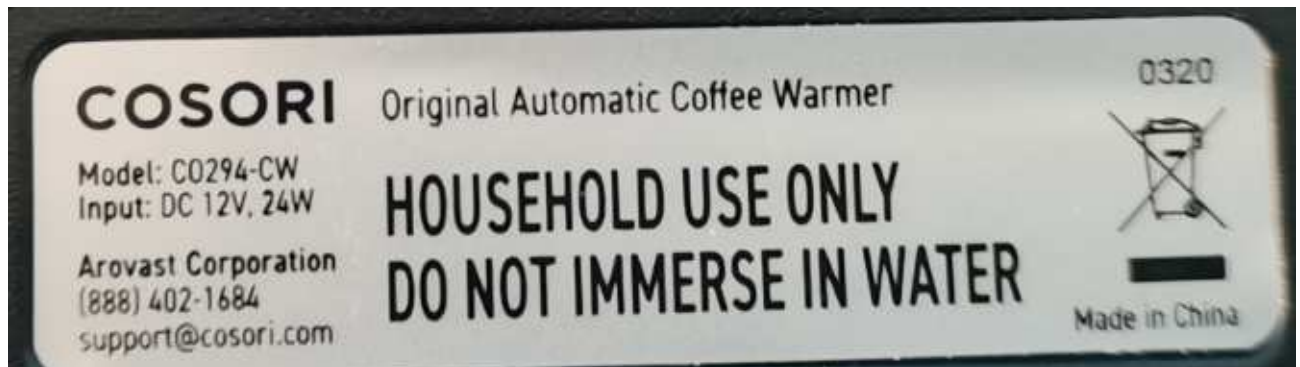


TEST REPORT UL 1082 Standard for Household Electric Coffee Makers and Brewing-Type Appliances CSA C22.2 No.64.19 Household cooking and liquid-heating appliances	
Report reference No.:	ESTS-P21063022
Tested by.....: (printed name and signature)	Tom Nie
Approved by.....: (printed name and signature)	Jimmy Liang
Date of issue.....:	2021-07-03
Testing laboratory	EST Technology Co., Ltd.
Address.....:	Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China
Test location.....:	Same as above
Applicant.....:	Arovast Corporation
Address.....:	1202 N Miller St. Suite A, Anaheim, CA 92806, USA
Manufacturer.....:	Same as Factory
Address.....:	Same as Factory
Standards.....:	UL 1082 6th Ed., dated 2009-03-17, rev. 2017-09-28; CSA C22.2 NO.64-19, dated 2019-05-01.
Test Procedure	Test report
Non-standard test method.....:	N/A
Type of test equipment	Original Automatic Coffee Warmer
Trade mark.....:	
Model/Type designation.....:	CO294-CW
Rating.....:	Adaptor input: 100-240Vac, 50/60Hz, 0.8A Adaptor output: 12Vdc, 3A (JK120300-S23USD) or 12Vdc, 2.5A (XH1200-2500W) Product input: 12Vdc, 24W
TRF originator.....:	EST Technology Co., Ltd.
Copyright blank test report:	EST Technology Co., Ltd.
Test item particulars:	--
Equipment mobility	Portable appliance
Operating Condition	Continuous
Tested for IT power systems	No
IT testing, phase-phase voltage (V)	N/A
Class of equipment	Class III equipment

List Attachments (Including a total number of pages in each attachment):

-Attachments 1: Photo documentation (4 pages)

Copy of marking plate(s):

Remark:



POSSIBLE TEST CASE VERDICTS:	
- test case does not apply to the test object	N/A
- test object does meet the requirement	P (Pass)
- test object does not meet the requirement.....	F (Fail)
TESTING:	
Date of receipt of test item	2021-06-30
Date (s) of performance of tests.....	2021-06-30~2021-07- 02
GENERAL REMARKS:	
"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report a ☐ comma / ☒ point is used as the decimal separator.	
Name and address of factory (ies).....	Dongguan Raiwee Electronic Technology Co., Ltd Building 11, Antouling Industry Avenue, Qinghu Village, Qishi Town, Dongguan, Guangdong, China
GENERAL PRODUCT INFORMATION:	
1: The products covered by this report are Original Coffee Warmer, intended for indoor and household use only, powered by directly-plugged-in LPS or Class 2 adaptor terminated in non-polarized 1-15P plug.	



