

Appendix for Band 5

Report No.: BCTC2504135595-3E

Applicant: Shanghai TUGE Data Technologies Co., Ltd.

Product Name: Smart IoT 4G Router

Test Model: TR40

Tested Date: 2025-04-03 to 2025-05-16

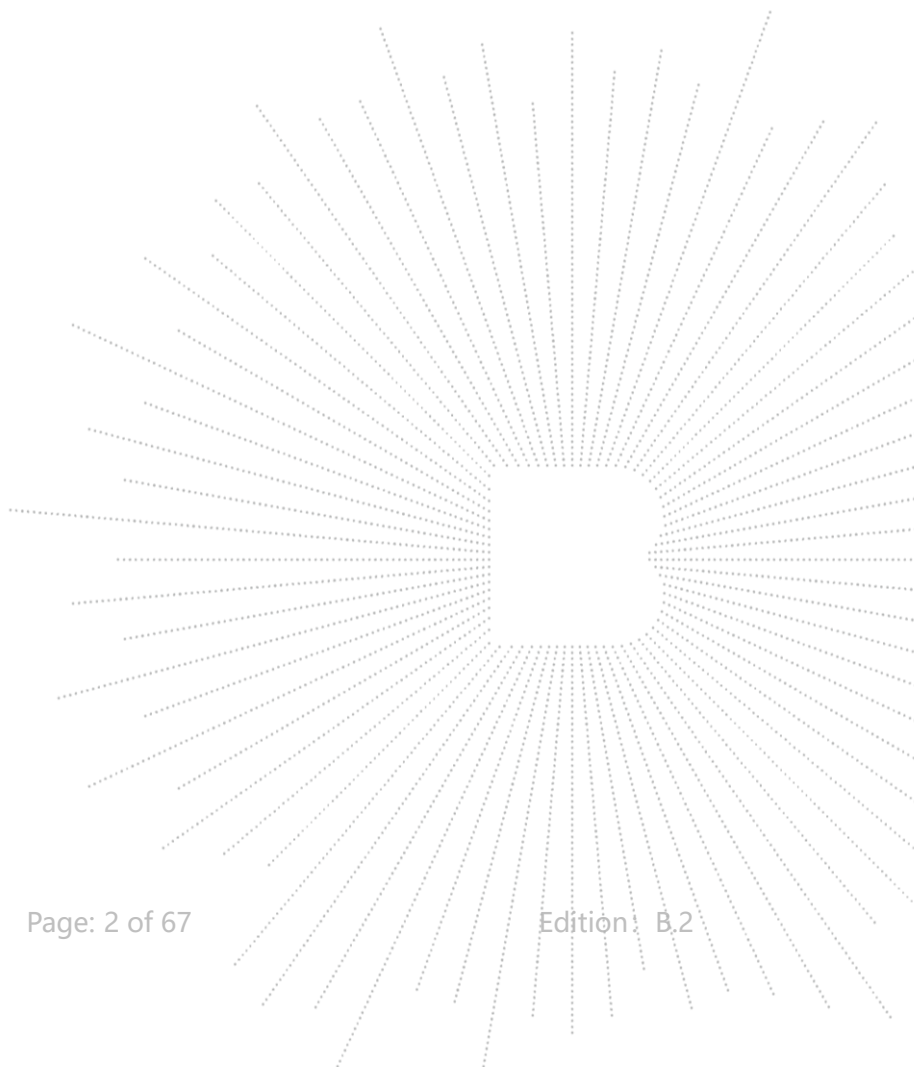
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Shenzhen BCTC Testing Co., Ltd.



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Appendix 1. Conducted output power

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Verdict
Band5	1.4	20407	1	#0	QPSK	23.00	PASS
Band5	1.4	20407	1	#Mid	QPSK	22.99	PASS
Band5	1.4	20407	1	#Max	QPSK	22.91	PASS
Band5	1.4	20407	3	#0	QPSK	22.73	PASS
Band5	1.4	20407	3	#Mid	QPSK	22.83	PASS
Band5	1.4	20407	3	#Max	QPSK	22.81	PASS
Band5	1.4	20407	6	#0	QPSK	21.86	PASS
Band5	1.4	20407	1	#0	16QAM	22.78	PASS
Band5	1.4	20407	1	#Mid	16QAM	22.82	PASS
Band5	1.4	20407	1	#Max	16QAM	22.83	PASS
Band5	1.4	20407	3	#0	16QAM	22.03	PASS
Band5	1.4	20407	3	#Mid	16QAM	22.03	PASS
Band5	1.4	20407	3	#Max	16QAM	22.09	PASS
Band5	1.4	20407	6	#0	16QAM	20.88	PASS
Band5	1.4	20525	1	#0	QPSK	22.52	PASS
Band5	1.4	20525	1	#Mid	QPSK	22.55	PASS
Band5	1.4	20525	1	#Max	QPSK	22.59	PASS
Band5	1.4	20525	3	#0	QPSK	22.78	PASS
Band5	1.4	20525	3	#Mid	QPSK	22.73	PASS
Band5	1.4	20525	3	#Max	QPSK	22.73	PASS
Band5	1.4	20525	6	#0	QPSK	21.57	PASS
Band5	1.4	20525	1	#0	16QAM	22.15	PASS
Band5	1.4	20525	1	#Mid	16QAM	22.15	PASS
Band5	1.4	20525	1	#Max	16QAM	22.16	PASS
Band5	1.4	20525	3	#0	16QAM	21.60	PASS
Band5	1.4	20525	3	#Mid	16QAM	21.64	PASS
Band5	1.4	20525	3	#Max	16QAM	21.60	PASS
Band5	1.4	20525	6	#0	16QAM	20.87	PASS
Band5	1.4	20643	1	#0	QPSK	22.70	PASS
Band5	1.4	20643	1	#Mid	QPSK	22.66	PASS
Band5	1.4	20643	1	#Max	QPSK	22.71	PASS
Band5	1.4	20643	3	#0	QPSK	22.66	PASS
Band5	1.4	20643	3	#Mid	QPSK	22.58	PASS
Band5	1.4	20643	3	#Max	QPSK	22.56	PASS
Band5	1.4	20643	6	#0	QPSK	21.70	PASS
Band5	1.4	20643	1	#0	16QAM	22.66	PASS
Band5	1.4	20643	1	#Mid	16QAM	22.64	PASS
Band5	1.4	20643	1	#Max	16QAM	22.70	PASS
Band5	1.4	20643	3	#0	16QAM	22.17	PASS
Band5	1.4	20643	3	#Mid	16QAM	22.21	PASS

Band5	1.4	20643	3	#Max	16QAM	22.20	PASS
Band5	1.4	20643	6	#0	16QAM	21.22	PASS
Band5	3	20415	1	#0	QPSK	22.74	PASS
Band5	3	20415	1	#Mid	QPSK	22.74	PASS
Band5	3	20415	1	#Max	QPSK	22.74	PASS
Band5	3	20415	8	#0	QPSK	21.79	PASS
Band5	3	20415	8	#Mid	QPSK	21.82	PASS
Band5	3	20415	8	#Max	QPSK	21.76	PASS
Band5	3	20415	15	#0	QPSK	21.76	PASS
Band5	3	20415	1	#0	16QAM	22.71	PASS
Band5	3	20415	1	#Mid	16QAM	22.62	PASS
Band5	3	20415	1	#Max	16QAM	22.52	PASS
Band5	3	20415	8	#0	16QAM	20.70	PASS
Band5	3	20415	8	#Mid	16QAM	20.68	PASS
Band5	3	20415	8	#Max	16QAM	20.95	PASS
Band5	3	20415	15	#0	16QAM	20.80	PASS
Band5	3	20525	1	#0	QPSK	22.57	PASS
Band5	3	20525	1	#Mid	QPSK	22.51	PASS
Band5	3	20525	1	#Max	QPSK	22.62	PASS
Band5	3	20525	8	#0	QPSK	21.66	PASS
Band5	3	20525	8	#Mid	QPSK	21.59	PASS
Band5	3	20525	8	#Max	QPSK	21.59	PASS
Band5	3	20525	15	#0	QPSK	21.58	PASS
Band5	3	20525	1	#0	16QAM	22.18	PASS
Band5	3	20525	1	#Mid	16QAM	22.07	PASS
Band5	3	20525	1	#Max	16QAM	22.18	PASS
Band5	3	20525	8	#0	16QAM	20.74	PASS
Band5	3	20525	8	#Mid	16QAM	21.13	PASS
Band5	3	20525	8	#Max	16QAM	21.13	PASS
Band5	3	20525	15	#0	16QAM	21.02	PASS
Band5	3	20635	1	#0	QPSK	22.75	PASS
Band5	3	20635	1	#Mid	QPSK	22.73	PASS
Band5	3	20635	1	#Max	QPSK	22.73	PASS
Band5	3	20635	8	#0	QPSK	21.65	PASS
Band5	3	20635	8	#Mid	QPSK	21.67	PASS
Band5	3	20635	8	#Max	QPSK	21.67	PASS
Band5	3	20635	15	#0	QPSK	21.68	PASS
Band5	3	20635	1	#0	16QAM	22.52	PASS
Band5	3	20635	1	#Mid	16QAM	22.61	PASS
Band5	3	20635	1	#Max	16QAM	22.67	PASS
Band5	3	20635	8	#0	16QAM	20.59	PASS
Band5	3	20635	8	#Mid	16QAM	20.57	PASS
Band5	3	20635	8	#Max	16QAM	21.07	PASS
Band5	3	20635	15	#0	16QAM	20.63	PASS

Band5	5	20425	1	#0	QPSK	22.64	PASS
Band5	5	20425	1	#Mid	QPSK	22.73	PASS
Band5	5	20425	1	#Max	QPSK	22.71	PASS
Band5	5	20425	12	#0	QPSK	21.76	PASS
Band5	5	20425	12	#Mid	QPSK	21.80	PASS
Band5	5	20425	12	#Max	QPSK	21.80	PASS
Band5	5	20425	25	#0	QPSK	21.82	PASS
Band5	5	20425	1	#0	16QAM	22.03	PASS
Band5	5	20425	1	#Mid	16QAM	21.94	PASS
Band5	5	20425	1	#Max	16QAM	21.93	PASS
Band5	5	20425	12	#0	16QAM	20.67	PASS
Band5	5	20425	12	#Mid	16QAM	21.06	PASS
Band5	5	20425	12	#Max	16QAM	20.97	PASS
Band5	5	20425	25	#0	16QAM	21.16	PASS
Band5	5	20525	1	#0	QPSK	22.64	PASS
Band5	5	20525	1	#Mid	QPSK	22.61	PASS
Band5	5	20525	1	#Max	QPSK	22.71	PASS
Band5	5	20525	12	#0	QPSK	21.64	PASS
Band5	5	20525	12	#Mid	QPSK	21.58	PASS
Band5	5	20525	12	#Max	QPSK	21.55	PASS
Band5	5	20525	25	#0	QPSK	21.49	PASS
Band5	5	20525	1	#0	16QAM	21.19	PASS
Band5	5	20525	1	#Mid	16QAM	21.14	PASS
Band5	5	20525	1	#Max	16QAM	21.38	PASS
Band5	5	20525	12	#0	16QAM	20.46	PASS
Band5	5	20525	12	#Mid	16QAM	20.86	PASS
Band5	5	20525	12	#Max	16QAM	20.81	PASS
Band5	5	20525	25	#0	16QAM	21.05	PASS
Band5	5	20625	1	#0	QPSK	22.60	PASS
Band5	5	20625	1	#Mid	QPSK	22.62	PASS
Band5	5	20625	1	#Max	QPSK	22.53	PASS
Band5	5	20625	12	#0	QPSK	21.55	PASS
Band5	5	20625	12	#Mid	QPSK	21.66	PASS
Band5	5	20625	12	#Max	QPSK	21.73	PASS
Band5	5	20625	25	#0	QPSK	21.61	PASS
Band5	5	20625	1	#0	16QAM	21.65	PASS
Band5	5	20625	1	#Mid	16QAM	21.78	PASS
Band5	5	20625	1	#Max	16QAM	21.74	PASS
Band5	5	20625	12	#0	16QAM	20.96	PASS
Band5	5	20625	12	#Mid	16QAM	20.62	PASS
Band5	5	20625	12	#Max	16QAM	20.60	PASS
Band5	5	20625	25	#0	16QAM	20.62	PASS
Band5	10	20450	1	#0	QPSK	22.79	PASS
Band5	10	20450	1	#Mid	QPSK	22.77	PASS

Band5	10	20450	1	#Max	QPSK	22.59	PASS
Band5	10	20450	25	#0	QPSK	21.65	PASS
Band5	10	20450	25	#Mid	QPSK	21.65	PASS
Band5	10	20450	25	#Max	QPSK	21.71	PASS
Band5	10	20450	50	#0	QPSK	21.61	PASS
Band5	10	20450	1	#0	16QAM	22.82	PASS
Band5	10	20450	1	#Mid	16QAM	22.68	PASS
Band5	10	20450	1	#Max	16QAM	22.57	PASS
Band5	10	20450	25	#0	16QAM	20.94	PASS
Band5	10	20450	25	#Mid	16QAM	20.56	PASS
Band5	10	20450	25	#Max	16QAM	20.47	PASS
Band5	10	20450	50	#0	16QAM	20.62	PASS
Band5	10	20525	1	#0	QPSK	22.68	PASS
Band5	10	20525	1	#Mid	QPSK	22.66	PASS
Band5	10	20525	1	#Max	QPSK	22.78	PASS
Band5	10	20525	25	#0	QPSK	21.70	PASS
Band5	10	20525	25	#Mid	QPSK	21.69	PASS
Band5	10	20525	25	#Max	QPSK	21.76	PASS
Band5	10	20525	50	#0	QPSK	21.72	PASS
Band5	10	20525	1	#0	16QAM	21.67	PASS
Band5	10	20525	1	#Mid	16QAM	21.56	PASS
Band5	10	20525	1	#Max	16QAM	21.80	PASS
Band5	10	20525	25	#0	16QAM	20.55	PASS
Band5	10	20525	25	#Mid	16QAM	20.95	PASS
Band5	10	20525	25	#Max	16QAM	20.99	PASS
Band5	10	20525	50	#0	16QAM	21.02	PASS
Band5	10	20600	1	#0	QPSK	22.80	PASS
Band5	10	20600	1	#Mid	QPSK	22.68	PASS
Band5	10	20600	1	#Max	QPSK	22.68	PASS
Band5	10	20600	25	#0	QPSK	21.66	PASS
Band5	10	20600	25	#Mid	QPSK	21.93	PASS
Band5	10	20600	25	#Max	QPSK	21.69	PASS
Band5	10	20600	50	#0	QPSK	21.95	PASS
Band5	10	20600	1	#0	16QAM	21.64	PASS
Band5	10	20600	1	#Mid	16QAM	22.03	PASS
Band5	10	20600	1	#Max	16QAM	21.74	PASS
Band5	10	20600	25	#0	16QAM	20.57	PASS
Band5	10	20600	25	#Mid	16QAM	20.97	PASS
Band5	10	20600	25	#Max	16QAM	20.68	PASS
Band5	10	20600	50	#0	16QAM	20.94	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
Band5	1.4	20407	6	#0	QPSK	LV	NT	16.58	0.020	-2.5	2.5	PASS
Band5	1.4	20407	6	#0	QPSK	NV	NT	12.07	0.015	-2.5	2.5	PASS
Band5	1.4	20407	6	#0	QPSK	HV	NT	8.37	0.010	-2.5	2.5	PASS
Band5	1.4	20407	6	#0	16QAM	LV	NT	8.51	0.010	-2.5	2.5	PASS
Band5	1.4	20407	6	#0	16QAM	NV	NT	7.75	0.009	-2.5	2.5	PASS
Band5	1.4	20407	6	#0	16QAM	HV	NT	8.18	0.010	-2.5	2.5	PASS
Band5	1.4	20525	6	#0	QPSK	LV	NT	5.87	0.007	-2.5	2.5	PASS
Band5	1.4	20525	6	#0	QPSK	NV	NT	5.87	0.007	-2.5	2.5	PASS
Band5	1.4	20525	6	#0	QPSK	HV	NT	4.81	0.006	-2.5	2.5	PASS
Band5	1.4	20525	6	#0	16QAM	LV	NT	2.63	0.003	-2.5	2.5	PASS
Band5	1.4	20525	6	#0	16QAM	NV	NT	1.72	0.002	-2.5	2.5	PASS
Band5	1.4	20525	6	#0	16QAM	HV	NT	1.17	0.001	-2.5	2.5	PASS
Band5	1.4	20643	6	#0	QPSK	LV	NT	0.62	0.001	-2.5	2.5	PASS
Band5	1.4	20643	6	#0	QPSK	NV	NT	-2.16	-0.003	-2.5	2.5	PASS
Band5	1.4	20643	6	#0	QPSK	HV	NT	-6.72	-0.008	-2.5	2.5	PASS
Band5	1.4	20643	6	#0	16QAM	LV	NT	-9.68	-0.011	-2.5	2.5	PASS
Band5	1.4	20643	6	#0	16QAM	NV	NT	-13.33	-0.016	-2.5	2.5	PASS
Band5	1.4	20643	6	#0	16QAM	HV	NT	-16.89	-0.020	-2.5	2.5	PASS



Ban d5	3	20415	15	#0	QPSK	LV	NT	16.1 2	0.02 0	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	QPSK	NV	NT	12.1 0	0.01 5	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	QPSK	HV	NT	9.81	0.01 2	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	16QAM	LV	NT	11.0 6	0.01 3	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	16QAM	NV	NT	12.0 2	0.01 5	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	16QAM	HV	NT	13.3 8	0.01 6	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	QPSK	LV	NT	8.14	0.01 0	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	QPSK	NV	NT	8.98	0.01 1	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	QPSK	HV	NT	7.65	0.00 9	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	16QAM	LV	NT	6.94	0.00 8	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	16QAM	NV	NT	5.91	0.00 7	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	16QAM	HV	NT	3.98	0.00 5	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	QPSK	LV	NT	4.43	0.00 5	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	QPSK	NV	NT	0.46	0.00 1	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	QPSK	HV	NT	-4.2 5	-0.0 05	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	16QAM	LV	NT	-6.6 1	-0.0 08	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	16QAM	NV	NT	-9.9 6	-0.0 12	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	16QAM	HV	NT	-14. 56	-0.0 17	-2.5	2.5	PAS S
Ban d5	5	20425	25	#0	QPSK	LV	NT	15.6 8	0.01 9	-2.5	2.5	PAS S
Ban d5	5	20425	25	#0	QPSK	NV	NT	13.2 2	0.01 6	-2.5	2.5	PAS S
Ban d5	5	20425	25	#0	QPSK	HV	NT	8.50	0.01 0	-2.5	2.5	PAS S
Ban d5	5	20425	25	#0	16QAM	LV	NT	6.45	0.00 8	-2.5	2.5	PAS S



Ban d5	5	20425	25	#0	16QAM	NV	NT	6.04	0.00 7	-2.5	2.5	PAS S
Ban d5	5	20425	25	#0	16QAM	HV	NT	5.21	0.00 6	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	QPSK	LV	NT	-3.3 0	-0.0 04	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	QPSK	NV	NT	-7.2 0	-0.0 09	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	QPSK	HV	NT	-12. 29	-0.0 15	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	16QAM	LV	NT	-14. 76	-0.0 18	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	16QAM	NV	NT	-16. 71	-0.0 20	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	16QAM	HV	NT	-18. 90	-0.0 23	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	QPSK	LV	NT	9.11	0.01 1	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	QPSK	NV	NT	6.39	0.00 8	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	QPSK	HV	NT	3.59	0.00 4	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	16QAM	LV	NT	1.60	0.00 2	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	16QAM	NV	NT	-0.0 9	0.00 0	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	16QAM	HV	NT	-2.4 3	-0.0 03	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	QPSK	LV	NT	24.3 0	0.02 9	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	QPSK	NV	NT	22.7 7	0.02 7	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	QPSK	HV	NT	24.0 5	0.02 9	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	16QAM	LV	NT	26.7 9	0.03 2	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	16QAM	NV	NT	28.7 4	0.03 5	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	16QAM	HV	NT	29.0 8	0.03 5	-2.5	2.5	PAS S
Ban d5	10	20525	50	#0	QPSK	LV	NT	-3.0 2	-0.0 04	-2.5	2.5	PAS S
Ban d5	10	20525	50	#0	QPSK	NV	NT	-8.7 0	-0.0 10	-2.5	2.5	PAS S



Ban d5	10	20525	50	#0	QPSK	HV	NT	-12. 86	-0.0 15	-2.5	2.5	PAS S
Ban d5	10	20525	50	#0	16QAM	LV	NT	-16. 92	-0.0 20	-2.5	2.5	PAS S
Ban d5	10	20525	50	#0	16QAM	NV	NT	-22. 66	-0.0 27	-2.5	2.5	PAS S
Ban d5	10	20525	50	#0	16QAM	HV	NT	-27. 41	-0.0 33	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	QPSK	LV	NT	-3.6 3	-0.0 04	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	QPSK	NV	NT	-13. 28	-0.0 16	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	QPSK	HV	NT	-21. 79	-0.0 26	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	16QAM	LV	NT	-33. 06	-0.0 39	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	16QAM	NV	NT	-42. 04	-0.0 50	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	16QAM	HV	NT	-10.1 1	-0.0 12	-2.5	2.5	PAS S

Ban d	Bandwi dth (MHz)	UL Chann el	RB Siz e	RB Positi on	Modulati on	Volta ge (Vdc)	Temperat ue (C)	Res ult (Hz)	Res ult (pp m)	Low Limi t (pp m)	high Limi t (pp m)	Verdi ct
Ban d5	1.4	20407	6	#0	QPSK	NV	-30	31.1 0	0.03 8	-2.5	2.5	PAS S
Ban d5	1.4	20407	6	#0	QPSK	NV	-20	33.3 9	0.04 0	-2.5	2.5	PAS S
Ban d5	1.4	20407	6	#0	QPSK	NV	0	36.1 3	0.04 4	-2.5	2.5	PAS S
Ban d5	1.4	20407	6	#0	QPSK	NV	10	40.3 3	0.04 9	-2.5	2.5	PAS S
Ban d5	1.4	20407	6	#0	QPSK	NV	20	42.5 4	0.05 2	-2.5	2.5	PAS S
Ban d5	1.4	20407	6	#0	QPSK	NV	30	46.5 6	0.05 6	-2.5	2.5	PAS S
Ban d5	1.4	20407	6	#0	QPSK	NV	40	2.27	0.00 3	-2.5	2.5	PAS S
Ban d5	1.4	20407	6	#0	QPSK	NV	50	6.98	0.00 8	-2.5	2.5	PAS S
Ban d5	1.4	20407	6	#0	16QAM	NV	-30	11.8 3	0.01 4	-2.5	2.5	PAS S



Ban d5	1.4	20407	6	#0	16QAM	NV	-20	16.4 9	0.02 0	-2.5	2.5	PAS S
Ban d5	1.4	20407	6	#0	16QAM	NV	0	21.5 7	0.02 6	-2.5	2.5	PAS S
Ban d5	1.4	20407	6	#0	16QAM	NV	10	27.3 8	0.03 3	-2.5	2.5	PAS S
Ban d5	1.4	20407	6	#0	16QAM	NV	20	31.2 9	0.03 8	-2.5	2.5	PAS S
Ban d5	1.4	20407	6	#0	16QAM	NV	30	36.2 1	0.04 4	-2.5	2.5	PAS S
Ban d5	1.4	20407	6	#0	16QAM	NV	40	38.7 1	0.04 7	-2.5	2.5	PAS S
Ban d5	1.4	20407	6	#0	16QAM	NV	50	42.3 1	0.05 1	-2.5	2.5	PAS S
Ban d5	1.4	20525	6	#0	QPSK	NV	-30	4.48	0.00 5	-2.5	2.5	PAS S
Ban d5	1.4	20525	6	#0	QPSK	NV	-20	4.73	0.00 6	-2.5	2.5	PAS S
Ban d5	1.4	20525	6	#0	QPSK	NV	0	7.07	0.00 8	-2.5	2.5	PAS S
Ban d5	1.4	20525	6	#0	QPSK	NV	10	8.15	0.01 0	-2.5	2.5	PAS S
Ban d5	1.4	20525	6	#0	QPSK	NV	20	9.97	0.01 2	-2.5	2.5	PAS S
Ban d5	1.4	20525	6	#0	QPSK	NV	30	12.7 6	0.01 5	-2.5	2.5	PAS S
Ban d5	1.4	20525	6	#0	QPSK	NV	40	13.9 8	0.01 7	-2.5	2.5	PAS S
Ban d5	1.4	20525	6	#0	QPSK	NV	50	17.0 1	0.02 0	-2.5	2.5	PAS S
Ban d5	1.4	20525	6	#0	16QAM	NV	-30	18.8 7	0.02 3	-2.5	2.5	PAS S
Ban d5	1.4	20525	6	#0	16QAM	NV	-20	19.6 7	0.02 4	-2.5	2.5	PAS S
Ban d5	1.4	20525	6	#0	16QAM	NV	0	21.8 2	0.02 6	-2.5	2.5	PAS S
Ban d5	1.4	20525	6	#0	16QAM	NV	10	24.1 3	0.02 9	-2.5	2.5	PAS S
Ban d5	1.4	20525	6	#0	16QAM	NV	20	25.8 5	0.03 1	-2.5	2.5	PAS S
Ban d5	1.4	20525	6	#0	16QAM	NV	30	26.5 6	0.03 2	-2.5	2.5	PAS S
Ban d5	1.4	20525	6	#0	16QAM	NV	40	29.4 7	0.03 5	-2.5	2.5	PAS S



Ban d5	1.4	20525	6	#0	16QAM	NV	50	31.2 1	0.03 7	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	QPSK	NV	-30	2.73	0.00 3	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	QPSK	NV	-20	2.57	0.00 3	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	QPSK	NV	0	3.29	0.00 4	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	QPSK	NV	10	3.19	0.00 4	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	QPSK	NV	20	2.65	0.00 3	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	QPSK	NV	30	2.17	0.00 3	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	QPSK	NV	40	1.89	0.00 2	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	QPSK	NV	50	3.02	0.00 4	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	16QAM	NV	-30	2.75	0.00 3	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	16QAM	NV	-20	3.66	0.00 4	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	16QAM	NV	0	3.35	0.00 4	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	16QAM	NV	10	3.88	0.00 5	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	16QAM	NV	20	3.92	0.00 5	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	16QAM	NV	30	2.79	0.00 3	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	16QAM	NV	40	1.52	0.00 2	-2.5	2.5	PAS S
Ban d5	1.4	20643	6	#0	16QAM	NV	50	0.70	0.00 1	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	QPSK	NV	-30	18.1 0	0.02 2	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	QPSK	NV	-20	16.9 2	0.02 0	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	QPSK	NV	0	16.0 4	0.01 9	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	QPSK	NV	10	16.6 2	0.02 0	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	QPSK	NV	20	17.8 8	0.02 2	-2.5	2.5	PAS S



Ban d5	3	20415	15	#0	QPSK	NV	30	20.9 9	0.02 5	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	QPSK	NV	40	22.8 9	0.02 8	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	QPSK	NV	50	25.4 1	0.03 1	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	16QAM	NV	-30	26.3 8	0.03 2	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	16QAM	NV	-20	27.7 4	0.03 4	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	16QAM	NV	0	30.0 6	0.03 6	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	16QAM	NV	10	34.9 8	0.04 2	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	16QAM	NV	20	36.9 4	0.04 5	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	16QAM	NV	30	41.1 1	0.05 0	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	16QAM	NV	40	44.7 2	0.05 4	-2.5	2.5	PAS S
Ban d5	3	20415	15	#0	16QAM	NV	50	46.9 9	0.05 7	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	QPSK	NV	-30	12.9 0	0.01 5	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	QPSK	NV	-20	15.4 4	0.01 8	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	QPSK	NV	0	16.1 4	0.01 9	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	QPSK	NV	10	17.1 7	0.02 1	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	QPSK	NV	20	17.4 5	0.02 1	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	QPSK	NV	30	18.6 7	0.02 2	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	QPSK	NV	40	19.7 8	0.02 4	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	QPSK	NV	50	21.5 4	0.02 6	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	16QAM	NV	-30	19.8 0	0.02 4	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	16QAM	NV	-20	19.9 8	0.02 4	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	16QAM	NV	0	21.6 4	0.02 6	-2.5	2.5	PAS S



Ban d5	3	20525	15	#0	16QAM	NV	10	21.4 7	0.02 6	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	16QAM	NV	20	23.4 6	0.02 8	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	16QAM	NV	30	22.5 7	0.02 7	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	16QAM	NV	40	23.0 7	0.02 8	-2.5	2.5	PAS S
Ban d5	3	20525	15	#0	16QAM	NV	50	23.7 9	0.02 8	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	QPSK	NV	-30	-3.3 0	-0.0 04	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	QPSK	NV	-20	-3.3 9	-0.0 04	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	QPSK	NV	0	-4.7 8	-0.0 06	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	QPSK	NV	10	-6.7 7	-0.0 08	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	QPSK	NV	20	-7.7 5	-0.0 09	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	QPSK	NV	30	-9.4 8	-0.01 1	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	QPSK	NV	40	-10. 06	-0.0 12	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	QPSK	NV	50	-10. 87	-0.0 13	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	16QAM	NV	-30	-13. 19	-0.0 16	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	16QAM	NV	-20	-14. 48	-0.0 17	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	16QAM	NV	0	-15. 32	-0.0 18	-2.5	2.5	PAS S
Ban d5	3	20635	15	#0	16QAM	NV	10	-15. 65	-0.0 18	-2.5	2.5	PAS S
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Ban d5	5	20425	25	#0	QPSK	NV	30	-3.7 8	-0.0 05	-2.5	2.5	PAS S
Ban d5	5	20425	25	#0	QPSK	NV	40	-1.2 0	-0.0 01	-2.5	2.5	PAS S
Ban d5	5	20425	25	#0	QPSK	NV	50	-0.5 1	-0.0 01	-2.5	2.5	PAS S
Ban d5	5	20425	25	#0	16QAM	NV	-30	-1.0 6	-0.0 01	-2.5	2.5	PAS S
Ban d5	5	20425	25	#0	16QAM	NV	-20	-1.5 9	-0.0 02	-2.5	2.5	PAS S
Ban d5	5	20425	25	#0	16QAM	NV	0	-1.2 2	-0.0 01	-2.5	2.5	PAS S
Ban d5	5	20425	25	#0	16QAM	NV	10	-1.3 4	-0.0 02	-2.5	2.5	PAS S
Ban d5	5	20425	25	#0	16QAM	NV	20	-3.3 8	-0.0 04	-2.5	2.5	PAS S
Ban d5	5	20425	25	#0	16QAM	NV	30	-4.2 5	-0.0 05	-2.5	2.5	PAS S
Ban d5	5	20425	25	#0	16QAM	NV	40	-5.3 2	-0.0 06	-2.5	2.5	PAS S
Ban d5	5	20425	25	#0	16QAM	NV	50	-6.1 9	-0.0 07	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	QPSK	NV	-30	2.86	0.00 3	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	QPSK	NV	-20	-0.5 1	-0.0 01	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	QPSK	NV	0	-1.0 7	-0.0 01	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	QPSK	NV	10	-4.1 8	-0.0 05	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	QPSK	NV	20	-8.9 4	-0.01 1	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	QPSK	NV	30	-12. 25	-0.0 15	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	QPSK	NV	40	-17. 34	-0.0 21	-2.5	2.5	PAS S



Ban d5	5	20525	25	#0	QPSK	NV	50	-19. 23	-0.0 23	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	16QAM	NV	-30	-23. 05	-0.0 28	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	16QAM	NV	-20	-24. 33	-0.0 29	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	16QAM	NV	0	-24. 58	-0.0 29	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	16QAM	NV	10	-24. 70	-0.0 30	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	16QAM	NV	20	-25. 16	-0.0 30	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	16QAM	NV	30	-27. 51	-0.0 33	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	16QAM	NV	40	-28. 48	-0.0 34	-2.5	2.5	PAS S
Ban d5	5	20525	25	#0	16QAM	NV	50	-29. 74	-0.0 36	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	QPSK	NV	-30	0.40	0.00 0	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	QPSK	NV	-20	-2.6 5	-0.0 03	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	QPSK	NV	0	-6.2 8	-0.0 07	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	QPSK	NV	10	-9.3 7	-0.01 1	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	QPSK	NV	20	-14. 02	-0.0 17	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	QPSK	NV	30	-19. 43	-0.0 23	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	QPSK	NV	40	-24. 85	-0.0 29	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	QPSK	NV	50	-31. 01	-0.0 37	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	16QAM	NV	-30	-36. 23	-0.0 43	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	16QAM	NV	-20	-40. 45	-0.0 48	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	16QAM	NV	0	-42. 97	-0.0 51	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	16QAM	NV	10	-46. 41	-0.0 55	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	16QAM	NV	20	-46. 26	-0.0 55	-2.5	2.5	PAS S

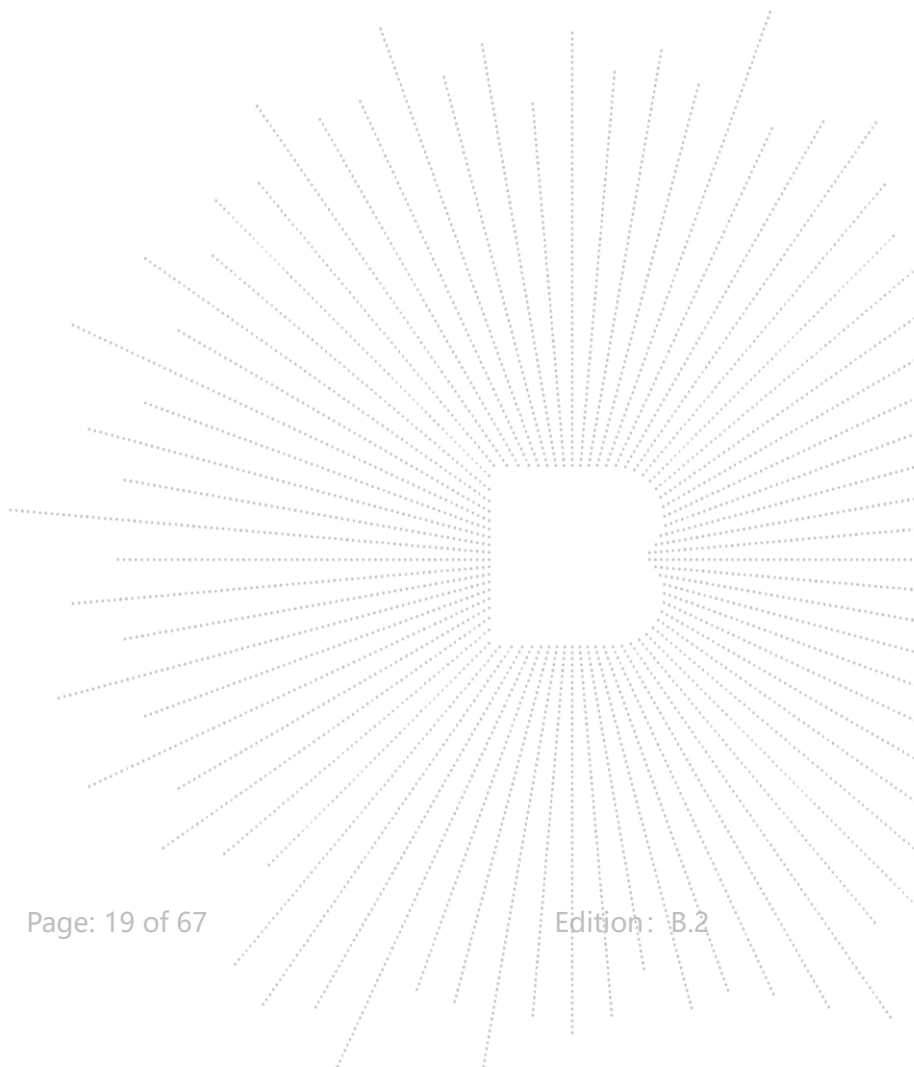


Ban d5	5	20625	25	#0	16QAM	NV	30	1.95	0.00 2	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	16QAM	NV	40	0.31	0.00 0	-2.5	2.5	PAS S
Ban d5	5	20625	25	#0	16QAM	NV	50	-1.6 5	-0.0 02	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	QPSK	NV	-30	24.8 2	0.03 0	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	QPSK	NV	-20	23.1 2	0.02 8	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	QPSK	NV	0	25.1 6	0.03 0	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	QPSK	NV	10	25.5 3	0.03 1	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	QPSK	NV	20	26.7 8	0.03 2	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	QPSK	NV	30	29.1 1	0.03 5	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	QPSK	NV	40	29.7 0	0.03 6	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	QPSK	NV	50	32.3 3	0.03 9	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	16QAM	NV	-30	32.6 7	0.03 9	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	16QAM	NV	-20	33.3 0	0.04 0	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	16QAM	NV	0	34.3 9	0.04 1	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	16QAM	NV	10	33.7 6	0.04 1	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	16QAM	NV	20	33.3 6	0.04 0	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	16QAM	NV	30	33.9 6	0.04 1	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	16QAM	NV	40	35.6 8	0.04 3	-2.5	2.5	PAS S
Ban d5	10	20450	50	#0	16QAM	NV	50	38.7 7	0.04 7	-2.5	2.5	PAS S
Ban d5	10	20525	50	#0	QPSK	NV	-30	6.01	0.00 7	-2.5	2.5	PAS S
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Ban d5	10	20525	50	#0	QPSK	NV	0	6.52	0.00 8	-2.5	2.5	PAS S



