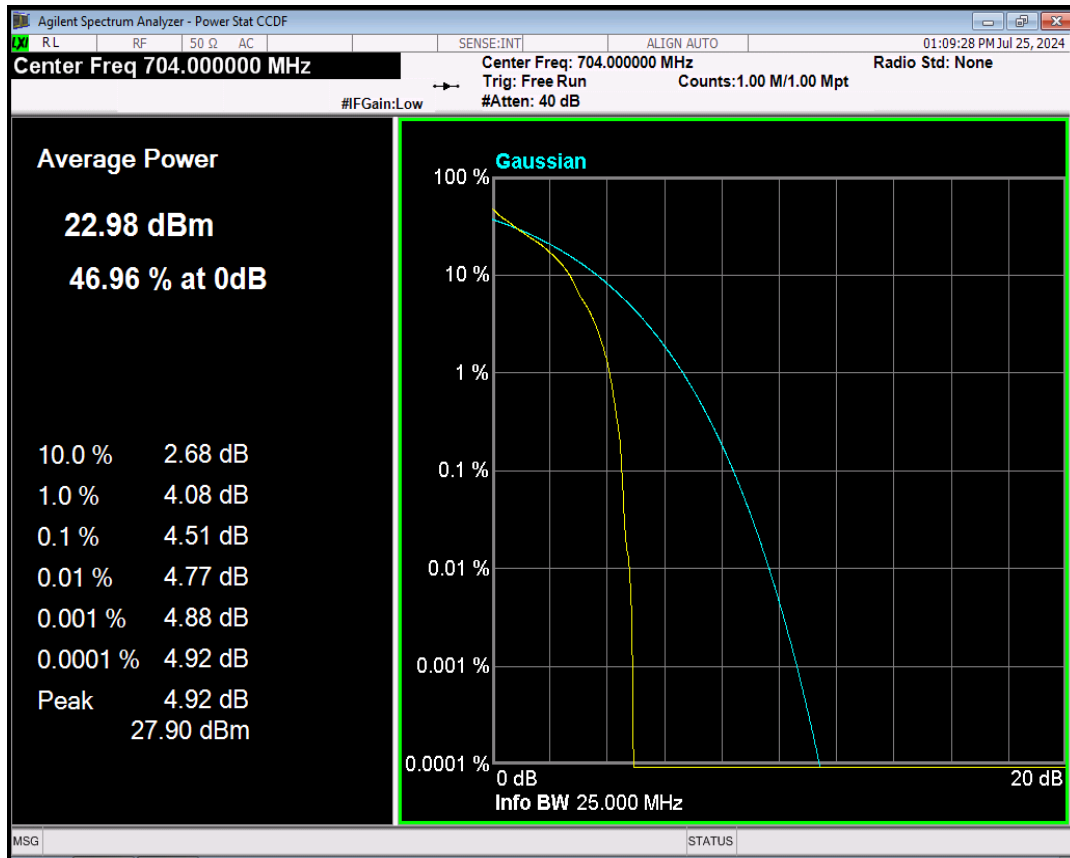
Band12 QPSK BW=5MHz Channel=23155 RB Size=1 Position=#0



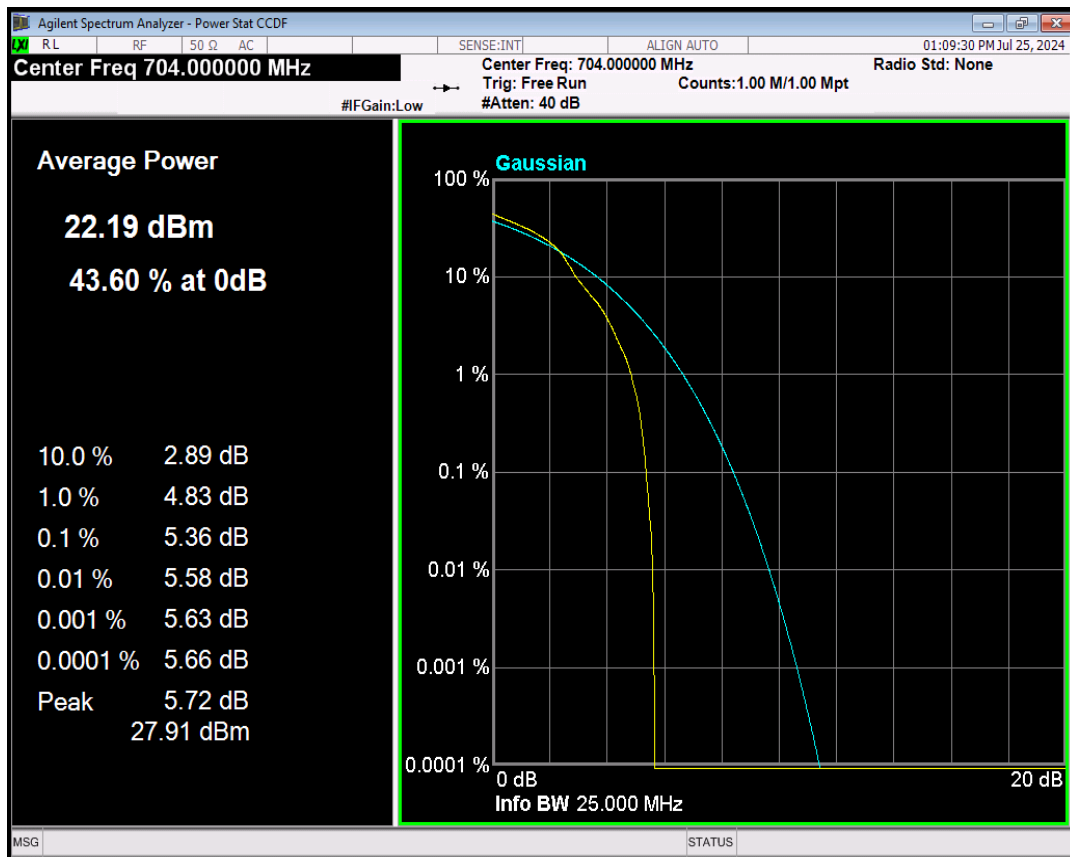
Band12 16QAM BW=5MHz Channel=23155 RB Size=1 Position=#0



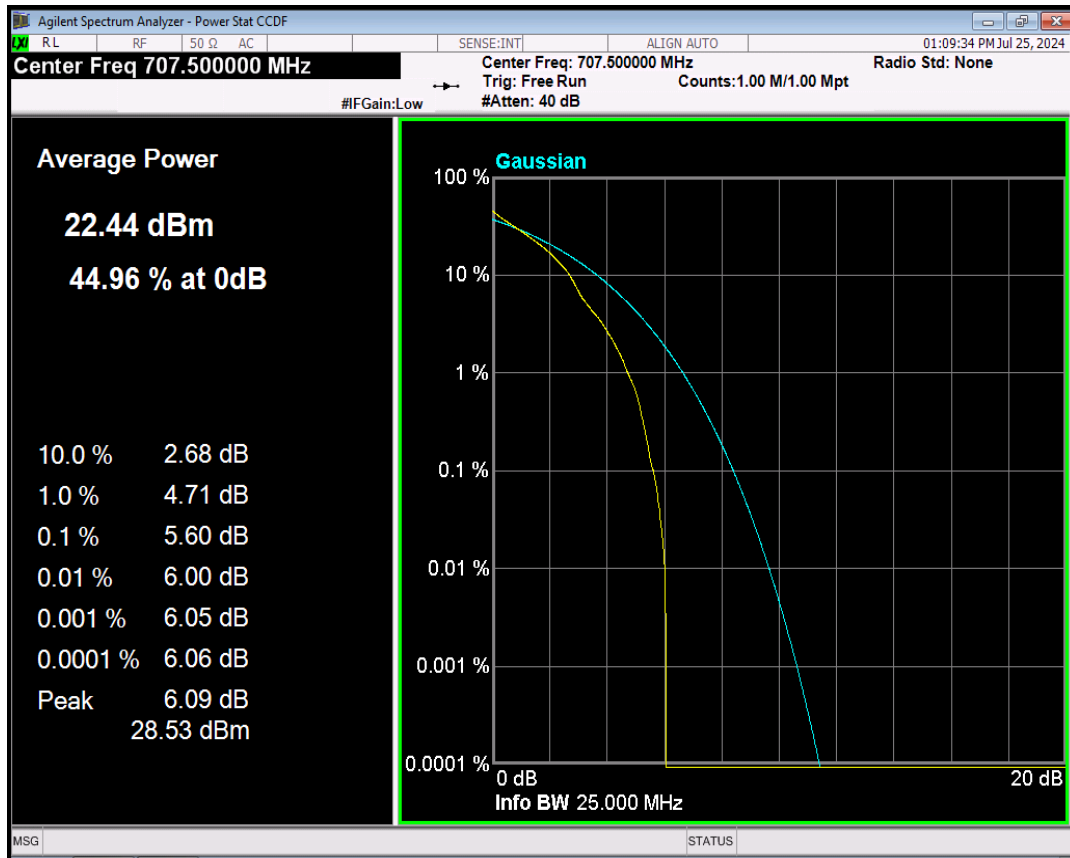
Band12 QPSK BW=10MHz Channel=23060 RB Size=1 Position=#0



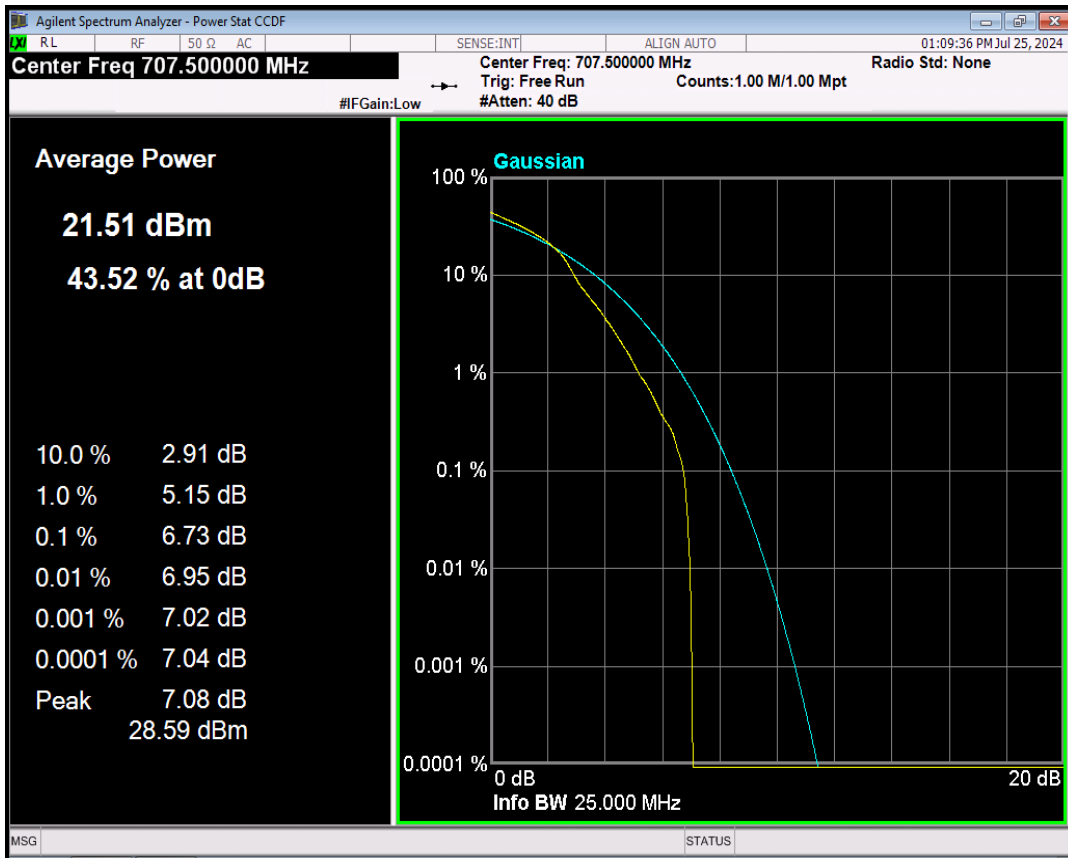
Band12 16QAM BW=10MHz Channel=23060 RB Size=1 Position=#0



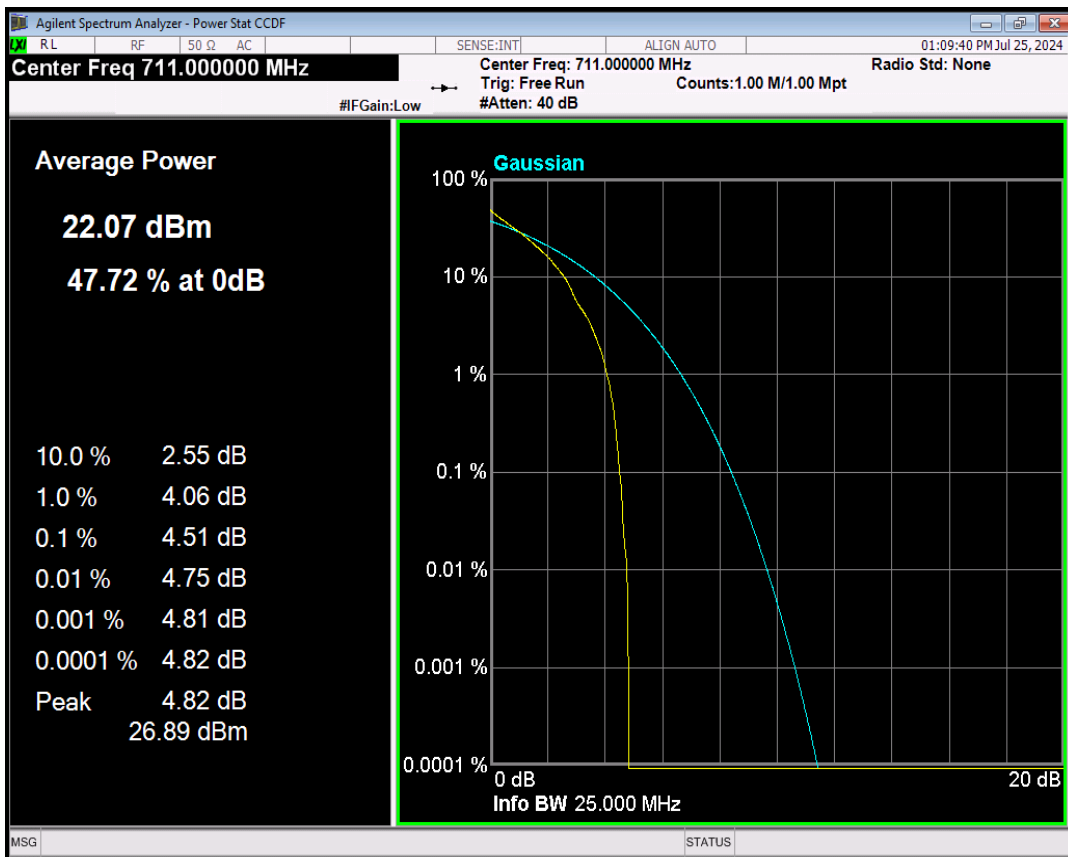
Band12 QPSK BW=10MHz Channel=23095 RB Size=1 Position=#0



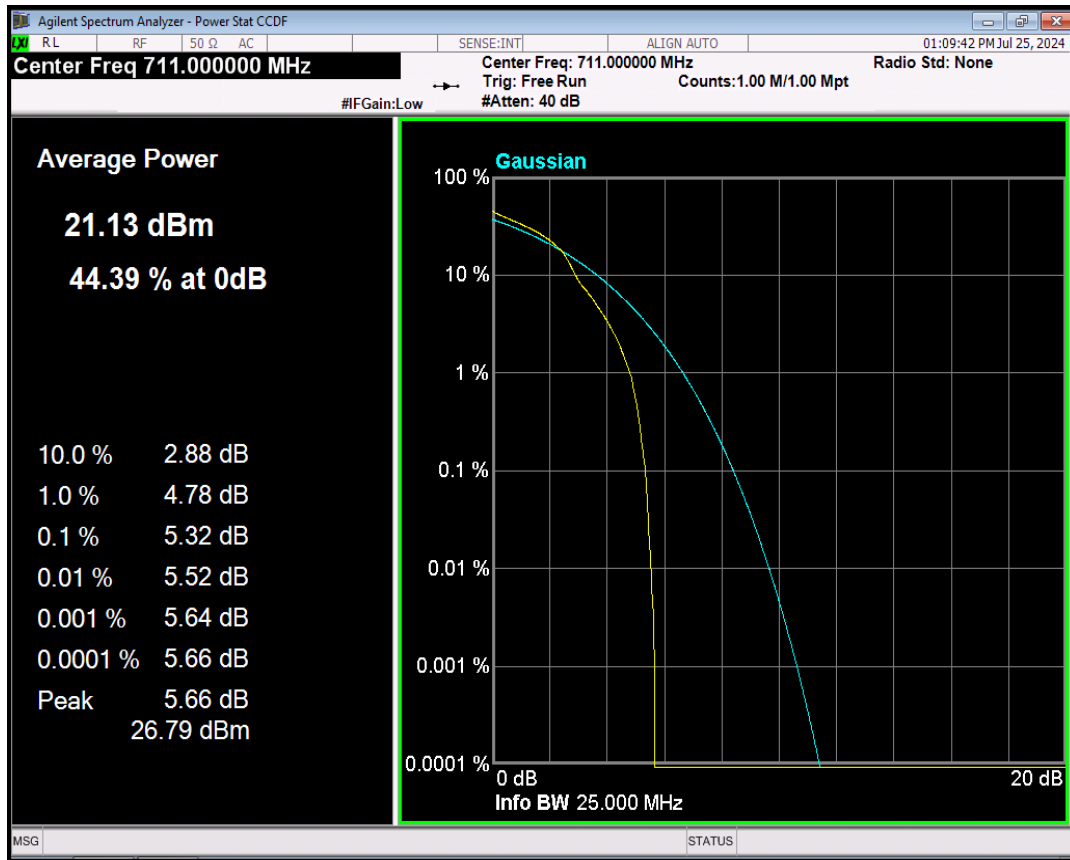
Band12 16QAM BW=10MHz Channel=23095 RB Size=1 Position=#0



Band12 QPSK BW=10MHz Channel=23130 RB Size=1 Position=#0



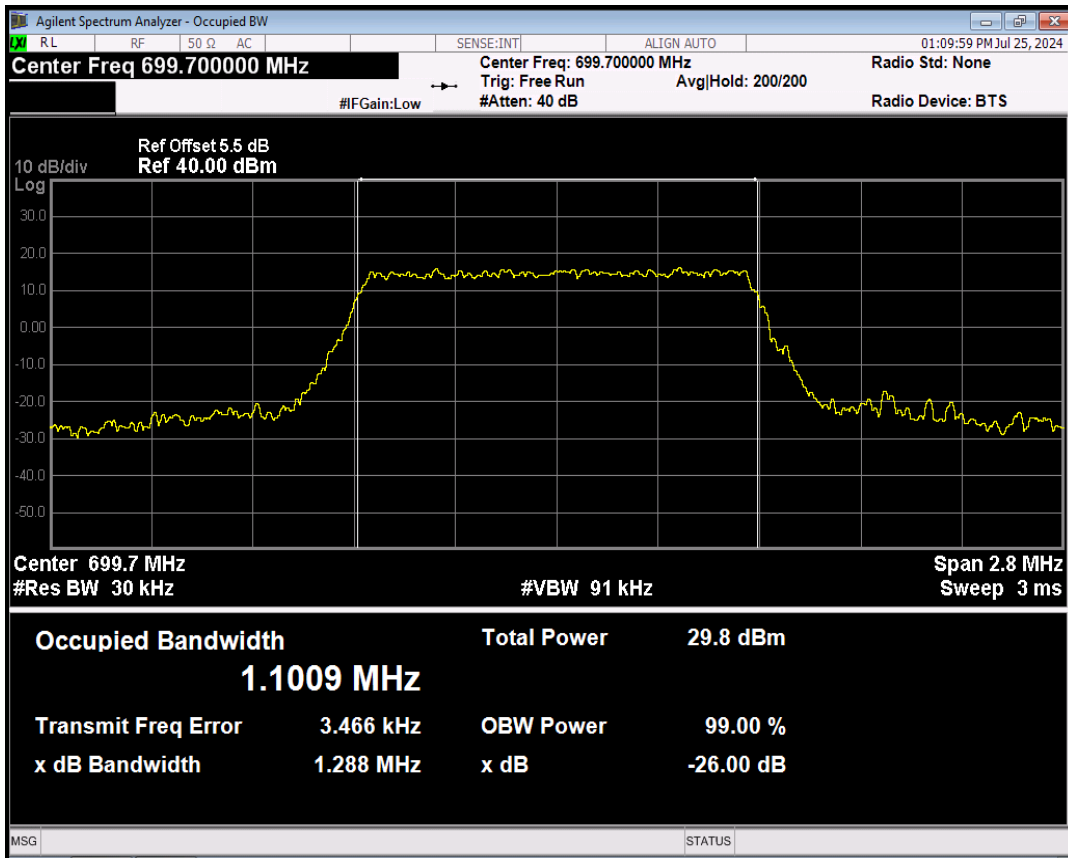
Band12 16QAM BW=10MHz Channel=23130 RB Size=1 Position=#0



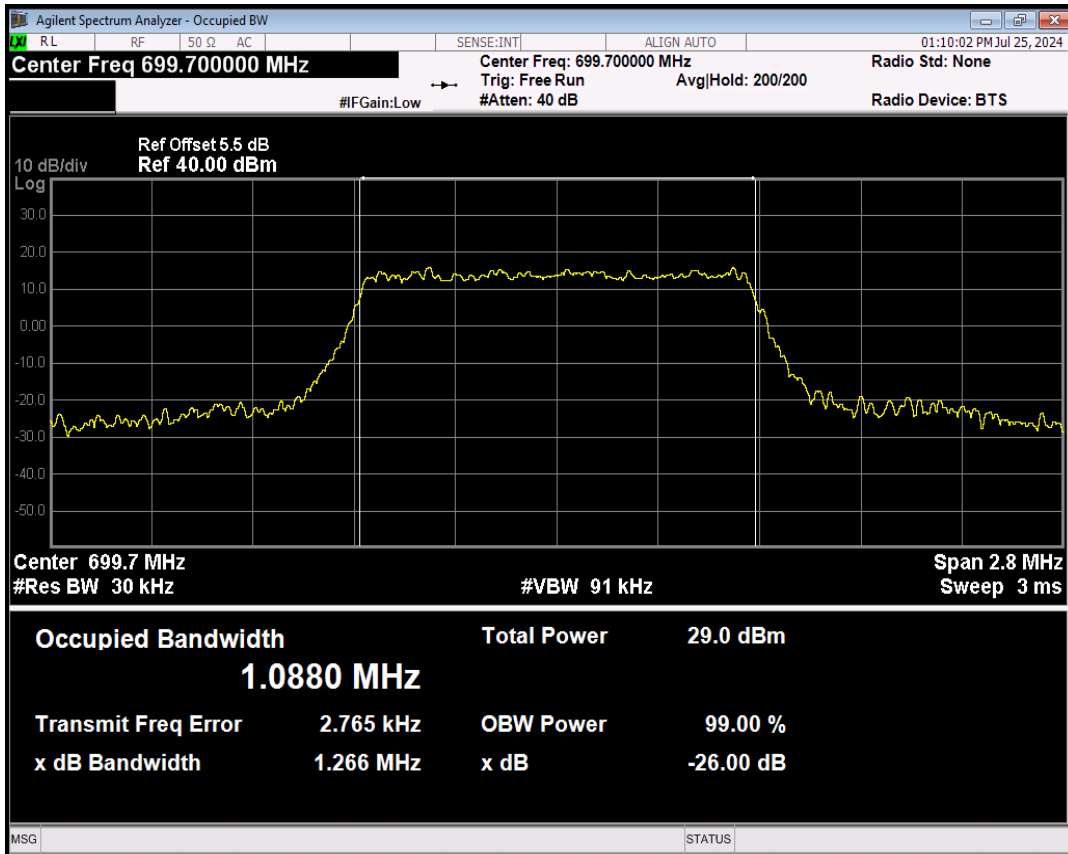
Appendix 4. Occupied bandwidth

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% OBW (MHz)	-26dB EBW (MHz)	Verdict
Band12	1.4	23017	6	#0	QPSK	1.101	1.288	PASS
Band12	1.4	23017	6	#0	16QAM	1.088	1.266	PASS
Band12	1.4	23095	6	#0	QPSK	1.099	1.280	PASS
Band12	1.4	23095	6	#0	16QAM	1.095	1.319	PASS
Band12	1.4	23173	6	#0	QPSK	1.095	1.305	PASS
Band12	1.4	23173	6	#0	16QAM	1.099	1.289	PASS
Band12	3	23025	15	#0	QPSK	2.686	2.917	PASS
Band12	3	23025	15	#0	16QAM	2.681	2.894	PASS
Band12	3	23095	15	#0	QPSK	2.693	2.941	PASS
Band12	3	23095	15	#0	16QAM	2.691	2.913	PASS
Band12	3	23165	15	#0	QPSK	2.702	2.930	PASS
Band12	3	23165	15	#0	16QAM	2.691	2.932	PASS
Band12	5	23035	25	#0	QPSK	4.507	5.000	PASS
Band12	5	23035	25	#0	16QAM	4.500	5.038	PASS
Band12	5	23095	25	#0	QPSK	4.520	5.068	PASS
Band12	5	23095	25	#0	16QAM	4.523	5.217	PASS
Band12	5	23155	25	#0	QPSK	4.544	5.064	PASS
Band12	5	23155	25	#0	16QAM	4.525	5.072	PASS
Band12	10	23060	50	#0	QPSK	9.012	10.085	PASS
Band12	10	23060	50	#0	16QAM	9.024	10.094	PASS
Band12	10	23095	50	#0	QPSK	8.987	9.932	PASS
Band12	10	23095	50	#0	16QAM	9.013	10.015	PASS
Band12	10	23130	50	#0	QPSK	8.942	9.771	PASS
Band12	10	23130	50	#0	16QAM	8.947	9.797	PASS

Band12 QPSK BW=1.4MHz Channel=23017 RB Size=6 Position=#0

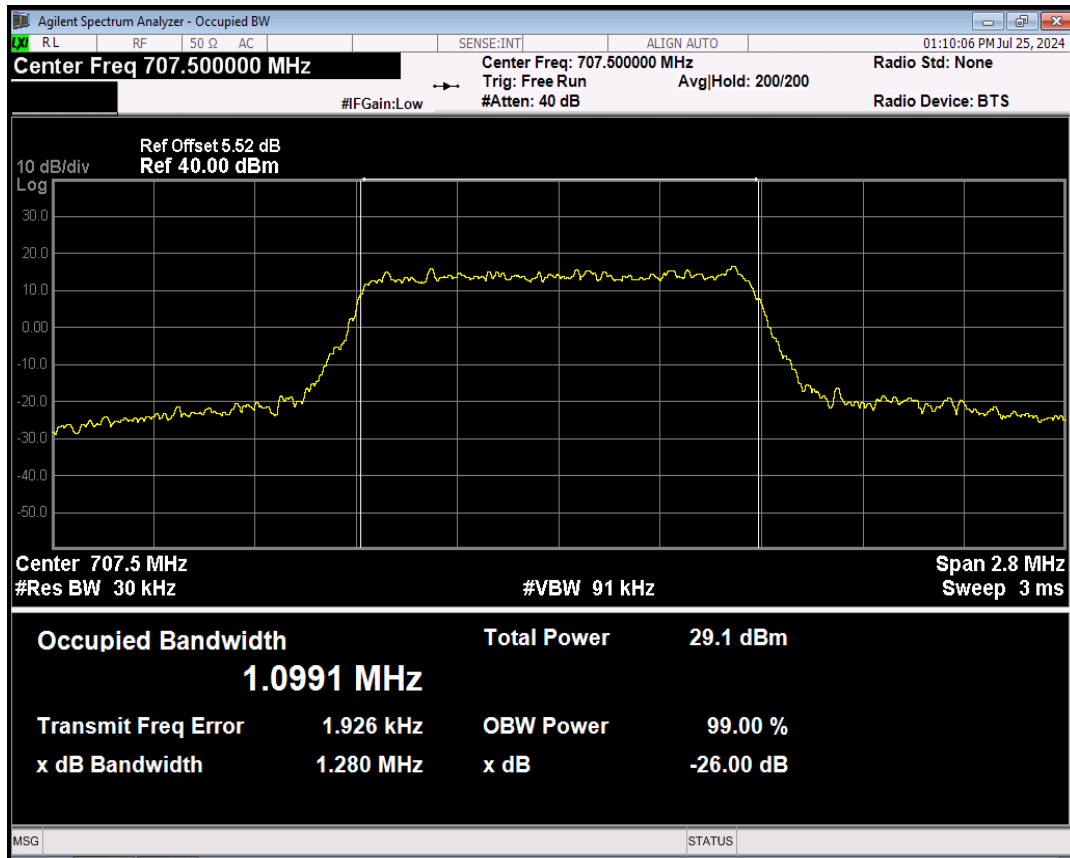


Band12 16QAM BW=1.4MHz Channel=23017 RB Size=6 Position=#0

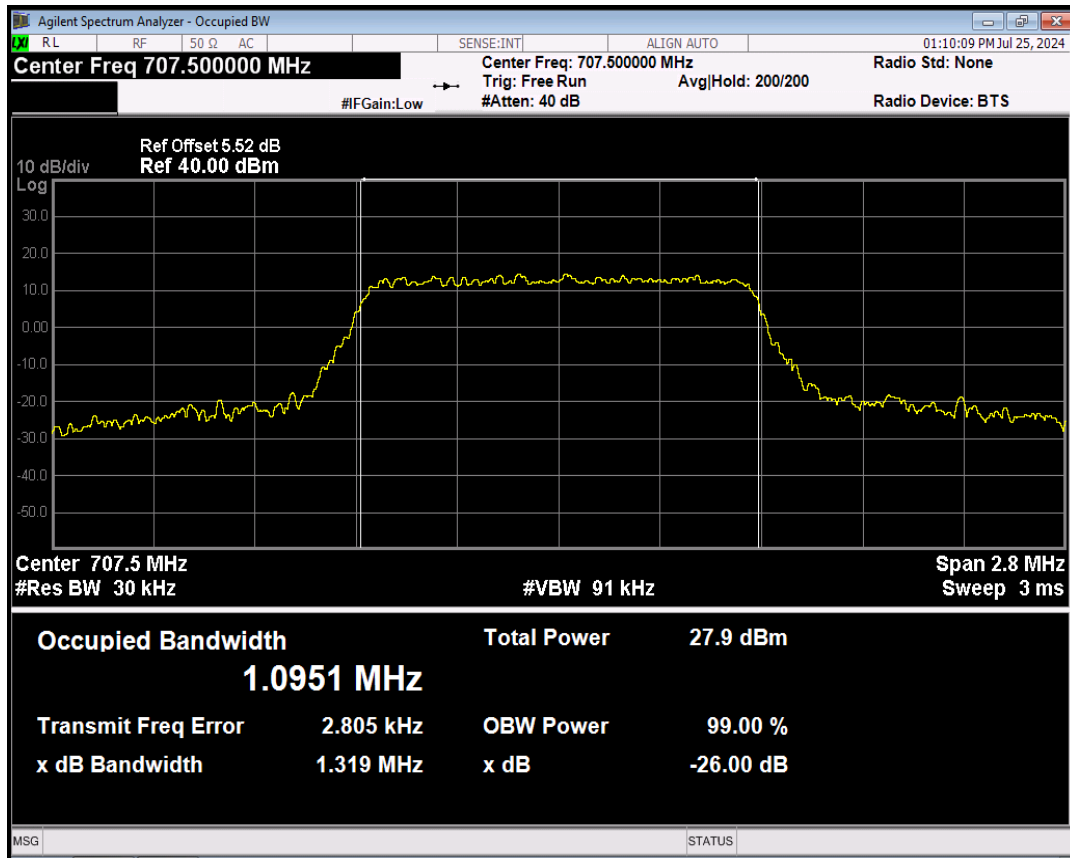




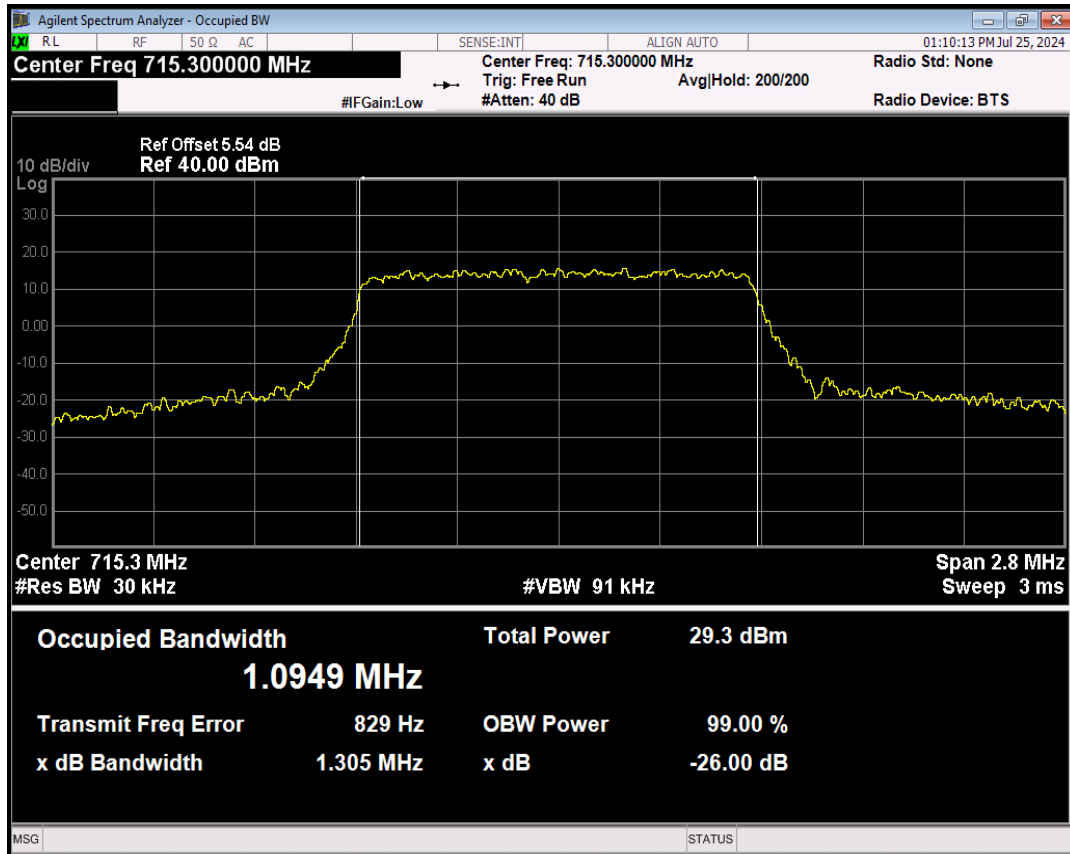
Band12 QPSK BW=1.4MHz Channel=23095 RB Size=6 Position=#0



