

APPENDIX B: TEST RESULTS FOR UTRA OPERATING BAND 4

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APPENDIX B.1: EFFECTIVE (ISOTROPIC) RADIATED POWER

Test Result

WCDMA

Band	Channel	Power(dBm)	Limit(dBm)	Verdict
Band4	1312	23.45	30	PASS
Band4	1413	23.26	30	PASS
Band4	1513	23.34	30	PASS

HSDPA

Band	Channel	SubTest	Power(dBm)	Limit(dBm)	Verdict
Band4	1312	1	22.25	30	PASS
Band4	1312	2	21.76	30	PASS
Band4	1312	3	21.84	30	PASS
Band4	1312	4	21.87	30	PASS
Band4	1413	1	22.24	30	PASS
Band4	1413	2	21.85	30	PASS
Band4	1413	3	21.83	30	PASS
Band4	1413	4	21.86	30	PASS
Band4	1513	1	22.27	30	PASS
Band4	1513	2	21.83	30	PASS
Band4	1513	3	21.89	30	PASS
Band4	1513	4	21.83	30	PASS

HSUPA

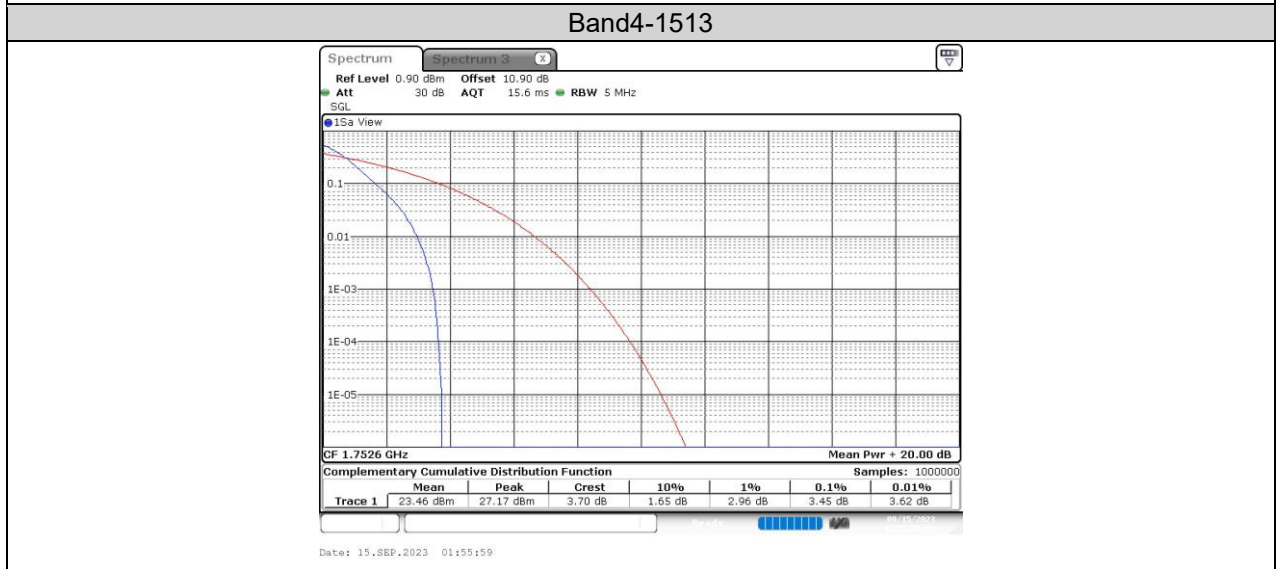
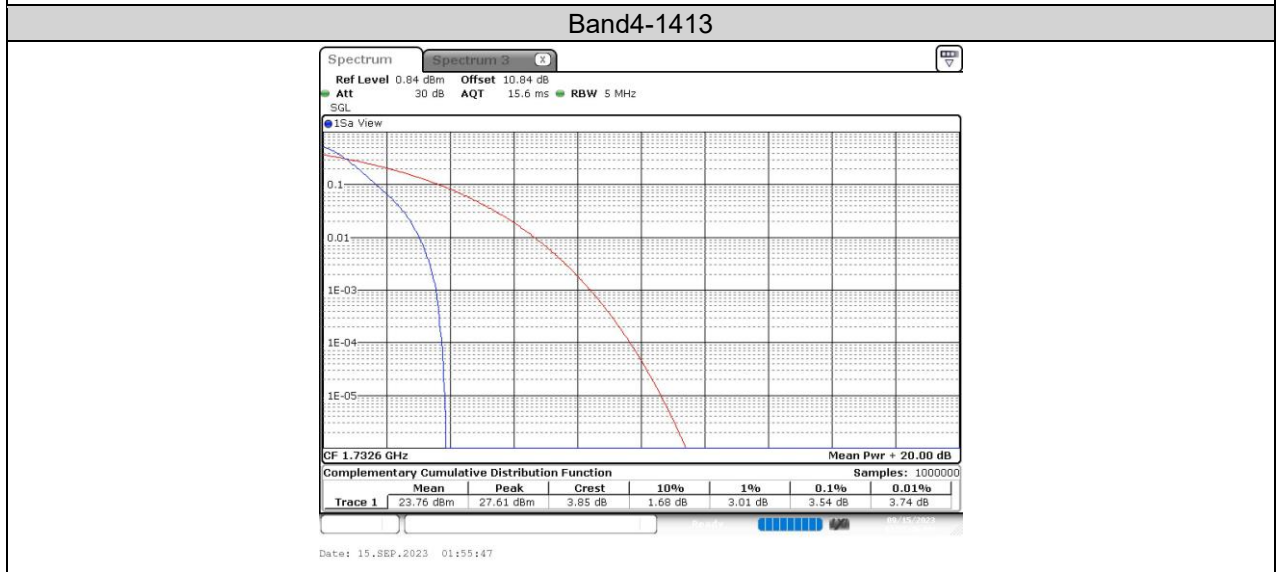
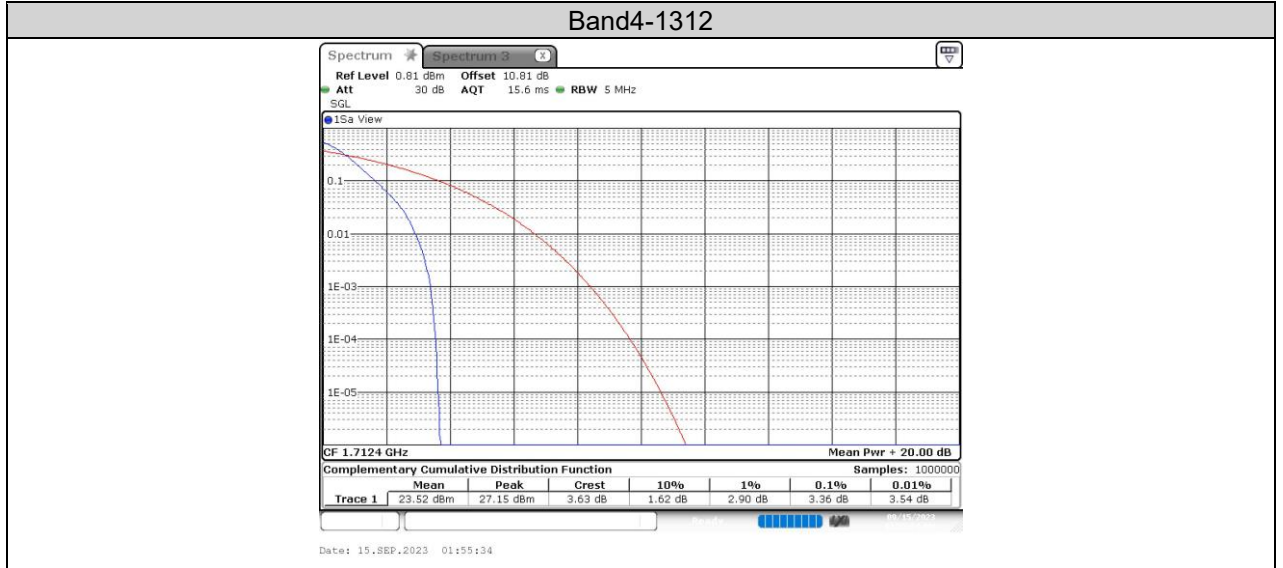
Band	Channel	SubTest	Power(dBm)	Limit(dBm)	Verdict
Band4	1312	1	22.04	30	PASS
Band4	1312	2	21.47	30	PASS
Band4	1312	3	21.34	30	PASS
Band4	1312	4	21.81	30	PASS
Band4	1312	5	22.40	30	PASS
Band4	1413	1	21.86	30	PASS
Band4	1413	2	21.19	30	PASS
Band4	1413	3	20.63	30	PASS
Band4	1413	4	21.91	30	PASS
Band4	1413	5	22.43	30	PASS
Band4	1513	1	22.32	30	PASS
Band4	1513	2	21.57	30	PASS
Band4	1513	3	20.54	30	PASS
Band4	1513	4	21.75	30	PASS
Band4	1513	5	22.35	30	PASS

