Appendix-A LTE Band 30

Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	EIRP (dBm)	Verdict
Band30	5MHz	QPSK	27685	1RB#0	22.34	22.56	PASS
Band30	5MHz	QPSK	27685	25RB#0	21.25	21.47	PASS
Band30	5MHz	QPSK	27685	1RB#12	22.32	22.54	PASS
Band30	5MHz	QPSK	27685	1RB#24	22.19	22.41	PASS
Band30	5MHz	QPSK	27710	1RB#0	21.75	21.97	PASS
Band30	5MHz	QPSK	27710	25RB#0	21.27	21.49	PASS
Band30	5MHz	QPSK	27710	1RB#12	22.39	22.61	PASS
Band30	5MHz	QPSK	27710	1RB#24	22.25	22.47	PASS
Band30	5MHz	QPSK	27735	1RB#0	21.75	21.97	PASS
Band30	5MHz	QPSK	27735	25RB#0	21.36	21.58	PASS
Band30	5MHz	QPSK	27735	1RB#12	22.33	22.55	PASS
Band30	5MHz	QPSK	27735	1RB#24	22.21	22.43	PASS
Band30	5MHz	16QAM	27685	1RB#0	21.90	22.12	PASS
Band30	5MHz	16QAM	27685	25RB#0	20.33	20.55	PASS
Band30	5MHz	16QAM	27685	1RB#12	21.50	21.72	PASS
Band30	5MHz	16QAM	27685	1RB#24	21.30	21.52	PASS
Band30	5MHz	16QAM	27710	1RB#0	21.38	21.6	PASS
Band30	5MHz	16QAM	27710	25RB#0	20.37	20.59	PASS
Band30	5MHz	16QAM	27710	1RB#12	21.48	21.7	PASS
Band30	5MHz	16QAM	27710	1RB#24	21.27	21.49	PASS
Band30	5MHz	16QAM	27735	1RB#0	21.39	21.61	PASS
Band30	5MHz	16QAM	27735	25RB#0	20.37	20.59	PASS
Band30	5MHz	16QAM	27735	1RB#12	21.46	21.68	PASS
Band30	5MHz	16QAM	27735	1RB#24	21.22	21.44	PASS
Band30	5MHz	64QAM	27685	1RB#0	21.35	21.57	PASS
Band30	5MHz	64QAM	27685	25RB#0	19.30	19.52	PASS
Band30	5MHz	64QAM	27685	1RB#12	20.41	20.63	PASS
Band30	5MHz	64QAM	27685	1RB#24	20.28	20.5	PASS
Band30	5MHz	64QAM	27710	1RB#0	20.53	20.75	PASS
Band30	5MHz	64QAM	27710	25RB#0	19.34	19.56	PASS
Band30	5MHz	64QAM	27710	1RB#12	20.57	20.79	PASS
Band30	5MHz	64QAM	27710	1RB#24	20.42	20.64	PASS
Band30	5MHz	64QAM	27735	1RB#0	20.49	20.71	PASS
Band30	5MHz	64QAM	27735	25RB#0	19.35	19.57	PASS
Band30	5MHz	64QAM	27735	1RB#12	20.61	20.83	PASS
Band30	5MHz	64QAM	27735	1RB#24	20.29	20.51	PASS

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Band30	5MHz	256QAM	27685	1RB#0	17.45	17.67	PASS
Band30	5MHz	256QAM	27685	25RB#0	17.24	17.46	PASS
Band30	5MHz	256QAM	27685	1RB#12	17.56	17.78	PASS
Band30	5MHz	256QAM	27685	1RB#24	17.22	17.44	PASS
Band30	5MHz	256QAM	27710	1RB#0	17.48	17.7	PASS
Band30	5MHz	256QAM	27710	25RB#0	17.22	17.44	PASS
Band30	5MHz	256QAM	27710	1RB#12	17.42	17.64	PASS
Band30	5MHz	256QAM	27710	1RB#24	17.29	17.51	PASS
Band30	5MHz	256QAM	27735	1RB#0	17.40	17.62	PASS
Band30	5MHz	256QAM	27735	25RB#0	17.36	17.58	PASS
Band30	5MHz	256QAM	27735	1RB#12	17.48	17.7	PASS
Band30	5MHz	256QAM	27735	1RB#24	17.01	17.23	PASS
Band30	10MHz	QPSK	27710	1RB#0	22.54	22.76	PASS
Band30	10MHz	QPSK	27710	50RB#0	21.29	21.51	PASS
Band30	10MHz	QPSK	27710	1RB#24	22.28	22.5	PASS
Band30	10MHz	QPSK	27710	1RB#49	22.31	22.53	PASS
Band30	10MHz	16QAM	27710	1RB#0	21.53	21.75	PASS
Band30	10MHz	16QAM	27710	50RB#0	20.33	20.55	PASS
Band30	10MHz	16QAM	27710	1RB#24	21.58	21.8	PASS
Band30	10MHz	16QAM	27710	1RB#49	21.30	21.52	PASS
Band30	10MHz	64QAM	27710	1RB#0	20.57	20.79	PASS
Band30	10MHz	64QAM	27710	50RB#0	19.39	19.61	PASS
Band30	10MHz	64QAM	27710	1RB#24	20.51	20.73	PASS
Band30	10MHz	64QAM	27710	1RB#49	20.39	20.61	PASS
Band30	10MHz	256QAM	27710	1RB#0	17.36	17.58	PASS
Band30	10MHz	256QAM	27710	50RB#0	17.27	17.49	PASS
Band30	10MHz	256QAM	27710	1RB#24	17.58	17.8	PASS
Band30	10MHz	256QAM	27710	1RB#49	17.19	17.41	PASS

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Maximum_power_spectral_density

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm/5MHz)	EIRP (dBm/5MHz)	Limit (dBm/5MHz)	Verdict
Band30	5MHz	QPSK	27685	1RB#0	23.07	23.29	23.98	PASS
Band30	5MHz	QPSK	27685	12RB#0	21.62	21.84	23.98	PASS
Band30	5MHz	QPSK	27685	25RB#0	21.04	21.26	23.98	PASS
Band30	5MHz	QPSK	27685	12RB#6	21.55	21.77	23.98	PASS
Band30	5MHz	QPSK	27685	1RB#12	23.12	23.34	23.98	PASS
Band30	5MHz	QPSK	27685	12RB#13	21.47	21.69	23.98	PASS
Band30	5MHz	QPSK	27685	1RB#24	23.13	23.35	23.98	PASS
Band30	5MHz	QPSK	27710	1RB#0	23.01	23.23	23.98	PASS
Band30	5MHz	QPSK	27710	12RB#0	21.53	21.75	23.98	PASS
Band30	5MHz	QPSK	27710	25RB#0	21.05	21.27	23.98	PASS
Band30	5MHz	QPSK	27710	12RB#6	21.50	21.72	23.98	PASS
Band30	5MHz	QPSK	27710	1RB#12	22.92	23.14	23.98	PASS
Band30	5MHz	QPSK	27710	12RB#13	21.51	21.73	23.98	PASS
Band30	5MHz	QPSK	27710	1RB#24	23.05	23.27	23.98	PASS
Band30	5MHz	QPSK	27735	1RB#0	22.86	23.08	23.98	PASS
Band30	5MHz	QPSK	27735	12RB#0	21.51	21.73	23.98	PASS
Band30	5MHz	QPSK	27735	25RB#0	21.08	21.3	23.98	PASS
Band30	5MHz	QPSK	27735	12RB#6	21.58	21.8	23.98	PASS
Band30	5MHz	QPSK	27735	1RB#12	22.90	23.12	23.98	PASS
Band30	5MHz	QPSK	27735	12RB#13	21.51	21.73	23.98	PASS
Band30	5MHz	QPSK	27735	1RB#24	22.95	23.17	23.98	PASS
Band30	10MHz	QPSK	27710	1RB#0	22.97	23.19	23.98	PASS
Band30	10MHz	QPSK	27710	25RB#0	21.15	21.37	23.98	PASS
Band30	10MHz	QPSK	27710	50RB#0	19.06	19.28	23.98	PASS
Band30	10MHz	QPSK	27710	25RB#12	21.09	21.31	23.98	PASS
Band30	10MHz	QPSK	27710	1RB#24	23.00	23.22	23.98	PASS
Band30	10MHz	QPSK	27710	25RB#25	21.03	21.25	23.98	PASS
Band30	10MHz	QPSK	27710	1RB#49	22.85	23.07	23.98	PASS

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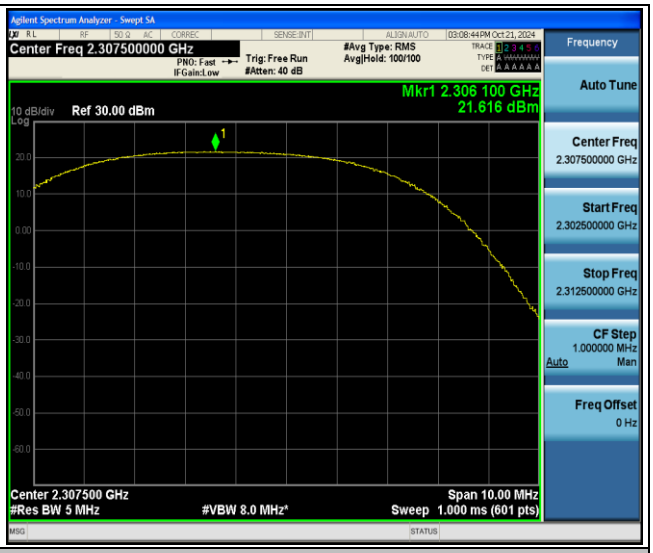
Test Graphs

