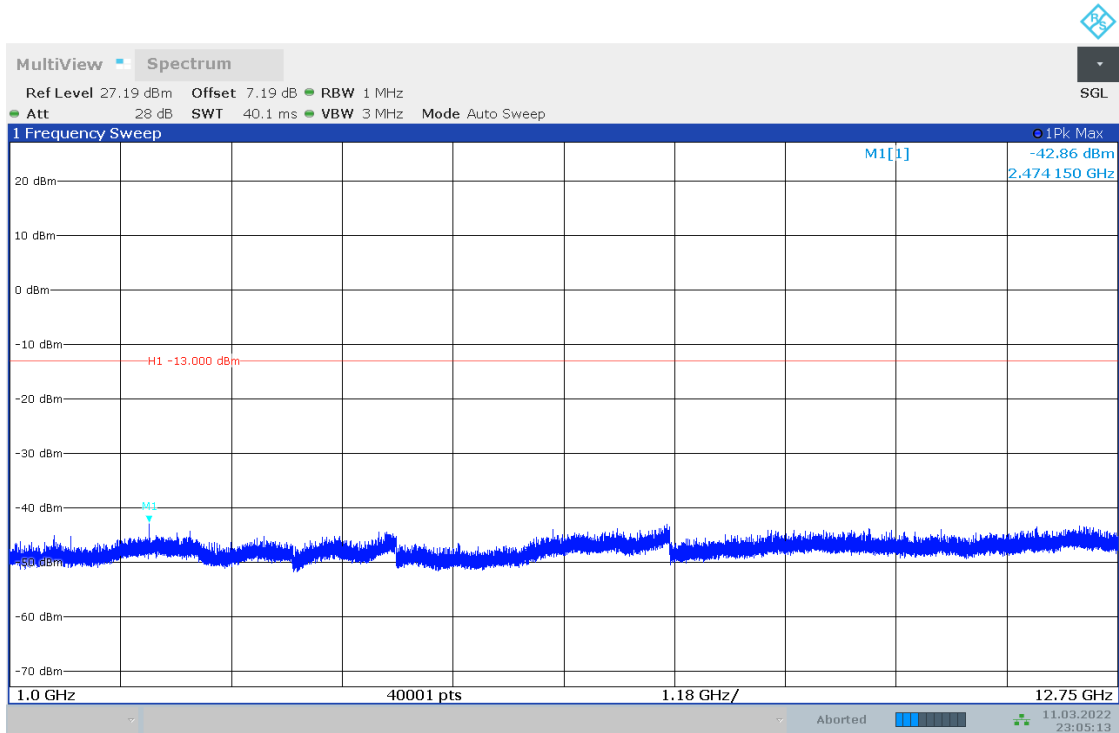
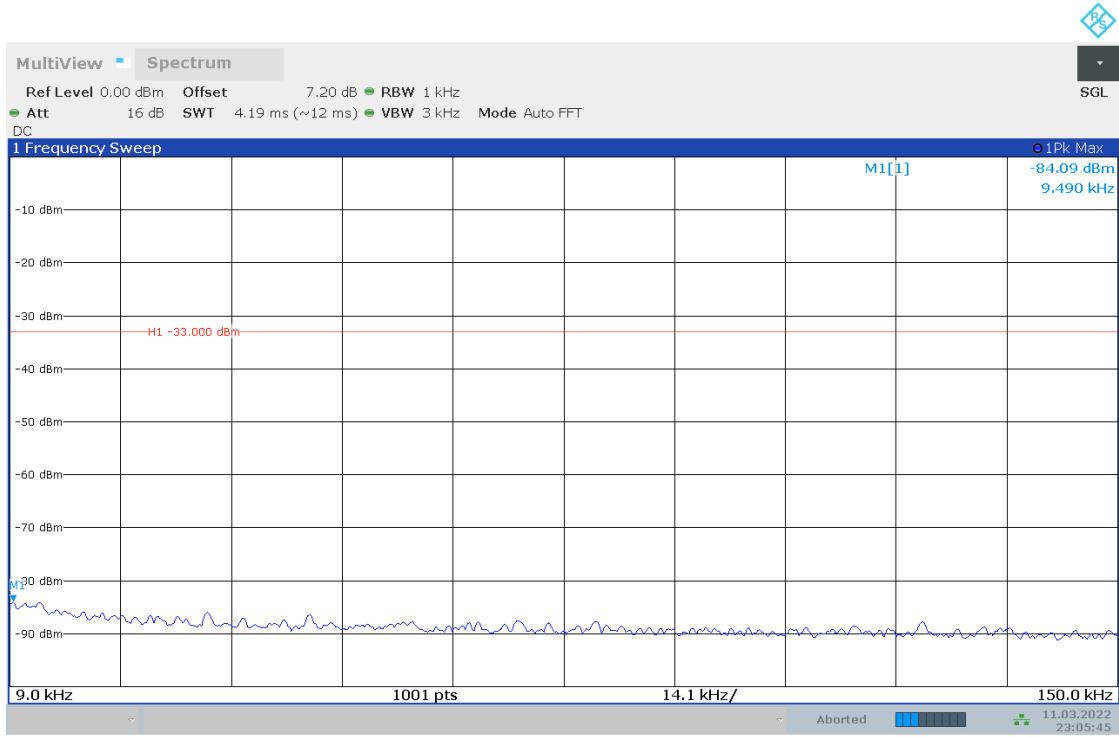


