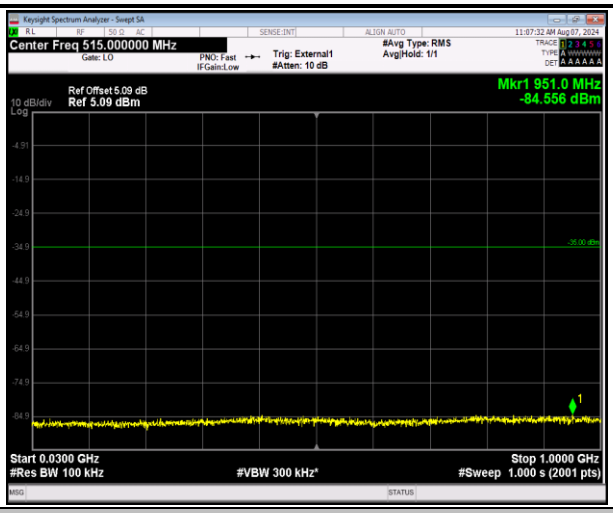
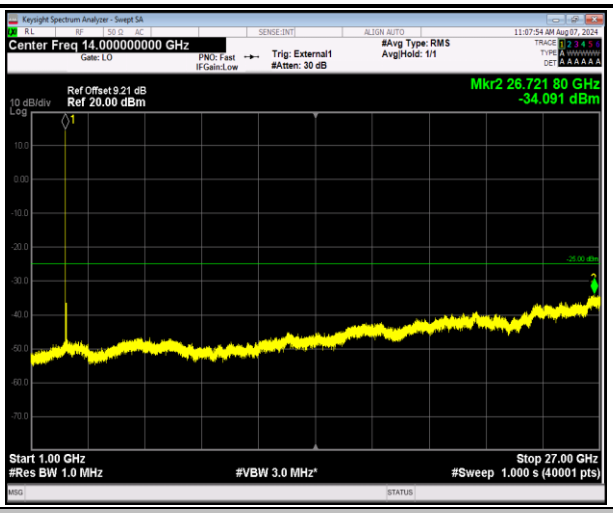
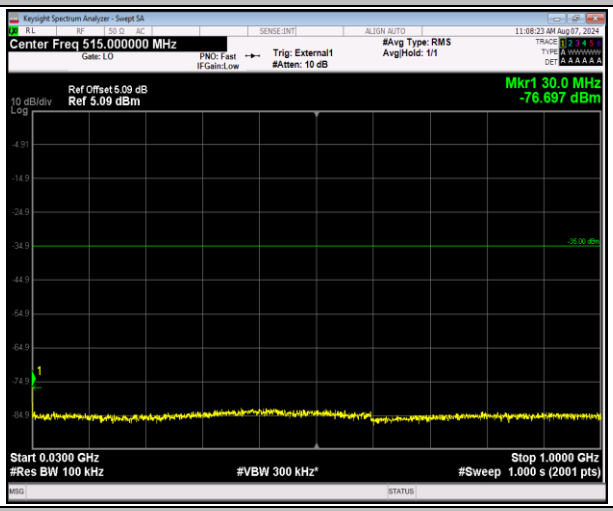


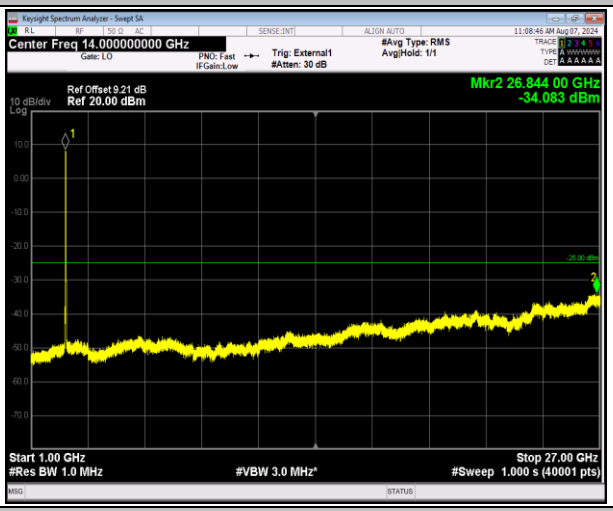
41-41-20MHz-20MHz-16QAM-16QAM-40521-40719-1RB#0-1RB#99-30~1000MHz-PASS



