

APPENDIX G: TEST RESULTS FOR E-UTRA OPERATING BAND 5

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APPENDIX G.1: EFFECTIVE (ISOTROPIC) RADIATED POWER

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Result (dBm)	ERP Result (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	22.78	21.63	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	22.74	21.59	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	22.79	21.64	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	22.68	21.53	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	22.81	21.66	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	22.82	21.67	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	21.77	20.62	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	22.90	21.75	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	22.78	21.63	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	22.74	21.59	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	22.88	21.73	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	22.81	21.66	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	22.74	21.59	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	21.71	20.56	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	22.70	21.55	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	22.49	21.34	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	22.60	21.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	22.57	21.42	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	22.58	21.43	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	22.41	21.26	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	21.66	20.51	PASS
Band5	3MHz	QPSK	20415	1RB#0	22.85	21.70	PASS
Band5	3MHz	QPSK	20415	1RB#8	22.77	21.62	PASS
Band5	3MHz	QPSK	20415	1RB#14	22.98	21.83	PASS
Band5	3MHz	QPSK	20415	8RB#0	-19.99	-21.14	PASS
Band5	3MHz	QPSK	20415	8RB#4	22.01	20.86	PASS
Band5	3MHz	QPSK	20415	8RB#7	21.87	20.72	PASS
Band5	3MHz	QPSK	20415	15RB#0	21.74	20.59	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.00	21.85	PASS

Band5	3MHz	QPSK	20525	1RB#8	22.81	21.66	PASS
Band5	3MHz	QPSK	20525	1RB#14	22.63	21.48	PASS
Band5	3MHz	QPSK	20525	8RB#0	21.91	20.76	PASS
Band5	3MHz	QPSK	20525	8RB#4	21.84	20.69	PASS
Band5	3MHz	QPSK	20525	8RB#7	21.60	20.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	21.76	20.61	PASS
Band5	3MHz	QPSK	20635	1RB#0	22.80	21.65	PASS
Band5	3MHz	QPSK	20635	1RB#8	22.45	21.30	PASS
Band5	3MHz	QPSK	20635	1RB#14	22.47	21.32	PASS
Band5	3MHz	QPSK	20635	8RB#0	21.71	20.56	PASS
Band5	3MHz	QPSK	20635	8RB#4	21.74	20.59	PASS
Band5	3MHz	QPSK	20635	8RB#7	21.54	20.39	PASS
Band5	3MHz	QPSK	20635	15RB#0	21.64	20.49	PASS
Band5	5MHz	QPSK	20425	1RB#0	22.67	21.52	PASS
Band5	5MHz	QPSK	20425	1RB#12	22.88	21.73	PASS
Band5	5MHz	QPSK	20425	1RB#24	22.67	21.52	PASS
Band5	5MHz	QPSK	20425	12RB#0	21.80	20.65	PASS
Band5	5MHz	QPSK	20425	12RB#6	22.01	20.86	PASS
Band5	5MHz	QPSK	20425	12RB#13	21.96	20.81	PASS
Band5	5MHz	QPSK	20425	25RB#0	21.82	20.67	PASS
Band5	5MHz	QPSK	20525	1RB#0	22.85	21.70	PASS
Band5	5MHz	QPSK	20525	1RB#12	22.96	21.81	PASS
Band5	5MHz	QPSK	20525	1RB#24	22.52	21.37	PASS
Band5	5MHz	QPSK	20525	12RB#0	21.85	20.70	PASS
Band5	5MHz	QPSK	20525	12RB#6	21.87	20.72	PASS
Band5	5MHz	QPSK	20525	12RB#13	21.52	20.37	PASS
Band5	5MHz	QPSK	20525	25RB#0	21.76	20.61	PASS
Band5	5MHz	QPSK	20625	1RB#0	22.90	21.75	PASS
Band5	5MHz	QPSK	20625	1RB#12	22.62	21.47	PASS
Band5	5MHz	QPSK	20625	1RB#24	22.41	21.26	PASS
Band5	5MHz	QPSK	20625	12RB#0	21.81	20.66	PASS
Band5	5MHz	QPSK	20625	12RB#6	21.81	20.66	PASS
Band5	5MHz	QPSK	20625	12RB#13	21.55	20.40	PASS
Band5	5MHz	QPSK	20625	25RB#0	21.66	20.51	PASS

Band5	10MHz	QPSK	20450	1RB#0	22.47	21.32	PASS
Band5	10MHz	QPSK	20450	1RB#24	23.17	22.02	PASS
Band5	10MHz	QPSK	20450	1RB#49	22.70	21.55	PASS
Band5	10MHz	QPSK	20450	25RB#0	21.87	20.72	PASS
Band5	10MHz	QPSK	20450	25RB#12	21.87	20.72	PASS
Band5	10MHz	QPSK	20450	25RB#25	21.98	20.83	PASS
Band5	10MHz	QPSK	20450	50RB#0	21.88	20.73	PASS
Band5	10MHz	QPSK	20525	1RB#0	23.00	21.85	PASS
Band5	10MHz	QPSK	20525	1RB#24	22.90	21.75	PASS
Band5	10MHz	QPSK	20525	1RB#49	22.40	21.25	PASS
Band5	10MHz	QPSK	20525	25RB#0	21.94	20.79	PASS
Band5	10MHz	QPSK	20525	25RB#12	21.85	20.70	PASS
Band5	10MHz	QPSK	20525	25RB#25	21.59	20.44	PASS
Band5	10MHz	QPSK	20525	50RB#0	21.71	20.56	PASS
Band5	10MHz	QPSK	20600	1RB#0	22.49	21.34	PASS
Band5	10MHz	QPSK	20600	1RB#24	22.95	21.80	PASS
Band5	10MHz	QPSK	20600	1RB#49	22.56	21.41	PASS
Band5	10MHz	QPSK	20600	25RB#0	21.59	20.44	PASS
Band5	10MHz	QPSK	20600	25RB#12	21.59	20.44	PASS
Band5	10MHz	QPSK	20600	25RB#25	21.62	20.47	PASS
Band5	10MHz	QPSK	20600	50RB#0	21.47	20.32	PASS