Ban d5	10	20525	50	#0	QPSK	NV	10	6.41	0.00 8	-2.5	2.5	PAS S
Ban d5	10	20525	50	#0	QPSK	NV	20	5.06	0.00 6	-2.5	2.5	PAS S
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Ban d5	10	20525	50	#0	QPSK	NV	50	-3.0 0	-0.0 04	-2.5	2.5	PAS S
Ban d5	10	20525	50	#0	16QAM	NV	-30	-4.7 9	-0.0 06	-2.5	2.5	PAS S
Ban d5	10	20525	50	#0	16QAM	NV	-20	-5.3 1	-0.0 06	-2.5	2.5	PAS S
Ban d5	10	20525	50	#0	16QAM	NV	0	-6.3 1	-0.0 08	-2.5	2.5	PAS S
Ban d5	10	20525	50	#0	16QAM	NV	10	-6.9 0	-0.0 08	-2.5	2.5	PAS S
Ban d5	10	20525	50	#0	16QAM	NV	20	-8.0 8	-0.0 10	-2.5	2.5	PAS S
Ban d5	10	20525	50	#0	16QAM	NV	30	-11.5 3	-0.0 14	-2.5	2.5	PAS S
Ban d5	10	20525	50	#0	16QAM	NV	40	-11.6 4	-0.0 14	-2.5	2.5	PAS S
Ban d5	10	20525	50	#0	16QAM	NV	50	-14. 23	-0.0 17	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	QPSK	NV	-30	-2.1 5	-0.0 03	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	QPSK	NV	-20	-6.2 4	-0.0 07	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	QPSK	NV	0	-8.9 1	-0.01 1	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	QPSK	NV	10	-14. 02	-0.0 17	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	QPSK	NV	20	-17. 91	-0.0 21	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	QPSK	NV	30	-21. 09	-0.0 25	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	QPSK	NV	40	-25. 09	-0.0 30	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	QPSK	NV	50	-29. 53	-0.0 35	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	16QAM	NV	-30	-34. 26	-0.0 41	-2.5	2.5	PAS S

Ban d5	10	20600	50	#0	16QAM	NV	-20	-36. 59	-0.0 43	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	16QAM	NV	0	-38. 18	-0.0 45	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	16QAM	NV	10	-40. 76	-0.0 48	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	16QAM	NV	20	-41. 70	-0.0 49	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	16QAM	NV	30	-41. 70	-0.0 49	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	16QAM	NV	40	-39. 93	-0.0 47	-2.5	2.5	PAS S
Ban d5	10	20600	50	#0	16QAM	NV	50	-38. 14	-0.0 45	-2.5	2.5	PAS S

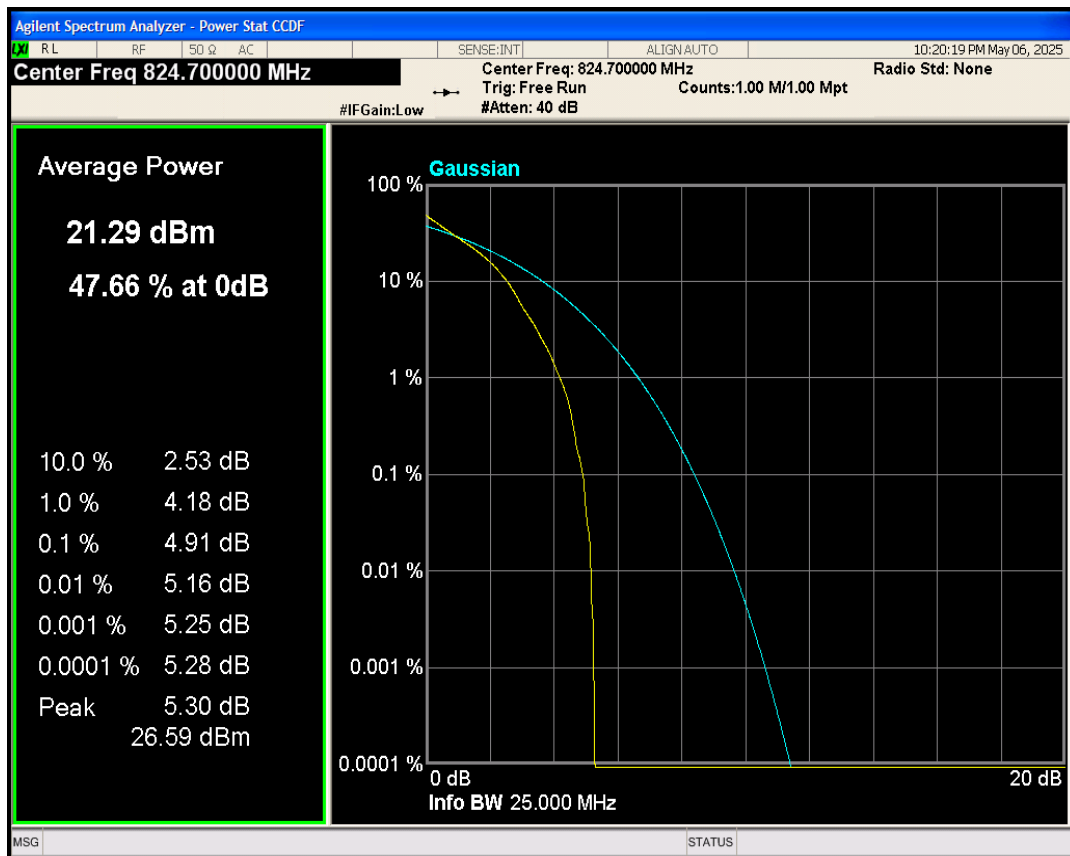


Appendix 3. Peak-to-Average Ratio

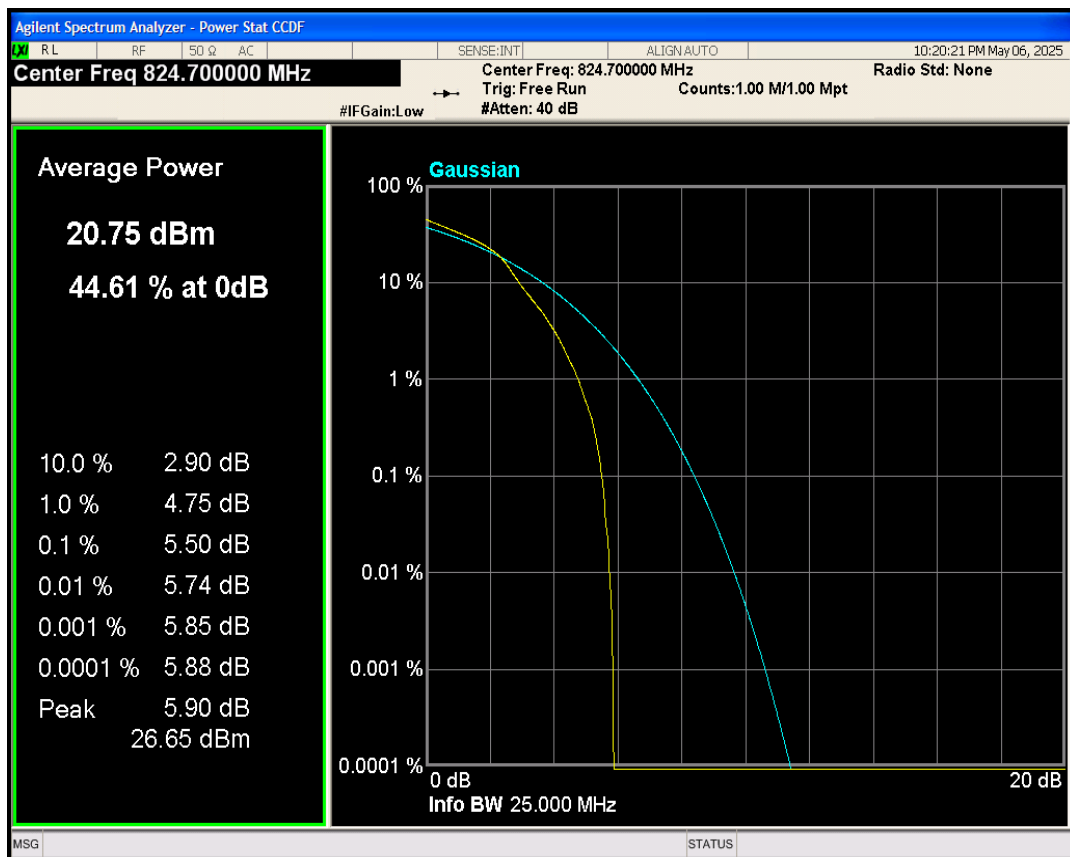
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Result (dB)	high Limit (dB)	Verdict
Band5	1.4	20407	1	#0	QPSK	4.91	13	PASS
Band5	1.4	20407	1	#0	16QAM	5.50	13	PASS
Band5	1.4	20525	1	#0	QPSK	5.12	13	PASS
Band5	1.4	20525	1	#0	16QAM	6.02	13	PASS
Band5	1.4	20643	1	#0	QPSK	4.90	13	PASS
Band5	1.4	20643	1	#0	16QAM	5.81	13	PASS
Band5	3	20415	1	#0	QPSK	4.86	13	PASS
Band5	3	20415	1	#0	16QAM	5.88	13	PASS
Band5	3	20525	1	#0	QPSK	5.24	13	PASS
Band5	3	20525	1	#0	16QAM	5.94	13	PASS
Band5	3	20635	1	#0	QPSK	4.53	13	PASS
Band5	3	20635	1	#0	16QAM	5.47	13	PASS
Band5	5	20425	1	#0	QPSK	4.97	13	PASS
Band5	5	20425	1	#0	16QAM	5.90	13	PASS
Band5	5	20525	1	#0	QPSK	5.25	13	PASS
Band5	5	20525	1	#0	16QAM	5.89	13	PASS
Band5	5	20625	1	#0	QPSK	5.03	13	PASS
Band5	5	20625	1	#0	16QAM	5.89	13	PASS
Band5	10	20450	1	#0	QPSK	4.73	13	PASS
Band5	10	20450	1	#0	16QAM	5.75	13	PASS
Band5	10	20525	1	#0	QPSK	5.44	13	PASS
Band5	10	20525	1	#0	16QAM	6.39	13	PASS
Band5	10	20600	1	#0	QPSK	4.79	13	PASS
Band5	10	20600	1	#0	16QAM	5.65	13	PASS



