

TEST REPORT

Report No.: BCTC2205535730-2E

Applicant: UMOVAL IoT Technology Co., Ltd

Product Name: 3G/4G LTE Solar Security PTZ Cameras

Model/Type
reference: UM-Q6-4G

Tested Date: 2022-05-26 to 2022-06-30

Issued Date: 2022-06-30

Shenzhen BCTC Testing Co., Ltd.

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Appendix 1. Conducted output power

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Gain (dBi)	ERP (dBm)	Verdict
Band5	1.4	20407	1	#0	QPSK	22.44	5	25.29	PASS
Band5	1.4	20407	1	#Mid	QPSK	22.75	5	25.60	PASS
Band5	1.4	20407	1	#Max	QPSK	22.57	5	25.42	PASS
Band5	1.4	20407	3	#0	QPSK	22.72	5	25.57	PASS
Band5	1.4	20407	3	#Mid	QPSK	22.69	5	25.54	PASS
Band5	1.4	20407	3	#Max	QPSK	22.60	5	25.45	PASS
Band5	1.4	20407	6	#0	QPSK	21.75	5	24.60	PASS
Band5	1.4	20407	1	#0	QAM16	21.43	5	24.28	PASS
Band5	1.4	20407	1	#Mid	QAM16	21.52	5	24.37	PASS
Band5	1.4	20407	1	#Max	QAM16	21.39	5	24.24	PASS
Band5	1.4	20407	3	#0	QAM16	21.76	5	24.61	PASS
Band5	1.4	20407	3	#Mid	QAM16	21.77	5	24.62	PASS
Band5	1.4	20407	3	#Max	QAM16	21.68	5	24.53	PASS
Band5	1.4	20407	6	#0	QAM16	20.66	5	23.51	PASS
Band5	1.4	20525	1	#0	QPSK	22.71	5	25.56	PASS
Band5	1.4	20525	1	#Mid	QPSK	22.88	5	25.73	PASS
Band5	1.4	20525	1	#Max	QPSK	22.78	5	25.63	PASS
Band5	1.4	20525	3	#0	QPSK	22.64	5	25.49	PASS
Band5	1.4	20525	3	#Mid	QPSK	22.64	5	25.49	PASS
Band5	1.4	20525	3	#Max	QPSK	22.75	5	25.60	PASS
Band5	1.4	20525	6	#0	QPSK	21.73	5	24.58	PASS
Band5	1.4	20525	1	#0	QAM16	21.72	5	24.57	PASS
Band5	1.4	20525	1	#Mid	QAM16	21.86	5	24.71	PASS
Band5	1.4	20525	1	#Max	QAM16	21.70	5	24.55	PASS
Band5	1.4	20525	3	#0	QAM16	21.76	5	24.61	PASS
Band5	1.4	20525	3	#Mid	QAM16	21.97	5	24.82	PASS
Band5	1.4	20525	3	#Max	QAM16	22.02	5	24.87	PASS
Band5	1.4	20525	6	#0	QAM16	20.98	5	23.83	PASS
Band5	1.4	20643	1	#0	QPSK	22.34	5	25.19	PASS
Band5	1.4	20643	1	#Mid	QPSK	22.47	5	25.32	PASS
Band5	1.4	20643	1	#Max	QPSK	22.30	5	25.15	PASS
Band5	1.4	20643	3	#0	QPSK	22.38	5	25.23	PASS
Band5	1.4	20643	3	#Mid	QPSK	22.43	5	25.28	PASS
Band5	1.4	20643	3	#Max	QPSK	22.47	5	25.32	PASS
Band5	1.4	20643	6	#0	QPSK	21.52	5	24.37	PASS
Band5	1.4	20643	1	#0	QAM16	21.30	5	24.15	PASS
Band5	1.4	20643	1	#Mid	QAM16	21.27	5	24.12	PASS
Band5	1.4	20643	1	#Max	QAM16	21.13	5	23.98	PASS

Band5	1.4	20643	3	#0	QAM16	21.26	5	24.11	PASS
Band5	1.4	20643	3	#Mid	QAM16	21.34	5	24.19	PASS
Band5	1.4	20643	3	#Max	QAM16	21.34	5	24.19	PASS
Band5	1.4	20643	6	#0	QAM16	20.49	5	23.34	PASS
Band5	3	20415	1	#0	QPSK	22.54	5	25.39	PASS
Band5	3	20415	1	#Mid	QPSK	22.45	5	25.30	PASS
Band5	3	20415	1	#Max	QPSK	22.36	5	25.21	PASS
Band5	3	20415	8	#0	QPSK	21.72	5	24.57	PASS
Band5	3	20415	8	#Mid	QPSK	21.65	5	24.50	PASS
Band5	3	20415	8	#Max	QPSK	21.54	5	24.39	PASS
Band5	3	20415	15	#0	QPSK	21.58	5	24.43	PASS
Band5	3	20415	1	#0	QAM16	22.28	5	25.13	PASS
Band5	3	20415	1	#Mid	QAM16	22.10	5	24.95	PASS
Band5	3	20415	1	#Max	QAM16	21.87	5	24.72	PASS
Band5	3	20415	8	#0	QAM16	20.56	5	23.41	PASS
Band5	3	20415	8	#Mid	QAM16	20.56	5	23.41	PASS
Band5	3	20415	8	#Max	QAM16	20.61	5	23.46	PASS
Band5	3	20415	15	#0	QAM16	20.80	5	23.65	PASS
Band5	3	20525	1	#0	QPSK	22.48	5	25.33	PASS
Band5	3	20525	1	#Mid	QPSK	22.78	5	25.63	PASS
Band5	3	20525	1	#Max	QPSK	22.90	5	25.75	PASS
Band5	3	20525	8	#0	QPSK	21.66	5	24.51	PASS
Band5	3	20525	8	#Mid	QPSK	21.73	5	24.58	PASS
Band5	3	20525	8	#Max	QPSK	21.74	5	24.59	PASS
Band5	3	20525	15	#0	QPSK	21.61	5	24.46	PASS
Band5	3	20525	1	#0	QAM16	21.24	5	24.09	PASS
Band5	3	20525	1	#Mid	QAM16	21.50	5	24.35	PASS
Band5	3	20525	1	#Max	QAM16	21.29	5	24.14	PASS
Band5	3	20525	8	#0	QAM16	20.36	5	23.21	PASS
Band5	3	20525	8	#Mid	QAM16	20.35	5	23.20	PASS
Band5	3	20525	8	#Max	QAM16	20.46	5	23.31	PASS
Band5	3	20525	15	#0	QAM16	20.54	5	23.39	PASS
Band5	3	20635	1	#0	QPSK	22.49	5	25.34	PASS
Band5	3	20635	1	#Mid	QPSK	22.56	5	25.41	PASS
Band5	3	20635	1	#Max	QPSK	22.55	5	25.40	PASS
Band5	3	20635	8	#0	QPSK	21.49	5	24.34	PASS
Band5	3	20635	8	#Mid	QPSK	21.59	5	24.44	PASS
Band5	3	20635	8	#Max	QPSK	21.55	5	24.40	PASS
Band5	3	20635	15	#0	QPSK	21.59	5	24.44	PASS
Band5	3	20635	1	#0	QAM16	21.31	5	24.16	PASS
Band5	3	20635	1	#Mid	QAM16	21.44	5	24.29	PASS
Band5	3	20635	1	#Max	QAM16	21.46	5	24.31	PASS
Band5	3	20635	8	#0	QAM16	20.25	5	23.10	PASS

Band5	3	20635	8	#Mid	QAM16	20.54	5	23.39	PASS
Band5	3	20635	8	#Max	QAM16	20.69	5	23.54	PASS
Band5	3	20635	15	#0	QAM16	20.67	5	23.52	PASS
Band5	5	20425	1	#0	QPSK	22.55	5	25.40	PASS
Band5	5	20425	1	#Mid	QPSK	22.62	5	25.47	PASS
Band5	5	20425	1	#Max	QPSK	22.58	5	25.43	PASS
Band5	5	20425	12	#0	QPSK	21.56	5	24.41	PASS
Band5	5	20425	12	#Mid	QPSK	21.48	5	24.33	PASS
Band5	5	20425	12	#Max	QPSK	21.48	5	24.33	PASS
Band5	5	20425	25	#0	QPSK	21.57	5	24.42	PASS
Band5	5	20425	1	#0	QAM16	21.49	5	24.34	PASS
Band5	5	20425	1	#Mid	QAM16	21.39	5	24.24	PASS
Band5	5	20425	1	#Max	QAM16	21.32	5	24.17	PASS
Band5	5	20425	12	#0	QAM16	20.46	5	23.31	PASS
Band5	5	20425	12	#Mid	QAM16	20.31	5	23.16	PASS
Band5	5	20425	12	#Max	QAM16	20.27	5	23.12	PASS
Band5	5	20425	25	#0	QAM16	20.63	5	23.48	PASS
Band5	5	20525	1	#0	QPSK	22.37	5	25.22	PASS
Band5	5	20525	1	#Mid	QPSK	22.69	5	25.54	PASS
Band5	5	20525	1	#Max	QPSK	22.67	5	25.52	PASS
Band5	5	20525	12	#0	QPSK	21.55	5	24.40	PASS
Band5	5	20525	12	#Mid	QPSK	21.62	5	24.47	PASS
Band5	5	20525	12	#Max	QPSK	21.72	5	24.57	PASS
Band5	5	20525	25	#0	QPSK	21.63	5	24.48	PASS
Band5	5	20525	1	#0	QAM16	21.43	5	24.28	PASS
Band5	5	20525	1	#Mid	QAM16	21.60	5	24.45	PASS
Band5	5	20525	1	#Max	QAM16	21.55	5	24.40	PASS
Band5	5	20525	12	#0	QAM16	20.08	5	22.93	PASS
Band5	5	20525	12	#Mid	QAM16	20.18	5	23.03	PASS
Band5	5	20525	12	#Max	QAM16	20.28	5	23.13	PASS
Band5	5	20525	25	#0	QAM16	20.38	5	23.23	PASS
Band5	5	20625	1	#0	QPSK	22.49	5	25.34	PASS
Band5	5	20625	1	#Mid	QPSK	23.10	5	25.95	PASS
Band5	5	20625	1	#Max	QPSK	22.46	5	25.31	PASS
Band5	5	20625	12	#0	QPSK	21.52	5	24.37	PASS
Band5	5	20625	12	#Mid	QPSK	21.61	5	24.46	PASS
Band5	5	20625	12	#Max	QPSK	21.55	5	24.40	PASS
Band5	5	20625	25	#0	QPSK	21.57	5	24.42	PASS
Band5	5	20625	1	#0	QAM16	21.63	5	24.48	PASS
Band5	5	20625	1	#Mid	QAM16	21.65	5	24.50	PASS
Band5	5	20625	1	#Max	QAM16	21.51	5	24.36	PASS
Band5	5	20625	12	#0	QAM16	20.53	5	23.38	PASS
Band5	5	20625	12	#Mid	QAM16	20.60	5	23.45	PASS

Band5	5	20625	12	#Max	QAM16	20.64	5	23.49	PASS
Band5	5	20625	25	#0	QAM16	20.37	5	23.22	PASS
Band5	10	20450	1	#0	QPSK	22.41	5	25.26	PASS
Band5	10	20450	1	#Mid	QPSK	22.62	5	25.47	PASS
Band5	10	20450	1	#Max	QPSK	22.55	5	25.40	PASS
Band5	10	20450	25	#0	QPSK	21.57	5	24.42	PASS
Band5	10	20450	25	#Mid	QPSK	21.50	5	24.35	PASS
Band5	10	20450	25	#Max	QPSK	21.63	5	24.48	PASS
Band5	10	20450	50	#0	QPSK	21.61	5	24.46	PASS
Band5	10	20450	1	#0	QAM16	21.90	5	24.75	PASS
Band5	10	20450	1	#Mid	QAM16	21.94	5	24.79	PASS
Band5	10	20450	1	#Max	QAM16	21.99	5	24.84	PASS
Band5	10	20450	25	#0	QAM16	20.56	5	23.41	PASS
Band5	10	20450	25	#Mid	QAM16	20.50	5	23.35	PASS
Band5	10	20450	25	#Max	QAM16	20.61	5	23.46	PASS
Band5	10	20450	50	#0	QAM16	20.59	5	23.44	PASS
Band5	10	20525	1	#0	QPSK	22.54	5	25.39	PASS
Band5	10	20525	1	#Mid	QPSK	22.88	5	25.73	PASS
Band5	10	20525	1	#Max	QPSK	22.47	5	25.32	PASS
Band5	10	20525	25	#0	QPSK	21.47	5	24.32	PASS
Band5	10	20525	25	#Mid	QPSK	21.66	5	24.51	PASS
Band5	10	20525	25	#Max	QPSK	21.75	5	24.60	PASS
Band5	10	20525	50	#0	QPSK	21.68	5	24.53	PASS
Band5	10	20525	1	#0	QAM16	21.18	5	24.03	PASS
Band5	10	20525	1	#Mid	QAM16	21.22	5	24.07	PASS
Band5	10	20525	1	#Max	QAM16	20.83	5	23.68	PASS
Band5	10	20525	25	#0	QAM16	20.43	5	23.28	PASS
Band5	10	20525	25	#Mid	QAM16	20.54	5	23.39	PASS
Band5	10	20525	25	#Max	QAM16	20.55	5	23.40	PASS
Band5	10	20525	50	#0	QAM16	20.65	5	23.50	PASS
Band5	10	20600	1	#0	QPSK	22.61	5	25.46	PASS
Band5	10	20600	1	#Mid	QPSK	22.56	5	25.41	PASS
Band5	10	20600	1	#Max	QPSK	22.88	5	25.73	PASS
Band5	10	20600	25	#0	QPSK	21.60	5	24.45	PASS
Band5	10	20600	25	#Mid	QPSK	21.63	5	24.48	PASS
Band5	10	20600	25	#Max	QPSK	21.63	5	24.48	PASS
Band5	10	20600	50	#0	QPSK	21.59	5	24.44	PASS
Band5	10	20600	1	#0	QAM16	21.57	5	24.42	PASS
Band5	10	20600	1	#Mid	QAM16	21.52	5	24.37	PASS
Band5	10	20600	1	#Max	QAM16	21.41	5	24.26	PASS
Band5	10	20600	25	#0	QAM16	20.63	5	23.48	PASS
Band5	10	20600	25	#Mid	QAM16	20.61	5	23.46	PASS
Band5	10	20600	25	#Max	QAM16	20.68	5	23.53	PASS

Band5	10	20600	50	#0	QAM16	20.53	5	23.38	PASS
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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 5	1.4	20407	6	#0	QPSK	LV	NT	-2.13	-0.003	-2.5	2.5	PASS
Band 5	1.4	20407	6	#0	QPSK	NV	NT	-1.44	-0.002	-2.5	2.5	PASS
Band 5	1.4	20407	6	#0	QPSK	HV	NT	-1.65	-0.002	-2.5	2.5	PASS
Band 5	1.4	20407	6	#0	QAM16	LV	NT	-1.04	-0.001	-2.5	2.5	PASS
Band 5	1.4	20407	6	#0	QAM16	NV	NT	0.17	0.000	-2.5	2.5	PASS
Band 5	1.4	20407	6	#0	QAM16	HV	NT	-0.17	0.000	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QPSK	LV	NT	-0.30	0.000	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QPSK	NV	NT	-0.77	-0.001	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QPSK	HV	NT	-0.97	-0.001	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QAM16	LV	NT	-0.77	-0.001	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QAM16	NV	NT	-1.32	-0.002	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QAM16	HV	NT	-0.31	0.000	-2.5	2.5	PASS
Band 5	1.4	20643	6	#0	QPSK	LV	NT	-0.04	0.000	-2.5	2.5	PASS
Band 5	1.4	20643	6	#0	QPSK	NV	NT	-0.53	-0.001	-2.5	2.5	PASS
Band 5	1.4	20643	6	#0	QPSK	HV	NT	0.39	0.000	-2.5	2.5	PASS
Band 5	1.4	20643	6	#0	QAM16	LV	NT	-1.03	-0.001	-2.5	2.5	PASS
Band 5	1.4	20643	6	#0	QAM16	NV	NT	0.60	0.001	-2.5	2.5	PASS

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Band 5	1.4	20643	6	#0	QAM16	HV	NT	0.33	0.000	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QPSK	LV	NT	-1.87	-0.002	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QPSK	NV	NT	-1.49	-0.002	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QPSK	HV	NT	-1.27	-0.002	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QAM16	LV	NT	1.17	0.001	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QAM16	NV	NT	0.66	0.001	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QAM16	HV	NT	0.36	0.000	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QPSK	LV	NT	-0.34	0.000	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QPSK	NV	NT	-0.21	0.000	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QPSK	HV	NT	-1.12	-0.001	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QAM16	LV	NT	-0.90	-0.001	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QAM16	NV	NT	-1.03	-0.001	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QAM16	HV	NT	-1.62	-0.002	-2.5	2.5	PASS
Band 5	3	20635	15	#0	QPSK	LV	NT	-1.67	-0.002	-2.5	2.5	PASS
Band 5	3	20635	15	#0	QPSK	NV	NT	-1.75	-0.002	-2.5	2.5	PASS
Band 5	3	20635	15	#0	QPSK	HV	NT	-0.56	-0.001	-2.5	2.5	PASS
Band 5	3	20635	15	#0	QAM16	LV	NT	-2.53	-0.003	-2.5	2.5	PASS
Band 5	3	20635	15	#0	QAM16	NV	NT	-2.92	-0.003	-2.5	2.5	PASS
Band 5	3	20635	15	#0	QAM16	HV	NT	-2.13	-0.003	-2.5	2.5	PASS
Band 5	5	20425	25	#0	QPSK	LV	NT	-0.37	0.000	-2.5	2.5	PASS
Band 5	5	20425	25	#0	QPSK	NV	NT	-1.19	-0.001	-2.5	2.5	PASS

Band 5	5	20425	25	#0	QPSK	HV	NT	-1.59	-0.00 2	-2.5	2.5	PASS
Band 5	5	20425	25	#0	QAM16	LV	NT	-2.22	-0.00 3	-2.5	2.5	PASS
Band 5	5	20425	25	#0	QAM16	NV	NT	-2.03	-0.00 2	-2.5	2.5	PASS
Band 5	5	20425	25	#0	QAM16	HV	NT	-1.87	-0.00 2	-2.5	2.5	PASS
Band 5	5	20525	25	#0	QPSK	LV	NT	-1.00	-0.00 1	-2.5	2.5	PASS
Band 5	5	20525	25	#0	QPSK	NV	NT	-1.75	-0.00 2	-2.5	2.5	PASS
Band 5	5	20525	25	#0	QPSK	HV	NT	-1.00	-0.00 1	-2.5	2.5	PASS
Band 5	5	20525	25	#0	QAM16	LV	NT	-0.53	-0.00 1	-2.5	2.5	PASS
Band 5	5	20525	25	#0	QAM16	NV	NT	-2.12	-0.00 3	-2.5	2.5	PASS
Band 5	5	20525	25	#0	QAM16	HV	NT	-1.32	-0.00 2	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QPSK	LV	NT	-1.02	-0.00 1	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QPSK	NV	NT	-0.49	-0.00 1	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QPSK	HV	NT	-0.86	-0.00 1	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QAM16	LV	NT	-1.54	-0.00 2	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QAM16	NV	NT	-0.36	0.000	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QAM16	HV	NT	-0.17	0.000	-2.5	2.5	PASS
Band 5	10	20450	50	#0	QPSK	LV	NT	-1.69	-0.00 2	-2.5	2.5	PASS
Band 5	10	20450	50	#0	QPSK	NV	NT	-1.77	-0.00 2	-2.5	2.5	PASS
Band 5	10	20450	50	#0	QPSK	HV	NT	-0.84	-0.00 1	-2.5	2.5	PASS
Band 5	10	20450	50	#0	QAM16	LV	NT	-0.77	-0.00 1	-2.5	2.5	PASS
Band 5	10	20450	50	#0	QAM16	NV	NT	-0.50	-0.00 1	-2.5	2.5	PASS
Band 5	10	20450	50	#0	QAM16	HV	NT	-0.03	0.000	-2.5	2.5	PASS

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Band 5	10	20525	50	#0	QPSK	LV	NT	-1.16	-0.001	-2.5	2.5	PASS
Band 5	10	20525	50	#0	QPSK	NV	NT	-0.67	-0.001	-2.5	2.5	PASS
Band 5	10	20525	50	#0	QPSK	HV	NT	-1.57	-0.002	-2.5	2.5	PASS
Band 5	10	20525	50	#0	QAM16	LV	NT	-0.94	-0.001	-2.5	2.5	PASS
Band 5	10	20525	50	#0	QAM16	NV	NT	-0.93	-0.001	-2.5	2.5	PASS
Band 5	10	20525	50	#0	QAM16	HV	NT	-0.63	-0.001	-2.5	2.5	PASS
Band 5	10	20600	50	#0	QPSK	LV	NT	-1.04	-0.001	-2.5	2.5	PASS
Band 5	10	20600	50	#0	QPSK	NV	NT	-0.87	-0.001	-2.5	2.5	PASS
Band 5	10	20600	50	#0	QPSK	HV	NT	-0.14	0.000	-2.5	2.5	PASS
Band 5	10	20600	50	#0	QAM16	LV	NT	-0.73	-0.001	-2.5	2.5	PASS
Band 5	10	20600	50	#0	QAM16	NV	NT	-0.60	-0.001	-2.5	2.5	PASS
Band 5	10	20600	50	#0	QAM16	HV	NT	0.13	0.000	-2.5	2.5	PASS

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 5	1.4	20407	6	#0	QPSK	NV	-30	-1.22	-0.001	-2.5	2.5	PASS
Band 5	1.4	20407	6	#0	QPSK	NV	-20	-1.97	-0.002	-2.5	2.5	PASS
Band 5	1.4	20407	6	#0	QPSK	NV	0	-0.17	0.000	-2.5	2.5	PASS
Band 5	1.4	20407	6	#0	QPSK	NV	10	-0.51	-0.001	-2.5	2.5	PASS
Band 5	1.4	20407	6	#0	QPSK	NV	20	-2.40	-0.003	-2.5	2.5	PASS
Band 5	1.4	20407	6	#0	QAM16	NV	-30	-2.09	-0.003	-2.5	2.5	PASS
Band	1.4	20407	6	#0	QAM16	NV	-20	-2.29	-0.00	-2.5	2.5	PASS

5									3			
Band 5	1.4	20407	6	#0	QAM16	NV	0	-2.76	-0.003	-2.5	2.5	PASS
Band 5	1.4	20407	6	#0	QAM16	NV	10	-1.52	-0.002	-2.5	2.5	PASS
Band 5	1.4	20407	6	#0	QAM16	NV	20	-2.73	-0.003	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QPSK	NV	-30	0.36	0.000	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QPSK	NV	-20	0.17	0.000	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QPSK	NV	0	-0.21	0.000	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QPSK	NV	10	0.29	0.000	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QPSK	NV	20	0.01	0.000	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QAM16	NV	-30	-0.01	0.000	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QAM16	NV	-20	-0.51	-0.001	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QAM16	NV	0	-0.07	0.000	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QAM16	NV	10	-1.23	-0.001	-2.5	2.5	PASS
Band 5	1.4	20525	6	#0	QAM16	NV	20	-0.03	0.000	-2.5	2.5	PASS
Band 5	1.4	20643	6	#0	QPSK	NV	-30	0.27	0.000	-2.5	2.5	PASS
Band 5	1.4	20643	6	#0	QPSK	NV	-20	-0.56	-0.001	-2.5	2.5	PASS
Band 5	1.4	20643	6	#0	QPSK	NV	0	-0.23	0.000	-2.5	2.5	PASS
Band 5	1.4	20643	6	#0	QPSK	NV	10	-0.26	0.000	-2.5	2.5	PASS
Band 5	1.4	20643	6	#0	QPSK	NV	20	0.26	0.000	-2.5	2.5	PASS
Band 5	1.4	20643	6	#0	QAM16	NV	-30	-0.54	-0.001	-2.5	2.5	PASS
Band 5	1.4	20643	6	#0	QAM16	NV	-20	-1.13	-0.001	-2.5	2.5	PASS
Band 5	1.4	20643	6	#0	QAM16	NV	0	-2.30	-0.003	-2.5	2.5	PASS

Band 5	1.4	20643	6	#0	QAM16	NV	10	-0.03	0.000	-2.5	2.5	PASS
Band 5	1.4	20643	6	#0	QAM16	NV	20	-0.67	-0.001	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QPSK	NV	-30	-0.41	0.000	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QPSK	NV	-20	-0.54	-0.001	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QPSK	NV	0	0.29	0.000	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QPSK	NV	10	-0.36	0.000	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QPSK	NV	20	-0.39	0.000	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QAM16	NV	-30	1.17	0.001	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QAM16	NV	-20	1.20	0.001	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QAM16	NV	0	0.44	0.001	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QAM16	NV	10	-0.17	0.000	-2.5	2.5	PASS
Band 5	3	20415	15	#0	QAM16	NV	20	-0.30	0.000	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QPSK	NV	-30	0.37	0.000	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QPSK	NV	-20	-0.93	-0.001	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QPSK	NV	0	-1.42	-0.002	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QPSK	NV	10	-0.20	0.000	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QPSK	NV	20	-0.09	0.000	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QAM16	NV	-30	-0.77	-0.001	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QAM16	NV	-20	-0.26	0.000	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QAM16	NV	0	-0.79	-0.001	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QAM16	NV	10	-1.09	-0.001	-2.5	2.5	PASS
Band 5	3	20525	15	#0	QAM16	NV	20	-0.63	-0.00	-2.5	2.5	PASS

5									1			
Band 5	3	20635	15	#0	QPSK	NV	-30	-1.37	-0.002	-2.5	2.5	PASS
Band 5	3	20635	15	#0	QPSK	NV	-20	-2.36	-0.003	-2.5	2.5	PASS
Band 5	3	20635	15	#0	QPSK	NV	0	-2.00	-0.002	-2.5	2.5	PASS
Band 5	3	20635	15	#0	QPSK	NV	10	-1.13	-0.001	-2.5	2.5	PASS
Band 5	3	20635	15	#0	QPSK	NV	20	0.41	0.000	-2.5	2.5	PASS
Band 5	3	20635	15	#0	QAM16	NV	-30	-1.44	-0.002	-2.5	2.5	PASS
Band 5	3	20635	15	#0	QAM16	NV	-20	-1.92	-0.002	-2.5	2.5	PASS
Band 5	3	20635	15	#0	QAM16	NV	0	-1.24	-0.001	-2.5	2.5	PASS
Band 5	3	20635	15	#0	QAM16	NV	10	-2.70	-0.003	-2.5	2.5	PASS
Band 5	3	20635	15	#0	QAM16	NV	20	-0.50	-0.001	-2.5	2.5	PASS
Band 5	5	20425	25	#0	QPSK	NV	-30	-1.00	-0.001	-2.5	2.5	PASS
Band 5	5	20425	25	#0	QPSK	NV	-20	0.47	0.001	-2.5	2.5	PASS
Band 5	5	20425	25	#0	QPSK	NV	0	1.04	0.001	-2.5	2.5	PASS
Band 5	5	20425	25	#0	QPSK	NV	10	-1.96	-0.002	-2.5	2.5	PASS
Band 5	5	20425	25	#0	QPSK	NV	20	-0.74	-0.001	-2.5	2.5	PASS
Band 5	5	20425	25	#0	QAM16	NV	-30	-2.22	-0.003	-2.5	2.5	PASS
Band 5	5	20425	25	#0	QAM16	NV	-20	-0.39	0.000	-2.5	2.5	PASS
Band 5	5	20425	25	#0	QAM16	NV	0	0.14	0.000	-2.5	2.5	PASS
Band 5	5	20425	25	#0	QAM16	NV	10	0.09	0.000	-2.5	2.5	PASS
Band 5	5	20425	25	#0	QAM16	NV	20	0.10	0.000	-2.5	2.5	PASS
Band 5	5	20525	25	#0	QPSK	NV	-30	-0.44	-0.001	-2.5	2.5	PASS

Band 5	5	20525	25	#0	QPSK	NV	-20	0.14	0.000	-2.5	2.5	PASS
Band 5	5	20525	25	#0	QPSK	NV	0	-1.50	-0.002	-2.5	2.5	PASS
Band 5	5	20525	25	#0	QPSK	NV	10	1.17	0.001	-2.5	2.5	PASS
Band 5	5	20525	25	#0	QPSK	NV	20	0.53	0.001	-2.5	2.5	PASS
Band 5	5	20525	25	#0	QAM16	NV	-30	-0.96	-0.001	-2.5	2.5	PASS
Band 5	5	20525	25	#0	QAM16	NV	-20	-2.13	-0.003	-2.5	2.5	PASS
Band 5	5	20525	25	#0	QAM16	NV	0	-0.72	-0.001	-2.5	2.5	PASS
Band 5	5	20525	25	#0	QAM16	NV	10	-1.67	-0.002	-2.5	2.5	PASS
Band 5	5	20525	25	#0	QAM16	NV	20	-0.49	-0.001	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QPSK	NV	-30	0.51	0.001	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QPSK	NV	-20	-0.23	0.000	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QPSK	NV	0	0.79	0.001	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QPSK	NV	10	-1.33	-0.002	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QPSK	NV	20	0.10	0.000	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QAM16	NV	-30	1.00	0.001	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QAM16	NV	-20	1.96	0.002	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QAM16	NV	0	1.53	0.002	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QAM16	NV	10	1.99	0.002	-2.5	2.5	PASS
Band 5	5	20625	25	#0	QAM16	NV	20	0.51	0.001	-2.5	2.5	PASS
Band 5	10	20450	50	#0	QPSK	NV	-30	-1.09	-0.001	-2.5	2.5	PASS
Band 5	10	20450	50	#0	QPSK	NV	-20	-0.06	0.000	-2.5	2.5	PASS
Band 5	10	20450	50	#0	QPSK	NV	0	-0.04	0.000	-2.5	2.5	PASS

5												
Band 5	10	20450	50	#0	QPSK	NV	10	0.41	0.000	-2.5	2.5	PASS
Band 5	10	20450	50	#0	QPSK	NV	20	-1.54	-0.002	-2.5	2.5	PASS
Band 5	10	20450	50	#0	QAM16	NV	-30	-1.22	-0.001	-2.5	2.5	PASS
Band 5	10	20450	50	#0	QAM16	NV	-20	-1.43	-0.002	-2.5	2.5	PASS
Band 5	10	20450	50	#0	QAM16	NV	0	-1.37	-0.002	-2.5	2.5	PASS
Band 5	10	20450	50	#0	QAM16	NV	10	-0.99	-0.001	-2.5	2.5	PASS
Band 5	10	20450	50	#0	QAM16	NV	20	-1.90	-0.002	-2.5	2.5	PASS
Band 5	10	20525	50	#0	QPSK	NV	-30	-0.19	0.000	-2.5	2.5	PASS
Band 5	10	20525	50	#0	QPSK	NV	-20	-1.30	-0.002	-2.5	2.5	PASS
Band 5	10	20525	50	#0	QPSK	NV	0	-0.60	-0.001	-2.5	2.5	PASS
Band 5	10	20525	50	#0	QPSK	NV	10	-0.36	0.000	-2.5	2.5	PASS
Band 5	10	20525	50	#0	QPSK	NV	20	-0.87	-0.001	-2.5	2.5	PASS
Band 5	10	20525	50	#0	QAM16	NV	-30	-1.75	-0.002	-2.5	2.5	PASS
Band 5	10	20525	50	#0	QAM16	NV	-20	-1.26	-0.002	-2.5	2.5	PASS
Band 5	10	20525	50	#0	QAM16	NV	0	0.06	0.000	-2.5	2.5	PASS
Band 5	10	20525	50	#0	QAM16	NV	10	-0.36	0.000	-2.5	2.5	PASS
Band 5	10	20525	50	#0	QAM16	NV	20	-0.50	-0.001	-2.5	2.5	PASS
Band 5	10	20600	50	#0	QPSK	NV	-30	-0.93	-0.001	-2.5	2.5	PASS
Band 5	10	20600	50	#0	QPSK	NV	-20	-0.99	-0.001	-2.5	2.5	PASS
Band 5	10	20600	50	#0	QPSK	NV	0	-0.76	-0.001	-2.5	2.5	PASS
Band 5	10	20600	50	#0	QPSK	NV	10	0.04	0.000	-2.5	2.5	PASS

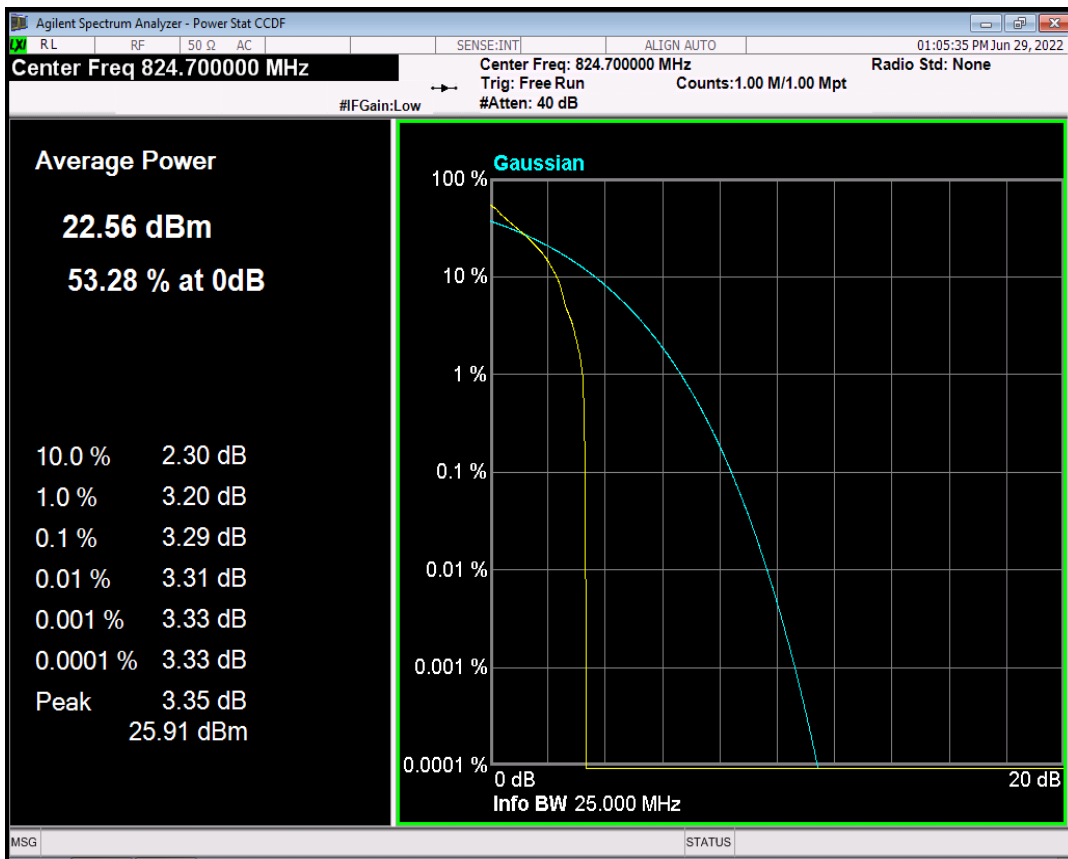
Band 5	10	20600	50	#0	QPSK	NV	20	-1.12	-0.00 1	-2.5	2.5	PASS
Band 5	10	20600	50	#0	QAM16	NV	-30	-0.93	-0.00 1	-2.5	2.5	PASS
Band 5	10	20600	50	#0	QAM16	NV	-20	-1.27	-0.00 2	-2.5	2.5	PASS
Band 5	10	20600	50	#0	QAM16	NV	0	-1.12	-0.00 1	-2.5	2.5	PASS
Band 5	10	20600	50	#0	QAM16	NV	10	-0.90	-0.00 1	-2.5	2.5	PASS
Band 5	10	20600	50	#0	QAM16	NV	20	-0.13	0.000	-2.5	2.5	PASS

