

Appendix Test Data for LTE band 5 (Conducted Measurement)

Product Name: Voter Identification Unit

Trade Mark: SMARTMATIC

Test Model: VIU-500 Model 700

FCC ID: 2AGVK-VIU-500A70-R2

Environmental Conditions

Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

Appendix A: RF output power

Test Result

Band	Bandwidth (MHz)	UL Frequency (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)	Peak Power (dBm)	PAR (dB)	Limit (dB)	AntGain (dBi)	ERP (dBm)	Limit (dBm)	Conclusion
5	1.4	824.7	QPSK	6	LOW	22.21	28.13	5.92	13	-1.12	18.94	38.5	Pass
5	1.4	824.7	QPSK	3	LOW	23.23	29.03	5.80	13	-1.12	19.96	38.5	Pass
5	1.4	824.7	QPSK	3	MID	23.24	29.02	5.79	13	-1.12	19.97	38.5	Pass
5	1.4	824.7	QPSK	3	HIGH	23.27	28.98	5.71	13	-1.12	20.00	38.5	Pass
5	1.4	824.7	QPSK	1	LOW	23.12	28.00	4.88	13	-1.12	19.85	38.5	Pass
5	1.4	824.7	QPSK	1	MID	23.33	28.10	4.77	13	-1.12	20.06	38.5	Pass
5	1.4	824.7	QPSK	1	HIGH	23.13	27.95	4.82	13	-1.12	19.86	38.5	Pass
5	1.4	824.7	16QAM	6	LOW	21.17	28.05	6.88	13	-1.12	17.90	38.5	Pass
5	1.4	824.7	16QAM	3	LOW	22.31	28.49	6.17	13	-1.12	19.04	38.5	Pass
5	1.4	824.7	16QAM	3	MID	22.34	28.50	6.17	13	-1.12	19.07	38.5	Pass
5	1.4	824.7	16QAM	3	HIGH	22.30	28.34	6.04	13	-1.12	19.03	38.5	Pass
5	1.4	824.7	16QAM	1	LOW	22.16	27.57	5.40	13	-1.12	18.89	38.5	Pass
5	1.4	824.7	16QAM	1	MID	22.36	27.69	5.33	13	-1.12	19.09	38.5	Pass
5	1.4	824.7	16QAM	1	HIGH	22.18	27.50	5.32	13	-1.12	18.91	38.5	Pass
5	1.4	836.5	QPSK	6	LOW	22.03	28.01	5.98	13	-1.12	18.76	38.5	Pass
5	1.4	836.5	QPSK	3	LOW	23.09	28.69	5.60	13	-1.12	19.82	38.5	Pass
5	1.4	836.5	QPSK	3	MID	23.10	28.71	5.61	13	-1.12	19.83	38.5	Pass
5	1.4	836.5	QPSK	3	HIGH	23.09	28.61	5.53	13	-1.12	19.82	38.5	Pass
5	1.4	836.5	QPSK	1	LOW	22.98	28.71	5.73	13	-1.12	19.71	38.5	Pass
5	1.4	836.5	QPSK	1	MID	23.16	28.71	5.55	13	-1.12	19.89	38.5	Pass
5	1.4	836.5	QPSK	1	HIGH	22.97	28.54	5.57	13	-1.12	19.70	38.5	Pass
5	1.4	836.5	16QAM	6	LOW	21.09	28.34	7.25	13	-1.12	17.82	38.5	Pass

Band	Bandwidth (MHz)	UL Frequency (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)	Peak Power (dBm)	PAR (dB)	Limit (dB)	AntGain (dBi)	ERP (dBm)	Limit (dBm)	Conclusion
5	1.4	836.5	16QAM	3	LOW	22.27	28.48	6.21	13	-1.12	19.00	38.5	Pass
5	1.4	836.5	16QAM	3	MID	22.26	28.45	6.19	13	-1.12	18.99	38.5	Pass
5	1.4	836.5	16QAM	3	HIGH	22.29	28.46	6.17	13	-1.12	19.02	38.5	Pass
5	1.4	836.5	16QAM	1	LOW	22.02	27.87	5.85	13	-1.12	18.75	38.5	Pass
5	1.4	836.5	16QAM	1	MID	22.20	27.95	5.75	13	-1.12	18.93	38.5	Pass
5	1.4	836.5	16QAM	1	HIGH	22.05	27.79	5.74	13	-1.12	18.78	38.5	Pass
5	1.4	848.3	QPSK	6	LOW	21.94	27.74	5.80	13	-1.12	18.67	38.5	Pass
5	1.4	848.3	QPSK	3	LOW	23.00	28.64	5.64	13	-1.12	19.73	38.5	Pass
5	1.4	848.3	QPSK	3	MID	23.00	28.63	5.63	13	-1.12	19.73	38.5	Pass
5	1.4	848.3	QPSK	3	HIGH	23.00	28.64	5.64	13	-1.12	19.73	38.5	Pass
5	1.4	848.3	QPSK	1	LOW	22.89	28.35	5.46	13	-1.12	19.62	38.5	Pass
5	1.4	848.3	QPSK	1	MID	23.14	28.56	5.41	13	-1.12	19.87	38.5	Pass
5	1.4	848.3	QPSK	1	HIGH	22.89	28.37	5.48	13	-1.12	19.62	38.5	Pass
5	1.4	848.3	16QAM	6	LOW	21.03	27.47	6.44	13	-1.12	17.76	38.5	Pass
5	1.4	848.3	16QAM	3	LOW	21.99	28.58	6.59	13	-1.12	18.72	38.5	Pass
5	1.4	848.3	16QAM	3	MID	21.98	28.57	6.59	13	-1.12	18.71	38.5	Pass
5	1.4	848.3	16QAM	3	HIGH	22.00	28.69	6.69	13	-1.12	18.73	38.5	Pass
5	1.4	848.3	16QAM	1	LOW	22.00	27.06	5.06	13	-1.12	18.73	38.5	Pass
5	1.4	848.3	16QAM	1	MID	22.21	27.29	5.07	13	-1.12	18.94	38.5	Pass
5	1.4	848.3	16QAM	1	HIGH	22.03	27.12	5.08	13	-1.12	18.76	38.5	Pass
5	3	825.5	QPSK	15	LOW	22.61	28.88	6.27	13	-1.12	19.34	38.5	Pass
5	3	825.5	QPSK	8	LOW	22.50	28.34	5.84	13	-1.12	19.23	38.5	Pass
5	3	825.5	QPSK	8	MID	22.31	28.16	5.85	13	-1.12	19.04	38.5	Pass
5	3	825.5	QPSK	8	HIGH	22.22	28.05	5.83	13	-1.12	18.95	38.5	Pass
5	3	825.5	QPSK	1	LOW	23.20	28.04	4.84	13	-1.12	19.93	38.5	Pass
5	3	825.5	QPSK	1	MID	23.23	27.96	4.73	13	-1.12	19.96	38.5	Pass
5	3	825.5	QPSK	1	HIGH	23.16	27.90	4.74	13	-1.12	19.89	38.5	Pass
5	3	825.5	16QAM	15	LOW	21.28	28.12	6.85	13	-1.12	18.01	38.5	Pass
5	3	825.5	16QAM	8	LOW	21.30	27.85	6.55	13	-1.12	18.03	38.5	Pass
5	3	825.5	16QAM	8	MID	21.28	27.83	6.54	13	-1.12	18.01	38.5	Pass
5	3	825.5	16QAM	8	HIGH	21.31	27.78	6.47	13	-1.12	18.04	38.5	Pass
5	3	825.5	16QAM	1	LOW	22.25	27.61	5.35	13	-1.12	18.98	38.5	Pass
5	3	825.5	16QAM	1	MID	22.18	27.50	5.31	13	-1.12	18.91	38.5	Pass
5	3	825.5	16QAM	1	HIGH	22.13	27.45	5.32	13	-1.12	18.86	38.5	Pass
5	3	836.5	QPSK	15	LOW	22.05	27.92	5.87	13	-1.12	18.78	38.5	Pass
5	3	836.5	QPSK	8	LOW	22.18	27.99	5.81	13	-1.12	18.91	38.5	Pass
5	3	836.5	QPSK	8	MID	22.18	28.00	5.82	13	-1.12	18.91	38.5	Pass
5	3	836.5	QPSK	8	HIGH	22.12	27.85	5.73	13	-1.12	18.85	38.5	Pass
5	3	836.5	QPSK	1	LOW	23.04	27.98	4.94	13	-1.12	19.77	38.5	Pass
5	3	836.5	QPSK	1	MID	23.03	27.85	4.82	13	-1.12	19.76	38.5	Pass
5	3	836.5	QPSK	1	HIGH	23.00	27.72	4.71	13	-1.12	19.73	38.5	Pass

Band	Bandwidth (MHz)	UL Frequency (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)	Peak Power (dBm)	PAR (dB)	Limit (dB)	AntGain (dBi)	ERP (dBm)	Limit (dBm)	Conclusion
5	3	836.5	16QAM	15	LOW	21.14	27.70	6.56	13	-1.12	17.87	38.5	Pass
5	3	836.5	16QAM	8	LOW	21.28	28.09	6.81	13	-1.12	18.01	38.5	Pass
5	3	836.5	16QAM	8	MID	21.28	28.08	6.81	13	-1.12	18.01	38.5	Pass
5	3	836.5	16QAM	8	HIGH	21.27	28.00	6.73	13	-1.12	18.00	38.5	Pass
5	3	836.5	16QAM	1	LOW	22.71	28.81	6.10	13	-1.12	19.44	38.5	Pass
5	3	836.5	16QAM	1	MID	22.64	28.57	5.93	13	-1.12	19.37	38.5	Pass
5	3	836.5	16QAM	1	HIGH	22.61	28.36	5.75	13	-1.12	19.34	38.5	Pass
5	3	847.5	QPSK	15	LOW	21.98	27.99	6.01	13	-1.12	18.71	38.5	Pass
5	3	847.5	QPSK	8	LOW	22.01	28.08	6.07	13	-1.12	18.74	38.5	Pass
5	3	847.5	QPSK	8	MID	22.01	28.02	6.00	13	-1.12	18.74	38.5	Pass
5	3	847.5	QPSK	8	HIGH	21.97	28.01	6.04	13	-1.12	18.70	38.5	Pass
5	3	847.5	QPSK	1	LOW	23.02	28.17	5.15	13	-1.12	19.75	38.5	Pass
5	3	847.5	QPSK	1	MID	22.98	28.37	5.39	13	-1.12	19.71	38.5	Pass
5	3	847.5	QPSK	1	HIGH	22.98	28.46	5.48	13	-1.12	19.71	38.5	Pass
5	3	847.5	16QAM	15	LOW	21.00	27.55	6.56	13	-1.12	17.73	38.5	Pass
5	3	847.5	16QAM	8	LOW	20.99	27.54	6.55	13	-1.12	17.72	38.5	Pass
5	3	847.5	16QAM	8	MID	21.01	27.56	6.55	13	-1.12	17.74	38.5	Pass
5	3	847.5	16QAM	8	HIGH	20.98	27.50	6.52	13	-1.12	17.71	38.5	Pass
5	3	847.5	16QAM	1	LOW	22.15	27.09	4.93	13	-1.12	18.88	38.5	Pass
5	3	847.5	16QAM	1	MID	22.10	27.14	5.04	13	-1.12	18.83	38.5	Pass
5	3	847.5	16QAM	1	HIGH	22.15	27.24	5.09	13	-1.12	18.88	38.5	Pass
5	5	826.5	QPSK	25	LOW	22.63	28.87	6.23	13	-1.12	19.36	38.5	Pass
5	5	826.5	QPSK	12	LOW	22.65	28.46	5.81	13	-1.12	19.38	38.5	Pass
5	5	826.5	QPSK	12	MID	22.62	28.49	5.87	13	-1.12	19.35	38.5	Pass
5	5	826.5	QPSK	12	HIGH	22.65	28.45	5.81	13	-1.12	19.38	38.5	Pass
5	5	826.5	QPSK	1	LOW	23.39	28.50	5.11	13	-1.12	20.12	38.5	Pass
5	5	826.5	QPSK	1	MID	23.58	28.41	4.83	13	-1.12	20.31	38.5	Pass
5	5	826.5	QPSK	1	HIGH	23.34	28.36	5.03	13	-1.12	20.07	38.5	Pass
5	5	826.5	16QAM	25	LOW	21.45	28.65	7.20	13	-1.12	18.18	38.5	Pass
5	5	826.5	16QAM	12	LOW	21.51	28.46	6.95	13	-1.12	18.24	38.5	Pass
5	5	826.5	16QAM	12	MID	21.45	28.42	6.96	13	-1.12	18.18	38.5	Pass
5	5	826.5	16QAM	12	HIGH	21.45	28.35	6.90	13	-1.12	18.18	38.5	Pass
5	5	826.5	16QAM	1	LOW	22.22	28.24	6.01	13	-1.12	18.95	38.5	Pass
5	5	826.5	16QAM	1	MID	22.33	28.15	5.82	13	-1.12	19.06	38.5	Pass
5	5	826.5	16QAM	1	HIGH	22.26	28.16	5.91	13	-1.12	18.99	38.5	Pass
5	5	836.5	QPSK	25	LOW	22.40	28.44	6.04	13	-1.12	19.13	38.5	Pass
5	5	836.5	QPSK	12	LOW	22.34	28.15	5.81	13	-1.12	19.07	38.5	Pass
5	5	836.5	QPSK	12	MID	22.37	28.17	5.79	13	-1.12	19.10	38.5	Pass
5	5	836.5	QPSK	12	HIGH	22.29	27.94	5.65	13	-1.12	19.02	38.5	Pass
5	5	836.5	QPSK	1	LOW	23.08	28.96	5.89	13	-1.12	19.81	38.5	Pass
5	5	836.5	QPSK	1	MID	23.15	28.68	5.53	13	-1.12	19.88	38.5	Pass

Band	Bandwidth (MHz)	UL Frequency (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)	Peak Power (dBm)	PAR (dB)	Limit (dB)	AntGain (dBi)	ERP (dBm)	Limit (dBm)	Conclusion
5	5	836.5	QPSK	1	HIGH	22.96	28.24	5.28	13	-1.12	19.69	38.5	Pass
5	5	836.5	16QAM	25	LOW	21.25	28.17	6.91	13	-1.12	17.98	38.5	Pass
5	5	836.5	16QAM	12	LOW	21.22	28.81	7.59	13	-1.12	17.95	38.5	Pass
5	5	836.5	16QAM	12	MID	21.41	29.02	7.61	13	-1.12	18.14	38.5	Pass
5	5	836.5	16QAM	12	HIGH	21.35	28.63	7.28	13	-1.12	18.08	38.5	Pass
5	5	836.5	16QAM	1	LOW	21.97	27.55	5.58	13	-1.12	18.70	38.5	Pass
5	5	836.5	16QAM	1	MID	22.00	27.46	5.46	13	-1.12	18.73	38.5	Pass
5	5	836.5	16QAM	1	HIGH	21.87	27.19	5.32	13	-1.12	18.60	38.5	Pass
5	5	846.5	QPSK	25	LOW	21.97	28.70	6.73	13	-1.12	18.70	38.5	Pass
5	5	846.5	QPSK	12	LOW	22.10	28.17	6.07	13	-1.12	18.83	38.5	Pass
5	5	846.5	QPSK	12	MID	22.02	28.16	6.14	13	-1.12	18.75	38.5	Pass
5	5	846.5	QPSK	12	HIGH	21.94	28.43	6.49	13	-1.12	18.67	38.5	Pass
5	5	846.5	QPSK	1	LOW	22.96	27.86	4.90	13	-1.12	19.69	38.5	Pass
5	5	846.5	QPSK	1	MID	23.02	28.29	5.27	13	-1.12	19.75	38.5	Pass
5	5	846.5	QPSK	1	HIGH	22.92	28.41	5.49	13	-1.12	19.65	38.5	Pass
5	5	846.5	16QAM	25	LOW	21.01	28.42	7.41	13	-1.12	17.74	38.5	Pass
5	5	846.5	16QAM	12	LOW	21.10	27.89	6.78	13	-1.12	17.83	38.5	Pass
5	5	846.5	16QAM	12	MID	21.11	27.85	6.74	13	-1.12	17.84	38.5	Pass
5	5	846.5	16QAM	12	HIGH	20.96	27.87	6.91	13	-1.12	17.69	38.5	Pass
5	5	846.5	16QAM	1	LOW	22.20	27.62	5.42	13	-1.12	18.93	38.5	Pass
5	5	846.5	16QAM	1	MID	22.29	28.02	5.73	13	-1.12	19.02	38.5	Pass
5	5	846.5	16QAM	1	HIGH	22.22	28.12	5.90	13	-1.12	18.95	38.5	Pass
5	10	829	QPSK	50	LOW	22.70	29.09	6.39	13	-1.12	19.43	38.5	Pass
5	10	829	QPSK	25	LOW	22.72	29.21	6.48	13	-1.12	19.45	38.5	Pass
5	10	829	QPSK	25	MID	22.70	29.19	6.49	13	-1.12	19.43	38.5	Pass
5	10	829	QPSK	25	HIGH	22.72	29.44	6.72	13	-1.12	19.45	38.5	Pass
5	10	829	QPSK	1	LOW	23.71	28.47	4.75	13	-1.12	20.44	38.5	Pass
5	10	829	QPSK	1	MID	23.86	28.53	4.68	13	-1.12	20.59	38.5	Pass
5	10	829	QPSK	1	HIGH	23.55	28.55	4.99	13	-1.12	20.28	38.5	Pass
5	10	829	16QAM	50	LOW	21.76	29.42	7.66	13	-1.12	18.49	38.5	Pass
5	10	829	16QAM	25	LOW	21.86	28.90	7.04	13	-1.12	18.59	38.5	Pass
5	10	829	16QAM	25	MID	21.83	28.90	7.06	13	-1.12	18.56	38.5	Pass
5	10	829	16QAM	25	HIGH	21.89	29.20	7.31	13	-1.12	18.62	38.5	Pass
5	10	829	16QAM	1	LOW	22.49	27.88	5.39	13	-1.12	19.22	38.5	Pass
5	10	829	16QAM	1	MID	22.75	28.03	5.28	13	-1.12	19.48	38.5	Pass
5	10	829	16QAM	1	HIGH	22.43	27.92	5.49	13	-1.12	19.16	38.5	Pass
5	10	836.5	QPSK	50	LOW	22.62	28.81	6.19	13	-1.12	19.35	38.5	Pass
5	10	836.5	QPSK	25	LOW	22.47	28.86	6.39	13	-1.12	19.20	38.5	Pass
5	10	836.5	QPSK	25	MID	22.43	28.89	6.46	13	-1.12	19.16	38.5	Pass
5	10	836.5	QPSK	25	HIGH	22.38	28.42	6.04	13	-1.12	19.11	38.5	Pass
5	10	836.5	QPSK	1	LOW	23.24	28.24	5.01	13	-1.12	19.97	38.5	Pass

