

Appendix for WCDMA

Model: ANY-NX1

BTL-FCCP-6-2203G020

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1. APPENDIX A - EFFECTIVE (ISOTROPIC) RADIATED POWER OF TRANSMITTER

1.1 TEST RESULTS

Effective (Isotropic) Radiated Power of Transmitter						
Test Band	Test Mode	Test Channel	Conducted Power [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
Band II	TM1	LCH	22.57	21.87	33.01	PASS
		MCH	23.1	22.4	33.01	PASS
		HCH	23.07	22.37	33.01	PASS
Test Band	Test Mode	Test Channel	Conducted Power [dBm]	ERP [dBm]	Limit [dBm]	Verdict
BandV	TM1	LCH	24.88	21.63	38.45	PASS
		MCH	24.74	21.49	38.45	PASS
		HCH	24.59	21.34	38.45	PASS

2. APPENDIX B - PEAK-TO-AVERAGE RATIO

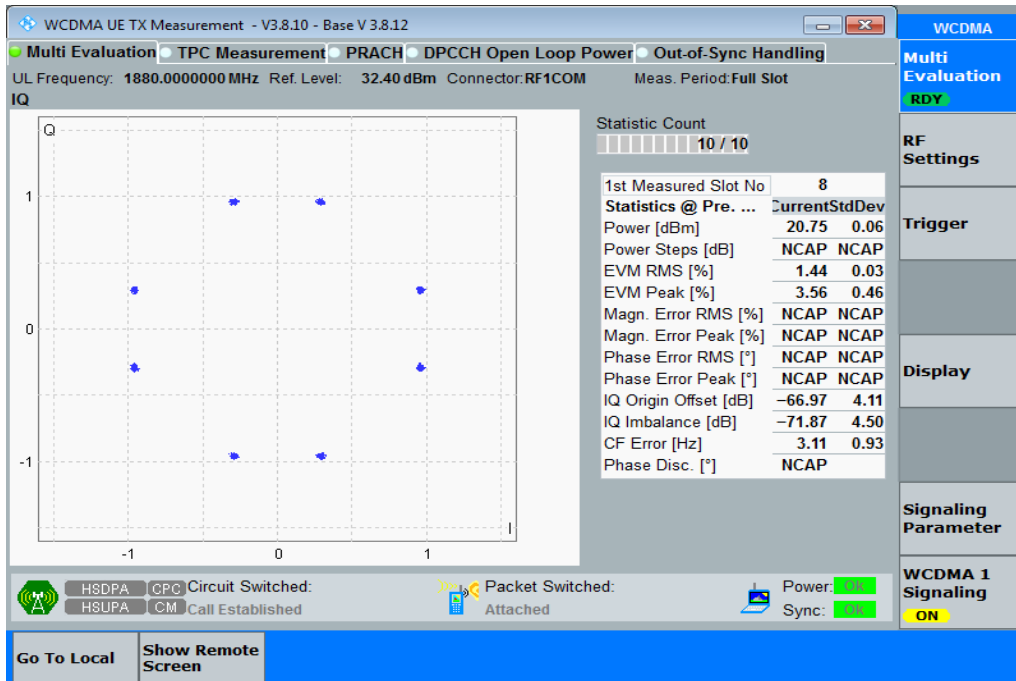
2.1 TEST RESULTS

Peak-to-Average Ratio					
Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dBm]	Verdict
Band II	TM1	LCH	3.33	13	PASS
		MCH	3.37	13	PASS
		HCH	3.0	13	PASS
Band V		LCH	3.0	13	PASS
		MCH	2.55	13	PASS
		HCH	2.77	13	PASS

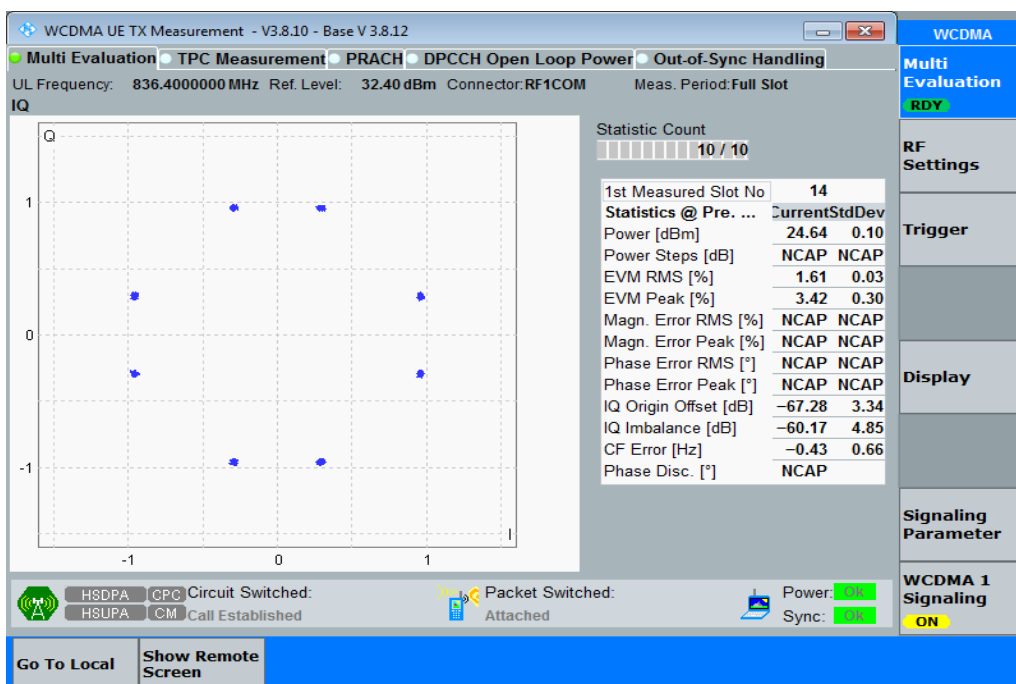
3. APPENDIX C - MODULATION CHARACTERISTICS

3.1 TEST PLOTS

3.1.1 BAND II_TM1_MCH



3.1.2 BAND V_TM1_MCH



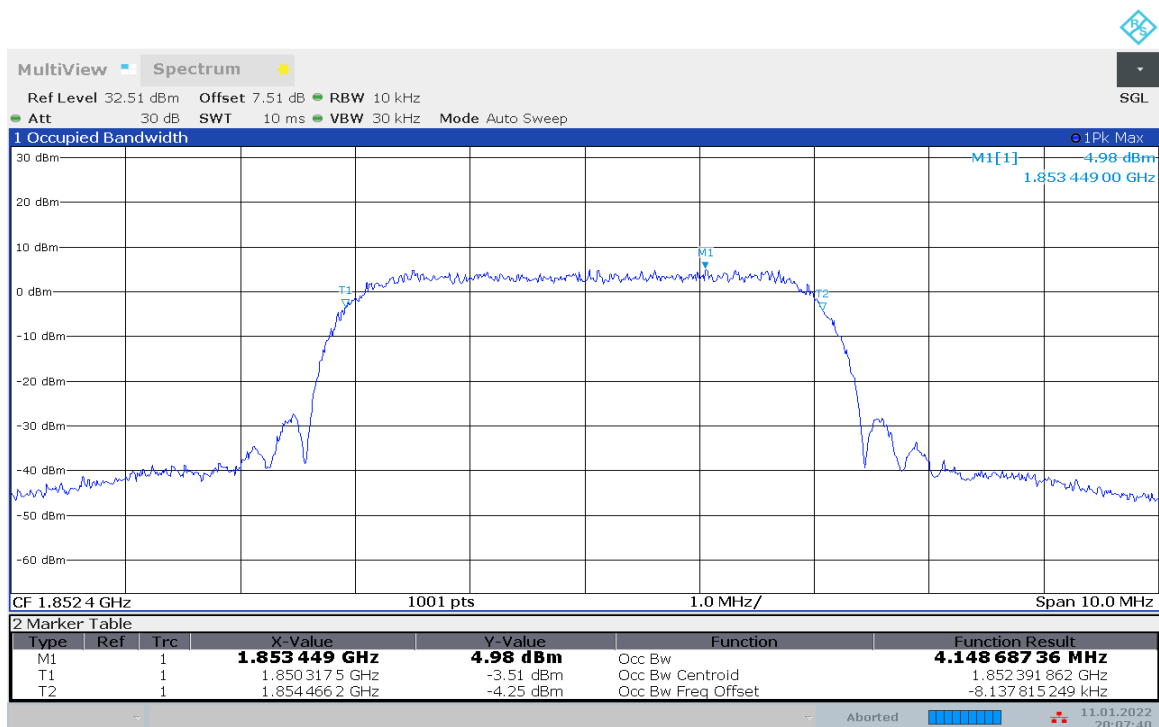
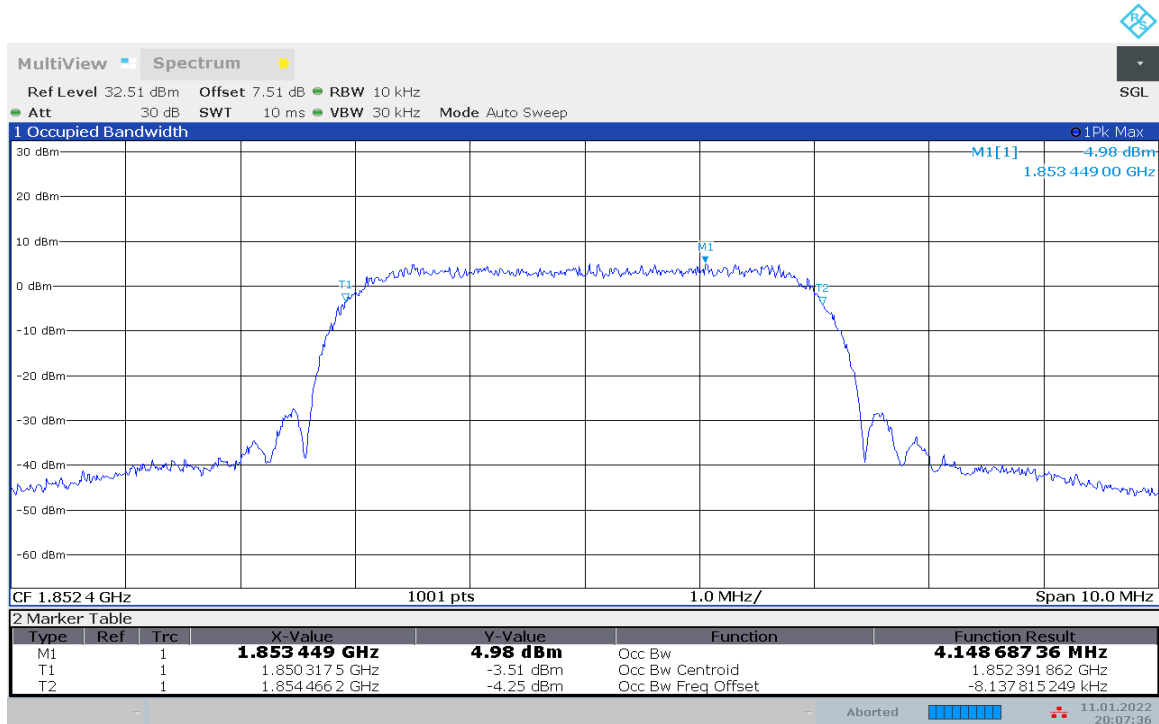
4. APPENDIX D - OCCUPIED BANDWIDTH

4.1 TEST RESULTS

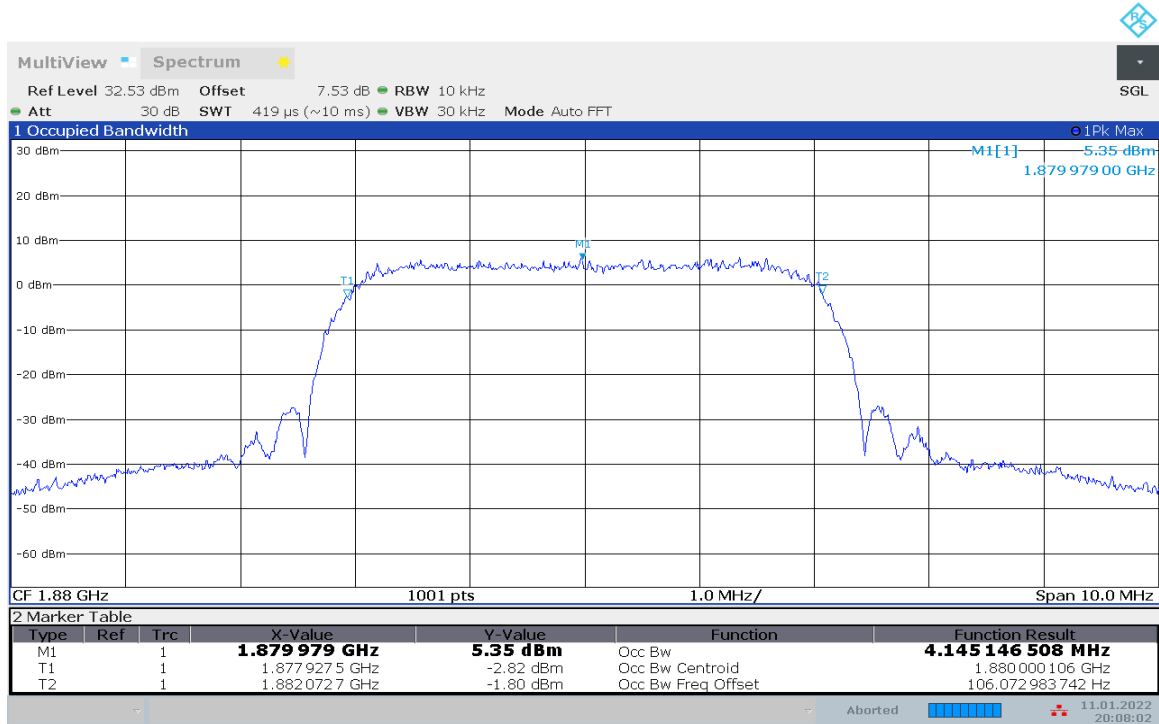
Occupied Bandwidth					
Test Band	Test Mode	Test Channel	Occupied Bandwidth [kHz]	Emission Bandwidth [KHz]	Verdict
Band II	TM1	LCH	4.15	4.71	PASS
		MCH	4.15	4.68	PASS
		HCH	4.15	4.71	PASS
Band V		LCH	4.14	4.70	PASS
		MCH	4.15	4.71	PASS
		HCH	4.14	4.68	PASS

