

Appendix for Band 4

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

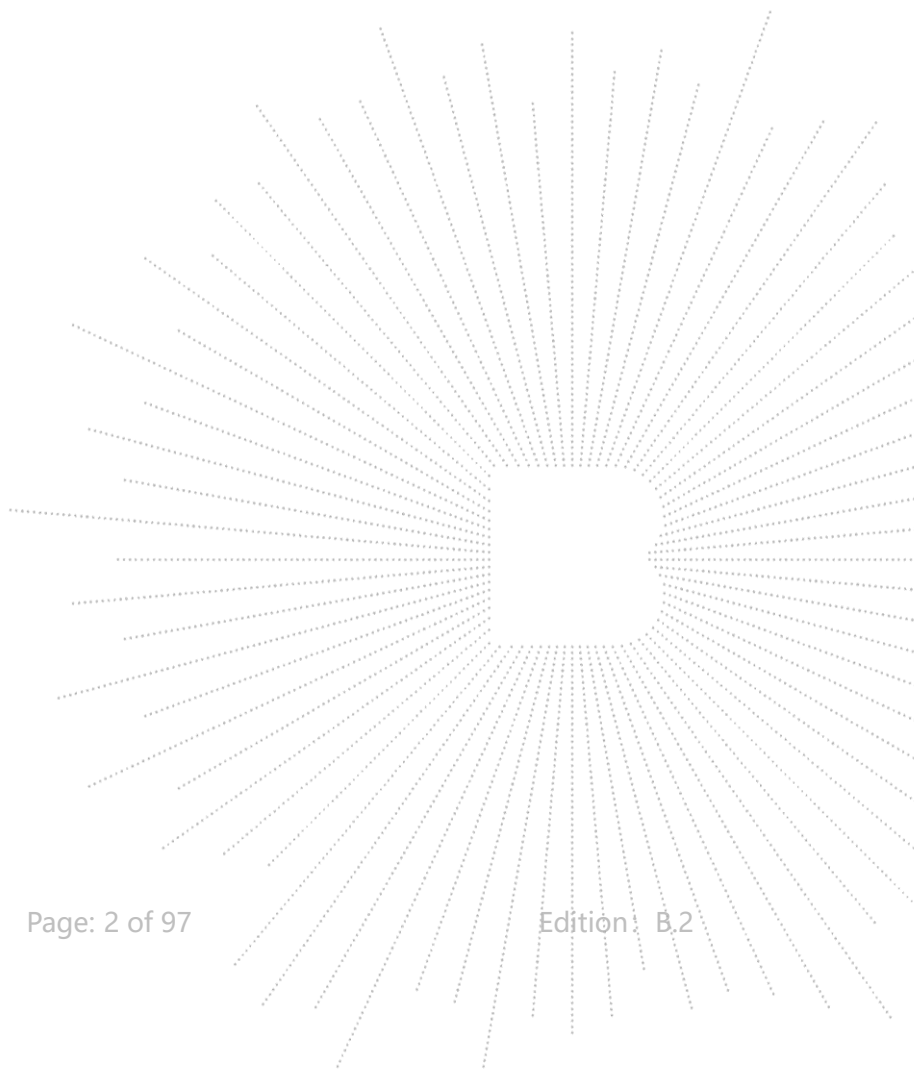
Issued Date: 2025-05-22

Shenzhen BCTC Testing Co., Ltd.



Contents

Appendix 1. Conducted output power	3
Appendix 2. Frequency stability	9
Appendix 3. Peak-to-Average Ratio	28
Appendix 4. Occupied bandwidth	47
Appendix 5. Band edge	66
Appendix 6. Out-of-band emissions	79



Appendix 1. Conducted output power

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Verdict
Band4	1.4	19957	1	#0	QPSK	23.23	PASS
Band4	1.4	19957	1	#Mid	QPSK	23.26	PASS
Band4	1.4	19957	1	#Max	QPSK	23.30	PASS
Band4	1.4	19957	3	#0	QPSK	23.09	PASS
Band4	1.4	19957	3	#Mid	QPSK	23.09	PASS
Band4	1.4	19957	3	#Max	QPSK	23.04	PASS
Band4	1.4	19957	6	#0	QPSK	22.08	PASS
Band4	1.4	19957	1	#0	16QAM	23.15	PASS
Band4	1.4	19957	1	#Mid	16QAM	23.11	PASS
Band4	1.4	19957	1	#Max	16QAM	23.12	PASS
Band4	1.4	19957	3	#0	16QAM	22.31	PASS
Band4	1.4	19957	3	#Mid	16QAM	22.29	PASS
Band4	1.4	19957	3	#Max	16QAM	22.32	PASS
Band4	1.4	19957	6	#0	16QAM	21.30	PASS
Band4	1.4	20175	1	#0	QPSK	23.12	PASS
Band4	1.4	20175	1	#Mid	QPSK	23.09	PASS
Band4	1.4	20175	1	#Max	QPSK	23.10	PASS
Band4	1.4	20175	3	#0	QPSK	23.20	PASS
Band4	1.4	20175	3	#Mid	QPSK	23.13	PASS
Band4	1.4	20175	3	#Max	QPSK	23.15	PASS
Band4	1.4	20175	6	#0	QPSK	22.11	PASS
Band4	1.4	20175	1	#0	16QAM	22.90	PASS
Band4	1.4	20175	1	#Mid	16QAM	22.79	PASS
Band4	1.4	20175	1	#Max	16QAM	22.85	PASS
Band4	1.4	20175	3	#0	16QAM	22.33	PASS
Band4	1.4	20175	3	#Mid	16QAM	22.27	PASS
Band4	1.4	20175	3	#Max	16QAM	22.29	PASS
Band4	1.4	20175	6	#0	16QAM	21.24	PASS
Band4	1.4	20393	1	#0	QPSK	23.37	PASS
Band4	1.4	20393	1	#Mid	QPSK	23.38	PASS
Band4	1.4	20393	1	#Max	QPSK	23.37	PASS
Band4	1.4	20393	3	#0	QPSK	23.24	PASS
Band4	1.4	20393	3	#Mid	QPSK	23.19	PASS
Band4	1.4	20393	3	#Max	QPSK	23.17	PASS
Band4	1.4	20393	6	#0	QPSK	22.34	PASS
Band4	1.4	20393	1	#0	16QAM	22.77	PASS
Band4	1.4	20393	1	#Mid	16QAM	22.69	PASS
Band4	1.4	20393	1	#Max	16QAM	22.79	PASS
Band4	1.4	20393	3	#0	16QAM	22.69	PASS
Band4	1.4	20393	3	#Mid	16QAM	22.59	PASS

Band4	1.4	20393	3	#Max	16QAM	22.57	PASS
Band4	1.4	20393	6	#0	16QAM	21.42	PASS
Band4	3	19965	1	#0	QPSK	22.97	PASS
Band4	3	19965	1	#Mid	QPSK	23.03	PASS
Band4	3	19965	1	#Max	QPSK	23.02	PASS
Band4	3	19965	8	#0	QPSK	22.07	PASS
Band4	3	19965	8	#Mid	QPSK	21.98	PASS
Band4	3	19965	8	#Max	QPSK	22.11	PASS
Band4	3	19965	15	#0	QPSK	21.95	PASS
Band4	3	19965	1	#0	16QAM	23.14	PASS
Band4	3	19965	1	#Mid	16QAM	23.17	PASS
Band4	3	19965	1	#Max	16QAM	23.16	PASS
Band4	3	19965	8	#0	16QAM	21.09	PASS
Band4	3	19965	8	#Mid	16QAM	21.10	PASS
Band4	3	19965	8	#Max	16QAM	21.05	PASS
Band4	3	19965	15	#0	16QAM	21.28	PASS
Band4	3	20175	1	#0	QPSK	23.12	PASS
Band4	3	20175	1	#Mid	QPSK	23.04	PASS
Band4	3	20175	1	#Max	QPSK	23.08	PASS
Band4	3	20175	8	#0	QPSK	22.23	PASS
Band4	3	20175	8	#Mid	QPSK	22.12	PASS
Band4	3	20175	8	#Max	QPSK	22.04	PASS
Band4	3	20175	15	#0	QPSK	22.16	PASS
Band4	3	20175	1	#0	16QAM	22.90	PASS
Band4	3	20175	1	#Mid	16QAM	22.85	PASS
Band4	3	20175	1	#Max	16QAM	22.74	PASS
Band4	3	20175	8	#0	16QAM	21.52	PASS
Band4	3	20175	8	#Mid	16QAM	21.46	PASS
Band4	3	20175	8	#Max	16QAM	21.45	PASS
Band4	3	20175	15	#0	16QAM	21.37	PASS
Band4	3	20385	1	#0	QPSK	23.33	PASS
Band4	3	20385	1	#Mid	QPSK	23.38	PASS
Band4	3	20385	1	#Max	QPSK	23.39	PASS
Band4	3	20385	8	#0	QPSK	22.20	PASS
Band4	3	20385	8	#Mid	QPSK	22.26	PASS
Band4	3	20385	8	#Max	QPSK	22.28	PASS
Band4	3	20385	15	#0	QPSK	22.22	PASS
Band4	3	20385	1	#0	16QAM	22.70	PASS
Band4	3	20385	1	#Mid	16QAM	22.77	PASS
Band4	3	20385	1	#Max	16QAM	22.80	PASS
Band4	3	20385	8	#0	16QAM	21.25	PASS
Band4	3	20385	8	#Mid	16QAM	21.31	PASS
Band4	3	20385	8	#Max	16QAM	21.33	PASS
Band4	3	20385	15	#0	16QAM	21.23	PASS

Band4	5	19975	1	#0	QPSK	22.99	PASS
Band4	5	19975	1	#Mid	QPSK	23.04	PASS
Band4	5	19975	1	#Max	QPSK	22.96	PASS
Band4	5	19975	12	#0	QPSK	22.07	PASS
Band4	5	19975	12	#Mid	QPSK	22.09	PASS
Band4	5	19975	12	#Max	QPSK	22.01	PASS
Band4	5	19975	25	#0	QPSK	22.11	PASS
Band4	5	19975	1	#0	16QAM	22.31	PASS
Band4	5	19975	1	#Mid	16QAM	22.47	PASS
Band4	5	19975	1	#Max	16QAM	22.44	PASS
Band4	5	19975	12	#0	16QAM	21.06	PASS
Band4	5	19975	12	#Mid	16QAM	21.12	PASS
Band4	5	19975	12	#Max	16QAM	21.09	PASS
Band4	5	19975	25	#0	16QAM	21.17	PASS
Band4	5	20175	1	#0	QPSK	23.21	PASS
Band4	5	20175	1	#Mid	QPSK	23.23	PASS
Band4	5	20175	1	#Max	QPSK	23.18	PASS
Band4	5	20175	12	#0	QPSK	22.18	PASS
Band4	5	20175	12	#Mid	QPSK	22.09	PASS
Band4	5	20175	12	#Max	QPSK	22.05	PASS
Band4	5	20175	25	#0	QPSK	22.15	PASS
Band4	5	20175	1	#0	16QAM	21.96	PASS
Band4	5	20175	1	#Mid	16QAM	21.83	PASS
Band4	5	20175	1	#Max	16QAM	21.90	PASS
Band4	5	20175	12	#0	16QAM	21.14	PASS
Band4	5	20175	12	#Mid	16QAM	21.17	PASS
Band4	5	20175	12	#Max	16QAM	21.15	PASS
Band4	5	20175	25	#0	16QAM	21.33	PASS
Band4	5	20375	1	#0	QPSK	23.01	PASS
Band4	5	20375	1	#Mid	QPSK	22.99	PASS
Band4	5	20375	1	#Max	QPSK	23.00	PASS
Band4	5	20375	12	#0	QPSK	22.28	PASS
Band4	5	20375	12	#Mid	QPSK	22.14	PASS
Band4	5	20375	12	#Max	QPSK	22.13	PASS
Band4	5	20375	25	#0	QPSK	22.25	PASS
Band4	5	20375	1	#0	16QAM	22.52	PASS
Band4	5	20375	1	#Mid	16QAM	22.52	PASS
Band4	5	20375	1	#Max	16QAM	22.56	PASS
Band4	5	20375	12	#0	16QAM	21.37	PASS
Band4	5	20375	12	#Mid	16QAM	21.29	PASS
Band4	5	20375	12	#Max	16QAM	21.29	PASS
Band4	5	20375	25	#0	16QAM	21.25	PASS
Band4	10	20000	1	#0	QPSK	23.08	PASS
Band4	10	20000	1	#Mid	QPSK	23.16	PASS

Band4	10	20000	1	#Max	QPSK	23.21	PASS
Band4	10	20000	25	#0	QPSK	22.14	PASS
Band4	10	20000	25	#Mid	QPSK	22.18	PASS
Band4	10	20000	25	#Max	QPSK	22.25	PASS
Band4	10	20000	50	#0	QPSK	22.07	PASS
Band4	10	20000	1	#0	16QAM	22.49	PASS
Band4	10	20000	1	#Mid	16QAM	22.57	PASS
Band4	10	20000	1	#Max	16QAM	22.54	PASS
Band4	10	20000	25	#0	16QAM	21.27	PASS
Band4	10	20000	25	#Mid	16QAM	21.24	PASS
Band4	10	20000	25	#Max	16QAM	21.31	PASS
Band4	10	20000	50	#0	16QAM	21.23	PASS
Band4	10	20175	1	#0	QPSK	23.10	PASS
Band4	10	20175	1	#Mid	QPSK	23.07	PASS
Band4	10	20175	1	#Max	QPSK	23.09	PASS
Band4	10	20175	25	#0	QPSK	22.23	PASS
Band4	10	20175	25	#Mid	QPSK	22.10	PASS
Band4	10	20175	25	#Max	QPSK	22.17	PASS
Band4	10	20175	50	#0	QPSK	22.10	PASS
Band4	10	20175	1	#0	16QAM	23.31	PASS
Band4	10	20175	1	#Mid	16QAM	23.32	PASS
Band4	10	20175	1	#Max	16QAM	23.18	PASS
Band4	10	20175	25	#0	16QAM	21.30	PASS
Band4	10	20175	25	#Mid	16QAM	21.26	PASS
Band4	10	20175	25	#Max	16QAM	21.27	PASS
Band4	10	20175	50	#0	16QAM	21.26	PASS
Band4	10	20350	1	#0	QPSK	23.07	PASS
Band4	10	20350	1	#Mid	QPSK	23.19	PASS
Band4	10	20350	1	#Max	QPSK	23.17	PASS
Band4	10	20350	25	#0	QPSK	22.04	PASS
Band4	10	20350	25	#Mid	QPSK	22.20	PASS
Band4	10	20350	25	#Max	QPSK	22.19	PASS
Band4	10	20350	50	#0	QPSK	22.27	PASS
Band4	10	20350	1	#0	16QAM	22.26	PASS
Band4	10	20350	1	#Mid	16QAM	22.36	PASS
Band4	10	20350	1	#Max	16QAM	22.33	PASS
Band4	10	20350	25	#0	16QAM	21.31	PASS
Band4	10	20350	25	#Mid	16QAM	21.25	PASS
Band4	10	20350	25	#Max	16QAM	21.25	PASS
Band4	10	20350	50	#0	16QAM	21.40	PASS
Band4	15	20025	1	#0	QPSK	23.01	PASS
Band4	15	20025	1	#Mid	QPSK	23.12	PASS
Band4	15	20025	1	#Max	QPSK	23.12	PASS
Band4	15	20025	36	#0	QPSK	22.16	PASS

Band4	15	20025	36	#Mid	QPSK	22.11	PASS
Band4	15	20025	36	#Max	QPSK	22.16	PASS
Band4	15	20025	75	#0	QPSK	22.22	PASS
Band4	15	20025	1	#0	16QAM	23.29	PASS
Band4	15	20025	1	#Mid	16QAM	23.38	PASS
Band4	15	20025	1	#Max	16QAM	23.33	PASS
Band4	15	20025	36	#0	16QAM	21.16	PASS
Band4	15	20025	36	#Mid	16QAM	21.33	PASS
Band4	15	20025	36	#Max	16QAM	21.31	PASS
Band4	15	20025	75	#0	16QAM	21.25	PASS
Band4	15	20175	1	#0	QPSK	23.18	PASS
Band4	15	20175	1	#Mid	QPSK	23.18	PASS
Band4	15	20175	1	#Max	QPSK	23.15	PASS
Band4	15	20175	36	#0	QPSK	22.15	PASS
Band4	15	20175	36	#Mid	QPSK	22.18	PASS
Band4	15	20175	36	#Max	QPSK	22.09	PASS
Band4	15	20175	75	#0	QPSK	22.16	PASS
Band4	15	20175	1	#0	16QAM	22.31	PASS
Band4	15	20175	1	#Mid	16QAM	22.29	PASS
Band4	15	20175	1	#Max	16QAM	22.22	PASS
Band4	15	20175	36	#0	16QAM	21.40	PASS
Band4	15	20175	36	#Mid	16QAM	21.36	PASS
Band4	15	20175	36	#Max	16QAM	21.38	PASS
Band4	15	20175	75	#0	16QAM	21.29	PASS
Band4	15	20325	1	#0	QPSK	23.41	PASS
Band4	15	20325	1	#Mid	QPSK	23.41	PASS
Band4	15	20325	1	#Max	QPSK	23.41	PASS
Band4	15	20325	36	#0	QPSK	22.20	PASS
Band4	15	20325	36	#Mid	QPSK	22.20	PASS
Band4	15	20325	36	#Max	QPSK	22.28	PASS
Band4	15	20325	75	#0	QPSK	22.13	PASS
Band4	15	20325	1	#0	16QAM	22.85	PASS
Band4	15	20325	1	#Mid	16QAM	22.79	PASS
Band4	15	20325	1	#Max	16QAM	22.92	PASS
Band4	15	20325	36	#0	16QAM	21.23	PASS
Band4	15	20325	36	#Mid	16QAM	21.24	PASS
Band4	15	20325	36	#Max	16QAM	21.29	PASS
Band4	15	20325	75	#0	16QAM	21.44	PASS
Band4	20	20050	1	#0	QPSK	23.13	PASS
Band4	20	20050	1	#Mid	QPSK	23.17	PASS
Band4	20	20050	1	#Max	QPSK	23.23	PASS
Band4	20	20050	50	#0	QPSK	22.13	PASS
Band4	20	20050	50	#Mid	QPSK	22.09	PASS
Band4	20	20050	50	#Max	QPSK	22.14	PASS

Band4	20	20050	100	#0	QPSK	22.09	PASS
Band4	20	20050	1	#0	16QAM	21.77	PASS
Band4	20	20050	1	#Mid	16QAM	21.88	PASS
Band4	20	20050	1	#Max	16QAM	21.90	PASS
Band4	20	20050	50	#0	16QAM	21.29	PASS
Band4	20	20050	50	#Mid	16QAM	21.45	PASS
Band4	20	20050	50	#Max	16QAM	21.36	PASS
Band4	20	20050	100	#0	16QAM	21.31	PASS
Band4	20	20175	1	#0	QPSK	23.24	PASS
Band4	20	20175	1	#Mid	QPSK	23.22	PASS
Band4	20	20175	1	#Max	QPSK	23.32	PASS
Band4	20	20175	50	#0	QPSK	22.17	PASS
Band4	20	20175	50	#Mid	QPSK	22.11	PASS
Band4	20	20175	50	#Max	QPSK	22.13	PASS
Band4	20	20175	100	#0	QPSK	22.14	PASS
Band4	20	20175	1	#0	16QAM	22.46	PASS
Band4	20	20175	1	#Mid	16QAM	22.39	PASS
Band4	20	20175	1	#Max	16QAM	22.44	PASS
Band4	20	20175	50	#0	16QAM	21.26	PASS
Band4	20	20175	50	#Mid	16QAM	21.20	PASS
Band4	20	20175	50	#Max	16QAM	21.20	PASS
Band4	20	20175	100	#0	16QAM	21.22	PASS
Band4	20	20300	1	#0	QPSK	23.33	PASS
Band4	20	20300	1	#Mid	QPSK	23.32	PASS
Band4	20	20300	1	#Max	QPSK	23.38	PASS
Band4	20	20300	50	#0	QPSK	22.17	PASS
Band4	20	20300	50	#Mid	QPSK	22.13	PASS
Band4	20	20300	50	#Max	QPSK	22.11	PASS
Band4	20	20300	100	#0	QPSK	22.22	PASS
Band4	20	20300	1	#0	16QAM	22.40	PASS
Band4	20	20300	1	#Mid	16QAM	22.33	PASS
Band4	20	20300	1	#Max	16QAM	22.31	PASS
Band4	20	20300	50	#0	16QAM	21.28	PASS
Band4	20	20300	50	#Mid	16QAM	21.26	PASS
Band4	20	20300	50	#Max	16QAM	21.21	PASS
Band4	20	20300	100	#0	16QAM	21.29	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
Band4	1.4	19957	6	#0	QPSK	LV	NT	7.64	0.004	-2.5	2.5	PASS
Band4	1.4	19957	6	#0	QPSK	NV	NT	-6.45	-0.004	-2.5	2.5	PASS
Band4	1.4	19957	6	#0	QPSK	HV	NT	-18.63	-0.011	-2.5	2.5	PASS
Band4	1.4	19957	6	#0	16QAM	LV	NT	-30.48	-0.018	-2.5	2.5	PASS
Band4	1.4	19957	6	#0	16QAM	NV	NT	-8.27	-0.005	-2.5	2.5	PASS
Band4	1.4	19957	6	#0	16QAM	HV	NT	-24.40	-0.014	-2.5	2.5	PASS
Band4	1.4	20175	6	#0	QPSK	LV	NT	-13.29	-0.008	-2.5	2.5	PASS
Band4	1.4	20175	6	#0	QPSK	NV	NT	-24.25	-0.014	-2.5	2.5	PASS
Band4	1.4	20175	6	#0	QPSK	HV	NT	-35.89	-0.021	-2.5	2.5	PASS
Band4	1.4	20175	6	#0	16QAM	LV	NT	-12.23	-0.007	-2.5	2.5	PASS
Band4	1.4	20175	6	#0	16QAM	NV	NT	-17.50	-0.010	-2.5	2.5	PASS
Band4	1.4	20175	6	#0	16QAM	HV	NT	-23.26	-0.013	-2.5	2.5	PASS
Band4	1.4	20393	6	#0	QPSK	LV	NT	3.99	0.002	-2.5	2.5	PASS
Band4	1.4	20393	6	#0	QPSK	NV	NT	-4.23	-0.002	-2.5	2.5	PASS
Band4	1.4	20393	6	#0	QPSK	HV	NT	-15.26	-0.009	-2.5	2.5	PASS
Band4	1.4	20393	6	#0	16QAM	LV	NT	-23.05	-0.013	-2.5	2.5	PASS
Band4	1.4	20393	6	#0	16QAM	NV	NT	-26.82	-0.015	-2.5	2.5	PASS
Band4	1.4	20393	6	#0	16QAM	HV	NT	-32.27	-0.018	-2.5	2.5	PASS



Ban d4	3	19965	15	#0	QPSK	LV	NT	20.7 3	0.01 2	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	QPSK	NV	NT	6.49	0.00 4	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	QPSK	HV	NT	-6.6 2	-0.0 04	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	16QAM	LV	NT	-17. 62	-0.0 10	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	16QAM	NV	NT	-24. 72	-0.0 14	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	16QAM	HV	NT	-21. 50	-0.0 13	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	QPSK	LV	NT	5.76	0.00 3	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	QPSK	NV	NT	-1.3 4	-0.0 01	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	QPSK	HV	NT	-11.3 2	-0.0 07	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	16QAM	LV	NT	-22. 49	-0.0 13	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	16QAM	NV	NT	-30. 21	-0.0 17	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	16QAM	HV	NT	-0.2 9	0.00 0	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	QPSK	LV	NT	-4.7 6	-0.0 03	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	QPSK	NV	NT	-15. 08	-0.0 09	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	QPSK	HV	NT	-25. 69	-0.0 15	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	16QAM	LV	NT	-36. 76	-0.0 21	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	16QAM	NV	NT	-5.0 1	-0.0 03	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	16QAM	HV	NT	-6.9 8	-0.0 04	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	QPSK	LV	NT	5.52	0.00 3	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	QPSK	NV	NT	-9.6 8	-0.0 06	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	QPSK	HV	NT	-19. 91	-0.0 12	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	16QAM	LV	NT	-31. 37	-0.0 18	-2.5	2.5	PAS S



Ban d4	5	19975	25	#0	16QAM	NV	NT	-40. 64	-0.0 24	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	16QAM	HV	NT	-0.3 4	0.00 0	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	QPSK	LV	NT	-2.5 2	-0.0 01	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	QPSK	NV	NT	-11.1 0	-0.0 06	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	QPSK	HV	NT	-16. 79	-0.0 10	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	16QAM	LV	NT	-23. 02	-0.0 13	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	16QAM	NV	NT	-24. 95	-0.0 14	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	16QAM	HV	NT	-21. 93	-0.0 13	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	QPSK	LV	NT	18.5 8	0.01 1	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	QPSK	NV	NT	15.8 6	0.00 9	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	QPSK	HV	NT	9.08	0.00 5	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	16QAM	LV	NT	3.96	0.00 2	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	16QAM	NV	NT	0.23	0.00 0	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	16QAM	HV	NT	-5.2 5	-0.0 03	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	QPSK	LV	NT	-1.7 7	-0.0 01	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	QPSK	NV	NT	-24. 16	-0.0 14	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	QPSK	HV	NT	-18. 32	-0.01 1	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	16QAM	LV	NT	-12. 80	-0.0 07	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	16QAM	NV	NT	-18. 22	-0.01 1	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	16QAM	HV	NT	-22. 87	-0.0 13	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	QPSK	LV	NT	14.3 8	0.00 8	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	QPSK	NV	NT	13.0 9	0.00 8	-2.5	2.5	PAS S



Ban d4	10	20175	50	#0	QPSK	HV	NT	6.94	0.00 4	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	16QAM	LV	NT	4.09	0.00 2	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	16QAM	NV	NT	3.91	0.00 2	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	16QAM	HV	NT	6.74	0.00 4	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	QPSK	LV	NT	-0.7 3	0.00 0	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	QPSK	NV	NT	-11.8 6	-0.0 07	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	QPSK	HV	NT	-22. 43	-0.0 13	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	16QAM	LV	NT	-34. 60	-0.0 20	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	16QAM	NV	NT	-44. 46	-0.0 25	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	16QAM	HV	NT	-15. 86	-0.0 09	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	QPSK	LV	NT	27.0 4	0.01 6	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	QPSK	NV	NT	-3.4 2	-0.0 02	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	QPSK	HV	NT	-27. 72	-0.0 16	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	16QAM	LV	NT	4.91	0.00 3	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	16QAM	NV	NT	-7.5 1	-0.0 04	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	16QAM	HV	NT	-19. 03	-0.01 1	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	QPSK	LV	NT	-5.3 5	-0.0 03	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	QPSK	NV	NT	-20. 18	-0.0 12	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	QPSK	HV	NT	-35. 28	-0.0 20	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	16QAM	LV	NT	-18. 87	-0.01 1	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	16QAM	NV	NT	-7.7 1	-0.0 04	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	16QAM	HV	NT	-9.1 7	-0.0 05	-2.5	2.5	PAS S



Ban d4	15	20325	75	#0	QPSK	LV	NT	-1.8 3	-0.0 01	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	QPSK	NV	NT	-6.9 2	-0.0 04	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	QPSK	HV	NT	-17. 34	-0.0 10	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	16QAM	LV	NT	-29. 77	-0.0 17	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	16QAM	NV	NT	-32. 19	-0.0 18	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	16QAM	HV	NT	-40. 25	-0.0 23	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	QPSK	LV	NT	2.66	0.00 2	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	QPSK	NV	NT	-10. 69	-0.0 06	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	QPSK	HV	NT	-8.8 3	-0.0 05	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	16QAM	LV	NT	-15. 44	-0.0 09	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	16QAM	NV	NT	-18. 10	-0.01 1	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	16QAM	HV	NT	-22. 02	-0.0 13	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	QPSK	LV	NT	-1.3 2	-0.0 01	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	QPSK	NV	NT	-15. 49	-0.0 09	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	QPSK	HV	NT	-32. 44	-0.0 19	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	16QAM	LV	NT	-43. 49	-0.0 25	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	16QAM	NV	NT	-9.9 3	-0.0 06	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	16QAM	HV	NT	-5.9 5	-0.0 03	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	QPSK	LV	NT	-0.7 2	0.00 0	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	QPSK	NV	NT	-23. 42	-0.0 13	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	QPSK	HV	NT	1.17	0.00 1	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	16QAM	LV	NT	-17. 60	-0.0 10	-2.5	2.5	PAS S



Ban d4	20	20300	10 0	#0	16QAM	NV	NT	-23. 30	-0.0 13	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	16QAM	HV	NT	-20. 60	-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 d4	1.4	19957	6	#0	QPSK	NV	-30	27.2 2	0.01 6	-2.5	2.5	PAS S
Ban d4	1.4	19957	6	#0	QPSK	NV	-20	12.7 5	0.00 7	-2.5	2.5	PAS S
Ban d4	1.4	19957	6	#0	QPSK	NV	0	2.99	0.00 2	-2.5	2.5	PAS S
Ban d4	1.4	19957	6	#0	QPSK	NV	10	-6.3 9	-0.0 04	-2.5	2.5	PAS S
Ban d4	1.4	19957	6	#0	QPSK	NV	20	-12. 86	-0.0 08	-2.5	2.5	PAS S
Ban d4	1.4	19957	6	#0	QPSK	NV	30	-21. 26	-0.0 12	-2.5	2.5	PAS S
Ban d4	1.4	19957	6	#0	QPSK	NV	40	-29. 45	-0.0 17	-2.5	2.5	PAS S
Ban d4	1.4	19957	6	#0	QPSK	NV	50	-40. 78	-0.0 24	-2.5	2.5	PAS S
Ban d4	1.4	19957	6	#0	16QAM	NV	-30	-15. 41	-0.0 09	-2.5	2.5	PAS S
Ban d4	1.4	19957	6	#0	16QAM	NV	-20	-26. 18	-0.0 15	-2.5	2.5	PAS S
Ban d4	1.4	19957	6	#0	16QAM	NV	0	-37. 88	-0.0 22	-2.5	2.5	PAS S
Ban d4	1.4	19957	6	#0	16QAM	NV	10	-42. 34	-0.0 25	-2.5	2.5	PAS S
Ban d4	1.4	19957	6	#0	16QAM	NV	20	-21. 03	-0.0 12	-2.5	2.5	PAS S
Ban d4	1.4	19957	6	#0	16QAM	NV	30	-30. 63	-0.0 18	-2.5	2.5	PAS S
Ban d4	1.4	19957	6	#0	16QAM	NV	40	-39. 27	-0.0 23	-2.5	2.5	PAS S
Ban d4	1.4	19957	6	#0	16QAM	NV	50	-47. 31	-0.0 28	-2.5	2.5	PAS S
Ban d4	1.4	20175	6	#0	QPSK	NV	-30	-3.3 0	-0.0 02	-2.5	2.5	PAS S



Ban d4	1.4	20175	6	#0	QPSK	NV	-20	-9.2 0	-0.0 05	-2.5	2.5	PAS S
Ban d4	1.4	20175	6	#0	QPSK	NV	0	-14. 79	-0.0 09	-2.5	2.5	PAS S
Ban d4	1.4	20175	6	#0	QPSK	NV	10	-21. 93	-0.0 13	-2.5	2.5	PAS S
Ban d4	1.4	20175	6	#0	QPSK	NV	20	-24. 22	-0.0 14	-2.5	2.5	PAS S
Ban d4	1.4	20175	6	#0	QPSK	NV	30	-28. 87	-0.0 17	-2.5	2.5	PAS S
Ban d4	1.4	20175	6	#0	QPSK	NV	40	-33. 12	-0.0 19	-2.5	2.5	PAS S
Ban d4	1.4	20175	6	#0	QPSK	NV	50	-35. 48	-0.0 20	-2.5	2.5	PAS S
Ban d4	1.4	20175	6	#0	16QAM	NV	-30	-35. 42	-0.0 20	-2.5	2.5	PAS S
Ban d4	1.4	20175	6	#0	16QAM	NV	-20	-34. 60	-0.0 20	-2.5	2.5	PAS S
Ban d4	1.4	20175	6	#0	16QAM	NV	0	-31. 37	-0.0 18	-2.5	2.5	PAS S
Ban d4	1.4	20175	6	#0	16QAM	NV	10	-25. 58	-0.0 15	-2.5	2.5	PAS S
Ban d4	1.4	20175	6	#0	16QAM	NV	20	-21. 36	-0.0 12	-2.5	2.5	PAS S
Ban d4	1.4	20175	6	#0	16QAM	NV	30	-18. 25	-0.01 1	-2.5	2.5	PAS S
Ban d4	1.4	20175	6	#0	16QAM	NV	40	-13. 49	-0.0 08	-2.5	2.5	PAS S
Ban d4	1.4	20175	6	#0	16QAM	NV	50	-6.7 4	-0.0 04	-2.5	2.5	PAS S
Ban d4	1.4	20393	6	#0	QPSK	NV	-30	17.2 1	0.01 0	-2.5	2.5	PAS S
Ban d4	1.4	20393	6	#0	QPSK	NV	-20	17.4 7	0.01 0	-2.5	2.5	PAS S
Ban d4	1.4	20393	6	#0	QPSK	NV	0	16.3 8	0.00 9	-2.5	2.5	PAS S
Ban d4	1.4	20393	6	#0	QPSK	NV	10	15.1 9	0.00 9	-2.5	2.5	PAS S
Ban d4	1.4	20393	6	#0	QPSK	NV	20	15.3 8	0.00 9	-2.5	2.5	PAS S
Ban d4	1.4	20393	6	#0	QPSK	NV	30	14.0 9	0.00 8	-2.5	2.5	PAS S
Ban d4	1.4	20393	6	#0	QPSK	NV	40	11.8 4	0.00 7	-2.5	2.5	PAS S



Ban d4	1.4	20393	6	#0	QPSK	NV	50	8.65	0.00 5	-2.5	2.5	PAS S
Ban d4	1.4	20393	6	#0	16QAM	NV	-30	3.89	0.00 2	-2.5	2.5	PAS S
Ban d4	1.4	20393	6	#0	16QAM	NV	-20	1.96	0.00 1	-2.5	2.5	PAS S
Ban d4	1.4	20393	6	#0	16QAM	NV	0	1.95	0.00 1	-2.5	2.5	PAS S
Ban d4	1.4	20393	6	#0	16QAM	NV	10	2.53	0.00 1	-2.5	2.5	PAS S
Ban d4	1.4	20393	6	#0	16QAM	NV	20	1.00	0.00 1	-2.5	2.5	PAS S
Ban d4	1.4	20393	6	#0	16QAM	NV	30	1.29	0.00 1	-2.5	2.5	PAS S
Ban d4	1.4	20393	6	#0	16QAM	NV	40	1.77	0.00 1	-2.5	2.5	PAS S
Ban d4	1.4	20393	6	#0	16QAM	NV	50	0.74	0.00 0	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	QPSK	NV	-30	15.5 6	0.00 9	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	QPSK	NV	-20	2.66	0.00 2	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	QPSK	NV	0	-8.9 7	-0.0 05	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	QPSK	NV	10	-15. 91	-0.0 09	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	QPSK	NV	20	-22. 63	-0.0 13	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	QPSK	NV	30	-32.1 1	-0.0 19	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	QPSK	NV	40	-2.7 3	-0.0 02	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	QPSK	NV	50	-13. 53	-0.0 08	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	16QAM	NV	-30	-28. 38	-0.0 17	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	16QAM	NV	-20	-40. 87	-0.0 24	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	16QAM	NV	0	-13. 15	-0.0 08	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	16QAM	NV	10	-23. 72	-0.0 14	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	16QAM	NV	20	-37. 68	-0.0 22	-2.5	2.5	PAS S



Ban d4	3	19965	15	#0	16QAM	NV	30	-1.9 7	-0.0 01	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	16QAM	NV	40	-18. 57	-0.01 1	-2.5	2.5	PAS S
Ban d4	3	19965	15	#0	16QAM	NV	50	-33. 07	-0.0 19	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	QPSK	NV	-30	-1.5 4	-0.0 01	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	QPSK	NV	-20	-12. 25	-0.0 07	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	QPSK	NV	0	-27. 19	-0.0 16	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	QPSK	NV	10	-38. 31	-0.0 22	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	QPSK	NV	20	-17. 42	-0.0 10	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	QPSK	NV	30	-17. 12	-0.0 10	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	QPSK	NV	40	-23. 47	-0.0 14	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	QPSK	NV	50	-28. 68	-0.0 17	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	16QAM	NV	-30	-34. 96	-0.0 20	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	16QAM	NV	-20	-37. 84	-0.0 22	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	16QAM	NV	0	-38. 58	-0.0 22	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	16QAM	NV	10	-40. 73	-0.0 24	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	16QAM	NV	20	-40. 50	-0.0 23	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	16QAM	NV	30	-41. 46	-0.0 24	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	16QAM	NV	40	-38. 85	-0.0 22	-2.5	2.5	PAS S
Ban d4	3	20175	15	#0	16QAM	NV	50	-36. 99	-0.0 21	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	QPSK	NV	-30	-0.6 2	0.00 0	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	QPSK	NV	-20	-6.4 8	-0.0 04	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	QPSK	NV	0	-13. 62	-0.0 08	-2.5	2.5	PAS S



Ban d4	3	20385	15	#0	QPSK	NV	10	-21. 31	-0.0 12	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	QPSK	NV	20	-26. 28	-0.0 15	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	QPSK	NV	30	-32. 94	-0.0 19	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	QPSK	NV	40	-39. 18	-0.0 22	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	QPSK	NV	50	-0.9 7	-0.0 01	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	16QAM	NV	-30	-4.2 9	-0.0 02	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	16QAM	NV	-20	-7.8 4	-0.0 04	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	16QAM	NV	0	-9.2 4	-0.0 05	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	16QAM	NV	10	-13. 20	-0.0 08	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	16QAM	NV	20	-17. 28	-0.0 10	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	16QAM	NV	30	-23. 03	-0.0 13	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	16QAM	NV	40	-27. 25	-0.0 16	-2.5	2.5	PAS S
Ban d4	3	20385	15	#0	16QAM	NV	50	-33. 45	-0.0 19	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	QPSK	NV	-30	16.3 7	0.01 0	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	QPSK	NV	-20	0.43	0.00 0	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	QPSK	NV	0	-12. 15	-0.0 07	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	QPSK	NV	10	-18. 37	-0.01 1	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	QPSK	NV	20	-28. 47	-0.0 17	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	QPSK	NV	30	-39. 63	-0.0 23	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	QPSK	NV	40	-15. 41	-0.0 09	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	QPSK	NV	50	-29. 95	-0.0 17	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	16QAM	NV	-30	-23. 56	-0.0 14	-2.5	2.5	PAS S



Ban d4	5	19975	25	#0	16QAM	NV	-20	-24. 66	-0.0 14	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	16QAM	NV	0	-38. 28	-0.0 22	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	16QAM	NV	10	-5.8 4	-0.0 03	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	16QAM	NV	20	-21.1 1	-0.0 12	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	16QAM	NV	30	-37. 62	-0.0 22	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	16QAM	NV	40	-3.9 1	-0.0 02	-2.5	2.5	PAS S
Ban d4	5	19975	25	#0	16QAM	NV	50	-20. 93	-0.0 12	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	QPSK	NV	-30	-1.9 2	-0.0 01	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	QPSK	NV	-20	-12. 17	-0.0 07	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	QPSK	NV	0	-25. 36	-0.0 15	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	QPSK	NV	10	-34. 76	-0.0 20	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	QPSK	NV	20	-43. 66	-0.0 25	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	QPSK	NV	30	-12. 26	-0.0 07	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	QPSK	NV	40	-20. 48	-0.0 12	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	QPSK	NV	50	-30. 46	-0.0 18	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	16QAM	NV	-30	-13. 85	-0.0 08	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	16QAM	NV	-20	-3.0 0	-0.0 02	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	16QAM	NV	0	-3.8 5	-0.0 02	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	16QAM	NV	10	-0.1 0	0.00 0	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	16QAM	NV	20	1.49 1	0.00 1	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	16QAM	NV	30	6.47 4	0.00 4	-2.5	2.5	PAS S
Ban d4	5	20175	25	#0	16QAM	NV	40	13.5 5	0.00 8	-2.5	2.5	PAS S



Ban d4	5	20175	25	#0	16QAM	NV	50	15.1 9	0.00 9	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	QPSK	NV	-30	16.4 9	0.00 9	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	QPSK	NV	-20	11.1 7	0.00 6	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	QPSK	NV	0	2.60	0.00 1	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	QPSK	NV	10	-7.0 7	-0.0 04	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	QPSK	NV	20	-16. 98	-0.0 10	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	QPSK	NV	30	-24. 19	-0.0 14	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	QPSK	NV	40	-34. 40	-0.0 20	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	QPSK	NV	50	2.00	0.00 1	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	16QAM	NV	-30	-10. 41	-0.0 06	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	16QAM	NV	-20	-20. 28	-0.0 12	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	16QAM	NV	0	-25. 32	-0.0 14	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	16QAM	NV	10	-31. 86	-0.0 18	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	16QAM	NV	20	-1.1 3	-0.0 01	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	16QAM	NV	30	-9.3 0	-0.0 05	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	16QAM	NV	40	-16. 15	-0.0 09	-2.5	2.5	PAS S
Ban d4	5	20375	25	#0	16QAM	NV	50	-20. 79	-0.0 12	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	QPSK	NV	-30	11.1 0	0.00 6	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	QPSK	NV	-20	-8.0 8	-0.0 05	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	QPSK	NV	0	-25. 28	-0.0 15	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	QPSK	NV	10	-36. 59	-0.0 21	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	QPSK	NV	20	-1.4 7	-0.0 01	-2.5	2.5	PAS S



Ban d4	10	20000	50	#0	QPSK	NV	30	-9.2 3	-0.0 05	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	QPSK	NV	40	-26. 81	-0.0 16	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	QPSK	NV	50	5.26	0.00 3	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	16QAM	NV	-30	-14. 53	-0.0 08	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	16QAM	NV	-20	-29. 88	-0.0 17	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	16QAM	NV	0	-4.6 8	-0.0 03	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	16QAM	NV	10	-13. 60	-0.0 08	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	16QAM	NV	20	-19. 07	-0.01 1	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	16QAM	NV	30	-27. 48	-0.0 16	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	16QAM	NV	40	-32. 67	-0.0 19	-2.5	2.5	PAS S
Ban d4	10	20000	50	#0	16QAM	NV	50	-5.9 7	-0.0 03	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	QPSK	NV	-30	-1.5 0	-0.0 01	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	QPSK	NV	-20	-7.4 4	-0.0 04	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	QPSK	NV	0	-12. 04	-0.0 07	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	QPSK	NV	10	-16. 59	-0.0 10	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	QPSK	NV	20	-22. 22	-0.0 13	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	QPSK	NV	30	-29. 91	-0.0 17	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	QPSK	NV	40	-33. 50	-0.0 19	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	QPSK	NV	50	-37. 32	-0.0 22	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	16QAM	NV	-30	7.18	0.00 4	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	16QAM	NV	-20	9.47	0.00 5	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	16QAM	NV	0	16.4 7	0.01 0	-2.5	2.5	PAS S



Ban d4	10	20175	50	#0	16QAM	NV	10	19.7 4	0.01 1	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	16QAM	NV	20	21.8 7	0.01 3	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	16QAM	NV	30	30.6 7	0.01 8	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	16QAM	NV	40	38.4 2	0.02 2	-2.5	2.5	PAS S
Ban d4	10	20175	50	#0	16QAM	NV	50	-3.2 0	-0.0 02	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	QPSK	NV	-30	27.5 1	0.01 6	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	QPSK	NV	-20	18.1 1	0.01 0	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	QPSK	NV	0	9.31	0.00 5	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	QPSK	NV	10	-0.8 6	0.00 0	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	QPSK	NV	20	-7.2 1	-0.0 04	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	QPSK	NV	30	-20. 89	-0.0 12	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	QPSK	NV	40	-33. 10	-0.0 19	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	QPSK	NV	50	-10. 94	-0.0 06	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	16QAM	NV	-30	-28. 55	-0.0 16	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	16QAM	NV	-20	-37. 25	-0.0 21	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	16QAM	NV	0	-13. 48	-0.0 08	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	16QAM	NV	10	-20. 14	-0.0 12	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	16QAM	NV	20	-27. 22	-0.0 16	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	16QAM	NV	30	-31. 44	-0.0 18	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	16QAM	NV	40	-36. 56	-0.0 21	-2.5	2.5	PAS S
Ban d4	10	20350	50	#0	16QAM	NV	50	-39. 74	-0.0 23	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	QPSK	NV	-30	18.6 8	0.01 1	-2.5	2.5	PAS S



Ban d4	15	20025	75	#0	QPSK	NV	-20	6.85	0.00 4	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	QPSK	NV	0	0.57	0.00 0	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	QPSK	NV	10	-6.0 5	-0.0 04	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	QPSK	NV	20	-16. 54	-0.0 10	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	QPSK	NV	30	-25. 35	-0.0 15	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	QPSK	NV	40	-14. 71	-0.0 09	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	QPSK	NV	50	-26. 54	-0.0 15	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	16QAM	NV	-30	-14. 41	-0.0 08	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	16QAM	NV	-20	-5.0 4	-0.0 03	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	16QAM	NV	0	-3.4 5	-0.0 02	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	16QAM	NV	10	-0.3 3	0.00 0	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	16QAM	NV	20	1.10	0.00 1	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	16QAM	NV	30	2.70	0.00 2	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	16QAM	NV	40	-0.5 9	0.00 0	-2.5	2.5	PAS S
Ban d4	15	20025	75	#0	16QAM	NV	50	-4.7 9	-0.0 03	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	QPSK	NV	-30	8.41	0.00 5	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	QPSK	NV	-20	8.35	0.00 5	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	QPSK	NV	0	9.58	0.00 6	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	QPSK	NV	10	9.83	0.00 6	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	QPSK	NV	20	13.0 3	0.00 8	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	QPSK	NV	30	14.0 6	0.00 8	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	QPSK	NV	40	10.7 1	0.00 6	-2.5	2.5	PAS S



Ban d4	15	20175	75	#0	QPSK	NV	50	13.1 2	0.00 8	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	16QAM	NV	-30	16.5 7	0.01 0	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	16QAM	NV	-20	20.7 6	0.01 2	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	16QAM	NV	0	22.6 0	0.01 3	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	16QAM	NV	10	26.3 6	0.01 5	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	16QAM	NV	20	33.4 9	0.01 9	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	16QAM	NV	30	-5.4 4	-0.0 03	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	16QAM	NV	40	2.78	0.00 2	-2.5	2.5	PAS S
Ban d4	15	20175	75	#0	16QAM	NV	50	14.3 3	0.00 8	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	QPSK	NV	-30	18.4 0	0.01 1	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	QPSK	NV	-20	15.0 6	0.00 9	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	QPSK	NV	0	5.95	0.00 3	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	QPSK	NV	10	-2.8 8	-0.0 02	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	QPSK	NV	20	-13. 90	-0.0 08	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	QPSK	NV	30	-27. 97	-0.0 16	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	QPSK	NV	40	10.3 6	0.00 6	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	QPSK	NV	50	-2.3 6	-0.0 01	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	16QAM	NV	-30	-16. 85	-0.0 10	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	16QAM	NV	-20	-21. 96	-0.0 13	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	16QAM	NV	0	-29. 03	-0.0 17	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	16QAM	NV	10	-0.9 2	-0.0 01	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	16QAM	NV	20	-5.6 4	-0.0 03	-2.5	2.5	PAS S

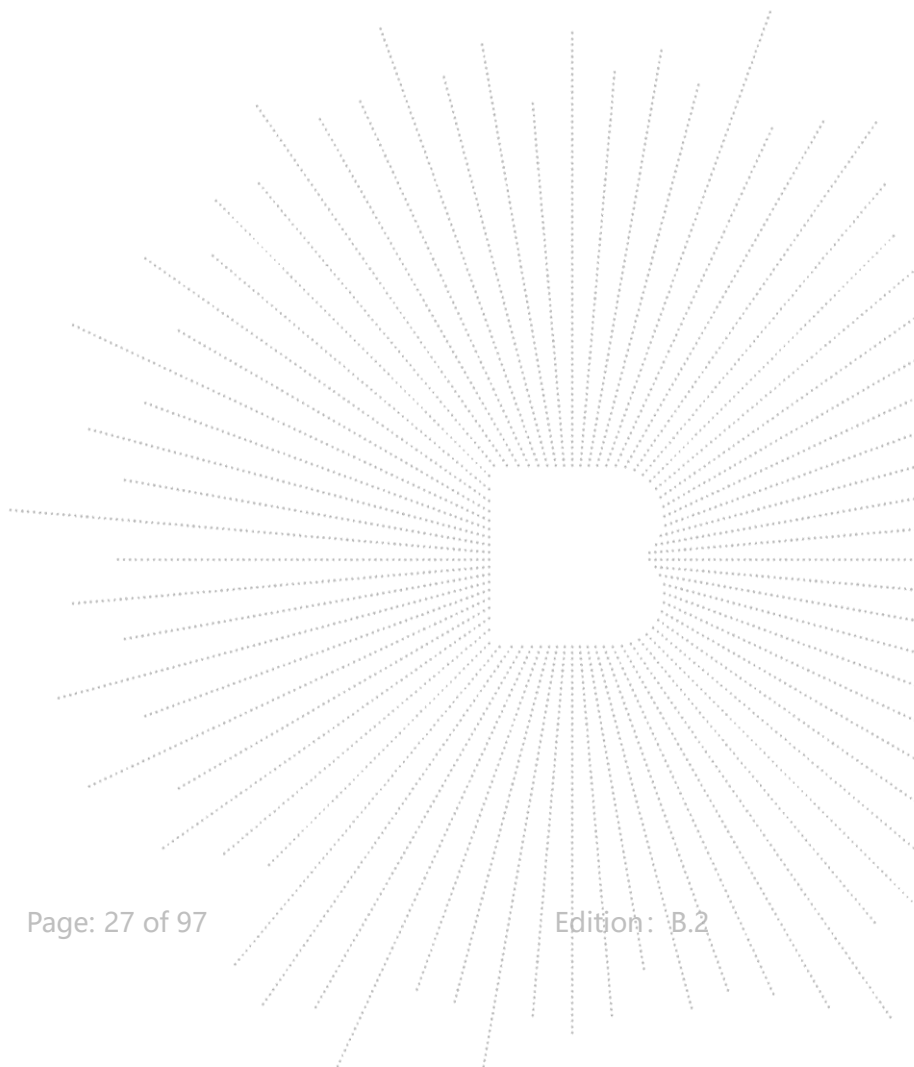


Ban d4	15	20325	75	#0	16QAM	NV	30	-8.4 4	-0.0 05	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	16QAM	NV	40	-13. 59	-0.0 08	-2.5	2.5	PAS S
Ban d4	15	20325	75	#0	16QAM	NV	50	-21. 53	-0.0 12	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	QPSK	NV	-30	15.5 2	0.00 9	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	QPSK	NV	-20	7.24	0.00 4	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	QPSK	NV	0	9.46	0.00 6	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	QPSK	NV	10	8.78	0.00 5	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	QPSK	NV	20	-0.5 7	0.00 0	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	QPSK	NV	30	-10. 49	-0.0 06	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	QPSK	NV	40	-28. 82	-0.0 17	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	QPSK	NV	50	-16. 68	-0.0 10	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	16QAM	NV	-30	-20. 93	-0.0 12	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	16QAM	NV	-20	-26. 69	-0.0 16	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	16QAM	NV	0	-22. 70	-0.0 13	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	16QAM	NV	10	-0.0 4	0.00 0	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	16QAM	NV	20	-1.5 7	-0.0 01	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	16QAM	NV	30	-4.0 5	-0.0 02	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	16QAM	NV	40	-0.9 3	-0.0 01	-2.5	2.5	PAS S
Ban d4	20	20050	10 0	#0	16QAM	NV	50	-0.6 4	0.00 0	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	QPSK	NV	-30	18.6 5	0.01 1	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	QPSK	NV	-20	12.2 9	0.00 7	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	QPSK	NV	0	0.90	0.00 1	-2.5	2.5	PAS S



Ban d4	20	20175	10 0	#0	QPSK	NV	10	-6.0 7	-0.0 04	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	QPSK	NV	20	-21. 97	-0.0 13	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	QPSK	NV	30	-24. 50	-0.0 14	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	QPSK	NV	40	-19. 23	-0.01 1	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	QPSK	NV	50	-30. 78	-0.0 18	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	16QAM	NV	-30	-36. 74	-0.0 21	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	16QAM	NV	-20	-30. 61	-0.0 18	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	16QAM	NV	0	-26. 24	-0.0 15	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	16QAM	NV	10	-20. 83	-0.0 12	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	16QAM	NV	20	-15. 81	-0.0 09	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	16QAM	NV	30	-7.2 8	-0.0 04	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	16QAM	NV	40	-2.0 0	-0.0 01	-2.5	2.5	PAS S
Ban d4	20	20175	10 0	#0	16QAM	NV	50	-0.5 7	0.00 0	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	QPSK	NV	-30	12.5 3	0.00 7	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	QPSK	NV	-20	0.97	0.00 1	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	QPSK	NV	0	-12. 13	-0.0 07	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	QPSK	NV	10	-23. 89	-0.0 14	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	QPSK	NV	20	-19. 60	-0.01 1	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	QPSK	NV	30	-26. 71	-0.0 15	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	QPSK	NV	40	-13. 32	-0.0 08	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	QPSK	NV	50	-24. 00	-0.0 14	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	16QAM	NV	-30	-19. 10	-0.01 1	-2.5	2.5	PAS S

