

306

Dr. 6110

SOLAR/0010-80/04  
Distribution Category UC-59  
(Modified)

# Environmental Data for Sites in the National Solar Data Network

April 1980

**MASTER**



---

**U.S. DEPARTMENT OF ENERGY**

**NATIONAL SOLAR DATA PROGRAM**

## **DISCLAIMER**

**This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.**

---

## **DISCLAIMER**

**Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.**

APRIL 1980 ENVIRONMENTAL DATA  
FOR SITES IN THE  
NATIONAL SOLAR DATA NETWORK

PREPARED FOR

U. S. DEPARTMENT OF ENERGY  
DE-AC01-79CS30027  
H. JACKSON HALE, DOE PROGRAM MANAGER

AND

ARGONNE NATIONAL LABORATORY, A. A. LONGNECKER, ANL PROGRAM MANAGER

BY

AUTOMATION INDUSTRIES  
VITRO LABORATORIES DIVISION  
DONALD M. ROHA, VITRO PROGRAM MANAGER

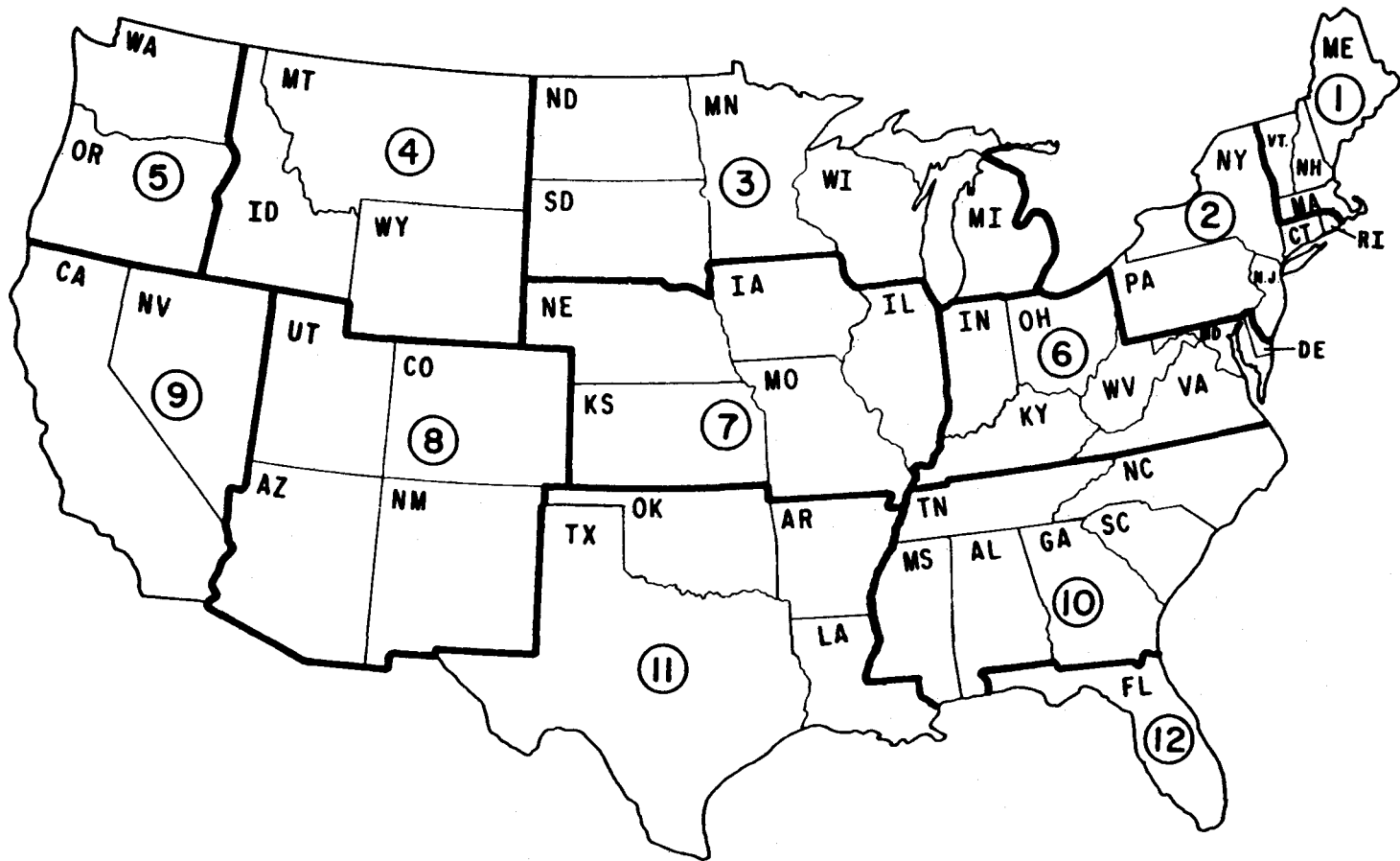
## TABLE OF CONTENTS

	Page
<b>INTRODUCTION</b>	
Organization of the Data . . . . .	3
 <b>SENSOR TECHNOLOGY</b>	
Insolation . . . . .	4
Temperature . . . . .	5
Wind . . . . .	5
Humidity . . . . .	6
 <b>MEASUREMENT OF THE DATA</b>	
Insolation . . . . .	6
Temperature . . . . .	8
Wind . . . . .	8
Relative Humidity . . . . .	9
OTHER PUBLICATIONS . . . . .	9
ENVIRONMENTAL DATA TABLES . . . . .	10
 <u>ZONE 1 (Maine, Massachusetts, New Hampshire, Vermont)</u>	
Concord Municipal Light . . . . .	1-1
Greenmoss Builders, Inc . . . . .	1-3
Kalwall Corporation . . . . .	1-4
Saddle Hill Trust, Lot 36 . . . . .	1-8
Saddle Hill Trust, Lot 73 . . . . .	1-10
Saddle Hill Trust, Lot 77 . . . . .	1-12
 <u>ZONE 2 (Connecticut, New Jersey, New York, Pennsylvania, Rhode Island)</u>	
Bell of Pennsylvania . . . . .	2-1
Hamden Apartments . . . . .	2-3
Lutz-Sotire . . . . .	2-5
M. F. Smith Associates . . . . .	2-7

	Page
<u>ZONE 2 (Continued)</u>	
Stewart-Teele-Mitchell. . . . .	2-9
Summerwood. . . . .	2-11
Sun Tech Homes. . . . .	2-13
<u>ZONE 3 (Michigan, Minnesota, North Dakota, South Dakota, Wisconsin)</u>	
Basin Electric. . . . .	3-1
First Baptist Church. . . . .	3-3
Houston Construction Co.. . . . .	3-5
Howards Grove School. . . . .	3-7
South Dakota School of Mines. . . . .	3-11
Telex Communications. . . . .	3-13
Zien Mechanical . . . . .	3-17
<u>ZONE 4 (Idaho, Montana, Wyoming)</u>	
Billings Shipping . . . . .	4-1
Design Construction . . . . .	4-3
<u>ZONE 5 (Oregon, Washington)</u>	
Landura Corporation . . . . .	5-1
Olympic Engineering . . . . .	5-3
Washington Natural Gas. . . . .	5-5
<u>ZONE 6 (Delaware, Indiana, Kentucky, Maryland, Ohio, Virginia, Washington, D.C., West Virginia)</u>	
Alpha Construction. . . . .	6-1
Columbia Gas. . . . .	6-3
Damascus Land Corporation . . . . .	6-5
Davidson-Phillips . . . . .	6-7
Forest City Dillon. . . . .	6-9
Hogate's Restaurant . . . . .	6-11
Loudoun County School . . . . .	6-13
Moulder Corporation . . . . .	6-17
Padonia Elementary School . . . . .	6-19
Page Jackson School . . . . .	6-23
Rademaker Corporation . . . . .	6-25

	Page
<u>ZONE 6 (Continued)</u>	
Sir Galahad . . . . .	6-27
Terrell E. Moseley. . . . .	6-29
Troy-Miami County Library . . . . .	6-31
Upton Center. . . . .	6-33
<u>ZONE 7 (Illinois, Iowa, Kansas, Missouri, Nebraska)</u>	
Argonne National Laboratory . . . . .	7-1
Du-Cat Investment . . . . .	7-3
John C. Byram . . . . .	7-4
Kaw Valley State Bank . . . . .	7-6
Lincoln Housing Authority . . . . .	7-8
Scattergood School. . . . .	7-10
<u>ZONE 8 (Arizona, Colorado, New Mexico, Utah)</u>	
Albuquerque Western . . . . .	8-1
Boulder Post Office . . . . .	8-3
Colorado Sunworks . . . . .	8-5
Homes by Marilynn . . . . .	8-10
Hullco Construction . . . . .	8-12
Kirtland Air Force Base . . . . .	8-17
Perl-Mack Enterprises . . . . .	8-21
Public Service. . . . .	8-23
Tempe Union High School . . . . .	8-25
<u>ZONE 9 (California, Nevada)</u>	
Aratex Services . . . . .	9-1
Facilities Development. . . . .	9-5
Irvine School . . . . .	9-7
Lake Valley Firehouse . . . . .	9-9
Living Systems. . . . .	9-13
Montecito Pines . . . . .	9-18
Ortiz & Reill . . . . .	9-20

	Page
<u>ZONE 10 (Alabama, Georgia, Mississippi, North Carolina,</u>	
<u>South Carolina, Tennessee)</u>	
Alabama Power . . . . .	10-1
Blakedale Professional Center . . . . .	10-3
Charlotte Medical Center. . . . .	10-5
Chester West. . . . .	10-9
Helio Thermics. . . . .	10-11
Phillips-Kauric . . . . .	10-13
RHRU Clemson. . . . .	10-15
Towns Elementary School . . . . .	10-18
<u>ZONE 11 (Arkansas, Louisiana, Oklahoma, Texas)</u>	
College Houses. . . . .	11-1
Dallas Recreation Center. . . . .	11-3
Radian Corporation. . . . .	11-5
Randolph Air Force Base . . . . .	11-10
Trinity University. . . . .	11-12
<u>ZONE 12 (Florida)</u>	
Florida Gas . . . . .	12-1
Florida I-95 Visitors Center. . . . .	12-4
Matt D. Cannon. . . . .	12-8
Reedy Creek Utilities . . . . .	12-10
<u>HAWAII</u>	
A-Frame Industries. . . . .	13-1
Hei Wai Wong. . . . .	13-3



1

Figure 1. National Solar Data Program Zones

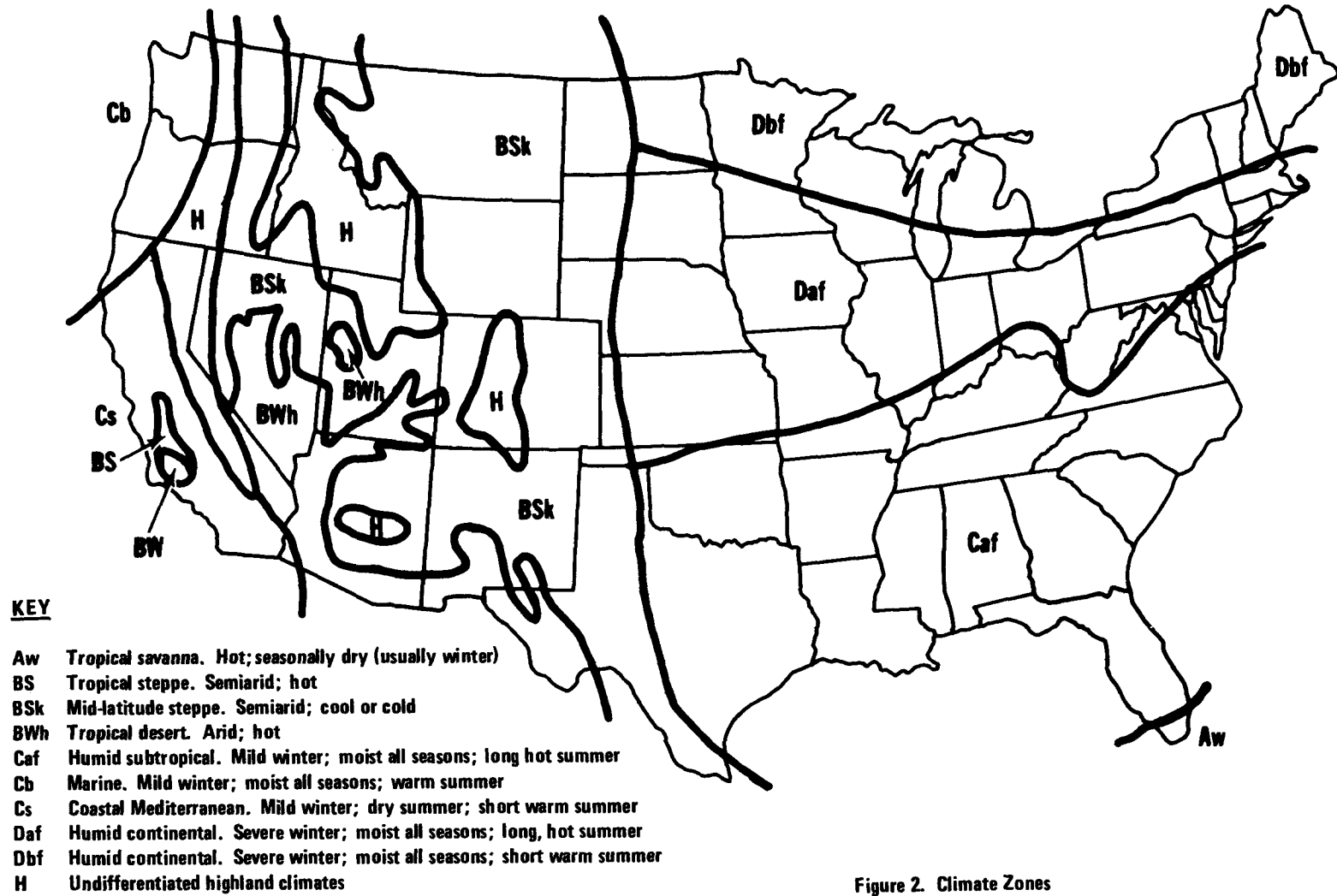


Figure 2. Climate Zones

## ENVIRONMENTAL DATA

FOR

### SITES IN THE NATIONAL SOLAR DATA NETWORK

#### INTRODUCTION

The Department of Energy's National Solar Data Program established solar energy systems in residential and commercial buildings across the United States. These solar sites are linked to Vitro Laboratories Division's computer in the National Solar Data Network (NSDN). Vitro collects and analyzes data from this network to determine the thermal performance of each of the solar systems.

The network consists of: (1) sensors which measure key performance parameters at a selected site; (2) a Site Data Acquisition Subsystem (SDAS); (3) telephone transmission circuits; and (4) a Central Data Processing System (CDPS). Sensor data are collected and stored on a cassette tape in the SDAS. The CDPS collects and processes the information at Vitro and performs the required computations.

For the majority of parameters, raw data is collected approximately every five minutes. Solar insolation and certain other parameters, which are subject to rapid variance, are sampled every 32 seconds. The CDPS interrogates each SDAS on a daily basis and retrieves all accumulated data. At the conclusion of data retrieval, the SDAS cassette is reset by command from the CDPS for continuing data collection.

This report presents environmental information collected at the sites for the reporting month. Only those sites for which the data are found to be valid are reported.

#### Organization of the Data

The environmental data for the NSDN are presented in the form of tables for each solar site. The solar sites are grouped into 12 zones, each of which consists of several adjacent states (as shown in Figure 1). The solar energy sites are in alphabetical sequence within each zone.

The tables provide available meteorological data for reporting sites in the NSDN as follows:

- o Insolation. The insolation table presents the total, diffuse, direct, maximum, and extra-terrestrial radiation for the solar site. It also shows the ratio of total extra-terrestrial radiation, as a percent.
- o Temperature. The temperature table gives the average, daytime, nighttime, maximum, minimum and inlet-water temperatures for the solar site.

Additional tables are presented for some of these NSDN sites, supplying either wind or relative humidity data, or both.

- o Wind. All of the passive and some of the active solar sites are equipped with wind sensors. These provide information for two wind tables. The first furnishes wind speed and direction. The second table correlates wind speed with time (hours for a range of speeds) for each day.
- o Humidity. The humidity table provides relative humidity values for day and night. It also gives values for the maximum and minimum humidity for each day.

A technical discussion of the instruments and measurements used to obtain these data tables follows.

A map illustrating the climate zones is provided in Figure 2.

## SENSOR TECHNOLOGY

### Insolation

Eppley pyranometers and shadow-band pyranometers are used to measure the amount of radiant energy incident on a surface. A standard pyranometer measures the total amount of solar energy available, including both the direct beam component and the diffuse component, while the shadow-band instrument is designed to measure the diffuse component only. The instruments are calibrated in the horizontal position, with an Eppley thermopile used as the signal generator of the sensor. The heating of the thermopile by the radiation of the sun generates the signal, with the response being linear over the operating range. Measurements are in  $\text{BTU}/\text{ft}^2\text{-hr}$ .

The addition of a shadow band to a pyranometer enables the instrument to record only the diffuse portion of the sunlight by shielding the sensor from the direct rays of the sun (the beam component). The amount of beam radiation available is readily calculated by subtracting the diffuse radiation measurement from the total radiation measured by the unshaded standard pyranometer. This beam radiation measurement is useful when working with focusing solar collectors. When using the shadow-band pyranometer, the accuracy of its measurement depends on the correct adjustment of the shadow band to be certain that the sensor is shielded from the direct rays of the sun.

The pyranometer includes a circular multi-junction thermopile of the wire-wound type. The thermopile has the advantage of withstanding some mechanical vibration and shock. The receiver is circular, and coated with Parsons black lacquer. The instrument has a pair of removable precision ground and polished hemispheres of Schott optical glass. It also has a spirit level and a desiccator that can be readily inspected. The clear glass is transparent from a wavelength of about 285 to 2,800 nanometers. The temperature dependence is  $\pm 1\%$  over the range of  $-4^\circ\text{F}$  to  $140^\circ\text{F}$ . It has a fairly fast response time of one second and a linearity of  $\pm 5\%$  over the range of the instrument.

## Temperature

Temperatures are measured by a Minco Products S53P platinum Resistance Temperature Detector (RTD). Because the resistance of platinum wire varies as a function of temperature, measurement of the resistance of a calibrated length of platinum wire can be used to accurately determine the temperature of the wire. This is the principle of the platinum RTD which utilizes a tiny coil of platinum wire encased in a copper-tipped probe to measure temperature. The probes are designed to have a normal resistance of 100 Ohms at 32°F.

Ambient temperature sensors are housed in a WeatherMeasure Radiation Shield in order to protect the probe from solar radiation. Care is taken to locate the sensor away from extraneous heat sources which could produce erroneous temperature readings. Temperature probes mounted in ducts or pipes are installed in stainless steel thermowells for physical protection of the sensor and to allow easy removal and replacement of the sensors. A thermally conductive grease is used between the probe and the thermowell to assure faster temperature response.

The RTDs are connected in a Wheatstone bridge arrangement to yield an output signal of 0-100 millivolts, which is measured by the SDAS. Different resistance values are used in the bridge, depending on the temperature range the sensor must measure. A third wire is brought out from the sensor and connected into the bridge to compensate for the resistance of the lead wires between the sensor and the SDAS.

The RTDs are individually calibrated to National Bureau of Standards traceable standards at the factory. In addition, a five-point check is done at the site in an attempt to take into account any deviation of the measurement system from nominal values.

The data-processing software takes these checks and calibrations into account, using a third-order polynomial curve fit to relate SDAS output to temperature.

## Wind

Wind speed and direction are measured by a Model W101-P-DC/540 (or W102-P-DC/540) sensor made by the WeatherMeasure Corporation. This sensor is rugged, reliable and accurate and will withstand severe environments such as icing and hurricane winds.

Wind speed is measured by a four-bladed propeller vehicle coupled to a DC generator. The balanced propeller is fabricated from a special low-density, fiberglass-reinforced plastic to yield maximum sensitivity and strength. The DC generator has excellent linearity but somewhat higher threshold due to brush friction.

Dual-wiper, precious-metal slip rings are used to bring the wind speed signals (15 Volts DC at 100 miles per hour) to the base of the sensor. These generally provide trouble-free use for several years.

Wind direction is measured by means of a dual-wiper 1000-Ohm long-life conductive plastic potentiometer housed in the base of the sensor (0-540°). It is attached to the stainless steel shaft which supports and rotates with the upper body assembly.

The potentiometer is of high commercial grade and has sealed bearings. The conductive plastic resistance element has infinite resolution and a lifetime about 10 times that of wire-wound potentiometers. The base is of aluminum, and corrosion-resistant materials are used in the construction.

### Humidity

Relative humidity is measured by a WeatherMeasure Corporation Model HM111-P/HM14-P sensor. This measurement is of particular importance in monitoring atmospheric corrosion at solar sites.

This solid-state sensor measures relative humidity over the full range of 0-100%. Response of the sensing element is linear within approximately 1%, from 0-80% relative humidity, with small hysteresis and negligible temperature dependence.

The sensor is based upon the capacitance change of a polymer thin-film capacitor. A one-micron thick dielectric polymer layer absorbs water molecules through a thin metal electrode and causes capacitance change proportional to relative humidity. The thin polymer layer reacts very quickly and, therefore, the response time is very short (one second to 90% humidity change at 68°F).

The polymer material is resistant to most chemicals. Because the sensor response is based on "bulk" effect, under normal conditions dust and dirt do not easily influence its operation. For use outdoors, a sintered filter is used because sulphur dioxide absorbed on small particles can corrode the thin film electrodes of the sensor. The smaller the pore size of the filter, the greater the protection. The response time, however, is increased.

The sensor is mounted in a small probe which contains all the electronics necessary to provide a millivolt output. The output of the probe electronics is linear from 0-100% relative humidity. Because the capacitance change of the sensor is sensitive only to ambient water vapor, temperature compensation is not required in most situations.

## MEASUREMENT OF THE DATA

### Insolation

Total insolation in the wavelength band of approximately 285 to 2,800 nanometers at the site-specific collector tilt angle is given. In some sites the pyranometer is shaded during certain times of the day, varying with the season, or there may be snow, dust or frost on some pyranometers. Figure 3 illustrates insolation and its measurement.

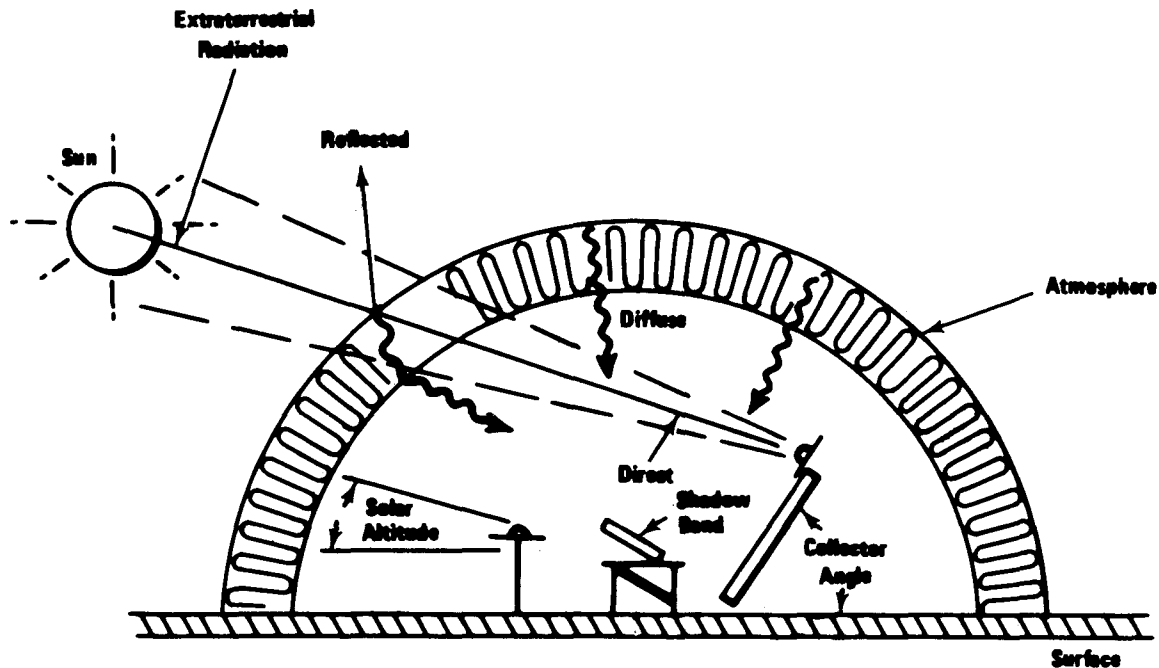


Figure 3. Incoming Solar Radiation

For sites with concentrating or evacuated tube collectors, diffuse insolation is also measured. Diffuse radiation is measured in the mean plane of tilt of the collectors with a shadow band pyranometer. The diffuse radiation readings have not been corrected for sky radiation blocked by the band. Maladjustment of the shadow band may, in some cases, cause erroneous readings.

Direct insolation is computed by subtracting the diffuse insolation from the total insolation value. The maximum value of total insolation and its time of occurrence in local standard time are also given for each day of the month.

Extraterrestrial radiation values are computed<sup>1</sup> for each site and given for each day of the month. The ratio of total insolation on a tilted surface to extraterrestrial radiation on a parallel surface is given in the last column of the data sheet. This parameter quantifies the effects of cloudiness and atmospheric transmission on the insolation received at the earth's surface for each site.

<sup>1</sup>See TRNSYS, A Transient Simulation Program, Engineering Experiment Station Report #38, Solar Energy Laboratory, University of Wisconsin, Madison, 1975.

## Temperature

The temperature sensors and supporting data acquisition systems in the NSDN have rapid time response and sufficient accuracy to resolve temperatures to  $\pm 1^{\circ}\text{F}$  over the monthly reporting period. This feature provides good accuracy of the monthly values to the user.

The on-site ambient temperature sensor is mounted near the collector array or solar structure and records temperatures in the SDAS that are considered representative of the microclimate temperature near the solar equipment, e.g., collector array, passive structure aperture or mounting location of concentrating collectors.

Average monthly temperature is computed on the basis of all data values for temperature.

Daytime temperature average is computed on the basis of temperatures monitored from 30 minutes prior to sunrise to 30 minutes after sunset.

Nighttime temperatures are computed on the basis of remaining data acquired outside the daytime time parameters.

Maximum and minimum temperatures are obtained at a sampling point, meaning that they reflect a temperature value (Max or Min) which could have occurred for as short a time as a five-minute interval during the month. These temperature data reflect microclimate thermal variance at the site.

System cold-water inlet temperatures are provided for sites with domestic hot water systems. These data are most representative under flow conditions. Some elevation of this temperature can be expected if the sensor is mounted near the hot water heating equipment or in the outdoor environment. These temperatures represent average daily values of DHW cold-water inlet temperature, not necessarily the ground-water temperature provided by municipalities or private wells to the system.

## Wind

The wind data are presented as averages of speed and direction for the 24-hour period, averages of speed and direction for the daytime, and maximum speed for the 24-hour period, with corresponding direction and time of occurrence.

The daytime wind data are tabulated over the period from 30 minutes prior to sunrise to 30 minutes after sunset. Wind speed is in miles per hour and wind direction is expressed in common convention used by the National Weather Service (NWS), where the angle or compass heading refers to the direction from which the wind is blowing. Thus, a tabular entry of  $315^{\circ}$  indicates that the wind is blowing from the northwest.

The second page of wind data presents a frequency distribution of wind speeds, giving the number of hours in each velocity interval. Wind speed and direction data are collected once every 5 minutes and 20 seconds.

The anemometers in the NSDN are placed to measure the wind at the collector array and thus may not be representative of regional wind because some sensors may be in the turbulent wake of an object or otherwise shielded from the wind.

#### Relative Humidity

Relative humidity is measured at some of the solar sites because this is one of the parameters used in studies of atmospheric corrosion. Site selection was based on the availability of SDAS channels, rather than on environmental factors.

These relative humidity data are presented for those sites for which data is available.

#### OTHER PUBLICATIONS

These environmental data reports will be issued monthly and will include all sites which are transmitting valid data at the time of publication.

The data are also available on tape in the SOLMET System from the National Oceanographic and Atmospheric Administration Environmental Data and Information Service, National Climatic Center, Federal Building, Asheville, N. C., 28801.

Previous reports are:

SOLAR/0010-78/09, September 1978  
SOLAR/0010-78/10, October 1978  
SOLAR/0010-78/11, November 1978  
SOLAR/0010-78/12, December 1978  
SOLAR/0010-79/01, January 1979  
SOLAR/0010-79/02, February 1979  
SOLAR/0010-79/03, March 1979  
SOLAR/0010-79/04, April 1979  
SOLAR/0010-79/05, May 1979  
SOLAR/0010-79/06, June 1979  
SOLAR/0010-79/07, July 1979  
SOLAR/0010-79/08, August 1979  
SOLAR/0010-79/09, September 1979  
SOLAR/0010-79/10, October 1979  
SOLAR/0010-79/11, November 1979  
SOLAR/0010-80/01, December 1979  
SOLAR/0010-80/01, January 1980  
SOLAR/0010/80/02, February 1980  
SOLAR/0010/80/03, March 1980

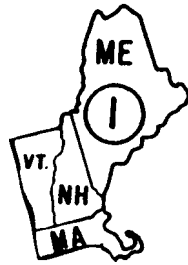
## NATIONAL SOLAR DATA NETWORK

## ENVIRONMENTAL DATA TABLES

---

\* denotes data missing due to sensor failure or transmission problems.  
N.A. denotes data for this parameter not measured at this site.

ZONE 1



ENVIRONMENTAL SUMMARY REPORT

SITE: CONCORD MUNICIPAL LIGHT  
CONCORD, MASSACHUSETTS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 189

LATITUDE: 42.47 DEG NORTH  
LONGITUDE: 71.35 DEG WEST

AZIMUTH: -14 DEG  
PYRANOMETER TILT: 57 DEG

TIME ZONE: EASTERN  
ALTITUDE: 125 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2281.	N.A.	N.A.	330.	11: 3	3105.	73.
2	352.	N.A.	N.A.	87.	10:23	3101.	11.
3	2295.	N.A.	N.A.	333.	10:55	3089.	74.
4	106.	N.A.	N.A.	34.	14:47	3079.	3.
5	975.	N.A.	N.A.	287.	10:40	3075.	32.
6	2075.	N.A.	N.A.	346.	11: 6	3061.	68.
7	2058.	N.A.	N.A.	321.	11:17	3052.	67.
8	395.	N.A.	N.A.	84.	9:31	3046.	13.
9	365.	N.A.	N.A.	100.	10:57	3033.	12.
10	145.	N.A.	N.A.	44.	7:15	3023.	5.
11	1740.	N.A.	N.A.	355.	11:48	3013.	58.
12	1075.	N.A.	N.A.	287.	12:53	3003.	36.
13	1931.	N.A.	N.A.	324.	11:12	2992.	65.
14	360.	N.A.	N.A.	153.	9:35	2982.	12.
15	1255.	N.A.	N.A.	315.	12: 4	2972.	42.
16	842.	N.A.	N.A.	327.	11:41	2961.	28.
17	2274.	N.A.	N.A.	330.	10:45	2950.	77.
18	1512.	N.A.	N.A.	355.	11: 6	2939.	51.
19	2188.	N.A.	N.A.	318.	11: 9	2926.	75.
20	1608.	N.A.	N.A.	299.	10:27	2912.	55.
21	2211.	N.A.	N.A.	324.	11: 3	2899.	76.
22	1077.	N.A.	N.A.	302.	9: 6	2888.	37.
23	642.	N.A.	N.A.	168.	10:10	2877.	22.
24	1032.	N.A.	N.A.	321.	13: 4	2861.	36.
25	1153.	N.A.	N.A.	280.	11:35	2850.	40.
26	489.	N.A.	N.A.	125.	10:50	2837.	17.
27	757.	N.A.	N.A.	246.	9:14	2826.	27.
28	104.	N.A.	N.A.	19.	9:57	2813.	4.
29	272.	N.A.	N.A.	56.	13:36	2800.	10.
30	593.	N.A.	N.A.	156.	11:24	2790.	21.
MEAN	1139.	N.A.	N.A.			2959.	
STANDARD DEVIATION	760.	N.A.	N.A.			98.	

ENVIRONMENTAL SUMMARY REPORT

SITE: CONCORD MUNICIPAL LIGHT  
CONCORD, MASSACHUSETTS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 189

LATITUDE: 42.47 DEG NORTH      AZIMUTH: -14 DEG      TIME ZONE: EASTERN  
LONGITUDE: 71.35 DEG WEST      PYRANOMETER TILT: 57 DEG      ALTITUDE: 125 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	42.	50.	35.	61.	14:26	28.	6: 5	N.A.
2	40.	45.	35.	50.	11: 6	32.	2:45	N.A.
3	45.	53.	37.	68.	15: 6	30.	2:23	N.A.
4	41.	43.	40.	44.	15:30	37.	21:52	N.A.
5	41.	46.	36.	51.	16: 0	30.	23:38	N.A.
6	45.	57.	34.	67.	15:17	28.	4:42	N.A.
7	41.	50.	34.	56.	13:52	27.	3:27	N.A.
8	46.	50.	42.	54.	15:28	37.	1: 4	N.A.
9	48.	52.	45.	59.	11:45	38.	4:27	N.A.
10	53.	55.	51.	56.	13:12	48.	23:47	N.A.
11	52.	59.	46.	66.	15: 5	39.	23:49	N.A.
12	53.	61.	46.	73.	14:29	34.	4:37	N.A.
13	55.	59.	51.	66.	15: 1	46.	23:54	N.A.
14	46.	48.	43.	53.	10: 7	41.	21:13	N.A.
15	59.	66.	52.	75.	14:56	42.	0: 4	N.A.
16	44.	48.	40.	56.	13:24	32.	23:44	N.A.
17	41.	48.	34.	60.	17: 9	29.	4:58	N.A.
18	45.	54.	36.	61.	15:11	28.	2:34	N.A.
19	50.	61.	39.	73.	16:45	31.	4:56	N.A.
20	57.	70.	46.	81.	15:19	35.	4:24	N.A.
21	57.	66.	49.	74.	15:45	40.	23:57	N.A.
22	41.	46.	36.	50.	14:58	29.	5: 6	N.A.
23	47.	50.	44.	58.	16:56	37.	0:28	N.A.
24	51.	56.	45.	69.	14:40	40.	22:10	N.A.
25	50.	57.	44.	64.	12:29	38.	2:26	N.A.
26	51.	55.	46.	64.	15:22	41.	23:43	N.A.
27	50.	57.	43.	64.	11:22	38.	2:18	N.A.
28	42.	42.	41.	43.	0: 3	40.	19:18	N.A.
29	42.	43.	42.	45.	14:30	40.	0: 6	N.A.
30	51.	55.	47.	60.	13: 5	44.	0: 1	N.A.
MEAN	47.	53.	42.					N.A.
STANDARD DEVIATION	5.5	7.1	5.5					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: GREENMOSS BUILDERS, INC.  
 WAITSFIELD, VERMONT

REPORT PERIOD: 80/ 4  
 SITE NUMBER: 53

LATITUDE: 44.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
 LONGITUDE: 73.00 DEG WEST PYRANOMETER TILT: 89 DEG ALTITUDE: 330 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1263.	N.A.	N.A.	198.	11:57	2095.	60.
2	218.	N.A.	N.A.	114.	14:16	2069.	11.
3	1308.	N.A.	N.A.	201.	11:26	2042.	64.
4	13.	N.A.	N.A.	6.	9:53	2015.	1.
5	76.	N.A.	N.A.	66.	15:18	1989.	4.
6	1136.	N.A.	N.A.	201.	11:13	1961.	58.
7	1059.	N.A.	N.A.	192.	11: 7	1936.	55.
8	30.	N.A.	N.A.	12.	10: 8	1909.	2.
9	114.	N.A.	N.A.	36.	10: 9	1883.	6.
10	185.	N.A.	N.A.	141.	14: 8	1857.	10.
11	472.	N.A.	N.A.	213.	10:53	1832.	26.
12	122.	N.A.	N.A.	69.	8:52	1806.	7.
13	900.	N.A.	N.A.	198.	12:30	1781.	51.
14	169.	N.A.	N.A.	84.	10:12	1757.	10.
15	427.	N.A.	N.A.	177.	12:44	1732.	25.
16	92.	N.A.	N.A.	84.	11:23	1708.	5.
17	1144.	N.A.	N.A.	180.	11:34	1683.	68.
18	215.	N.A.	N.A.	159.	13:23	1660.	13.
19	1054.	N.A.	N.A.	171.	11:30	1636.	64.
20	*	N.A.	N.A.	*	*:*	1613.	*
21	1066.	N.A.	N.A.	168.	11:15	1589.	67.
22	467.	N.A.	N.A.	174.	10: 5	1568.	30.
23	338.	N.A.	N.A.	117.	12:50	1544.	22.
24	472.	N.A.	N.A.	171.	12:48	1523.	31.
25	77.	N.A.	N.A.	36.	14:10	1500.	5.
26	388.	N.A.	N.A.	183.	11:43	1480.	26.
27	560.	N.A.	N.A.	129.	13: 2	1458.	38.
28	118.	N.A.	N.A.	45.	13:39	1436.	8.
29	68.	N.A.	N.A.	45.	10:33	1416.	5.
30	*	N.A.	N.A.	*	*:*	1395.	*
MEAN	484.	N.A.	N.A.			1729.	
STANDARD DEVIATION	438.	N.A.	N.A.			213.	

ENVIRONMENTAL SUMMARY REPORT

SITE: KALWALL CORPORATION  
MANCHESTER, NEW HAMPSHIRE

REPORT PERIOD: 80/ 4  
SITE NUMBER: 5

LATITUDE: 43.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 71.40 DEG WEST PYRANOMETER TILT: 89 DEG ALTITUDE: 500 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1476.	N.A.	N.A.	216.	11:35	2050.	72.
2	126.	N.A.	N.A.	32.	10:14	2021.	6.
3	1424.	N.A.	N.A.	206.	11:50	1995.	71.
4	33.	N.A.	N.A.	13.	12:43	1968.	2.
5	298.	N.A.	N.A.	119.	13: 0	1940.	15.
6	1197.	N.A.	N.A.	222.	11:56	1914.	63.
7	1301.	N.A.	N.A.	200.	12: 1	1888.	69.
8	112.	N.A.	N.A.	42.	9:32	1863.	6.
9	110.	N.A.	N.A.	35.	12: 1	1835.	6.
10	56.	N.A.	N.A.	23.	14: 7	1810.	3.
11	955.	N.A.	N.A.	200.	12:26	1783.	54.
12	386.	N.A.	N.A.	119.	11: 2	1759.	22.
13	1271.	N.A.	N.A.	197.	12: 6	1732.	73.
14	207.	N.A.	N.A.	93.	8:54	1708.	12.
15	703.	N.A.	N.A.	197.	11:34	1682.	42.
16	367.	N.A.	N.A.	129.	10:30	1658.	22.
17	1258.	N.A.	N.A.	193.	11:52	1634.	77.
18	608.	N.A.	N.A.	164.	10:12	1609.	38.
19	1195.	N.A.	N.A.	187.	11:52	1586.	75.
20	695.	N.A.	N.A.	145.	10:27	1564.	44.
21	1174.	N.A.	N.A.	180.	11:31	1540.	76.
22	584.	N.A.	N.A.	164.	9:40	1517.	38.
23	370.	N.A.	N.A.	81.	11:33	1494.	25.
24	697.	N.A.	N.A.	190.	12:41	1472.	47.
25	602.	N.A.	N.A.	184.	11:51	1450.	41.
26	169.	N.A.	N.A.	71.	14:58	1429.	12.
27	425.	N.A.	N.A.	126.	9:43	1407.	30.
28	41.	N.A.	N.A.	10.	9: 1	1386.	3.
29	72.	N.A.	N.A.	23.	12:19	1365.	5.
30	225.	N.A.	N.A.	64.	12:26	1345.	17.
MEAN	605.	N.A.	N.A.			1680.	
STANDARD DEVIATION	480.	N.A.	N.A.			215.	

ENVIRONMENTAL SUMMARY REPORT

SITE: KALWALL CORPORATION  
MANCHESTER, NEW HAMPSHIRE

REPORT PERIOD: 80/ 4  
SITE NUMBER: 5

LATITUDE: 43.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 71.40 DEG WEST PYRANOMETER TILT: 89 DEG ALTITUDE: 500 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	44.	56.	34.	67.	15:19	25.	2:30	N.A.
2	39.	43.	35.	48.	11:55	30.	3:2	N.A.
3	48.	57.	39.	69.	15:29	30.	1:58	N.A.
4	40.	41.	39.	44.	12:27	35.	23:35	N.A.
5	40.	45.	36.	49.	13:0	29.	23:40	N.A.
6	46.	59.	35.	69.	14:46	25.	3:19	N.A.
7	42.	53.	33.	60.	13:58	24.	5:5	N.A.
8	44.	47.	42.	51.	10:20	38.	0:1	N.A.
9	47.	51.	44.	56.	12:1	42.	1:42	N.A.
10	52.	53.	51.	55.	11:48	47.	0:4	N.A.
11	53.	60.	47.	69.	14:34	40.	23:24	N.A.
12	51.	56.	47.	66.	15:40	33.	5:0	N.A.
13	56.	62.	52.	67.	15:18	43.	23:18	N.A.
14	46.	49.	43.	56.	9:10	40.	21:48	N.A.
15	55.	63.	50.	74.	13:26	42.	0:1	N.A.
16	44.	51.	39.	60.	10:30	30.	23:26	N.A.
17	43.	52.	35.	61.	14:43	29.	5:18	N.A.
18	45.	55.	38.	67.	14:34	26.	2:12	N.A.
19	51.	64.	41.	74.	14:16	27.	5:6	N.A.
20	56.	67.	47.	76.	12:14	32.	4:56	N.A.
21	57.	69.	48.	76.	14:43	38.	23:26	N.A.
22	42.	49.	37.	57.	14:44	29.	3:58	N.A.
23	49.	54.	46.	68.	16:0	39.	0:27	N.A.
24	54.	59.	49.	70.	14:12	43.	23:56	N.A.
25	53.	60.	47.	66.	11:19	40.	1:59	N.A.
26	51.	54.	49.	63.	14:58	40.	23:46	N.A.
27	51.	62.	44.	68.	9:43	34.	4:45	N.A.
28	40.	40.	40.	44.	0:2	38.	5:59	N.A.
29	43.	44.	42.	47.	15:15	38.	4:3	N.A.
30	53.	56.	50.	62.	15:48	45.	0:26	N.A.
MEAN	48.	54.	43.					N.A.
STANDARD DEVIATION	5.5	7.5	5.7					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: KALWALL CORPORATION  
MANCHESTER, NEW HAMPSHIRE

REPORT PERIOD: 80/ 4  
SITE NUMBER: 5

LATITUDE: 43.00 DEG NORTH AZIMUTH: 0 DEG TIME\_ZONE: EASTERN  
LONGITUDE: 71.40 DEG WEST PYRANOMETER TILT: 89 DEG ALTITUDE: 500 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	*	1.	*	2.	8.	*	12:33
2	*	1.	*	1.	5.	*	14:56
3	128.	2.	127.	4.	9.	149.	9:26
4	*	1.	*	2.	9.	*	12:38
5	117.	5.	119.	9.	14.	116.	13:37
6	*	2.	*	4.	10.	*	8:39
7	281.	2.	284.	4.	10.	258.	16:27
8	*	1.	*	1.	3.	*	16:54
9	272.	2.	284.	3.	7.	245.	14:30
10	*	2.	*	1.	11.	*	5:46
11	116.	3.	115.	6.	12.	125.	15: 1
12	*	2.	*	2.	7.	*	23:34
13	113.	7.	112.	11.	17.	105.	12:49
14	274.	2.	290.	2.	6.	268.	15:50
15	76.	4.	49.	4.	13.	117.	20:22
16	139.	5.	128.	5.	13.	118.	17:55
17	144.	6.	142.	8.	15.	132.	11:58
18	116.	2.	113.	5.	11.	121.	13:14
19	*	2.	*	3.	8.	*	10:48
20	60.	3.	50.	4.	21.	119.	17: 7
21	136.	4.	125.	7.	15.	107.	12:25
22	161.	3.	164.	4.	9.	127.	9:45
23	176.	3.	181.	5.	9.	112.	8:48
24	*	1.	*	2.	7.	*	8:36
25	*	1.	*	2.	6.	*	11:24
26	*	0.	*	1.	4.	*	15:52
27	*	2.	*	1.	7.	*	21:22
28	219.	5.	221.	6.	11.	244.	13:27
29	205.	4.	210.	4.	8.	188.	13:45
30	*	0.	*	0.	5.	*	18:44
MEAN	161.	3.	160.	4.			
STANDARD DEVIATION	67.6	1.6	75.4	2.5			

ENVIRONMENTAL SUMMARY REPORT

SITE: KALWALL CORPORATION  
MANCHESTER, NEW HAMPSHIRE

REPORT PERIOD: 80/ 4  
SITE NUMBER: 5

LATITUDE: 43.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 71.40 DEG WEST PYRANOMETER TILT: 89 DEG ALTITUDE: 500 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	24	0	0	0	0	0	0	0	0
2	24	0	0	0	0	0	0	0	0
3	20	4	0	0	0	0	0	0	0
4	23	1	0	0	0	0	0	0	0
5	12	5	7	0	0	0	0	0	0
6	17	7	0	0	0	0	0	0	0
7	19	5	0	0	0	0	0	0	0
8	24	0	0	0	0	0	0	0	0
9	22	2	0	0	0	0	0	0	0
10	22	2	0	0	0	0	0	0	0
11	15	5	4	0	0	0	0	0	0
12	21	3	0	0	0	0	0	0	0
13	9	4	9	2	0	0	0	0	0
14	24	0	0	0	0	0	0	0	0
15	12	11	1	0	0	0	0	0	0
16	11	6	7	0	0	0	0	0	0
17	7	13	4	0	0	0	0	0	0
18	18	5	1	0	0	0	0	0	0
19	20	4	0	0	0	0	0	0	0
20	16	7	1	0	0	0	0	0	0
21	12	10	2	0	0	0	0	0	0
22	19	5	0	0	0	0	0	0	0
23	17	7	0	0	0	0	0	0	0
24	24	0	0	0	0	0	0	0	0
25	24	0	0	0	0	0	0	0	0
26	24	0	0	0	0	0	0	0	0
27	22	2	0	0	0	0	0	0	0
28	2	22	0	0	0	0	0	0	0
29	13	11	0	0	0	9	0	0	0
30	23	0	0	0	0	0	0	0	1
AVERAGE	18.0	4.7	1.2	0.1	0.0	0.0	0.0	0.0	0.0
TOTAL	540	141	36	2	0	0	0	0	1

ENVIRONMENTAL SUMMARY REPORT

SITE: SADDLE HILL TRUST, LOT 36  
 MEDWAY, MASSACHUSETTS

REPORT PERIOD: 80/ 4  
 SITE NUMBER: 83

LATITUDE: 42.00 DEG NORTH AZIMUTH: 0 DEG  
 LONGITUDE: 71.00 DEG WEST PYRANOMETER TILT: 58 DEG TIME ZONE: EASTERN  
 ALTITUDE: 200 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2259.	N.A.	N.A.	320.	11:28	3096.	73.
2	327.	N.A.	N.A.	66.	11:22	3081.	11.
3	2287.	N.A.	N.A.	323.	11:30	3069.	75.
4	97.	N.A.	N.A.	22.	14:12	3054.	3.
5	1180.	N.A.	N.A.	329.	11:34	3039.	39.
6	1866.	N.A.	N.A.	335.	11:45	3027.	62.
7	2199.	N.A.	N.A.	310.	11:12	3015.	73.
8	409.	N.A.	N.A.	103.	9:57	3000.	14.
9	405.	N.A.	N.A.	97.	10: 3	2985.	14.
10	162.	N.A.	N.A.	31.	12:58	2973.	5.
11	1904.	N.A.	N.A.	329.	11:30	2958.	64.
12	1186.	N.A.	N.A.	304.	12:50	2943.	40.
13	1696.	N.A.	N.A.	307.	11:19	2930.	58.
14	281.	N.A.	N.A.	75.	11:48	2918.	10.
15	1355.	N.A.	N.A.	317.	12:15	2903.	47.
16	754.	N.A.	N.A.	279.	13:12	2888.	26.
17	2238.	N.A.	N.A.	310.	11:12	2876.	78.
18	1628.	N.A.	N.A.	317.	11:25	2861.	57.
19	2126.	N.A.	N.A.	301.	11:34	2848.	75.
20	1687.	N.A.	N.A.	285.	11: 7	2833.	60.
21	2176.	N.A.	N.A.	301.	11: 3	2821.	77.
22	1089.	N.A.	N.A.	288.	9:44	2806.	39.
23	480.	N.A.	N.A.	138.	10:13	2792.	17.
24	1152.	N.A.	N.A.	320.	12:49	2780.	41.
25	1104.	N.A.	N.A.	245.	10:26	2765.	40.
26	418.	N.A.	N.A.	169.	10:35	2750.	15.
27	715.	N.A.	N.A.	201.	13: 5	2739.	26.
28	123.	N.A.	N.A.	22.	12: 1	2727.	4.
29	237.	N.A.	N.A.	44.	12:55	2713.	9.
30	560.	N.A.	N.A.	129.	11:48	2699.	21.
MEAN	1137.	N.A.	N.A.			2896.	
STANDARD DEVIATION	764.	N.A.	N.A.			121.	

ENVIRONMENTAL SUMMARY REPORT

SITE: SADDLE HILL TRUST, LOT 36  
 MEDWAY, MASSACHUSETTS

REPORT PERIOD: 80/ 4  
 SITE NUMBER: 83

LATITUDE: 42.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
 LONGITUDE: 71.00 DEG WEST PYRANOMETER TILT: 58 DEG ALTITUDE: 200 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	45.	54.	37.	75.	16: 6	29.	5:15	60.
2	39.	43.	36.	48.	13:14	33.	1:35	57.
3	48.	55.	41.	71.	15:19	36.	4: 7	62.
4	41.	43.	39.	49.	12:36	36.	1:51	62.
5	42.	46.	39.	53.	15:29	36.	20:54	62.
6	49.	57.	42.	76.	16: 0	36.	23:50	60.
7	47.	56.	37.	67.	15:28	32.	5:31	62.
8	47.	52.	43.	60.	16:26	36.	3: 6	62.
9	50.	54.	47.	59.	12:59	40.	4: 6	60.
10	51.	52.	50.	53.	12:58	49.	22:26	59.
11	54.	59.	49.	68.	16: 8	42.	23:24	62.
12	53.	60.	47.	74.	13:59	35.	4: 7	61.
13	54.	58.	51.	65.	14:22	47.	23:58	66.
14	45.	46.	44.	49.	11:53	42.	20: 5	59.
15	58.	63.	53.	71.	14:18	43.	0: 5	60.
16	43.	47.	40.	53.	14:10	30.	23:54	65.
17	41.	46.	36.	65.	15:54	28.	5: 4	62.
18	45.	52.	39.	61.	15:47	28.	4:19	63.
19	52.	60.	45.	73.	15:34	33.	5:15	63.
20	57.	66.	50.	76.	14:47	42.	4:22	65.
21	57.	64.	51.	74.	15:25	42.	23:41	66.
22	42.	46.	38.	52.	10:37	32.	4:24	65.
23	46.	49.	44.	60.	17: 9	36.	0:10	64.
24	53.	60.	47.	79.	14:51	41.	23:46	59.
25	53.	60.	46.	78.	14: 5	39.	3:57	64.
26	51.	56.	48.	63.	14:35	43.	23:18	65.
27	54.	61.	47.	73.	13: 5	43.	2:19	64.
28	42.	43.	42.	45.	0: 1	40.	17:48	61.
29	43.	44.	42.	47.	13:32	41.	4:50	65.
30	51.	56.	47.	65.	12: 9	42.	1: 8	63.
MEAN	49.	54.	44.					62.
STANDARD DEVIATION	5.4	6.9	4.9					2.2

ENVIRONMENTAL SUMMARY REPORT

SITE: SADDLE HILL TRUST, LOT 73  
 MEDWAY, MASSACHUSETTS

REPORT PERIOD: 80/ 4  
 SITE NUMBER: 84

LATITUDE: 42.00 DEG NORTH AZIMUTH: 0 DEG  
 LONGITUDE: 71.00 DEG WEST PYRANOMETER TILT: 45 DEG  
 TIME ZONE: EASTERN  
 ALTITUDE: 200 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	*	N.A.	N.A.	*	*:*	3301.	*
2	*	N.A.	N.A.	*	*:*	3296.	*
3	*	N.A.	N.A.	*	*:*	3290.	*
4	*	N.A.	N.A.	*	*:*	3284.	*
5	*	N.A.	N.A.	*	*:*	3277.	*
6	*	N.A.	N.A.	*	*:*	3274.	*
7	*	N.A.	N.A.	*	*:*	3268.	*
8	*	N.A.	N.A.	*	*:*	3261.	*
9	*	N.A.	N.A.	*	*:*	3255.	*
10	*	N.A.	N.A.	*	*:*	3248.	*
11	*	N.A.	N.A.	*	*:*	3241.	*
12	*	N.A.	N.A.	*	*:*	3234.	*
13	*	N.A.	N.A.	*	*:*	3227.	*
14	*	N.A.	N.A.	*	*:*	3220.	*
15	*	N.A.	N.A.	*	*:*	3213.	*
16	*	N.A.	N.A.	*	*:*	3206.	*
17	*	N.A.	N.A.	*	*:*	3198.	*
18	*	N.A.	N.A.	*	*:*	3191.	*
19	*	N.A.	N.A.	*	*:*	3183.	*
20	*	N.A.	N.A.	*	*:*	3176.	*
21	*	N.A.	N.A.	*	*:*	3171.	*
22	*	N.A.	N.A.	*	*:*	3163.	*
23	715.	N.A.	N.A.	81.	11:33	3156.	23.
24	1239.	N.A.	N.A.	311.	12:57	3148.	39.
25	1071.	N.A.	N.A.	250.	13:54	3140.	34.
26	388.	N.A.	N.A.	172.	10:36	3133.	12.
27	707.	N.A.	N.A.	196.	13: 2	3125.	23.
28	57.	N.A.	N.A.	18.	11:58	3117.	2.
29	172.	N.A.	N.A.	45.	13: 9	3109.	6.
30	533.	N.A.	N.A.	148.	12: 4	3101.	17.
MEAN	610.	N.A.	N.A.			3207.	
STANDARD DEVIATION	411.	N.A.	N.A.			61.	

ENVIRONMENTAL SUMMARY REPORT

SITE: SADDLE HILL TRUST, LOT 73  
 MEDWAY, MASSACHUSETTS

REPORT PERIOD: 80/ 4  
 SITE NUMBER: 84

LATITUDE: 42.00 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: EASTERN  
 LONGITUDE: 71.00 DEG WEST      PYRANOMETER TILT: 45 DEG      ALTITUDE: 200 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	42.	49.	36.	56.	16:40	28.	5:28	60.
2	41.	45.	34.	51.	13:15	31.	21:24	56.
3	45.	61.	33.	70.	12: 4	27.	4:20	63.
4	42.	44.	37.	50.	12:13	33.	1:55	59.
5	44.	50.	36.	58.	11:44	32.	23:23	58.
6	52.	65.	39.	77.	10: 8	34.	0: 0	59.
7	42.	54.	32.	58.	12:53	26.	4:53	57.
8	44.	48.	39.	55.	17:16	34.	3:13	61.
9	49.	51.	46.	57.	14:23	36.	3:59	61.
10	52.	52.	51.	54.	13:12	49.	23:56	62.
11	59.	68.	49.	74.	8:18	45.	5:48	59.
12	51.	59.	40.	66.	9:20	31.	3: 7	58.
13	55.	60.	50.	68.	9:57	48.	22:27	62.
14	44.	45.	44.	47.	12: 3	41.	21:34	63.
15	56.	63.	48.	69.	11: 5	43.	0: 3	63.
16	45.	52.	40.	58.	7:53	32.	22:53	58.
17	37.	*	37.	51.	17:56	28.	23:43	61.
18	45.	59.	32.	73.	11:59	23.	4:20	62.
19	59.	69.	43.	76.	11: 4	33.	3:36	62.
20	56.	78.	47.	80.	10:32	38.	4:56	62.
21	64.	73.	46.	83.	10:10	43.	23:21	62.
22	43.	48.	34.	56.	7: 5	28.	3:47	63.
23	48.	49.	45.	55.	17:18	38.	0:21	67.
24	50.	55.	45.	67.	15:15	39.	22:47	63.
25	50.	55.	45.	62.	14:58	38.	0:28	62.
26	51.	55.	47.	65.	13:16	40.	23:35	62.
27	53.	60.	45.	72.	7:24	41.	0: 1	61.
28	42.	42.	41.	44.	7:37	40.	17:57	61.
29	43.	44.	42.	47.	14:24	41.	0: 0	62.
30	50.	54.	47.	65.	11:48	43.	1:50	61.
MEAN	48.	55.	42.					61.
STANDARD DEVIATION	6.4	9.0	5.6					2.2

ENVIRONMENTAL SUMMARY REPORT

SITE: SADDLE HILL TRUST, LOT 77  
 MEDWAY, MASSACHUSETTS

REPORT PERIOD: 80/ 4  
 SITE NUMBER: 85

LATITUDE: 42.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
 LONGITUDE: 71.00 DEG WEST PYRANOMETER TILT: 38 DEG ALTITUDE: 200 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2353.	N.A.	N.A.	340.	11:36	3343.	70.
2	319.	N.A.	N.A.	76.	11:26	3342.	10.
3	2395.	N.A.	N.A.	343.	11:40	3341.	72.
4	43.	N.A.	N.A.	24.	14:11	3340.	1.
5	1218.	N.A.	N.A.	350.	11:32	3339.	36.
6	1981.	N.A.	N.A.	365.	11:48	3338.	59.
7	2336.	N.A.	N.A.	337.	12: 3	3336.	70.
8	405.	N.A.	N.A.	116.	9:53	3332.	12.
9	412.	N.A.	N.A.	106.	10: 1	3330.	12.
10	114.	N.A.	N.A.	33.	14:36	3328.	3.
11	2067.	N.A.	N.A.	368.	12: 3	3326.	62.
12	1238.	N.A.	N.A.	334.	12:51	3324.	37.
13	1839.	N.A.	N.A.	337.	11:31	3318.	55.
14	262.	N.A.	N.A.	82.	11:45	3316.	8.
15	1575.	N.A.	N.A.	347.	12:23	3313.	48.
16	790.	N.A.	N.A.	343.	12:38	3311.	24.
17	2488.	N.A.	N.A.	343.	11:18	3308.	75.
18	1784.	N.A.	N.A.	356.	11:42	3305.	54.
19	2380.	N.A.	N.A.	331.	11:29	3302.	72.
20	1865.	N.A.	N.A.	313.	11: 8	3298.	57.
21	2422.	N.A.	N.A.	337.	11:20	3295.	74.
22	1321.	N.A.	N.A.	337.	9:45	3292.	40.
23	506.	N.A.	N.A.	146.	10:14	3288.	15.
24	1195.	N.A.	N.A.	340.	12:54	3285.	36.
25	1142.	N.A.	N.A.	274.	10:26	3278.	35.
26	425.	N.A.	N.A.	188.	10:36	3275.	13.
27	803.	N.A.	N.A.	198.	13: 2	3271.	25.
28	69.	N.A.	N.A.	21.	11:58	3267.	2.
29	197.	N.A.	N.A.	55.	13:10	3263.	6.
30	618.	N.A.	N.A.	167.	12: 4	3259.	19.
MEAN	1219.	N.A.	N.A.			3309.	
STANDARD DEVIATION	846.	N.A.	N.A.			26.	

