

# Appendix for WCDMA Band IV

Model: LGE-NX9

**BTL-FCCP-3-2203G019**

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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]	Gain [dBi]	EIRP [dBm]	Limit [dBm]	Verdict
4	TM1	LCH	23.12	-3.2	19.92	30	PASS
		MCH	23.20	-3.2	20.00	30	PASS
		HCH	23.42	-3.2	20.22	30	PASS

## 2. APPENDIX B - PEAK-TO-AVERAGE RATIO

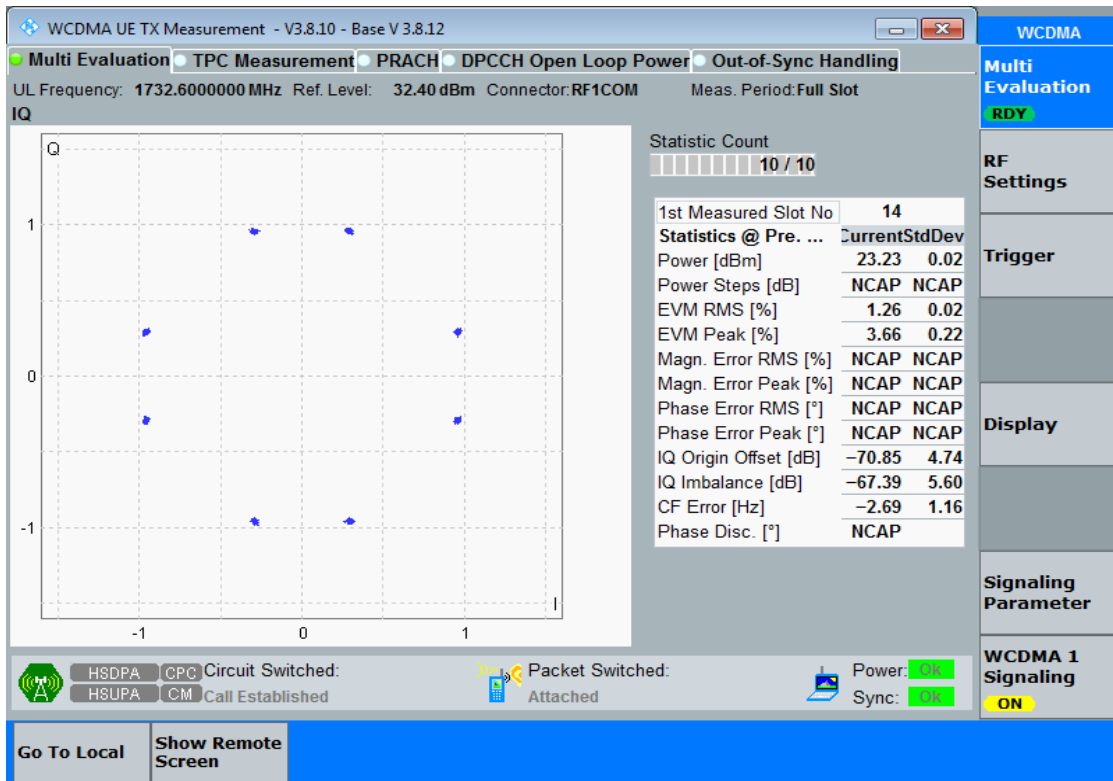
### 2.1 TEST RESULTS

Peak-to-Average Ratio					
Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dBm]	Verdict
4	TM1	LCH	2.81	13	PASS
		MCH	2.69	13	PASS
		HCH	2.73	13	PASS