Band30-5MHz-QPSK-27685-1RB#0-PASS



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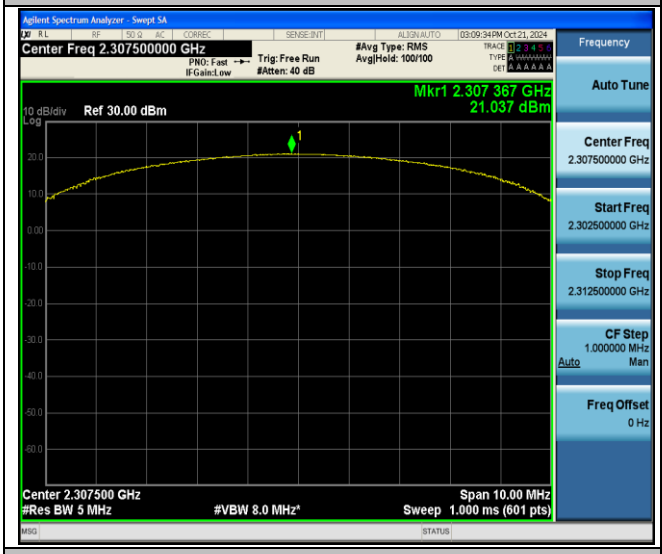

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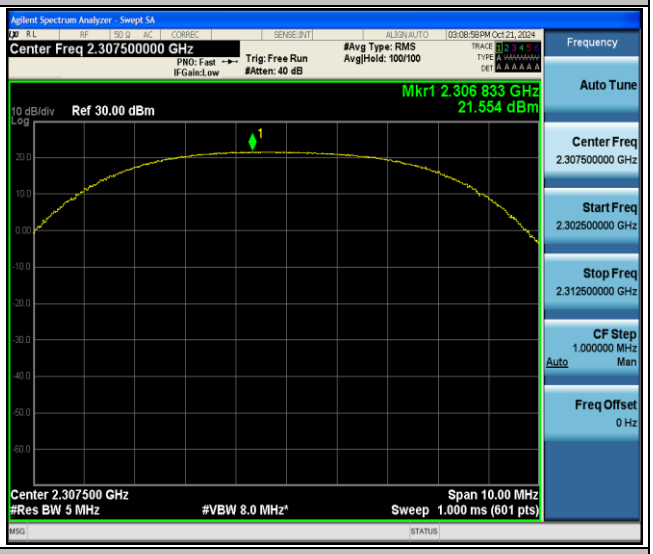
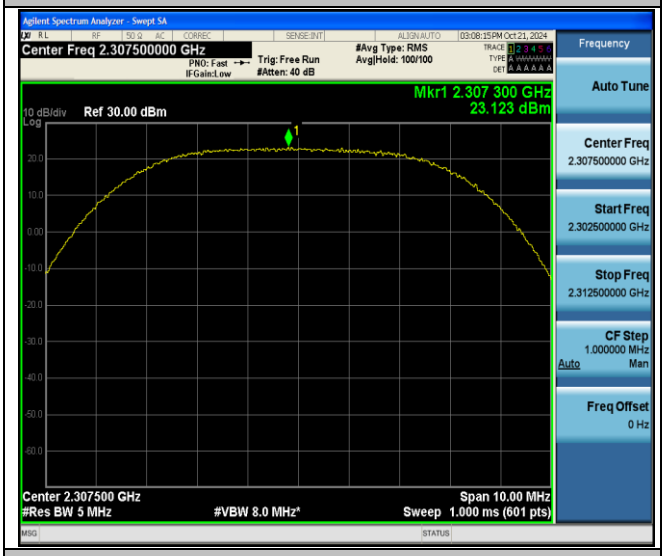


Band30-5MHz-QPSK-27685-12RB#6-PASS



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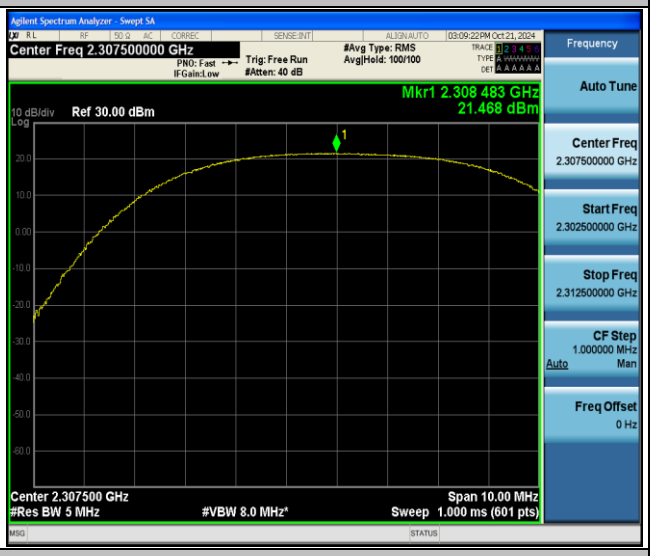

Band30-5MHz-QPSK-27685-12RB#13-PASS

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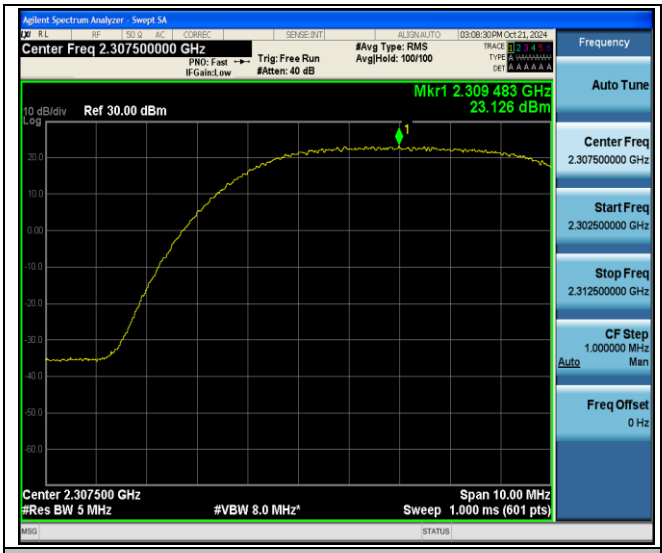

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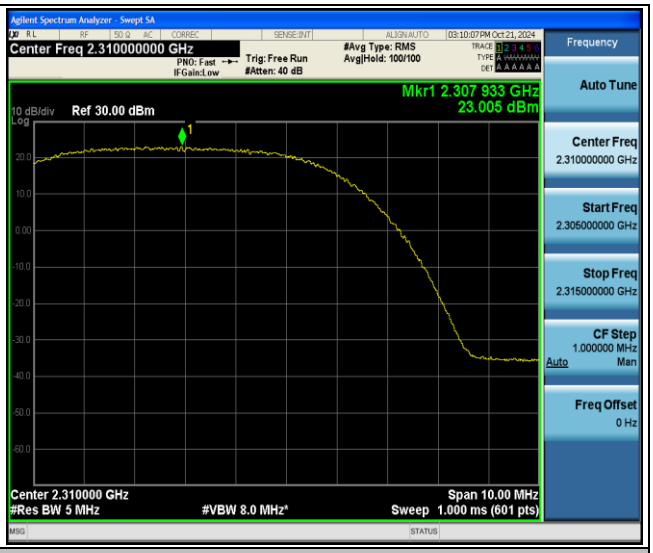

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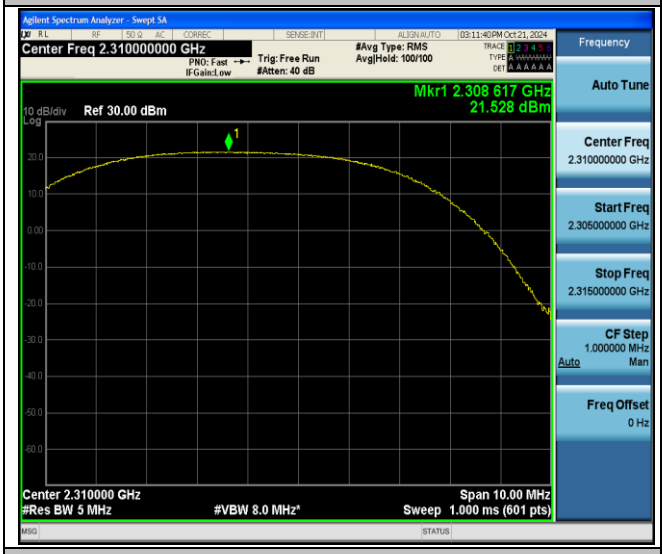