Appendix 3. Peak-to-Average Ratio

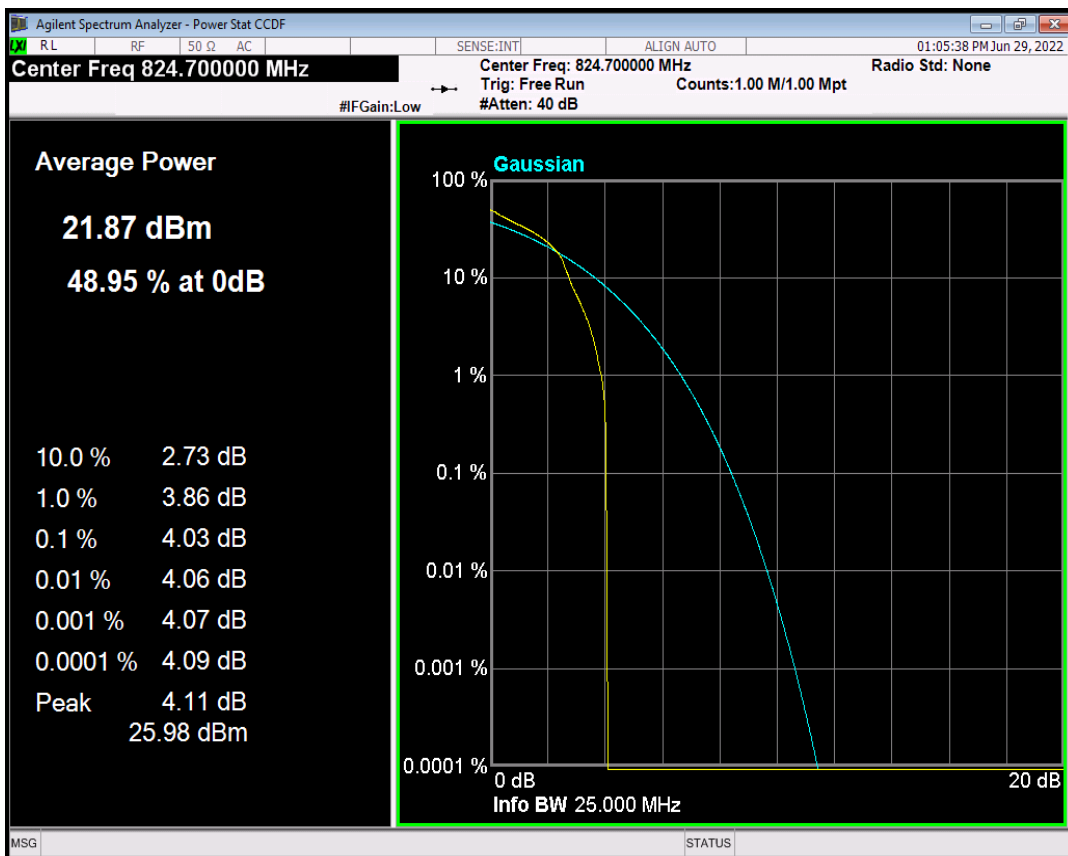
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Result (dB)	high Limit (dB)	Verdict
Band5	1.4	20407	1	#0	QPSK	3.29	13	PASS
Band5	1.4	20407	1	#0	QAM16	4.03	13	PASS
Band5	1.4	20525	1	#0	QPSK	4.71	13	PASS
Band5	1.4	20525	1	#0	QAM16	5.65	13	PASS
Band5	1.4	20643	1	#0	QPSK	4.56	13	PASS
Band5	1.4	20643	1	#0	QAM16	5.45	13	PASS
Band5	3	20415	1	#0	QPSK	3.31	13	PASS
Band5	3	20415	1	#0	QAM16	4.12	13	PASS
Band5	3	20525	1	#0	QPSK	4.68	13	PASS
Band5	3	20525	1	#0	QAM16	5.59	13	PASS
Band5	3	20635	1	#0	QPSK	3.91	13	PASS
Band5	3	20635	1	#0	QAM16	4.74	13	PASS
Band5	5	20425	1	#0	QPSK	3.29	13	PASS
Band5	5	20425	1	#0	QAM16	4.22	13	PASS
Band5	5	20525	1	#0	QPSK	4.54	13	PASS
Band5	5	20525	1	#0	QAM16	5.39	13	PASS
Band5	5	20625	1	#0	QPSK	2.97	13	PASS
Band5	5	20625	1	#0	QAM16	3.69	13	PASS
Band5	10	20450	1	#0	QPSK	3.34	13	PASS
Band5	10	20450	1	#0	QAM16	4.14	13	PASS
Band5	10	20525	1	#0	QPSK	4.47	13	PASS
Band5	10	20525	1	#0	QAM16	5.38	13	PASS
Band5	10	20600	1	#0	QPSK	4.29	13	PASS
Band5	10	20600	1	#0	QAM16	5.23	13	PASS