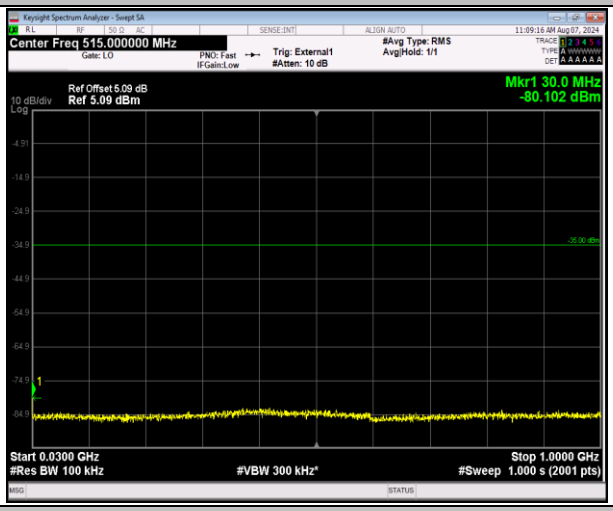
41-41-20MHz-20MHz-16QAM-16QAM-40521-40719-1RB#0-1RB#99-1000~27000MHz-PASS



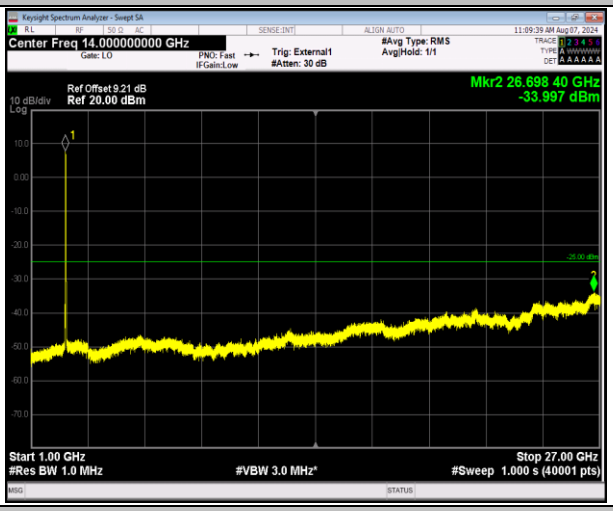
41-41-20MHz-20MHz-QPSK-QPSK-40521-40719-100RB#0-100RB#0-30~1000MHz-PASS



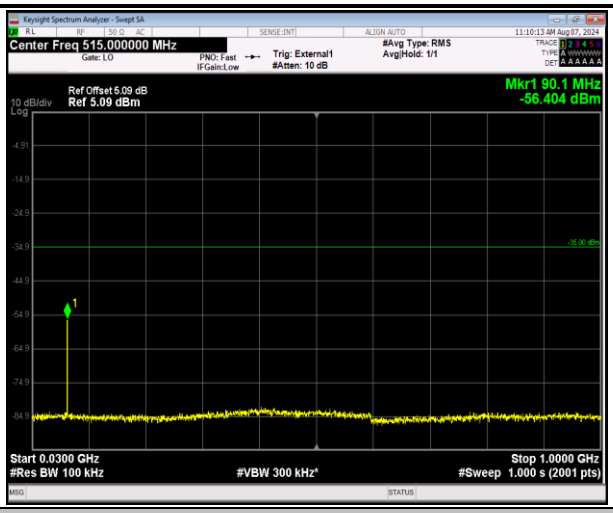
41-41-20MHz-20MHz-QPSK-QPSK-40521-40719-100RB#0-100RB#0-1000~27000MHz-PASS



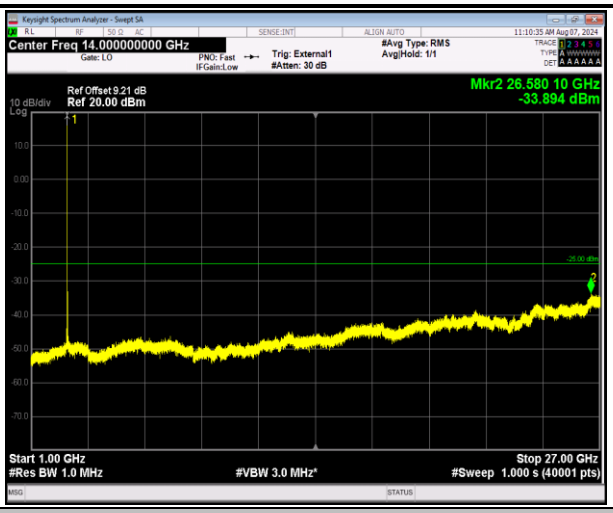
41-41-20MHz-20MHz-16QAM-16QAM-40521-40719-100RB#0-100RB#0-30~1000MHz-PASS



