

Report No. <u>12151</u>

Date: 4/19/06

### www.intellidyne.green

# Electricity Reduction Pilot Program

**CONDUCTED AT** 

HOUSTON ISD MAINTENANCE FACILITY

For

Alltex Energy Management, Inc.

TEST RESULTS
FOR
ROOF-TOP AIR CONDITIONER

A Confidential Report

Prepared by





5507 Nesconset HWY STE 10 PMB 148 11766

## Test Repo

Report No.

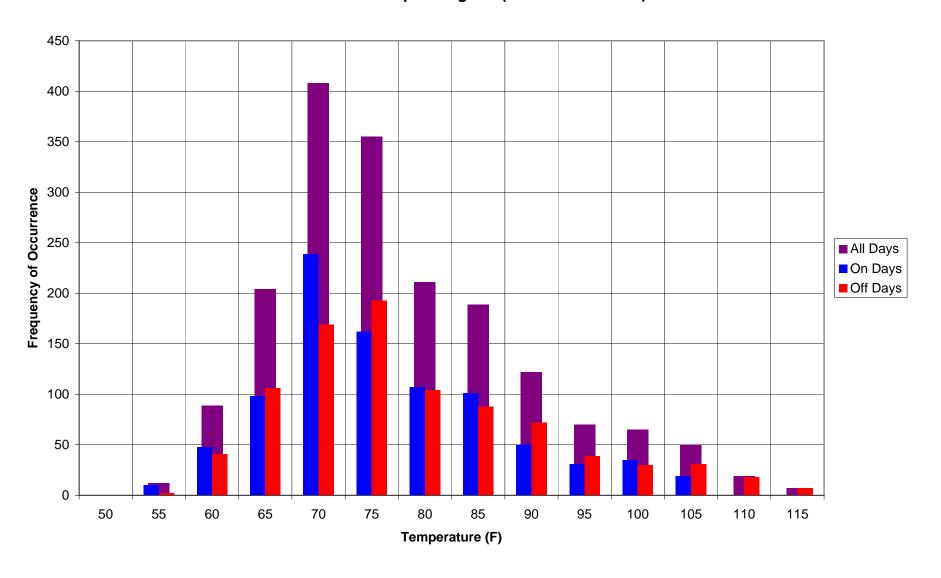
	Date: 04/19/0
Customer:	Test Site Location:
Alltex Energy Management, Inc	Houston ISD Maintenance Facility
15955 WestHardy Road, Suite224	Transportation Warehouse Operations Building
Houston, Texas, 77060	
Contact: Will Armstrong	
Test Type: ☐ HEATING ☑ AIR CONDITIONING	REFRIGERATION OTHER:
Product Tested: ☐ HW ☐ LCH ☐ LCS ☐ CHW ☐ CHS	□ AC □ CAC □ RU □ OTHER:
Type of Equipments	
Type of Equipment:  Manufacturer: Rheem	
Model: RAWD-100 DAZ 949	Test Start Date: 04/06/06
Capacity / SetPt: 10 Ton / 68 deg F	rest start bate.
Fuel Type:	Test End Date: 04/15/06
Application: Space Cooling	======
Area Served: Lounge Area, hallway and 5-6 offices	No. of Days in Test: 10
Misc. 365/24/7 operation	
COMPRESSOR RUN-TIME:	COMPRESSOR USAGE FACTOR
IntelliCon ON-DAYS: 71:17:18	IntelliCon On-Days: 59%
Intelligen OFF DAVE: 00:50:44 BLIN TIME was	reduced by 44 000/
IntelliCon OFF-DAYS: 82:58:41 RUN-TIME was	reduced by: 14.09% IntelliCon Off-Days: 69%
COOLING DEGREE-DAYS (FOR TEST PERIOD) at 45 degree Ba	lance-Point (See Comments). USAGE PER DEGREE-DAY
,	
IntelliCon ON-DAYS: 145	ON-DAYS: 0:29:35
IntelliCon OFF-DAYS: 156	<b>OFF-DAYS:</b> 0:31:54
<u>======</u>	
Total Degree-Days: 301	
SOLAR LOAD COMPENSATION: (Lumens/Sq. Ft.)	
SOLAR LOAD COMPENSATION: (Lumens/Sq. Ft.)	
IntelliCon ON-DAYS: 725	
III. SIII OII OII DATO.	
IntelliCon OFF-DAYS: 790	

