

Appendix A

RF Test Data for BR_EDR(Conducted Measurement)

Product Name: Wireless Speaker
Trade Mark: ETECH
Test Model: EBS5-222508

Environmental Conditions

Temperature:	24.6°C
Relative Humidity:	51.4%
ATM Pressure:	101Kpa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen

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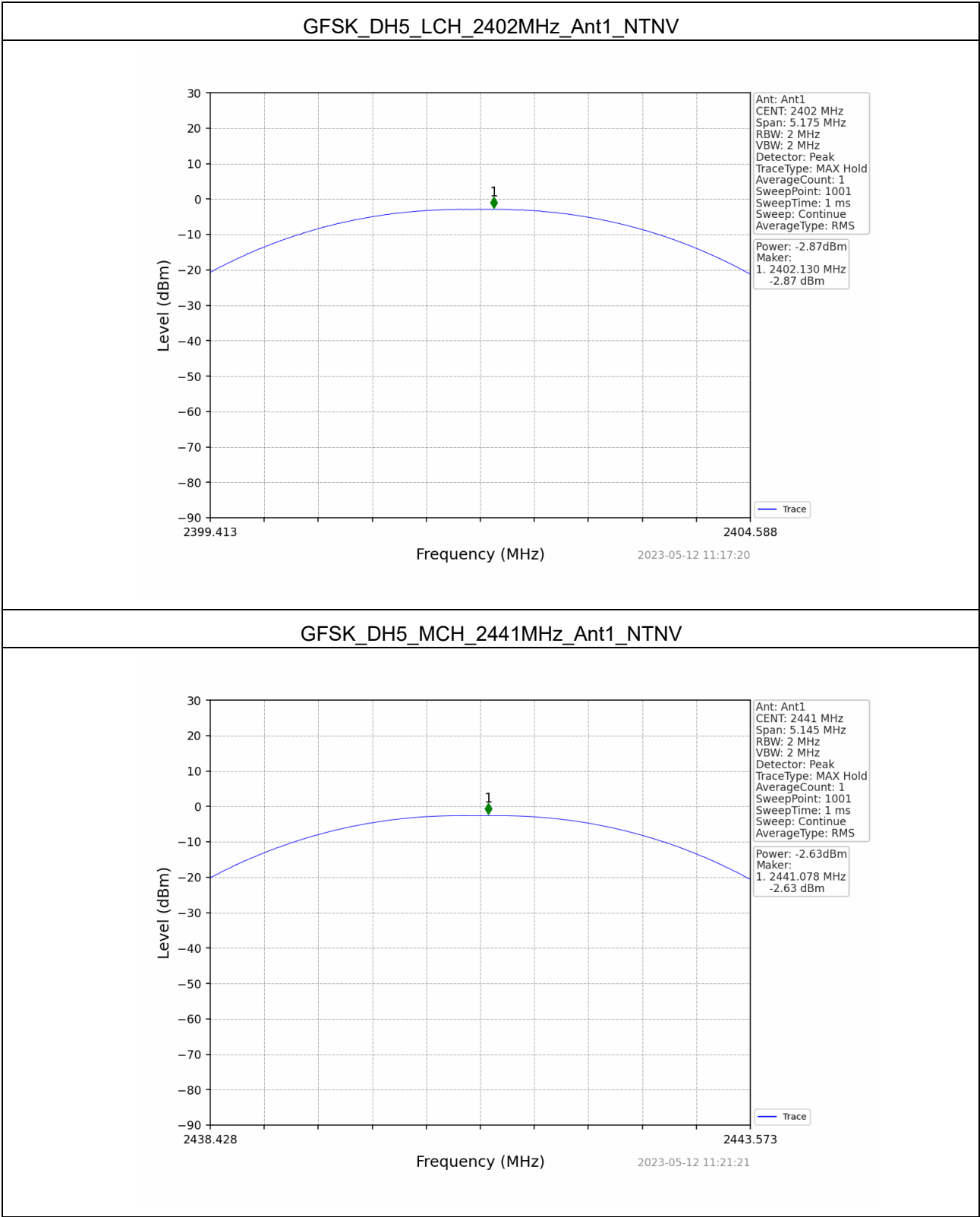
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1 Maximum Conducted Peak Output Power

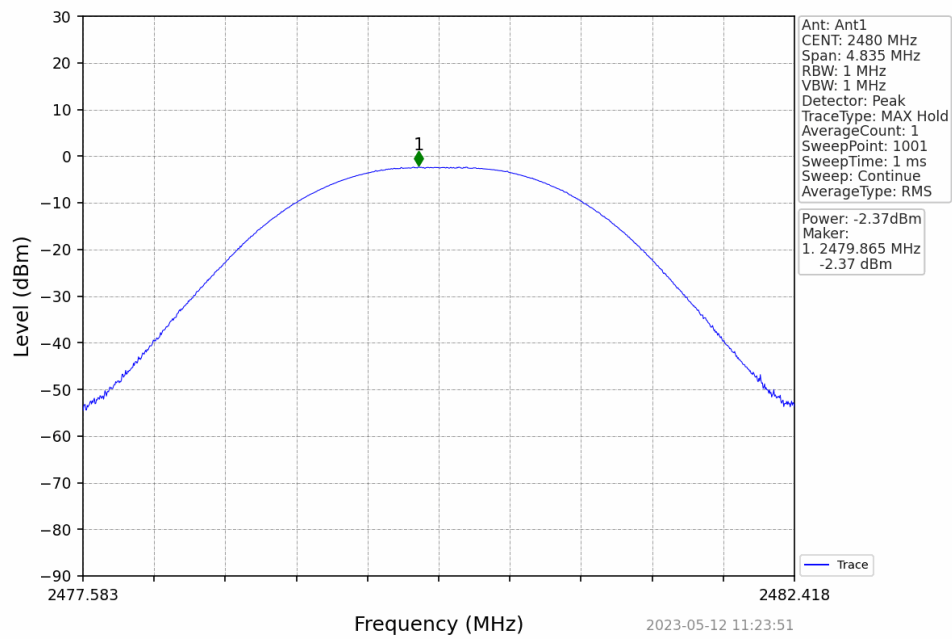
1.1 Test Result

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-2.87	≤ 21	Pass
	MCH	-2.63	≤ 21	Pass
	HCH	-2.37	≤ 21	Pass