23:04:39 11.03.2022

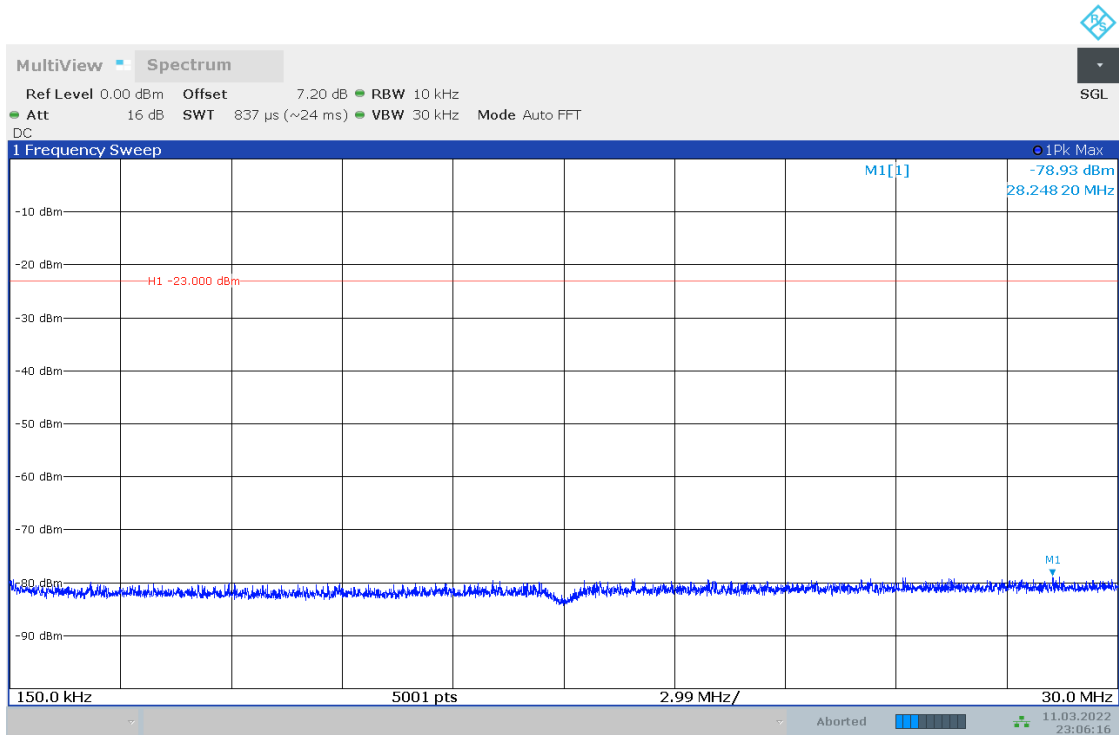


23:05:14 11.03.2022

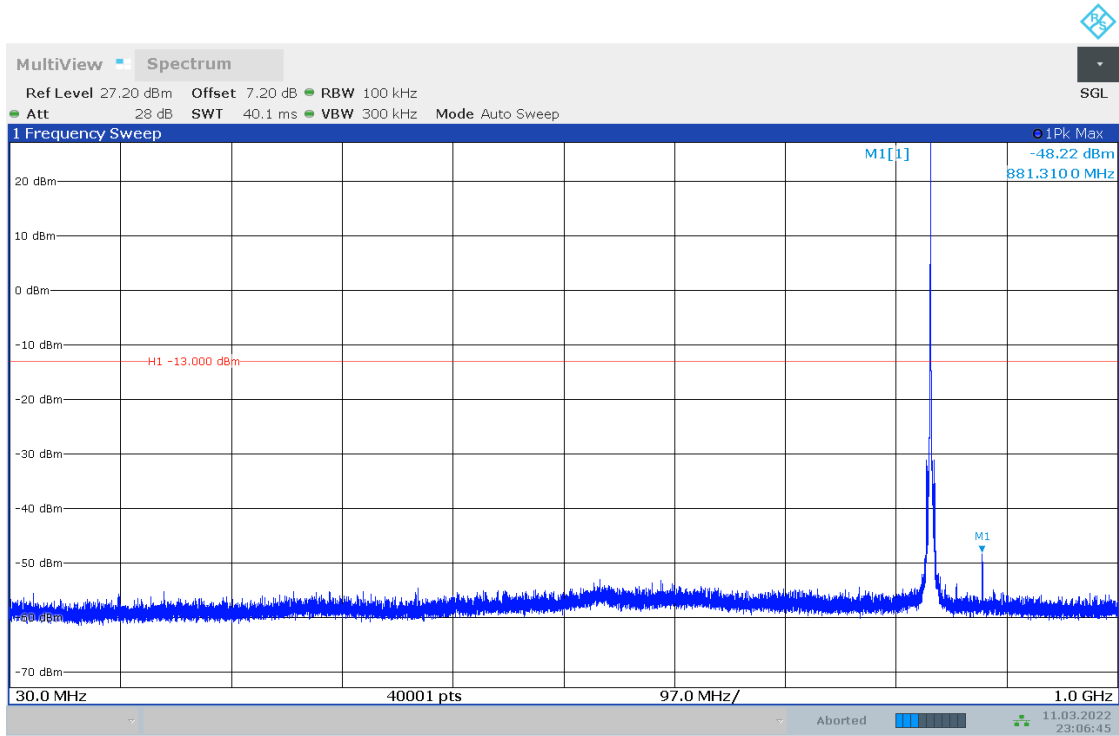
## 6.2.31 TM2\_1.4MHZ\_MCH\_RB1#0



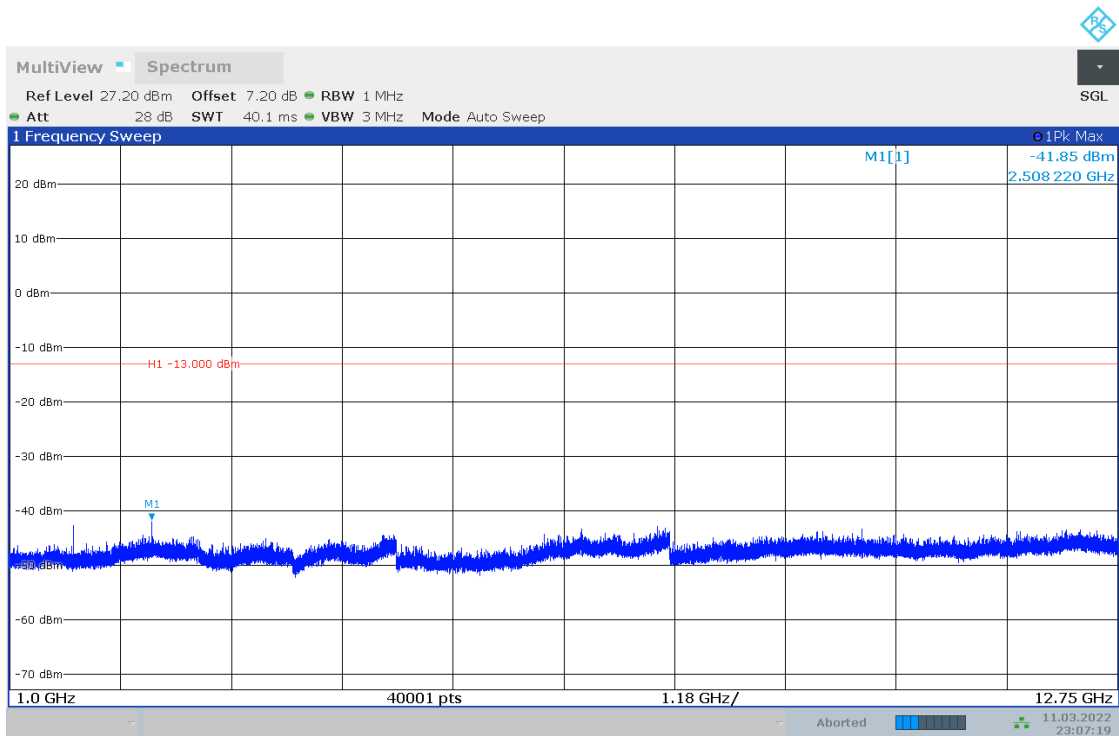
23:05:46 11.03.2022



23:06:16 11.03.2022

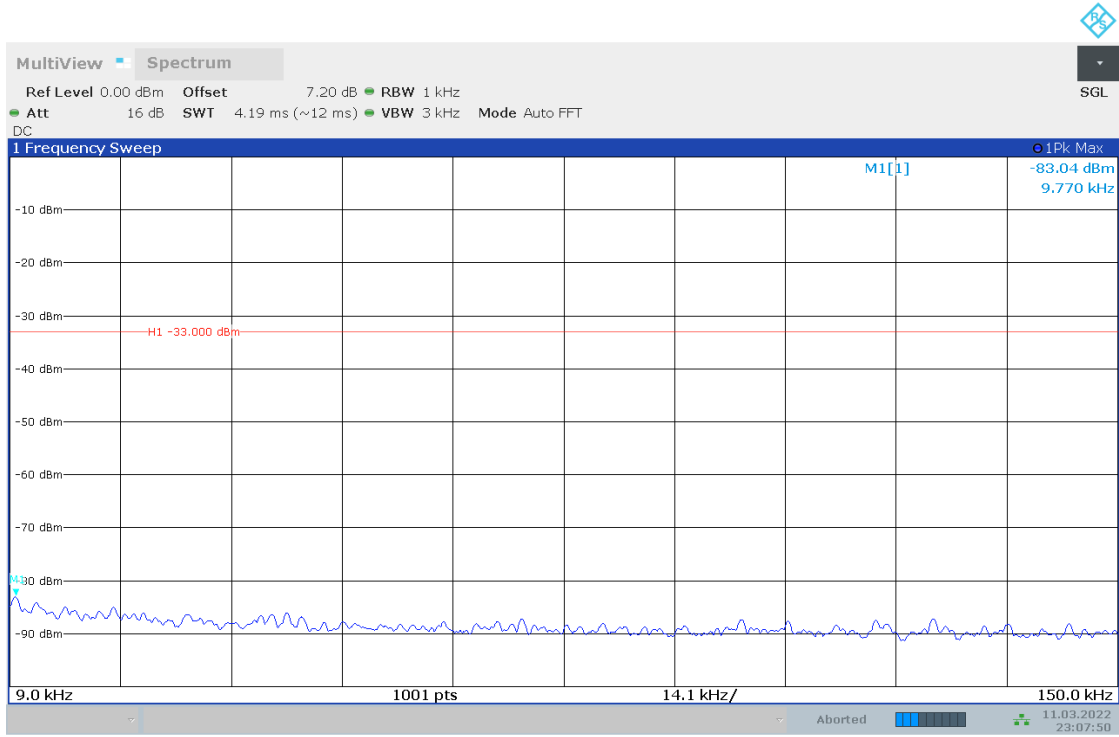


23:06:45 11.03.2022

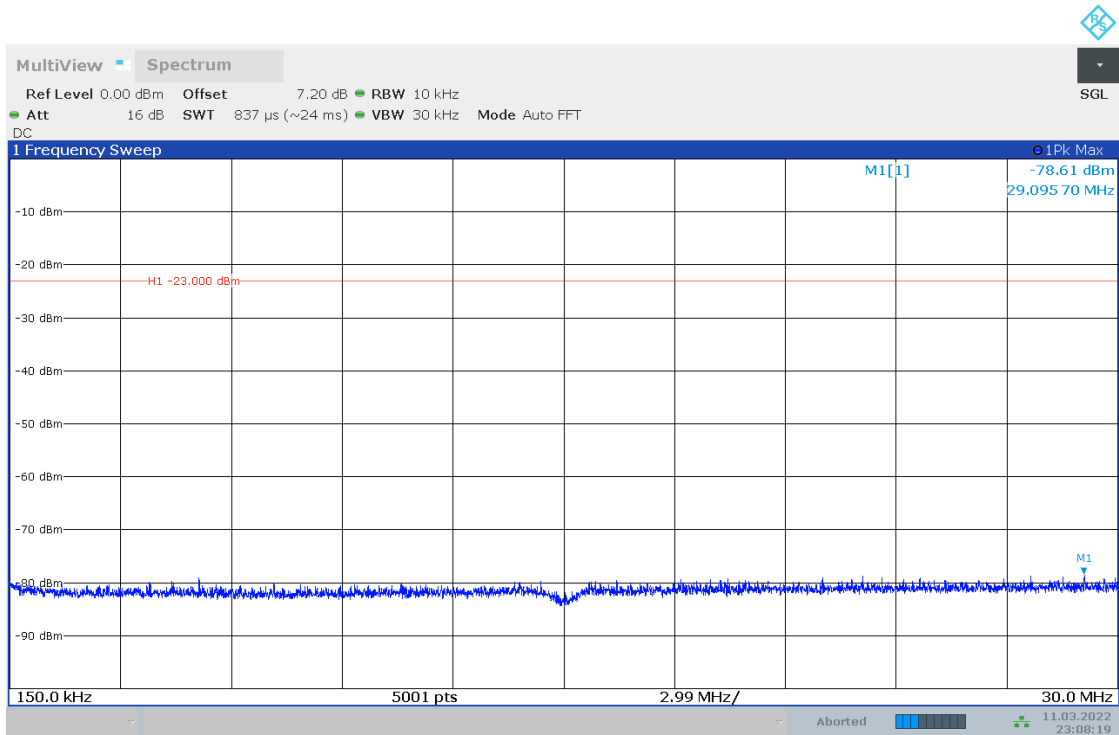


23:07:19 11.03.2022

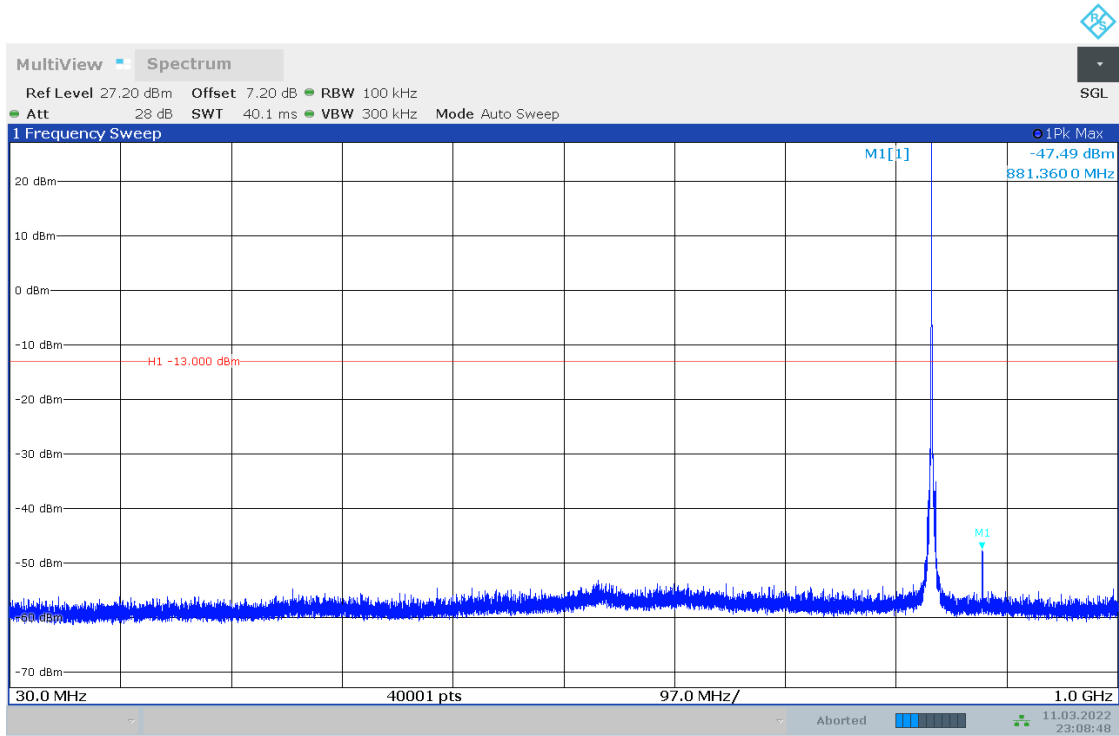
## 6.2.32 TM2\_1.4MHZ\_MCH\_RB1#5



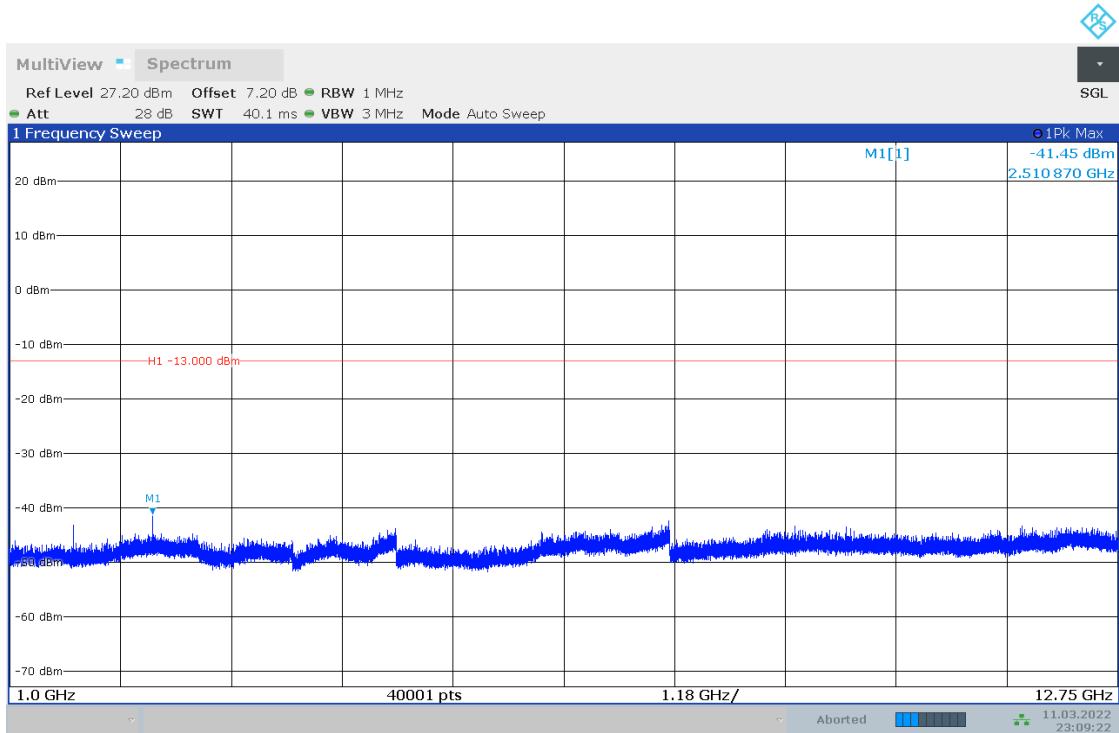
23:07:50 11.03.2022



23:08:19 11.03.2022

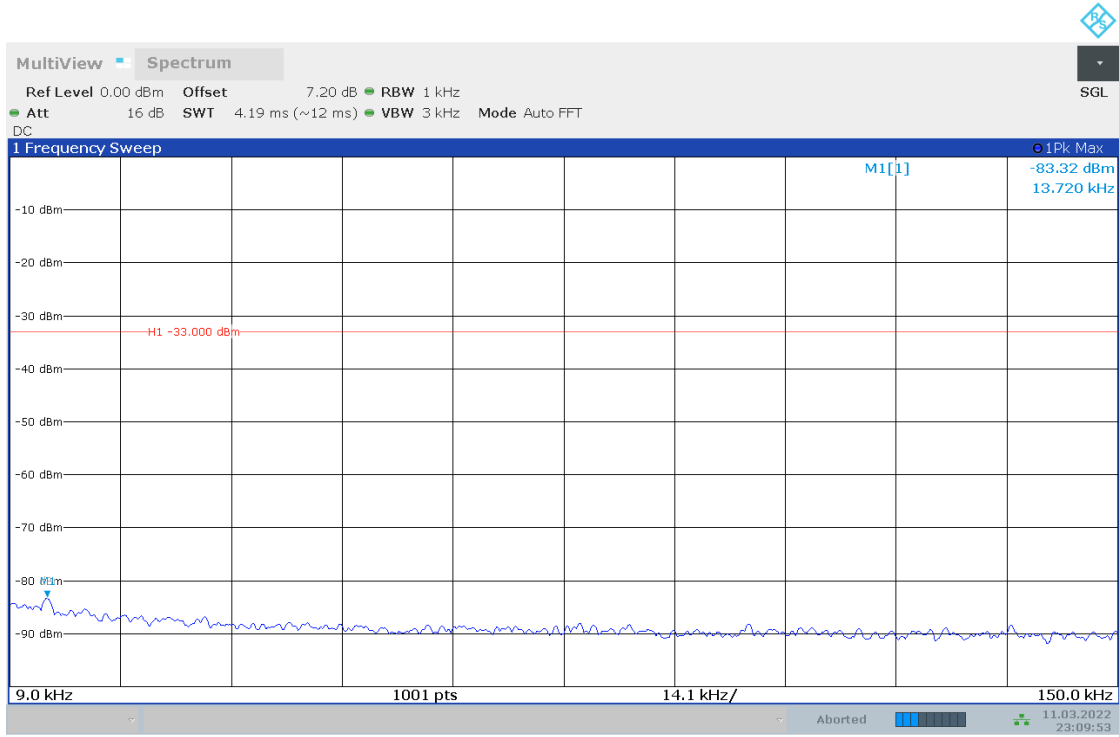


23:08:48 11.03.2022

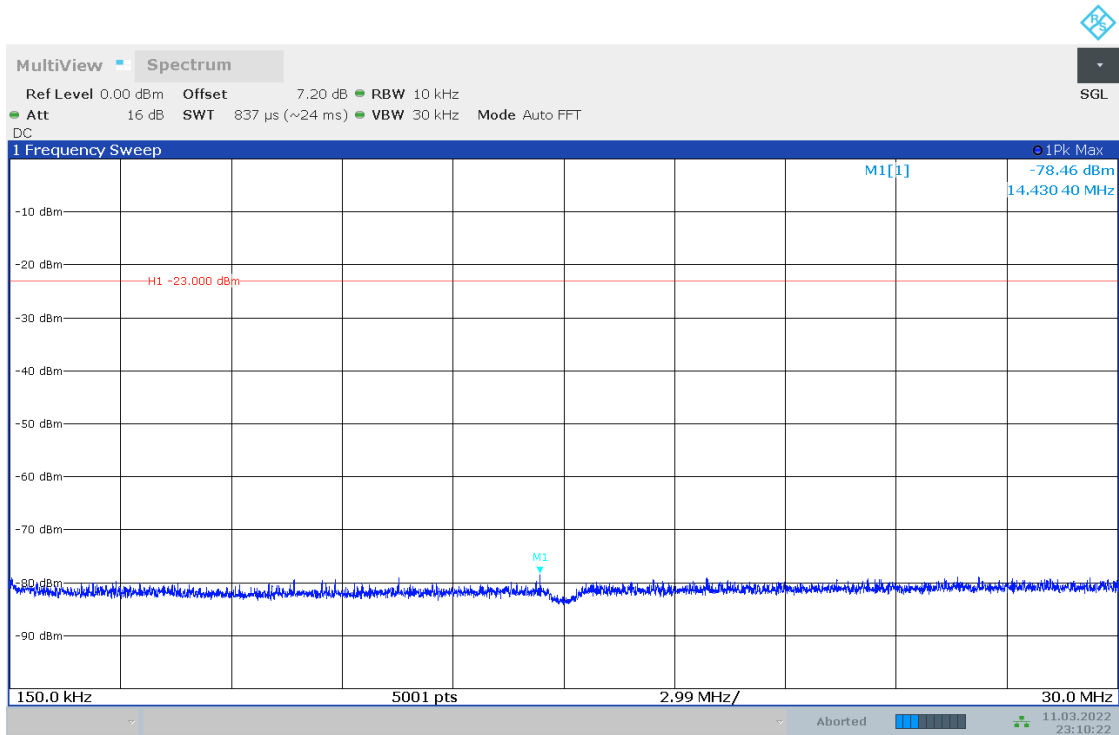


23:09:23 11.03.2022

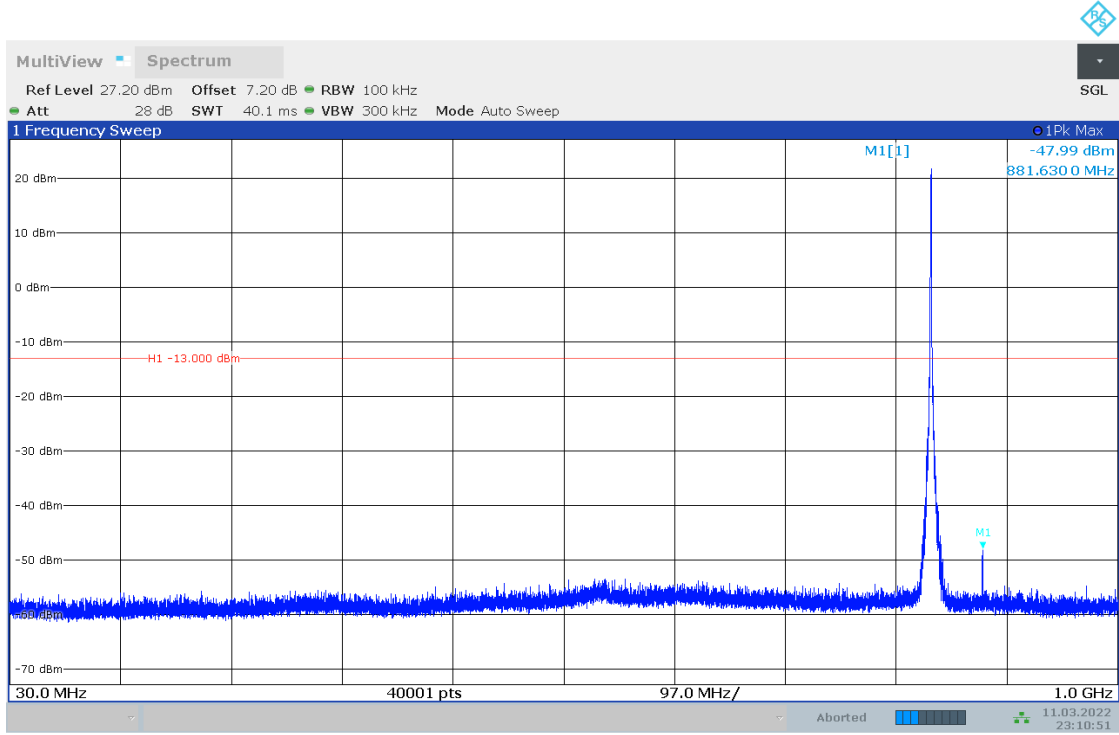
## 6.2.33 TM2\_1.4MHZ\_MCH\_RB6#0



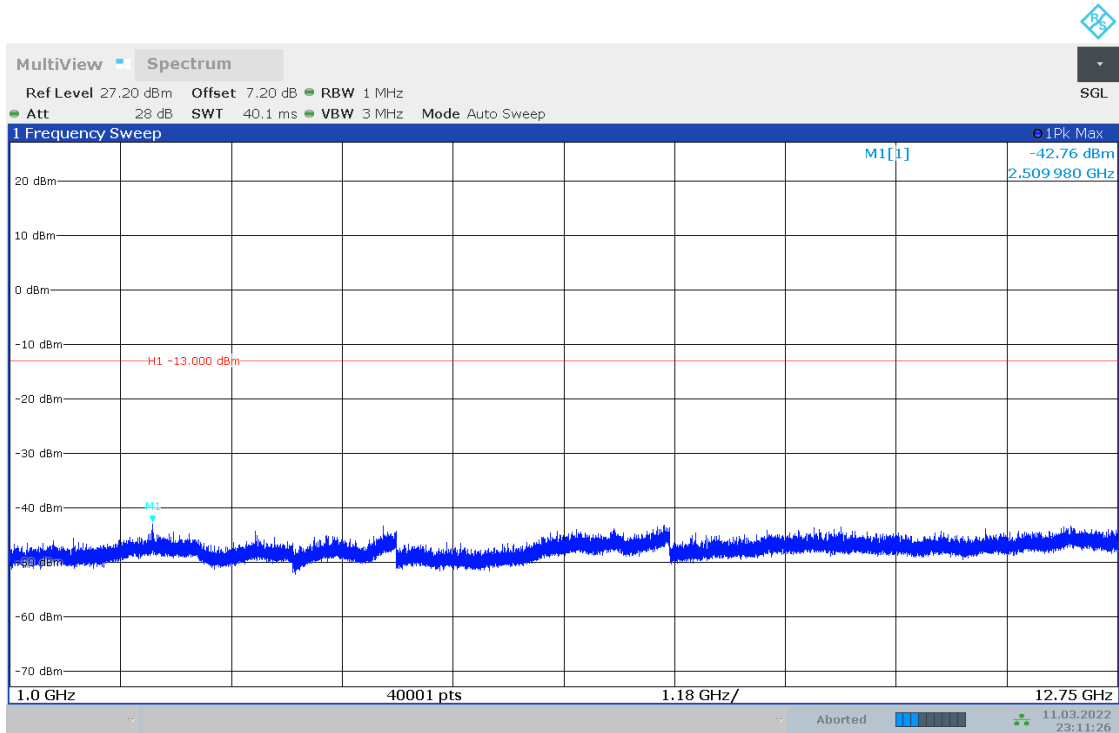
23:09:53 11.03.2022



23:10:23 11.03.2022

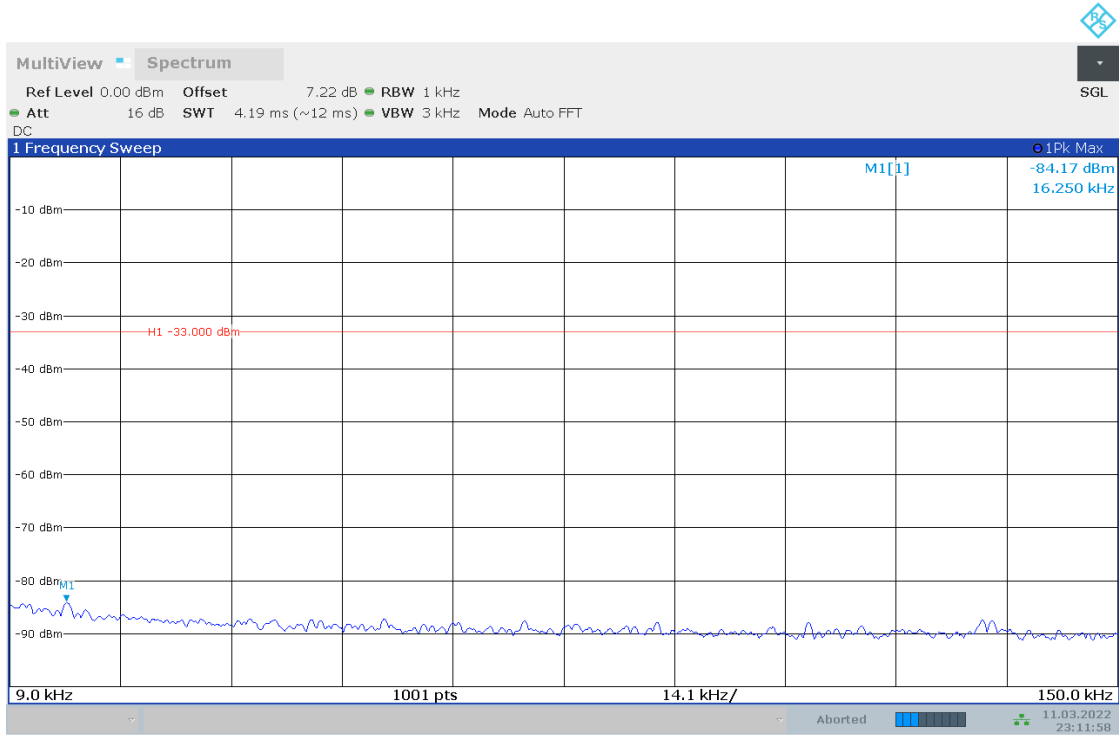


23:10:52 11.03.2022

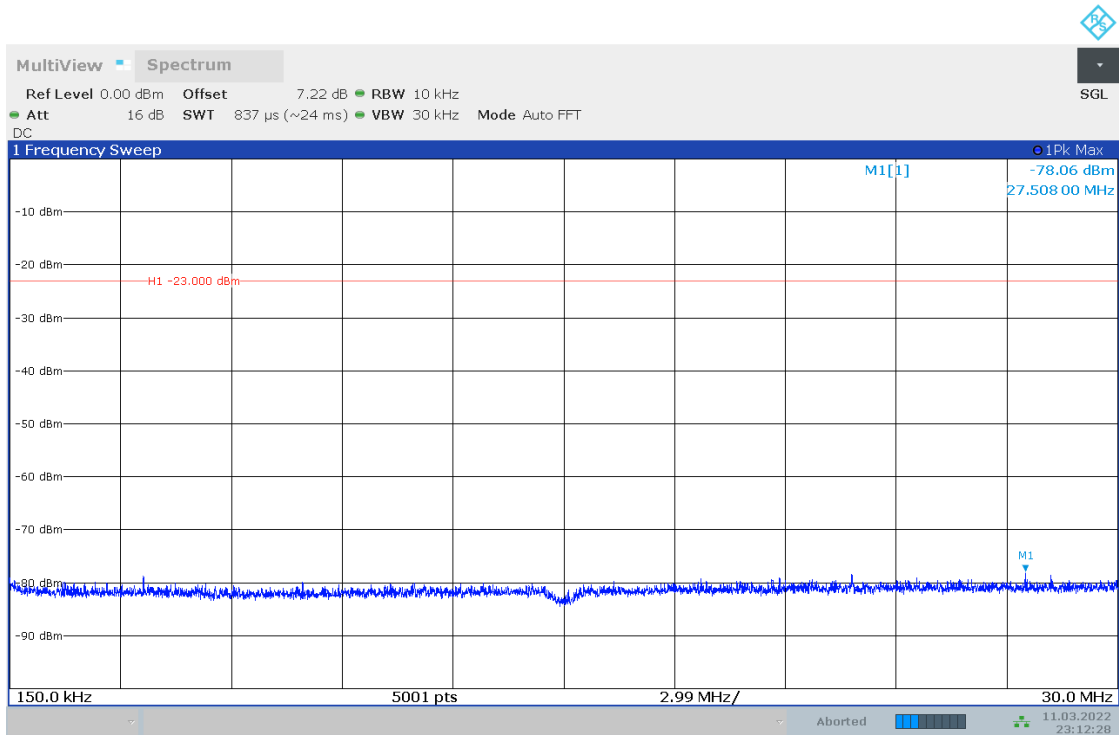


23:11:26 11.03.2022

## 6.2.34 TM2\_1.4MHZ\_HCH\_RB1#0

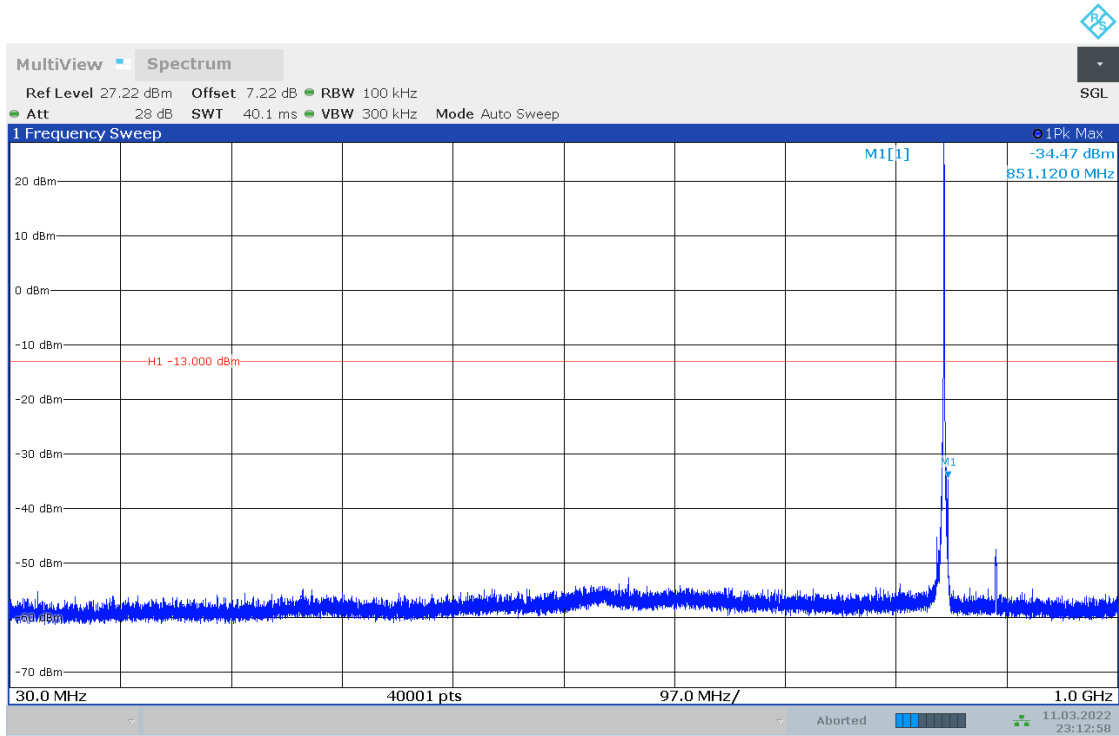


23:11:59 11.03.2022

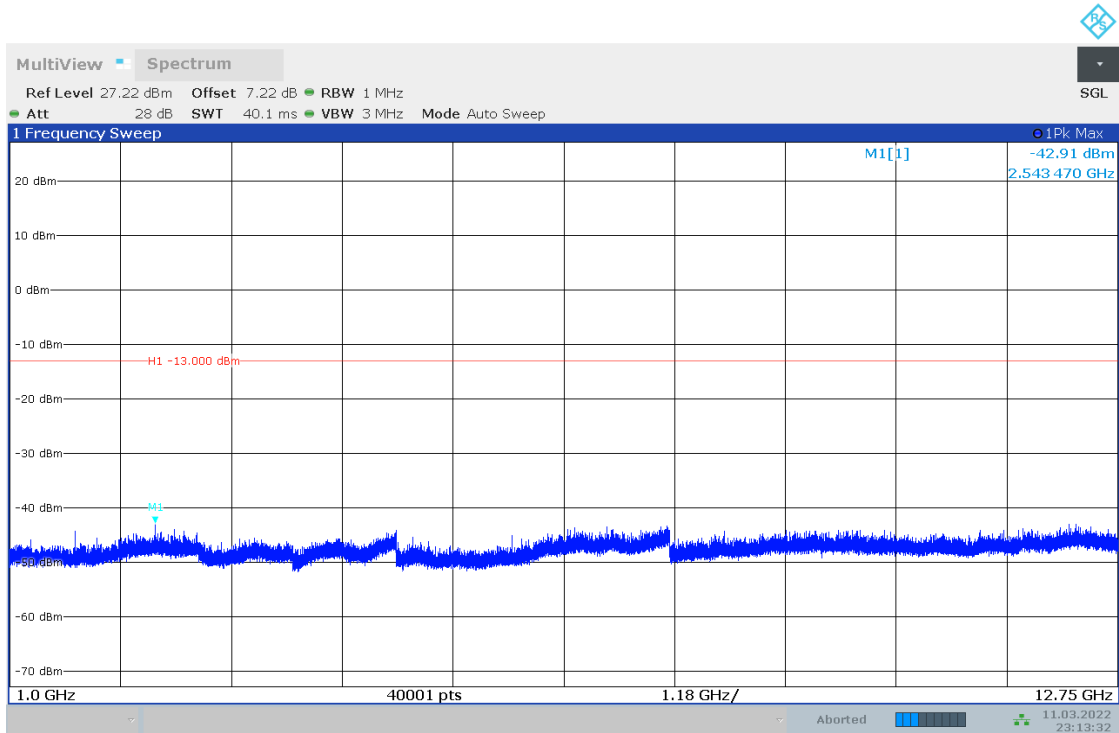


23:12:28 11.03.2022



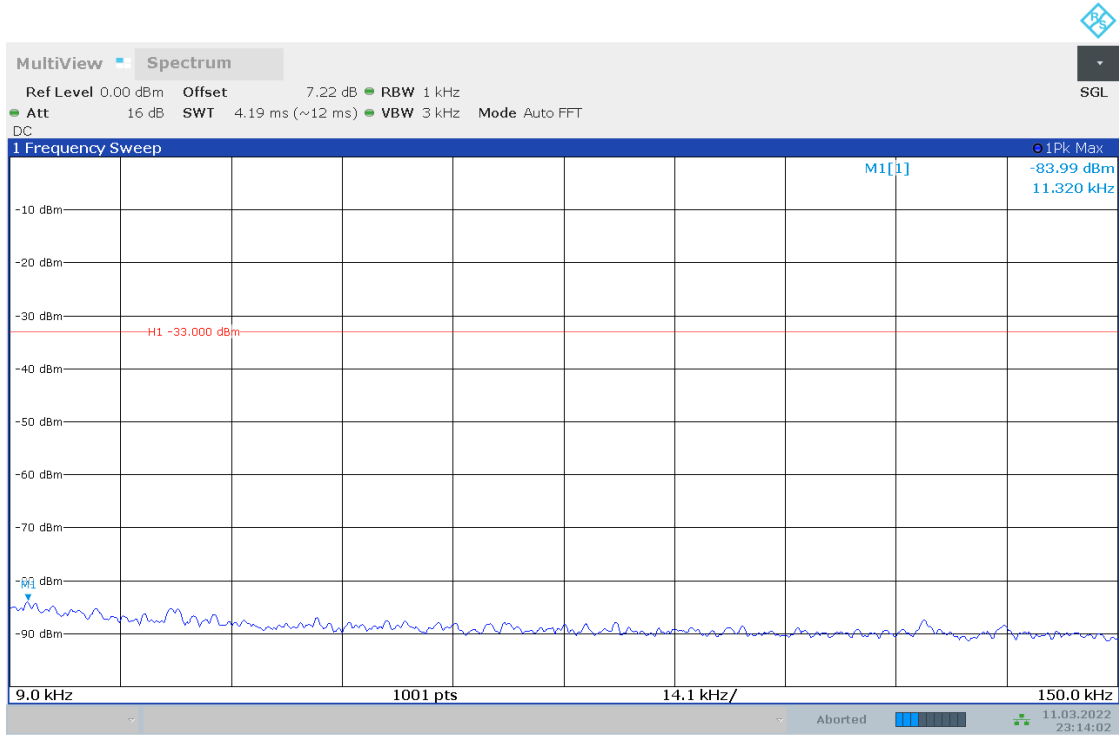


23:12:58 11.03.2022

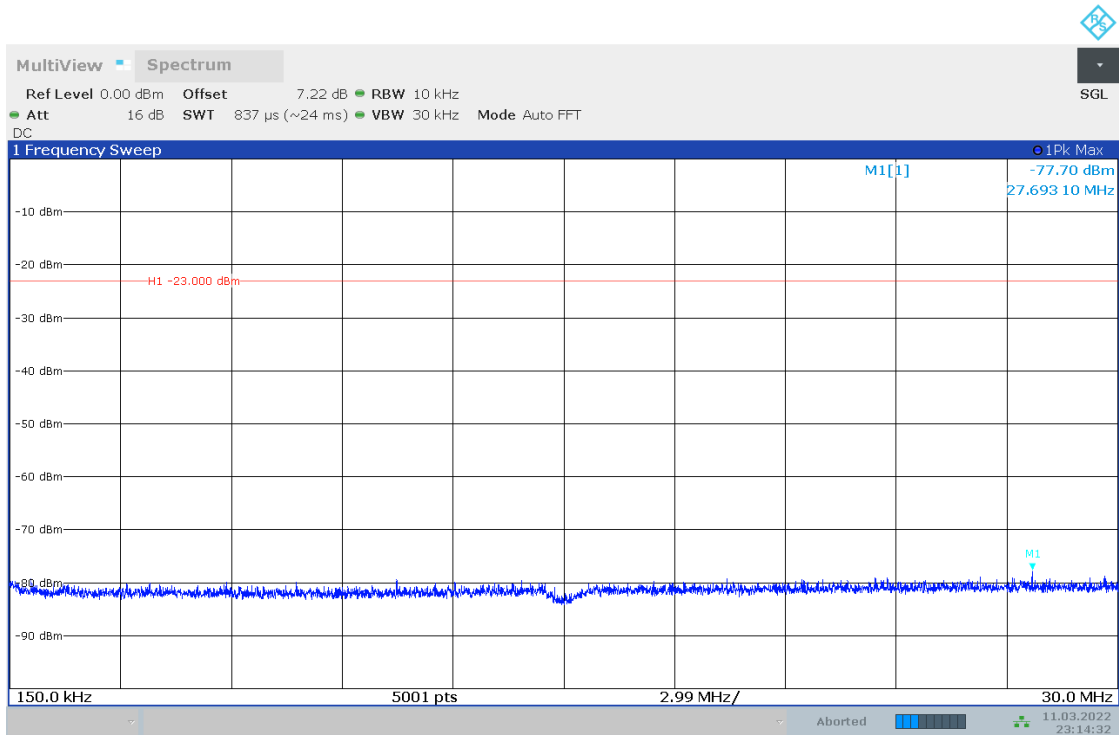