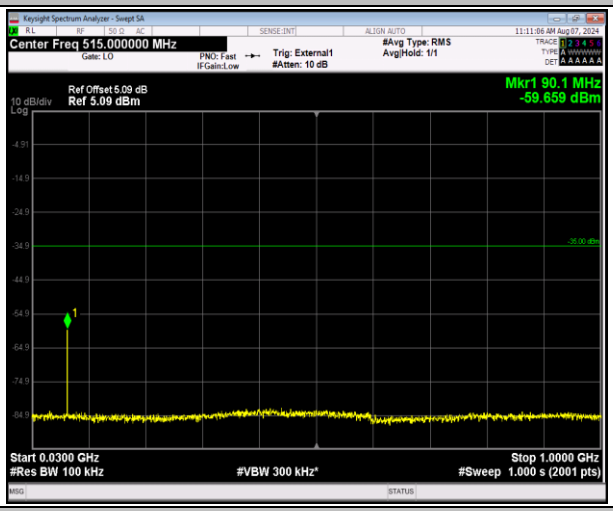
41-41-20MHz-20MHz-16QAM-16QAM-40521-40719-100RB#0-100RB#0-1000~27000MHz-PASS



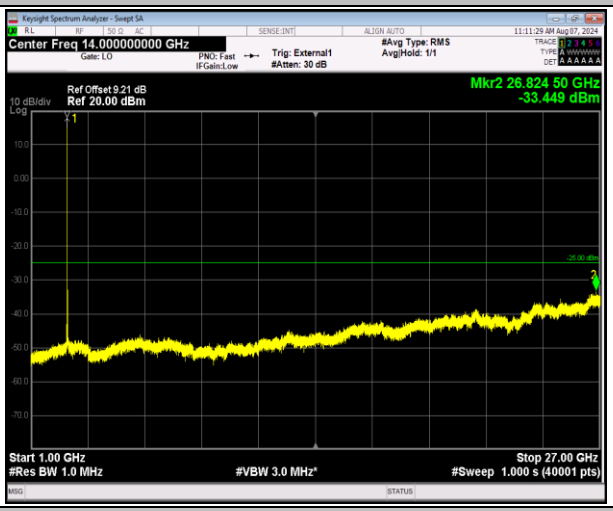
41-41-20MHz-20MHz-QPSK-QPSK-41292-41490-1RB#0-0RB#0-30~1000MHz-PASS



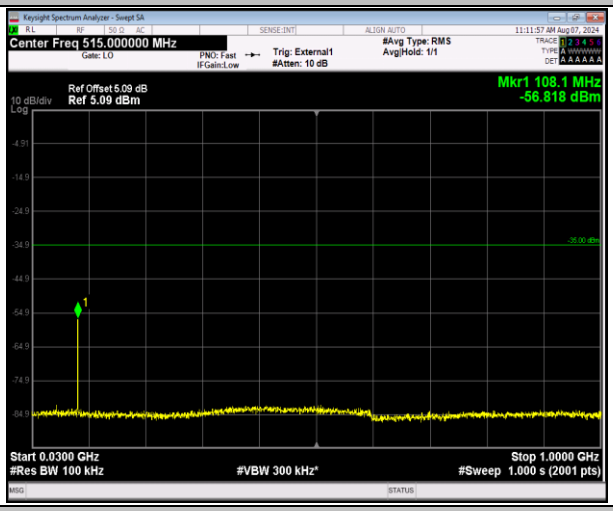
41-41-20MHz-20MHz-QPSK-QPSK-41292-41490-1RB#0-0RB#0-1000~27000MHz-PASS



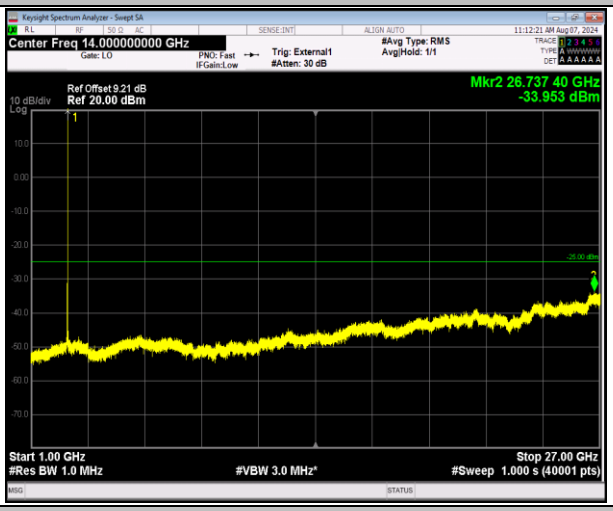
41-41-20MHz-20MHz-16QAM-16QAM-41292-41490-1RB#0-0RB#0-30~1000MHz-PASS