4.2 TEST PLOTS

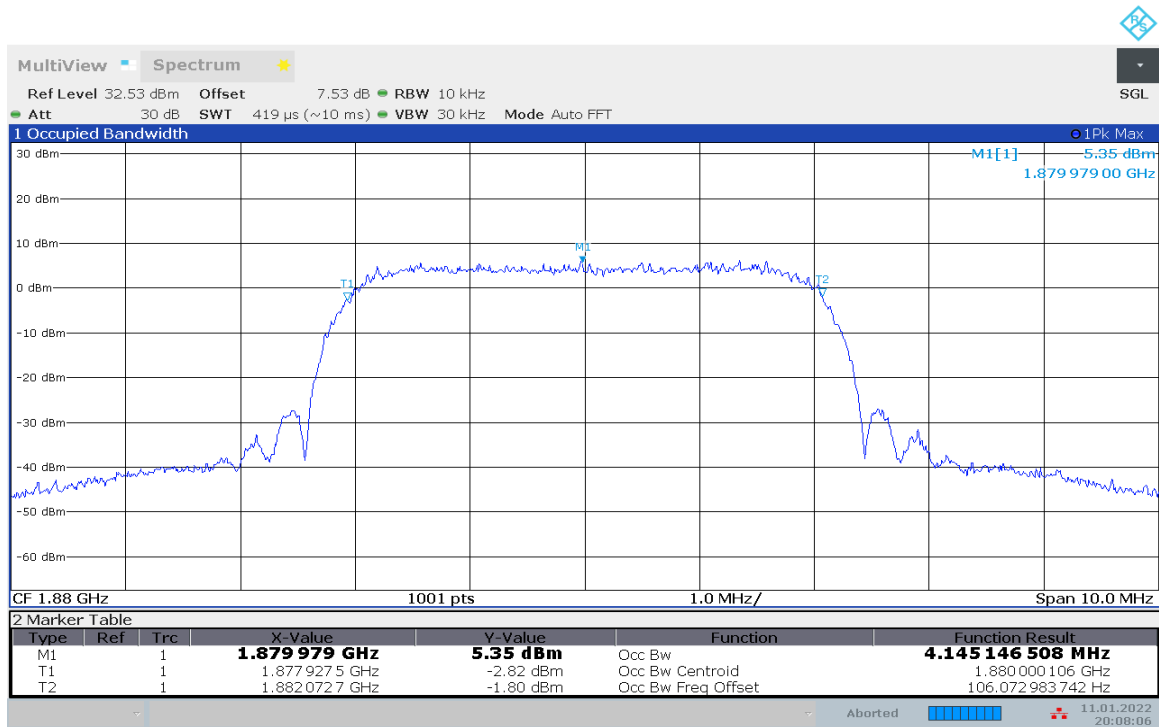
4.2.1 BAND II_TM1_LCH



4.2.2 BAND II_TM1_MCH

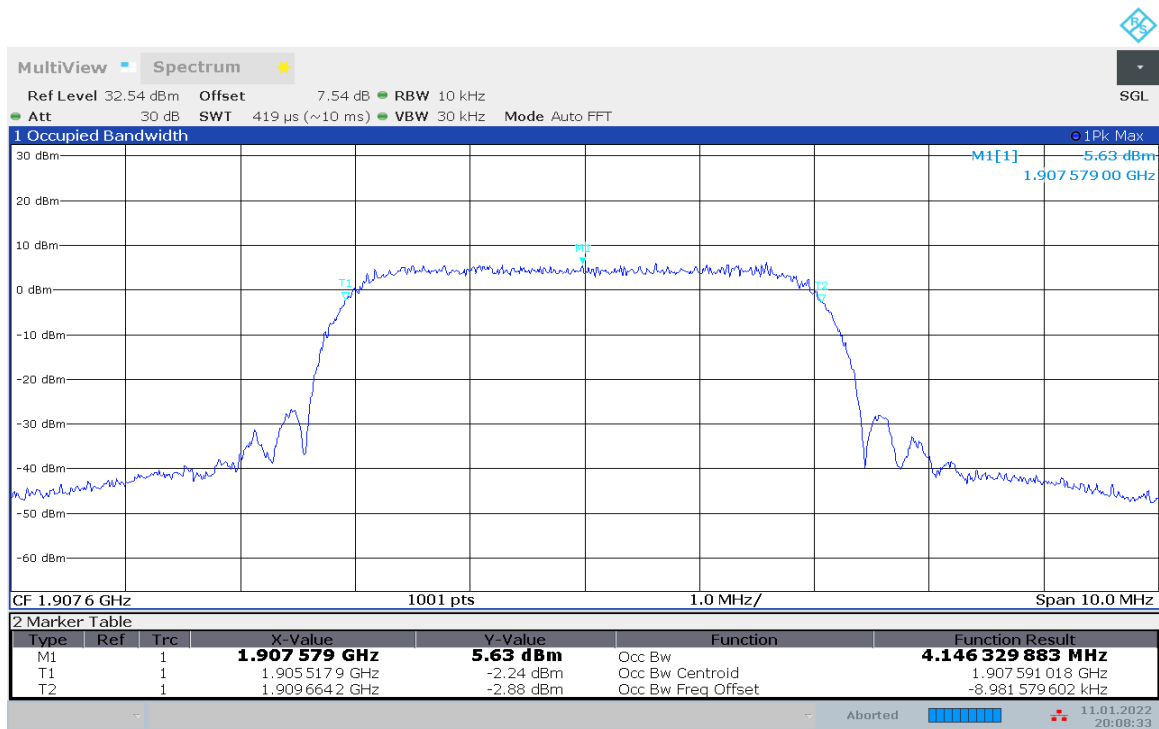
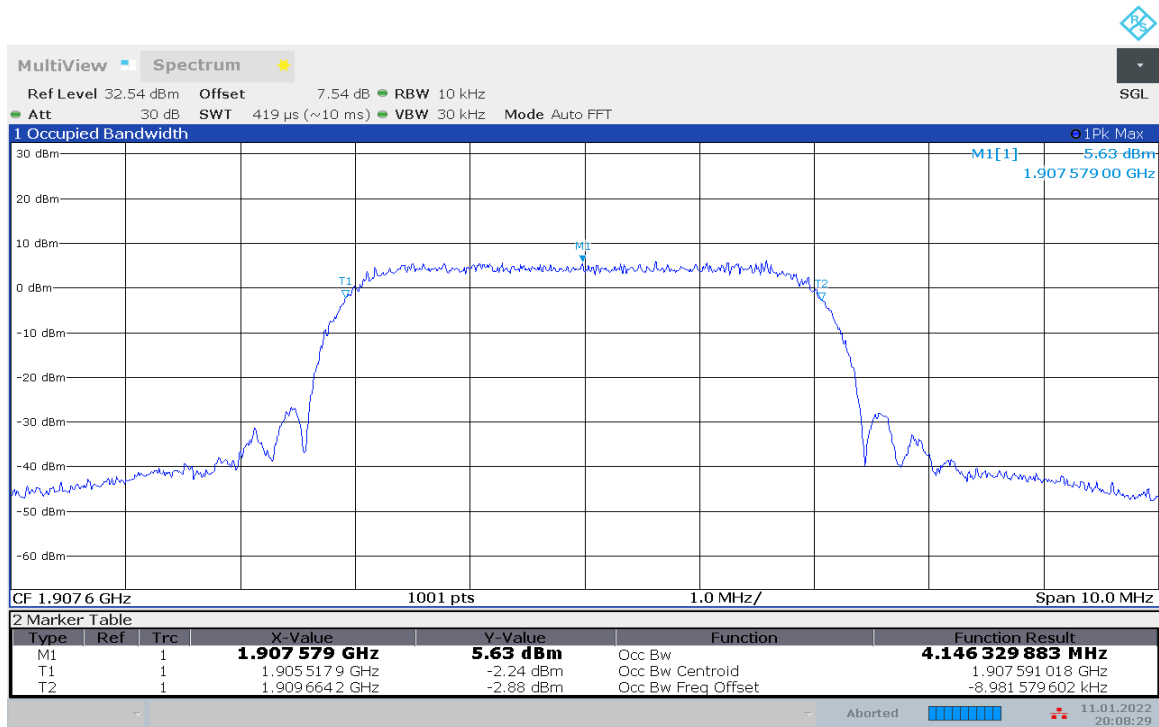


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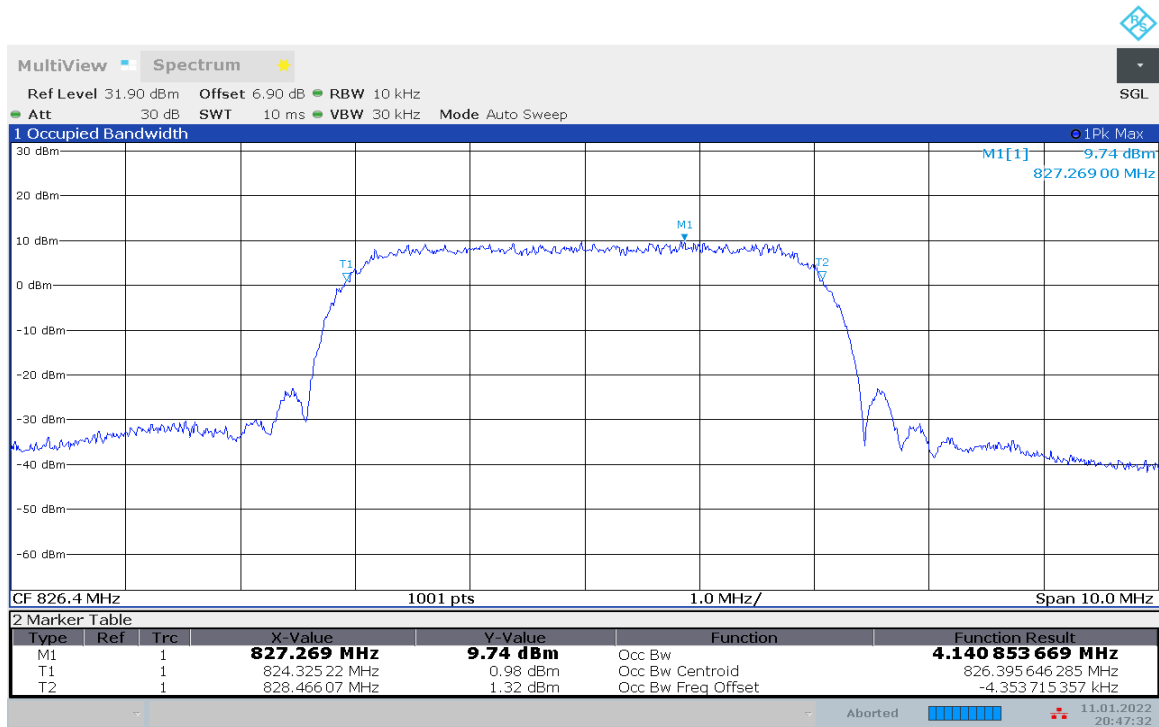


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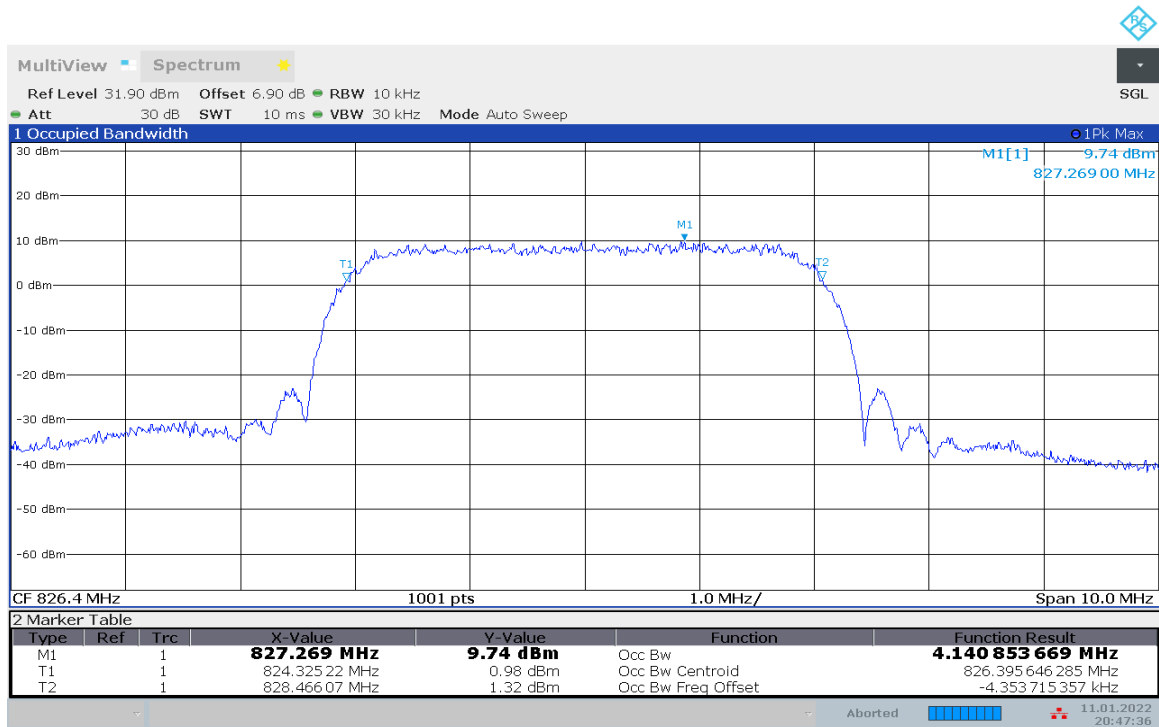
4.2.3 BAND II_TM1_HCH