UL 1082			
Clause	Requirement + Test	Result - Remark	Verdict
6	General		P
7	Frame and Enclosure	See appendix A.	P
8	Assembly		P
9	Handles	No handles provided.	P
10	Corrosion Protection	Stainless steel employed.	P
11	Supply Connections	No power cord.	N/A
12	Current-Carrying Parts		P
13	Internal Wiring	See appendix A	P
14	Secondary Circuits	Powered by UL approved Class2 or LPS adaptor, no need to evaluate on this clause.	N/A
15	Heating Elements		P
16	Electrical Insulation	See appendix A	P
17	Thermal Insulation	No thermal insulation employed	N/A
18	Thermal Cutoffs	See appendix A	N/A
19	Lampholders		N/A
20	Switches		N/A
21	Dual Voltage Appliance		N/A
22	Controls and Control Circuits	Auxiliary and regulating controls provided.	P
22A	Electromechanical and Electronic Controls		N/A
22B	Controls – End Product Test Parameters :	Auxiliary and regulating controls provided. UL approved NTC sensor provided.	P
22C	Capsule-Type Brewing Appliance Controls		N/A
23	Overheating Protection	UL approved thermal link provided.	P
24	Spacings		P
24A	Spacings on Printed-Wiring Boards		N/A
25	Grounding		N/A
26	Protection Against Injury to Persons		P
26A	Ground-Fault, Arc-Fault, and Leakage Current Detectors/Interrupters		N/A
26B	Surge Protective Device		N/A
27	Pressure Vessels and Parts Subject to Pressure		N/A
28	General		N/A
29	Resistance of Grounding Test		N/A
30	Power Input		P



UL 1082			
Clause	Requirement + Test	Result - Remark	Verdict
31	Leakage Current Test		P
32	Operational Tests		P
33	Normal Temperature Tests		P
34	Leakage Current as a Result of Moisture Tests		P
35	Dielectric Voltage-Withstand Test		P
36	Broken Element Test		N/A
37	Strain Relief Test		N/A
38	Push-Back Relief Test		N/A
39	Metal Enclosure Impact Tests		P
40	Thermal Degradation		N/A
41	Handle Securement Tests		N/A
42	Under- Cabinet and Wall Mounted Appliances- Impact Test		N/A
43	Loading Test		N/A
44	Stability Test		P
45	Tip Over Test		N/A
46	Dynamic Stability Test		N/A
46A	Hydrostatic Pressure Tests for Parts Subject to Pressure		N/A
46B	Open Brew Chamber Test – Pressure Brewing Appliances		N/A
46C	Brew Chamber Blockage Following Mold Stress Test for Capsule-Type Brewing Appliances		N/A
47	Abnormal Operation Tests		P
48	Component Failure Test		P
49	Automatic Controls Test		P
50	Permanence of Marking Tests		N/A
	MARKINGS		P
	INSTRUCTION MANUAL		P