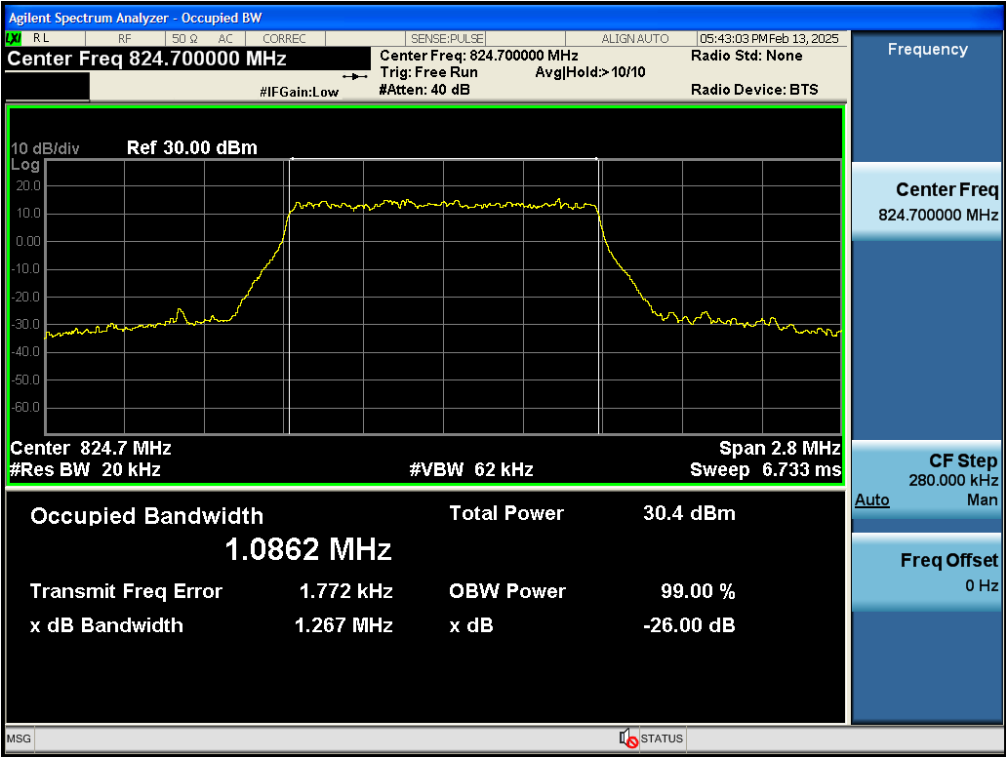
Band	Bandwidth (MHz)	UL Frequency (MHz)	Modulation	RB Size	RB Offset	Average Power (dBm)	Peak Power (dBm)	PAR (dB)	Limit (dB)	AntGain (dBi)	ERP (dBm)	Limit (dBm)	Conclusion
5	10	836.5	QPSK	1	MID	23.31	28.07	4.76	13	-1.12	20.04	38.5	Pass
5	10	836.5	QPSK	1	HIGH	23.18	27.51	4.33	13	-1.12	19.91	38.5	Pass
5	10	836.5	16QAM	50	LOW	21.43	29.05	7.61	13	-1.12	18.16	38.5	Pass
5	10	836.5	16QAM	25	LOW	21.56	29.01	7.46	13	-1.12	18.29	38.5	Pass
5	10	836.5	16QAM	25	MID	21.48	28.93	7.46	13	-1.12	18.21	38.5	Pass
5	10	836.5	16QAM	25	HIGH	21.58	28.40	6.82	13	-1.12	18.31	38.5	Pass
5	10	836.5	16QAM	1	LOW	22.83	29.04	6.20	13	-1.12	19.56	38.5	Pass
5	10	836.5	16QAM	1	MID	22.88	28.72	5.84	13	-1.12	19.61	38.5	Pass
5	10	836.5	16QAM	1	HIGH	22.61	27.91	5.29	13	-1.12	19.34	38.5	Pass
5	10	844	QPSK	50	LOW	22.14	28.21	6.07	13	-1.12	18.87	38.5	Pass
5	10	844	QPSK	25	LOW	22.35	27.97	5.62	13	-1.12	19.08	38.5	Pass
5	10	844	QPSK	25	MID	22.30	27.98	5.67	13	-1.12	19.03	38.5	Pass
5	10	844	QPSK	25	HIGH	22.08	28.24	6.16	13	-1.12	18.81	38.5	Pass
5	10	844	QPSK	1	LOW	23.10	27.87	4.77	13	-1.12	19.83	38.5	Pass
5	10	844	QPSK	1	MID	23.13	27.88	4.75	13	-1.12	19.86	38.5	Pass
5	10	844	QPSK	1	HIGH	23.00	28.46	5.46	13	-1.12	19.73	38.5	Pass
5	10	844	16QAM	50	LOW	21.15	28.10	6.95	13	-1.12	17.88	38.5	Pass
5	10	844	16QAM	25	LOW	21.24	28.03	6.79	13	-1.12	17.97	38.5	Pass
5	10	844	16QAM	25	MID	21.26	27.98	6.72	13	-1.12	17.99	38.5	Pass
5	10	844	16QAM	25	HIGH	21.08	28.23	7.15	13	-1.12	17.81	38.5	Pass
5	10	844	16QAM	1	LOW	22.29	27.03	4.74	13	-1.12	19.02	38.5	Pass
5	10	844	16QAM	1	MID	22.27	27.01	4.74	13	-1.12	19.00	38.5	Pass
5	10	844	16QAM	1	HIGH	22.28	27.00	4.72	13	-1.12	19.01	38.5	Pass

Appendix B: Occupied bandwidth

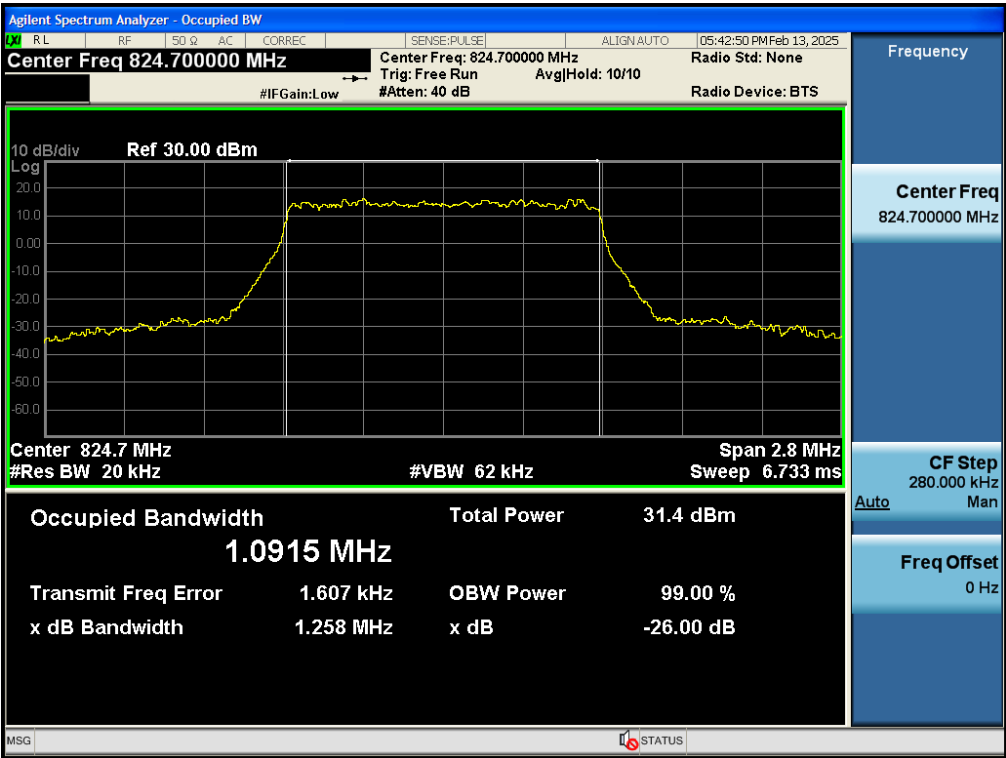
Test Result

Band	Bandwidth (MHz)	UL Frequency (MHz)	Modulation	RB Size	RB Offset	Occupied Bandwidth (MHz)	Emission Bandwidth (MHz)	Limit
5	1.4	824.7	QPSK	6	LOW	1.092	1.258	No limit
5	1.4	824.7	16QAM	6	LOW	1.086	1.267	No limit
5	1.4	836.5	QPSK	6	LOW	1.085	1.254	No limit
5	1.4	836.5	16QAM	6	LOW	1.087	1.295	No limit
5	1.4	848.3	QPSK	6	LOW	1.086	1.282	No limit
5	1.4	848.3	16QAM	6	LOW	1.08	1.254	No limit
5	3	825.5	QPSK	15	LOW	2.68	2.866	No limit
5	3	825.5	16QAM	15	LOW	2.675	2.858	No limit
5	3	836.5	QPSK	15	LOW	2.678	2.877	No limit
5	3	836.5	16QAM	15	LOW	2.673	2.856	No limit
5	3	847.5	QPSK	15	LOW	2.683	2.867	No limit
5	3	847.5	16QAM	15	LOW	2.678	2.859	No limit
5	5	826.5	QPSK	25	LOW	4.467	4.808	No limit
5	5	826.5	16QAM	25	LOW	4.469	4.842	No limit
5	5	836.5	QPSK	25	LOW	4.481	4.843	No limit
5	5	836.5	16QAM	25	LOW	4.469	4.81	No limit
5	5	846.5	QPSK	25	LOW	4.484	4.842	No limit
5	5	846.5	16QAM	25	LOW	4.482	4.85	No limit
5	10	829	QPSK	50	LOW	8.946	9.59	No limit
5	10	829	16QAM	50	LOW	8.947	9.598	No limit
5	10	836.5	QPSK	50	LOW	8.951	9.617	No limit
5	10	836.5	16QAM	50	LOW	8.944	9.475	No limit
5	10	844	QPSK	50	LOW	8.932	9.581	No limit
5	10	844	16QAM	50	LOW	8.955	9.51	No limit

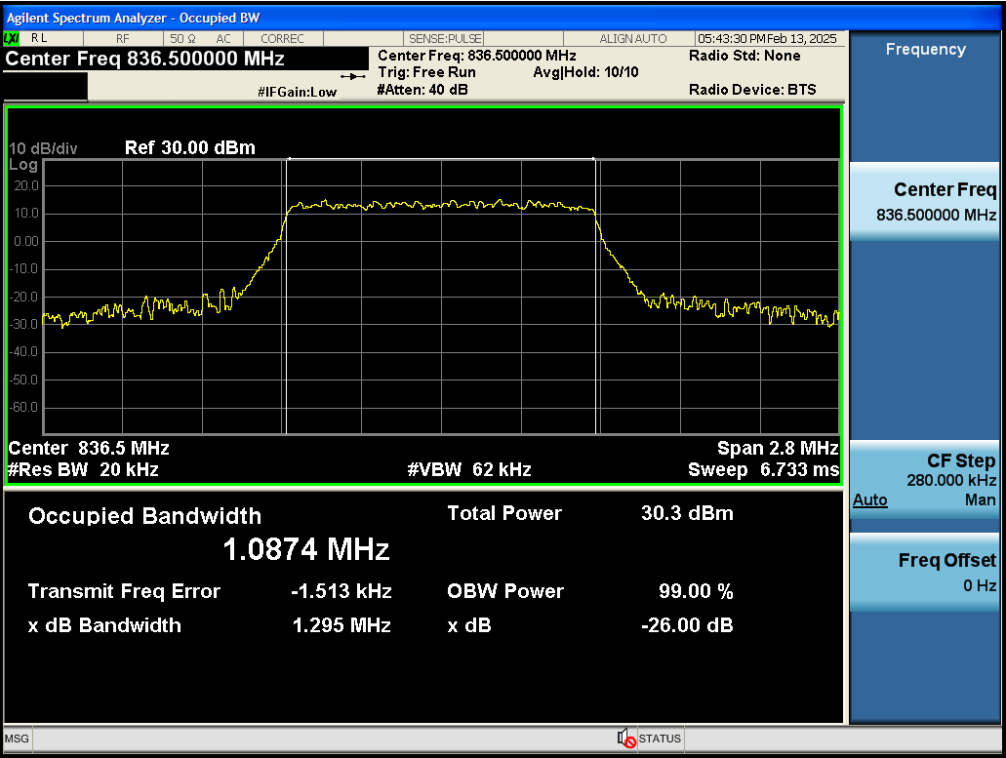
Test Graphs



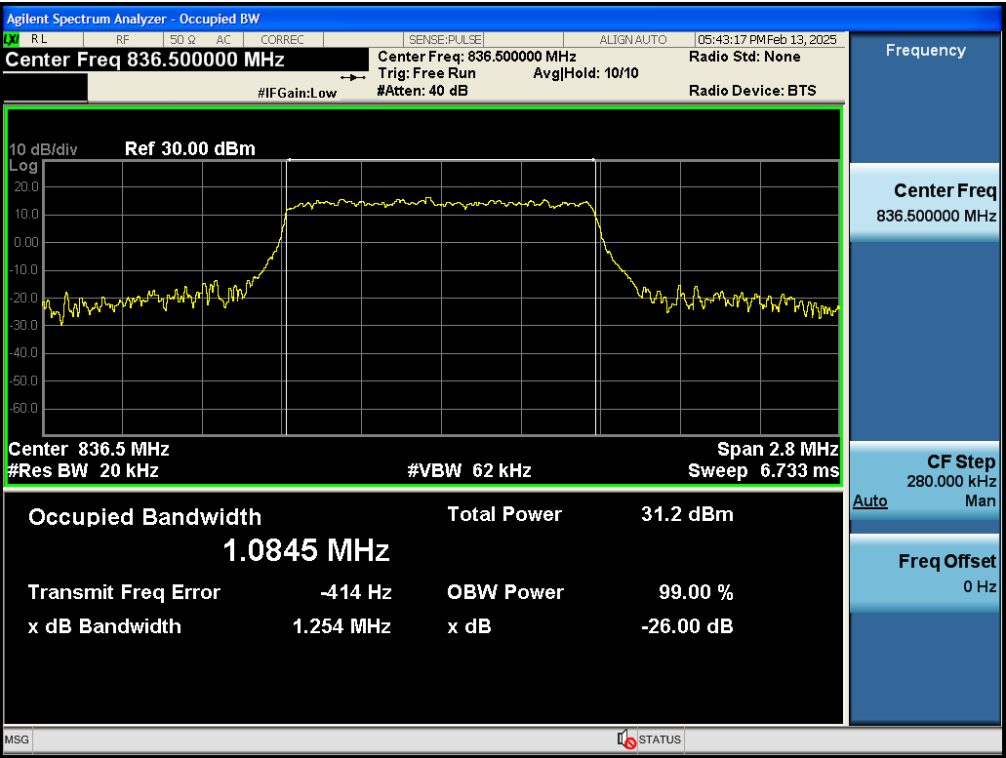
Test_Graph_band5_824.7MHz_1.4M_16QAM_6RB#LOW_OBW&EBW