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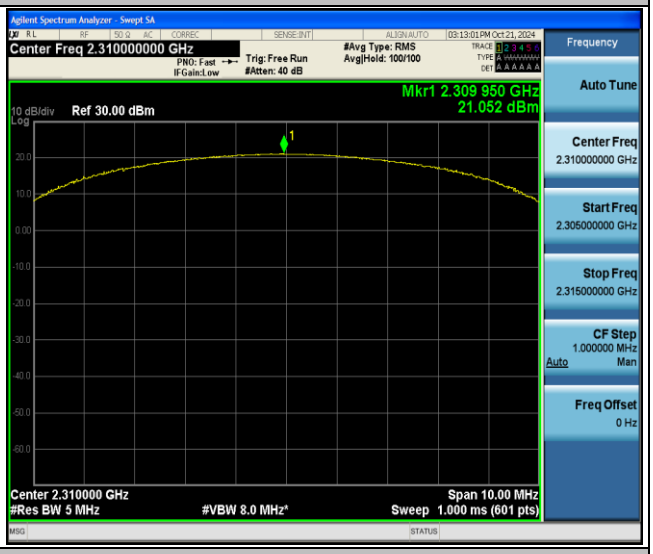

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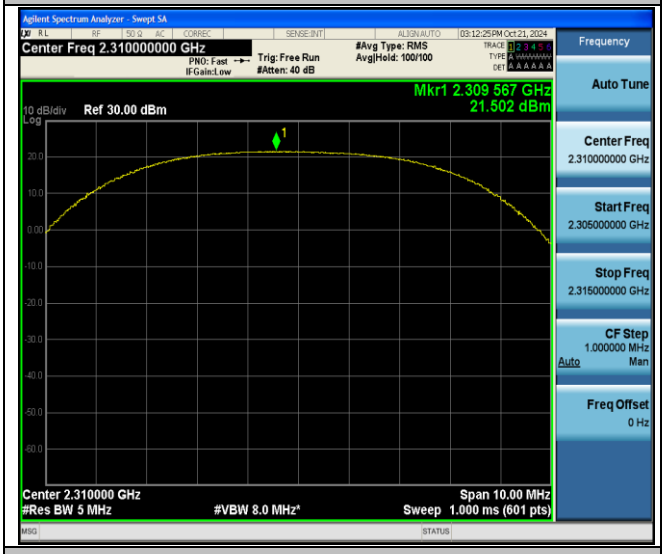

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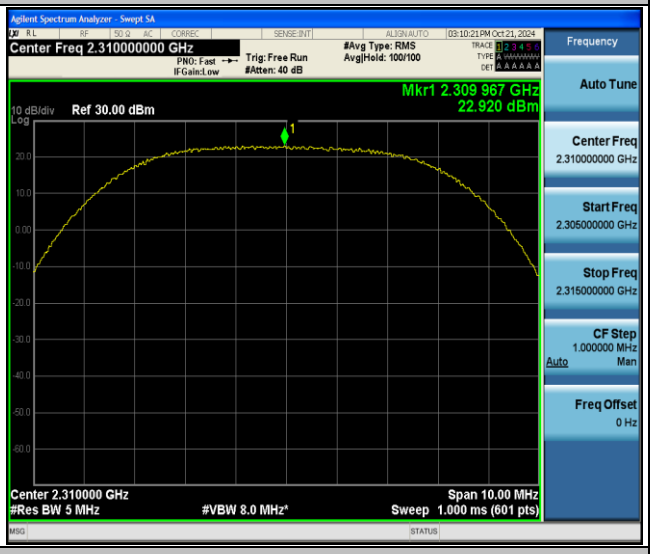

Band30-5MHz-QPSK-27710-1RB#12-PASS

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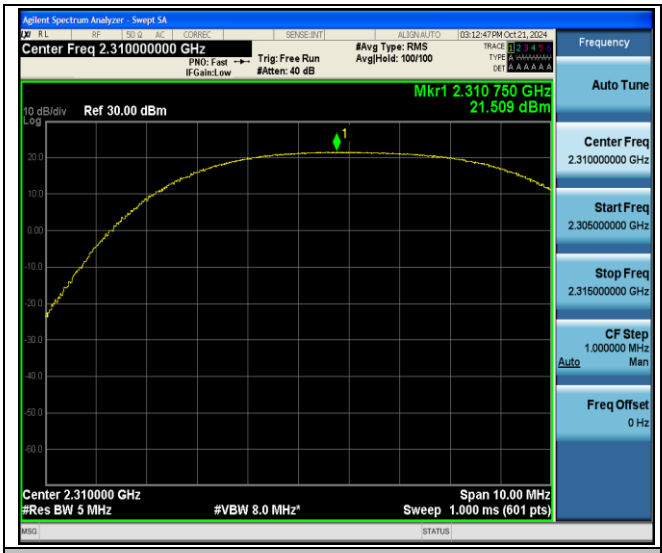

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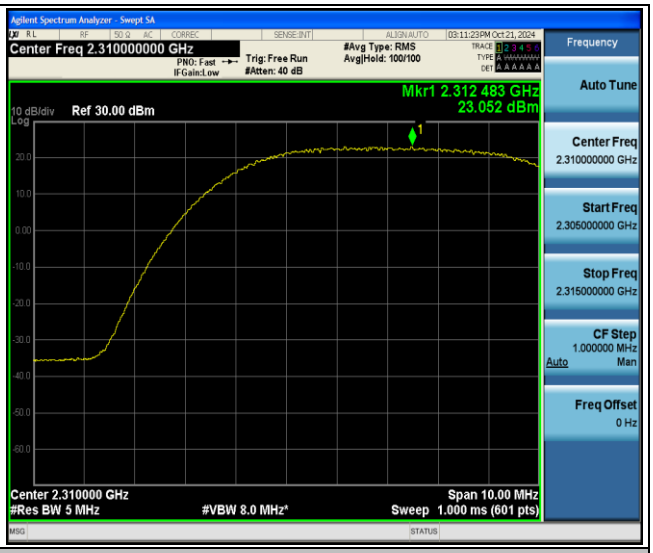
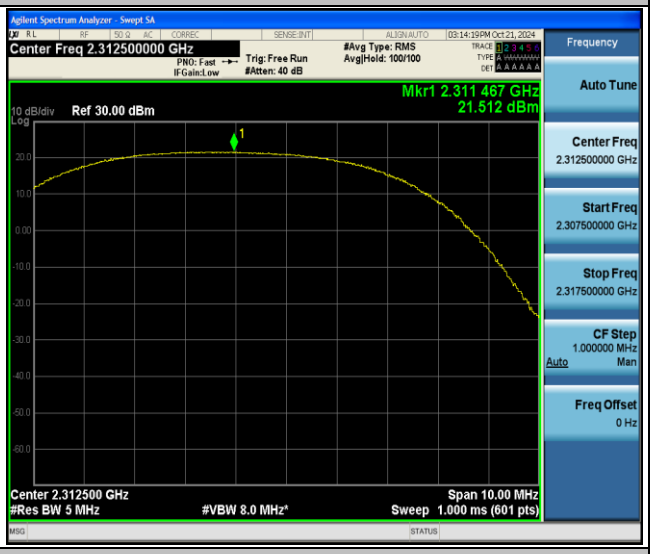


Band30-5MHz-QPSK-27710-1RB#24-PASS

Band30-5MHz-QPSK-27735-1RB#0-PASS



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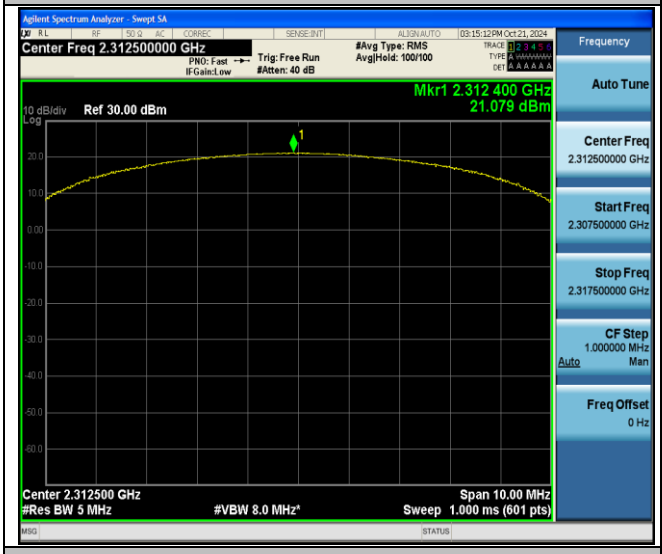