4.2.4 BAND V_TM1_LCH

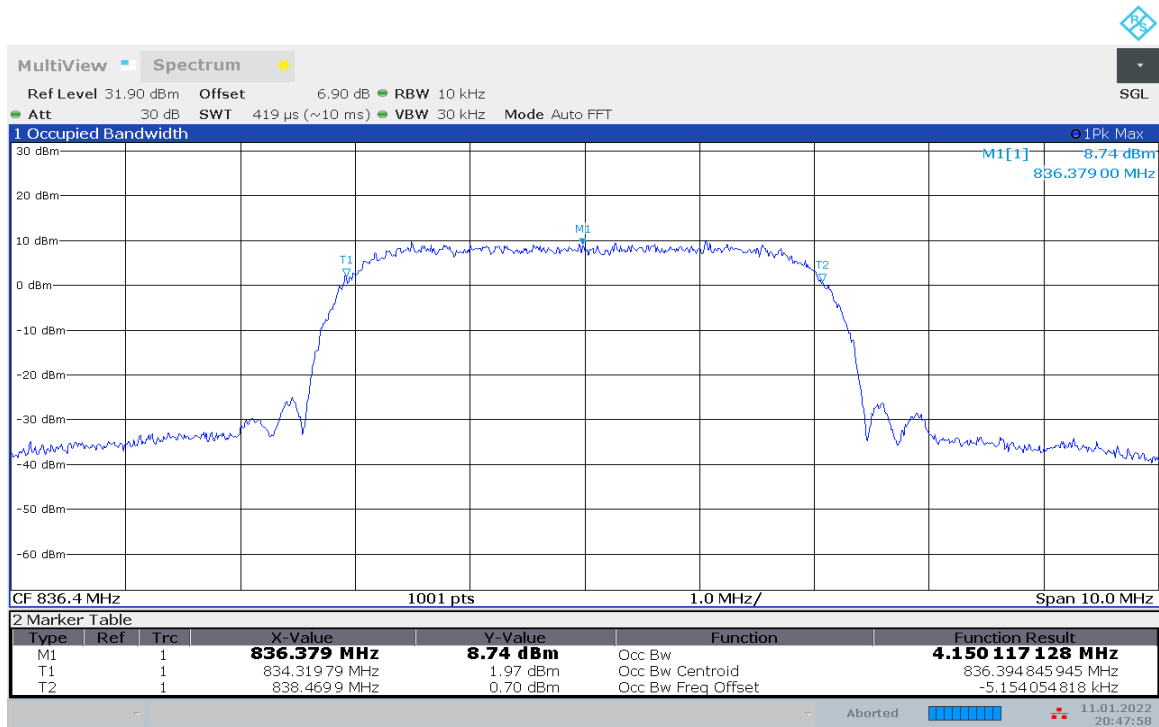


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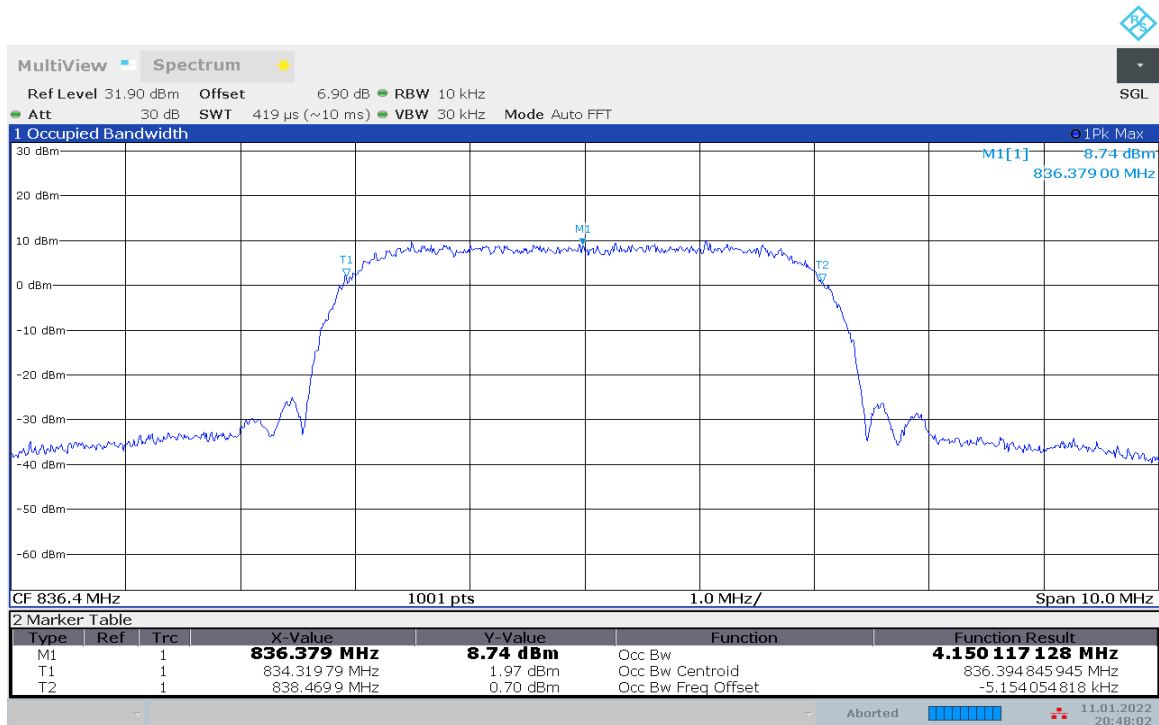


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4.2.5 BAND V_TM1_MCH

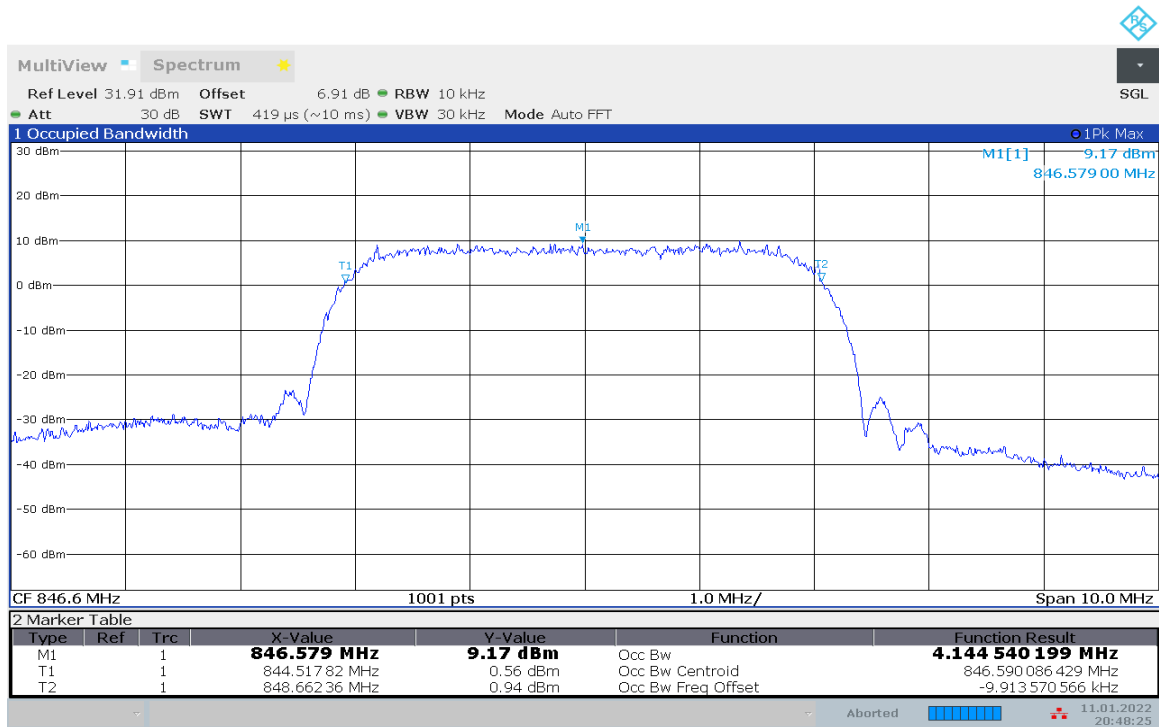


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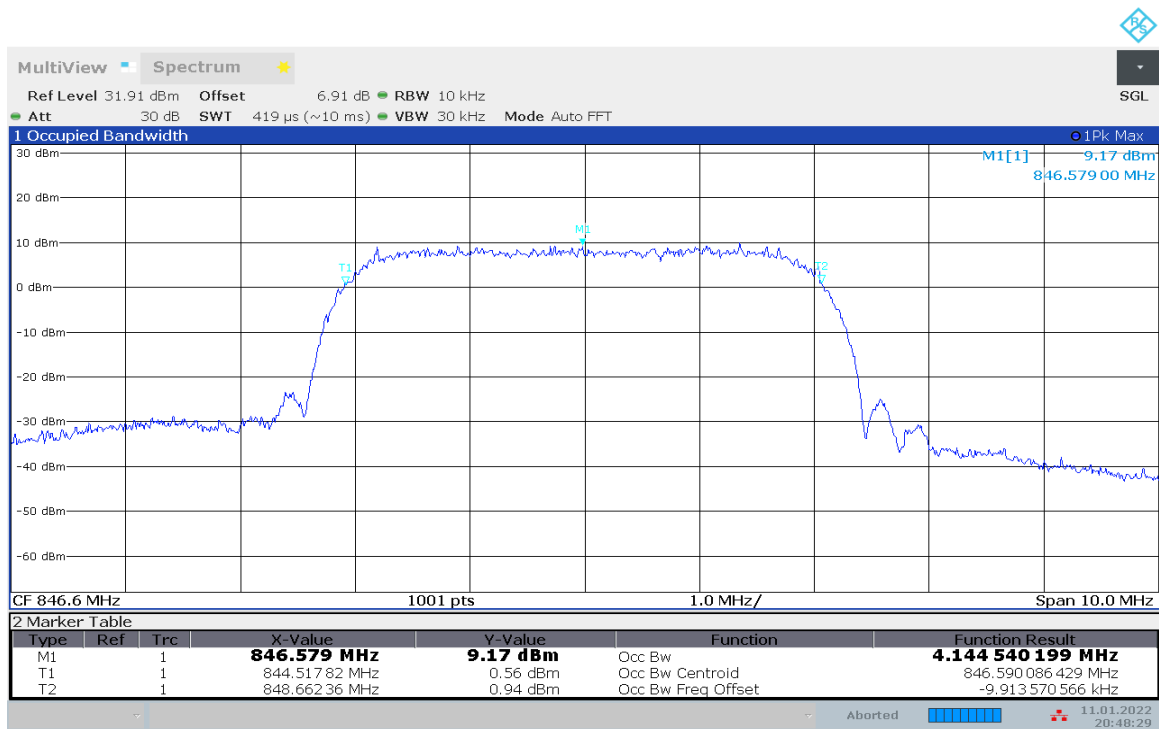


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4.2.6 BAND V_TM1_HCH



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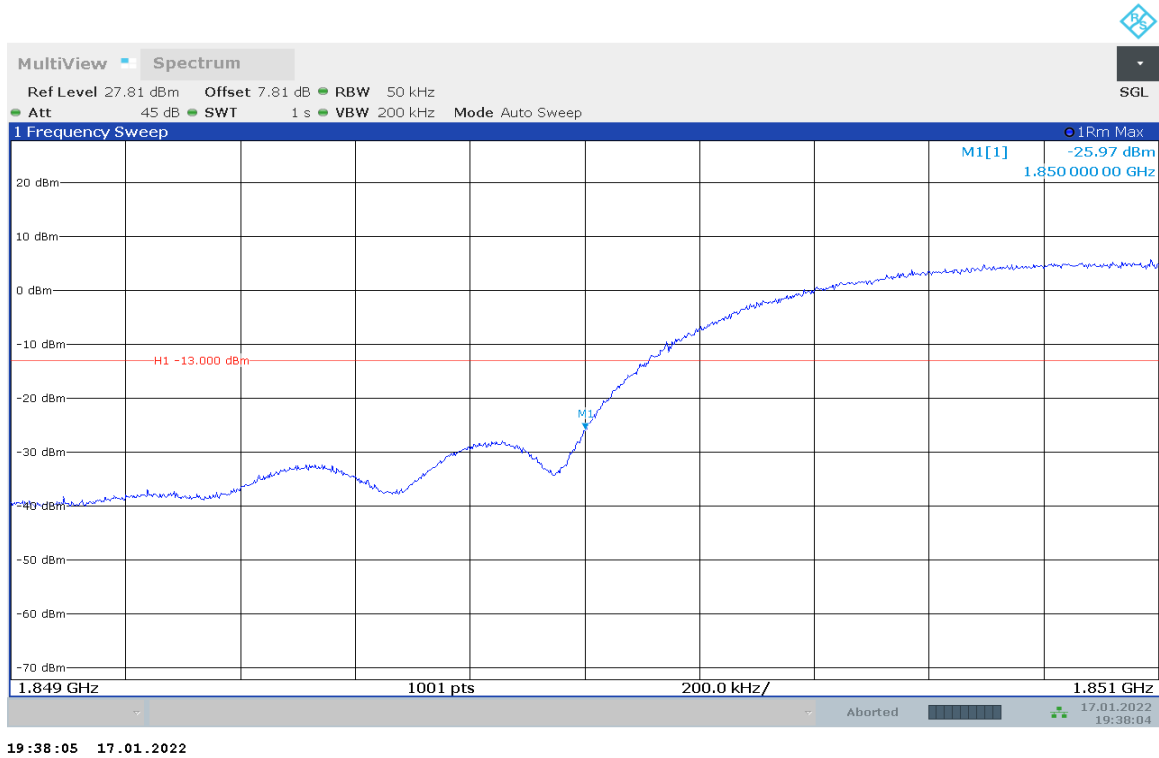
5. APPENDIX E - BAND EDGES COMPLIANCE