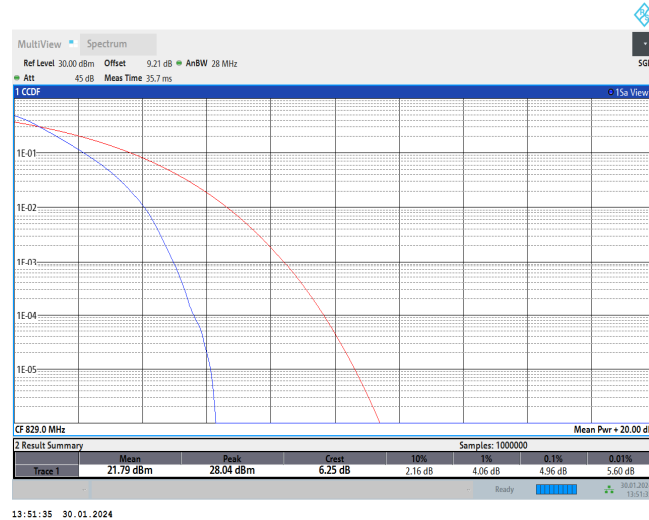
APPENDIX G.2: PEAK-TO AVERAGE RATIO

Test Result

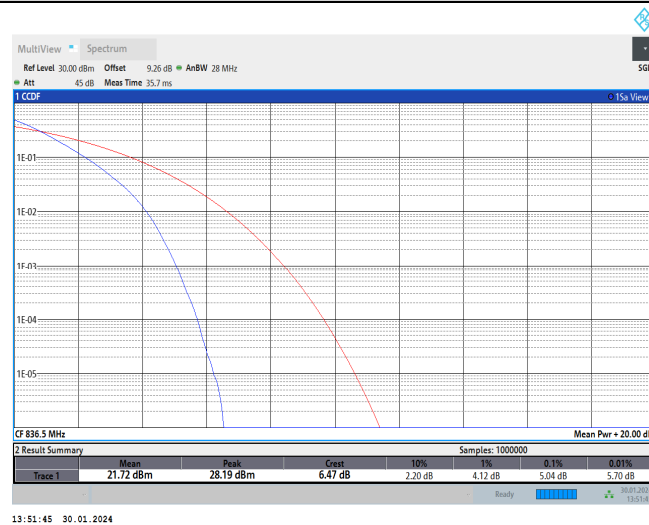
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	4.96	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	5.04	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	5.28	13	PASS

Test Graphs

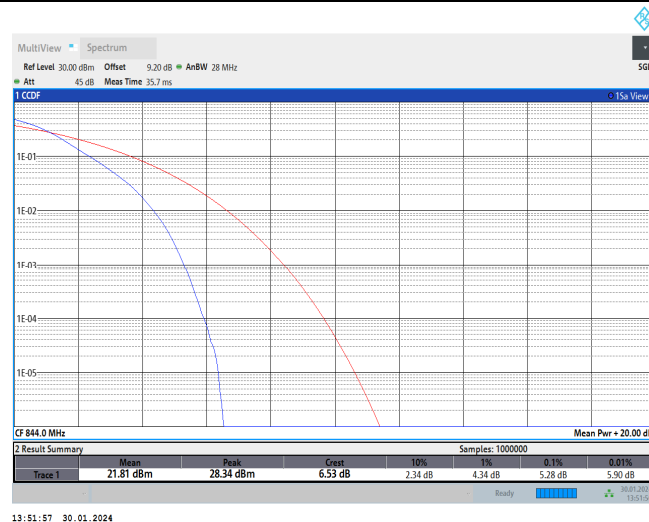
Band5-10MHz-QPSK-20450-50RB#0



Band5-10MHz-QPSK-20525-50RB#0



Band5-10MHz-QPSK-20600-50RB#0



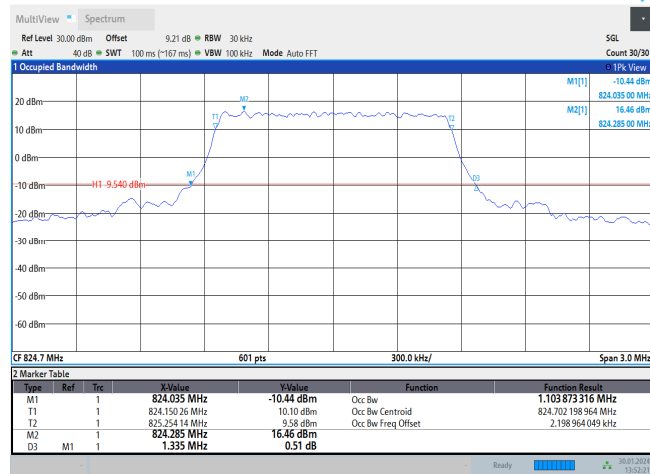
APPENDIX G.3: 26dB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result

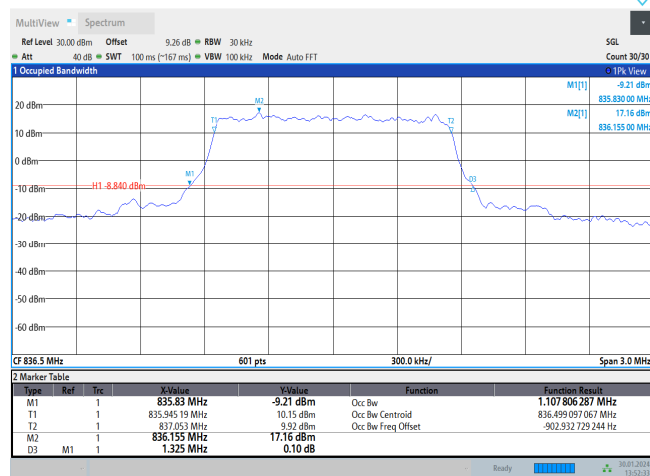
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.104	1.33	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.108	1.32	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.101	1.34	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.707	2.99	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.708	2.99	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.693	3.00	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.488	4.98	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.47	4.92	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.469	4.90	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.938	9.70	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.916	9.70	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.912	9.73	PASS