Band5 QPSK BW=1.4MHz Channel=20407 RB Size=1 Position=#0

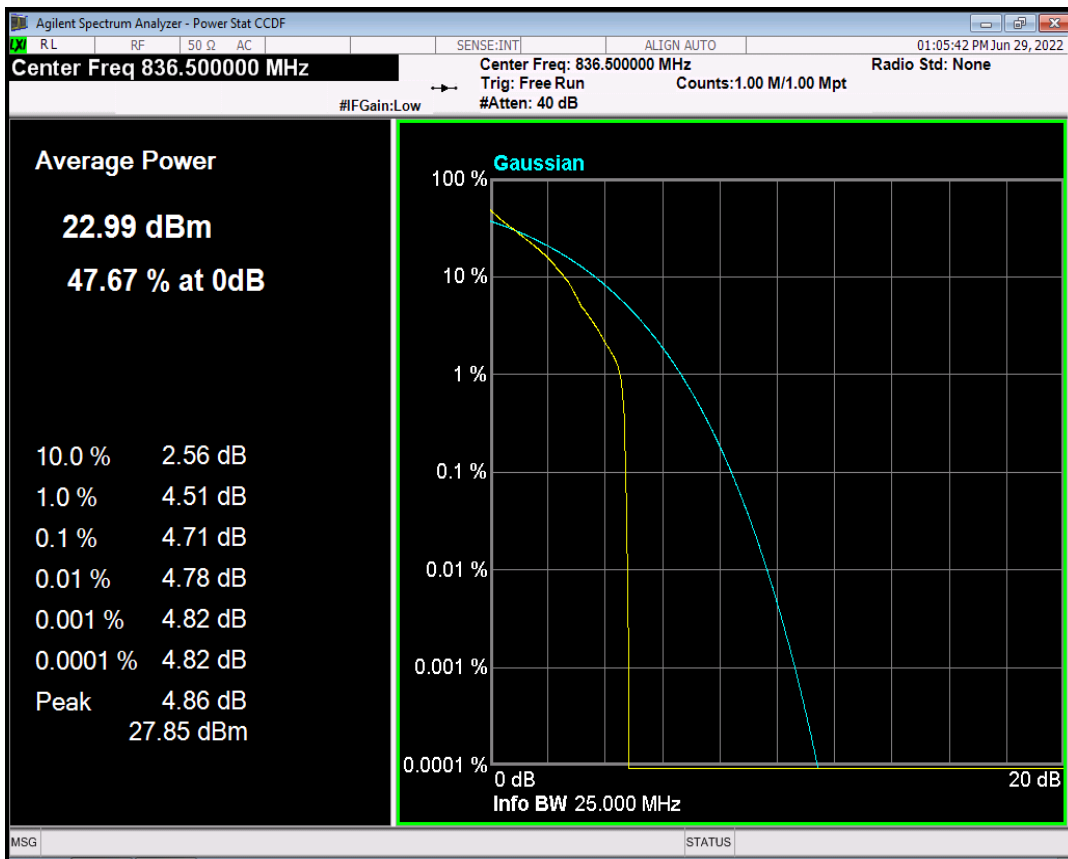


Band5 QAM16 BW=1.4MHz Channel=20407 RB Size=1 Position=#0

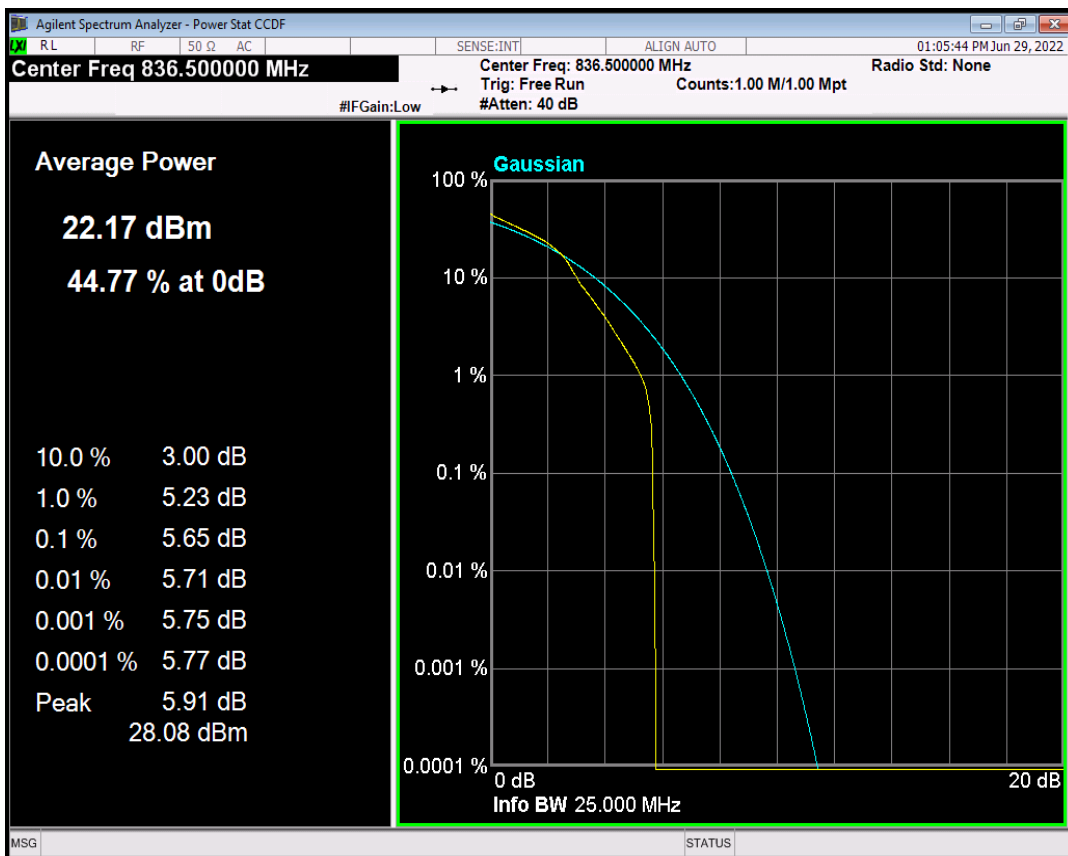




Band5 QPSK BW=1.4MHz Channel=20525 RB Size=1 Position=#0

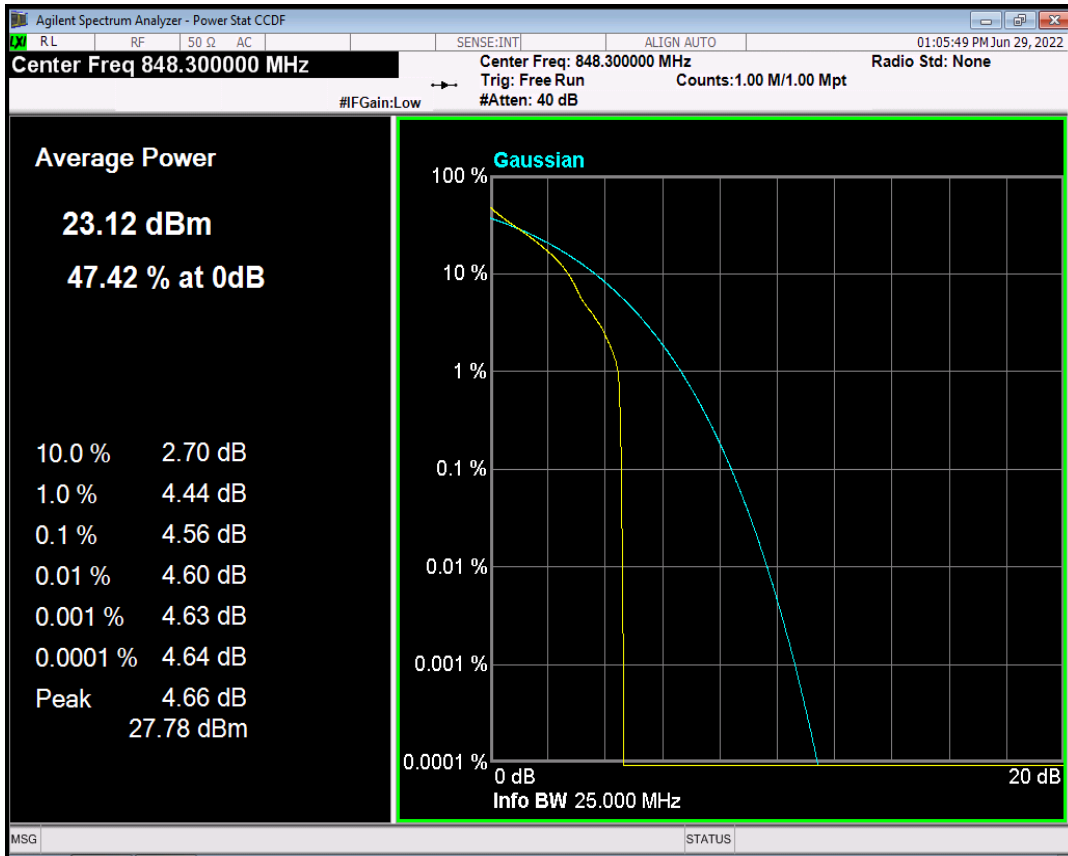


Band5 QAM16 BW=1.4MHz Channel=20525 RB Size=1 Position=#0

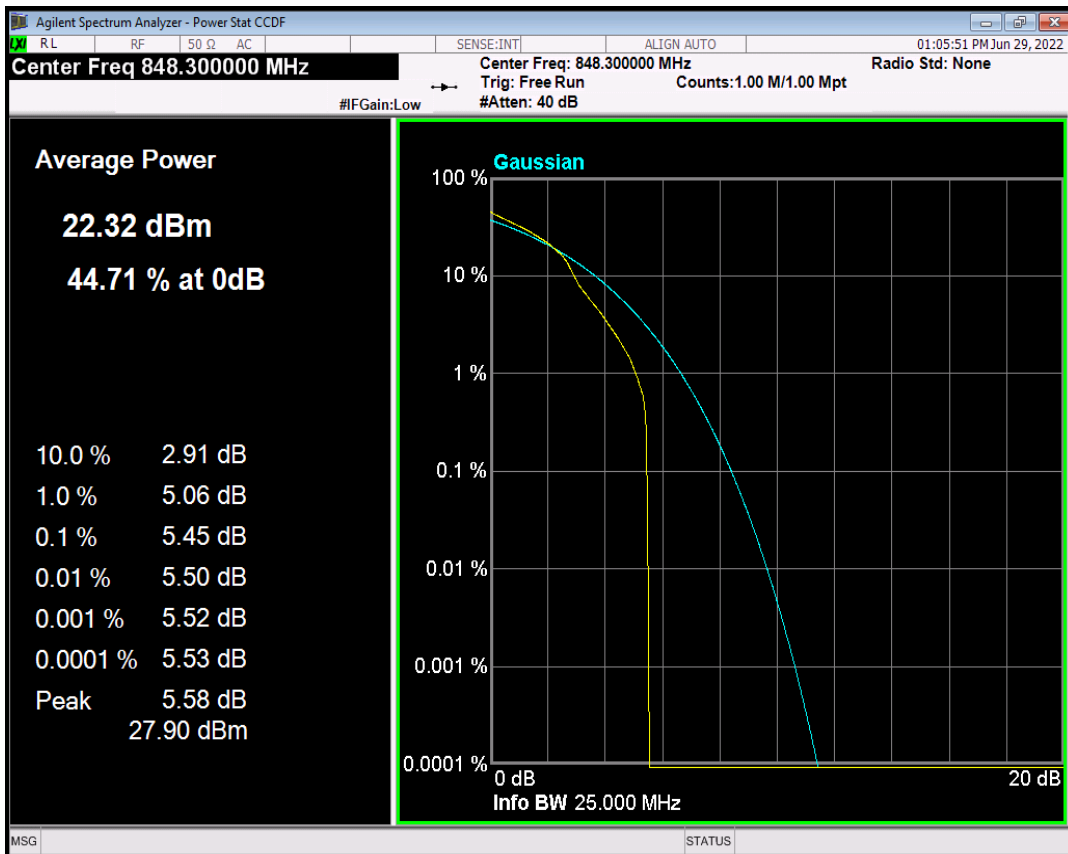




Band5 QPSK BW=1.4MHz Channel=20643 RB Size=1 Position=#0

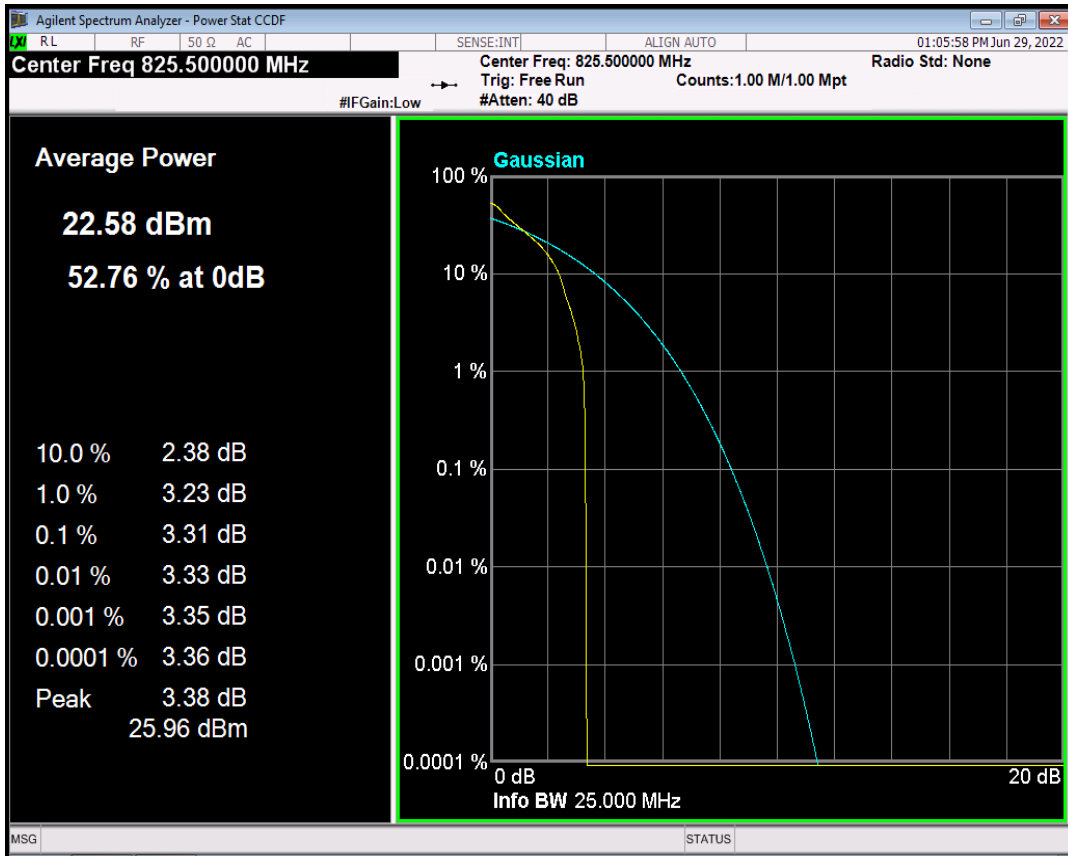


Band5 QAM16 BW=1.4MHz Channel=20643 RB Size=1 Position=#0

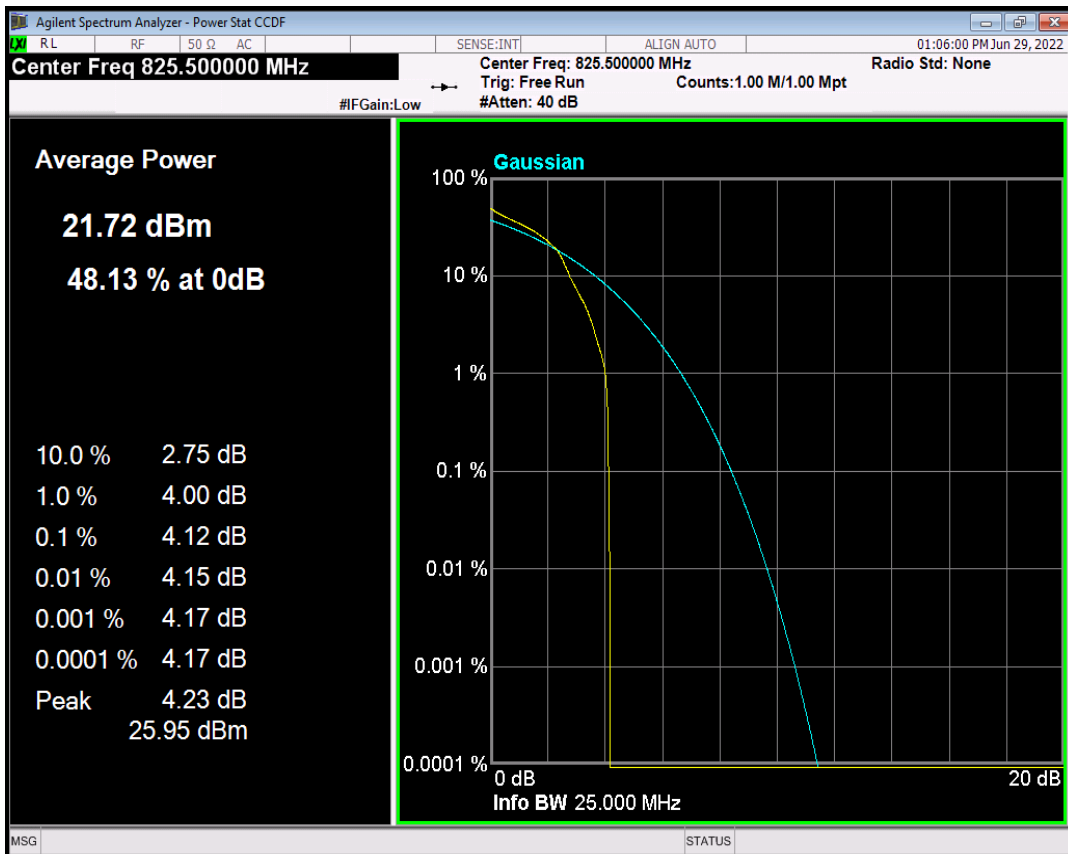




Band5 QPSK BW=3MHz Channel=20415 RB Size=1 Position=#0

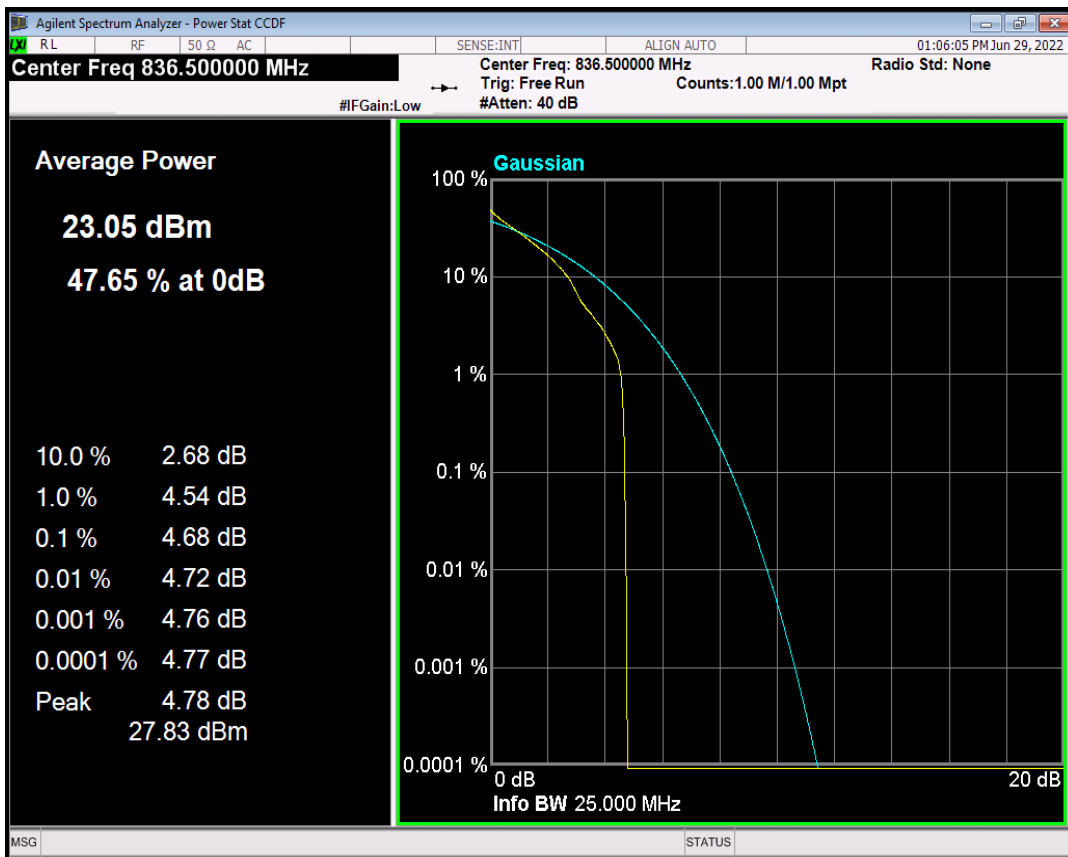


Band5 QAM16 BW=3MHz Channel=20415 RB Size=1 Position=#0

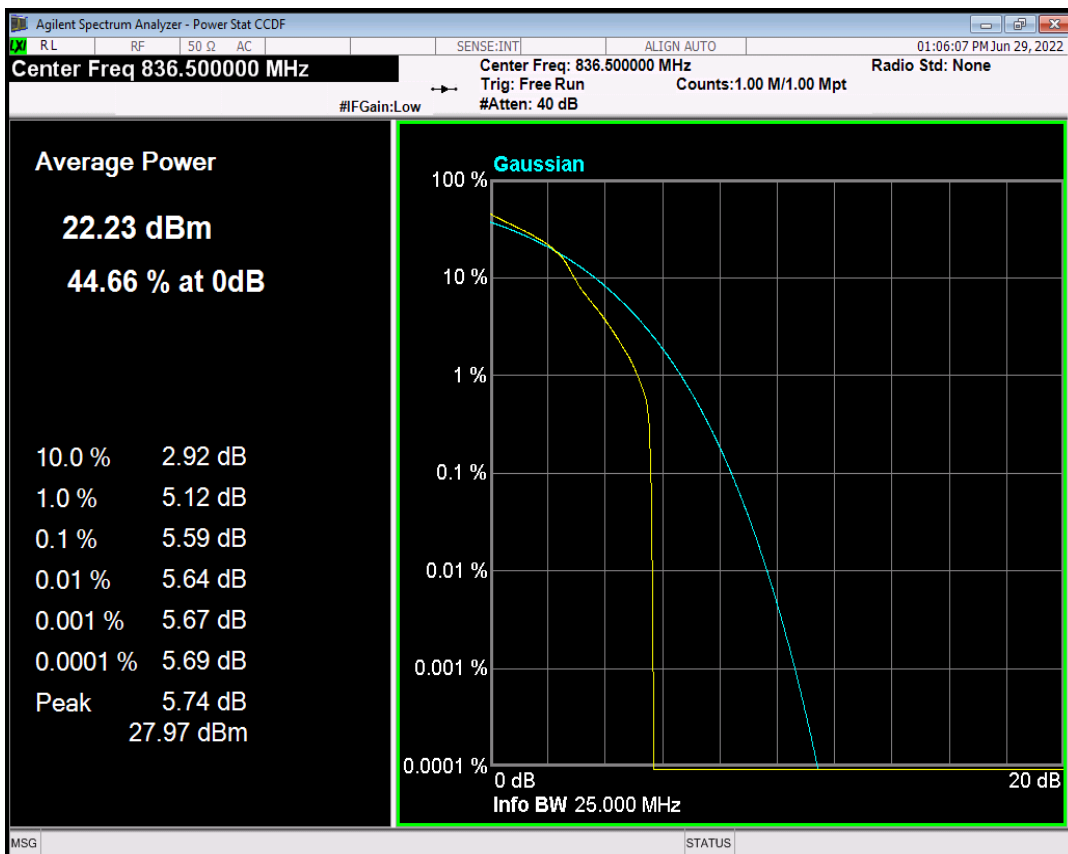




Band5 QPSK BW=3MHz Channel=20525 RB Size=1 Position=#0

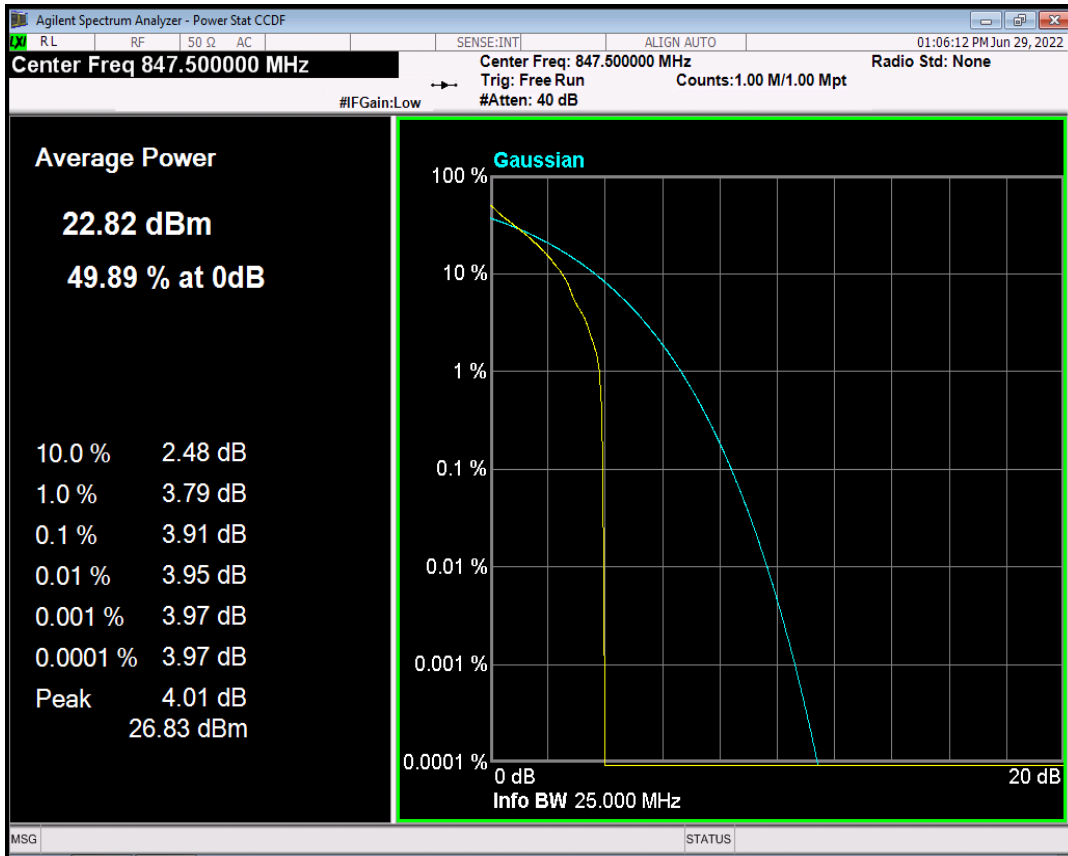


Band5 QAM16 BW=3MHz Channel=20525 RB Size=1 Position=#0

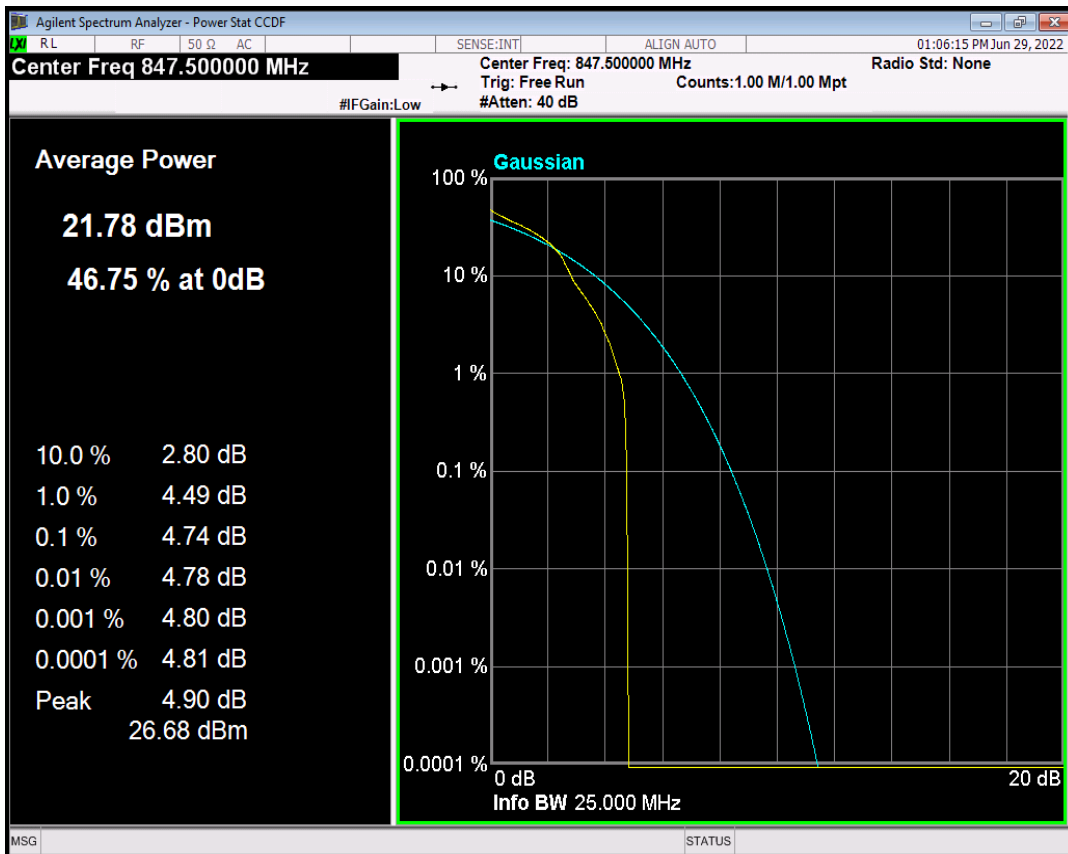




Band5 QPSK BW=3MHz Channel=20635 RB Size=1 Position=#0

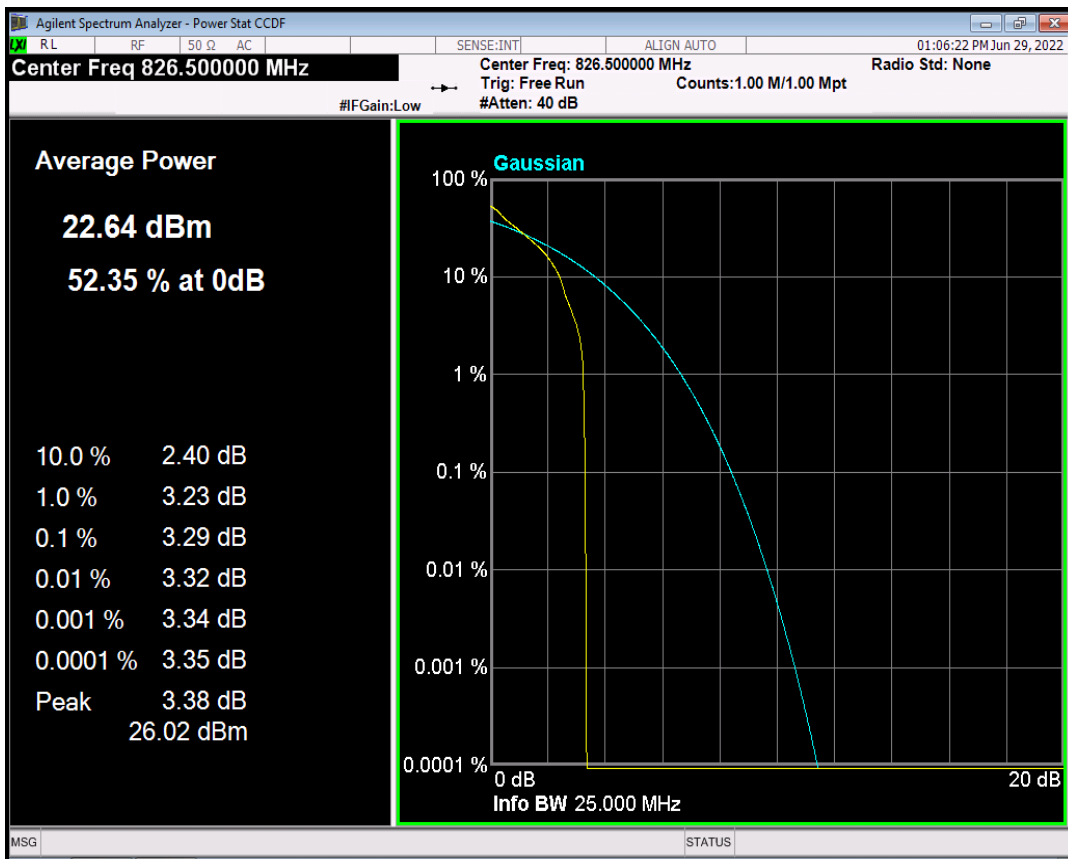


Band5 QAM16 BW=3MHz Channel=20635 RB Size=1 Position=#0

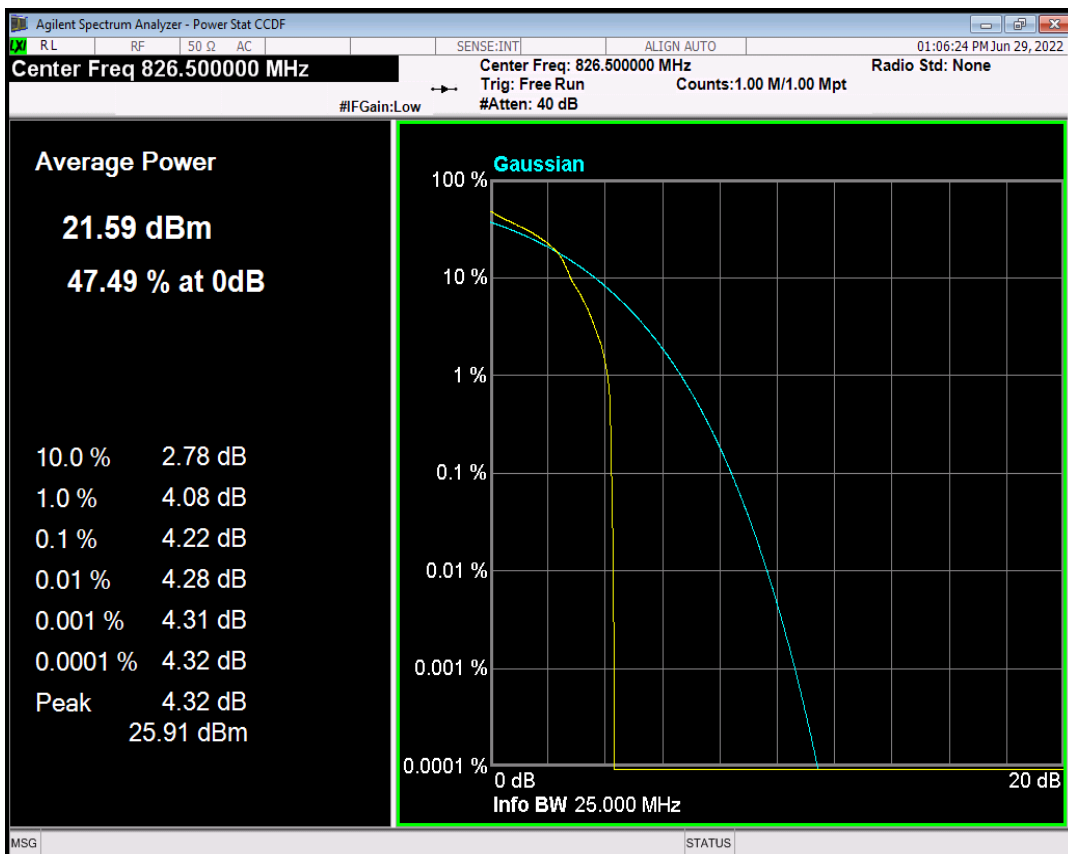




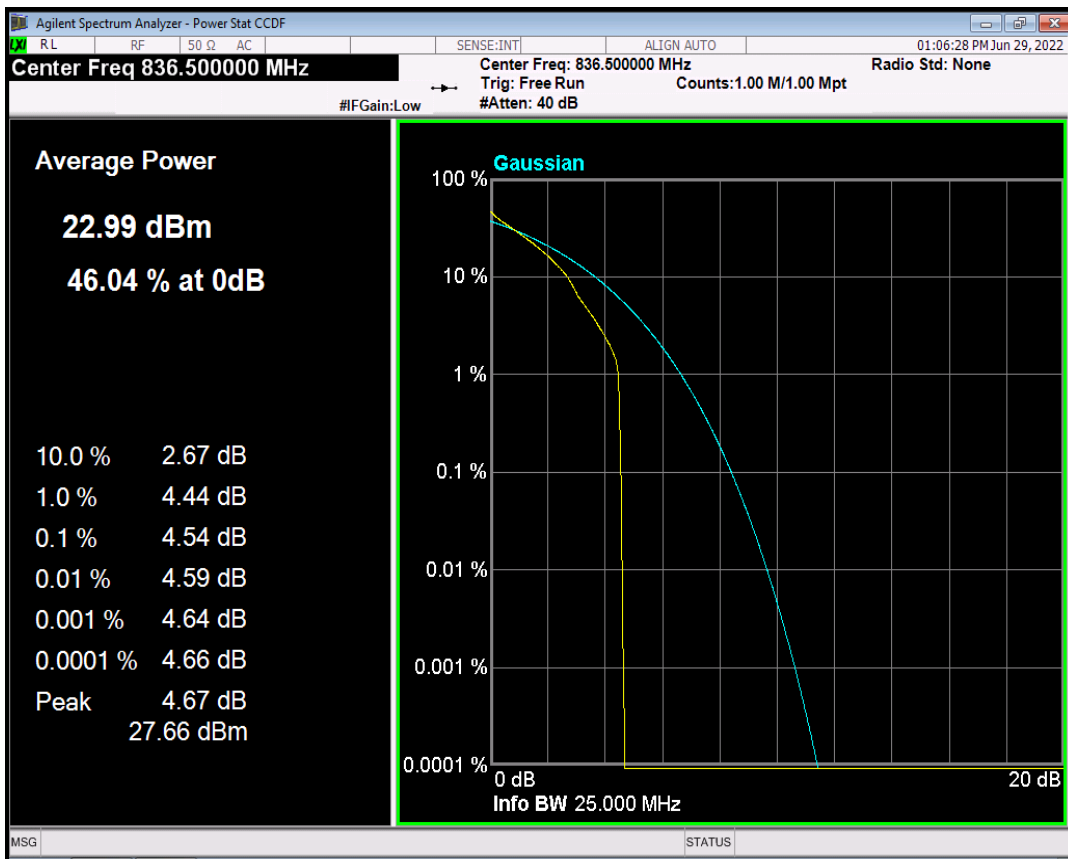
Band5 QPSK BW=5MHz Channel=20425 RB Size=1 Position=#0



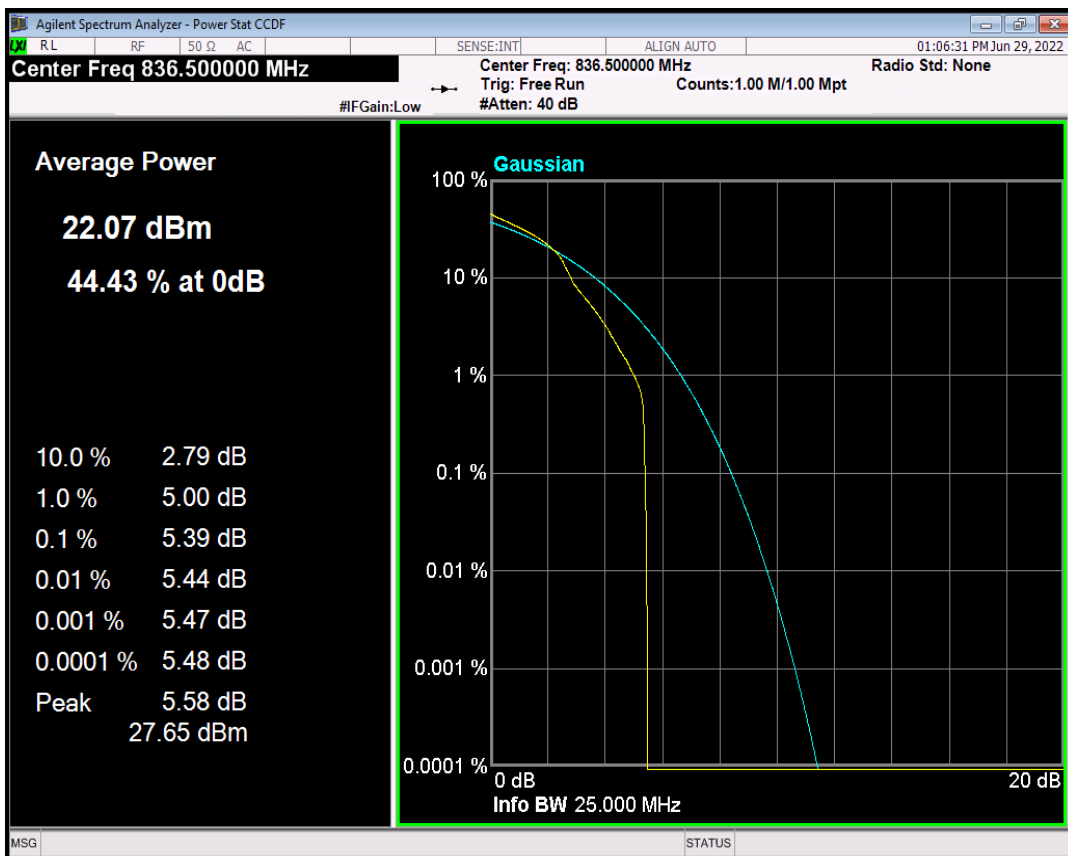
Band5 QAM16 BW=5MHz Channel=20425 RB Size=1 Position=#0



Band5 QPSK BW=5MHz Channel=20525 RB Size=1 Position=#0

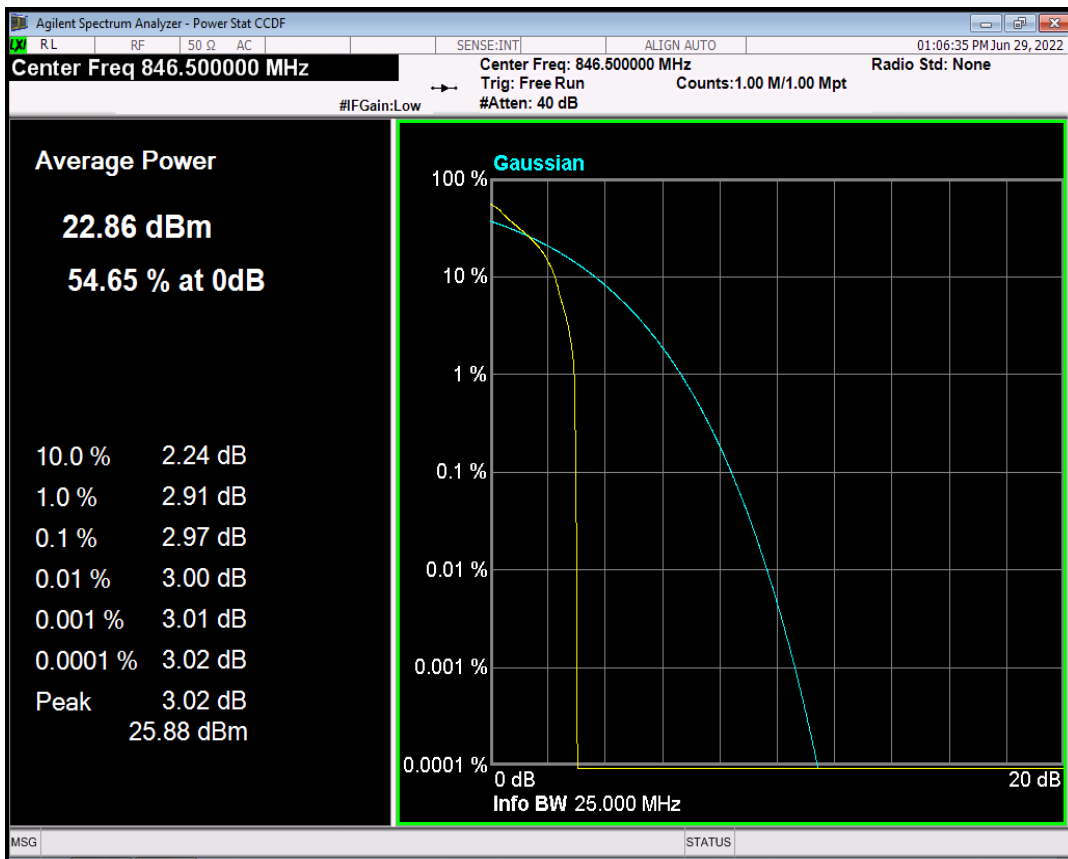


Band5 QAM16 BW=5MHz Channel=20525 RB Size=1 Position=#0

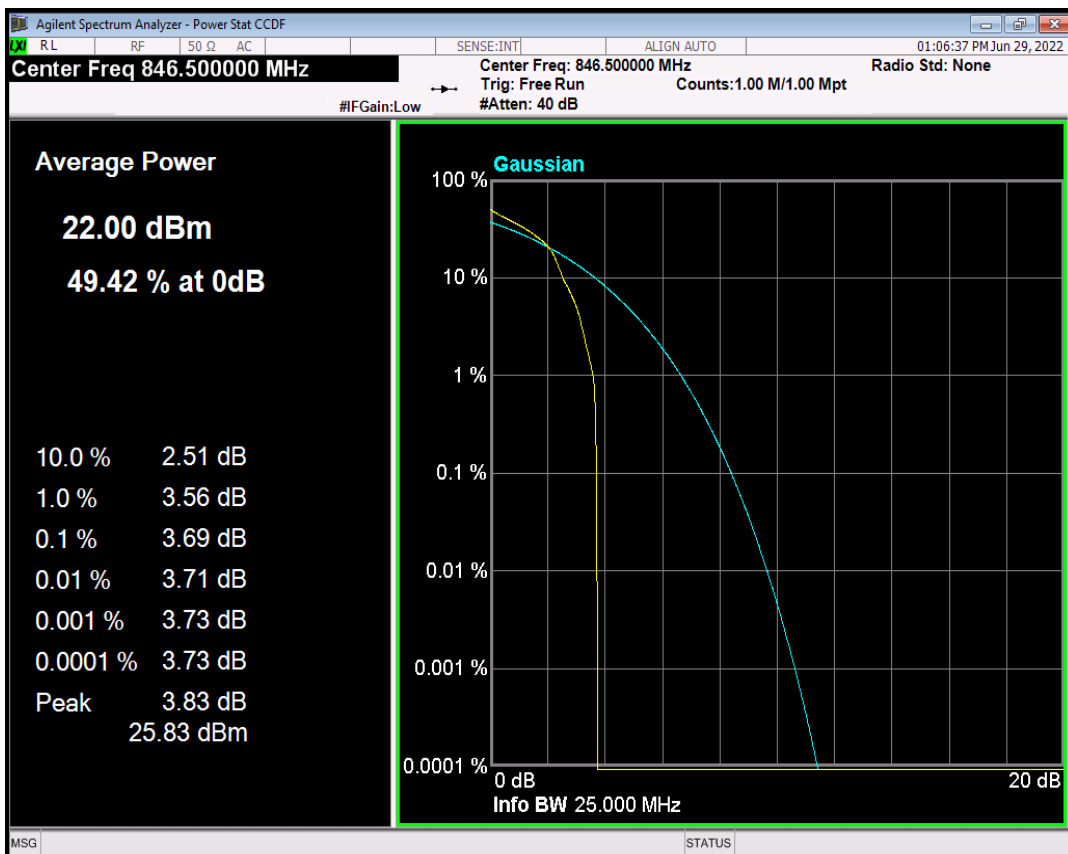




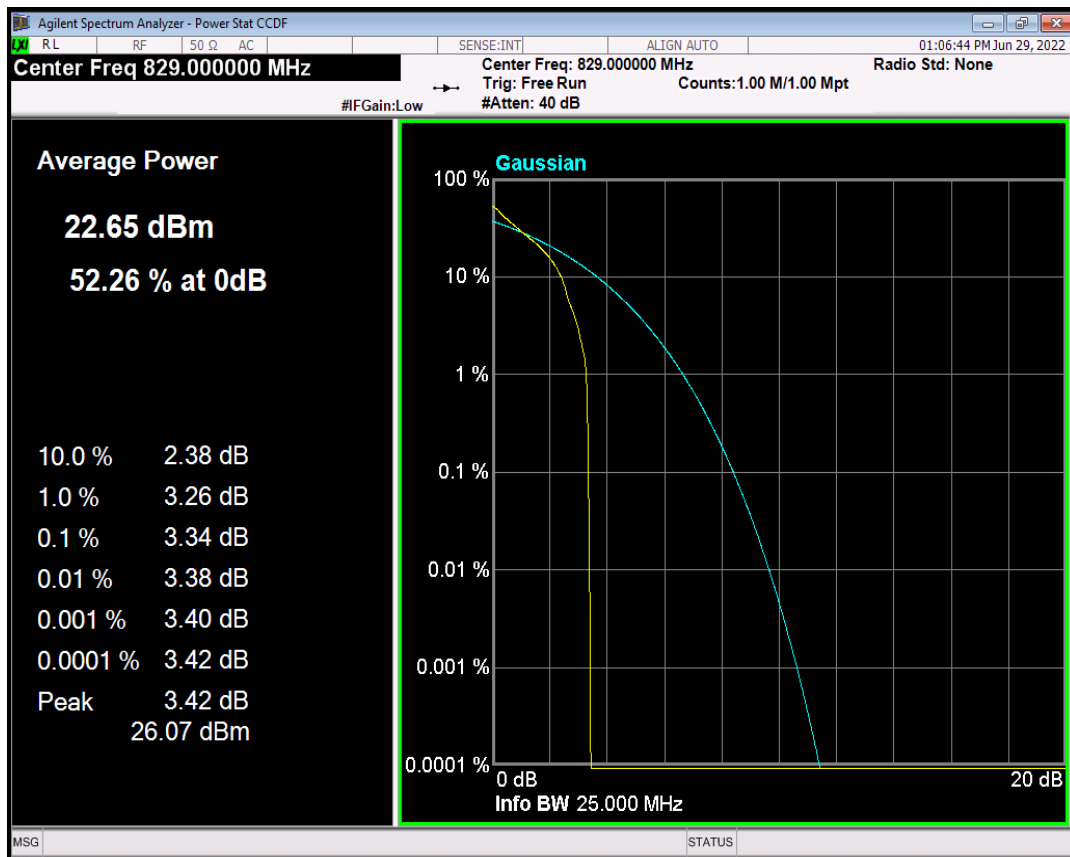
Band5 QPSK BW=5MHz Channel=20625 RB Size=1 Position=#0



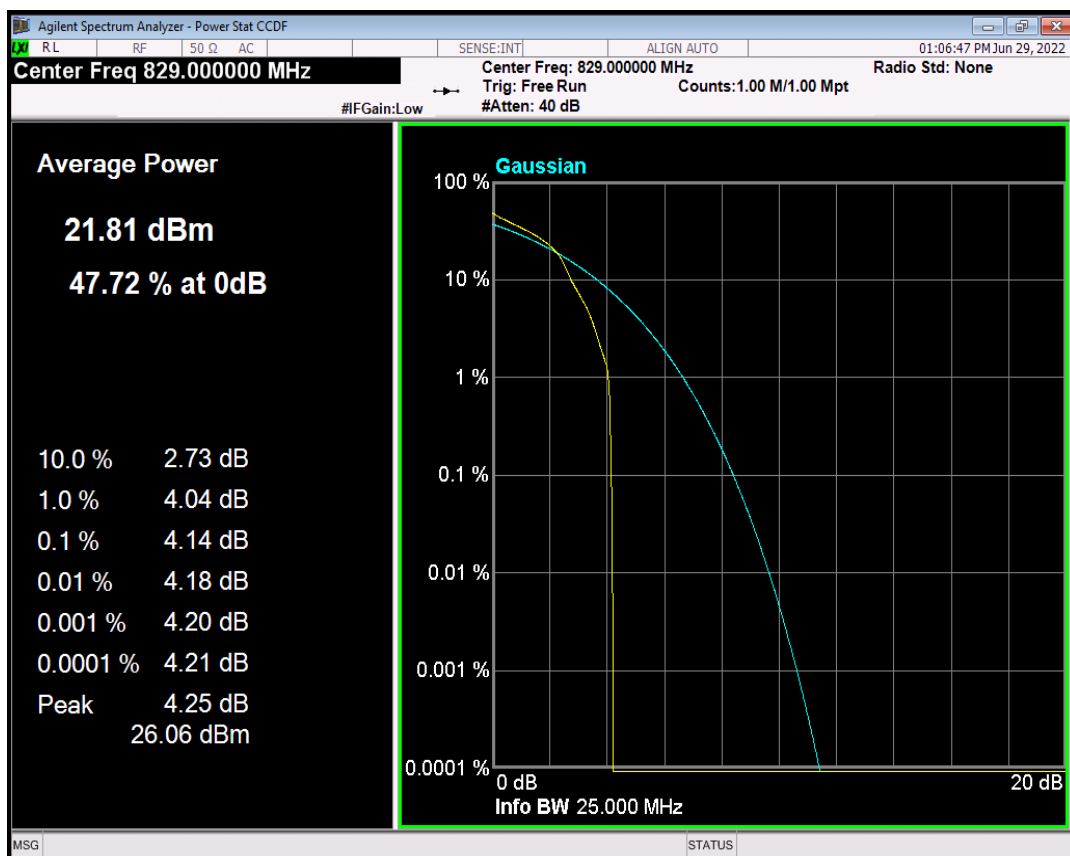
Band5 QAM16 BW=5MHz Channel=20625 RB Size=1 Position=#0