### 3. APPENDIX C - MODULATION CHARACTERISTICS

#### 3.1 TEST PLOTS

##### 3.1.1 BAND 4\_TM1\_MCH

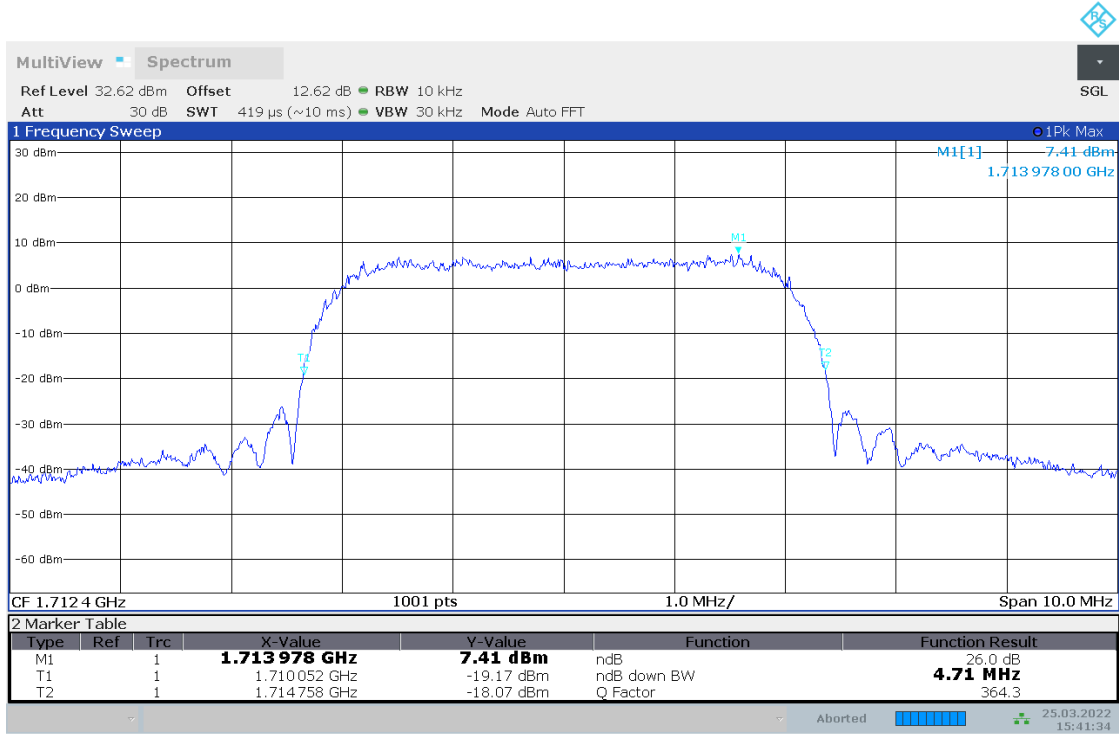


**4. APPENDIX D - OCCUPIED BANDWIDTH****4.1 TEST RESULTS**

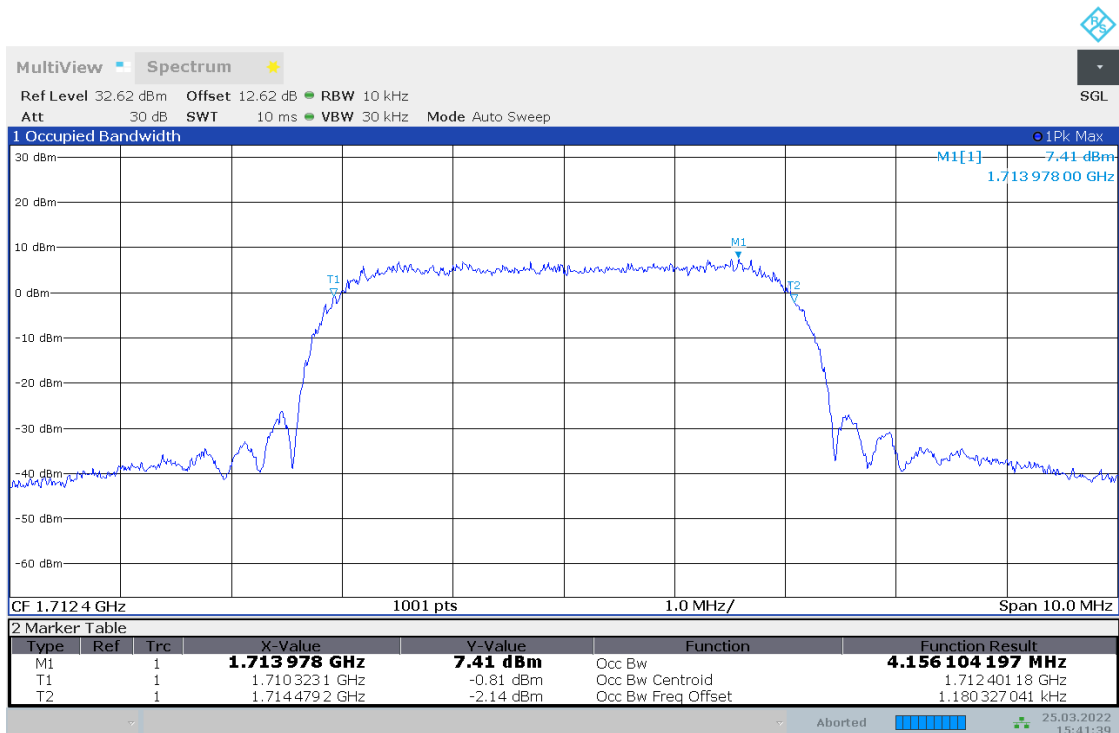
Occupied Bandwidth					
Test Band	Test Mode	Test Channel	Occupied Bandwidth [kHz]	Emission Bandwidth [KHz]	Verdict
4	TM1	LCH	4.16	4.71	PASS
		MCH	4.16	4.71	PASS
		HCH	4.16	4.71	PASS