APPENDIX B.2: PEAK-TO AVERAGE RATIO

Test Result

Band	Channel	Peak-to-Average Ratio(dB)	Limit(dBm)	Verdict
Band4	1312	3.36	13	PASS
Band4	1413	3.54	13	PASS
Band4	1513	3.45	13	PASS

Test Graphs

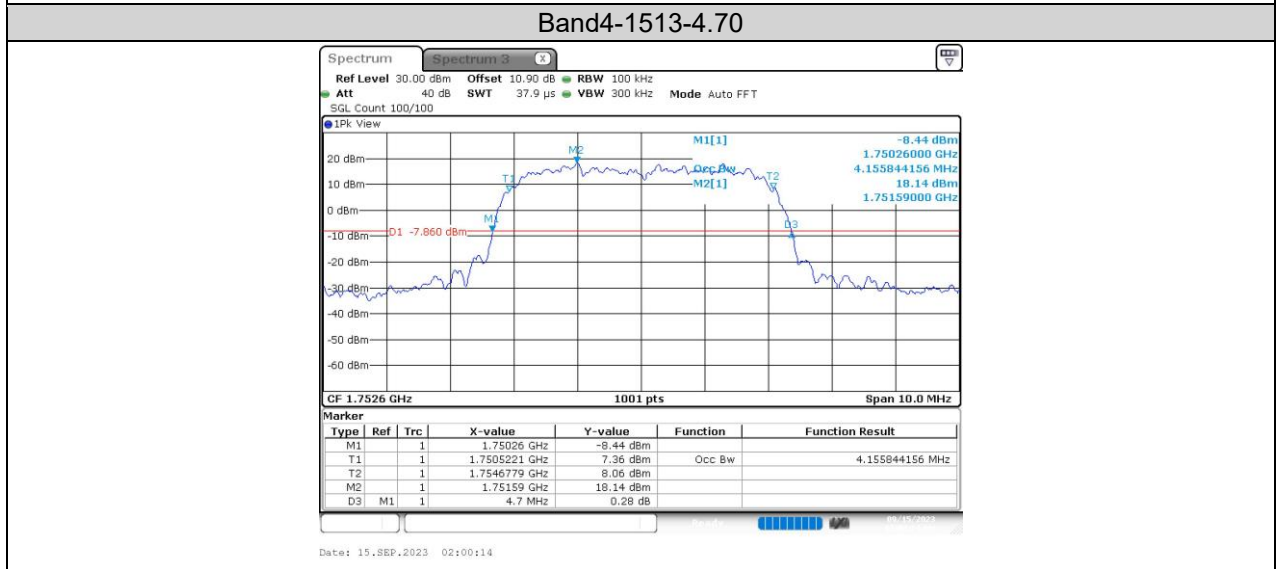
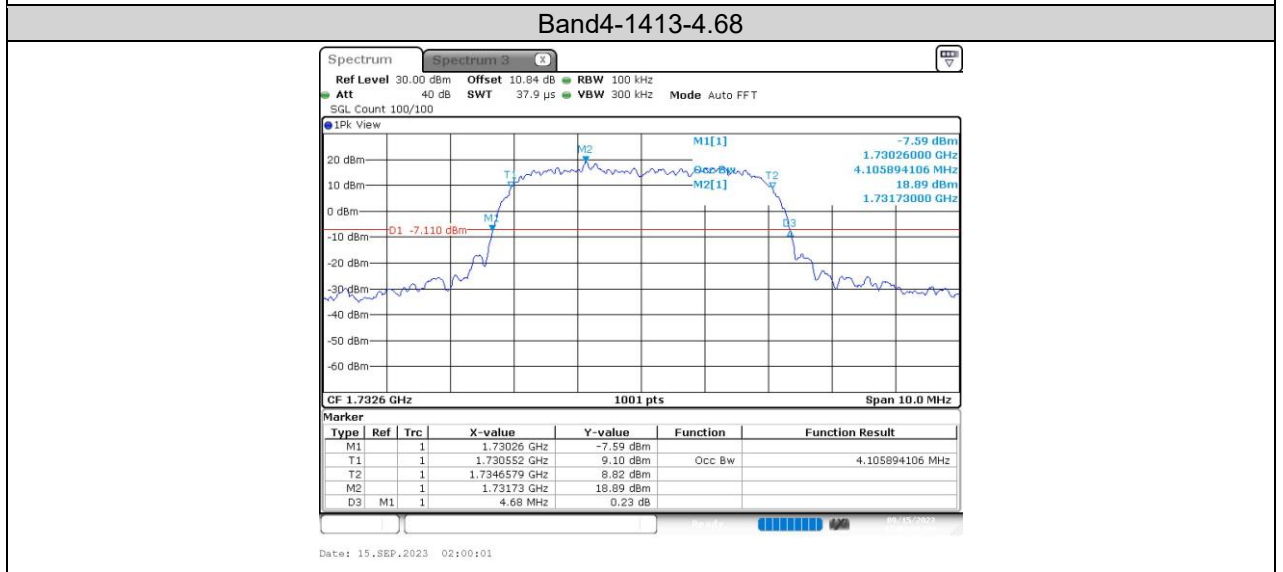
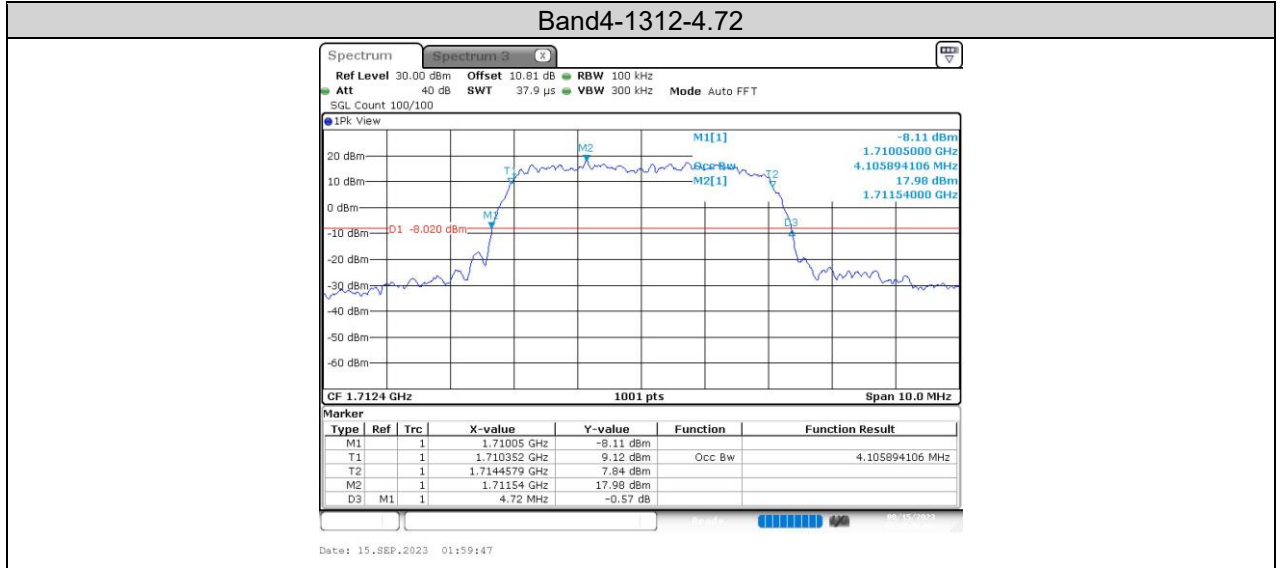


APPENDIX B.3: 26dB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(MHz)	Verdict
Band4	1312	4.106	4.72	---	PASS
Band4	1413	4.106	4.68	---	PASS
Band4	1513	4.156	4.70	---	PASS