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

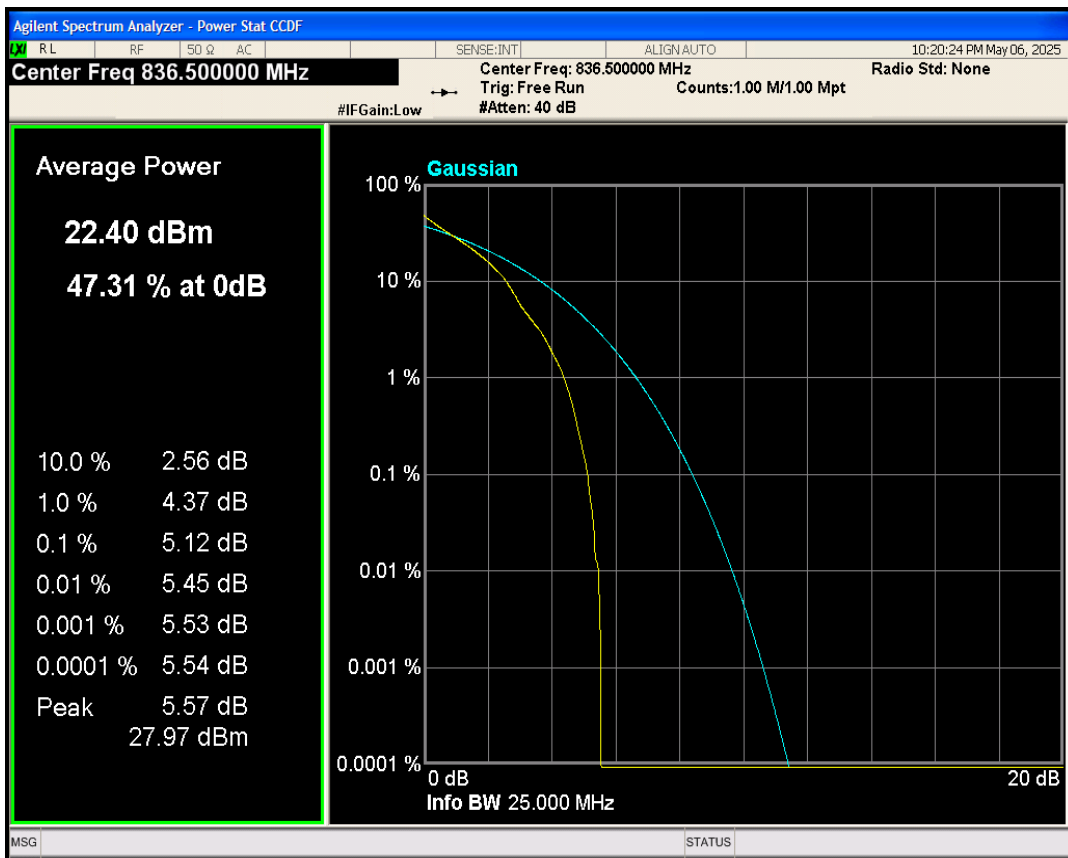


Band5 16QAM BW=1.4MHz Channel=20407 RB Size=1 Position=#0

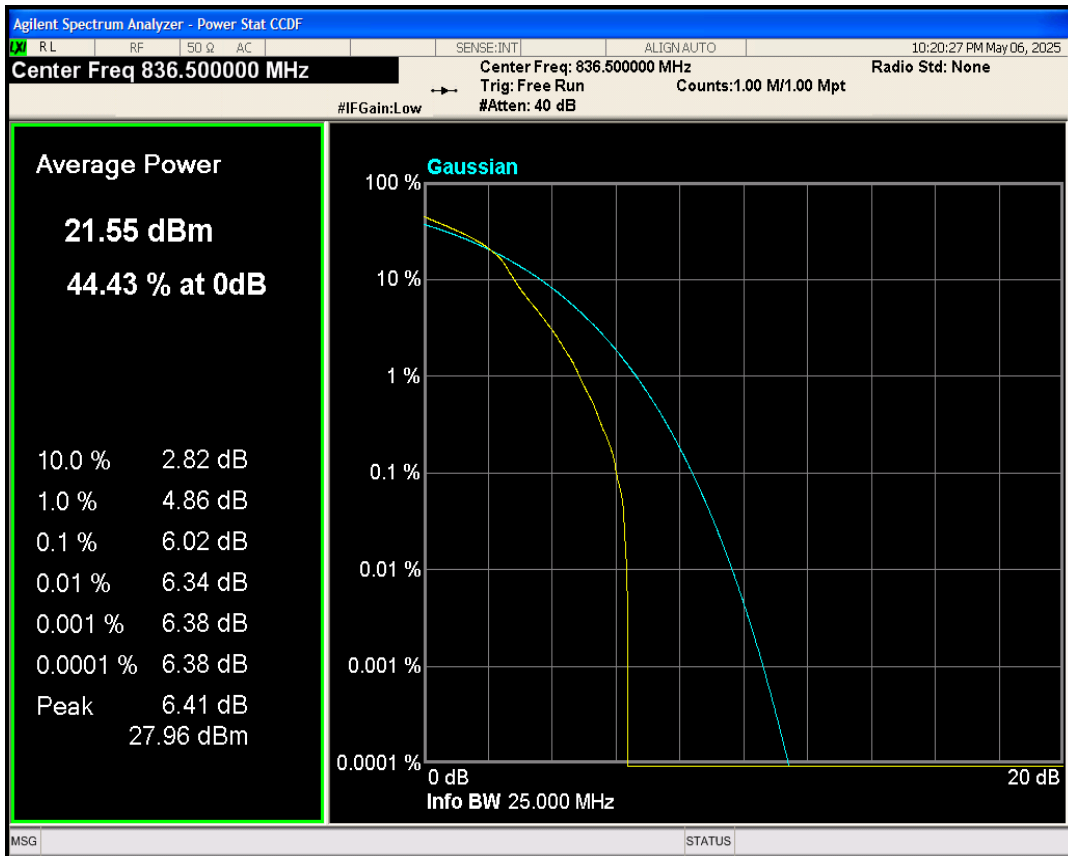




Band5 QPSK BW=1.4MHz Channel=20525 RB Size=1 Position=#0

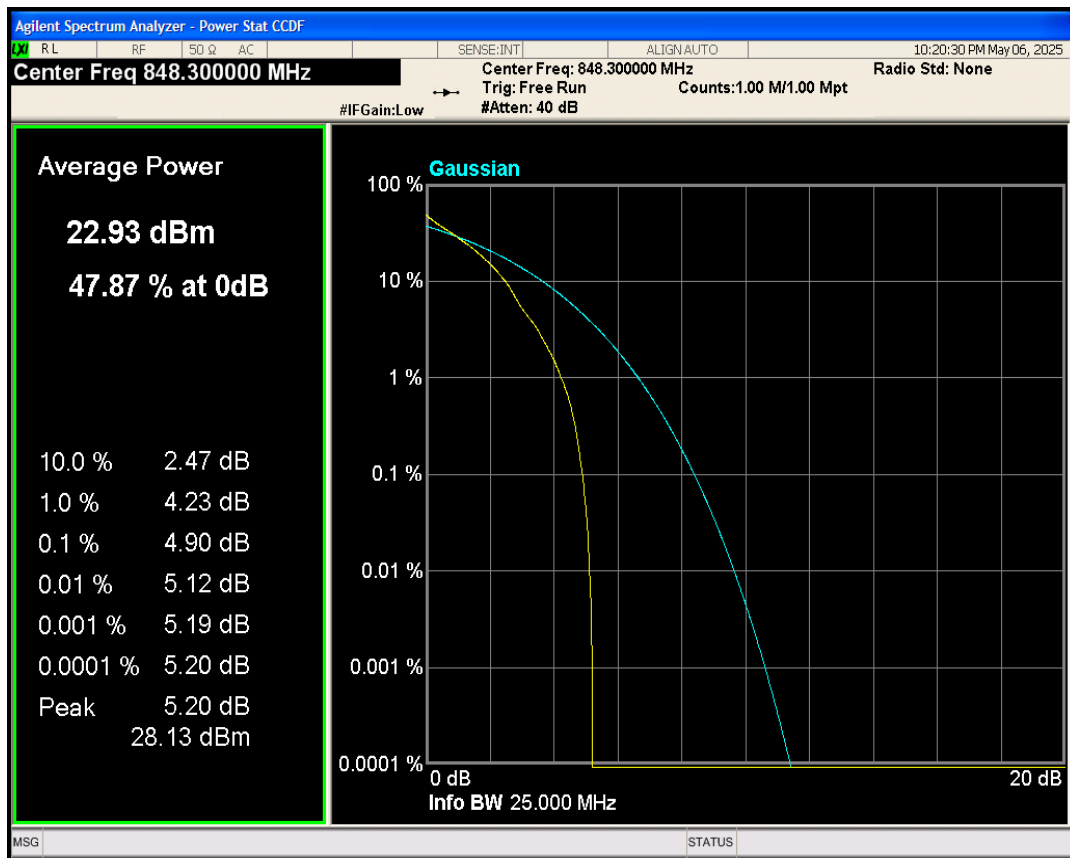


Band5 16QAM BW=1.4MHz Channel=20525 RB Size=1 Position=#0

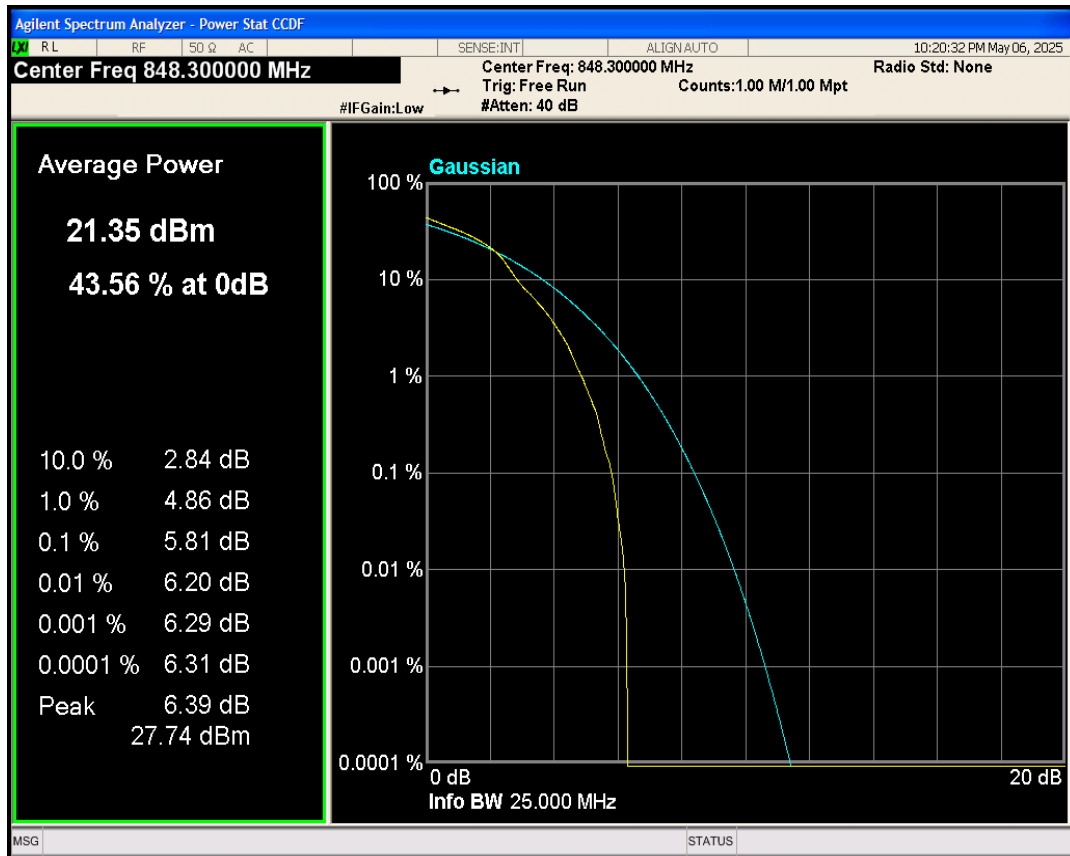




Band5 QPSK BW=1.4MHz Channel=20643 RB Size=1 Position=#0

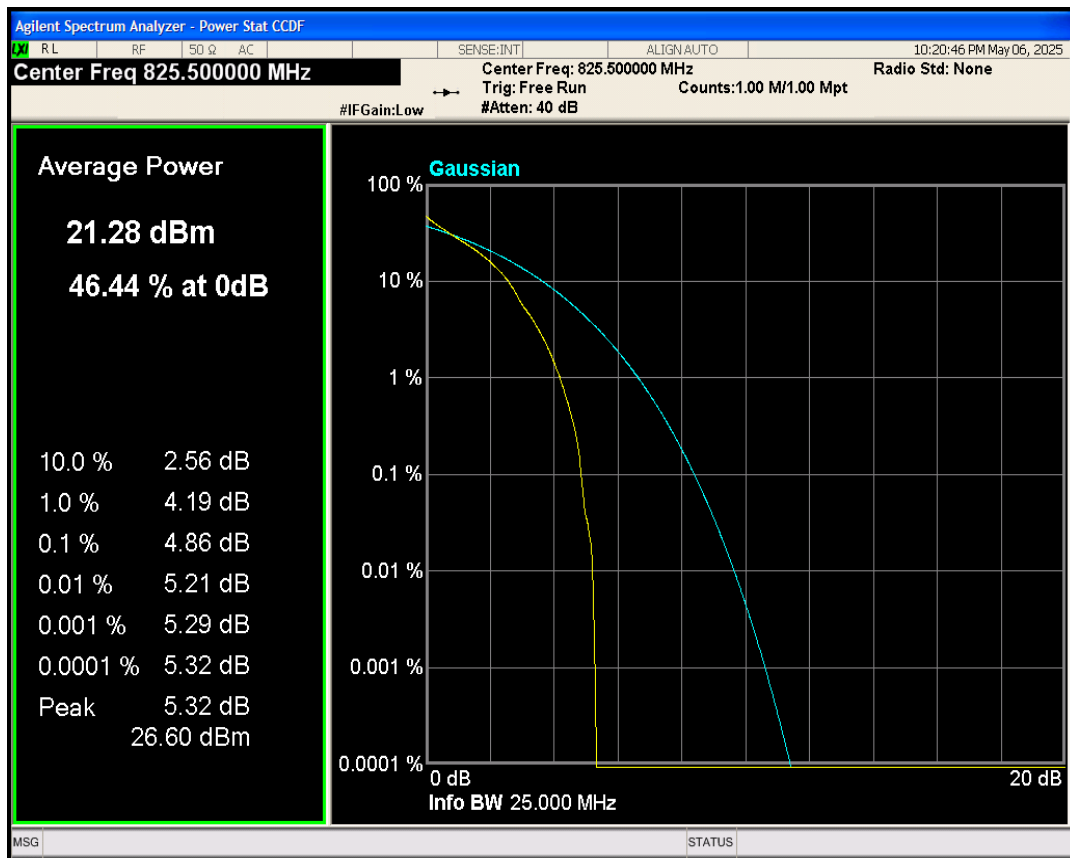


Band5 16QAM BW=1.4MHz Channel=20643 RB Size=1 Position=#0

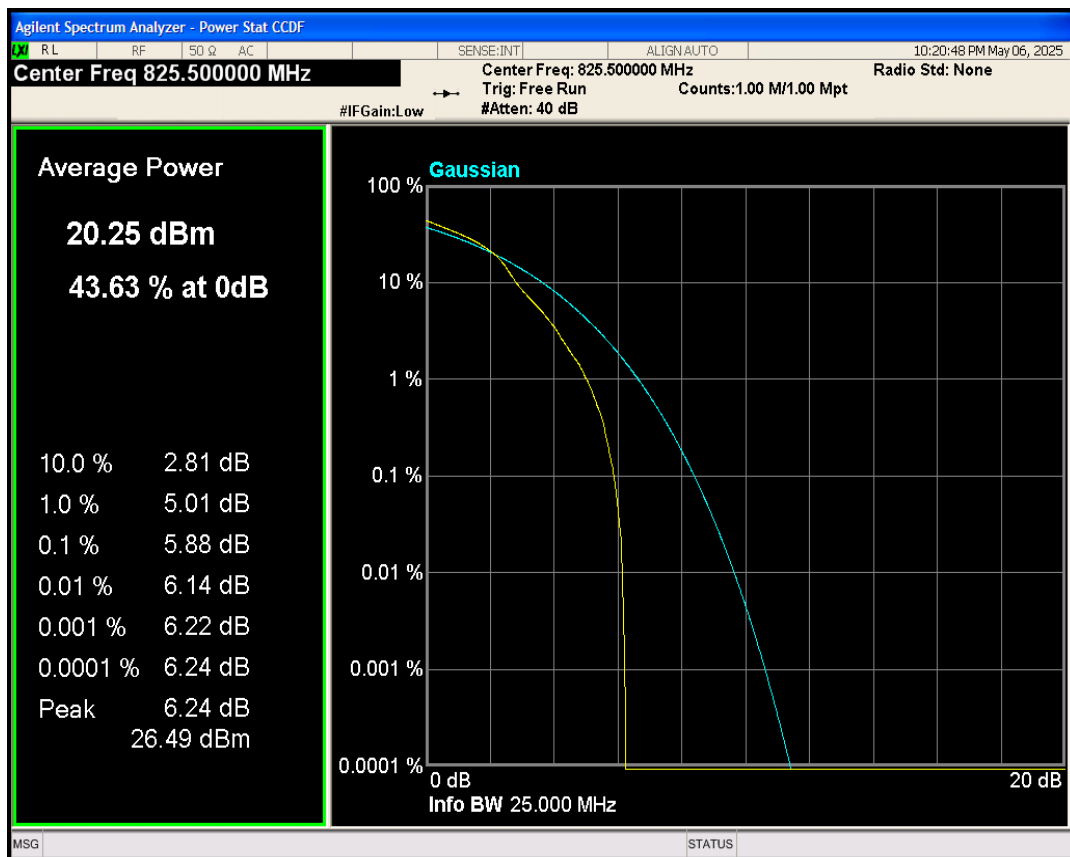




Band5 QPSK BW=3MHz Channel=20415 RB Size=1 Position=#0

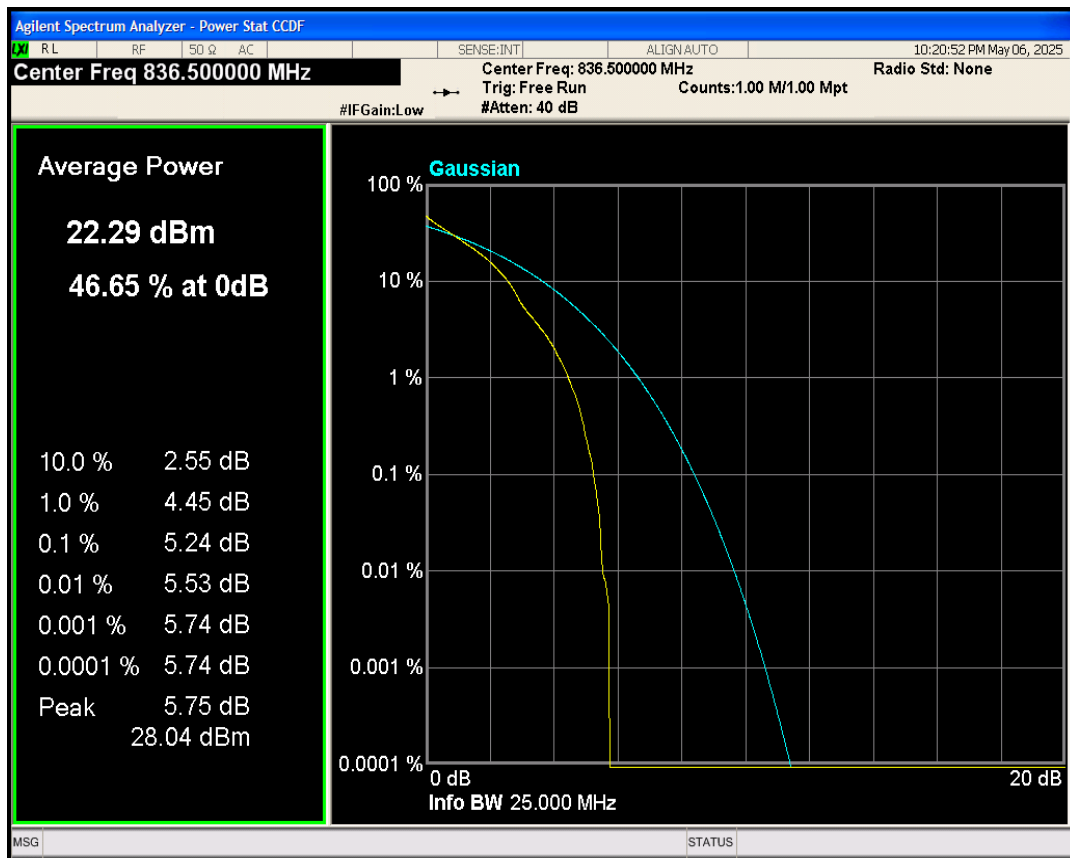


Band5 16QAM BW=3MHz Channel=20415 RB Size=1 Position=#0

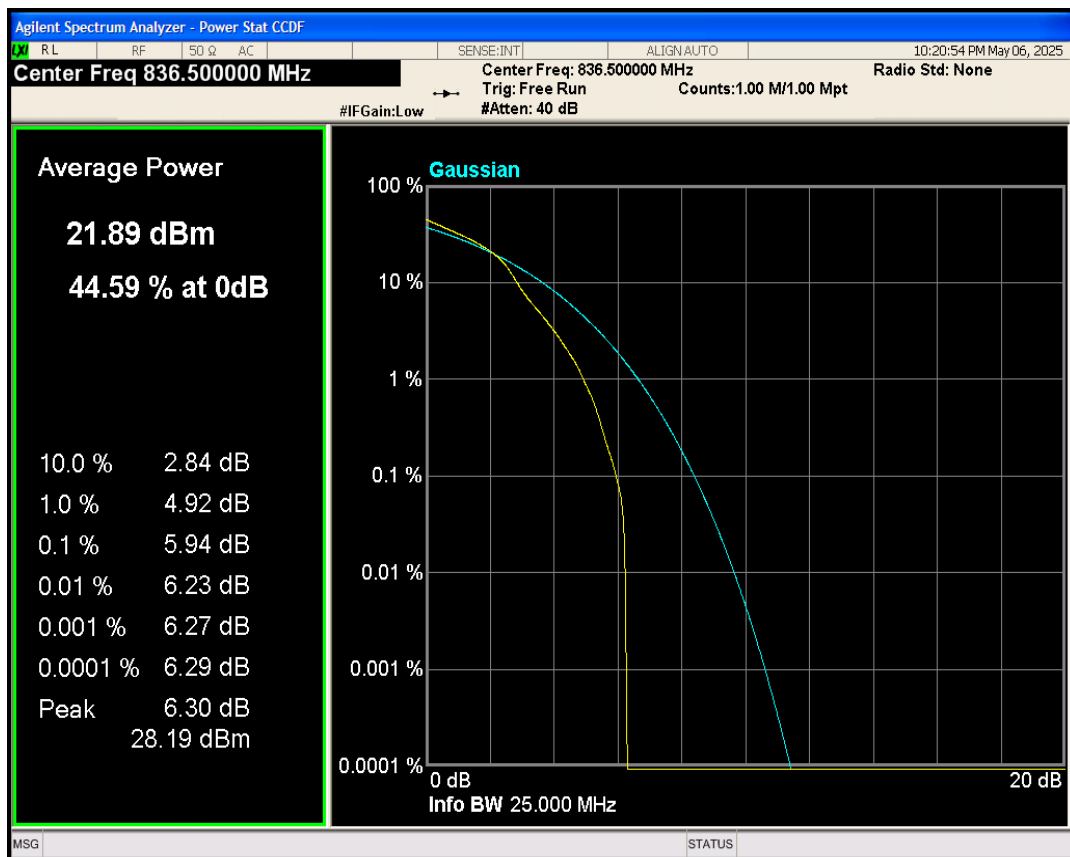




Band5 QPSK BW=3MHz Channel=20525 RB Size=1 Position=#0

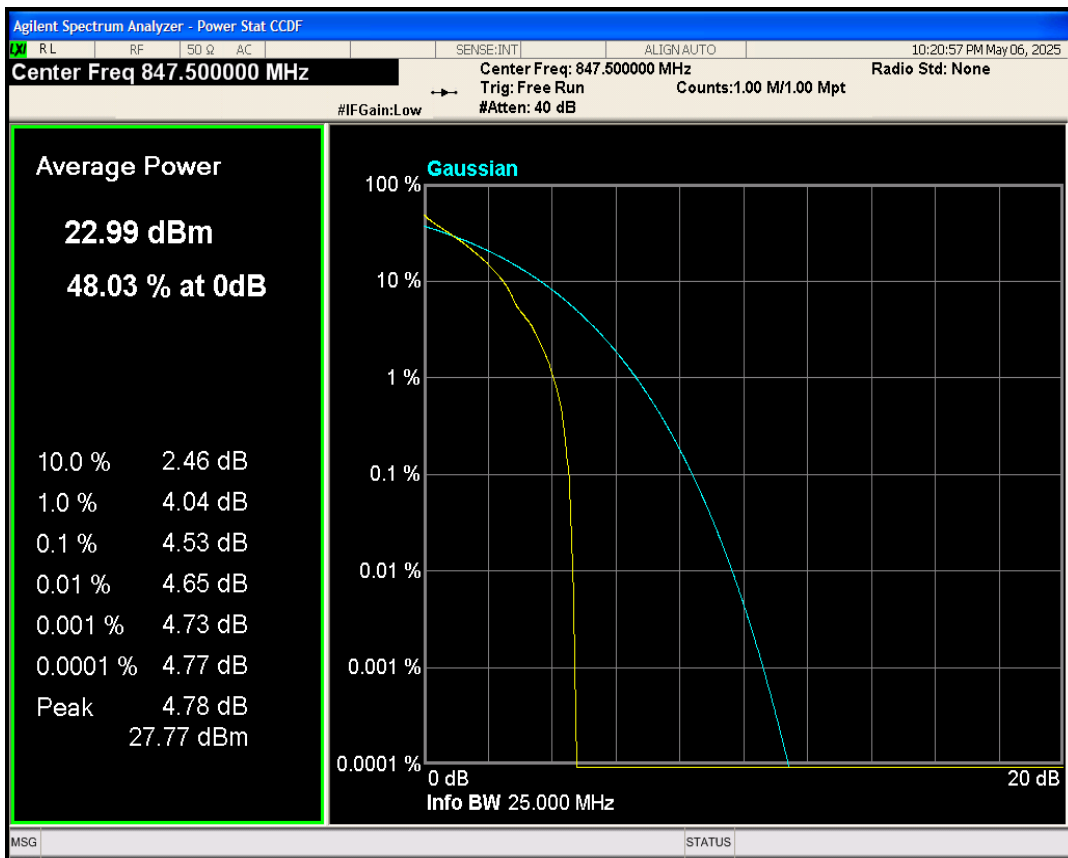


Band5 16QAM BW=3MHz Channel=20525 RB Size=1 Position=#0

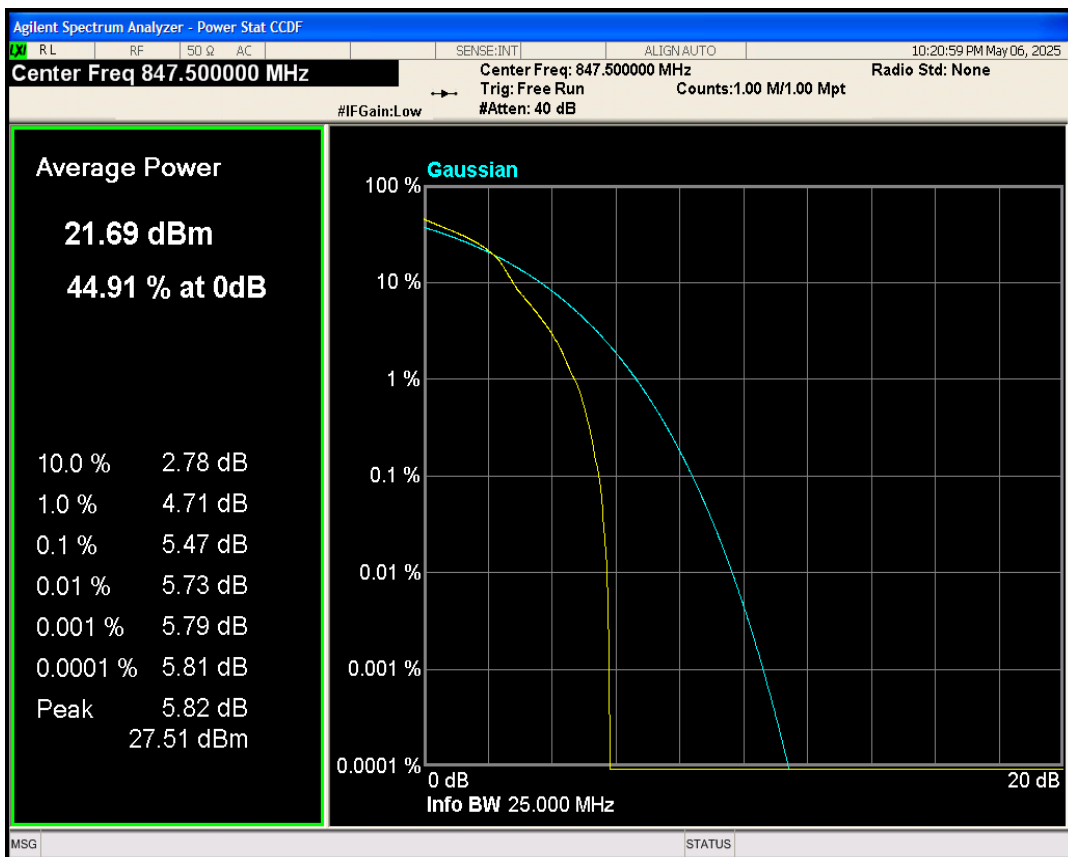




Band5 QPSK BW=3MHz Channel=20635 RB Size=1 Position=#0

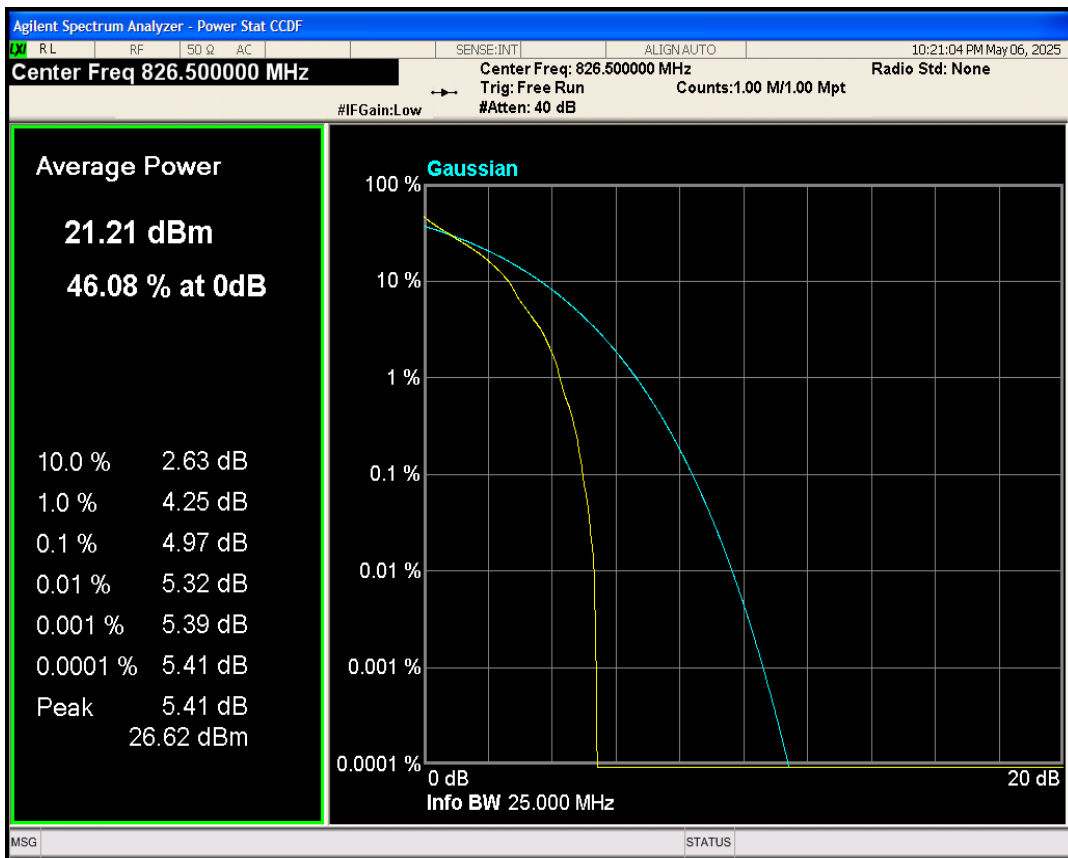


Band5 16QAM BW=3MHz Channel=20635 RB Size=1 Position=#0

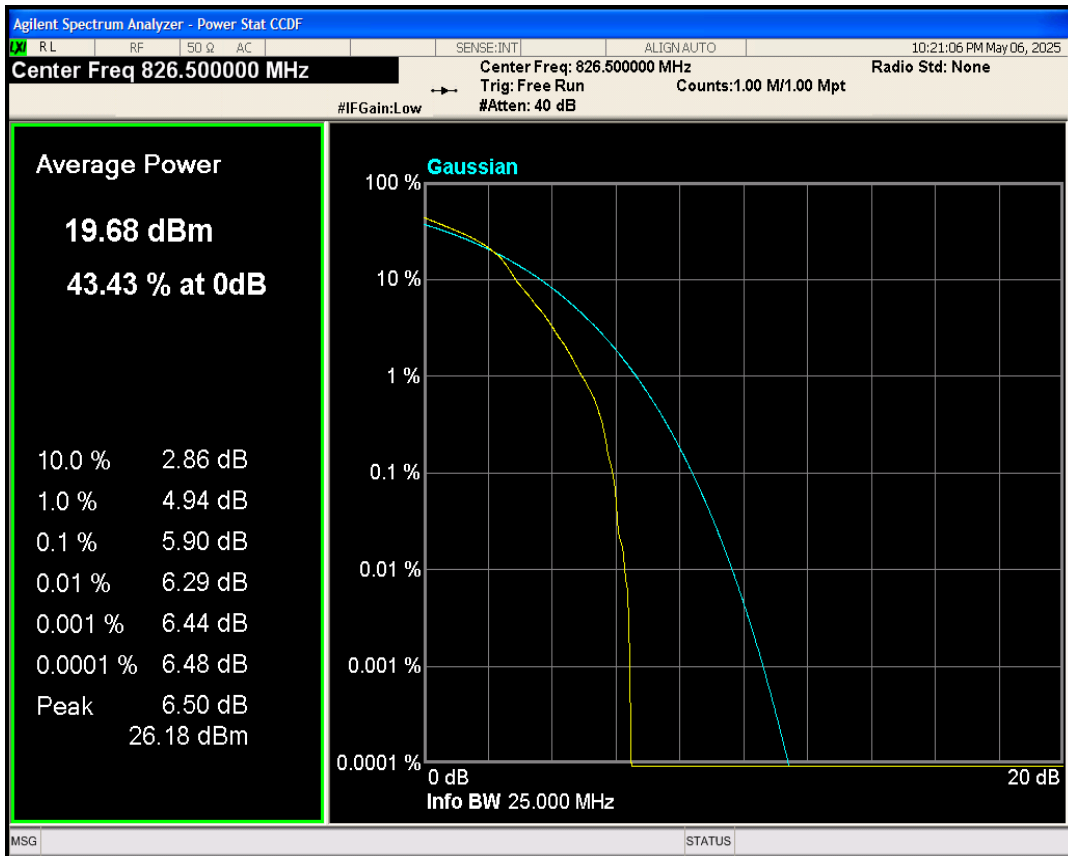




Band5 QPSK BW=5MHz Channel=20425 RB Size=1 Position=#0

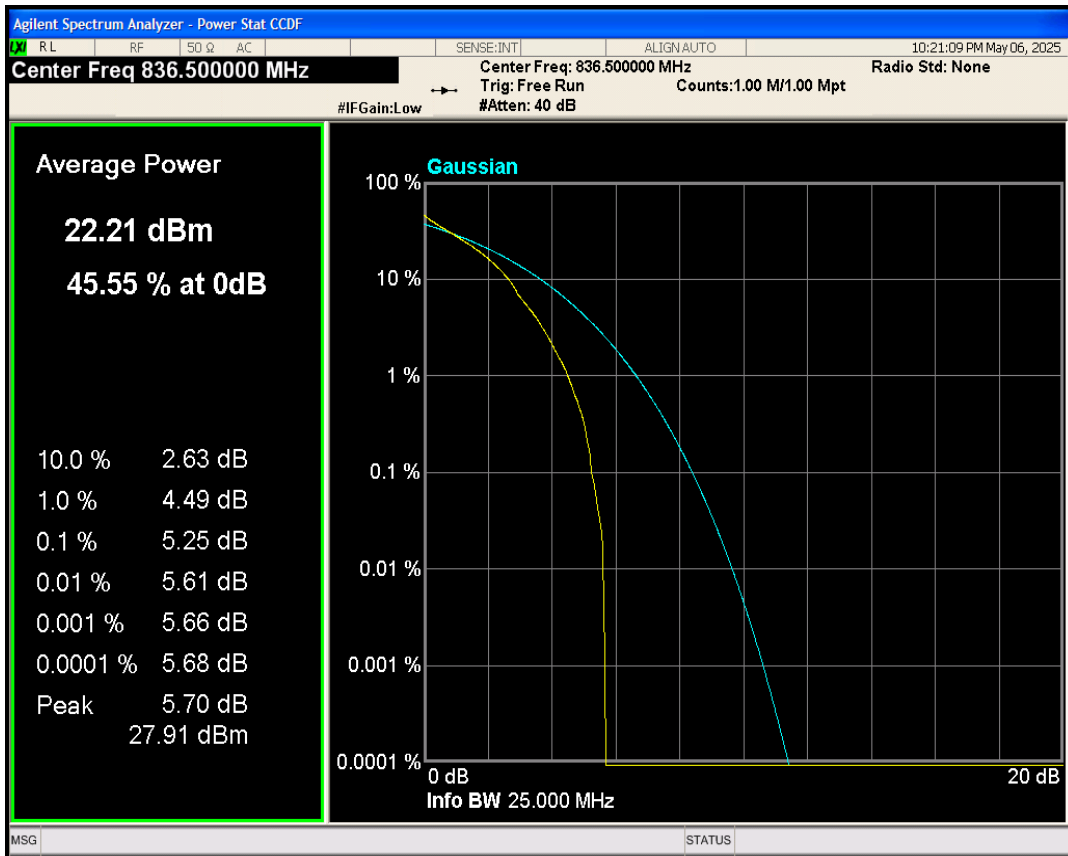


Band5 16QAM BW=5MHz Channel=20425 RB Size=1 Position=#0

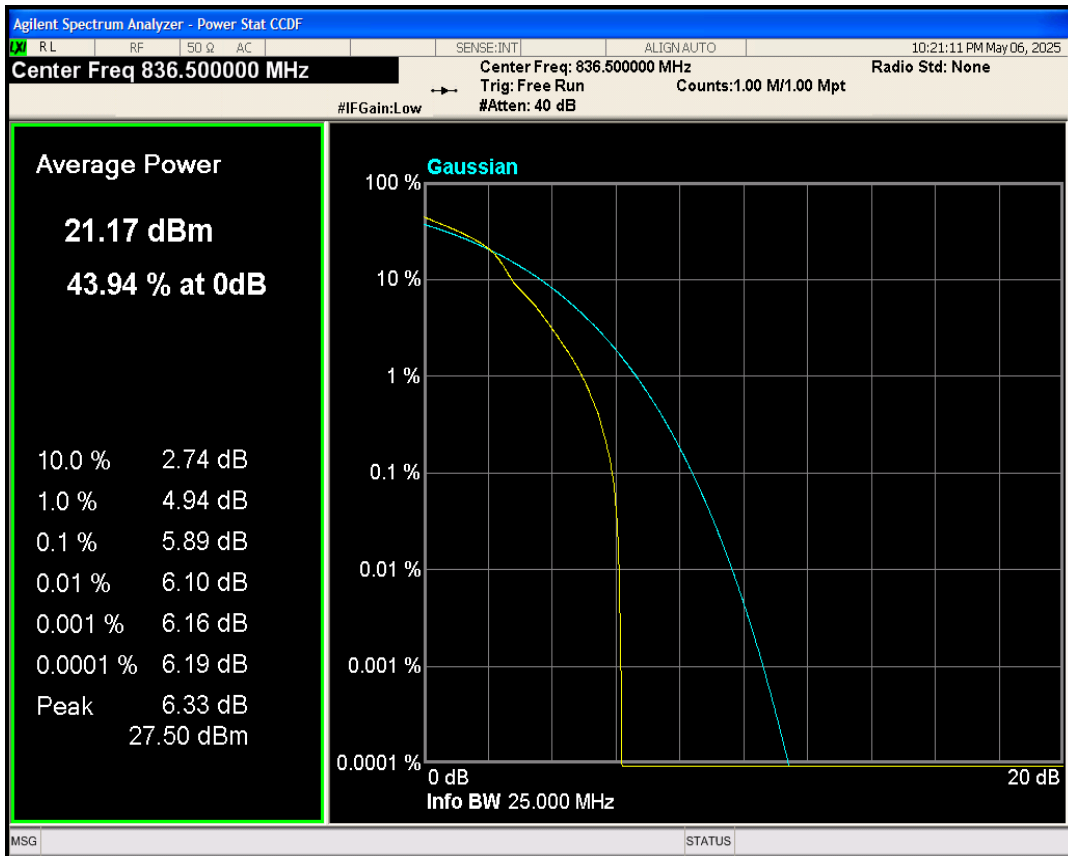




Band5 QPSK BW=5MHz Channel=20525 RB Size=1 Position=#0

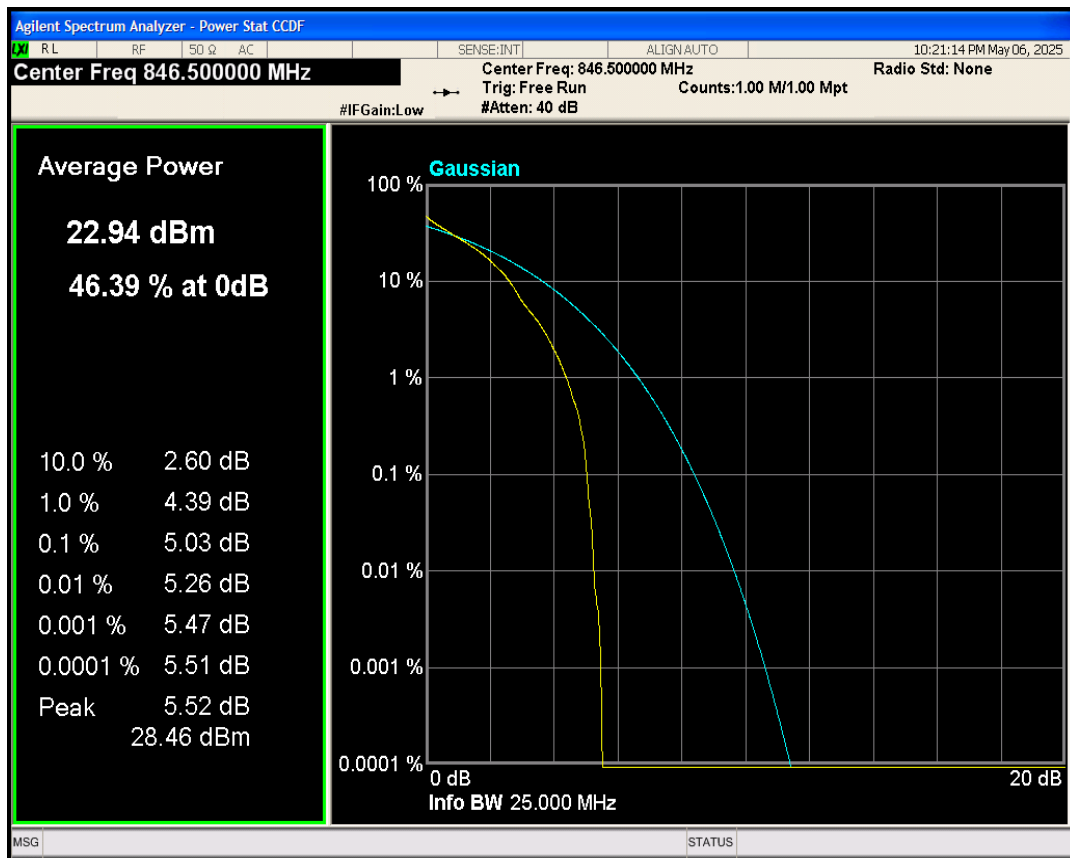


Band5 16QAM BW=5MHz Channel=20525 RB Size=1 Position=#0

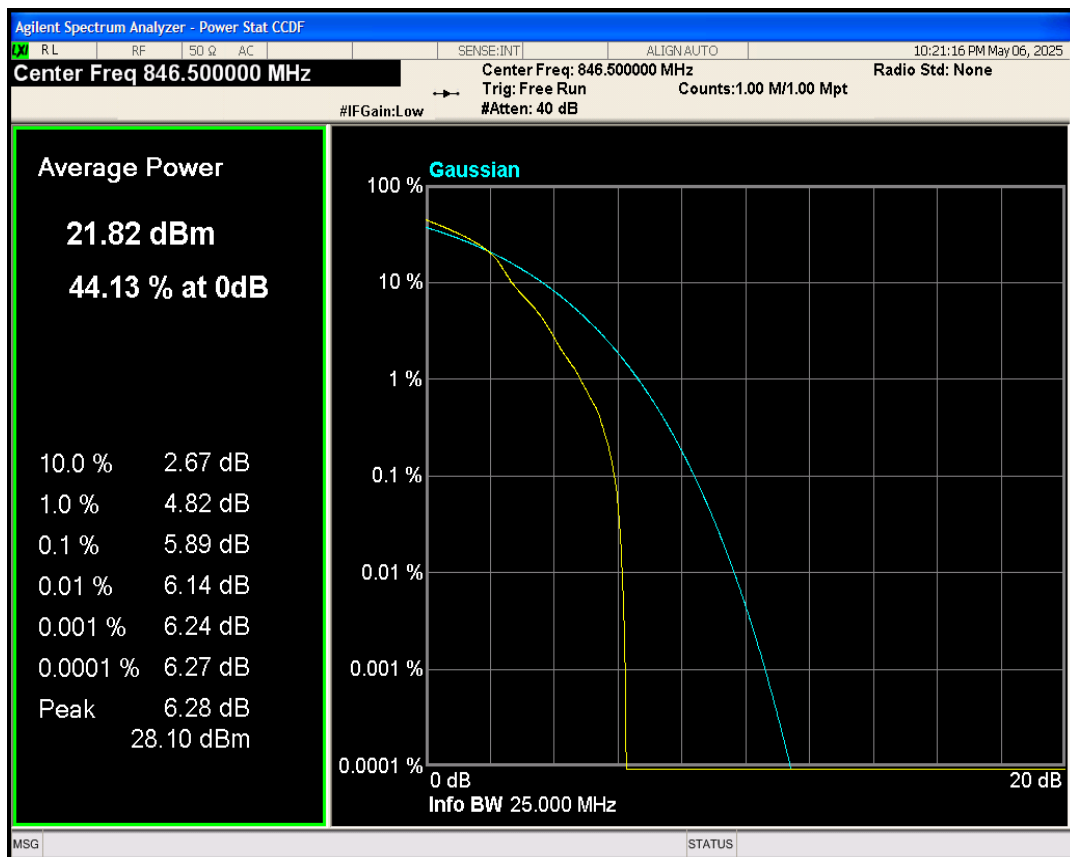




Band5 QPSK BW=5MHz Channel=20625 RB Size=1 Position=#0

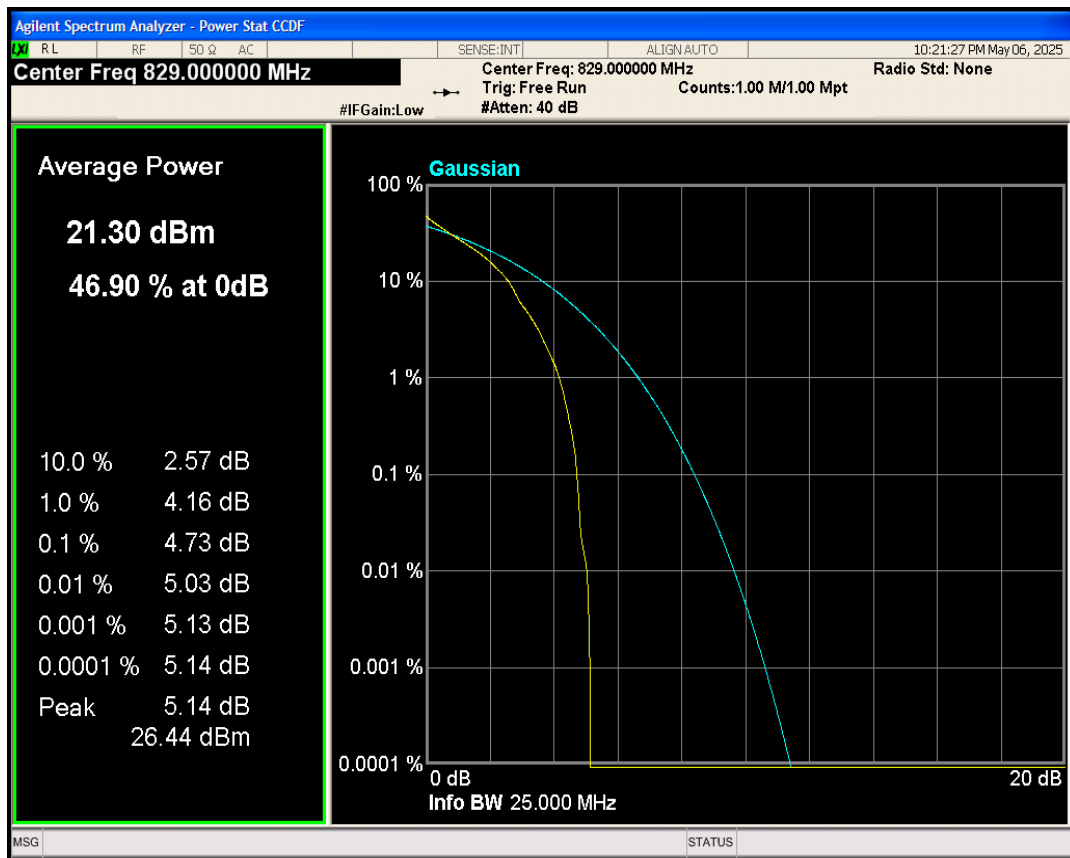


Band5 16QAM BW=5MHz Channel=20625 RB Size=1 Position=#0