1.2 Test Graphs



GFSK_DH5_HCH_2480MHz_Ant1_NTNV



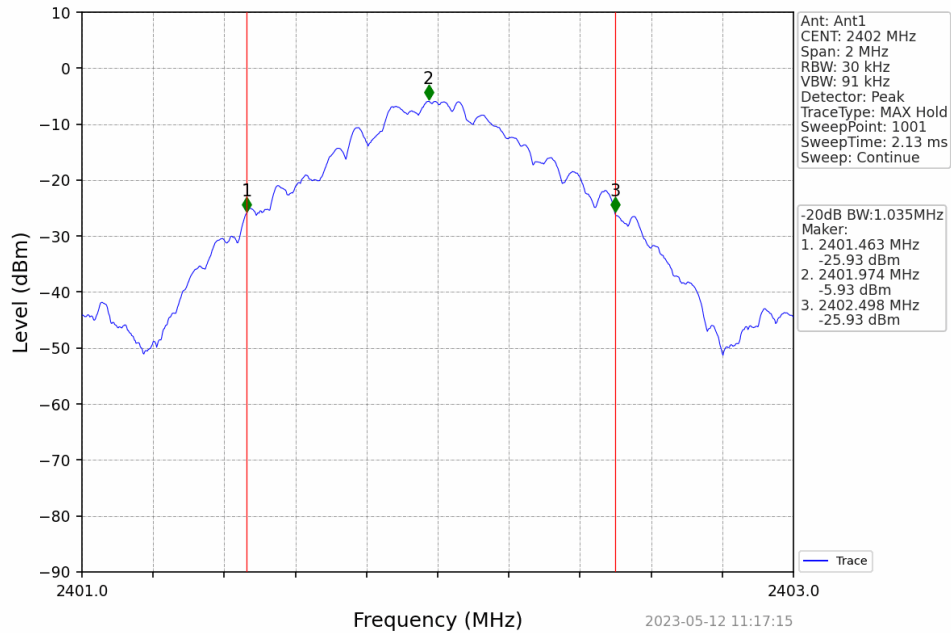
2 20dB Bandwidth

2.1 Test Result

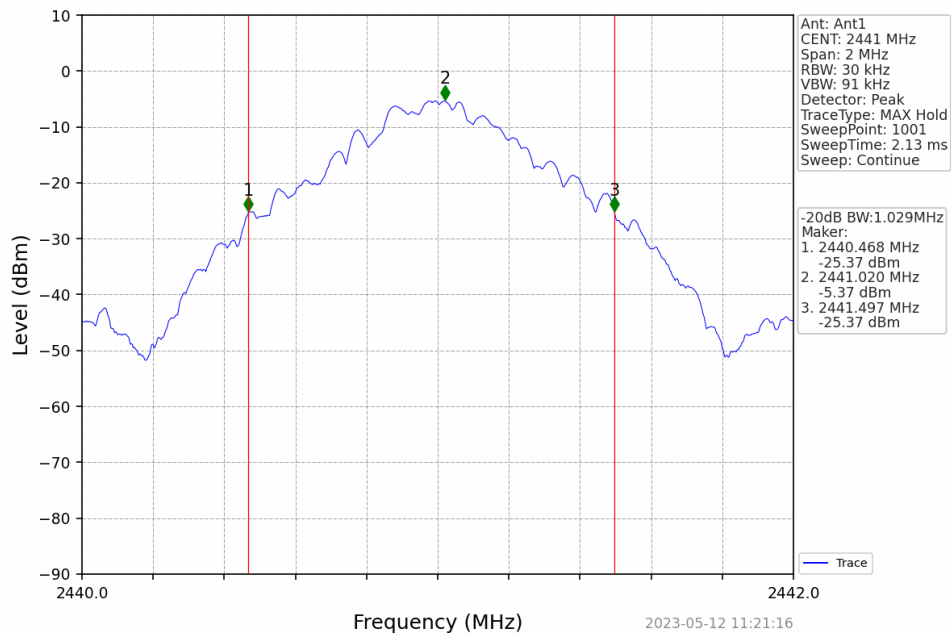
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.035	Not Specified	Pass
	MCH	1.029	Not Specified	Pass
	HCH	0.967	Not Specified	Pass

