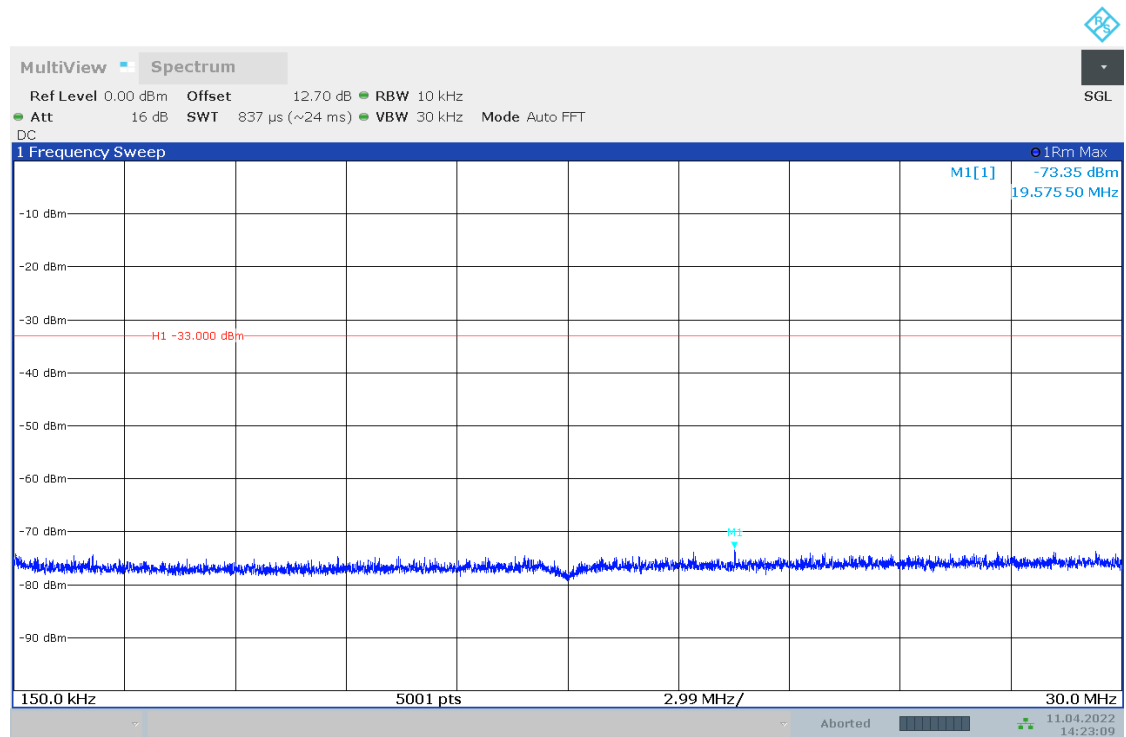
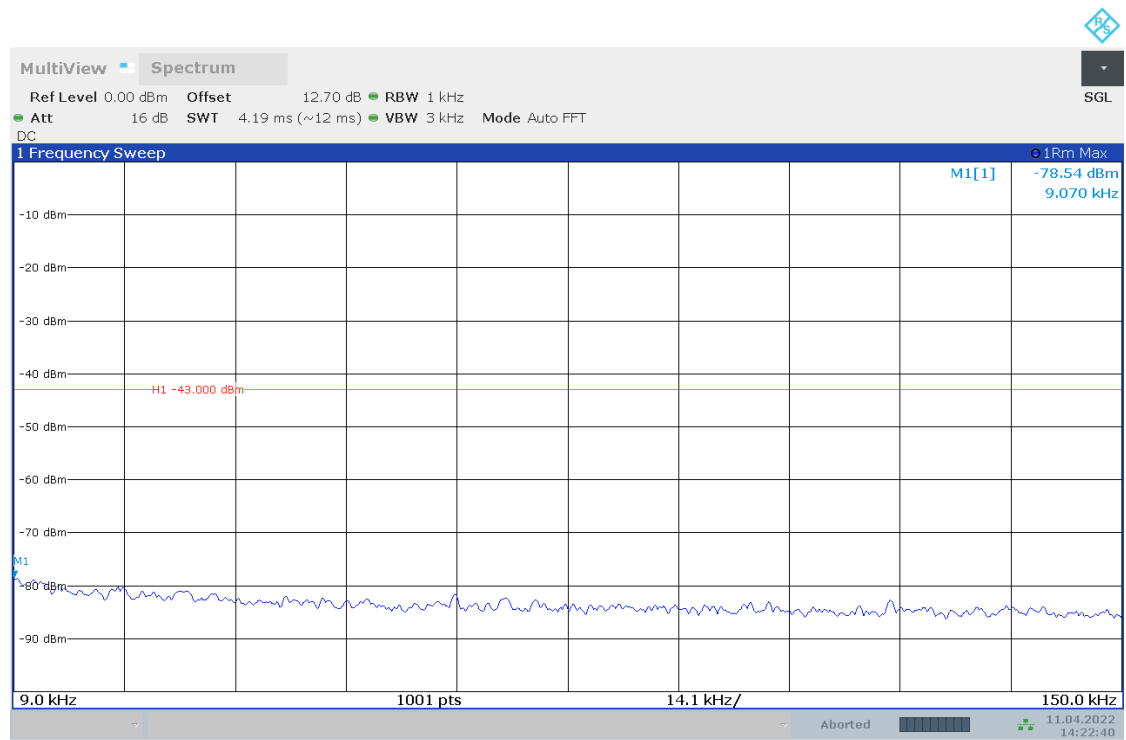
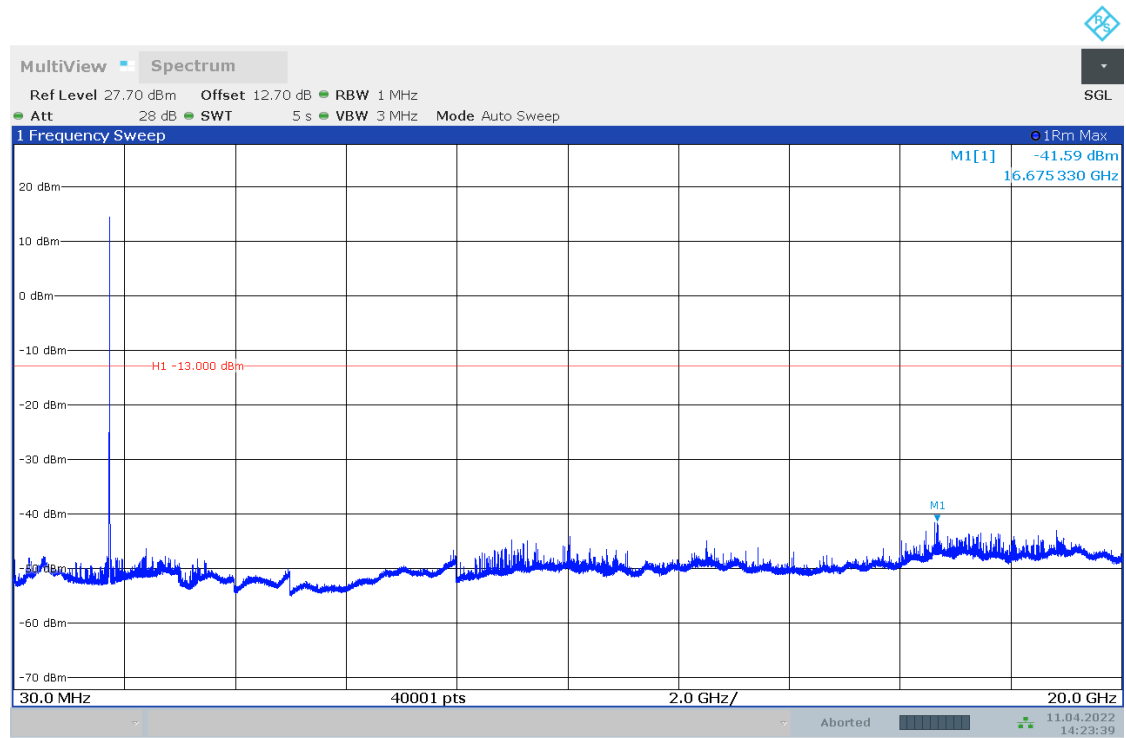
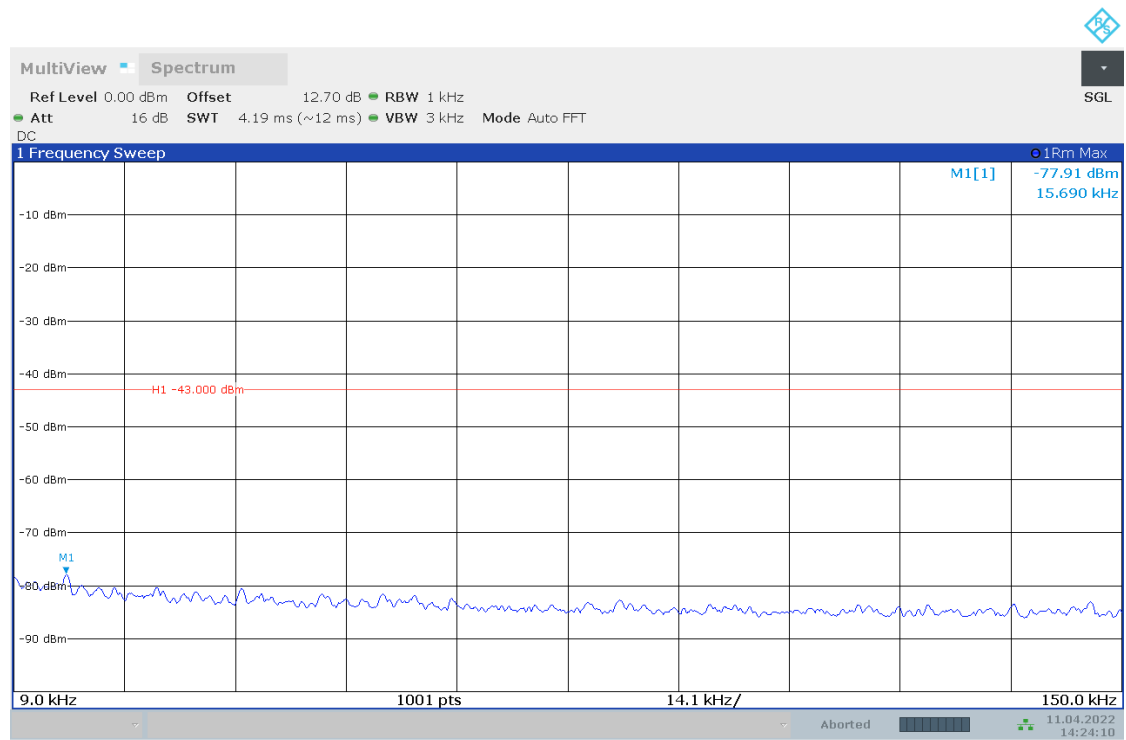


