

1118

MONTHLY DISTRIBUTION

DETAILED STATISTICAL SUMMARY FOR MARCH 1980

HANSTOWN CABIN. -- TOTAL INSOLATION -- BTU/SQ METER

File  
8452

1118

DAY OF MONTH	BTU/ DAY-SW FT	KWH/ DAY-SW FT	MAXIMUM VALUE	TIME OF MAX	MINIMUM VALUE	TIME OF MIN	NUM OF OBSERV	DAY
60	1075.	3.36	871.	11:46	0.	16	96	SUN
61	1499.	4.74	890.	11:46	0.	16	96	TUE
62	1342.	4.23	729.	10:31	0.	31	96	TUE
63	1699.	5.33	776.	12:01	0.	16	96	WED
64	1729.	5.43	795.	1:45	0.	16	96	FRI
65	1727.	5.45	797.	1:15	0.	1	96	FRI
66	1812.	5.71	807.	1:20	0.	1	96	SAT
67	1296.	4.04	776.	11:46	0.	16	96	SUN
68	1417.	4.43	800.	11:46	0.	16	96	TUE
69	1425.	4.45	799.	11:46	0.	1	96	TUE
70	1789.	5.64	800.	11:46	0.	1	96	WED
71	1942.	6.14	800.	11:46	0.	16	96	FRI
72	1917.	6.05	800.	11:46	0.	16	96	FRI
73	1869.	5.88	800.	11:46	0.	1	96	SAT
74	1931.	6.04	800.	11:46	0.	16	96	SUN
75	1401.	4.39	800.	11:46	0.	1	96	TUE
76	1548.	4.84	800.	11:46	0.	16	96	TUE
77	1578.	4.93	800.	11:46	0.	1	96	WED
78	1714.	5.38	800.	11:46	0.	1	96	FRI
79	2009.	6.34	800.	11:46	0.	16	96	FRI
80	2027.	6.41	800.	11:46	0.	16	96	SAT
81	1843.	5.81	800.	11:46	0.	16	96	SUN
82	2014.	6.31	800.	11:46	0.	16	96	TUE
83	2020.	6.35	800.	11:46	0.	1	96	TUE
84	1980.	6.15	800.	11:46	0.	15	96	WED
85	2099.	6.61	800.	11:46	0.	1	96	FRI
86	2070.	6.48	800.	11:46	0.	1	96	FRI
87	2076.	6.50	800.	11:46	0.	1	96	SAT
88	2133.	6.68	800.	11:46	0.	1	96	SUN
89	2171.	6.85	800.	11:46	0.	1	96	SUN
90	2084.	6.57	800.	11:46	0.	16	96	TUE

# THE WEST ASSOCIATES SOLAR RESOURCE EVALUATION PROJECT

## SOLAR ENERGY MEASUREMENTS DURING 1978

67 KWH/SQ M = 1782. BTU/SQ FT. ON MON 30 AT 11:46 AM  
 70 FOR MONTH = 174.30 KWH/SQ M. ON SUN 1 AT 11:46 AM  
 = 55252. BTU/SQ FT. NUMBER OF OBSERVATIONS = 2976

BUILDING APPLICATIONS DATA FOR VICTORVILLE, CAL

HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER HOUR PER SQUARE FOOT						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)
	350	300	250	200	150	100					
65 F	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70 F	0.0	0.0	0.0	0.0	0.0	0.0	75.6	60.9	66.0	14.4	1.6
75 F	0.0	75.8	90.6	89.8	88.7	87.4	60.9	70.9	66.0	1.6	1.6
80 F	0.0	0.0	0.0	0.0	174.2	228.0	49.4	60.6	43.5	467.6	0.0
85 F	0.0	0.0	0.0	0.0	4.7	73.6	72.5	6.8	127.2	188.7	62.5

Project Management  
Sponsored By  
**WEST ASSOCIATES**

Project Manager  
**SCE SOUTHERN CALIFORNIA EDISON**

Cat. No: 21-1815

THE WEST ASSOCIATES  
SOLAR RESOURCE  
EVALUATION PROJECT

Solar Energy Measurements  
at Selected Sites  
Throughout the Southwest  
During 1978

Project Management Sponsored By:  
WEST Associates

Prepared By:  
Robert J. Yinger  
Southern California Edison  
Research and Development  
P. O. Box 800  
Rosemead, California 91770  
September, 1979

THE HISTORY OF THE  
SOUTHERN CALIFORNIA EDISON  
COMPANY

NOTICE

This booklet was produced by the Southern California Edison Company based on project activities sponsored by Western Energy Supply and Transmission (WEST) Associates. Neither the Southern California Edison Company, WEST, members of WEST, nor any of their contractors, subcontractors or their employees make any warranty or representation, expressed or implied, with respect to the accuracy, completeness or usefulness of the information contained in this booklet, or assumes any liabilities with respect to the use of, or damages resulting from the use of any information, apparatus, method or process disclosed in this report.

## PREFACE

This report describes the Western Energy Supply and Transmission (WEST) Associates Solar Resource Evaluation Project. Contained in this report are data and results for 1978 from 43 solar monitoring stations in the Southwest.

The Southern California Edison Company (SCE) has prepared this report under contract with WEST Associates. WEST Associates funds SCE for the project management portion of this project. Station instrumentation, site and maintenance costs for each station are borne by the respective utilities.

Any comments or suggestions pertaining to the WEST Associates monitoring network for this report are appreciated. Your input will help make this network and its data more useful to all.



TABLE OF CONTENTS

	<u>Page</u>
Preface	iii
Acknowledgements	viii
Members of Western Energy Supply & Transmission (WEST) Associates	ix
I Introduction	1
II General Observations and Summary	7
III Data Format Description	23
IV Appendices	
A Maps and Participants	31
B Missing Data	35
C Latitudes, Longitudes and Elevations of Monitoring Stations	41
D Building Applications Summary	43
E Detailed Statistical Summary	135

LIST OF TABLES

<u>Table #</u>		<u>Page</u>
1	Average Daily Total Insolation - 1978	16
2	Average Daily Direct Insolation - 1978	18
3	Average Daily Total Insolation - 1977	19
4	Average Daily Direct Insolation - 1977	21
5	Average Daily Total Insolation - 1976	22
6	Average Daily Direct Insolation - 1976	22
7	Summary of Missing Data - Total Insolation	36
8	Summary of Missing Data - Direct Insolation	38
9	Summary of Missing Data - Dry Bulb Temperature	39

LIST OF MAPS

<u>Map #</u>		<u>Page</u>
1	Solar Monitoring Network	32
2	Solar Monitoring Network - Southern California	33

## ACKNOWLEDGEMENTS

In an effort such as the WEST Associates Solar Resource Evaluation Project, the cooperation of a number of people is necessary for a successful program.

The SCE Shop and Test Division has been of tremendous help in the maintenance, calibration and data tape translation parts of the project. Special notice is given to Mr. Dorr Kimball and Mr. J. R. Coroas for their consistent efforts in perfecting the calibration program; Mr. Alan Hood for his assistance with instrumentation design and operation problems; and the Data Acquisition section for its assistance in the extraction of data from the magnetic data tapes and help in detection of instrumentation problems.