ENVIRONMENTAL SUMMARY REPORT

SITE: SADDLE HILL TRUST, LOT 77  
 MEDWAY, MASSACHUSETTS

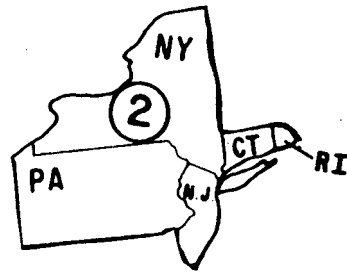
REPORT PERIOD: 80/ 4  
 SITE NUMBER: 85

LATITUDE: 42.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
 LONGITUDE: 71.00 DEG WEST PYRANOMETER TILT: 38 DEG ALTITUDE: 200 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	47.	56.	37.	80.	15:20	30.	5:28	55.
2	41.	45.	37.	50.	13:18	33.	20:12	52.
3	48.	57.	39.	76.	14:36	30.	3:40	51.
4	42.	45.	40.	51.	12:13	34.	1:49	56.
5	43.	48.	39.	54.	15:38	29.	22:12	58.
6	50.	59.	41.	75.	15:36	33.	23:47	60.
7	45.	55.	35.	68.	14:38	27.	4:24	60.
8	48.	53.	43.	61.	16:28	35.	2:47	53.
9	50.	54.	46.	61.	13:13	37.	4:15	54.
10	53.	53.	52.	55.	13: 0	50.	22:43	55.
11	54.	60.	47.	69.	14:59	36.	23:47	60.
12	52.	59.	45.	71.	14: 0	31.	5:12	53.
13	56.	60.	52.	66.	14:30	48.	23:39	56.
14	45.	46.	45.	49.	9: 5	43.	6:14	55.
15	59.	64.	54.	73.	15:14	44.	0: 2	57.
16	45.	48.	42.	56.	11: 2	32.	23:50	59.
17	41.	48.	34.	62.	15:50	28.	23:58	60.
18	45.	53.	37.	62.	11:42	24.	3:47	59.
19	52.	60.	44.	74.	15:40	29.	5: 5	60.
20	59.	67.	51.	78.	14:48	43.	4:54	57.
21	58.	65.	51.	74.	14:32	41.	23:58	64.
22	42.	47.	37.	58.	11: 5	27.	4:41	56.
23	47.	50.	44.	59.	17:13	37.	0:11	54.
24	53.	61.	45.	83.	15:18	40.	22:42	56.
25	54.	62.	46.	79.	14:42	39.	3:56	56.
26	52.	57.	48.	65.	14:36	41.	23: 8	56.
27	54.	62.	46.	75.	13:23	41.	2: 9	58.
28	43.	43.	43.	45.	7:21	41.	18:19	55.
29	45.	46.	43.	48.	14:19	43.	0: 1	54.
30	52.	57.	48.	68.	12: 9	44.	0:31	54.
MEAN	49.	55.	44.					57.
STANDARD DEVIATION	5.5	6.8	5.4					2.9

ZONE 2



ENVIRONMENTAL SUMMARY REPORT

SITE: BELL OF PENNSYLVANIA  
WEST GOSHEN, PENNSYLVANIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 20

LATITUDE: 39.90 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 75.70 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 5 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2194.	N.A.	N.A.	314.	11:29	3116.	70.
2	1573.	N.A.	N.A.	305.	12: 3	3102.	51.
3	2157.	N.A.	N.A.	311.	11:52	3088.	70.
4	519.	N.A.	N.A.	287.	13: 5	3076.	17.
5	2034.	N.A.	N.A.	323.	11:56	3062.	66.
6	1998.	N.A.	N.A.	317.	11:29	3048.	66.
7	1703.	N.A.	N.A.	305.	12:20	3036.	56.
8	1283.	N.A.	N.A.	299.	11:28	3025.	42.
9	179.	N.A.	N.A.	70.	11: 7	3010.	6.
10	1657.	N.A.	N.A.	317.	11:42	2996.	55.
11	2080.	N.A.	N.A.	305.	11:52	2984.	70.
12	1306.	N.A.	N.A.	287.	11:30	2969.	44.
13	1780.	N.A.	N.A.	305.	12: 2	2955.	60.
14	99.	N.A.	N.A.	33.	12: 6	2943.	3.
15	993.	N.A.	N.A.	323.	12:51	2931.	34.
16	640.	N.A.	N.A.	184.	10:17	2917.	22.
17	2131.	N.A.	N.A.	314.	11:40	2902.	73.
18	1918.	N.A.	N.A.	299.	11:41	2890.	66.
19	2033.	N.A.	N.A.	293.	12: 3	2876.	71.
20	1784.	N.A.	N.A.	278.	12: 9	2861.	62.
21	2103.	N.A.	N.A.	302.	11:47	2850.	74.
22	2109.	N.A.	N.A.	302.	11:48	2835.	74.
23	2001.	N.A.	N.A.	287.	11:36	2823.	71.
24	1848.	N.A.	N.A.	290.	11:13	2809.	66.
25	1268.	N.A.	N.A.	296.	12: 4	2795.	45.
26	185.	N.A.	N.A.	48.	10:48	2784.	7.
27	82.	N.A.	N.A.	27.	12:52	2770.	3.
28	151.	N.A.	N.A.	42.	12:46	2756.	5.
29	138.	N.A.	N.A.	30.	9: 9	2745.	5.
30	83.	N.A.	N.A.	24.	11:11	2731.	3.
MEAN	1334.	N.A.	N.A.			2923.	
STANDARD DEVIATION	796.	N.A.	N.A.			117.	

ENVIRONMENTAL SUMMARY REPORT

SITE: BELL OF PENNSYLVANIA  
WEST GOSHEN, PENNSYLVANIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 20

LATITUDE: 39.90 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 75.70 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 5 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	45.	48.	41.	63.	17:28	35.	0: 6	N.A.
2	50.	53.	47.	61.	14:27	40.	2:16	N.A.
3	53.	57.	50.	68.	16:14	41.	6: 0	N.A.
4	55.	59.	52.	67.	14: 4	49.	23:51	N.A.
5	50.	52.	49.	60.	17:21	41.	5:53	N.A.
6	55.	58.	51.	68.	17:14	42.	5:48	N.A.
7	56.	60.	51.	66.	12:52	47.	6:23	N.A.
8	59.	63.	55.	70.	14:13	49.	5:25	N.A.
9	59.	60.	57.	62.	15:50	56.	5:21	N.A.
10	58.	61.	55.	65.	12:19	49.	4:41	N.A.
11	55.	57.	53.	65.	16:46	46.	6:11	N.A.
12	59.	64.	55.	74.	13:49	47.	2:26	N.A.
13	57.	57.	57.	63.	14:46	50.	8:18	N.A.
14	53.	50.	56.	64.	23:37	48.	7:45	N.A.
15	52.	53.	52.	64.	0:14	42.	23:58	N.A.
16	42.	44.	40.	45.	12: 9	34.	23:56	N.A.
17	43.	46.	40.	61.	17: 5	30.	5:32	N.A.
18	53.	57.	50.	69.	17: 2	39.	3:20	N.A.
19	59.	63.	56.	75.	17:23	48.	6: 1	N.A.
20	63.	67.	58.	79.	16:57	48.	5: 2	N.A.
21	63.	65.	61.	76.	16:30	56.	5:55	N.A.
22	58.	61.	55.	72.	17:33	49.	5:45	N.A.
23	56.	60.	53.	72.	16: 3	40.	5:55	N.A.
24	63.	66.	60.	79.	15:40	52.	6:20	N.A.
25	62.	66.	58.	75.	14:17	52.	23:31	N.A.
26	52.	53.	50.	58.	11:26	49.	4:51	N.A.
27	52.	53.	51.	56.	15:32	49.	4:24	N.A.
28	52.	53.	51.	54.	14:33	49.	23:28	N.A.
29	52.	53.	52.	56.	15:44	48.	7:23	N.A.
30	53.	53.	52.	54.	15:27	50.	6: 2	N.A.
MEAN	55.	57.	52.					N.A.
STANDARD DEVIATION	5.4	6.1	5.2					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: HAMDEN APARTMENTS  
HAMDEN, CONNECTICUT

REPORT PERIOD: 80/ 4  
SITE NUMBER: 124

LATITUDE: 40.23 DEG NORTH  
LONGITUDE: 72.54 DEG WEST

AZIMUTH: 7 DEG  
PYRANOMETER TILT: 40 DEG

TIME ZONE: EASTERN  
ALTITUDE: 60 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2297.	N.A.	N.A.	337.	11:45	3323.	69.
2	196.	N.A.	N.A.	48.	15:41	3324.	6.
3	2284.	N.A.	N.A.	337.	12:16	3318.	69.
4	71.	N.A.	N.A.	23.	13:32	3318.	2.
5	1401.	N.A.	N.A.	315.	10:23	3314.	42.
6	2270.	N.A.	N.A.	329.	12: 5	3310.	69.
7	2176.	N.A.	N.A.	326.	12: 6	3306.	66.
8	520.	N.A.	N.A.	198.	12:32	3302.	16.
9	160.	N.A.	N.A.	62.	12:16	3297.	5.
10	295.	N.A.	N.A.	82.	15:26	3293.	9.
11	1892.	N.A.	N.A.	332.	12:37	3288.	58.
12	1381.	N.A.	N.A.	337.	11:18	3284.	42.
13	1863.	N.A.	N.A.	323.	11:50	3279.	57.
14	210.	N.A.	N.A.	79.	12:17	3274.	6.
15	1906.	N.A.	N.A.	320.	12:21	3269.	58.
16	800.	N.A.	N.A.	295.	12: 9	3264.	25.
17	2411.	N.A.	N.A.	332.	11:59	3259.	74.
18	1656.	N.A.	N.A.	343.	12:10	3254.	51.
19	*	N.A.	N.A.	*	*:*	3248.	*
20	*	N.A.	N.A.	*	*:*	3243.	*
21	*	N.A.	N.A.	*	*:*	3238.	*
22	*	N.A.	N.A.	*	*:*	3232.	*
23	*	N.A.	N.A.	*	*:*	3226.	*
24	*	N.A.	N.A.	*	*:*	3221.	*
25	*	N.A.	N.A.	*	*:*	3215.	*
26	*	N.A.	N.A.	*	*:*	3209.	*
27	*	N.A.	N.A.	*	*:*	3203.	*
28	*	N.A.	N.A.	*	*:*	3197.	*
29	*	N.A.	N.A.	*	*:*	3192.	*
30	*	N.A.	N.A.	*	*:*	3186.	*
MEAN	1322.	N.A.	N.A.			3263.	
STANDARD DEVIATION	880.	N.A.	N.A.			43.	



ENVIRONMENTAL SUMMARY REPORT

SITE: LUTZ-SOTIRE  
STAMFORD, CONNECTICUT

REPORT PERIOD: 80/ 4  
SITE NUMBER: 127

LATITUDE: 41.10 DEG NORTH  
LONGITUDE: 73.08 DEG WEST

AZIMUTH: 5 DEG  
PYRANOMETER TILT: 55 DEG

TIME ZONE: EASTERN  
ALTITUDE: 7 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2211.	*	*	318.	12:32	3142.	70.
2	221.	*	*	215.	14:36	3132.	7.
3	2129.	*	*	315.	12:24	3119.	68.
4	396.	*	*	253.	14:18	3105.	13.
5	1697.	*	*	306.	12:32	3095.	55.
6	2107.	*	*	312.	12:37	3081.	68.
7	1889.	*	*	309.	12:43	3068.	62.
8	837.	*	*	306.	12:57	3054.	27.
9	28.	*	*	12.	8:56	3043.	1.
10	995.	*	*	321.	12:46	3032.	33.
11	2003.	*	*	306.	12: 7	3016.	66.
12	1106.	*	*	283.	11:51	3005.	37.
13	1756.	*	*	301.	12:39	2994.	59.
14	123.	*	*	44.	11:44	2980.	4.
15	1433.	*	*	327.	12:44	2966.	48.
16	890.	*	*	248.	11: 5	2955.	30.
17	2180.	*	*	312.	12:28	2942.	74.
18	1543.	*	*	324.	13: 6	2930.	53.
19	2042.	*	*	295.	12:17	2914.	70.
20	1702.	*	*	283.	12:33	2903.	59.
21	2119.	*	*	304.	12:35	2892.	73.
22	2028.	*	*	304.	12:24	2878.	70.
23	2009.	*	*	289.	12:25	2865.	70.
24	1845.	*	*	286.	12:46	2851.	65.
25	341.	*	*	168.	10:59	2840.	12.
26	764.	*	*	262.	10:31	2830.	27.
27	131.	*	*	62.	11:14	2816.	5.
28	46.	*	*	18.	9: 8	2803.	2.
29	180.	*	*	38.	11:34	2790.	6.
30	944.	*	*	298.	12:40	2779.	34.
MEAN	1257.	0.	0.			2961.	
STANDARD DEVIATION		786.					111.

ENVIRONMENTAL SUMMARY REPORT

SITE: LUTZ-SOTIRE  
STAMFORD, CONNECTICUT

REPORT PERIOD: 80/ 4  
SITE NUMBER: 127

LATITUDE: 41.10 DEG NORTH AZIMUTH: 5 DEG TIME ZONE: EASTERN  
LONGITUDE: 73.08 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 7 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	44.	51.	38.	59.	12:37	33.	23:50	N.A.
2	39.	42.	35.	50.	14:36	28.	4: 6	N.A.
3	48.	57.	39.	69.	12:13	29.	5: 7	N.A.
4	50.	53.	47.	60.	15:59	43.	5:35	N.A.
5	47.	50.	44.	59.	15:44	35.	23:33	N.A.
6	50.	59.	41.	69.	15:55	31.	5: 4	N.A.
7	47.	54.	41.	63.	10:35	36.	2:46	N.A.
8	48.	51.	45.	62.	15:27	42.	0:20	N.A.
9	51.	52.	51.	54.	22:54	47.	0: 3	N.A.
10	55.	58.	52.	67.	17:13	48.	23:41	N.A.
11	55.	60.	50.	69.	16:18	40.	5:33	N.A.
12	53.	57.	49.	66.	12:13	40.	3: 9	N.A.
13	57.	61.	53.	68.	13:38	48.	23:39	N.A.
14	44.	42.	45.	60.	23:45	39.	6: 8	N.A.
15	58.	62.	54.	68.	11: 8	47.	23:58	N.A.
16	42.	46.	38.	50.	11:10	31.	23:30	N.A.
17	42.	49.	37.	60.	15:56	28.	5: 6	N.A.
18	48.	56.	40.	65.	13:12	31.	3: 4	N.A.
19	51.	61.	41.	69.	12:12	32.	5:11	N.A.
20	54.	63.	46.	74.	13: 6	36.	5:16	N.A.
21	60.	66.	53.	76.	14:43	42.	23:47	N.A.
22	48.	55.	42.	60.	14:37	35.	5:12	N.A.
23	51.	57.	45.	69.	16: 9	37.	1:34	N.A.
24	54.	61.	47.	66.	14: 0	40.	2:48	N.A.
25	50.	53.	48.	60.	10:16	46.	4:13	N.A.
26	54.	60.	49.	71.	11:25	46.	23:25	N.A.
27	48.	50.	47.	53.	9:33	43.	4:18	N.A.
28	47.	48.	46.	51.	11: 5	43.	22:14	N.A.
29	47.	48.	46.	50.	13: 4	44.	0:11	N.A.
30	52.	54.	49.	63.	13:44	46.	4:29	N.A.
MEAN	50.	54.	45.					N.A.
STANDARD DEVIATION	4.9	6.2	5.2					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: M. F. SMITH ASSOCIATES  
JAMESTOWN, RHODE ISLAND

REPORT PERIOD: 80/ 4  
SITE NUMBER: 160

LATITUDE: 41.44 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 71.26 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 110 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2364.	N.A.	N.A.	342.	12: 9	3295.	72.
2	547.	N.A.	N.A.	144.	9:31	3289.	17.
3	2393.	N.A.	N.A.	339.	12:16	3283.	73.
4	148.	N.A.	N.A.	45.	15:55	3279.	5.
5	1411.	N.A.	N.A.	376.	12:33	3273.	43.
6	2306.	N.A.	N.A.	334.	12: 1	3266.	71.
7	2051.	N.A.	N.A.	337.	11:29	3260.	63.
8	858.	N.A.	N.A.	192.	14:28	3253.	26.
9	888.	N.A.	N.A.	339.	11:56	3246.	27.
10	257.	N.A.	N.A.	71.	14:15	3239.	8.
11	2308.	N.A.	N.A.	331.	12: 9	3231.	71.
12	1543.	N.A.	N.A.	322.	12:36	3224.	48.
13	1713.	N.A.	N.A.	339.	10:38	3217.	53.
14	278.	N.A.	N.A.	85.	11:32	3209.	9.
15	1540.	N.A.	N.A.	314.	11:40	3202.	48.
16	615.	N.A.	N.A.	156.	9: 4	3197.	19.
17	2449.	N.A.	N.A.	342.	12: 2	3189.	77.
18	1935.	N.A.	N.A.	351.	12: 8	3181.	61.
19	2276.	N.A.	N.A.	325.	12:14	3174.	72.
20	2081.	N.A.	N.A.	322.	11:36	3166.	66.
21	2399.	N.A.	N.A.	334.	12: 4	3158.	76.
22	1238.	N.A.	N.A.	356.	11:32	3150.	39.
23	456.	N.A.	N.A.	102.	11:52	3142.	15.
24	1850.	N.A.	N.A.	331.	11:12	3134.	59.
25	1541.	N.A.	N.A.	317.	13:10	3126.	49.
26	587.	N.A.	N.A.	249.	11:43	3118.	19.
27	673.	N.A.	N.A.	167.	10:18	3110.	22.
28	131.	N.A.	N.A.	25.	10:38	3101.	4.
29	545.	N.A.	N.A.	105.	13:22	3096.	18.
30	1043.	N.A.	N.A.	218.	11:54	3088.	34.
MEAN	1347.	N.A.	N.A.			3196.	
STANDARD DEVIATION	798.	N.A.	N.A.			64.	

ENVIRONMENTAL SUMMARY REPORT

SITE: M. F. SMITH ASSOCIATES  
JAMESTOWN, RHODE ISLAND

REPORT PERIOD: 80/ 4  
SITE NUMBER: 160

LATITUDE: 41.44 DEG NORTH      AZIMUTH: 0 DEG  
LONGITUDE: 71.26 DEG WEST      PYRANOMETER TILT: 45 DEG      TIME ZONE: EASTERN  
ALTITUDE: 110 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	41.	46.	37.	52.	12:41	34.	5:13	56.
2	40.	44.	37.	48.	11: 7	35.	2:14	63.
3	44.	51.	38.	56.	10:13	33.	5:20	51.
4	45.	47.	43.	51.	13:36	38.	1:41	56.
5	45.	47.	42.	52.	12:33	39.	21:26	64.
6	49.	56.	43.	62.	10:36	40.	0:17	54.
7	44.	46.	41.	49.	14:14	40.	5:10	56.
8	46.	49.	43.	52.	14:23	39.	5:13	49.
9	48.	49.	47.	53.	11:56	45.	0:12	53.
10	48.	49.	48.	51.	6:15	46.	21:23	55.
11	53.	58.	47.	63.	14:38	42.	5:29	57.
12	50.	54.	46.	59.	8:41	40.	3:21	63.
13	55.	59.	51.	67.	13:56	46.	6:28	57.
14	47.	46.	47.	51.	23:24	43.	10:33	62.
15	51.	53.	50.	57.	11:51	45.	19:54	56.
16	45.	48.	42.	51.	16:21	34.	23:46	67.
17	41.	46.	37.	53.	16:34	32.	5:22	66.
18	47.	51.	42.	58.	13:28	34.	2: 0	62.
19	49.	55.	43.	59.	14:48	36.	4:14	54.
20	51.	55.	46.	60.	11:52	40.	3:31	56.
21	56.	62.	50.	67.	13:56	44.	23:54	61.
22	44.	47.	40.	53.	11:38	37.	4:58	64.
23	46.	48.	44.	51.	16:18	37.	1:33	68.
24	48.	52.	43.	59.	13:15	39.	4: 5	57.
25	48.	51.	45.	56.	14:14	41.	0:38	65.
26	48.	50.	47.	56.	11:59	44.	23:59	58.
27	49.	53.	46.	58.	14: 2	40.	5: 8	56.
28	46.	46.	46.	48.	0: 9	44.	18:25	61.
29	48.	49.	46.	53.	14:15	45.	23:16	60.
30	50.	53.	47.	60.	14: 7	45.	0:15	60.
MEAN	47.	51.	44.					59.
STANDARD DEVIATION	3.6	4.4	3.9					4.8

ENVIRONMENTAL SUMMARY REPORT

SITE: STEWART-TEELE-MITCHELL  
MALTA, NEW YORK

REPORT PERIOD: 80/ 4  
SITE NUMBER: 62

LATITUDE: 43.00 DEG NORTH  
LONGITUDE: 74.00 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 45 DEG

TIME ZONE: EASTERN  
ALTITUDE: 277 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2380.	N.A.	N.A.	342.	11:58	3308.	72.
2	434.	N.A.	N.A.	159.	15:23	3306.	13.
3	*	N.A.	N.A.	*	*:*	3301.	*
4	270.	N.A.	N.A.	68.	14:27	3296.	8.
5	1089.	N.A.	N.A.	308.	11:10	3290.	33.
6	2276.	N.A.	N.A.	351.	11:26	3285.	69.
7	2367.	N.A.	N.A.	317.	11:39	3279.	72.
8	237.	N.A.	N.A.	106.	14: 1	3273.	7.
9	215.	N.A.	N.A.	56.	15:14	3267.	7.
10	1941.	N.A.	N.A.	327.	12: 4	3261.	60.
11	1520.	N.A.	N.A.	330.	12:22	3255.	47.
12	*	N.A.	N.A.	*	*:*	3249.	*
13	*	N.A.	N.A.	*	*:*	3245.	*
14	228.	N.A.	N.A.	56.	8:51	3239.	7.
15	1182.	N.A.	N.A.	351.	12:45	3232.	37.
16	677.	N.A.	N.A.	336.	13: 9	3226.	21.
17	2418.	N.A.	N.A.	333.	12:11	3219.	75.
18	990.	N.A.	N.A.	299.	13: 2	3212.	31.
19	2351.	N.A.	N.A.	323.	11:30	3205.	73.
20	1109.	N.A.	N.A.	239.	10:28	3198.	35.
21	2422.	N.A.	N.A.	327.	11:36	3191.	76.
22	1617.	N.A.	N.A.	339.	11:13	3184.	51.
23	1905.	N.A.	N.A.	320.	11:22	3177.	60.
24	*	N.A.	N.A.	*	*:*	3170.	*
25	302.	N.A.	N.A.	205.	13:31	3163.	10.
26	*	N.A.	N.A.	*	*:*	3156.	*
27	690.	N.A.	N.A.	196.	8:28	3148.	22.
28	188.	N.A.	N.A.	53.	8:40	3141.	6.
29	299.	N.A.	N.A.	56.	12:52	3134.	10.
30	1249.	N.A.	N.A.	320.	13:15	3127.	40.
MEAN	1214.	N.A.	N.A.			3225.	
STANDARD DEVIATION	843.	N.A.	N.A.			56.	

ENVIRONMENTAL SUMMARY REPORT

SITE: STEWART-TEELE-MITCHELL  
MALTA, NEW YORK

REPORT PERIOD: 80/ 4  
SITE NUMBER: 62

LATITUDE: 43.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 74.00 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 277 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	41.	49.	33.	59.	14:33	23.	5:50	64.
2	40.	42.	36.	45.	15:39	31.	0:49	64.
3	40.	*	40.	41.	23:15	38.	22:54	61.
4	41.	41.	40.	47.	15:57	36.	5: 2	65.
5	43.	45.	40.	54.	15:37	36.	5:43	62.
6	45.	53.	38.	61.	14:13	31.	5:50	61.
7	45.	54.	32.	65.	12:59	25.	4:43	68.
8	49.	49.	48.	58.	16:20	42.	6: 7	68.
9	52.	53.	51.	57.	15:24	46.	5:54	63.
10	56.	61.	49.	72.	14: 6	45.	22:46	67.
11	49.	51.	44.	57.	14: 3	41.	6: 9	65.
12	*	*	*	*	*:*	*	*:*	*
13	47.	55.	42.	59.	14:59	37.	22:33	67.
14	41.	41.	40.	44.	23:52	36.	1:18	63.
15	50.	53.	46.	62.	13:44	42.	23:49	67.
16	37.	40.	34.	47.	10:39	29.	23:55	66.
17	37.	43.	31.	52.	14:30	22.	4:43	67.
18	43.	48.	37.	57.	16: 3	32.	1:39	66.
19	48.	57.	39.	67.	15:30	28.	5:22	66.
20	50.	59.	45.	68.	15:55	33.	5:13	66.
21	51.	61.	42.	70.	14:48	34.	5:18	71.
22	38.	45.	31.	51.	11:24	25.	5: 5	70.
23	46.	51.	33.	59.	15:22	29.	0:32	70.
24	50.	50.	0.	57.	10:35	43.	7:12	68.
25	51.	53.	49.	61.	13:58	46.	4: 3	69.
26	50.	55.	47.	63.	10:47	44.	4:50	69.
27	55.	58.	51.	61.	11:10	50.	23:31	67.
28	47.	47.	47.	51.	1:44	43.	18:55	70.
29	49.	51.	48.	54.	14:23	45.	0:15	67.
30	54.	57.	48.	68.	14:57	48.	5: 5	69.
MEAN	46.	51.	42.					66.
STANDARD DEVIATION	5.4	6.0	6.4					2.7

ENVIRONMENTAL SUMMARY REPORT

SITE: SUMMERWOOD  
OLD SAYBROOK, CONNECTICUT

REPORT PERIOD: 80/ 4  
SITE NUMBER: 226

LATITUDE: 41.00 DEG NORTH AZIMUTH: 12 DEG  
LONGITUDE: 73.00 DEG WEST PYRANOMETER TILT: 50 DEG  
TIME ZONE: EASTERN  
ALTITUDE: 100 FEET

INSOLATION

DAY	TOTAL	TOTAL DIFF	TOTAL DIR	MAXIMUM TOTAL	EXTRATERRESTRIAL	TTL INS
	INSOLATION	INSOLATION	INSOLATION	INSOLATION		INSOLATION
	BTU/FT2	BTU/FT2	BTU/FT2	VALUE	BTU/FT2	EXT INS
				TIME		PERCENT
				HR:MN		
1	2159.	N.A.	N.A.	326.	12:10	67.
2	262.	N.A.	N.A.	50.	8: 1	8.
3	2220.	N.A.	N.A.	326.	12:19	69.
4	73.	N.A.	N.A.	34.	15: 2	2.
5	1088.	N.A.	N.A.	298.	14:12	34.
6	2264.	N.A.	N.A.	323.	12:15	71.
7	2136.	N.A.	N.A.	329.	12:27	67.
8	266.	N.A.	N.A.	87.	16:40	8.
9	278.	N.A.	N.A.	87.	12:24	9.
10	196.	N.A.	N.A.	62.	11:11	6.
11	2170.	N.A.	N.A.	310.	12:27	69.
12	1425.	N.A.	N.A.	304.	11:30	46.
13	1797.	N.A.	N.A.	313.	12:23	57.
14	155.	N.A.	N.A.	50.	10:18	5.
15	1770.	N.A.	N.A.	317.	12: 9	57.
16	1005.	N.A.	N.A.	326.	13:20	32.
17	2268.	N.A.	N.A.	320.	12: 0	73.
18	2001.	N.A.	N.A.	310.	12:23	65.
19	2124.	N.A.	N.A.	310.	12: 1	69.
20	2194.	N.A.	N.A.	295.	12: 1	72.
21	2266.	N.A.	N.A.	317.	12:13	74.
22	1729.	N.A.	N.A.	344.	11:54	57.
23	1825.	N.A.	N.A.	332.	12: 3	60.
24	2817.	N.A.	N.A.	310.	12:50	93.
25	970.	N.A.	N.A.	267.	11:44	32.
26	706.	N.A.	N.A.	301.	11:35	24.
27	329.	N.A.	N.A.	106.	9:32	11.
28	94.	N.A.	N.A.	31.	9:15	3.
29	416.	N.A.	N.A.	78.	11: 8	14.
30	1405.	N.A.	N.A.	320.	11:53	48.
MEAN	1347.	N.A.	N.A.			3094.
STANDARD DEVIATION	871.	N.A.	N.A.			80.

ENVIRONMENTAL SUMMARY REPORT

SITE: SUMMERWOOD  
OLD SAYBROOK, CONNECTICUT

REPORT PERIOD: 80/ 4  
SITE NUMBER: 226

LATITUDE: 41.00 DEG NORTH AZIMUTH: 12 DEG TIME ZONE: EASTERN  
LONGITUDE: 73.00 DEG WEST PYRANOMETER TILT: 50 DEG ALTITUDE: 100 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	43.	49.	37.	60.	13:46	32.	23:56	55.
2	40.	44.	35.	48.	12:39	29.	1:16	54.
3	46.	56.	37.	68.	11:20	31.	1:49	55.
4	46.	48.	44.	54.	14: 3	36.	0:54	56.
5	46.	49.	42.	54.	14:18	35.	23:59	55.
6	50.	59.	41.	68.	10:12	34.	0:15	56.
7	44.	47.	41.	50.	9:15	37.	0:16	57.
8	46.	48.	45.	51.	16:24	43.	0: 3	58.
9	49.	50.	48.	52.	10:16	44.	1: 1	57.
10	51.	52.	50.	53.	9:29	47.	22:46	58.
11	53.	59.	47.	67.	8:38	44.	5:26	59.
12	51.	56.	47.	64.	13:38	38.	4:39	60.
13	55.	59.	52.	70.	14:10	46.	2:58	62.
14	46.	44.	47.	54.	23:43	42.	7: 1	59.
15	55.	60.	51.	73.	11: 5	43.	23:49	60.
16	45.	50.	40.	59.	12:16	32.	23:55	59.
17	42.	48.	37.	60.	13:31	29.	4:32	58.
18	47.	55.	40.	62.	9:27	27.	4:18	59.
19	51.	61.	42.	69.	8:55	31.	4:55	62.
20	52.	62.	44.	75.	10:25	35.	4:55	64.
21	59.	64.	54.	74.	10:31	45.	5:17	66.
22	49.	55.	43.	66.	12:20	38.	5: 3	65.
23	50.	56.	45.	60.	13:39	38.	0:41	64.
24	52.	55.	46.	61.	8:12	40.	4:17	68.
25	50.	52.	48.	60.	9: 4	45.	0: 4	66.
26	53.	57.	49.	66.	10: 4	45.	23:40	64.
27	49.	51.	48.	56.	9:38	44.	4:50	63.
28	47.	47.	47.	49.	2:57	44.	18:35	59.
29	50.	52.	48.	56.	13:32	47.	23:32	58.
30	50.	52.	48.	58.	13:24	46.	3:21	59.
MEAN	49.	53.	45.					60.
STANDARD DEVIATION	4.2	5.4	4.7					3.7

ENVIRONMENTAL SUMMARY REPORT

SITE: SUN TECH HOMES  
CHESTER, NEW YORK

REPORT PERIOD: 80/ 4  
SITE NUMBER: 71

LATITUDE: 41.00 DEG NORTH  
LONGITUDE: 74.00 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 60 DEG

TIME ZONE: EASTERN  
ALTITUDE: 400 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2453.	N.A.	N.A.	340.	11:26	3025.	81.
2	*	N.A.	N.A.	*	*:*	3009.	*
3	*	N.A.	N.A.	*	*:*	2995.	*
4	*	N.A.	N.A.	*	*:*	2978.	*
5	1038.	N.A.	N.A.	304.	12:26	2964.	35.
6	*	N.A.	N.A.	*	*:*	2947.	*
7	2001.	N.A.	N.A.	284.	11:26	2933.	68.
8	730.	N.A.	N.A.	251.	13:12	2917.	25.
9	108.	N.A.	N.A.	62.	14:21	2903.	4.
10	2034.	N.A.	N.A.	290.	11:36	2888.	70.
11	1876.	N.A.	N.A.	290.	11:45	2872.	65.
12	982.	N.A.	N.A.	272.	11:11	2857.	34.
13	1856.	N.A.	N.A.	293.	11:59	2841.	65.
14	98.	N.A.	N.A.	38.	11:51	2824.	3.
15	1759.	N.A.	N.A.	319.	11:26	2810.	63.
16	495.	N.A.	N.A.	207.	12:32	2796.	18.
17	2093.	N.A.	N.A.	298.	11:15	2779.	75.
18	1436.	N.A.	N.A.	301.	11:20	2765.	52.
19	2056.	N.A.	N.A.	284.	11: 9	2749.	75.
20	1260.	N.A.	N.A.	284.	11: 4	2735.	46.
21	2023.	N.A.	N.A.	284.	11: 5	2718.	74.
22	2122.	N.A.	N.A.	278.	11:16	2705.	78.
23	1938.	N.A.	N.A.	269.	10:50	2688.	72.
24	1883.	N.A.	N.A.	260.	10:54	2675.	70.
25	226.	N.A.	N.A.	59.	16:15	2659.	8.
26	*	N.A.	N.A.	*	*:*	2645.	*
27	*	N.A.	N.A.	*	*:*	2630.	*
28	38.	N.A.	N.A.	9.	9:20	2617.	1.
29	145.	N.A.	N.A.	27.	12:44	2601.	6.
30	1118.	N.A.	N.A.	284.	12:16	2588.	43.
MEAN	1324.	N.A.	N.A.			2804.	
STANDARD DEVIATION	794.	N.A.	N.A.			133.	

ENVIRONMENTAL SUMMARY REPORT

SITE: SUN TECH HOMES  
CHESTER, NEW YORK

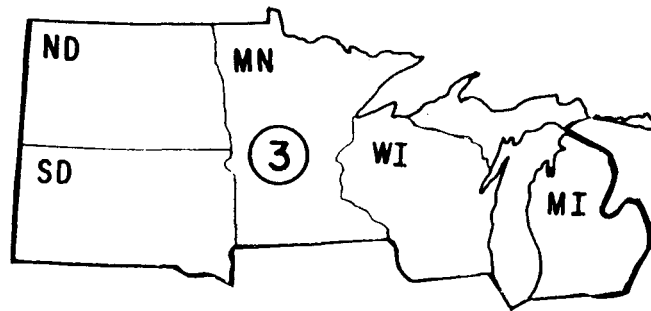
REPORT PERIOD: 80/ 4  
SITE NUMBER: 71

LATITUDE: 41.00 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: EASTERN  
LONGITUDE: 74.00 DEG WEST      PYRANOMETER TILT: 60 DEG      ALTITUDE: 400 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	43.	50.	34.	59.	11:58	28.	5:50	49.
2	36.	36.	36.	38.	0:34	33.	1:54	50.
3	48.	*	48.	48.	23:52	48.	23:57	*
4	47.	45.	47.	49.	21:46	44.	5:49	48.
5	47.	49.	45.	58.	15:27	40.	5:41	52.
6	48.	56.	42.	64.	12:26	37.	5:19	50.
7	48.	58.	37.	64.	13:39	31.	5:12	49.
8	52.	56.	49.	67.	13:38	44.	3:30	52.
9	55.	56.	54.	59.	14:27	52.	1: 7	52.
10	57.	63.	49.	74.	13:23	43.	5:55	54.
11	55.	59.	48.	68.	15:35	43.	23:59	53.
12	55.	61.	50.	72.	13:46	39.	2:34	55.
13	56.	58.	54.	66.	14:26	47.	6:18	52.
14	45.	43.	46.	59.	23:58	39.	7: 3	55.
15	57.	60.	54.	65.	14:27	43.	22:45	56.
16	40.	42.	37.	46.	12:32	29.	23:15	56.
17	42.	49.	35.	62.	16:14	26.	4:35	55.
18	46.	55.	35.	64.	16:14	29.	1:55	54.
19	55.	65.	46.	81.	16:40	30.	5: 1	58.
20	60.	69.	51.	81.	13: 8	40.	5: 6	53.
21	58.	66.	52.	74.	16: 4	40.	23:58	58.
22	47.	55.	39.	63.	14:22	32.	5:13	55.
23	49.	58.	36.	72.	16:47	28.	4:20	60.
24	55.	63.	48.	75.	13:12	39.	4:51	54.
25	55.	58.	52.	67.	13:24	51.	0:36	54.
26	*	*	*	*	*:*	*	*:*	*
27	51.	*	51.	52.	19:57	49.	23:36	56.
28	48.	48.	47.	50.	1:44	44.	23:45	56.
29	47.	48.	46.	50.	13:27	44.	0: 7	56.
30	54.	58.	48.	70.	14:18	48.	5: 4	56.
MEAN	50.	55.	45.					54.
STANDARD DEVIATION	6.0	7.9	6.4					3.0

ZONE 3



ENVIRONMENTAL SUMMARY REPORT

SITE: BASIN ELECTRIC  
BISMARCK, NORTH DAKOTA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 174

LATITUDE: 46.70 DEG NORTH AZIMUTH: 15 DEG TIME ZONE: MOUNTAIN  
LONGITUDE: 100.80 DEG WEST PYRANOMETER TILT: 67 DEG ALTITUDE: 1850 FEET

INSOLATION

DAY	TOTAL	TOTAL DIFF	TOTAL DIR	MAXIMUM TOTAL	EXTRATERRESTRIAL	TTL INS	
	INSOLATION	INSOLATION	INSOLATION	INSOLATION			
	BTU/FT2	BTU/FT2	BTU/FT2	VALUE TIME	BTU/FT2	EXT INS	
				BTU/HR/FT2 HR:MN		PERCENT	
1	651.	N.A.	N.A.	176.	14: 2	2974.	22.
2	1604.	N.A.	N.A.	276.	14: 5	2962.	54.
3	1495.	N.A.	N.A.	286.	14: 9	2953.	51.
4	2039.	N.A.	N.A.	349.	13: 8	2942.	69.
5	1791.	N.A.	N.A.	311.	12:16	2929.	61.
6	1699.	N.A.	N.A.	324.	13:10	2919.	58.
7	74.	N.A.	N.A.	25.	15: 5	2906.	3.
8	362.	N.A.	N.A.	185.	11:59	2895.	13.
9	2131.	N.A.	N.A.	305.	12:25	2881.	74.
10	1692.	N.A.	N.A.	330.	12:21	2870.	59.
11	2095.	N.A.	N.A.	308.	11:58	2859.	73.
12	2091.	N.A.	N.A.	327.	13:15	2844.	74.
13	2103.	N.A.	N.A.	308.	12:53	2832.	74.
14	2078.	N.A.	N.A.	302.	12:20	2820.	74.
15	2075.	N.A.	N.A.	302.	11:38	2806.	74.
16	1675.	N.A.	N.A.	324.	12:52	2793.	60.
17	1899.	N.A.	N.A.	298.	12:44	2778.	68.
18	2015.	N.A.	N.A.	298.	12:37	2766.	73.
19	1923.	N.A.	N.A.	298.	12: 4	2750.	70.
20	2004.	N.A.	N.A.	292.	12:20	2733.	73.
21	1990.	N.A.	N.A.	289.	12:36	2719.	73.
22	1477.	N.A.	N.A.	258.	12:11	2703.	55.
23	2082.	N.A.	N.A.	298.	12:26	2689.	77.
24	2052.	N.A.	N.A.	292.	12:16	2676.	77.
25	1952.	N.A.	N.A.	292.	12:34	2660.	73.
26	1091.	N.A.	N.A.	286.	13:50	2644.	41.
27	1799.	N.A.	N.A.	317.	12:45	2631.	68.
28	1990.	N.A.	N.A.	286.	12:17	2618.	76.
29	2009.	N.A.	N.A.	286.	12:35	2602.	77.
30	1761.	N.A.	N.A.	292.	12:32	2587.	68.
MEAN	1723.	N.A.	N.A.			2791.	
STANDARD DEVIATION	523.	N.A.	N.A.			119.	



ENVIRONMENTAL SUMMARY REPORT

SITE: FIRST BAPTIST CHURCH  
 ABERDEEN, SOUTH DAKOTA

REPORT PERIOD: 80/ 4  
 SITE NUMBER: 153

LATITUDE: 45.27 DEG NORTH AZIMUTH: 0 DEG  
 LONGITUDE: 98.26 DEG WEST PYRANOMETER TILT: 58 DEG  
 TIME ZONE: CENTRAL  
 ALTITUDE: 1296 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	*	N.A.	N.A.	*	*:*	3163.	*
2	*	N.A.	N.A.	*	*:*	3150.	*
3	*	N.A.	N.A.	*	*:*	3141.	*
4	*	N.A.	N.A.	*	*:*	3128.	*
5	2004.	N.A.	N.A.	306.	13:34	3115.	64.
6	1889.	N.A.	N.A.	323.	11:42	3105.	61.
7	125.	N.A.	N.A.	54.	13: 4	3092.	4.
8	149.	N.A.	N.A.	37.	10:44	3080.	5.
9	2400.	N.A.	N.A.	330.	11:59	3067.	78.
10	2250.	N.A.	N.A.	330.	12:17	3056.	74.
11	2255.	N.A.	N.A.	333.	12:25	3043.	74.
12	2349.	N.A.	N.A.	333.	12:44	3033.	77.
13	2411.	N.A.	N.A.	330.	12:23	3020.	80.
14	2409.	N.A.	N.A.	340.	12:30	3007.	80.
15	2410.	N.A.	N.A.	360.	14:29	2996.	80.
16	793.	N.A.	N.A.	195.	11:23	2983.	27.
17	2308.	N.A.	N.A.	319.	12: 2	2970.	78.
18	2400.	N.A.	N.A.	323.	12:44	2959.	81.
19	2163.	N.A.	N.A.	319.	13:15	2946.	73.
20	2280.	N.A.	N.A.	326.	12:27	2936.	78.
21	2339.	N.A.	N.A.	316.	12:31	2923.	80.
22	2106.	N.A.	N.A.	299.	12:13	2909.	72.
23	2463.	N.A.	N.A.	326.	12:10	2896.	85.
24	2336.	N.A.	N.A.	316.	12:46	2886.	81.
25	1998.	N.A.	N.A.	330.	12:51	2873.	70.
26	680.	N.A.	N.A.	205.	13:39	2860.	24.
27	2329.	N.A.	N.A.	319.	12:30	2847.	82.
28	2427.	N.A.	N.A.	323.	12:16	2837.	86.
29	2427.	N.A.	N.A.	326.	12:31	2824.	86.
30	2210.	N.A.	N.A.	343.	11:52	2814.	79.
MEAN	1997.	N.A.	N.A.			2989.	
STANDARD DEVIATION	704.	N.A.	N.A.			107.	

ENVIRONMENTAL SUMMARY REPORT

SITE: FIRST BAPTIST CHURCH  
 ABERDEEN, SOUTH DAKOTA

REPORT PERIOD: 80/ 4  
 SITE NUMBER: 153

LATITUDE: 45.27 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: CENTRAL  
 LONGITUDE: 98.26 DEG WEST      PYRANOMETER TILT: 58 DEG      ALTITUDE: 1296 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	*	*	*	*	*:*	*	*:*	*
2	*	*	*	*	*:*	*	*:*	*
3	*	*	*	*	*:*	*	*:*	*
4	47.	58.	40.	62.	15: 0	31.	23:42	68.
5	47.	54.	40.	67.	15: 5	27.	3:15	74.
6	57.	65.	50.	79.	14:22	38.	6:17	66.
7	43.	43.	43.	50.	0:48	38.	23:27	66.
8	34.	33.	36.	39.	0: 4	32.	6: 7	114.
9	43.	48.	37.	57.	14:39	31.	23:56	82.
10	41.	48.	34.	59.	14: 4	21.	5:32	66.
11	40.	46.	34.	55.	14:44	27.	5:45	69.
12	40.	47.	33.	55.	15:45	25.	5:16	73.
13	40.	47.	33.	55.	14:20	25.	5: 0	68.
14	48.	56.	39.	71.	17:29	23.	4:35	66.
15	48.	55.	41.	69.	15: 1	28.	5:36	75.
16	50.	56.	45.	65.	12:11	39.	23:57	74.
17	55.	67.	44.	83.	10:58	28.	4:39	68.
18	59.	69.	51.	80.	16: 6	33.	5:48	69.
19	65.	76.	55.	89.	15:55	43.	4: 5	61.
20	70.	80.	62.	95.	15:11	47.	4:53	62.
21	73.	84.	62.	98.	14:34	49.	5:24	70.
22	61.	69.	54.	74.	12: 7	48.	4:29	73.
23	54.	61.	47.	72.	14:28	35.	5:30	83.
24	48.	55.	42.	62.	15:21	30.	5:40	75.
25	54.	62.	48.	72.	13:49	35.	3:36	77.
26	55.	56.	54.	63.	14:54	47.	6:33	73.
27	63.	71.	56.	82.	15:18	46.	5:29	72.
28	63.	74.	53.	84.	14:14	41.	5:31	72.
29	61.	70.	53.	80.	12:20	38.	5:56	72.
30	65.	74.	56.	81.	14:22	42.	5:34	85.
MEAN	53.	60.	46.					73.
STANDARD DEVIATION	10.3	12.5	8.9					10.1



ENVIRONMENTAL SUMMARY REPORT

SITE: HOUSTON CONSTRUCTION CO.  
EDEN PRAIRIE, MINNESOTA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 57

LATITUDE: 45.00 DEG NORTH      AZIMUTH: 0 DEG  
LONGITUDE: 93.00 DEG WEST      PYRANOMETER TILT: 60 DEG  
TIME ZONE: CENTRAL  
ALTITUDE: 809 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	41.	44.	38.	51.	13:10	30.	5:37	56.
2	42.	44.	41.	57.	15:57	30.	5:45	48.
3	38.	37.	39.	44.	0: 2	33.	16:39	43.
4	40.	45.	36.	52.	15: 3	30.	5:22	53.
5	46.	51.	40.	60.	12:56	31.	6:11	52.
6	53.	57.	49.	62.	14:36	44.	1:12	51.
7	47.	47.	47.	53.	18: 1	42.	23:38	43.
8	36.	36.	36.	42.	0:42	32.	23:24	63.
9	31.	32.	30.	33.	11:30	27.	22:23	46.
10	32.	34.	31.	38.	17:20	26.	5:35	49.
11	36.	41.	30.	46.	15:17	25.	6:13	43.
12	37.	40.	33.	47.	15:23	28.	5:15	51.
13	32.	34.	30.	37.	16:13	28.	23:57	46.
14	39.	42.	35.	54.	15:20	24.	5:44	57.
15	47.	51.	43.	59.	15:22	36.	23:56	44.
16	49.	54.	43.	63.	14: 4	32.	4:44	65.
17	54.	61.	48.	72.	14:59	41.	5:23	61.
18	60.	66.	53.	75.	15:14	43.	4:45	67.
19	62.	68.	57.	80.	15:15	50.	23:52	71.
20	65.	73.	57.	84.	15: 5	43.	5:39	60.
21	74.	81.	67.	93.	15:27	55.	5:45	64.
22	70.	78.	63.	87.	12:31	51.	23:51	68.
23	53.	56.	50.	64.	15:46	42.	5:43	59.
24	46.	49.	43.	62.	15:33	30.	5:47	63.
25	50.	51.	49.	58.	15:43	41.	5:41	45.
26	51.	53.	49.	57.	14:22	45.	23:58	45.
27	57.	64.	51.	74.	15:52	42.	5:34	52.
28	56.	61.	51.	70.	15:43	39.	5:23	62.
29	57.	61.	53.	69.	13:19	43.	4: 4	58.
30	65.	70.	59.	79.	15:42	48.	3:42	63.
MEAN	49.	53.	45.					55.
STANDARD DEVIATION	11.6	13.5	10.1					8.5



ENVIRONMENTAL SUMMARY REPORT

SITE: HOWARDS GROVE SCHOOL  
HOWARDS GROVE, WISCONSIN

REPORT PERIOD: 80/ 4  
SITE NUMBER: 154

LATITUDE: 43.80 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL  
LONGITUDE: 89.20 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 858 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	40.	45.	34.	52.	12:50	29.	1: 1	N.A.
2	41.	46.	36.	50.	12:41	33.	5:35	N.A.
3	35.	35.	34.	39.	8:39	32.	13: 5	N.A.
4	39.	42.	36.	51.	14:53	32.	1:22	N.A.
5	47.	53.	40.	60.	14:56	35.	3: 2	N.A.
6	47.	51.	44.	57.	10:14	39.	5:20	N.A.
7	45.	45.	44.	50.	12:50	41.	16:55	N.A.
8	*	*	*	*	*:*	*	*:*	N.A.
9	35.	36.	35.	36.	17: 4	34.	22: 0	N.A.
10	39.	42.	37.	49.	13:23	34.	23:47	N.A.
11	35.	*	35.	36.	2: 8	33.	0:30	N.A.
12	*	*	*	*	*:*	*	*:*	N.A.
13	*	*	*	*	*:*	*	*:*	N.A.
14	*	*	*	*	*:*	*	*:*	N.A.
15	*	*	*	*	*:*	*	*:*	N.A.
16	*	*	*	*	*:*	*	*:*	N.A.
17	*	*	*	*	*:*	*	*:*	N.A.
18	*	*	*	*	*:*	*	*:*	N.A.
19	*	*	*	*	*:*	*	*:*	N.A.
20	50.	55.	48.	57.	16:21	46.	23:39	N.A.
21	58.	68.	50.	78.	11:15	44.	0:35	N.A.
22	75.	86.	66.	92.	12:45	50.	1:44	N.A.
23	47.	52.	42.	60.	15:21	30.	23:53	N.A.
24	33.	35.	32.	39.	16: 1	26.	4:47	N.A.
25	41.	45.	37.	52.	11:56	35.	5:20	N.A.
26	45.	48.	43.	53.	16: 4	32.	2:50	N.A.
27	47.	50.	45.	57.	9:55	42.	23:22	N.A.
28	*	*	*	*	*:*	*	*:*	N.A.
29	*	*	*	*	*:*	*	*:*	N.A.
30	*	*	*	*	*:*	*	*:*	N.A.
MEAN	44.	49.	41.					N.A.
STANDARD DEVIATION	10.0	12.5	8.0					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: HOWARDS GROVE SCHOOL  
HOWARDS GROVE, WISCONSIN

REPORT PERIOD: 80/ 4  
SITE NUMBER: 154

LATITUDE: 43.80 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL  
LONGITUDE: 89.20 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 858 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	*	1.	*	3.	9.	*	13:54
2	225.	3.	225.	5.	18.	231.	14:49
3	231.	8.	241.	9.	23.	230.	15:56
4	141.	10.	135.	10.	21.	183.	3:46
5	102.	8.	103.	11.	22.	121.	11:34
6	353.	4.	358.	6.	16.	40.	7:18
7	345.	4.	339.	3.	11.	343.	7: 8
8	*	*	*	*	*	*	*:*
9	202.	3.	238.	5.	8.	192.	22:13
10	101.	7.	103.	9.	15.	113.	11:53
11	88.	3.	*	0.	7.	87.	1:38
12	*	*	*	*	*	*	*:*
13	*	*	*	*	*	*	*:*
14	*	*	*	*	*	*	*:*
15	*	*	*	*	*	*	*:*
16	*	*	*	*	*	*	*:*
17	*	*	*	*	*	*	*:*
18	*	*	*	*	*	*	*:*
19	*	*	*	*	*	*	*:*
20	*	0.	*	2.	8.	*	16:25
21	354.	4.	346.	6.	15.	336.	14:18
22	81.	10.	60.	11.	28.	180.	22: 4
23	173.	10.	154.	11.	23.	229.	17:12
24	172.	7.	162.	8.	18.	198.	3:43
25	*	1.	*	2.	12.	*	14:17
26	212.	4.	224.	6.	15.	227.	17:38
27	199.	7.	207.	8.	24.	225.	12:12
28	*	*	*	*	*	*	*:*
29	*	*	*	*	*	*	*:*
30	*	*	*	*	*	*	*:*
MEAN	199.	5.	207.	7.			
STANDARD DEVIATION	92.9	3.2	94.2	3.2			



ENVIRONMENTAL SUMMARY REPORT

SITE: SOUTH DAKOTA SCHOOL OF MINES  
KEYSTONE, SOUTH DAKOTA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 15

LATITUDE: 43.90 DEG NORTH AZIMUTH: -19 DEG  
LONGITUDE: 103.50 DEG WEST PYRANOMETER TILT: 46 DEG  
TIME ZONE: MOUNTAIN  
ALTITUDE: 5265 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	211.	N.A.	N.A.	42.	9:41	3263.	6.
2	407.	N.A.	N.A.	140.	9:24	3259.	12.
3	624.	N.A.	N.A.	311.	14: 3	3261.	19.
4	1929.	N.A.	N.A.	395.	12:23	3257.	59.
5	1725.	N.A.	N.A.	332.	11:21	3259.	53.
6	797.	N.A.	N.A.	231.	15:53	3254.	24.
7	587.	N.A.	N.A.	280.	9:56	3256.	18.
8	2295.	N.A.	N.A.	343.	12:42	3251.	71.
9	1649.	N.A.	N.A.	353.	13:17	3251.	51.
10	399.	N.A.	N.A.	115.	8:45	3246.	12.
11	1086.	N.A.	N.A.	318.	14:34	3246.	33.
12	1111.	N.A.	N.A.	353.	13: 2	3241.	34.
13	2070.	N.A.	N.A.	378.	12:46	3241.	64.
14	2299.	N.A.	N.A.	332.	12:46	3235.	71.
15	784.	N.A.	N.A.	203.	13:12	3234.	24.
16	1332.	N.A.	N.A.	318.	14:17	3229.	41.
17	2275.	N.A.	N.A.	325.	12:41	3227.	71.
18	2240.	N.A.	N.A.	325.	12:36	3221.	70.
19	2193.	N.A.	N.A.	318.	12:20	3220.	68.
20	2235.	N.A.	N.A.	325.	12:31	3214.	70.
21	1874.	N.A.	N.A.	325.	13:30	3211.	58.
22	1997.	N.A.	N.A.	325.	12:34	3205.	62.
23	1492.	N.A.	N.A.	322.	12:25	3202.	47.
24	2274.	N.A.	N.A.	325.	12:14	3199.	71.
25	1603.	N.A.	N.A.	346.	13:52	3193.	50.
26	334.	N.A.	N.A.	122.	11:10	3190.	10.
27	1617.	N.A.	N.A.	374.	12:32	3183.	51.
28	2194.	N.A.	N.A.	315.	12:21	3177.	69.
29	1644.	N.A.	N.A.	322.	11:38	3170.	52.
30	1873.	N.A.	N.A.	360.	13: 4	3164.	59.
MEAN	1505.	N.A.	N.A.			3225.	
STANDARD DEVIATION	696.	N.A.	N.A.			30.	