Ban d4	20	20300	10 0	#0	16QAM	NV	-20	-34. 25	-0.0 20	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	16QAM	NV	0	0.37	0.00 0	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	16QAM	NV	10	-8.8 4	-0.0 05	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	16QAM	NV	20	-12. 59	-0.0 07	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	16QAM	NV	30	-8.1 3	-0.0 05	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	16QAM	NV	40	-6.2 4	-0.0 04	-2.5	2.5	PAS S
Ban d4	20	20300	10 0	#0	16QAM	NV	50	-11.3 7	-0.0 07	-2.5	2.5	PAS S

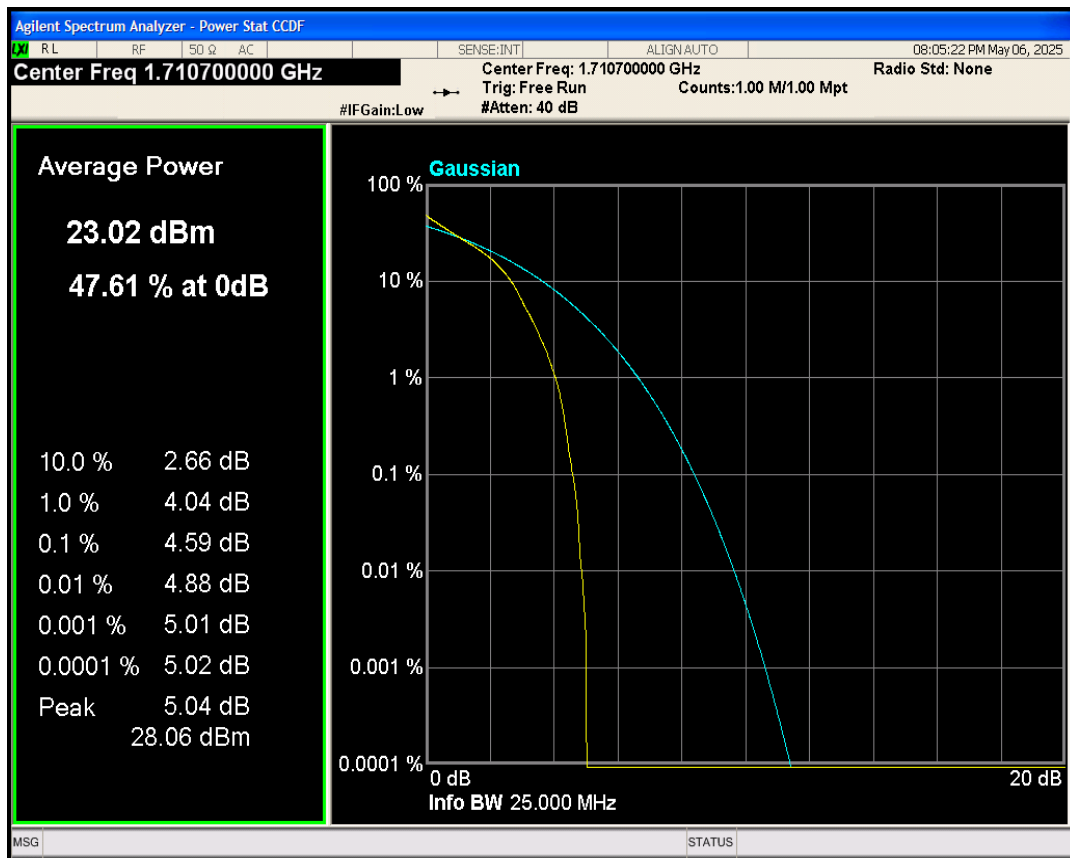


Appendix 3. Peak-to-Average Ratio

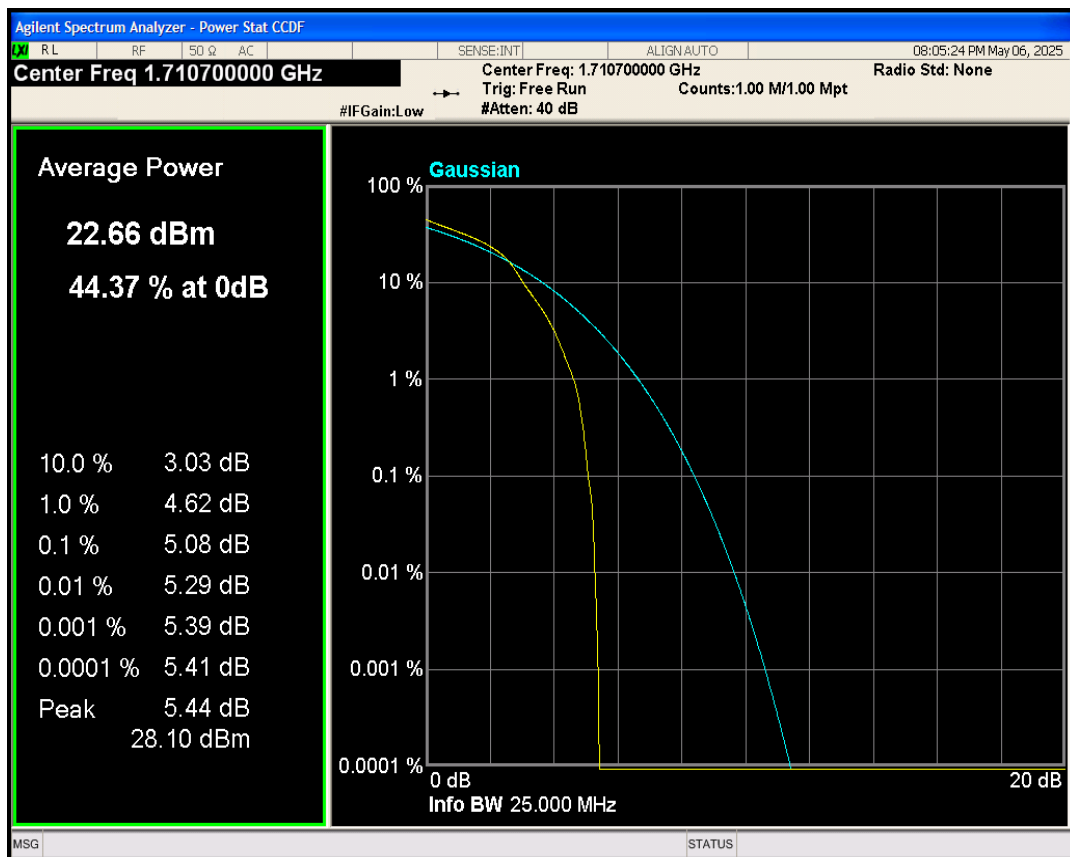
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Result (dB)	high Limit (dB)	Verdict
Band4	1.4	19957	1	#0	QPSK	4.59	13	PASS
Band4	1.4	19957	1	#0	16QAM	5.08	13	PASS
Band4	1.4	20175	1	#0	QPSK	4.31	13	PASS
Band4	1.4	20175	1	#0	16QAM	4.75	13	PASS
Band4	1.4	20393	1	#0	QPSK	4.80	13	PASS
Band4	1.4	20393	1	#0	16QAM	5.76	13	PASS
Band4	3	19965	1	#0	QPSK	4.67	13	PASS
Band4	3	19965	1	#0	16QAM	5.73	13	PASS
Band4	3	20175	1	#0	QPSK	4.38	13	PASS
Band4	3	20175	1	#0	16QAM	4.88	13	PASS
Band4	3	20385	1	#0	QPSK	4.93	13	PASS
Band4	3	20385	1	#0	16QAM	5.62	13	PASS
Band4	5	19975	1	#0	QPSK	4.75	13	PASS
Band4	5	19975	1	#0	16QAM	5.81	13	PASS
Band4	5	20175	1	#0	QPSK	4.40	13	PASS
Band4	5	20175	1	#0	16QAM	5.21	13	PASS
Band4	5	20375	1	#0	QPSK	5.43	13	PASS
Band4	5	20375	1	#0	16QAM	6.23	13	PASS
Band4	10	20000	1	#0	QPSK	4.66	13	PASS
Band4	10	20000	1	#0	16QAM	5.89	13	PASS
Band4	10	20175	1	#0	QPSK	4.62	13	PASS
Band4	10	20175	1	#0	16QAM	5.72	13	PASS
Band4	10	20350	1	#0	QPSK	5.10	13	PASS
Band4	10	20350	1	#0	16QAM	6.12	13	PASS
Band4	15	20025	1	#0	QPSK	4.54	13	PASS
Band4	15	20025	1	#0	16QAM	5.79	13	PASS
Band4	15	20175	1	#0	QPSK	4.89	13	PASS
Band4	15	20175	1	#0	16QAM	5.94	13	PASS
Band4	15	20325	1	#0	QPSK	4.73	13	PASS
Band4	15	20325	1	#0	16QAM	5.67	13	PASS
Band4	20	20050	1	#0	QPSK	4.41	13	PASS
Band4	20	20050	1	#0	16QAM	5.48	13	PASS
Band4	20	20175	1	#0	QPSK	5.05	13	PASS
Band4	20	20175	1	#0	16QAM	6.07	13	PASS
Band4	20	20300	1	#0	QPSK	4.39	13	PASS
Band4	20	20300	1	#0	16QAM	5.22	13	PASS