## 4.2 TEST PLOTS

### 4.2.1 BAND 4\_TM1\_LCH

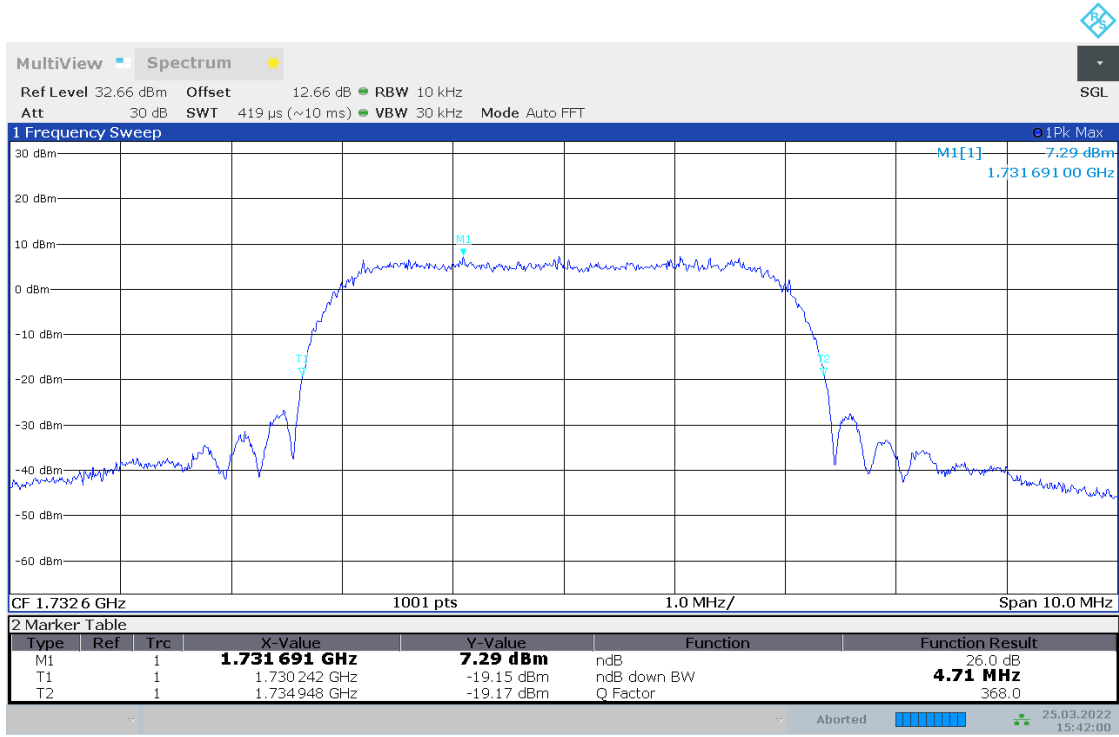


15:41:34 25.03.2022

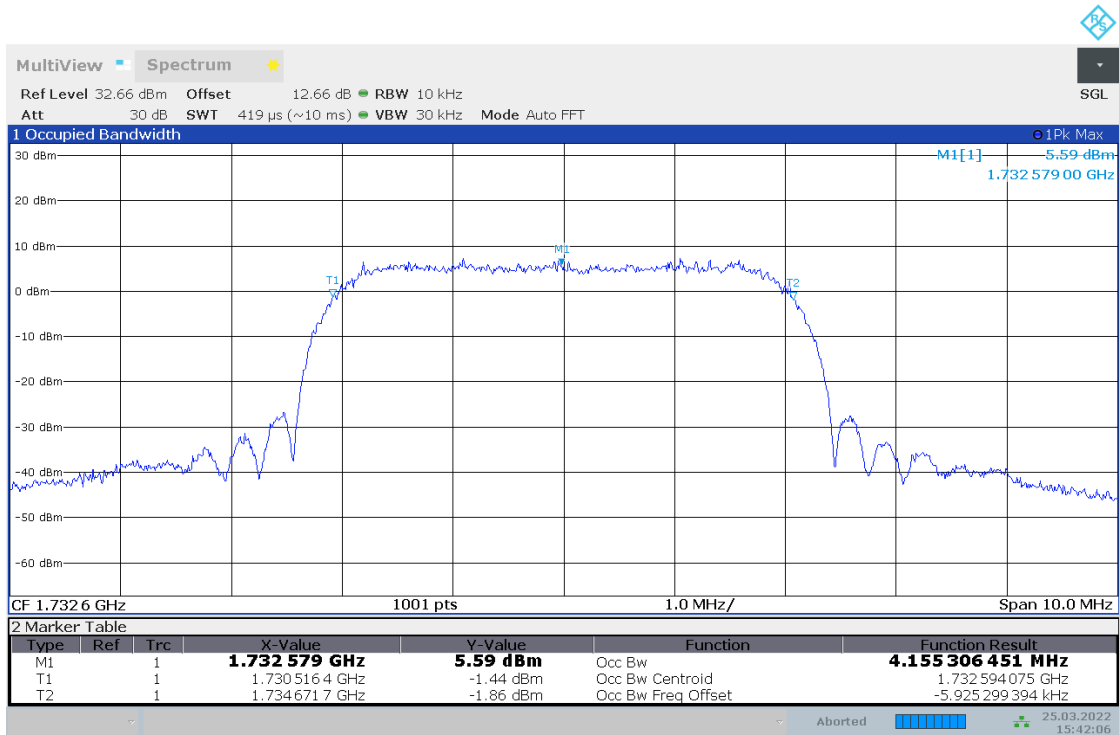


15:41:39 25.03.2022

## 4.2.2 BAND 4\_TM1\_MCH



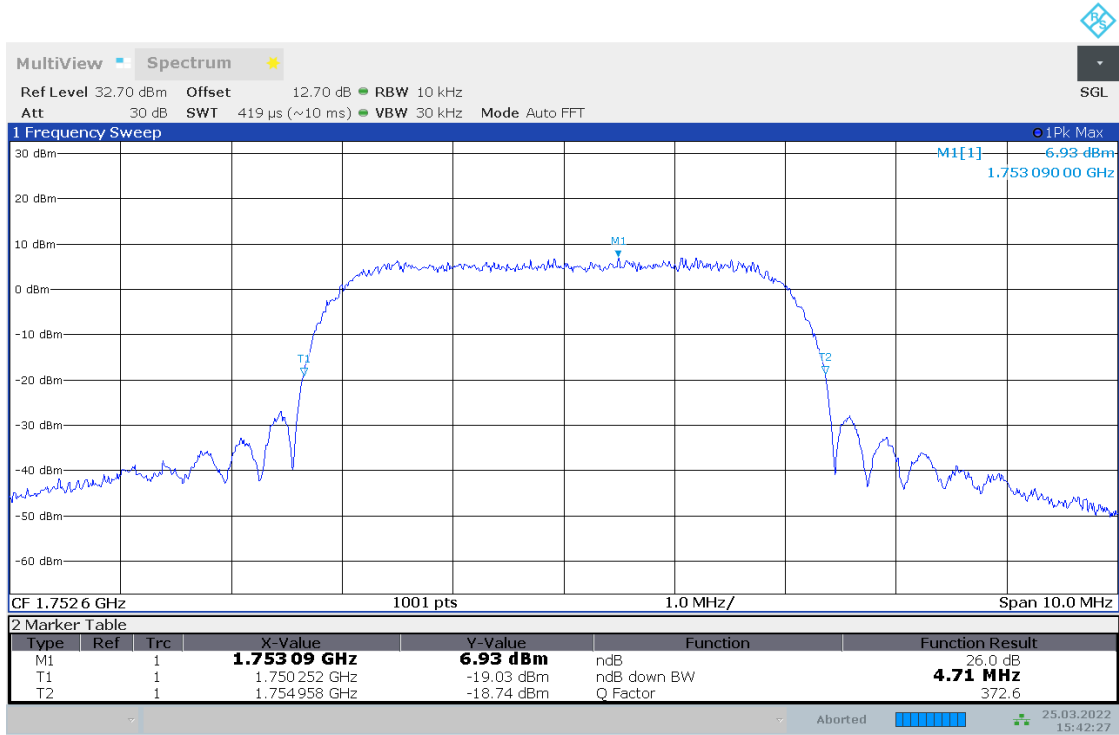
15:42:01 25.03.2022



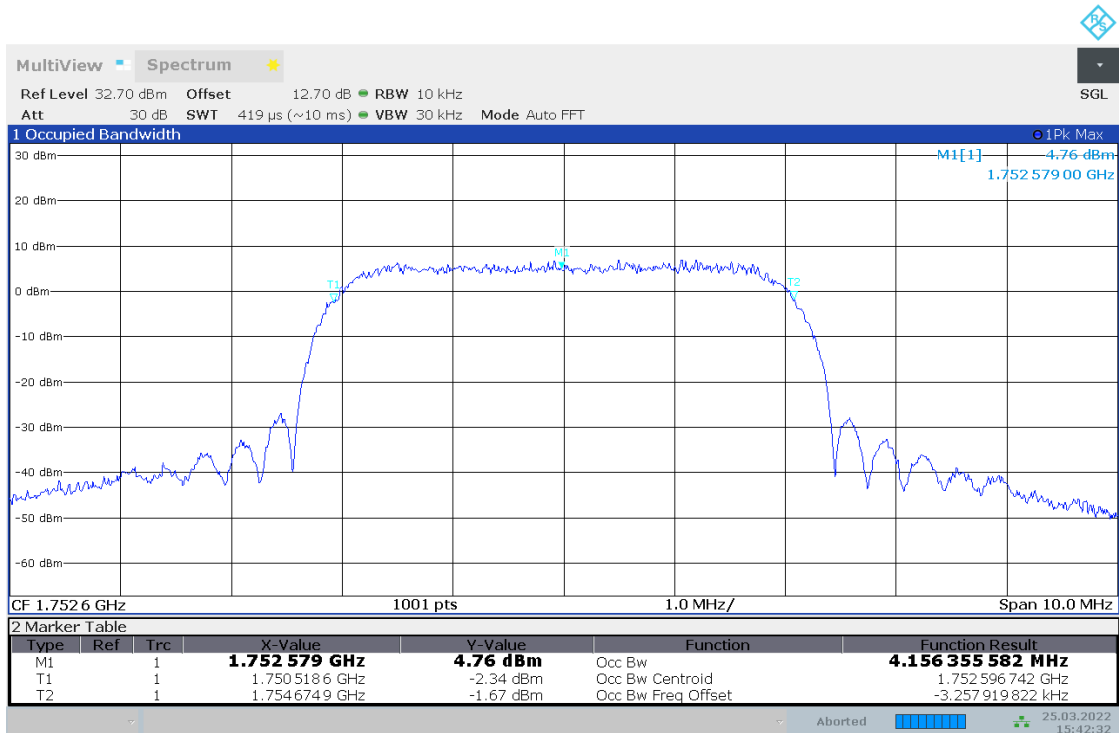
15:42:06 25.03.2022