ENVIRONMENTAL SUMMARY REPORT

SITE: SOUTH DAKOTA SCHOOL OF MINES  
KEYSTONE, SOUTH DAKOTA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 15

LATITUDE: 43.90 DEG NORTH AZIMUTH: -19 DEG TIME ZONE: MOUNTAIN  
LONGITUDE: 103.50 DEG WEST PYRANOMETER TILT: 46 DEG ALTITUDE: 5265 FEET

TEMPERATURES IN DEGRÉES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	27.	29.	26.	32.	15:42	25.	0:11	N.A.
2	27.	29.	25.	33.	11: 5	24.	5:34	N.A.
3	28.	31.	26.	38.	14:35	23.	23:51	N.A.
4	38.	47.	31.	58.	14:15	21.	1:38	N.A.
5	46.	54.	39.	65.	14: 1	31.	2:54	N.A.
6	43.	47.	40.	65.	8:20	35.	23:48	N.A.
7	36.	39.	33.	52.	9: 2	29.	5:45	N.A.
8	36.	42.	31.	48.	14:55	27.	5:40	N.A.
9	41.	48.	34.	*	9:10	*	8:54	N.A.
10	33.	34.	32.	45.	7:35	27.	21:36	N.A.
11	29.	31.	27.	35.	14:34	26.	3:17	N.A.
12	31.	35.	28.	44.	14:16	25.	4:56	N.A.
13	38.	44.	31.	51.	14:17	28.	23:53	N.A.
14	49.	58.	41.	66.	14:17	28.	0:20	N.A.
15	45.	54.	36.	63.	10:11	30.	5: 1	N.A.
16	42.	46.	39.	53.	14:17	35.	0:15	N.A.
17	56.	66.	46.	74.	13:56	42.	1: 8	N.A.
18	64.	73.	56.	82.	13:40	49.	1:35	N.A.
19	65.	74.	55.	81.	14:18	50.	5: 3	N.A.
20	72.	81.	63.	87.	14: 2	56.	1: 3	N.A.
21	74.	81.	66.	89.	15:52	62.	1:57	N.A.
22	56.	58.	55.	71.	2: 0	40.	23:53	N.A.
23	44.	51.	38.	61.	15:21	31.	4:46	N.A.
24	46.	55.	37.	62.	12:46	34.	4:51	N.A.
25	43.	48.	38.	58.	13:46	32.	5: 4	N.A.
26	42.	43.	41.	50.	11:10	38.	20:20	N.A.
27	46.	54.	39.	63.	15:23	37.	5: 2	N.A.
28	56.	68.	44.	76.	13:41	37.	0:43	N.A.
29	59.	68.	49.	76.	11:38	45.	4:15	N.A.
30	55.	65.	46.	78.	12:26	40.	4:53	N.A.
MEAN	46.	52.	40.					N.A.
STANDARD DEVIATION	12.8	15.1	11.0					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: TELEX COMMUNICATIONS  
BLUE EARTH, MINNESOTA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 167

LATITUDE: 44.00 DEG NORTH  
LONGITUDE: 94.25 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 55 DEG

TIME ZONE: CENTRAL  
ALTITUDE: 1150 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	501.	N.A.	N.A.	150.	13:10	3193.	16.
2	1758.	N.A.	N.A.	309.	12: 1	3182.	55.
3	295.	N.A.	N.A.	69.	11:37	3173.	9.
4	2270.	N.A.	N.A.	322.	11:50	3162.	72.
5	1856.	N.A.	N.A.	322.	12:42	3153.	59.
6	1894.	N.A.	N.A.	309.	12:37	3141.	60.
7	293.	N.A.	N.A.	162.	9: 3	3129.	9.
8	59.	N.A.	N.A.	19.	13:57	3118.	2.
9	403.	N.A.	N.A.	97.	10:25	3109.	13.
10	826.	N.A.	N.A.	234.	10: 7	3097.	27.
11	1190.	N.A.	N.A.	181.	10:18	3085.	39.
12	2099.	N.A.	N.A.	331.	12:15	3073.	68.
13	610.	N.A.	N.A.	234.	9:40	3063.	20.
14	2155.	N.A.	N.A.	315.	12:21	3051.	71.
15	2150.	N.A.	N.A.	325.	11:42	3042.	71.
16	1284.	N.A.	N.A.	281.	11:29	3030.	42.
17	1953.	N.A.	N.A.	293.	12: 9	3017.	65.
18	2008.	N.A.	N.A.	293.	12: 9	3005.	67.
19	1924.	N.A.	N.A.	287.	11:57	2996.	64.
20	1916.	N.A.	N.A.	278.	11:36	2983.	64.
21	2011.	N.A.	N.A.	287.	12: 7	2971.	68.
22	1970.	N.A.	N.A.	284.	11:39	2959.	67.
23	2056.	N.A.	N.A.	297.	11:34	2950.	70.
24	2090.	N.A.	N.A.	287.	11:44	2938.	71.
25	653.	N.A.	N.A.	240.	12:22	2928.	22.
26	888.	N.A.	N.A.	228.	11:16	2916.	30.
27	1927.	N.A.	N.A.	303.	11:46	2904.	66.
28	2001.	N.A.	N.A.	287.	12:13	2892.	69.
29	1657.	N.A.	N.A.	300.	12: 4	2880.	58.
30	1515.	N.A.	N.A.	300.	12: 9	2871.	53.
MEAN	1474.	N.A.	N.A.			3034.	
STANDARD DEVIATION	700.	N.A.	N.A.			99.	

ENVIRONMENTAL SUMMARY REPORT

SITE: TELEX COMMUNICATIONS  
BLUE EARTH, MINNESOTA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 167

LATITUDE: 44.00 DEG NORTH  
LONGITUDE: 94.25 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 55 DEG

TIME ZONE: CENTRAL  
ALTITUDE: 1150 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	39.	42.	37.	49.	13:21	32.	5:37	70.
2	42.	47.	37.	55.	13:21	28.	5:48	71.
3	34.	33.	36.	42.	1: 2	31.	6:22	71.
4	36.	39.	34.	48.	16:58	25.	6:20	73.
5	47.	52.	42.	60.	15:38	33.	5: 3	75.
6	55.	60.	51.	68.	15:16	46.	1:41	77.
7	47.	47.	47.	52.	0: 4	42.	6:28	77.
8	36.	36.	37.	43.	0:32	31.	23:19	76.
9	32.	33.	31.	35.	10:20	28.	21:57	73.
10	33.	34.	31.	39.	17:24	28.	0:21	72.
11	37.	42.	33.	47.	14:39	29.	4: 4	73.
12	37.	40.	34.	48.	15:43	29.	5:35	72.
13	32.	34.	31.	37.	9:40	28.	5:40	70.
14	37.	40.	34.	50.	16:27	25.	5:47	72.
15	44.	50.	39.	58.	15:58	32.	23:51	75.
16	48.	55.	42.	66.	15:35	29.	5:21	76.
17	57.	63.	51.	73.	14:17	45.	4:41	76.
18	57.	65.	51.	73.	15:32	41.	5:29	75.
19	60.	67.	54.	78.	15:25	46.	5: 7	78.
20	66.	75.	57.	88.	15:56	40.	4:35	77.
21	73.	83.	64.	93.	16:12	54.	2:20	80.
22	70.	80.	61.	87.	11:18	52.	23:56	81.
23	52.	56.	48.	63.	16:28	42.	21:31	76.
24	43.	45.	41.	57.	15:44	31.	5:36	76.
25	45.	49.	41.	53.	12:54	35.	4: 1	76.
26	49.	52.	46.	57.	15:27	38.	0:47	74.
27	55.	61.	50.	71.	16:50	38.	5: 8	75.
28	53.	60.	46.	69.	14:48	35.	5:17	75.
29	54.	61.	48.	70.	13:40	38.	3:48	75.
30	61.	67.	55.	76.	14:23	43.	5:13	77.
MEAN	48.	52.	44.					75.
STANDARD DEVIATION	11.5	14.0	9.3					2.7

ENVIRONMENTAL SUMMARY REPORT

SITE: TELEX COMMUNICATIONS  
BLUE EARTH, MINNESOTA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 167

LATITUDE: 44.00 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: CENTRAL  
LONGITUDE: 94.25 DEG WEST      PYRANOMETER TILT: 55 DEG      ALTITUDE: 1150 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	206.	6.	207.	9.	18.	170.	14:19
2	204.	4.	204.	7.	17.	195.	12:49
3	165.	14.	159.	16.	25.	176.	9: 7
4	88.	7.	87.	9.	19.	84.	13:48
5	17.	6.	33.	7.	18.	43.	13: 3
6	344.	11.	6.	13.	31.	38.	10:50
7	39.	9.	38.	11.	22.	46.	10:44
8	124.	13.	124.	14.	25.	95.	16:11
9	121.	14.	120.	13.	31.	119.	3:45
10	120.	5.	118.	7.	14.	115.	12:10
11	109.	6.	116.	8.	22.	128.	18: 3
12	113.	12.	111.	15.	26.	121.	15:59
13	158.	8.	150.	10.	20.	150.	9:24
14	133.	10.	135.	14.	23.	139.	13:20
15	125.	9.	127.	13.	23.	127.	11:58
16	298.	6.	298.	8.	20.	285.	15:45
17	*	2.	*	2.	13.	*	14:28
18	41.	8.	46.	12.	21.	37.	14:39
19	62.	7.	82.	9.	19.	49.	8:40
20	345.	5.	9.	6.	14.	310.	17:11
21	22.	9.	34.	13.	25.	61.	13:22
22	101.	12.	97.	15.	25.	111.	16:43
23	146.	11.	146.	12.	21.	133.	0:38
24	162.	9.	161.	11.	23.	165.	7: 2
25	163.	6.	168.	10.	18.	187.	8: 0
26	162.	8.	162.	11.	21.	160.	11: 1
27	143.	8.	138.	12.	21.	138.	13: 6
28	153.	7.	155.	10.	20.	148.	10:42
29	169.	6.	171.	10.	24.	170.	12:52
30	180.	6.	177.	10.	20.	205.	15: 0
MEAN	145.	8.	123.	11.			
STANDARD DEVIATION	80.9	3.0	65.0	3.1			



ENVIRONMENTAL SUMMARY REPORT

SITE: ZIEN MECHANICAL  
MILWAUKEE, WISCONSIN

REPORT PERIOD: 80/ 4  
SITE NUMBER: 184

LATITUDE: 43.00 DEG NORTH  
LONGITUDE: 88.00 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 53 DEG

TIME ZONE: CENTRAL  
ALTITUDE: 750 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1411.	N.A.	N.A.	314.	10: 6	3211.	44.
2	2146.	N.A.	N.A.	317.	11:41	3200.	67.
3	21.	N.A.	N.A.	18.	8:45	3189.	1.
4	1735.	N.A.	N.A.	352.	10:14	3181.	55.
5	2237.	N.A.	N.A.	317.	11:52	3170.	71.
6	576.	N.A.	N.A.	217.	13:20	3162.	18.
7	611.	N.A.	N.A.	297.	11: 7	3151.	19.
8	467.	N.A.	N.A.	244.	9:45	3140.	15.
9	302.	N.A.	N.A.	109.	10:42	3129.	10.
10	811.	N.A.	N.A.	241.	12:10	3117.	26.
11	1367.	N.A.	N.A.	317.	11:43	3109.	44.
12	973.	N.A.	N.A.	294.	10:33	3097.	31.
13	946.	N.A.	N.A.	258.	9:13	3086.	31.
14	125.	N.A.	N.A.	29.	10:19	3074.	4.
15	1199.	N.A.	N.A.	261.	9:37	3066.	39.
16	2052.	N.A.	N.A.	326.	11:34	3054.	67.
17	1221.	N.A.	N.A.	276.	11: 8	3045.	40.
18	1928.	N.A.	N.A.	299.	12:18	3034.	64.
19	1742.	N.A.	N.A.	279.	10:33	3022.	58.
20	1841.	N.A.	N.A.	297.	12:18	3010.	61.
21	2013.	N.A.	N.A.	291.	11:30	2999.	67.
22	2043.	N.A.	N.A.	288.	11:53	2990.	68.
23	2258.	N.A.	N.A.	302.	11:28	2978.	76.
24	620.	N.A.	N.A.	258.	9: 9	2967.	21.
25	661.	N.A.	N.A.	206.	11:58	2955.	22.
26	720.	N.A.	N.A.	241.	14: 0	2943.	24.
27	286.	N.A.	N.A.	85.	10:23	2935.	10.
28	88.	N.A.	N.A.	68.	8:39	2923.	3.
29	427.	N.A.	N.A.	164.	12: 1	2915.	15.
30	715.	N.A.	N.A.	167.	12:15	2903.	25.
MEAN	1118.	N.A.	N.A.			3059.	
STANDARD DEVIATION	725.	N.A.	N.A.			94.	

ENVIRONMENTAL SUMMARY REPORT

SITE: ZIEN MECHANICAL  
MILWAUKEE, WISCONSIN

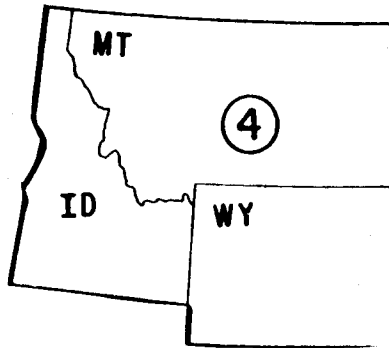
REPORT PERIOD: 80/ 4  
SITE NUMBER: 184

LATITUDE: 43.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL  
LONGITUDE: 88.00 DEG WEST PYRANOMETER TILT: 53 DEG ALTITUDE: 750 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	38.	42.	34.	48.	10:27	28.	2:27	59.
2	42.	47.	36.	54.	13:44	34.	20: 3	59.
3	36.	37.	36.	40.	6:53	32.	23:44	60.
4	39.	42.	36.	51.	15:39	31.	5:15	59.
5	47.	53.	41.	61.	15:20	33.	5: 1	59.
6	51.	55.	47.	63.	13:36	40.	1: 1	59.
7	49.	54.	46.	64.	15:23	40.	23:58	59.
8	48.	52.	44.	57.	12:57	37.	23:52	59.
9	35.	35.	35.			31.	6:53	58.
10	37.	38.	35.	43.	11:59	33.	0:31	58.
11	37.	41.	34.	50.	11: 1	32.	21:24	59.
12	36.	39.	34.	42.	14:59	30.	23:53	59.
13	32.	34.	31.	37.	13:31	27.	5: 7	59.
14	32.	32.	32.	33.	7:33	31.	9: 9	59.
15	37.	41.	33.	47.	16: 6	28.	23:50	59.
16	34.	38.	30.	44.	11:29	26.	4:43	60.
17	46.	52.	41.	62.	16:23	29.	1:54	62.
18	59.	66.	53.	72.	15:46	47.	4:55	61.
19	61.	67.	56.	72.	16:14	49.	4:35	57.
20	53.	58.	50.	64.	13:54	44.	23:19	59.
21	61.	68.	56.	80.	14:20	44.	2:26	59.
22	76.	83.	69.	90.	15: 5	61.	1:51	64.
23	50.	54.	45.	61.	0: 0	33.	23:39	61.
24	34.	35.	33.	39.	18:44	27.	3:23	60.
25	40.	42.	37.	48.	15:32	34.	0:14	61.
26	43.	46.	40.	51.	14:48	32.	3:20	59.
27	45.	46.	44.	52.	9:30	41.	20:44	58.
28	44.	45.	44.	47.	9:16	40.	1:32	59.
29	47.	47.	46.	51.	14:20	44.	5:48	59.
30	50.	52.	48.	59.	15:16	44.	1:13	60.
MEAN	45.	48.	42.					59.
STANDARD DEVIATION	10.3	11.7	9.1					1.3

ZONE 4



ENVIRONMENTAL SUMMARY REPORT

SITE: BILLINGS SHIPPING  
BILLINGS, MONTANA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 195

LATITUDE: 45.48 DEG NORTH AZIMUTH: 0 DEG  
LONGITUDE: 108.32 DEG WEST PYRANOMETER TILT: 50 DEG  
TIME ZONE: MOUNTAIN  
ALTITUDE: 3567 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	656.	N.A.	N.A.	178.	12:28	3287.	20.
2	454.	N.A.	N.A.	234.	14:44	3281.	14.
3	1606.	N.A.	N.A.	377.	12: 8	3274.	49.
4	2451.	N.A.	N.A.	340.	12:11	3267.	75.
5	1351.	N.A.	N.A.	383.	13:44	3259.	41.
6	1922.	N.A.	N.A.	346.	12:14	3252.	59.
7	1337.	N.A.	N.A.	355.	12:53	3245.	41.
8	2402.	N.A.	N.A.	346.	11:39	3237.	74.
9	1416.	N.A.	N.A.	324.	11:33	3229.	44.
10	1364.	N.A.	N.A.	349.	13:36	3222.	42.
11	1951.	N.A.	N.A.	371.	11:21	3217.	61.
12	1455.	N.A.	N.A.	361.	12:19	3209.	45.
13	2416.	N.A.	N.A.	340.	12: 8	3201.	75.
14	2215.	N.A.	N.A.	324.	12:15	3193.	69.
15	868.	N.A.	N.A.	246.	9:39	3185.	27.
16	2390.	N.A.	N.A.	330.	11:59	3176.	75.
17	2398.	N.A.	N.A.	333.	12:13	3168.	76.
18	1442.	N.A.	N.A.	277.	13:59	3160.	46.
19	2133.	N.A.	N.A.	312.	11:36	3151.	68.
20	2290.	N.A.	N.A.	321.	12:14	3143.	73.
21	1963.	N.A.	N.A.	315.	11:57	3137.	63.
22	1962.	N.A.	N.A.	308.	12: 0	3129.	63.
23	2158.	N.A.	N.A.	321.	12: 3	3120.	69.
24	1882.	N.A.	N.A.	333.	12:10	3111.	60.
25	2441.	N.A.	N.A.	333.	11:34	3103.	79.
26	2295.	N.A.	N.A.	318.	11:54	3097.	74.
27	2250.	N.A.	N.A.	312.	11:48	3089.	73.
28	2060.	N.A.	N.A.	312.	12: 6	3080.	67.
29	1927.	N.A.	N.A.	321.	11:52	3071.	63.
30	1368.	N.A.	N.A.	321.	11:49	3063.	45.
MEAN	1827.	N.A.	N.A.			3178.	
STANDARD DEVIATION	549.	N.A.	N.A.			68.	

ENVIRONMENTAL SUMMARY REPORT

SITE: BILLINGS SHIPPING  
BILLINGS, MONTANA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 195

LATITUDE: 45.48 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: MOUNTAIN  
LONGITUDE: 108.32 DEG WEST      PYRANOMETER TILT: 50 DEG      ALTITUDE: 3567 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	36.	38.	34.	45.	16: 1	31.	3:29	N.A.
2	35.	36.	33.	45.	14:50	32.	19: 4	N.A.
3	39.	43.	34.	57.	15:14	30.	23:44	N.A.
4	44.	51.	37.	62.	16: 5	28.	1:15	N.A.
5	48.	54.	43.	69.	15:52	32.	5:28	N.A.
6	48.	52.	43.	60.	14:29	39.	23:28	N.A.
7	41.	45.	38.	52.	14:29	33.	23:55	N.A.
8	42.	48.	36.	59.	15: 7	26.	5:52	N.A.
9	50.	56.	43.	66.	11:33	32.	3:33	N.A.
10	45.	49.	42.	59.	14:34	39.	5:52	N.A.
11	42.	46.	38.	56.	15: 5	33.	23:36	N.A.
12	43.	49.	37.	61.	14:43	29.	5:18	N.A.
13	52.	59.	45.	71.	16:42	32.	4:14	N.A.
14	60.	68.	53.	81.	13:25	42.	5:57	N.A.
15	53.	56.	49.	64.	8:56	43.	23:59	N.A.
16	55.	62.	48.	72.	16:36	39.	2:55	N.A.
17	61.	71.	51.	82.	15:57	38.	4:24	N.A.
18	63.	72.	54.	90.	15:51	45.	4:34	N.A.
19	65.	74.	55.	89.	15:10	40.	4:46	N.A.
20	71.	81.	60.	95.	15:57	46.	5:12	N.A.
21	70.	79.	61.	95.	14:11	49.	3:25	N.A.
22	58.	60.	56.	68.	15: 6	48.	7:28	N.A.
23	59.	65.	53.	78.	14:22	44.	4:46	N.A.
24	63.	70.	56.	81.	12:26	43.	5:46	N.A.
25	59.	65.	54.	76.	14:25	42.	5:16	N.A.
26	60.	67.	53.	75.	13:51	43.	4:52	N.A.
27	62.	69.	55.	81.	15:18	43.	5:30	N.A.
28	65.	75.	55.	90.	14:24	41.	4:54	N.A.
29	68.	76.	60.	89.	13:39	48.	5:17	N.A.
30	61.	67.	56.	79.	12:53	48.	5: 9	N.A.
MEAN	54.	60.	48.					N.A.
STANDARD DEVIATION	10.5	12.5	8.9					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: DESIGN CONSTRUCTION  
BIGFORK, MONTANA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 76

LATITUDE: 48.00 DEG NORTH  
LONGITUDE: 107.00 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 45 DEG

TIME ZONE: MOUNTAIN  
ALTITUDE: 2284 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	424.	N.A.	N.A.	78.	13: 8	3339.	13.
2	886.	N.A.	N.A.	194.	12:48	3338.	27.
3	*	N.A.	N.A.	*	*:*	3336.	*
4	*	N.A.	N.A.	*	*:*	3334.	*
5	680.	N.A.	N.A.	194.	13:32	3332.	20.
6	659.	N.A.	N.A.	374.	13:44	3330.	20.
7	553.	N.A.	N.A.	278.	13:34	3328.	17.
8	1062.	N.A.	N.A.	370.	12:14	3326.	32.
9	167.	N.A.	N.A.	48.	11:49	3323.	5.
10	*	N.A.	N.A.	*	*:*	3321.	*
11	1931.	N.A.	N.A.	326.	12:22	3318.	58.
12	2012.	N.A.	N.A.	326.	13: 1	3315.	61.
13	1944.	N.A.	N.A.	323.	12:18	3309.	59.
14	1380.	N.A.	N.A.	323.	13:20	3306.	42.
15	163.	N.A.	N.A.	41.	14:13	3303.	5.
16	2228.	N.A.	N.A.	323.	12:25	3299.	68.
17	1965.	N.A.	N.A.	333.	12:24	3296.	60.
18	2243.	N.A.	N.A.	319.	12:21	3292.	68.
19	*	N.A.	N.A.	*	*:*	3288.	*
20	*	N.A.	N.A.	*	*:*	3285.	*
21	*	N.A.	N.A.	*	*:*	3278.	*
22	1692.	N.A.	N.A.	272.	12:40	3274.	52.
23	*	N.A.	N.A.	*	*:*	3270.	*
24	95.	N.A.	N.A.	44.	15:38	3266.	3.
25	*	N.A.	N.A.	*	*:*	3261.	*
26	*	N.A.	N.A.	*	*:*	3257.	*
27	*	N.A.	N.A.	*	*:*	3253.	*
28	*	N.A.	N.A.	*	*:*	3248.	*
29	*	N.A.	N.A.	*	*:*	3244.	*
30	1013.	N.A.	N.A.	346.	12:39	3239.	31.
MEAN	1172.	N.A.	N.A.			3297.	
STANDARD DEVIATION	761.	N.A.	N.A.			32.	

ENVIRONMENTAL SUMMARY REPORT

SITE: DESIGN CONSTRUCTION  
BIGFORK, MONTANA

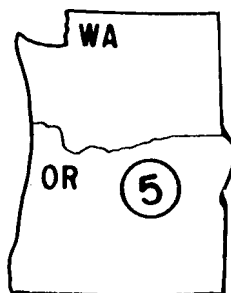
REPORT PERIOD: 80/ 4  
SITE NUMBER: 76

LATITUDE: 48.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN  
LONGITUDE: 107.00 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 2284 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	34.	36.	32.	41.	13: 8	27.	5:30	61.
2	37.	41.	33.	47.	14:35	30.	20:35	62.
3	38.	45.	33.	49.	15:31	24.	5:55	60.
4	38.	43.	35.	53.	15:46	28.	2:47	66.
5	39.	43.	35.	57.	16:50	27.	5:27	60.
6	36.	38.	35.	45.	12:55	31.	19:37	55.
7	35.	37.	33.	45.	14:22	27.	22:54	58.
8	34.	38.	31.	45.	13:13	23.	5:45	65.
9	35.	36.	32.	41.	10:23	28.	5:46	59.
10	35.	36.	34.	38.	11:17	33.	19:34	57.
11	38.	42.	34.	51.	17:42	29.	23:36	62.
12	40.	46.	34.	56.	17:54	26.	6: 5	58.
13	45.	50.	39.	67.	17:41	27.	5:17	54.
14	47.	52.	41.	64.	16:16	34.	5: 9	65.
15	42.	43.	42.	47.	17:56	39.	2:39	64.
16	46.	51.	40.	64.	17:28	30.	5:56	65.
17	50.	56.	44.	73.	15:57	29.	5:54	63.
18	57.	61.	52.	68.	16:31	45.	23:16	70.
19	48.	49.	42.	71.	17:18	35.	6: 6	67.
20	62.	67.	55.	78.	15: 3	40.	5:50	61.
21	59.	62.	56.	78.	14:47	48.	5:54	61.
22	55.	60.	51.	75.	15:36	45.	4:14	73.
23	51.	52.	51.	67.	17:21	41.	5: 0	66.
24	49.	50.	49.	56.	15:32	45.	5:19	67.
25	50.	54.	48.	63.	17:20	45.	23:26	67.
26	51.	55.	48.	73.	17: 2	38.	5:40	63.
27	52.	60.	41.	78.	16:48	39.	3:26	72.
28	64.	71.	61.	78.	16:43	46.	1:31	75.
29	46.	48.	44.	56.	4:53	35.	21:59	70.
30	39.	40.	39.	47.	17: 2	31.	6: 4	68.
MEAN	45.	49.	41.					64.
STANDARD DEVIATION	8.8	9.6	8.3					5.2

ZONE 5



ENVIRONMENTAL SUMMARY REPORT

SITE: LANDURA CORPORATION  
STAYTON, OREGON

REPORT PERIOD: 80/ 4  
SITE NUMBER: 156

LATITUDE: 45.00 DEG NORTH  
LONGITUDE: 123.00 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 89 DEG

TIME ZONE: PACIFIC  
ALTITUDE: 1000 FEET

INSOLATION

DAY	TOTAL GLOBAL INSOLATION BTU/FT2	PYRANOMETER TILT89 DEG INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1076.	623.	N.A.	243.	12:50	2139.	50.
2	1607.	1186.	N.A.	269.	13:44	2113.	76.
3	1092.	646.	N.A.	214.	10: 9	2087.	52.
4	875.	506.	N.A.	210.	9:52	2060.	42.
5	710.	339.	N.A.	285.	10:52	2035.	35.
6	651.	297.	N.A.	282.	10:46	2007.	32.
7	806.	323.	N.A.	155.	12: 5	1982.	41.
8	411.	135.	N.A.	120.	12: 7	1956.	21.
9	1027.	527.	N.A.	304.	13:47	1931.	53.
10	1451.	869.	N.A.	304.	11:38	1905.	76.
11	1822.	1141.	N.A.	275.	12: 0	1880.	97.
12	1977.	1259.	N.A.	262.	12: 1	1854.	107.
13	1536.	911.	N.A.	295.	12:17	1830.	84.
14	576.	227.	N.A.	230.	9:18	1805.	32.
15	1786.	1075.	N.A.	269.	11:50	1781.	100.
16	1911.	1164.	N.A.	256.	11:40	1756.	109.
17	1341.	681.	N.A.	262.	11: 9	1733.	77.
18	1602.	853.	N.A.	278.	11:25	1709.	94.
19	471.	170.	N.A.	207.	10:46	1686.	28.
20	414.	133.	N.A.	155.	10: 3	1662.	25.
21	830.	327.	N.A.	220.	13:39	1641.	51.
22	1052.	495.	N.A.	288.	11:21	1617.	65.
23	1675.	903.	N.A.	291.	12:16	1594.	105.
24	1248.	553.	N.A.	320.	13:20	1573.	79.
25	1818.	955.	N.A.	262.	12:18	1551.	117.
26	2021.	1038.	N.A.	265.	12:31	1530.	132.
27	2054.	1024.	N.A.	265.	11:48	1508.	136.
28	1038.	483.	N.A.	298.	12:37	1489.	70.
29	1401.	622.	N.A.	324.	11: 0	1468.	95.
30	2158.	1031.	N.A.	275.	11:42	1448.	149.
MEAN	1281.	683.	N.A.			1778.	
STANDARD DEVIATION	536.	349.	N.A.			211.	

ENVIRONMENTAL SUMMARY REPORT

SITE: LANDURA CORPORATION  
STAYTON, OREGON

REPORT PERIOD: 80/ 4  
SITE NUMBER: 156

LATITUDE: 45.00 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: PACIFIC  
LONGITUDE: 123.00 DEG WEST      PYRANOMETER TILT: 89 DEG      ALTITUDE: 1000 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	41.	45.	38.	53.	15: 9	30.	5:28	68.
2	46.	53.	40.	63.	14:37	32.	2:21	69.
3	47.	53.	42.	58.	13:21	36.	5:58	71.
4	50.	56.	45.	66.	10:24	40.	4:32	72.
5	45.	47.	43.	56.	11:50	41.	23:13	71.
6	38.	39.	37.	47.	14:24	33.	7:50	68.
7	43.	47.	40.	52.	15:17	32.	0:21	67.
8	50.	51.	49.	55.	12:50	45.	5:43	69.
9	46.	48.	44.	54.	13:15	39.	22:39	70.
10	46.	51.	42.	59.	14:44	38.	23:55	68.
11	52.	59.	46.	71.	16:16	32.	5:41	69.
12	61.	68.	55.	78.	15:50	43.	5:15	73.
13	61.	69.	56.	78.	16:25	49.	5:42	76.
14	50.	52.	49.	58.	9:18	43.	23:50	77.
15	51.	57.	46.	61.	12:22	39.	23:45	76.
16	55.	65.	47.	76.	14:52	36.	5:26	77.
17	53.	58.	49.	65.	16:45	42.	4:56	78.
18	58.	65.	52.	73.	13: 6	44.	5:12	78.
19	54.	58.	51.	67.	10:51	47.	23:29	79.
20	47.	48.	46.	52.	8:43	43.	23:53	77.
21	47.	49.	45.	56.	14:17	42.	2:27	76.
22	51.	56.	47.	65.	13: 2	40.	4:25	75.
23	55.	62.	49.	67.	14:35	45.	5:20	76.
24	50.	54.	47.	62.	15: 2	42.	23:46	77.
25	53.	60.	48.	70.	15:30	40.	2:42	76.
26	59.	66.	54.	74.	16: 9	45.	4:57	78.
27	62.	70.	57.	78.	14:23	46.	5:19	80.
28	53.	58.	50.	67.	14:39	40.	23:58	80.
29	48.	53.	44.	59.	17: 2	37.	4:36	79.
30	52.	57.	49.	67.	17: 8	36.	3:52	78.
MEAN	51.	56.	47.					74.
STANDARD DEVIATION	5.9	7.6	5.1					4.2

ENVIRONMENTAL SUMMARY REPORT

SITE: OLYMPIC ENGINEERING  
 RICHLAND, WASHINGTON

REPORT PERIOD: 80/ 4  
 SITE NUMBER: 6

LATITUDE: 46.20 DEG NORTH  
 LONGITUDE: 118.20 DEG WEST

AZIMUTH: 0 DEG  
 PYRANOMETER TILT: 56 DEG

TIME ZONE: PACIFIC  
 ALTITUDE: 949 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2004.	N.A.	N.A.	348.	11:44	3214.	62.
2	1435.	N.A.	N.A.	348.	11:57	3204.	45.
3	2321.	N.A.	N.A.	330.	11:45	3193.	73.
4	2160.	N.A.	N.A.	369.	11:56	3185.	68.
5	1358.	N.A.	N.A.	318.	10:26	3174.	43.
6	1548.	N.A.	N.A.	381.	12:27	3164.	49.
7	2107.	N.A.	N.A.	354.	11:50	3155.	67.
8	479.	N.A.	N.A.	66.	14:32	3144.	15.
9	1762.	N.A.	N.A.	348.	13: 3	3133.	56.
10	2126.	N.A.	N.A.	387.	12:29	3122.	68.
11	2411.	N.A.	N.A.	330.	11:31	3114.	77.
12	2220.	N.A.	N.A.	333.	11:52	3102.	72.
13	2165.	N.A.	N.A.	321.	12:29	3091.	70.
14	1255.	N.A.	N.A.	318.	13:14	3080.	41.
15	2373.	N.A.	N.A.	327.	11:27	3068.	77.
16	2364.	N.A.	N.A.	327.	11:33	3060.	77.
17	1613.	N.A.	N.A.	339.	11:28	3048.	53.
18	2092.	N.A.	N.A.	321.	11:52	3039.	69.
19	1311.	N.A.	N.A.	258.	13: 6	3028.	43.
20	361.	N.A.	N.A.	105.	13: 2	3016.	12.
21	885.	N.A.	N.A.	285.	13:52	3005.	29.
22	2049.	N.A.	N.A.	357.	12:27	2993.	68.
23	2235.	N.A.	N.A.	309.	11:39	2984.	75.
24	2317.	N.A.	N.A.	330.	11:17	2973.	78.
25	2379.	N.A.	N.A.	330.	11:36	2961.	80.
26	2334.	N.A.	N.A.	318.	11:49	2950.	79.
27	2265.	N.A.	N.A.	318.	11:54	2938.	77.
28	1734.	N.A.	N.A.	327.	12:26	2930.	59.
29	2393.	N.A.	N.A.	348.	11:27	2919.	82.
30	1996.	N.A.	N.A.	342.	11:49	2910.	69.
MEAN	1868.	N.A.	N.A.			3063.	
STANDARD DEVIATION	566.	N.A.	N.A.			93.	

ENVIRONMENTAL SUMMARY REPORT

SITE: OLYMPIC ENGINEERING  
 RICHLAND, WASHINGTON

REPORT PERIOD: 80/ 4  
 SITE NUMBER: 6

LATITUDE: 46.20 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: PACIFIC  
 LONGITUDE: 118.20 DEG WEST PYRANOMETER TILT: 56 DEG ALTITUDE: 949 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	47.	55.	39.	65.	13:36	29.	4:53	59.
2	49.	56.	42.	63.	12: 3	36.	1:12	58.
3	51.	60.	42.	70.	14:57	33.	5:42	64.
4	56.	63.	48.	76.	14:30	39.	2:14	59.
5	54.	60.	49.	72.	10:26	42.	5:22	78.
6	47.	53.	42.	61.	14: 8	38.	23:55	91.
7	49.	57.	42.	66.	12:16	33.	5:31	62.
8	53.	57.	48.	63.	15:52	43.	2: 0	57.
9	53.	58.	48.	65.	13: 9	46.	23:46	60.
10	52.	60.	45.	73.	14:58	37.	4:50	57.
11	54.	65.	44.	75.	14:54	34.	4:35	62.
12	59.	69.	49.	81.	14:27	40.	4: 8	81.
13	62.	73.	52.	84.	14:28	38.	4: 8	88.
14	58.	65.	52.	75.	14:50	45.	3:54	58.
15	59.	67.	51.	78.	14:13	45.	23:55	60.
16	57.	68.	46.	80.	13:57	31.	4:43	60.
17	62.	72.	54.	83.	11:44	45.	5: 4	64.
18	64.	74.	54.	86.	13:17	39.	5:12	71.
19	67.	75.	60.	84.	14:42	53.	4:18	83.
20	54.	53.	55.	59.	0: 2	49.	9:43	88.
21	57.	61.	53.	72.	16:32	50.	23:55	62.
22	62.	71.	54.	81.	14:14	47.	1: 4	64.
23	64.	74.	56.	82.	12:59	46.	4:59	64.
24	63.	71.	55.	79.	13:20	46.	23:58	68.
25	60.	70.	51.	80.	14:48	40.	4:56	64.
26	68.	78.	58.	90.	16:27	47.	5: 4	92.
27	72.	84.	61.	93.	15:28	50.	4:43	78.
28	68.	79.	57.	92.	12:58	53.	1:30	72.
29	58.	65.	50.	73.	14:23	43.	4:36	73.
30	57.	64.	52.	74.	16:45	45.	3:33	69.
MEAN	58.	66.	50.					69.
STANDARD DEVIATION	6.4	8.2	5.7					11.0

ENVIRONMENTAL SUMMARY REPORT

SITE: WASHINGTON NAT GAS  
KIRTLAND, WASHINGTON

REPORT PERIOD: 80/ 4  
SITE NUMBER: 64

LATITUDE: 47.50 DEG NORTH  
LONGITUDE: 122.30 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 57 DEG

TIME ZONE: PACIFIC  
ALTITUDE: 200 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION		EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS
				VALUE BTU/HR/FT2	TIME HR:MN		----- EXT INS PERCENT
1	1733.	N.A.	N.A.	310.	12:16	3219.	54.
2	1913.	N.A.	N.A.	295.	12:37	3209.	60.
3	1186.	N.A.	N.A.	280.	12: 9	3198.	37.
4	1363.	N.A.	N.A.	295.	12: 3	3188.	43.
5	693.	N.A.	N.A.	252.	12:27	3180.	22.
6	776.	N.A.	N.A.	328.	12:28	3170.	24.
7	1145.	N.A.	N.A.	267.	12:49	3162.	36.
8	756.	N.A.	N.A.	207.	13:11	3151.	24.
9	739.	N.A.	N.A.	322.	11:42	3140.	24.
10	1541.	N.A.	N.A.	295.	11:57	3129.	49.
11	1693.	N.A.	N.A.	301.	12:24	3118.	54.
12	1690.	N.A.	N.A.	271.	11:38	3110.	54.
13	1407.	N.A.	N.A.	271.	11:57	3098.	45.
14	286.	N.A.	N.A.	152.	13: 7	3087.	9.
15	466.	N.A.	N.A.	140.	12:49	3076.	15.
16	1732.	N.A.	N.A.	271.	12:45	3067.	56.
17	536.	N.A.	N.A.	170.	10:37	3056.	18.
18	468.	N.A.	N.A.	155.	12:39	3045.	15.
19	155.	N.A.	N.A.	64.	11:40	3036.	5.
20	680.	N.A.	N.A.	198.	13:17	3025.	22.
21	788.	N.A.	N.A.	246.	10:21	3013.	26.
22	1028.	N.A.	N.A.	258.	13: 0	3002.	34.
23	1819.	N.A.	N.A.	280.	12:40	2991.	61.
24	883.	N.A.	N.A.	304.	11:26	2982.	30.
25	1449.	N.A.	N.A.	289.	12:38	2971.	49.
26	1381.	N.A.	N.A.	286.	11:45	2960.	47.
27	1762.	N.A.	N.A.	258.	12: 0	2948.	60.
28	587.	N.A.	N.A.	234.	13: 4	2937.	20.
29	1388.	N.A.	N.A.	295.	12:48	2929.	47.
30	1790.	N.A.	N.A.	271.	12:11	2918.	61.
MEAN	1128.	N.A.	N.A.			3070.	
STANDARD DEVIATION	525.	N.A.	N.A.			92.	

ENVIRONMENTAL SUMMARY REPORT

SITE: WASHINGTON NAT GAS  
KIRTLAND, WASHINGTON

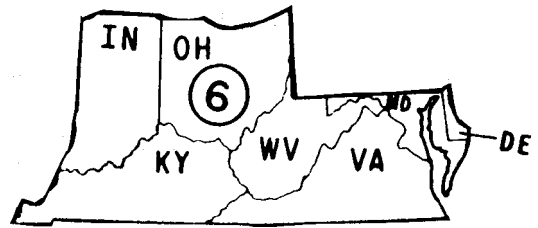
REPORT PERIOD: 80/ 4  
SITE NUMBER: 64

LATITUDE: 47.50 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: PACIFIC  
LONGITUDE: 122.30 DEG WEST PYRANOMETER TILT: 57 DEG ALTITUDE: 200 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	48.	52.	45.	58.	17: 9	40.	0:11	52.
2	48.	52.	44.	62.	15:21	35.	6:29	52.
3	51.	55.	47.	63.	16:34	37.	6:17	53.
4	52.	54.	50.	63.	15: 1	45.	6:47	55.
5	48.	50.	46.	56.	13:36	43.	23:49	59.
6	42.	44.	40.	50.	12:28	37.	5:31	56.
7	46.	48.	44.	56.	15:30	40.	6:57	54.
8	49.	52.	47.	60.	16:34	42.	5:43	54.
9	47.	47.	46.	52.	11:42	42.	23:57	57.
10	48.	51.	45.	62.	16:13	42.	4:34	54.
11	52.	56.	48.	69.	15: 9	37.	6:16	53.
12	64.	69.	59.	82.	16:31	46.	5: 8	56.
13	62.	66.	58.	78.	13:12	51.	7: 6	53.
14	52.	52.	52.	58.	13:13	48.	23:39	59.
15	50.	52.	48.	60.	16:56	44.	23:41	60.
16	54.	60.	49.	73.	16: 3	39.	5:12	67.
17	52.	54.	50.	57.	13:57	47.	2:37	67.
18	56.	59.	53.	64.	13:11	50.	6: 4	68.
19	52.	55.	50.	57.	11:56	46.	23:50	67.
20	49.	50.	47.	56.	13:23	43.	5:37	67.
21	52.	55.	49.	62.	17:36	44.	6: 5	66.
22	53.	57.	49.	66.	14:43	42.	6:29	57.
23	55.	60.	51.	73.	16:57	40.	5:50	59.
24	53.	55.	50.	63.	17:37	45.	23:50	54.
25	52.	57.	47.	68.	15: 3	41.	5:42	57.
26	56.	59.	53.	67.	16:28	48.	4:12	64.
27	59.	65.	54.	75.	14: 8	46.	5:43	62.
28	53.	56.	51.	64.	14:56	46.	23:34	65.
29	50.	53.	47.	61.	15:23	44.	4:11	62.
30	53.	58.	49.	70.	15:28	41.	3:44	59.
MEAN	52.	55.	49.					59.
STANDARD DEVIATION	4.6	5.5	4.0					5.3

ZONE 6



ENVIRONMENTAL SUMMARY REPORT

SITE: ALPHA CONSTRUCTION  
CANTON, OHIO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 79

LATITUDE: 41.00 DEG NORTH  
LONGITUDE: 81.00 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 37 DEG

TIME ZONE: EASTERN  
ALTITUDE: 1208 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	*	N.A.	N.A.	*	*:*	3343.	*
2	*	N.A.	N.A.	*	*:*	3342.	*
3	*	N.A.	N.A.	*	*:*	3341.	*
4	*	N.A.	N.A.	*	*:*	3340.	*
5	*	N.A.	N.A.	*	*:*	3339.	*
6	*	N.A.	N.A.	*	*:*	3338.	*
7	*	N.A.	N.A.	*	*:*	3336.	*
8	*	N.A.	N.A.	*	*:*	3332.	*
9	*	N.A.	N.A.	*	*:*	3330.	*
10	*	N.A.	N.A.	*	*:*	3328.	*
11	*	N.A.	N.A.	*	*:*	3326.	*
12	*	N.A.	N.A.	*	*:*	3324.	*
13	*	N.A.	N.A.	*	*:*	3318.	*
14	*	N.A.	N.A.	*	*:*	3316.	*
15	*	N.A.	N.A.	*	*:*	3313.	*
16	*	N.A.	N.A.	*	*:*	3311.	*
17	*	N.A.	N.A.	*	*:*	3308.	*
18	*	N.A.	N.A.	*	*:*	3305.	*
19	*	N.A.	N.A.	*	*:*	3302.	*
20	*	N.A.	N.A.	*	*:*	3298.	*
21	*	N.A.	N.A.	*	*:*	3295.	*
22	*	N.A.	N.A.	*	*:*	3292.	*
23	*	N.A.	N.A.	*	*:*	3288.	*
24	2119.	N.A.	N.A.	362.	12:45	3285.	65.
25	861.	N.A.	N.A.	331.	13:42	3278.	26.
26	1649.	N.A.	N.A.	306.	12:23	3275.	50.
27	401.	N.A.	N.A.	161.	9: 1	3271.	12.
28	1527.	N.A.	N.A.	334.	11:17	3267.	47.
29	1010.	N.A.	N.A.	275.	11:48	3263.	31.
30	1890.	N.A.	N.A.	313.	10:43	3259.	58.
MEAN	1351.	N.A.	N.A.			3309.	
STANDARD DEVIATION	614.	N.A.	N.A.			26.	

ENVIRONMENTAL SUMMARY REPORT

SITE: ALPHA CONSTRUCTION  
CANTON, OHIO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 79

LATITUDE: 41.00 DEG NORTH AZIMUTH: 0 DEG  
LONGITUDE: 81.00 DEG WEST PYRANOMETER TILT: 37 DEG TIME ZONE: EASTERN  
ALTITUDE: 1208 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	*	*	*	*	*:*	*	*:*	*
2	*	*	*	*	*:*	*	*:*	*
3	*	*	*	*	*:*	*	*:*	*
4	*	*	*	*	*:*	*	*:*	*
5	*	*	*	*	*:*	*	*:*	*
6	*	*	*	*	*:*	*	*:*	*
7	*	*	*	*	*:*	*	*:*	*
8	*	*	*	*	*:*	*	*:*	*
9	*	*	*	*	*:*	*	*:*	*
10	*	*	*	*	*:*	*	*:*	*
11	*	*	*	*	*:*	*	*:*	*
12	*	*	*	*	*:*	*	*:*	*
13	*	*	*	*	*:*	*	*:*	*
14	*	*	*	*	*:*	*	*:*	*
15	*	*	*	*	*:*	*	*:*	*
16	*	*	*	*	*:*	*	*:*	*
17	*	*	*	*	*:*	*	*:*	*
18	*	*	*	*	*:*	*	*:*	*
19	*	*	*	*	*:*	*	*:*	*
20	*	*	*	*	*:*	*	*:*	*
21	*	*	*	*	*:*	*	*:*	*
22	*	*	*	*	*:*	*	*:*	*
23	49.	55.	43.	56.	17: 5	38.	23:54	57.
24	49.	57.	42.	64.	14: 5	32.	5:46	61.
25	44.	46.	41.	54.	15:34	37.	23:51	62.
26	47.	53.	41.	62.	15:14	32.	4:45	57.
27	45.	47.	42.	52.	9: 6	37.	4:18	56.
28	48.	51.	44.	60.	13:35	37.	5:51	62.
29	49.	54.	45.	59.	11:48	41.	1:13	59.
30	51.	56.	45.	66.	14: 1	37.	5:34	57.
MEAN	48.	52.	43.					59.
STANDARD DEVIATION	2.5	4.1	1.6					2.6

ENVIRONMENTAL SUMMARY REPORT

SITE: COLUMBIA GAS  
COLUMBUS, OHIO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 176

LATITUDE: 40.00 DEG NORTH AZIMUTH: -5 DEG TIME ZONE: EASTERN  
LONGITUDE: 83.00 DEG WEST PYRANOMETER TILT: 40 DEG ALTITUDE: 755 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE TIME BTU/HR/FT2 HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	348.	320.	28.	86. 10:48	3327.	10.
2	1673.	708.	965.	298. 13:36	3324.	50.
3	764.	531.	233.	182. 9:36	3320.	23.
4	96.	93.	3.	38. 10:48	3316.	3.
5	2327.	303.	2024.	314. 11:55	3312.	70.
6	1964.	604.	1360.	333. 12:32	3308.	59.
7	549.	455.	93.	154. 15: 3	3304.	17.
8	492.	376.	116.	250. 15:41	3300.	15.
9	450.	384.	66.	179. 11:46	3295.	14.
10	425.	381.	44.	112. 12:22	3290.	13.
11	1502.	636.	866.	288. 11:36	3286.	46.
12	306.	226.	79.	214. 15:51	3281.	9.
13	425.	375.	50.	109. 9:11	3276.	13.
14	540.	345.	195.	259. 14: 0	3271.	17.
15	310.	281.	29.	90. 13:19	3266.	10.
16	2196.	556.	1640.	333. 11:32	3260.	67.
17	2324.	537.	1787.	304. 13:28	3255.	71.
18	2124.	396.	1728.	275. 13:52	3249.	65.
19	2063.	507.	1557.	291. 11:57	3244.	64.
20	1523.	791.	731.	275. 11:19	3238.	47.
21	2257.	276.	1981.	282. 11: 6	3233.	70.
22	1934.	578.	1357.	275. 12:13	3227.	60.
23	1856.	680.	1176.	291. 12:11	3221.	58.
24	2062.	508.	1553.	301. 13: 5	3215.	64.
25	691.	576.	116.	211. 13:57	3209.	22.
26	815.	660.	155.	259. 11:50	3203.	25.
27	529.	448.	81.	115. 16:46	3197.	17.
28	817.	662.	155.	243. 12:52	3191.	26.
29	692.	555.	137.	246. 10:18	3185.	22.
30	1482.	760.	723.	304. 12:25	3179.	47.
MEAN	1184.	484.	701.		3259.	
STANDARD DEVIATION	769.	169.	720.		46.	

ENVIRONMENTAL SUMMARY REPORT

SITE: COLUMBIA GAS  
COLUMBUS, OHIO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 176

LATITUDE: 40.00 DEG NORTH AZIMUTH: -5 DEG TIME ZONE: EASTERN  
LONGITUDE: 83.00 DEG WEST PYRANOMETER TILT: 40 DEG ALTITUDE: 755 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	46.	47.	45.	49.	11:26	42.	23:55	*
2	51.	57.	44.	70.	15:1	35.	6:3	*
3	54.	57.	51.	65.	17:26	41.	6:19	*
4	43.	43.	44.	52.	2:43	38.	23:28	*
5	46.	51.	41.	60.	15:39	33.	6:8	*
6	51.	57.	46.	66.	16:1	37.	6:14	*
7	56.	59.	53.	70.	16:28	40.	3:35	*
8	58.	61.	55.	67.	16:3	50.	17:34	*
9	49.	52.	46.	57.	11:56	39.	21:37	*
10	42.	43.	42.	48.	17:42	37.	22:16	*
11	50.	56.	45.	64.	16:40	33.	4:24	*
12	49.	51.	48.	54.	12:39	40.	23:51	*
13	40.	43.	38.	46.	15:52	35.	5:32	*
14	45.	50.	40.	57.	14:27	37.	1:12	*
15	39.	38.	39.	44.	19:5	35.	6:28	*
16	40.	42.	37.	50.	16:52	33.	23:36	*
17	46.	50.	41.	61.	15:25	31.	5:55	*
18	55.	63.	47.	73.	15:50	34.	5:20	*
19	62.	70.	54.	79.	15:9	42.	5:38	*
20	61.	70.	53.	80.	13:30	45.	5:43	*
21	60.	67.	52.	76.	16:20	43.	5:51	*
22	65.	71.	58.	84.	16:29	42.	2:27	*
23	64.	66.	62.	70.	16:17	51.	23:7	*
24	53.	60.	46.	67.	14:3	39.	23:28	*
25	44.	46.	42.	56.	17:25	38.	23:50	*
26	50.	55.	45.	62.	18:19	36.	3:2	*
27	48.	51.	45.	56.	14:38	42.	2:46	*
28	49.	52.	45.	57.	12:52	42.	23:59	*
29	51.	55.	47.	66.	10:23	41.	0:47	*
30	56.	61.	51.	69.	13:7	45.	5:39	*
MEAN	51.	55.	47.					0.
STANDARD DEVIATION	7.1	8.8	6.0					*





ENVIRONMENTAL SUMMARY REPORT

SITE: DAVIDSON-PHILLIPS  
COLUMBUS, OHIO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 68

LATITUDE: 40.00 DEG NORTH  
LONGITUDE: 82.53 DEG WEST

AZIMUTH: -12 DEG  
PYRANOMETER TILT: 40 DEG

TIME ZONE: EASTERN  
ALTITUDE: 812 FEET

INSOLATION

DAY	TOTAL	TOTAL DIFF	TOTAL DIR	MAXIMUM TOTAL	EXTRATERRESTRIAL	TTL INS	
	INSOLATION	INSOLATION	INSOLATION	INSOLATION			
	BTU/FT2	BTU/FT2	BTU/FT2	VALUE TIME	BTU/FT2	EXT INS	
				BTU/HR/FT2 HR:MN		PERCENT	
1	345.	N.A.	N.A.	99.	11:13	3306.	10.
2	1732.	N.A.	N.A.	320.	13: 6	3303.	52.
3	728.	N.A.	N.A.	178.	13: 5	3304.	22.
4	99.	N.A.	N.A.	34.	13:30	3301.	3.
5	2397.	N.A.	N.A.	340.	12:56	3301.	73.
6	2061.	N.A.	N.A.	314.	14:32	3297.	63.
7	639.	N.A.	N.A.	252.	15:11	3297.	19.
8	561.	N.A.	N.A.	249.	15:42	3293.	17.
9	466.	N.A.	N.A.	300.	11:23	3293.	14.
10	540.	N.A.	N.A.	122.	12:21	3289.	16.
11	1575.	N.A.	N.A.	320.	12:14	3284.	48.
12	392.	N.A.	N.A.	258.	15:42	3283.	12.
13	513.	N.A.	N.A.	96.	11:31	3278.	16.
14	571.	N.A.	N.A.	311.	14:35	3277.	17.
15	375.	N.A.	N.A.	93.	13:57	3272.	11.
16	2264.	N.A.	N.A.	351.	14: 5	3267.	69.
17	2308.	N.A.	N.A.	340.	12:26	3262.	71.
18	2286.	N.A.	N.A.	323.	13: 3	3257.	70.
19	2071.	N.A.	N.A.	326.	12:15	3251.	64.
20	1556.	N.A.	N.A.	309.	13: 9	3246.	48.
21	2381.	N.A.	N.A.	331.	12:38	3241.	73.
22	2083.	N.A.	N.A.	303.	12:26	3235.	64.
23	1947.	N.A.	N.A.	337.	13: 9	3230.	60.
24	2137.	N.A.	N.A.	337.	13:16	3224.	66.
25	819.	N.A.	N.A.	258.	13: 6	3218.	25.
26	927.	N.A.	N.A.	232.	10:45	3213.	29.
27	661.	N.A.	N.A.	167.	13: 9	3207.	21.
28	846.	N.A.	N.A.	289.	11:47	3201.	26.
29	624.	N.A.	N.A.	243.	11:12	3196.	20.
30	1507.	N.A.	N.A.	340.	12:43	3190.	47.
MEAN	1247.	N.A.	N.A.			3260.	
STANDARD DEVIATION	781.	N.A.	N.A.			37.	

ENVIRONMENTAL SUMMARY REPORT

SITE: DAVIDSON-PHILLIPS  
COLUMBUS, OHIO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 68

LATITUDE: 40.00 DEG NORTH      AZIMUTH: -12 DEG      TIME ZONE: EASTERN  
LONGITUDE: 82.53 DEG WEST      PYRANOMETER TILT: 40 DEG      ALTITUDE: 812 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	62.	62.	61.	65.	12: 1	58.	23:52	N.A.
2	64.	69.	59.	76.	14:42	53.	5: 1	N.A.
3	67.	71.	64.	76.	16:23	57.	0:23	N.A.
4	60.	59.	60.	66.	2:34	55.	23:31	N.A.
5	61.	66.	57.	71.	14:59	51.	5:44	N.A.
6	65.	71.	60.	77.	15:38	53.	6:38	N.A.
7	69.	72.	66.	81.	17: 3	56.	2:44	N.A.
8	72.	74.	70.	80.	15:53	64.	17:18	N.A.
9	64.	67.	62.	70.	13:31	57.	21:47	N.A.
10	59.	60.	58.	63.	17: 4	54.	22:44	N.A.
11	65.	69.	60.	76.	14:17	50.	4:20	N.A.
12	65.	66.	64.	69.	12:24	56.	21:23	N.A.
13	57.	59.	55.	62.	16:11	51.	6:22	N.A.
14	61.	65.	57.	71.	14:30	55.	0:33	N.A.
15	56.	56.	56.	60.	18:53	52.	7:55	N.A.
16	56.	58.	54.	63.	16:34	50.	23:54	N.A.
17	60.	65.	53.	73.	16:21	46.	3:11	N.A.
18	67.	73.	61.	81.	17: 3	50.	5:40	N.A.
19	72.	79.	66.	85.	15:27	57.	5:35	N.A.
20	73.	80.	66.	86.	14:52	59.	6:23	N.A.
21	71.	77.	65.	83.	14:57	59.	5:48	N.A.
22	76.	82.	70.	92.	16:47	57.	2:28	N.A.
23	75.	76.	74.	81.	0:42	65.	22:14	N.A.
24	67.	73.	61.	78.	14:30	56.	22:20	N.A.
25	60.	62.	58.	68.	17: 6	54.	23:49	N.A.
26	64.	69.	59.	74.	17:30	52.	1:57	N.A.
27	63.	66.	60.	70.	14:13	58.	5: 9	N.A.
28	63.	67.	60.	70.	12:35	56.	0:46	N.A.
29	65.	68.	62.	74.	11:12	56.	0: 0	N.A.
30	68.	72.	63.	78.	13:15	59.	5:58	N.A.
MEAN	65.	68.	61.					N.A.
STANDARD DEVIATION	5.4	6.7	4.8					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: FOREST CITY DILLON  
WASHINGTON, D.C.

REPORT PERIOD: 80/ 4  
SITE NUMBER: 125

LATITUDE: 39.00 DEG NORTH  
LONGITUDE: 77.00 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 40 DEG

TIME ZONE: EASTERN  
ALTITUDE: 200 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	*	N.A.	N.A.	*	*:*	3317.	*
2	*	N.A.	N.A.	*	*:*	3313.	*
3	*	N.A.	N.A.	*	*:*	3308.	*
4	*	N.A.	N.A.	*	*:*	3304.	*
5	*	N.A.	N.A.	*	*:*	3299.	*
6	*	N.A.	N.A.	*	*:*	3294.	*
7	*	N.A.	N.A.	*	*:*	3289.	*
8	*	N.A.	N.A.	*	*:*	3284.	*
9	*	N.A.	N.A.	*	*:*	3279.	*
10	1324.	N.A.	N.A.	322.	11:31	3273.	40.
11	2317.	N.A.	N.A.	325.	12:39	3268.	71.
12	871.	N.A.	N.A.	235.	10: 8	3262.	27.
13	1437.	N.A.	N.A.	339.	12:12	3259.	44.
14	170.	N.A.	N.A.	74.	15:33	3254.	5.
15	978.	N.A.	N.A.	354.	11:17	3248.	30.
16	1837.	N.A.	N.A.	365.	11:54	3242.	57.
17	2388.	N.A.	N.A.	334.	11:52	3236.	74.
18	2305.	N.A.	N.A.	320.	11:44	3229.	71.
19	2137.	N.A.	N.A.	325.	11:54	3223.	66.
20	2110.	N.A.	N.A.	320.	11:59	3217.	66.
21	2254.	N.A.	N.A.	325.	12:12	3210.	70.
22	2223.	N.A.	N.A.	320.	11:28	3204.	69.
23	1990.	N.A.	N.A.	277.	11:34	3197.	62.
24	1928.	N.A.	N.A.	294.	12:27	3191.	60.
25	1501.	N.A.	N.A.	311.	12:53	3184.	47.
26	157.	N.A.	N.A.	28.	16:47	3178.	5.
27	236.	N.A.	N.A.	42.	10:12	3171.	7.
28	200.	N.A.	N.A.	37.	9: 9	3164.	6.
29	1538.	N.A.	N.A.	345.	11:42	3158.	49.
30	363.	N.A.	N.A.	110.	11:55	3151.	12.
MEAN	1441.	N.A.	N.A.			3240.	
STANDARD DEVIATION	815.	N.A.	N.A.			51.	