2.2 Test Graphs

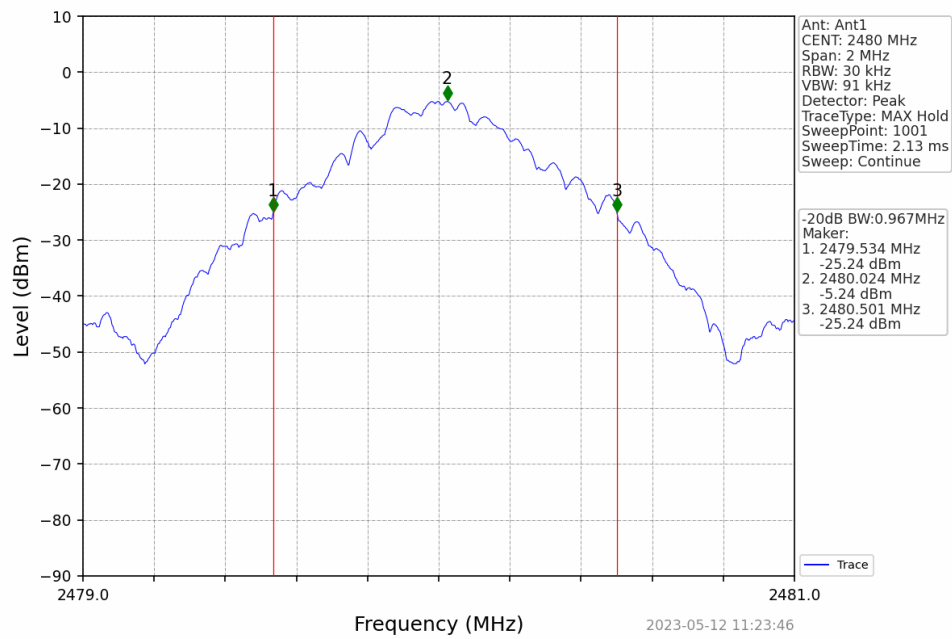
GFSK_DH5_LCH_2402MHz_Ant1_NTNV



GFSK_DH5_MCH_2441MHz_Ant1_NTNV



GFSK_DH5_HCH_2480MHz_Ant1_NTNV

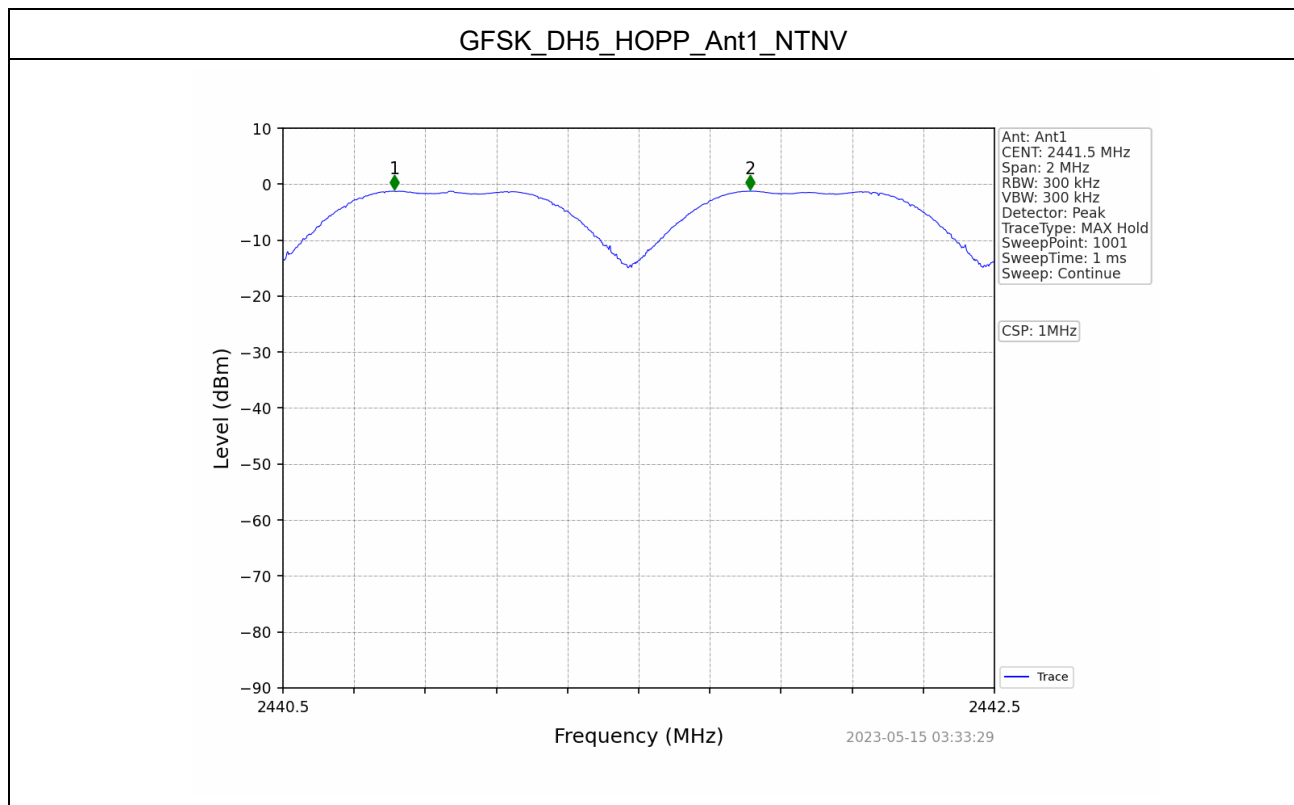


3 Carrier Frequency Separation

3.1 Test Result

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	MCH	1.000	≥ 0.690	Pass

3.2 Test Graphs

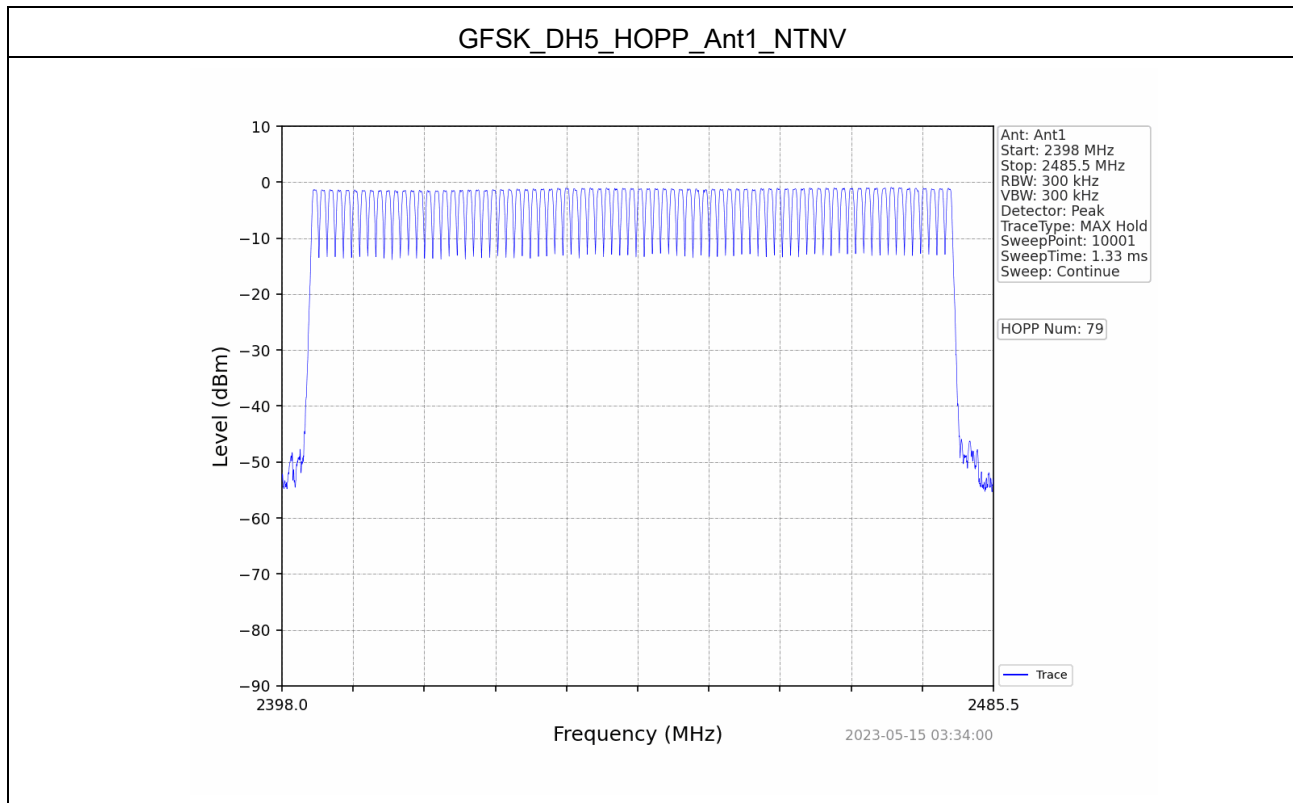


4 Hopping Channel Number

4.1 Test Result

Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	≥ 15	PASS

4.2 Test Graphs

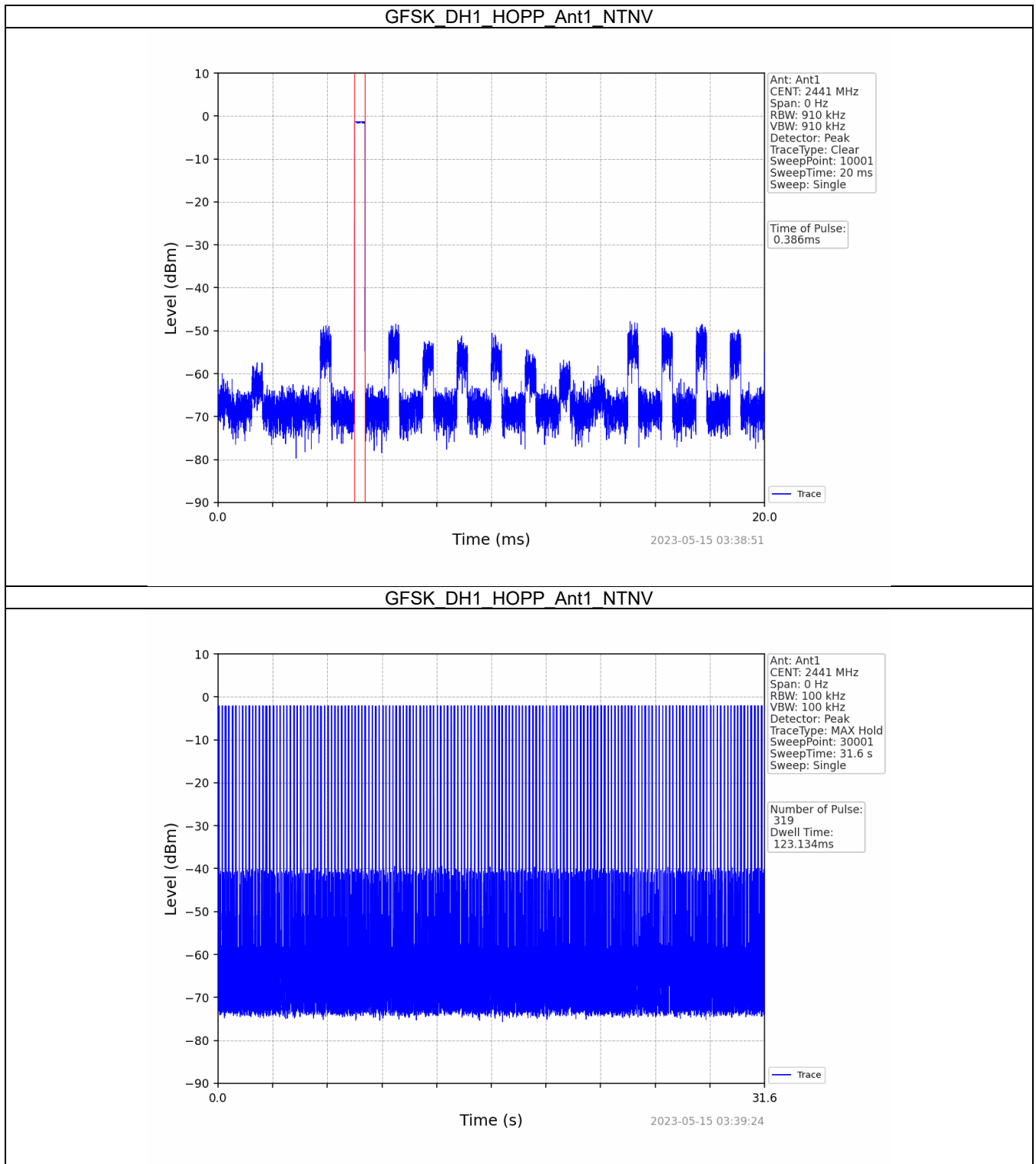


5 Dwell Time

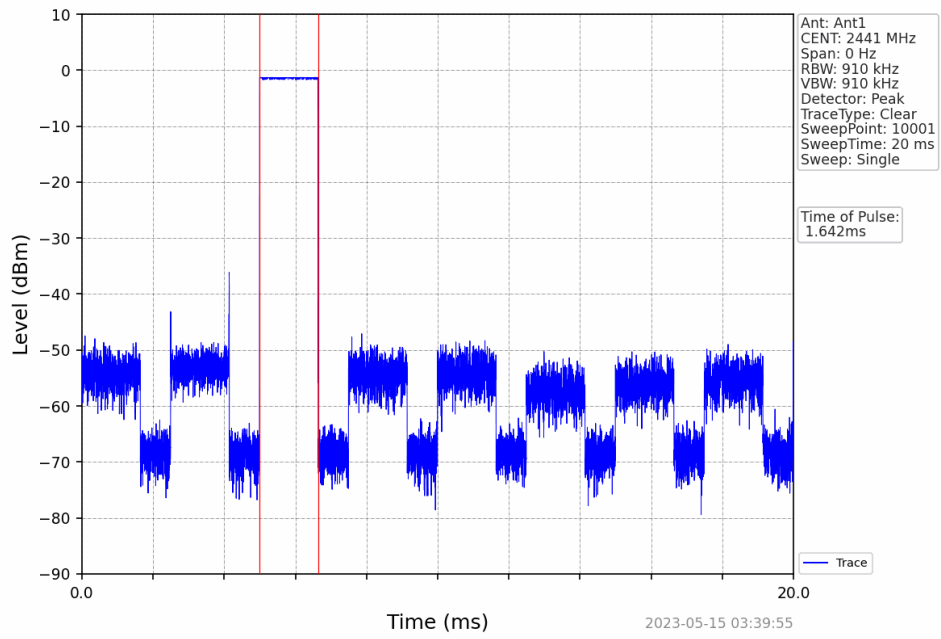
5.1 Test Result

Mode	Packet	Channel	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time[ms]	Limit [s]	Verdict
GFSK	DH5	LCH	0.386	31.600	319	123.134	0.4	Pass
		MCH	1.642	31.600	149	244.658	0.4	Pass
		HCH	2.890	31.600	114	329.460	0.4	Pass

