

# ENVIRONMENTAL TEST REPORT

IDAH070924

Idaho Technology

September 25, 2007

PROPRIETARY



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REPORT IDAH070924

# Idaho Technology Temperature/Altitude Test

## APPROVALS

**Approved By:** Layne A Viereck **Date:** 9/27/2007  
Environmental Test Coordinator

**Written By:** Bryce Buckley **Date:** 9/27/2007  
Technical Writer

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## **1.0 PURPOSE**

The purpose of this report is to present the test procedures used and the test results obtained during the performance of an environmental test program. The results included in this report relate only to the items tested. The objective of the test was for UUT Serial # Razex 4001 and 4003 to undergo temperature/altitude testing.

## **2.0 REFERENCES**

- 2.1 RMTS Quote #: IDAH070924
- 2.2 The article tested was two UUT's hereafter referred to as "Product." The Product was tested by Rocky Mountain Testing Solutions, LLC located in Roy, Utah to the requirements listed in References 2.1 and 2.2.
- 2.3 RMTS Test Procedures. LTP003C-TA

## **3.0 TEST CONDITIONS AND TEST EQUIPMENT**

### **3.1 TEST CONDITIONS**

Unless otherwise specified herein, all tests were performed at room ambient conditions defined as a temperature of  $73^{\circ} \pm 18^{\circ}$  F ( $23^{\circ} \pm 10^{\circ}$  C), with a relative humidity of  $40\% \pm 30\%$ .

### **3.2 TEST EQUIPMENT**

The required test equipment presented in Appendix A was calibrated in accordance with established standards set by Rocky Mountain Testing Solutions, LLC. The calibration records are maintained on file.

#### 4.0 TEST PROCEDURES AND TEST RESULTS

##### 4.1 TEMPERATURE/ALTITUDE

Reference 2.1, RMTS Quote #: IDAH070924  
Reference 2.4, RMTS Procedure LTP003C-TA

Date Commenced: September 25, 2007  
Date Completed: September 25, 2007

4.1.1. The test Product was placed in an altitude chamber. The test set-up photographs are shown in Appendix B.

4.1.2. The product was then subjected to the following:

- 4.1.2.1. 23 °C @ 760 Torr (sea level)
- 4.1.2.2. 23 °C @ 522.8 Torr (10,000 ft)
- 4.1.2.3. 40 °C @ 522.8 Torr (10,000 ft)
- 4.1.2.4. 40 °C @ 483.4 Torr (12,000 ft)
- 4.1.2.5. 0 °C @ 522.8 Torr (10,000 ft)
- 4.1.2.6. 0 °C @ 760 Torr (10,000 ft)

4.1.3. The test record may be referenced in Appendix C.

4.2 This concludes the temperature/altitude testing of Idaho Technology's product.

**APPENDIX LISTING**

APPENDIX A (1 pages)	Equipment List
APPENDIX B (1 pages)	Photographs
APPENDIX C (4 pages)	Temperature / Altitude Test Record

# **APPENDIX A**

## **EQUIPMENT LIST**

***ENVIRONMENTAL LAB EQUIPMENT LIST***

Instrument	Altitude Chamber
Manufacturer	Russells Technical Products
Model Number	RHB-13-5-5-WC
Serial Number	04063710

Instrument	Controller
Manufacturer	WATLOW
Model Number	F4
Serial Number	010205
Calibration Date	8/16/2007
Calibration Due Date	8/15/2008

Instrument	Field Point Recorder
Manufacturer	National Instruments
Model Number	CFP-2010
Serial Number	114C6DC
Calibration Date	8/15/2007
Calibration Due Date	8/16/2008

