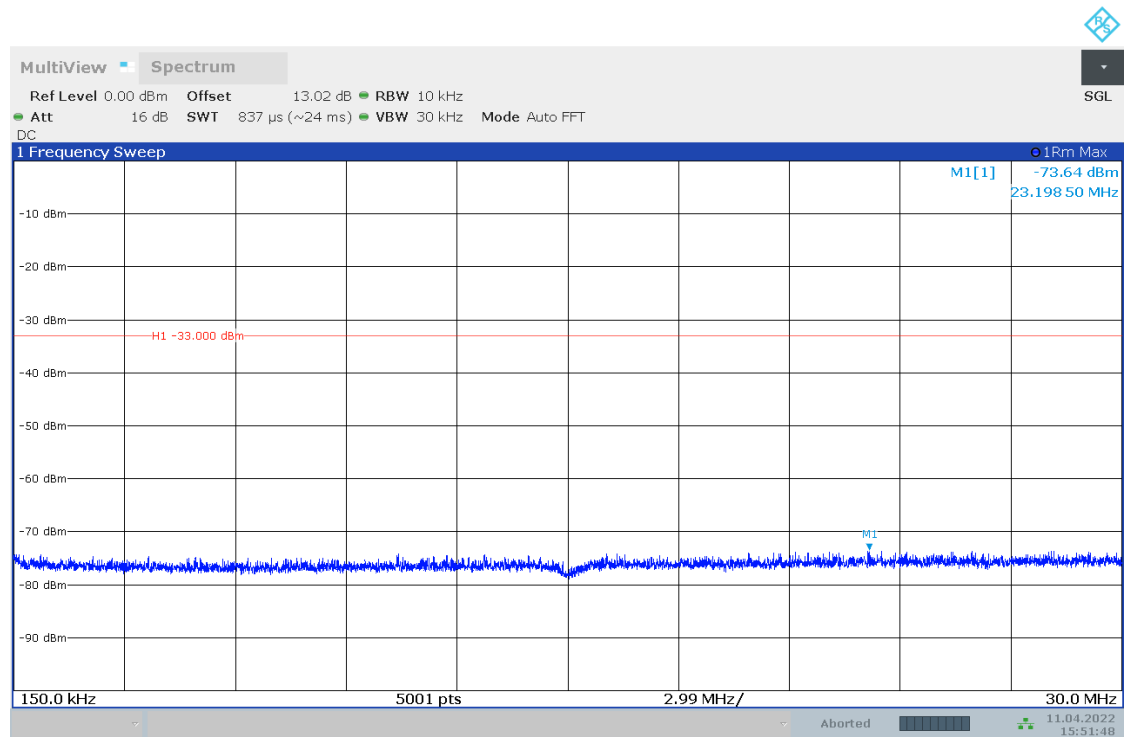
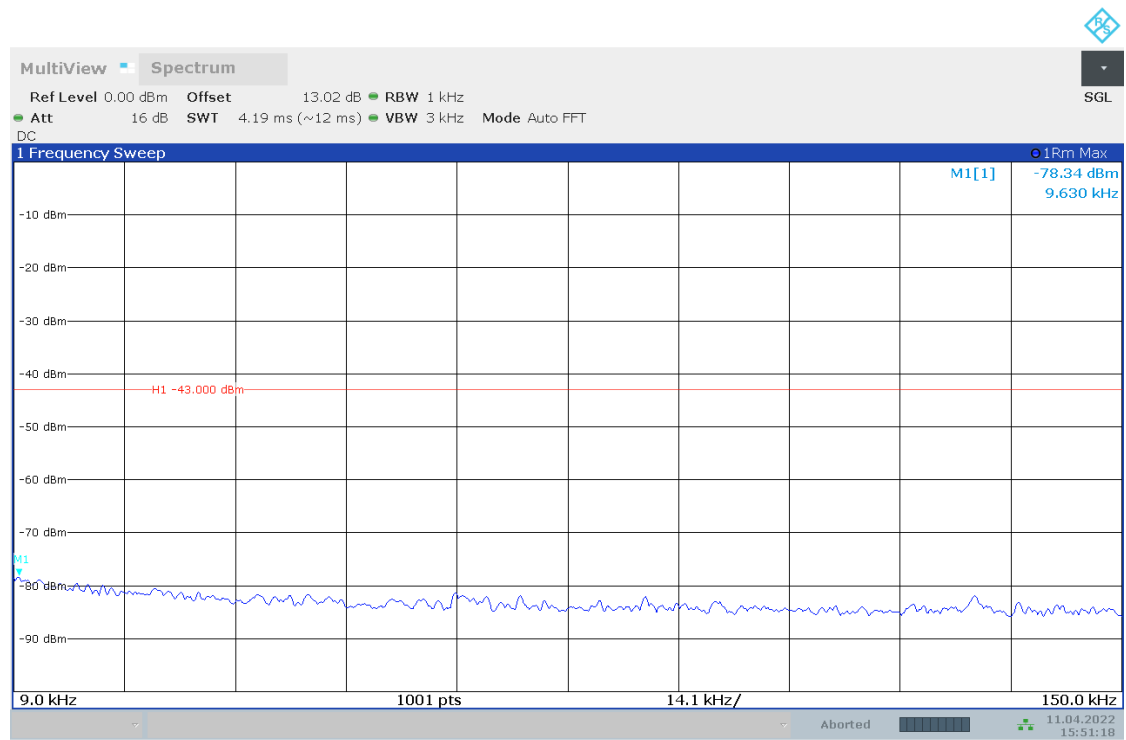
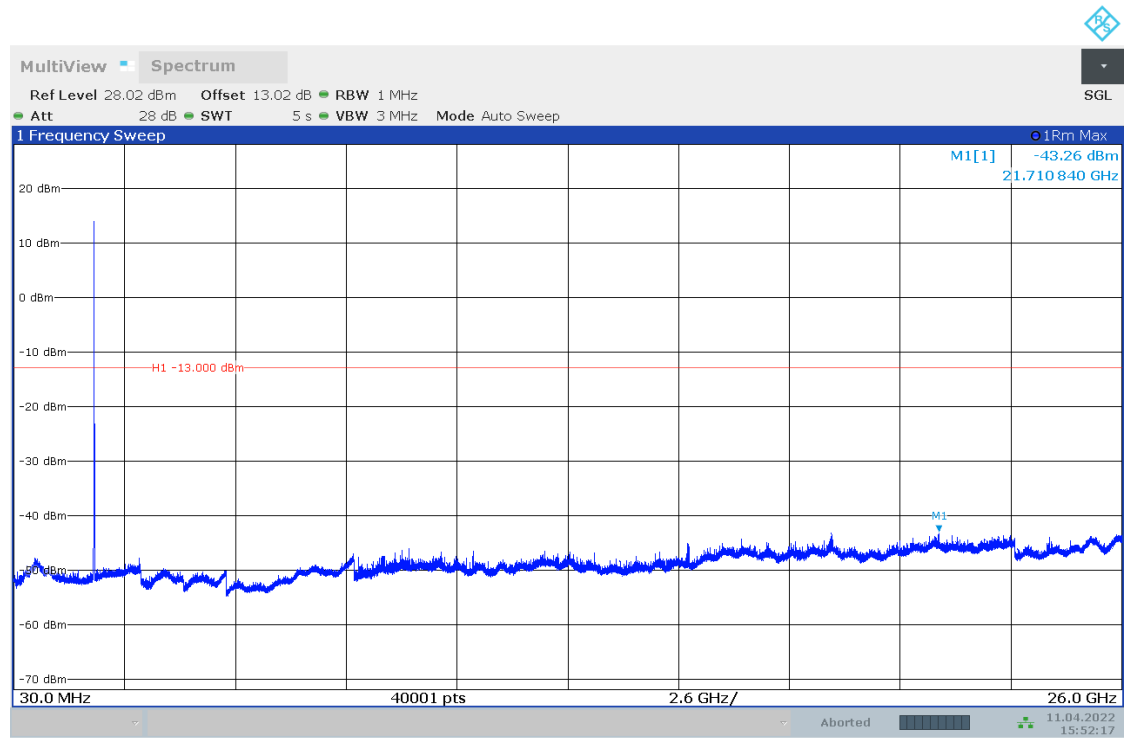