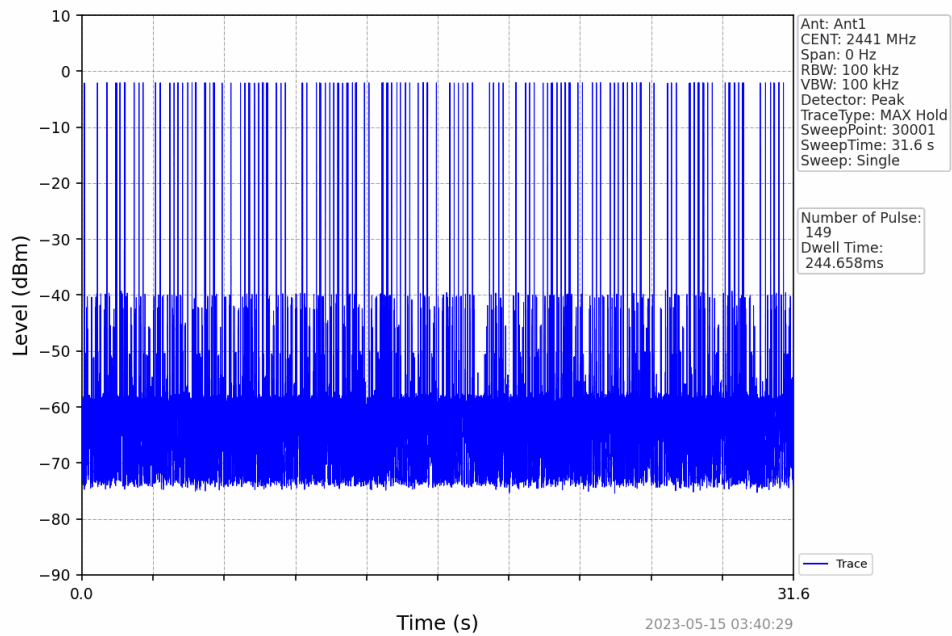
5.2 Test Graphs



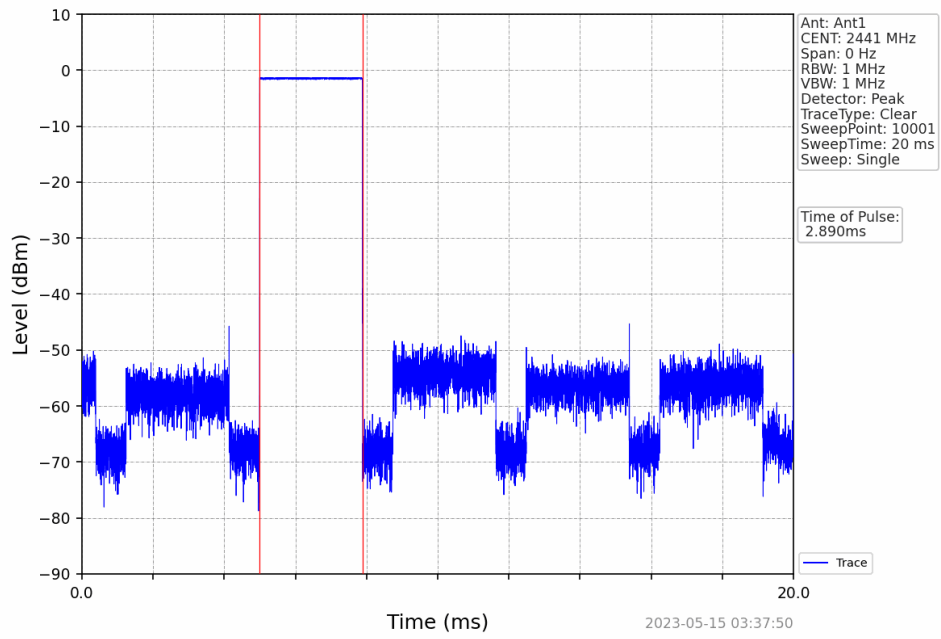
GFSK_DH3_HOPP_Ant1_NTNV



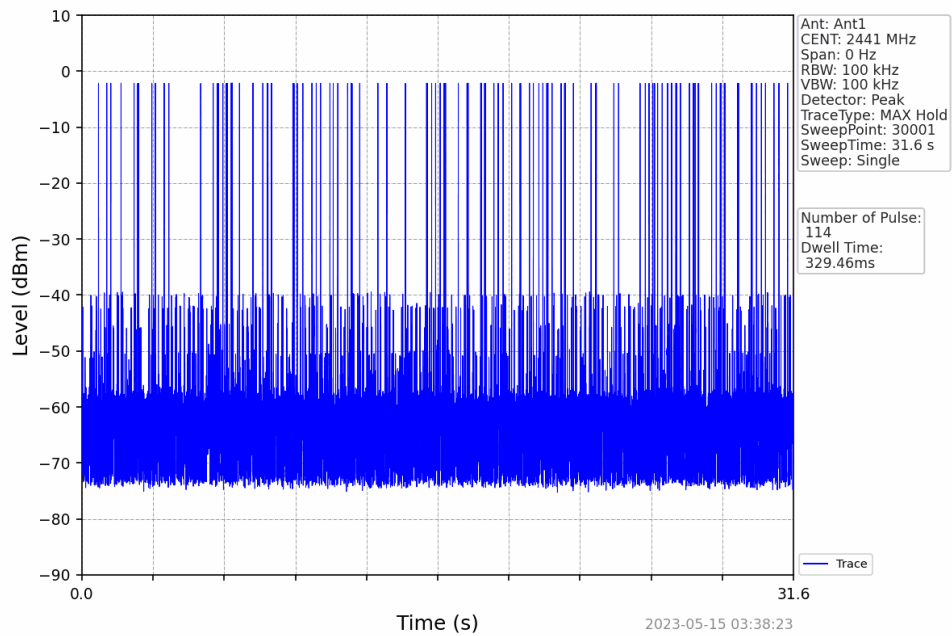
GFSK_DH3_HOPP_Ant1_NTNV



GFSK_DH5_HOPP_Ant1_NTNV



GFSK_DH5_HOPP_Ant1_NTNV



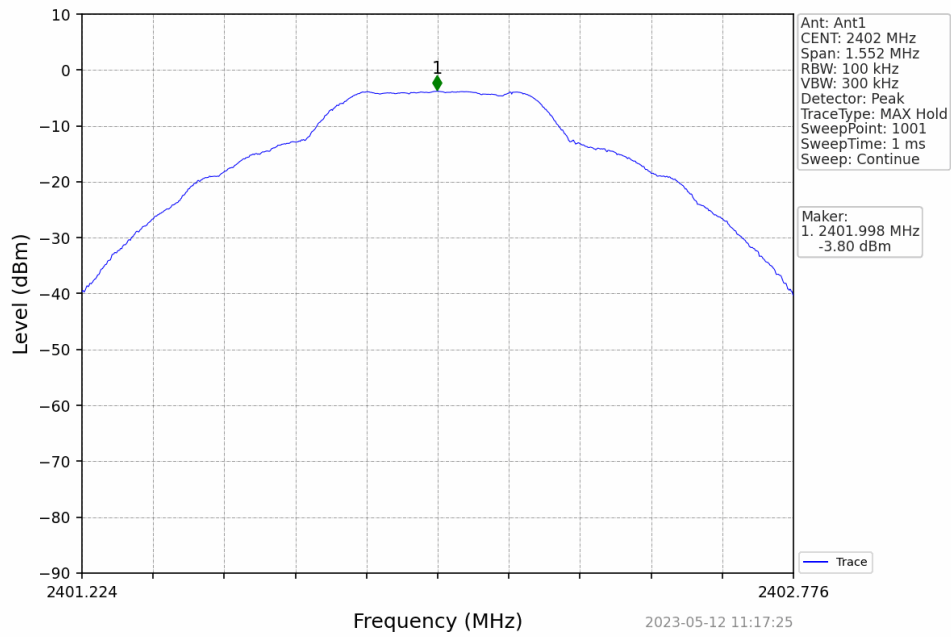
6 Conducted Spurious Emissions and Band Edges Test