# **APPENDIX B**

# **PHOTOGRAPHS**





**Photograph 1. Test Setup.**



**Photograph 2. After Test.**

# **APPENDIX C**

## **Temperature/Altitude Test Record**

# ALTITUDE TEST

**COMPANY NAME:** Idaho Technology **QUOTE#** #070924

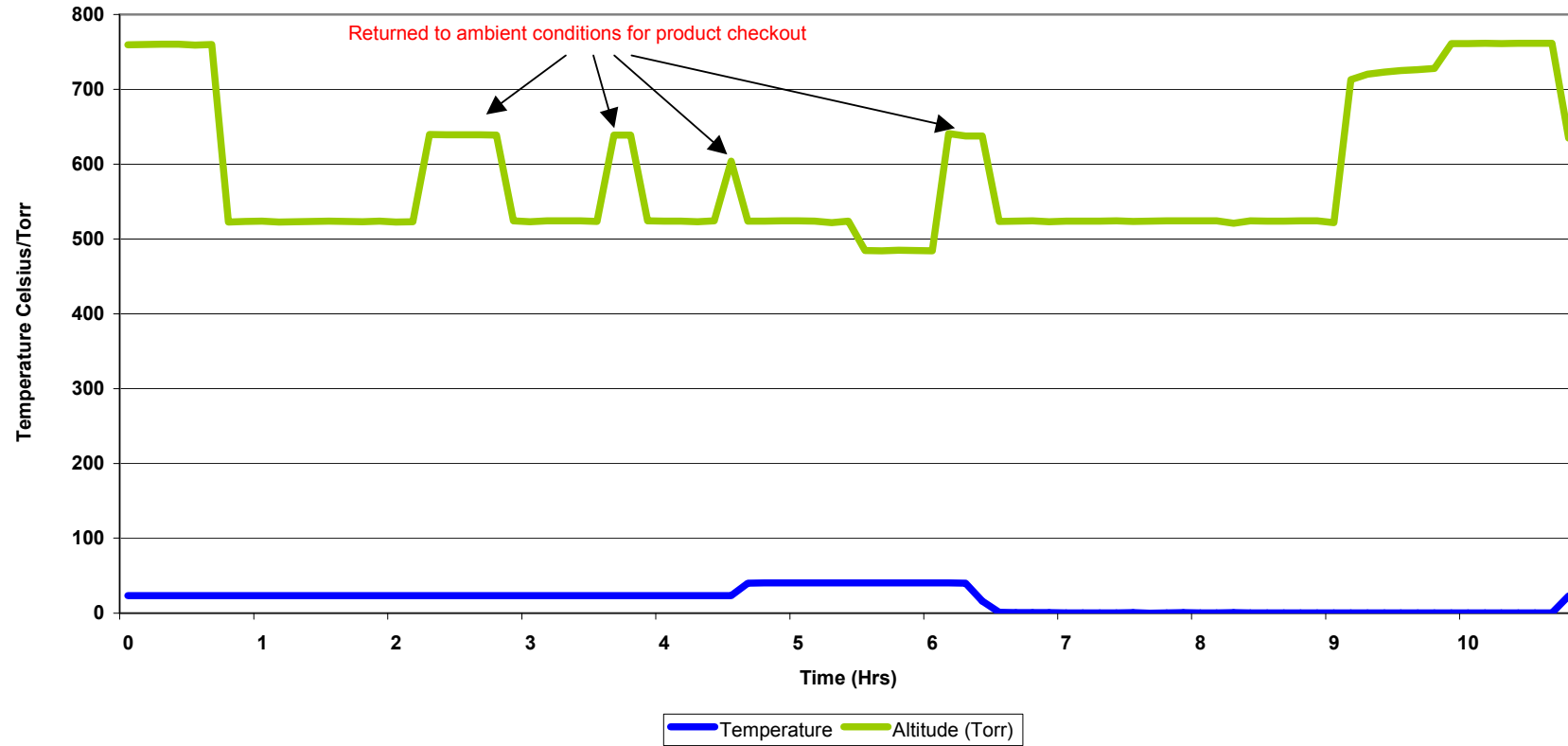
**PROFILE NAME:** IDAHO70924

**TOTAL TEST DURATION:** Approximately 10 hours **CHAMBER:** Altitude

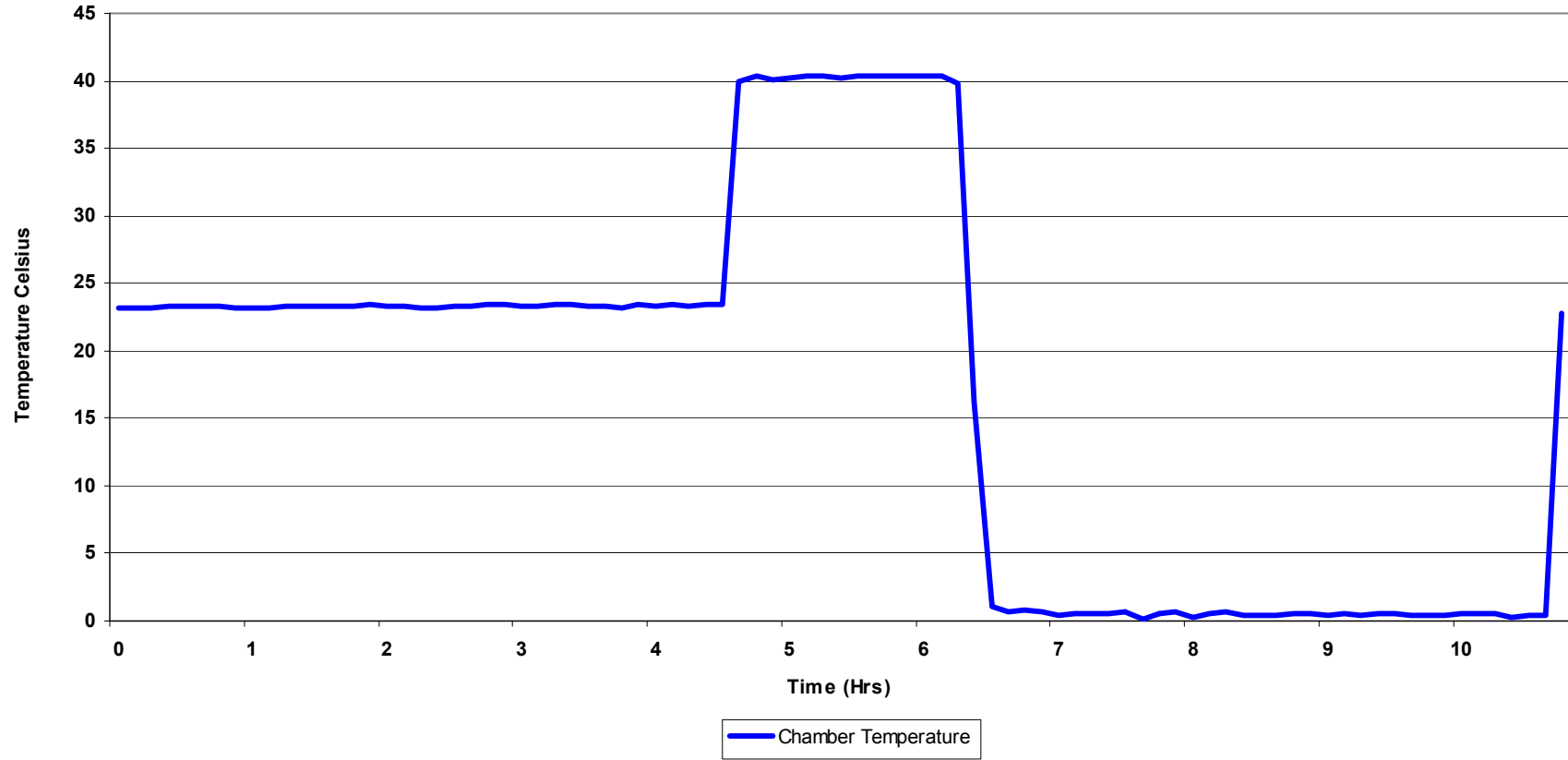
Step	Time	Date	Duration	Temperature (Celsius)	Altitude (Torr)	Altitude (Feet)	Initials
Start	9:20	9/25/2007		23	760	Sea Level	RS
Stop	10:05	9/25/2007		23	760	Sea Level	RS
Start	10:09	9/25/2007		23	522.8	10,000 ft	RS
Stop	11:38	9/25/2007		23	522.8	10,000 ft	RS
Start	12:12	9/25/2007		23	522.8	10,000 ft	LV
Stop	12:56	9/25/2007		23	522.8	10,000 ft	RS
Start	13:14	9/25/2007		23	522.8	10,000 ft	LV
Stop	13:54	9/25/2007		23	522.8	10,000 ft	LV
Start	13:57	9/25/2007		40	522.8	10,000 ft	LV
Stop	15:30	9/25/2007		40	Ramped to 483.4 and held for .5 hrs	10,000/12,000 ft	LV
Start	15:49	9/25/2007		0	522.8	10,000 ft	LV
Stop	18:24	9/25/2007		0	522.8	10,000 ft	LV
Start	18:25	9/25/2007		0	760	Sea Level	LV
Stop	20:03	9/25/2007		0	760	Sea Level	BIB



