

Guangdong Candor Intelligent Technology Co., Ltd.

TEST REPORT

SCOPE OF WORK

ENERGY EFFICIENCY TESTING - REFRIGERATOR-FREEZER

REPORT NUMBER

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Guangdong, China

Applicant: Guangdong Candor Intelligent Technology Co., Ltd.
Address: #41, North Xingye Rd., Nantou Town, Zhongshan City,
528427, Guangdong, China

Manufacturing Site: Same as applicant
Address: Same as applicant address
Testing Location: Same as applicant
Address: Same as applicant address
Product: Refrigerator-freezer
Brand Name: Candor
Description: The product covered by this report is a household, indoor
use, cord connected refrigerating appliance.

Model(s): BCD-275WA2EQ
Model Similarity: N/A
Ratings: 115V~, 60Hz
Date of receipt of sample(s): 22-Jul-2023
Date Range of Test: 22-Jul-2023~6-Aug-2023
Test standard(s) or criteria(s): 20 CCR § 1605.1
10 C.F.R. §430.32(a)
10 C.F.R. Appendix A to Subpart B of Part 430 Uniform Test
Method for Measuring the Energy Consumption of
Refrigerators, Refrigerator-Freezers, and Miscellaneous
Refrigeration Products[86 FR 56821, Oct. 12, 2021]
ENERGY STAR® Program Requirements
Product Specification for Consumer Refrigeration Products
Eligibility Criteria Version 5.1

Conclusion: The product tested complies with the Energy Efficiency
Standard of CEC, DOE and E-star.

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Signature: Richard Zhang

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Title: Technical Supervisor

Signature: Felix Li

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Photos

Photo 1 - Front view

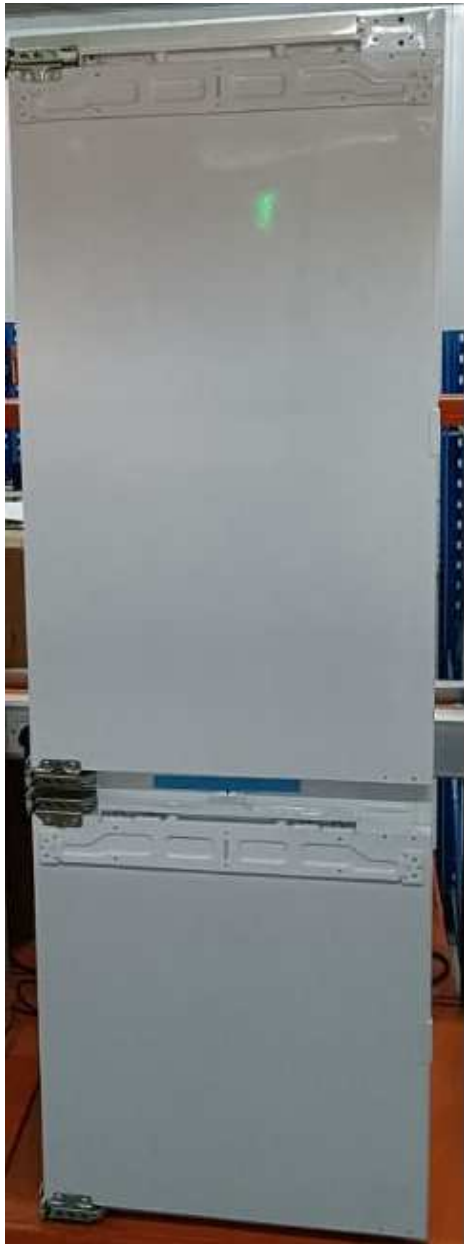


Photo 2 - Rear view



Photo 3 - Front view with open door



Photo 4 - Label of compressor



Photo 5 - Nameplate

Guangdong Candor Intelligent Technology Co., Ltd.