6.2.43 TM2_5MHZ_HCH_RB25#0

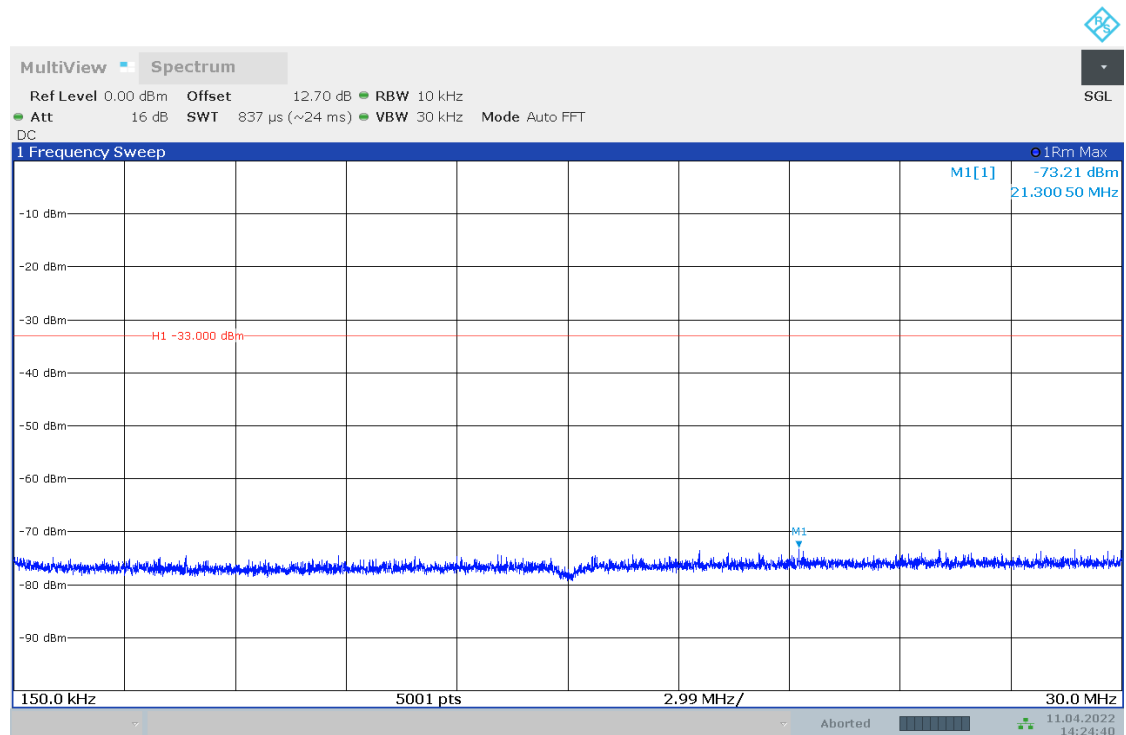




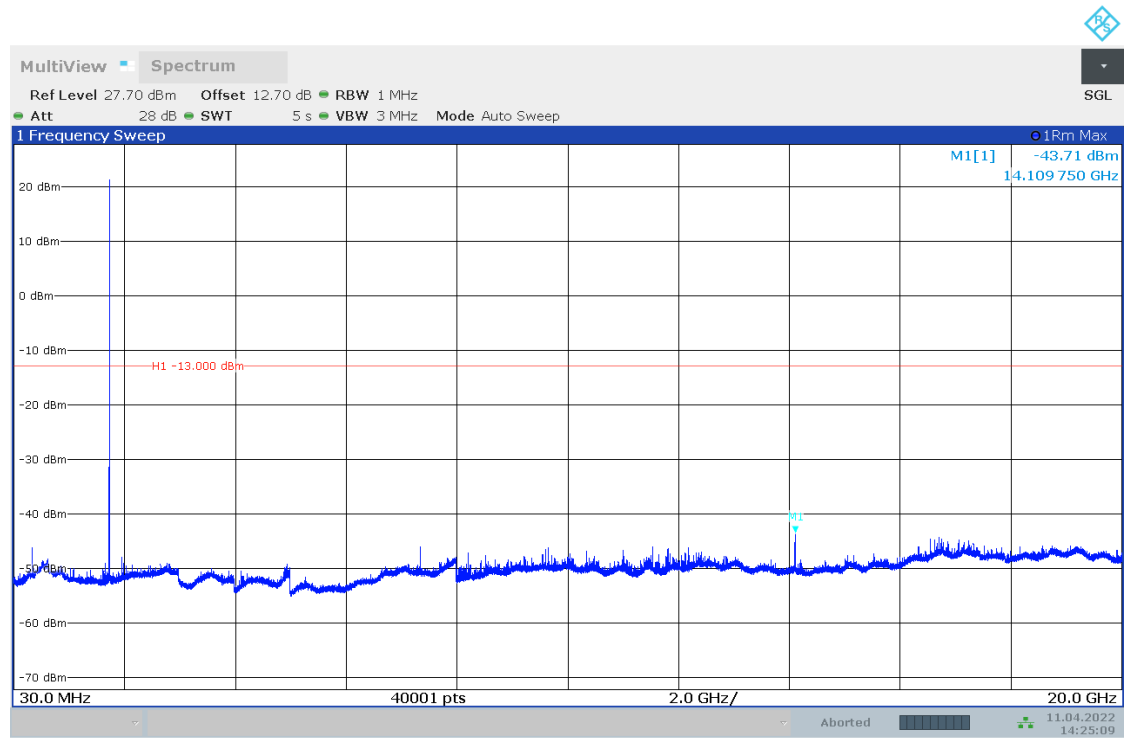
6.2.44 TM2_5MHZ_HCH_RB1#0



14:24:11 11.04.2022

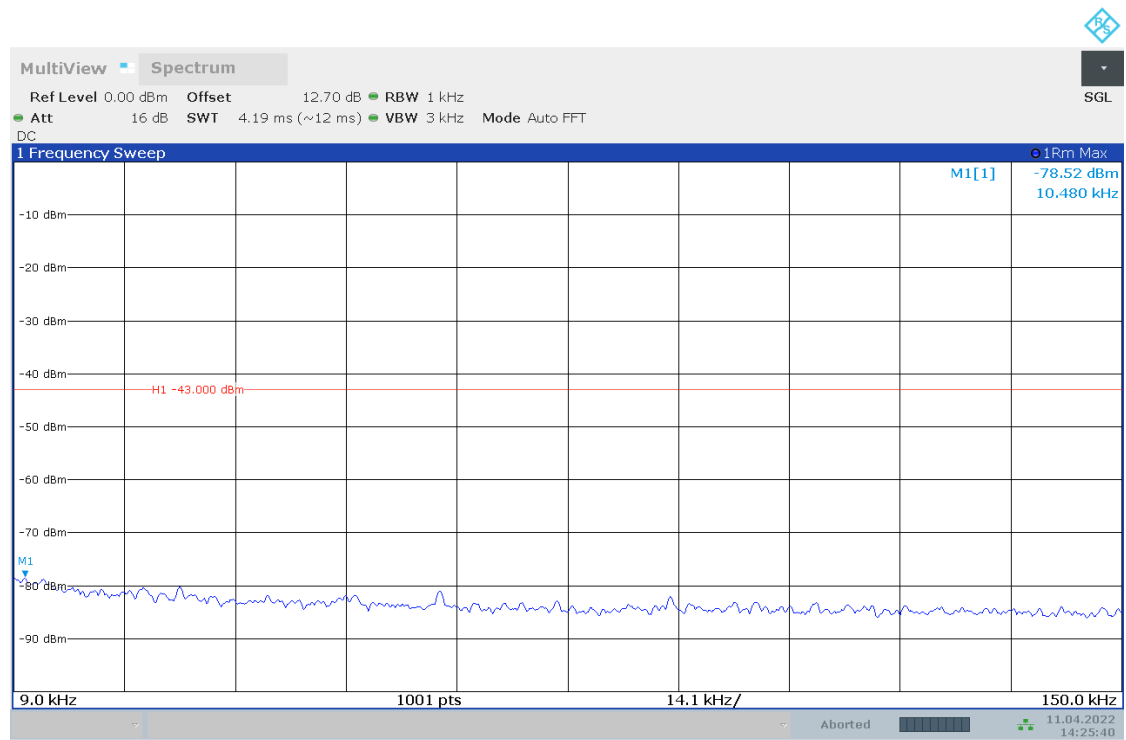


14:24:40 11.04.2022

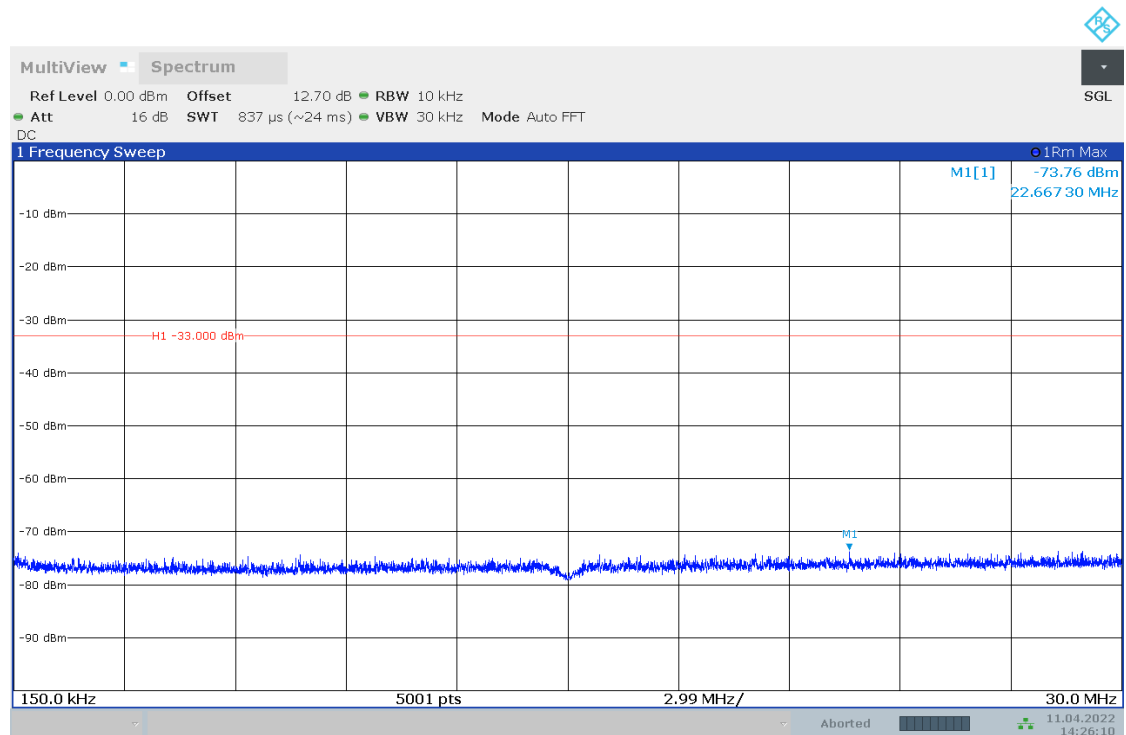


14:25:10 11.04.2022

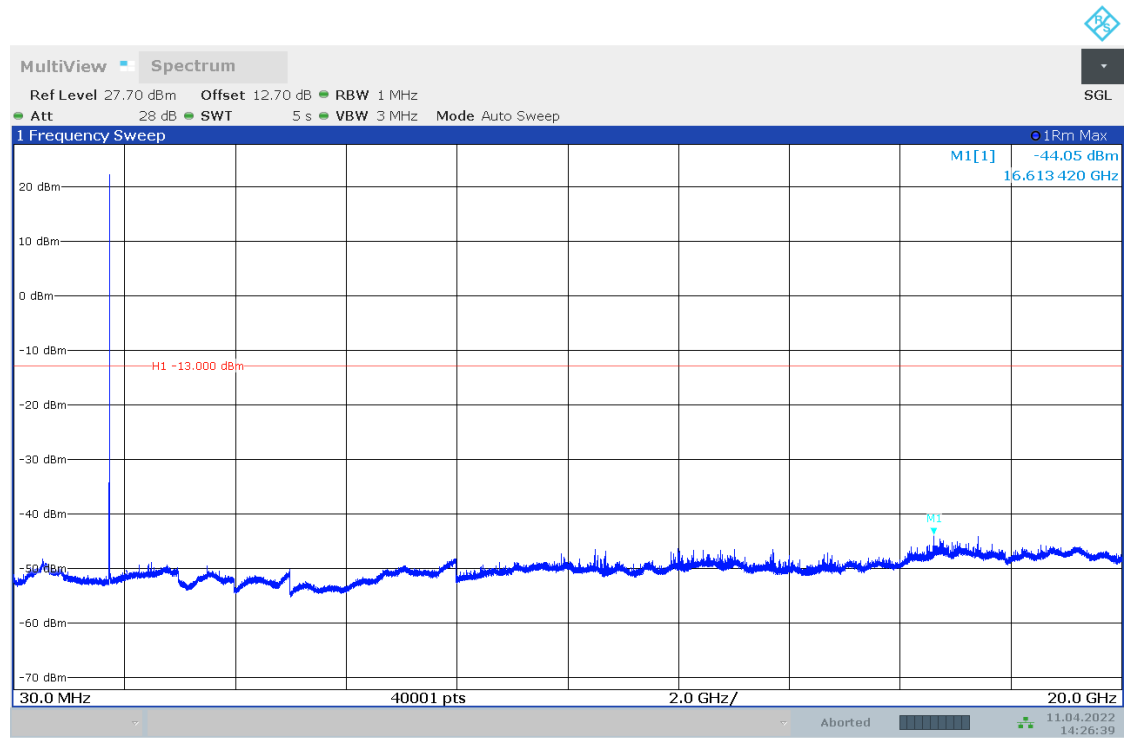
6.2.45 TM2_5MHZ_HCH_RB1#24



14:25:41 11.04.2022

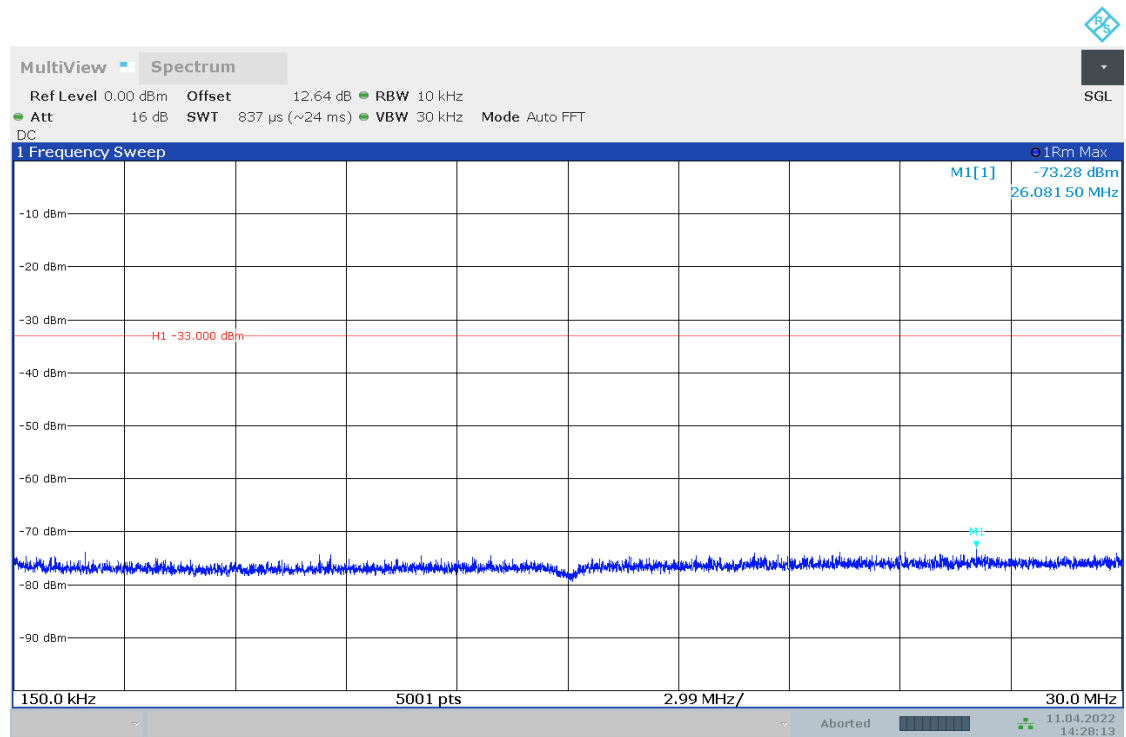
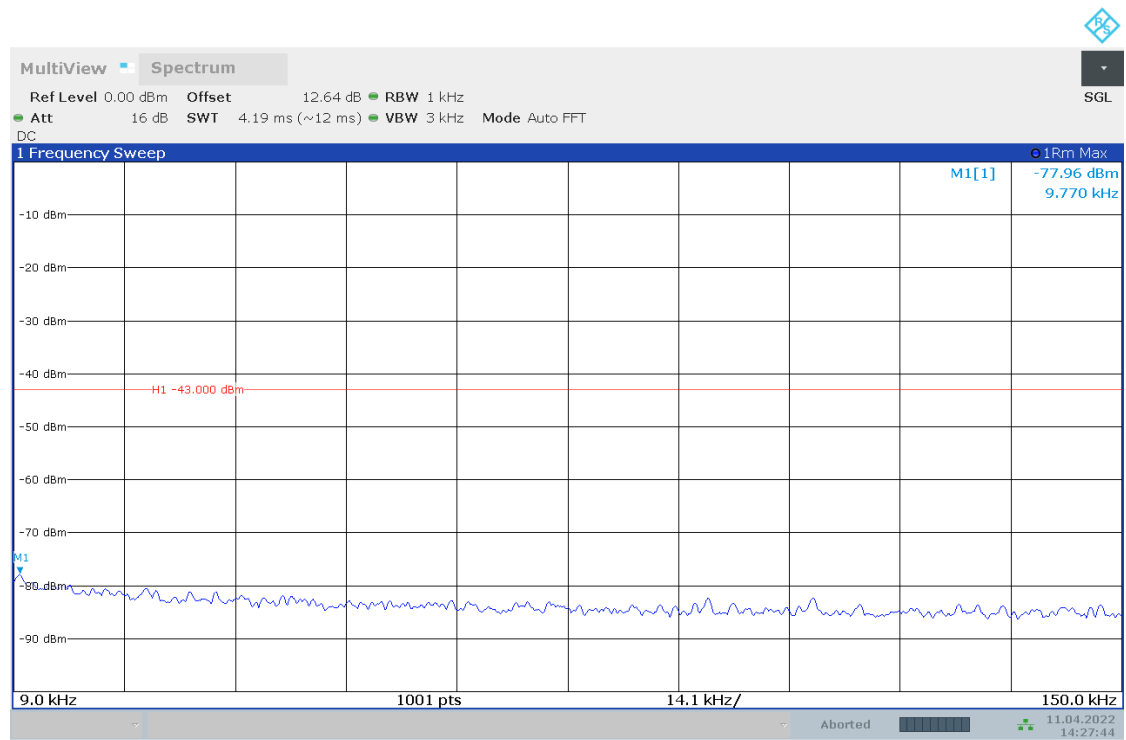