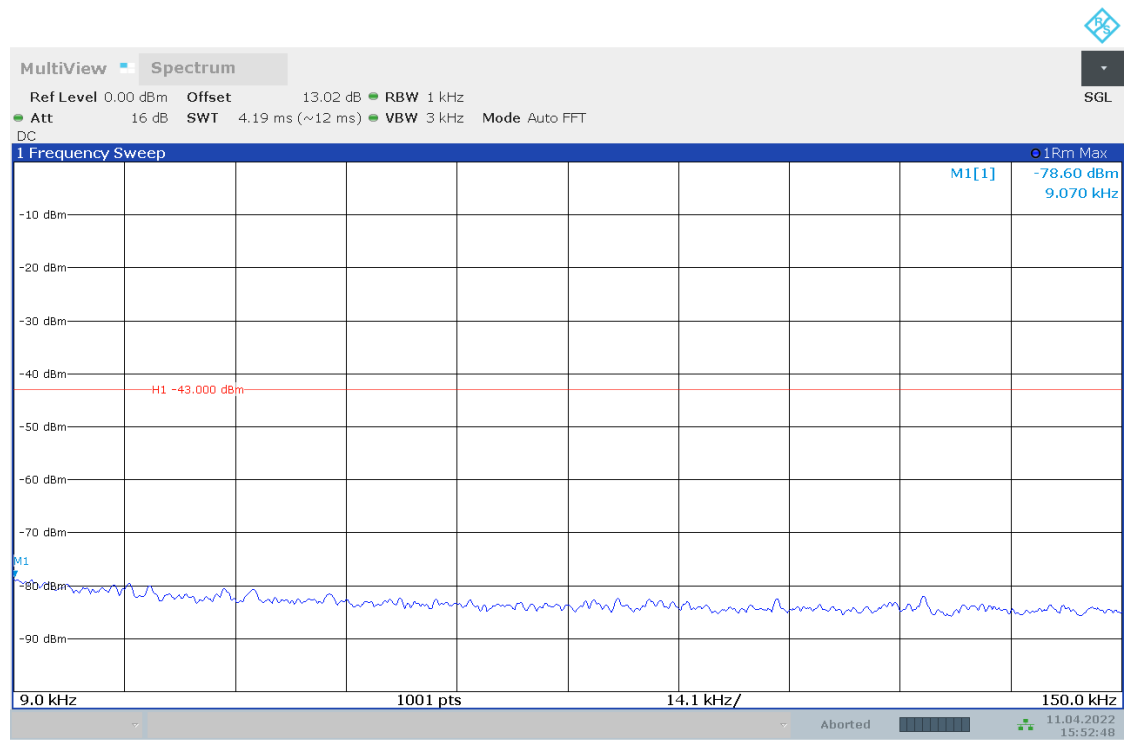
6.2.43 TM2_5MHZ_HCH_RB25#0



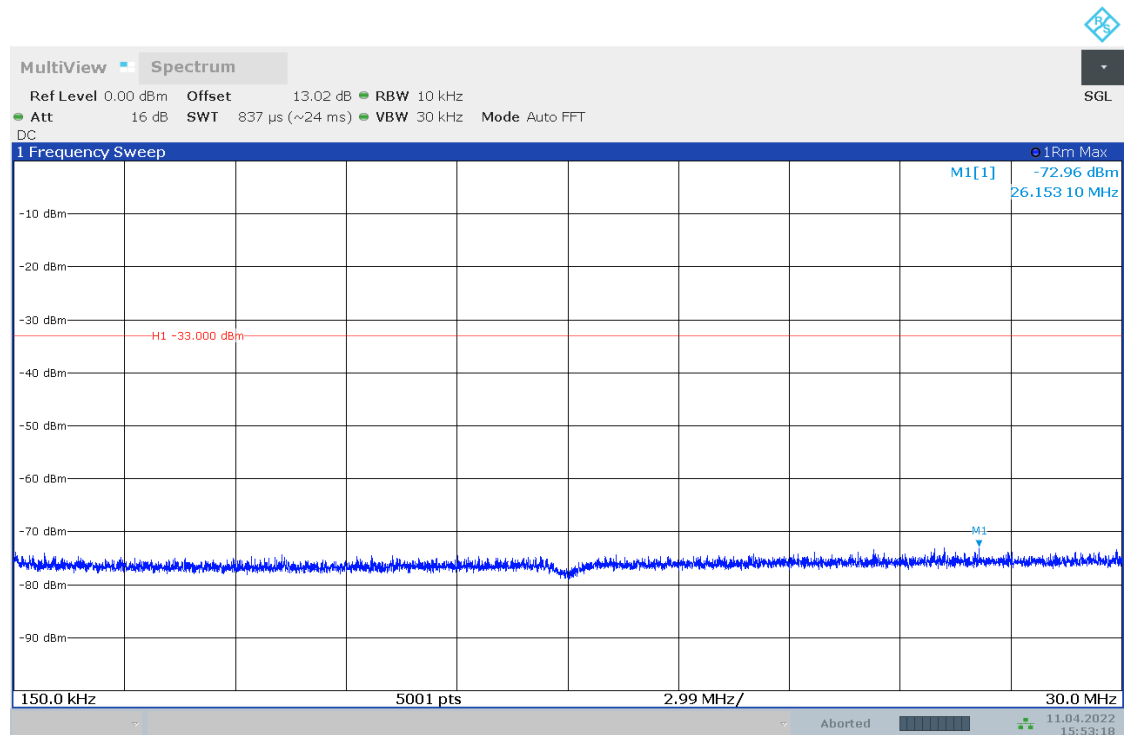


15:52:17 11.04.2022

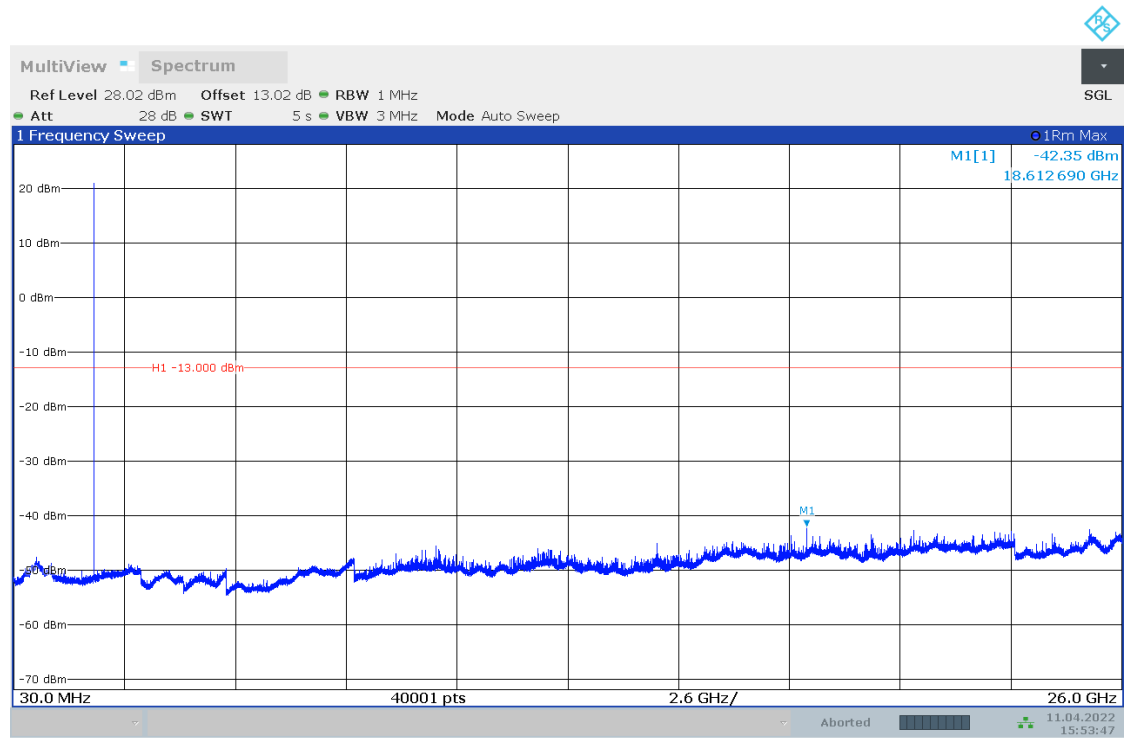
6.2.44 TM2_5MHZ_HCH_RB1#0



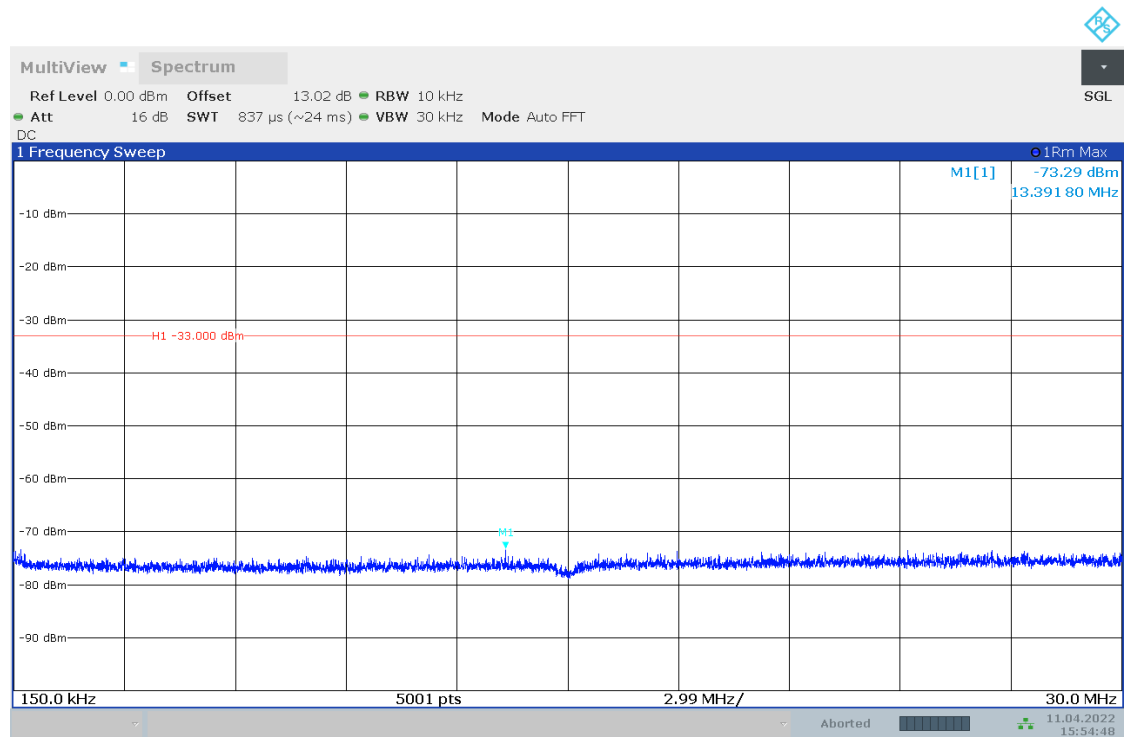
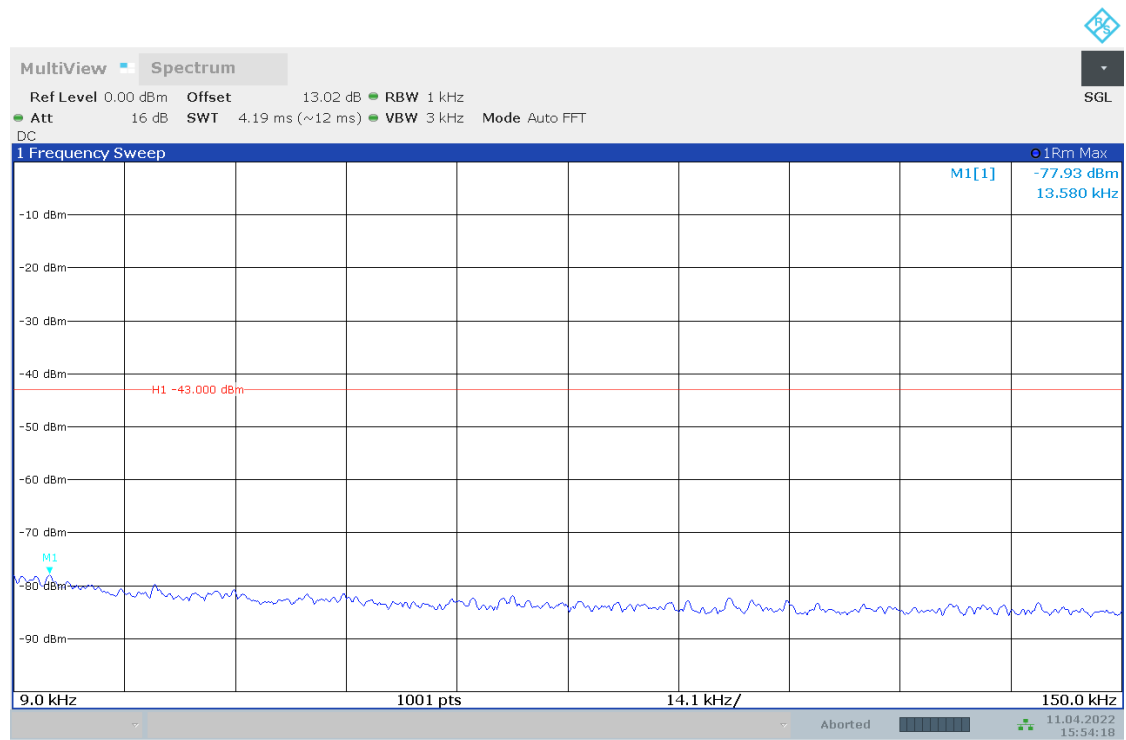
15:52:48 11.04.2022

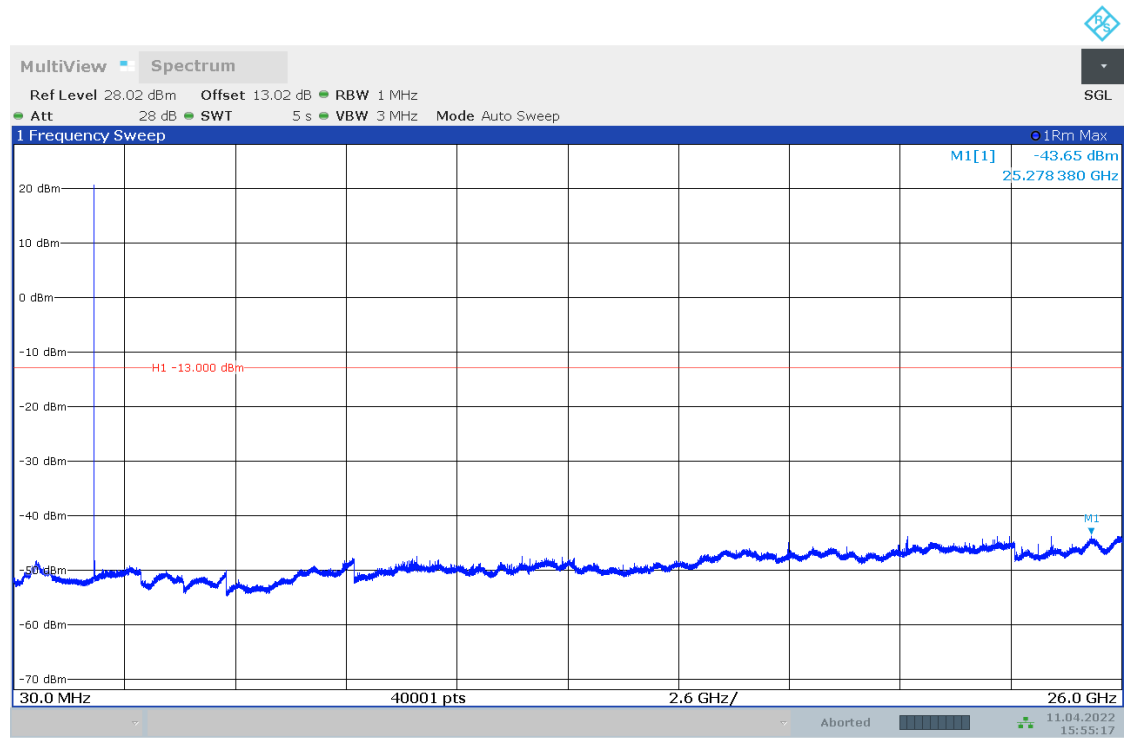


15:53:18 11.04.2022

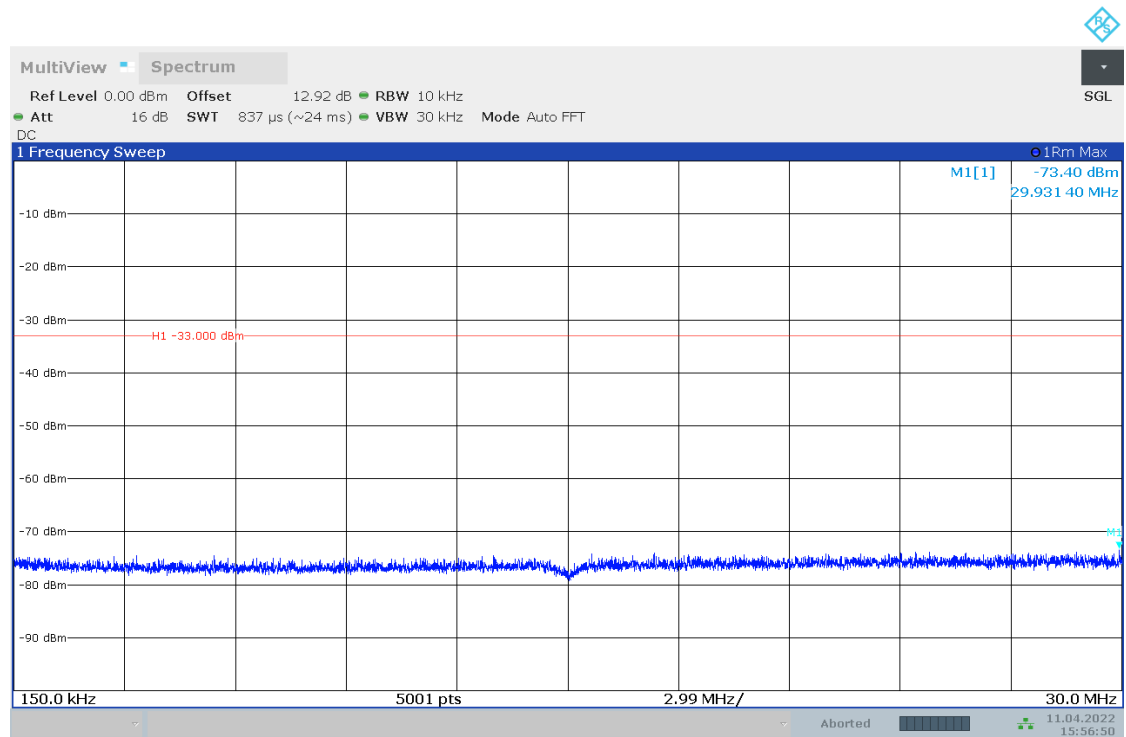
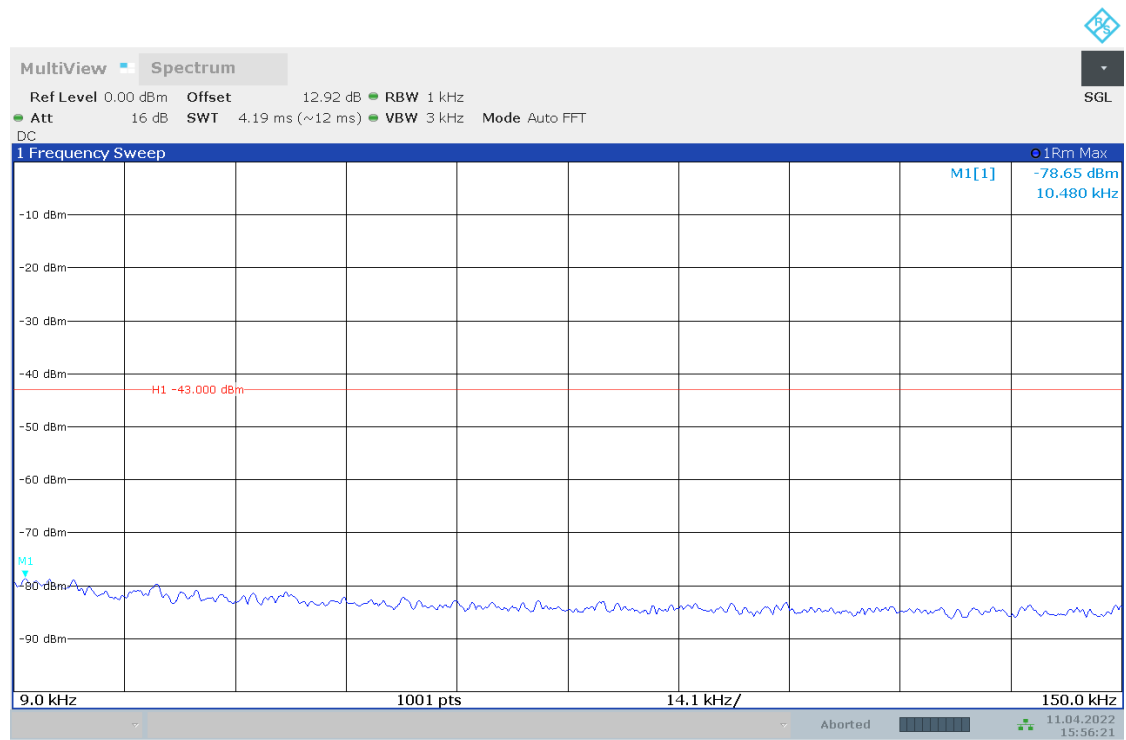