6.1 Test Result

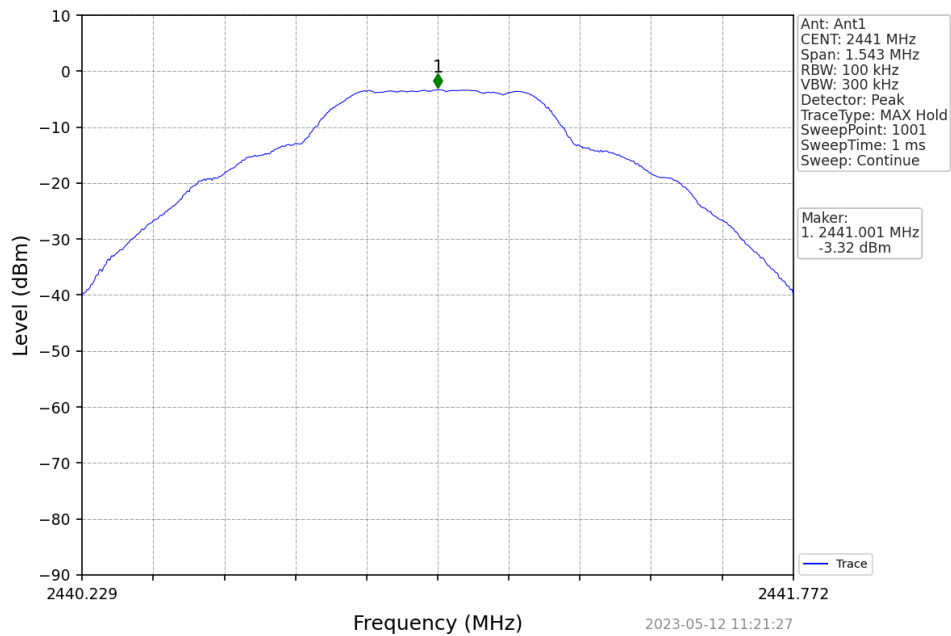
Mode	Channel	Max. Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	-3.80	-20	Pass
	MCH	-3.32	-20	Pass
	HCH	-3.28	-20	Pass

6.2 Test Graphs

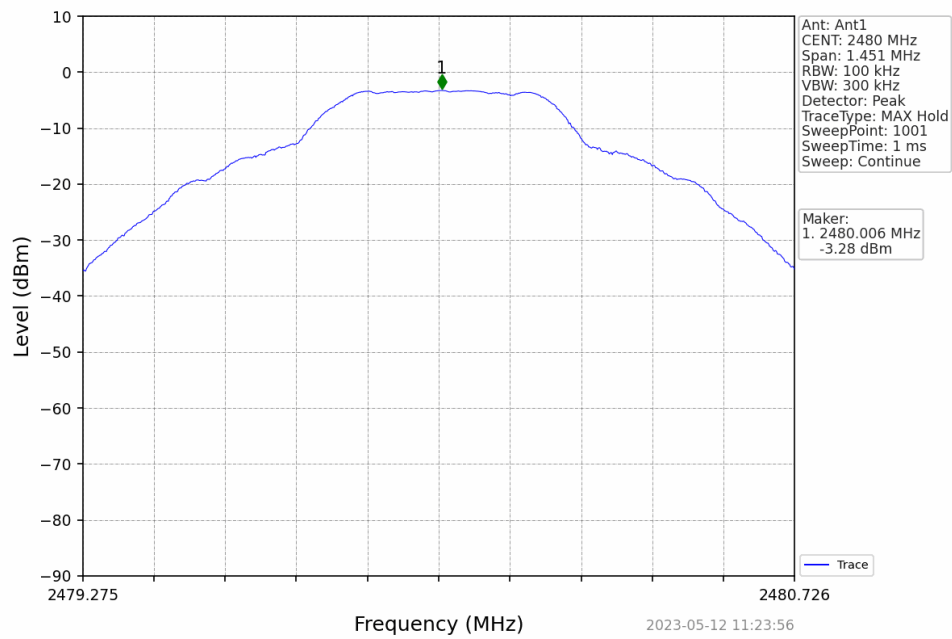
GFSK_DH5_LCH_2402MHz_Ant1_NTNV



GFSK_DH5_MCH_2441MHz_Ant1_NTNV



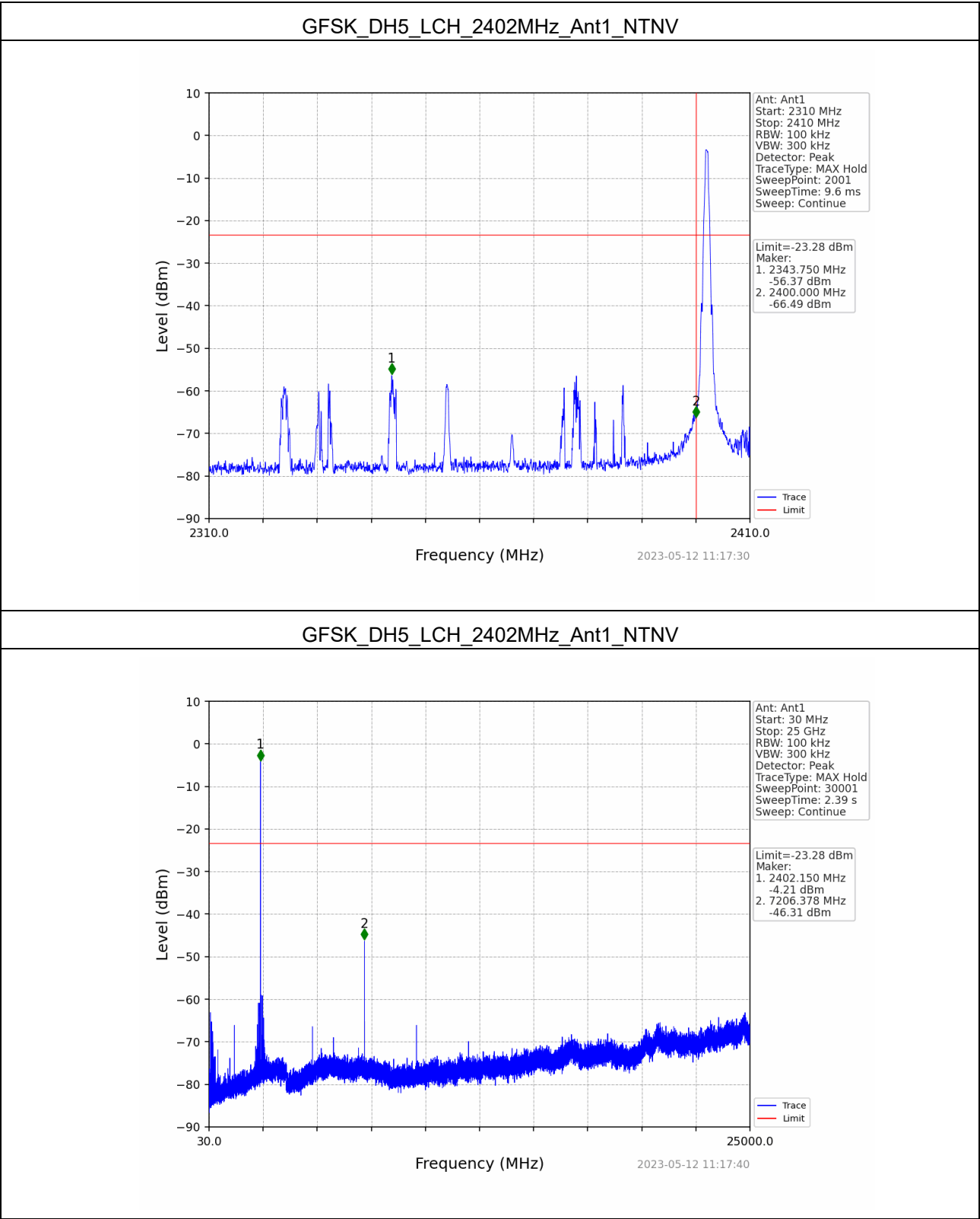
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