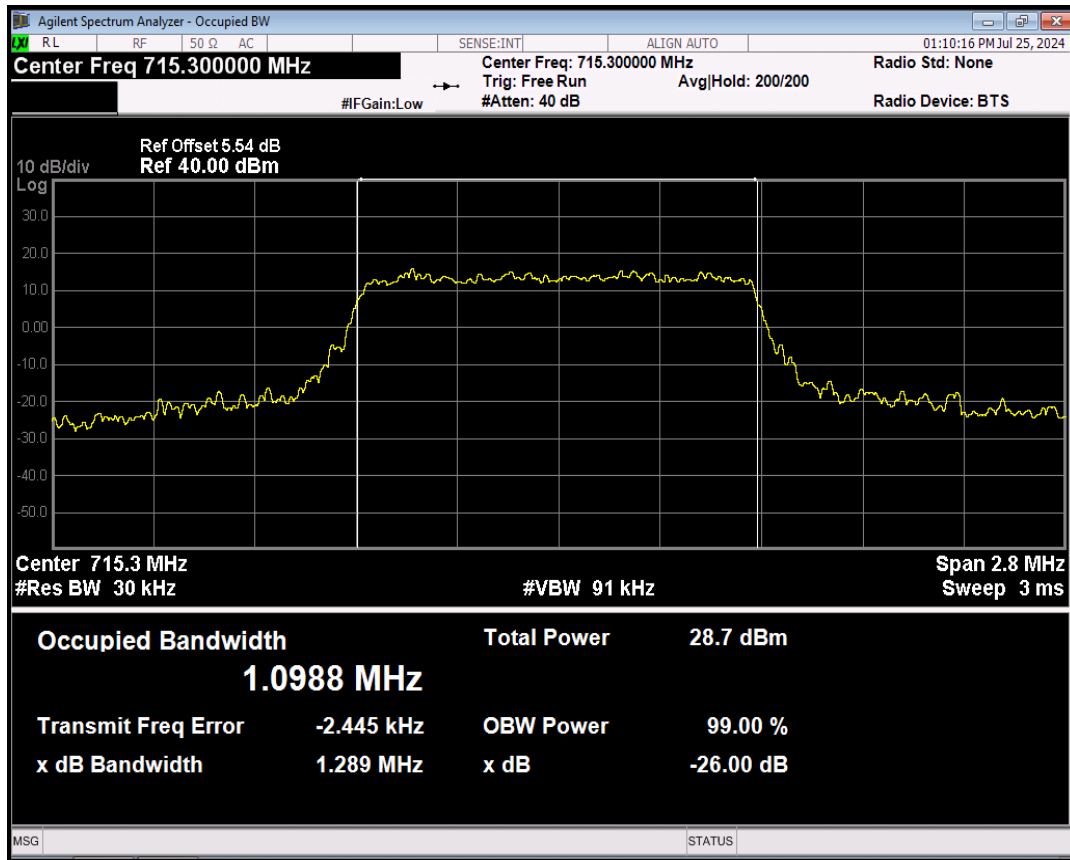
Band12 16QAM BW=1.4MHz Channel=23095 RB Size=6 Position=#0



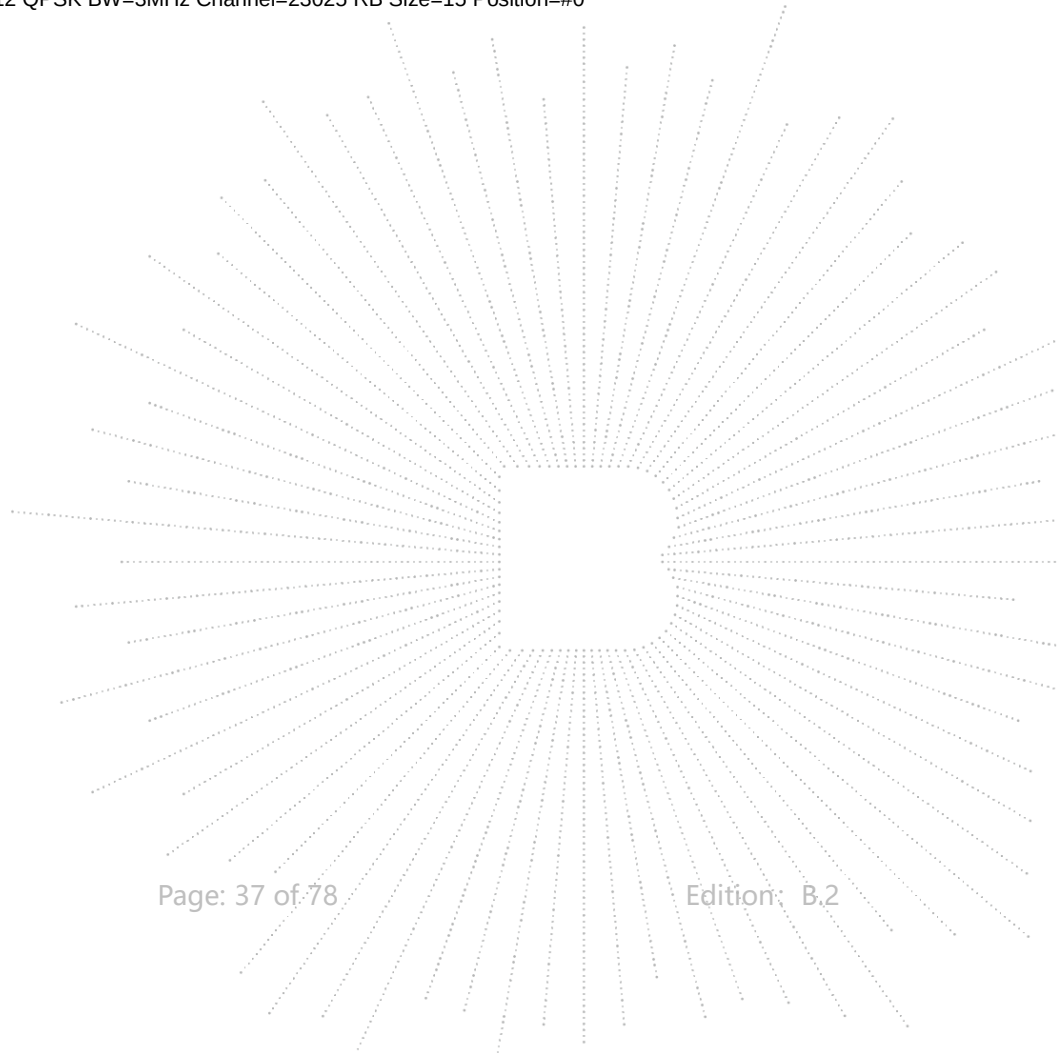
Band12 QPSK BW=1.4MHz Channel=23173 RB Size=6 Position=#0

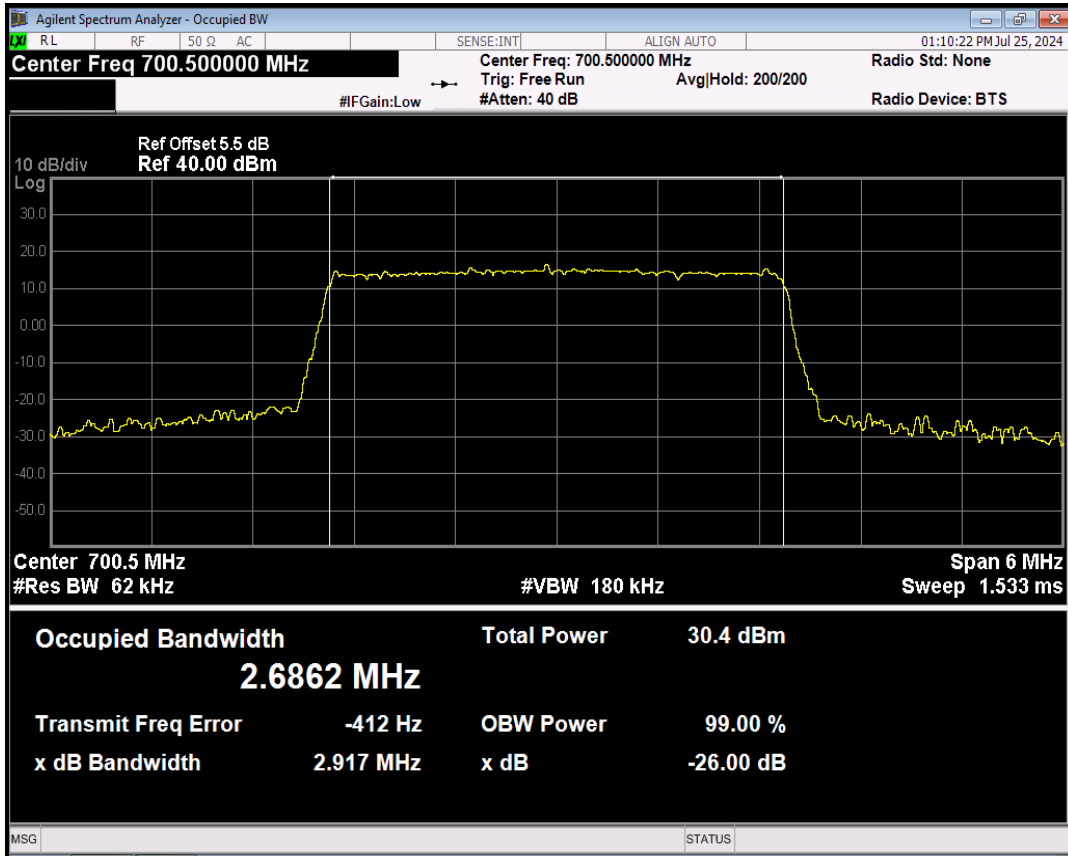


Band12 16QAM BW=1.4MHz Channel=23173 RB Size=6 Position=#0

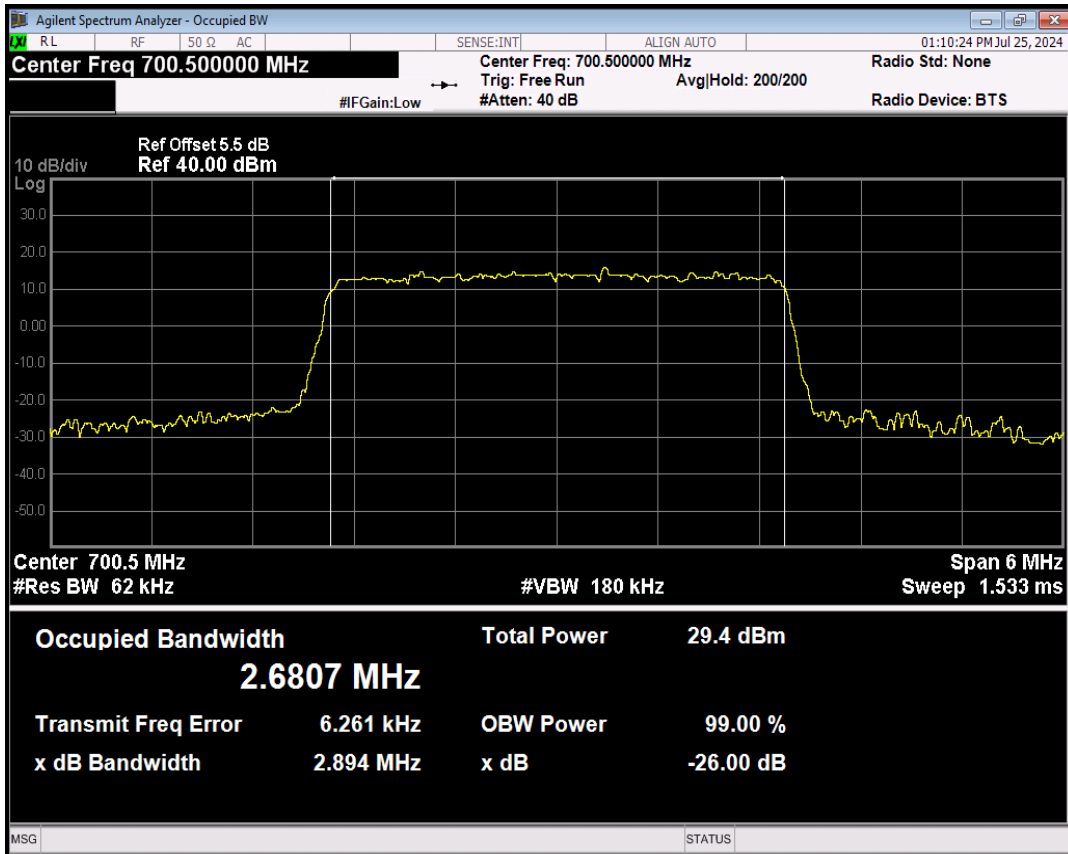


Band12 QPSK BW=3MHz Channel=23025 RB Size=15 Position=#0



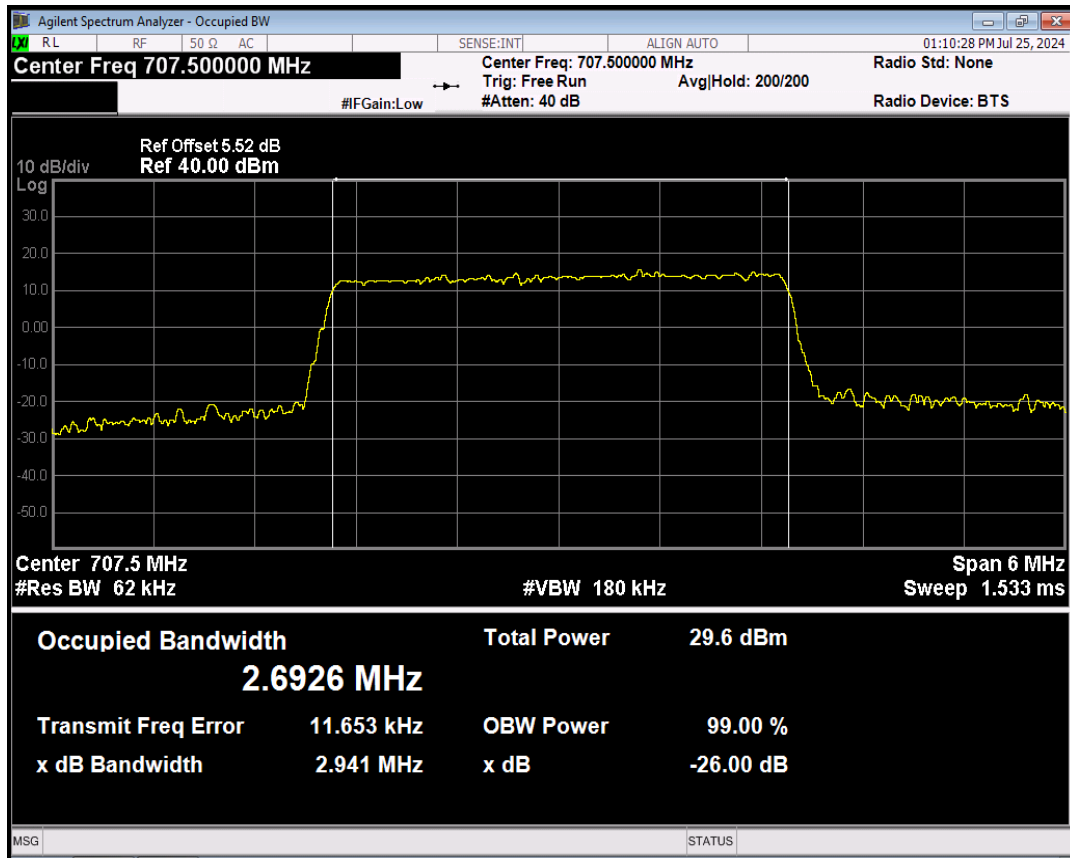


Band12 16QAM BW=3MHz Channel=23025 RB Size=15 Position=#0

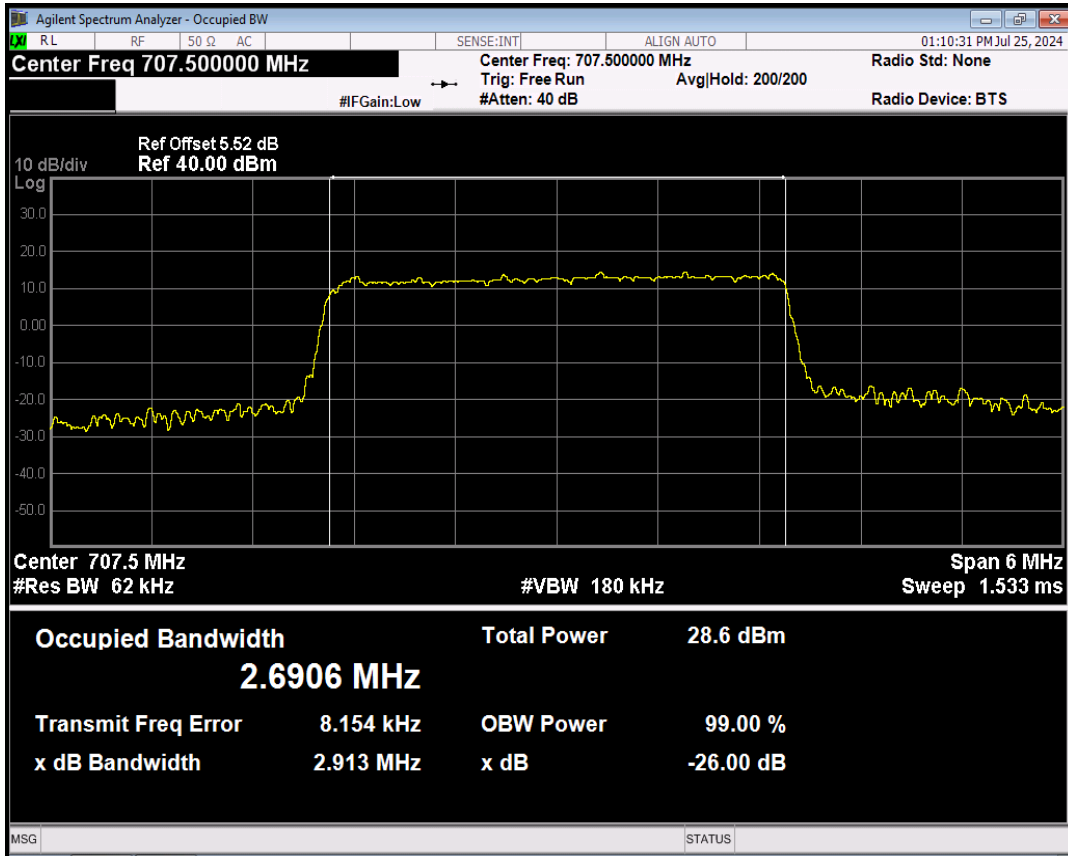




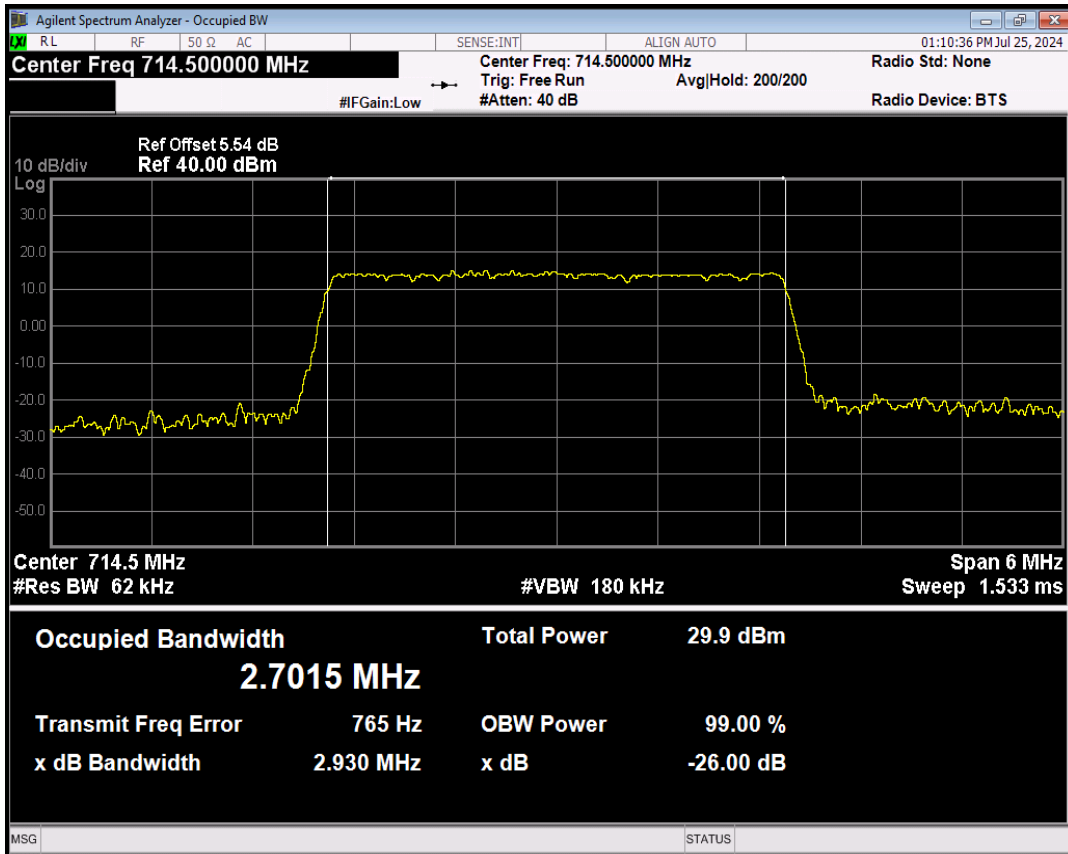
Band12 QPSK BW=3MHz Channel=23095 RB Size=15 Position=#0



Band12 16QAM BW=3MHz Channel=23095 RB Size=15 Position=#0

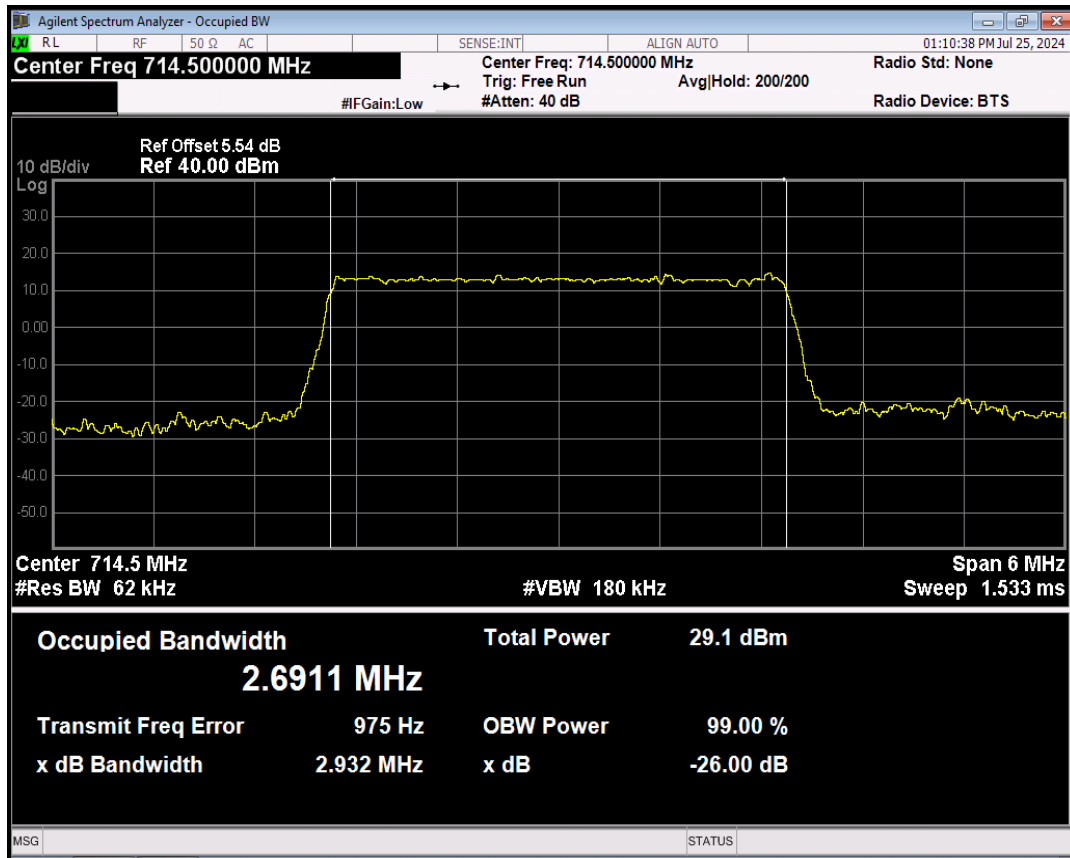


Band12 QPSK BW=3MHz Channel=23165 RB Size=15 Position=#0

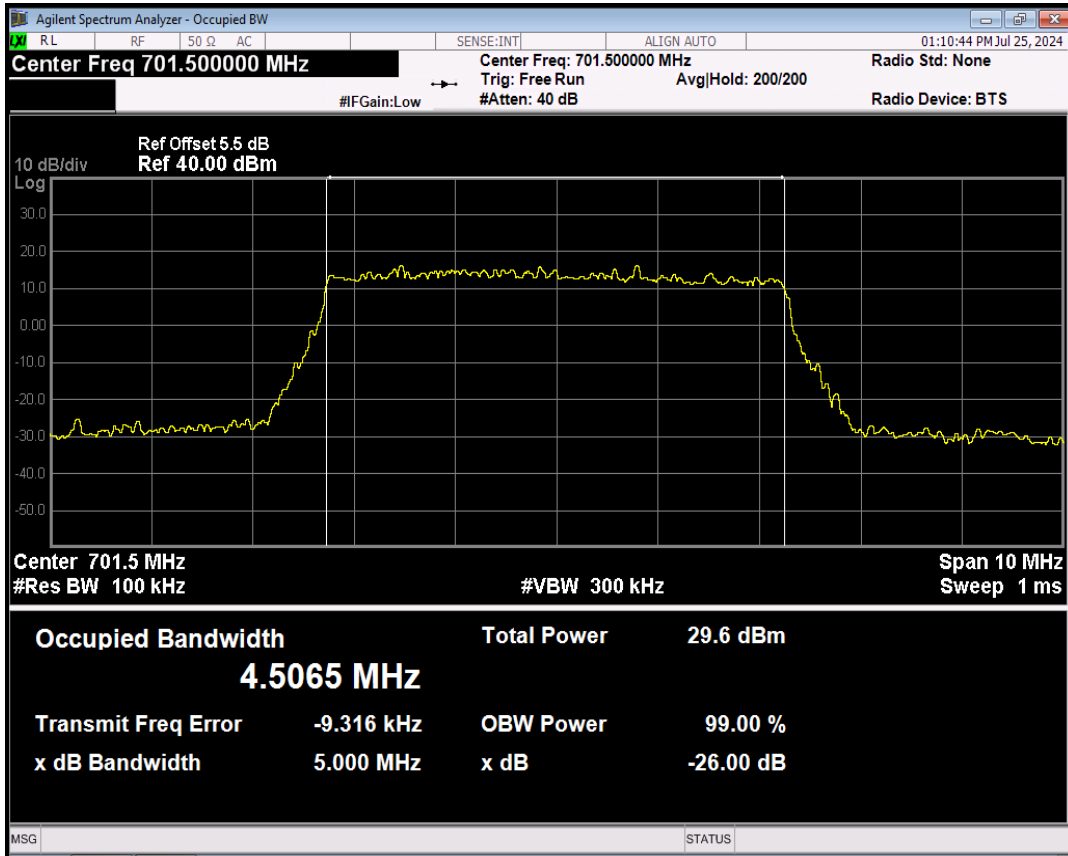




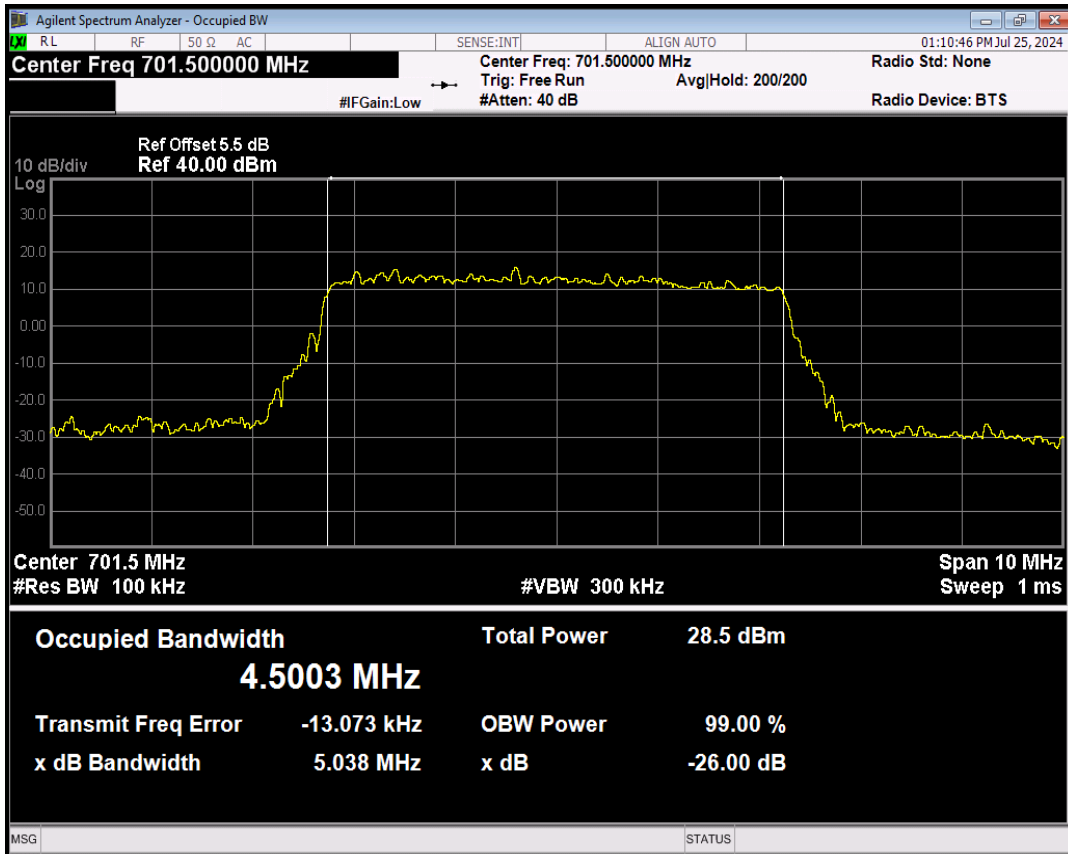
Band12 16QAM BW=3MHz Channel=23165 RB Size=15 Position=#0