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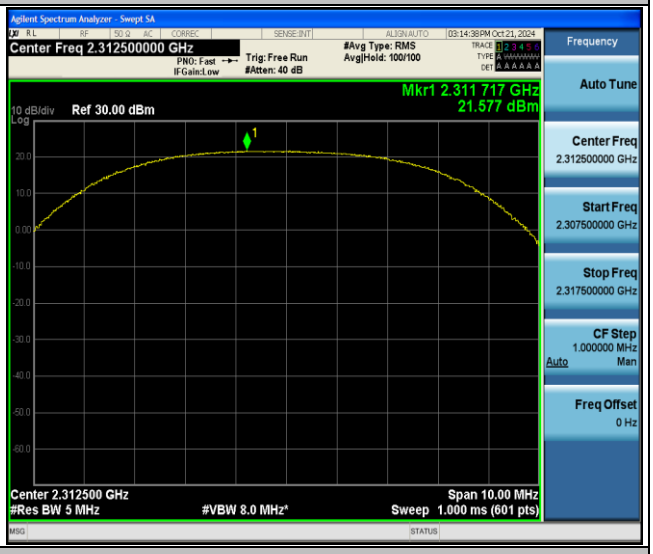

Band30-5MHz-QPSK-27735-12RB#6-PASS

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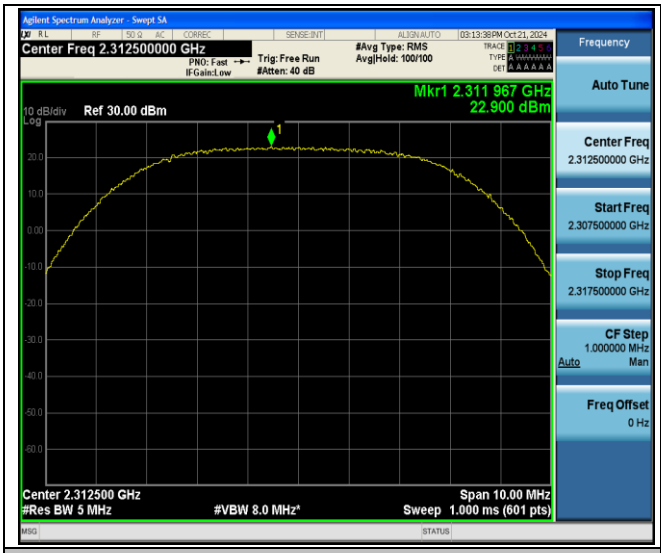

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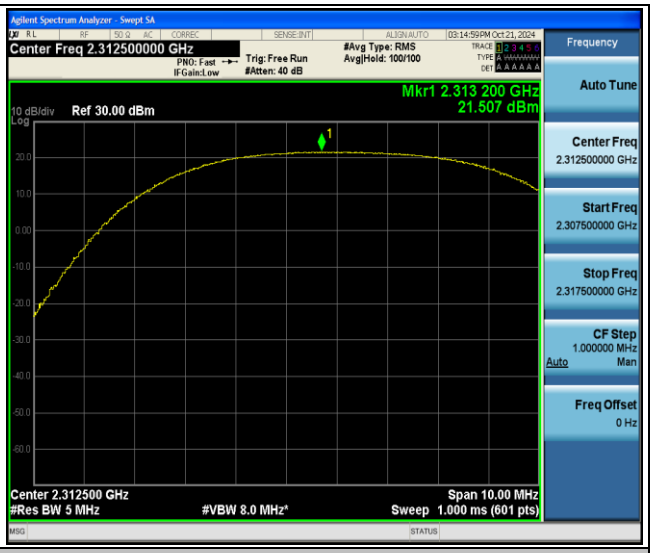

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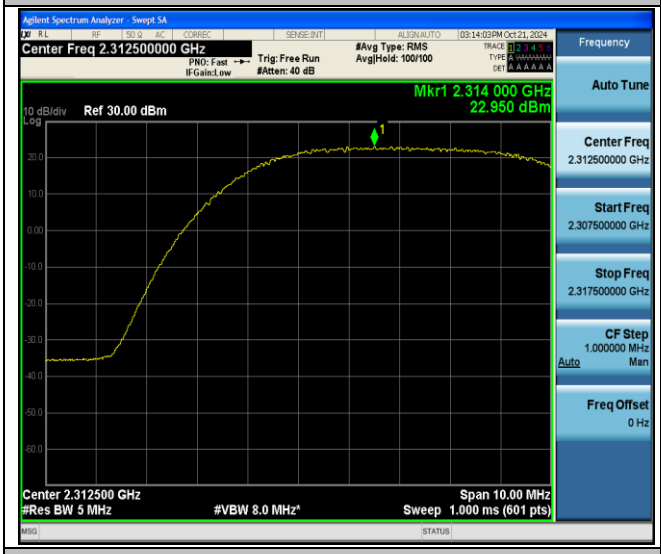
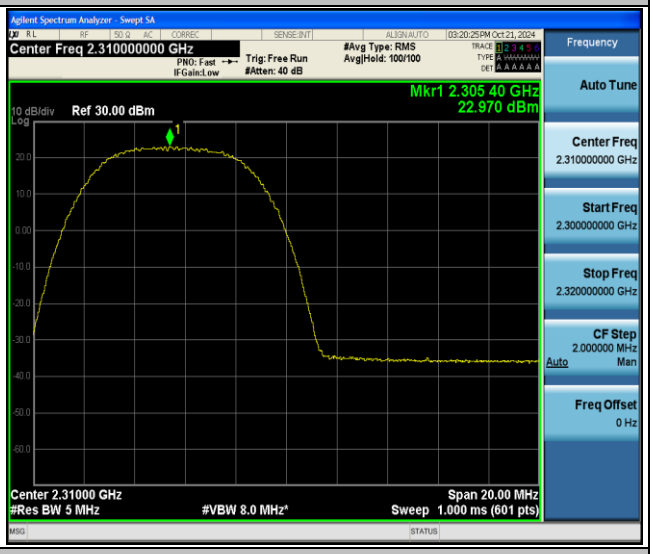
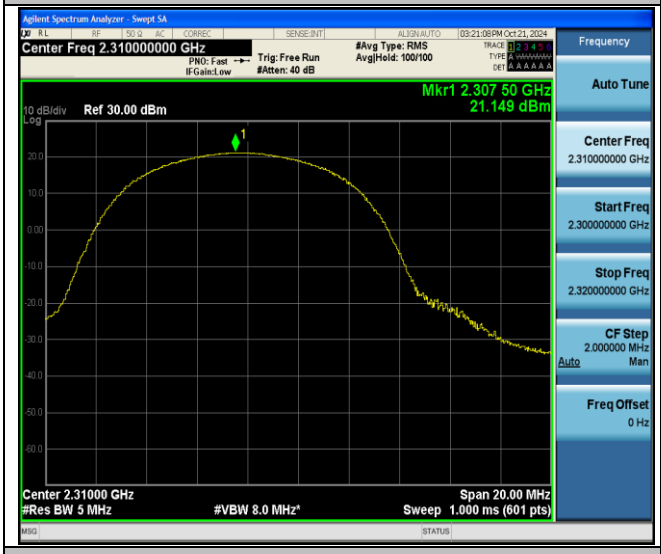


Band30-5MHz-QPSK-27735-1RB#24-PASS



Band30-10MHz-QPSK-27710-1RB#0-PASS



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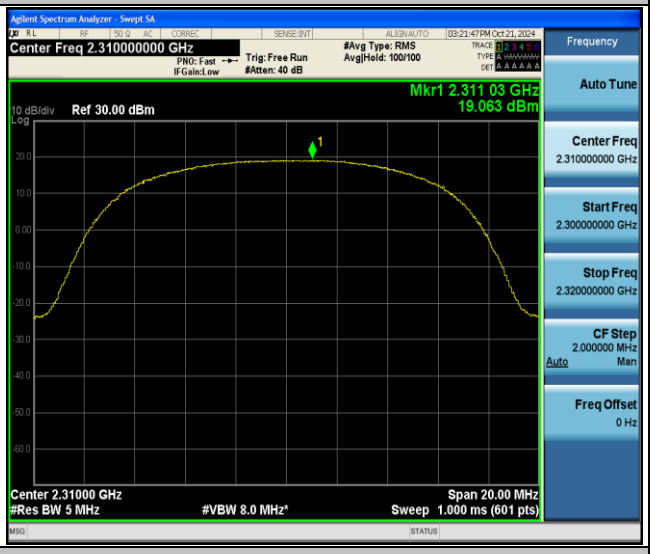

Band30-10MHz-QPSK-27710-50RB#0-PASS

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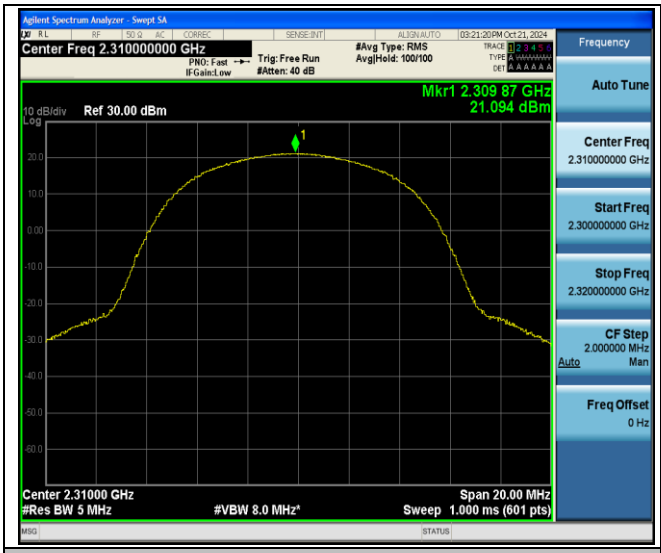