Test Graphs

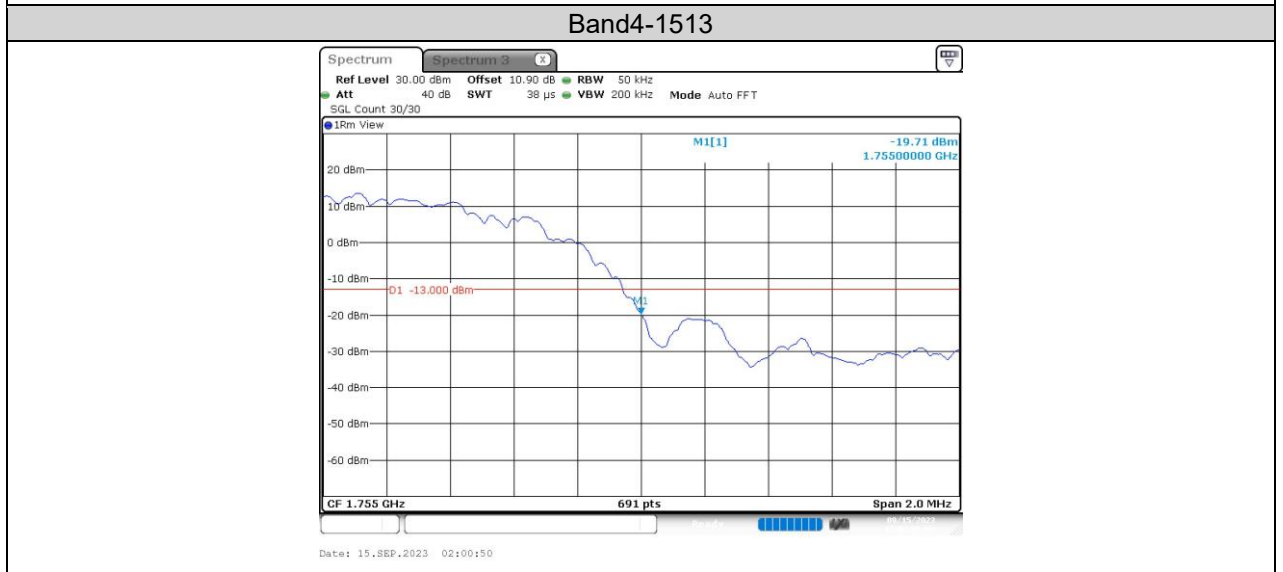
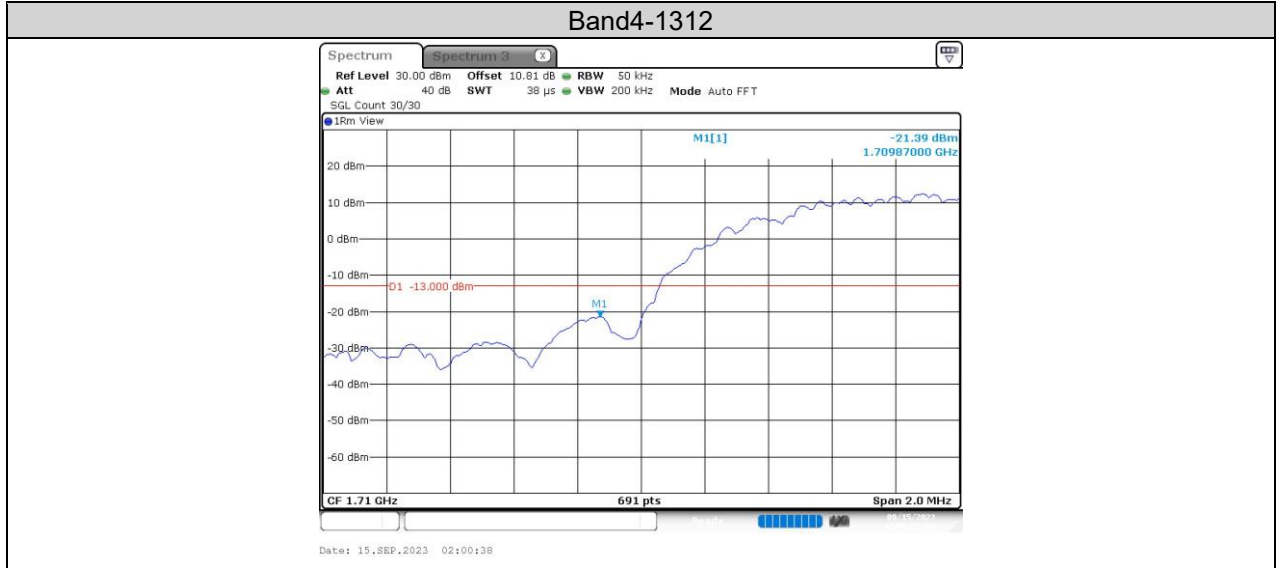


APPENDIX B.4: BAND EDGE

Test Result

Band	Channel	Frequency (MHz)	Result (dBm)	Limit(dBm)	Verdict
Band4	1312	1709.87	-21.39	-13	PASS
Band4	1513	1755.00	-19.71	-13	PASS