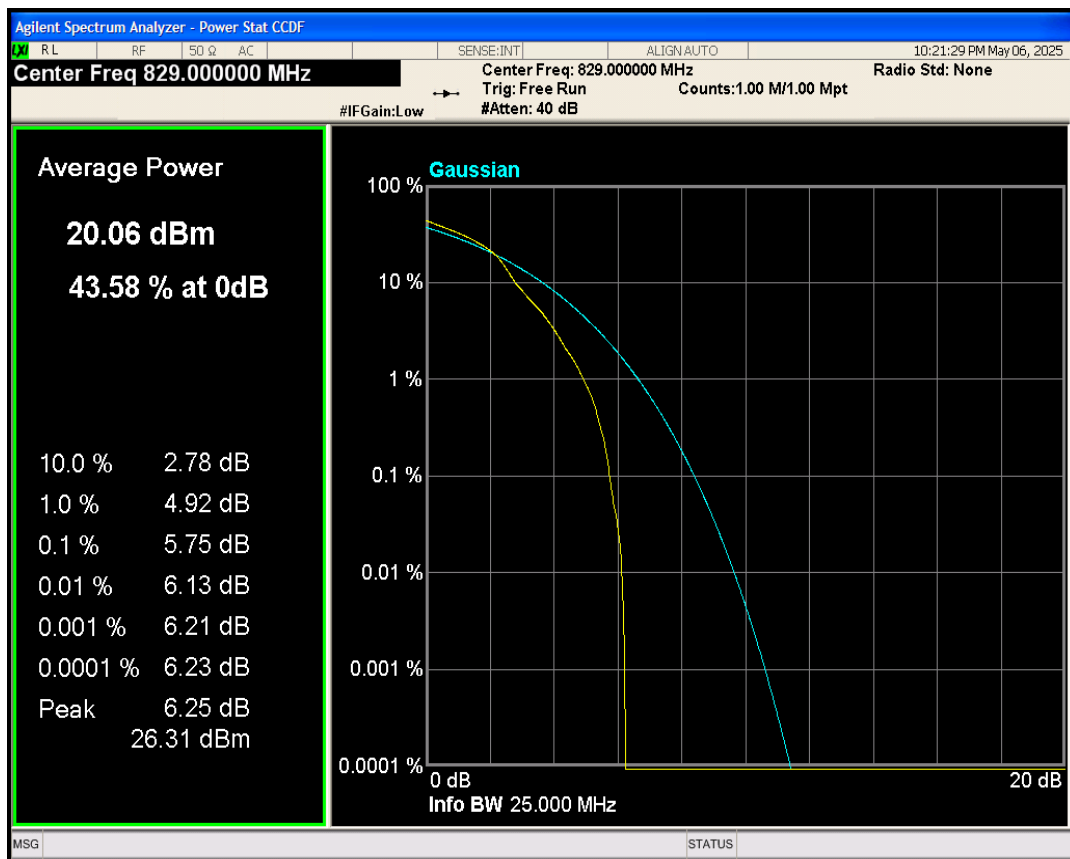




Band5 QPSK BW=10MHz Channel=20450 RB Size=1 Position=#0

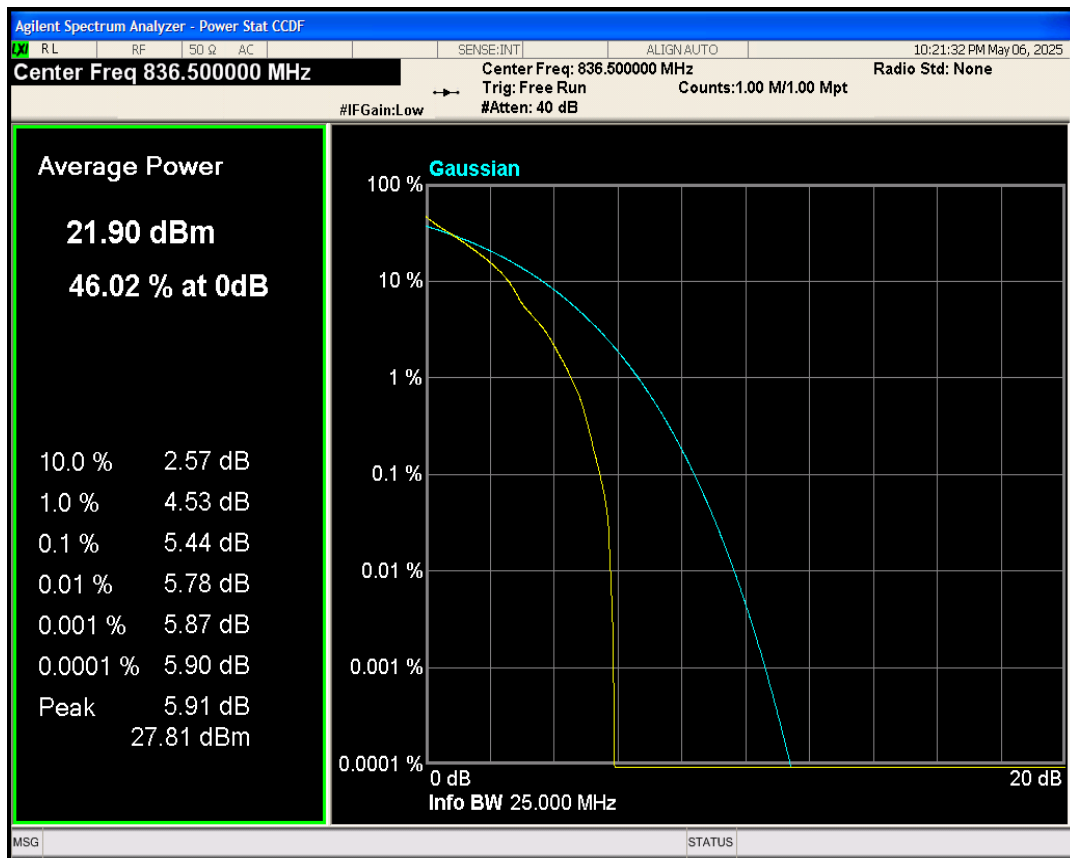


Band5 16QAM BW=10MHz Channel=20450 RB Size=1 Position=#0

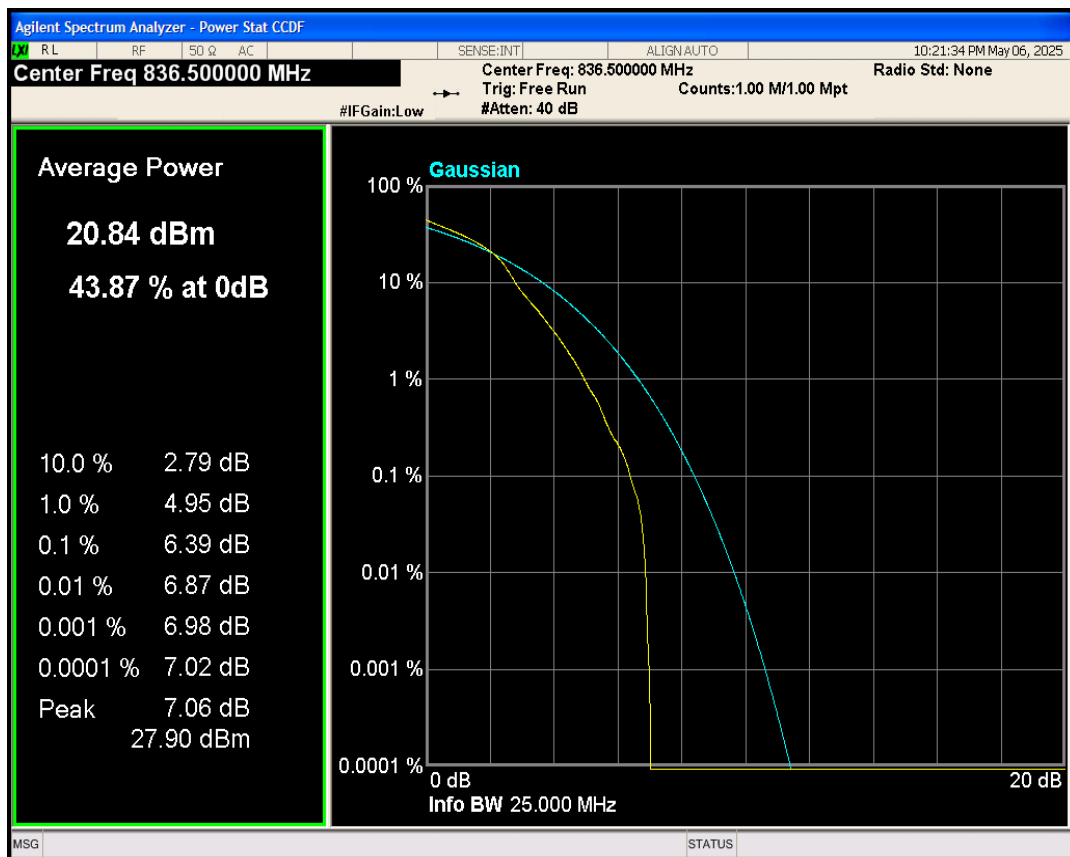




Band5 QPSK BW=10MHz Channel=20525 RB Size=1 Position=#0

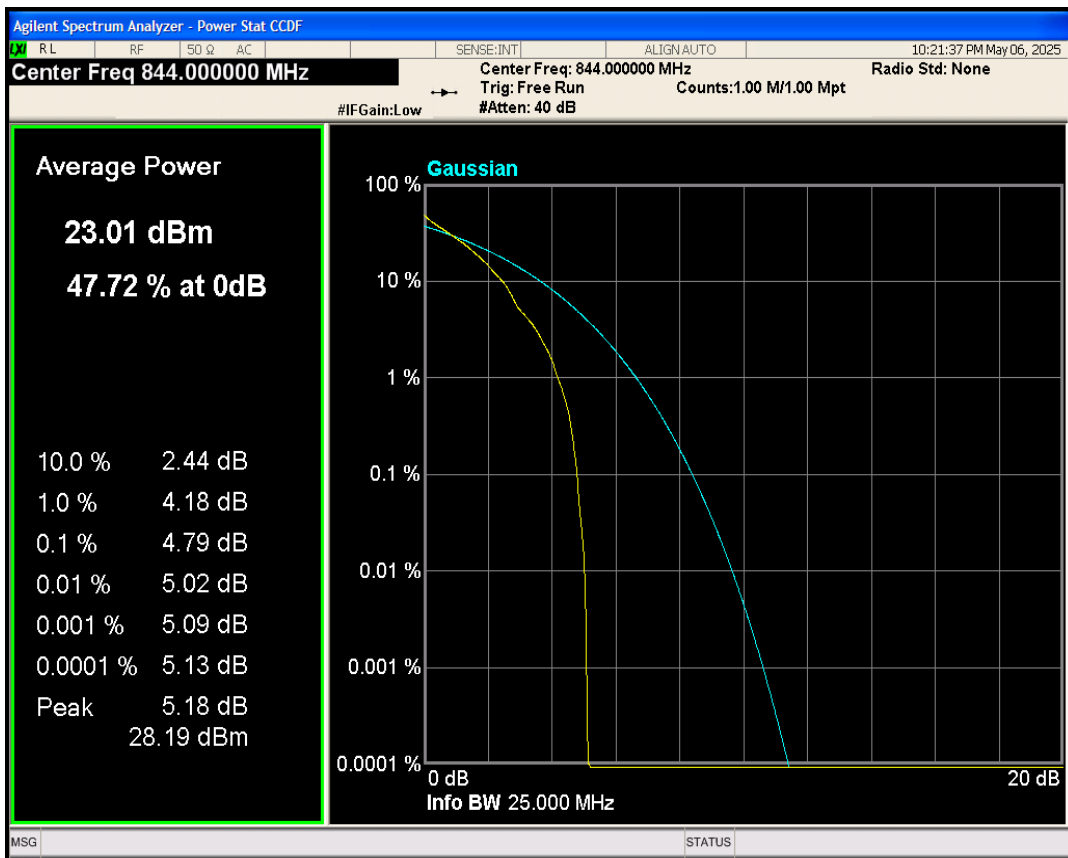


Band5 16QAM BW=10MHz Channel=20525 RB Size=1 Position=#0

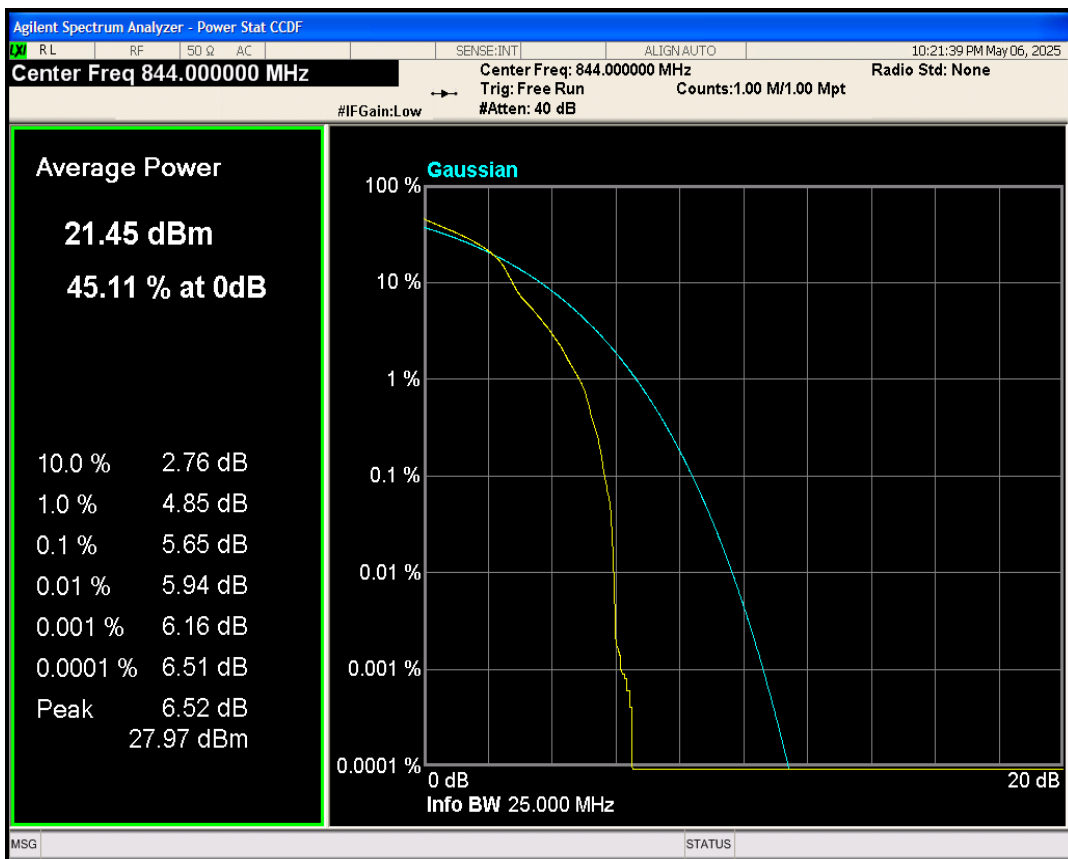




Band5 QPSK BW=10MHz Channel=20600 RB Size=1 Position=#0



Band5 16QAM BW=10MHz Channel=20600 RB Size=1 Position=#0

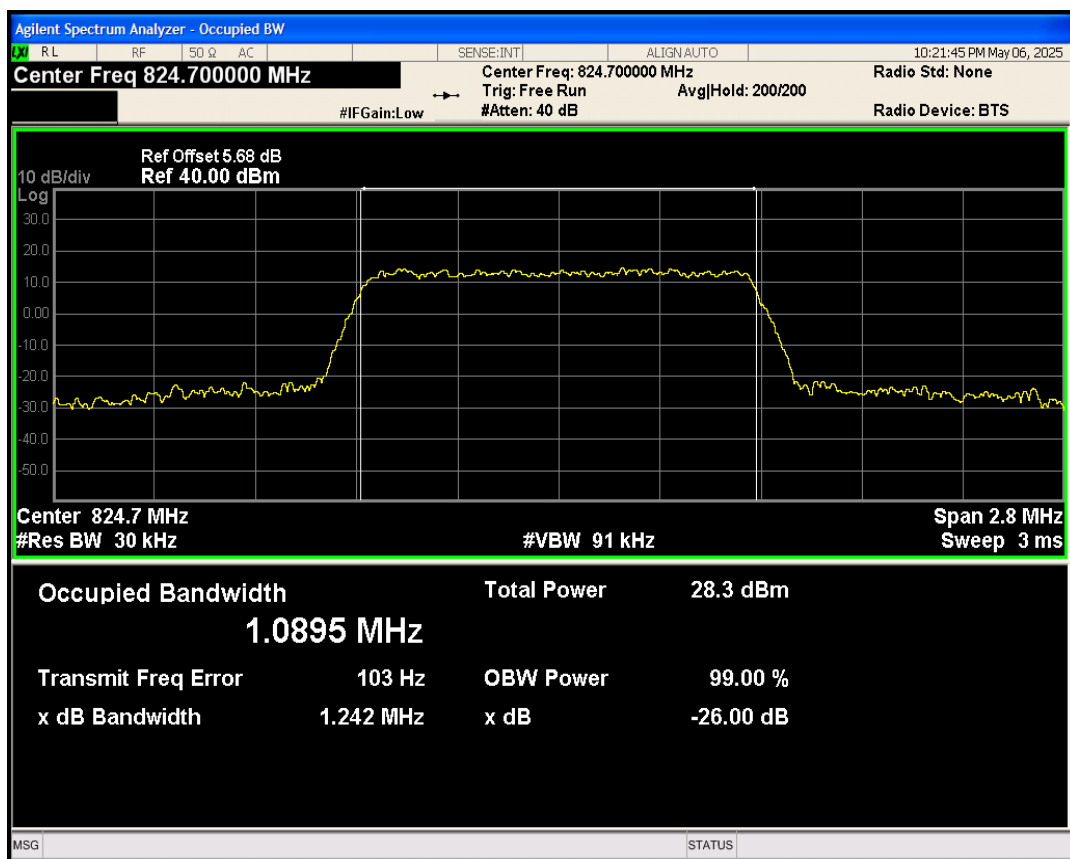


Appendix 4. Occupied bandwidth

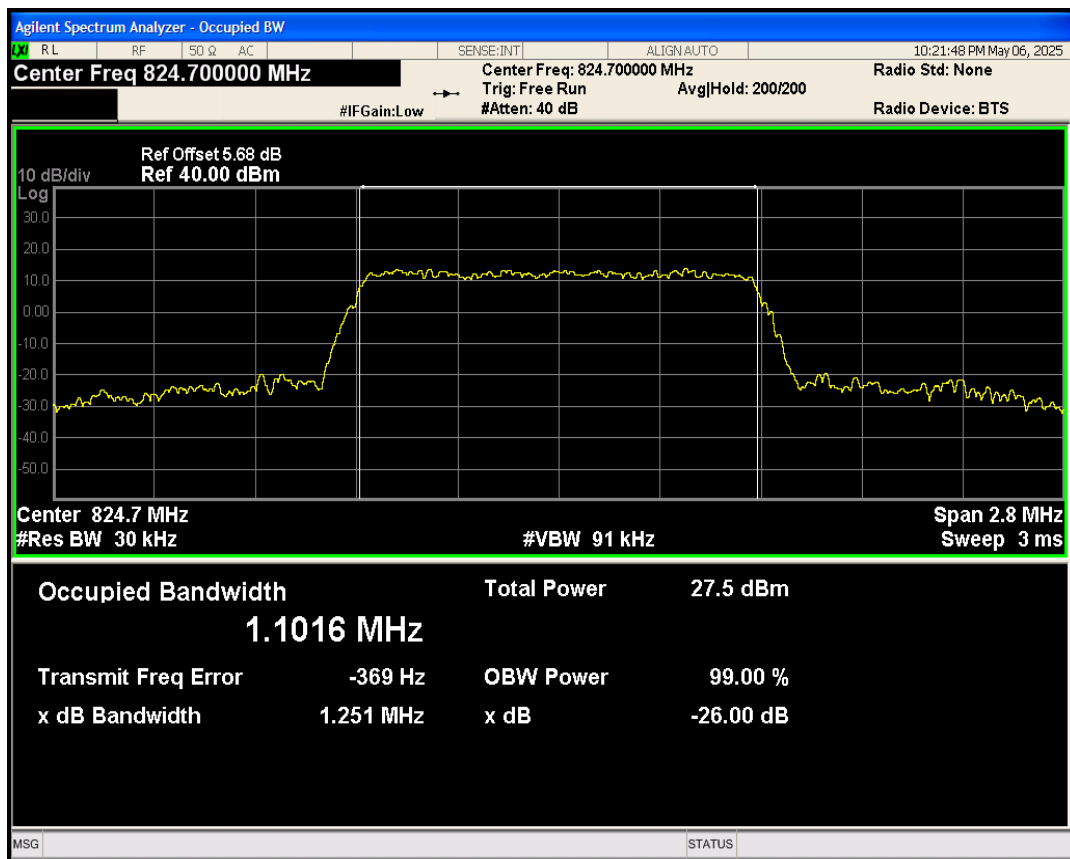
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% OBW (MHz)	-26dB EBW (MHz)	Verdict
Band5	1.4	20407	6	#0	QPSK	1.089	1.242	PASS
Band5	1.4	20407	6	#0	16QAM	1.102	1.251	PASS
Band5	1.4	20525	6	#0	QPSK	1.099	1.246	PASS
Band5	1.4	20525	6	#0	16QAM	1.098	1.241	PASS
Band5	1.4	20643	6	#0	QPSK	1.098	1.247	PASS
Band5	1.4	20643	6	#0	16QAM	1.101	1.245	PASS
Band5	3	20415	15	#0	QPSK	2.713	3.037	PASS
Band5	3	20415	15	#0	16QAM	2.703	3.032	PASS
Band5	3	20525	15	#0	QPSK	2.705	3.026	PASS
Band5	3	20525	15	#0	16QAM	2.704	3.055	PASS
Band5	3	20635	15	#0	QPSK	2.712	3.058	PASS
Band5	3	20635	15	#0	16QAM	2.716	3.065	PASS
Band5	5	20425	25	#0	QPSK	4.527	4.958	PASS
Band5	5	20425	25	#0	16QAM	4.493	4.964	PASS
Band5	5	20525	25	#0	QPSK	4.507	4.971	PASS
Band5	5	20525	25	#0	16QAM	4.504	4.911	PASS
Band5	5	20625	25	#0	QPSK	4.509	4.993	PASS
Band5	5	20625	25	#0	16QAM	4.511	4.941	PASS
Band5	10	20450	50	#0	QPSK	9.026	9.785	PASS
Band5	10	20450	50	#0	16QAM	9.007	9.849	PASS
Band5	10	20525	50	#0	QPSK	8.972	9.690	PASS
Band5	10	20525	50	#0	16QAM	8.972	9.838	PASS
Band5	10	20600	50	#0	QPSK	8.954	9.779	PASS
Band5	10	20600	50	#0	16QAM	8.946	9.708	PASS