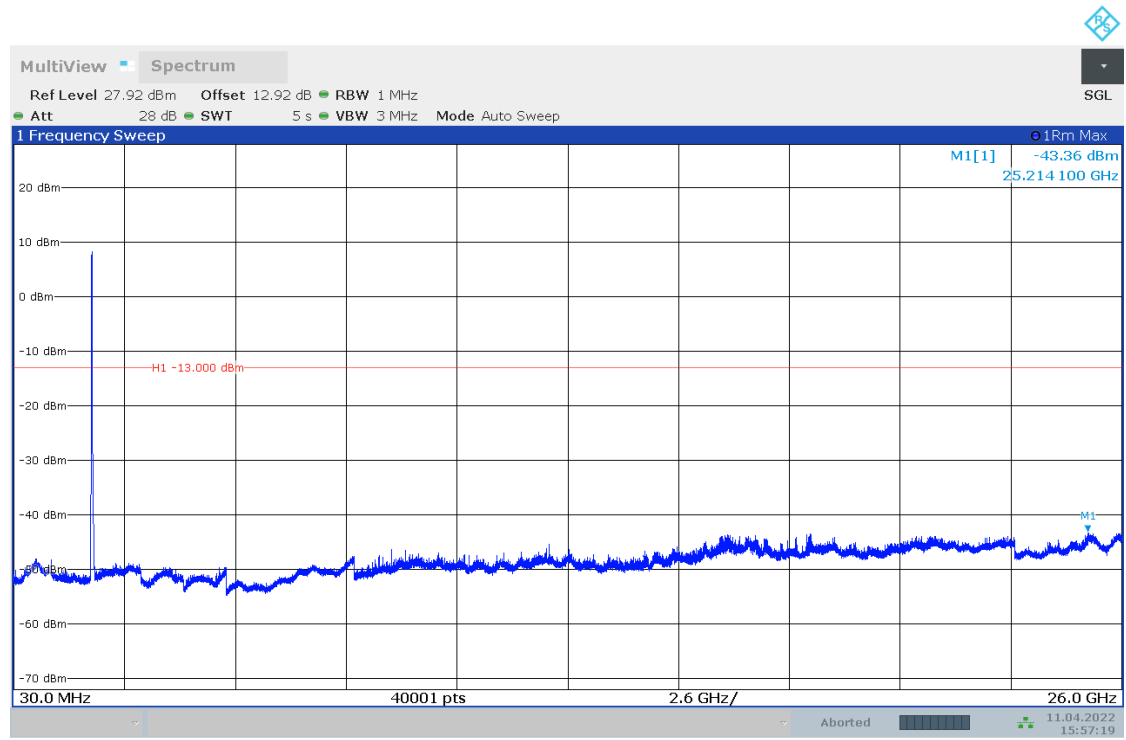
6.2.45 TM2_5MHZ_HCH_RB1#24



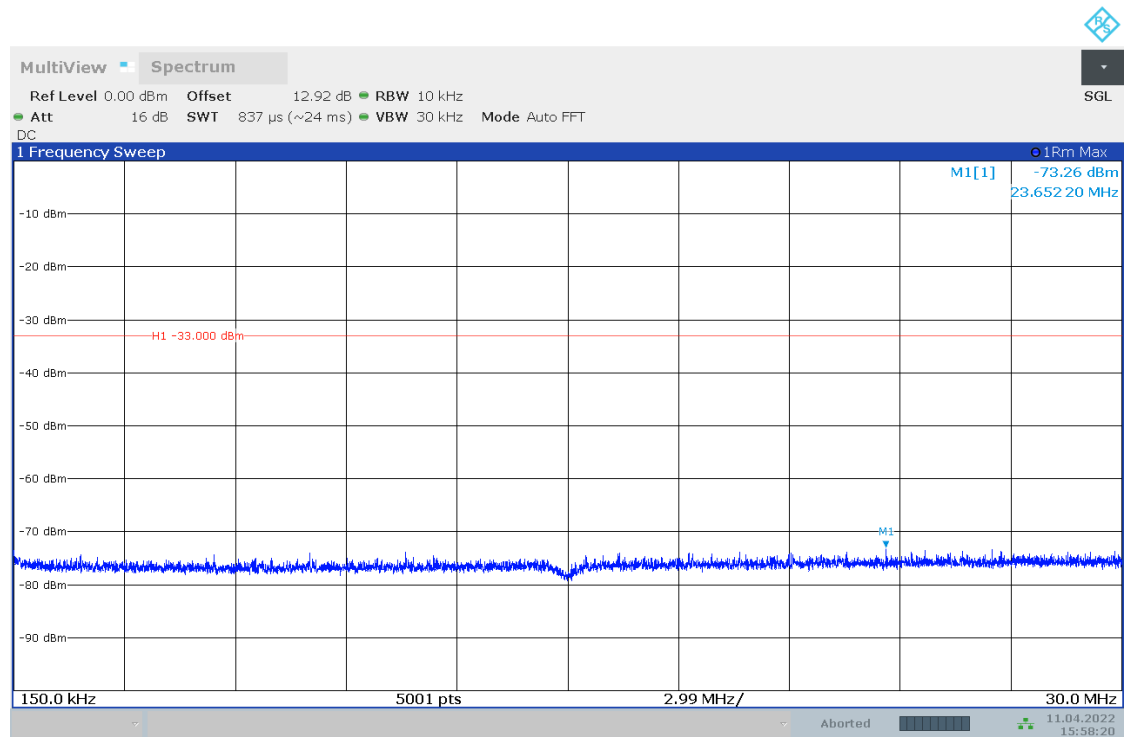
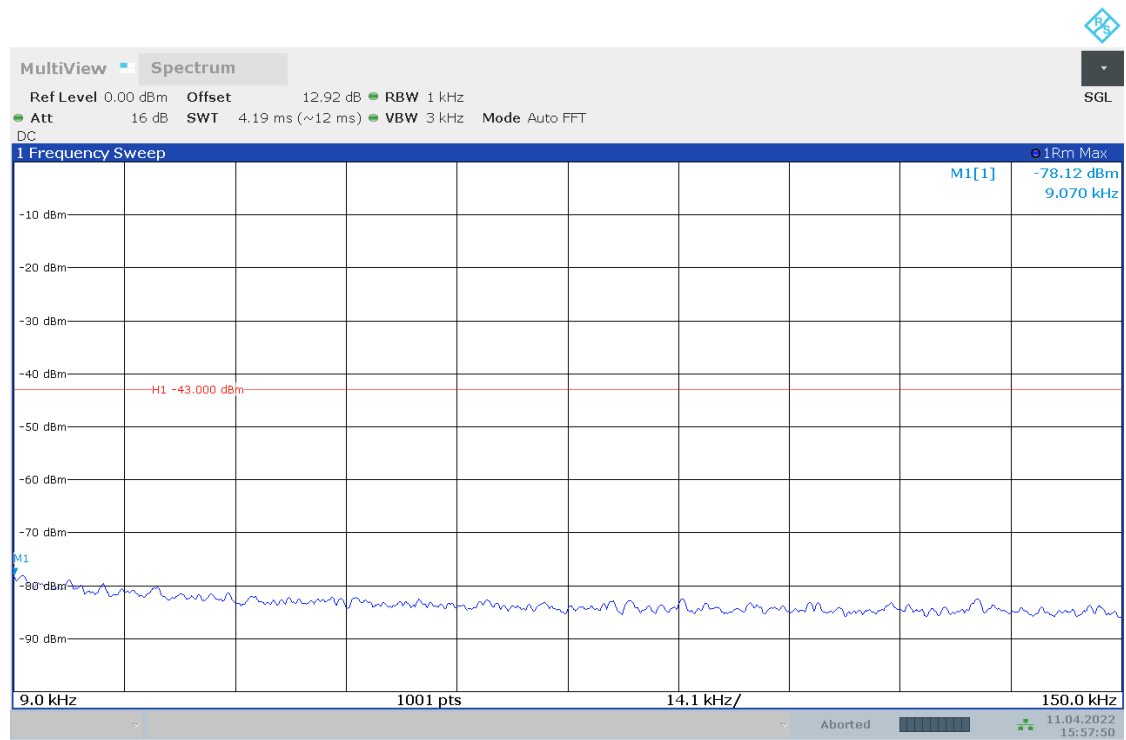