Test Graphs



APPENDIX B.5: CONDUCTED SPURIOUS EMISSIONS

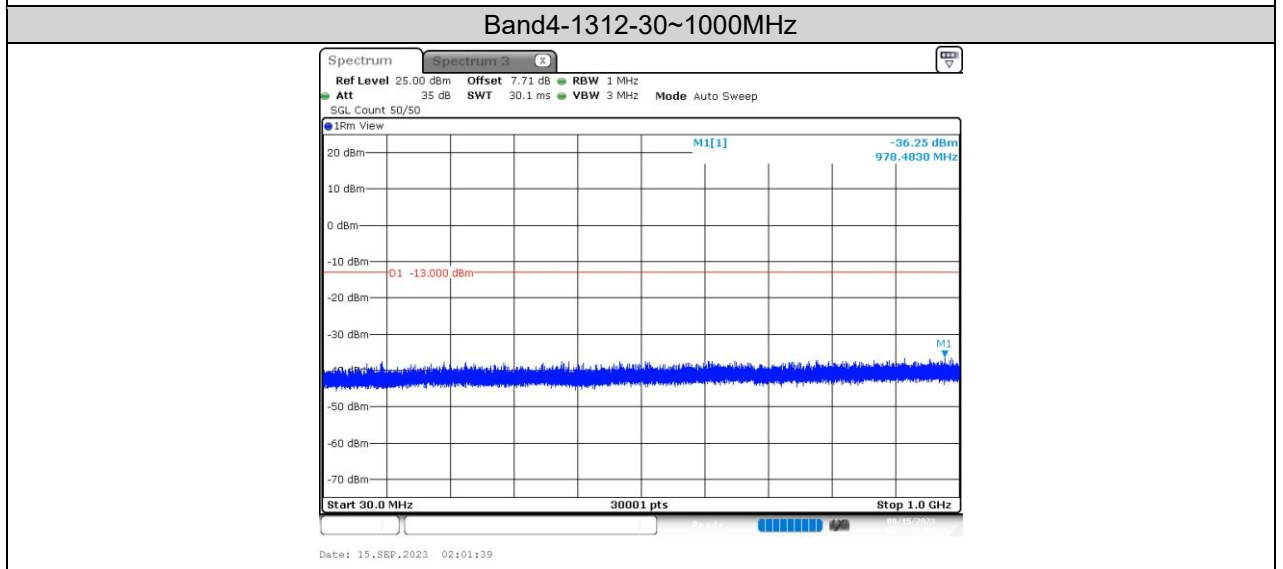
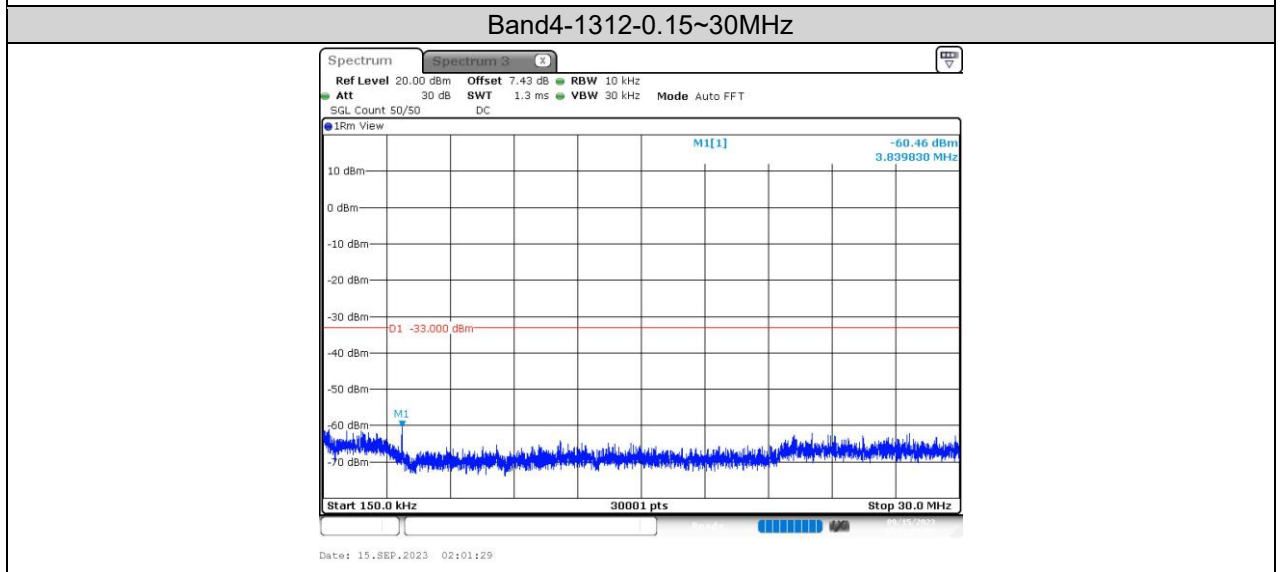
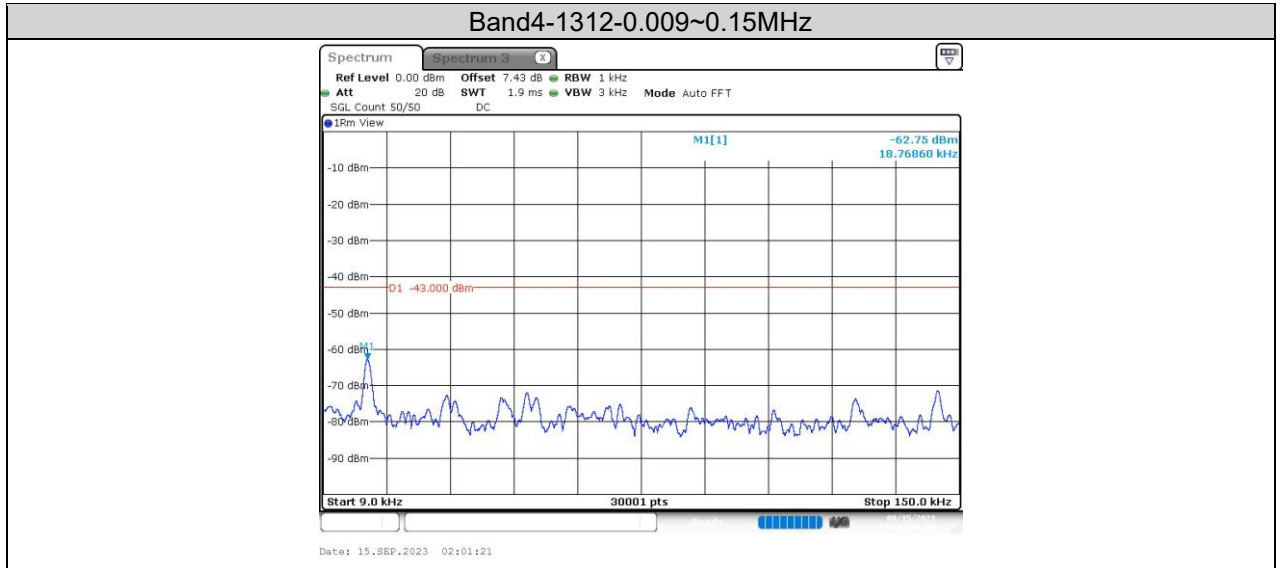
Test Result

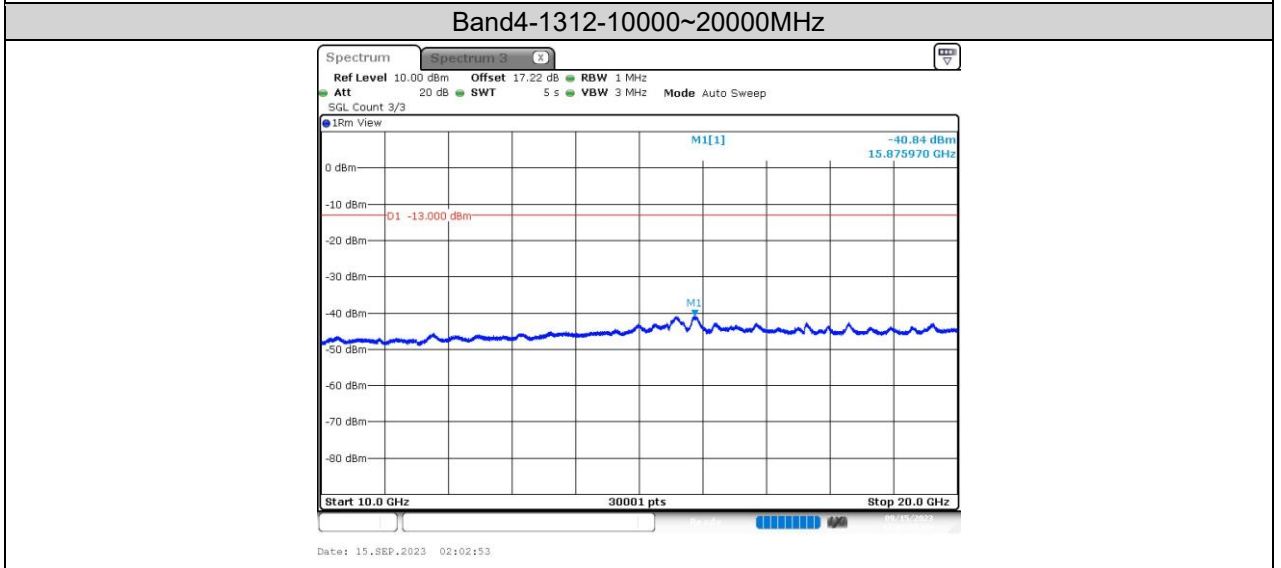
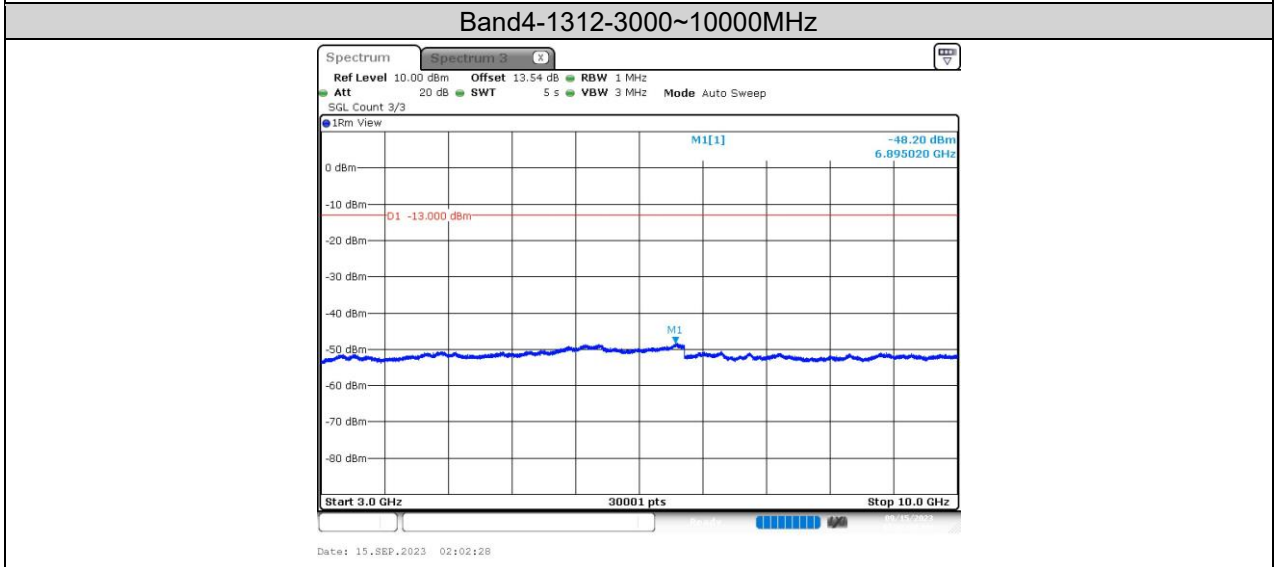
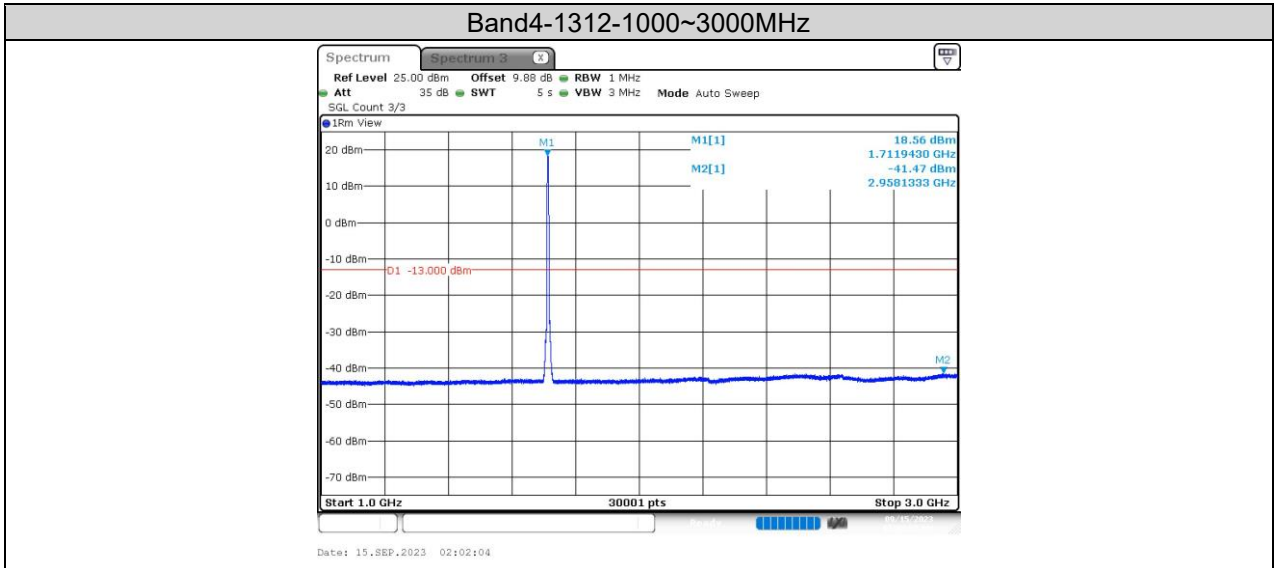
General:

Band	Channel	Frequency Range (MHz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band4	1312	0.009~0.15MHz	0.02	-62.75	-43	PASS
Band4	1312	0.15~30MHz	3.84	-60.46	-33	PASS
Band4	1312	30~1000MHz	978.48	-36.25	-13	PASS
Band4	1312	1000~3000MHz	2958.13	-41.47	-13	PASS
Band4	1312	3000~10000MHz	6895.02	-48.2	-13	PASS
Band4	1312	10000~20000MHz	15875.97	-40.84	-13	PASS
Band4	1413	0.009~0.15MHz	0.02	-63.49	-43	PASS
Band4	1413	0.15~30MHz	3.84	-59.82	-33	PASS
Band4	1413	30~1000MHz	915.4	-36.01	-13	PASS
Band4	1413	1000~3000MHz	2633.53	-41.56	-13	PASS
Band4	1413	3000~10000MHz	6937.49	-48.45	-13	PASS
Band4	1413	10000~20000MHz	15892.3	-40.57	-13	PASS
Band4	1513	0.009~0.15MHz	0.02	-62.72	-43	PASS
Band4	1513	0.15~30MHz	3.84	-59.52	-33	PASS
Band4	1513	30~1000MHz	827.39	-36.08	-13	PASS
Band4	1513	1000~3000MHz	2968.13	-41.42	-13	PASS
Band4	1513	3000~10000MHz	6929.79	-48.41	-13	PASS
Band4	1513	10000~20000MHz	15861.3	-40.65	-13	PASS

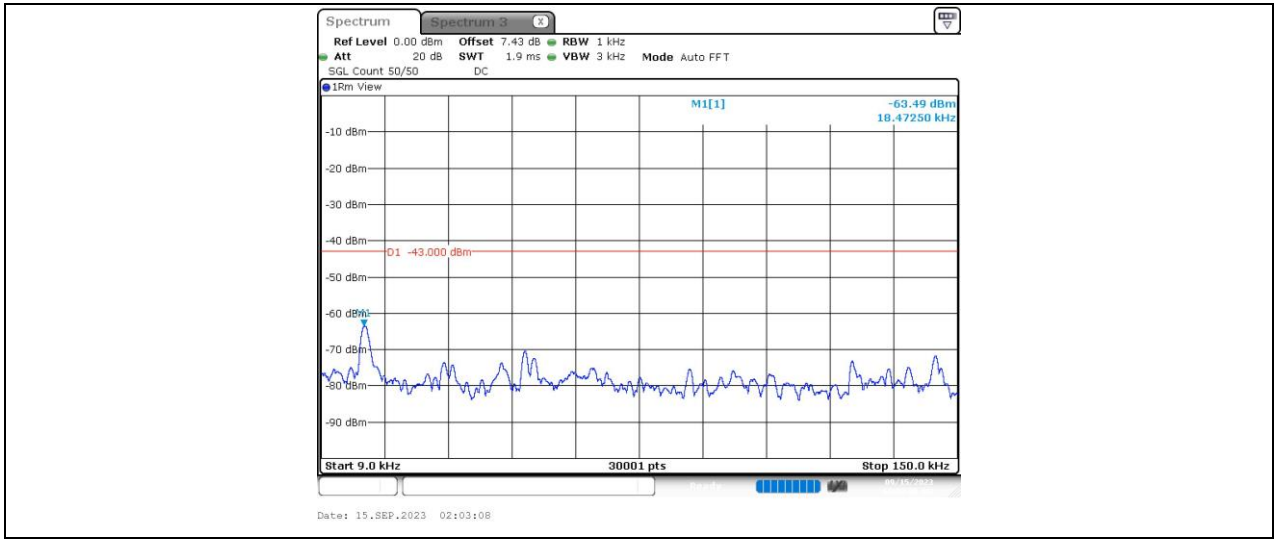
Test Graphs

General:

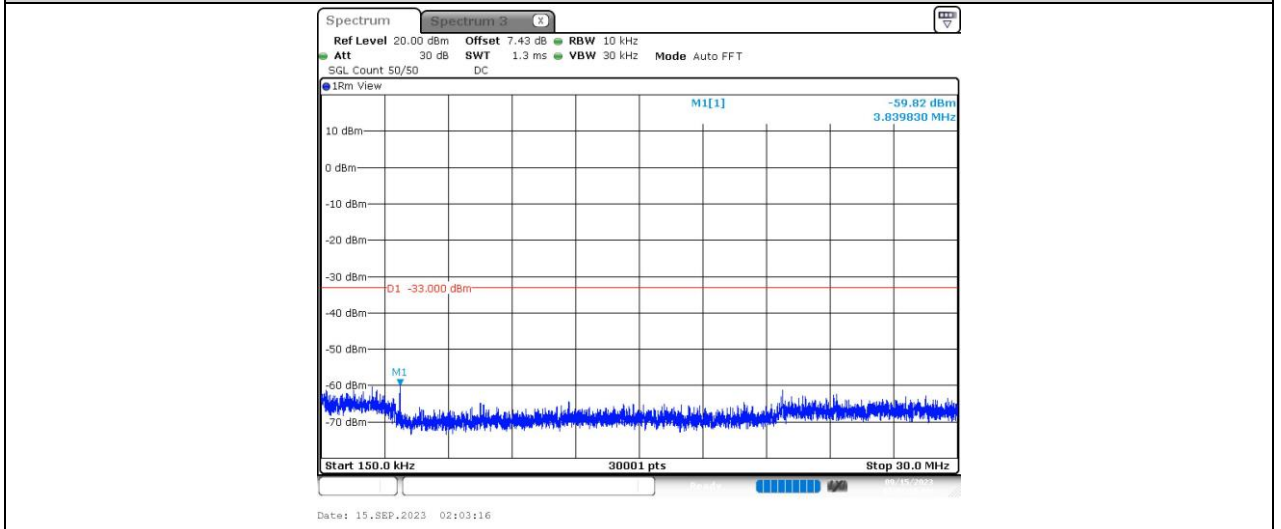




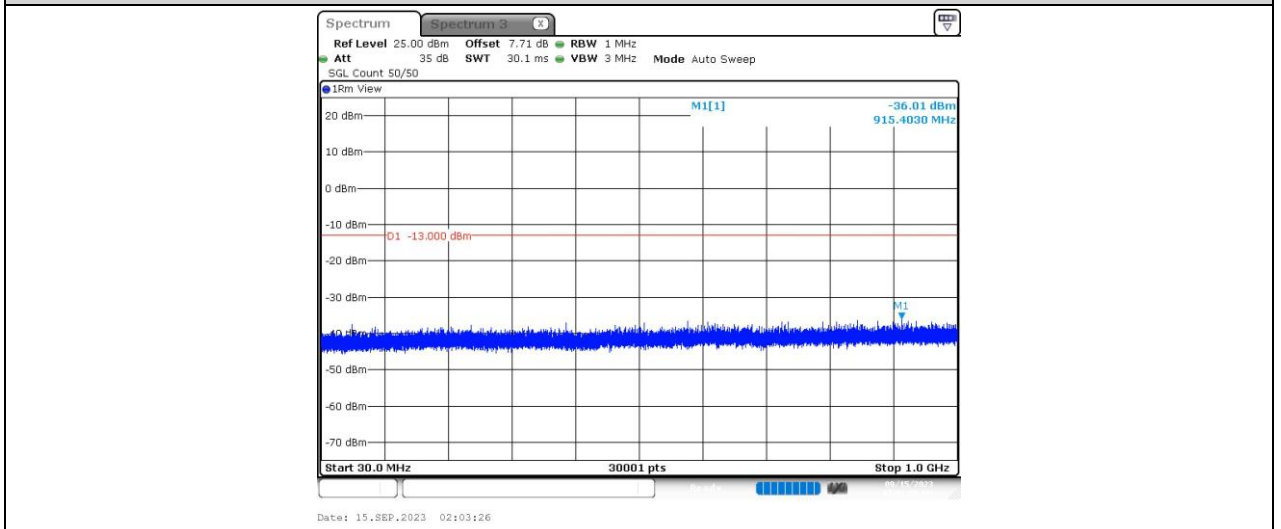
Band4-1413-0.009~0.15MHz



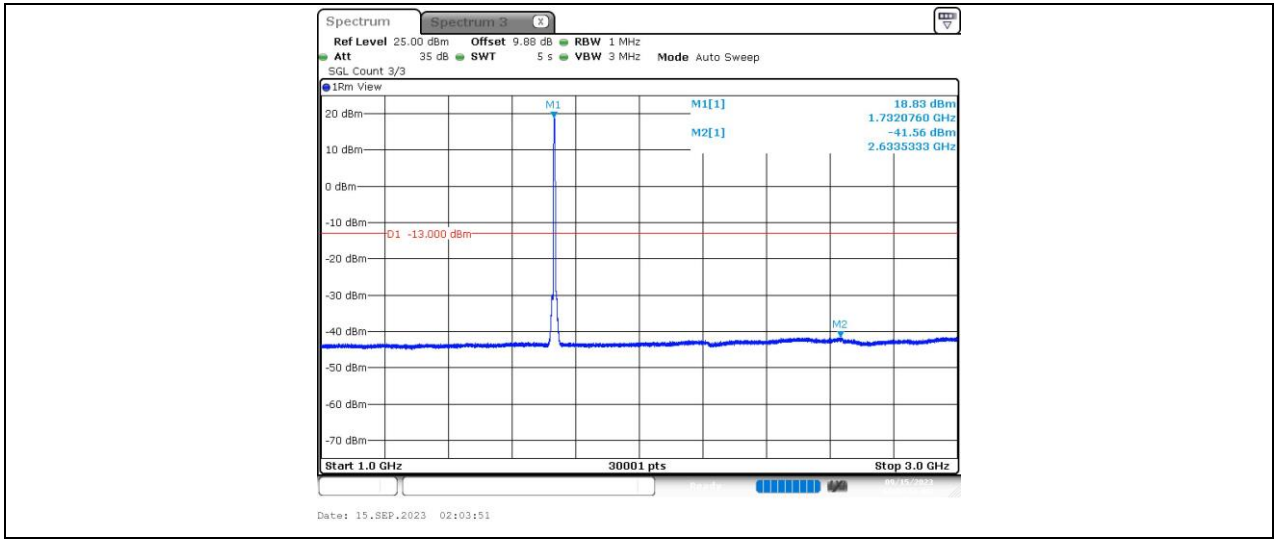
Band4-1413-0.15~30MHz



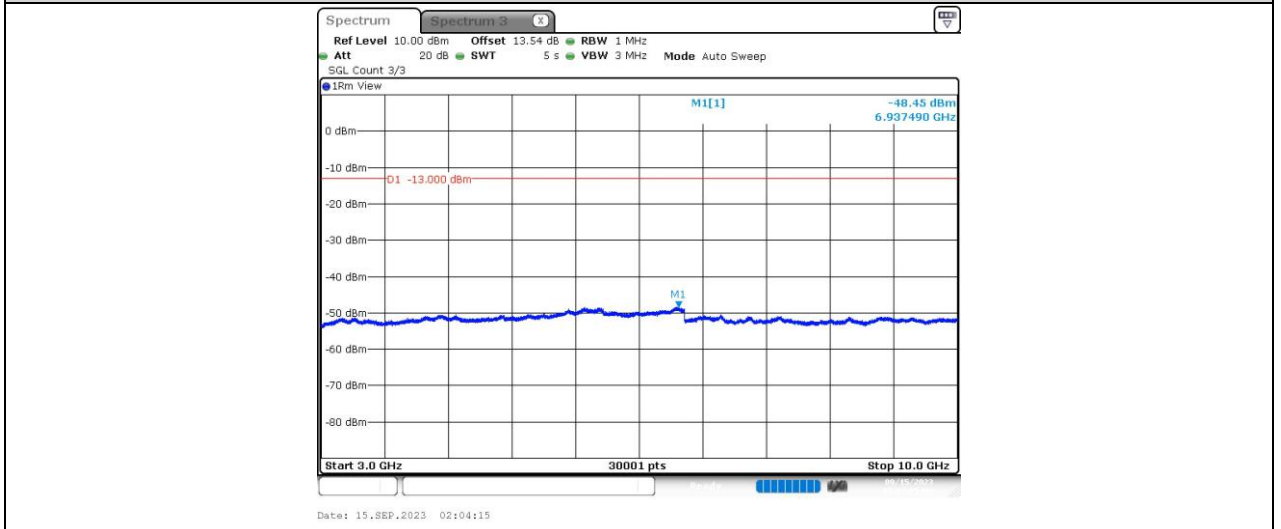
Band4-1413-30~1000MHz



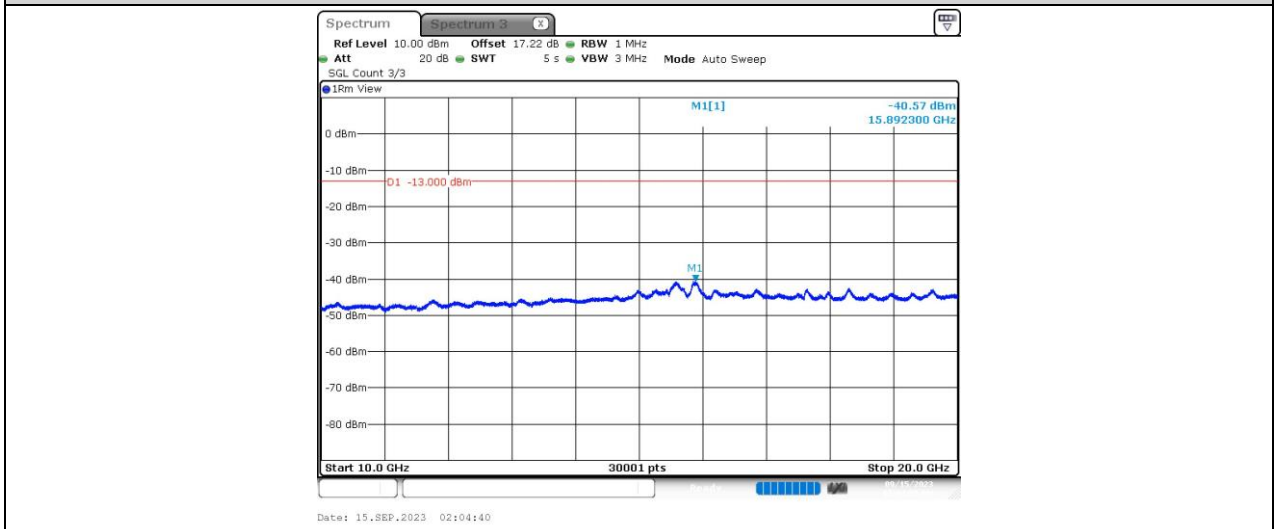
Band4-1413-1000~3000MHz



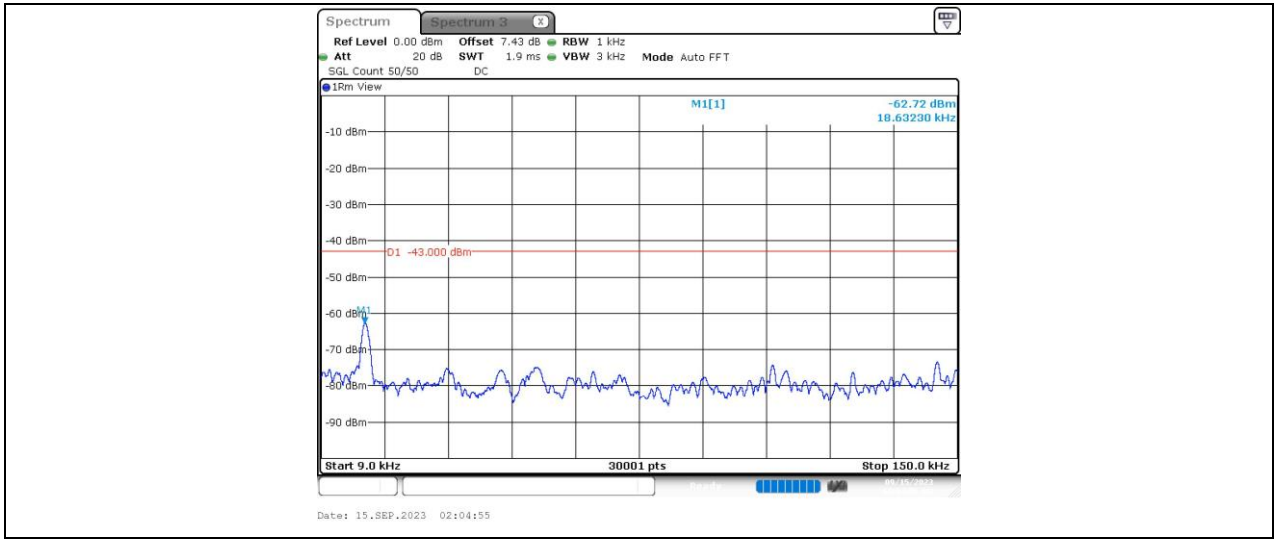
Band4-1413-3000~10000MHz



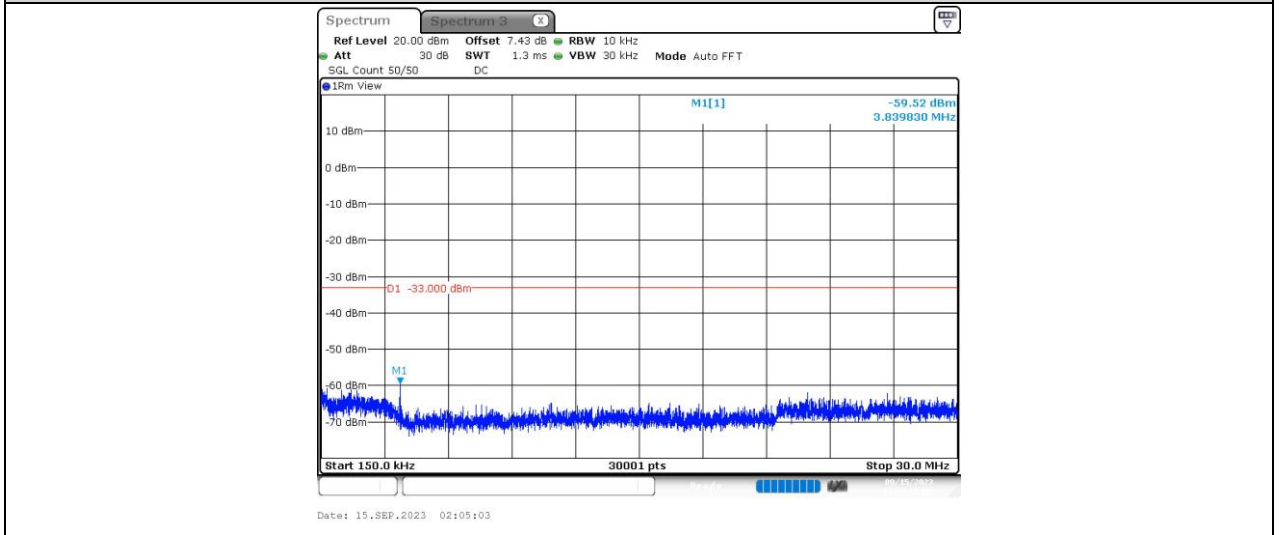
Band4-1413-10000~20000MHz



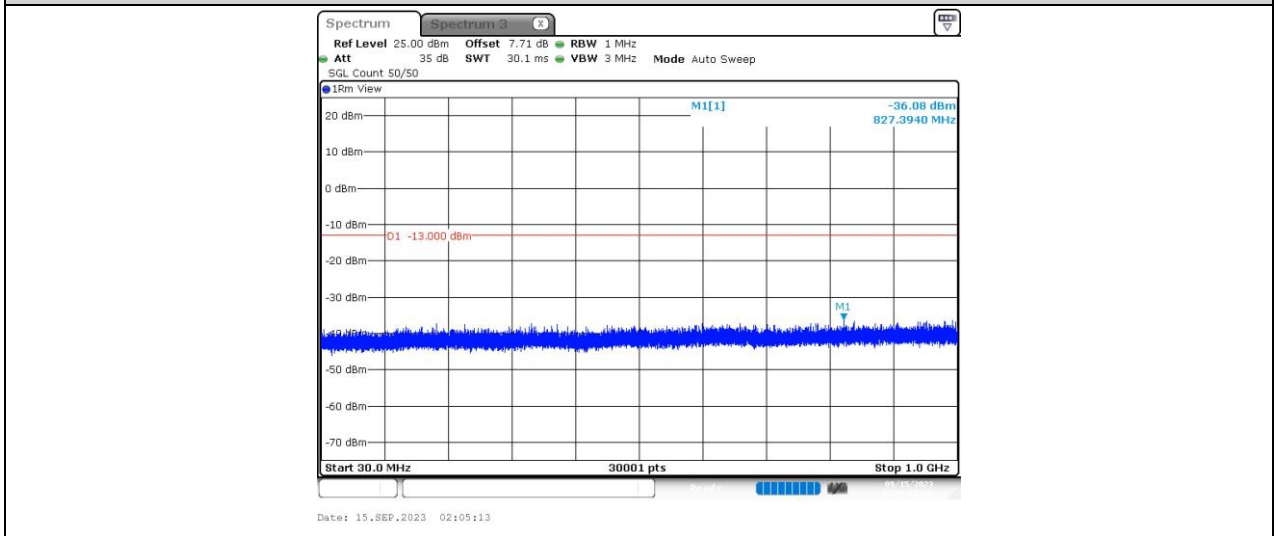
Band4-1513-0.009~0.15MHz



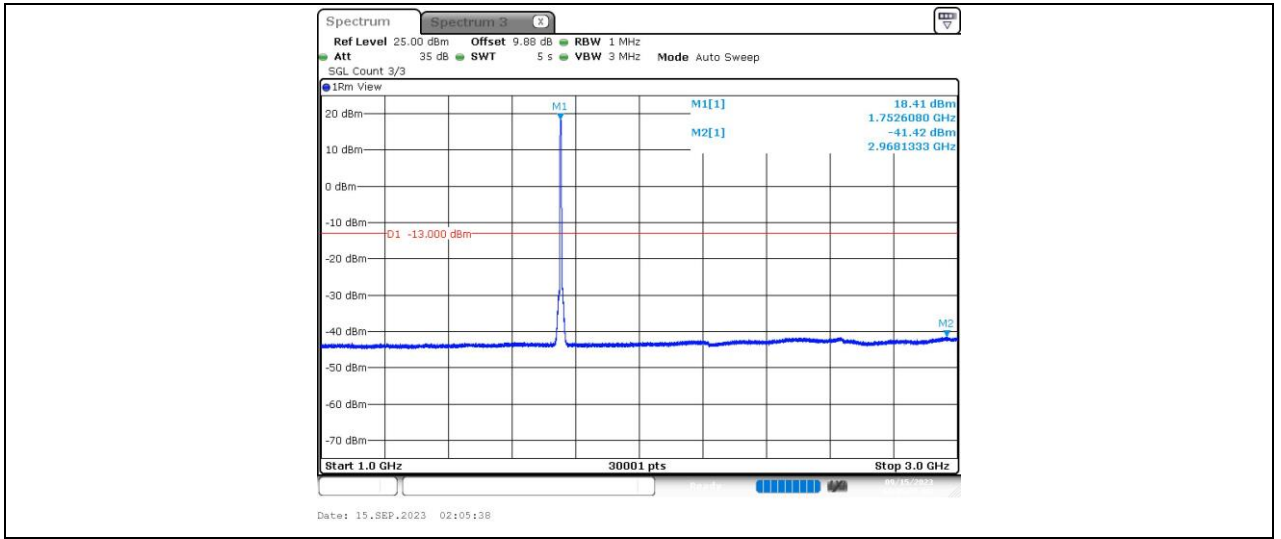
Band4-1513-0.15~30MHz



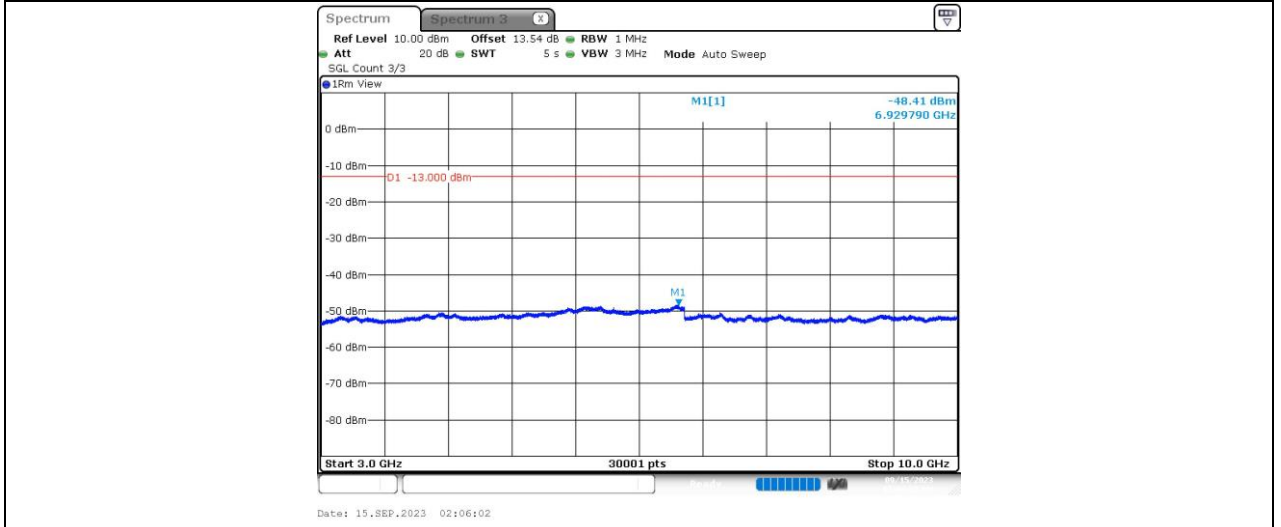
Band4-1513-30~1000MHz



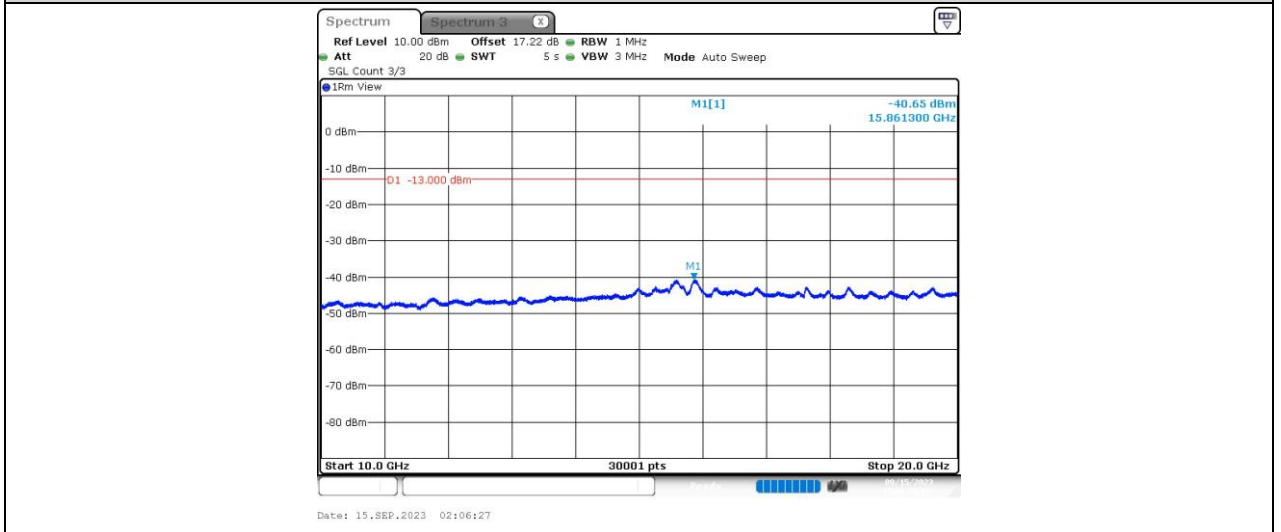
Band4-1513-1000~3000MHz



Band4-1513-3000~10000MHz



Band4-1513-10000~20000MHz



APPENDIX B.6: FREQUENCY STABILITY

Test Result