ENVIRONMENTAL SUMMARY REPORT

SITE: FOREST CITY DILLON  
WASHINGTON, D.C.

REPORT PERIOD: 80/ 4  
SITE NUMBER: 125

LATITUDE: 39.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 77.00 DEG WEST PYRANOMETER TILT: 40 DEG ALTITUDE: 200 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	*	*	*	*	*:*	*	*:*	*
2	*	*	*	*	*:*	*	*:*	*
3	*	*	*	*	*:*	*	*:*	*
4	*	*	*	*	*:*	*	*:*	*
5	*	*	*	*	*:*	*	*:*	*
6	*	*	*	*	*:*	*	*:*	*
7	*	*	*	*	*:*	*	*:*	*
8	*	*	*	*	*:*	*	*:*	*
9	65.	69.	60.	79.	14:58	57.	23:58	58.
10	61.	66.	56.	78.	11:31	49.	5:50	58.
11	63.	68.	57.	77.	14:10	50.	5:46	63.
12	63.	68.	58.	75.	10:14	49.	5:36	62.
13	59.	60.	57.	72.	13: 6	51.	7: 2	62.
14	58.	57.	58.	69.	16:42	48.	2:55	63.
15	54.	55.	52.	64.	11:17	47.	21:28	63.
16	47.	50.	44.	54.	13:35	37.	23:57	63.
17	47.	53.	41.	66.	14:42	31.	5: 1	63.
18	55.	62.	49.	73.	15: 1	37.	2:51	64.
19	64.	71.	57.	80.	15:49	48.	5:41	64.
20	68.	75.	62.	87.	15:13	53.	5:13	64.
21	64.	67.	61.	75.	15:50	58.	22:40	66.
22	64.	68.	60.	75.	13:20	49.	5:20	65.
23	63.	68.	57.	79.	14:51	47.	5:10	65.
24	64.	69.	58.	82.	13:10	52.	5:26	66.
25	62.	67.	57.	75.	10:30	53.	23:16	67.
26	49.	49.	50.	54.	0: 4	47.	12:10	65.
27	51.	51.	51.	55.	16:10	47.	0:10	66.
28	52.	53.	52.	54.	12:58	51.	6: 2	67.
29	58.	63.	53.	74.	13:18	49.	5:53	66.
30	53.	54.	52.	57.	11:44	51.	5:26	65.
MEAN	58.	62.	55.					64.
STANDARD DEVIATION	6.3	7.9	5.4					2.3

ENVIRONMENTAL SUMMARY REPORT

SITE: HOGATE'S RESTAURANT  
WASHINGTON, DC

REPORT PERIOD: 80/ 4  
SITE NUMBER: 42

LATITUDE: 38.90 DEG NORTH  
LONGITUDE: 77.00 DEG WEST

AZIMUTH: 45 DEG  
PYRANOMETER TILT: 55 DEG

TIME ZONE: EASTERN  
ALTITUDE: 10 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	*	N.A.	N.A.	*	*:*	2916.	*
2	1536.	N.A.	N.A.	290.	13:32	2915.	53.
3	1291.	N.A.	N.A.	293.	13:36	2917.	44.
4	920.	N.A.	N.A.	305.	14:33	2914.	32.
5	1653.	N.A.	N.A.	320.	14: 2	2916.	57.
6	1525.	N.A.	N.A.	308.	13:24	2914.	52.
7	648.	N.A.	N.A.	210.	12:52	2913.	22.
8	544.	N.A.	N.A.	252.	12:47	2914.	19.
9	*	N.A.	N.A.	*	*:*	2912.	*
10	*	N.A.	N.A.	*	*:*	2909.	*
11	*	N.A.	N.A.	*	*:*	2910.	*
12	*	N.A.	N.A.	*	*:*	2906.	*
13	*	N.A.	N.A.	*	*:*	2906.	*
14	*	N.A.	N.A.	*	*:*	2903.	*
15	*	N.A.	N.A.	*	*:*	2900.	*
16	3310.	N.A.	N.A.	349.	13:53	2899.	114.
17	1580.	N.A.	N.A.	326.	13: 6	2896.	55.
18	1577.	N.A.	N.A.	302.	13:45	2892.	55.
19	1404.	N.A.	N.A.	311.	13:35	2891.	49.
20	1454.	N.A.	N.A.	293.	14:15	2888.	50.
21	1603.	N.A.	N.A.	305.	14:10	2884.	56.
22	1451.	N.A.	N.A.	299.	13:53	2882.	50.
23	1395.	N.A.	N.A.	264.	13:57	2878.	48.
24	1346.	N.A.	N.A.	272.	13:48	2876.	47.
25	940.	N.A.	N.A.	272.	12:51	2872.	33.
26	49.	N.A.	N.A.	15.	14:47	2867.	2.
27	119.	N.A.	N.A.	27.	12:18	2865.	4.
28	68.	N.A.	N.A.	18.	9:27	2860.	2.
29	1326.	N.A.	N.A.	284.	14:24	2857.	46.
30	458.	N.A.	N.A.	190.	11:40	2852.	16.
MEAN	1191.	N.A.	N.A.			2894.	
STANDARD DEVIATION	717.	N.A.	N.A.			20.	

ENVIRONMENTAL SUMMARY REPORT

SITE: HOGATE'S RESTAURANT  
WASHINGTON, DC

REPORT PERIOD: 80/ 4  
SITE NUMBER: 42

LATITUDE: 38.90 DEG NORTH  
LONGITUDE: 77.00 DEG WEST

AZIMUTH: 45 DEG  
PYRANOMETER TILT: 55 DEG

TIME ZONE: EASTERN  
ALTITUDE: 10 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	48.	51.	46.	65.	15:14	38.	0:11	50.
2	55.	55.	54.	73.	15:51	40.	4:55	50.
3	59.	62.	56.	72.	13:31	50.	6: 3	51.
4	58.	63.	54.	73.	15:43	50.	23:59	52.
5	52.	53.	52.	63.	15:22	45.	5:40	53.
6	58.	62.	55.	72.	13:51	42.	5: 9	53.
7	58.	62.	55.	69.	13: 8	48.	5:40	54.
8	62.	65.	59.	72.	12:47	54.	2:28	55.
9	*	*	*	*	*:*	*	*:*	*
10	*	*	*	*	*:*	*	*:*	*
11	*	*	*	*	*:*	*	*:*	*
12	*	*	*	*	*:*	*	*:*	*
13	*	*	*	*	*:*	*	*:*	*
14	*	*	*	*	*:*	*	*:*	*
15	*	*	*	*	*:*	*	*:*	*
16	51.	52.	47.	54.	14: 4	39.	23:51	57.
17	48.	49.	47.	66.	15:51	34.	5:38	57.
18	57.	60.	54.	74.	15:58	40.	4:29	56.
19	63.	68.	60.	81.	15:27	47.	5:24	56.
20	67.	70.	65.	87.	16: 2	52.	4:58	57.
21	66.	68.	64.	77.	16: 7	54.	23:45	*
22	65.	66.	64.	79.	16:17	51.	3:34	59.
23	63.	64.	63.	78.	15:12	49.	5: 9	60.
24	66.	71.	62.	83.	14:20	55.	5:27	62.
25	63.	67.	60.	74.	12:51	56.	23:35	63.
26	51.	51.	51.	55.	0: 1	48.	12:55	64.
27	52.	52.	53.	56.	15:19	49.	0:39	63.
28	54.	54.	53.	56.	15: 9	52.	5: 6	62.
29	60.	62.	58.	76.	15:33	51.	5:19	61.
30	55.	56.	55.	62.	11:40	53.	5:36	61.
MEAN	58.	60.	56.					57.
STANDARD DEVIATION	5.9	6.9	5.5					4.5

ENVIRONMENTAL SUMMARY REPORT

SITE: LOUDOUN COUNTY SCHOOL  
LEESBURG, VIRGINIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 33

LATITUDE: 39.10 DEG NORTH  
LONGITUDE: 77.60 DEG WEST

AZIMUTH: 15 DEG  
PYRANOMETER TILT: 37 DEG

TIME ZONE: EASTERN  
ALTITUDE: 400 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1678.	N.A.	N.A.	332.	12:59	3309.	51.
2	1885.	N.A.	N.A.	311.	12: 6	3312.	57.
3	1788.	N.A.	N.A.	308.	12:15	3308.	54.
4	1166.	N.A.	N.A.	314.	13:59	3310.	35.
5	2301.	N.A.	N.A.	338.	12:39	3309.	70.
6	2124.	N.A.	N.A.	329.	12:53	3310.	64.
7	884.	N.A.	N.A.	305.	11: 1	3309.	27.
8	696.	N.A.	N.A.	290.	11:25	3307.	21.
9	1516.	N.A.	N.A.	365.	12:48	3305.	46.
10	768.	N.A.	N.A.	175.	13:59	3303.	23.
11	2214.	N.A.	N.A.	335.	12: 9	3303.	67.
12	609.	N.A.	N.A.	172.	10: 2	3301.	18.
13	1494.	N.A.	N.A.	359.	13:30	3301.	45.
14	67.	N.A.	N.A.	57.	14:55	3298.	2.
15	692.	N.A.	N.A.	242.	15:47	3298.	21.
16	2162.	N.A.	N.A.	359.	11:53	3294.	66.
17	2278.	N.A.	N.A.	338.	12:30	3291.	69.
18	2236.	N.A.	N.A.	323.	12:21	3290.	68.
19	2189.	N.A.	N.A.	320.	12:44	3286.	67.
20	2079.	N.A.	N.A.	320.	11:41	3285.	63.
21	2252.	N.A.	N.A.	320.	12:40	3280.	69.
22	2015.	N.A.	N.A.	320.	12: 7	3273.	62.
23	1860.	N.A.	N.A.	284.	12:10	3269.	57.
24	1850.	N.A.	N.A.	296.	12:54	3265.	57.
25	1727.	N.A.	N.A.	311.	11:49	3261.	53.
26	197.	N.A.	N.A.	54.	9:26	3257.	6.
27	142.	N.A.	N.A.	63.	11:26	3255.	4.
28	234.	N.A.	N.A.	151.	11:53	3251.	7.
29	1287.	N.A.	N.A.	326.	12: 3	3247.	40.
30	522.	N.A.	N.A.	242.	12:28	3239.	16.
MEAN	1430.	N.A.	N.A.			3288.	
STANDARD DEVIATION	754.	N.A.	N.A.			22.	

ENVIRONMENTAL SUMMARY REPORT

SITE: LOUDOUN COUNTY SCHOOL  
LEESBURG, VIRGINIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 33

LATITUDE: 39.10 DEG NORTH AZIMUTH: 15 DEG TIME ZONE: EASTERN  
LONGITUDE: 77.60 DEG WEST PYRANOMETER TILT: 37 DEG ALTITUDE: 400 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	46.	49.	42.	58.	14: 8	35.	0: 5	56.
2	54.	60.	49.	74.	15:29	37.	6:19	56.
3	56.	60.	52.	69.	13:45	44.	5:56	59.
4	55.	60.	50.	71.	14:15	47.	23:57	72.
5	50.	53.	47.	62.	15:19	42.	5:54	82.
6	55.	62.	48.	72.	15: 1	34.	4:45	82.
7	53.	58.	48.	69.	11: 1	41.	5:52	70.
8	59.	62.	55.	71.	11:35	50.	4:50	60.
9	60.	63.	58.	74.	16:42	49.	23:56	60.
10	56.	61.	52.	67.	14: 4	43.	5:32	59.
11	59.	65.	53.	75.	14:22	42.	5: 2	63.
12	58.	61.	55.	70.	10:40	46.	4:58	69.
13	55.	57.	53.	66.	13:30	47.	5:57	72.
14	55.	53.	57.	68.	19:36	47.	4:20	59.
15	50.	52.	49.	58.	0: 3	44.	23:58	57.
16	45.	48.	42.	52.	15:10	35.	23:58	56.
17	45.	49.	40.	63.	16:14	30.	5:23	57.
18	54.	60.	47.	72.	16:21	34.	3:22	58.
19	60.	66.	55.	78.	14:46	41.	5:26	71.
20	65.	72.	58.	85.	14:43	42.	5:10	73.
21	63.	66.	60.	74.	15: 4	53.	22:21	61.
22	63.	67.	59.	78.	14:47	46.	3: 3	62.
23	61.	65.	57.	78.	16:26	44.	5:30	62.
24	61.	66.	56.	80.	14:24	48.	5:42	61.
25	59.	63.	55.	70.	10:34	50.	23:55	59.
26	48.	49.	48.	52.	9:42	46.	21:26	65.
27	49.	49.	49.	53.	17:50	46.	1:15	65.
28	51.	51.	51.	53.	12:36	49.	23:45	59.
29	56.	60.	53.	69.	13:38	48.	5:31	58.
30	53.	53.	52.	59.	12:39			58.
MEAN	55.	59.	52.					63.
STANDARD DEVIATION	5.4	6.5	5.1					7.2

ENVIRONMENTAL SUMMARY REPORT

SITE: LOUDOUN COUNTY SCHOOL  
LEESBURG, VIRGINIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 33

LATITUDE: 39.10 DEG NORTH  
LONGITUDE: 77.60 DEG WEST

AZIMUTH: 15 DEG  
PYRANOMETER TILT: 37 DEG

TIME ZONE: EASTERN  
ALTITUDE: 400 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	*	2.	*	2.	8.	*	23:50
2	*	4.	*	4.	15.	*	20:52
3	299.	4.	290.	5.	13.	323.	15:43
4	89.	6.	94.	5.	25.	88.	16:55
5	102.	8.	107.	11.	23.	107.	2:47
6	45.	3.	43.	5.	12.	46.	13:20
7	342.	3.	343.	6.	17.	303.	12:53
8	317.	6.	320.	7.	19.	329.	13:33
9	344.	4.	327.	4.	15.	54.	20:7
10	76.	2.	67.	3.	13.	71.	13:48
11	87.	3.	79.	6.	13.	50.	11:37
12	7.	3.	359.	5.	21.	6.	13:52
13	157.	5.	155.	5.	18.	126.	3:44
14	*	8.	*	6.	35.	*	21:33
15	68.	5.	53.	5.	19.	29.	14:0
16	108.	8.	111.	11.	26.	102.	11:26
17	115.	2.	96.	3.	12.	122.	1:2
18	124.	2.	130.	4.	11.	154.	8:0
19	123.	2.	166.	3.	11.	103.	13:5
20	44.	2.	30.	3.	12.	63.	13:33
21	167.	4.	183.	6.	14.	179.	10:59
22	130.	4.	126.	5.	12.	101.	12:18
23	*	2.	*	2.	8.	*	0:26
24	126.	3.	*	4.	19.	118.	16:22
25	127.	4.	120.	6.	21.	81.	12:53
26	*	2.	*	2.	10.	*	1:26
27	212.	3.	226.	4.	9.	230.	12:57
28	133.	3.	131.	4.	11.	119.	12:52
29	204.	3.	201.	2.	9.	163.	12:40
30	214.	5.	222.	6.	15.	232.	14:4
MEAN	150.	4.	166.	5.			
STANDARD DEVIATION	92.9	1.8	99.7	2.2			

ENVIRONMENTAL SUMMARY REPORT

SITE: LOUDOUN COUNTY SCHOOL  
LEESBURG, VIRGINIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 33

LATITUDE: 39.10 DEG NORTH AZIMUTH: 15 DEG TIME ZONE: EASTERN  
LONGITUDE: 77.60 DEG WEST PYRANOMETER TILT: 37 DEG ALTITUDE: 400 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	23	1	0	0	0	0	0	0	0
2	13	11	0	0	0	0	0	0	0
3	12	12	0	0	0	0	0	0	0
4	8	5	0	3	0	0	0	0	0
5	6	4	12	2	0	0	0	0	0
6	15	9	0	0	0	0	0	0	0
7	14	7	3	0	0	0	0	0	0
8	8	3	13	0	0	0	0	0	0
9	15	7	2	0	0	0	0	0	0
10	18	6	0	0	0	0	0	0	0
11	13	9	2	0	0	0	0	0	0
12	16	4	4	0	0	0	0	0	0
13	8	14	2	0	0	0	0	0	0
14	2	14	5	3	0	0	0	0	0
15	10	9	5	0	0	0	0	0	0
16	3	9	10	2	0	0	0	0	0
17	21	3	0	0	0	0	0	0	0
18	15	9	0	0	0	0	0	0	0
19	22	2	0	0	0	0	0	0	0
20	18	6	0	0	0	0	0	0	0
21	10	12	2	0	0	0	0	0	0
22	14	10	0	0	0	0	0	0	0
23	22	2	0	0	0	0	0	0	0
24	16	8	0	0	0	0	0	0	0
25	13	9	2	0	0	0	0	0	0
26	19	5	0	0	0	0	0	0	0
27	19	5	0	0	0	0	0	0	0
28	17	7	0	0	0	0	0	0	0
29	18	6	0	0	0	0	0	0	0
30	10	12	1	0	0	0	0	0	1
AVERAGE	13.9	7.3	2.4	0.3	0.0	0.0	0.0	0.0	0.0
TOTAL	418	220	71	10	0	0	0	0	1

ENVIRONMENTAL SUMMARY REPORT

SITE: MOULDER CORPORATION  
GREENWOOD, INDIANA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 50

LATITUDE: 39.50 DEG NORTH  
LONGITUDE: 86.25 DEG WEST

AZIMUTH: 6 DEG  
PYRANOMETER TILT: 45 DEG

TIME ZONE: CENTRAL  
ALTITUDE: 700 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	486.	N.A.	N.A.	67.	9:23	3273.	15.
2	1978.	N.A.	N.A.	333.	13:0	3267.	61.
3	712.	N.A.	N.A.	263.	11:8	3261.	22.
4	236.	N.A.	N.A.	40.	11:36	3253.	7.
5	*	N.A.	N.A.	*	*:*	3248.	*
6	*	N.A.	N.A.	*	*:*	3241.	*
7	1096.	N.A.	N.A.	321.	12:44	3233.	34.
8	819.	N.A.	N.A.	309.	11:29	3224.	25.
9	407.	N.A.	N.A.	89.	12:38	3219.	13.
10	1320.	N.A.	N.A.	272.	13:30	3211.	41.
11	*	N.A.	N.A.	*	*:*	3203.	*
12	994.	N.A.	N.A.	361.	11:52	3194.	31.
13	*	N.A.	N.A.	*	*:*	3186.	*
14	*	N.A.	N.A.	*	*:*	3177.	*
15	706.	N.A.	N.A.	309.	13:44	3168.	22.
16	2270.	N.A.	N.A.	330.	12:7	3159.	72.
17	2150.	N.A.	N.A.	348.	12:34	3151.	68.
18	2306.	N.A.	N.A.	315.	12:12	3145.	73.
19	2270.	N.A.	N.A.	312.	12:14	3136.	72.
20	1634.	N.A.	N.A.	275.	11:24	3127.	52.
21	2162.	N.A.	N.A.	315.	12:23	3118.	69.
22	2210.	N.A.	N.A.	302.	12:44	3112.	71.
23	2064.	N.A.	N.A.	306.	12:7	3100.	67.
24	2293.	N.A.	N.A.	312.	12:1	3091.	74.
25	2126.	N.A.	N.A.	302.	11:32	3082.	69.
26	1692.	N.A.	N.A.	354.	12:1	3076.	55.
27	727.	N.A.	N.A.	186.	10:10	3067.	24.
28	374.	N.A.	N.A.	86.	11:25	3057.	12.
29	887.	N.A.	N.A.	217.	14:42	3048.	29.
30	943.	N.A.	N.A.	296.	10:58	3039.	31.
MEAN	1395.	N.A.	N.A.			3162.	
STANDARD DEVIATION	738.	N.A.	N.A.			72.	

ENVIRONMENTAL SUMMARY REPORT

SITE: MOULDER CORPORATION  
GREENWOOD, INDIANA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 50

LATITUDE: 39.50 DEG NORTH      AZIMUTH: 6 DEG      TIME ZONE: CENTRAL  
LONGITUDE: 86.25 DEG WEST      PYRANOMETER TILT: 45 DEG      ALTITUDE: 700 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	41.	43.	39.	45.	13:18	37.	22:46	*
2	52.	58.	45.	68.	15:34	36.	6:9	*
3	52.	55.	49.	64.	16:18	44.	3:56	*
4	40.	39.	41.	46.	2:5	35.	21:2	*
5	44.	48.	36.	58.	14:54	32.	4:56	*
6	59.	64.	54.	66.	13:53	51.	22:4	*
7	58.	60.	55.	70.	15:18	49.	2:57	*
8	57.	58.	55.	67.	11:34	50.	23:34	*
9	43.	43.	43.	50.	0:11	37.	13:4	*
10	41.	44.	39.	50.	15:1	34.	22:14	*
11	44.	50.	40.	57.	10:19	34.	4:1	*
12	46.	47.	46.	52.	15:25	34.	23:36	*
13	37.	41.	35.	46.	10:52	34.	0:56	*
14	33.	*	33.	33.	23:7	33.	23:39	*
15	38.	40.	36.	49.	15:31	32.	4:59	*
16	42.	48.	36.	56.	14:31	29.	4:2	*
17	49.	54.	44.	65.	15:40	31.	0:2	*
18	55.	62.	48.	71.	15:58	36.	5:10	*
19	58.	67.	48.	76.	15:4	38.	4:51	*
20	64.	71.	58.	78.	15:3	44.	2:32	*
21	63.	70.	56.	78.	14:36	49.	3:3	*
22	70.	76.	65.	85.	13:59	52.	4:55	*
23	62.	65.	59.	72.	0:2	43.	23:50	*
24	45.	54.	37.	63.	11:7	33.	23:59	*
25	45.	52.	40.	60.	16:22	30.	3:43	*
26	51.	56.	45.	65.	14:30	40.	2:30	*
27	50.	52.	47.	57.	10:10	42.	4:1	*
28	44.	45.	44.	47.	12:7	41.	23:8	*
29	48.	52.	45.	60.	15:2	39.	4:18	*
30	50.	54.	45.	62.	10:58	35.	4:34	*
MEAN	49.	54.	45.					0.
STANDARD DEVIATION	9.0	9.9	8.1					

ENVIRONMENTAL SUMMARY REPORT

SITE: PADONIA ELEMENTARY SCHOOL  
COCKEYSVILLE, MARYLAND

REPORT PERIOD: 80/ 4  
SITE NUMBER: 126

LATITUDE: 39.14 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 76.52 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 350 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1866.	267.	1599.	268.	11:46	3271.	57.
2	1564.	523.	1040.	257.	12: 9	3263.	48.
3	1689.	495.	1193.	259.	11:57	3255.	52.
4	927.	410.	516.	265.	11:54	3247.	29.
5	1892.	359.	1533.	287.	11:57	3239.	58.
6	1873.	403.	1470.	282.	12: 8	3234.	58.
7	1223.	575.	648.	296.	11:58	3225.	38.
8	1248.	622.	626.	276.	13: 5	3217.	39.
9	540.	357.	183.	209.	14:29	3208.	17.
10	1136.	714.	422.	240.	9:54	3200.	36.
11	1981.	309.	1671.	282.	11:39	3191.	62.
12	1008.	517.	492.	243.	10:59	3182.	32.
13	1637.	495.	1142.	285.	12:46	3173.	52.
14	157.	137.	20.	36.	11: 8	3167.	5.
15	692.	533.	159.	243.	10:17	3158.	22.
16	1299.	731.	568.	324.	11:48	3149.	41.
17	2120.	328.	1792.	296.	11:56	3143.	67.
18	2004.	337.	1668.	285.	11:40	3134.	64.
19	1980.	358.	1621.	273.	11:49	3124.	63.
20	1878.	498.	1380.	282.	11:59	3115.	60.
21	2127.	292.	1835.	293.	12:21	3106.	68.
22	2039.	283.	1756.	285.	11:52	3097.	66.
23	1903.	499.	1405.	271.	12: 1	3087.	62.
24	1780.	499.	1282.	268.	12: 1	3078.	58.
25	1348.	668.	680.	279.	12: 6	3071.	44.
26	308.	279.	29.	84.	12:25	3062.	10.
27	181.	163.	18.	31.	12:14	3053.	6.
28	207.	185.	21.	42.	11:42	3043.	7.
29	1047.	674.	373.	223.	13:21	3034.	35.
30	285.	258.	27.	70.	11:50	3025.	9.
MEAN	1331.	426.	906.			3152.	
STANDARD DEVIATION	659.	164.	647.			75.	

ENVIRONMENTAL SUMMARY REPORT

SITE: PADONIA ELEMENTARY SCHOOL  
COCKEYSVILLE, MARYLAND

REPORT PERIOD: 80/ 4  
SITE NUMBER: 126

LATITUDE: 39.14 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: EASTERN  
LONGITUDE: 76.52 DEG WEST      PYRANOMETER TILT: 45 DEG      ALTITUDE: 350 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	47.	53.	41.	63.	14:42	36.	0:18	N.A.
2	51.	57.	46.	69.	15:10	39.	5:56	N.A.
3	52.	58.	47.	68.	12: 2	36.	5:59	N.A.
4	55.	60.	50.	71.	13: 4	46.	3:28	N.A.
5	51.	54.	48.	61.	16:50	42.	5:49	N.A.
6	53.	59.	46.	69.	13:49	33.	5:44	N.A.
7	55.	60.	51.	67.	12: 3	45.	4:40	N.A.
8	59.	63.	54.	70.	13: 5	49.	4:11	N.A.
9	60.	62.	58.	71.	15:55	54.	1:15	N.A.
10	57.	61.	53.	66.	11:57	43.	6: 5	N.A.
11	57.	61.	53.	70.	16:32	45.	5:57	N.A.
12	60.	65.	54.	74.	11:26	46.	1: 2	N.A.
13	57.	59.	55.	69.	13: 7	49.	6:59	N.A.
14	54.	51.	56.	66.	19:24	47.	12:12	N.A.
15	51.	52.	51.	63.	0: 4	45.	22: 7	N.A.
16	43.	46.	41.	48.	15:21	34.	23:45	N.A.
17	43.	49.	37.	61.	14:30	28.	5:21	N.A.
18	53.	61.	46.	71.	15:13	32.	2:20	N.A.
19	59.	67.	51.	76.	13:57	40.	4:53	N.A.
20	62.	70.	54.	81.	11:59	40.	5:19	N.A.
21	63.	69.	57.	78.	14: 2	46.	23:52	N.A.
22	59.	66.	51.	75.	13:38	38.	5:17	N.A.
23	61.	66.	56.	80.	15:24	42.	5:27	N.A.
24	63.	69.	57.	77.	12:39	50.	5:37	N.A.
25	60.	65.	54.	75.	11:56	51.	22:49	N.A.
26	51.	52.	49.	57.	10:33	48.	14:17	N.A.
27	50.	50.	50.	54.	17:29	46.	5:18	N.A.
28	52.	54.	51.	56.	13: 8	50.	4:36	N.A.
29	55.	60.	51.	73.	15:29	48.	4:23	N.A.
30	52.	52.	51.	55.	16:22	49.	6:30	N.A.
MEAN	55.	59.	51.					N.A.
STANDARD DEVIATION	5.2	6.5	5.0					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: PADONIA ELEMENTARY SCHOOL  
COCKEYSVILLE, MARYLAND

REPORT PERIOD: 80/ 4  
SITE NUMBER: 126

LATITUDE: 39.14 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: EASTERN  
LONGITUDE: 76.52 DEG WEST      PYRANOMETER TILT: 45 DEG      ALTITUDE: 350 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	247.	2.	251.	2.	7.	295.	21:50
2	38.	3.	56.	4.	11.	3.	7:16
3	326.	2.	321.	2.	13.	330.	21: 9
4	101.	4.	102.	4.	27.	121.	16:21
5	111.	7.	117.	9.	23.	127.	12:34
6	*	2.	*	3.	8.	*	11:30
7	332.	4.	336.	6.	18.	339.	15:20
8	335.	5.	339.	7.	30.	332.	12:59
9	325.	4.	330.	4.	14.	320.	6:24
10	117.	2.	111.	3.	11.	131.	17:43
11	89.	3.	83.	4.	13.	52.	16:16
12	9.	4.	8.	6.	28.	61.	14:27
13	142.	4.	142.	5.	14.	148.	6:48
14	291.	6.	265.	7.	24.	334.	20:25
15	76.	5.	90.	4.	16.	82.	15:54
16	110.	7.	120.	10.	22.	128.	9:51
17	124.	2.	118.	3.	10.	124.	8:12
18	*	2.	*	3.	11.	*	13:37
19	*	1.	*	3.	9.	*	11:54
20	26.	2.	41.	3.	13.	53.	13:30
21	179.	3.	179.	4.	13.	217.	8:31
22	144.	2.	137.	4.	12.	106.	15: 4
23	*	2.	*	2.	9.	*	22:52
24	299.	2.	286.	2.	9.	260.	18:41
25	123.	3.	110.	4.	13.	110.	16: 6
26	*	1.	*	1.	7.	*	0:30
27	258.	3.	253.	3.	10.	266.	19:37
28	*	2.	*	2.	6.	*	16:30
29	*	1.	*	1.	8.	*	21:47
30	246.	4.	248.	4.	10.	247.	3:44
MEAN	176.	3.	176.	4.			
STANDARD DEVIATION	106.9	1.6	103.9	2.1			

ENVIRONMENTAL SUMMARY REPORT

SITE: PADONIA ELEMENTARY SCHOOL  
COCKEYSVILLE, MARYLAND

REPORT PERIOD: 80/ 4  
SITE NUMBER: 126

LATITUDE: 39.14 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: EASTERN  
LONGITUDE: 76.52 DEG WEST      PYRANOMETER TILT: 45 DEG      ALTITUDE: 350 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	23	1	0	0	0	0	0	0	0
2	17	7	0	0	0	0	0	0	0
3	17	7	0	0	0	0	0	0	0
4	12	6	6	0	0	0	0	0	0
5	6	7	11	0	0	0	0	0	0
6	21	3	0	0	0	0	0	0	0
7	13	8	3	0	0	0	0	0	0
8	9	10	5	0	0	0	0	0	0
9	14	10	0	0	0	0	0	0	0
10	21	3	0	0	0	0	0	0	0
11	16	8	0	0	0	0	0	0	0
12	13	7	4	0	0	0	0	0	0
13	16	7	1	0	0	0	0	0	0
14	5	13	6	0	0	0	0	0	0
15	9	13	2	0	0	0	0	0	0
16	4	9	11	0	0	0	0	0	0
17	22	2	0	0	0	0	0	0	0
18	20	4	0	0	0	0	0	0	0
19	22	2	0	0	0	0	0	0	0
20	19	5	0	0	0	0	0	0	0
21	16	8	0	0	0	0	0	0	0
22	14	10	0	0	0	0	0	0	0
23	24	0	0	0	0	0	0	0	0
24	23	1	0	0	0	0	0	0	0
25	14	10	0	0	0	0	0	0	0
26	24	0	0	0	0	0	0	0	0
27	20	4	0	0	0	0	0	0	0
28	24	0	0	0	0	0	0	0	0
29	24	0	0	0	0	0	0	0	0
30	12	11	0	0	0	0	0	0	1
AVERAGE	16.5	5.9	1.6	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	494	176	49	0	0	0	0	0	1

ENVIRONMENTAL SUMMARY REPORT

SITE: PAGE JACKSON SCHOOL  
CHARLES TOWN, WEST VIRGINIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 46

LATITUDE: 40.80 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 82.53 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 812 FEET

INSOLATION

DAY	TOTAL	TOTAL DIFF	TOTAL DIR	MAXIMUM TOTAL	EXTRATERRESTRIAL	TTL INS	
	INSOLATION	INSOLATION	INSOLATION	INSOLATION		INSOLATION	INS
	BTU/FT2	BTU/FT2	BTU/FT2	VALUE	BTU/FT2	EXT INS	
				BTU/HR/FT2		PERCENT	
				TIME			
				HR:MN			
1	1532.	N.A.	N.A.	358.	12:23	3288.	47.
2	1824.	N.A.	N.A.	309.	11:37	3285.	56.
3	1973.	N.A.	N.A.	316.	11:32	3278.	60.
4	1628.	N.A.	N.A.	332.	11:31	3271.	50.
5	2257.	N.A.	N.A.	338.	10:47	3264.	69.
6	2287.	N.A.	N.A.	322.	11:14	3257.	70.
7	1338.	N.A.	N.A.	326.	10:45	3250.	41.
8	685.	N.A.	N.A.	271.	10:27	3242.	21.
9	1799.	N.A.	N.A.	371.	11:11	3235.	56.
10	638.	N.A.	N.A.	213.	15:38	3227.	20.
11	2282.	N.A.	N.A.	338.	11:41	3220.	71.
12	522.	N.A.	N.A.	177.	8:43	3215.	16.
13	1688.	N.A.	N.A.	319.	10:51	3207.	53.
14	103.	N.A.	N.A.	84.	13: 8	3199.	3.
15	561.	N.A.	N.A.	197.	8:16	3191.	18.
16	1981.	N.A.	N.A.	374.	12:11	3183.	62.
17	2369.	N.A.	N.A.	332.	11:39	3175.	75.
18	2232.	N.A.	N.A.	316.	11: 1	3167.	70.
19	2214.	N.A.	N.A.	316.	12: 0	3159.	70.
20	*	N.A.	N.A.	*	*:*	3151.	*
21	2344.	N.A.	N.A.	355.	14:37	3142.	75.
22	2019.	N.A.	N.A.	309.	11:13	3134.	64.
23	1922.	N.A.	N.A.	287.	11:12	3128.	61.
24	1579.	N.A.	N.A.	290.	12: 9	3120.	51.
25	1814.	N.A.	N.A.	303.	11: 0	3112.	58.
26	189.	N.A.	N.A.	64.	9:25	3103.	6.
27	122.	N.A.	N.A.	39.	13:51	3095.	4.
28	167.	N.A.	N.A.	64.	10:45	3086.	5.
29	1543.	N.A.	N.A.	326.	11:55	3081.	50.
30	576.	N.A.	N.A.	245.	11:56	3072.	19.
MEAN	1455.	N.A.	N.A.			3185.	
STANDARD DEVIATION	779.	N.A.	N.A.			67.	

ENVIRONMENTAL SUMMARY REPORT

SITE: PAGE JACKSON SCHOOL  
CHARLES TOWN, WEST VIRGINIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 46

LATITUDE: 40.80 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 82.53 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 812 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	45.	49.	42.	61.	16:28	35.	0:33	N.A.
2	53.	59.	47.	73.	14:44	39.	6:7	N.A.
3	54.	58.	49.	67.	13:3	38.	6:7	N.A.
4	54.	60.	49.	68.	11:47	44.	23:56	N.A.
5	48.	51.	45.	59.	16:34	40.	5:22	N.A.
6	54.	61.	48.	73.	15:49	36.	3:14	N.A.
7	55.	59.	51.	67.	13:3	44.	3:59	N.A.
8	58.	61.	55.	67.	11:57	51.	3:41	N.A.
9	60.	65.	55.	76.	15:59	49.	22:45	N.A.
10	53.	57.	49.	64.	16:32	41.	3:49	N.A.
11	56.	62.	50.	74.	16:7	39.	5:1	N.A.
12	58.	61.	54.	69.	8:48	47.	0:16	N.A.
13	52.	55.	50.	64.	13:58	44.	6:14	N.A.
14	53.	51.	54.	67.	17:40	44.	1:40	N.A.
15	47.	49.	46.	55.	11:33	42.	23:55	N.A.
16	42.	45.	40.	50.	15:28	33.	23:49	N.A.
17	43.	49.	37.	64.	16:11	26.	5:20	N.A.
18	52.	60.	45.	77.	15:28	34.	5:15	N.A.
19	58.	65.	51.	77.	16:11	42.	5:52	N.A.
20	59.	66.	55.	79.	12:27	41.	6:3	N.A.
21	61.	65.	57.	73.	16:8	51.	6:0	N.A.
22	61.	65.	56.	76.	13:48	44.	2:36	N.A.
23	61.	66.	57.	82.	16:0	45.	5:47	N.A.
24	59.	63.	54.	74.	12:15	43.	5:24	N.A.
25	56.	60.	51.	65.	16:15	48.	23:33	N.A.
26	47.	48.	46.	51.	9:41	45.	1:9	N.A.
27	48.	48.	47.	51.	17:3	45.	1:19	N.A.
28	50.	51.	49.	52.	13:35	49.	4:47	N.A.
29	56.	60.	52.	68.	11:50	45.	5:42	N.A.
30	52.	53.	51.	58.	14:4	50.	5:27	N.A.
MEAN	53.	57.	50.					N.A.
STANDARD DEVIATION	5.3	6.5	5.0					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: RADEMAKER CORPORATION  
LOUISVILLE, KENTUCKY

REPORT PERIOD: 80/ 4  
SITE NUMBER: 8

LATITUDE: 38.20 DEG NORTH  
LONGITUDE: 85.70 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 53 DEG

TIME ZONE: EASTERN  
ALTITUDE: 474 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	785.	N.A.	N.A.	239.	16: 2	3122.	25.
2	2177.	N.A.	N.A.	316.	13:25	3109.	70.
3	792.	N.A.	N.A.	316.	12:39	3095.	26.
4	156.	N.A.	N.A.	51.	12:38	3084.	5.
5	2364.	N.A.	N.A.	336.	12:49	3069.	77.
6	2211.	N.A.	N.A.	341.	13:22	3055.	72.
7	1048.	N.A.	N.A.	279.	15:20	3044.	34.
8	1384.	N.A.	N.A.	310.	13:34	3030.	46.
9	445.	N.A.	N.A.	188.	11:18	3018.	15.
10	2200.	N.A.	N.A.	350.	13: 9	3004.	73.
11	582.	N.A.	N.A.	151.	10:12	2992.	19.
12	569.	N.A.	N.A.	236.	15:48	2978.	19.
13	235.	N.A.	N.A.	57.	9:40	2964.	8.
14	463.	N.A.	N.A.	287.	11:25	2952.	16.
15	591.	N.A.	N.A.	173.	15:32	2938.	20.
16	2261.	N.A.	N.A.	338.	12:27	2926.	77.
17	2207.	N.A.	N.A.	319.	13:44	2912.	76.
18	2210.	N.A.	N.A.	316.	12:32	2897.	76.
19	2217.	N.A.	N.A.	313.	12:41	2886.	77.
20	1808.	N.A.	N.A.	307.	13: 8	2871.	63.
21	2155.	N.A.	N.A.	327.	12: 9	2857.	75.
22	2076.	N.A.	N.A.	293.	12:45	2845.	73.
23	1964.	N.A.	N.A.	284.	12:51	2831.	69.
24	2094.	N.A.	N.A.	301.	13:17	2820.	74.
25	1844.	N.A.	N.A.	287.	12: 9	2806.	66.
26	546.	N.A.	N.A.	250.	11:30	2792.	20.
27	1138.	N.A.	N.A.	316.	14:12	2781.	41.
28	653.	N.A.	N.A.	267.	11:37	2767.	24.
29	666.	N.A.	N.A.	316.	11:28	2753.	24.
30	1624.	N.A.	N.A.	333.	13:48	2742.	59.
MEAN	1382.	N.A.	N.A.			2931.	
STANDARD DEVIATION	771.	N.A.	N.A.			116.	

ENVIRONMENTAL SUMMARY REPORT

SITE: RADEMAKER CORPORATION  
LOUISVILLE, KENTUCKY

REPORT PERIOD: 80/ 4  
SITE NUMBER: 8

LATITUDE: 38.20 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 85.70 DEG WEST PYRANOMETER TILT: 53 DEG ALTITUDE: 474 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	46.	49.	43.	62.	16:26	40.	21:35	67.
2	59.	68.	51.	82.	15:38	38.	6:29	85.
3	60.	64.	56.	75.	12:39	47.	5:37	91.
4	44.	43.	44.	60.	0:17	36.	23:56	85.
5	46.	54.	37.	68.	15:24	28.	4: 6	88.
6	51.	59.	42.	71.	15:41	28.	4:12	93.
7	58.	62.	53.	73.	15:20	48.	3:36	81.
8	61.	64.	57.	74.	13:23	50.	22:57	83.
9	49.	51.	47.	57.	10: 4	42.	17:30	80.
10	53.	59.	47.	67.	14:29	38.	23:53	84.
11	51.	59.	43.	70.	12:52	32.	5:40	85.
12	50.	51.	49.	58.	16:14	42.	21:24	80.
13	40.	40.	39.	43.	0: 9	36.	18:10	71.
14	41.	43.	39.	50.	8:45	36.	23:53	65.
15	40.	41.	40.	52.	16:38	32.	4:20	65.
16	46.	53.	39.	63.	14: 3	29.	4:59	72.
17	52.	60.	44.	76.	16:19	32.	3:52	82.
18	57.	64.	51.	77.	16: 4	38.	5:52	90.
19	63.	72.	54.	84.	14:22	44.	6:17	97.
20	62.	73.	52.	85.	14:33	37.	6:17	101.
21	63.	71.	56.	81.	16:15	47.	6: 1	105.
22	67.	76.	59.	90.	15:51	39.	5:22	109.
23	72.	79.	65.	89.	14:32	53.	23:41	113.
24	58.	68.	48.	78.	15: 4	37.	23:37	112.
25	49.	54.	44.	68.	16: 9	31.	5:50	107.
26	50.	50.	49.	57.	15:40	43.	6: 4	103.
27	51.	55.	48.	68.	14:17	45.	1: 0	83.
28	48.	51.	45.	58.	11:48	42.	4:20	68.
29	48.	52.	44.	60.	11:50	39.	23:29	67.
30	52.	60.	45.	72.	13:48	34.	5:53	71.
MEAN	53.	58.	48.					86.
STANDARD DEVIATION	8.0	10.4	6.7					14.6

ENVIRONMENTAL SUMMARY REPORT

SITE: SIR GALAHAD  
VIRGINIA BEACH, VIRGINIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 75

LATITUDE: 36.80 DEG NORTH AZIMUTH: 0 DEG  
LONGITUDE: 76.00 DEG WEST PYRANOMETER TILT: 45 DEG  
TIME ZONE: EASTERN  
ALTITUDE: 26 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1407.	N.A.	N.A.	341.	13: 8	3237.	43.
2	2017.	N.A.	N.A.	312.	12:13	3231.	62.
3	2080.	N.A.	N.A.	299.	12:18	3221.	65.
4	904.	N.A.	N.A.	299.	13:56	3212.	28.
5	2195.	N.A.	N.A.	341.	11:41	3202.	69.
6	2159.	N.A.	N.A.	322.	12: 7	3192.	68.
7	1532.	N.A.	N.A.	299.	12:28	3185.	48.
8	1341.	N.A.	N.A.	309.	11:36	3175.	42.
9	1054.	N.A.	N.A.	280.	12:38	3165.	33.
10	2092.	N.A.	N.A.	315.	12:55	3158.	66.
11	2137.	N.A.	N.A.	306.	12:11	3147.	68.
12	1312.	N.A.	N.A.	277.	12:17	3137.	42.
13	402.	N.A.	N.A.	106.	11:24	3127.	13.
14	340.	N.A.	N.A.	96.	16:36	3116.	11.
15	1767.	N.A.	N.A.	328.	11:27	3109.	57.
16	1159.	N.A.	N.A.	331.	12: 7	3098.	37.
17	2196.	N.A.	N.A.	309.	11:34	3088.	71.
18	1847.	N.A.	N.A.	309.	11:20	3077.	60.
19	2131.	N.A.	N.A.	299.	11:56	3066.	70.
20	2082.	N.A.	N.A.	306.	12:33	3056.	68.
21	1873.	N.A.	N.A.	280.	12:28	3048.	61.
22	2131.	N.A.	N.A.	296.	11:45	3037.	70.
23	1959.	N.A.	N.A.	273.	12: 3	3027.	65.
24	1843.	N.A.	N.A.	286.	12:29	3019.	61.
25	1823.	N.A.	N.A.	273.	12:20	3008.	61.
26	1183.	N.A.	N.A.	293.	11:51	2998.	39.
27	1281.	N.A.	N.A.	280.	10:31	2987.	43.
28	343.	N.A.	N.A.	113.	7:49	2977.	12.
29	1616.	N.A.	N.A.	299.	11:29	2969.	54.
30	883.	N.A.	N.A.	322.	12: 3	2958.	30.
MEAN	1570.	N.A.	N.A.			3101.	
STANDARD DEVIATION	578.	N.A.	N.A.			86.	

ENVIRONMENTAL SUMMARY REPORT

SITE: SIR GALAHAD  
VIRGINIA BEACH, VIRGINIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 75

LATITUDE: 36.80 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 76.00 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 26 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE	TIME HR:MN	MIN TEMPERATURE VALUE	TIME HR:MN	INLET WATER TEMPERATURE
1	45.	49.	42.	58.	15: 5	36.	23:41	58.
2	55.	64.	47.	77.	14:37	33.	4:13	72.
3	57.	60.	54.	66.	14:58	50.	5:11	68.
4	66.	72.	61.	83.	15:37	54.	22:31	74.
5	53.	57.	49.	63.	15:46	39.	23:51	67.
6	53.	62.	44.	71.	13:32	34.	5:11	63.
7	56.	62.	49.	70.	11:14	40.	5:16	68.
8	63.	68.	58.	76.	13:49	53.	5:12	70.
9	68.	72.	65.	80.	14: 3	61.	0: 6	72.
10	65.	72.	58.	80.	15: 9	50.	5:54	65.
11	58.	66.	50.	74.	14:40	44.	5:20	70.
12	66.	73.	60.	82.	13:37	49.	5:10	72.
13	62.	64.	61.	70.	11:24	57.	20:52	75.
14	68.	70.	65.	75.	17:24	58.	0: 4	72.
15	58.	59.	56.	67.	0: 5	50.	23:56	70.
16	51.	55.	48.	62.	14:47	43.	5:43	67.
17	47.	53.	42.	67.	16:33	39.	22:42	66.
18	53.	63.	44.	74.	13:54	36.	4:34	70.
19	59.	70.	49.	81.	13:43	40.	5:32	67.
20	62.	72.	52.	83.	13:16	41.	5:22	*
21	58.	66.	51.	72.	10:14	43.	23:50	75.
22	60.	68.	53.	79.	16:33	42.	0:17	79.
23	62.	67.	56.	78.	13:12	53.	6:11	73.
24	67.	76.	59.	84.	12:23	50.	4:45	72.
25	70.	79.	63.	89.	13:30	56.	4:31	79.
26	60.	63.	57.	68.	12: 1	54.	23:56	75.
27	67.	74.	61.	86.	13: 9	54.	0:23	84.
28	60.	63.	58.	67.	8:58	56.	22:46	73.
29	60.	66.	54.	75.	12:38	48.	5:31	80.
30	56.	60.	53.	71.	14:11	50.	20:53	76.
MEAN	60.	66.	54.					71.
STANDARD DEVIATION	6.3	7.0	6.6					5.4



ENVIRONMENTAL SUMMARY REPORT

SITE: TERRELL E. MOSELEY  
LYNCHBURG, VIRGINIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 14

LATITUDE: 37.46 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 70.00 DEG WEST PYRANOMETER TILT: 50 DEG ALTITUDE: 700 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	49.	51.	47.	64.	15:33	39.	5:35	N.A.
2	56.	62.	49.	77.	15:24	34.	5:32	N.A.
3	62.	65.	60.	76.	15: 5	49.	6:22	N.A.
4	62.	68.	57.	76.	14: 0	48.	23:53	N.A.
5	50.	54.	47.	61.	14:28	39.	23:53	N.A.
6	52.	61.	44.	71.	15:15	30.	5:51	N.A.
7	50.	53.	48.	58.	10:37	40.	6: 5	N.A.
8	56.	57.	56.	61.	16:48	52.	6: 3	N.A.
9	62.	66.	59.	76.	15: 1	53.	23:18	N.A.
10	58.	63.	53.	72.	15:39	41.	5:42	N.A.
11	61.	68.	54.	81.	15:34	38.	5:53	N.A.
12	56.	59.	54.	65.	14:32	47.	5:55	N.A.
13	55.	56.	53.	58.	9:34	48.	23:58	N.A.
14	56.	59.	53.	73.	16:20	47.	7:58	N.A.
15	48.	50.	46.	56.	9:48	37.	5:32	N.A.
16	49.	53.	45.	59.	16:29	41.	23:37	N.A.
17	49.	56.	43.	67.	13:55	29.	5:39	N.A.
18	55.	64.	46.	76.	15:31	34.	4:14	N.A.
19	60.	70.	50.	81.	16:53	35.	5:36	N.A.
20	63.	72.	55.	84.	14:59	42.	5:52	N.A.
21	63.	71.	56.	80.	15:26	48.	23:56	N.A.
22	64.	73.	56.	85.	15: 3	38.	5:16	N.A.
23	78.	82.	75.	94.	15:56	62.	7: 8	N.A.
24	66.	74.	59.	85.	13:37	53.	5:37	N.A.
25	66.	70.	61.	82.	16:53	53.	5:46	N.A.
26	51.	51.	51.	59.	0: 0	47.	8:53	N.A.
27	51.	51.	50.	60.	17:47	47.	3: 7	N.A.
28	56.	61.	52.	72.	15:12	48.	23:37	N.A.
29	52.	57.	46.	62.	10: 6	43.	4: 3	N.A.
30	49.	53.	46.	65.	13:29	41.	5: 2	N.A.
MEAN	57.	62.	52.					N.A.
STANDARD DEVIATION	7.0	8.4	6.6					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: TROY-MIAMI COUNTY LIBRARY  
TROY, OHIO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 32

LATITUDE: 40.10 DEG NORTH AZIMUTH: 28 DEG TIME ZONE: EASTERN  
LONGITUDE: 84.40 DEG WEST PYRANOMETER TILT: 40 DEG ALTITUDE: 850 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MM	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	242.	*	*	51.	12:56	3236.	7.
2	1592.	*	*	337.	13:24	3237.	49.
3	514.	*	*	157.	13:42	3239.	16.
4	108.	*	*	29.	14:40	3240.	3.
5	2161.	*	*	331.	13:20	3243.	67.
6	1872.	*	*	331.	13:31	3243.	58.
7	741.	*	*	334.	13:21	3244.	23.
8	733.	*	*	325.	13:58	3244.	23.
9	332.	*	*	129.	10:32	3247.	10.
10	659.	*	*	235.	16:13	3246.	20.
11	1050.	*	*	254.	11:50	3248.	32.
12	576.	*	*	344.	14:31	3245.	18.
13	520.	*	*	96.	13:40	3247.	16.
14	445.	*	*	280.	13:30	3246.	14.
15	546.	*	*	138.	16:16	3247.	17.
16	2229.	*	*	337.	13:43	3245.	69.
17	1942.	*	*	331.	13:25	3243.	60.
18	2076.	*	*	318.	13:21	3244.	64.
19	2032.	*	*	318.	13:48	3242.	63.
20	1429.	*	*	286.	12:56	3240.	44.
21	2188.	*	*	331.	13:28	3237.	68.
22	2015.	*	*	309.	13:31	3237.	62.
23	1864.	*	*	328.	13: 7	3234.	58.
24	1741.	*	*	366.	13: 2	3234.	54.
25	1214.	*	*	331.	13:34	3231.	38.
26	1273.	*	*	321.	15: 6	3230.	39.
27	677.	*	*	186.	13:56	3227.	21.
28	508.	*	*	180.	14:44	3223.	16.
29	1114.	*	*	337.	13:16	3222.	35.
30	876.	*	*	257.	11:53	3218.	27.
MEAN	1176.	0.	0.			3239.	
STANDARD DEVIATION	690.						8.

ENVIRONMENTAL SUMMARY REPORT

SITE: TROY-MIAMI COUNTY LIBRARY  
TROY, OHIO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 32

LATITUDE: 40.10 DEG NORTH AZIMUTH: 28 DEG TIME ZONE: EASTERN  
LONGITUDE: 84.40 DEG WEST PYRANOMETER TILT: 40 DEG ALTITUDE: 850 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	44.	44.	44.	48.	14:16	41.	5:12	N.A.
2	50.	55.	45.	71.	13:40	38.	4:41	N.A.
3	51.	54.	49.	63.	15:24	42.	4:12	N.A.
4	41.	41.	41.	51.	0:0	35.	23:50	N.A.
5	46.	50.	42.	62.	13:52	32.	4:6	N.A.
6	51.	55.	48.	69.	14:14	35.	6:24	N.A.
7	55.	56.	54.	68.	17:27	45.	6:3	N.A.
8	57.	61.	54.	73.	14:3	50.	23:20	N.A.
9	46.	49.	44.	53.	10:32	38.	21:33	N.A.
10	42.	42.	42.	49.	16:19	36.	5:12	N.A.
11	49.	53.	45.	66.	13:58	33.	4:28	N.A.
12	48.	49.	48.	54.	17:17	39.	23:57	N.A.
13	41.	42.	39.	48.	14:2	36.	6:5	N.A.
14	41.	45.	38.	51.	12:36	36.	0:10	N.A.
15	38.	37.	38.	46.	16:38	33.	8:6	N.A.
16	40.	41.	38.	54.	16:45	31.	5:27	N.A.
17	47.	51.	44.	66.	15:22	30.	5:25	N.A.
18	55.	59.	52.	73.	14:31	36.	6:9	N.A.
19	60.	64.	56.	78.	14:15	42.	5:53	N.A.
20	61.	67.	56.	79.	12:51	46.	5:59	N.A.
21	59.	63.	57.	75.	14:32	45.	6:0	N.A.
22	66.	68.	64.	85.	16:17	46.	5:5	N.A.
23	64.	65.	62.	72.	13:45	50.	23:58	N.A.
24	51.	58.	44.	69.	13:2	38.	22:49	N.A.
25	46.	47.	44.	60.	17:1	37.	4:30	N.A.
26	51.	55.	48.	67.	15:6	39.	3:11	N.A.
27	48.	50.	46.	58.	14:1	41.	4:26	N.A.
28	46.	46.	45.	51.	15:0	40.	23:56	N.A.
29	52.	56.	49.	67.	10:36	39.	1:0	N.A.
30	53.	56.	51.	66.	11:53	40.	5:12	N.A.
MEAN	50.	53.	48.					N.A.
STANDARD DEVIATION	7.3	8.2	6.8					N.A.



ENVIRONMENTAL SUMMARY REPORT

SITE: UPTON CENTER  
BALTIMORE, MARYLAND

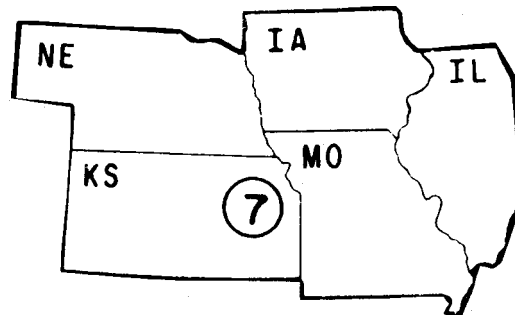
REPORT PERIOD: 80/ 4  
SITE NUMBER: 36

LATITUDE: 39.20 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 76.60 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 172 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	47.	51.	42.	60.	14:28	35.	4:14	51.
2	56.	64.	48.	78.	14:3	38.	5:36	53.
3	55.	60.	50.	71.	13:10	44.	5:26	54.
4	56.	61.	51.	75.	15:32	48.	4:9	56.
5	53.	56.	49.	64.	14:55	44.	6:13	79.
6	58.	66.	50.	79.	13:58	41.	5:42	78.
7	57.	62.	53.	70.	14:21	48.	4:35	60.
8	60.	64.	56.	72.	10:56	51.	3:55	57.
9	60.	61.	58.	71.	15:49	54.	0:31	57.
10	60.	65.	56.	74.	12:53	48.	5:41	60.
11	62.	68.	56.	79.	15:58	46.	5:39	57.
12	63.	68.	59.	81.	10:46	53.	5:58	77.
13	60.	64.	57.	75.	13:31	51.	6:14	78.
14	54.	52.	57.	64.	19:3	47.	11:30	60.
15	53.	55.	51.	63.	10:26	45.	22:31	62.
16	46.	49.	42.	53.	12:34	36.	23:56	57.
17	48.	55.	40.	68.	13:59	30.	4:55	58.
18	58.	67.	49.	77.	13:57	38.	3:11	57.
19	64.	73.	56.	84.	14:57	47.	5:15	77.
20	67.	77.	59.	91.	12:59	50.	5:47	78.
21	66.	72.	60.	81.	14:26	54.	23:33	59.
22	65.	72.	58.	81.	13:57	51.	5:31	60.
23	63.	70.	57.	82.	15:49	47.	5:9	64.
24	63.	69.	58.	78.	11:14	53.	5:22	63.
25	62.	68.	56.	81.	11:59	52.	23:14	64.
26	50.	51.	50.	56.	9:33	48.	19:19	77.
27	50.	51.	50.	54.	16:37	46.	1:27	79.
28	52.	53.	51.	55.	13:9	50.	4:26	62.
29	54.	57.	52.	63.	14:35	49.	5:10	61.
30	52.	52.	52.	54.	17:19	49.	7:22	60.
MEAN	57.	62.	53.					64.
STANDARD DEVIATION	5.9	7.8	5.2					9.1

ZONE 7



ENVIRONMENTAL SUMMARY REPORT

SITE: ARGONNE NATIONAL LABORATORY  
ARGONNE, ILLINOIS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 217

LATITUDE: 41.70 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL  
LONGITUDE: 88.00 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 750 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1412.	N.A.	N.A.	327.	12:10	3298.	43.
2	902.	N.A.	N.A.	272.	11:54	3292.	27.
3	314.	N.A.	N.A.	146.	16:19	3286.	10.
4	522.	N.A.	N.A.	227.	13:41	3283.	16.
5	2339.	N.A.	N.A.	337.	11:12	3276.	71.
6	1558.	N.A.	N.A.	343.	11:39	3270.	48.
7	992.	N.A.	N.A.	279.	11:47	3263.	30.
8	387.	N.A.	N.A.	133.	9:59	3257.	12.
9	192.	N.A.	N.A.	55.	10:29	3250.	6.
10	525.	N.A.	N.A.	266.	9:21	3243.	16.
11	386.	N.A.	N.A.	146.	8:49	3236.	12.
12	1293.	N.A.	N.A.	298.	10: 8	3229.	40.
13	1061.	N.A.	N.A.	288.	9:46	3222.	33.
14	106.	N.A.	N.A.	26.	10:28	3214.	3.
15	1351.	N.A.	N.A.	327.	11:12	3207.	42.
16	2026.	N.A.	N.A.	327.	11:31	3199.	63.
17	1310.	N.A.	N.A.	311.	10:46	3192.	41.
18	2272.	N.A.	N.A.	324.	11:58	3187.	71.
19	2193.	N.A.	N.A.	314.	11:43	3179.	69.
20	1904.	N.A.	N.A.	308.	11:27	3172.	60.
21	2129.	N.A.	N.A.	305.	11:31	3164.	67.
22	2187.	N.A.	N.A.	308.	11:33	3156.	69.
23	2262.	N.A.	N.A.	327.	12: 1	3148.	72.
24	924.	N.A.	N.A.	305.	10: 9	3140.	29.
25	580.	N.A.	N.A.	100.	9: 6	3133.	19.
26	592.	N.A.	N.A.	133.	11:35	3125.	19.
27	237.	N.A.	N.A.	52.	9:27	3117.	8.
28	215.	N.A.	N.A.	42.	16:18	3109.	7.
29	668.	N.A.	N.A.	230.	12:55	3101.	22.
30	762.	N.A.	N.A.	305.	13: 5	3093.	25.
MEAN	1120.	N.A.	N.A.			3201.	
STANDARD DEVIATION	747.	N.A.	N.A.			63.	

