



Report No. 12148  
Date: 1/31/06

# ALLIED ENERGY SYSTEMS, LLC

## Fuel Consumption Reduction Pilot Program

TEST RESULTS  
FOR:  
SPACE HEATING BOILER

Located at:

NEW JERSEY DEPT. OF TRANS.  
CHERRY HILL COMPLEX  
CHERRY HILL, NJ

A Confidential Report  
*Prepared by*  
Intellidyne LLC



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# Test Report

Report No. 12148

Date: 01/31/06

**Customer:**

Allied Energy Systems LLC  
  
 Attn: Bill Tarves

**Test Site Location:**

New Jersey Department of Transportation  
 Cherry Hill Complex  
 Frontage Rd.  
 Cherry Hill NJ

Test Type:  HEATING     AIR CONDITIONING     REFRIGERATION     OTHER: \_\_\_\_\_  
 Product Tested:  HW     LCH     LCS     CHW     CHS     AC     CAC     RU     OTHER: \_\_\_\_\_

**Type of Equipment:**

Manuf.: Weil McLain  
 Model :LGB-9  
 Capacity/SetPt: 1040 MBH / 190  
 Fuel Type Used: Natural Gas  
 Application: Hydronic Heating Only No DHW  
 Area Served: Electrical Building

Test Start Date: 11/10/05  
 Test End Date: 12/13/05  
 No. of Days in Test: 34

**BURNER RUN-TIME:**     in HRS.     in MIN.  
 IntelliCon ON-DAYS: 59:10:36  
 IntelliCon OFF-DAYS: 70:46:18    RUN-TIME was reduced by: 16.38%

**BURNER USAGE FACTOR:**  
 IntelliCon On-Days: 15%  
 IntelliCon Off-Days: 17%

**HEATING DEGREE-DAYS (FOR TEST PERIOD)**  
 IntelliCon ON-DAYS: 826    It was 2.9% Warmer on the On-Days.  
 IntelliCon OFF-DAYS: 851  
 Total Degree-Days: 1677

**USAGE PER DEGREE-DAY**  
 ON-DAYS: 0:04:18  
 OFF-DAYS: 0:04:59

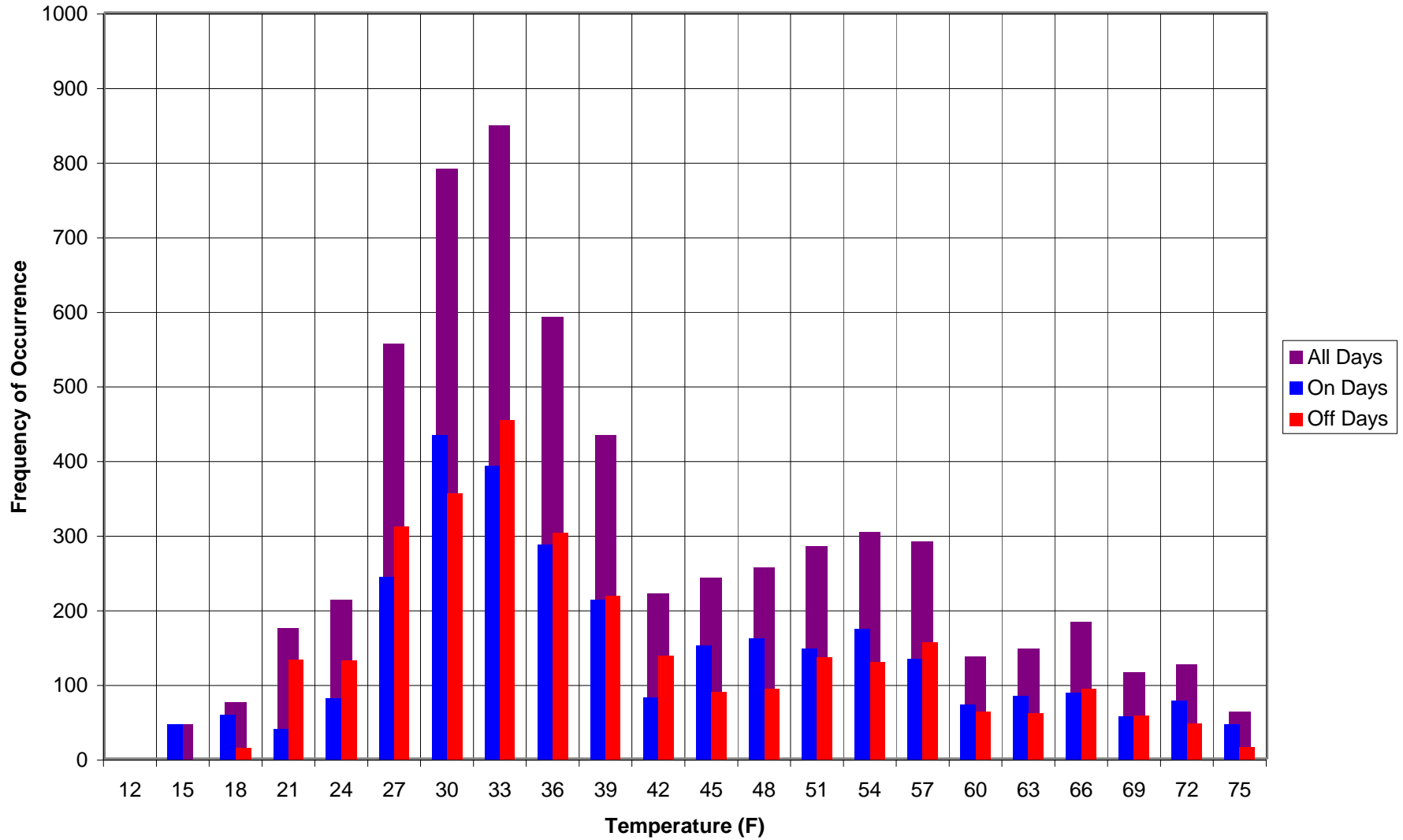
**SOLAR LOAD COMPENSATION: (Lumens/Sq. Ft.)**  
 IntelliCon ON-DAYS: 7249  
 IntelliCon OFF-DAYS: 8851    It was 18.10% Sunnier on the OFF-Days.

