

Hangzhou Kalifon Stainless Steel Kitchen Equipment Co., Ltd.

DOE/CEC/Energy Star TEST REPORT

SCOPE OF WORK

<EE TESTING – COMMERCIAL REFRIGERATOR– KR-23B1>

REPORT NUMBER

221100927HAN-001

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Issued: March 27, 2023

Intertek Report No. 221100927HAN-001

Intertek Project No. 221100927HAN

PERFORMANCE TEST
OF
Commercial Refrigerator
RENDERED TO

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

GENERAL: This Report gives the results of Performance Tests of Commercial Refrigerator, Model: KR-23B1, 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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Sample Descriptions:	
Model:	KR-23B1
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 / 1.94oz
Insulation Type	Non-ozone depleting
Width / Depth / Height (mm)	683 / 780 / 2180
Evaporator fan motor:	Yes
Condenser fan motor:	Yes
Timer	No
Defrost heater:	No
Thermostat:	Yes
Anti-sweat heater:	No
Defrost mode:	Automatic defrost
Ice maker:	No
Water dispenser	No
Fresh food compartment volume(cu.ft / Litres):	18.68 / 529.1
Freezer compartment volume(cu.ft / Litres):	0 / 0
Total volume(cu.ft / Litres):	18.7 / 529
Total Display Area(m ² / ft ²)	NA
Remark:	

Test Conditions:	
Dry bulb range	24±1°C
Wet bulb range	18±1°C

Marking Plate:

COMMERCIAL FREERIGERATOR	
MODE:	KR-23B1
SOURCE:	115V
FREQUENCY:	60Hz
RATED INPUT:	Cooling: 1.4A
GROSS VOLUME:	529L
REFRIGERANT/CHARGE:	R290/1.94ocnces
MANUFACTURING DATE:	YYMM
SERIAL NO:	
Design pressure:High-side:245psig,low-side: 129psig	
This equipment is intended for the storage anddisplay of packaged product only	
Hangzhou Kalifon Stainless Steel Kitchen Equipment Co.Ltd.	

Photos:

Front view



Side view



Photos:

Back view

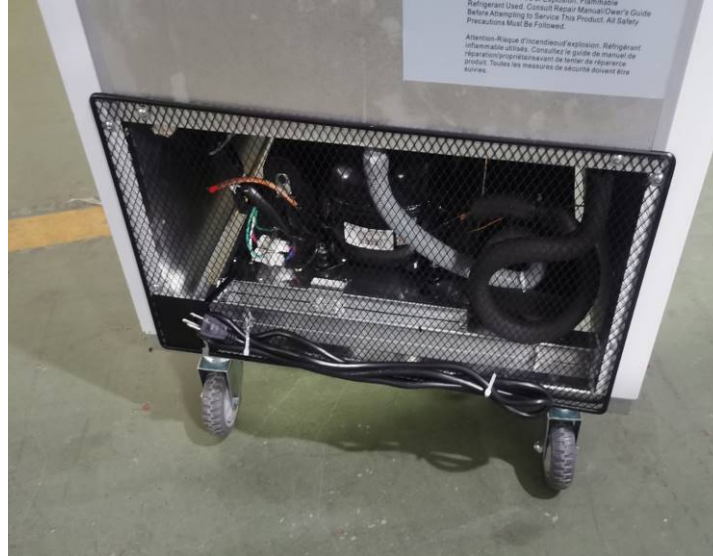


Open view



Photos:

Compressor compartment view



Compressor view



Critical Components Table:

Object / part No.	Manufacturer/ trademark	Type / model	Technical data
Compressor	Embraco	EMX3117U	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	YZF6-13	120V, 60Hz, 6W

Test results:

Verification of DOE/CEC/Energy Star Version 5.0		
Model:	KR-23B1	
Product Class	VCS.SC.M	
Volume	18.7 cu.ft	
TDA	NA	
Sample No.	1	2
Integrated Average Product Temperature (°C)	4.14	4.14
Daily energy consumption (kWh/day)	1.17	1.12
The sample mean (kWh/day)	1.14	
UCL/1.1 (kWh/day)	1.18	
DOE/CEC Maximum daily energy consumption (kWh/day)	$0.05V + 1.36 = 2.29$	
Energy Star Maximum Daily Energy Consumption (kWh/day)	$0.05V + 0.45 = 1.38$	
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.

Report prepared by:

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Engineer
Kyrie Wang

Report approved by:

Calvin Li

Reviewer
Calvin Li