5.1 TEST RESULTS

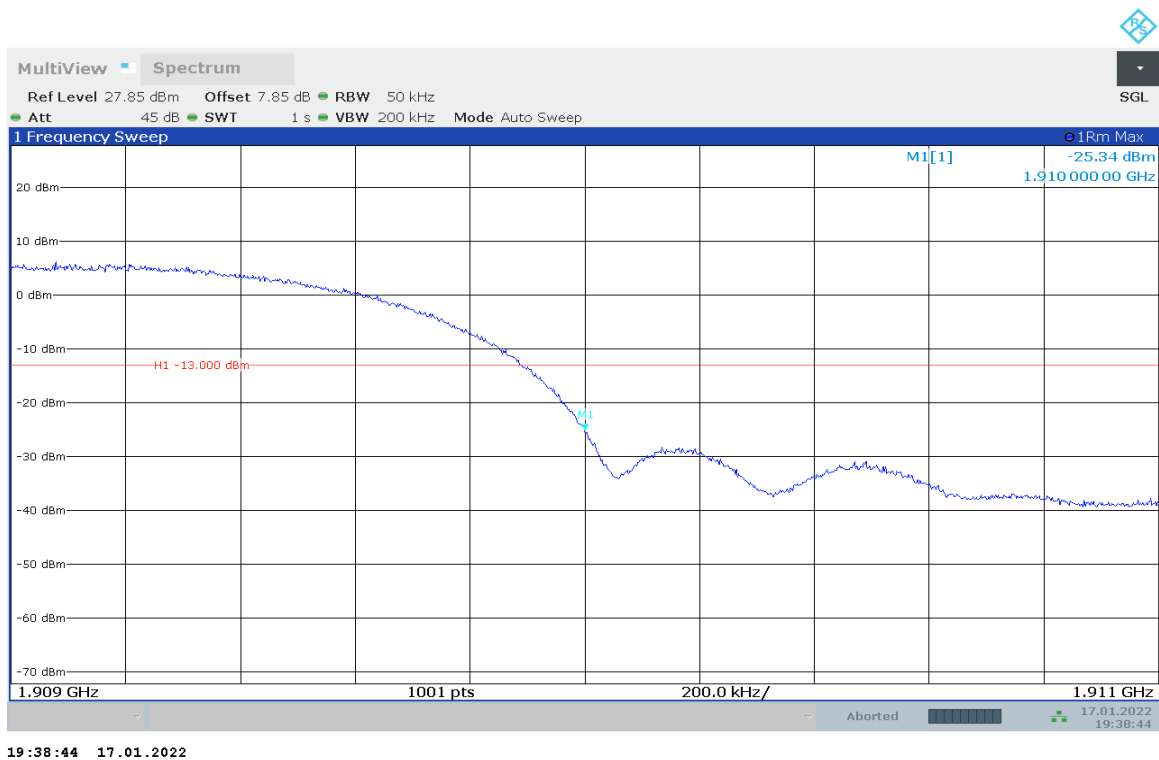
Band Edges Compliance						
Test Band	Test Mode	Test Channel	Frequency [MHz]	Power [dBm]	Limit [dBm]	Verdict
Band II	TM1	LCH	1850.0	-25.97	-13	PASS
		HCH	1910.0	-25.34	-13	PASS
Band V		LCH	823.835	-24.89	-13	PASS
		HCH	849.0	-24.04	-13	PASS

5.2 TEST PLOTS

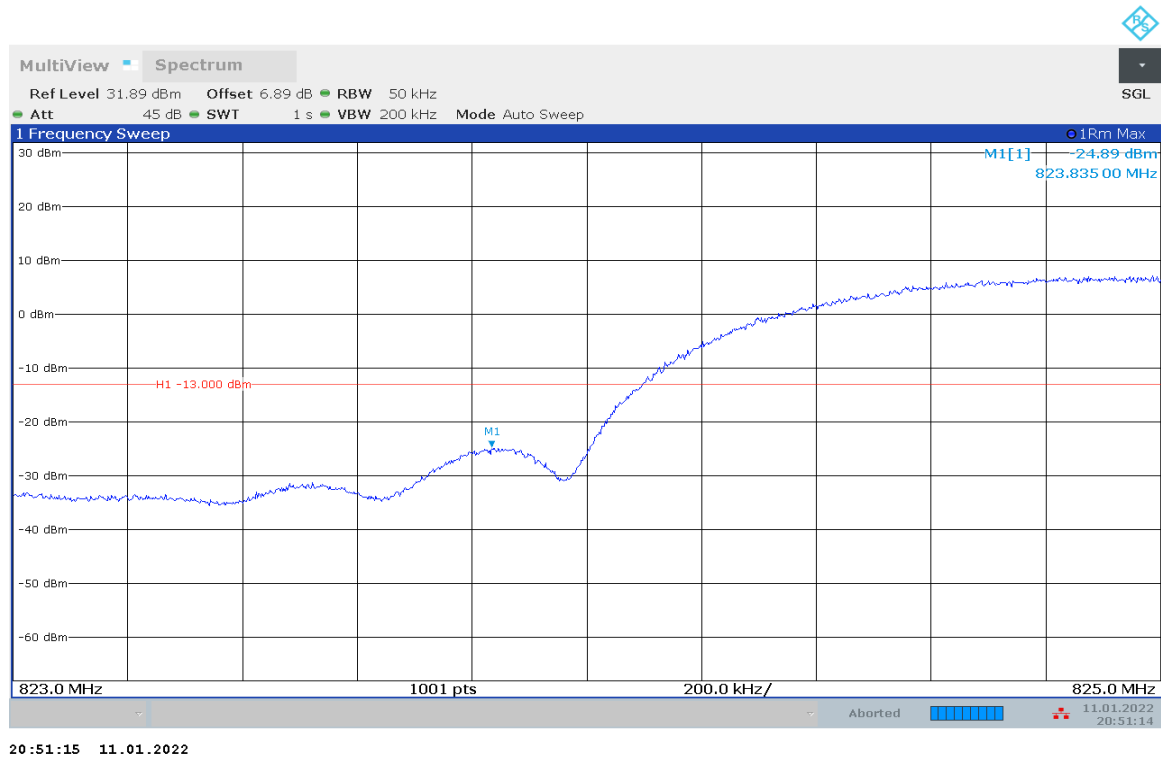
5.2.1 BAND II_TM1_LCH



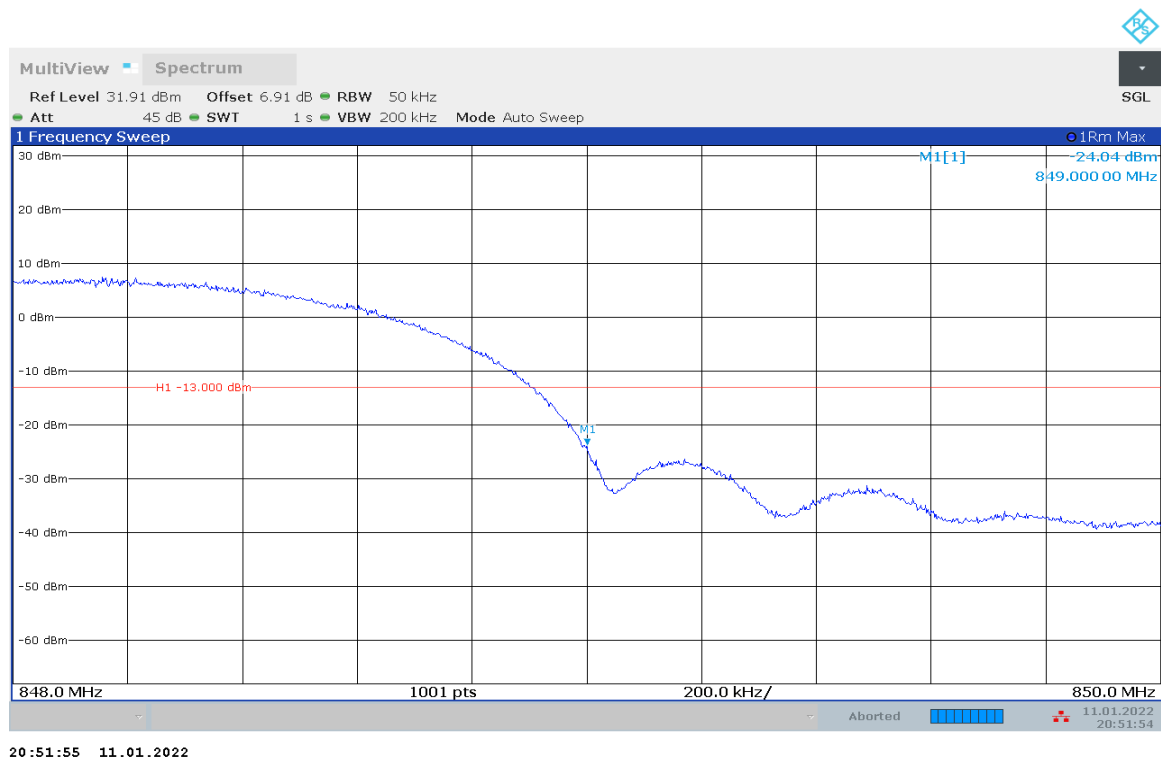
5.2.2 BAND II_TM1_HCH



5.2.3 BAND V_TM1_LCH



5.2.4 BAND V_TM1_HCH



6. APPENDIX F - SPURIOUS EMISSION AT ANTENNA TERMINAL

6.1 TEST RESULTS

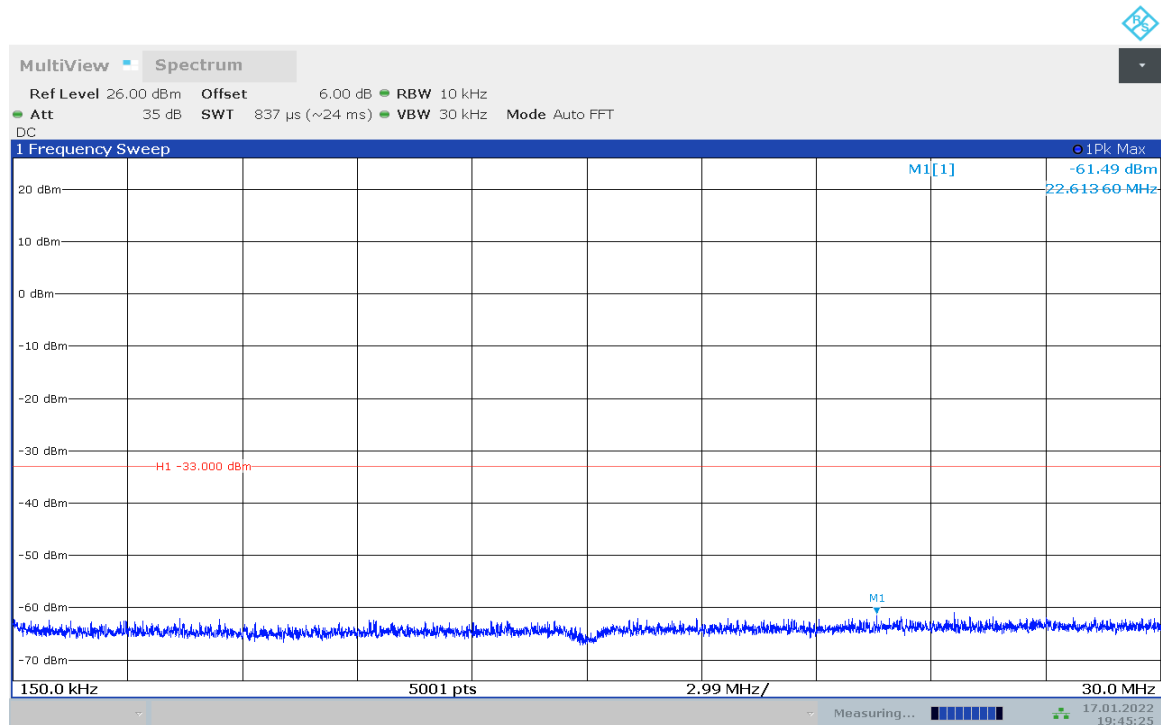
Spurious Emission at Antenna Terminal								
Test Band	Test Mode	Test Channel	Start Freq. [MHz]	Stop Freq. [MHz]	Measured Freq. [MHz]	Measured Power [dBm]	Limit [dBm]	Verdict
Band II	TM1	LCH	0.009	0.15	0.01	-82.3	-43	PASS
			0.15	30	22.61	-61.49	-33	PASS
			30	20000	18608.87	-34.09	-13	PASS
		MCH	0.009	0.15	0.01	-81.56	-43	PASS
			0.15	30	24.91	-60.66	-33	PASS
			30	20000	17455.64	-34.33	-13	PASS
		HCH	0.009	0.15	0.01	-81.68	-43	PASS
			0.15	30	0.18	-61.28	-33	PASS
			30	20000	19001.28	-34.7	-13	PASS
Band V		LCH	0.009	0.15	0.01	-71.97	-33	PASS
			0.15	30	28.44	-58.81	-23	PASS
			30	1000	822.65	-23.7	-13	PASS
			1000	12750	11638.04	-35.88	-13	PASS
		MCH	0.009	0.15	0.01	-72.03	-33	PASS
			0.15	30	27.91	-59.74	-23	PASS
			30	1000	541.19	-47.52	-13	PASS
			1000	12750	12325.1	-35.47	-13	PASS
		HCH	0.009	0.15	0.01	-71.48	-33	PASS
			0.15	30	23.16	-58.93	-23	PASS
			30	1000	669.74	-48.14	-13	PASS
			1000	12750	12429.09	-36.0	-13	PASS