**BURNER CYCLING REDUCTION:**  
 IntelliCon ON-DAYS: 512  
 IntelliCon OFF-DAYS: 960    Cycling was reduced by: 46.7%

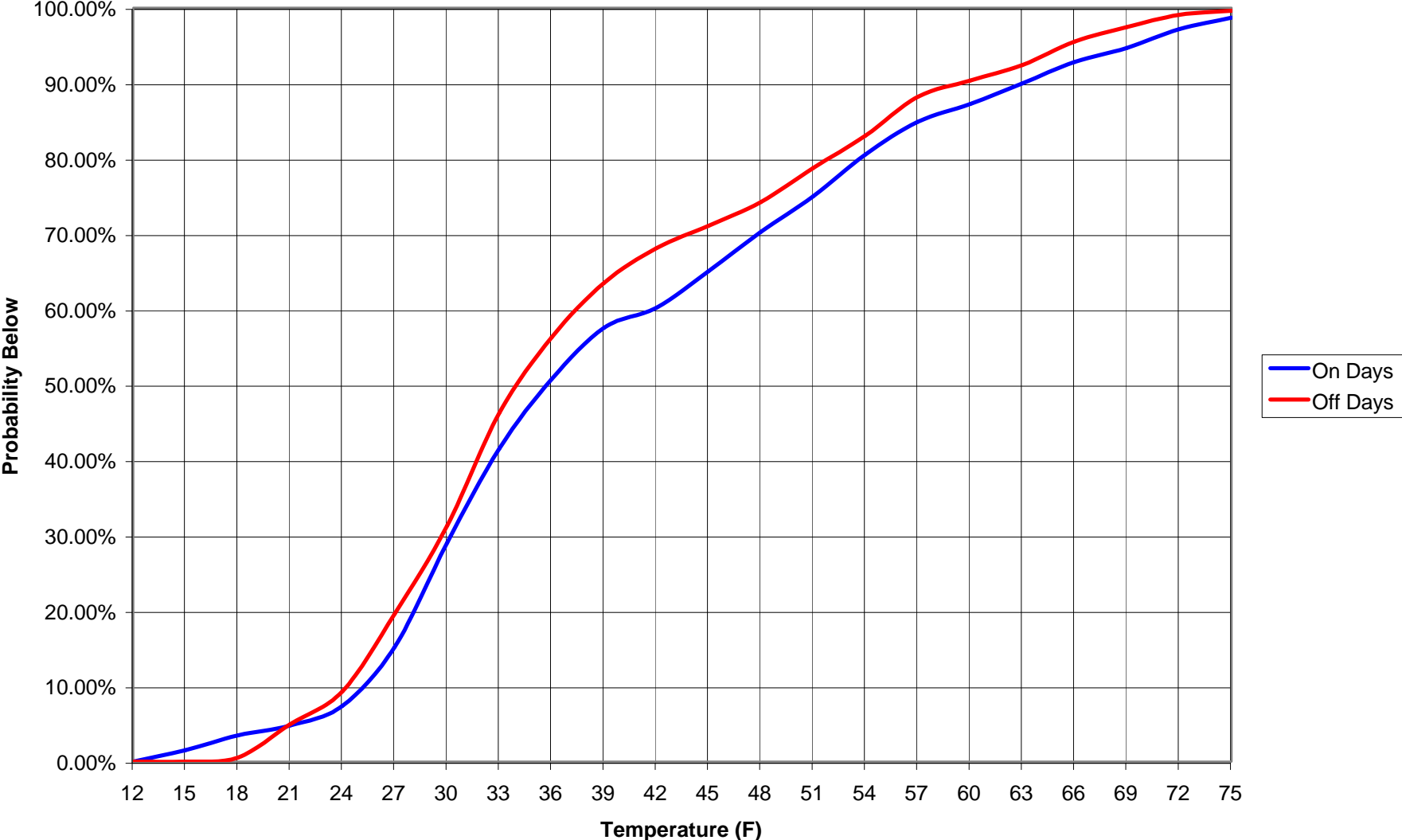
