



Intertek Order No.: 100126173
Report No.: 100126173COL-001A

Date: July 31, 2010

RENDERED TO
A.S TRUST & HOLDINGS INC
44-129 MIKIOLA DRIVE
KANEHOE, HI 96744

REFRIGERANT COMPARISON TESTING ON
A HAIER REFRIGERATOR/ FREEZER

General

This report gives the results of a comparison test of R-134 A and HCR-188C refrigerant using a Haier 21 cubic ft refrigerator/freezer.

The client supplied the sample, which Intertek received on July 14, 2010. The test sample was assumed to be in new condition.

The purchase order dated April 30, 2010 authorized the tests. Mr. Richard Maruya representing the client coordinated the work.

The performance tests were conducted in accordance with the following standard

- DOE 10 CFR PT 430 Subpart B Appendix B1-Uniform Test Method for Measuring the Energy Consumption of Freezers.
- ANSI/AHAM HRF-1-1979

Notes: (1) The results contained in the report are for technical evaluation only and are applicable only to the specific test specimen referenced within the report.

Nameplate Data

Manufacturer: Haier
Model No. PRTS21SACW
Serial No: N/A
Volts: 115 Hertz: 60
Phase: 1 Amp: 7
Refrigerant Type: R-134A
Total Refrigerant Charge: 4.7 OZ



Remarks

The results of the tests are a comparison of R-134A and HCR-188C refrigerants. The refrigerator was set at the coldest setting. Each test ran for a period of 24 hours and the results are an average of the 24 hour time period. The R-134 was tested at the nameplate charge of 4.7 Oz, and the HCR-188C was tested with 1.32 Oz.

Test Run

R-134A

HCR-188C

| <u>Temperatures °F</u> | | |
|-------------------------------|-------|-------|
| Dry Bulb °F | 89.79 | 89.94 |
| Freezer Temperature°F # 1 | 8.21 | -2.5 |
| Freezer Temperature°F # 2 | 6.51 | -4.57 |
| Freezer Temperature°F # 3 | 5.6 | -5.42 |
| Refrigerator Temperature°F #1 | 36.77 | 35.25 |
| Refrigerator Temperature°F #2 | 37.74 | 36.41 |
| Refrigerator Temperature°F #3 | 38.27 | 37.32 |