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

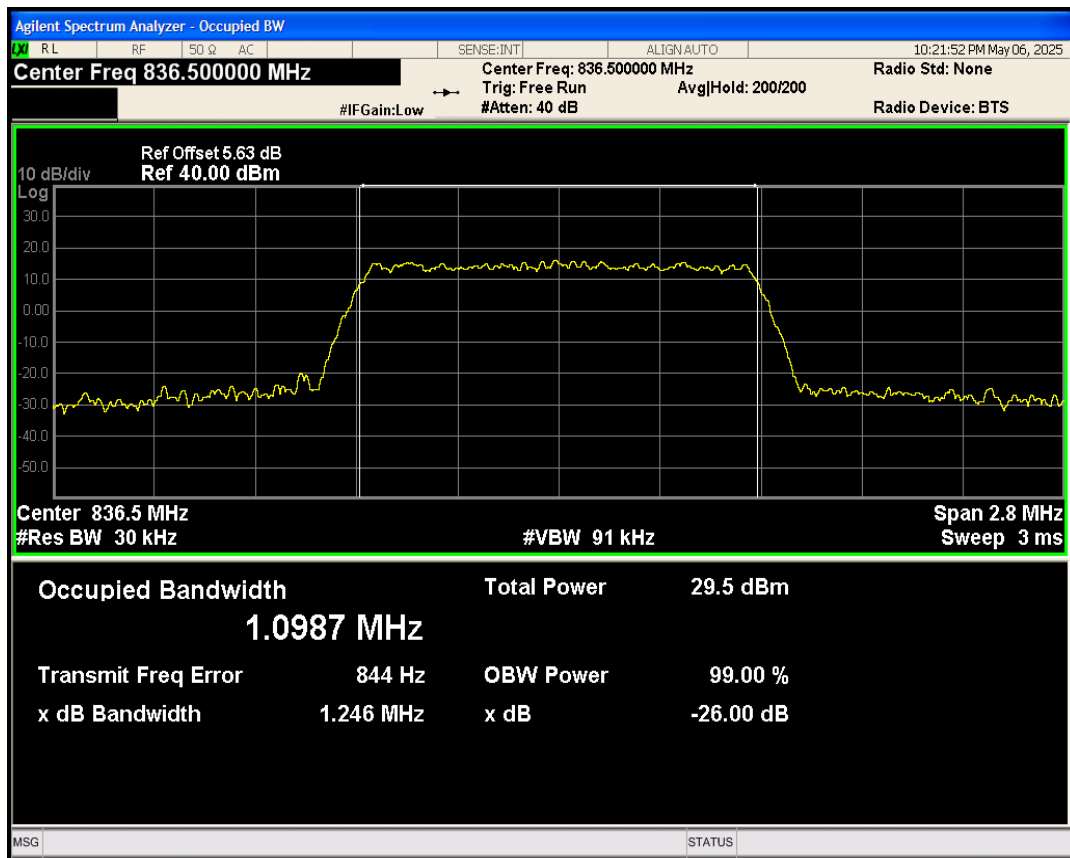


Band5 16QAM BW=1.4MHz Channel=20407 RB Size=6 Position=#0

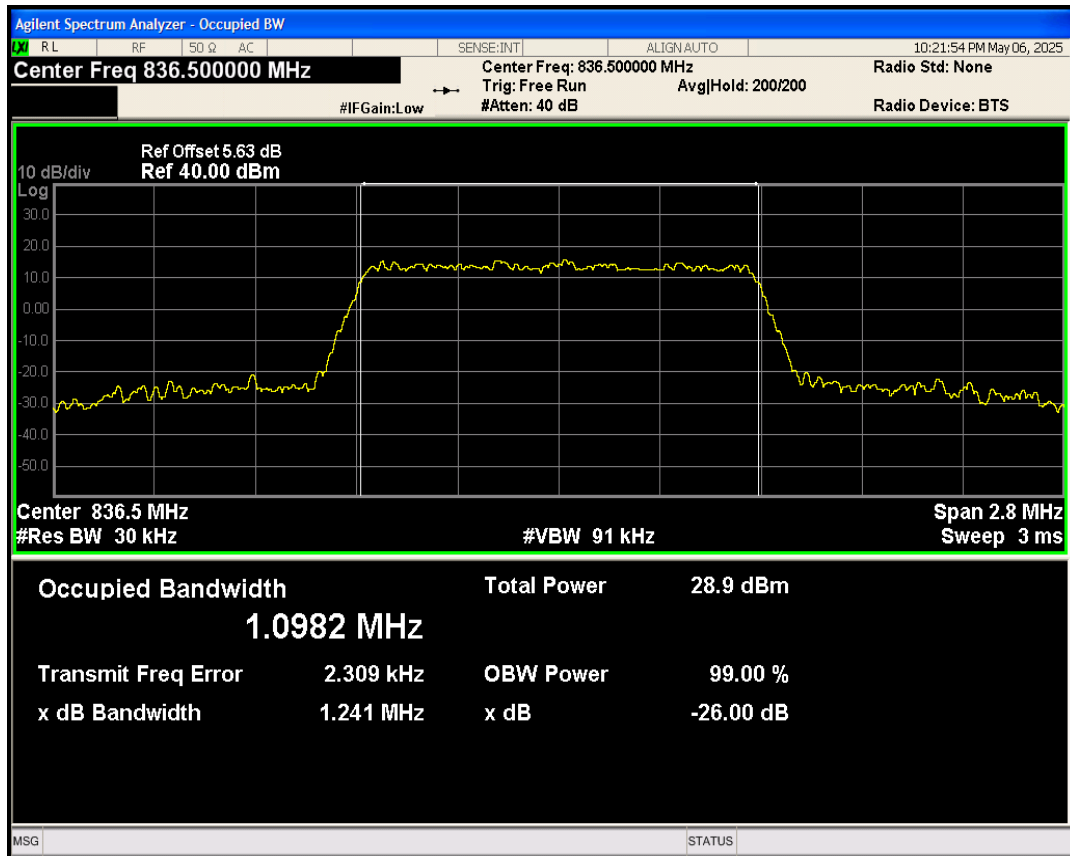




Band5 QPSK BW=1.4MHz Channel=20525 RB Size=6 Position=#0

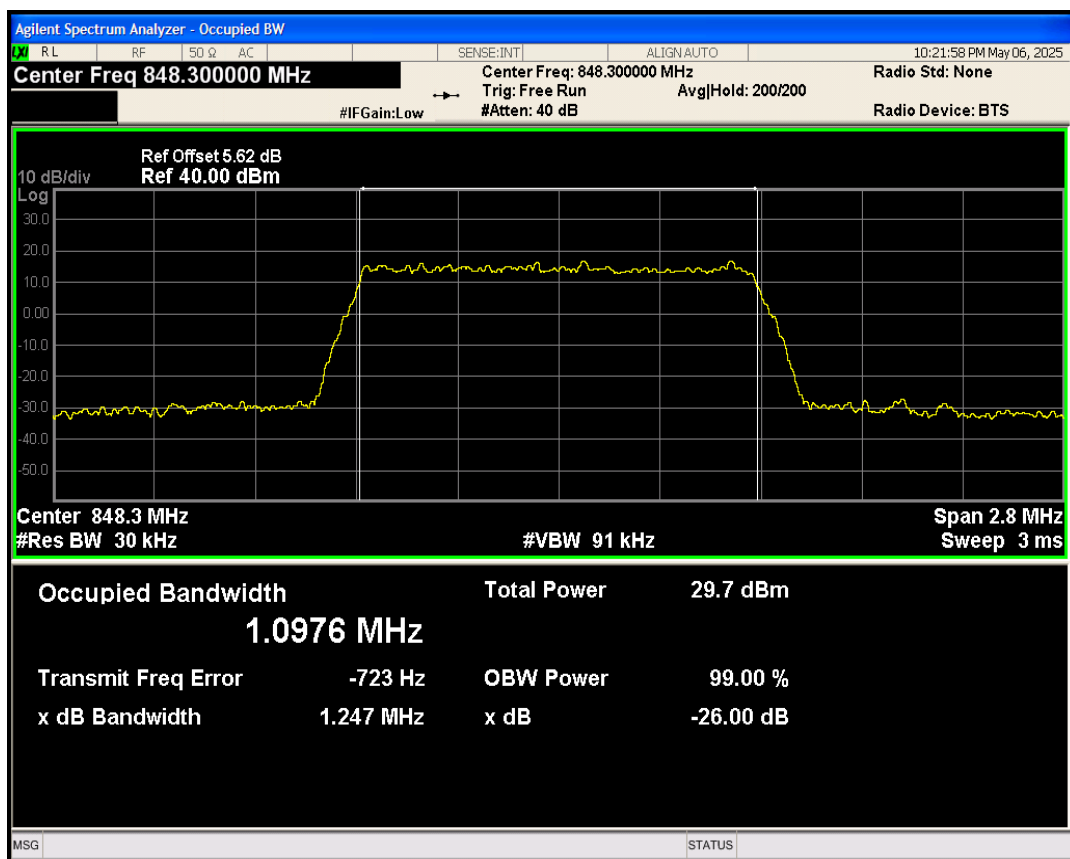


Band5 16QAM BW=1.4MHz Channel=20525 RB Size=6 Position=#0

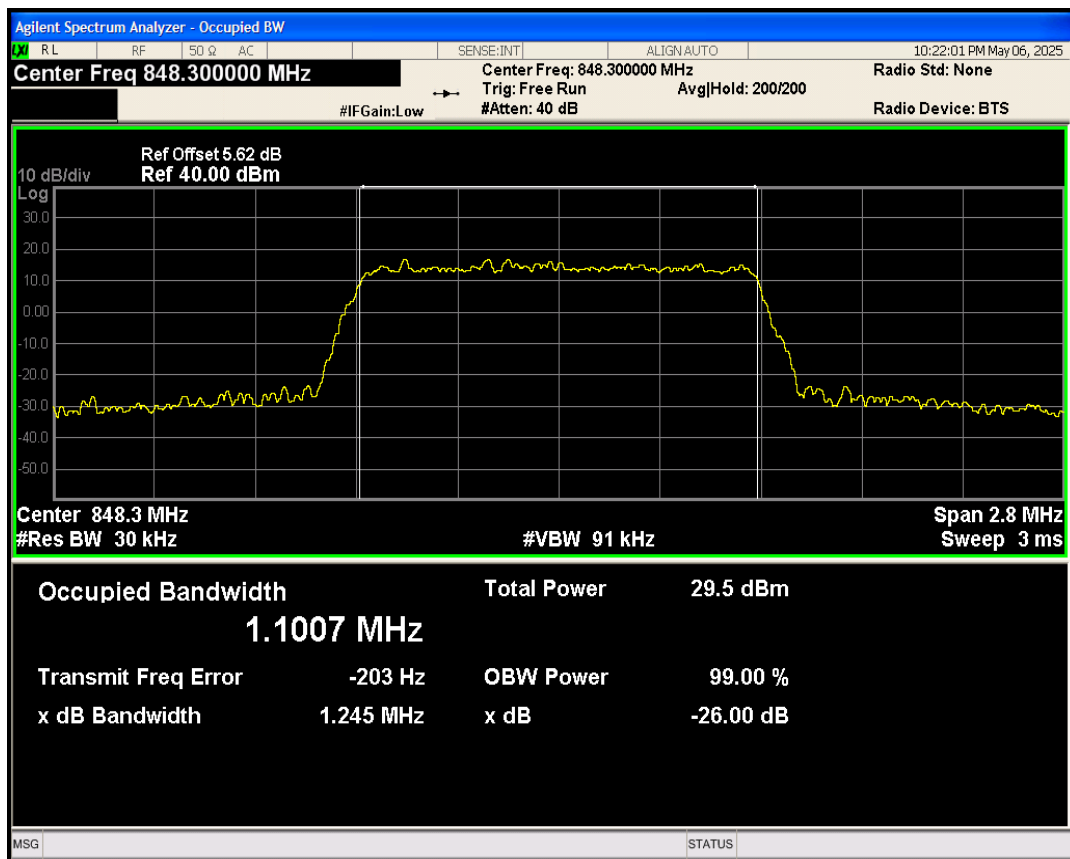




Band5 QPSK BW=1.4MHz Channel=20643 RB Size=6 Position=#0

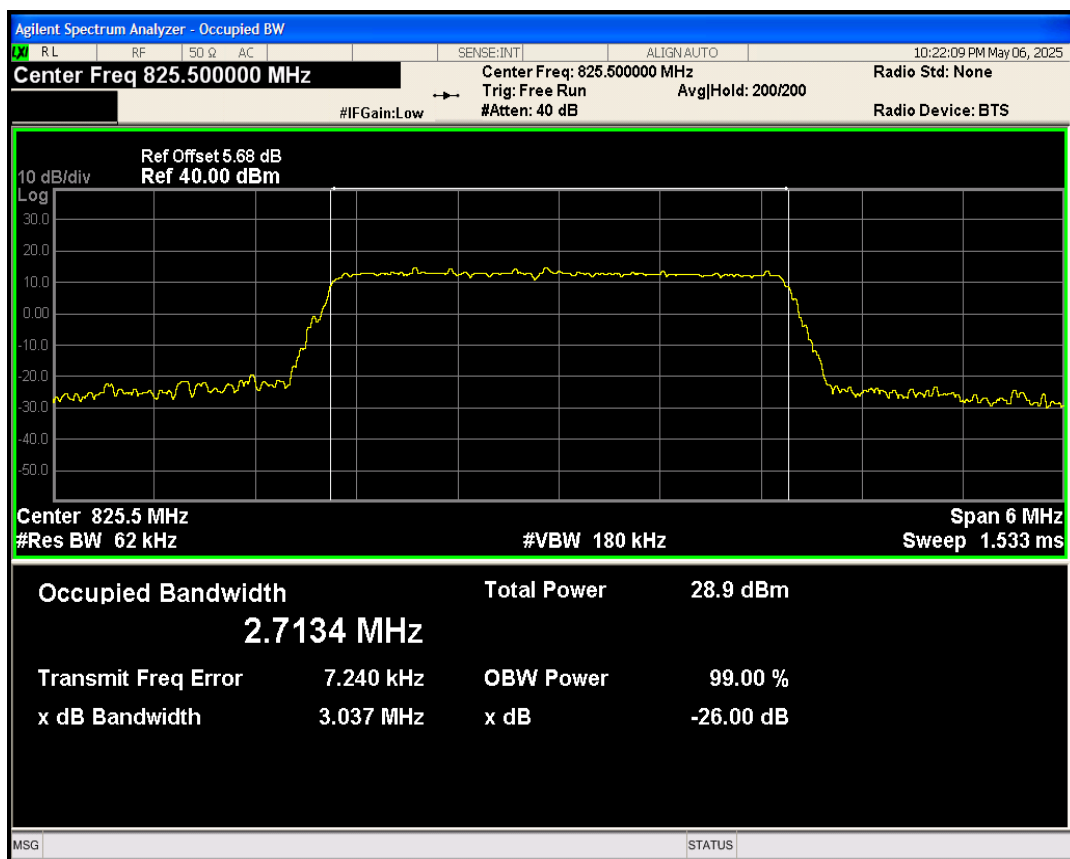


Band5 16QAM BW=1.4MHz Channel=20643 RB Size=6 Position=#0

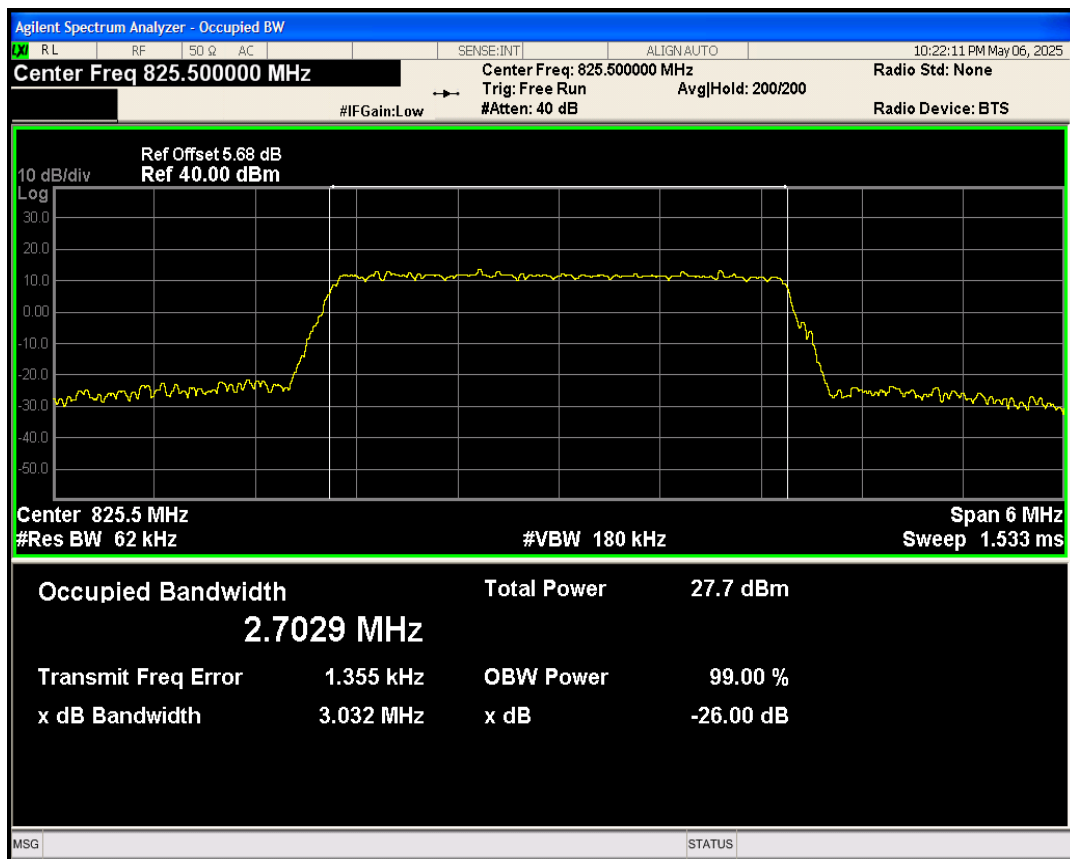




Band5 QPSK BW=3MHz Channel=20415 RB Size=15 Position=#0

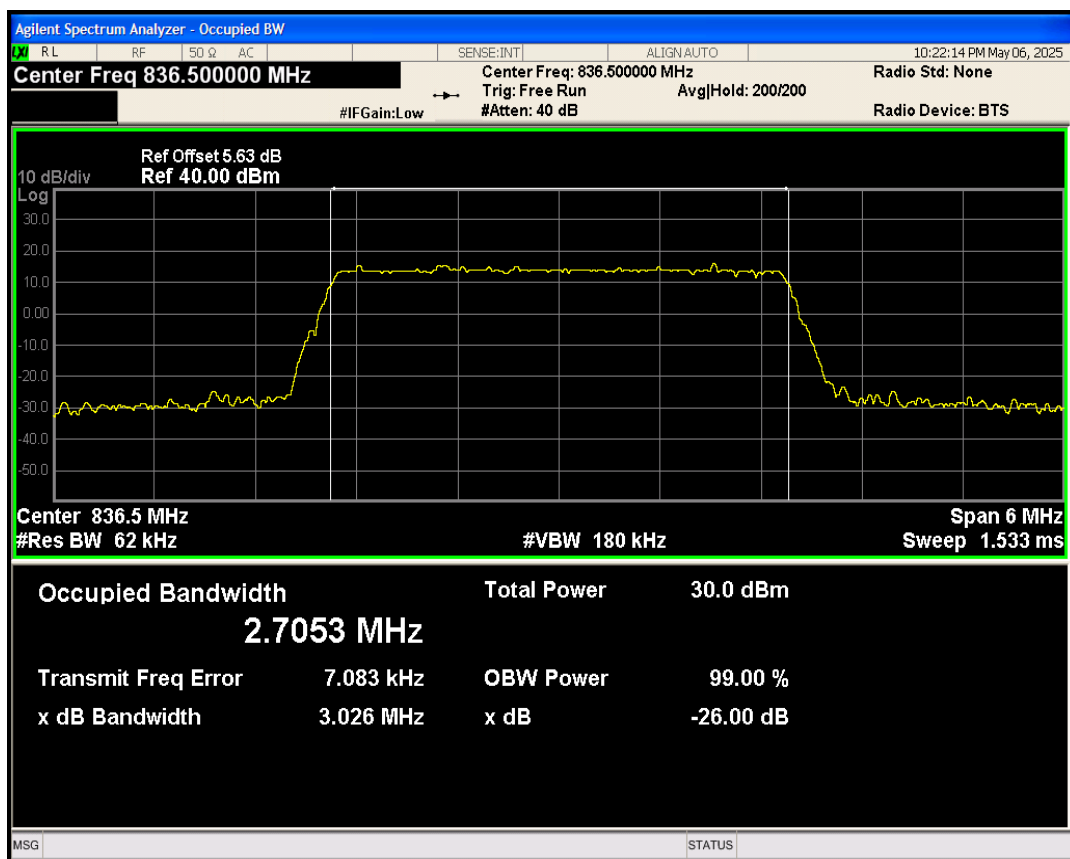


Band5 16QAM BW=3MHz Channel=20415 RB Size=15 Position=#0

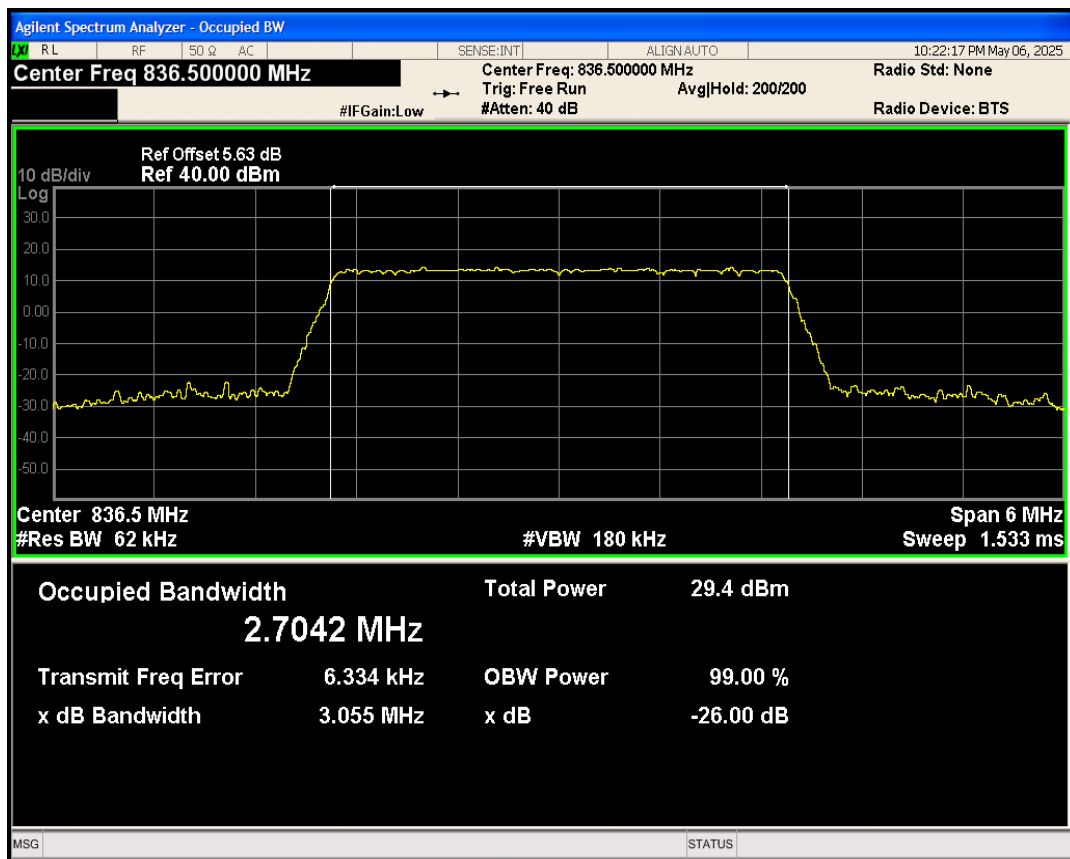




Band5 QPSK BW=3MHz Channel=20525 RB Size=15 Position=#0

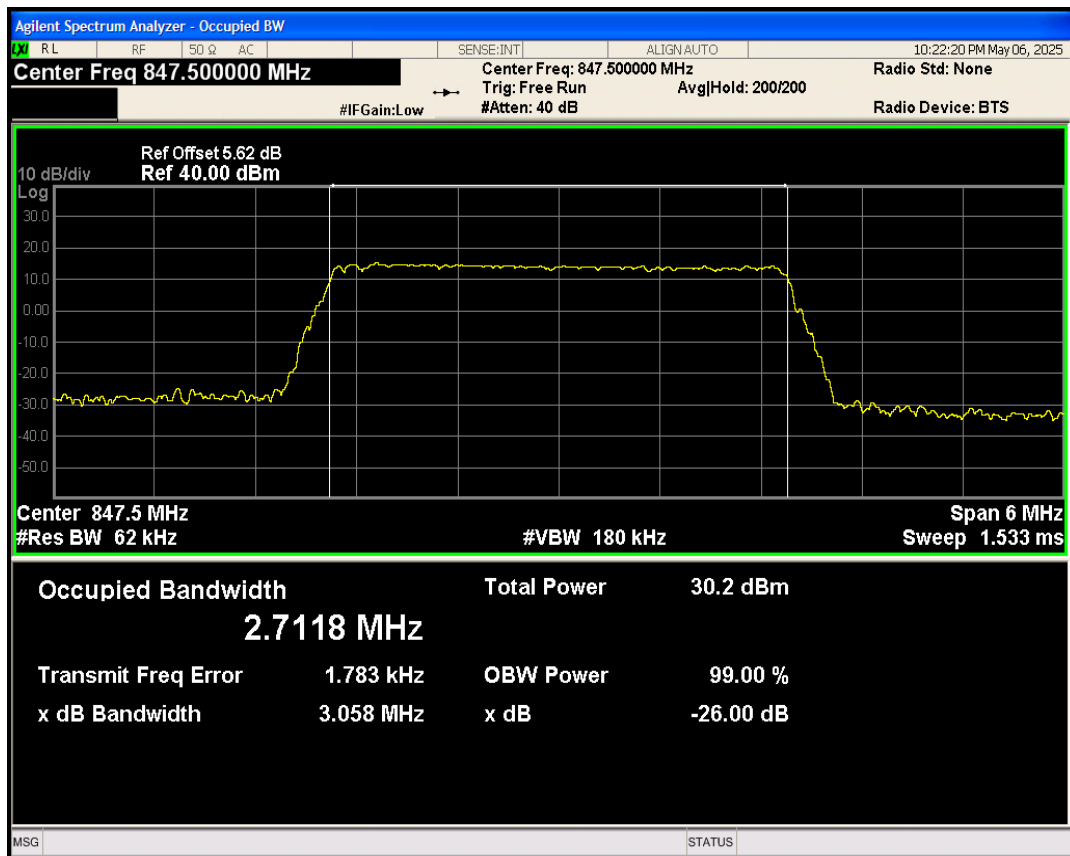


Band5 16QAM BW=3MHz Channel=20525 RB Size=15 Position=#0

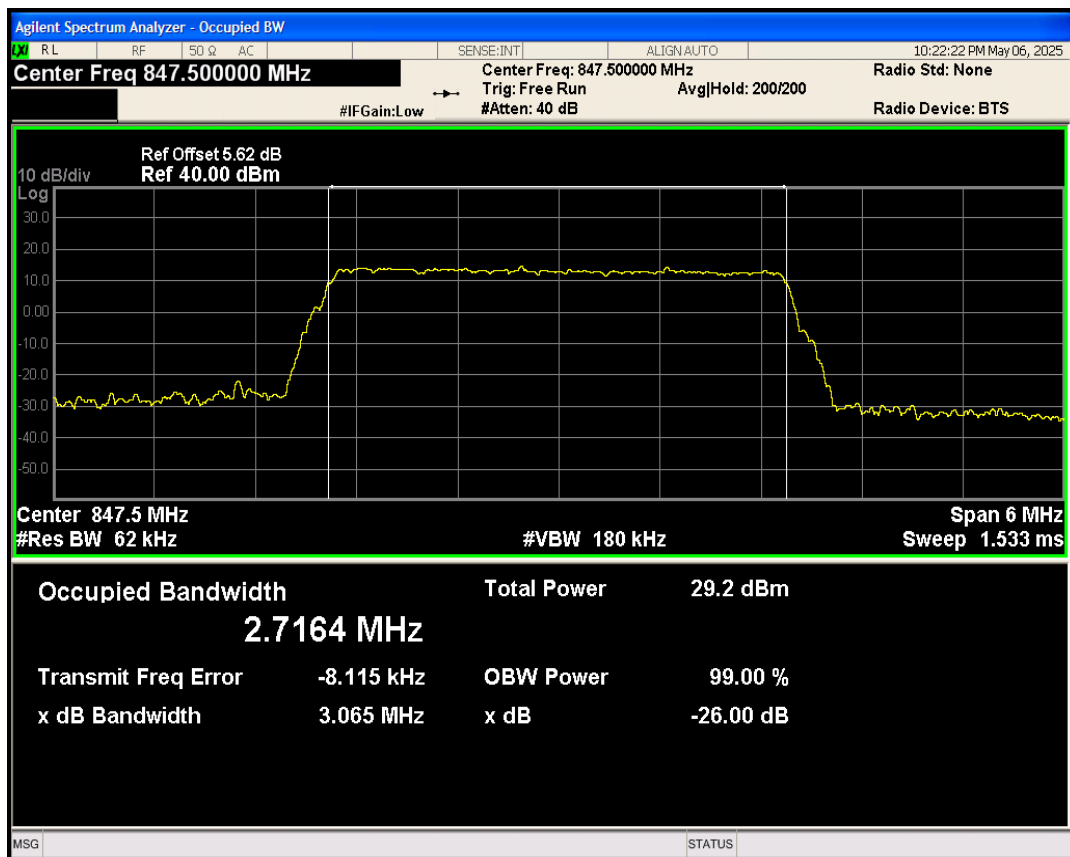




Band5 QPSK BW=3MHz Channel=20635 RB Size=15 Position=#0

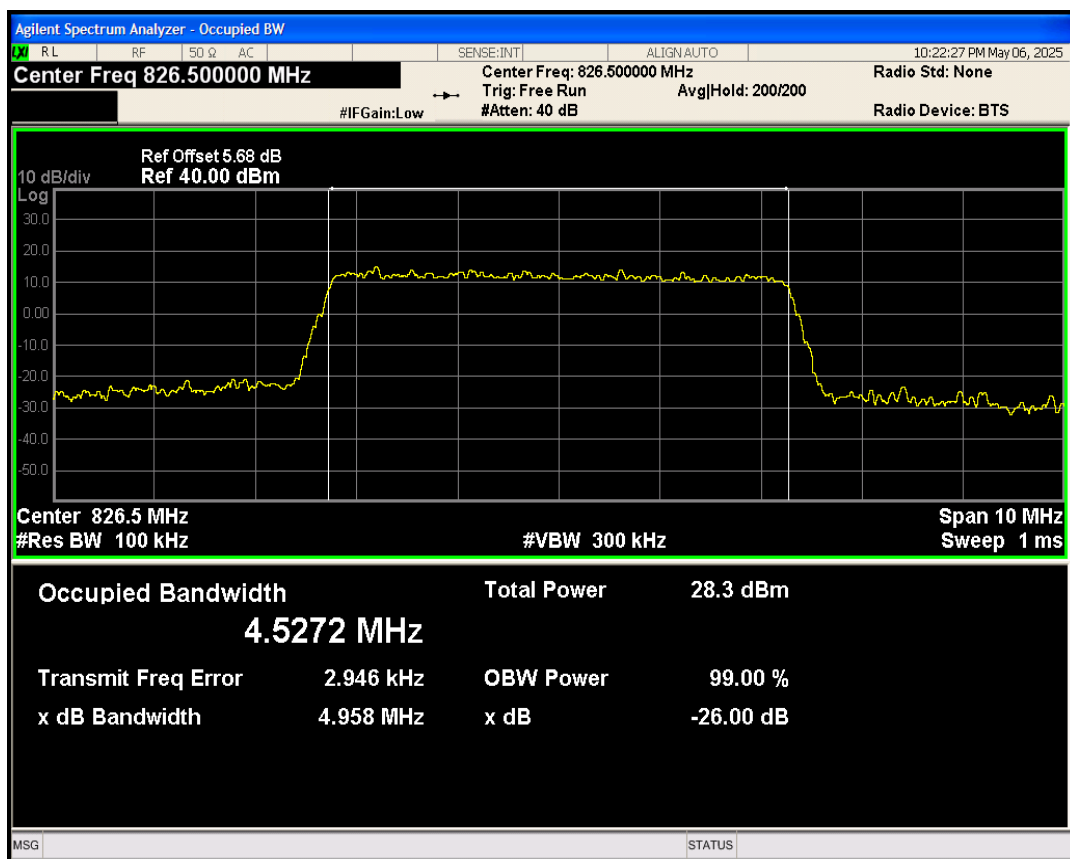


Band5 16QAM BW=3MHz Channel=20635 RB Size=15 Position=#0

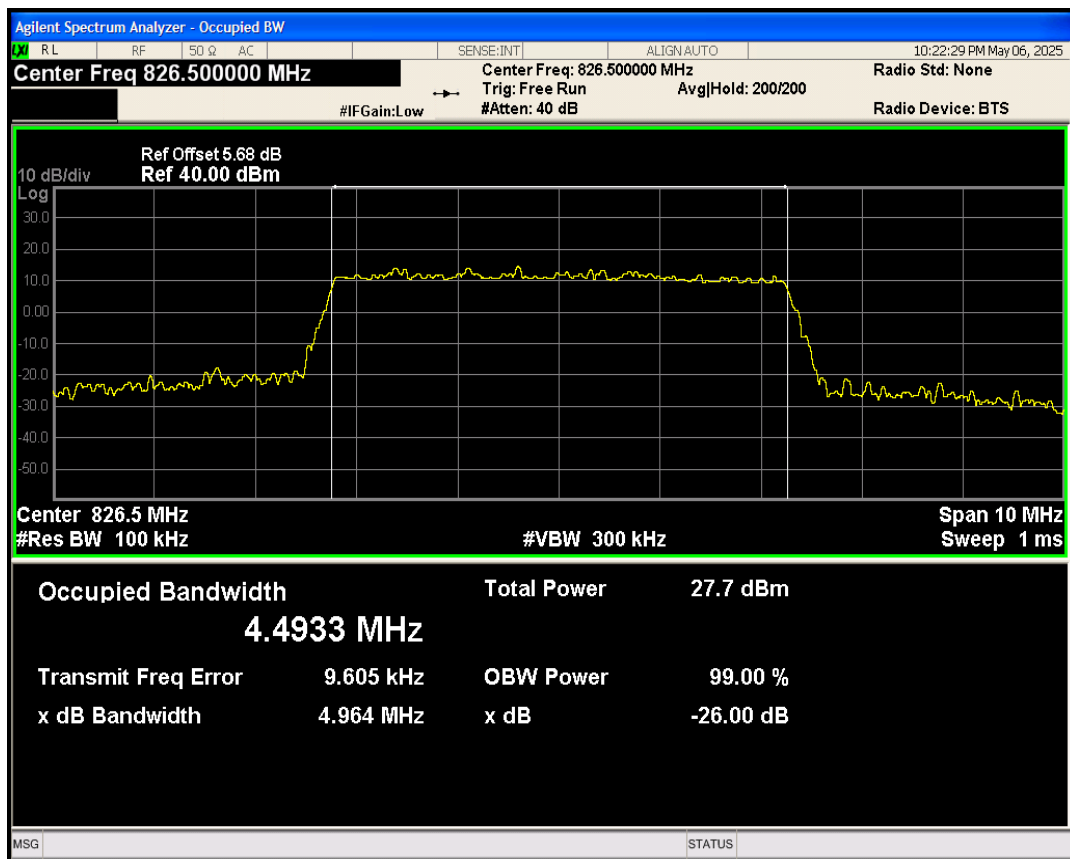




Band5 QPSK BW=5MHz Channel=20425 RB Size=25 Position=#0

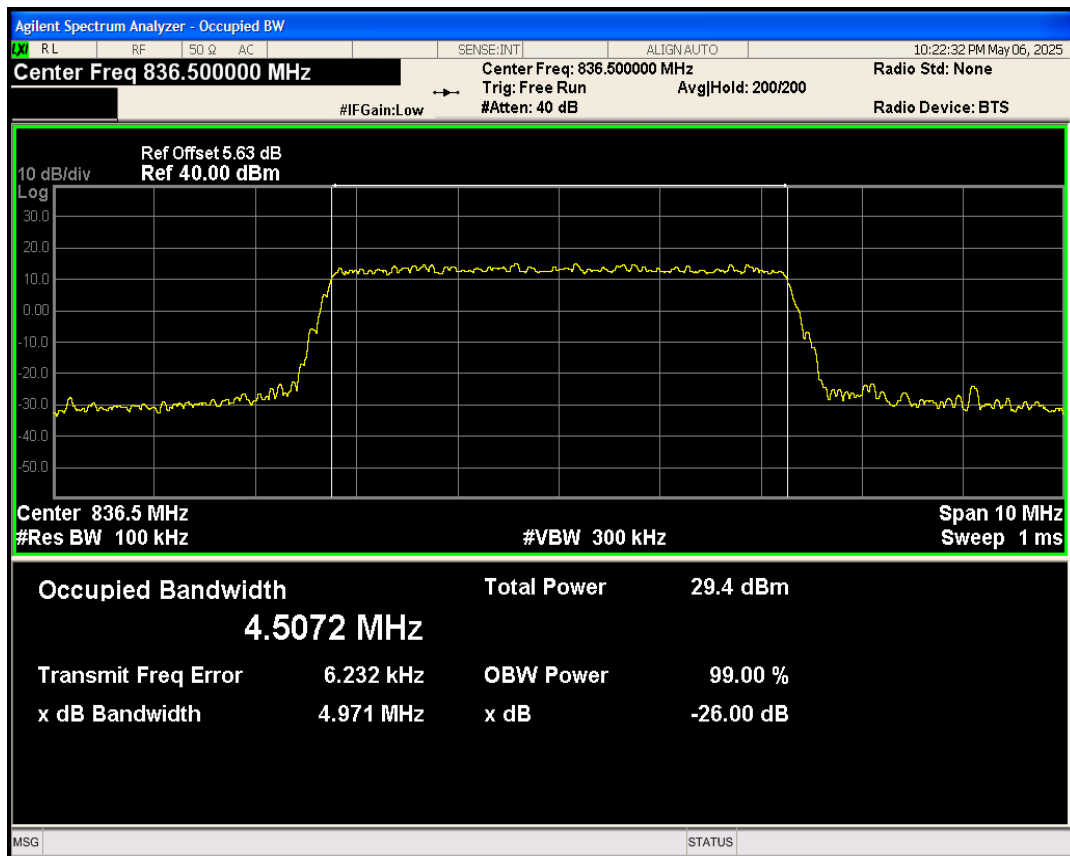


Band5 16QAM BW=5MHz Channel=20425 RB Size=25 Position=#0

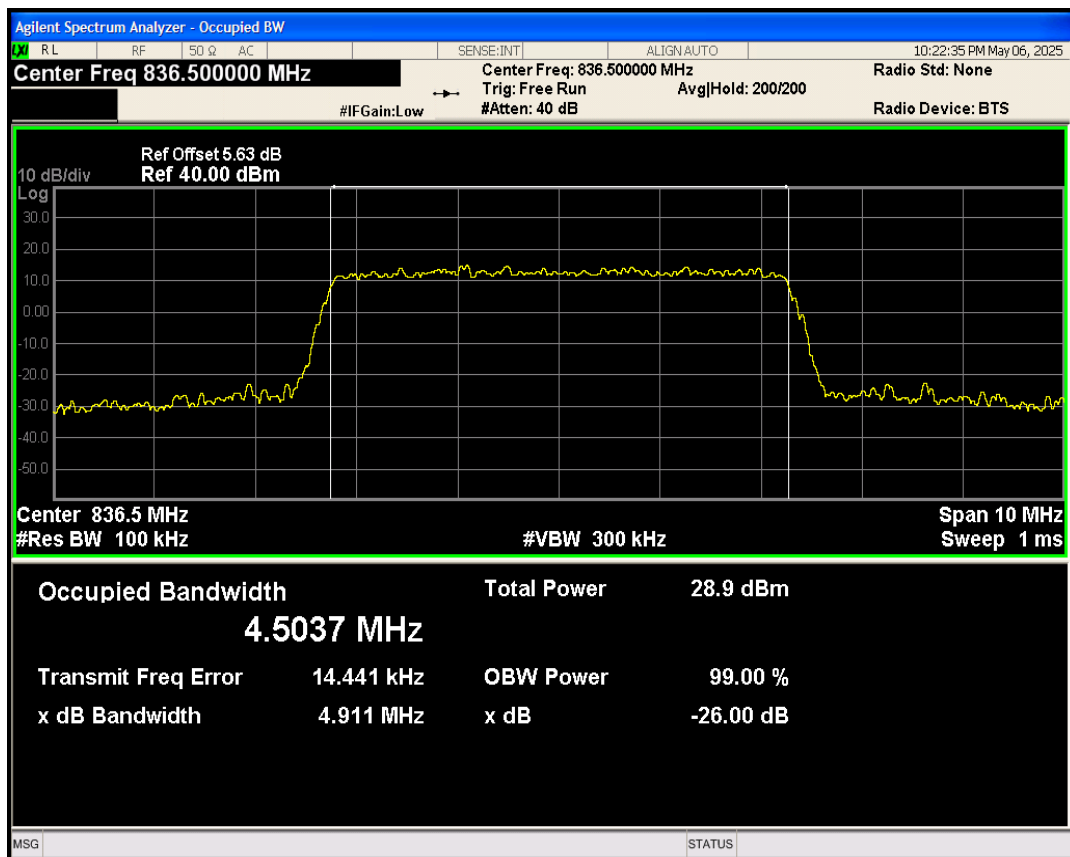




Band5 QPSK BW=5MHz Channel=20525 RB Size=25 Position=#0

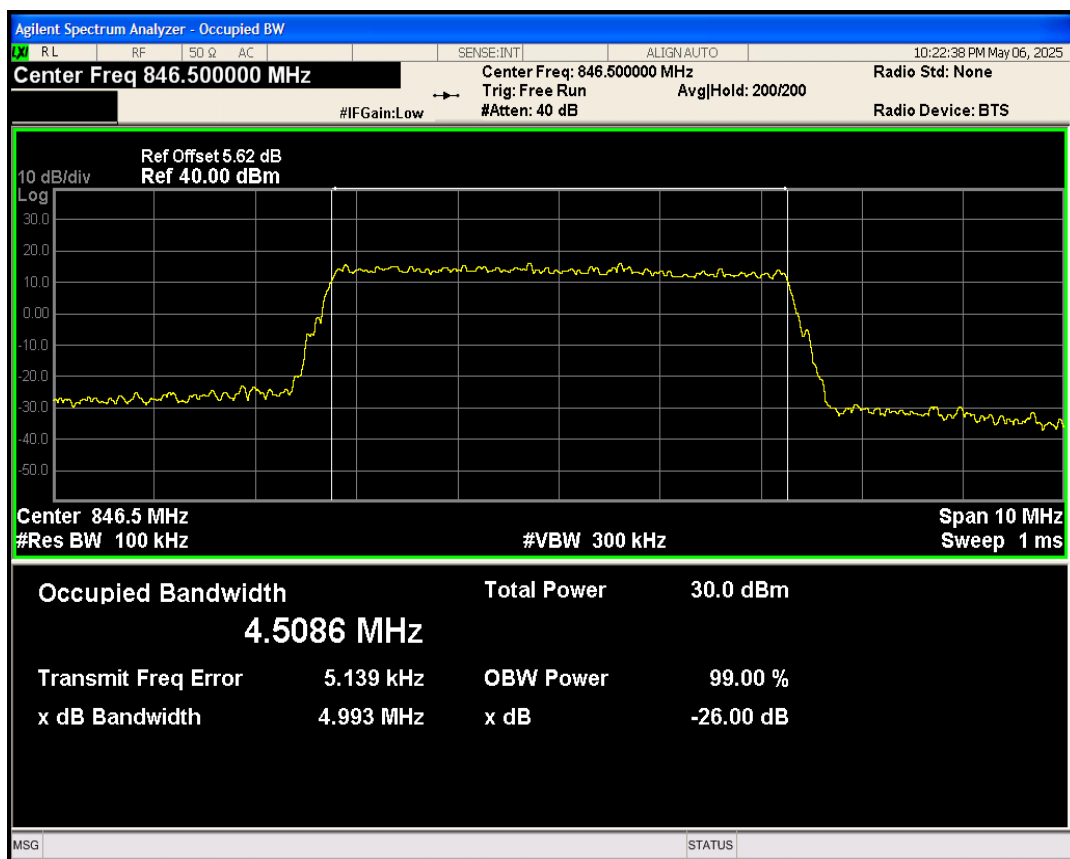


Band5 16QAM BW=5MHz Channel=20525 RB Size=25 Position=#0

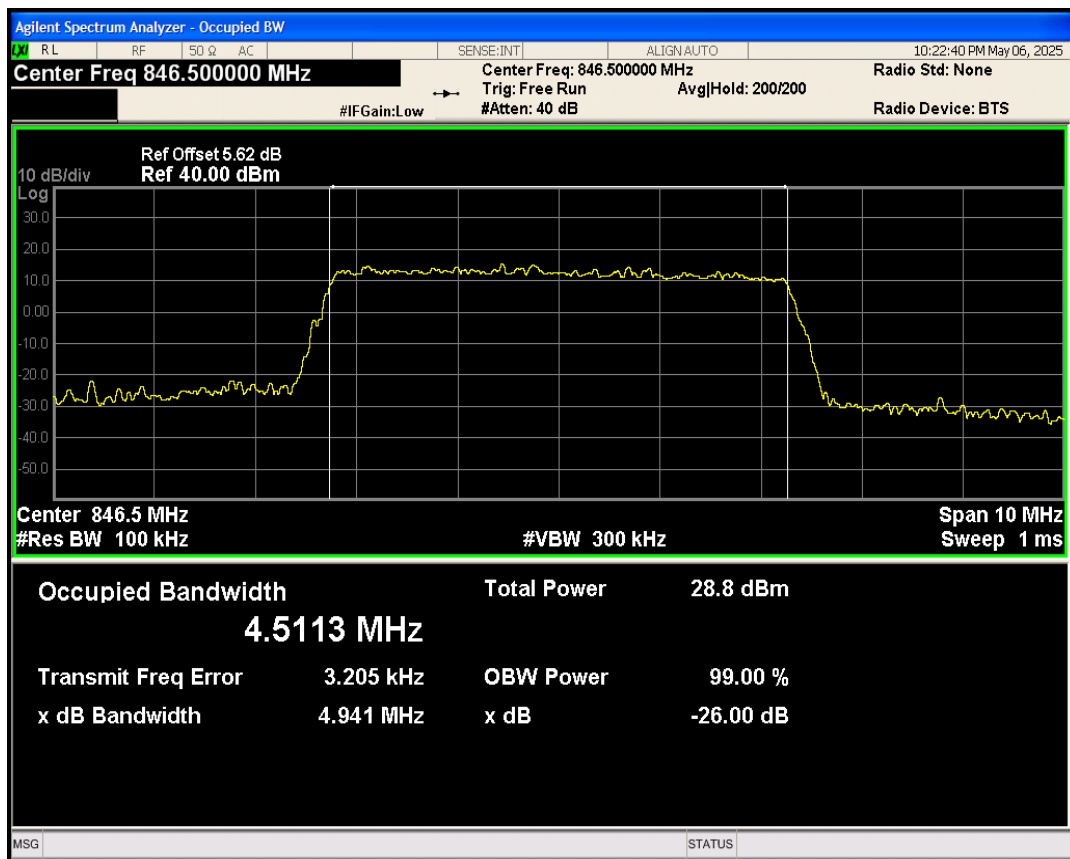