**Adj. Savings = 13.87%**

COMMENTS:

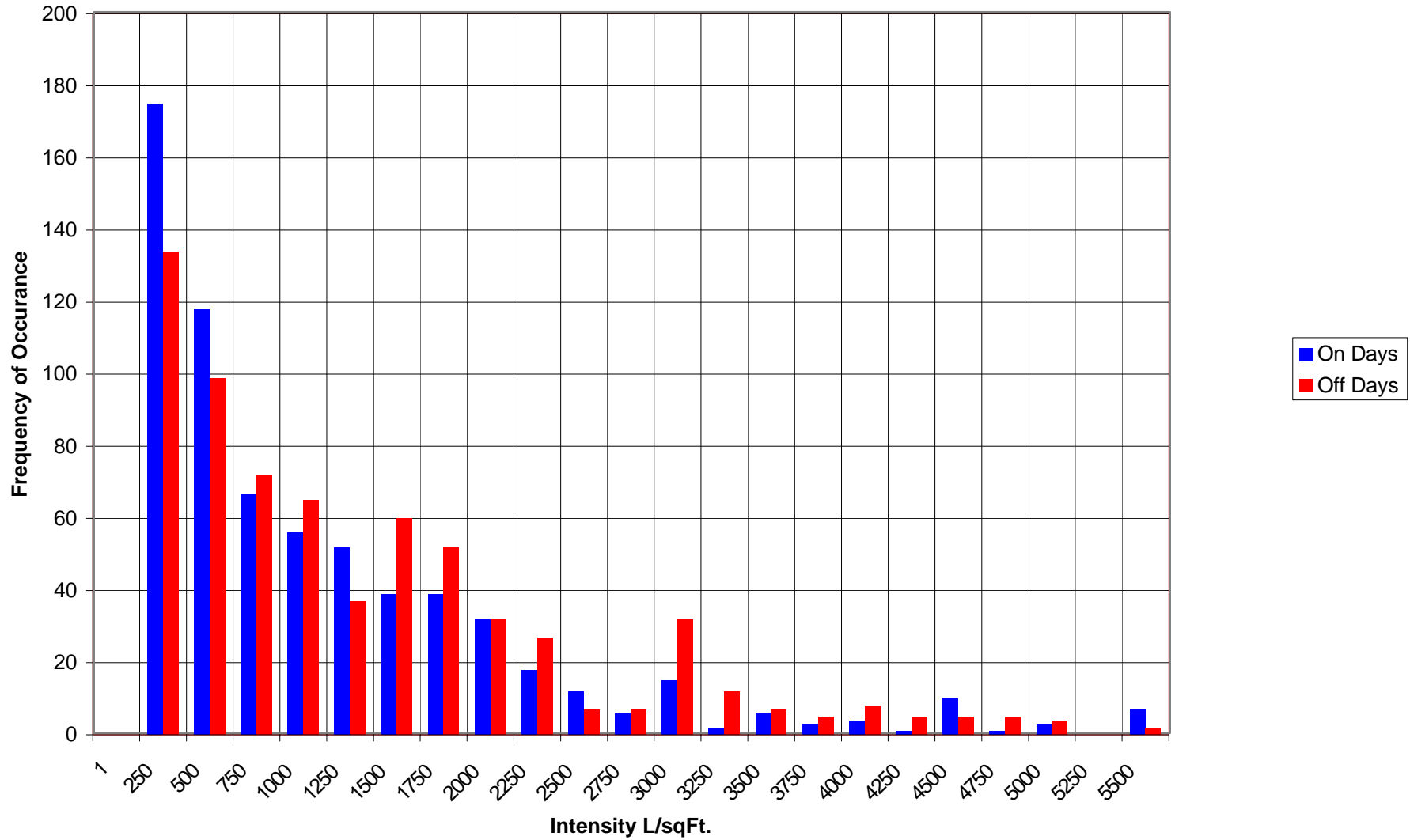
Outside Air Temp Histogram (11/10/05 --12/13/05)