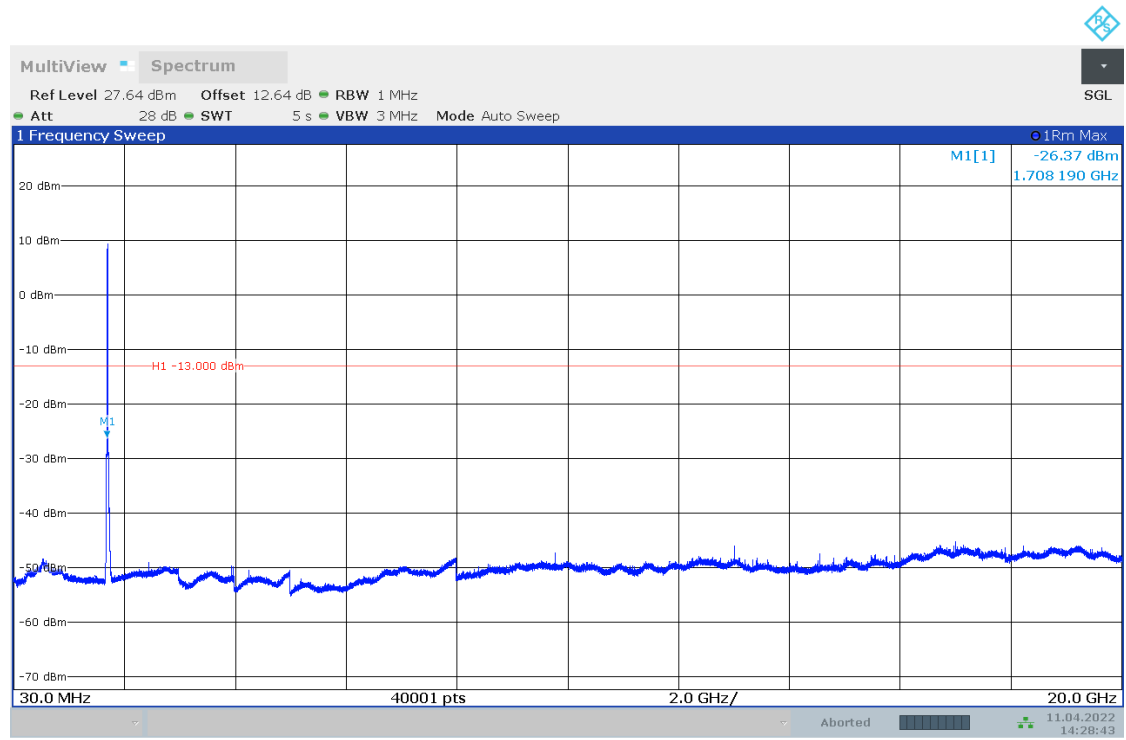
14:26:11 11.04.2022



14:26:40 11.04.2022

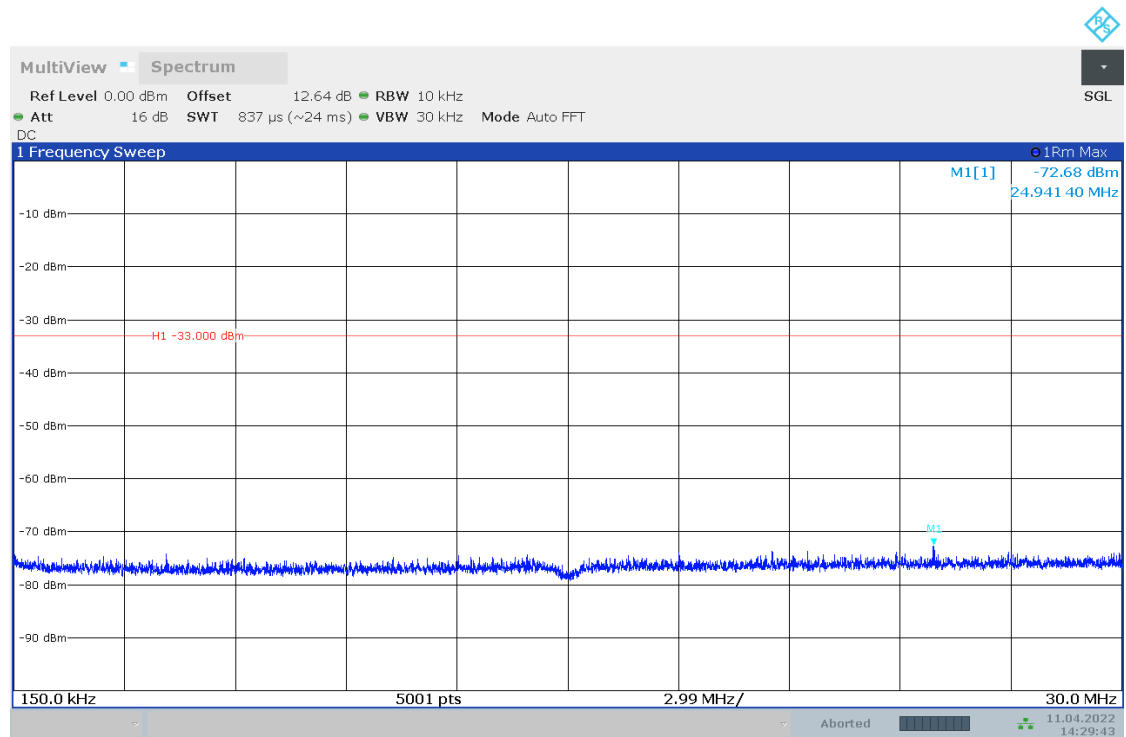
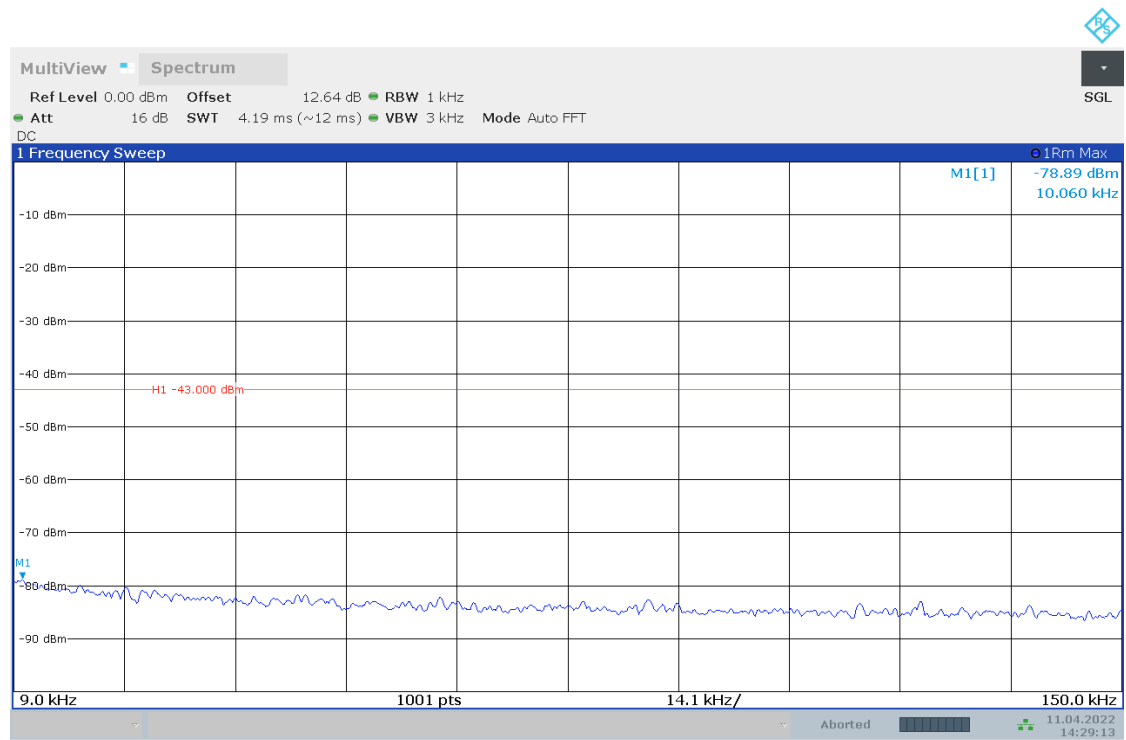
6.2.46 TM2_20MHZ_LCH_RB100#0