Special thanks is given to Mr. N. W. Patapoff for his assistance and advice in management of the network. Also, Mr. J. Zavala was helpful in the data validation procedures.

Recognition must also be given to the project representative(s) and maintenance personnel for each of the utilities that operate monitoring stations. Without their efforts, this project would not be possible.

ROSTER OF MEMBERS OF  
WESTERN ENERGY SUPPLY & TRANSMISSION ASSOCIATES  
- WEST ASSOCIATES -

Arizona Electric Power Cooperative, Inc.	Colorado-Ute Electric Association, Inc.
Arizona Power Authority	El Paso Electric Company*
Arizona Public Service Co.*	Nevada Power Company*
Anaheim Utilities Department	Pacific Power & Light
Burbank Public Service Department	Public Service Co. of Colorado*
Colorado Springs Department of Public Utilities	Public Service Co. of New Mexico*
Glendale Public Service Department	Salt River Project*
Los Angeles Department of Water & Power*	San Diego Gas & Electric Co.*
Pasadena Water & Power Department	Sierra Pacific Power Co.*
	Southern California Edison*
	Tucson Gas & Electric*

\* Participant in the Solar Resource Evaluation Project

I

INTRODUCTION

## INTRODUCTION

The Southwest has long been known as an area having an abundance of sunshine. This abundance has led to an increasing interest in supplementing fossil fuels with solar energy for use in space heating, water heating, industrial processes and generation of electricity. This project was designed to provide data that could be used for solar equipment design and evaluation of various solar technologies.

### Background

In the course of initial technical assessments of solar energy applications in Southern California, Southern California Edison (SCE) recognized the need to have accurate incident solar radiation (insolation) information. However, the existing data base was inadequate.

In mid 1975 SCE installed the first of its 21 solar monitoring stations at Barstow, California, in a program to establish an accurate solar data base. A proposal was submitted to WEST Associates to expand the solar monitoring effort outside of the SCE service territory. The project, as approved, created the WEST Solar Monitoring network which now includes stations in six western states (Arizona, California, Colorado, Nevada, New Mexico and Wyoming). The first station outside of SCE's service territory was installed in mid 1976 at Tucson, Arizona.

WEST Associates funds the project management portion of the program which provides (through SCE): calibration of instruments; translation and storage of data; data reduction (summaries and graphs); and production of annual reports. The utility operating the station provides: monitoring equipment; a site; station setup costs; maintenance; and data tape changeout.

The network, as presently envisioned, is shown on Maps 1 and 2. Of these stations, 13 were included in the initial publication (1976 report) and 37 were included in the 1977 report. The 1978 report contains data collected from 43 of the network's stations.

#### Instrumentation

All network stations monitor total insolation on a horizontal surface and dry bulb temperature. Total insolation is an approximate indication of how much energy is incident on a horizontally mounted flat plate collector. The three types of pyranometers used to monitor total insolation on the WEST network are: the Eppley Black and White; the Eppley Precision Spectral; and the Spectrolab Spectrosun SR75.

At present, 19 stations also measure direct insolation. This information shows the amount of energy available to concentrating collectors, such as the high temperature collectors needed for electric power generation. Direct insolation is measured with the Eppley Normal Incidence Pyrheliometer (NIP).



## Maintenance and Calibration

The value of a solar monitoring network is dependent on the accuracy of the instruments and the routine maintenance program. With this in mind, a rigorous program of maintenance and calibration has been instituted on the WEST network.

The WEST procedures call for maintenance to be performed once per week at stations that monitor total insolation and dry bulb temperature. At this time the pyranometer dome is cleaned and the electronics package is checked for correct operation. At stations that also monitor direct insolation, additional procedures call for maintenance to be performed three times per week. During this maintenance, the pyrhelimeter is cleaned and adjustments for declination and azimuth are made on the tracking mount.

All solar instruments on the network are calibrated to the Absolute Scale (SI units). This scale is about 2 percent higher than the International Pyrhelimetric Scale of 1956 used in the 1976 data report.

SCE's goal is to calibrate all instruments on the network twice per year. To calibrate the pyrhelimeters, SCE has obtained a cavity radiometer. Pyrhelimeters are calibrated side by side in sunlight, near noon, under clear sky conditions and only after waiting a suitable length of time for temperature stabilization.

Pyranometers undergo two different tests to assure a valid calibration: the Sun and Shade method and a side by side comparison with a reference pyranometer. The pyranometers are also checked for cosine and azimuth response calibrations.

#### Data Collection and Storage

Instrument outputs are converted by the electronics package to a series of pulses. These pulses are recorded on magnetic tape by equipment that is compatible with the existing SCE Data Acquisition System. These tapes are changed once per month and sent to SCE's Data Acquisition Translator/Computer Facilities, where the data is read from the tapes and placed on the main data base as 15 minute average values. All data is recorded using local standard time as a time base.

Even with all the efforts to maintain station reliability, there have been occasional data losses. Every effort has been made to locate and delete bad data points. In 1976, about 3 percent of the nearly 800,000 data points possible from the 13 stations were lost. In 1977, 4.7 percent of the possible 2.5 million data points collected at the 37 stations were lost. This year, 1978, 6.4 percent of the possible 3.3 million data points collected at the 43 stations were lost (see Tables 7, 8 and 9 in Appendix B). In future years, as typical problems and operating procedures become more familiar to utility participants, data losses should be reduced.

II

GENERAL OBSERVATIONS  
AND SUMMARY

## GENERAL OBSERVATIONS AND SUMMARY

While compiling the data for this report, certain observations were made as to the solar energy level and its distribution in the Southwest. To aid in explaining these observations, six tables have been included to show the total horizontal and direct normal insolation for the last three years (Tables 1-6). It should be noted that all solar instruments are calibrated to the Absolute Scale (SI units). All values shown in the tables are in kwh/sq m-day.

### General Observations

During 1978, the WEST network again grew in size, adding 6 new stations. Since some of these stations were not in operation for the entire year, complete comparisons of annual averages, minimums and maximums are not possible for all stations. Annual averages were only computed for stations having 12 months of data.

Data collected during 1978 were only slightly different than 1977. Total insolation was essentially unchanged, with some stations slightly higher and others slightly lower than 1977 (see Table 1). Most were not as high as 1976. Direct normal insolation was higher in most cases (1-2 percent), but not as high as 1976 (see Table 2).

The best year to date, 1976, was characterized by drought conditions and clear skies. The drought ended in 1977, which had heavy rainfall at the end of the year. There was also heavy

rainfall in most of the southwest during the first four months of 1978. In September, 1978, areas of California, Nevada and Arizona experienced the effects of two tropical storms. These periods are noticeable on most of the graphs shown in Appendix D, Building Applications Summary (pp. 43-133). The Colorado stations were not affected much by these tropical storms, but had heavy cloud cover in June (note dips on Public Service of Colorado station graphs, pp. 64-73).

### 1978 Data Observations

From Table 1 it is noted that the Yucca Valley, California station recorded the highest total insolation average over 1978 (5.87 kwh/sq m-day). This area is characterized by low humidity, very little rainfall and moderate elevation (Yucca Valley is 3360 feet high). Other California desert areas followed closely behind Yucca Valley. The area with the lowest total insolation averages was Colorado. The lowest station was Denver #2, Colorado (4.53 kwh/sq m-day) followed closely by the other Colorado stations. These low averages are partially due to the high latitude of the stations. The Public Service of Colorado stations are the most northerly stations on the network. The stations on the east side of the Rocky Mountains are affected by some air quality problems in the winter months. To some extent, all the Colorado stations are affected by thundershower activity during the summer. These effects tend to lower the average insolation levels.