Built-in refrigerator

Product Model: BCD-275WA2EQ

Rated voltage: AC 115V

Rated frequency: 60Hz

Rated current: 3.0A

The power of defrost heating: AC115V, 190W

Electric shock protection type: I

Refrigerant amount: R600a (62g)

Total volume: 267L Volume of freeze: 82L

Cold storage volume: 185L

Refrigeration method: Air cooling

Insulation blowing gas: Cyclopentane

Net weight: 82kg Gross weight: 87 kg

Product size(WxDxH): 558*545*1770mm

Production date: 2023-9-20

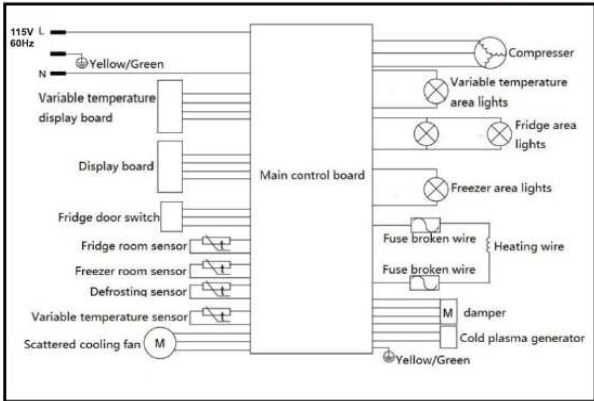


CONFORMS TO
UL STD.
60335-1 AND 60335-2-24
CERTIFIED TO
CSA STD. C22.2 NO.
60335-1 AND 60335-2-24



ENERGY
PERFORMANCE
VERIFIED
RENDEMENT
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Product Details

Item	Data
Model number of Unit Under Tested	BCD-275WA2EQ
Serial number	N/A
Condition of sample(s)	Prototype
Configuration	Refrigerator-freezer
Product class (Refrigerators, Refrigerator-Freezers and Freezers)	5-BI Built-In Refrigerator-freezers—automatic defrost with bottom-mounted freezer
Refrigerating type	Compression-type
Condenser type	Grill
Condenser location	Back
Does the unit have an automatic icemaker?	No
Does the unit have a through the door: ice dispenser/water dispenser?	No
Is the unit a Built-in appliance?	Yes
Does the unit have a defrost heater?	No
Does the unit have an anti-sweat heater?	No
Defrost type	Automatic defrost
Reported refrigerated volume method	CAD-derived volume
Refrigerant	R600a
Charge of refrigerant [g]	62
Overall dimensions (W*D*H)[mm]	558*545*1770

Critical Components

Name	Manufacturer / trademark	Type / model	Technical data
Compressor	jiaxipera	VTX1113Y	230V,40-150Hz,R600a

NOTE

"Various" means any type, from any manufacturer that complies with the "Technical data and securement means" can be used.

Test Conditions

Items	Minimum	Maximum	Average
a) General			
Test voltage [V]:			115
Test Frequency [Hz]:			60
Air velocity [m/s]:		0.20	
b) Ambient conditions			
Ambient Temperature [°C]:	32.0	32.4	32.2

Refrigerated Volume

CAD-derived Volume

Compartment type	Description	Width (mm)	Depth (mm)	Heigh (mm)	Number	Volume (L)	Volume (Cu.ft)
Fresh food compartment	Part 1	325	934	485	1	147.22	5.199
	Part 2	452	107	539	1	26.07	0.921
	Part 3	385	464	107	1	19.11	0.675
	Part 4	6	12	178	14	0.18	0.006
	Part 5	5	12	12	14	0.01	0.000
	Part 6	50	16	10	-14	-0.11	-0.004
	Part 7	263	83	50	-1	-1.09	-0.039
	Part 8	263	142	171	-1	-6.39	-0.226
	Total:					185.0	6.53
Freezer compartment	Part 1	356	462	349	1	57.40	2.027
	Part 2	616	446	94	1	25.83	0.912
	Part 3	163	24	40	1	0.16	0.006
	Part 4	393	141	5	-1	-0.28	-0.010
	Part 5	1612	20	10	-1	-0.32	-0.011
	Total:					82.8	2.92

Compartment	Volume (L)	Volume (Cu.ft)
Fresh food compartment	185.0	6.53
Freezer compartment	82.8	2.92
Total volume	268	9.5
Total adjusted volume	330.7	11.67

