

TEST REPORT

Applicant Name: Dragino Technology Co., Limited.
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Report Number: 2504A05297E-RF
FCC ID: ZHZTHERMOSTAT1

Test Standard (s)

47 CFR §2.1091

Sample Description

Product Name: LoRaWAN Thermostat
Model No.: Thermostat1
Trade Mark: DRAGINO
Received Date: 2025-12-25
Report Date: 2026-08-25

Test Result:	The EUT complied with the standards above.
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Prepared and Checked By:

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Engineer

Approved By:

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Supervisor

Note: This report must not be used by the customer to claim product certification, approval, or endorsement by A2LA, or any agency of the Federal Government. The information marked "#" is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included but no need marked.
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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
Rev.00	2504A05297E-RF	Original Report	2026-08-25

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product Name	LoRaWAN Thermostat
Tested Model	Thermostat1
Voltage Range [#]	AC 18-30V
Frequency Range	Lora-Hybrid: 902.3-914.9MHz Lora-DTS: 903.0-914.2MHz
Maximum Conducted Output Power(Peak) (actual test result)	Lora-Hybrid: 8.21 dBm Lora-DTS: 14.99 dBm
Antenna Specification [#]	Internal Antenna, Gain: -9.59 dBi (It is provided by the applicant.)
Sample Serial Number	3F4F-1 (Assigned by BACL, Shenzhen, Guangming)
Sample/EUT Status	Good condition

Objective

This test report is in accordance with Part 2-Subpart J, Radiofrequency Radiation Exposure of the Federal Communication Commission rules.

The tests were performed in order to determine compliance with 47 CFR §2.1091 rules.

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Shenzhen, Guangming) to collect test data is located on the Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, China.

Accredited by American Association for Laboratory Accreditation (A2LA).The Certificate Number is 4297.01.

MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (Minutes)
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz

* = Plane-wave equivalent power density

MPE Calculated Formulary:

- Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Calculated Result

Radio	Frequency (MHz)	Antenna Gain [#]		Tune up conducted power [#]		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
		(dBi)	(numeric)	(dBm)	(mW)			
Lora-Hybrid	902.3-914.9	-9.59	0.11	8.8	7.59	20	0.0002	0.601
Lora-DTS	903.0-914.2	-9.59	0.11	15.5	35.48	20	0.001	0.601

Note 1: The tune-up power and antenna gain are declared by the applicant.

Note 2: The Hybrid and DTS can't transmission simultaneously.

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

Result: Compliance

EXHIBIT A-EUT PHOTOGRAPHS

Please refer to the Attachment No.1 2504A05297E-RF EUT External Photos and Attachment No.2 2504A05297E-RF EUT Internal Photos.

***** END OF REPORT *****