## 4.2.3 BAND 4\_TM1\_HCH



15:42:27 25.03.2022



15:42:33 25.03.2022

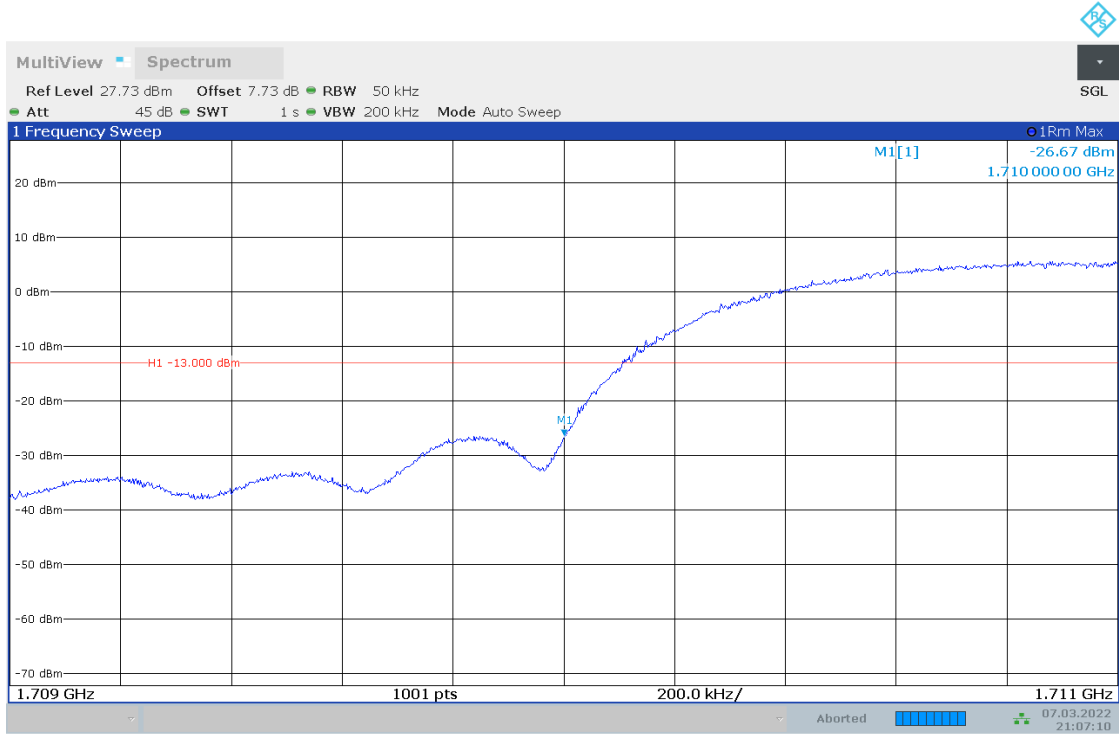
## 5. APPENDIX E - BAND EDGES COMPLIANCE

### 5.1 TEST RESULTS

Band Edges Compliance						
Test Band	Test Mode	Test Channel	Frequency [MHz]	Power [dBm]	Limit [dBm]	Verdict
4	TM1	LCH	1710	-26.67	-13	PASS
		HCH	1755	-24.66	-13	PASS