In Table 2, direct normal insolation is presented for 1978. The highest annual average for direct insolation observed this year was in Yucca Valley, California (7.85 kwh/sq m-day). The characteristics that allowed high total insolation averages also apply to direct insolation, so no further explanation is needed for this site. The lowest direct insolation average was in Escondido, California (5.65 kwh/sq m-day). Escondido is in an area affected by moist marine air and, at times, fog and overcast conditions. This station is the closest monitoring station to the coastline that was in operation for a full year. Stations installed in the Los Angeles basin will probably have similar averages when complete years of data are obtained from them.

#### Regional Descriptions

The area covered by the WEST network can be divided roughly into five regions as follows: Pacific Coastal; Los Angeles Basin; California-Nevada Desert; Arizona; and Rocky Mountain - New Mexico. There is some degree of overlap between regions because the meteorological factors affecting insolation tend not to have distinct boundaries. A short description of each region and its climatic characteristics for 1978 follows.

The Pacific Coastal region is made up of stations located on or near the Pacific Ocean. This region typically has fog and low clouds, decreasing as you move inland, during the spring and summer seasons. Winter and fall are usually clear except for winter storms and an occasional tropical storm in the late summer or early

fall. In 1978, there were persistent rain storms in the first four months of the year. There was also some tropical storm activity during September.

The Los Angeles Basin region is made up of stations in the greater Los Angeles Metropolitan Area. This region is similar to the Pacific Coastal region, except for less fog and more haze and air quality problems during the summer and fall seasons.

The California - Nevada Desert region is composed of stations in the Mojave Desert and surrounding areas. This region typically has low rainfall (3-10 inches per year), clear air and low humidity. In 1978, the area had higher than normal rainfall during the first part of the year and had some tropical storm activity in September, most severe in the southerly sections.

The Arizona region is made-up of the stations located in Arizona with the addition of Blythe and Imperial, California. This region resembles the California - Nevada Desert region in many respects. There is generally more rainfall in the winter and thundershower activity during the summer. One station in this region, Phoenix, is affected by air quality problems, so the insolation averages are generally lower than in the surrounding areas.

The Rocky Mountains - New Mexico region is made-up of all the Public Service of Colorado stations plus Albuquerque, New Mexico. Most of these stations are near mountains and located at relatively high elevation. The elevation factor leads to high insolation

values when the sky is clear. Rainfall in this region is higher than the other regions. There is also thundershower activity during the summer. These factors have a tendency to reduce insolation averages.

In addition to these five regions, there are two other stations whose characteristics and locations make them hard to place in any region. Visalia, California is located in the San Joaquin Valley. This site has heavy ground fog during the winter months. During the summer and fall, the valley is filled with haze, reducing the insolation levels. The second station, Arrowhead, California, is located in the San Bernardino Mountains (elevation 5060 feet) outside of the Los Angeles Basin. At this location there are frequent occurrences of cloud cover in the winter. During the summer, there is some thundershower activity and during most afternoons haze and air pollutants from the Los Angeles Basin penetrate into the area. When the air is clear, insolation levels are quite high due to the station's elevation.

It must be noted that these regional descriptions are quite general. Each station has its own special set of characteristics that affect the insolation levels. But, from these regional descriptions the reader should be able to see patterns and similarities between the graphs of the stations in each region (see Appendix D, Building Applications Summary, pp. 43-133). These observations should be useful for interpolation between stations.



## Summary

The coverage of the WEST network is at the point where some preliminary observations can be drawn from the collected data. Qualitative comparisons between broad climatic regions have been described above.

The monitoring stations are now recording more data so that both short and long-term effects can be better defined. Some of the short-term effects to be looked at in the coming year are diversity (how the solar resource is distributed and correlated) and forecastability (the likelihood of successive days of high or low insolation). Observations on these effects will be presented in the next annual report for this project. Long-term effects, such as gradual climatic changes, will take a data record much longer than the network has now. A longer data record will also help define the magnitude of extreme occurrences such as maximum length of cloud cover periods and sunshine periods for each station. The longest data record on the network is from the thirteen SCE stations in operations since late 1975. As more data are recorded both short and long-term effects will be better defined.

Previous editions of this report have been distributed to government agencies, universities, utilities, solar consultants and other interested parties. The Detailed Statistical Summaries for the individual stations and the raw data tapes have been used for analysis of solar energy systems and integration studies.

Information on the WEST network, its organization and maintenance has been shared with the Department of Energy (DOE), National Oceanic and Atmospheric Administration (NOAA), the National Weather Service (NWS) and their contractors who work with the national solar data network. These exchanges of information and experiences have been very helpful for all parties involved.

TABLE 1

AVERAGE DAILY TOTAL INSOLATION  
DATA COLLECTED DURING 1978

## WEST SOLAR MONITORING NETWORK (KWH/SQ. M - DAY)\*

STATION NAME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1978 AVG.	1977 AVG.	1976 AVG.	AVG. ANNUAL
ARIZONA PUBLIC SERVICE																
GILA BEND	2.98	3.75	5.23	6.90	7.67	--	7.23	6.78	--	3.27	--	--	--	--	--	--
PHOENIX	1.63	2.68	3.91	5.38	6.22	6.70	--	5.31	5.18	--	--	--	--	--	--	--
IMPERIAL IRRIGATION DISTRICT																
IMPERIAL	2.82	4.11	5.28	6.96	7.79	8.32	7.69	7.35	6.27	4.72	3.61	3.05	5.66	--	--	5.66
LOS ANGELES DEPT WATER & POWER																
LOS ANGELES	--	--	--	--	--	7.05	7.33	6.31	4.98	3.70	2.76	2.42	--	--	--	--
SUN VALLEY	--	--	--	--	--	--	--	--	5.60	4.07	2.94	2.64	--	--	--	--
UNIV CA LOS ANGELES	--	--	--	--	--	--	--	--	--	--	--	2.51	--	--	--	--
NEVADA POWER COMPANY																
BOULDER CITY (DRI)	--	--	--	--	--	--	--	--	--	--	--	2.66	--	--	--	--
LAS VEGAS	2.48	3.58	4.71	6.62	7.74	8.41	7.77	7.19	5.98	4.40	3.25	2.68	5.40	--	--	5.40
PUBLIC SERVICE OF COLORADO																
ALAMOSA	2.83	3.84	5.08	6.55	6.84	8.19	8.17	6.93	6.16	--	3.24	3.01	--	--	--	--
CHEYENNE	2.13	2.85	4.78	5.32	6.00	6.98	7.03	5.90	5.44	3.95	2.17	2.20	4.56	--	--	4.56
DENVER 1 (SOUTHEAST)	2.16	3.10	4.61	5.67	6.12	6.83	7.05	6.15	5.68	4.04	2.51	2.27	4.68	--	--	4.68
DENVER 2 (HOLLY)	2.28	3.28	4.63	5.66	6.22	6.46	6.53	5.83	5.35	3.76	2.24	2.14	4.53	--	--	4.53
PUEBLO	2.65	3.30	4.93	6.32	6.34	6.32	6.81	6.21	5.76	4.19	2.33	2.49	4.80	--	--	4.80
PUBLIC SERVICE NEW MEXICO																
ALBUQUERQUE	--	--	4.86	6.90	6.95	7.87	7.58	6.86	5.77	4.50	2.91	2.83	--	--	--	--
SAN DIEGO GAS & ELECTRIC																
ALPINE	2.46	3.42	3.80	5.32	7.30	8.32	8.02	7.42	5.46	--	3.38	2.95	--	5.33	--	5.33
CHULA VISTA	2.68	3.59	4.28	6.18	7.04	6.90	6.69	6.41	5.21	4.00	3.27	2.82	4.92	5.03	--	4.97
CARLSBAD	2.50	3.49	4.47	6.14	6.93	7.01	6.79	6.39	5.24	3.89	3.40	2.89	4.93	--	--	4.93
EL CAJON	2.53	3.54	4.11	5.82	7.36	7.97	7.97	7.18	5.29	4.49	3.30	2.90	5.20	5.13	--	5.16
ESCONDIDO	2.48	3.39	4.05	5.59	6.96	7.82	7.83	7.18	5.29	4.50	3.26	2.82	5.10	--	--	5.10
RAMONA	2.39	3.35	3.94	5.20	6.71	8.16	7.79	6.98	5.34	4.46	3.22	2.84	5.03	--	--	5.03
SPRING VALLEY	2.62	3.63	4.20	5.91	7.25	8.13	7.85	6.93	5.18	4.45	3.33	2.86	5.19	5.27	--	5.23