Band5 QPSK BW=5MHz Channel=20625 RB Size=25 Position=#0

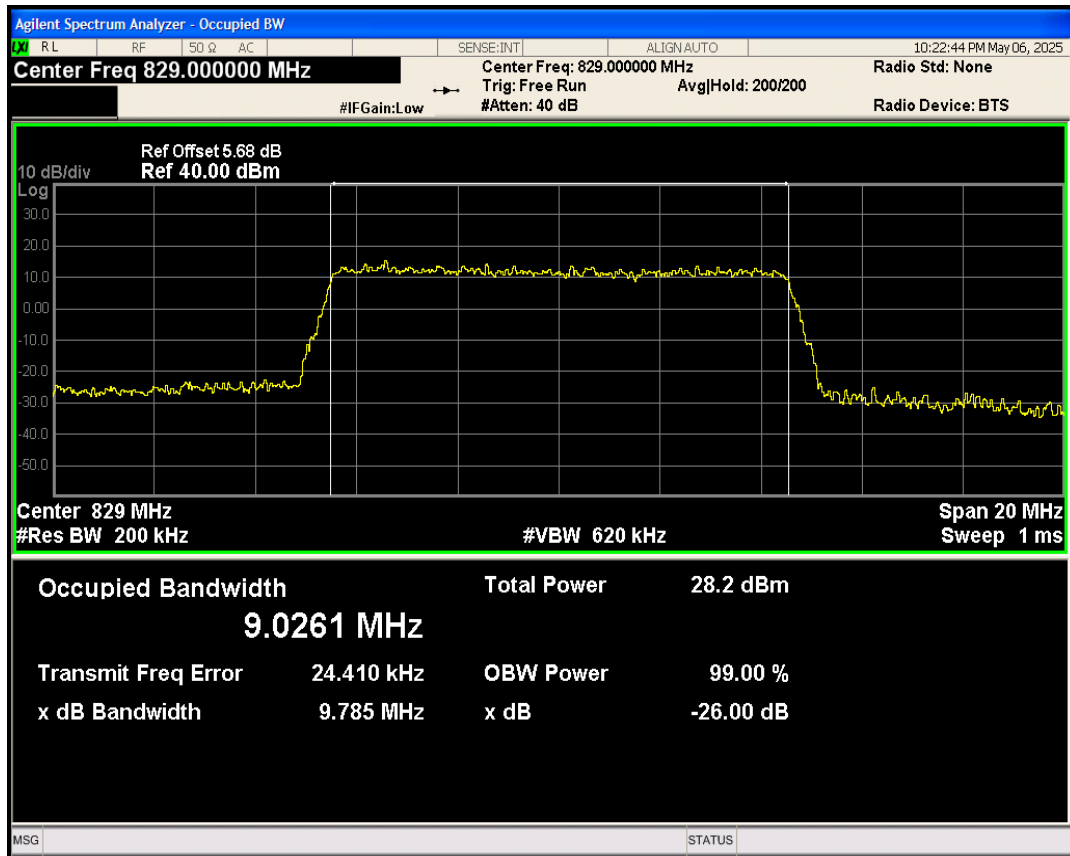


Band5 16QAM BW=5MHz Channel=20625 RB Size=25 Position=#0

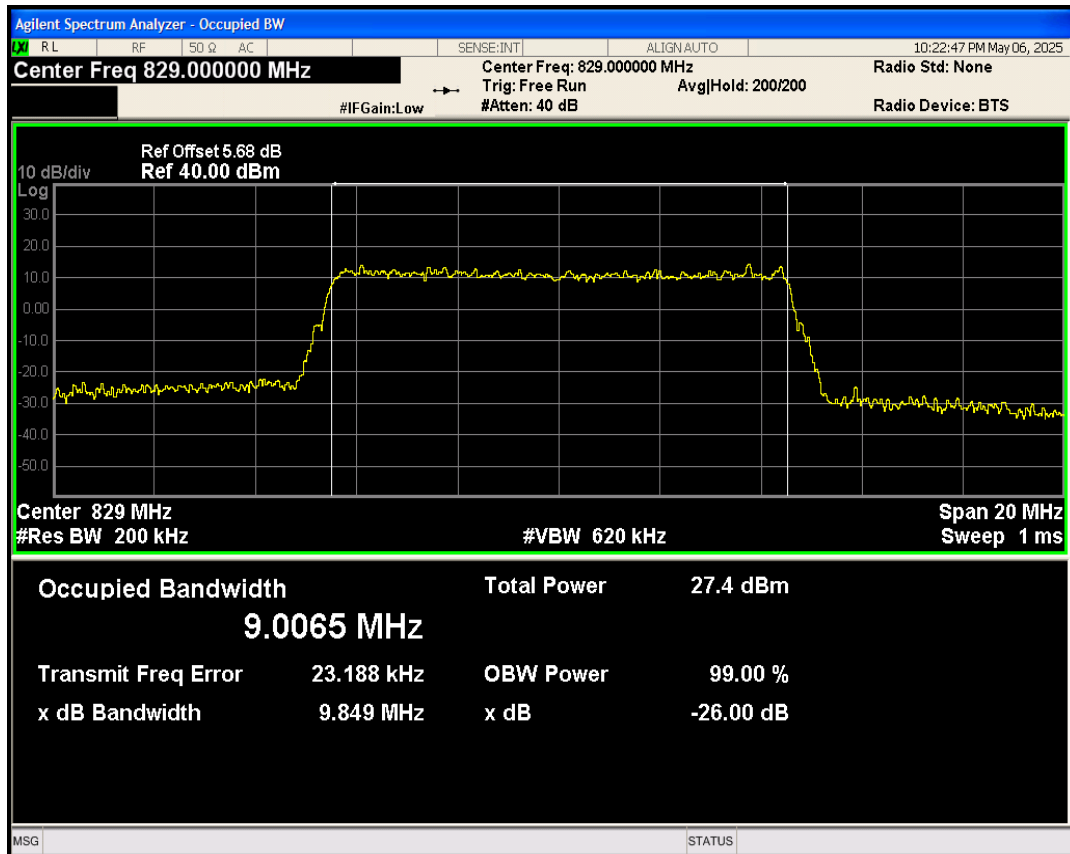




Band5 QPSK BW=10MHz Channel=20450 RB Size=50 Position=#0

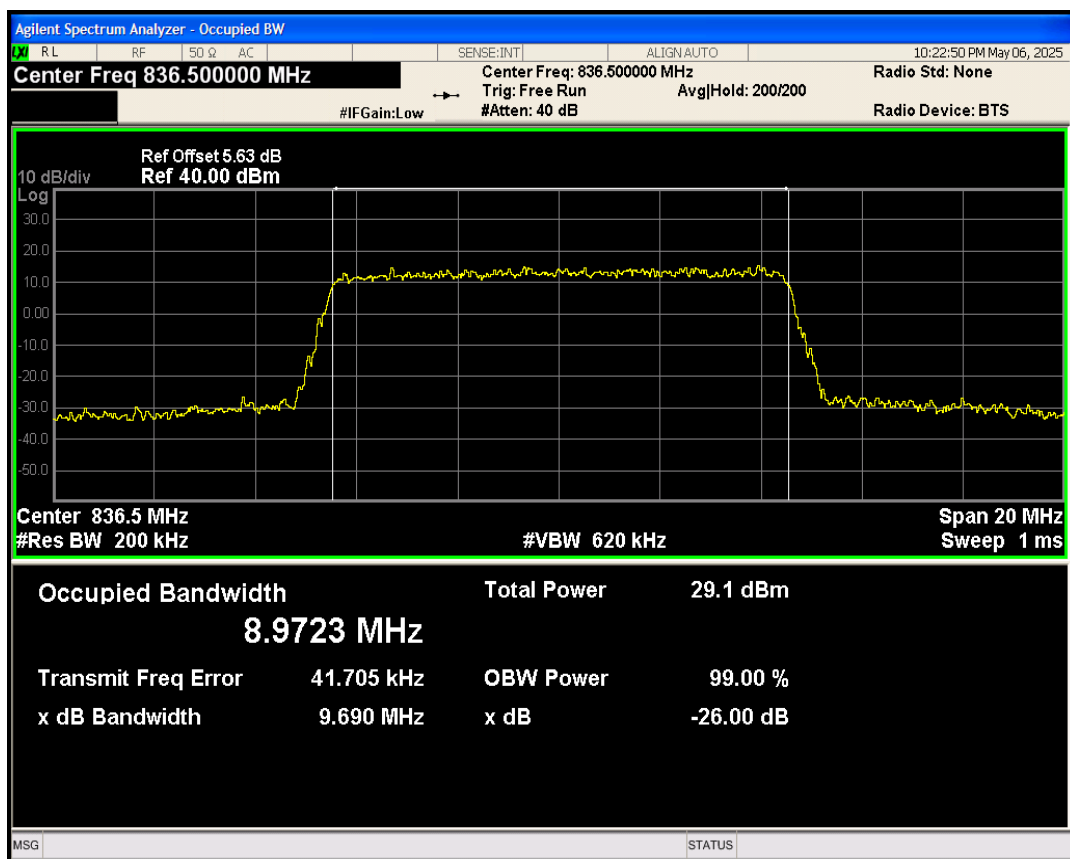


Band5 16QAM BW=10MHz Channel=20450 RB Size=50 Position=#0

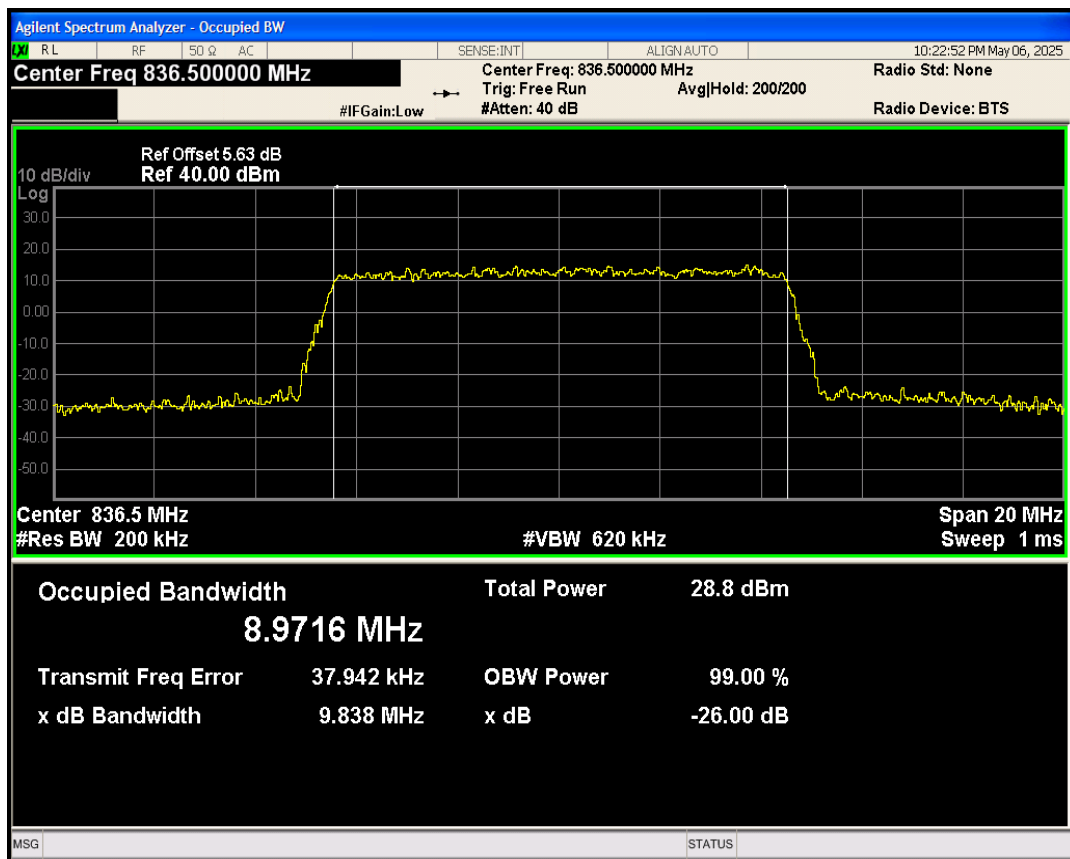




Band5 QPSK BW=10MHz Channel=20525 RB Size=50 Position=#0

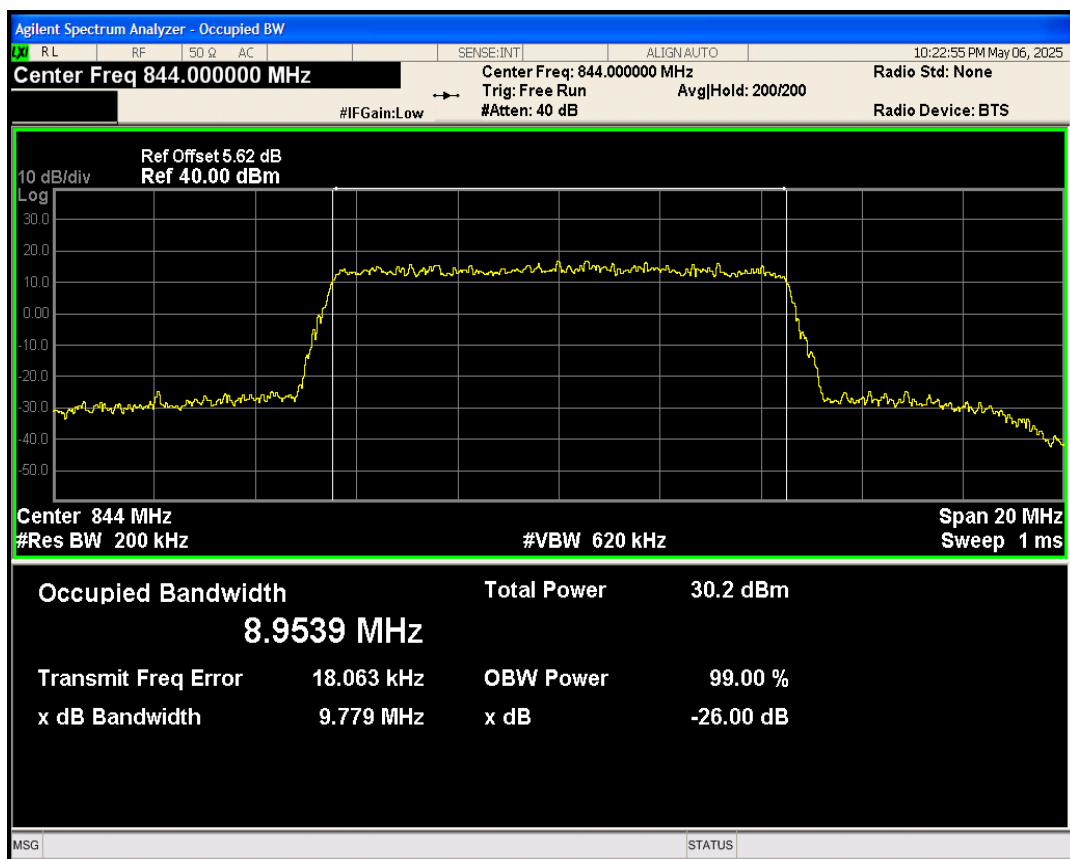


Band5 16QAM BW=10MHz Channel=20525 RB Size=50 Position=#0

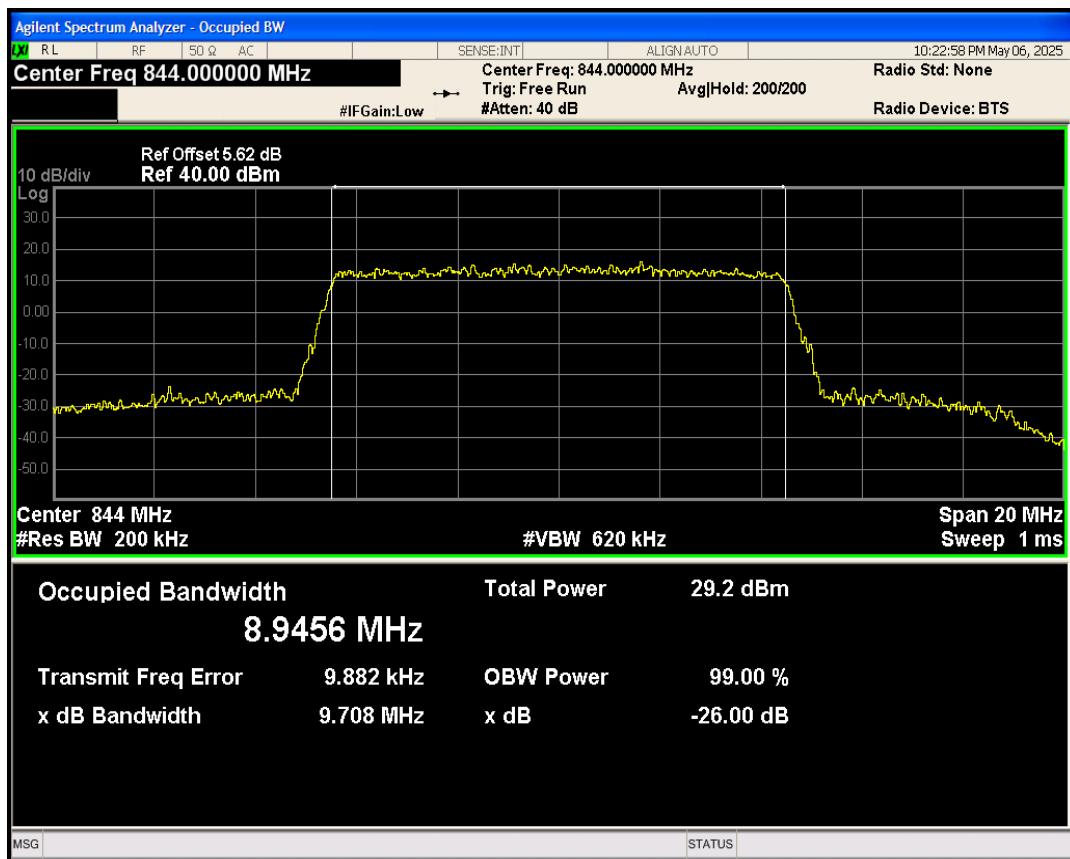




Band5 QPSK BW=10MHz Channel=20600 RB Size=50 Position=#0

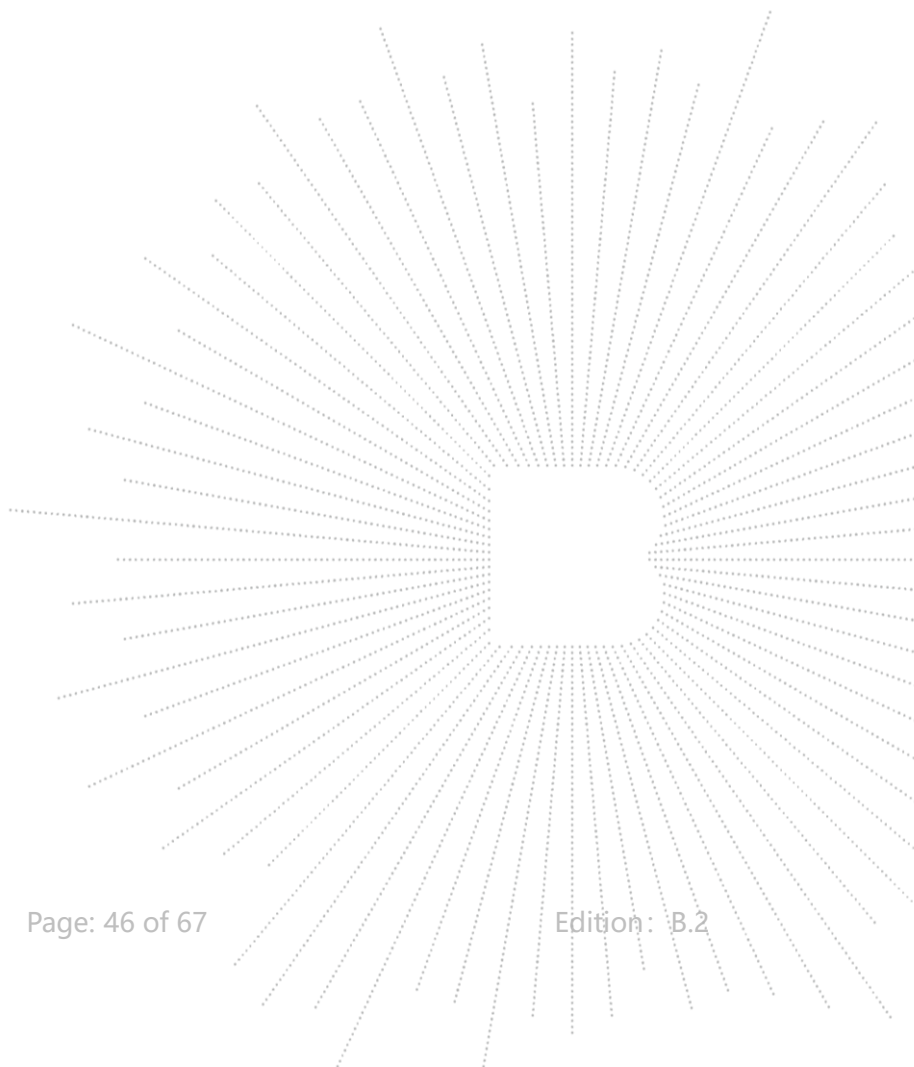


Band5 16QAM BW=10MHz Channel=20600 RB Size=50 Position=#0



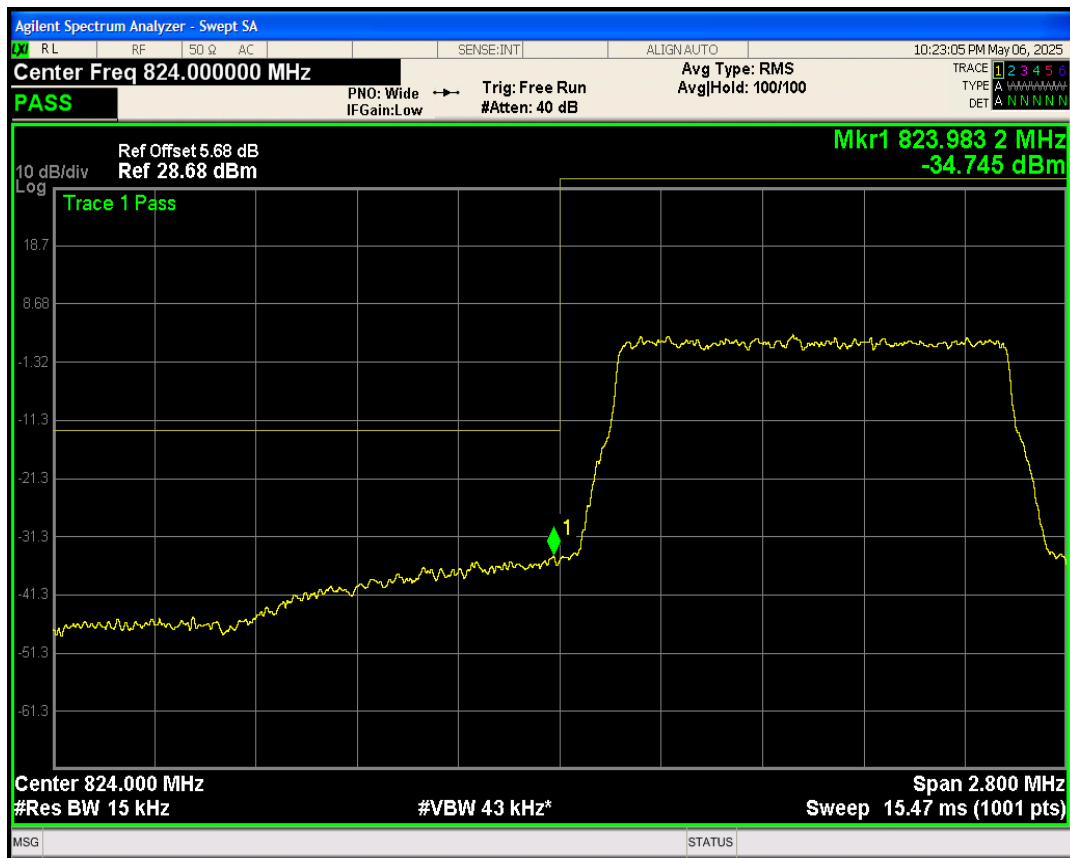
Appendix 5. Band edge

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	823.98	-34.74	-13	PASS
Band5	1.4	20407	6	#0	16QAM	823.96	-35.44	-13	PASS
Band5	1.4	20643	6	#0	QPSK	849.00	-40.00	-13	PASS
Band5	1.4	20643	6	#0	16QAM	849.03	-39.47	-13	PASS
Band5	3	20415	15	#0	QPSK	824.00	-26.59	-13	PASS
Band5	3	20415	15	#0	16QAM	824.00	-28.80	-13	PASS
Band5	3	20635	15	#0	QPSK	849.01	-27.58	-13	PASS
Band5	3	20635	15	#0	16QAM	849.00	-27.64	-13	PASS
Band5	5	20425	25	#0	QPSK	824.00	-31.51	-13	PASS
Band5	5	20425	25	#0	16QAM	824.00	-31.37	-13	PASS
Band5	5	20625	25	#0	QPSK	849.03	-33.47	-13	PASS
Band5	5	20625	25	#0	16QAM	849.00	-33.63	-13	PASS
Band5	10	20450	50	#0	QPSK	824.00	-32.94	-13	PASS
Band5	10	20450	50	#0	16QAM	823.94	-34.63	-13	PASS
Band5	10	20600	50	#0	QPSK	849.02	-35.61	-13	PASS
Band5	10	20600	50	#0	16QAM	849.00	-35.58	-13	PASS