ENVIRONMENTAL SUMMARY REPORT

SITE: ARGONNE NATIONAL LABORATORY  
ARGONNE, ILLINOIS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 217

LATITUDE: 41.70 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL  
LONGITUDE: 88.00 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 750 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	43.	47.	38.	54.	10:40	31.	4: 0	N.A.
2	43.	45.	41.	52.	15:22	38.	6:18	N.A.
3	48.	52.	43.	66.	16:24	37.	1: 2	N.A.
4	40.	40.	39.	50.	16:48	33.	9: 9	N.A.
5	47.	53.	41.	61.	15:39	31.	5:31	N.A.
6	54.	59.	48.	69.	13: 4	41.	3:33	N.A.
7	58.	62.	54.	73.	15:15	46.	0:41	N.A.
8	52.	54.	50.	58.	5: 0	39.	22:10	N.A.
9	34.	34.	35.	40.	0:16	31.	8:11	N.A.
10	35.	37.	34.	41.	9:21	31.	22:30	N.A.
11	36.	39.	34.	43.	11: 8	31.	5:42	N.A.
12	39.	43.	36.	48.	16:48	30.	23:54	N.A.
13	38.	43.	33.	51.	9:30	30.	0:16	N.A.
14	34.	34.	33.	38.	0:15	30.	3:43	N.A.
15	38.	41.	35.	47.	11:28	31.	2:40	N.A.
16	40.	47.	34.	55.	13:39	29.	5: 7	N.A.
17	49.	57.	41.	64.	15:34	30.	4:49	N.A.
18	58.	66.	50.	77.	15:31	39.	5:18	N.A.
19	62.	69.	56.	76.	14:12	48.	4:36	N.A.
20	62.	69.	55.	80.	12:58	49.	23: 9	N.A.
21	65.	74.	56.	85.	14: 0	46.	4:40	N.A.
22	74.	82.	67.	91.	14:29	56.	4:32	N.A.
23	54.	55.	52.	71.	0: 1	42.	23:50	N.A.
24	38.	38.	39.	45.	0:33	30.	6:25	N.A.
25	42.	46.	37.	54.	15: 9	31.	23:25	N.A.
26	43.	46.	40.	50.	16:13	31.	1:54	N.A.
27	44.	45.	43.	47.	9:54	41.	3:51	N.A.
28	44.	44.	43.	46.	21:54	41.	1:22	N.A.
29	48.	51.	46.	56.	13:11	43.	3:41	N.A.
30	51.	54.	48.	60.	13:10	42.	23: 1	N.A.
MEAN	47.	51.	43.					N.A.
STANDARD DEVIATION	10.2	12.2	8.7					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: DU-CAT INVESTMENT  
KANSAS CITY, KANSAS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 171

LATITUDE: 39.17 DEG NORTH  
LONGITUDE: 94.43 DEG WEST

AZIMUTH: 3 DEG  
PYRANOMETER TILT: 53 DEG

TIME ZONE: CENTRAL  
ALTITUDE: 1014 FEET

INSOLATION

DAY	TOTAL	TOTAL DIFF	TOTAL DIR	MAXIMUM TOTAL	EXTRATERRESTRIAL	TTL INS	
	INSOLATION	INSOLATION	INSOLATION	INSOLATION			
	BTU/FT2	BTU/FT2	BTU/FT2	VALUE	INSOLATION	-----	
				TIME	BTU/FT2	EXT INS	
				HR:MN		PERCENT	
1	1789.	N.A.	N.A.	340.	11:59	3143.	57.
2	326.	N.A.	N.A.	116.	13:24	3130.	10.
3	294.	N.A.	N.A.	154.	12:43	3116.	9.
4	2160.	N.A.	N.A.	335.	12: 8	3106.	70.
5	2136.	N.A.	N.A.	316.	12: 5	3092.	69.
6	911.	N.A.	N.A.	273.	10:19	3082.	30.
7	866.	N.A.	N.A.	235.	12:11	3068.	28.
8	424.	N.A.	N.A.	108.	15:16	3055.	14.
9	1465.	N.A.	N.A.	327.	13:26	3044.	48.
10	1698.	N.A.	N.A.	324.	12:35	3030.	56.
11	136.	N.A.	N.A.	51.	15:47	3016.	5.
12	2102.	N.A.	N.A.	319.	12:36	3005.	70.
13	1216.	N.A.	N.A.	284.	11: 0	2992.	41.
14	748.	N.A.	N.A.	211.	14:34	2981.	25.
15	2245.	N.A.	N.A.	319.	12: 2	2967.	76.
16	1389.	N.A.	N.A.	308.	12:22	2953.	47.
17	853.	N.A.	N.A.	300.	13: 1	2942.	29.
18	1683.	N.A.	N.A.	319.	11:55	2928.	57.
19	2093.	N.A.	N.A.	302.	12: 2	2914.	72.
20	2026.	N.A.	N.A.	300.	11:46	2903.	70.
21	2139.	N.A.	N.A.	302.	12:18	2890.	74.
22	2118.	N.A.	N.A.	302.	12: 4	2879.	74.
23	1985.	N.A.	N.A.	286.	11:15	2865.	69.
24	1912.	N.A.	N.A.	316.	11:55	2851.	67.
25	1736.	N.A.	N.A.	289.	11:16	2841.	61.
26	1910.	N.A.	N.A.	311.	12:54	2827.	68.
27	1263.	N.A.	N.A.	324.	12:44	2814.	45.
28	2146.	N.A.	N.A.	302.	11:56	2800.	77.
29	2018.	N.A.	N.A.	311.	12: 8	2790.	72.
30	1937.	N.A.	N.A.	300.	10:59	2777.	70.
MEAN	1524.	N.A.	N.A.			2960.	
STANDARD DEVIATION	658.	N.A.	N.A.			111.	



ENVIRONMENTAL SUMMARY REPORT

SITE: JOHN C. BYRAM  
SHAWNEE, KANSAS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 66

LATITUDE: 39.00 DEG NORTH AZIMUTH: 0 DEG TIME\_ZONE: CENTRAL  
LONGITUDE: 95.00 DEG WEST PYRANOMETER TILT: 54 DEG ALTITUDE: 742 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	51.	57.	46.	65.	14:57	40.	23:59	65.
2	45.	47.	44.	54.	13:15	39.	1:14	69.
3	44.	44.	44.	50.	13:12	38.	6:32	58.
4	49.	57.	40.	68.	15:12	32.	6:9	66.
5	54.	62.	46.	71.	13:31	34.	1:58	64.
6	58.	60.	56.	67.	16:51	50.	5:31	58.
7	57.	62.	51.	73.	12:36	45.	23:45	56.
8	50.	51.	48.	56.	15:40	45.	23:27	66.
9	50.	55.	45.	66.	15:16	39.	22:52	68.
10	55.	63.	47.	75.	12:50	30.	6:4	68.
11	45.	45.	45.	57.	0:27	32.	23:51	58.
12	43.	51.	35.	62.	14:47	27.	2:52	59.
13	41.	48.	35.	58.	12:4	27.	5:16	51.
14	38.	42.	35.	52.	15:0	33.	6:7	53.
15	52.	64.	34.	78.	12:31	33.	5:40	53.
16	53.	*	53.	54.	21:49	52.	23:36	55.
17	55.	59.	51.	72.	14:31	45.	4:13	55.
18	59.	65.	53.	76.	15:54	45.	6:24	57.
19	63.	72.	54.	82.	15:17	41.	5:57	55.
20	71.	80.	63.	91.	14:58	51.	5:41	67.
21	72.	82.	61.	93.	12:39	52.	4:34	69.
22	75.	84.	67.	92.	14:10	62.	5:54	61.
23	70.	81.	61.	91.	13:11	50.	5:22	69.
24	59.	66.	54.	75.	14:16	46.	5:27	67.
25	56.	61.	51.	68.	14:12	42.	4:35	64.
26	57.	63.	52.	70.	14:27	48.	5:7	60.
27	58.	65.	52.	75.	15:15	49.	1:28	57.
28	61.	72.	51.	83.	15:24	43.	23:56	67.
29	60.	73.	49.	84.	14:27	36.	5:22	64.
30	60.	70.	52.	77.	10:59	41.	5:27	61.
MEAN	55.	62.	49.					61.
STANDARD DEVIATION	9.1	11.6	8.2					5.6

ENVIRONMENTAL SUMMARY REPORT

SITE: KAW VALLEY STATE BANK  
TOPEKA, KANSAS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 172

LATITUDE: 39.40 DEG NORTH  
LONGITUDE: 95.38 DEG WEST

AZIMUTH: 5 DEG  
PYRANOMETER TILT: 45 DEG

TIME ZONE: CENTRAL  
ALTITUDE: 877 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1340.	N.A.	N.A.	350.	12:13	3274.	41.
2	239.	N.A.	N.A.	71.	13: 3	3267.	7.
3	439.	N.A.	N.A.	302.	11:40	3259.	13.
4	2205.	N.A.	N.A.	344.	11:54	3252.	68.
5	2099.	N.A.	N.A.	321.	12:36	3244.	65.
6	1550.	N.A.	N.A.	331.	12: 5	3239.	48.
7	1392.	N.A.	N.A.	331.	12:35	3231.	43.
8	874.	N.A.	N.A.	169.	13: 0	3223.	27.
9	2215.	N.A.	N.A.	360.	11:10	3214.	69.
10	1825.	N.A.	N.A.	324.	11:54	3209.	57.
11	281.	N.A.	N.A.	94.	16:37	3200.	9.
12	2190.	N.A.	N.A.	334.	12:41	3189.	69.
13	1881.	N.A.	N.A.	337.	12:57	3180.	59.
14	1565.	N.A.	N.A.	347.	12:11	3174.	49.
15	2292.	N.A.	N.A.	328.	11:51	3166.	72.
16	1236.	N.A.	N.A.	334.	11:32	3157.	39.
17	881.	N.A.	N.A.	272.	14: 7	3148.	28.
18	1406.	N.A.	N.A.	328.	13:15	3142.	45.
19	2193.	N.A.	N.A.	311.	12: 0	3133.	70.
20	2160.	N.A.	N.A.	318.	12:16	3124.	69.
21	2313.	N.A.	N.A.	308.	11:49	3115.	74.
22	2127.	N.A.	N.A.	311.	12: 6	3106.	68.
23	1993.	N.A.	N.A.	308.	12:43	3097.	64.
24	2139.	N.A.	N.A.	347.	12:27	3087.	69.
25	1186.	N.A.	N.A.	269.	10:52	3078.	39.
26	1386.	N.A.	N.A.	295.	11:26	3069.	45.
27	1244.	N.A.	N.A.	292.	13: 7	3063.	41.
28	2274.	N.A.	N.A.	311.	12: 8	3054.	74.
29	2167.	N.A.	N.A.	308.	12: 1	3045.	71.
30	1907.	N.A.	N.A.	337.	12:42	3036.	63.
MEAN	1633.	N.A.	N.A.			3159.	
STANDARD DEVIATION	624.	N.A.	N.A.			73.	

ENVIRONMENTAL SUMMARY REPORT

SITE: KAW VALLEY STATE BANK  
TOPEKA, KANSAS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 172

LATITUDE: 39.40 DEG NORTH AZIMUTH: 5 DEG  
LONGITUDE: 95.38 DEG WEST PYRANOMETER TILT: 45 DEG  
TIME ZONE: CENTRAL  
ALTITUDE: 877 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	50.	54.	46.	60.	15:41	40.	23:53	N.A.
2	43.	44.	42.	50.	13:13	38.	0:57	N.A.
3	43.	43.	42.	47.	11:46	38.	5:16	N.A.
4	46.	51.	42.	61.	15:33	33.	5:51	N.A.
5	54.	62.	47.	74.	15:21	32.	5:51	N.A.
6	60.	64.	57.	72.	16:46	49.	4:10	N.A.
7	58.	63.	53.	77.	14:33	45.	4: 3	N.A.
8	50.	51.	49.	59.	16:28	45.	21: 0	N.A.
9	49.	51.	47.	62.	16:35	40.	23:27	N.A.
10	55.	63.	48.	79.	14:12	32.	5:35	N.A.
11	44.	42.	46.	57.	0:10	33.	23:42	N.A.
12	42.	46.	38.	53.	14:44	31.	4: 9	N.A.
13	42.	46.	38.	52.	13:18	33.	5:45	N.A.
14	40.	41.	39.	53.	17: 4	32.	5:47	N.A.
15	51.	59.	44.	69.	14:47	34.	2:47	N.A.
16	56.	65.	48.	76.	14:38	42.	3:26	N.A.
17	52.	55.	50.	62.	16: 5	46.	4:53	N.A.
18	59.	64.	53.	77.	14:24	47.	5:52	N.A.
19	63.	71.	56.	84.	15:33	41.	4:53	N.A.
20	71.	80.	63.	95.	14:29	46.	5:31	N.A.
21	75.	85.	65.	95.	13:41	50.	5:30	N.A.
22	75.	83.	67.	93.	14:30	59.	23:55	N.A.
23	67.	73.	61.	84.	10:46	50.	4:59	N.A.
24	58.	62.	54.	69.	14:46	48.	4:59	N.A.
25	53.	57.	50.	65.	14:58	43.	4:18	N.A.
26	54.	57.	51.	62.	17:34	45.	23:47	N.A.
27	55.	60.	50.	65.	15:30	42.	2: 1	N.A.
28	59.	67.	52.	75.	15:20	44.	5:38	N.A.
29	60.	68.	52.	80.	15:24	39.	4:54	N.A.
30	61.	67.	56.	76.	15:48	44.	5:19	N.A.
MEAN	55.	60.	50.					N.A.
STANDARD DEVIATION	9.4	11.8	7.5					N.A.



ENVIRONMENTAL SUMMARY REPORT

SITE: LINCOLN HOUSING AUTHORITY  
LINCOLN, NEBRASKA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 178

LATITUDE: 40.51 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: CENTRAL  
LONGITUDE: 96.45 DEG WEST      PYRANOMETER TILT: 56 DEG      ALTITUDE: 1180 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	42.	42.	41.	45.	0: 2	37.	22: 8	65.
2	41.	42.	40.	46.	13: 4	37.	0:37	66.
3	39.	38.	40.	43.	0:53	35.	8:16	66.
4	46.	49.	42.	58.	15: 8	33.	4:27	65.
5	52.	56.	48.	67.	15:44	35.	5:36	76.
6	61.	63.	58.	72.	16:15	52.	5:31	79.
7	56.	60.	51.	68.	14:39	43.	6: 7	68.
8	44.	45.	44.	50.	15:37	38.	22: 1	63.
9	46.	48.	44.	59.	16:39	38.	7: 3	67.
10	53.	59.	47.	70.	14: 0	36.	5:28	67.
11	41.	39.	44.	52.	17:23	33.	10: 6	66.
12	42.	46.	39.	55.	15:56	33.	4:55	75.
13	40.	45.	35.	51.	12:23	30.	5:53	80.
14	41.	43.	39.	55.	17:31	30.	5: 4	68.
15	52.	57.	48.	67.	16:51	38.	4:40	67.
16	54.	56.	51.	62.	12:21	47.	6: 2	67.
17	52.	53.	51.	64.	15:40	46.	7:18	66.
18	55.	60.	50.	69.	11:44	40.	5:52	68.
19	63.	67.	59.	80.	16:27	46.	5:21	77.
20	72.	79.	66.	93.	14:40	53.	5:42	78.
21	75.	82.	70.	91.	14:45	58.	5:25	68.
22	75.	80.	69.	88.	15:49	61.	3:49	66.
23	61.	64.	57.	72.	15:51	49.	23:57	63.
24	51.	56.	47.	62.	15:57	40.	5:28	66.
25	52.	60.	46.	67.	13:34	37.	4:57	65.
26	52.	54.	50.	63.	17: 9	45.	0: 5	73.
27	54.	58.	51.	68.	16:47	40.	4:31	74.
28	61.	68.	55.	76.	17:10	45.	5:30	65.
29	61.	68.	54.	78.	15:42	42.	5:18	64.
30	61.	67.	55.	73.	15:51	46.	5:27	65.
MEAN	53.	57.	50.					69.
STANDARD DEVIATION	10.1	11.9	8.8					5.1

ENVIRONMENTAL SUMMARY REPORT

SITE: SCATTERGOOD SCHOOL  
WEST BRANCH, IOWA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 9

LATITUDE: 41.70 DEG NORTH  
LONGITUDE: 91.30 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 50 DEG

TIME ZONE: CENTRAL  
ALTITUDE: 860 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	854.	N.A.	N.A.	269.	10:52	3236.	26.
2	*	N.A.	N.A.	*	*:*	3229.	*
3	663.	N.A.	N.A.	282.	11:16	3219.	21.
4	2193.	N.A.	N.A.	354.	11:44	3210.	68.
5	2155.	N.A.	N.A.	328.	12: 1	3200.	67.
6	320.	N.A.	N.A.	198.	9:43	3190.	10.
7	1719.	N.A.	N.A.	328.	11:53	3183.	54.
8	172.	N.A.	N.A.	62.	12:43	3173.	5.
9	374.	N.A.	N.A.	101.	10:23	3163.	12.
10	983.	N.A.	N.A.	188.	8:57	3156.	31.
11	270.	N.A.	N.A.	71.	8:57	3145.	9.
12	2379.	N.A.	N.A.	360.	11:42	3135.	76.
13	1427.	N.A.	N.A.	360.	12:54	3124.	46.
14	535.	N.A.	N.A.	130.	12:11	3114.	17.
15	2272.	N.A.	N.A.	331.	12: 3	3106.	73.
16	2076.	N.A.	N.A.	318.	11:44	3096.	67.
17	905.	N.A.	N.A.	295.	13:58	3085.	29.
18	2164.	N.A.	N.A.	315.	12:20	3074.	70.
19	2110.	N.A.	N.A.	315.	12:18	3064.	69.
20	2035.	N.A.	N.A.	308.	12:30	3056.	67.
21	2090.	N.A.	N.A.	298.	12: 8	3045.	69.
22	2159.	N.A.	N.A.	305.	12: 0	3034.	71.
23	1726.	N.A.	N.A.	315.	13:22	3027.	57.
24	2230.	N.A.	N.A.	331.	12:16	3016.	74.
25	1328.	N.A.	N.A.	357.	12:12	3005.	44.
26	1605.	N.A.	N.A.	331.	12:54	2995.	54.
27	1486.	N.A.	N.A.	302.	12:59	2984.	50.
28	1034.	N.A.	N.A.	350.	11:33	2973.	35.
29	450.	N.A.	N.A.	162.	13:30	2966.	15.
30	488.	N.A.	N.A.	230.	15: 7	2955.	17.
MEAN	1386.	N.A.	N.A.			3099.	
STANDARD DEVIATION	750.	N.A.	N.A.			86.	

ENVIRONMENTAL SUMMARY REPORT

SITE: SCATTERGOOD SCHOOL  
WEST BRANCH, IOWA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 9

LATITUDE: 41.70 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL  
LONGITUDE: 91.30 DEG WEST PYRANOMETER TILT: 50 DEG ALTITUDE: 860 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	41.	45.	36.	51.	13:32	33.	4:39	63.
2	44.	46.	42.	47.	16:24	40.	22:54	61.
3	44.	48.	40.	57.	11:21	37.	23:50	63.
4	42.	45.	38.	52.	14:35	34.	23:56	64.
5	49.	55.	43.	65.	15:13	32.	4:12	66.
6	52.	53.	51.	60.	15:11	45.	8:7	65.
7	57.	62.	53.	69.	12:9	49.	1:13	68.
8	44.	45.	42.	50.	0:16	35.	23:37	69.
9	33.	33.	33.	35.	0:4	31.	6:49	61.
10	35.	33.	32.	45.	15:53	29.	22:22	62.
11	32.	33.	31.	35.	9:7	27.	3:42	61.
12	38.	41.	34.	49.	16:14	28.	5:2	64.
13	37.	41.	33.	46.	14:9	28.	5:28	65.
14	32.	32.	31.	35.	11:55	29.	7:2	69.
15	42.	48.	37.	57.	14:59	26.	1:49	67.
16	48.	54.	43.	63.	14:29	34.	6:24	67.
17	51.	53.	49.	65.	14:51	42.	5:20	66.
18	59.	66.	53.	75.	14:1	43.	5:24	68.
19	62.	68.	55.	76.	14:42	46.	4:50	69.
20	68.	75.	60.	86.	16:51	48.	4:45	71.
21	69.	76.	62.	88.	15:30	51.	4:8	70.
22	73.	82.	66.	92.	15:45	56.	4:37	69.
23	57.	61.	54.	69.	13:43	44.	23:54	72.
24	45.	48.	43.	58.	16:23	36.	5:4	70.
25	49.	54.	43.	64.	12:28	37.	3:51	70.
26	50.	58.	43.	67.	14:3	32.	5:10	68.
27	57.	62.	51.	70.	16:32	46.	0:32	72.
28	52.	58.	47.	66.	12:48	38.	5:4	69.
29	50.	53.	47.	59.	14:2	41.	2:7	67.
30	54.	56.	52.	63.	15:28	49.	1:36	66.
MEAN	49.	53.	45.					67.
STANDARD DEVIATION	10.8	12.7	9.5					3.2

ENVIRONMENTAL SUMMARY REPORT

SITE: SCATTERGOOD SCHOOL  
WEST BRANCH, IOWA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 9

LATITUDE: 41.70 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: CENTRAL  
LONGITUDE: 91.30 DEG WEST      PYRANOMETER TILT: 50 DEG      ALTITUDE: 860 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	87.	3.	91.	4.	11.	84.	14:36
2	78.	3.	76.	3.	6.	72.	23:20
3	*	6.	*	6.	11.	*	4:46
4	325.	4.	326.	4.	9.	329.	5:58
5	220.	3.	233.	4.	7.	239.	12:33
6	152.	4.	153.	5.	9.	177.	15:16
7	203.	3.	221.	5.	8.	233.	11:59
8	291.	4.	291.	5.	11.	295.	17:47
9	310.	6.	312.	6.	10.	320.	9:45
10	312.	3.	311.	4.	7.	305.	12:57
11	*	2.	*	3.	37.	*	11:53
12	320.	4.	322.	4.	9.	320.	15:36
13	3.	2.	10.	2.	7.	30.	22: 9
14	353.	3.	354.	3.	6.	28.	1:53
15	320.	2.	326.	3.	8.	319.	12:19
16	*	2.	*	3.	6.	*	16: 0
17	125.	2.	126.	3.	6.	134.	3:50
18	*	1.	*	1.	4.	*	14:44
19	219.	4.	221.	5.	10.	211.	11: 3
20	*	1.	*	1.	4.	*	23: 4
21	156.	3.	162.	4.	6.	196.	14:16
22	235.	5.	236.	7.	13.	234.	13:34
23	*	2.	*	2.	6.	*	6:31
24	*	2.	*	2.	6.	*	13:46
25	*	1.	*	1.	4.	*	18: 3
26	*	2.	*	2.	6.	*	17:47
27	*	1.	*	2.	5.	*	9: 4
28	*	1.	*	2.	5.	*	12:53
29	*	1.	*	2.	5.	*	10:50
30	*	1.	*	2.	4.	*	14:18
MEAN	218.	3.	222.	3.			
STANDARD DEVIATION	104.0	1.3	103.4	1.6			

ENVIRONMENTAL SUMMARY REPORT

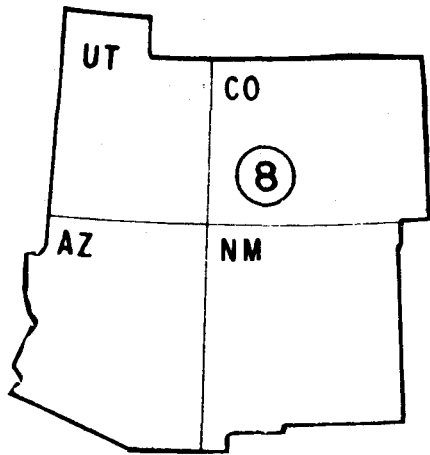
SITE: SCATTERGOOD SCHOOL  
WEST BRANCH, IOWA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 9

LATITUDE: 41.70 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: CENTRAL  
LONGITUDE: 91.30 DEG WEST      PYRANOMETER TILT: 50 DEG      ALTITUDE: 860 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	10	10	0	0	0	0	0	0	4
2	12	1	0	0	0	0	0	0	11
3	4	19	1	0	0	0	0	0	0
4	11	13	0	0	0	0	0	0	0
5	20	4	0	0	0	0	0	0	0
6	10	14	0	0	0	0	0	0	0
7	16	6	0	0	0	0	0	0	2
8	9	13	1	0	0	0	0	0	1
9	1	23	0	0	0	0	0	0	0
10	19	5	0	0	0	0	0	0	0
11	23	0	0	1	0	0	0	0	0
12	16	8	0	0	0	0	0	0	0
13	23	1	0	0	0	0	0	0	0
14	23	1	0	0	0	0	0	0	0
15	22	2	0	0	0	0	0	0	0
16	23	1	0	0	0	0	0	0	0
17	21	3	0	0	0	0	0	0	0
18	24	0	0	0	0	0	0	0	0
19	14	10	0	0	0	0	0	0	0
20	24	0	0	0	0	0	0	0	0
21	18	6	0	0	0	0	0	0	0
22	12	6	6	0	0	0	0	0	0
23	24	0	0	0	0	0	0	0	0
24	24	0	0	0	0	0	0	0	0
25	24	0	0	0	0	0	0	0	0
26	24	0	0	0	0	0	0	0	0
27	24	0	0	0	0	0	0	0	0
28	24	0	0	0	0	0	0	0	0
29	24	0	0	0	0	0	0	0	0
30	23	0	0	0	0	0	0	0	1
AVERAGE	18.2	4.9	0.3	0.0	0.0	0.0	0.0	0.0	0.6
TOTAL	546	146	8	1	0	0	0	0	19



ENVIRONMENTAL SUMMARY REPORT

SITE: ALBUQUERQUE WESTERN  
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 55

LATITUDE: 35.00 DEG NORTH AZIMUTH: 0 DEG  
LONGITUDE: 106.00 DEG WEST PYRANOMETER TILT: 35 DEG TIME ZONE: MOUNTAIN  
ALTITUDE: 5389 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1967.	N.A.	N.A.	280.	11:43	3325.	59.
2	1231.	N.A.	N.A.	342.	12: 7	3321.	37.
3	2095.	N.A.	N.A.	288.	11:59	3317.	63.
4	1701.	N.A.	N.A.	283.	12: 6	3313.	51.
5	1780.	N.A.	N.A.	285.	11:38	3309.	54.
6	*	N.A.	N.A.	*	*:*	3305.	*
7	2126.	N.A.	N.A.	288.	12: 1	3301.	64.
8	2122.	N.A.	N.A.	283.	11:44	3296.	64.
9	1957.	N.A.	N.A.	291.	12:13	3292.	59.
10	2397.	N.A.	N.A.	280.	12:40	3287.	73.
11	*	N.A.	N.A.	*	*:*	3282.	*
12	1374.	N.A.	N.A.	302.	11:43	3277.	42.
13	1582.	N.A.	N.A.	340.	12:12	3272.	48.
14	2123.	N.A.	N.A.	288.	12:12	3267.	65.
15	2048.	N.A.	N.A.	280.	12: 9	3262.	63.
16	2104.	N.A.	N.A.	288.	12:49	3257.	65.
17	2041.	N.A.	N.A.	277.	11:59	3251.	63.
18	2020.	N.A.	N.A.	283.	11:51	3246.	62.
19	2022.	N.A.	N.A.	277.	11:31	3240.	62.
20	1905.	N.A.	N.A.	277.	11:28	3234.	59.
21	1177.	N.A.	N.A.	277.	12:48	3229.	36.
22	1870.	N.A.	N.A.	291.	11:52	3223.	58.
23	1885.	N.A.	N.A.	312.	11:22	3217.	59.
24	479.	N.A.	N.A.	139.	12:40	3211.	15.
25	1267.	N.A.	N.A.	288.	11:28	3205.	40.
26	2006.	N.A.	N.A.	283.	13: 5	3199.	63.
27	1769.	N.A.	N.A.	291.	12:55	3193.	55.
28	2014.	N.A.	N.A.	285.	12:18	3187.	63.
29	933.	N.A.	N.A.	168.	12:17	3181.	29.
30	1745.	N.A.	N.A.	323.	13: 0	3174.	55.
MEAN	1776.	N.A.	N.A.			3256.	
STANDARD DEVIATION	428.	N.A.	N.A.			46.	

ENVIRONMENTAL SUMMARY REPORT

SITE: ALBUQUERQUE WESTERN  
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 55

LATITUDE: 35.00 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: MOUNTAIN  
LONGITUDE: 106.00 DEG WEST      PYRANOMETER TILT: 35 DEG      ALTITUDE: 5389 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	45.	48.	42.	61.	15:54	22.	5:56	66.
2	42.	44.	40.	53.	0: 5	33.	23:53	66.
3	44.	49.	39.	63.	16:59	29.	5: 8	67.
4	52.	58.	46.	73.	16:58	31.	5:47	67.
5	58.	63.	52.	74.	13:57	39.	5:36	67.
6	54.	57.	53.	72.	16:38	41.	6: 8	67.
7	52.	56.	48.	60.	12:49	42.	23:50	68.
8	48.	53.	43.	67.	16:38	29.	4: 0	68.
9	54.	60.	48.	71.	15: 4	34.	6: 5	68.
10	56.	64.	43.	75.	12:46	39.	5:28	69.
11	36.	*	36.	37.	23: 6	34.	22:23	70.
12	38.	39.	36.	44.	15:22	34.	22:50	68.
13	41.	44.	39.	53.	16:33	32.	5:14	68.
14	52.	58.	45.	71.	16:12	31.	5:53	69.
15	60.	67.	53.	77.	14: 1	43.	5:18	69.
16	60.	66.	54.	75.	16: 4	42.	5:58	69.
17	58.	63.	53.	76.	16:15	40.	5:56	70.
18	61.	69.	54.	82.	16:18	40.	5:27	70.
19	65.	72.	58.	84.	16: 3	46.	6: 0	70.
20	69.	75.	63.	86.	15:28	51.	5:12	71.
21	62.	68.	57.	77.	12:48	53.	21:39	70.
22	64.	70.	58.	78.	13:39	46.	5:23	70.
23	61.	67.	56.	74.	16:10	48.	23:57	70.
24	40.	41.	39.	47.	0: 3	36.	19:55	69.
25	46.	52.	41.	58.	12:27	36.	0:27	69.
26	53.	58.	48.	70.	15:55	35.	4:54	70.
27	59.	64.	54.	74.	16: 2	42.	5:15	70.
28	65.	71.	58.	82.	15:45	45.	4:50	70.
29	62.	68.	57.	77.	13:10	50.	5:42	70.
30	56.	60.	51.	68.	13: 0	46.	5:32	70.
MEAN	54.	59.	49.					69.
STANDARD DEVIATION	9.0	9.9	7.6					1.4

ENVIRONMENTAL SUMMARY REPORT

SITE: BOULDER POST OFFICE  
BOULDER, COLORADO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 181

LATITUDE: 39.45 DEG NORTH  
LONGITUDE: 104.52 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 45 DEG

TIME ZONE: MOUNTAIN  
ALTITUDE: 5283 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	474.	N.A.	N.A.	115.	11:50	3275.	14.
2	581.	N.A.	N.A.	134.	14:57	3267.	18.
3	2215.	N.A.	N.A.	377.	10:35	3260.	68.
4	2732.	N.A.	N.A.	377.	11:18	3252.	84.
5	1600.	N.A.	N.A.	371.	11:25	3244.	49.
6	2151.	N.A.	N.A.	364.	11: 3	3236.	66.
7	2220.	N.A.	N.A.	368.	11:51	3231.	69.
8	2614.	N.A.	N.A.	361.	11:24	3222.	81.
9	1829.	N.A.	N.A.	345.	10:13	3214.	57.
10	2031.	N.A.	N.A.	387.	11:39	3206.	63.
11	467.	N.A.	N.A.	166.	10:46	3197.	15.
12	1914.	N.A.	N.A.	425.	11:17	3188.	60.
13	2533.	N.A.	N.A.	355.	10:56	3180.	80.
14	2572.	N.A.	N.A.	348.	11:13	3171.	81.
15	2272.	N.A.	N.A.	387.	11: 9	3165.	72.
16	2445.	N.A.	N.A.	387.	11:28	3156.	77.
17	2517.	N.A.	N.A.	342.	10:42	3147.	80.
18	2903.	N.A.	N.A.	339.	10:54	3138.	92.
19	2194.	N.A.	N.A.	361.	12: 9	3132.	70.
20	1799.	N.A.	N.A.	364.	12: 9	3123.	58.
21	2044.	N.A.	N.A.	348.	11:10	3114.	66.
22	1609.	N.A.	N.A.	348.	11:17	3105.	52.
23	304.	N.A.	N.A.	54.	10:13	3096.	10.
24	*	N.A.	N.A.	*	*:*	3086.	*
25	*	N.A.	N.A.	*	*:*	3077.	*
26	*	N.A.	N.A.	*	*:*	3068.	*
27	*	N.A.	N.A.	*	*:*	3059.	*
28	*	N.A.	N.A.	*	*:*	3053.	*
29	*	N.A.	N.A.	*	*:*	3044.	*
30	*	N.A.	N.A.	*	*:*	3034.	*
MEAN	1914.	N.A.	N.A.			3158.	
STANDARD DEVIATION	763.	N.A.	N.A.			73.	



ENVIRONMENTAL SUMMARY REPORT

SITE: COLORADO SUNWORKS  
LONGMONT, COLORADO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 138

LATITUDE: 39.45 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN  
LONGITUDE: 104.52 DEG WEST PYRANOMETER TILT: 89 DEG ALTITUDE: 5283 FEET

INSOLATION

DAY	TOTAL	TOTAL DIFF	TOTAL DIR	MAXIMUM TOTAL	EXTRATERRESTRIAL	TTL INS	
	INSOLATION	INSOLATION	INSOLATION	INSOLATION		INSOLATION	EXT INS
	BTU/FT2	BTU/FT2	BTU/FT2	VALUE	BTU/FT2	PERCENT	
				TIME			
				HR:MN			
1	1241.	N.A.	N.A.	258.	13:10	1883.	66.
2	1243.	N.A.	N.A.	304.	10:27	1855.	67.
3	1666.	N.A.	N.A.	243.	11:50	1827.	91.
4	1512.	N.A.	N.A.	218.	11:39	1797.	84.
5	747.	N.A.	N.A.	218.	11:50	1771.	42.
6	1347.	N.A.	N.A.	212.	11:24	1744.	77.
7	1252.	N.A.	N.A.	237.	12: 1	1715.	73.
8	1332.	N.A.	N.A.	200.	11: 7	1688.	79.
9	1253.	N.A.	N.A.	215.	11:47	1661.	75.
10	910.	N.A.	N.A.	218.	11:21	1635.	56.
11	432.	N.A.	N.A.	215.	11:42	1608.	27.
12	1005.	N.A.	N.A.	221.	11:51	1581.	64.
13	1303.	N.A.	N.A.	194.	11:35	1555.	84.
14	1263.	N.A.	N.A.	188.	11:16	1530.	83.
15	1020.	N.A.	N.A.	197.	12:22	1505.	68.
16	1031.	N.A.	N.A.	212.	11:10	1480.	70.
17	1252.	N.A.	N.A.	188.	11:35	1454.	86.
18	1177.	N.A.	N.A.	178.	10:58	1429.	82.
19	1058.	N.A.	N.A.	194.	11:22	1406.	75.
20	993.	N.A.	N.A.	200.	10:55	1382.	72.
21	*	N.A.	N.A.	*	*:*	1359.	*
22	*	N.A.	N.A.	*	*:*	1334.	*
23	*	N.A.	N.A.	*	*:*	1312.	*
24	*	N.A.	N.A.	*	*:*	1289.	*
25	*	N.A.	N.A.	*	*:*	1268.	*
26	*	N.A.	N.A.	*	*:*	1246.	*
27	*	N.A.	N.A.	*	*:*	1223.	*
28	*	N.A.	N.A.	*	*:*	1203.	*
29	*	N.A.	N.A.	*	*:*	1181.	*
30	157.	N.A.	N.A.	80.	9:46	1161.	14.
MEAN	1104.	N.A.	N.A.			1503.	
STANDARD DEVIATION	340.	N.A.	N.A.			220.	

ENVIRONMENTAL SUMMARY REPORT

SITE: COLORADO SUNWORKS  
LONGMONT, COLORADO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 138

LATITUDE: 39.45 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN  
LONGITUDE: 104.52 DEG WEST PYRANOMETER TILT: 89 DEG ALTITUDE: 5283 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	31.	37.	27.	45.	9:36	25.	0:48	51.
2	30.	35.	26.	46.	11:58	20.	23:55	51.
3	31.	40.	23.	53.	14:30	16.	5:37	53.
4	36.	45.	29.	52.	14:51	21.	5:47	50.
5	42.	49.	36.	61.	13:48	28.	5:16	51.
6	43.	50.	36.	56.	13:37	30.	23:51	55.
7	37.	42.	34.	46.	15:13	27.	23: 2	56.
8	38.	46.	33.	59.	15:24	23.	4:49	54.
9	45.	56.	36.	71.	15:37	26.	2: 8	54.
10	44.	52.	37.	61.	11:26	30.	5: 2	54.
11	35.	38.	32.	43.	14: 6	28.	23:57	52.
12	33.	40.	28.	48.	13:27	21.	5:43	51.
13	37.	48.	30.	57.	15: 7	17.	5:22	51.
14	46.	59.	34.	69.	14:34	20.	5:35	55.
15	55.	66.	46.	75.	15: 2	34.	4:48	53.
16	46.	54.	40.	60.	13:28	31.	23:40	55.
17	48.	62.	38.	75.	15:30	23.	5:38	55.
18	55.	71.	43.	83.	15:56	27.	4:39	57.
19	59.	74.	47.	82.	13:57	35.	4:26	59.
20	62.	76.	42.	88.	15:24	35.	5: 9	52.
21	*	*	*	*	*:*	*	*:*	*
22	*	*	*	*	*:*	*	*:*	*
23	*	*	*	*	*:*	*	*:*	*
24	*	*	*	*	*:*	*	*:*	*
25	*	*	*	*	*:*	*	*:*	*
26	*	*	*	*	*:*	*	*:*	*
27	*	*	*	*	*:*	*	*:*	*
28	*	*	*	*	*:*	*	*:*	*
29	54.	*	54.	57.	19:37	51.	23:58	51.
30	49.	49.	50.	53.	9:51	45.	16:27	51.
MEAN	44.	52.	36.					53.
STANDARD DEVIATION	9.4	12.3	8.2					2.3

ENVIRONMENTAL SUMMARY REPORT

SITE: COLORADO SUNWORKS  
LONGMONT, COLORADO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 138

LATITUDE: 39.45 DEG NORTH  
LONGITUDE: 104.52 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 89 DEG

TIME ZONE: MOUNTAIN  
ALTITUDE: 5283 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	242.	6.	228.	5.	15.	226.	3: 7
2	262.	5.	272.	4.	14.	222.	21:58
3	*	1.	*	2.	5.	*	8:33
4	244.	3.	254.	4.	9.	239.	13:57
5	260.	2.	259.	4.	16.	233.	15: 8
6	119.	10.	118.	18.	33.	73.	16:49
7	170.	15.	163.	22.	36.	142.	16:23
8	324.	6.	322.	7.	13.	331.	9:42
9	252.	3.	281.	2.	11.	249.	19:53
10	144.	9.	121.	12.	28.	110.	13:55
11	234.	11.	244.	13.	22.	213.	9:18
12	226.	7.	229.	9.	15.	222.	14: 5
13	222.	7.	222.	10.	22.	237.	16:22
14	227.	8.	230.	13.	30.	227.	17:14
15	183.	5.	*	6.	22.	149.	20: 9
16	221.	13.	225.	19.	27.	228.	11:36
17	*	2.	*	3.	7.	*	12:23
18	296.	2.	333.	3.	9.	298.	13:59
19	238.	3.	*	5.	13.	193.	17:41
20	352.	3.	4.	4.	14.	31.	11:43
21	*	*	*	*	*	*	*:*
22	*	*	*	*	*	*	*:*
23	*	*	*	*	*	*	*:*
24	*	*	*	*	*	*	*:*
25	*	*	*	*	*	*	*:*
26	*	*	*	*	*	*	*:*
27	*	*	*	*	*	*	*:*
28	*	*	*	*	*	*	*:*
29	353.	7.	*	0.	14.	343.	21:23
30	314.	9.	318.	12.	21.	323.	14:46
MEAN	232.	6.	223.	8.			
STANDARD DEVIATION	64.0	3.7	83.7	5.9			



ENVIRONMENTAL SUMMARY REPORT

SITE: COLORADO SUNWORKS  
LONGMONT, COLORADO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 138

LATITUDE: 39.45 DEG NORTH AZIMUTH: 0 DEG  
LONGITUDE: 104.52 DEG WEST PYRANOMETER TILT: 89 DEG

TIME ZONE: MOUNTAIN  
ALTITUDE: 5283 FEET

RELATIVE HUMIDITY IN PER CENT

DAY	RELATIVE HUMIDITY	DAYTIME REL HUM	NIGHTTIME REL HUM	MAXIMUM VALUE	HUMIDITY TIME HR:MN	MINIMUM VALUE	HUMIDITY TIME HR:MN
1	86.	70.	99.	100.	0: 0	48.	10:19
2	88.	76.	100.	100.	0: 3	40.	12: 3
3	70.	43.	94.	100.	0: 6	22.	11:23
4	76.	54.	95.	100.	0: 0	40.	13:20
5	75.	58.	90.	100.	0: 1	36.	16:33
6	61.	32.	84.	100.	22:25	13.	11:29
7	35.	21.	47.	100.	0: 1	9.	11:40
8	30.	18.	38.	62.	22:56	11.	15:14
9	46.	27.	61.	94.	5: 4	9.	15:42
10	49.	31.	63.	88.	5:23	9.	15:26
11	76.	64.	87.	100.	1:34	41.	16:25
12	51.	31.	67.	89.	3:30	18.	13:22
13	39.	19.	55.	90.	5:38	5.	15:45
14	40.	20.	59.	93.	5:46	10.	14:12
15	27.	15.	36.	66.	4:59	2.	15: 7
16	34.	20.	45.	77.	2:44	9.	14:54
17	31.	13.	45.	83.	5:54	4.	15:46
18	27.	10.	41.	73.	4:44	0.	13:16
19	23.	9.	33.	51.	4:31	1.	10:50
20	24.	9.	46.	61.	5:51	1.	15:29
21	*	*	*	*	*:*	*	*:*
22	*	*	*	*	*:*	*	*:*
23	*	*	*	*	*:*	*	*:*
24	*	*	*	*	*:*	*	*:*
25	*	*	*	*	*:*	*	*:*
26	*	*	*	*	*:*	*	*:*
27	*	*	*	*	*:*	*	*:*
28	*	*	*	*	*:*	*	*:*
29	63.	0.	63.	79.	23:21	53.	20:19
30	98.	100.	96.	100.	2:43	76.	0: 3
MEAN	52.	35.	66.				
STANDARD DEVIATION	24.	26.	23.				

ENVIRONMENTAL SUMMARY REPORT

SITE: HOMES BY MARILYNN  
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 52

LATITUDE: 35.05 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN  
LONGITUDE: 106.42 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 5100 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2104.	N.A.	N.A.	313.	12:40	3000.	70.
2	1562.	N.A.	N.A.	361.	12:36	2983.	52.
3	2216.	N.A.	N.A.	322.	12:22	2969.	75.
4	1807.	N.A.	N.A.	292.	11:35	2954.	61.
5	1951.	N.A.	N.A.	346.	12:41	2937.	66.
6	2178.	N.A.	N.A.	322.	12:24	2922.	75.
7	2244.	N.A.	N.A.	316.	12:35	2905.	77.
8	2242.	N.A.	N.A.	316.	12:24	2890.	78.
9	2018.	N.A.	N.A.	325.	12: 2	2876.	70.
10	2040.	N.A.	N.A.	313.	12:31	2858.	71.
11	1311.	N.A.	N.A.	307.	12:47	2844.	46.
12	1206.	N.A.	N.A.	322.	13:33	2826.	43.
13	1752.	N.A.	N.A.	358.	12:35	2812.	62.
14	2144.	N.A.	N.A.	304.	12: 8	2797.	77.
15	2053.	N.A.	N.A.	295.	12: 3	2780.	74.
16	2170.	N.A.	N.A.	307.	12:24	2762.	79.
17	2079.	N.A.	N.A.	298.	12:18	2748.	76.
18	2079.	N.A.	N.A.	292.	12: 7	2731.	76.
19	2044.	N.A.	N.A.	292.	11:47	2716.	75.
20	1868.	N.A.	N.A.	283.	12:13	2702.	69.
21	1284.	N.A.	N.A.	307.	12:56	2685.	48.
22	1691.	N.A.	N.A.	304.	13: 6	2671.	63.
23	1923.	N.A.	N.A.	319.	12:30	2654.	72.
24	382.	N.A.	N.A.	108.	11:27	2640.	14.
25	1399.	N.A.	N.A.	352.	12:25	2624.	53.
26	1857.	N.A.	N.A.	286.	13: 4	2610.	71.
27	1696.	N.A.	N.A.	292.	13: 4	2594.	65.
28	1916.	N.A.	N.A.	301.	12:32	2580.	74.
29	937.	N.A.	N.A.	168.	13: 3	2564.	37.
30	1666.	N.A.	N.A.	349.	12:45	2551.	65.
MEAN	1794.	N.A.	N.A.			2773.	
STANDARD DEVIATION	430.	N.A.	N.A.			137.	

ENVIRONMENTAL SUMMARY REPORT

SITE: HOMES BY MARILYNN  
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 52

LATITUDE: 35.05 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: MOUNTAIN  
LONGITUDE: 106.42 DEG WEST      PYRANOMETER TILT: 55 DEG      ALTITUDE: 5100 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	37.	44.	31.	58.	14:38	12.	5:50	68.
2	34.	38.	30.	45.	14:39	24.	23:28	67.
3	36.	48.	26.	59.	14:30	17.	5:20	63.
4	41.	53.	30.	63.	15:26	20.	5:32	75.
5	46.	56.	37.	66.	13:29	27.	3:15	77.
6	47.	56.	39.	67.	14:43	33.	5:13	76.
7	46.	54.	39.	66.	8:24	26.	23:47	77.
8	48.	62.	35.	79.	15:36	19.	6:0	74.
9	56.	71.	42.	87.	14:58	30.	4:55	69.
10	56.	73.	41.	90.	14:7	31.	6:7	71.
11	41.	52.	31.	64.	11:6	24.	5:19	72.
12	32.	35.	30.	44.	13:28	27.	23:41	73.
13	35.	40.	31.	50.	15:47	24.	6:43	73.
14	52.	65.	40.	87.	15:42	26.	5:44	66.
15	58.	73.	45.	92.	15:31	29.	5:23	69.
16	61.	74.	49.	86.	14:37	33.	5:49	73.
17	61.	75.	49.	91.	14:15	36.	5:38	72.
18	64.	80.	48.	96.	15:37	34.	5:11	68.
19	65.	81.	50.	97.	14:1	38.	5:2	72.
20	69.	84.	56.	101.	14:32	41.	4:30	80.
21	63.	75.	53.	90.	11:30	46.	5:38	80.
22	65.	77.	54.	91.	13:1	42.	5:59	73.
23	62.	74.	51.	82.	13:34	39.	5:2	67.
24	41.	44.	39.	49.	12:21	35.	23:42	68.
25	47.	58.	37.	73.	12:41	27.	1:45	69.
26	54.	68.	41.	82.	15:44	33.	5:30	72.
27	50.	58.	42.	68.	15:34	30.	5:20	71.
28	54.	65.	44.	77.	15:43	33.	5:36	72.
29	51.	59.	45.	68.	13:13	38.	1:51	72.
30	59.	68.	52.	82.	11:36	44.	5:28	72.
MEAN	51.	62.	41.					72.
STANDARD DEVIATION	10.5	13.8	8.4					3.9

ENVIRONMENTAL SUMMARY REPORT

SITE: HULLCO CONSTRUCTION  
PRESCOTT, ARIZONA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 148

LATITUDE: 34.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN  
LONGITUDE: 114.40 DEG WEST PYRANOMETER TILT: 60 DEG ALTITUDE: 7000 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	785.	N.A.	N.A.	339.	11:45	2828.	28.
2	1199.	N.A.	N.A.	330.	13: 1	2810.	43.
3	2256.	N.A.	N.A.	321.	12:21	2789.	81.
4	2236.	N.A.	N.A.	336.	12:13	2771.	81.
5	2145.	N.A.	N.A.	315.	12: 6	2753.	78.
6	2155.	N.A.	N.A.	315.	12:18	2734.	79.
7	2197.	N.A.	N.A.	318.	12: 7	2713.	81.
8	2147.	N.A.	N.A.	306.	11:57	2698.	80.
9	2072.	N.A.	N.A.	304.	12:17	2677.	77.
10	2120.	N.A.	N.A.	301.	12: 3	2659.	80.
11	2093.	N.A.	N.A.	312.	12:22	2638.	79.
12	2127.	N.A.	N.A.	304.	12:12	2623.	81.
13	2101.	N.A.	N.A.	304.	12:31	2602.	81.
14	2100.	N.A.	N.A.	301.	12:20	2584.	81.
15	2020.	N.A.	N.A.	286.	12:13	2564.	79.
16	2080.	N.A.	N.A.	295.	12: 6	2549.	82.
17	2038.	N.A.	N.A.	289.	12: 4	2529.	81.
18	1915.	N.A.	N.A.	289.	12:53	2511.	76.
19	1997.	N.A.	N.A.	283.	11:53	2491.	80.
20	2010.	N.A.	N.A.	283.	12:43	2476.	81.
21	1675.	N.A.	N.A.	306.	11:18	2457.	68.
22	1668.	N.A.	N.A.	327.	12:54	2440.	68.
23	1275.	N.A.	N.A.	360.	13:20	2420.	53.
24	833.	N.A.	N.A.	253.	14: 3	2404.	35.
25	1838.	N.A.	N.A.	312.	13:10	2387.	77.
26	1332.	N.A.	N.A.	327.	12:20	2370.	56.
27	1810.	N.A.	N.A.	309.	12:36	2352.	77.
28	1764.	N.A.	N.A.	336.	11:59	2336.	76.
29	508.	N.A.	N.A.	174.	8:26	2320.	22.
30	586.	N.A.	N.A.	230.	14:11	2302.	25.
MEAN	1769.	N.A.	N.A.			2560.	
STANDARD DEVIATION	516.	N.A.	N.A.			160.	

ENVIRONMENTAL SUMMARY REPORT

SITE: HULLCO CONSTRUCTION  
PRESCOTT, ARIZONA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 148

LATITUDE: 34.00 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: MOUNTAIN  
LONGITUDE: 114.40 DEG WEST      PYRANOMETER TILT: 60 DEG      ALTITUDE: 7000 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	35.	37.	32.	46.	10:20	26.	0:22	N.A.
2	34.	37.	31.	42.	17:20	25.	23:55	N.A.
3	37.	45.	30.	58.	15: 1	21.	6:13	N.A.
4	46.	54.	39.	68.	13:55	25.	6: 5	N.A.
5	49.	55.	43.	63.	14:14	34.	6:35	N.A.
6	49.	56.	43.	64.	13:48	35.	6:19	N.A.
7	47.	55.	39.	62.	14:58	31.	6: 4	N.A.
8	46.	56.	37.	68.	15: 4	26.	6:16	N.A.
9	51.	61.	43.	74.	14: 3	28.	5:42	N.A.
10	54.	64.	46.	75.	15:20	35.	3:42	N.A.
11	43.	48.	38.	51.	13:31	32.	4:11	N.A.
12	46.	51.	40.	60.	14:58	33.	23:56	N.A.
13	44.	52.	37.	63.	16:15	28.	3: 3	N.A.
14	49.	58.	40.	73.	16:20	26.	6: 2	N.A.
15	53.	63.	44.	75.	14: 5	32.	5:38	N.A.
16	54.	65.	44.	76.	15: 8	33.	5:53	N.A.
17	57.	68.	47.	80.	15:42	34.	5:50	N.A.
18	58.	70.	48.	81.	14: 7	37.	5:19	N.A.
19	60.	73.	49.	83.	15:53	38.	5:40	N.A.
20	61.	72.	50.	80.	11:12	40.	4:47	N.A.
21	60.	66.	54.	73.	13:10	47.	5:58	N.A.
22	48.	52.	45.	58.	11:34	36.	23:55	N.A.
23	37.	43.	33.	52.	12:32	28.	23:44	N.A.
24	41.	45.	37.	59.	16:57	25.	3:49	N.A.
25	52.	60.	46.	67.	15:29	35.	5:45	N.A.
26	55.	64.	47.	73.	12:57	36.	6: 6	N.A.
27	57.	68.	48.	77.	14:49	38.	4:25	N.A.
28	56.	65.	49.	73.	14:28	40.	6:12	N.A.
29	44.	44.	44.	52.	8:53	36.	23:42	N.A.
30	43.	45.	41.	52.	16: 0	35.	23:28	N.A.
MEAN	49.	56.	42.					N.A.
STANDARD DEVIATION	7.7	10.2	6.0					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: HULLCO CONSTRUCTION  
PRESCOTT, ARIZONA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 148

LATITUDE: 34.00 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: MOUNTAIN  
LONGITUDE: 114.40 DEG WEST      PYRANOMETER TILT: 60 DEG      ALTITUDE: 7000 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	283.	5.	277.	7.	39.	278.	14:36
2	292.	4.	292.	6.	39.	277.	10:26
3	*	1.	*	2.	5.	*	10:40
4	291.	3.	288.	3.	13.	295.	20:22
5	303.	5.	302.	7.	15.	300.	16:27
6	297.	4.	298.	7.	14.	302.	13:0
7	6.	3.	6.	6.	11.	10.	10:52
8	*	1.	*	3.	7.	*	14:43
9	317.	2.	319.	3.	10.	331.	15:45
10	356.	3.	358.	4.	11.	332.	15:52
11	14.	7.	15.	10.	17.	15.	18:4
12	18.	5.	22.	7.	12.	209.	10:10
13	*	2.	*	3.	8.	*	10:15
14	*	1.	*	2.	8.	*	17:11
15	*	2.	*	3.	8.	*	17:37
16	*	1.	*	3.	7.	*	13:32
17	*	1.	*	2.	6.	*	12:20
18	*	2.	*	3.	8.	*	16:15
19	*	2.	*	3.	10.	*	14:12
20	274.	3.	274.	6.	13.	292.	14:56
21	268.	5.	267.	8.	14.	257.	11:28
22	278.	7.	277.	9.	15.	254.	13:10
23	307.	3.	302.	6.	24.	49.	16:54
24	330.	3.	339.	5.	12.	324.	16:5
25	332.	4.	343.	6.	13.	324.	12:54
26	*	1.	*	2.	8.	*	14:1
27	257.	2.	253.	4.	10.	205.	12:4
28	266.	4.	264.	6.	12.	289.	15:38
29	275.	5.	282.	7.	40.	286.	12:21
30	276.	3.	275.	5.	9.	272.	13:34
MEAN	252.	3.	253.	5.			
STANDARD DEVIATION	106.2	1.7	106.3	2.2			





ENVIRONMENTAL SUMMARY REPORT

SITE: KIRTLAND AIR FORCE BASE  
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 24

LATITUDE: 35.06 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: MOUNTAIN  
LONGITUDE: 106.60 DEG WEST      PYRANOMETER TILT: 30 DEG      ALTITUDE: 5350 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2431.	N.A.	N.A.	348.	12: 6	3346.	73.
2	1433.	N.A.	N.A.	408.	12:25	3346.	43.
3	2535.	N.A.	N.A.	356.	12: 1	3346.	76.
4	2161.	N.A.	N.A.	374.	11:53	3342.	65.
5	2190.	N.A.	N.A.	359.	11:36	3342.	66.
6	1615.	N.A.	N.A.	333.	10:53	3341.	48.
7	2524.	N.A.	N.A.	356.	12:14	3341.	76.
8	2551.	N.A.	N.A.	356.	12: 3	3337.	76.
9	2419.	N.A.	N.A.	363.	12:11	3336.	73.
10	2468.	N.A.	N.A.	348.	12:18	3335.	74.
11	1736.	N.A.	N.A.	370.	11:40	3333.	52.
12	1638.	N.A.	N.A.	378.	12:11	3332.	49.
13	1784.	N.A.	N.A.	408.	12:27	3330.	54.
14	2564.	N.A.	N.A.	356.	11:50	3328.	77.
15	2454.	N.A.	N.A.	348.	12: 6	3326.	74.
16	2520.	N.A.	N.A.	352.	11:23	3324.	76.
17	1596.	N.A.	N.A.	281.	9:59	3319.	48.
18	2499.	N.A.	N.A.	348.	11:50	3317.	75.
19	2439.	N.A.	N.A.	344.	12:14	3315.	74.
20	2269.	N.A.	N.A.	341.	11:24	3312.	69.
21	1467.	N.A.	N.A.	337.	12:23	3310.	44.
22	2466.	N.A.	N.A.	363.	12: 8	3307.	75.
23	2269.	N.A.	N.A.	389.	12: 3	3304.	69.
24	530.	N.A.	N.A.	187.	11: 7	3301.	16.
25	1569.	N.A.	N.A.	385.	11:39	3298.	48.
26	2435.	N.A.	N.A.	341.	12:51	3295.	74.
27	2231.	N.A.	N.A.	352.	11:32	3289.	68.
28	2406.	N.A.	N.A.	356.	12:31	3286.	73.
29	1106.	N.A.	N.A.	210.	13: 1	3283.	34.
30	2207.	N.A.	N.A.	412.	12: 6	3279.	67.
MEAN	2084.	N.A.	N.A.			3320.	
STANDARD DEVIATION	514.	N.A.	N.A.			21.	