\*ABSOLUTE SCALE

BTU/SQ. FT. - DAY = 317 X KWH/SQ. M - DAY

TABLE 1 - CONTINUED

## TOTAL INSOLATION (KWH/SQ. M - DAY)\*

STATION NAME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1978 AVG.	1977 AVG.	1976 AVG.	AVG. ANNUAL
SOUTHERN CALIFORNIA EDISON																
ALHAMBRA	--	--	--	--	7.19	7.68	7.98	6.93	5.48	4.16	3.11	2.79	--	--	--	--
ARROWHEAD	2.53	3.53	4.50	5.85	8.18	8.80	8.47	7.54	6.27	4.94	3.26	2.89	5.56	--	--	5.56
BARSTOW	2.59	3.82	4.93	6.68	7.93	8.50	8.20	7.35	6.19	4.86	3.42	3.01	5.62	5.62	5.74	5.66
BLYTHE	2.93	4.07	5.36	6.98	8.03	8.40	7.37	7.34	6.39	4.88	3.51	3.05	5.69	5.73	5.78	5.73
ELDORADO	2.60	3.71	4.69	6.50	7.88	8.64	7.73	7.26	6.02	4.67	3.24	2.89	5.49	5.45	5.56	5.50
EL SEGUNDO	2.34	3.38	4.46	6.03	7.34	7.12	7.02	6.65	5.59	3.71	3.18	2.78	4.97	4.83	5.09	4.96
EL TORO	2.28	3.39	4.09	5.50	7.10	7.68	7.65	6.88	5.24	4.25	3.14	2.73	4.99	5.10	--	5.05
HUNTINGTON BEACH	2.41	3.53	4.43	6.33	7.29	6.95	6.84	6.71	5.58	3.83	3.02	2.74	4.97	5.05	5.12	5.05
LAGUNA BELL	2.38	3.37	4.15	5.40	7.34	7.74	7.98	6.86	5.53	4.08	3.09	2.73	5.05	4.98	4.86	4.96
LANCASTER	2.75	3.82	5.06	6.66	8.35	8.75	8.61	7.72	6.39	5.02	3.56	3.19	5.82	5.84	5.97	5.88
MANDALAY	2.70	3.38	4.52	5.92	6.89	6.98	6.10	5.82	5.46	3.56	3.33	2.93	4.80	5.05	4.81	4.89
MOORPARK	2.45	3.41	4.21	5.30	7.38	7.42	7.64	6.59	5.36	3.98	2.98	2.58	4.94	--	--	4.94
PALM SPRINGS	2.61	3.90	4.97	6.64	7.91	8.34	8.00	6.57	6.16	4.69	3.51	2.89	5.52	5.59	--	5.55
PARDEE	2.51	3.43	4.27	5.34	7.93	8.10	8.23	7.23	5.70	4.60	3.25	2.92	5.29	5.36	5.45	5.37
RIALTO	2.25	3.31	3.79	5.17	7.15	7.90	7.88	6.91	5.63	4.44	3.16	2.88	5.04	--	--	5.04
RIDGECREST	2.64	3.96	5.12	6.89	8.28	8.65	8.58	7.55	6.41	4.91	3.53	3.07	5.80	5.83	5.91	5.85
VICTORVILLE	2.67	3.89	5.11	6.52	8.06	8.64	8.43	7.46	6.48	5.07	3.46	3.14	5.74	5.78	5.88	5.80
VILLA PARK	2.22	3.31	4.06	5.29	7.22	7.74	7.81	6.91	5.36	4.18	3.10	2.70	4.99	--	--	4.99
VISALIA	1.66	2.52	4.04	5.40	7.80	8.20	8.30	7.20	5.51	4.46	2.80	1.68	4.96	--	--	4.96
WALNUT	2.24	3.25	3.90	5.17	6.94	7.54	7.77	6.83	5.39	3.97	3.00	2.69	4.89	4.99	4.88	4.92
YUCCA VALLEY	2.86	4.03	5.34	7.01	8.28	8.56	8.28	7.64	6.51	4.92	3.70	3.14	5.86	5.84	5.91	5.87
TUCSON GAS & ELECTRIC																
TUCSON	2.75	4.10	4.67	6.54	6.97	7.23	6.49	6.14	5.71	4.38	3.06	2.59	5.05	4.92	--	4.98