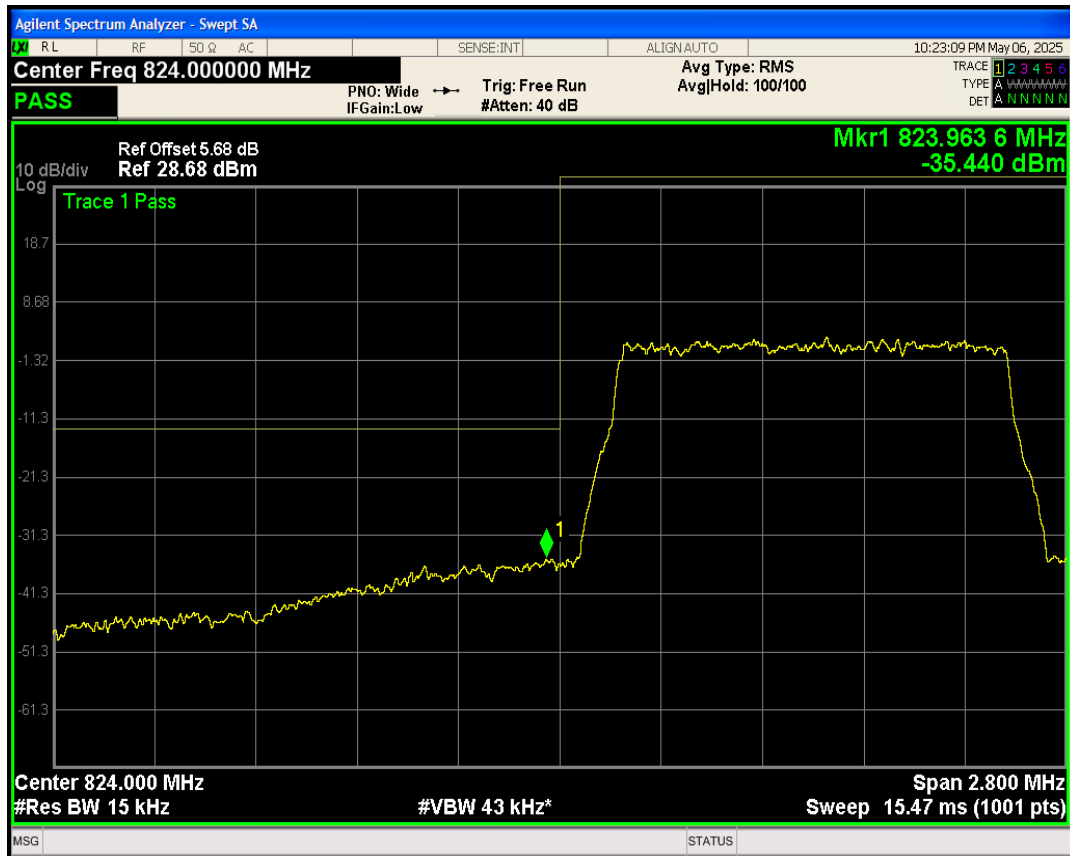




Band5 QPSK BW=1.4MHz Channel=20407 RB Size=6 Position=#0

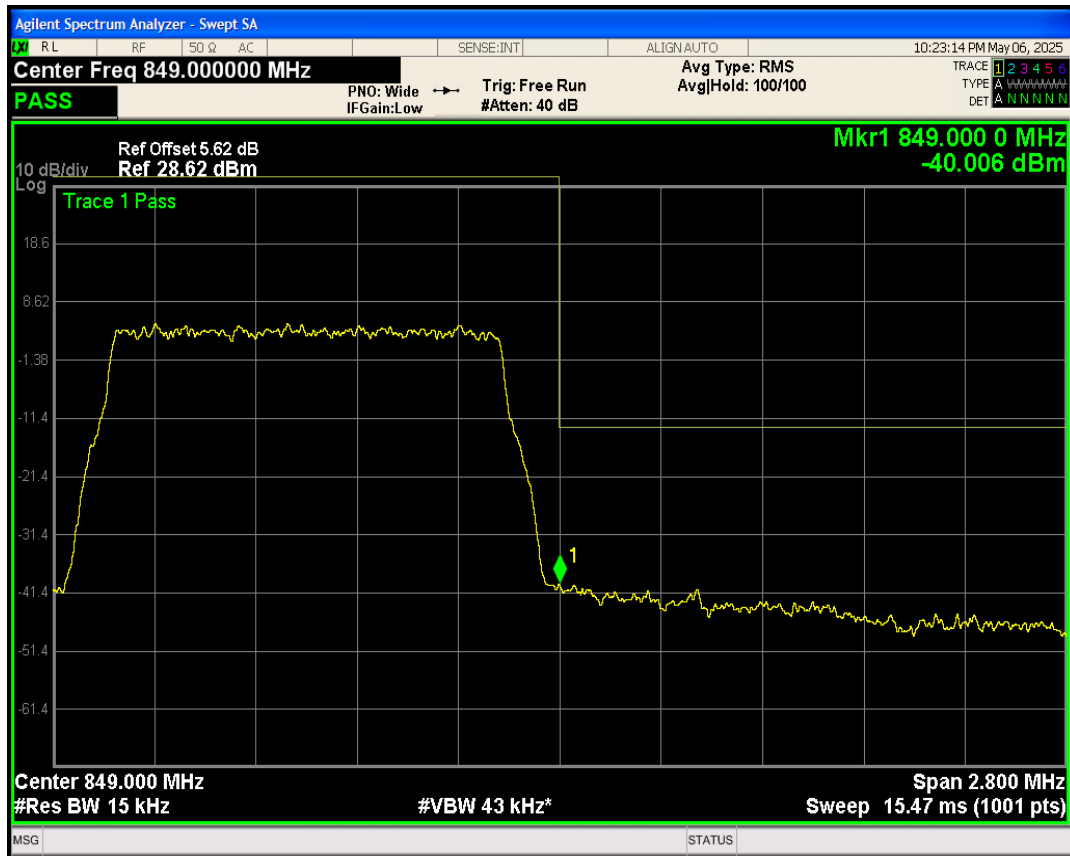


Band5 16QAM BW=1.4MHz Channel=20407 RB Size=6 Position=#0

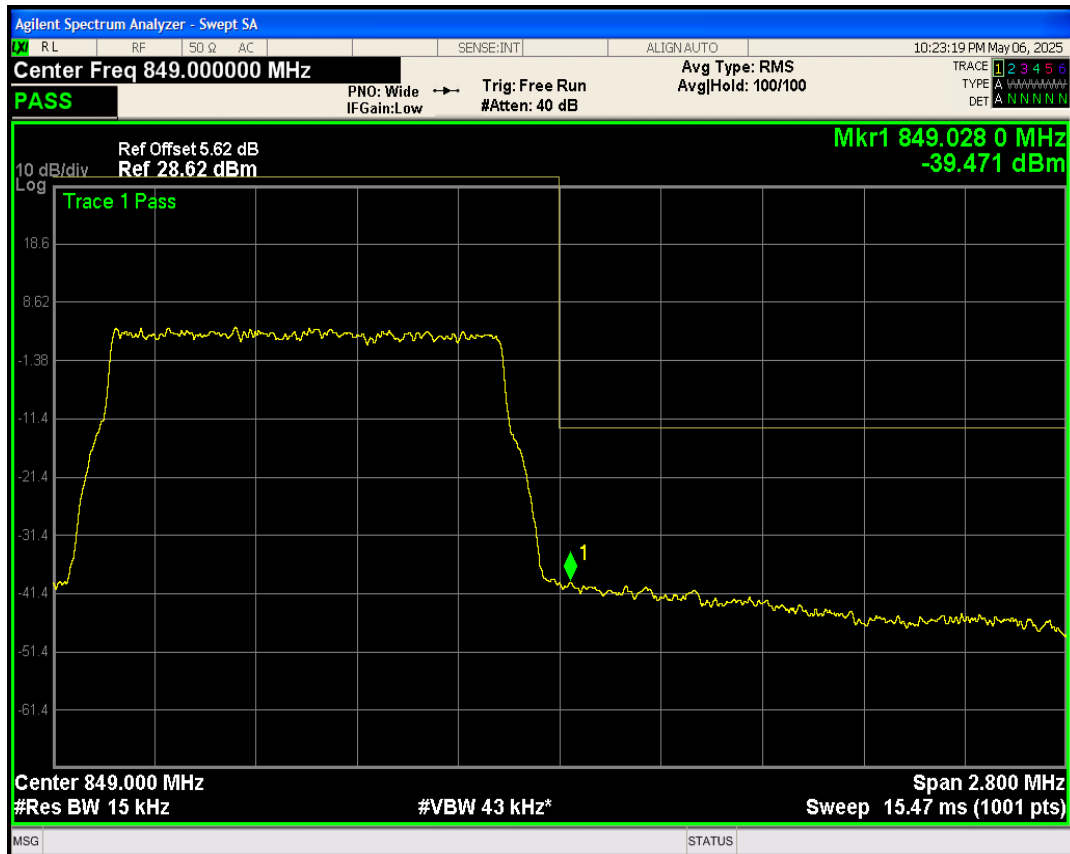




Band5 QPSK BW=1.4MHz Channel=20643 RB Size=6 Position=#0



Band5 16QAM BW=1.4MHz Channel=20643 RB Size=6 Position=#0

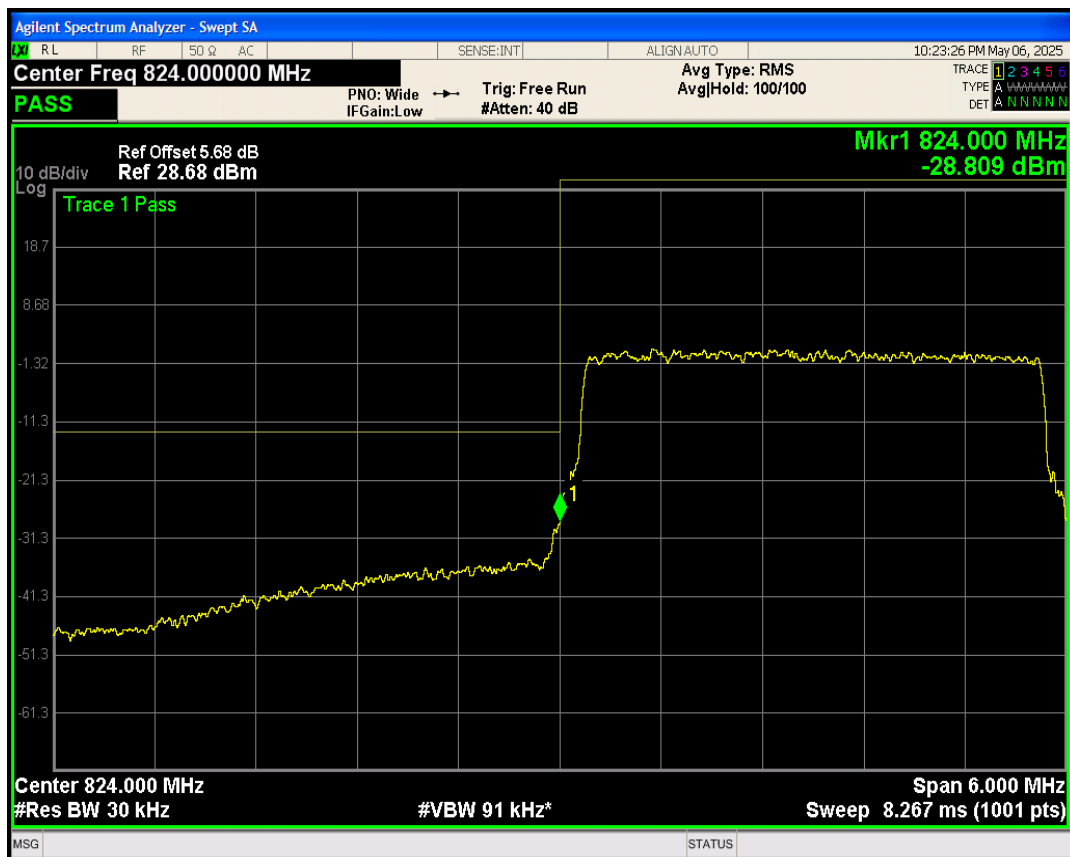




Band5 QPSK BW=3MHz Channel=20415 RB Size=15 Position=#0

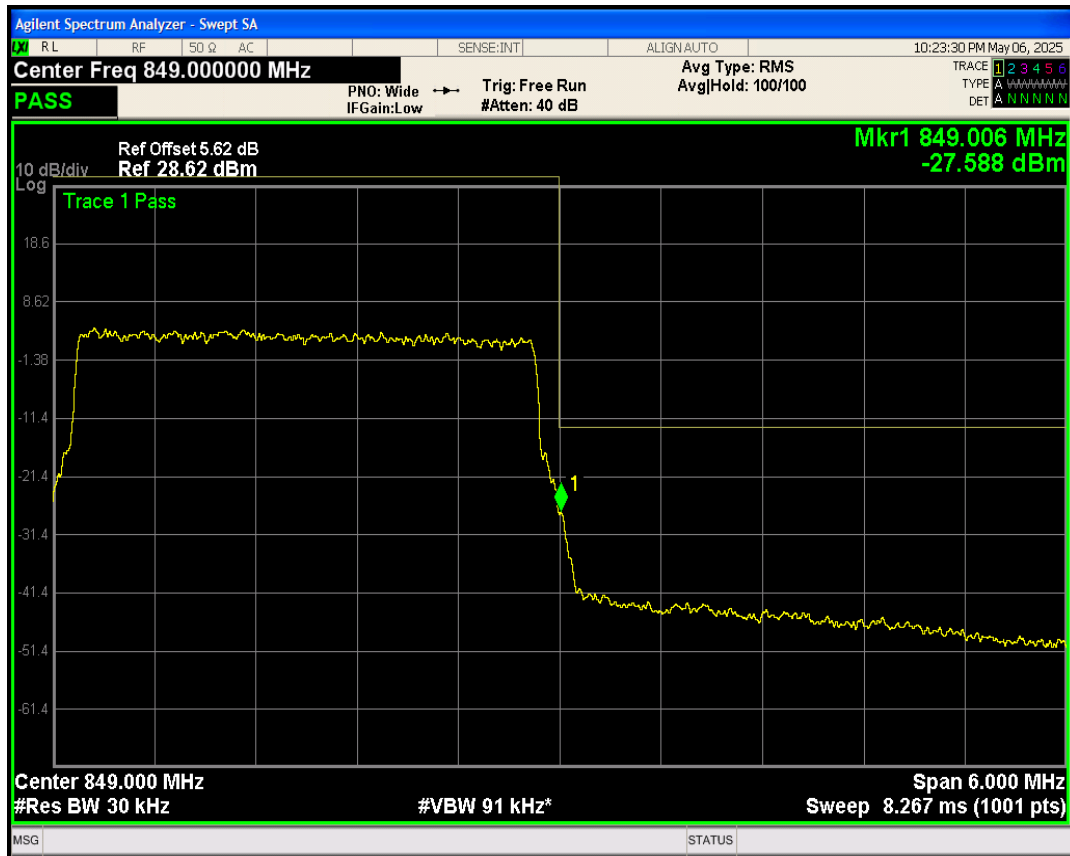


Band5 16QAM BW=3MHz Channel=20415 RB Size=15 Position=#0





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

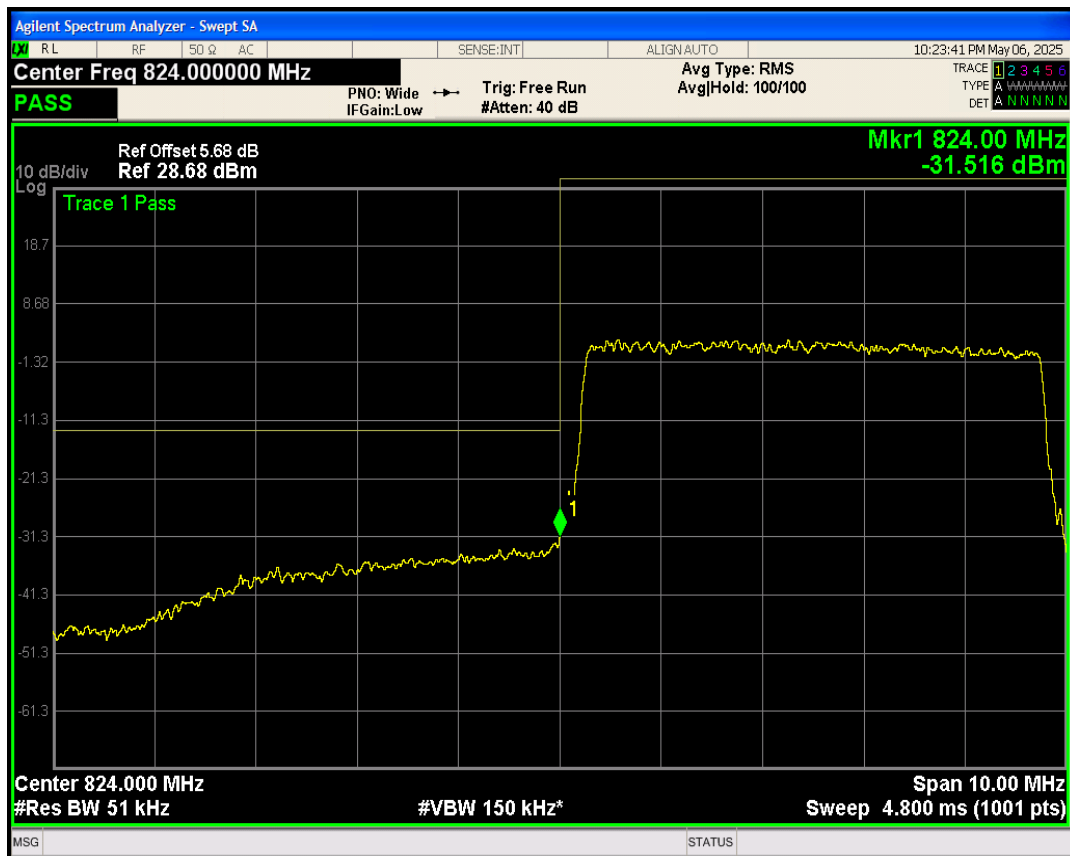


Band5 16QAM BW=3MHz Channel=20635 RB Size=15 Position=#0

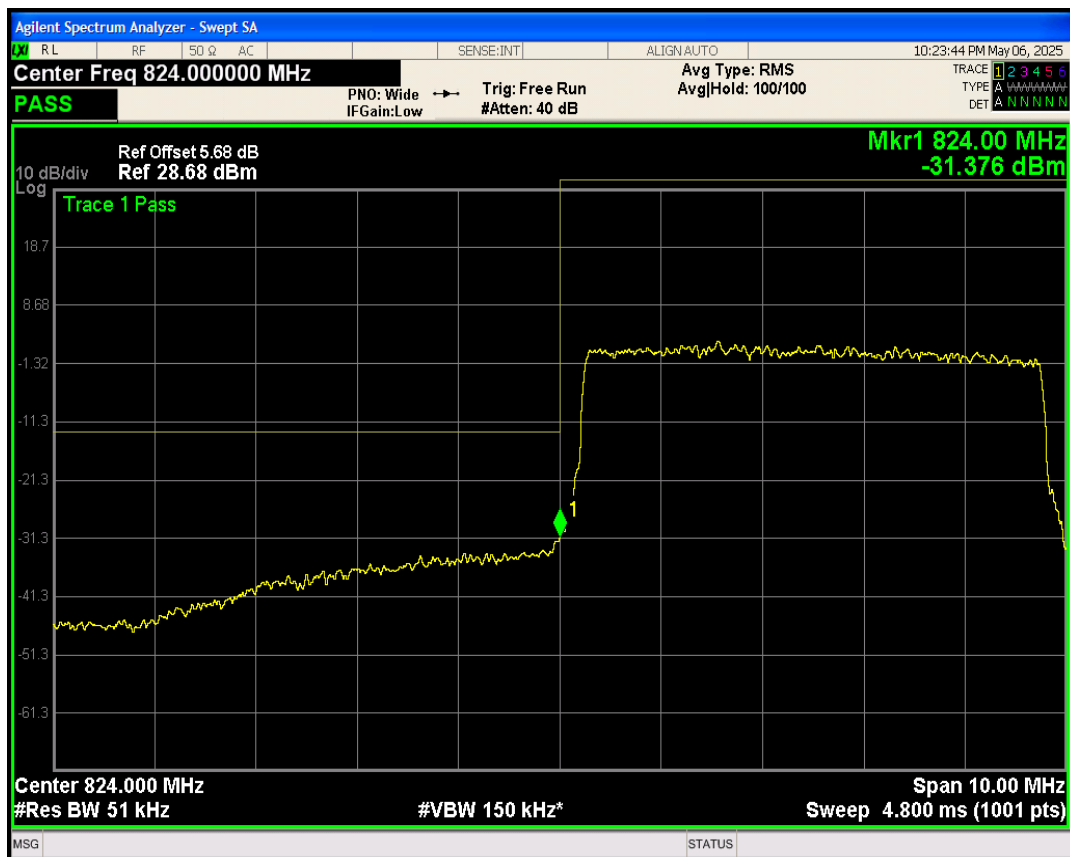




Band5 QPSK BW=5MHz Channel=20425 RB Size=25 Position=#0

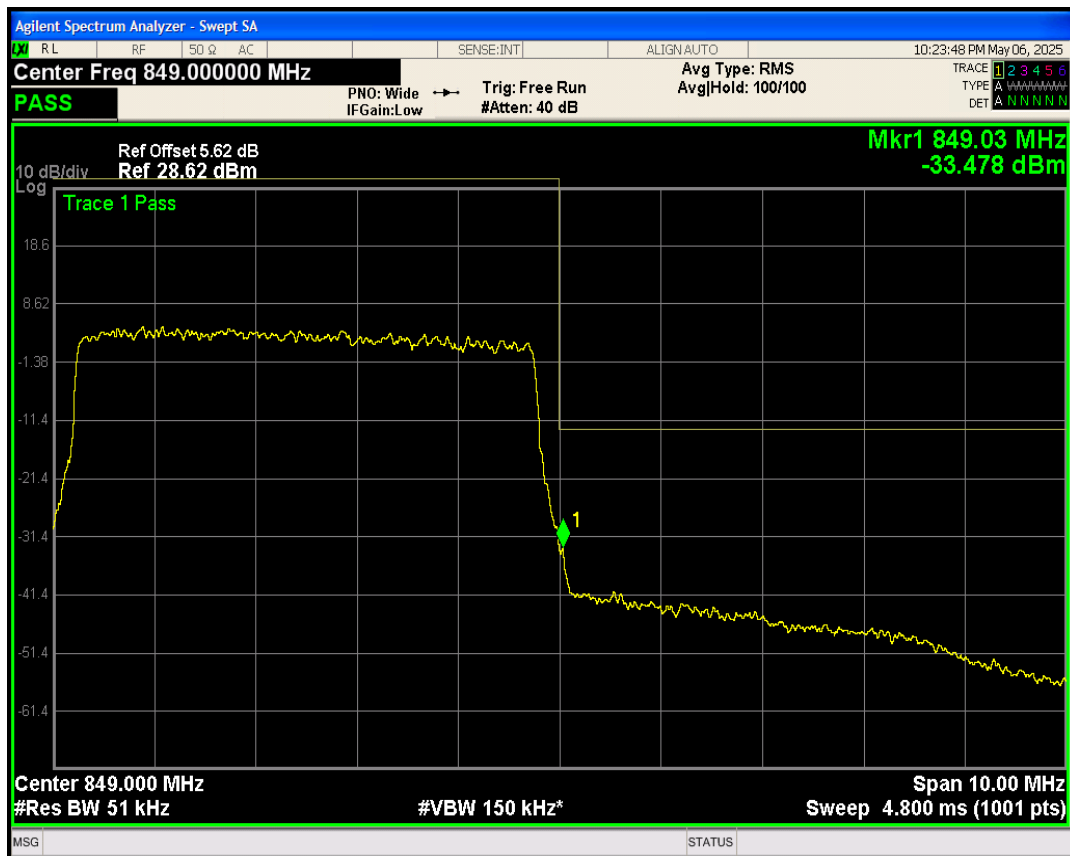


Band5 16QAM BW=5MHz Channel=20425 RB Size=25 Position=#0

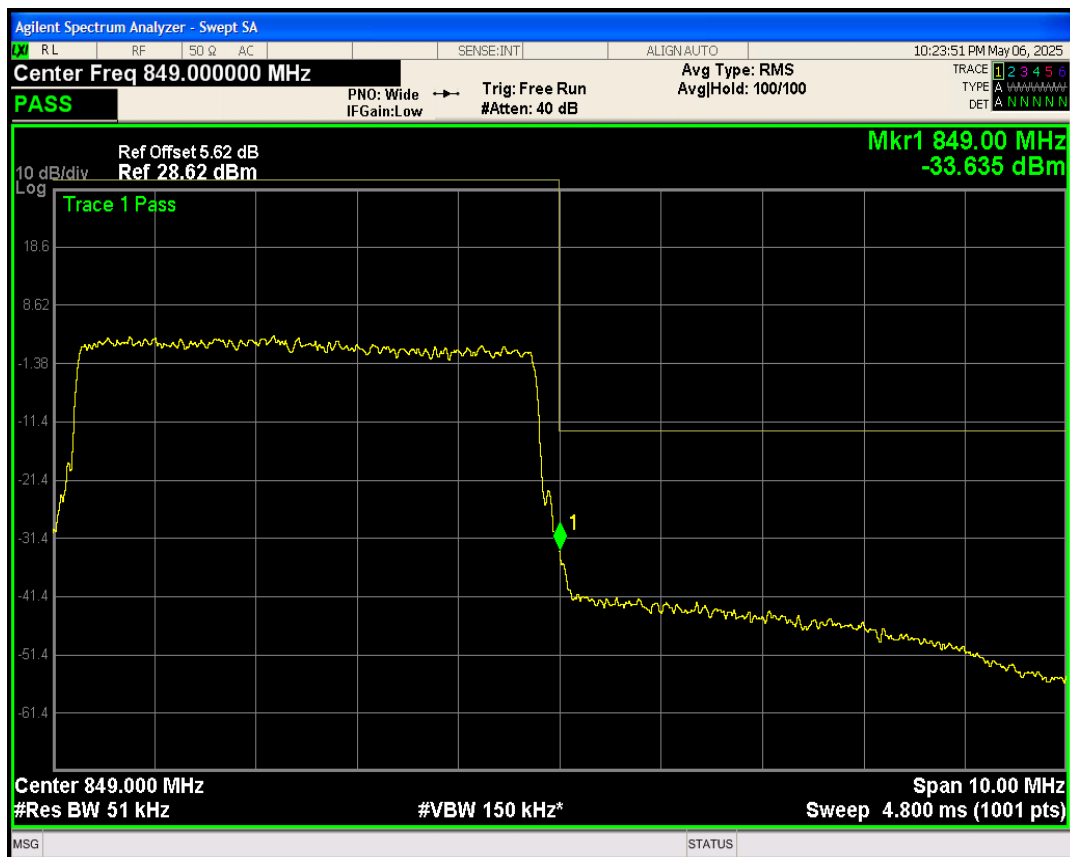




Band5 QPSK BW=5MHz Channel=20625 RB Size=25 Position=#0



Band5 16QAM BW=5MHz Channel=20625 RB Size=25 Position=#0

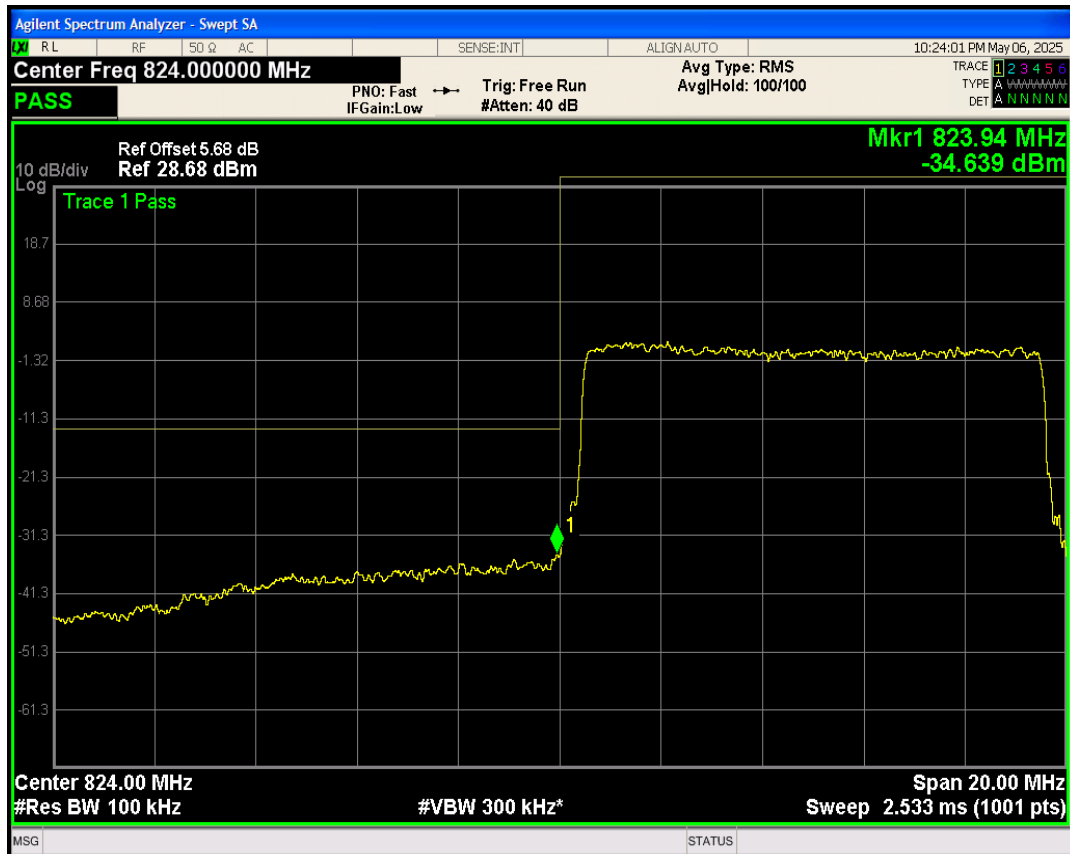




Band5 QPSK BW=10MHz Channel=20450 RB Size=50 Position=#0



Band5 16QAM BW=10MHz Channel=20450 RB Size=50 Position=#0





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



Band5 16QAM BW=10MHz Channel=20600 RB Size=50 Position=#0

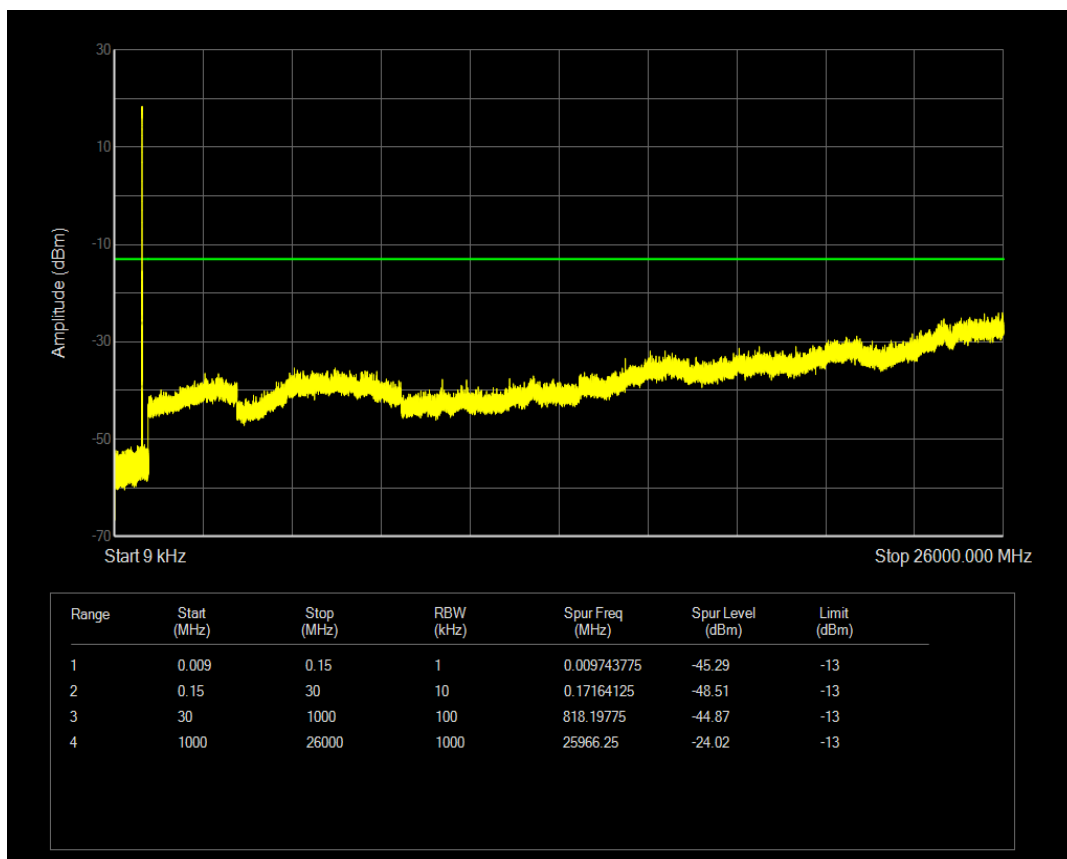


Appendix 6. Out-of-band emissions

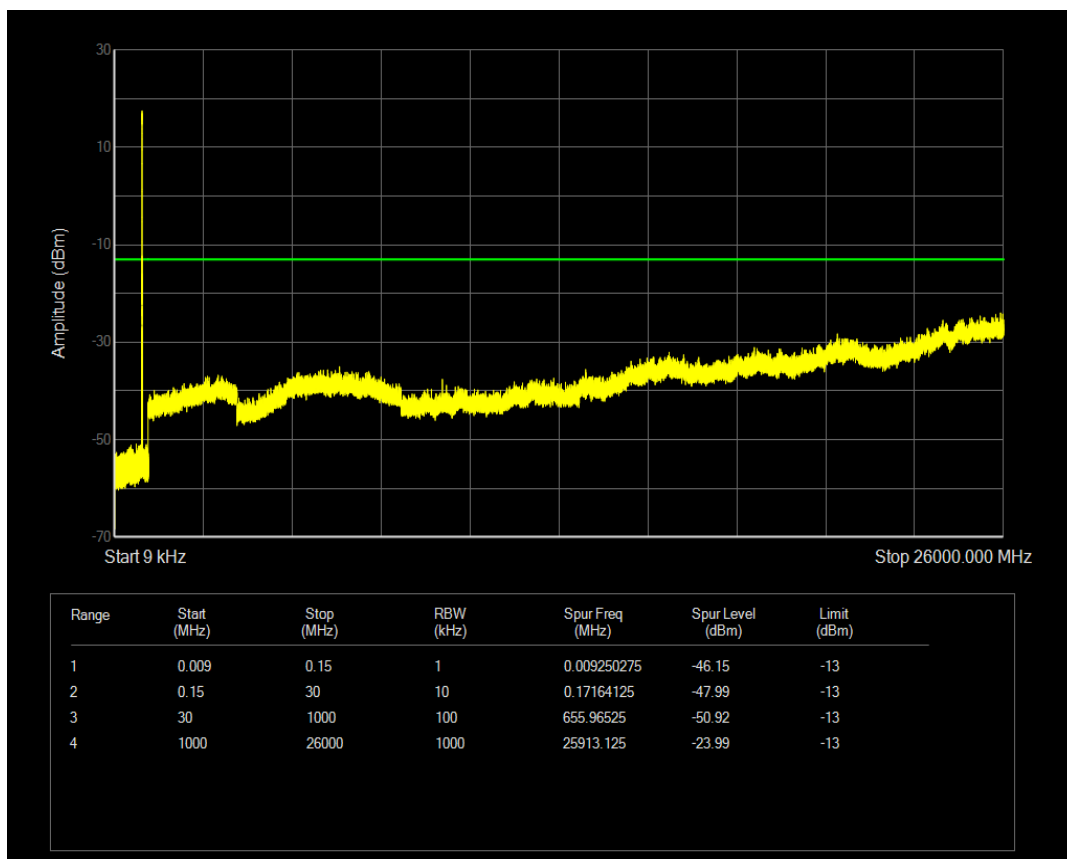
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band5	1.4	20407	6	#0	QPSK	25966.25	-24.02	-13	PASS
Band5	1.4	20407	6	#0	16QAM	25913.13	-23.99	-13	PASS
Band5	1.4	20525	6	#0	QPSK	25916.25	-24.50	-13	PASS
Band5	1.4	20525	6	#0	16QAM	24325.63	-24.50	-13	PASS
Band5	1.4	20643	6	#0	QPSK	25905.63	-24.56	-13	PASS
Band5	1.4	20643	6	#0	16QAM	24678.75	-23.78	-13	PASS
Band5	3	20415	15	#0	QPSK	25577.50	-24.63	-13	PASS
Band5	3	20415	15	#0	16QAM	25704.38	-23.50	-13	PASS
Band5	3	20525	15	#0	QPSK	24675.00	-24.38	-13	PASS
Band5	3	20525	15	#0	16QAM	25741.88	-24.06	-13	PASS
Band5	3	20635	15	#0	QPSK	25942.50	-24.29	-13	PASS
Band5	3	20635	15	#0	16QAM	25711.88	-24.13	-13	PASS
Band5	5	20425	25	#0	QPSK	25524.38	-24.74	-13	PASS
Band5	5	20425	25	#0	16QAM	24668.75	-23.86	-13	PASS
Band5	5	20525	25	#0	QPSK	25320.00	-24.36	-13	PASS
Band5	5	20525	25	#0	16QAM	26000.00	-24.02	-13	PASS
Band5	5	20625	25	#0	QPSK	25139.38	-24.46	-13	PASS
Band5	5	20625	25	#0	16QAM	25990.00	-23.71	-13	PASS
Band5	10	20450	50	#0	QPSK	25793.75	-23.47	-13	PASS
Band5	10	20450	50	#0	16QAM	25379.38	-24.46	-13	PASS
Band5	10	20525	50	#0	QPSK	25525.00	-24.46	-13	PASS
Band5	10	20525	50	#0	16QAM	25338.75	-24.41	-13	PASS
Band5	10	20600	50	#0	QPSK	24812.50	-24.46	-13	PASS
Band5	10	20600	50	#0	16QAM	25375.00	-24.47	-13	PASS



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

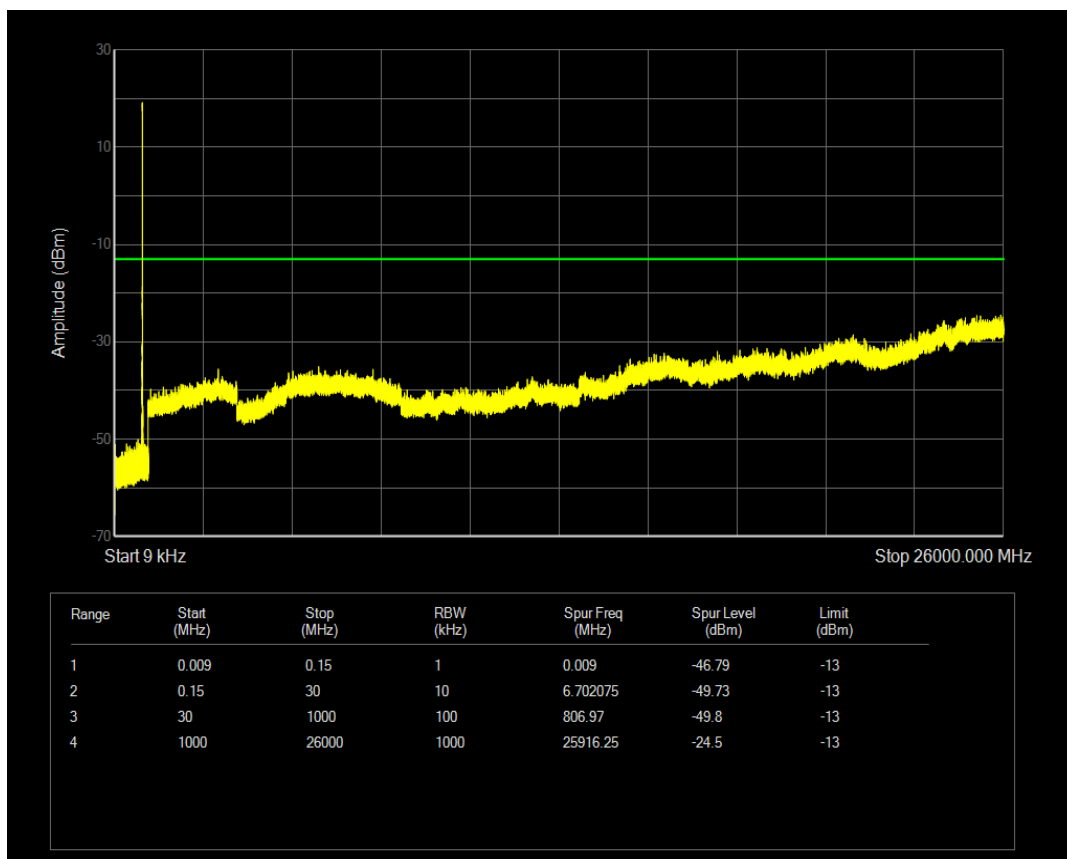


Band5 16QAM BW=1.4MHz Channel=20407 RB Size=6 Position=#0

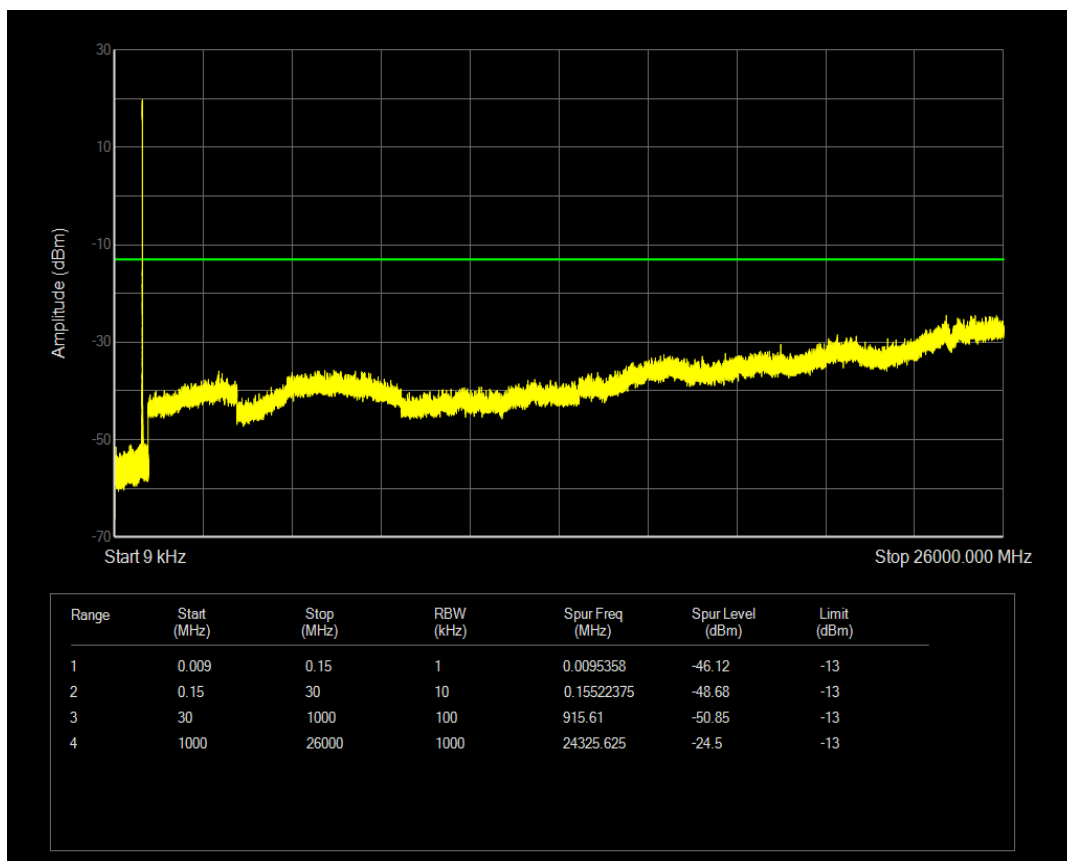




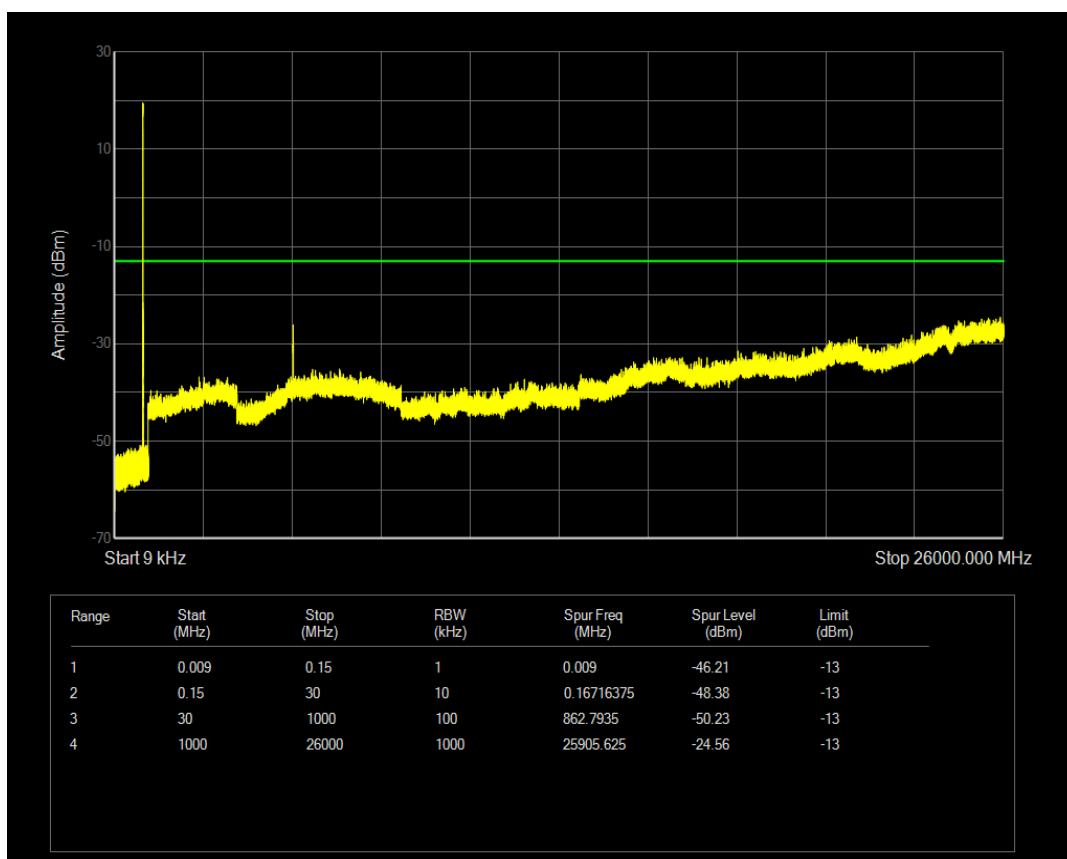
Band5 QPSK BW=1.4MHz Channel=20525 RB Size=6 Position=#0



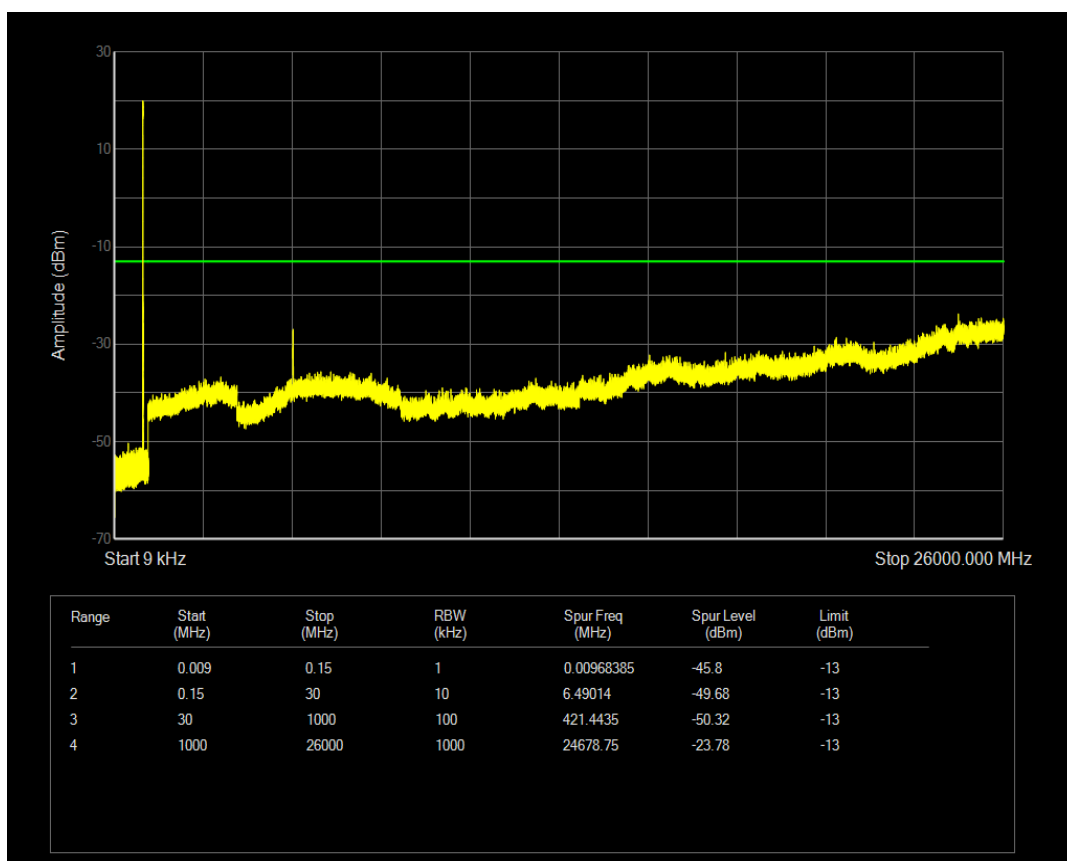
Band5 16QAM BW=1.4MHz Channel=20525 RB Size=6 Position=#0