Voltage							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1312	VL	NT	11.69	0.006827	±2.5	PASS
Band4	1312	VN	NT	9.82	0.005735	±2.5	PASS
Band4	1312	VH	NT	11.96	0.006984	±2.5	PASS
Band4	1413	VL	NT	-1.96	-0.001131	±2.5	PASS
Band4	1413	VN	NT	-1.13	-0.000652	±2.5	PASS
Band4	1413	VH	NT	-2.25	-0.001299	±2.5	PASS
Band4	1513	VL	NT	-24.39	-0.013916	±2.5	PASS
Band4	1513	VN	NT	-23.30	-0.013295	±2.5	PASS
Band4	1513	VH	NT	-24.45	-0.013951	±2.5	PASS

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1312	NV	-30	12.20	0.007125	±2.5	PASS
Band4	1312	NV	-20	12.84	0.007498	±2.5	PASS
Band4	1312	NV	0	13.60	0.007942	±2.5	PASS
Band4	1312	NV	10	13.79	0.008053	±2.5	PASS
Band4	1312	NV	20	14.11	0.008240	±2.5	PASS
Band4	1312	NV	30	15.16	0.008853	±2.5	PASS
Band4	1312	NV	40	16.42	0.009589	±2.5	PASS
Band4	1312	NV	50	16.37	0.009560	±2.5	PASS