23:13:52 11.03.2022

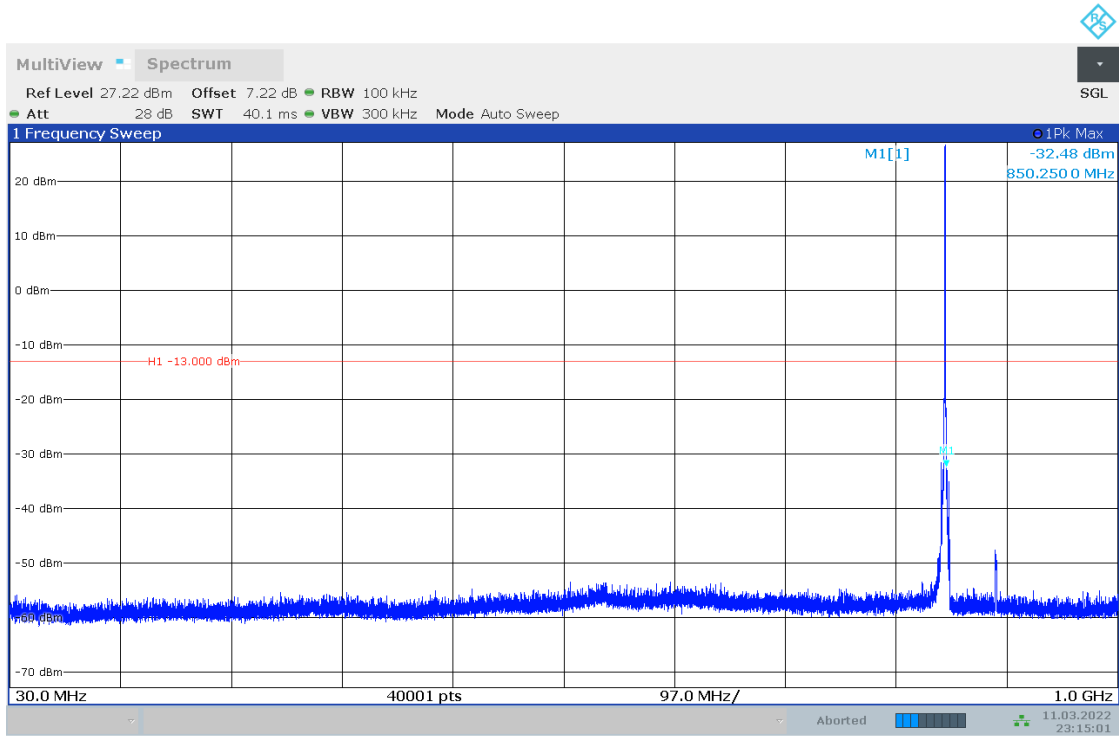
## 6.2.35 TM2\_1.4MHZ\_HCH\_RB1#5



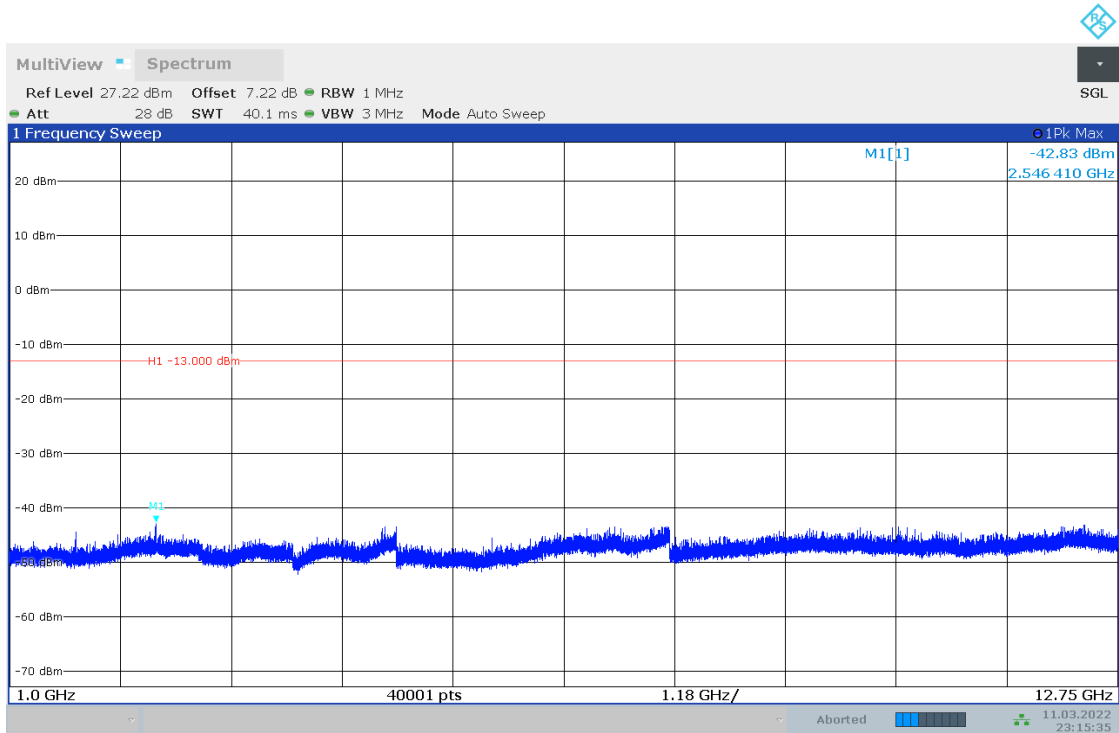
23:14:03 11.03.2022



23:14:32 11.03.2022

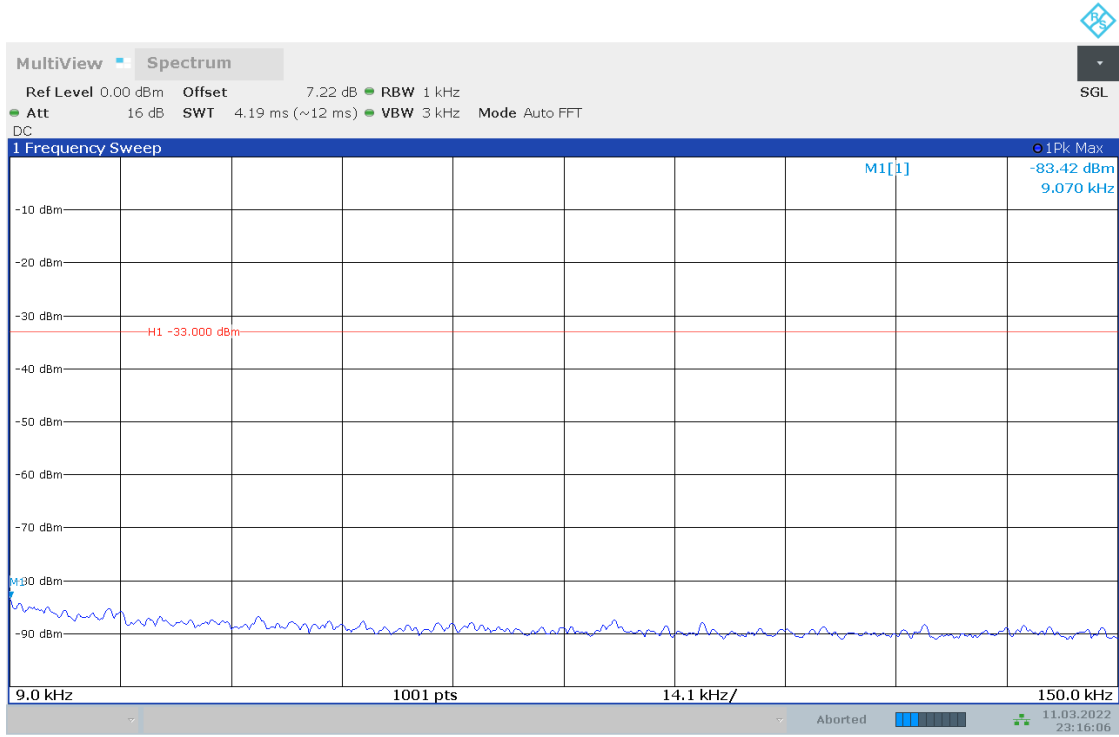


23:15:02 11.03.2022

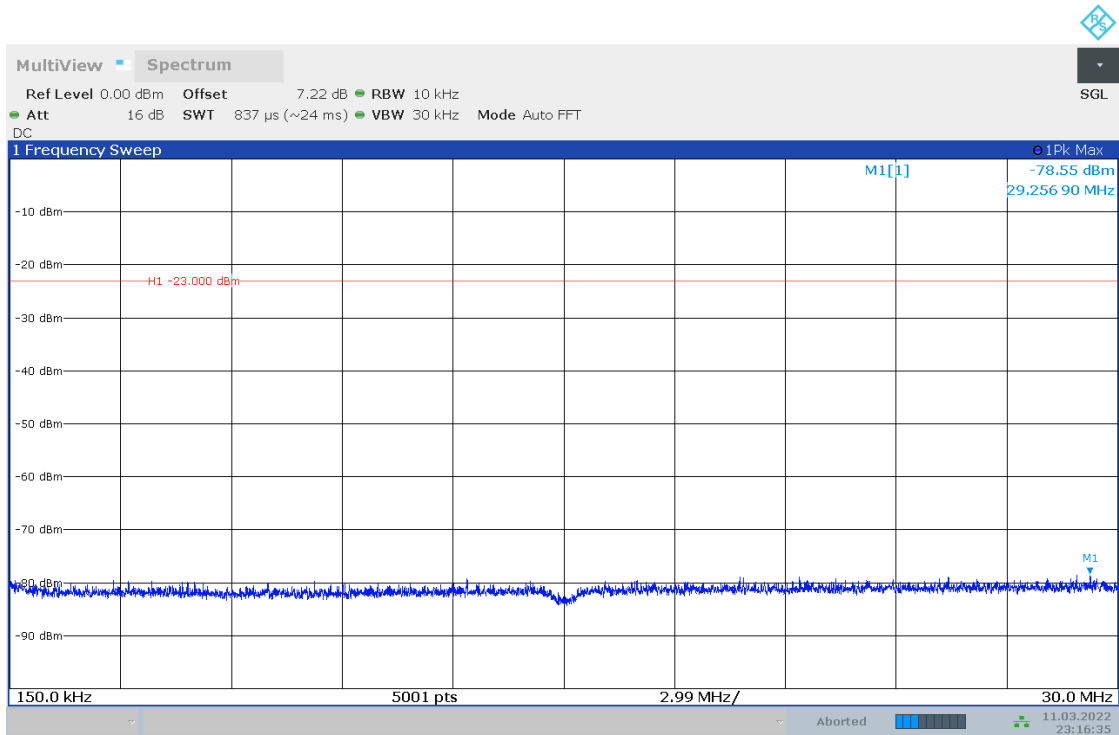


23:15:36 11.03.2022

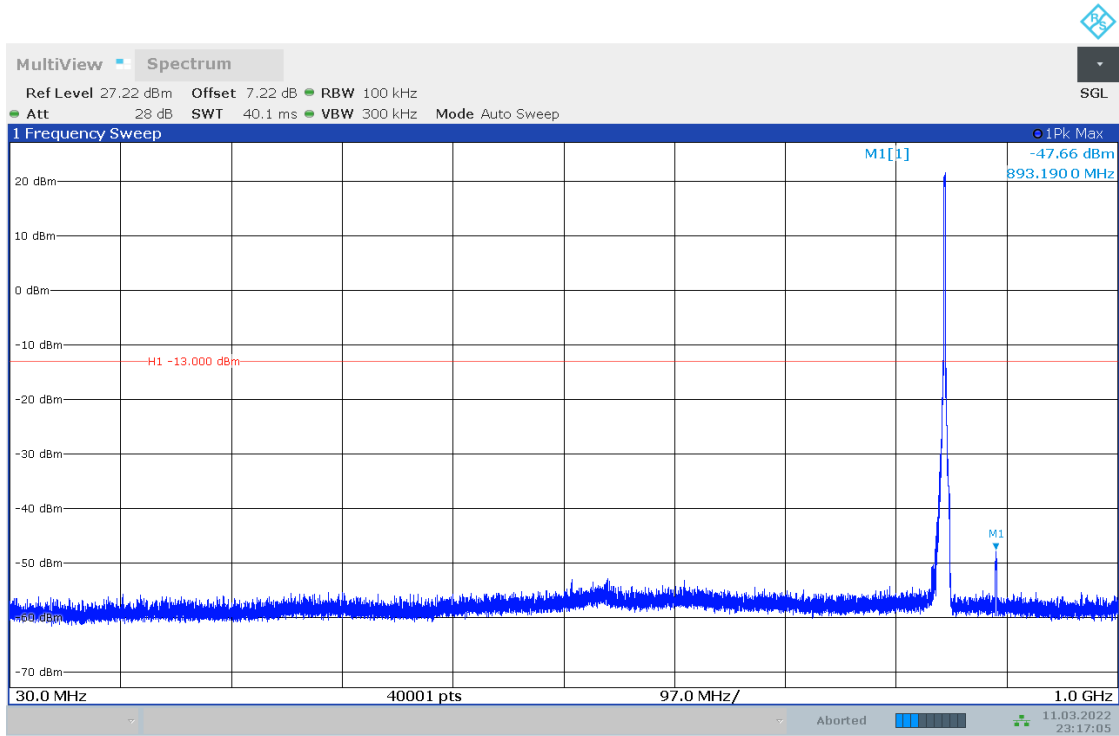
## 6.2.36 TM2\_1.4MHZ\_HCH\_RB6#0



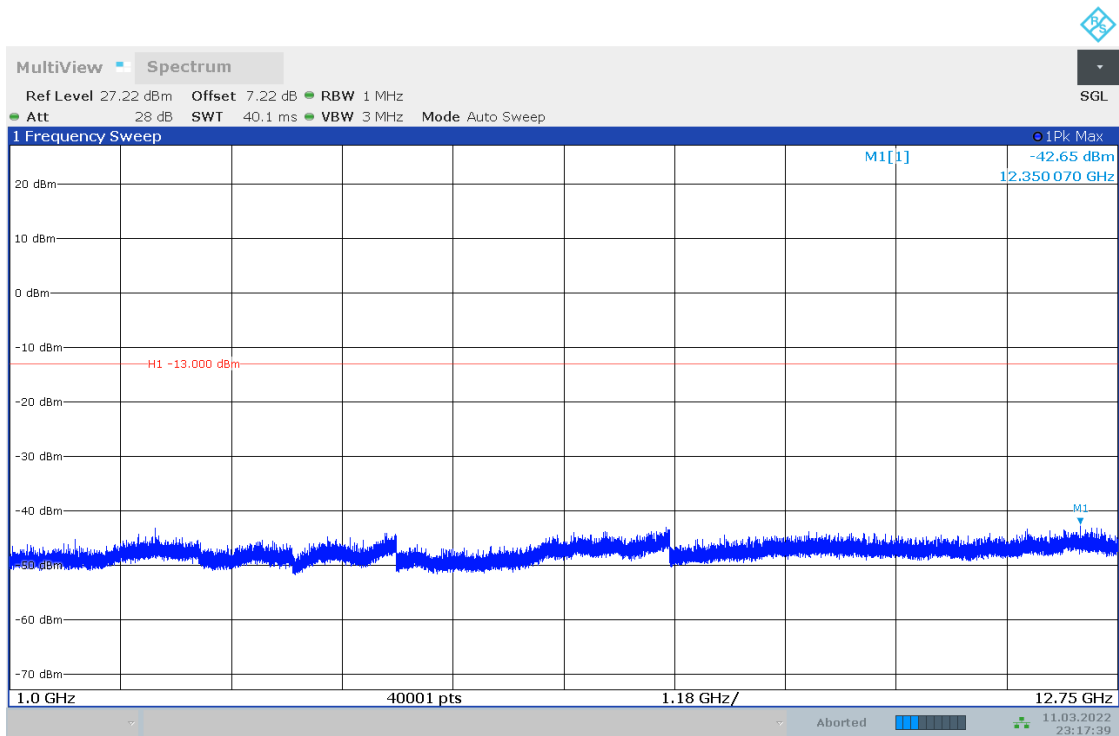
23:16:06 11.03.2022



23:16:36 11.03.2022

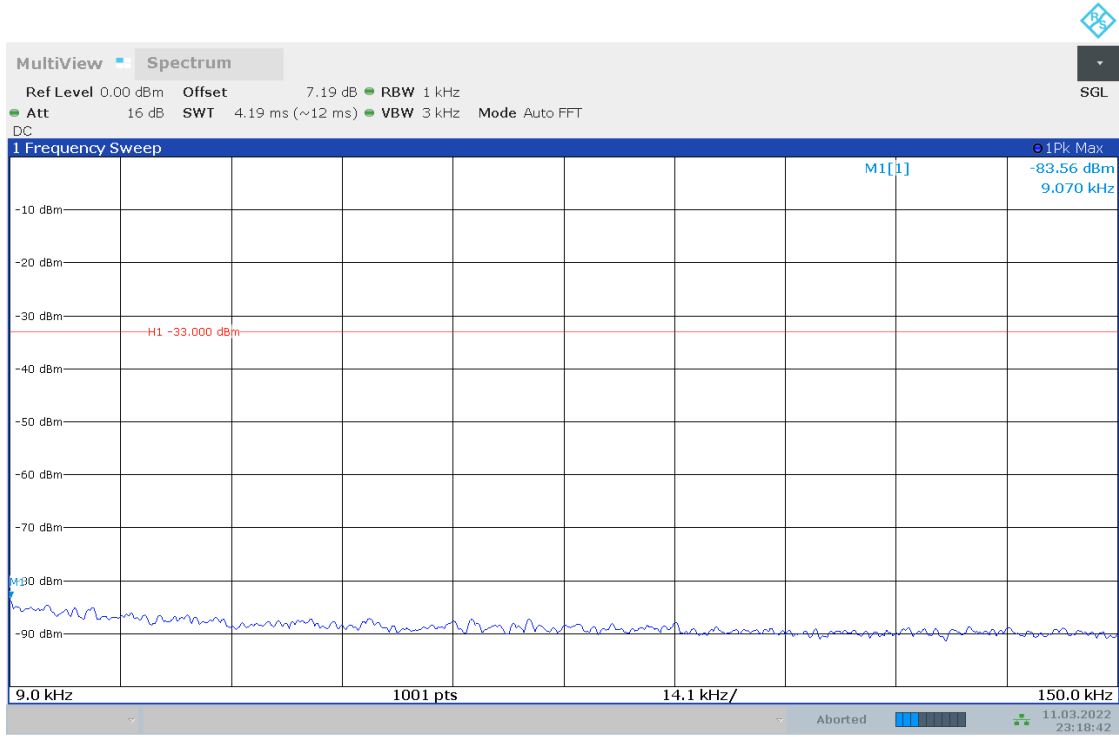


23:17:05 11.03.2022

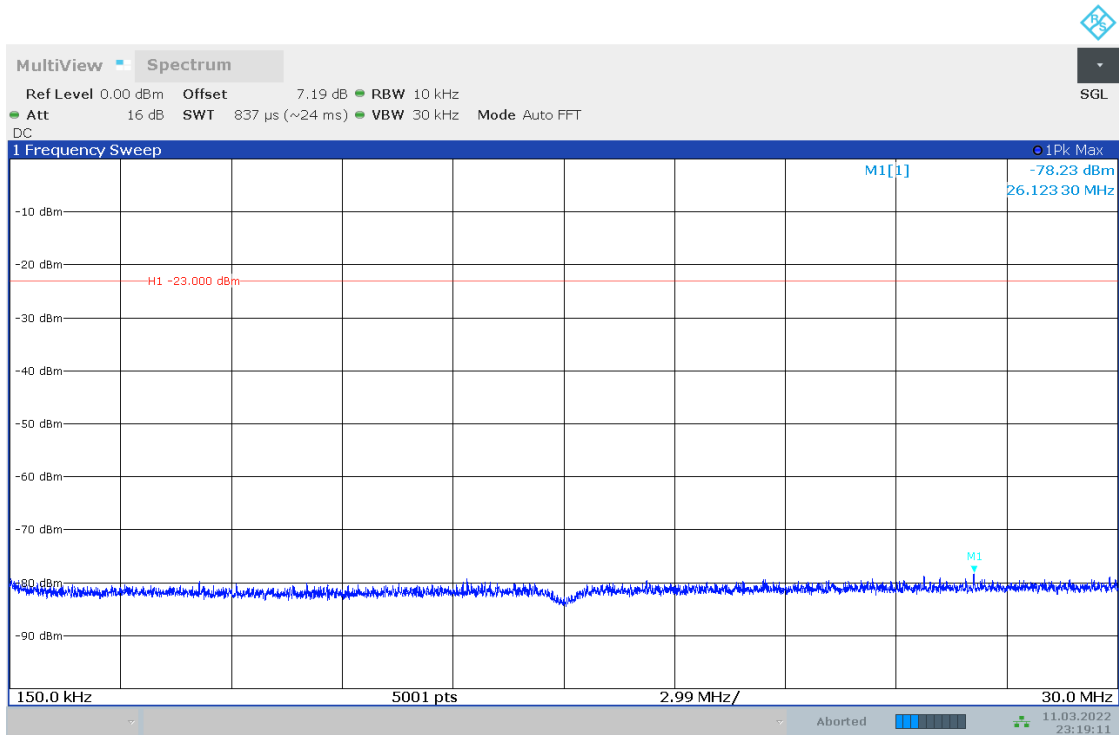


23:17:39 11.03.2022

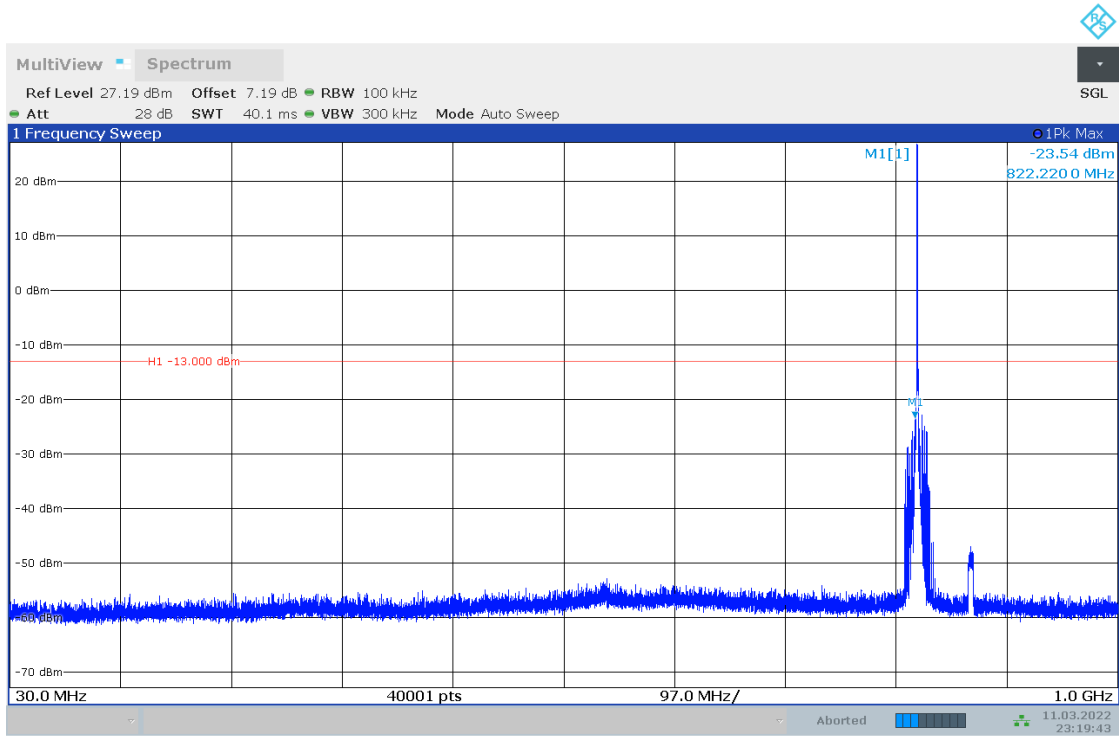
## 6.2.37 TM2\_5MHZ\_LCH\_RB1#0



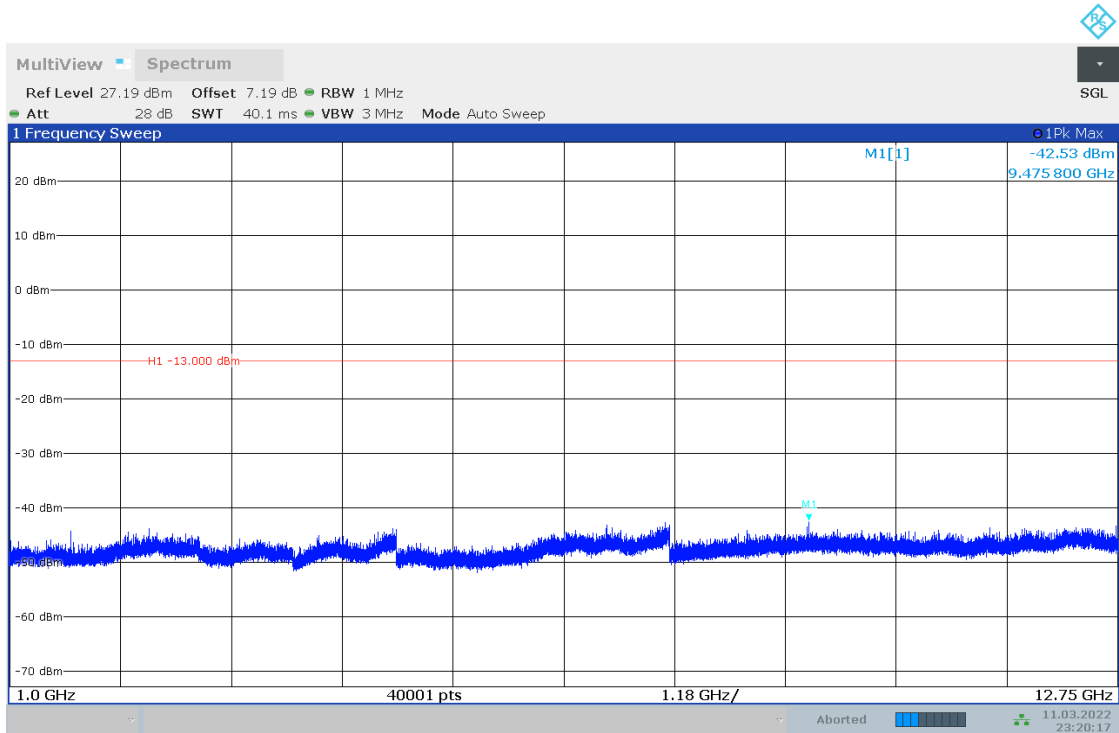
23:18:42 11.03.2022



23:19:12 11.03.2022

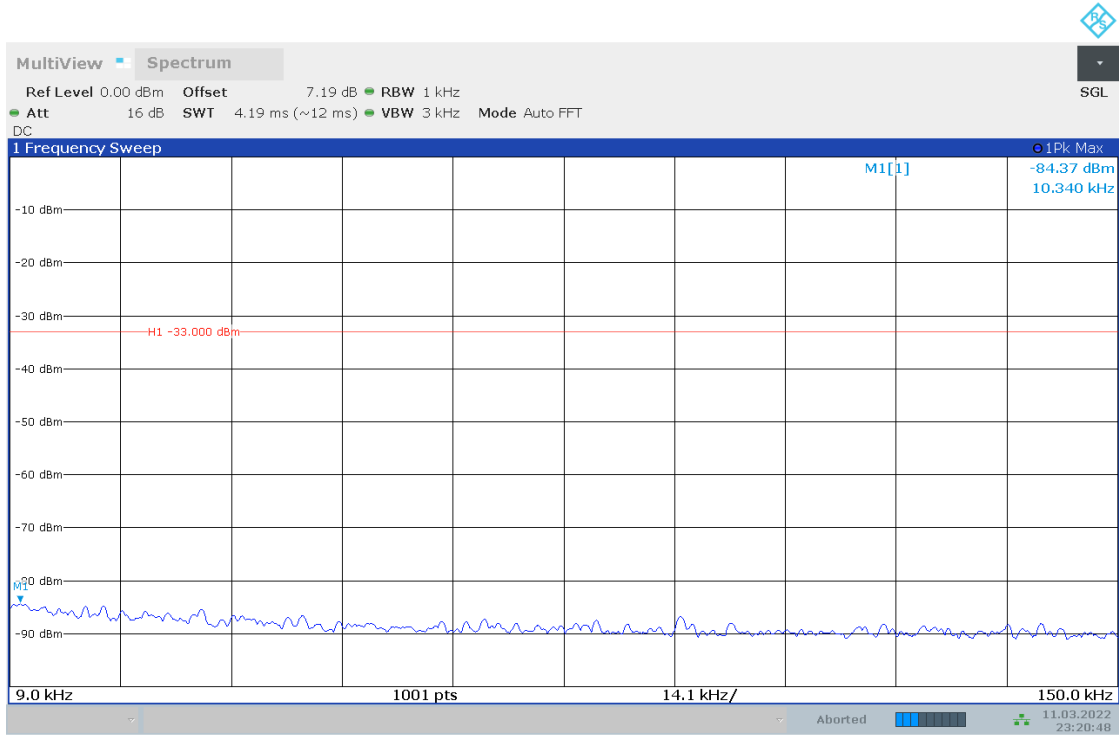


23:19:43 11.03.2022

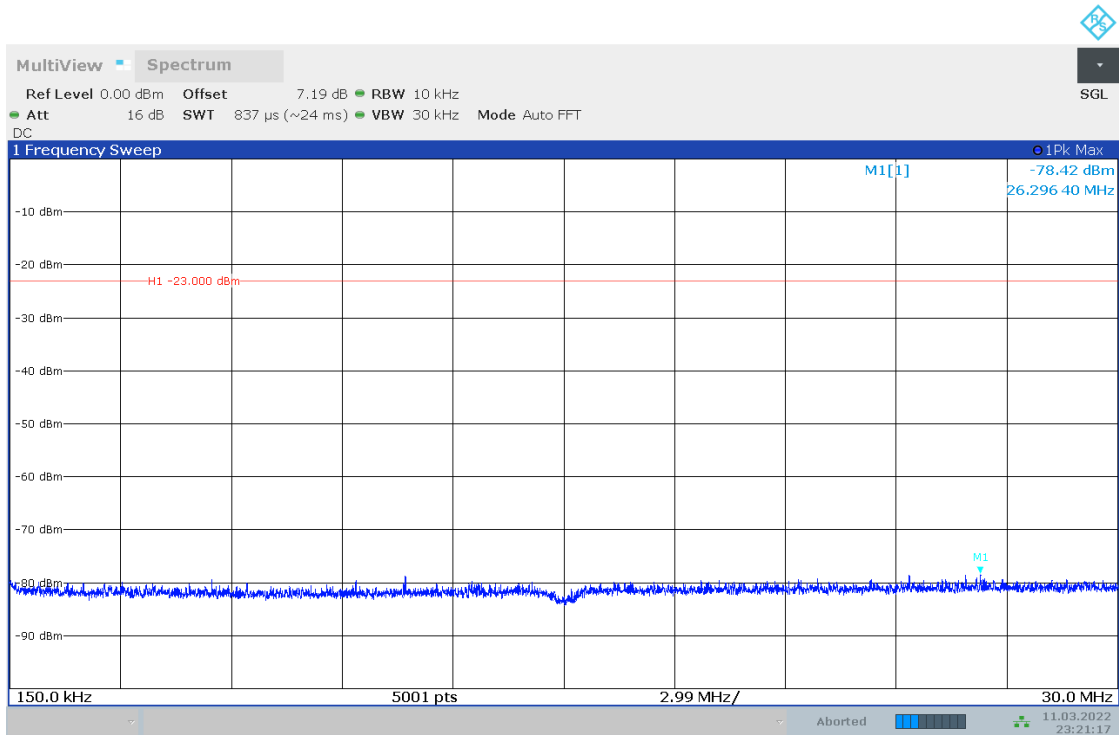


23:20:17 11.03.2022

## 6.2.38 TM2\_5MHZ\_LCH\_RB1#24

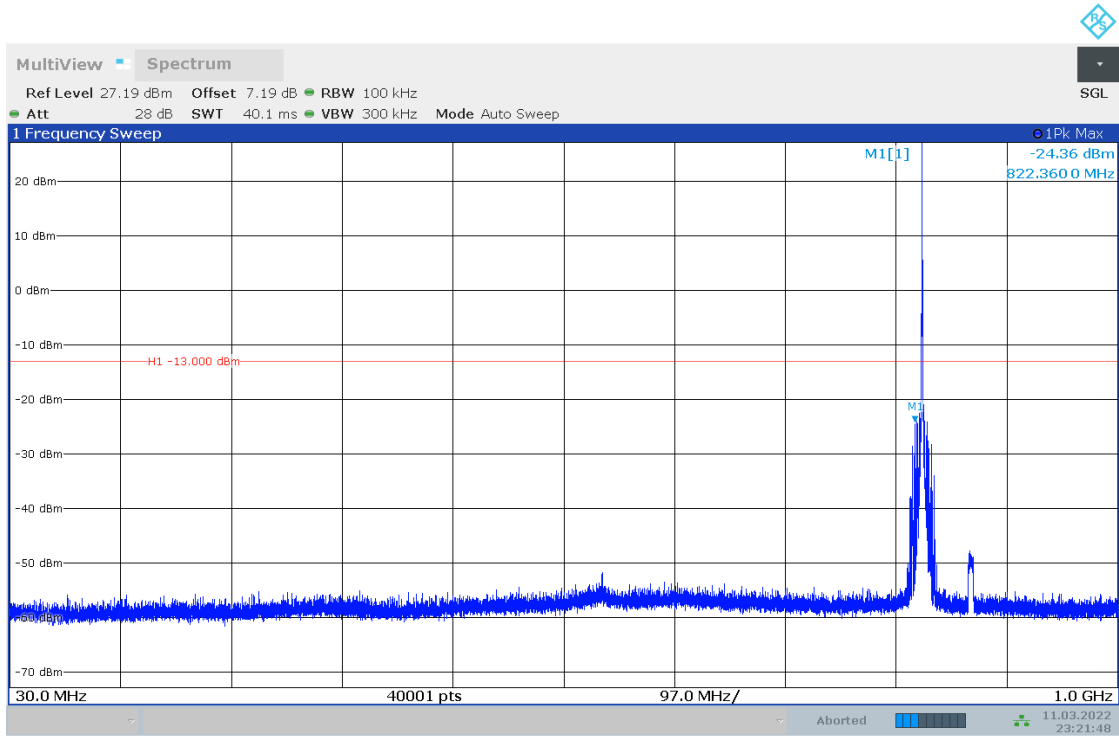


23:20:48 11.03.2022

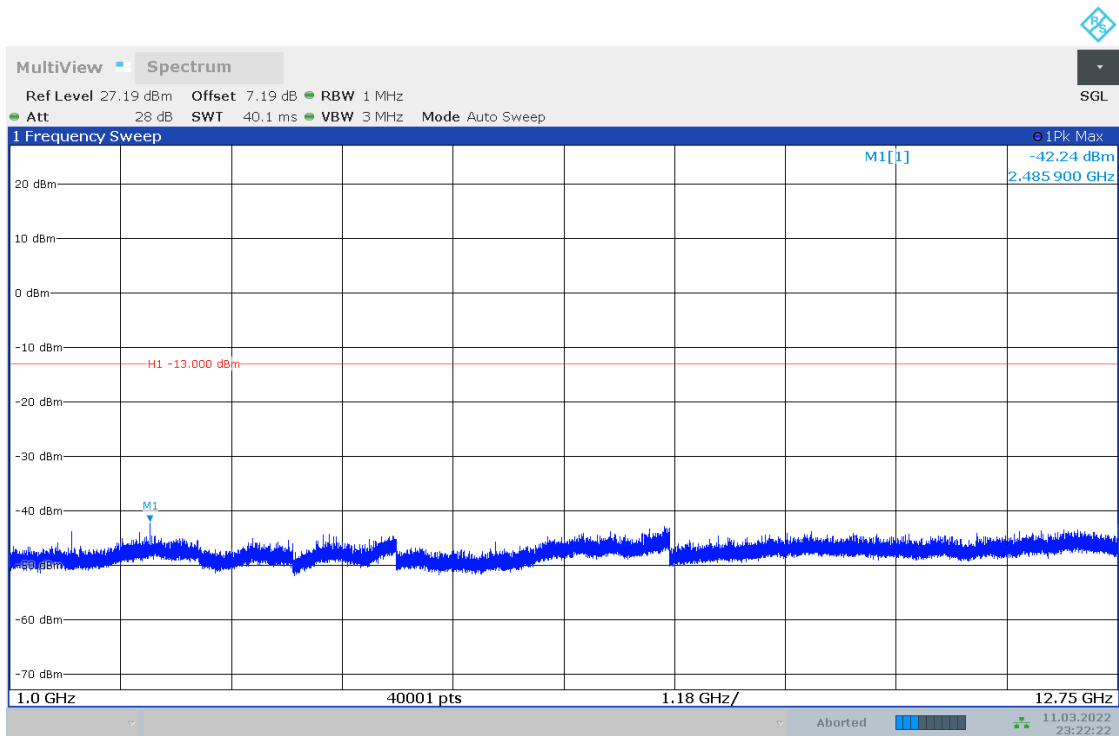


23:21:17 11.03.2022



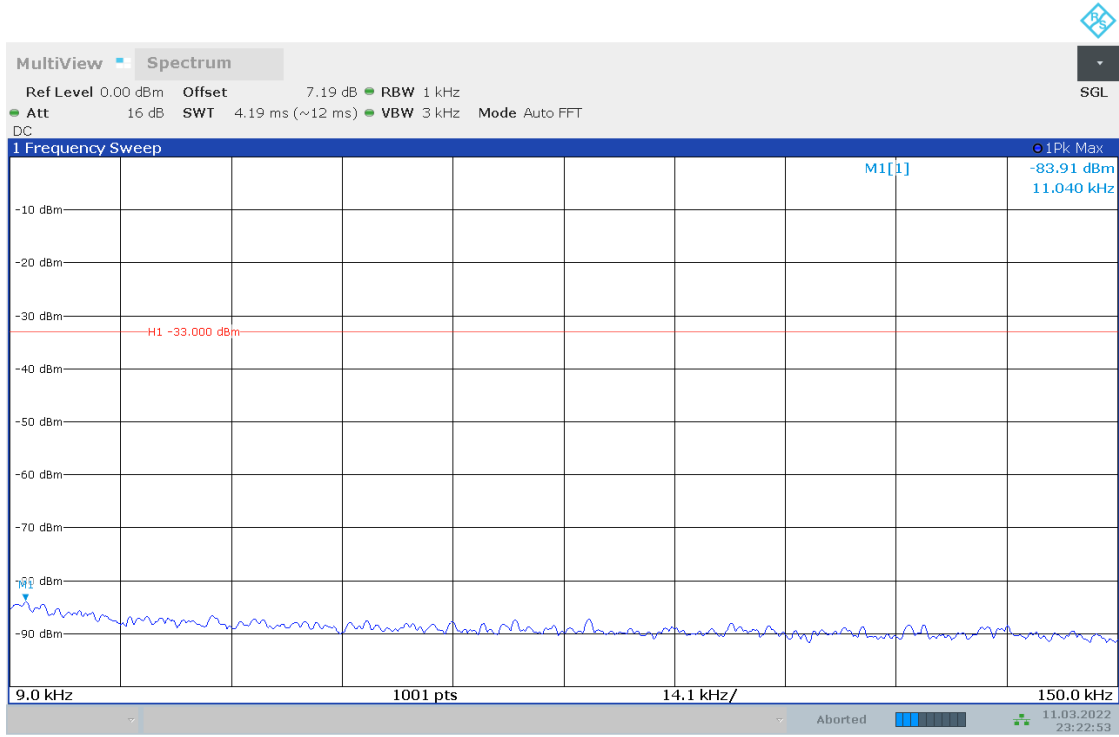


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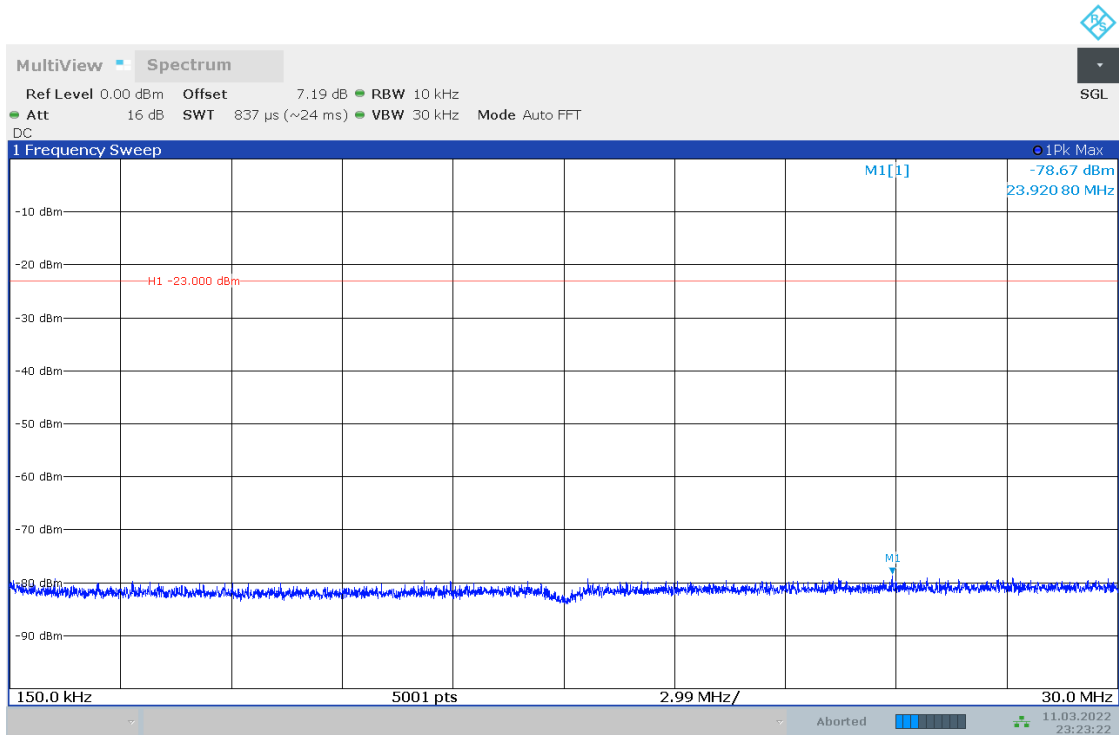