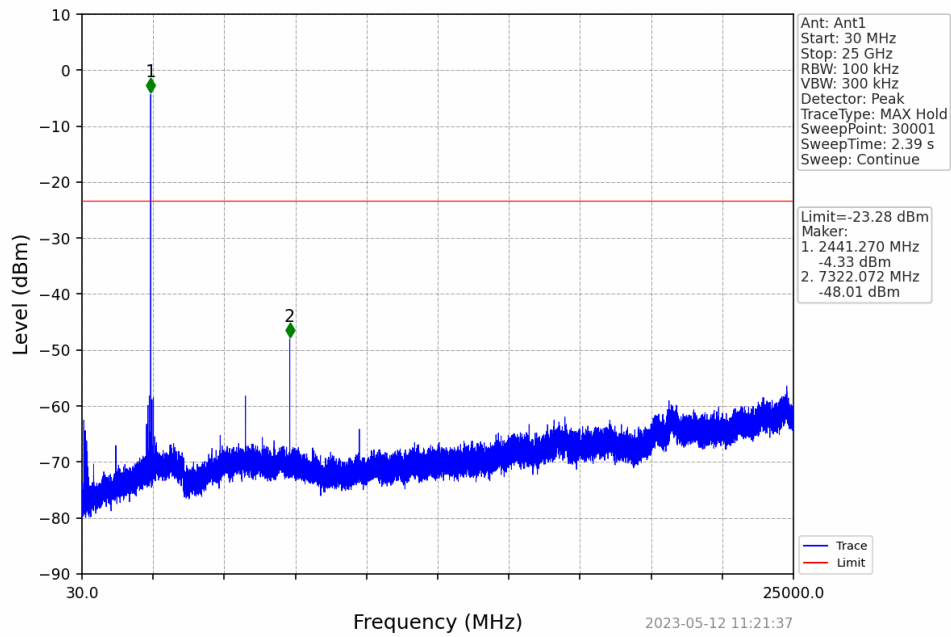
6.3 Conducted Spurious Emission

Mode	Channel	Carrier Frequency [MHz]	Frequency Hopping	Max Spurious Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	2402	Off	-3.28	-23.28	Pass
			On	-3.28	-23.28	Pass
	HCH	2480	Off	-3.28	-23.28	Pass
			On	-3.28	-23.28	Pass