ENVIRONMENTAL SUMMARY REPORT

SITE: KIRTLAND AIR FORCE BASE  
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 24

LATITUDE: 35.06 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: MOUNTAIN  
LONGITUDE: 106.60 DEG WEST      PYRANOMETER TILT: 30 DEG      ALTITUDE: 5350 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	44.	50.	39.	64.	15: 8	18.	4:44	N.A.
2	41.	44.	38.	52.	15:26	30.	23:50	N.A.
3	44.	52.	36.	67.	16:24	25.	3:18	N.A.
4	53.	61.	45.	77.	14:33	31.	5:35	N.A.
5	57.	65.	50.	75.	13:38	38.	5:28	N.A.
6	52.	57.	49.	70.	17: 7	38.	5: 1	N.A.
7	51.	57.	46.	61.	11:31	37.	23:15	N.A.
8	48.	56.	40.	71.	14:37	25.	4:45	N.A.
9	54.	63.	45.	79.	15:39	31.	5:52	N.A.
10	58.	68.	48.	79.	15:41	35.	5:32	N.A.
11	49.	59.	38.	75.	13:21	31.	22: 8	N.A.
12	36.	39.	34.	45.	13:58	32.	2:51	N.A.
13	41.	45.	36.	55.	14:46	30.	4:27	N.A.
14	51.	60.	42.	76.	15: 7	27.	5:52	N.A.
15	59.	68.	50.	82.	13:47	39.	2:14	N.A.
16	60.	68.	51.	76.	14:25	39.	5:42	N.A.
17	51.	55.	49.	64.	9:48	39.	5:54	N.A.
18	61.	71.	51.	86.	14:51	38.	5:42	N.A.
19	65.	76.	54.	89.	14:38	42.	5: 2	N.A.
20	68.	78.	58.	91.	13:59	44.	5:34	N.A.
21	62.	69.	55.	79.	8:28	50.	21:38	N.A.
22	62.	72.	55.	81.	15:30	43.	4:40	N.A.
23	61.	69.	53.	75.	13:55	43.	23:50	N.A.
24	38.	40.	36.	48.	11:12	33.	23:10	N.A.
25	47.	54.	40.	64.	11:39	34.	0:19	N.A.
26	54.	62.	46.	77.	15:58	33.	4:40	N.A.
27	60.	67.	53.	78.	14:34	45.	5:34	N.A.
28	66.	75.	57.	87.	15:14	42.	5:30	N.A.
29	62.	69.	56.	82.	13: 6	47.	23:18	N.A.
30	55.	61.	49.	70.	13:26	43.	5:31	N.A.
MEAN	54.	61.	47.					N.A.
STANDARD DEVIATION	8.6	10.5	7.2					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: KIRTLAND AIR FORCE BASE  
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 24

LATITUDE: 35.06 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: MOUNTAIN  
LONGITUDE: 106.60 DEG WEST      PYRANOMETER TILT: 30 DEG      ALTITUDE: 5350 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	333.	6.	343.	5.	25.	13.	15:48
2	79.	6.	76.	10.	23.	76.	14:17
3	*	2.	*	3.	9.	*	13:53
4	*	2.	*	2.	11.	*	21: 1
5	71.	5.	63.	6.	21.	99.	16:24
6	67.	4.	61.	6.	16.	54.	16:51
7	124.	9.	126.	13.	23.	140.	14: 6
8	139.	3.	135.	4.	10.	143.	17:39
9	*	1.	*	1.	7.	*	12:53
10	104.	3.	94.	5.	17.	102.	16:28
11	264.	7.	279.	6.	27.	284.	18:51
12	266.	11.	267.	11.	25.	277.	0:27
13	148.	4.	127.	5.	11.	320.	0:11
14	*	2.	*	3.	9.	*	16:43
15	39.	3.	57.	4.	11.	86.	14:46
16	162.	5.	140.	6.	18.	263.	23: 8
17	255.	4.	132.	1.	18.	278.	0:28
18	*	1.	*	2.	7.	*	12:59
19	*	1.	*	2.	8.	*	14:54
20	28.	3.	37.	3.	13.	292.	22:15
21	343.	5.	358.	9.	24.	8.	13: 0
22	355.	5.	11.	7.	18.	7.	14:21
23	359.	10.	356.	16.	26.	354.	14: 1
24	35.	3.	71.	4.	12.	80.	12:38
25	300.	4.	344.	3.	10.	279.	18:19
26	296.	3.	31.	3.	17.	271.	22:27
27	275.	6.	305.	4.	16.	257.	1:34
28	293.	3.	4.	2.	11.	289.	22:32
29	344.	6.	2.	8.	25.	22.	18: 3
30	27.	5.	35.	6.	16.	29.	15:35
MEAN	196.	4.	144.	5.			
STANDARD DEVIATION	121.2	2.6	124.6	3.6			

ENVIRONMENTAL SUMMARY REPORT

SITE: KIRTLAND AIR FORCE BASE  
ALBUQUERQUE, NEW MEXICO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 24

LATITUDE: 35.06 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: MOUNTAIN  
LONGITUDE: 106.60 DEG WEST      PYRANOMETER TILT: 30 DEG      ALTITUDE: 5350 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	12	2	5	5	0	0	0	0	0
2	12	3	7	2	0	0	0	0	0
3	21	3	0	0	0	0	0	0	0
4	21	2	1	0	0	0	0	0	0
5	10	11	2	1	0	0	0	0	0
6	10	7	2	0	0	0	0	0	5
7	5	7	3	9	0	0	0	0	0
8	17	7	0	0	0	0	0	0	0
9	24	0	0	0	0	0	0	0	0
10	18	3	3	0	0	0	0	0	0
11	12	2	0	6	4	0	0	0	0
12	1	5	15	2	1	0	0	0	0
13	14	8	2	0	0	0	0	0	0
14	21	3	0	0	0	0	0	0	0
15	17	7	0	0	0	0	0	0	0
16	11	4	6	3	0	0	0	0	0
17	10	4	1	0	0	0	0	0	9
18	23	1	0	0	0	0	0	0	0
19	23	1	0	0	0	0	0	0	0
20	18	4	2	0	0	0	0	0	0
21	14	3	2	5	0	0	0	0	0
22	10	6	5	2	0	0	0	0	1
23	7	4	2	8	3	0	0	0	0
24	18	5	1	0	0	0	0	0	0
25	13	11	0	0	0	0	0	0	0
26	18	2	3	1	0	0	0	0	0
27	9	6	9	0	0	0	0	0	0
28	18	5	1	0	0	0	0	0	0
29	11	8	0	4	1	0	0	0	0
30	10	7	6	0	0	0	0	0	1
AVERAGE	14.3	4.7	2.6	1.6	0.3	0.0	0.0	0.0	0.5
TOTAL	428	141	78	48	9	0	0	0	16

ENVIRONMENTAL SUMMARY REPORT

SITE: PERL-MACK ENTERPRISES  
DENVER, COLORADO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 60

LATITUDE: 39.80 DEG NORTH  
LONGITUDE: 104.00 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 30 DEG

TIME ZONE: MOUNTAIN  
ALTITUDE: 5250 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	609.	N.A.	N.A.	190.	14: 5	3339.	18.
2	1314.	N.A.	N.A.	432.	13:51	3342.	39.
3	2175.	N.A.	N.A.	343.	13:52	3346.	65.
4	2311.	N.A.	N.A.	326.	13: 9	3346.	69.
5	1314.	N.A.	N.A.	320.	13:20	3349.	39.
6	*	N.A.	N.A.	*	*:*	3352.	*
7	1463.	N.A.	N.A.	349.	14:26	3354.	44.
8	2364.	N.A.	N.A.	337.	13:31	3357.	70.
9	2025.	N.A.	N.A.	332.	13:50	3356.	60.
10	1476.	N.A.	N.A.	346.	13:36	3358.	44.
11	703.	N.A.	N.A.	280.	12:43	3357.	21.
12	1163.	N.A.	N.A.	415.	13:56	3359.	35.
13	2097.	N.A.	N.A.	340.	14: 7	3361.	62.
14	2560.	N.A.	N.A.	334.	13: 8	3362.	76.
15	1987.	N.A.	N.A.	352.	13:39	3364.	59.
16	1852.	N.A.	N.A.	395.	14: 3	3362.	55.
17	2344.	N.A.	N.A.	332.	13:36	3363.	70.
18	2354.	N.A.	N.A.	332.	13:20	3364.	70.
19	2175.	N.A.	N.A.	334.	13:31	3364.	65.
20	*	N.A.	N.A.	*	*:*	3362.	*
21	1788.	N.A.	N.A.	311.	14:21	3363.	53.
22	*	N.A.	N.A.	*	*:*	3363.	*
23	188.	N.A.	N.A.	58.	12:29	3360.	6.
24	348.	N.A.	N.A.	107.	15:38	3360.	10.
25	1289.	N.A.	N.A.	306.	14:35	3360.	38.
26	1876.	N.A.	N.A.	357.	12:54	3360.	56.
27	1972.	N.A.	N.A.	355.	14:29	3360.	59.
28	*	N.A.	N.A.	*	*:*	3356.	*
29	*	N.A.	N.A.	*	*:*	3356.	*
30	*	N.A.	N.A.	*	*:*	3355.	*
MEAN	1656.	N.A.	N.A.			3357.	
STANDARD DEVIATION	674.	N.A.	N.A.			7.	

ENVIRONMENTAL SUMMARY REPORT

SITE: PERL-MACK ENTERPRISES  
DENVER, COLORADO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 60

LATITUDE: 39.80 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: MOUNTAIN  
LONGITUDE: 104.00 DEG WEST      PYRANOMETER TILT: 30 DEG      ALTITUDE: 5250 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	29.	30.	27.	36.	14:37	22.	21:46	*
2	29.	32.	27.	42.	13:41	23.	6:34	*
3	31.	34.	27.	48.	14:24	20.	7:34	*
4	41.	46.	36.	60.	16: 5	25.	7:23	*
5	45.	50.	41.	64.	13:26	31.	4:11	*
6	43.	48.	41.	56.	11:28	35.	23:51	*
7	38.	41.	35.	47.	15:24	28.	23:55	*
8	40.	44.	36.	56.	15:23	24.	1:47	*
9	47.	51.	43.	71.	17:24	27.	7: 5	*
10	46.	50.	41.	64.	12:10	32.	7: 1	*
11	34.	35.	33.	41.	18:24	30.	22: 7	*
12	33.	35.	31.	42.	16:15	21.	6:55	*
13	38.	40.	36.	53.	18: 2	24.	7:11	*
14	47.	53.	42.	67.	16:26	26.	4:52	*
15	57.	61.	52.	75.	17:58	42.	4:51	*
16	48.	48.	47.	59.	15: 2	34.	6:51	*
17	51.	55.	46.	71.	18:18	32.	6:13	*
18	61.	65.	57.	84.	15:28	40.	6:40	*
19	62.	67.	56.	85.	16: 0	46.	6:24	*
20	58.	53.	60.	76.	19: 3	45.	5:58	*
21	68.	72.	62.	87.	15: 9	52.	5:33	*
22	61.	64.	59.	81.	15:16	49.	7: 5	*
23	44.	44.	45.	55.	0: 2	40.	11:57	*
24	39.	37.	42.	43.	6:13	32.	10: 7	*
25	40.	41.	38.	54.	16:22	30.	5:21	*
26	47.	53.	41.	62.	13:47	34.	5:58	*
27	50.	54.	47.	67.	15:38	35.	6: 9	*
28	55.	61.	48.	74.	15:17	39.	7: 1	*
29	59.	66.	51.	82.	15:24	44.	6:41	*
30	48.	50.	46.	56.	0:18	39.	22:56	*
MEAN	46.	49.	43.					0.
STANDARD DEVIATION	10.4	11.3	9.8					



ENVIRONMENTAL SUMMARY REPORT

SITE: PUBLIC SERVICE  
RIO RANCHO, NEW MEXICO

REPORT PERIOD: 80/ 4  
SITE NUMBER: 201

LATITUDE: 35.03 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: MOUNTAIN  
LONGITUDE: 106.37 DEG WEST      PYRANOMETER TILT: 32 DEG      ALTITUDE: 5311 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE      TIME HR:MN	MIN TEMPERATURE VALUE      TIME HR:MN	INLET WATER TEMPERATURE
1	43.	49.	37.	63. 15:35	18. 5:57	72.
2	40.	44.	36.	51. 13:59	29. 23:32	73.
3	41.	50.	30.	63. 15:16	25. 2:39	74.
4	51.	59.	43.	75. 15:35	34. 5:22	74.
5	54.	63.	46.	75. 12:20	36. 5:56	70.
6	55.	62.	47.	71. 15:26	37. 5:56	70.
7	48.	55.	41.	59. 11:15	34. 22:10	73.
8	47.	56.	38.	70. 15:30	25. 5:38	71.
9	53.	63.	43.	78. 15: 5	32. 4:31	73.
10	56.	66.	46.	76. 14:40	32. 4:58	73.
11	48.	58.	37.	71. 12:17	32. 20: 1	72.
12	38.	41.	36.	52. 15:35	33. 8: 7	73.
13	40.	46.	35.	56. 12:42	27. 4:49	72.
14	50.	58.	42.	72. 13:54	26. 4:36	71.
15	56.	66.	46.	78. 12:55	30. 5:32	72.
16	57.	67.	48.	74. 13:45	38. 5:50	73.
17	57.	67.	47.	82. 16:19	37. 5:33	75.
18	61.	72.	51.	85. 14:54	42. 4:51	74.
19	62.	74.	51.	85. 12:36	38. 4:46	76.
20	65.	75.	55.	88. 14:29	44. 3:32	73.
21	59.	67.	51.	77. 11:12	48. 5:36	76.
22	60.	69.	51.	80. 12:59	41. 5:26	77.
23	57.	66.	48.	72. 14:50	42. 4:47	76.
24	40.	43.	37.	47. 8:16	34. 23:56	73.
25	45.	52.	38.	62. 16:30	32. 5:10	72.
26	52.	60.	43.	71. 15:42	31. 3:26	74.
27	56.	64.	49.	78. 15:30	41. 5:23	76.
28	62.	71.	54.	82. 16: 9	46. 5: 1	76.
29	61.	67.	54.	76. 13:38	48. 22:28	76.
30	55.	61.	49.	70. 15:39	43. 6: 1	75.
MEAN	52.	60.	44.			73.
STANDARD DEVIATION	7.8	9.4	6.6			2.0

ENVIRONMENTAL SUMMARY REPORT

SITE: TEMPE UNION HIGH SCHOOL  
TEMPE, ARIZONA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 34

LATITUDE: 33.26 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN  
LONGITUDE: 111.50 DEG WEST PYRANOMETER TILT: 32 DEG ALTITUDE: 1117 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1577.	N.A.	N.A.	352.	13: 9	3333.	47.
2	1153.	N.A.	N.A.	308.	12:41	3330.	35.
3	2356.	N.A.	N.A.	330.	12: 2	3328.	71.
4	2110.	N.A.	N.A.	361.	12:25	3325.	63.
5	2281.	N.A.	N.A.	323.	12:24	3321.	69.
6	2286.	N.A.	N.A.	323.	12:34	3318.	69.
7	2261.	N.A.	N.A.	330.	13: 8	3315.	68.
8	2357.	N.A.	N.A.	327.	11:44	3311.	71.
9	2328.	N.A.	N.A.	327.	11:51	3304.	70.
10	2348.	N.A.	N.A.	327.	12:56	3301.	71.
11	2396.	N.A.	N.A.	330.	12:18	3297.	73.
12	2384.	N.A.	N.A.	333.	12:33	3293.	72.
13	2361.	N.A.	N.A.	333.	12:39	3288.	72.
14	2380.	N.A.	N.A.	333.	12:16	3284.	72.
15	2283.	N.A.	N.A.	323.	12:49	3280.	70.
16	2309.	N.A.	N.A.	323.	12:29	3275.	70.
17	2651.	N.A.	N.A.	327.	12:22	3271.	81.
18	2299.	N.A.	N.A.	323.	12:24	3266.	70.
19	2307.	N.A.	N.A.	320.	12:36	3261.	71.
20	1907.	N.A.	N.A.	314.	11:33	3256.	59.
21	2363.	N.A.	N.A.	346.	12:35	3251.	73.
22	2136.	N.A.	N.A.	323.	12:13	3246.	66.
23	1684.	N.A.	N.A.	352.	13: 6	3241.	52.
24	1439.	N.A.	N.A.	336.	12:39	3236.	44.
25	2273.	N.A.	N.A.	314.	12:29	3230.	70.
26	2202.	N.A.	N.A.	311.	12:37	3225.	68.
27	1766.	N.A.	N.A.	374.	12:38	3220.	55.
28	2076.	N.A.	N.A.	355.	12:53	3214.	65.
29	1082.	N.A.	N.A.	260.	14:35	3209.	34.
30	716.	N.A.	N.A.	314.	10:37	3203.	22.
MEAN	2069.	N.A.	N.A.			3274.	
STANDARD DEVIATION	458.	N.A.	N.A.			40.	

ENVIRONMENTAL SUMMARY REPORT

SITE: TEMPE UNION HIGH SCHOOL  
TEMPE, ARIZONA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 34

LATITUDE: 33.26 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: MOUNTAIN  
LONGITUDE: 111.50 DEG WEST PYRANOMETER TILT: 32 DEG ALTITUDE: 1117 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	49.	57.	42.	71.	13: 9	38.	6: 3	106.
2	50.	55.	44.	66.	16:20	37.	6: 7	96.
3	57.	65.	50.	79.	16:36	37.	5: 1	106.
4	63.	71.	55.	86.	15:47	41.	6:22	104.
5	64.	72.	57.	82.	13:23	45.	5:39	89.
6	65.	72.	58.	83.	16:55	47.	6:16	83.
7	68.	76.	61.	87.	15:32	49.	5:38	100.
8	69.	77.	62.	90.	16:16	46.	6:35	98.
9	72.	80.	64.	92.	15: 3	46.	6:20	99.
10	72.	79.	64.	91.	16: 2	47.	6:21	100.
11	67.	73.	61.	81.	13: 1	47.	6:15	112.
12	65.	71.	59.	80.	16:55	51.	2:57	107.
13	64.	71.	57.	81.	15:39	47.	5:48	94.
14	66.	75.	58.	88.	17: 9	43.	4:27	94.
15	71.	80.	62.	92.	15:45	47.	5:37	102.
16	74.	83.	65.	98.	16:18	51.	5:33	113.
17	75.	86.	64.	102.	15:39	52.	4:43	100.
18	80.	90.	70.	104.	16: 3	57.	4:51	88.
19	83.	93.	73.	108.	15:42	55.	5:29	102.
20	81.	89.	72.	100.	15: 6	57.	6:12	94.
21	78.	86.	71.	95.	8:19	62.	5:30	88.
22	64.	69.	60.	78.	10: 0	54.	22:10	100.
23	57.	62.	52.	72.	10:16	45.	4:24	97.
24	59.	65.	53.	77.	16:29	43.	4:39	102.
25	67.	75.	59.	89.	15:25	44.	5:33	102.
26	75.	84.	66.	96.	16:11	53.	4:43	104.
27	78.	85.	71.	99.	15: 7	59.	5:47	93.
28	73.	82.	65.	91.	13:25	53.	5:36	98.
29	60.	62.	58.	69.	8:38	53.	22:16	100.
30	57.	59.	55.	67.	10:37	50.	1:39	101.
MEAN	67.	75.	60.					99.
STANDARD DEVIATION	8.7	10.1	7.6					6.7

ZONE 9





ENVIRONMENTAL SUMMARY REPORT

SITE: ARATEX SERVICES  
FRESNO, CALIFORNIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 31

LATITUDE: 36.80 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: PACIFIC  
LONGITUDE: 119.43 DEG WEST      PYRANOMETER TILT: 30 DEG      ALTITUDE: 328 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	55.	60.	50.	72.	14:33	41.	5:42	72.
2	57.	64.	51.	75.	14:45	45.	5:50	72.
3	58.	66.	50.	77.	15: 5	40.	5:36	72.
4	57.	62.	52.	68.	11:10	44.	5:13	72.
5	56.	59.	53.	70.	15:48	49.	23:58	68.
6	57.	63.	51.	69.	14:55	44.	5:29	74.
7	57.	64.	50.	78.	15: 3	41.	5:25	71.
8	62.	71.	53.	83.	15:56	41.	5: 0	72.
9	63.	71.	55.	78.	14:30	47.	5:32	72.
10	61.	68.	54.	79.	15:12	46.	5:32	71.
11	65.	75.	56.	88.	15:17	44.	4:38	72.
12	71.	81.	60.	92.	14:41	50.	4:12	76.
13	70.	79.	60.	93.	15:27	49.	5:32	102.
14	63.	69.	56.	77.	14:55	50.	5:25	72.
15	63.	71.	56.	85.	14:29	43.	5:24	72.
16	72.	83.	62.	96.	15:14	50.	5: 4	72.
17	76.	87.	65.	99.	14:59	54.	5:17	73.
18	66.	73.	61.	87.	13: 1	52.	5:28	73.
19	72.	82.	62.	97.	15:57	52.	4:45	81.
20	66.	75.	56.	86.	14:10	51.	23:19	73.
21	55.	62.	49.	75.	15:15	43.	4:50	72.
22	51.	55.	47.	64.	10:59	43.	22:29	71.
23	52.	55.	49.	64.	9:47	40.	2:56	71.
24	61.	66.	56.	73.	11: 3	52.	3:51	72.
25	64.	71.	57.	81.	14:10	48.	5: 2	72.
26	68.	76.	59.	88.	15: 4	49.	4:29	82.
27	70.	76.	63.	87.	13: 2	54.	5:12	78.
28	65.	70.	60.	77.	14:15	57.	21:48	72.
29	62.	64.	60.	79.	14: 9	55.	8: 7	71.
30	67.	73.	61.	81.	12:44	55.	4:54	72.
MEAN	63.	70.	56.					74.
STANDARD DEVIATION	6.4	8.1	5.1					6.1

ENVIRONMENTAL SUMMARY REPORT

SITE: ARATEX SERVICES  
FRESNO, CALIFORNIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 31

LATITUDE: 36.80 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: PACIFIC  
LONGITUDE: 119.43 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 328 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	289.	3.	311.	2.	14.	263.	3:13
2	*	2.	*	1.	15.	*	3:42
3	*	2.	*	2.	9.	*	23:32
4	*	2.	*	2.	9.	*	11:48
5	54.	4.	65.	4.	12.	78.	11:32
6	291.	8.	292.	9.	17.	277.	16:52
7	307.	2.	80.	2.	11.	303.	0: 5
8	*	1.	*	2.	8.	*	9: 0
9	292.	7.	292.	8.	21.	298.	15:45
10	293.	4.	293.	4.	10.	300.	17:31
11	*	2.	*	3.	10.	*	9:58
12	296.	2.	283.	2.	10.	318.	17:59
13	88.	2.	89.	4.	11.	73.	9: 0
14	291.	9.	291.	12.	19.	286.	12:47
15	*	2.	*	2.	10.	*	0: 4
16	*	0.	*	1.	5.	*	11:38
17	282.	2.	174.	1.	12.	294.	19: 9
18	291.	4.	*	2.	16.	285.	17:54
19	295.	2.	52.	1.	17.	282.	22:10
20	290.	8.	288.	3.	29.	294.	19:41
21	282.	4.	277.	4.	17.	300.	0: 2
22	280.	2.	284.	4.	17.	288.	12:56
23	*	1.	*	1.	8.	*	12:27
24	*	2.	*	2.	9.	*	22:43
25	288.	3.	291.	3.	10.	311.	15:52
26	291.	3.	268.	1.	12.	297.	23: 9
27	277.	3.	*	2.	12.	310.	2:16
28	308.	3.	308.	3.	16.	321.	17: 0
29	*	1.	*	2.	8.	*	8:28
30	*	1.	*	2.	9.	*	14:39
MEAN	268.	3.	232.	3.			
STANDARD DEVIATION	69.9	2.2	96.3	2.5			

ENVIRONMENTAL SUMMARY REPORT

SITE: ARATEX SERVICES  
FRESNO, CALIFORNIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 31

LATITUDE: 36.80 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: PACIFIC  
LONGITUDE: 119.43 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 328 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	18	4	2	0	0	0	0	0	0
2	21	2	1	0	0	0	0	0	0
3	22	2	0	0	0	0	0	0	0
4	22	2	0	0	0	0	0	0	0
5	12	11	1	0	0	0	0	0	0
6	5	5	12	2	0	0	0	0	0
7	21	3	0	0	0	0	0	0	0
8	23	1	0	0	0	0	0	0	0
9	6	5	12	1	0	0	0	0	0
10	13	11	0	0	0	0	0	0	0
11	19	5	0	0	0	0	0	0	0
12	20	4	0	0	0	0	0	0	0
13	18	6	0	0	0	0	0	0	0
14	3	5	13	3	0	0	0	0	0
15	22	2	0	0	0	0	0	0	0
16	24	0	0	0	0	0	0	0	0
17	16	8	0	0	0	0	0	0	0
18	15	4	2	0	0	0	0	0	3
19	19	2	3	0	0	0	0	0	0
20	11	3	5	4	1	0	0	0	0
21	16	6	2	0	0	0	0	0	0
22	18	5	1	0	0	0	0	0	0
23	24	0	0	0	0	0	0	0	0
24	20	4	0	0	0	0	0	0	0
25	18	6	0	0	0	0	0	0	0
26	17	7	0	0	0	0	0	0	0
27	20	3	1	0	0	0	0	0	0
28	17	3	4	0	0	0	0	0	0
29	23	1	0	0	0	0	0	0	0
30	21	2	0	0	0	0	0	0	1
AVERAGE	17.5	4.1	2.0	0.3	0.0	0.0	0.0	0.0	0.1
TOTAL	524	122	59	10	1	0	0	0	4

ENVIRONMENTAL SUMMARY REPORT

SITE: FACILITIES DEVELOPMENT  
SAN DIEGO, CALIFORNIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 61

LATITUDE: 32.73 DEG NORTH  
LONGITUDE: 117.17 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 42 DEG

TIME ZONE: PACIFIC  
ALTITUDE: 50 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1400.	N.A.	N.A.	331.	10:55	3223.	43.
2	1316.	N.A.	N.A.	349.	11: 7	3213.	41.
3	2118.	N.A.	N.A.	307.	11: 4	3203.	66.
4	1915.	N.A.	N.A.	301.	10:48	3192.	60.
5	2063.	N.A.	N.A.	313.	10: 1	3185.	65.
6	*	N.A.	N.A.	*	*:*	3174.	*
7	2030.	N.A.	N.A.	301.	11: 4	3164.	64.
8	2059.	N.A.	N.A.	298.	11: 4	3156.	65.
9	2061.	N.A.	N.A.	298.	11: 8	3145.	66.
10	1961.	N.A.	N.A.	295.	10:42	3134.	63.
11	1321.	N.A.	N.A.	298.	10:31	3123.	42.
12	2138.	N.A.	N.A.	304.	10:41	3115.	69.
13	2057.	N.A.	N.A.	298.	10:47	3104.	66.
14	2182.	N.A.	N.A.	295.	10:15	3093.	71.
15	*	N.A.	N.A.	*	*:*	3082.	*
16	1932.	N.A.	N.A.	286.	10:39	3071.	63.
17	1902.	N.A.	N.A.	286.	10:47	3062.	62.
18	1825.	N.A.	N.A.	289.	10:39	3051.	60.
19	1938.	N.A.	N.A.	286.	11: 8	3040.	64.
20	1392.	N.A.	N.A.	304.	10:49	3031.	46.
21	1519.	N.A.	N.A.	292.	10: 6	3020.	50.
22	*	N.A.	N.A.	*	*:*	3009.	*
23	841.	N.A.	N.A.	229.	10: 2	2998.	28.
24	1926.	N.A.	N.A.	283.	10:51	2986.	65.
25	1833.	N.A.	N.A.	307.	9:46	2978.	62.
26	1315.	N.A.	N.A.	310.	10: 9	2967.	44.
27	1300.	N.A.	N.A.	277.	10:40	2956.	44.
28	1298.	N.A.	N.A.	292.	9:41	2945.	44.
29	630.	N.A.	N.A.	207.	12:31	2934.	21.
30	856.	N.A.	N.A.	262.	11:36	2925.	29.
MEAN	1671.	N.A.	N.A.			3076.	
STANDARD DEVIATION	444.	N.A.	N.A.			91.	

ENVIRONMENTAL SUMMARY REPORT

SITE: FACILITIES DEVELOPMENT  
SAN DIEGO, CALIFORNIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 61

LATITUDE: 32.73 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: PACIFIC  
LONGITUDE: 117.17 DEG WEST      PYRANOMETER TILT: 42 DEG      ALTITUDE: 50 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	56.	57.	55.	61.	16:11	48.	9:56	64.
2	55.	58.	53.	62.	14:48	47.	23:52	64.
3	55.	59.	50.	64.	15:19	43.	5:44	64.
4	56.	60.	52.	65.	10:58	46.	4:50	64.
5	57.	62.	48.	68.	13: 2	46.	3:42	64.
6	60.	64.	55.	66.	13:39	52.	23:57	64.
7	59.	64.	54.	71.	10:11	47.	5:49	65.
8	64.	71.	57.	77.	13:49	50.	5:44	65.
9	62.	67.	56.	77.	9:16	51.	5:32	65.
10	63.	66.	59.	72.	11:51	58.	0: 2	65.
11	62.	65.	60.	69.	15: 6	54.	23:55	65.
12	65.	73.	57.	83.	10:14	47.	5:37	65.
13	65.	74.	57.	81.	14:52	47.	4:38	65.
14	60.	66.	51.	69.	13:37	47.	5:27	66.
15	64.	68.	60.	70.	13:17	57.	23:54	66.
16	62.	67.	58.	71.	14:28	51.	5: 3	66.
17	63.	68.	58.	73.	14:55	54.	3:25	66.
18	62.	65.	59.	71.	16:28	55.	4:57	66.
19	61.	65.	58.	71.	14:52	53.	5:32	67.
20	62.	64.	60.	67.	12: 3	59.	0: 1	67.
21	58.	60.	57.	62.	15:17	55.	22: 2	67.
22	54.	58.	52.	61.	14:39	51.	22:34	67.
23	54.	57.	52.	60.	14:24	48.	4:20	66.
24	56.	61.	52.	64.	9: 3	46.	4:42	66.
25	60.	63.	56.	68.	12:42	50.	1:35	67.
26	61.	62.	59.	65.	11: 8	58.	6:31	67.
27	61.	63.	59.	67.	10:34	58.	0:55	67.
28	61.	63.	58.	68.	11:17	56.	23:59	67.
29	57.	59.	55.	62.	13: 8	54.	3:32	67.
30	58.	60.	56.	64.	13:26	54.	0: 8	67.
MEAN	60.	64.	56.					66.
STANDARD DEVIATION	3.2	4.4	3.3					1.1



ENVIRONMENTAL SUMMARY REPORT

SITE: IRVINE SCHOOL  
IRVINE, CALIFORNIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 16

LATITUDE: 33.73 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: PACIFIC  
LONGITUDE: 117.78 DEG WEST      PYRANOMETER TILT: 25 DEG      ALTITUDE: 200 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	59.	65.	53.	72.	12: 0	50.	23:59	N.A.
2	58.	64.	52.	71.	14:13	47.	23:11	N.A.
3	59.	68.	49.	75.	11: 6	43.	5: 3	N.A.
4	60.	69.	50.	77.	11: 3	44.	5:27	N.A.
5	61.	67.	56.	75.	10: 6	48.	3:26	N.A.
6	63.	70.	56.	78.	10:27	53.	22:19	N.A.
7	64.	74.	55.	82.	13:31	48.	5:10	N.A.
8	70.	82.	57.	91.	12:19	49.	5:34	N.A.
9	67.	78.	55.	85.	11:12	50.	5: 4	N.A.
10	66.	74.	57.	83.	12:24	52.	5:17	N.A.
11	70.	77.	63.	87.	13:39	51.	4:56	N.A.
12	72.	82.	61.	90.	13:17	53.	4:45	N.A.
13	70.	82.	56.	91.	12:50	48.	3:31	N.A.
14	66.	77.	54.	85.	10: 5	48.	5:27	N.A.
15	66.	77.	56.	85.	11:41	48.	4:51	N.A.
16	69.	80.	59.	90.	11: 8	52.	4:39	N.A.
17	67.	77.	57.	88.	11: 4	53.	5:18	N.A.
18	68.	78.	57.	86.	12:35	49.	4:24	N.A.
19	67.	78.	56.	86.	9:59	48.	4:50	N.A.
20	64.	70.	58.	81.	13:17	52.	3: 9	N.A.
21	60.	64.	57.	69.	14: 5	54.	23:57	N.A.
22	57.	62.	52.	68.	7:41	49.	23:11	N.A.
23	55.	58.	51.	68.	15:59	48.	23:52	N.A.
24	59.	67.	51.	73.	14:32	45.	3:10	N.A.
25	61.	68.	53.	78.	14:35	47.	5:26	N.A.
26	62.	66.	59.	75.	14:16	52.	0:40	N.A.
27	65.	70.	60.	78.	10:17	58.	3: 4	N.A.
28	62.	65.	59.	75.	9:40	56.	22:55	N.A.
29	62.	67.	57.	74.	8:47	53.	4: 5	N.A.
30	60.	62.	57.	67.	15:28	54.	1:58	N.A.
MEAN	64.	71.	56.					N.A.
STANDARD DEVIATION	4.5	7.0	3.3					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: LAKE VALLEY FIREHOUSE  
TAHOE PARADISE, CALIFORNIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 11

LATITUDE: 38.57 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: PACIFIC  
LONGITUDE: 119.58 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 6300 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1447.	N.A.	N.A.	418.	12:58	3086.	47.
2	1352.	N.A.	N.A.	388.	11: 2	3071.	44.
3	1851.	N.A.	N.A.	335.	12:12	3059.	61.
4	1466.	N.A.	N.A.	285.	10:46	3043.	48.
5	767.	N.A.	N.A.	335.	13:53	3031.	25.
6	1579.	N.A.	N.A.	325.	11:23	3016.	52.
7	2023.	N.A.	N.A.	345.	11:50	3004.	67.
8	1634.	N.A.	N.A.	292.	10:17	2988.	55.
9	2231.	N.A.	N.A.	329.	11:41	2976.	75.
10	2096.	N.A.	N.A.	338.	11:47	2961.	71.
11	1962.	N.A.	N.A.	345.	11:34	2945.	67.
12	2094.	N.A.	N.A.	329.	11:40	2933.	71.
13	*	N.A.	N.A.	*	*:*	2920.	*
14	1886.	N.A.	N.A.	299.	11:57	2905.	65.
15	1967.	N.A.	N.A.	312.	11:55	2889.	68.
16	1928.	N.A.	N.A.	309.	11:53	2877.	67.
17	1691.	N.A.	N.A.	325.	11:43	2861.	59.
18	1491.	N.A.	N.A.	315.	12:55	2846.	52.
19	1953.	N.A.	N.A.	309.	12: 1	2834.	69.
20	933.	N.A.	N.A.	236.	11:38	2821.	33.
21	1399.	N.A.	N.A.	382.	10:56	2806.	50.
22	585.	N.A.	N.A.	285.	14: 8	2791.	21.
23	737.	N.A.	N.A.	305.	14: 3	2779.	27.
24	1992.	N.A.	N.A.	312.	12: 6	2764.	72.
25	1964.	N.A.	N.A.	302.	11:42	2749.	71.
26	1850.	N.A.	N.A.	305.	11:36	2737.	68.
27	1814.	N.A.	N.A.	312.	11: 7	2725.	67.
28	1079.	N.A.	N.A.	295.	12: 6	2710.	40.
29	1740.	N.A.	N.A.	315.	11:46	2696.	65.
30	1936.	N.A.	N.A.	305.	11:49	2684.	72.
MEAN	1636.	N.A.	N.A.			2884.	
STANDARD DEVIATION	445.	N.A.	N.A.			123.	

ENVIRONMENTAL SUMMARY REPORT

SITE: LAKE VALLEY FIREHOUSE  
TAHOE PARADISE, CALIFORNIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 11

LATITUDE: 38.57 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: PACIFIC  
LONGITUDE: 119.58 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 6300 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	29.	32.	25.	40.	13:19	22.	23:45	71.
2	31.	37.	26.	46.	12:44	17.	6:9	70.
3	36.	43.	28.	53.	14:4	21.	6:20	67.
4	37.	44.	30.	54.	10:51	22.	5:15	65.
5	34.	36.	31.	42.	14:4	29.	23:56	68.
6	32.	37.	28.	42.	13:36	21.	23:50	68.
7	32.	42.	22.	52.	14:33	12.	5:31	71.
8	39.	49.	28.	61.	15:15	20.	5:34	68.
9	43.	52.	34.	59.	13:38	25.	23:15	68.
10	42.	53.	31.	63.	11:10	19.	5:39	65.
11	38.	46.	31.	54.	15:23	24.	5:10	72.
12	41.	55.	28.	70.	15:24	19.	5:38	71.
13	37.	48.	33.	60.	16:35	24.	5:54	67.
14	44.	53.	35.	60.	14:10	25.	23:17	67.
15	41.	54.	29.	66.	14:49	20.	5:25	68.
16	46.	60.	32.	74.	15:22	24.	5:29	66.
17	48.	62.	34.	72.	12:47	27.	3:32	69.
18	46.	61.	34.	71.	16:12	25.	3:51	67.
19	48.	61.	35.	74.	14:4	25.	4:23	68.
20	44.	52.	37.	61.	8:21	27.	23:33	68.
21	31.	35.	27.	43.	12:42	20.	5:46	71.
22	35.	38.	32.	47.	15:33	29.	21:25	72.
23	43.	49.	37.	63.	16:16	30.	0:5	73.
24	41.	51.	32.	62.	14:27	26.	5:26	73.
25	45.	57.	33.	69.	14:32	26.	5:13	71.
26	46.	59.	35.	67.	14:5	25.	5:1	71.
27	51.	63.	40.	71.	14:40	29.	5:1	70.
28	50.	59.	43.	68.	13:38	38.	23:46	69.
29	50.	59.	41.	69.	14:25	37.	22:57	67.
30	46.	55.	37.	65.	14:29	28.	5:53	67.
MEAN	41.	50.	32.					69.
STANDARD DEVIATION	6.3	9.2	4.7					2.2

ENVIRONMENTAL SUMMARY REPORT

SITE: LAKE VALLEY FIREHOUSE  
TAHOE PARADISE, CALIFORNIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 11

LATITUDE: 38.57 DEG NORTH AZIMUTH: 0 DEG TIME\_ZONE: PACIFIC  
LONGITUDE: 119.58 DEG WEST PYRANOMETER TILT: 55 DEG ALTITUDE: 6300 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	*	2.	*	2.	11.	*	11:32
2	*	1.	*	1.	10.	*	17:32
3	*	1.	*	1.	8.	*	15:23
4	*	1.	*	2.	9.	*	12:48
5	*	1.	*	2.	13.	*	13:48
6	216.	2.	216.	3.	11.	250.	0:49
7	*	1.	*	1.	9.	*	12:27
8	*	1.	*	2.	7.	*	11:31
9	*	2.	*	2.	13.	*	10:48
10	*	1.	*	1.	8.	*	16: 1
11	89.	4.	89.	6.	20.	85.	13:53
12	*	1.	*	2.	7.	*	10:20
13	*	0.	*	1.	10.	*	17: 1
14	*	2.	*	3.	11.	*	6:59
15	*	1.	*	2.	7.	*	15:21
16	*	1.	*	2.	12.	*	13: 3
17	*	1.	*	2.	10.	*	10:28
18	*	1.	*	2.	9.	*	10:25
19	*	1.	*	3.	11.	*	14:47
20	*	2.	*	3.	11.	*	15:38
21	*	1.	*	1.	10.	*	11: 1
22	*	1.	*	1.	7.	*	15: 7
23	*	1.	*	1.	8.	*	11:23
24	*	1.	*	3.	10.	*	12: 6
25	*	1.	*	2.	9.	*	13: 7
26	*	1.	*	2.	9.	*	11: 4
27	*	1.	*	2.	8.	*	14:56
28	*	1.	*	1.	9.	*	12:54
29	*	1.	*	3.	11.	*	14:41
30	*	2.	*	2.	14.	*	17: 4
MEAN	152.	1.	152.	2.			
STANDARD DEVIATION	90.4	0.6	90.0	1.0			

ENVIRONMENTAL SUMMARY REPORT

SITE: LAKE VALLEY FIREHOUSE  
TAHOE PARADISE, CALIFORNIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 11

LATITUDE: 38.57 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: PACIFIC  
LONGITUDE: 119.58 DEG WEST      PYRANOMETER TILT: 55 DEG      ALTITUDE: 6300 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	21	3	0	0	0	0	0	0	0
2	24	0	0	0	0	0	0	0	0
3	24	0	0	0	0	0	0	0	0
4	24	0	0	0	0	0	0	0	0
5	23	1	0	0	0	0	0	0	0
6	24	0	0	0	0	0	0	0	0
7	24	0	0	0	0	0	0	0	0
8	24	0	0	0	0	0	0	0	0
9	23	1	0	0	0	0	0	0	0
10	23	1	0	0	0	0	0	0	0
11	15	2	7	0	0	0	0	0	0
12	24	0	0	0	0	0	0	0	0
13	18	0	0	0	0	0	0	0	6
14	22	2	0	0	0	0	0	0	0
15	24	0	0	0	0	0	0	0	0
16	24	0	0	0	0	0	0	0	0
17	24	0	0	0	0	0	0	0	0
18	24	0	0	0	0	0	0	0	0
19	23	1	0	0	0	0	0	0	0
20	24	0	0	0	0	0	0	0	0
21	24	0	0	0	0	0	0	0	0
22	24	0	0	0	0	0	0	0	0
23	24	0	0	0	0	0	0	0	0
24	22	2	0	0	0	0	0	0	0
25	21	3	0	0	0	0	0	0	0
26	22	2	0	0	0	0	0	0	0
27	24	0	0	0	0	0	0	0	0
28	24	0	0	0	0	0	0	0	0
29	22	2	0	0	0	0	0	0	0
30	21	2	0	0	0	0	0	0	1
AVERAGE	22.8	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.2
TOTAL	684	22	7	0	0	0	0	0	7





ENVIRONMENTAL SUMMARY REPORT

SITE: LIVING SYSTEMS  
DAVIS, CALIFORNIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 159

LATITUDE: 38.38 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: PACIFIC  
LONGITUDE: 121.35 DEG WEST      PYRANOMETER TILT: 60 DEG      ALTITUDE: 17 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	218.	14.	215.	15.	22.	215.	7:54
2	283.	7.	301.	7.	14.	340.	17:22
3	339.	6.	331.	9.	12.	350.	11:14
4	17.	6.	12.	5.	14.	11.	20:57
5	350.	11.	334.	11.	16.	11.	4:35
6	342.	9.	337.	10.	13.	343.	8:41
7	211.	7.	207.	10.	15.	212.	8:48
8	*	4.	*	4.	9.	*	23:36
9	350.	7.	350.	8.	12.	24.	8:56
10	215.	9.	209.	14.	21.	206.	9:0
11	212.	14.	209.	18.	21.	194.	9:41
12	297.	4.	244.	4.	10.	329.	17:35
13	345.	4.	330.	5.	12.	309.	17:12
14	319.	4.	294.	4.	8.	2.	2:53
15	218.	6.	203.	9.	17.	206.	9:21
16	*	2.	*	2.	5.	*	2:58
17	345.	6.	341.	5.	10.	358.	16:28
18	344.	4.	307.	3.	9.	344.	17:47
19	349.	5.	350.	6.	12.	342.	15:23
20	332.	8.	331.	11.	16.	271.	15:52
21	*	3.	*	3.	10.	*	14:32
22	14.	6.	21.	9.	14.	40.	13:23
23	29.	5.	36.	4.	13.	12.	18:24
24	*	3.	*	2.	6.	*	19:5
25	352.	4.	348.	3.	10.	352.	17:51
26	350.	3.	318.	3.	7.	355.	19:5
27	*	1.	*	1.	7.	*	17:38
28	337.	10.	326.	11.	19.	305.	13:38
29	356.	3.	*	3.	8.	347.	17:8
30	219.	9.	209.	13.	18.	227.	7:58
MEAN	270.	6.	257.	7.			
STANDARD DEVIATION	108.7	3.3	105.0	4.4			

ENVIRONMENTAL SUMMARY REPORT

SITE: LIVING SYSTEMS  
DAVIS, CALIFORNIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 159

LATITUDE: 38.38 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: PACIFIC  
LONGITUDE: 121.35 DEG WEST      PYRANOMETER TILT: 60 DEG      ALTITUDE: 17 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	1	3	3	12	1	0	0	0	4
2	3	9	10	0	0	0	0	0	2
3	5	8	5	0	0	0	0	0	6
4	7	5	6	1	0	0	0	0	5
5	0	6	11	7	0	0	0	0	0
6	1	5	9	0	0	0	0	0	9
7	6	5	4	1	0	0	0	0	8
8	11	8	1	0	0	0	0	0	4
9	3	9	6	0	0	0	0	0	6
10	1	3	6	4	0	0	0	0	10
11	1	5	1	10	2	0	0	0	5
12	14	5	2	0	0	0	0	0	3
13	9	6	2	0	0	0	0	0	7
14	10	8	0	0	0	0	0	0	6
15	6	8	2	2	0	0	0	0	6
16	16	1	0	0	0	0	0	0	7
17	6	5	5	0	0	0	0	0	8
18	15	7	0	0	0	0	0	0	2
19	8	8	6	0	0	0	0	0	2
20	1	6	7	2	0	0	0	0	8
21	12	5	1	0	0	0	0	0	6
22	8	8	4	1	0	0	0	0	3
23	8	2	4	0	0	0	0	0	10
24	18	5	0	0	0	0	0	0	1
25	10	10	2	0	0	0	0	0	2
26	18	6	0	0	0	0	0	0	0
27	16	4	0	0	0	0	0	0	4
28	2	3	0	7	0	0	0	0	9
29	11	8	0	0	0	0	0	0	5
30	3	6	5	4	0	0	0	0	6
AVERAGE	7.7	5.9	3.5	1.7	0.1	0.0	0.0	0.0	5.1
TOTAL	230	177	105	51	3	0	0	0	154

ENVIRONMENTAL SUMMARY REPORT

SITE: LIVING SYSTEMS  
DAVIS, CALIFORNIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 159

LATITUDE: 38.38 DEG NORTH  
LONGITUDE: 121.35 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 60 DEG

TIME ZONE: PACIFIC  
ALTITUDE: 17 FEET

RELATIVE HUMIDITY IN PER CENT

DAY	RELATIVE HUMIDITY	DAYTIME REL HUM	NIGHTTIME REL HUM	MAXIMUM VALUE	HUMIDITY TIME HR:MN	MINIMUM VALUE	HUMIDITY TIME HR:MN
1	1.	0.	2.	9.	5:46	0.	7: 0
2	14.	2.	30.	68.	22:53	0.	8: 4
3	45.	14.	65.	100.	3:19	0.	10:53
4	72.	60.	84.	100.	17:39	22.	10:47
5	64.	45.	81.	100.	0:25	0.	14:11
6	70.	43.	93.	100.	0:14	0.	17:36
7	26.	11.	45.	76.	6:35	0.	10:46
8	26.	13.	50.	100.	3:36	0.	10:16
9	39.	33.	50.	98.	6:21	0.	12:18
10	22.	2.	41.	78.	0:39	0.	8:12
11	1.	0.	1.	11.	23:54	0.	0:42
12	12.	3.	19.	72.	3:59	0.	8:42
13	15.	3.	33.	72.	5:56	0.	0:15
14	21.	5.	38.	78.	2: 5	0.	9:12
15	28.	1.	46.	82.	2:14	0.	9:21
16	13.	3.	36.	78.	5:54	0.	9:49
17	16.	9.	25.	82.	6:10	0.	9:32
18	32.	7.	49.	96.	5:44	0.	10: 0
19	32.	7.	55.	100.	4:22	0.	10: 3
20	66.	57.	77.	100.	4:33	8.	17:17
21	46.	10.	64.	90.	5:17	0.	10:43
22	84.	81.	87.	100.	13:12	33.	10:43
23	86.	73.	99.	100.	0:39	62.	13:21
24	50.	34.	70.	100.	1:20	0.	14: 8
25	46.	16.	64.	100.	5:29	0.	11:27
26	41.	21.	52.	96.	5: 8	0.	11:32
27	40.	10.	68.	99.	4:57	0.	10:17
28	51.	28.	68.	74.	7: 9	5.	10:26
29	36.	22.	58.	100.	3:26	0.	12:46
30	15.	1.	30.	100.	3: 5	0.	7:26
MEAN	37.	21.	53.				
STANDARD DEVIATION	23.	23.	25.				



ENVIRONMENTAL SUMMARY REPORT

SITE: MONTECITO PINES  
SANTA ROSA, CALIFORNIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 164

LATITUDE: 37.61 DEG NORTH      AZIMUTH: 22 DEG      TIME ZONE: PACIFIC  
LONGITUDE: 122.38 DEG WEST      PYRANOMETER TILT: 45 DEG      ALTITUDE: 8 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	52.	58.	47.	70.	15:28	37.	5:52	65.
2	49.	56.	43.	64.	11:34	35.	5:31	63.
3	47.	52.	42.	58.	13:46	36.	0:41	65.
4	47.	47.	47.	51.	16:19	44.	3:57	62.
5	53.	56.	51.	63.	11:10	48.	23:42	65.
6	50.	54.	46.	61.	14:27	37.	23:26	64.
7	48.	57.	41.	68.	14:22	31.	5:39	66.
8	52.	61.	45.	73.	14:32	34.	5:33	66.
9	54.	59.	50.	67.	15:39	40.	23:52	65.
10	54.	63.	47.	74.	13:55	35.	5:44	64.
11	61.	72.	51.	85.	16:33	38.	5:26	67.
12	60.	70.	50.	81.	15: 6	39.	5:35	67.
13	57.	65.	49.	77.	11:27	38.	5:35	67.
14	54.	60.	49.	70.	14: 9	42.	4:28	67.
15	57.	65.	49.	77.	13:34	40.	5:39	66.
16	58.	68.	49.	84.	13:18	38.	5: 7	65.
17	52.	57.	47.	71.	13:28	43.	23:58	65.
18	55.	62.	49.	73.	13:45	39.	4: 9	66.
19	57.	64.	51.	72.	15:12	43.	5:30	66.
20	50.	53.	48.	58.	15:55	39.	22:51	66.
21	45.	50.	40.	60.	11:28	35.	2:45	65.
22	48.	51.	44.	61.	13:17	37.	1:54	65.
23	55.	59.	52.	70.	15:21	45.	23:49	66.
24	54.	61.	47.	70.	13:41	39.	5:15	66.
25	51.	58.	45.	67.	13:44	38.	5:23	66.
26	53.	60.	46.	70.	13:38	36.	5:22	66.
27	59.	67.	51.	78.	12:14	42.	4: 2	68.
28	53.	56.	51.	65.	11:21	48.	21:53	66.
29	57.	63.	51.	73.	14:31	41.	5:11	66.
30	58.	68.	49.	79.	10:45	41.	5:19	67.
MEAN	53.	60.	48.					65.
STANDARD DEVIATION	4.1	6.1	3.2					1.3

ENVIRONMENTAL SUMMARY REPORT

SITE: ORTIZ & REILL  
ESCONDIDO, CALIFORNIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 175

LATITUDE: 33.07 DEG NORTH  
LONGITUDE: 117.10 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 45 DEG

TIME ZONE: PACIFIC  
ALTITUDE: 13 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1475.	N.A.	N.A.	339.	11: 3	3176.	46.
2	1741.	N.A.	N.A.	361.	10:38	3167.	55.
3	2320.	N.A.	N.A.	324.	10:54	3154.	74.
4	2425.	N.A.	N.A.	315.	10:23	3145.	77.
5	2026.	N.A.	N.A.	327.	10:42	3133.	65.
6	1601.	N.A.	N.A.	349.	11:20	3121.	51.
7	2197.	N.A.	N.A.	315.	10:46	3111.	71.
8	2247.	N.A.	N.A.	318.	10:45	3099.	73.
9	2226.	N.A.	N.A.	315.	10:38	3086.	72.
10	2100.	N.A.	N.A.	318.	10:51	3074.	68.
11	2089.	N.A.	N.A.	303.	10:55	3064.	68.
12	2213.	N.A.	N.A.	330.	10:37	3051.	73.
13	2083.	N.A.	N.A.	324.	10:48	3042.	68.
14	2488.	N.A.	N.A.	324.	10:31	3029.	82.
15	2180.	N.A.	N.A.	309.	10:33	3016.	72.
16	2106.	N.A.	N.A.	303.	10:24	3003.	70.
17	2569.	N.A.	N.A.	306.	10:50	2993.	86.
18	2210.	N.A.	N.A.	306.	10:41	2981.	74.
19	2088.	N.A.	N.A.	309.	10:38	2968.	70.
20	1022.	N.A.	N.A.	309.	9:50	2958.	35.
21	*	N.A.	N.A.	*	*:*	2945.	*
22	1414.	N.A.	N.A.	324.	11:16	2935.	48.
23	648.	N.A.	N.A.	161.	7:49	2923.	22.
24	2143.	N.A.	N.A.	324.	11:36	2910.	74.
25	1729.	N.A.	N.A.	352.	10:31	2897.	60.
26	974.	N.A.	N.A.	288.	12: 9	2888.	34.
27	1158.	N.A.	N.A.	285.	10:55	2875.	40.
28	781.	N.A.	N.A.	373.	10: 8	2863.	27.
29	468.	N.A.	N.A.	176.	14:48	2850.	16.
30	580.	N.A.	N.A.	215.	8: 6	2841.	20.
MEAN	1769.	N.A.	N.A.			3010.	
STANDARD DEVIATION	625.	N.A.	N.A.			103.	