CSA C22.2 No.64.19			
Clause	Requirement + Test	Result - Remark	Verdict
5	Construction	See table A	P
6	Markings	See page 2	P
7	Tests	See below test results	P
7.1	General		P
7.2	Rating		P
7.3	Temperature (normal)		P
7.4	Temperature (abnormal)		P
7.5	Dielectric strength		P
7.6	Flexing and detachment (power supply cords and cord sets)	No power supply cord	N/A
7.7	Flexing (internal wiring)	No internal wiring subjected to flexing	N/A
7.8	Leakage current		P
7.9	Performance of manually operated switches		P
7.10	Performance of automatic temperature controls		P
7.11	Performance of fusible links		P
7.12	Aging of water seals	No such sealing parts	N/A
7.13	Physical abuse		P
7.14	Backflow	No connected to water main. No need to subject to this test.	N/A
7.15	Stability		P
7.16	Insertion endurance		N/A
7.17	Investigation of fibreglass sleeving (over bare conductors used as wiring)		N/A
7.18	Thermoset material aging		N/A
7.19	Insulating liner investigation		N/A
7.20	Electric toilets — Spillage		N/A
7.21	Performance of appliances having PTC heaters		N/A
7.22	Thermal endurance (rope heater element)		N/A
7.23	Mechanical endurance (cord reels)		N/A
7.24	Open-coil heating element breakage		N/A
7.25	Strength of handles..... :		N/A

Table A		TABLE: List of critical components				P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹	
Adaptor	JUKEELECTRON IC(HK)COLTD	JK120300- S23USD	Rated input: 100-240Vac, 50/60Hz, 0.8A, output12Vdc, 3A. LPS.	UL60950-1 CSAC22.2No.60 950-1	cULus	
(Alternative)	XIAMEN XUNHENG ELECTRONICS TECH CO LTD	XH1200- 2500W	Rated input 100- 240Vac, 50/60Hz, 0.8A, output 12Vdc, 2.5A. Class 2.	UL 1310 CSA C22.2 No.223	cULus	
Top Cover	Interchangeable	Interchangeable	Stainless steel. 0.7 mm thick. Secured by screws.	N/A	NR	
Control Panel	Interchangeable	Interchangeable	PMMA. Rated HB, 80°Cat least.	UL 94, CSA C22.2 No. 0.17	cURus	
Lower Enclosure	SABIC JAPAN L L C	945 (GG)	PC. Rated V-0, 120oC. 2.0 mm thick. Secured by screws.	UL 94, CSA C22.2 No. 0.17	cURus	
Power Inlet	Interchangeable	Interchangeable	Rated 12Vdc, 3A.	N/A	NR	
Upper Enclosure	SABIC JAPAN L L C	945 (GG)	PC. Rated V-0, 120oC. 1.5 mm thick. Secured by scre ws.	UL 94, CSA C2 2.2 No. 0.17	cURus	
Closed-end Connector	Interchangeable	Interchangeable	Rated 105°C.	UL 486A- 486B CSA C22.2 No. 65	cURus	
Internal Wire	Interchangeable	3232	Rated 3k Vdc, 200°C. Min.22AW G for connecting to Thermal Link and Power Inlet.	UL 758 & CSA- C22.2 No. 15	cURus	
(Alternative)	Interchangeable	3135	Rated 600Vac, 200°C. Min.22AW G for connecting to Thermostat.	UL 758 & CSA- C22.2 No. 15	cURus	
(Alternative)	Interchangeable	1332	Rated 300Vac, 200°C. Min.24AW G for connecting to NTC Sensor	UL 758 & CSA- C22.2 No. 15	cURus	
PWBs	Interchangeable	Interchangeable	Rated V-1, 130°C. 1.2 mm thick..	UL 796	UR	
Heating Plate	Interchangeable	Interchangeable	Stainless steel. 2.0 mm thick..	N/A	NR	
Sealing Pad	Interchangeable	Interchangeable	SIR. Rated V-0, 150°C. 2.2 mm thick..	UL 94, CSA C2 2.2 No. 0.17	cURus	
Heater Back Cover	SABIC JAPAN L L C	945 (GG)	PC. Rated V-0, 125°C. 1.6 mm thick..	UL 94, CSA C22.2 No. 0.17	cURus	



