

Appendix for Band 12

Report No.: BCTC2310372691-2E

Applicant: Cube Tracker LLC

Product Name: CUBE GPS PRO

Model/Type
reference: CUBE GPS PRO

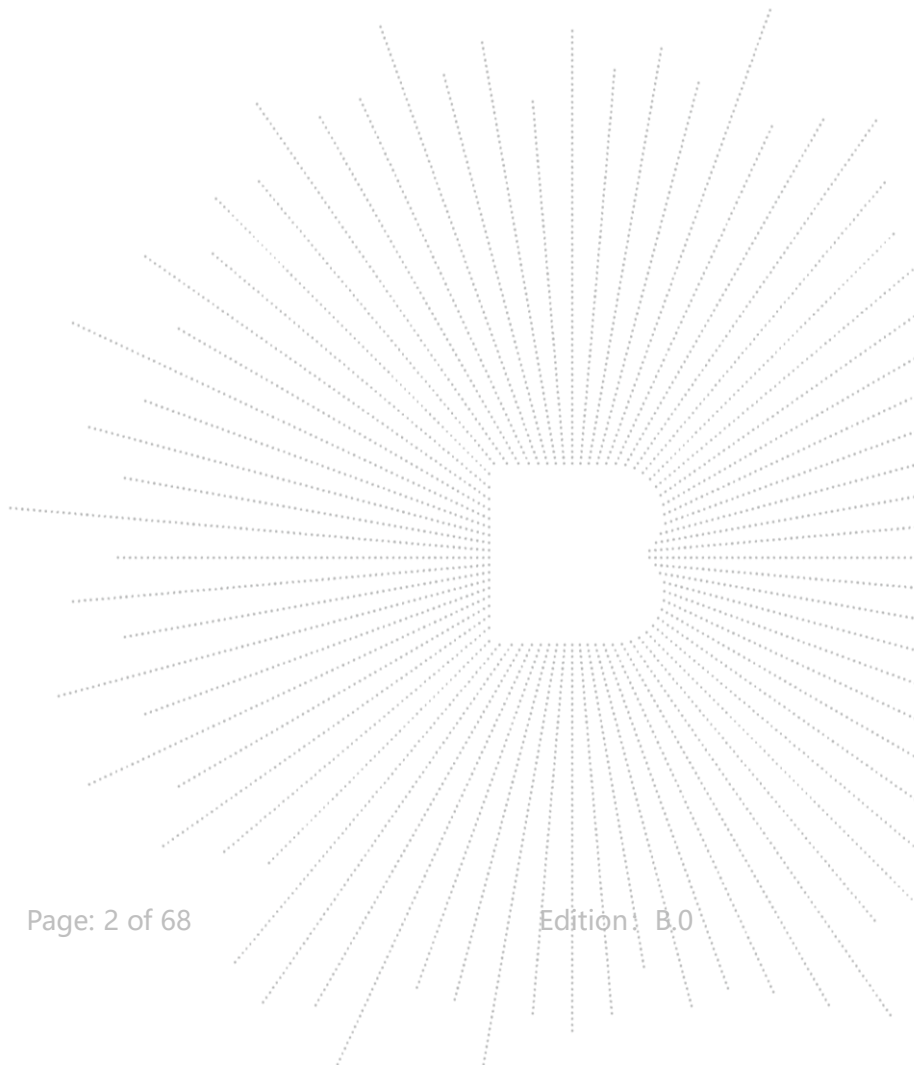
Tested Date: 2023-10-25 to 2023-11-15

Issued Date: 2023-11-17

Shenzhen BCTC Testing Co., Ltd.

Contents

Appendix 1. Conducted output power	3
Appendix 2. Frequency stability.....	7
Appendix 3. Peak-to-Average Ratio	21
Appendix 4. Occupied bandwidth	34
Appendix 5. Band edge	47
Appendix 6. Out-of-band emissions	56



Appendix 1. Conducted output power

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Verdict
Band12	1.4	23017	1	#0	QPSK	23.23	PASS
Band12	1.4	23017	1	#Mid	QPSK	23.36	PASS
Band12	1.4	23017	1	#Max	QPSK	23.29	PASS
Band12	1.4	23017	3	#0	QPSK	23.35	PASS
Band12	1.4	23017	3	#Mid	QPSK	23.40	PASS
Band12	1.4	23017	3	#Max	QPSK	23.39	PASS
Band12	1.4	23017	6	#0	QPSK	22.48	PASS
Band12	1.4	23017	1	#0	16QAM	22.19	PASS
Band12	1.4	23017	1	#Mid	16QAM	22.40	PASS
Band12	1.4	23017	1	#Max	16QAM	22.22	PASS
Band12	1.4	23017	3	#0	16QAM	22.40	PASS
Band12	1.4	23017	3	#Mid	16QAM	22.46	PASS
Band12	1.4	23017	3	#Max	16QAM	22.37	PASS
Band12	1.4	23017	6	#0	16QAM	21.38	PASS
Band12	1.4	23095	1	#0	QPSK	23.30	PASS
Band12	1.4	23095	1	#Mid	QPSK	23.49	PASS
Band12	1.4	23095	1	#Max	QPSK	23.44	PASS
Band12	1.4	23095	3	#0	QPSK	23.43	PASS
Band12	1.4	23095	3	#Mid	QPSK	23.38	PASS
Band12	1.4	23095	3	#Max	QPSK	23.36	PASS
Band12	1.4	23095	6	#0	QPSK	22.44	PASS
Band12	1.4	23095	1	#0	16QAM	22.35	PASS
Band12	1.4	23095	1	#Mid	16QAM	22.60	PASS
Band12	1.4	23095	1	#Max	16QAM	22.31	PASS
Band12	1.4	23095	3	#0	16QAM	22.49	PASS
Band12	1.4	23095	3	#Mid	16QAM	22.51	PASS
Band12	1.4	23095	3	#Max	16QAM	22.46	PASS
Band12	1.4	23095	6	#0	16QAM	21.50	PASS
Band12	1.4	23173	1	#0	QPSK	23.36	PASS
Band12	1.4	23173	1	#Mid	QPSK	23.33	PASS
Band12	1.4	23173	1	#Max	QPSK	23.38	PASS
Band12	1.4	23173	3	#0	QPSK	23.25	PASS
Band12	1.4	23173	3	#Mid	QPSK	23.29	PASS
Band12	1.4	23173	3	#Max	QPSK	23.28	PASS
Band12	1.4	23173	6	#0	QPSK	22.38	PASS
Band12	1.4	23173	1	#0	16QAM	22.33	PASS
Band12	1.4	23173	1	#Mid	16QAM	22.48	PASS
Band12	1.4	23173	1	#Max	16QAM	22.29	PASS
Band12	1.4	23173	3	#0	16QAM	22.35	PASS
Band12	1.4	23173	3	#Mid	16QAM	22.45	PASS

Band12	1.4	23173	3	#Max	16QAM	22.36	PASS
Band12	1.4	23173	6	#0	16QAM	21.36	PASS
Band12	3	23025	1	#0	QPSK	23.45	PASS
Band12	3	23025	1	#Mid	QPSK	23.70	PASS
Band12	3	23025	1	#Max	QPSK	23.27	PASS
Band12	3	23025	8	#0	QPSK	22.48	PASS
Band12	3	23025	8	#Mid	QPSK	22.44	PASS
Band12	3	23025	8	#Max	QPSK	22.36	PASS
Band12	3	23025	15	#0	QPSK	22.42	PASS
Band12	3	23025	1	#0	16QAM	22.44	PASS
Band12	3	23025	1	#Mid	16QAM	22.54	PASS
Band12	3	23025	1	#Max	16QAM	22.22	PASS
Band12	3	23025	8	#0	16QAM	21.40	PASS
Band12	3	23025	8	#Mid	16QAM	21.42	PASS
Band12	3	23025	8	#Max	16QAM	21.37	PASS
Band12	3	23025	15	#0	16QAM	21.39	PASS
Band12	3	23095	1	#0	QPSK	23.32	PASS
Band12	3	23095	1	#Mid	QPSK	23.51	PASS
Band12	3	23095	1	#Max	QPSK	23.35	PASS
Band12	3	23095	8	#0	QPSK	22.45	PASS
Band12	3	23095	8	#Mid	QPSK	22.44	PASS
Band12	3	23095	8	#Max	QPSK	22.42	PASS
Band12	3	23095	15	#0	QPSK	22.41	PASS
Band12	3	23095	1	#0	16QAM	22.13	PASS
Band12	3	23095	1	#Mid	16QAM	22.59	PASS
Band12	3	23095	1	#Max	16QAM	22.18	PASS
Band12	3	23095	8	#0	16QAM	21.49	PASS
Band12	3	23095	8	#Mid	16QAM	21.55	PASS
Band12	3	23095	8	#Max	16QAM	21.52	PASS
Band12	3	23095	15	#0	16QAM	21.53	PASS
Band12	3	23165	1	#0	QPSK	23.37	PASS
Band12	3	23165	1	#Mid	QPSK	23.48	PASS
Band12	3	23165	1	#Max	QPSK	23.45	PASS
Band12	3	23165	8	#0	QPSK	22.44	PASS
Band12	3	23165	8	#Mid	QPSK	22.42	PASS
Band12	3	23165	8	#Max	QPSK	22.40	PASS
Band12	3	23165	15	#0	QPSK	22.39	PASS
Band12	3	23165	1	#0	16QAM	22.44	PASS
Band12	3	23165	1	#Mid	16QAM	22.45	PASS
Band12	3	23165	1	#Max	16QAM	22.38	PASS
Band12	3	23165	8	#0	16QAM	21.39	PASS
Band12	3	23165	8	#Mid	16QAM	21.41	PASS
Band12	3	23165	8	#Max	16QAM	21.41	PASS
Band12	3	23165	15	#0	16QAM	21.38	PASS

Band12	5	23035	1	#0	QPSK	23.22	PASS
Band12	5	23035	1	#Mid	QPSK	23.56	PASS
Band12	5	23035	1	#Max	QPSK	23.25	PASS
Band12	5	23035	12	#0	QPSK	22.44	PASS
Band12	5	23035	12	#Mid	QPSK	22.40	PASS
Band12	5	23035	12	#Max	QPSK	22.34	PASS
Band12	5	23035	25	#0	QPSK	22.30	PASS
Band12	5	23035	1	#0	16QAM	22.16	PASS
Band12	5	23035	1	#Mid	16QAM	22.28	PASS
Band12	5	23035	1	#Max	16QAM	22.20	PASS
Band12	5	23035	12	#0	16QAM	21.50	PASS
Band12	5	23035	12	#Mid	16QAM	21.48	PASS
Band12	5	23035	12	#Max	16QAM	21.29	PASS
Band12	5	23035	25	#0	16QAM	21.35	PASS
Band12	5	23095	1	#0	QPSK	23.37	PASS
Band12	5	23095	1	#Mid	QPSK	23.48	PASS
Band12	5	23095	1	#Max	QPSK	23.39	PASS
Band12	5	23095	12	#0	QPSK	22.48	PASS
Band12	5	23095	12	#Mid	QPSK	22.51	PASS
Band12	5	23095	12	#Max	QPSK	22.50	PASS
Band12	5	23095	25	#0	QPSK	22.48	PASS
Band12	5	23095	1	#0	16QAM	22.15	PASS
Band12	5	23095	1	#Mid	16QAM	22.53	PASS
Band12	5	23095	1	#Max	16QAM	22.04	PASS
Band12	5	23095	12	#0	16QAM	21.35	PASS
Band12	5	23095	12	#Mid	16QAM	21.34	PASS
Band12	5	23095	12	#Max	16QAM	21.36	PASS
Band12	5	23095	25	#0	16QAM	21.44	PASS
Band12	5	23155	1	#0	QPSK	23.30	PASS
Band12	5	23155	1	#Mid	QPSK	23.27	PASS
Band12	5	23155	1	#Max	QPSK	23.25	PASS
Band12	5	23155	12	#0	QPSK	22.31	PASS
Band12	5	23155	12	#Mid	QPSK	22.26	PASS
Band12	5	23155	12	#Max	QPSK	22.26	PASS
Band12	5	23155	25	#0	QPSK	22.30	PASS
Band12	5	23155	1	#0	16QAM	22.07	PASS
Band12	5	23155	1	#Mid	16QAM	22.29	PASS
Band12	5	23155	1	#Max	16QAM	22.08	PASS
Band12	5	23155	12	#0	16QAM	21.10	PASS
Band12	5	23155	12	#Mid	16QAM	21.05	PASS
Band12	5	23155	12	#Max	16QAM	21.01	PASS
Band12	5	23155	25	#0	16QAM	21.24	PASS
Band12	10	23060	1	#0	QPSK	23.47	PASS
Band12	10	23060	1	#Mid	QPSK	23.37	PASS

Band12	10	23060	1	#Max	QPSK	23.35	PASS
Band12	10	23060	25	#0	QPSK	22.27	PASS
Band12	10	23060	25	#Mid	QPSK	22.29	PASS
Band12	10	23060	25	#Max	QPSK	22.45	PASS
Band12	10	23060	50	#0	QPSK	22.36	PASS
Band12	10	23060	1	#0	16QAM	22.30	PASS
Band12	10	23060	1	#Mid	16QAM	22.44	PASS
Band12	10	23060	1	#Max	16QAM	22.26	PASS
Band12	10	23060	25	#0	16QAM	21.29	PASS
Band12	10	23060	25	#Mid	16QAM	21.33	PASS
Band12	10	23060	25	#Max	16QAM	21.44	PASS
Band12	10	23060	50	#0	16QAM	21.36	PASS
Band12	10	23095	1	#0	QPSK	23.13	PASS
Band12	10	23095	1	#Mid	QPSK	23.31	PASS
Band12	10	23095	1	#Max	QPSK	23.22	PASS
Band12	10	23095	25	#0	QPSK	22.28	PASS
Band12	10	23095	25	#Mid	QPSK	22.36	PASS
Band12	10	23095	25	#Max	QPSK	22.43	PASS
Band12	10	23095	50	#0	QPSK	22.36	PASS
Band12	10	23095	1	#0	16QAM	22.16	PASS
Band12	10	23095	1	#Mid	16QAM	22.38	PASS
Band12	10	23095	1	#Max	16QAM	22.16	PASS
Band12	10	23095	25	#0	16QAM	21.34	PASS
Band12	10	23095	25	#Mid	16QAM	21.41	PASS
Band12	10	23095	25	#Max	16QAM	21.41	PASS
Band12	10	23095	50	#0	16QAM	21.42	PASS
Band12	10	23130	1	#0	QPSK	23.41	PASS
Band12	10	23130	1	#Mid	QPSK	23.37	PASS
Band12	10	23130	1	#Max	QPSK	23.23	PASS
Band12	10	23130	25	#0	QPSK	22.43	PASS
Band12	10	23130	25	#Mid	QPSK	22.44	PASS
Band12	10	23130	25	#Max	QPSK	22.34	PASS
Band12	10	23130	50	#0	QPSK	22.41	PASS
Band12	10	23130	1	#0	16QAM	22.20	PASS
Band12	10	23130	1	#Mid	16QAM	22.39	PASS
Band12	10	23130	1	#Max	16QAM	22.26	PASS
Band12	10	23130	25	#0	16QAM	21.50	PASS
Band12	10	23130	25	#Mid	16QAM	21.41	PASS
Band12	10	23130	25	#Max	16QAM	21.31	PASS
Band12	10	23130	50	#0	16QAM	21.38	PASS

Appendix 2. Frequency stability

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Voltage (Vdc)	Temperature (C)	Result (Hz)	Result (ppm)	Low Limit (ppm)	high Limit (ppm)	Verdict
Band 12	1.4	23017	6	#0	QPSK	LV	NT	-1.30	-0.02	-2.5	2.5	PASS
Band 12	1.4	23017	6	#0	QPSK	NV	NT	-1.36	-0.02	-2.5	2.5	PASS
Band 12	1.4	23017	6	#0	QPSK	HV	NT	-1.19	-0.02	-2.5	2.5	PASS
Band 12	1.4	23017	6	#0	16QAM	LV	NT	-0.27	0.00	-2.5	2.5	PASS
Band 12	1.4	23017	6	#0	16QAM	NV	NT	-0.97	-0.01	-2.5	2.5	PASS
Band 12	1.4	23017	6	#0	16QAM	HV	NT	-0.87	-0.01	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	QPSK	LV	NT	-1.00	-0.01	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	QPSK	NV	NT	-1.33	-0.02	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	QPSK	HV	NT	-0.44	-0.01	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	16QAM	LV	NT	-1.12	-0.02	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	16QAM	NV	NT	-0.62	-0.01	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	16QAM	HV	NT	-0.60	-0.01	-2.5	2.5	PASS
Band 12	1.4	23173	6	#0	QPSK	LV	NT	-0.76	-0.01	-2.5	2.5	PASS
Band 12	1.4	23173	6	#0	QPSK	NV	NT	-1.42	-0.02	-2.5	2.5	PASS
Band 12	1.4	23173	6	#0	QPSK	HV	NT	-0.73	-0.01	-2.5	2.5	PASS
Band 12	1.4	23173	6	#0	16QAM	LV	NT	-0.41	-0.01	-2.5	2.5	PASS
Band 12	1.4	23173	6	#0	16QAM	NV	NT	-0.79	-0.01	-2.5	2.5	PASS
Band 12	1.4	23173	6	#0	16QAM	HV	NT	-0.62	-0.01	-2.5	2.5	PASS

Band 12	3	23025	15	#0	QPSK	LV	NT	0.03	0.00 0	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	QPSK	NV	NT	-0.2 3	0.00 0	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	QPSK	HV	NT	-1.0 2	-0.0 01	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	16QAM	LV	NT	0.24	0.00 0	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	16QAM	NV	NT	-0.4 4	-0.0 01	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	16QAM	HV	NT	0.23	0.00 0	-2.5	2.5	PAS S
Band 12	3	23095	15	#0	QPSK	LV	NT	-1.3 9	-0.0 02	-2.5	2.5	PAS S
Band 12	3	23095	15	#0	QPSK	NV	NT	-1.0 3	-0.0 01	-2.5	2.5	PAS S
Band 12	3	23095	15	#0	QPSK	HV	NT	-0.7 3	-0.0 01	-2.5	2.5	PAS S
Band 12	3	23095	15	#0	16QAM	LV	NT	-1.2 3	-0.0 02	-2.5	2.5	PAS S
Band 12	3	23095	15	#0	16QAM	NV	NT	-0.5 7	-0.0 01	-2.5	2.5	PAS S
Band 12	3	23095	15	#0	16QAM	HV	NT	-1.6 9	-0.0 02	-2.5	2.5	PAS S
Band 12	3	23165	15	#0	QPSK	LV	NT	-0.8 2	-0.0 01	-2.5	2.5	PAS S
Band 12	3	23165	15	#0	QPSK	NV	NT	-0.2 7	0.00 0	-2.5	2.5	PAS S
Band 12	3	23165	15	#0	QPSK	HV	NT	-0.4 9	-0.0 01	-2.5	2.5	PAS S
Band 12	3	23165	15	#0	16QAM	LV	NT	-0.6 4	-0.0 01	-2.5	2.5	PAS S
Band 12	3	23165	15	#0	16QAM	NV	NT	-0.7 7	-0.0 01	-2.5	2.5	PAS S
Band 12	3	23165	15	#0	16QAM	HV	NT	0.01	0.00 0	-2.5	2.5	PAS S
Band 12	5	23035	25	#0	QPSK	LV	NT	-2.2 9	-0.0 03	-2.5	2.5	PAS S
Band 12	5	23035	25	#0	QPSK	NV	NT	-1.6 3	-0.0 02	-2.5	2.5	PAS S
Band 12	5	23035	25	#0	QPSK	HV	NT	-1.1 4	-0.0 02	-2.5	2.5	PAS S
Band 12	5	23035	25	#0	16QAM	LV	NT	-0.4 3	-0.0 01	-2.5	2.5	PAS S

Band 12	5	23035	25	#0	16QAM	NV	NT	-1.2 9	-0.0 02	-2.5	2.5	PAS S
Band 12	5	23035	25	#0	16QAM	HV	NT	-0.9 9	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	QPSK	LV	NT	-1.2 0	-0.0 02	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	QPSK	NV	NT	-1.3 0	-0.0 02	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	QPSK	HV	NT	-1.3 6	-0.0 02	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	16QAM	LV	NT	-1.0 9	-0.0 02	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	16QAM	NV	NT	-1.4 2	-0.0 02	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	16QAM	HV	NT	-1.4 7	-0.0 02	-2.5	2.5	PAS S
Band 12	5	23155	25	#0	QPSK	LV	NT	-1.6 6	-0.0 02	-2.5	2.5	PAS S
Band 12	5	23155	25	#0	QPSK	NV	NT	-1.8 3	-0.0 03	-2.5	2.5	PAS S
Band 12	5	23155	25	#0	QPSK	HV	NT	-0.9 9	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23155	25	#0	16QAM	LV	NT	-1.0 0	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23155	25	#0	16QAM	NV	NT	-1.0 4	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23155	25	#0	16QAM	HV	NT	-1.7 5	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	QPSK	LV	NT	0.16	0.00 0	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	QPSK	NV	NT	-0.0 6	0.00 0	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	QPSK	HV	NT	-1.0 2	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	16QAM	LV	NT	-0.7 3	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	16QAM	NV	NT	-1.0 0	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	16QAM	HV	NT	-0.4 9	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	QPSK	LV	NT	-1.3 4	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	QPSK	NV	NT	-0.6 3	-0.0 01	-2.5	2.5	PAS S

Band 12	10	23095	50	#0	QPSK	HV	NT	-1.0 0	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	16QAM	LV	NT	-0.3 0	0.00 0	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	16QAM	NV	NT	-1.4 7	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	16QAM	HV	NT	-1.1 7	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	QPSK	LV	NT	-2.4 0	-0.0 03	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	QPSK	NV	NT	-2.4 0	-0.0 03	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	QPSK	HV	NT	-2.4 7	-0.0 03	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	16QAM	LV	NT	-2.6 0	-0.0 04	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	16QAM	NV	NT	-1.7 5	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	16QAM	HV	NT	-1.3 2	-0.0 02	-2.5	2.5	PAS S

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Voltage (Vdc)	Temperature (C)	Result (Hz)	Result (ppm)	Low Limit (ppm)	high Limit (ppm)	Verdict
Band 12	1.4	23017	6	#0	QPSK	NV	-30	-0.4 7	-0.0 01	-2.5	2.5	PAS S
Band 12	1.4	23017	6	#0	QPSK	NV	-20	-0.2 9	0.00 0	-2.5	2.5	PAS S
Band 12	1.4	23017	6	#0	QPSK	NV	-10	-0.8 2	-0.0 01	-2.5	2.5	PAS S
Band 12	1.4	23017	6	#0	QPSK	NV	0	-0.7 7	-0.0 01	-2.5	2.5	PAS S
Band 12	1.4	23017	6	#0	QPSK	NV	10	-0.8 4	-0.0 01	-2.5	2.5	PAS S
Band 12	1.4	23017	6	#0	QPSK	NV	20	-0.9 7	-0.0 01	-2.5	2.5	PAS S
Band 12	1.4	23017	6	#0	QPSK	NV	30	-1.0 3	-0.0 01	-2.5	2.5	PAS S
Band 12	1.4	23017	6	#0	QPSK	NV	40	-0.8 0	-0.0 01	-2.5	2.5	PAS S
Band 12	1.4	23017	6	#0	QPSK	NV	50	-1.5 9	-0.0 02	-2.5	2.5	PAS S

Band 12	1.4	23017	6	#0	16QAM	NV	-30	-0.89	-0.001	-2.5	2.5	PASS
Band 12	1.4	23017	6	#0	16QAM	NV	-20	-1.20	-0.002	-2.5	2.5	PASS
Band 12	1.4	23017	6	#0	16QAM	NV	-10	-0.79	-0.001	-2.5	2.5	PASS
Band 12	1.4	23017	6	#0	16QAM	NV	0	-2.15	-0.003	-2.5	2.5	PASS
Band 12	1.4	23017	6	#0	16QAM	NV	10	-0.83	-0.001	-2.5	2.5	PASS
Band 12	1.4	23017	6	#0	16QAM	NV	20	-1.30	-0.002	-2.5	2.5	PASS
Band 12	1.4	23017	6	#0	16QAM	NV	30	-0.77	-0.001	-2.5	2.5	PASS
Band 12	1.4	23017	6	#0	16QAM	NV	40	-0.86	-0.001	-2.5	2.5	PASS
Band 12	1.4	23017	6	#0	16QAM	NV	50	-0.66	-0.001	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	QPSK	NV	-30	-0.57	-0.001	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	QPSK	NV	-20	-0.66	-0.001	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	QPSK	NV	-10	-1.39	-0.002	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	QPSK	NV	0	-0.93	-0.001	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	QPSK	NV	10	-0.79	-0.001	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	QPSK	NV	20	-1.14	-0.002	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	QPSK	NV	30	-0.44	-0.001	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	QPSK	NV	40	0.01	0.000	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	QPSK	NV	50	-0.77	-0.001	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	16QAM	NV	-30	-1.37	-0.002	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	16QAM	NV	-20	-0.93	-0.001	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	16QAM	NV	-10	-0.53	-0.001	-2.5	2.5	PASS
Band 12	1.4	23095	6	#0	16QAM	NV	0	-1.87	-0.003	-2.5	2.5	PASS

Band 12	1.4	23095	6	#0	16QAM	NV	10	-0.6 9	-0.0 01	-2.5	2.5	PAS S
Band 12	1.4	23095	6	#0	16QAM	NV	20	-1.4 9	-0.0 02	-2.5	2.5	PAS S
Band 12	1.4	23095	6	#0	16QAM	NV	30	-1.1 4	-0.0 02	-2.5	2.5	PAS S
Band 12	1.4	23095	6	#0	16QAM	NV	40	-1.5 9	-0.0 02	-2.5	2.5	PAS S
Band 12	1.4	23095	6	#0	16QAM	NV	50	-0.1 6	0.00 0	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	QPSK	NV	-30	-0.6 9	-0.0 01	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	QPSK	NV	-20	-0.5 3	-0.0 01	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	QPSK	NV	-10	-0.4 1	-0.0 01	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	QPSK	NV	0	-1.2 3	-0.0 02	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	QPSK	NV	10	-1.5 9	-0.0 02	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	QPSK	NV	20	-0.5 6	-0.0 01	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	QPSK	NV	30	-0.5 6	-0.0 01	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	QPSK	NV	40	-1.1 6	-0.0 02	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	QPSK	NV	50	-1.5 7	-0.0 02	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	16QAM	NV	-30	-1.4 6	-0.0 02	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	16QAM	NV	-20	-0.1 7	0.00 0	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	16QAM	NV	-10	-1.6 9	-0.0 02	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	16QAM	NV	0	-0.7 2	-0.0 01	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	16QAM	NV	10	-1.6 2	-0.0 02	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	16QAM	NV	20	-0.2 7	0.00 0	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	16QAM	NV	30	0.31	0.00 0	-2.5	2.5	PAS S
Band 12	1.4	23173	6	#0	16QAM	NV	40	-0.7 0	-0.0 01	-2.5	2.5	PAS S

Band 12	1.4	23173	6	#0	16QAM	NV	50	-1.5 6	-0.0 02	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	QPSK	NV	-30	-1.6 6	-0.0 02	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	QPSK	NV	-20	-2.1 9	-0.0 03	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	QPSK	NV	-10	-1.3 3	-0.0 02	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	QPSK	NV	0	-1.7 0	-0.0 02	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	QPSK	NV	10	-1.8 9	-0.0 03	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	QPSK	NV	20	-2.0 0	-0.0 03	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	QPSK	NV	30	-2.1 6	-0.0 03	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	QPSK	NV	40	-1.6 3	-0.0 02	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	QPSK	NV	50	-0.9 2	-0.0 01	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	16QAM	NV	-30	-2.3 9	-0.0 03	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	16QAM	NV	-20	-1.9 0	-0.0 03	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	16QAM	NV	-10	-1.9 3	-0.0 03	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	16QAM	NV	0	-2.0 2	-0.0 03	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	16QAM	NV	10	-2.5 9	-0.0 04	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	16QAM	NV	20	-2.1 7	-0.0 03	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	16QAM	NV	30	-1.8 5	-0.0 03	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	16QAM	NV	40	-2.1 0	-0.0 03	-2.5	2.5	PAS S
Band 12	3	23025	15	#0	16QAM	NV	50	-2.3 2	-0.0 03	-2.5	2.5	PAS S
Band 12	3	23095	15	#0	QPSK	NV	-30	-0.9 7	-0.0 01	-2.5	2.5	PAS S
Band 12	3	23095	15	#0	QPSK	NV	-20	-1.5 6	-0.0 02	-2.5	2.5	PAS S
Band 12	3	23095	15	#0	QPSK	NV	-10	-1.1 0	-0.0 02	-2.5	2.5	PAS S

Band 12	3	23095	15	#0	QPSK	NV	0	-1.46	-0.02	-2.5	2.5	PASS
Band 12	3	23095	15	#0	QPSK	NV	10	-0.14	0.00	-2.5	2.5	PASS
Band 12	3	23095	15	#0	QPSK	NV	20	-0.73	-0.01	-2.5	2.5	PASS
Band 12	3	23095	15	#0	QPSK	NV	30	-1.33	-0.02	-2.5	2.5	PASS
Band 12	3	23095	15	#0	QPSK	NV	40	-0.79	-0.01	-2.5	2.5	PASS
Band 12	3	23095	15	#0	QPSK	NV	50	-1.56	-0.02	-2.5	2.5	PASS
Band 12	3	23095	15	#0	16QAM	NV	-30	-1.19	-0.02	-2.5	2.5	PASS
Band 12	3	23095	15	#0	16QAM	NV	-20	-2.16	-0.03	-2.5	2.5	PASS
Band 12	3	23095	15	#0	16QAM	NV	-10	-1.62	-0.02	-2.5	2.5	PASS
Band 12	3	23095	15	#0	16QAM	NV	0	-1.16	-0.02	-2.5	2.5	PASS
Band 12	3	23095	15	#0	16QAM	NV	10	-1.33	-0.02	-2.5	2.5	PASS
Band 12	3	23095	15	#0	16QAM	NV	20	-0.76	-0.01	-2.5	2.5	PASS
Band 12	3	23095	15	#0	16QAM	NV	30	-0.30	0.00	-2.5	2.5	PASS
Band 12	3	23095	15	#0	16QAM	NV	40	-1.97	-0.03	-2.5	2.5	PASS
Band 12	3	23095	15	#0	16QAM	NV	50	-0.34	0.00	-2.5	2.5	PASS
Band 12	3	23165	15	#0	QPSK	NV	-30	-0.17	0.00	-2.5	2.5	PASS
Band 12	3	23165	15	#0	QPSK	NV	-20	-0.66	-0.01	-2.5	2.5	PASS
Band 12	3	23165	15	#0	QPSK	NV	-10	-0.67	-0.01	-2.5	2.5	PASS
Band 12	3	23165	15	#0	QPSK	NV	0	-0.04	0.00	-2.5	2.5	PASS
Band 12	3	23165	15	#0	QPSK	NV	10	-0.20	0.00	-2.5	2.5	PASS
Band 12	3	23165	15	#0	QPSK	NV	20	-1.20	-0.02	-2.5	2.5	PASS
Band 12	3	23165	15	#0	QPSK	NV	30	-0.23	0.00	-2.5	2.5	PASS

Band 12	3	23165	15	#0	QPSK	NV	40	-0.37	-0.001	-2.5	2.5	PASS
Band 12	3	23165	15	#0	QPSK	NV	50	-0.74	-0.001	-2.5	2.5	PASS
Band 12	3	23165	15	#0	16QAM	NV	-30	-0.04	0.000	-2.5	2.5	PASS
Band 12	3	23165	15	#0	16QAM	NV	-20	-0.13	0.000	-2.5	2.5	PASS
Band 12	3	23165	15	#0	16QAM	NV	-10	0.24	0.000	-2.5	2.5	PASS
Band 12	3	23165	15	#0	16QAM	NV	0	0.66	0.001	-2.5	2.5	PASS
Band 12	3	23165	15	#0	16QAM	NV	10	-2.13	-0.003	-2.5	2.5	PASS
Band 12	3	23165	15	#0	16QAM	NV	20	-1.60	-0.002	-2.5	2.5	PASS
Band 12	3	23165	15	#0	16QAM	NV	30	-0.97	-0.001	-2.5	2.5	PASS
Band 12	3	23165	15	#0	16QAM	NV	40	-0.14	0.000	-2.5	2.5	PASS
Band 12	3	23165	15	#0	16QAM	NV	50	-0.14	0.000	-2.5	2.5	PASS
Band 12	5	23035	25	#0	QPSK	NV	-30	-0.39	-0.001	-2.5	2.5	PASS
Band 12	5	23035	25	#0	QPSK	NV	-20	-1.10	-0.002	-2.5	2.5	PASS
Band 12	5	23035	25	#0	QPSK	NV	-10	-1.12	-0.002	-2.5	2.5	PASS
Band 12	5	23035	25	#0	QPSK	NV	0	-2.66	-0.004	-2.5	2.5	PASS
Band 12	5	23035	25	#0	QPSK	NV	10	-1.29	-0.002	-2.5	2.5	PASS
Band 12	5	23035	25	#0	QPSK	NV	20	-0.84	-0.001	-2.5	2.5	PASS
Band 12	5	23035	25	#0	QPSK	NV	30	-0.46	-0.001	-2.5	2.5	PASS
Band 12	5	23035	25	#0	QPSK	NV	40	-0.86	-0.001	-2.5	2.5	PASS
Band 12	5	23035	25	#0	QPSK	NV	50	-0.77	-0.001	-2.5	2.5	PASS
Band 12	5	23035	25	#0	16QAM	NV	-30	-1.56	-0.002	-2.5	2.5	PASS
Band 12	5	23035	25	#0	16QAM	NV	-20	-1.46	-0.002	-2.5	2.5	PASS

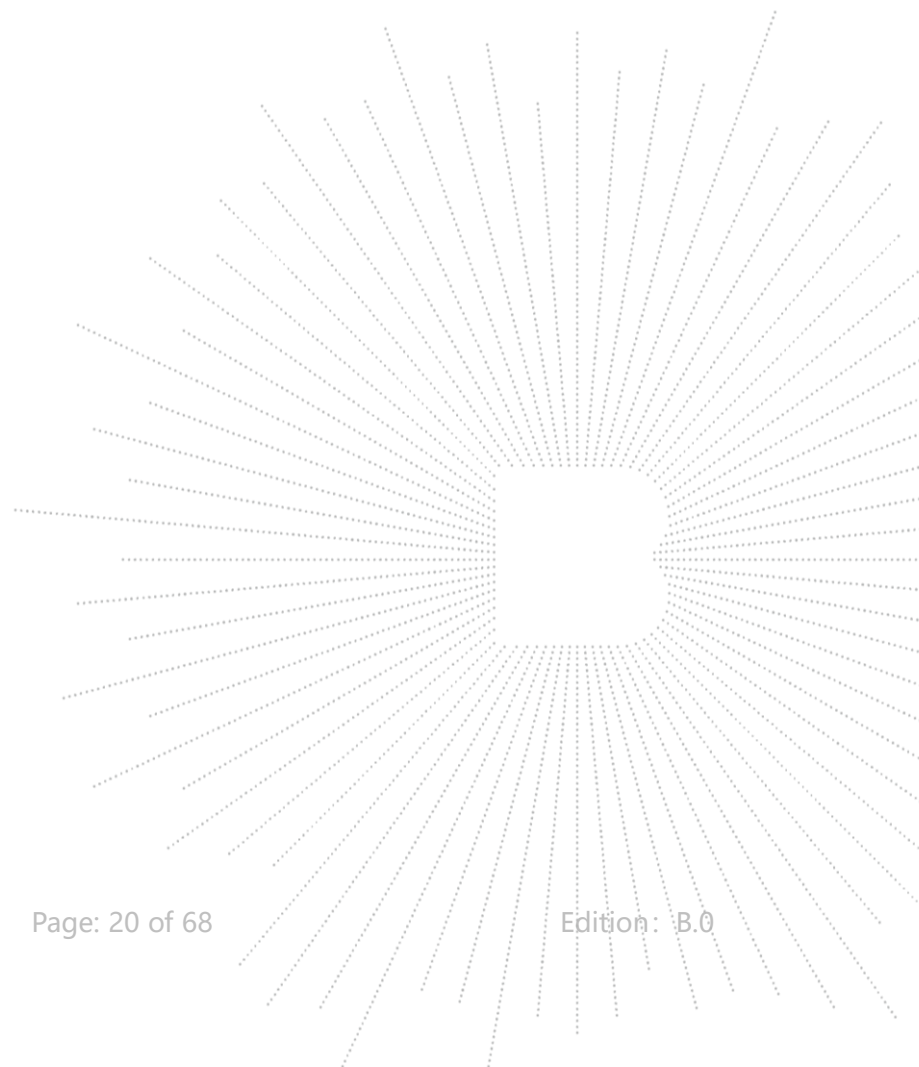
Band 12	5	23035	25	#0	16QAM	NV	-10	-0.8 3	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23035	25	#0	16QAM	NV	0	-1.1 4	-0.0 02	-2.5	2.5	PAS S
Band 12	5	23035	25	#0	16QAM	NV	10	-0.6 3	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23035	25	#0	16QAM	NV	20	-1.9 7	-0.0 03	-2.5	2.5	PAS S
Band 12	5	23035	25	#0	16QAM	NV	30	-0.4 1	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23035	25	#0	16QAM	NV	40	-1.4 4	-0.0 02	-2.5	2.5	PAS S
Band 12	5	23035	25	#0	16QAM	NV	50	-0.4 7	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	QPSK	NV	-30	-0.8 6	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	QPSK	NV	-20	-0.8 6	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	QPSK	NV	-10	-0.9 2	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	QPSK	NV	0	-0.5 4	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	QPSK	NV	10	-0.8 7	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	QPSK	NV	20	-1.0 2	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	QPSK	NV	30	-0.7 3	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	QPSK	NV	40	-1.1 0	-0.0 02	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	QPSK	NV	50	-1.3 7	-0.0 02	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	16QAM	NV	-30	-1.0 4	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	16QAM	NV	-20	-1.0 9	-0.0 02	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	16QAM	NV	-10	-0.7 7	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	16QAM	NV	0	-0.7 4	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	16QAM	NV	10	-0.6 2	-0.0 01	-2.5	2.5	PAS S
Band 12	5	23095	25	#0	16QAM	NV	20	-1.2 6	-0.0 02	-2.5	2.5	PAS S

Band 12	5	23095	25	#0	16QAM	NV	30	-0.07	0.000	-2.5	2.5	PASS
Band 12	5	23095	25	#0	16QAM	NV	40	-1.59	-0.002	-2.5	2.5	PASS
Band 12	5	23095	25	#0	16QAM	NV	50	-1.49	-0.002	-2.5	2.5	PASS
Band 12	5	23155	25	#0	QPSK	NV	-30	-2.42	-0.003	-2.5	2.5	PASS
Band 12	5	23155	25	#0	QPSK	NV	-20	-1.02	-0.001	-2.5	2.5	PASS
Band 12	5	23155	25	#0	QPSK	NV	-10	-0.33	0.000	-2.5	2.5	PASS
Band 12	5	23155	25	#0	QPSK	NV	0	-0.66	-0.001	-2.5	2.5	PASS
Band 12	5	23155	25	#0	QPSK	NV	10	-0.62	-0.001	-2.5	2.5	PASS
Band 12	5	23155	25	#0	QPSK	NV	20	-0.47	-0.001	-2.5	2.5	PASS
Band 12	5	23155	25	#0	QPSK	NV	30	-0.50	-0.001	-2.5	2.5	PASS
Band 12	5	23155	25	#0	QPSK	NV	40	-0.30	0.000	-2.5	2.5	PASS
Band 12	5	23155	25	#0	QPSK	NV	50	-1.23	-0.002	-2.5	2.5	PASS
Band 12	5	23155	25	#0	16QAM	NV	-30	-0.93	-0.001	-2.5	2.5	PASS
Band 12	5	23155	25	#0	16QAM	NV	-20	-1.14	-0.002	-2.5	2.5	PASS
Band 12	5	23155	25	#0	16QAM	NV	-10	-1.56	-0.002	-2.5	2.5	PASS
Band 12	5	23155	25	#0	16QAM	NV	0	-1.06	-0.001	-2.5	2.5	PASS
Band 12	5	23155	25	#0	16QAM	NV	10	-0.06	0.000	-2.5	2.5	PASS
Band 12	5	23155	25	#0	16QAM	NV	20	-1.89	-0.003	-2.5	2.5	PASS
Band 12	5	23155	25	#0	16QAM	NV	30	-0.93	-0.001	-2.5	2.5	PASS
Band 12	5	23155	25	#0	16QAM	NV	40	-0.97	-0.001	-2.5	2.5	PASS
Band 12	5	23155	25	#0	16QAM	NV	50	-2.12	-0.003	-2.5	2.5	PASS
Band 12	10	23060	50	#0	QPSK	NV	-30	-0.33	0.000	-2.5	2.5	PASS