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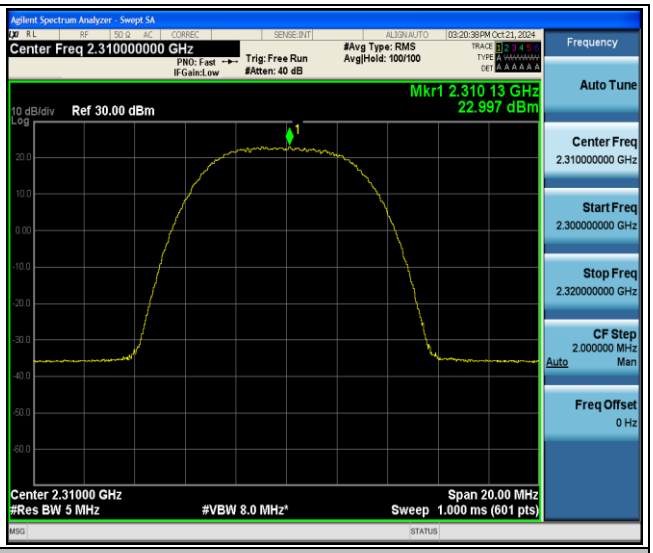

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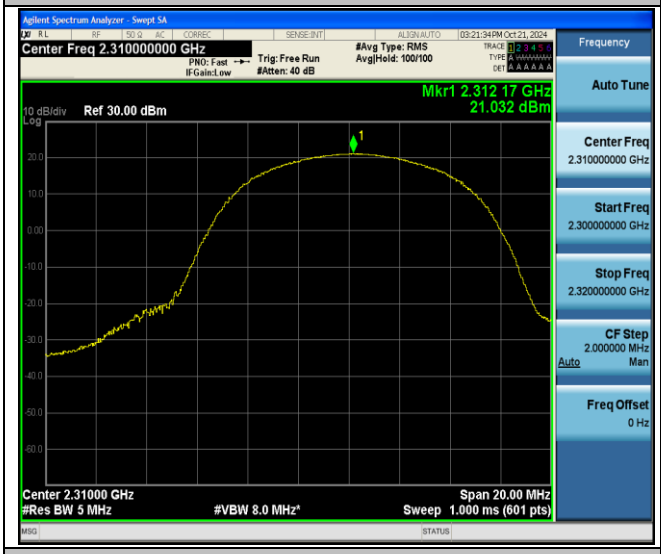

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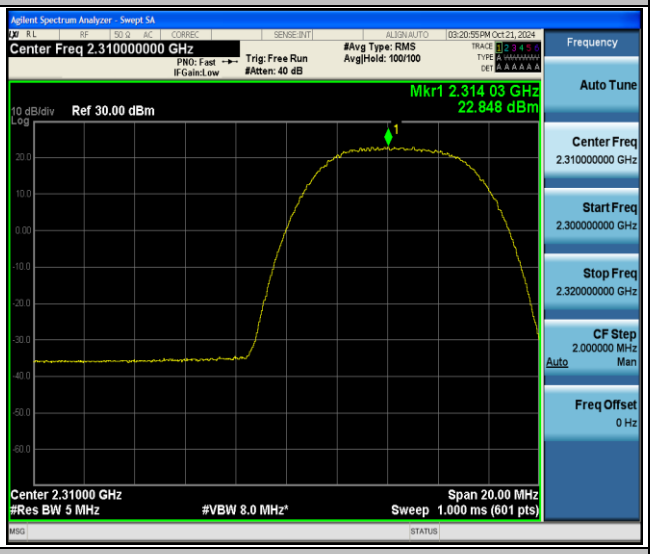

Band30-10MHz-QPSK-27710-1RB#49-PASS

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Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band30	10MHz	QPSK	27710	50RB#0	4.60	13	PASS
Band30	10MHz	16QAM	27710	50RB#0	5.63	13	PASS
Band30	10MHz	64QAM	27710	50RB#0	6.52	13	PASS
Band30	10MHz	256QAM	27710	50RB#0	7.01	13	PASS

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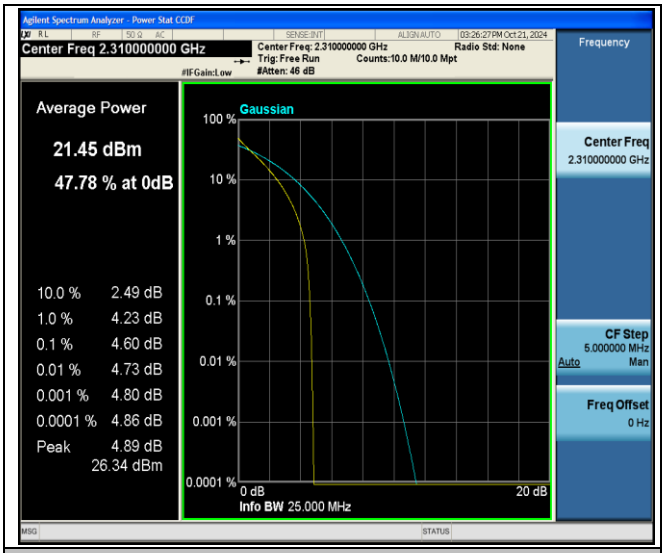
Test Graphs



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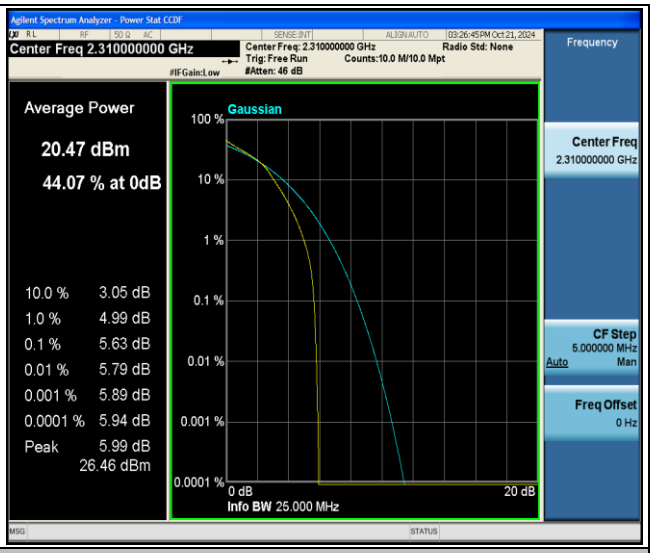
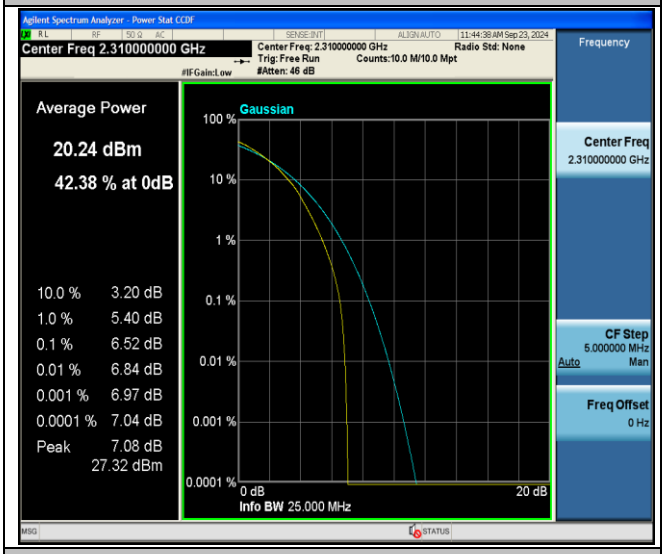
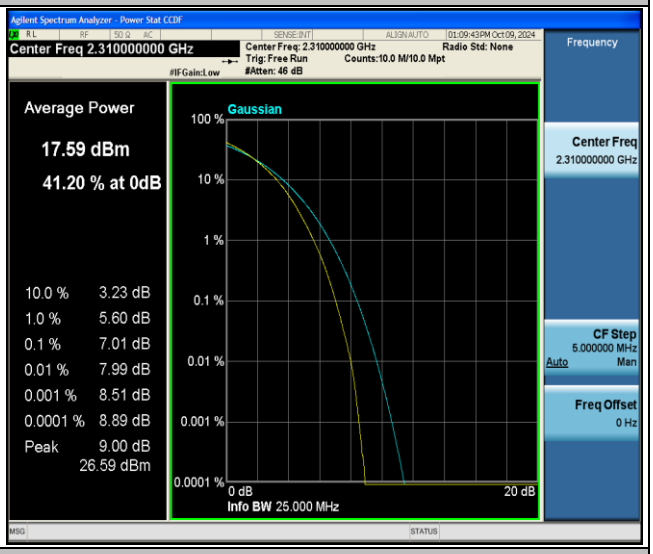