Test Graphs

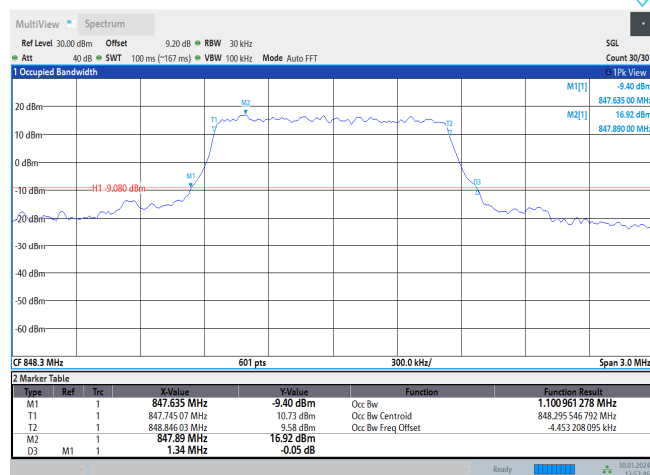
Band5-1.4MHz-QPSK-20407-6RB#0



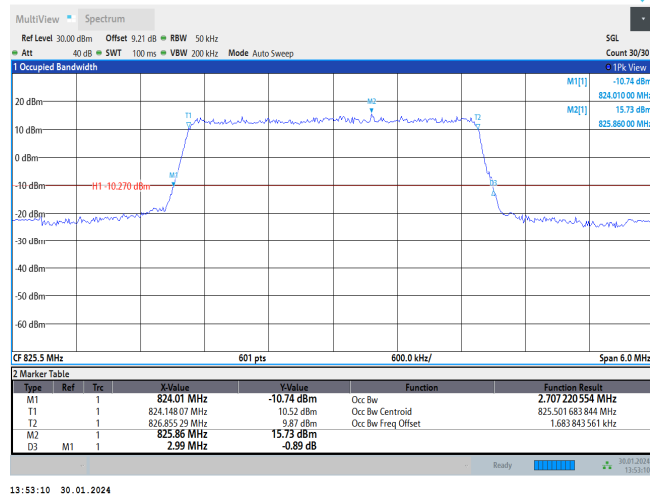
Band5-1.4MHz-QPSK-20525-6RB#0



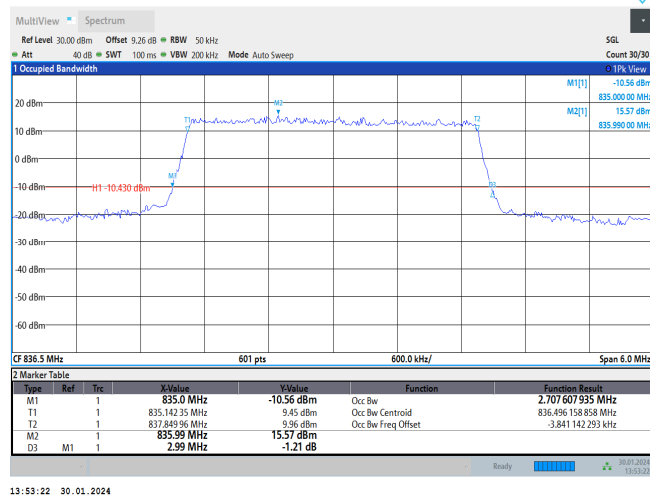
Band5-1.4MHz-QPSK-20643-6RB#0



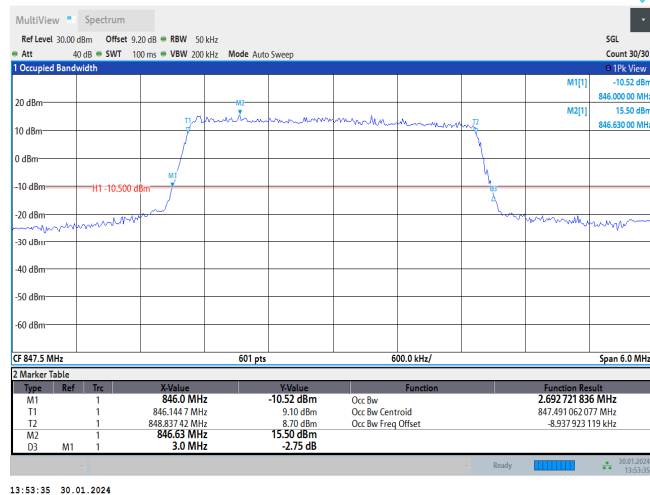
Band5-3MHz-QPSK-20415-15RB#0



Band5-3MHz-QPSK-20525-15RB#0



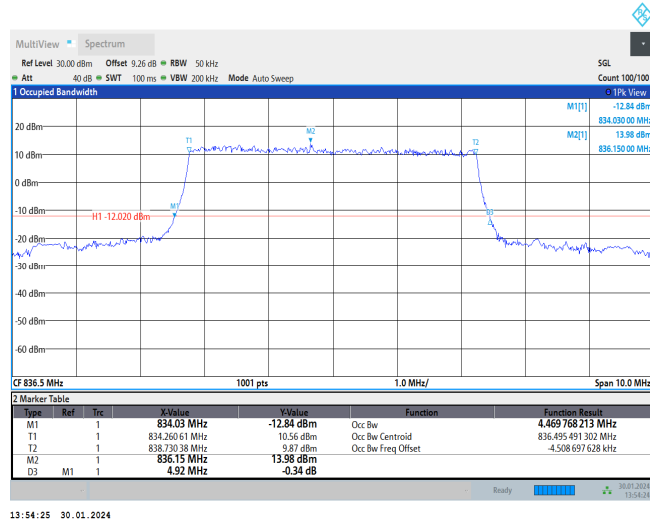
Band5-3MHz-QPSK-20635-15RB#0



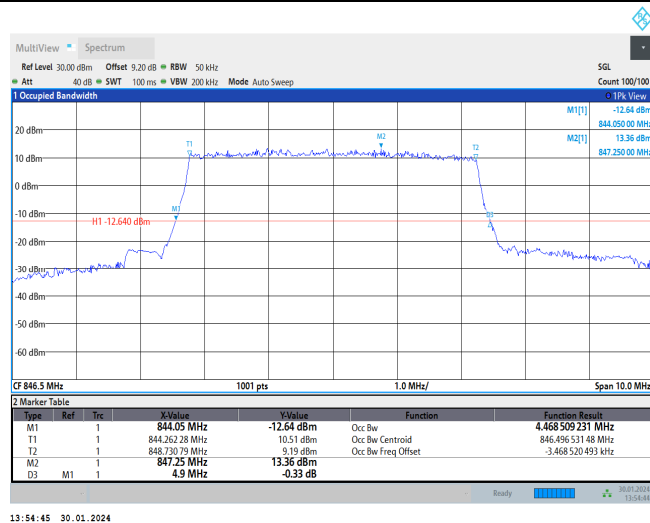
Band5-5MHz-QPSK-20425-25RB#0



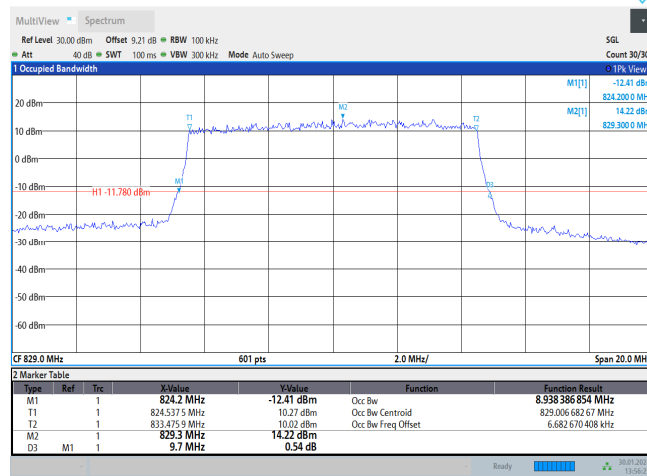
Band5-5MHz-QPSK-20525-25RB#0



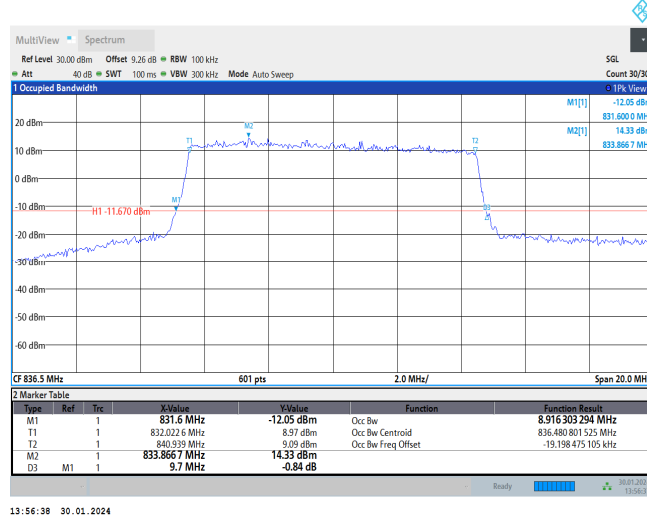
Band5-5MHz-QPSK-20625-25RB#0



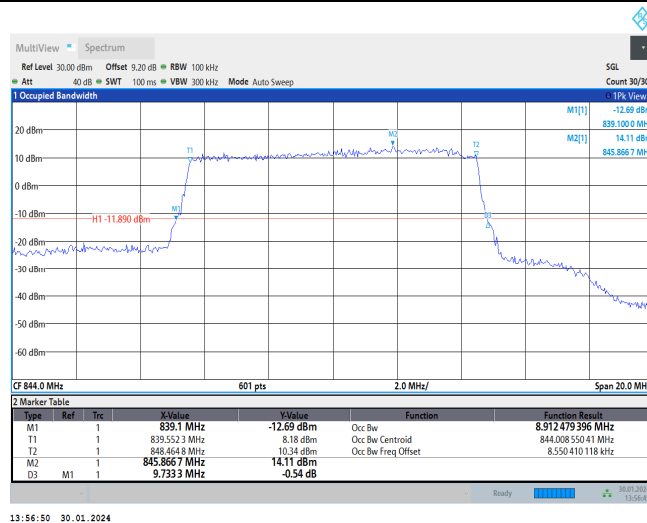
Band5-10MHz-QPSK-20450-50RB#0



Band5-10MHz-QPSK-20525-50RB#0



Band5-10MHz-QPSK-20600-50RB#0



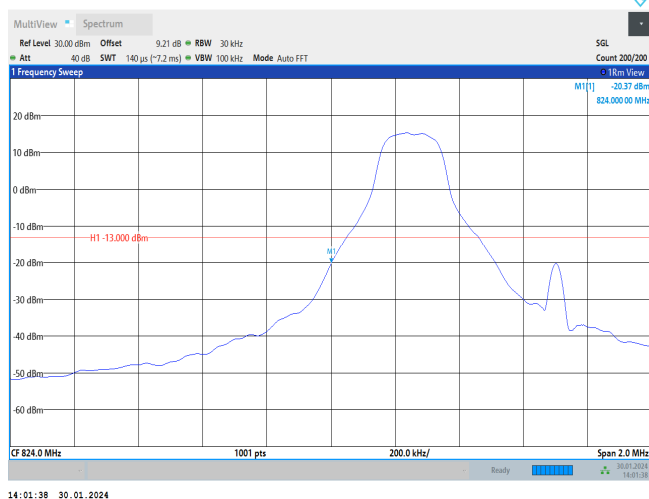
APPENDIX G.4: BAND EDGE