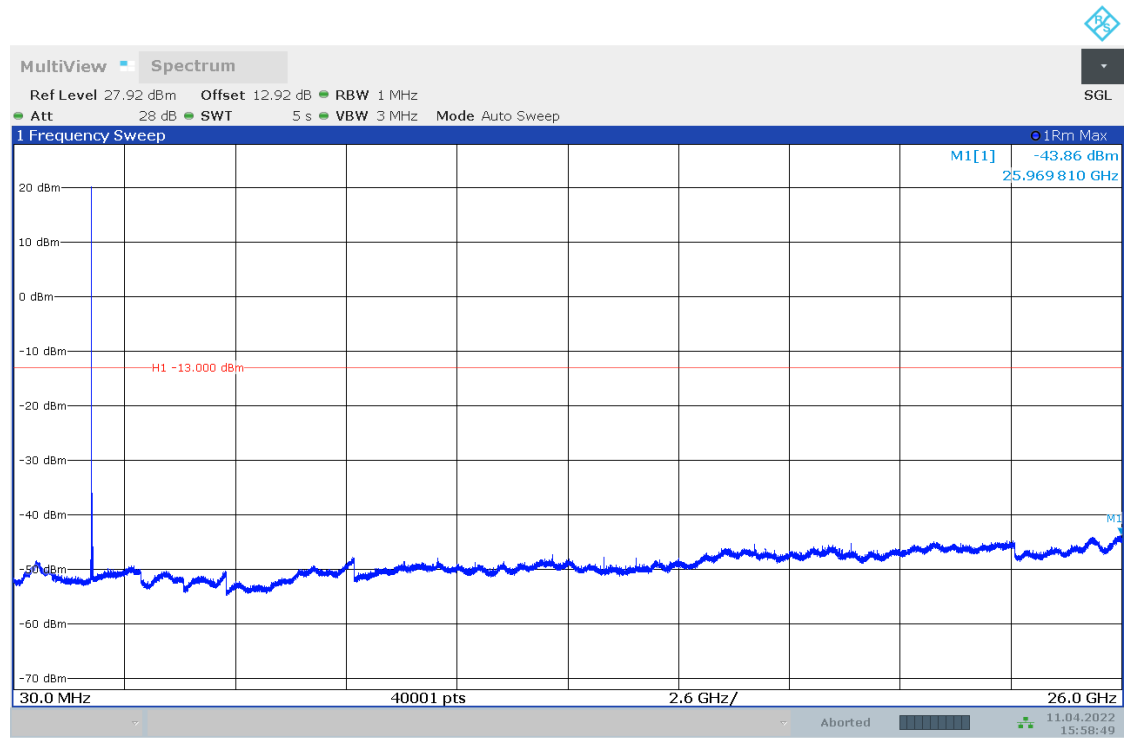
6.2.46 TM2_20MHZ_LCH_RB100#0



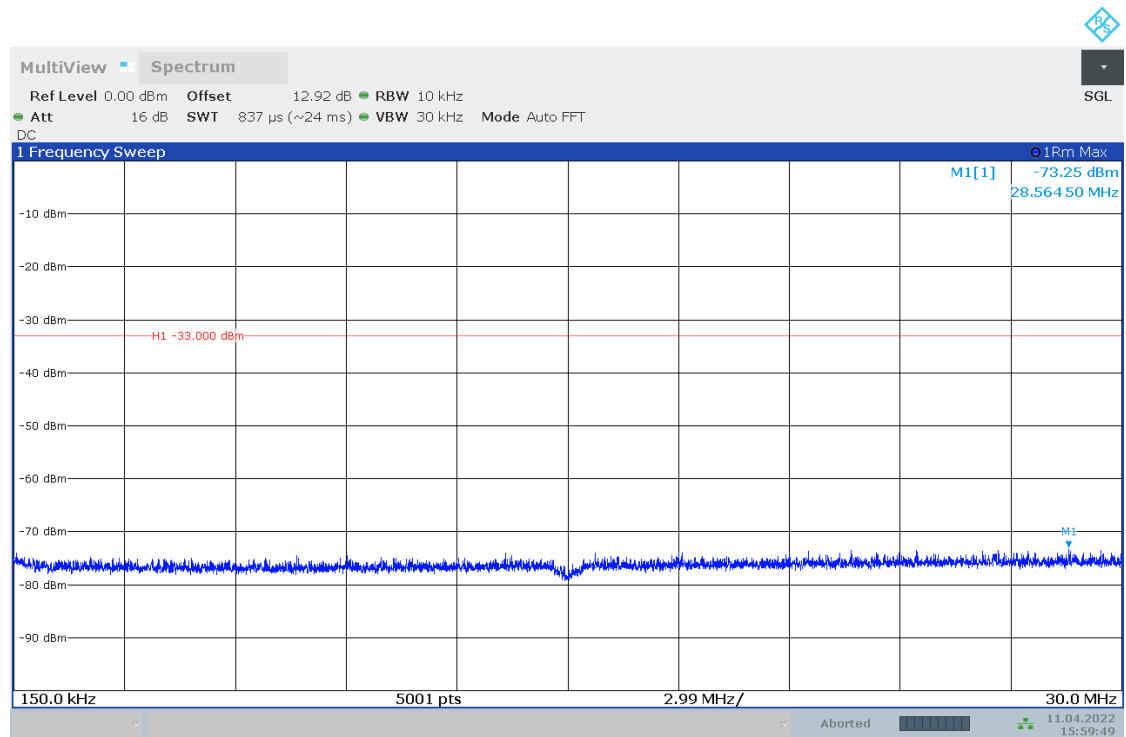
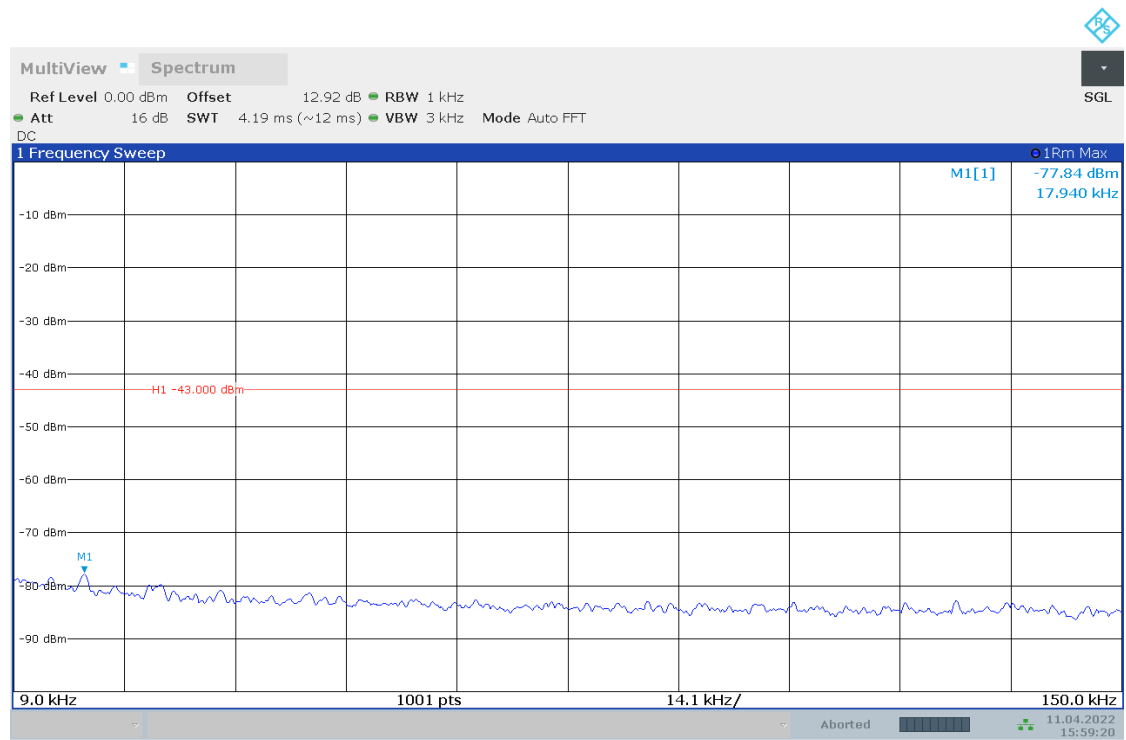