Band4 QPSK BW=1.4MHz Channel=19957 RB Size=1 Position=#0

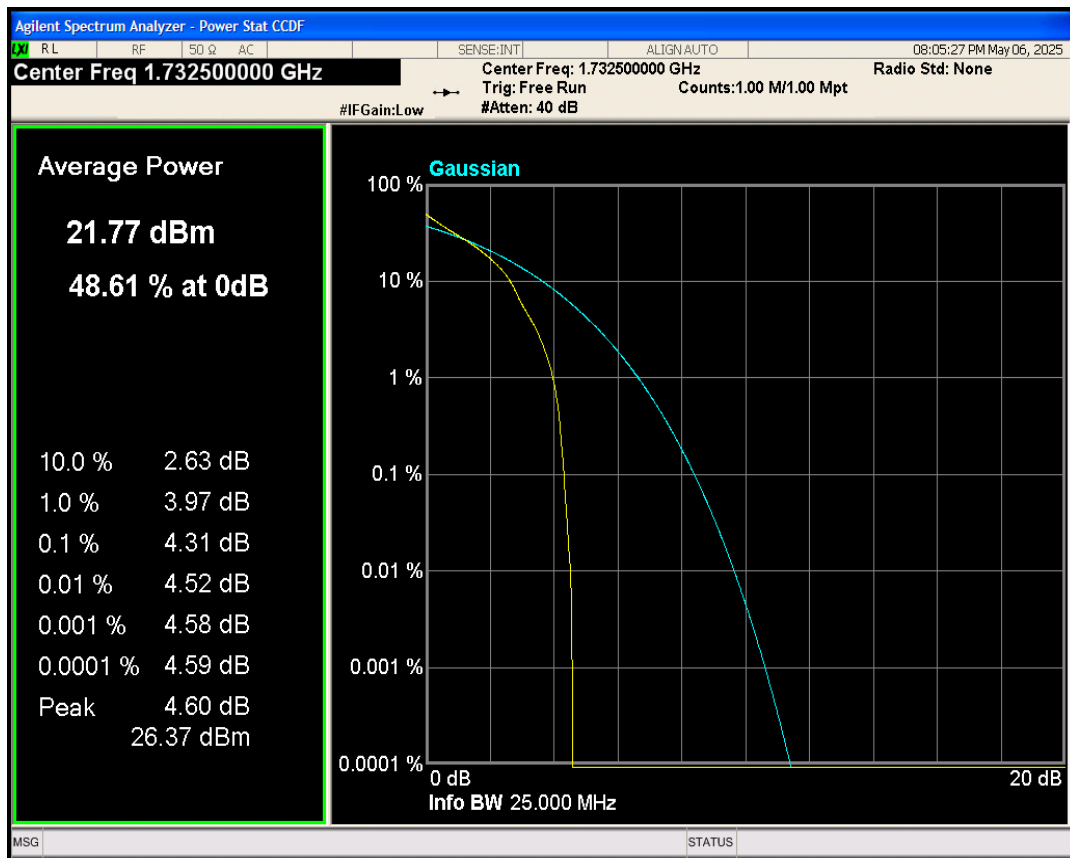


Band4 16QAM BW=1.4MHz Channel=19957 RB Size=1 Position=#0

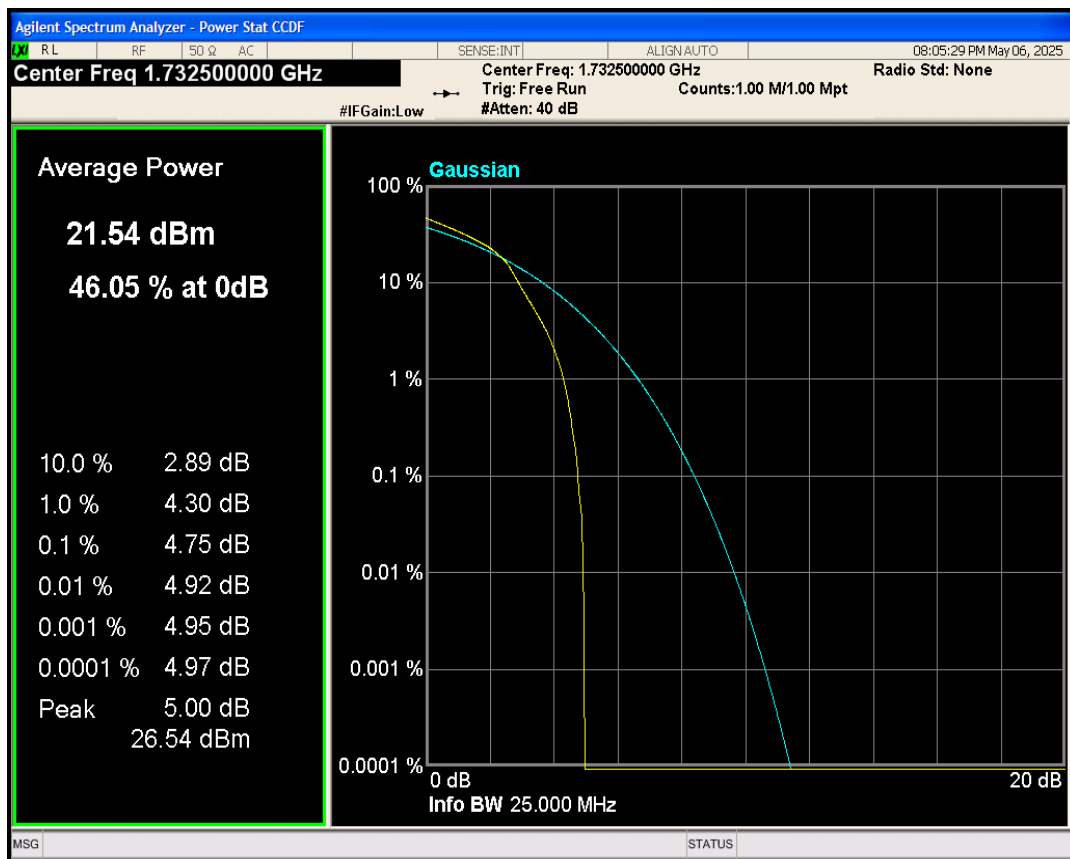




Band4 QPSK BW=1.4MHz Channel=20175 RB Size=1 Position=#0

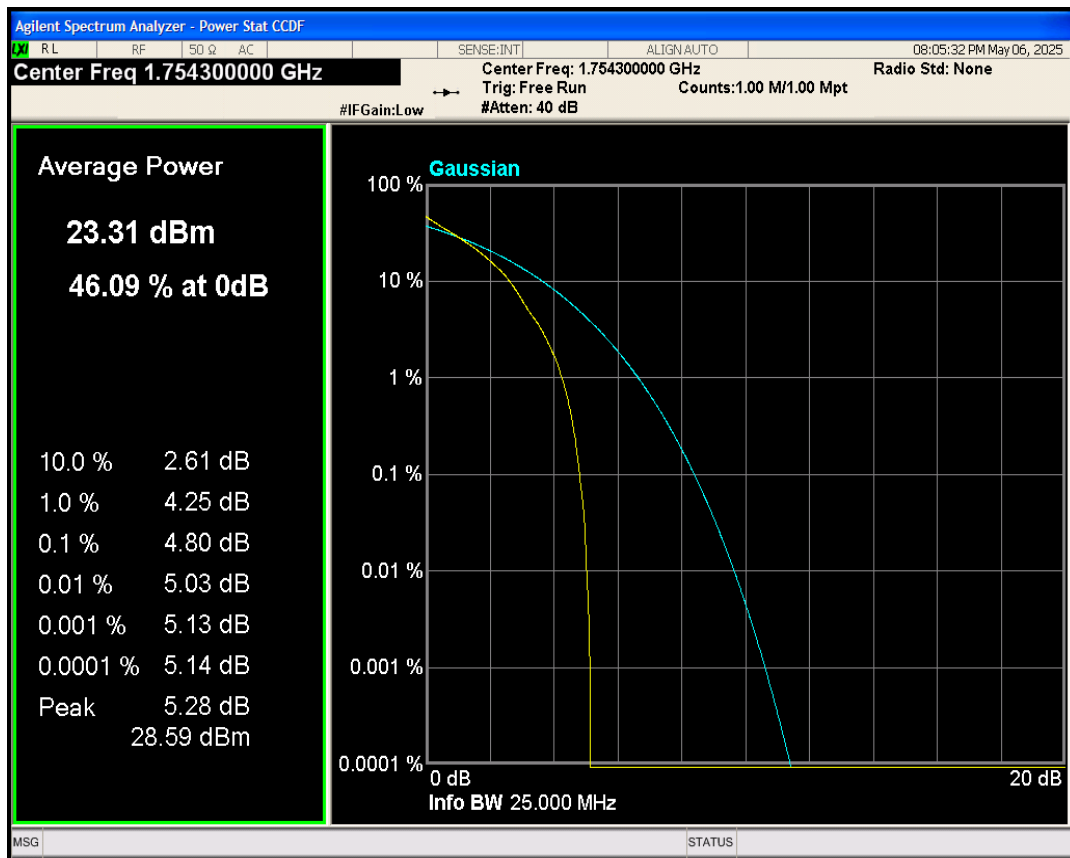


Band4 16QAM BW=1.4MHz Channel=20175 RB Size=1 Position=#0

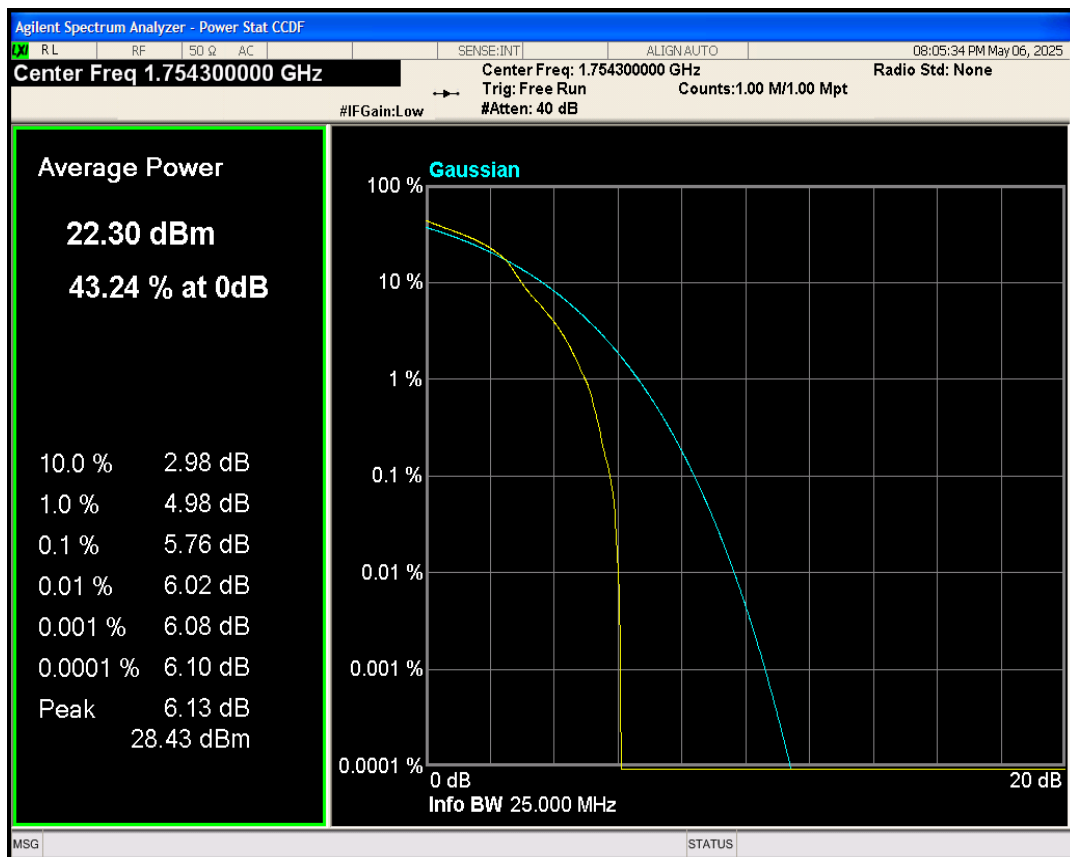




Band4 QPSK BW=1.4MHz Channel=20393 RB Size=1 Position=#0

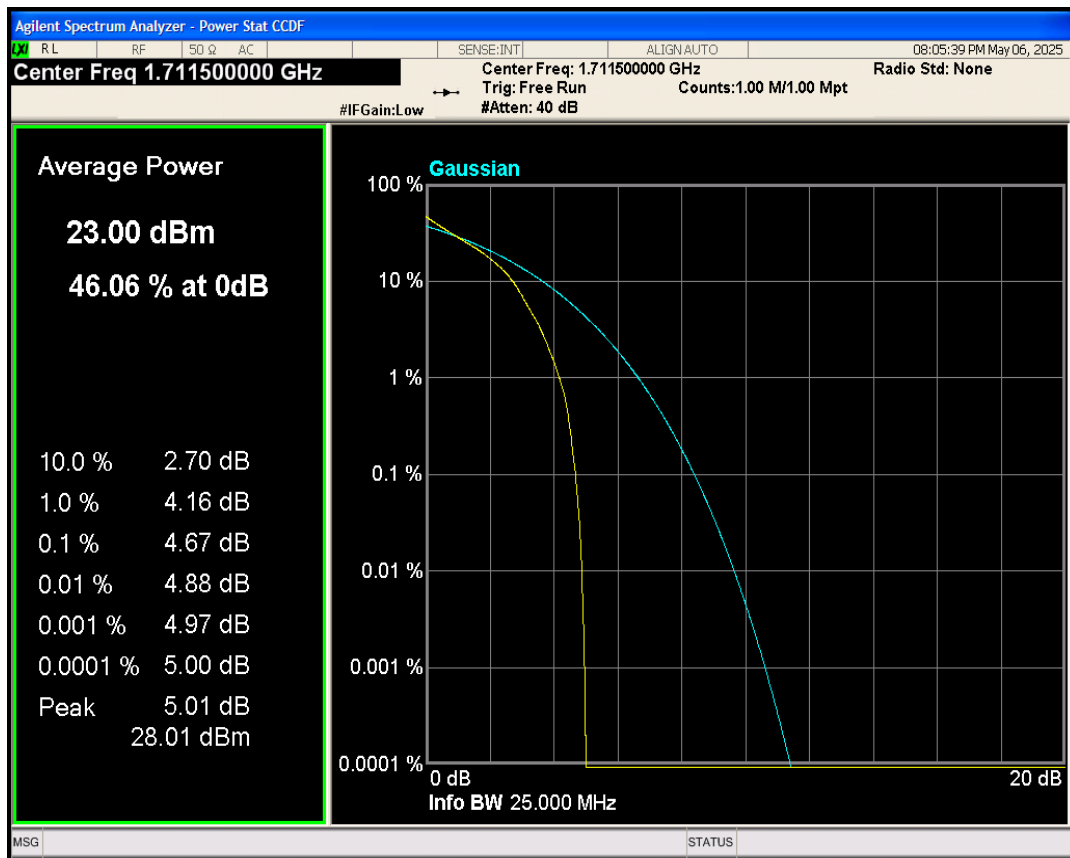


Band4 16QAM BW=1.4MHz Channel=20393 RB Size=1 Position=#0

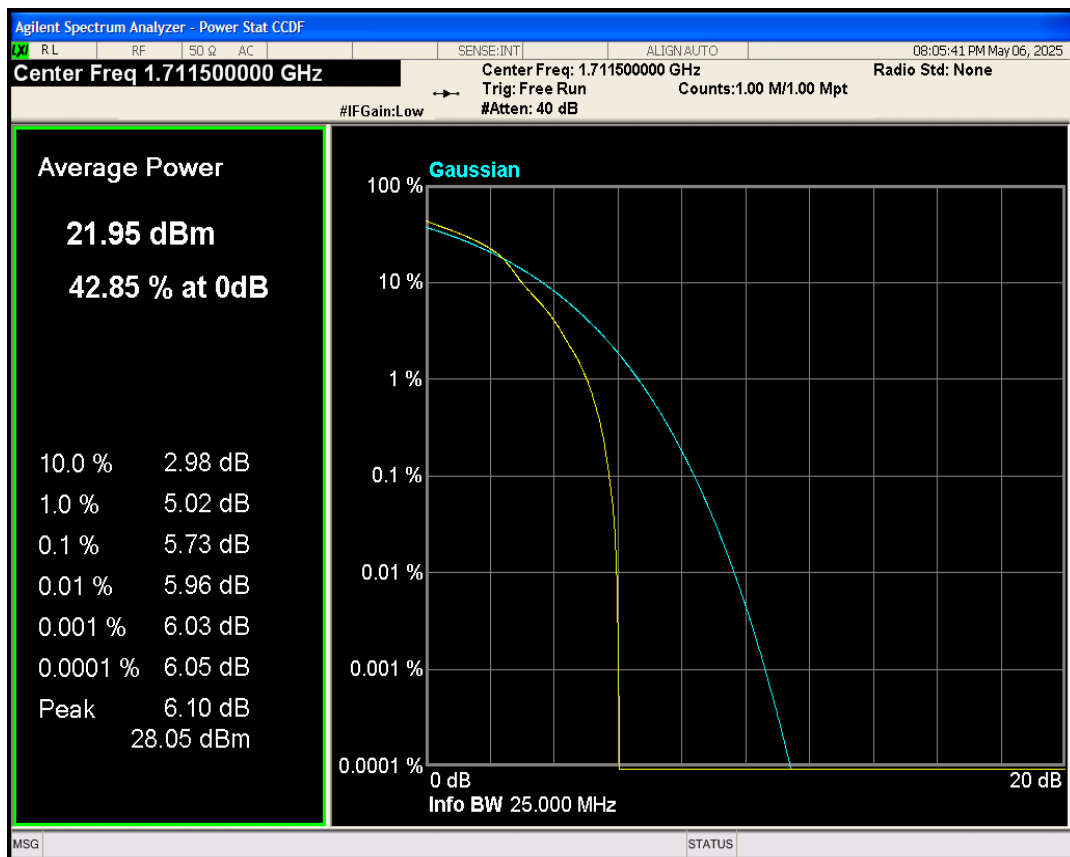




Band4 QPSK BW=3MHz Channel=19965 RB Size=1 Position=#0

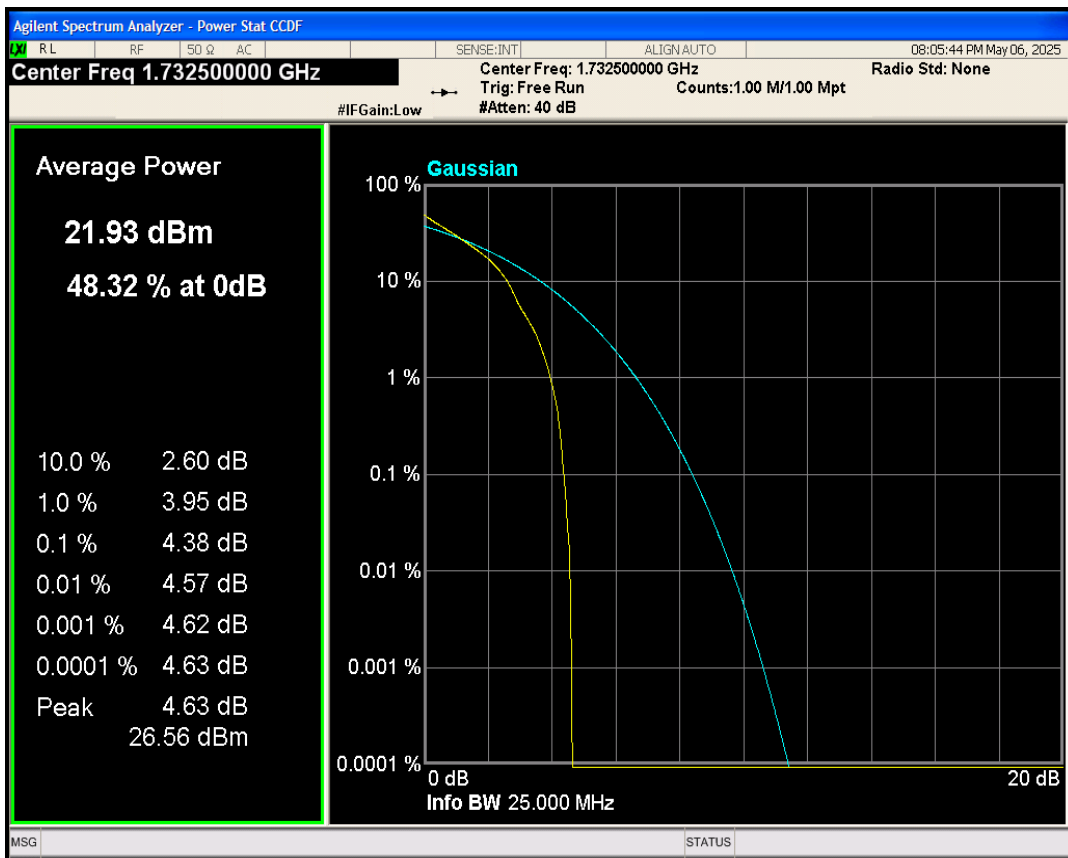


Band4 16QAM BW=3MHz Channel=19965 RB Size=1 Position=#0

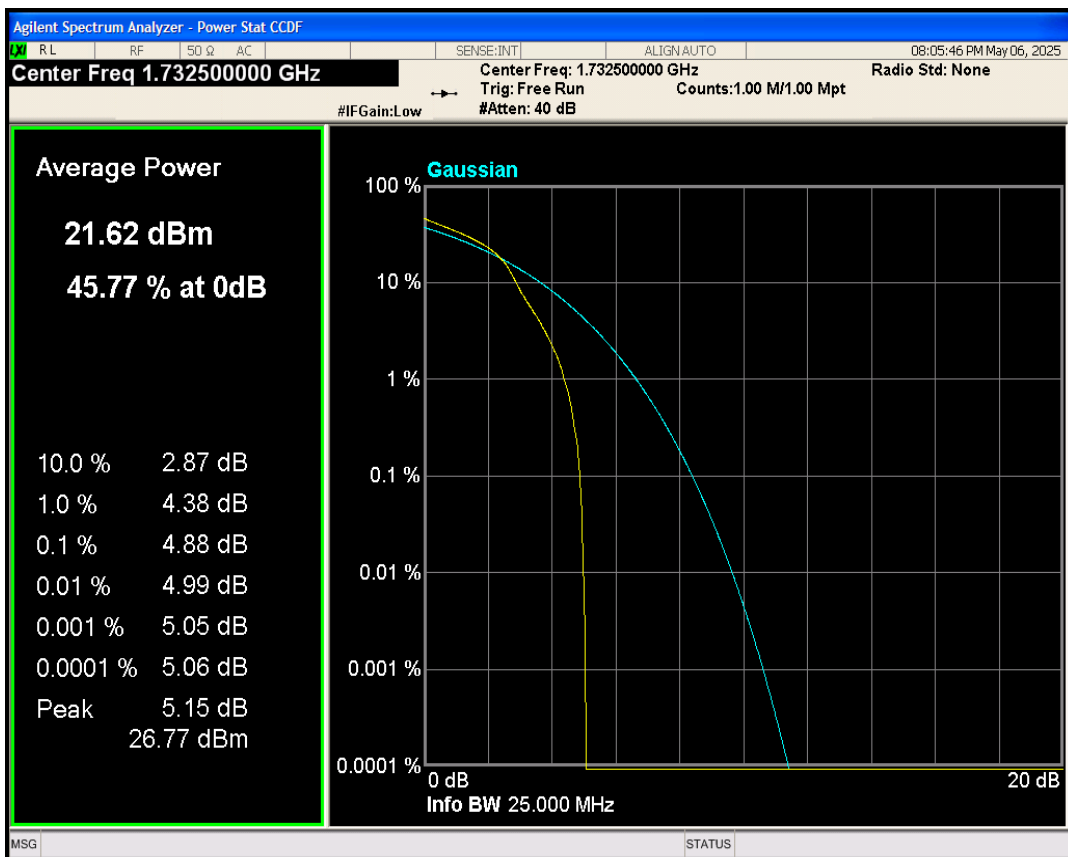




Band4 QPSK BW=3MHz Channel=20175 RB Size=1 Position=#0

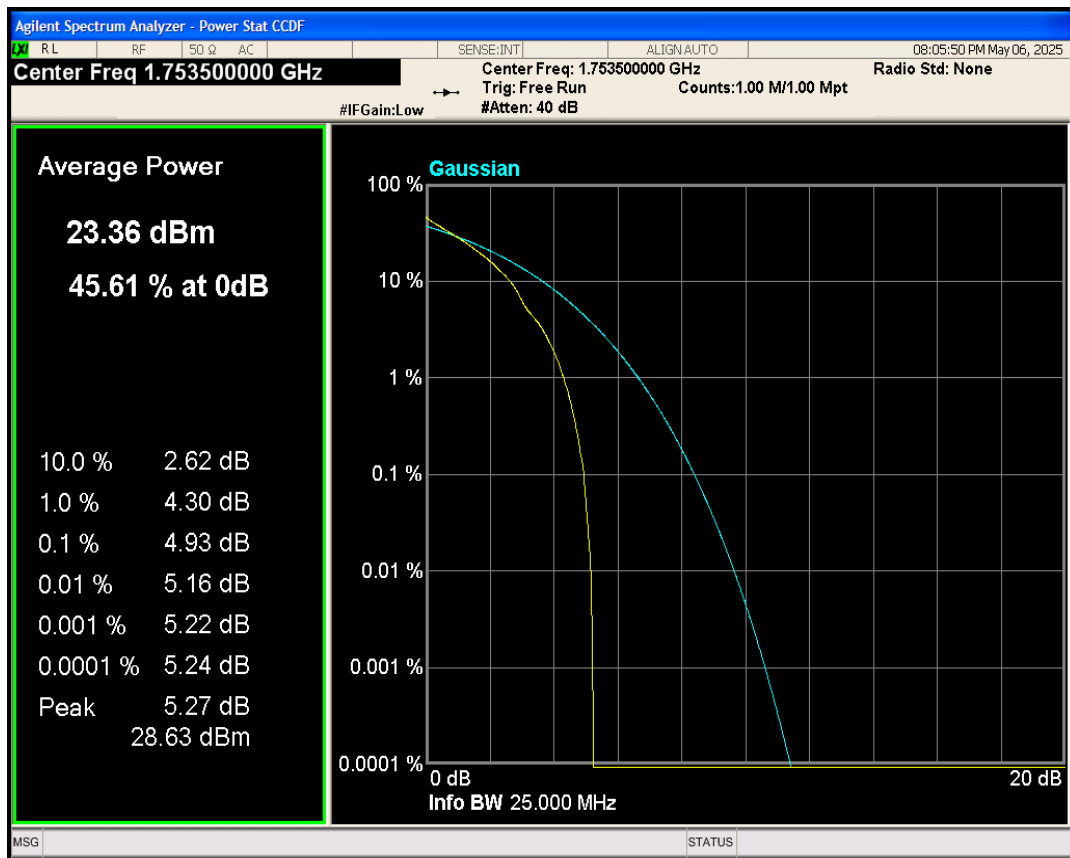


Band4 16QAM BW=3MHz Channel=20175 RB Size=1 Position=#0

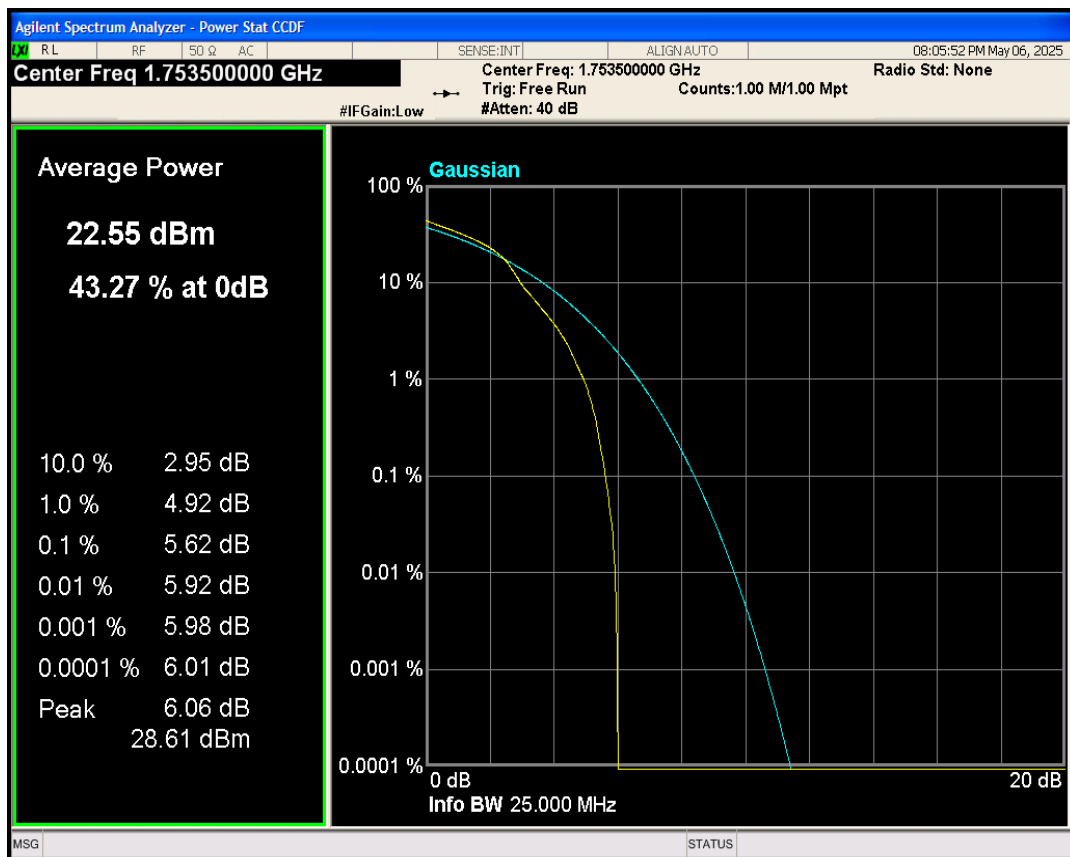




Band4 QPSK BW=3MHz Channel=20385 RB Size=1 Position=#0

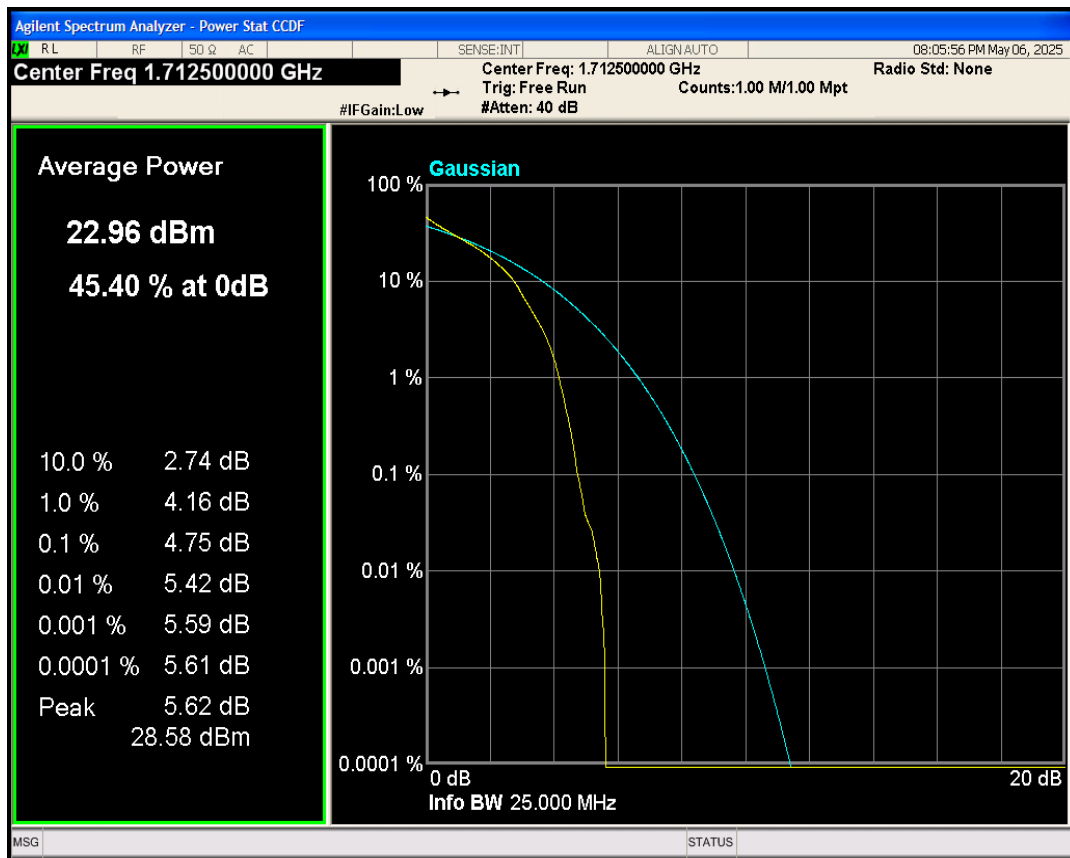


Band4 16QAM BW=3MHz Channel=20385 RB Size=1 Position=#0

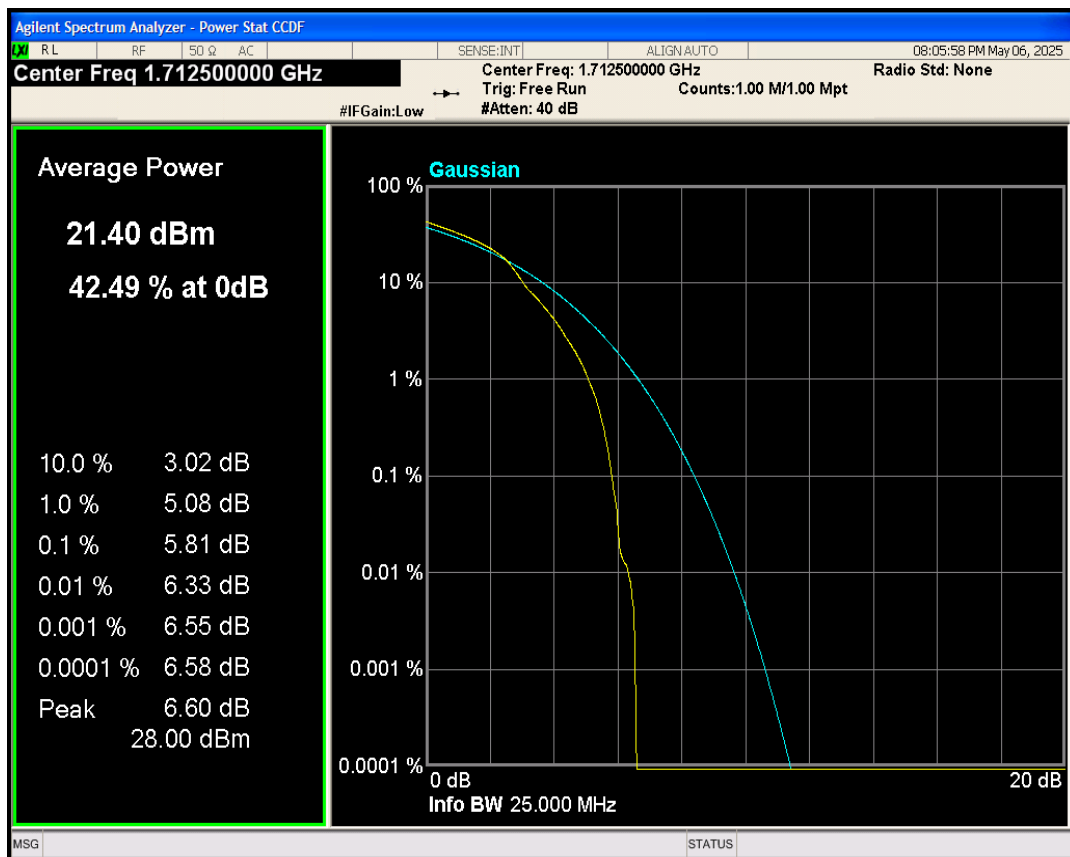




Band4 QPSK BW=5MHz Channel=19975 RB Size=1 Position=#0

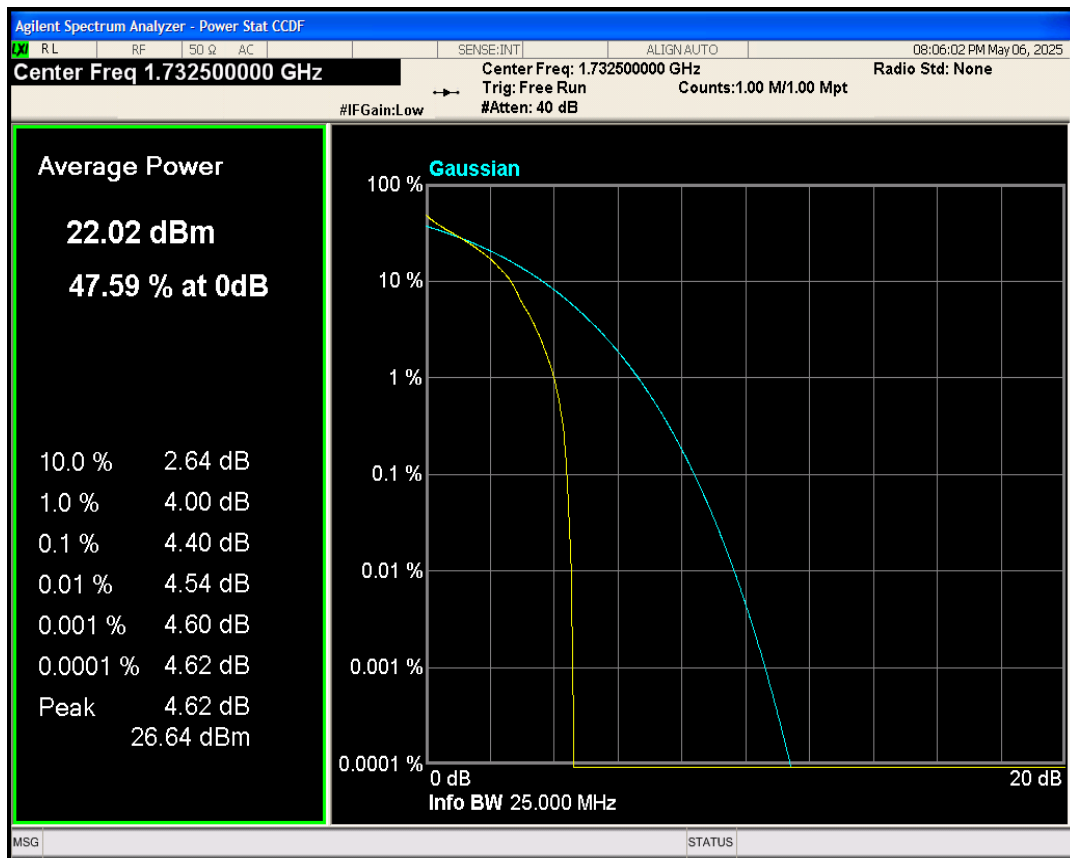


Band4 16QAM BW=5MHz Channel=19975 RB Size=1 Position=#0

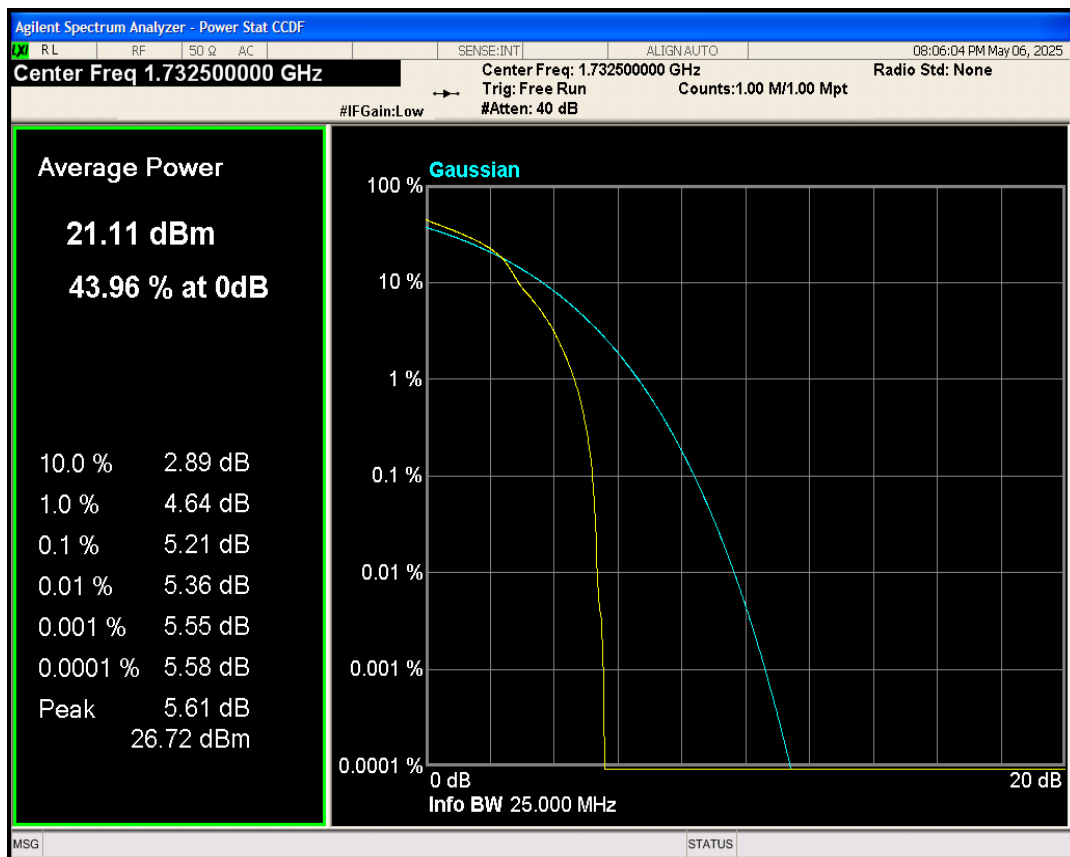




Band4 QPSK BW=5MHz Channel=20175 RB Size=1 Position=#0

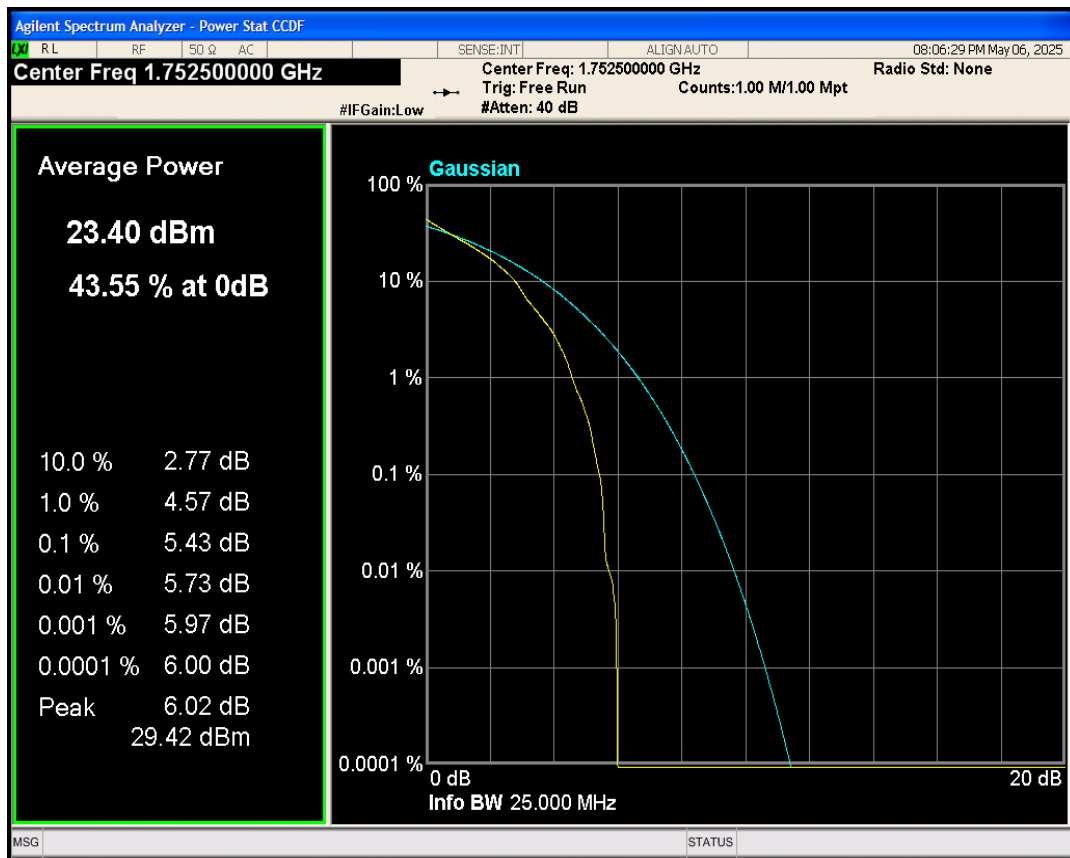


Band4 16QAM BW=5MHz Channel=20175 RB Size=1 Position=#0

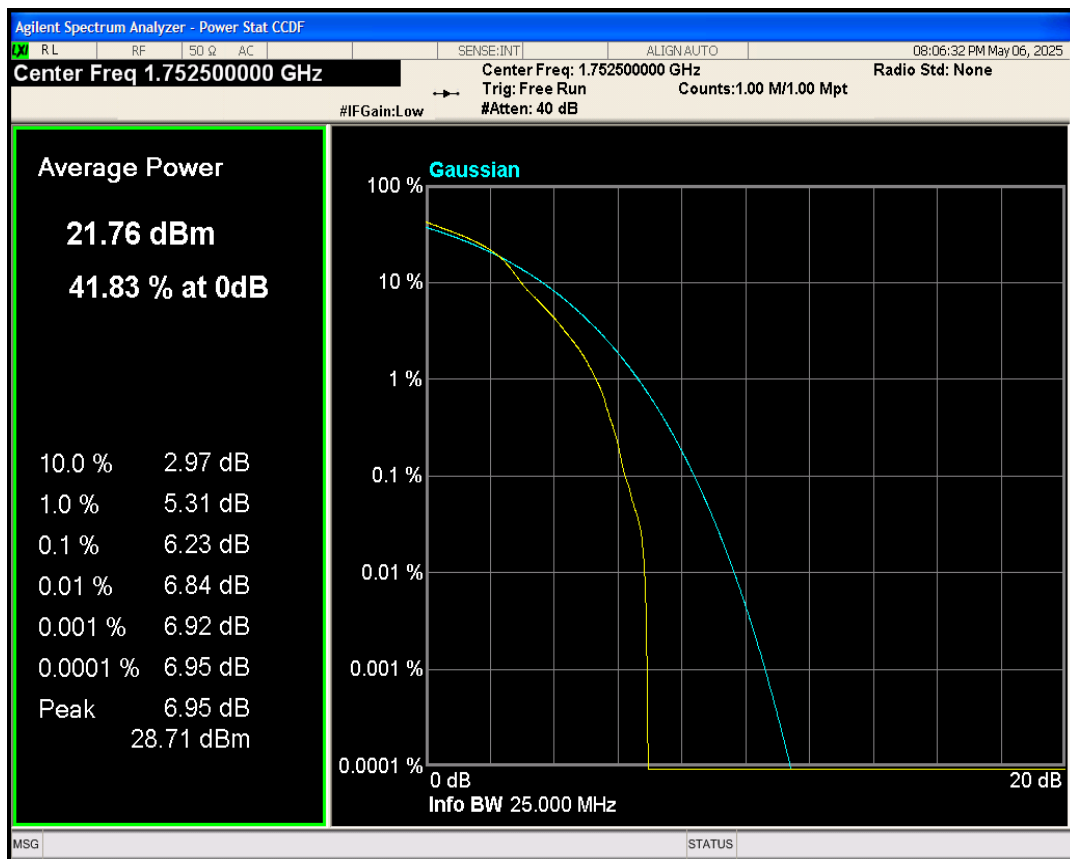




Band4 QPSK BW=5MHz Channel=20375 RB Size=1 Position=#0

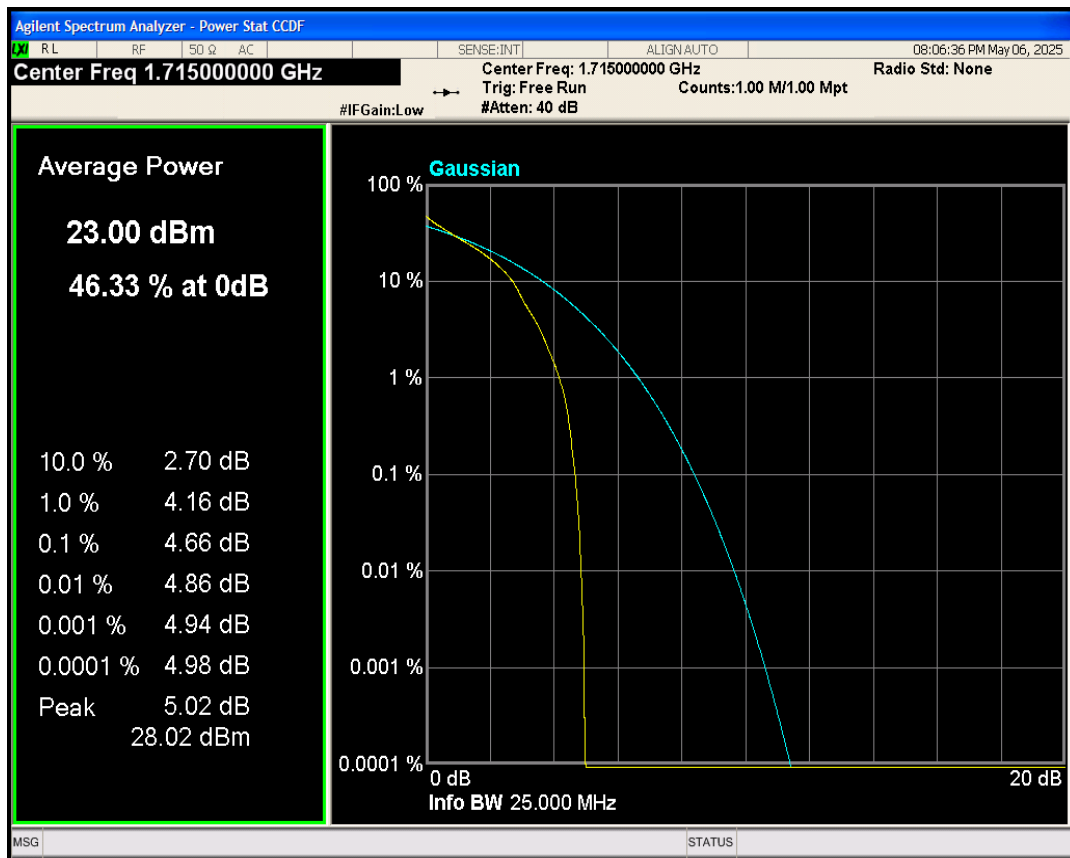


Band4 16QAM BW=5MHz Channel=20375 RB Size=1 Position=#0

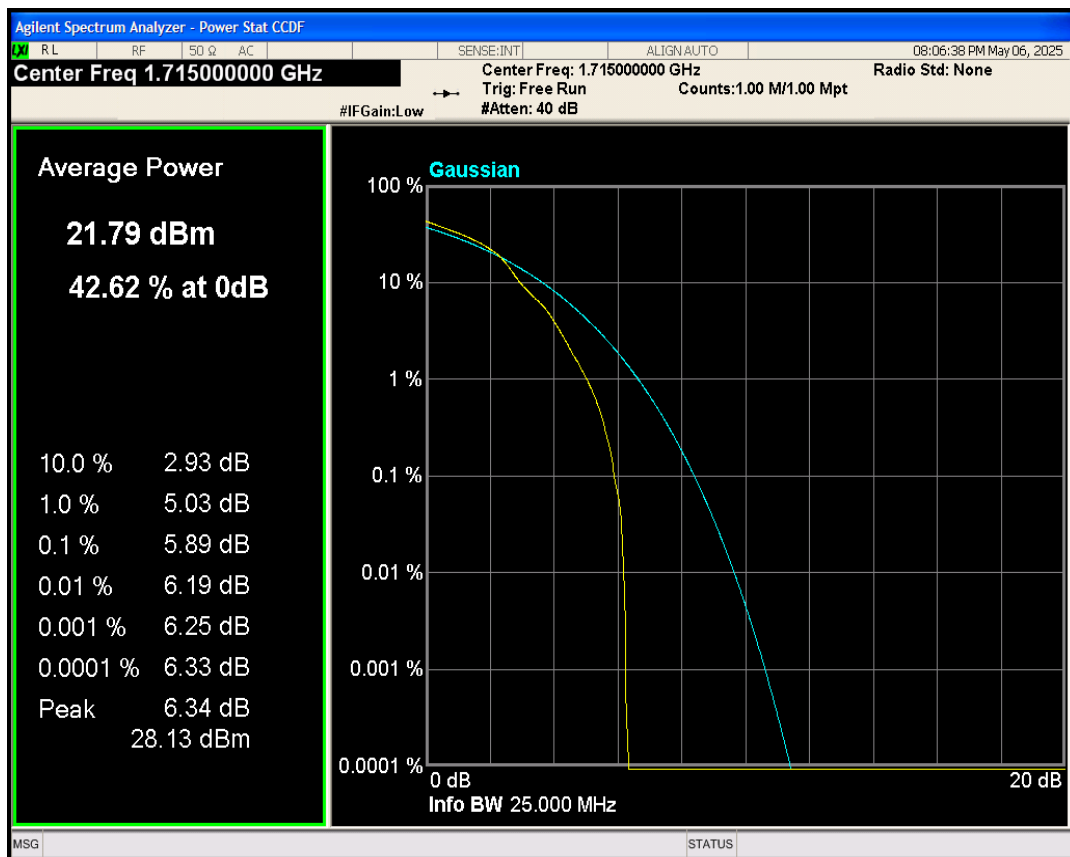




Band4 QPSK BW=10MHz Channel=20000 RB Size=1 Position=#0

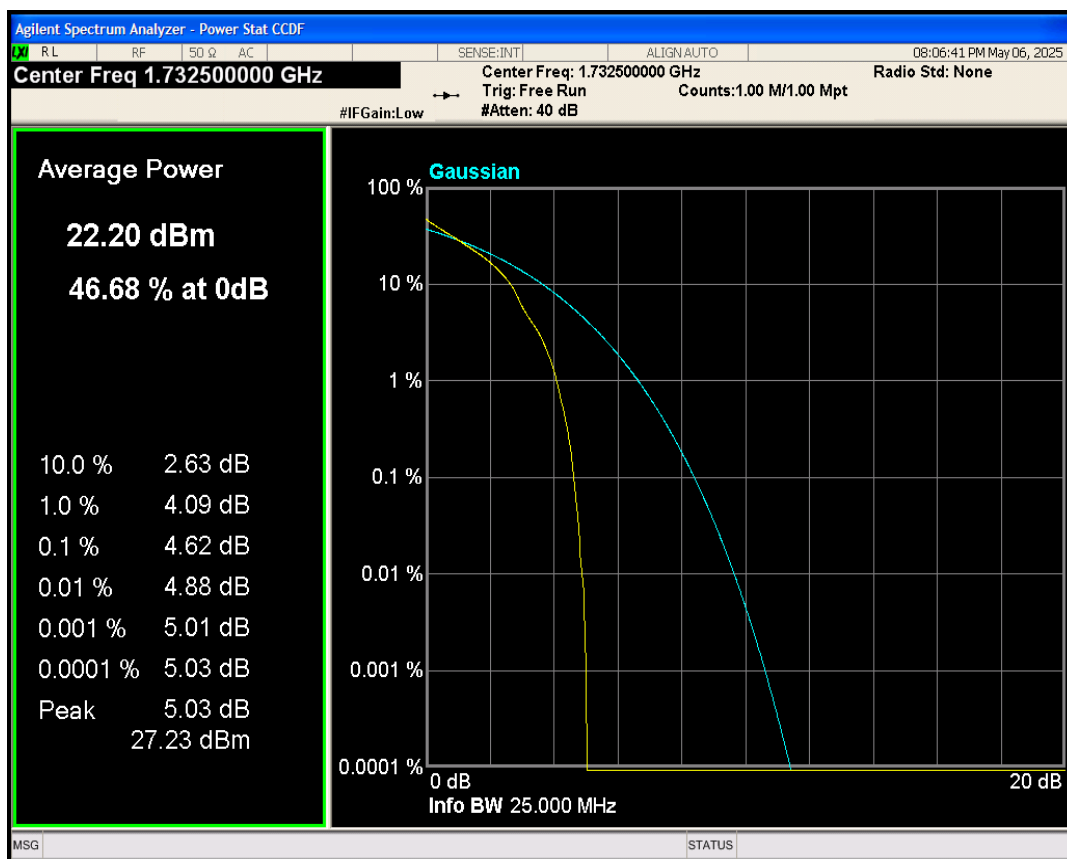


Band4 16QAM BW=10MHz Channel=20000 RB Size=1 Position=#0

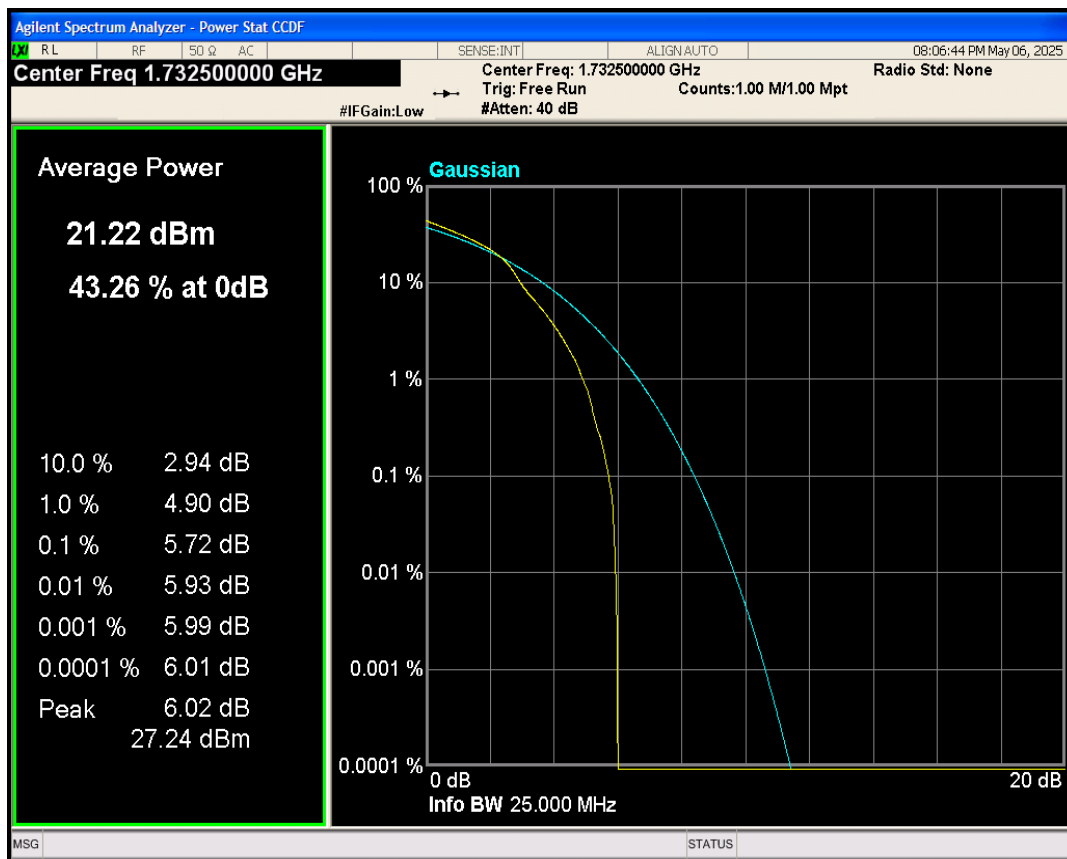




Band4 QPSK BW=10MHz Channel=20175 RB Size=1 Position=#0

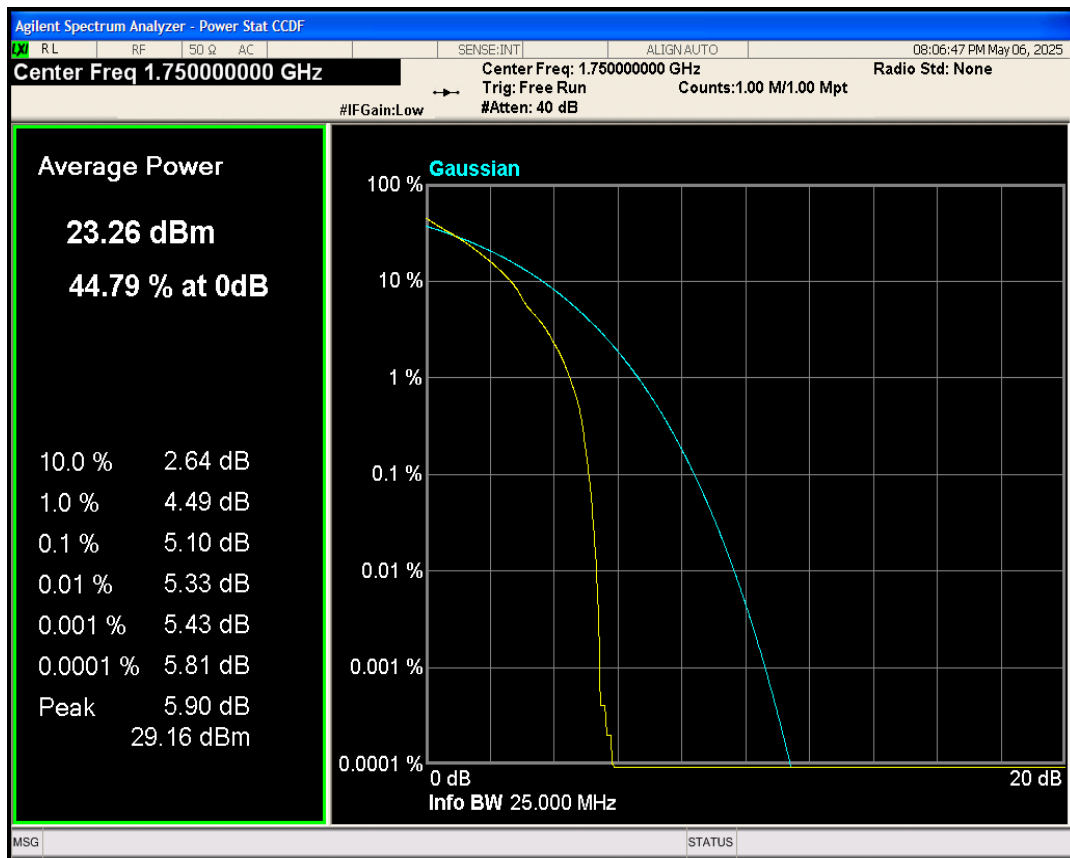


Band4 16QAM BW=10MHz Channel=20175 RB Size=1 Position=#0

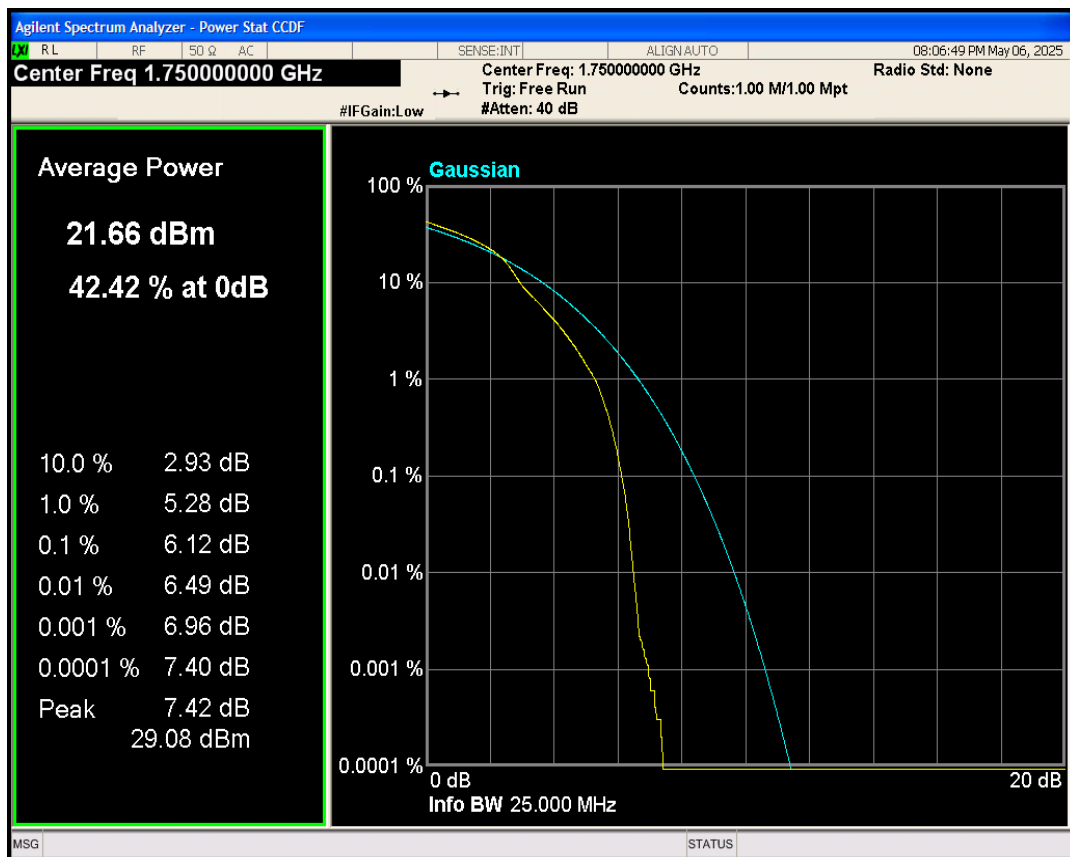




Band4 QPSK BW=10MHz Channel=20350 RB Size=1 Position=#0

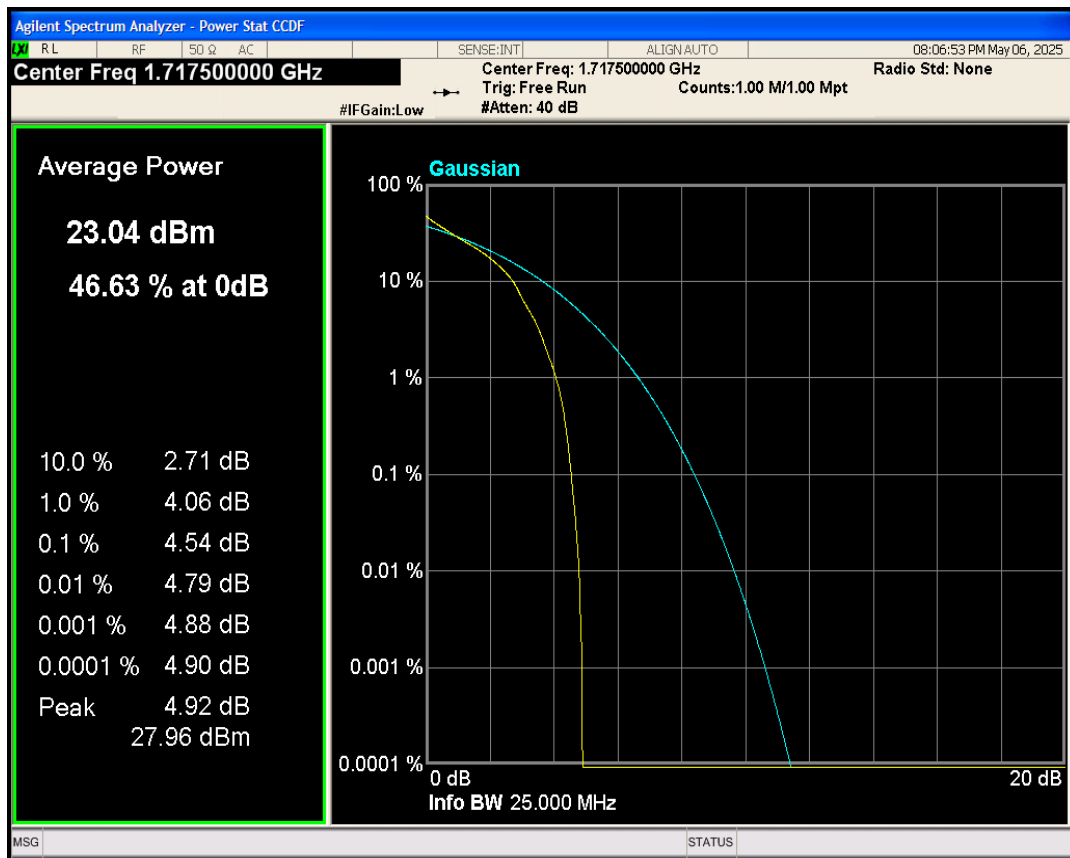


Band4 16QAM BW=10MHz Channel=20350 RB Size=1 Position=#0

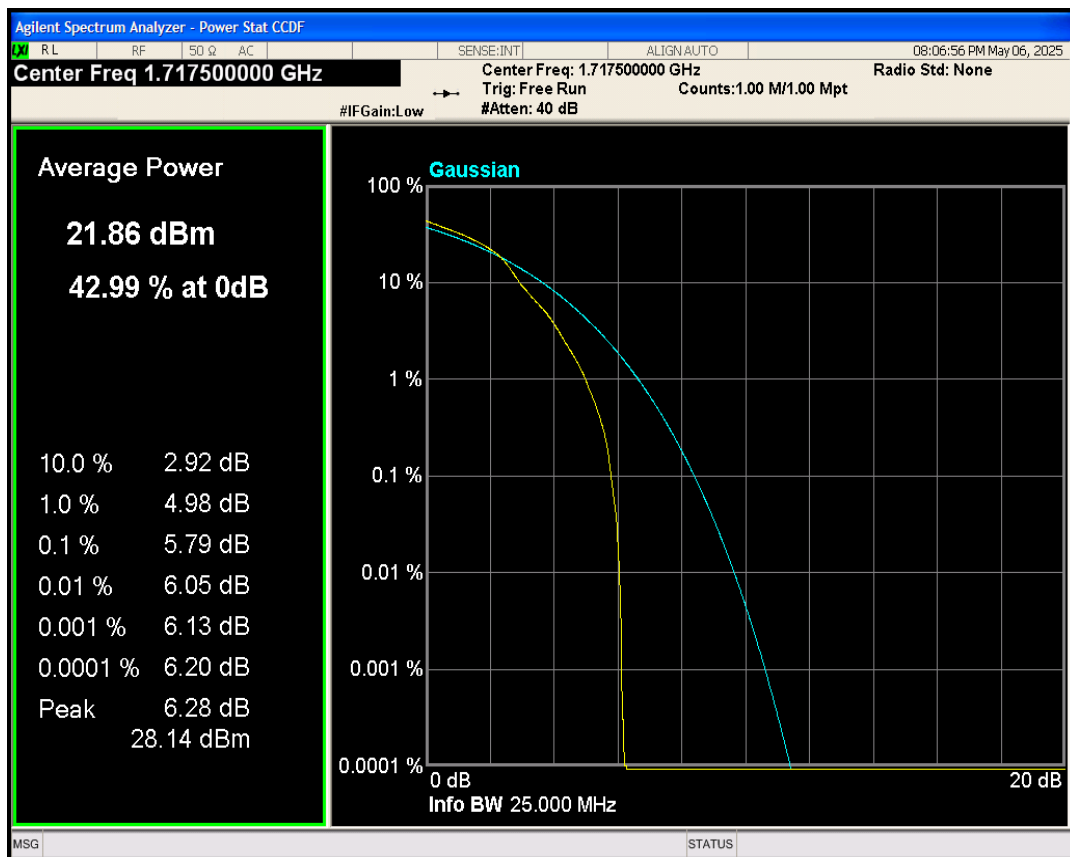




Band4 QPSK BW=15MHz Channel=20025 RB Size=1 Position=#0

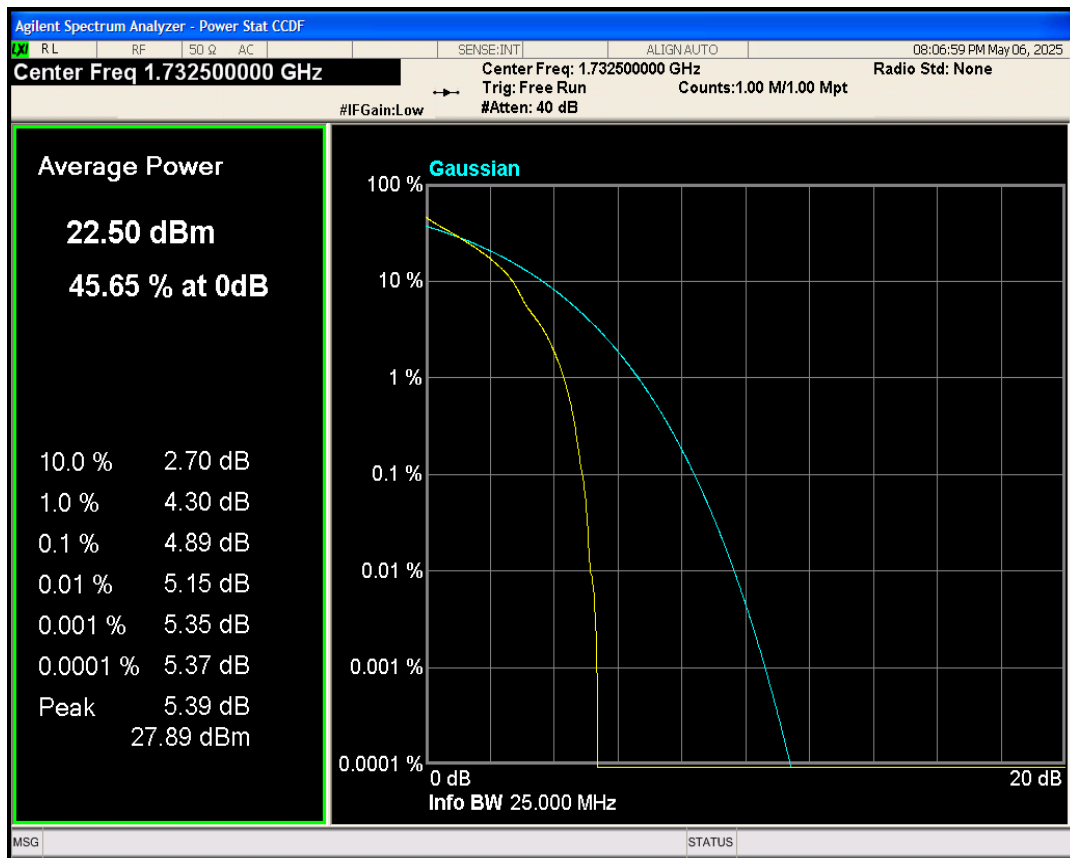


Band4 16QAM BW=15MHz Channel=20025 RB Size=1 Position=#0

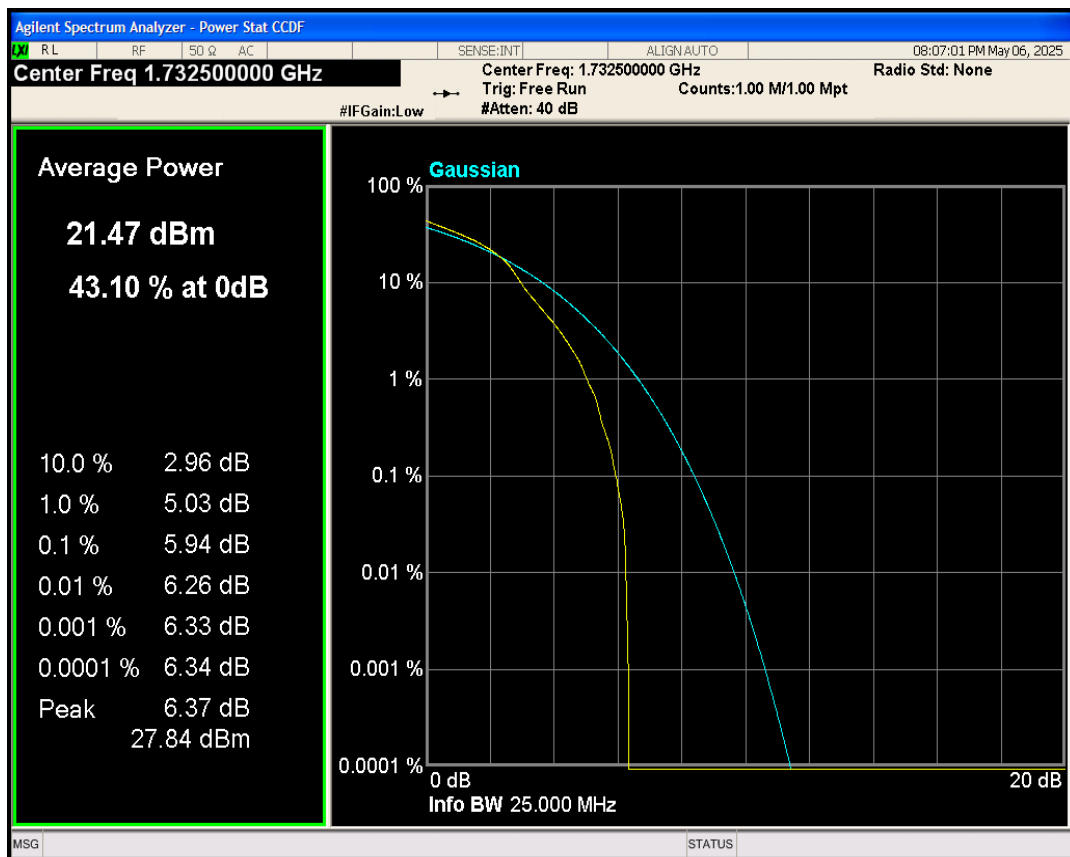




Band4 QPSK BW=15MHz Channel=20175 RB Size=1 Position=#0