Test Result

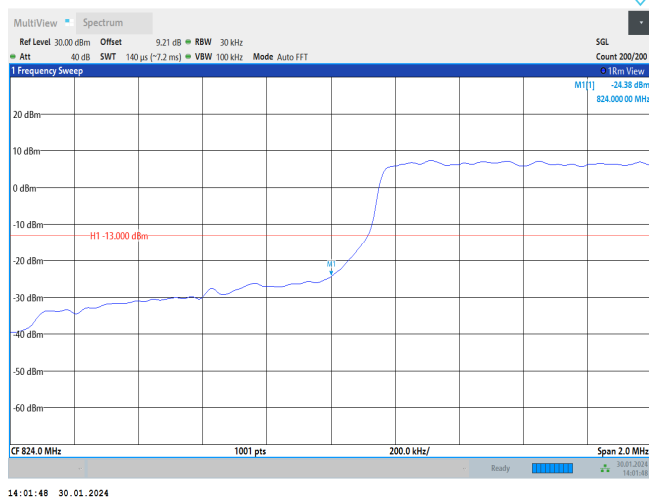
Band	Bandwidth	Modulation	Channel	RB Config.	Result (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	-20.37	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	-24.38	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	-22.22	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	-26.18	PASS
Band5	3MHz	QPSK	20415	1RB#0	-16.16	PASS
Band5	3MHz	QPSK	20415	15RB#0	-23.70	PASS
Band5	3MHz	QPSK	20635	1RB#14	-17.64	PASS
Band5	3MHz	QPSK	20635	15RB#0	-25.33	PASS
Band5	5MHz	QPSK	20425	1RB#0	-22.21	PASS
Band5	5MHz	QPSK	20425	25RB#0	-28.19	PASS
Band5	5MHz	QPSK	20625	1RB#24	-23.27	PASS
Band5	5MHz	QPSK	20625	25RB#0	-28.07	PASS
Band5	10MHz	QPSK	20450	1RB#0	-30.88	PASS
Band5	10MHz	QPSK	20450	50RB#0	-29.07	PASS
Band5	10MHz	QPSK	20600	1RB#49	-30.20	PASS
Band5	10MHz	QPSK	20600	50RB#0	-32.17	PASS