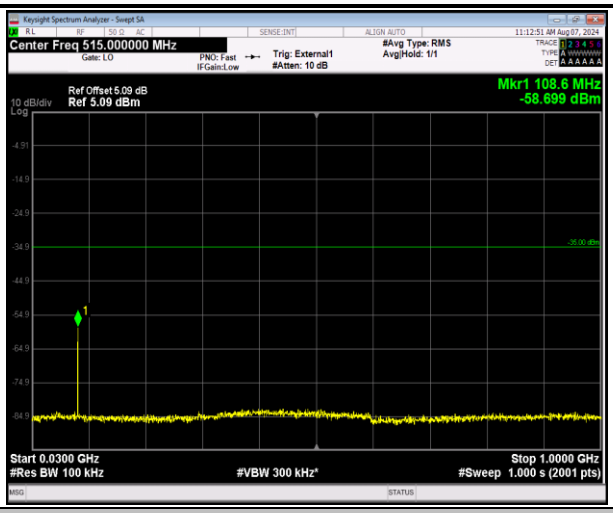
41-41-20MHz-20MHz-16QAM-16QAM-41292-41490-1RB#0-0RB#0-1000~27000MHz-PASS



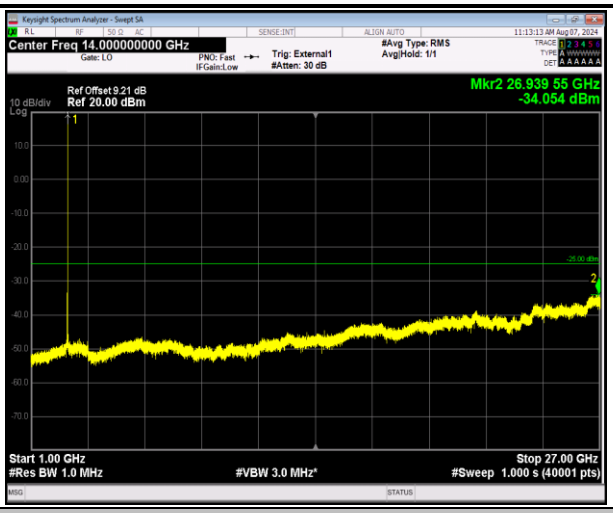
41-41-20MHz-20MHz-QPSK-QPSK-41292-41490-1RB#99-0RB#0-30~1000MHz-PASS



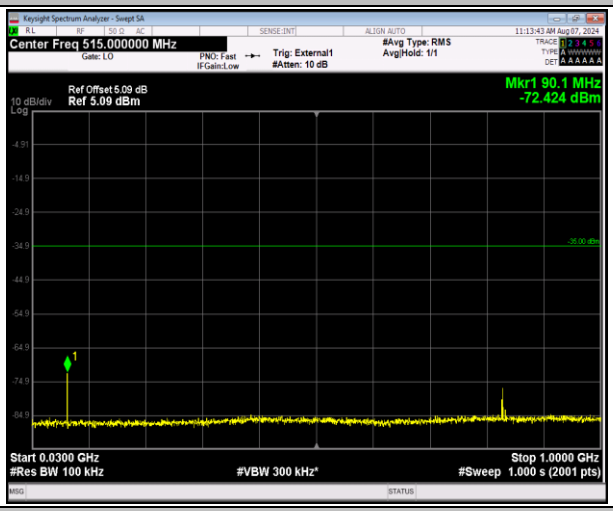
41-41-20MHz-20MHz-QPSK-QPSK-41292-41490-1RB#99-0RB#0-1000~27000MHz-PASS



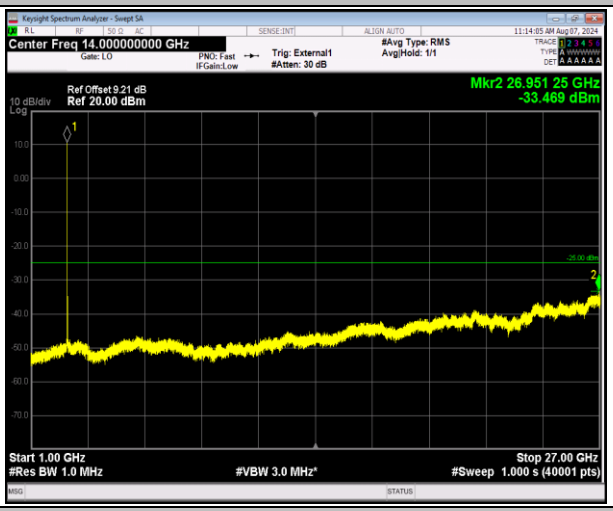
41-41-20MHz-20MHz-16QAM-16QAM-41292-41490-1RB#99-0RB#0-30~1000MHz-PASS