Band30-10MHz-16QAM-27710-50RB#0-PASS



Band30-10MHz-64QAM-27710-50RB#0-PASS



Band30-10MHz-256QAM-27710-50RB#0-PASS

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26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band30	5MHz	QPSK	27685	25RB#0	4.4987	5.081	PASS
Band30	5MHz	QPSK	27710	25RB#0	4.5012	5.144	PASS
Band30	5MHz	QPSK	27735	25RB#0	4.5041	5.106	PASS
Band30	5MHz	16QAM	27685	25RB#0	4.5143	5.133	PASS
Band30	5MHz	16QAM	27710	25RB#0	4.5033	5.090	PASS
Band30	5MHz	16QAM	27735	25RB#0	4.4970	5.131	PASS
Band30	5MHz	256QAM	27685	25RB#0	4.5073	5.132	PASS
Band30	5MHz	256QAM	27710	25RB#0	4.5057	5.128	PASS
Band30	5MHz	256QAM	27735	25RB#0	4.5063	5.196	PASS
Band30	10MHz	QPSK	27710	50RB#0	8.9807	9.949	PASS
Band30	10MHz	16QAM	27710	50RB#0	9.0056	10.06	PASS
Band30	10MHz	64QAM	27710	50RB#0	9.0119	10.04	PASS
Band30	10MHz	256QAM	27710	50RB#0	8.9960	10.04	PASS

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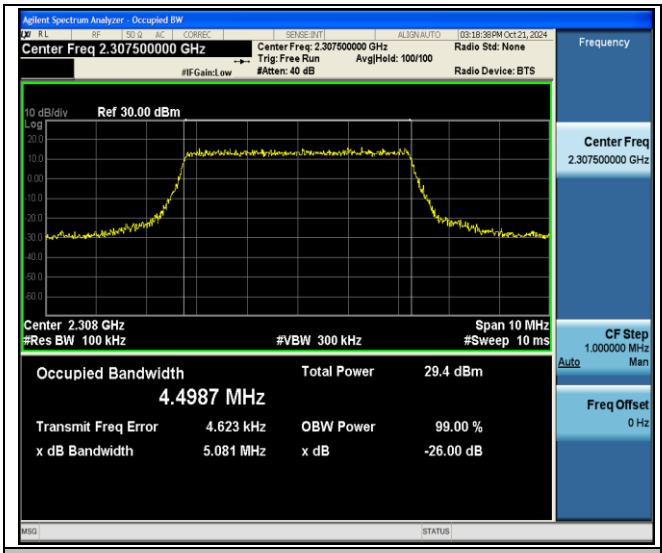
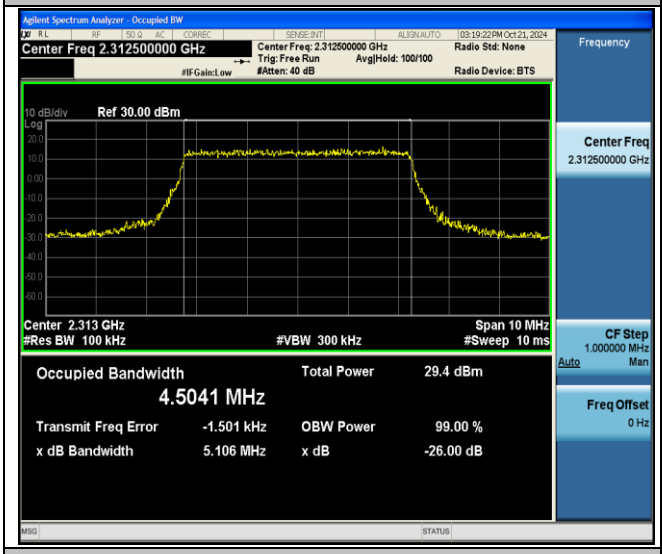
Test Graphs

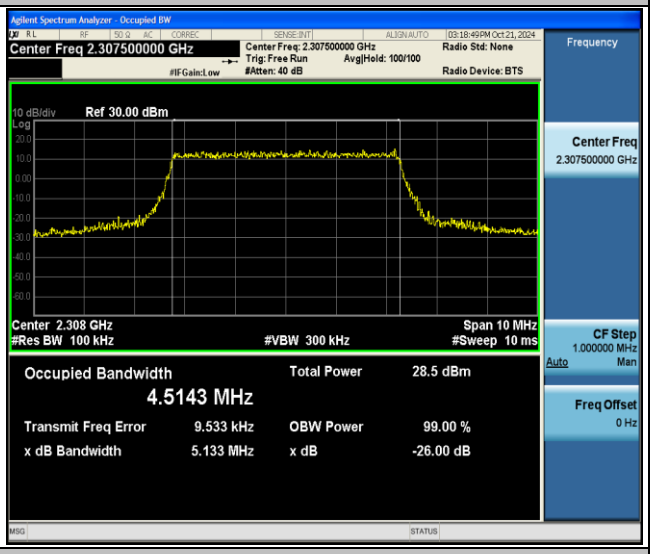


Band30-5MHz-QPSK-27685-25RB#0-PASS

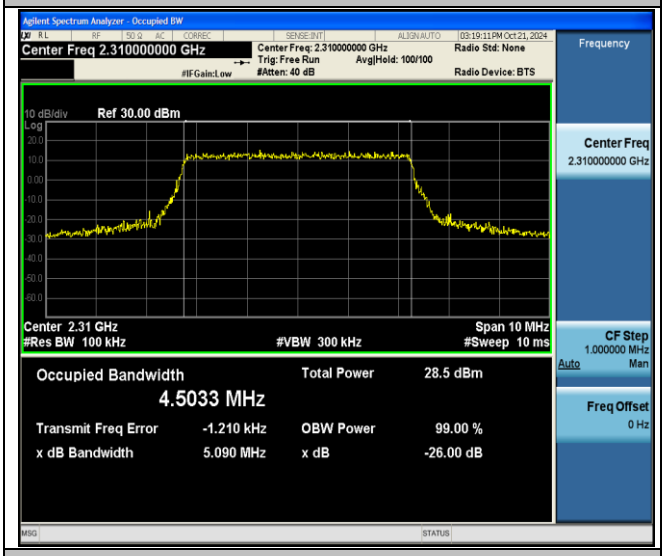
Band30-5MHz-QPSK-27710-25RB#0-PASS



Band30-5MHz-QPSK-27735-25RB#0-PASS



Band30-5MHz-16QAM-27685-25RB#0-PASS



Band30-5MHz-16QAM-27710-25RB#0-PASS

Band30-5MHz-16QAM-27735-25RB#0-PASS

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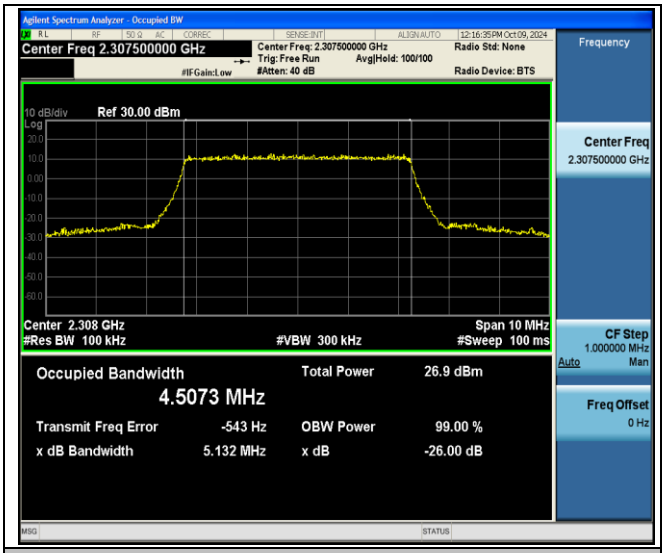
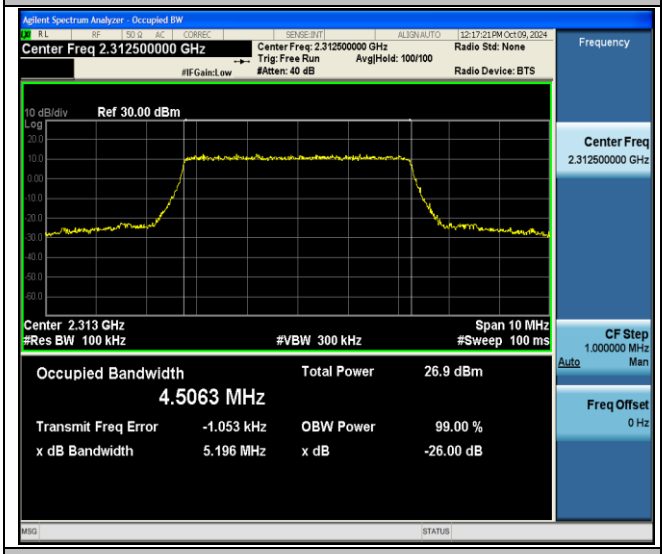