Band5 QPSK BW=10MHz Channel=20450 RB Size=1 Position=#0

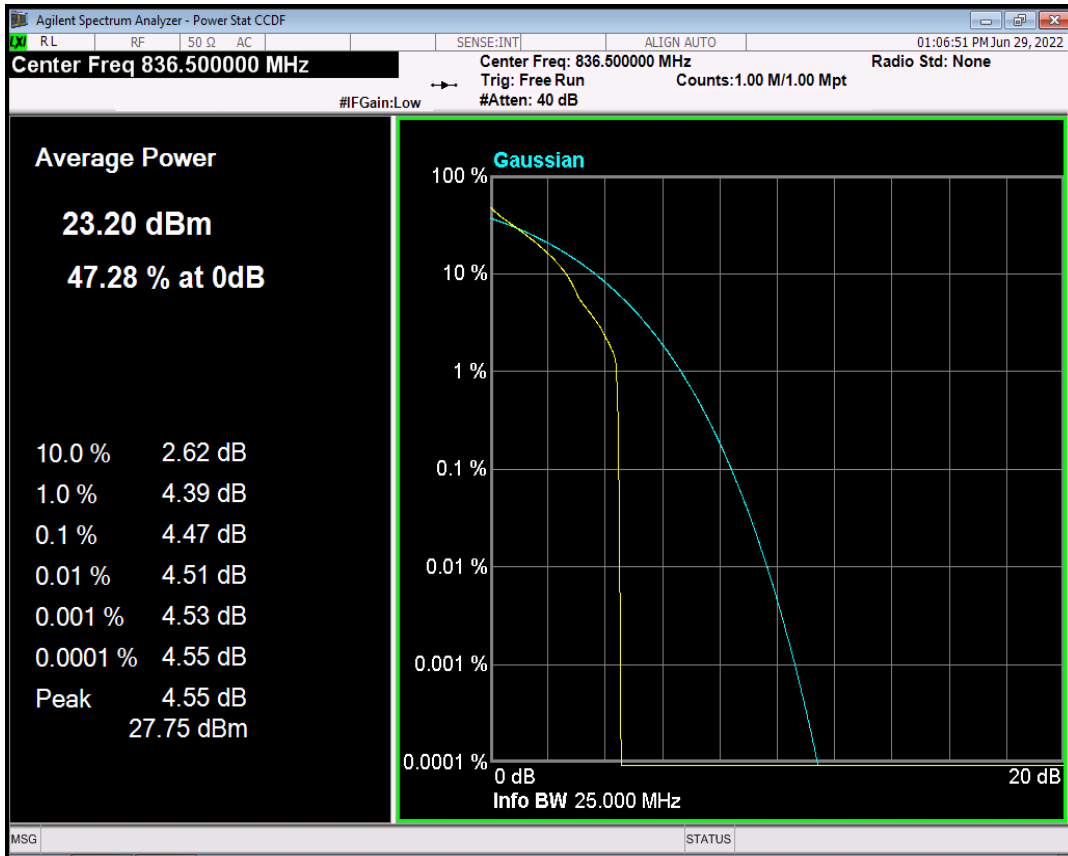


Band5 QAM16 BW=10MHz Channel=20450 RB Size=1 Position=#0

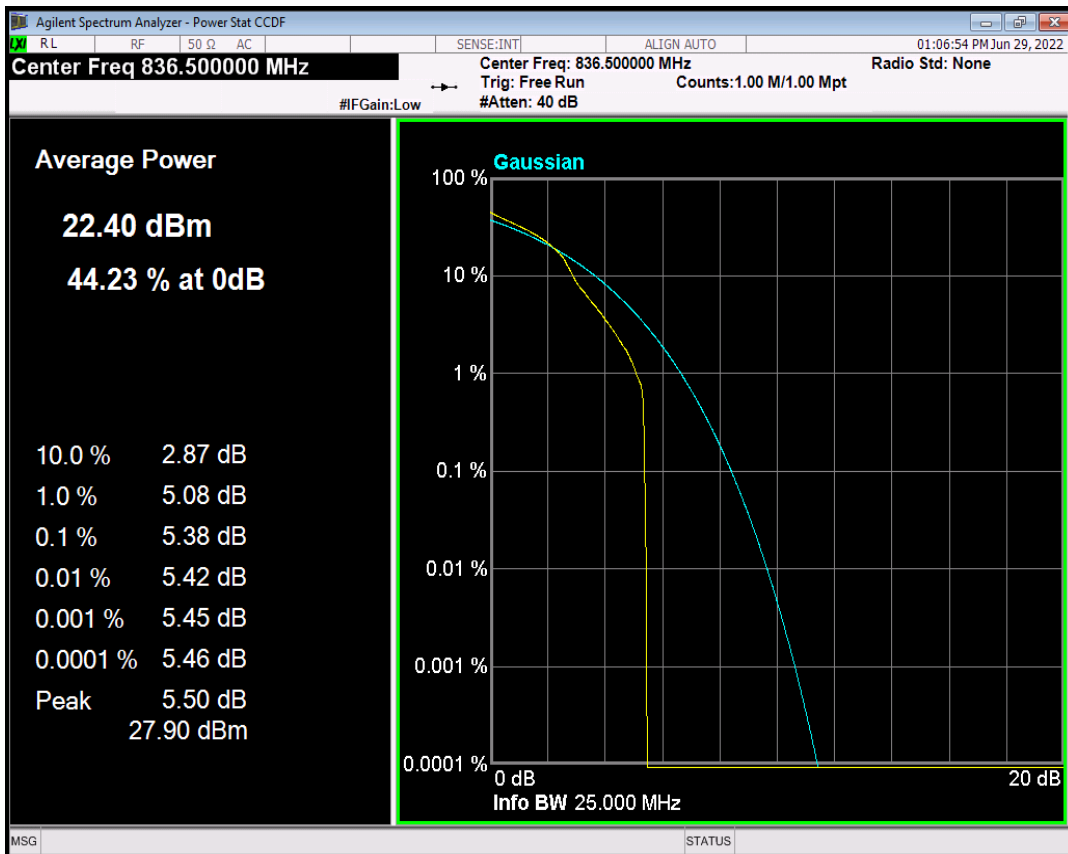




Band5 QPSK BW=10MHz Channel=20525 RB Size=1 Position=#0

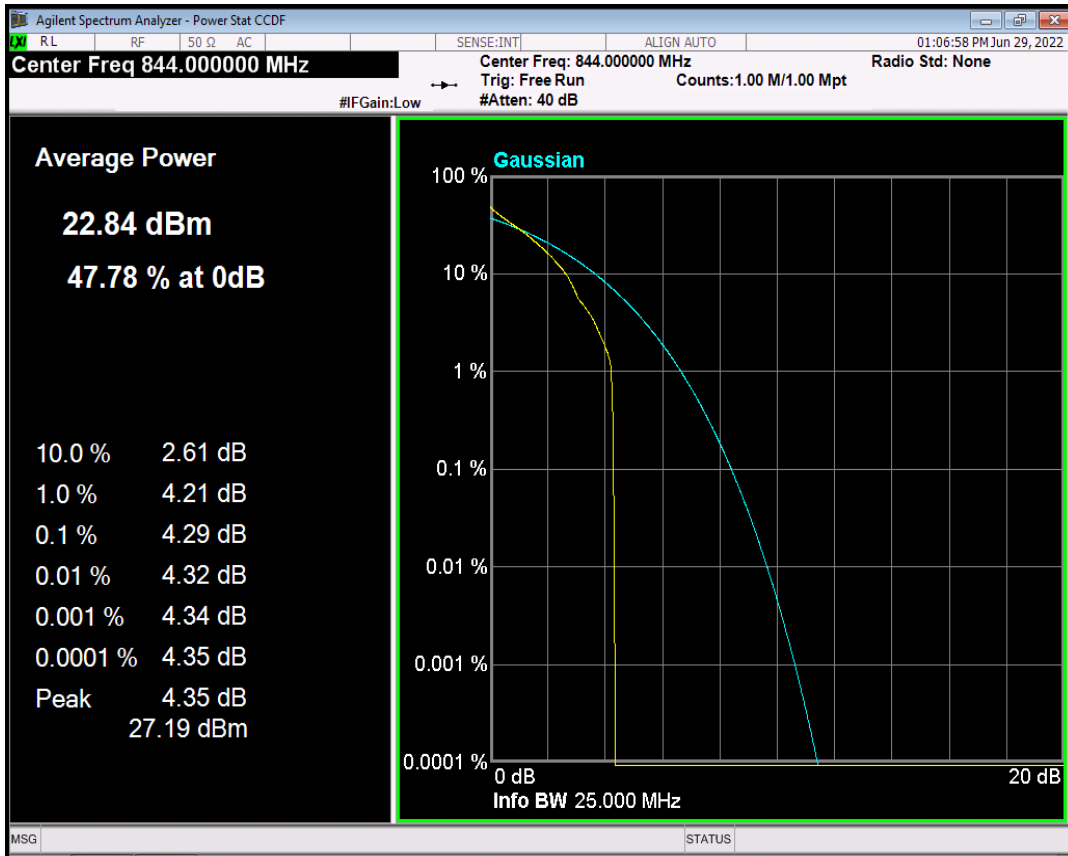


Band5 QAM16 BW=10MHz Channel=20525 RB Size=1 Position=#0

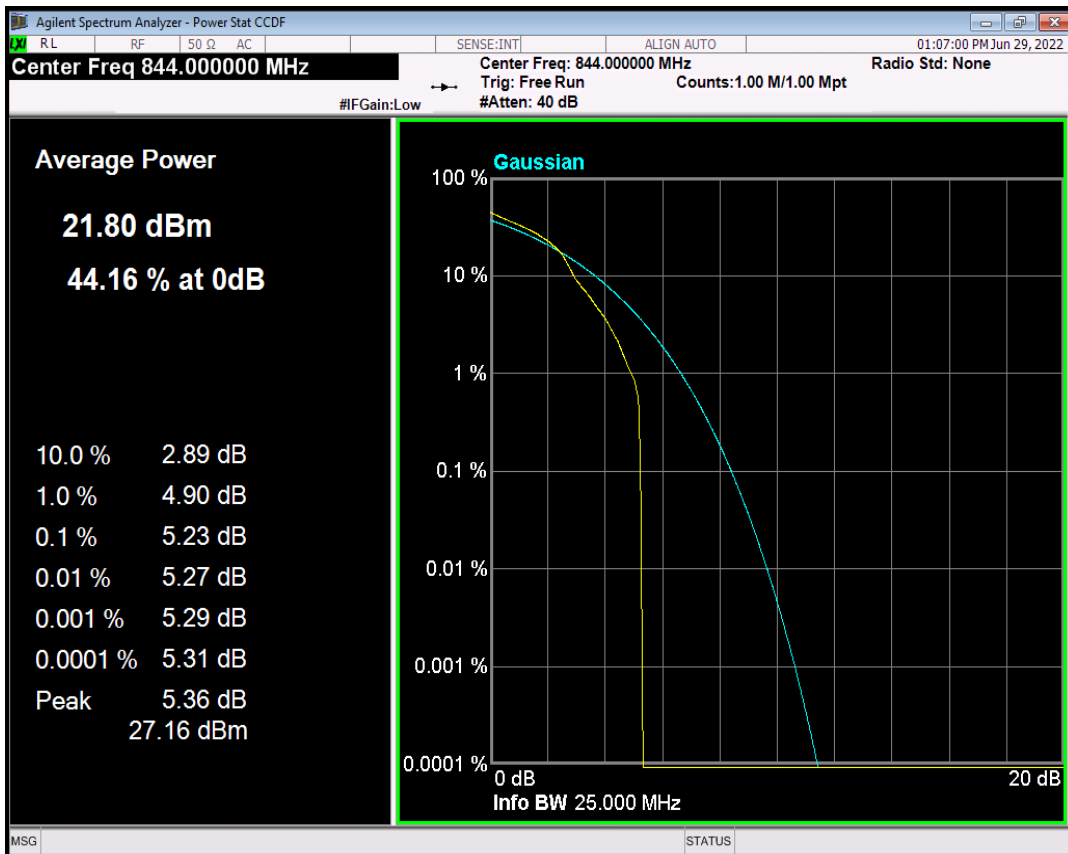




Band5 QPSK BW=10MHz Channel=20600 RB Size=1 Position=#0



Band5 QAM16 BW=10MHz Channel=20600 RB Size=1 Position=#0

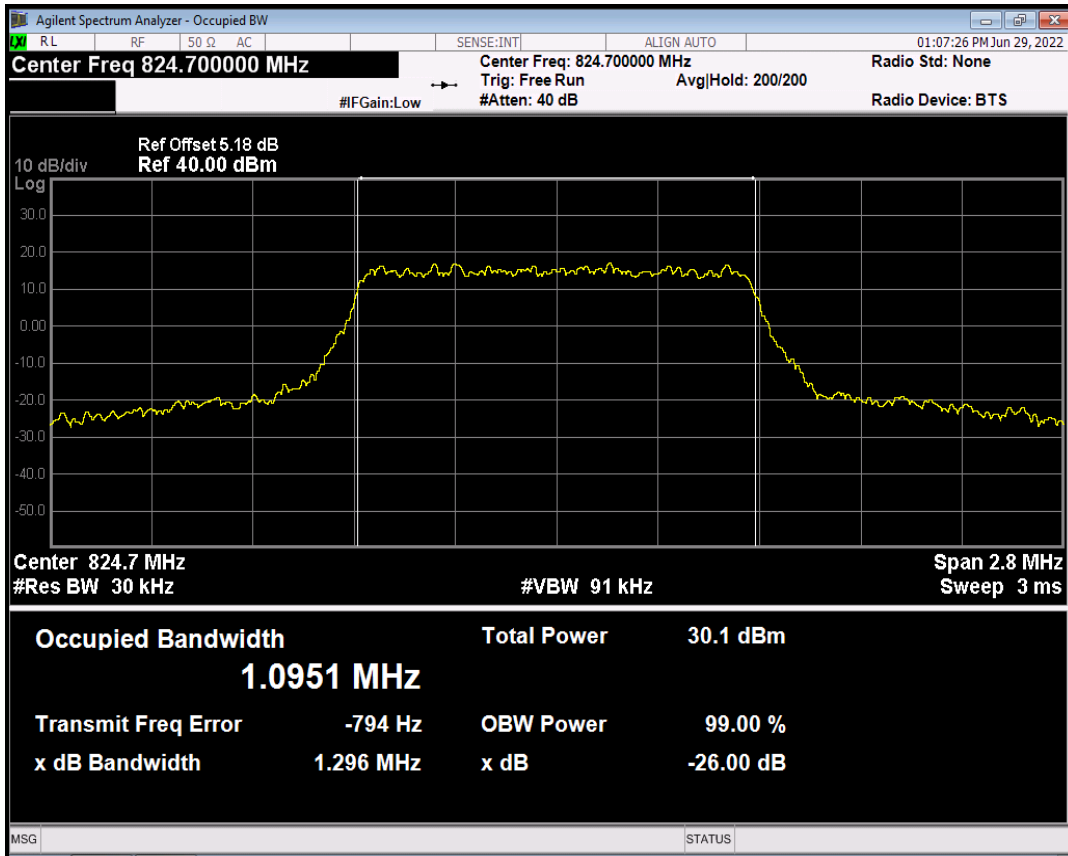


Appendix 4. Occupied bandwidth

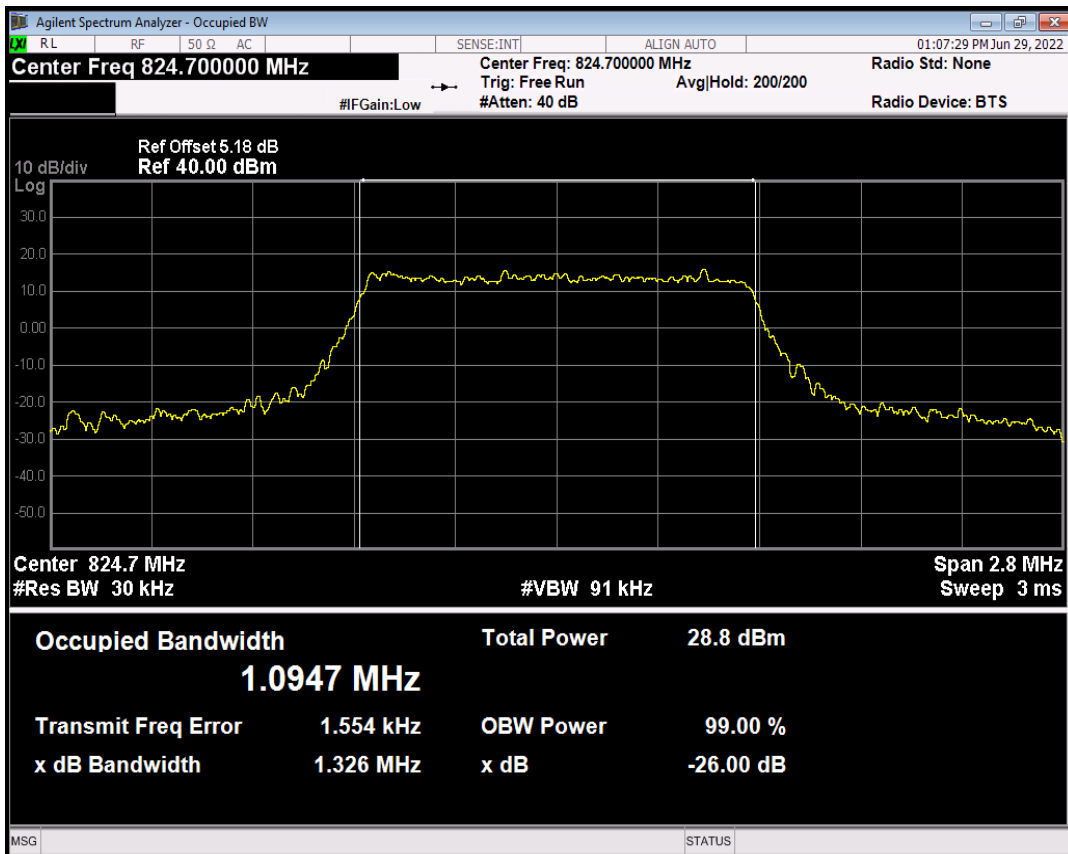
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% OBW (MHz)	-26dB EBW (MHz)	Verdict
Band5	1.4	20407	6	#0	QPSK	1.095	1.296	PASS
Band5	1.4	20407	6	#0	QAM16	1.095	1.326	PASS
Band5	1.4	20525	6	#0	QPSK	1.095	1.280	PASS
Band5	1.4	20525	6	#0	QAM16	1.103	1.325	PASS
Band5	1.4	20643	6	#0	QPSK	1.099	1.296	PASS
Band5	1.4	20643	6	#0	QAM16	1.099	1.270	PASS
Band5	3	20415	15	#0	QPSK	2.708	2.992	PASS
Band5	3	20415	15	#0	QAM16	2.712	2.948	PASS
Band5	3	20525	15	#0	QPSK	2.705	2.977	PASS
Band5	3	20525	15	#0	QAM16	2.697	2.990	PASS
Band5	3	20635	15	#0	QPSK	2.697	2.974	PASS
Band5	3	20635	15	#0	QAM16	2.694	2.971	PASS
Band5	5	20425	25	#0	QPSK	4.524	4.999	PASS
Band5	5	20425	25	#0	QAM16	4.511	4.984	PASS
Band5	5	20525	25	#0	QPSK	4.516	4.961	PASS
Band5	5	20525	25	#0	QAM16	4.505	4.988	PASS
Band5	5	20625	25	#0	QPSK	4.526	5.022	PASS
Band5	5	20625	25	#0	QAM16	4.540	5.030	PASS
Band5	10	20450	50	#0	QPSK	8.985	9.840	PASS
Band5	10	20450	50	#0	QAM16	8.952	9.871	PASS
Band5	10	20525	50	#0	QPSK	8.973	9.793	PASS
Band5	10	20525	50	#0	QAM16	8.951	9.668	PASS
Band5	10	20600	50	#0	QPSK	9.006	9.781	PASS
Band5	10	20600	50	#0	QAM16	8.981	9.750	PASS