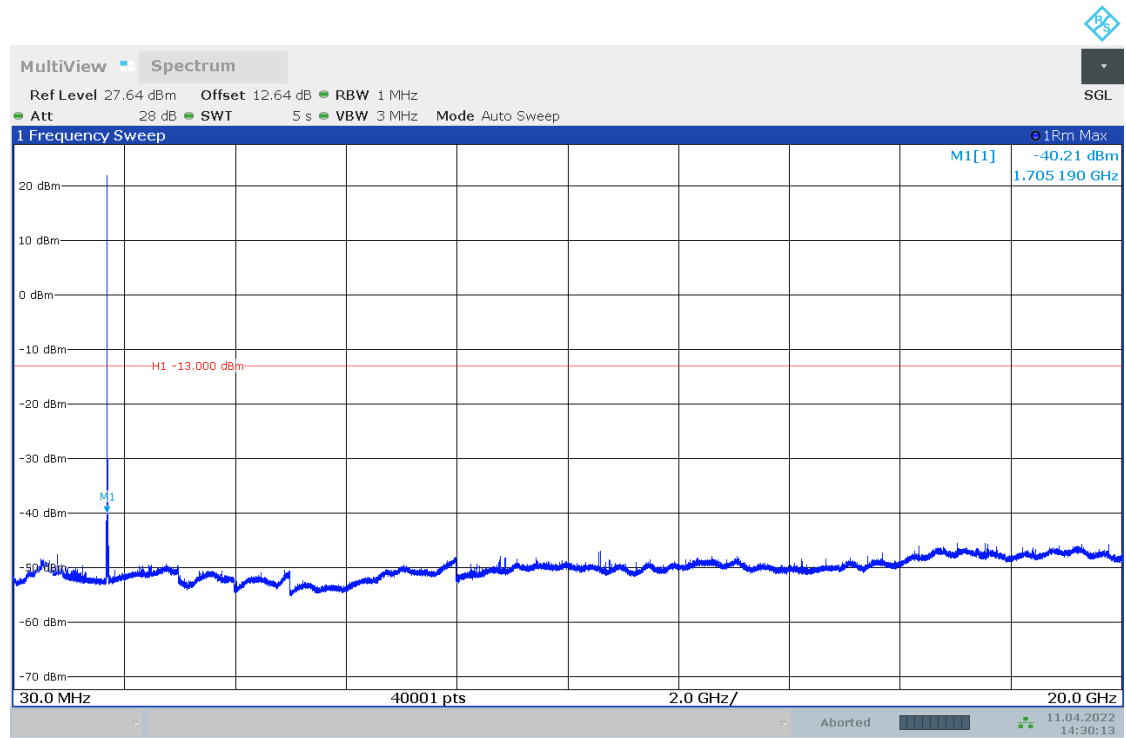




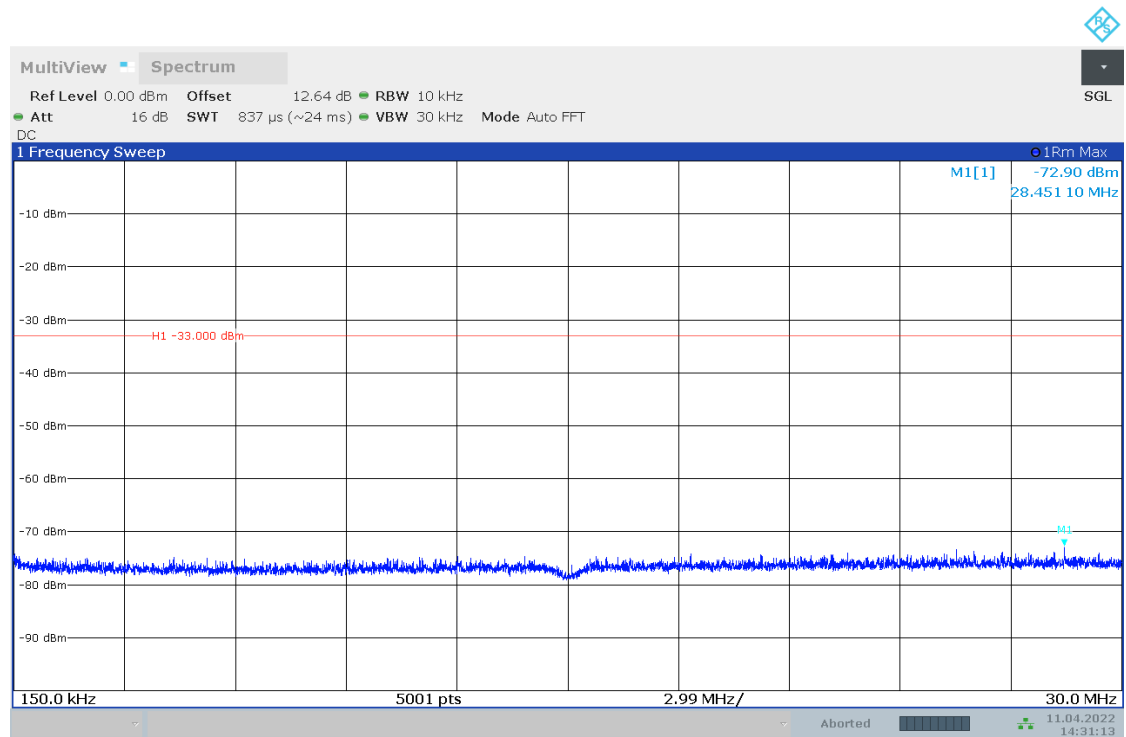
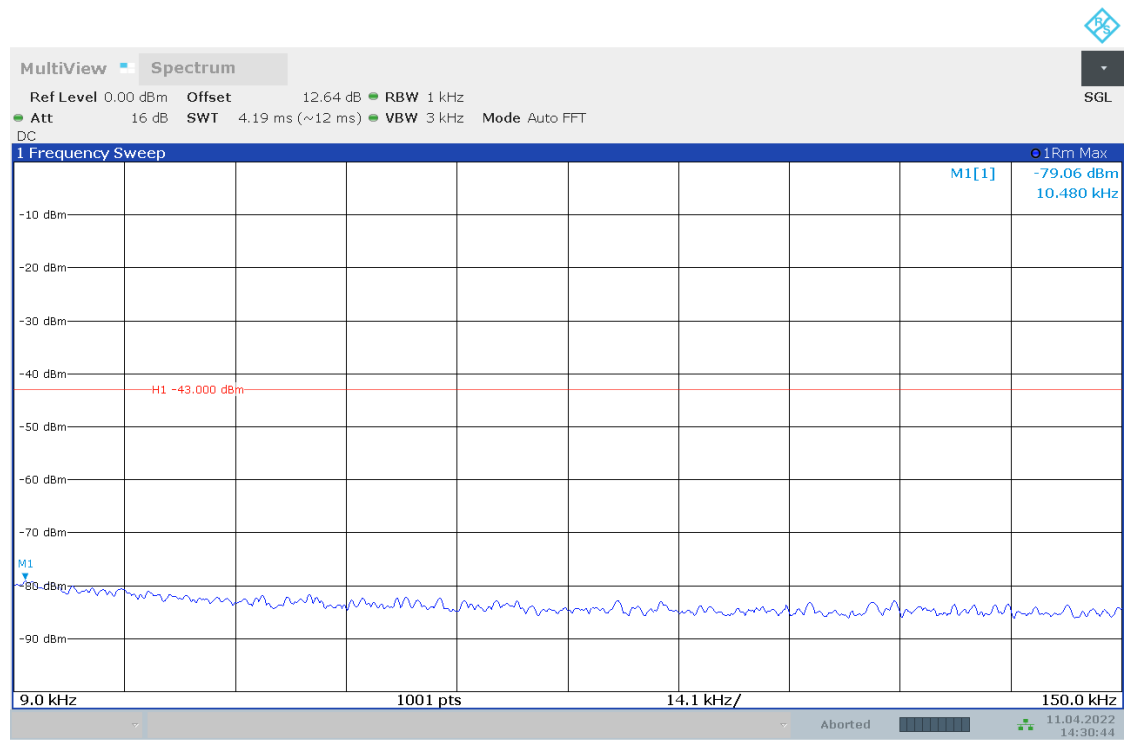
14:28:43 11.04.2022

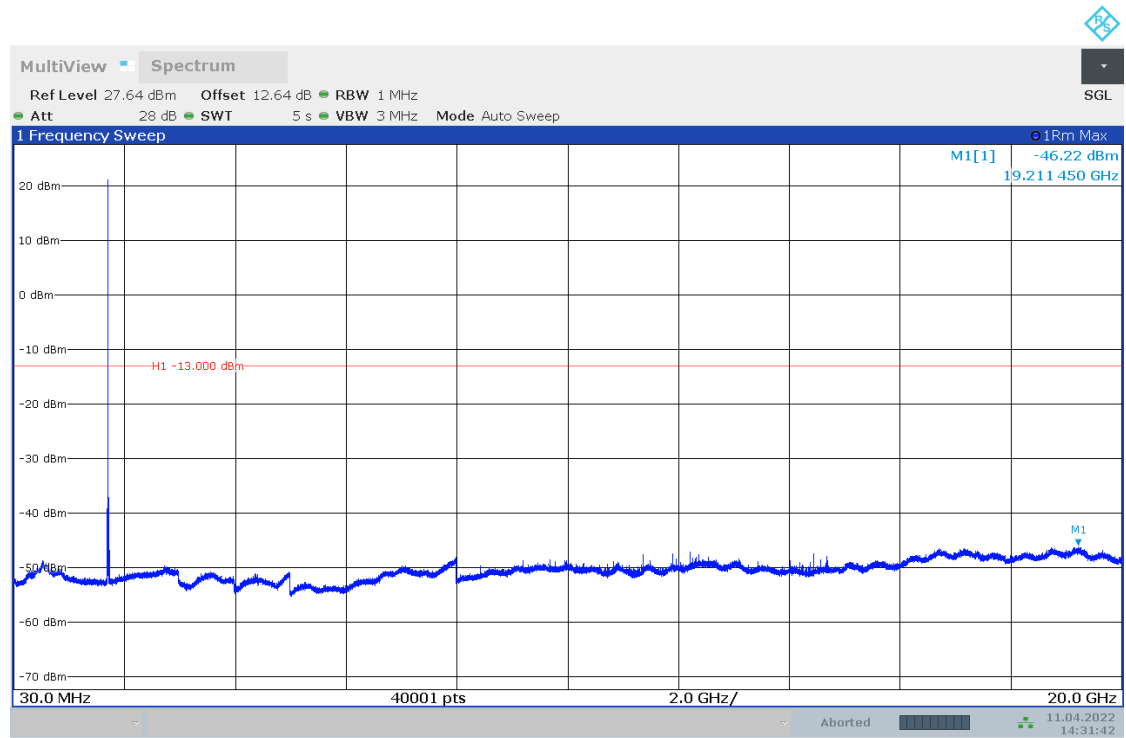
6.2.47 TM2_20MHZ_LCH_RB1#0





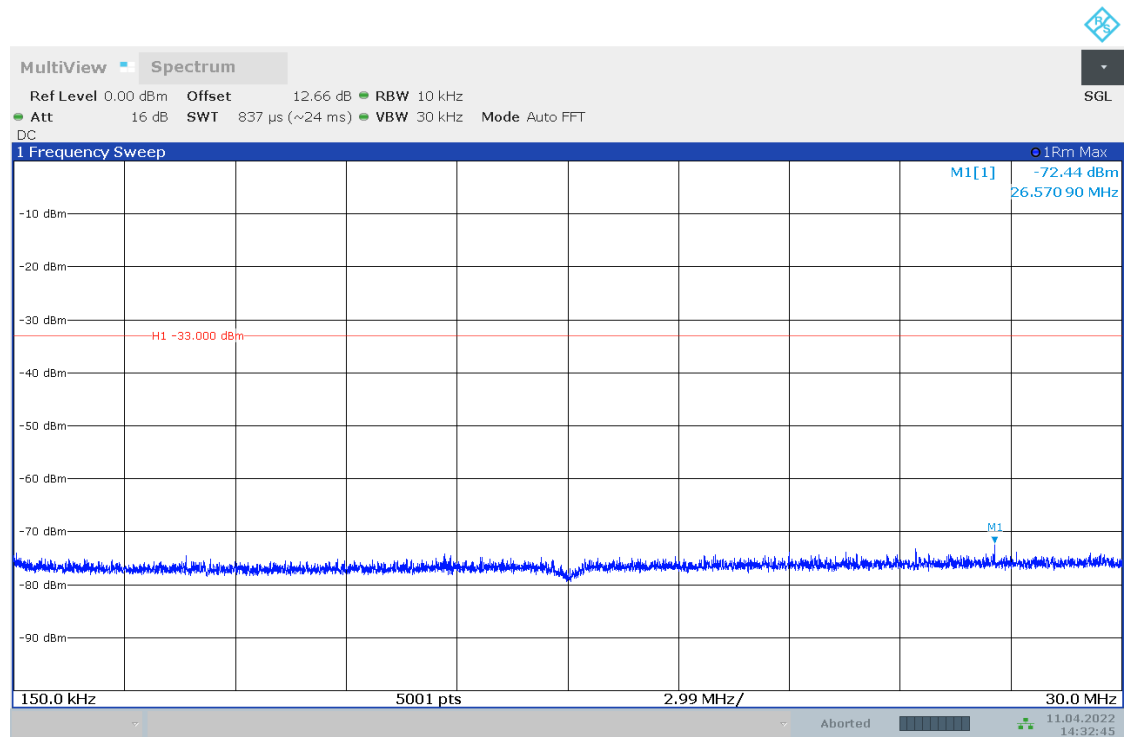
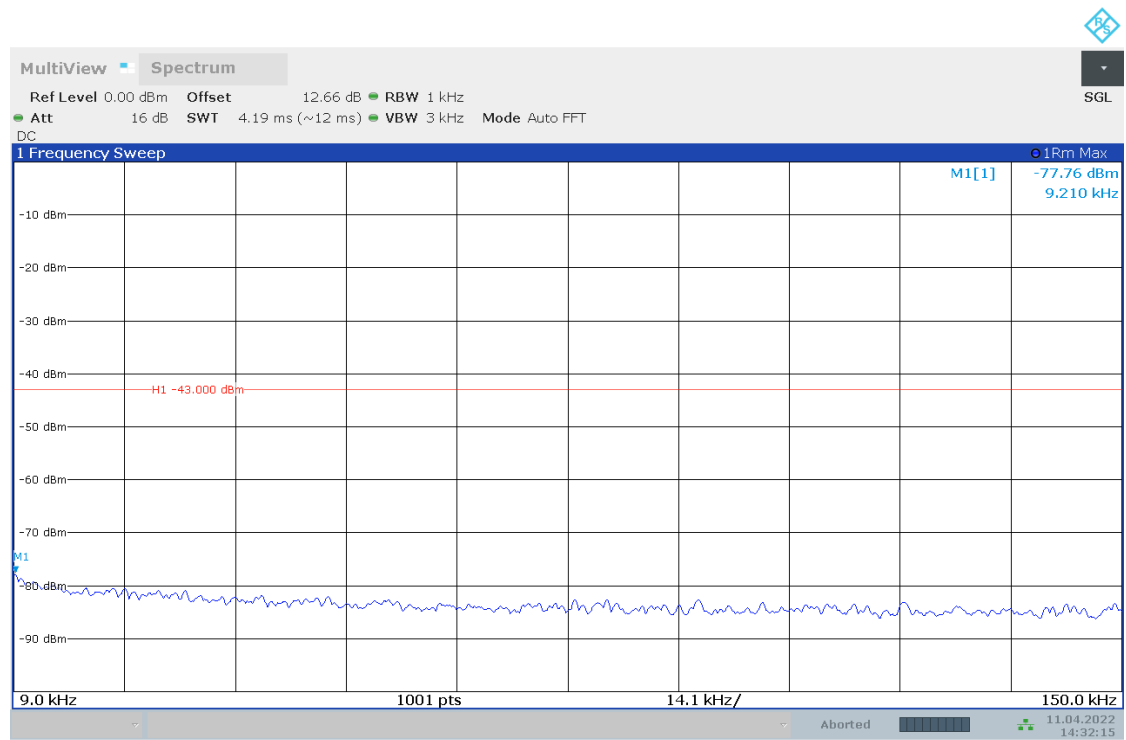
6.2.48 TM2_20MHZ_LCH_RB1#99