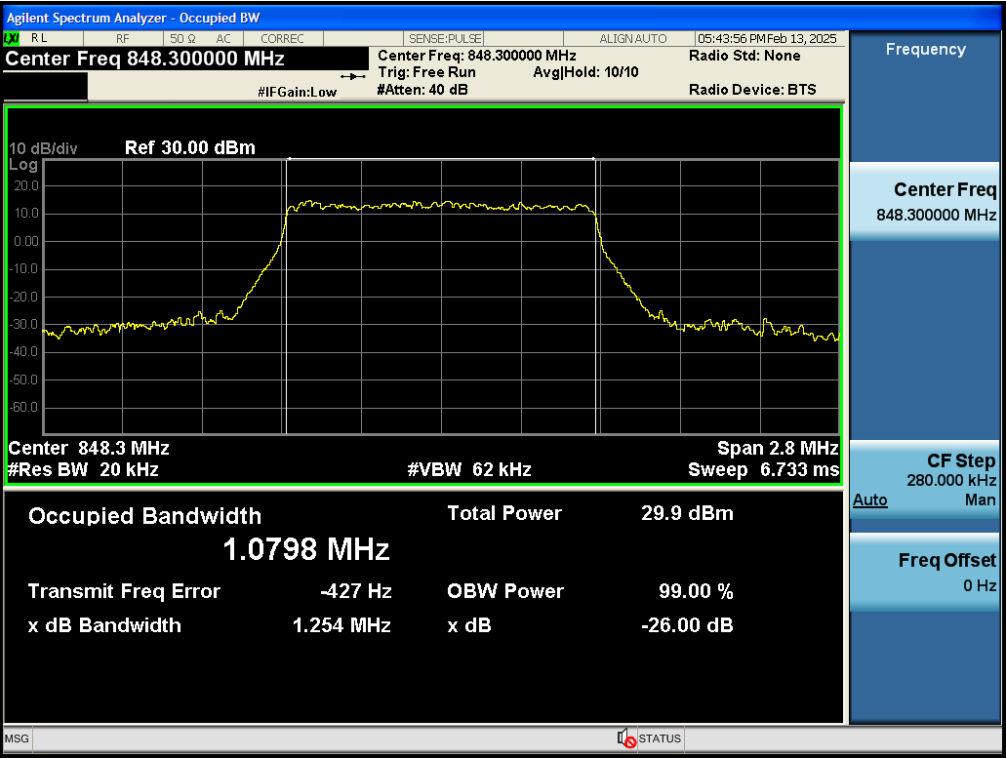
Test_Graph_band5_824.7MHz_1.4M_QPSK_6RB#LOW_OBW&EBW



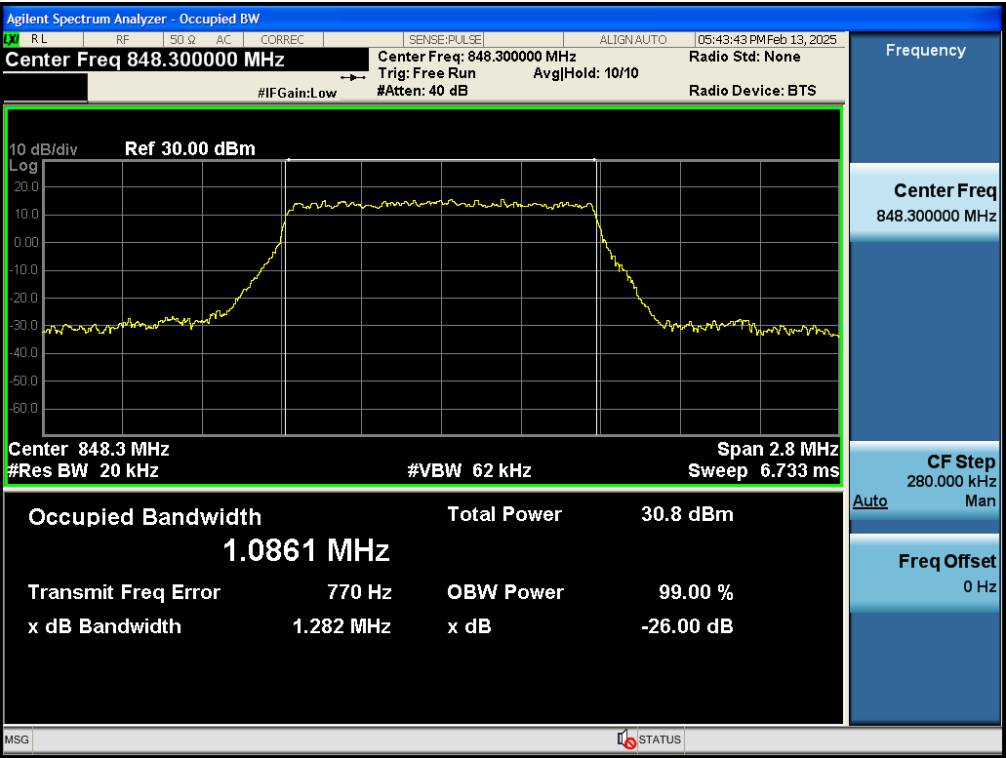
Test_Graph_band5_836.5MHz_1.4M_16QAM_6RB#LOW_OBW&EBW



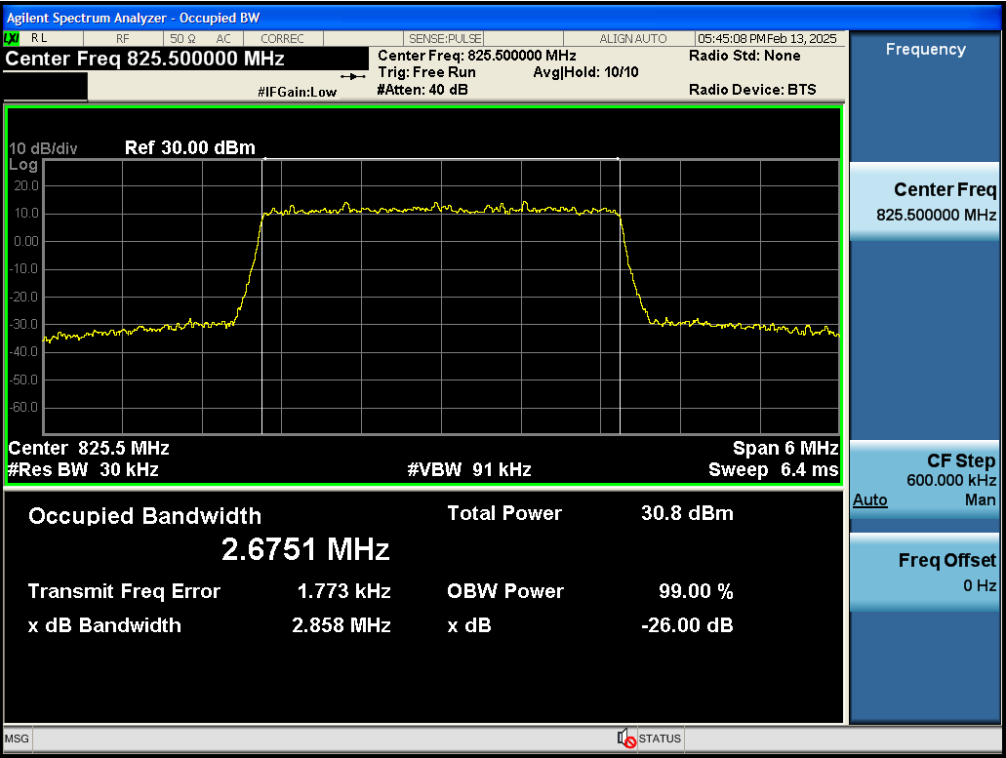
Test_Graph_band5_836.5MHz_1.4M_QPSK_6RB#LOW_OBW&EBW



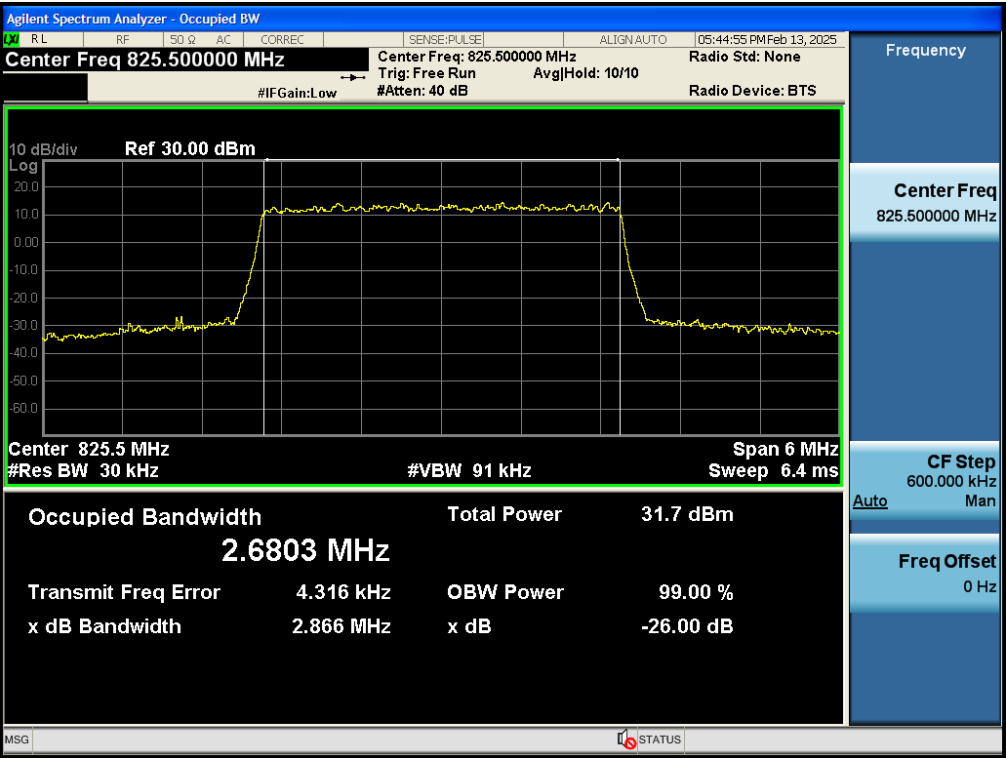
Test_Graph_band5_848.3MHz_1.4M_16QAM_6RB#LOW_OBW&EBW



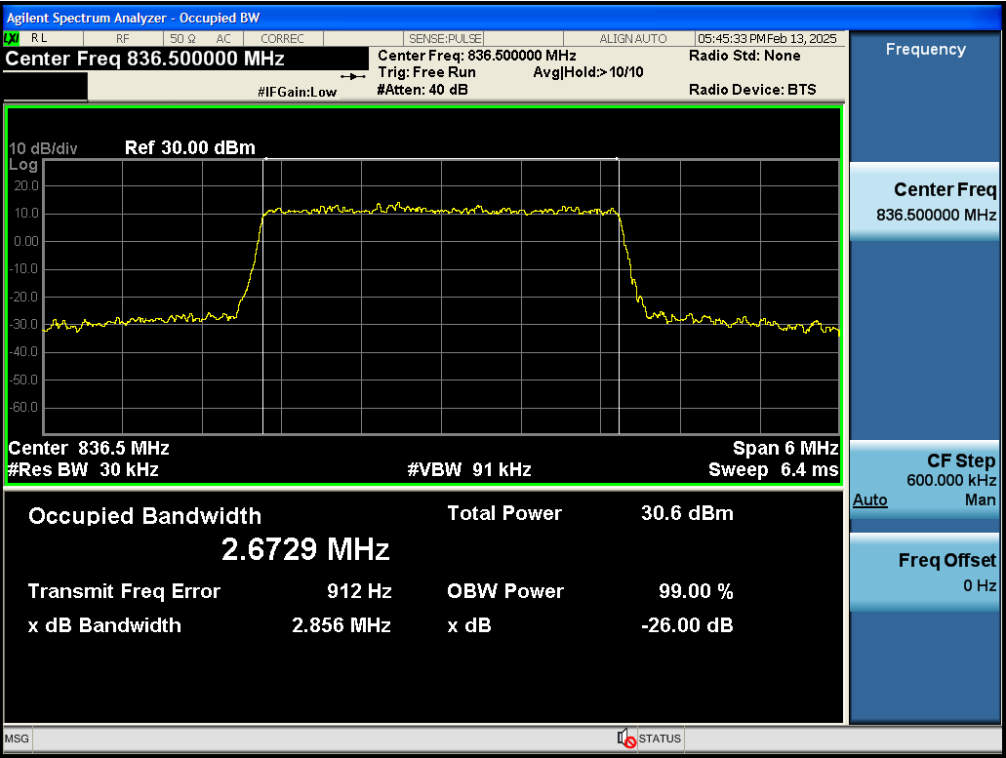
Test_Graph_band5_848.3MHz_1.4M_QPSK_6RB#LOW_OBW&EBW



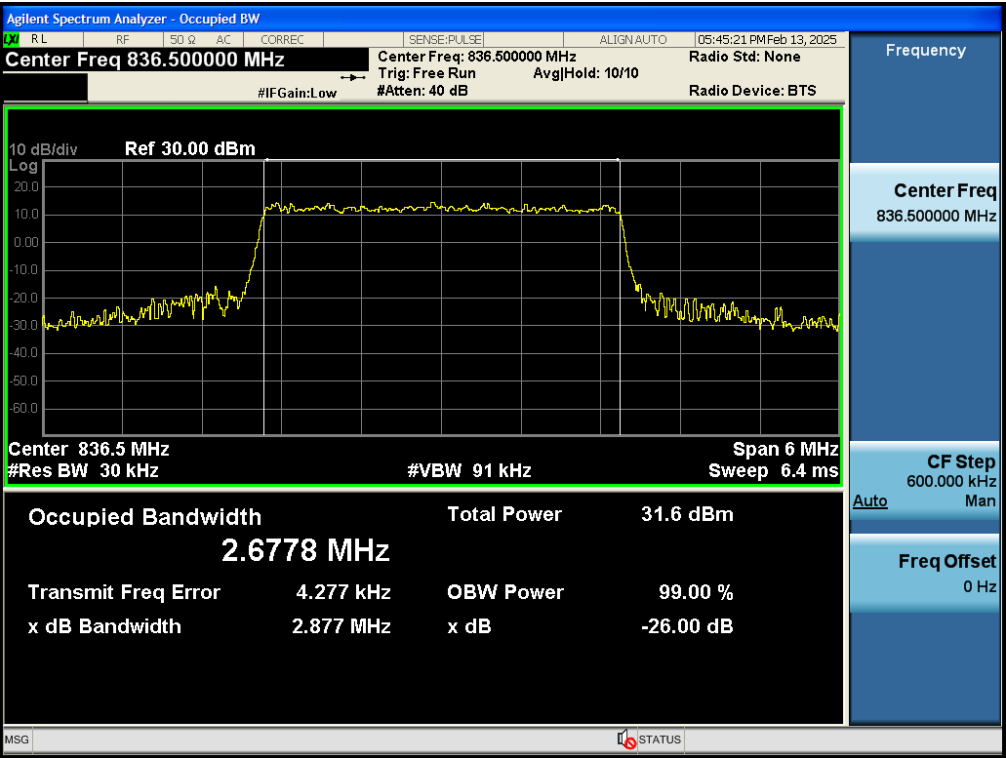
Test_Graph_band5_825.5MHz_3M_16QAM_15RB#LOW_OBW&EBW



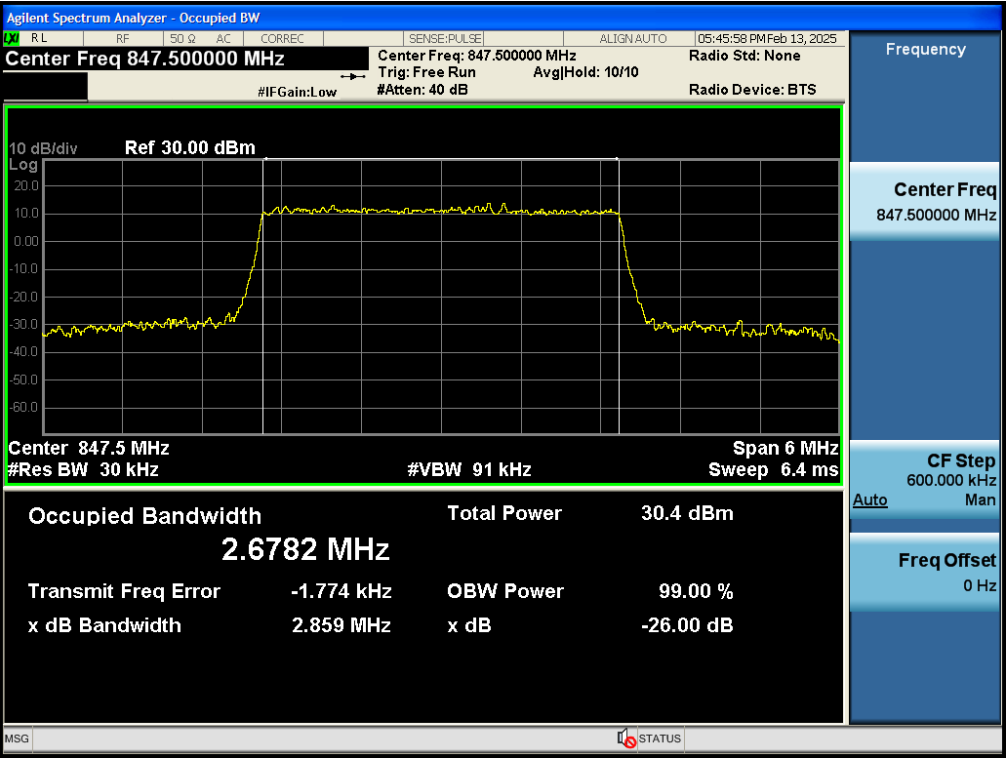
Test_Graph_band5_825.5MHz_3M_QPSK_15RB#LOW_OBW&EBW