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

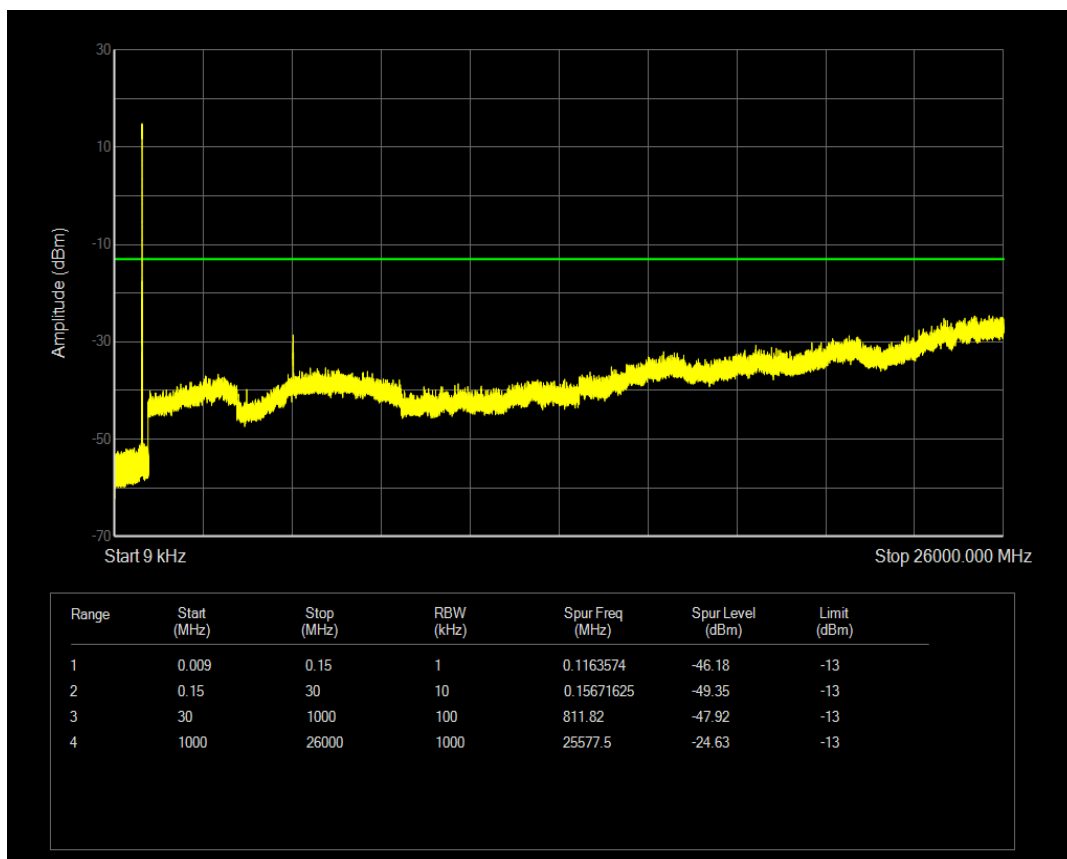


Band5 16QAM BW=1.4MHz Channel=20643 RB Size=6 Position=#0

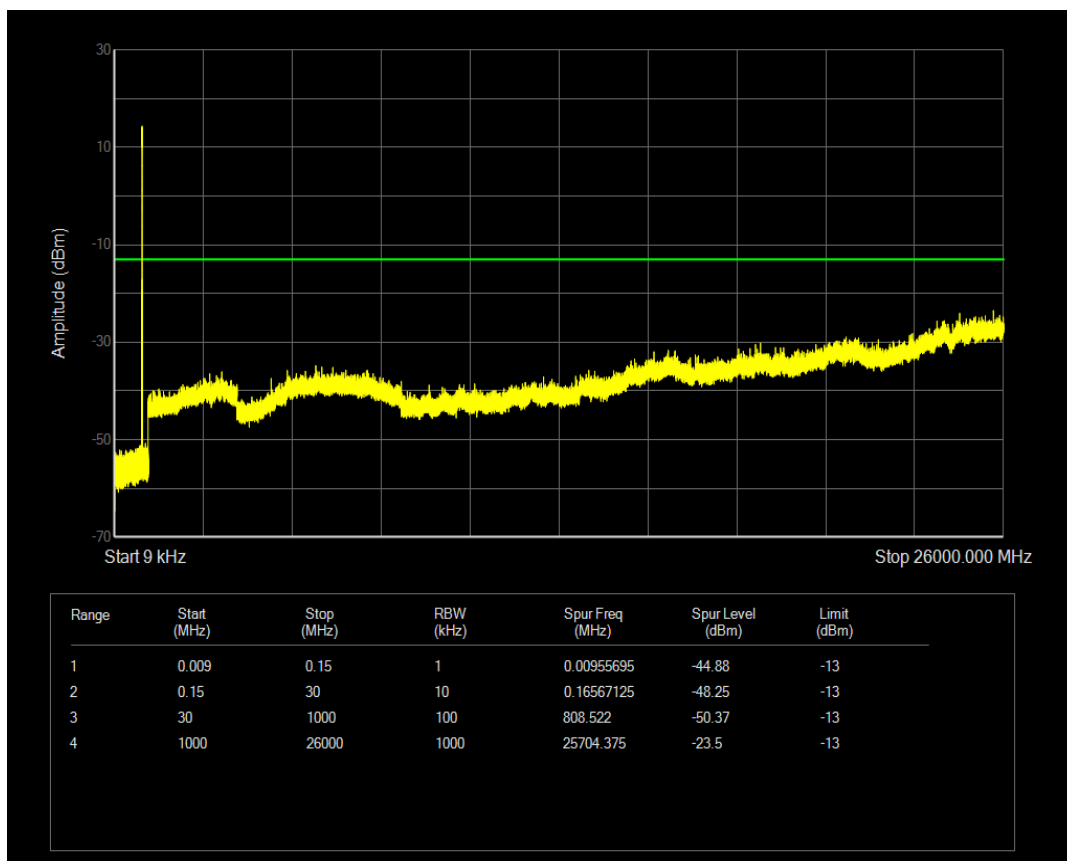




Band5 QPSK BW=3MHz Channel=20415 RB Size=15 Position=#0

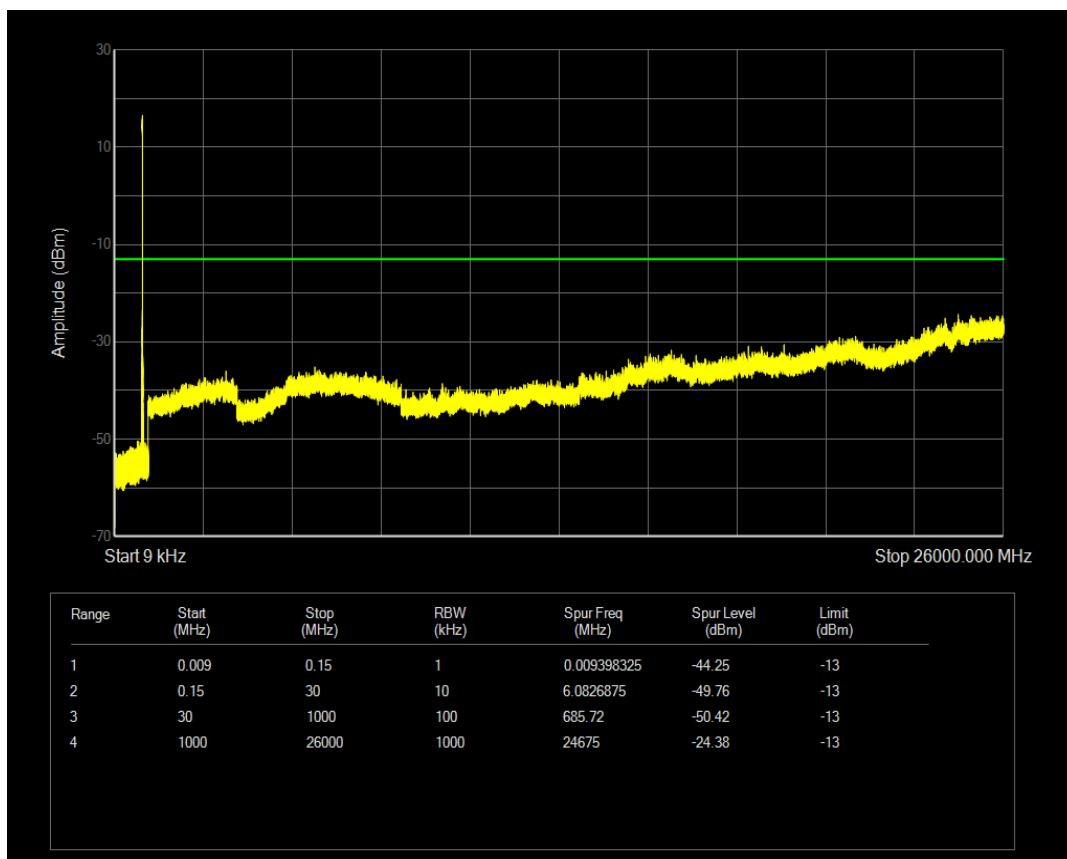


Band5 16QAM BW=3MHz Channel=20415 RB Size=15 Position=#0

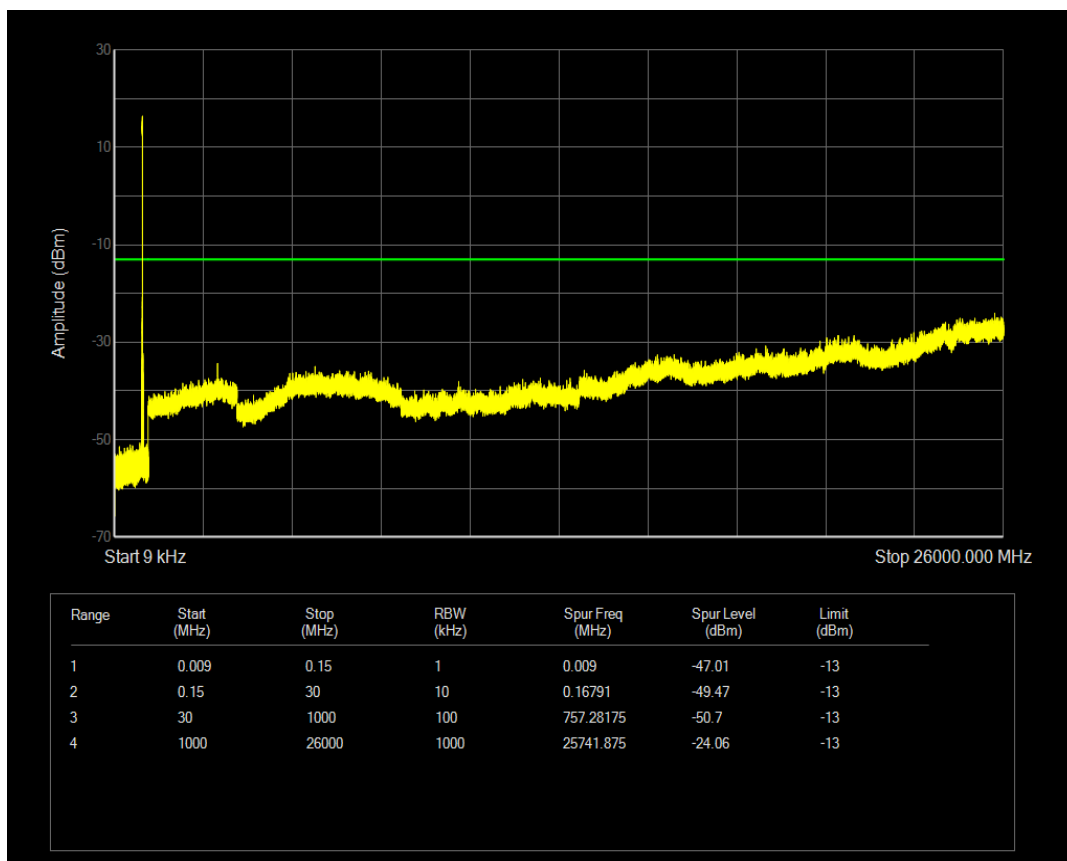




Band5 QPSK BW=3MHz Channel=20525 RB Size=15 Position=#0

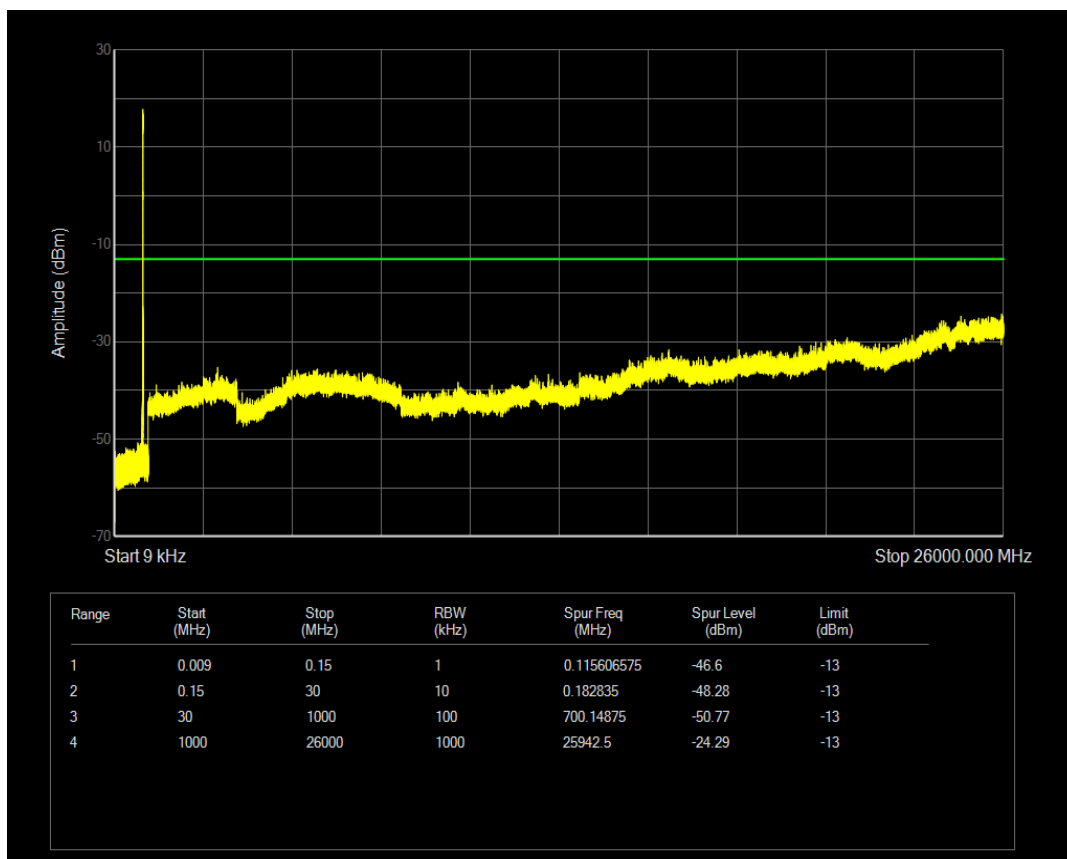


Band5 16QAM BW=3MHz Channel=20525 RB Size=15 Position=#0

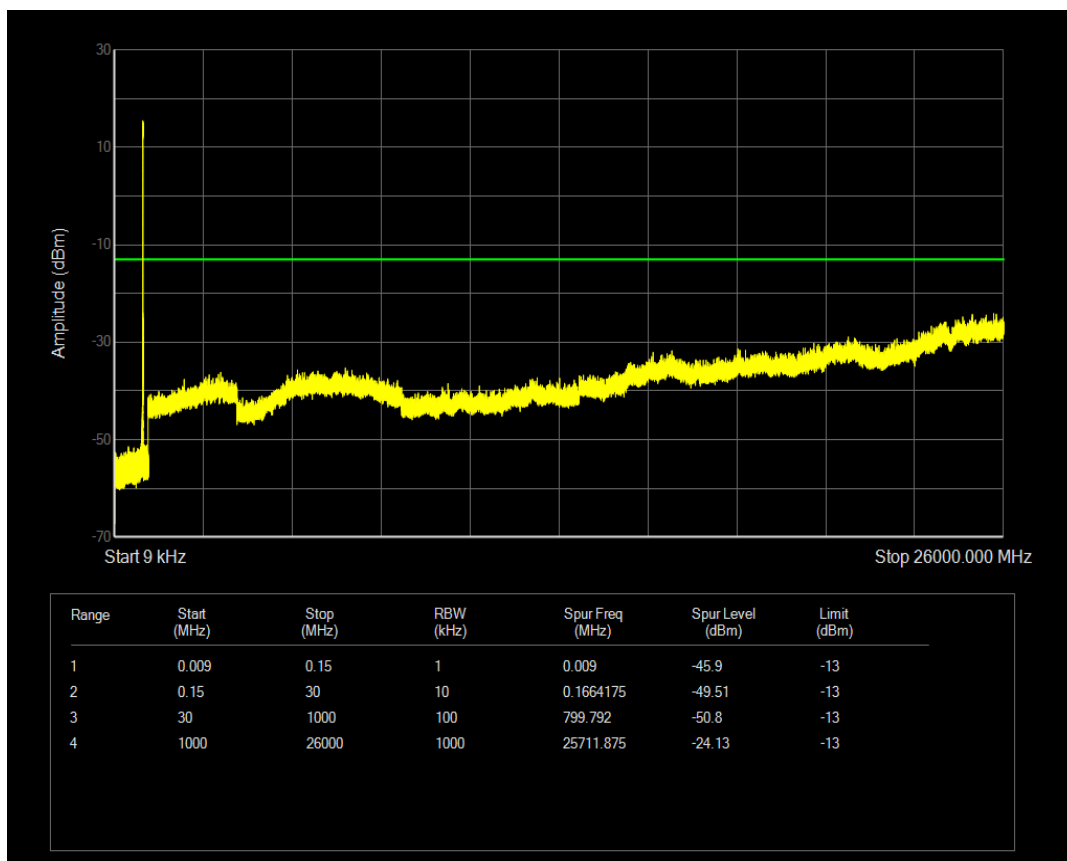




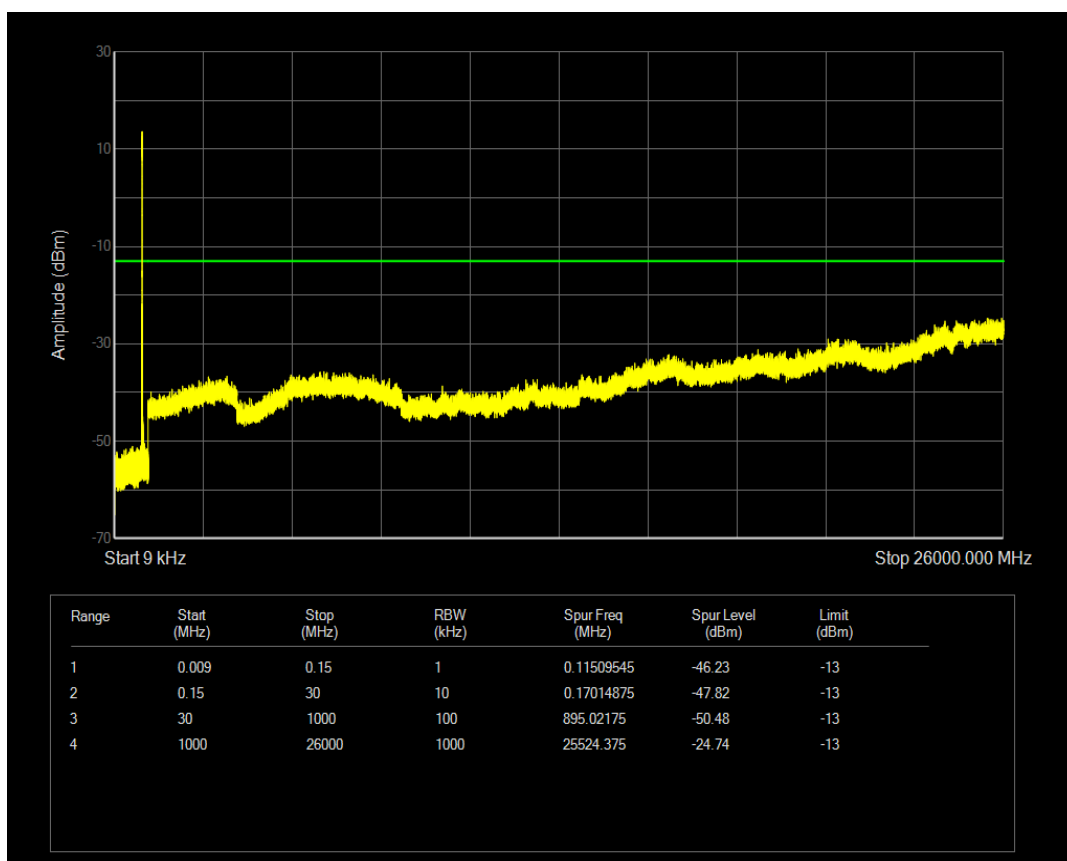
Band5 QPSK BW=3MHz Channel=20635 RB Size=15 Position=#0



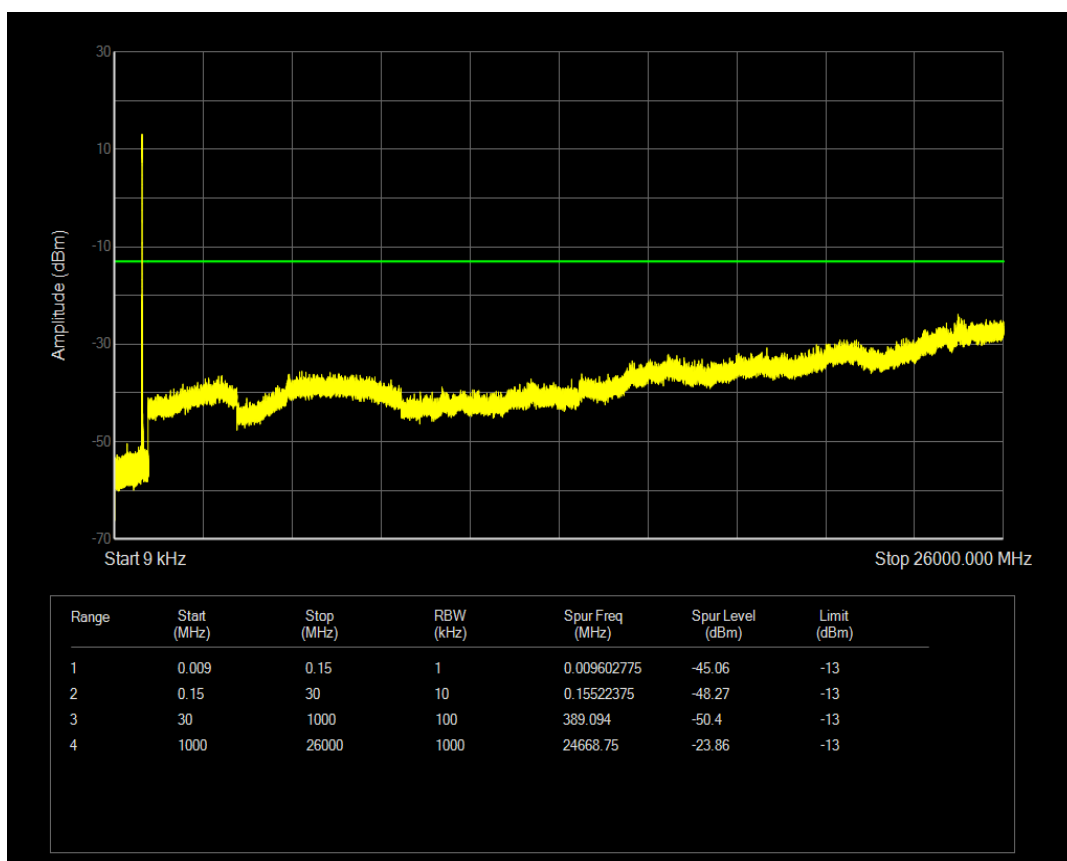
Band5 16QAM BW=3MHz Channel=20635 RB Size=15 Position=#0



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

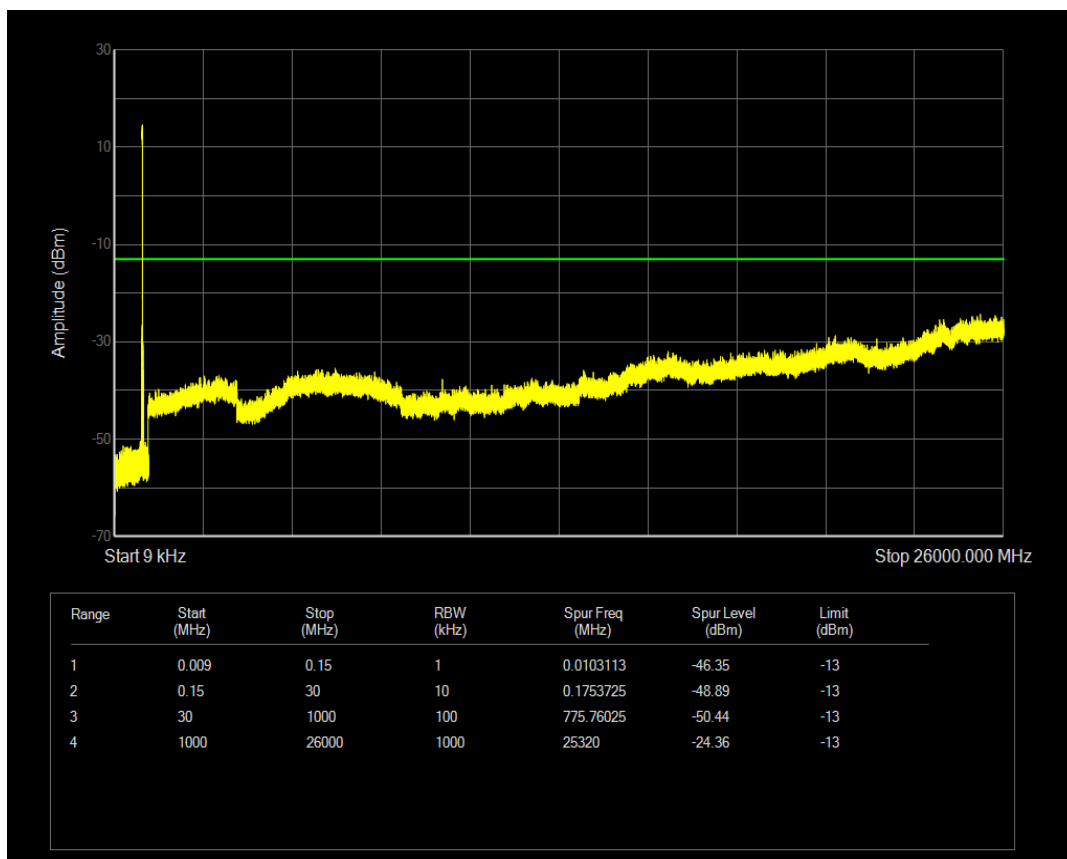


Band5 16QAM BW=5MHz Channel=20425 RB Size=25 Position=#0

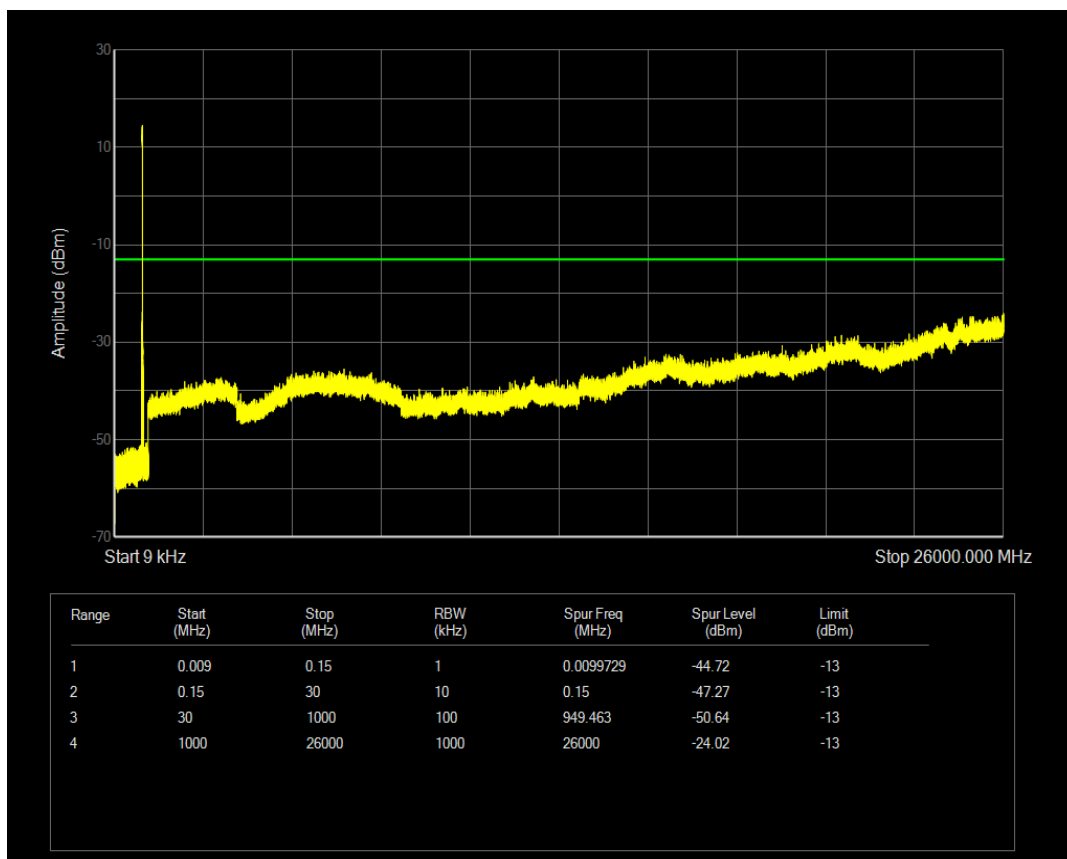




Band5 QPSK BW=5MHz Channel=20525 RB Size=25 Position=#0

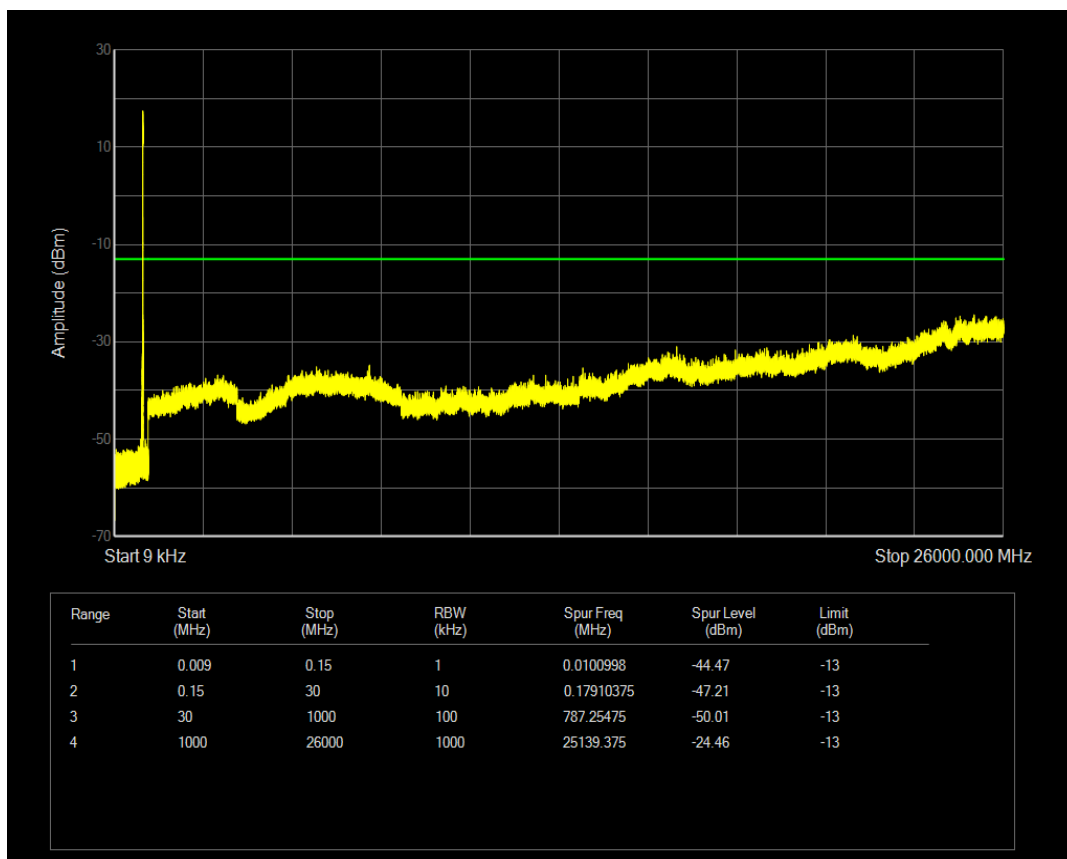


Band5 16QAM BW=5MHz Channel=20525 RB Size=25 Position=#0

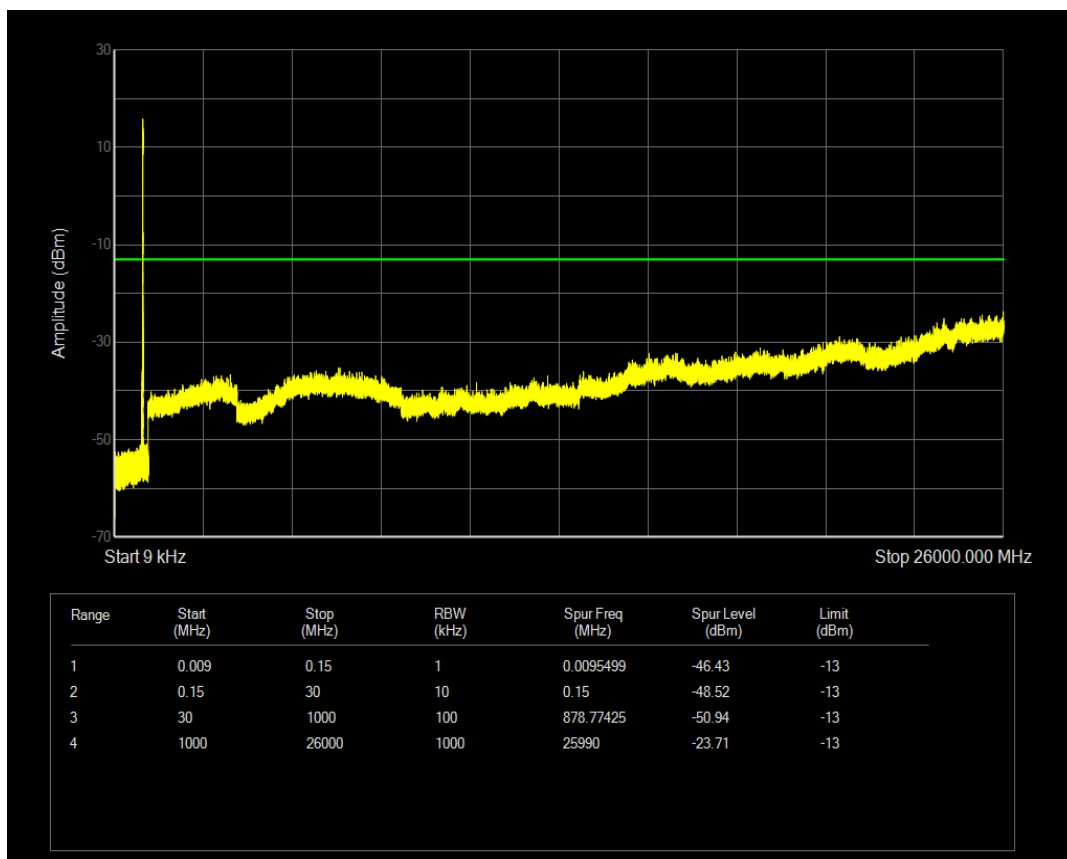




Band5 QPSK BW=5MHz Channel=20625 RB Size=25 Position=#0

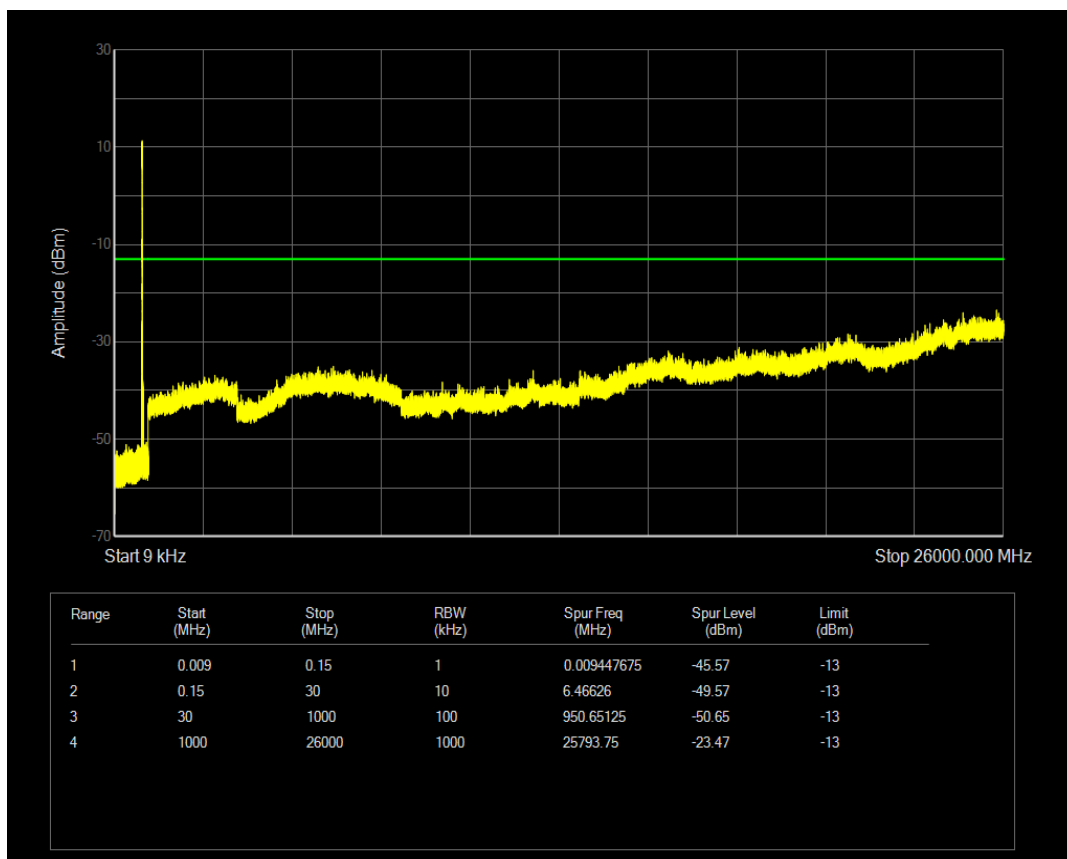


Band5 16QAM BW=5MHz Channel=20625 RB Size=25 Position=#0

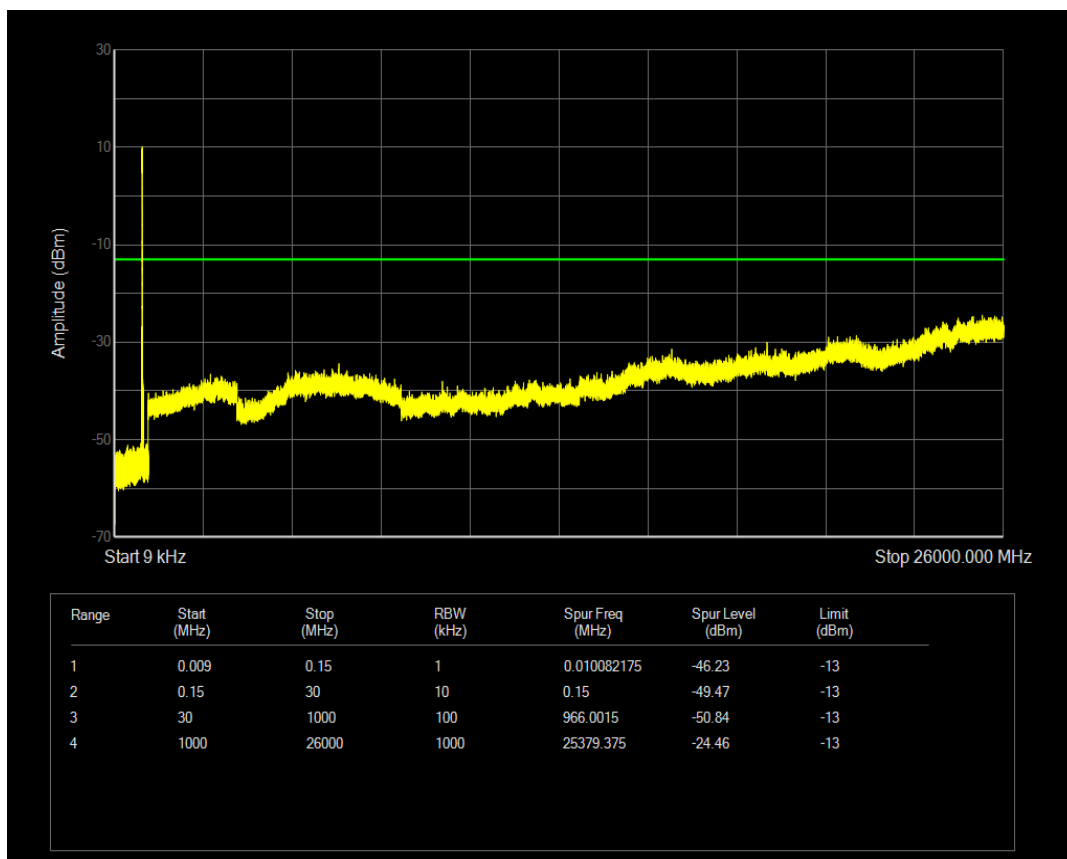




Band5 QPSK BW=10MHz Channel=20450 RB Size=50 Position=#0

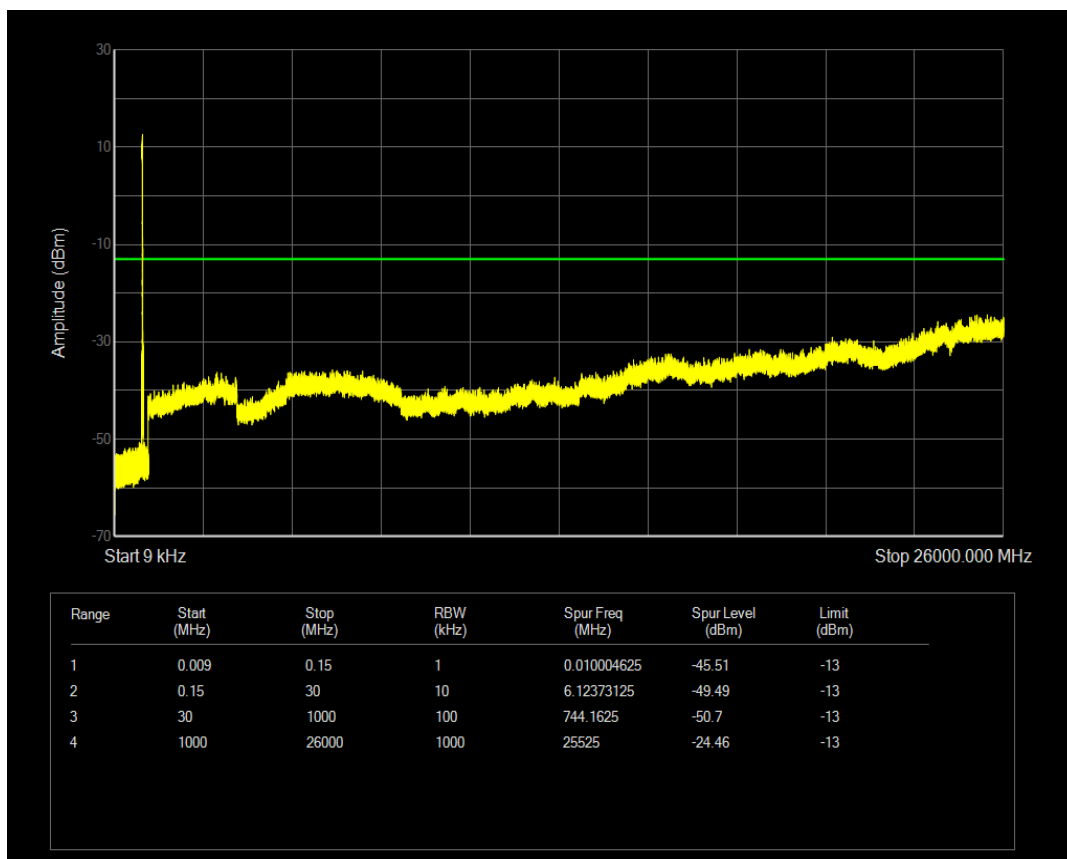


Band5 16QAM BW=10MHz Channel=20450 RB Size=50 Position=#0

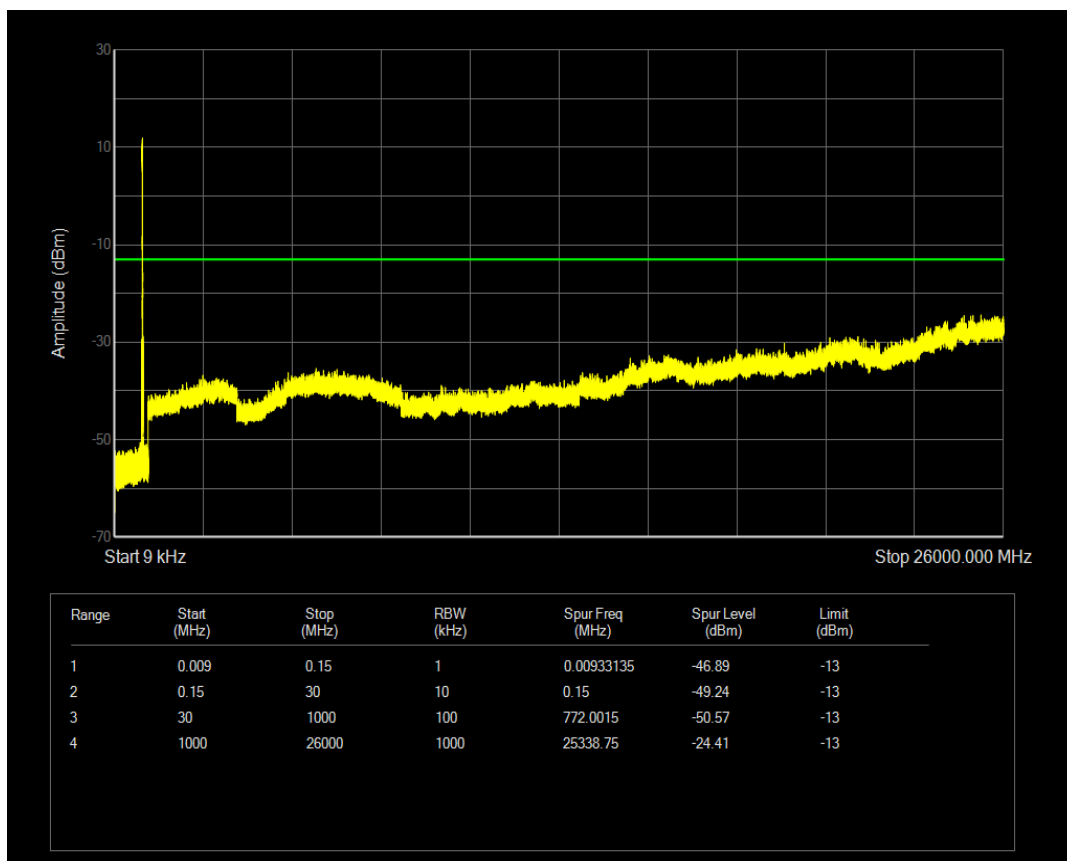




Band5 QPSK BW=10MHz Channel=20525 RB Size=50 Position=#0

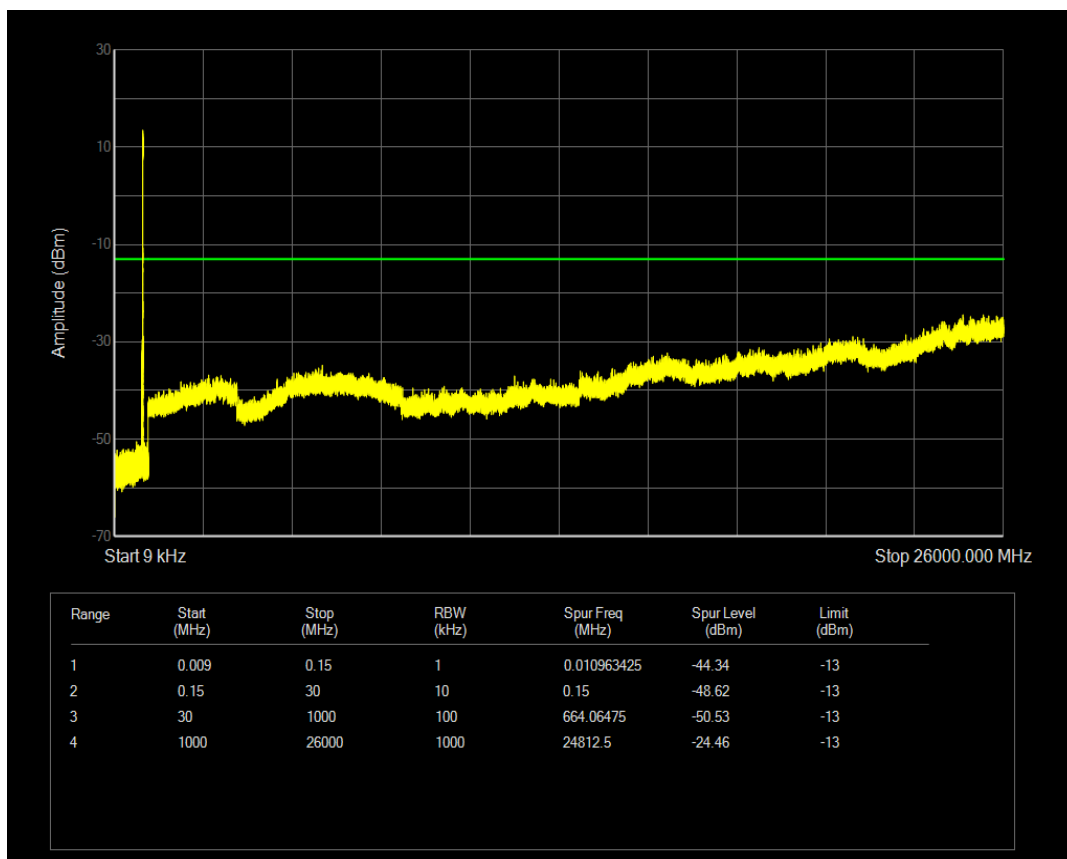


Band5 16QAM BW=10MHz Channel=20525 RB Size=50 Position=#0





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



Band5 16QAM BW=10MHz Channel=20600 RB Size=50 Position=#0