Band5 QPSK BW=1.4MHz Channel=20407 RB Size=6 Position=#0

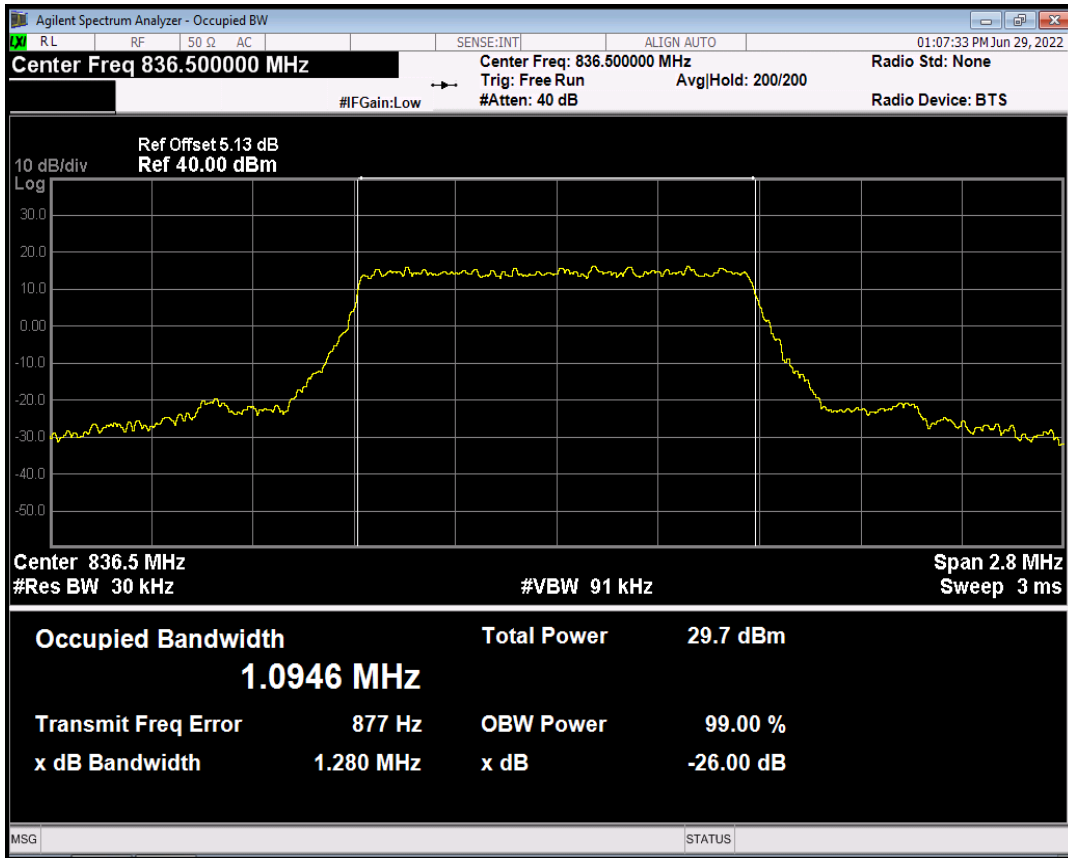


Band5 QAM16 BW=1.4MHz Channel=20407 RB Size=6 Position=#0

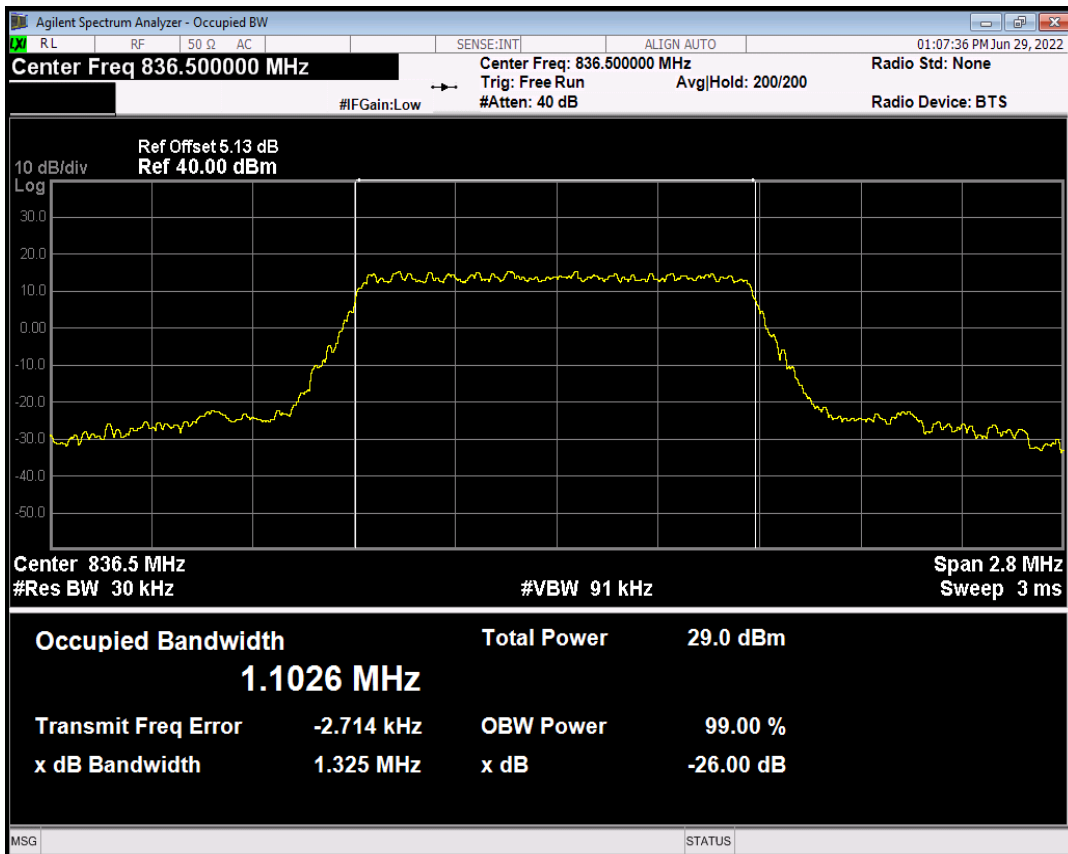




Band5 QPSK BW=1.4MHz Channel=20525 RB Size=6 Position=#0

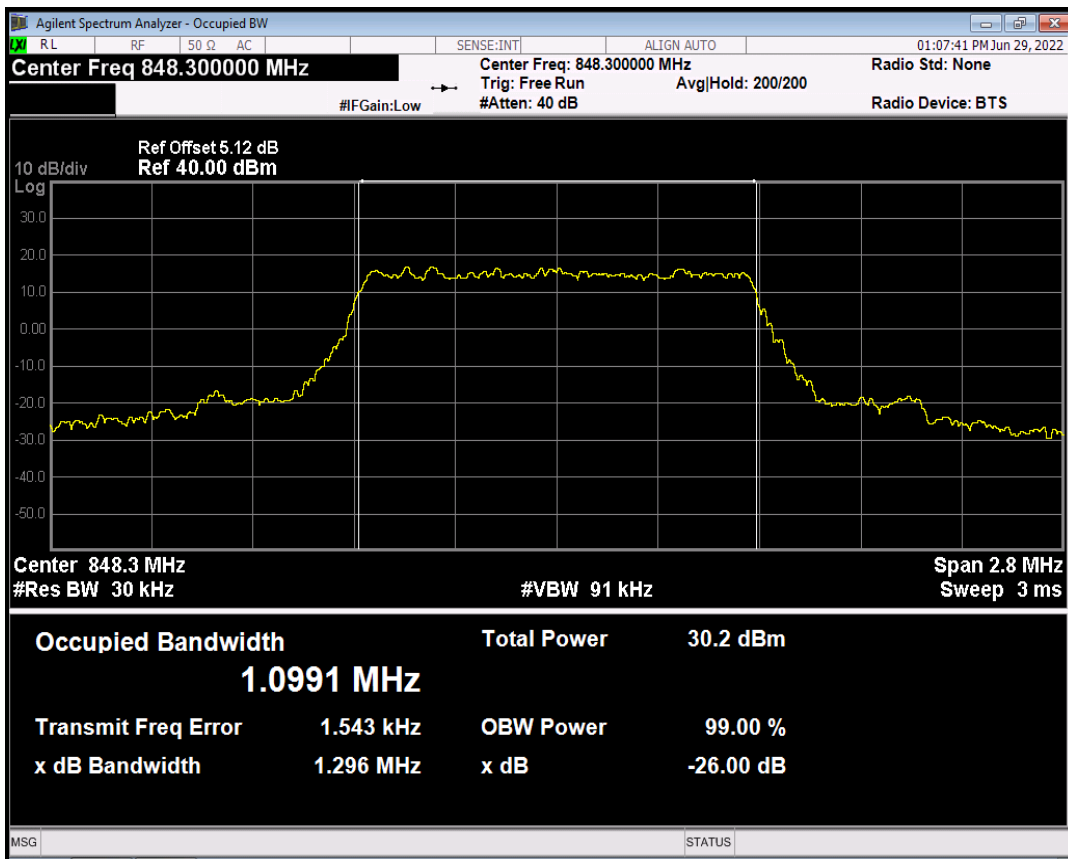


Band5 QAM16 BW=1.4MHz Channel=20525 RB Size=6 Position=#0

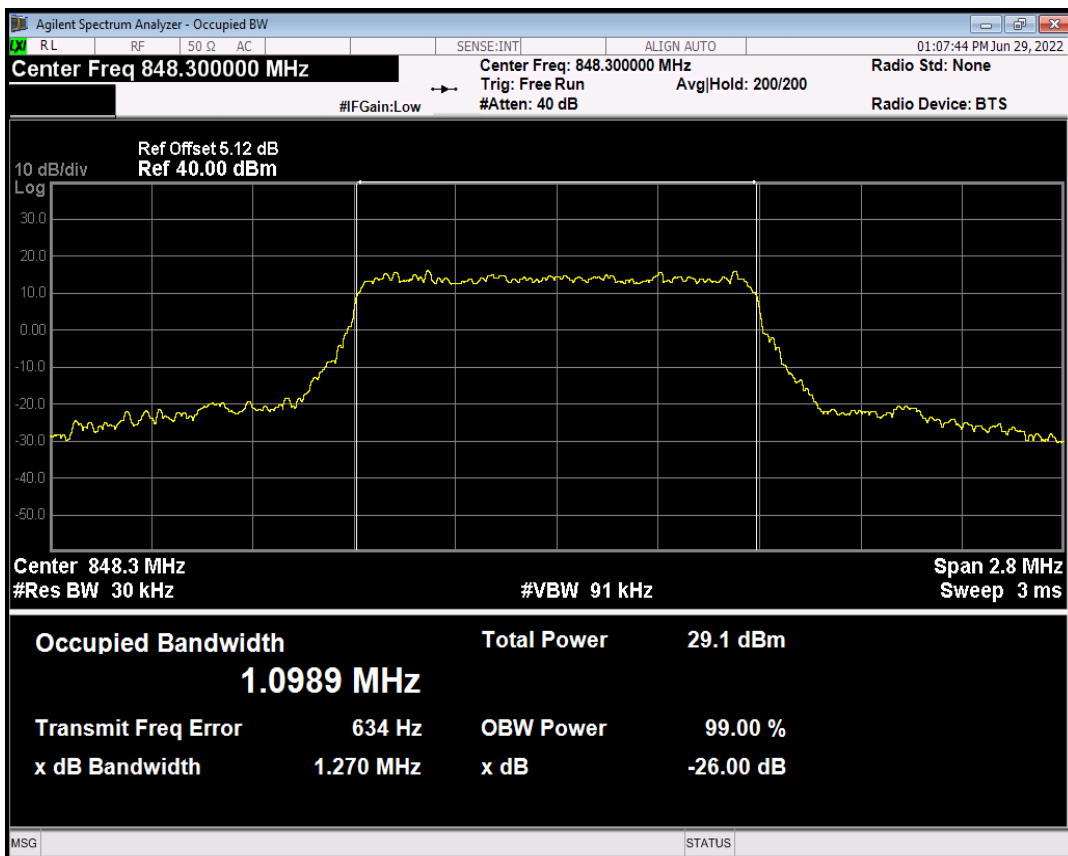




Band5 QPSK BW=1.4MHz Channel=20643 RB Size=6 Position=#0

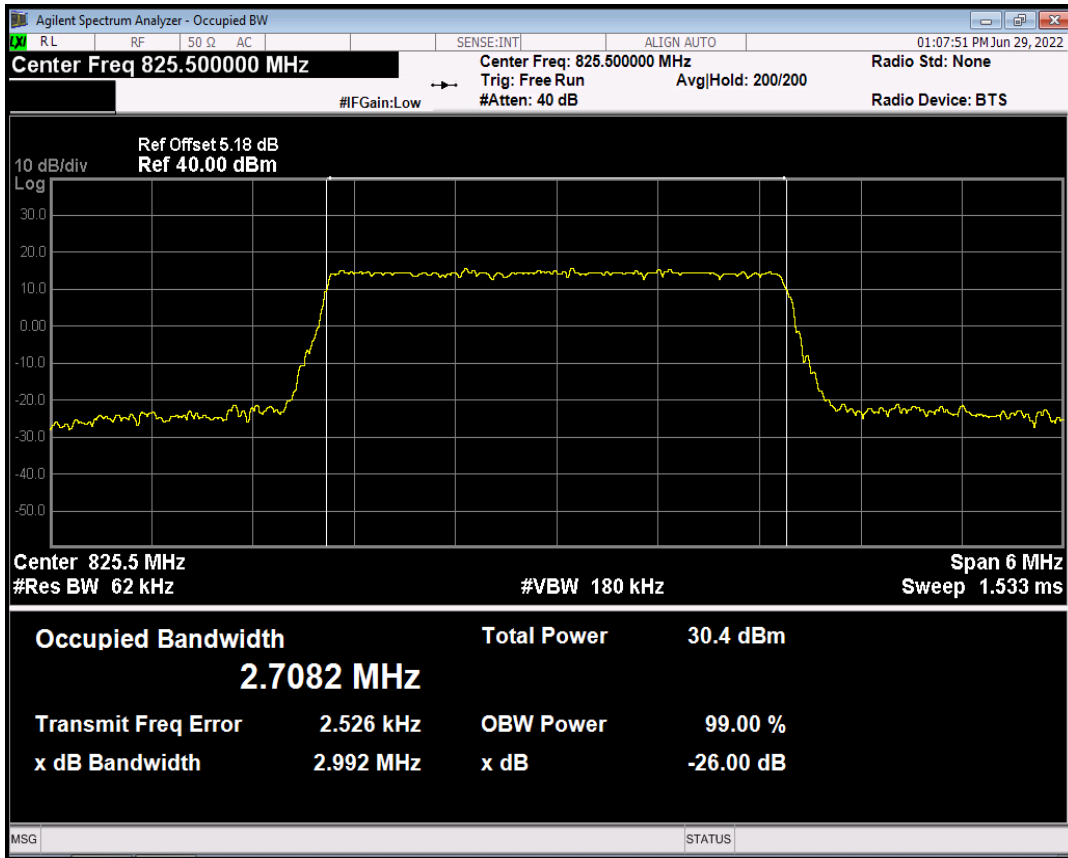


Band5 QAM16 BW=1.4MHz Channel=20643 RB Size=6 Position=#0

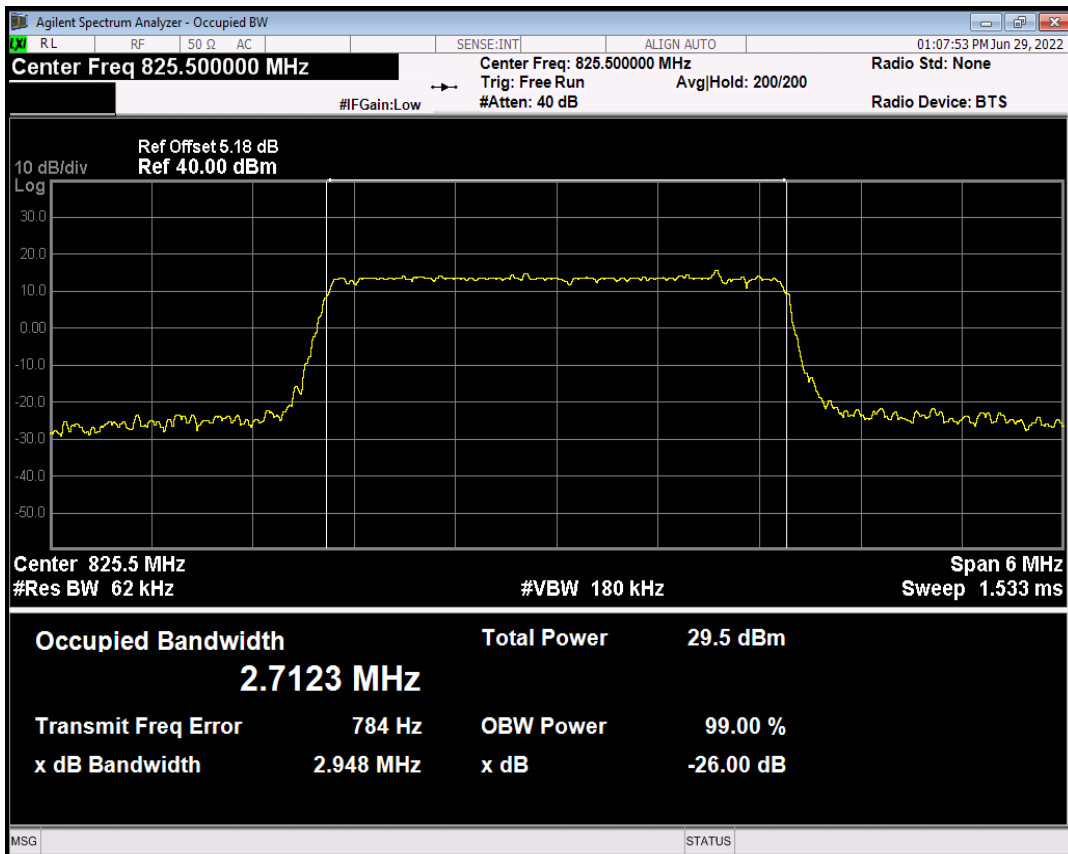




Band5 QPSK BW=3MHz Channel=20415 RB Size=15 Position=#0

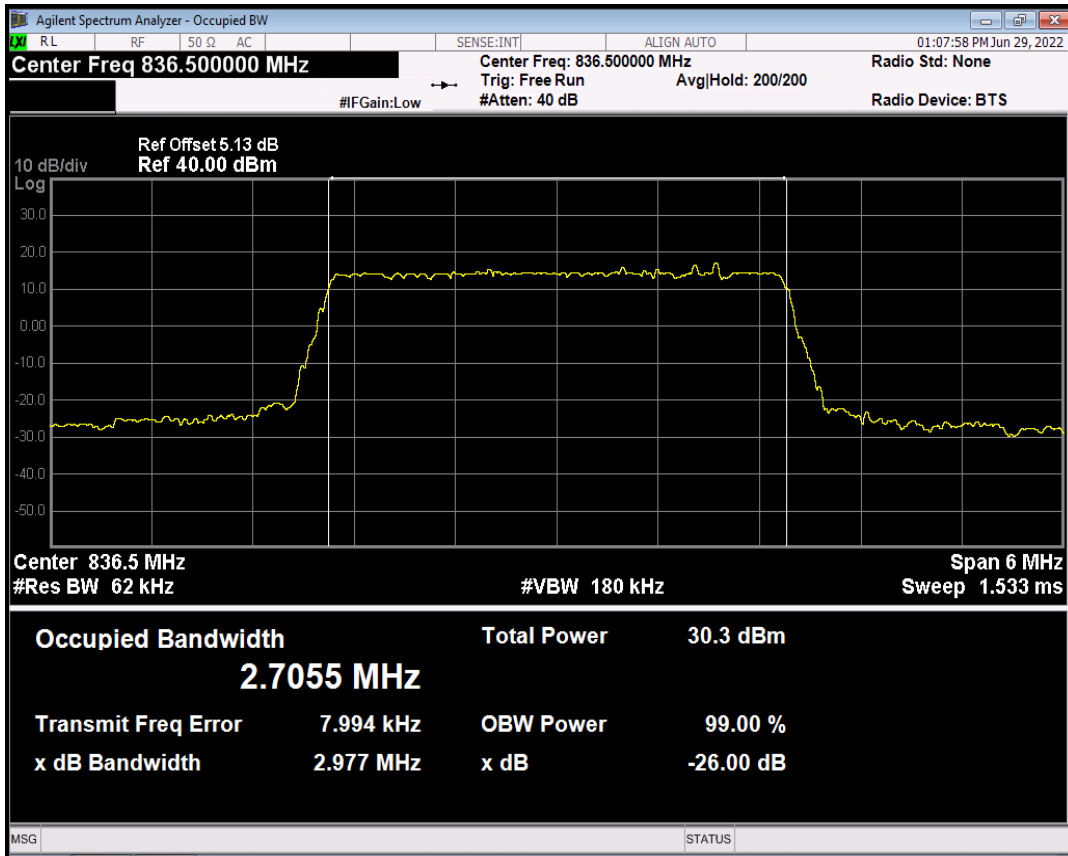


Band5 QAM16 BW=3MHz Channel=20415 RB Size=15 Position=#0

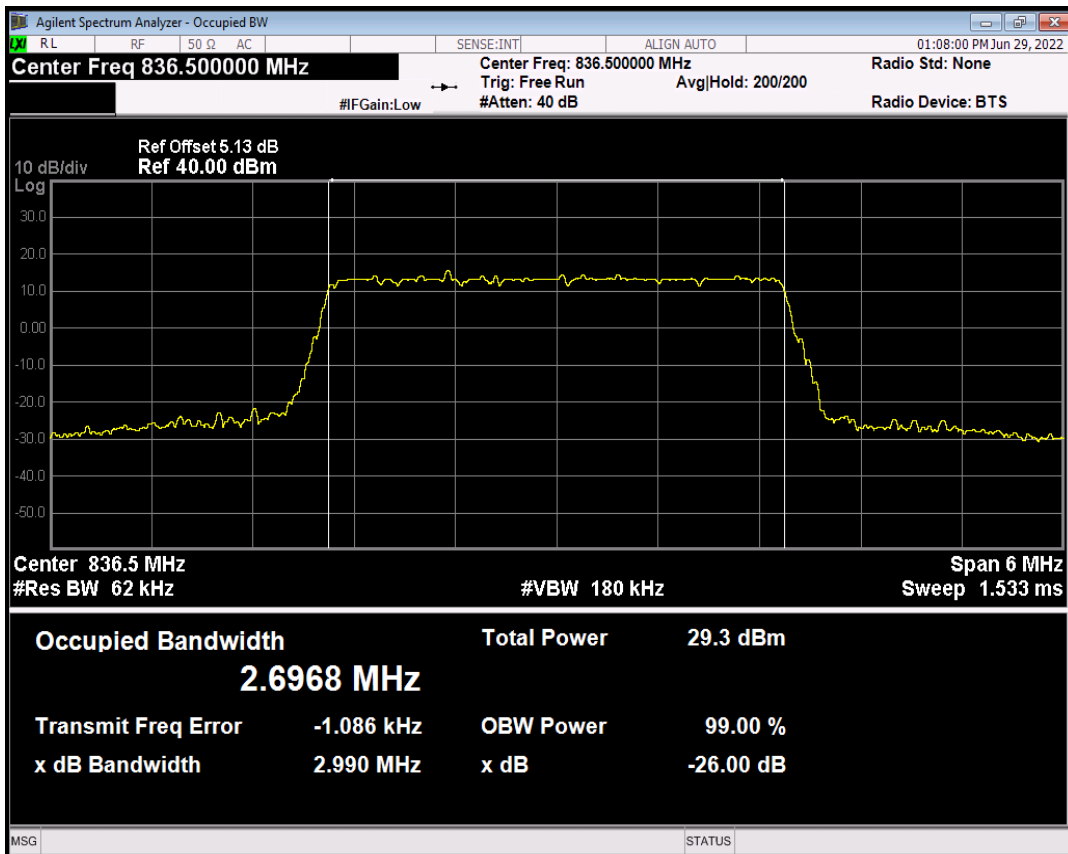




Band5 QPSK BW=3MHz Channel=20525 RB Size=15 Position=#0

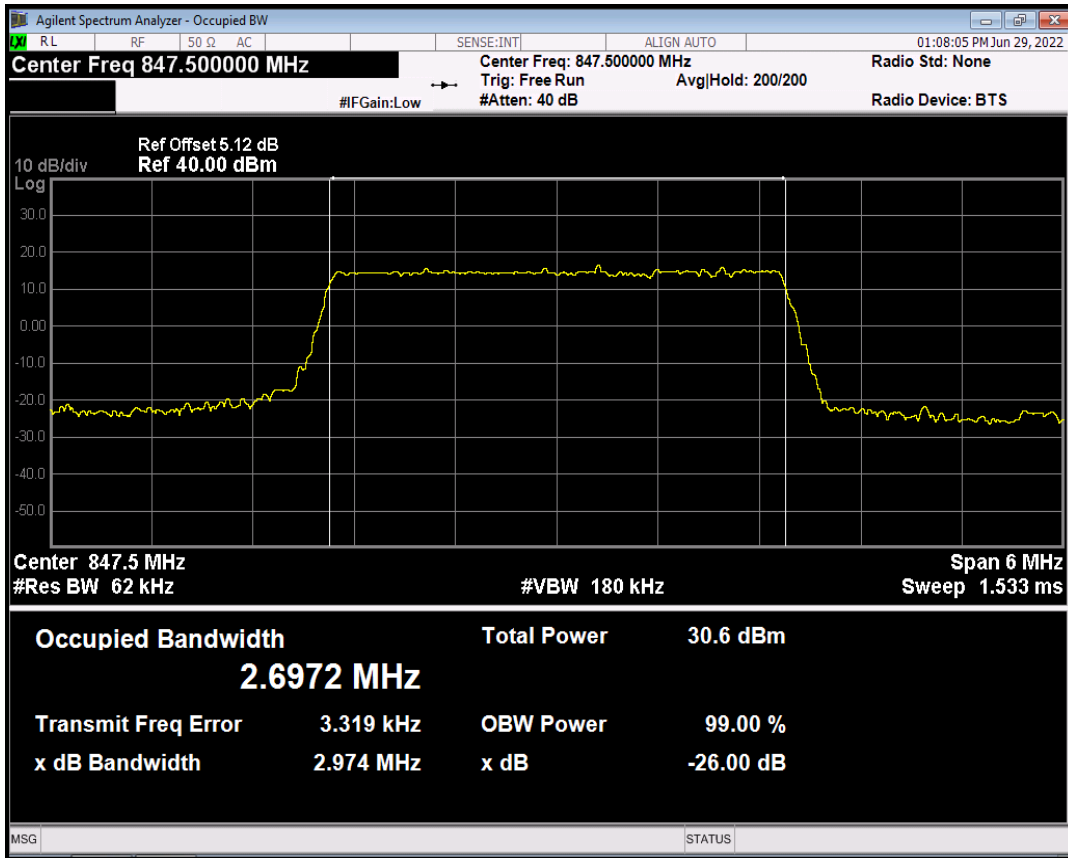


Band5 QAM16 BW=3MHz Channel=20525 RB Size=15 Position=#0

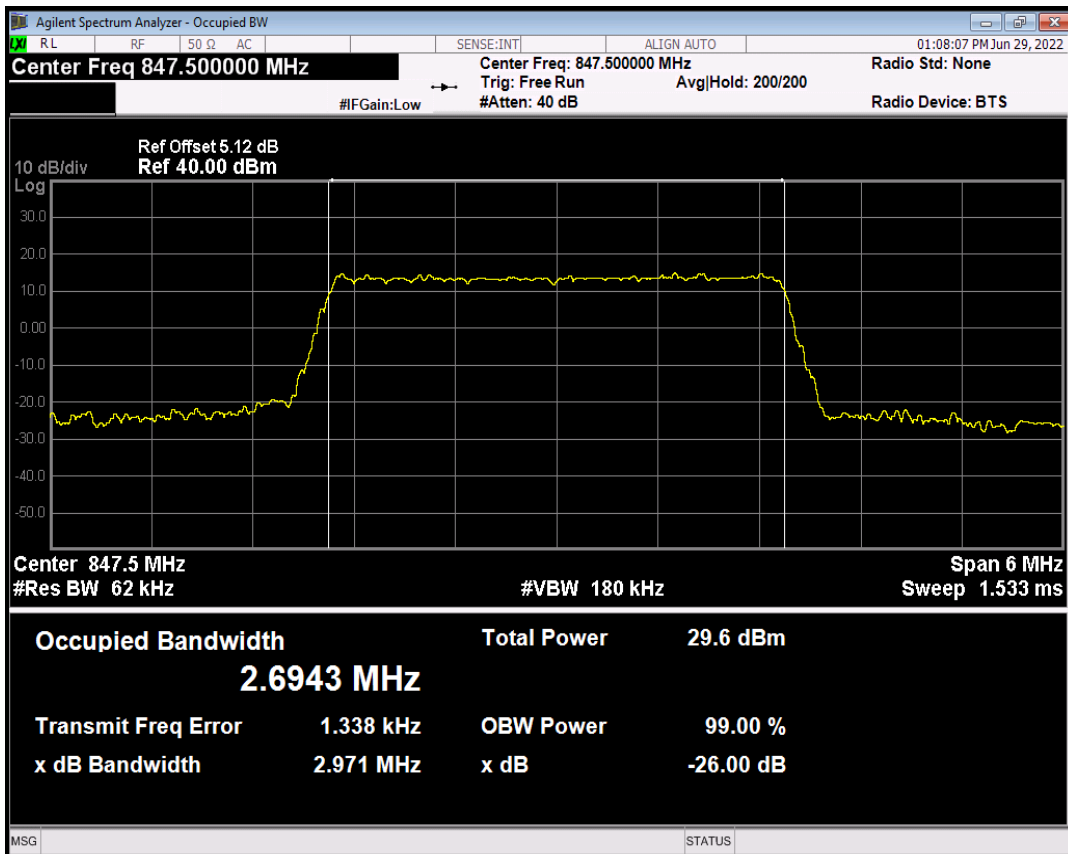




Band5 QPSK BW=3MHz Channel=20635 RB Size=15 Position=#0

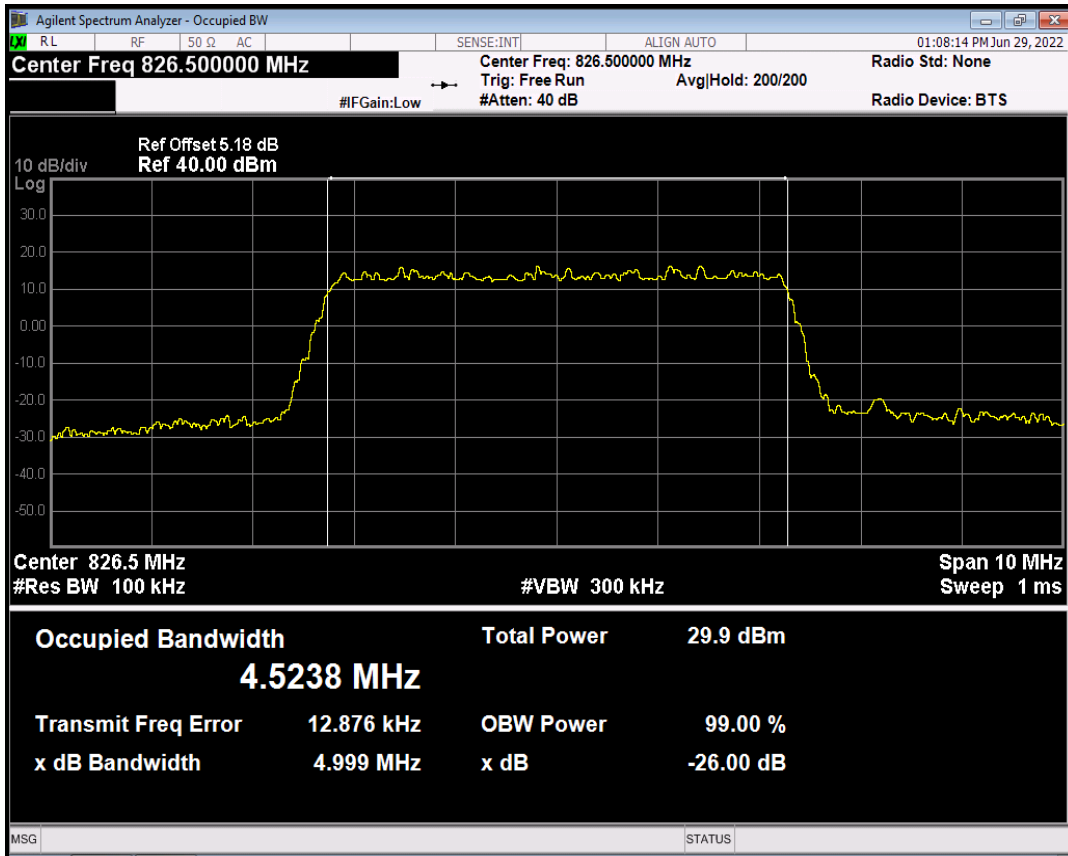


Band5 QAM16 BW=3MHz Channel=20635 RB Size=15 Position=#0

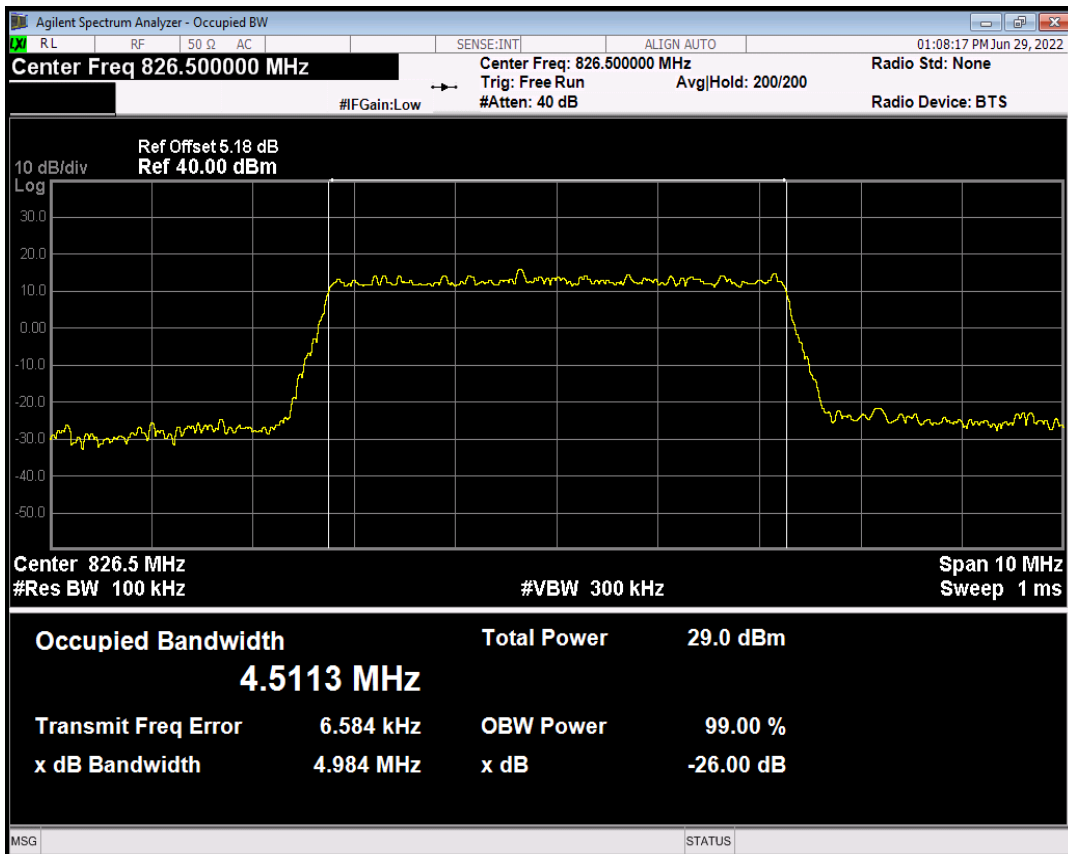




Band5 QPSK BW=5MHz Channel=20425 RB Size=25 Position=#0

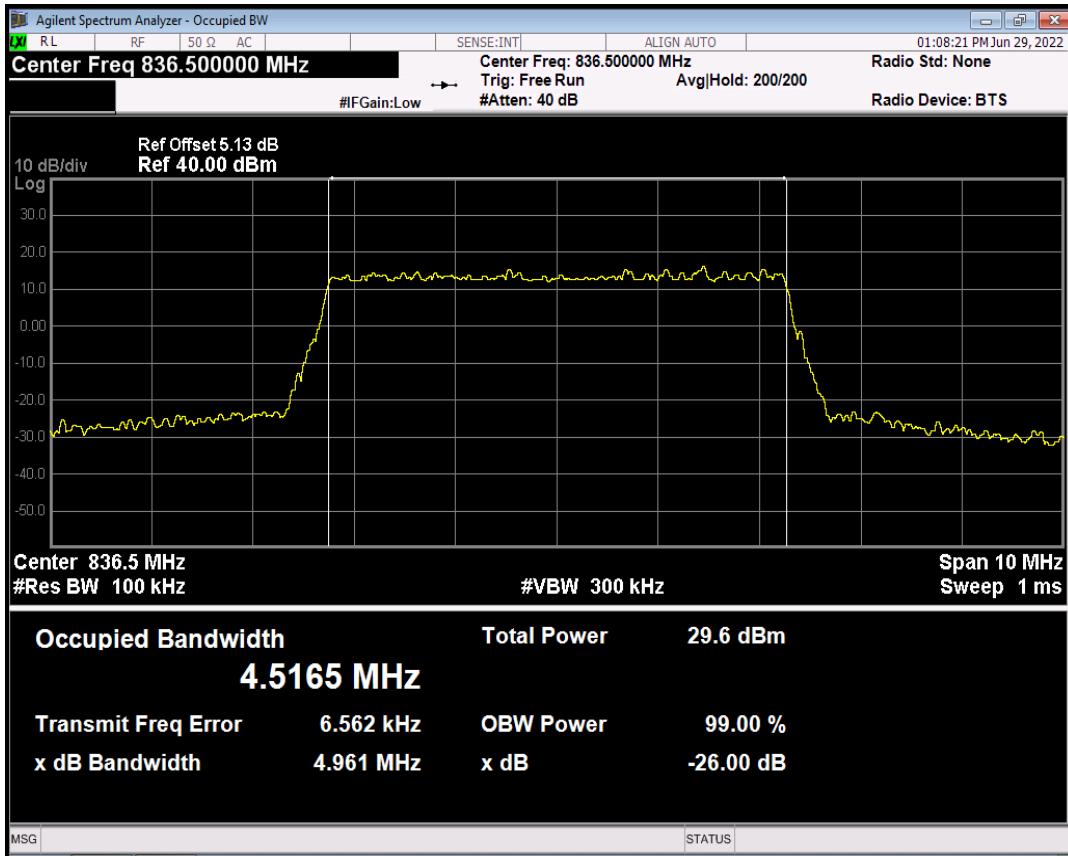


Band5 QAM16 BW=5MHz Channel=20425 RB Size=25 Position=#0

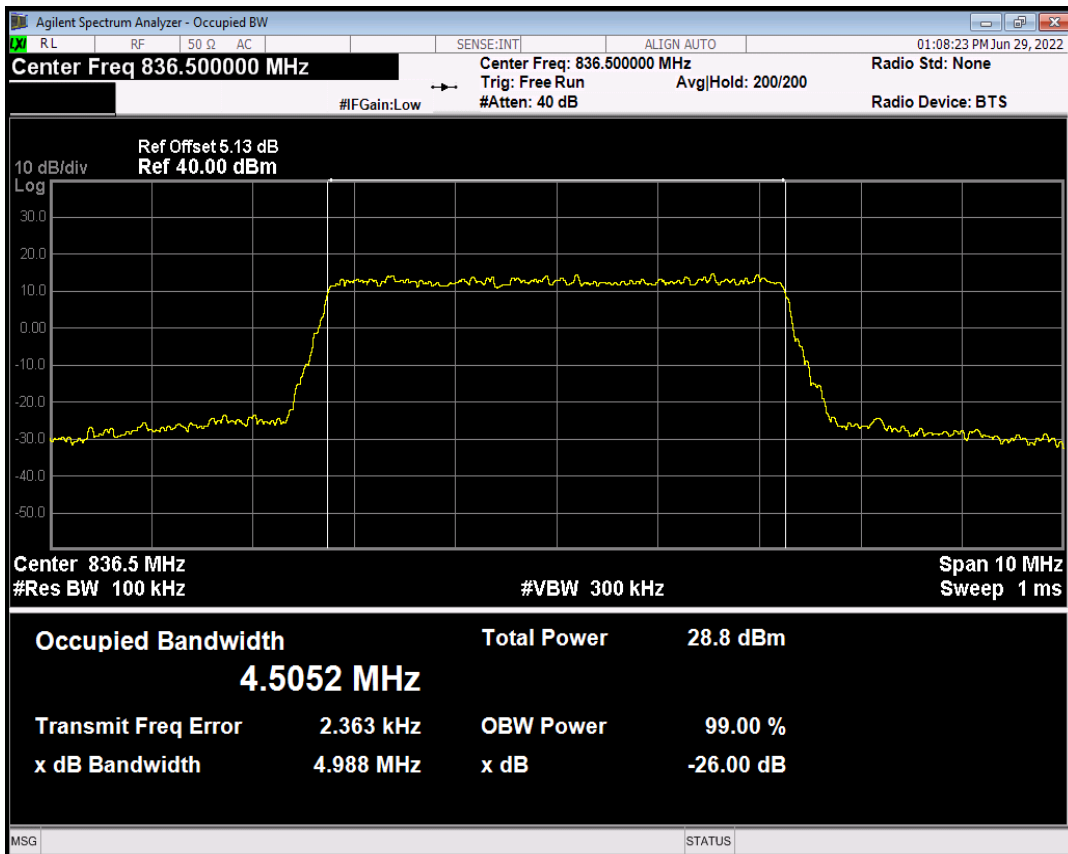




Band5 QPSK BW=5MHz Channel=20525 RB Size=25 Position=#0

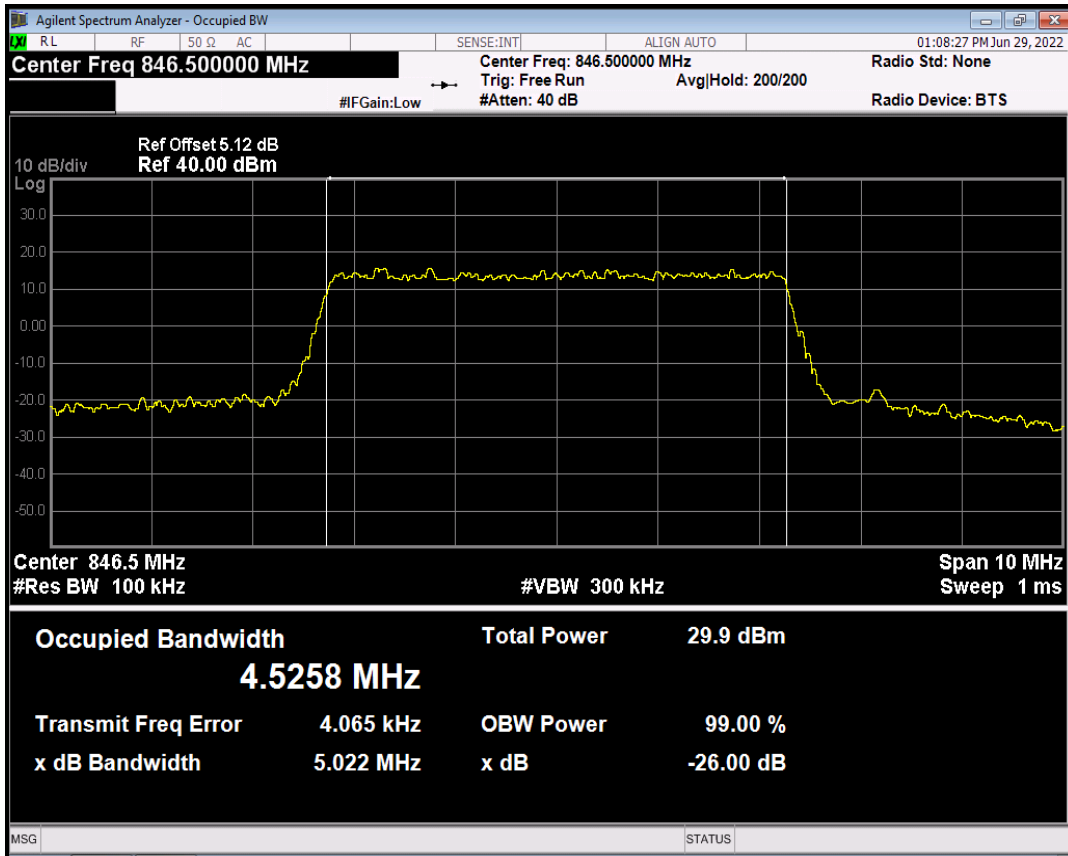


Band5 QAM16 BW=5MHz Channel=20525 RB Size=25 Position=#0

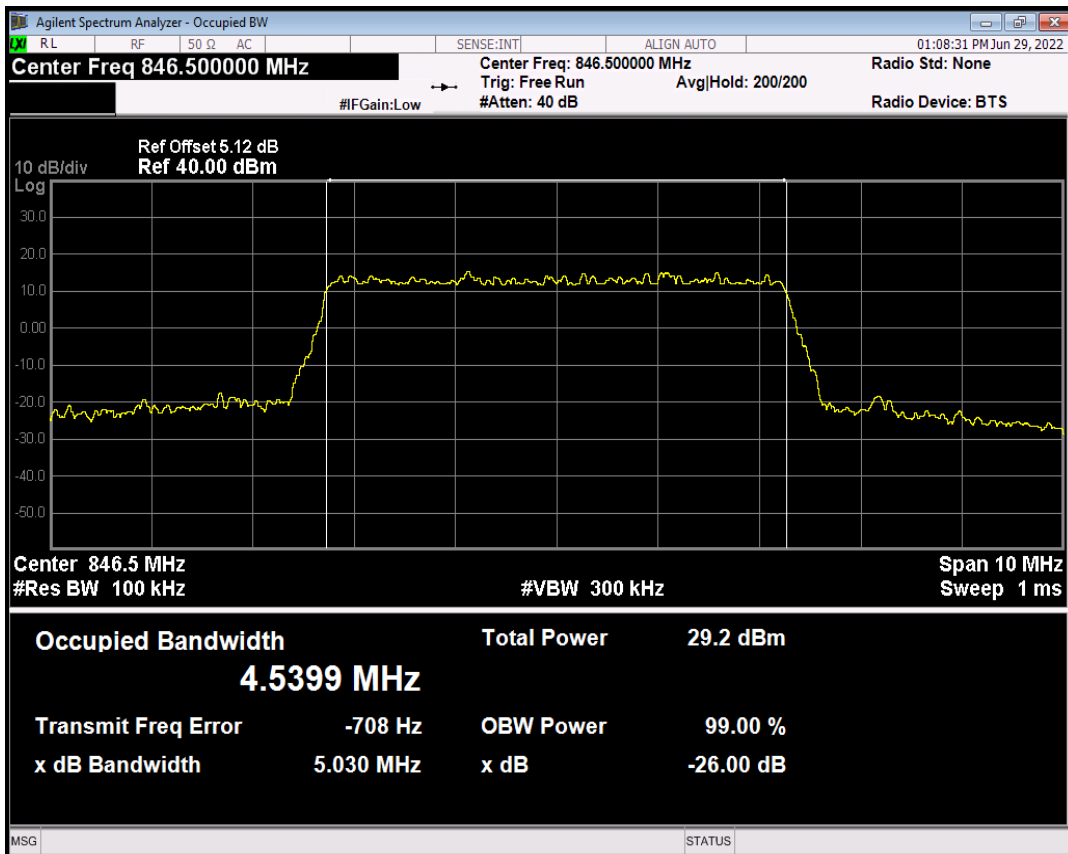