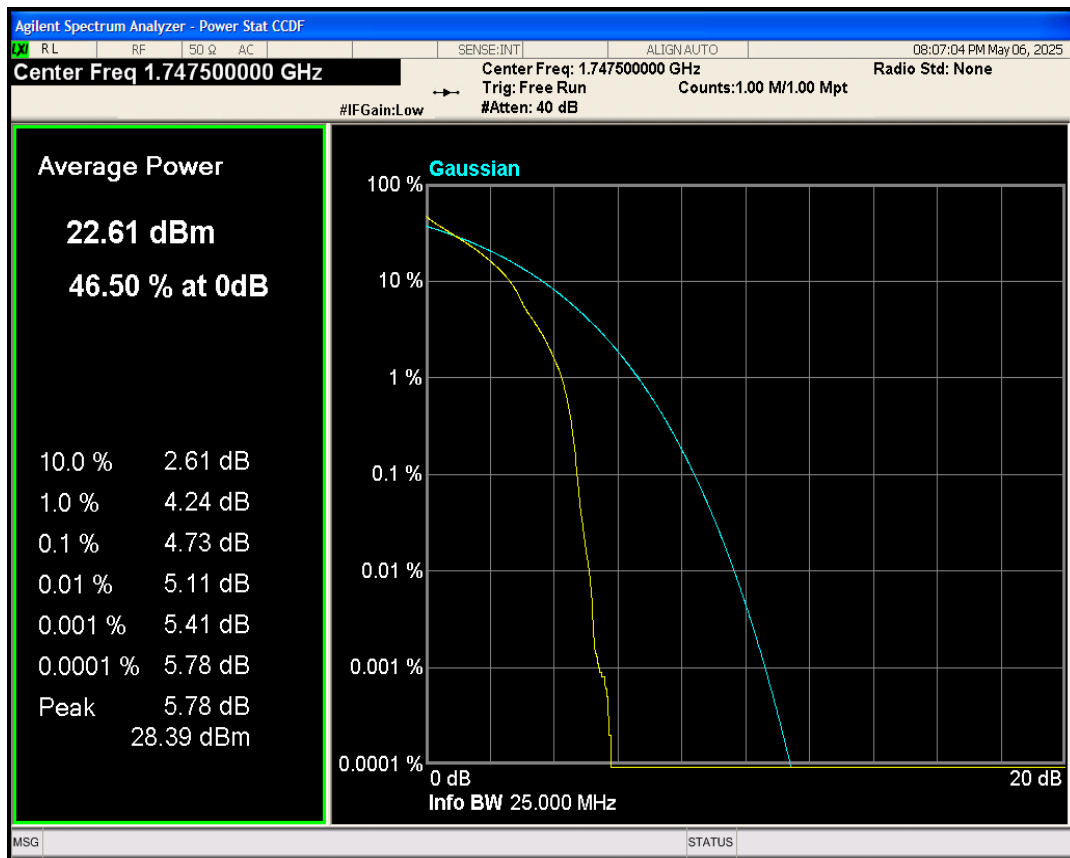


Band4 16QAM BW=15MHz Channel=20175 RB Size=1 Position=#0

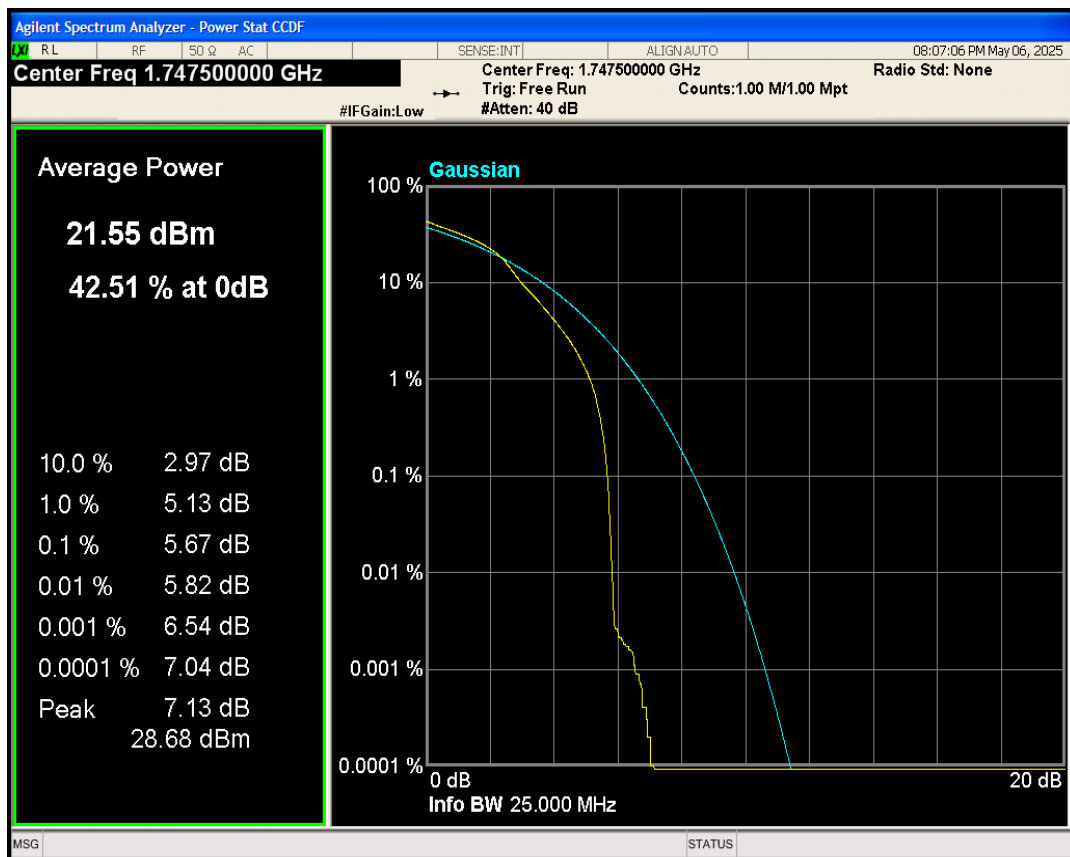




Band4 QPSK BW=15MHz Channel=20325 RB Size=1 Position=#0

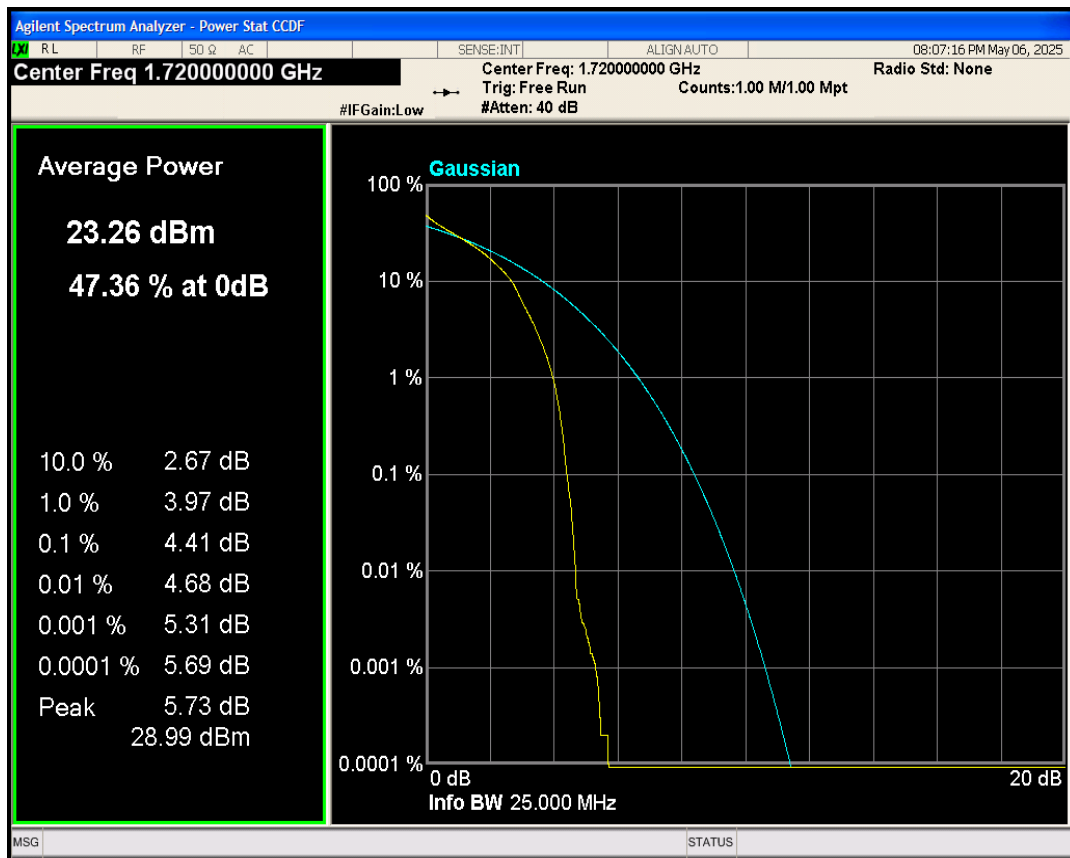


Band4 16QAM BW=15MHz Channel=20325 RB Size=1 Position=#0

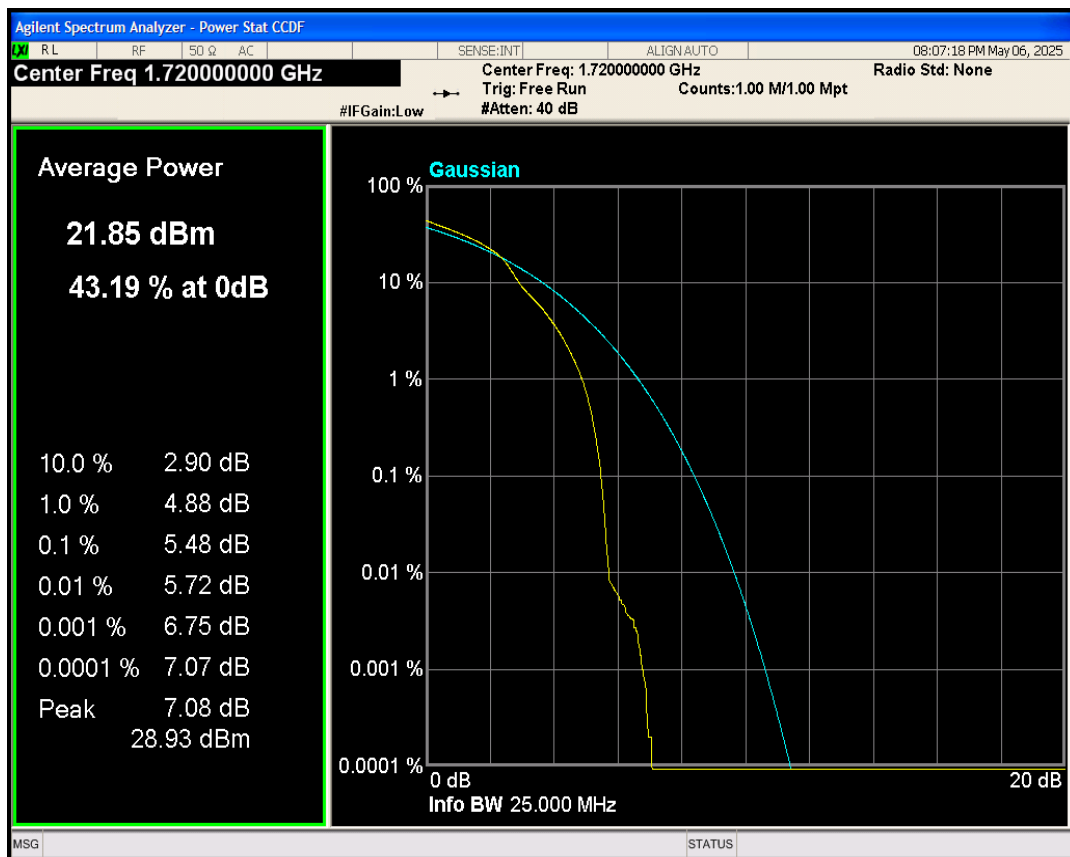




Band4 QPSK BW=20MHz Channel=20050 RB Size=1 Position=#0

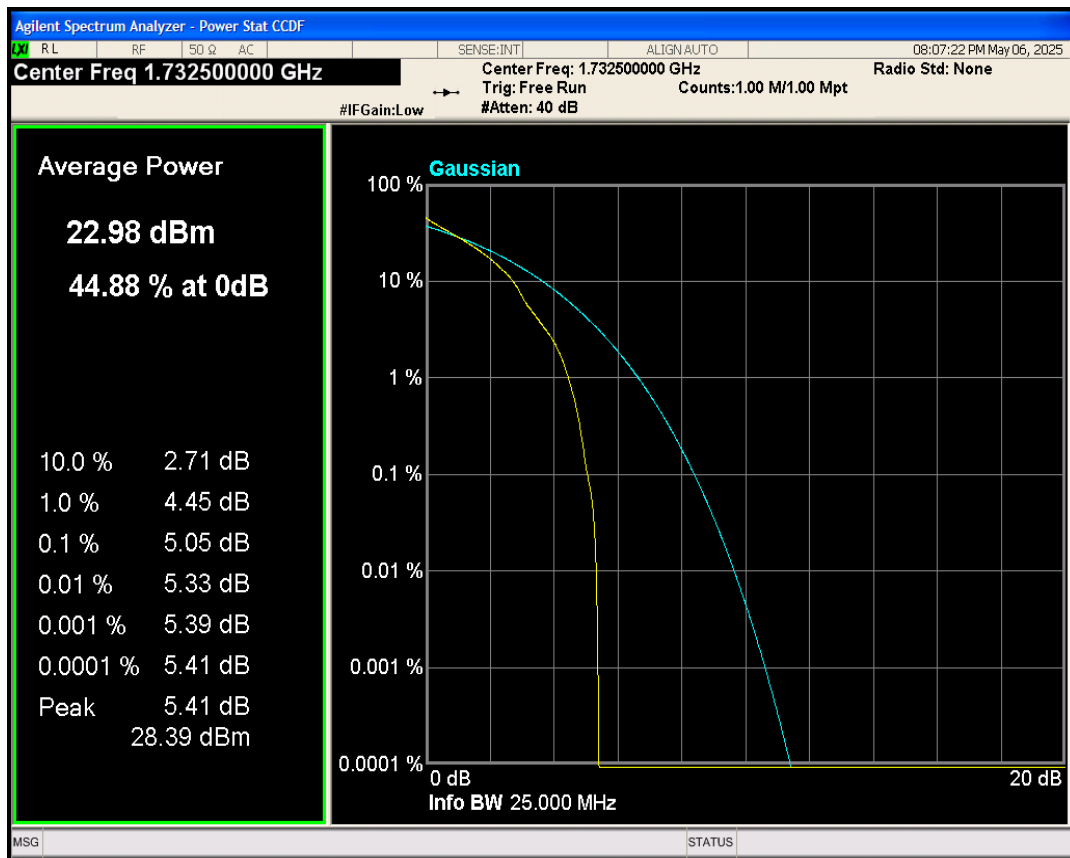


Band4 16QAM BW=20MHz Channel=20050 RB Size=1 Position=#0

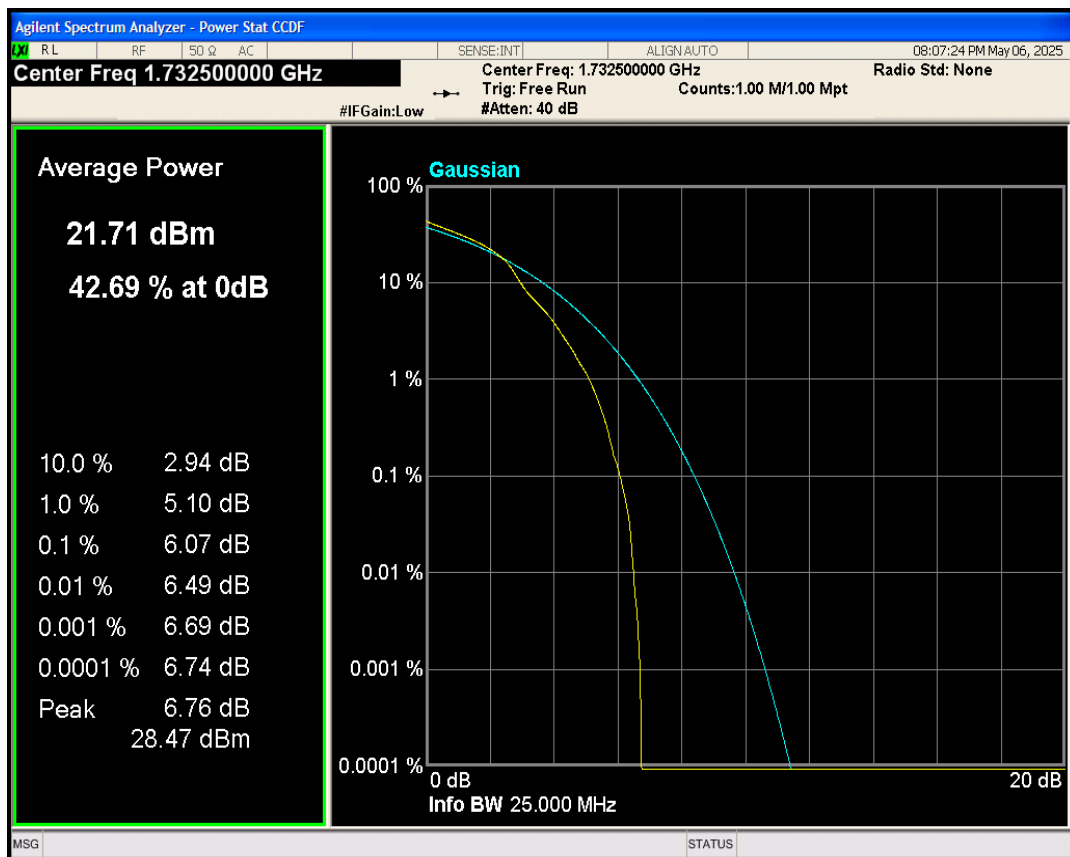




Band4 QPSK BW=20MHz Channel=20175 RB Size=1 Position=#0

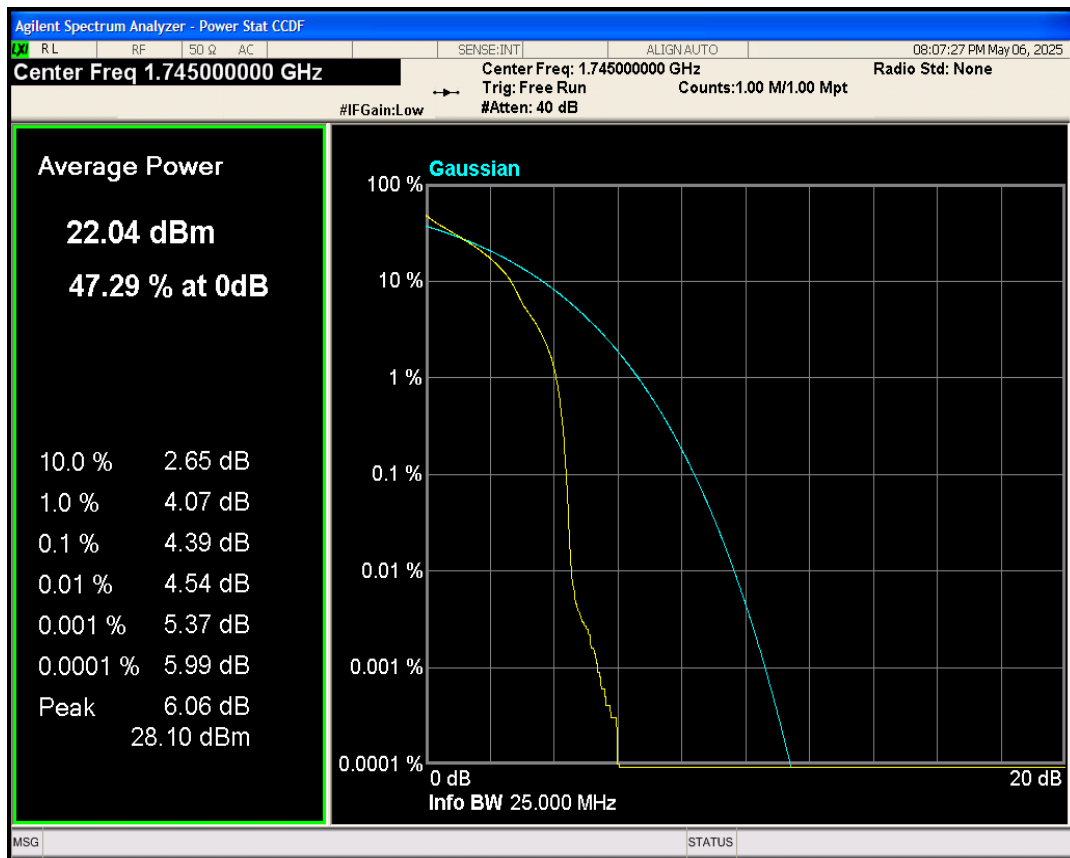


Band4 16QAM BW=20MHz Channel=20175 RB Size=1 Position=#0

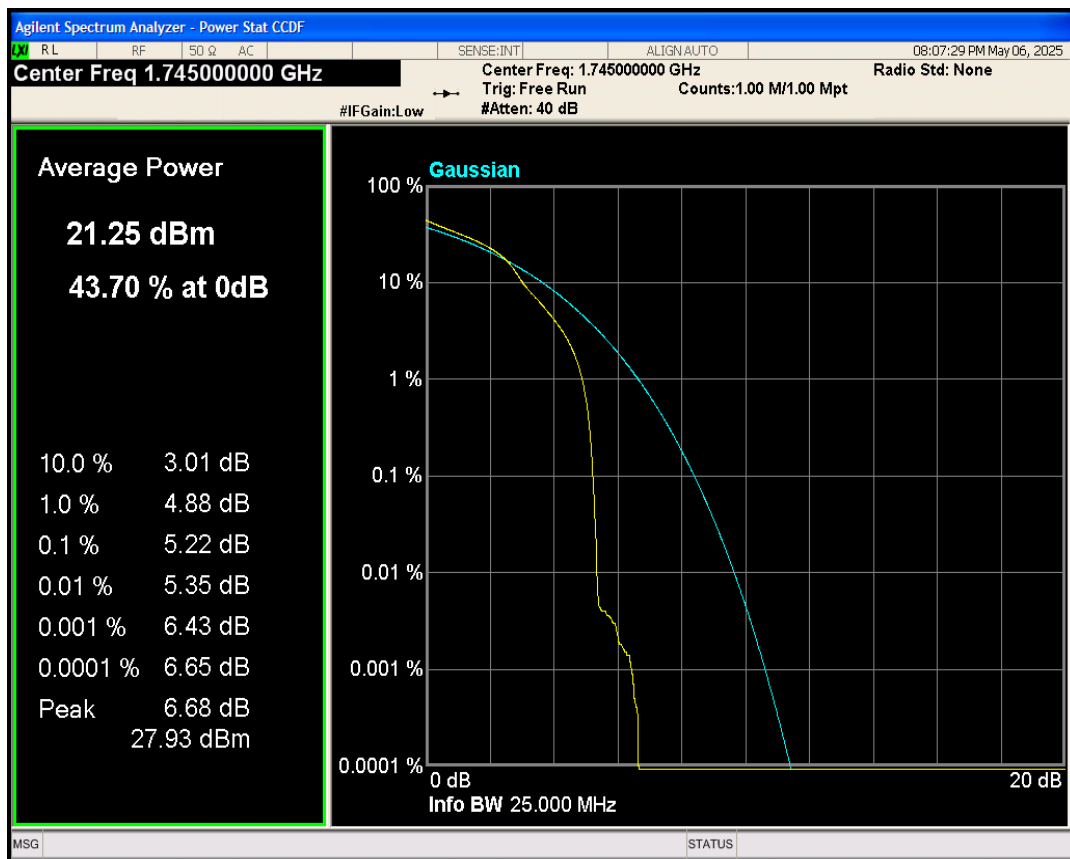




Band4 QPSK BW=20MHz Channel=20300 RB Size=1 Position=#0



Band4 16QAM BW=20MHz Channel=20300 RB Size=1 Position=#0

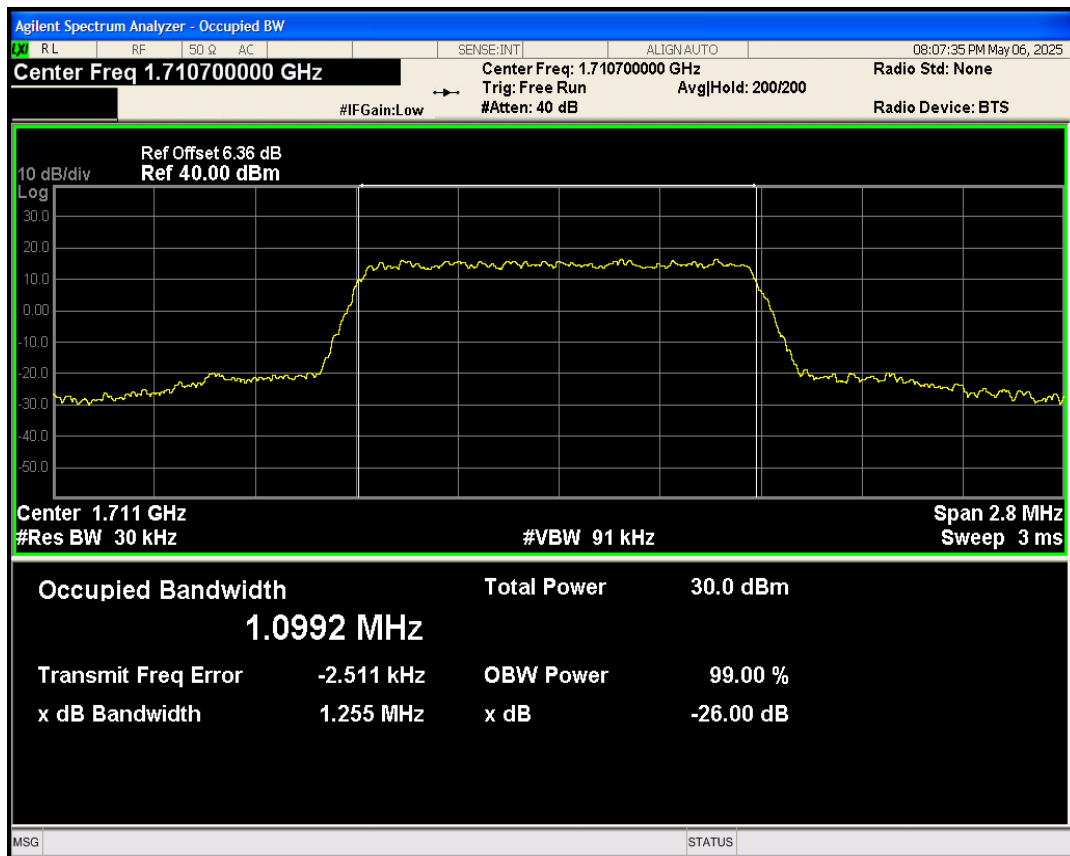


Appendix 4. Occupied bandwidth

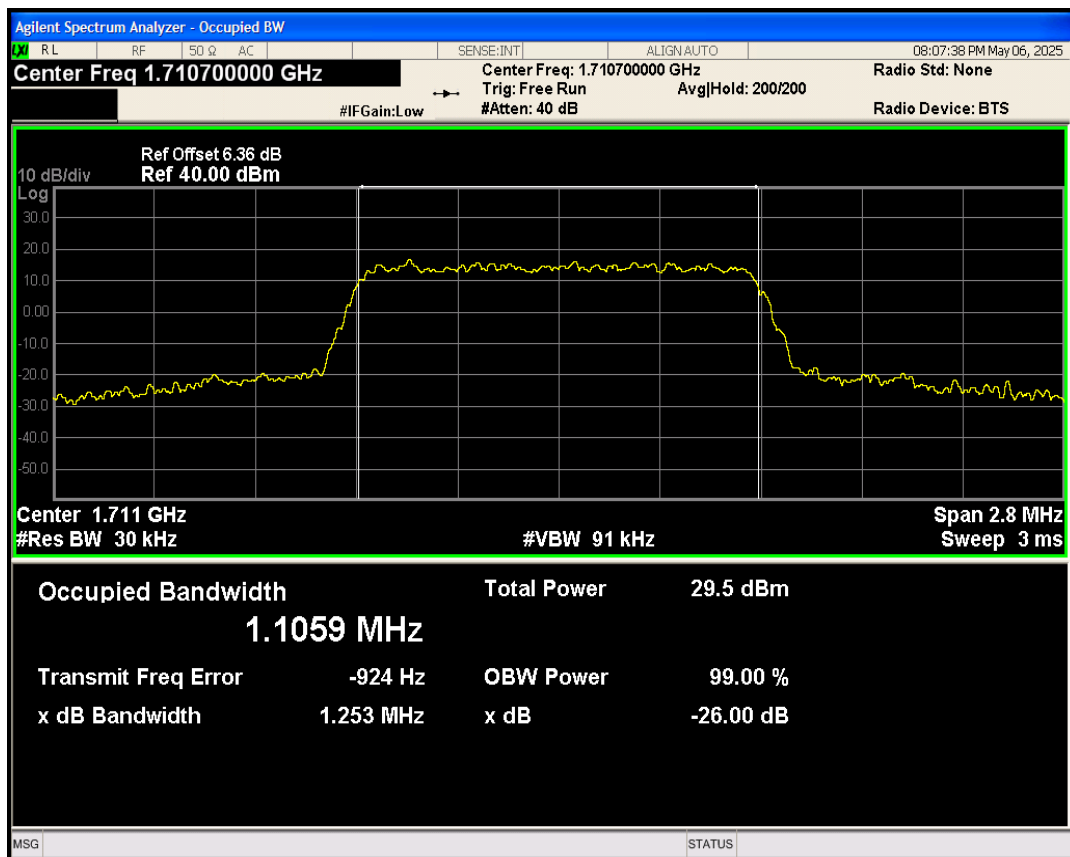
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% OBW (MHz)	-26dB EBW (MHz)	Verdict
Band4	1.4	19957	6	#0	QPSK	1.099	1.255	PASS
Band4	1.4	19957	6	#0	16QAM	1.106	1.253	PASS
Band4	1.4	20175	6	#0	QPSK	1.095	1.248	PASS
Band4	1.4	20175	6	#0	16QAM	1.098	1.244	PASS
Band4	1.4	20393	6	#0	QPSK	1.098	1.250	PASS
Band4	1.4	20393	6	#0	16QAM	1.100	1.246	PASS
Band4	3	19965	15	#0	QPSK	2.713	3.044	PASS
Band4	3	19965	15	#0	16QAM	2.710	3.048	PASS
Band4	3	20175	15	#0	QPSK	2.694	3.033	PASS
Band4	3	20175	15	#0	16QAM	2.705	3.019	PASS
Band4	3	20385	15	#0	QPSK	2.710	3.017	PASS
Band4	3	20385	15	#0	16QAM	2.718	3.043	PASS
Band4	5	19975	25	#0	QPSK	4.532	4.987	PASS
Band4	5	19975	25	#0	16QAM	4.529	4.934	PASS
Band4	5	20175	25	#0	QPSK	4.505	4.943	PASS
Band4	5	20175	25	#0	16QAM	4.521	4.969	PASS
Band4	5	20375	25	#0	QPSK	4.509	4.934	PASS
Band4	5	20375	25	#0	16QAM	4.528	4.920	PASS
Band4	10	20000	50	#0	QPSK	8.992	9.696	PASS
Band4	10	20000	50	#0	16QAM	8.953	9.832	PASS
Band4	10	20175	50	#0	QPSK	8.996	9.902	PASS
Band4	10	20175	50	#0	16QAM	8.998	9.764	PASS
Band4	10	20350	50	#0	QPSK	8.988	9.872	PASS
Band4	10	20350	50	#0	16QAM	8.968	9.887	PASS
Band4	15	20025	75	#0	QPSK	13.448	14.718	PASS
Band4	15	20025	75	#0	16QAM	13.438	14.867	PASS
Band4	15	20175	75	#0	QPSK	13.470	14.736	PASS
Band4	15	20175	75	#0	16QAM	13.466	14.990	PASS
Band4	15	20325	75	#0	QPSK	13.447	14.864	PASS
Band4	15	20325	75	#0	16QAM	13.420	14.702	PASS
Band4	20	20050	100	#0	QPSK	17.909	19.370	PASS
Band4	20	20050	100	#0	16QAM	17.912	19.496	PASS
Band4	20	20175	100	#0	QPSK	17.980	19.417	PASS
Band4	20	20175	100	#0	16QAM	17.993	19.668	PASS
Band4	20	20300	100	#0	QPSK	18.059	19.706	PASS
Band4	20	20300	100	#0	16QAM	18.024	19.501	PASS