Thermal Link	DONGGUAN HONGDA ELECTRONIC TECHNOLOGY CO LTD	H10/D10/HT 150	Rated 250Vac, 10A, Tf=150°C.	UL 60691 CSA E60691	cURus
NTC Sensor	Interchangeable	Interchangeable	It consists of following parts.	N/A	NR
NTC Resistor	Interchangeable	Interchangeable	Rated 100k ohm at 25 °C.	UL 1434 UL 60730-1 CSA- E60730-1	cURus
Housing	Interchangeable	Interchangeable	Stainless steel. 0.2 mm thick.	N/A	NR
Thermostat	FOSHAN HESHU O METAL ELECT RICAL APPLIANC ES CO LTD	BW-DCM	Rated 125V, 8A. Tset- point=120°C.	UL 60730- 1&- 2-9 CSA C22.2 No.60730 -1&-2-23	cURus
Heater Assembly	Interchangeable	Interchangeable	Rated 12Vdc, 24W. It consists of following parts.	N/A	NR
Heating Element	Interchangeable	Interchangeable	304. 0.06 mm thick.	N/A	NR
Film	Interchangeable	Interchangeable	PI film. Rated V- 0, 220°C.	UL 94, CSA C2 2.2 No. 0.17	cURus

Supplementary information:



Figure 1: Overview



Figure 2: Overview



Figure 3: Overview

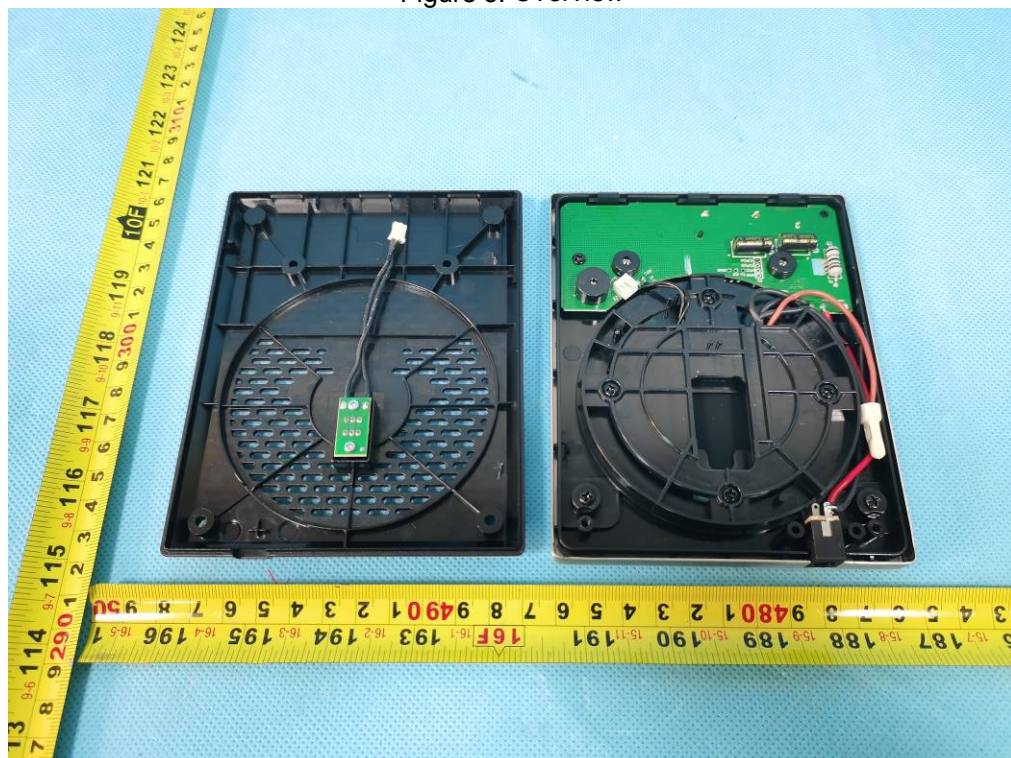


Figure 4: Internal view

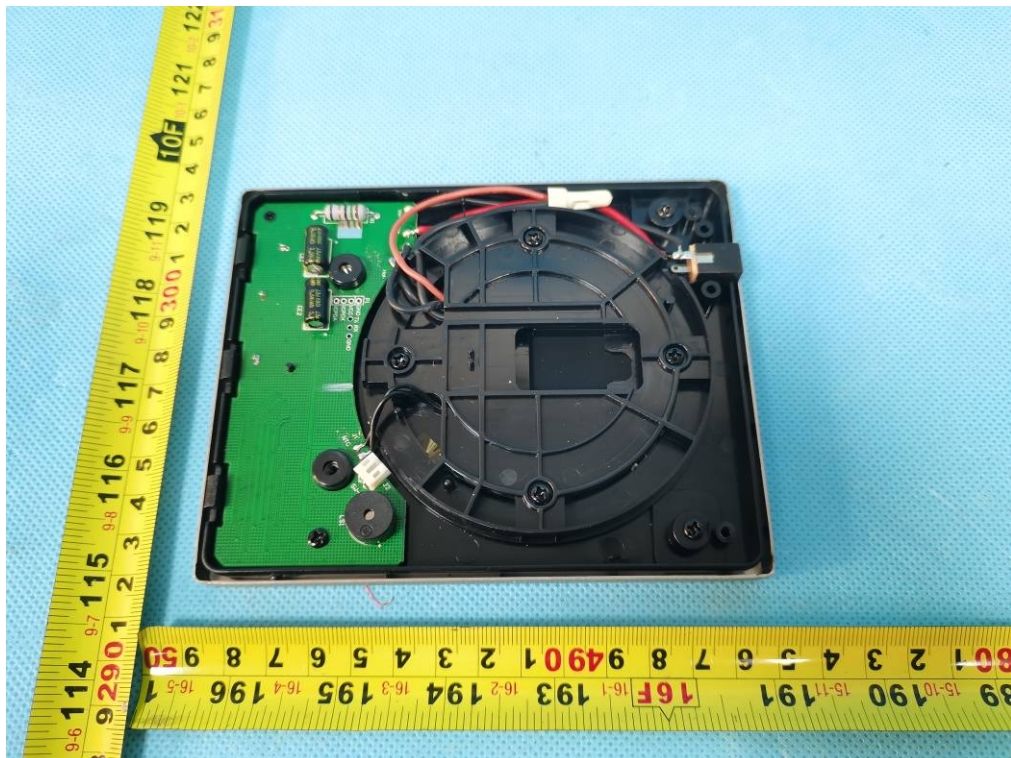