Band5 QPSK BW=5MHz Channel=20625 RB Size=25 Position=#0

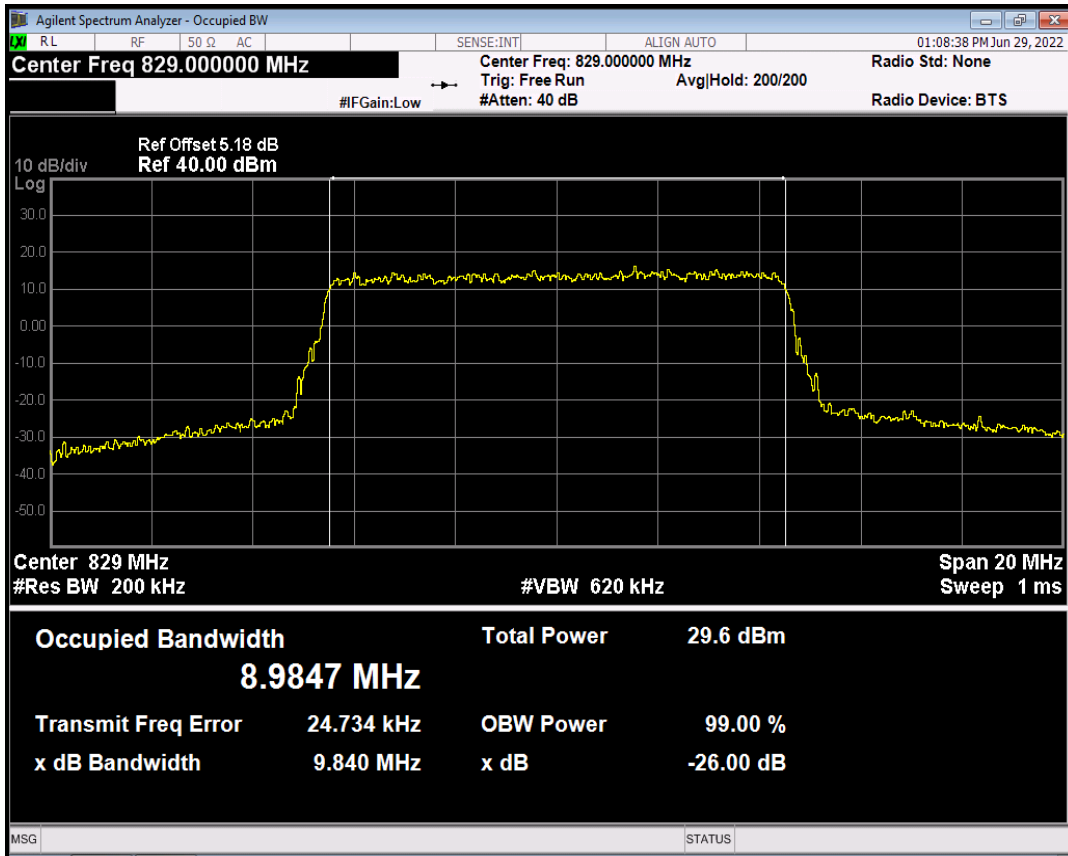


Band5 QAM16 BW=5MHz Channel=20625 RB Size=25 Position=#0

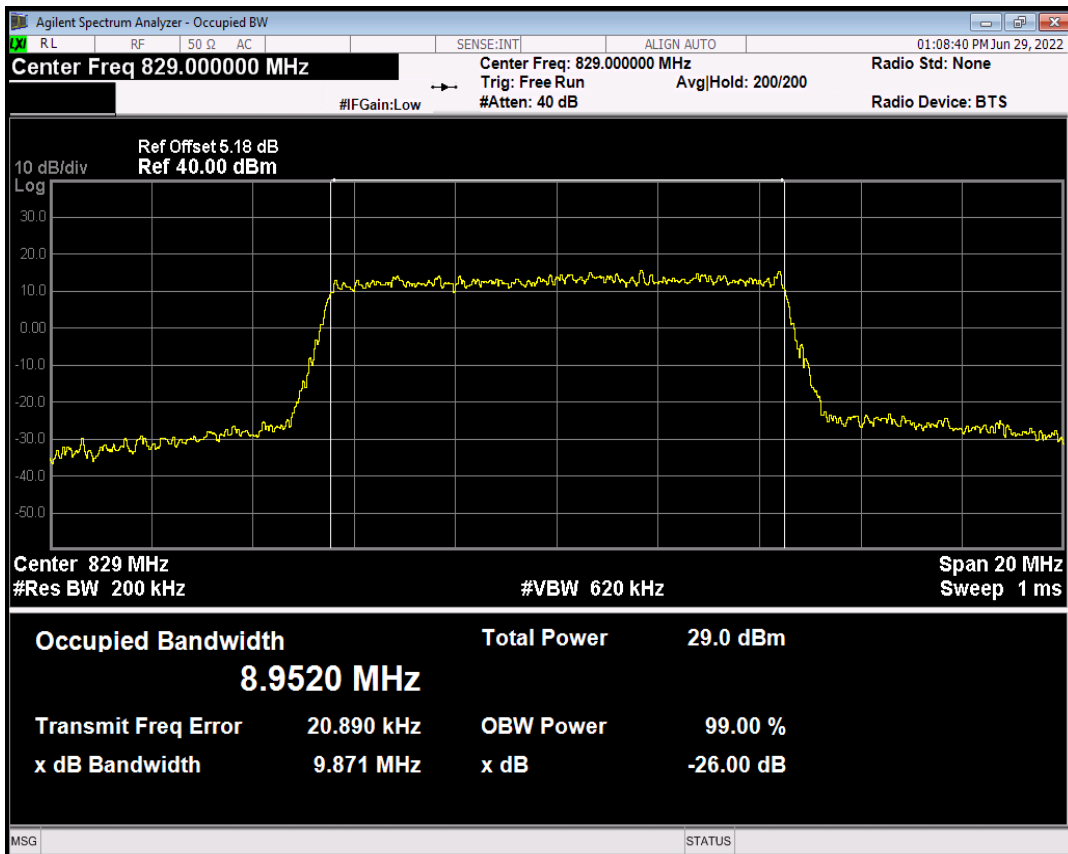




Band5 QPSK BW=10MHz Channel=20450 RB Size=50 Position=#0

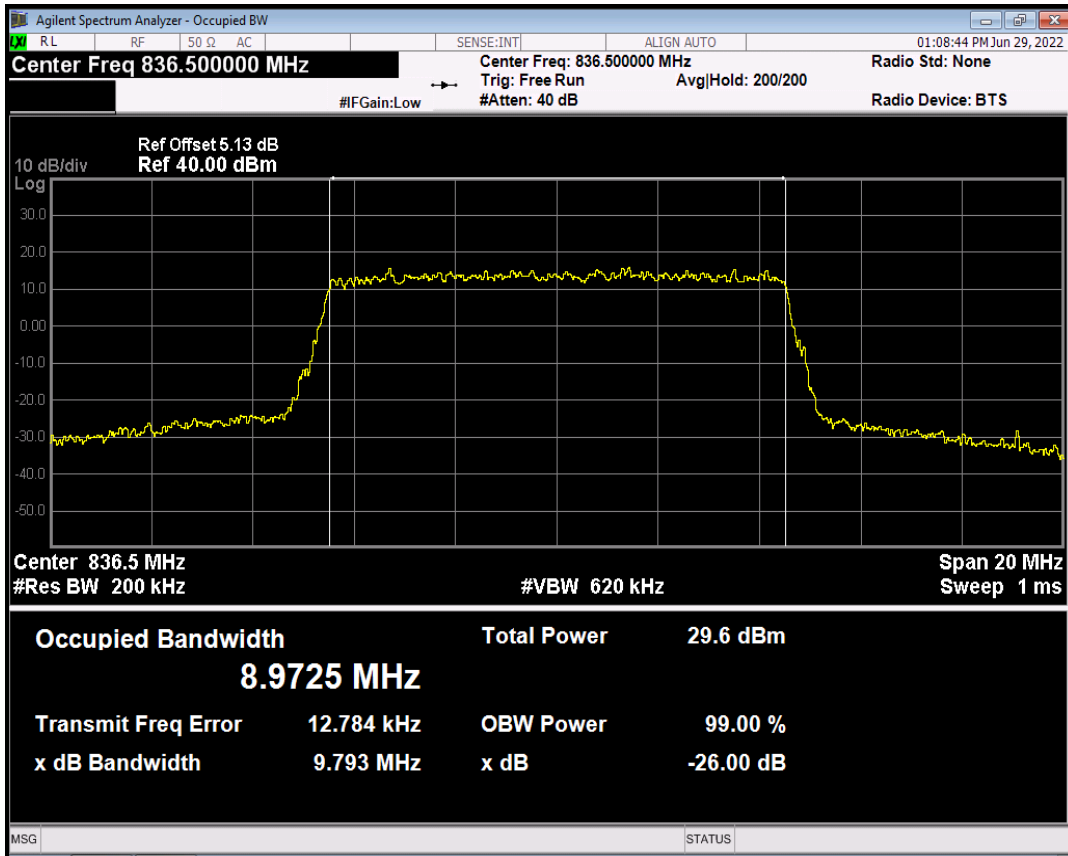


Band5 QAM16 BW=10MHz Channel=20450 RB Size=50 Position=#0

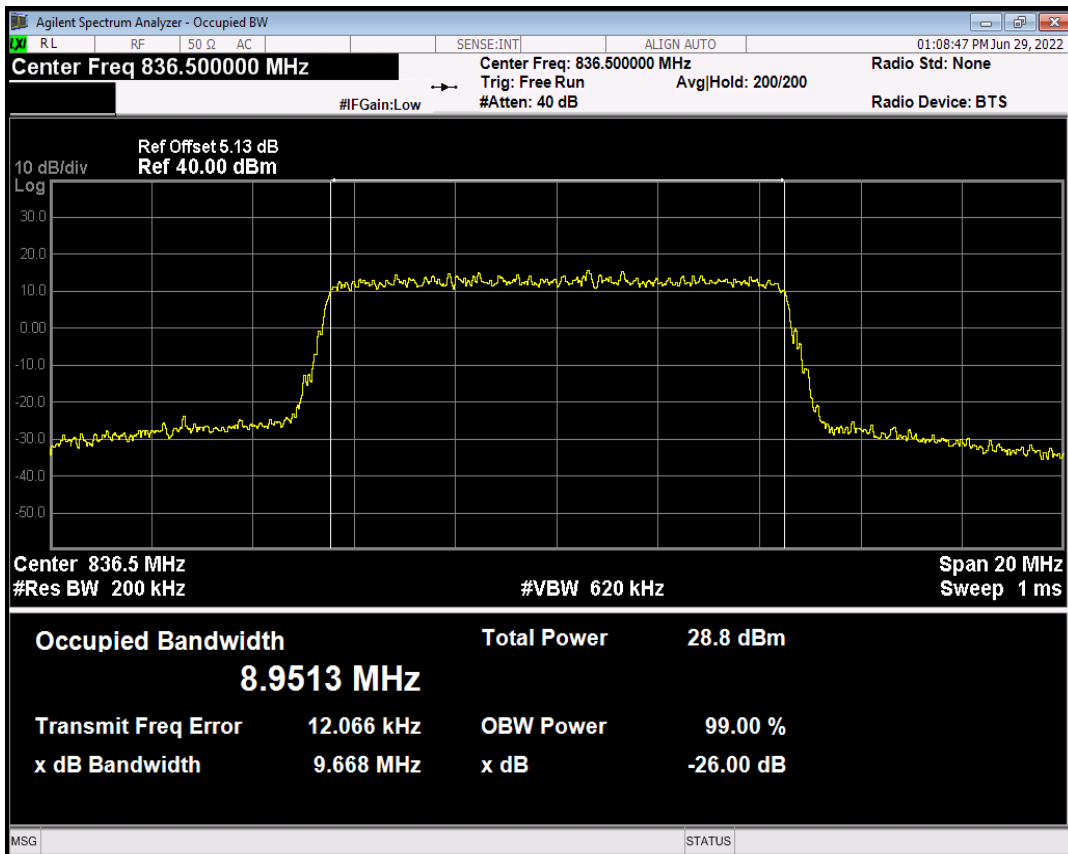




Band5 QPSK BW=10MHz Channel=20525 RB Size=50 Position=#0

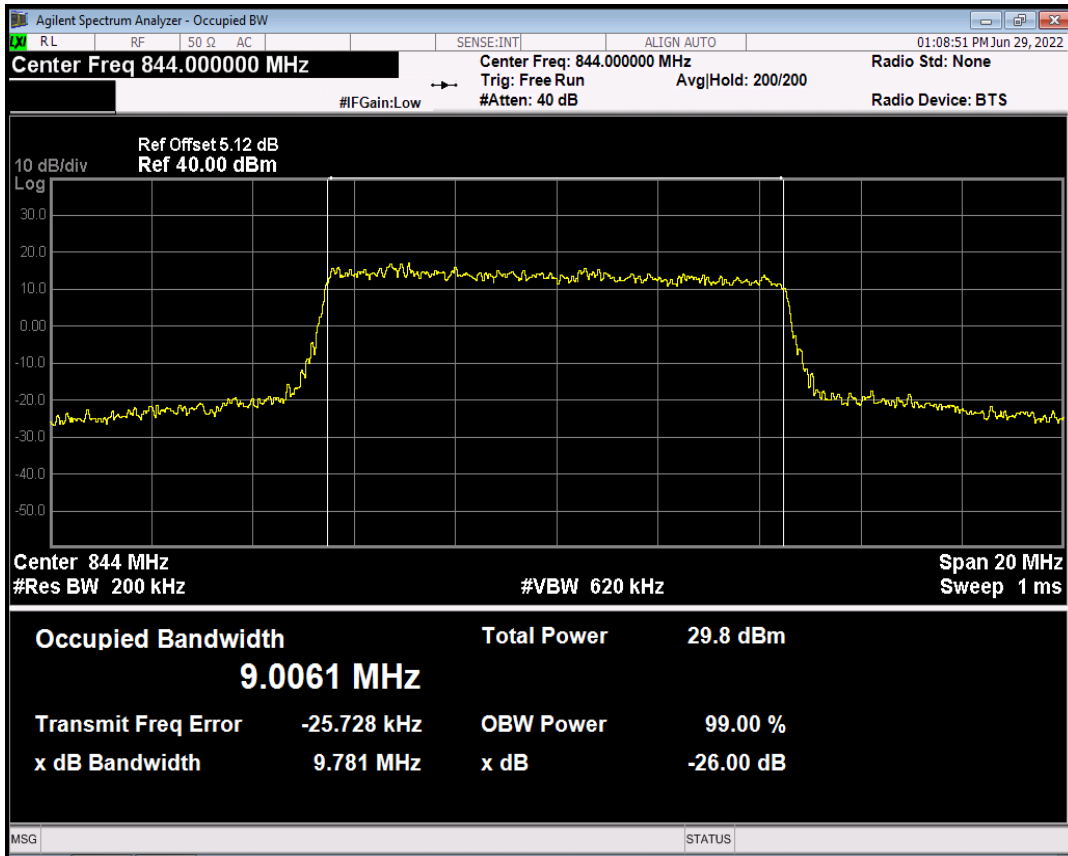


Band5 QAM16 BW=10MHz Channel=20525 RB Size=50 Position=#0

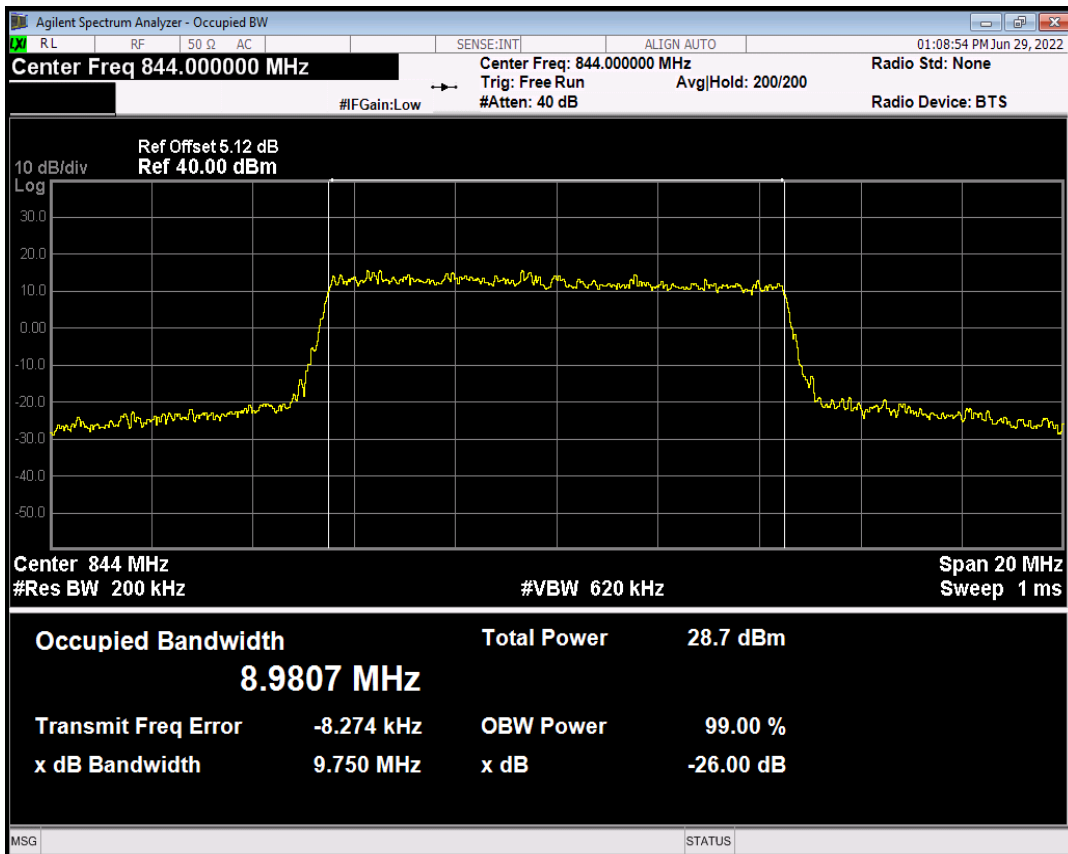




Band5 QPSK BW=10MHz Channel=20600 RB Size=50 Position=#0



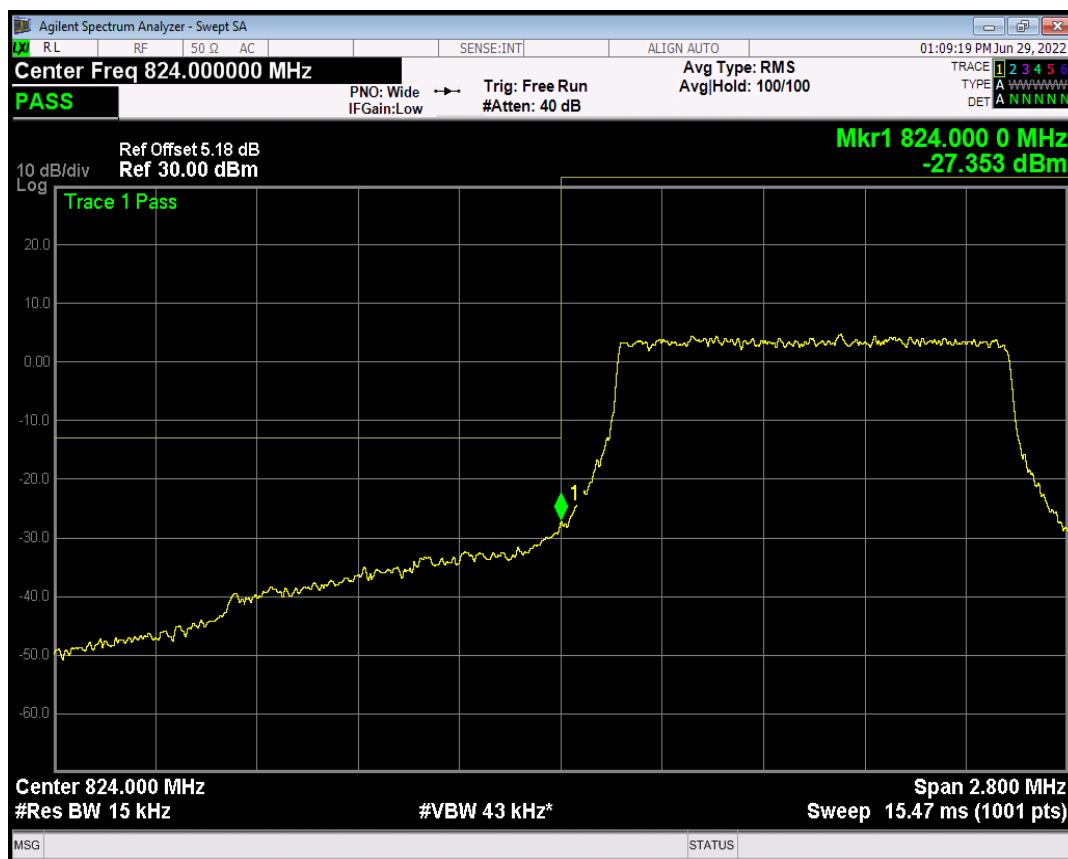
Band5 QAM16 BW=10MHz Channel=20600 RB Size=50 Position=#0



Appendix 5. Band edge

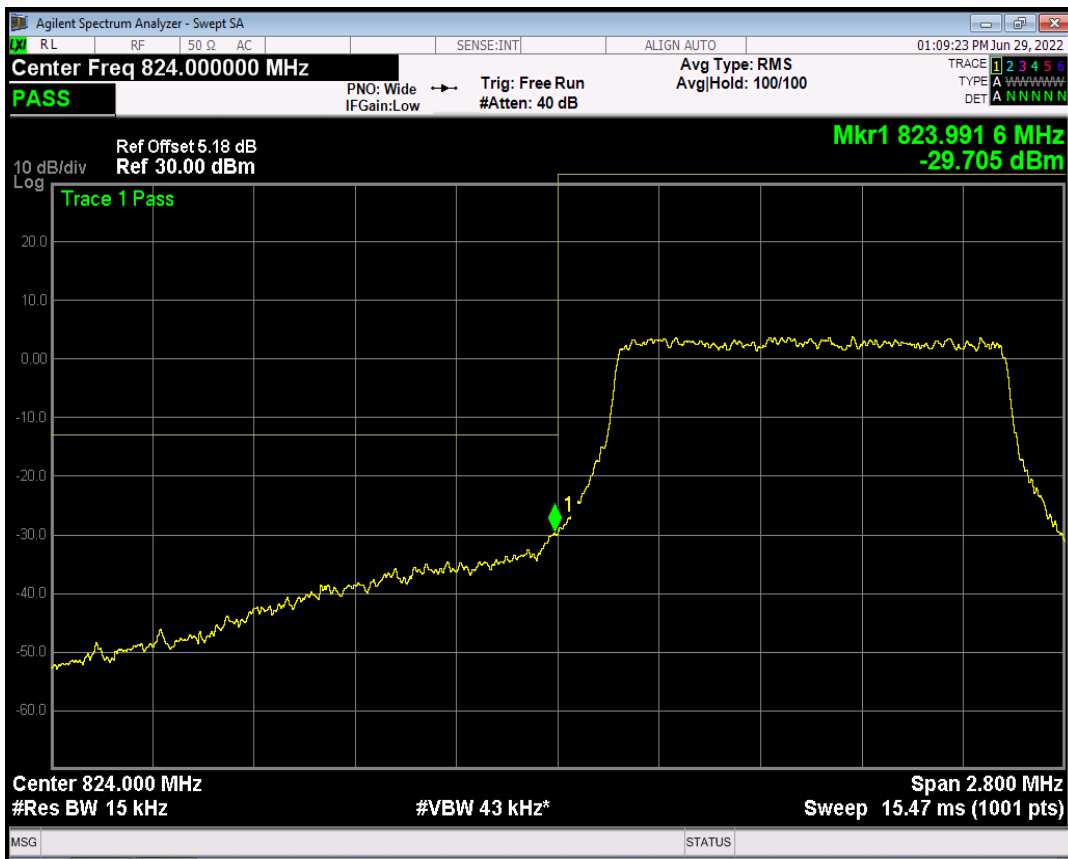
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band5	1.4	20407	6	#0	QPSK	824.00	-27.35	-13	PASS
Band5	1.4	20407	6	#0	QAM16	823.99	-29.70	-13	PASS
Band5	1.4	20643	6	#0	QPSK	849.03	-29.41	-13	PASS
Band5	1.4	20643	6	#0	QAM16	849.01	-31.46	-13	PASS
Band5	3	20415	15	#0	QPSK	824.00	-27.33	-13	PASS
Band5	3	20415	15	#0	QAM16	824.00	-29.35	-13	PASS
Band5	3	20635	15	#0	QPSK	849.00	-27.87	-13	PASS
Band5	3	20635	15	#0	QAM16	849.01	-29.35	-13	PASS
Band5	5	20425	25	#0	QPSK	824.00	-27.83	-13	PASS
Band5	5	20425	25	#0	QAM16	824.00	-31.31	-13	PASS
Band5	5	20625	25	#0	QPSK	849.00	-27.77	-13	PASS
Band5	5	20625	25	#0	QAM16	849.00	-28.21	-13	PASS
Band5	10	20450	50	#0	QPSK	824.00	-31.43	-13	PASS
Band5	10	20450	50	#0	QAM16	824.00	-34.63	-13	PASS
Band5	10	20600	50	#0	QPSK	849.14	-29.30	-13	PASS
Band5	10	20600	50	#0	QAM16	849.00	-30.99	-13	PASS