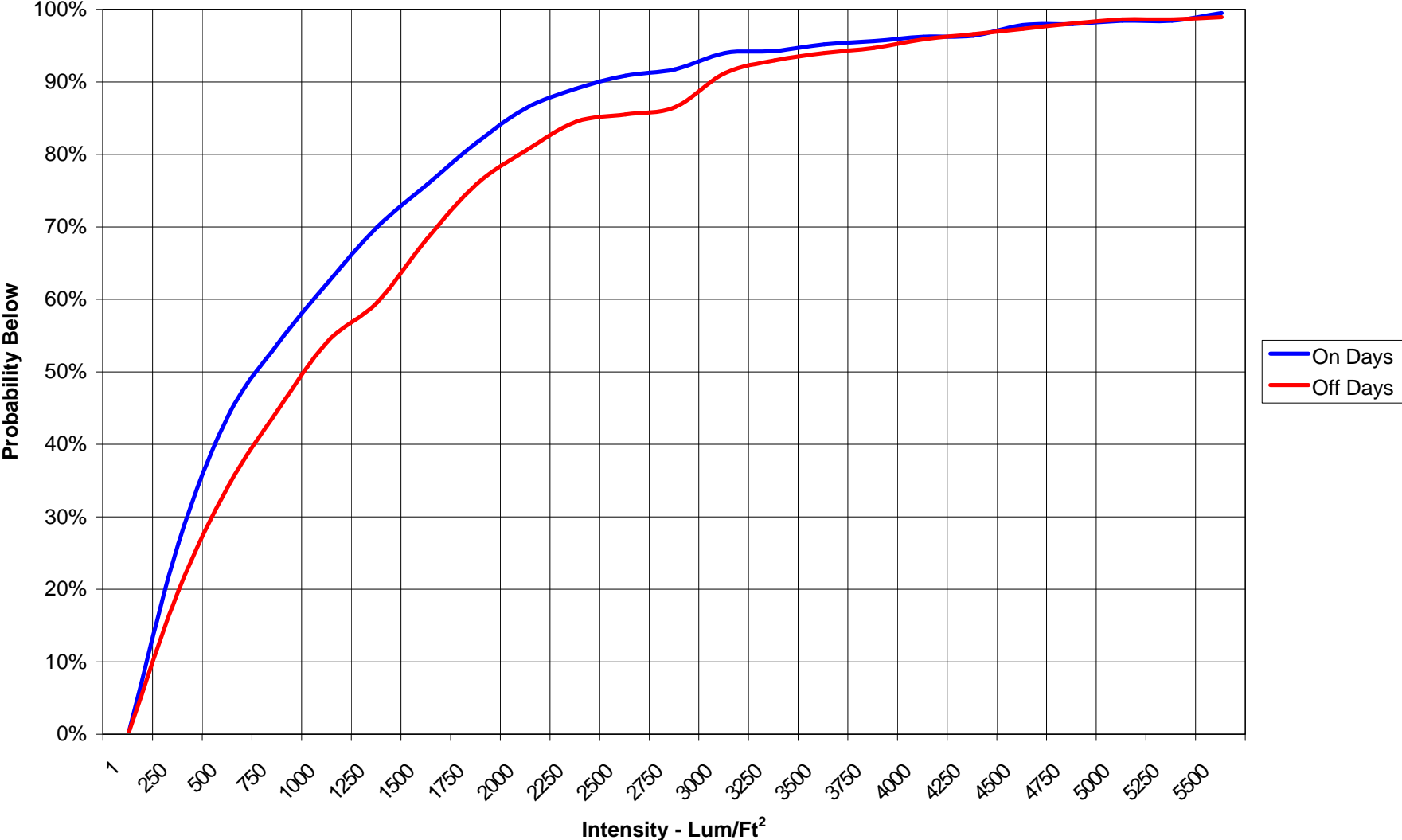
OAT Temperature Probabilities (11/10/05 --12/13/05)