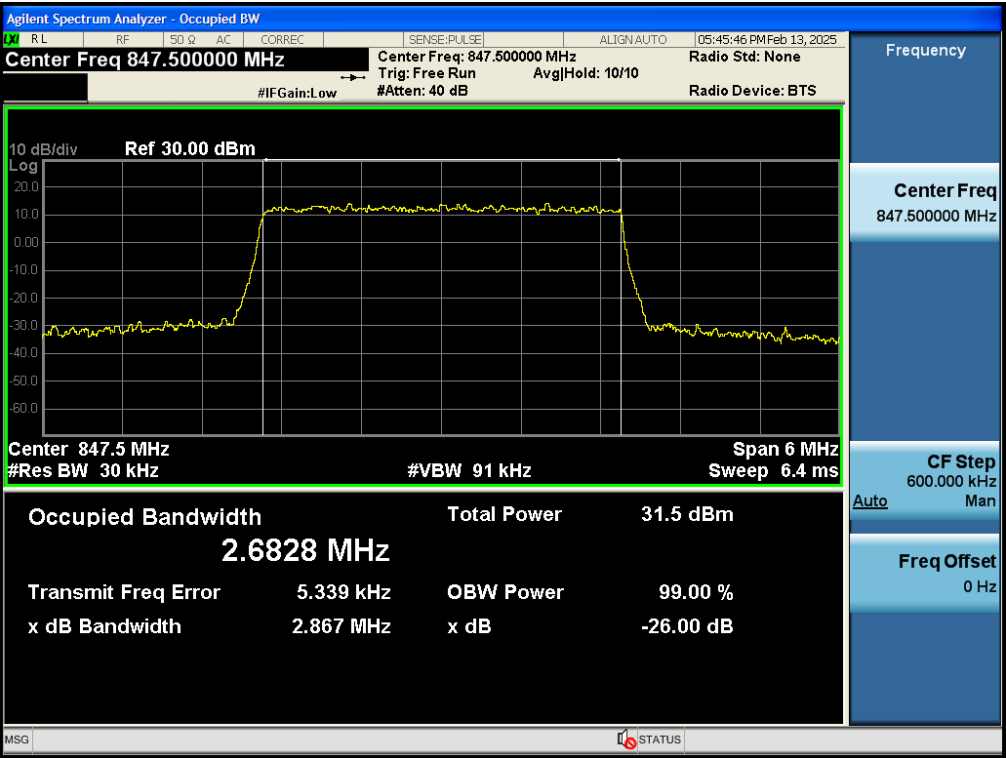
Test_Graph_band5_836.5MHz_3M_16QAM_15RB#LOW_OBW&EBW



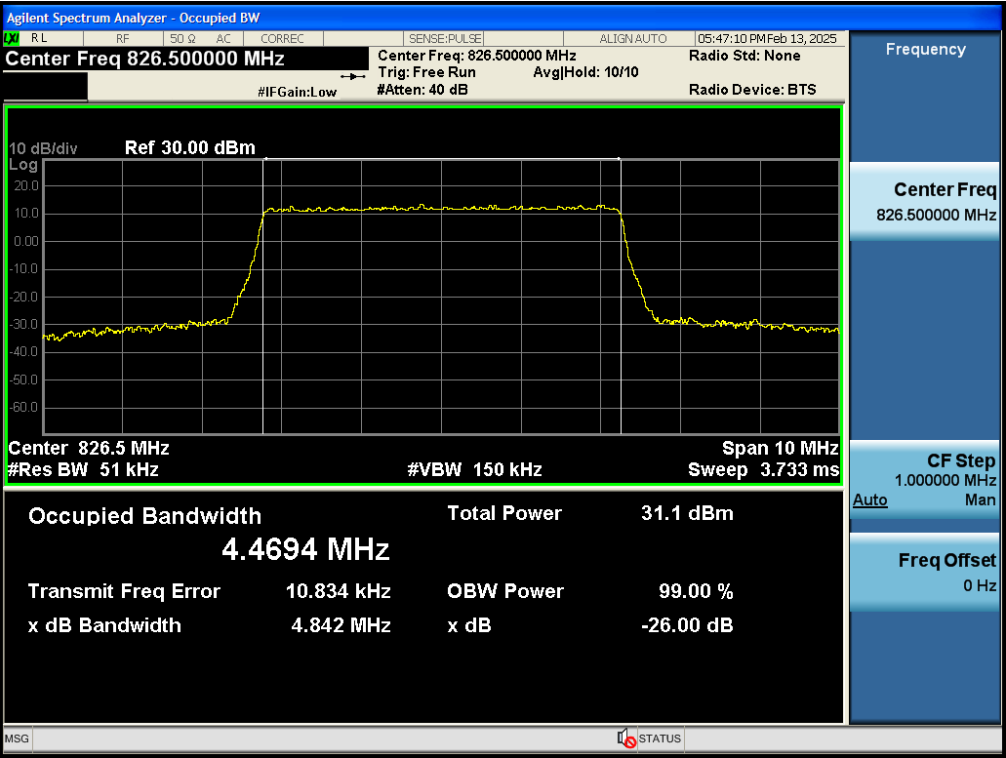
Test_Graph_band5_836.5MHz_3M_QPSK_15RB#LOW_OBW&EBW



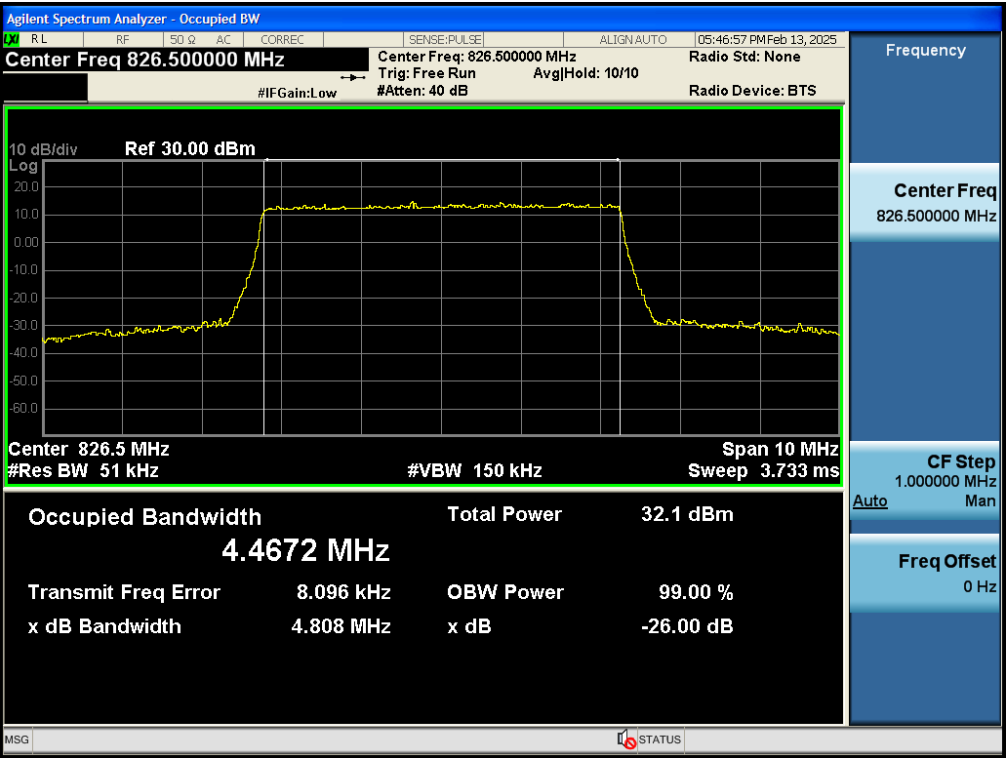
Test_Graph_band5_847.5MHz_3M_16QAM_15RB#LOW_OBW&EBW



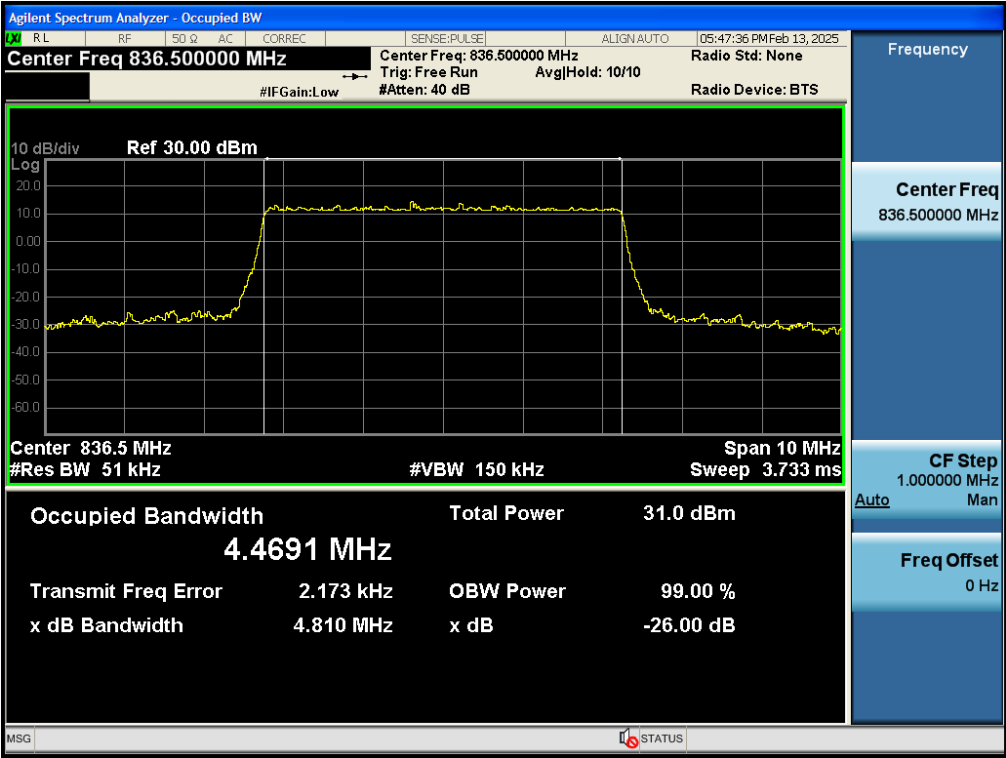
Test_Graph_band5_847.5MHz_3M_QPSK_15RB#LOW_OBW&EBW



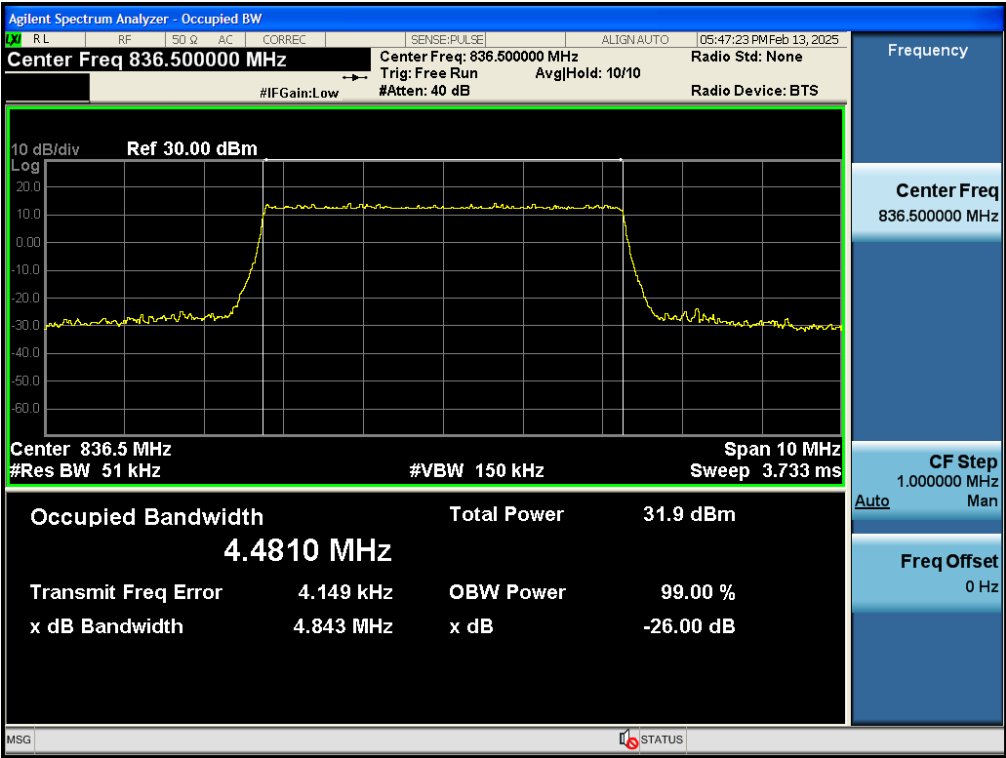
Test_Graph_band5_826.5MHz_5M_16QAM_25RB#LOW_OBW&EBW



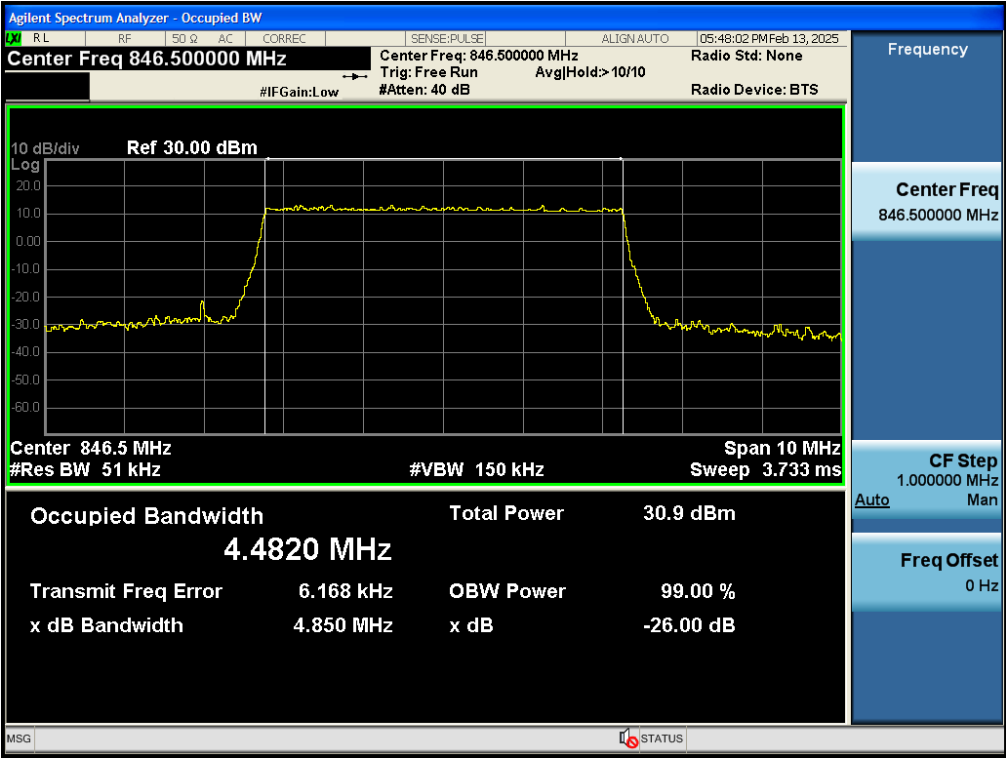
Test_Graph_band5_826.5MHz_5M_QPSK_25RB#LOW_OBW&EBW



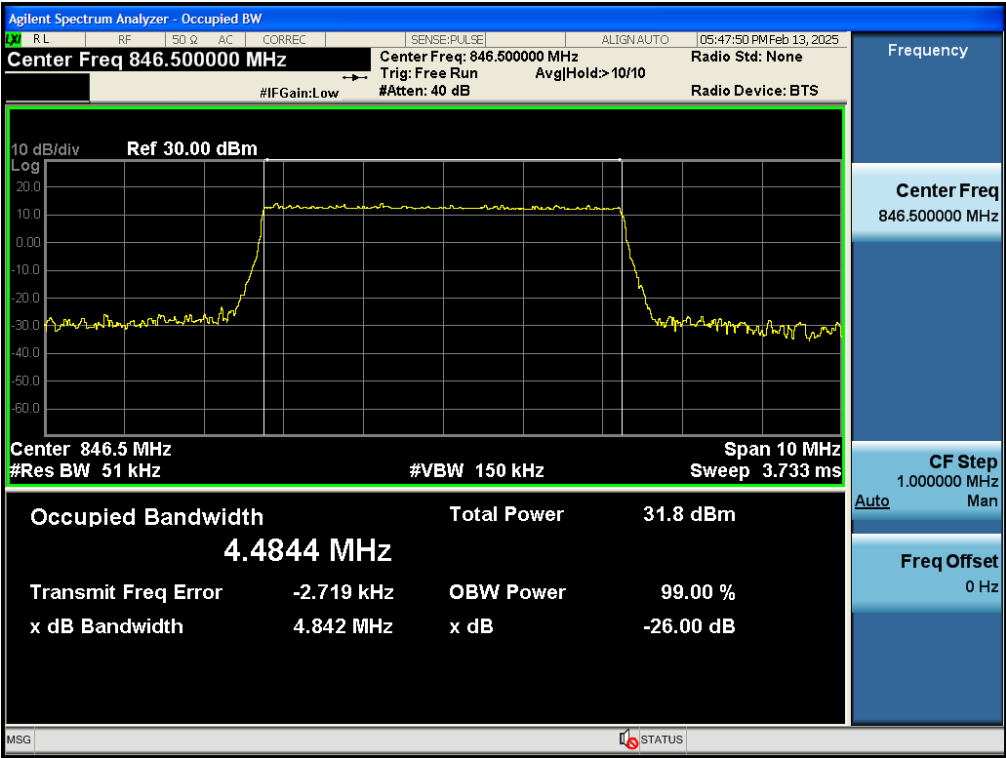
Test_Graph_band5_836.5MHz_5M_16QAM_25RB#LOW_OBW&EBW