23:22:22 11.03.2022

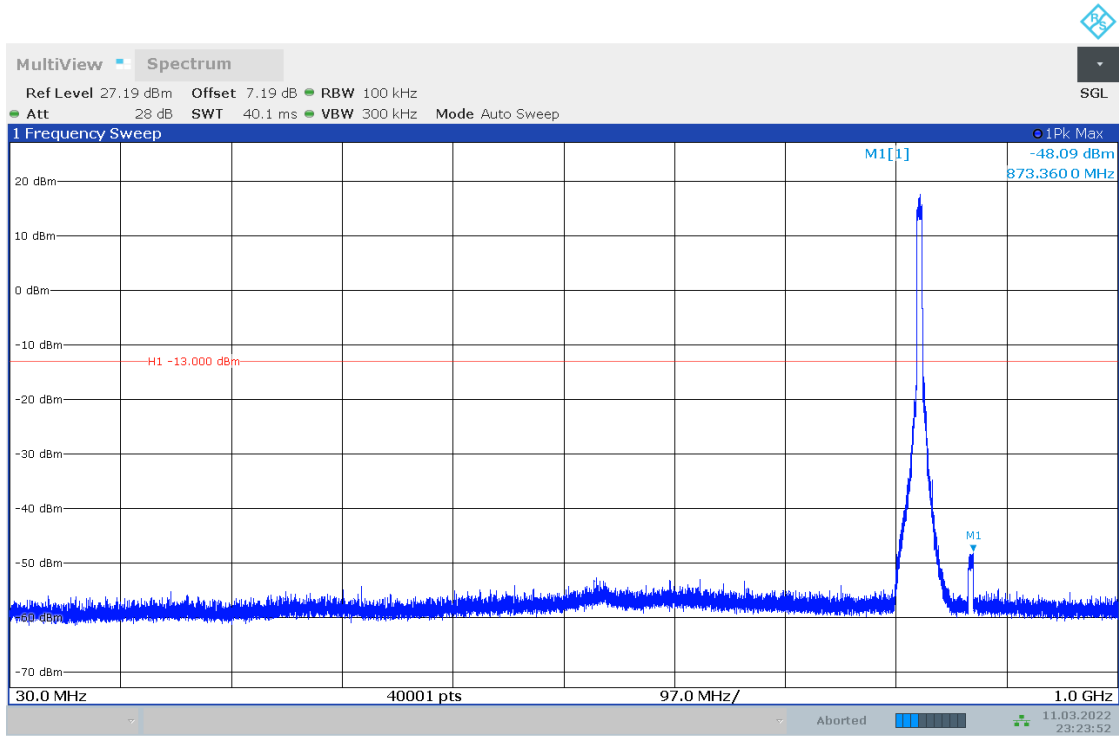
## 6.2.39 TM2\_5MHZ\_LCH\_RB25#0



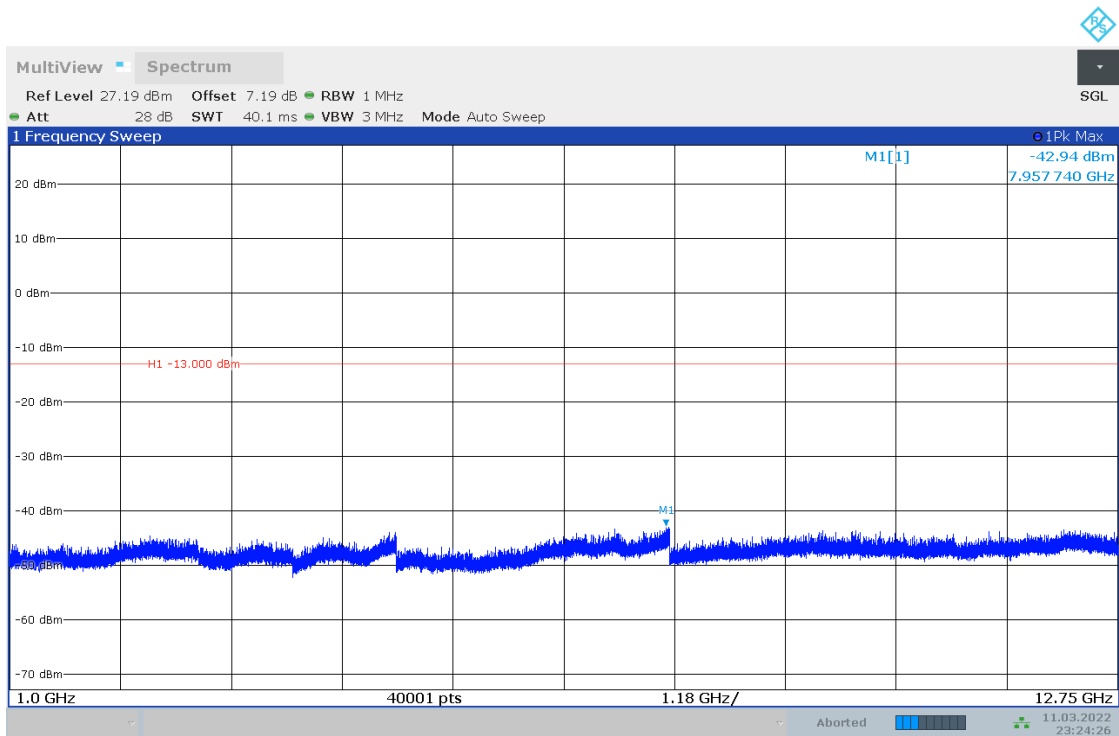
23:22:53 11.03.2022



23:23:23 11.03.2022

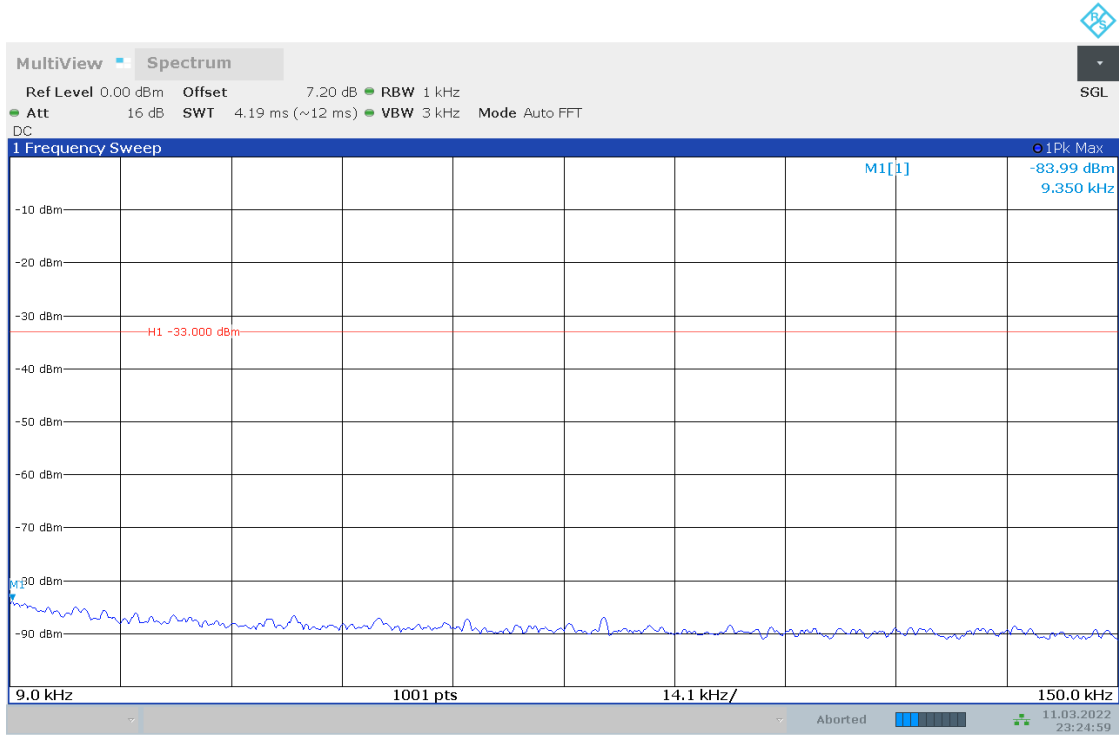


23:23:52 11.03.2022

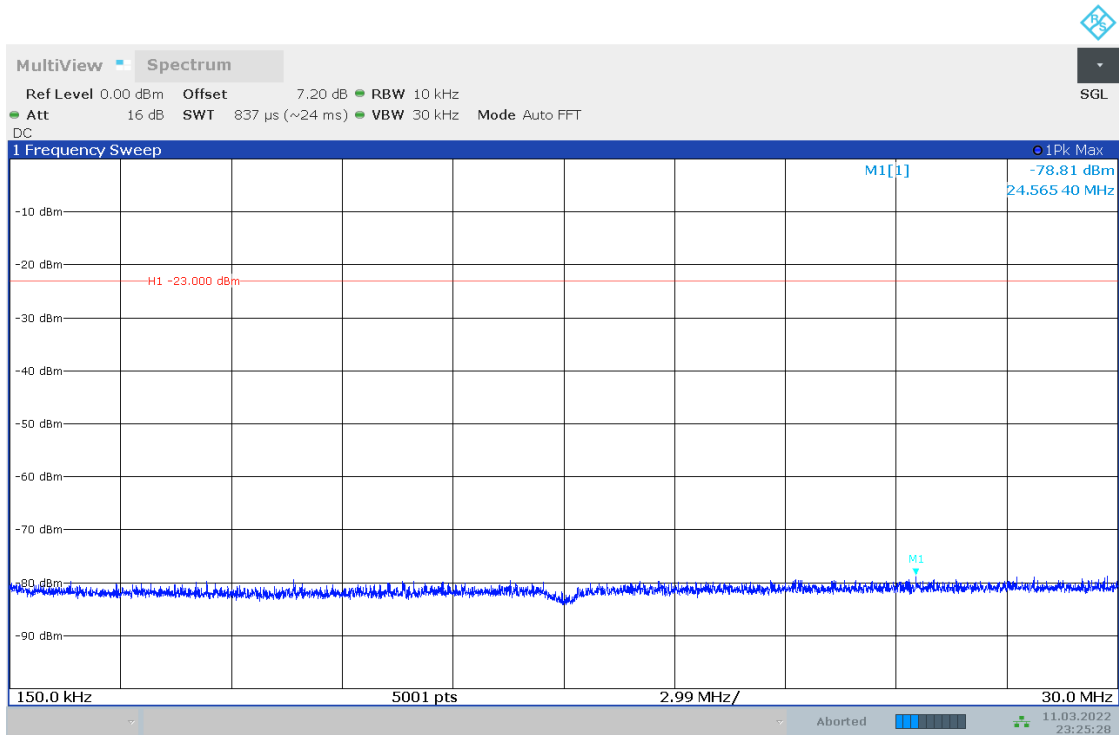


23:24:27 11.03.2022

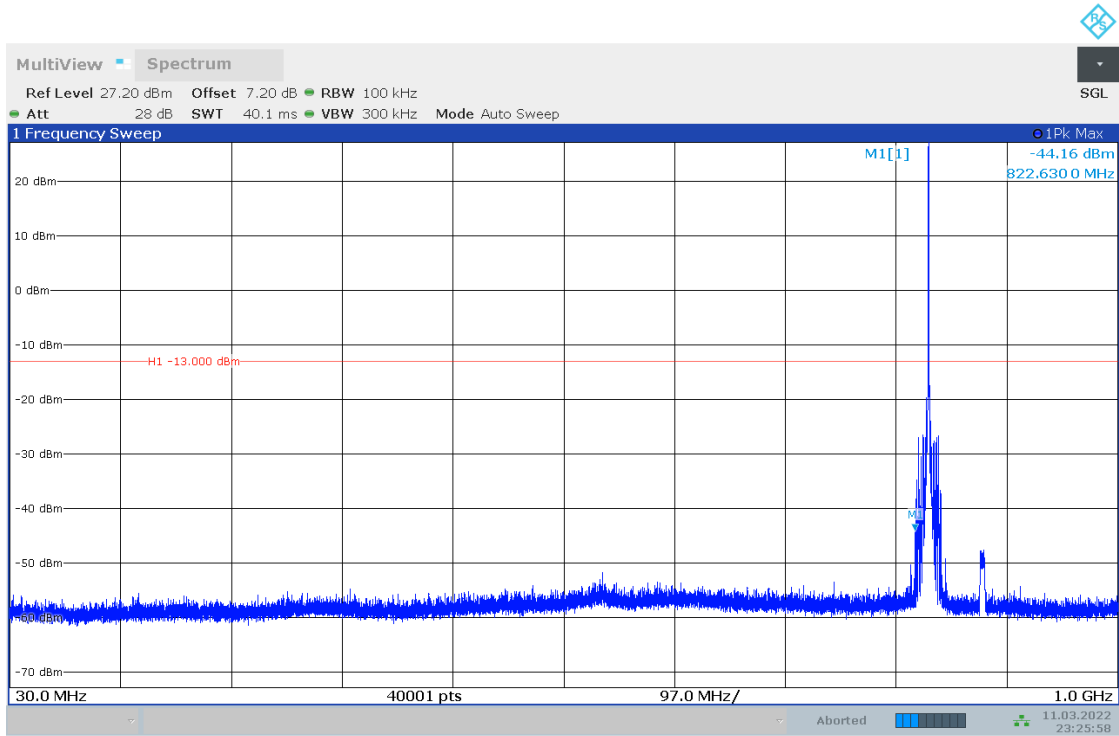
## 6.2.40 TM2\_5MHZ\_MCH\_RB1#0



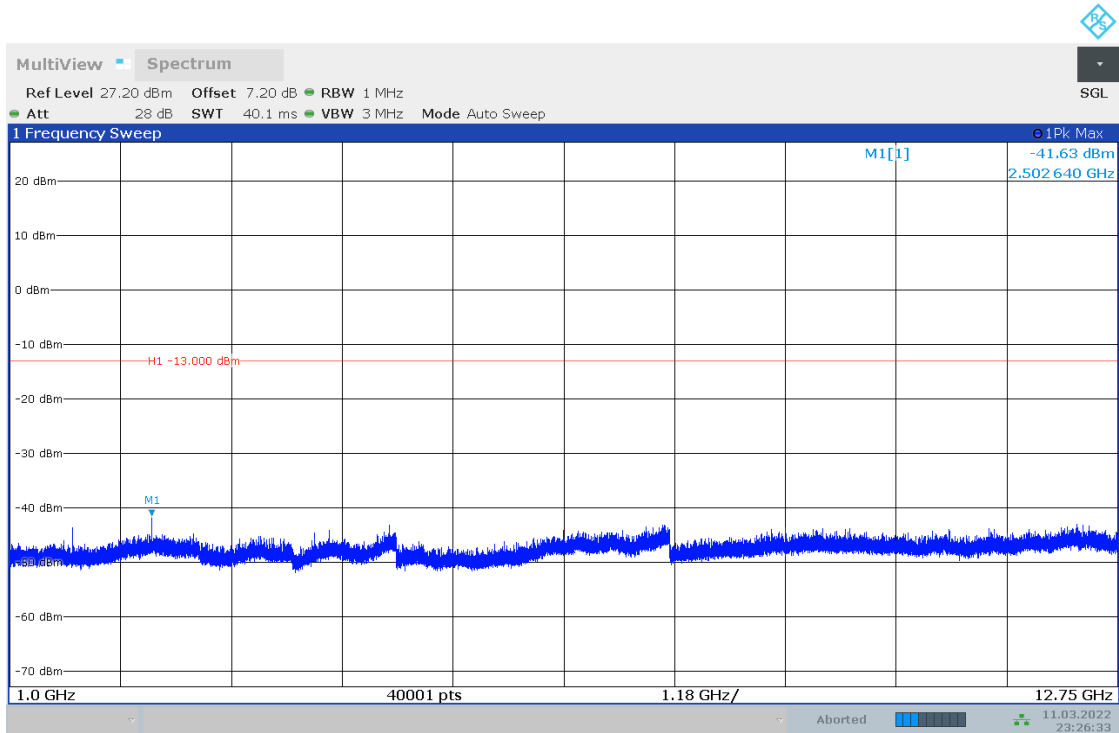
23:25:00 11.03.2022



23:25:29 11.03.2022

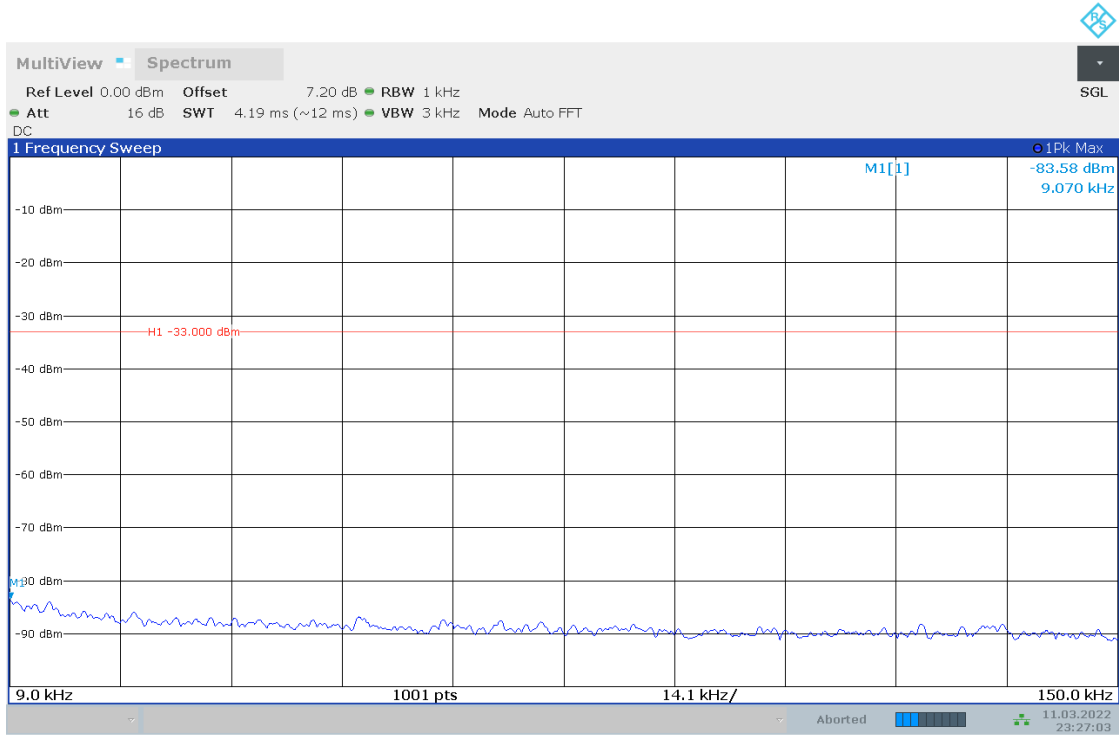


23:25:59 11.03.2022

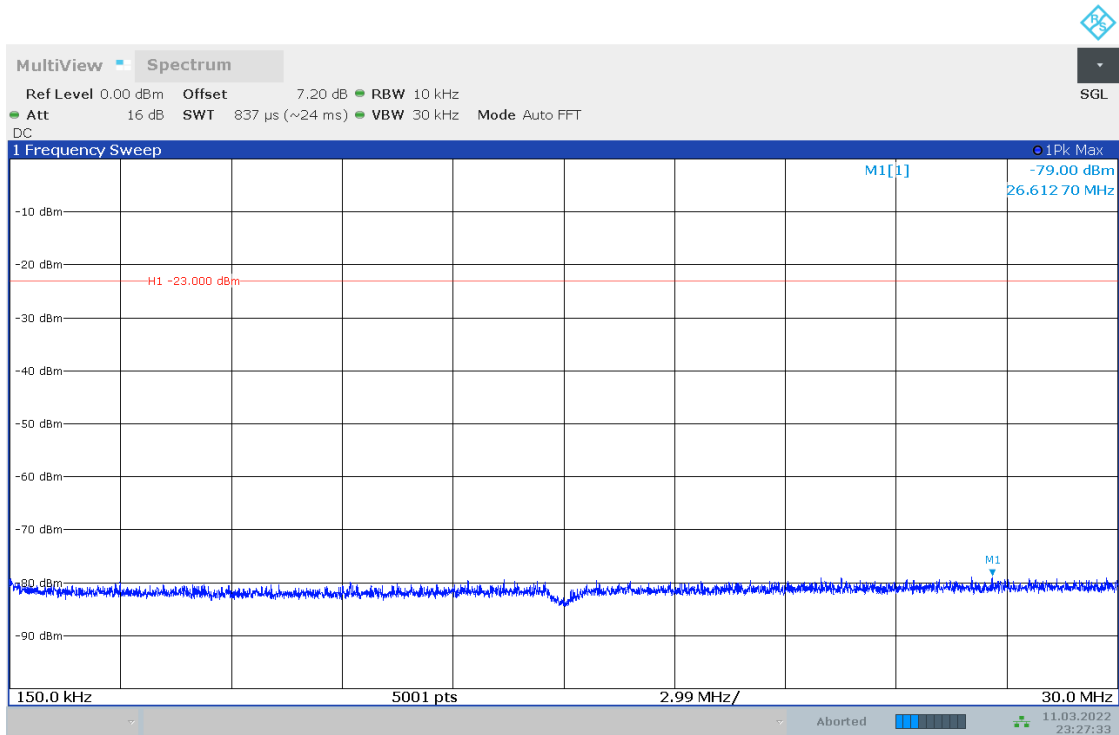


23:26:33 11.03.2022

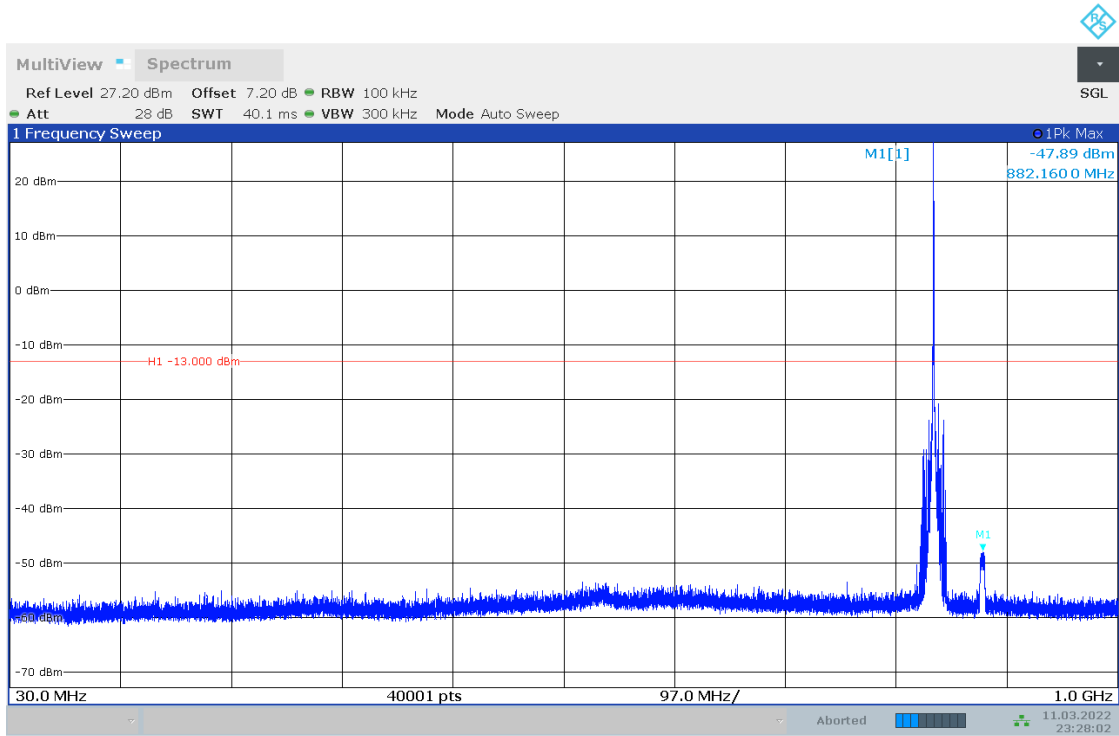
## 6.2.41 TM2\_5MHZ\_MCH\_RB1#24



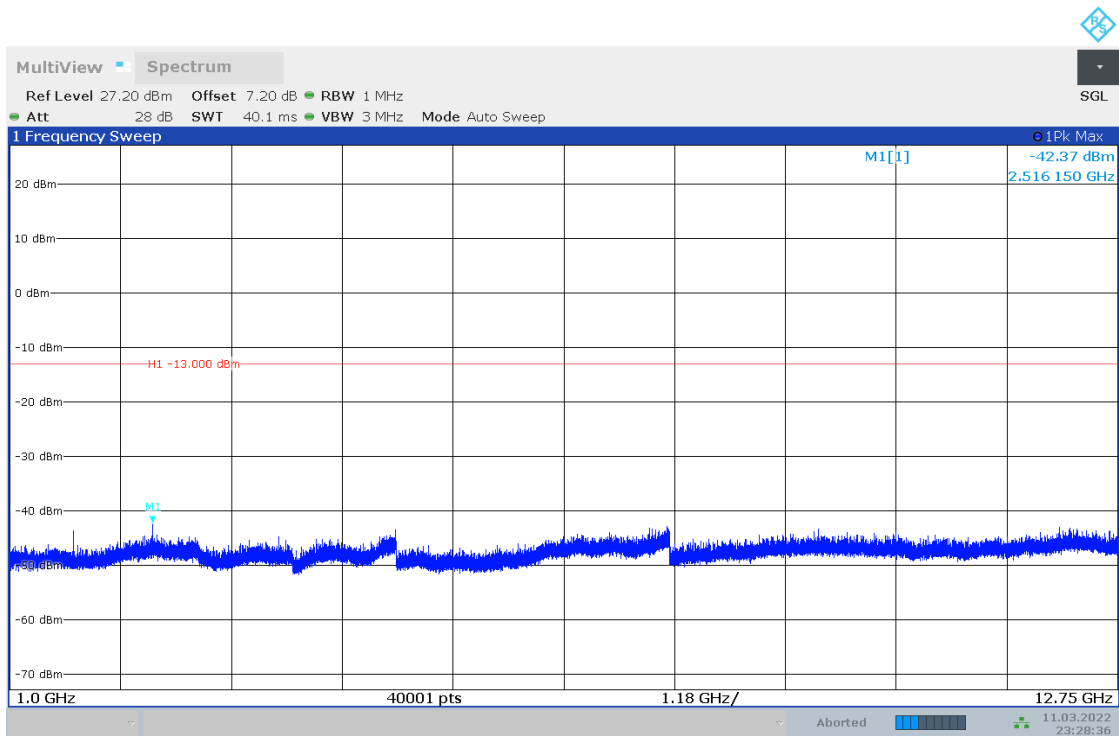
23:27:04 11.03.2022



23:27:33 11.03.2022

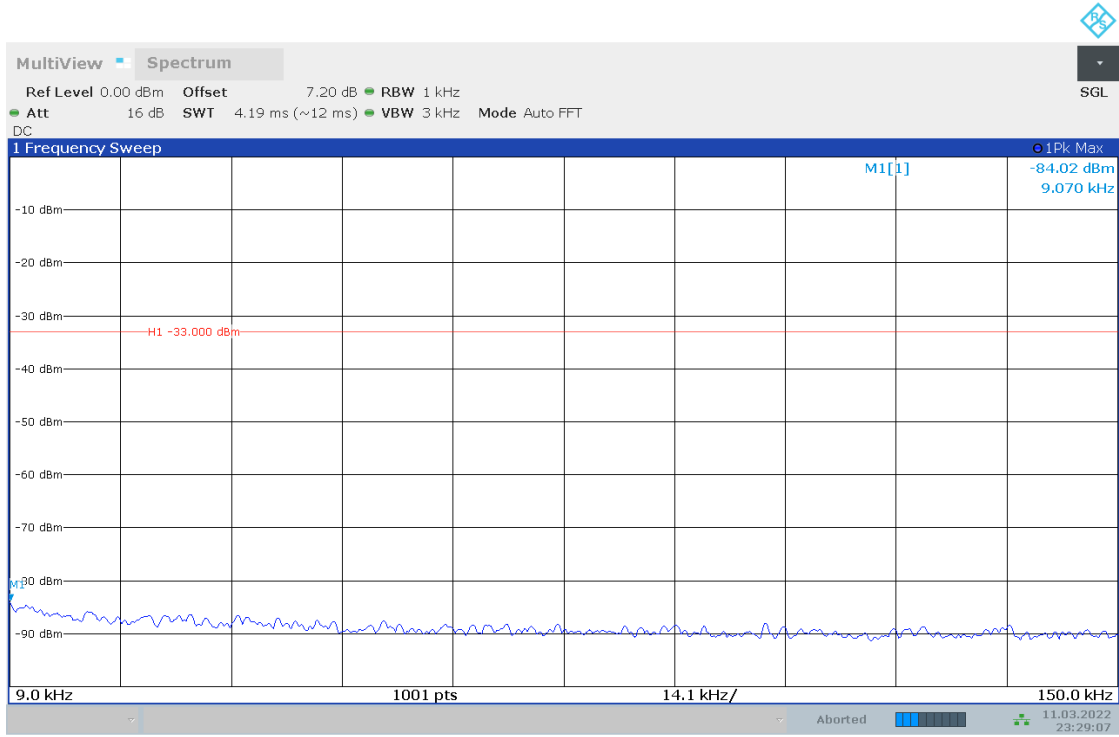


23:28:02 11.03.2022

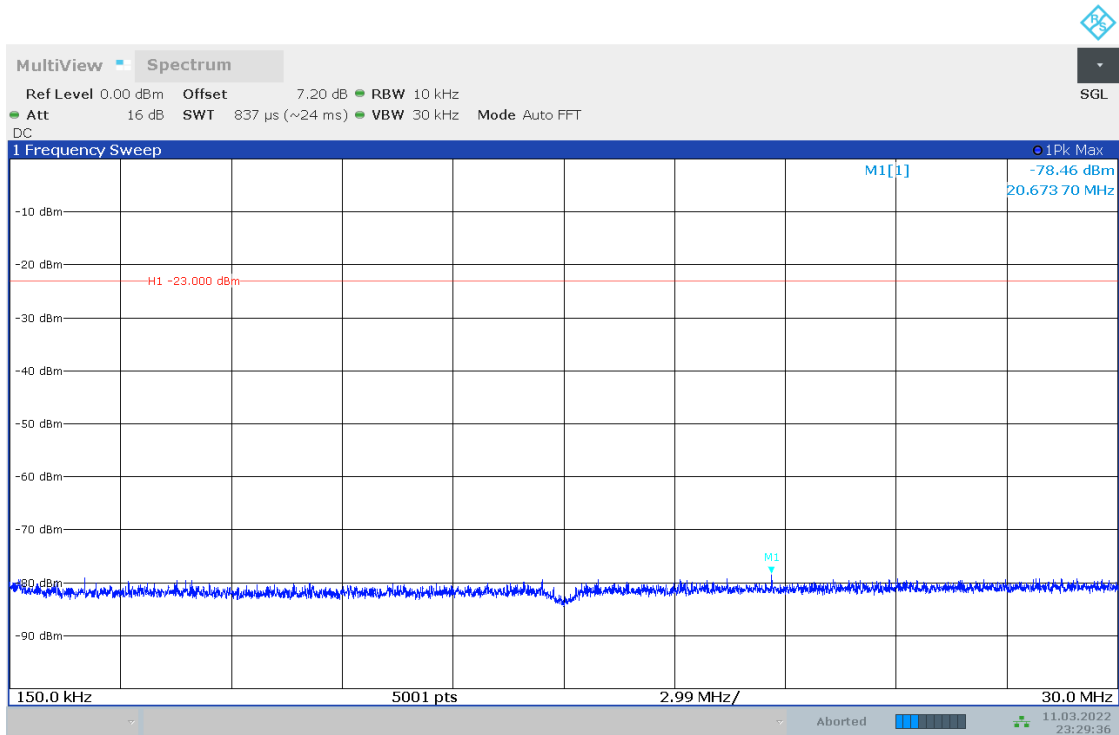


23:28:37 11.03.2022

## 6.2.42 TM2\_5MHZ\_MCH\_RB25#0

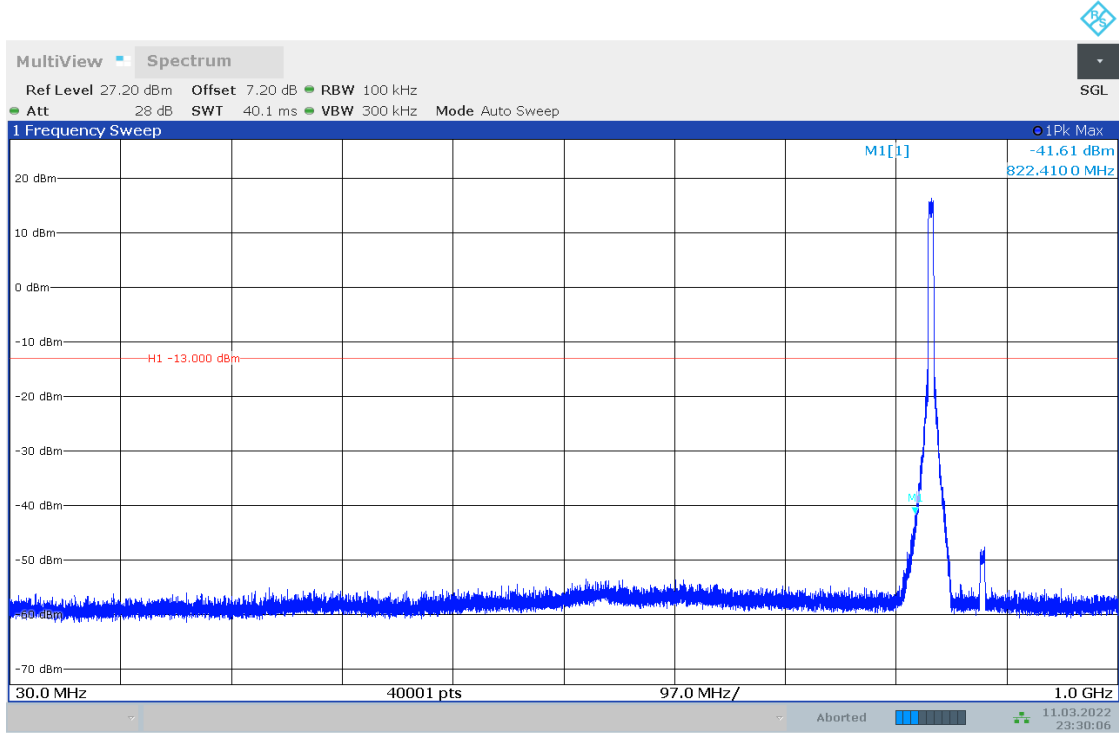


23:29:07 11.03.2022

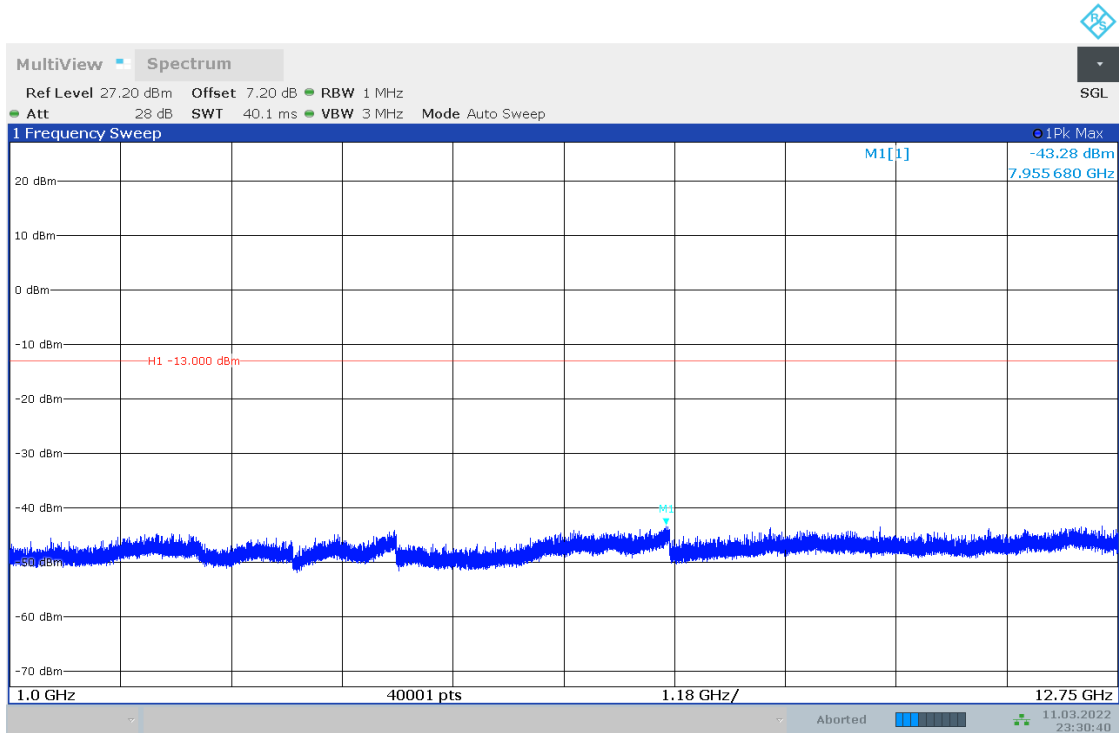


23:29:37 11.03.2022



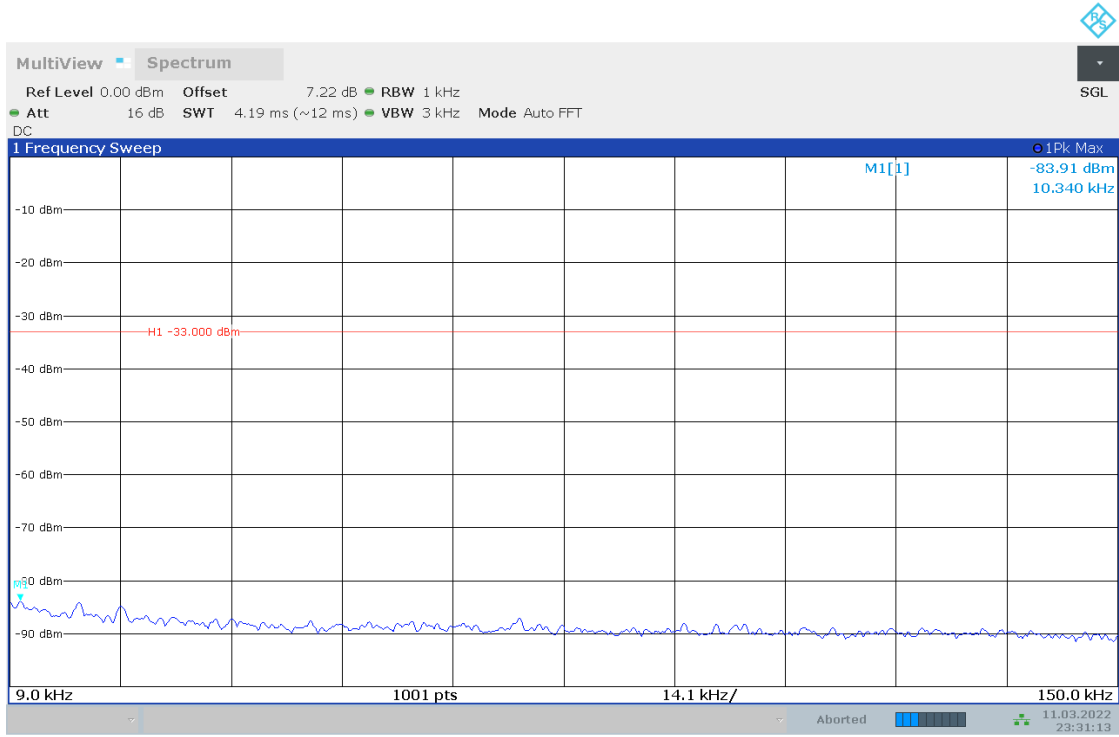


23:30:06 11.03.2022

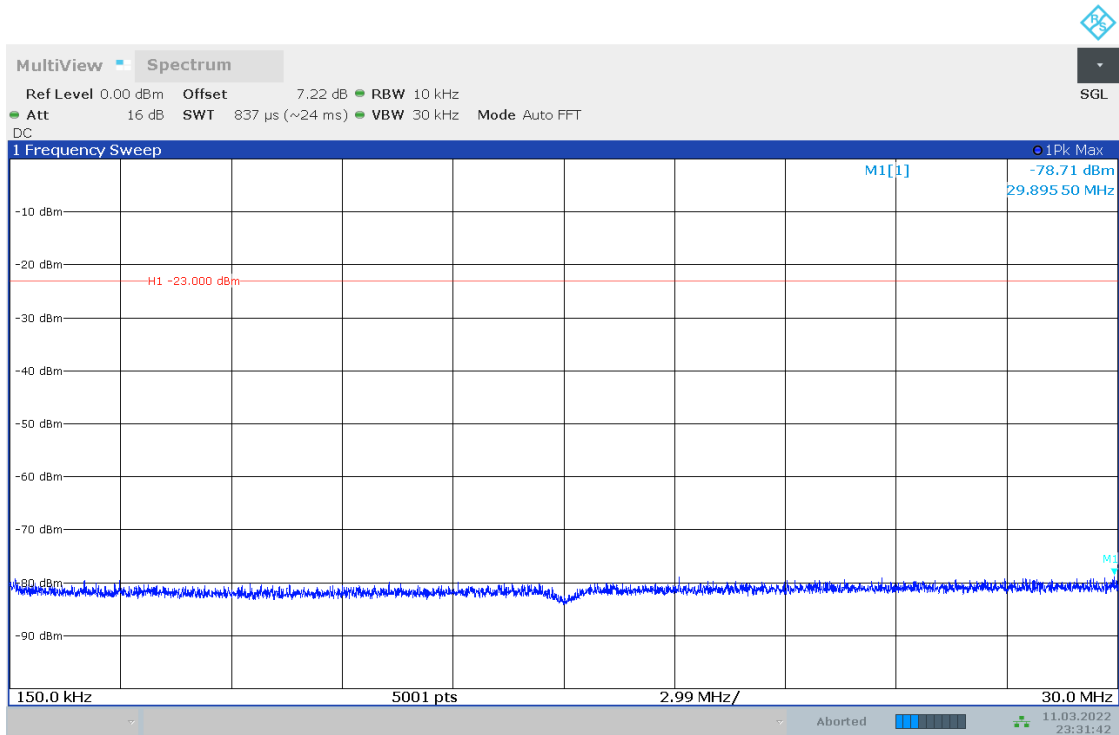


23:30:40 11.03.2022

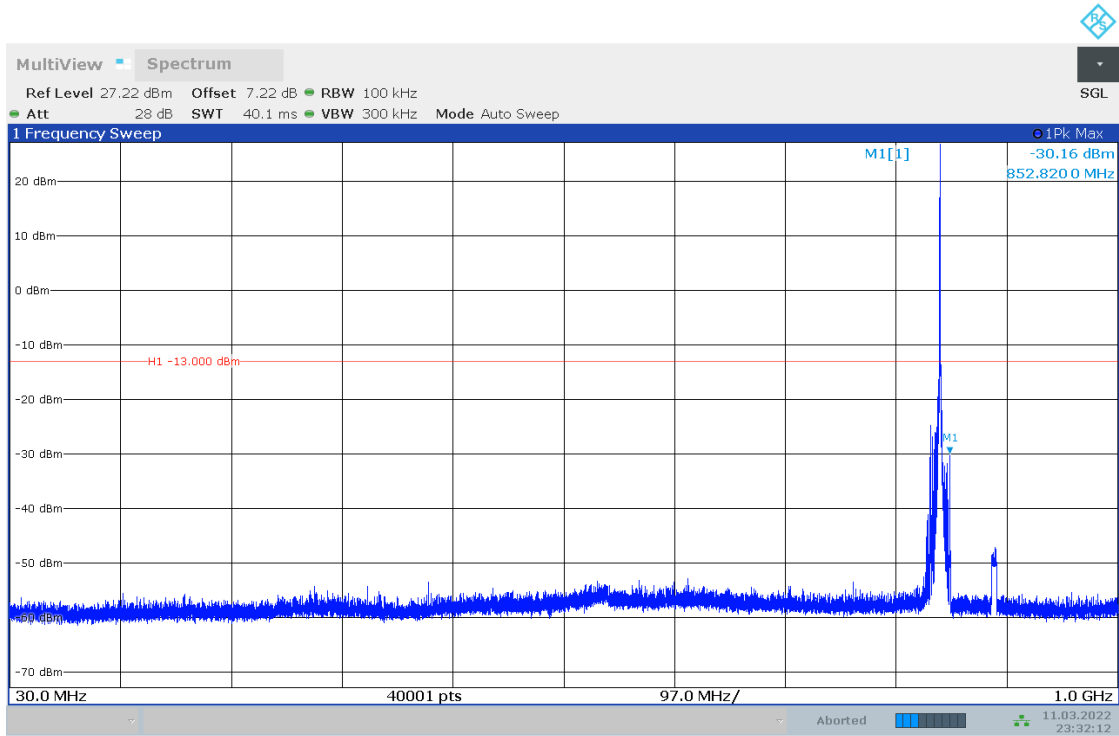
## 6.2.43 TM2\_5MHZ\_HCH\_RB1#0



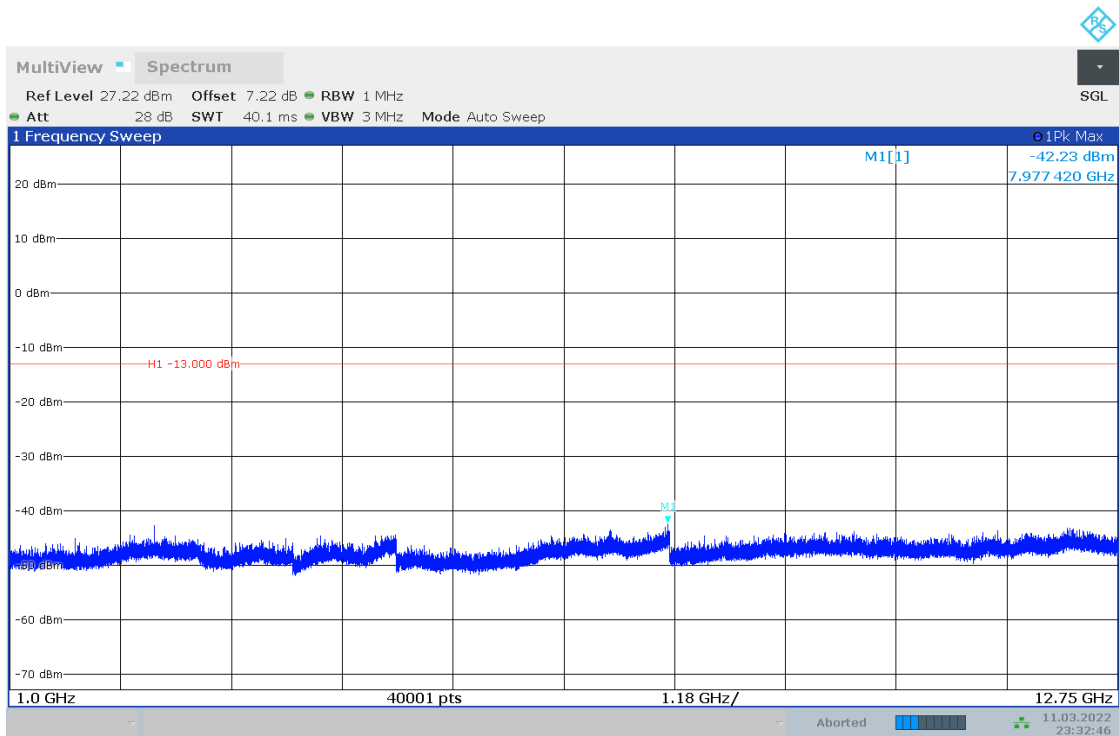
23:31:13 11.03.2022



23:31:43 11.03.2022

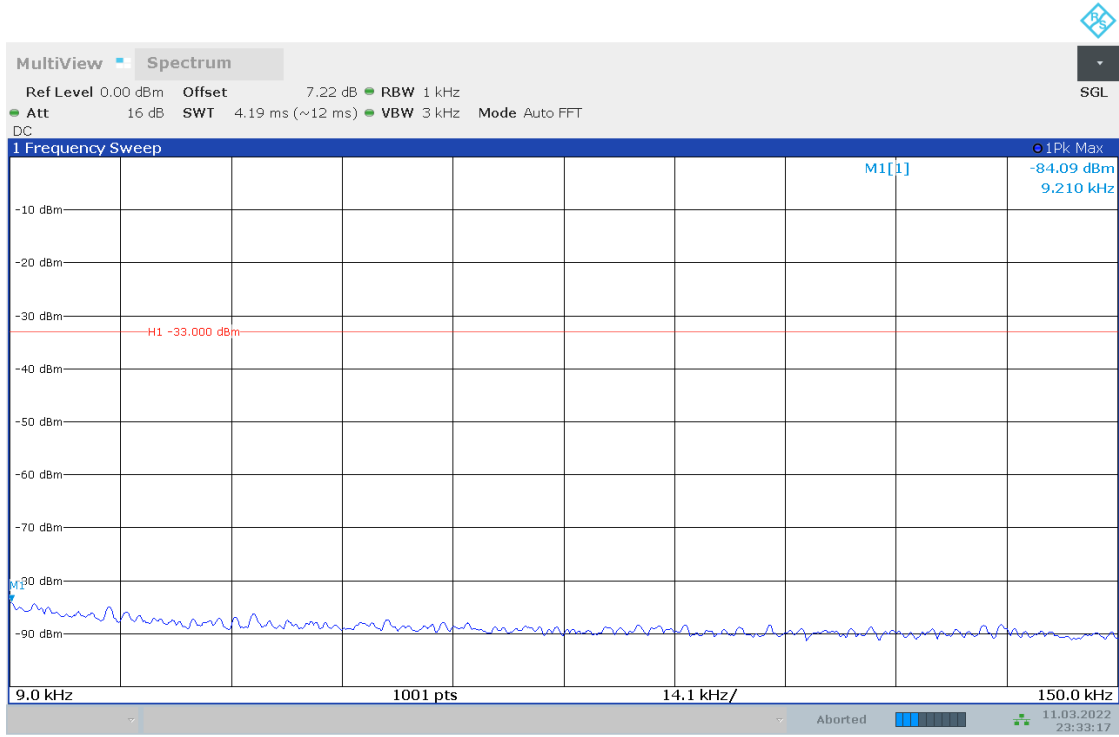


23:32:13 11.03.2022

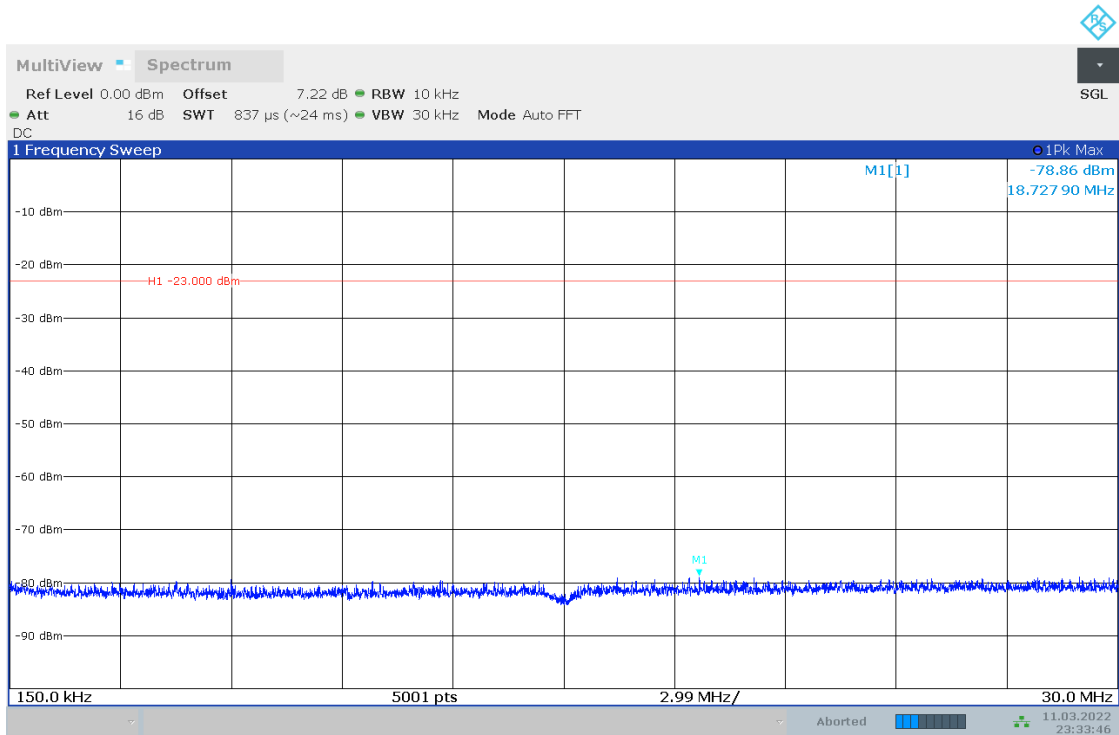


23:32:47 11.03.2022

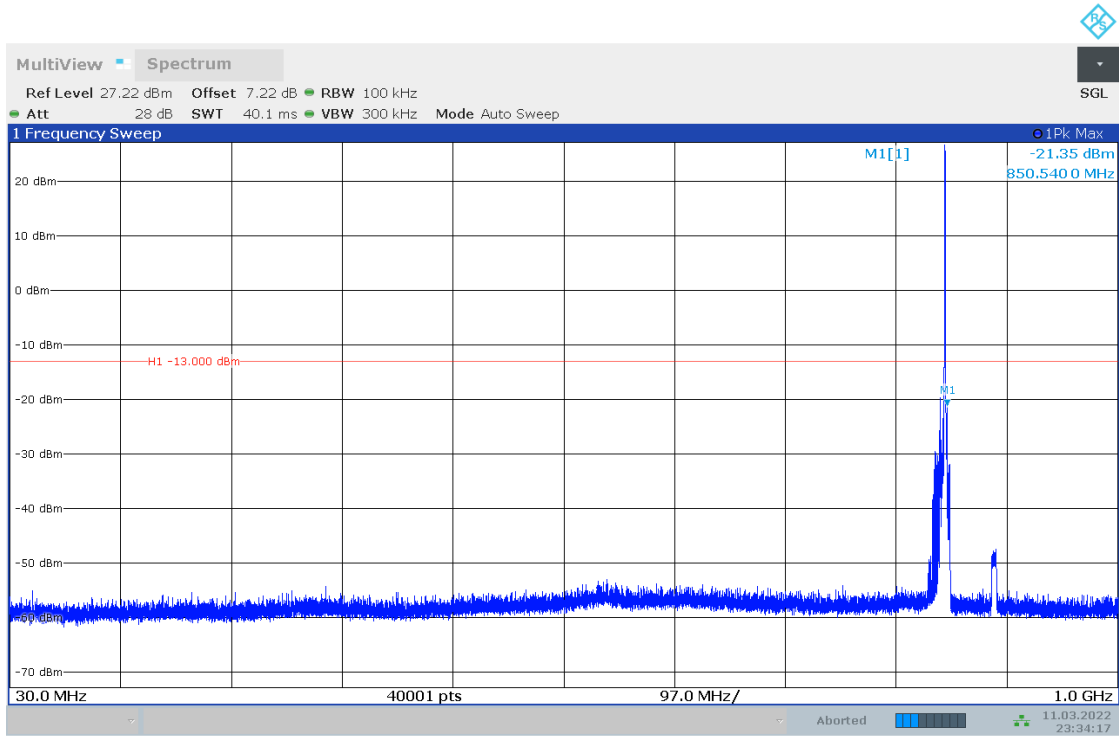
## 6.2.44 TM2\_5MHZ\_HCH\_RB1#24



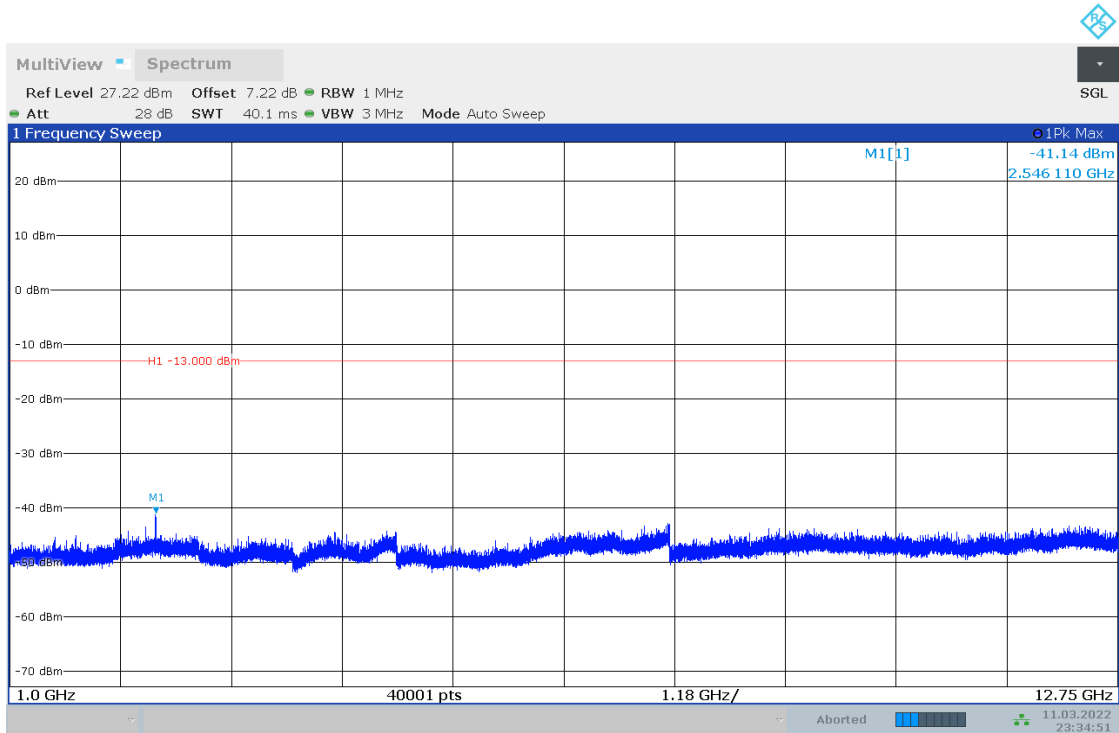
23:33:18 11.03.2022



23:33:47 11.03.2022

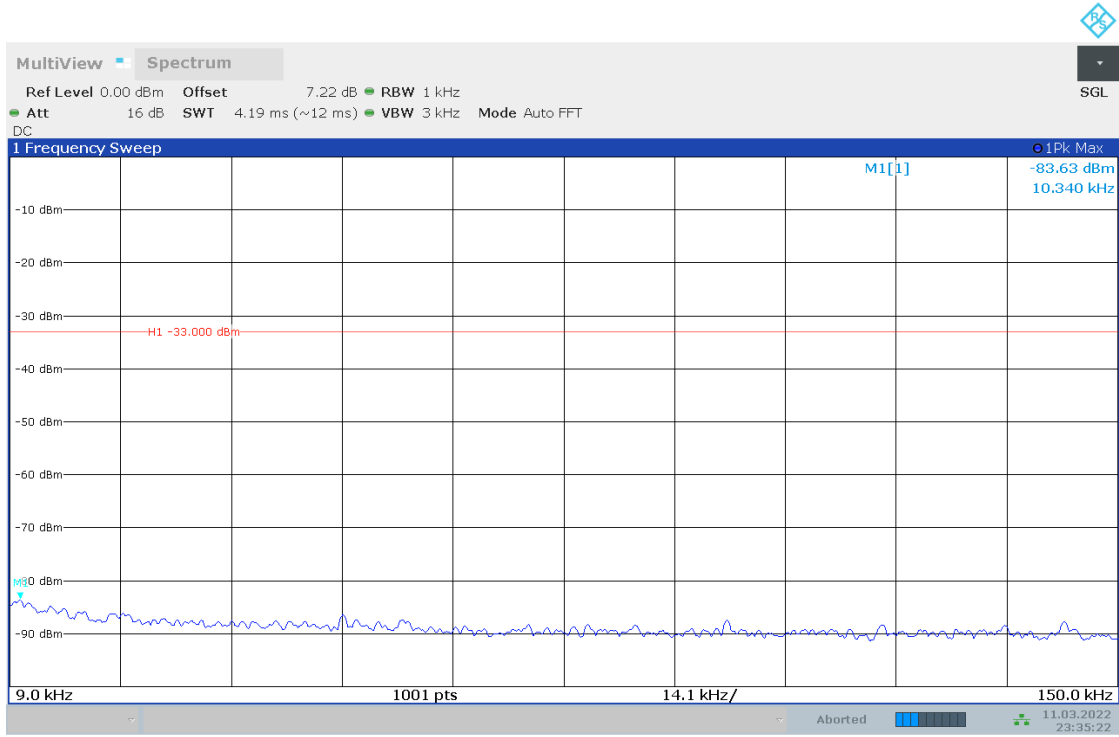


23:34:17 11.03.2022

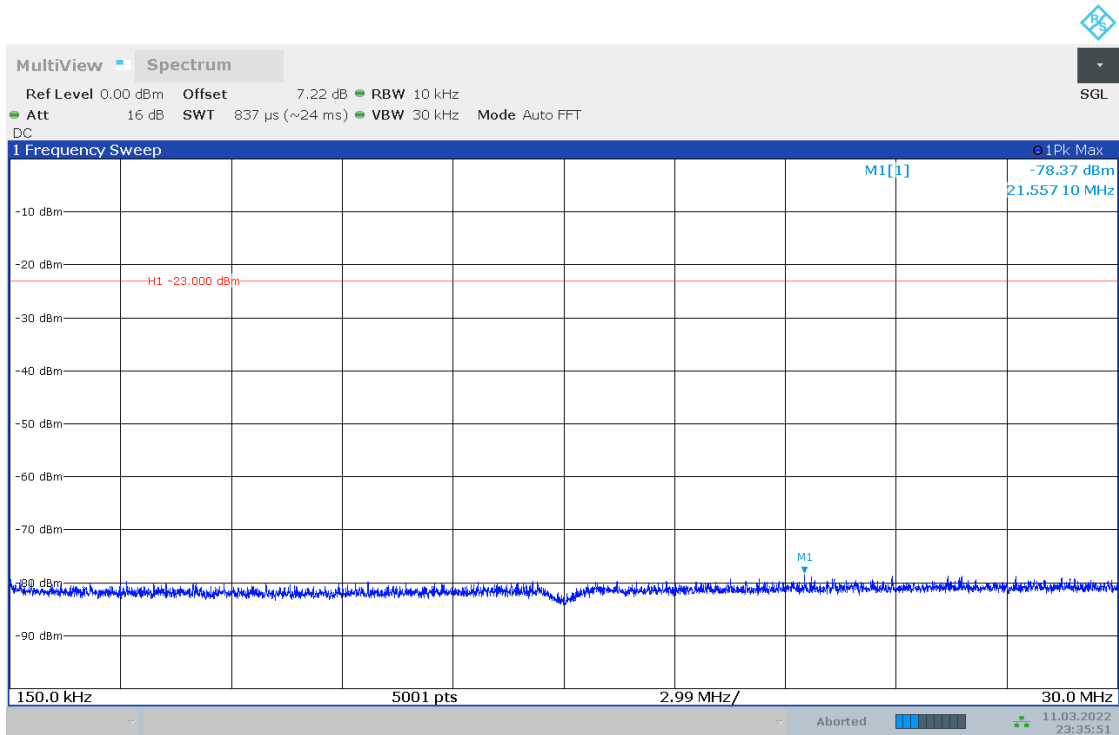


23:34:51 11.03.2022

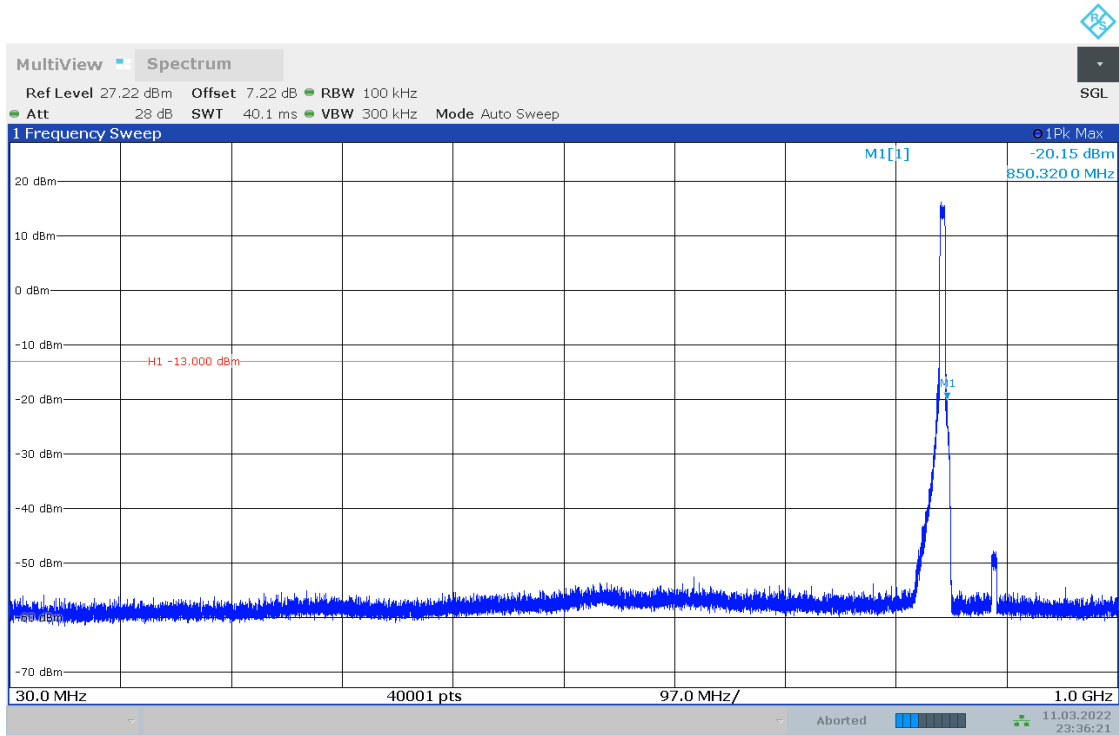
## 6.2.45 TM2\_5MHZ\_HCH\_RB25#0



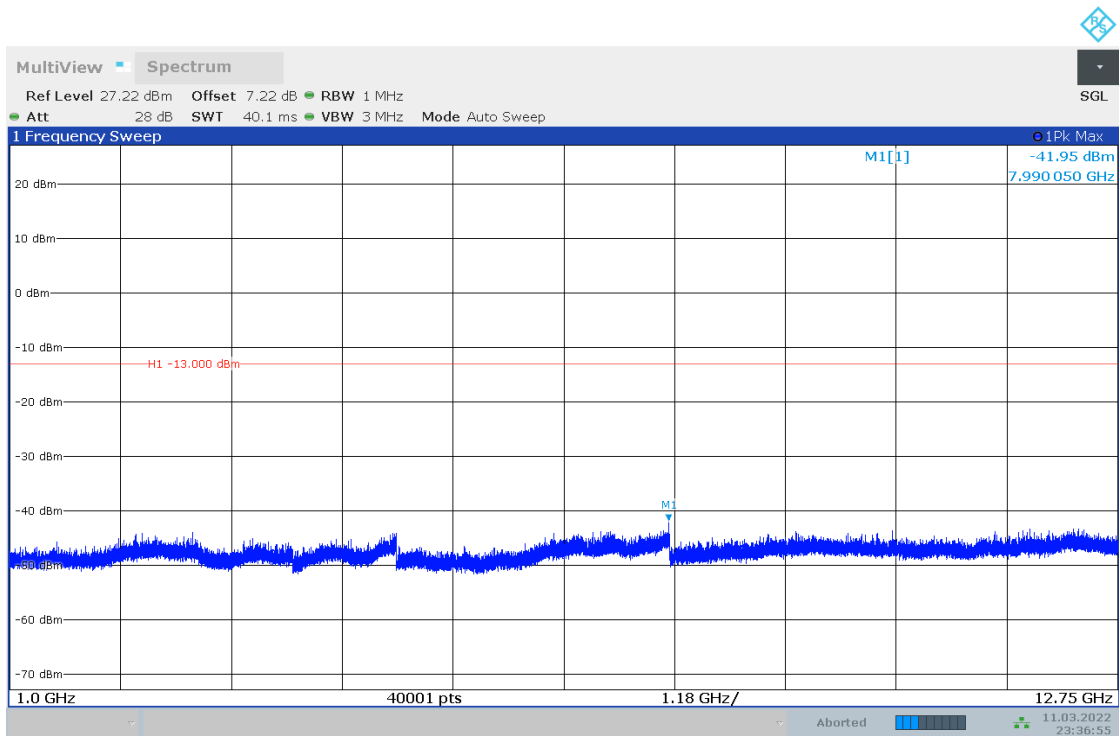
23:35:22 11.03.2022



23:35:52 11.03.2022

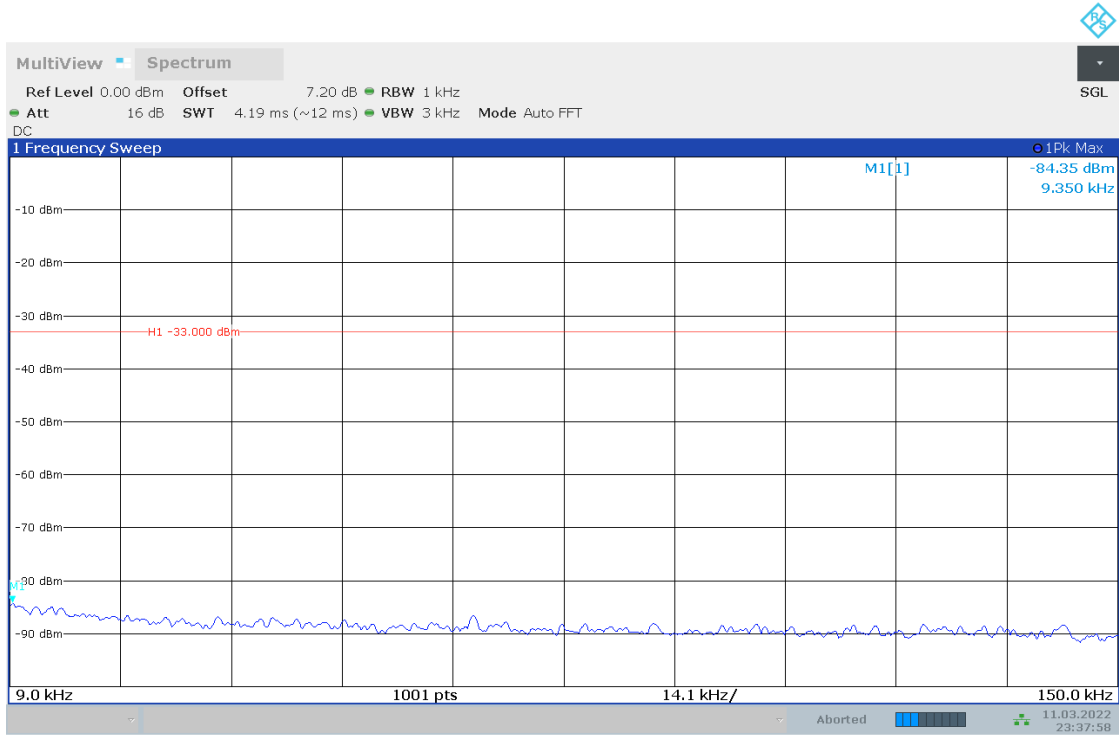


23:36:21 11.03.2022

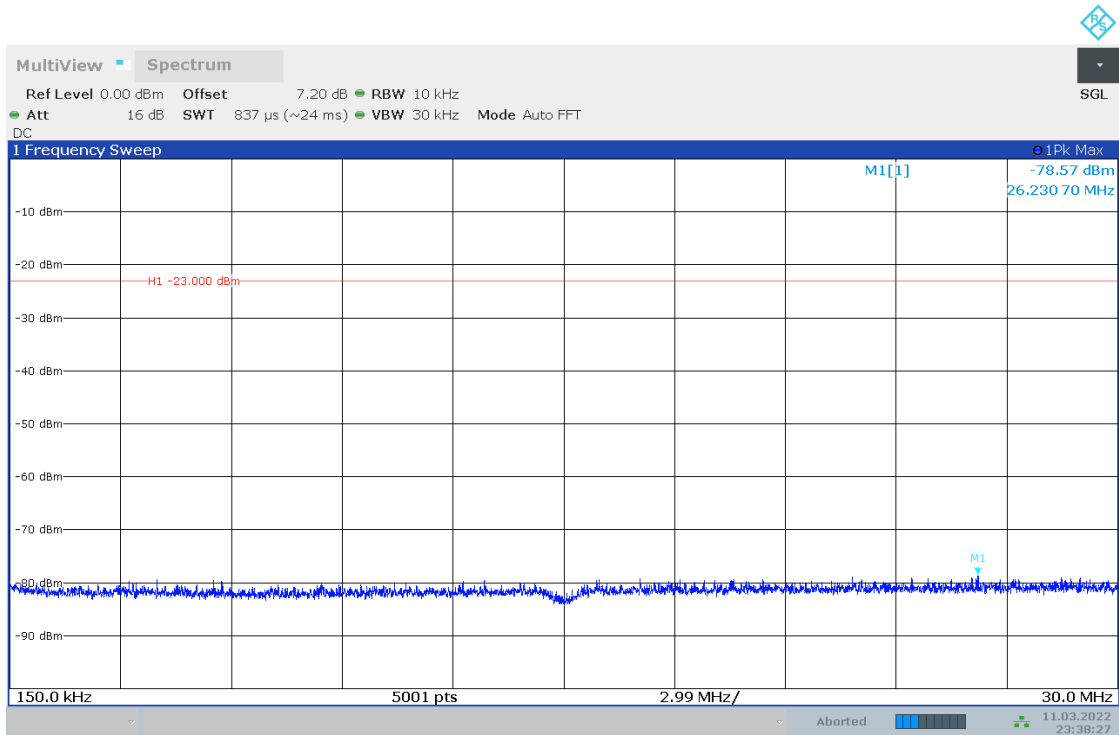


23:36:55 11.03.2022

## 6.2.46 TM2\_15MHZ\_LCH\_RB1#0

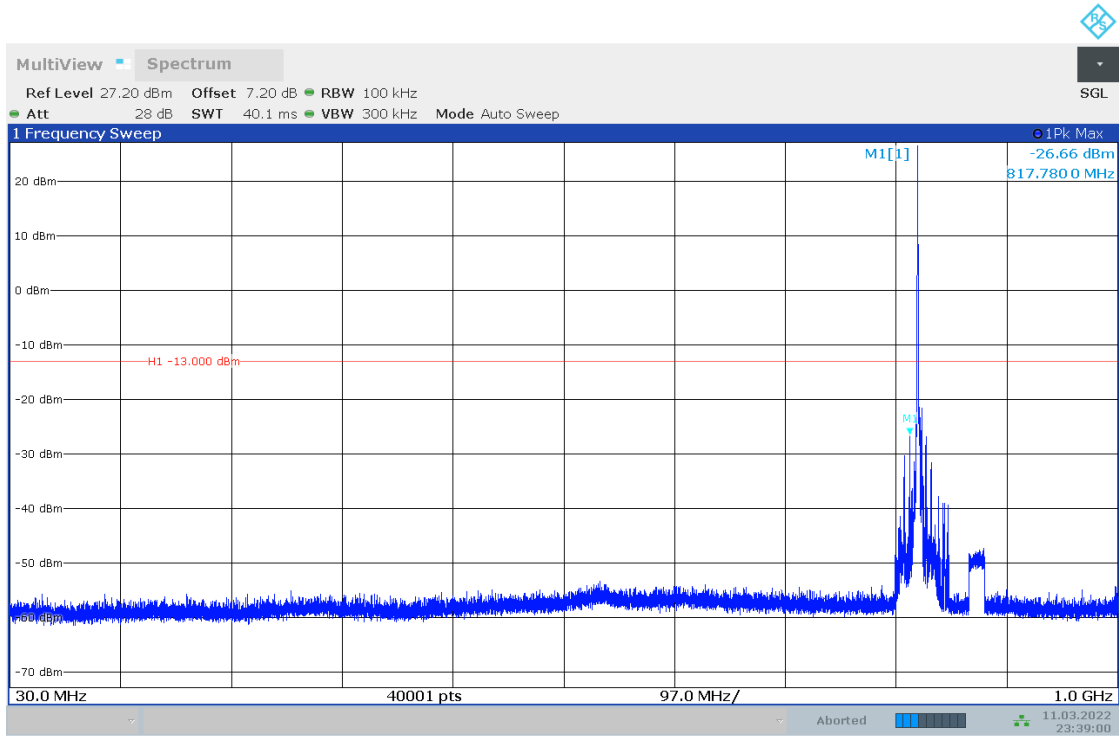


23:37:59 11.03.2022

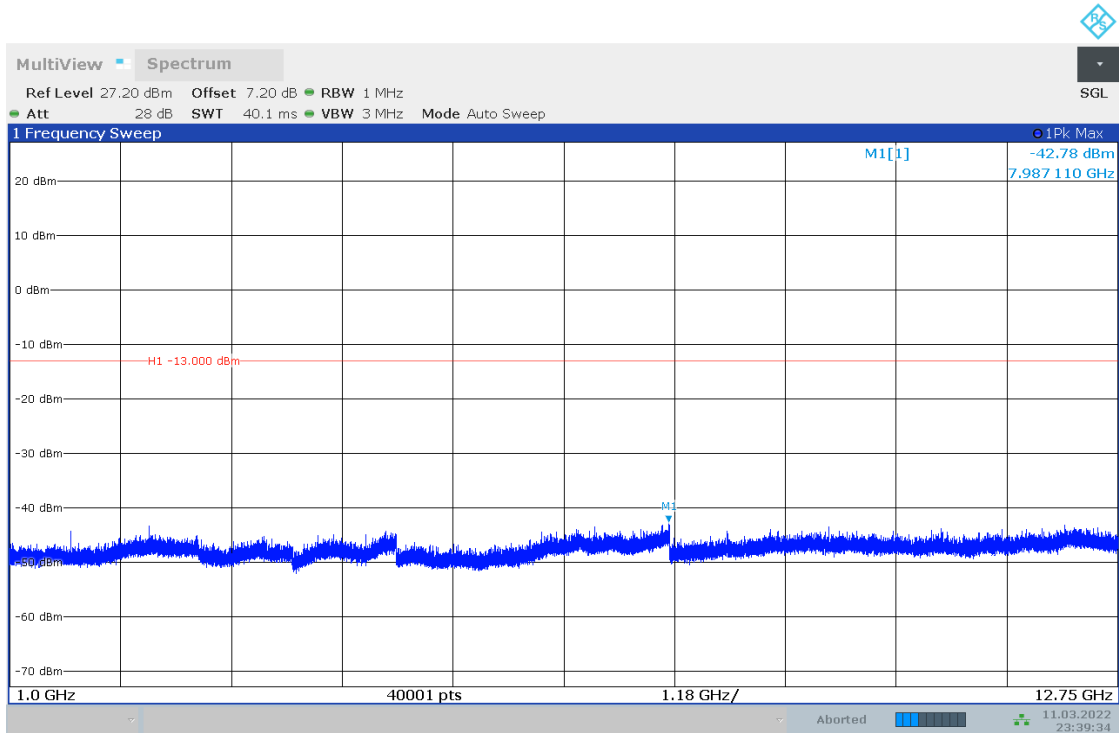


23:38:28 11.03.2022



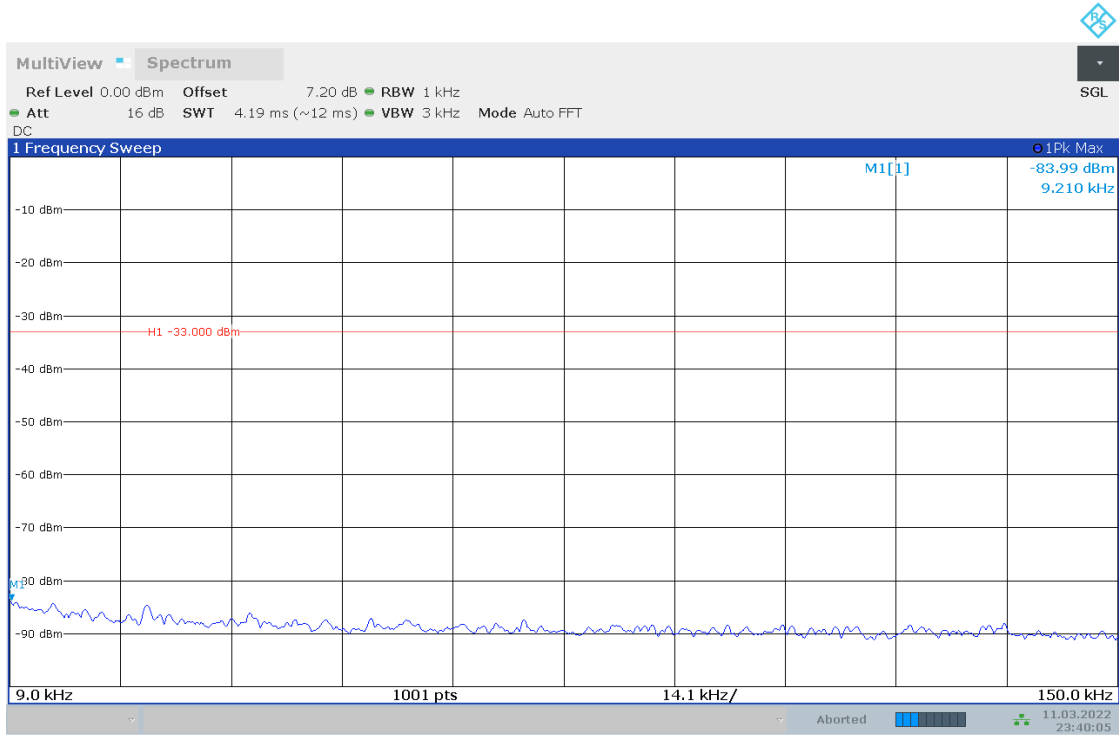


23:39:01 11.03.2022

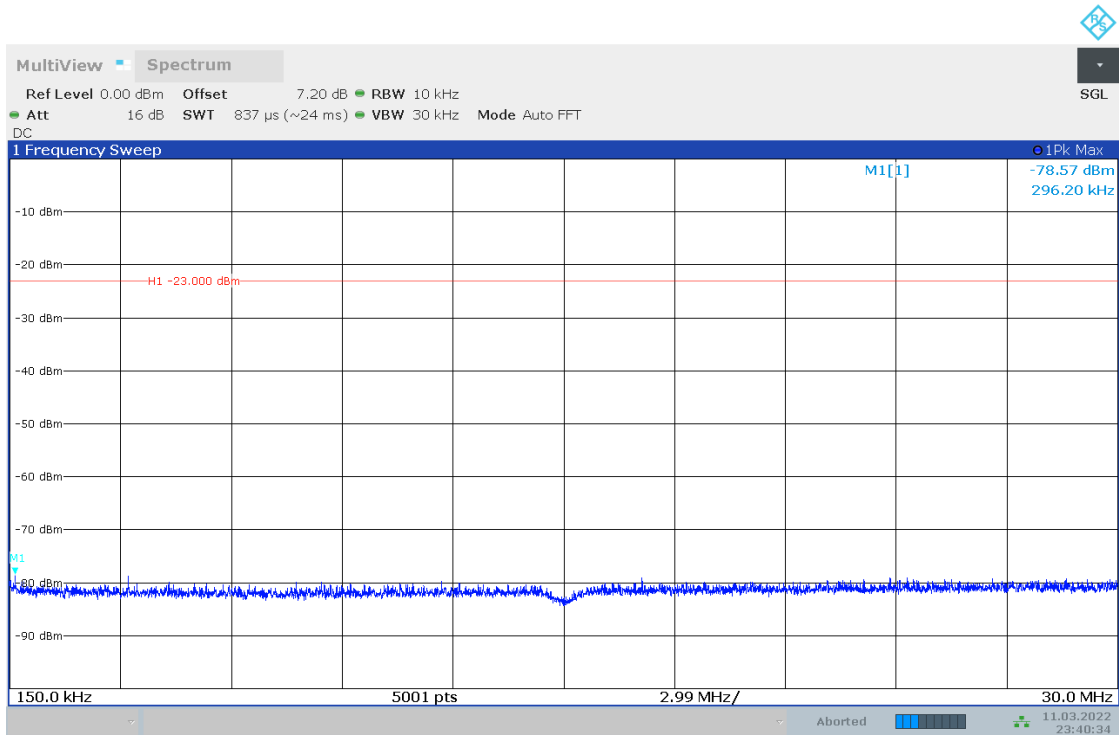


23:39:35 11.03.2022

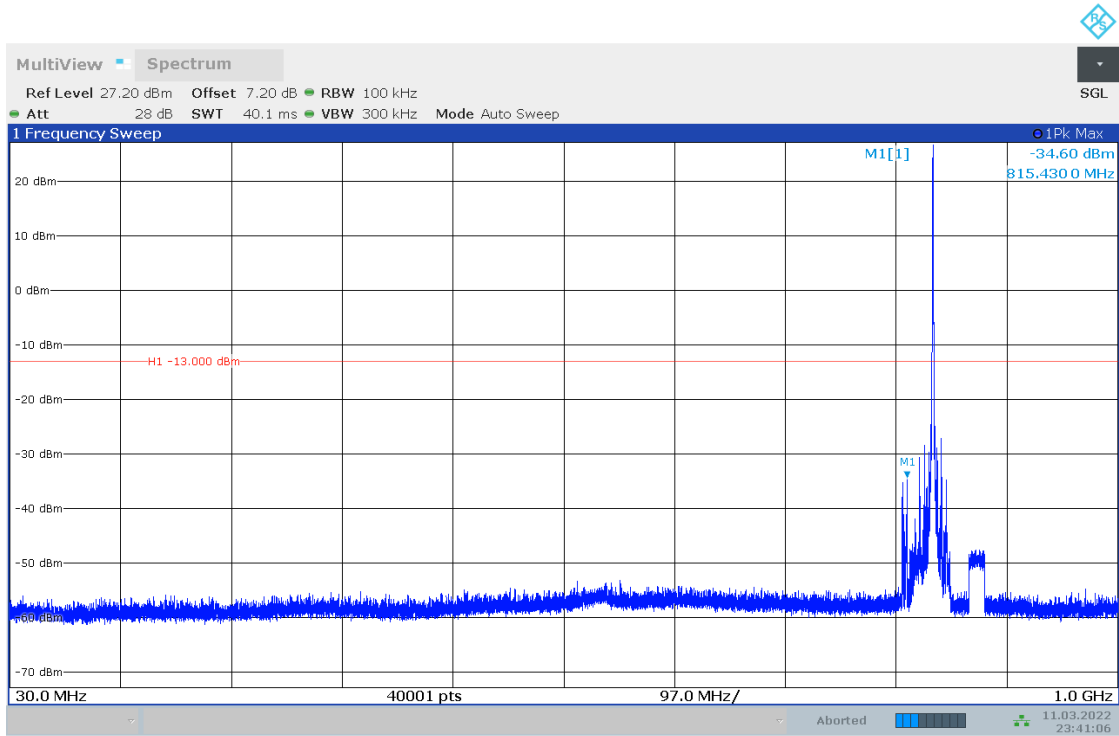
## 6.2.47 TM2\_15MHZ\_LCH\_RB1#74



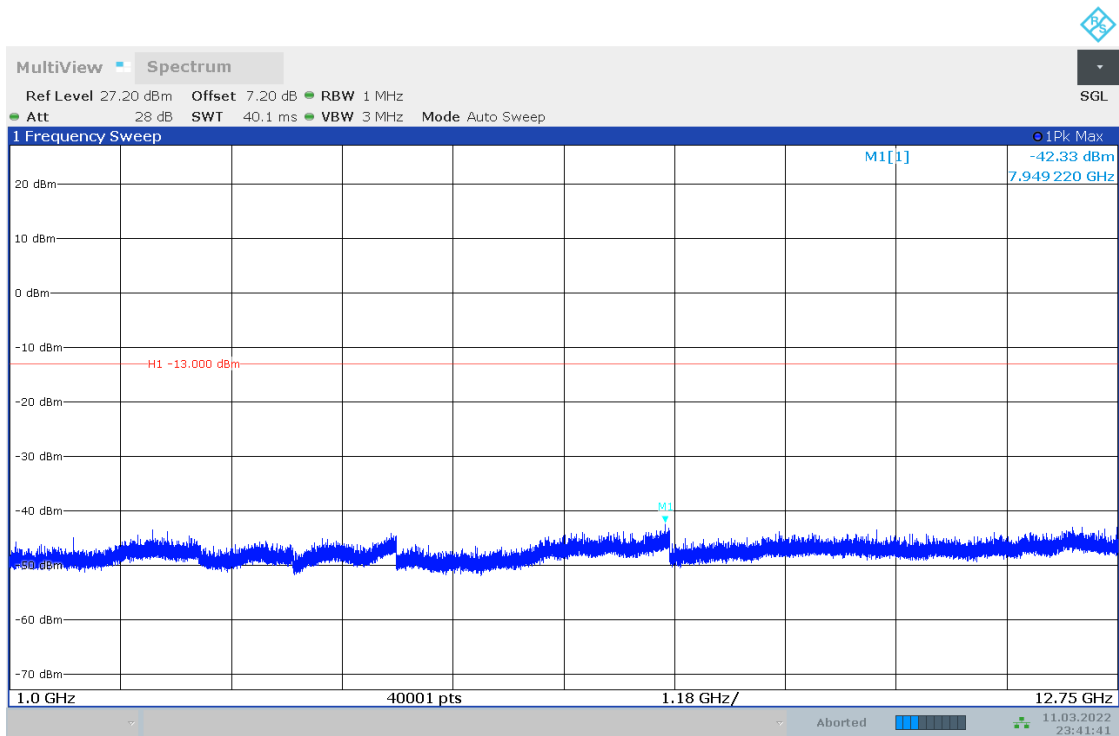