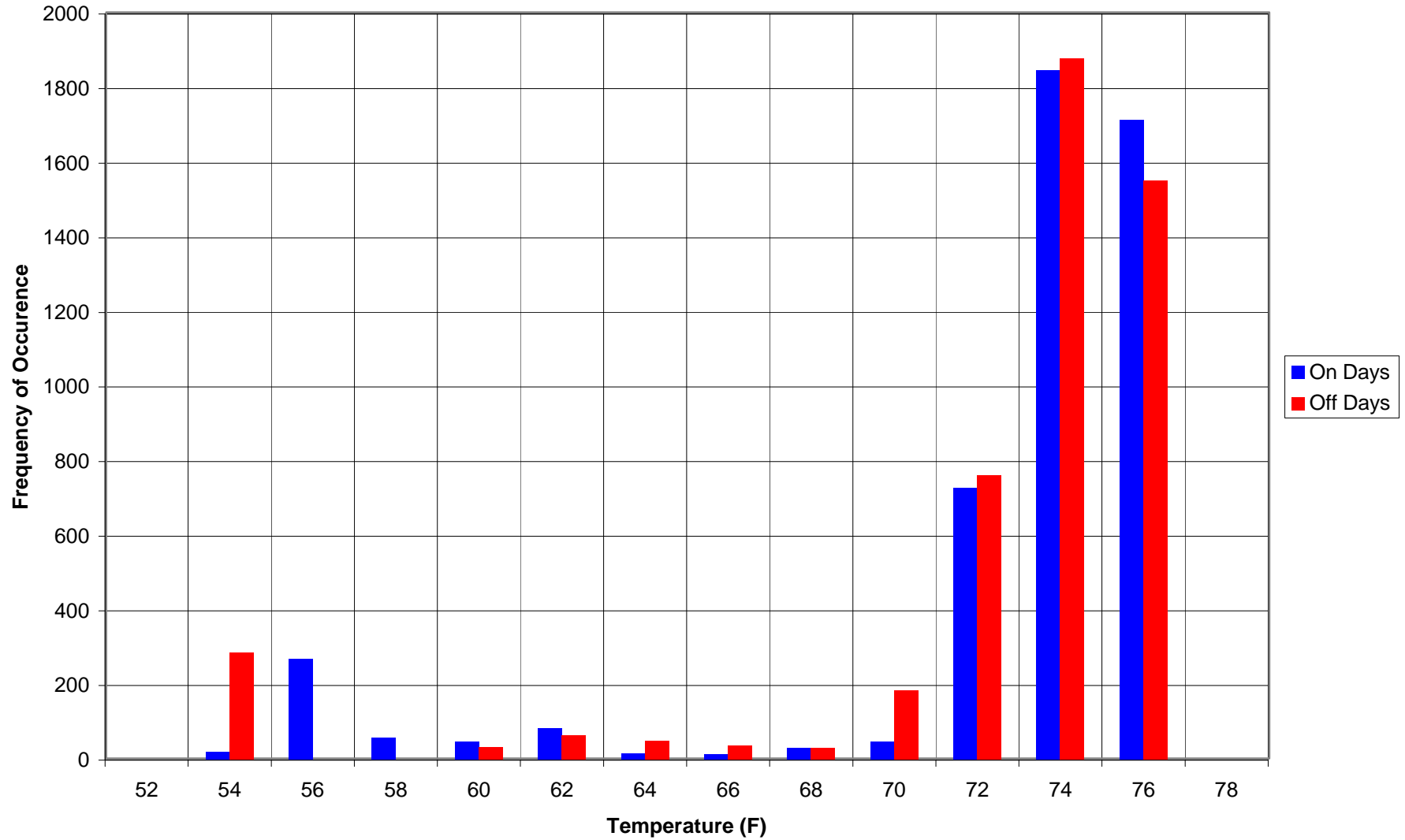
Solar Influence Histogram (11/10/05 - 12/13/05)



Solar Influence Probabilities (11/10/05 - 12/13/05)



Space Temperature Histogram (11/10/05 -- 12/13/05)



### Space Temperature Probabilities (11/10/05 -- 12/13/05)