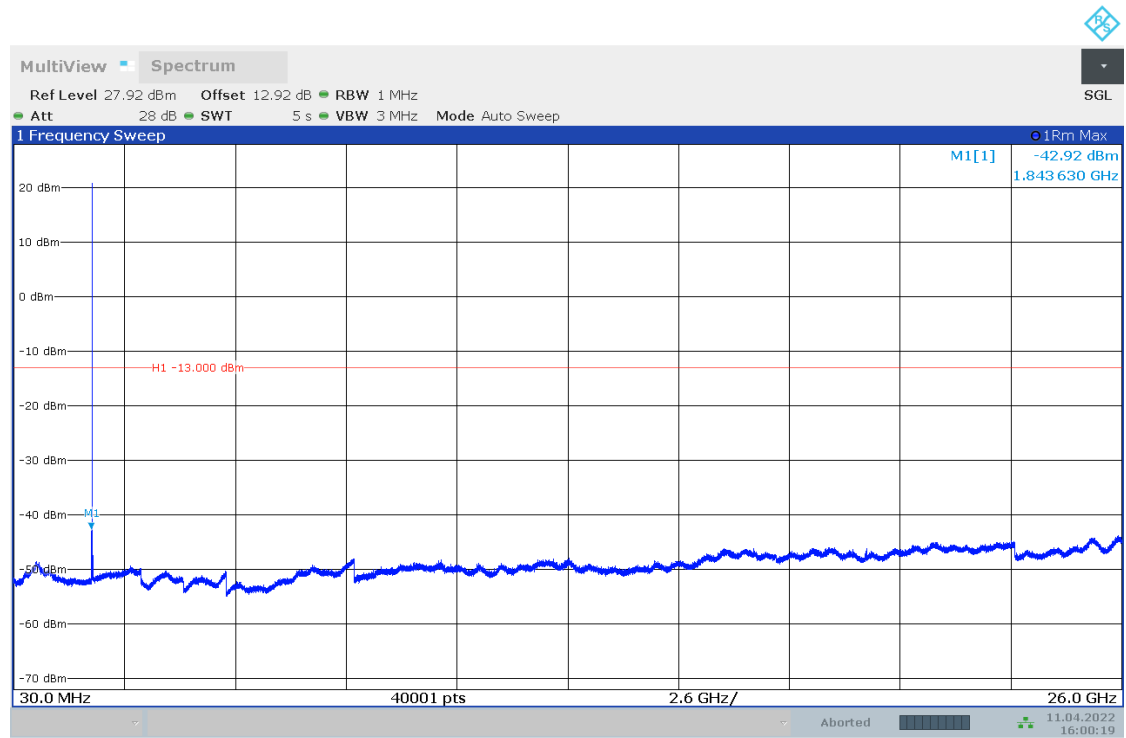
6.2.47 TM2_20MHZ_LCH_RB1#0





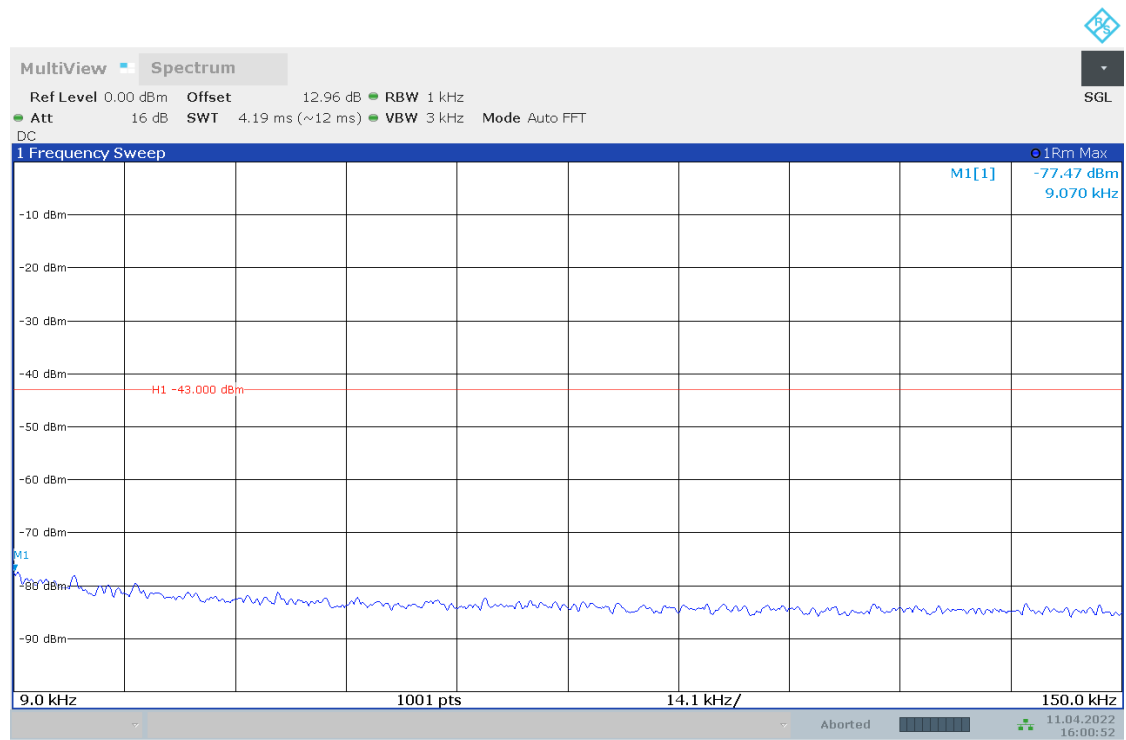
6.2.48 TM2_20MHZ_LCH_RB1#99



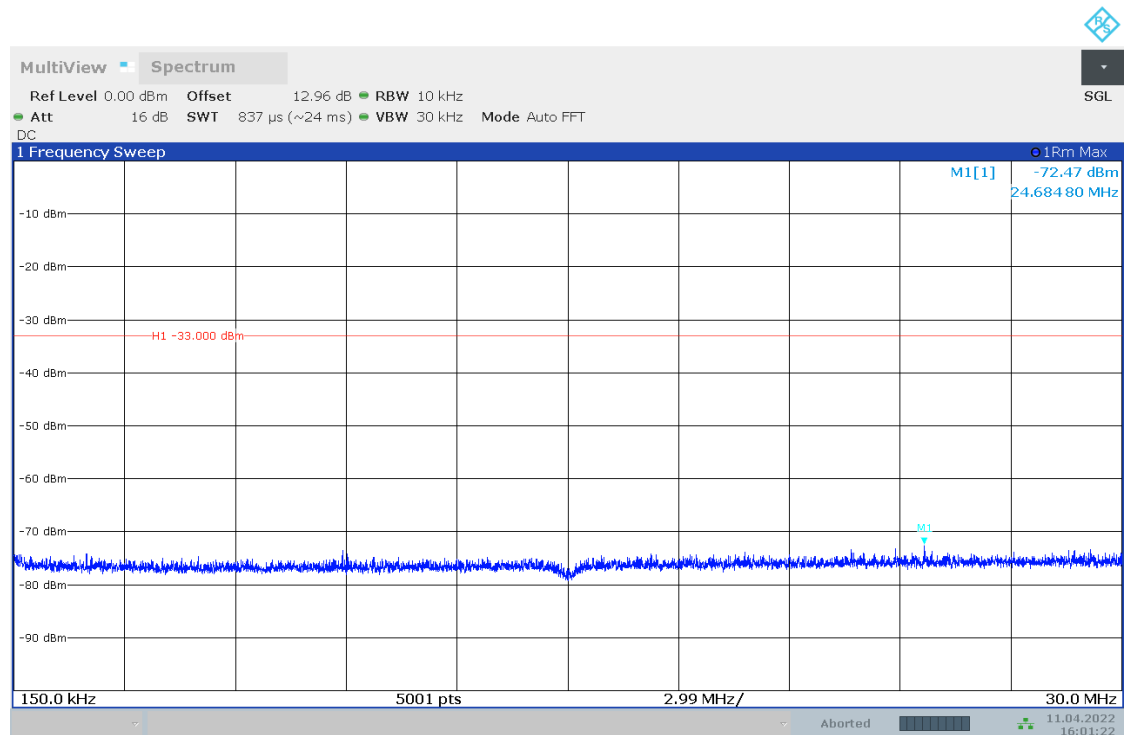


16:00:19 11.04.2022

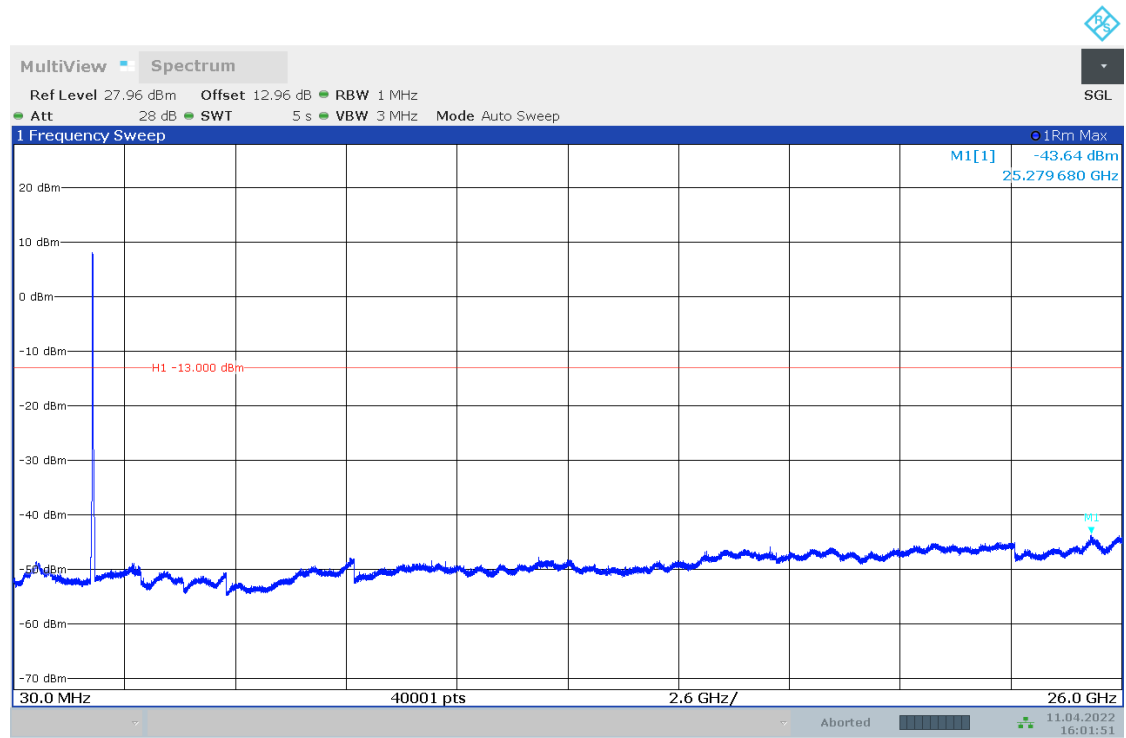
6.2.49 TM2_20MHZ_MCH_RB100#0



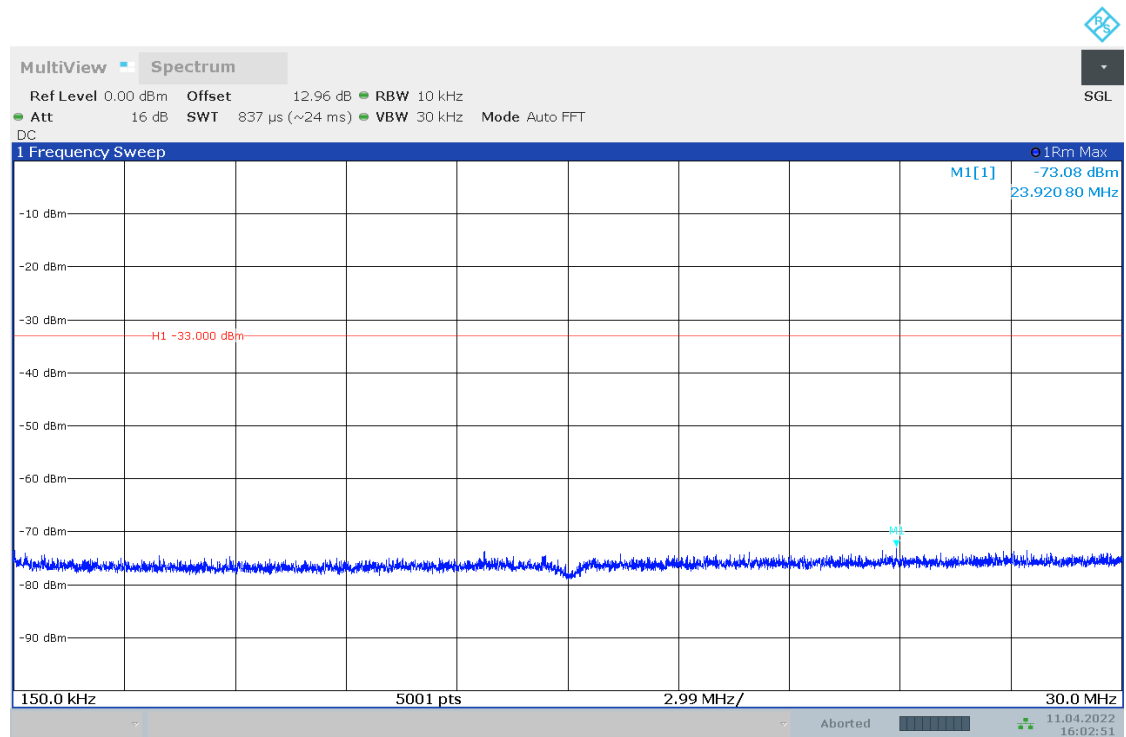
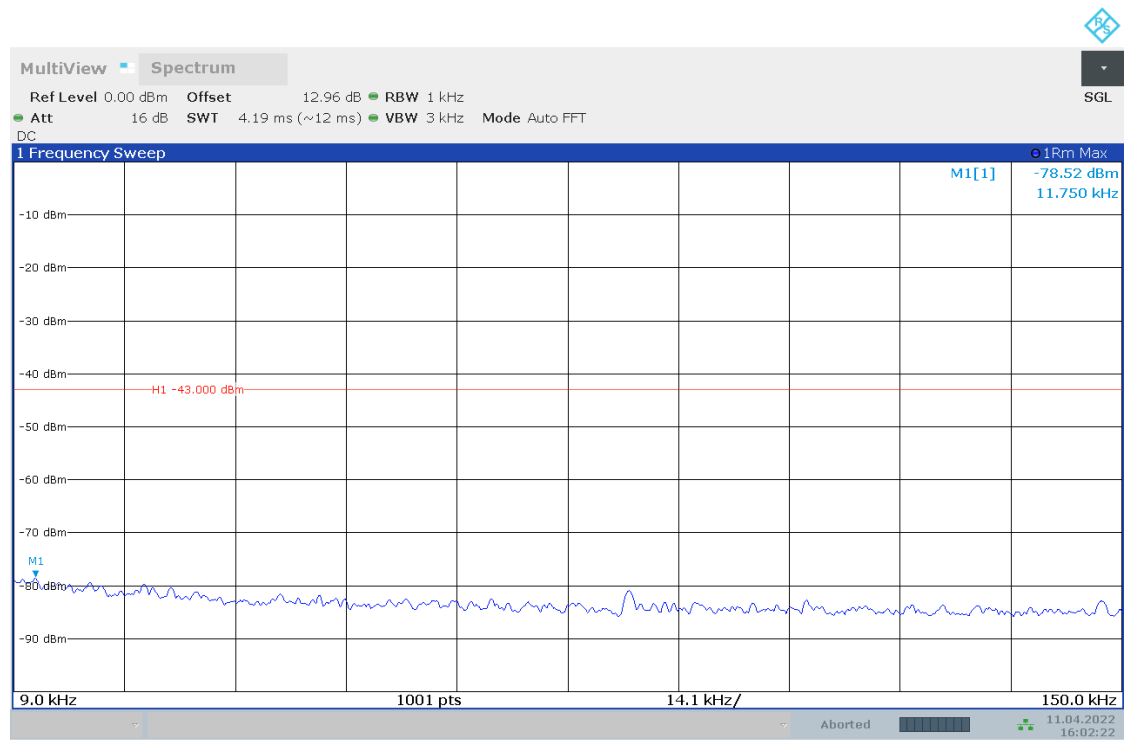
16:00:52 11.04.2022

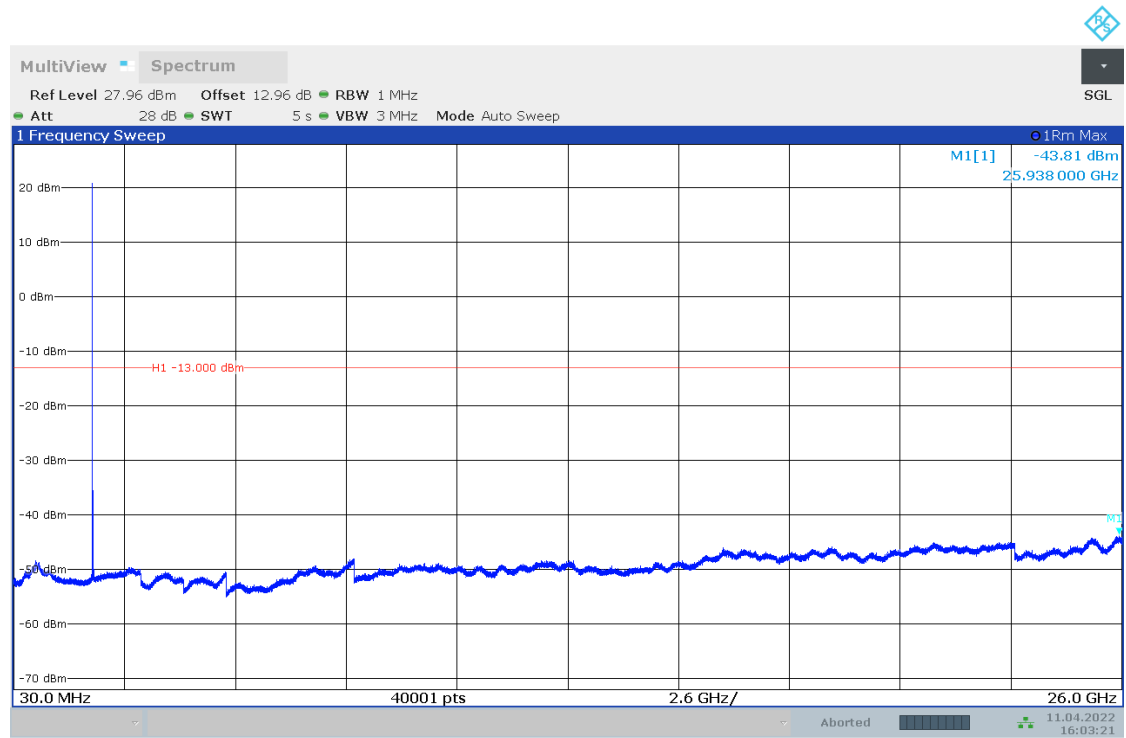


16:01:22 11.04.2022

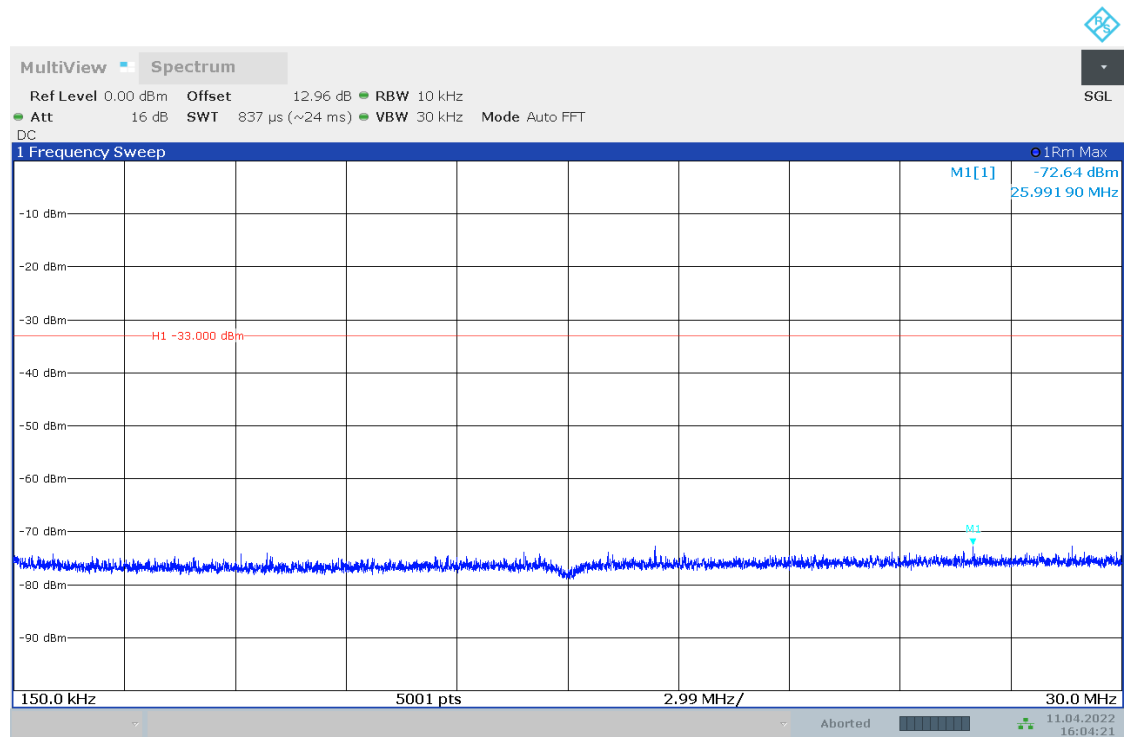
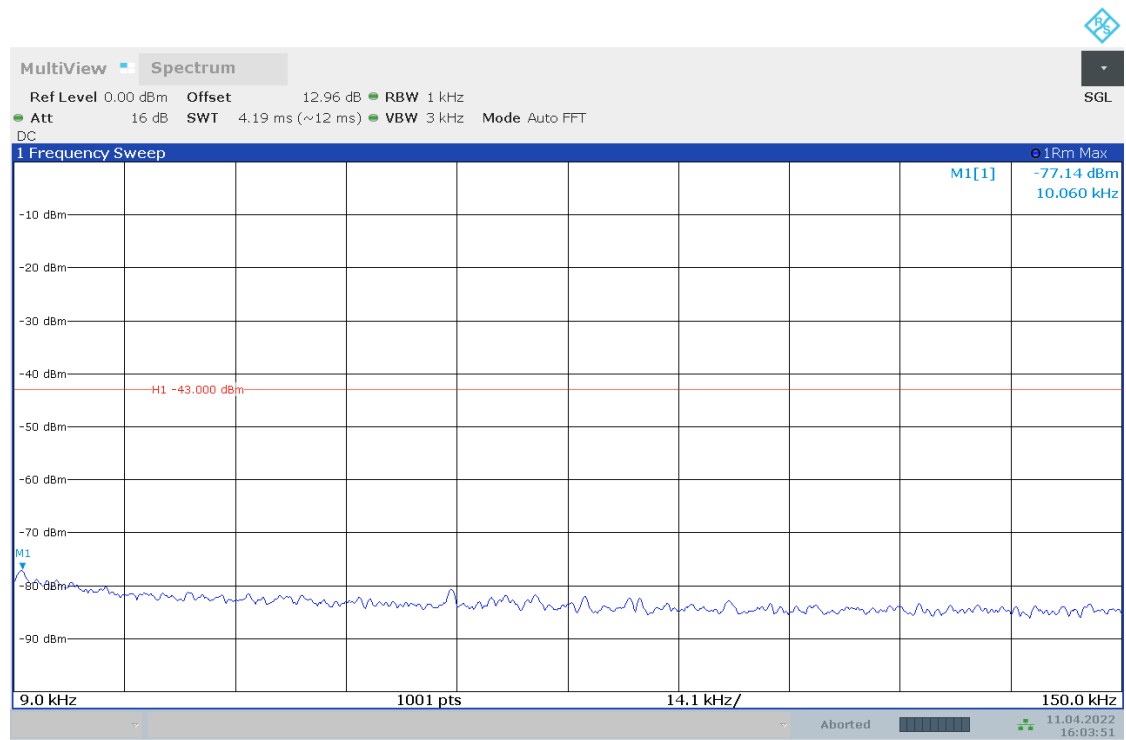