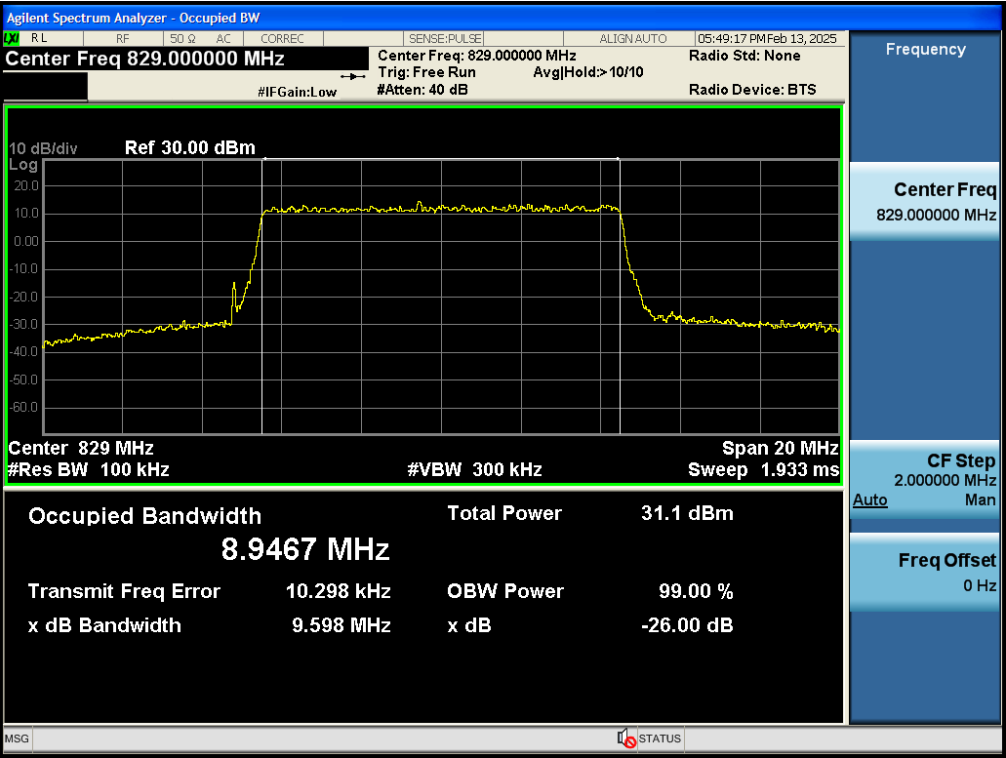
Test_Graph_band5_836.5MHz_5M_QPSK_25RB#LOW_OBW&EBW



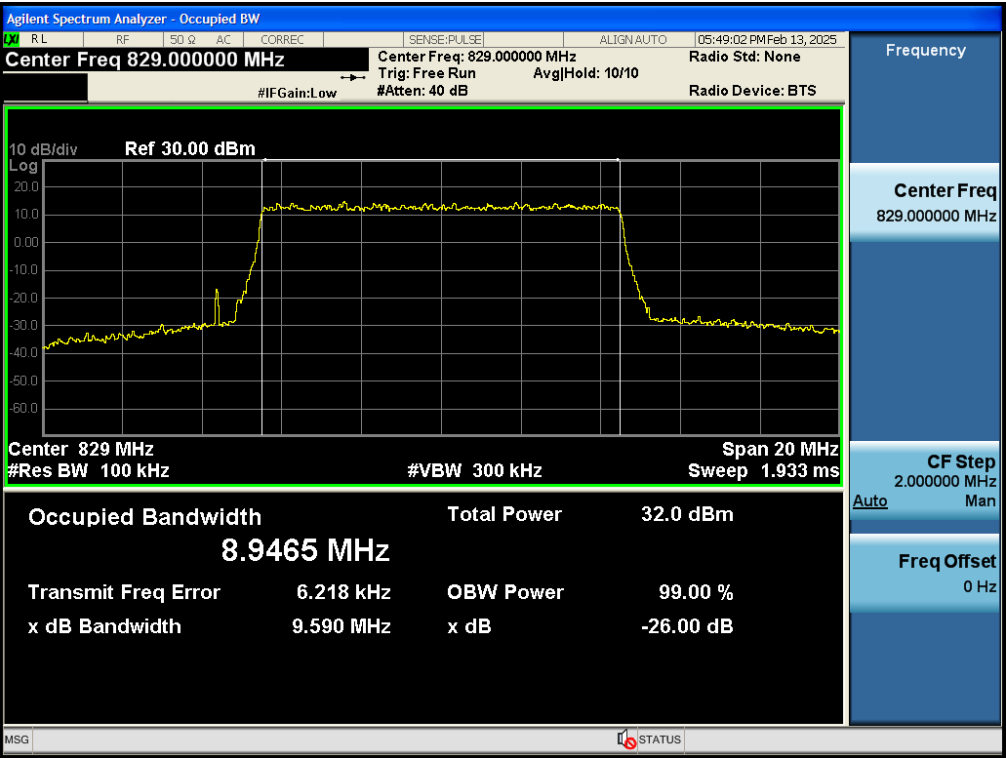
Test_Graph_band5_846.5MHz_5M_16QAM_25RB#LOW_OBW&EBW



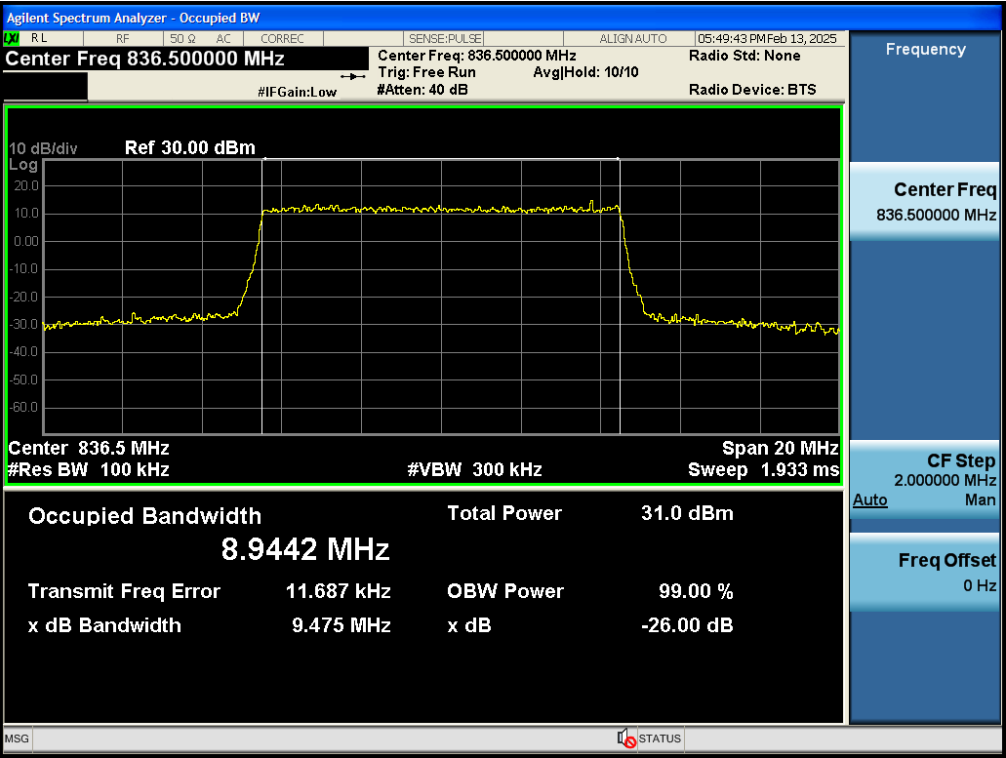
Test_Graph_band5_846.5MHz_5M_QPSK_25RB#LOW_OBW&EBW



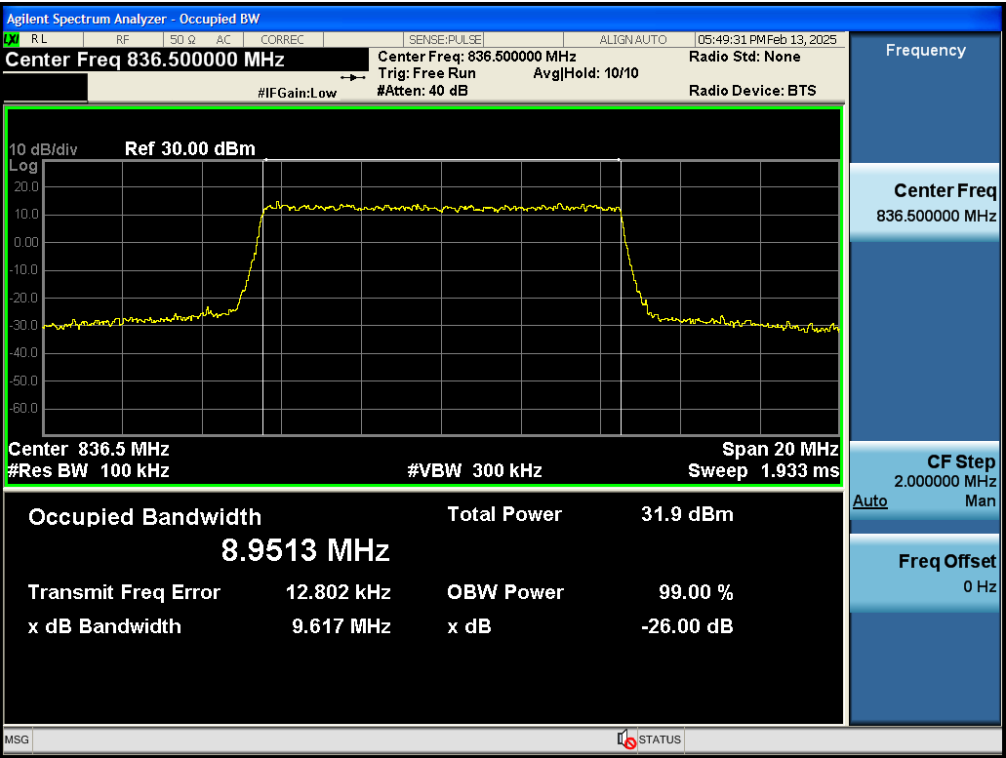
Test_Graph_band5_829MHz_10M_16QAM_50RB#LOW_OBW&EBW



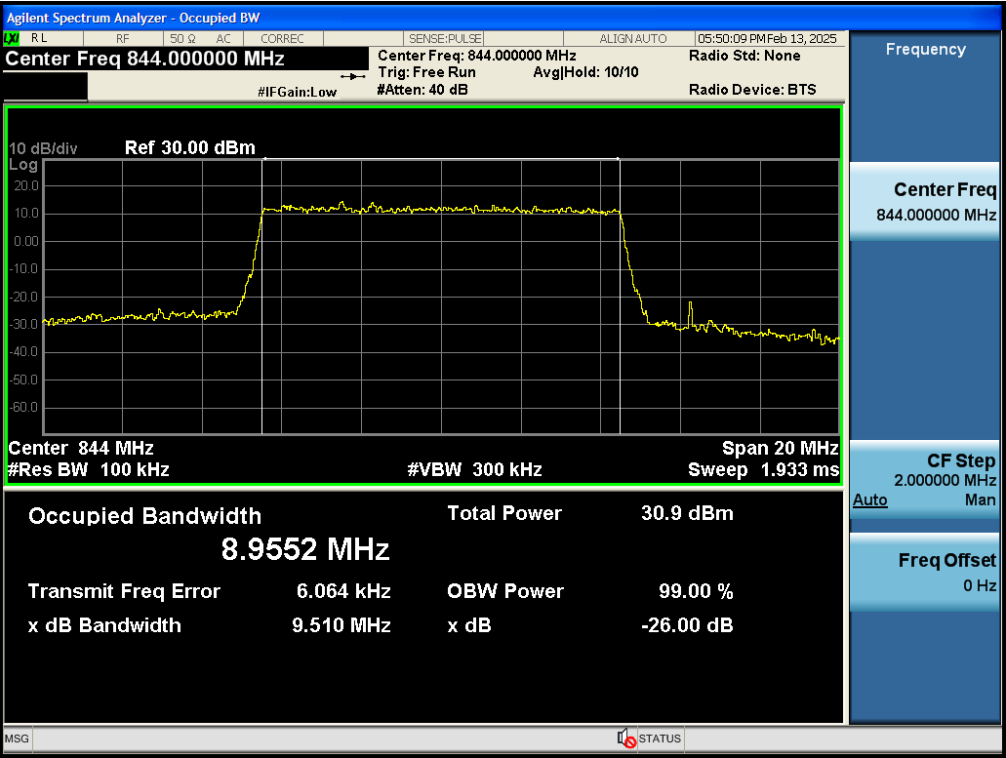
Test_Graph_band5_829MHz_10M_QPSK_50RB#LOW_OBW&EBW



Test_Graph_band5_836.5MHz_10M_16QAM_50RB#LOW_OBW&EBW



Test_Graph_band5_836.5MHz_10M_QPSK_50RB#LOW_OBW&EBW



Test_Graph_band5_844MHz_10M_16QAM_50RB#LOW_OBW&EBW



Test_Graph_band5_844MHz_10M_QPSK_50RB#LOW_OBW&EBW

Appendix C: Band edge emissions

Test Result

Band	Bandwidth (MHz)	UL Frequency (MHz)	Modulation	RB Size	RB Offset	Conclusion
5	1.4	824.7	QPSK	6	LOW	Pass
5	1.4	824.7	16QAM	6	LOW	Pass
5	1.4	848.3	QPSK	6	LOW	Pass
5	1.4	848.3	16QAM	6	LOW	Pass
5	3	825.5	QPSK	15	LOW	Pass
5	3	825.5	16QAM	15	LOW	Pass
5	3	847.5	QPSK	15	LOW	Pass
5	3	847.5	16QAM	15	LOW	Pass
5	5	826.5	QPSK	25	LOW	Pass
5	5	826.5	16QAM	25	LOW	Pass
5	5	846.5	QPSK	25	LOW	Pass
5	5	846.5	16QAM	25	LOW	Pass
5	10	829	QPSK	50	LOW	Pass
5	10	829	16QAM	50	LOW	Pass
5	10	844	QPSK	50	LOW	Pass
5	10	844	16QAM	50	HIGH	Pass

Test Graphs



Test_Graph_band5_824.7MHz_1.4M_16QAM_6RB#LOW_Band edge



Test_Graph_band5_824.7MHz_1.4M_QPSK_6RB#LOW_Band edge



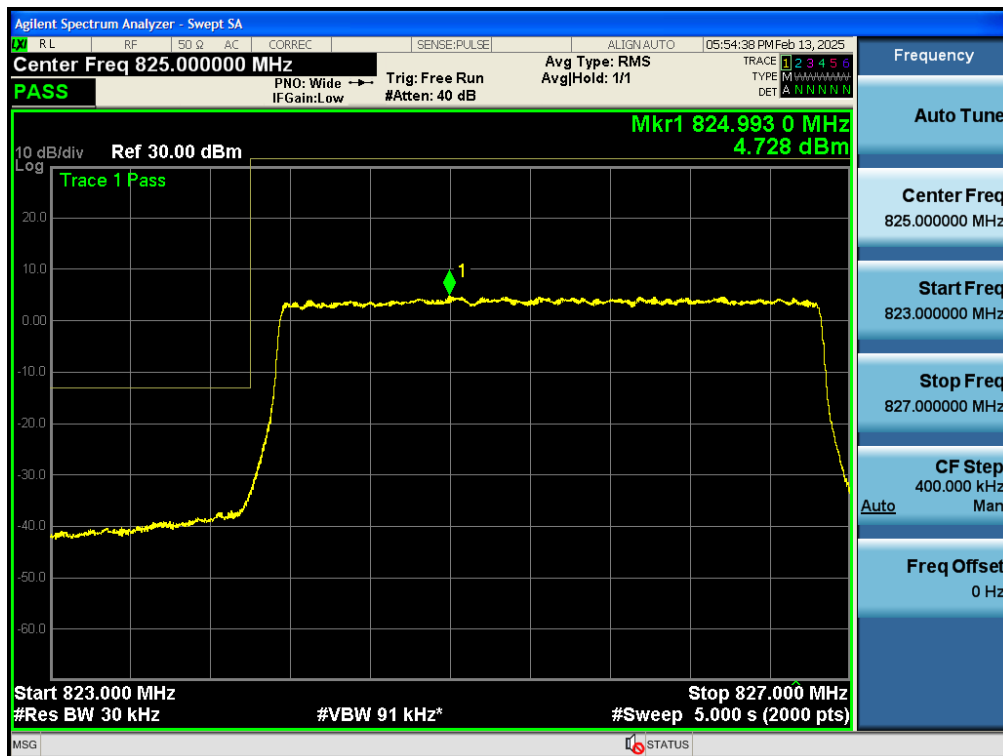
Test_Graph_band5_848.3MHz_1.4M_16QAM_6RB#LOW_Band edge