#### **Savings = 14.09%**

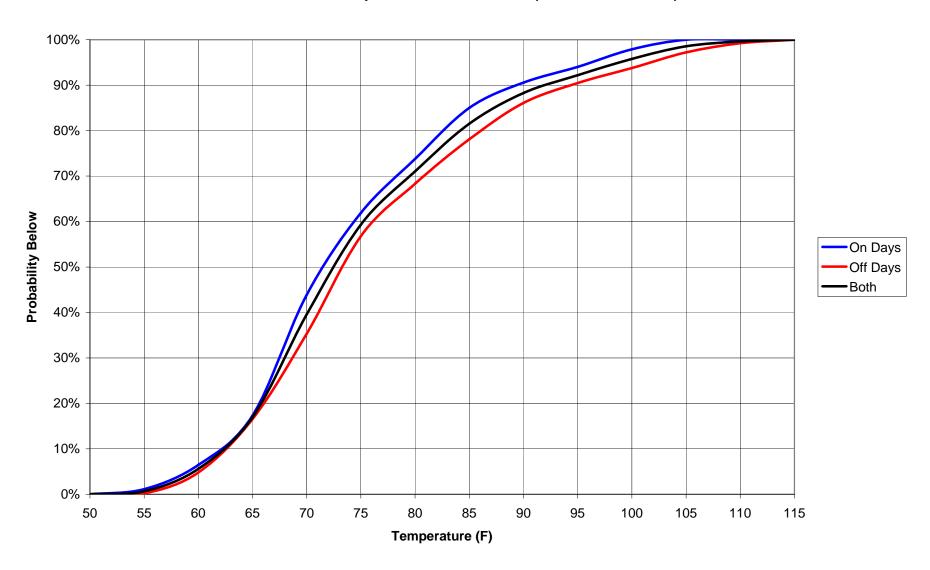
COMMENTS:

Data analysis revealed that, for the duration of the Test period, cooling was provided regardless of the Outside Air Temperature . Because of this it was impossible to determine the balance-point for calculating Cooling Degree-Days. As such, 45 degrees was selected since it was below the lowest temperature recorded during the testing. This was done so that there could be an evaluation of the affect outside air temperature had on compressor run-time. This analysis is normally performed on the OFF-Days to determine a baseline for normalizing the ON-day data. The data did reveal an affect on run-time, however it was impossible to calculate due to the short duration of the test. A chart is provided depicting these fluctuations.

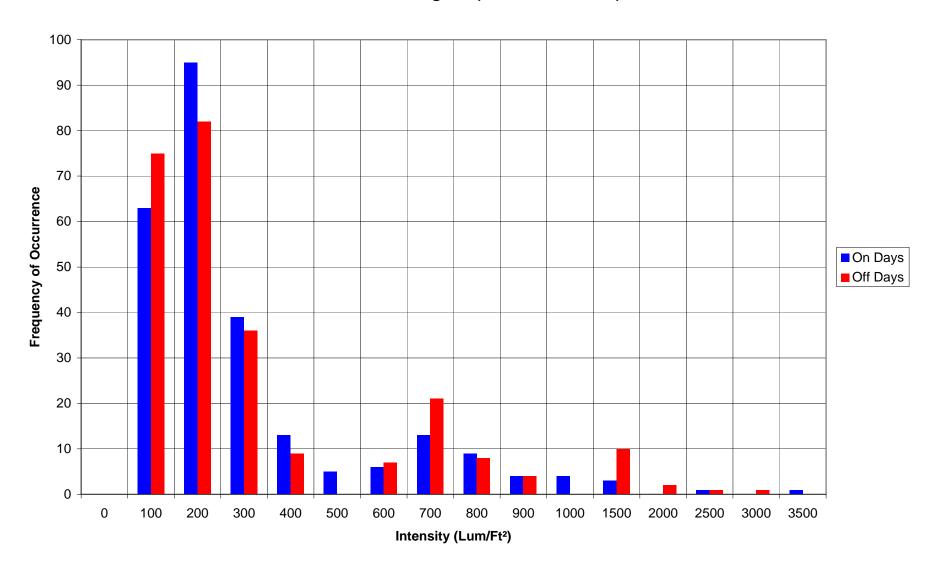
## Houston ISD Maintenance Facility Outside Air Temp Histogram (04/06/06--04/15/06)



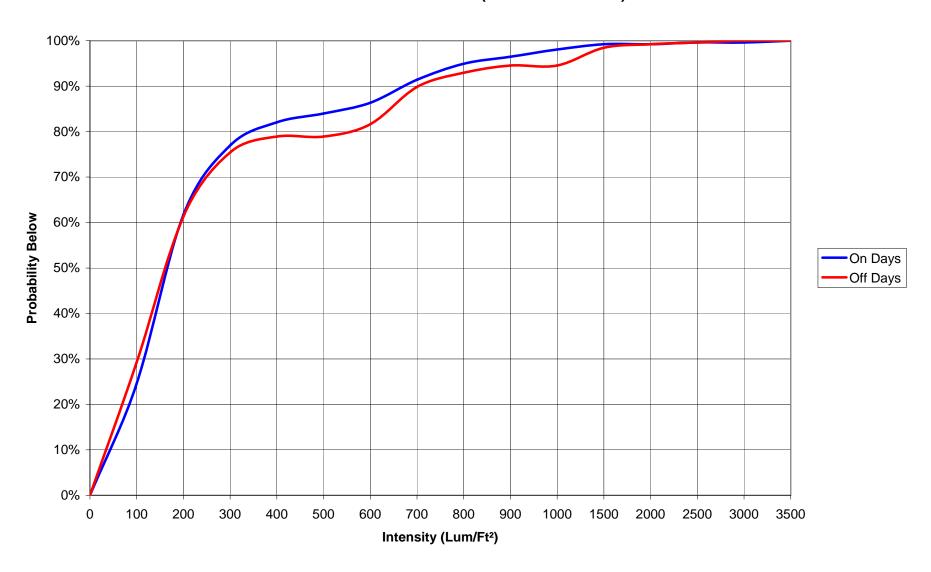
## Houston ISD Maintenance Facility Outside Air Temperature Probabilities (04/06/06--04/14/06)