Test Graphs

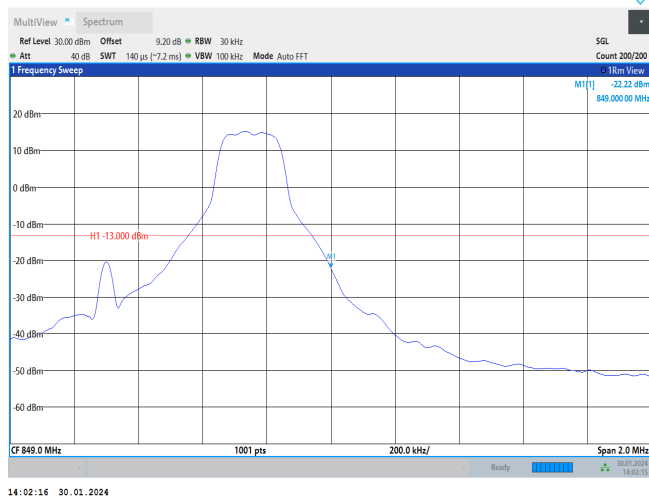
Band5-1.4MHz-QPSK-20407-1RB#0



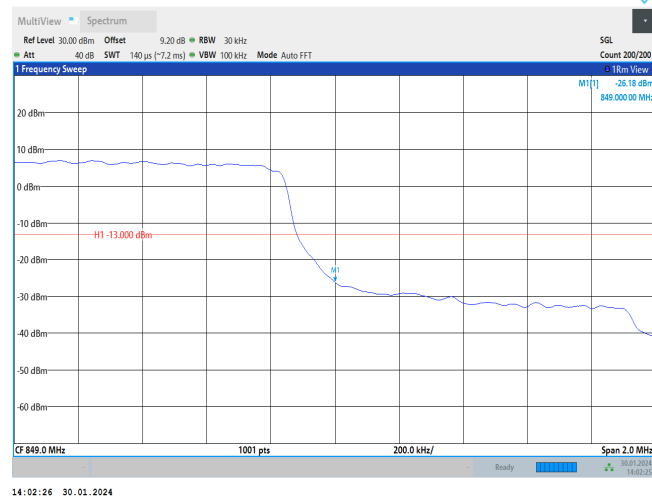
Band5-1.4MHz-QPSK-20407-6RB#0



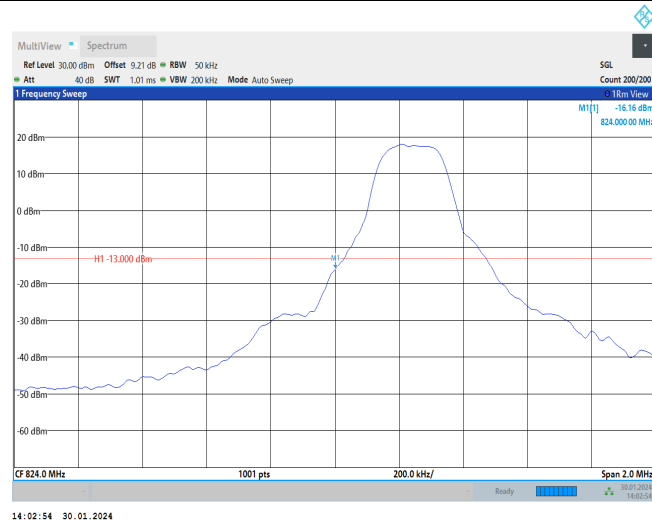
Band5-1.4MHz-QPSK-20643-1RB#5



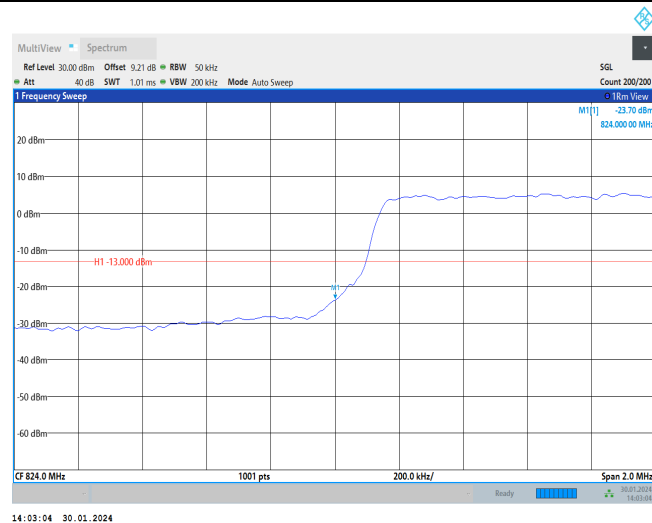
Band5-1.4MHz-QPSK-20643-6RB#0



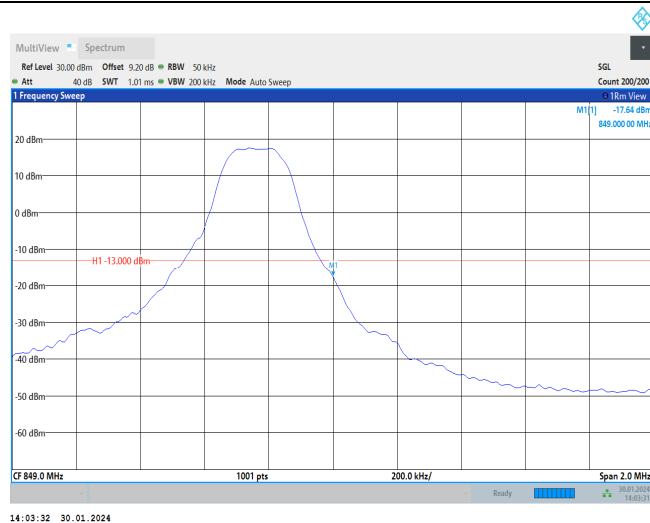
Band5-3MHz-QPSK-20415-1RB#0



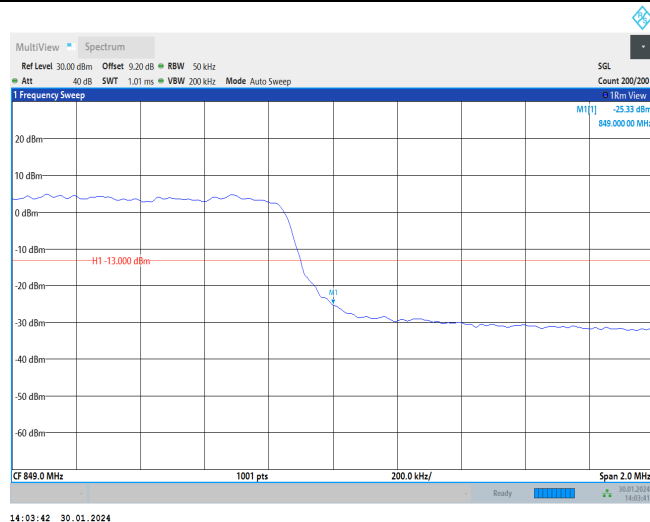
Band5-3MHz-QPSK-20415-15RB#0



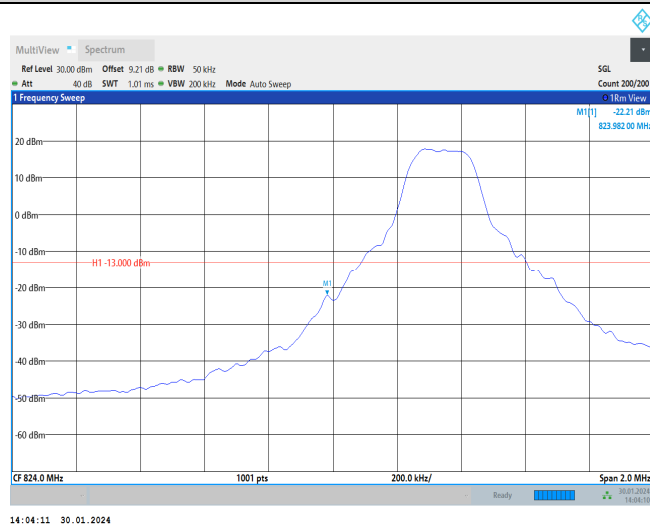
Band5-3MHz-QPSK-20635-1RB#14



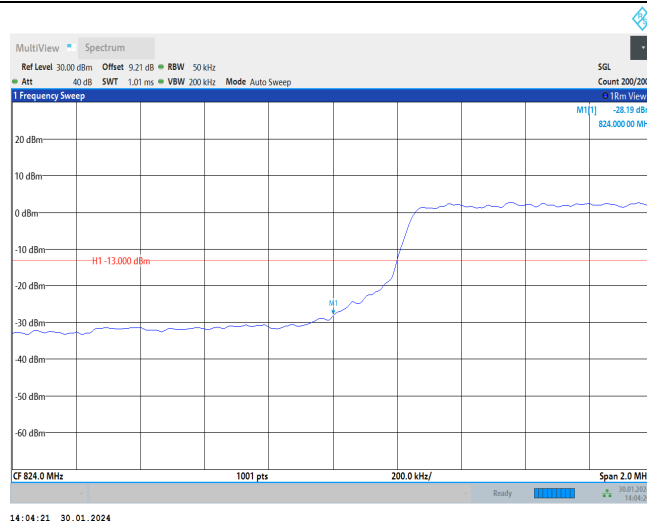
Band5-3MHz-QPSK-20635-15RB#0



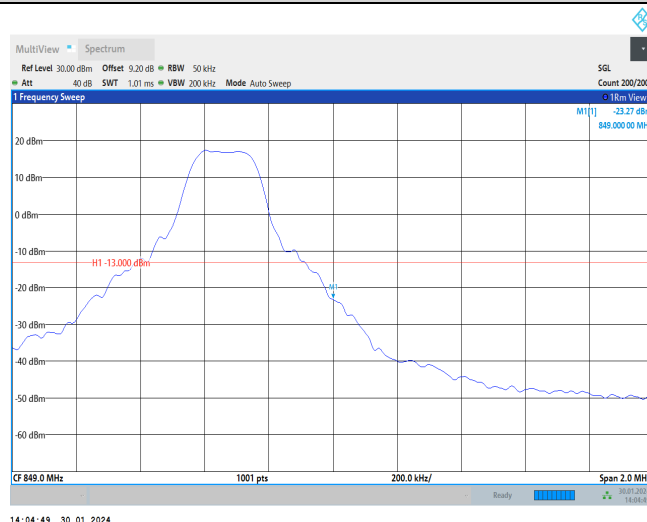