Test_Graph_band5_848.3MHz_1.4M_QPSK_6RB#LOW_Band edge



Test_Graph_band5_825.5MHz_3M_16QAM_15RB#LOW_Band edge



Test_Graph_band5_825.5MHz_3M_QPSK_15RB#LOW_Band edge



Test_Graph_band5_847.5MHz_3M_16QAM_15RB#LOW_Band edge



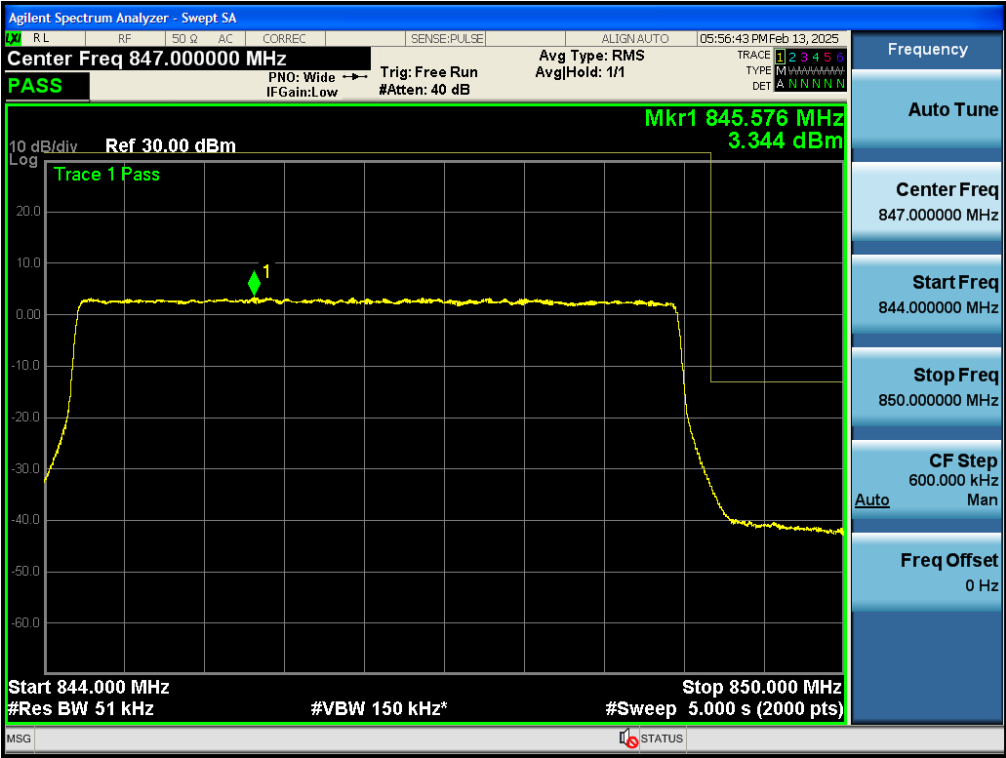
Test_Graph_band5_847.5MHz_3M_QPSK_15RB#LOW_Band edge



Test_Graph_band5_826.5MHz_5M_16QAM_25RB#LOW_Band edge



Test_Graph_band5_826.5MHz_5M_QPSK_25RB#LOW_Band edge



Test_Graph_band5_846.5MHz_5M_16QAM_25RB#LOW_Band edge



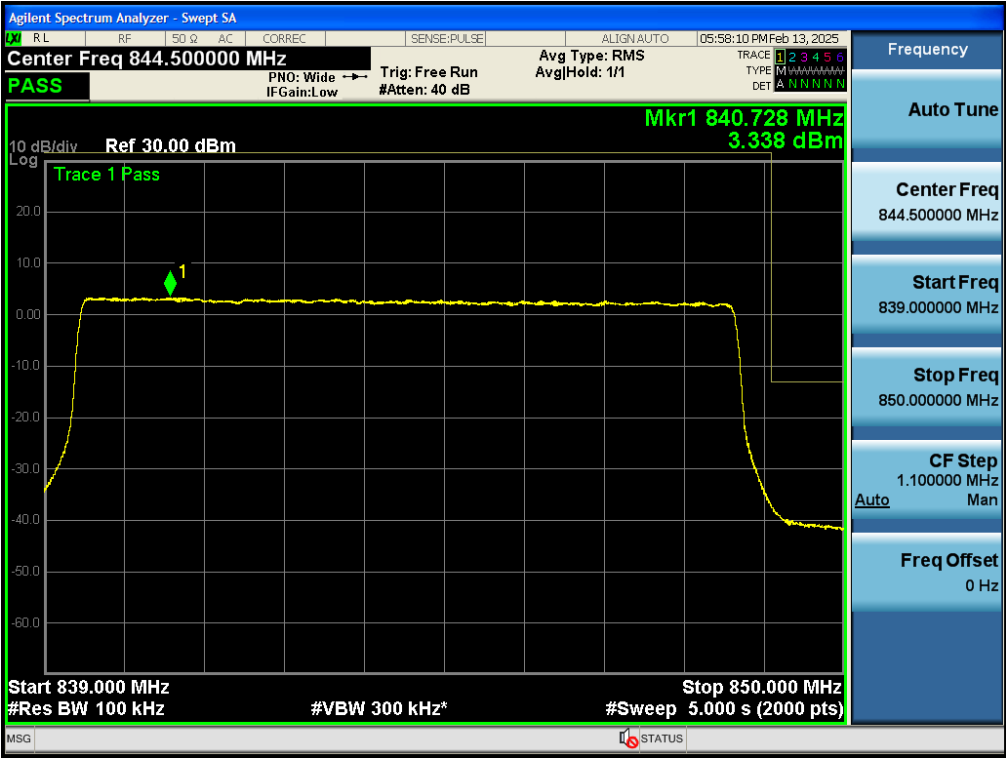
Test_Graph_band5_846.5MHz_5M_QPSK_25RB#LOW_Band edge



Test_Graph_band5_829MHz_10M_16QAM_50RB#LOW_Band edge



Test_Graph_band5_829MHz_10M_QPSK_50RB#LOW_Band edge



Test_Graph_band5_844MHz_10M_16QAM_50RB#HIGH_Band edge



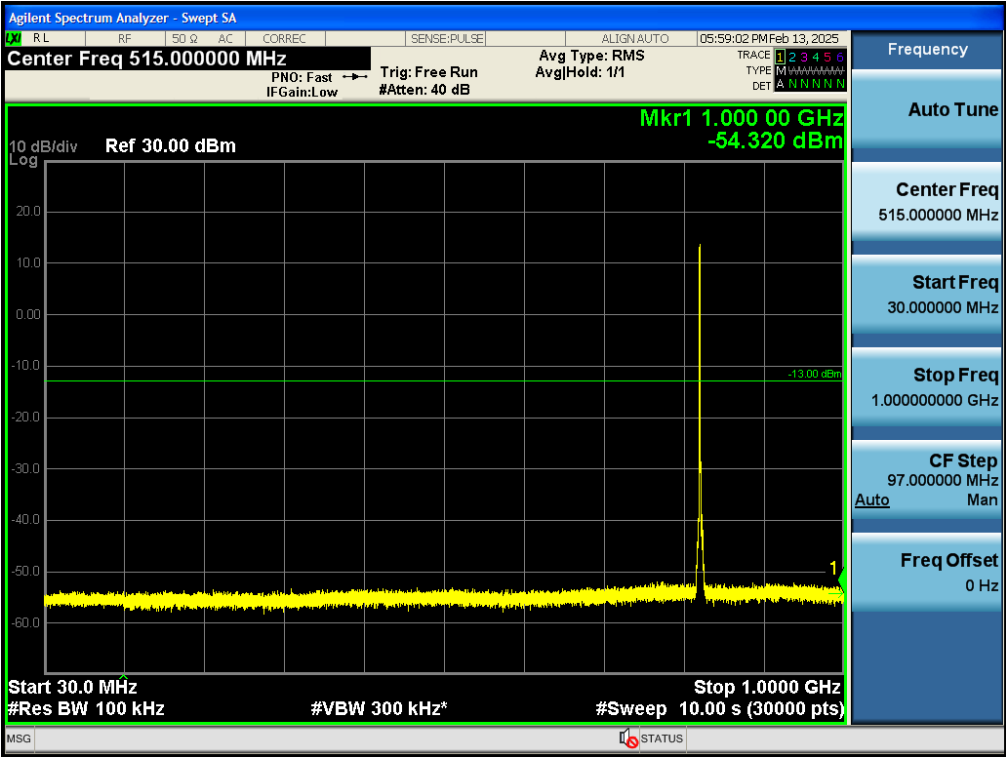
Test_Graph_band5_844MHz_10M_QPSK_50RB#LOW_Band edge

Appendix D: Unwanted spurious emissions at antenna terminals

Test Result

Band	Bandwidth (MHz)	UL Frequency (MHz)	Modulation	RB Size	RB Offset	Conclusion
5	1.4	824.7	QPSK	6	LOW	Pass
5	1.4	836.5	QPSK	6	LOW	Pass
5	1.4	848.3	QPSK	6	LOW	Pass
5	3	825.5	QPSK	15	LOW	Pass
5	3	836.5	QPSK	15	LOW	Pass
5	3	847.5	QPSK	15	LOW	Pass
5	5	826.5	QPSK	25	LOW	Pass
5	5	836.5	QPSK	25	LOW	Pass
5	5	846.5	QPSK	25	LOW	Pass
5	10	829	QPSK	50	LOW	Pass
5	10	836.5	QPSK	50	LOW	Pass
5	10	844	QPSK	50	LOW	Pass

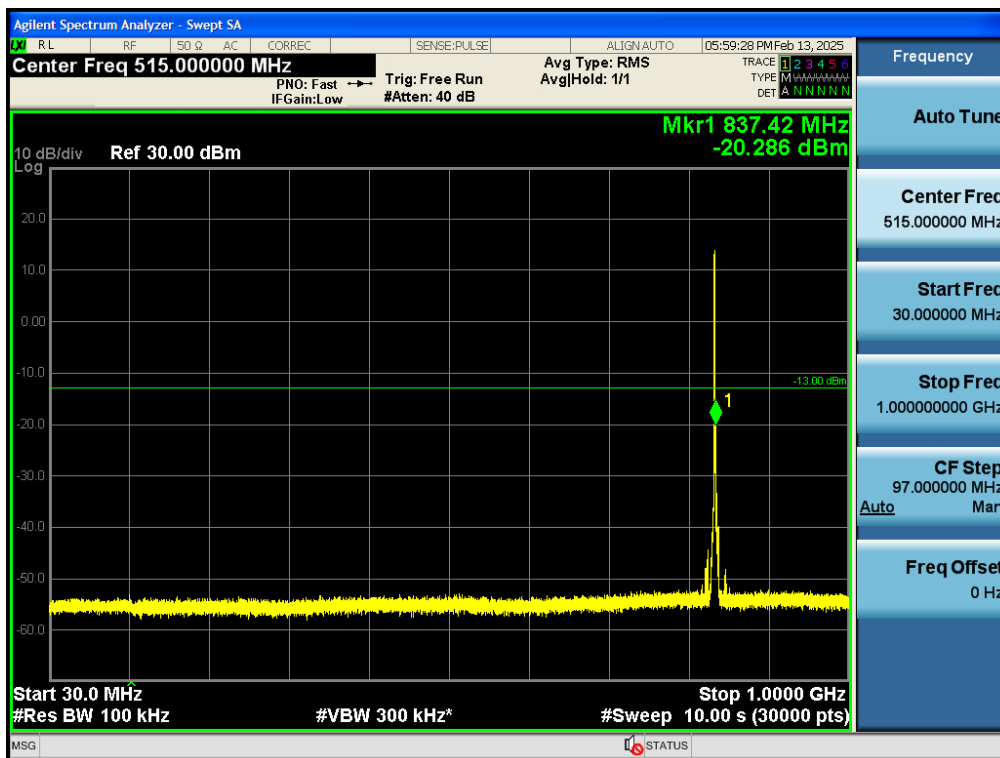
Test Graphs



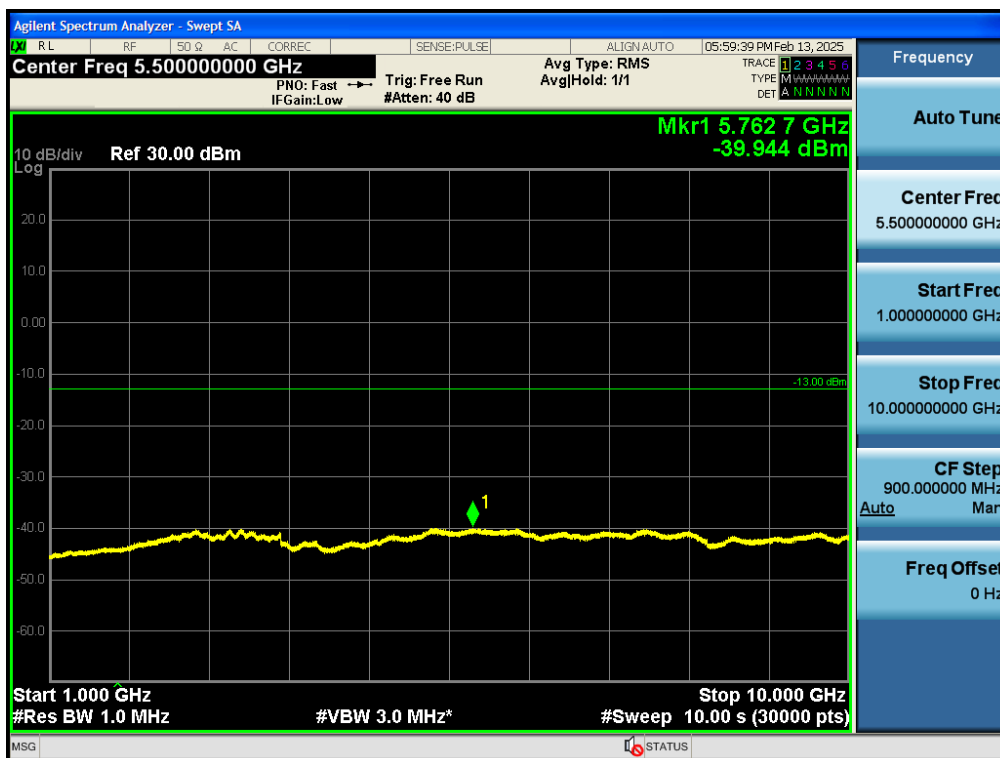
Test_Graph_band5_824.7MHz_1.4M_QPSK_6RB#LOW_30M_1G_TX



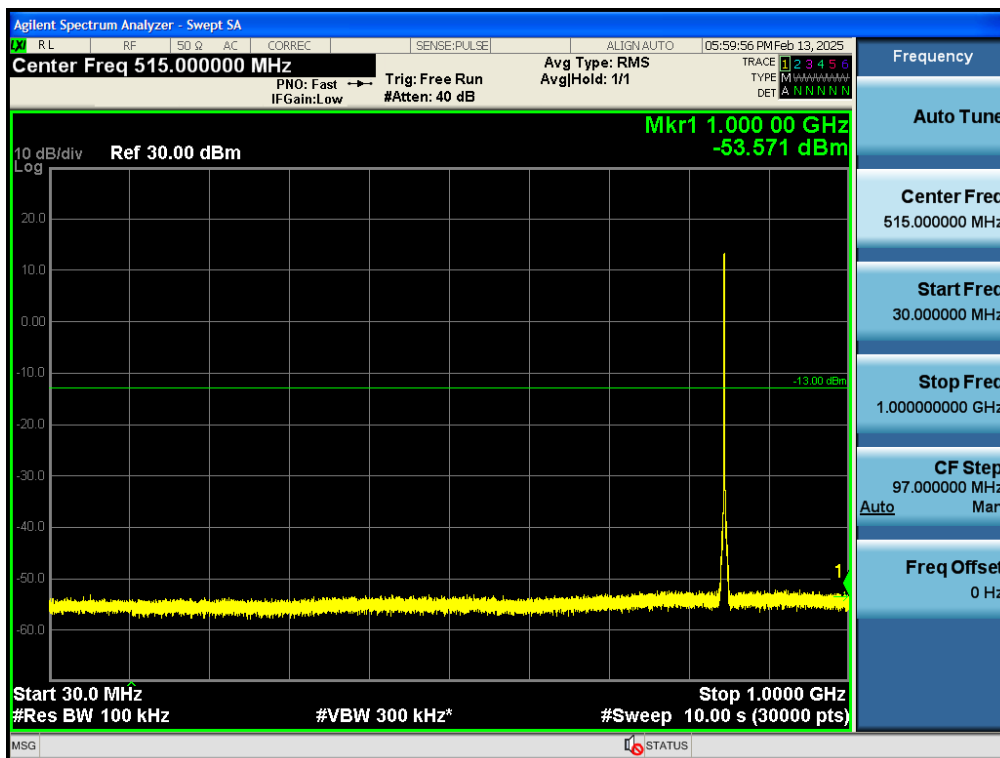
Test_Graph_band5_824.7MHz_1.4M_QPSK_6RB#LOW_1G_10G_TX