Band 12	10	23060	50	#0	QPSK	NV	-20	1.42	0.00 2	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	QPSK	NV	-10	0.46	0.00 1	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	QPSK	NV	0	-0.2 4	0.00 0	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	QPSK	NV	10	-1.1 4	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	QPSK	NV	20	-0.5 7	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	QPSK	NV	30	0.04	0.00 0	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	QPSK	NV	40	-0.2 7	0.00 0	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	QPSK	NV	50	-1.2 2	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	16QAM	NV	-30	-0.7 9	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	16QAM	NV	-20	-0.2 4	0.00 0	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	16QAM	NV	-10	-0.2 3	0.00 0	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	16QAM	NV	0	-1.6 3	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	16QAM	NV	10	-0.7 0	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	16QAM	NV	20	-0.8 3	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	16QAM	NV	30	-0.7 7	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	16QAM	NV	40	-1.2 4	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23060	50	#0	16QAM	NV	50	-0.5 7	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	QPSK	NV	-30	-1.5 2	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	QPSK	NV	-20	-1.6 3	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	QPSK	NV	-10	-0.7 9	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	QPSK	NV	0	-0.6 3	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	QPSK	NV	10	-0.8 0	-0.0 01	-2.5	2.5	PAS S

Band 12	10	23095	50	#0	QPSK	NV	20	-0.3 3	0.00 0	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	QPSK	NV	30	-0.2 4	0.00 0	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	QPSK	NV	40	-1.1 0	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	QPSK	NV	50	-1.1 7	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	16QAM	NV	-30	-1.2 0	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	16QAM	NV	-20	-1.2 3	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	16QAM	NV	-10	-0.5 4	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	16QAM	NV	0	-1.0 9	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	16QAM	NV	10	-1.3 2	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	16QAM	NV	20	-1.4 2	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	16QAM	NV	30	-0.8 2	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	16QAM	NV	40	-1.2 0	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23095	50	#0	16QAM	NV	50	-0.4 9	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	QPSK	NV	-30	-0.8 0	-0.0 01	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	QPSK	NV	-20	-2.3 5	-0.0 03	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	QPSK	NV	-10	-1.3 6	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	QPSK	NV	0	-2.1 2	-0.0 03	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	QPSK	NV	10	-1.6 6	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	QPSK	NV	20	-1.9 5	-0.0 03	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	QPSK	NV	30	-2.1 9	-0.0 03	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	QPSK	NV	40	-1.8 3	-0.0 03	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	QPSK	NV	50	-2.2 3	-0.0 03	-2.5	2.5	PAS S

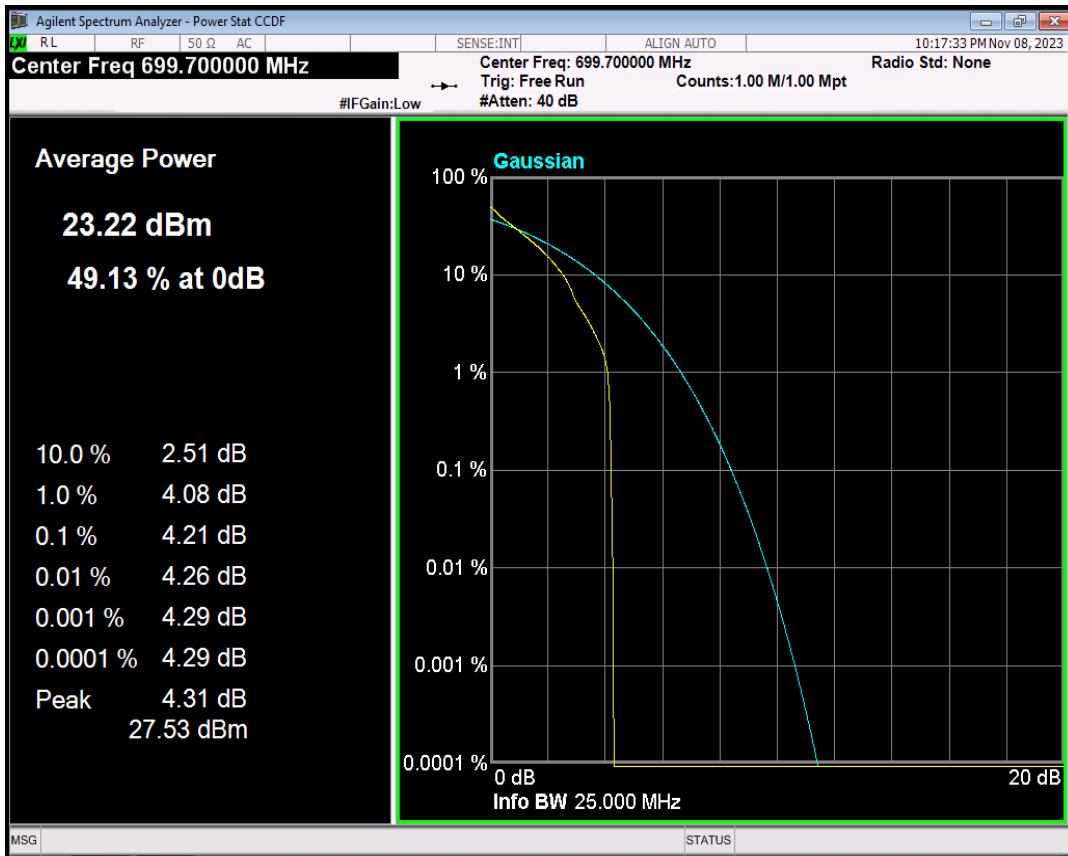
Band 12	10	23130	50	#0	16QAM	NV	-30	-2.4 2	-0.0 03	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	16QAM	NV	-20	-1.5 2	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	16QAM	NV	-10	-1.3 9	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	16QAM	NV	0	-1.6 6	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	16QAM	NV	10	-1.7 5	-0.0 02	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	16QAM	NV	20	0.00	0.00 0	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	16QAM	NV	30	0.00	0.00 0	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	16QAM	NV	40	0.00	0.00 0	-2.5	2.5	PAS S
Band 12	10	23130	50	#0	16QAM	NV	50	0.00	0.00 0	-2.5	2.5	PAS S



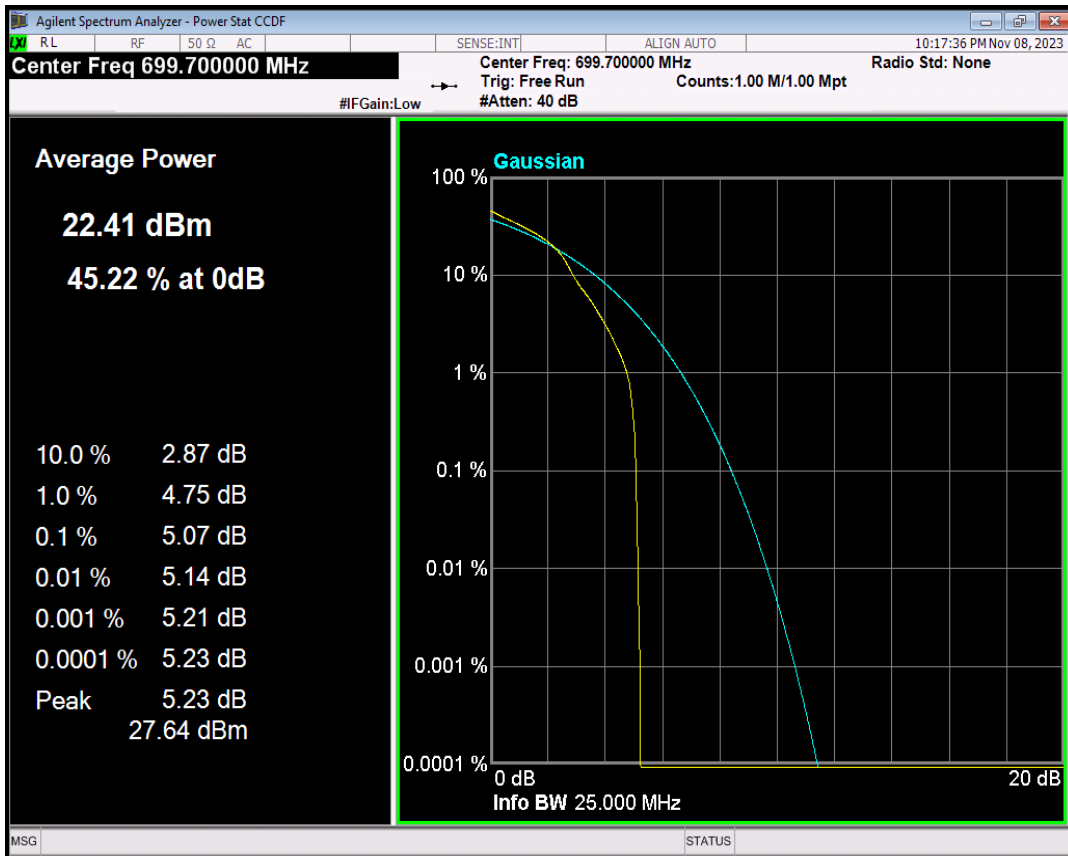
Appendix 3. Peak-to-Average Ratio

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Result (dB)	high Limit (dB)	Verdict
Band12	1.4	23017	1	#0	QPSK	4.21	13	PASS
Band12	1.4	23017	1	#0	16QAM	5.07	13	PASS
Band12	1.4	23095	1	#0	QPSK	4.37	13	PASS
Band12	1.4	23095	1	#0	16QAM	5.24	13	PASS
Band12	1.4	23173	1	#0	QPSK	4.33	13	PASS
Band12	1.4	23173	1	#0	16QAM	5.29	13	PASS
Band12	3	23025	1	#0	QPSK	4.25	13	PASS
Band12	3	23025	1	#0	16QAM	5.12	13	PASS
Band12	3	23095	1	#0	QPSK	4.40	13	PASS
Band12	3	23095	1	#0	16QAM	5.24	13	PASS
Band12	3	23165	1	#0	QPSK	4.41	13	PASS
Band12	3	23165	1	#0	16QAM	5.30	13	PASS
Band12	5	23035	1	#0	QPSK	4.19	13	PASS
Band12	5	23035	1	#0	16QAM	5.05	13	PASS
Band12	5	23095	1	#0	QPSK	4.36	13	PASS
Band12	5	23095	1	#0	16QAM	5.18	13	PASS
Band12	5	23155	1	#0	QPSK	4.34	13	PASS
Band12	5	23155	1	#0	16QAM	5.14	13	PASS
Band12	10	23060	1	#0	QPSK	4.21	13	PASS
Band12	10	23060	1	#0	16QAM	5.13	13	PASS
Band12	10	23095	1	#0	QPSK	4.26	13	PASS
Band12	10	23095	1	#0	16QAM	5.20	13	PASS
Band12	10	23130	1	#0	QPSK	4.33	13	PASS
Band12	10	23130	1	#0	16QAM	5.25	13	PASS

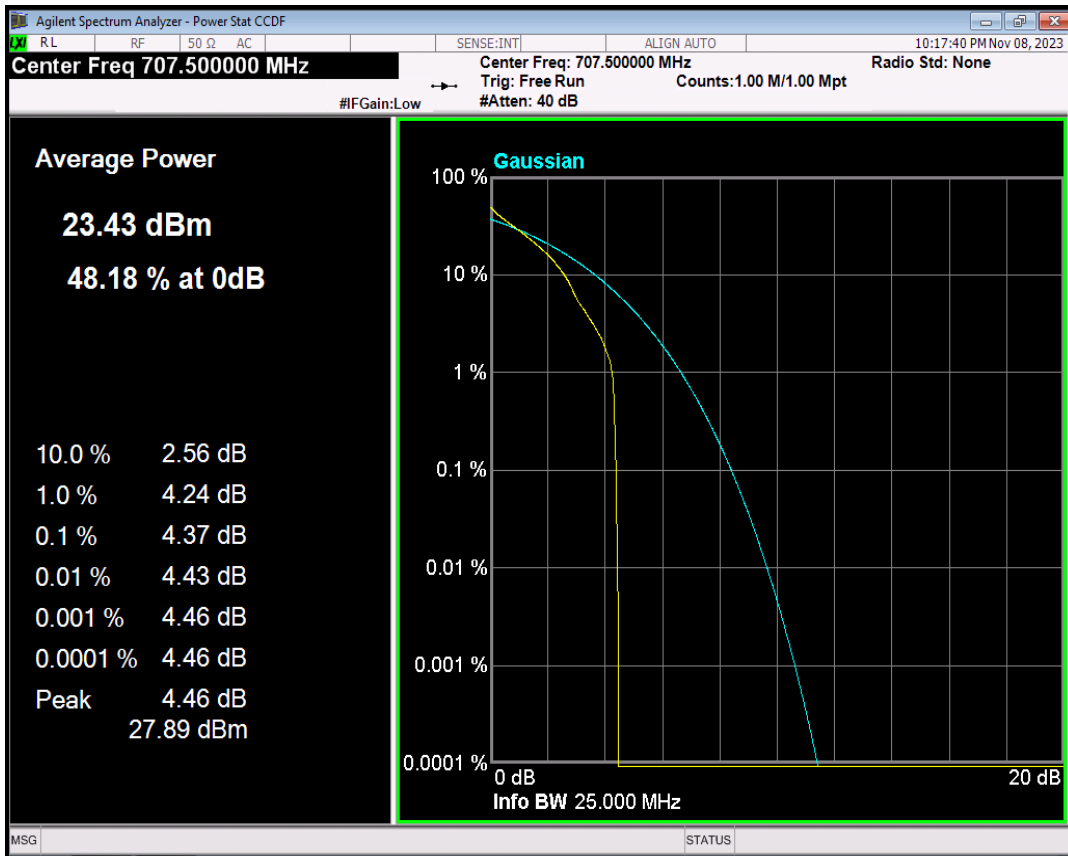
Band12 QPSK BW=1.4MHz Channel=23017 RB Size=1 Position=#0



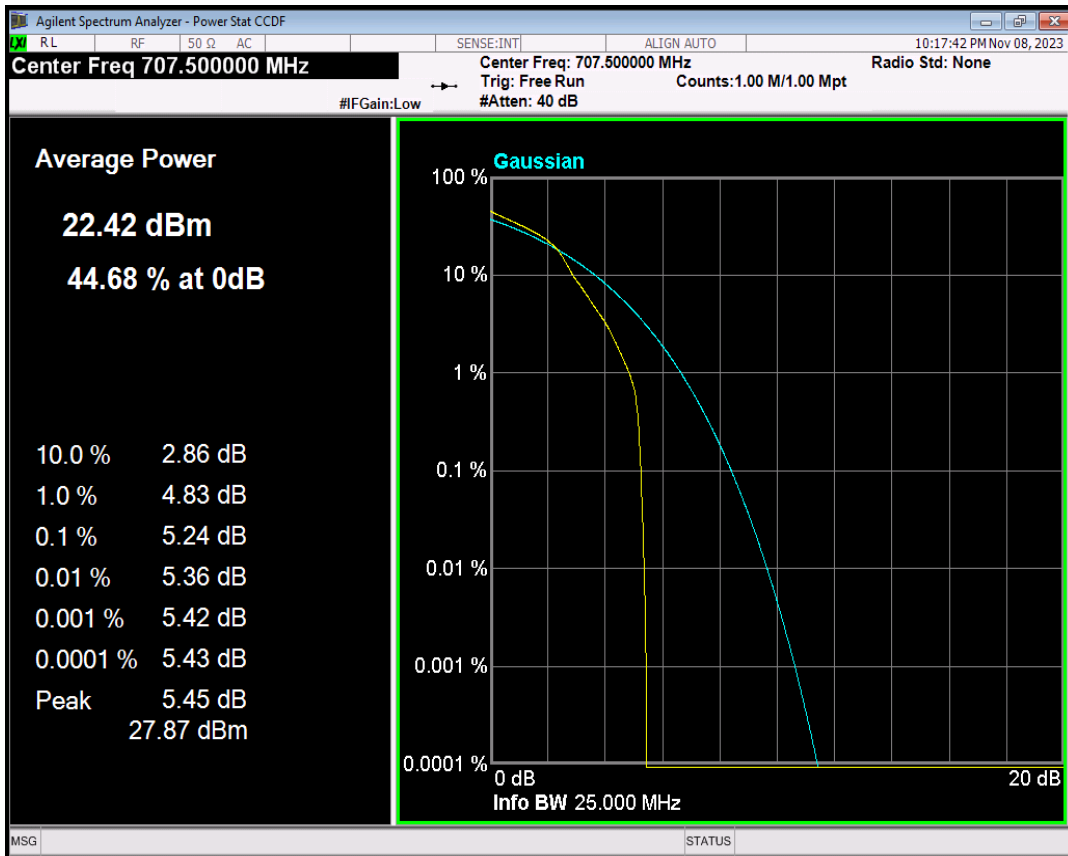
Band12 16QAM BW=1.4MHz Channel=23017 RB Size=1 Position=#0



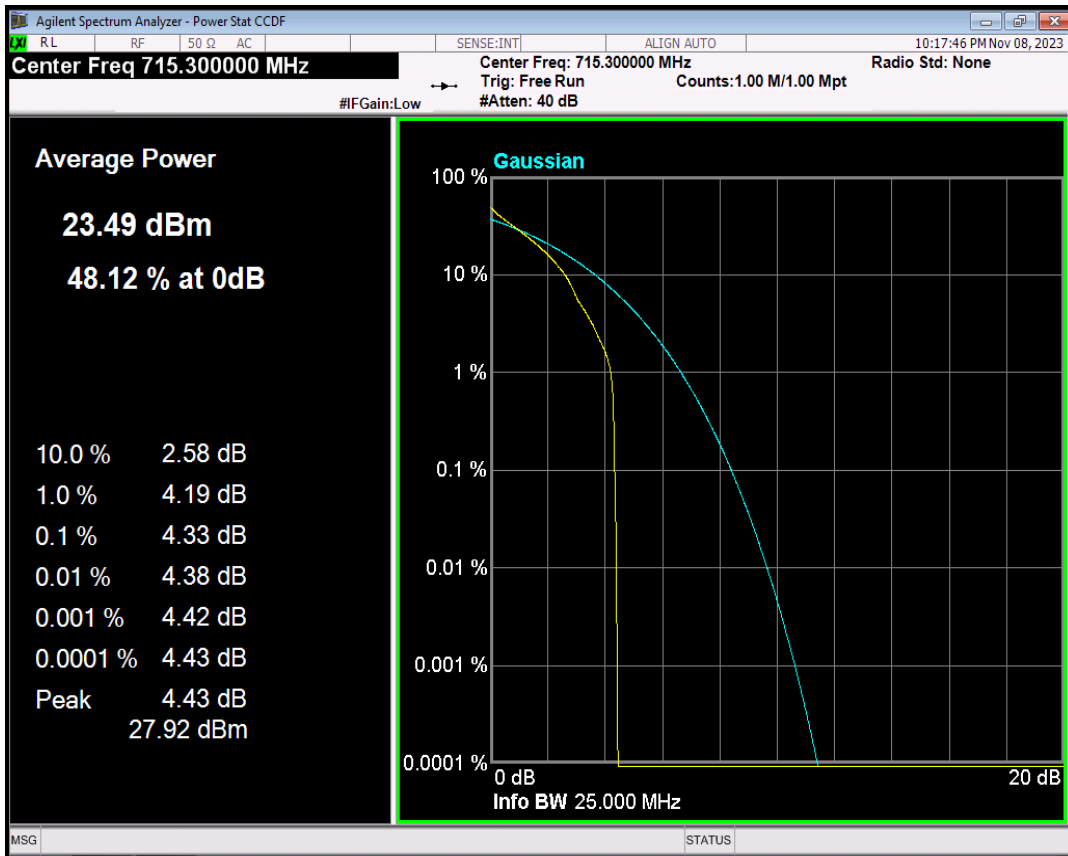
Band12 QPSK BW=1.4MHz Channel=23095 RB Size=1 Position=#0



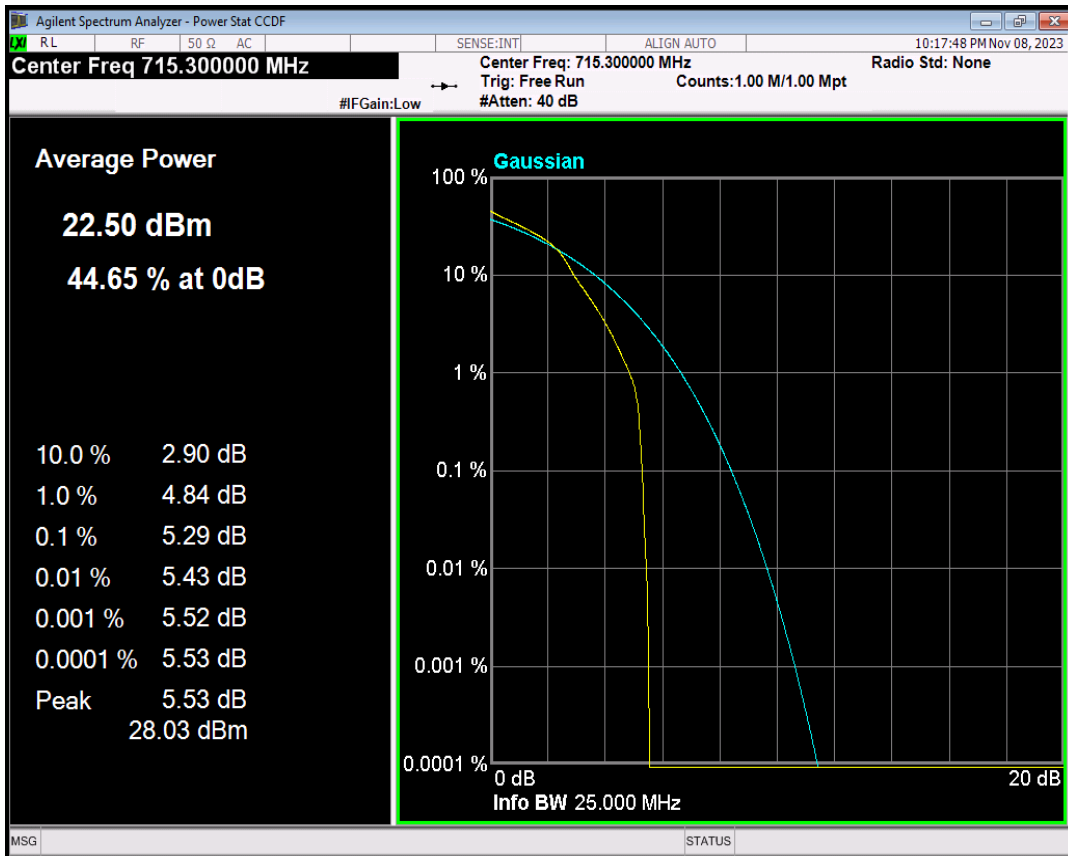
Band12 16QAM BW=1.4MHz Channel=23095 RB Size=1 Position=#0



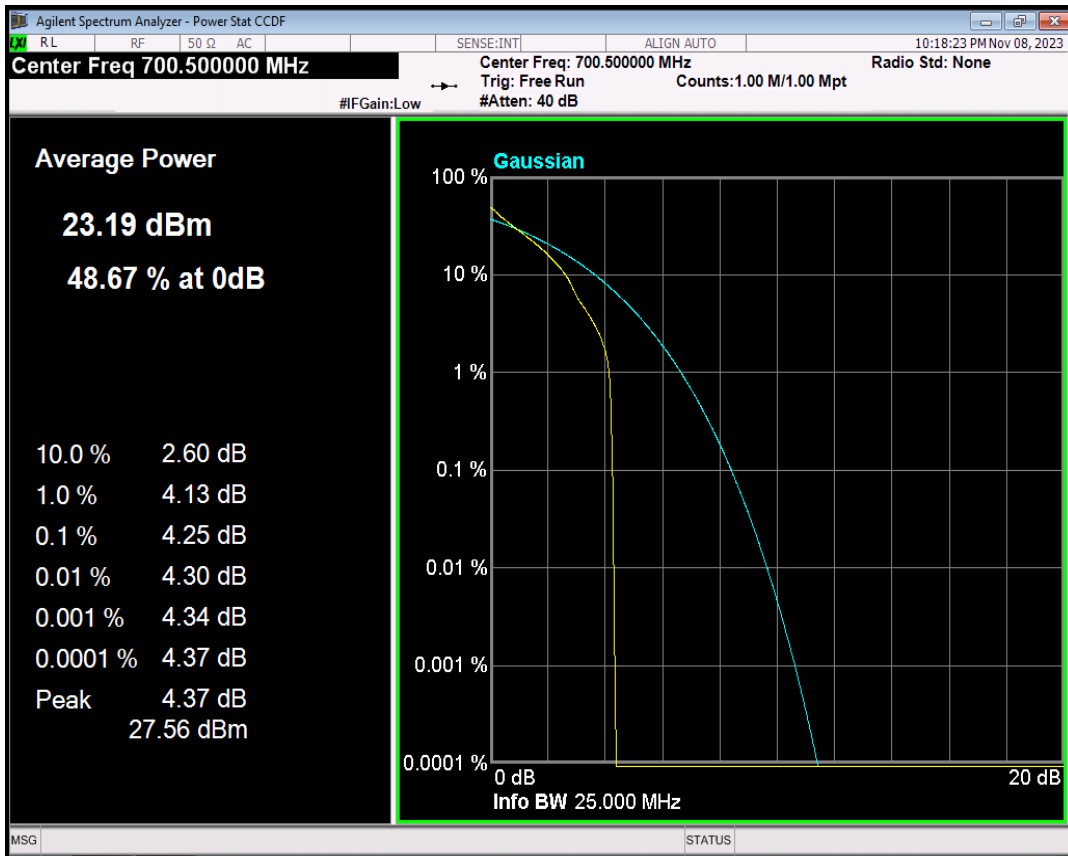
Band12 QPSK BW=1.4MHz Channel=23173 RB Size=1 Position=#0



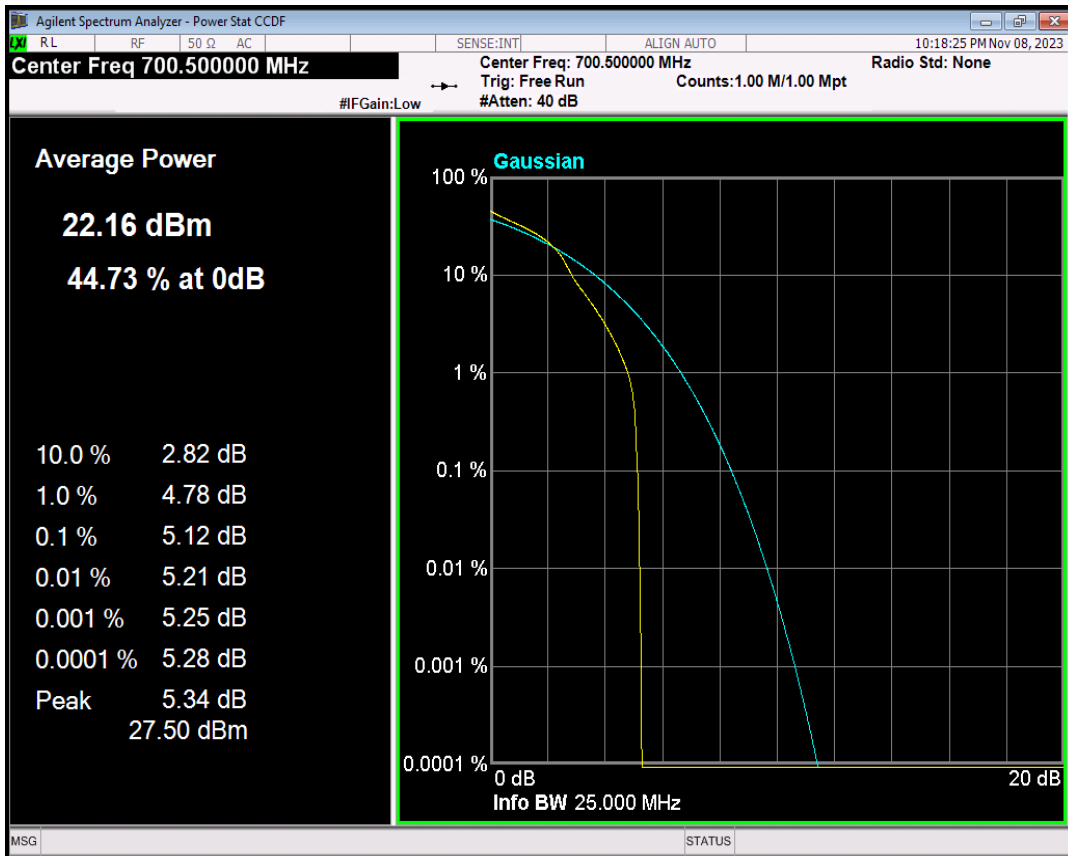
Band12 16QAM BW=1.4MHz Channel=23173 RB Size=1 Position=#0



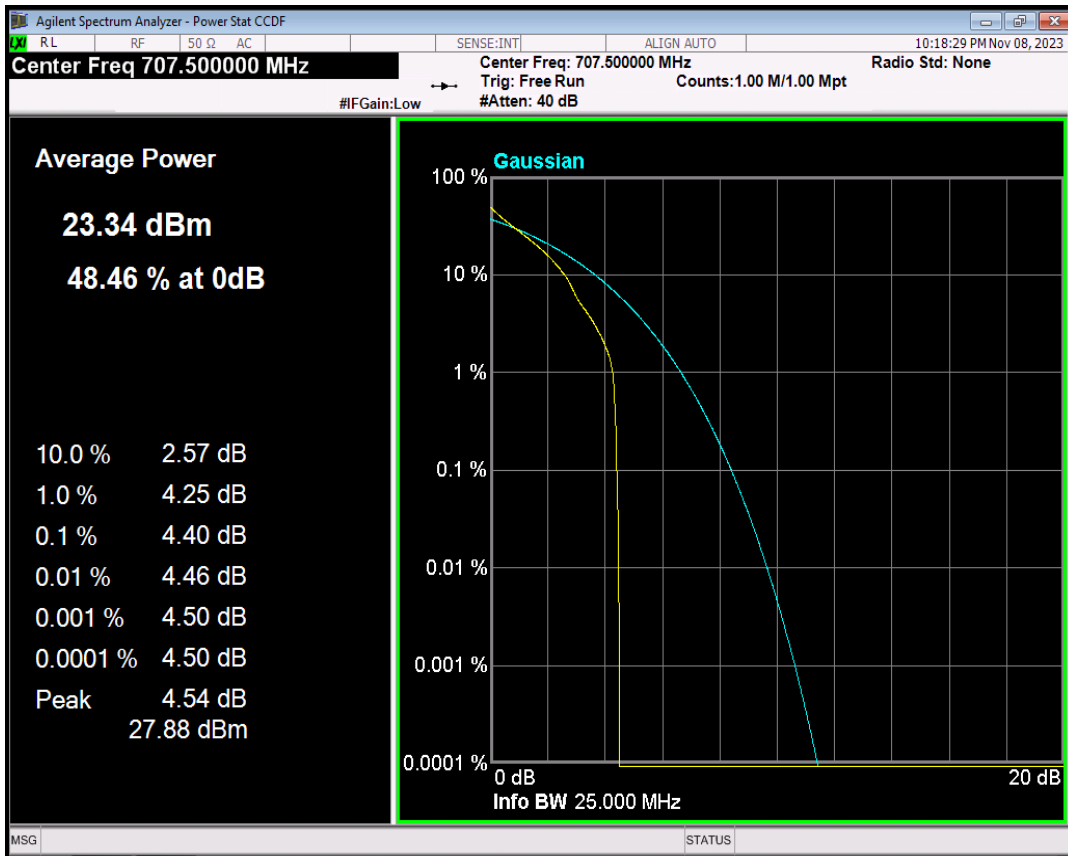
Band12 QPSK BW=3MHz Channel=23025 RB Size=1 Position=#0



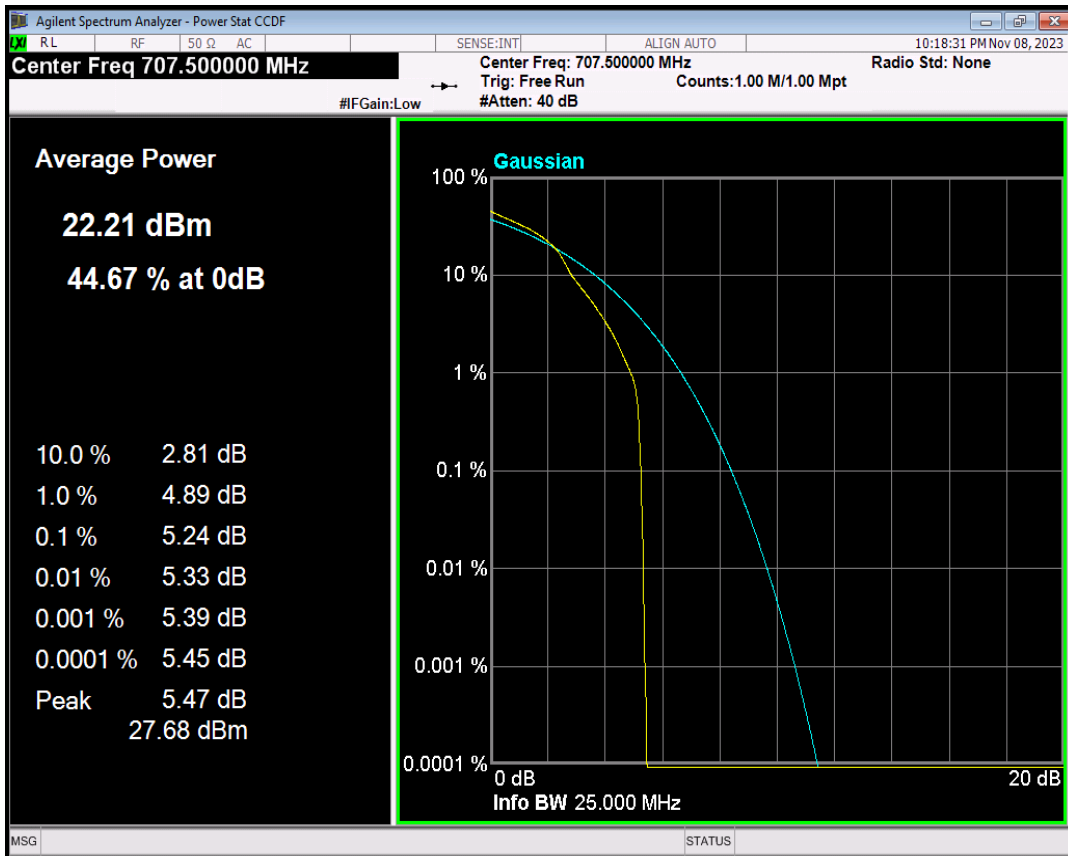
Band12 16QAM BW=3MHz Channel=23025 RB Size=1 Position=#0



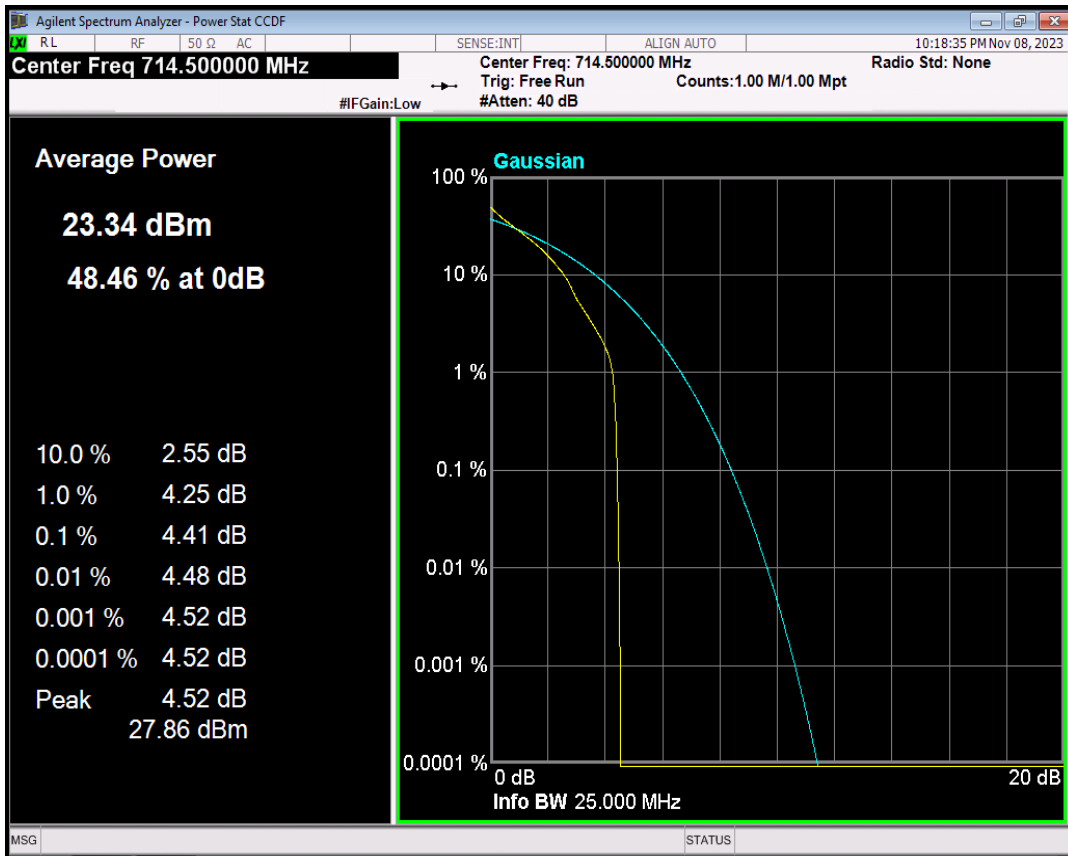
Band12 QPSK BW=3MHz Channel=23095 RB Size=1 Position=#0