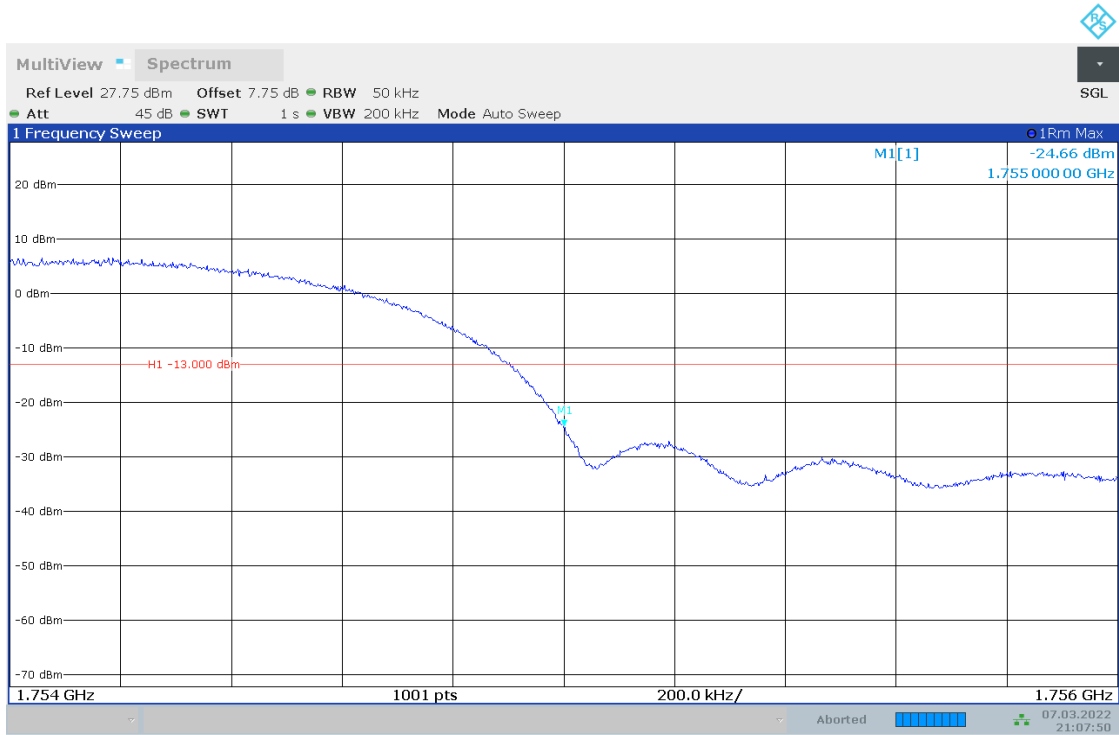
## 5.2 TEST PLOTS

### 5.2.1 BAND 4\_TM1\_LCH



21:07:11 07.03.2022

### 5.2.2 BAND 4\_TM1\_HCH



21:07:50 07.03.2022

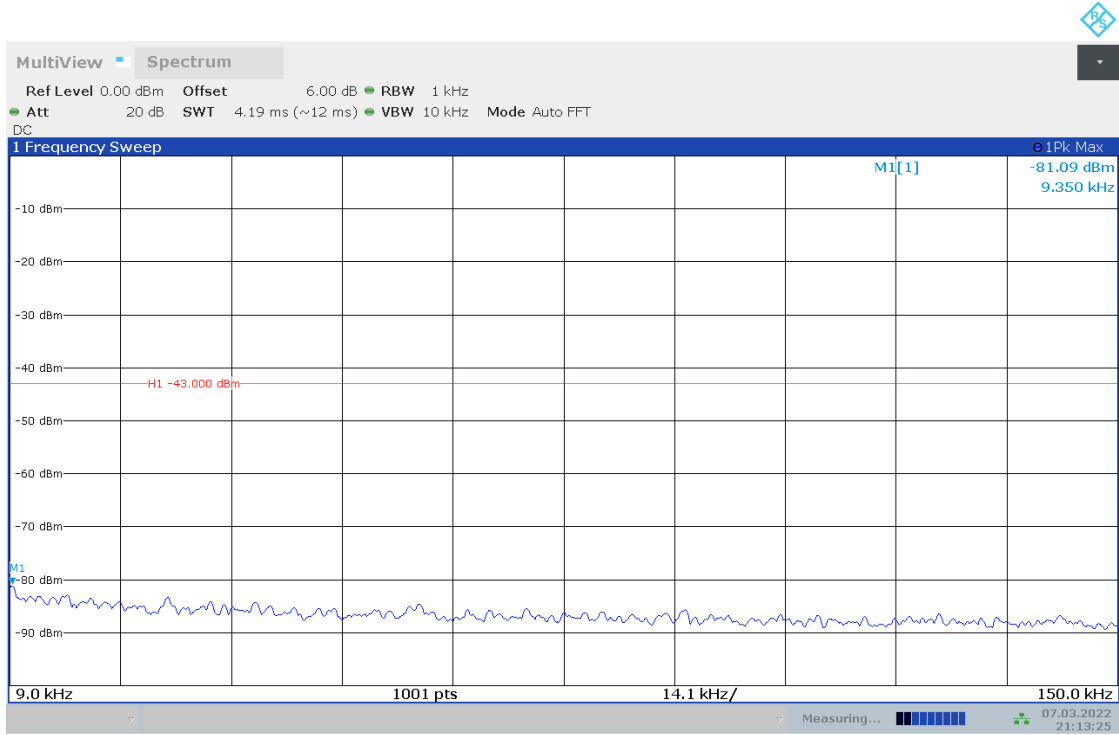
## 6. APPENDIX F - SPURIOUS EMISSION AT ANTENNA TERMINAL

### 6.1 TEST RESULTS

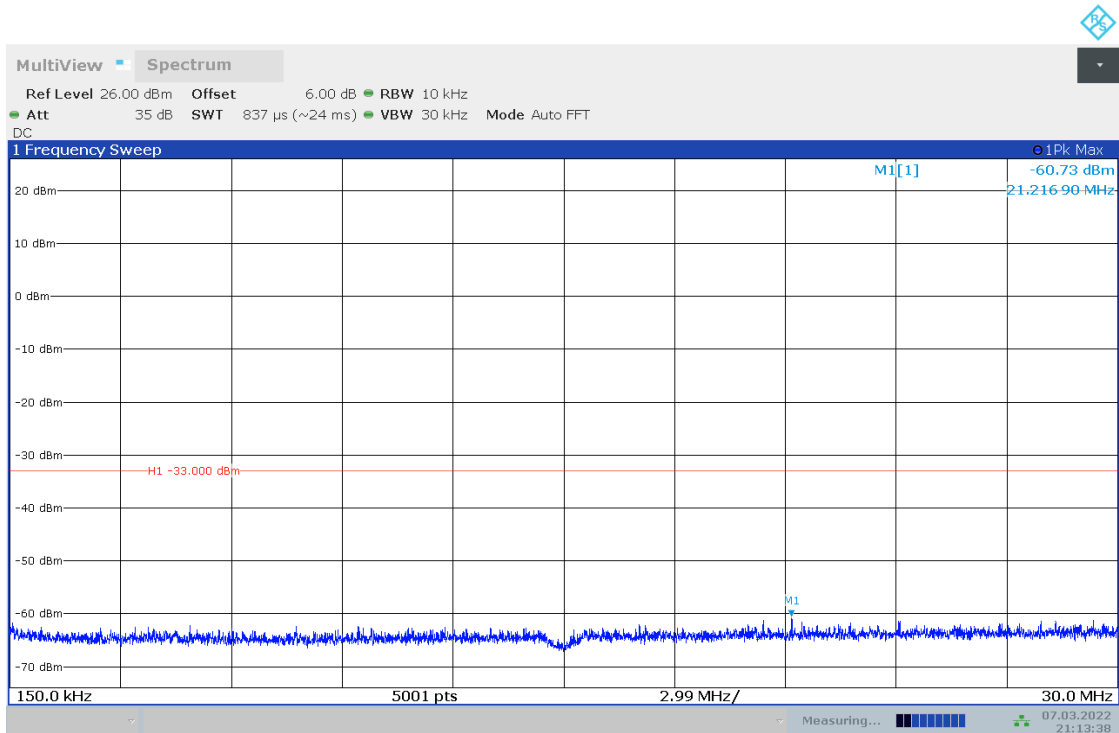
Spurious Emission at Antenna Terminal								
Test Band	Test Mode	Test Channel	Start Freq. [MHz]	Stop Freq. [MHz]	Measured Freq. [MHz]	Measured Power [dBm]	Limit [dBm]	Verdict
4	TM1	LCH	0.009	0.15	0.01	-81.09	-43	PASS
			0.15	30	21.22	-60.73	-33	PASS
			30	20000	18616.86	-34.64	-13	PASS
		MCH	0.009	0.15	0.01	-80.86	-43	PASS
			0.15	30	26.76	-61.30	-33	PASS
			30	20000	19104.62	-34.31	-13	PASS
		HCH	0.009	0.15	0.01	-81.82	-43	PASS
			0.15	30	18.78	-60.96	-33	PASS
			30	20000	19135.57	-33.99	-13	PASS