\*ABSOLUTE SCALE

BTU/SQ. FT. - DAY = 317 X KWH/SQ. M - DAY

TABLE 2

AVERAGE DAILY DIRECT INSOLATION  
DATA COLLECTED DURING 1978

WEST SOLAR MONITORING NETWORK (KWH/SQ. M - DAY)\*

STATION NAME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1978 AVG.	1977 AVG.	1976 AVG.	AVG. ANNUAL
ARIZONA PUBLIC SERVICE GILA BEND	3.63	--	--	--	--	--	--	8.55	8.18	6.26	5.95	5.66	--	--	--	--
LOS ANGELES DEPT WATER & POWER LOS ANGELES	--	--	--	--	--	7.46	8.15	5.95	6.40	3.92	4.32	4.43	--	--	--	--
SUN VALLEY	--	--	--	--	--	--	--	--	5.93	4.59	4.92	5.14	--	--	--	--
UNIV CA LOS ANGELES	--	--	--	--	--	--	--	--	--	--	--	4.53	--	--	--	--
NEVADA POWER COMPANY BOULDER CITY (DRI)	--	--	--	--	--	--	--	--	--	--	5.83	5.39	--	--	--	--
LAS VEGAS	3.65	5.44	5.32	--	--	--	9.60	9.20	7.77	7.03	5.82	5.56	--	--	--	--
PUBLIC SERVICE COLORADO ALAMOSA	5.37	6.19	7.06	7.91	7.61	9.38	9.20	8.33	8.83	--	5.81	5.75	--	--	--	--
PUBLIC SERVICE NEW MEXICO ALBUQUERQUE	4.00	5.07	5.48	8.08	8.49	8.83	8.22	7.84	6.44	6.15	3.73	5.51	6.49	--	--	6.49
SAN DIEGO GAS & ELECTRIC ESCONDIDO	2.67	4.01	2.53	4.37	7.73	8.57	8.69	8.09	7.40	5.07	4.50	4.22	5.65	--	--	5.65
SOUTHERN CALIFORNIA EDISON ALHAMBRA	--	--	--	4.37	6.75	7.49	8.48	6.63	5.98	3.97	4.82	4.81	--	--	--	--
BARSTOW	3.46	5.30	5.58	7.69	9.45	10.31	10.43	9.32	8.63	7.27	6.08	6.03	7.46	7.43	7.46	7.45
BLYTHE	3.49	4.63	5.89	7.55	8.69	9.59	--	--	8.70	6.73	5.66	5.48	--	6.99	7.44	7.22
LANCASTER	3.81	5.21	5.57	7.07	9.58	10.55	10.87	9.45	8.53	7.07	5.80	6.05	7.46	7.27	7.91	7.55
PALM SPRINGS	3.52	5.75	5.85	6.94	8.79	9.63	9.14	8.62	7.79	6.23	5.72	5.12	6.93	6.75	--	6.84
RIDGECREST	4.90	5.79	5.93	8.12	9.73	10.52	10.48	--	--	7.48	6.29	6.08	--	7.62	8.16	7.89
VICTORVILLE	3.40	5.24	5.74	7.11	9.18	10.40	10.43	9.08	8.71	7.41	5.59	5.96	7.35	7.36	7.76	7.49
YUCCA VALLEY	4.05	6.21	6.55	8.15	9.96	10.48	10.25	9.81	8.98	7.31	6.45	5.99	7.85	7.74	7.98	7.86
TUCSON GAS & ELECTRIC TUCSON	4.81	--	6.24	8.91	9.55	9.41	6.66	7.44	7.51	6.32	5.37	5.16	--	6.36	--	6.36

\*ABSOLUTE SCALE

BTU/SQ. FT. - DAY = 317 X KWH/SQ. M - DAY

TABLE 3

AVERAGE DAILY TOTAL INSOLATION  
DATA COLLECTED DURING 1977

WEST SOLAR MONITORING NETWORK (KWH/SQ. M - DAY)\*

STATION NAME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1977 AVG.	1976 AVG.	AVG. ANNUAL
ARIZONA PUBLIC SERVICE															
GILA BEND	--	5.91	5.97	7.01	7.67	8.20	7.20	6.63	5.56	4.39	3.91	2.88	--	--	--
PHOENIX	--	--	5.64	6.70	7.47	--	6.52	6.35	3.98	3.55	2.51	1.90	--	--	--
IMPERIAL IRRIGATION DISTRICT															
IMPERIAL	--	--	--	7.06	7.55	8.06	7.50	6.68	5.65	4.35	3.90	2.52	--	--	--
NEVADA POWER COMPANY															
LAS VEGAS	--	--	--	--	--	--	--	6.82	5.87	4.57	3.26	2.38	--	--	--
PUBLIC SERVICE OF COLORADO															
ALAMOSA	--	--	--	--	7.20	6.95	6.64	5.88	5.38	4.62	3.26	2.60	--	--	--
CHEYENNE	--	--	4.81	5.11	6.44	6.46	6.19	5.33	5.21	4.15	2.58	2.17	--	--	--
DENVER 1 (SOUTHEAST)	--	--	4.79	4.95	6.37	6.68	6.27	5.48	5.16	3.85	2.66	2.06	--	--	--
DENVER 2 (HOLLY)	--	--	4.93	5.08	6.54	6.61	6.34	5.53	5.21	3.85	2.68	2.01	--	--	--
PUEBLO	--	--	5.57	5.61	7.19	--	6.86	6.08	5.31	4.23	2.92	2.55	--	--	--
PUBLIC SERVICE NEW MEXICO															
ALBUQUERQUE	--	--	--	--	--	6.58	7.24	6.17	5.30	4.85	3.49	--	--	--	--
SAN DIEGO GAS & ELECTRIC															
ALPINE	3.24	4.57	4.94	6.45	5.63	7.62	7.69	6.50	6.30	4.71	3.84	2.43	5.33	--	5.33
CHULA VISTA	3.19	4.37	5.46	6.15	6.34	6.11	6.97	5.72	5.85	4.27	3.62	2.34	5.03	--	5.03
DEL MAR / CARLSBAD	--	4.02	5.40	5.75	6.26	5.73	6.58	5.26	5.22	3.83	3.53	2.32	--	--	--
EL CAJON	2.84	4.31	5.35	6.25	6.03	6.79	7.59	6.05	5.91	4.40	3.67	2.40	5.13	--	5.13
ESCONDIDO	--	4.43	5.30	6.16	6.14	7.00	7.15	--	5.96	4.36	3.68	2.37	--	--	--
SPRING VALLEY	3.69	4.66	5.26	6.35	6.17	7.17	7.59	6.16	5.85	4.27	3.65	2.47	5.27	--	5.27