Refrigerated Volume

Measured Volume of A Production Unit

Compartment type	Description	Width (mm)	Depth (mm)	Heigh (mm)	Number	Volume (L)	Volume (Cu.ft)
Fresh food compartment	Part 1	324	934	486	1	147.07	5.194
	Part 2	452	108	539	1	26.31	0.929
	Part 3	385	464	107	1	19.11	0.675
	Part 4	6	12	178	14	0.18	0.006
	Part 5	5	12	12	14	0.01	0.000
	Part 6	50	16	10	-14	-0.11	-0.004
	Part 7	263	83	50	-1	-1.09	-0.039
	Part 8	263	142	171	-1	-6.39	-0.226
	Total:					185.1	6.54
Freezer compartment	Part 1	355	463	349	1	57.36	2.026
	Part 2	615	445	94	1	25.73	0.908
	Part 3	163	25	40	1	0.16	0.006
	Part 4	394	141	5	-1	-0.28	-0.010
	Part 5	1612	20	11	-1	-0.35	-0.013
	Total:					82.6	2.92

Compartment	Volume (L)	Volume (Cu.ft)
Fresh food compartment	185.1	6.54
Freezer compartment	82.6	2.92
Total volume	268	9.5
Total adjusted volume	330.5	11.68

Note: The calculated value of CAD-derived volume is within two percent, or 0.5 cubic feet (0.2 cubic feet for products with total refrigerated volume less than 7.75 cubic feet (220 liters)), whichever is greater, of the volume of a production unit of the basic model measured in accordance with the applicable test procedure in part 430 of this chapter.

Volume Result Summary - Reported Value

Compartment	Volume (L)	Volume (Cu.ft)
Fresh food compartment	185.0	6.53
Freezer compartment	82.8	2.92
Total volume	268	9.5
Total adjusted volume	330.7	11.67

Energy Consumption Test

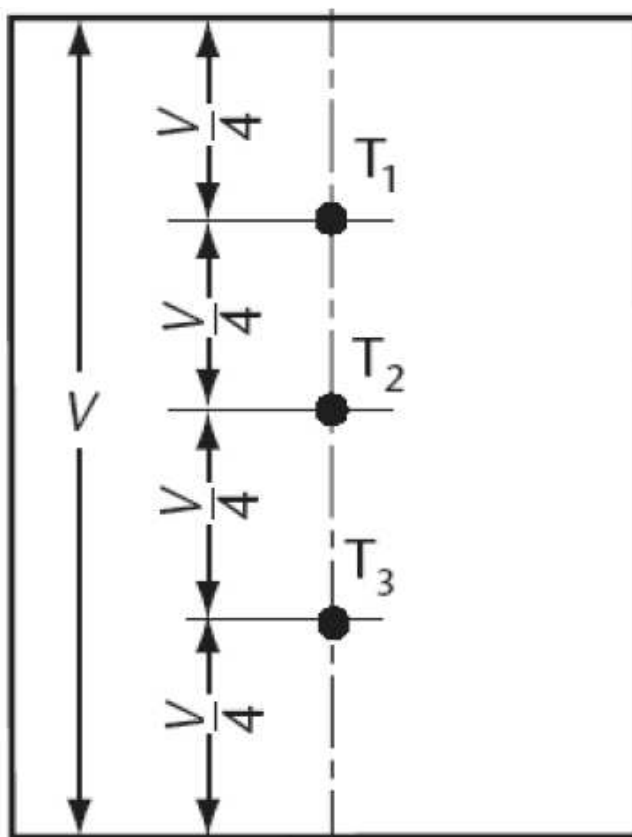
Item	Unit	Sample 1	Sample 2	-
Location of thermostat setting of the first test	-	Medium	Medium	-
The average temperature in fresh food compartment	°F	38.35	36.75	-
The average temperature in freezer compartment	°F	-0.04	-1.05	-
Energy expended during the first test period	kWh	2.035	2.207	-
Length of time of the first test period	min	3023	3039	-
Test cycle energy expended during the first test cycle	kWh/24h	0.969	1.046	-
Location of thermostat setting of the second test	-	Warmest	Warmest	-
The average temperature in fresh food compartment	°F	44.11	44.98	-
The average temperature in freezer compartment	°F	7.43	5.09	-
Energy expended during the second test period	kWh	1.681	1.810	-
Length of time of the second test period	min	3023	3033	-
Test cycle energy expended during the second test cycle	kWh/24h	0.801	0.859	-
The average per-cycle energy consumption per fresh food compartment (TR =39°F)	kWh/24h	0.950	0.995	-
The average per-cycle energy consumption per freezer compartment (TF =0°F)	kWh/24h	0.968	1.014	-
Higher of Energy Consumption	kWh/24h	0.968	1.014	-
Annual Energy Use	kWh/Year	353.32	370.11	-