Figure 5: Overview



Figure 6: Internal view

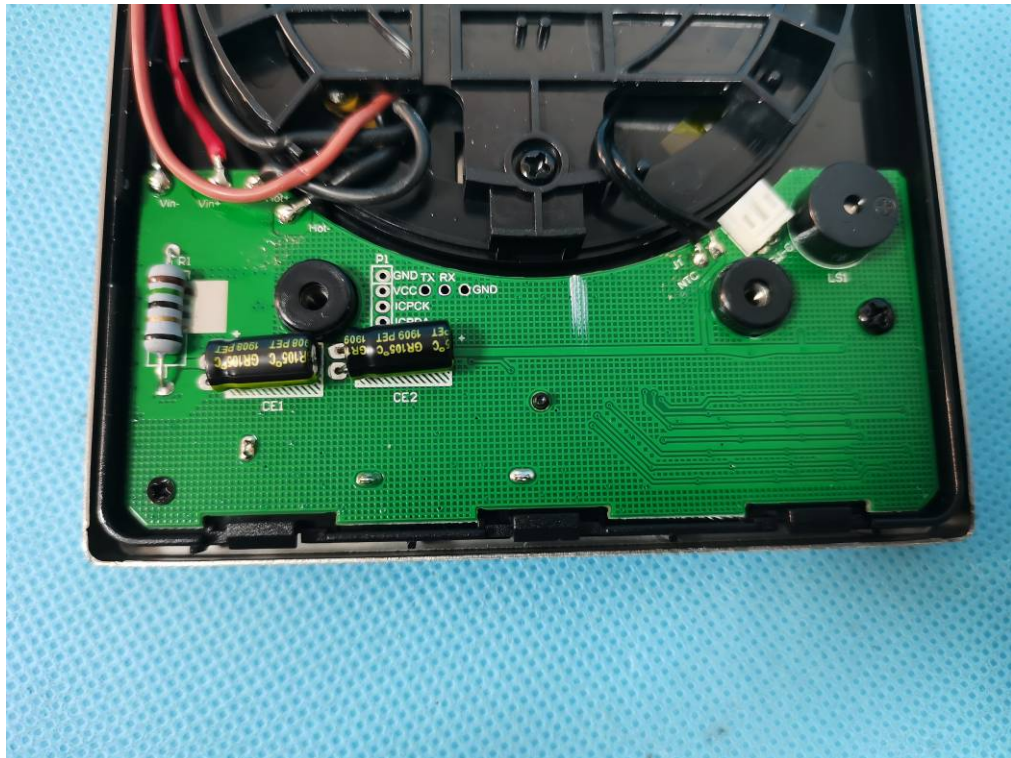


Figure 7: Internal view

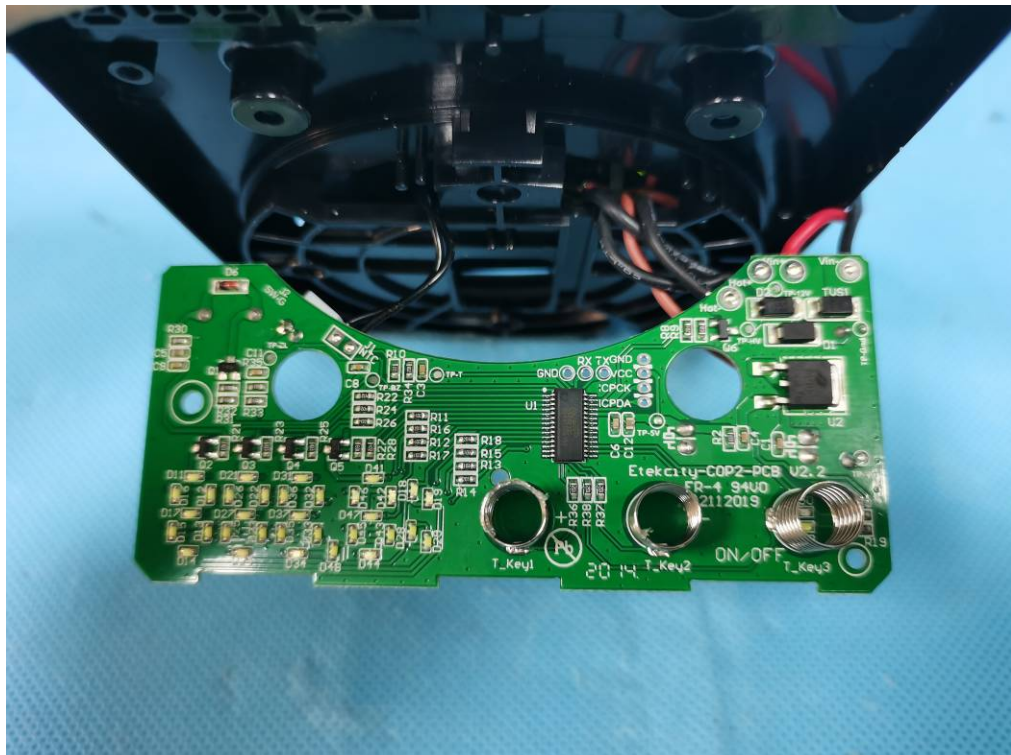


Figure 8: Internal view