23:40:06 11.03.2022



23:40:35 11.03.2022

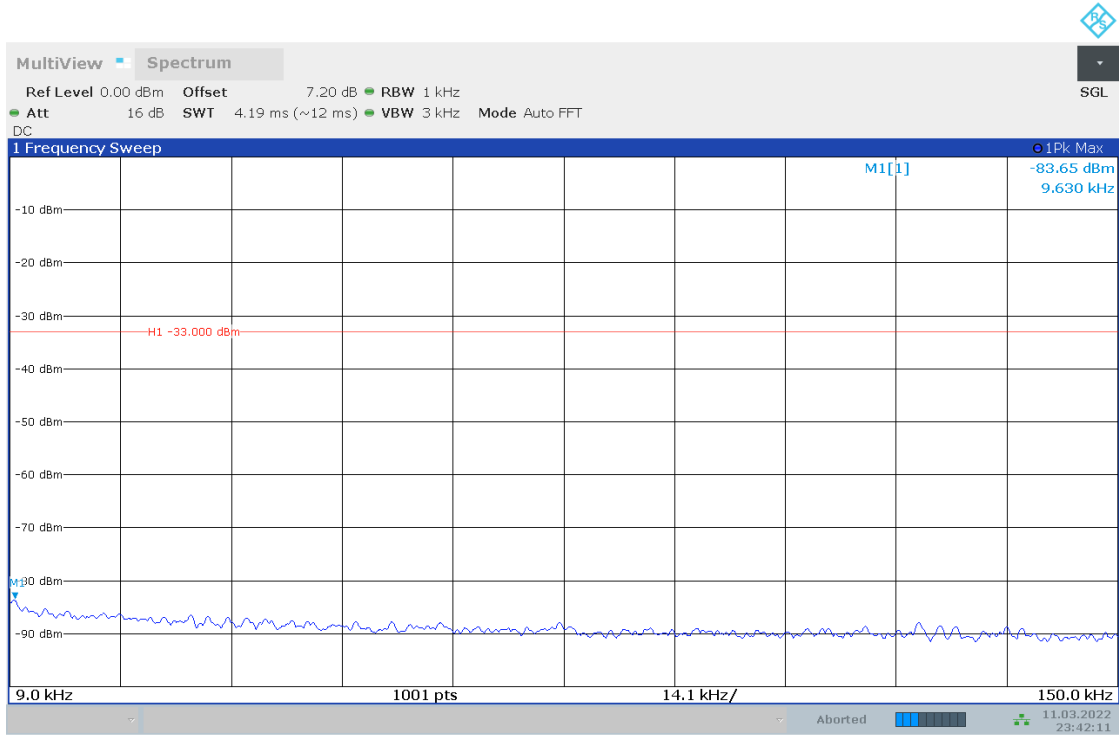


23:41:07 11.03.2022

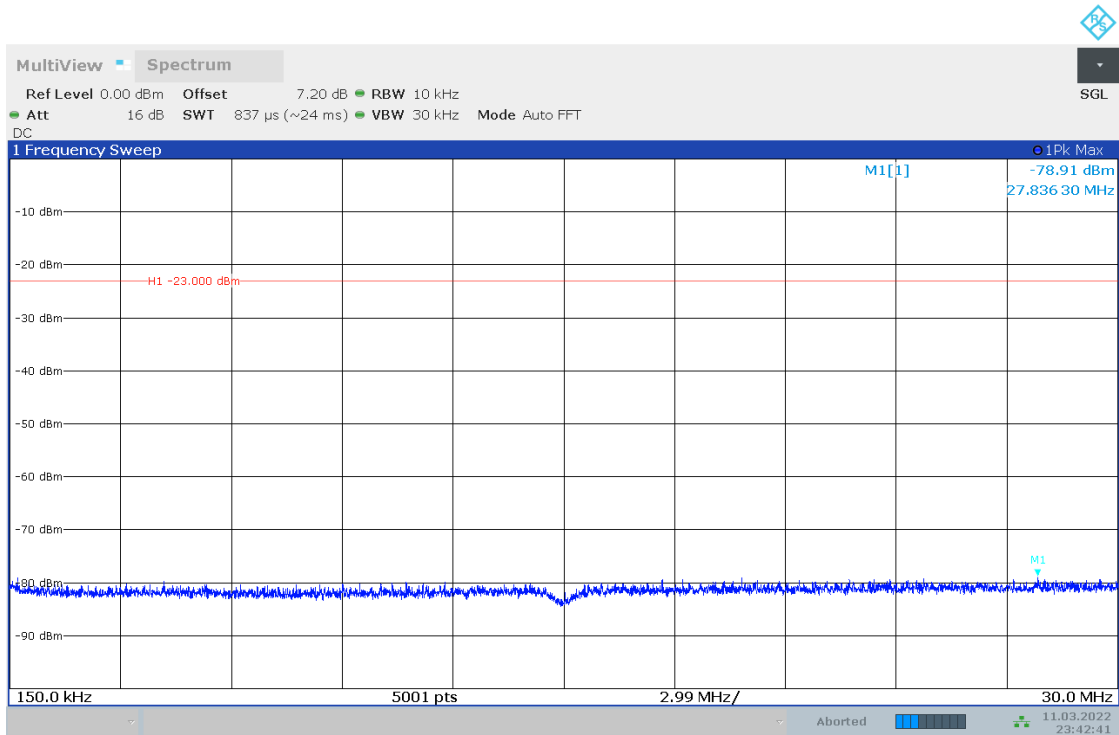


23:41:41 11.03.2022

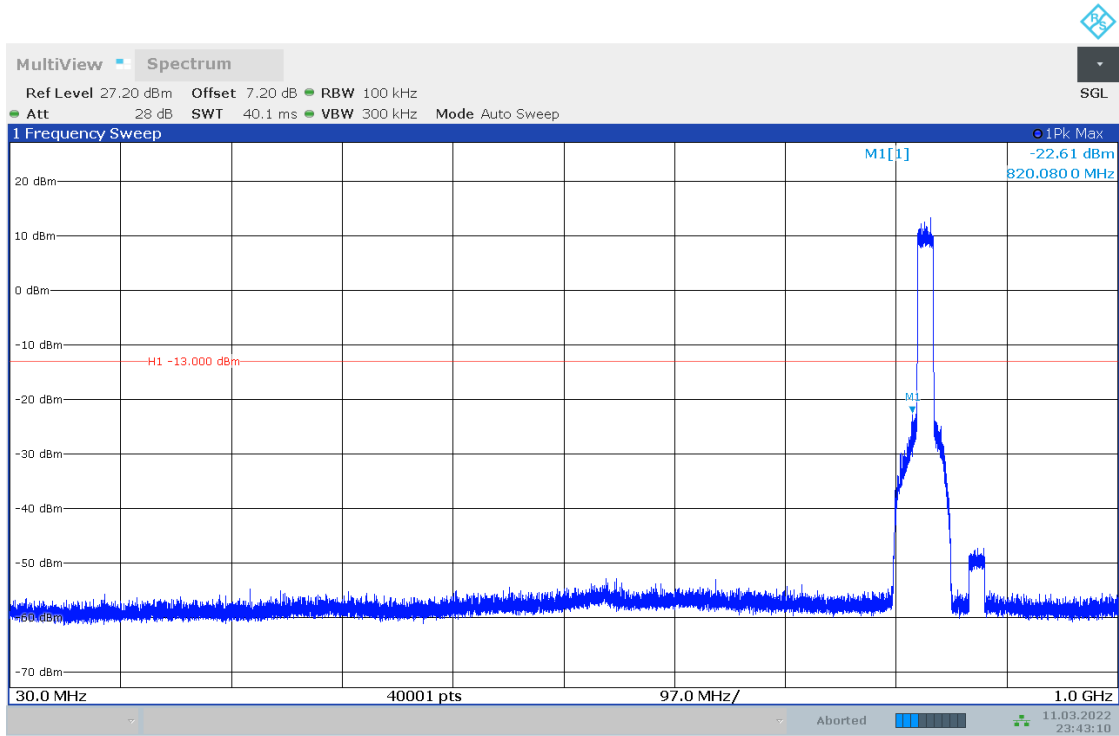
## 6.2.48 TM2\_15MHZ\_LCH\_RB75#0



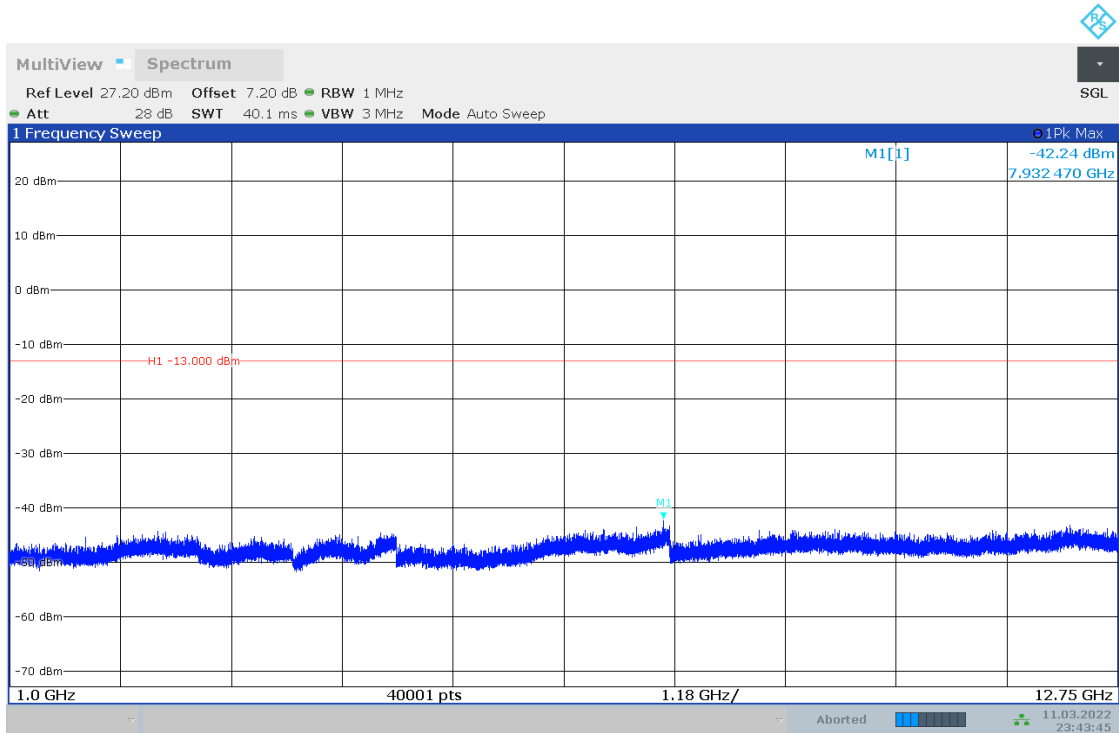
23:42:12 11.03.2022



23:42:41 11.03.2022

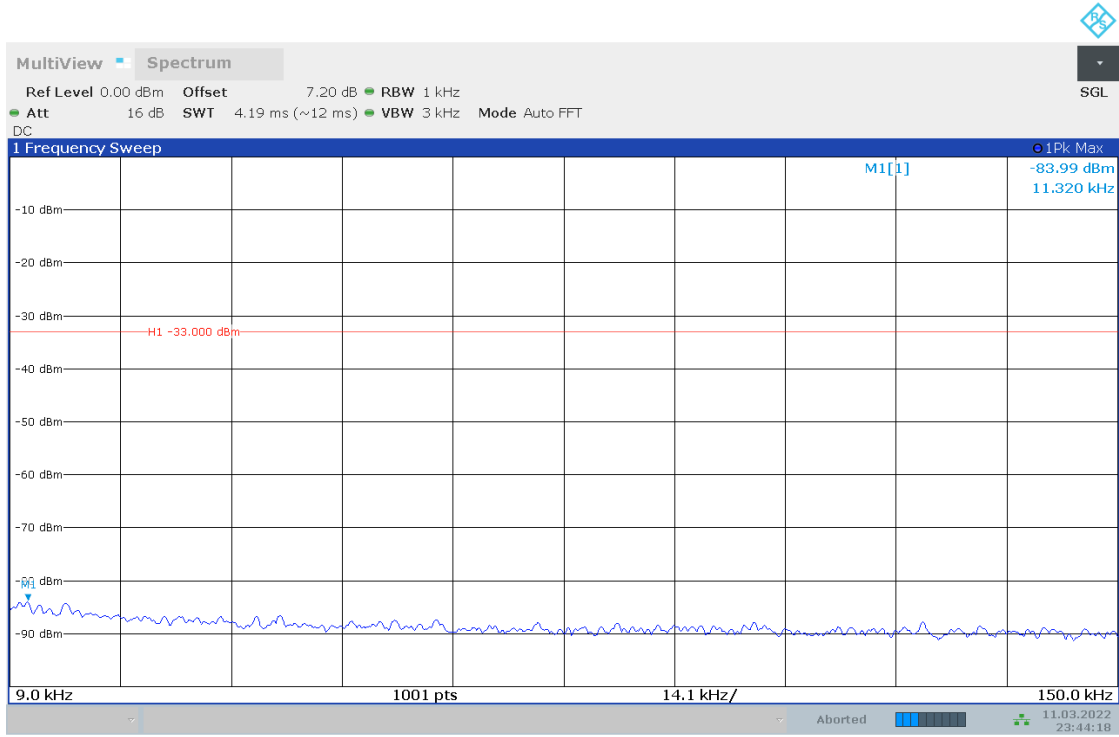


23:43:11 11.03.2022

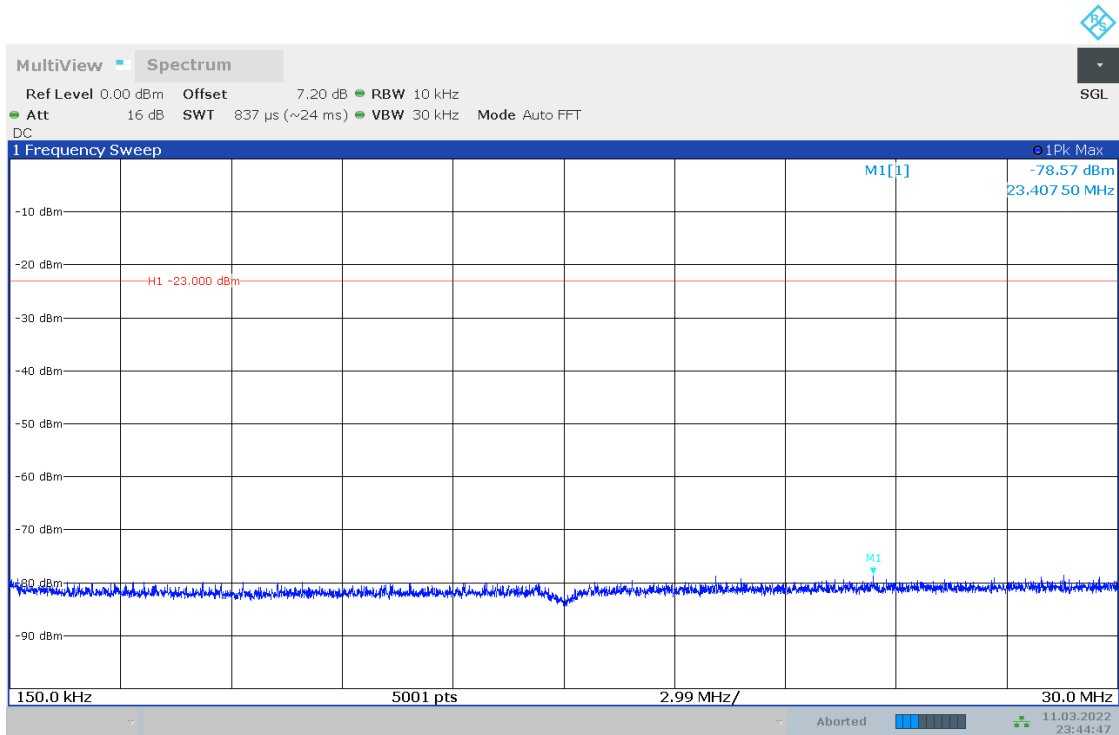


23:43:45 11.03.2022

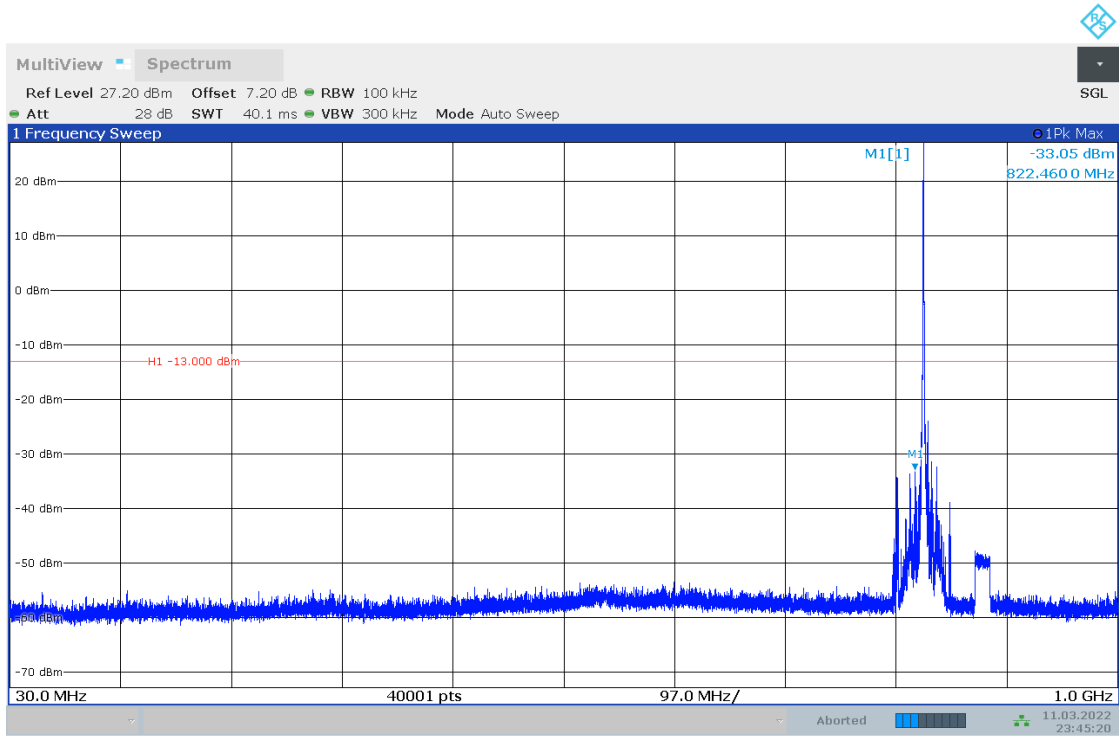
## 6.2.49 TM2\_15MHZ\_MCH\_RB1#0



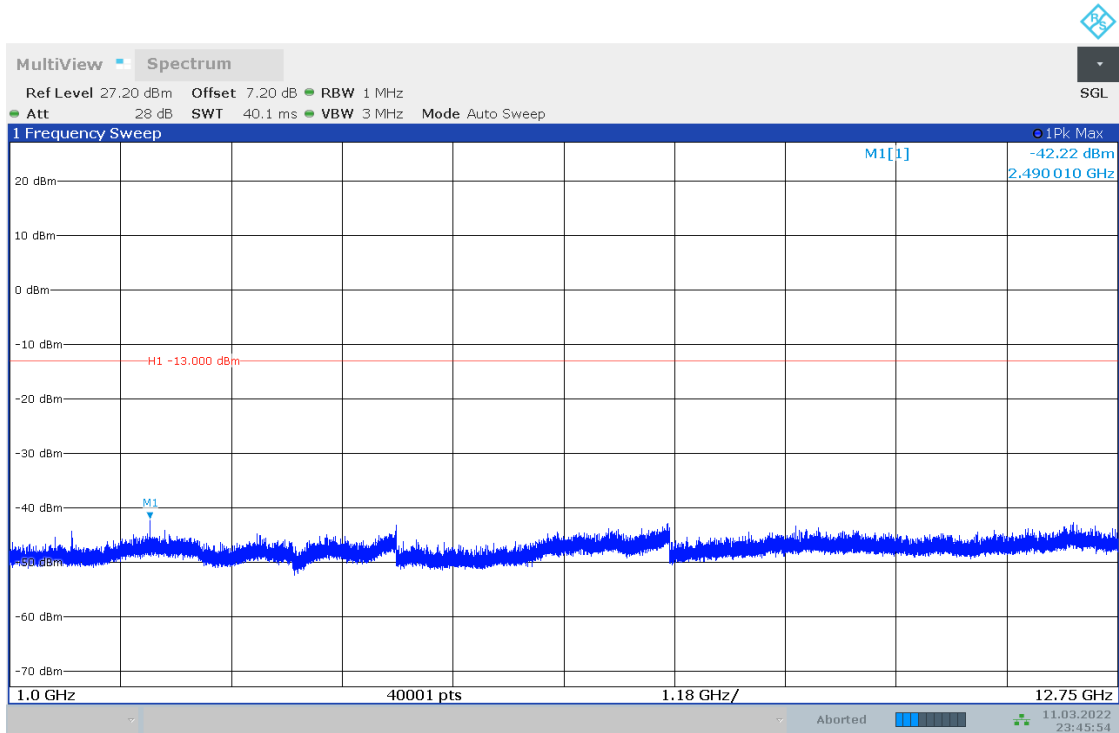
23:44:18 11.03.2022



23:44:47 11.03.2022

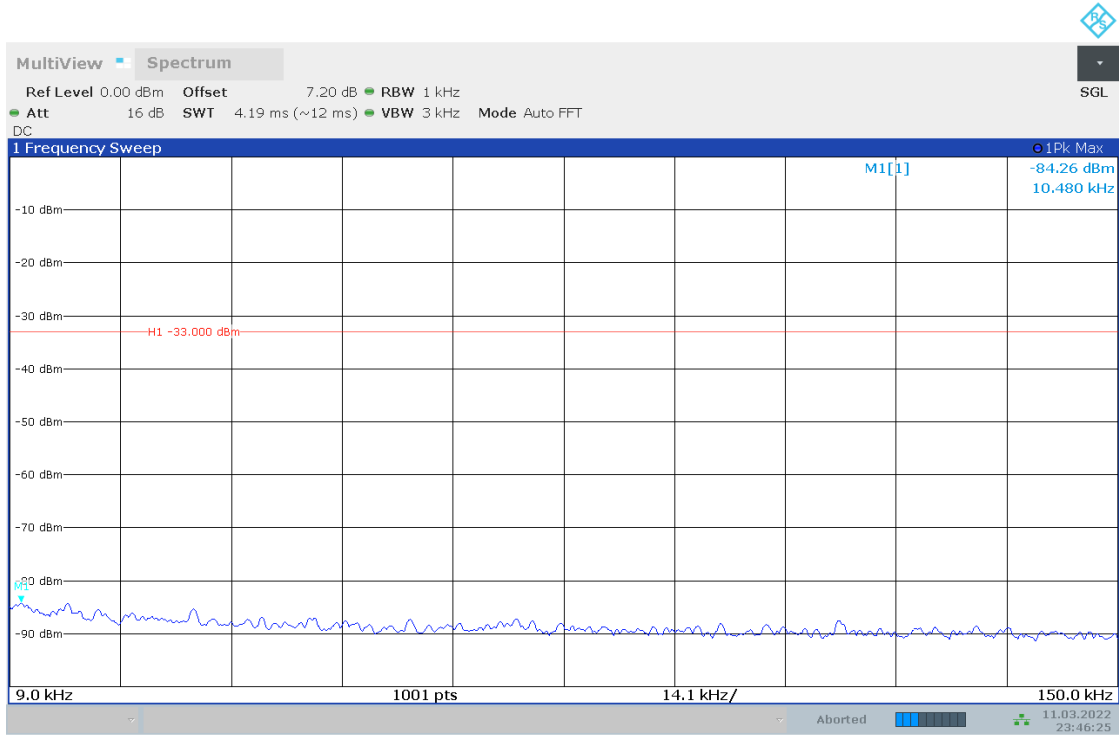


23:45:20 11.03.2022

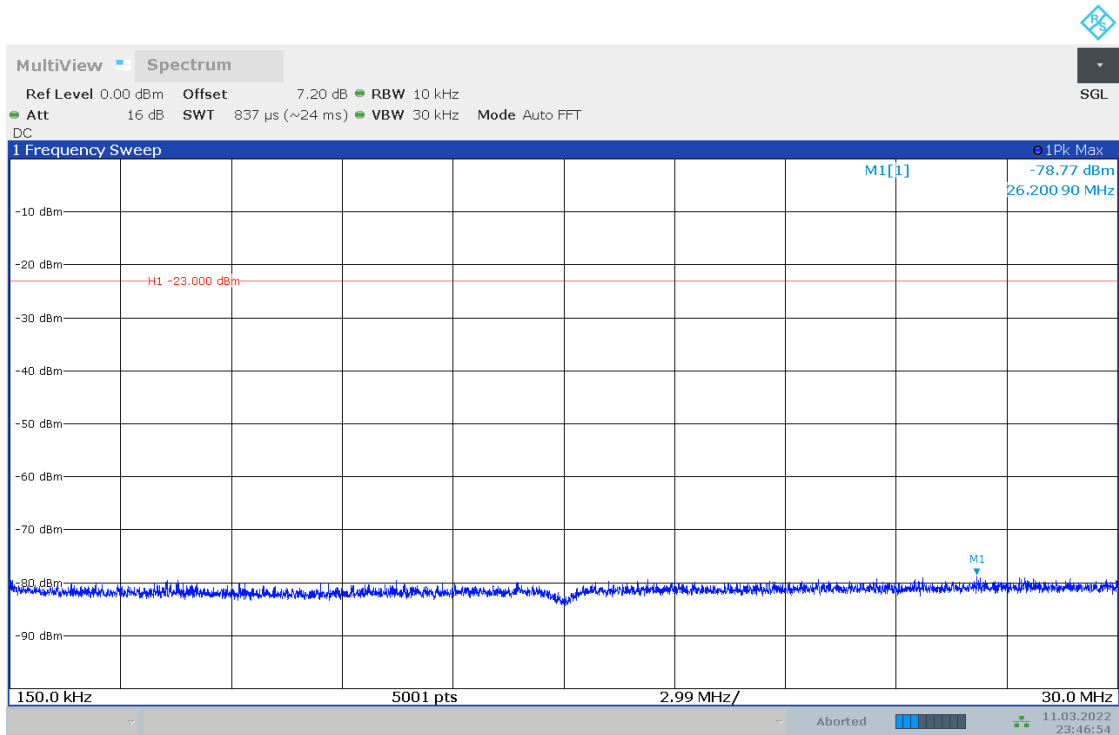


23:45:55 11.03.2022

## 6.2.50 TM2\_15MHZ\_MCH\_RB1#74

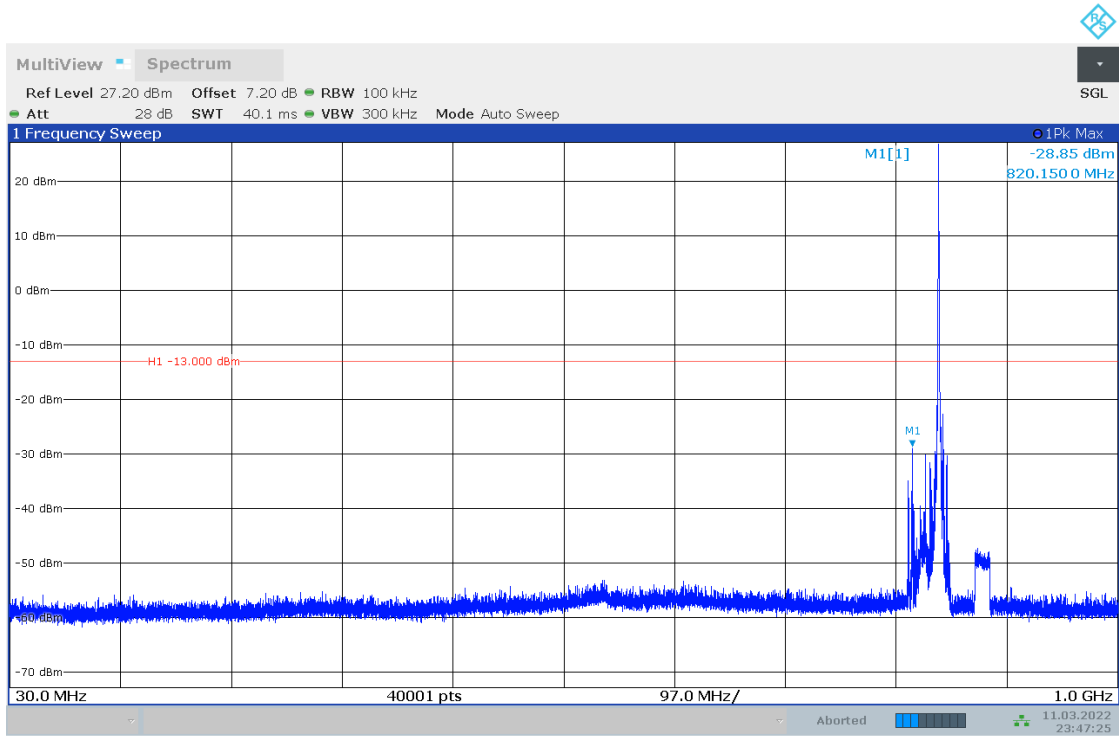


23:46:25 11.03.2022

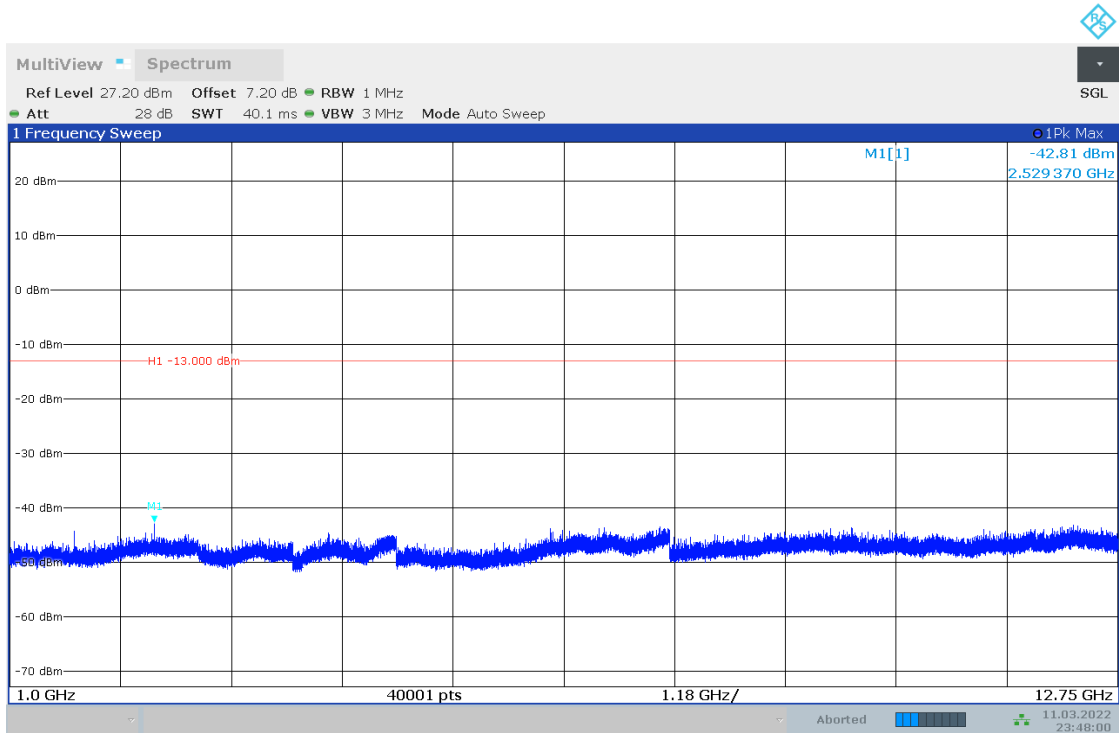


23:46:55 11.03.2022



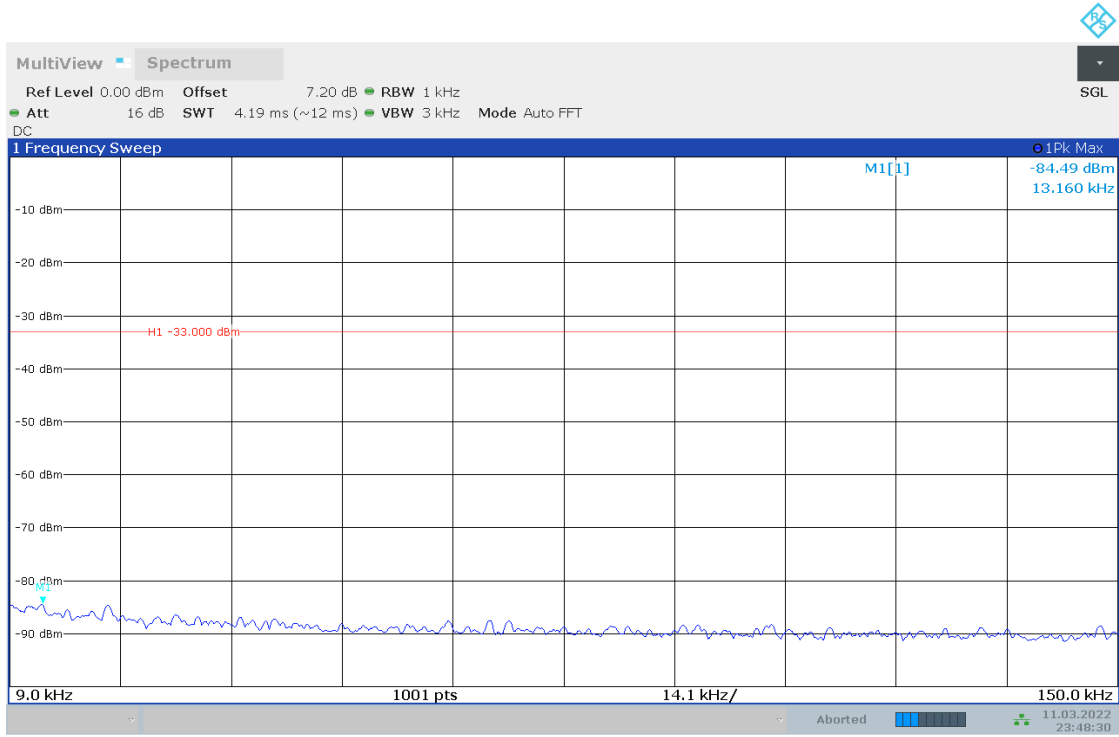


23:47:26 11.03.2022

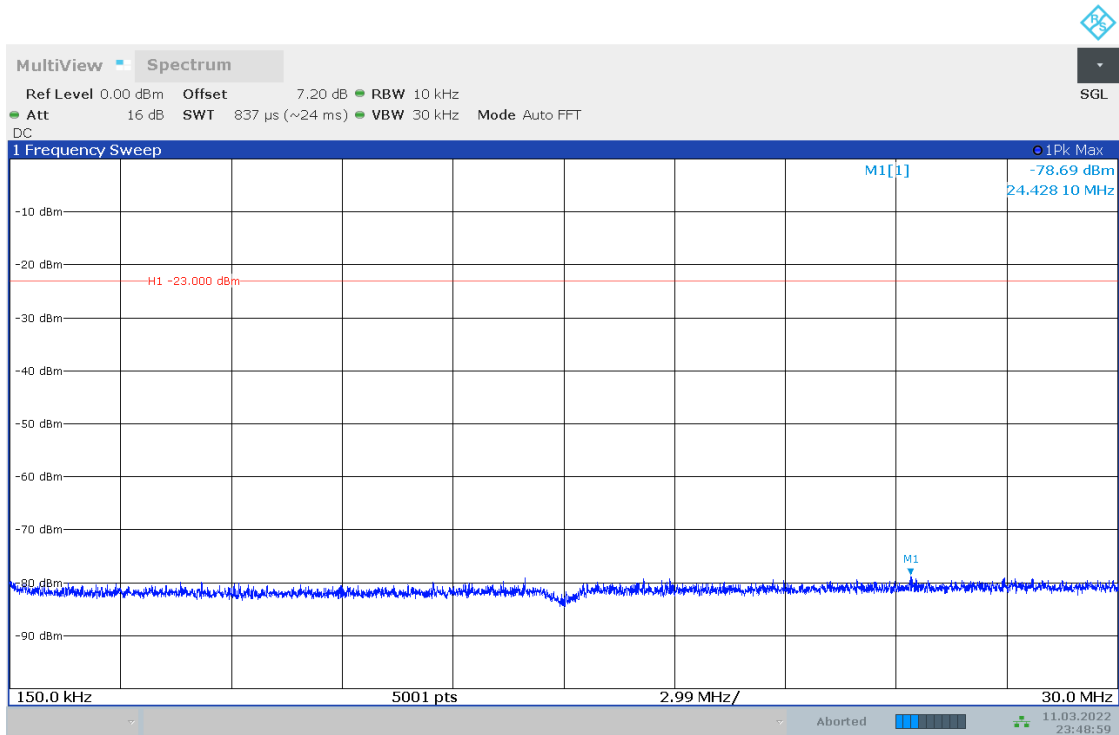


23:48:00 11.03.2022

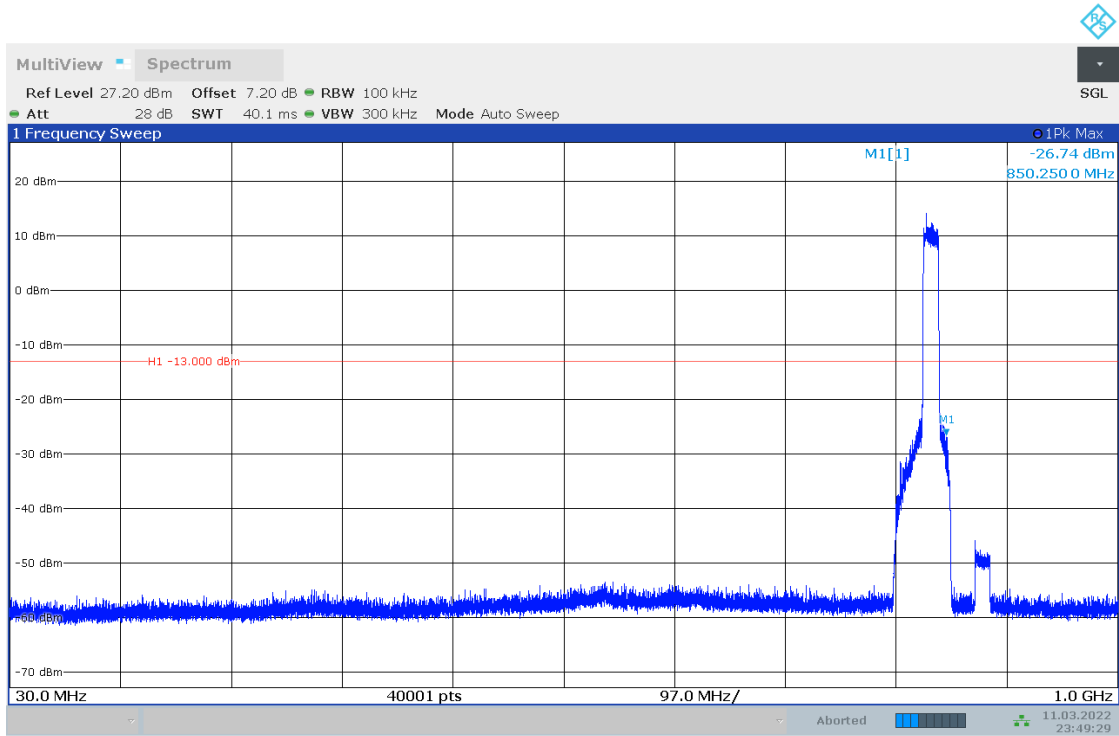
## 6.2.51 TM2\_15MHZ\_MCH\_RB75#0



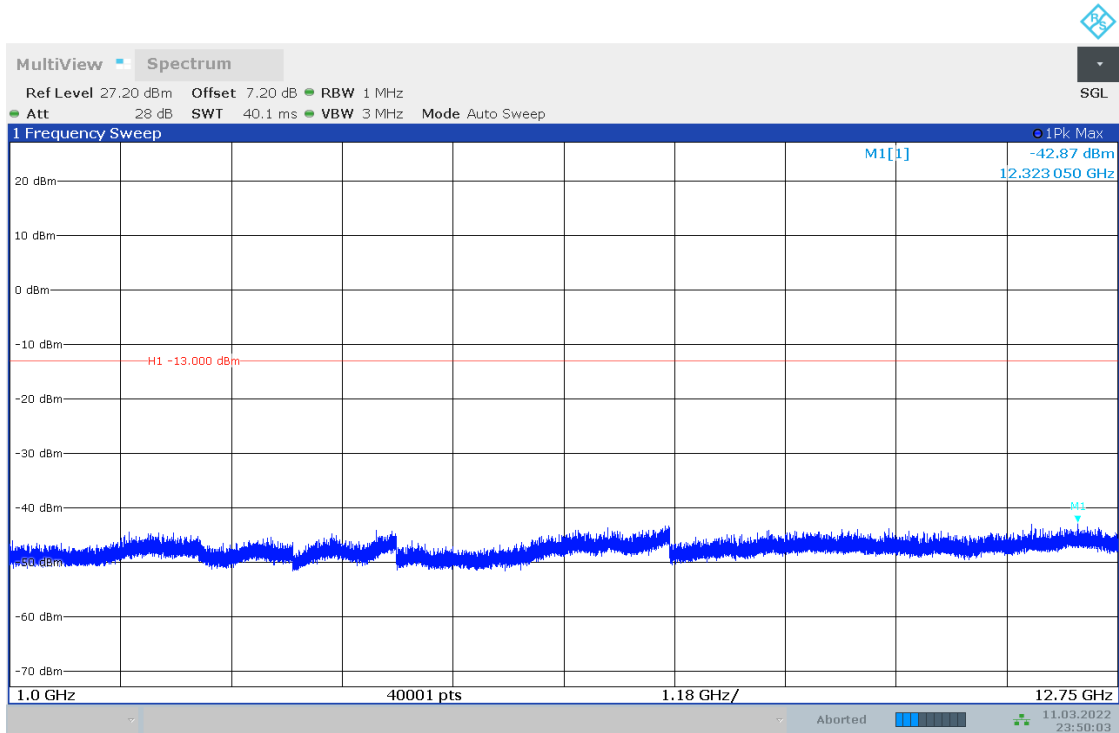
23:48:31 11.03.2022



23:49:00 11.03.2022

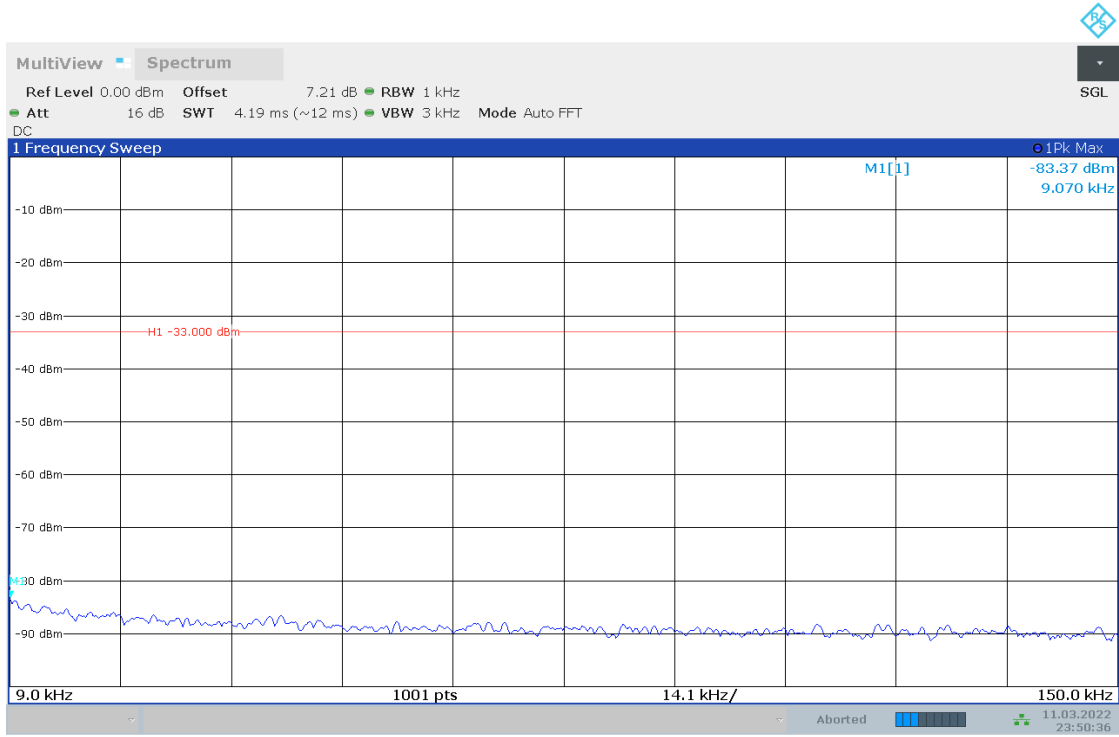


23:49:30 11.03.2022

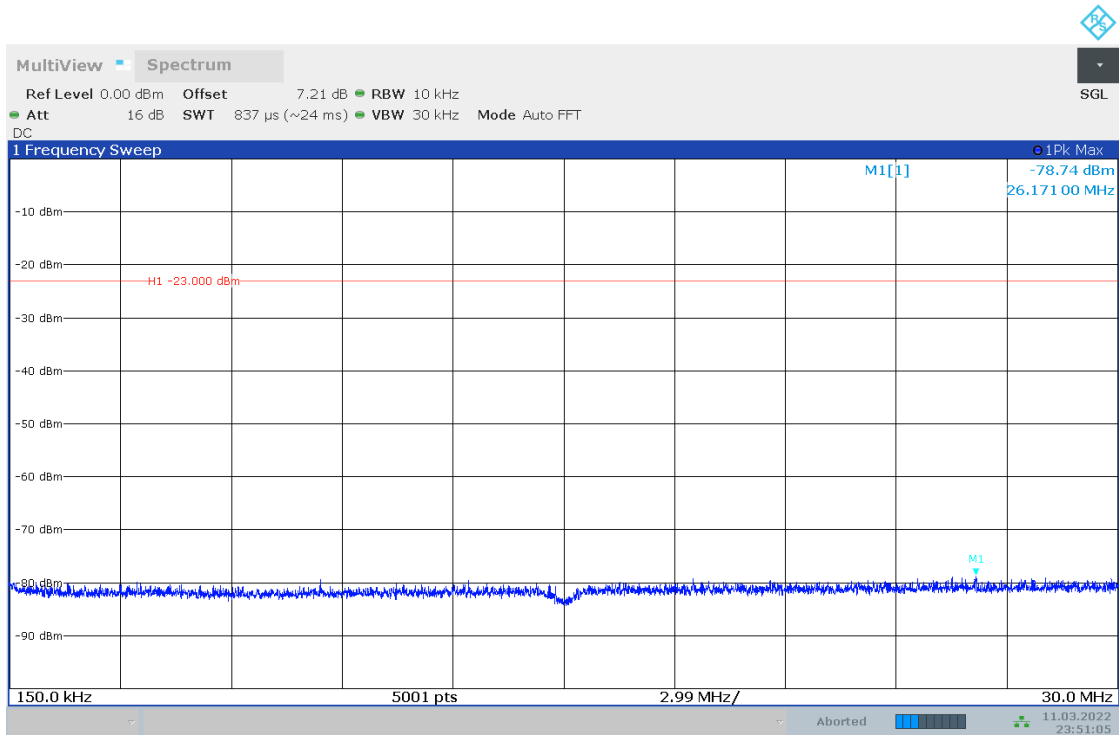


23:50:04 11.03.2022

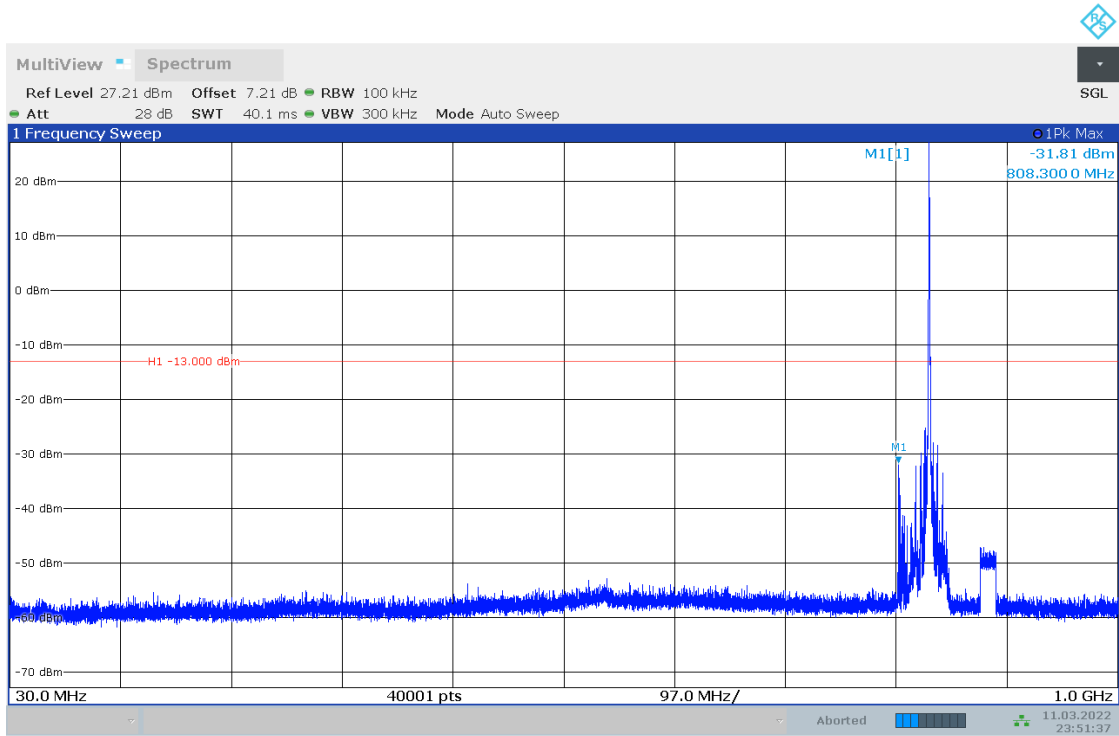
## 6.2.52 TM2\_15MHZ\_HCH\_RB1#0



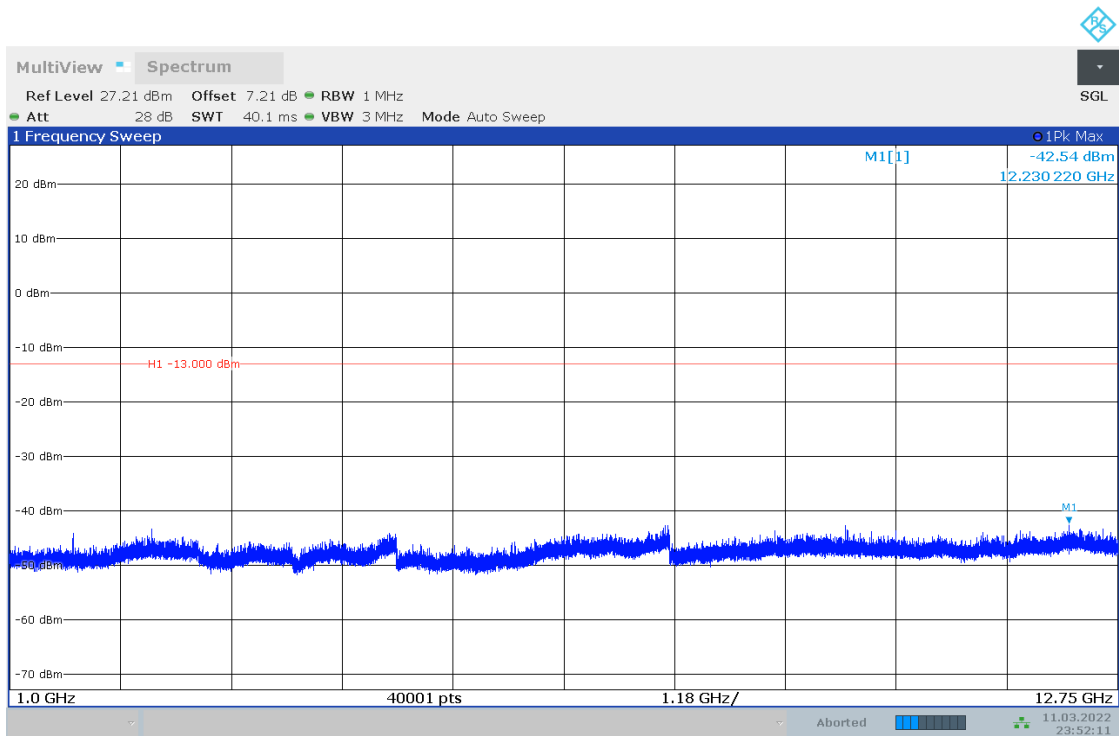
23:50:37 11.03.2022



23:51:06 11.03.2022

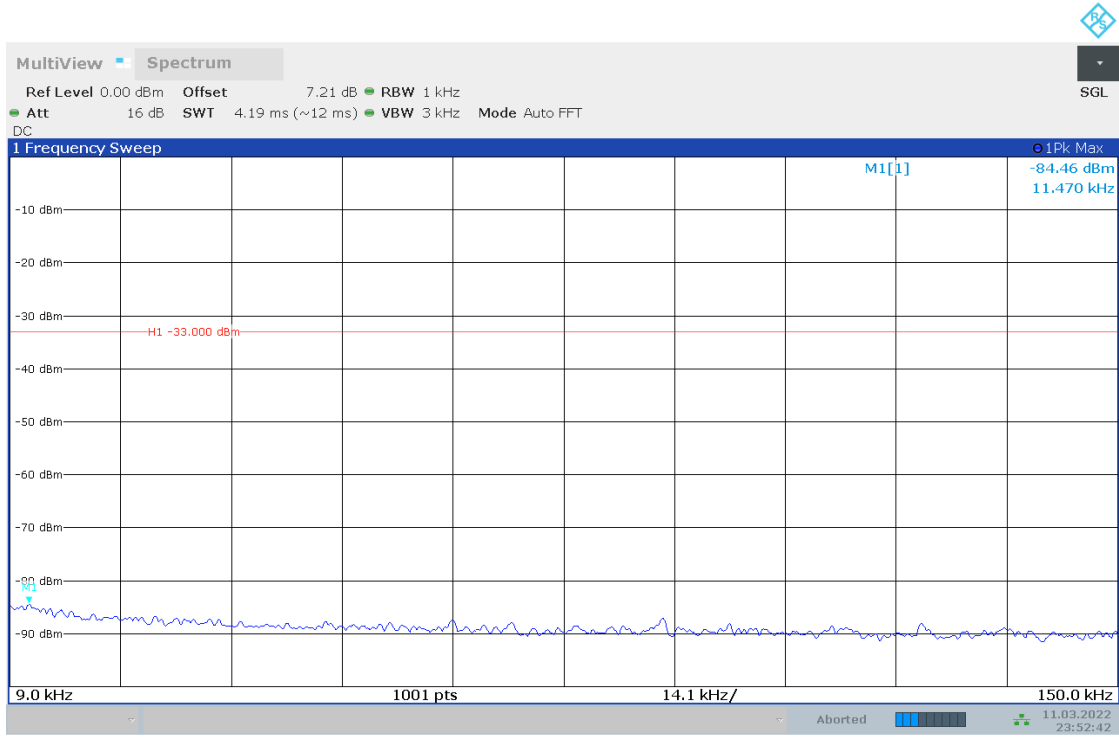


23:51:38 11.03.2022

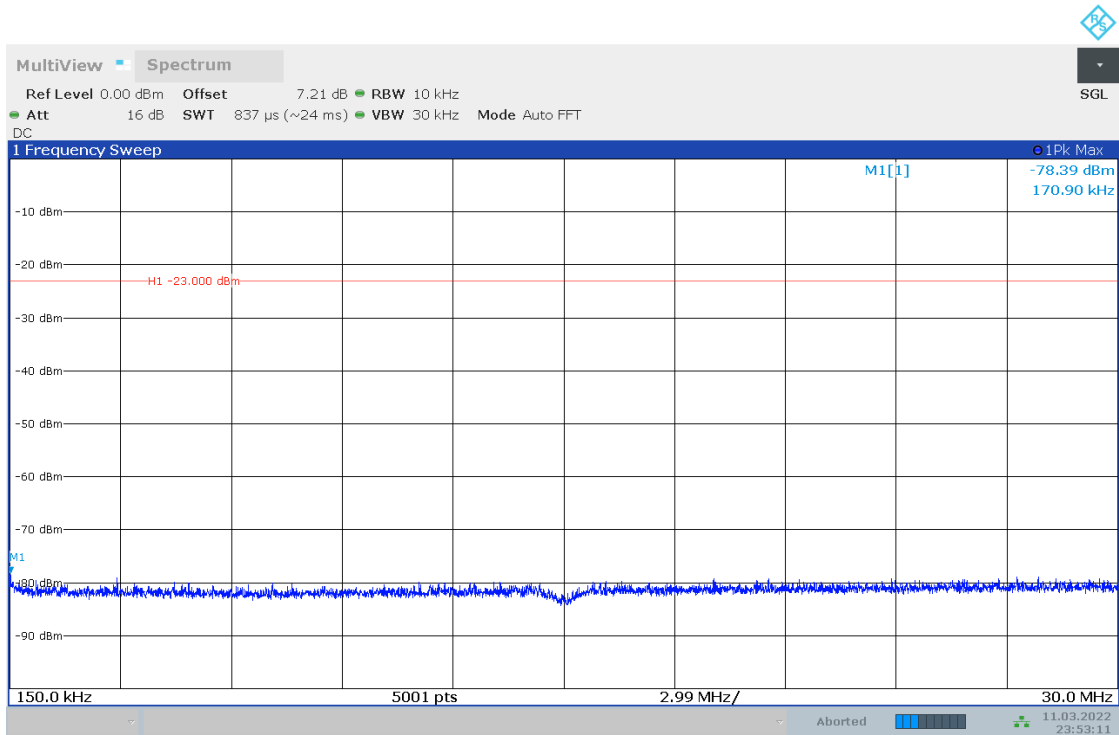


23:52:12 11.03.2022

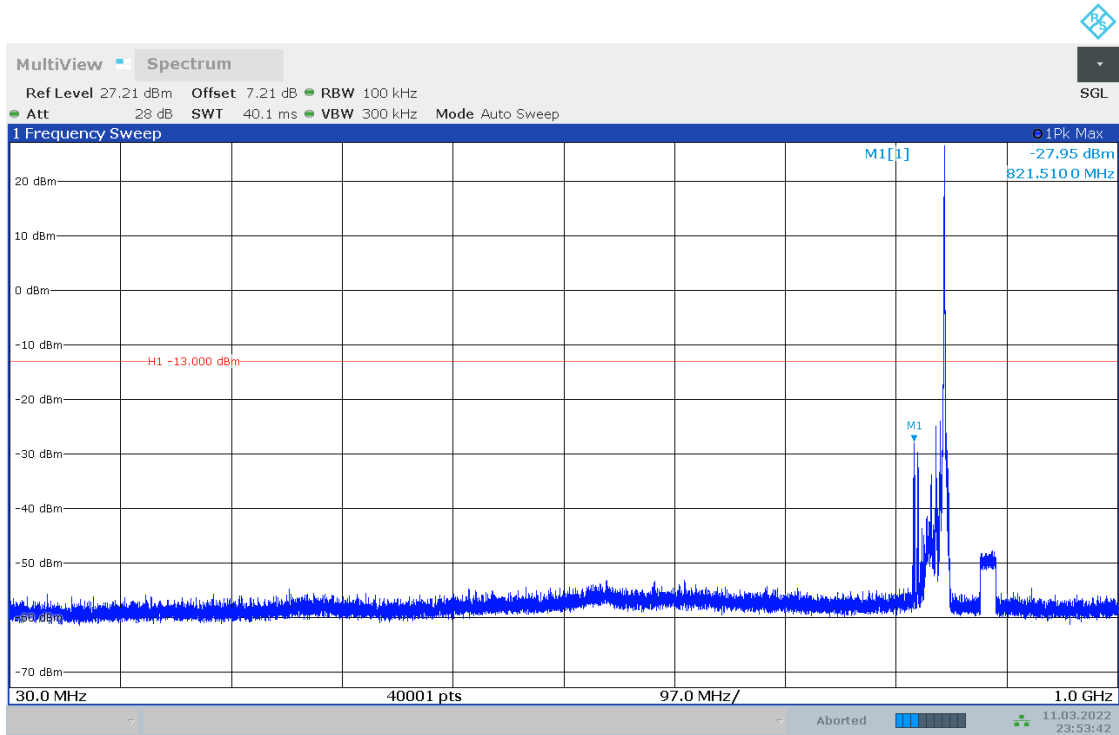
## 6.2.53 TM2\_15MHZ\_HCH\_RB1#74



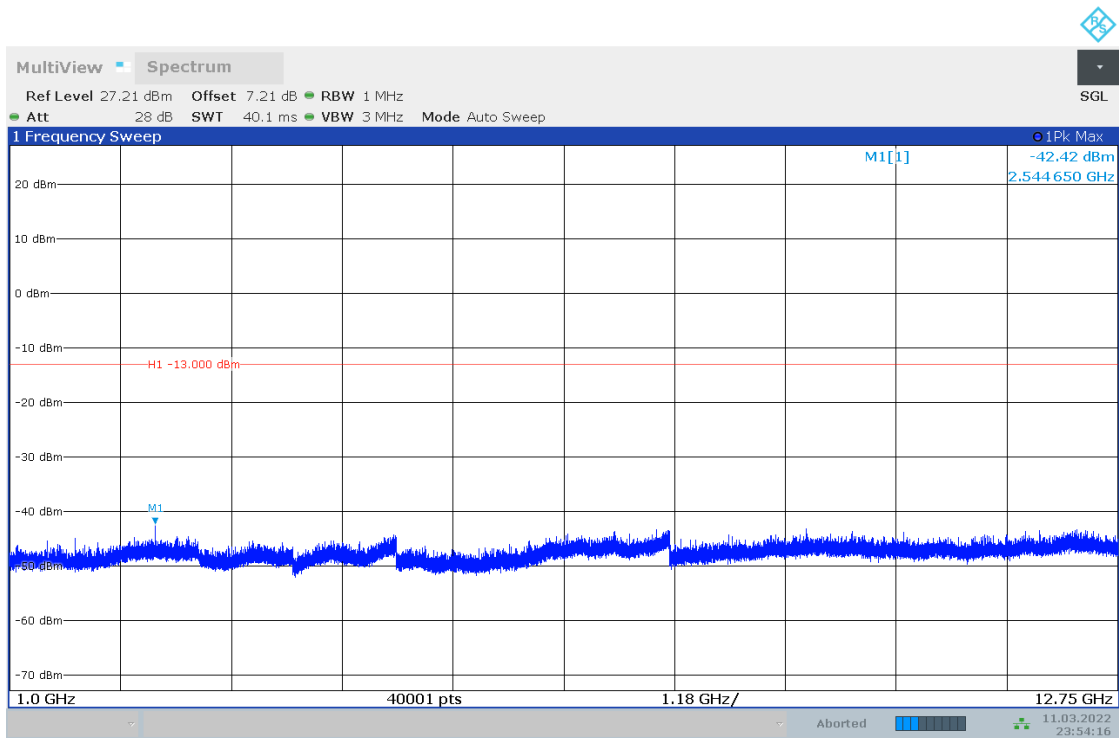
23:52:43 11.03.2022



23:53:12 11.03.2022

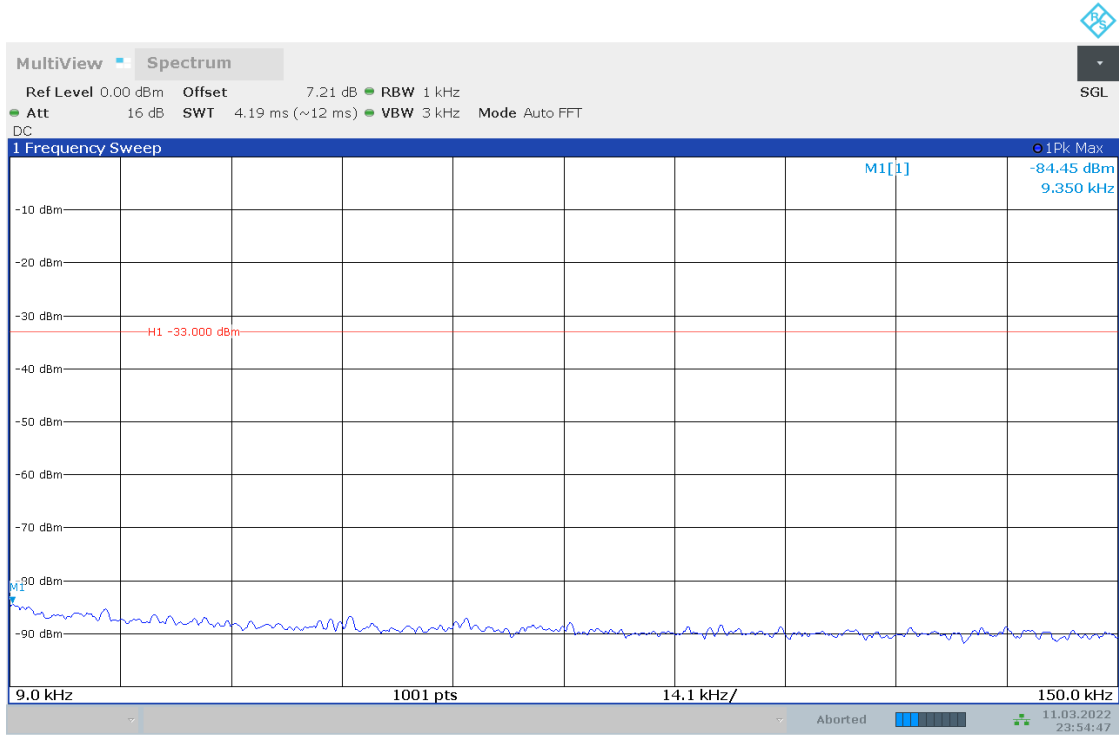


23:53:43 11.03.2022

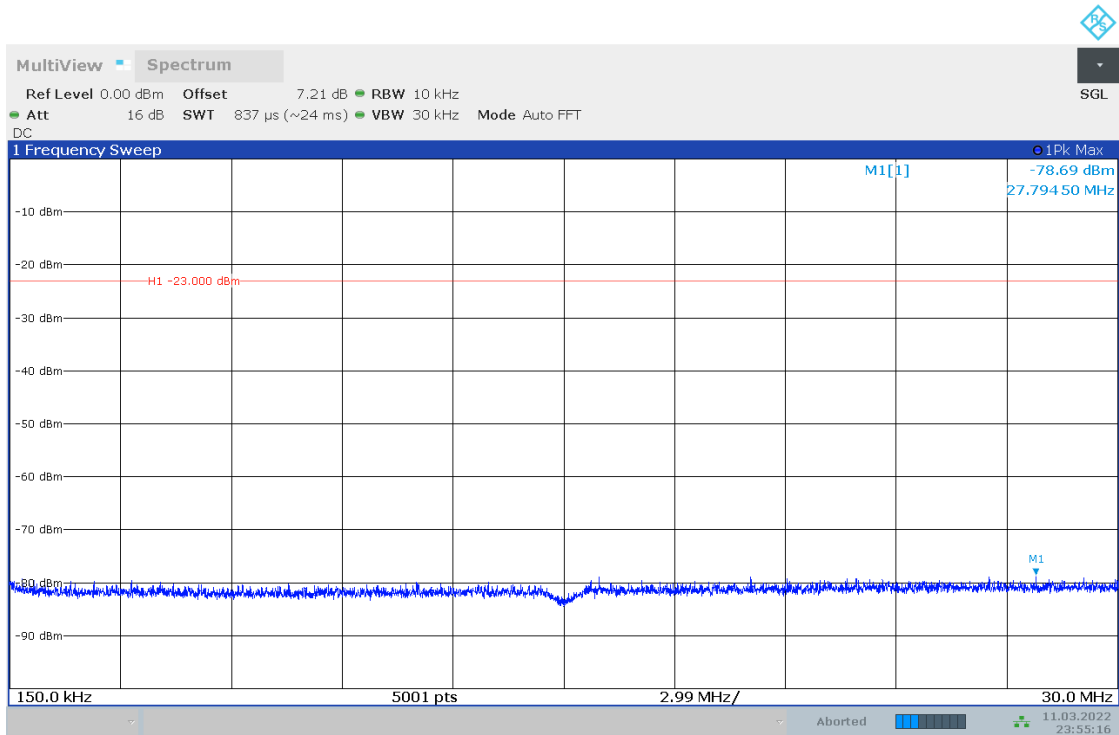


23:54:17 11.03.2022

## 6.2.54 TM2\_15MHZ\_HCH\_RB75#0

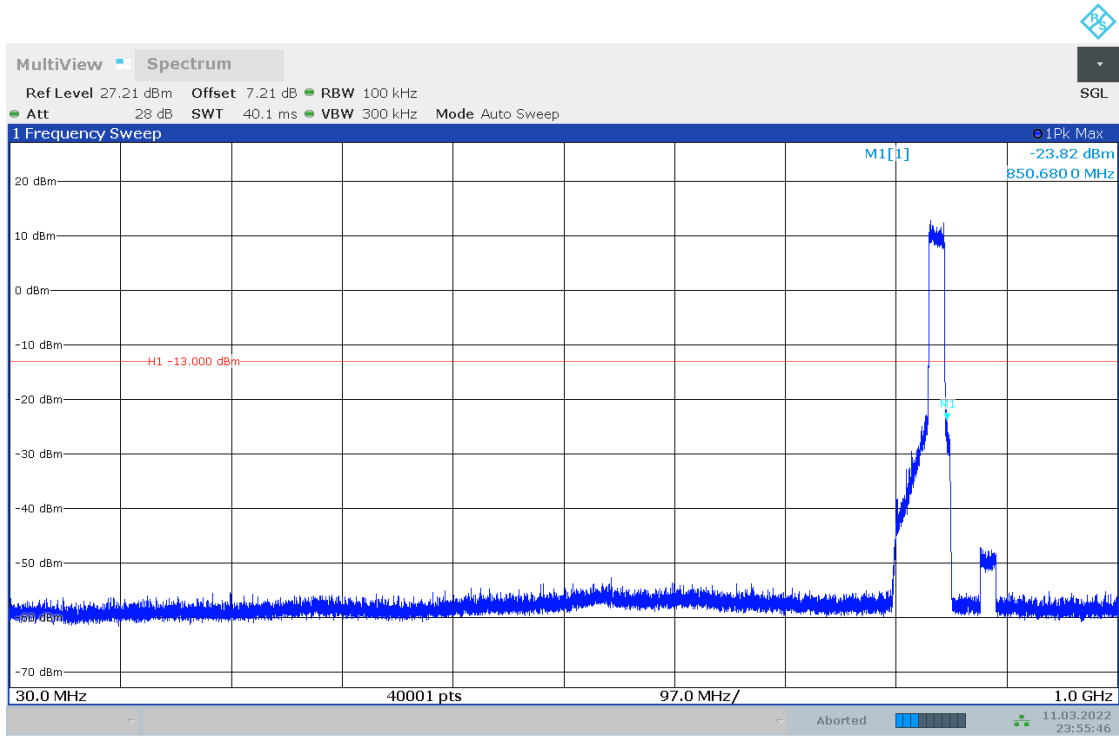


23:54:48 11.03.2022

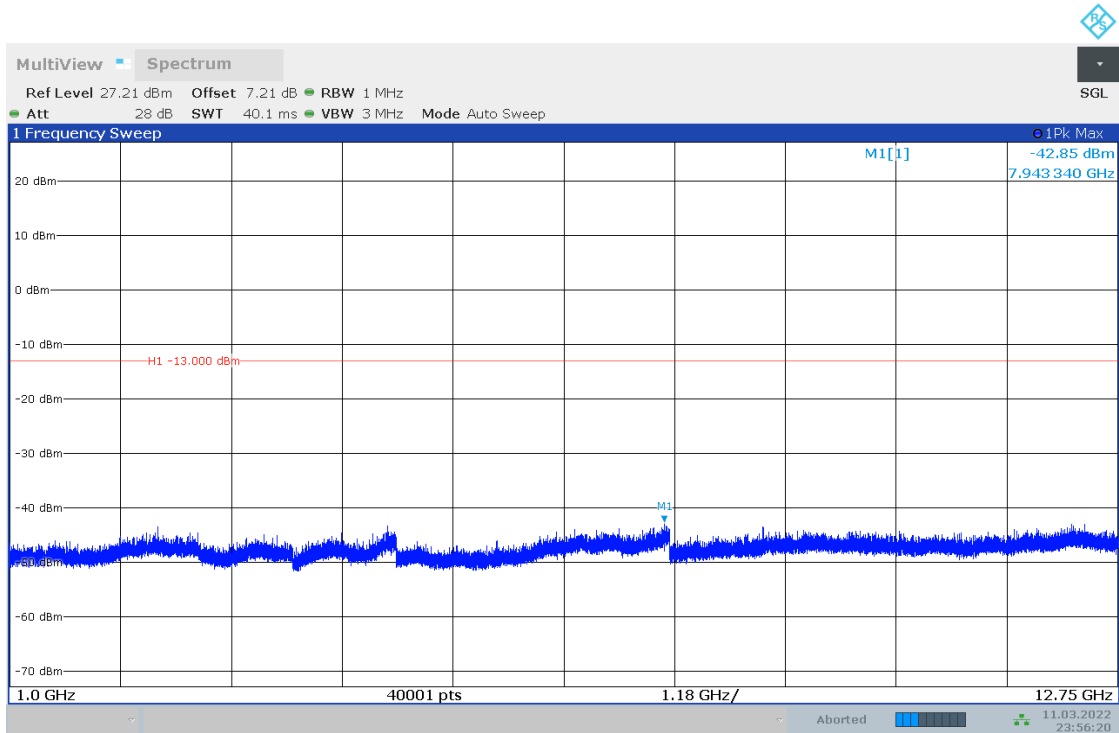


23:55:17 11.03.2022





23:55:47 11.03.2022



23:56:21 11.03.2022

## 7. APPENDIX G - FREQUENCY STABILITY

### 7.1 TEST RESULTS

#### 7.1.1 FREQUENCY ERROR VS. VOLTAGE

Frequency Error vs. Voltage								
Test Mode	Test Bandwidth	Test Channel	Modulation	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM1	1.4	LCH	QPSK	TN	VH	-1.65	0	PASS
			QPSK	TN	VN	6.44	0.01	PASS