Band4 QPSK BW=1.4MHz Channel=19957 RB Size=6 Position=#0

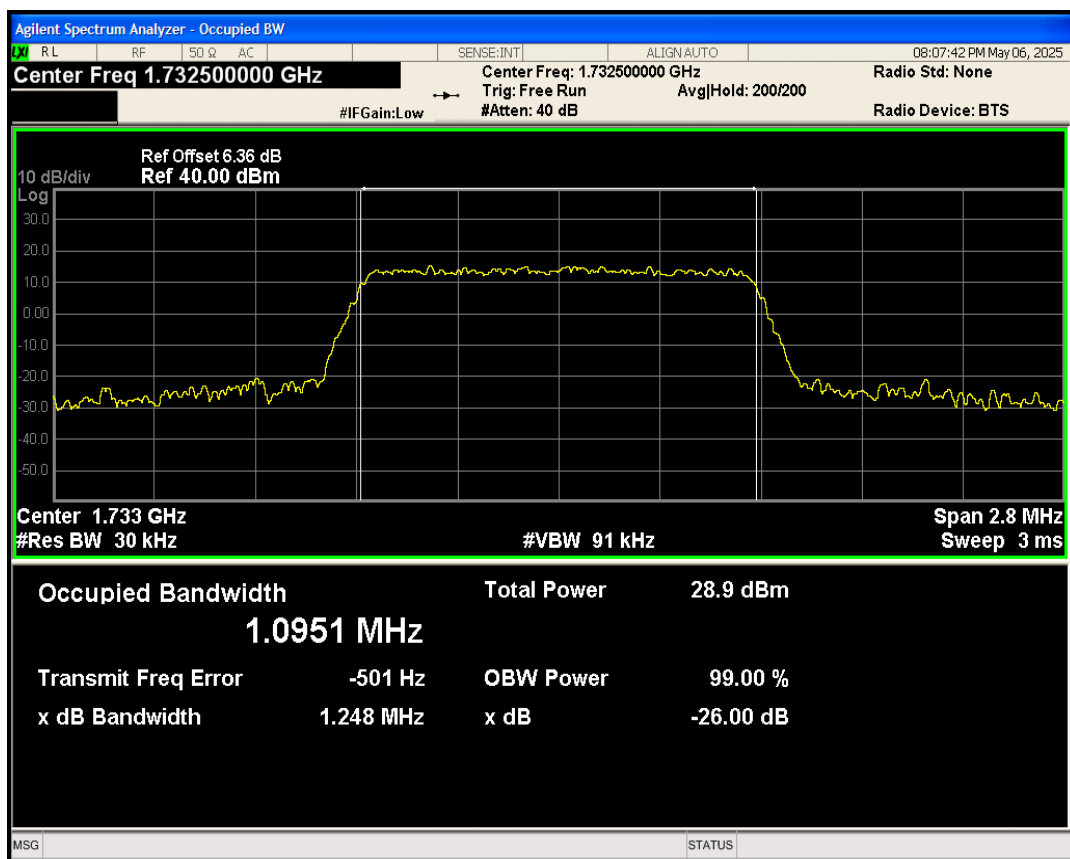


Band4 16QAM BW=1.4MHz Channel=19957 RB Size=6 Position=#0

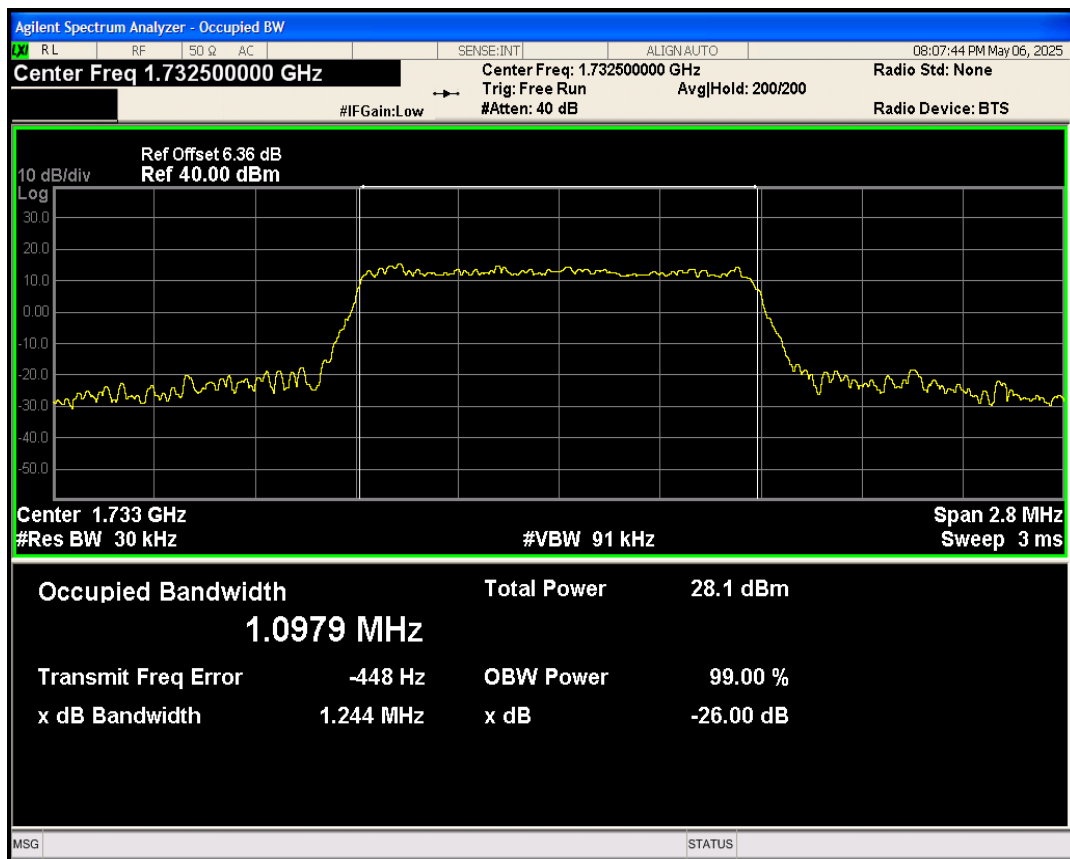




Band4 QPSK BW=1.4MHz Channel=20175 RB Size=6 Position=#0

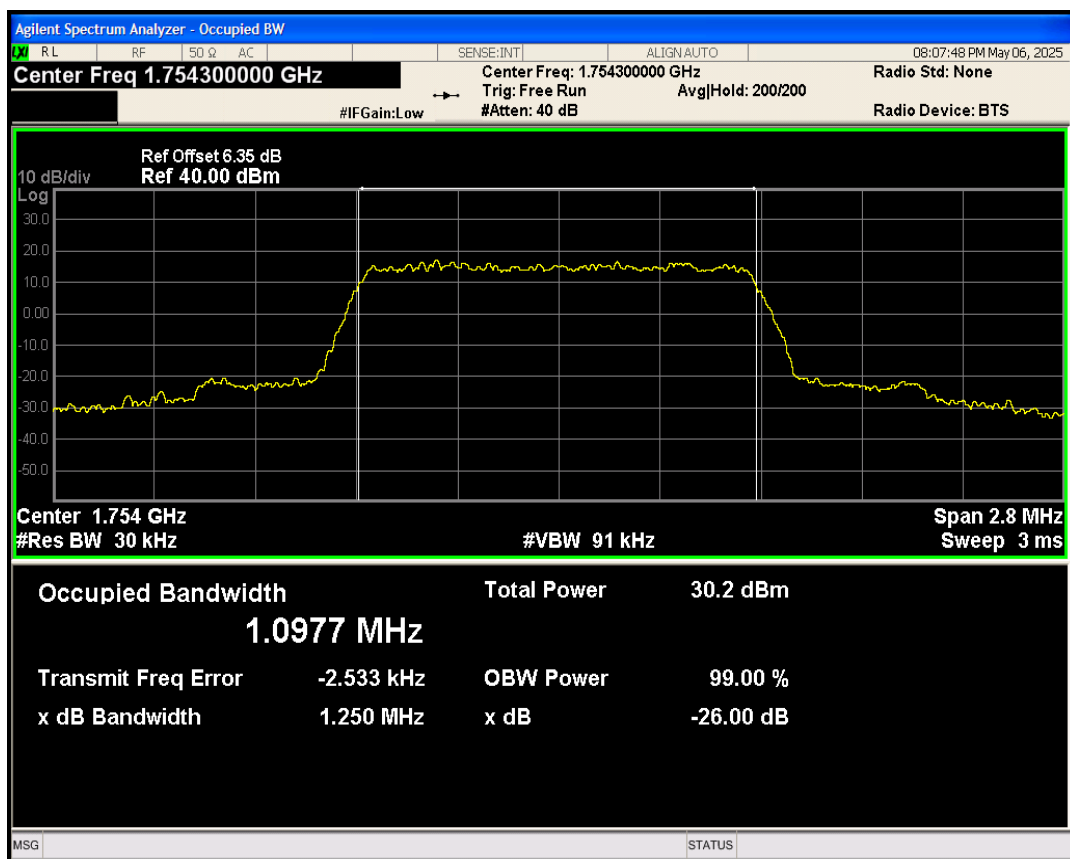


Band4 16QAM BW=1.4MHz Channel=20175 RB Size=6 Position=#0

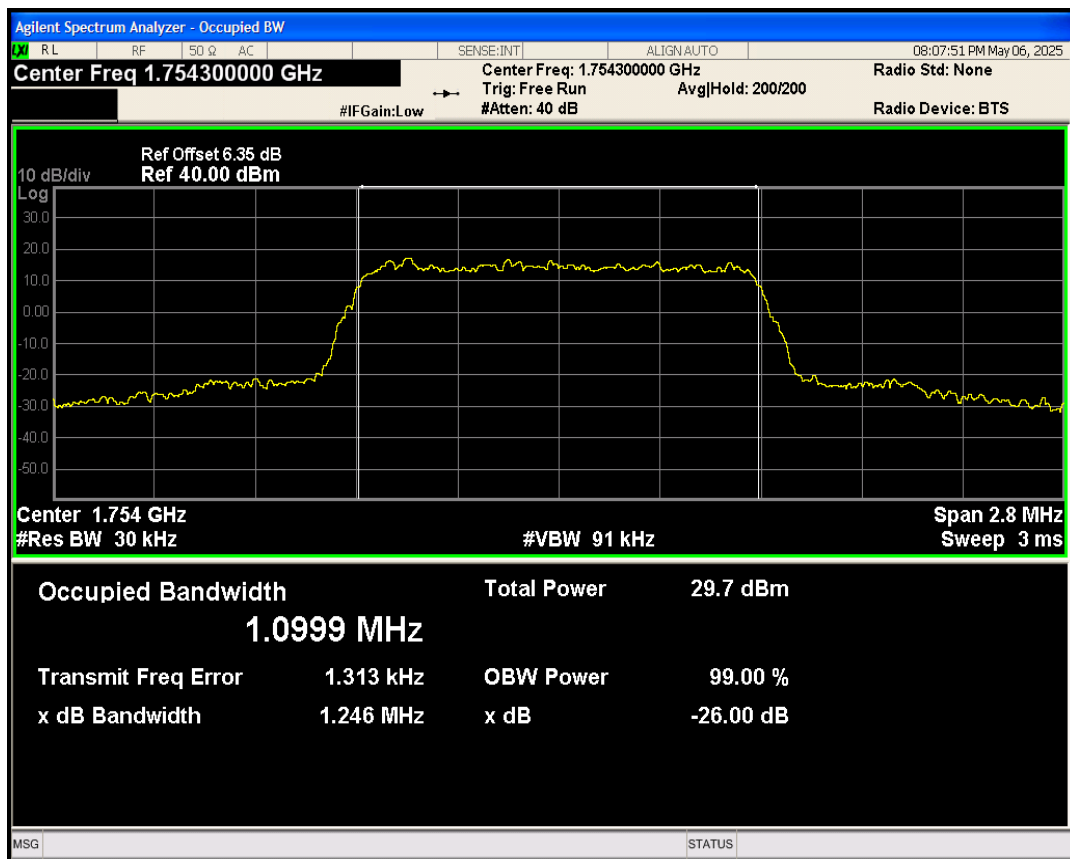




Band4 QPSK BW=1.4MHz Channel=20393 RB Size=6 Position=#0

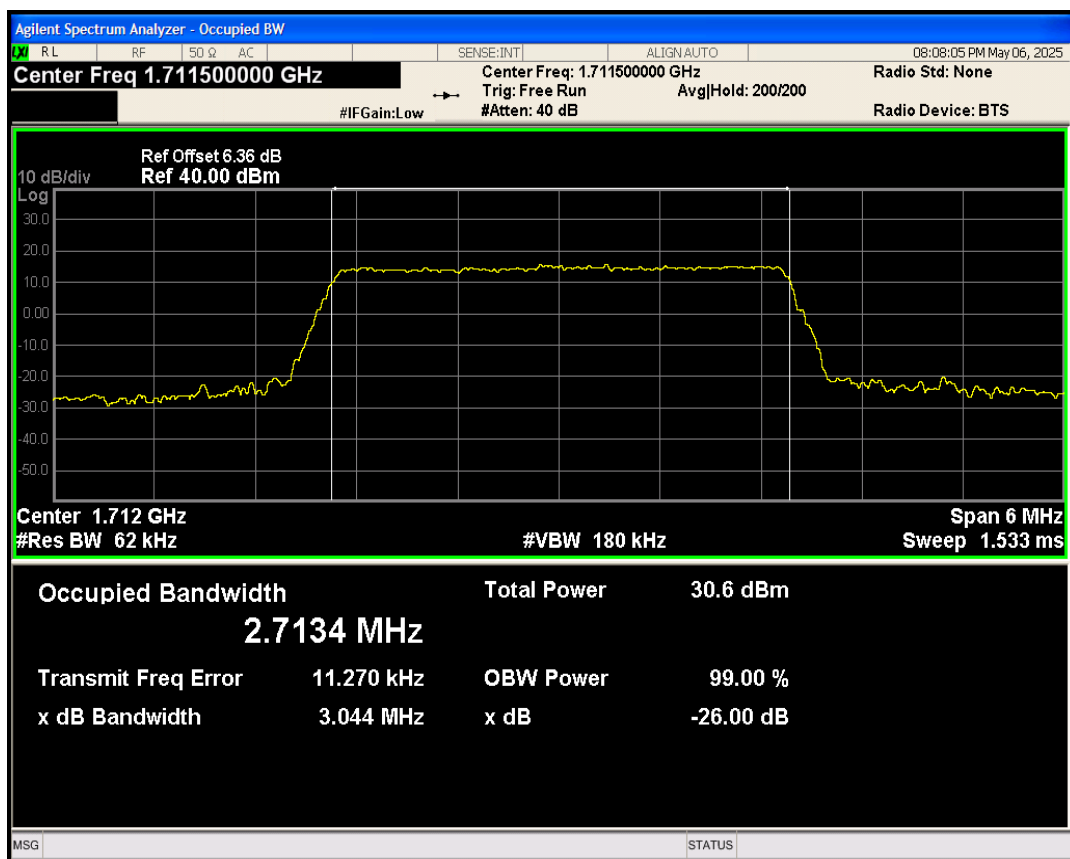


Band4 16QAM BW=1.4MHz Channel=20393 RB Size=6 Position=#0

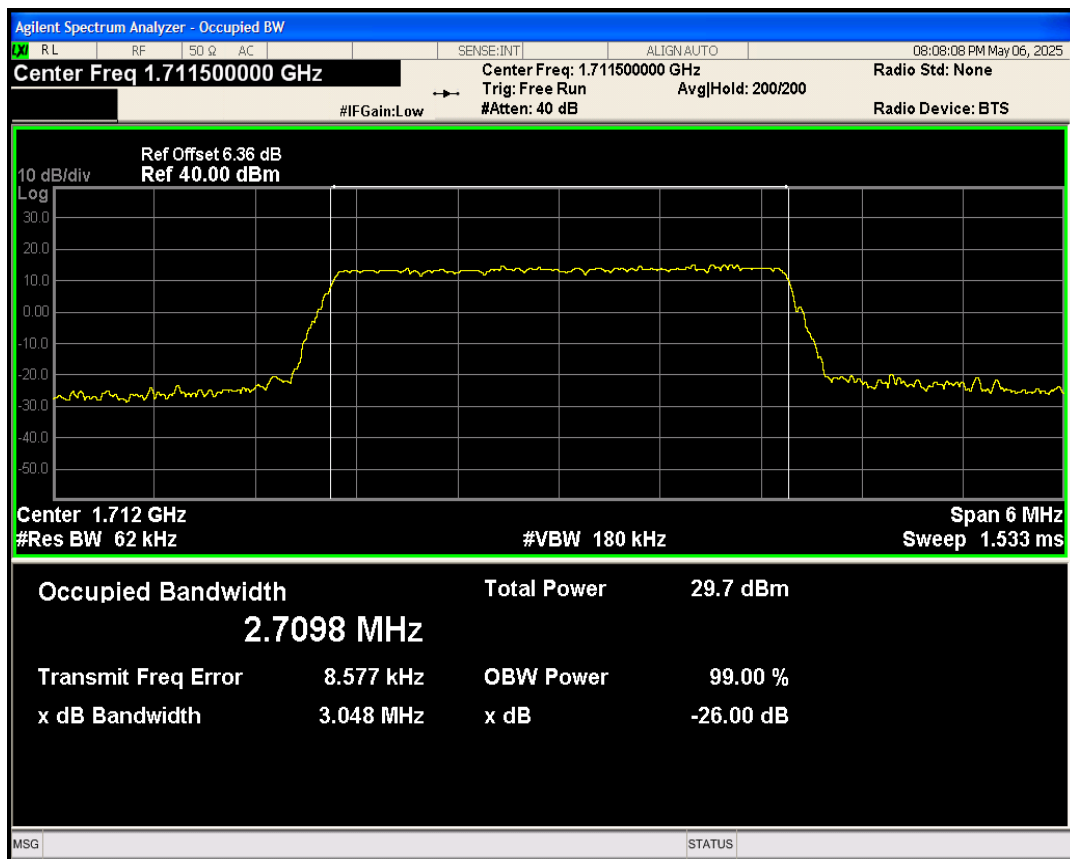




Band4 QPSK BW=3MHz Channel=19965 RB Size=15 Position=#0

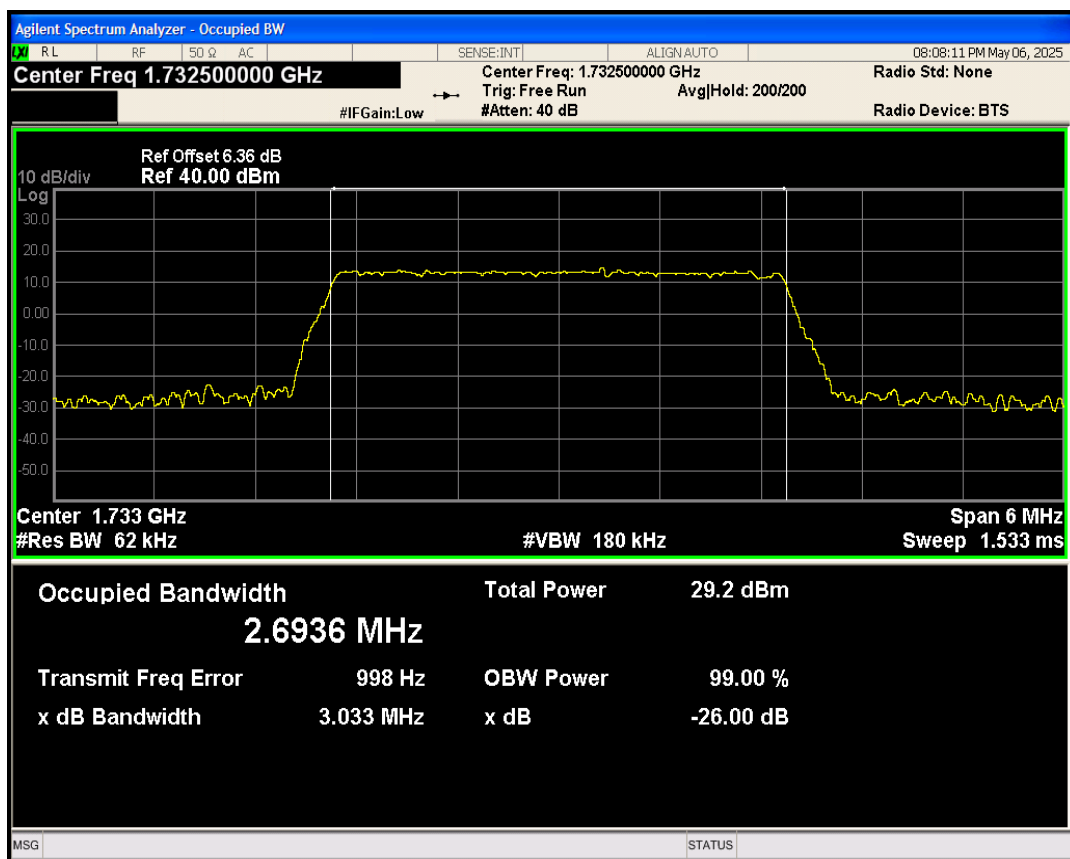


Band4 16QAM BW=3MHz Channel=19965 RB Size=15 Position=#0

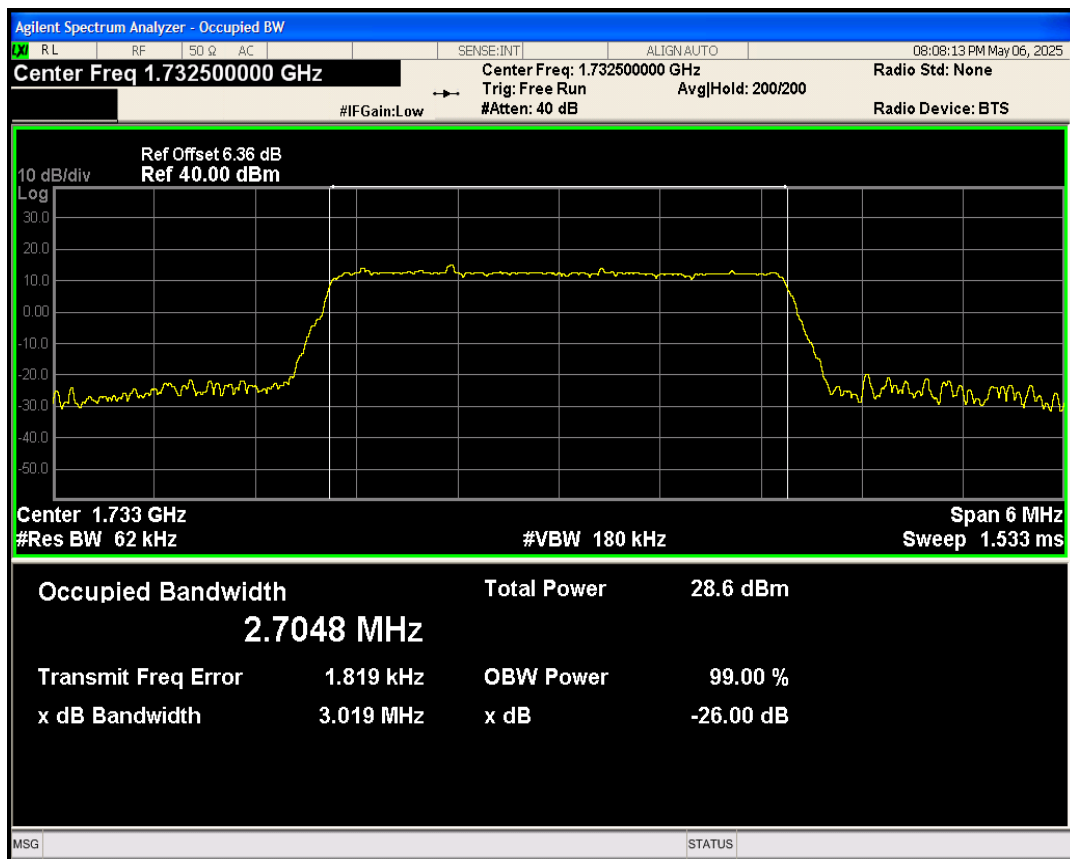




Band4 QPSK BW=3MHz Channel=20175 RB Size=15 Position=#0

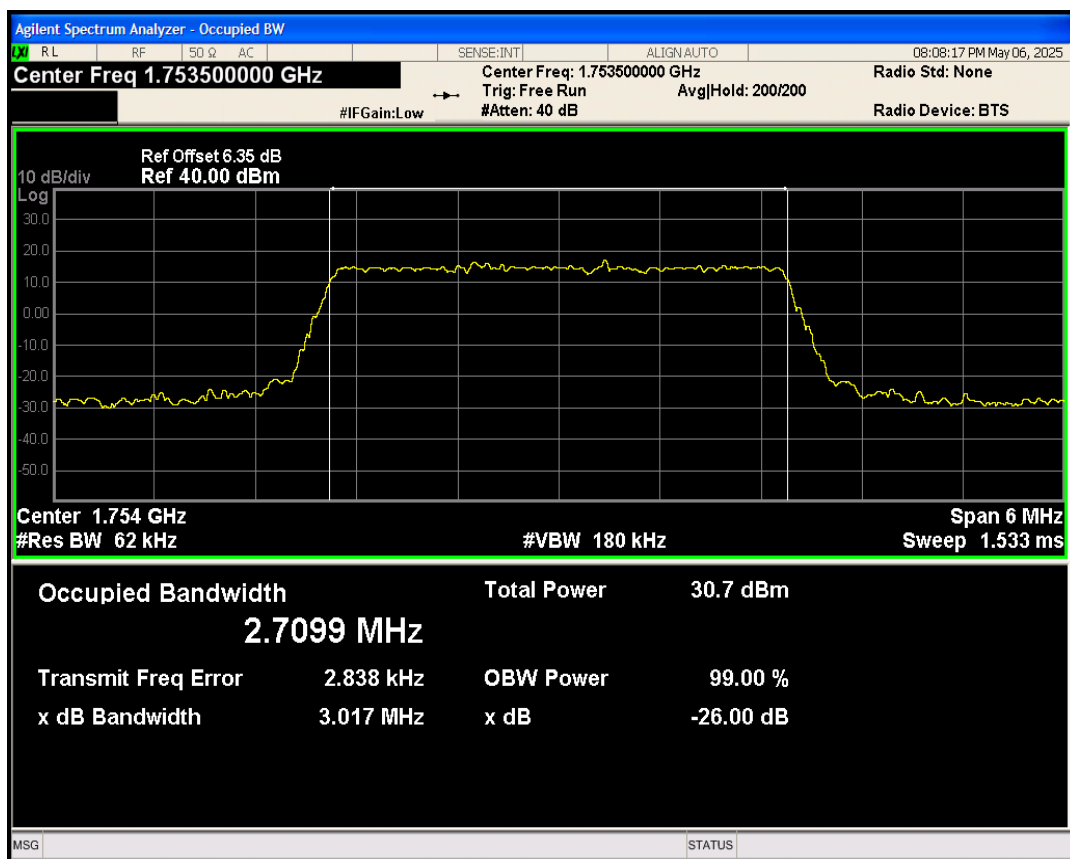


Band4 16QAM BW=3MHz Channel=20175 RB Size=15 Position=#0

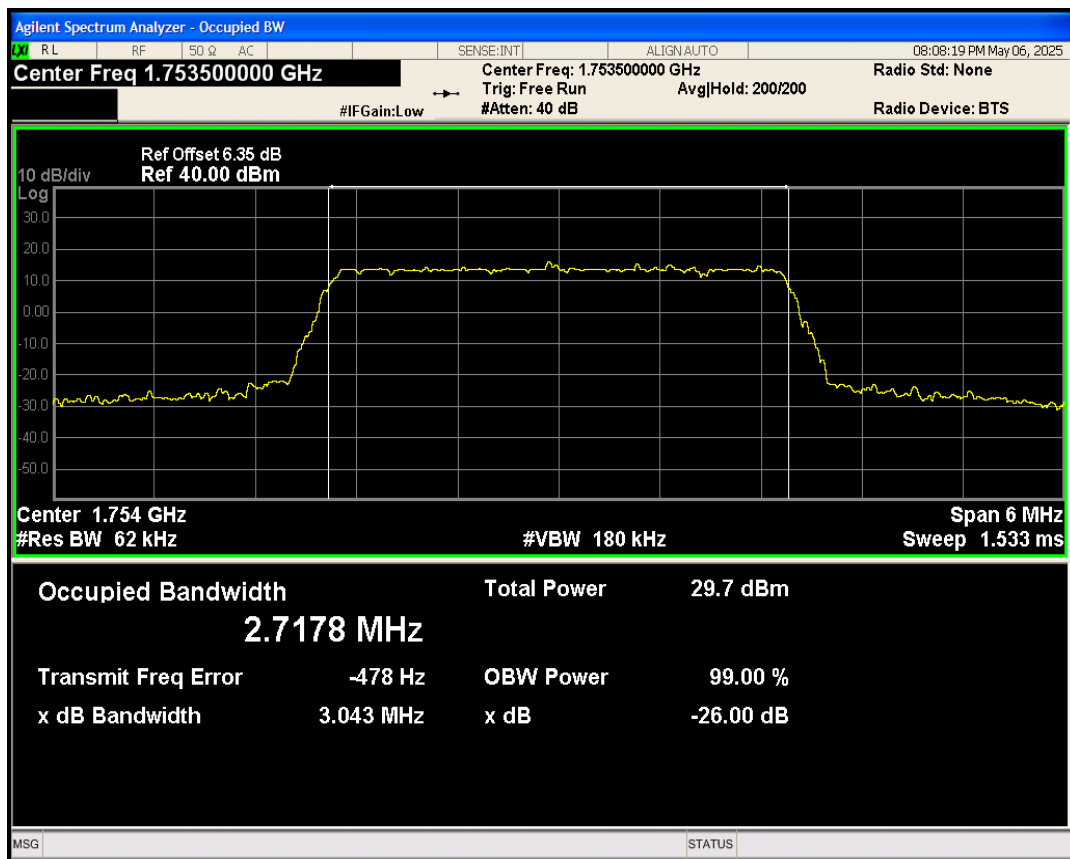




Band4 QPSK BW=3MHz Channel=20385 RB Size=15 Position=#0

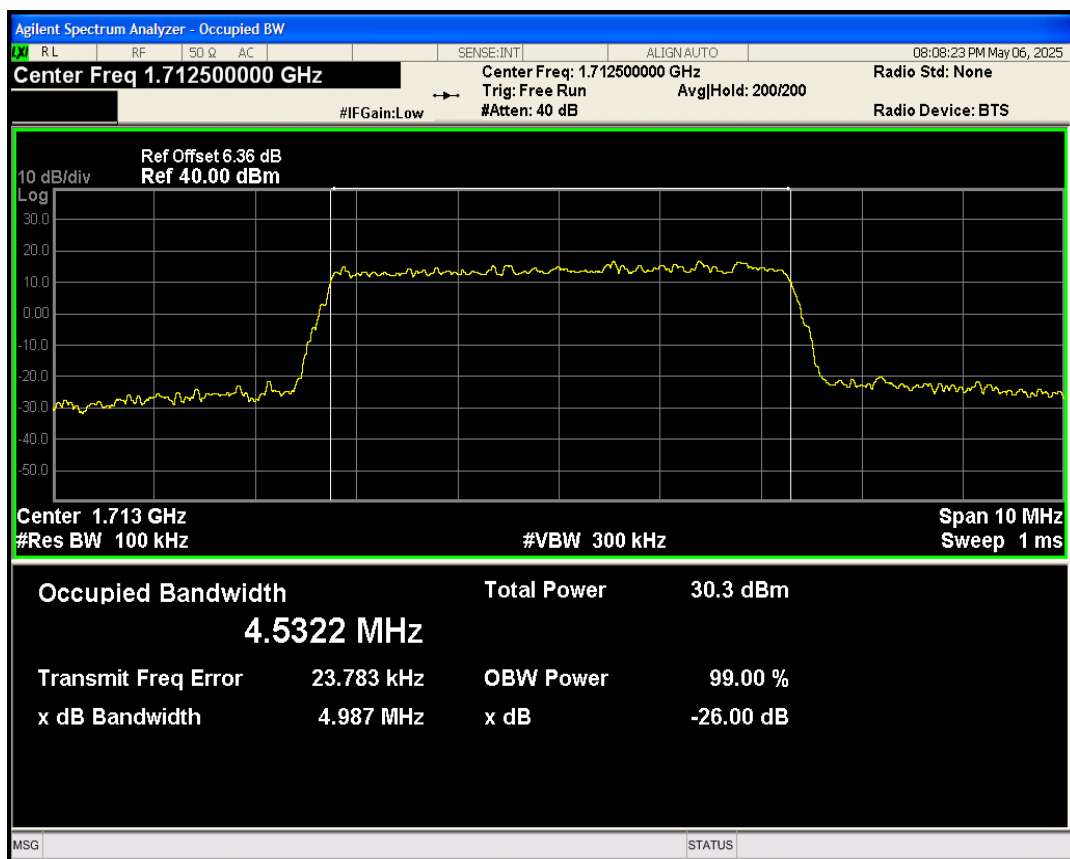


Band4 16QAM BW=3MHz Channel=20385 RB Size=15 Position=#0

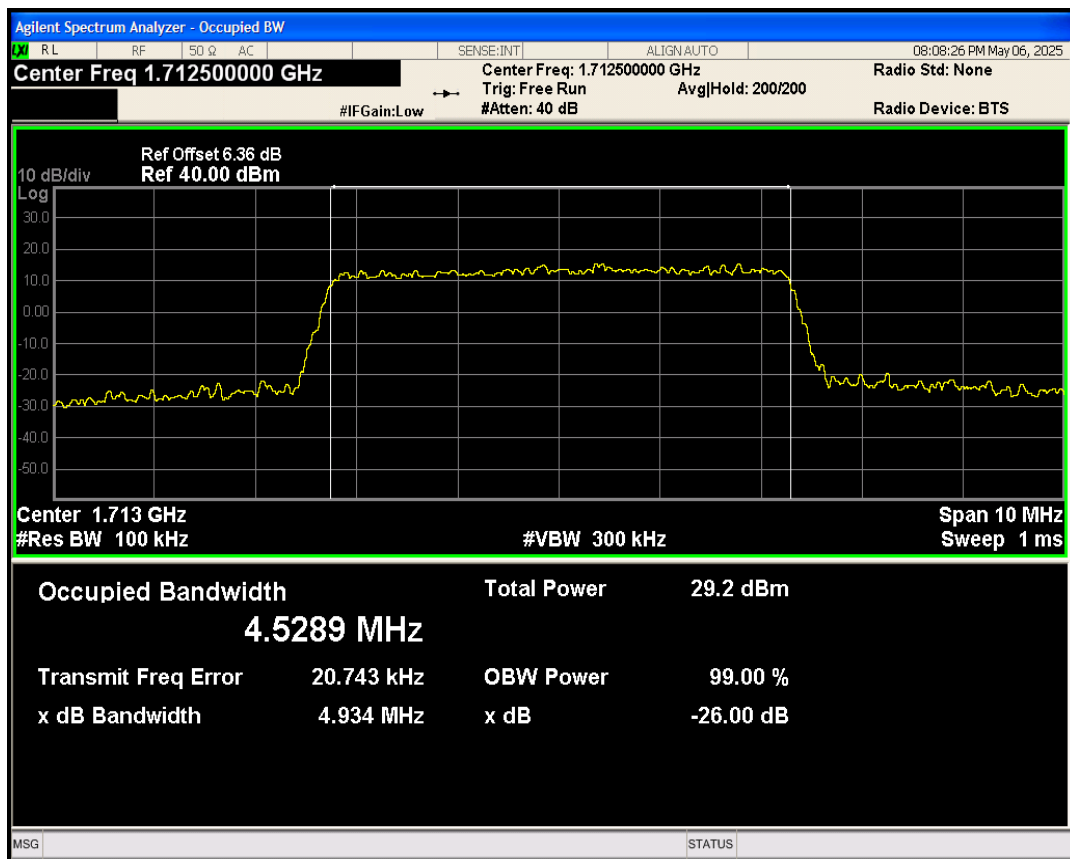




Band4 QPSK BW=5MHz Channel=19975 RB Size=25 Position=#0

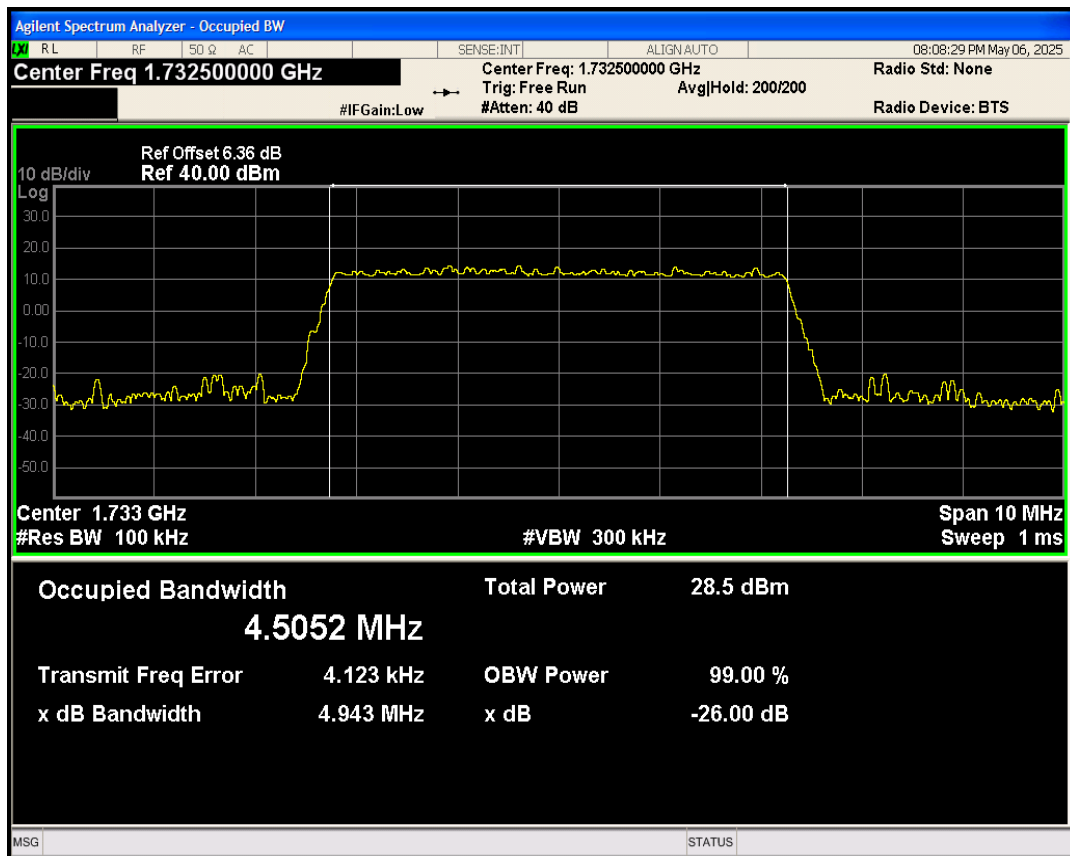


Band4 16QAM BW=5MHz Channel=19975 RB Size=25 Position=#0

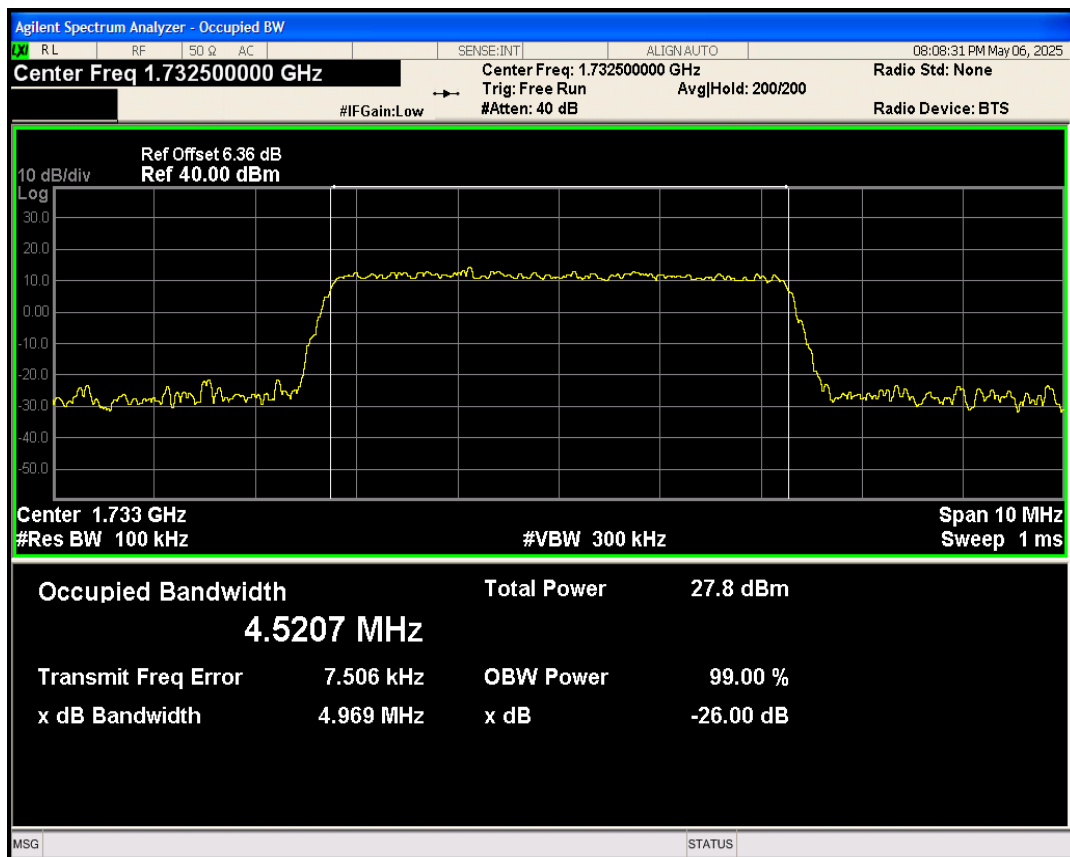




Band4 QPSK BW=5MHz Channel=20175 RB Size=25 Position=#0

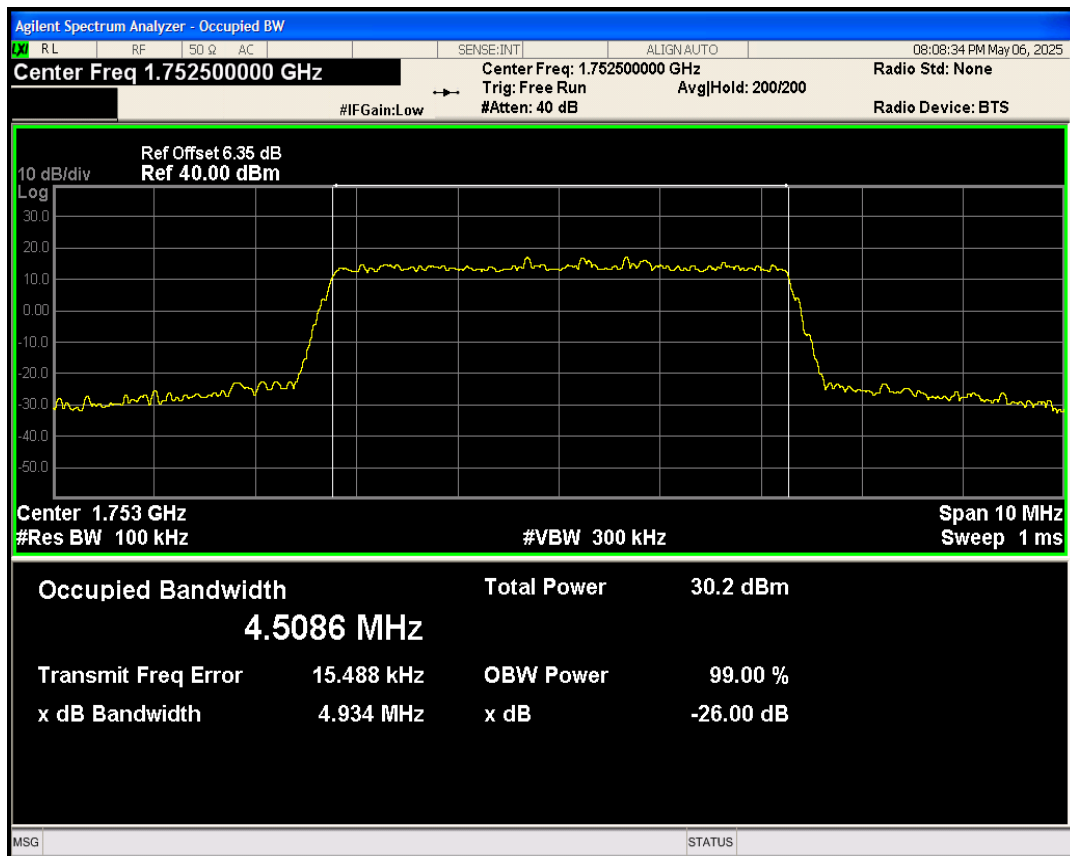


Band4 16QAM BW=5MHz Channel=20175 RB Size=25 Position=#0

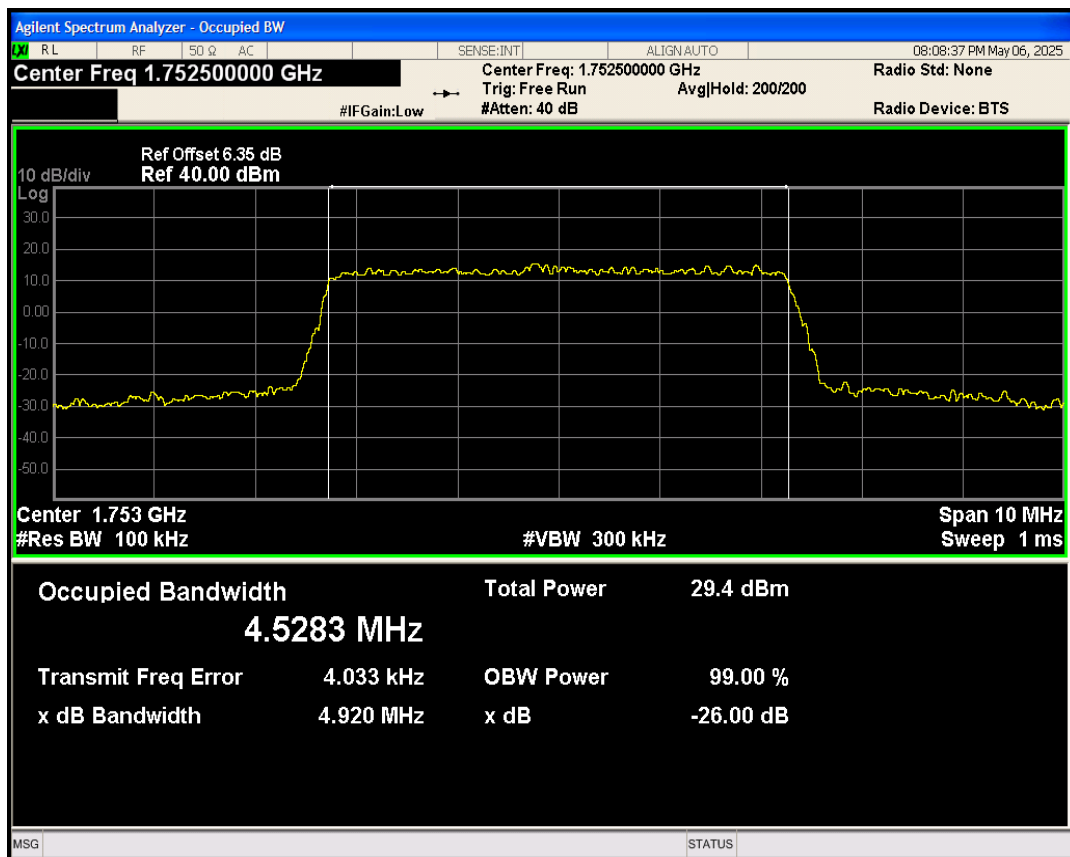




Band4 QPSK BW=5MHz Channel=20375 RB Size=25 Position=#0

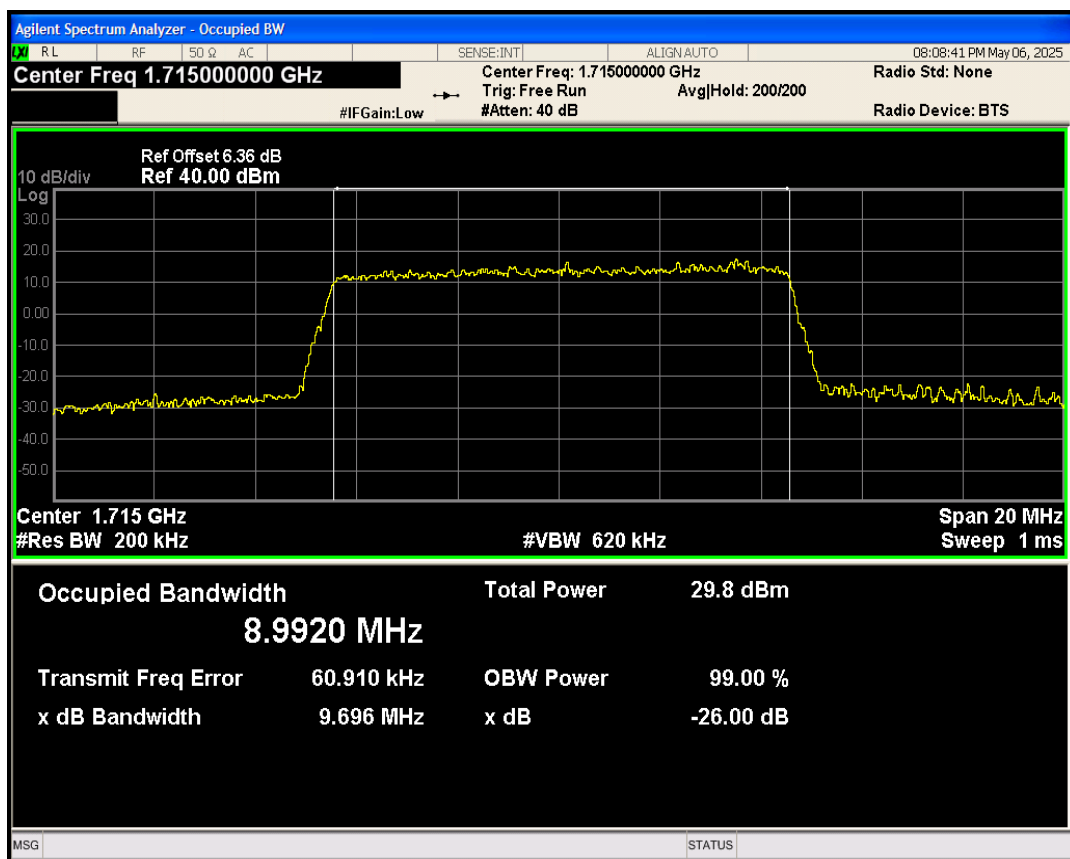


Band4 16QAM BW=5MHz Channel=20375 RB Size=25 Position=#0

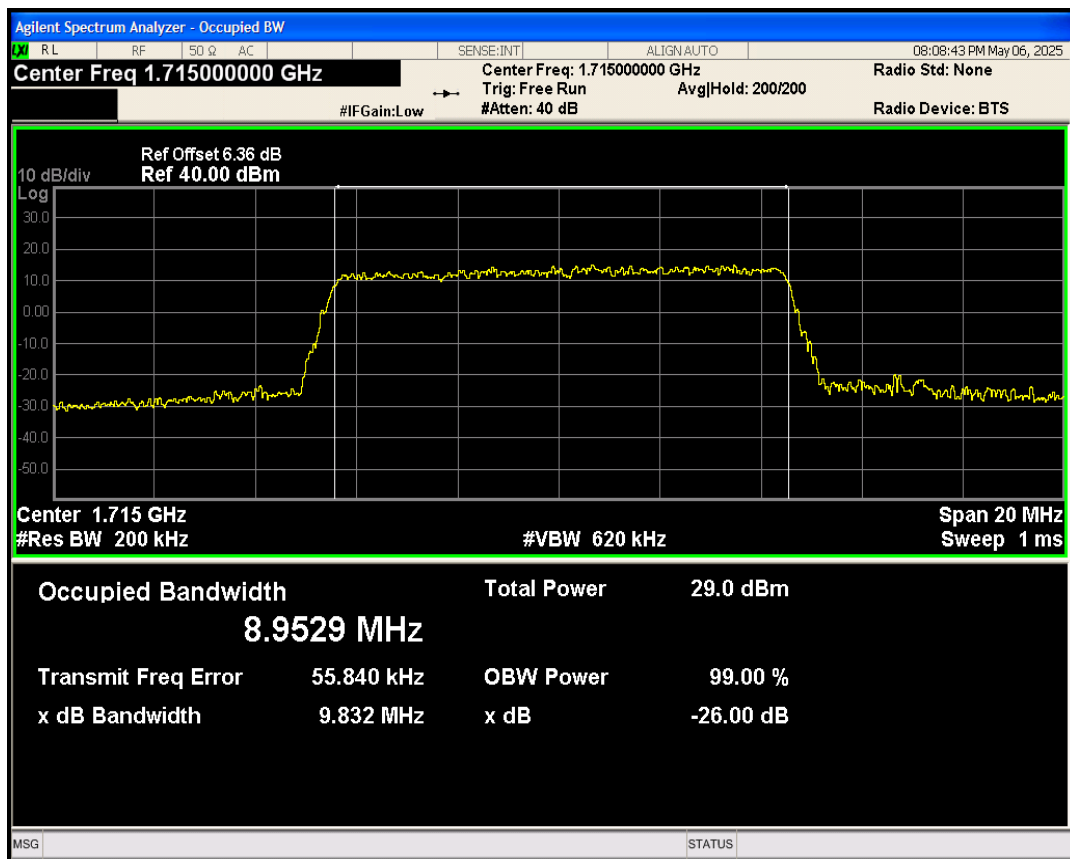




Band4 QPSK BW=10MHz Channel=20000 RB Size=50 Position=#0

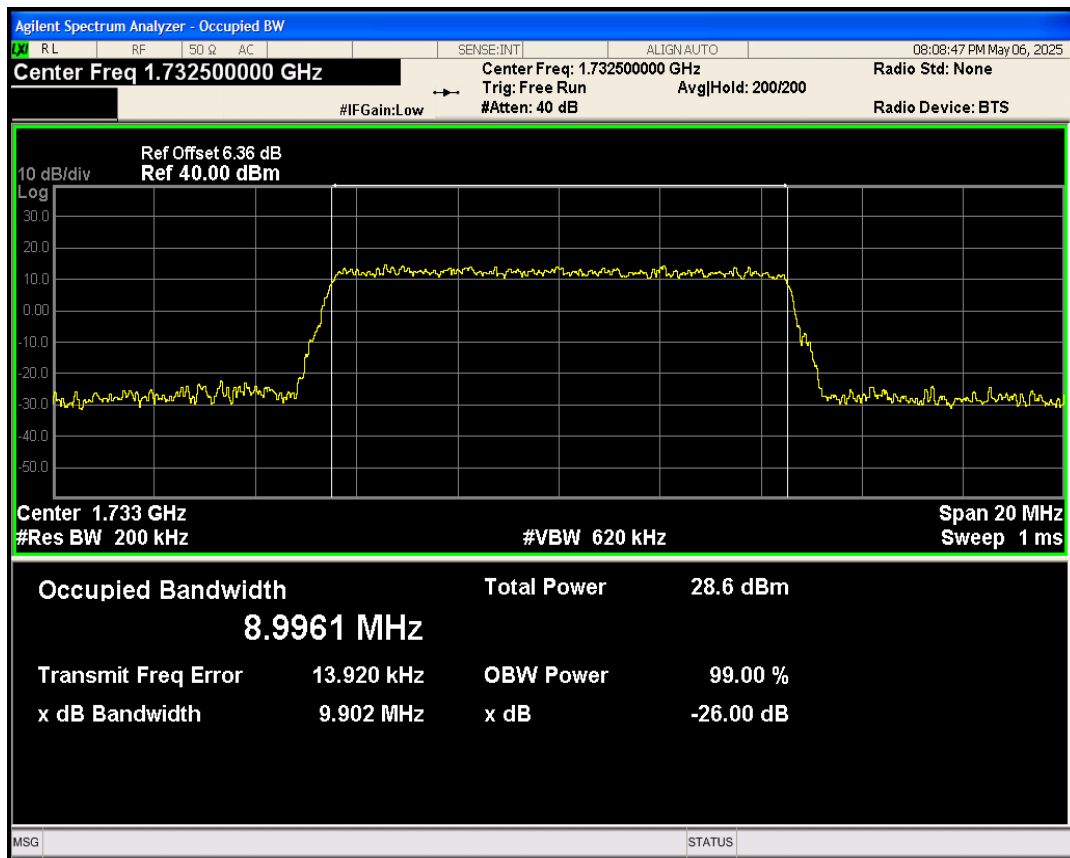


Band4 16QAM BW=10MHz Channel=20000 RB Size=50 Position=#0

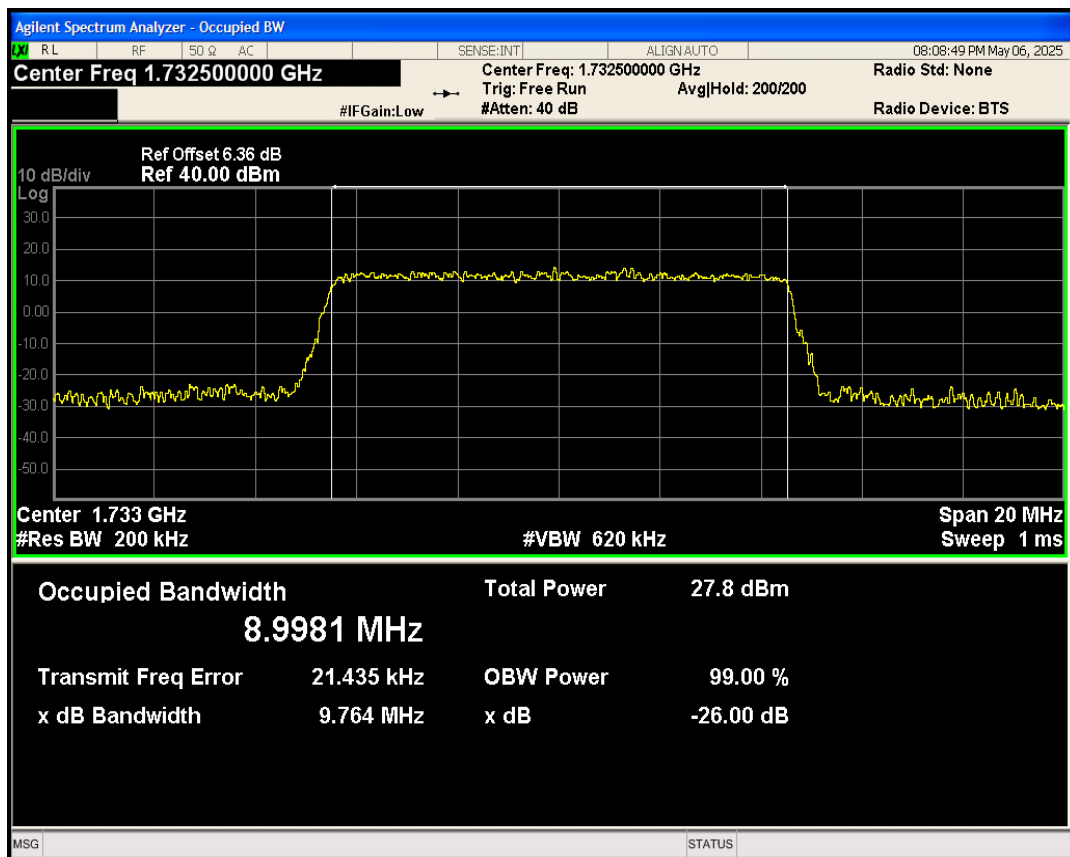




Band4 QPSK BW=10MHz Channel=20175 RB Size=50 Position=#0

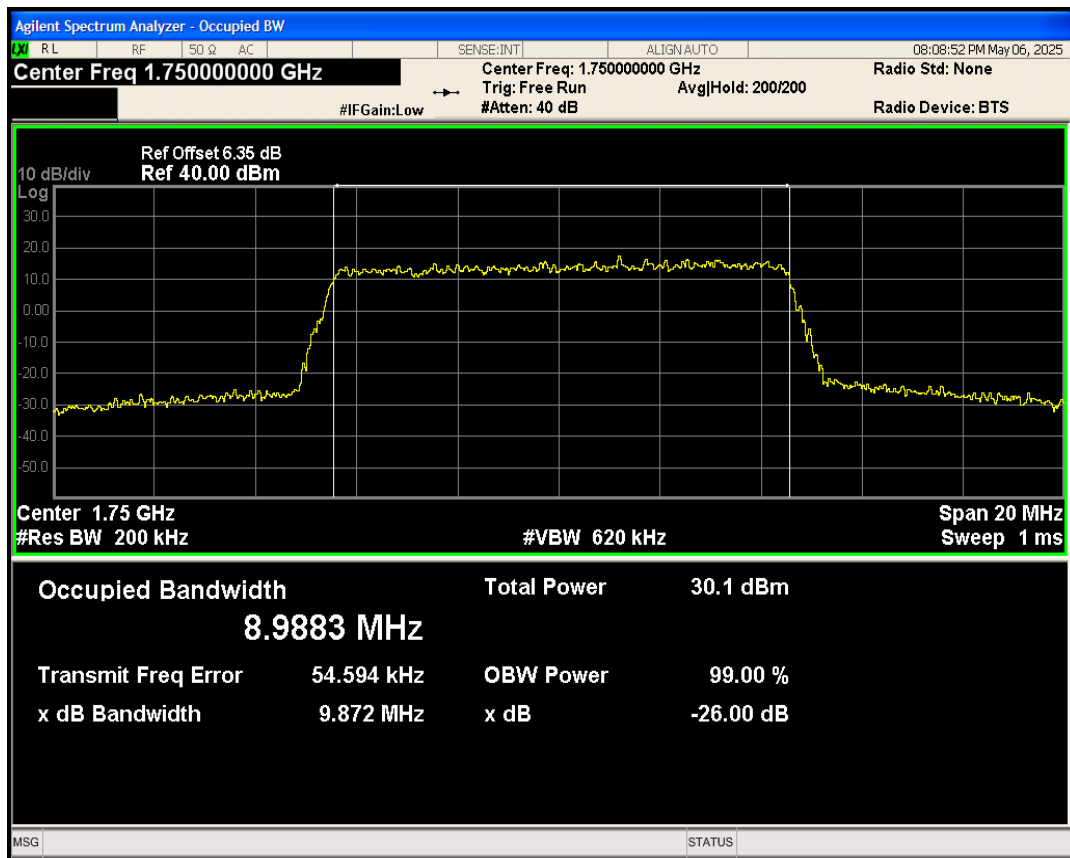


Band4 16QAM BW=10MHz Channel=20175 RB Size=50 Position=#0

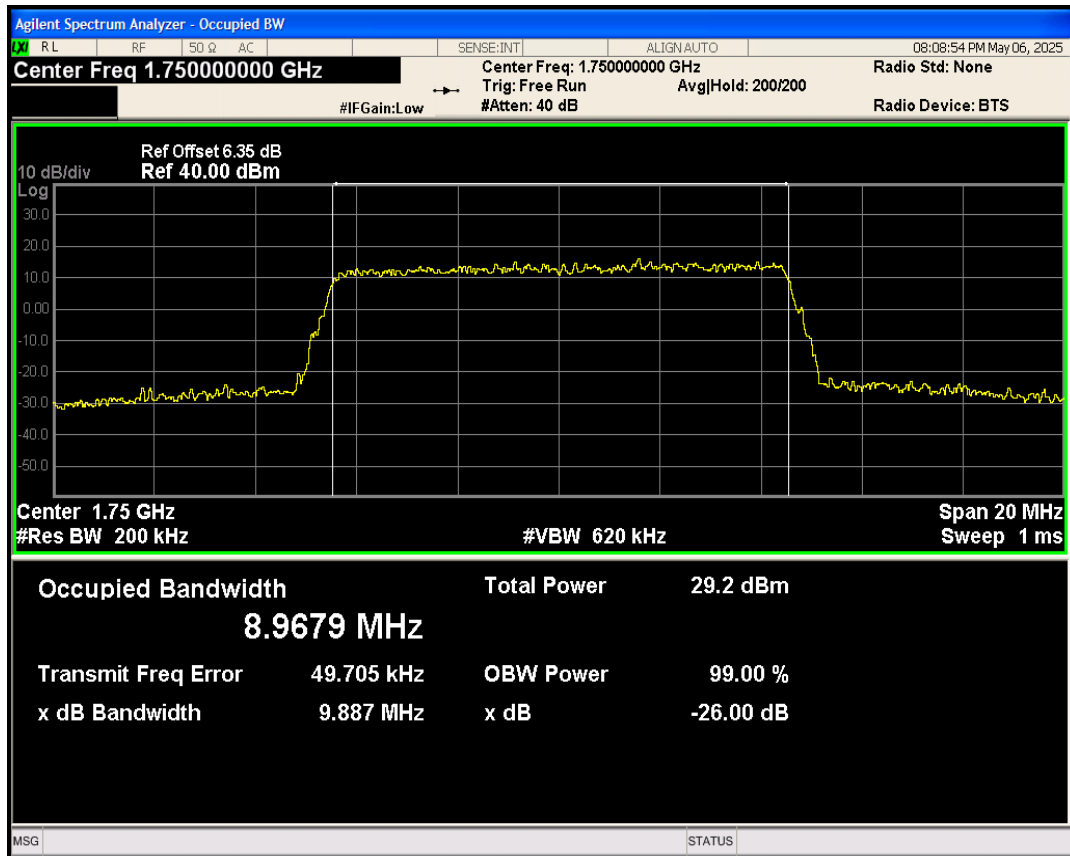




Band4 QPSK BW=10MHz Channel=20350 RB Size=50 Position=#0

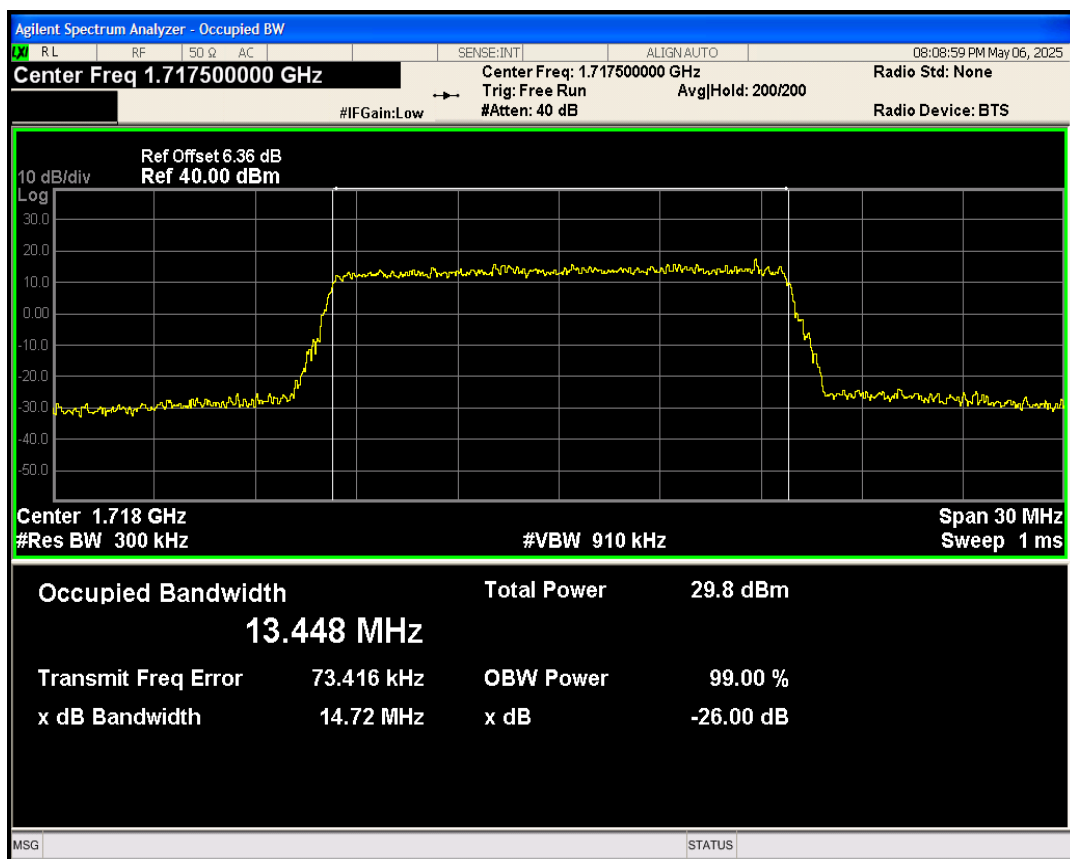


Band4 16QAM BW=10MHz Channel=20350 RB Size=50 Position=#0

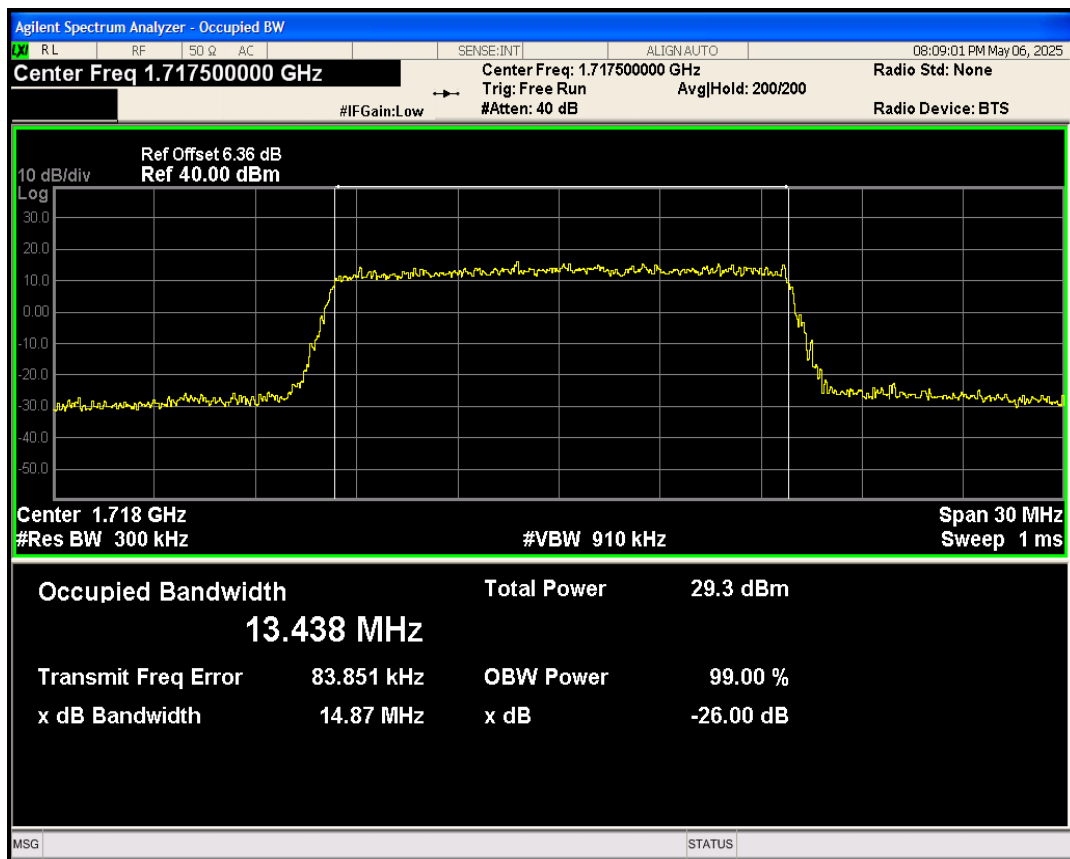




Band4 QPSK BW=15MHz Channel=20025 RB Size=75 Position=#0

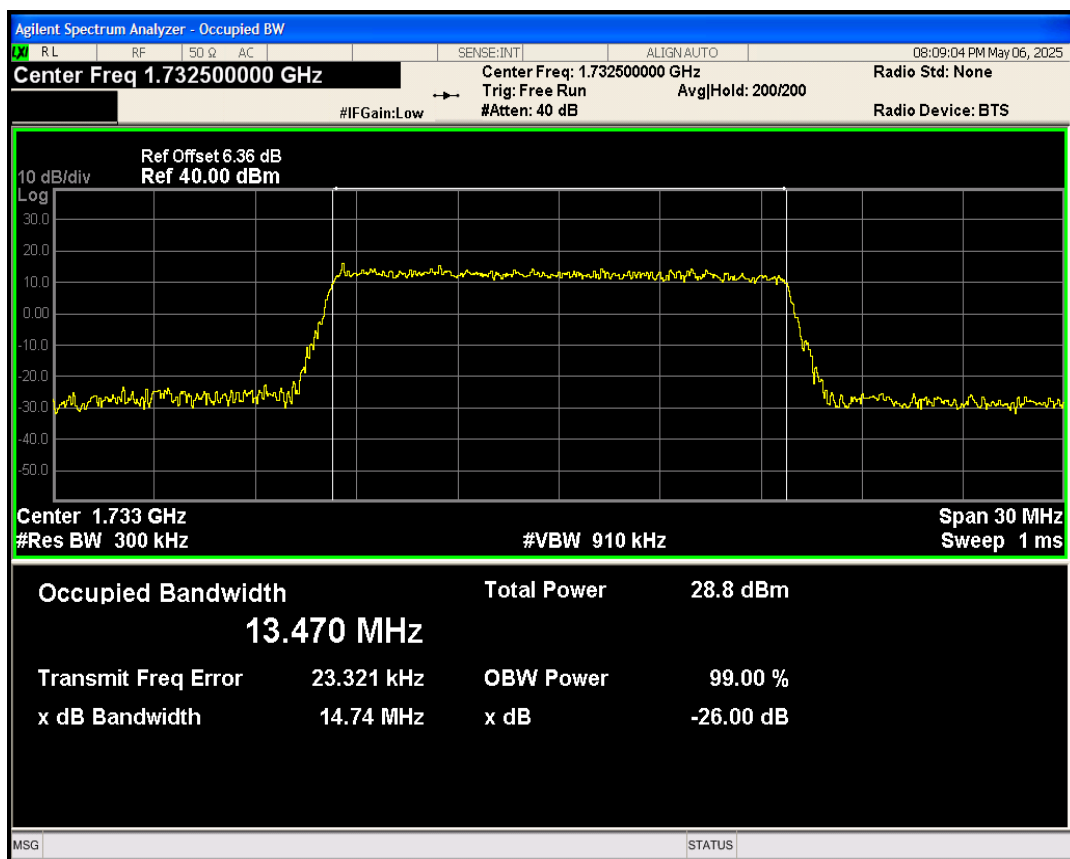


Band4 16QAM BW=15MHz Channel=20025 RB Size=75 Position=#0

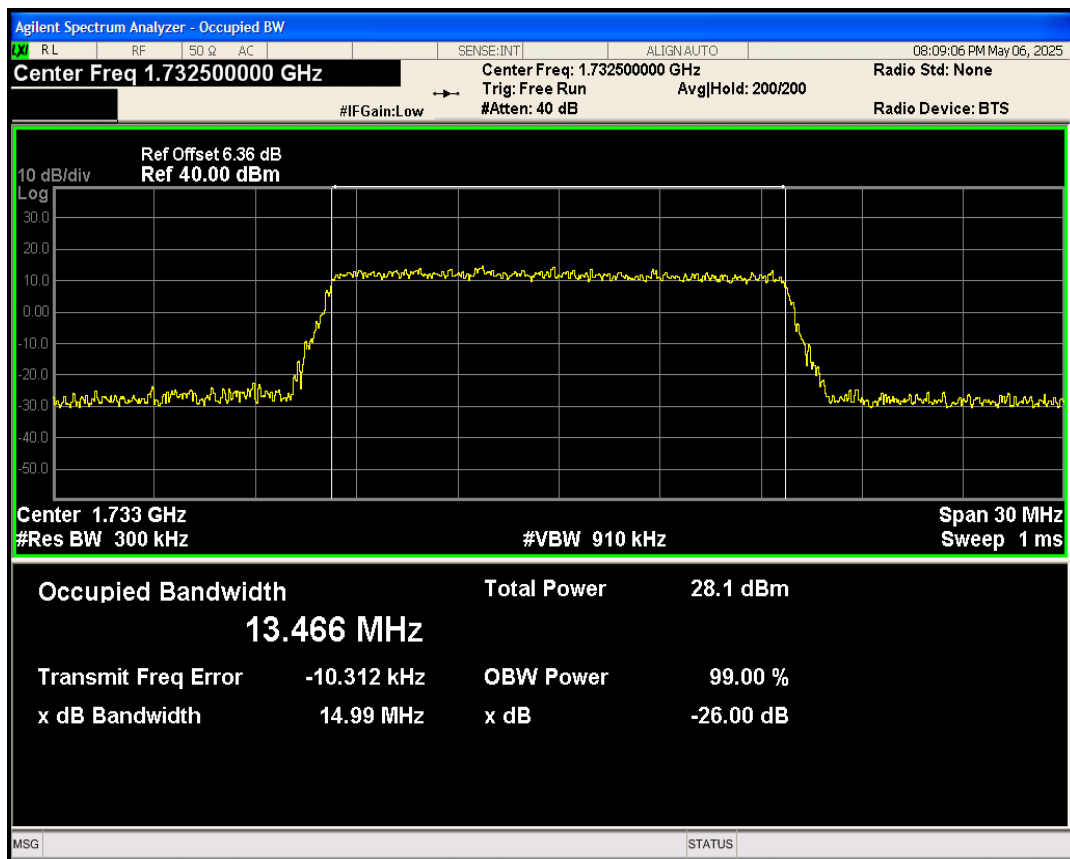




Band4 QPSK BW=15MHz Channel=20175 RB Size=75 Position=#0

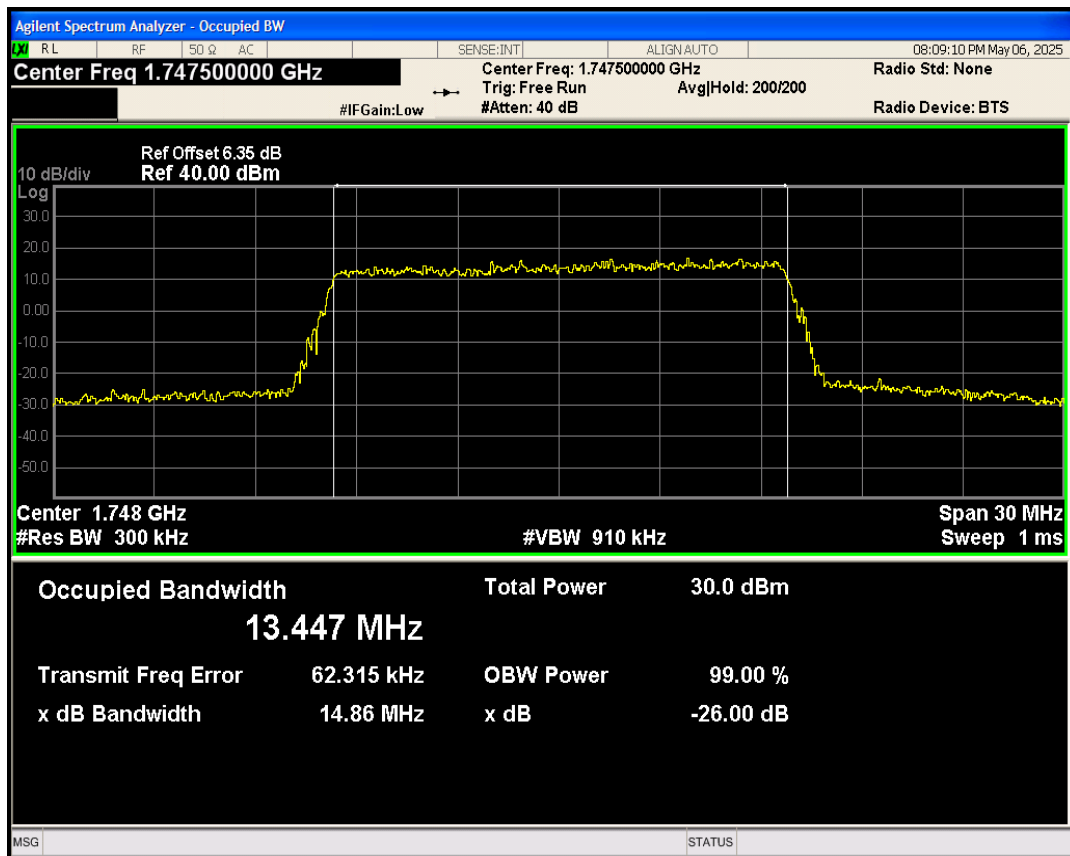


Band4 16QAM BW=15MHz Channel=20175 RB Size=75 Position=#0

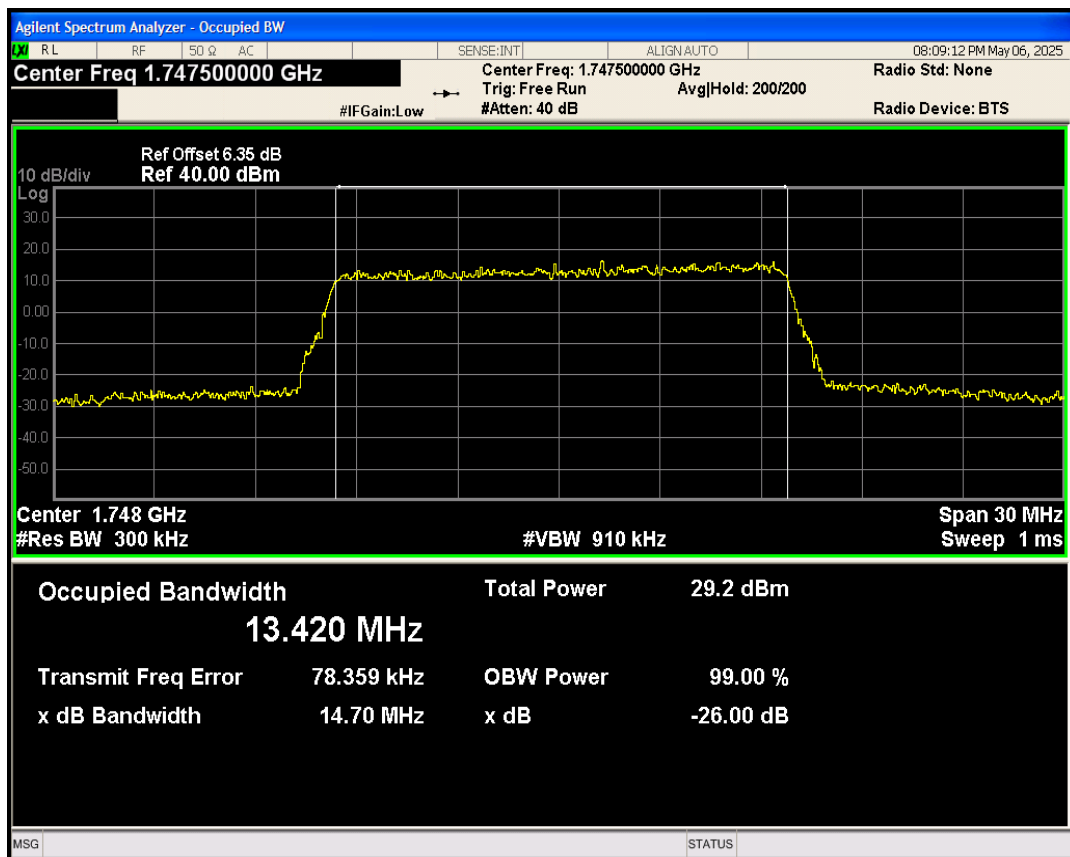




Band4 QPSK BW=15MHz Channel=20325 RB Size=75 Position=#0

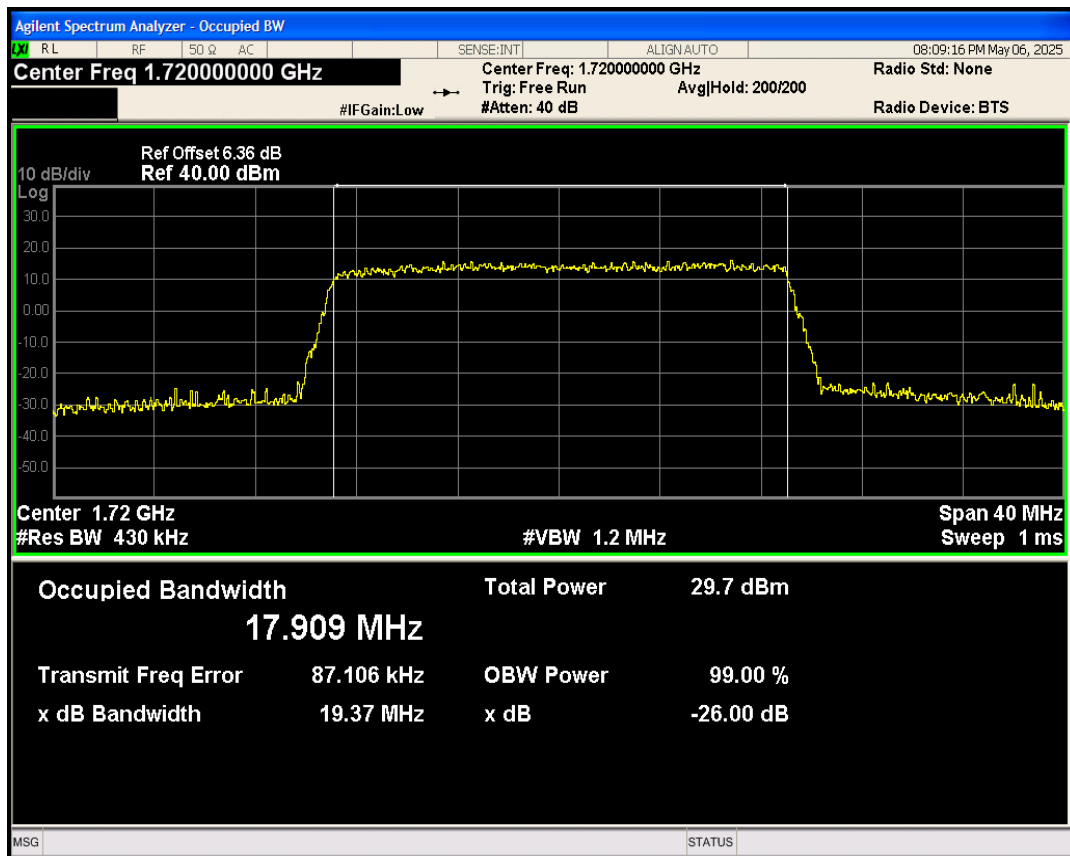


Band4 16QAM BW=15MHz Channel=20325 RB Size=75 Position=#0

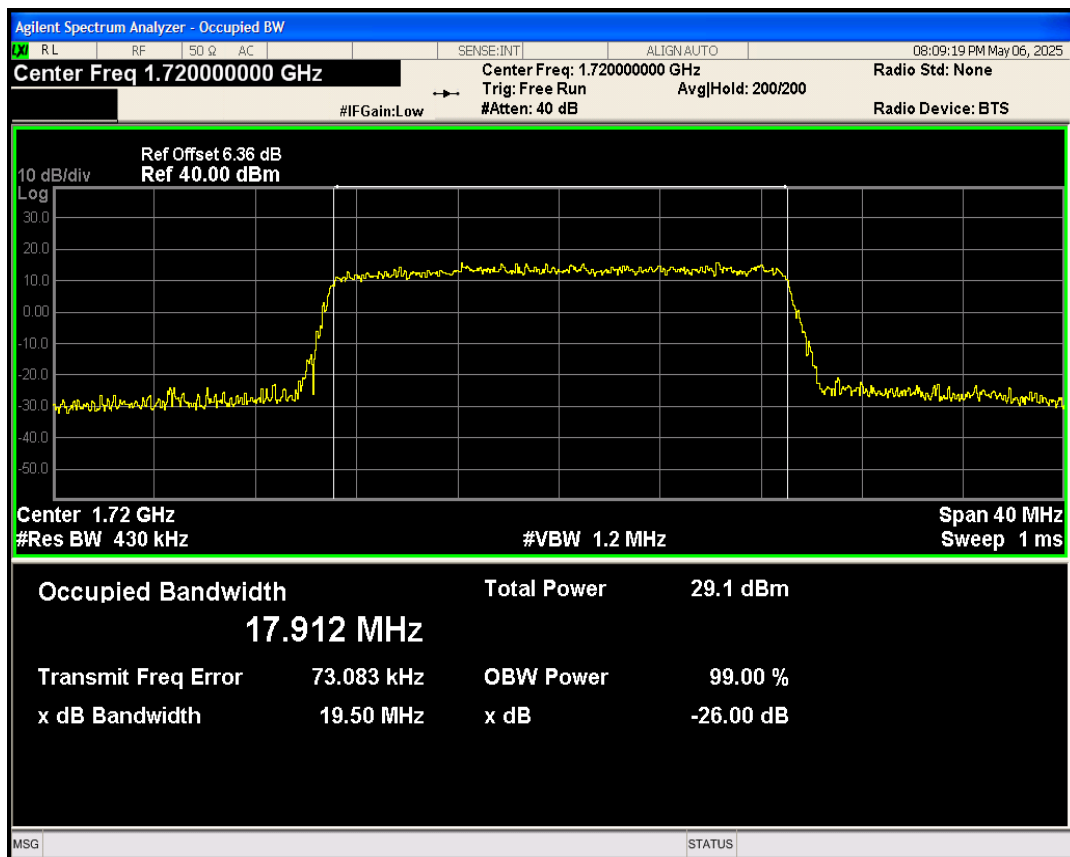




Band4 QPSK BW=20MHz Channel=20050 RB Size=100 Position=#0

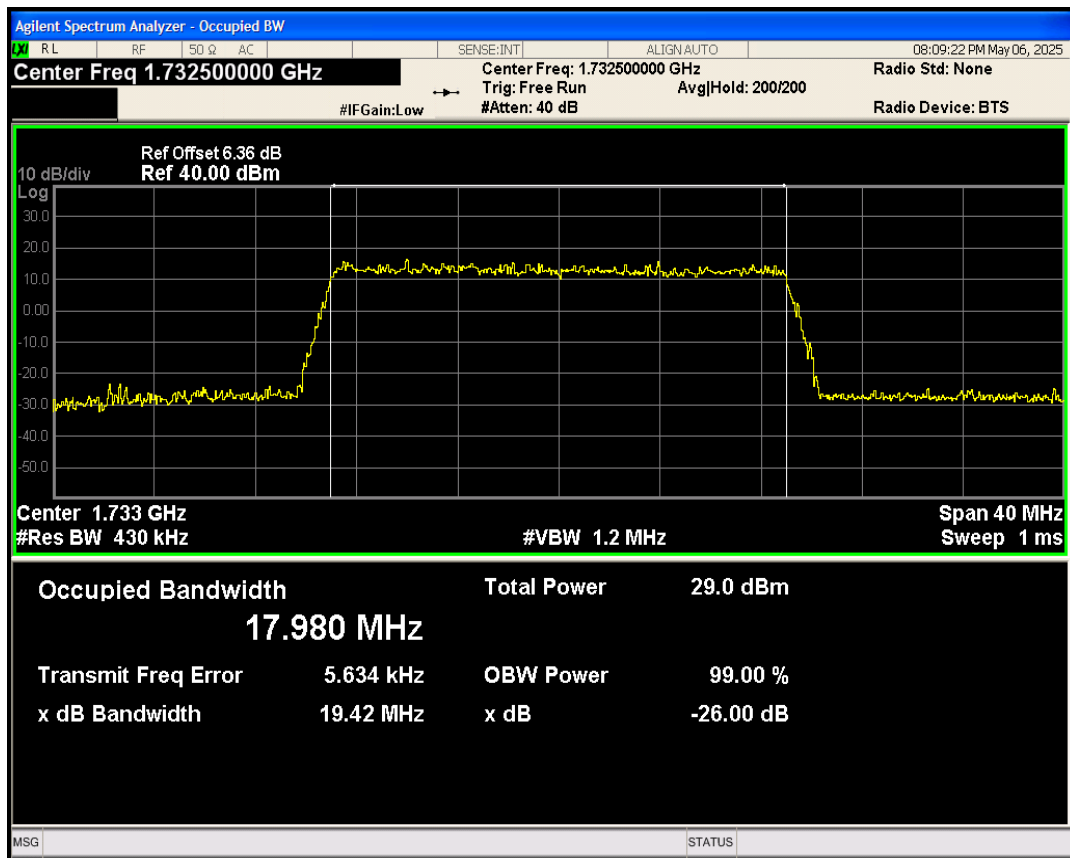


Band4 16QAM BW=20MHz Channel=20050 RB Size=100 Position=#0

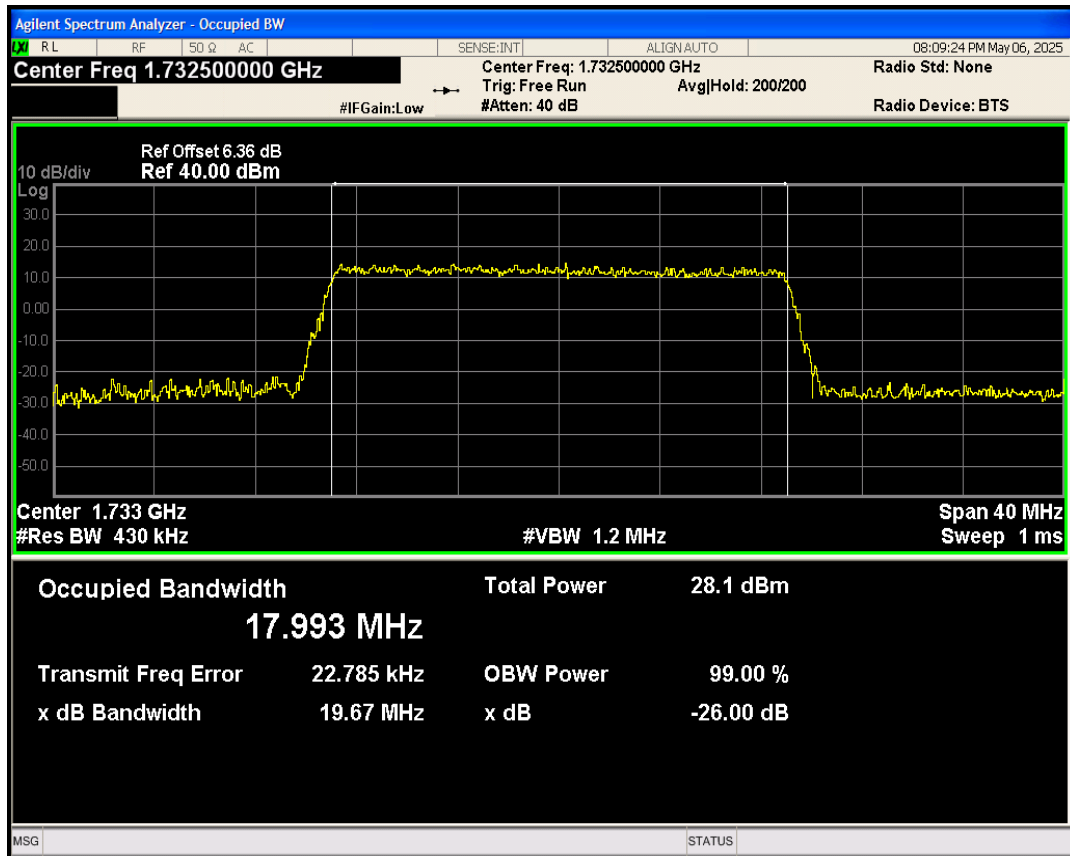




Band4 QPSK BW=20MHz Channel=20175 RB Size=100 Position=#0

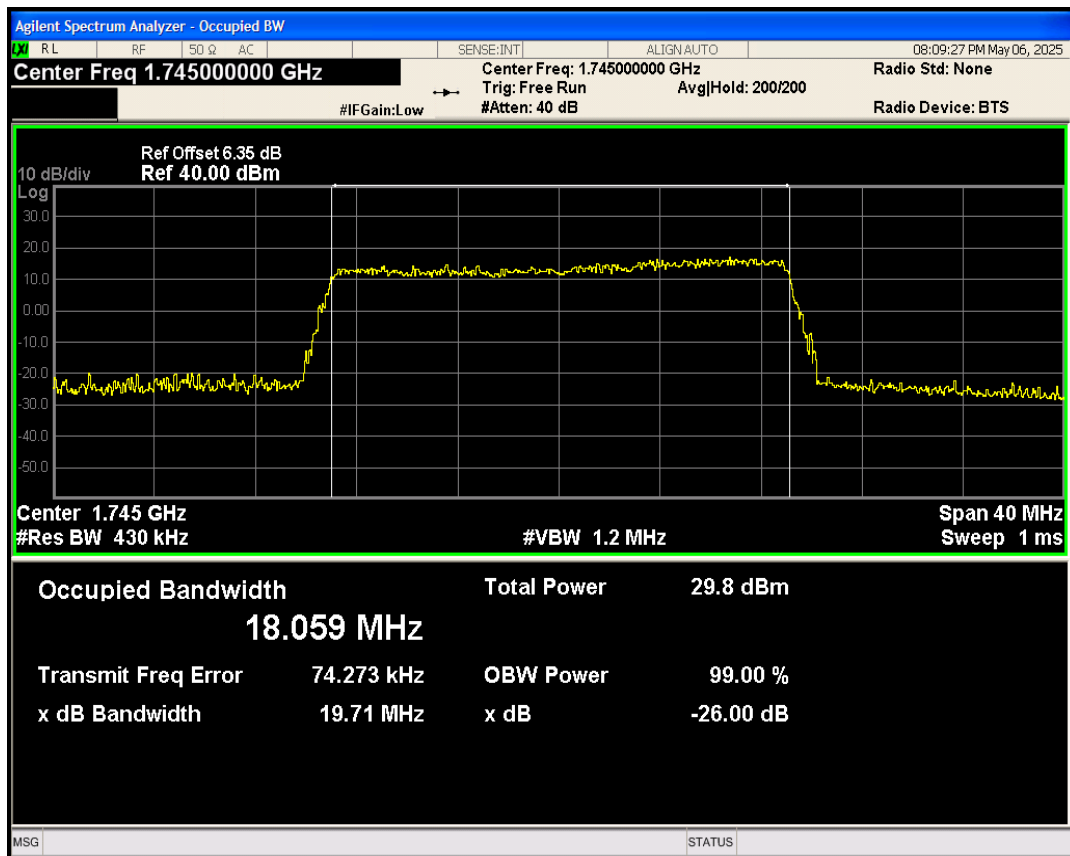


Band4 16QAM BW=20MHz Channel=20175 RB Size=100 Position=#0

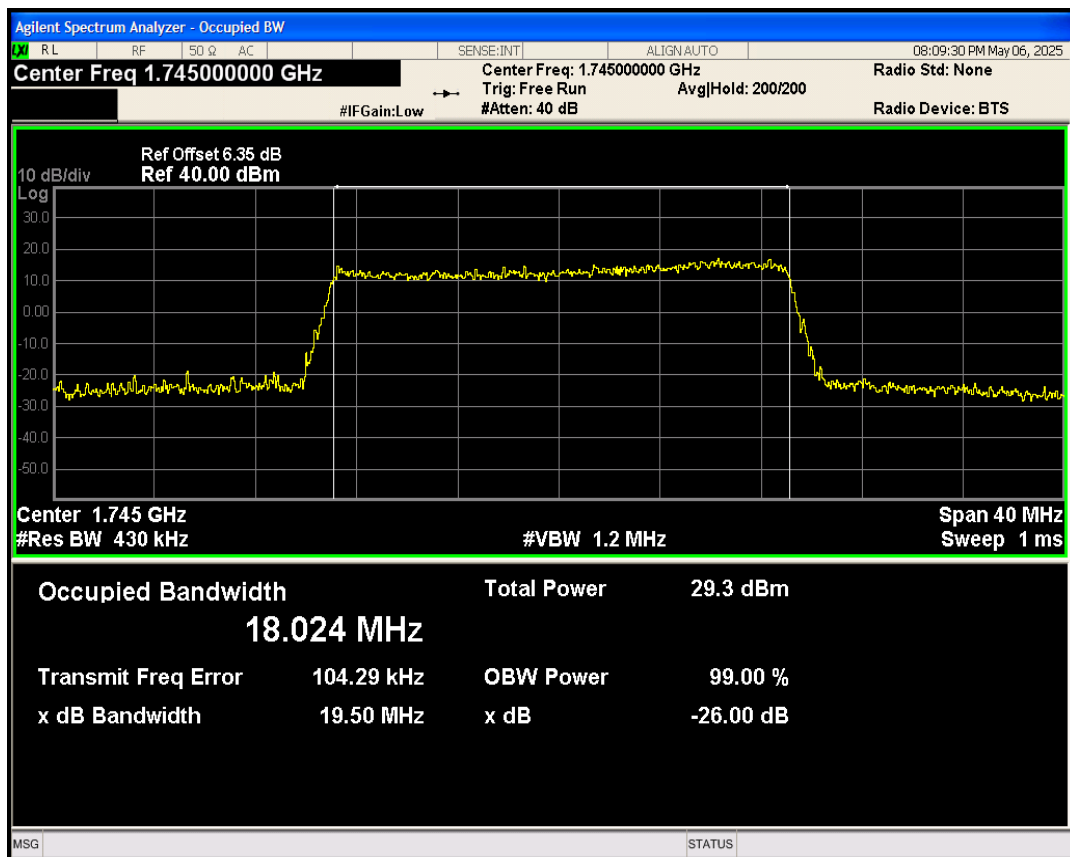