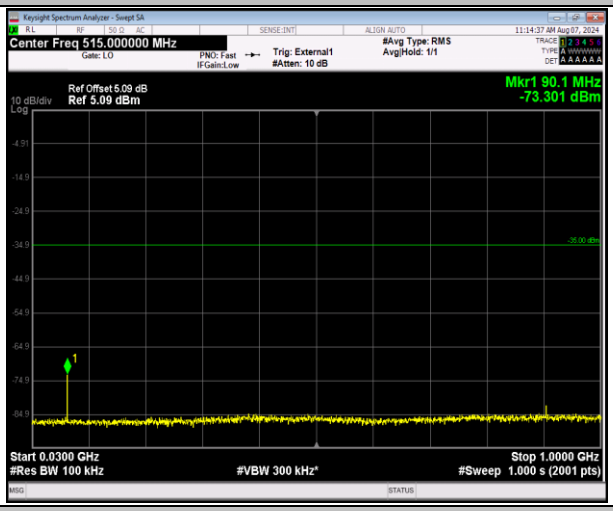
41-41-20MHz-20MHz-16QAM-16QAM-41292-41490-1RB#99-0RB#0-1000~27000MHz-PASS



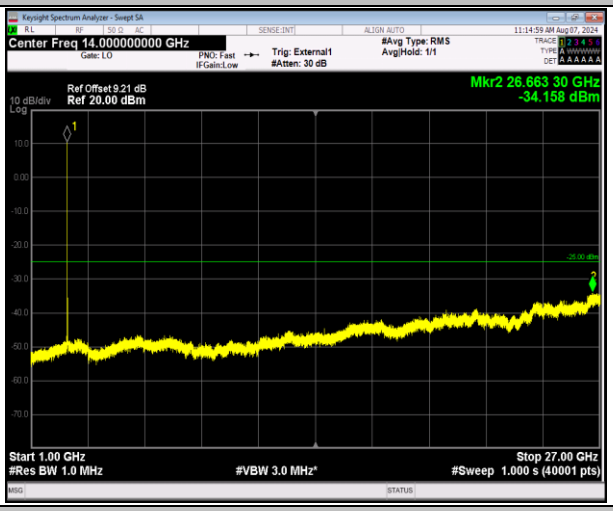
41-41-20MHz-20MHz-QPSK-QPSK-41292-41490-1RB#0-1RB#99-30~1000MHz-PASS



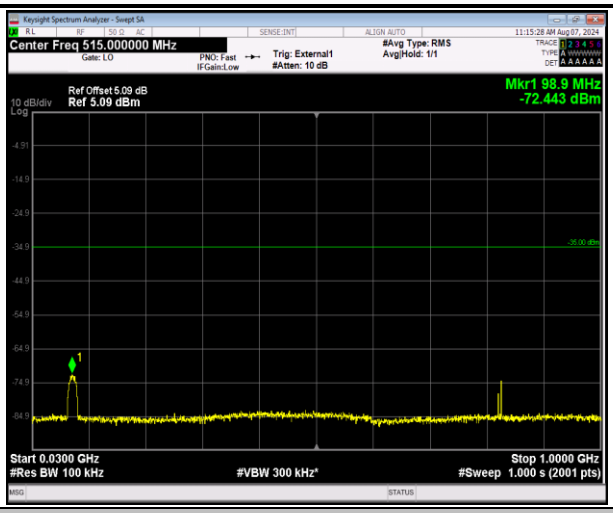
41-41-20MHz-20MHz-QPSK-QPSK-41292-41490-1RB#0-1RB#99-1000~27000MHz-PASS



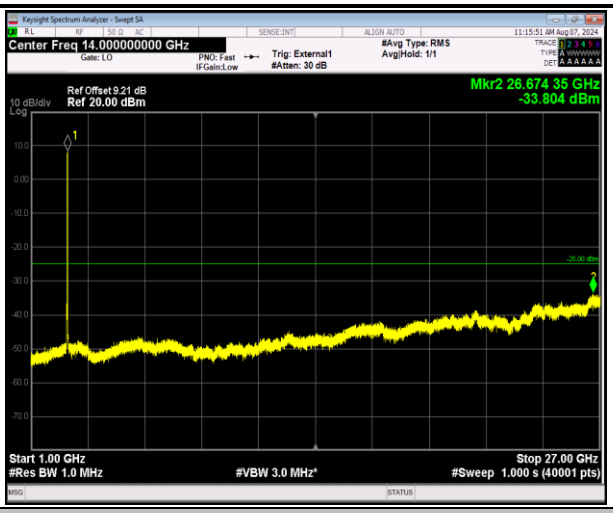
41-41-20MHz-20MHz-16QAM-16QAM-41292-41490-1RB#0-1RB#99-30~1000MHz-PASS