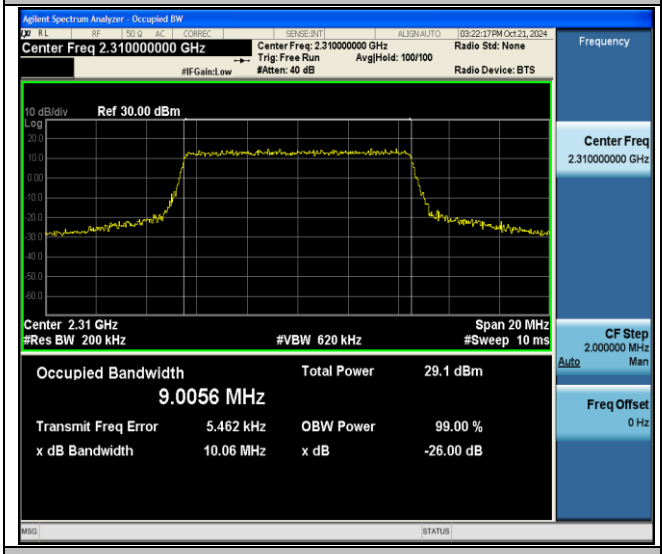
Band30-5MHz-256QAM-27685-25RB#0-PASS

Band30-5MHz-256QAM-27710-25RB#0-PASS

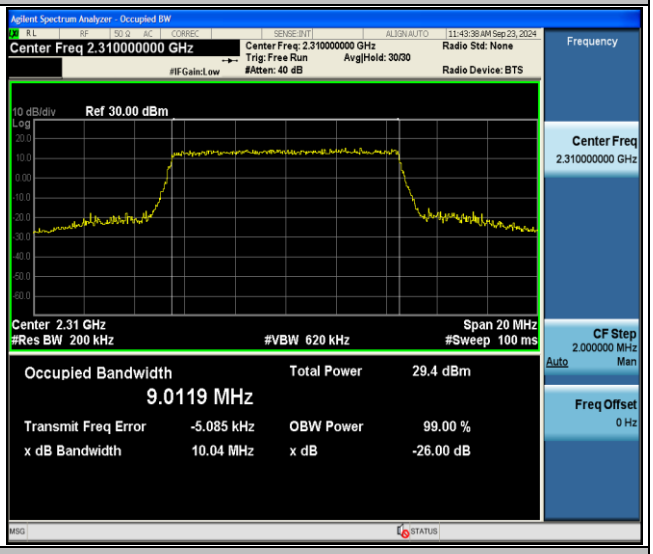


Band30-5MHz-256QAM-27735-25RB#0-PASS

Band30-10MHz-QPSK-27710-50RB#0-PASS



Band30-10MHz-16QAM-27710-50RB#0-PASS



Band30-10MHz-64QAM-27710-50RB#0-PASS

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Band30-10MHz-256QAM-27710-50RB#0-PASS

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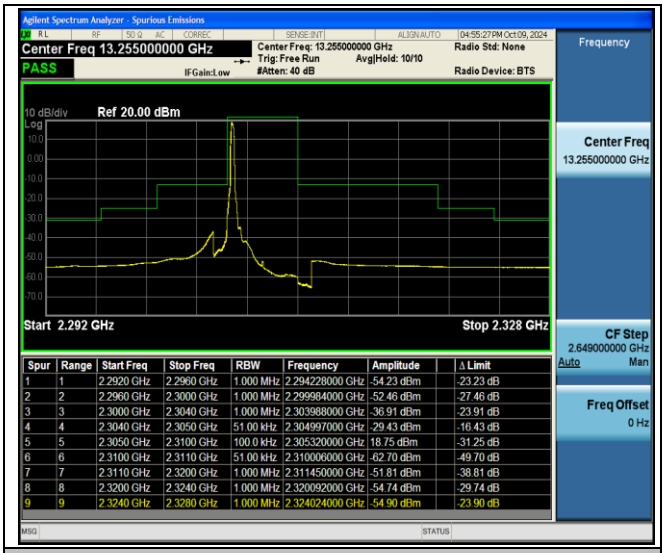
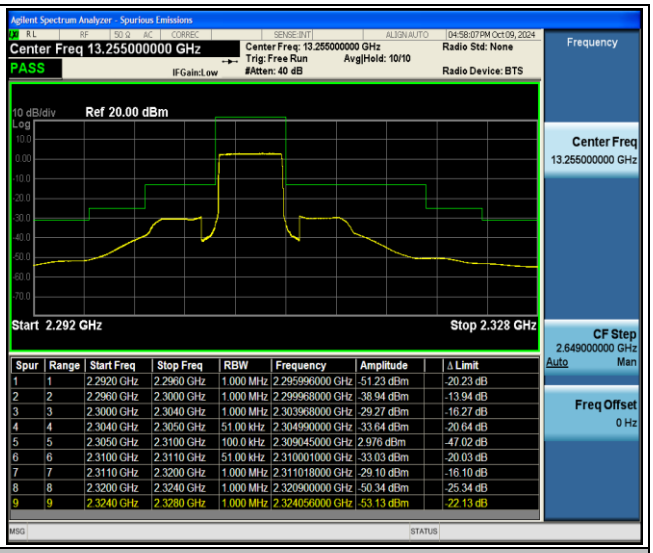
Band Edge