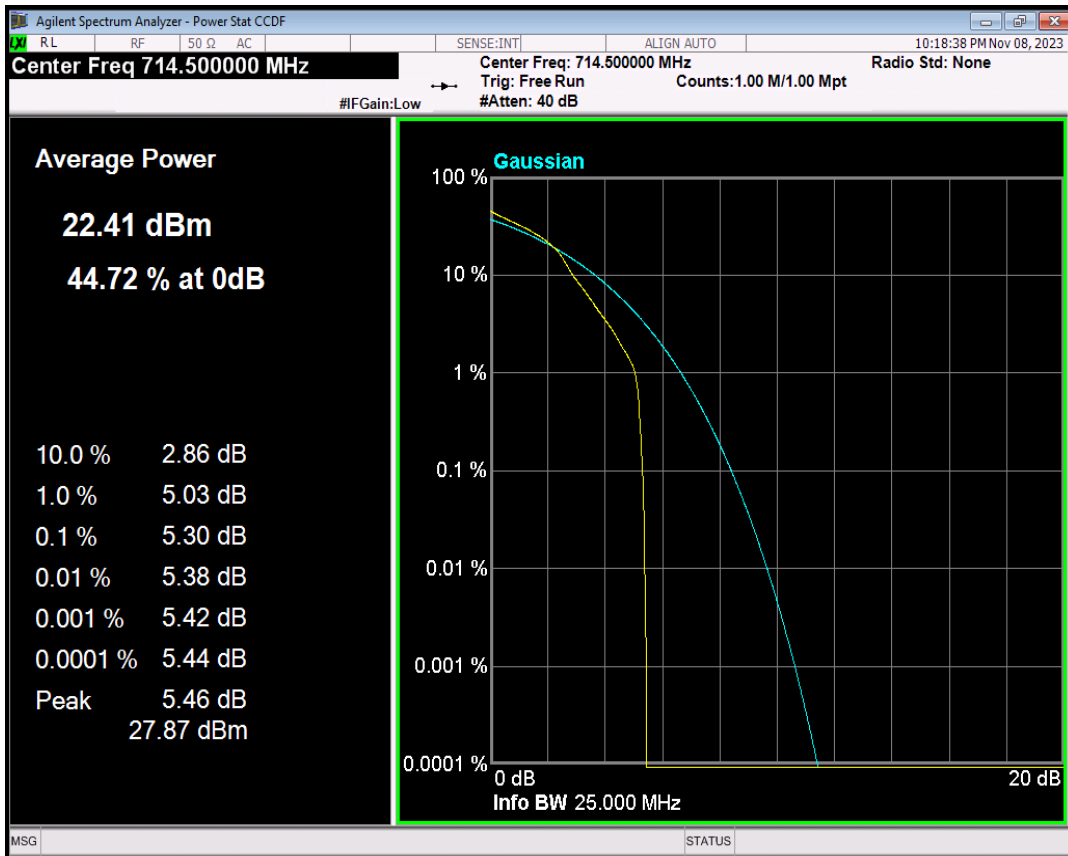
Band12 16QAM BW=3MHz Channel=23095 RB Size=1 Position=#0



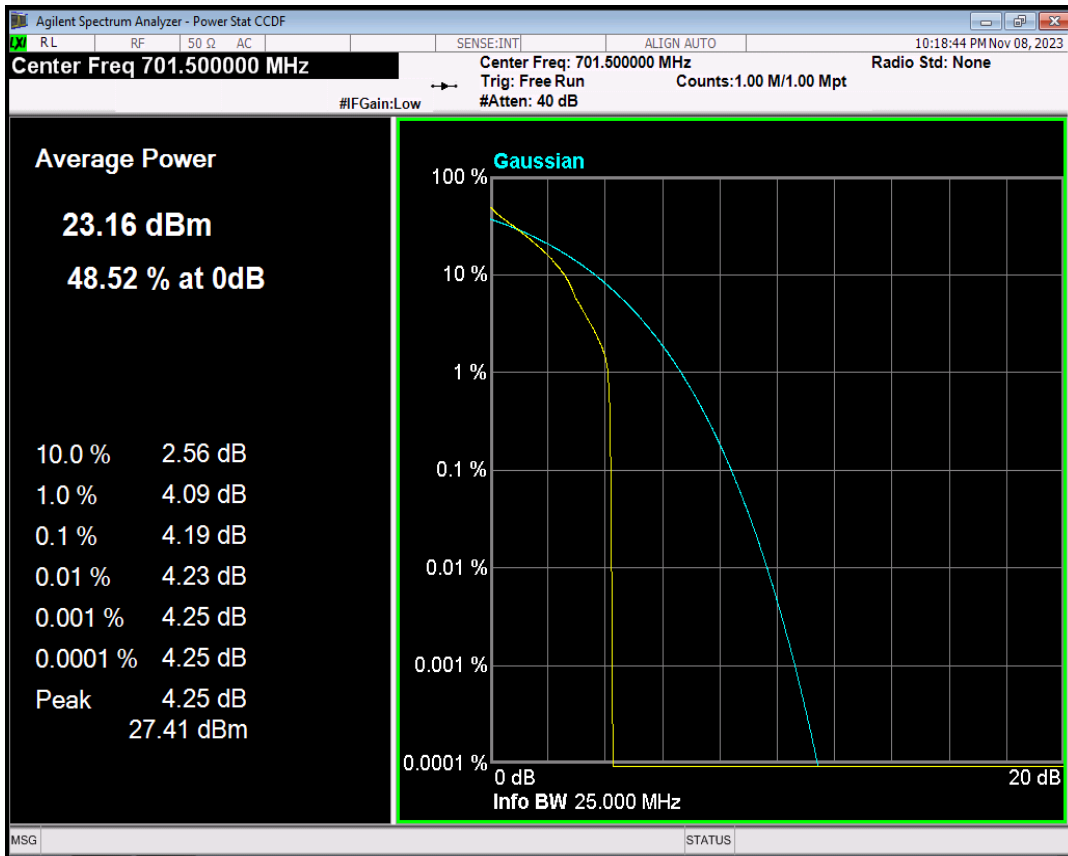
Band12 QPSK BW=3MHz Channel=23165 RB Size=1 Position=#0



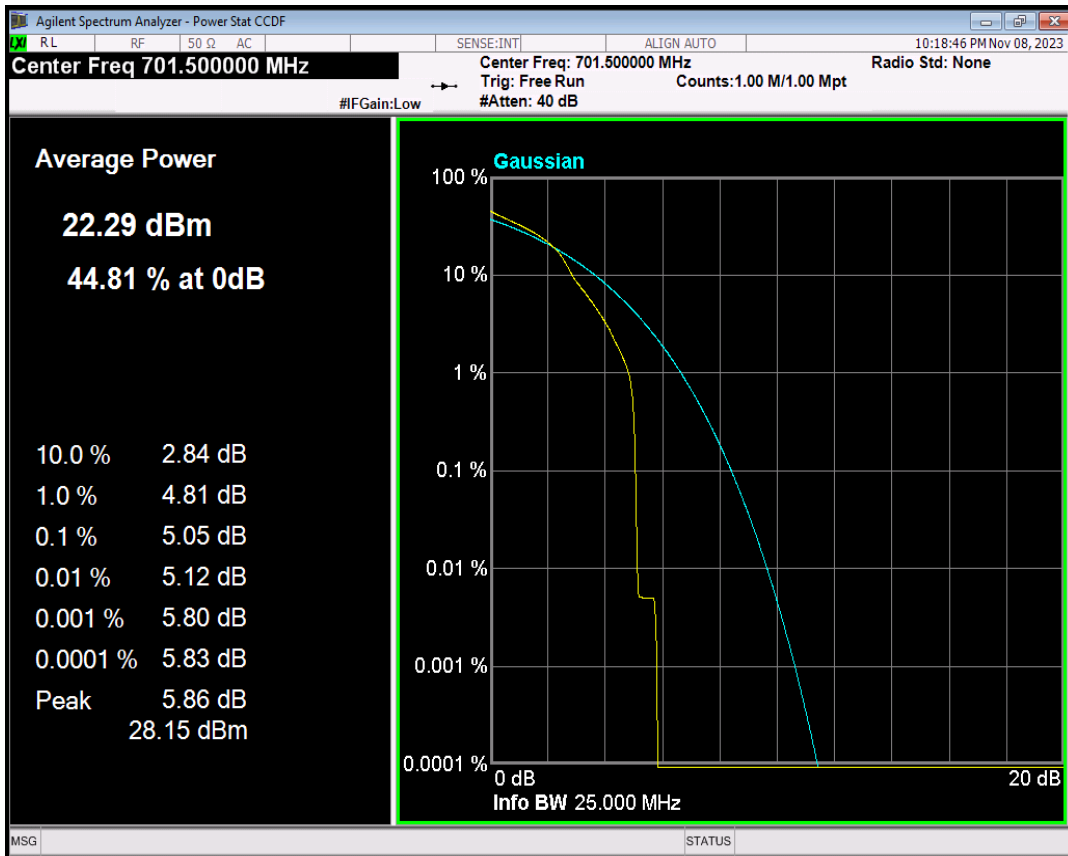
Band12 16QAM BW=3MHz Channel=23165 RB Size=1 Position=#0



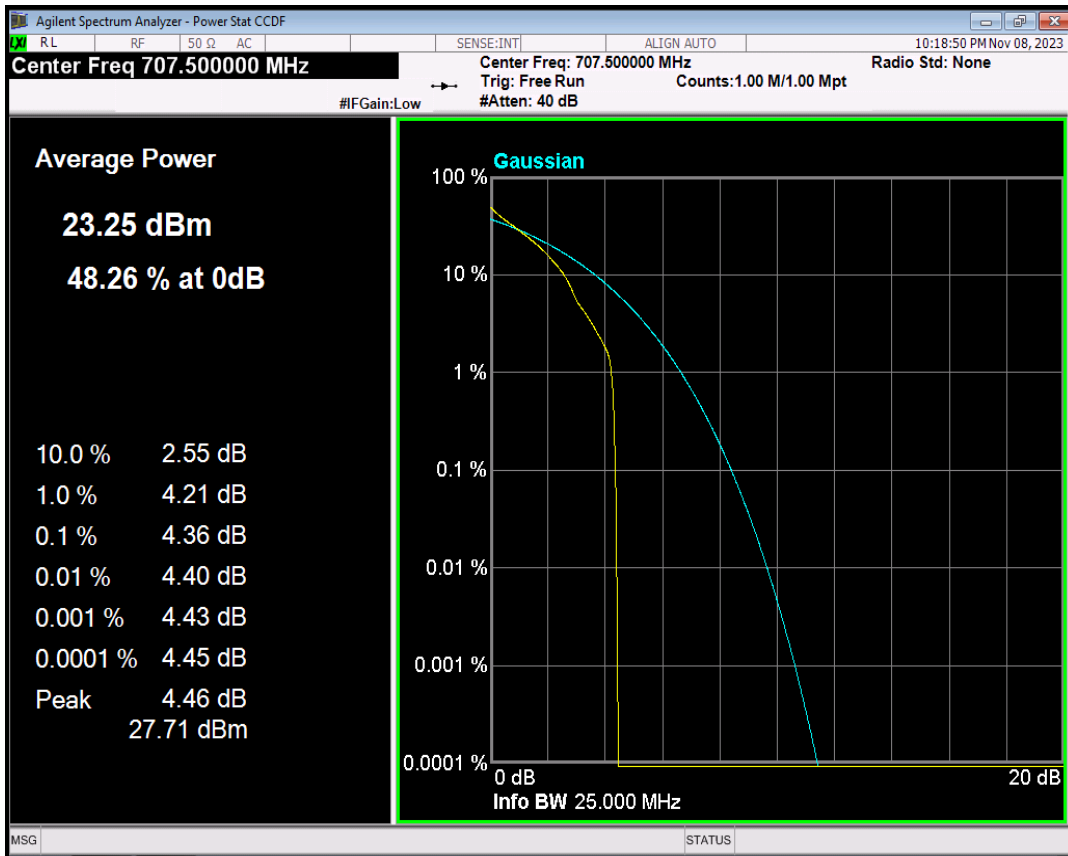
Band12 QPSK BW=5MHz Channel=23035 RB Size=1 Position=#0



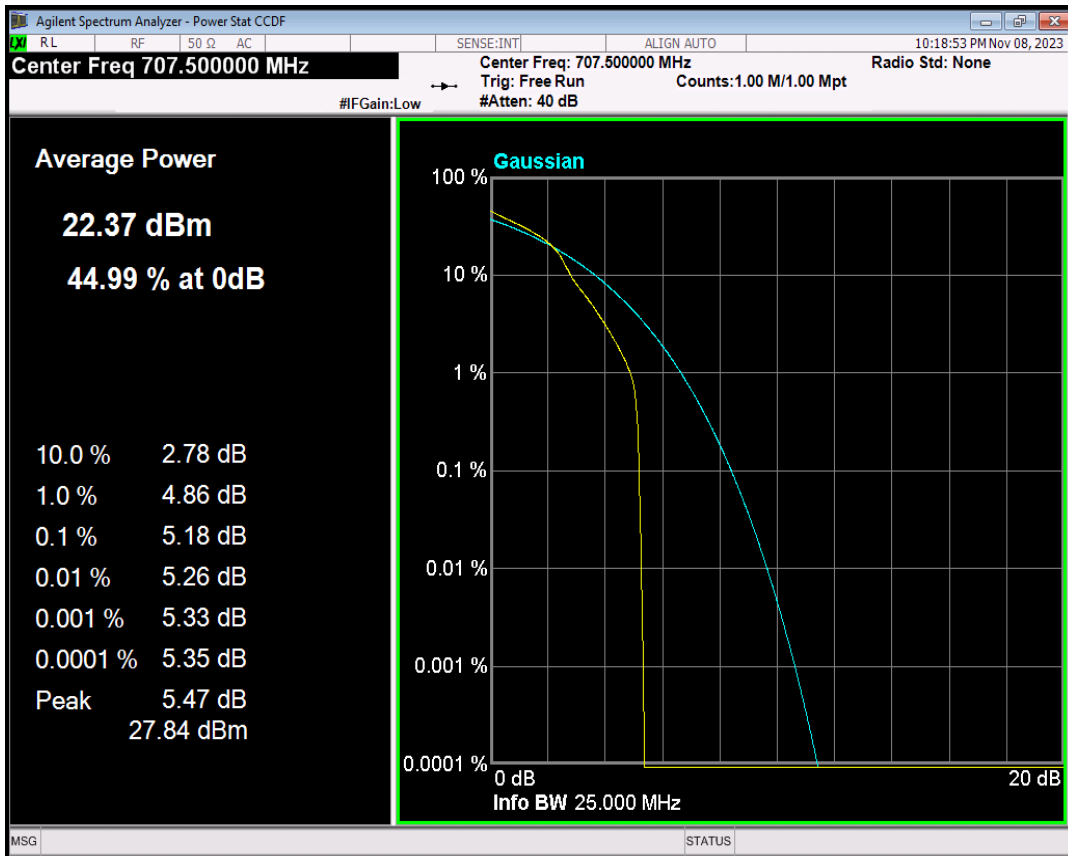
Band12 16QAM BW=5MHz Channel=23035 RB Size=1 Position=#0



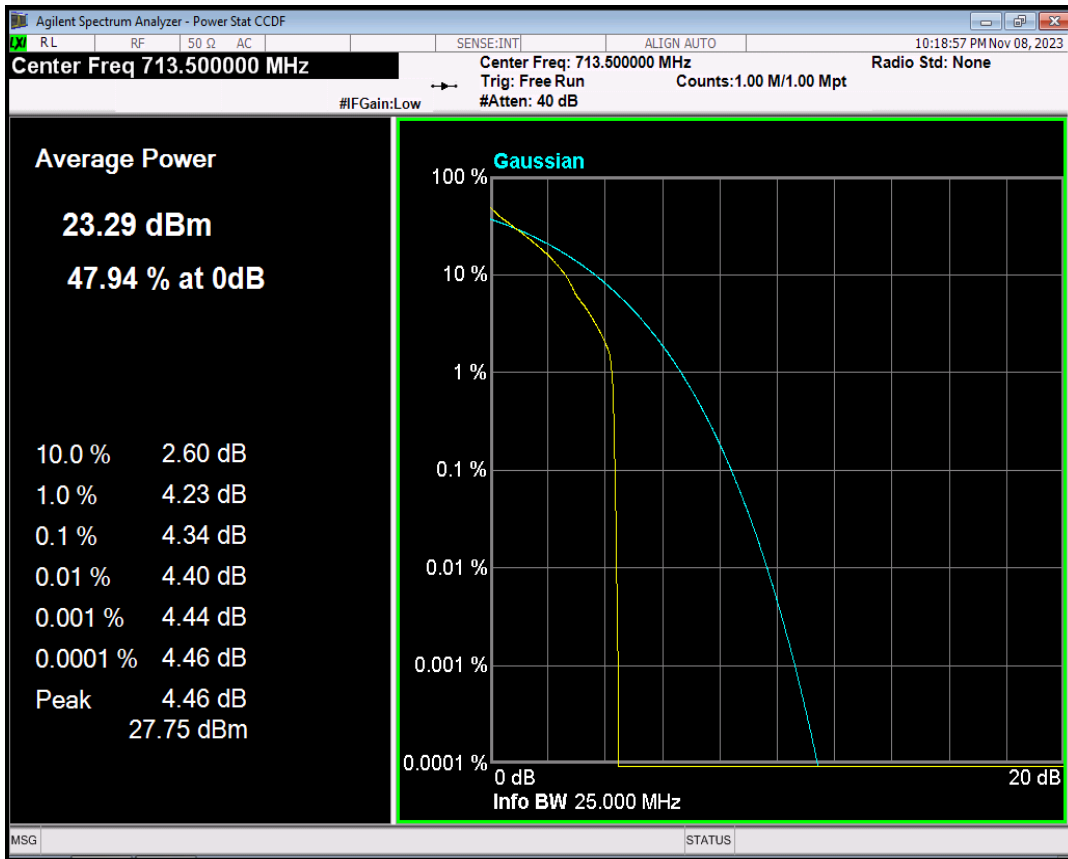
Band12 QPSK BW=5MHz Channel=23095 RB Size=1 Position=#0



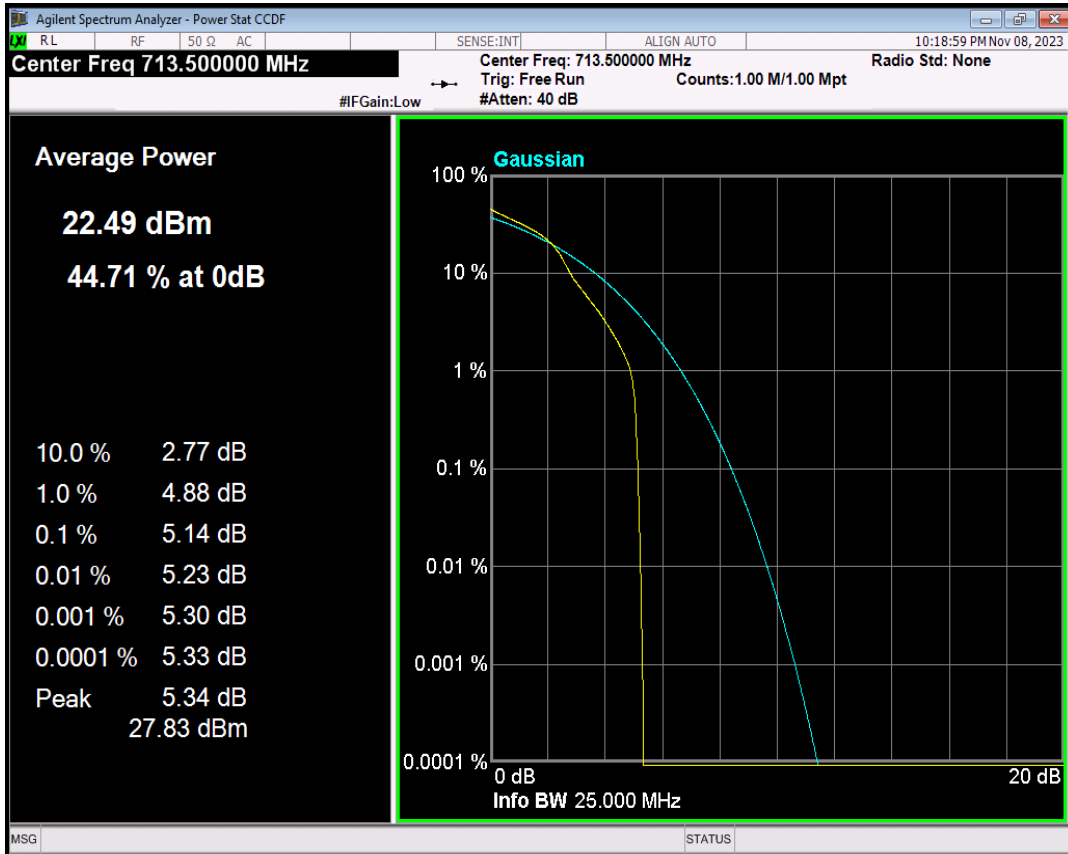
Band12 16QAM BW=5MHz Channel=23095 RB Size=1 Position=#0



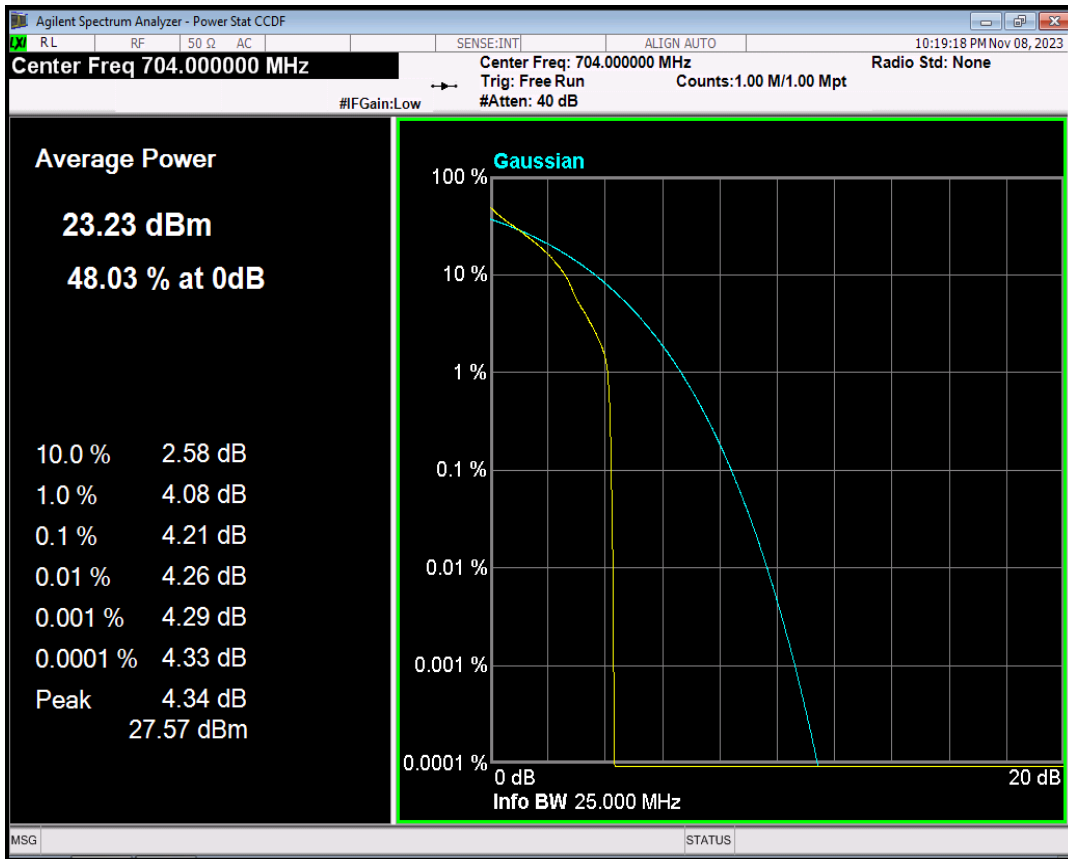
Band12 QPSK BW=5MHz Channel=23155 RB Size=1 Position=#0



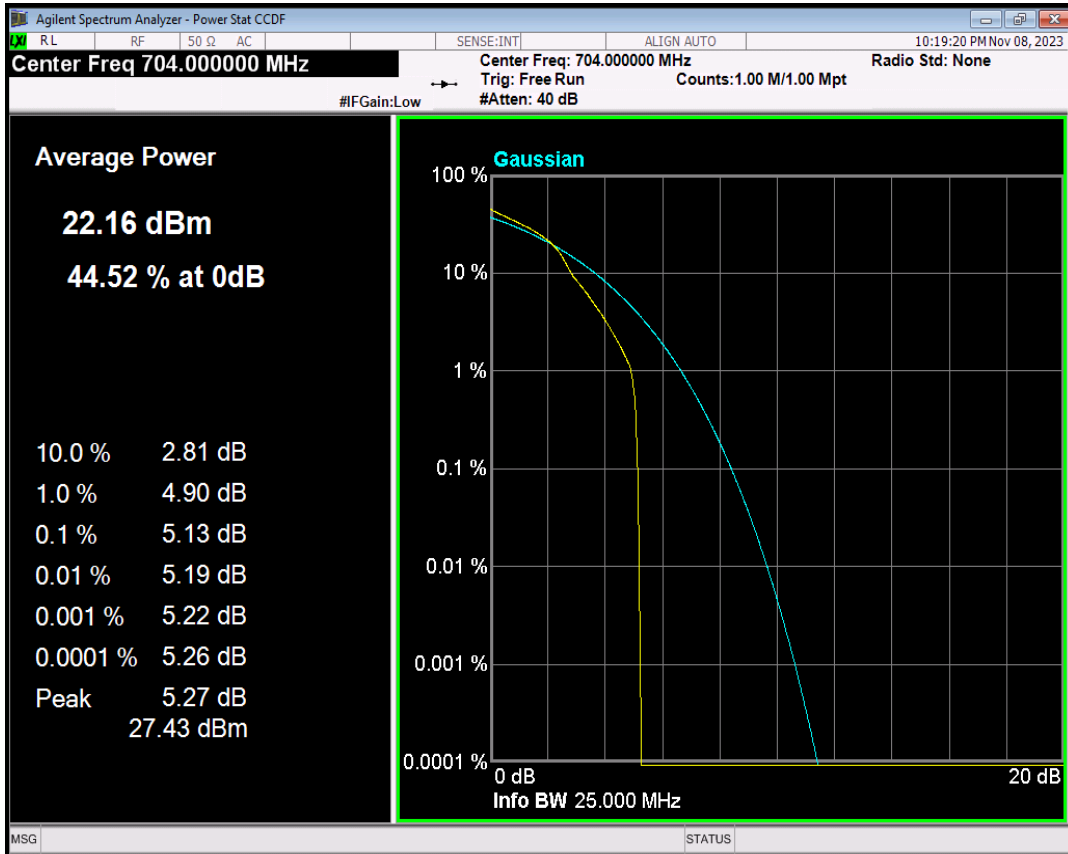
Band12 16QAM BW=5MHz Channel=23155 RB Size=1 Position=#0



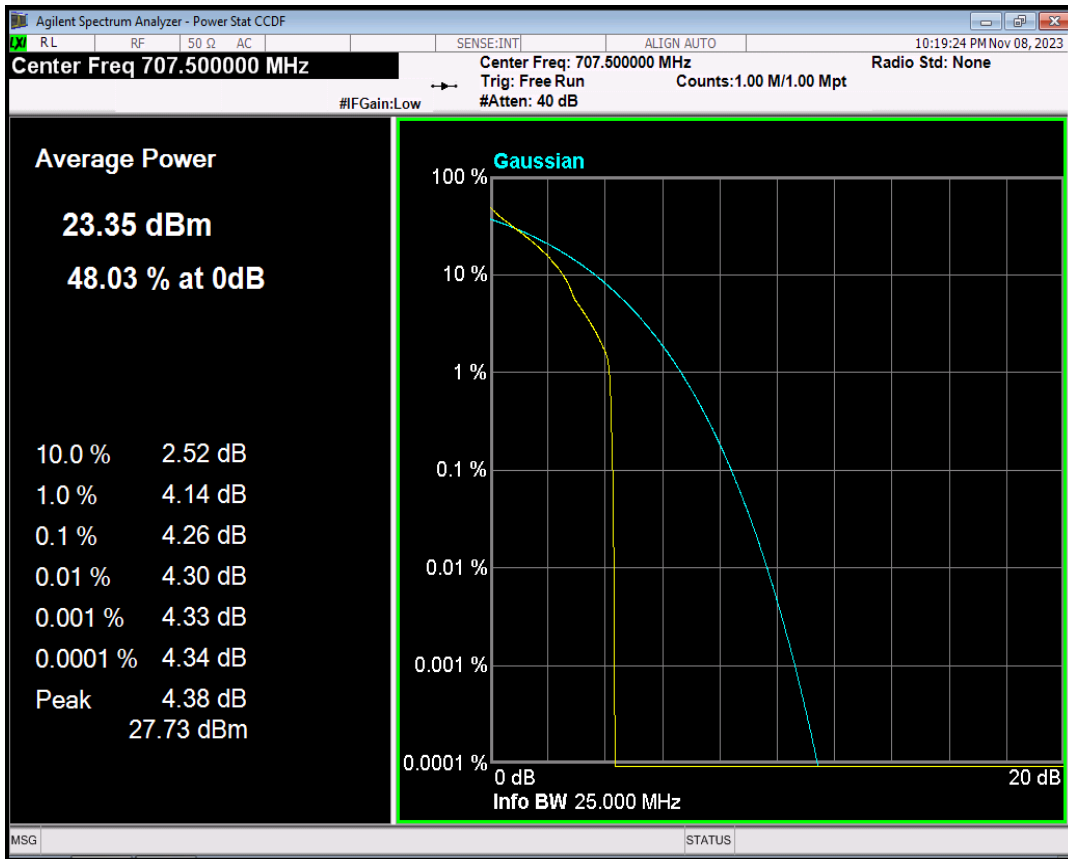
Band12 QPSK BW=10MHz Channel=23060 RB Size=1 Position=#0



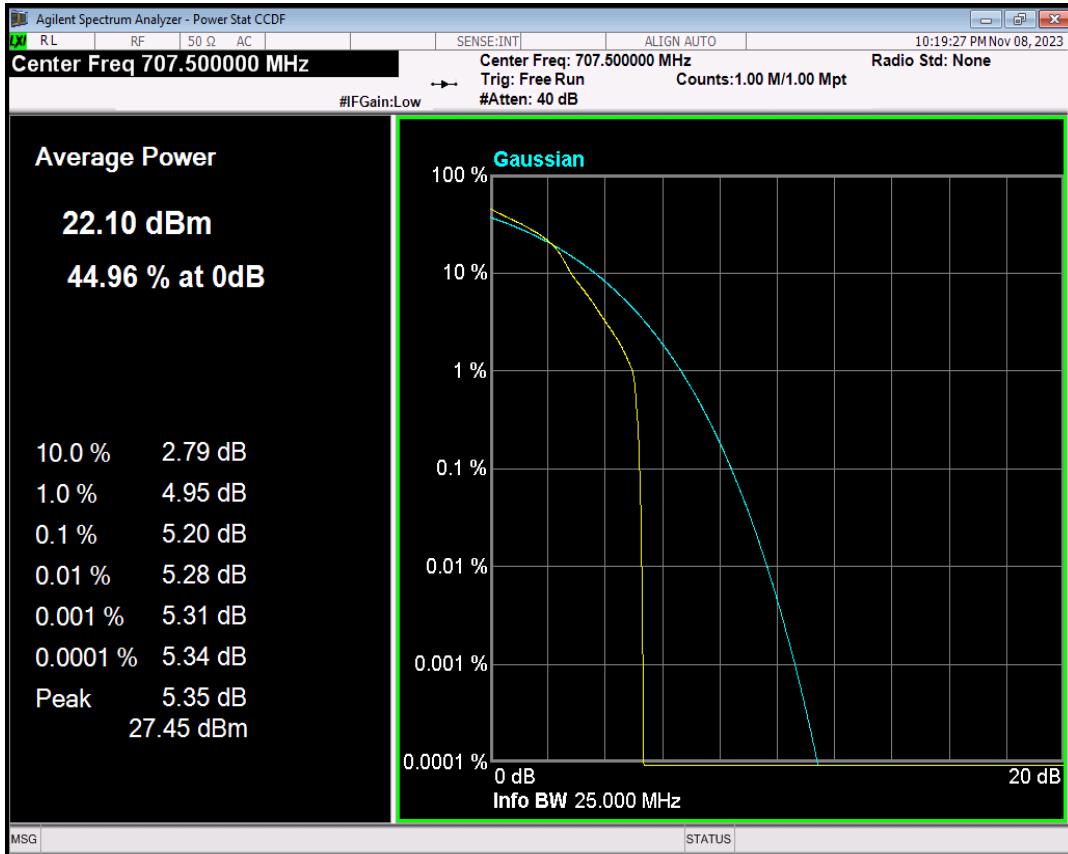
Band12 16QAM BW=10MHz Channel=23060 RB Size=1 Position=#0



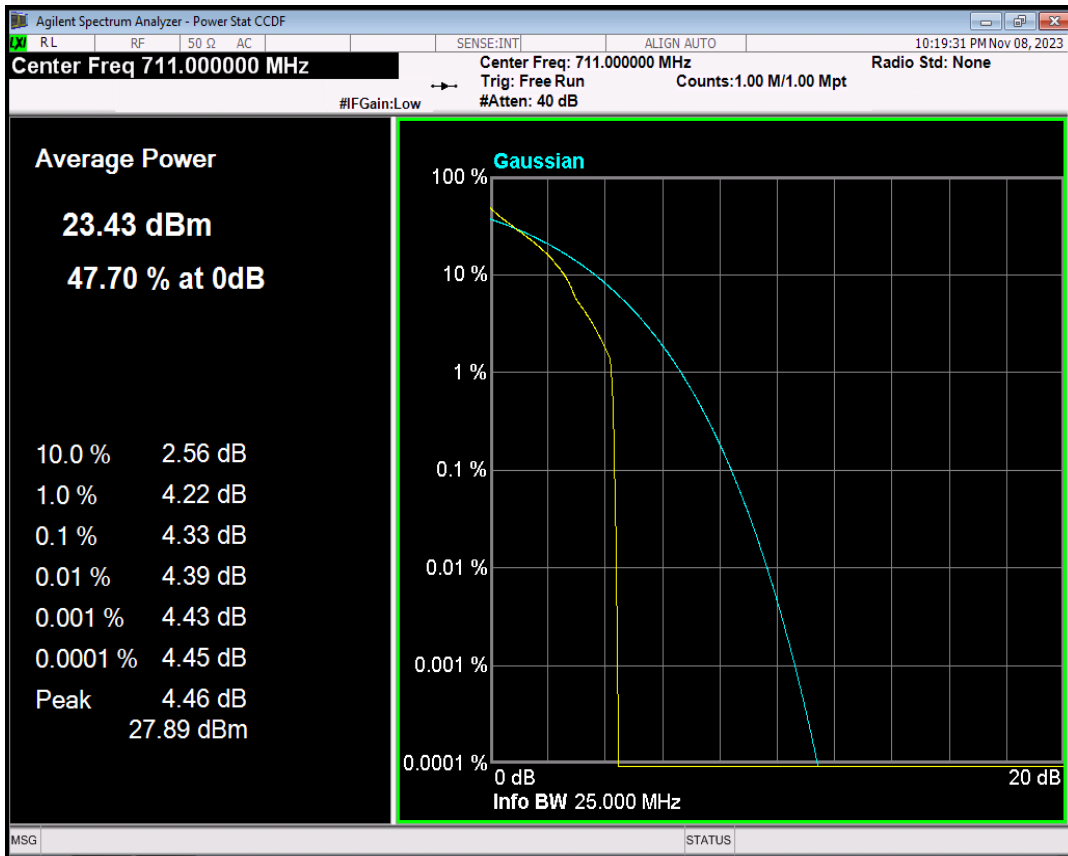
Band12 QPSK BW=10MHz Channel=23095 RB Size=1 Position=#0



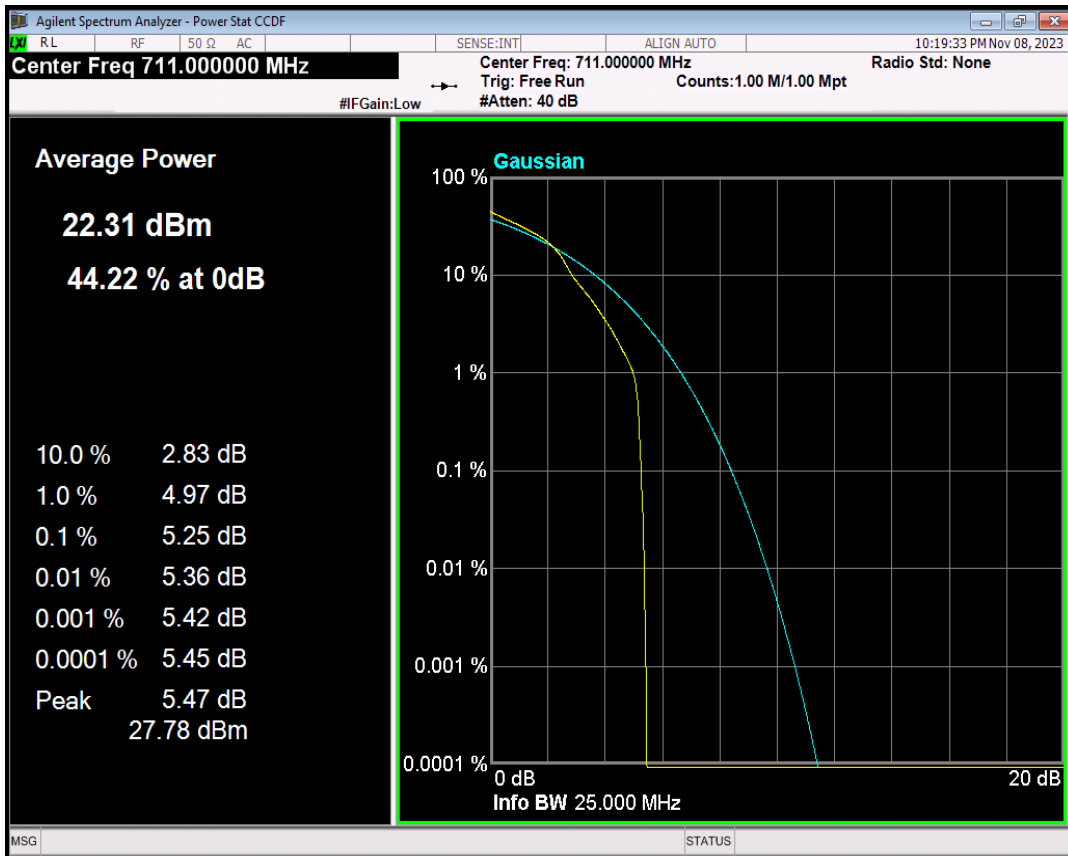
Band12 16QAM BW=10MHz Channel=23095 RB Size=1 Position=#0