\*ABSOLUTE SCALE

BTU/SQ. FT. - DAY = 317 X KWH/SQ. M - DAY

TABLE 3 - CONTINUED

## TOTAL INSOLATION (KWH/SQ. M - DAY)\*

STATION NAME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1977 AVG.	1976 AVG.	AVG. ANNUAL
SOUTHERN CALIFORNIA EDISON															
ARROWHEAD	--	--	--	--	--	--	--	7.48	6.81	5.11	3.71	2.47	--	--	--
BARSTOW	3.10	4.36	5.69	7.02	7.16	8.00	8.06	6.80	6.25	4.79	3.59	2.59	5.62	5.74	5.68
BLYTHE	3.26	4.70	6.01	7.15	7.66	7.98	7.46	6.75	6.26	4.93	3.86	2.69	5.73	5.78	5.76
ELDORADO	3.00	4.41	5.71	6.99	6.99	7.58	7.54	6.54	5.91	4.72	3.42	2.59	5.45	5.56	5.51
EL SEGUNDO	2.93	3.88	5.52	6.25	6.27	5.88	7.24	6.28	5.47	3.91	3.41	1.95	4.83	5.09	4.96
EL TORO	2.98	4.13	5.33	6.22	6.40	6.73	7.49	6.29	5.59	4.24	3.53	2.22	5.10	--	5.10
HUNTINGTON BEACH	3.08	3.96	5.56	6.27	6.76	6.27	7.20	6.14	5.58	4.05	3.58	2.15	5.05	5.12	5.09
LAGUNA BELL	2.76	4.02	5.18	6.15	5.77	6.64	7.58	6.47	5.48	4.17	3.55	1.98	4.98	4.86	4.92
LANCASTER	3.04	4.55	5.90	7.32	7.20	8.38	8.62	7.22	6.59	4.96	3.69	2.64	5.84	5.97	5.91
MANDALAY	3.01	4.23	5.64	6.18	7.62	5.96	6.78	5.78	5.51	4.12	3.54	2.26	5.05	4.81	4.93
MOORPARK	--	--	--	--	--	--	5.94	6.42	5.57	4.38	3.55	2.11	--	--	--
PALM SPRINGS	3.07	4.53	5.86	7.03	7.18	8.07	7.57	6.52	6.21	4.69	3.79	2.57	5.59	--	5.59
PARDEE	3.00	4.37	5.56	6.88	5.81	7.46	8.15	6.67	6.07	4.60	3.53	2.27	5.36	5.45	5.41
RIALTO	--	--	--	--	--	--	6.23	6.34	5.65	4.35	3.56	2.21	--	--	--
RIDGECREST	3.13	4.56	5.91	7.29	7.42	8.11	8.51	7.14	6.47	5.29	3.50	2.58	5.83	5.91	5.87
VICTORVILLE	3.11	4.51	5.95	7.25	7.14	8.26	8.35	6.99	6.50	4.94	3.67	2.65	5.78	5.88	5.83
VILLA PARK	--	--	--	--	--	--	7.28	6.26	5.45	4.05	3.43	2.07	--	--	--
VISALIA	--	--	--	--	--	--	--	--	5.32	4.46	2.95	1.67	--	--	--
WALNUT	2.88	4.04	5.19	6.52	5.62	6.64	7.55	6.36	5.34	4.05	3.41	1.95	4.99	4.88	4.94
YUCCA VALLEY	3.12	4.67	6.05	7.35	7.46	8.31	8.05	6.83	6.44	5.05	3.89	2.86	5.84	5.91	5.88
TUCSON GAS & ELECTRIC															
TUCSON	2.70	4.21	5.14	6.17	6.66	6.70	6.43	5.70	5.03	4.24	3.51	2.54	4.92	--	4.92

\*ABSOLUTE SCALE

BTU/SQ. FT. - DAY = 317 X KWH/SQ. M - DAY

TABLE 4

AVERAGE DAILY DIRECT INSOLATION  
DATA COLLECTED DURING 1977

## WEST SOLAR MONITORING NETWORK (KWH/SQ. M - DAY)\*

STATION NAME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1977 AVG.	1976 AVG.	AVG. ANNUAL
ARIZONA PUBLIC SERVICE GILA BEND	--	--	5.98	8.28	8.29	9.40	7.05	6.92	5.89	5.13	5.73	4.20	--	--	--
NEVADA POWER COMPANY LAS VEGAS	--	--	--	--	--	--	--	8.15	7.60	6.99	5.43	4.10	--	--	--
PUBLIC SERVICE COLORADO ALAMOSA	--	--	--	--	8.15	7.34	7.15	6.71	7.17	7.60	6.16	5.55	--	--	--
PUBLIC SERVICE NEW MEXICO ALBUQUERQUE	--	--	--	--	--	5.95	7.86	7.40	5.94	7.28	6.34	4.78	--	--	--
SAN DIEGO GAS & ELECTRIC ESCONDIDO	--	--	--	5.50	5.90	5.33	8.15	7.06	6.57	4.46	5.76	4.08	--	--	--
SOUTHERN CALIFORNIA EDISON															
BARSTOW	5.05	7.03	7.48	8.47	7.60	9.11	9.76	8.40	8.57	7.14	6.11	4.47	7.43	7.46	7.45
BLYTHE	4.82	7.19	7.41	8.22	8.18	8.79	7.87	7.23	7.42	7.08	6.10	3.64	6.99	7.44	7.22
LANCASTER	4.31	7.08	7.21	8.51	6.60	9.58	10.54	8.08	8.51	6.52	5.98	4.36	7.27	7.91	7.59
PALM SPRINGS	3.69	4.64	7.92	8.31	7.22	8.79	8.56	8.07	7.39	6.19	6.29	3.98	6.75	--	6.75
RIDGECREST	5.21	7.17	7.98	8.54	7.88	8.73	10.76	8.69	8.62	7.87	5.68	4.29	7.62	8.16	7.89
VICTORVILLE	4.94	7.16	7.91	8.16	7.11	9.24	9.77	8.15	8.59	7.26	5.83	4.15	7.36	7.76	7.56
YUCCA VALLEY	4.84	7.58	8.39	9.04	8.15	9.66	9.42	8.01	8.79	7.51	6.80	4.63	7.74	7.98	7.86
TUCSON GAS & ELECTRIC TUCSON	4.45	7.92	7.45	7.93	8.74	8.08	6.04	6.62	6.61	6.99	6.95	4.66	6.87	--	6.87

\*ABSOLUTE SCALE

BTU/SQ. FT. - DAY = 317 X KWH/SQ. M - DAY



TABLE 5

AVERAGE DAILY TOTAL INSOLATION  
DATA COLLECTED DURING 1976

WEST SOLAR MONITORING NETWORK (KWH/SQ. M - DAY)\*

STATION NAME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1976 AVG.
SOUTHERN CALIFORNIA EDISON													
BARSTOW	3.61	4.17	5.74	6.91	7.95	8.54	7.43	7.60	5.16	4.87	3.78	3.18	5.74
BLYTHE	3.66	4.15	5.94	6.98	7.83	8.40	7.27	7.61	5.58	4.97	3.92	3.22	5.78
ELDORADO	3.55	3.99	5.66	6.71	7.75	8.44	6.98	7.56	5.26	4.43	3.44	3.05	5.56
EL SEGUNDO	3.60	3.64	5.75	6.36	6.02	7.72	6.11	6.45	4.20	4.42	3.63	3.20	5.09
HUNTINGTON BEACH	3.53	3.62	5.54	6.23	6.28	7.45	6.12	7.12	4.06	4.52	3.64	3.20	5.12
LAGUNA BELL	3.24	3.32	5.03	5.72	6.04	7.48	6.53	6.93	3.72	4.10	3.32	2.87	4.86
LANCASTER	3.71	4.04	5.99	7.22	8.33	8.76	8.14	7.75	5.53	5.00	3.88	3.28	5.97
MANDALAY	3.58	3.80	5.61	6.34	6.38	7.67	5.96	4.01	2.22	4.77	3.97	3.44	4.81
PARDEE	3.63	3.61	5.69	6.13	7.17	8.17	7.57	7.12	4.47	4.64	3.65	3.33	5.45
RIDGECREST	3.60	4.23	5.96	7.18	8.05	8.65	7.89	7.67	5.60	5.02	3.85	3.25	5.91
VICTORVILLE	3.70	4.17	5.91	7.19	8.13	8.65	7.70	7.74	5.42	4.95	3.79	3.25	5.88
WALNUT	3.35	3.23	5.07	5.65	5.93	7.48	6.58	6.82	3.83	4.22	3.40	3.00	4.88
YUCCA VALLEY	3.79	4.21	5.89	7.20	8.16	8.72	7.43	7.84	5.34	5.00	3.97	3.37	5.91