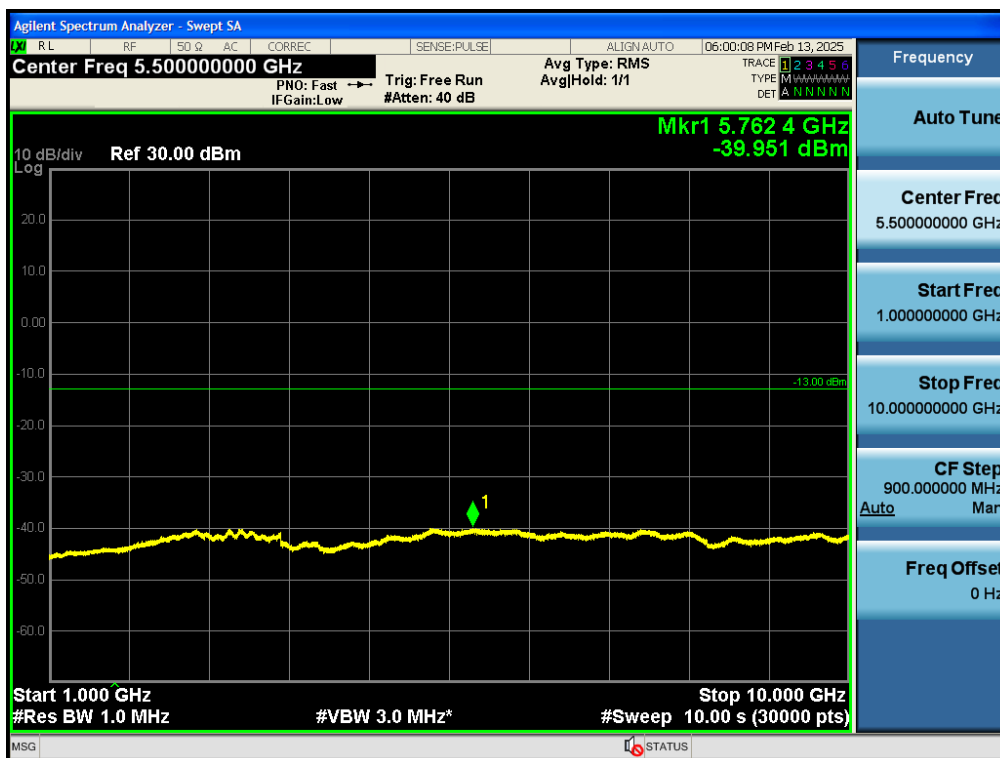
Test_Graph_band5_836.5MHz_1.4M_QPSK_6RB#LOW_30M_1G_TX



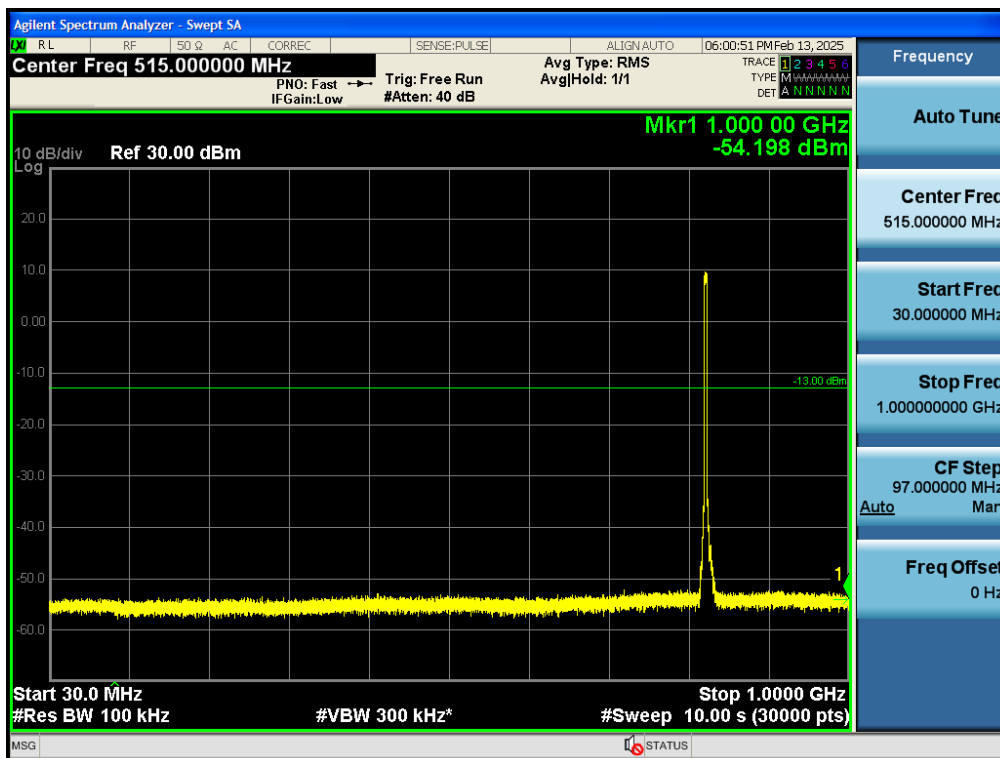
Test_Graph_band5_836.5MHz_1.4M_QPSK_6RB#LOW_1G_10G_TX



Test_Graph_band5_848.3MHz_1.4M_QPSK_6RB#LOW_30M_1G_TX



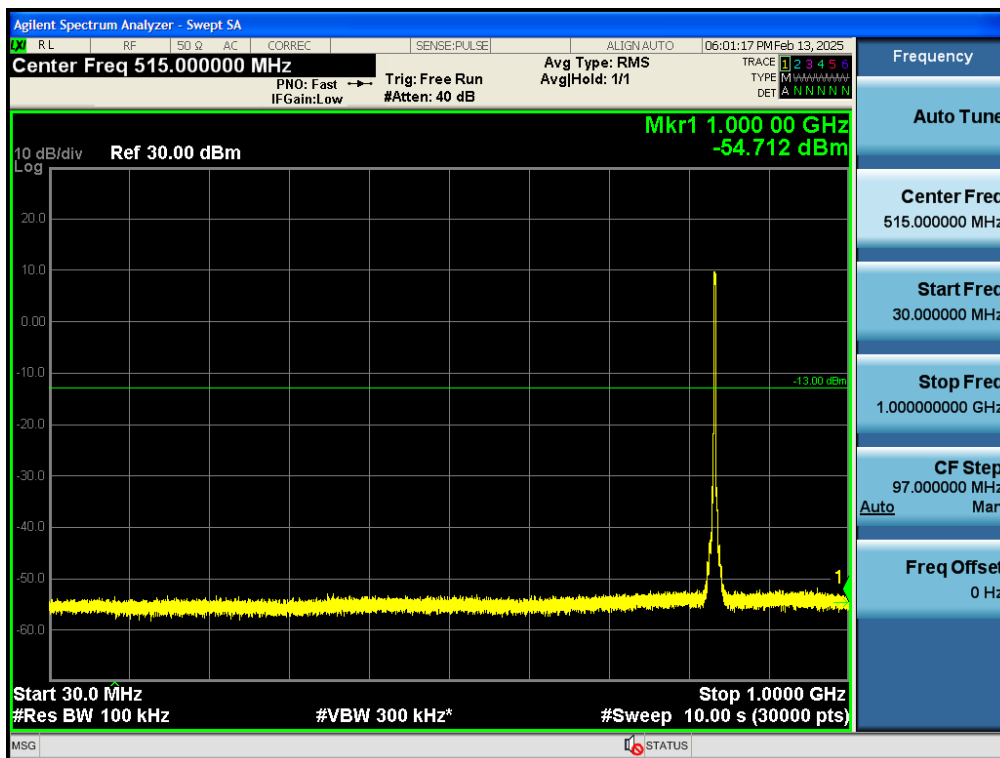
Test_Graph_band5_848.3MHz_1.4M_QPSK_6RB#LOW_1G_10G_TX



Test_Graph_band5_825.5MHz_3M_QPSK_15RB#LOW_30M_1G_TX



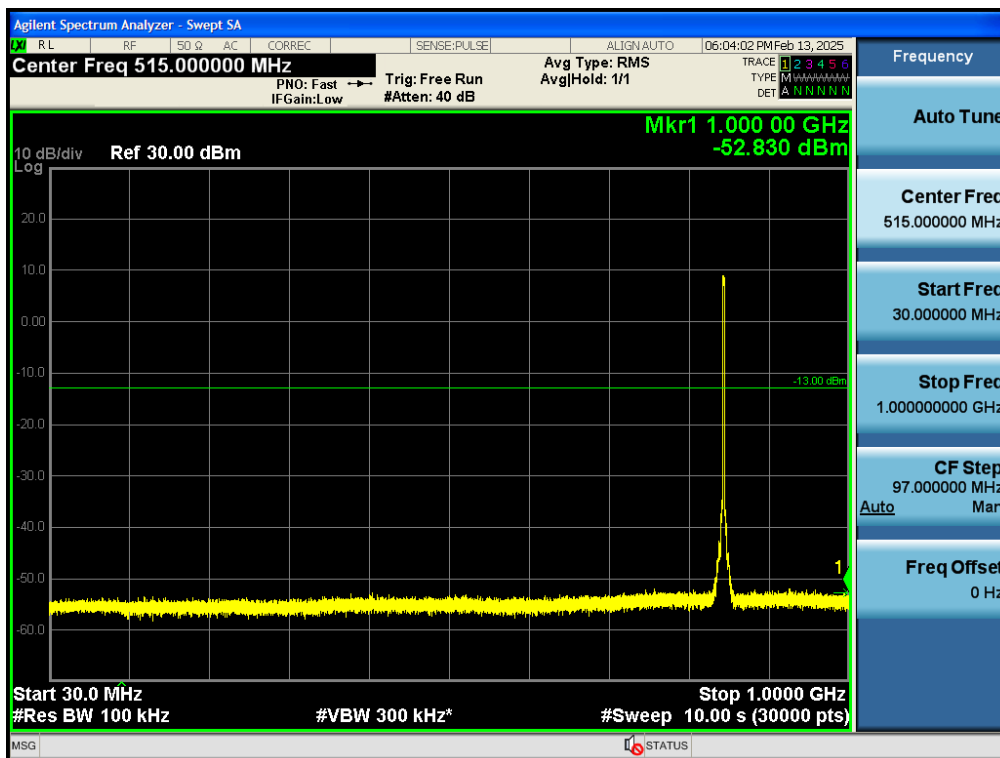
Test_Graph_band5_825.5MHz_3M_QPSK_15RB#LOW_1G_10G_TX



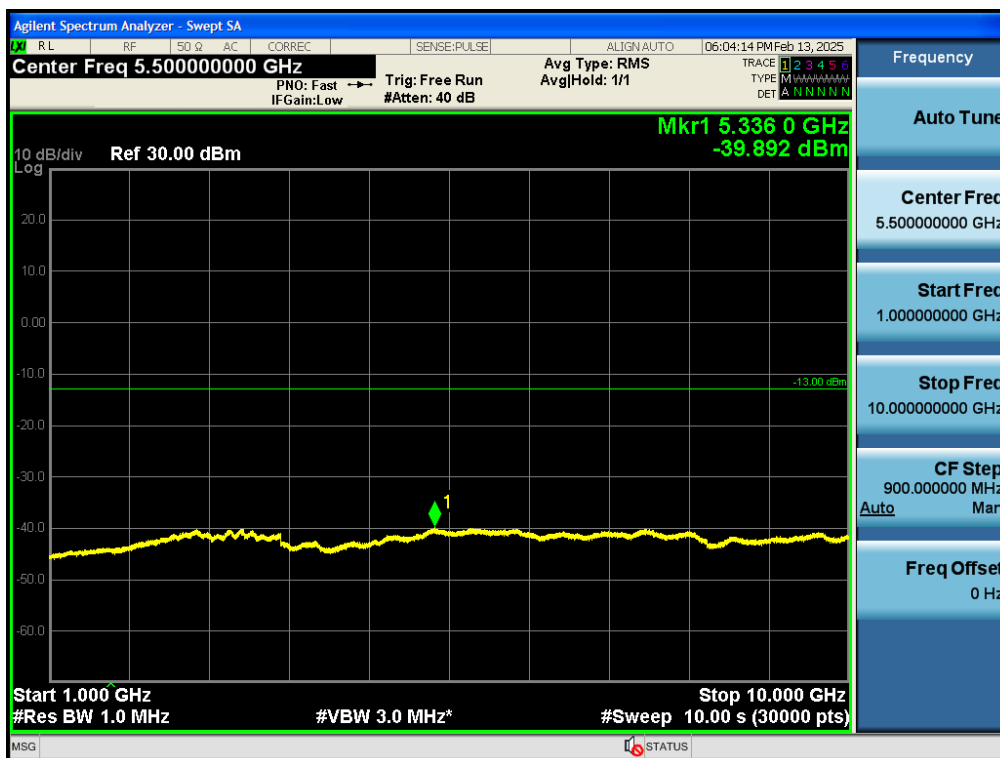
Test_Graph_band5_836.5MHz_3M_QPSK_15RB#LOW_30M_1G_TX



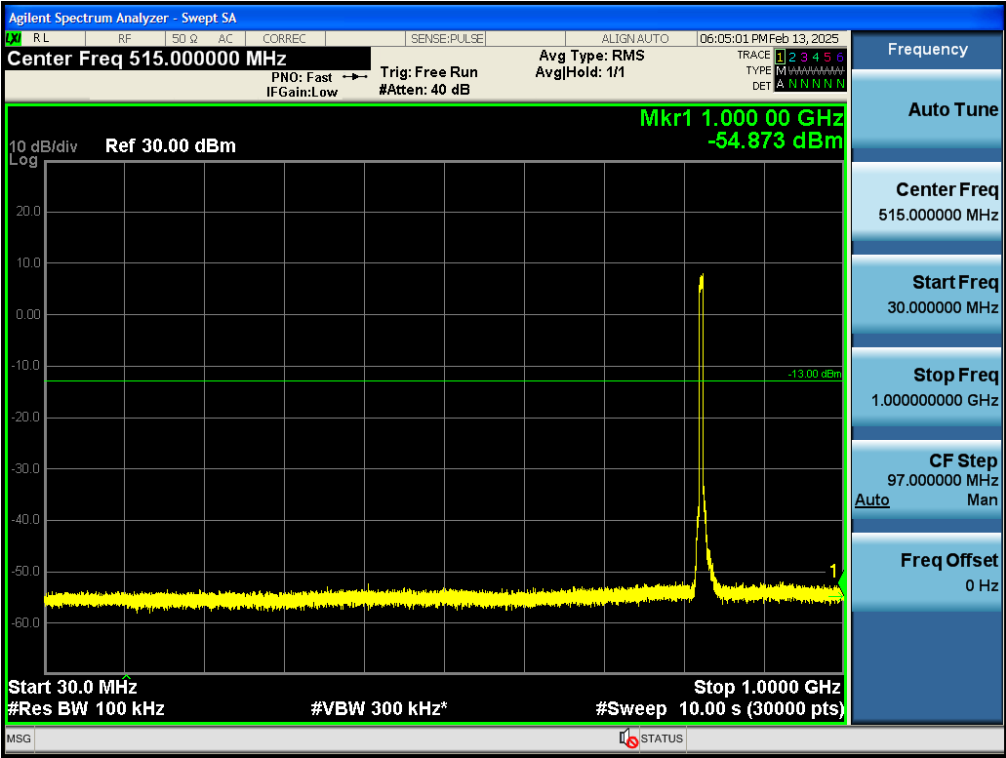
Test_Graph_band5_836.5MHz_3M_QPSK_15RB#LOW_1G_10G_TX



Test_Graph_band5_847.5MHz_3M_QPSK_15RB#LOW_30M_1G_TX



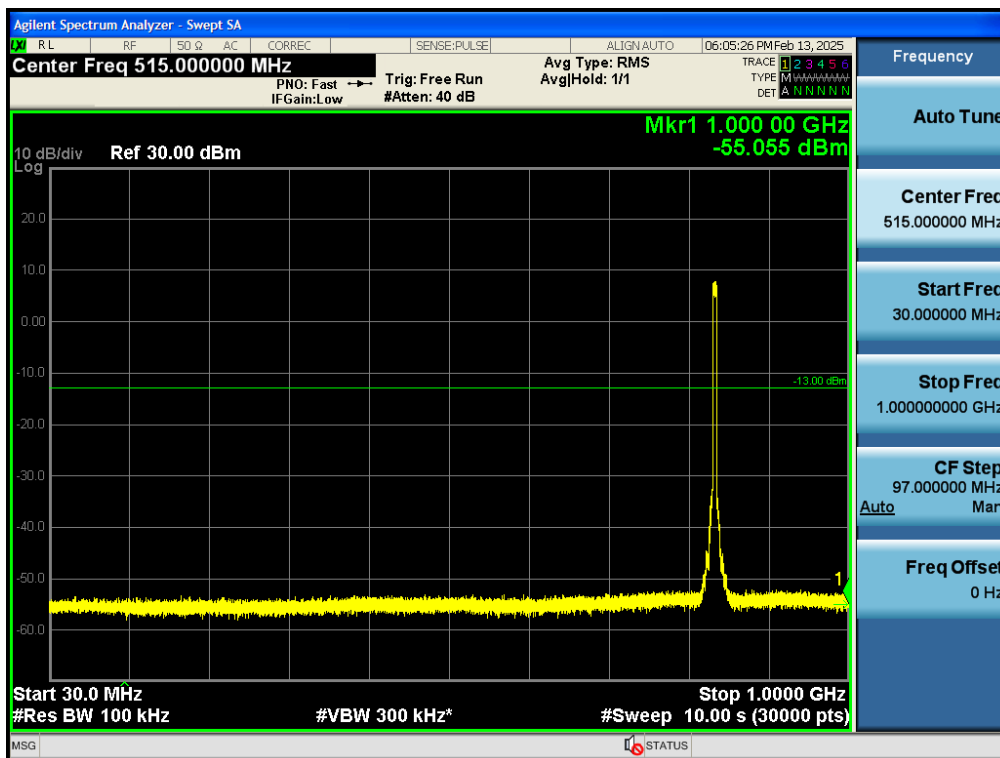
Test_Graph_band5_847.5MHz_3M_QPSK_15RB#LOW_1G_10G_TX