Band5-5MHz-QPSK-20425-1RB#0



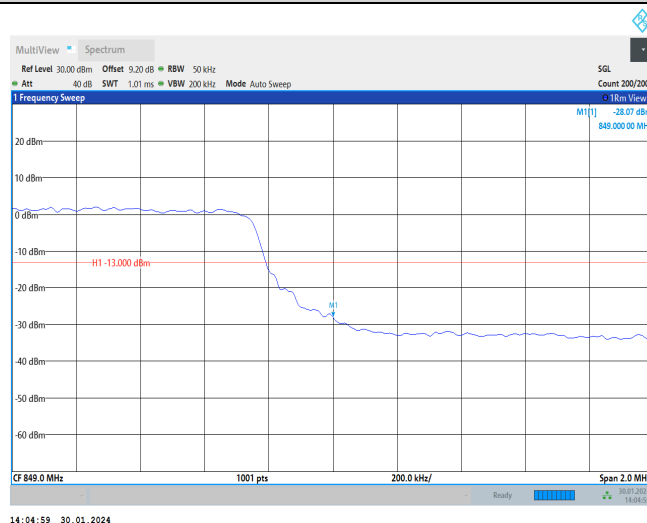
Band5-5MHz-QPSK-20425-25RB#0



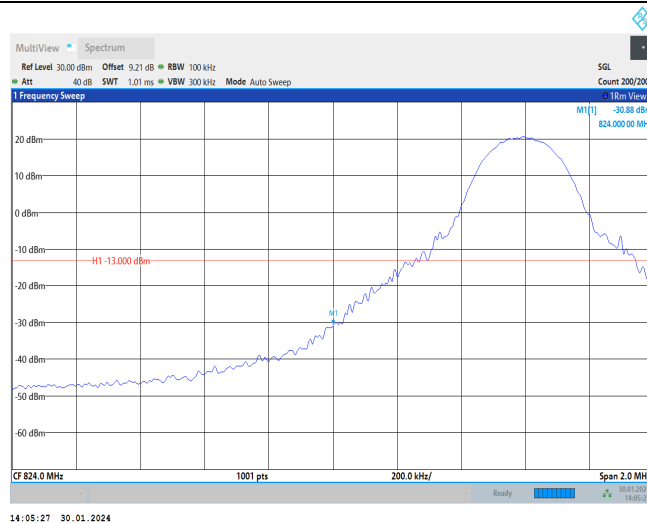
Band5-5MHz-QPSK-20625-1RB#24



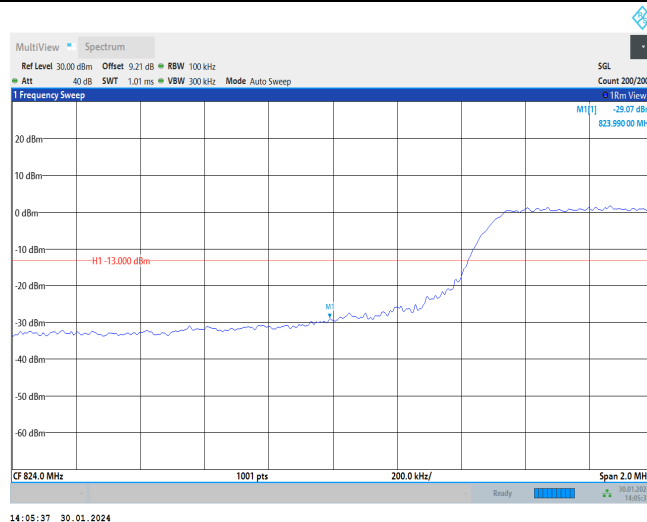
Band5-5MHz-QPSK-20625-25RB#0



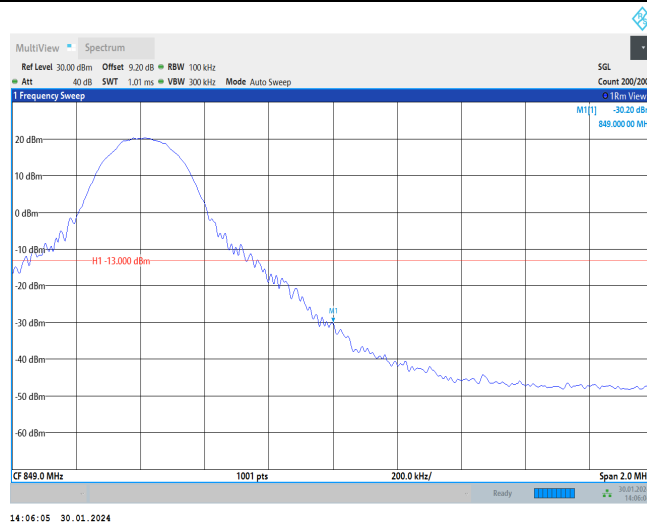
Band5-10MHz-QPSK-20450-1RB#0



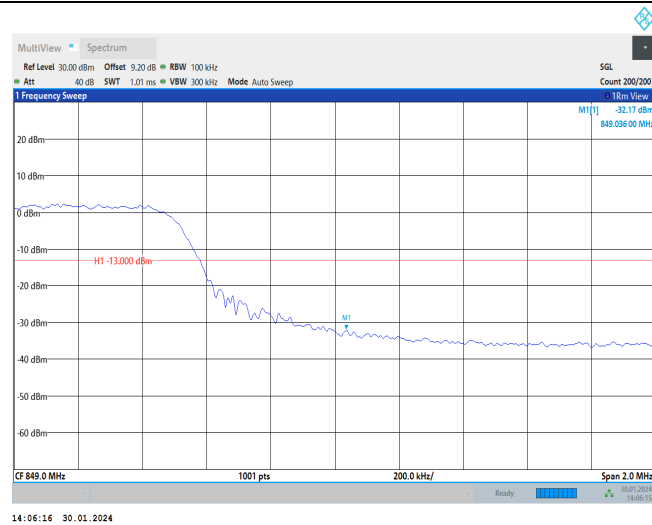
Band5-10MHz-QPSK-20450-50RB#0



Band5-10MHz-QPSK-20600-1RB#49



Band5-10MHz-QPSK-20600-50RB#0



APPENDIX G.5: CONDUCTED SPURIOUS EMISSIONS

Test Result

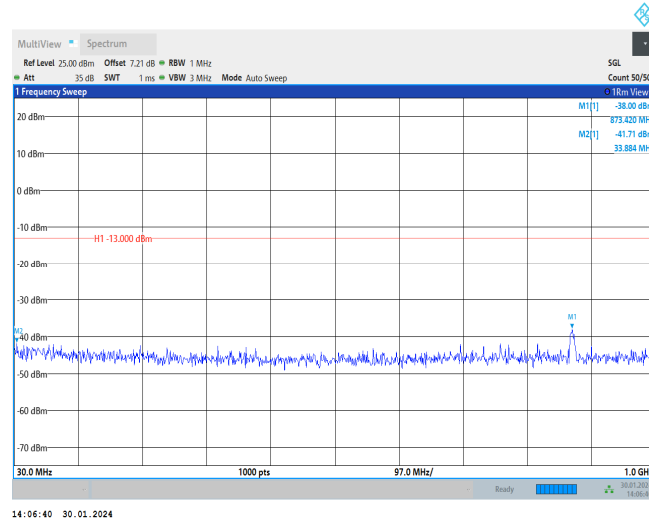
General:

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band5	10MHz	QPSK	20450	1RB#0	Range1:30~1000MHz	-41.71	PASS
Band5	10MHz	QPSK	20450	1RB#0	Range2:1000~10000MHz	-51.24	PASS
Band5	10MHz	QPSK	20525	1RB#0	Range1:30~1000MHz	-41.24	PASS
Band5	10MHz	QPSK	20525	1RB#0	Range2:1000~10000MHz	-41.21	PASS
Band5	10MHz	QPSK	20600	1RB#0	Range1:30~1000MHz	-40.41	PASS
Band5	10MHz	QPSK	20600	1RB#0	Range2:1000~10000MHz	-51.29	PASS

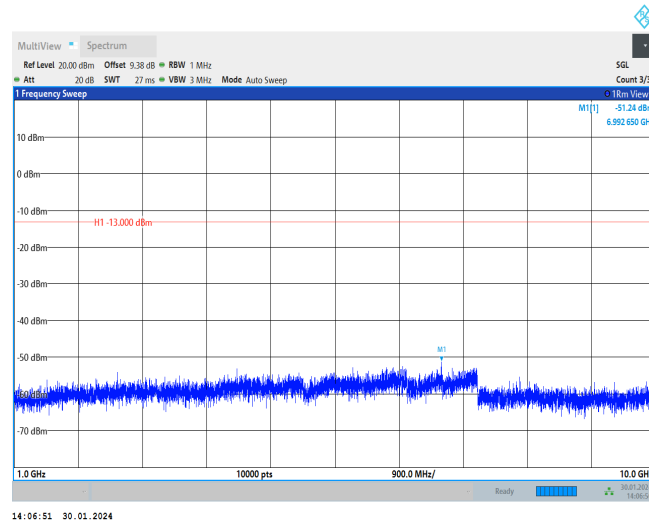
Test Graphs

General:

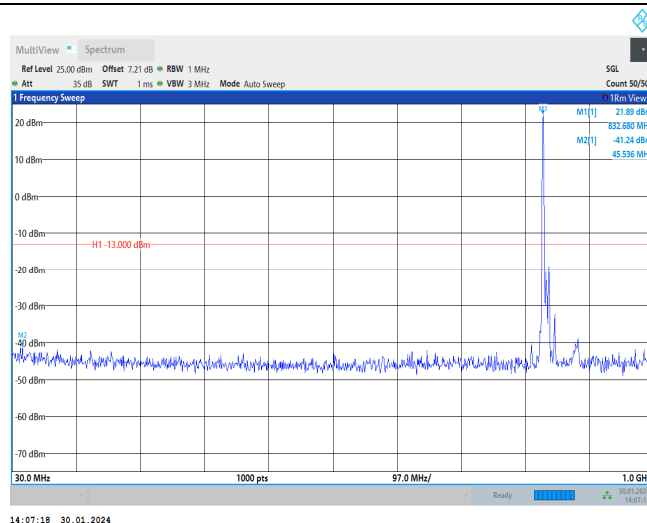
Band5-10MHz-QPSK-20450-1RB#0-Range1:30~1000MHz



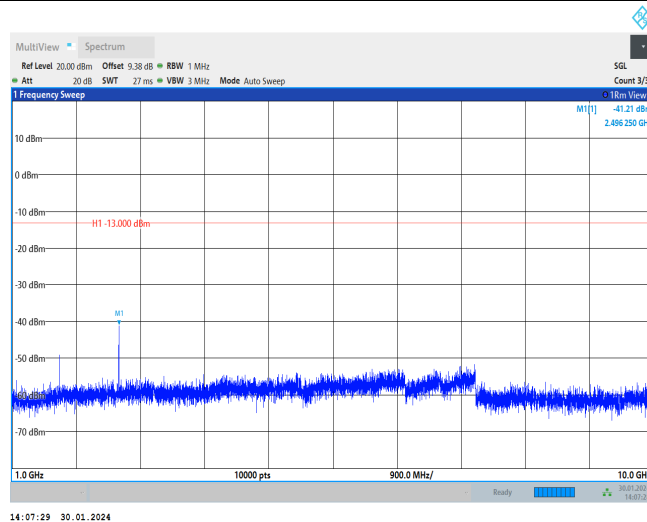
Band5-10MHz-QPSK-20450-1RB#0-Range2:1000~10000MHz