6.2 TEST PLOTS

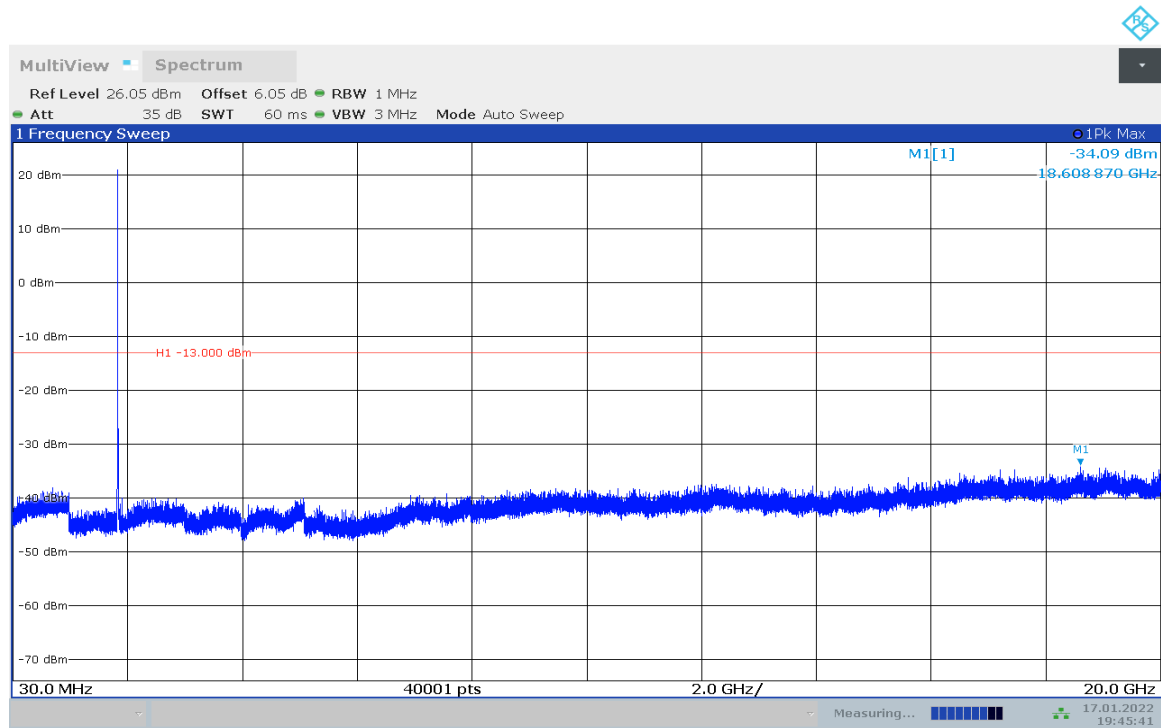
6.2.1 BAND II_TM1_LCH



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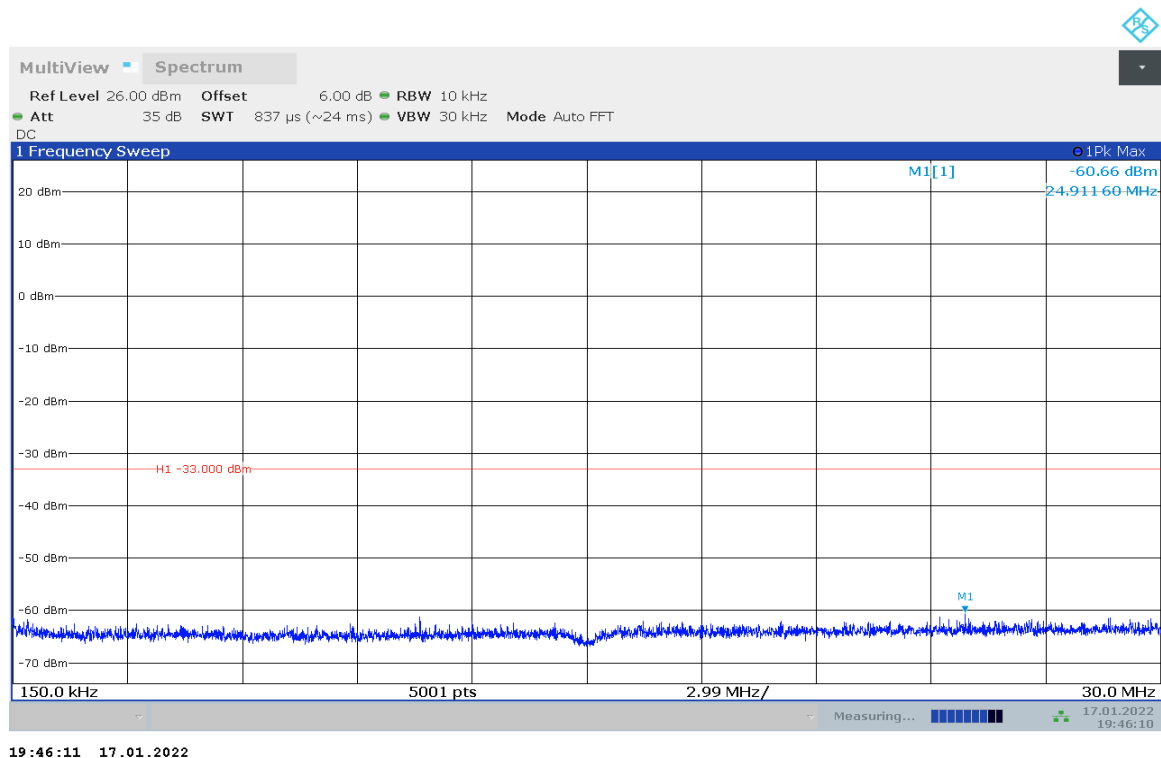
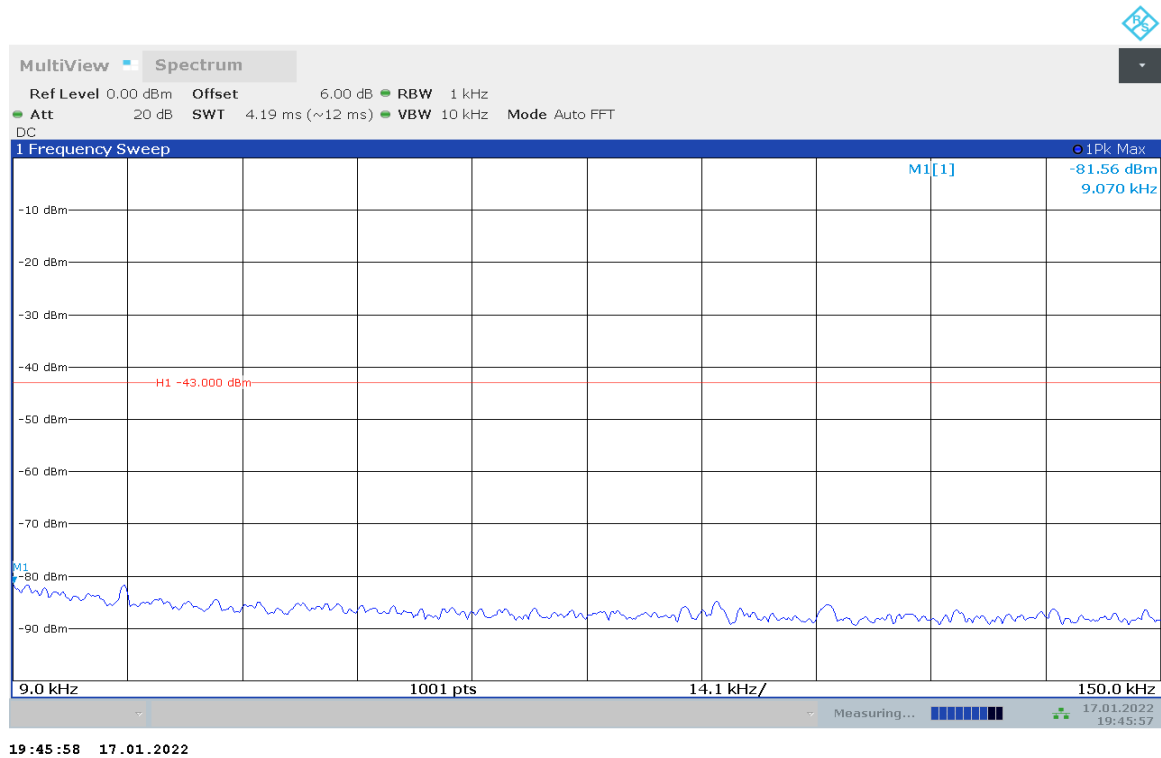


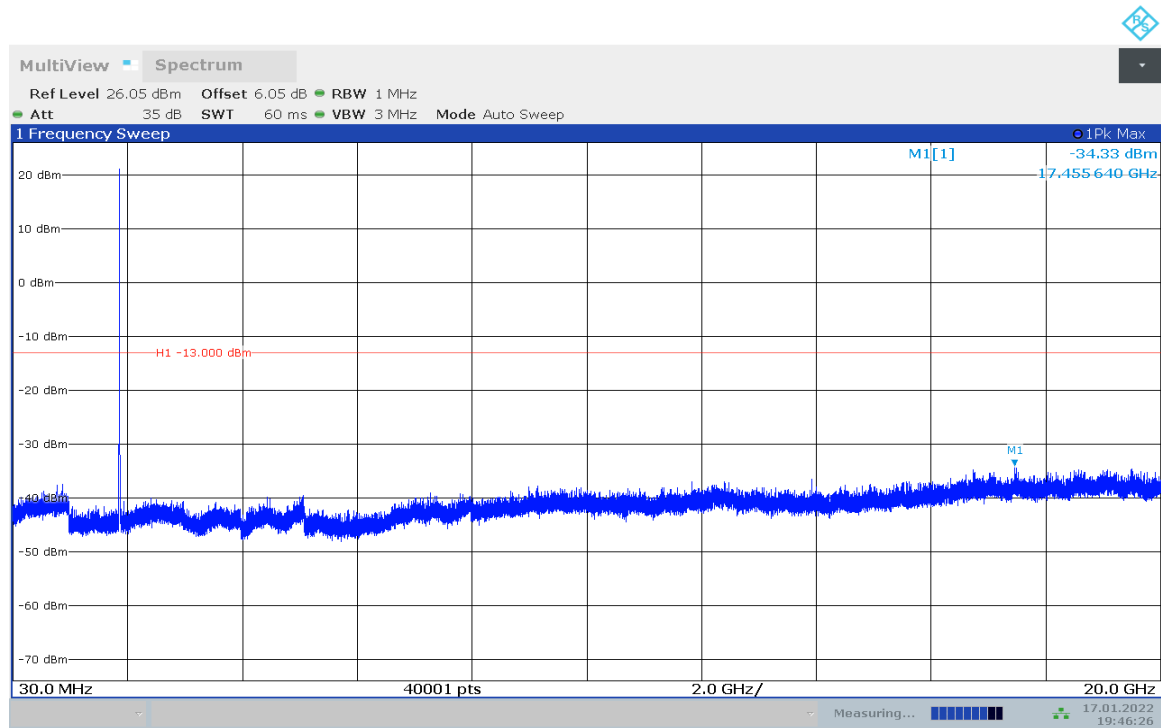
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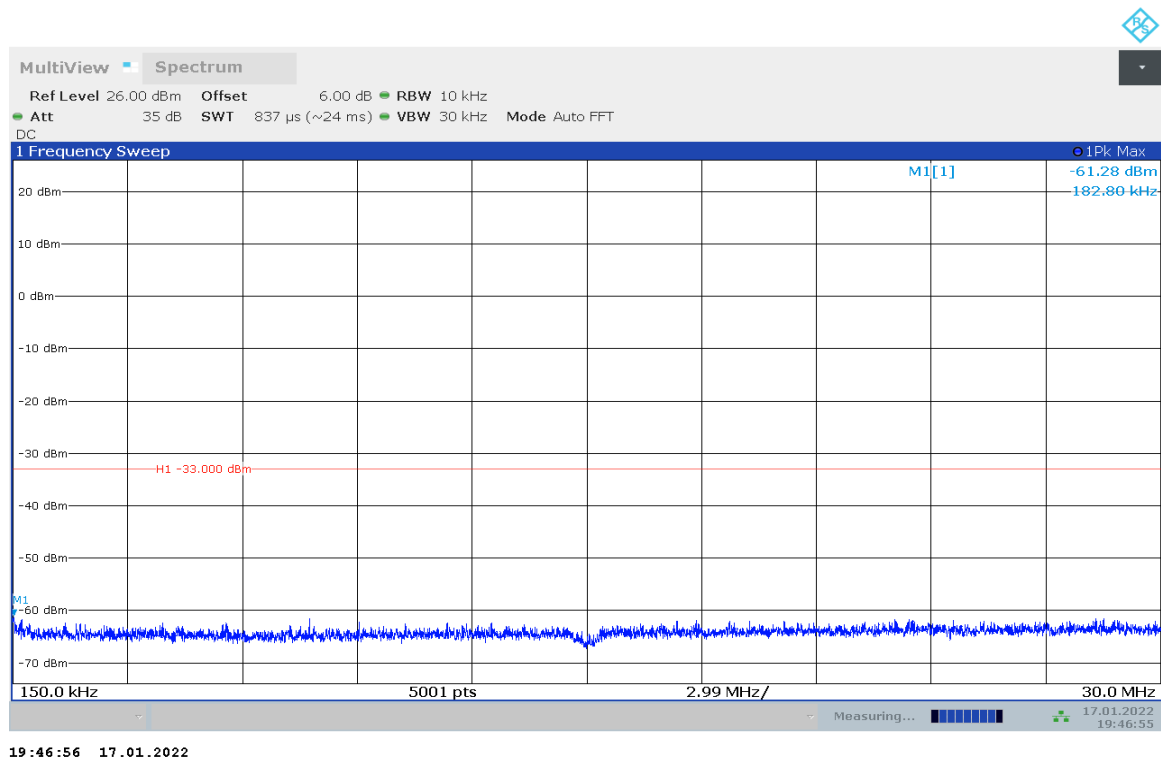
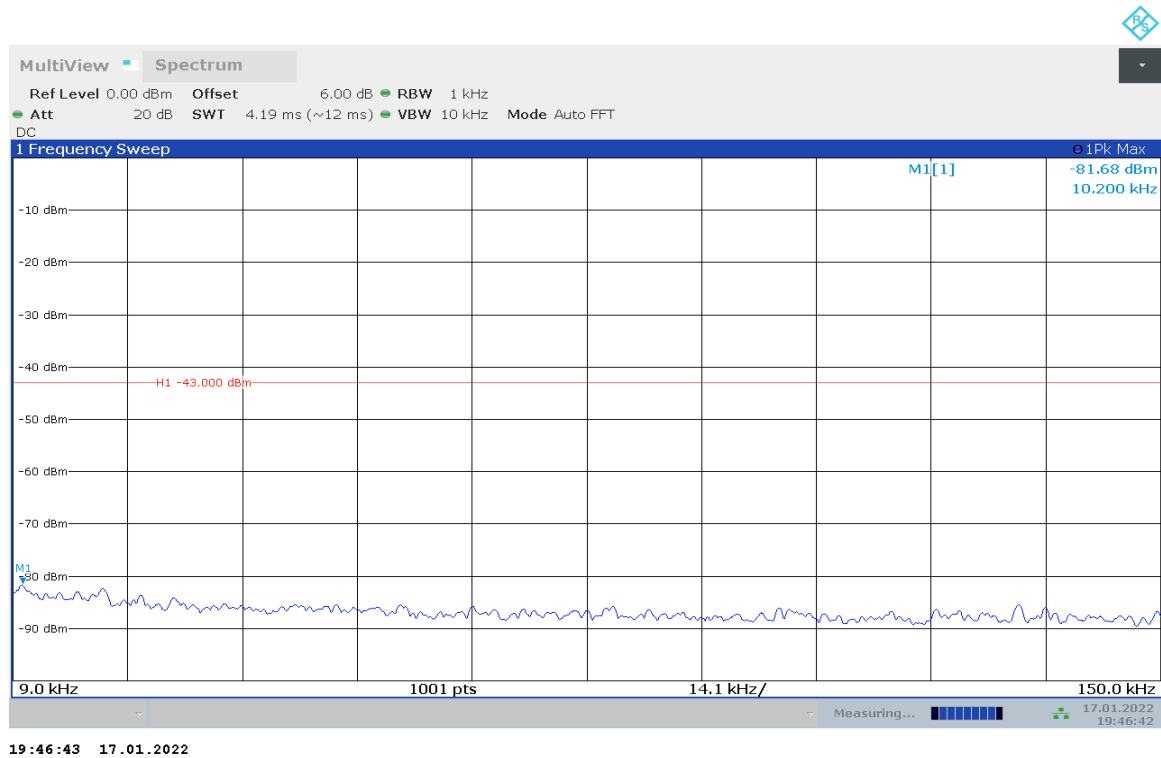
6.2.2 BAND II_TM1_MCH