Band12 QPSK BW=5MHz Channel=23035 RB Size=25 Position=#0

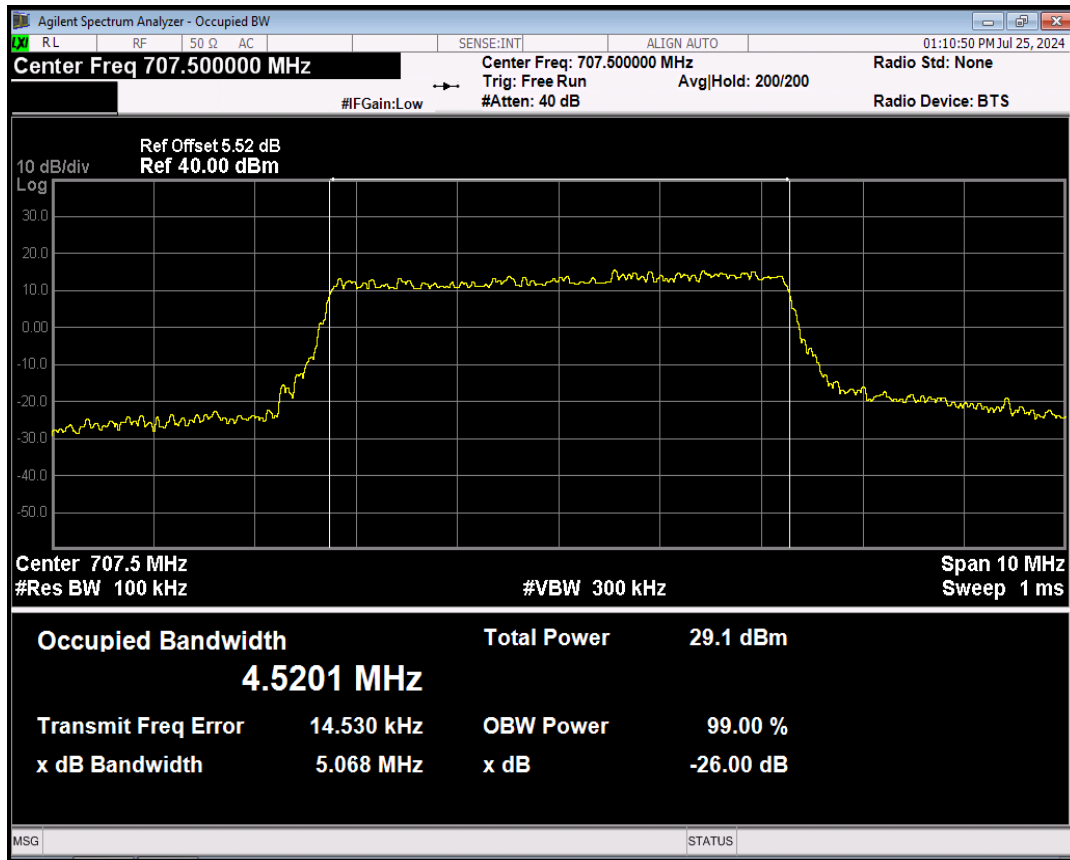


Band12 16QAM BW=5MHz Channel=23035 RB Size=25 Position=#0

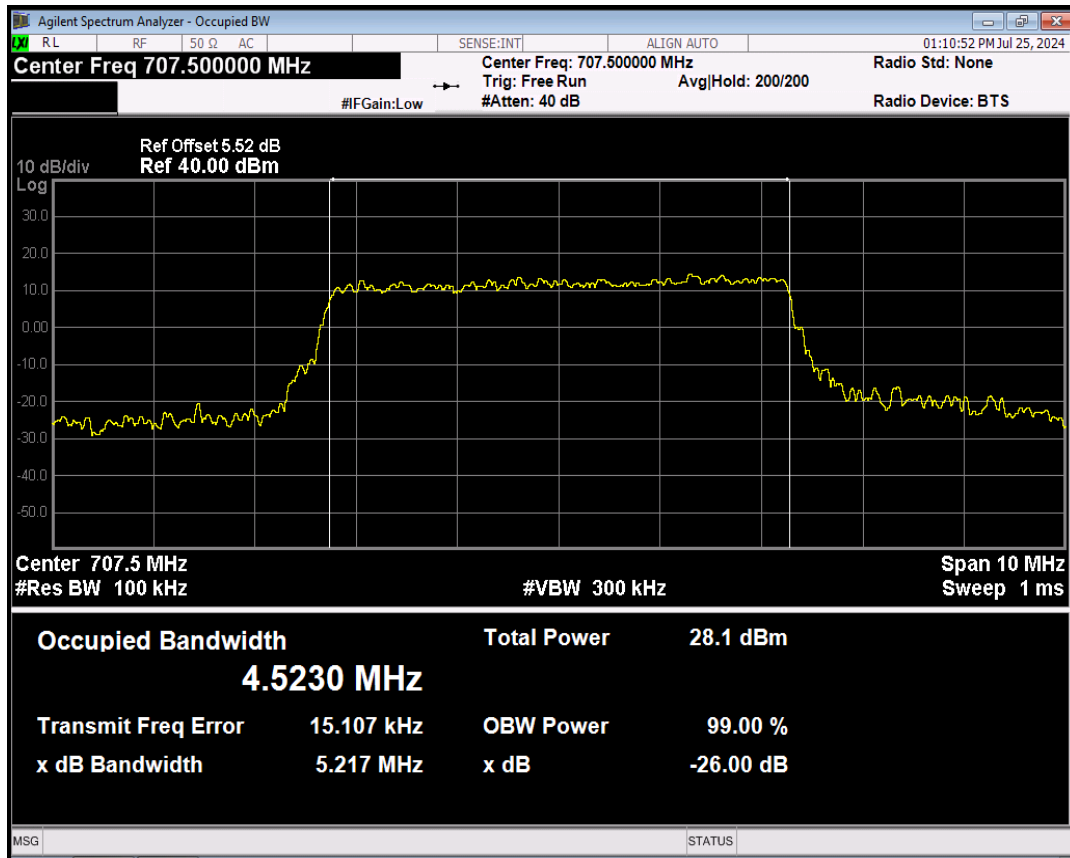




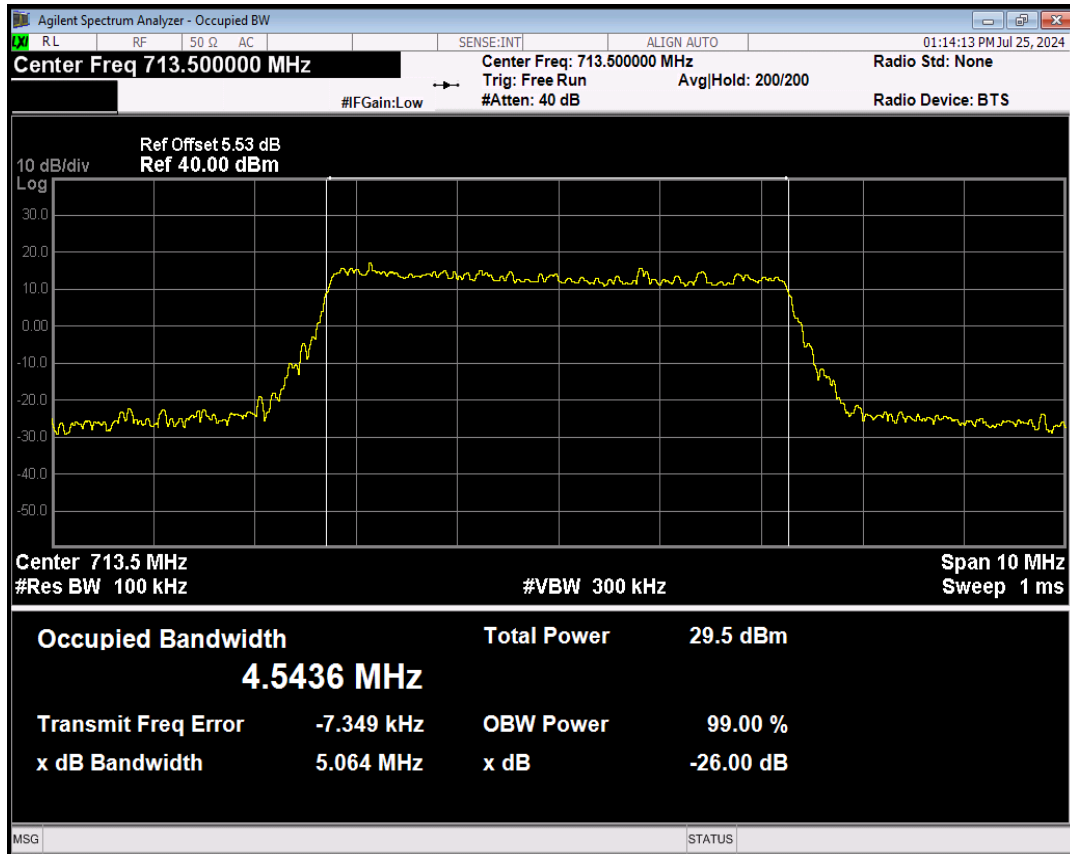
Band12 QPSK BW=5MHz Channel=23095 RB Size=25 Position=#0



Band12 16QAM BW=5MHz Channel=23095 RB Size=25 Position=#0

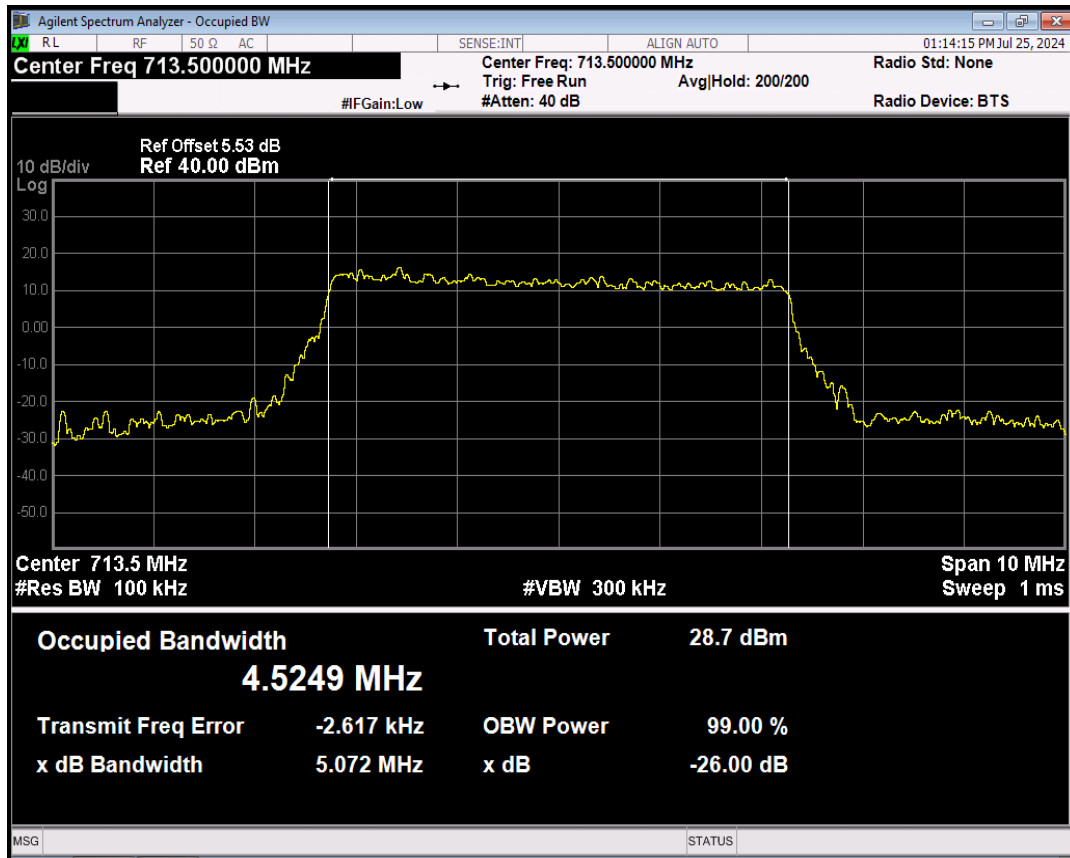


Band12 QPSK BW=5MHz Channel=23155 RB Size=25 Position=#0

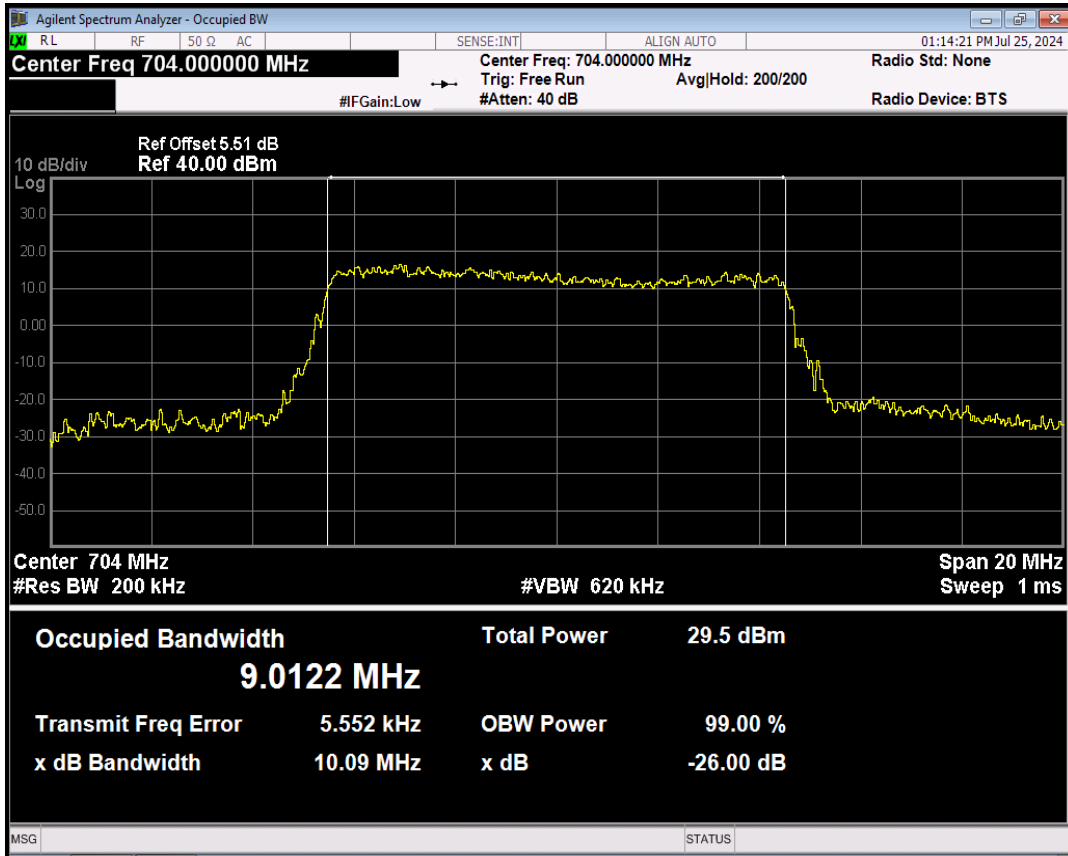




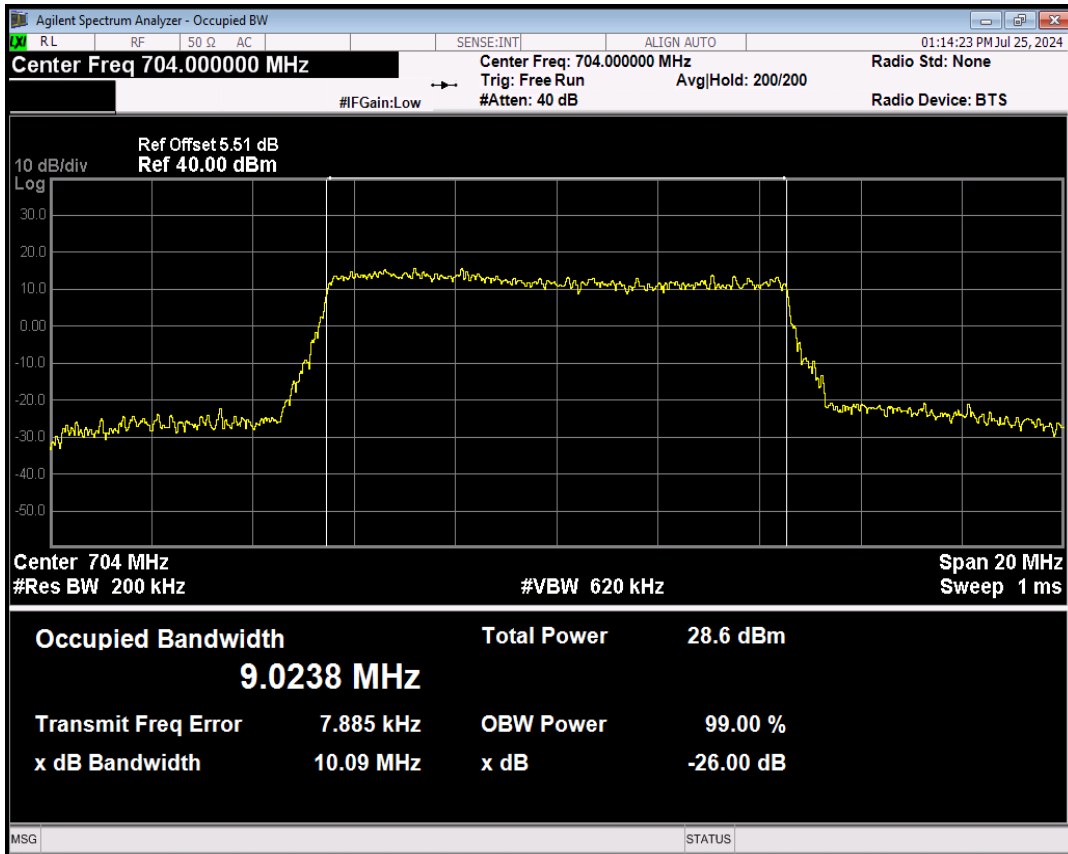
Band12 16QAM BW=5MHz Channel=23155 RB Size=25 Position=#0



Band12 QPSK BW=10MHz Channel=23060 RB Size=50 Position=#0

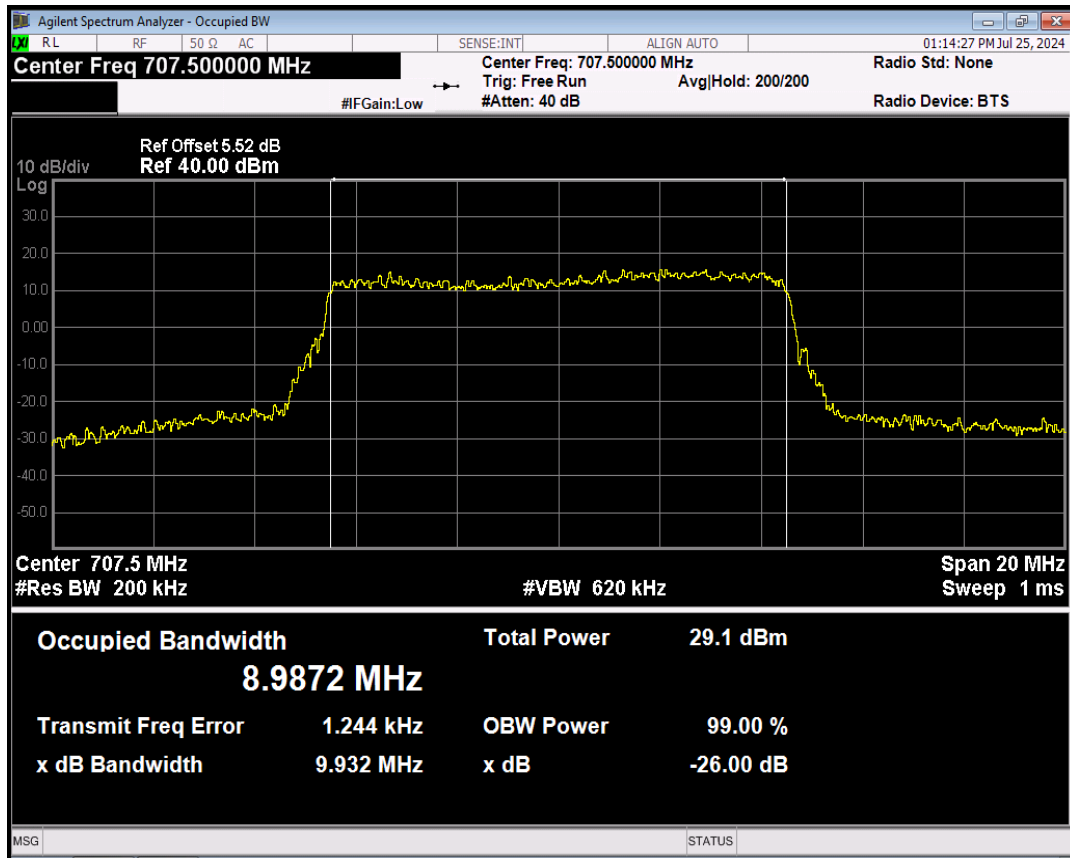


Band12 16QAM BW=10MHz Channel=23060 RB Size=50 Position=#0

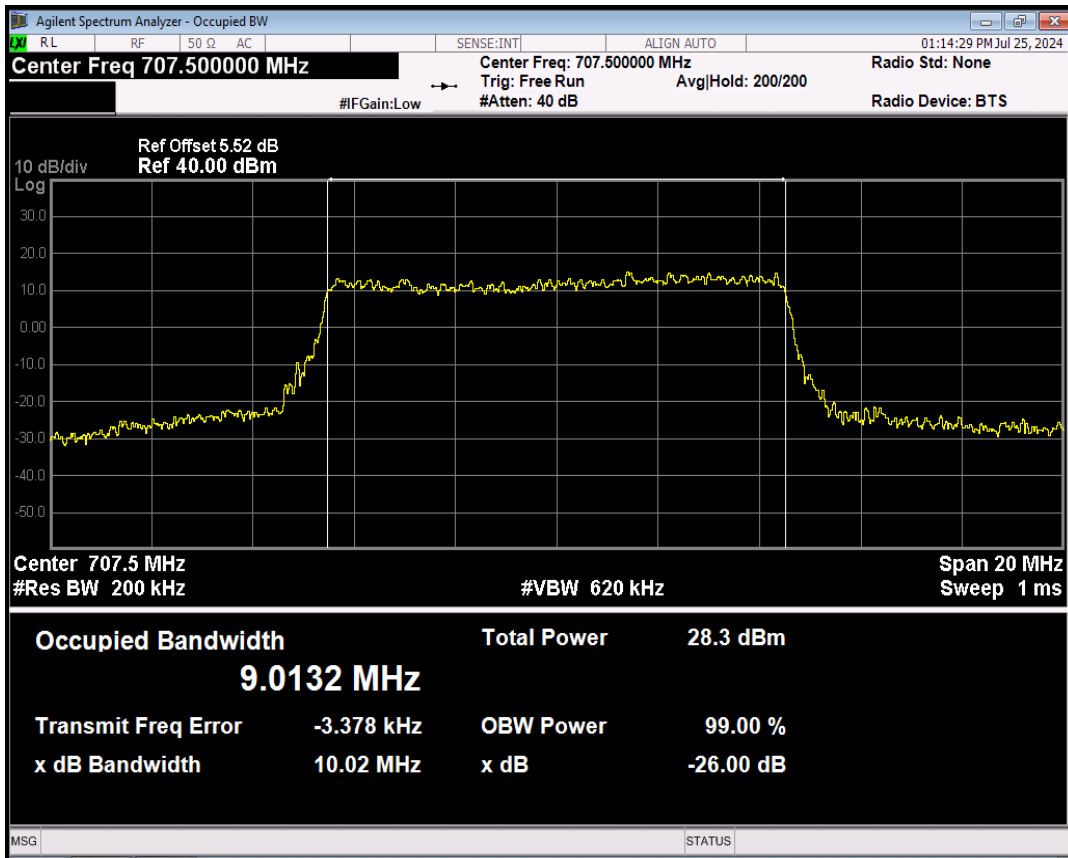




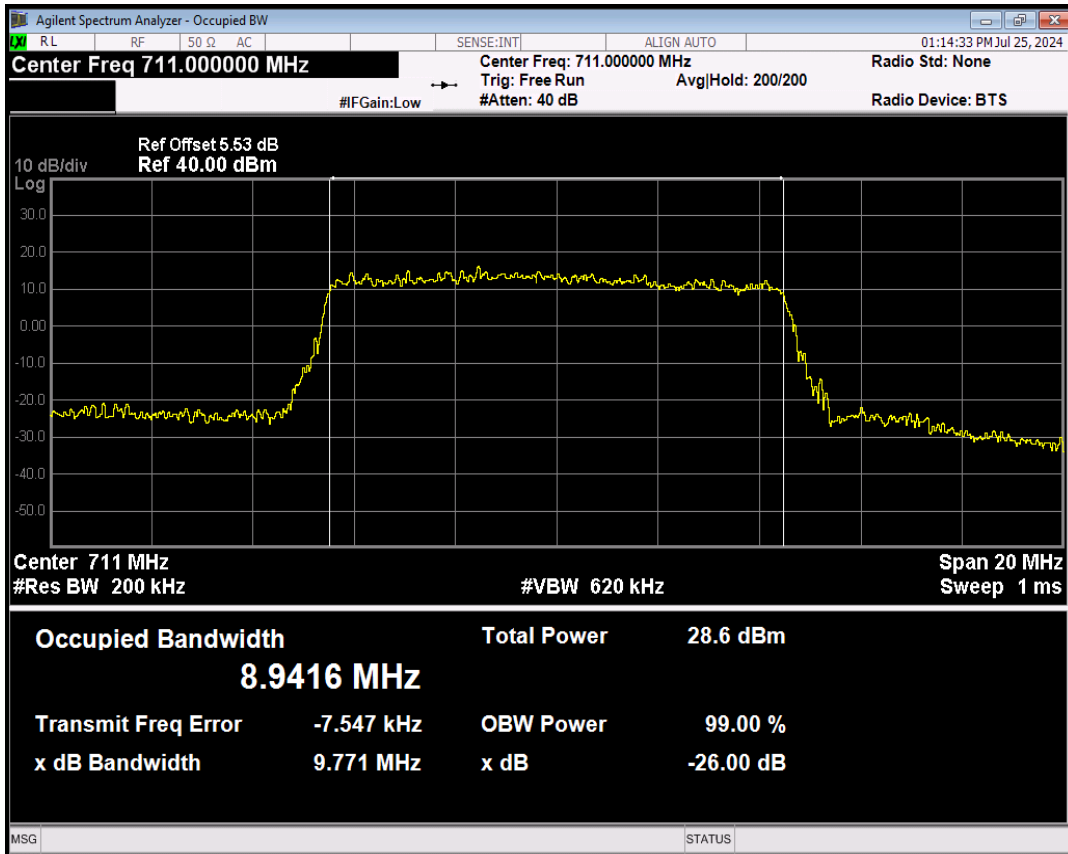
Band12 QPSK BW=10MHz Channel=23095 RB Size=50 Position=#0



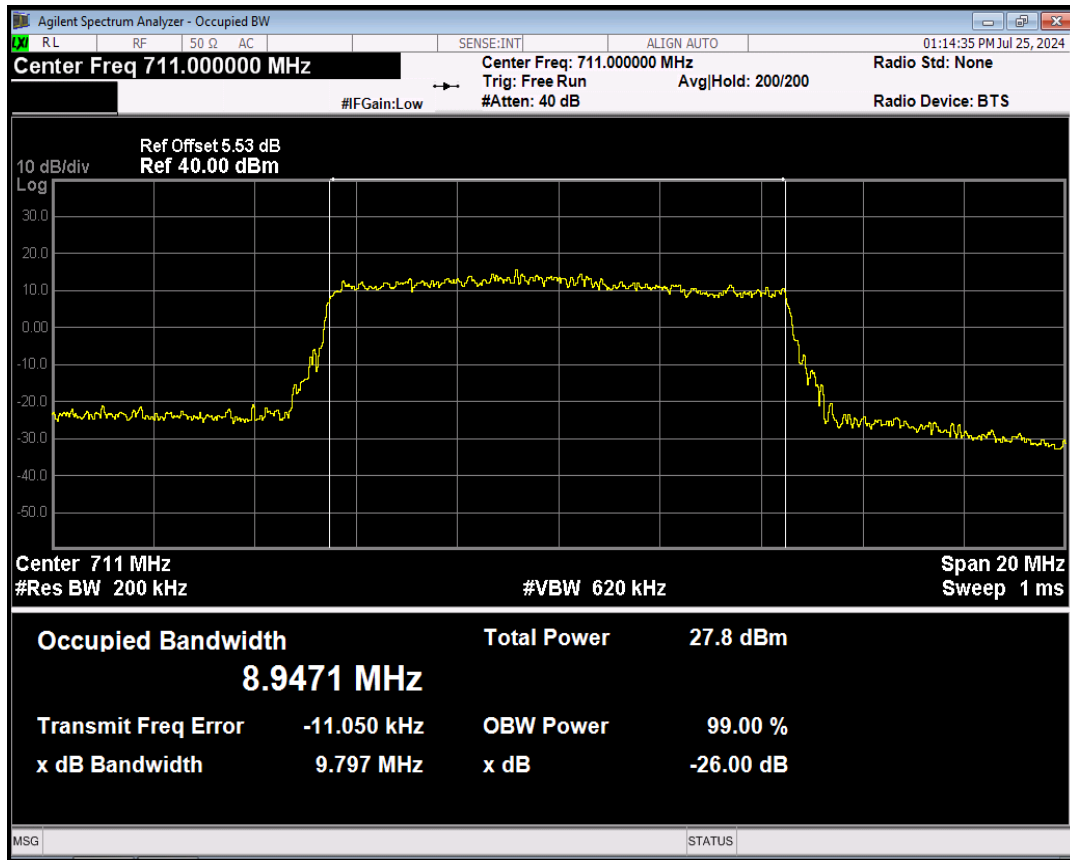
Band12 16QAM BW=10MHz Channel=23095 RB Size=50 Position=#0



Band12 QPSK BW=10MHz Channel=23130 RB Size=50 Position=#0



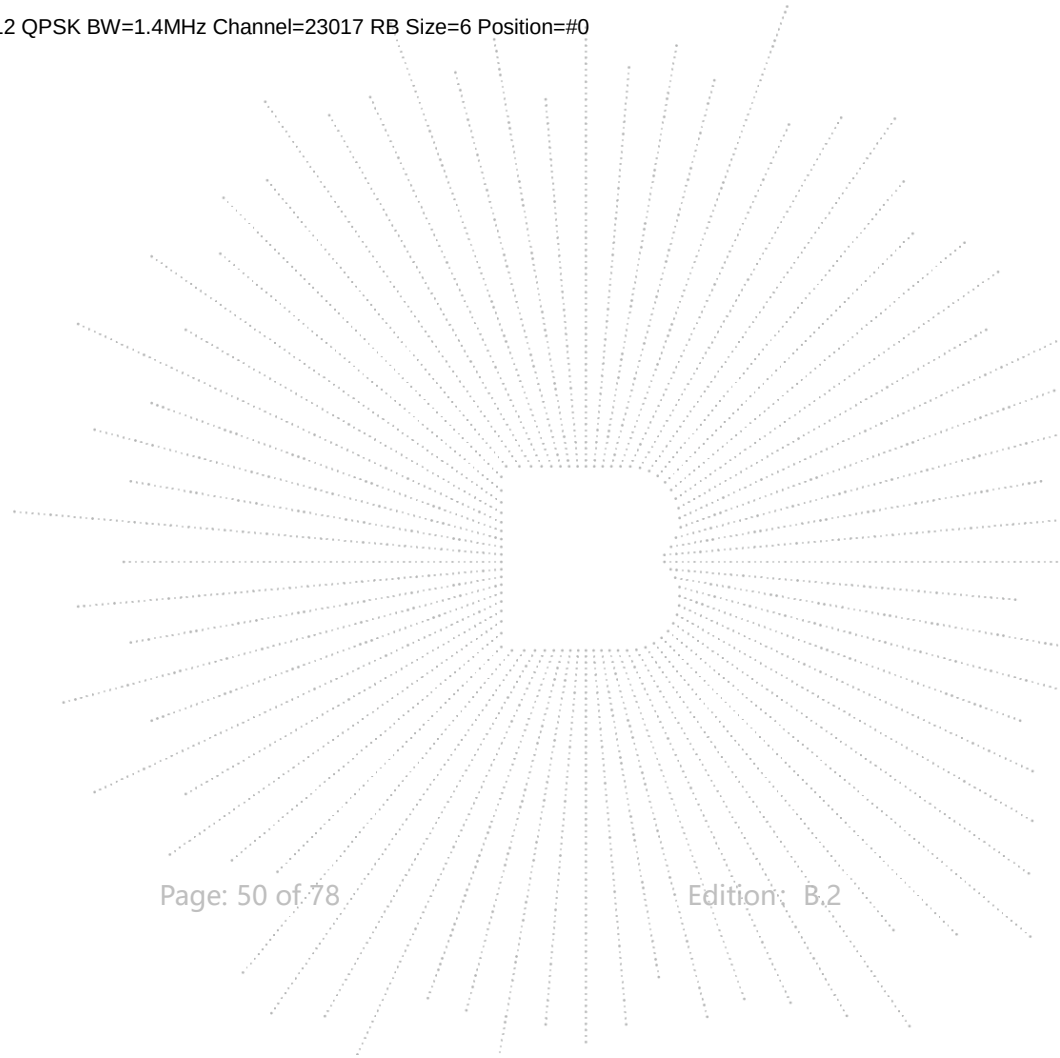
Band12 16QAM BW=10MHz Channel=23130 RB Size=50 Position=#0