Test Result Summary

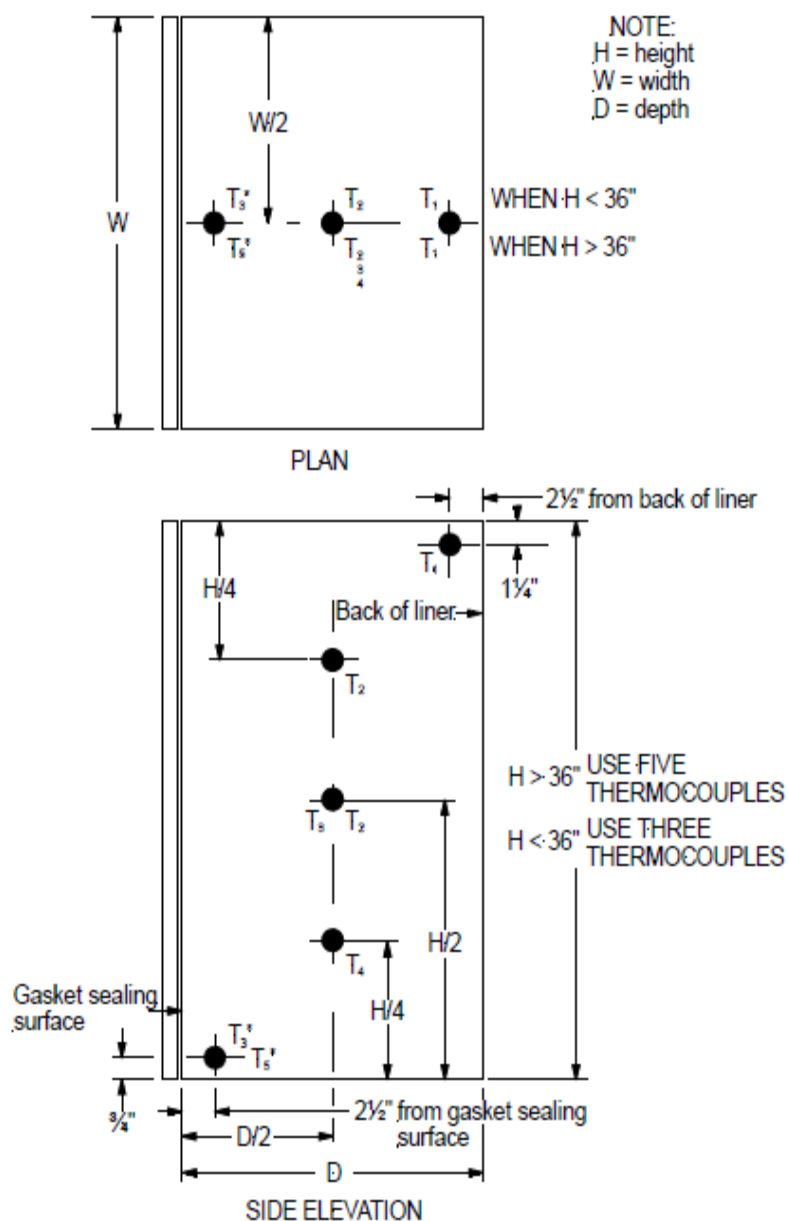
Item	Unit	Value
Sampling size	-	2
Mean of sample	-	361.72
Sample standard deviation	-	11.872
UCL/1.1	-	377.02
The decided Annual Energy Use (AEU)	kWh/Year	377.02
Rated AEU	kWh/Year	400
Maximum AEU Limit of DOE	kWh/Year	446.59
Maximum AEU Limit of E-star	kWh/Year	401.92
Verdict	-	Pass

Temperature measurement points

fresh food compartment



Freezer compartment (unloaded and use three thermocouples)



Revision Summary

[illegible]

-THE END-