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



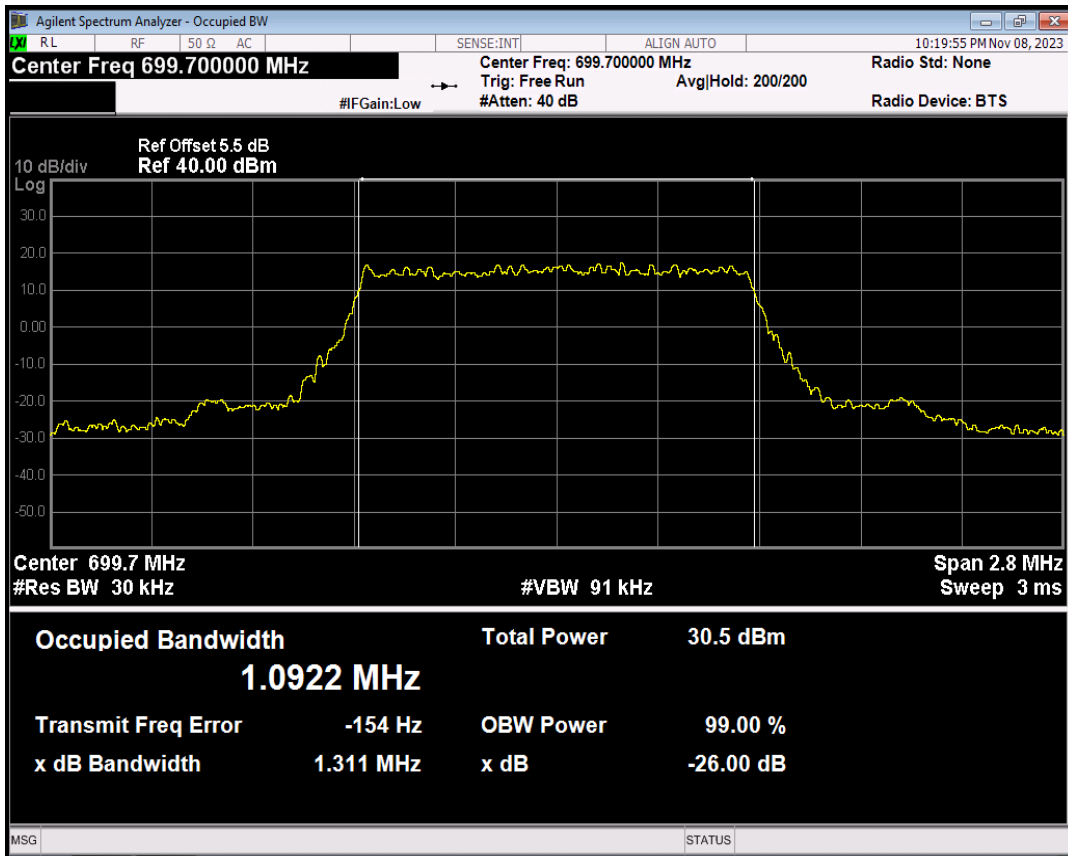
Band12 16QAM BW=10MHz Channel=23130 RB Size=1 Position=#0



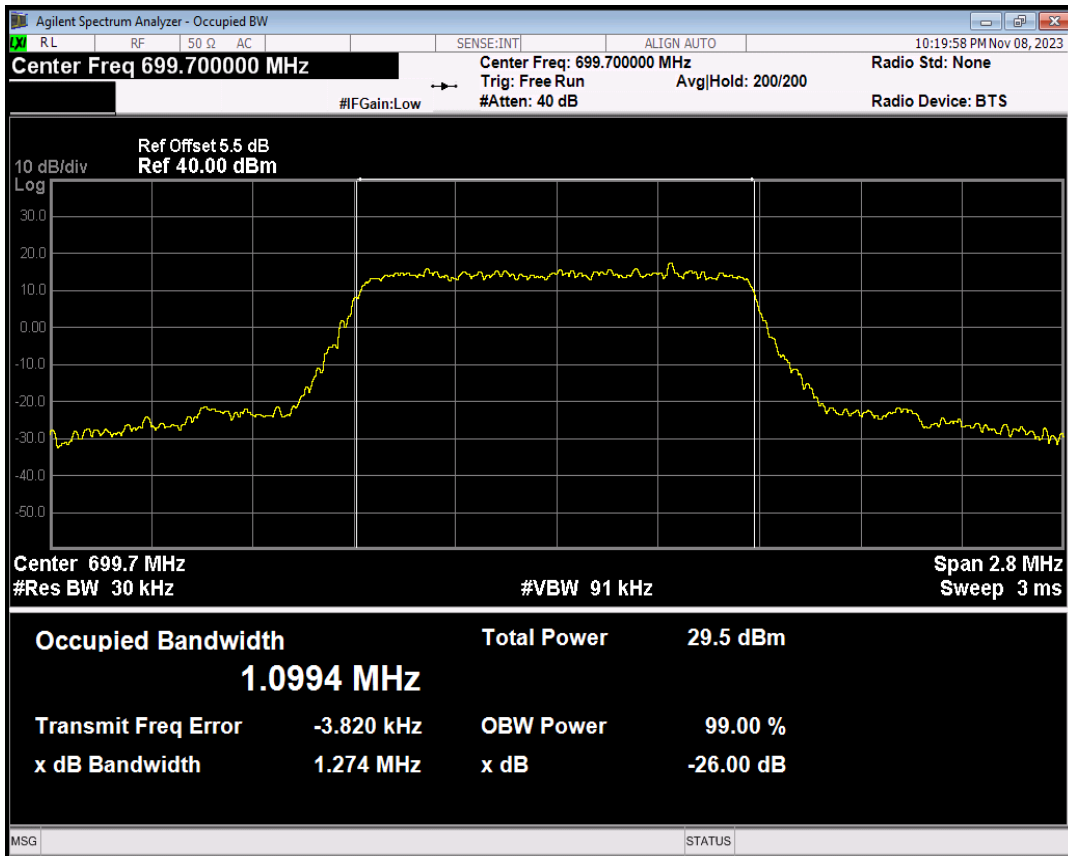
Appendix 4. Occupied bandwidth

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% OBW (MHz)	-26dB EBW (MHz)	Verdict
Band12	1.4	23017	6	#0	QPSK	1.092	1.311	PASS
Band12	1.4	23017	6	#0	16QAM	1.099	1.274	PASS
Band12	1.4	23095	6	#0	QPSK	1.091	1.283	PASS
Band12	1.4	23095	6	#0	16QAM	1.096	1.288	PASS
Band12	1.4	23173	6	#0	QPSK	1.099	1.286	PASS
Band12	1.4	23173	6	#0	16QAM	1.101	1.304	PASS
Band12	3	23025	15	#0	QPSK	2.700	2.980	PASS
Band12	3	23025	15	#0	16QAM	2.690	2.979	PASS
Band12	3	23095	15	#0	QPSK	2.697	2.958	PASS
Band12	3	23095	15	#0	16QAM	2.702	2.967	PASS
Band12	3	23165	15	#0	QPSK	2.698	2.988	PASS
Band12	3	23165	15	#0	16QAM	2.705	2.983	PASS
Band12	5	23035	25	#0	QPSK	4.518	4.905	PASS
Band12	5	23035	25	#0	16QAM	4.506	4.988	PASS
Band12	5	23095	25	#0	QPSK	4.478	4.918	PASS
Band12	5	23095	25	#0	16QAM	4.511	4.912	PASS
Band12	5	23155	25	#0	QPSK	4.523	4.973	PASS
Band12	5	23155	25	#0	16QAM	4.519	4.977	PASS
Band12	10	23060	50	#0	QPSK	9.034	9.771	PASS
Band12	10	23060	50	#0	16QAM	9.028	9.804	PASS
Band12	10	23095	50	#0	QPSK	8.936	9.712	PASS
Band12	10	23095	50	#0	16QAM	8.948	9.605	PASS
Band12	10	23130	50	#0	QPSK	8.965	9.753	PASS
Band12	10	23130	50	#0	16QAM	8.972	9.758	PASS

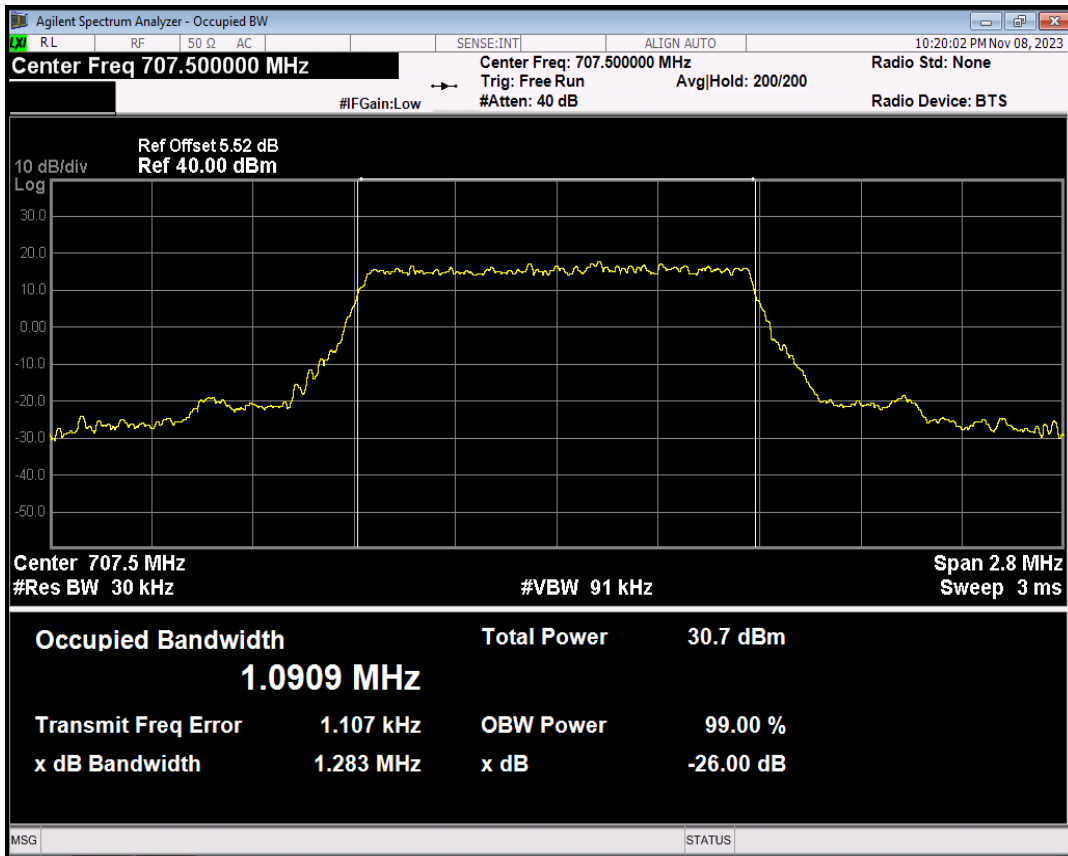
Band12 QPSK BW=1.4MHz Channel=23017 RB Size=6 Position=#0



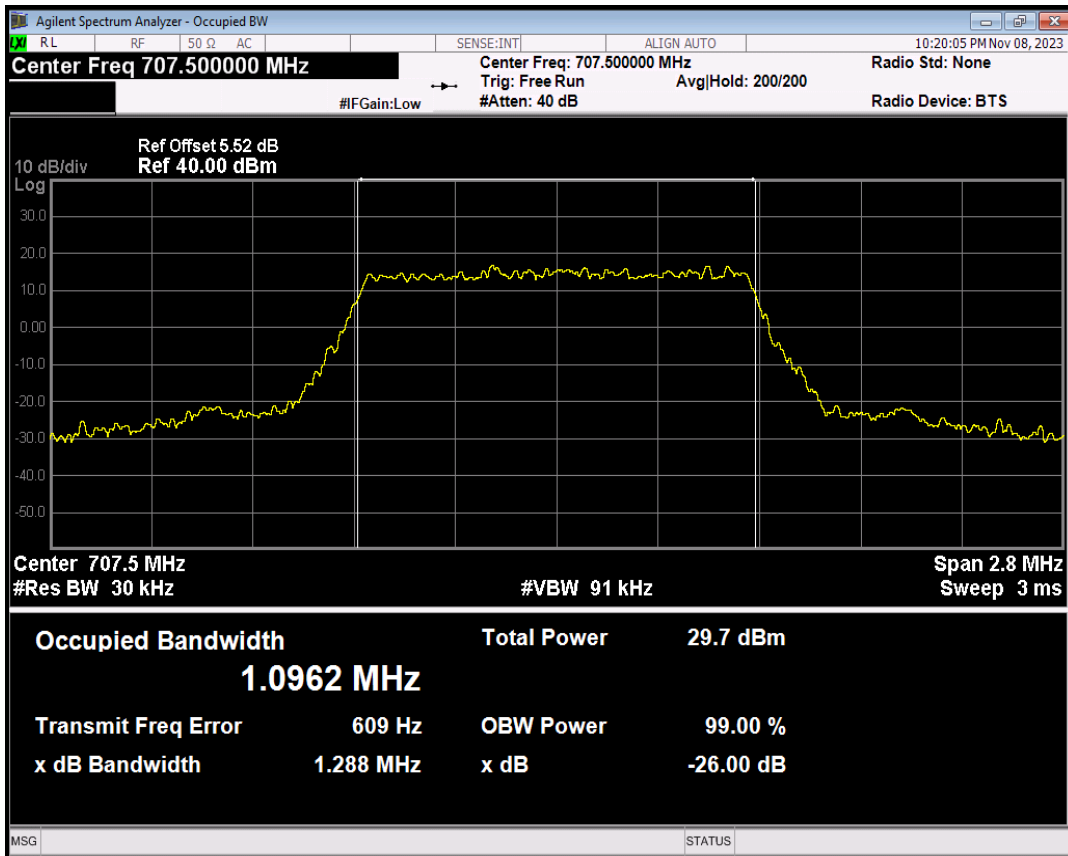
Band12 16QAM BW=1.4MHz Channel=23017 RB Size=6 Position=#0



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

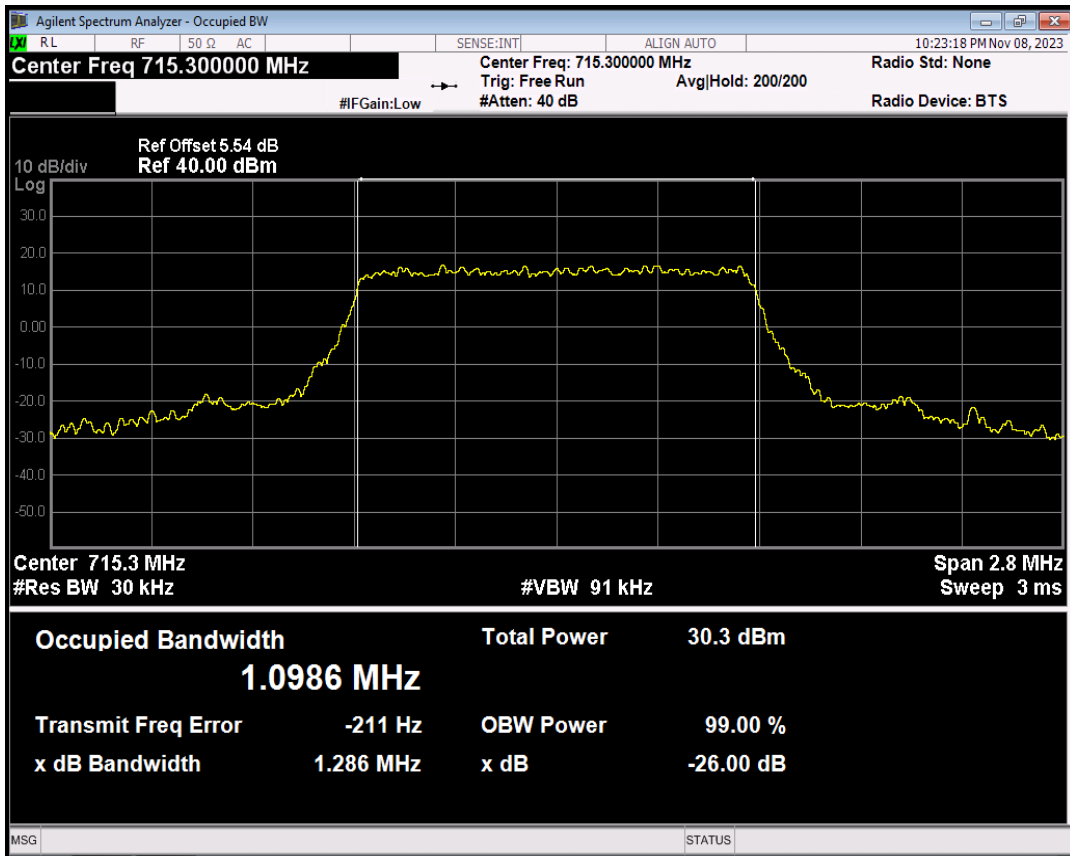


Band12 16QAM BW=1.4MHz Channel=23095 RB Size=6 Position=#0

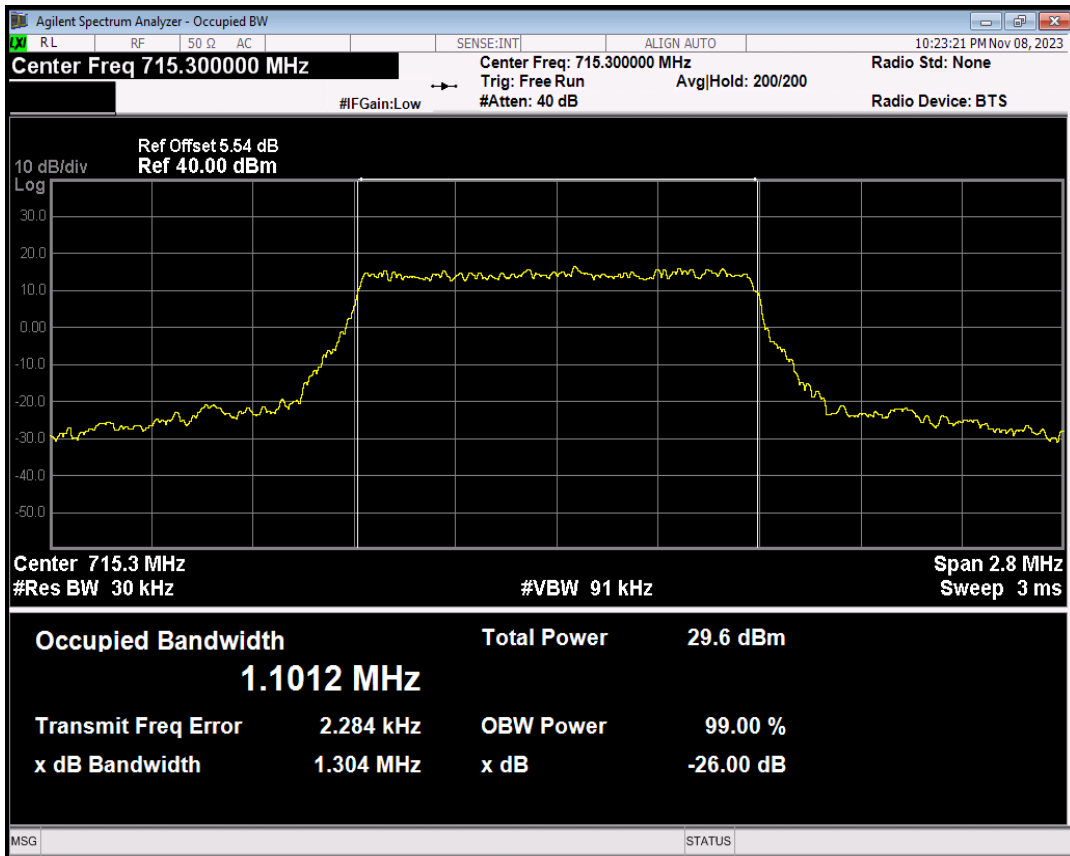




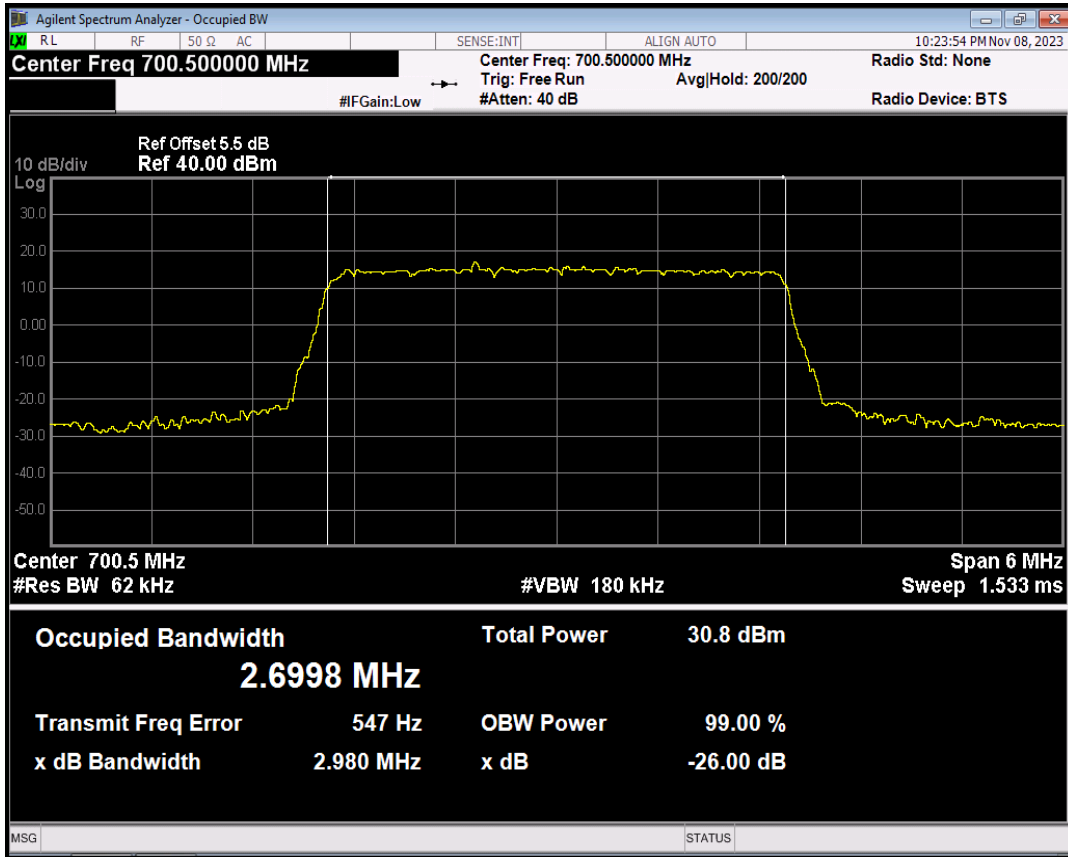
Band12 QPSK BW=1.4MHz Channel=23173 RB Size=6 Position=#0



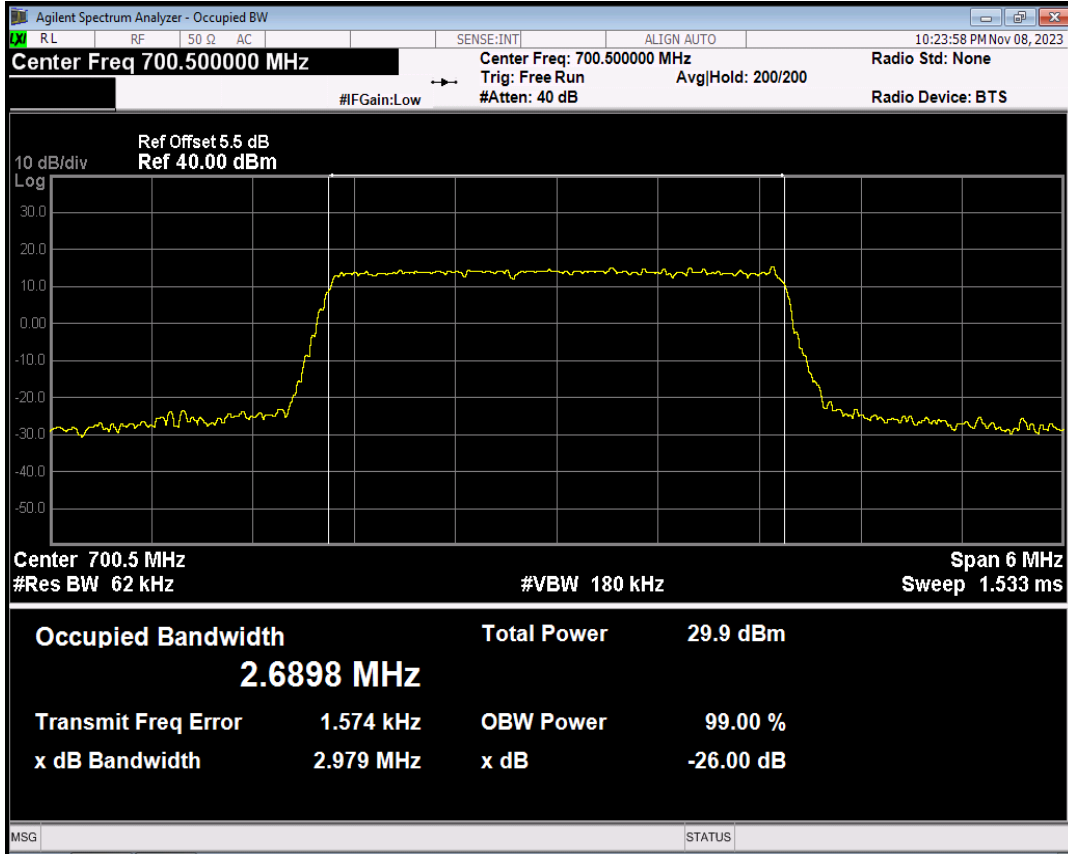
Band12 16QAM BW=1.4MHz Channel=23173 RB Size=6 Position=#0



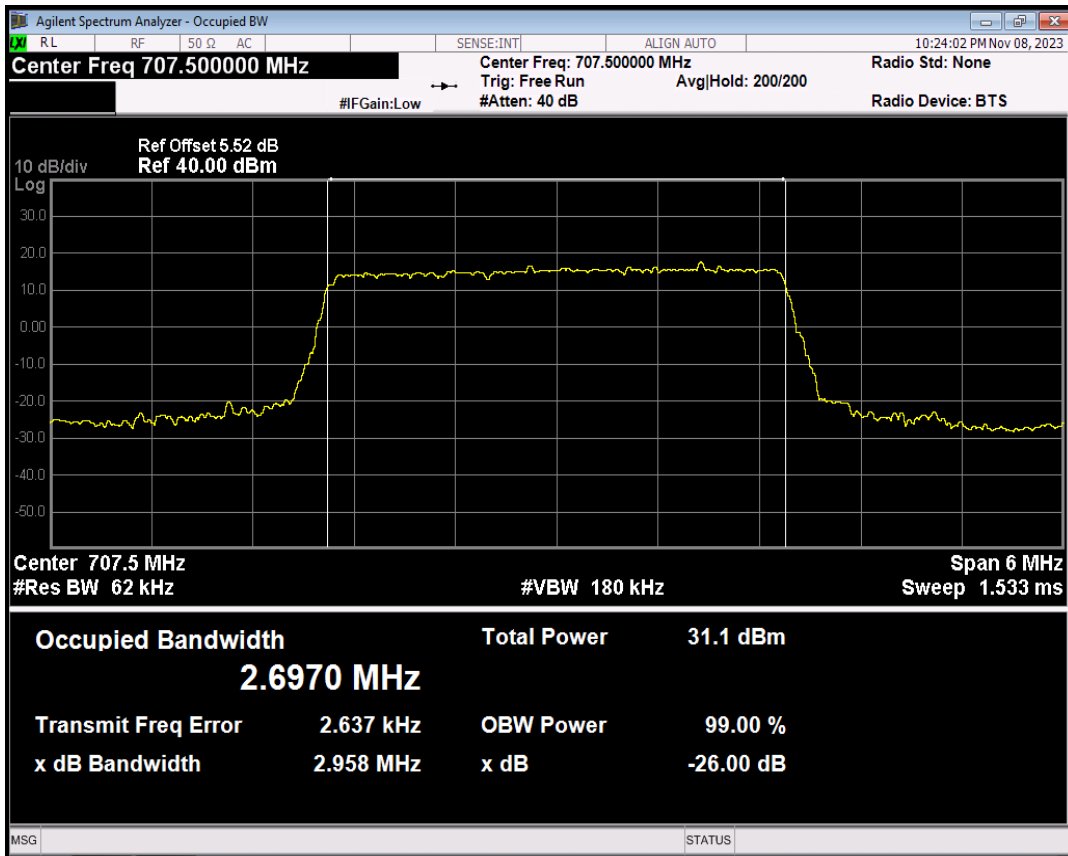
Band12 QPSK BW=3MHz Channel=23025 RB Size=15 Position=#0



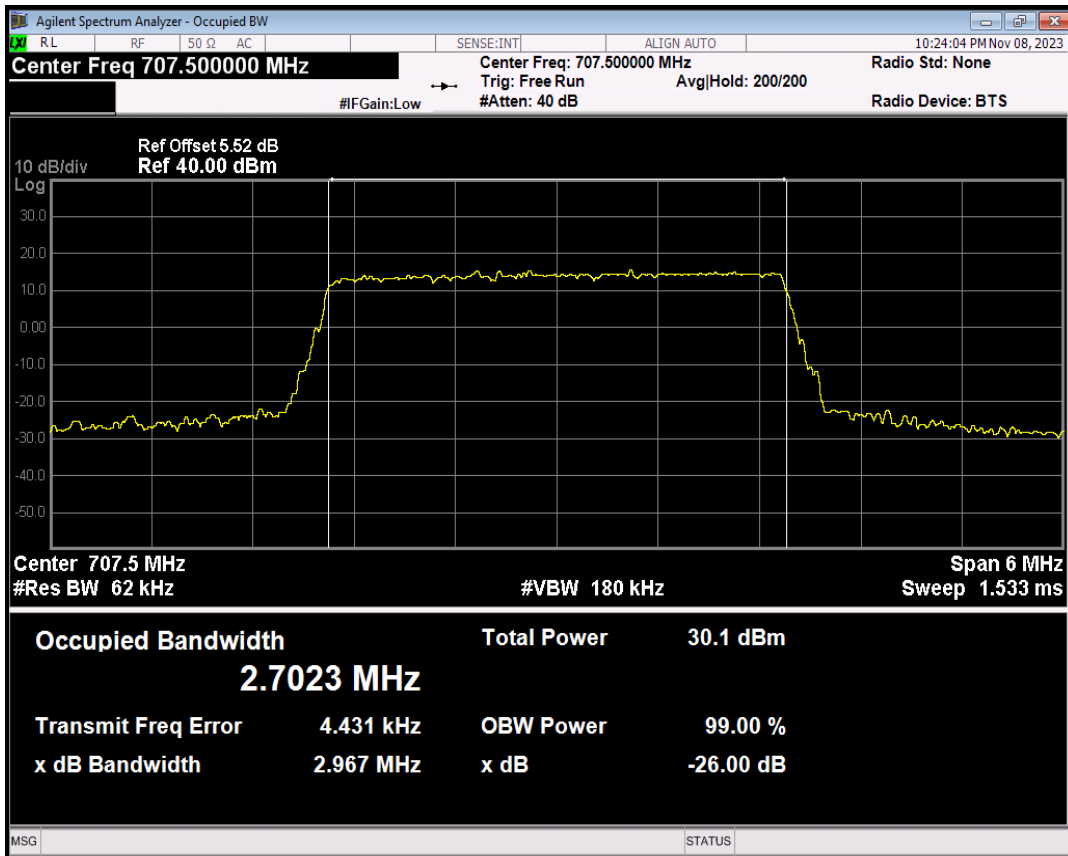
Band12 16QAM BW=3MHz Channel=23025 RB Size=15 Position=#0



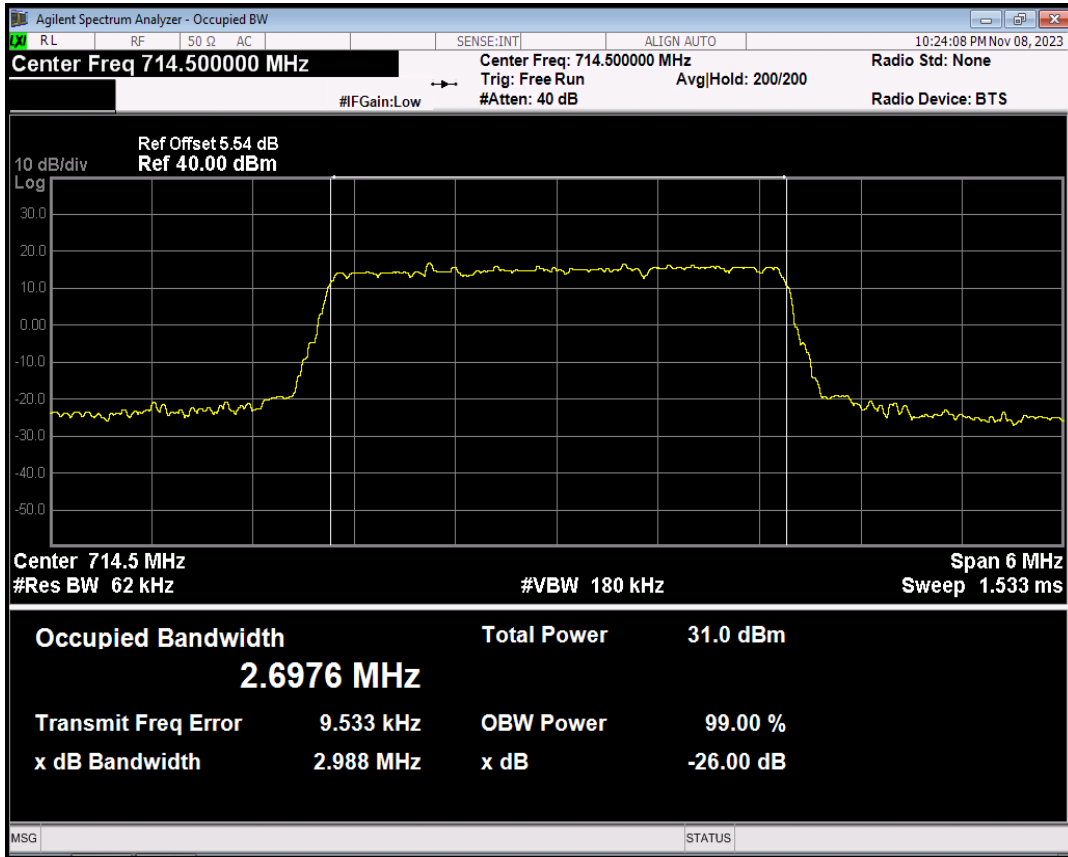
Band12 QPSK BW=3MHz Channel=23095 RB Size=15 Position=#0



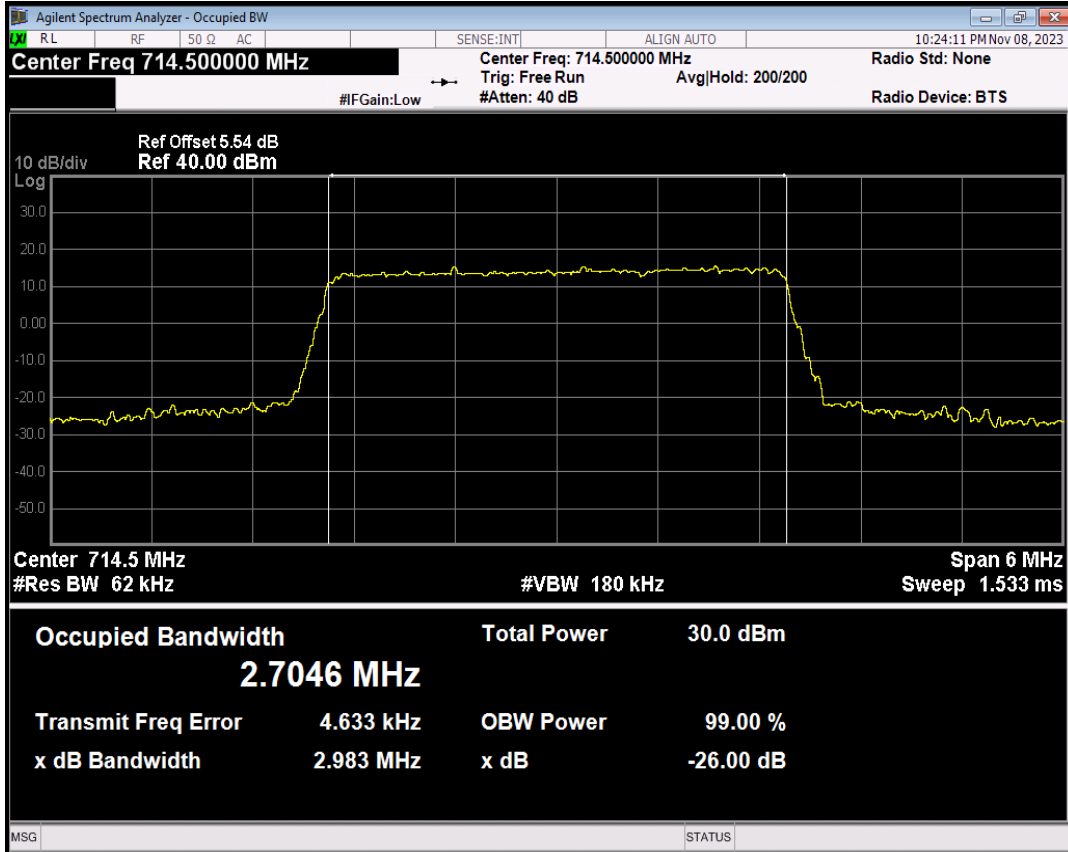
Band12 16QAM BW=3MHz Channel=23095 RB Size=15 Position=#0