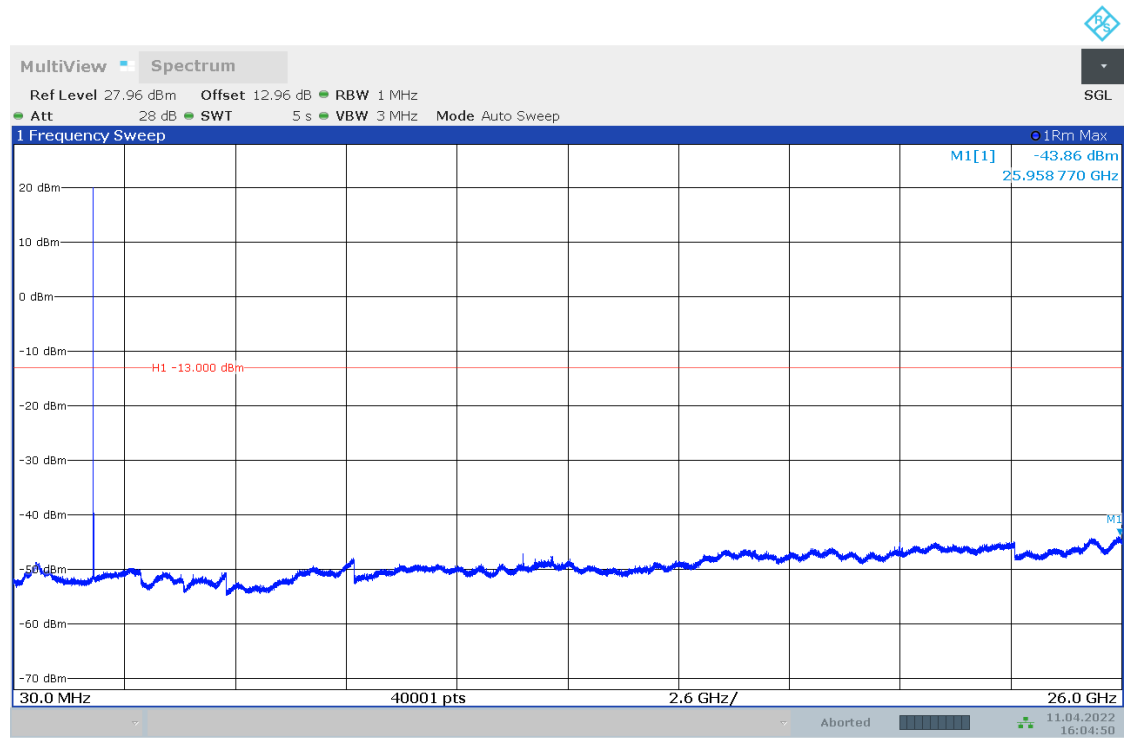
6.2.50 TM2_20MHZ_MCH_RB1#0





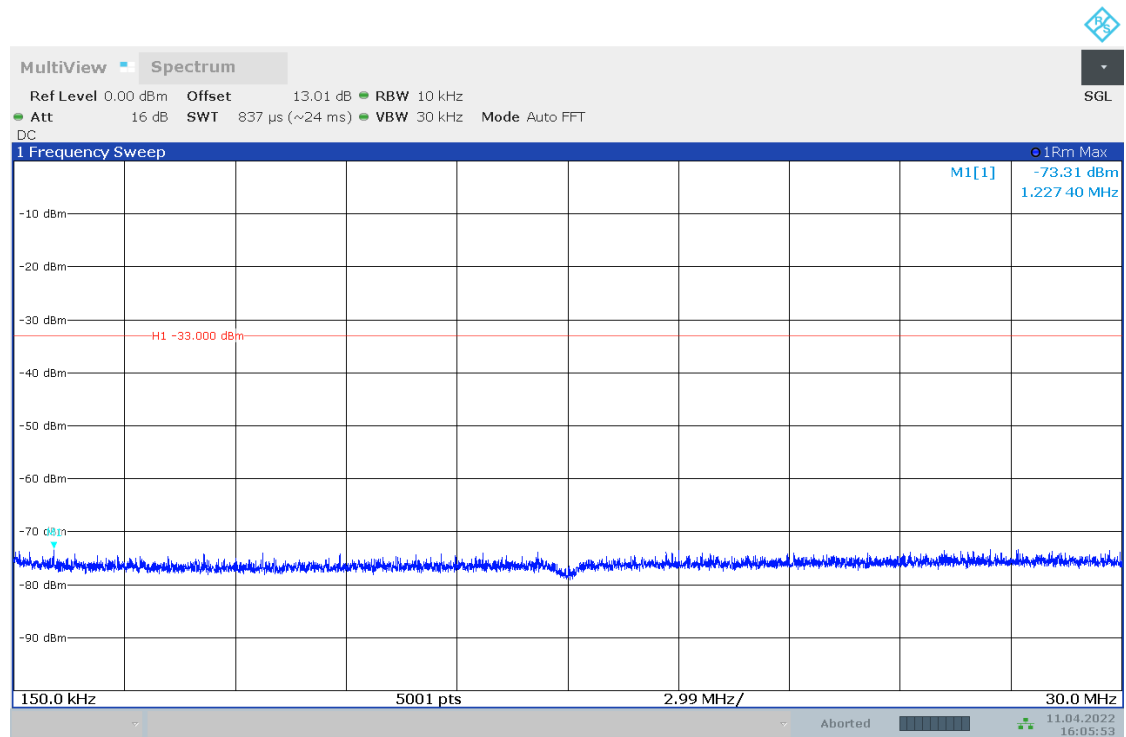
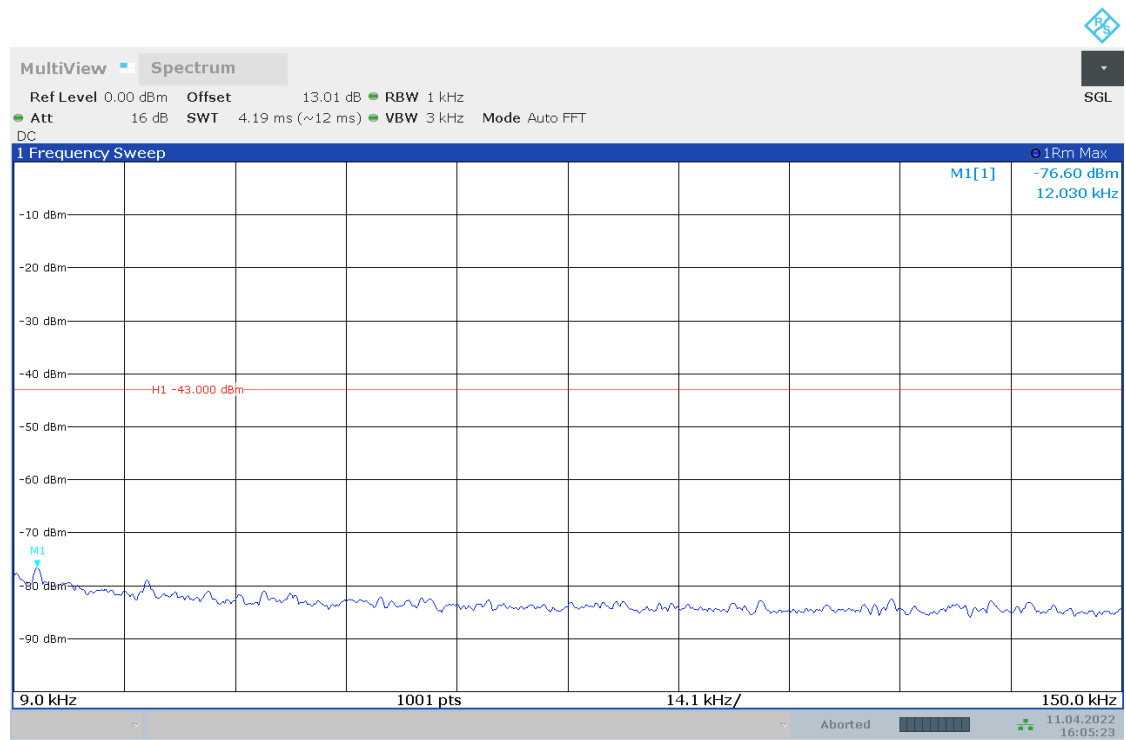
6.2.51 TM2_20MHZ_MCH_RB1#99