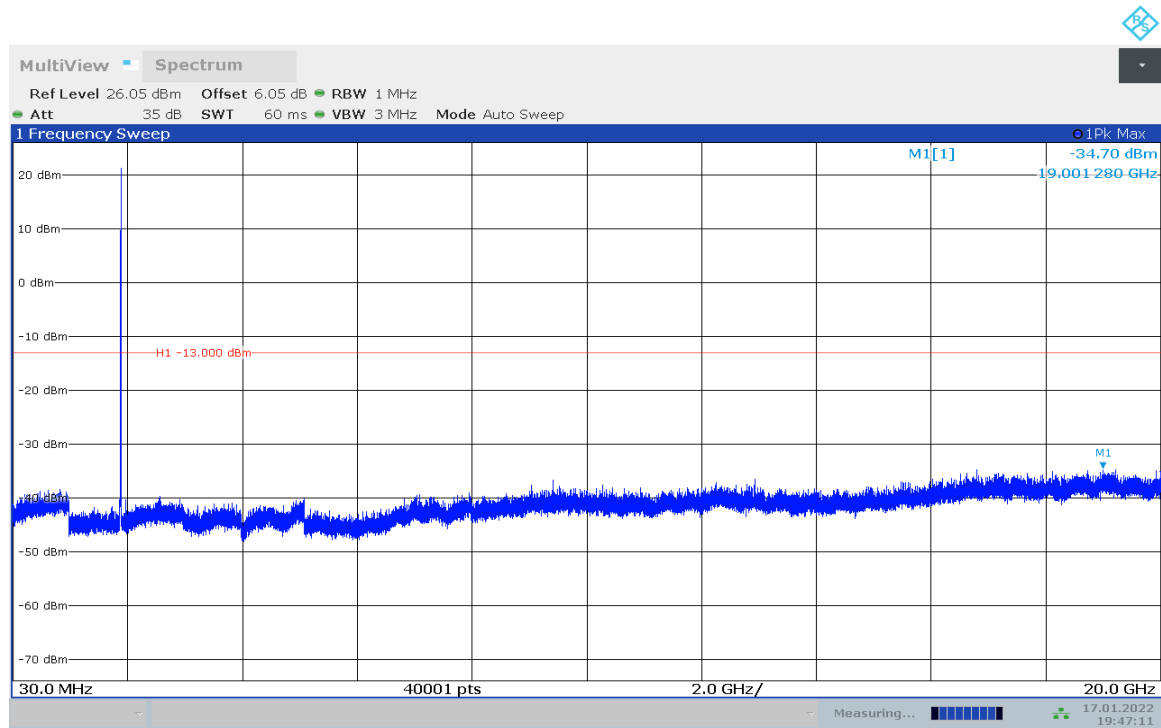




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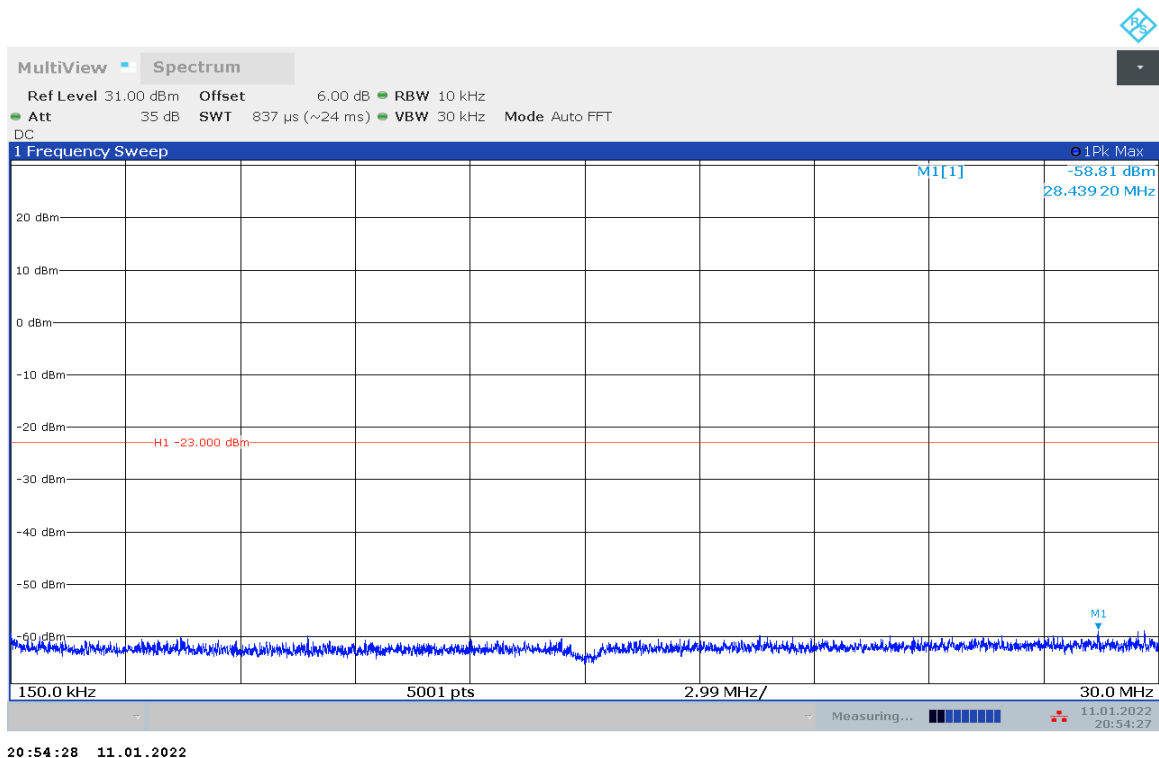
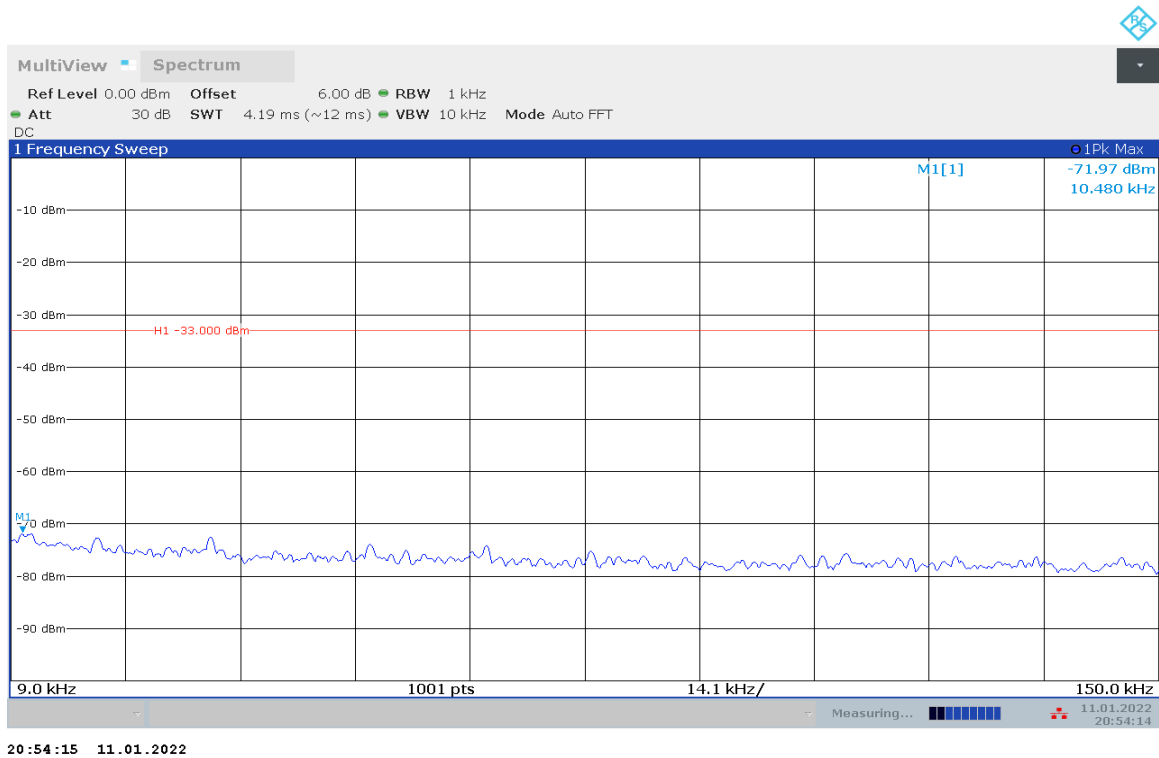
6.2.3 BAND II_TM1_HCH