Band5 QPSK BW=1.4MHz Channel=20407 RB Size=6 Position=#0





Band5 QAM16 BW=1.4MHz Channel=20407 RB Size=6 Position=#0



Band5 QPSK BW=1.4MHz Channel=20643 RB Size=6 Position=#0

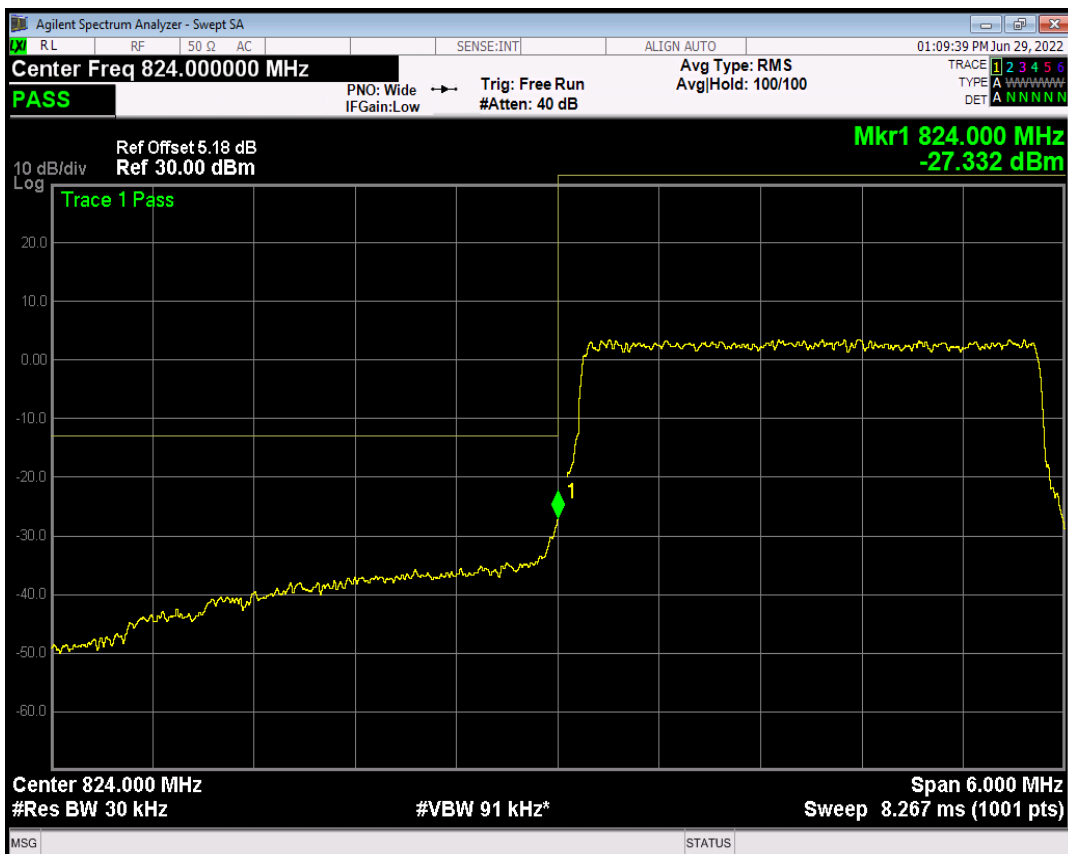




Band5 QAM16 BW=1.4MHz Channel=20643 RB Size=6 Position=#0

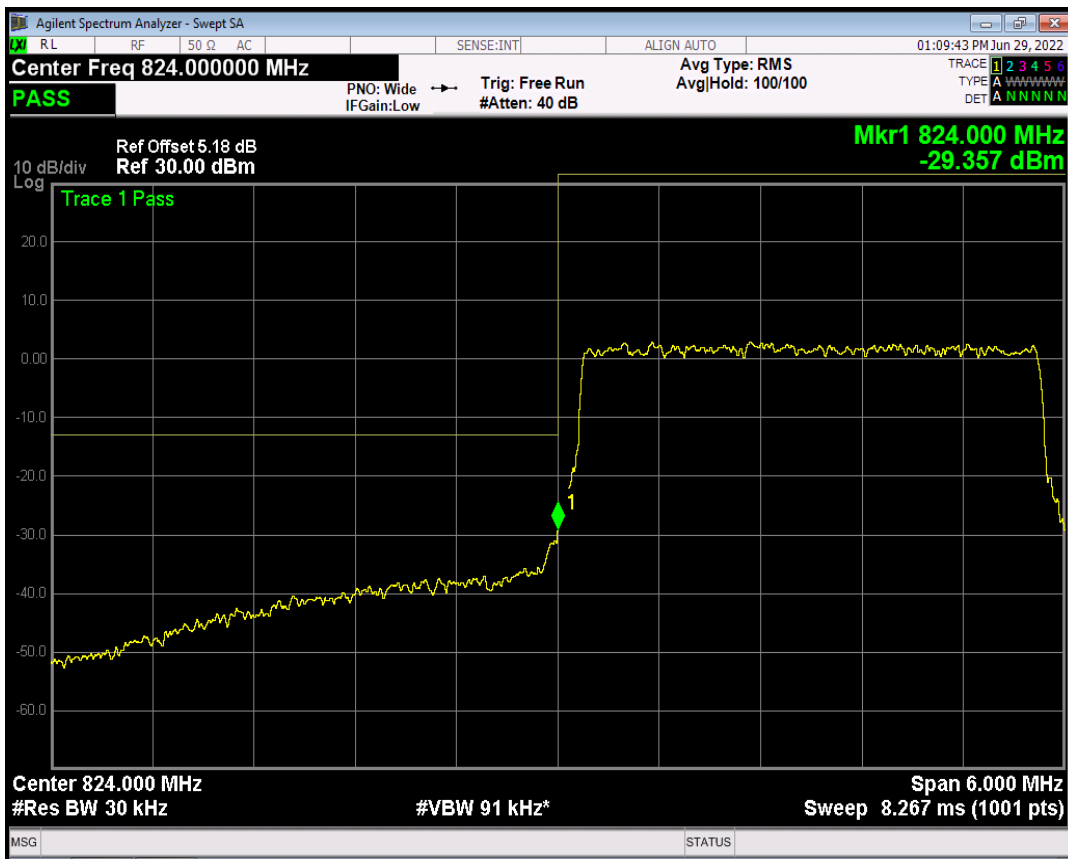


Band5 QPSK BW=3MHz Channel=20415 RB Size=15 Position=#0

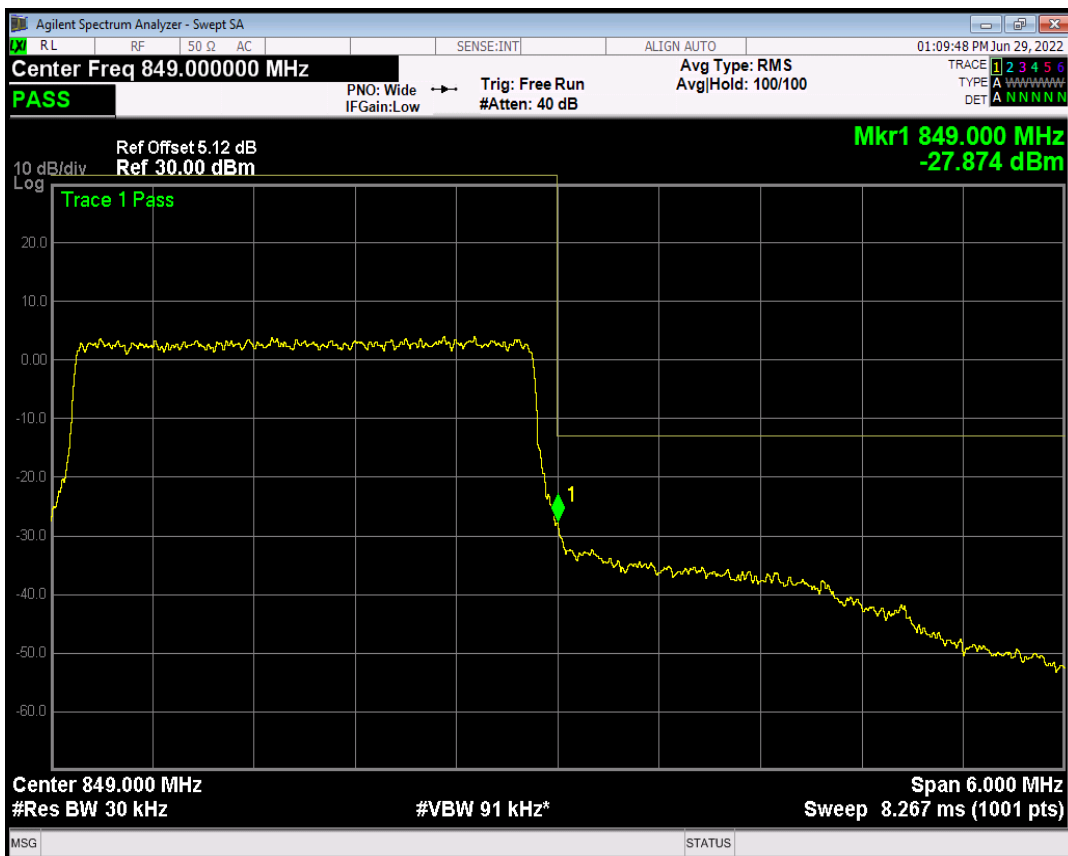




Band5 QAM16 BW=3MHz Channel=20415 RB Size=15 Position=#0

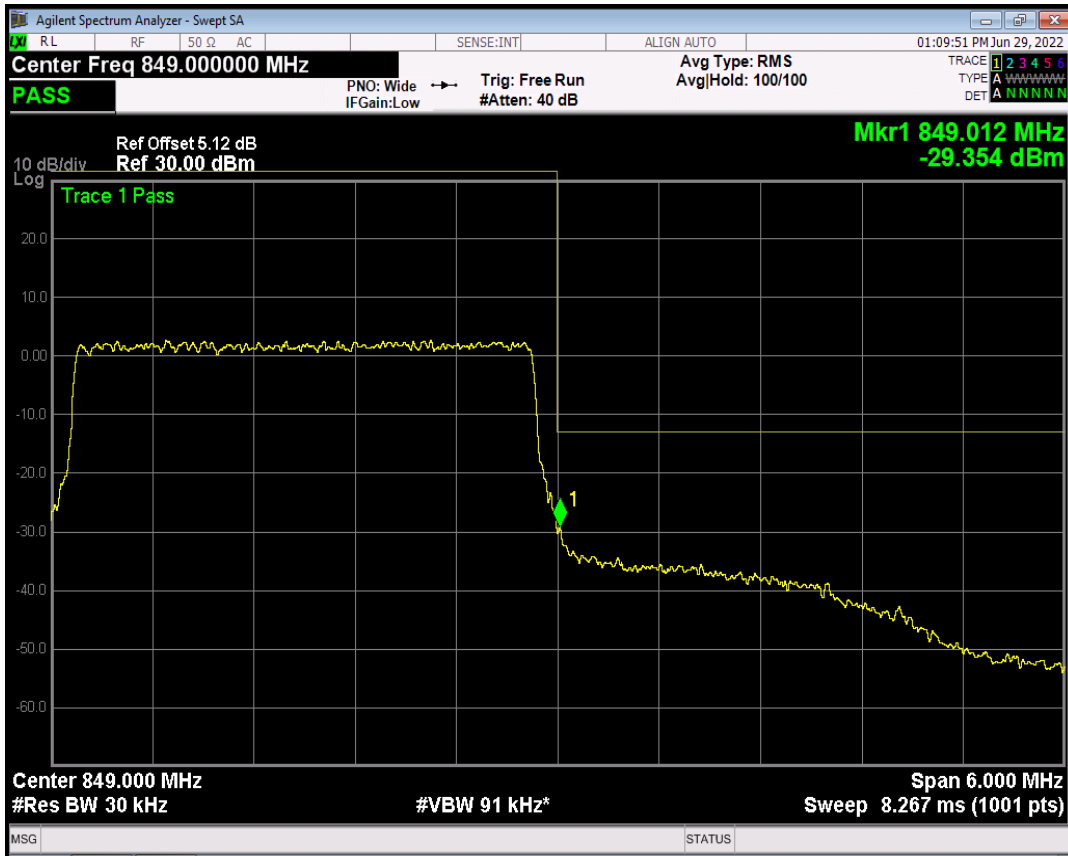


Band5 QPSK BW=3MHz Channel=20635 RB Size=15 Position=#0

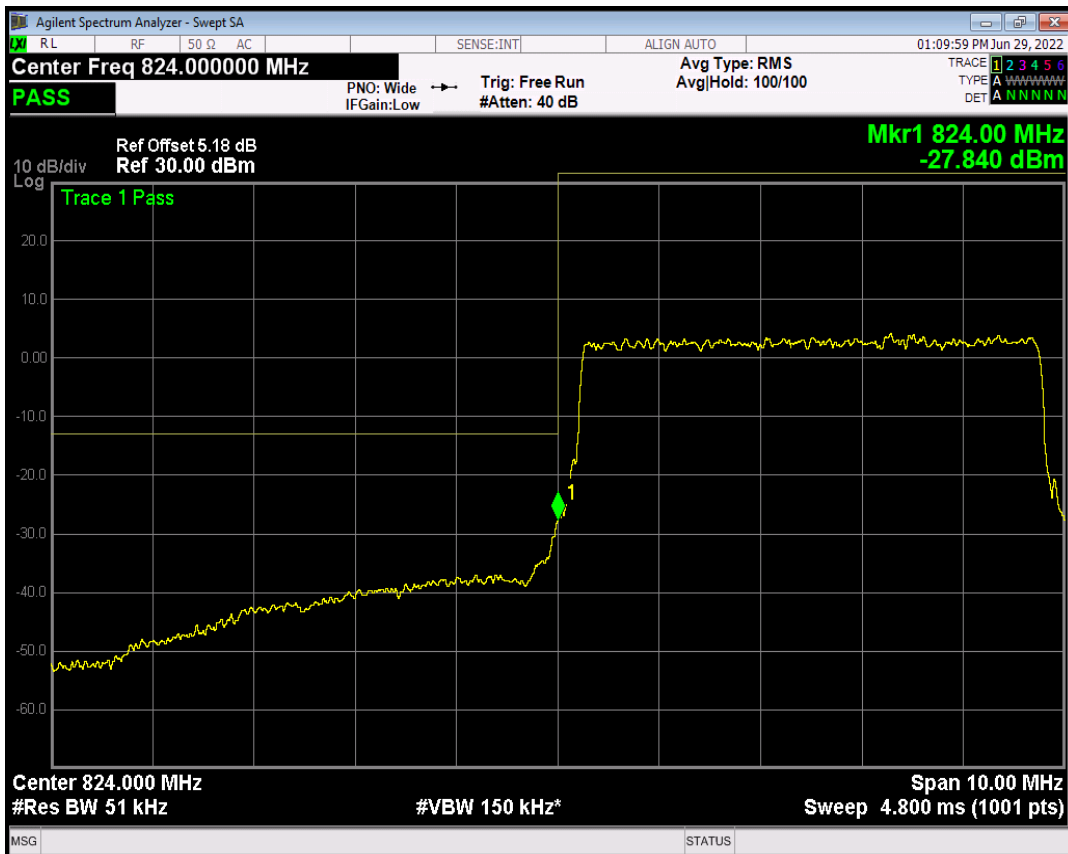




Band5 QAM16 BW=3MHz Channel=20635 RB Size=15 Position=#0

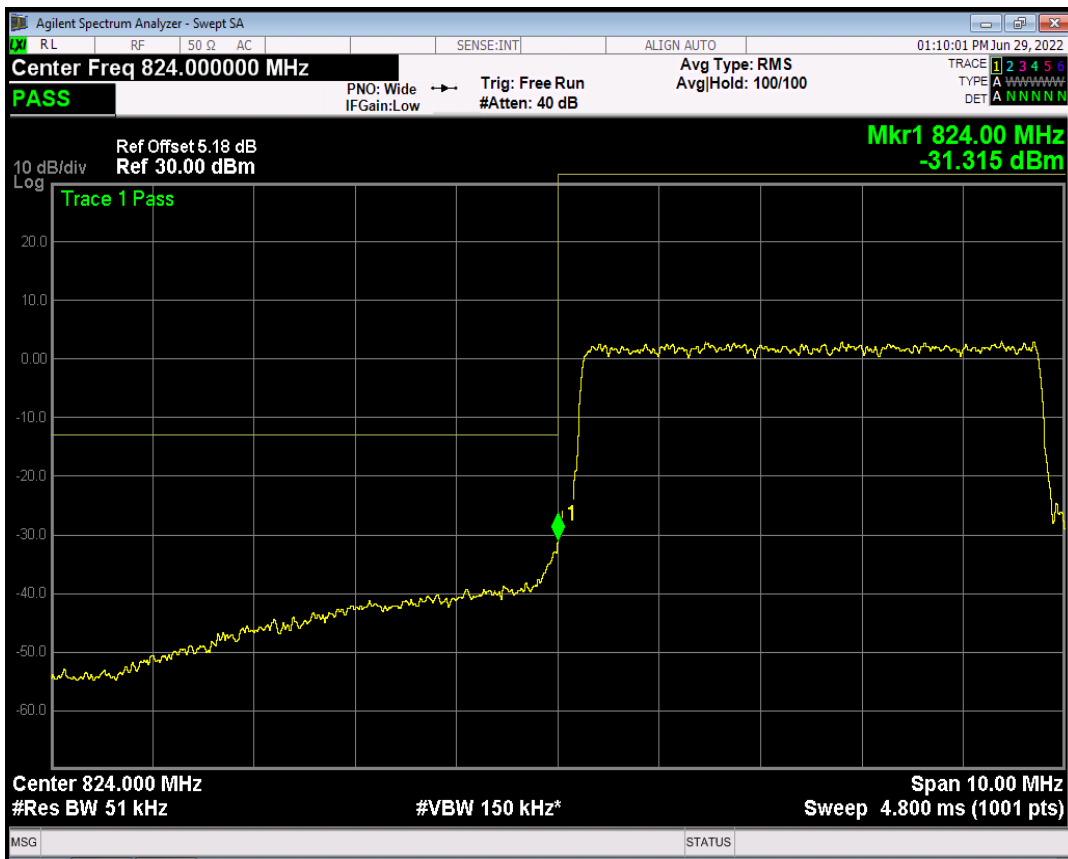


Band5 QPSK BW=5MHz Channel=20425 RB Size=25 Position=#0

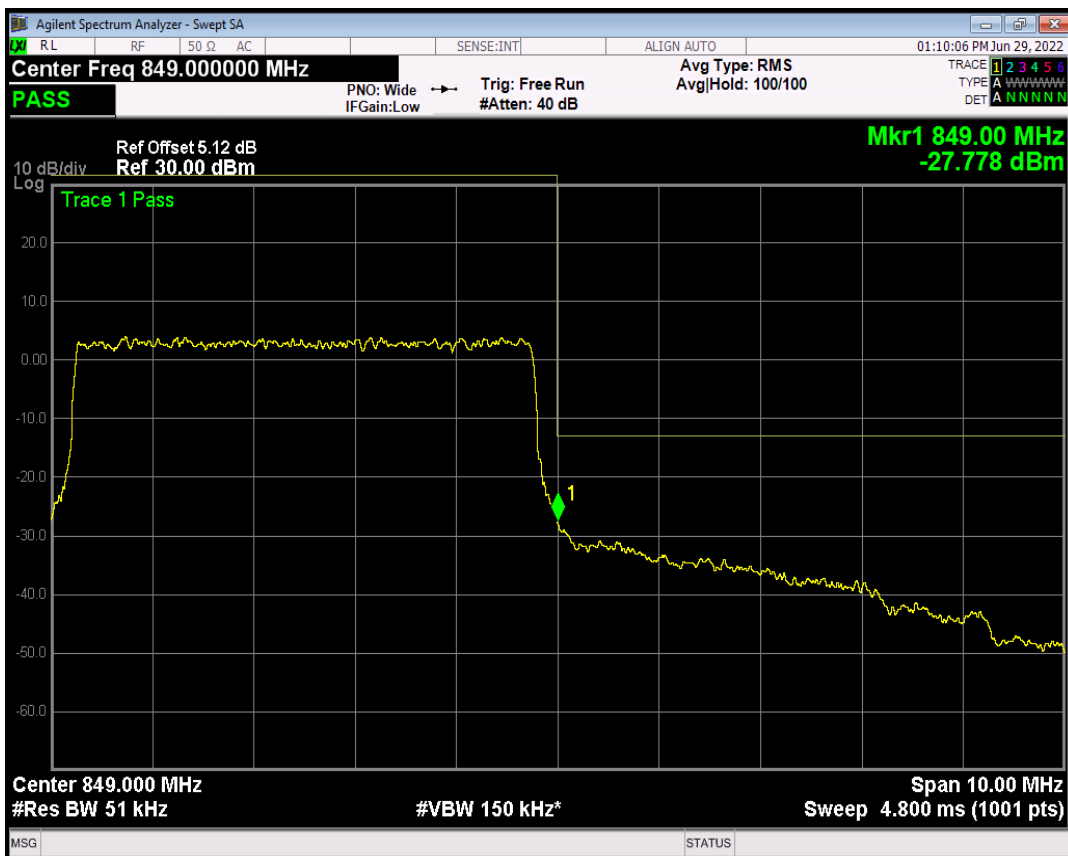




Band5 QAM16 BW=5MHz Channel=20425 RB Size=25 Position=#0

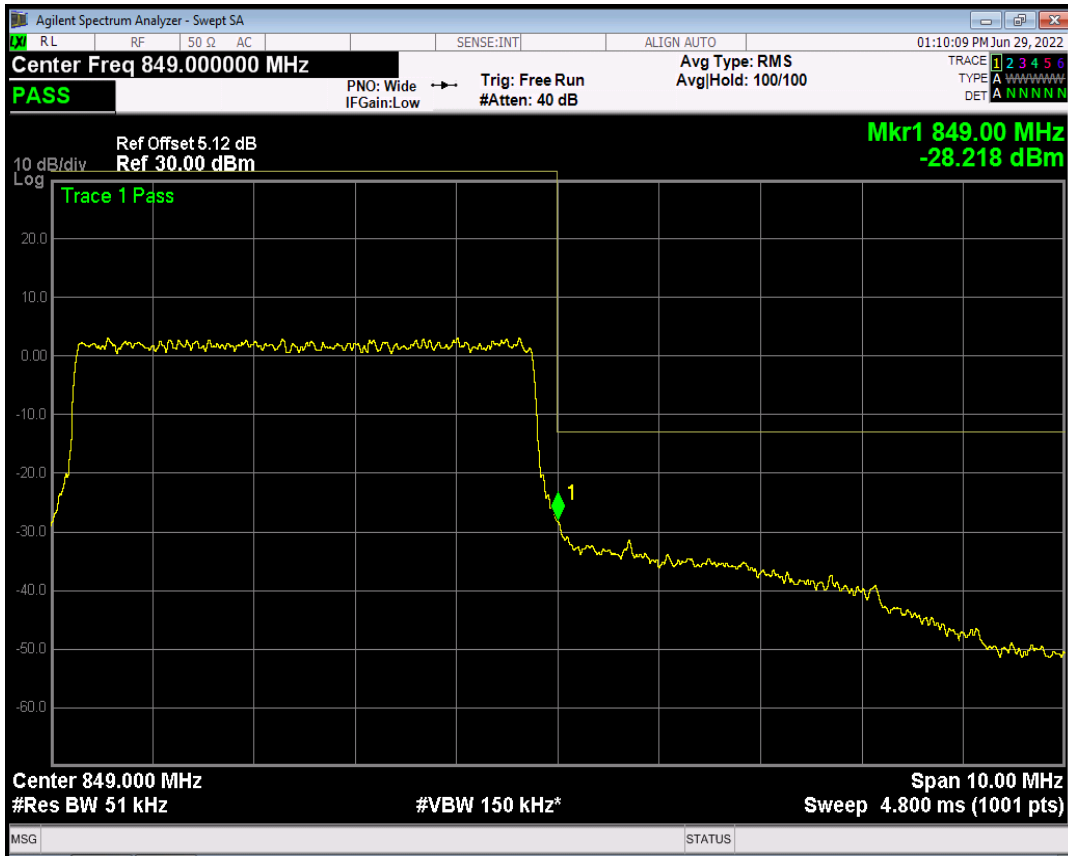


Band5 QPSK BW=5MHz Channel=20625 RB Size=25 Position=#0

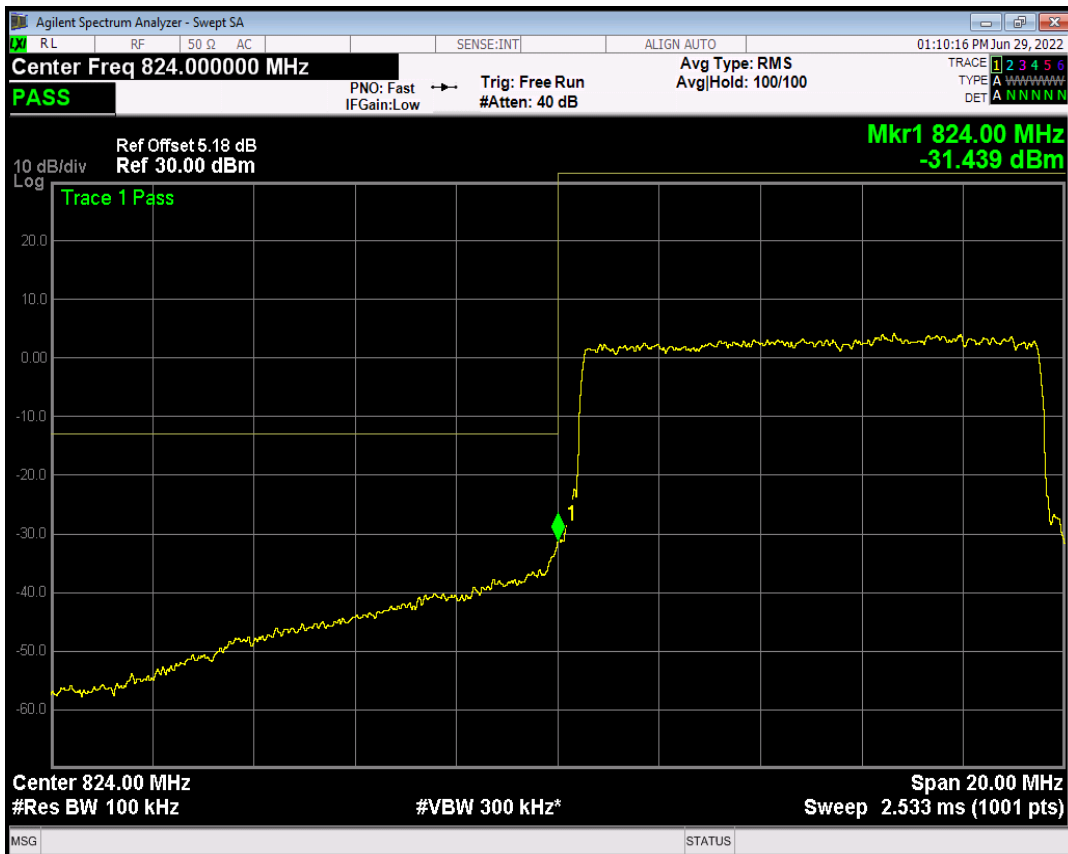




Band5 QAM16 BW=5MHz Channel=20625 RB Size=25 Position=#0

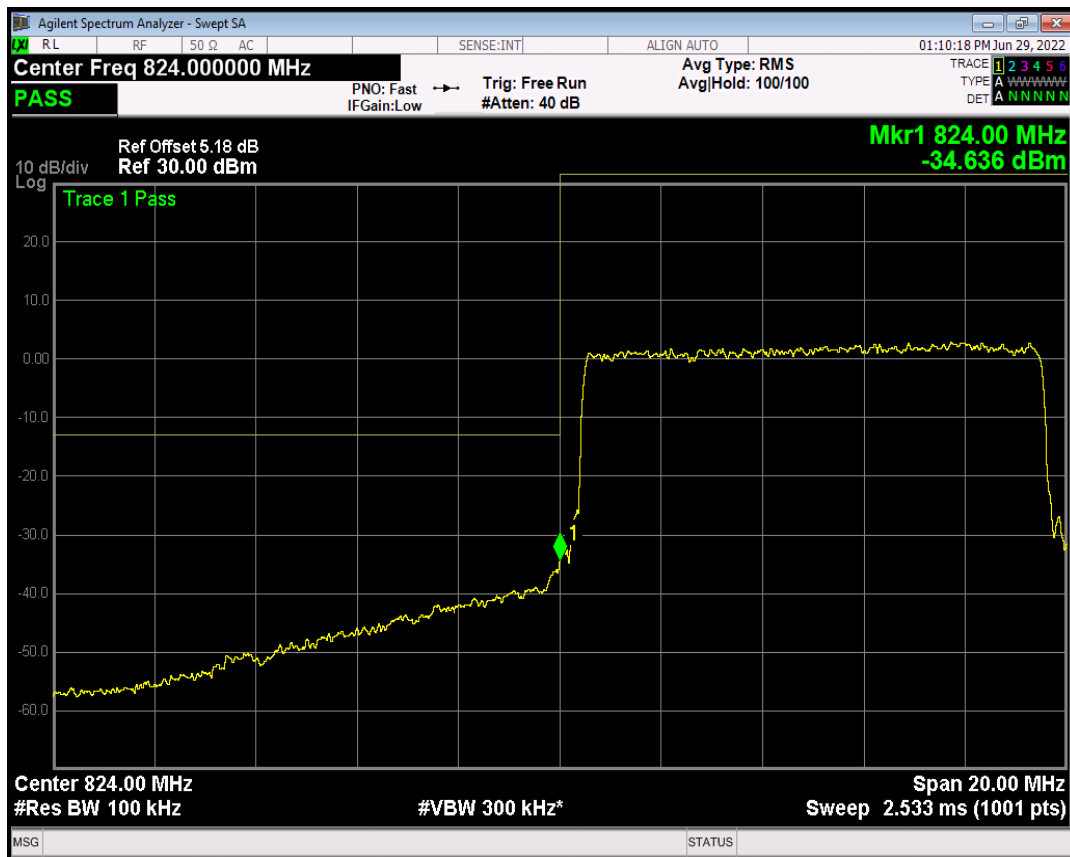


Band5 QPSK BW=10MHz Channel=20450 RB Size=50 Position=#0





Band5 QAM16 BW=10MHz Channel=20450 RB Size=50 Position=#0

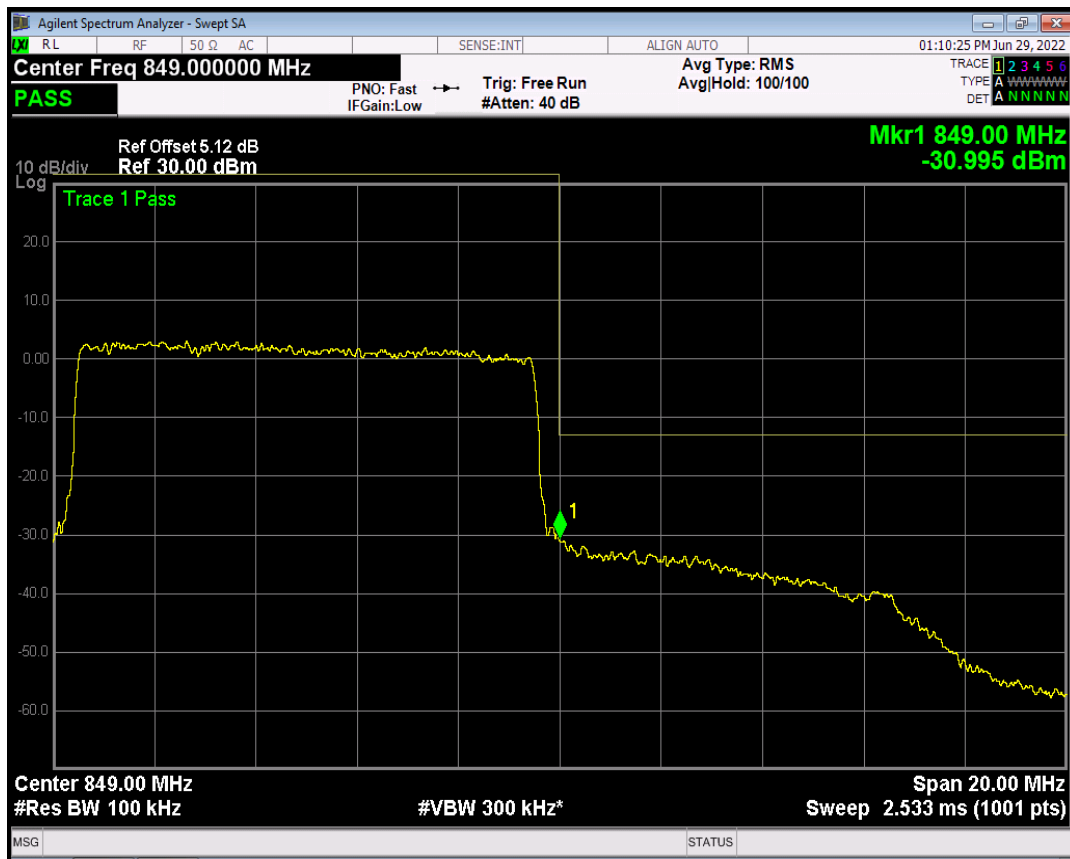


Band5 QPSK BW=10MHz Channel=20600 RB Size=50 Position=#0





Band5 QAM16 BW=10MHz Channel=20600 RB Size=50 Position=#0

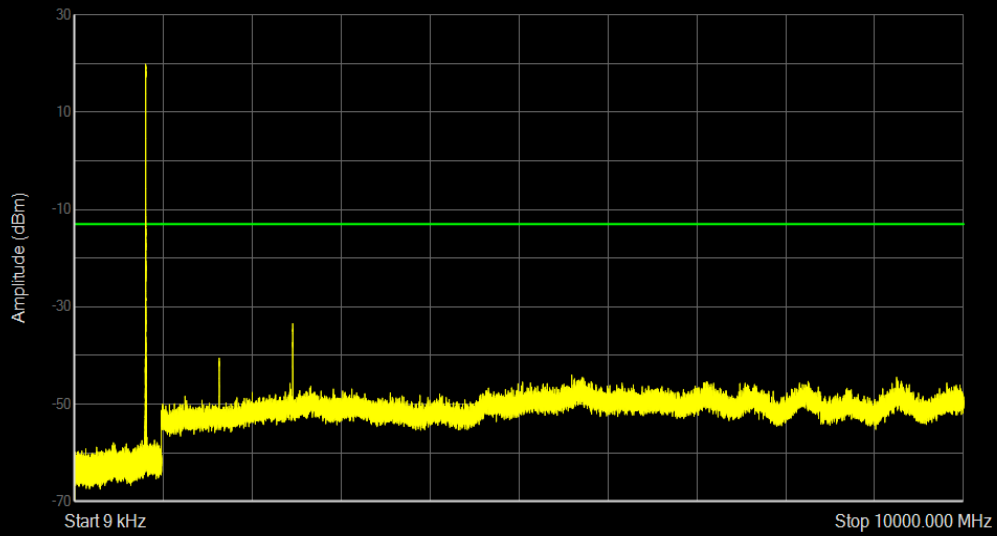


Appendix 6. Out-of-band emissions

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band5	1.4	20407	6	#0	QPSK	2474.43	-33.44	-13	PASS
Band5	1.4	20407	6	#0	QAM16	2475.33	-35.30	-13	PASS
Band5	1.4	20525	6	#0	QPSK	2509.30	-32.09	-13	PASS
Band5	1.4	20525	6	#0	QAM16	2509.53	-31.04	-13	PASS
Band5	1.4	20643	6	#0	QPSK	2545.08	-30.95	-13	PASS
Band5	1.4	20643	6	#0	QAM16	2544.85	-30.57	-13	PASS
Band5	3	20415	15	#0	QPSK	2477.13	-38.00	-13	PASS
Band5	3	20415	15	#0	QAM16	2475.55	-37.87	-13	PASS
Band5	3	20525	15	#0	QPSK	2510.20	-35.18	-13	PASS
Band5	3	20525	15	#0	QAM16	2510.88	-36.18	-13	PASS
Band5	3	20635	15	#0	QPSK	2543.05	-35.64	-13	PASS
Band5	3	20635	15	#0	QAM16	2543.50	-36.18	-13	PASS
Band5	5	20425	25	#0	QPSK	2480.50	-39.68	-13	PASS
Band5	5	20425	25	#0	QAM16	2482.98	-37.86	-13	PASS
Band5	5	20525	25	#0	QPSK	2509.08	-39.44	-13	PASS
Band5	5	20525	25	#0	QAM16	2506.83	-39.50	-13	PASS
Band5	5	20625	25	#0	QPSK	2544.18	-39.79	-13	PASS
Band5	5	20625	25	#0	QAM16	2541.48	-39.83	-13	PASS
Band5	10	20450	50	#0	QPSK	2485.90	-40.82	-13	PASS
Band5	10	20450	50	#0	QAM16	2487.48	-42.62	-13	PASS
Band5	10	20525	50	#0	QPSK	2509.08	-41.06	-13	PASS
Band5	10	20525	50	#0	QAM16	2508.85	-41.51	-13	PASS
Band5	10	20600	50	#0	QPSK	2528.43	-42.08	-13	PASS
Band5	10	20600	50	#0	QAM16	2527.08	-41.88	-13	PASS

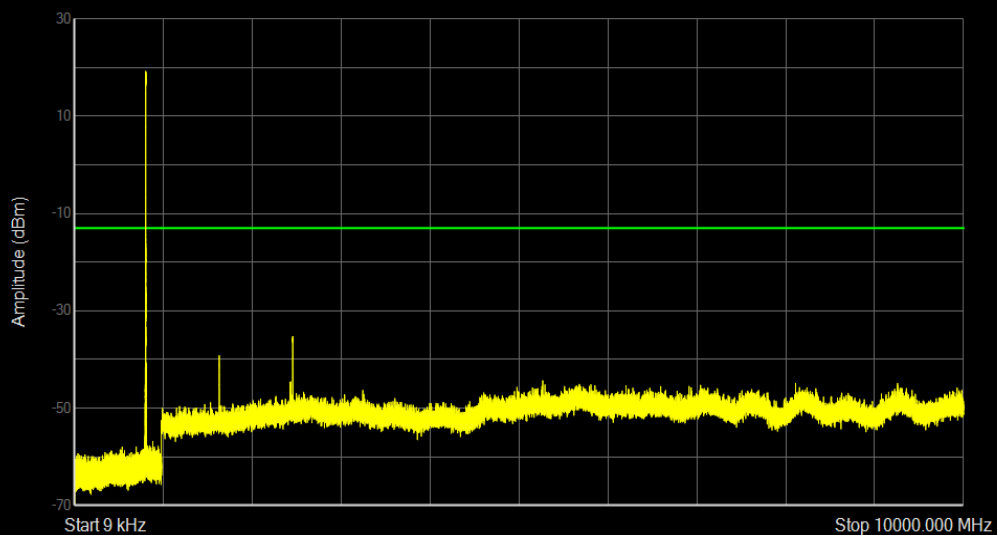


Band5 QPSK BW=1.4MHz Channel=20407 RB Size=6 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009807225	-53.54	-13
2	0.15	30	10	0.1514925	-54.61	-13
3	30	1000	100	923.44275	-57.41	-13
4	1000	10000	1000	2474.425	-33.44	-13

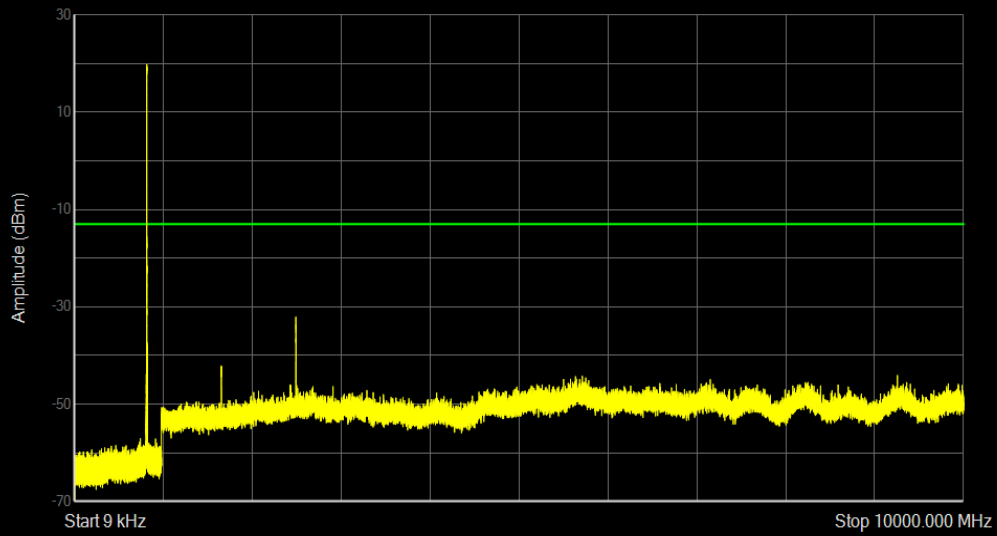
Band5 QAM16 BW=1.4MHz Channel=20407 RB Size=6 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009870675	-53.74	-13
2	0.15	30	10	0.158955	-56.1	-13
3	30	1000	100	903.84875	-56.86	-13
4	1000	10000	1000	2475.325	-35.3	-13

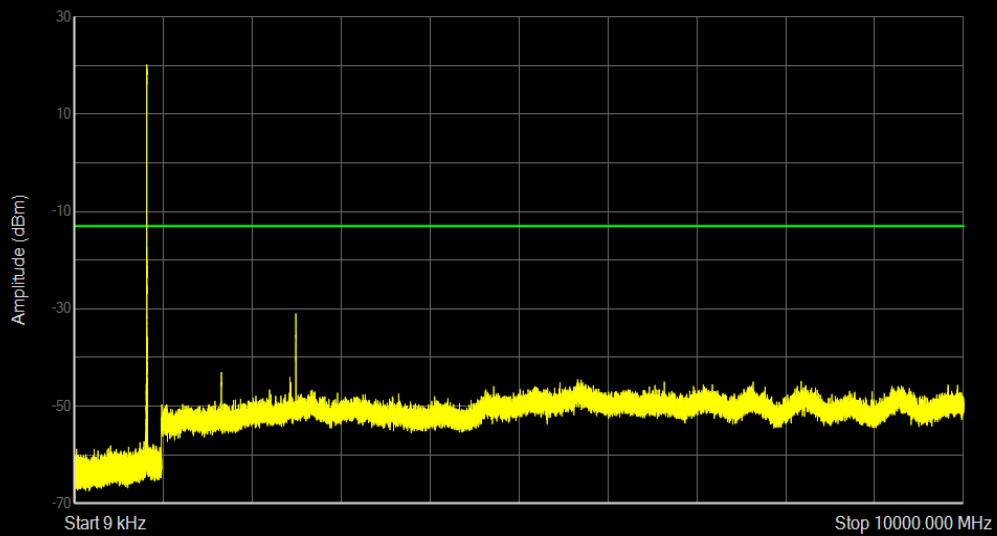


Band5 QPSK BW=1.4MHz Channel=20525 RB Size=6 Position=#0



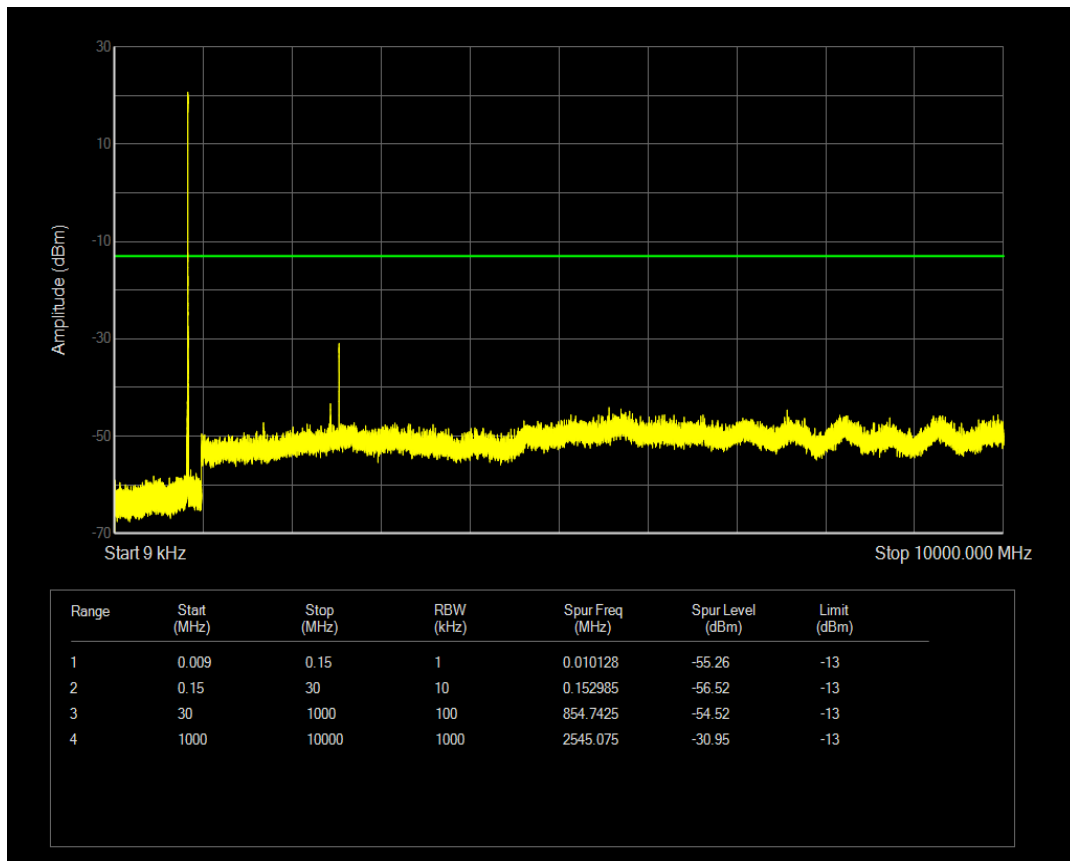
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009398325	-54.78	-13
2	0.15	30	10	0.15	-55.58	-13
3	30	1000	100	765.38125	-57.11	-13
4	1000	10000	1000	2509.3	-32.09	-13

Band5 QAM16 BW=1.4MHz Channel=20525 RB Size=6 Position=#0

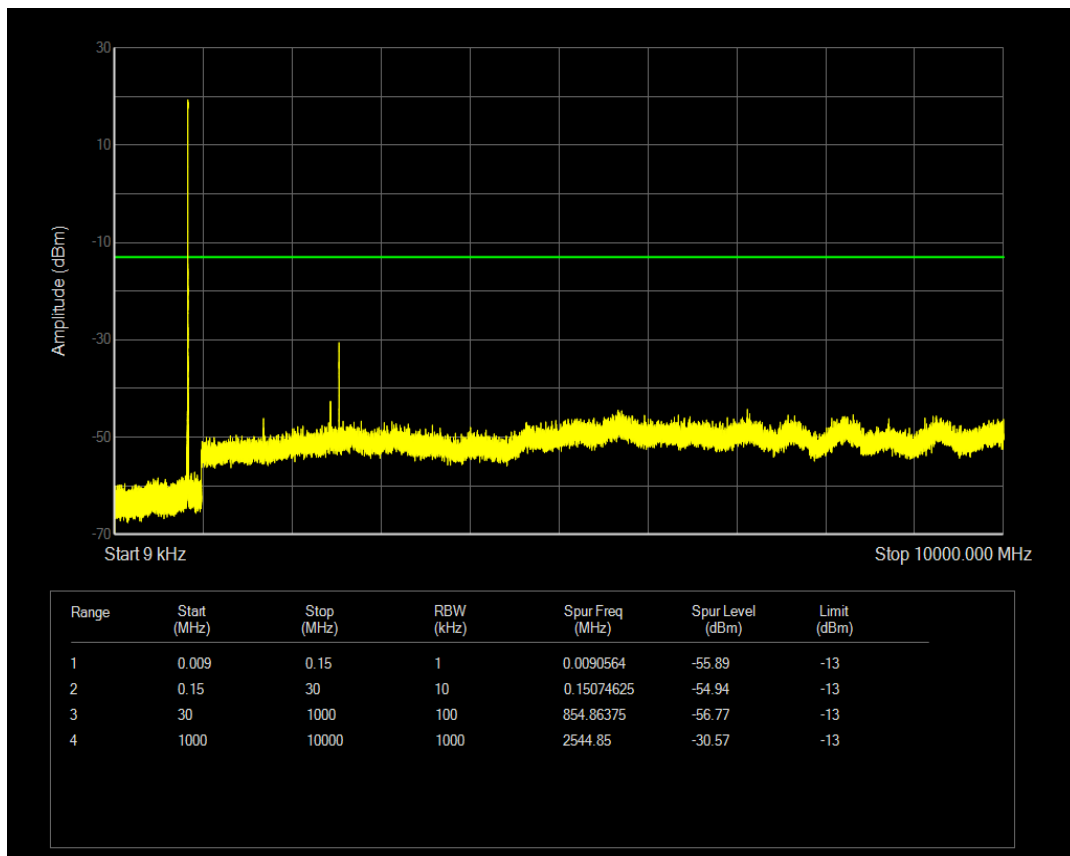


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010885875	-55.01	-13
2	0.15	30	10	0.17985	-53.64	-13
3	30	1000	100	806.582	-57.27	-13
4	1000	10000	1000	2509.525	-31.04	-13

Band5 QPSK BW=1.4MHz Channel=20643 RB Size=6 Position=#0

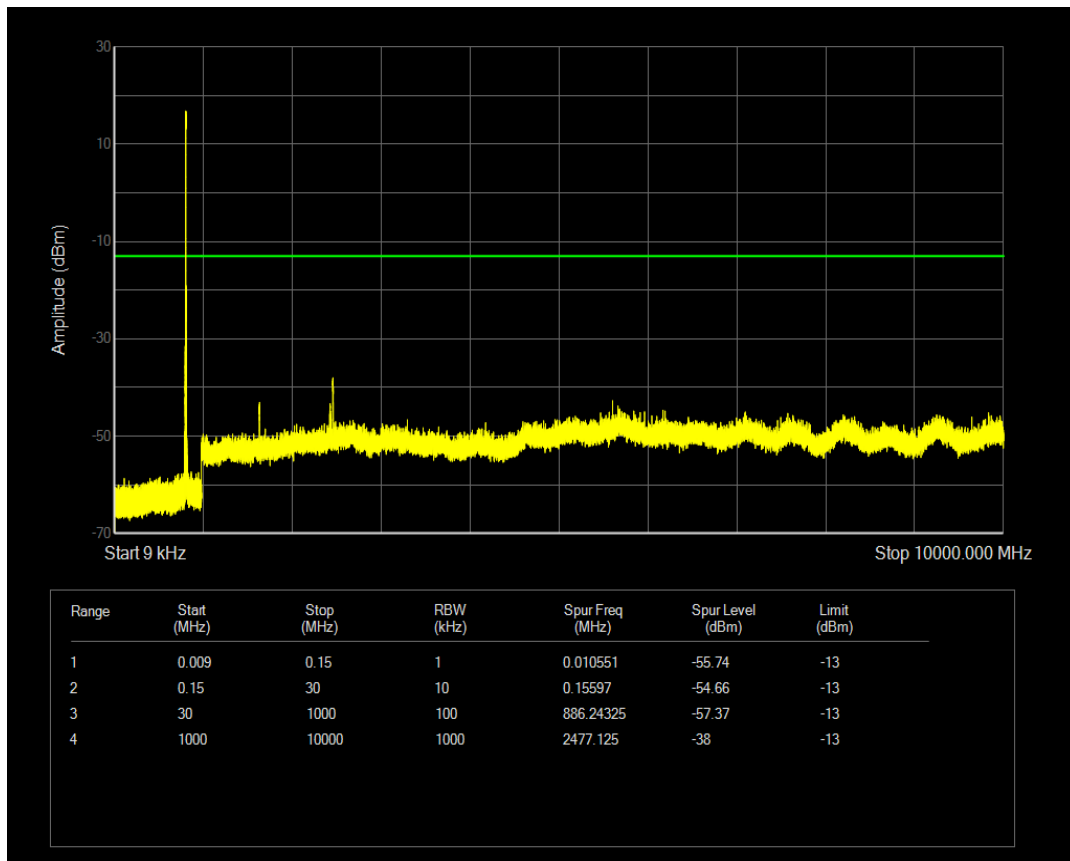


Band5 QAM16 BW=1.4MHz Channel=20643 RB Size=6 Position=#0

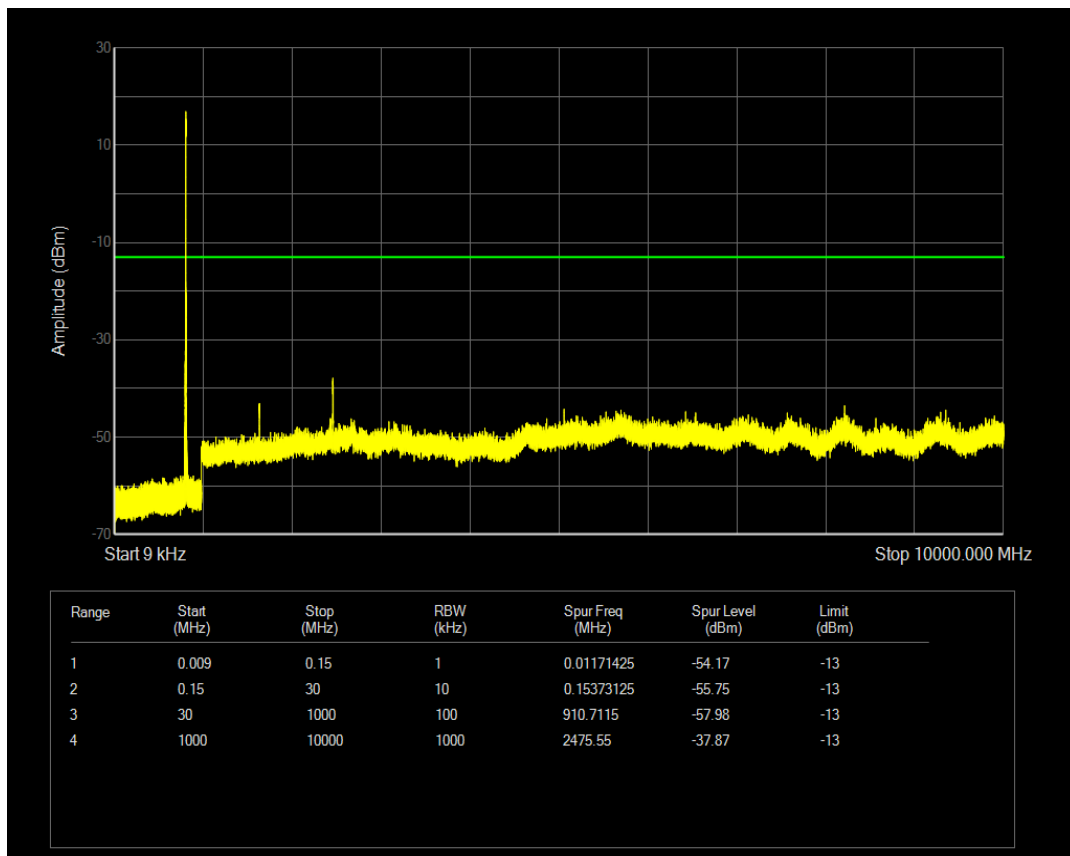




Band5 QPSK BW=3MHz Channel=20415 RB Size=15 Position=#0

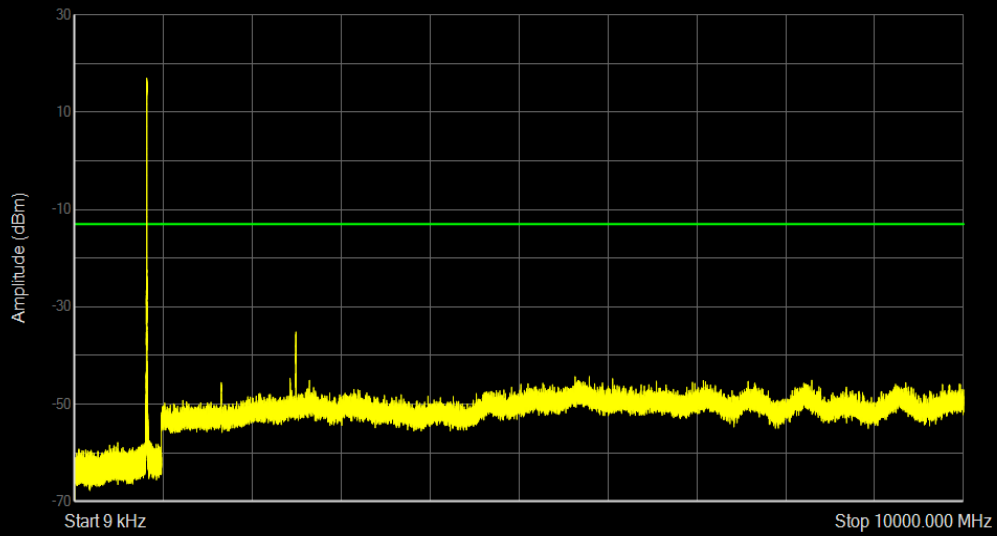


Band5 QAM16 BW=3MHz Channel=20415 RB Size=15 Position=#0



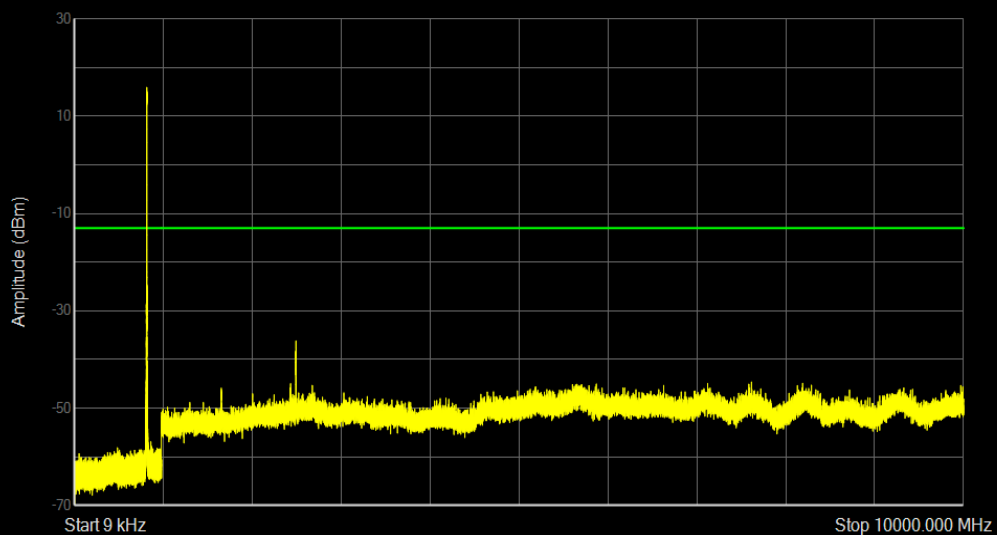


Band5 QPSK BW=3MHz Channel=20525 RB Size=15 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0092397	-55.56	-13
2	0.15	30	10	0.15373125	-54.4	-13
3	30	1000	100	867.61925	-57.59	-13
4	1000	10000	1000	2510.2	-35.18	-13