			QPSK	TN	VL	-8.75	-0.01	PASS
		MCH	QPSK	TN	VH	12.45	0.01	PASS
			QPSK	TN	VN	1.11	0	PASS
			QPSK	TN	VL	1.58	0	PASS
		HCH	QPSK	TN	VH	-15.53	-0.02	PASS
			QPSK	TN	VN	-13.33	-0.02	PASS
			QPSK	TN	VL	-1.50	0	PASS
	5	LCH	QPSK	TN	VH	-1.59	0	PASS
			QPSK	TN	VN	-7.39	-0.01	PASS
			QPSK	TN	VL	2.86	0	PASS
		MCH	QPSK	TN	VH	1.08	0	PASS
			QPSK	TN	VN	-1.70	0	PASS
			QPSK	TN	VL	-5.14	-0.01	PASS
		HCH	QPSK	TN	VH	-4.55	-0.01	PASS
			QPSK	TN	VN	2.49	0	PASS
			QPSK	TN	VL	9.14	0.01	PASS
	15	LCH	QPSK	TN	VH	12.7	0.02	PASS
			QPSK	TN	VN	1.69	0	PASS
			QPSK	TN	VL	-5.01	-0.01	PASS
		MCH	QPSK	TN	VH	-3.98	0	PASS
			QPSK	TN	VN	-3.15	0	PASS
			QPSK	TN	VL	5.03	0.01	PASS
HCH		QPSK	TN	VH	-3.86	0	PASS	
		QPSK	TN	VN	-2.60	0	PASS	
		QPSK	TN	VL	0.32	0	PASS	

Frequency Error vs. Voltage								
Test Mode	Test Bandwidth	Test Channel	Modulation	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM2	1.4	LCH	16QAM	TN	VH	20.41	0.02	PASS
			16QAM	TN	VN	8.33	0.01	PASS
			16QAM	TN	VL	-0.65	0	PASS
		MCH	16QAM	TN	VH	14.05	0.02	PASS
			16QAM	TN	VN	16.22	0.02	PASS
			16QAM	TN	VL	13.46	0.02	PASS
		HCH	16QAM	TN	VH	18.05	0.02	PASS
			16QAM	TN	VN	-6.74	-0.01	PASS
			16QAM	TN	VL	8.58	0.01	PASS
	5	LCH	16QAM	TN	VH	-1.27	0	PASS
			16QAM	TN	VN	4.95	0.01	PASS
			16QAM	TN	VL	12.54	0.02	PASS
		MCH	16QAM	TN	VH	-5.47	-0.01	PASS
			16QAM	TN	VN	-1.39	0	PASS
			16QAM	TN	VL	0.72	0	PASS
		HCH	16QAM	TN	VH	-4.62	-0.01	PASS
			16QAM	TN	VN	-0.70	0	PASS
			16QAM	TN	VL	9.40	0.01	PASS
	15	LCH	16QAM	TN	VH	6.67	0.01	PASS
			16QAM	TN	VN	8.93	0.01	PASS
			16QAM	TN	VL	-1.41	0	PASS
		MCH	16QAM	TN	VH	-2.74	0	PASS
			16QAM	TN	VN	-1.85	0	PASS
			16QAM	TN	VL	-1.86	0	PASS
		HCH	16QAM	TN	VH	-1.58	0	PASS
			16QAM	TN	VN	1.29	0	PASS
			16QAM	TN	VL	0.66	0	PASS

**7.1.2 FREQUENCY ERROR VS. TEMPERATURE**

Frequency Error vs. Temperature								
Test Mode	Test Bandwidth	Test Channel	Modulation	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM1	1.4	LCH	QPSK	VN	-30	13.91	0.02	PASS
			QPSK	VN	-20	16.58	0.02	PASS
			QPSK	VN	-10	9.05	0.01	PASS
			QPSK	VN	0	5.35	0.01	PASS
			QPSK	VN	10	5.06	0.01	PASS
			QPSK	VN	20	-3.14	0	PASS
			QPSK	VN	30	-5.86	-0.01	PASS
			QPSK	VN	40	-5.76	-0.01	PASS
		MCH	QPSK	VN	50	5.16	0.01	PASS
			QPSK	VN	-30	-17.76	-0.02	PASS
			QPSK	VN	-20	-7.73	-0.01	PASS
			QPSK	VN	-10	4.36	0.01	PASS
			QPSK	VN	0	-0.07	0	PASS
			QPSK	VN	10	1.23	0	PASS
			QPSK	VN	20	4.64	0.01	PASS
			QPSK	VN	30	-2.42	0	PASS
		HCH	QPSK	VN	40	-18.25	-0.02	PASS
			QPSK	VN	50	-0.79	0	PASS
			QPSK	VN	-30	8.77	0.01	PASS