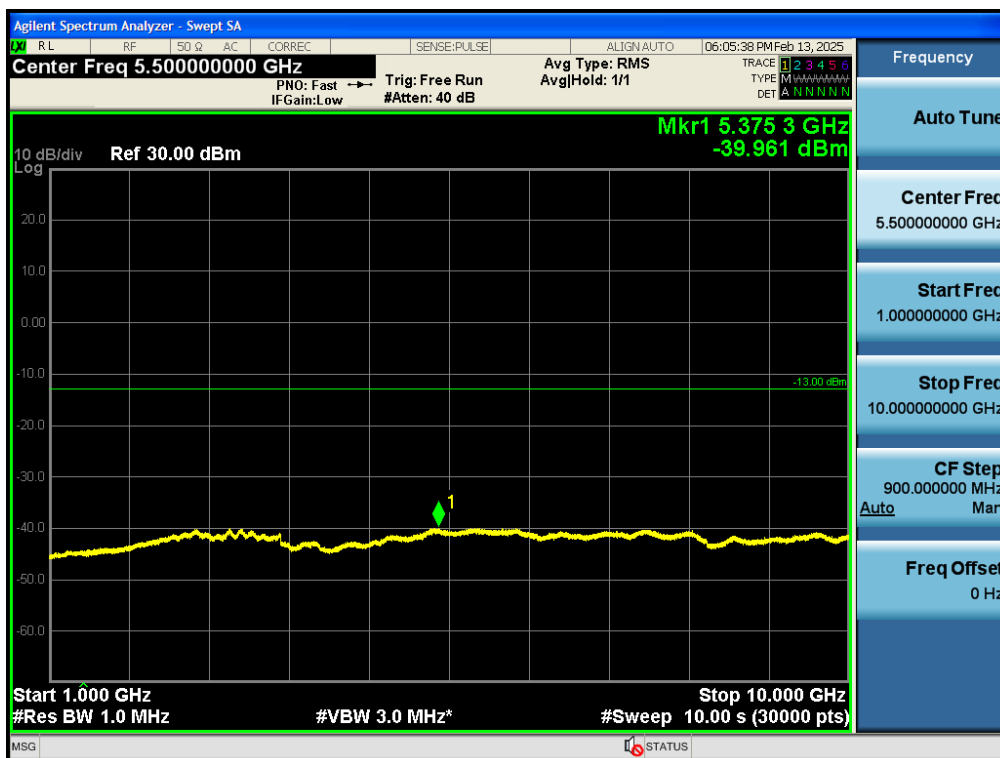
Test_Graph_band5_826.5MHz_5M_QPSK_25RB#LOW_30M_1G_TX



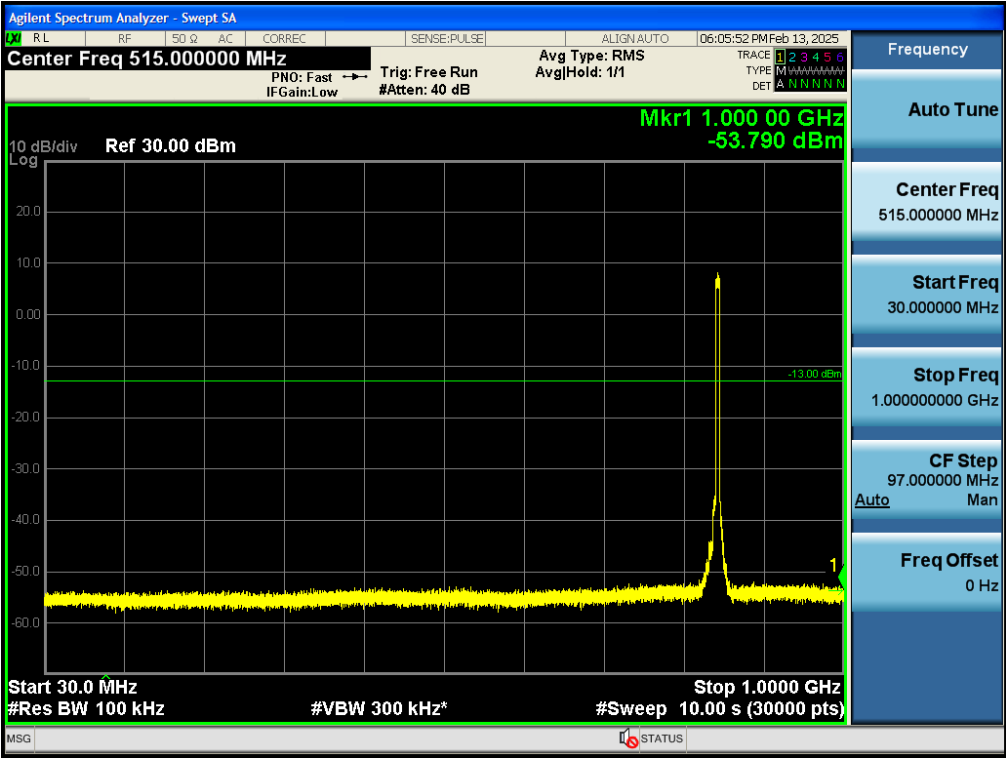
Test_Graph_band5_826.5MHz_5M_QPSK_25RB#LOW_1G_10G_TX



Test_Graph_band5_836.5MHz_5M_QPSK_25RB#LOW_30M_1G_TX



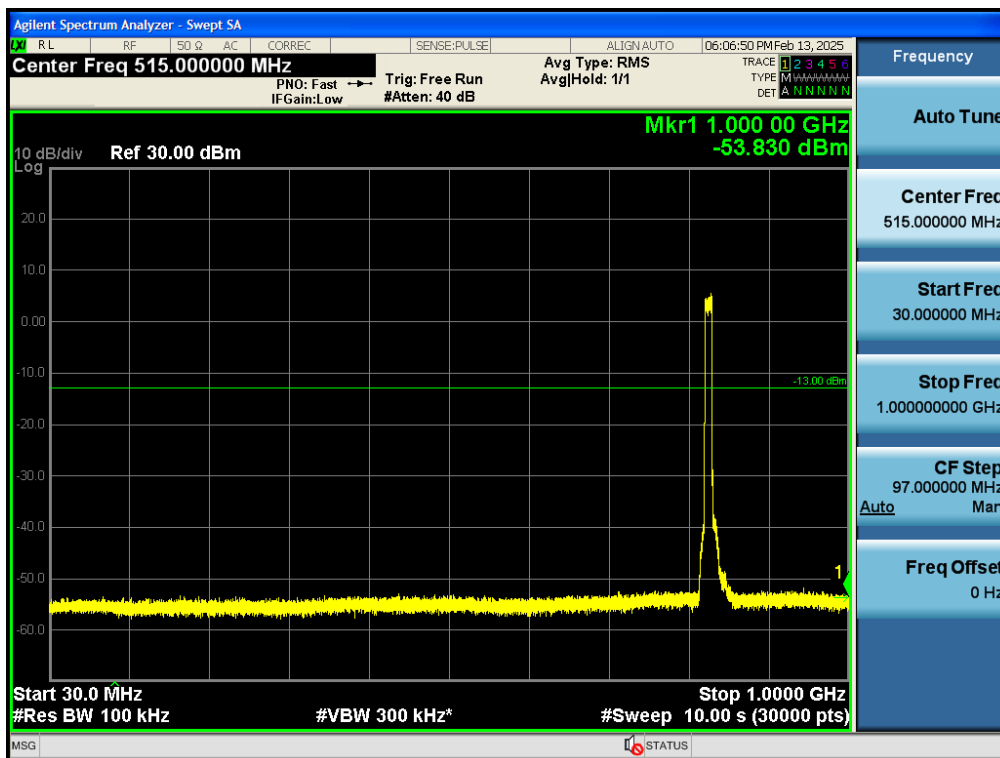
Test_Graph_band5_836.5MHz_5M_QPSK_25RB#LOW_1G_10G_TX



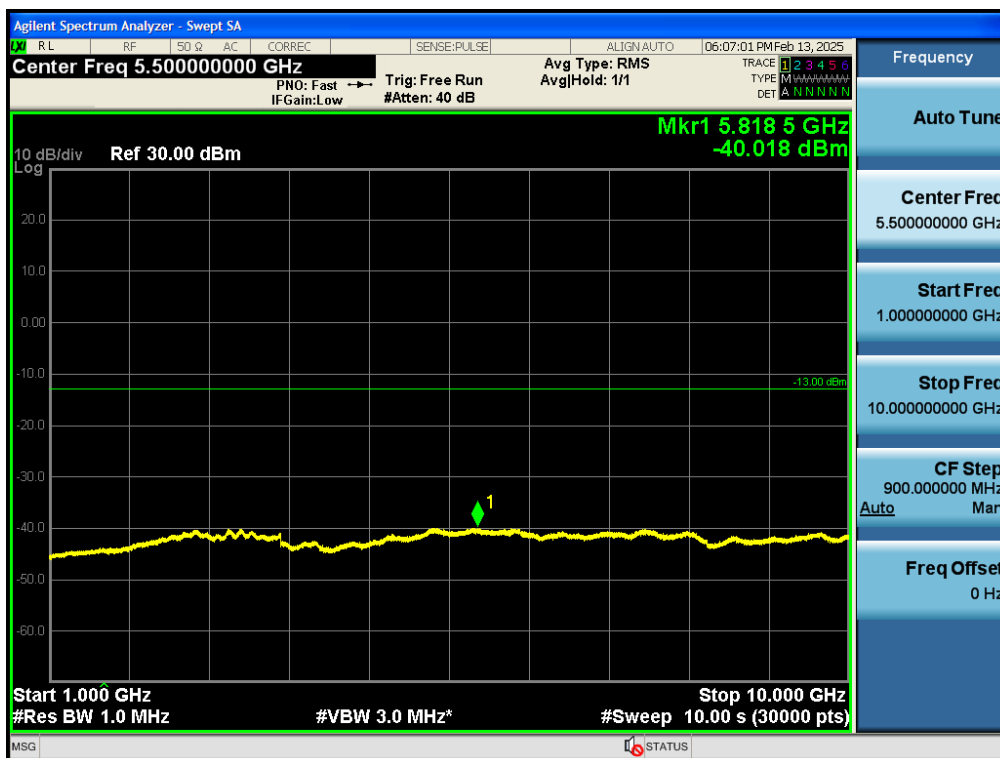
Test_Graph_band5_846.5MHz_5M_QPSK_25RB#LOW_30M_1G_TX



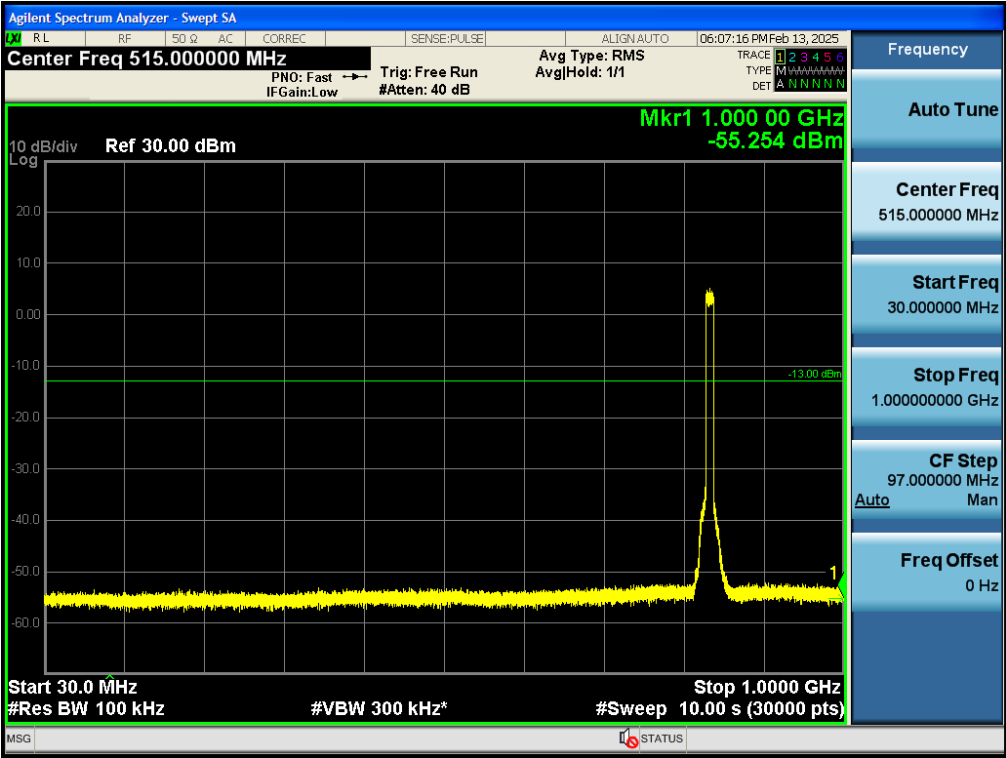
Test_Graph_band5_846.5MHz_5M_QPSK_25RB#LOW_1G_10G_TX



Test_Graph_band5_829MHz_10M_QPSK_50RB#LOW_30M_1G_TX



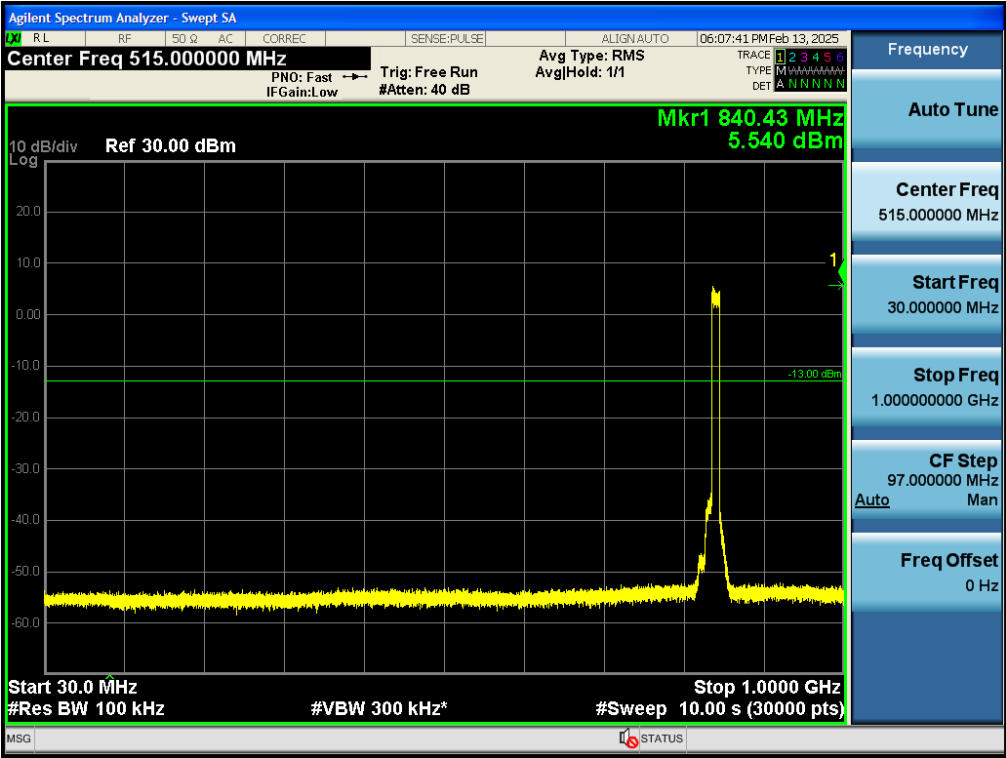
Test_Graph_band5_829MHz_10M_QPSK_50RB#LOW_1G_10G_TX



Test_Graph_band5_836.5MHz_10M_QPSK_50RB#LOW_30M_1G_TX



Test_Graph_band5_836.5MHz_10M_QPSK_50RB#LOW_1G_10G_TX



Test_Graph_band5_844MHz_10M_QPSK_50RB#LOW_30M_1G_TX



Test_Graph_band5_844MHz_10M_QPSK_50RB#LOW_1G_10G_TX

Appendix E: Frequency stability

Test Result

Test Conditions		LTE Band 5(QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0686	PASS
40	Normal Voltage	0.0411	
30	Normal Voltage	0.0276	
20(Ref.)	Normal Voltage	0.0380	
10	Normal Voltage	0.0682	
0	Normal Voltage	0.0280	
-10	Normal Voltage	0.0520	
-20	Normal Voltage	0.0501	
-30	Normal Voltage	0.0252	
20	Maximum Voltage	0.0281	
20	Normal Voltage	0.0366	
20	Battery End Point	0.0705	