Band4	1312	NV	55	17.24	0.010068	±2.5	PASS
Band4	1413	NV	-30	-1.56	-0.000900	±2.5	PASS
Band4	1413	NV	-20	-1.70	-0.000981	±2.5	PASS
Band4	1413	NV	0	-1.97	-0.001137	±2.5	PASS
Band4	1413	NV	10	-1.45	-0.000837	±2.5	PASS
Band4	1413	NV	20	-1.02	-0.000589	±2.5	PASS
Band4	1413	NV	30	-1.22	-0.000704	±2.5	PASS
Band4	1413	NV	40	-1.20	-0.000693	±2.5	PASS
Band4	1413	NV	50	-0.75	-0.000433	±2.5	PASS
Band4	1413	NV	55	-0.89	-0.000514	±2.5	PASS
Band4	1513	NV	-30	-25.19	-0.014373	±2.5	PASS
Band4	1513	NV	-20	-24.59	-0.014031	±2.5	PASS
Band4	1513	NV	0	-24.36	-0.013899	±2.5	PASS
Band4	1513	NV	10	-25.21	-0.014384	±2.5	PASS
Band4	1513	NV	20	-25.00	-0.014265	±2.5	PASS
Band4	1513	NV	30	-24.65	-0.014065	±2.5	PASS
Band4	1513	NV	40	-25.21	-0.014384	±2.5	PASS
Band4	1513	NV	50	-25.89	-0.014772	±2.5	PASS
Band4	1513	NV	55	-25.84	-0.014744	±2.5	PASS