\*ABSOLUTE SCALE

BTU/SQ. FT. - DAY = 317 X KWH/SQ. M - DAY

22

TABLE 6

AVERAGE DAILY DIRECT INSOLATION  
DATA COLLECTED DURING 1976

WEST SOLAR MONITORING NETWORK (KWH/SQ. M - DAY)\*

STATION NAME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1976 AVG.
SOUTHERN CALIFORNIA EDISON													
BARSTOW	7.13	6.17	7.35	8.03	8.96	9.95	8.26	9.30	4.70	7.29	6.24	6.19	7.46
BLYTHE	6.44	5.38	7.28	8.09	8.63	10.02	8.26	9.70	5.88	7.10	6.84	5.69	7.44
LANCASTER	7.19	5.80	7.51	8.10	9.46	10.57	9.26	10.34	5.60	7.44	7.33	6.37	7.91
RIDGECREST	7.25	7.34	7.74	8.35	8.98	10.51	9.01	10.14	6.58	7.83	7.40	6.74	8.16
VICTORVILLE	7.27	5.93	7.36	7.99	9.02	10.51	8.35	10.04	5.97	6.87	7.14	6.62	7.76
YUCCA VALLEY	7.26	5.96	7.50	8.35	9.39	10.81	8.05	10.59	6.00	7.75	7.56	6.54	7.98

\*ABSOLUTE SCALE

BTU/SQ. FT. - DAY = 317 X KWH/SQ. M - DAY

III

DATA FORMAT  
DESCRIPTION

## DATA FORMAT DESCRIPTION

Since there are significant differences in the requirements among solar data users, three different methods of data presentation have been developed. A short description of each method follows.

### Building Applications Summary

The Building Applications Summary is designed to be used with generally available solar collector performance data in the design of solar systems. This summary is composed of a Building Applications Data table, an Annual Distribution curve and an Annual Solar Duration curve for each solar monitoring station having valid total insolation and dry bulb temperature data. The Building Applications Summary is included in this report as Appendix D (pp. 43-133). There is no charge for the Building Applications Summary.

### Detailed Statistical Summary

The Detailed Statistical Summary (DSS) provides significantly greater detail for insolation and dry bulb temperature levels than the Building Applications Summary.

Because of its length, up to 50 graphs and 135 data summaries and tables, each station's DSS is contained in a separate booklet.

In the DSS, total insolation levels and direct insolation levels (if measured) are summarized on a monthly and annual basis in the form of graphs and tables. On the same bases, a Solar Duration Curve summarizes the insolation levels as a function of the number of days the insolation was at or above any given level. The typical day in each of the twelve months is characterized by a Daily Profile. The Daily Profile does not represent a particular day, but rather is created by examining corresponding 15-minute intervals in the month to determine peak and average values. There is also a Solar Duration Curve of the Daily Profile, which summarizes the insolation level as a function of the number of hours it was at or above any given level. Dry bulb temperature data are summarized in Monthly Distribution and Daily Profile tables. Insolation values are in watts/sq. meter and BTU/sq. foot-hour. Dry bulb temperature values are given in degrees Fahrenheit. An example of the contents of a DSS is shown in Appendix E.

The DSS is available at a cost of \$10 per station summary. To order see the subsequent section "Cost and Ordering Procedures."

#### Computer Tape

The computer tape contains all raw data as 15 minute averages recorded at the 43 solar monitoring stations which were in operation

during 1978. Insolation data are in units of watts per square meter. Dry bulb temperature data are in units of degrees Fahrenheit.

The tape is an unlabeled, 9 track, odd parity, 1600 bit per inch (BPI) magnetic tape. The logical record length is 686 bytes and the block size is 12348 bytes. The information is written in EBCDIC code.

The computer tape is available at a cost of \$50. To order see the following section "Cost and Ordering Procedures."

#### Cost and Ordering Procedures

To facilitate distribution of the data, the following fee schedule has been developed:

Detailed Statistical Summary -	\$10 per solar monitoring station
Computer Tape of Raw Data -	\$50 per tape

To request a Detailed Statistical Summary or a Computer Tape, send check or money order payable to Southern California Edison to:

Solar Data  
Research and Development  
Southern California Edison Company  
Post Office Box 800  
Rosemead, California 91770

APPENDIX A

THE WEST NETWORK

Maps and Participants

125°

120°

115°

110°

105°

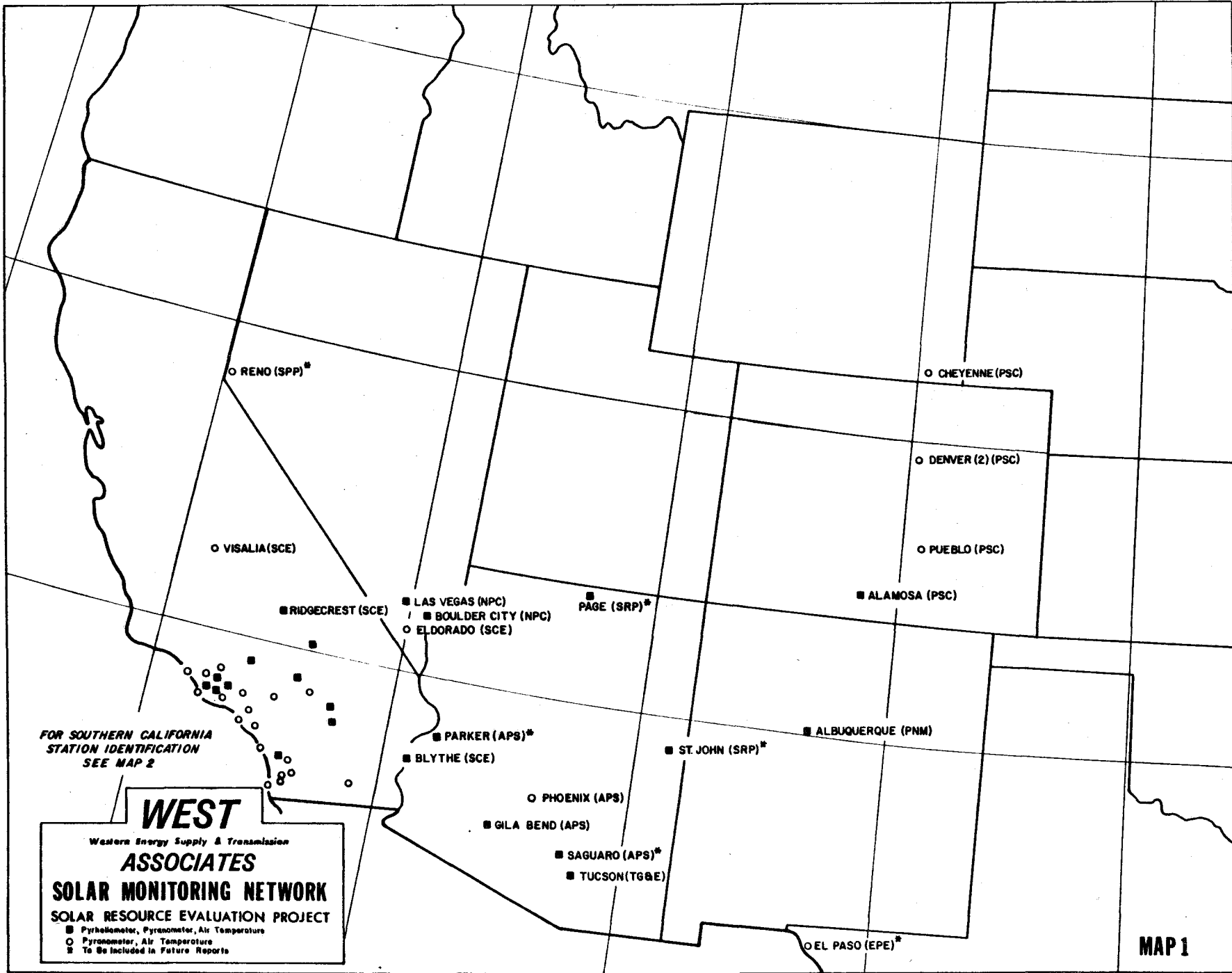
100°

45°

40°

35°

32



○ RENO (SPP)\*

○ CHEYENNE (PSC)