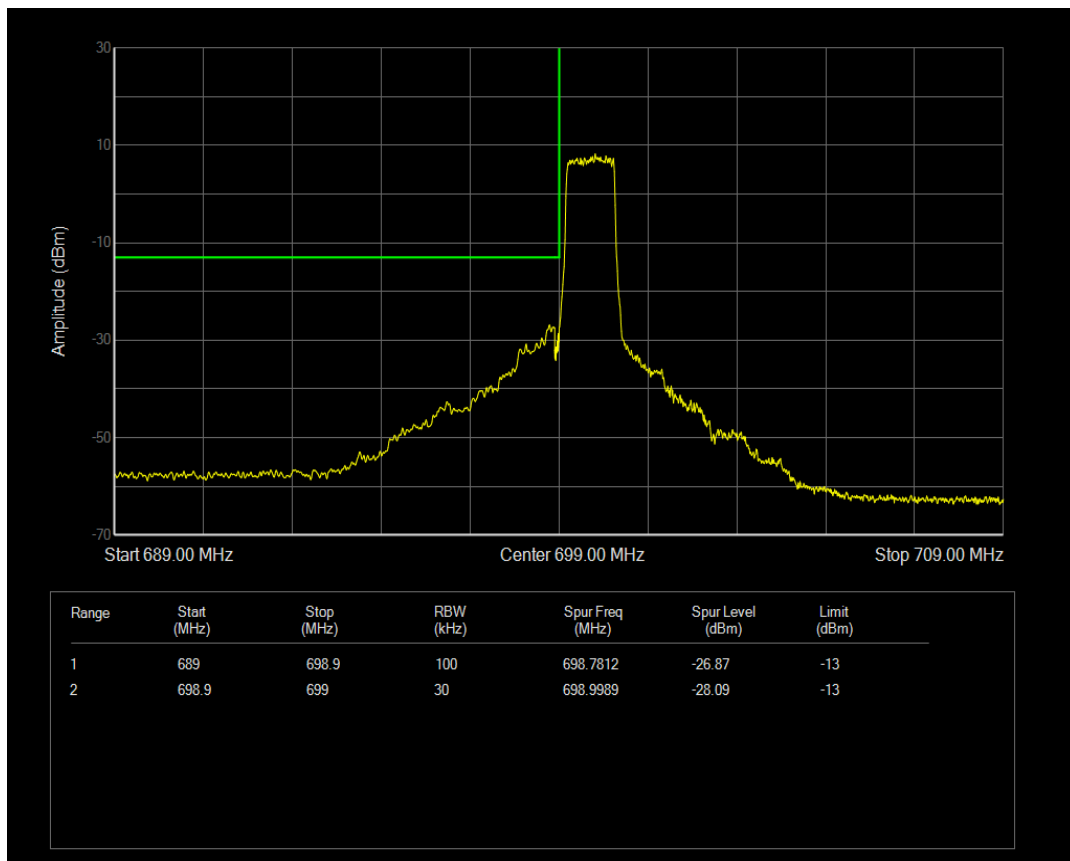


Appendix 5. Band edge

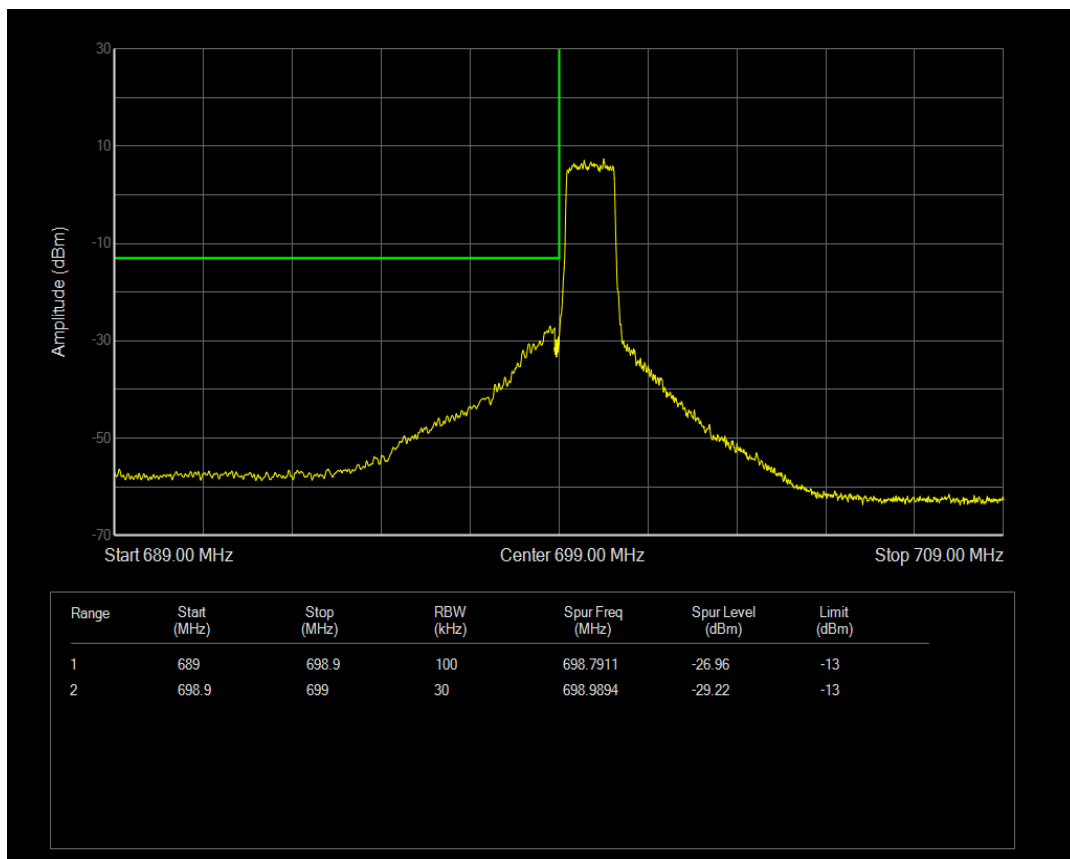
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band12	1.4	23017	6	#0	QPSK	698.78	-26.87	-13	PASS
Band12	1.4	23017	6	#0	16QAM	698.79	-26.96	-13	PASS
Band12	1.4	23173	6	#0	QPSK	716.20	-21.20	-13	PASS
Band12	1.4	23173	6	#0	16QAM	716.11	-23.16	-13	PASS
Band12	3	23025	15	#0	QPSK	698.86	-30.64	-13	PASS
Band12	3	23025	15	#0	16QAM	698.85	-29.86	-13	PASS
Band12	3	23165	15	#0	QPSK	716.32	-28.25	-13	PASS
Band12	3	23165	15	#0	16QAM	716.81	-28.10	-13	PASS
Band12	5	23035	25	#0	QPSK	699.00	-27.21	-13	PASS
Band12	5	23035	25	#0	16QAM	698.98	-29.12	-13	PASS
Band12	5	23155	25	#0	QPSK	716.11	-27.36	-13	PASS
Band12	5	23155	25	#0	16QAM	716.11	-27.53	-13	PASS
Band12	10	23060	50	#0	QPSK	698.90	-31.70	-13	PASS
Band12	10	23060	50	#0	16QAM	698.90	-31.77	-13	PASS
Band12	10	23130	50	#0	QPSK	716.14	-34.57	-13	PASS
Band12	10	23130	50	#0	16QAM	716.11	-35.31	-13	PASS