## 6.2 TEST PLOTS

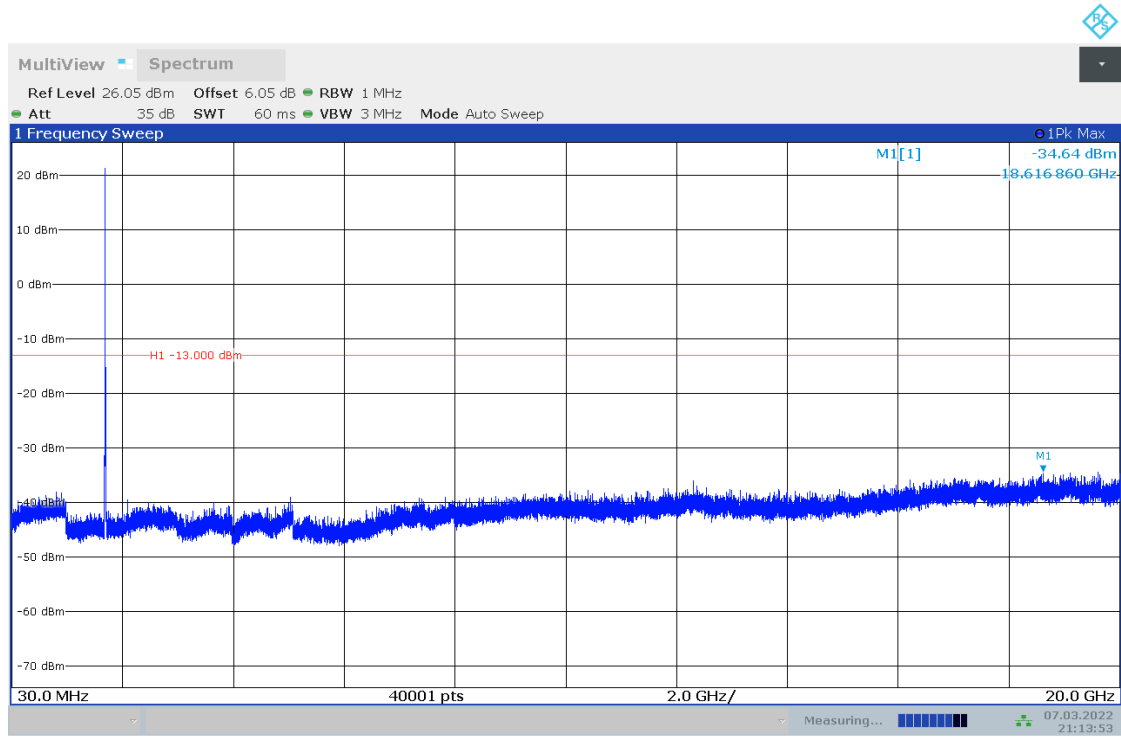
### 6.2.1 BAND 4\_TM1\_LCH



21:13:26 07.03.2022

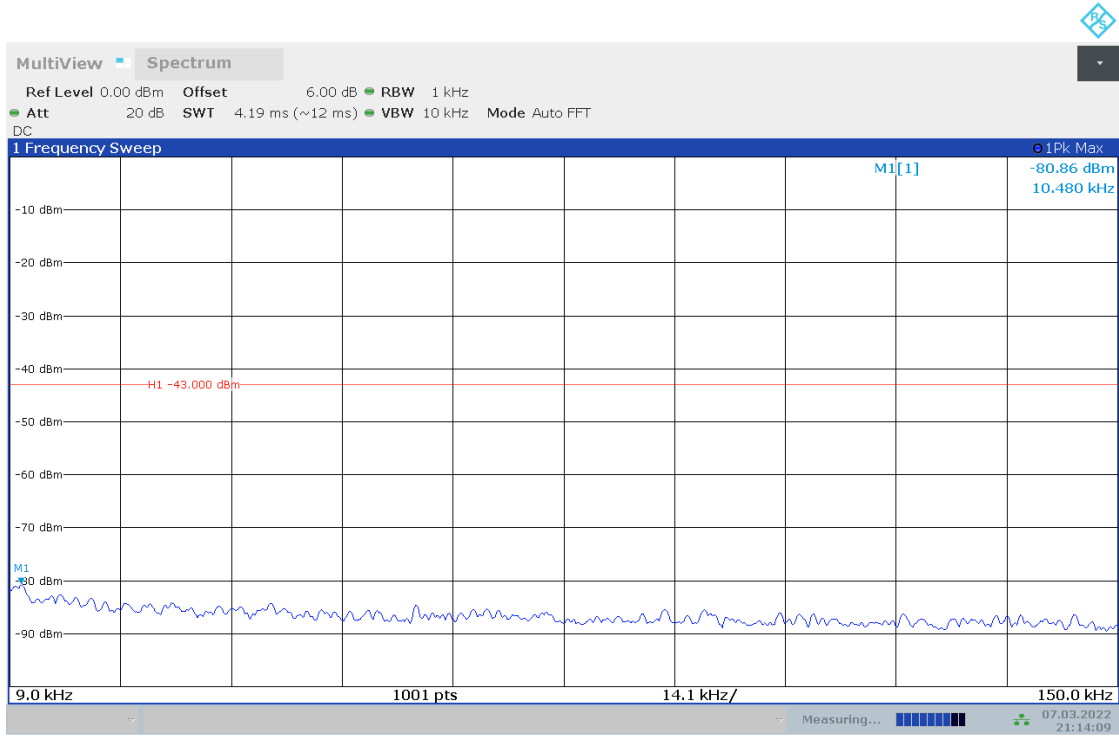


21:13:39 07.03.2022

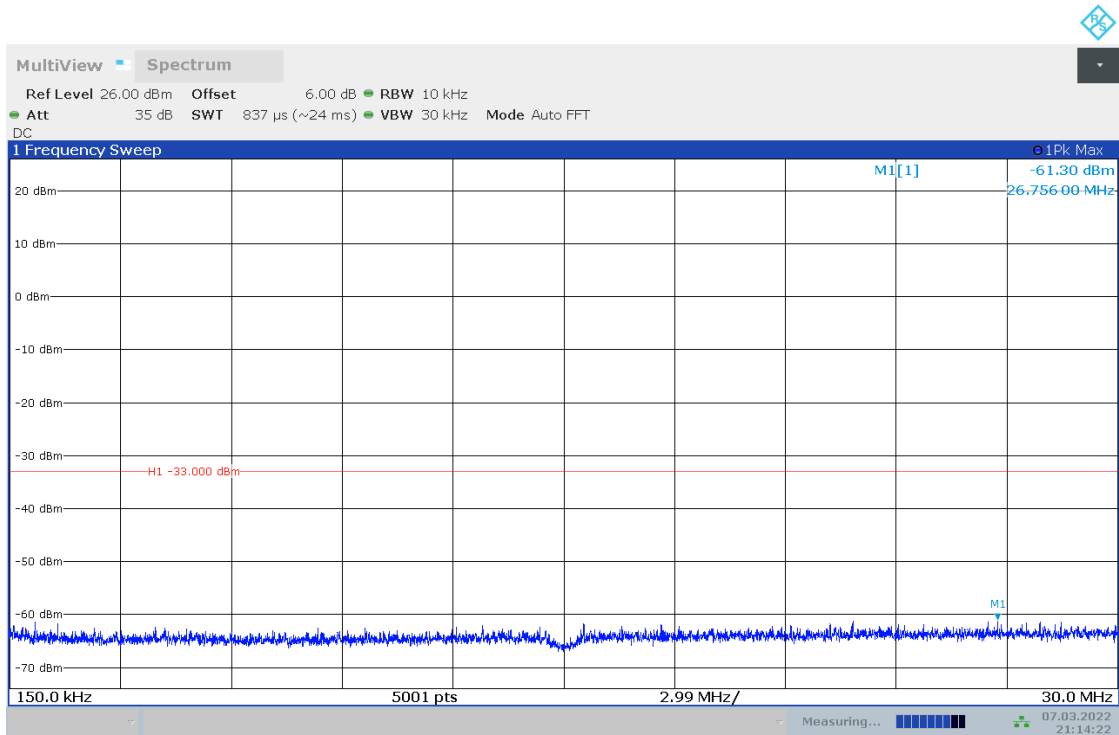


21:13:54 07.03.2022

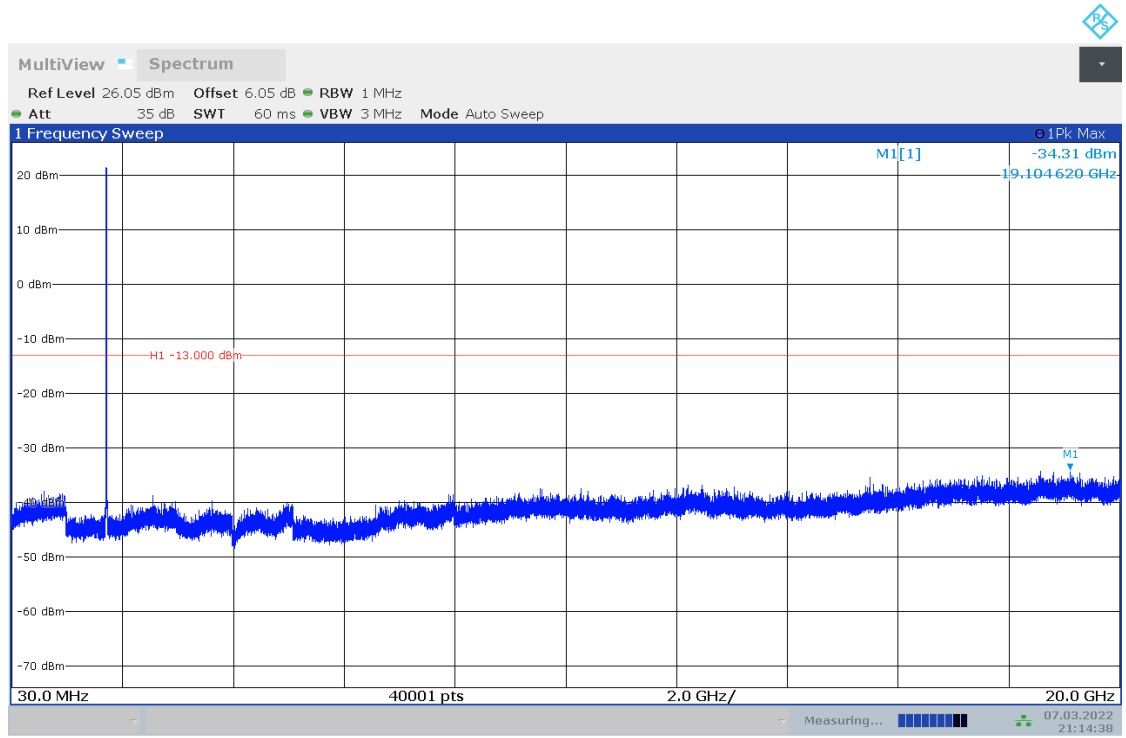
## 6.2.2 BAND 4\_TM1\_MCH



21:14:10 07.03.2022



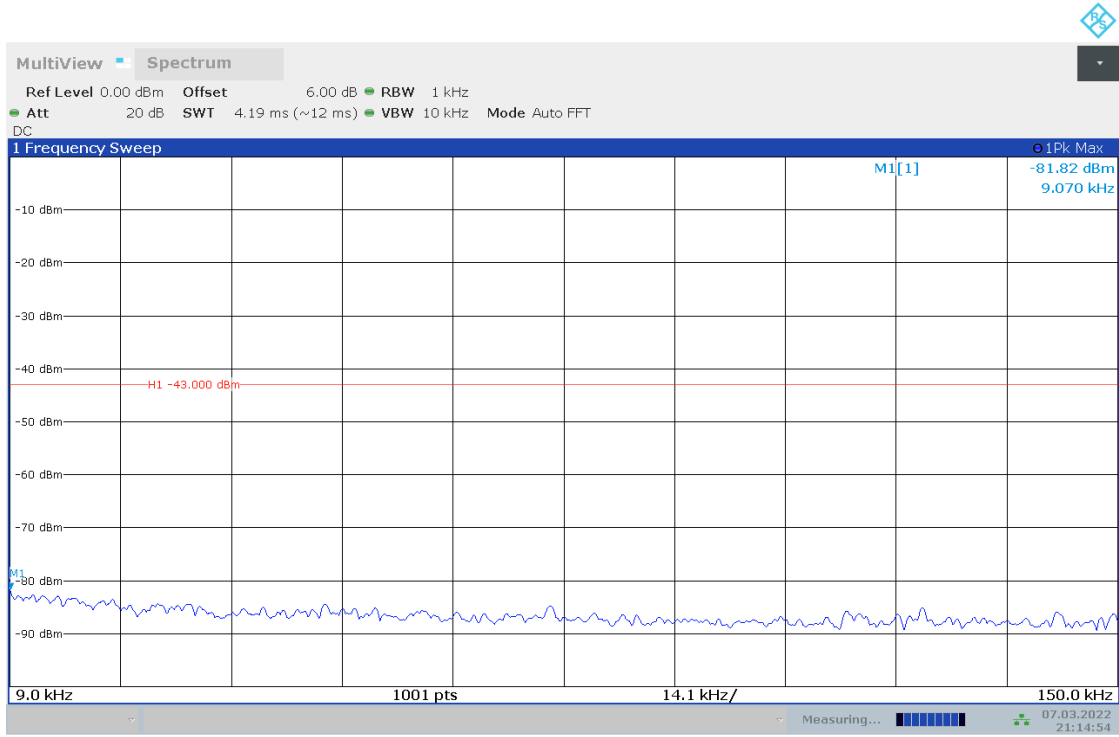
21:14:23 07.03.2022



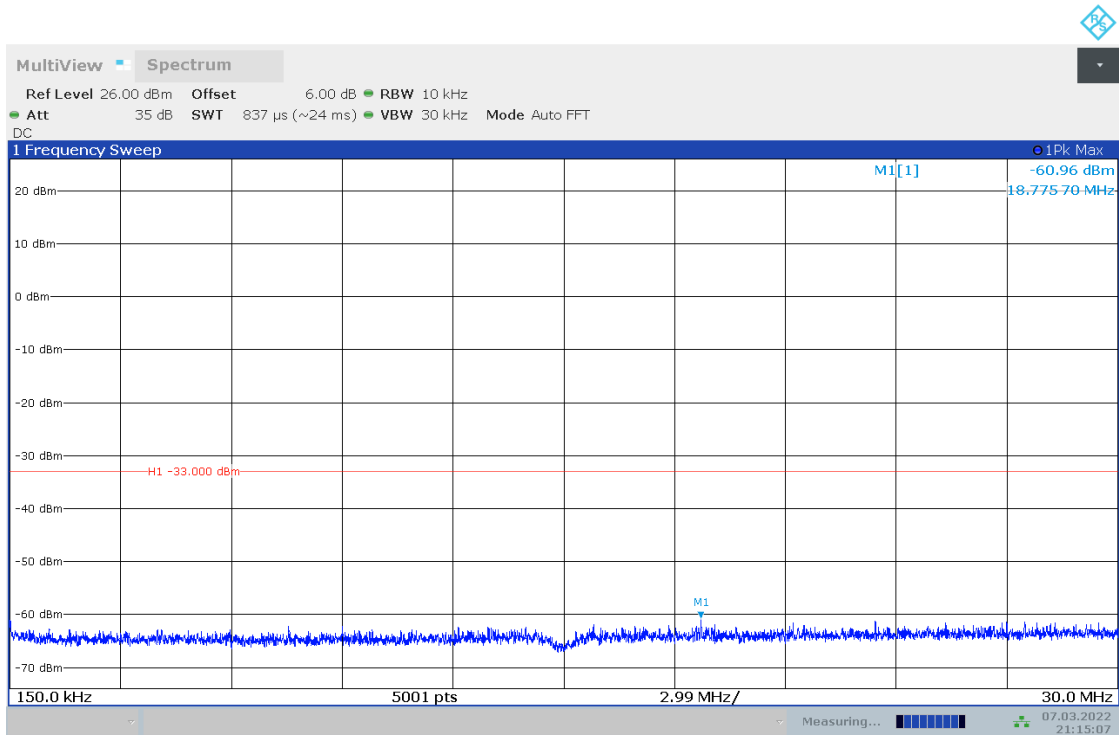
21:14:39 07.03.2022



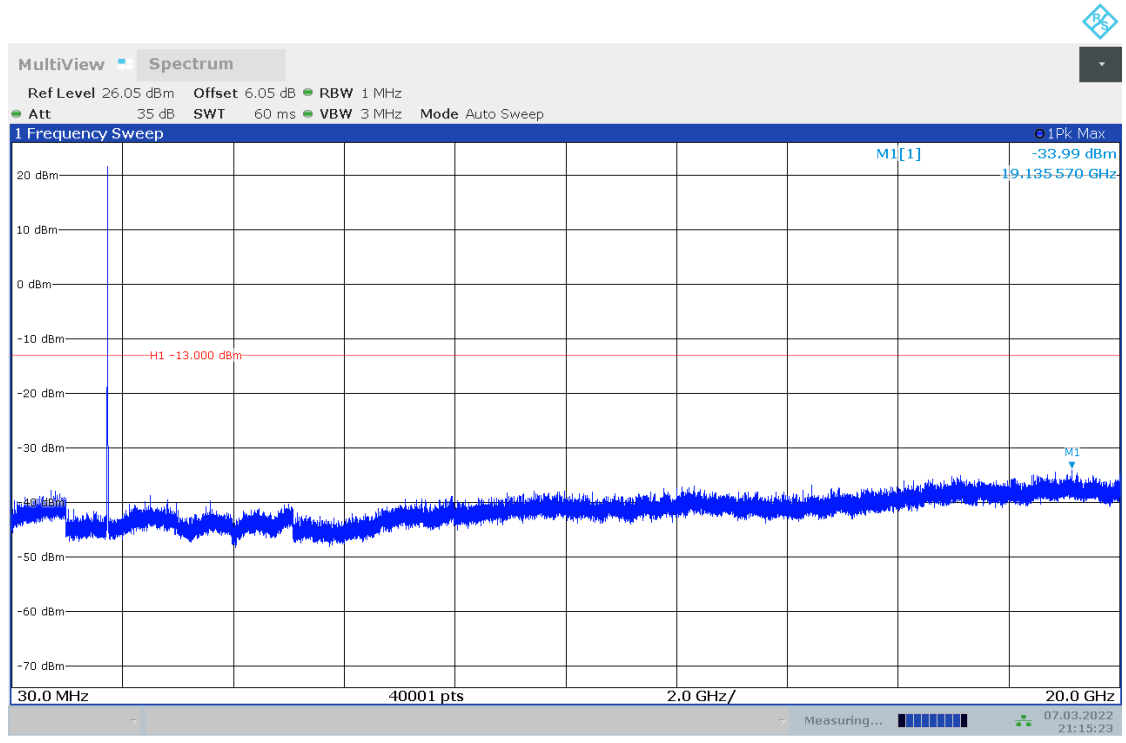
## 6.2.3 BAND 4\_TM1\_HCH



21:14:55 07.03.2022