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

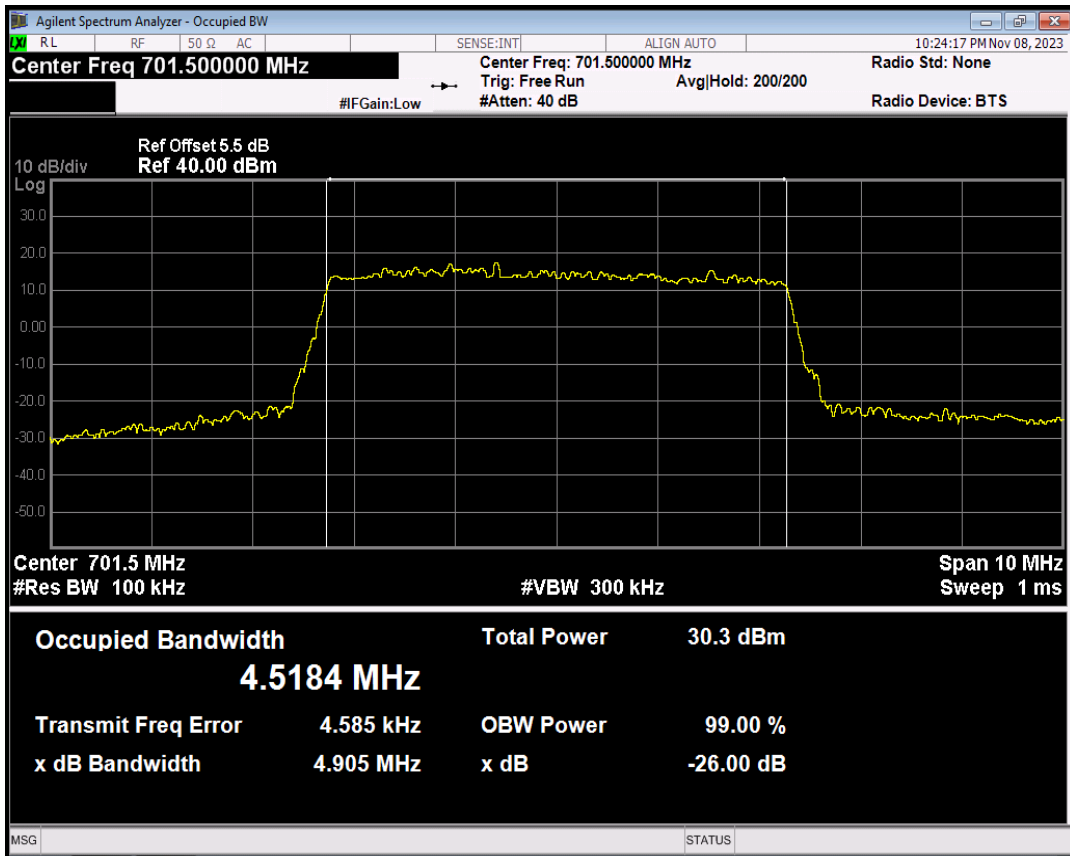


Band12 16QAM BW=3MHz Channel=23165 RB Size=15 Position=#0

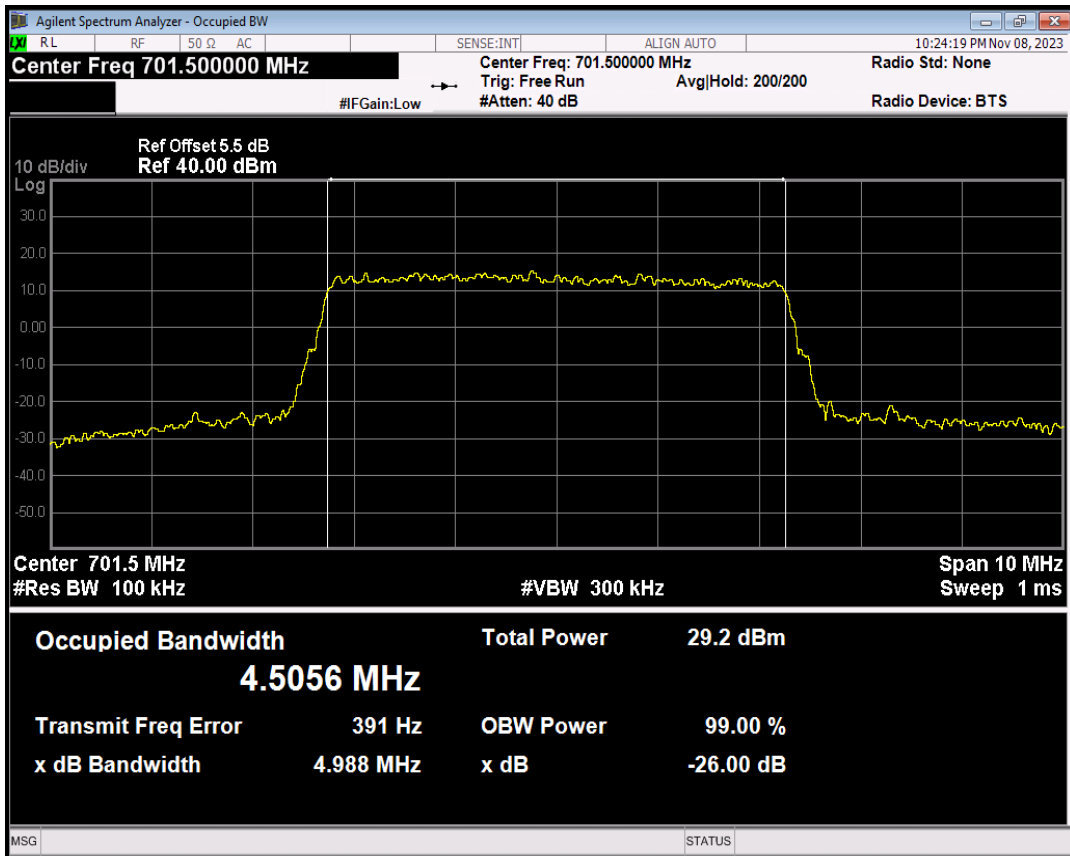




Band12 QPSK BW=5MHz Channel=23035 RB Size=25 Position=#0

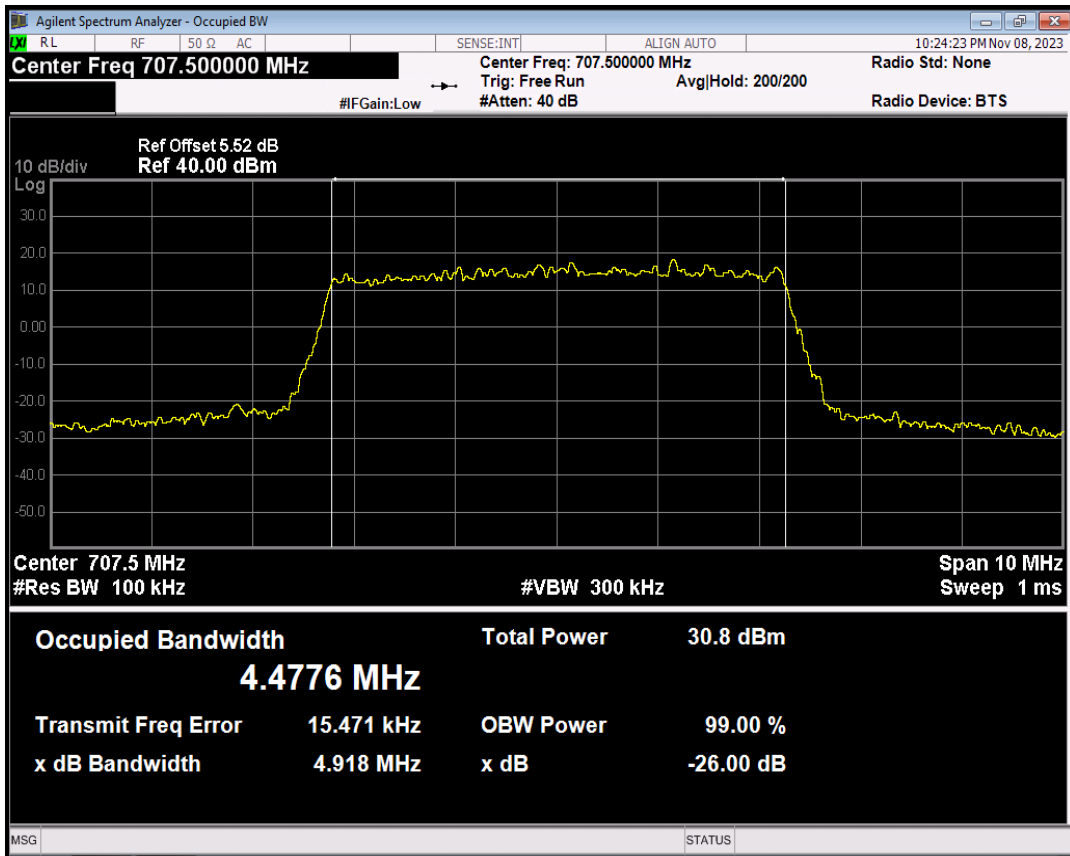


Band12 16QAM BW=5MHz Channel=23035 RB Size=25 Position=#0

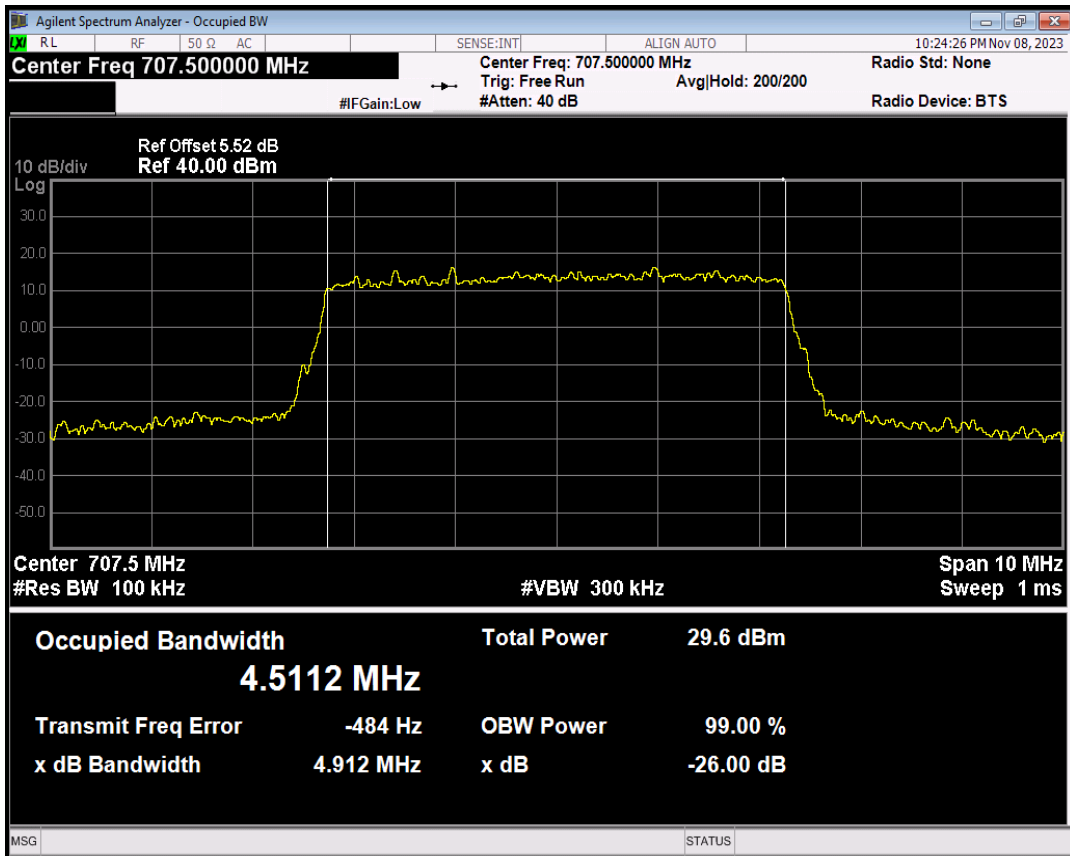




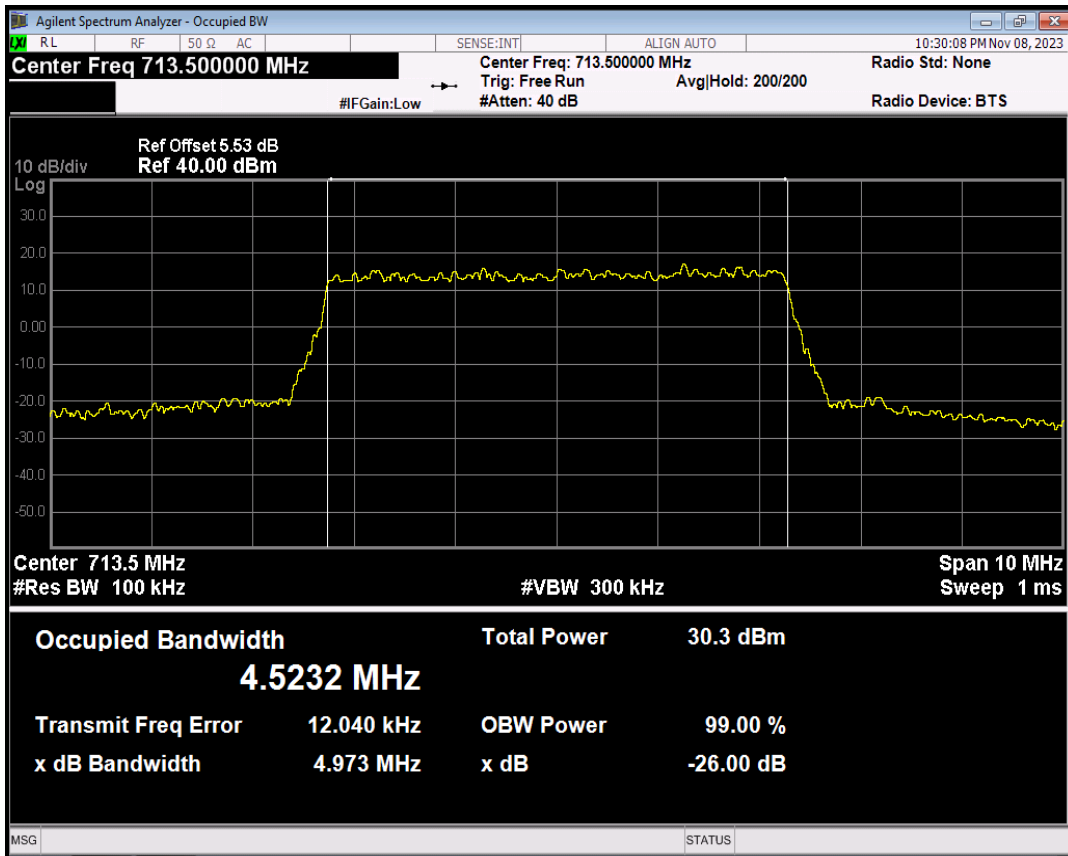
Band12 QPSK BW=5MHz Channel=23095 RB Size=25 Position=#0



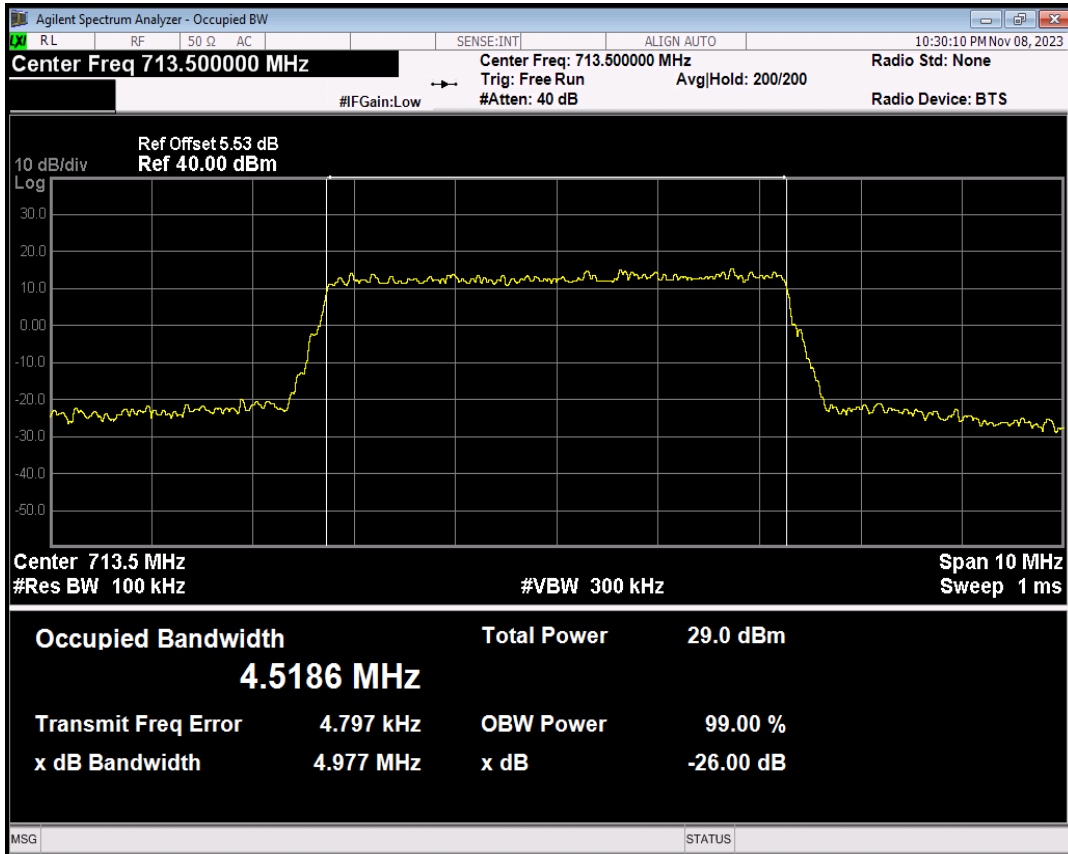
Band12 16QAM BW=5MHz Channel=23095 RB Size=25 Position=#0



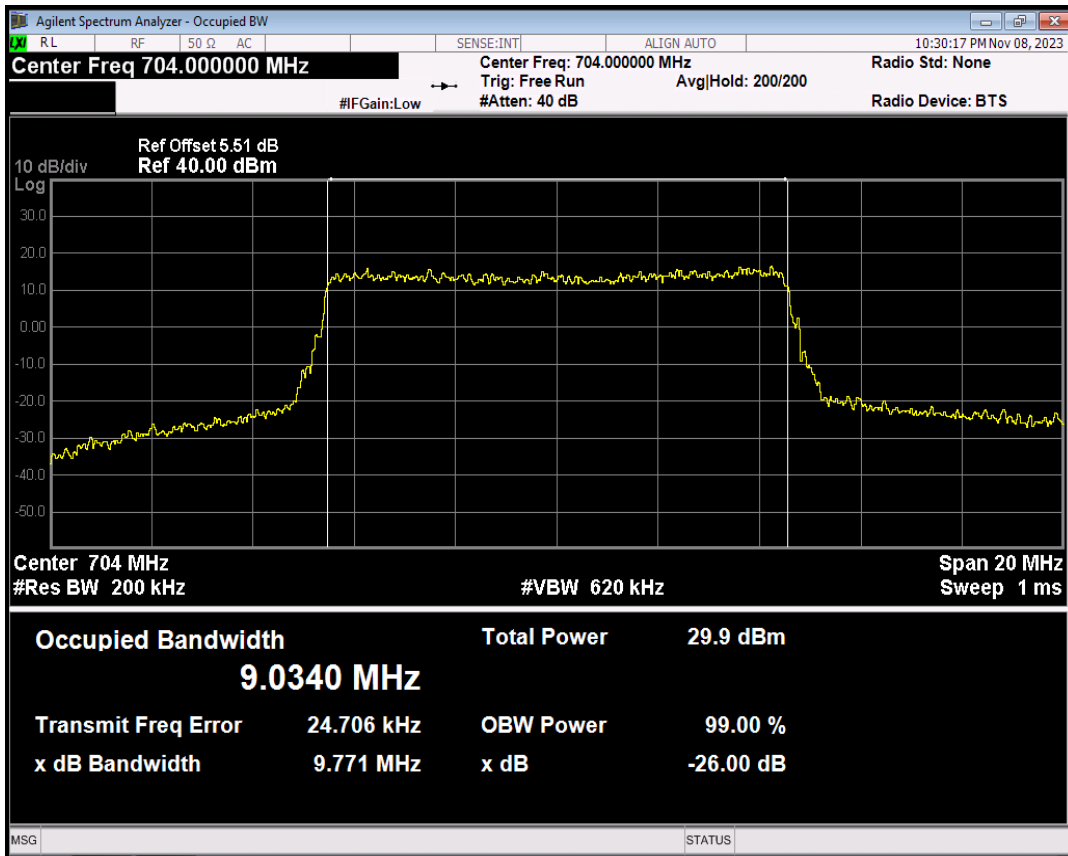
Band12 QPSK BW=5MHz Channel=23155 RB Size=25 Position=#0



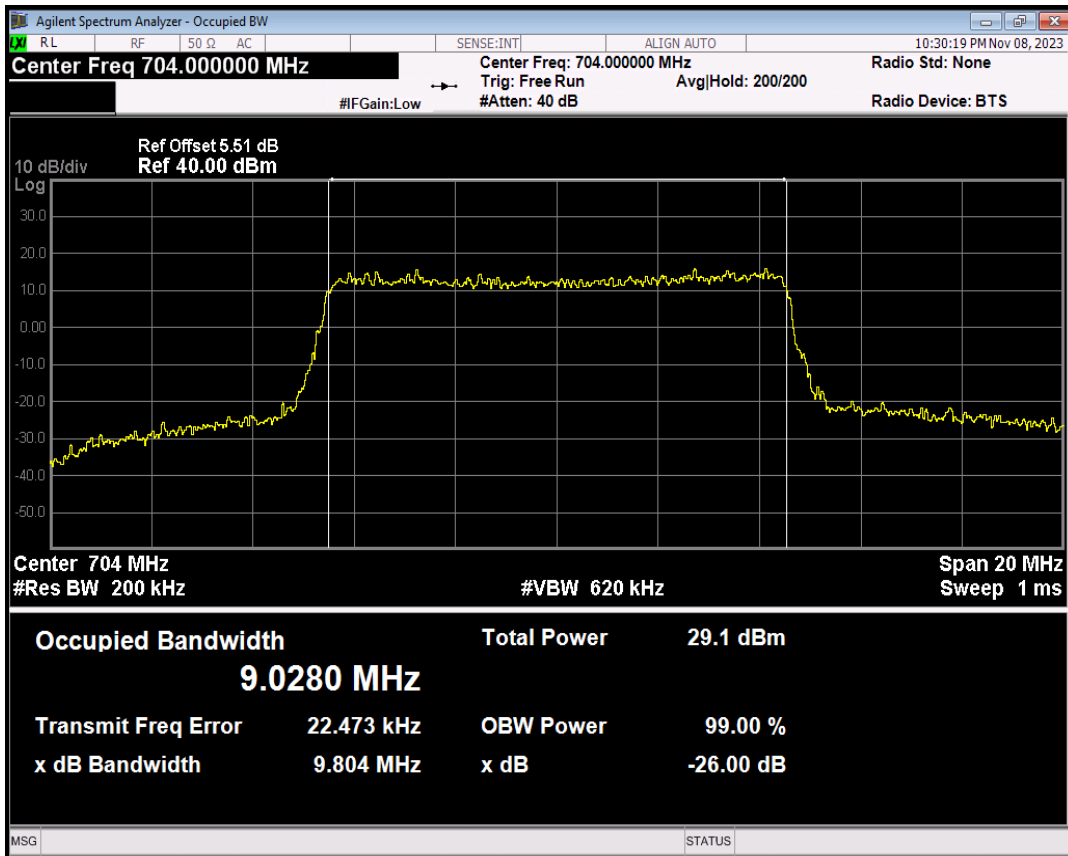
Band12 16QAM BW=5MHz Channel=23155 RB Size=25 Position=#0



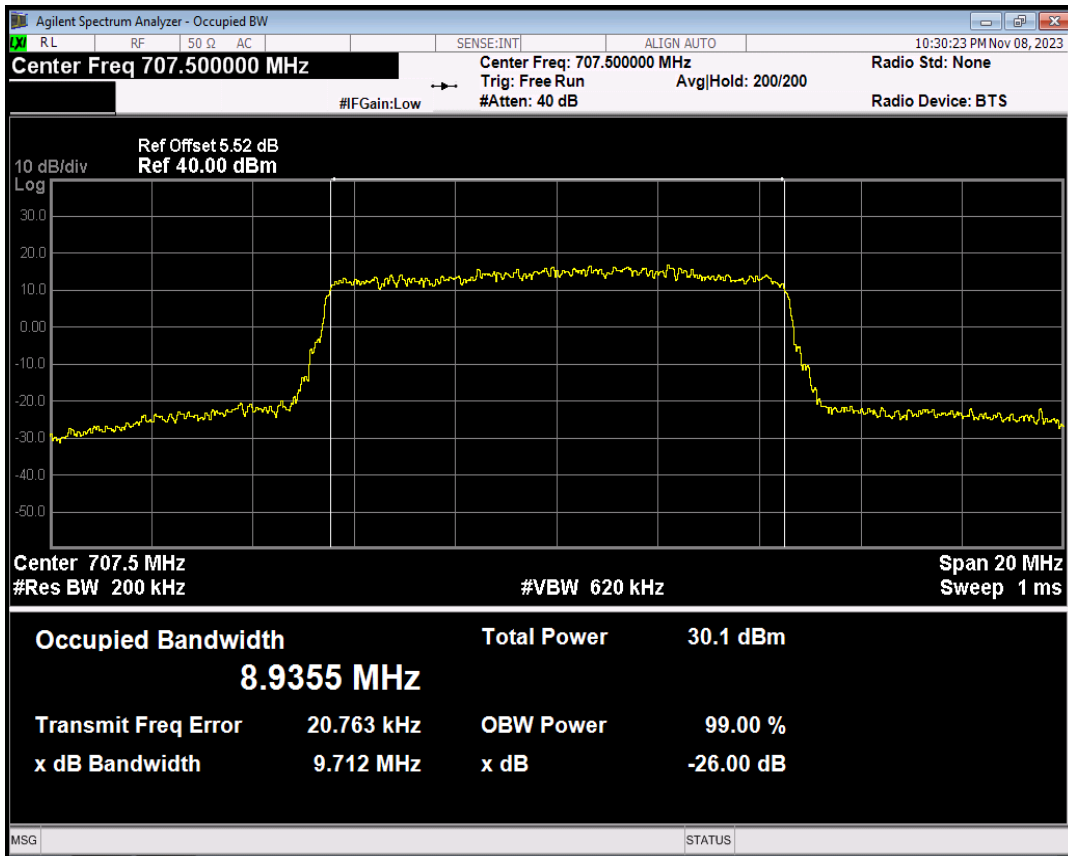
Band12 QPSK BW=10MHz Channel=23060 RB Size=50 Position=#0



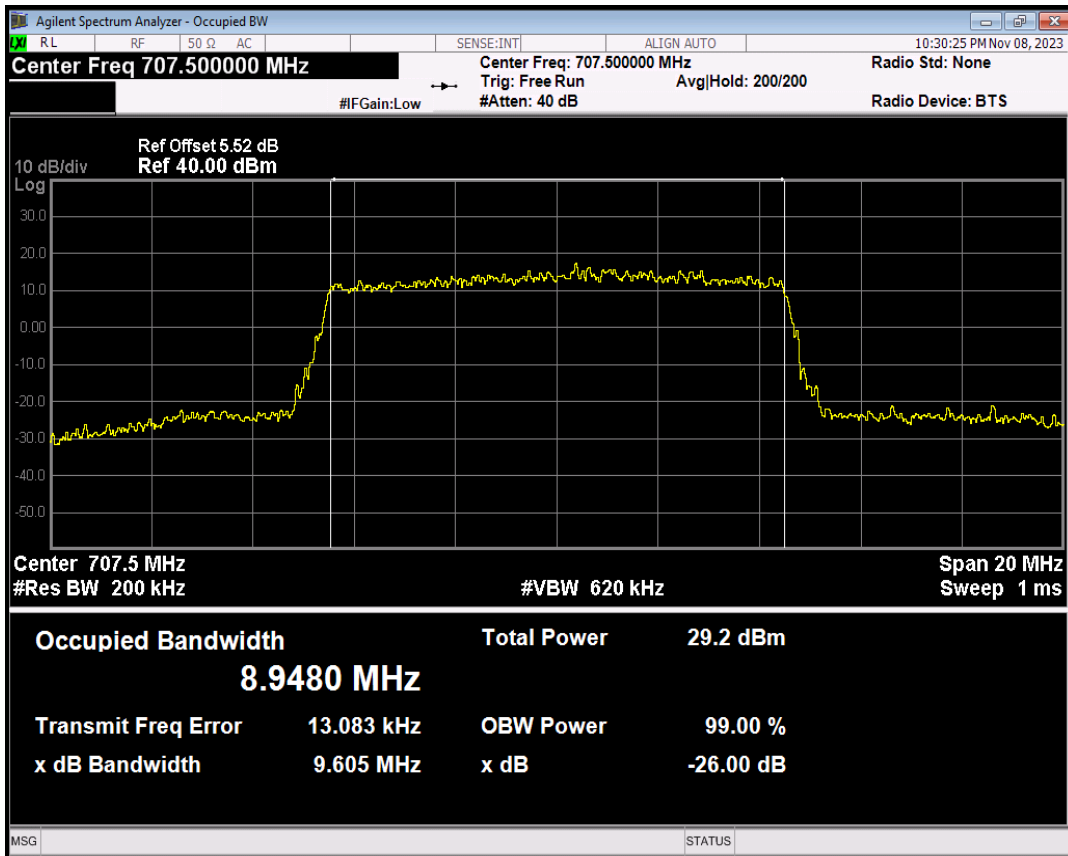
Band12 16QAM BW=10MHz Channel=23060 RB Size=50 Position=#0



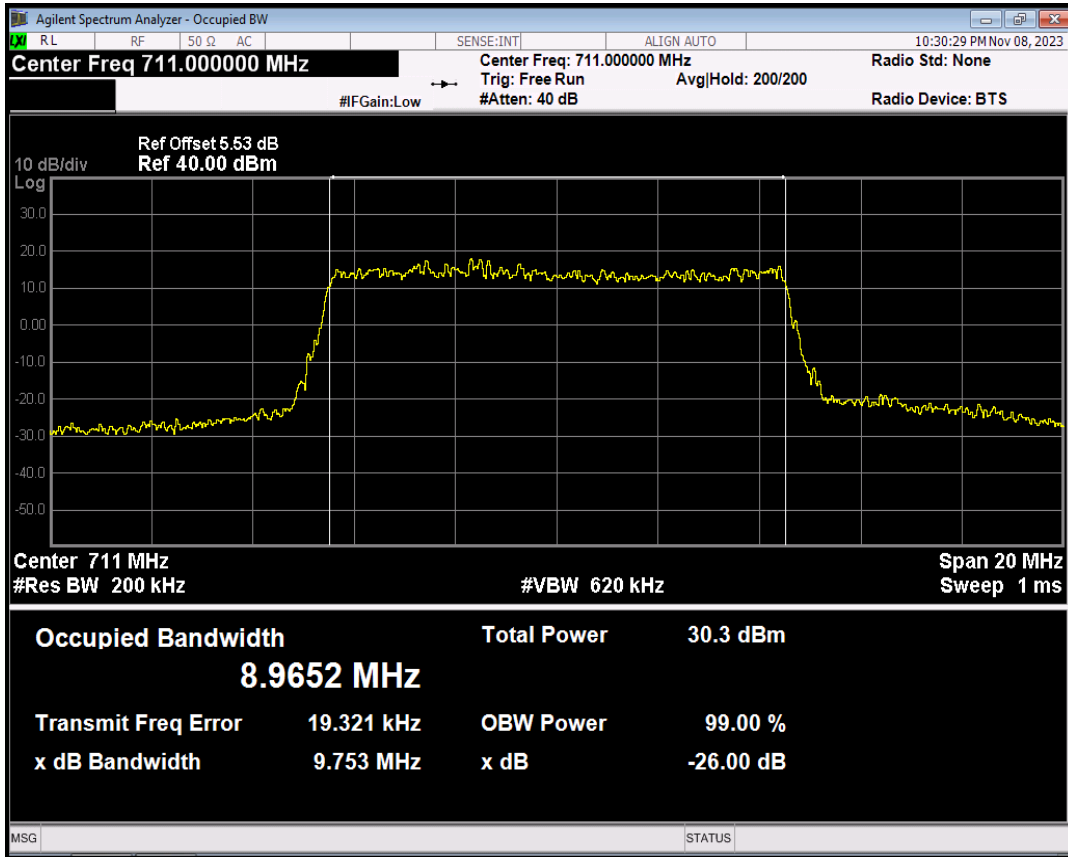
Band12 QPSK BW=10MHz Channel=23095 RB Size=50 Position=#0



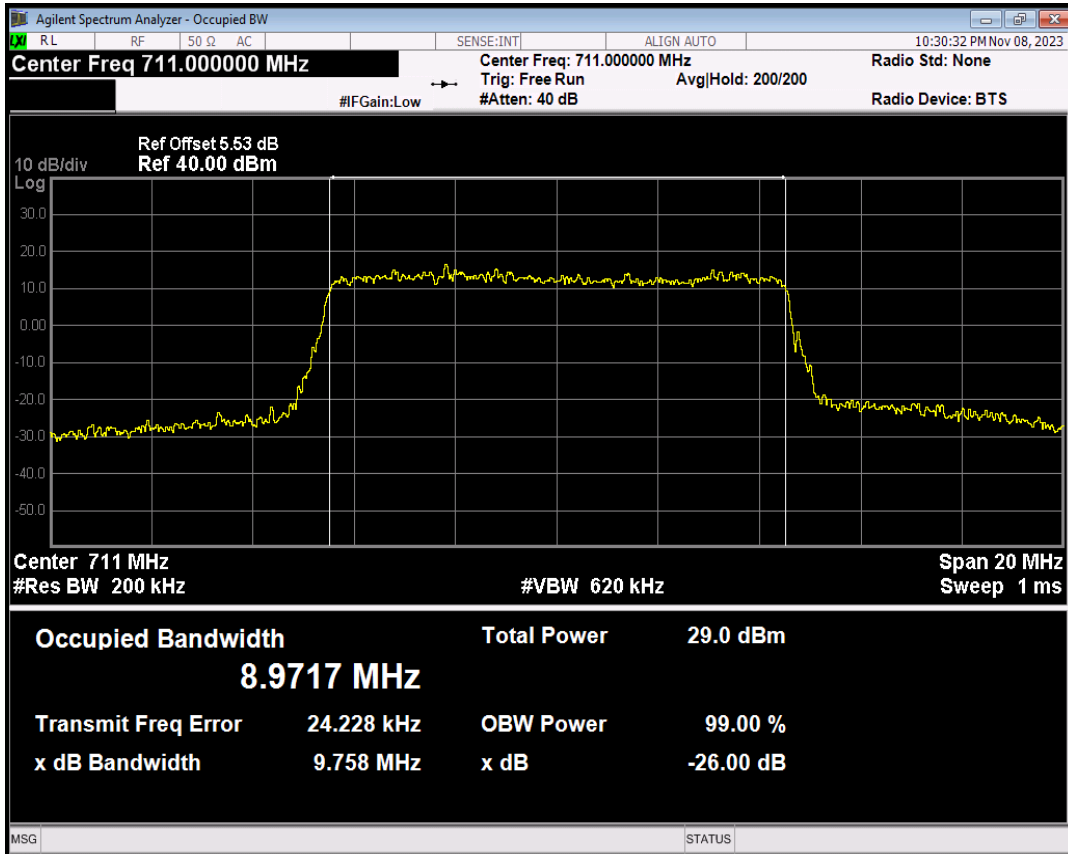
Band12 16QAM BW=10MHz Channel=23095 RB Size=50 Position=#0



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

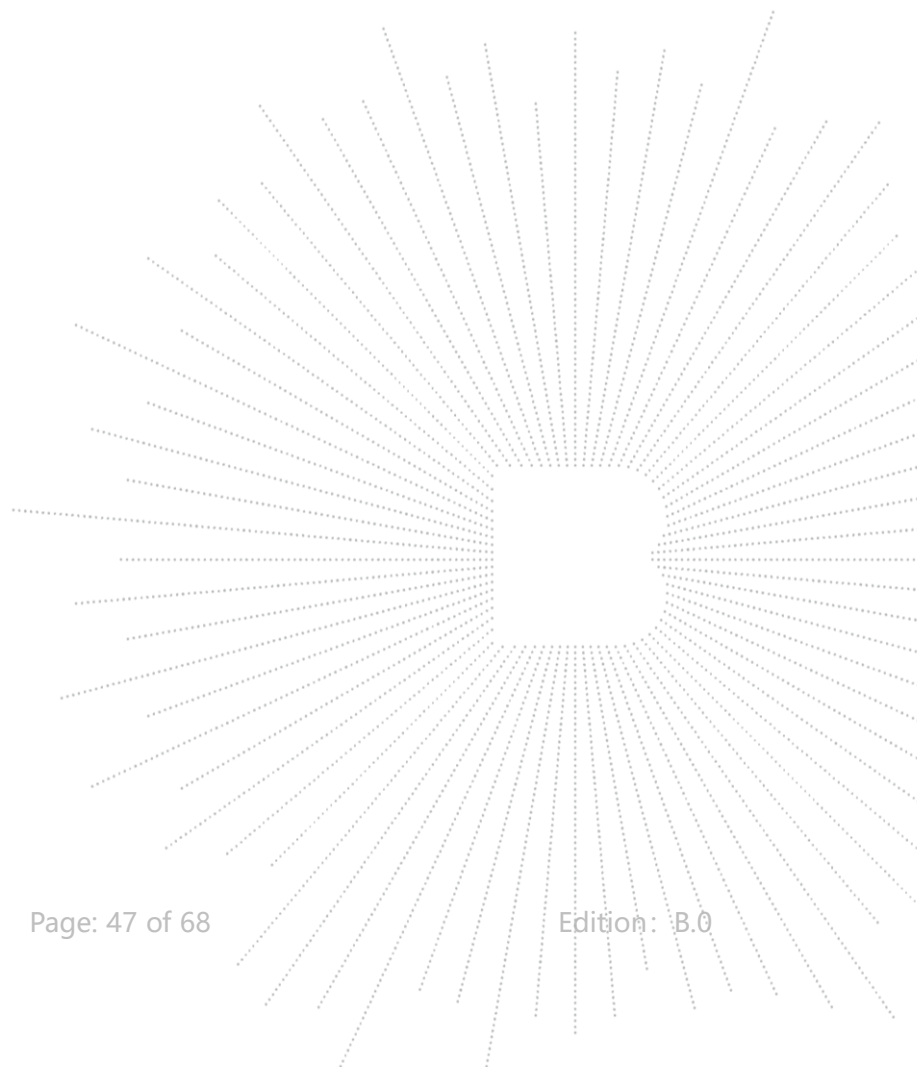


Band12 16QAM BW=10MHz Channel=23130 RB Size=50 Position=#0

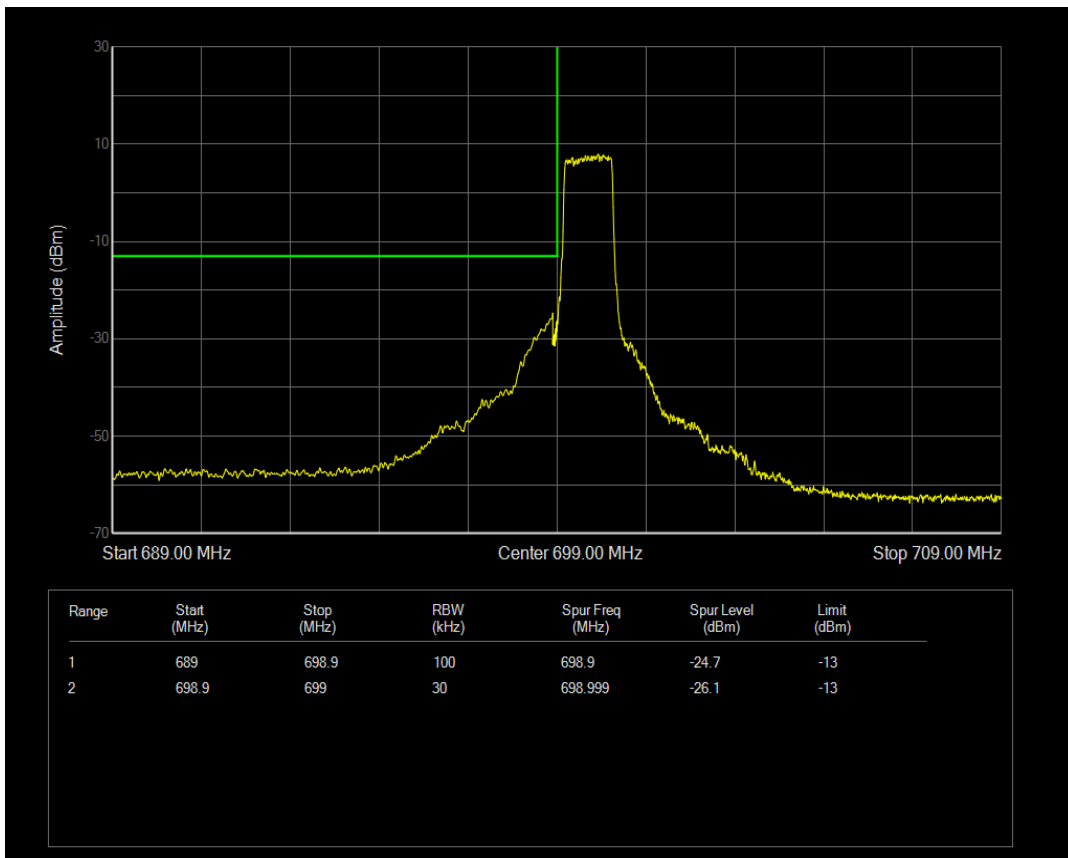


Appendix 5. Band edge

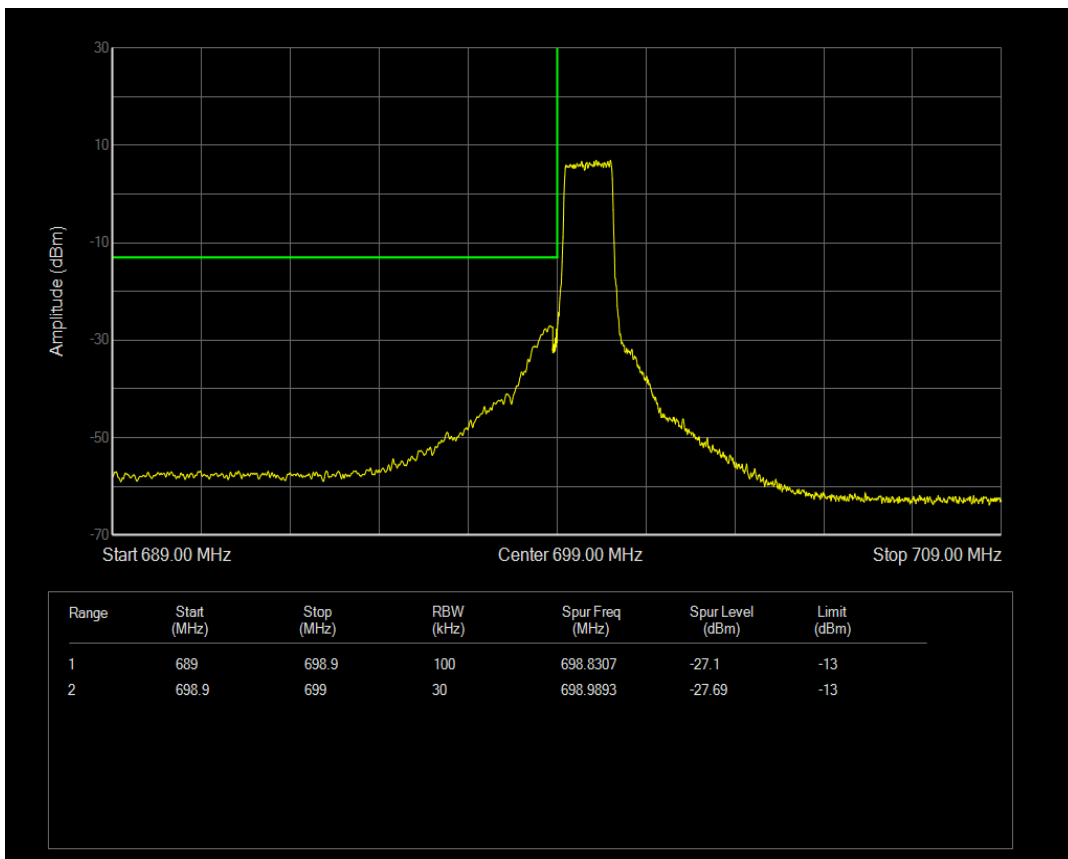
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band12	1.4	23017	6	#0	QPSK	698.90	-24.70	-13	PASS
Band12	1.4	23017	6	#0	16QAM	698.83	-27.10	-13	PASS
Band12	1.4	23173	6	#0	QPSK	716.11	-24.78	-13	PASS
Band12	1.4	23173	6	#0	16QAM	716.11	-25.72	-13	PASS
Band12	3	23025	15	#0	QPSK	698.89	-27.60	-13	PASS
Band12	3	23025	15	#0	16QAM	698.99	-28.92	-13	PASS
Band12	3	23165	15	#0	QPSK	716.11	-25.98	-13	PASS
Band12	3	23165	15	#0	16QAM	716.11	-27.37	-13	PASS
Band12	5	23035	25	#0	QPSK	698.90	-28.78	-13	PASS
Band12	5	23035	25	#0	16QAM	698.90	-31.07	-13	PASS
Band12	5	23155	25	#0	QPSK	716.11	-27.56	-13	PASS
Band12	5	23155	25	#0	16QAM	716.13	-28.72	-13	PASS
Band12	10	23060	50	#0	QPSK	698.89	-31.39	-13	PASS
Band12	10	23060	50	#0	16QAM	698.90	-33.46	-13	PASS
Band12	10	23130	50	#0	QPSK	716.12	-28.79	-13	PASS
Band12	10	23130	50	#0	16QAM	716.11	-31.25	-13	PASS