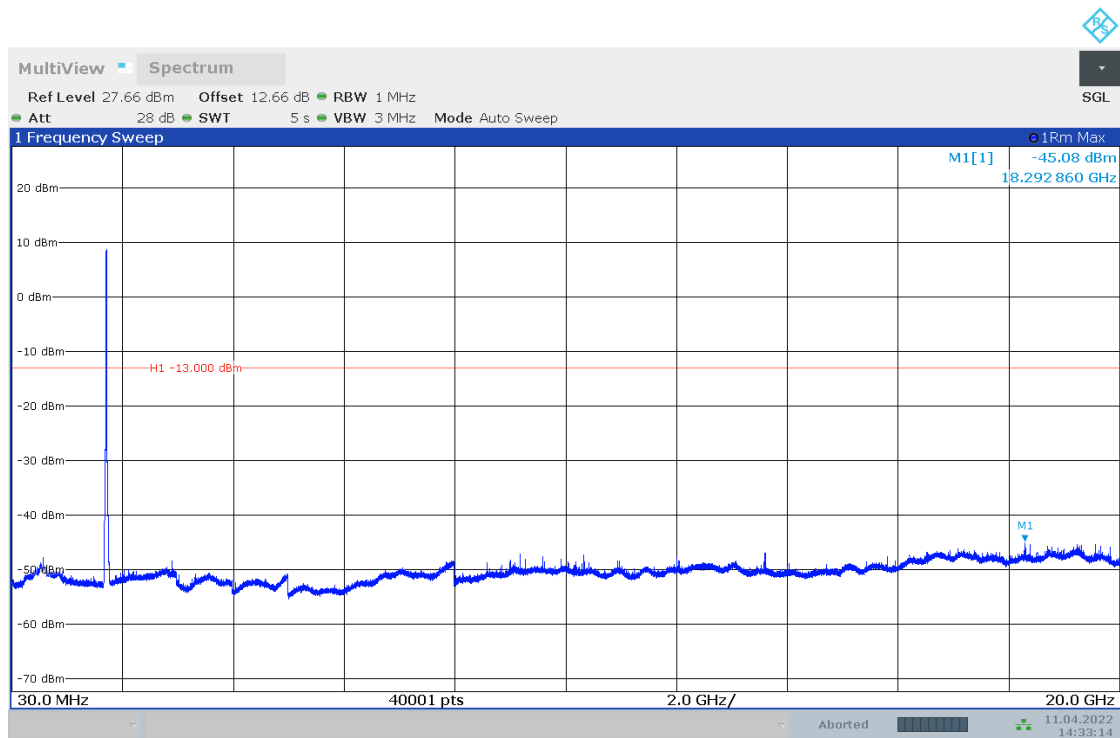




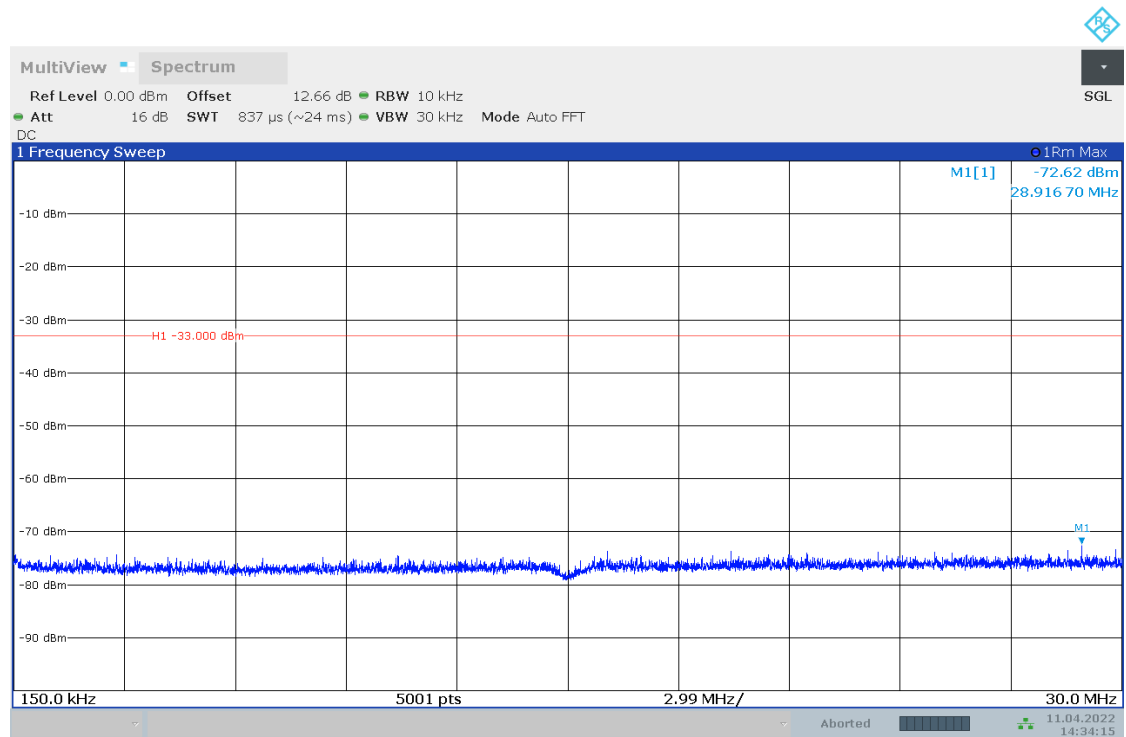
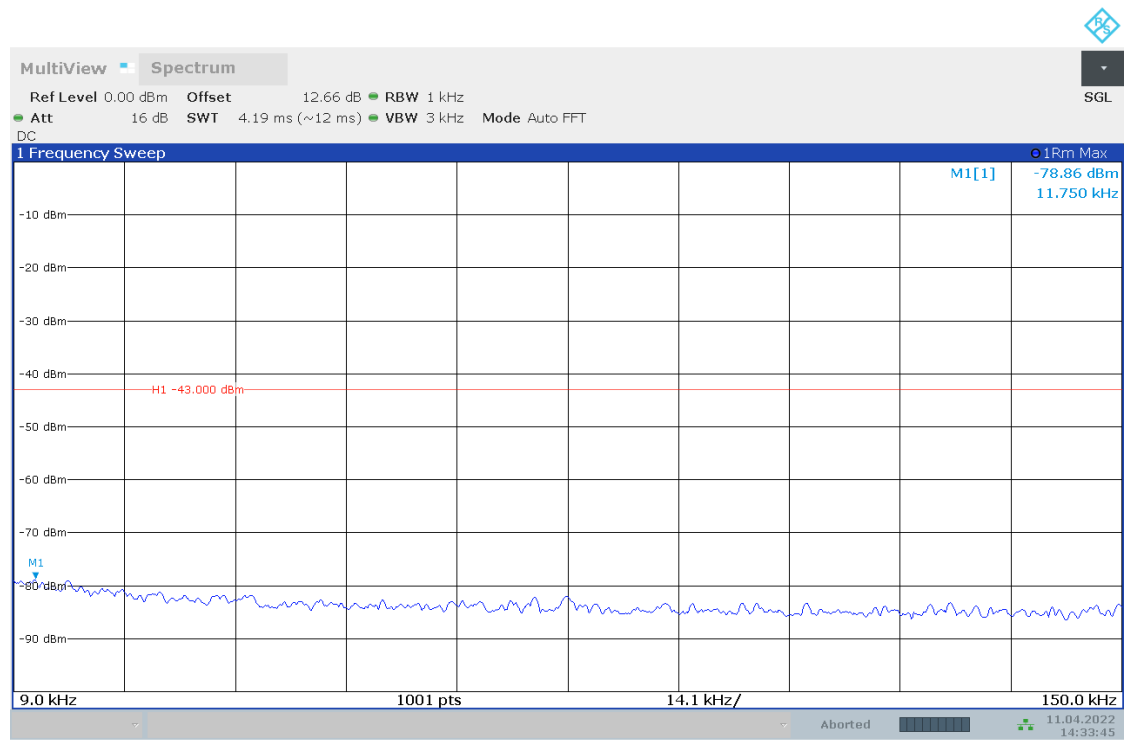
14:31:43 11.04.2022

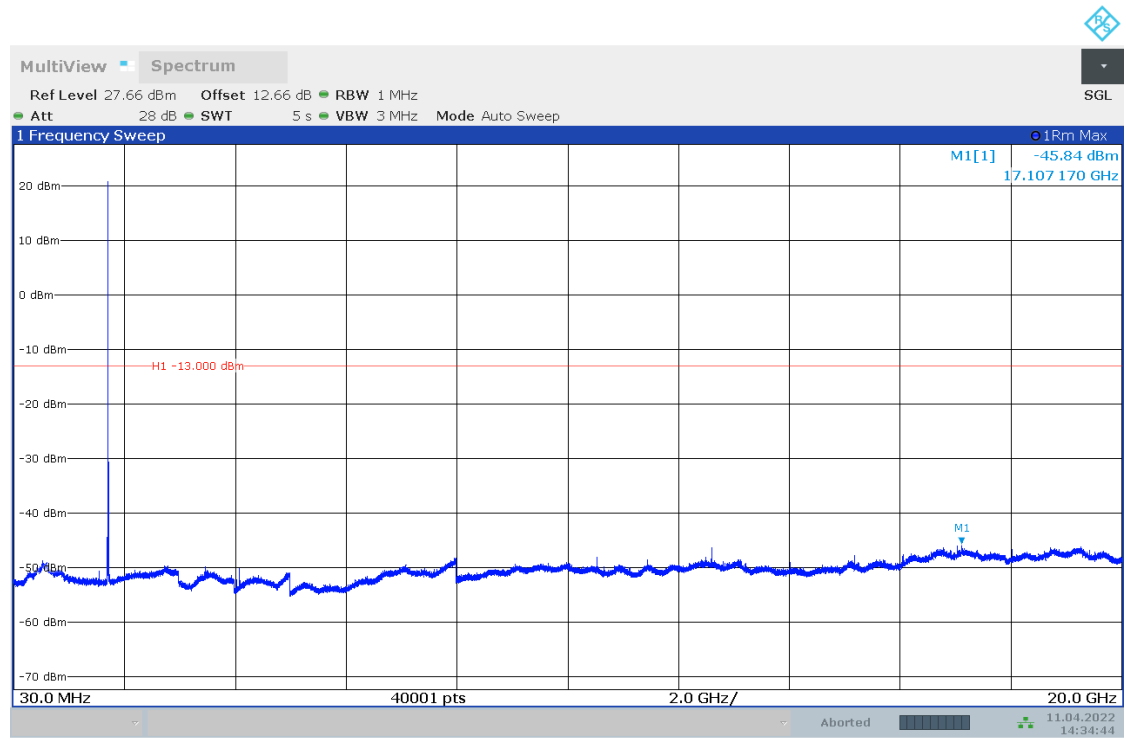
6.2.49 TM2_20MHZ_MCH_RB100#0





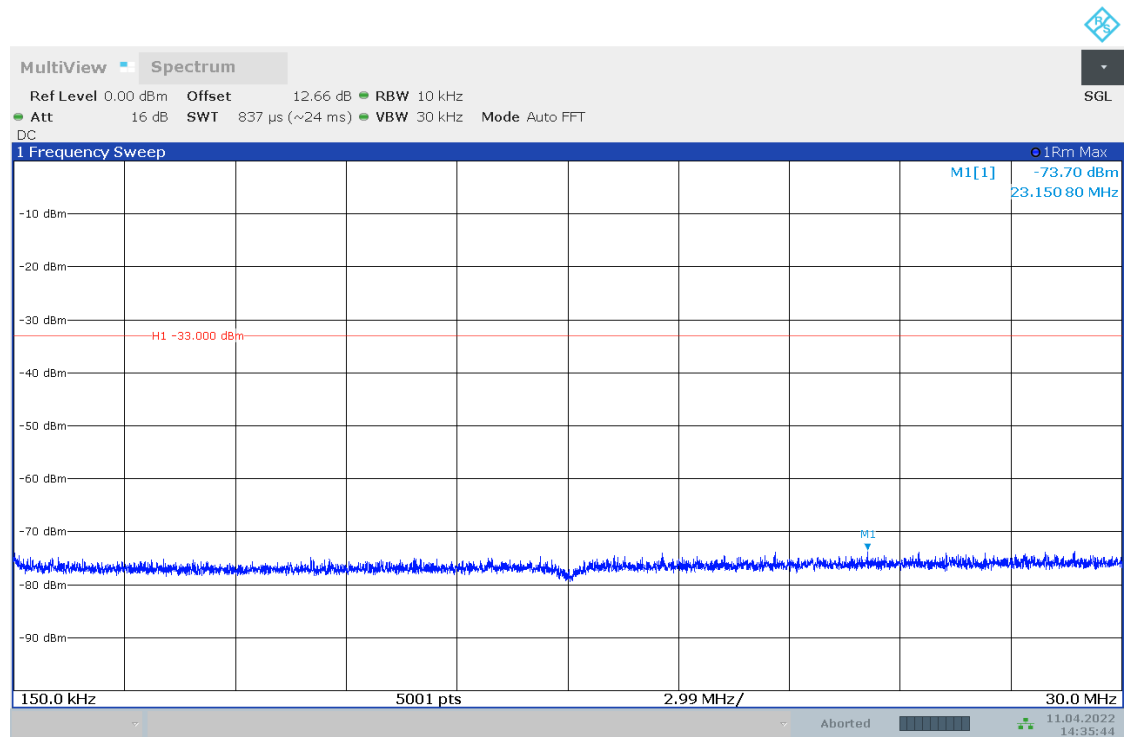
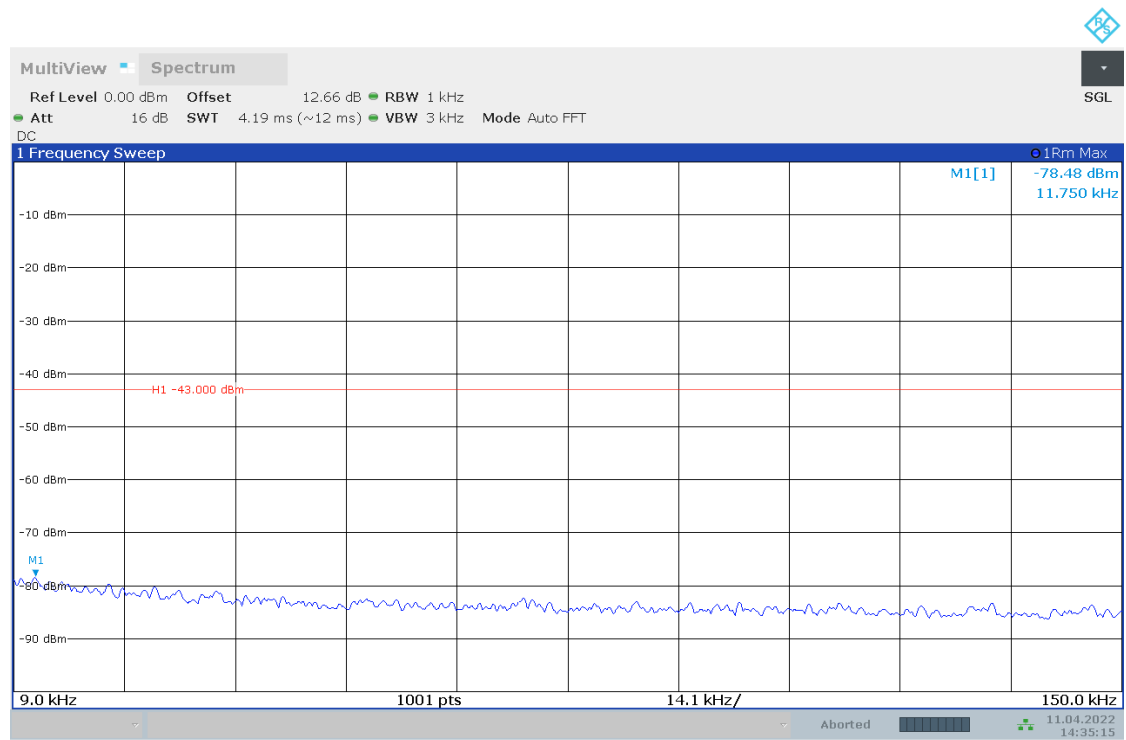
6.2.50 TM2_20MHZ_MCH_RB1#0