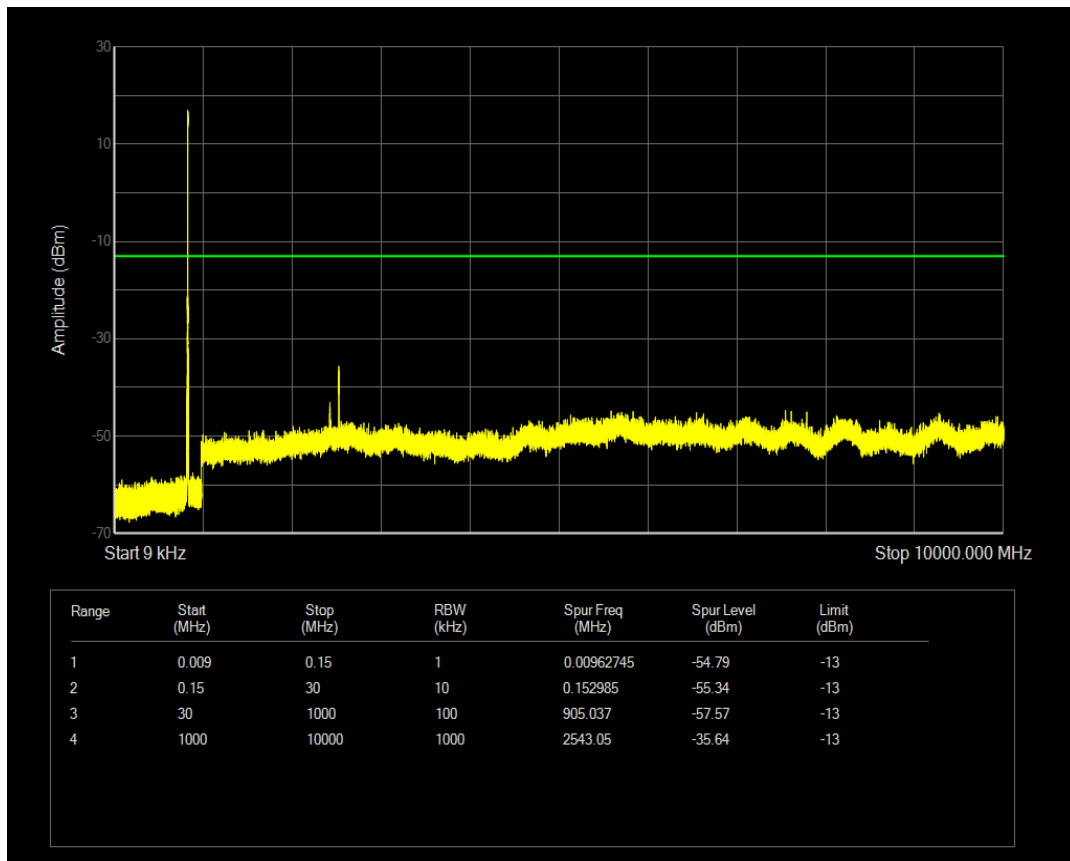
Band5 QAM16 BW=3MHz Channel=20525 RB Size=15 Position=#0



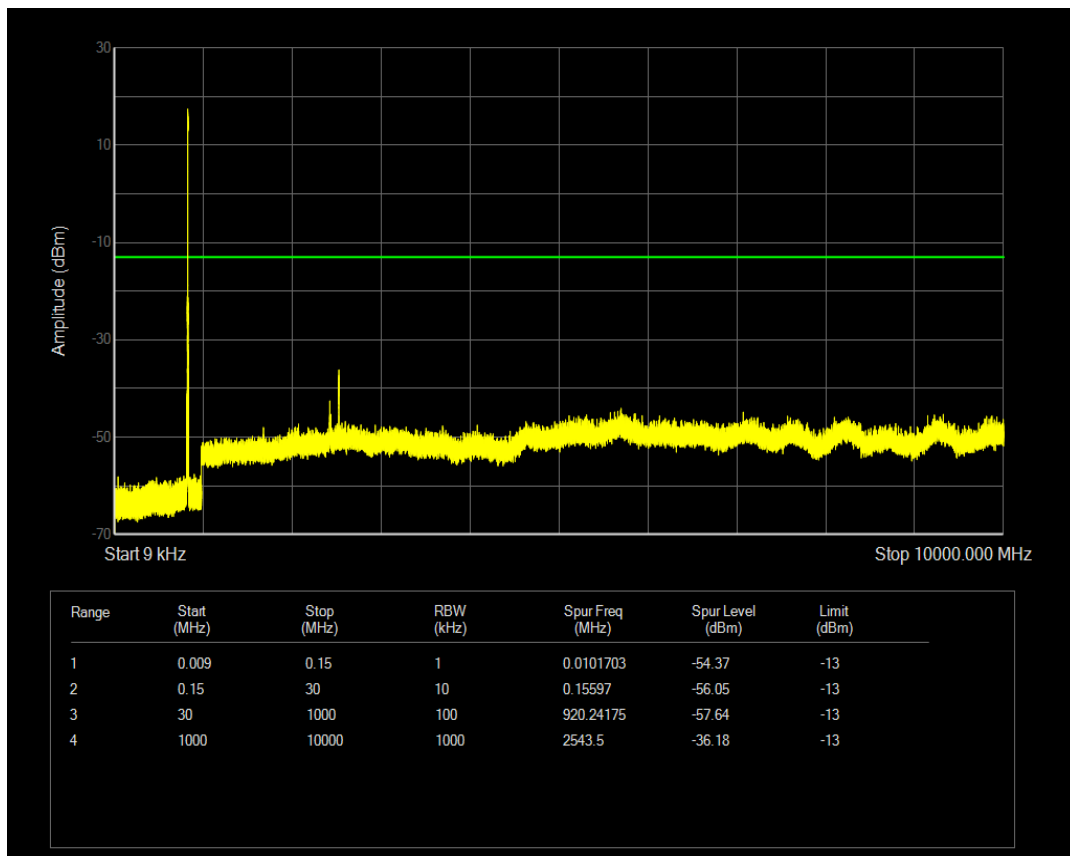
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0095217	-54.61	-13
2	0.15	30	10	0.15	-52.76	-13
3	30	1000	100	882.65425	-56.93	-13
4	1000	10000	1000	2510.875	-36.18	-13



Band5 QPSK BW=3MHz Channel=20635 RB Size=15 Position=#0

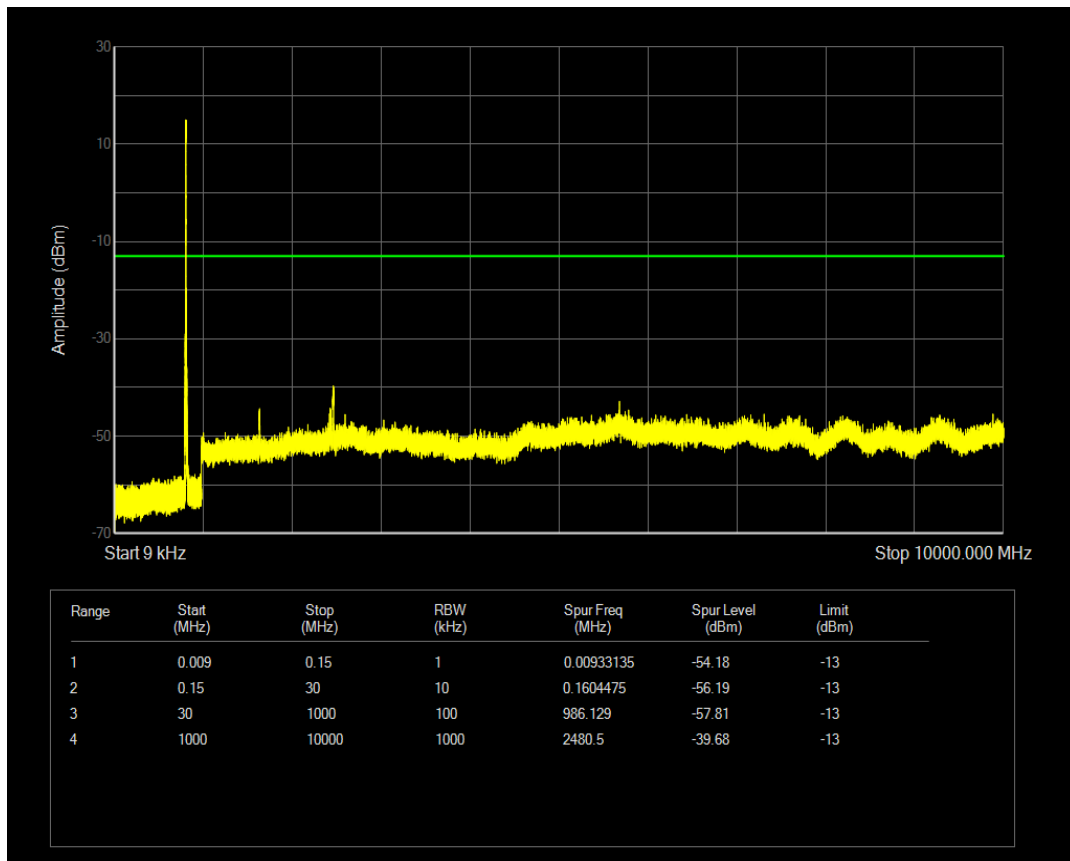


Band5 QAM16 BW=3MHz Channel=20635 RB Size=15 Position=#0

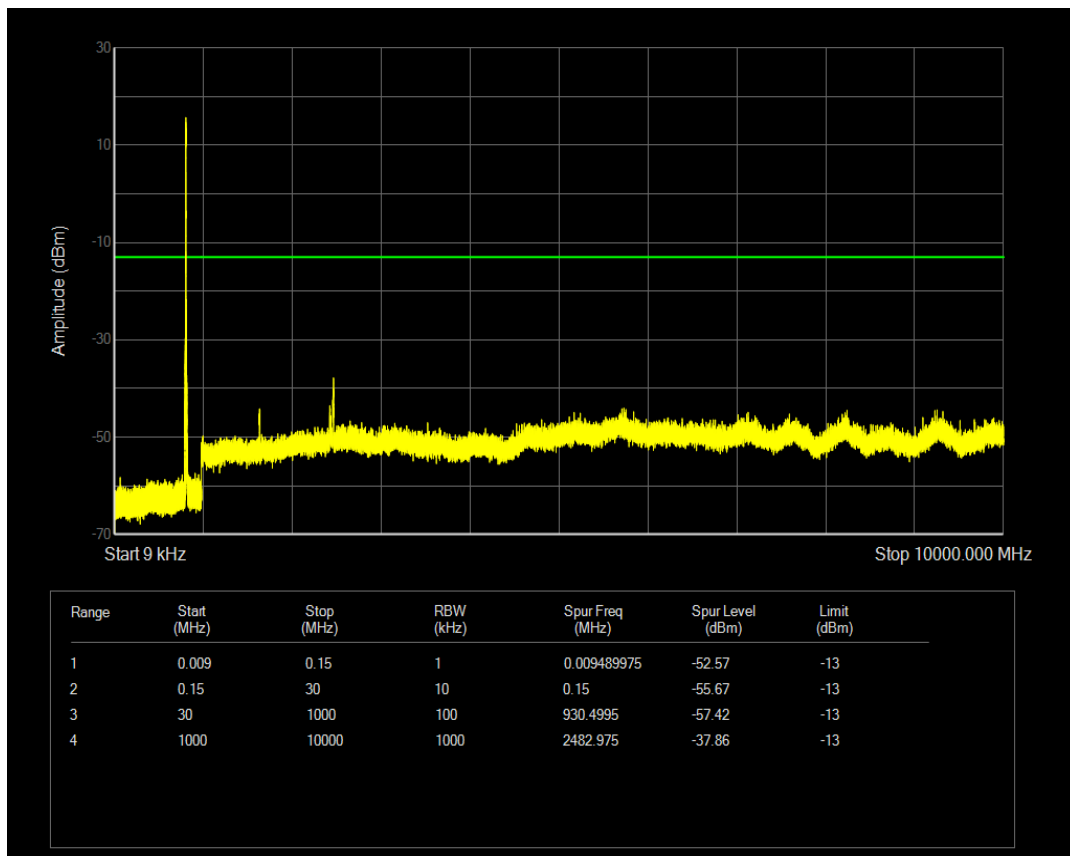




Band5 QPSK BW=5MHz Channel=20425 RB Size=25 Position=#0

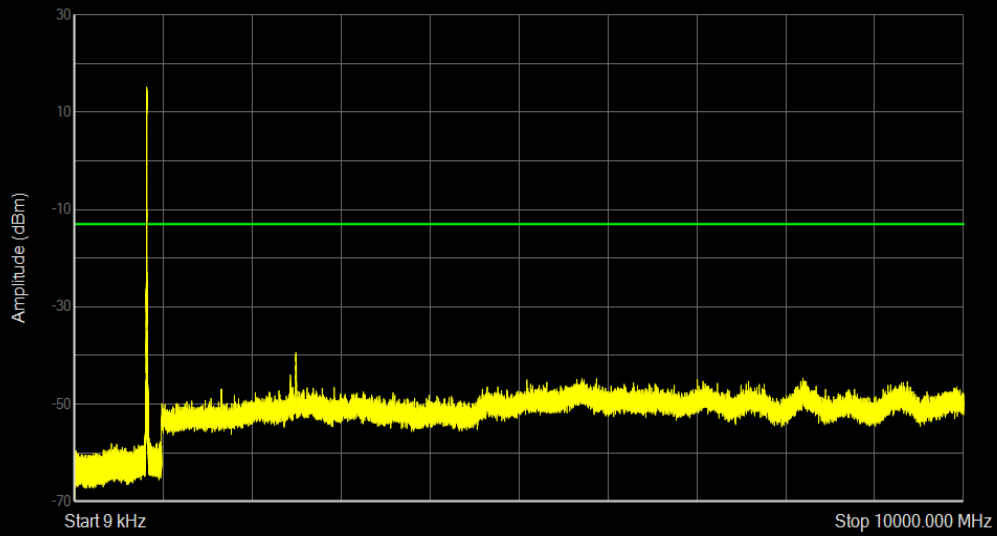


Band5 QAM16 BW=5MHz Channel=20425 RB Size=25 Position=#0



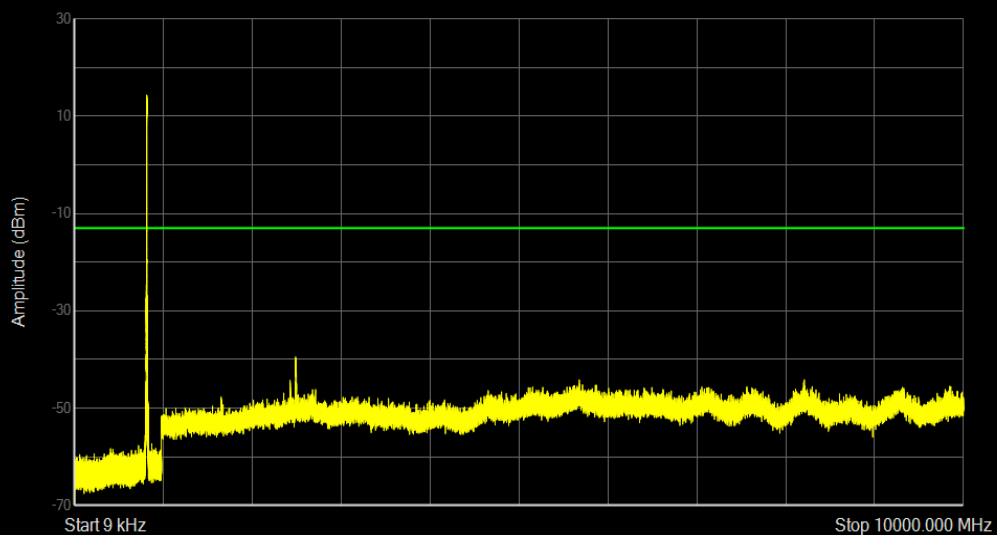


Band5 QPSK BW=5MHz Channel=20525 RB Size=25 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.01494315	-55.58	-13
2	0.15	30	10	0.15	-56.64	-13
3	30	1000	100	985.7895	-57.73	-13
4	1000	10000	1000	2509.075	-39.44	-13

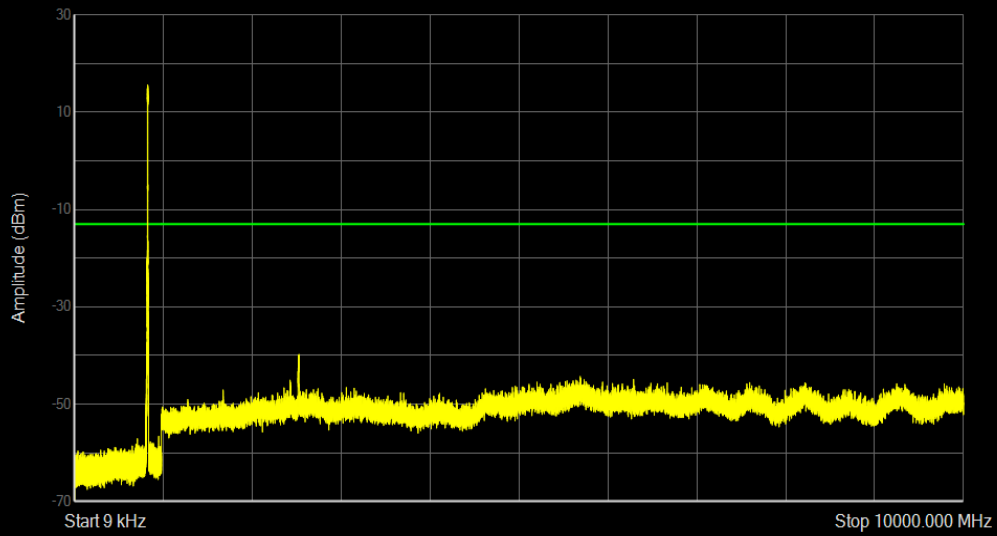
Band5 QAM16 BW=5MHz Channel=20525 RB Size=25 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009609825	-54.5	-13
2	0.15	30	10	0.152985	-56.83	-13
3	30	1000	100	892.039	-57.31	-13
4	1000	10000	1000	2506.825	-39.5	-13

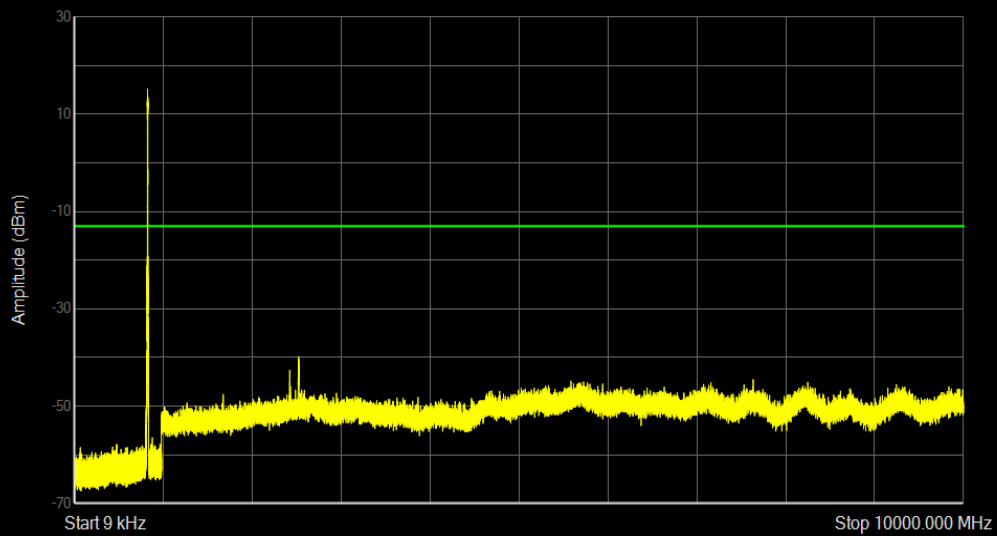


Band5 QPSK BW=5MHz Channel=20625 RB Size=25 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.01151685	-54.58	-13
2	0.15	30	10	0.15	-56.46	-13
3	30	1000	100	970.1725	-56.63	-13
4	1000	10000	1000	2544.175	-39.79	-13

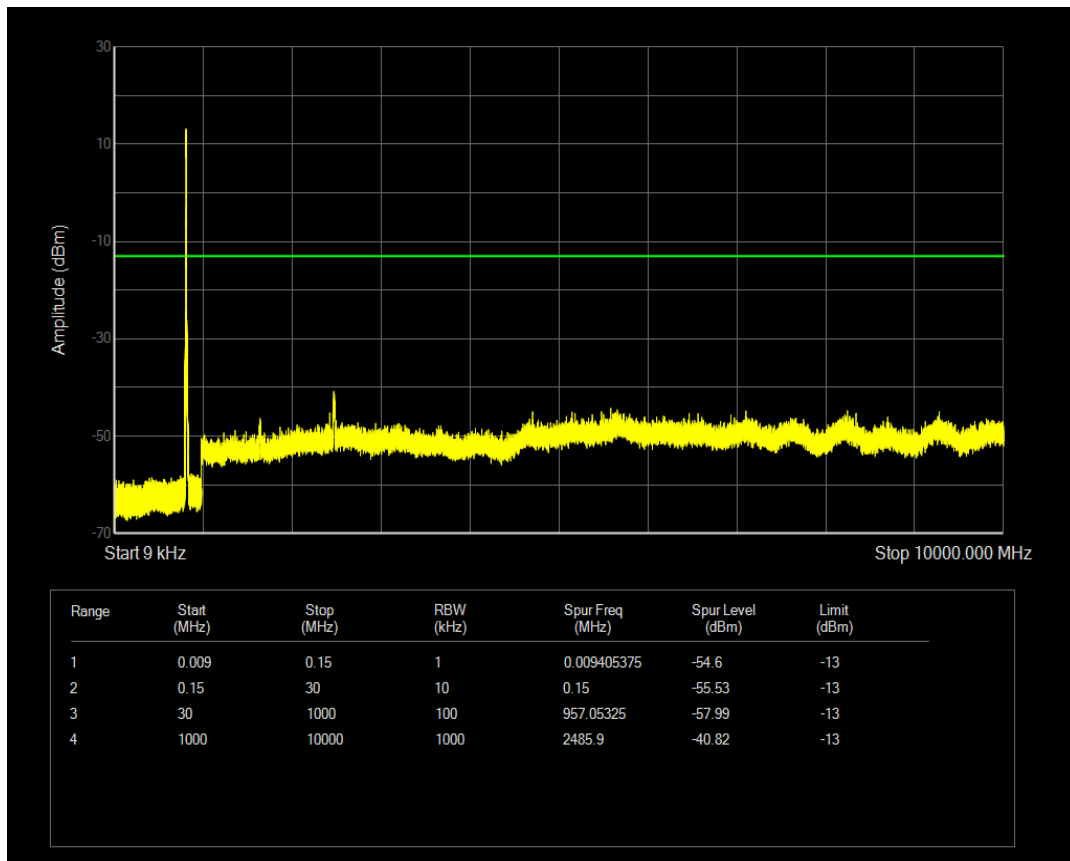
Band5 QAM16 BW=5MHz Channel=20625 RB Size=25 Position=#0



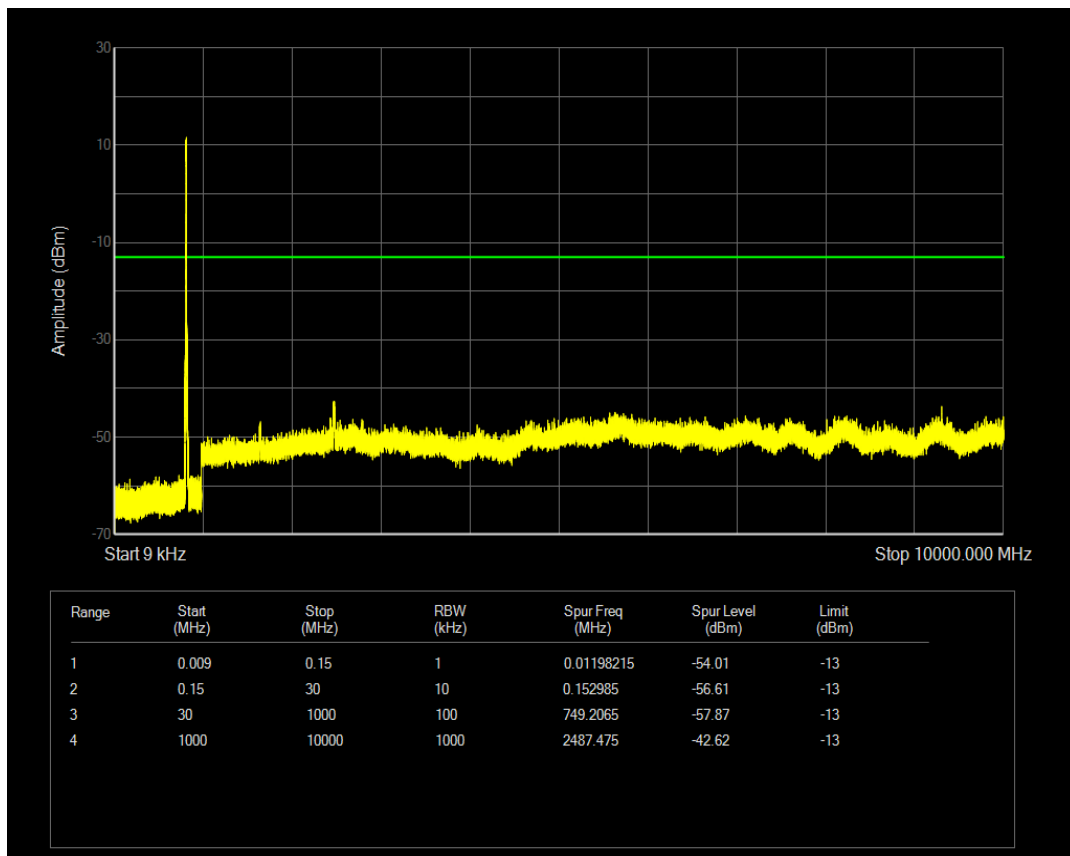
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009045825	-54.97	-13
2	0.15	30	10	0.170895	-55.97	-13
3	30	1000	100	899.04725	-56.52	-13
4	1000	10000	1000	2541.475	-39.83	-13



Band5 QPSK BW=10MHz Channel=20450 RB Size=50 Position=#0

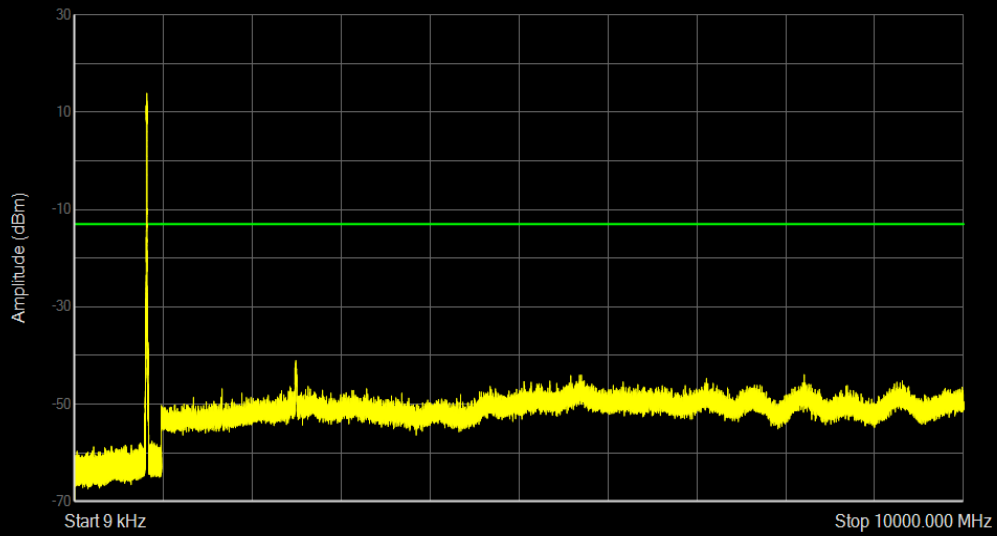


Band5 QAM16 BW=10MHz Channel=20450 RB Size=50 Position=#0



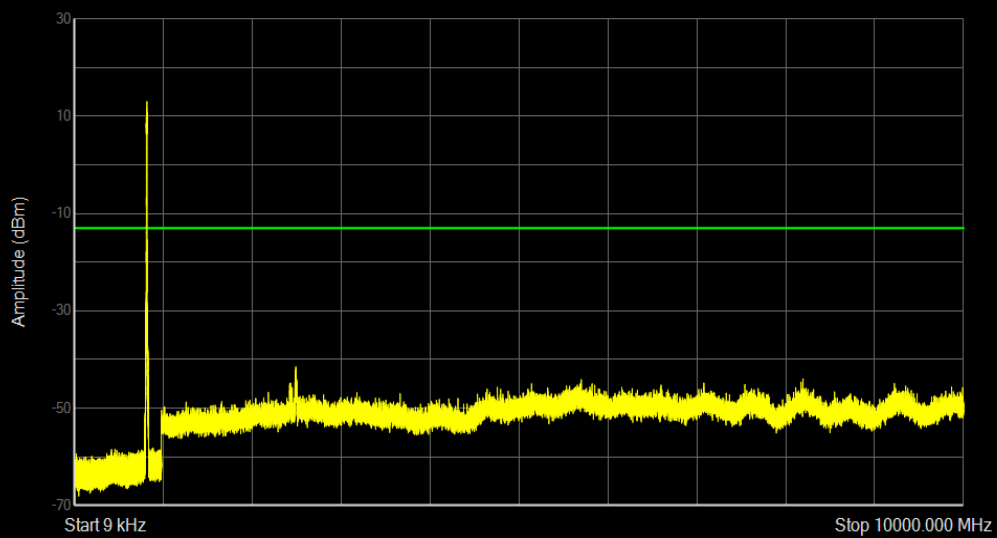


Band5 QPSK BW=10MHz Channel=20525 RB Size=50 Position=#0



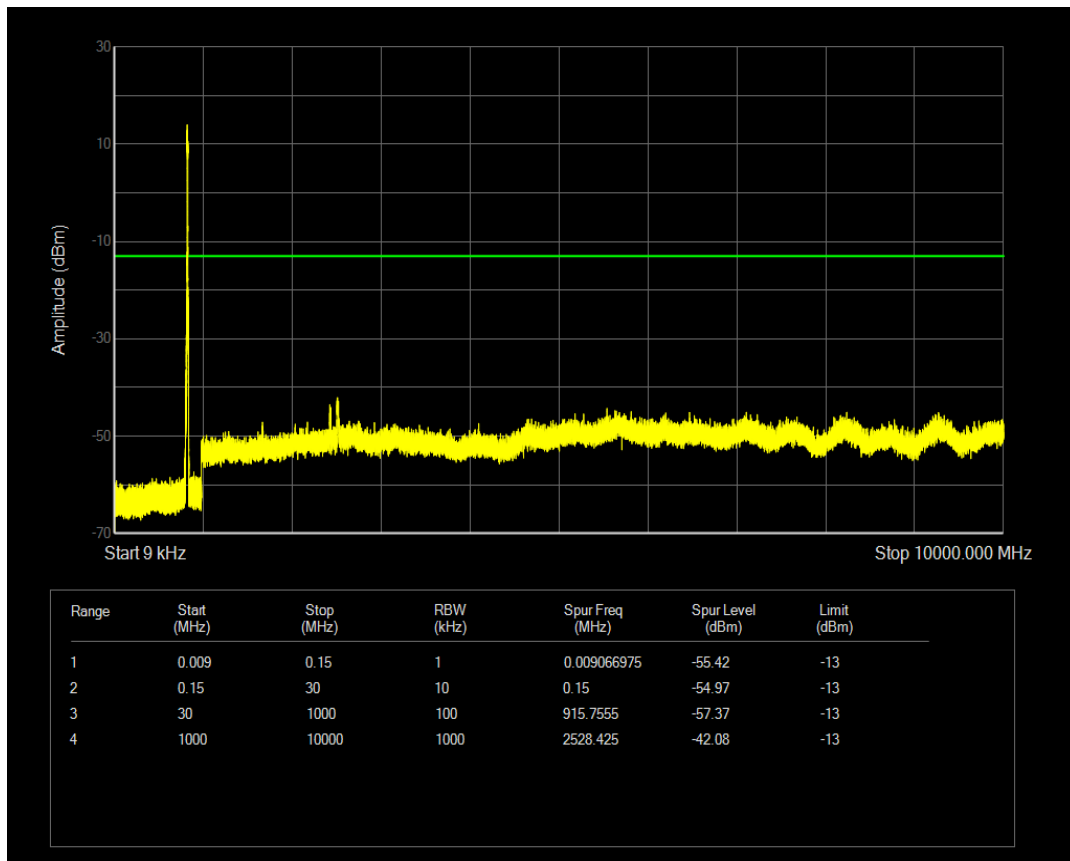
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0093102	-53.58	-13
2	0.15	30	10	0.15	-54.92	-13
3	30	1000	100	895.40975	-57.64	-13
4	1000	10000	1000	2509.075	-41.06	-13

Band5 QAM16 BW=10MHz Channel=20525 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	0.009003525	-54.47	-13
2	0.15	30	10	0.15074625	-56.19	-13
3	30	1000	100	907.8015	-58.18	-13
4	1000	10000	1000	2508.85	-41.51	-13

Band5 QPSK BW=10MHz Channel=20600 RB Size=50 Position=#0



Band5 QAM16 BW=10MHz Channel=20600 RB Size=50 Position=#0