Band12 QPSK BW=1.4MHz Channel=23017 RB Size=6 Position=#0



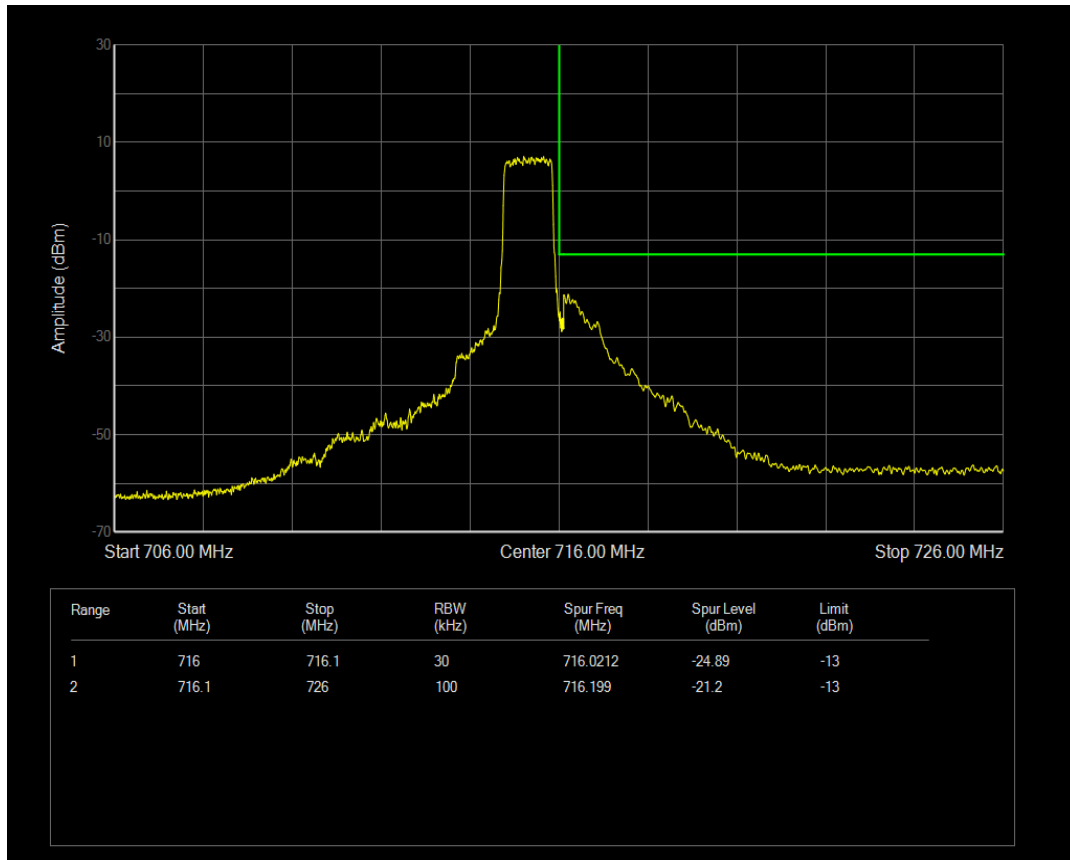


Band12 16QAM BW=1.4MHz Channel=23017 RB Size=6 Position=#0

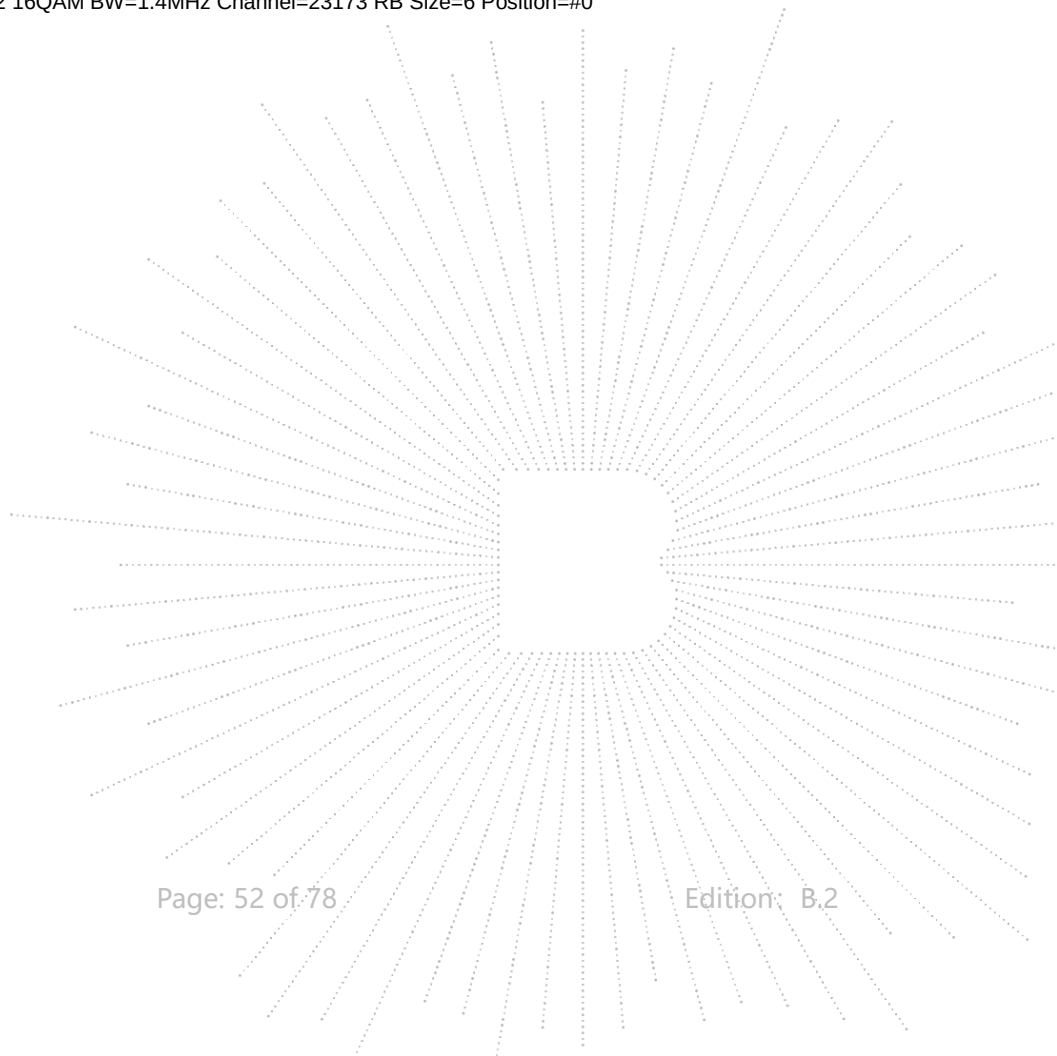


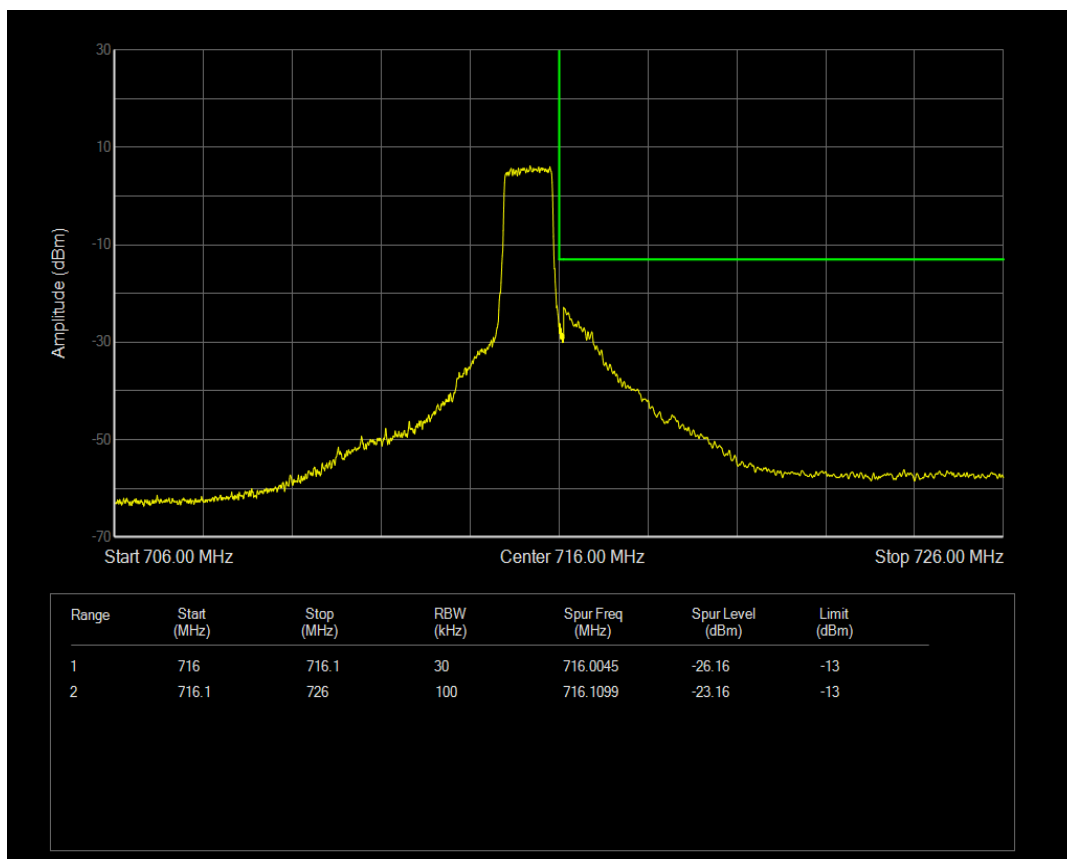


Band12 QPSK BW=1.4MHz Channel=23173 RB Size=6 Position=#0

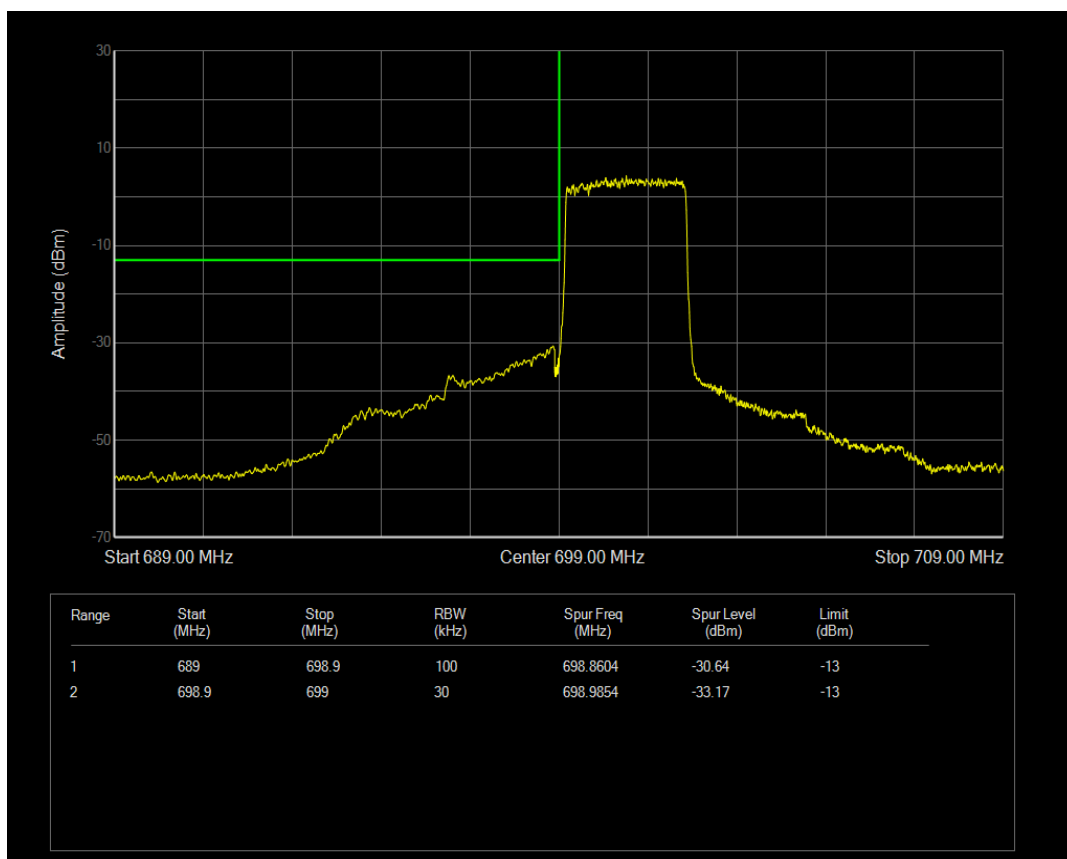


Band12 16QAM BW=1.4MHz Channel=23173 RB Size=6 Position=#0



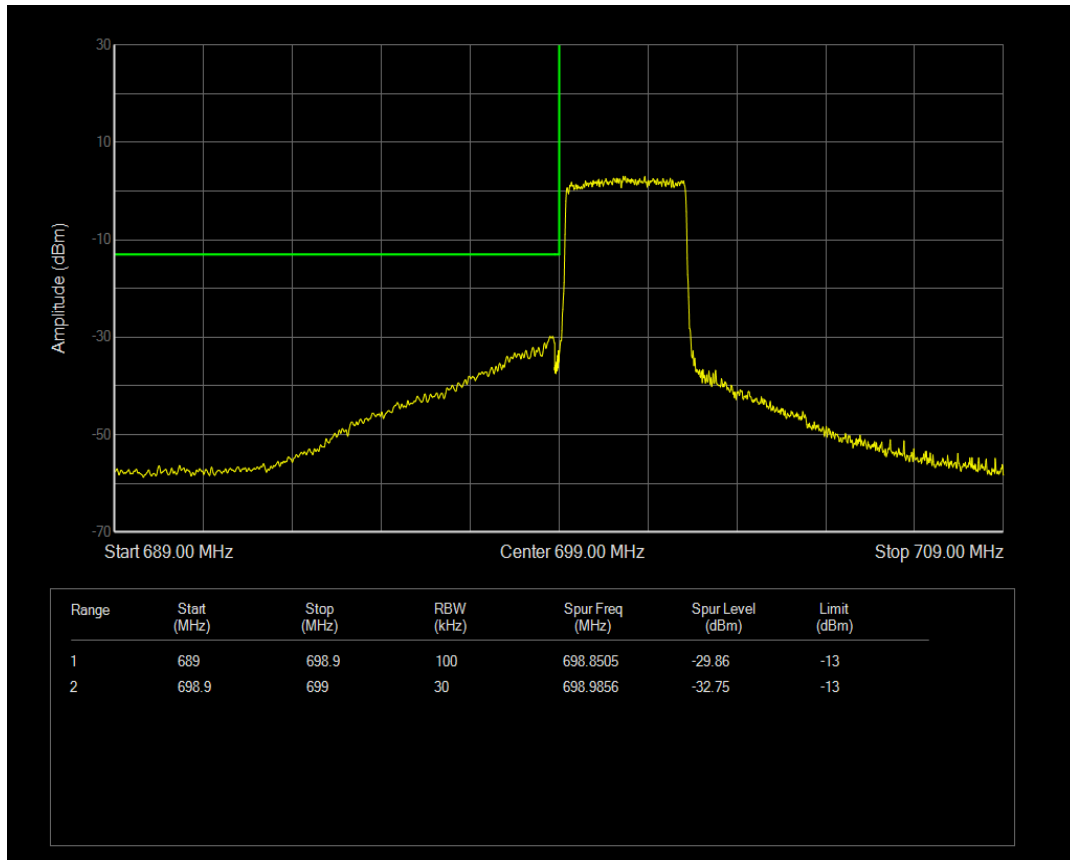


Band12 QPSK BW=3MHz Channel=23025 RB Size=15 Position=#0

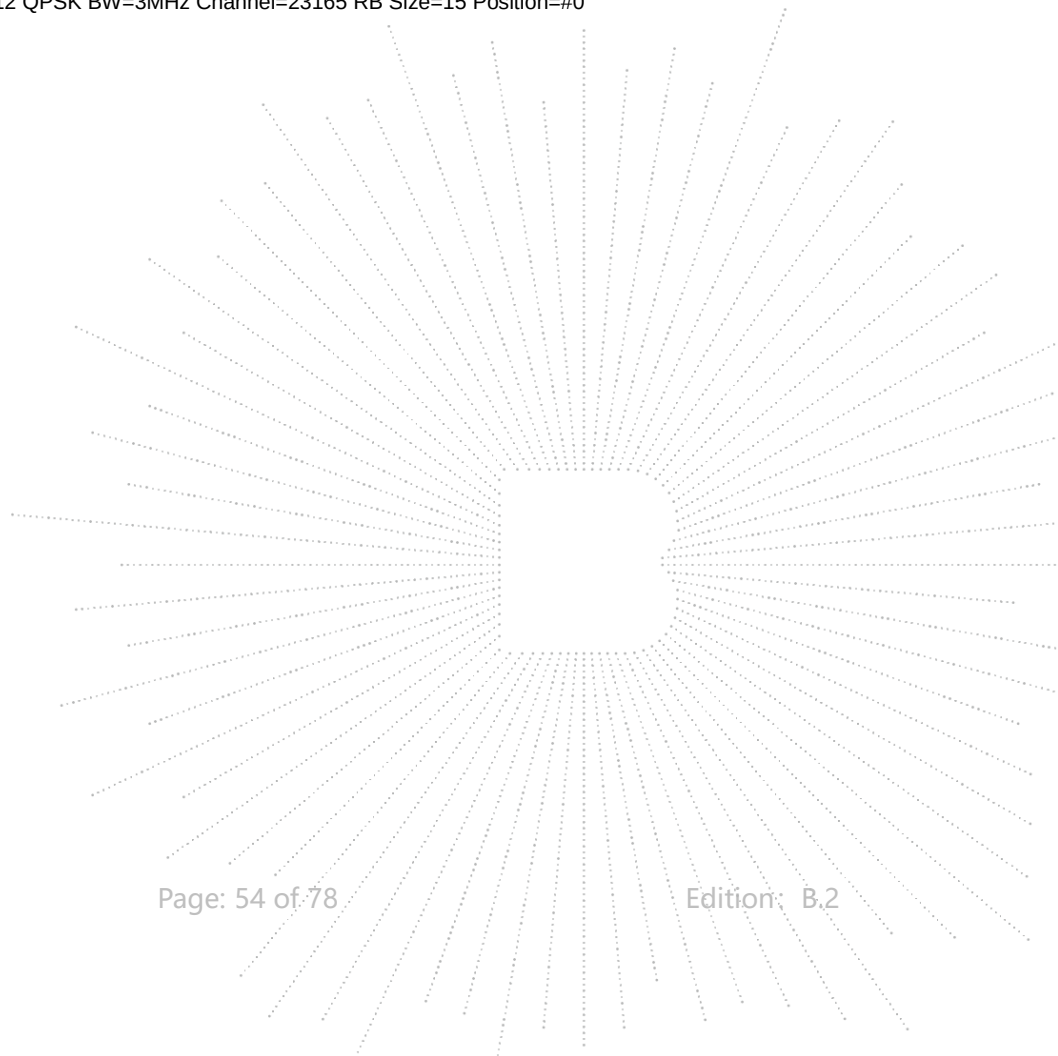


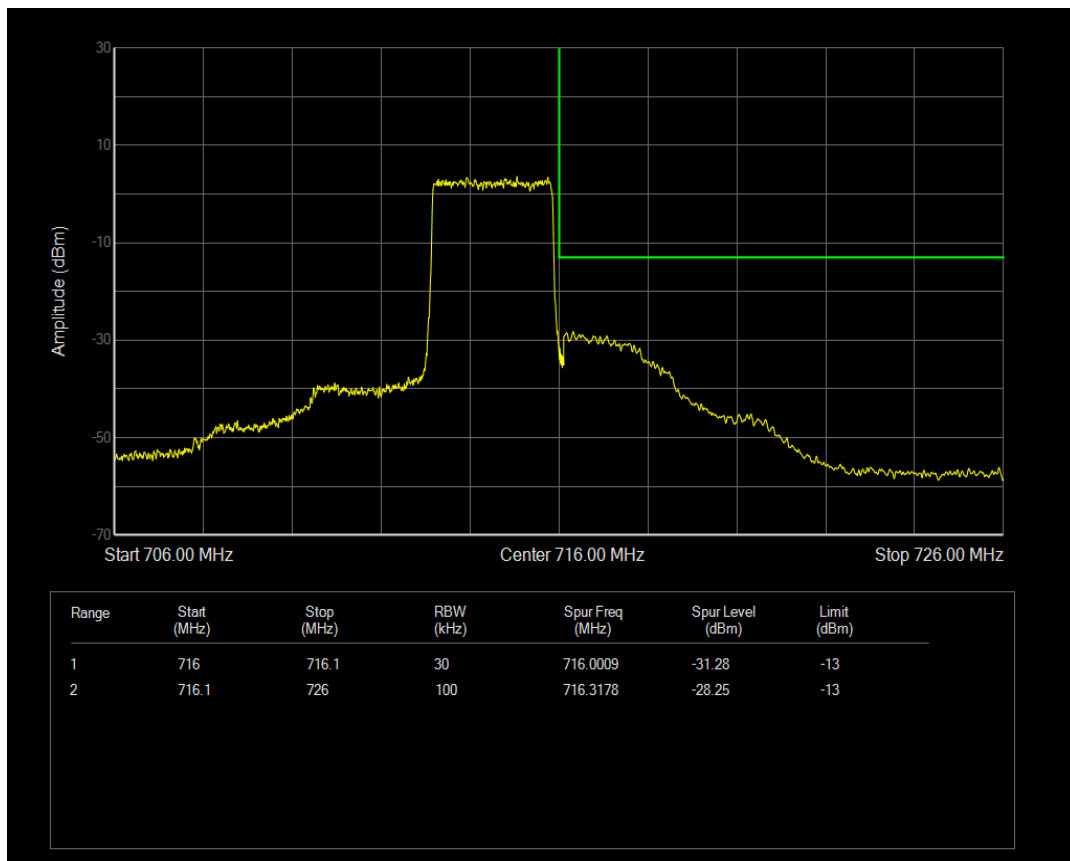


Band12 16QAM BW=3MHz Channel=23025 RB Size=15 Position=#0

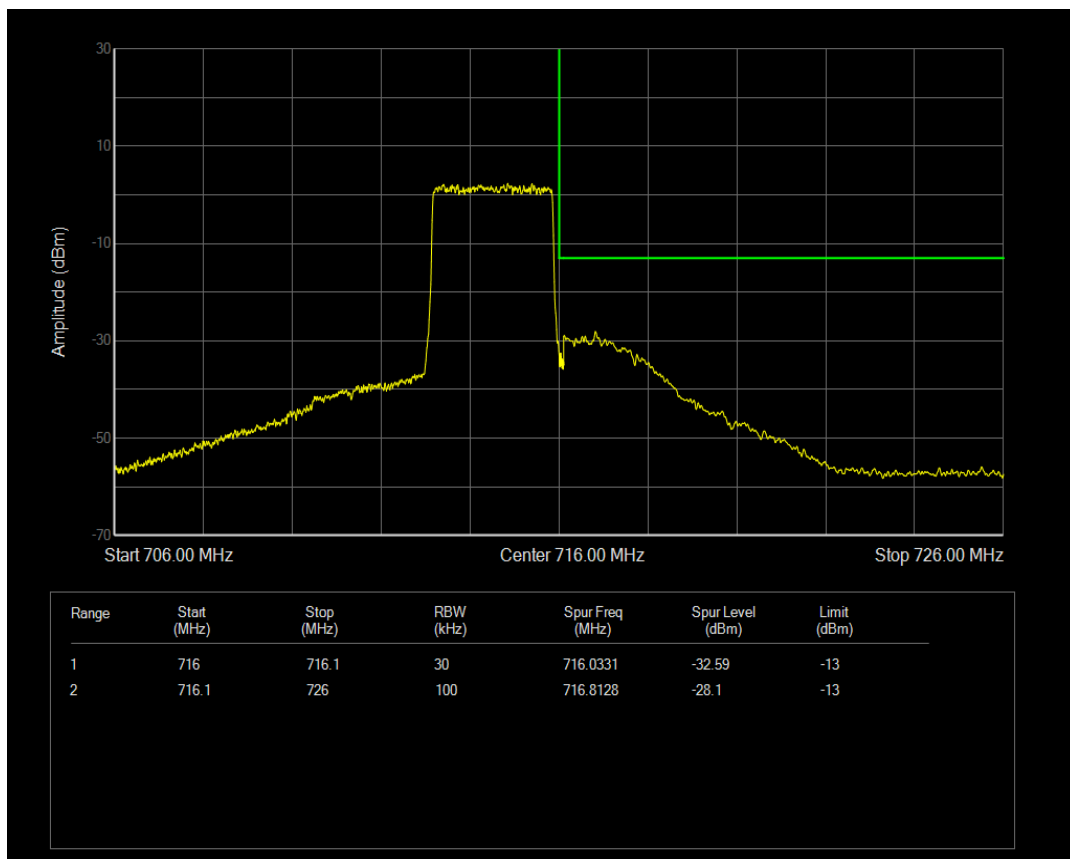


Band12 QPSK BW=3MHz Channel=23165 RB Size=15 Position=#0



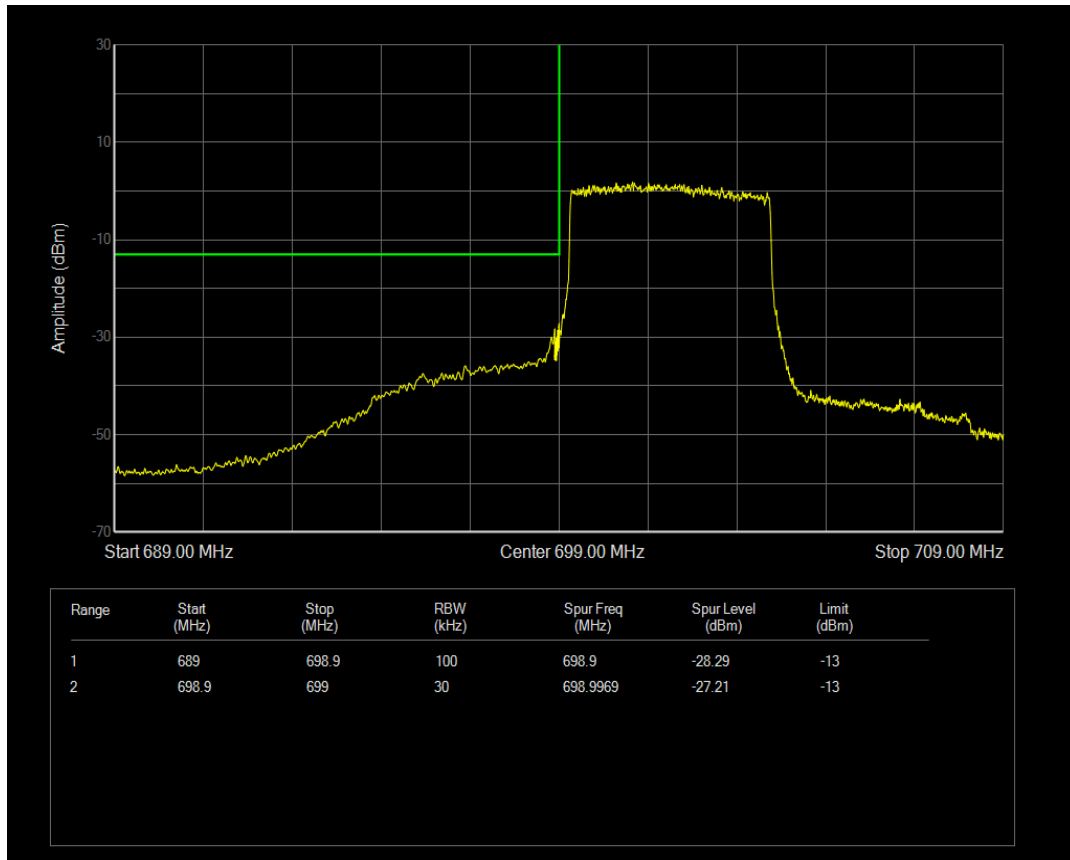


Band12 16QAM BW=3MHz Channel=23165 RB Size=15 Position=#0

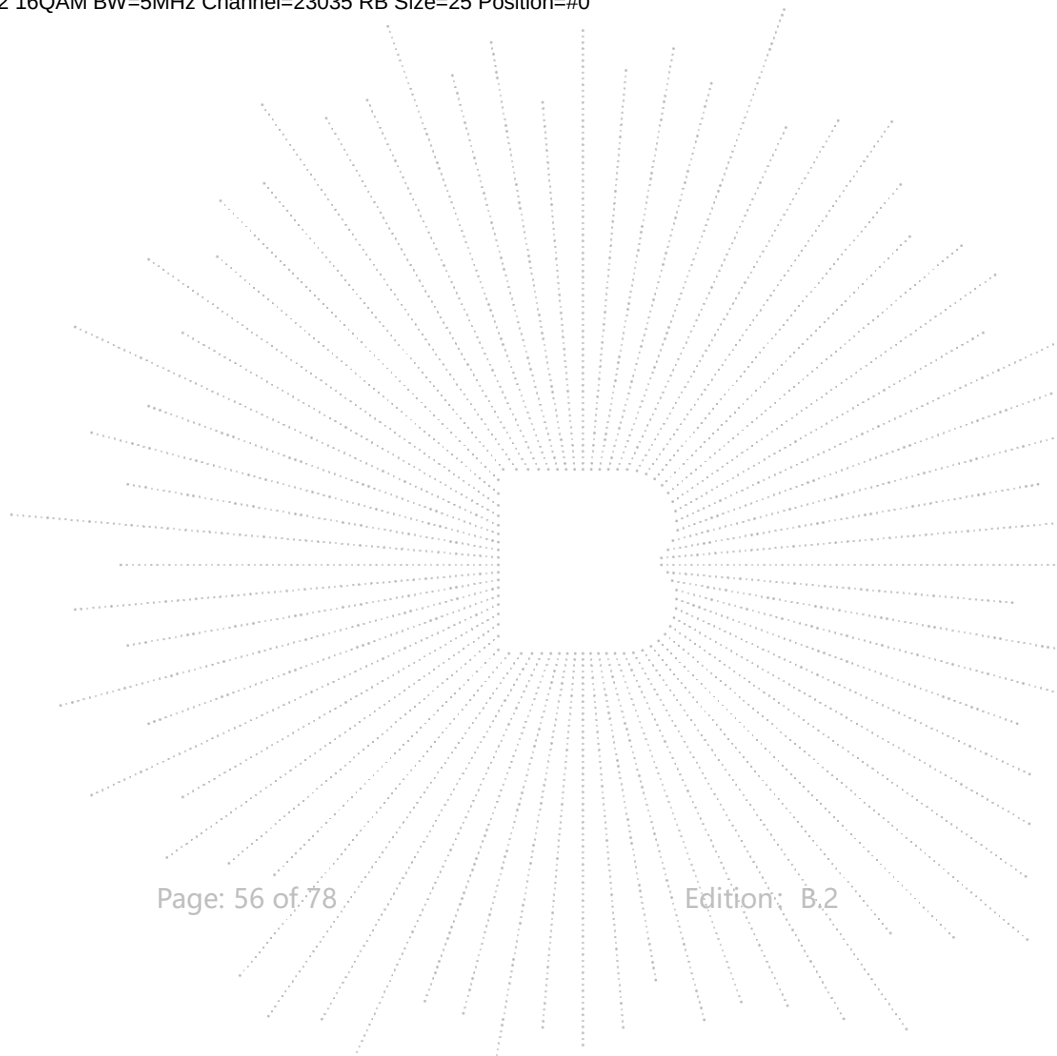


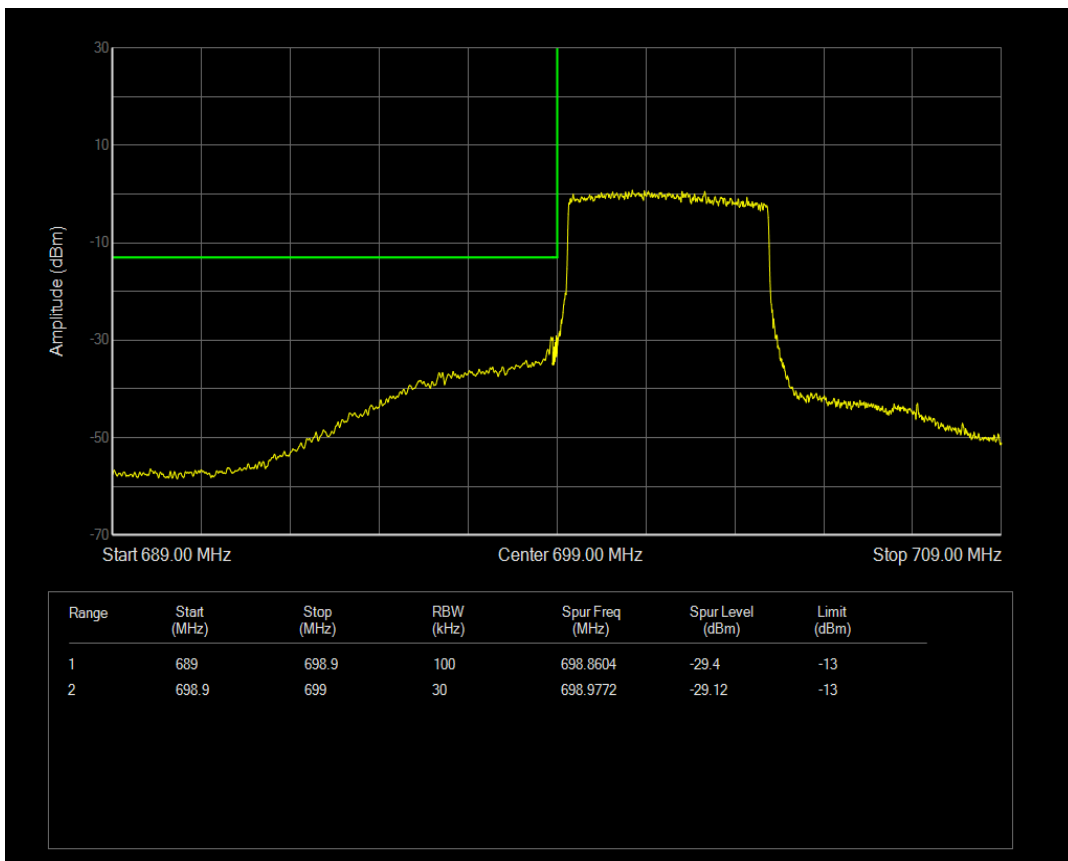


Band12 QPSK BW=5MHz Channel=23035 RB Size=25 Position=#0

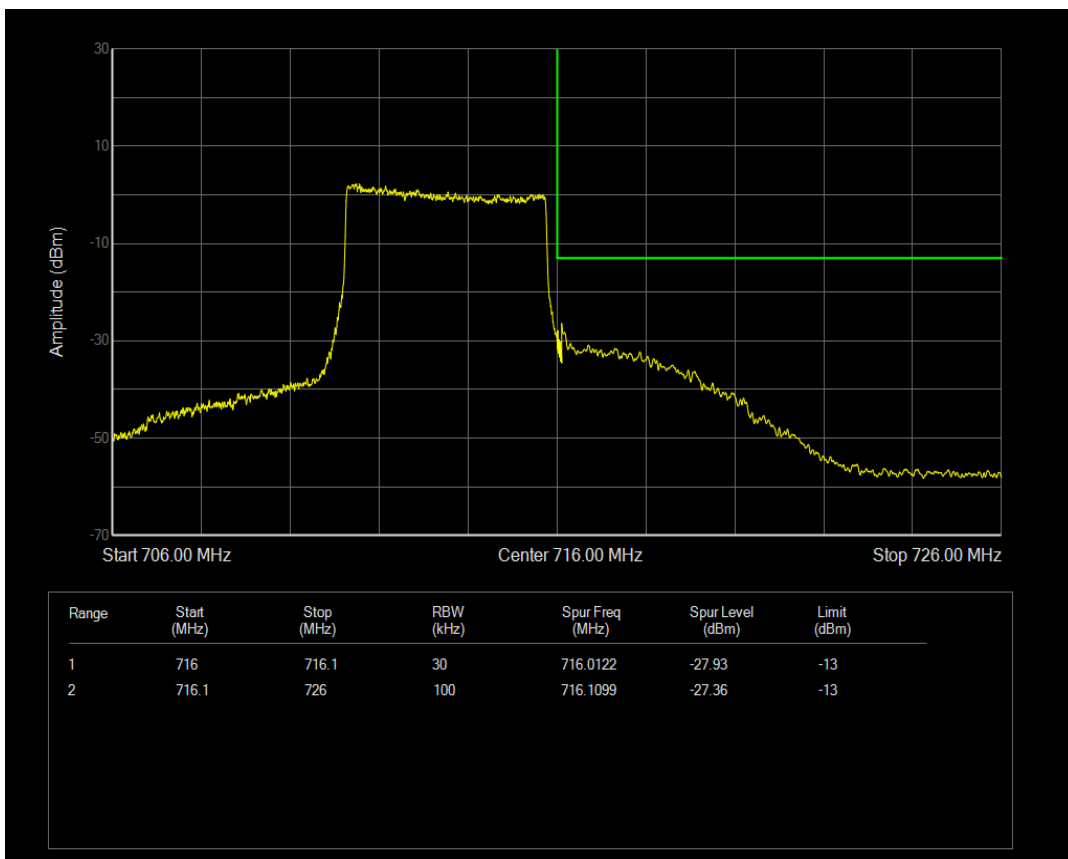


Band12 16QAM BW=5MHz Channel=23035 RB Size=25 Position=#0



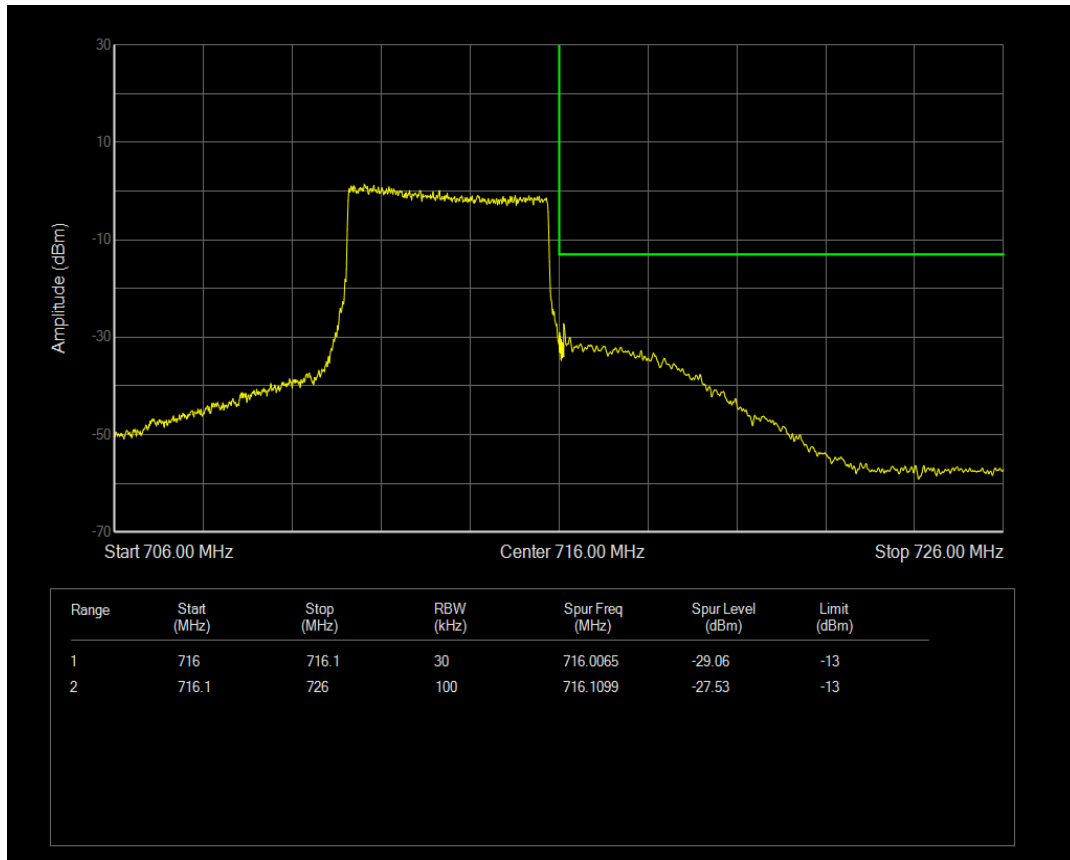


Band12 QPSK BW=5MHz Channel=23155 RB Size=25 Position=#0

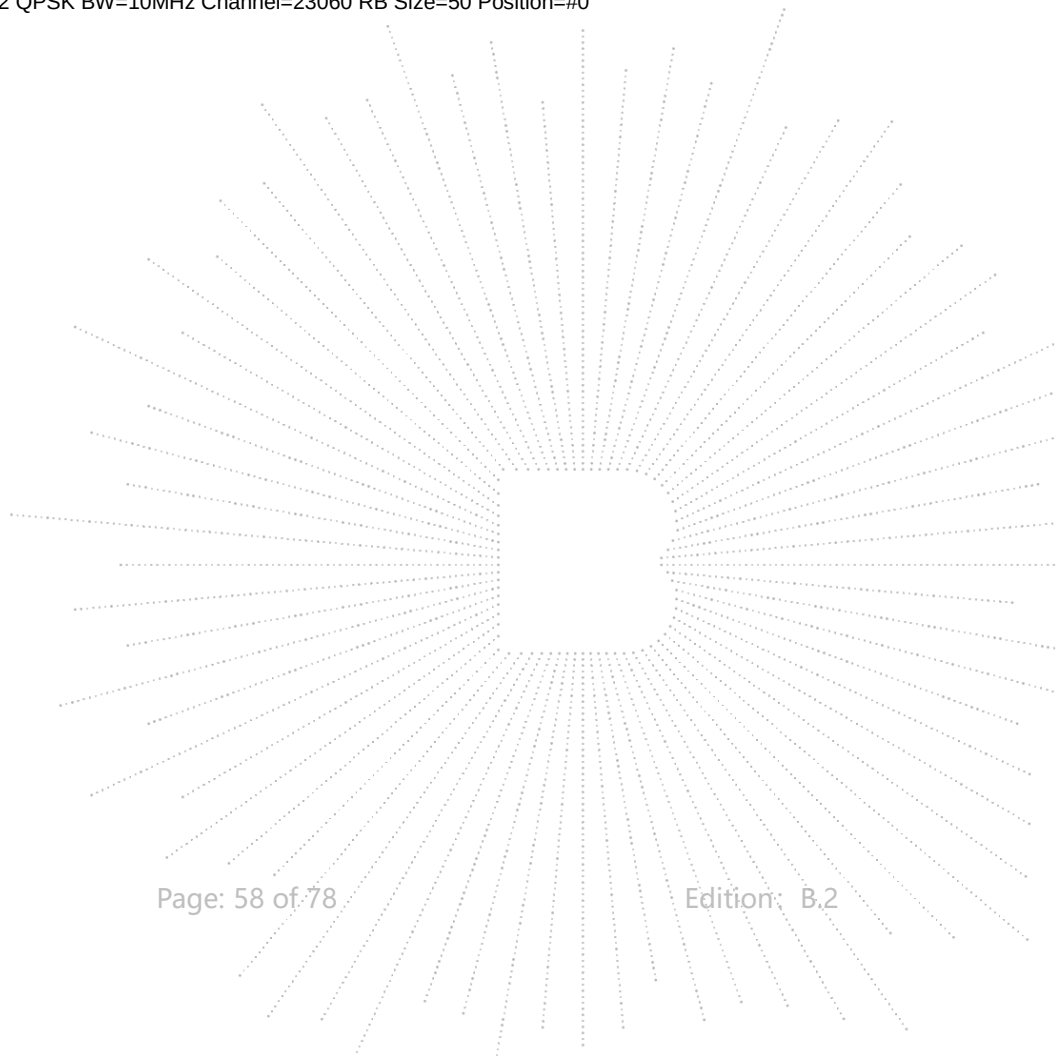


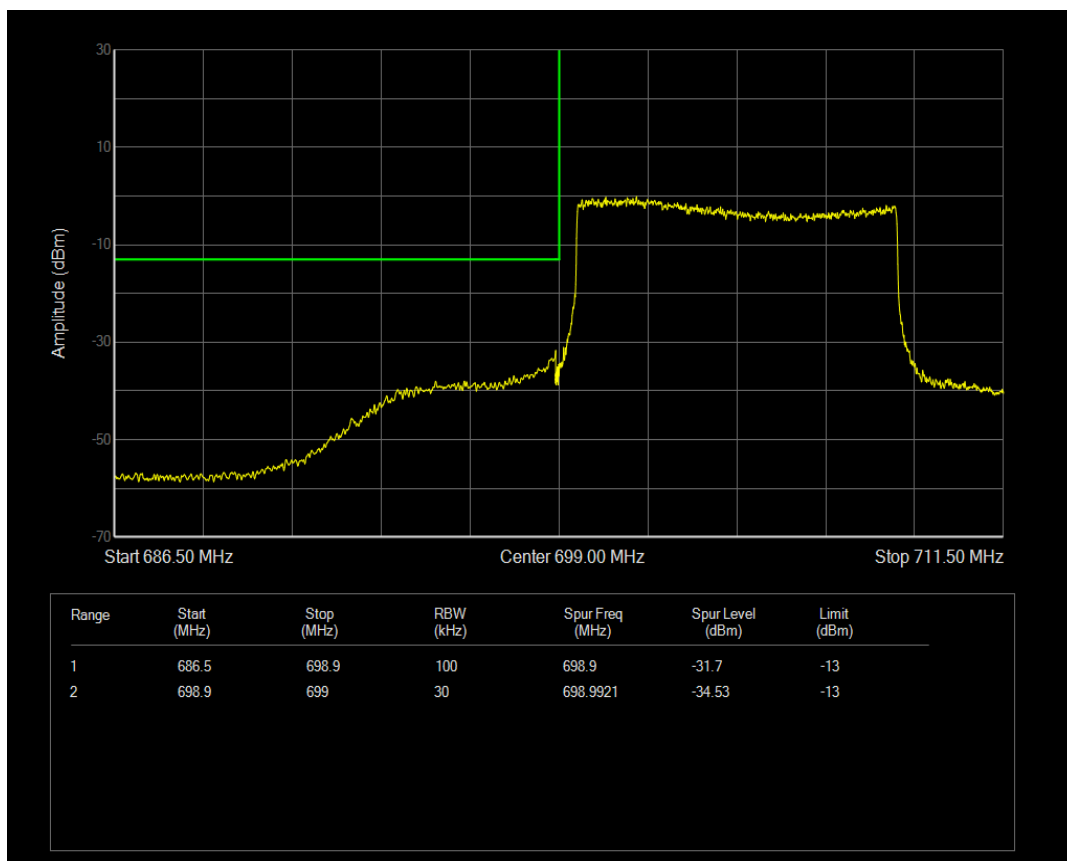


Band12 16QAM BW=5MHz Channel=23155 RB Size=25 Position=#0

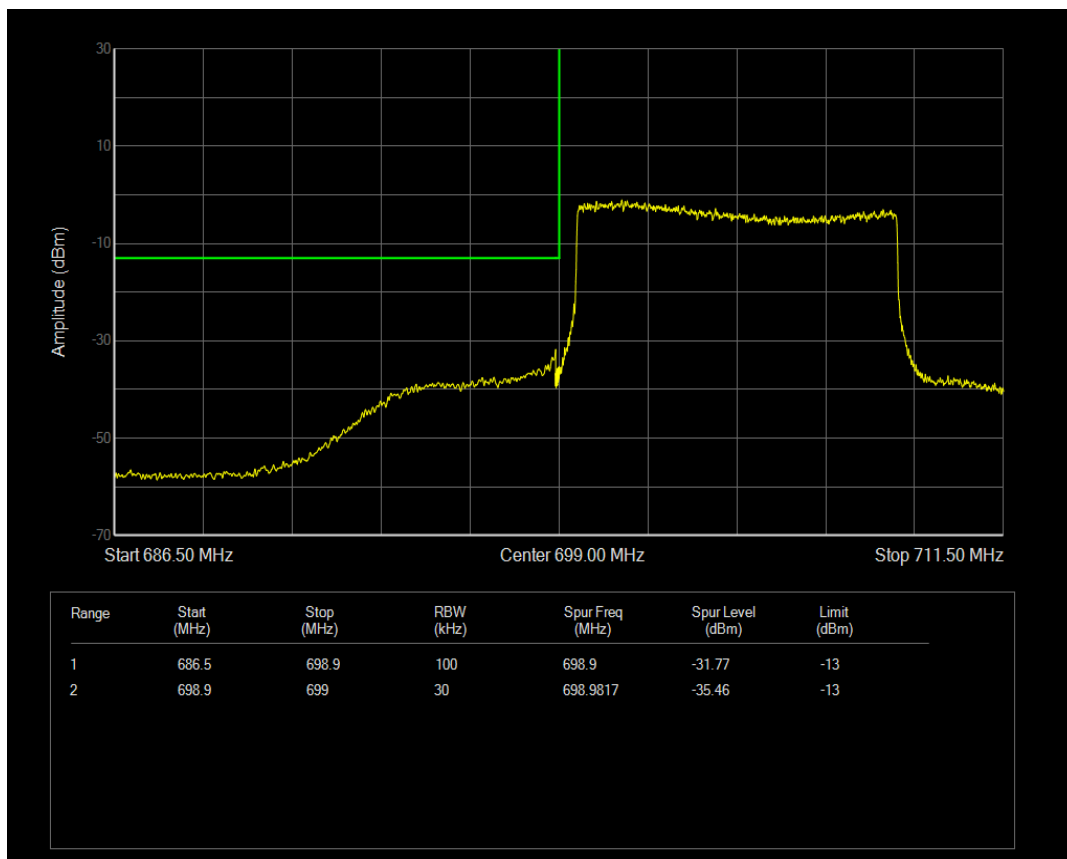


Band12 QPSK BW=10MHz Channel=23060 RB Size=50 Position=#0



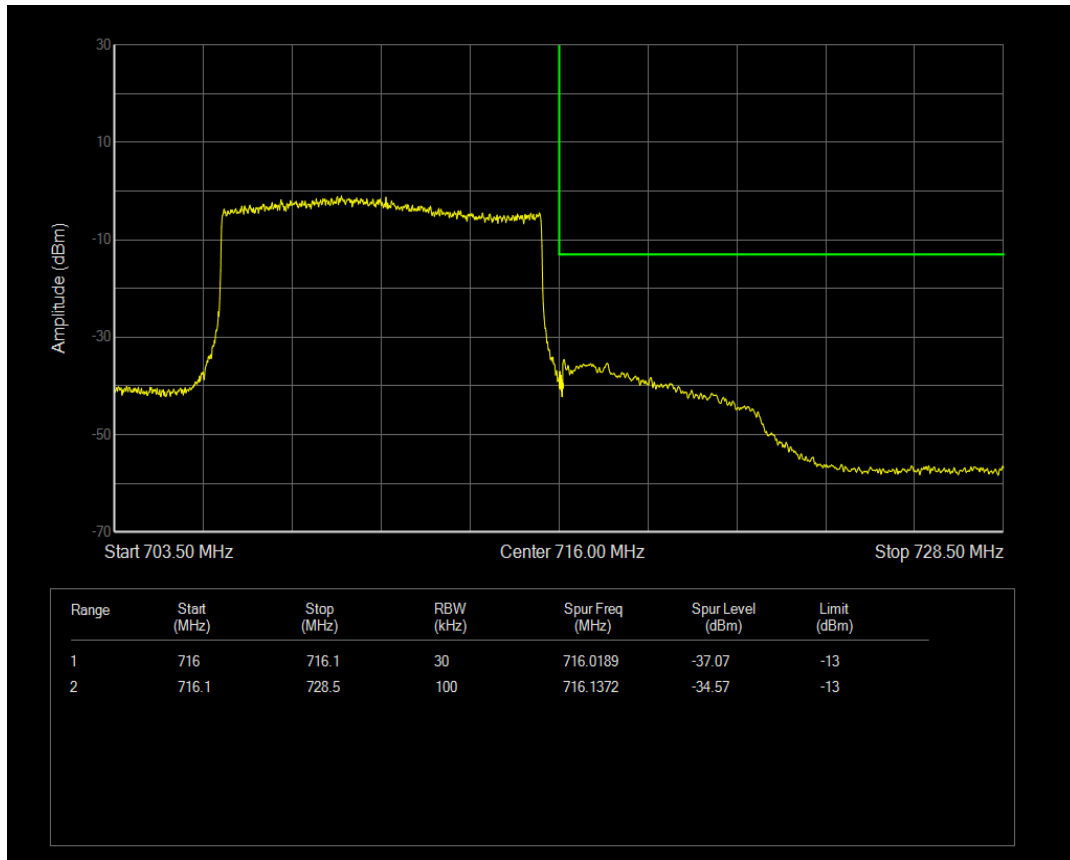


Band12 16QAM BW=10MHz Channel=23060 RB Size=50 Position=#0

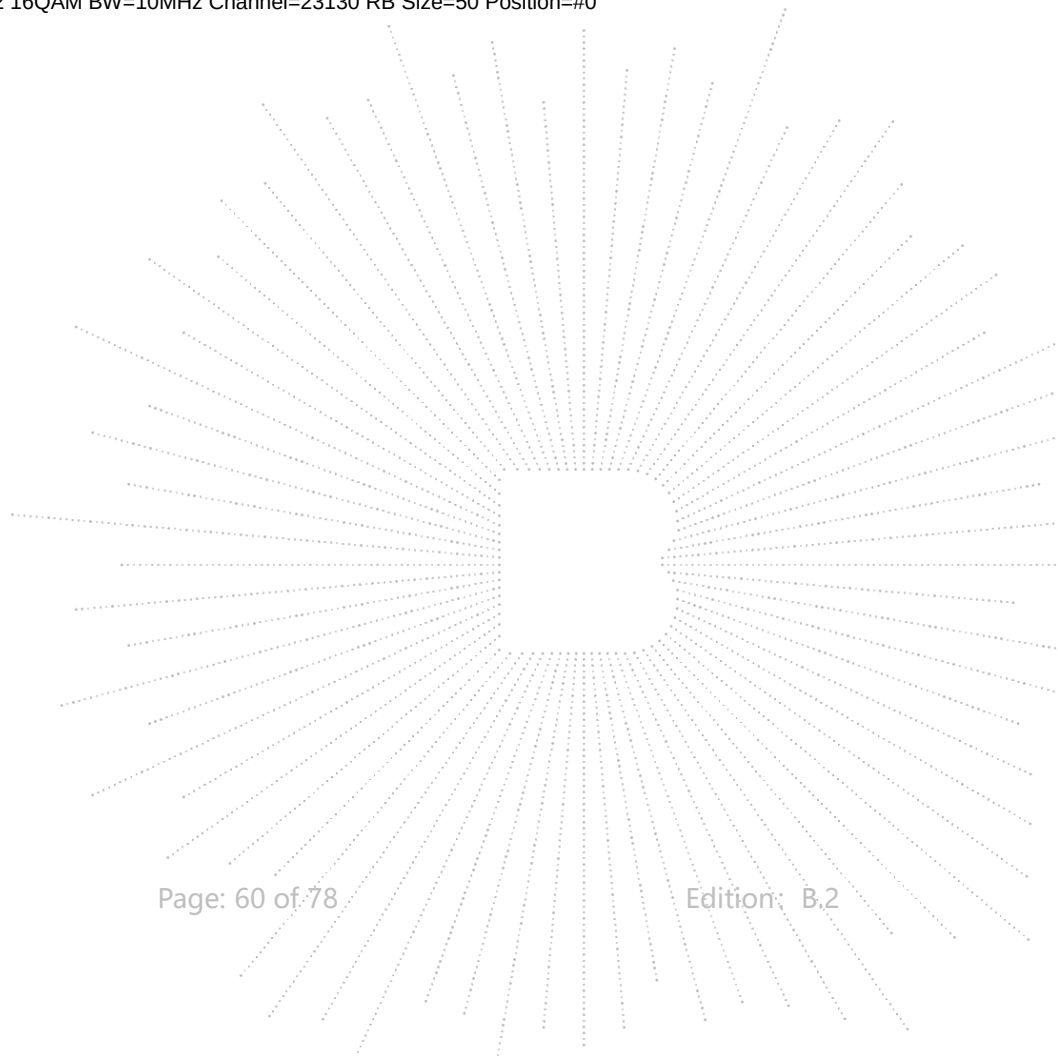


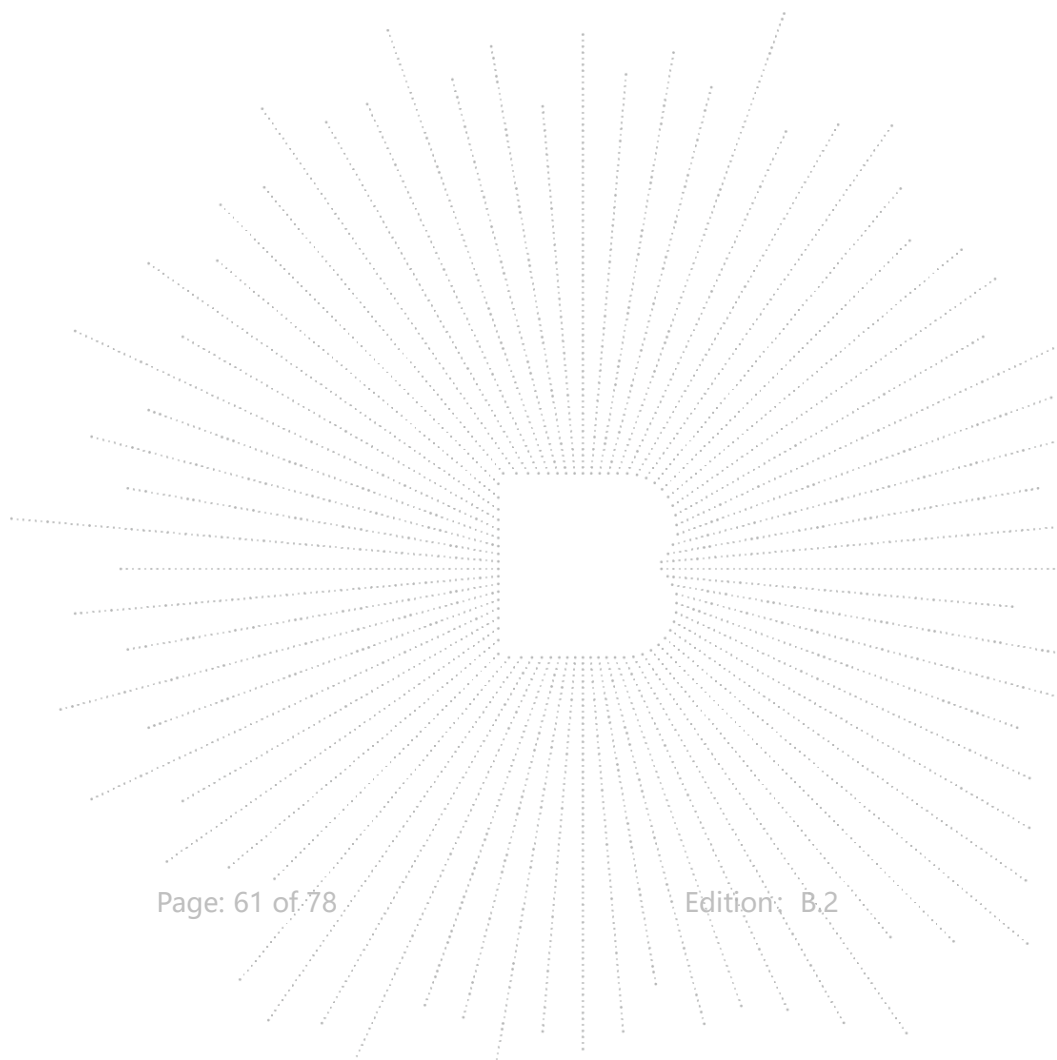
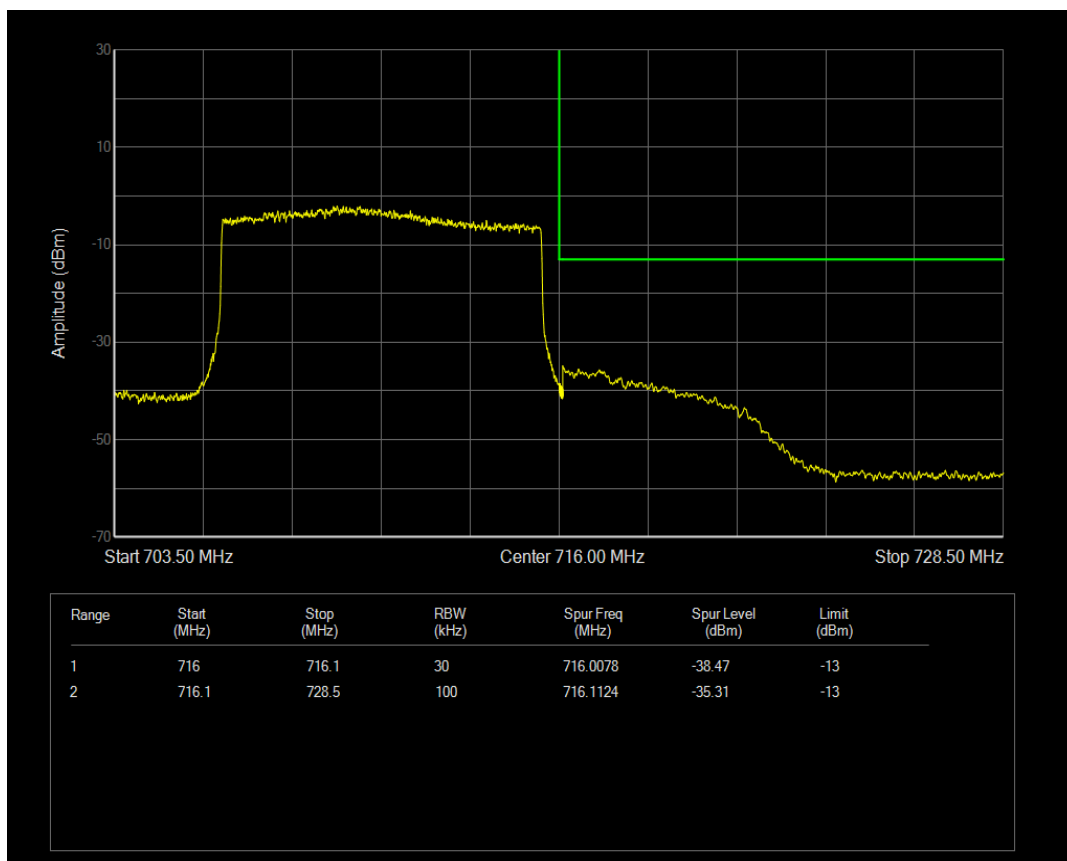