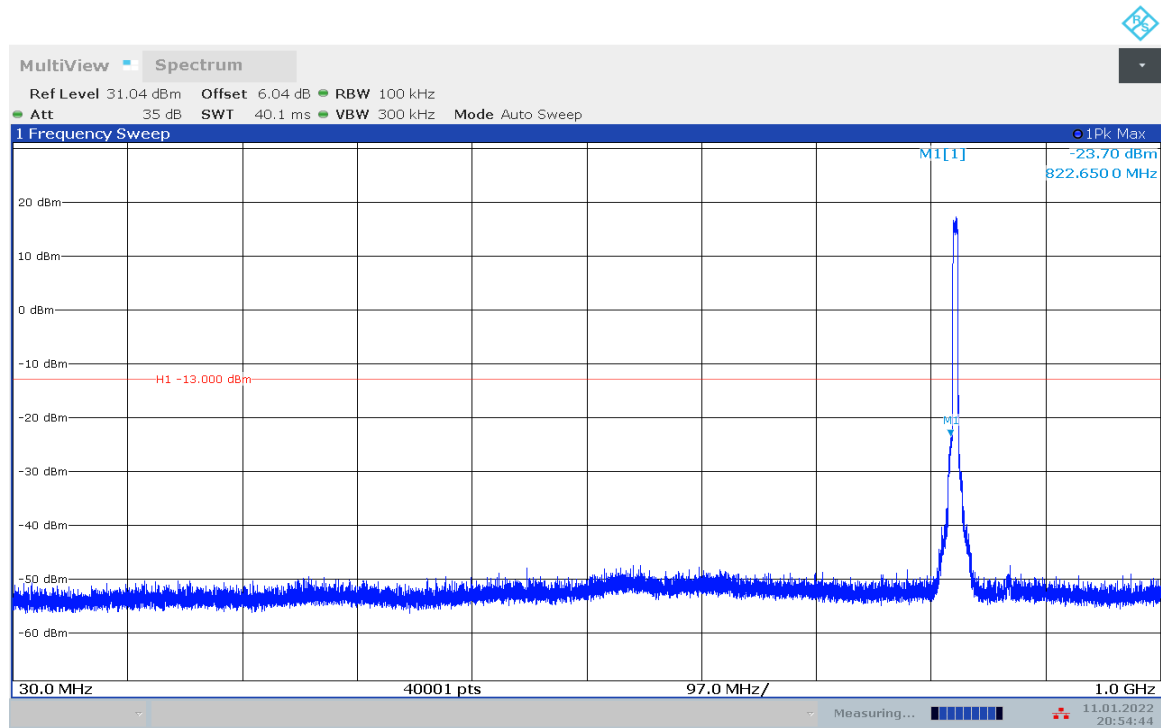




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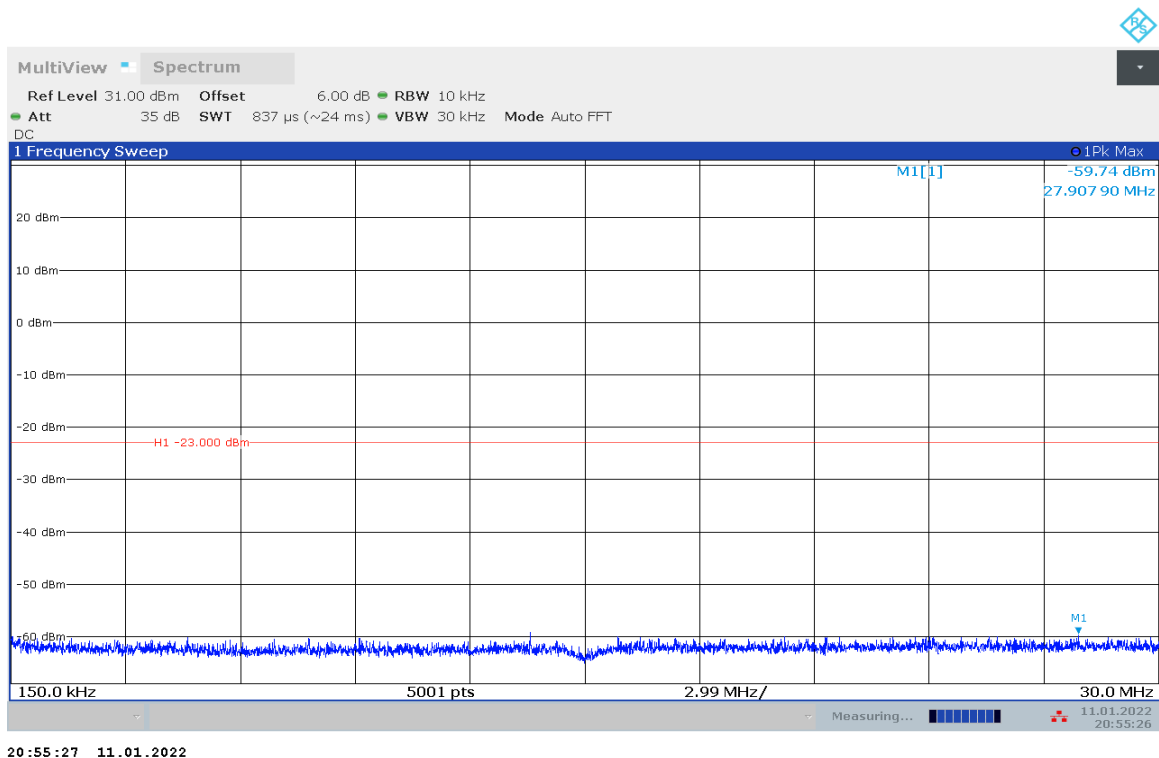
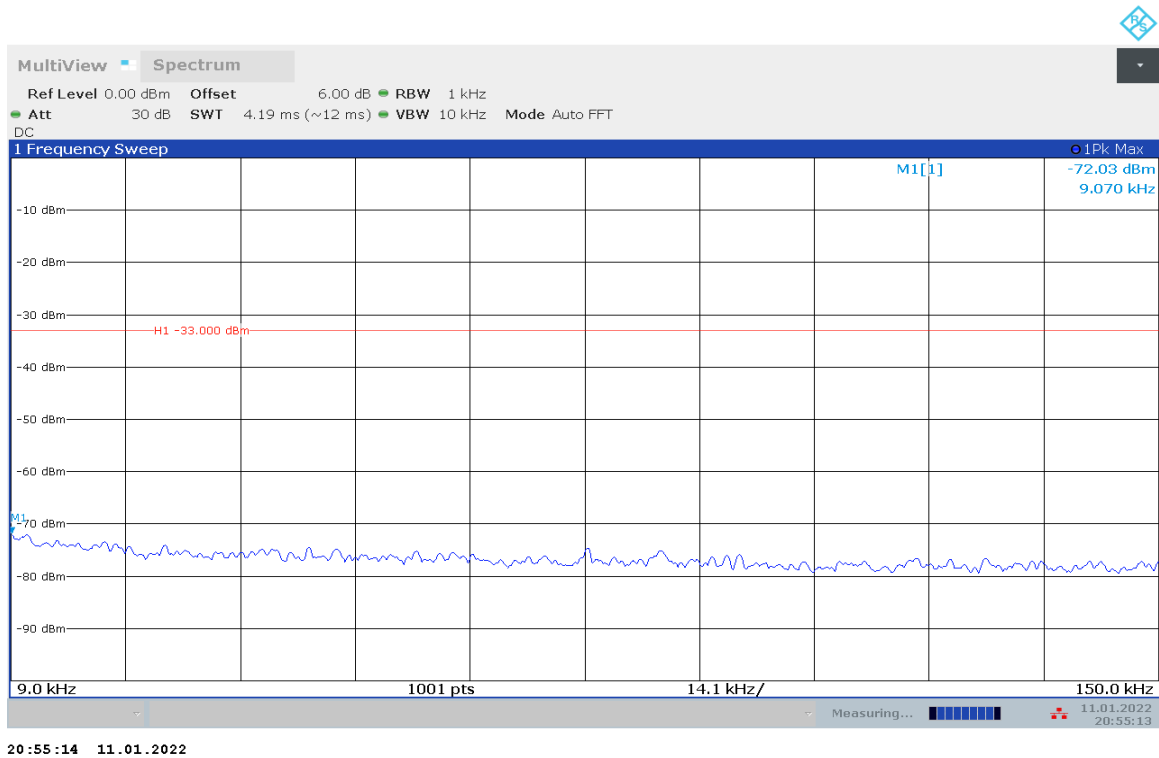
6.2.4 BAND V_TM1_LCH

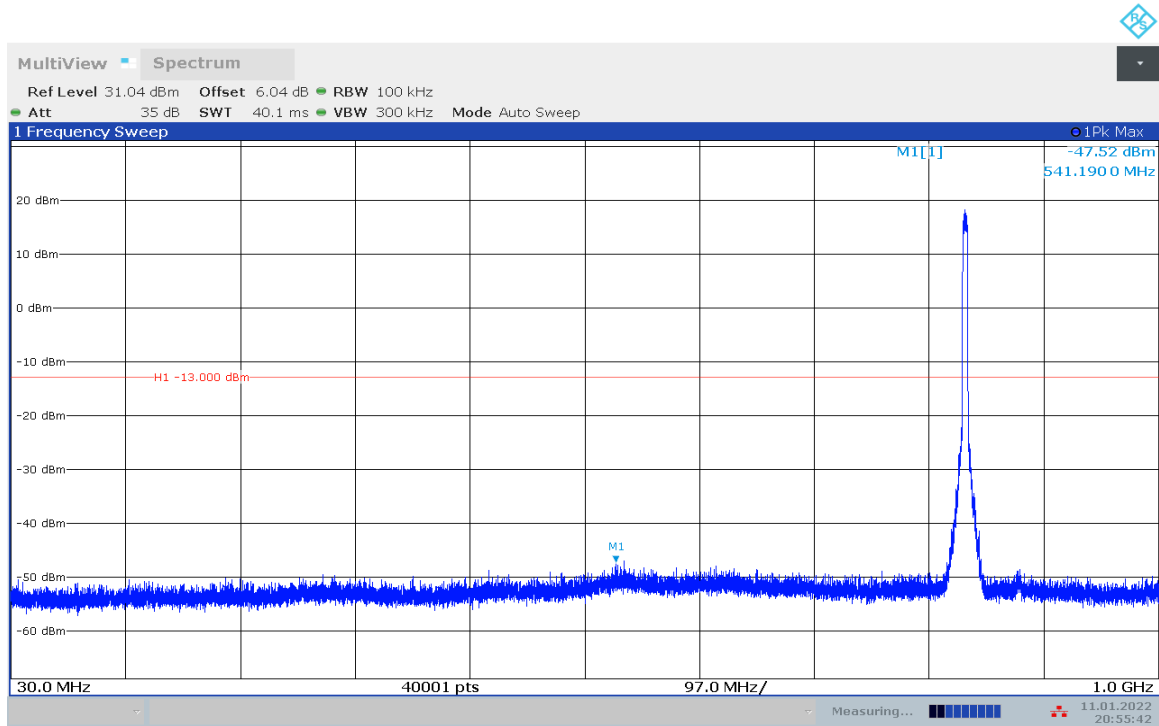




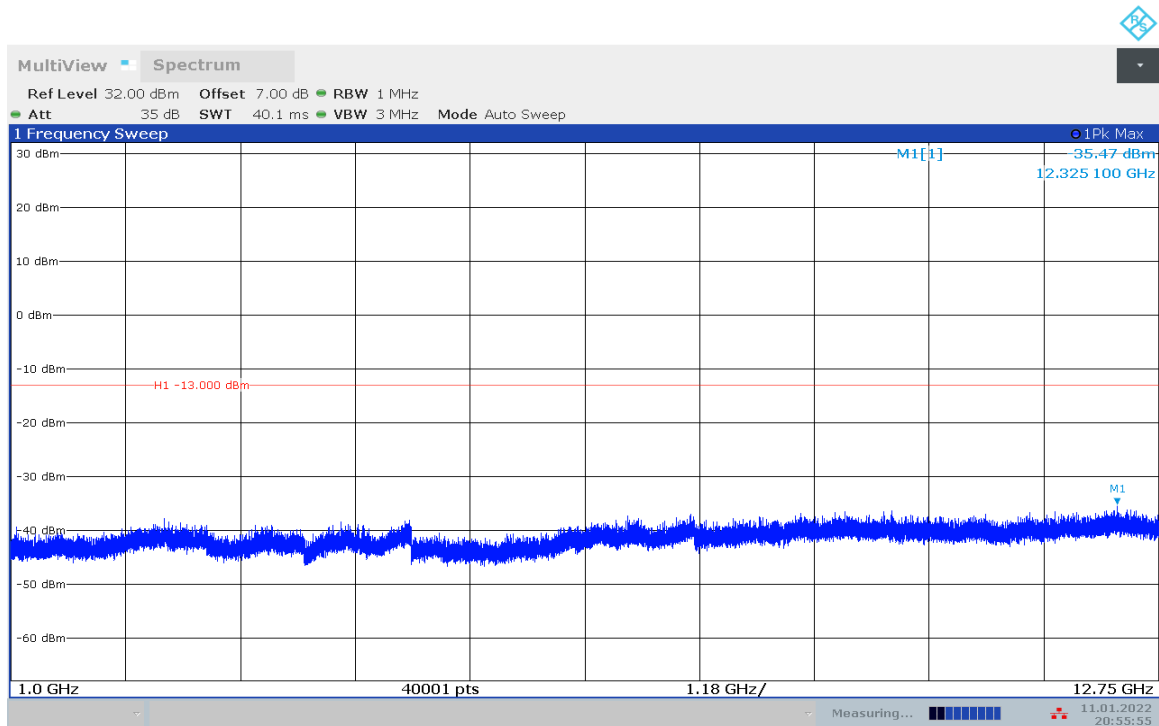
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6.2.5 BAND V_TM1_MCH