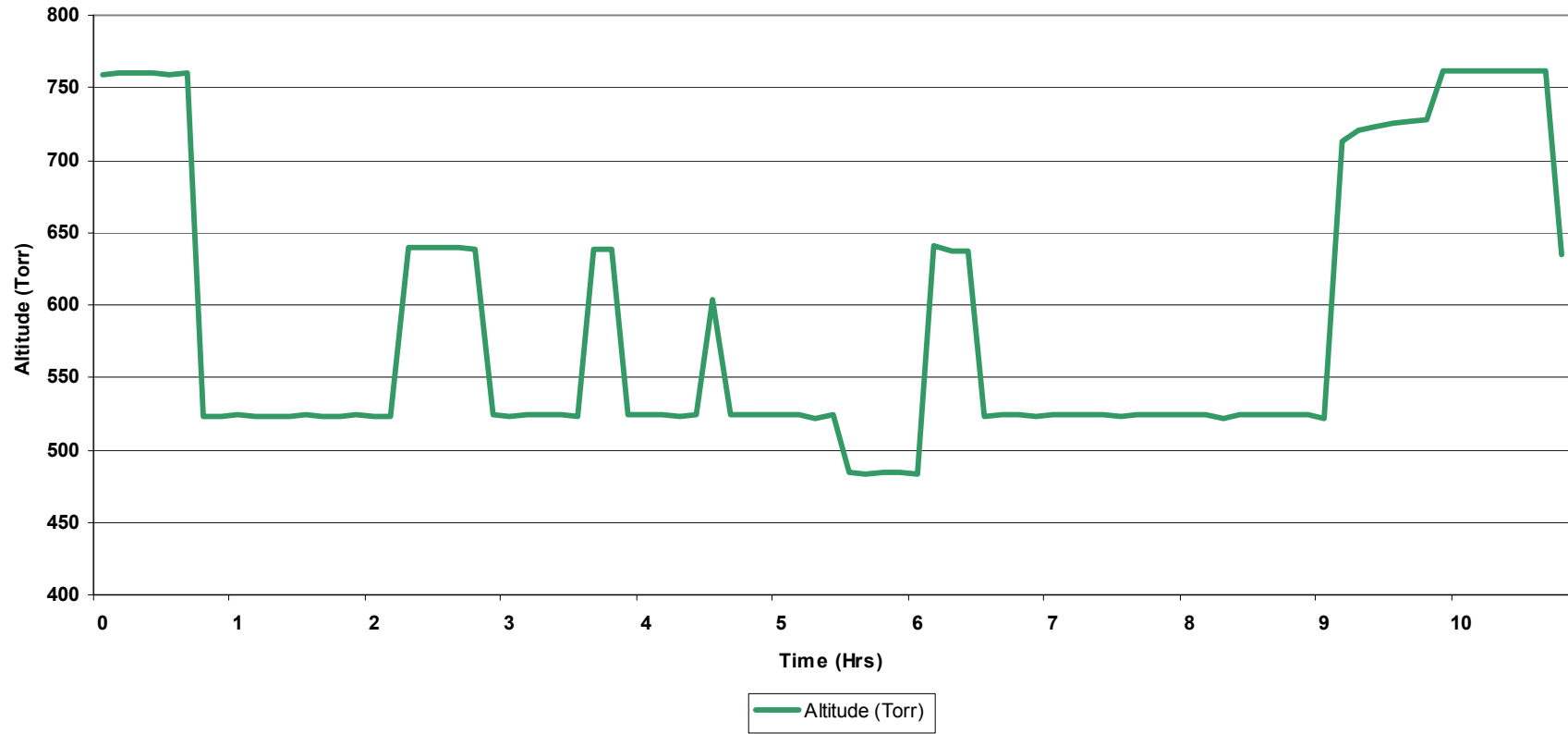
**Temperature/Altitude Chart**  
9/25/07 @ 9:20 to 9/25/07 @ 20:03



23 C, 40 C and 0 C  
9/25/07 @ 9:20 to 9/25/07 @ 20:03



760, 522.8, and 483.4 Torr  
9/25/07 @ 9:20 to 9/25/07 @ 20:03



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