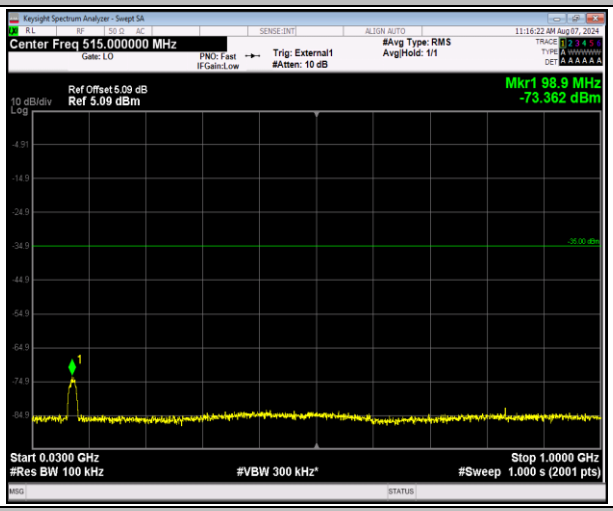
41-41-20MHz-20MHz-16QAM-16QAM-41292-41490-1RB#0-1RB#99-1000~27000MHz-PASS



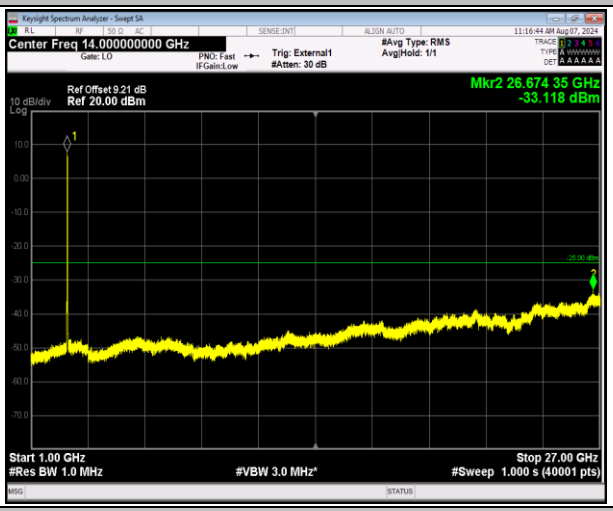
41-41-20MHz-20MHz-QPSK-QPSK-41292-41490-100RB #0-100RB#0-30~1000MHz-PASS



41-41-20MHz-20MHz-QPSK-QPSK-41292-41490-100RB#0 -100RB#0-1000~27000MHz-PASS



41-41-20MHz-20MHz-16QAM-16QAM-41292-41490-100 RB#0-100RB#0-30~1000MHz-PASS



41-41-20MHz-20MHz-16QAM-16QAM-41292-41490-100RB #0-100RB#0-1000~27000MHz-PASS

Appendix F: Frequency Stability

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
7-7	20MHz-20MHz	64QAM-64QAM	21001-21199	100RB#0-100RB#0	VN	NT	-35790.00	-14.118343	±NA	PASS
7-7	20MHz-20MHz	64QAM-64QAM	21001-21199	100RB#0-100RB#0	VL	NT	-15630.00	-6.165680	±NA	PASS
7-7	20MHz-20MHz	64QAM-64QAM	21001-21199	100RB#0-100RB#0	VH	NT	-16060.00	-6.335306	±NA	PASS
41-41	20MHz-20MHz	64QAM-64QAM	40521-40719	100RB#0-100RB#0	VN	NT	-38710.00	-14.928654	±NA	PASS
41-41	20MHz-20MHz	64QAM-64QAM	40521-40719	100RB#0-100RB#0	VL	NT	-38690.00	-14.920941	±NA	PASS
41-41	20MHz-20MHz	64QAM-64QAM	40521-40719	100RB#0-100RB#0	VH	NT	-38140.00	-14.708831	±NA	PASS
7-7	20MHz-20MHz	QPSK-QPSK	21001-21199	100RB#0-100RB#0	VN	NT	3840.00	1.514793	±NA	PASS
41-41	20MHz-20MHz	QPSK-QPSK	40521-40719	100RB#0-100RB#0	VN	NT	13120.00	5.059776	±NA	PASS
41-41	20MHz-20MHz	QPSK-QPSK	40521-40719	100RB#0-100RB#0	VL	NT	-11950.00	-4.608562	±NA	PASS
41-41	20MHz-20MHz	QPSK-QPSK	40521-40719	100RB#0-100RB#0	VH	NT	2030.00	0.782877	±NA	PASS
41-41	20MHz-20MHz	16QAM-16QAM	40521-40719	100RB#0-100RB#0	VN	NT	-22380.00	-8.630929	±NA	PASS
41-41	20MHz-20MHz	16QAM-16QAM	40521-40719	100RB#0-100RB#0	VL	NT	-12480.00	-4.812958	±NA	PASS
41-41	20MHz-20MHz	16QAM-16QAM	40521-40719	100RB#0-100RB#0	VH	NT	-25280.00	-9.749325	±NA	PASS
7-7	20MHz-20MHz	QPSK-QPSK	21001-21199	100RB#0-100RB#0	VL	NT	-2450.00	-0.966469	±NA	PASS
7-7	20MHz-20MHz	QPSK-QPSK	21001-21199	100RB#0-100RB#0	VH	NT	-4070.00	-1.605523	±NA	PASS
7-7	20MHz-20MHz	16QAM-16QAM	21001-21199	100RB#0-100RB#0	VN	NT	-17980.00	-7.092702	±NA	PASS
7-7	20MHz-20MHz	16QAM-16QAM	21001-21199	100RB#0-100RB#0	VL	NT	-17760.00	-7.005917	±NA	PASS