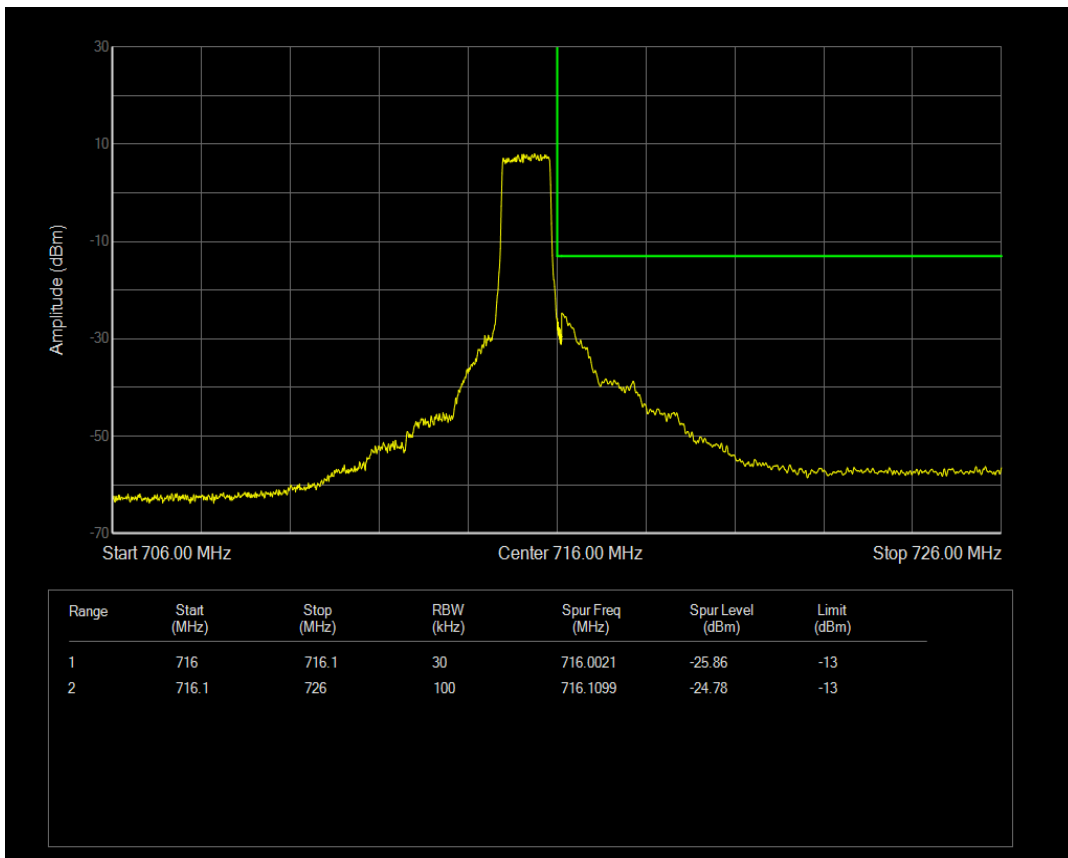
Band12 QPSK BW=1.4MHz Channel=23017 RB Size=6 Position=#0



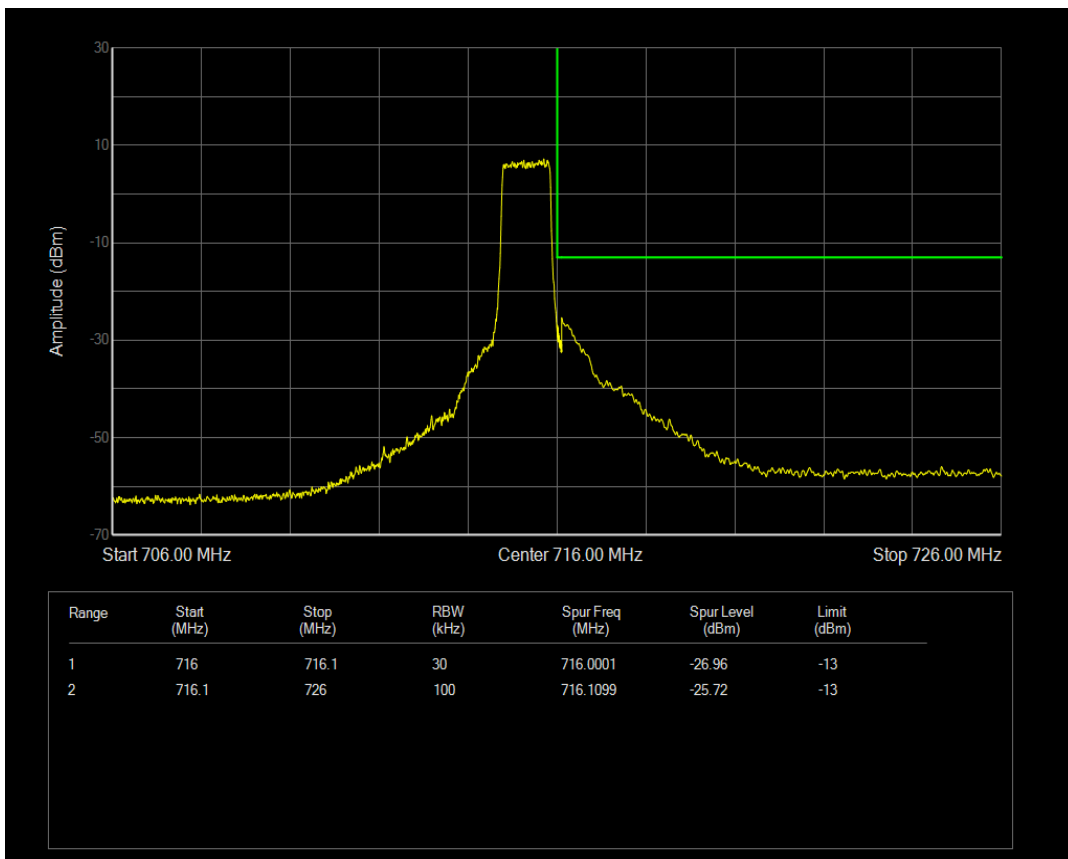
Band12 16QAM BW=1.4MHz Channel=23017 RB Size=6 Position=#0



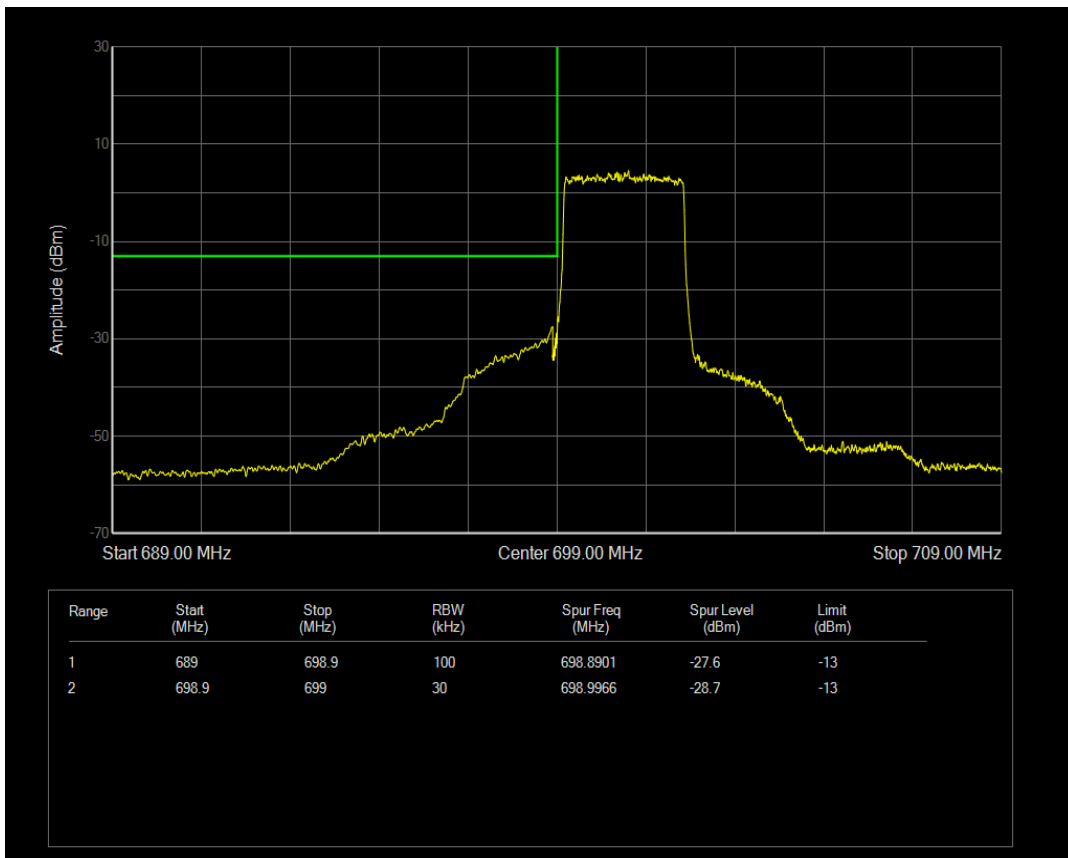
Band12 QPSK BW=1.4MHz Channel=23173 RB Size=6 Position=#0



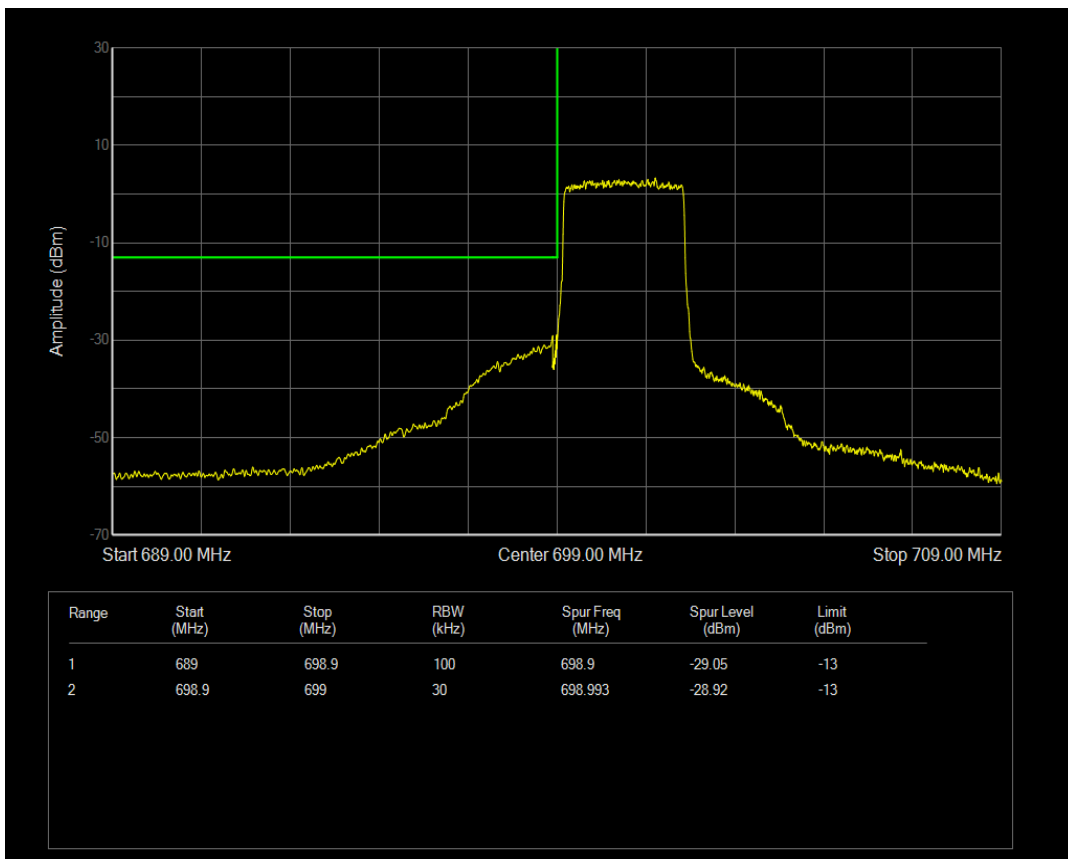
Band12 16QAM BW=1.4MHz Channel=23173 RB Size=6 Position=#0



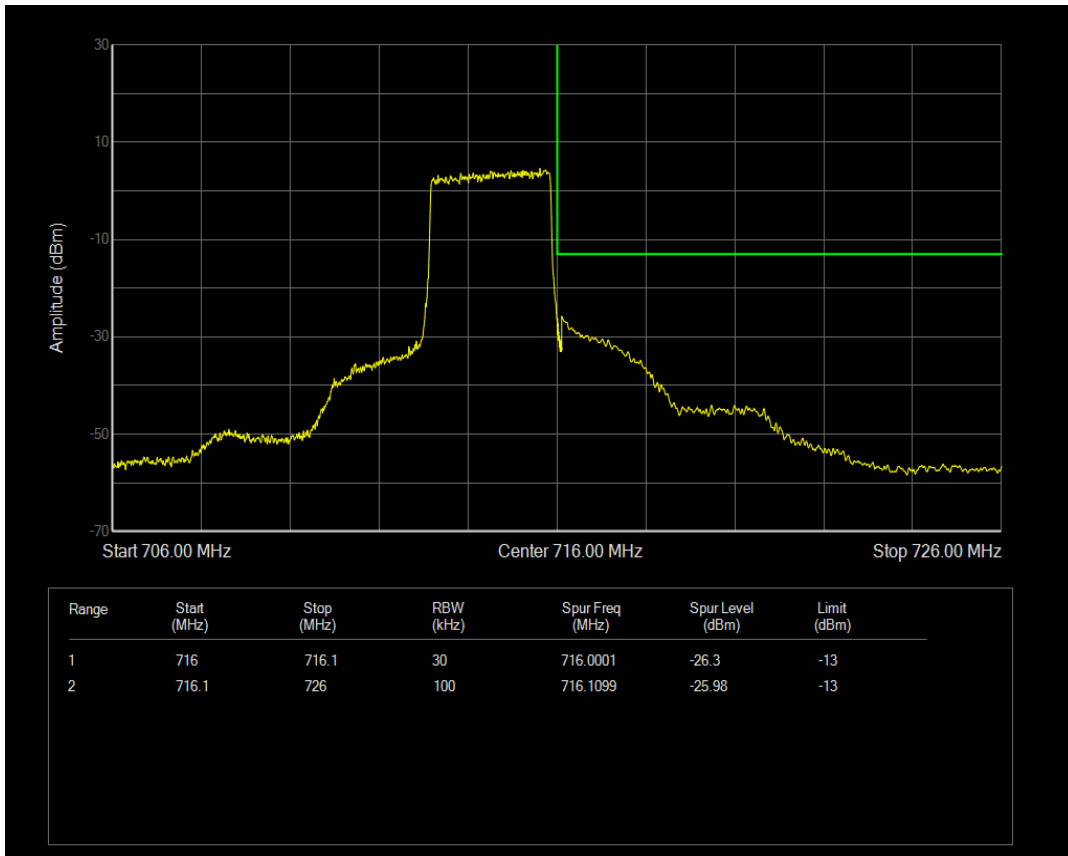
Band12 QPSK BW=3MHz Channel=23025 RB Size=15 Position=#0



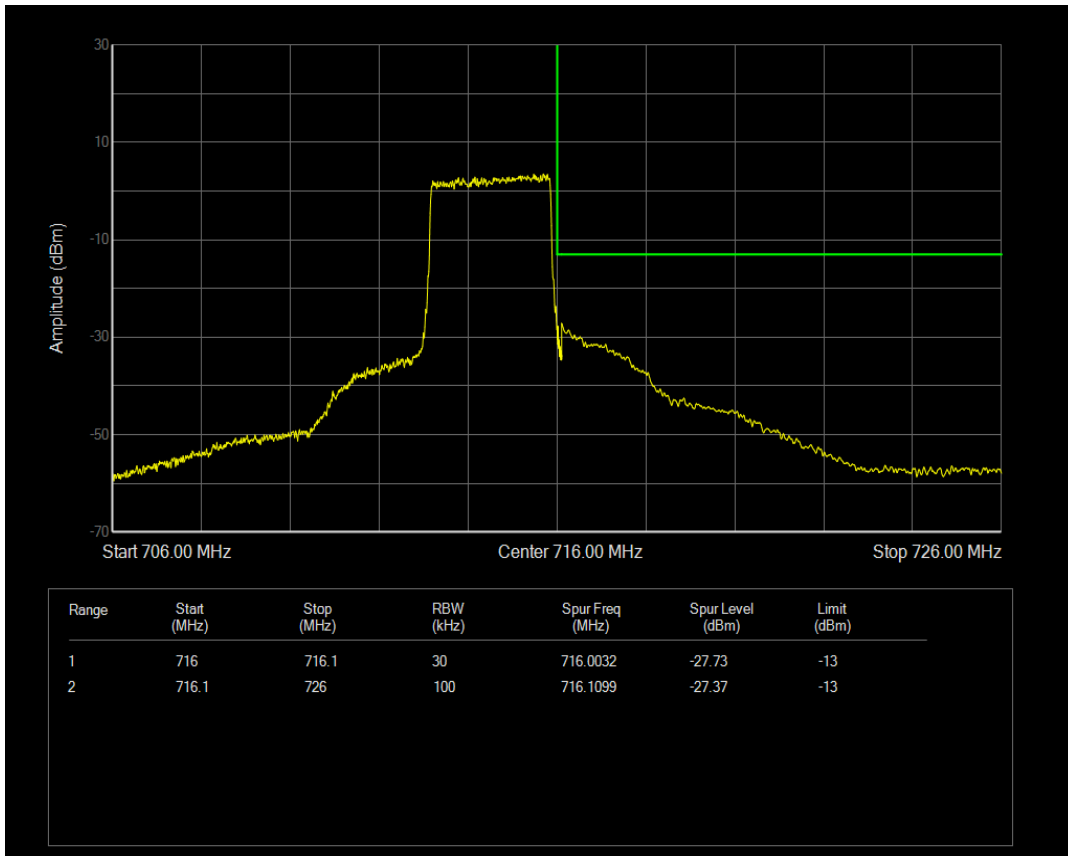
Band12 16QAM BW=3MHz Channel=23025 RB Size=15 Position=#0



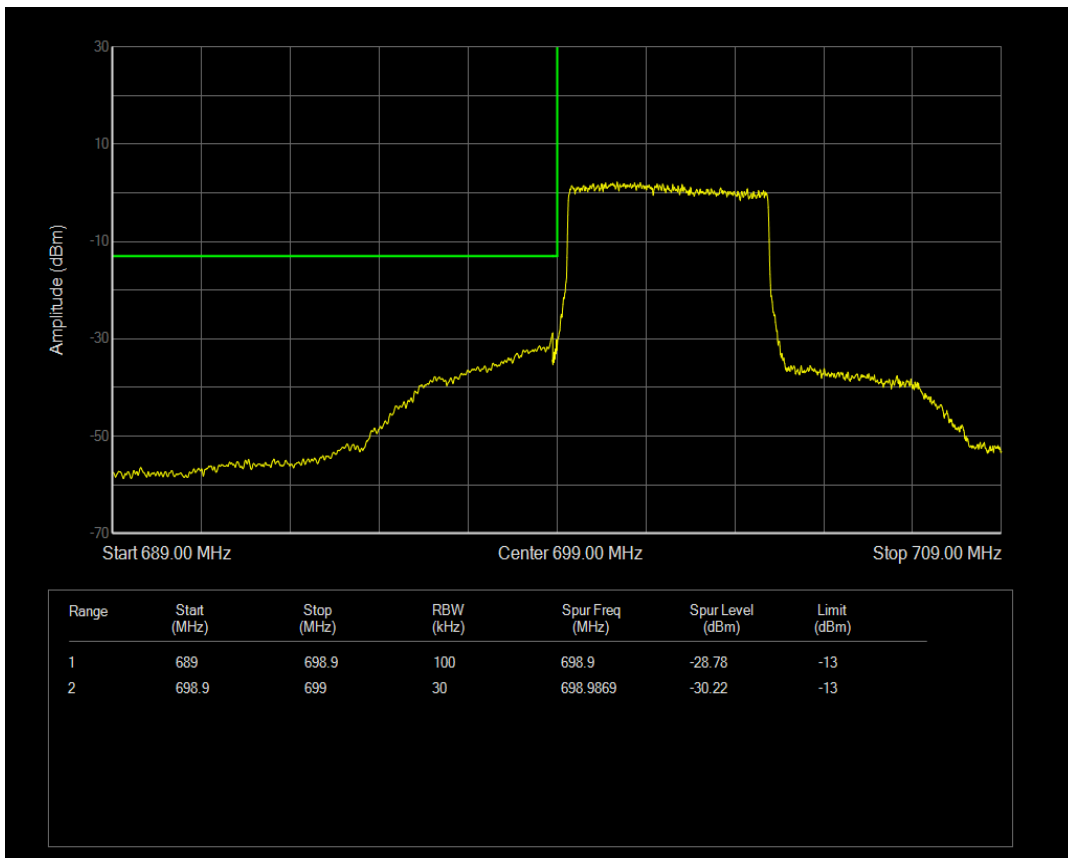
Band12 QPSK BW=3MHz Channel=23165 RB Size=15 Position=#0



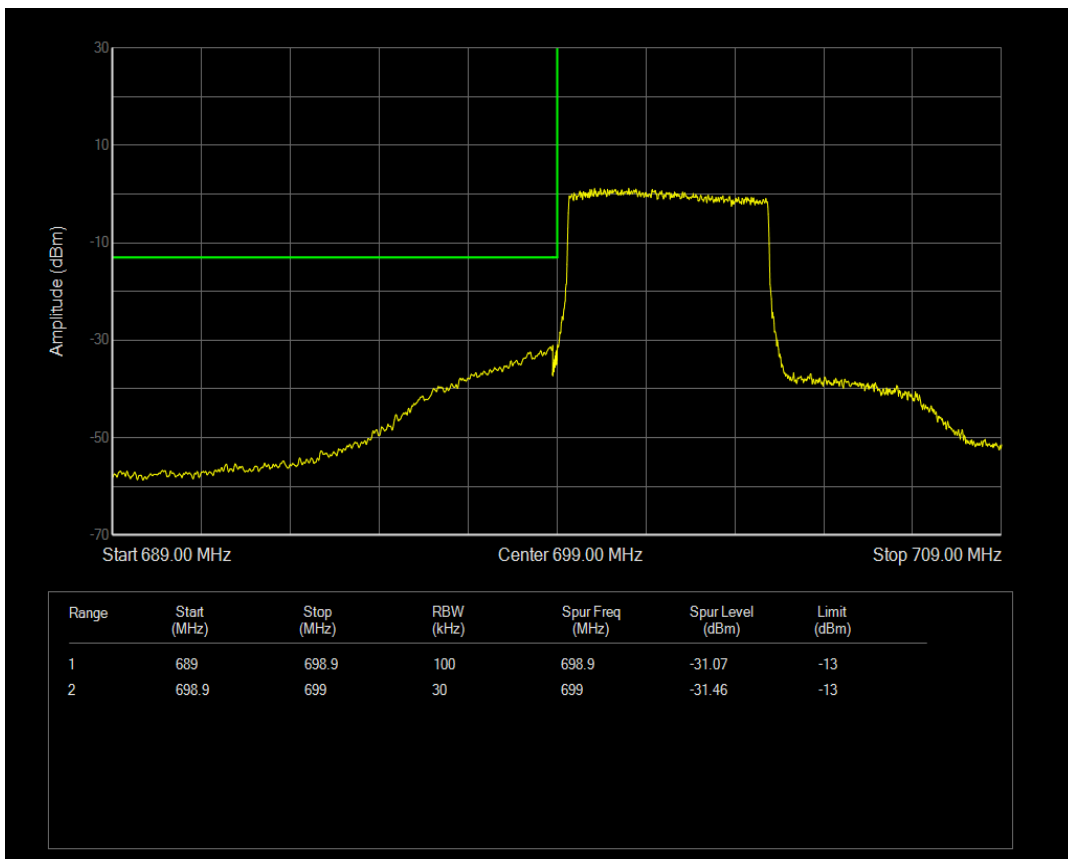
Band12 16QAM BW=3MHz Channel=23165 RB Size=15 Position=#0



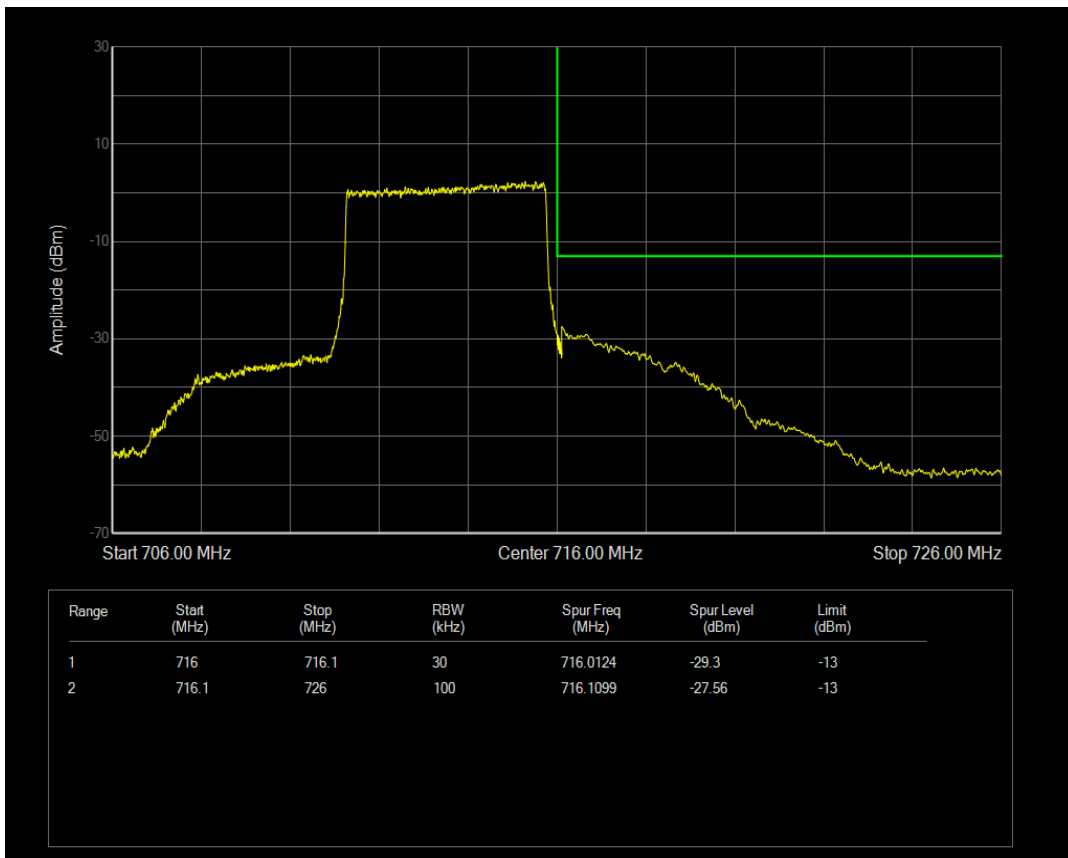
Band12 QPSK BW=5MHz Channel=23035 RB Size=25 Position=#0



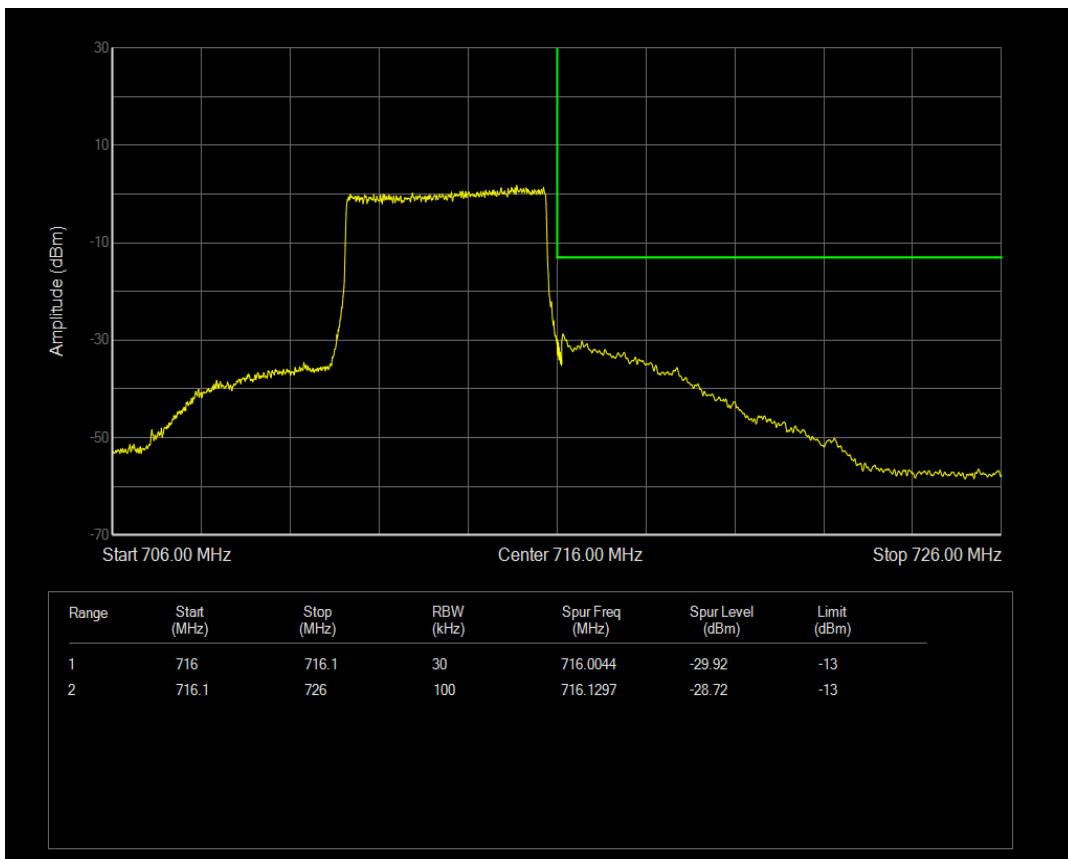
Band12 16QAM BW=5MHz Channel=23035 RB Size=25 Position=#0



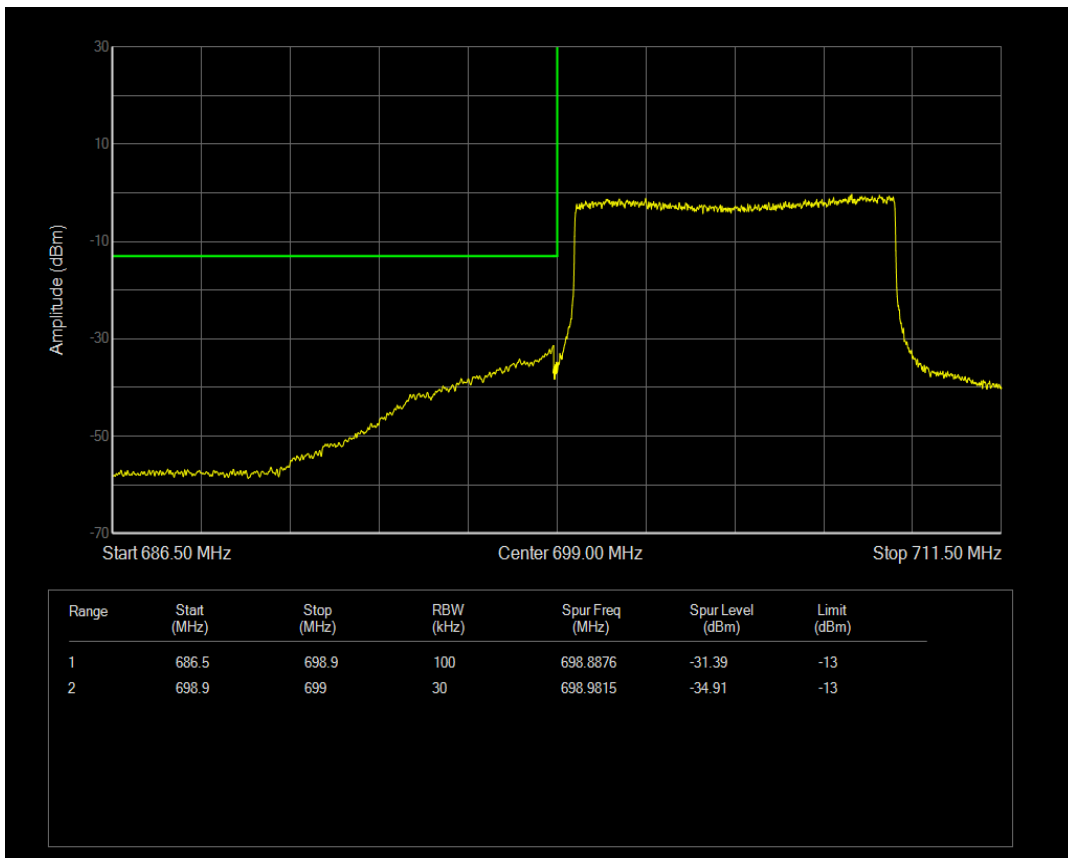
Band12 QPSK BW=5MHz Channel=23155 RB Size=25 Position=#0



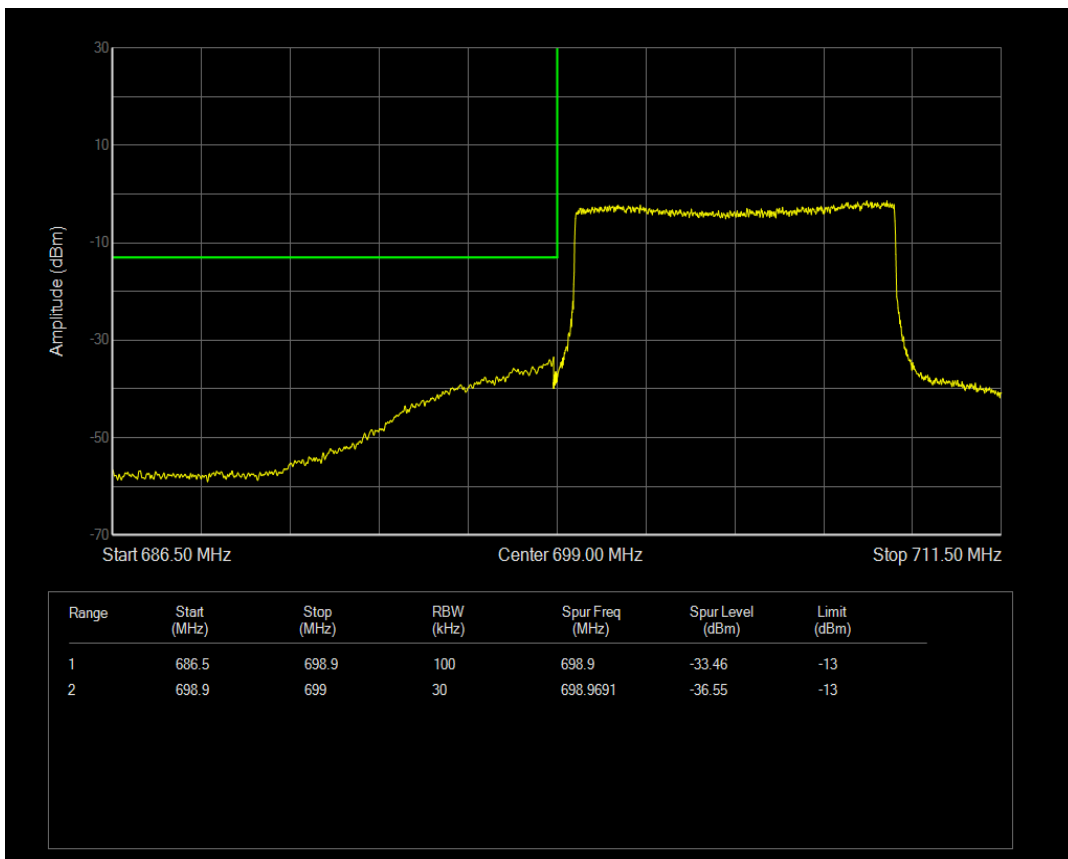
Band12 16QAM BW=5MHz Channel=23155 RB Size=25 Position=#0