Miscellaneous

Electrical Characteristics

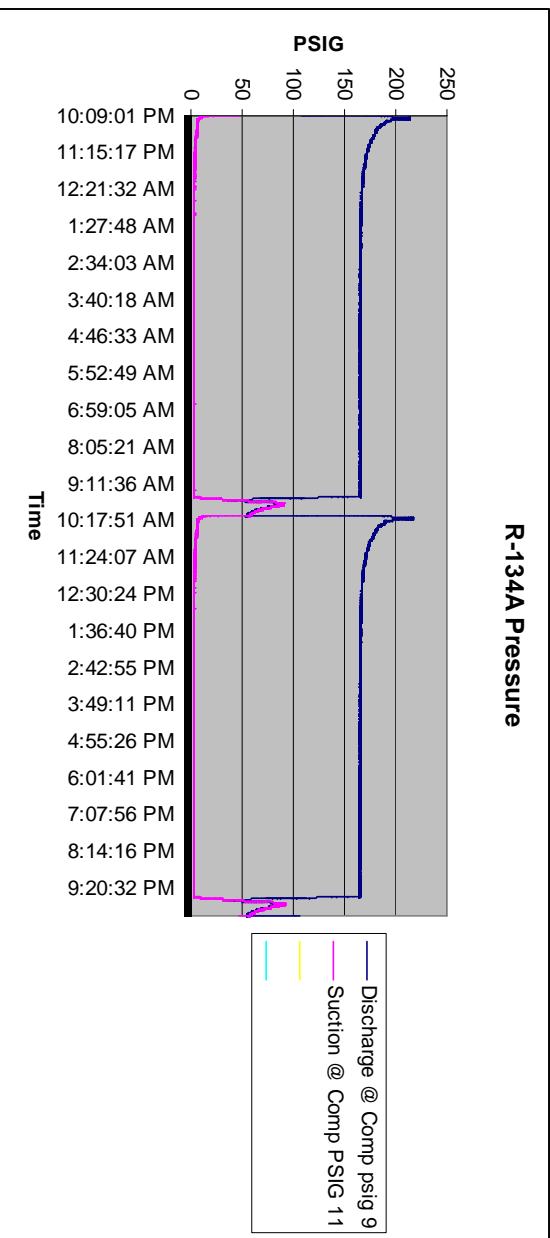
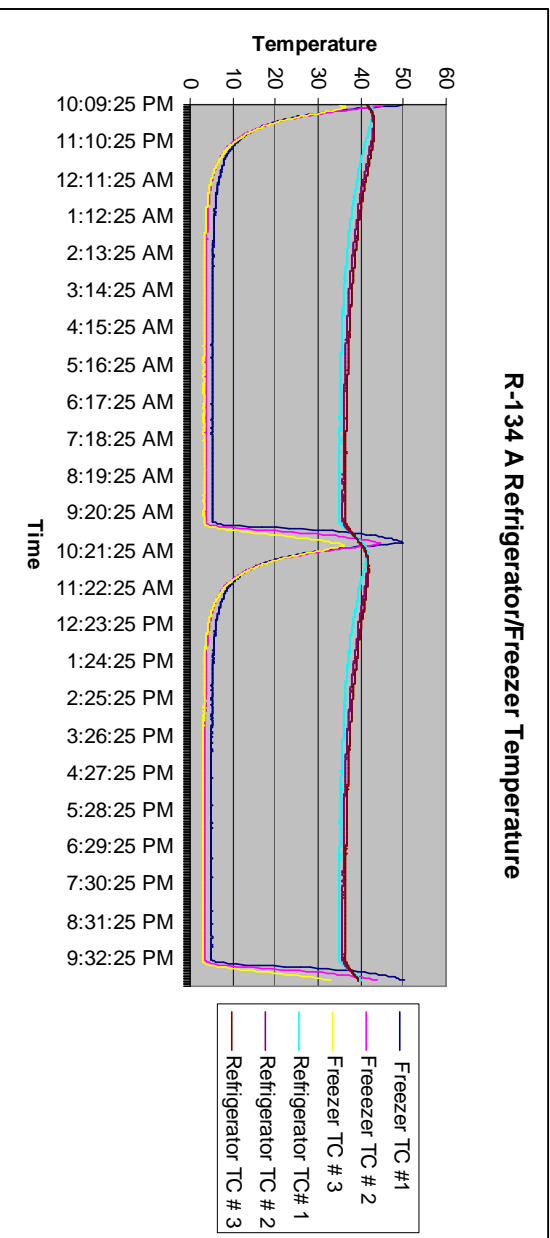
| | | |
|------------------|---------|---------|
| Frequency, Hz | 60 | 60 |
| Current, amps | 1.05 | 0.56 |
| Watts | 122.58 | 64.61 |
| Total Watt Hours | 2937.18 | 1571.19 |