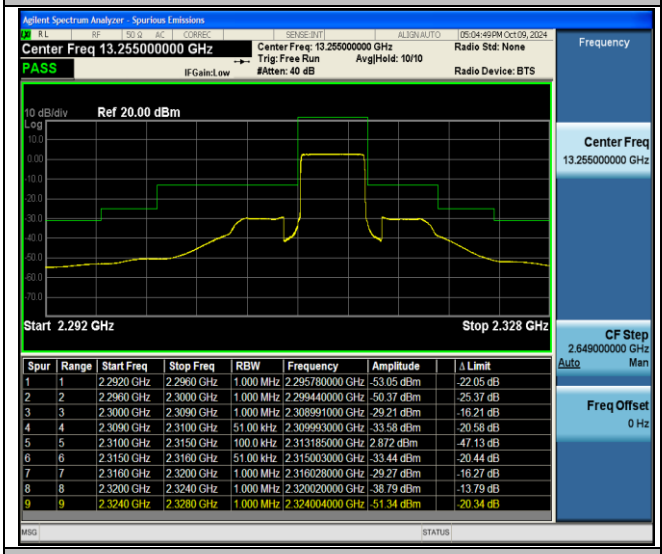
Test Graphs



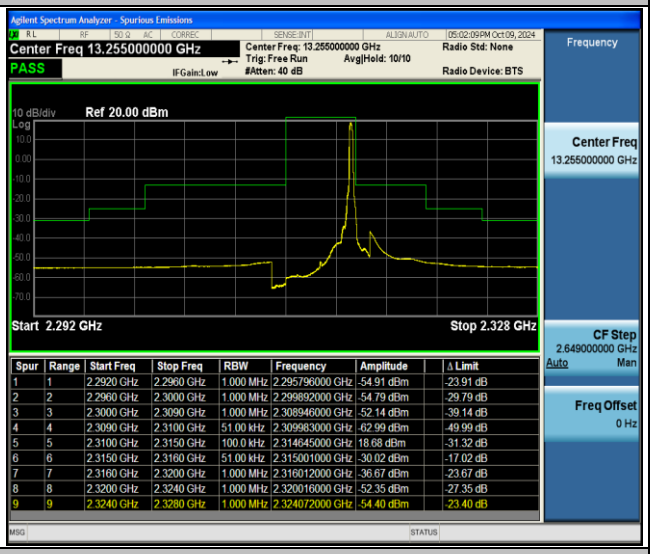
Band30-5MHz-QPSK-27685-1RB#0-PASS



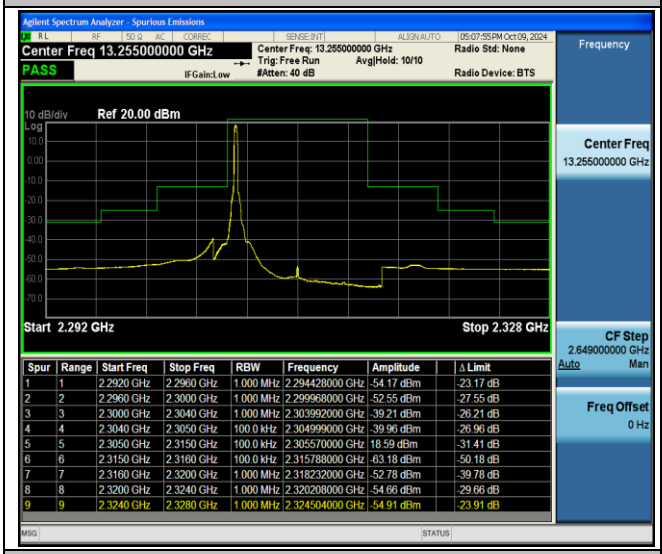
Band30-5MHz-QPSK-27685-25RB#0-PASS



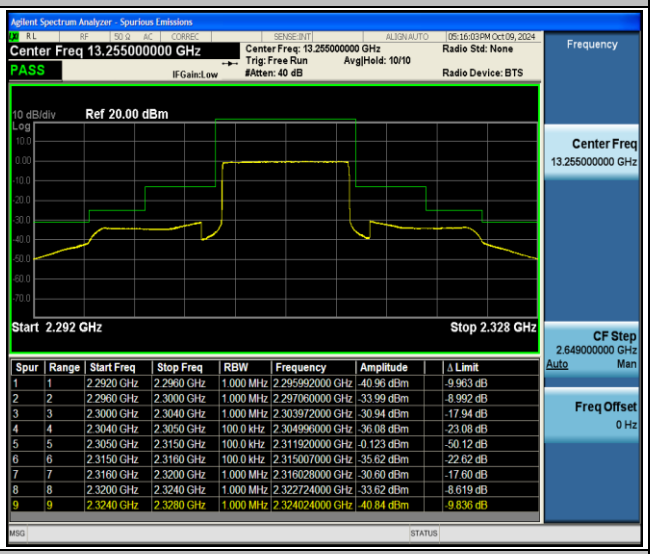
Band30-5MHz-QPSK-27735-25RB#0-PASS



Band30-5MHz-QPSK-27735-1RB#24-PASS



Band30-10MHz-QPSK-27710-1RB#0-PASS



Band30-10MHz-QPSK-27710-50RB#0-PASS

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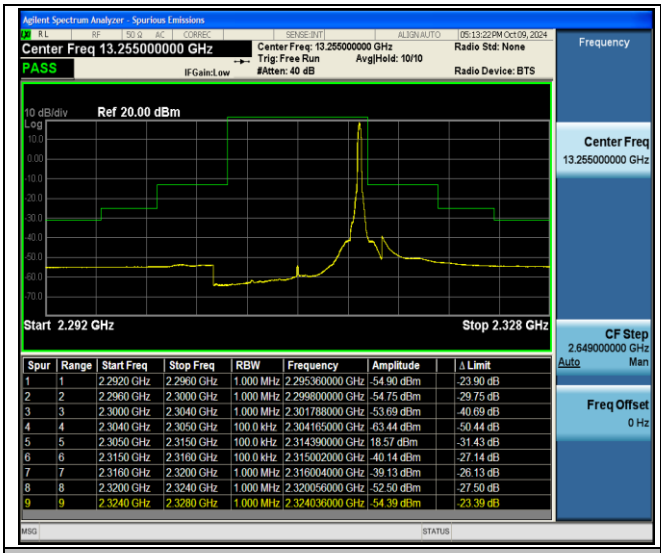

Band30-10MHz-QPSK-27710-1RB#49-PASS

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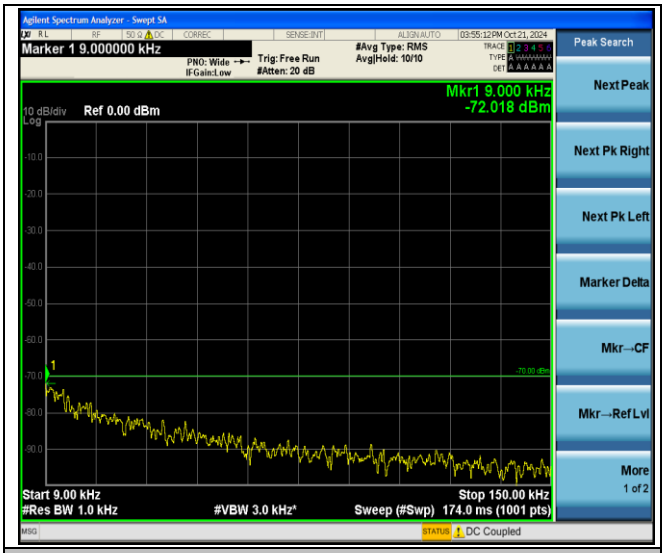
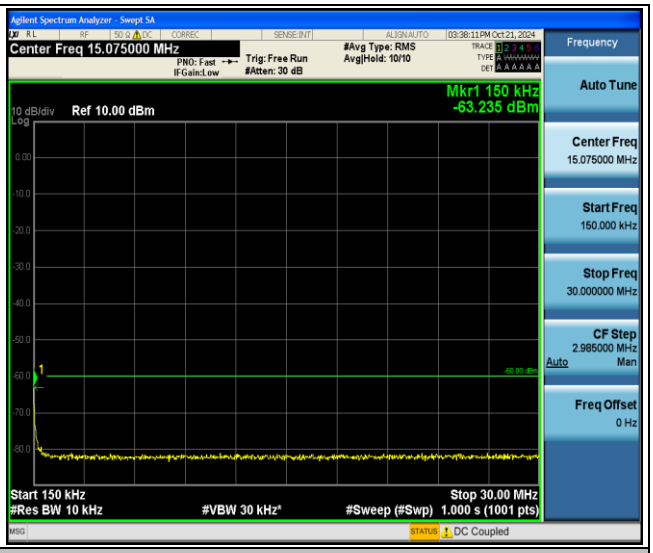
Conducted Spurious Emission

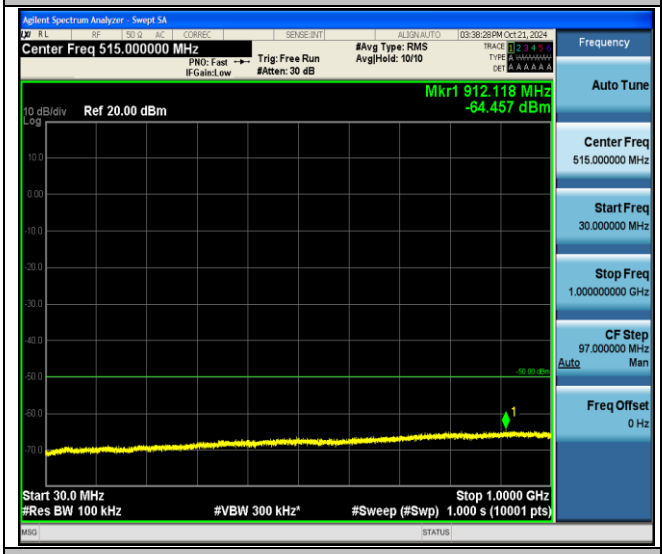
Test Graphs



Band30-10MHz-QPSK-27710-1RB#0-0.009~0.15-PASS

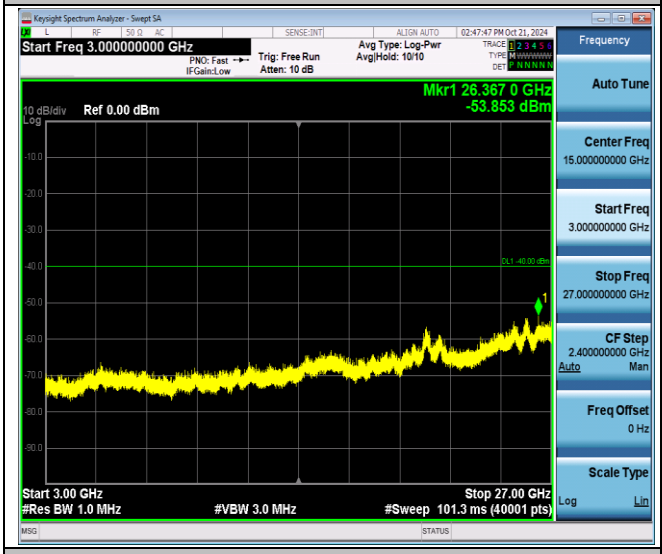


Band30-10MHz-QPSK-27710-1RB#0-0.15~30-PASS



Band30-10MHz-QPSK-27710-1RB#0-30~1000-PASS

Band30-10MHz-QPSK-27710-1RB#0-1000~3000-PASS



Band30-10MHz-QPSK-27710-1RB#0-3000~27000-FAIL

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Frequency Stability

Test Result

Voltage									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Verdict
Band30	10MHz	QPSK	27710	50RB#0	VN	NT	-1.50	-0.000649	PASS
Band30	10MHz	QPSK	27710	50RB#0	VL	NT	-1.60	-0.000693	PASS
Band30	10MHz	QPSK	27710	50RB#0	VH	NT	-1.50	-0.000649	PASS

Temperature									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Verdict
Band30	10MHz	QPSK	27710	50RB#0	NV	-30	-0.80	-0.000346	PASS
Band30	10MHz	QPSK	27710	50RB#0	NV	-20	-2.30	-0.000996	PASS
Band30	10MHz	QPSK	27710	50RB#0	NV	-10	-1.10	-0.000476	PASS
Band30	10MHz	QPSK	27710	50RB#0	NV	30	-1.40	-0.000606	PASS
Band30	10MHz	QPSK	27710	50RB#0	NV	40	-0.90	-0.000390	PASS
Band30	10MHz	QPSK	27710	50RB#0	NV	50	0.50	0.000216	PASS
Band30	10MHz	QPSK	27710	50RB#0	NV	0	0.30	0.000130	PASS
Band30	10MHz	QPSK	27710	50RB#0	NV	10	-1.70	-0.000736	PASS
Band30	10MHz	QPSK	27710	50RB#0	NV	20	-0.20	-0.000087	PASS

~The End~

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