Band12 QPSK BW=10MHz Channel=23130 RB Size=50 Position=#0



Band12 16QAM BW=10MHz Channel=23130 RB Size=50 Position=#0

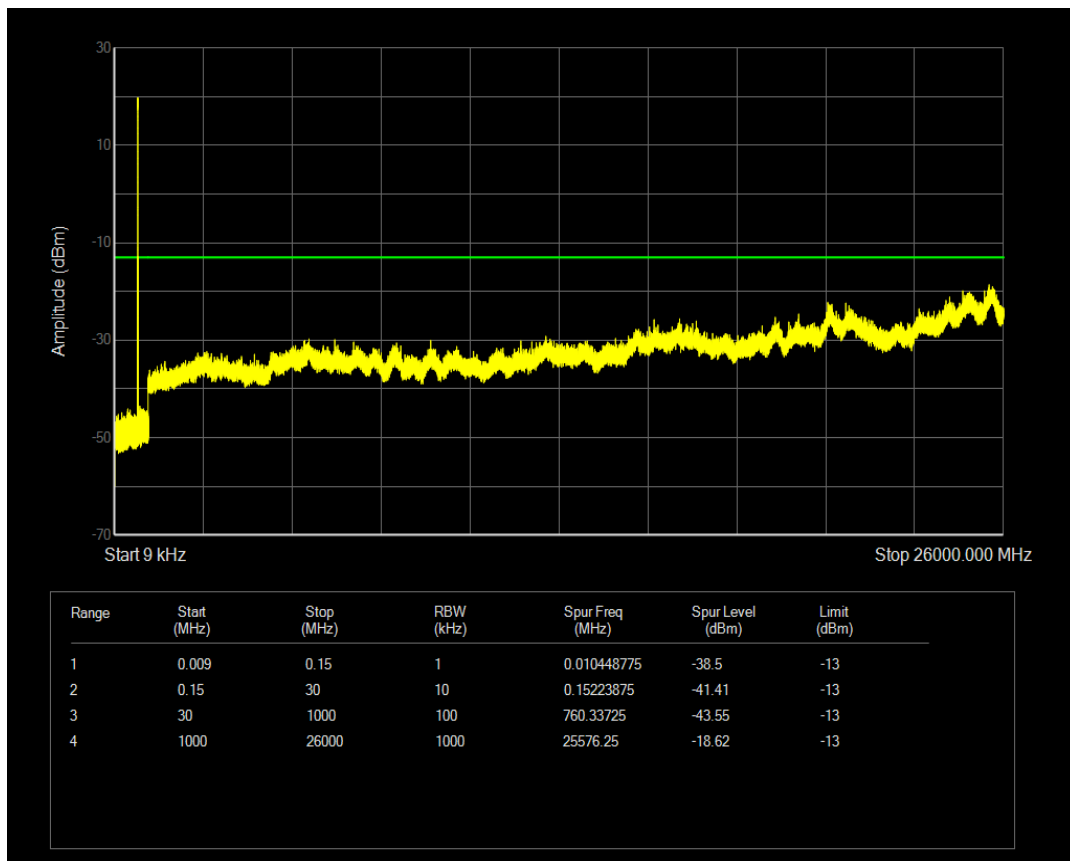




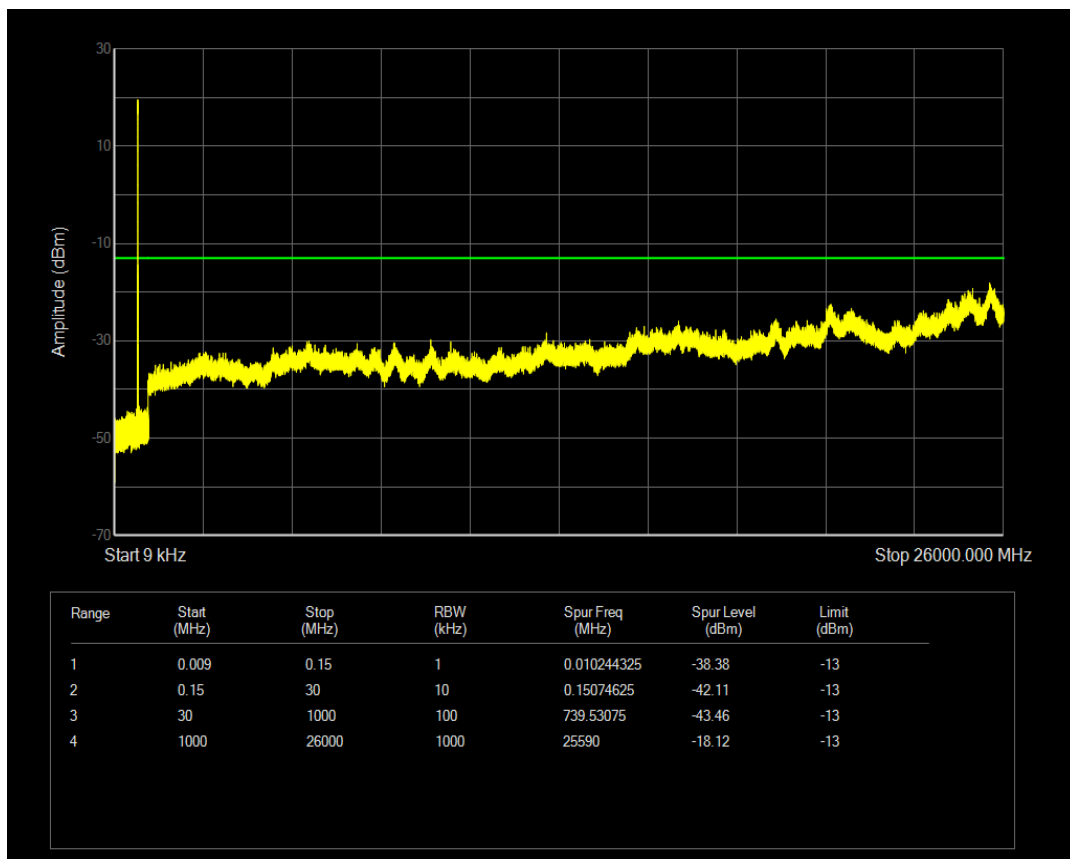
Appendix 6. Out-of-band emissions

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band12	1.4	23017	6	#0	QPSK	25576.25	-18.62	-13	PASS
Band12	1.4	23017	6	#0	16QAM	25590.00	-18.12	-13	PASS
Band12	1.4	23095	6	#0	QPSK	25640.63	-17.99	-13	PASS
Band12	1.4	23095	6	#0	16QAM	25556.88	-18.39	-13	PASS
Band12	1.4	23173	6	#0	QPSK	25625.00	-18.00	-13	PASS
Band12	1.4	23173	6	#0	16QAM	25618.75	-18.36	-13	PASS
Band12	3	23025	15	#0	QPSK	25622.50	-18.06	-13	PASS
Band12	3	23025	15	#0	16QAM	25612.50	-17.59	-13	PASS
Band12	3	23095	15	#0	QPSK	25642.50	-17.89	-13	PASS
Band12	3	23095	15	#0	16QAM	25610.63	-18.60	-13	PASS
Band12	3	23165	15	#0	QPSK	25625.63	-18.03	-13	PASS
Band12	3	23165	15	#0	16QAM	25636.25	-17.62	-13	PASS
Band12	5	23035	25	#0	QPSK	25598.13	-18.80	-13	PASS
Band12	5	23035	25	#0	16QAM	25560.00	-18.69	-13	PASS
Band12	5	23095	25	#0	QPSK	25633.13	-17.89	-13	PASS
Band12	5	23095	25	#0	16QAM	25603.13	-18.12	-13	PASS
Band12	5	23155	25	#0	QPSK	25634.38	-17.40	-13	PASS
Band12	5	23155	25	#0	16QAM	25608.13	-18.09	-13	PASS
Band12	10	23060	50	#0	QPSK	25600.00	-18.05	-13	PASS
Band12	10	23060	50	#0	16QAM	25567.50	-18.43	-13	PASS
Band12	10	23095	50	#0	QPSK	25617.50	-16.99	-13	PASS
Band12	10	23095	50	#0	16QAM	25625.63	-17.75	-13	PASS
Band12	10	23130	50	#0	QPSK	25683.75	-17.92	-13	PASS
Band12	10	23130	50	#0	16QAM	25589.38	-18.01	-13	PASS