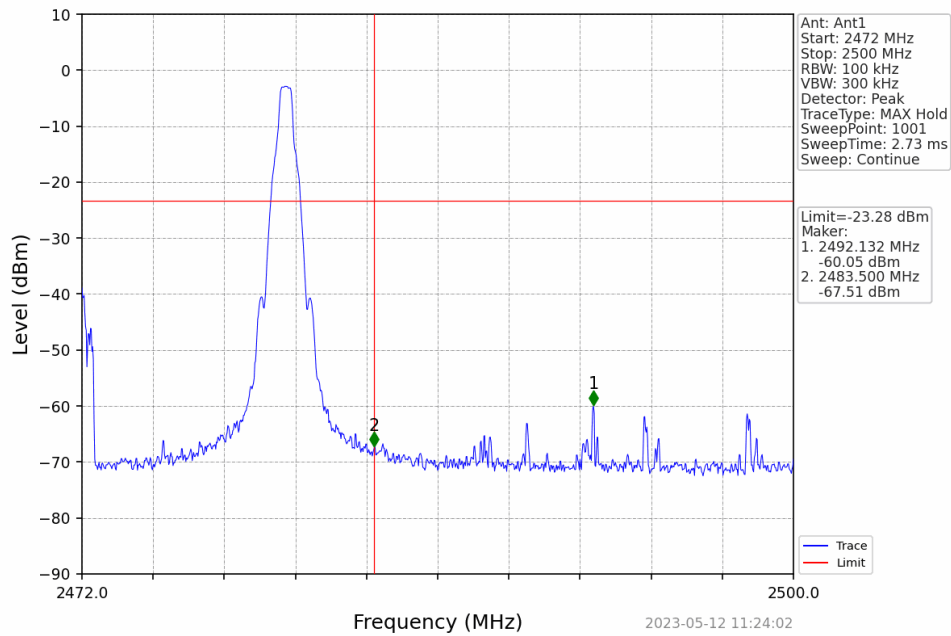
6.4 Test Graphs



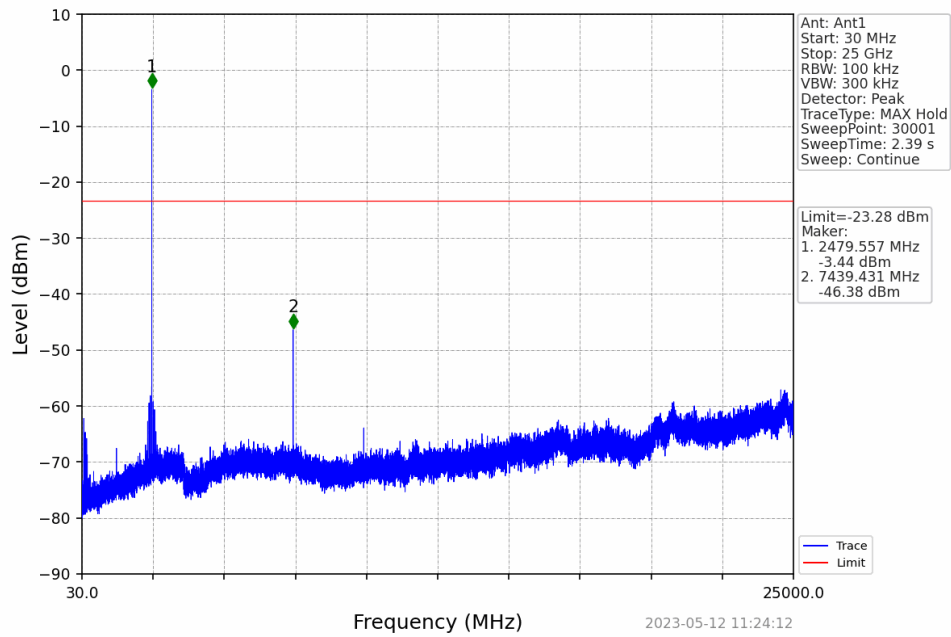
GFSK_DH5_MCH_2441MHz_Ant1_NTNV



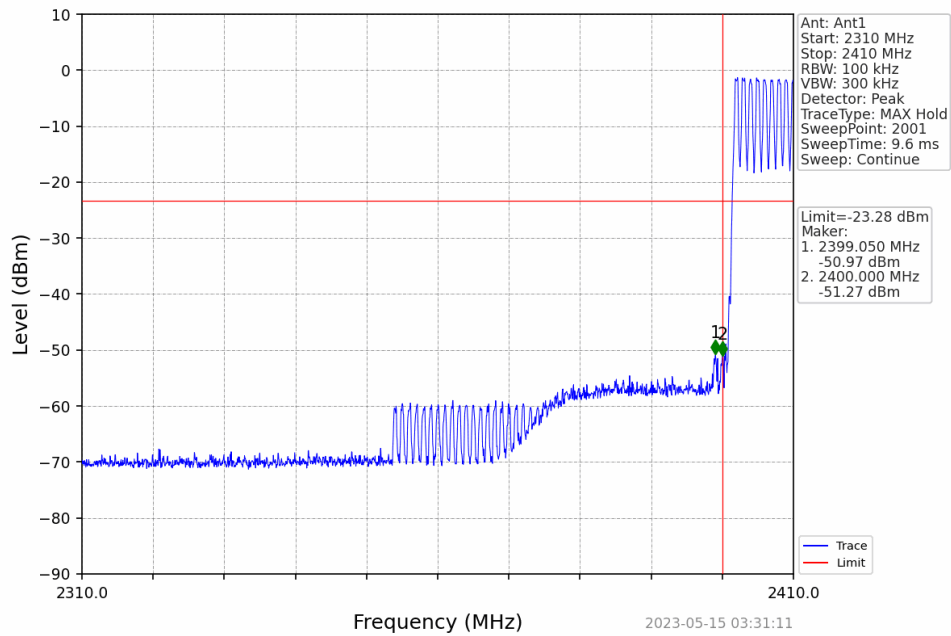
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



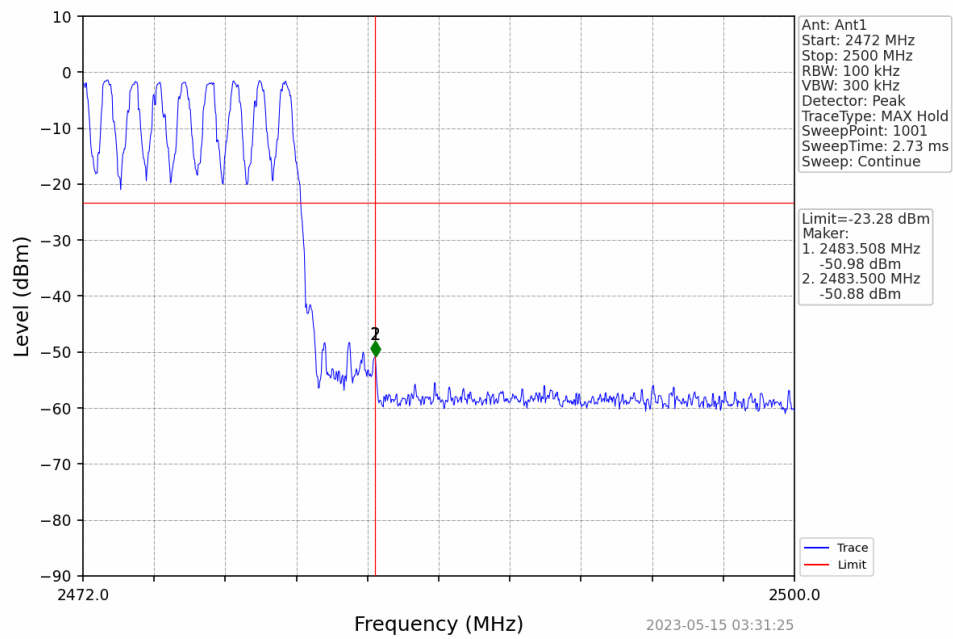
GFSK_DH5_HCH_2480MHz_Ant1_NTNV



GFSK_DH5_HOPP_Ant1_NTNV



GFSK_DH5_HOPP_Ant1_NTNV





7 Restrict-band Band-edge Test

7.1 Test Result

Test Mode: GFKS										
Pol.	Frequen cy (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/ m)	Margin (dB)	Detect or Type	Result
Low Channel: 2402MHz										
H	2390.00	45.61	29.15	3.41	34.01	44.16	74.00	-29.84	PK	PASS
H	2400.00	62.79	29.16	3.43	34.01	61.37	74.00	-12.63	PK	PASS
V	2390.00	46.42	29.15	3.41	34.01	44.97	74.00	-29.03	PK	PASS
V	2400.00	65.12	29.16	3.43	34.01	63.70	74.00	-10.30	PK	PASS
H	2390.00	35.54	29.15	3.41	34.01	34.09	54.00	-19.91	AV	PASS
H	2400.00	46.94	29.16	3.43	34.01	45.52	54.00	-8.48	AV	PASS
V	2390.00	35.68	29.15	3.41	34.01	34.23	54.00	-19.77	AV	PASS
V	2400.00	48.85	29.16	3.43	34.01	47.43	54.00	-6.57	AV	PASS
High Channel: 2480MHz										
H	2483.50	48.04	29.28	3.53	34.03	46.82	74.00	-27.18	PK	PASS
H	2500.00	46.69	29.30	3.56	34.03	45.52	74.00	-28.48	PK	PASS
V	2483.50	49.34	29.28	3.53	34.03	48.12	74.00	-25.88	PK	PASS
V	2500.00	47.95	29.30	3.56	34.03	46.78	74.00	-27.22	PK	PASS
H	2483.50	38.40	29.28	3.53	34.03	37.18	54.00	-16.82	AV	PASS
H	2500.00	36.01	29.30	3.56	34.03	34.84	54.00	-19.16	AV	PASS
V	2483.50	39.84	29.28	3.53	34.03	38.62	54.00	-15.38	AV	PASS
V	2500.00	36.16	29.30	3.56	34.03	34.99	54.00	-19.01	AV	PASS

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

.....End.....