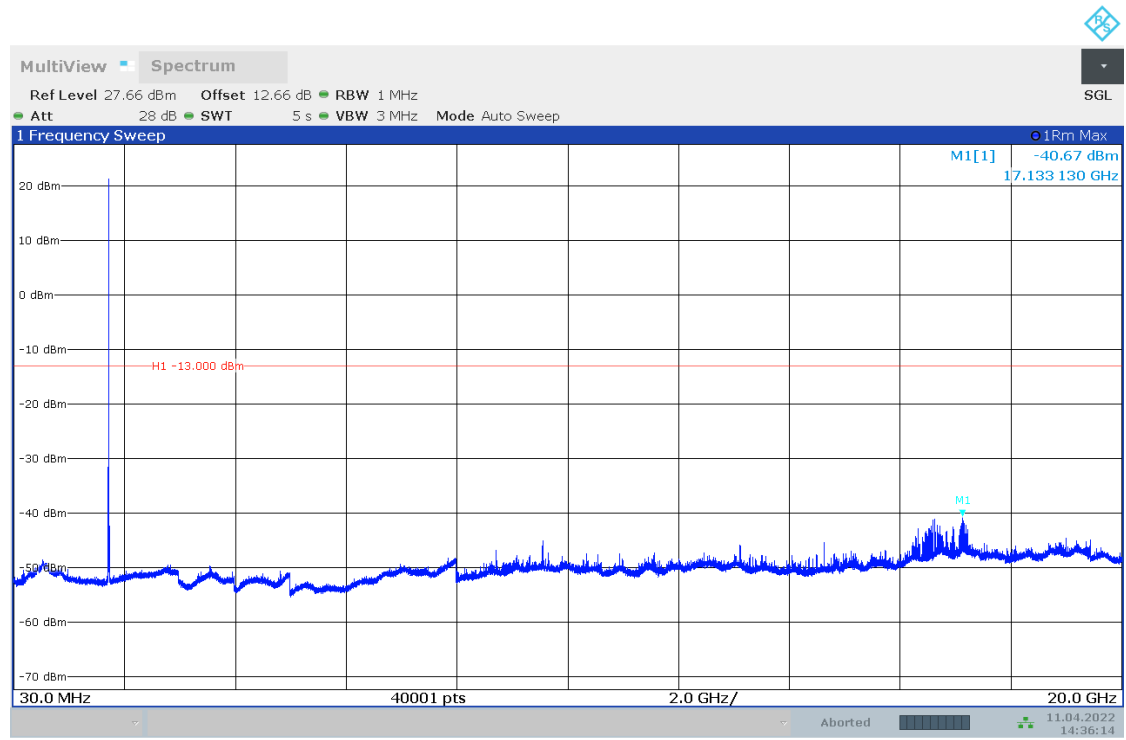




14:34:44 11.04.2022

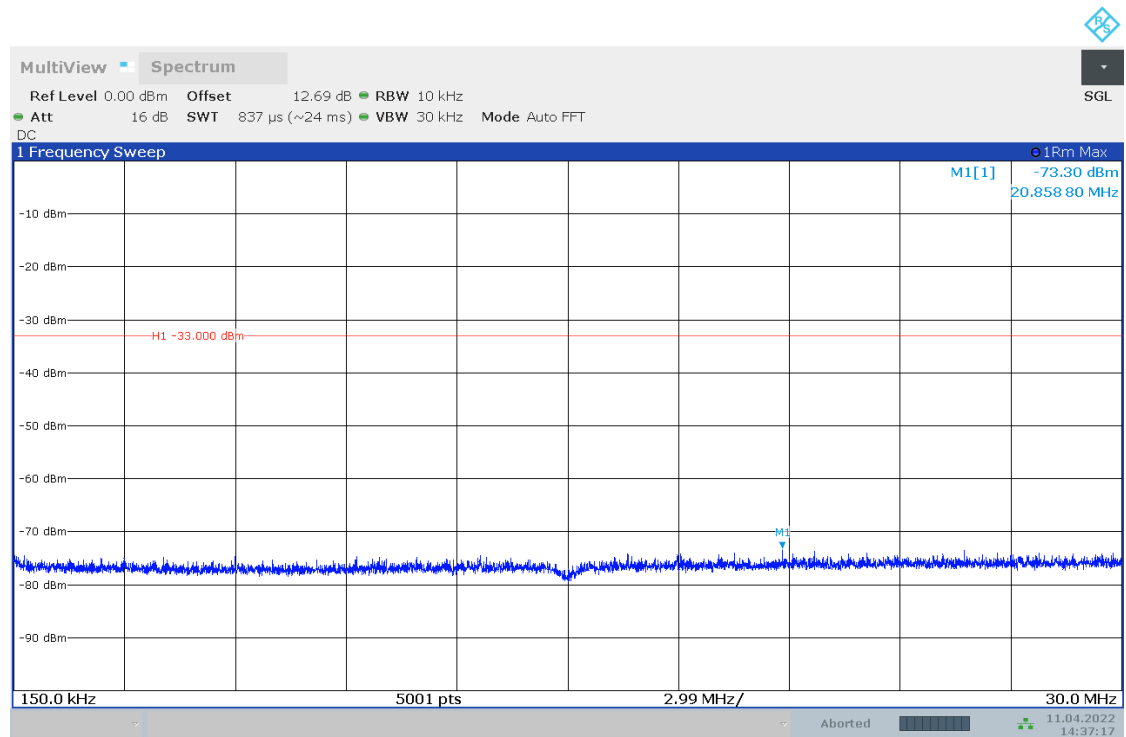
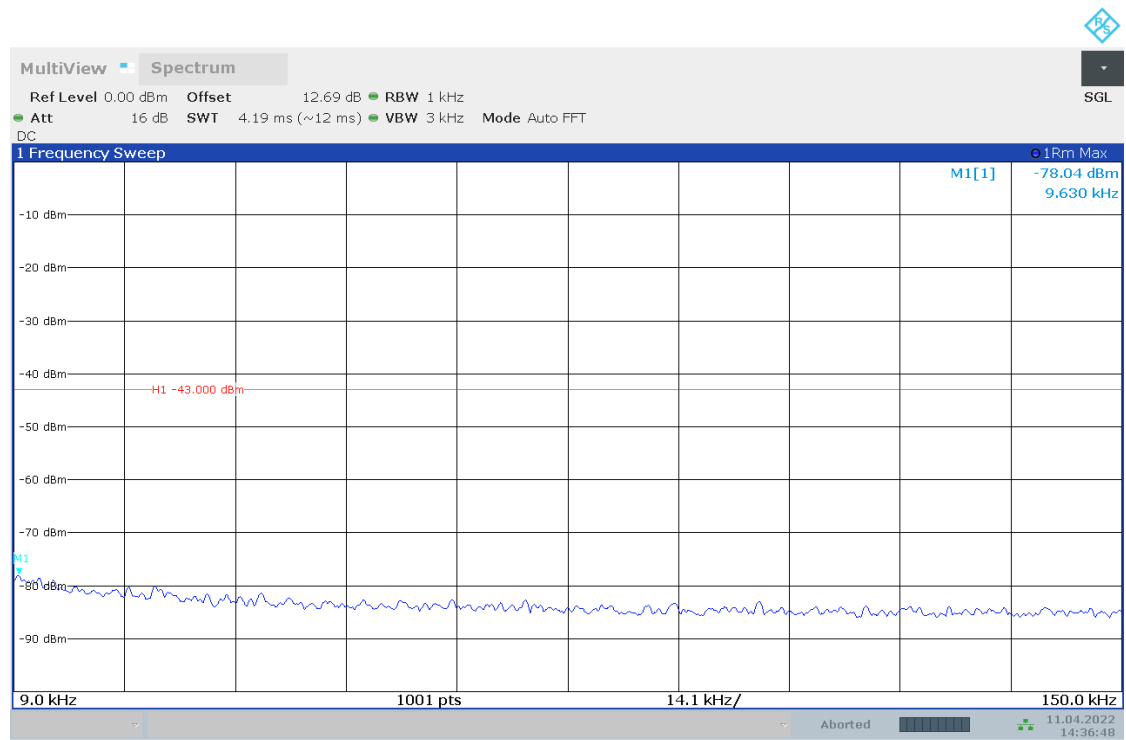
6.2.51 TM2_20MHZ_MCH_RB1#99