Band12 QPSK BW=1.4MHz Channel=23017 RB Size=6 Position=#0

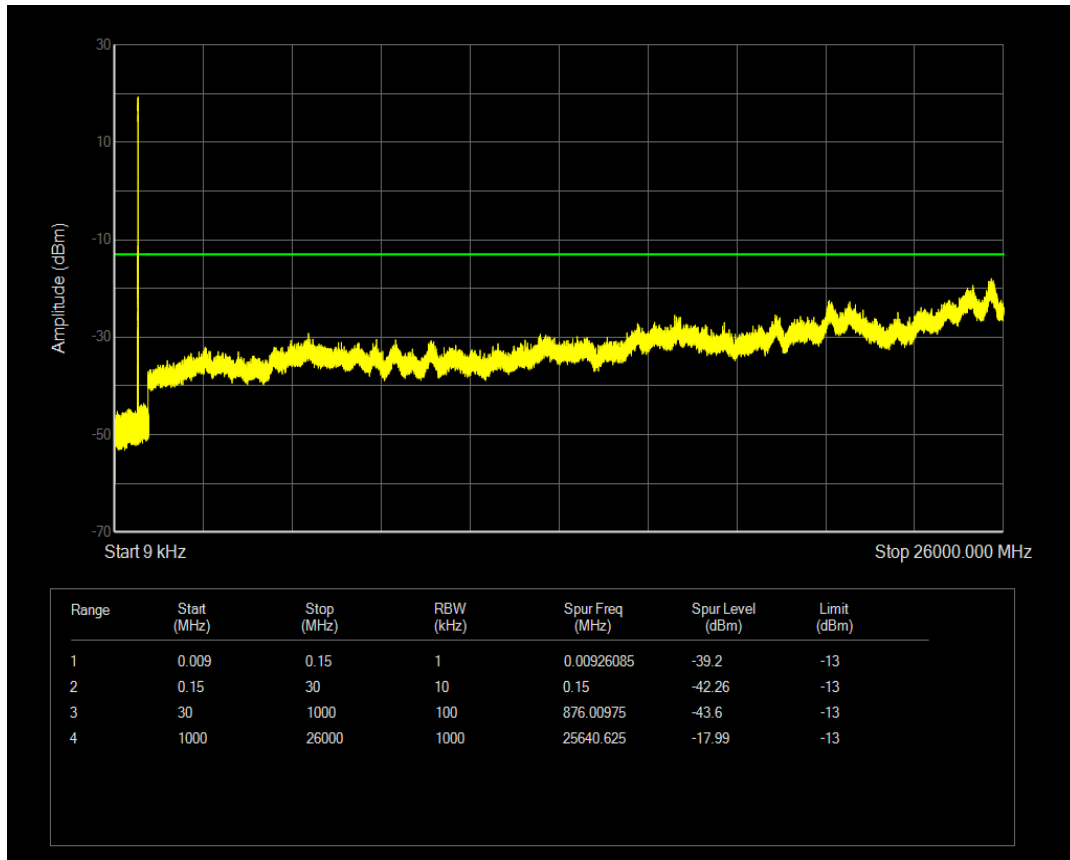


Band12 16QAM BW=1.4MHz Channel=23017 RB Size=6 Position=#0

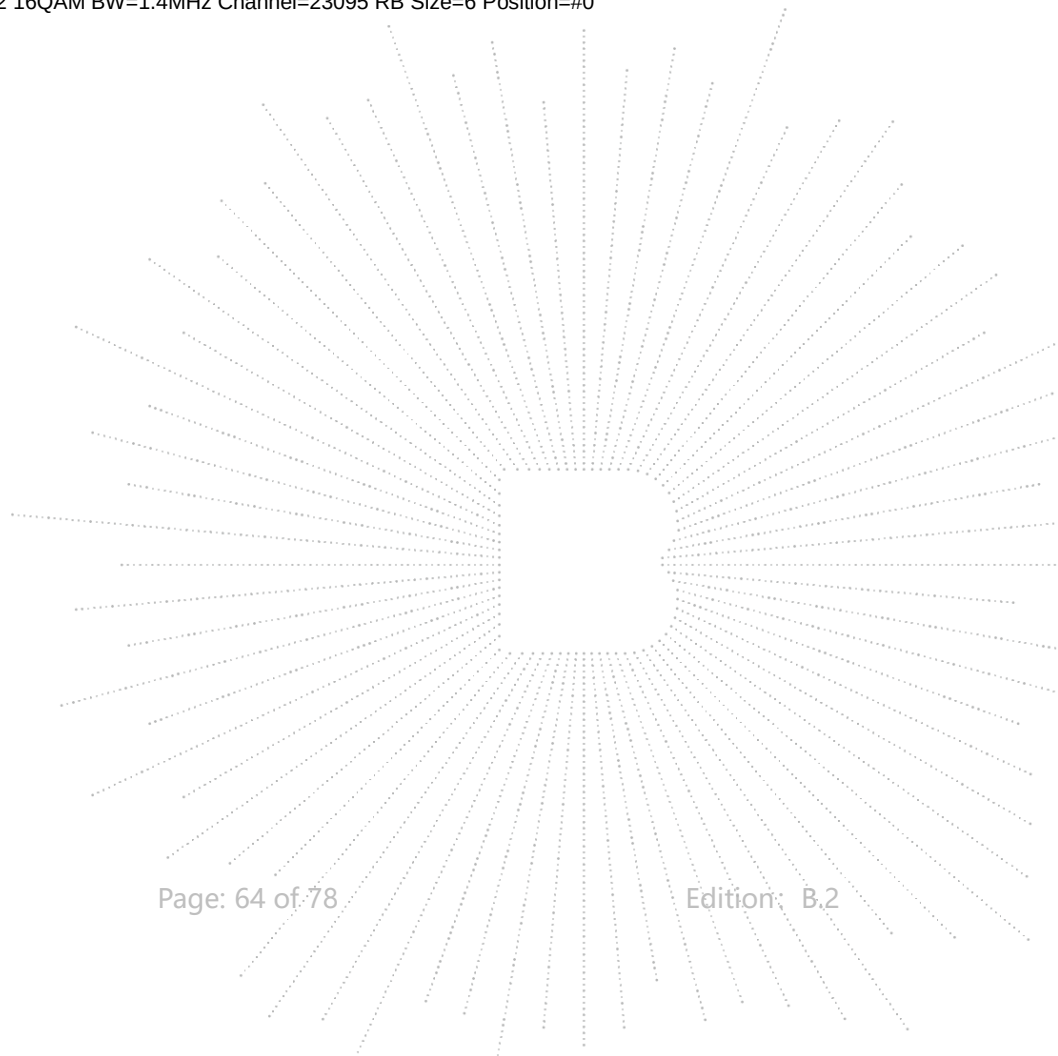


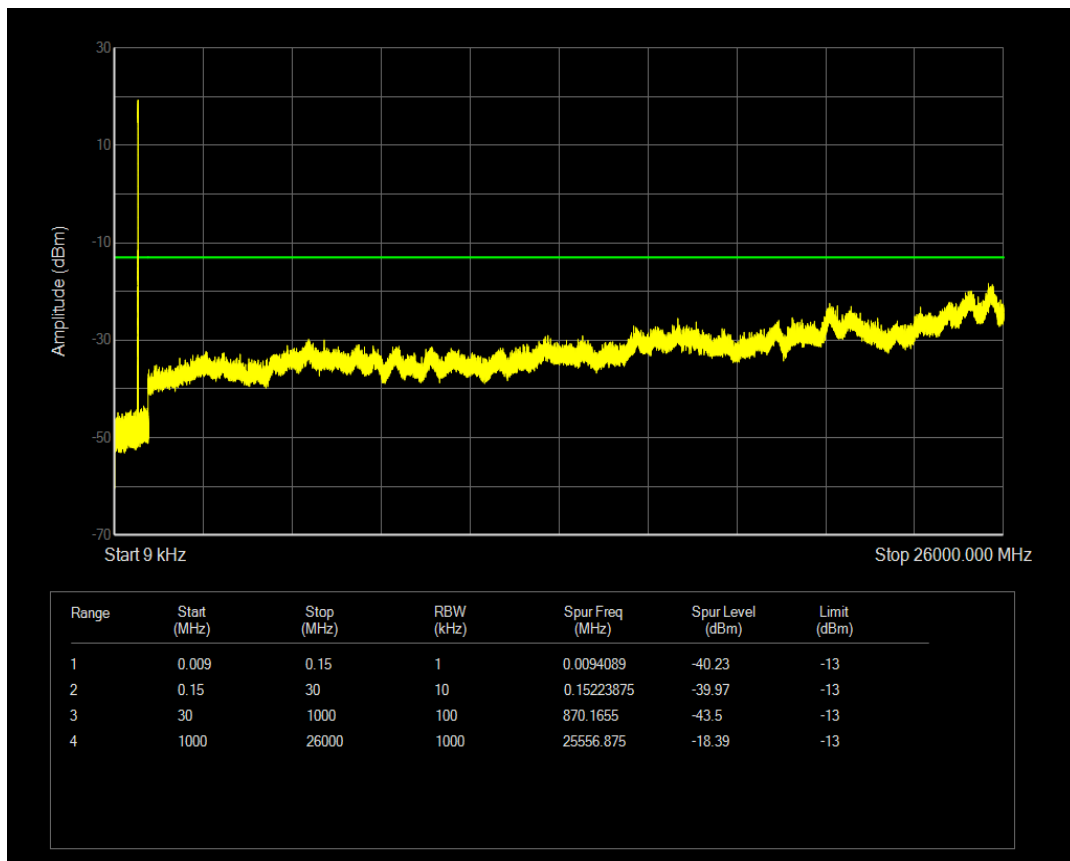


Band12 QPSK BW=1.4MHz Channel=23095 RB Size=6 Position=#0

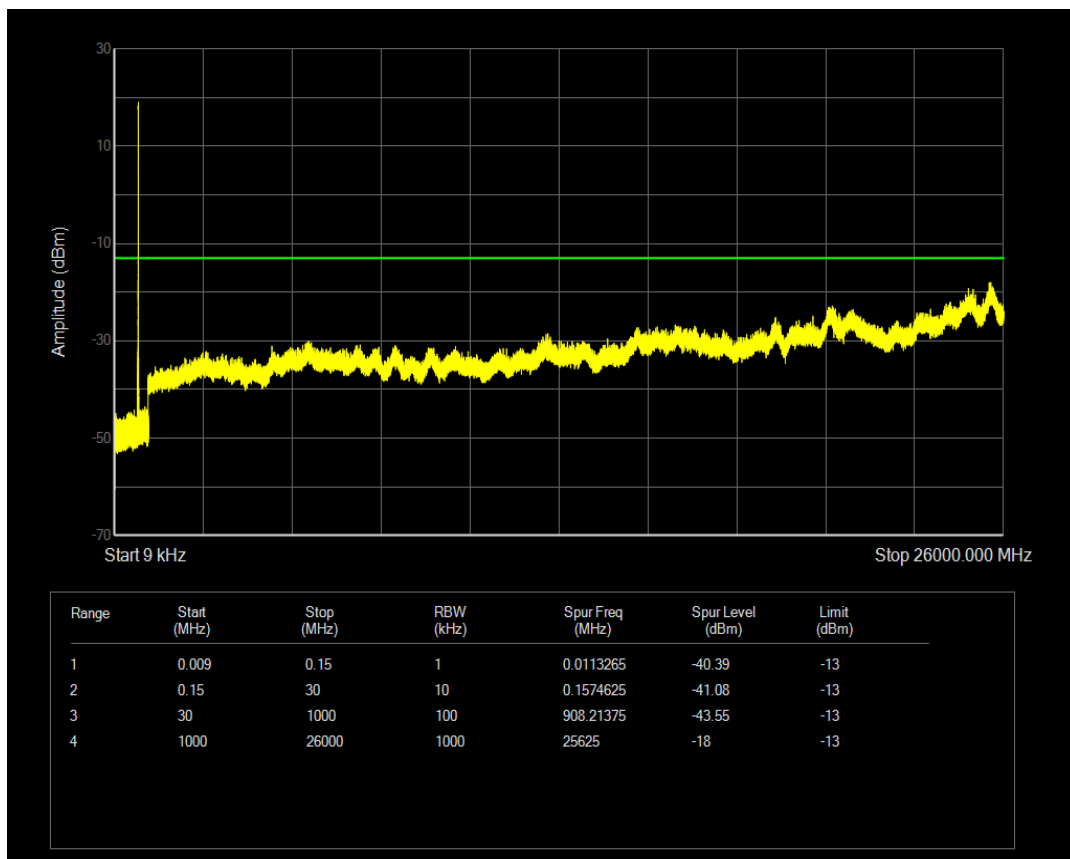


Band12 16QAM BW=1.4MHz Channel=23095 RB Size=6 Position=#0



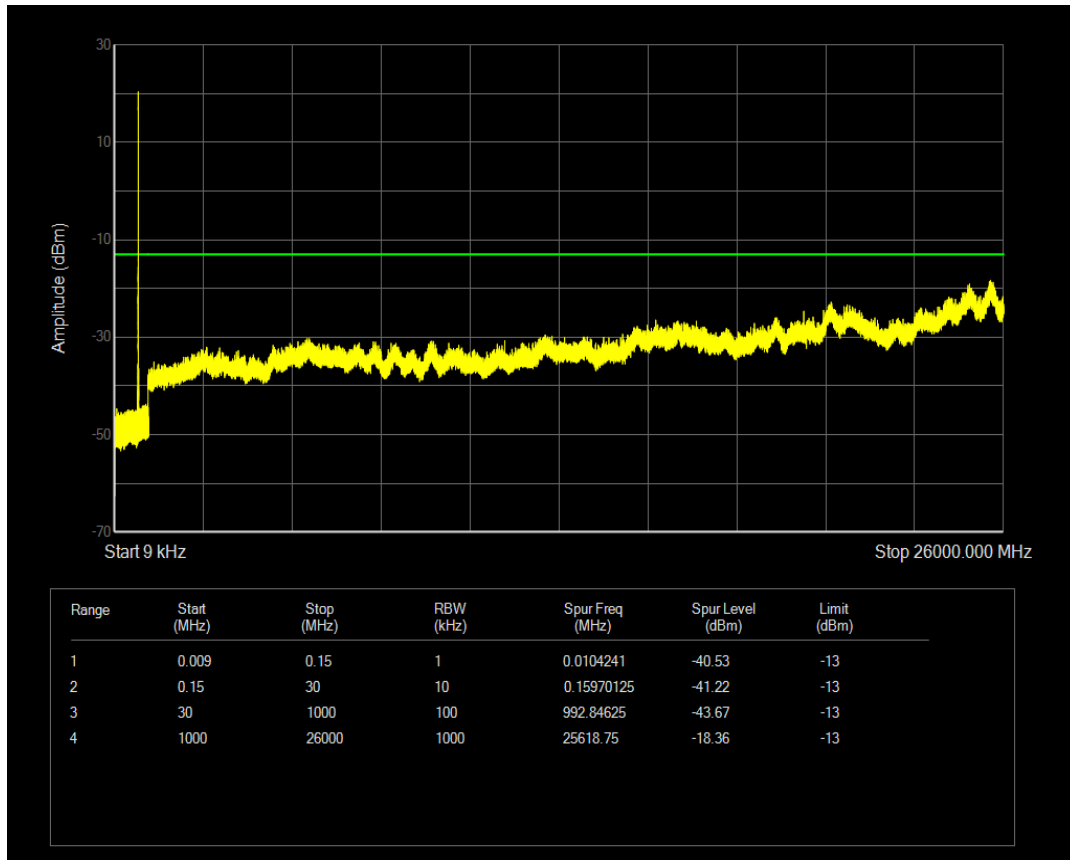


Band12 QPSK BW=1.4MHz Channel=23173 RB Size=6 Position=#0

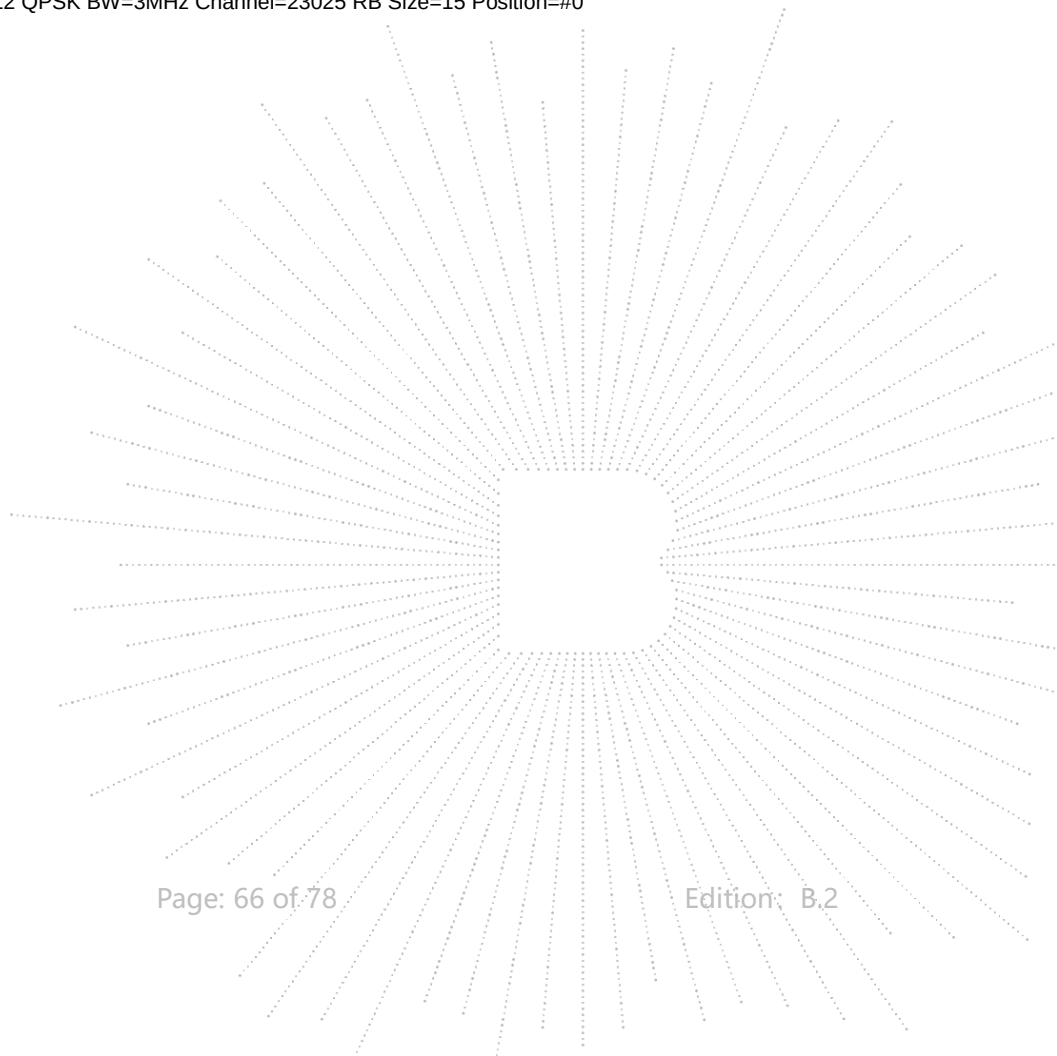


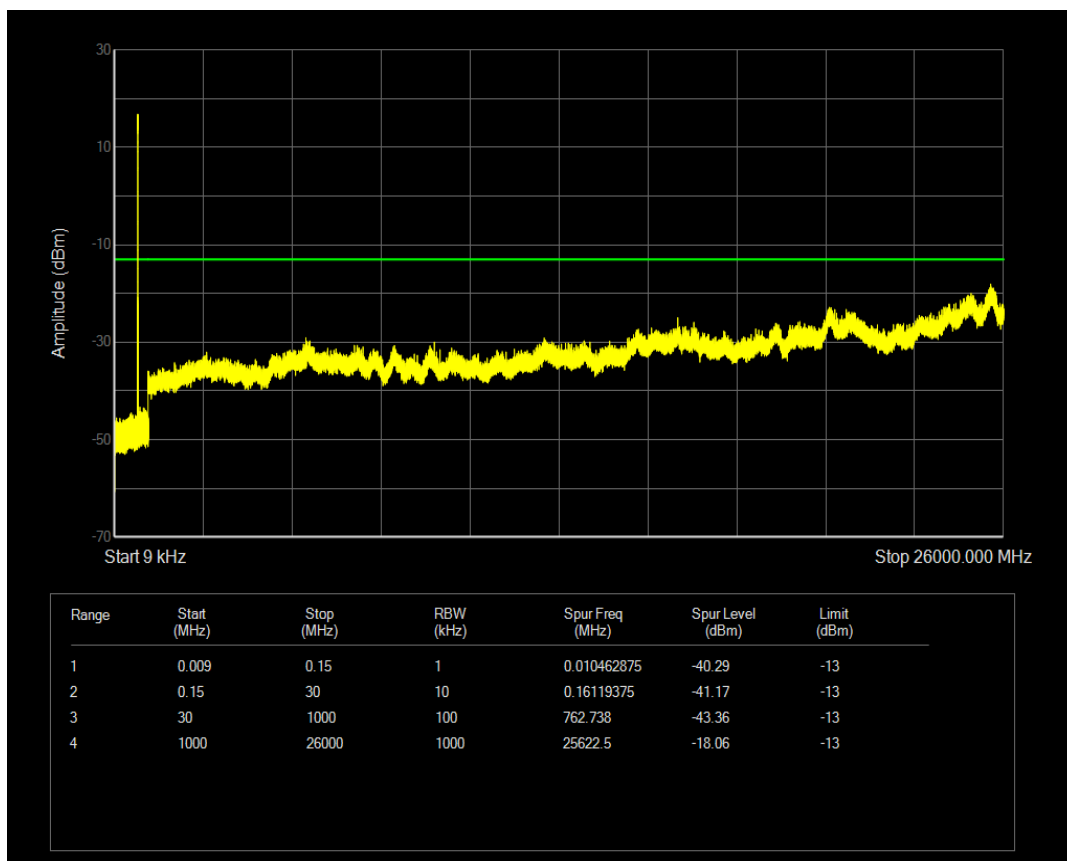


Band12 16QAM BW=1.4MHz Channel=23173 RB Size=6 Position=#0

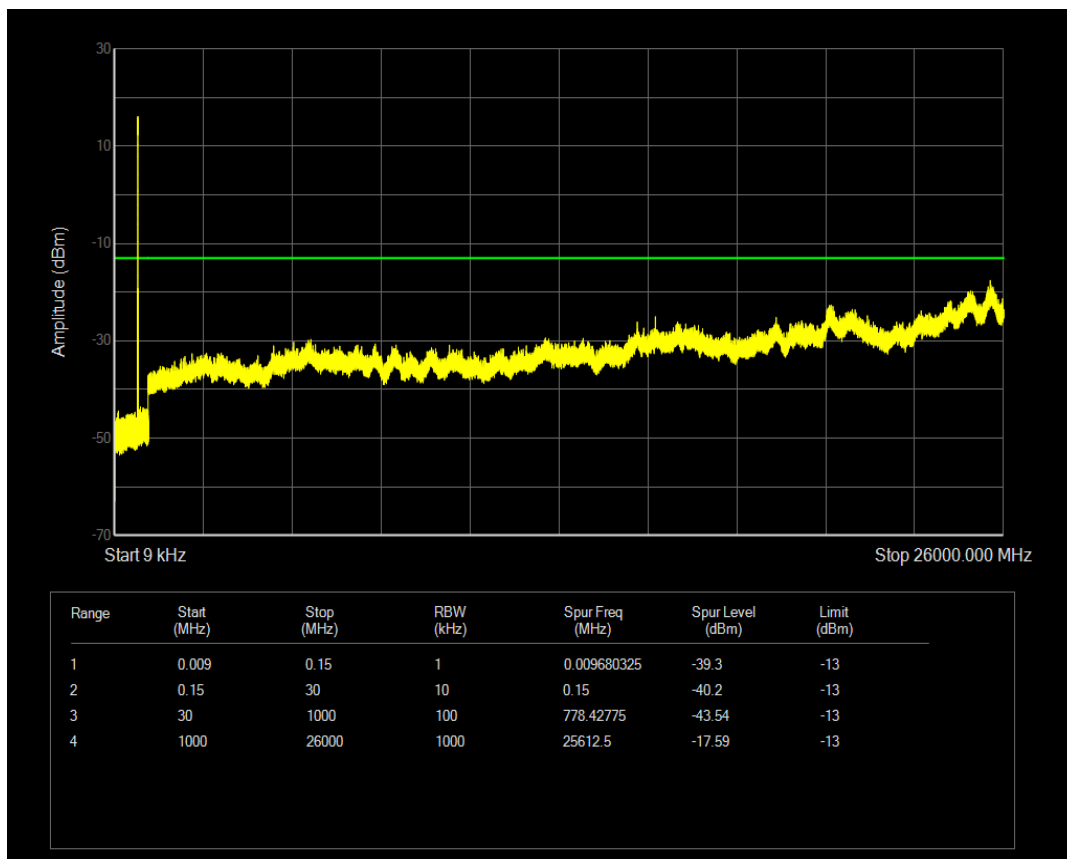


Band12 QPSK BW=3MHz Channel=23025 RB Size=15 Position=#0

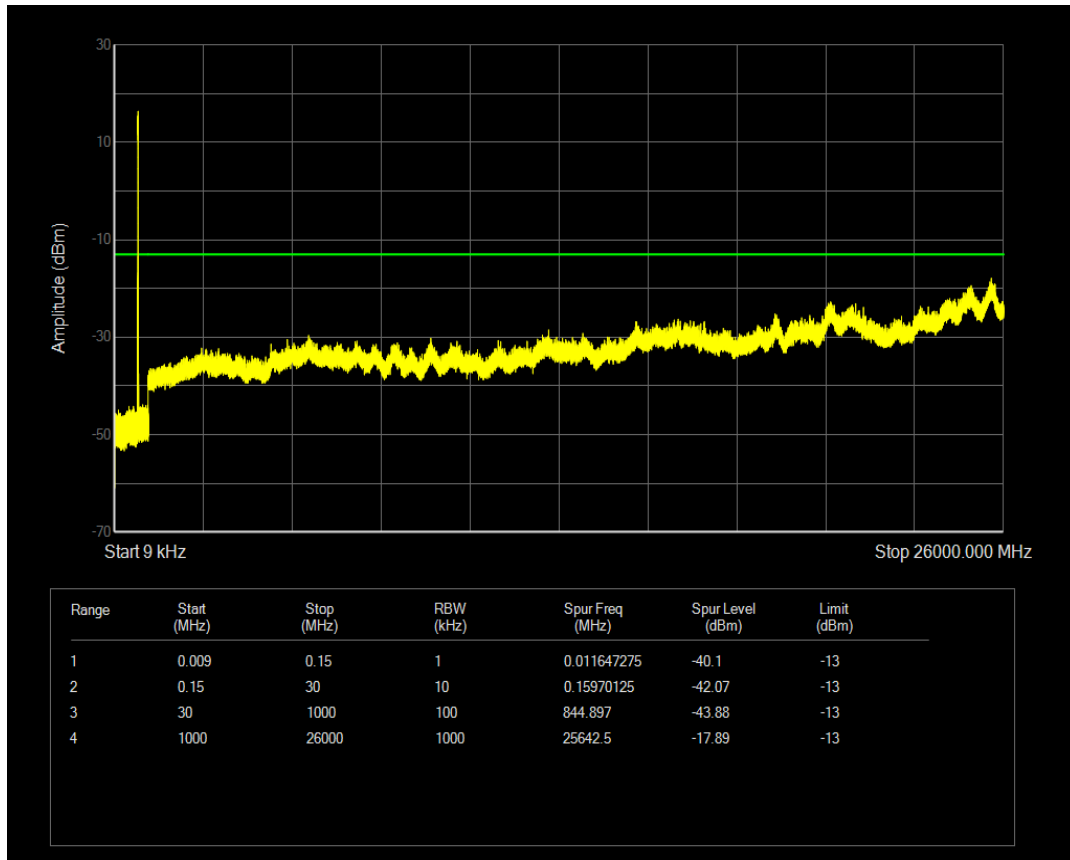




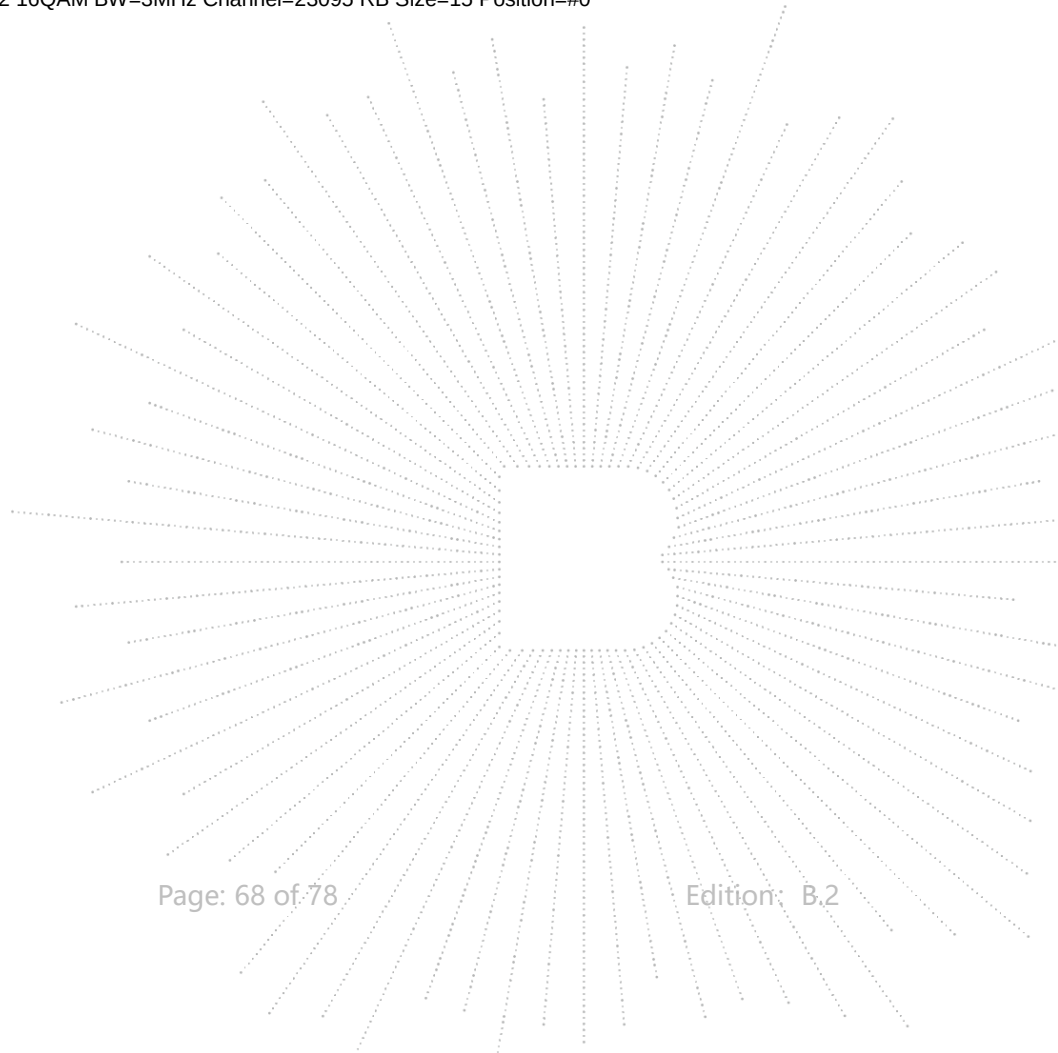
Band12 16QAM BW=3MHz Channel=23025 RB Size=15 Position=#0

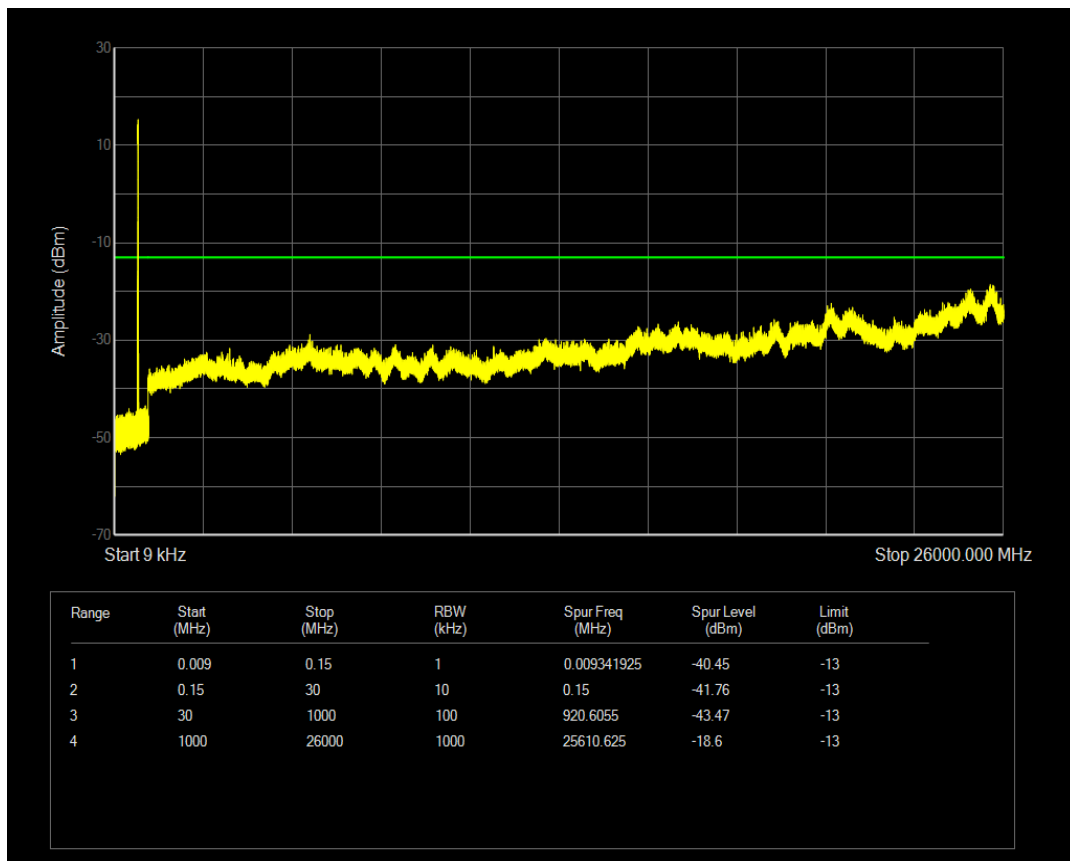


Band12 QPSK BW=3MHz Channel=23095 RB Size=15 Position=#0

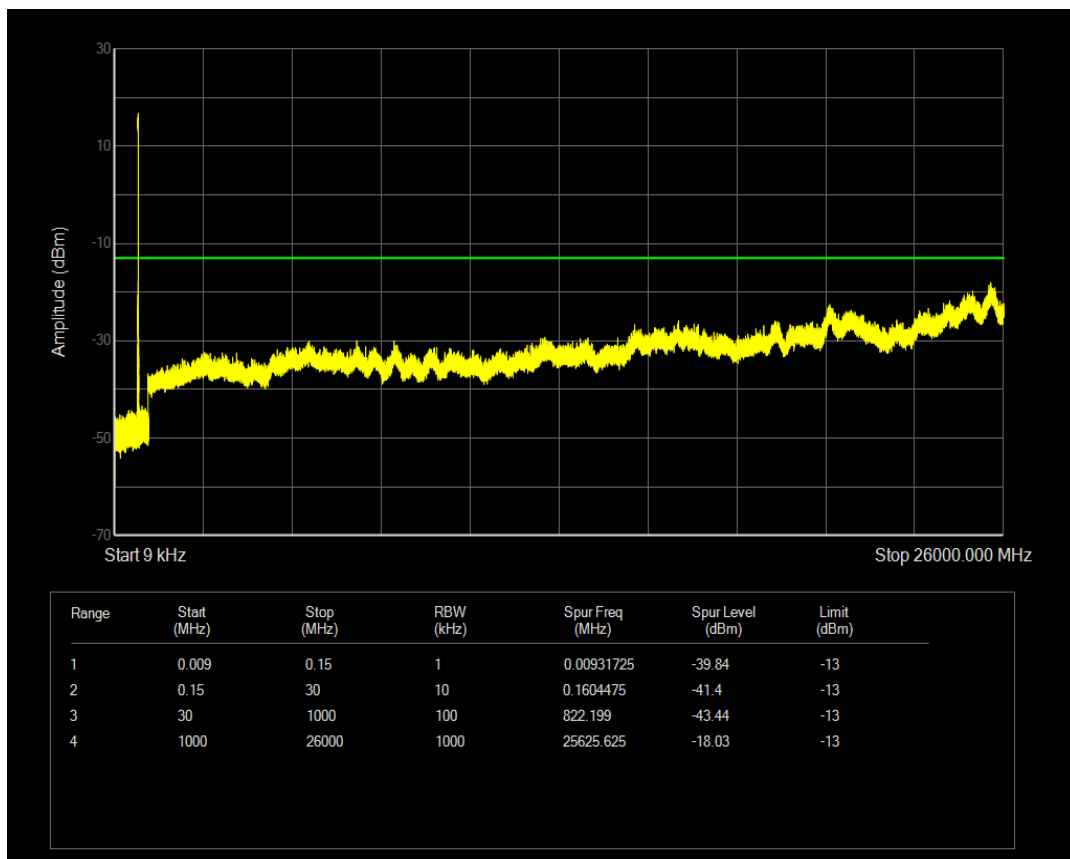


Band12 16QAM BW=3MHz Channel=23095 RB Size=15 Position=#0



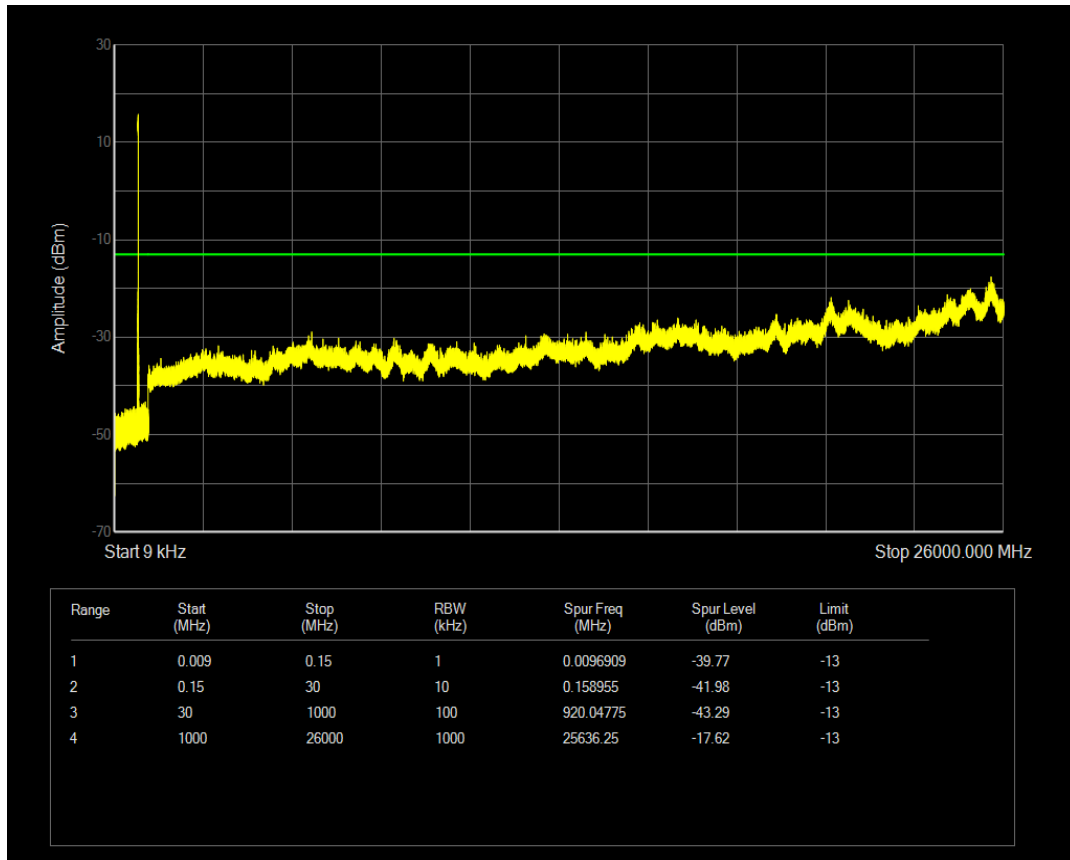


Band12 QPSK BW=3MHz Channel=23165 RB Size=15 Position=#0

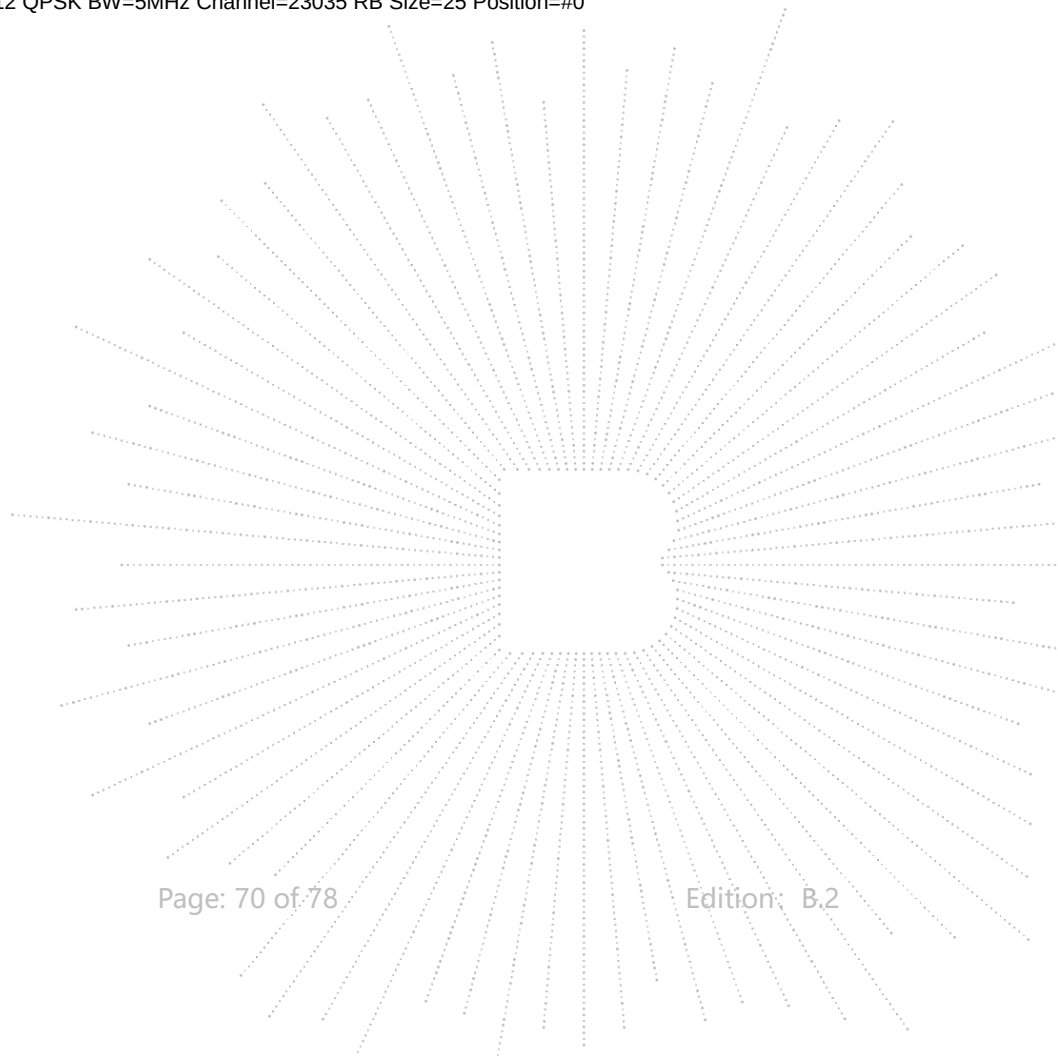


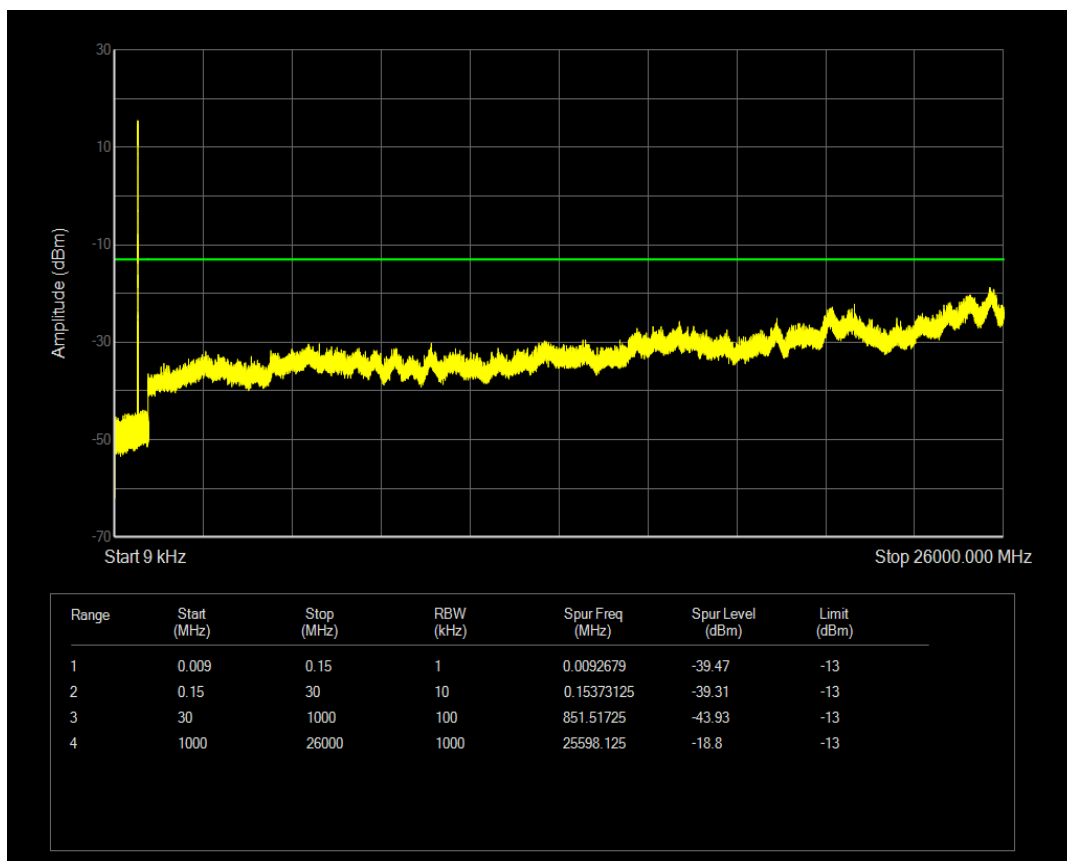


Band12 16QAM BW=3MHz Channel=23165 RB Size=15 Position=#0

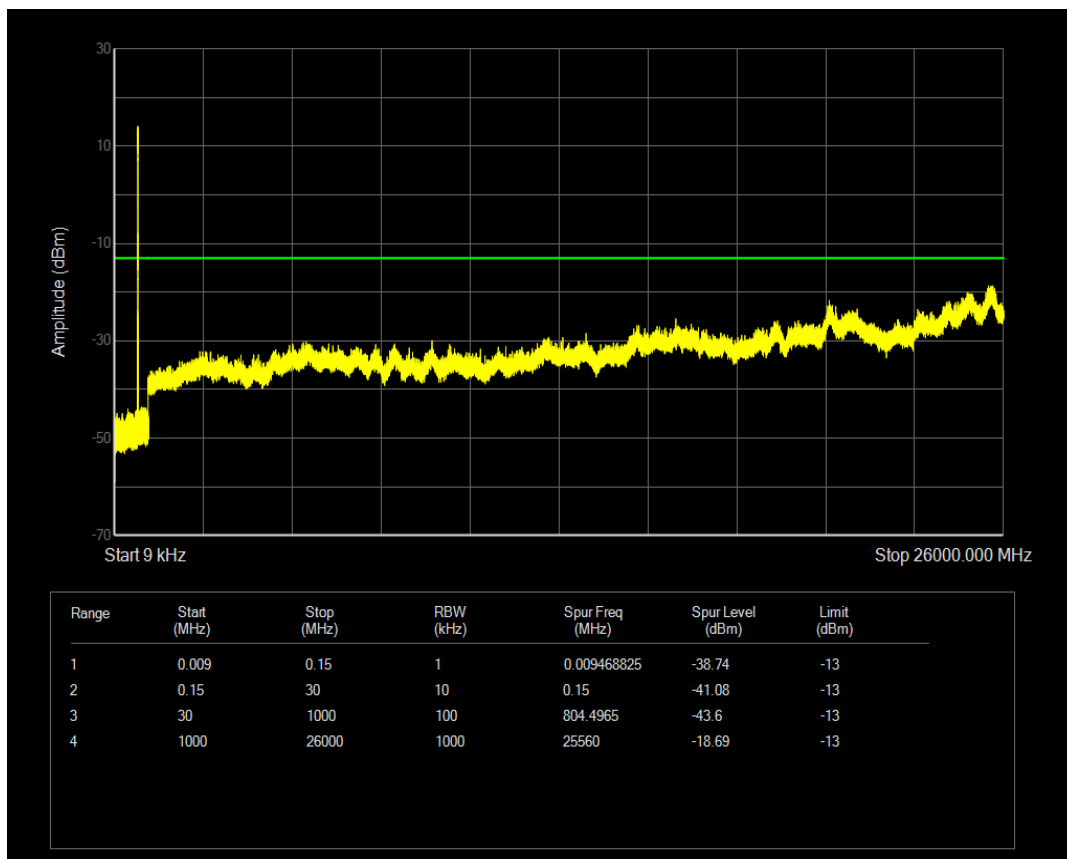


Band12 QPSK BW=5MHz Channel=23035 RB Size=25 Position=#0

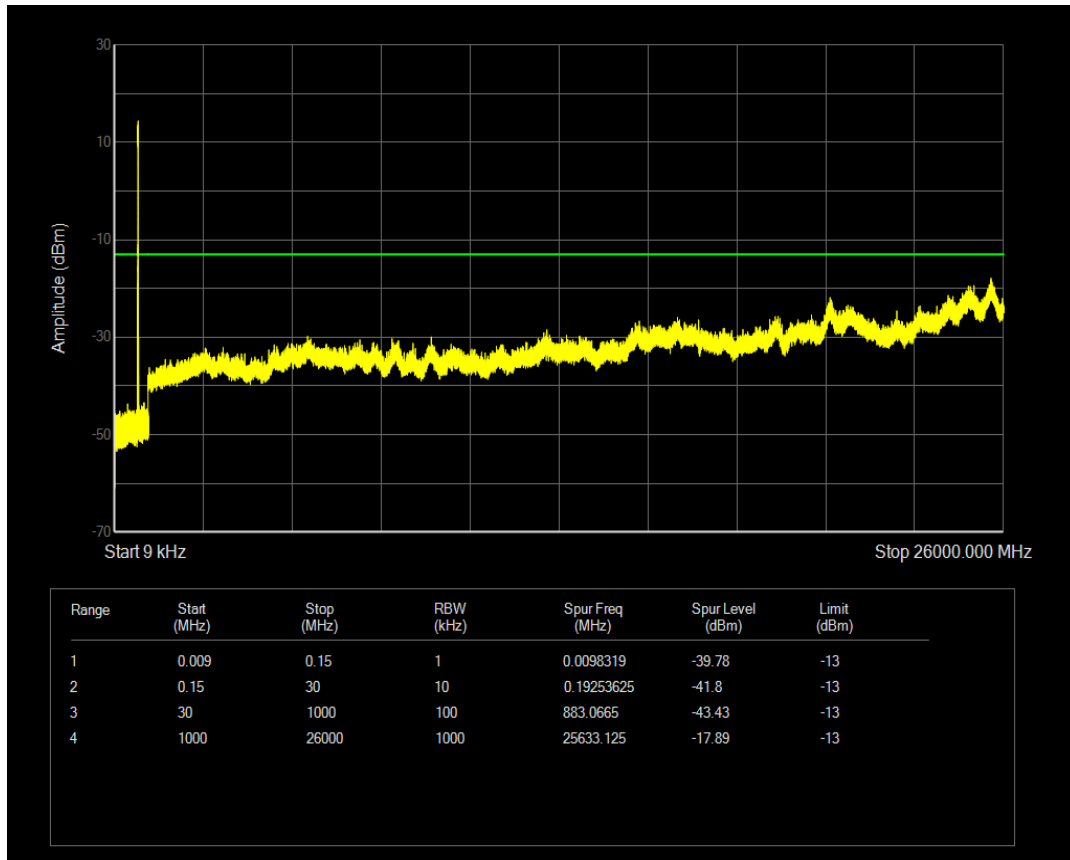




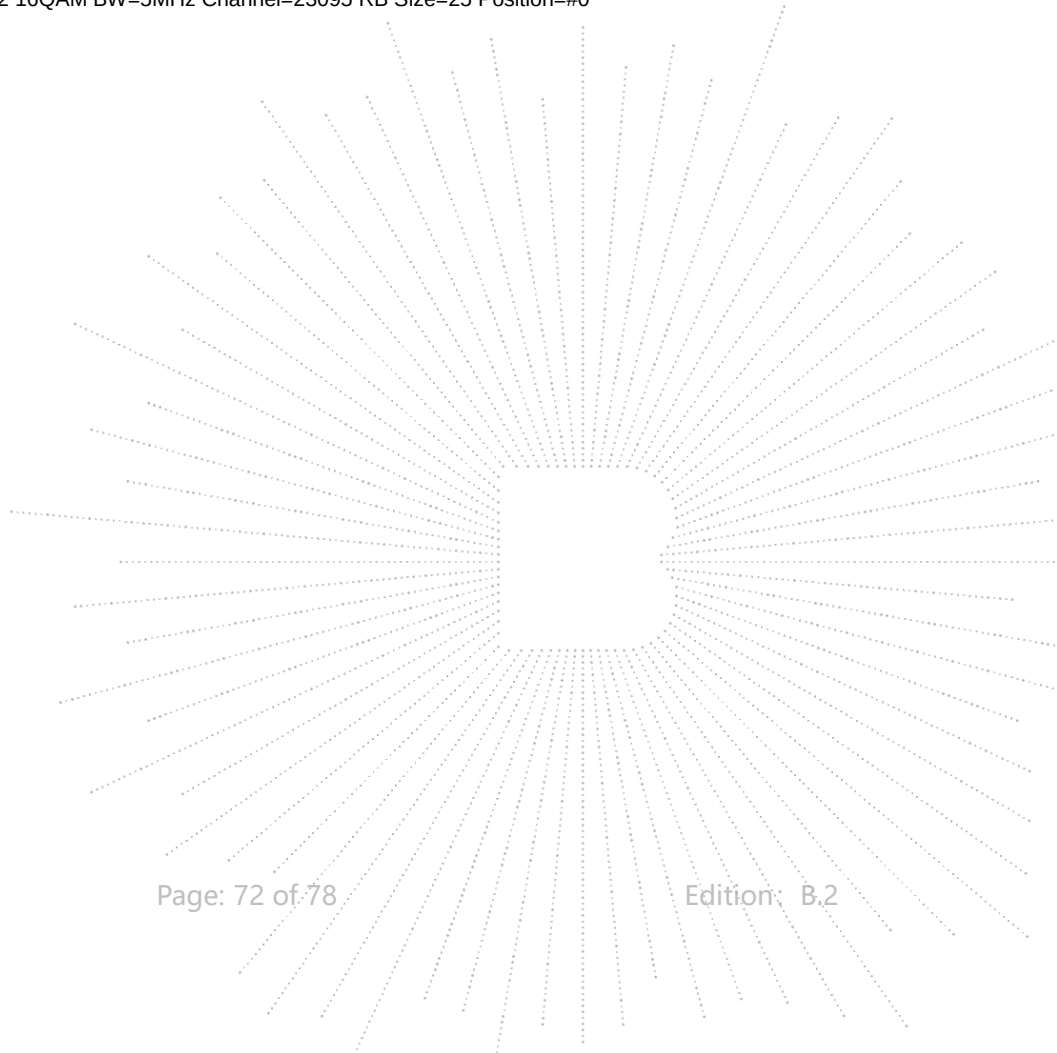
Band12 16QAM BW=5MHz Channel=23035 RB Size=25 Position=#0