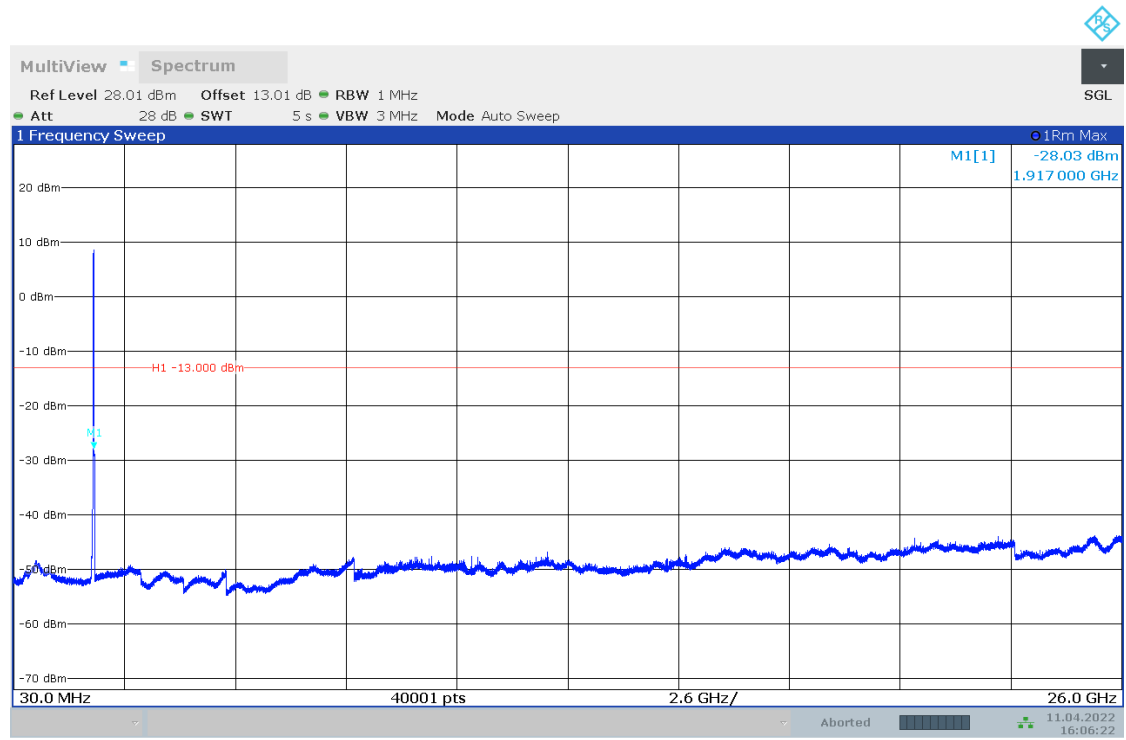




16:04:51 11.04.2022

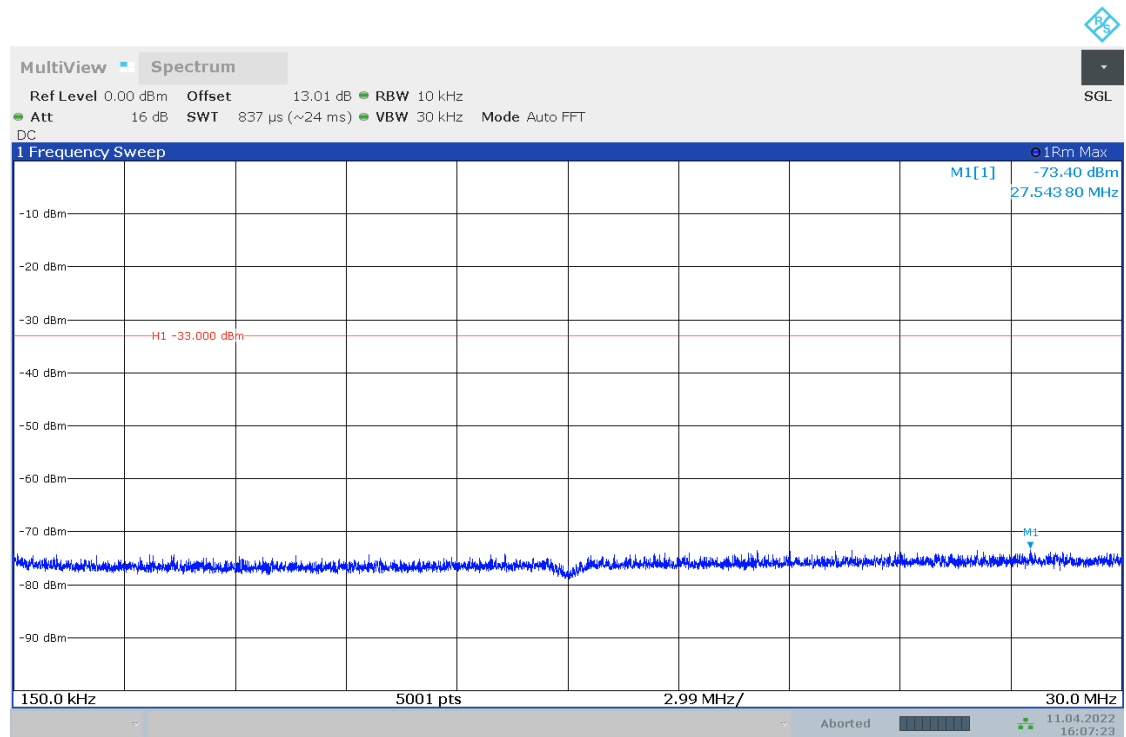
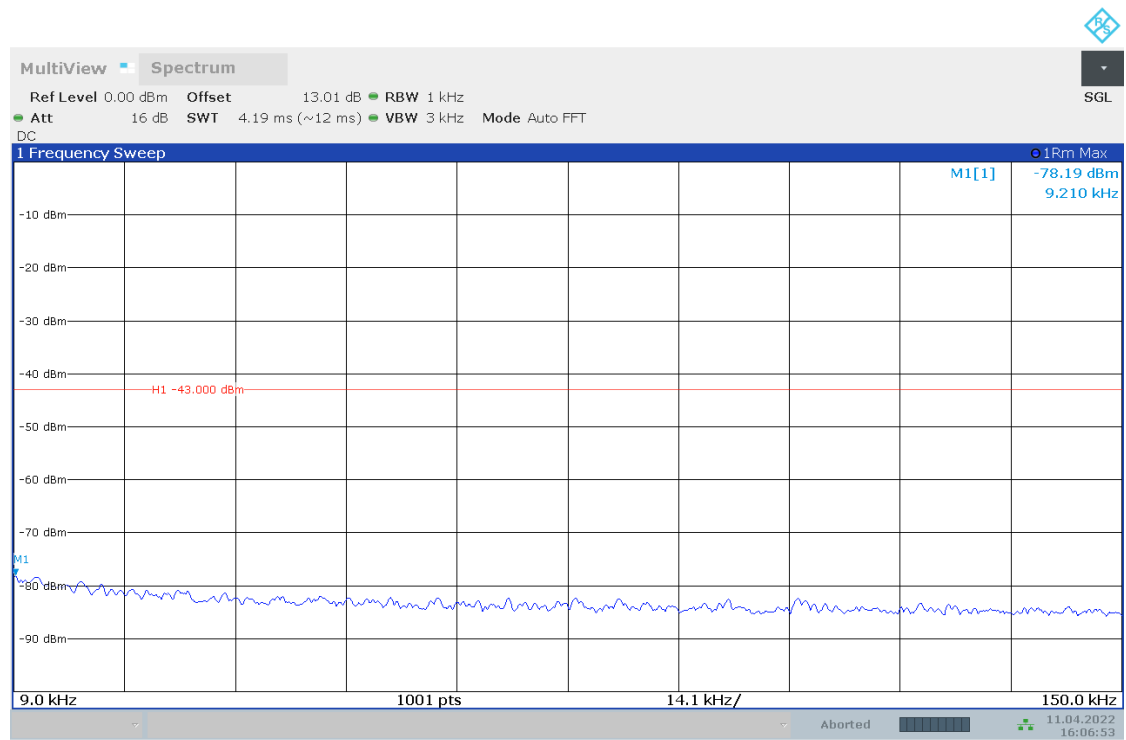
6.2.52 TM2_20MHZ_HCH_RB100#0

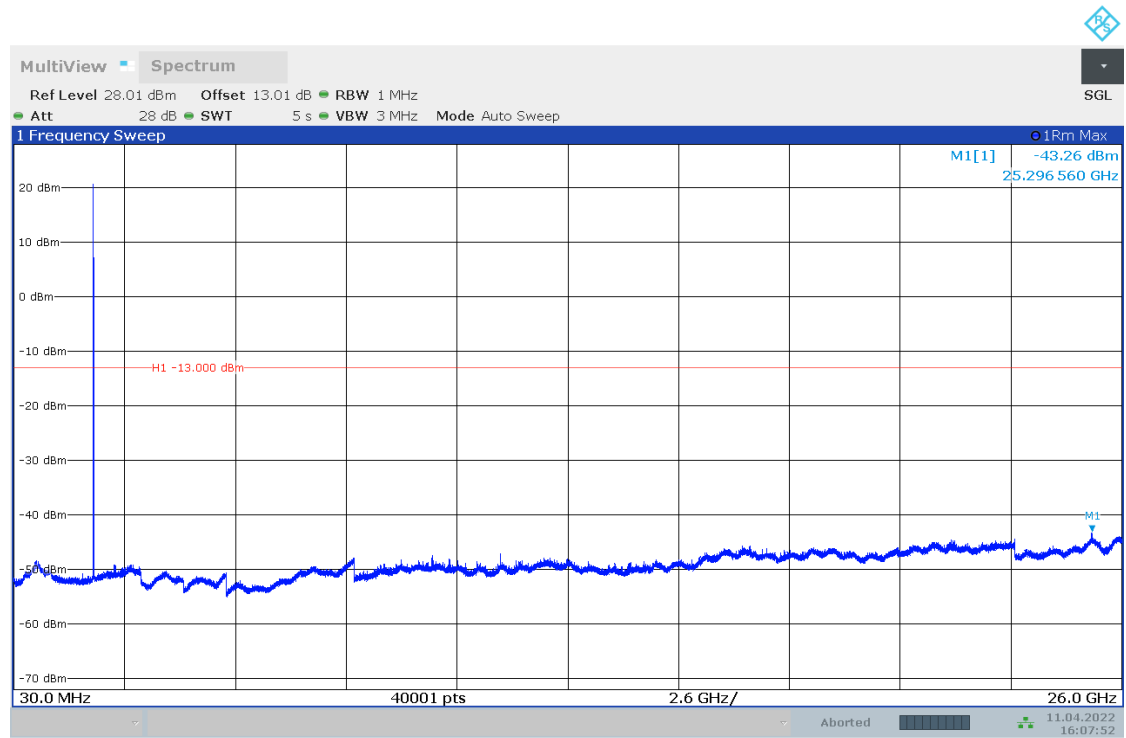




16:06:23 11.04.2022

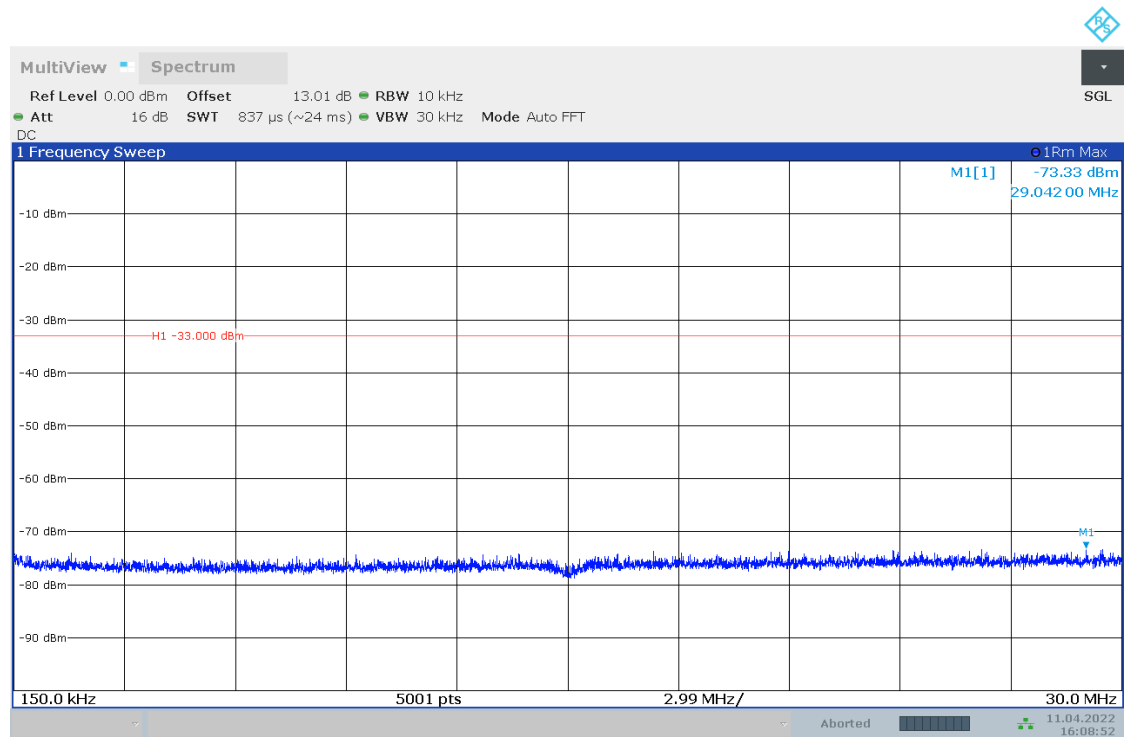
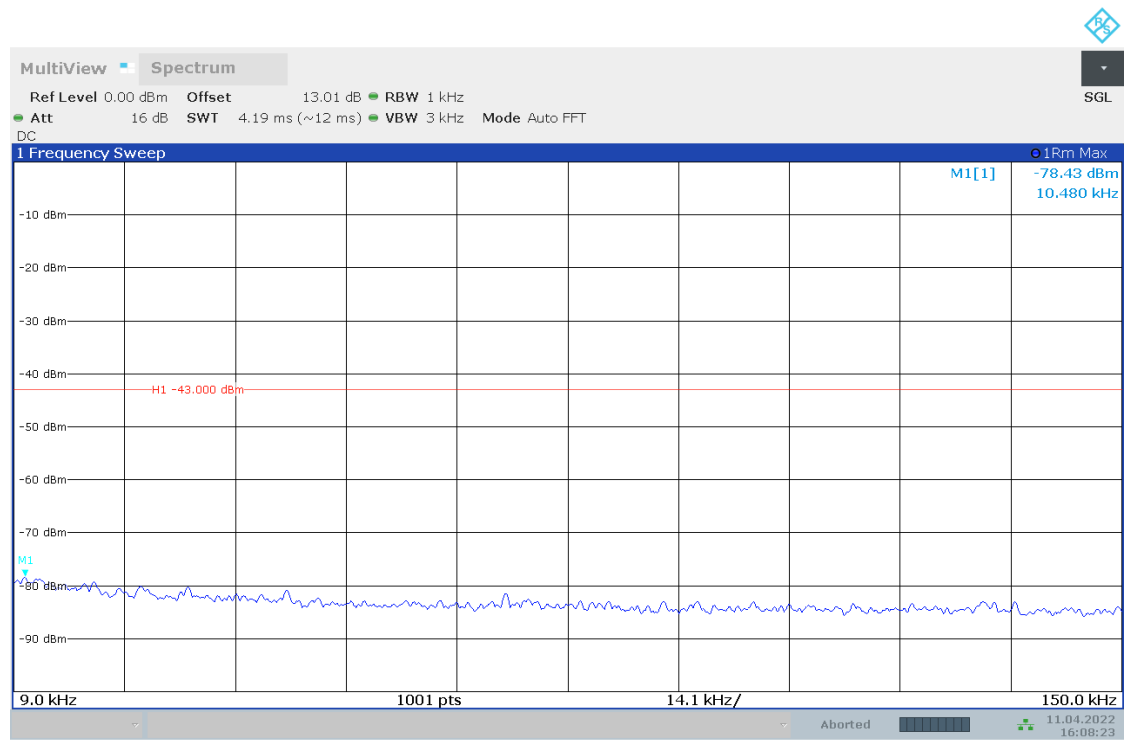
6.2.53 TM2_20MHZ_HCH_RB1#0