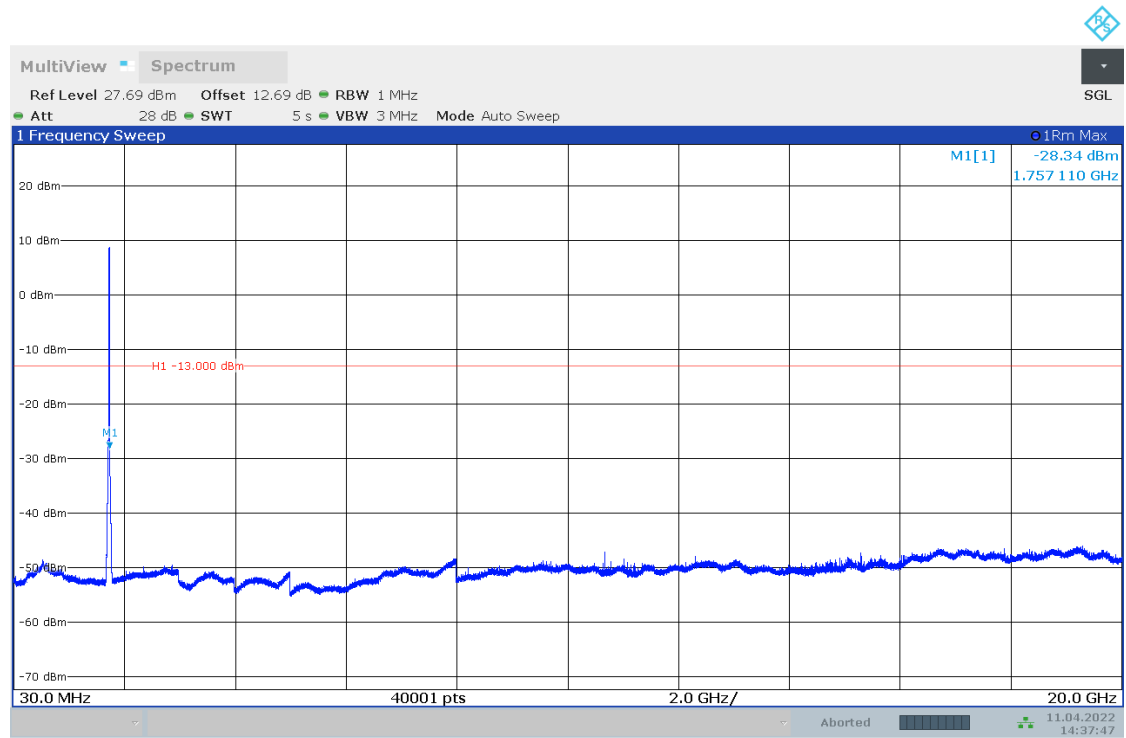




14:36:15 11.04.2022

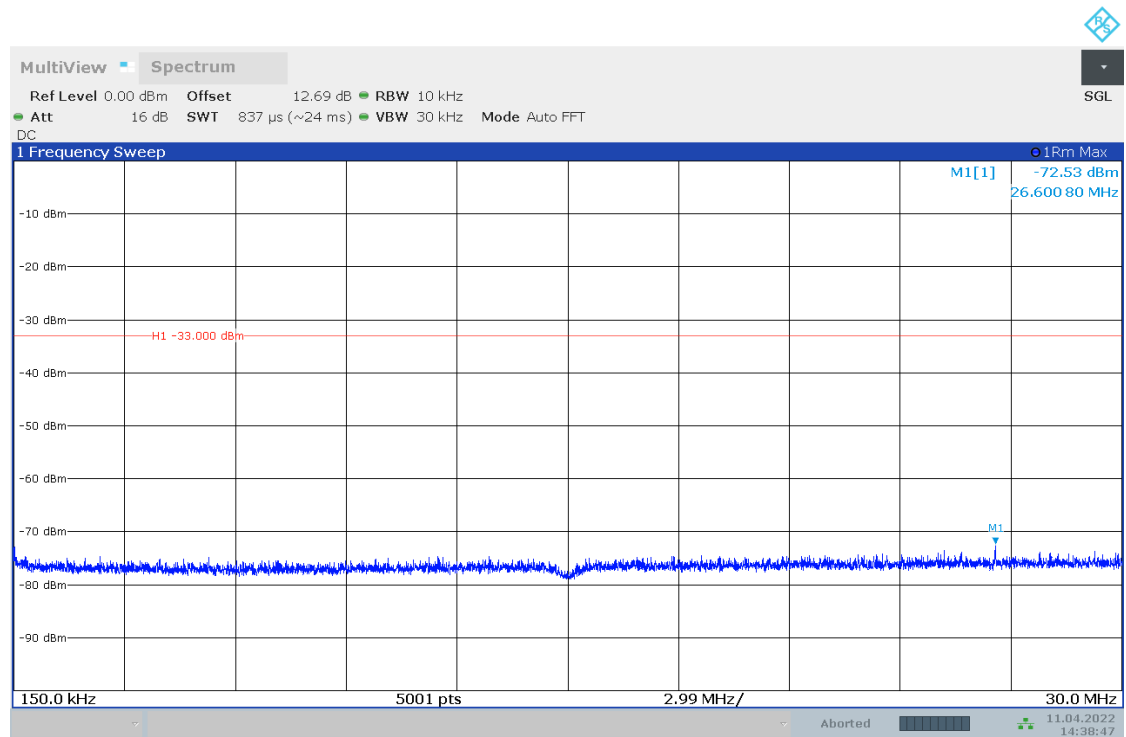
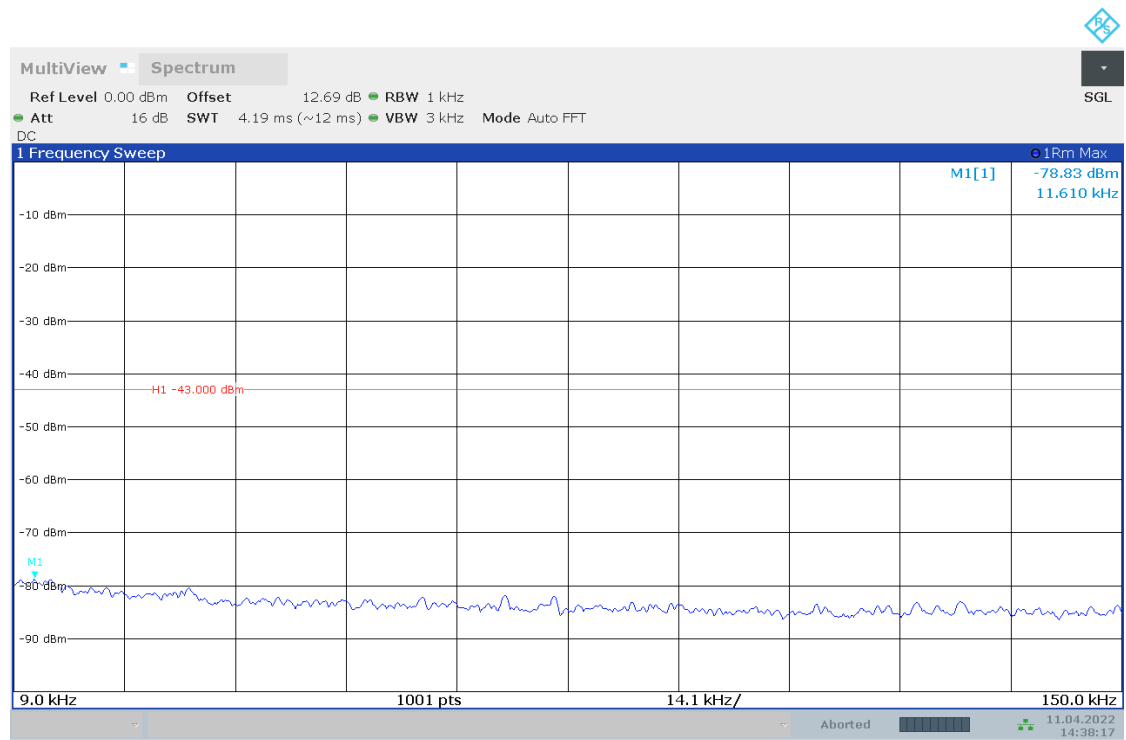
6.2.52 TM2_20MHZ_HCH_RB100#0

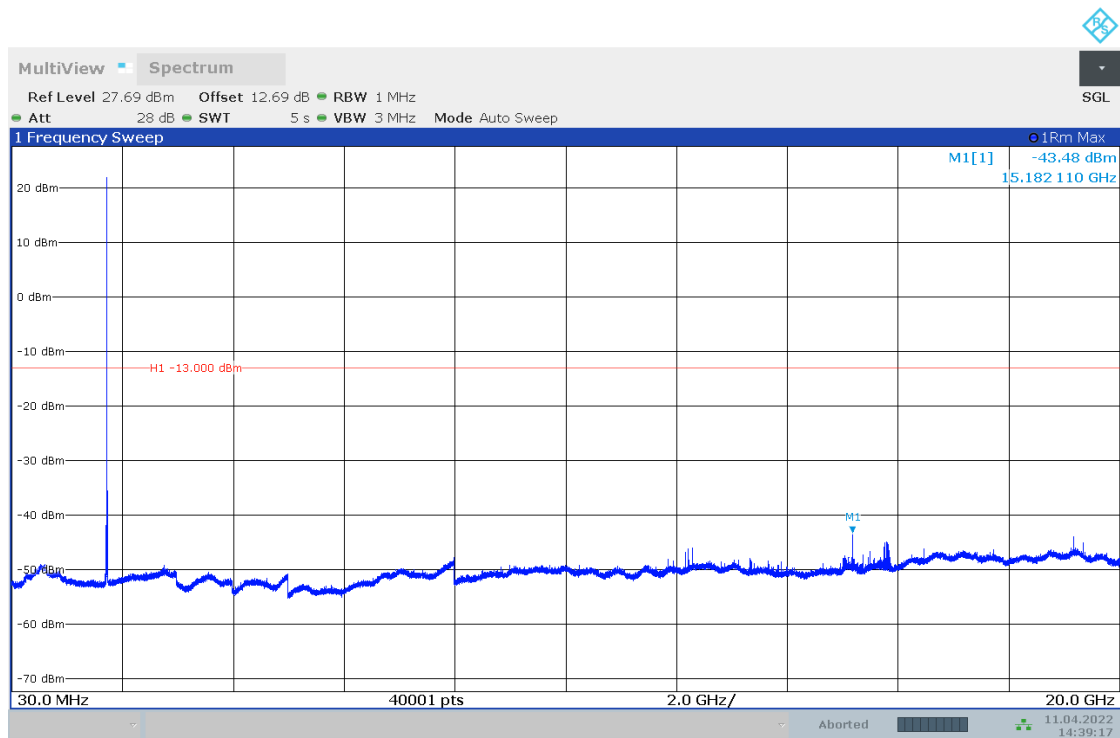




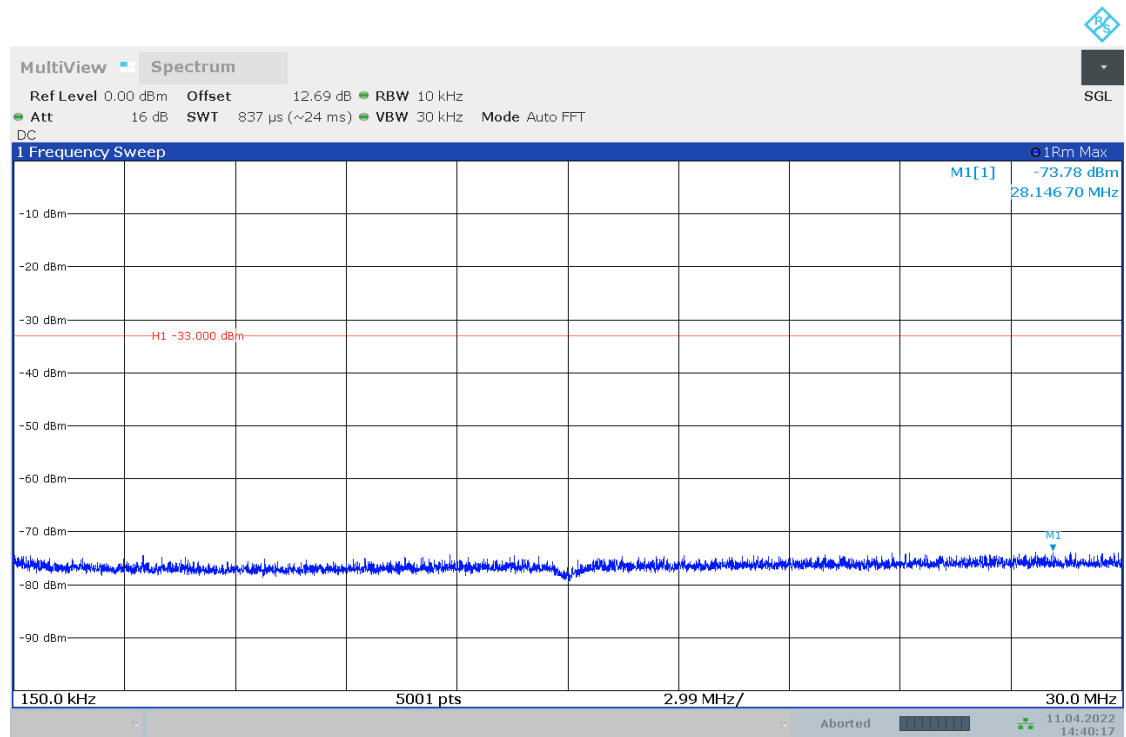
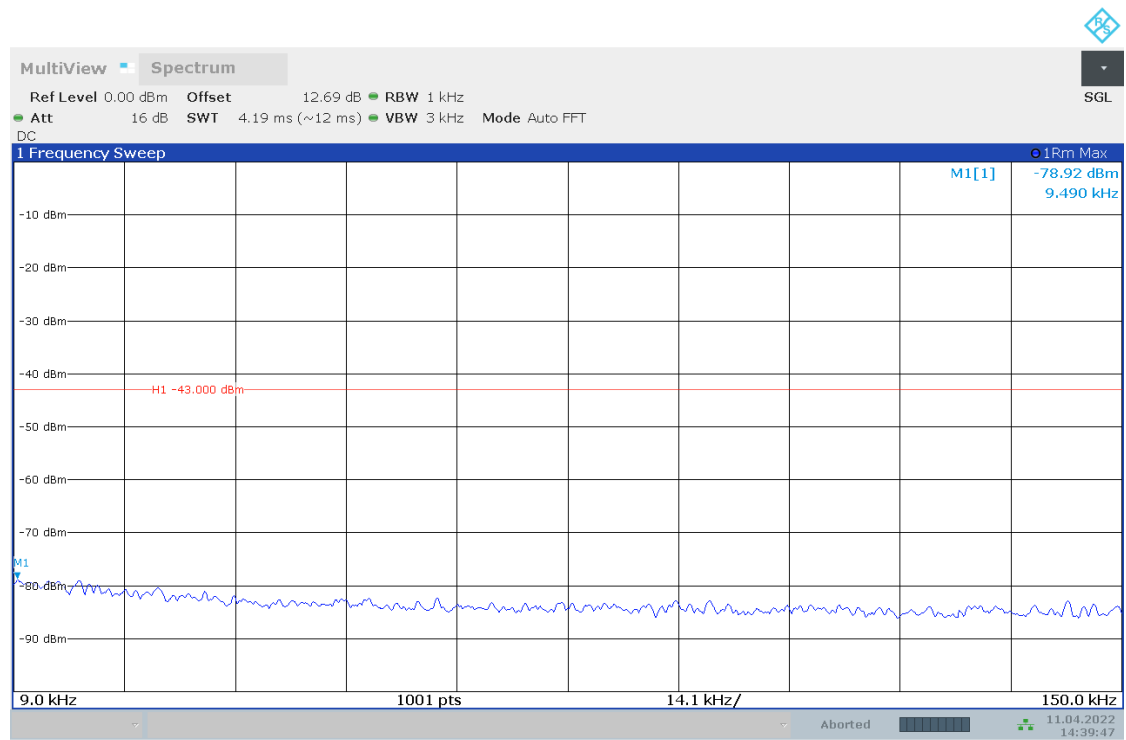
14:37:47 11.04.2022