Band4 QPSK BW=20MHz Channel=20300 RB Size=100 Position=#0



Band4 16QAM BW=20MHz Channel=20300 RB Size=100 Position=#0

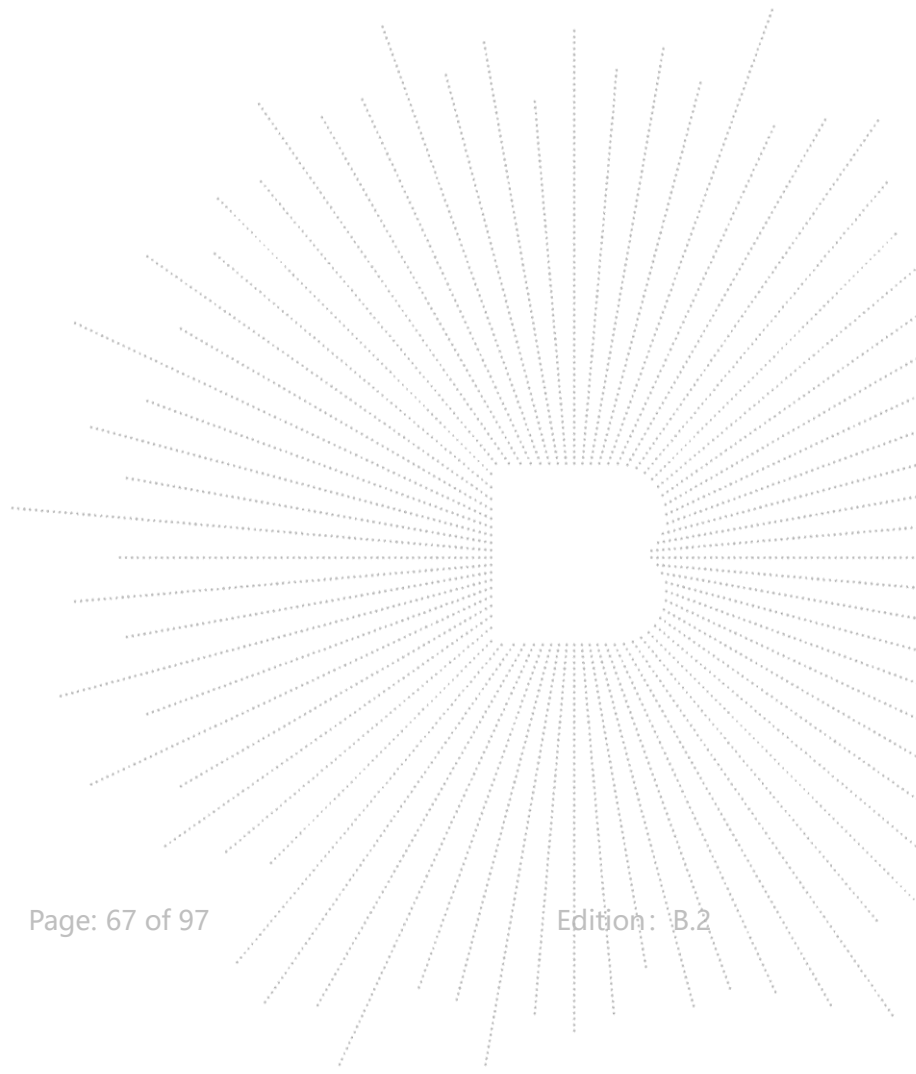


Appendix 5. Band edge

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band4	1.4	19957	6	#0	QPSK	1709.06	-32.14	-13	PASS
Band4	1.4	19957	6	#0	16QAM	1709.99	-32.05	-13	PASS
Band4	1.4	20393	6	#0	QPSK	1755.04	-32.33	-13	PASS
Band4	1.4	20393	6	#0	16QAM	1755.03	-33.46	-13	PASS
Band4	3	19965	15	#0	QPSK	1710.00	-25.02	-13	PASS
Band4	3	19965	15	#0	16QAM	1710.00	-23.91	-13	PASS
Band4	3	20385	15	#0	QPSK	1755.00	-26.55	-13	PASS
Band4	3	20385	15	#0	16QAM	1755.00	-27.28	-13	PASS
Band4	5	19975	25	#0	QPSK	1709.99	-30.75	-13	PASS
Band4	5	19975	25	#0	16QAM	1710.00	-31.94	-13	PASS
Band4	5	20375	25	#0	QPSK	1755.00	-31.62	-13	PASS
Band4	5	20375	25	#0	16QAM	1755.00	-31.71	-13	PASS
Band4	10	20000	50	#0	QPSK	1710.00	-35.03	-13	PASS
Band4	10	20000	50	#0	16QAM	1710.00	-33.74	-13	PASS
Band4	10	20350	50	#0	QPSK	1755.06	-34.19	-13	PASS
Band4	10	20350	50	#0	16QAM	1755.00	-33.12	-13	PASS
Band4	15	20025	75	#0	QPSK	1709.79	-34.38	-13	PASS
Band4	15	20025	75	#0	16QAM	1709.88	-35.19	-13	PASS
Band4	15	20325	75	#0	QPSK	1755.00	-33.03	-13	PASS
Band4	15	20325	75	#0	16QAM	1755.00	-34.65	-13	PASS
Band4	20	20050	100	#0	QPSK	1709.88	-36.89	-13	PASS
Band4	20	20050	100	#0	16QAM	1710.00	-35.54	-13	PASS
Band4	20	20300	100	#0	QPSK	1755.16	-35.60	-13	PASS
Band4	20	20300	100	#0	16QAM	1755.00	-35.12	-13	PASS



Band4 16QAM BW=1.4MHz Channel=19957 RB Size=6 Position=#0





Band4 QPSK BW=1.4MHz Channel=20393 RB Size=6 Position=#0

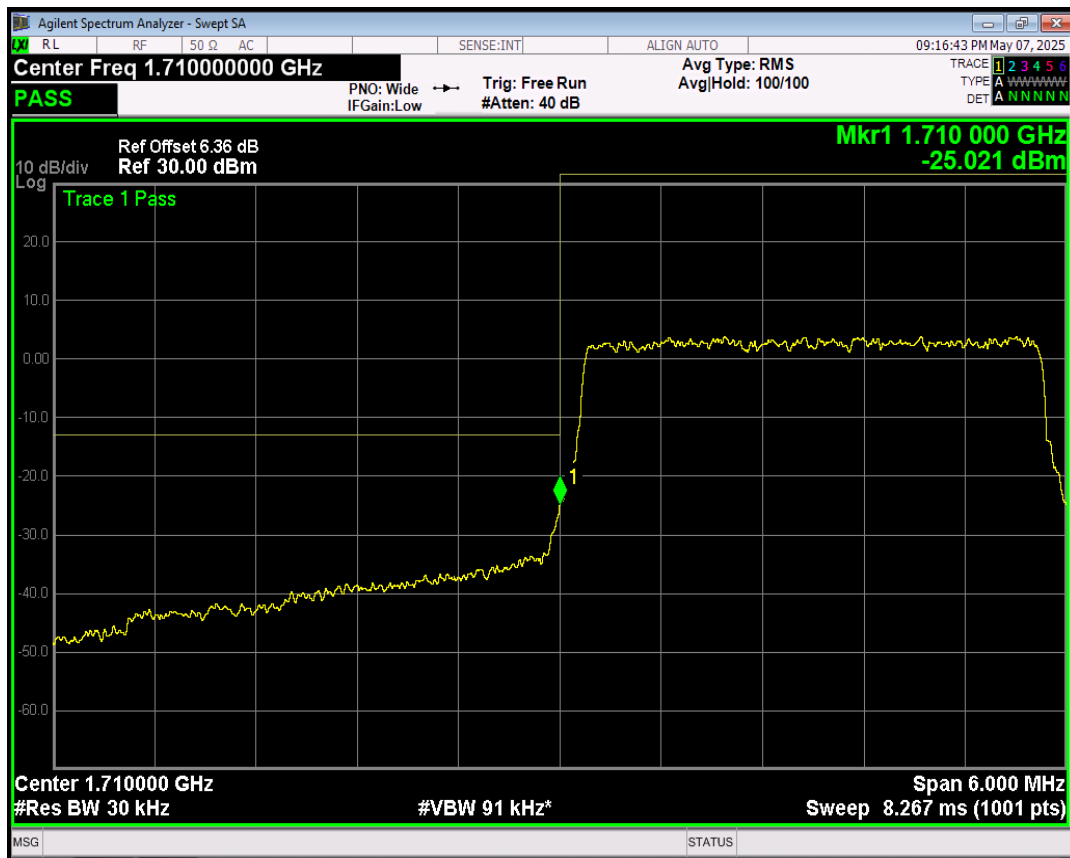


Band4 16QAM BW=1.4MHz Channel=20393 RB Size=6 Position=#0

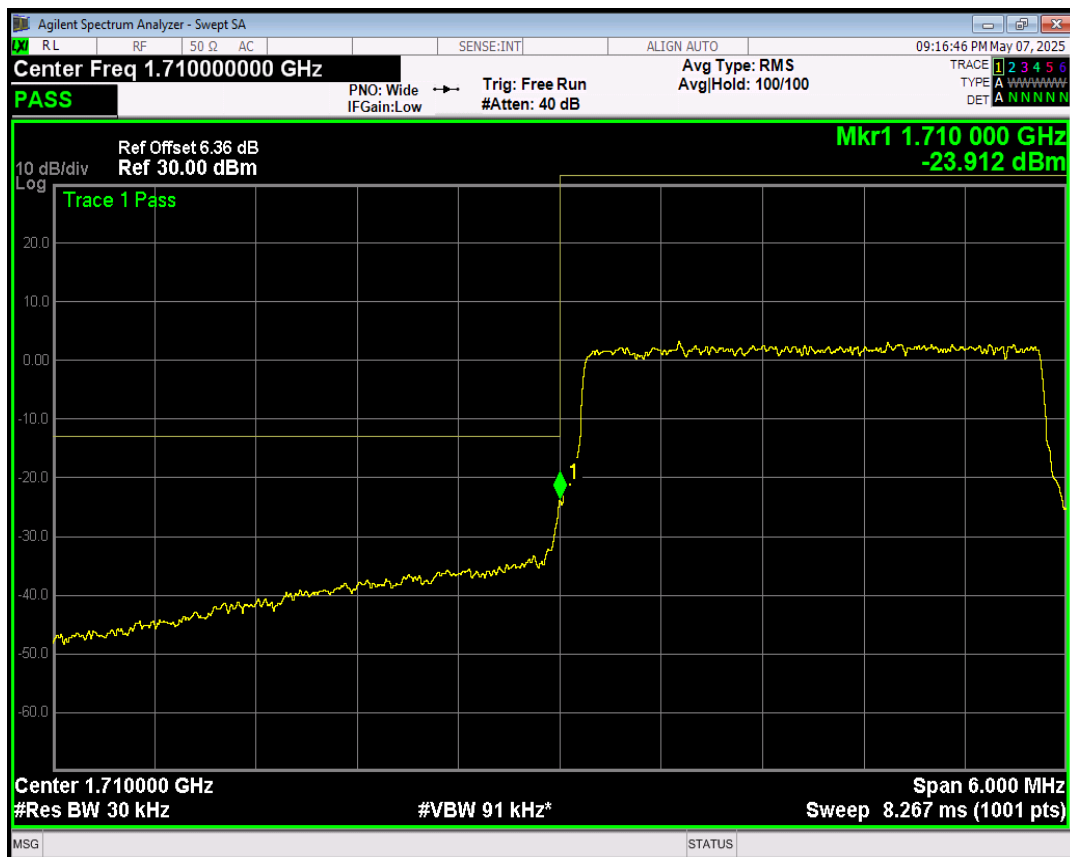




Band4 QPSK BW=3MHz Channel=19965 RB Size=15 Position=#0

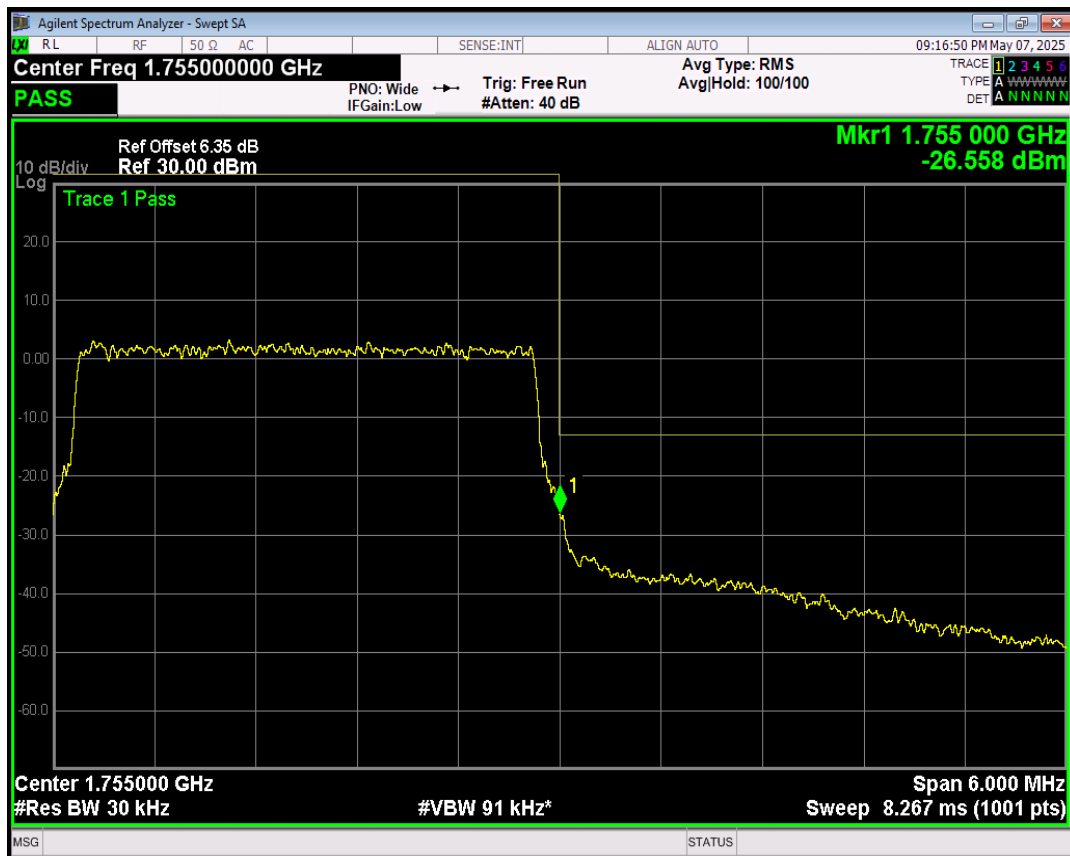


Band4 16QAM BW=3MHz Channel=19965 RB Size=15 Position=#0

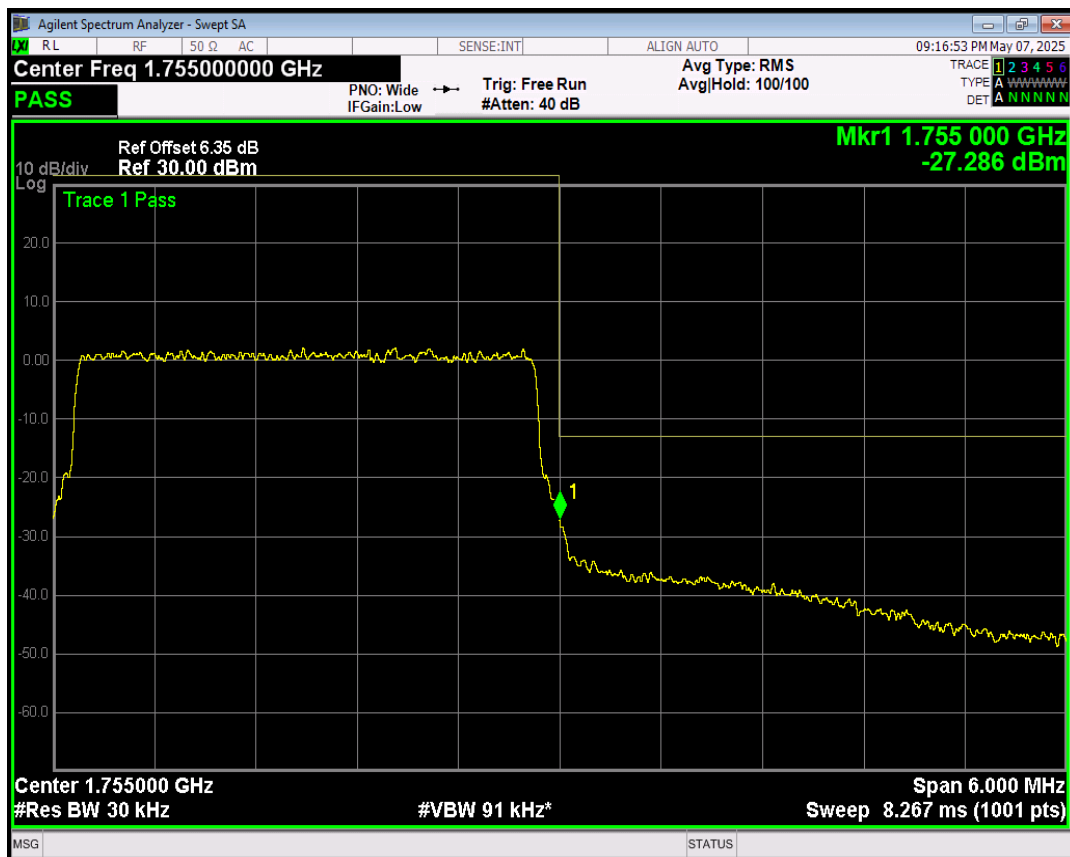




Band4 QPSK BW=3MHz Channel=20385 RB Size=15 Position=#0

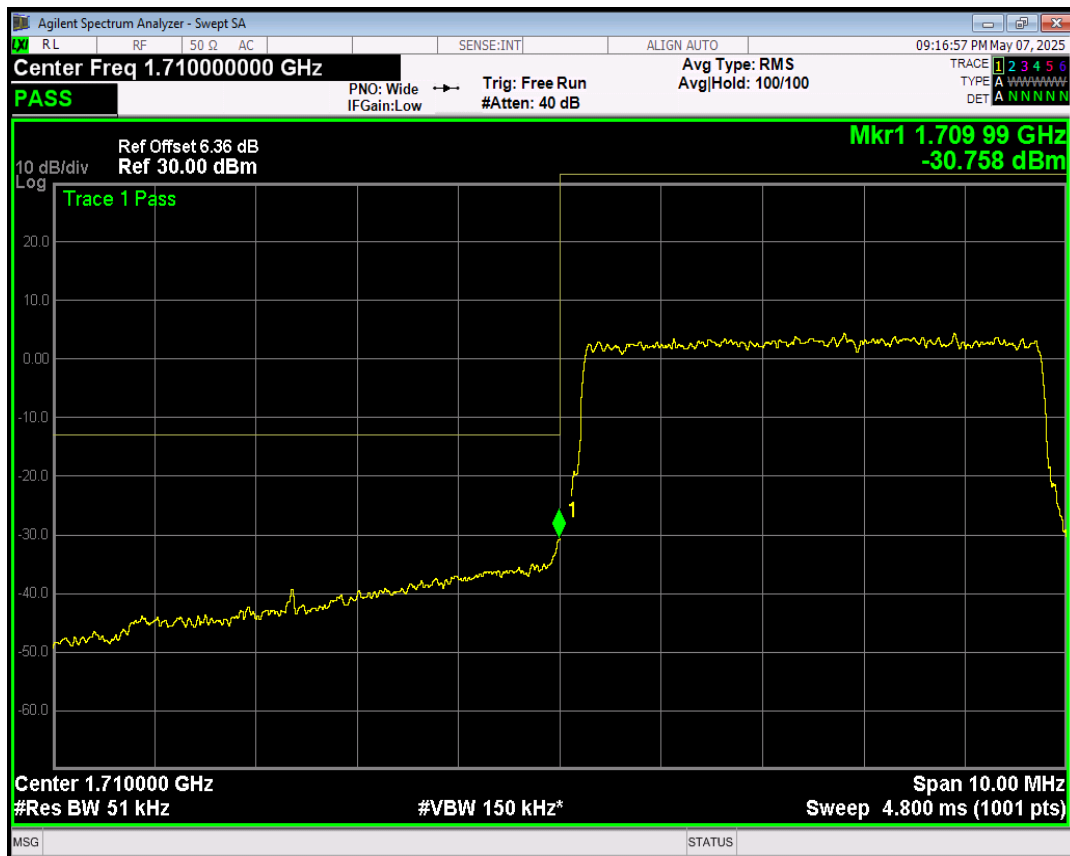


Band4 16QAM BW=3MHz Channel=20385 RB Size=15 Position=#0

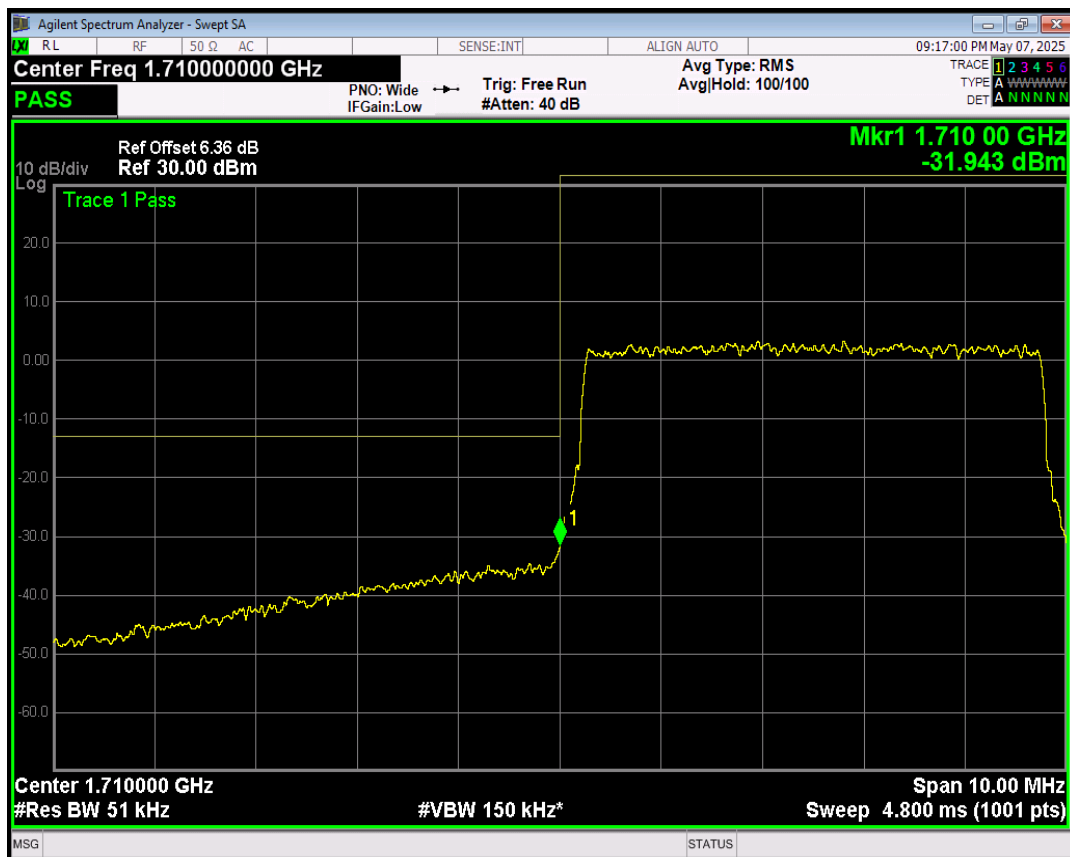




Band4 QPSK BW=5MHz Channel=19975 RB Size=25 Position=#0



Band4 16QAM BW=5MHz Channel=19975 RB Size=25 Position=#0

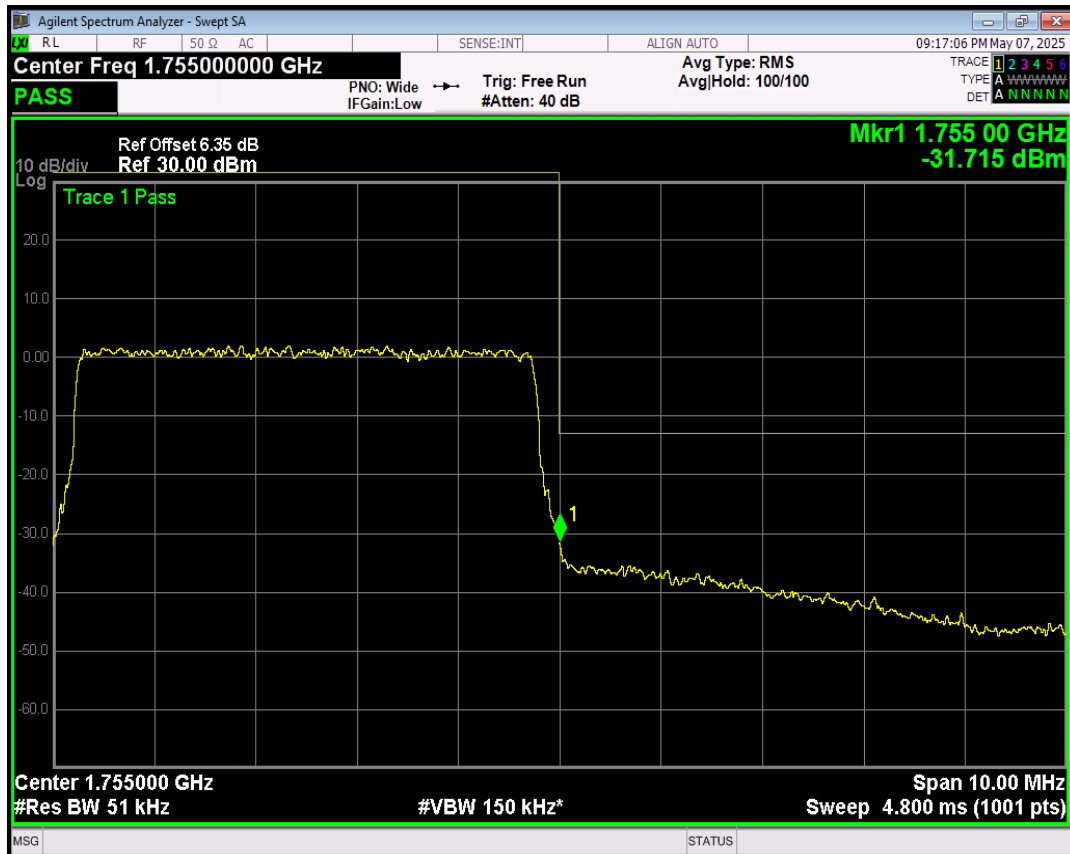




Band4 QPSK BW=5MHz Channel=20375 RB Size=25 Position=#0

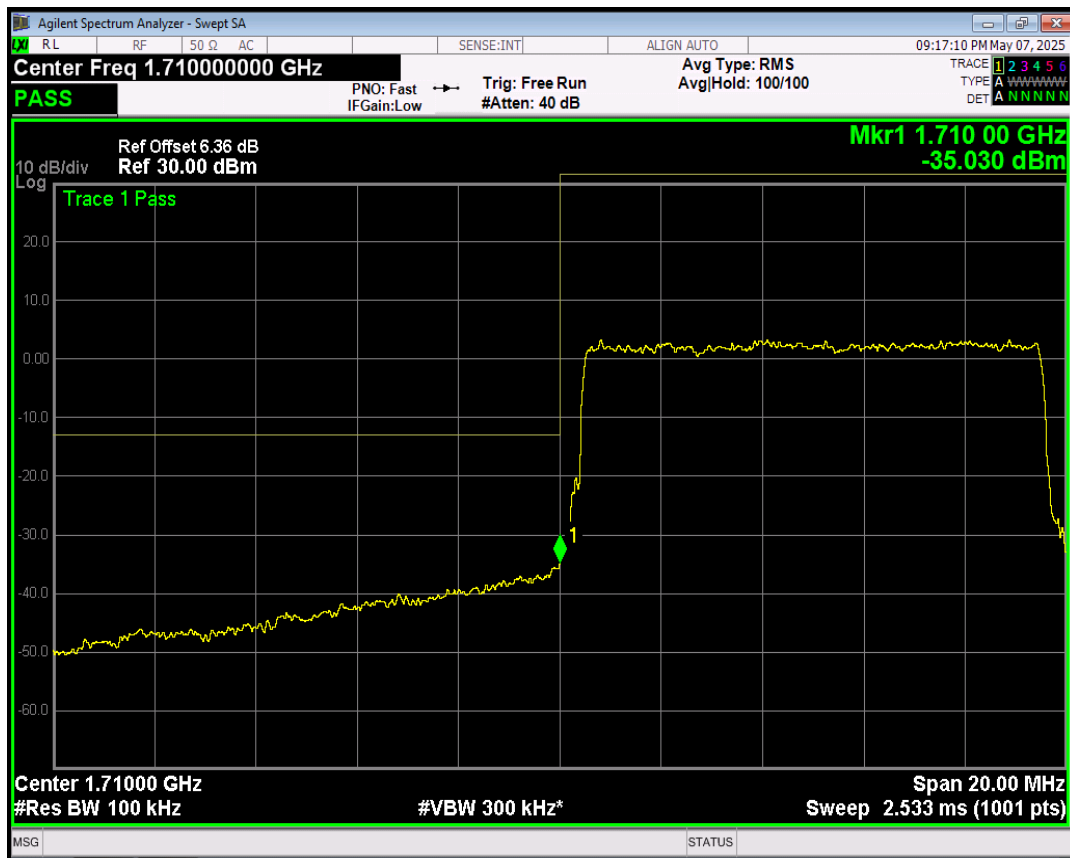


Band4 16QAM BW=5MHz Channel=20375 RB Size=25 Position=#0

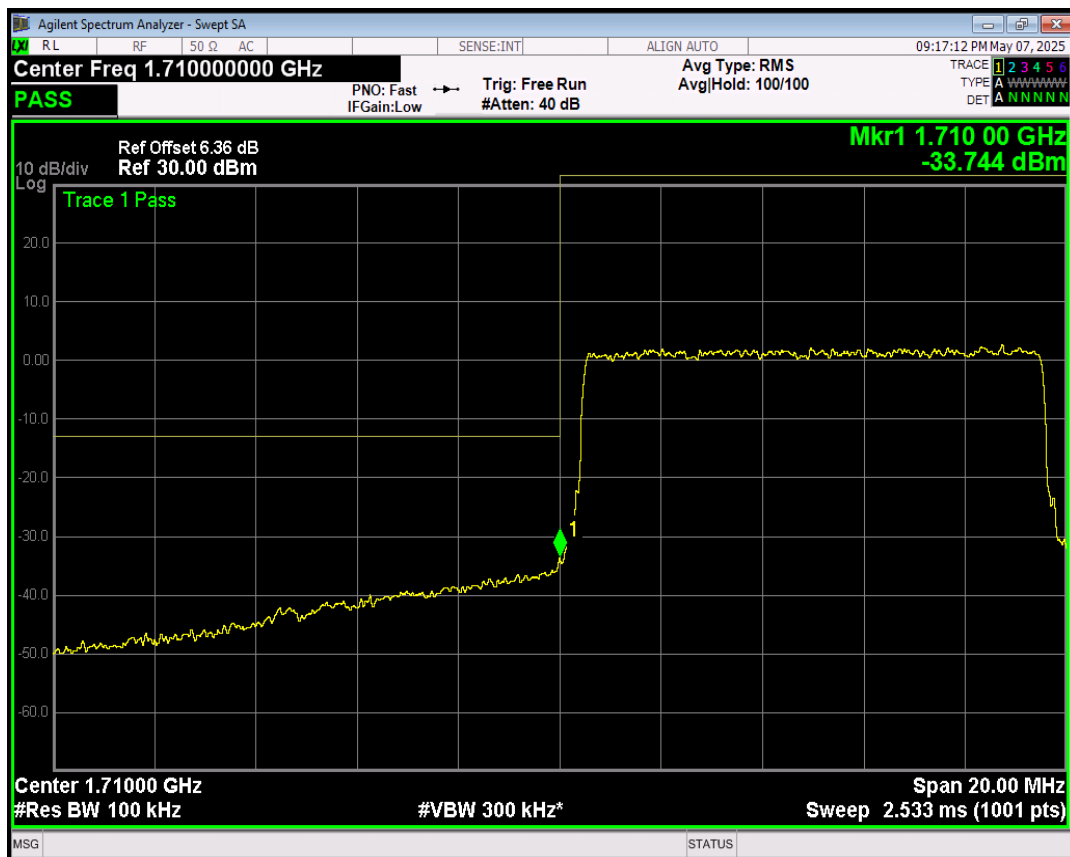




Band4 QPSK BW=10MHz Channel=20000 RB Size=50 Position=#0



Band4 16QAM BW=10MHz Channel=20000 RB Size=50 Position=#0





Band4 QPSK BW=10MHz Channel=20350 RB Size=50 Position=#0

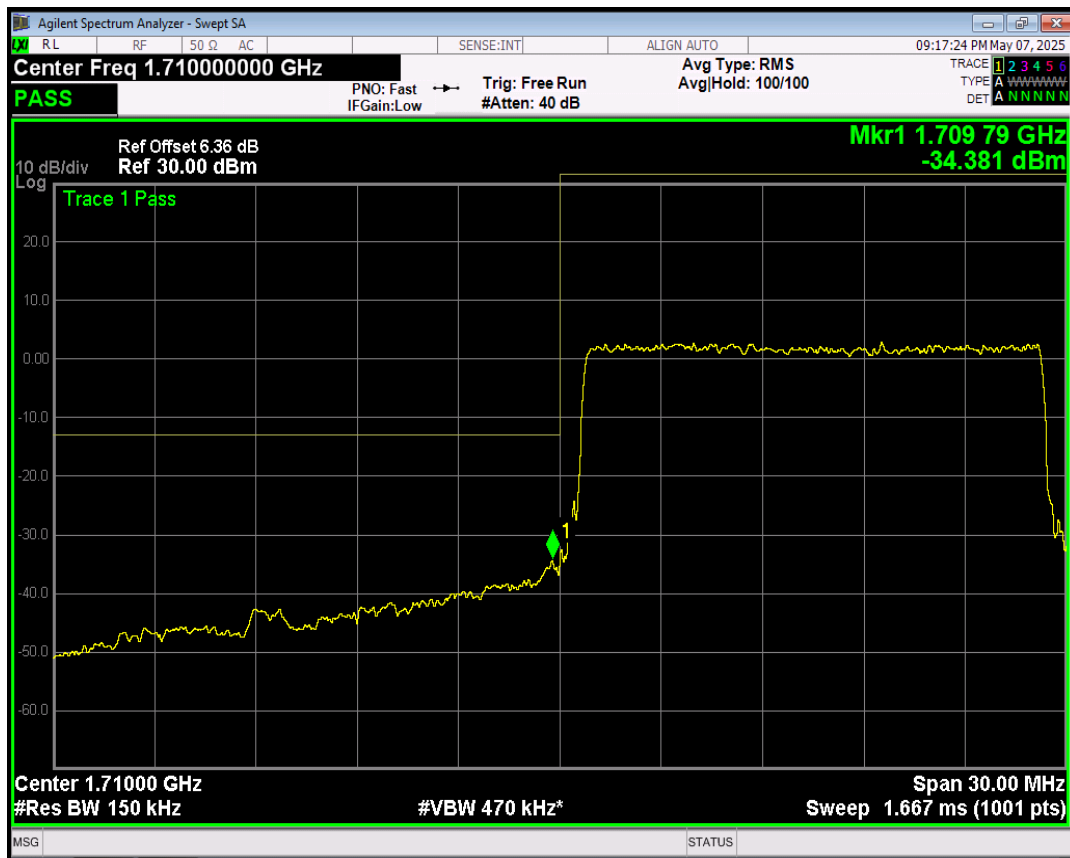


Band4 16QAM BW=10MHz Channel=20350 RB Size=50 Position=#0

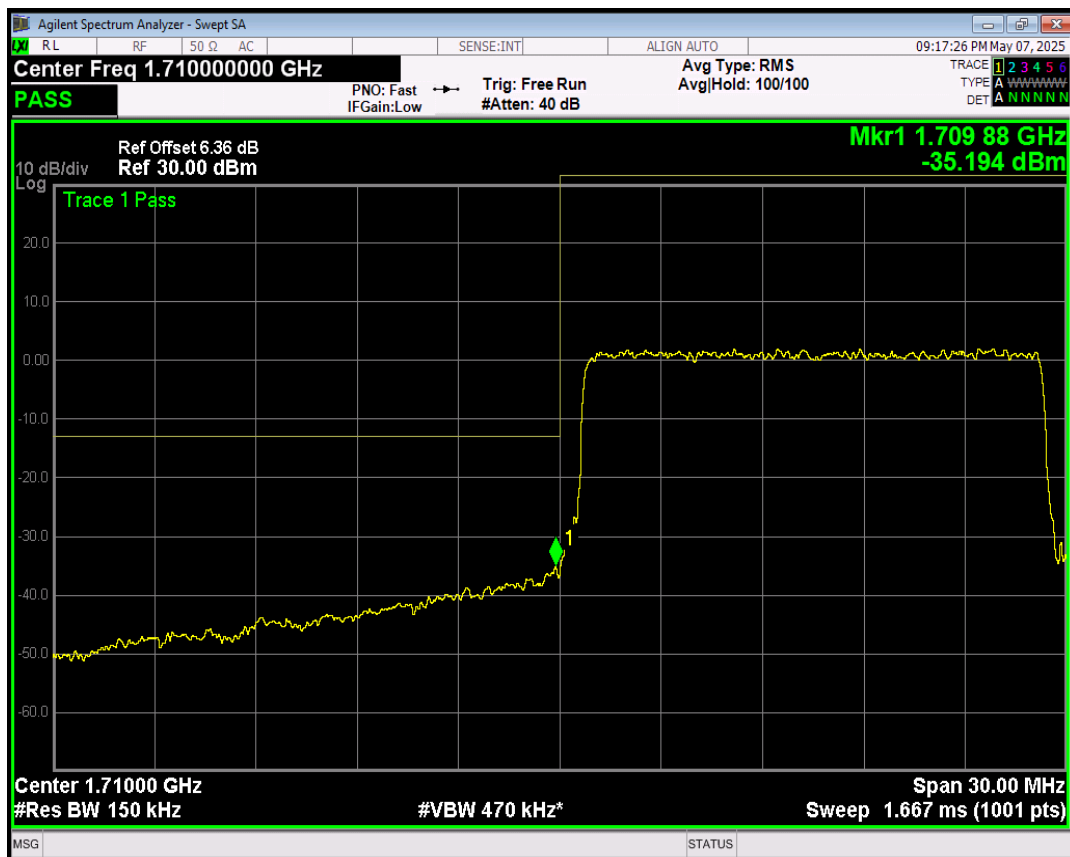




Band4 QPSK BW=15MHz Channel=20025 RB Size=75 Position=#0



Band4 16QAM BW=15MHz Channel=20025 RB Size=75 Position=#0





Band4 QPSK BW=15MHz Channel=20325 RB Size=75 Position=#0

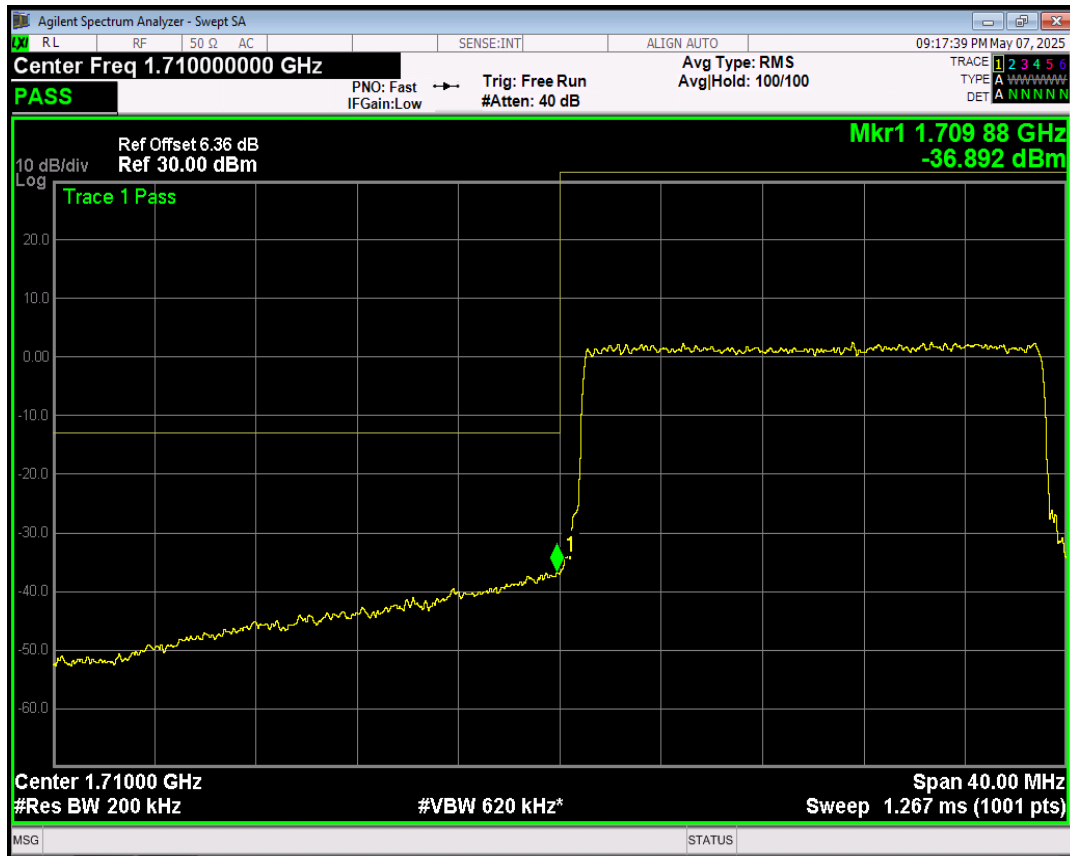


Band4 16QAM BW=15MHz Channel=20325 RB Size=75 Position=#0

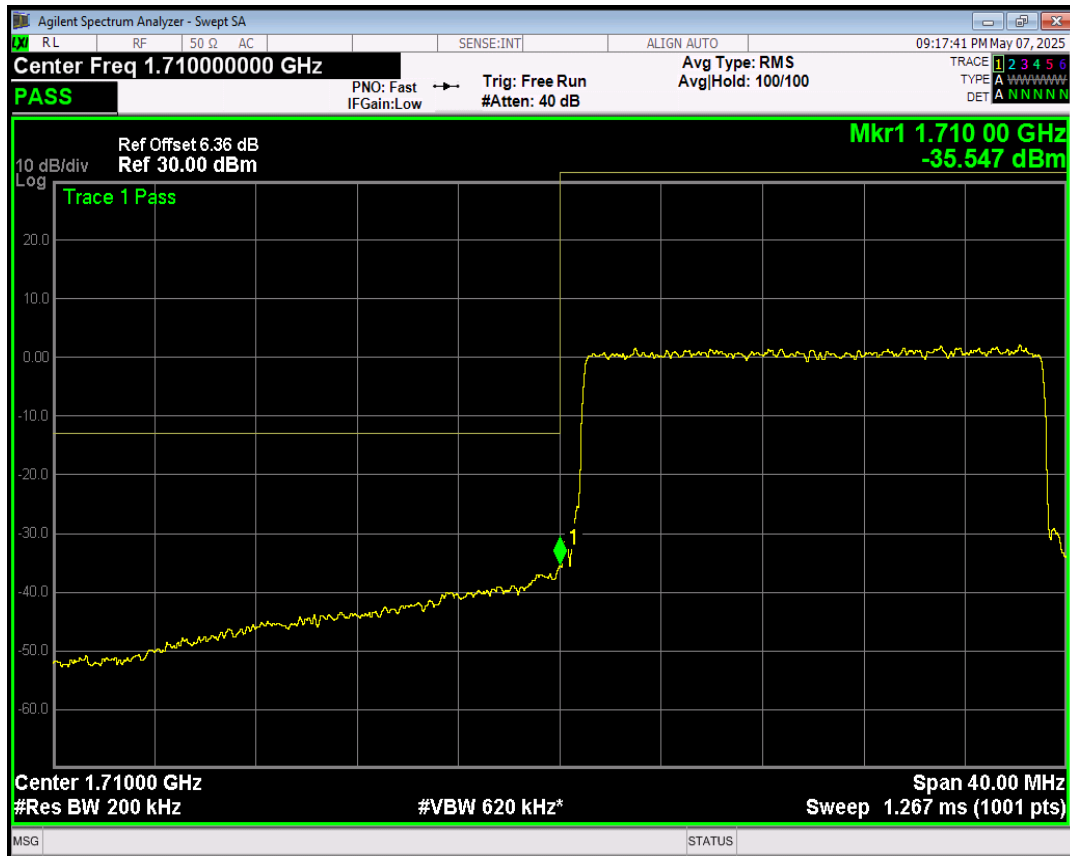




Band4 QPSK BW=20MHz Channel=20050 RB Size=100 Position=#0



Band4 16QAM BW=20MHz Channel=20050 RB Size=100 Position=#0





Band4 QPSK BW=20MHz Channel=20300 RB Size=100 Position=#0



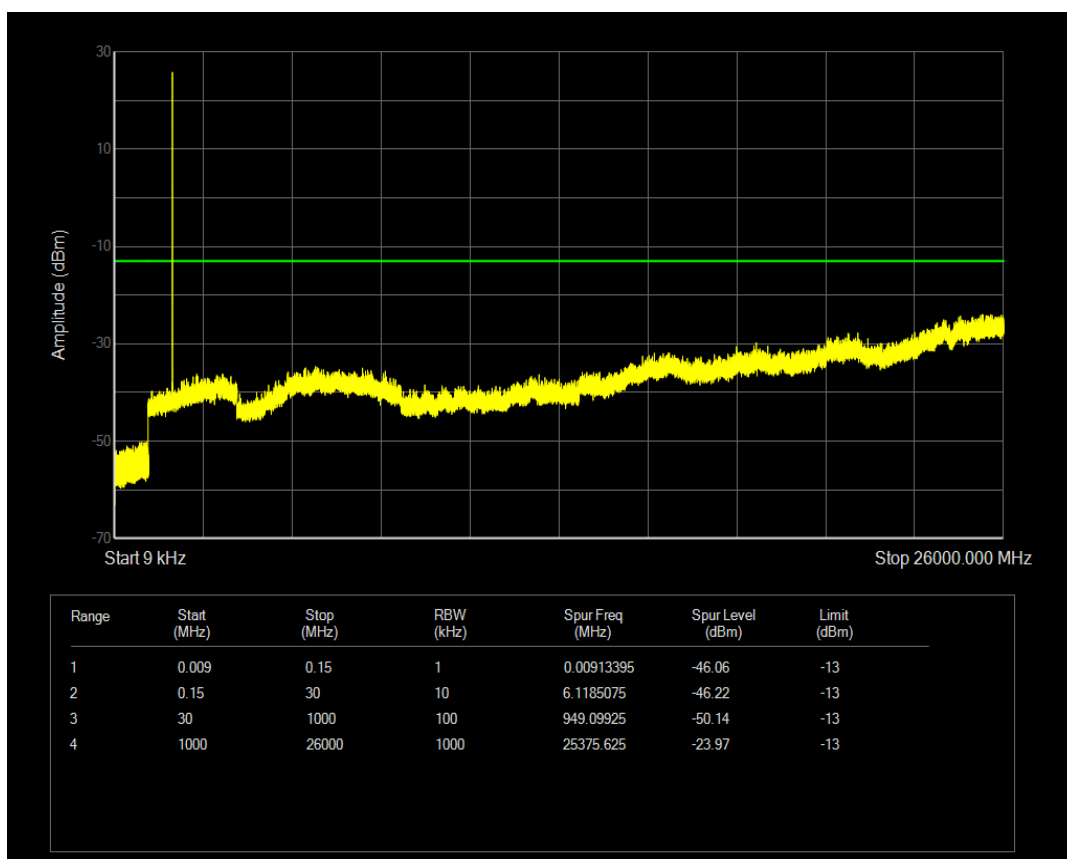
Band4 16QAM BW=20MHz Channel=20300 RB Size=100 Position=#0