7-7	20MHz-20MHz	16QAM-16QAM	21001-21199	100RB#0-100RB#0	VH	NT	-11650.00	-4.595661	±NA	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
7-7	20MHz-20MHz	64QAM-64QAM	21001-21199	100RB#0-100RB#0	NV	-30	-16490.00	-6.504931	±NA	PASS
7-7	20MHz-20MHz	64QAM-64QAM	21001-21199	100RB#0-100RB#0	NV	-20	-21250.00	-8.382643	±NA	PASS
7-7	20MHz-20MHz	64QAM-64QAM	21001-21199	100RB#0-100RB#0	NV	-10	-11930.00	-4.706114	±NA	PASS
7-7	20MHz-20MHz	64QAM-64QAM	21001-21199	100RB#0-100RB#0	NV	0	-29000.00	-11.439842	±NA	PASS
7-7	20MHz-20MHz	64QAM-64QAM	21001-21199	100RB#0-100RB#0	NV	10	-33450.00	-13.195266	±NA	PASS
7-7	20MHz-20MHz	64QAM-64QAM	21001-21199	100RB#0-100RB#0	NV	20	-20840.00	-8.220907	±NA	PASS
7-7	20MHz-20MHz	64QAM-64QAM	21001-21199	100RB#0-100RB#0	NV	30	-40730.00	-16.067061	±NA	PASS
7-7	20MHz-20MHz	64QAM-64QAM	21001-21199	100RB#0-100RB#0	NV	40	-7900.00	-3.116371	±NA	PASS
7-7	20MHz-20MHz	64QAM-64QAM	21001-21199	100RB#0-100RB#0	NV	50	-32630.00	-12.871795	±NA	PASS
41-41	20MHz-20MHz	64QAM-64QAM	40521-40719	100RB#0-100RB#0	NV	-30	-38830.00	-14.974933	±NA	PASS
41-41	20MHz-20MHz	64QAM-64QAM	40521-40719	100RB#0-100RB#0	NV	-20	-38800.00	-14.963363	±NA	PASS
41-41	20MHz-20MHz	64QAM-64QAM	40521-40719	100RB#0-100RB#0	NV	-10	-39120.00	-15.086772	±NA	PASS
41-41	20MHz-20MHz	64QAM-64QAM	40521-40719	100RB#0-100RB#0	NV	0	-38250.00	-14.751253	±NA	PASS
41-41	20MHz-20MHz	64QAM-64QAM	40521-40719	100RB#0-100RB#0	NV	10	-38720.00	-14.932511	±NA	PASS
41-41	20MHz-20MHz	64QAM-64QAM	40521-40719	100RB#0-100RB#0	NV	20	-38440.00	-14.824528	±NA	PASS
41-41	20MHz-20MHz	64QAM-64QAM	40521-40719	100RB#0-100RB#0	NV	30	-38460.00	-14.832241	±NA	PASS
41-41	20MHz-20MHz	64QAM-64QAM	40521-40719	100RB#0-100RB#0	NV	40	-37970.00	-14.643270	±NA	PASS
41-41	20MHz-	64QAM-	40521-	100RB#0-	NV	50	-38300.00	-14.770536	±NA	PASS