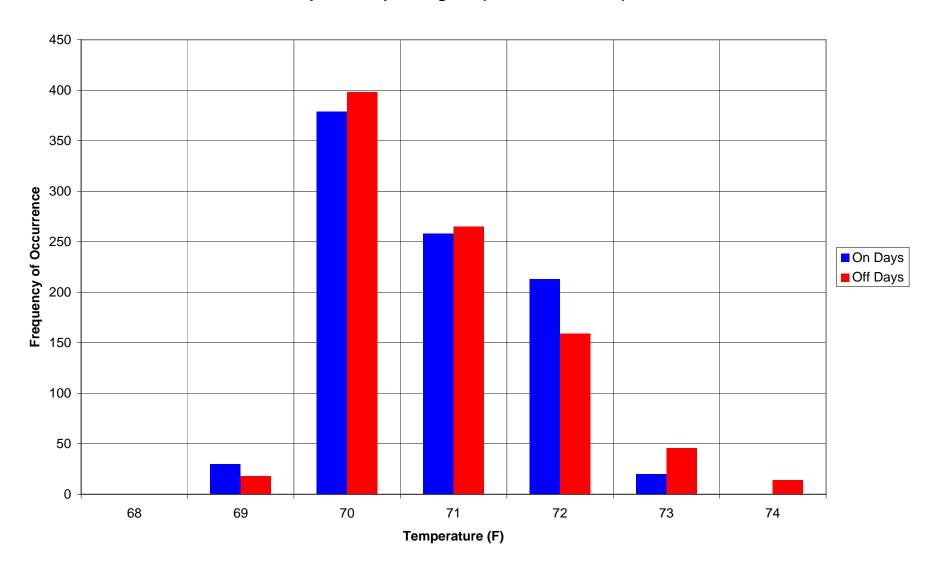
#### Houston ISD Maintenance Facility Solar Load Histogram (04/06/06--04/14/06)



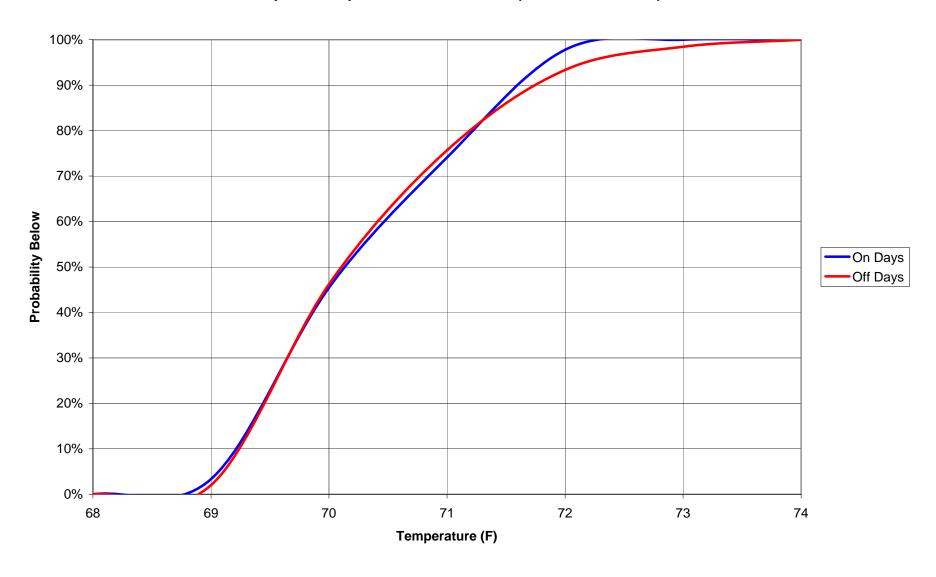
#### Houston ISD Maintenance Facility Solar Load Probabilities (04/06/06--04/14/06)



#### Houston ISD Maintenance Facility Space Temp Histogram (04/06/06--04/14/06)



## Houston ISD Maintenance Facility Space Temperature Probabilities (04/06/06--04/14/06)



## **Houston ISD Maintenance Facility Runtime per Cooling Degree-Day**