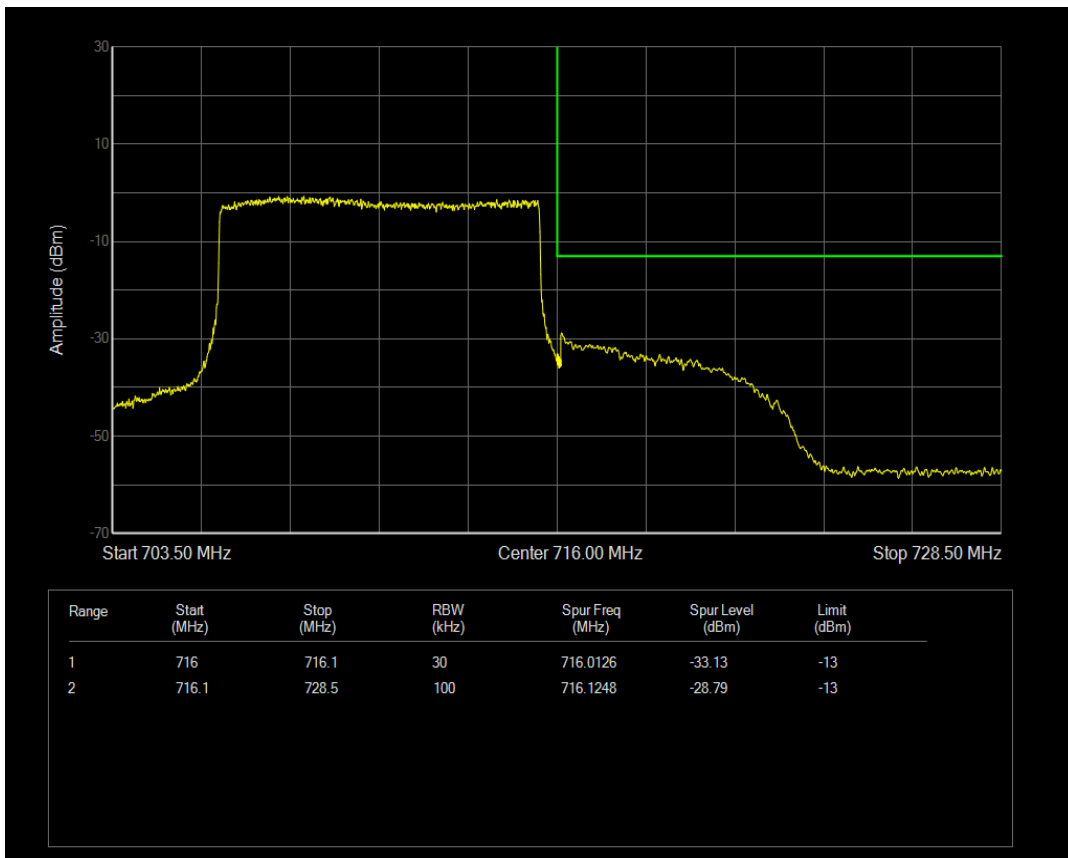
Band12 QPSK BW=10MHz Channel=23060 RB Size=50 Position=#0



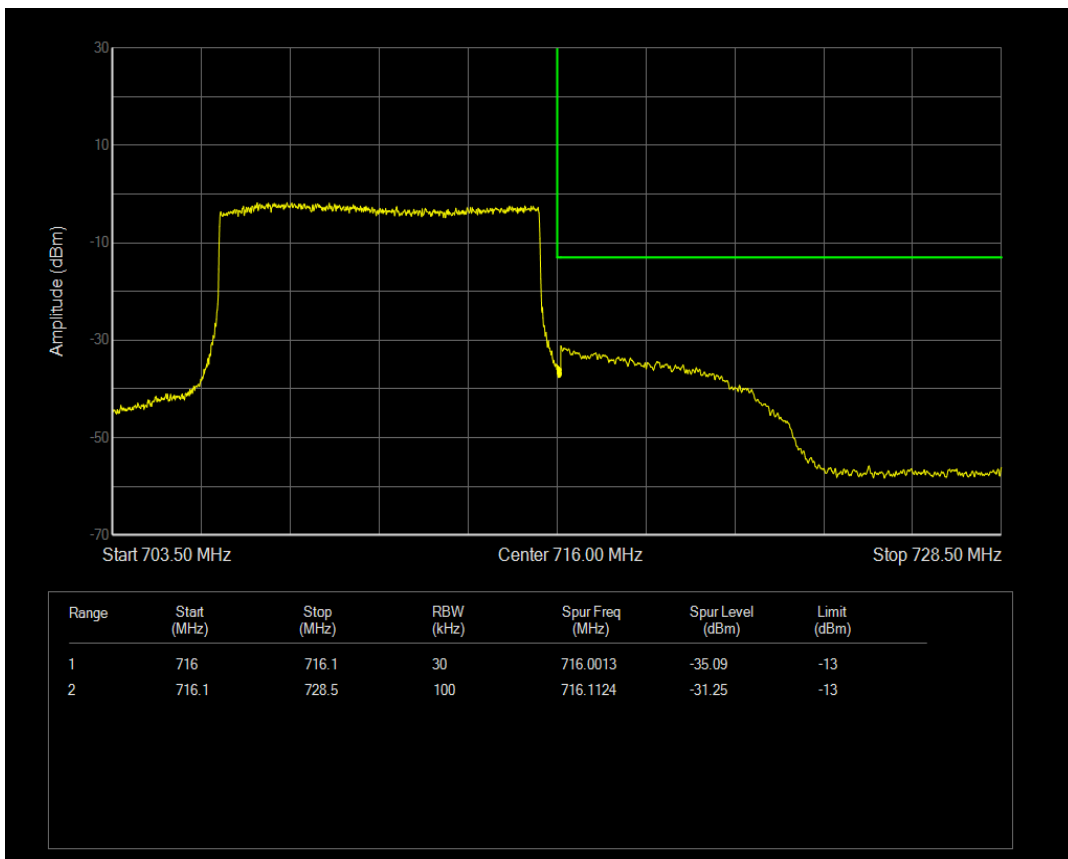
Band12 16QAM BW=10MHz Channel=23060 RB Size=50 Position=#0



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

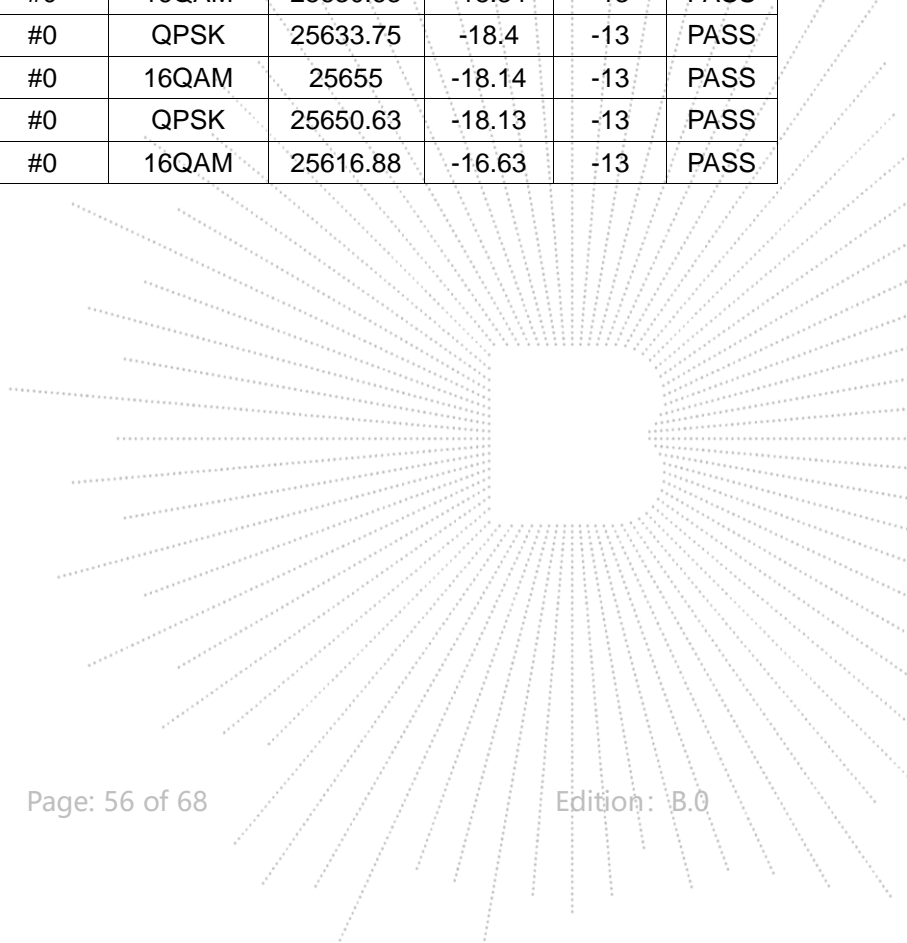


Band12 16QAM BW=10MHz Channel=23130 RB Size=50 Position=#0

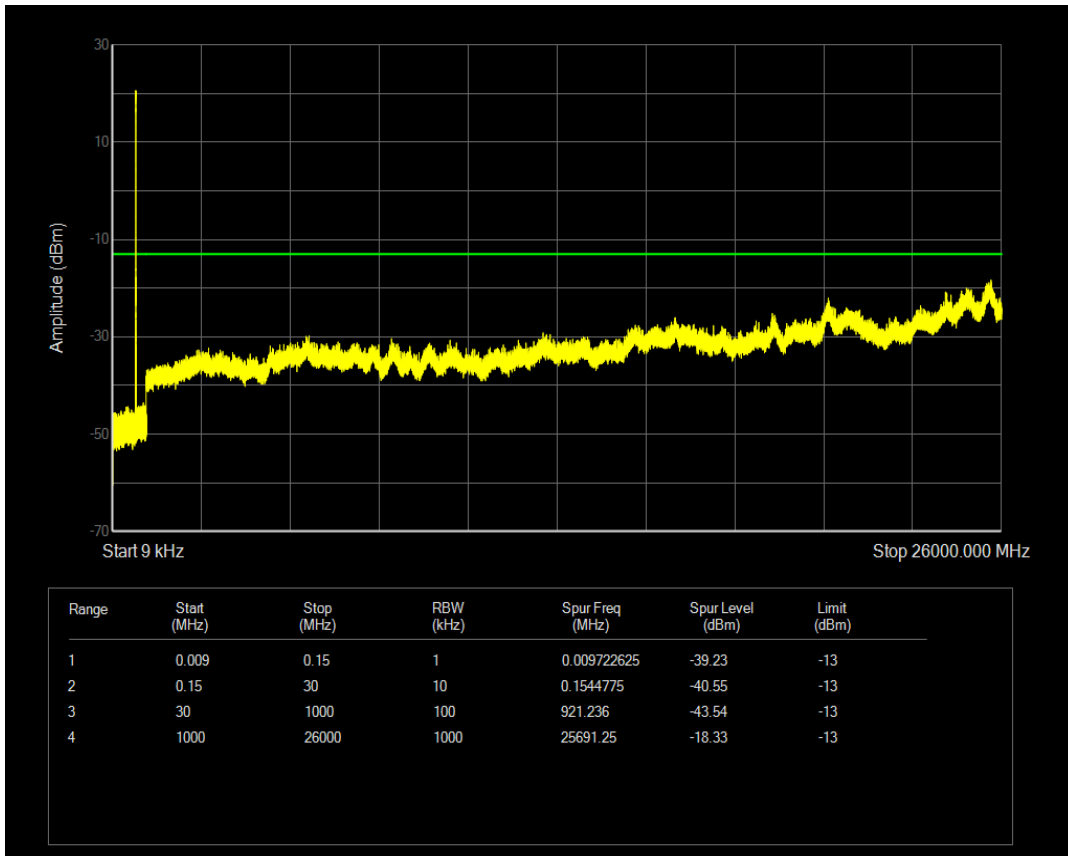


Appendix 6. Out-of-band emissions

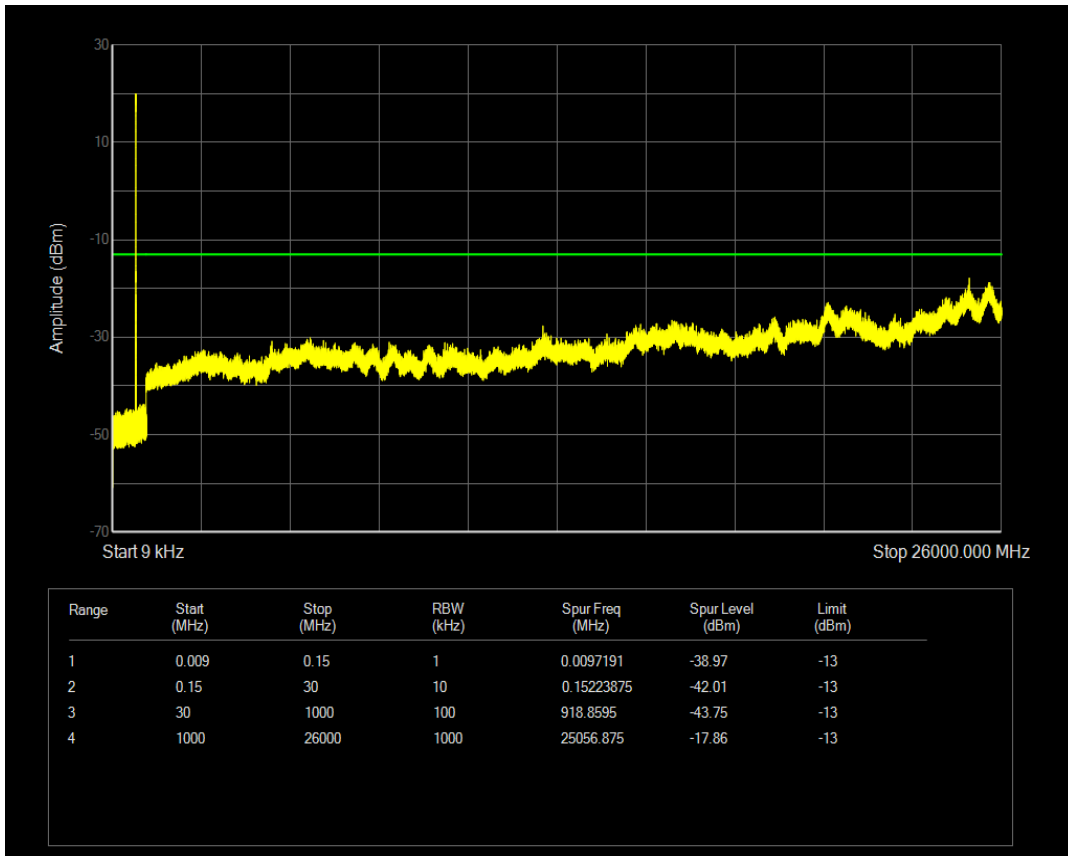
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band12	1.4	23017	6	#0	QPSK	25691.25	-18.33	-13	PASS
Band12	1.4	23017	6	#0	16QAM	25056.88	-17.86	-13	PASS
Band12	1.4	23095	6	#0	QPSK	25672.5	-17.47	-13	PASS
Band12	1.4	23095	6	#0	16QAM	25666.88	-18.44	-13	PASS
Band12	1.4	23173	6	#0	QPSK	25742.5	-18.14	-13	PASS
Band12	1.4	23173	6	#0	16QAM	25673.75	-17.16	-13	PASS
Band12	3	23025	15	#0	QPSK	25622.5	-18.43	-13	PASS
Band12	3	23025	15	#0	16QAM	25606.88	-18.52	-13	PASS
Band12	3	23095	15	#0	QPSK	25580.63	-18.43	-13	PASS
Band12	3	23095	15	#0	16QAM	25661.88	-17.55	-13	PASS
Band12	3	23165	15	#0	QPSK	25680	-17.98	-13	PASS
Band12	3	23165	15	#0	16QAM	25650.63	-17.99	-13	PASS
Band12	5	23035	25	#0	QPSK	25613.75	-17.35	-13	PASS
Band12	5	23035	25	#0	16QAM	25652.5	-18.14	-13	PASS
Band12	5	23095	25	#0	QPSK	25621.88	-18.58	-13	PASS
Band12	5	23095	25	#0	16QAM	25627.5	-17.42	-13	PASS
Band12	5	23155	25	#0	QPSK	25583.13	-18.47	-13	PASS
Band12	5	23155	25	#0	16QAM	25668.75	-18.15	-13	PASS
Band12	10	23060	50	#0	QPSK	24952.5	-18.74	-13	PASS
Band12	10	23060	50	#0	16QAM	25630.63	-18.34	-13	PASS
Band12	10	23095	50	#0	QPSK	25633.75	-18.4	-13	PASS
Band12	10	23095	50	#0	16QAM	25655	-18.14	-13	PASS
Band12	10	23130	50	#0	QPSK	25650.63	-18.13	-13	PASS
Band12	10	23130	50	#0	16QAM	25616.88	-16.63	-13	PASS



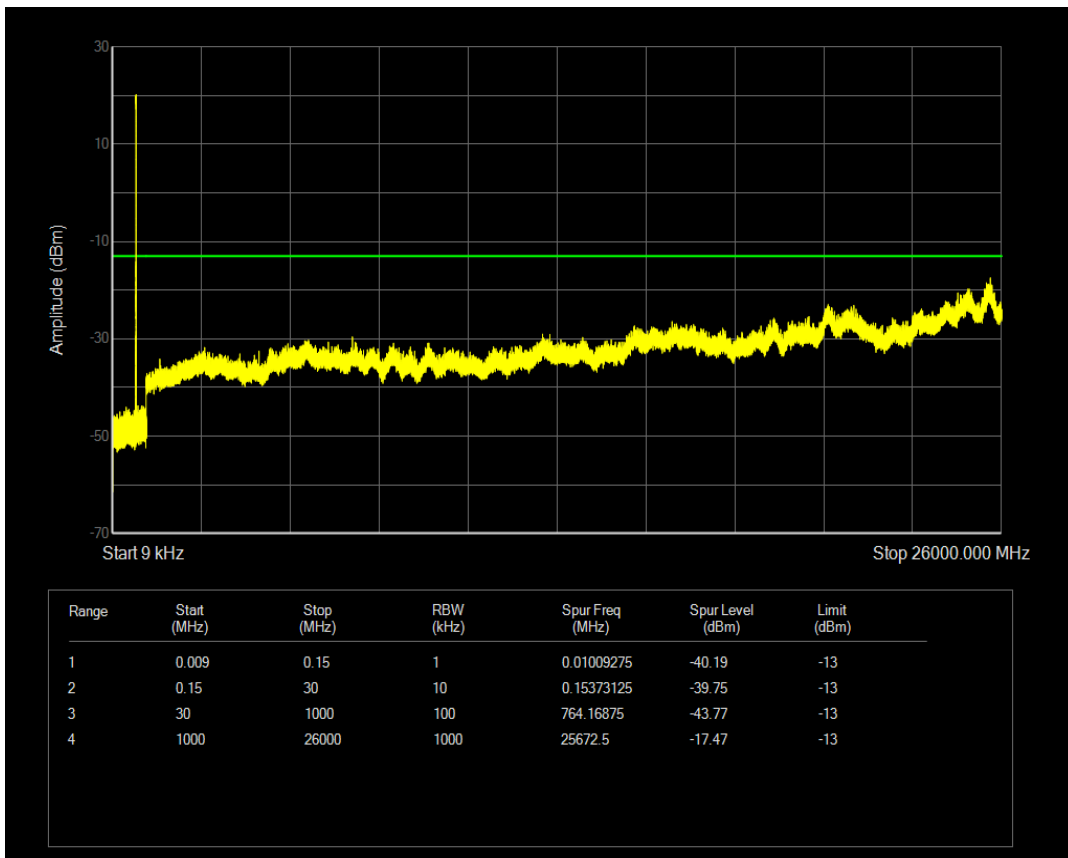
Band12 QPSK BW=1.4MHz Channel=23017 RB Size=6 Position=#0



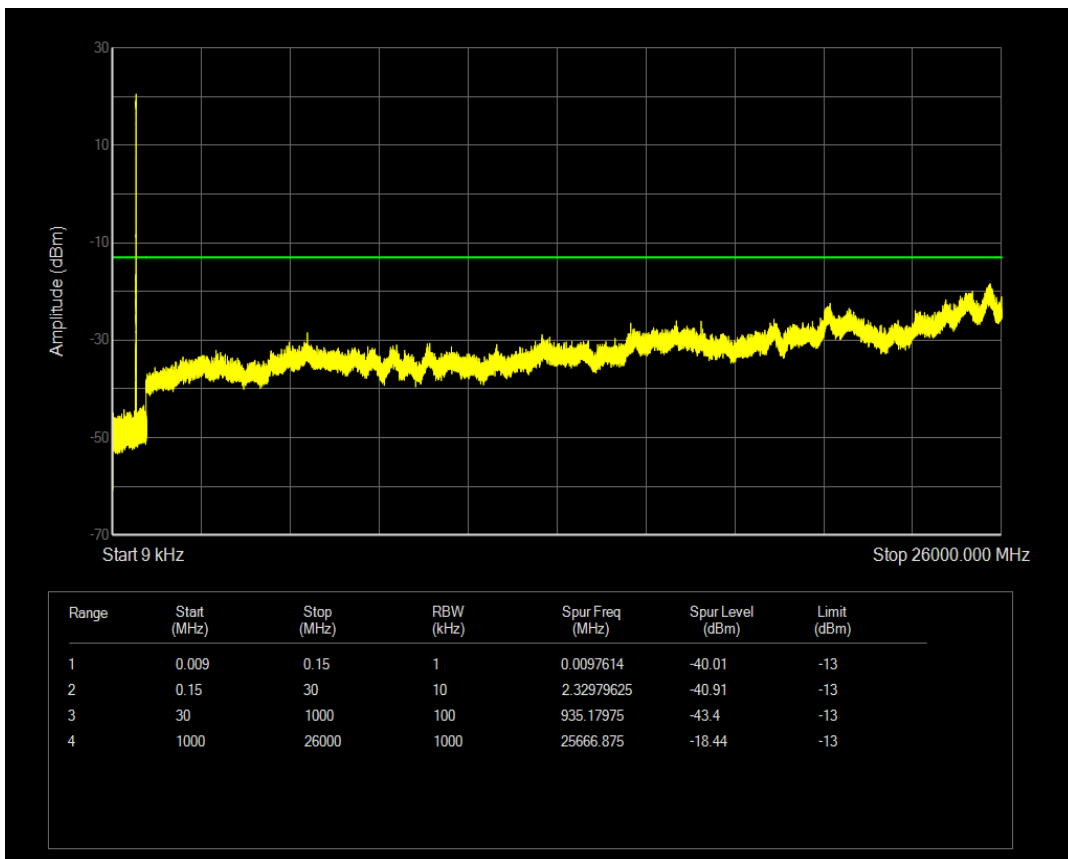
Band12 16QAM BW=1.4MHz Channel=23017 RB Size=6 Position=#0



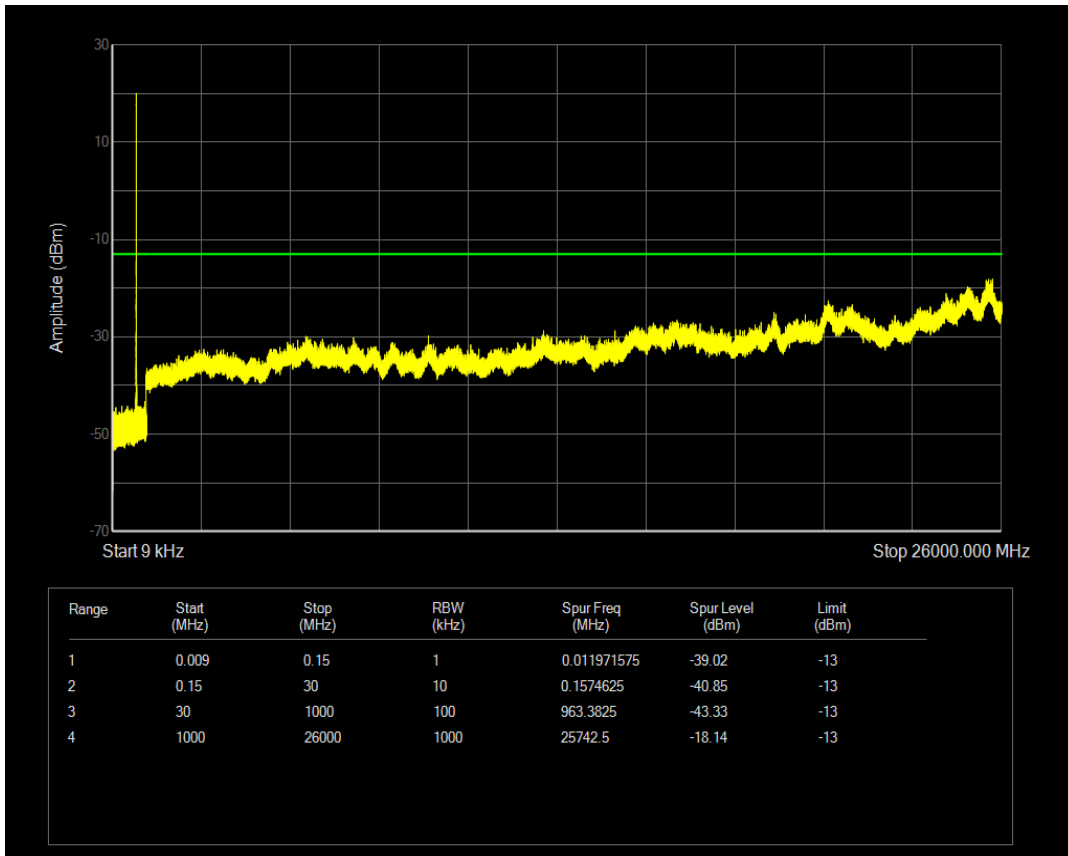
Band12 QPSK BW=1.4MHz Channel=23095 RB Size=6 Position=#0



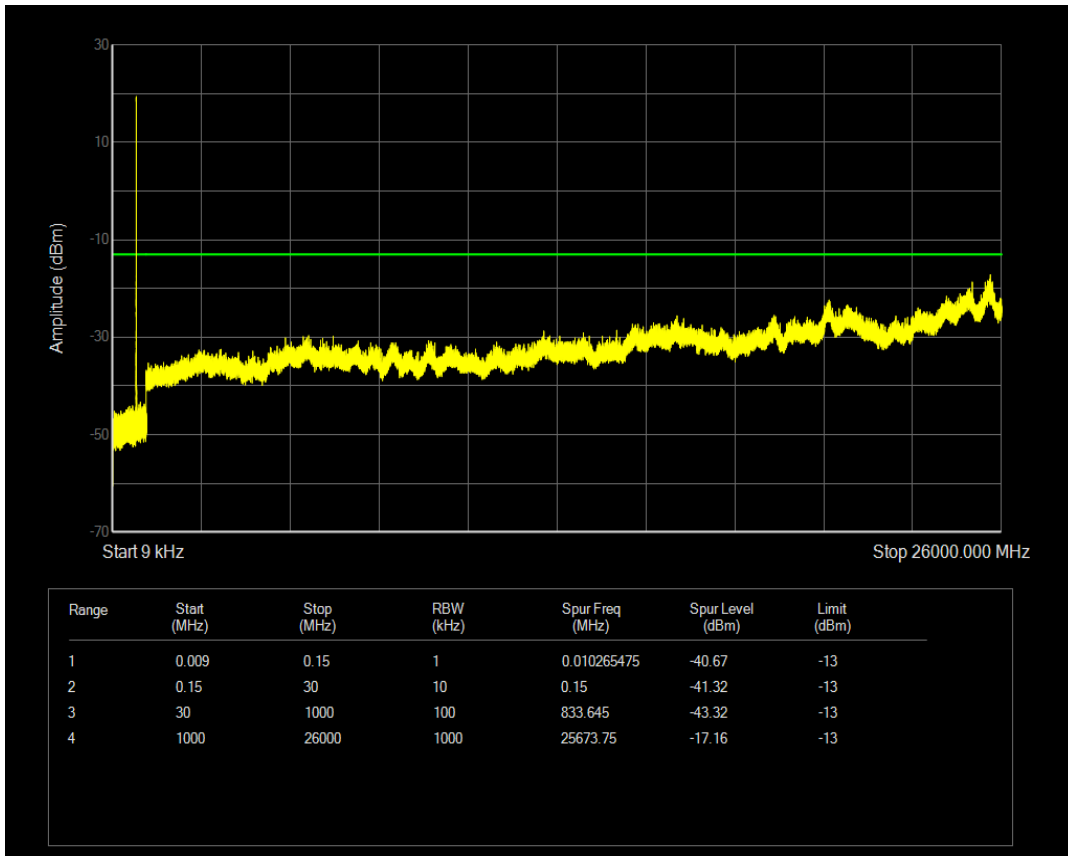
Band12 16QAM BW=1.4MHz Channel=23095 RB Size=6 Position=#0



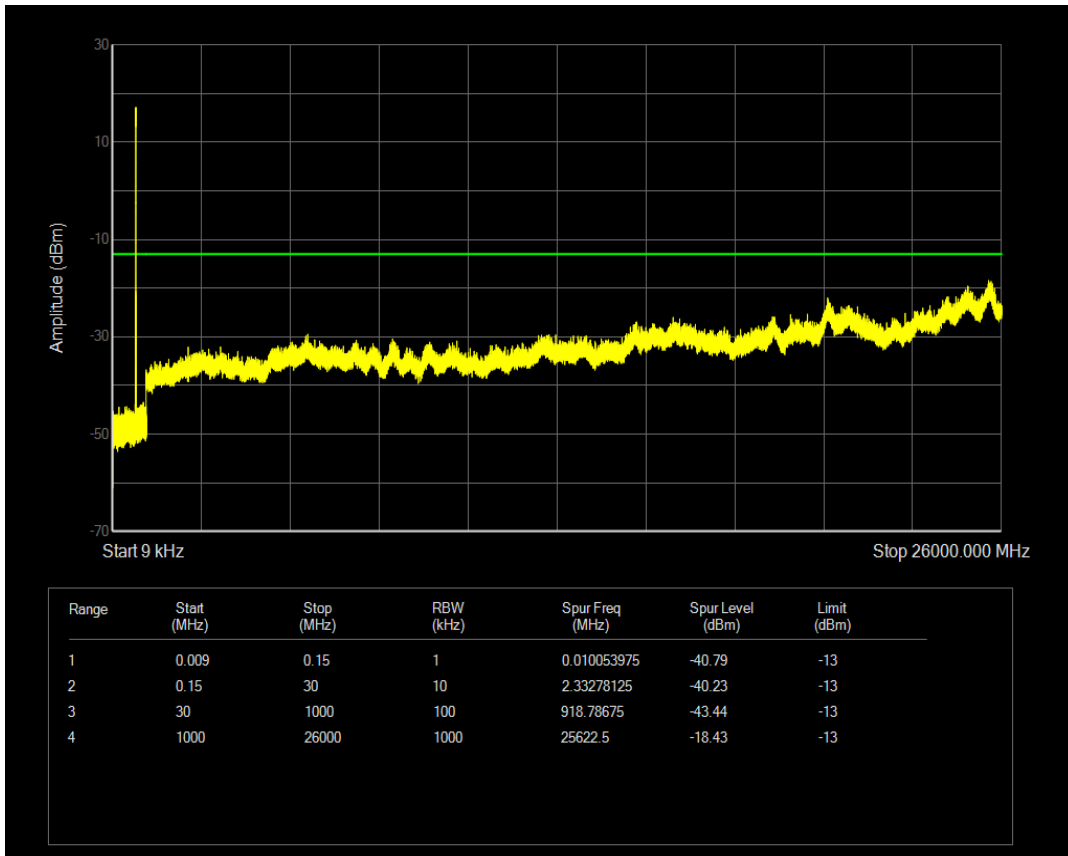
Band12 QPSK BW=1.4MHz Channel=23173 RB Size=6 Position=#0



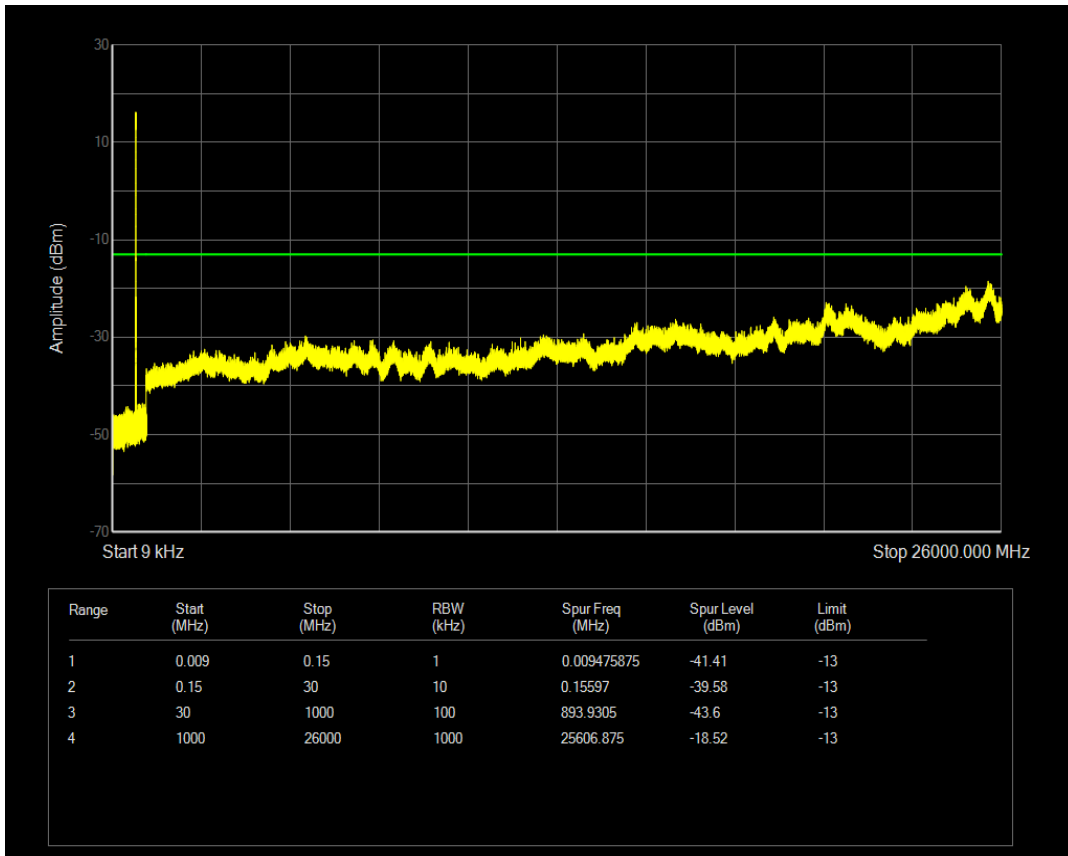
Band12 16QAM BW=1.4MHz Channel=23173 RB Size=6 Position=#0



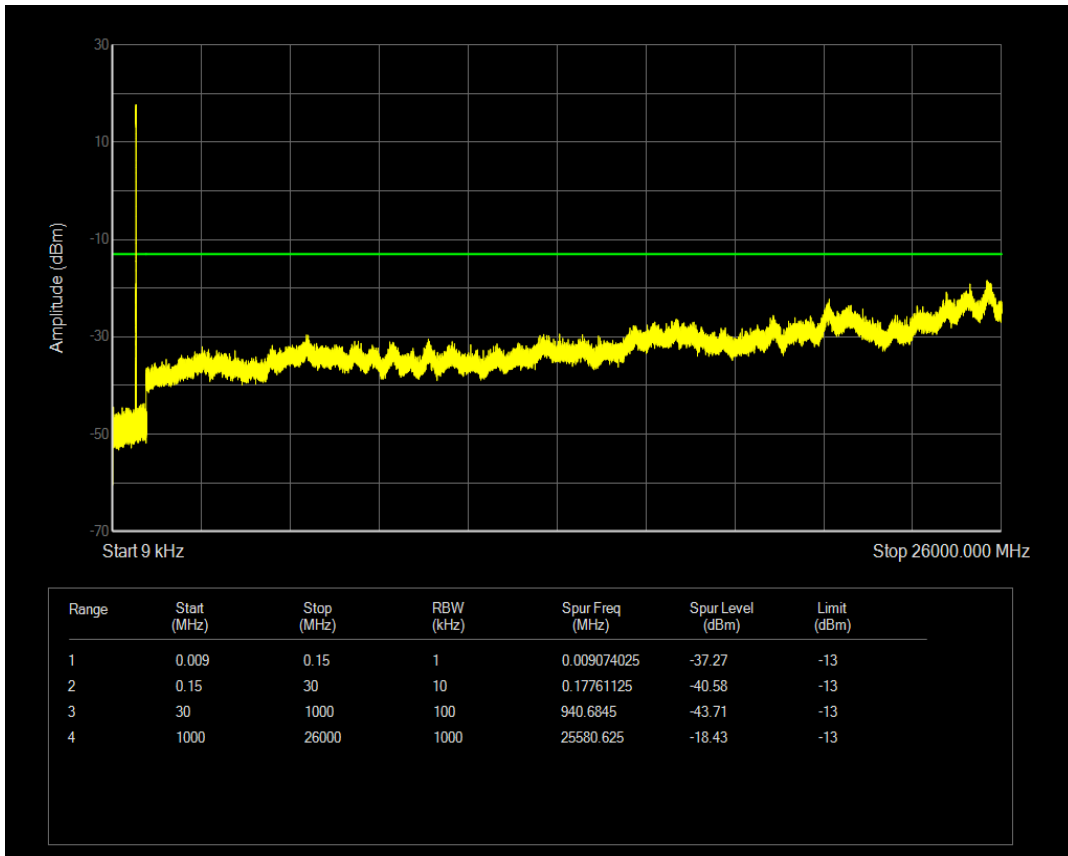
Band12 QPSK BW=3MHz Channel=23025 RB Size=15 Position=#0



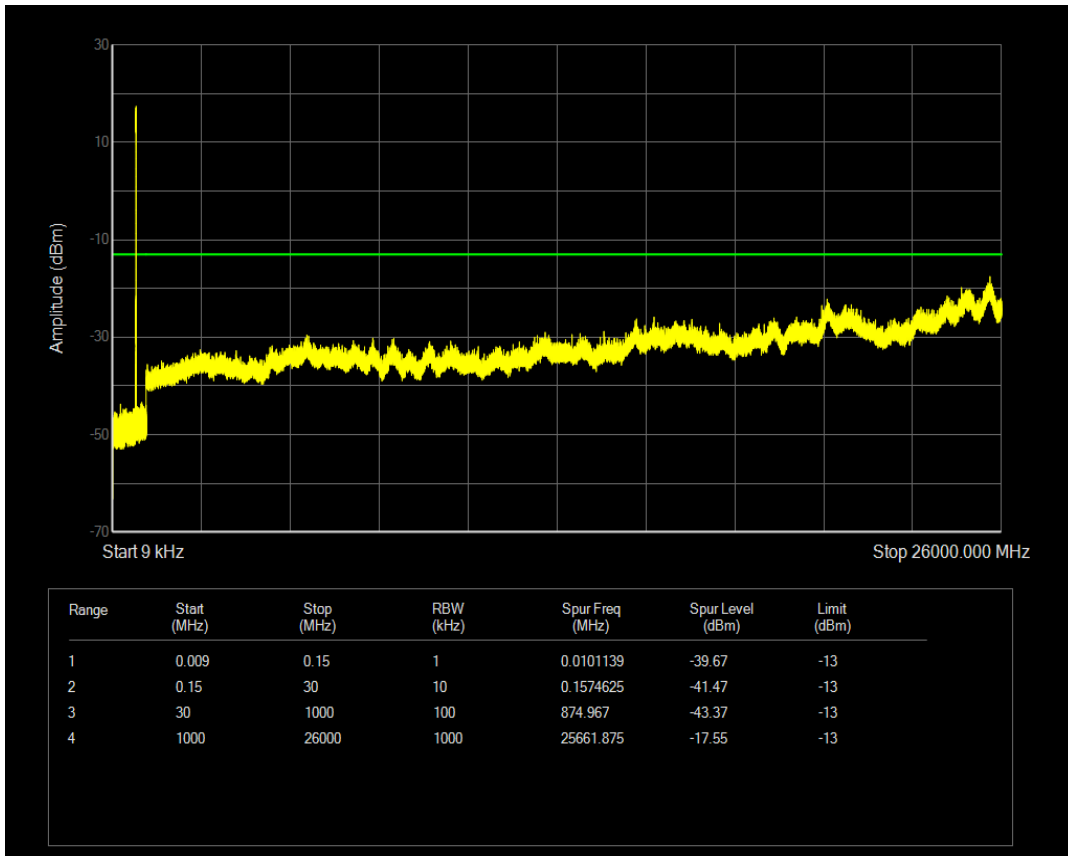
Band12 16QAM BW=3MHz Channel=23025 RB Size=15 Position=#0