21:15:08 07.03.2022



21:15:24 07.03.2022

## 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
4	UMTS/TM1	LCH	TN	VH	12.06	0.01	PASS
			TN	VN	11.39	0.01	PASS
			TN	VL	11.32	0.01	PASS
		MCH	TN	VH	-3.54	0	PASS
			TN	VN	-4.13	0	PASS
			TN	VL	-3.92	0	PASS
		HCH	TN	VH	-11.28	-0.01	PASS
			TN	VN	-11.04	-0.01	PASS
			TN	VL	-11.08	-0.01	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
4	UMTS/TM1	LCH	VN	-30	13.30	0.01	PASS
			VN	-20	12.73	0.01	PASS
			VN	-10	13.2	0.01	PASS
			VN	0	13.63	0.01	PASS
			VN	10	12.57	0.01	PASS
			VN	20	13.15	0.01	PASS
			VN	30	13.2	0.01	PASS
			VN	40	13.44	0.01	PASS
			VN	50	13.18	0.01	PASS
		MCH	VN	-30	-4.40	0	PASS
			VN	-20	-3.82	0	PASS
			VN	-10	-4.18	0	PASS
			VN	0	-2.78	0	PASS
			VN	10	-3.83	0	PASS
			VN	20	-4.01	0	PASS
			VN	30	-4.09	0	PASS
			VN	40	-4.11	0	PASS
			VN	50	-3.55	0	PASS
		HCH	VN	-30	-12.59	-0.01	PASS
			VN	-20	-13.37	-0.01	PASS
			VN	-10	-13.09	-0.01	PASS
			VN	0	-12.81	-0.01	PASS
			VN	10	-13.25	-0.01	PASS
			VN	20	-12.33	-0.01	PASS
			VN	30	-12.07	-0.01	PASS
			VN	40	-13.29	-0.01	PASS
			VN	50	-13.19	-0.01	PASS

**End of Test Report**