ENVIRONMENTAL SUMMARY REPORT

SITE: ORTIZ & REILL  
 ESCONDIDO, CALIFORNIA

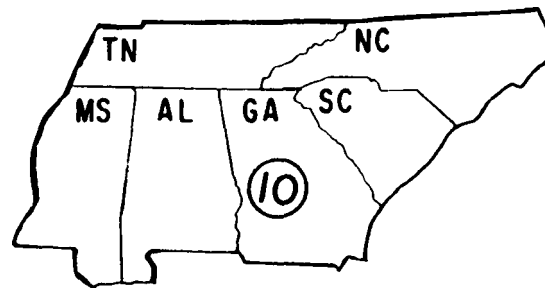
REPORT PERIOD: 80/ 4  
 SITE NUMBER: 175

LATITUDE: 33.07 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: PACIFIC  
 LONGITUDE: 117.10 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 13 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE VALUE TIME HR:MN	MIN TEMPERATURE VALUE TIME HR:MN	INLET WATER TEMPERATURE
1	53.	57.	51.	62. 14:15	45. 9:54	*
2	53.	58.	47.	68. 13:18	42. 23:26	*
3	56.	65.	46.	74. 11:48	37. 5:50	*
4	56.	66.	46.	74. 11:49	40. 5:25	*
5	59.	65.	52.	70. 12:24	39. 3: 4	*
6	60.	66.	54.	73. 13:21	47. 23:56	*
7	62.	73.	51.	85. 13:26	43. 5:37	*
8	72.	83.	53.	92. 11:38	48. 2:50	*
9	67.	80.	53.	88. 11:52	48. 5:12	*
10	64.	74.	55.	85. 12:48	47. 0:59	*
11	72.	81.	63.	93. 14: 2	49. 5:14	*
12	69.	81.	57.	89. 11:41	48. 23:57	*
13	66.	81.	52.	89. 11:52	43. 5: 7	*
14	64.	78.	50.	86. 11:35	43. 4:17	*
15	65.	78.	52.	85. 13:55	41. 5:13	*
16	70.	83.	57.	92. 11: 7	49. 5:31	*
17	71.	84.	55.	92. 11:16	50. 5:35	*
18	71.	84.	56.	95. 11: 3	49. 4: 7	*
19	70.	83.	56.	91. 11:15	48. 4:41	*
20	57.	61.	54.	72. 10:27	52. 1:34	*
21	49.	*	49.	52. 18:54	46. 23:37	*
22	52.	56.	47.	63. 14: 1	45. 3:42	*
23	52.	55.	50.	62. 11:43	45. 5:19	*
24	56.	66.	48.	72. 12:24	41. 4:34	*
25	60.	67.	53.	74. 13:22	44. 5:22	*
26	62.	66.	59.	78. 12: 4	56. 4:57	*
27	62.	67.	58.	75. 14:24	56. 1:56	*
28	59.	63.	56.	74. 10:14	54. 23:58	*
29	56.	59.	54.	67. 14:48	53. 20:22	*
30	56.	59.	54.	64. 9:10	52. 1:48	*
MEAN	61.	70.	53.			0.
STANDARD DEVIATION	6.8	9.9	3.9			*****

ZONE 10



ENVIRONMENTAL SUMMARY REPORT

SITE: ALABAMA POWER  
MONTEVALLO, ALABAMA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 17

LATITUDE: 32.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL  
LONGITUDE: 86.00 DEG WEST PYRANOMETER TILT: 50 DEG ALTITUDE: 620 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2197.	N.A.	N.A.	325.	13:19	3048.	72.
2	470.	N.A.	N.A.	99.	17:37	3035.	15.
3	861.	N.A.	N.A.	332.	13: 5	3019.	29.
4	2315.	N.A.	N.A.	335.	13:23	3005.	77.
5	2300.	N.A.	N.A.	332.	13:22	2992.	77.
6	1979.	N.A.	N.A.	357.	13:37	2976.	66.
7	1820.	N.A.	N.A.	370.	14:15	2960.	61.
8	972.	N.A.	N.A.	294.	15:18	2946.	33.
9	2312.	N.A.	N.A.	335.	13:41	2930.	79.
10	2287.	N.A.	N.A.	329.	13:39	2917.	78.
11	1124.	N.A.	N.A.	297.	12:48	2903.	39.
12	368.	N.A.	N.A.	70.	16:54	2887.	13.
13	106.	N.A.	N.A.	22.	10:41	2871.	4.
14	682.	N.A.	N.A.	332.	12:30	2857.	24.
15	2329.	N.A.	N.A.	329.	13:31	2841.	82.
16	2255.	N.A.	N.A.	325.	13:30	2827.	80.
17	2030.	N.A.	N.A.	316.	13:16	2814.	72.
18	1804.	N.A.	N.A.	345.	14: 0	2798.	64.
19	1415.	N.A.	N.A.	335.	12:47	2782.	51.
20	1885.	N.A.	N.A.	325.	14:24	2768.	68.
21	2028.	N.A.	N.A.	325.	14: 8	2752.	74.
22	2120.	N.A.	N.A.	310.	14: 0	2739.	77.
23	1973.	N.A.	N.A.	303.	13: 3	2726.	72.
24	2137.	N.A.	N.A.	319.	13:17	2711.	79.
25	1454.	N.A.	N.A.	274.	12:10	2695.	54.
26	1089.	N.A.	N.A.	303.	15: 0	2682.	41.
27	541.	N.A.	N.A.	131.	15: 2	2667.	20.
28	1637.	N.A.	N.A.	332.	13:42	2651.	62.
29	1516.	N.A.	N.A.	351.	13:19	2639.	57.
30	1952.	N.A.	N.A.	303.	14: 4	2627.	74.
MEAN	1599.	N.A.	N.A.			2835.	
STANDARD DEVIATION	677.	N.A.	N.A.			129.	

ENVIRONMENTAL SUMMARY REPORT

SITE: ALABAMA POWER  
MONTEVALLO, ALABAMA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 17

LATITUDE: 32.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL  
LONGITUDE: 86.00 DEG WEST PYRANOMETER TILT: 50 DEG ALTITUDE: 620 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	57.	61.	54.	80.	17:20	38.	7: 0	64.
2	58.	60.	57.	66.	16: 7	48.	4:50	64.
3	66.	69.	63.	80.	13:58	60.	3:18	65.
4	63.	64.	63.	70.	16:19	53.	23:46	65.
5	53.	56.	50.	69.	17:11	39.	4:50	65.
6	56.	59.	53.	75.	15:40	37.	5:54	65.
7	65.	65.	64.	82.	15:29	51.	7:40	66.
8	68.	69.	67.	80.	17:52	59.	23:59	66.
9	57.	61.	53.	73.	16:58	39.	7:43	66.
10	56.	62.	51.	77.	17: 2	35.	7:20	67.
11	56.	63.	50.	78.	12:54	40.	7: 2	66.
12	57.	58.	57.	62.	17:21	54.	1: 5	65.
13	59.	58.	60.	70.	21:12	55.	3:29	65.
14	48.	47.	49.	61.	0: 3	42.	9:28	65.
15	50.	54.	45.	66.	15:34	38.	7:39	65.
16	56.	62.	50.	76.	16: 0	34.	7:17	65.
17	59.	64.	55.	80.	16:14	40.	7:13	65.
18	62.	66.	59.	77.	15:20	48.	8: 2	65.
19	60.	63.	58.	73.	17:19	52.	23:43	65.
20	63.	69.	58.	83.	16:10	45.	7: 6	66.
21	65.	71.	59.	87.	16: 0	45.	7:12	66.
22	68.	74.	62.	91.	16:40	48.	7:25	67.
23	69.	76.	63.	92.	15:32	47.	6:28	68.
24	69.	75.	64.	85.	14:58	55.	7:19	69.
25	68.	72.	64.	84.	13:46	52.	6:18	69.
26	67.	69.	64.	80.	16:15	57.	23:27	70.
27	56.	56.	55.	59.	15: 7	52.	6: 7	69.
28	58.	61.	56.	72.	16:33	45.	7:29	69.
29	60.	63.	57.	72.	16:15	47.	6:55	68.
30	62.	67.	58.	81.	15:35	47.	2: 9	69.
MEAN	60.	64.	57.					66.
STANDARD DEVIATION	5.6	6.6	5.5					1.7

ENVIRONMENTAL SUMMARY REPORT

SITE: BLAKEDALE PROFESSIONAL CENTER  
GREENWOOD, SOUTH CAROLINA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 13

LATITUDE: 34.20 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 82.20 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 496 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2160.	N.A.	N.A.	325.	13:41	3197.	68.
2	943.	N.A.	N.A.	161.	12:52	3185.	30.
3	475.	N.A.	N.A.	201.	10:43	3177.	15.
4	2004.	N.A.	N.A.	325.	13:34	3166.	63.
5	2247.	N.A.	N.A.	332.	13:35	3157.	71.
6	2066.	N.A.	N.A.	318.	13:27	3145.	66.
7	685.	N.A.	N.A.	235.	12:12	3134.	22.
8	482.	N.A.	N.A.	201.	16:29	3122.	15.
9	2182.	N.A.	N.A.	325.	13:35	3113.	70.
10	2172.	N.A.	N.A.	322.	13:25	3101.	70.
11	1968.	N.A.	N.A.	308.	13:33	3090.	64.
12	337.	N.A.	N.A.	158.	11:36	3078.	11.
13	287.	N.A.	N.A.	70.	14:39	3069.	9.
14	1172.	N.A.	N.A.	302.	14: 2	3056.	38.
15	1688.	N.A.	N.A.	342.	13:11	3047.	55.
16	2180.	N.A.	N.A.	315.	13:18	3035.	72.
17	1919.	N.A.	N.A.	332.	13:19	3023.	63.
18	1504.	N.A.	N.A.	322.	13:25	3011.	50.
19	1535.	N.A.	N.A.	342.	14: 8	2999.	51.
20	2066.	N.A.	N.A.	302.	13:38	2989.	69.
21	1610.	N.A.	N.A.	328.	13: 1	2977.	54.
22	2073.	N.A.	N.A.	305.	13:40	2965.	70.
23	1983.	N.A.	N.A.	288.	13:25	2953.	67.
24	1861.	N.A.	N.A.	298.	13: 7	2944.	63.
25	1817.	N.A.	N.A.	302.	13:21	2932.	62.
26	814.	N.A.	N.A.	158.	12: 8	2923.	28.
27	1666.	N.A.	N.A.	308.	14: 4	2911.	57.
28	1411.	N.A.	N.A.	318.	13:53	2899.	49.
29	1191.	N.A.	N.A.	312.	12:16	2887.	41.
30	1819.	N.A.	N.A.	302.	13:26	2875.	63.
MEAN	1544.	N.A.	N.A.			3039.	
STANDARD DEVIATION	620.	N.A.	N.A.			98.	

ENVIRONMENTAL SUMMARY REPORT

SITE: BLAKEDALE PROFESSIONAL CENTER  
GREENWOOD, SOUTH CAROLINA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 13

LATITUDE: 34.20 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 82.20 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 496 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	62.	68.	56.	85.	16:41	43.	6:13	68.
2	62.	65.	59.	75.	13:45	48.	6:17	69.
3	65.	67.	62.	75.	11:26	56.	7: 5	70.
4	69.	75.	63.	83.	13:12	52.	23:59	71.
5	57.	63.	52.	77.	16:36	41.	6:12	64.
6	60.	68.	54.	83.	13:37	40.	6:28	64.
7	64.	67.	61.	77.	13:32	53.	6:52	68.
8	66.	67.	65.	72.	17:33	62.	3:15	71.
9	64.	68.	61.	77.	14:28	53.	6:43	69.
10	62.	68.	57.	79.	13:46	46.	5:51	68.
11	68.	75.	60.	92.	14:32	45.	5:54	69.
12	65.	66.	64.	74.	13:33	59.	6:16	70.
13	64.	64.	63.	71.	16:26	59.	3:47	67.
14	61.	63.	59.	68.	7: 1	49.	23:46	68.
15	53.	57.	50.	66.	14:58	42.	6:10	65.
16	59.	66.	53.	82.	14:59	40.	5:55	65.
17	61.	67.	55.	83.	15: 5	44.	6:17	67.
18	64.	71.	57.	86.	14:34	44.	6:13	70.
19	65.	72.	58.	84.	14:45	52.	4:53	68.
20	69.	77.	61.	90.	15:41	55.	4:53	68.
21	71.	79.	63.	92.	16: 8	53.	6: 0	71.
22	74.	82.	66.	96.	14:39	55.	6: 2	73.
23	79.	88.	70.	104.	14:13	58.	5:25	73.
24	78.	85.	71.	100.	13:39	61.	5:45	74.
25	76.	82.	71.	97.	15:24	61.	5:16	73.
26	71.	73.	68.	79.	14:37	64.	23:57	72.
27	70.	74.	65.	82.	14:47	57.	23:56	72.
28	62.	67.	57.	77.	13:53	52.	3: 8	69.
29	59.	63.	56.	71.	13:15	52.	3:17	68.
30	63.	69.	57.	84.	16:16	45.	6:22	67.
MEAN	65.	71.	61.					69.
STANDARD DEVIATION	6.0	7.3	5.6					2.6

ENVIRONMENTAL SUMMARY REPORT

SITE: CHARLOTTE MEDICAL CENTER  
 CHARLOTTE, NORTH CAROLINA

REPORT PERIOD: 80/ 4  
 SITE NUMBER: 7

LATITUDE: 35.22 DEG NORTH AZIMUTH: 0 DEG TIME\_ZONE: EASTERN  
 LONGITUDE: 80.84 DEG WEST PYRANOMETER TILT: 35 DEG ALTITUDE: 700 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2276.	N.A.	N.A.	328.	12:26	3326.	68.
2	1248.	N.A.	N.A.	289.	10:52	3323.	38.
3	817.	N.A.	N.A.	250.	10:10	3319.	25.
4	1851.	N.A.	N.A.	331.	12: 0	3315.	56.
5	2341.	N.A.	N.A.	337.	12: 8	3312.	71.
6	2163.	N.A.	N.A.	328.	12: 0	3308.	65.
7	372.	N.A.	N.A.	205.	13:20	3303.	11.
8	564.	N.A.	N.A.	259.	11:46	3299.	17.
9	2166.	N.A.	N.A.	328.	12:11	3295.	66.
10	2261.	N.A.	N.A.	319.	11:49	3290.	69.
11	2187.	N.A.	N.A.	316.	12:11	3286.	67.
12	346.	N.A.	N.A.	202.	12:55	3281.	11.
13	310.	N.A.	N.A.	105.	15:20	3276.	9.
14	939.	N.A.	N.A.	325.	13: 6	3271.	29.
15	1104.	N.A.	N.A.	334.	12:24	3266.	34.
16	2336.	N.A.	N.A.	328.	11:56	3261.	72.
17	2117.	N.A.	N.A.	322.	11:38	3255.	65.
18	2175.	N.A.	N.A.	310.	12: 1	3250.	67.
19	2136.	N.A.	N.A.	325.	11:37	3244.	66.
20	2104.	N.A.	N.A.	316.	11:49	3239.	65.
21	1827.	N.A.	N.A.	301.	12: 0	3233.	57.
22	2297.	N.A.	N.A.	316.	11:39	3227.	71.
23	2107.	N.A.	N.A.	298.	12: 9	3222.	65.
24	2044.	N.A.	N.A.	304.	12:18	3216.	64.
25	1840.	N.A.	N.A.	307.	12:52	3210.	57.
26	944.	N.A.	N.A.	280.	11:47	3204.	29.
27	1531.	N.A.	N.A.	310.	13: 2	3198.	48.
28	1521.	N.A.	N.A.	325.	12:46	3192.	48.
29	994.	N.A.	N.A.	331.	12:50	3186.	31.
30	1280.	N.A.	N.A.	307.	11:22	3180.	40.
MEAN	1607.	N.A.	N.A.			3260.	
STANDARD DEVIATION	679.	N.A.	N.A.			45.	

ENVIRONMENTAL SUMMARY REPORT

SITE: CHARLOTTE MEDICAL CENTER  
 CHARLOTTE, NORTH CAROLINA

REPORT PERIOD: 80/ 4  
 SITE NUMBER: 7

LATITUDE: 35.22 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
 LONGITUDE: 80.84 DEG WEST PYRANOMETER TILT: 35 DEG ALTITUDE: 700 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	60.	66.	55.	78.	14: 7	47.	6:12	64.
2	60.	64.	56.	76.	14:11	47.	5:20	65.
3	63.	67.	59.	78.	10:31	53.	6: 4	65.
4	67.	75.	60.	83.	15:54	51.	23:58	63.
5	55.	59.	51.	71.	16:14	43.	6: 6	77.
6	60.	66.	54.	76.	13:52	43.	6: 6	78.
7	59.	61.	56.	68.	13:42	51.	4:48	72.
8	64.	66.	61.	75.	11:51	56.	5: 1	67.
9	67.	71.	63.	77.	13:41	58.	23:44	66.
10	64.	71.	61.	80.	14:19	49.	5:36	66.
11	69.	77.	61.	87.	14:24	47.	4:59	67.
12	62.	64.	59.	73.	13:37	57.	21:11	78.
13	62.	62.	61.	69.	18:48	57.	5:32	80.
14	63.	66.	60.	69.	8:56	46.	23:57	68.
15	51.	54.	47.	58.	15: 4	42.	5:12	68.
16	56.	62.	49.	72.	16:47	40.	5:38	67.
17	57.	62.	51.	77.	15:38	41.	5:56	67.
18	64.	72.	56.	86.	14:14	45.	5:37	65.
19	67.	75.	58.	86.	14:38	50.	5:29	77.
20	68.	77.	59.	89.	15:33	51.	5:29	82.
21	68.	75.	61.	85.	14:50	53.	4:10	69.
22	72.	79.	65.	91.	15: 2	55.	4:59	64.
23	80.	87.	72.	98.	15:42	61.	3:42	69.
24	77.	84.	70.	93.	13:22	60.	5:33	69.
25	75.	81.	69.	92.	14:23	61.	5:51	69.
26	70.	75.	65.	83.	16: 8	61.	23: 4	76.
27	69.	74.	64.	83.	16: 8	59.	23:58	79.
28	62.	66.	58.	75.	13:18	53.	6: 6	72.
29	57.	60.	53.	69.	10:58	47.	5:32	71.
30	59.	64.	54.	71.	15:27	48.	4:37	70.
MEAN	64.	69.	59.					70.
STANDARD DEVIATION	6.7	8.0	5.9					5.6

ENVIRONMENTAL SUMMARY REPORT

SITE: CHARLOTTE MEDICAL CENTER  
 CHARLOTTE, NORTH CAROLINA

REPORT PERIOD: 80/ 4  
 SITE NUMBER: 7

LATITUDE: 35.22 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
 LONGITUDE: 80.84 DEG WEST PYRANOMETER TILT: 35 DEG ALTITUDE: 700 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	253.	4.	245.	4.	17.	190.	8:42
2	14.	5.	25.	6.	20.	18.	14:17
3	337.	3.	320.	3.	16.	322.	12:34
4	61.	8.	56.	9.	28.	74.	14:19
5	147.	5.	167.	5.	22.	191.	12:56
6	312.	4.	319.	4.	14.	322.	9:50
7	314.	4.	272.	3.	17.	332.	21:49
8	331.	8.	332.	8.	23.	345.	13:49
9	31.	6.	36.	7.	27.	30.	16:59
10	63.	3.	81.	3.	18.	60.	15:44
11	*	2.	*	1.	9.	*	17: 0
12	342.	3.	328.	3.	23.	317.	14: 9
13	315.	2.	303.	1.	14.	289.	19:30
14	12.	11.	12.	12.	31.	55.	15: 4
15	61.	8.	59.	11.	32.	84.	8: 8
16	116.	4.	115.	6.	21.	130.	10:10
17	253.	3.	301.	3.	15.	231.	8:42
18	7.	2.	20.	2.	13.	45.	14:52
19	338.	3.	323.	3.	15.	336.	17:34
20	*	1.	*	2.	10.	*	13: 9
21	188.	3.	188.	5.	21.	175.	11:54
22	148.	3.	166.	3.	15.	204.	12:17
23	75.	4.	78.	6.	19.	41.	9:24
24	34.	4.	36.	5.	27.	42.	17: 3
25	46.	3.	47.	3.	13.	84.	14: 1
26	15.	3.	19.	4.	14.	49.	17: 7
27	21.	7.	20.	9.	25.	339.	14: 6
28	160.	4.	131.	4.	19.	200.	2:48
29	37.	3.	36.	5.	19.	13.	12:44
30	123.	4.	119.	6.	19.	116.	13:57
MEAN	148.	4.	148.	5.			
STANDARD DEVIATION	124.4	2.1	120.1	2.7			

ENVIRONMENTAL SUMMARY REPORT

SITE: CHARLOTTE MEDICAL CENTER  
 CHARLOTTE, NORTH CAROLINA

REPORT PERIOD: 80/ 4  
 SITE NUMBER: 7

LATITUDE: 35.22 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
 LONGITUDE: 80.84 DEG WEST PYRANOMETER TILT: 35 DEG ALTITUDE: 700 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	14	8	2	0	0	0	0	0	0
2	13	6	3	2	0	0	0	0	0
3	12	12	0	0	0	0	0	0	0
4	2	13	7	2	0	0	0	0	0
5	9	11	4	0	0	0	0	0	0
6	9	14	1	0	0	0	0	0	0
7	11	12	1	0	0	0	0	0	0
8	2	9	12	1	0	0	0	0	0
9	6	11	7	0	0	0	0	0	0
10	20	4	0	0	0	0	0	0	0
11	20	4	0	0	0	0	0	0	0
12	16	6	2	0	0	0	0	0	0
13	17	7	0	0	0	0	0	0	0
14	0	2	17	5	0	0	0	0	0
15	5	9	7	3	0	0	0	0	0
16	14	5	5	0	0	0	0	0	0
17	20	4	0	0	0	0	0	0	0
18	21	3	0	0	0	0	0	0	0
19	15	9	0	0	0	0	0	0	0
20	23	1	0	0	0	0	0	0	0
21	18	3	3	0	0	0	0	0	0
22	18	6	0	0	0	0	0	0	0
23	13	11	0	0	0	0	0	0	0
24	12	9	2	1	0	0	0	0	0
25	18	6	0	0	0	0	0	0	0
26	16	8	0	0	0	0	0	0	0
27	3	11	10	0	0	0	0	0	0
28	13	10	1	0	0	0	0	0	0
29	18	2	4	0	0	0	0	0	0
30	13	7	3	0	0	0	0	0	1
AVERAGE	13.0	7.4	3.0	0.5	0.0	0.0	0.0	0.0	0.0
TOTAL	391	223	91	14	0	0	0	0	1

ENVIRONMENTAL SUMMARY REPORT

SITE: CHESTER WEST  
HUNTSVILLE, ALABAMA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 78

LATITUDE: 34.40 DEG NORTH  
LONGITUDE: 86.60 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 49 DEG

TIME ZONE: CENTRAL  
ALTITUDE: 600 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2140.	N.A.	N.A.	309.	11:42	3124.	68.
2	1004.	N.A.	N.A.	252.	12:49	3113.	32.
3	325.	N.A.	N.A.	132.	13:40	3099.	10.
4	2101.	N.A.	N.A.	312.	12: 0	3088.	68.
5	2127.	N.A.	N.A.	309.	11:39	3074.	69.
6	1722.	N.A.	N.A.	336.	12:58	3060.	56.
7	1646.	N.A.	N.A.	330.	10:39	3049.	54.
8	1153.	N.A.	N.A.	297.	11:55	3035.	38.
9	2137.	N.A.	N.A.	309.	11:38	3024.	71.
10	2071.	N.A.	N.A.	300.	11:27	3009.	69.
11	1274.	N.A.	N.A.	309.	11:18	2995.	43.
12	425.	N.A.	N.A.	144.	11:54	2984.	14.
13	129.	N.A.	N.A.	66.	14:15	2969.	4.
14	535.	N.A.	N.A.	285.	11:16	2955.	18.
15	1761.	N.A.	N.A.	318.	12: 9	2944.	60.
16	2069.	N.A.	N.A.	297.	11:33	2932.	71.
17	2030.	N.A.	N.A.	294.	11:39	2918.	70.
18	1145.	N.A.	N.A.	327.	11:32	2904.	39.
19	1741.	N.A.	N.A.	288.	11:48	2892.	60.
20	1891.	N.A.	N.A.	291.	12:41	2878.	66.
21	1763.	N.A.	N.A.	294.	11:58	2864.	62.
22	1932.	N.A.	N.A.	279.	11:44	2852.	68.
23	1831.	N.A.	N.A.	282.	12:22	2838.	65.
24	1606.	N.A.	N.A.	303.	11:23	2827.	57.
25	1257.	N.A.	N.A.	270.	12:31	2813.	45.
26	679.	N.A.	N.A.	309.	12: 6	2799.	24.
27	413.	N.A.	N.A.	198.	14: 2	2788.	15.
28	1388.	N.A.	N.A.	294.	12:48	2774.	50.
29	909.	N.A.	N.A.	291.	11:28	2761.	33.
30	1469.	N.A.	N.A.	327.	12:25	2747.	53.
MEAN	1422.	N.A.	N.A.			2937.	
STANDARD DEVIATION	622.	N.A.	N.A.			115.	

ENVIRONMENTAL SUMMARY REPORT

SITE: CHESTER WEST  
HUNTSVILLE, ALABAMA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 78

LATITUDE: 34.40 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: CENTRAL  
LONGITUDE: 86.60 DEG WEST      PYRANOMETER TILT: 49 DEG      ALTITUDE: 600 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	55.	63.	47.	76.	13:29	35.	5:13	73.
2	64.	68.	61.	76.	13:11	52.	2:36	*
3	64.	65.	63.	70.	15:43	59.	1:35	*
4	56.	58.	55.	65.	0:0	45.	23:39	*
5	49.	56.	43.	64.	15:39	33.	5:42	131.
6	58.	63.	53.	72.	15:38	37.	1:58	123.
7	66.	70.	63.	80.	14:23	57.	5:51	121.
8	65.	71.	60.	80.	14:19	47.	23:43	*
9	56.	64.	49.	70.	14:50	41.	4:58	*
10	56.	65.	47.	72.	15:16	39.	5:19	*
11	61.	71.	52.	78.	11:50	43.	3:50	*
12	57.	60.	54.	69.	14:34	52.	21:14	*
13	56.	53.	58.	69.	21:43	47.	6:50	*
14	45.	45.	45.	54.	0:2	38.	23:0	84.
15	49.	54.	43.	63.	16:10	38.	5:51	89.
16	53.	61.	46.	68.	15:59	37.	2:50	129.
17	61.	66.	56.	77.	14:3	43.	1:20	107.
18	63.	69.	57.	77.	15:32	51.	4:41	130.
19	63.	71.	55.	78.	15:5	48.	2:12	111.
20	64.	75.	54.	83.	15:31	47.	4:52	120.
21	68.	77.	60.	84.	13:50	47.	4:57	*
22	68.	79.	58.	89.	14:30	47.	5:4	*
23	71.	83.	60.	91.	15:2	51.	4:11	*
24	71.	79.	63.	84.	12:54	55.	4:27	*
25	65.	72.	58.	82.	12:47	53.	5:3	132.
26	64.	68.	60.	75.	12:49	56.	0:6	134.
27	54.	55.	53.	60.	14:2	47.	23:54	117.
28	55.	62.	49.	69.	13:4	43.	1:36	114.
29	55.	59.	51.	65.	12:58	49.	5:25	110.
30	59.	65.	53.	73.	15:0	48.	3:0	114.
MEAN	60.	66.	54.					114.
STANDARD DEVIATION	6.6	8.5	6.1					17.6

ENVIRONMENTAL SUMMARY REPORT

SITE: HELIO THERMICS  
GREENVILLE, SOUTH CAROLINA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 73

LATITUDE: 34.00 DEG NORTH AZIMUTH: 10 DEG  
LONGITUDE: 83.00 DEG WEST PYRANOMETER TILT: 51 DEG  
TIME ZONE: EASTERN  
ALTITUDE: 980 FEET

INSOLATION

DAY	TOTAL	TOTAL DIFF	TOTAL DIR	MAXIMUM TOTAL	EXTRATERRESTRIAL	TTL INS	
	INSOLATION	INSOLATION	INSOLATION	INSOLATION			
	BTU/FT2	BTU/FT2	BTU/FT2	VALUE	INSOLATION	-----	
				BTU/HR/FT2	BTU/FT2	EXT INS	
						PERCENT	
				TIME			
				HR:MN			
1	2210.	N.A.	N.A.	319.	12:35	3066.	72.
2	1299.	N.A.	N.A.	252.	12:33	3056.	42.
3	*	N.A.	N.A.	*	*:*	3043.	*
4	*	N.A.	N.A.	*	*:*	3030.	*
5	2289.	N.A.	N.A.	328.	12:35	3020.	76.
6	2062.	N.A.	N.A.	340.	12:59	3007.	69.
7	*	N.A.	N.A.	*	*:*	2996.	*
8	343.	N.A.	N.A.	284.	15:28	2983.	11.
9	2296.	N.A.	N.A.	325.	12:54	2969.	77.
10	2150.	N.A.	N.A.	319.	13:13	2958.	73.
11	2087.	N.A.	N.A.	310.	13: 5	2947.	71.
12	*	N.A.	N.A.	*	*:*	2933.	*
13	215.	N.A.	N.A.	53.	10: 8	2920.	7.
14	*	N.A.	N.A.	*	*:*	2905.	*
15	1272.	N.A.	N.A.	334.	13: 6	2890.	44.
16	2145.	N.A.	N.A.	313.	12:49	2877.	75.
17	1930.	N.A.	N.A.	319.	12:35	2862.	67.
18	*	N.A.	N.A.	*	*:*	2846.	*
19	1534.	N.A.	N.A.	328.	13:14	2834.	54.
20	*	N.A.	N.A.	*	*:*	2822.	*
21	*	N.A.	N.A.	*	*:*	2806.	*
22	*	N.A.	N.A.	*	*:*	2791.	*
23	*	N.A.	N.A.	*	*:*	2779.	*
24	*	N.A.	N.A.	*	*:*	2764.	*
25	*	N.A.	N.A.	*	*:*	2749.	*
26	868.	N.A.	N.A.	184.	12: 1	2737.	32.
27	*	N.A.	N.A.	*	*:*	2725.	*
28	1579.	N.A.	N.A.	322.	13:21	2711.	58.
29	1216.	N.A.	N.A.	296.	13:38	2696.	45.
30	1582.	N.A.	N.A.	307.	12:15	2685.	59.
MEAN	1593.	N.A.	N.A.			2880.	
STANDARD DEVIATION	656.	N.A.	N.A.			118.	

ENVIRONMENTAL SUMMARY REPORT

SITE: HELIO THERMICS  
GREENVILLE, SOUTH CAROLINA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 73

LATITUDE: 34.00 DEG NORTH AZIMUTH: 10 DEG TIME ZONE: EASTERN  
LONGITUDE: 83.00 DEG WEST PYRANOMETER TILT: 51 DEG ALTITUDE: 980 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	53.	60.	47.	72.	16:29	35.	6:11	72.
2	56.	64.	50.	72.	13:37	41.	5:43	68.
3	59.	58.	59.	74.	16:29	48.	6:31	70.
4	64.	70.	62.	80.	14:14	47.	23:10	72.
5	52.	55.	44.	68.	15:52	35.	3:31	63.
6	51.	59.	37.	73.	15:18	32.	6:11	65.
7	57.	58.	57.	71.	13:36	51.	1:10	65.
8	65.	66.	65.	73.	16:49	61.	4:21	70.
9	62.	65.	58.	73.	13:20	43.	6:34	73.
10	61.	65.	56.	76.	15:21	38.	3:53	79.
11	63.	70.	51.	83.	15:34	40.	5: 5	76.
12	59.	59.	59.	66.	0:46	55.	5:45	67.
13	60.	61.	60.	64.	19:21	56.	2: 7	67.
14	56.	62.	51.	68.	6:33	46.	20:45	72.
15	50.	53.	47.	59.	13: 6	43.	4:45	67.
16	55.	61.	50.	74.	16:18	41.	5: 8	73.
17	53.	59.	47.	72.	15:15	33.	6:12	77.
18	55.	65.	49.	78.	14:55	38.	5:43	75.
19	60.	68.	53.	79.	13:20	44.	5:57	79.
20	60.	70.	53.	81.	15:55	44.	6: 3	84.
21	65.	73.	63.	82.	16:33	48.	3:29	81.
22	67.	75.	64.	87.	15: 8	44.	5:48	97.
23	75.	87.	71.	97.	14:58	52.	3: 9	96.
24	74.	81.	69.	89.	14:35	56.	6: 3	89.
25	74.	81.	70.	88.	15:17	54.	5:47	95.
26	71.	74.	68.	81.	14:36	63.	4:49	81.
27	69.	76.	63.	79.	15:11	53.	23:55	94.
28	61.	65.	56.	73.	13:48	49.	0:22	85.
29	56.	61.	52.	69.	13:11	42.	23:54	75.
30	57.	64.	48.	74.	13:40	38.	4:10	81.
MEAN	61.	66.	56.					77.
STANDARD DEVIATION	7.0	8.2	8.5					9.7

ENVIRONMENTAL SUMMARY REPORT

SITE: PHILLIPS - KAURIC  
ST. MATTHEWS, SOUTH CAROLINA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 74

LATITUDE: 33.57 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 81.00 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 213 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	2280.	N.A.	N.A.	326.	12:28	3341.	68.
2	1233.	N.A.	N.A.	237.	12:56	3340.	37.
3	327.	N.A.	N.A.	83.	14:43	3339.	10.
4	1438.	N.A.	N.A.	314.	12:53	3338.	42.
5	2403.	N.A.	N.A.	333.	12:14	3336.	73.
6	2306.	N.A.	N.A.	326.	12: 9	3335.	69.
7	946.	N.A.	N.A.	259.	12:39	3333.	28.
8	1169.	N.A.	N.A.	268.	11:15	3331.	35.
9	2319.	N.A.	N.A.	329.	12: 6	3329.	70.
10	2418.	N.A.	N.A.	329.	12: 0	3324.	73.
11	2295.	N.A.	N.A.	323.	12: 5	3321.	69.
12	946.	N.A.	N.A.	206.	13:35	3319.	28.
13	1203.	N.A.	N.A.	302.	12:15	3316.	36.
14	1328.	N.A.	N.A.	333.	13:36	3313.	40.
15	1855.	N.A.	N.A.	373.	11:54	3311.	56.
16	2458.	N.A.	N.A.	336.	12: 9	3304.	74.
17	1988.	N.A.	N.A.	345.	12: 6	3301.	60.
18	2176.	N.A.	N.A.	345.	11:49	3298.	66.
19	1163.	N.A.	N.A.	345.	11:52	3295.	35.
20	2065.	N.A.	N.A.	323.	12:48	3291.	63.
21	2051.	N.A.	N.A.	323.	13:30	3288.	62.
22	2443.	N.A.	N.A.	339.	12:29	3284.	74.
23	2310.	N.A.	N.A.	314.	11:53	3280.	70.
24	2088.	N.A.	N.A.	317.	12:26	3277.	64.
25	2287.	N.A.	N.A.	317.	11:43	3273.	70.
26	1035.	N.A.	N.A.	259.	10:39	3269.	32.
27	1585.	N.A.	N.A.	317.	12:12	3265.	49.
28	1340.	N.A.	N.A.	342.	12:55	3261.	41.
29	1370.	N.A.	N.A.	329.	12:51	3254.	42.
30	2283.	N.A.	N.A.	333.	12:18	3250.	70.
MEAN	1770.	N.A.	N.A.			3304.	
STANDARD DEVIATION	593.	N.A.	N.A.			29.	

ENVIRONMENTAL SUMMARY REPORT

SITE: PHILLIPS - KAURIC  
ST. MATTHEWS, SOUTH CAROLINA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 74

LATITUDE: 33.57 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 81.00 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 213 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	58.	64.	53.	79.	17:10	43.	5:37	72.
2	61.	67.	56.	77.	15:20	46.	4:51	74.
3	61.	62.	60.	65.	15:42	57.	0:46	73.
4	68.	72.	64.	80.	14:40	56.	23:58	80.
5	51.	56.	47.	65.	17: 7	39.	23:42	*
6	56.	63.	48.	78.	16:39	35.	5:18	*
7	59.	64.	54.	74.	12:12	45.	5: 0	79.
8	67.	72.	62.	80.	11:52	58.	3:52	83.
9	65.	70.	61.	75.	14:41	54.	22:24	85.
10	59.	65.	53.	73.	17:20	47.	4:42	80.
11	63.	72.	55.	86.	15:49	42.	5:46	76.
12	65.	70.	60.	79.	13:40	55.	4:26	83.
13	68.	72.	65.	85.	13:19	58.	1:30	82.
14	64.	66.	62.	70.	1:20	48.	23:54	79.
15	52.	56.	49.	62.	16: 5	42.	5:46	66.
16	54.	60.	48.	69.	17:29	41.	5:45	*
17	55.	62.	48.	75.	14:46	39.	5:26	*
18	61.	70.	53.	83.	15:23	41.	5:52	84.
19	58.	63.	53.	72.	11:52	46.	3:58	*
20	62.	68.	56.	77.	16:10	49.	23:54	88.
21	62.	71.	52.	82.	13:36	45.	5:41	79.
22	65.	73.	57.	84.	17:27	47.	5:54	79.
23	76.	81.	70.	91.	14:44	59.	5:56	83.
24	76.	81.	71.	89.	13:36	62.	5:46	88.
25	73.	78.	68.	87.	15:59	62.	5:51	92.
26	70.	74.	67.	80.	14:34	63.	23:56	84.
27	70.	74.	65.	84.	14:31	61.	1:58	90.
28	60.	62.	58.	70.	16:12	53.	5:32	*
29	60.	62.	58.	70.	13:12	53.	6:11	*
30	58.	62.	54.	71.	14:47	47.	5:54	*
MEAN	63.	68.	58.					81.
STANDARD DEVIATION	6.4	6.5	6.8					6.2



ENVIRONMENTAL SUMMARY REPORT

SITE: RHRU CLEMSON  
CLEMSON, SOUTH CAROLINA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 216

LATITUDE: 34.54 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: EASTERN  
LONGITUDE: 83.13 DEG WEST      PYRANOMETER TILT: 60 DEG      ALTITUDE: 937 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	54.	60.	48.	70.	16:18	37.	6:26	80.
2	56.	62.	50.	70.	12:27	39.	6: 3	83.
3	61.	64.	57.	74.	14:38	49.	6:17	79.
4	63.	70.	57.	75.	12:58	46.	23:53	80.
5	53.	58.	48.	69.	15:37	40.	23:58	83.
6	53.	60.	47.	72.	15:53	32.	6:11	84.
7	59.	62.	56.	73.	12:50	50.	4:23	80.
8	63.	64.	62.	72.	16:16	59.	1:25	81.
9	59.	63.	56.	69.	15:17	47.	6:45	80.
10	59.	65.	54.	73.	17: 4	44.	3:55	81.
11	61.	68.	54.	82.	14:43	39.	5:57	83.
12	56.	55.	57.	64.	0:23	52.	6:10	75.
13	58.	59.	57.	61.	15:35	54.	1:49	77.
14	57.	57.	57.	64.	3:13	46.	23:53	78.
15	49.	51.	46.	57.	16: 9	42.	5:24	72.
16	53.	60.	47.	72.	17:13	36.	5:29	76.
17	51.	59.	45.	70.	16:27	32.	5:15	75.
18	57.	65.	49.	78.	14:50	38.	5:46	79.
19	61.	70.	53.	82.	15:21	44.	5:50	84.
20	60.	68.	53.	81.	15:45	41.	5:50	90.
21	64.	74.	55.	92.	15:45	46.	4:43	87.
22	66.	74.	59.	83.	14:26	44.	6: 0	89.
23	73.	82.	64.	92.	13:58	51.	4:17	89.
24	72.	77.	66.	84.	13:34	54.	6:22	88.
25	71.	76.	66.	83.	14:54	56.	5:45	80.
26	68.	71.	65.	77.	13:21	60.	5:53	78.
27	64.	69.	60.	74.	16:57	49.	23:58	79.
28	56.	61.	51.	68.	15: 5	45.	1: 2	78.
29	55.	59.	51.	65.	12:58	47.	23:55	79.
30	57.	63.	51.	77.	16: 1	41.	5:37	82.
MEAN	60.	65.	55.					81.
STANDARD DEVIATION	6.1	7.2	6.1					4.4

ENVIRONMENTAL SUMMARY REPORT

SITE: RHRU CLEMSON  
CLEMSON, SOUTH CAROLINA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 216

LATITUDE: 34.54 DEG NORTH AZIMUTH: 0 DEG  
LONGITUDE: 83.13 DEG WEST PYRANOMETER TILT: 60 DEG

TIME ZONE: EASTERN  
ALTITUDE: 937 FEET

RELATIVE HUMIDITY IN PER CENT

DAY	RELATIVE HUMIDITY	DAYTIME REL HUM	NIGHTTIME REL HUM	MAXIMUM VALUE	HUMIDITY TIME HR:MN	MINIMUM VALUE	HUMIDITY TIME HR:MN
1	76.	62.	90.	100.	1:48	43.	17: 0
2	87.	76.	97.	100.	0: 0	65.	12:38
3	95.	90.	100.	100.	0: 3	80.	14:38
4	68.	59.	76.	100.	0: 0	31.	15:38
5	54.	49.	59.	81.	23:58	34.	17:39
6	62.	52.	70.	100.	2:54	33.	17: 6
7	86.	82.	90.	100.	16:39	63.	0: 2
8	99.	98.	99.	100.	0: 0	86.	17:41
9	60.	55.	64.	100.	0: 0	38.	18:18
10	53.	49.	57.	91.	6:56	30.	18:51
11	55.	47.	62.	100.	4:16	27.	17:12
12	94.	100.	88.	100.	3:41	49.	0:29
13	100.	100.	100.	100.	0: 2	100.	0: 2
14	82.	77.	88.	100.	0: 1	64.	15:34
15	71.	65.	77.	95.	6:44	54.	16:20
16	61.	51.	69.	100.	3:37	29.	17:13
17	67.	50.	82.	100.	4:11	34.	16:53
18	76.	61.	89.	100.	0:47	38.	15:49
19	72.	57.	85.	100.	0: 4	35.	15:58
20	74.	60.	87.	100.	0: 4	39.	18: 9
21	65.	50.	78.	100.	0: 1	29.	15:50
22	58.	44.	70.	100.	5:44	23.	16:13
23	53.	40.	64.	100.	0:27	22.	16:33
24	60.	56.	65.	100.	6: 6	39.	17:34
25	74.	65.	82.	100.	4:57	50.	15:31
26	87.	80.	92.	100.	2: 3	62.	15: 2
27	81.	72.	88.	100.	0: 6	52.	17:13
28	77.	60.	91.	100.	0: 9	46.	15:21
29	80.	74.	84.	100.	1:24	54.	17:35
30	68.	57.	78.	100.	3: 2	38.	16:17
MEAN	73.	65.	81.				
STANDARD DEVIATION	14.	17.	13.				

ENVIRONMENTAL SUMMARY REPORT

SITE: TOWNS ELEMENTARY SCHOOL  
ATLANTA, GEORGIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 1

LATITUDE: 33.65 DEG NORTH  
LONGITUDE: 84.42 DEG WEST

AZIMUTH: 2 DEG  
PYRANOMETER TILT: 45 DEG

TIME ZONE: EASTERN  
ALTITUDE: 1000 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	*	N.A.	N.A.	*	*:*	3189.	*
2	579.	N.A.	N.A.	62.	15:15	3177.	18.
3	504.	N.A.	N.A.	253.	14:21	3165.	16.
4	2345.	N.A.	N.A.	360.	12:41	3157.	74.
5	2865.	N.A.	N.A.	344.	12:30	3145.	91.
6	2232.	N.A.	N.A.	364.	12:24	3133.	71.
7	654.	N.A.	N.A.	153.	12:40	3121.	21.
8	800.	N.A.	N.A.	308.	14:59	3112.	26.
9	2388.	N.A.	N.A.	360.	12: 7	3100.	77.
10	2436.	N.A.	N.A.	347.	12:21	3090.	79.
11	2028.	N.A.	N.A.	338.	12:34	3078.	66.
12	241.	N.A.	N.A.	81.	14:42	3066.	8.
13	144.	N.A.	N.A.	52.	8:24	3056.	5.
14	616.	N.A.	N.A.	237.	12:12	3044.	20.
15	2144.	N.A.	N.A.	357.	13: 5	3032.	71.
16	2379.	N.A.	N.A.	341.	12:31	3019.	79.
17	1918.	N.A.	N.A.	370.	13:21	3010.	64.
18	1397.	N.A.	N.A.	292.	12: 7	2997.	47.
19	1709.	N.A.	N.A.	338.	12:19	2988.	57.
20	*	N.A.	N.A.	*	*:*	2975.	*
21	2116.	N.A.	N.A.	325.	11:52	2963.	71.
22	2249.	N.A.	N.A.	328.	12:38	2950.	76.
23	2195.	N.A.	N.A.	328.	12:12	2941.	75.
24	1886.	N.A.	N.A.	331.	12:51	2929.	64.
25	1772.	N.A.	N.A.	328.	12:33	2916.	61.
26	791.	N.A.	N.A.	257.	14:30	2904.	27.
27	1199.	N.A.	N.A.	295.	10:18	2892.	41.
28	1798.	N.A.	N.A.	347.	12:42	2883.	62.
29	1215.	N.A.	N.A.	331.	11:11	2870.	42.
30	1771.	N.A.	N.A.	334.	12:12	2861.	62.
MEAN	1585.	N.A.	N.A.			3025.	
STANDARD DEVIATION	770.	N.A.	N.A.			100.	

ENVIRONMENTAL SUMMARY REPORT

SITE: TOWNS ELEMENTARY SCHOOL  
ATLANTA, GEORGIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 1

LATITUDE: 33.65 DEG NORTH AZIMUTH: 2 DEG TIME ZONE: EASTERN  
LONGITUDE: 84.42 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 1000 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	*	*	*	*	*:*	*	*:*	N.A.
2	67.	69.	62.	70.	15:14	59.	23:51	N.A.
3	63.	66.	61.	76.	14:21	56.	2: 4	N.A.
4	64.	70.	58.	77.	13:35	44.	23:58	N.A.
5	55.	64.	46.	73.	14:22	*	9: 2	N.A.
6	55.	63.	48.	75.	15: 9	32.	6:22	N.A.
7	60.	62.	58.	70.	15:47	51.	6:16	N.A.
8	64.	67.	61.	76.	14:59	51.	23:53	N.A.
9	59.	68.	51.	77.	13:59	43.	5:56	N.A.
10	59.	69.	50.	81.	14:55	38.	6:13	N.A.
11	62.	71.	54.	84.	14:10	38.	5:49	N.A.
12	56.	57.	55.	62.	15:51	53.	7:41	N.A.
13	60.	61.	59.	66.	16: 7	52.	0:35	N.A.
14	52.	51.	53.	66.	1:16	42.	23:50	N.A.
15	51.	57.	45.	67.	15:23	37.	6: 9	N.A.
16	55.	65.	45.	76.	14:50	38.	6:23	N.A.
17	55.	65.	48.	75.	15:29	37.	5:58	N.A.
18	59.	67.	52.	78.	15:24	45.	3:35	N.A.
19	59.	65.	54.	77.	14:54	49.	23:37	N.A.
20	56.	61.	54.	79.	17:17	43.	5:34	N.A.
21	68.	78.	58.	89.	14:16	46.	5:44	N.A.
22	71.	84.	58.	95.	14:30	47.	6: 9	N.A.
23	73.	86.	60.	99.	13:27	49.	5:53	N.A.
24	73.	83.	64.	92.	15: 9	54.	6: 4	N.A.
25	72.	79.	65.	92.	15:18	56.	6: 9	N.A.
26	67.	68.	66.	79.	14:41	59.	7:34	N.A.
27	60.	64.	56.	71.	14:18	47.	23:54	N.A.
28	57.	65.	49.	75.	14: 2	42.	4: 5	N.A.
29	57.	62.	52.	70.	14:50	46.	23:56	N.A.
30	59.	68.	51.	78.	12:39	42.	2:25	N.A.
MEAN	61.	67.	55.					N.A.
STANDARD DEVIATION	6.1	8.1	6.0					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: TOWNS ELEMENTARY SCHOOL  
ATLANTA, GEORGIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 1

LATITUDE: 33.65 DEG NORTH AZIMUTH: 2 DEG TIME\_ZONE: EASTERN  
LONGITUDE: 84.42 DEG WEST PYRANOMETER TILT: 45 DEG ALTITUDE: 1000 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	*	*	*	*	*	*	*:*
2	*	1.	*	1.	6.	*	15:19
3	*	1.	*	1.	5.	*	19:57
4	324.	5.	319.	7.	14.	330.	12:52
5	343.	3.	341.	5.	9.	350.	1:29
6	*	1.	*	2.	8.	*	14:32
7	*	1.	*	1.	4.	*	18:54
8	272.	3.	271.	4.	11.	276.	21:18
9	*	2.	*	3.	9.	*	11:19
10	338.	2.	338.	4.	10.	338.	13: 9
11	*	1.	*	2.	6.	*	13:28
12	*	1.	*	1.	4.	*	14:31
13	*	2.	*	1.	11.	*	21:37
14	291.	3.	319.	3.	10.	321.	12: 1
15	337.	3.	336.	5.	10.	335.	10:30
16	336.	2.	335.	4.	10.	334.	11:11
17	*	1.	*	2.	6.	*	8:54
18	*	1.	*	1.	6.	*	19: 5
19	*	1.	*	2.	5.	*	10:54
20	*	0.	*	0.	2.	*	3:42
21	334.	2.	334.	4.	10.	335.	13:38
22	*	1.	*	2.	6.	*	11: 7
23	*	2.	*	4.	8.	*	12:17
24	*	1.	*	2.	8.	*	11: 9
25	*	1.	*	1.	5.	*	14:14
26	*	2.	*	2.	12.	*	7:39
27	312.	3.	305.	4.	10.	307.	16:42
28	321.	3.	320.	4.	10.	313.	11:43
29	319.	2.	318.	4.	10.	341.	16: 1
30	*	1.	*	3.	8.	*	13:21
MEAN	320.	2.	321.	3.			
STANDARD DEVIATION	21.9	1.1	20.2	1.6			

ENVIRONMENTAL SUMMARY REPORT

SITE: TOWNS ELEMENTARY SCHOOL  
ATLANTA, GEORGIA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 1

LATITUDE: 33.65 DEG NORTH AZIMUTH: 2 DEG  
LONGITUDE: 84.42 DEG WEST PYRANOMETER TILT: 45 DEG  
TIME ZONE: EASTERN ALTITUDE: 1000 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	0	0	0	0	0	0	0	0	24
2	10	0	0	0	0	0	0	0	14
3	24	0	0	0	0	0	0	0	0
4	8	11	5	0	0	0	0	0	0
5	13	11	0	0	0	0	0	0	0
6	24	0	0	0	0	0	0	0	0
7	24	0	0	0	0	0	0	0	0
8	18	6	0	0	0	0	0	0	0
9	20	4	0	0	0	0	0	0	0
10	16	8	0	0	0	0	0	0	0
11	24	0	0	0	0	0	0	0	0
12	24	0	0	0	0	0	0	0	0
13	18	6	0	0	0	0	0	0	0
14	20	4	0	0	0	0	0	0	0
15	13	11	0	0	0	0	0	0	0
16	16	8	0	0	0	0	0	0	0
17	24	0	0	0	0	0	0	0	0
18	24	0	0	0	0	0	0	0	0
19	24	0	0	0	0	0	0	0	0
20	17	0	0	0	0	0	0	0	7
21	17	6	1	0	0	0	0	0	0
22	24	0	0	0	0	0	0	0	0
23	16	8	0	0	0	0	0	0	0
24	22	2	0	0	0	0	0	0	0
25	24	0	0	0	0	0	0	0	0
26	23	1	0	0	0	0	0	0	0
27	13	11	0	0	0	0	0	0	0
28	18	6	0	0	0	0	0	0	0
29	18	6	0	0	0	0	0	0	0
30	20	3	0	0	0	0	0	0	1
AVERAGE	18.5	3.7	0.2	0.0	0.0	0.0	0.0	0.0	1.5
TOTAL	556	112	6	0	0	0	0	0	46

ENVIRONMENTAL SUMMARY REPORT

SITE: TOWNS ELEMENTARY SCHOOL  
ATLANTA, GEORGIA

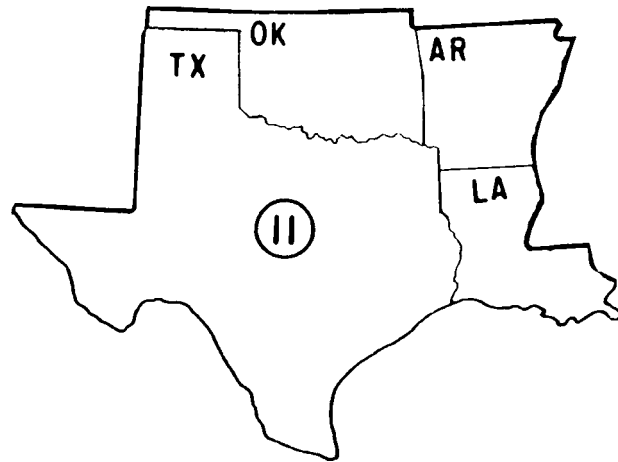
REPORT PERIOD: 80/ 4  
SITE NUMBER: 1

LATITUDE: 33.65 DEG NORTH AZIMUTH: 2 DEG  
LONGITUDE: 84.42 DEG WEST PYRANOMETER TILT: 45 DEG  
TIME ZONE: EASTERN  
ALTITUDE: 1000 FEET

RELATIVE HUMIDITY IN PER CENT

DAY	RELATIVE HUMIDITY	DAYTIME REL HUM	NIGHTTIME REL HUM	MAXIMUM VALUE	HUMIDITY TIME HR:MN	MINIMUM VALUE	HUMIDITY TIME HR:MN
1	*	*	*	*	***	*	**
2	68.	56.	92.	100.	21:27	53.	15:15
3	95.	89.	99.	100.	0: 2	71.	16:19
4	66.	55.	76.	100.	0: 0	31.	15:11
5	51.	42.	60.	96.	23:58	28.	17:23
6	57.	45.	68.	100.	0:25	26.	16:40
7	83.	82.	85.	100.	5:38	51.	1:17
8	96.	93.	98.	100.	0: 3	72.	21:29
9	59.	49.	68.	100.	4:14	27.	16:49
10	53.	41.	64.	100.	4:53	25.	16:45
11	59.	44.	74.	100.	0:50	24.	14:58
12	99.	98.	100.	100.	0:34	86.	0: 2
13	100.	100.	100.	100.	0: 3	99.	21:32
14	78.	70.	85.	100.	0: 1	56.	16:12
15	64.	53.	74.	100.	2:51	33.	17:40
16	63.	49.	77.	100.	3: 0	28.	18: 9
17	60.	43.	75.	100.	0:22	25.	17:54
18	82.	70.	92.	100.	3:30	39.	17: 2
19	76.	65.	87.	100.	0: 3	34.	16:46
20	82.	72.	85.	100.	0: 3	30.	18: 0
21	62.	46.	77.	100.	0: 2	32.	16:43
22	58.	39.	76.	100.	1: 5	18.	17:27
23	59.	38.	78.	100.	1:59	19.	16:17
24	61.	49.	72.	100.	3:46	30.	17: 5
25	68.	59.	76.	100.	6: 9	43.	16:32
26	88.	83.	94.	100.	3:50	62.	14:46
27	84.	72.	95.	100.	0: 1	57.	15:43
28	79.	61.	97.	100.	0: 5	42.	17: 3
29	79.	68.	90.	100.	0: 4	52.	16:39
30	76.	58.	91.	100.	0: 1	44.	14:20
MEAN	73.	62.	83.				
STANDARD DEVIATION	14.		18.				12.

ZONE 11









ENVIRONMENTAL SUMMARY REPORT

SITE: DALLAS RECREATION CENTER  
DALLAS, TEXAS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 48

LATITUDE: 32.54 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL  
LONGITUDE: 97.20 DEG WEST PYRANOMETER TILT: 25 DEG ALTITUDE: 551 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	66.	70.	63.	81.	14: 2	56.	5:55	74.
2	69.	73.	65.	80.	15:15	59.	5:13	74.
3	62.	65.	59.	76.	14:44	50.	23:46	71.
4	58.	62.	53.	72.	15:14	42.	5:38	71.
5	62.	68.	57.	78.	13:24	44.	6:12	76.
6	65.	66.	64.	78.	16:18	53.	4:53	78.
7	76.	81.	71.	91.	14:37	62.	23:59	78.
8	62.	67.	56.	75.	16:31	45.	5:51	75.
9	61.	70.	51.	80.	16:36	40.	5:35	70.
10	67.	73.	62.	84.	15:16	50.	3:15	71.
11	72.	77.	66.	88.	15:53	54.	23:48	79.
12	47.	48.	45.	54.	0: 4	41.	21:30	72.
13	43.	43.	43.	51.	16:51	39.	12:42	61.
14	52.	61.	44.	69.	16:19	35.	6: 6	63.
15	61.	71.	51.	85.	16:47	35.	5:46	64.
16	69.	76.	62.	85.	14:12	49.	4:52	67.
17	68.	73.	63.	81.	15:58	54.	23:57	72.
18	61.	67.	55.	76.	15: 8	48.	5:58	73.
19	67.	75.	57.	84.	15:58	46.	6: 1	71.
20	72.	78.	65.	89.	15:53	50.	5:55	71.
21	72.	79.	65.	87.	14:22	54.	5:18	74.
22	72.	77.	65.	84.	15:37	55.	5:56	77.
23	71.	75.	67.	86.	14:36	59.	6:26	77.
24	70.	74.	66.	80.	12: 2	60.	21:18	80.
25	65.	72.	58.	83.	13:29	51.	22:57	75.
26	52.	55.	49.	58.	11:18	44.	23:34	71.
27	58.	65.	50.	73.	14:59	42.	5:58	69.
28	64.	73.	55.	83.	17:21	44.	3:15	69.
29	73.	82.	63.	94.	15:13	51.	4:44	74.
30	71.	73.	69.	81.	14:51	62.	6: 9	79.
MEAN	64.	70.	59.					73.
STANDARD DEVIATION	7.9	9.0	7.7					4.7

ENVIRONMENTAL SUMMARY REPORT

SITE: RADIAN CORPORATION  
AUSTIN, TEXAS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 2

LATITUDE: 30.00 DEG NORTH  
LONGITUDE: 98.00 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 30 DEG

TIME ZONE: CENTRAL  
ALTITUDE: 600 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	575.	*	*	152.	13:14	3325.	17.
2	280.	*	*	59.	10:26	3321.	8.
3	1469.	*	*	315.	14: 7	3317.	44.
4	2300.	*	*	329.	12:41	3313.	69.
5	1894.	*	*	322.	12:26	3309.	57.
6	*	*	*	*	*:*	3305.	*
7	1872.	*	*	311.	12:32	3301.	57.
8	2354.	*	*	332.	12:39	3296.	71.
9	2294.	*	*	329.	12:47	3292.	70.
10	2213.	*	*	311.	12:29	3287.	67.
11	865.	*	*	242.	14:48	3282.	26.
12	217.	*	*	83.	10:47	3277.	7.
13	*	*	*	*	*:*	3272.	*
14	2328.	*	*	356.	13:12	3267.	71.
15	2315.	*	*	318.	12:18	3262.	71.
16	2211.	*	*	315.	12:19	3257.	68.
17	2114.	*	*	311.	12:54	3251.	65.
18	2242.	*	*	318.	12:40	3246.	69.
19	2224.	*	*	315.	12:43	3240.	69.
20	2149.	*	*	315.	12:55	3234.	66.
21	2041.	*	*	329.	12:55	3229.	63.
22	1836.	*	*	318.	11:46	3223.	57.
23	1463.	*	*	318.	13:58	3217.	45.
24	1112.	*	*	256.	13:41	3211.	35.
25	2196.	*	*	332.	12:35	3205.	69.
26	2185.	*	*	360.	12: 4	3199.	68.
27	2035.	*	*	325.	12:19	3193.	64.
28	2090.	*	*	301.	12:51	3187.	66.
29	1876.	*	*	273.	12:36	3181.	59.
30	704.	*	*	201.	11:25	3174.	22.
MEAN	1766.	0.	0.			3256.	
STANDARD DEVIATION	663.						46.