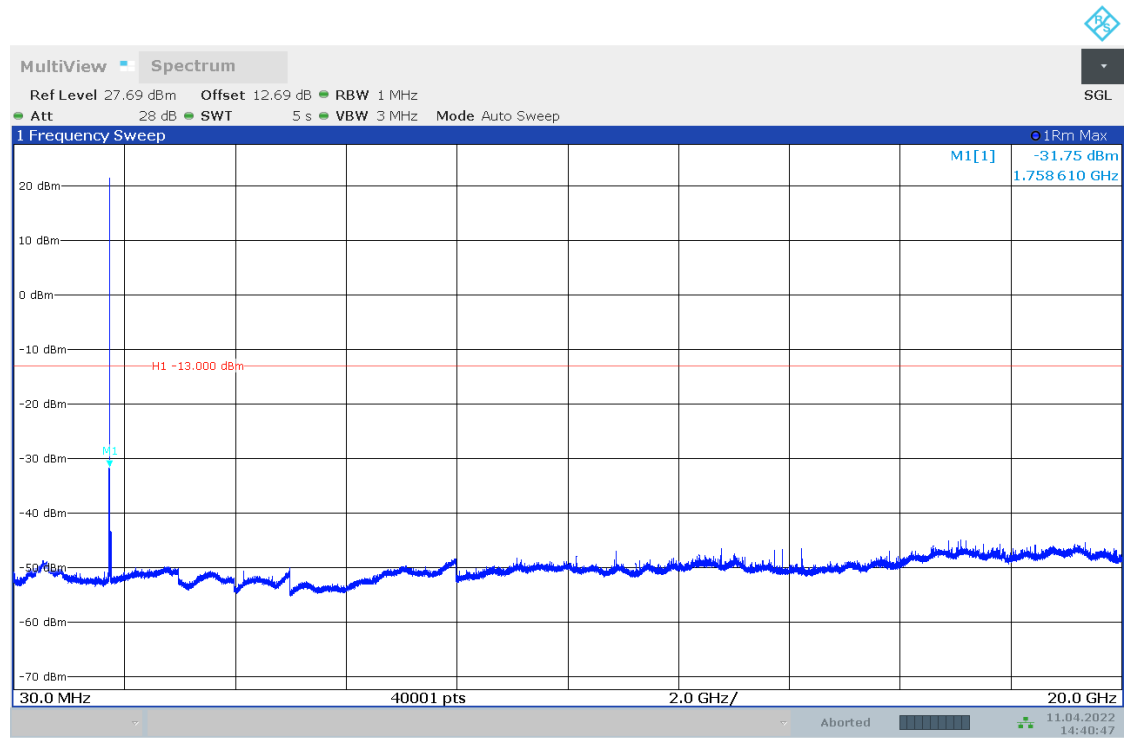
6.2.53 TM2_20MHZ_HCH_RB1#0





6.2.54 TM2_20MHZ_HCH_RB1#99





14:40:47 11.04.2022

7. APPENDIX G - FREQUENCY STABILITY

7.1 TEST RESULTS

7.1.1 FREQUENCY ERROR VS. VOLTAGE

Frequency Error vs. Voltage								
Test Mode	Test Bandwidth [MHz]	Test Channel	Modulation	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM1	1.4	LCH	QPSK	TN	VH	-20.49	-0.01	PASS
			QPSK	TN	VN	4.88	0	PASS
			QPSK	TN	VL	-5.91	0	PASS
		MCH	QPSK	TN	VH	-7.50	0	PASS
			QPSK	TN	VN	-22.26	-0.01	PASS
			QPSK	TN	VL	-7.11	0	PASS
		HCH	QPSK	TN	VH	-39.94	-0.02	PASS
			QPSK	TN	VN	0.77	0	PASS
			QPSK	TN	VL	8.60	0	PASS
	5	LCH	QPSK	TN	VH	-1.92	0	PASS
			QPSK	TN	VN	-6.03	0	PASS
			QPSK	TN	VL	-7.35	0	PASS
		MCH	QPSK	TN	VH	-13.3	-0.01	PASS
			QPSK	TN	VN	3.24	0	PASS
			QPSK	TN	VL	-6.58	0	PASS
		HCH	QPSK	TN	VH	-4.54	0	PASS
			QPSK	TN	VN	-2.07	0	PASS
			QPSK	TN	VL	1.06	0	PASS
	20	LCH	QPSK	TN	VH	-1.33	0	PASS
			QPSK	TN	VN	-1.75	0	PASS
			QPSK	TN	VL	3.01	0	PASS
		MCH	QPSK	TN	VH	0.75	0	PASS
			QPSK	TN	VN	1.93	0	PASS
			QPSK	TN	VL	-2.05	0	PASS
		HCH	QPSK	TN	VH	-2.13	0	PASS
			QPSK	TN	VN	-3.59	0	PASS
			QPSK	TN	VL	0.30	0	PASS

Frequency Error vs. Voltage								
Test Mode	Test Bandwidth [MHz]	Test Channel	Modulation	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM2	1.4	LCH	16QAM	TN	VH	6.09	0	PASS
			16QAM	TN	VN	51.55	0.03	PASS
			16QAM	TN	VL	-82.23	-0.05	PASS
		MCH	16QAM	TN	VH	118.24	0.07	PASS
			16QAM	TN	VN	0.55	0	PASS
			16QAM	TN	VL	12.48	0.01	PASS
		HCH	16QAM	TN	VH	55.32	0.03	PASS
			16QAM	TN	VN	-39.33	-0.02	PASS
			16QAM	TN	VL	43.92	0.03	PASS
	5	LCH	16QAM	TN	VH	0.16	0	PASS
			16QAM	TN	VN	-4.36	0	PASS
			16QAM	TN	VL	-11.05	-0.01	PASS
		MCH	16QAM	TN	VH	-1.16	0	PASS
			16QAM	TN	VN	-2.65	0	PASS
			16QAM	TN	VL	-1.48	0	PASS
		HCH	16QAM	TN	VH	0.90	0	PASS
			16QAM	TN	VN	9.88	0.01	PASS
			16QAM	TN	VL	1.53	0	PASS
	20	LCH	16QAM	TN	VH	-2.93	0	PASS
			16QAM	TN	VN	-0.22	0	PASS
			16QAM	TN	VL	-2.56	0	PASS
		MCH	16QAM	TN	VH	0.59	0	PASS
			16QAM	TN	VN	2.04	0	PASS
			16QAM	TN	VL	-2.41	0	PASS
		HCH	16QAM	TN	VH	-1.68	0	PASS
			16QAM	TN	VN	-1.95	0	PASS
			16QAM	TN	VL	-2.96	0	PASS

7.1.2 FREQUENCY ERROR VS. TEMPERATURE

Frequency Error vs. Temperature								
Test Mode	Test Bandwidth [MHz]	Test Channel	Modulation	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM1	1.4	LCH	QPSK	VN	-30	-110.98	-0.06	PASS
			QPSK	VN	-20	-9.06	-0.01	PASS
			QPSK	VN	-10	1.21	0	PASS
			QPSK	VN	0	0.58	0	PASS
			QPSK	VN	10	41.04	0.02	PASS
			QPSK	VN	20	-14.19	-0.01	PASS
			QPSK	VN	30	-48.42	-0.03	PASS
			QPSK	VN	40	-21.12	-0.01	PASS
			QPSK	VN	50	-1.39	0	PASS
		MCH	QPSK	VN	-30	8.63	0	PASS
			QPSK	VN	-20	176.75	0.1	PASS
			QPSK	VN	-10	-3.87	0	PASS
			QPSK	VN	0	-5.42	0	PASS
			QPSK	VN	10	-46.39	-0.03	PASS
			QPSK	VN	20	167.85	0.1	PASS
			QPSK	VN	30	-53.93	-0.03	PASS
			QPSK	VN	40	124.98	0.07	PASS
			QPSK	VN	50	75.51	0.04	PASS
		HCH	QPSK	VN	-30	-0.87	0	PASS
			QPSK	VN	-20	216.07	0.12	PASS
			QPSK	VN	-10	67.97	0.04	PASS
			QPSK	VN	0	60.38	0.03	PASS
			QPSK	VN	10	11.51	0.01	PASS
			QPSK	VN	20	68.42	0.04	PASS
			QPSK	VN	30	20.33	0.01	PASS
			QPSK	VN	40	-1.04	0	PASS
			QPSK	VN	50	-2.7	0	PASS

Frequency Error vs. Temperature								
Test Mode	Test Bandwidth [MHz]	Test Channel	Modulation	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM1	5	LCH	QPSK	VN	-30	2.58	0	PASS
			QPSK	VN	-20	2.51	0	PASS
			QPSK	VN	-10	6.7	0	PASS
			QPSK	VN	0	-4.17	0	PASS
			QPSK	VN	10	1.97	0	PASS
			QPSK	VN	20	8.36	0	PASS
			QPSK	VN	30	-9.97	-0.01	PASS
			QPSK	VN	40	11.01	0.01	PASS
			QPSK	VN	50	-0.76	0	PASS
		MCH	QPSK	VN	-30	-2.51	0	PASS
			QPSK	VN	-20	-7.14	0	PASS
			QPSK	VN	-10	3.33	0	PASS
			QPSK	VN	0	-0.26	0	PASS
			QPSK	VN	10	4.01	0	PASS
			QPSK	VN	20	2.67	0	PASS
			QPSK	VN	30	-6.23	0	PASS
			QPSK	VN	40	0.84	0	PASS
			QPSK	VN	50	-12.38	-0.01	PASS
		HCH	QPSK	VN	-30	6.02	0	PASS
			QPSK	VN	-20	-0.05	0	PASS
			QPSK	VN	-10	-5.28	0	PASS
			QPSK	VN	0	6.27	0	PASS
			QPSK	VN	10	-0.7	0	PASS
			QPSK	VN	20	-8.86	-0.01	PASS
			QPSK	VN	30	5.17	0	PASS
			QPSK	VN	40	7.48	0	PASS
			QPSK	VN	50	1.02	0	PASS

Frequency Error vs. Temperature								
Test Mode	Test Bandwidth [MHz]	Test Channel	Modulation	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM1	20	LCH	QPSK	VN	-30	0.28	0	PASS
			QPSK	VN	-20	-2.43	0	PASS
			QPSK	VN	-10	-2.88	0	PASS
			QPSK	VN	0	0.6	0	PASS
			QPSK	VN	10	-1.41	0	PASS
			QPSK	VN	20	2.31	0	PASS
			QPSK	VN	30	-2.34	0	PASS
			QPSK	VN	40	-1.37	0	PASS
			QPSK	VN	50	2.21	0	PASS
		MCH	QPSK	VN	-30	-1.84	0	PASS
			QPSK	VN	-20	1.23	0	PASS
			QPSK	VN	-10	0.61	0	PASS
			QPSK	VN	0	0.74	0	PASS
			QPSK	VN	10	-0.83	0	PASS
			QPSK	VN	20	-0.97	0	PASS
			QPSK	VN	30	-0.2	0	PASS
			QPSK	VN	40	-0.46	0	PASS
			QPSK	VN	50	1.36	0	PASS
		HCH	QPSK	VN	-30	-3.61	0	PASS
			QPSK	VN	-20	0.82	0	PASS
			QPSK	VN	-10	2.32	0	PASS
			QPSK	VN	0	-1.41	0	PASS
			QPSK	VN	10	0.97	0	PASS
			QPSK	VN	20	-0.67	0	PASS
			QPSK	VN	30	1.06	0	PASS
			QPSK	VN	40	-0.15	0	PASS
			QPSK	VN	50	-0.54	0	PASS

Frequency Error vs. Temperature								
Test Mode	Test Bandwidth [MHz]	Test Channel	Modulation	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM2	1.4	LCH	16QAM	VN	-30	9.74	0.01	PASS
			16QAM	VN	-20	15.85	0.01	PASS
			16QAM	VN	-10	1.57	0	PASS
			16QAM	VN	0	-3.6	0	PASS
			16QAM	VN	10	10.23	0.01	PASS
			16QAM	VN	20	99	0.06	PASS
			16QAM	VN	30	16.85	0.01	PASS
			16QAM	VN	40	-2.17	0	PASS
			16QAM	VN	50	-80.54	-0.05	PASS
		MCH	16QAM	VN	-30	5.1	0	PASS
			16QAM	VN	-20	-26.84	-0.02	PASS
			16QAM	VN	-10	6.08	0	PASS
			16QAM	VN	0	0.28	0	PASS
			16QAM	VN	10	-2.1	0	PASS
			16QAM	VN	20	8.89	0.01	PASS
			16QAM	VN	30	-25.41	-0.01	PASS
			16QAM	VN	40	82.03	0.05	PASS
			16QAM	VN	50	-11.13	-0.01	PASS
		HCH	16QAM	VN	-30	-4.05	0	PASS
			16QAM	VN	-20	29.15	0.02	PASS
			16QAM	VN	-10	67.44	0.04	PASS
			16QAM	VN	0	-9.85	-0.01	PASS
			16QAM	VN	10	1.77	0	PASS
			16QAM	VN	20	76.76	0.04	PASS
			16QAM	VN	30	3.84	0	PASS
			16QAM	VN	40	37.94	0.02	PASS
			16QAM	VN	50	5.71	0	PASS

Frequency Error vs. Temperature								
Test Mode	Test Bandwidth [MHz]	Test Channel	Modulation	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM2	5	LCH	16QAM	VN	-30	8.98	0.01	PASS
			16QAM	VN	-20	-0.1	0	PASS
			16QAM	VN	-10	3.71	0	PASS
			16QAM	VN	0	2.41	0	PASS
			16QAM	VN	10	-4.49	0	PASS
			16QAM	VN	20	-1.5	0	PASS
			16QAM	VN	30	-2.92	0	PASS
			16QAM	VN	40	0.4	0	PASS
			16QAM	VN	50	-0.71	0	PASS
		MCH	16QAM	VN	-30	-10.65	-0.01	PASS
			16QAM	VN	-20	-0.7	0	PASS
			16QAM	VN	-10	-11.9	-0.01	PASS
			16QAM	VN	0	-5.37	0	PASS
			16QAM	VN	10	5.25	0	PASS
			16QAM	VN	20	1.91	0	PASS
			16QAM	VN	30	2.83	0	PASS
			16QAM	VN	40	-6.39	0	PASS
			16QAM	VN	50	-10.16	-0.01	PASS
		HCH	16QAM	VN	-30	0.97	0	PASS
			16QAM	VN	-20	1.8	0	PASS
			16QAM	VN	-10	-0.26	0	PASS
			16QAM	VN	0	9	0.01	PASS
			16QAM	VN	10	-4.48	0	PASS
			16QAM	VN	20	-9.07	-0.01	PASS
			16QAM	VN	30	-2.26	0	PASS
			16QAM	VN	40	-1.61	0	PASS
			16QAM	VN	50	-4.28	0	PASS

Frequency Error vs. Temperature								
Test Mode	Test Bandwidth [MHz]	Test Channel	Modulation	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
TM2	20	LCH	16QAM	VN	-30	-0.29	0	PASS
			16QAM	VN	-20	-0.27	0	PASS
			16QAM	VN	-10	-2.62	0	PASS
			16QAM	VN	0	-1.46	0	PASS
			16QAM	VN	10	-2.03	0	PASS
			16QAM	VN	20	-3.46	0	PASS
			16QAM	VN	30	-0.38	0	PASS
			16QAM	VN	40	-1.77	0	PASS
			16QAM	VN	50	-1.03	0	PASS
		MCH	16QAM	VN	-30	0.12	0	PASS
			16QAM	VN	-20	-0.41	0	PASS
			16QAM	VN	-10	-0.35	0	PASS
			16QAM	VN	0	0.47	0	PASS
			16QAM	VN	10	-1.91	0	PASS
			16QAM	VN	20	1.02	0	PASS
			16QAM	VN	30	-2.75	0	PASS
			16QAM	VN	40	-2.87	0	PASS
			16QAM	VN	50	-3.21	0	PASS
		HCH	16QAM	VN	-30	0.91	0	PASS
			16QAM	VN	-20	-0.01	0	PASS
			16QAM	VN	-10	-0.74	0	PASS
			16QAM	VN	0	0.21	0	PASS
			16QAM	VN	10	-2.24	0	PASS
			16QAM	VN	20	2.63	0	PASS
			16QAM	VN	30	-2.26	0	PASS
			16QAM	VN	40	0.12	0	PASS
			16QAM	VN	50	-1.74	0	PASS

End of Test Report