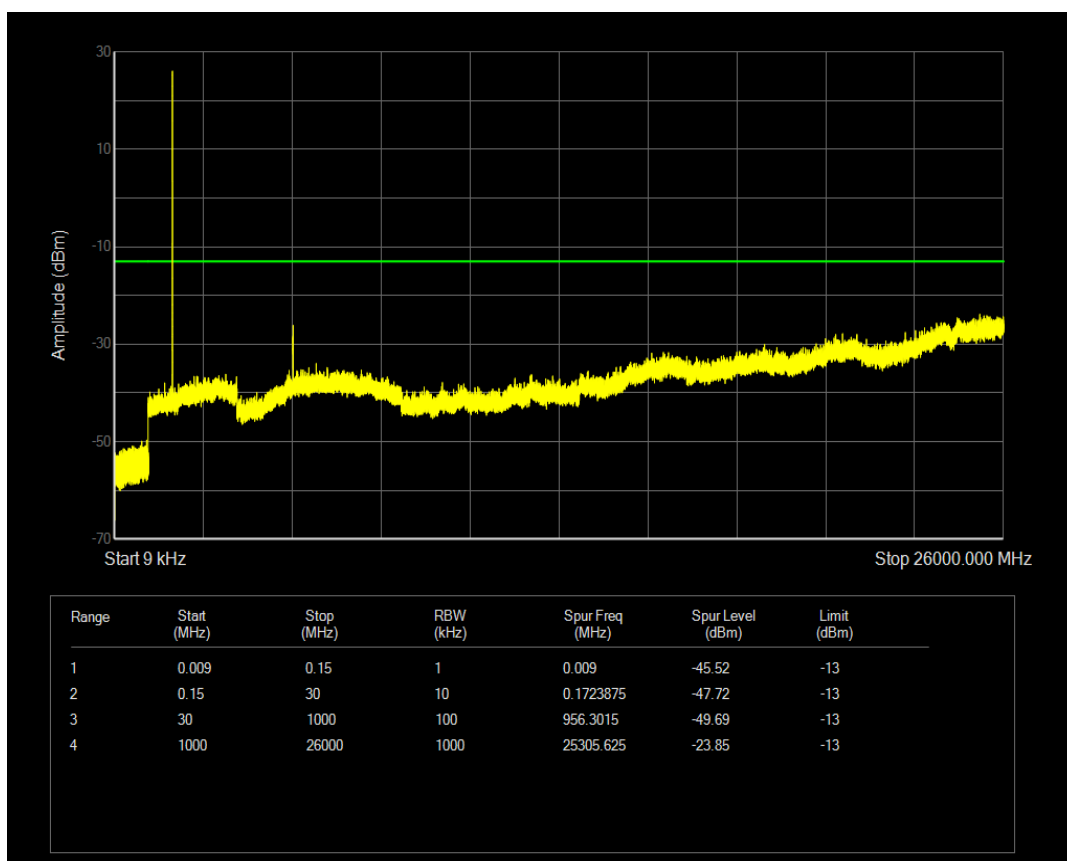
Appendix 6. Out-of-band emissions

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band4	1.4	19957	6	#0	QPSK	25375.63	-23.97	-13	PASS
Band4	1.4	19957	6	#0	16QAM	25305.63	-23.85	-13	PASS
Band4	1.4	20175	6	#0	QPSK	25726.25	-23.22	-13	PASS
Band4	1.4	20175	6	#0	16QAM	25846.25	-23.14	-13	PASS
Band4	1.4	20393	6	#0	QPSK	24780.63	-22.95	-13	PASS
Band4	1.4	20393	6	#0	16QAM	25156.88	-23.00	-13	PASS
Band4	3	19965	15	#0	QPSK	25542.50	-23.84	-13	PASS
Band4	3	19965	15	#0	16QAM	25923.75	-23.19	-13	PASS
Band4	3	20175	15	#0	QPSK	25992.50	-23.68	-13	PASS
Band4	3	20175	15	#0	16QAM	25442.50	-23.95	-13	PASS
Band4	3	20385	15	#0	QPSK	25843.75	-23.33	-13	PASS
Band4	3	20385	15	#0	16QAM	25530.63	-23.42	-13	PASS
Band4	5	19975	25	#0	QPSK	25795.00	-23.84	-13	PASS
Band4	5	19975	25	#0	16QAM	25803.13	-23.07	-13	PASS
Band4	5	20175	25	#0	QPSK	25708.13	-23.19	-13	PASS
Band4	5	20175	25	#0	16QAM	24735.00	-23.55	-13	PASS
Band4	5	20375	25	#0	QPSK	24698.75	-23.32	-13	PASS
Band4	5	20375	25	#0	16QAM	25113.13	-23.35	-13	PASS
Band4	10	20000	50	#0	QPSK	25081.88	-23.73	-13	PASS
Band4	10	20000	50	#0	16QAM	25739.38	-23.56	-13	PASS
Band4	10	20175	50	#0	QPSK	25998.75	-23.11	-13	PASS
Band4	10	20175	50	#0	16QAM	25320.00	-22.96	-13	PASS
Band4	10	20350	50	#0	QPSK	25813.75	-23.92	-13	PASS
Band4	10	20350	50	#0	16QAM	25256.25	-23.47	-13	PASS
Band4	15	20025	75	#0	QPSK	25672.50	-23.50	-13	PASS
Band4	15	20025	75	#0	16QAM	25382.50	-23.89	-13	PASS
Band4	15	20175	75	#0	QPSK	25754.38	-23.59	-13	PASS
Band4	15	20175	75	#0	16QAM	25987.50	-23.70	-13	PASS
Band4	15	20325	75	#0	QPSK	25081.88	-23.31	-13	PASS
Band4	15	20325	75	#0	16QAM	25781.25	-23.42	-13	PASS
Band4	20	20050	100	#0	QPSK	25439.38	-23.37	-13	PASS
Band4	20	20050	100	#0	16QAM	25976.25	-23.58	-13	PASS
Band4	20	20175	100	#0	QPSK	25969.38	-23.25	-13	PASS
Band4	20	20175	100	#0	16QAM	25162.50	-23.78	-13	PASS
Band4	20	20300	100	#0	QPSK	25823.13	-24.26	-13	PASS
Band4	20	20300	100	#0	16QAM	25834.38	-23.75	-13	PASS

Band4 QPSK BW=1.4MHz Channel=19957 RB Size=6 Position=#0

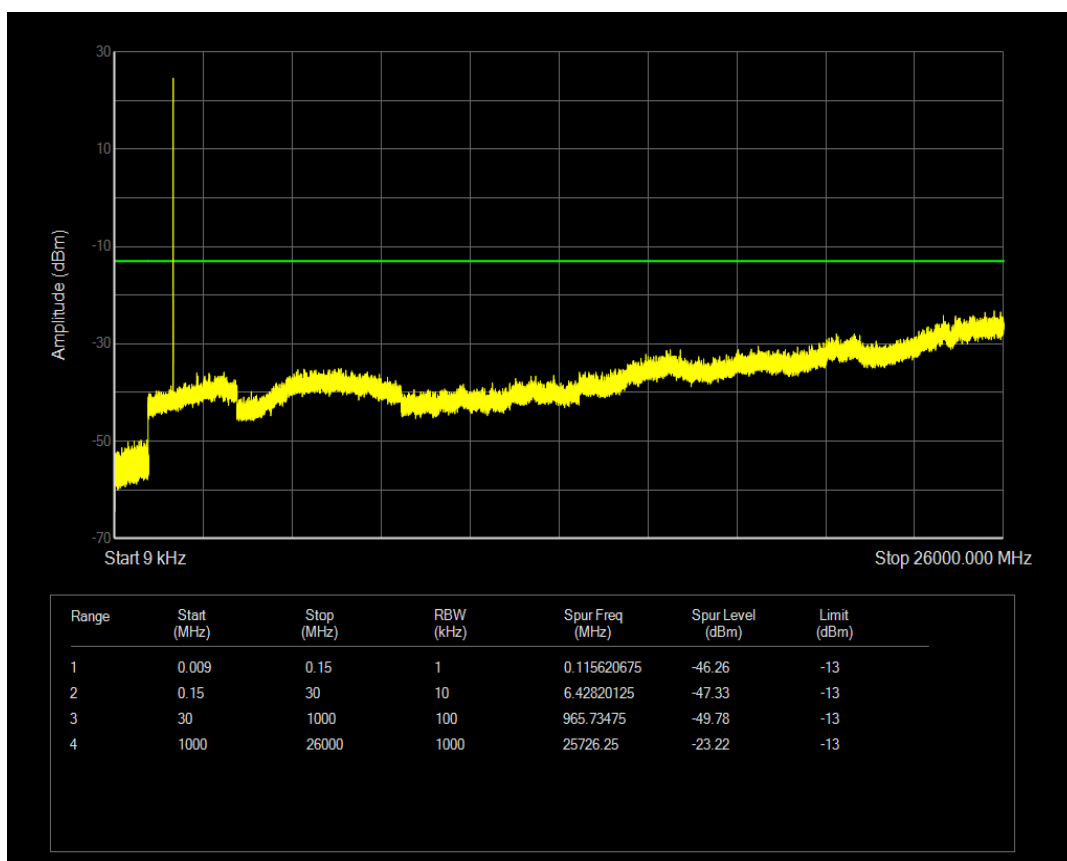


Band4 16QAM BW=1.4MHz Channel=19957 RB Size=6 Position=#0

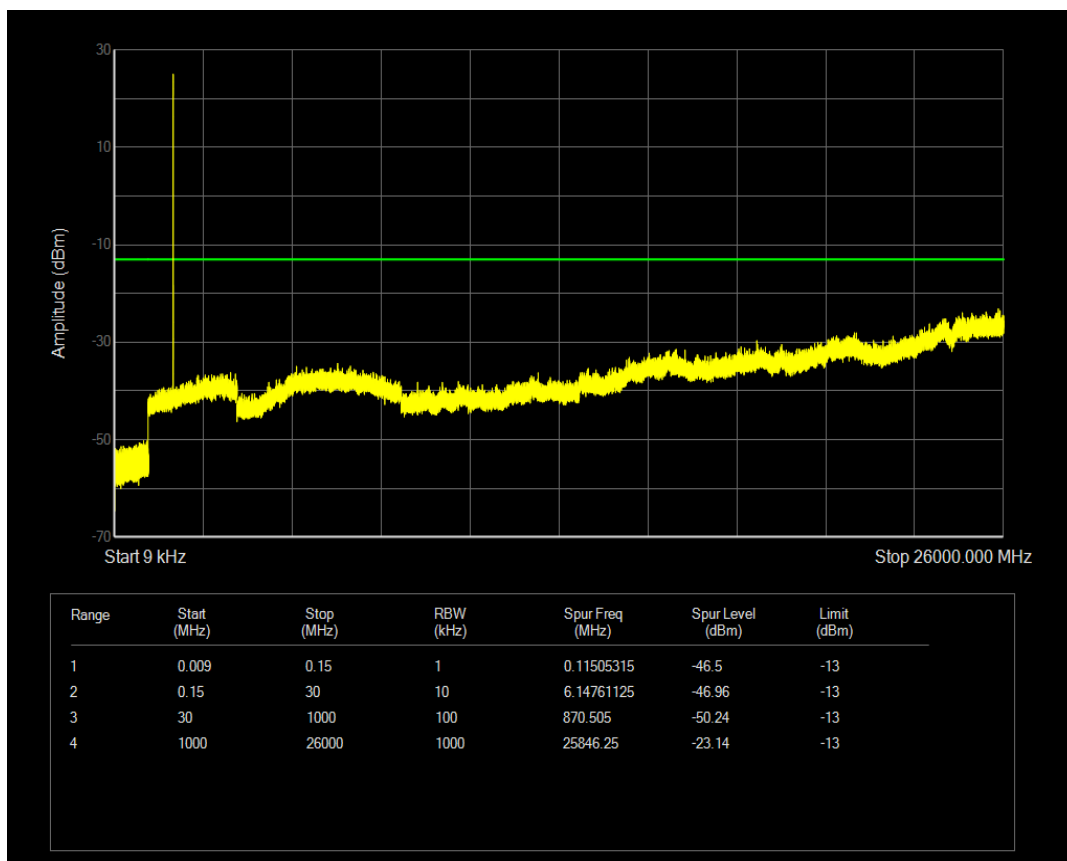




Band4 QPSK BW=1.4MHz Channel=20175 RB Size=6 Position=#0

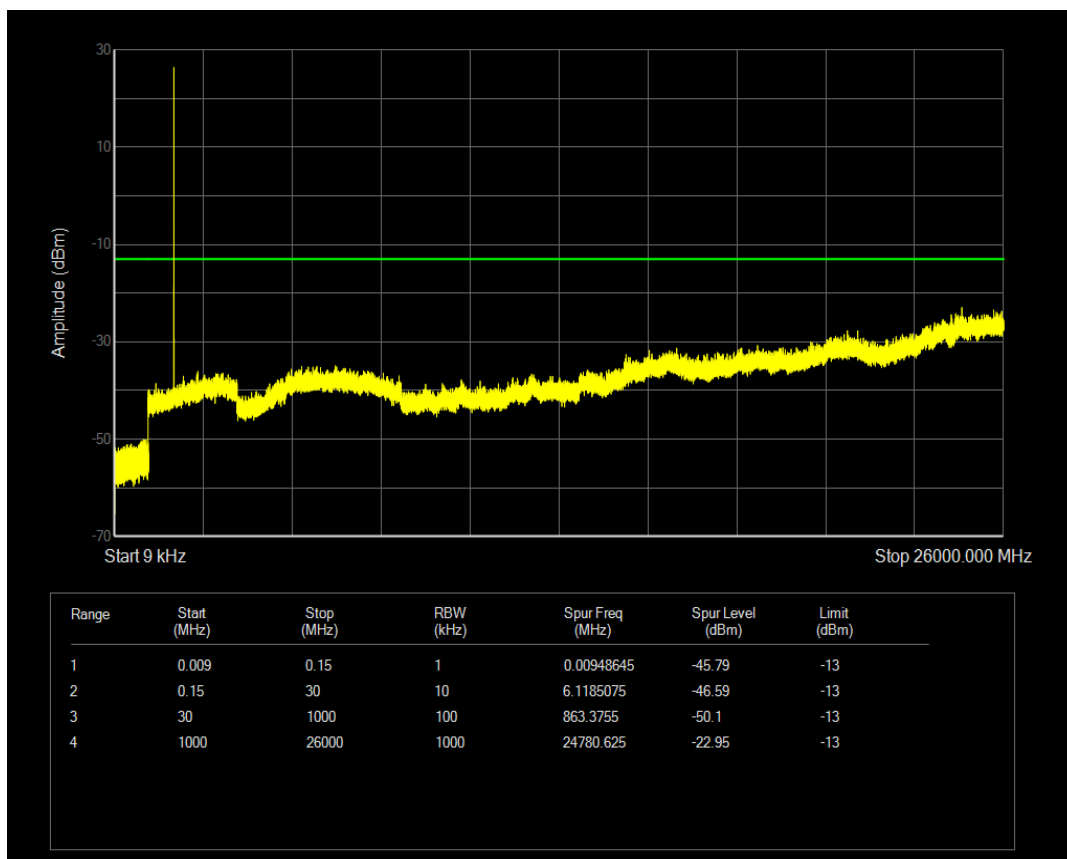


Band4 16QAM BW=1.4MHz Channel=20175 RB Size=6 Position=#0

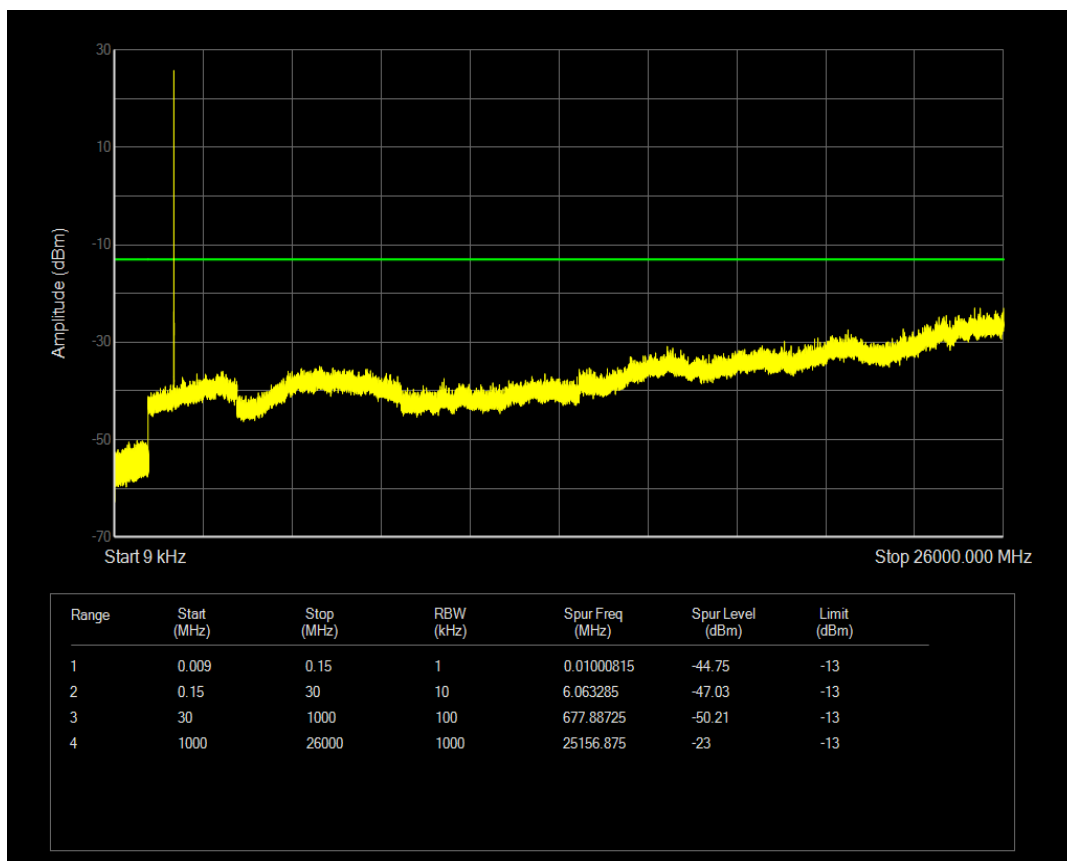




Band4 QPSK BW=1.4MHz Channel=20393 RB Size=6 Position=#0

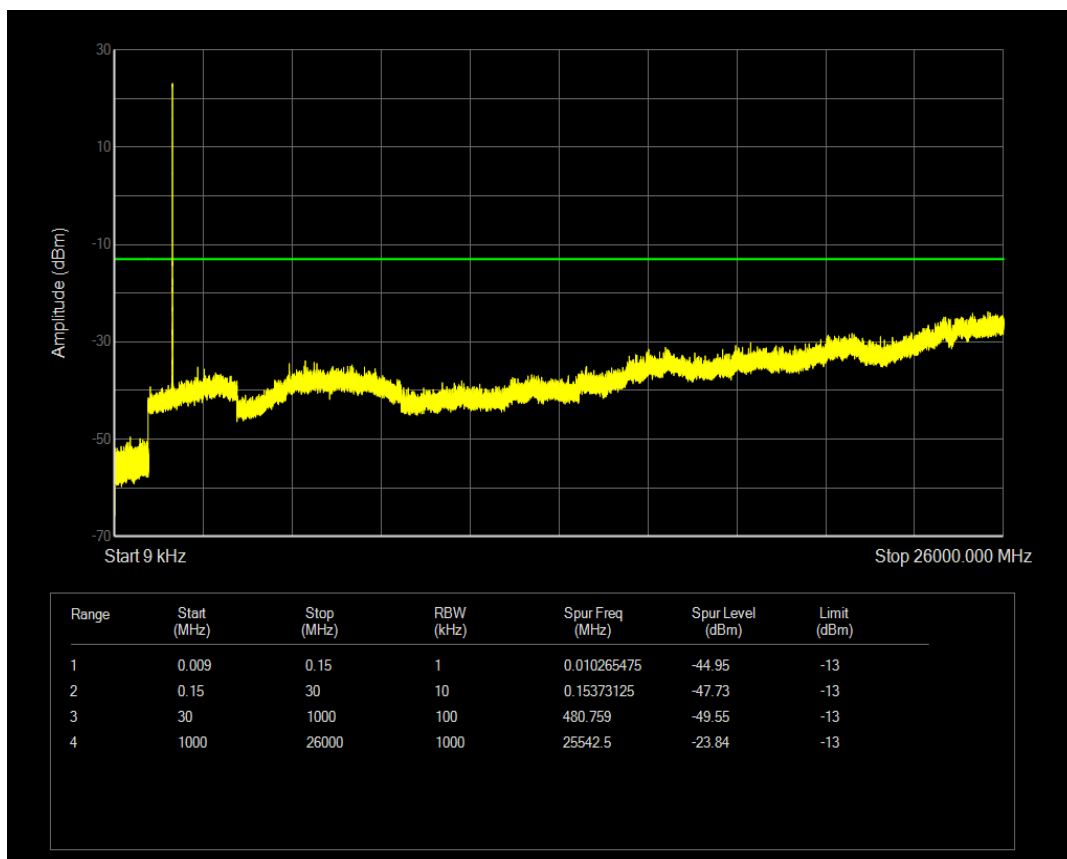


Band4 16QAM BW=1.4MHz Channel=20393 RB Size=6 Position=#0

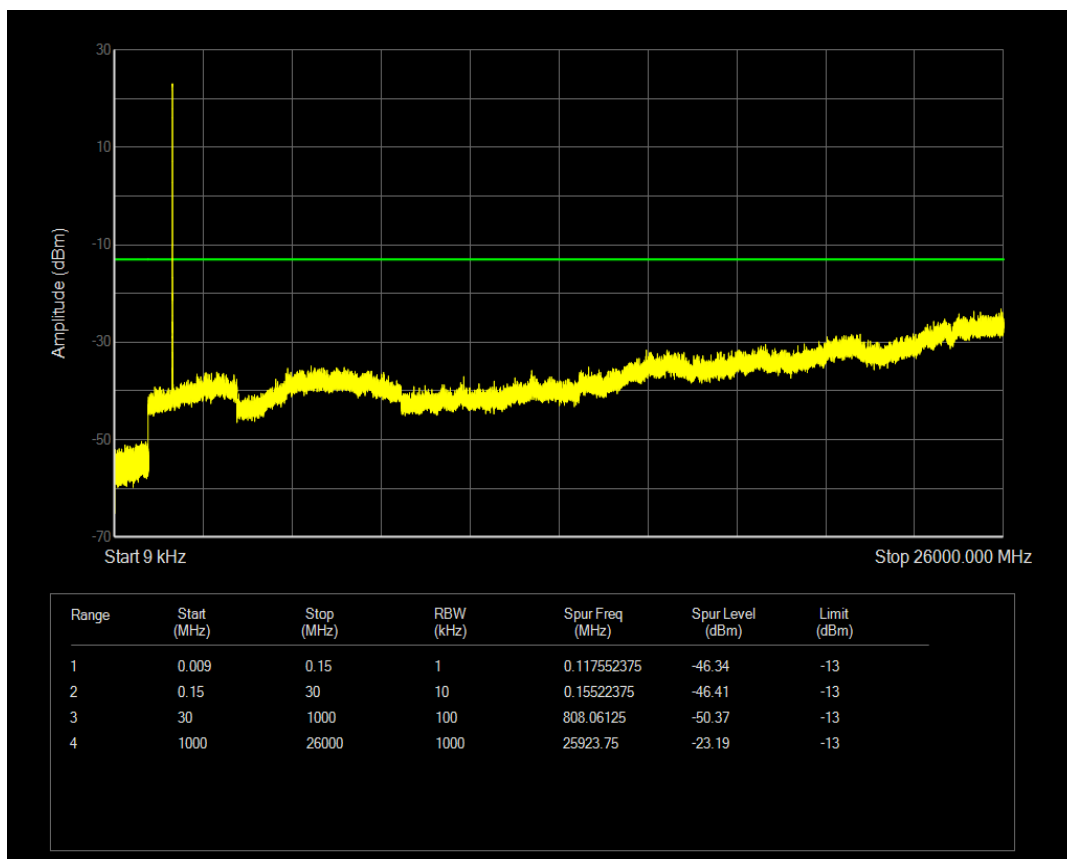




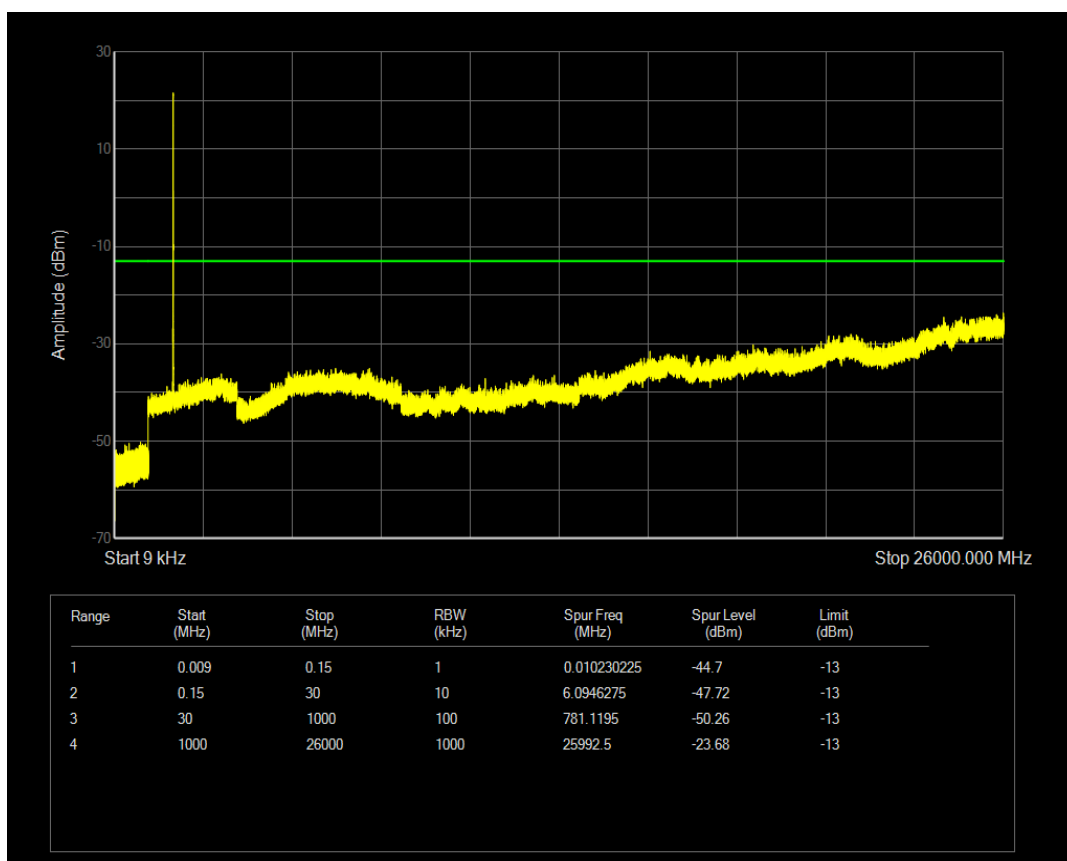
Band4 QPSK BW=3MHz Channel=19965 RB Size=15 Position=#0



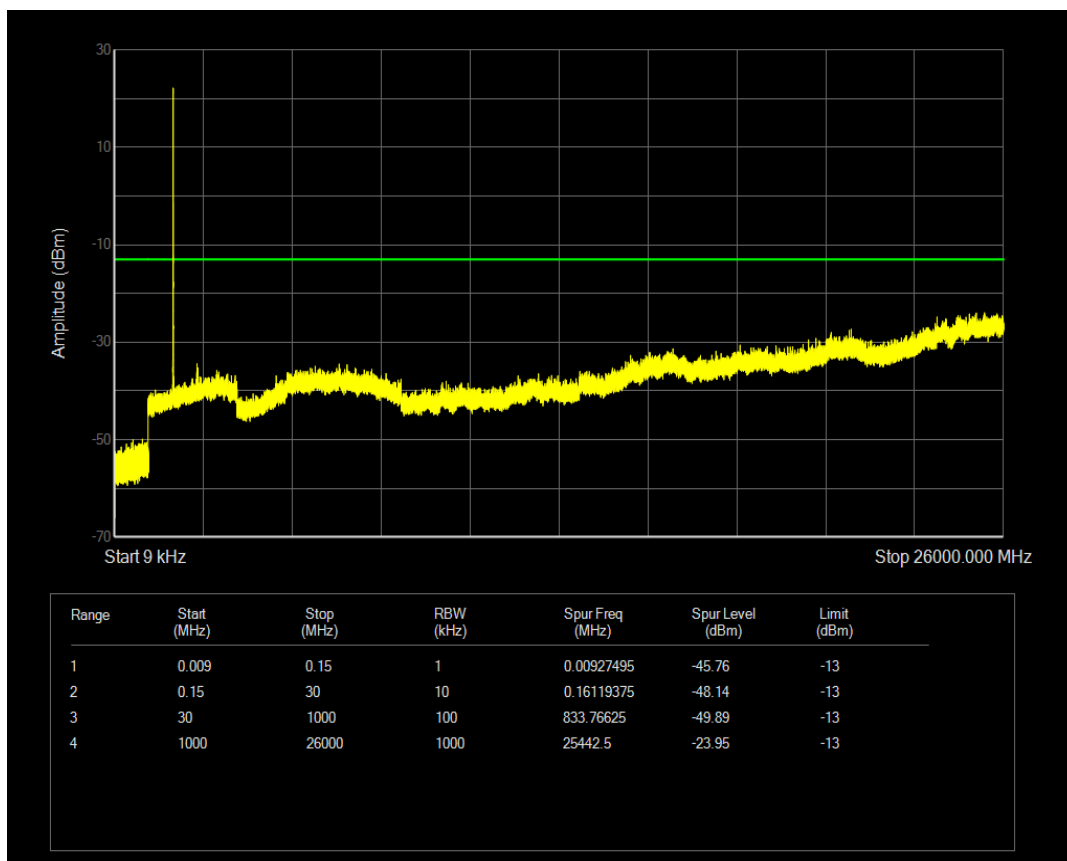
Band4 16QAM BW=3MHz Channel=19965 RB Size=15 Position=#0