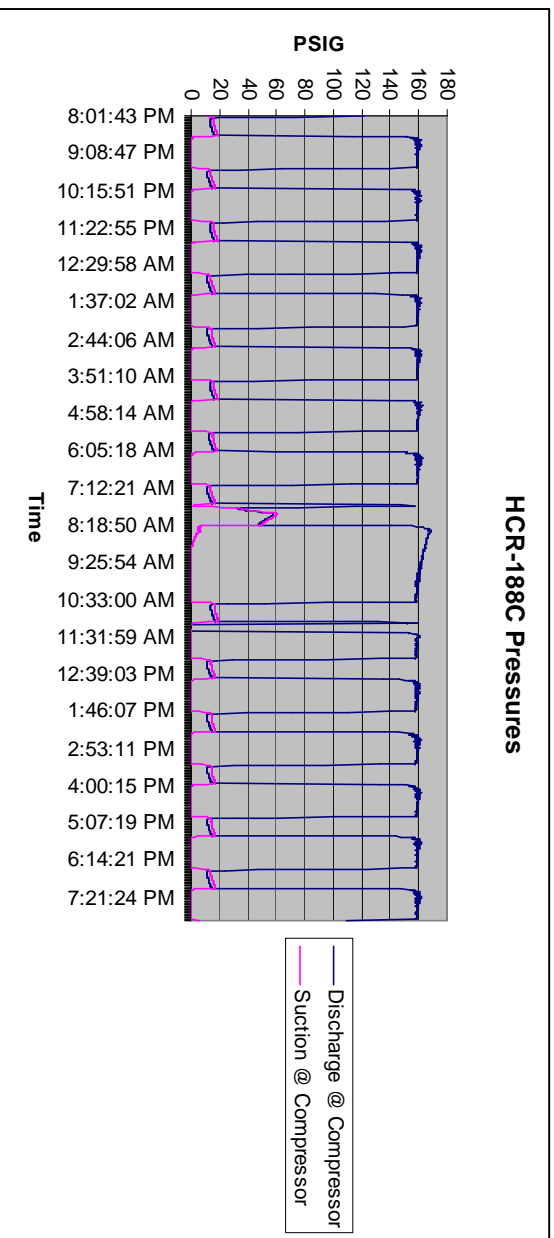
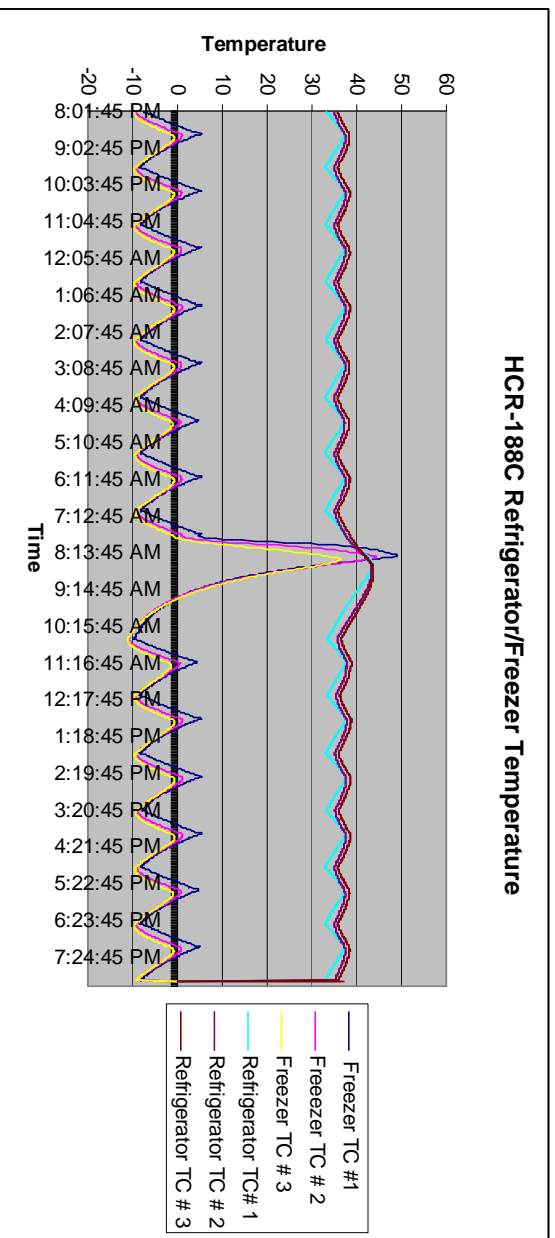
R-134A

HCR-188C

Refrigerant – Circuit Pressures, psig

| | | |
|-------------------------------|--------|--------|
| | | |
| Discharge at Compressor, psig | 162.71 | 108.97 |
| Suction at Compressor, psig | 6.33 | 5.22 |





Dates of Tests: July 30, 2010

Test Performed by:



Jody Coffman
Technician

Report Approved by:



Russell Allen
Technician Team Leader