ENVIRONMENTAL SUMMARY REPORT

SITE: RADIAN CORPORATION  
AUSTIN, TEXAS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 2

LATITUDE: 30.00 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: CENTRAL  
LONGITUDE: 98.00 DEG WEST      PYRANOMETER TILT: 30 DEG      ALTITUDE: 600 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	66.	68.	64.	80.	16:56	57.	7:16	N.A.
2	67.	67.	66.	72.	17:40	63.	2:48	N.A.
3	66.	68.	65.	76.	16:35	57.	6:12	N.A.
4	61.	63.	58.	72.	15:28	51.	6:17	N.A.
5	65.	70.	59.	79.	14: 8	54.	6: 8	N.A.
6	63.	61.	64.	81.	17:36	54.	2:45	N.A.
7	77.	82.	72.	91.	14:18	68.	2: 8	N.A.
8	64.	67.	61.	75.	15:24	53.	6:20	N.A.
9	66.	72.	60.	83.	15: 0	48.	5:46	N.A.
10	67.	72.	62.	82.	14:26	47.	6:16	N.A.
11	74.	77.	71.	86.	16:12	66.	3:36	N.A.
12	49.	48.	51.	70.	0: 1	41.	19: 0	N.A.
13	41.	38.	42.	50.	19: 4	36.	6:49	N.A.
14	55.	60.	49.	72.	15: 4	39.	5:39	N.A.
15	67.	76.	58.	89.	15:47	43.	6: 2	N.A.
16	67.	75.	60.	86.	14:33	48.	5: 2	N.A.
17	70.	76.	64.	83.	16: 7	57.	3:13	N.A.
18	65.	69.	60.	77.	16: 0	53.	5:43	N.A.
19	67.	75.	60.	84.	15: 7	49.	5:52	N.A.
20	71.	77.	64.	88.	14:10	54.	4:11	N.A.
21	70.	75.	64.	85.	14:42	53.	5:16	N.A.
22	69.	73.	64.	82.	14:52	55.	4:18	N.A.
23	71.	75.	67.	86.	15: 7	61.	4:54	N.A.
24	73.	77.	69.	88.	14:55	65.	0:42	N.A.
25	70.	75.	66.	84.	16:20	58.	2:27	N.A.
26	61.	64.	57.	72.	16:11	53.	4:42	N.A.
27	63.	68.	58.	76.	15:36	50.	3:34	N.A.
28	69.	75.	62.	85.	14:34	52.	5:49	N.A.
29	74.	80.	68.	89.	15:56	57.	5:35	N.A.
30	71.	73.	69.	79.	14:27	63.	4:56	N.A.
MEAN	66.	70.	62.					N.A.
STANDARD DEVIATION	7.3	9.2	6.4					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: RADIAN CORPORATION  
AUSTIN, TEXAS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 2

LATITUDE: 30.00 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: CENTRAL  
LONGITUDE: 98.00 DEG WEST      PYRANOMETER TILT: 30 DEG      ALTITUDE: 600 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	124.	9.	96.	7.	24.	121.	18:21
2	135.	6.	133.	5.	14.	106.	2: 5
3	360.	11.	358.	14.	27.	345.	10:50
4	14.	13.	18.	15.	27.	39.	7:53
5	142.	11.	128.	11.	38.	158.	17:14
6	168.	9.	172.	7.	24.	160.	19:44
7	178.	12.	179.	15.	31.	175.	14:56
8	339.	16.	334.	19.	41.	345.	9:11
9	112.	5.	82.	5.	18.	86.	12:52
10	169.	15.	170.	18.	36.	174.	10:16
11	182.	14.	184.	15.	30.	256.	23:13
12	352.	22.	353.	20.	47.	353.	20:14
13	312.	16.	308.	23.	36.	310.	8:20
14	280.	9.	284.	14.	37.	331.	13:28
15	130.	3.	152.	4.	14.	172.	10:16
16	172.	11.	176.	16.	32.	187.	14:11
17	304.	7.	324.	10.	22.	339.	12:33
18	341.	11.	340.	14.	28.	330.	9: 0
19	71.	2.	64.	3.	13.	22.	16:32
20	181.	6.	185.	8.	20.	198.	9:27
21	174.	9.	174.	12.	27.	174.	10:47
22	167.	10.	168.	11.	27.	177.	14:31
23	172.	13.	177.	14.	26.	199.	9:31
24	167.	15.	168.	15.	31.	156.	2:55
25	312.	8.	298.	8.	28.	266.	17: 8
26	319.	17.	312.	21.	38.	328.	13:35
27	334.	10.	335.	14.	28.	353.	14: 0
28	284.	3.	291.	5.	25.	323.	12:45
29	183.	11.	188.	13.	29.	182.	20:39
30	168.	11.	169.	12.	22.	179.	17:18
MEAN	202.	10.	230.	12.			
STANDARD DEVIATION	93.6	4.4	96.9	5.2			

ENVIRONMENTAL SUMMARY REPORT

SITE: RADIAN CORPORATION  
AUSTIN, TEXAS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 2

LATITUDE: 30.00 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: CENTRAL  
LONGITUDE: 98.00 DEG WEST      PYRANOMETER TILT: 30 DEG      ALTITUDE: 600 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	2	10	9	3	0	0	0	0	0
2	4	18	2	0	0	0	0	0	0
3	3	2	9	10	0	0	0	0	0
4	0	6	4	12	2	0	0	0	0
5	1	7	6	8	2	0	0	0	0
6	0	5	8	4	0	0	0	0	7
7	0	5	11	5	3	0	0	0	0
8	1	5	3	6	8	1	0	0	0
9	7	15	2	0	0	0	0	0	0
10	4	3	1	4	12	0	0	0	0
11	2	2	6	8	6	0	0	0	0
12	0	0	0	6	14	4	0	0	0
13	0	4	2	5	5	1	0	0	7
14	6	2	10	4	2	0	0	0	0
15	16	8	0	0	0	0	0	0	0
16	5	3	6	3	7	0	0	0	0
17	5	11	6	2	0	0	0	0	0
18	4	3	9	8	0	0	0	0	0
19	17	7	0	0	0	0	0	0	0
20	6	12	6	0	0	0	0	0	0
21	5	4	8	7	0	0	0	0	0
22	4	3	10	7	0	0	0	0	0
23	0	2	10	12	0	0	0	0	0
24	1	0	6	15	2	0	0	0	0
25	7	4	8	5	0	0	0	0	0
26	0	3	4	7	10	0	0	0	0
27	2	6	7	9	0	0	0	0	0
28	14	10	0	0	0	0	0	0	0
29	4	3	3	13	1	0	0	0	0
30	1	3	16	3	0	0	0	0	1
AVERAGE	4.0	5.5	5.7	5.5	2.5	0.2	0.0	0.0	0.5
TOTAL	121	166	172	166	74	6	0	0	15

ENVIRONMENTAL SUMMARY REPORT

SITE: RADIAN CORPORATION  
AUSTIN, TEXAS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 2

LATITUDE: 30.00 DEG NORTH  
LONGITUDE: 98.00 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 30 DEG

TIME ZONE: CENTRAL  
ALTITUDE: 600 FEET

RELATIVE HUMIDITY IN PER CENT

DAY	RELATIVE HUMIDITY	DAYTIME REL HUM	NIGHTTIME REL HUM	MAXIMUM VALUE	HUMIDITY TIME HR:MN	MINIMUM VALUE	HUMIDITY TIME HR:MN
1	88.	83.	93.	100.	0:52	61.	17: 1
2	100.	100.	100.	100.	0: 2	99.	17:51
3	62.	49.	75.	100.	0: 4	32.	16:41
4	46.	42.	50.	61.	6:27	30.	14:33
5	45.	36.	54.	66.	23:54	24.	15:44
6	82.	86.	81.	100.	21:41	52.	17:25
7	73.	61.	85.	99.	23:56	40.	14:34
8	33.	25.	40.	100.	0:12	17.	13:27
9	30.	24.	36.	48.	6: 7	16.	15:46
10	48.	40.	56.	85.	23:52	27.	12: 8
11	79.	73.	86.	100.	3: 4	52.	16:33
12	75.	71.	79.	100.	15:51	55.	0:39
13	85.	100.	80.	100.	0: 4	40.	19: 4
14	46.	37.	54.	68.	6:16	22.	15:15
15	39.	30.	48.	80.	6:18	13.	14:53
16	46.	37.	54.	82.	5:39	25.	15:45
17	53.	45.	60.	100.	3:55	19.	16:55
18	46.	42.	49.	65.	23:55	29.	16:27
19	50.	40.	61.	84.	6: 3	28.	15:23
20	46.	37.	54.	75.	4:22	23.	16:23
21	47.	42.	53.	73.	5:22	28.	13:48
22	66.	60.	71.	99.	5: 6	36.	16:22
23	72.	66.	78.	100.	5:10	45.	16: 6
24	73.	64.	81.	98.	0:47	44.	16:14
25	60.	53.	67.	100.	2:22	21.	16:10
26	55.	46.	65.	82.	4:42	36.	16:27
27	54.	45.	63.	82.	3:39	32.	16:45
28	50.	40.	60.	81.	6: 0	28.	16:20
29	47.	40.	53.	79.	5:46	24.	16:23
30	70.	69.	72.	92.	23:58	51.	0: 2
MEAN	59.	53.	65.				
STANDARD DEVIATION	17.	20.	16.				

ENVIRONMENTAL SUMMARY REPORT

SITE: RANDOLPH AIR FORCE BASE  
UNIVERSAL CITY, TEXAS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 25

LATITUDE: 29.50 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL  
LONGITUDE: 98.30 DEG WEST PYRANOMETER TILT: 15 DEG ALTITUDE: 790 FEET

INSOLATION

DAY	TOTAL	TOTAL DIFF	TOTAL DIR	MAXIMUM TOTAL		EXTRATERRESTRIAL	TTL INS
	INSOLATION BTU/FT2	INSOLATION BTU/FT2	INSOLATION BTU/FT2	INSOLATION VALUE	TIME	INSOLATION BTU/FT2	----- EXT INS PERCENT
1	504.	N.A.	N.A.	237.	15: 2	3313.	15.
2	627.	N.A.	N.A.	252.	14: 4	3319.	19.
3	1676.	N.A.	N.A.	322.	11:11	3323.	50.
4	2254.	N.A.	N.A.	325.	11:59	3330.	68.
5	1802.	N.A.	N.A.	325.	12: 2	3333.	54.
6	1601.	N.A.	N.A.	357.	12:45	3340.	48.
7	1956.	N.A.	N.A.	307.	11:41	3343.	59.
8	2348.	N.A.	N.A.	331.	12:46	3349.	70.
9	2356.	N.A.	N.A.	328.	12:39	3354.	70.
10	2237.	N.A.	N.A.	313.	12:16	3357.	67.
11	947.	N.A.	N.A.	228.	15:14	3362.	28.
12	297.	N.A.	N.A.	225.	9:48	3364.	9.
13	1188.	N.A.	N.A.	337.	11: 2	3369.	35.
14	2323.	N.A.	N.A.	351.	12:32	3374.	69.
15	2386.	N.A.	N.A.	331.	12: 9	3376.	71.
16	2333.	N.A.	N.A.	322.	12: 1	3380.	69.
17	1770.	N.A.	N.A.	328.	13:25	3384.	52.
18	2344.	N.A.	N.A.	325.	12:39	3385.	69.
19	2287.	N.A.	N.A.	322.	12:32	3389.	67.
20	2096.	N.A.	N.A.	316.	11:57	3390.	62.
21	1769.	N.A.	N.A.	331.	12:51	3393.	52.
22	1166.	N.A.	N.A.	266.	12:40	3397.	34.
23	1424.	N.A.	N.A.	357.	12:49	3397.	42.
24	1558.	N.A.	N.A.	331.	13: 2	3400.	47.
25	2332.	N.A.	N.A.	328.	12:42	3403.	69.
26	2360.	N.A.	N.A.	325.	12:25	3403.	69.
27	1963.	N.A.	N.A.	299.	12:26	3406.	58.
28	2257.	N.A.	N.A.	313.	12:58	3405.	66.
29	2194.	N.A.	N.A.	313.	12:46	3408.	64.
30	1103.	N.A.	N.A.	305.	13:14	3410.	32.
MEAN	1783.	N.A.	N.A.			3372.	
STANDARD DEVIATION	618.	N.A.	N.A.			30.	

ENVIRONMENTAL SUMMARY REPORT

SITE: RANDOLPH AIR FORCE BASE  
UNIVERSAL CITY, TEXAS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 25

LATITUDE: 29.50 DEG NORTH  
LONGITUDE: 98.30 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 15 DEG

TIME ZONE: CENTRAL  
ALTITUDE: 790 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	62.	62.	62.	73.	16: 6	58.	6:19	89.
2	68.	71.	66.	84.	15:13	62.	2:36	91.
3	69.	72.	66.	80.	13:51	59.	23:48	89.
4	63.	67.	59.	75.	14:17	55.	6:12	86.
5	64.	69.	58.	79.	14:10	53.	6:37	88.
6	69.	74.	64.	88.	16:29	56.	1:27	87.
7	77.	83.	72.	94.	15:45	67.	0: 2	92.
8	66.	69.	62.	78.	15:37	54.	23:56	90.
9	65.	71.	58.	84.	16:39	46.	6:20	95.
10	67.	72.	61.	84.	15:17	47.	6: 3	90.
11	75.	79.	71.	92.	16: 2	67.	2:21	89.
12	52.	49.	55.	71.	0: 1	41.	23:50	89.
13	46.	49.	43.	57.	16:59	39.	3: 8	87.
14	58.	64.	51.	76.	16:21	38.	6: 8	88.
15	67.	75.	59.	90.	15:32	43.	5:29	93.
16	69.	75.	62.	87.	15:34	47.	5:58	93.
17	69.	75.	63.	89.	16: 5	56.	5:41	89.
18	66.	72.	60.	82.	14:41	53.	6:20	89.
19	67.	75.	60.	87.	14:50	48.	6:13	89.
20	69.	76.	62.	89.	15:25	49.	5:58	96.
21	67.	73.	61.	81.	13:49	52.	6:11	93.
22	67.	71.	62.	82.	14: 5	54.	3:25	90.
23	70.	75.	65.	86.	14:52	58.	3:45	92.
24	73.	78.	68.	91.	14:32	63.	0:30	93.
25	70.	76.	65.	85.	16:10	57.	2:29	91.
26	64.	67.	60.	77.	16:25	53.	6: 6	93.
27	64.	70.	59.	82.	15:38	48.	4:53	94.
28	70.	77.	63.	90.	16:14	51.	5: 9	87.
29	73.	80.	67.	92.	15:21	57.	5:34	94.
30	73.	76.	70.	87.	14:28	66.	4: 4	92.
MEAN	67.	71.	62.					91.
STANDARD DEVIATION	6.3	7.5	5.8					2.7

ENVIRONMENTAL SUMMARY REPORT

SITE: TRINITY UNIVERSITY  
SAN ANTONIO, TEXAS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 3

LATITUDE: 29.97 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL  
LONGITUDE: 98.48 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 750 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	420.	*	*	183.	14:44	3324.	13.
2	277.	*	*	83.	13:49	3321.	8.
3	0.	*	*	0.	5:36	3317.	0.
4	2897.	*	*	402.	5:50	3313.	87.
5	2287.	*	*	282.	8:47	3309.	69.
6	2296.	*	*	322.	9:14	3305.	69.
7	1584.	*	*	336.	8:58	3301.	48.
8	614.	*	*	113.	10:11	3296.	19.
9	1758.	*	*	249.	8:53	3292.	53.
10	1913.	*	*	243.	8:59	3287.	58.
11	2227.	*	*	332.	9:12	3282.	68.
12	4463.	*	*	528.	12:16	3277.	136.
13	604.	*	*	528.	5:36	3272.	18.
14	962.	*	*	518.	14:39	3267.	29.
15	1843.	*	*	422.	14: 7	3262.	57.
16	4009.	*	*	532.	12:36	3256.	123.
17	3989.	*	*	508.	10:47	3251.	123.
18	2304.	*	*	276.	8:51	3245.	71.
19	2520.	*	*	352.	8:17	3240.	78.
20	2326.	*	*	342.	9:30	3234.	72.
21	3381.	*	*	346.	9:30	3228.	105.
22	4111.	*	*	389.	9: 0	3222.	128.
23	3143.	*	*	392.	7:56	3216.	98.
24	1366.	*	*	239.	7:54	3210.	43.
25	2627.	*	*	482.	6:35	3204.	82.
26	0.	*	*	0.	5:32	3198.	0.
27	0.	*	*	0.	6:25	3192.	0.
28	931.	*	*	528.	12:26	3186.	29.
29	1748.	*	*	263.	8:17	3180.	55.
30	2099.	*	*	246.	9:35	3174.	66.
MEAN	2174.	0.	0.			3255.	
STANDARD DEVIATION	1162.						46.

ENVIRONMENTAL SUMMARY REPORT

SITE: TRINITY UNIVERSITY  
SAN ANTONIO, TEXAS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 3

LATITUDE: 29.97 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL  
LONGITUDE: 98.48 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 750 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	64.	63.	65.	73.	17:22	59.	6:18	73.
2	69.	71.	67.	83.	16: 5	63.	2:42	74.
3	69.	72.	67.	78.	13:57	62.	23:53	74.
4	64.	67.	62.	75.	14:12	56.	7: 0	74.
5	64.	68.	61.	76.	15:38	56.	5:30	77.
6	70.	73.	66.	86.	15:44	58.	0:31	76.
7	78.	82.	73.	93.	16:14	67.	0: 0	75.
8	66.	68.	65.	76.	15: 4	56.	6:22	76.
9	65.	70.	60.	80.	15:21	50.	6: 7	76.
10	66.	70.	62.	82.	15:23	50.	4:11	74.
11	75.	78.	72.	88.	15:20	68.	0:24	75.
12	53.	50.	56.	73.	0: 5	41.	23: 1	74.
13	47.	50.	45.	57.	17:57	39.	2:24	73.
14	58.	64.	53.	75.	15:17	36.	5:41	73.
15	68.	74.	63.	87.	17:19	48.	6:23	73.
16	70.	74.	65.	84.	14:49	52.	6:12	74.
17	70.	74.	66.	84.	14:57	59.	2: 4	74.
18	67.	72.	63.	80.	14:59	53.	5:55	74.
19	68.	73.	63.	82.	15:56	51.	5:32	74.
20	69.	74.	65.	84.	15:27	55.	5:27	75.
21	68.	71.	64.	80.	15: 0	55.	6: 2	75.
22	68.	71.	65.	79.	13:58	59.	1:58	74.
23	71.	74.	67.	84.	15:24	61.	3:51	75.
24	73.	77.	69.	89.	14:55	64.	1:19	75.
25	70.	75.	66.	84.	16:49	57.	1:31	75.
26	64.	67.	62.	76.	16:38	54.	6: 4	76.
27	66.	69.	62.	77.	16:15	50.	4:17	75.
28	70.	74.	66.	85.	17:21	54.	5:57	75.
29	74.	78.	69.	89.	16:15	59.	6:15	75.
30	74.	76.	72.	84.	14:58	68.	7:27	75.
MEAN	67.	71.	64.					75.
STANDARD DEVIATION	6.1	7.0	5.7					1.0

ENVIRONMENTAL SUMMARY REPORT

SITE: TRINITY UNIVERSITY  
SAN ANTONIO, TEXAS

REPORT PERIOD: 80/ 4  
SITE NUMBER: 3

LATITUDE: 29.97 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: CENTRAL  
LONGITUDE: 98.48 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 750 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	129.	7.	165.	6.	15.	113.	23:14
2	120.	5.	103.	3.	17.	115.	0:13
3	169.	8.	185.	9.	21.	188.	12:16
4	161.	10.	156.	12.	23.	162.	9:13
5	105.	10.	99.	12.	27.	85.	17:19
6	67.	6.	36.	6.	15.	88.	18:40
7	70.	5.	69.	6.	17.	74.	15:12
8	168.	10.	167.	12.	28.	143.	3:15
9	114.	7.	113.	7.	17.	123.	8:58
10	68.	9.	65.	10.	27.	91.	16:50
11	70.	7.	59.	7.	17.	38.	10:0
12	182.	14.	182.	14.	32.	187.	19:22
13	232.	10.	229.	14.	30.	247.	9:20
14	276.	6.	279.	9.	22.	294.	11:33
15	5.	5.	320.	6.	22.	36.	11:43
16	73.	8.	73.	9.	26.	84.	13:40
17	142.	3.	157.	4.	19.	160.	15:52
18	169.	7.	174.	8.	21.	202.	14:48
19	112.	3.	110.	3.	13.	141.	11:35
20	83.	4.	100.	4.	13.	69.	22:2
21	69.	6.	63.	6.	18.	83.	19:56
22	76.	7.	78.	8.	24.	62.	12:22
23	74.	8.	69.	8.	20.	86.	19:6
24	77.	9.	74.	7.	27.	90.	22:29
25	251.	6.	267.	7.	26.	305.	15:17
26	222.	8.	232.	10.	23.	248.	10:9
27	205.	4.	211.	5.	12.	219.	10:29
28	97.	3.	3.	3.	14.	320.	11:54
29	65.	8.	48.	8.	25.	95.	17:14
30	77.	7.	74.	6.	19.	106.	18:37
MEAN	124.	7.	132.	8.			
STANDARD DEVIATION	65.8	2.4	79.6	3.1			

ENVIRONMENTAL SUMMARY REPORT

SITE: TRINITY UNIVERSITY  
SAN ANTONIO, TEXAS

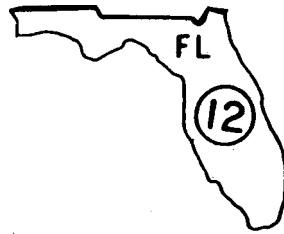
REPORT PERIOD: 80/ 4  
SITE NUMBER: 3

LATITUDE: 29.97 DEG NORTH AZIMUTH: 0 DEG  
LONGITUDE: 98.48 DEG WEST PYRANOMETER TILT: 30 DEG  
TIME ZONE: CENTRAL  
ALTITUDE: 750 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	2	16	6	0	0	0	0	0	0
2	7	15	2	0	0	0	0	0	0
3	5	4	13	2	0	0	0	0	0
4	0	7	11	6	0	0	0	0	0
5	0	10	11	2	1	0	0	0	0
6	5	15	4	0	0	0	0	0	0
7	11	7	6	0	0	0	0	0	0
8	3	6	6	9	0	0	0	0	0
9	0	16	8	0	0	0	0	0	0
10	7	1	7	9	0	0	0	0	0
11	3	11	10	0	0	0	0	0	0
12	0	1	9	13	1	0	0	0	0
13	6	1	8	8	1	0	0	0	0
14	12	4	8	0	0	0	0	0	0
15	12	6	6	0	0	0	0	0	0
16	8	4	6	6	0	0	0	0	0
17	19	4	1	0	0	0	0	0	0
18	1	17	6	0	0	0	0	0	0
19	17	7	0	0	0	0	0	0	0
20	12	11	1	0	0	0	0	0	0
21	8	8	7	1	0	0	0	0	0
22	6	6	11	1	0	0	0	0	0
23	3	8	10	3	0	0	0	0	0
24	3	11	4	6	0	0	0	0	0
25	10	7	6	1	0	0	0	0	0
26	4	8	9	3	0	0	0	0	0
27	13	10	1	0	0	0	0	0	0
28	18	6	0	0	0	0	0	0	0
29	7	2	10	5	0	0	0	0	0
30	3	13	7	0	0	0	0	0	1
AVERAGE	6.8	8.1	6.5	2.5	0.1	0.0	0.0	0.0	0.0
TOTAL	205	242	194	75	3	0	0	0	1

ZONE 12



ENVIRONMENTAL SUMMARY REPORT

SITE: FLORIDA GAS  
WINTER SPRING, FLORIDA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 51

LATITUDE: 28.00 DEG NORTH AZIMUTH: 0 DEG  
LONGITUDE: 82.00 DEG WEST PYRANOMETER TILT: 18 DEG  
TIME ZONE: EASTERN  
ALTITUDE: 106 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	892.	N.A.	N.A.	355.	13: 6	3338.	27.
2	368.	N.A.	N.A.	204.	10:11	3342.	11.
3	2187.	N.A.	N.A.	366.	12:20	3345.	65.
4	1762.	N.A.	N.A.	401.	12:10	3346.	53.
5	2596.	N.A.	N.A.	387.	12:18	3349.	78.
6	1712.	N.A.	N.A.	362.	11:50	3352.	51.
7	730.	N.A.	N.A.	241.	10:42	3355.	22.
8	2105.	N.A.	N.A.	393.	11:46	3357.	63.
9	811.	N.A.	N.A.	220.	14:15	3357.	24.
10	2598.	N.A.	N.A.	369.	12:12	3359.	77.
11	2566.	N.A.	N.A.	365.	11:44	3358.	76.
12	2471.	N.A.	N.A.	362.	12:12	3360.	74.
13	2414.	N.A.	N.A.	369.	11:45	3362.	72.
14	461.	N.A.	N.A.	138.	14:13	3364.	14.
15	2300.	N.A.	N.A.	410.	12:27	3362.	68.
16	2623.	N.A.	N.A.	372.	12: 0	3363.	78.
17	2509.	N.A.	N.A.	410.	12: 5	3364.	75.
18	1852.	N.A.	N.A.	344.	12: 6	3366.	55.
19	1217.	N.A.	N.A.	311.	12:50	3366.	36.
20	1142.	N.A.	N.A.	347.	11: 3	3364.	34.
21	1916.	N.A.	N.A.	317.	12:19	3365.	57.
22	2148.	N.A.	N.A.	308.	12: 5	3362.	64.
23	1908.	N.A.	N.A.	308.	11:56	3363.	57.
24	1994.	N.A.	N.A.	308.	12:58	3363.	59.
25	1940.	N.A.	N.A.	323.	12: 8	3363.	58.
26	2028.	N.A.	N.A.	305.	11:52	3363.	60.
27	1310.	N.A.	N.A.	233.	14:44	3360.	39.
28	1797.	N.A.	N.A.	320.	12:31	3360.	53.
29	1625.	N.A.	N.A.	335.	11:25	3359.	48.
30	1843.	N.A.	N.A.	323.	12:10	3359.	55.
MEAN	1794.	N.A.	N.A.			3358.	
STANDARD DEVIATION	655.	N.A.	N.A.			7.	

ENVIRONMENTAL SUMMARY REPORT

SITE: FLORIDA GAS  
WINTER SPRING, FLORIDA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 51

LATITUDE: 28.00 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 82.00 DEG WEST PYRANOMETER TILT: 18 DEG ALTITUDE: 106 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	63.	67.	59.	77.	14: 5	53.	1:17	N.A.
2	65.	69.	62.	76.	10:38	55.	4:46	N.A.
3	75.	81.	70.	89.	15:32	65.	4:47	N.A.
4	73.	77.	69.	85.	13:35	63.	4:47	N.A.
5	65.	69.	60.	77.	15: 9	50.	23:52	N.A.
6	61.	68.	55.	75.	12:28	47.	6:10	N.A.
7	67.	72.	63.	78.	10:48	56.	3:41	N.A.
8	74.	79.	70.	88.	14:37	61.	6:21	N.A.
9	71.	72.	69.	81.	16:28	64.	11:13	N.A.
10	68.	73.	62.	83.	15:51	54.	23:44	N.A.
11	66.	73.	58.	86.	14:29	46.	5:36	N.A.
12	72.	78.	65.	88.	15:18	56.	4:38	N.A.
13	75.	80.	70.	90.	14:18	61.	5:16	N.A.
14	68.	69.	66.	75.	2:50	55.	23:55	N.A.
15	58.	62.	53.	70.	14:56	47.	5:20	N.A.
16	58.	66.	50.	78.	16: 6	44.	6: 3	N.A.
17	61.	68.	53.	77.	13:35	44.	5:57	N.A.
18	63.	70.	56.	79.	13:15	49.	5:42	N.A.
19	64.	68.	59.	77.	12:50	54.	6:10	N.A.
20	63.	67.	59.	74.	14:48	54.	23:57	N.A.
21	64.	71.	57.	82.	14:53	50.	5: 7	N.A.
22	67.	75.	59.	85.	14:13	53.	6:29	N.A.
23	69.	74.	63.	83.	13:43	55.	1:11	N.A.
24	70.	76.	64.	83.	14:18	60.	23:57	N.A.
25	69.	75.	62.	84.	14:59	54.	3:47	N.A.
26	71.	78.	64.	88.	14:53	56.	5:55	N.A.
27	72.	77.	68.	83.	14:44	63.	2:48	N.A.
28	63.	66.	59.	73.	14:17	52.	23:58	N.A.
29	61.	67.	55.	76.	14:40	46.	5:24	N.A.
30	66.	72.	61.	82.	14:19	*	11: 1	N.A.
MEAN	67.	72.	61.					N.A.
STANDARD DEVIATION	4.9	4.8	5.5					N.A.

ENVIRONMENTAL SUMMARY REPORT

SITE: FLORIDA GAS  
WINTER SPRING, FLORIDA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 51

LATITUDE: 28.00 DEG NORTH AZIMUTH: 0 DEG  
LONGITUDE: 82.00 DEG WEST PYRANOMETER TILT: 18 DEG  
TIME ZONE: EASTERN  
ALTITUDE: 106 FEET

RELATIVE HUMIDITY IN PER CENT

DAY	RELATIVE HUMIDITY	DAYTIME REL HUM	NIGHTTIME REL HUM	MAXIMUM VALUE	HUMIDITY TIME HR:MN	MINIMUM VALUE	HUMIDITY TIME HR:MN
1	29.	30.	29.	32.	23:37	26.	0: 2
2	37.	37.	37.	48.	18:12	32.	0: 9
3	36.	35.	37.	44.	8:57	29.	16:47
4	36.	34.	37.	41.	23:20	26.	13:35
5	29.	26.	32.	38.	0: 2	17.	12: 2
6	29.	27.	30.	35.	20:40	23.	13:12
7	34.	34.	34.	40.	17:38	31.	0:40
8	35.	35.	35.	38.	22:25	28.	18:21
9	35.	34.	35.	39.	0:28	31.	10: 9
10	28.	27.	30.	36.	5: 6	17.	14:42
11	26.	25.	27.	30.	22:52	19.	14:40
12	29.	26.	32.	38.	22:25	21.	13:42
13	32.	31.	33.	36.	8:38	21.	13:30
14	36.	37.	34.	46.	10:23	32.	18:46
15	28.	27.	29.	33.	0:48	20.	11:28
16	25.	23.	26.	30.	7: 2	12.	15:50
17	26.	25.	27.	29.	19:55	18.	10:39
18	27.	27.	27.	29.	6:57	23.	14:41
19	30.	29.	30.	37.	7:46	23.	11:14
20	31.	31.	31.	32.	10:26	25.	16:45
21	27.	26.	28.	33.	8:40	17.	17:17
22	25.	25.	26.	29.	7:11	15.	17:48
23	25.	25.	25.	28.	9:22	20.	15:14
24	25.	25.	25.	30.	9:30	19.	13:57
25	27.	27.	27.	30.	7:15	25.	16:51
26	28.	27.	29.	30.	22:11	26.	9:55
27	31.	31.	30.	35.	8: 3	26.	10:32
28	25.	23.	26.	30.	3:32	18.	17:50
29	23.	22.	24.	27.	6:49	17.	17:20
30	24.	22.	26.	30.	22:41	17.	14:41
MEAN	29.	28.	30.				
STANDARD DEVIATION	4.	4.	4.				

ENVIRONMENTAL SUMMARY REPORT

SITE: FLORIDA I-95 VISITORS CENTER  
YULEE, FLORIDA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 29

LATITUDE: 30.30 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 81.42 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 26 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS EXT INS PERCENT
1	855.	*	*	286.	10: 9	3327.	26.
2	501.	*	*	212.	9:54	3323.	15.
3	1562.	*	*	336.	12:41	3320.	47.
4	597.	*	*	269.	11:23	3316.	18.
5	2265.	*	*	339.	12: 6	3312.	68.
6	1884.	*	*	326.	13:37	3308.	57.
7	528.	*	*	178.	9:44	3304.	16.
8	1229.	*	*	336.	12:47	3300.	37.
9	1038.	*	*	319.	13:43	3296.	32.
10	2245.	*	*	343.	12: 0	3291.	68.
11	2127.	*	*	319.	13:20	3287.	65.
12	1674.	*	*	326.	12:48	3282.	51.
13	1904.	*	*	306.	11:44	3277.	58.
14	1290.	*	*	316.	12:33	3272.	39.
15	2234.	*	*	363.	12:20	3267.	68.
16	2249.	*	*	336.	12: 4	3262.	69.
17	2200.	*	*	329.	12:58	3257.	68.
18	1706.	*	*	343.	11:57	3251.	52.
19	277.	*	*	161.	13:18	3246.	9.
20	1508.	*	*	323.	13:26	3240.	47.
21	2041.	*	*	319.	12: 1	3235.	63.
22	2112.	*	*	329.	11:49	3229.	65.
23	2077.	*	*	309.	12:51	3223.	64.
24	1882.	*	*	292.	11:39	3218.	58.
25	1851.	*	*	336.	11:48	3212.	58.
26	1744.	*	*	323.	12:56	3206.	54.
27	808.	*	*	252.	13:14	3200.	25.
28	1843.	*	*	329.	11:59	3194.	58.
29	1978.	*	*	329.	12:46	3188.	62.
30	1765.	*	*	349.	11:45	3182.	55.
MEAN	1599.	0.	0.			3261.	
STANDARD DEVIATION	600.						45.



ENVIRONMENTAL SUMMARY REPORT

SITE: FLORIDA I-95 VISITORS CENTER  
YULEE, FLORIDA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 29

LATITUDE: 30.30 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 81.42 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 26 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	*	1.	*	2.	10.	*	14:31
2	*	1.	*	1.	7.	*	13:12
3	*	1.	*	0.	8.	*	2: 6
4	*	2.	*	4.	13.	*	15:28
5	*	0.	*	1.	6.	*	17:15
6	*	2.	*	3.	11.	*	13:10
7	*	1.	*	1.	7.	*	10:38
8	*	1.	*	2.	7.	*	11:48
9	*	1.	*	2.	11.	*	15:51
10	*	0.	*	1.	9.	*	16:21
11	*	1.	*	1.	10.	*	14:51
12	*	1.	*	3.	10.	*	9:26
13	*	2.	*	3.	11.	*	12:38
14	*	4.	*	5.	17.	*	17:53
15	*	2.	*	5.	18.	*	11:43
16	*	0.	*	1.	6.	*	14:23
17	*	2.	*	3.	11.	*	16:58
18	*	2.	*	3.	15.	*	17:43
19	*	1.	*	2.	9.	*	12:25
20	*	2.	*	3.	12.	*	16:11
21	*	0.	*	0.	5.	*	13:53
22	*	0.	*	1.	7.	*	16:16
23	*	2.	*	2.	10.	*	12:14
24	*	2.	*	3.	8.	*	16: 6
25	*	1.	*	2.	9.	*	13:24
26	*	1.	*	2.	12.	*	10:59
27	*	1.	*	1.	7.	*	17: 3
28	*	1.	*	2.	16.	*	16: 5
29	*	3.	*	4.	12.	*	10:32
30	*	1.	*	1.	11.	*	19:14
MEAN	0.	1.	0.	2.			
STANDARD DEVIATION	*****	0.8	*****	1.3			

ENVIRONMENTAL SUMMARY REPORT

SITE: FLORIDA I-95 VISITORS CENTER  
YULEE, FLORIDA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 29

LATITUDE: 30.30 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 81.42 DEG WEST PYRANOMETER TILT: 30 DEG ALTITUDE: 26 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	24	0	0	0	0	0	0	0	0
2	24	0	0	0	0	0	0	0	0
3	24	0	0	0	0	0	0	0	0
4	17	7	0	0	0	0	0	0	0
5	24	0	0	0	0	0	0	0	0
6	20	4	0	0	0	0	0	0	0
7	24	0	0	0	0	0	0	0	0
8	24	0	0	0	0	0	0	0	0
9	22	2	0	0	0	0	0	0	0
10	24	0	0	0	0	0	0	0	0
11	19	1	0	0	0	0	0	0	4
12	23	1	0	0	0	0	0	0	0
13	21	3	0	0	0	0	0	0	0
14	16	8	0	0	0	0	0	0	0
15	17	6	1	0	0	0	0	0	0
16	24	0	0	0	0	0	0	0	0
17	20	4	0	0	0	0	0	0	0
18	19	5	0	0	0	0	0	0	0
19	23	1	0	0	0	0	0	0	0
20	18	6	0	0	0	0	0	0	0
21	24	0	0	0	0	0	0	0	0
22	24	0	0	0	0	0	0	0	0
23	23	1	0	0	0	0	0	0	0
24	24	0	0	0	0	0	0	0	0
25	23	1	0	0	0	0	0	0	0
26	23	1	0	0	0	0	0	0	0
27	24	0	0	0	0	0	0	0	0
28	24	0	0	0	0	0	0	0	0
29	15	9	0	0	0	0	0	0	0
30	23	0	0	0	0	0	0	0	1
AVERAGE	21.8	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
TOTAL	654	60	1	0	0	0	0	0	5

ENVIRONMENTAL SUMMARY REPORT

SITE: MATT D. CANNON  
GAINESVILLE, FLORIDA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 163

LATITUDE: 29.40 DEG NORTH  
LONGITUDE: 82.10 DEG WEST

AZIMUTH: 0 DEG  
PYRANOMETER TILT: 45 DEG

TIME ZONE: EASTERN  
ALTITUDE: 30 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	990.	N.A.	N.A.	307.	14:25	3105.	32.
2	217.	N.A.	N.A.	89.	8:39	3090.	7.
3	1548.	N.A.	N.A.	322.	12:24	3076.	50.
4	383.	N.A.	N.A.	130.	11:16	3064.	13.
5	2197.	N.A.	N.A.	340.	12:59	3050.	72.
6	1396.	N.A.	N.A.	316.	12:11	3038.	46.
7	384.	N.A.	N.A.	92.	11: 5	3023.	13.
8	1538.	N.A.	N.A.	316.	14: 2	3011.	51.
9	988.	N.A.	N.A.	292.	14: 0	2996.	33.
10	2094.	N.A.	N.A.	334.	12:55	2984.	70.
11	2350.	N.A.	N.A.	319.	14:17	2970.	79.
12	1704.	N.A.	N.A.	316.	13:53	2955.	58.
13	1816.	N.A.	N.A.	313.	13: 0	2943.	62.
14	1108.	N.A.	N.A.	331.	13:27	2928.	38.
15	1963.	N.A.	N.A.	337.	12:44	2916.	67.
16	2226.	N.A.	N.A.	328.	12:46	2901.	77.
17	1887.	N.A.	N.A.	310.	13:39	2889.	65.
18	1505.	N.A.	N.A.	301.	14:17	2874.	52.
19	640.	N.A.	N.A.	198.	15: 4	2859.	22.
20	1458.	N.A.	N.A.	387.	13:38	2847.	51.
21	2120.	N.A.	N.A.	313.	13:35	2832.	75.
22	2051.	N.A.	N.A.	286.	12: 7	2820.	73.
23	1385.	N.A.	N.A.	316.	12:47	2806.	49.
24	1961.	N.A.	N.A.	304.	13:22	2791.	70.
25	2119.	N.A.	N.A.	322.	12:59	2780.	76.
26	2010.	N.A.	N.A.	313.	13: 7	2765.	73.
27	1205.	N.A.	N.A.	286.	14: 0	2751.	44.
28	1667.	N.A.	N.A.	322.	12:59	2739.	61.
29	1875.	N.A.	N.A.	307.	12:18	2728.	69.
30	1454.	N.A.	N.A.	313.	13: 1	2714.	54.
MEAN	1541.	N.A.	N.A.			2908.	
STANDARD DEVIATION	585.	N.A.	N.A.			119.	



ENVIRONMENTAL SUMMARY REPORT

SITE: REEDY CREEK UTILITIES  
LAKE BUENA VISTA, FLORIDA

REPORT PERIOD: 80/ 4  
SITE NUMBER: 18

LATITUDE: 28.40 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 81.30 DEG WEST PYRANOMETER TILT: 0 DEG ALTITUDE: 66 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	459.	382.	77.	137.	15:50	3102.	15.
2	344.	288.	56.	181.	9:49	3119.	11.
3	1770.	510.	1260.	299.	13:22	3133.	56.
4	1528.	709.	819.	292.	10:59	3147.	49.
5	2068.	296.	1772.	314.	12:35	3160.	65.
6	1337.	523.	813.	314.	11:58	3174.	42.
7	685.	512.	173.	222.	9:39	3187.	21.
8	1792.	445.	1346.	311.	12:19	3200.	56.
9	719.	520.	199.	206.	13:52	3216.	22.
10	2218.	158.	2060.	305.	11:53	3228.	69.
11	2217.	164.	2052.	305.	12: 6	3241.	68.
12	2035.	303.	1732.	299.	12:26	3253.	63.
13	1850.	377.	1473.	314.	11:54	3265.	57.
14	322.	256.	66.	143.	12:45	3280.	10.
15	1979.	430.	1549.	330.	13:12	3288.	60.
16	2325.	199.	2126.	314.	12: 2	3302.	70.
17	1917.	464.	1454.	346.	12:17	3313.	58.
18	1956.	543.	1413.	337.	12:50	3324.	59.
19	1574.	559.	1015.	308.	13:39	3335.	47.
20	1652.	546.	1106.	334.	12:56	3345.	49.
21	2020.	355.	1665.	305.	12:50	3358.	60.
22	2214.	346.	1868.	302.	12: 0	3368.	66.
23	1821.	556.	1265.	311.	12:15	3378.	54.
24	1985.	504.	1482.	324.	12:45	3388.	59.
25	1982.	617.	1365.	314.	11:56	3399.	58.
26	1914.	402.	1511.	327.	12:30	3409.	56.
27	1320.	809.	511.	222.	14:14	3417.	39.
28	1492.	691.	801.	292.	14:10	3426.	44.
29	1897.	680.	1217.	346.	11:56	3437.	55.
30	1987.	572.	1415.	334.	12:21	3445.	58.
MEAN	1646.	457.	1189.			3288.	
STANDARD DEVIATION	577.	164.	618.			104.	

ENVIRONMENTAL SUMMARY REPORT

SITE: REEDY CREEK UTILITIES  
LAKE BUENA VISTA, FLORIDA

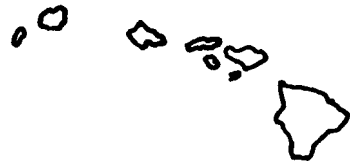
REPORT PERIOD: 80/ 4  
SITE NUMBER: 18

LATITUDE: 28.40 DEG NORTH AZIMUTH: 0 DEG TIME ZONE: EASTERN  
LONGITUDE: 81.30 DEG WEST PYRANOMETER TILT: 0 DEG ALTITUDE: 66 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	63.	64.	61.	71.	15:55	57.	0:38	*
2	68.	71.	66.	77.	13:43	59.	2: 5	*
3	80.	85.	74.	94.	14:37	68.	4:45	*
4	77.	81.	73.	90.	13:55	67.	5:50	*
5	69.	73.	65.	82.	16:19	57.	22:54	*
6	68.	73.	63.	82.	12:24	56.	5:44	*
7	72.	76.	69.	81.	13:55	65.	4:19	*
8	79.	84.	73.	93.	14:54	67.	5:13	*
9	73.	74.	71.	82.	17:20	66.	5:57	*
10	73.	77.	67.	89.	16:41	60.	5:56	*
11	74.	81.	66.	92.	16:12	53.	5:37	*
12	77.	82.	72.	91.	16:37	65.	5:52	*
13	78.	83.	74.	90.	16:13	67.	6: 8	*
14	69.	69.	69.	77.	0: 8	59.	23:52	*
15	64.	69.	58.	76.	14:53	53.	6:16	*
16	65.	72.	58.	81.	16:39	51.	6: 4	*
17	68.	76.	61.	84.	13:31	52.	4:54	*
18	72.	79.	66.	87.	14: 4	58.	5:38	*
19	70.	75.	65.	85.	12:30	63.	5:55	*
20	69.	73.	64.	82.	16:45	60.	23:57	*
21	71.	76.	64.	86.	16:18	56.	5:38	*
22	74.	81.	67.	91.	16:22	60.	1:52	*
23	73.	79.	66.	89.	12:15	59.	5:19	*
24	75.	80.	68.	89.	13:28	64.	23:56	*
25	75.	80.	69.	89.	13:38	60.	5:11	*
26	77.	82.	71.	93.	15:37	63.	5:40	*
27	76.	80.	72.	88.	16:17	67.	2:17	*
28	67.	71.	63.	77.	14:42	55.	23:45	*
29	67.	73.	59.	81.	14:15	52.	3:19	*
30	71.	77.	64.	86.	13:36	57.	5:25	*
MEAN	72.	77.	67.					0.
STANDARD DEVIATION	4.5	5.1	4.7					

HAWAII



ENVIRONMENTAL SUMMARY REPORT

SITE: A-FRAME INDUSTRIES  
KANEHOE, HAWAII

REPORT PERIOD: 80/ 4  
SITE NUMBER: 54

LATITUDE: 21.50 DEG NORTH  
LONGITUDE: 158.00 DEG WEST

AZIMUTH: -10 DEG  
PYRANOMETER TILT: 21 DEG

TIME ZONE: HONOLULU  
ALTITUDE: 50 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	459.	N.A.	N.A.	119.	13: 1	3321.	14.
2	1166.	N.A.	N.A.	283.	12:46	3318.	35.
3	1484.	N.A.	N.A.	399.	12:14	3315.	45.
4	2010.	N.A.	N.A.	393.	12: 8	3315.	61.
5	1571.	N.A.	N.A.	357.	14:16	3312.	47.
6	2122.	N.A.	N.A.	384.	12:26	3308.	64.
7	1179.	N.A.	N.A.	322.	14:18	3304.	36.
8	1751.	N.A.	N.A.	369.	12: 5	3300.	53.
9	1763.	N.A.	N.A.	369.	11:40	3300.	53.
10	1670.	N.A.	N.A.	348.	11:40	3295.	51.
11	1801.	N.A.	N.A.	372.	11:58	3291.	55.
12	740.	N.A.	N.A.	363.	12:29	3287.	23.
13	753.	N.A.	N.A.	191.	11:33	3282.	23.
14	726.	N.A.	N.A.	286.	12:55	3278.	22.
15	566.	N.A.	N.A.	113.	14:41	3273.	17.
16	1116.	N.A.	N.A.	274.	11: 6	3268.	34.
17	1063.	N.A.	N.A.	342.	11:36	3263.	33.
18	1005.	N.A.	N.A.	262.	12:42	3258.	31.
19	769.	N.A.	N.A.	244.	11:35	3253.	24.
20	1657.	N.A.	N.A.	325.	11: 4	3248.	51.
21	1471.	N.A.	N.A.	351.	13: 3	3242.	45.
22	688.	N.A.	N.A.	143.	12:50	3237.	21.
23	1340.	N.A.	N.A.	357.	11:25	3232.	41.
24	1075.	N.A.	N.A.	274.	10:12	3226.	33.
25	1496.	N.A.	N.A.	339.	12: 1	3221.	46.
26	1619.	N.A.	N.A.	363.	12:25	3215.	50.
27	1905.	N.A.	N.A.	363.	12:58	3209.	59.
28	1176.	N.A.	N.A.	280.	12:56	3204.	37.
29	1416.	N.A.	N.A.	316.	11:30	3198.	44.
30	1871.	N.A.	N.A.	345.	11:40	3192.	59.
MEAN	1314.	N.A.	N.A.			3265.	
STANDARD DEVIATION	463.	N.A.	N.A.			40.	

ENVIRONMENTAL SUMMARY REPORT

SITE: A-FRAME INDUSTRIES  
KANEHOE, HAWAII

REPORT PERIOD: 80/ 4  
SITE NUMBER: 54

LATITUDE: 21.50 DEG NORTH      AZIMUTH: -10 DEG      TIME ZONE: HONOLULU  
LONGITUDE: 158.00 DEG WEST      PYRANOMETER TILT: 21 DEG      ALTITUDE: 50 FEET

TEMPERATURES IN DEGREES F

DAY	AVERAGE TEMP	DAYTIME TEMP	NIGHTTIME TEMP	MAX TEMPERATURE		MIN TEMPERATURE		INLET WATER TEMPERATURE
				VALUE	TIME HR:MN	VALUE	TIME HR:MN	
1	72.	73.	71.	74.	13:33	69.	21:49	72.
2	73.	74.	71.	77.	12:46	68.	4:56	73.
3	73.	75.	72.	79.	12:31	71.	1:55	73.
4	74.	76.	71.	79.	12:13	71.	6:17	74.
5	73.	75.	71.	79.	14:16	70.	6:27	74.
6	74.	77.	71.	81.	12:10	69.	5:39	74.
7	72.	74.	71.	80.	15:33	68.	6:34	74.
8	75.	77.	72.	80.	11:44	71.	5:36	74.
9	75.	77.	73.	83.	14:15	72.	1:10	75.
10	73.	75.	71.	80.	14:38	68.	4: 1	75.
11	73.	75.	71.	78.	14:26	68.	20:13	73.
12	70.	71.	69.	75.	13:22	66.	20:24	70.
13	70.	71.	69.	74.	11: 6	67.	4:29	71.
14	71.	72.	70.	75.	13: 0	69.	2: 2	70.
15	70.	71.	70.	74.	10: 9	68.	5:11	70.
16	72.	74.	70.	78.	10:28	69.	0:51	72.
17	72.	74.	71.	78.	11:36	69.	8:45	72.
18	72.	73.	71.	75.	9:57	69.	2:34	71.
19	72.	73.	71.	77.	12:17	70.	0:12	71.
20	73.	75.	71.	78.	11: 4	70.	21:55	72.
21	71.	72.	70.	75.	13:41	68.	22:39	70.
22	71.	72.	70.	74.	12:56	68.	21:28	70.
23	73.	75.	71.	79.	11:20	67.	2:21	71.
24	73.	73.	72.	78.	10:12	70.	23:29	72.
25	73.	74.	71.	79.	11:40	68.	2:52	*
26	73.	75.	72.	79.	11:21	71.	1: 3	71.
27	74.	76.	72.	80.	14:18	70.	5:57	73.
28	74.	75.	72.	79.	12:29	70.	6:45	72.
29	74.	76.	72.	80.	12:27	71.	4:29	73.
30	73.	74.	71.	77.	13:37	69.	19:50	71.
MEAN	73.	74.	71.					72.
STANDARD DEVIATION	1.3	1.9	0.9					1.5

ENVIRONMENTAL SUMMARY REPORT

SITE: HEI WAI WONG  
HONOLULU, HAWAII

REPORT PERIOD: 80/ 4  
SITE NUMBER: 59

LATITUDE: 21.00 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: HONOLULU  
LONGITUDE: 157.00 DEG WEST      PYRANOMETER TILT: 24 DEG      ALTITUDE: 7 FEET

INSOLATION

DAY	TOTAL INSOLATION BTU/FT2	TOTAL DIFF INSOLATION BTU/FT2	TOTAL DIR INSOLATION BTU/FT2	MAXIMUM TOTAL INSOLATION VALUE BTU/HR/FT2	TOTAL TIME HR:MN	EXTRATERRESTRIAL INSOLATION BTU/FT2	TTL INS ----- EXT INS PERCENT
1	1813.	N.A.	N.A.	378.	12: 0	3301.	55.
2	2009.	N.A.	N.A.	356.	12:32	3296.	61.
3	2333.	N.A.	N.A.	319.	12:42	3290.	71.
4	2230.	N.A.	N.A.	356.	12:21	3284.	68.
5	1760.	N.A.	N.A.	353.	12:58	3277.	54.
6	*	N.A.	N.A.	*	*:*	3274.	*
7	*	N.A.	N.A.	*	*:*	3268.	*
8	2483.	N.A.	N.A.	335.	12: 5	3261.	76.
9	2290.	N.A.	N.A.	356.	12:31	3255.	70.
10	1594.	N.A.	N.A.	322.	13:38	3248.	49.
11	*	N.A.	N.A.	*	*:*	3241.	*
12	2229.	N.A.	N.A.	319.	12:53	3234.	69.
13	*	N.A.	N.A.	*	*:*	3227.	*
14	2128.	N.A.	N.A.	368.	13:20	3220.	66.
15	1126.	N.A.	N.A.	292.	10:52	3213.	35.
16	1916.	N.A.	N.A.	338.	13:15	3206.	60.
17	1826.	N.A.	N.A.	325.	12:46	3198.	57.
18	1522.	N.A.	N.A.	350.	12:35	3191.	48.
19	1458.	N.A.	N.A.	335.	13:40	3183.	46.
20	2010.	N.A.	N.A.	325.	13:27	3176.	63.
21	1335.	N.A.	N.A.	322.	11:19	3171.	42.
22	1142.	N.A.	N.A.	246.	16:10	3163.	36.
23	1587.	N.A.	N.A.	316.	11:59	3156.	50.
24	1388.	N.A.	N.A.	344.	13:45	3148.	44.
25	1354.	N.A.	N.A.	332.	13:14	3140.	43.
26	2069.	N.A.	N.A.	304.	12:26	3133.	66.
27	1612.	N.A.	N.A.	322.	13:53	3125.	52.
28	1798.	N.A.	N.A.	322.	13:27	3117.	58.
29	1878.	N.A.	N.A.	338.	14:19	3109.	60.
30	2078.	N.A.	N.A.	313.	12:23	3101.	67.
MEAN	1807.	N.A.	N.A.			3207.	
STANDARD DEVIATION	375.	N.A.	N.A.			61.	



ENVIRONMENTAL SUMMARY REPORT

SITE: HEI WAI WONG  
HONOLULU, HAWAII

REPORT PERIOD: 80/ 4  
SITE NUMBER: 59

LATITUDE: 21.00 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: HONOLULU  
LONGITUDE: 157.00 DEG WEST      PYRANOMETER TILT: 24 DEG      ALTITUDE: 7 FEET

WIND: SPEED IN MPH-DIRECTION IN DEGREES

DAY	AVG WIND DIRECTION	AVG WIND SPEED	DAYTIME DIRECTION	DAYTIME SPEED	MAXIMUM WIND SPEED	MAXIMUM WIND DIRECTION	TIME HR:MN
1	221.	4.	222.	5.	10.	233.	16:10
2	250.	3.	248.	4.	8.	252.	13:52
3	243.	4.	237.	5.	9.	246.	12:26
4	252.	3.	250.	4.	8.	231.	14:29
5	245.	2.	243.	2.	5.	268.	11:49
6	*	0.	*	0.	2.	*	1:14
7	*	1.	*	1.	3.	*	8:50
8	*	2.	*	2.	5.	*	12:10
9	*	2.	*	3.	6.	*	15:34
10	*	1.	*	1.	3.	*	15: 3
11	205.	9.	206.	11.	25.	220.	19:12
12	204.	21.	205.	21.	42.	225.	21: 9
13	205.	19.	208.	19.	41.	217.	1:52
14	208.	15.	208.	15.	30.	212.	23:34
15	206.	11.	204.	12.	30.	211.	12:12
16	223.	8.	222.	11.	25.	228.	13:57
17	220.	10.	216.	12.	28.	246.	13: 8
18	222.	10.	222.	10.	22.	194.	6:43
19	223.	9.	223.	10.	21.	236.	12:58
20	222.	10.	220.	10.	23.	224.	13:38
21	214.	9.	211.	9.	21.	225.	19:58
22	219.	9.	222.	9.	22.	240.	12:47
23	222.	10.	225.	10.	24.	239.	23:48
24	224.	9.	223.	10.	30.	225.	12:25
25	224.	9.	217.	12.	26.	199.	13:30
26	220.	12.	218.	13.	24.	245.	12:58
27	222.	10.	221.	11.	28.	212.	11:50
28	223.	9.	225.	10.	22.	217.	16:45
29	220.	9.	219.	10.	29.	214.	8:13
30	213.	11.	212.	11.	30.	214.	17:32
MEAN	217.	8.	217.	9.			
STANDARD DEVIATION	14.0	5.1	13.2	5.1			

ENVIRONMENTAL SUMMARY REPORT

SITE: HEI WAI WONG  
HONOLULU, HAWAII

REPORT PERIOD: 80/ 4  
SITE NUMBER: 59

LATITUDE: 21.00 DEG NORTH      AZIMUTH: 0 DEG      TIME ZONE: HONOLULU  
LONGITUDE: 157.00 DEG WEST      PYRANOMETER TILT: 24 DEG      ALTITUDE: 7 FEET

WIND: NUMBER OF HOURS IN EACH VELOCITY INTERVAL

DAY	0-3 MPH	4-7 MPH	8-12 MPH	13-18 MPH	19-24 MPH	25-31 MPH	32-38 MPH	ABOVE 38	MISSING HOURS
1	12	12	0	0	0	0	0	0	0
2	19	5	0	0	0	0	0	0	0
3	12	12	0	0	0	0	0	0	0
4	19	5	0	0	0	0	0	0	0
5	24	0	0	0	0	0	0	0	0
6	7	0	0	0	0	0	0	0	17
7	20	0	0	0	0	0	0	0	4
8	19	0	0	0	0	0	0	0	5
9	21	3	0	0	0	0	0	0	0
10	15	0	0	0	0	0	0	0	9
11	5	2	8	3	0	0	0	0	6
12	0	0	1	8	10	5	0	0	0
13	0	0	1	8	8	1	0	0	6
14	0	0	5	16	3	0	0	0	0
15	3	7	4	10	0	0	0	0	0
16	3	4	5	4	0	0	0	0	8
17	0	6	11	5	0	0	0	0	2
18	0	5	19	0	0	0	0	0	0
19	0	8	15	1	0	0	0	0	0
20	0	8	15	1	0	0	0	0	0
21	0	8	15	1	0	0	0	0	0
22	0	6	18	0	0	0	0	0	0
23	2	4	11	4	0	0	0	0	3
24	5	4	8	7	0	0	0	0	0
25	3	7	11	3	0	0	0	0	0
26	0	2	16	6	0	0	0	0	0
27	0	6	14	4	0	0	0	0	0
28	1	9	13	1	0	0	0	0	0
29	1	10	13	0	0	0	0	0	0
30	0	7	9	6	1	0	0	0	1
AVERAGE	6.4	4.7	7.1	2.9	0.7	0.2	0.0	0.0	2.0
TOTAL	191	140	212	88	22	6	0	0	61