Band4 QPSK BW=3MHz Channel=20175 RB Size=15 Position=#0

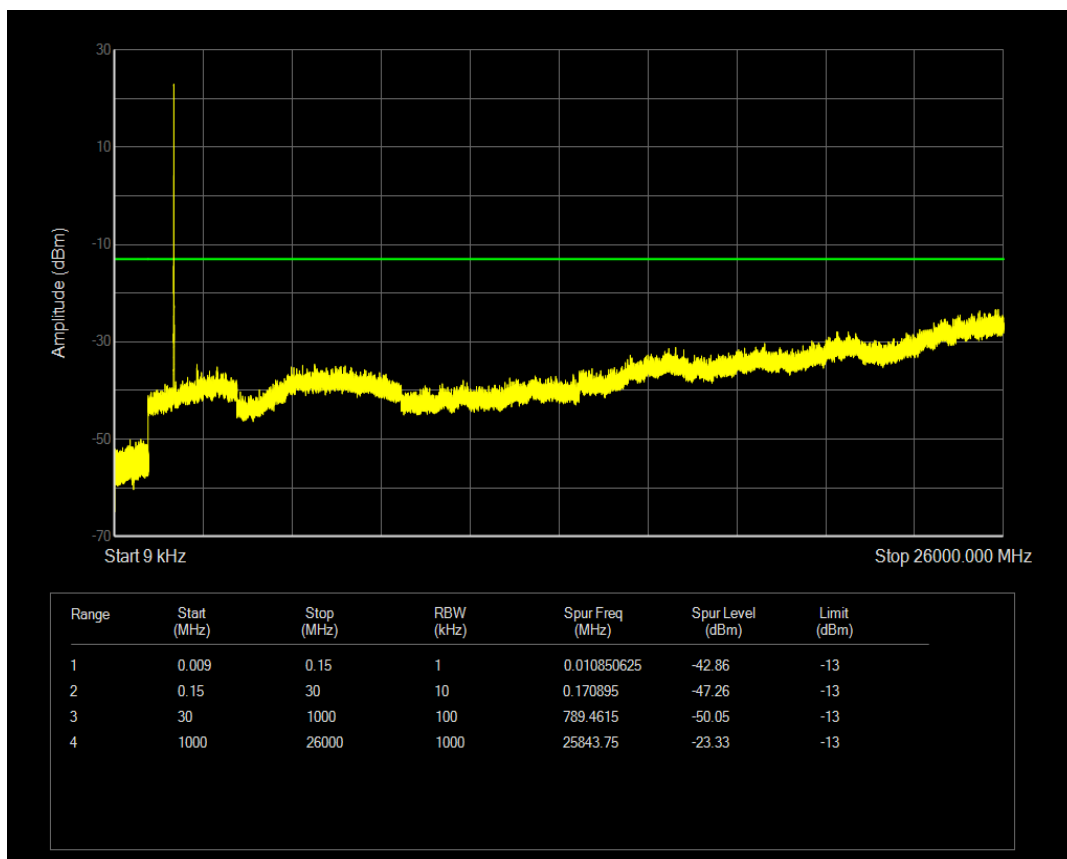


Band4 16QAM BW=3MHz Channel=20175 RB Size=15 Position=#0

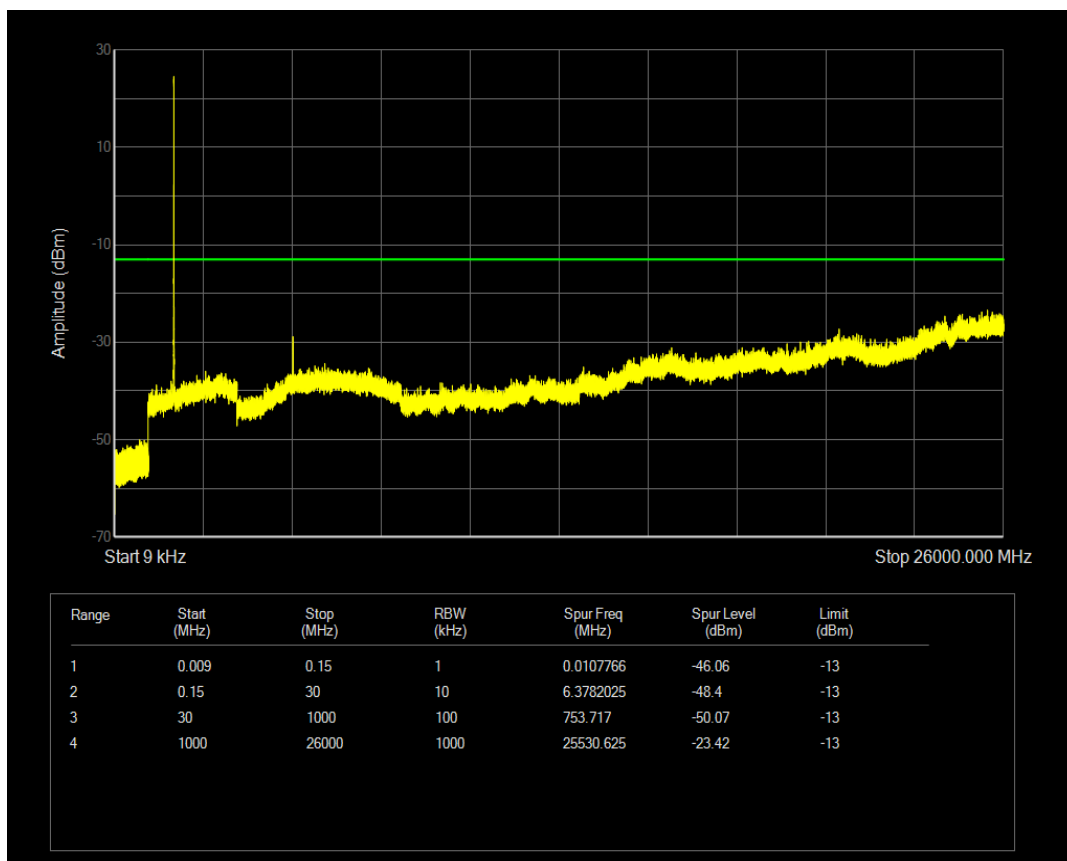




Band4 QPSK BW=3MHz Channel=20385 RB Size=15 Position=#0

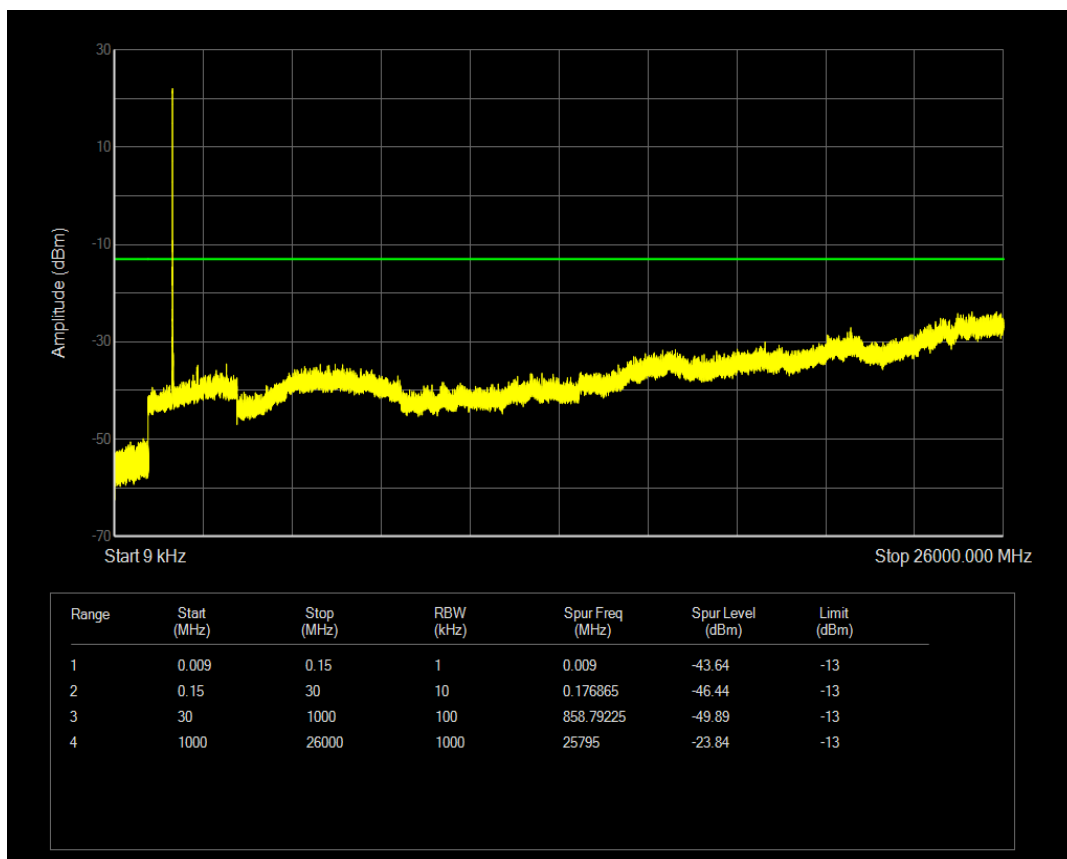


Band4 16QAM BW=3MHz Channel=20385 RB Size=15 Position=#0

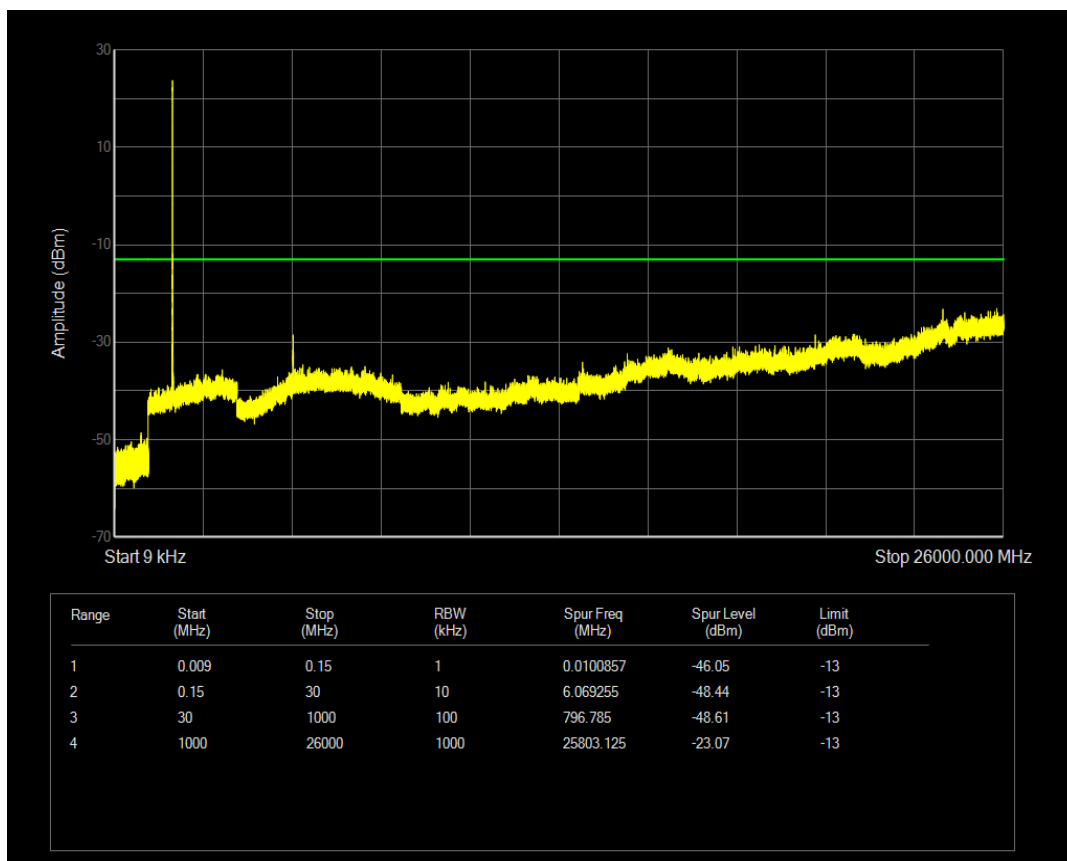




Band4 QPSK BW=5MHz Channel=19975 RB Size=25 Position=#0

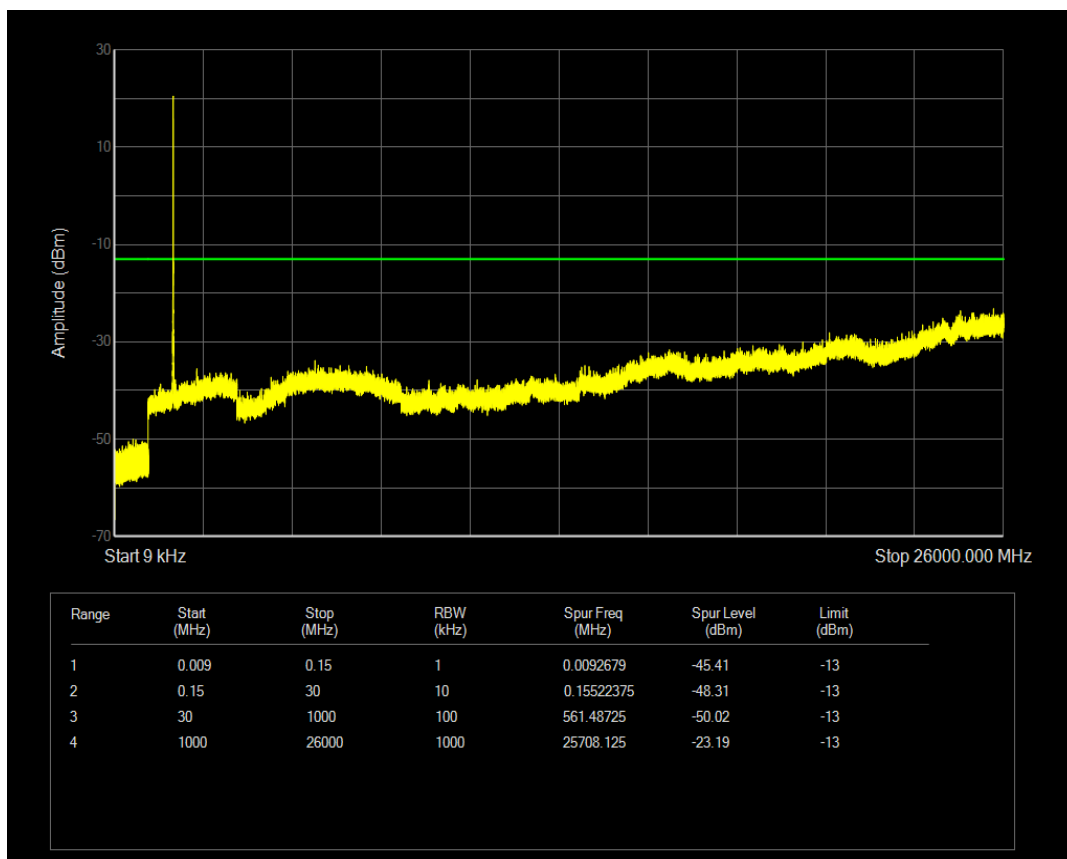


Band4 16QAM BW=5MHz Channel=19975 RB Size=25 Position=#0

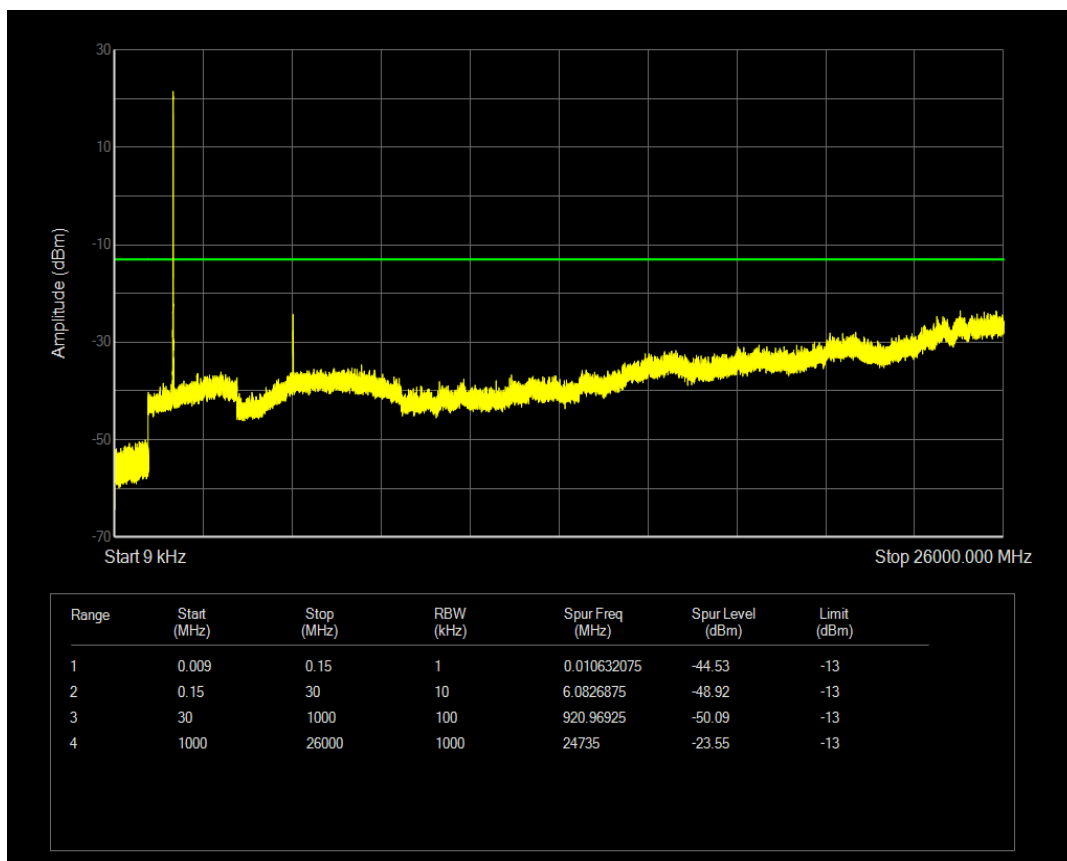




Band4 QPSK BW=5MHz Channel=20175 RB Size=25 Position=#0

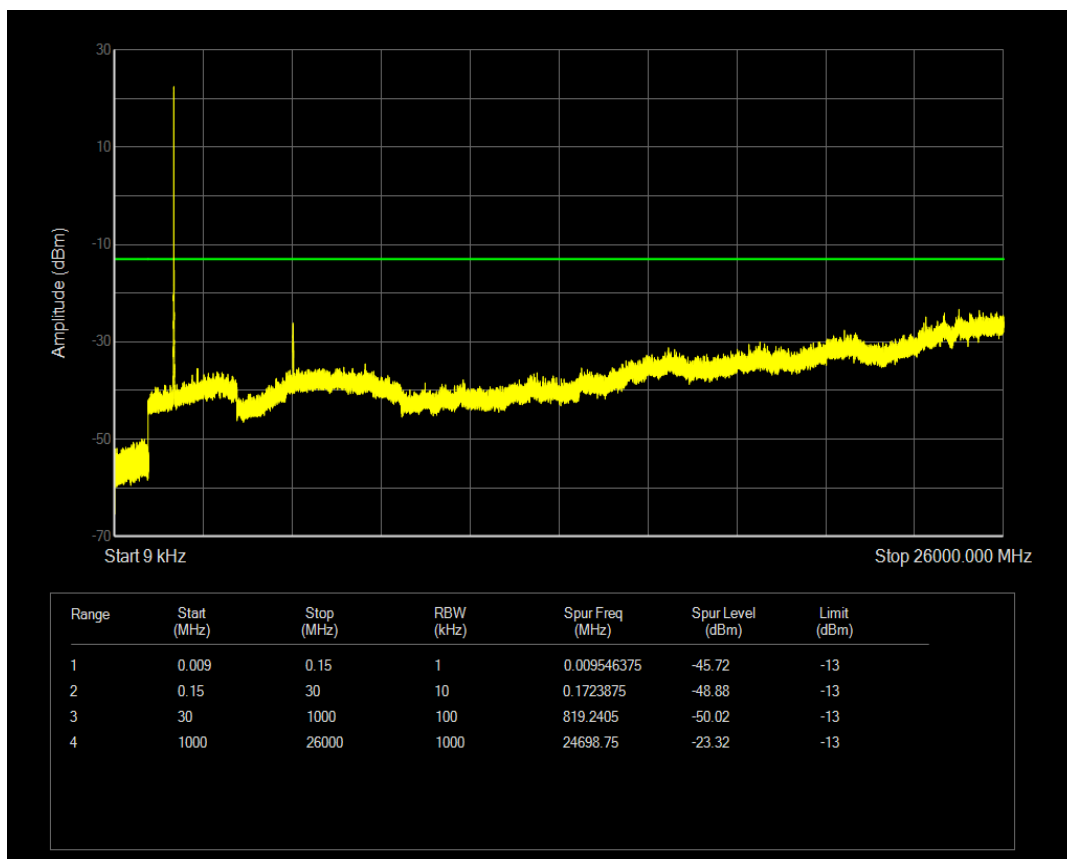


Band4 16QAM BW=5MHz Channel=20175 RB Size=25 Position=#0

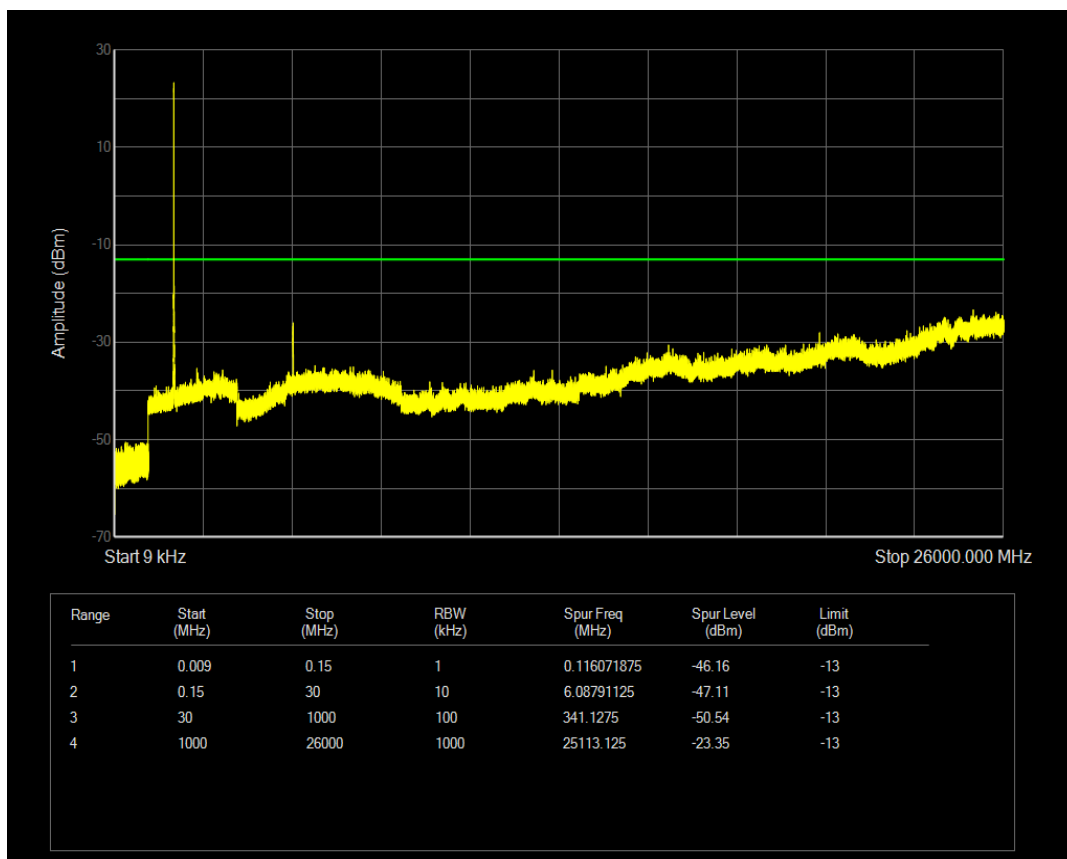




Band4 QPSK BW=5MHz Channel=20375 RB Size=25 Position=#0

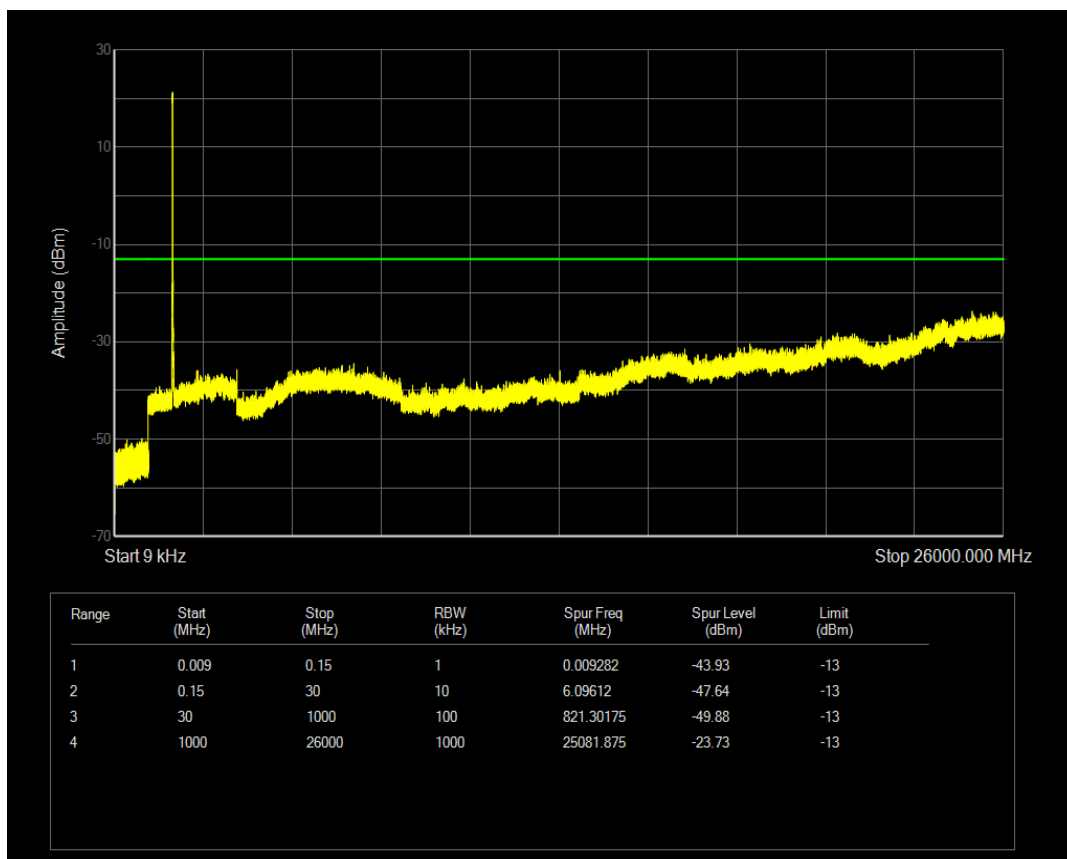


Band4 16QAM BW=5MHz Channel=20375 RB Size=25 Position=#0

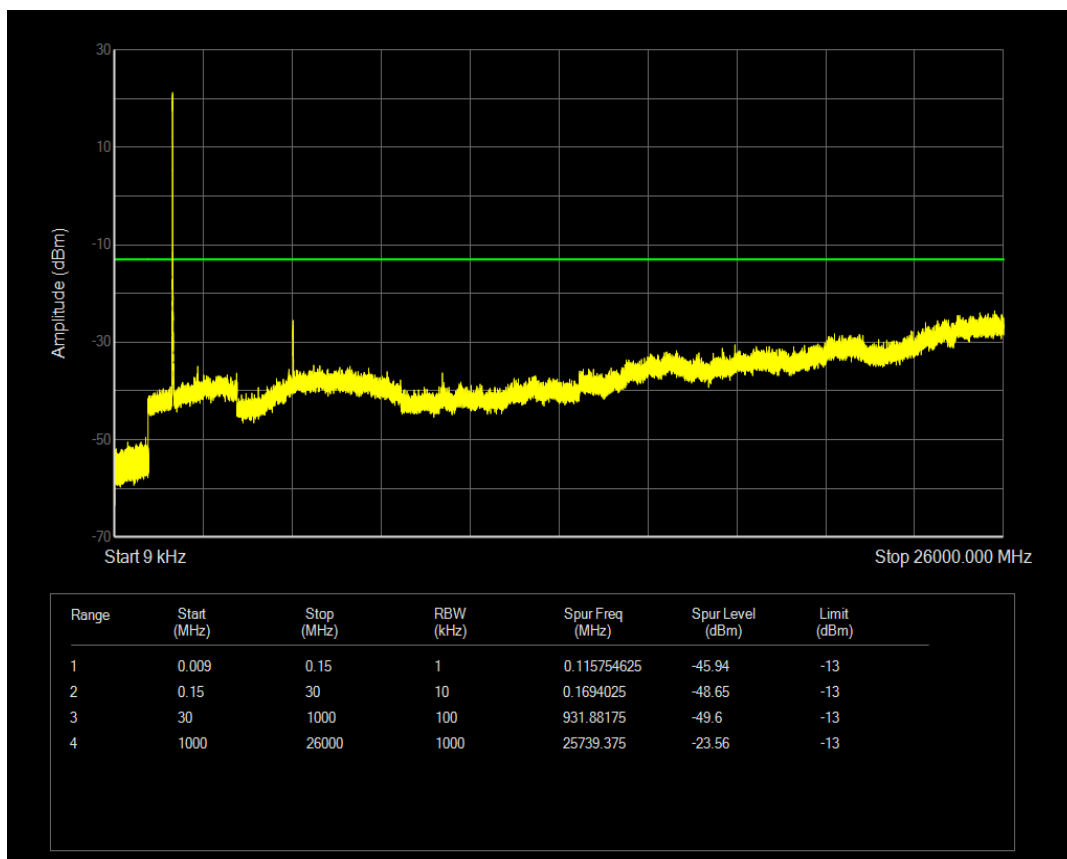




Band4 QPSK BW=10MHz Channel=20000 RB Size=50 Position=#0

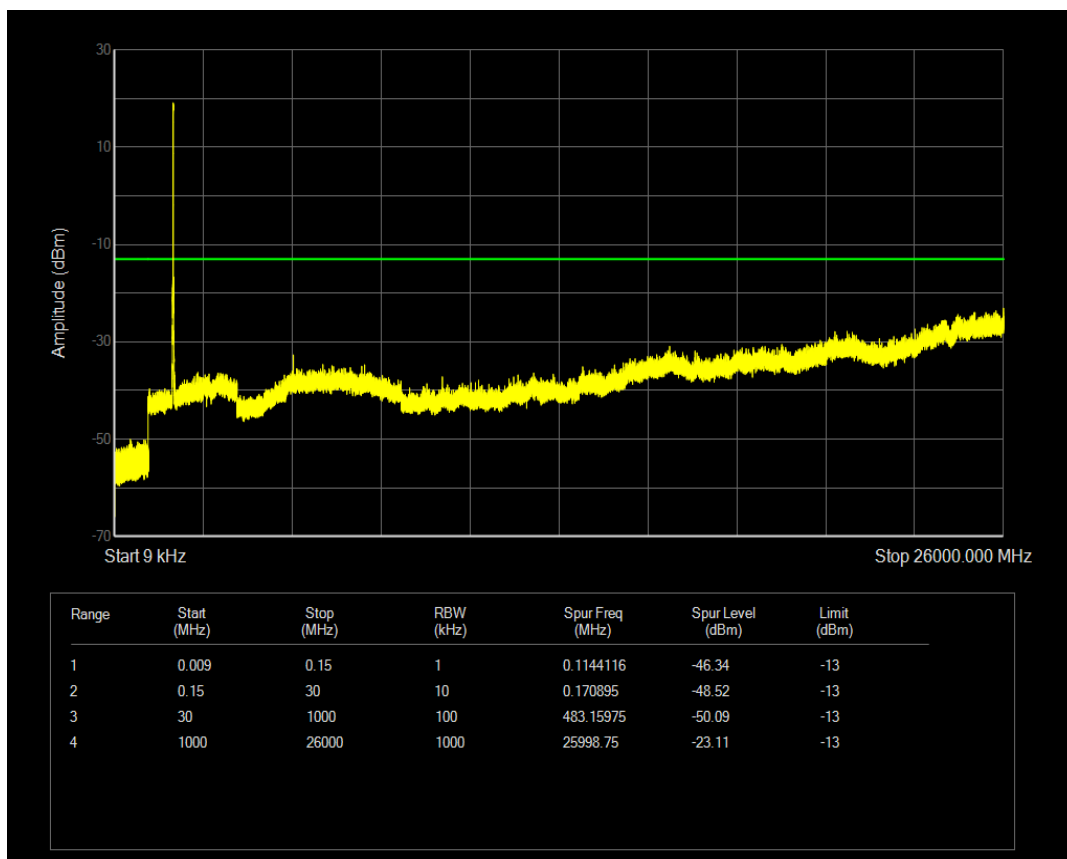


Band4 16QAM BW=10MHz Channel=20000 RB Size=50 Position=#0

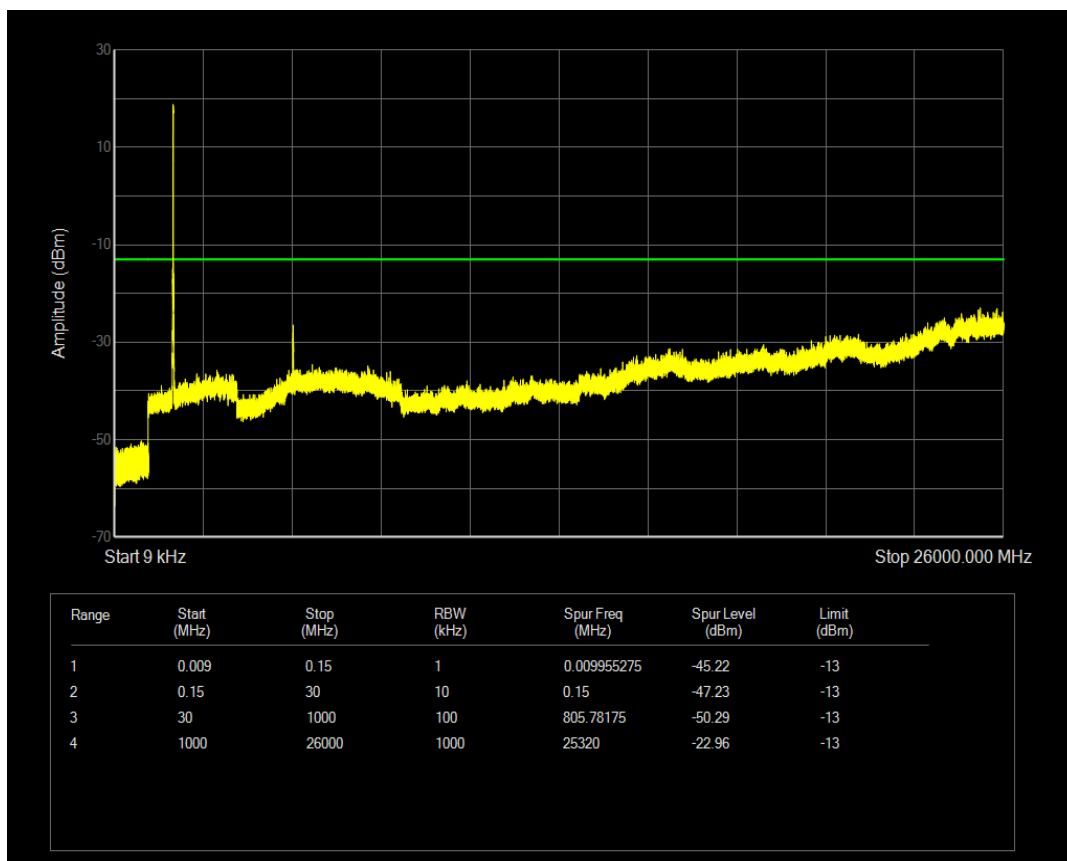




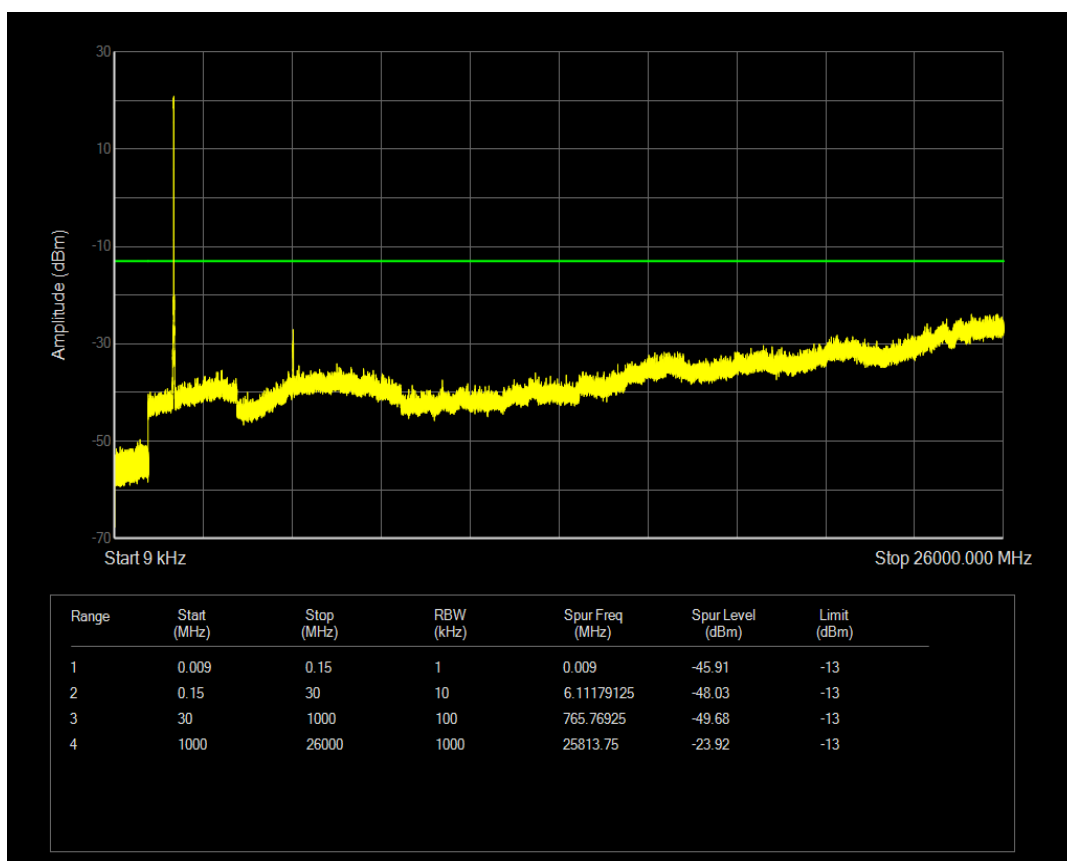
Band4 QPSK BW=10MHz Channel=20175 RB Size=50 Position=#0



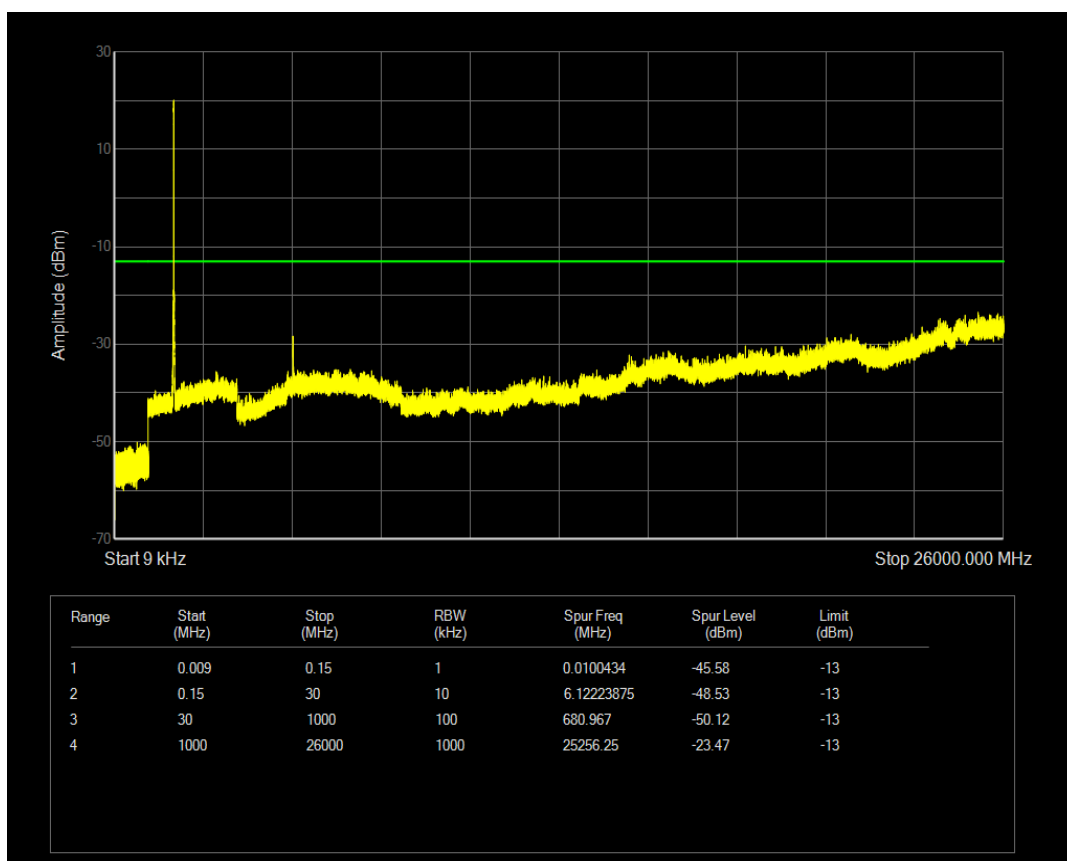
Band4 16QAM BW=10MHz Channel=20175 RB Size=50 Position=#0



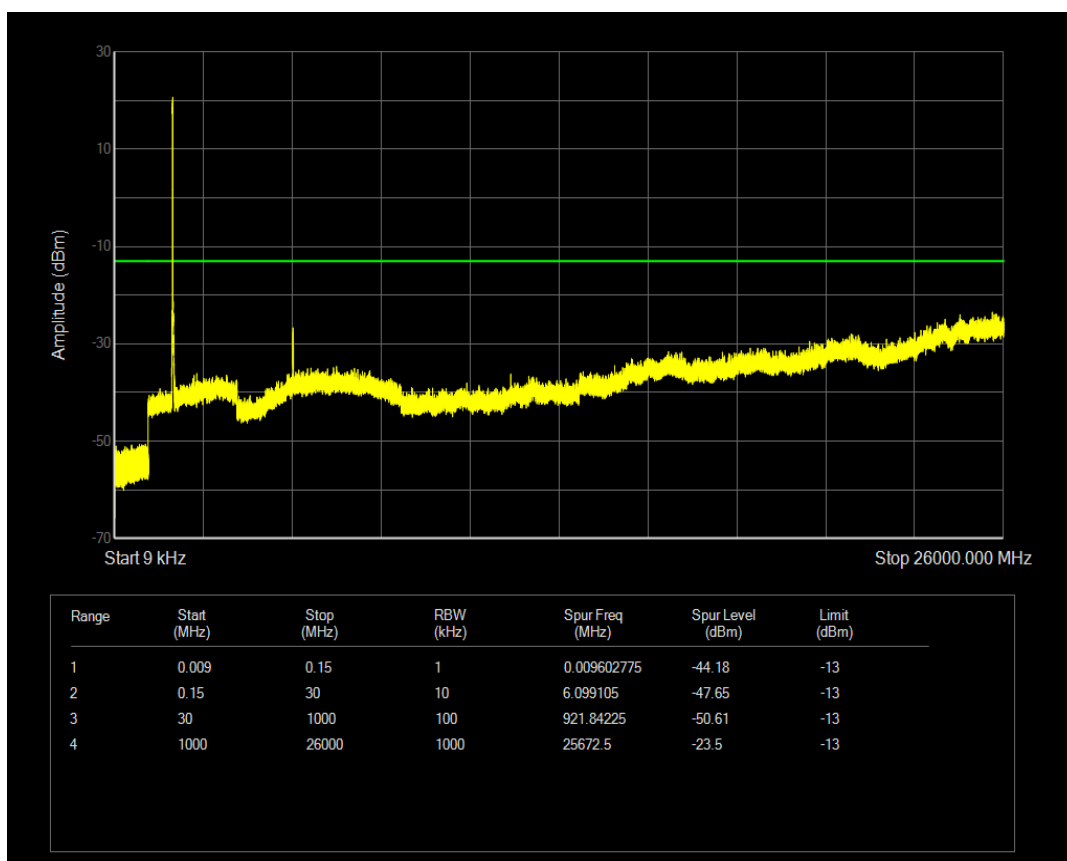
Band4 QPSK BW=10MHz Channel=20350 RB Size=50 Position=#0



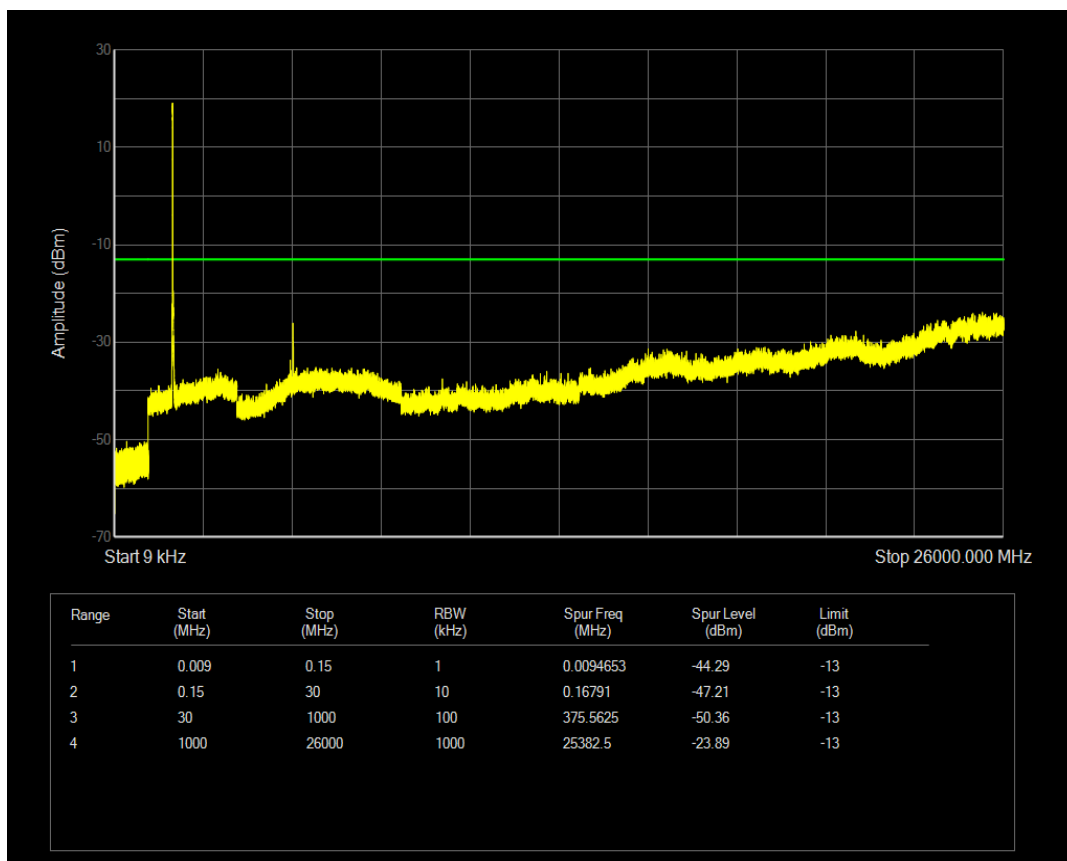
Band4 16QAM BW=10MHz Channel=20350 RB Size=50 Position=#0



Band4 QPSK BW=15MHz Channel=20025 RB Size=75 Position=#0

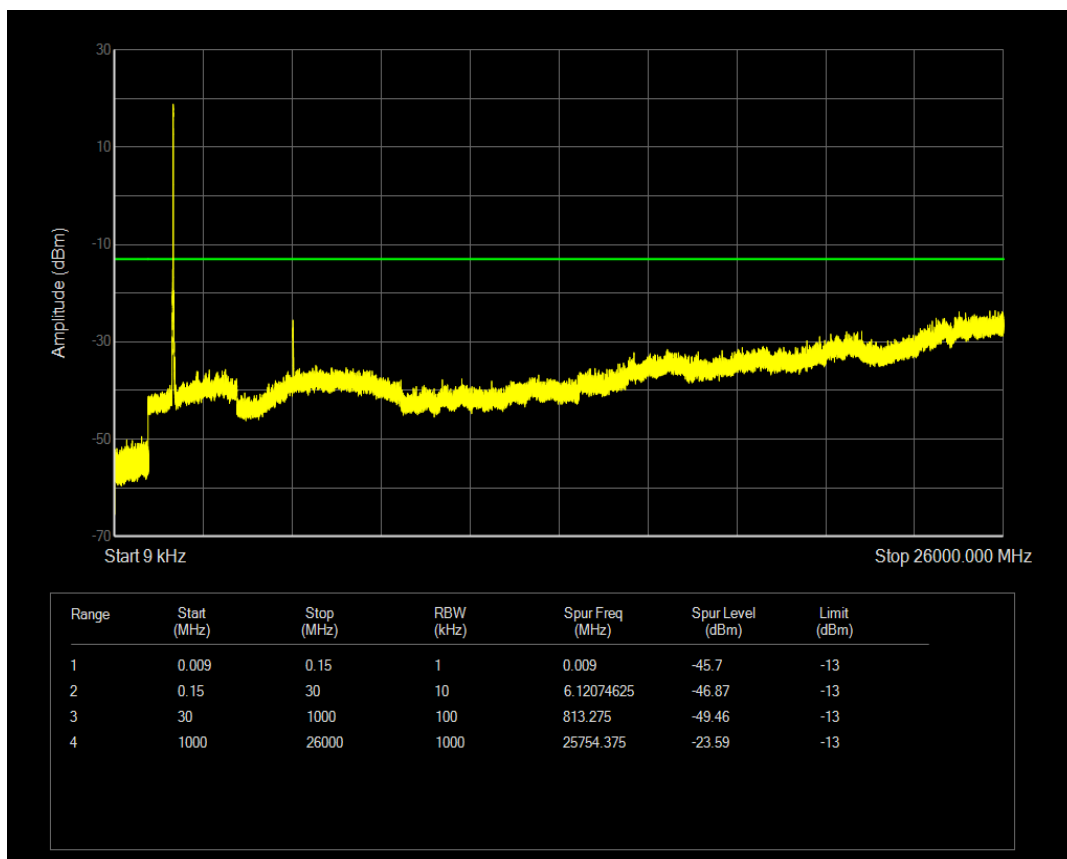


Band4 16QAM BW=15MHz Channel=20025 RB Size=75 Position=#0

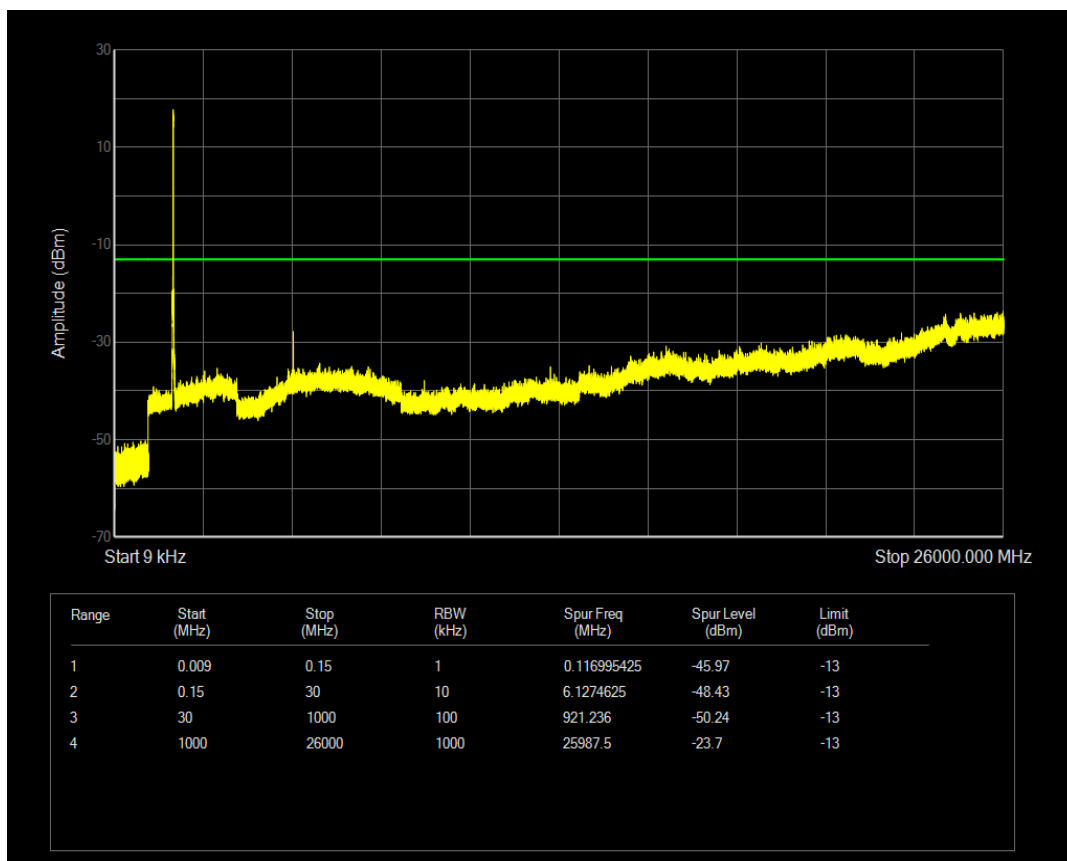




Band4 QPSK BW=15MHz Channel=20175 RB Size=75 Position=#0

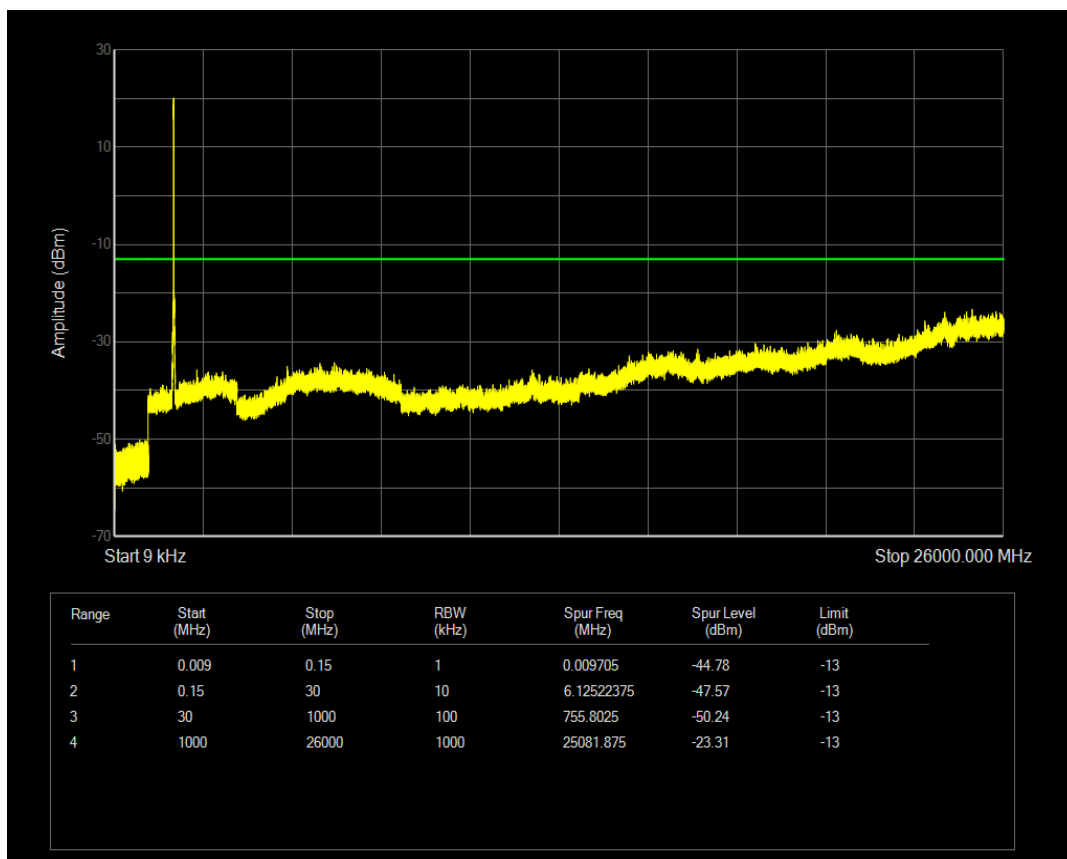


Band4 16QAM BW=15MHz Channel=20175 RB Size=75 Position=#0

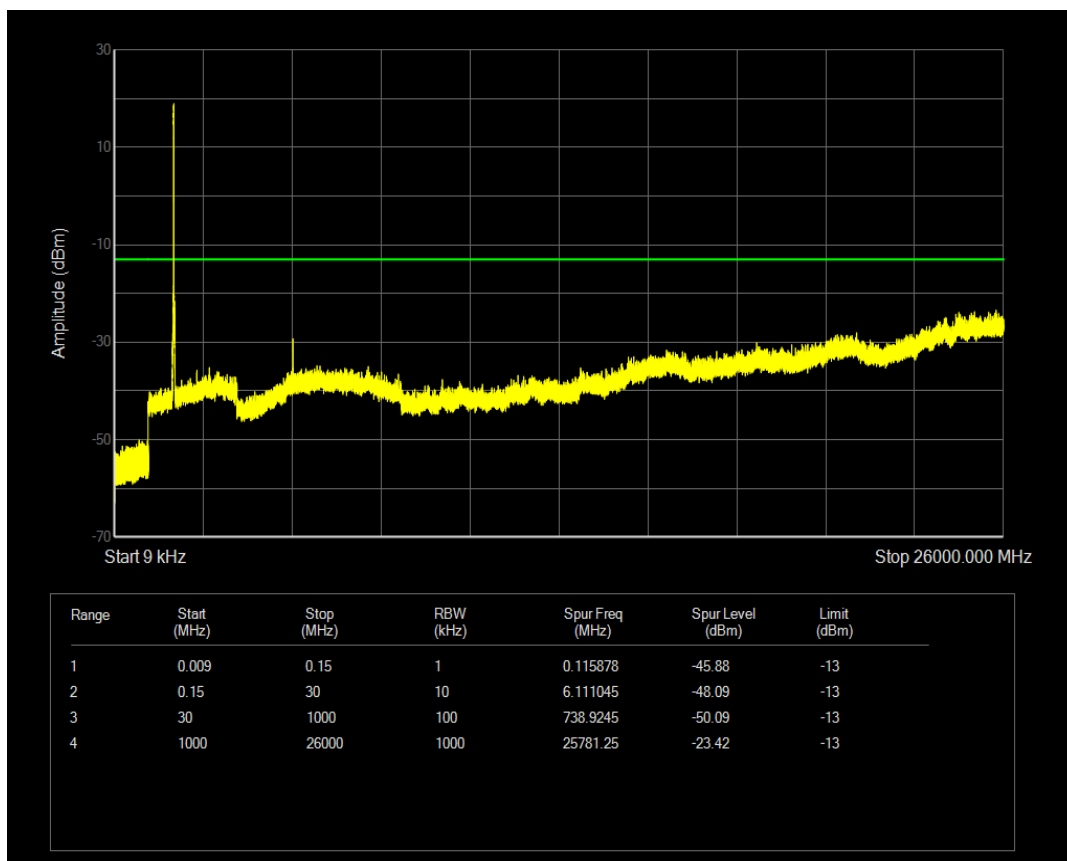




Band4 QPSK BW=15MHz Channel=20325 RB Size=75 Position=#0

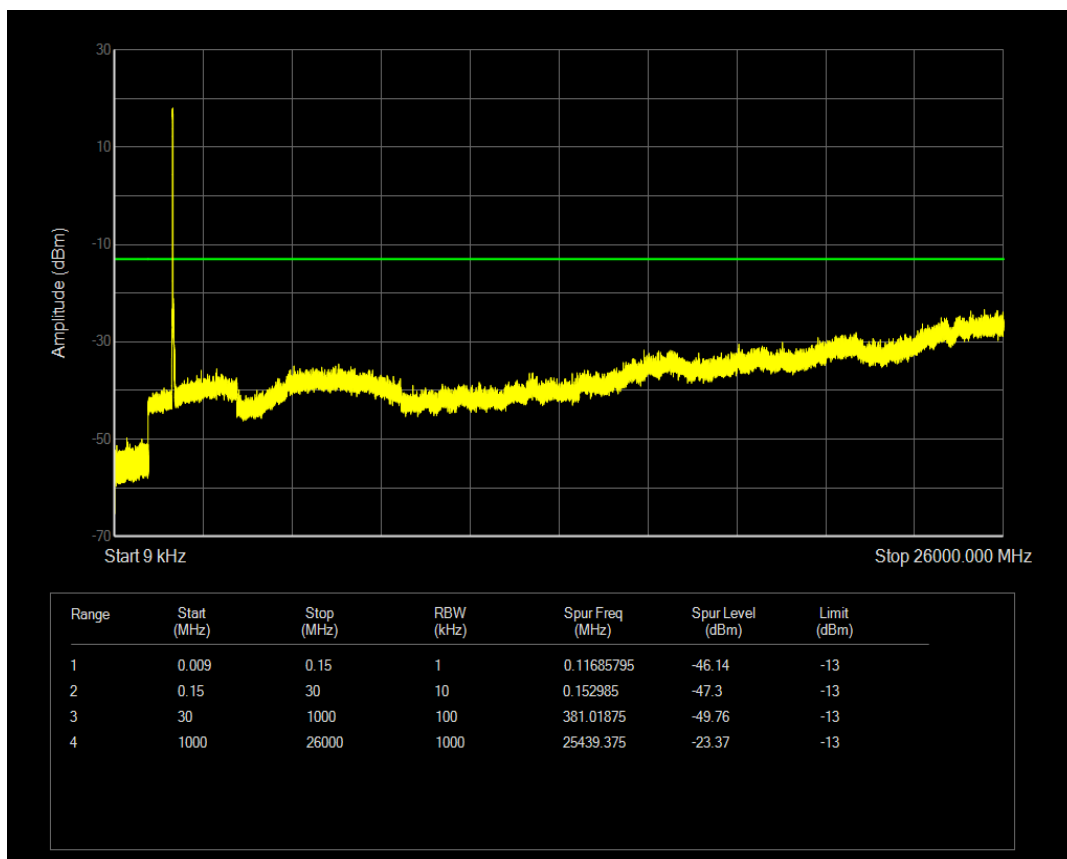


Band4 16QAM BW=15MHz Channel=20325 RB Size=75 Position=#0

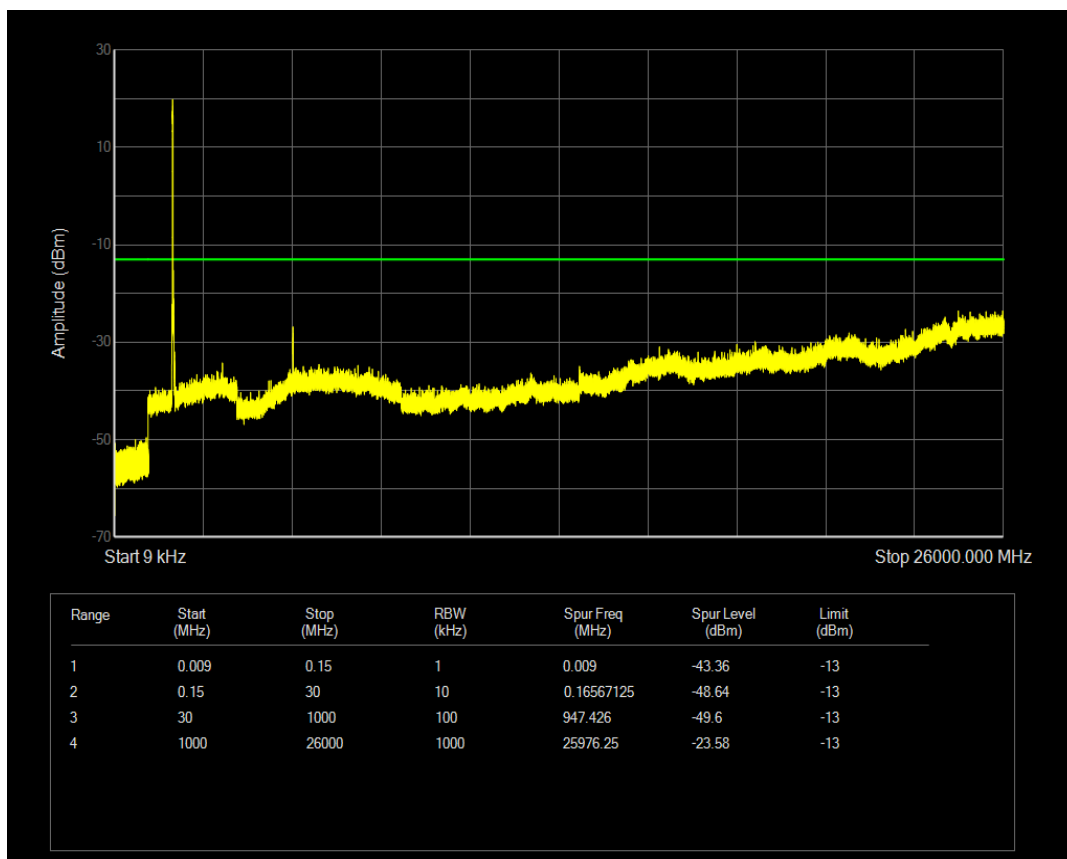




Band4 QPSK BW=20MHz Channel=20050 RB Size=100 Position=#0

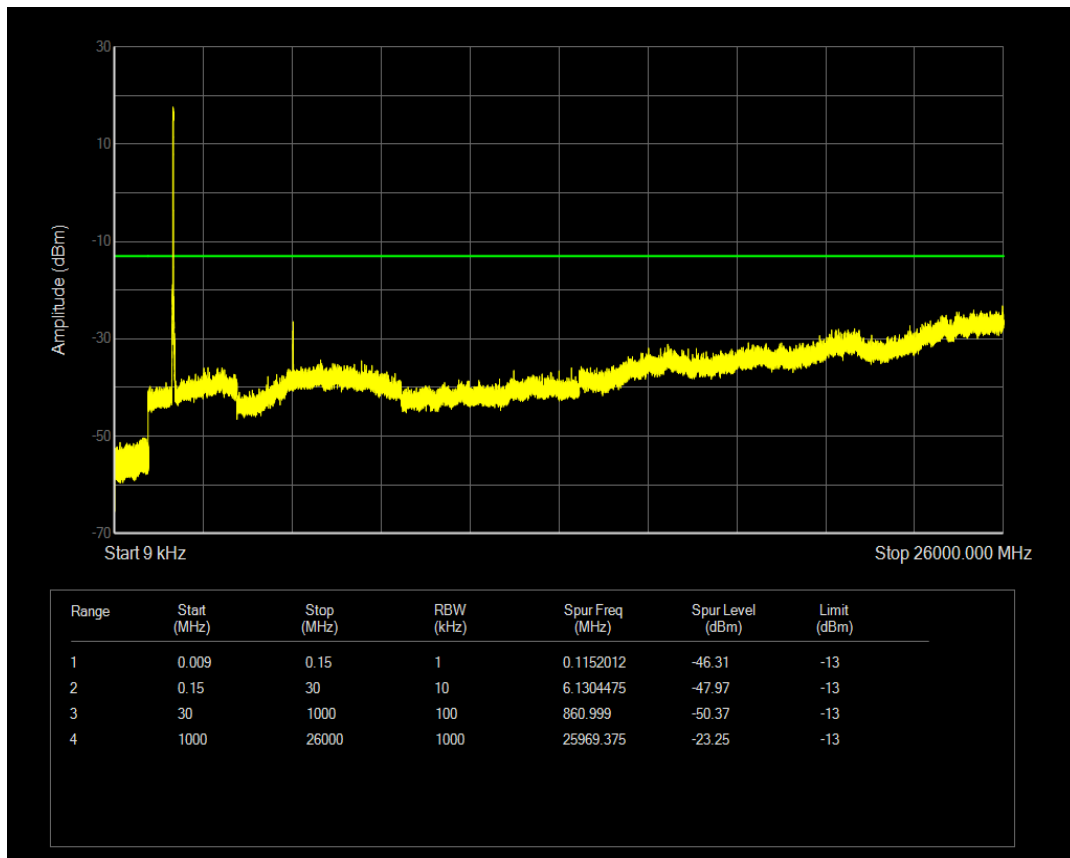


Band4 16QAM BW=20MHz Channel=20050 RB Size=100 Position=#0

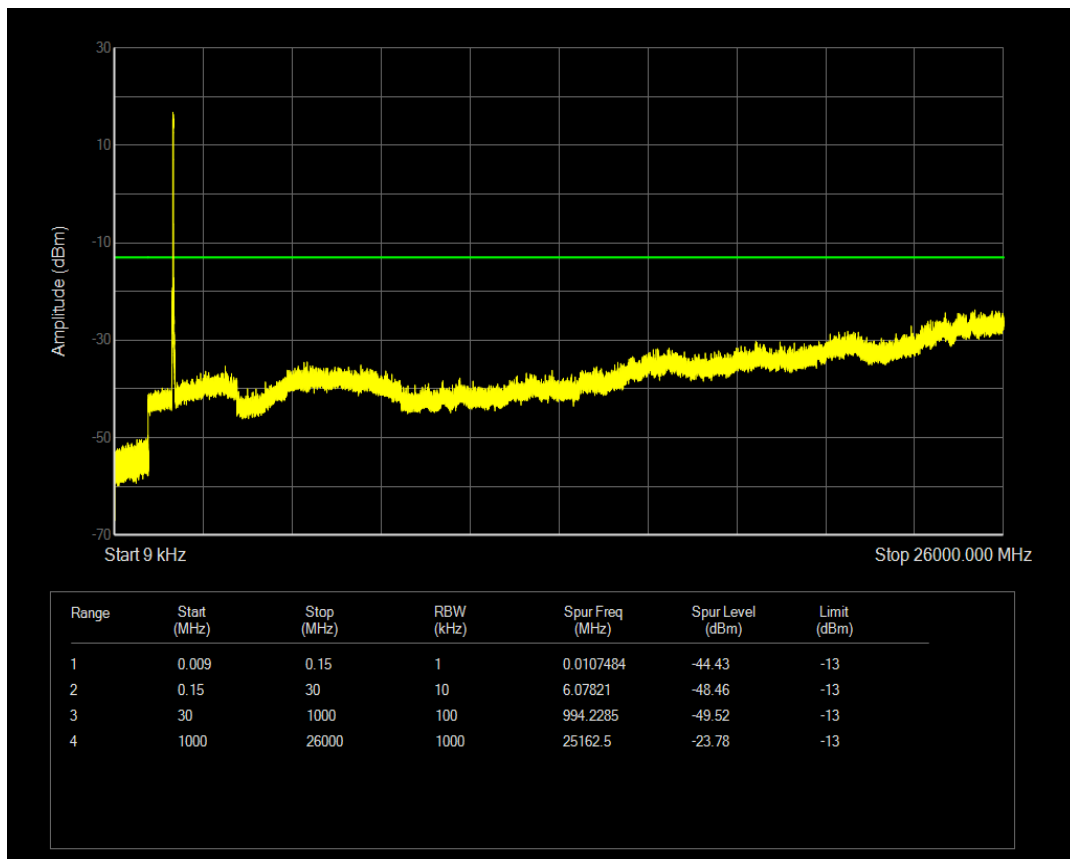




Band4 QPSK BW=20MHz Channel=20175 RB Size=100 Position=#0

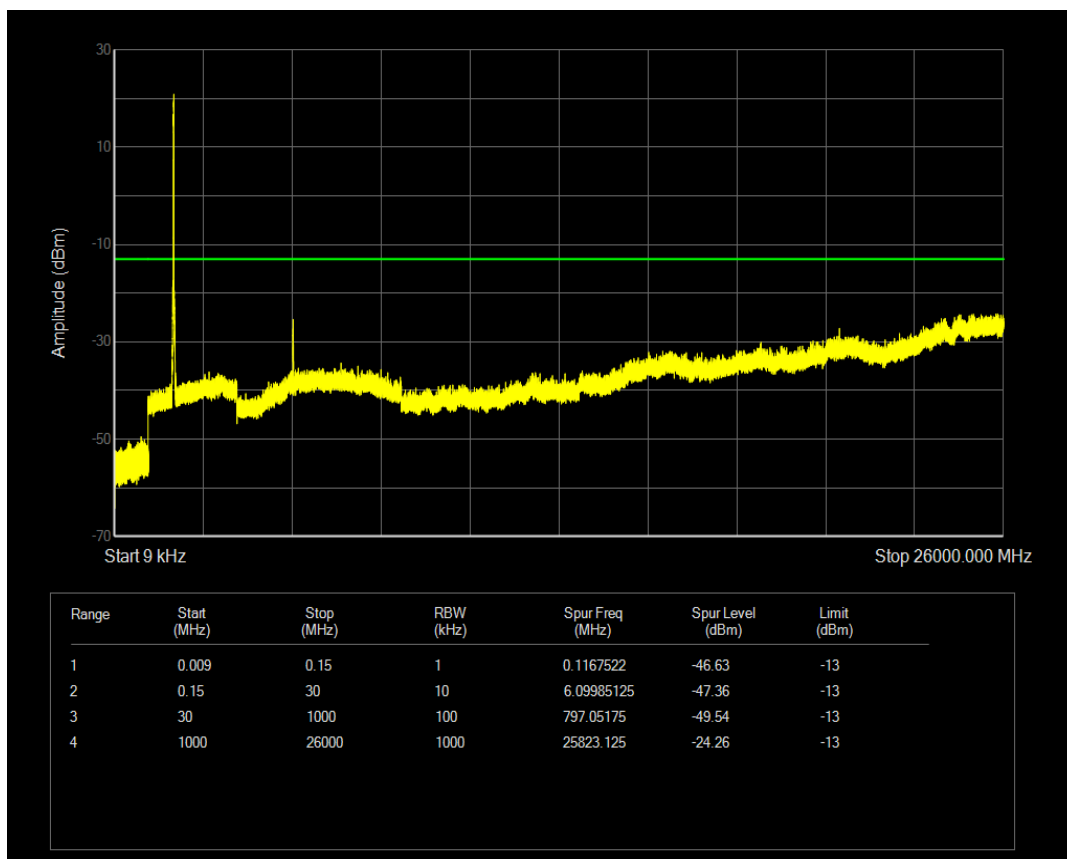


Band4 16QAM BW=20MHz Channel=20175 RB Size=100 Position=#0





Band4 QPSK BW=20MHz Channel=20300 RB Size=100 Position=#0



Band4 16QAM BW=20MHz Channel=20300 RB Size=100 Position=#0