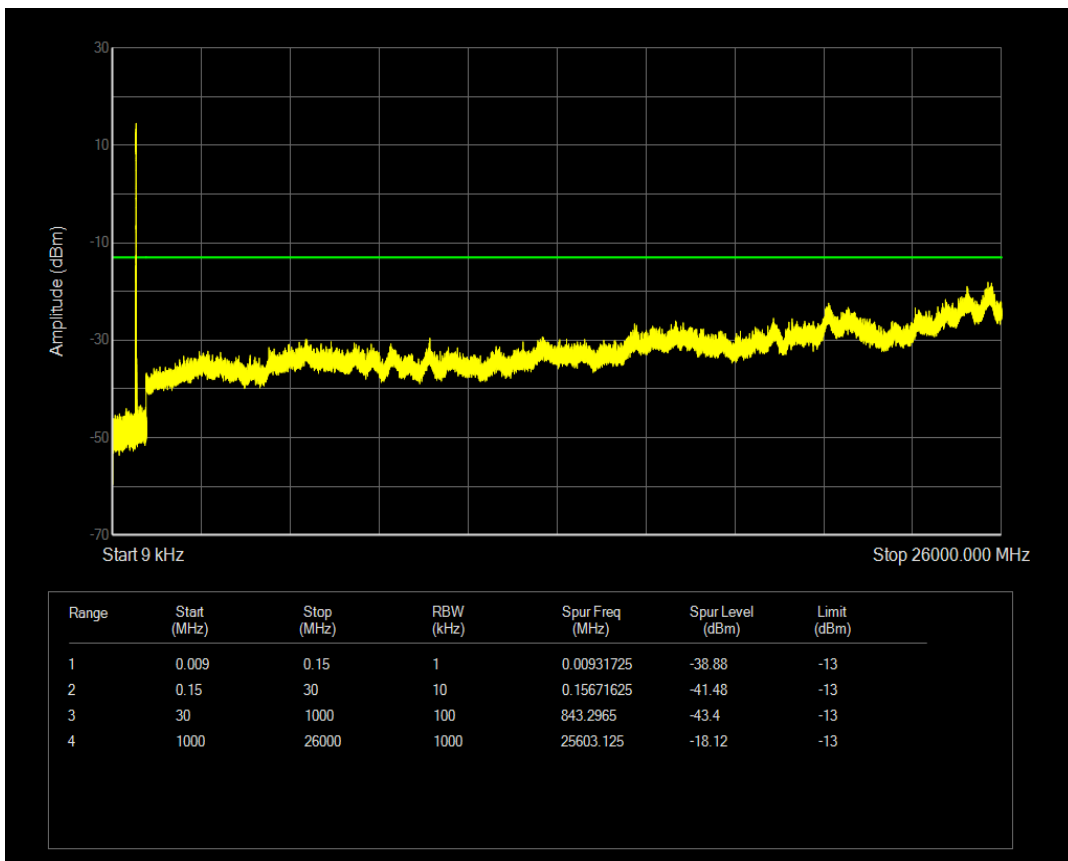


Band12 QPSK BW=5MHz Channel=23095 RB Size=25 Position=#0

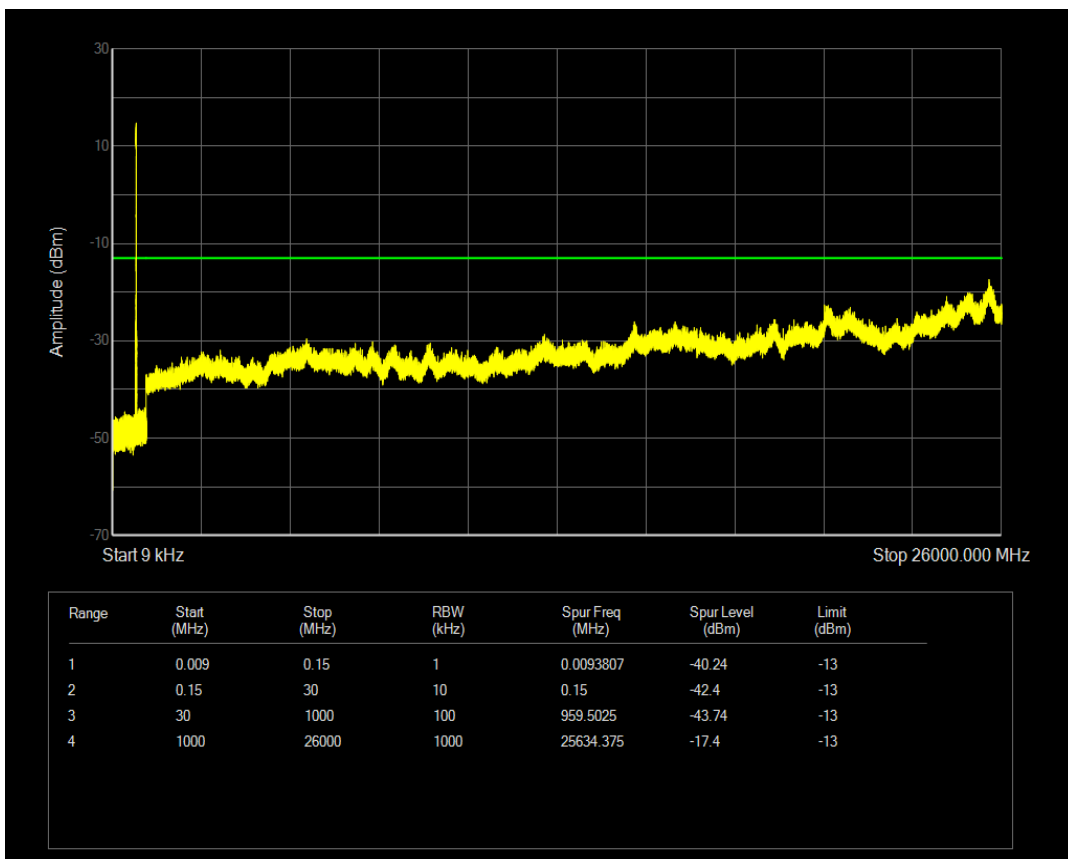


Band12 16QAM BW=5MHz Channel=23095 RB Size=25 Position=#0

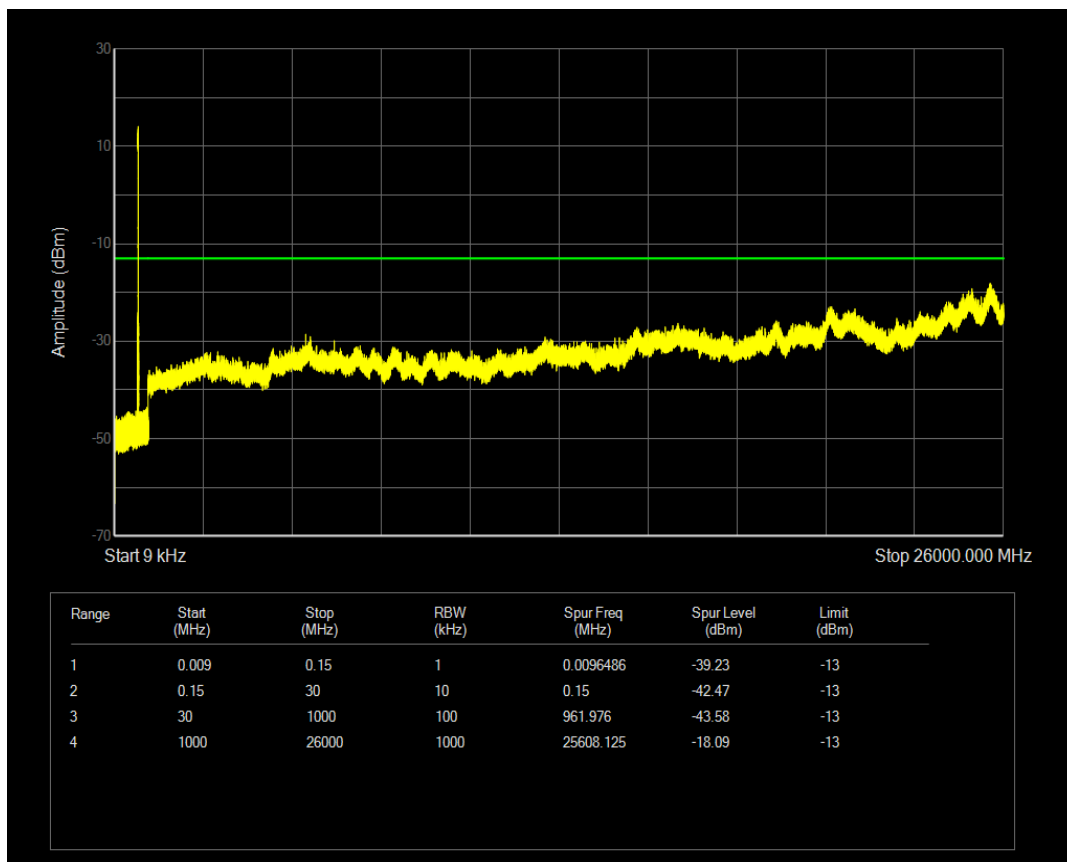




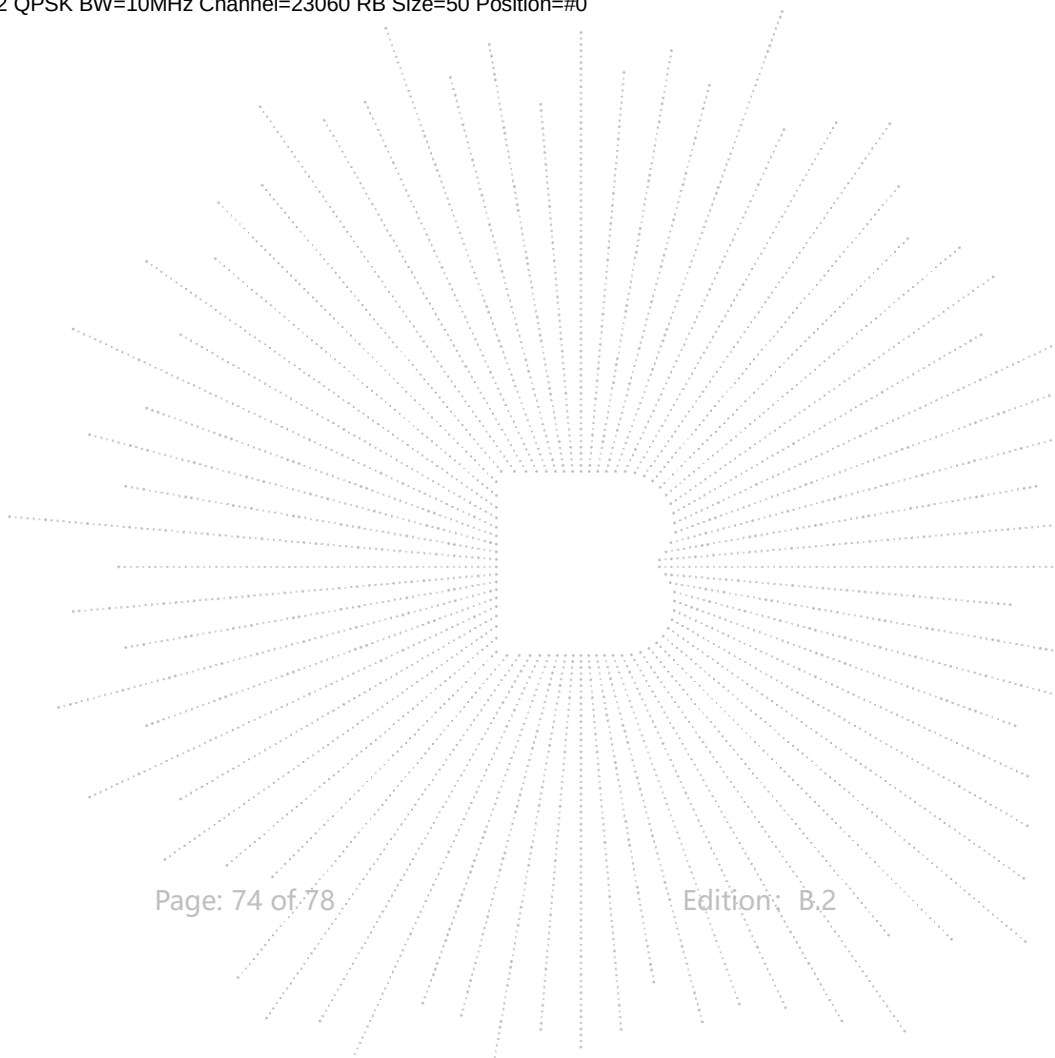
Band12 QPSK BW=5MHz Channel=23155 RB Size=25 Position=#0

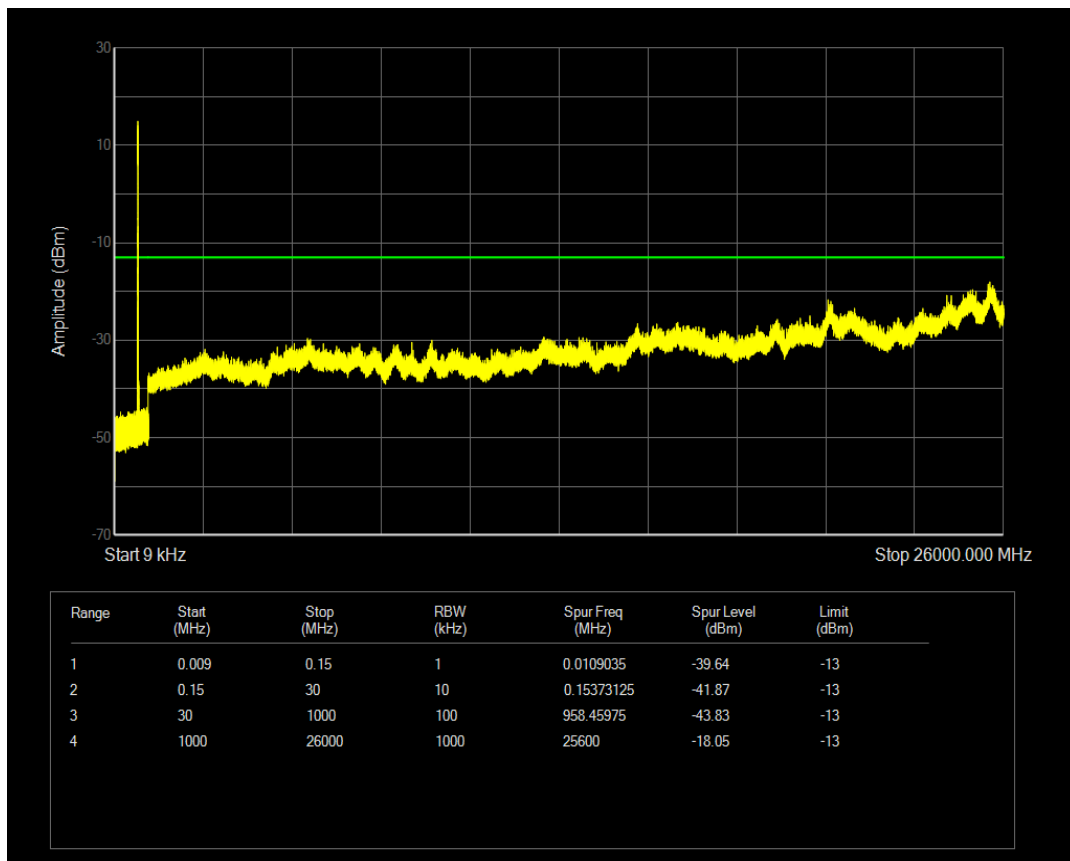


Band12 16QAM BW=5MHz Channel=23155 RB Size=25 Position=#0

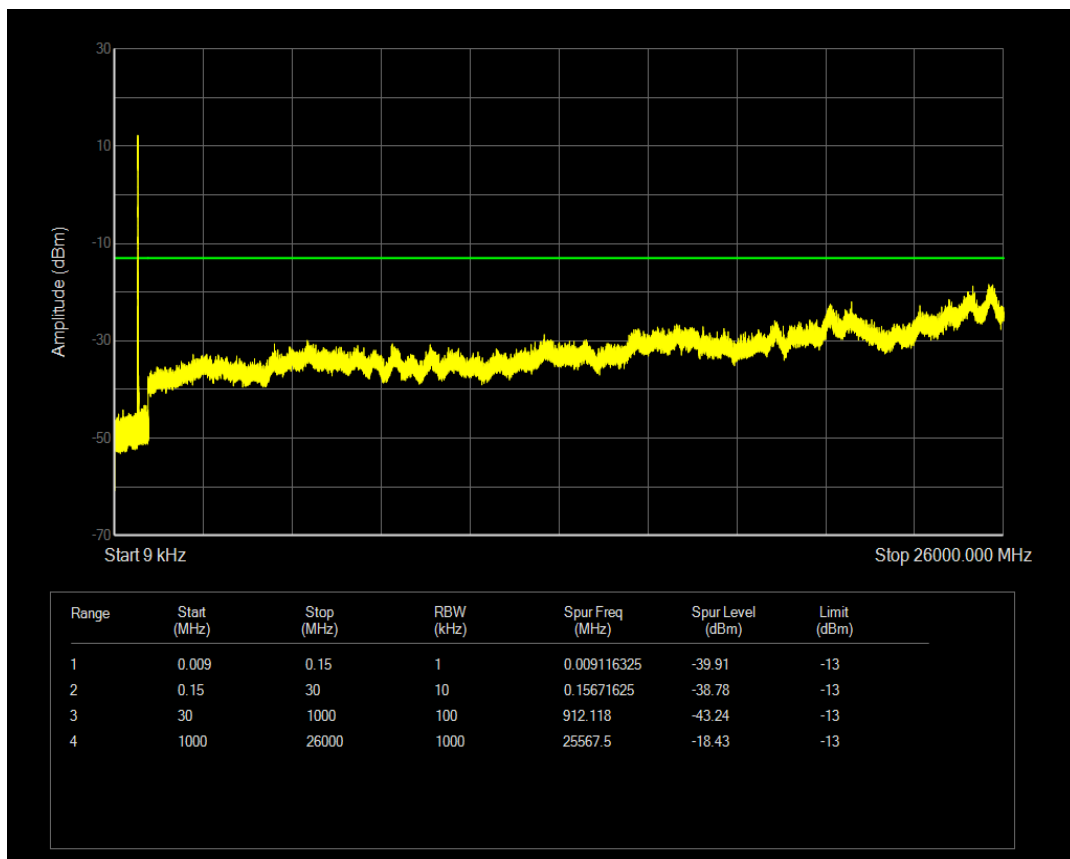


Band12 QPSK BW=10MHz Channel=23060 RB Size=50 Position=#0

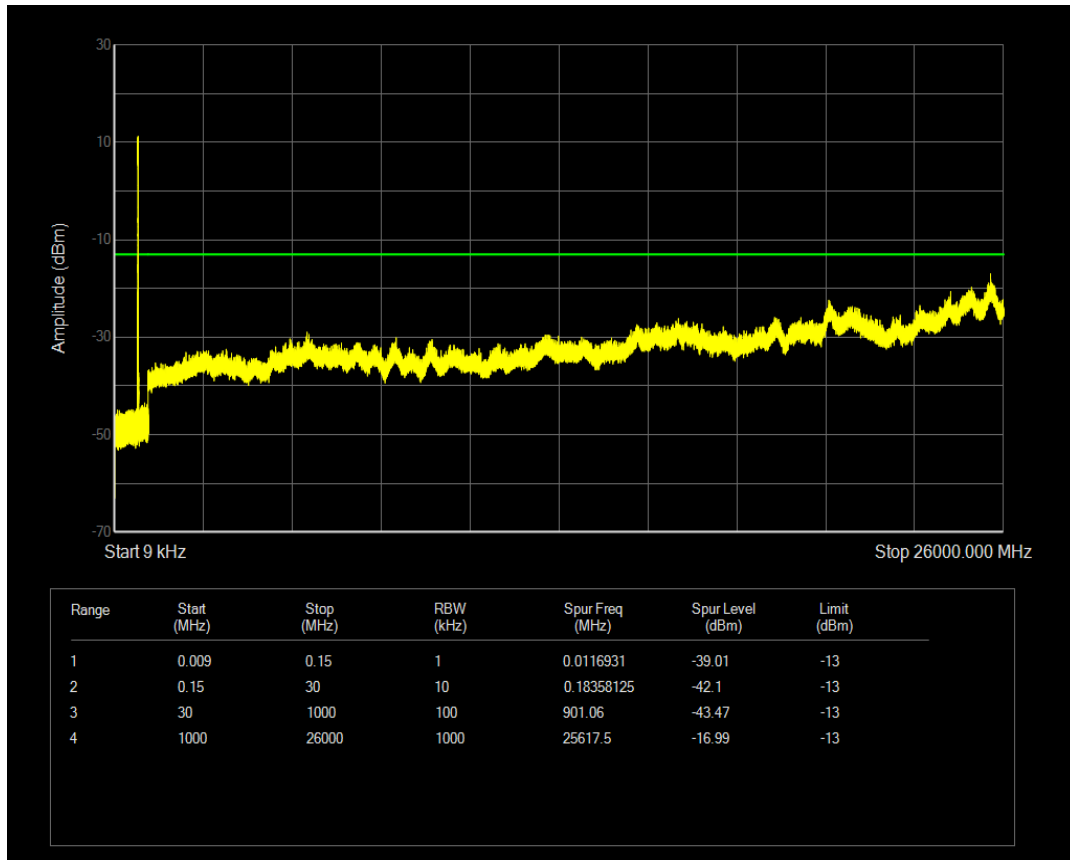




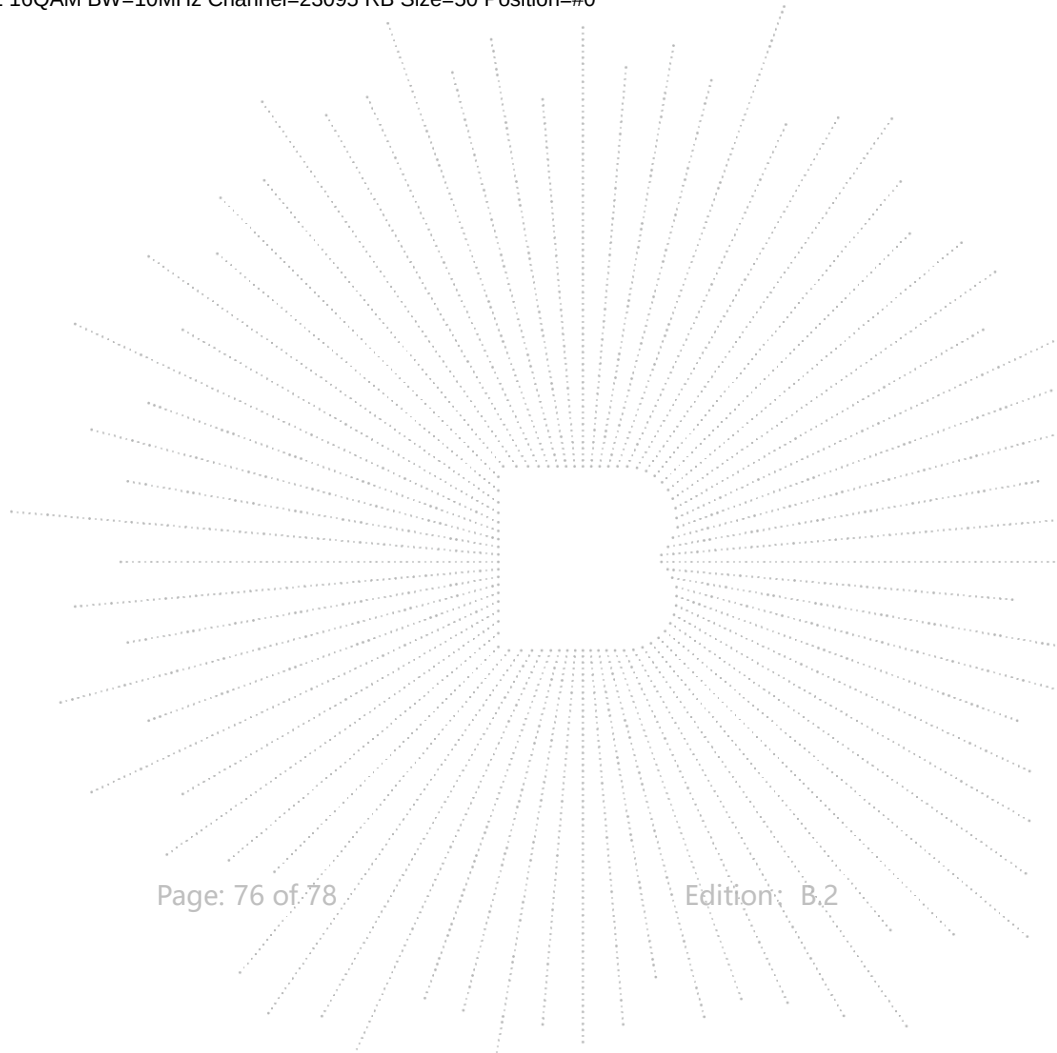
Band12 16QAM BW=10MHz Channel=23060 RB Size=50 Position=#0

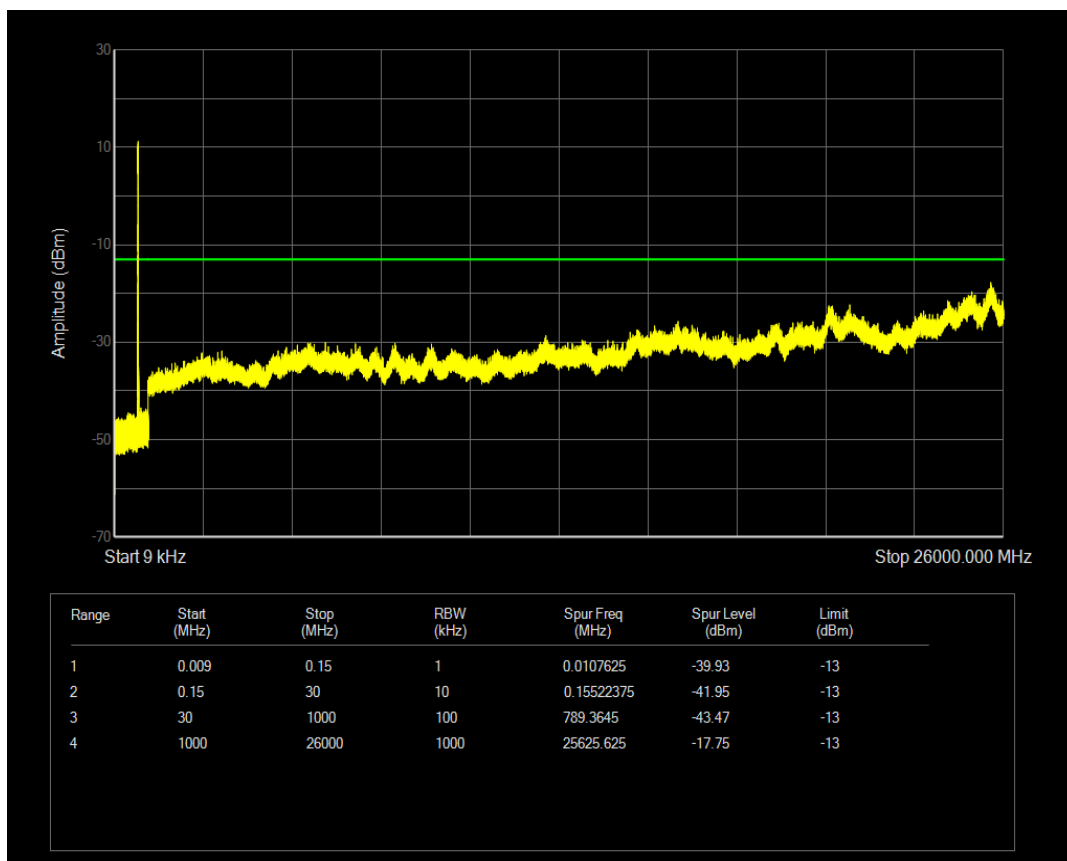


Band12 QPSK BW=10MHz Channel=23095 RB Size=50 Position=#0

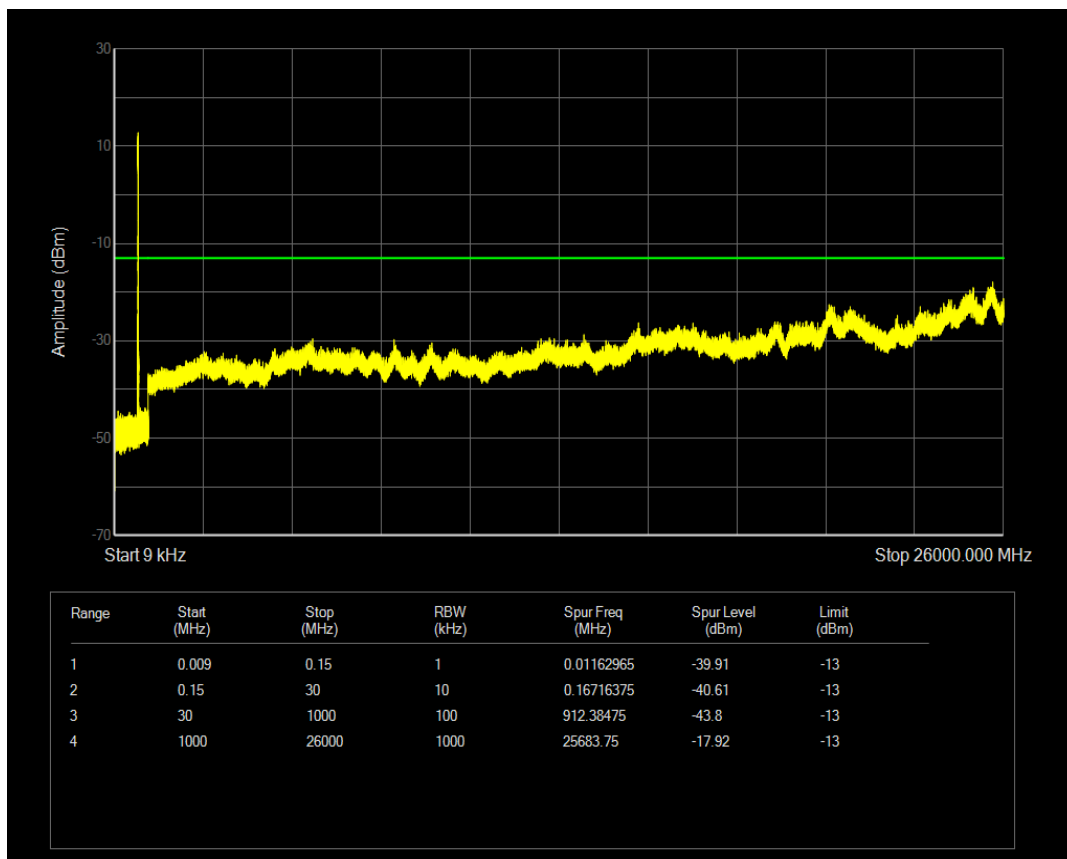


Band12 16QAM BW=10MHz Channel=23095 RB Size=50 Position=#0



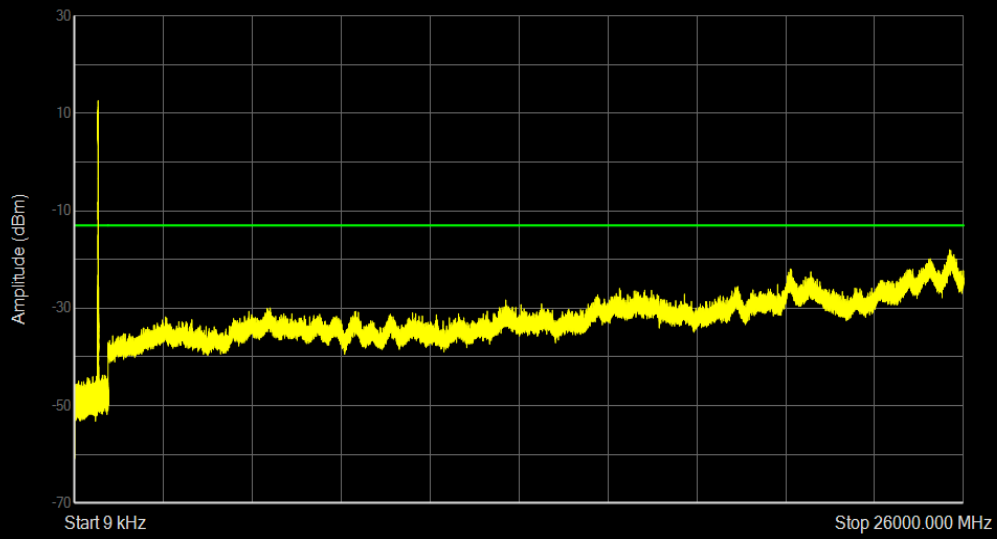


Band12 QPSK BW=10MHz Channel=23130 RB Size=50 Position=#0





Band12 16QAM BW=10MHz Channel=23130 RB Size=50 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.00934545	-39.44	-13
2	0.15	30	10	0.1664175	-40.48	-13
3	30	1000	100	892.7665	-43.77	-13
4	1000	26000	1000	25589.375	-18.01	-13

