

# Hangzhou Kalifon Stainless Steel Kitchen Equipment Co., Ltd.

## DOE/CEC/Energy Star TEST REPORT

### SCOPE OF WORK

<EE TESTING – COMMERCIAL FREEZER– KF-49B1>

### REPORT NUMBER

221100927HAN-002

### ISSUE DATE

27-March-2023

### [REVISED DATE]

[None]

### PAGES

9

### DOCUMENT CONTROL NUMBER

TTRF\_10 CFR 431 Subpart C Appendix B\_V1



Issued: March 27, 2023

Intertek Report No. 221100927HAN-002

Intertek Project No. 221100927HAN

PERFORMANCE TEST  
OF  
Commercial Freezer  
RENDERED TO

Hangzhou Kalifon Stainless Steel Kitchen Equipment Co., Ltd.  
China

**GENERAL:** This Report gives the results of Performance Tests of Commercial Freezer, Model: KF-49B1, Brand name: KALIFON. The investigation was begun on November 30, 2022 and completed on March 27, 2023. Each of prototype samples in good condition was provided by the client on November 30, 2022 and tested at Intertek Testing Services Zhejiang Ltd (Building 2, Juanhu Science and Technology Innovation Park, No. 500 Shuiyueting East Road, Haining, Zhejiang, China)

10 CFR Part 431 Subpart C Appendix B

California Code of Regulations: Title 20, Division 2, Chapter 4, Article 4, § 1605.1. Federal and State Standards for Federally-Regulated Appliances

ENERGY STAR® Program Requirements Product Specification for Commercial Refrigerators and Freezers Eligibility Criteria Version 5.0

Applicant:  
Hangzhou Kalifon Stainless Steel Kitchen  
Equipment Co., Ltd.

Manufacturer:  
Hangzhou Kalifon Stainless Steel Kitchen  
Equipment Co., Ltd.

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<b>Sample Descriptions:</b>	
Model:	KF-49B1
Serial No.:	NA
Multiple Compartments:	NA
Equipment category:	Self-Contained Commercial Refrigerators and Commercial Freezers With Doors
Equipment family:	Vertical Closed Solid (VCS)
Operating Temperature:	<0°C
Door:	Solid
Refrigerant:	R290 / 4.76oz
Insulation Type	Non-ozone depleting
Width / Depth / Height (mm)	1375 / 780 / 2180
Evaporator fan motor:	Yes
Condenser fan motor:	Yes
Timer	No
Defrost heater:	Yes
Thermostat:	Yes
Anti-sweat heater:	Yes
Defrost mode:	Automatic defrost
Ice maker:	No
Water dispenser	No
Fresh food compartment volume(cu.ft / Litres):	0 / 0
Freezer compartment volume(cu.ft / Litres):	42.19 / 1194.7
Total volume(cu.ft / Litres):	42.2 / 1195
Total Display Area(m <sup>2</sup> / ft <sup>2</sup> )	NA
Remark:	

<b>Test Conditions:</b>	
Dry bulb range .....	24±1°C
Wet bulb range .....	18±1°C

**Marking Plate:**

MODE:	KF-49B1
SOURCE:	115V
FREQUENCY:	60Hz
RATED INPUT:	Cooling: 4.9A Defrost: 740W
GROSS VOLUME:	1195L
REFRIGERANT/CHARGE:	R290/4.76ocnces
MANUFACTURING DATE:	YYMM
SERIAL NO:	
Design pressure:High-side:245psig,low-side: 129psig	

This equipment is intended for the storage and display of packaged product only

Hangzhou Kalifon Stainless Steel Kitchen Equipment Co.Ltd.

**Photos:**

**Front view**



**Side view**



**Photos:**

**Back view**



**Open view**



**Photos:**

**Compressor compartment view**



**Compressor view**



**Critical Components Table:**

Object / part No.	Manufacturer/ trademark	Type / model	Technical data
Compressor	Changhong Huayi Compressor Co Ltd	NPY12LR	115V, 60Hz, R290a
Evaporator fan motor	Hangzhou Weiguang Electronic Co Ltd	ECM7108	120V, 60Hz, 5W
LED	Hangzhou Melay Optoelectronics Technology Co., Ltd.	Various	12V, 6W
Condenser fan motor	Hangzhou Weiguang Electronic Co Ltd	ECM7112	120V, 60Hz, 15W
Defrost heater	Anhui Anze Electric Co.	RSS9H4	115V, 300W
Drian pan heater	Anhui Anze Electric Co.	3590	115V, 140W
Anti-sweat heater	Jiangyin Yinhe Electric Appliance Co., Ltd.	3590	115V, 83.5W
Drainpipe heating wire	Anhui Anze Electric Co.	Various	115V, 15W

**Test results:**

Verification of DOE/CEC/Energy Star Version 5.0		
Model:	KF-49B1	
Product Class	VCS.SC.L	
Volume	42.2 cu.ft	
TDA	NA	
Sample No.	1	2
Integrated Average Product Temperature (°C)	-18.81	-18.86
Daily energy consumption (kWh/day)	8.38	8.39
The sample mean (kWh/day)	8.38	
UCL/1.1 (kWh/day)	7.65	
DOE/CEC Maximum daily energy consumption (kWh/day)	$0.22V + 1.38 = 10.66$	
Energy Star Maximum Daily Energy Consumption (kWh/day)	$0.2578V - 1.8864 = 8.99$	
Verdict	P	

**Conclusion:**

From the results of our testing on the submitted samples, we are of the opinion that the samples comply with the requirements of DOE/CEC/Energy Star.

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Report approved by:

*Calvin Li*

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Calvin Li