	20MHz	64QAM	40719	100RB#0						
41-41	20MHz-20MHz	QPSK-QPSK	40521-40719	100RB#0-100RB#0	NV	-30	14550.00	5.611261	±NA	PASS
41-41	20MHz-20MHz	QPSK-QPSK	40521-40719	100RB#0-100RB#0	NV	-20	-3750.00	-1.446201	±NA	PASS
41-41	20MHz-20MHz	QPSK-QPSK	40521-40719	100RB#0-100RB#0	NV	-10	-3180.00	-1.226379	±NA	PASS
41-41	20MHz-20MHz	QPSK-QPSK	40521-40719	100RB#0-100RB#0	NV	0	3270.00	1.261088	±NA	PASS
41-41	20MHz-20MHz	QPSK-QPSK	40521-40719	100RB#0-100RB#0	NV	10	13970.00	5.387582	±NA	PASS
41-41	20MHz-20MHz	QPSK-QPSK	40521-40719	100RB#0-100RB#0	NV	20	6030.00	2.325492	±NA	PASS
41-41	20MHz-20MHz	QPSK-QPSK	40521-40719	100RB#0-100RB#0	NV	30	17280.00	6.664096	±NA	PASS
41-41	20MHz-20MHz	QPSK-QPSK	40521-40719	100RB#0-100RB#0	NV	40	4110.00	1.585037	±NA	PASS
41-41	20MHz-20MHz	QPSK-QPSK	40521-40719	100RB#0-100RB#0	NV	50	-7610.00	-2.934825	±NA	PASS
41-41	20MHz-20MHz	16QAM-16QAM	40521-40719	100RB#0-100RB#0	NV	-30	-14680.00	-5.661396	±NA	PASS
41-41	20MHz-20MHz	16QAM-16QAM	40521-40719	100RB#0-100RB#0	NV	-20	-15230.00	-5.873506	±NA	PASS
41-41	20MHz-20MHz	16QAM-16QAM	40521-40719	100RB#0-100RB#0	NV	-10	-13930.00	-5.372156	±NA	PASS
41-41	20MHz-20MHz	16QAM-16QAM	40521-40719	100RB#0-100RB#0	NV	0	-10940.00	-4.219051	±NA	PASS
41-41	20MHz-20MHz	16QAM-16QAM	40521-40719	100RB#0-100RB#0	NV	10	-13190.00	-5.086772	±NA	PASS
41-41	20MHz-20MHz	16QAM-16QAM	40521-40719	100RB#0-100RB#0	NV	20	-28960.00	-11.168531	±NA	PASS
41-41	20MHz-20MHz	16QAM-16QAM	40521-40719	100RB#0-100RB#0	NV	30	-18460.00	-7.119167	±NA	PASS
41-41	20MHz-20MHz	16QAM-16QAM	40521-40719	100RB#0-100RB#0	NV	40	-33210.00	-12.807559	±NA	PASS
41-41	20MHz-20MHz	16QAM-16QAM	40521-40719	100RB#0-100RB#0	NV	50	-14190.00	-5.472426	±NA	PASS
7-7	20MHz-20MHz	QPSK-QPSK	21001-21199	100RB#0-100RB#0	NV	-30	-15450.00	-6.094675	±NA	PASS
7-7	20MHz-20MHz	QPSK-QPSK	21001-21199	100RB#0-100RB#0	NV	-20	-9640.00	-3.802761	±NA	PASS

7-7	20MHz-20MHz	QPSK-QPSK	21001-21199	100RB#0-100RB#0	NV	-10	11660.00	4.599606	±NA	PASS
7-7	20MHz-20MHz	QPSK-QPSK	21001-21199	100RB#0-100RB#0	NV	0	-10350.00	-4.082840	±NA	PASS
7-7	20MHz-20MHz	QPSK-QPSK	21001-21199	100RB#0-100RB#0	NV	10	-14320.00	-5.648915	±NA	PASS
7-7	20MHz-20MHz	QPSK-QPSK	21001-21199	100RB#0-100RB#0	NV	20	6000.00	2.366864	±NA	PASS
7-7	20MHz-20MHz	QPSK-QPSK	21001-21199	100RB#0-100RB#0	NV	30	-16500.00	-6.508876	±NA	PASS
7-7	20MHz-20MHz	QPSK-QPSK	21001-21199	100RB#0-100RB#0	NV	40	500.00	0.197239	±NA	PASS
7-7	20MHz-20MHz	QPSK-QPSK	21001-21199	100RB#0-100RB#0	NV	50	-18900.00	-7.455621	±NA	PASS
7-7	20MHz-20MHz	16QAM-16QAM	21001-21199	100RB#0-100RB#0	NV	-30	-2320.00	-0.915187	±NA	PASS
7-7	20MHz-20MHz	16QAM-16QAM	21001-21199	100RB#0-100RB#0	NV	-20	-11110.00	-4.382643	±NA	PASS
7-7	20MHz-20MHz	16QAM-16QAM	21001-21199	100RB#0-100RB#0	NV	-10	-1870.00	-0.737673	±NA	PASS
7-7	20MHz-20MHz	16QAM-16QAM	21001-21199	100RB#0-100RB#0	NV	0	-18380.00	-7.250493	±NA	PASS
7-7	20MHz-20MHz	16QAM-16QAM	21001-21199	100RB#0-100RB#0	NV	10	5930.00	2.339250	±NA	PASS
7-7	20MHz-20MHz	16QAM-16QAM	21001-21199	100RB#0-100RB#0	NV	20	-10270.00	-4.051282	±NA	PASS
7-7	20MHz-20MHz	16QAM-16QAM	21001-21199	100RB#0-100RB#0	NV	30	-16920.00	-6.674556	±NA	PASS
7-7	20MHz-20MHz	16QAM-16QAM	21001-21199	100RB#0-100RB#0	NV	40	-8550.00	-3.372781	±NA	PASS
7-7	20MHz-20MHz	16QAM-16QAM	21001-21199	100RB#0-100RB#0	NV	50	9220.00	3.637081	±NA	PASS