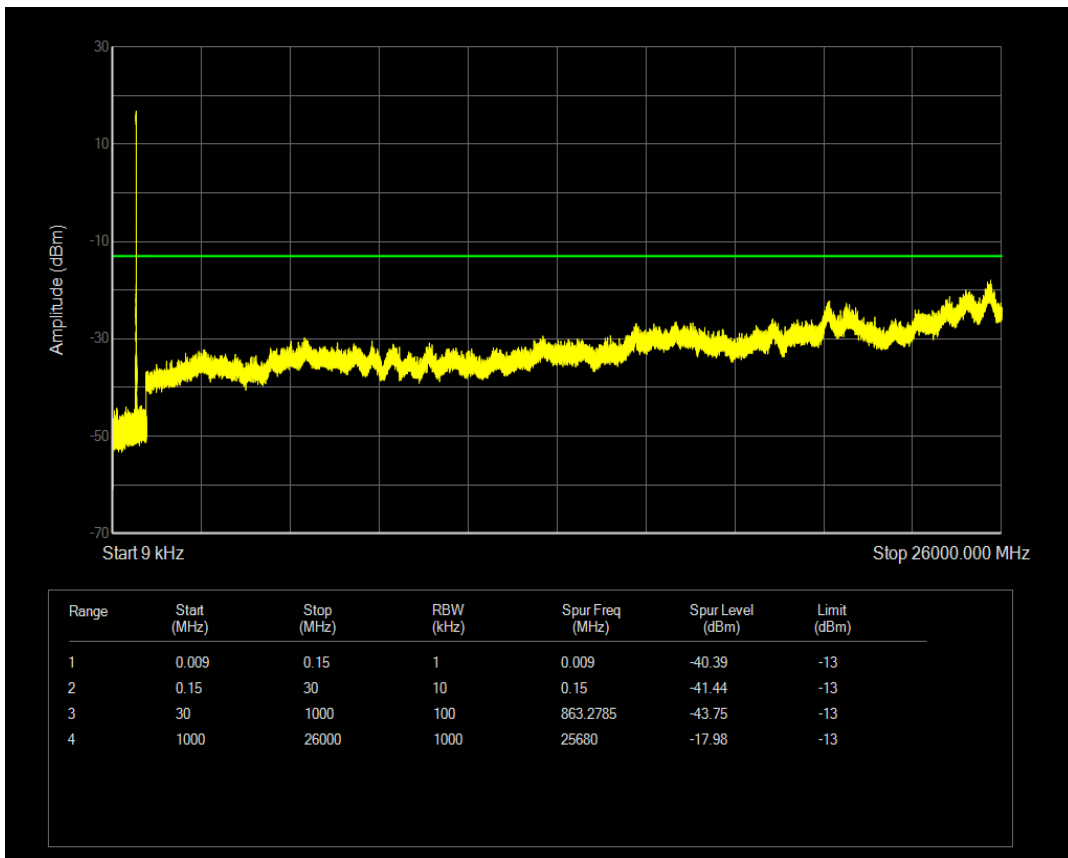
Band12 QPSK BW=3MHz Channel=23095 RB Size=15 Position=#0



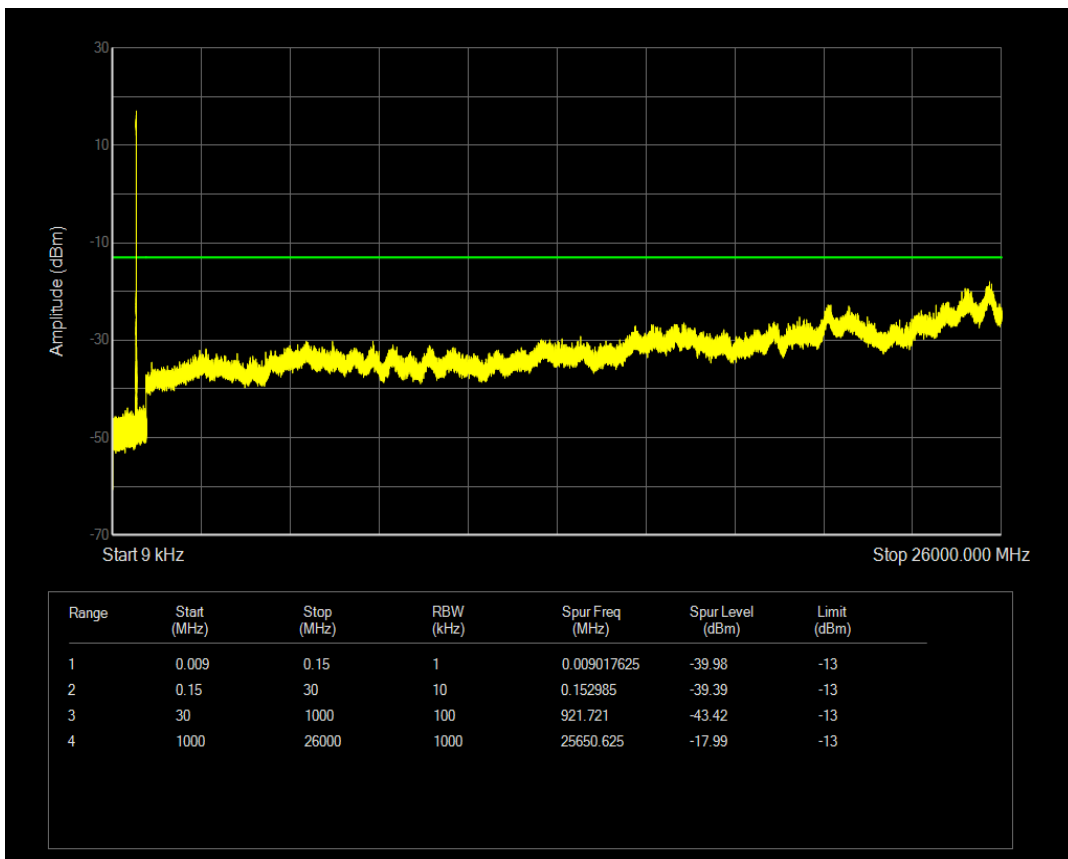
Band12 16QAM BW=3MHz Channel=23095 RB Size=15 Position=#0



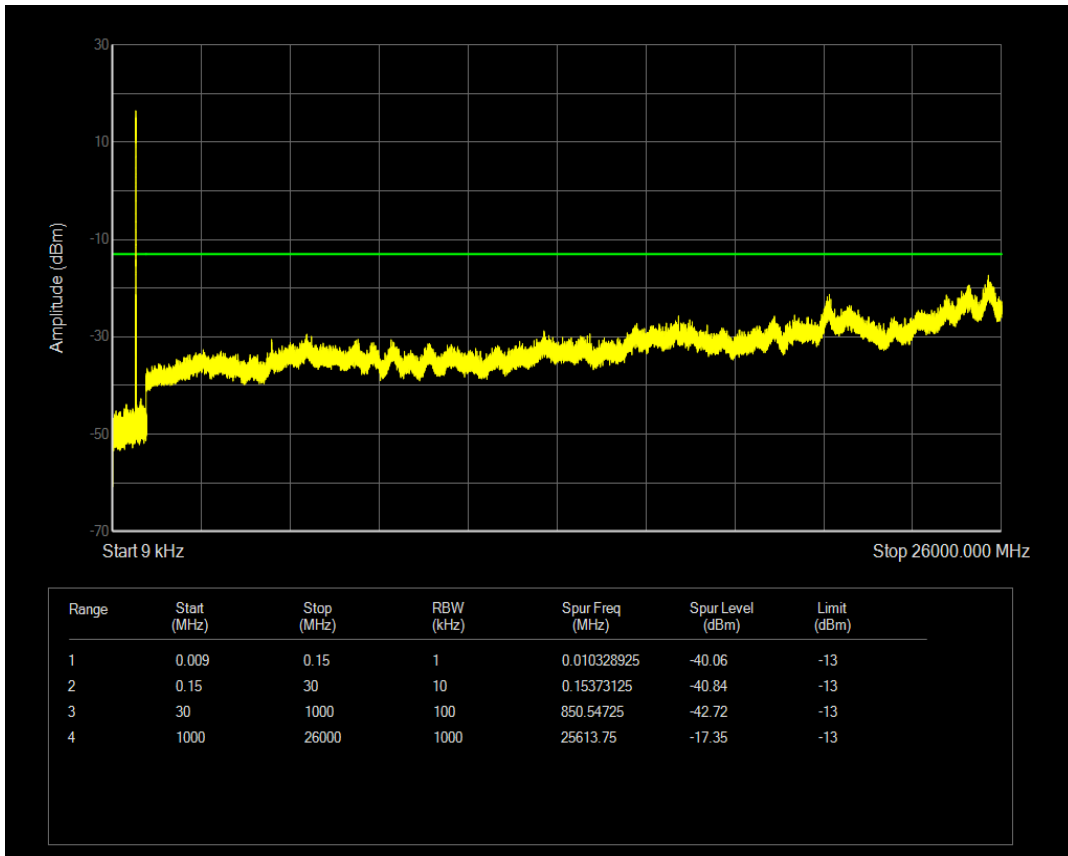
Band12 QPSK BW=3MHz Channel=23165 RB Size=15 Position=#0



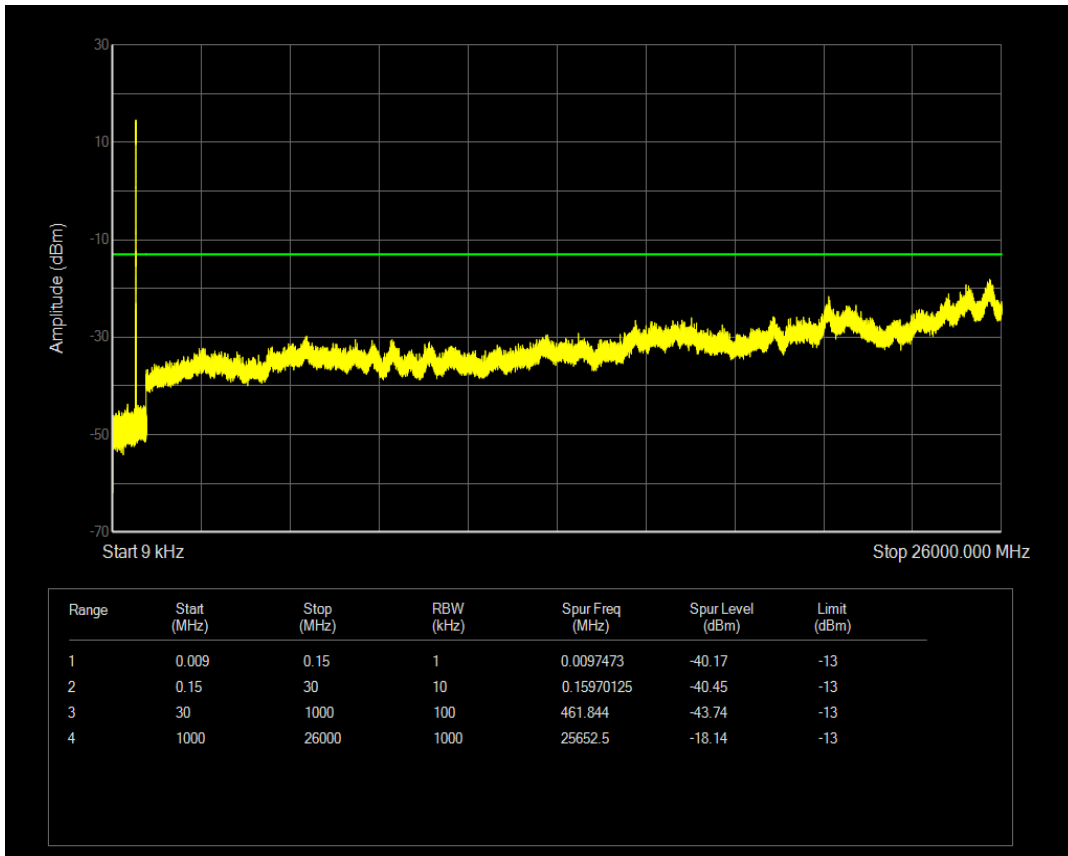
Band12 16QAM BW=3MHz Channel=23165 RB Size=15 Position=#0



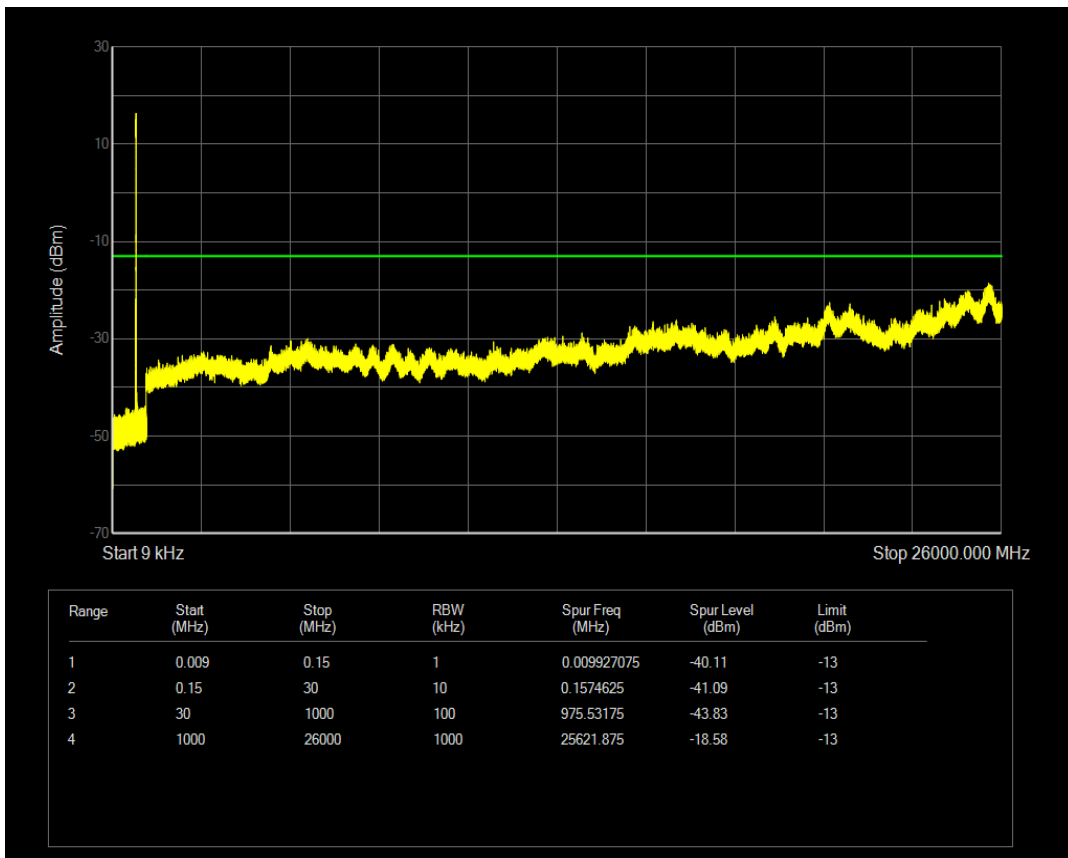
Band12 QPSK BW=5MHz Channel=23035 RB Size=25 Position=#0



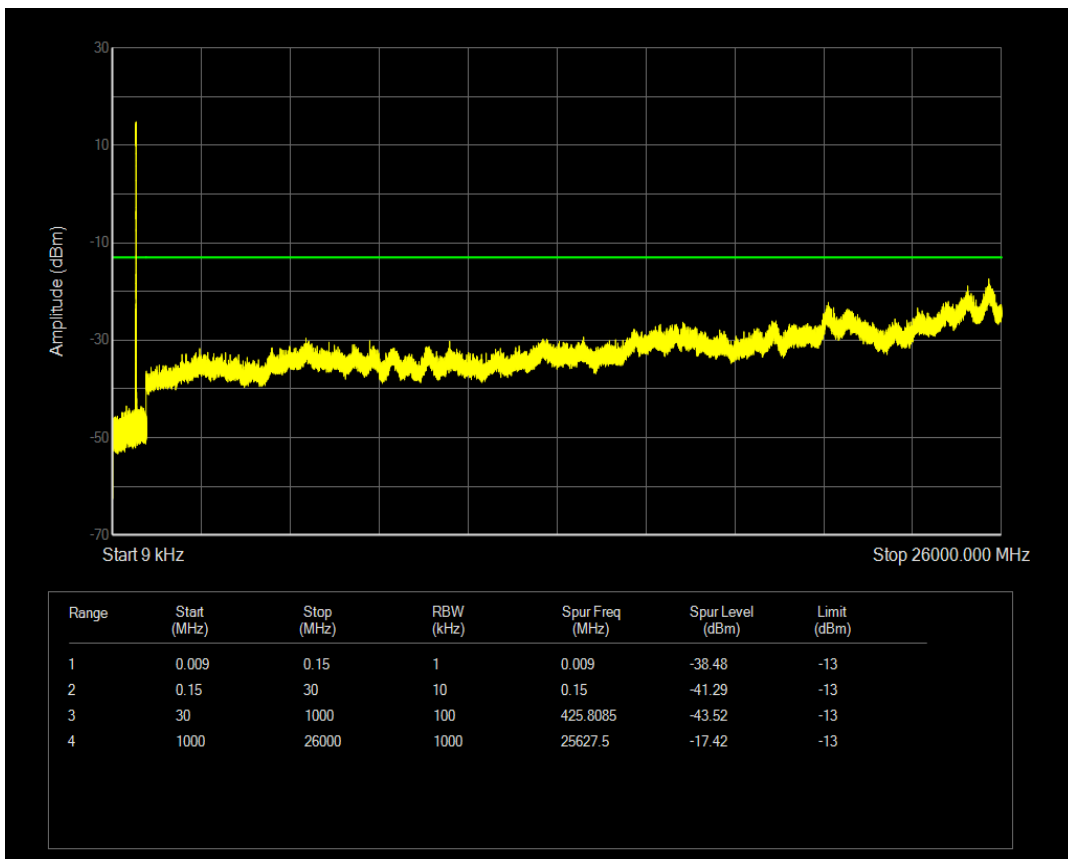
Band12 16QAM BW=5MHz Channel=23035 RB Size=25 Position=#0



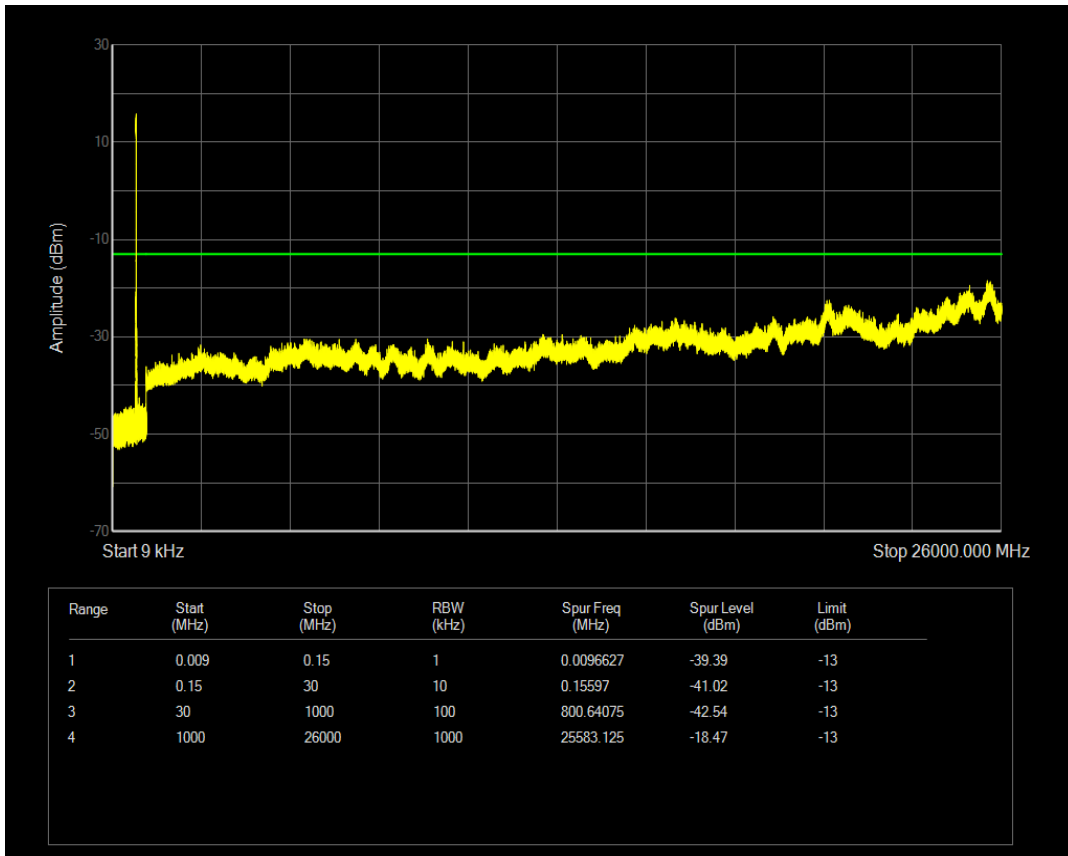
Band12 QPSK BW=5MHz Channel=23095 RB Size=25 Position=#0



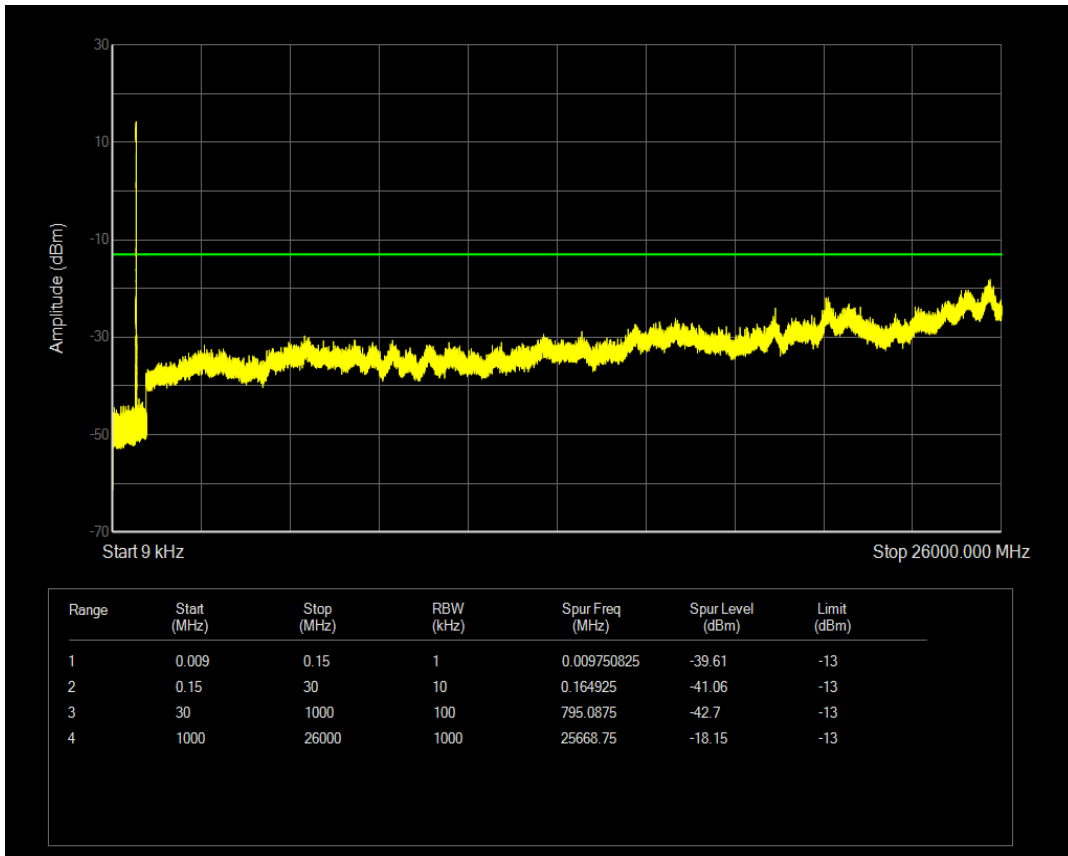
Band12 16QAM BW=5MHz Channel=23095 RB Size=25 Position=#0



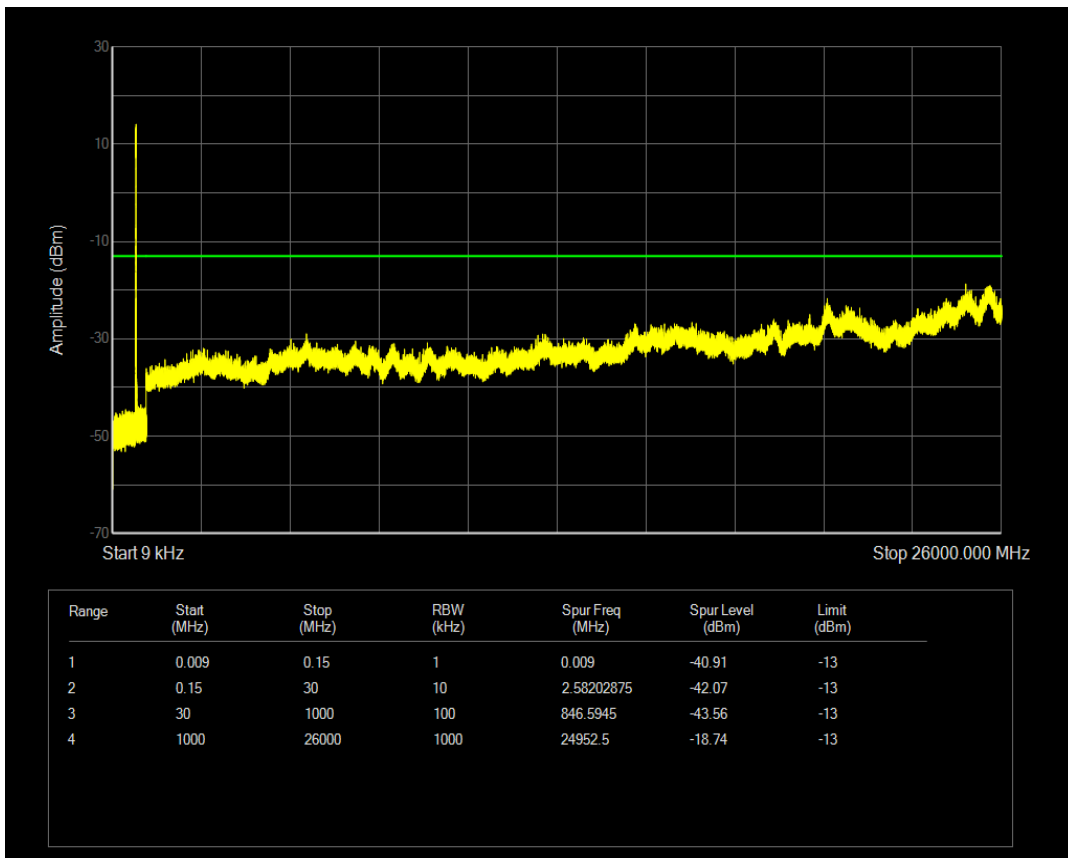
Band12 QPSK BW=5MHz Channel=23155 RB Size=25 Position=#0



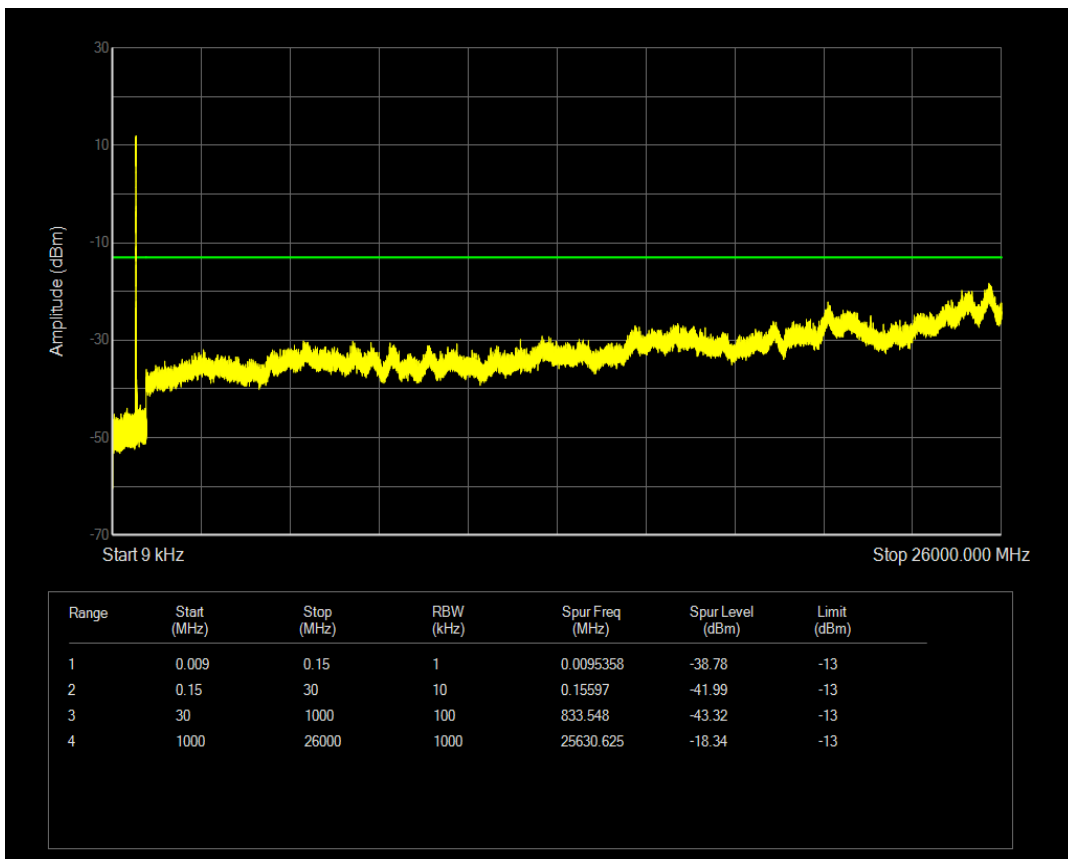
Band12 16QAM BW=5MHz Channel=23155 RB Size=25 Position=#0



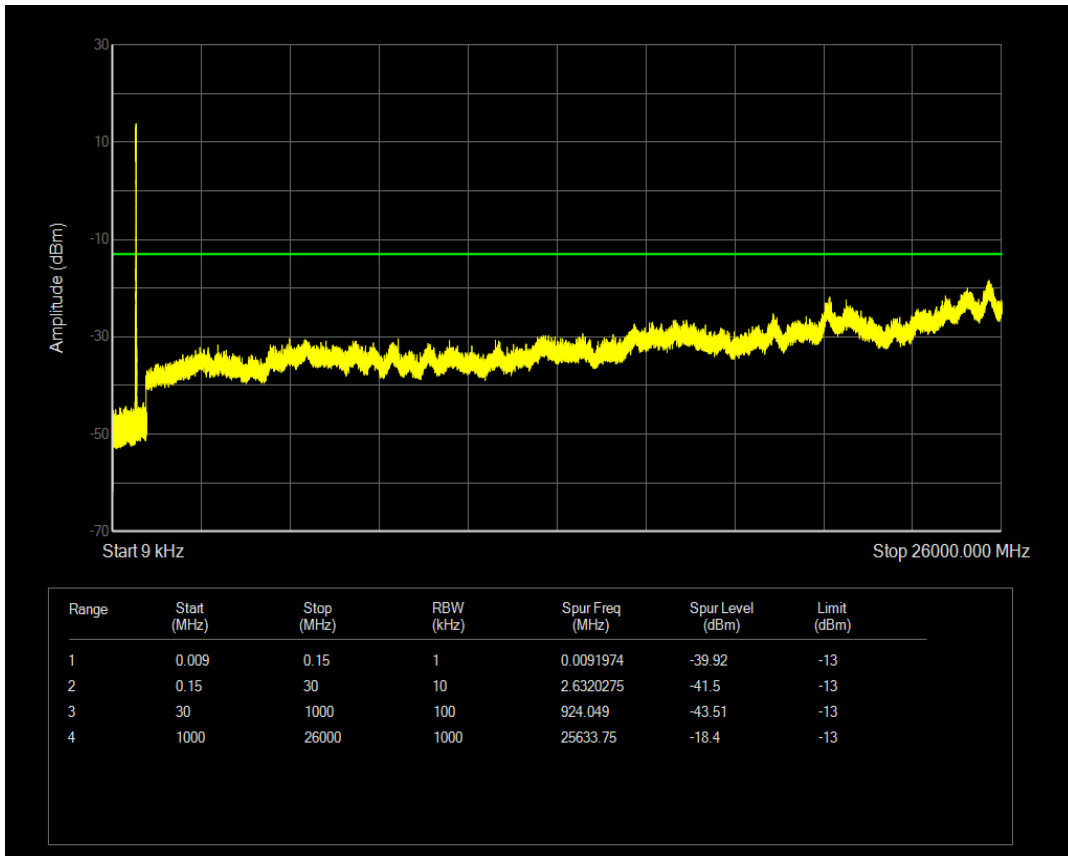
Band12 QPSK BW=10MHz Channel=23060 RB Size=50 Position=#0



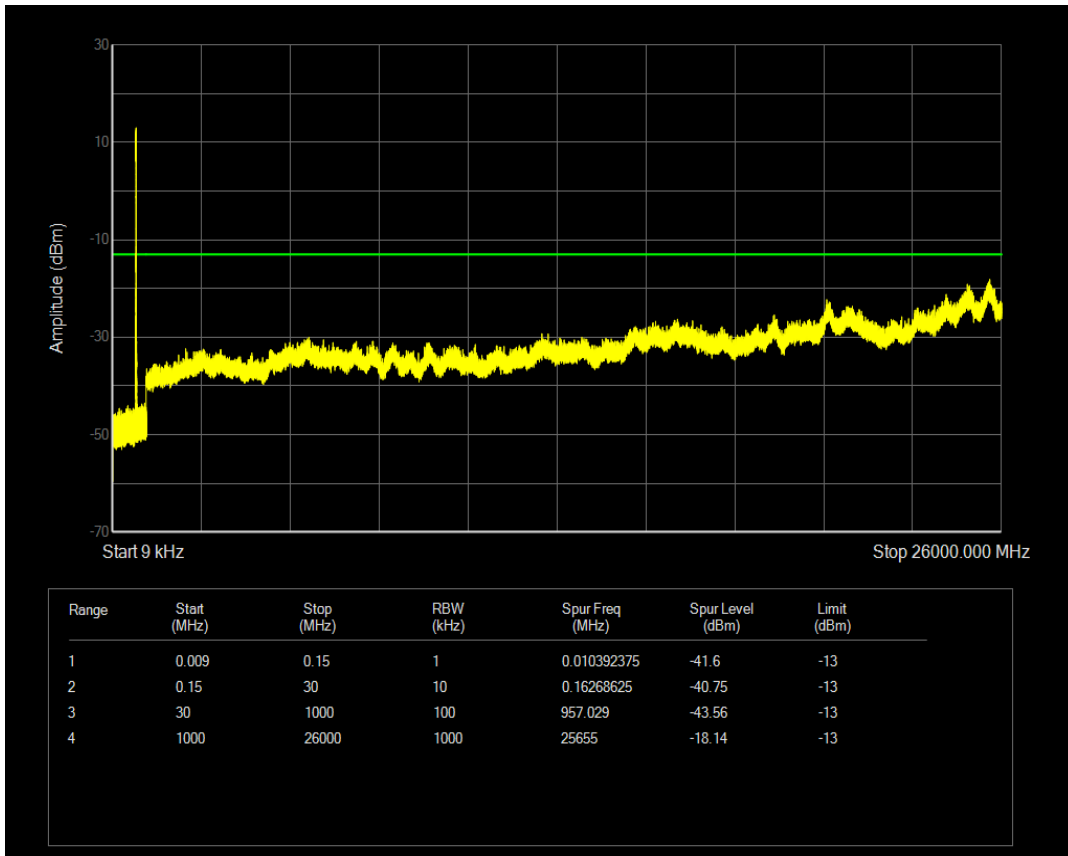
Band12 16QAM BW=10MHz Channel=23060 RB Size=50 Position=#0



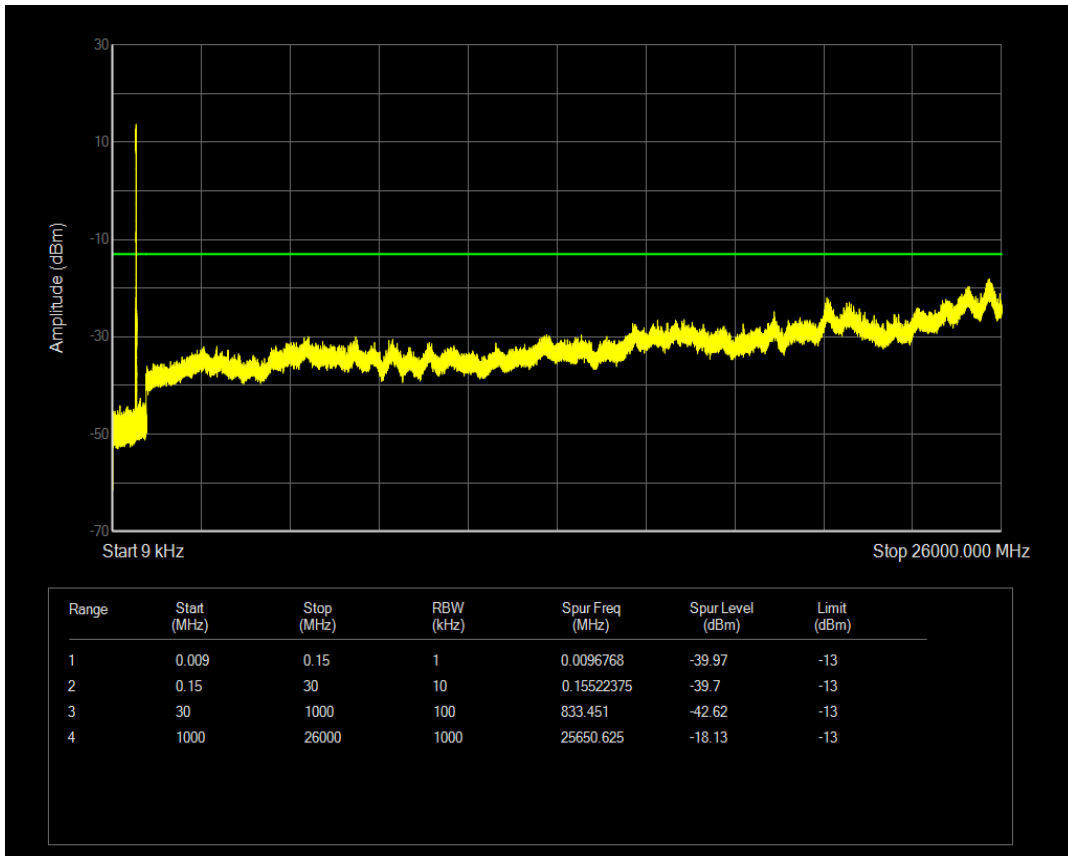
Band12 QPSK BW=10MHz Channel=23095 RB Size=50 Position=#0



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