			QPSK	VN	-20	8.42	0.01	PASS
			QPSK	VN	-10	11.24	0.01	PASS
			QPSK	VN	0	16.69	0.02	PASS
			QPSK	VN	10	4.66	0.01	PASS
			QPSK	VN	20	3.98	0	PASS
QPSK	VN	30	-8.61	-0.01	PASS			
QPSK	VN	40	8.86	0.01	PASS			
QPSK	VN	50	-5.06	-0.01	PASS			

Frequency Error vs. Temperature								
Test Mode	Test Bandwidth	Test Channel	Modulation	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM1	5	LCH	QPSK	VN	-30	1.39	0	PASS
			QPSK	VN	-20	-1.58	0	PASS
			QPSK	VN	-10	-1.05	0	PASS
			QPSK	VN	0	-5.1	-0.01	PASS
			QPSK	VN	10	-4.86	-0.01	PASS
			QPSK	VN	20	-2.03	0	PASS
			QPSK	VN	30	-0.97	0	PASS
			QPSK	VN	40	0.46	0	PASS
		MCH	QPSK	VN	50	-5.38	-0.01	PASS
			QPSK	VN	-30	0.32	0	PASS
			QPSK	VN	-20	-2.69	0	PASS
			QPSK	VN	-10	4.14	0	PASS
			QPSK	VN	0	-1.32	0	PASS
			QPSK	VN	10	2.97	0	PASS
			QPSK	VN	20	2.1	0	PASS
			QPSK	VN	30	3.29	0	PASS
		HCH	QPSK	VN	40	0.29	0	PASS
			QPSK	VN	50	0.38	0	PASS
			QPSK	VN	-30	0.81	0	PASS
			QPSK	VN	-20	8.06	0.01	PASS
			QPSK	VN	-10	8.74	0.01	PASS
			QPSK	VN	0	8.18	0.01	PASS
			QPSK	VN	10	-0.44	0	PASS
			QPSK	VN	20	0.54	0	PASS
		QPSK	VN	30	-2.02	0	PASS	
		QPSK	VN	40	-0.49	0	PASS	
		QPSK	VN	50	-3.34	0	PASS	

Frequency Error vs. Temperature								
Test Mode	Test Bandwidth	Test Channel	Modulation	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM1	15	LCH	QPSK	VN	-30	-0.01	0	PASS
			QPSK	VN	-20	1.31	0	PASS
			QPSK	VN	-10	0.82	0	PASS
			QPSK	VN	0	-1.83	0	PASS
			QPSK	VN	10	4.53	0.01	PASS
			QPSK	VN	20	4.94	0.01	PASS
			QPSK	VN	30	0.05	0	PASS
			QPSK	VN	40	2.99	0	PASS
		MCH	QPSK	VN	50	-1.71	0	PASS
			QPSK	VN	-30	-0.28	0	PASS
			QPSK	VN	-20	0.42	0	PASS
			QPSK	VN	-10	-0.23	0	PASS
			QPSK	VN	0	-1.65	0	PASS
			QPSK	VN	10	0.52	0	PASS
			QPSK	VN	20	-6.8	-0.01	PASS
			QPSK	VN	30	-3.34	0	PASS
		HCH	QPSK	VN	40	-7.01	-0.01	PASS
			QPSK	VN	50	-1.78	0	PASS
			QPSK	VN	-30	-4.31	-0.01	PASS
			QPSK	VN	-20	-0.21	0	PASS
			QPSK	VN	-10	-6.7	-0.01	PASS
			QPSK	VN	0	-4.95	-0.01	PASS
			QPSK	VN	10	-2.85	0	PASS
			QPSK	VN	20	3.34	0	PASS
		QPSK	VN	30	-0.79	0	PASS	
		QPSK	VN	40	0.84	0	PASS	
		QPSK	VN	50	2.27	0	PASS	

Frequency Error vs. Temperature								
Test Mode	Test Bandwidth	Test Channel	Modulation	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM2	1.4	LCH	16QAM	VN	-30	-25.8	-0.03	PASS
			16QAM	VN	-20	-14.54	-0.02	PASS
			16QAM	VN	-10	4.9	0.01	PASS
			16QAM	VN	0	13.49	0.02	PASS
			16QAM	VN	10	5.42	0.01	PASS
			16QAM	VN	20	-5.01	-0.01	PASS
			16QAM	VN	30	19.98	0.02	PASS
			16QAM	VN	40	3.71	0	PASS
		MCH	16QAM	VN	50	3.8	0	PASS