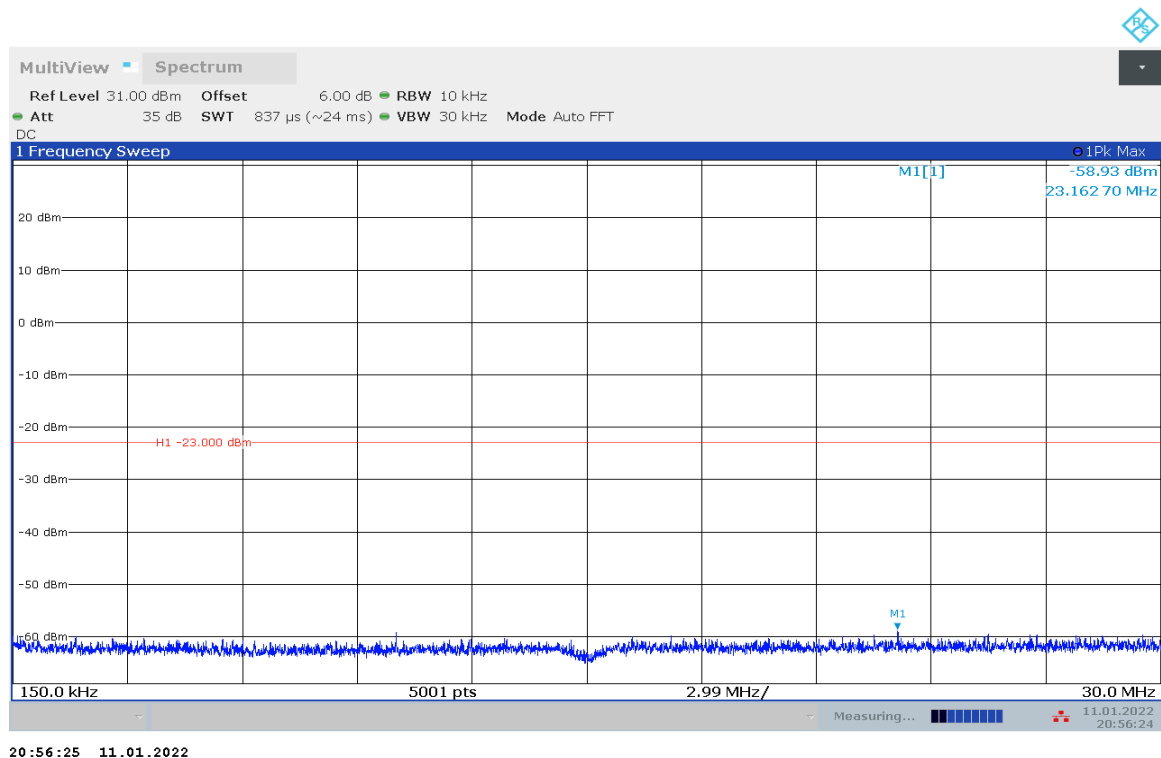
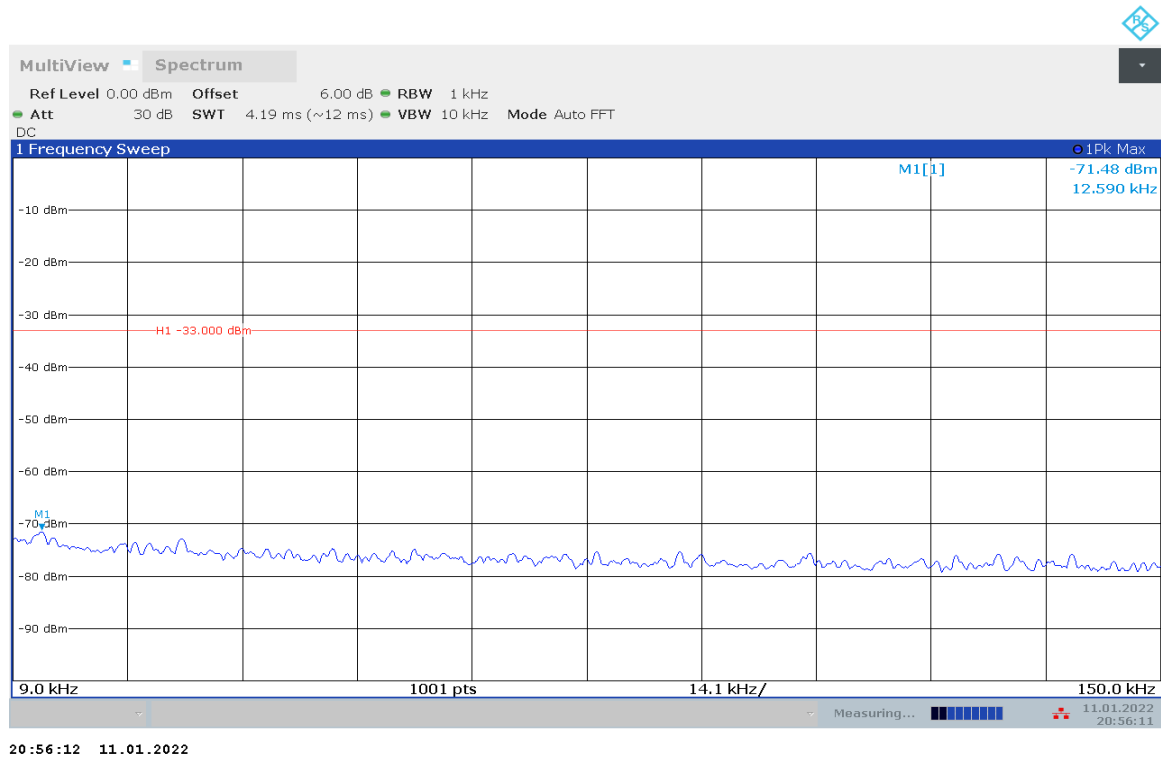


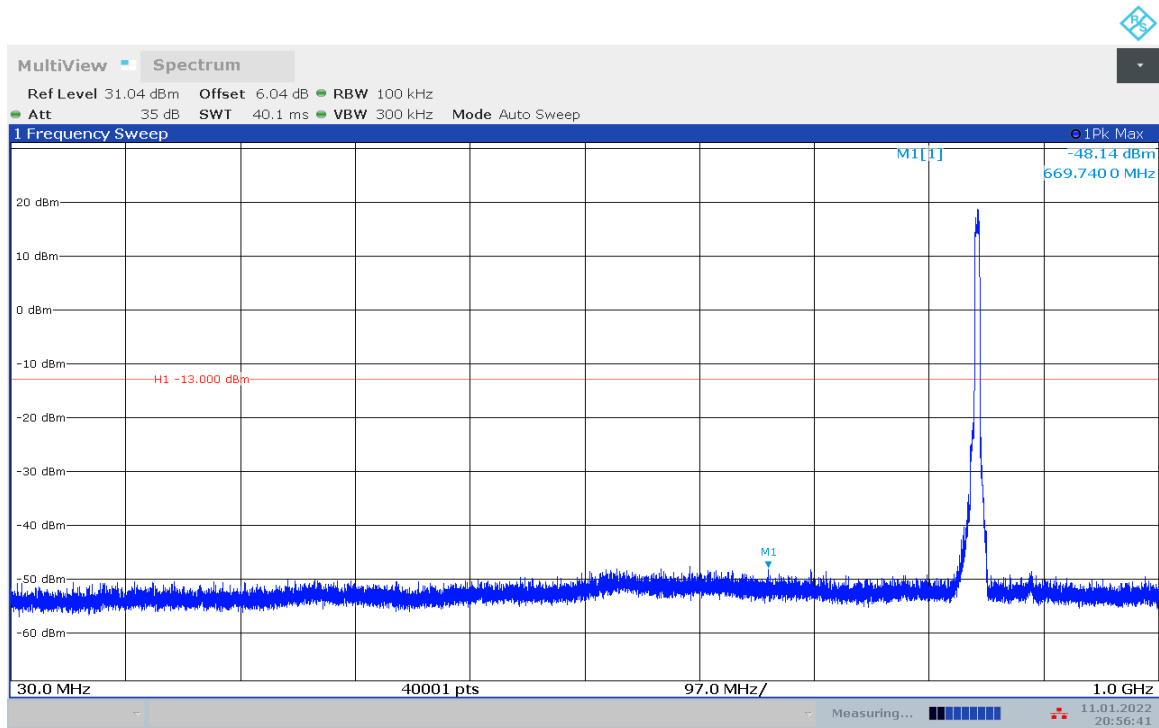
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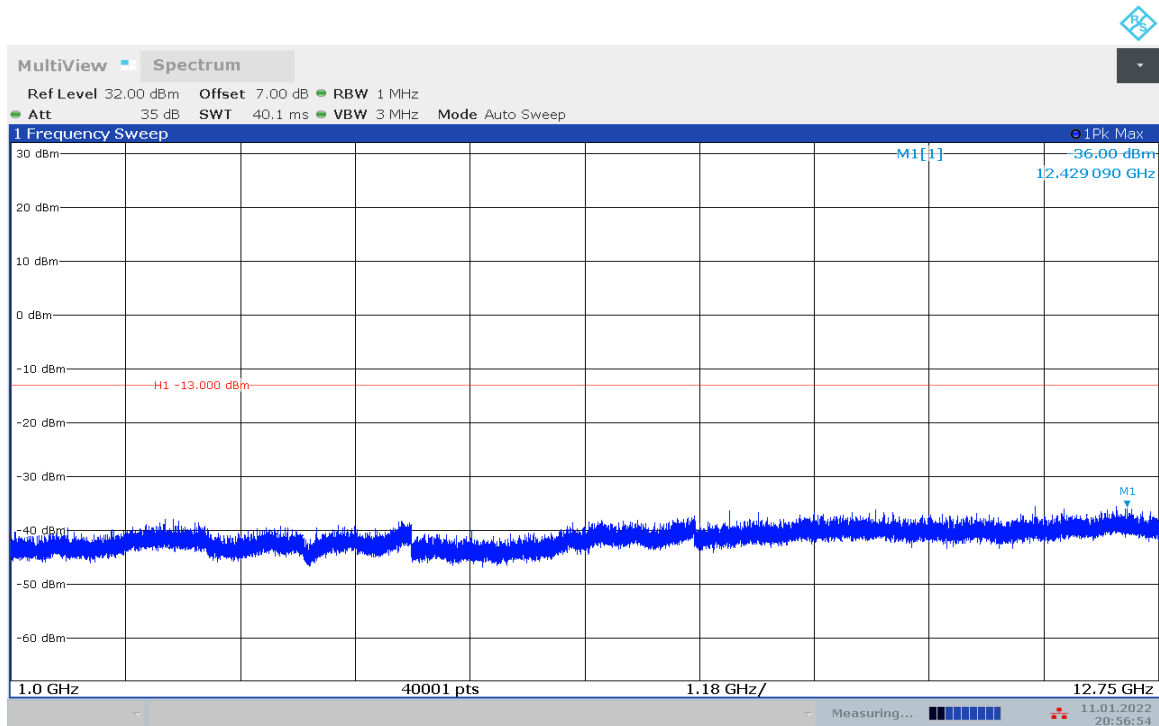
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6.2.6 BAND V_TM1_HCH





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7. APPENDIX G - FREQUENCY STABILITY

7.1 TEST RESULTS

7.1.1 FREQUENCY ERROR VS. VOLTAGE

Frequency Error vs. Voltage							
Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
Band II	UMTS/TM1	LCH	TN	VH	3.087	0.002	PASS
			TN	VN	1.963	0.001	PASS
			TN	VL	2.713	0.001	PASS
		MCH	TN	VH	2.178	0.001	PASS
			TN	VN	2.914	0.002	PASS
			TN	VL	3.097	0.002	PASS
		HCH	TN	VH	3.816	0.002	PASS
			TN	VN	3.697	0.002	PASS
			TN	VL	3.857	0.002	PASS
Band V		LCH	TN	VH	-0.2	-0.0	PASS
			TN	VN	-0.439	-0.001	PASS
			TN	VL	-0.918	-0.001	PASS
		MCH	TN	VH	0.003	0.0	PASS
			TN	VN	-0.598	-0.001	PASS
			TN	VL	0.25	0.0	PASS
	HCH	TN	VH	0.404	0.0	PASS	
		TN	VN	0.058	0.0	PASS	
		TN	VL	0.535	0.001	PASS	

7.1.2 FREQUENCY ERROR VS. TEMPERATURE

Frequency Error vs. Temperature							
Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
Band II	UMTS/TM1	LCH	VN	-30	2.121	0.001	PASS
			VN	-20	2.418	0.001	PASS
			VN	-10	1.554	0.001	PASS
			VN	0	1.659	0.001	PASS
			VN	10	1.613	0.001	PASS
			VN	20	1.535	0.001	PASS
			VN	30	0.653	0.0	PASS
			VN	40	0.977	0.001	PASS
			VN	50	0.747	0.0	PASS
		MCH	VN	-30	2.27	0.001	PASS
			VN	-20	1.974	0.001	PASS
			VN	-10	2.86	0.002	PASS
			VN	0	2.922	0.002	PASS
			VN	10	2.503	0.001	PASS
			VN	20	2.226	0.001	PASS
			VN	30	1.832	0.001	PASS
			VN	40	1.995	0.001	PASS
			VN	50	3.082	0.002	PASS
		HCH	VN	-30	3.304	0.002	PASS
			VN	-20	4.147	0.002	PASS
			VN	-10	3.719	0.002	PASS
			VN	0	3.539	0.002	PASS
			VN	10	3.707	0.002	PASS
			VN	20	3.59	0.002	PASS
			VN	30	3.669	0.002	PASS
			VN	40	3.529	0.002	PASS
			VN	50	3.59	0.002	PASS

Frequency Error vs. Temperature							
Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
Band V	UMTS/TM1	LCH	VN	-30	0.072	0.0	PASS
			VN	-20	-0.567	-0.001	PASS
			VN	-10	-0.817	-0.001	PASS
			VN	0	-0.595	-0.001	PASS
			VN	10	-0.744	-0.001	PASS
			VN	20	-0.8	-0.001	PASS
			VN	30	-0.637	-0.001	PASS
			VN	40	-0.885	-0.001	PASS
			VN	50	-0.701	-0.001	PASS
		MCH	VN	-30	-0.713	-0.001	PASS
			VN	-20	-0.404	-0.0	PASS
			VN	-10	-0.376	-0.0	PASS
			VN	0	-0.245	-0.0	PASS
			VN	10	-0.14	-0.0	PASS
			VN	20	-0.339	-0.0	PASS
			VN	30	-0.192	-0.0	PASS
			VN	40	-0.619	-0.001	PASS
			VN	50	-0.563	-0.001	PASS
		HCH	VN	-30	0.887	0.001	PASS
			VN	-20	0.411	0.0	PASS
			VN	-10	-0.018	-0.0	PASS
			VN	0	0.269	0.0	PASS
			VN	10	0.346	0.0	PASS
			VN	20	0.324	0.0	PASS
			VN	30	-0.027	-0.0	PASS
			VN	40	0.016	0.0	PASS
			VN	50	0.285	0.0	PASS

End of Test Report