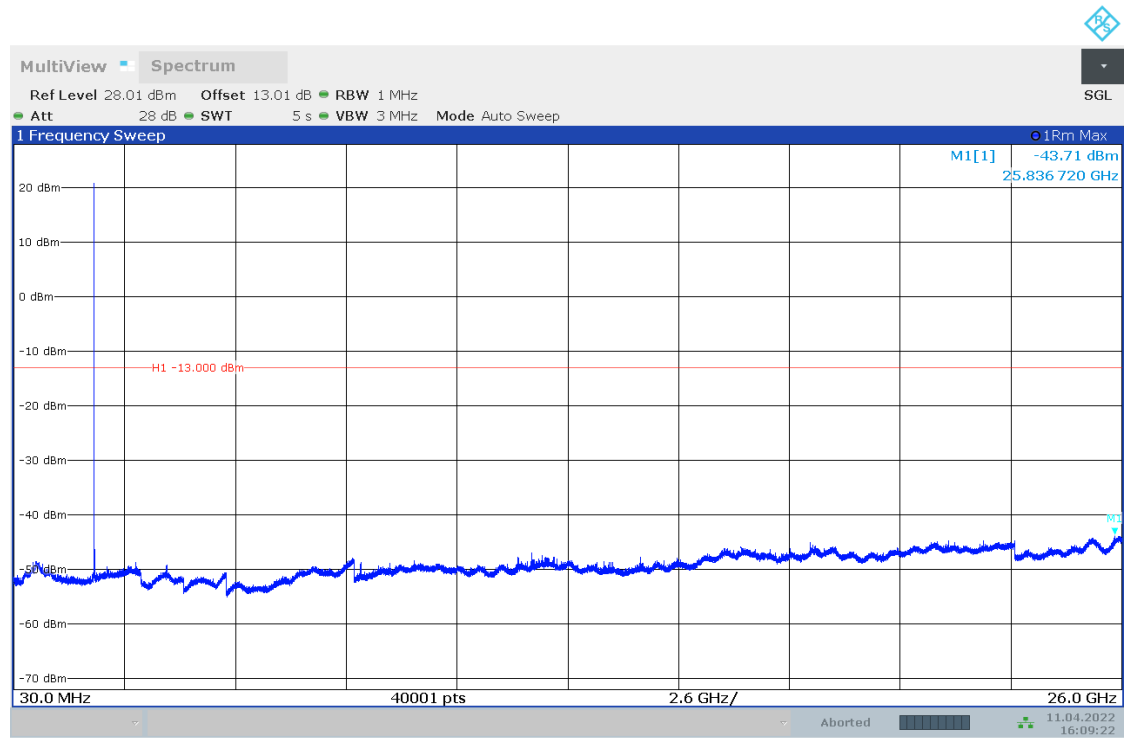




16:07:53 11.04.2022

6.2.54 TM2_20MHZ_HCH_RB1#99





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	4.58	0.0	PASS
			QPSK	TN	VN	25.24	0.01	PASS
			QPSK	TN	VL	17.71	0.01	PASS
		MCH	QPSK	TN	VH	26.96	0.01	PASS
			QPSK	TN	VN	7.87	0.0	PASS
			QPSK	TN	VL	6.71	0.0	PASS
		HCH	QPSK	TN	VH	-15.92	-0.01	PASS
			QPSK	TN	VN	-9.10	-0.0	PASS
			QPSK	TN	VL	6.83	0.0	PASS
	5	LCH	QPSK	TN	VH	1.84	0.0	PASS
			QPSK	TN	VN	2.97	0.0	PASS
			QPSK	TN	VL	0.78	0.0	PASS
		MCH	QPSK	TN	VH	4.55	0.0	PASS
			QPSK	TN	VN	3.09	0.0	PASS
			QPSK	TN	VL	-5.04	-0.0	PASS
		HCH	QPSK	TN	VH	9.43	0.0	PASS
			QPSK	TN	VN	-3.43	-0.0	PASS
			QPSK	TN	VL	-1.68	-0.0	PASS
	20	LCH	QPSK	TN	VH	1.55	0.0	PASS
			QPSK	TN	VN	-1.40	-0.0	PASS
			QPSK	TN	VL	-2.16	-0.0	PASS
		MCH	QPSK	TN	VH	1.95	0.0	PASS
			QPSK	TN	VN	3.84	0.0	PASS
			QPSK	TN	VL	0.65	0.0	PASS
		HCH	QPSK	TN	VH	0.48	0.0	PASS
			QPSK	TN	VN	0.03	0.0	PASS
			QPSK	TN	VL	-2.78	-0.0	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	17.05	0.01	PASS
			16QAM	TN	VN	4.53	0.0	PASS
			16QAM	TN	VL	5.48	0.0	PASS
		MCH	16QAM	TN	VH	10.27	0.01	PASS
			16QAM	TN	VN	17.02	0.01	PASS
			16QAM	TN	VL	6.50	0.0	PASS
		HCH	16QAM	TN	VH	0.16	0.0	PASS
			16QAM	TN	VN	-0.39	-0.0	PASS
			16QAM	TN	VL	-10.72	-0.01	PASS
	5	LCH	16QAM	TN	VH	-2.32	-0.0	PASS
			16QAM	TN	VN	0.05	0.0	PASS
			16QAM	TN	VL	-6.49	-0.0	PASS
		MCH	16QAM	TN	VH	15.45	0.01	PASS
			16QAM	TN	VN	3.90	0.0	PASS
			16QAM	TN	VL	1.73	0.0	PASS
		HCH	16QAM	TN	VH	-4.75	-0.0	PASS
			16QAM	TN	VN	0.97	0.0	PASS
			16QAM	TN	VL	-10.19	-0.01	PASS
	20	LCH	16QAM	TN	VH	-0.91	-0.0	PASS
			16QAM	TN	VN	2.02	0.0	PASS
			16QAM	TN	VL	-1.89	-0.0	PASS
		MCH	16QAM	TN	VH	0.49	0.0	PASS
			16QAM	TN	VN	0.38	0.0	PASS
			16QAM	TN	VL	0.87	0.0	PASS
		HCH	16QAM	TN	VH	2.43	0.0	PASS
			16QAM	TN	VN	-0.32	-0.0	PASS
			16QAM	TN	VL	-0.44	-0.0	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	13.1	0.01	PASS
			QPSK	VN	-20	20.0	0.01	PASS
			QPSK	VN	-10	-1.61	-0.0	PASS
			QPSK	VN	0	87.69	0.05	PASS
			QPSK	VN	10	4.81	0.0	PASS
			QPSK	VN	20	-0.69	-0.0	PASS
			QPSK	VN	30	-17.73	-0.01	PASS
			QPSK	VN	40	-32.3	-0.02	PASS
			QPSK	VN	50	-9.32	-0.01	PASS
		MCH	QPSK	VN	-30	-16.8	-0.01	PASS
			QPSK	VN	-20	-24.63	-0.01	PASS
			QPSK	VN	-10	-12.73	-0.01	PASS
			QPSK	VN	0	-7.58	-0.0	PASS
			QPSK	VN	10	6.2	0.0	PASS
			QPSK	VN	20	-6.19	-0.0	PASS
			QPSK	VN	30	4.38	0.0	PASS
			QPSK	VN	40	-9.77	-0.01	PASS
			QPSK	VN	50	15.22	0.01	PASS
		HCH	QPSK	VN	-30	2.01	0.0	PASS
			QPSK	VN	-20	-6.97	-0.0	PASS
			QPSK	VN	-10	18.27	0.01	PASS
			QPSK	VN	0	7.67	0.0	PASS
			QPSK	VN	10	7.49	0.0	PASS
			QPSK	VN	20	7.95	0.0	PASS
			QPSK	VN	30	12.66	0.01	PASS
			QPSK	VN	40	9.53	0.0	PASS
			QPSK	VN	50	31.79	0.02	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	1.24	0.0	PASS
			QPSK	VN	-20	-1.57	-0.0	PASS
			QPSK	VN	-10	-6.37	-0.0	PASS
			QPSK	VN	0	-4.28	-0.0	PASS
			QPSK	VN	10	0.7	0.0	PASS
			QPSK	VN	20	5.15	0.0	PASS
			QPSK	VN	30	-5.14	-0.0	PASS
			QPSK	VN	40	-6.25	-0.0	PASS
			QPSK	VN	50	1.63	0.0	PASS
		MCH	QPSK	VN	-30	6.81	0.0	PASS
			QPSK	VN	-20	0.91	0.0	PASS
			QPSK	VN	-10	3.99	0.0	PASS
			QPSK	VN	0	-2.44	-0.0	PASS
			QPSK	VN	10	5.76	0.0	PASS
			QPSK	VN	20	9.32	0.0	PASS
			QPSK	VN	30	0.6	0.0	PASS
			QPSK	VN	40	3.08	0.0	PASS
			QPSK	VN	50	1.97	0.0	PASS
		HCH	QPSK	VN	-30	-2.24	-0.0	PASS
			QPSK	VN	-20	1.79	0.0	PASS
			QPSK	VN	-10	9.85	0.01	PASS
			QPSK	VN	0	5.07	0.0	PASS
			QPSK	VN	10	5.52	0.0	PASS
			QPSK	VN	20	1.98	0.0	PASS
			QPSK	VN	30	1.63	0.0	PASS
			QPSK	VN	40	4.17	0.0	PASS
			QPSK	VN	50	-4.01	-0.0	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	0.23	0.0	PASS
			QPSK	VN	-20	0.22	0.0	PASS
			QPSK	VN	-10	-0.18	-0.0	PASS
			QPSK	VN	0	-3.17	-0.0	PASS
			QPSK	VN	10	0.77	0.0	PASS
			QPSK	VN	20	0.64	0.0	PASS
			QPSK	VN	30	-1.62	-0.0	PASS
			QPSK	VN	40	0.56	0.0	PASS
			QPSK	VN	50	0.88	0.0	PASS
		MCH	QPSK	VN	-30	3.2	0.0	PASS
			QPSK	VN	-20	0.85	0.0	PASS
			QPSK	VN	-10	-1.31	-0.0	PASS
			QPSK	VN	0	-2.56	-0.0	PASS
			QPSK	VN	10	0.4	0.0	PASS
			QPSK	VN	20	0.31	0.0	PASS
			QPSK	VN	30	-1.31	-0.0	PASS
			QPSK	VN	40	-1.69	-0.0	PASS
			QPSK	VN	50	-0.96	-0.0	PASS
		HCH	QPSK	VN	-30	-2.97	-0.0	PASS
			QPSK	VN	-20	2.3	0.0	PASS
			QPSK	VN	-10	-2.95	-0.0	PASS
			QPSK	VN	0	-1.78	-0.0	PASS
			QPSK	VN	10	-0.6	-0.0	PASS
			QPSK	VN	20	-1.01	-0.0	PASS
			QPSK	VN	30	-0.02	-0.0	PASS
			QPSK	VN	40	0.92	0.0	PASS
			QPSK	VN	50	-3.09	-0.0	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	-35.81	-0.02	PASS
			16QAM	VN	-20	-20.72	-0.01	PASS
			16QAM	VN	-10	-31.8	-0.02	PASS
			16QAM	VN	0	-7.42	-0.0	PASS
			16QAM	VN	10	-10.04	-0.01	PASS
			16QAM	VN	20	0.64	0.0	PASS
			16QAM	VN	30	-26.34	-0.01	PASS
			16QAM	VN	40	6.88	0.0	PASS
			16QAM	VN	50	-0.76	-0.0	PASS
		MCH	16QAM	VN	-30	-12.31	-0.01	PASS
			16QAM	VN	-20	-22.85	-0.01	PASS
			16QAM	VN	-10	-17.64	-0.01	PASS
			16QAM	VN	0	-12.54	-0.01	PASS
			16QAM	VN	10	2.67	0.0	PASS
			16QAM	VN	20	-15.23	-0.01	PASS
			16QAM	VN	30	-6.0	-0.0	PASS
			16QAM	VN	40	-4.21	-0.0	PASS
			16QAM	VN	50	-7.8	-0.0	PASS
		HCH	16QAM	VN	-30	-20.72	-0.01	PASS
			16QAM	VN	-20	-24.13	-0.01	PASS
			16QAM	VN	-10	-22.23	-0.01	PASS
			16QAM	VN	0	-0.3	-0.0	PASS
			16QAM	VN	10	-12.56	-0.01	PASS
			16QAM	VN	20	-10.49	-0.01	PASS
			16QAM	VN	30	-9.0	-0.0	PASS
			16QAM	VN	40	7.73	0.0	PASS
			16QAM	VN	50	-4.1	-0.0	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	4.08	0.0	PASS
			16QAM	VN	-20	0.01	0.0	PASS
			16QAM	VN	-10	-10.29	-0.01	PASS
			16QAM	VN	0	0.39	0.0	PASS
			16QAM	VN	10	-4.18	-0.0	PASS
			16QAM	VN	20	-6.67	-0.0	PASS
			16QAM	VN	30	11.25	0.01	PASS
			16QAM	VN	40	2.63	0.0	PASS
			16QAM	VN	50	2.19	0.0	PASS
		MCH	16QAM	VN	-30	-9.52	-0.01	PASS
			16QAM	VN	-20	1.16	0.0	PASS
			16QAM	VN	-10	3.9	0.0	PASS
			16QAM	VN	0	1.25	0.0	PASS
			16QAM	VN	10	2.08	0.0	PASS
			16QAM	VN	20	5.6	0.0	PASS
			16QAM	VN	30	-1.8	-0.0	PASS
			16QAM	VN	40	5.84	0.0	PASS
			16QAM	VN	50	2.77	0.0	PASS
		HCH	16QAM	VN	-30	-7.6	-0.0	PASS
			16QAM	VN	-20	-7.27	-0.0	PASS
			16QAM	VN	-10	-7.28	-0.0	PASS
			16QAM	VN	0	2.95	0.0	PASS
			16QAM	VN	10	8.37	0.0	PASS
			16QAM	VN	20	1.81	0.0	PASS
			16QAM	VN	30	-0.21	-0.0	PASS
			16QAM	VN	40	11.41	0.01	PASS
			16QAM	VN	50	-1.65	-0.0	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	-1.57	-0.0	PASS
			16QAM	VN	-20	-1.35	-0.0	PASS
			16QAM	VN	-10	-0.15	-0.0	PASS
			16QAM	VN	0	-1.43	-0.0	PASS
			16QAM	VN	10	0.38	0.0	PASS
			16QAM	VN	20	-0.27	-0.0	PASS
			16QAM	VN	30	1.85	0.0	PASS
			16QAM	VN	40	-3.18	-0.0	PASS
			16QAM	VN	50	-2.86	-0.0	PASS
		MCH	16QAM	VN	-30	-2.76	-0.0	PASS
			16QAM	VN	-20	-1.40	-0.0	PASS
			16QAM	VN	-10	-1.49	-0.0	PASS
			16QAM	VN	0	-1.16	-0.0	PASS
			16QAM	VN	10	-0.13	-0.0	PASS
			16QAM	VN	20	-0.76	-0.0	PASS
			16QAM	VN	30	-0.78	-0.0	PASS
			16QAM	VN	40	0.88	0.0	PASS
			16QAM	VN	50	1.81	0.0	PASS
		HCH	16QAM	VN	-30	0.8	0.0	PASS
			16QAM	VN	-20	-0.38	-0.0	PASS
			16QAM	VN	-10	-2.61	-0.0	PASS
			16QAM	VN	0	-0.58	-0.0	PASS
			16QAM	VN	10	-5.22	-0.0	PASS
			16QAM	VN	20	-2.15	-0.0	PASS
			16QAM	VN	30	-4.49	-0.0	PASS
			16QAM	VN	40	-1.44	-0.0	PASS
			16QAM	VN	50	-1.24	-0.0	PASS

End of Test Report