			16QAM	VN	-30	-23.73	-0.03	PASS
			16QAM	VN	-20	-9.41	-0.01	PASS
			16QAM	VN	-10	-5.54	-0.01	PASS
			16QAM	VN	0	-3.35	0	PASS
			16QAM	VN	10	-2.86	0	PASS
			16QAM	VN	20	-7.74	-0.01	PASS
			16QAM	VN	30	17.32	0.02	PASS
		HCH	16QAM	VN	40	10.15	0.01	PASS
			16QAM	VN	50	-12.04	-0.01	PASS
			16QAM	VN	-30	-36.14	-0.04	PASS
			16QAM	VN	-20	-1.54	0	PASS
			16QAM	VN	-10	-11.39	-0.01	PASS
			16QAM	VN	0	12.64	0.01	PASS
			16QAM	VN	10	-7.43	-0.01	PASS
			16QAM	VN	20	8.12	0.01	PASS
16QAM	VN	30	-14.66	-0.02	PASS			
16QAM	VN	40	3.14	0	PASS			
16QAM	VN	50	0.15	0	PASS			

Frequency Error vs. Temperature								
Test Mode	Test Bandwidth	Test Channel	Modulation	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM2	5	LCH	16QAM	VN	-30	6.22	0.01	PASS
			16QAM	VN	-20	-1.61	0	PASS
			16QAM	VN	-10	3.13	0	PASS
			16QAM	VN	0	12.59	0.02	PASS
			16QAM	VN	10	-1.24	0	PASS
			16QAM	VN	20	5.47	0.01	PASS
			16QAM	VN	30	-5.52	-0.01	PASS
			16QAM	VN	40	5.78	0.01	PASS
		MCH	16QAM	VN	50	-2.68	0	PASS
			16QAM	VN	-30	3.81	0	PASS
			16QAM	VN	-20	4.21	0.01	PASS
			16QAM	VN	-10	-0.42	0	PASS
			16QAM	VN	0	-1.98	0	PASS
			16QAM	VN	10	-0.08	0	PASS
			16QAM	VN	20	1.43	0	PASS
			16QAM	VN	30	3.26	0	PASS
		HCH	16QAM	VN	40	-0.66	0	PASS
			16QAM	VN	50	-4.02	0	PASS
			16QAM	VN	-30	6.68	0.01	PASS
			16QAM	VN	-20	-5.03	-0.01	PASS
			16QAM	VN	-10	6.69	0.01	PASS
			16QAM	VN	0	-6.16	-0.01	PASS
			16QAM	VN	10	4.58	0.01	PASS
			16QAM	VN	20	1.57	0	PASS
		16QAM	VN	30	-6.62	-0.01	PASS	
		16QAM	VN	40	-2.38	0	PASS	
		16QAM	VN	50	8.22	0.01	PASS	



Frequency Error vs. Temperature								
Test Mode	Test Bandwidth	Test Channel	Modulation	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM2	15	LCH	16QAM	VN	-30	0.74	0	PASS
			16QAM	VN	-20	2.13	0	PASS
			16QAM	VN	-10	2.54	0	PASS
			16QAM	VN	0	0.59	0	PASS
			16QAM	VN	10	5.73	0.01	PASS
			16QAM	VN	20	3.46	0	PASS
			16QAM	VN	30	1.97	0	PASS
			16QAM	VN	40	6.73	0.01	PASS
		16QAM	VN	50	3.04	0	PASS	
		MCH	16QAM	VN	-30	-6.14	-0.01	PASS
			16QAM	VN	-20	-4.49	-0.01	PASS
			16QAM	VN	-10	-3.97	0	PASS
			16QAM	VN	0	-1.62	0	PASS
			16QAM	VN	10	-0.89	0	PASS
			16QAM	VN	20	-7.08	-0.01	PASS
			16QAM	VN	30	0.69	0	PASS
			16QAM	VN	40	-2.28	0	PASS
		16QAM	VN	50	-4.2	-0.01	PASS	
		HCH	16QAM	VN	-30	-0.48	0	PASS
			16QAM	VN	-20	3.17	0	PASS
			16QAM	VN	-10	0.83	0	PASS
			16QAM	VN	0	1.02	0	PASS
			16QAM	VN	10	2.09	0	PASS
			16QAM	VN	20	1	0	PASS
			16QAM	VN	30	2.03	0	PASS
			16QAM	VN	40	-4.27	-0.01	PASS
		16QAM	VN	50	-2.38	0	PASS	

End of Test Report