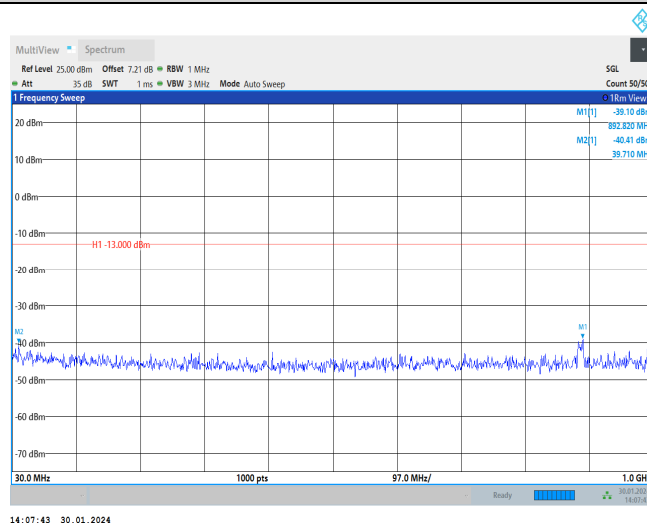
Band5-10MHz-QPSK-20525-1RB#0-Range1:30~1000MHz



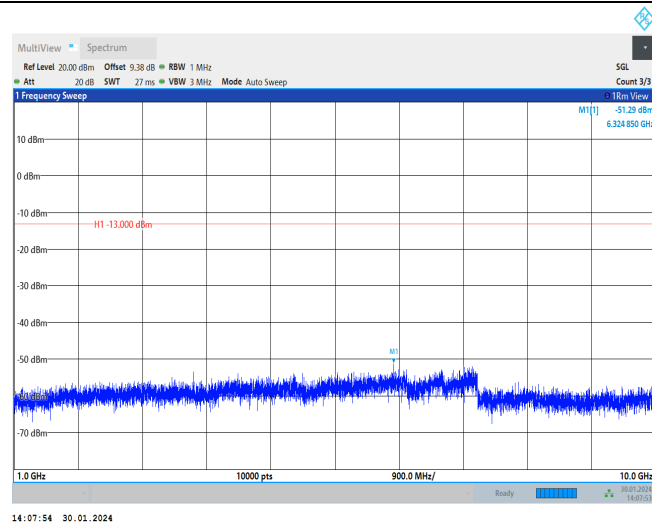
Band5-10MHz-QPSK-20525-1RB#0-Range2:1000~10000MHz



Band5-10MHz-QPSK-20600-1RB#0-Range1:30~1000MHz



Band5-10MHz-QPSK-20600-1RB#0-Range2:1000~10000MHz



APPENDIX G.6: FREQUENCY STABILITY

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	75RB#0	VL	NT	-3.28	-0.003957	±2.5	PASS
Band5	10MHz	QPSK	20450	75RB#0	VN	NT	-3.59	-0.004331	±2.5	PASS
Band5	10MHz	QPSK	20450	75RB#0	VH	NT	-3.40	-0.004101	±2.5	PASS
Band5	10MHz	QPSK	20525	75RB#0	VL	NT	-3.29	-0.003933	±2.5	PASS
Band5	10MHz	QPSK	20525	75RB#0	VN	NT	-1.87	-0.002236	±2.5	PASS
Band5	10MHz	QPSK	20525	75RB#0	VH	NT	-2.26	-0.002702	±2.5	PASS
Band5	10MHz	QPSK	20600	75RB#0	VL	NT	-2.60	-0.003081	±2.5	PASS
Band5	10MHz	QPSK	20600	75RB#0	VN	NT	1.96	0.002322	±2.5	PASS
Band5	10MHz	QPSK	20600	75RB#0	VH	NT	-2.50	-0.002962	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	75RB#0	NV	-30	-2.32	-0.002799	±2.5	PASS
Band5	10MHz	QPSK	20450	75RB#0	NV	-20	1.34	0.001616	±2.5	PASS
Band5	10MHz	QPSK	20450	75RB#0	NV	0	-2.02	-0.002437	±2.5	PASS
Band5	10MHz	QPSK	20450	75RB#0	NV	10	1.85	0.002232	±2.5	PASS
Band5	10MHz	QPSK	20450	75RB#0	NV	20	-2.83	-0.003414	±2.5	PASS
Band5	10MHz	QPSK	20450	75RB#0	NV	30	-2.65	-0.003197	±2.5	PASS
Band5	10MHz	QPSK	20450	75RB#0	NV	40	-2.46	-0.002967	±2.5	PASS
Band5	10MHz	QPSK	20450	75RB#0	NV	50	-2.90	-0.003498	±2.5	PASS
Band5	10MHz	QPSK	20450	75RB#0	NV	60	-2.55	-0.003076	±2.5	PASS
Band5	10MHz	QPSK	20450	75RB#0	NV	70	-2.15	-0.002593	±2.5	PASS
Band5	10MHz	QPSK	20525	75RB#0	NV	-30	-3.81	-0.004555	±2.5	PASS
Band5	10MHz	QPSK	20525	75RB#0	NV	-20	-2.55	-0.003048	±2.5	PASS
Band5	10MHz	QPSK	20525	75RB#0	NV	0	-2.55	-0.003048	±2.5	PASS
Band5	10MHz	QPSK	20525	75RB#0	NV	10	-1.76	-0.002104	±2.5	PASS
Band5	10MHz	QPSK	20525	75RB#0	NV	20	-2.42	-0.002893	±2.5	PASS
Band5	10MHz	QPSK	20525	75RB#0	NV	30	2.43	0.002905	±2.5	PASS
Band5	10MHz	QPSK	20525	75RB#0	NV	40	-2.22	-0.002654	±2.5	PASS
Band5	10MHz	QPSK	20525	75RB#0	NV	50	-3.02	-0.003610	±2.5	PASS
Band5	10MHz	QPSK	20525	75RB#0	NV	60	-3.25	-0.003885	±2.5	PASS
Band5	10MHz	QPSK	20525	75RB#0	NV	70	-2.73	-0.003264	±2.5	PASS
Band5	10MHz	QPSK	20600	75RB#0	NV	-30	-2.93	-0.003472	±2.5	PASS
Band5	10MHz	QPSK	20600	75RB#0	NV	-20	-2.82	-0.003341	±2.5	PASS
Band5	10MHz	QPSK	20600	75RB#0	NV	0	-2.23	-0.002642	±2.5	PASS
Band5	10MHz	QPSK	20600	75RB#0	NV	10	-1.97	-0.002334	±2.5	PASS
Band5	10MHz	QPSK	20600	75RB#0	NV	20	-2.76	-0.003270	±2.5	PASS
Band5	10MHz	QPSK	20600	75RB#0	NV	30	-2.99	-0.003543	±2.5	PASS
Band5	10MHz	QPSK	20600	75RB#0	NV	40	2.19	0.002595	±2.5	PASS

Band5	10MHz	QPSK	20600	75RB#0	NV	50	-2.03	-0.002405	±2.5	PASS
Band5	10MHz	QPSK	20600	75RB#0	NV	60	-3.05	-0.003614	±2.5	PASS
Band5	10MHz	QPSK	20600	75RB#0	NV	70	1.93	0.002287	±2.5	PASS