○ VISALIA (SCE)

○ DENVER (2) (PSC)

○ PUEBLO (PSC)

■ RIDGECREST (SCE)

■ LAS VEGAS (NPC)  
■ BOULDER CITY (NPC)  
○ EL DORADO (SCE)

■ PAGE (SRP)\*

■ ALAMOSA (PSC)

FOR SOUTHERN CALIFORNIA  
STATION IDENTIFICATION  
SEE MAP 2

■ PARKER (APS)\*

■ ALBUQUERQUE (PNM)

■ BLYTHE (SCE)

■ ST. JOHN (SRP)\*

○ PHOENIX (APS)

**WEST**

Western Energy Supply & Transmission

**ASSOCIATES**

**SOLAR MONITORING NETWORK**

**SOLAR RESOURCE EVALUATION PROJECT**

- Pyrheliometer, Pyranometer, Air Temperature
- Pyranometer, Air Temperature
- \* To Be Included in Future Reports

■ GILA BEND (APS)

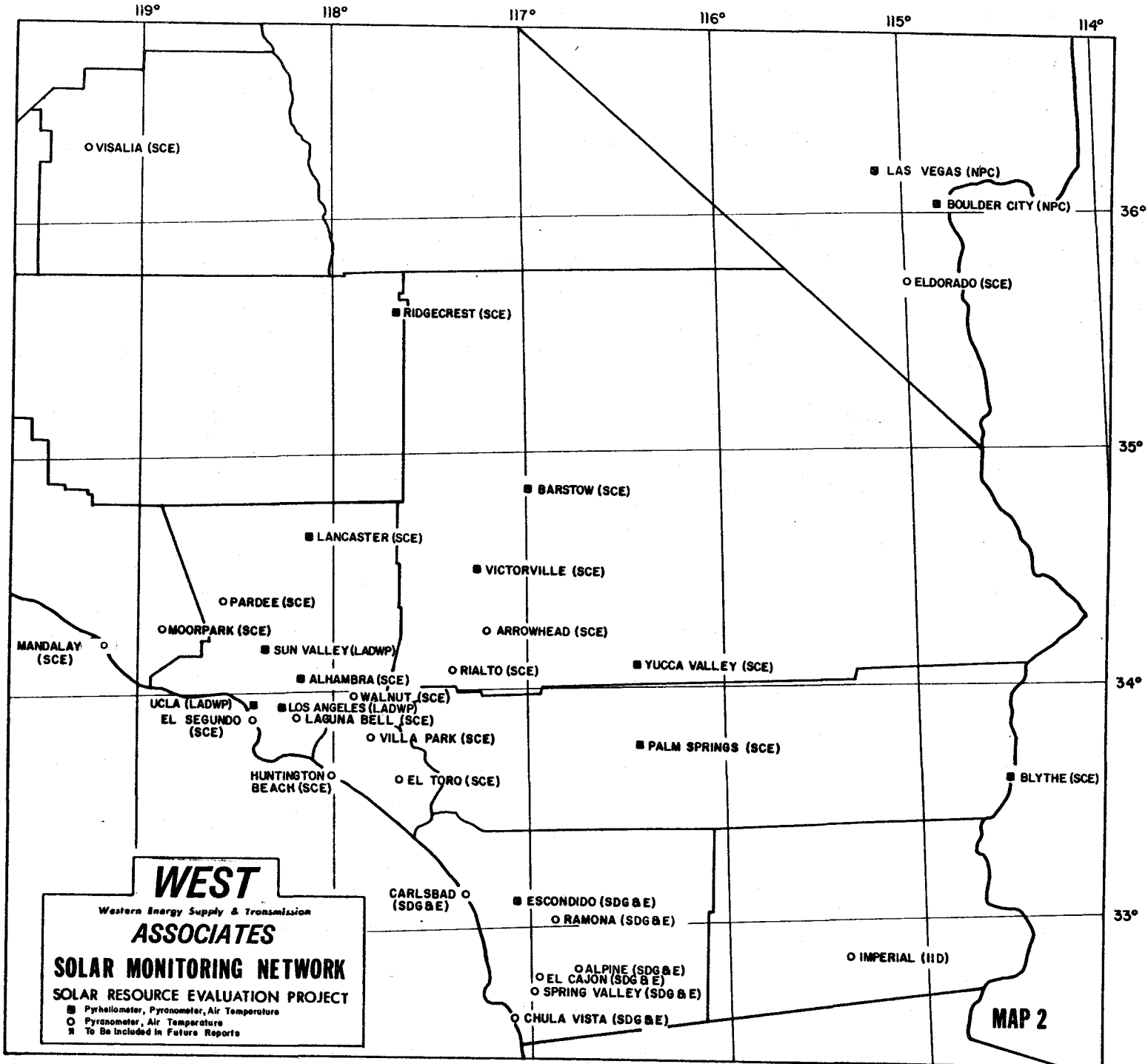
■ SAGUARO (APS)\*

■ TUCSON (TG&E)

○ EL PASO (EPE)\*

**MAP 1**

33



**WEST**  
 Western Energy Supply & Transmission  
**ASSOCIATES**  
**SOLAR MONITORING NETWORK**  
 SOLAR RESOURCE EVALUATION PROJECT

- Pyrheliometer, Pyranometer, Air Temperature
- Pyranometer, Air Temperature
- ✱ To Be Included in Future Reports

MAP 2



WEST Solar Resource Evaluation Project

APS	Arizona Public Service
IID	Imperial Irrigation District
LADWP	Los Angeles Department of Water and Power
EPE	El Paso Electric Company
NPC	Nevada Power Company
PSC	Public Service Company of Colorado
PNM	Public Service Company of New Mexico
SRP	Salt River Project
SDG&E	San Diego Gas and Electric
SPP	Sierra Pacific Power Company
SCE	Southern California Edison
TG&E	Tucson Gas and Electric

APPENDIX B  
MISSING DATA

In spite of efforts to maintain high levels of instrument reliability, there have been occasional hardware failures. These and other circumstances have caused data losses for periods ranging from a couple of hours to a few weeks.

This year, when 43 monitoring stations were in operation, nearly 3.3 million data points were recorded. Of these, 6.4 percent were lost. Data losses are divided as follows:

Total Insolation	-	5.4 percent
Direct Insolation	-	17.3 percent
Dry Bulb Temperature	-	3.2 percent

The following tables, 7, 8 and 9 show for each station where data are missing and the percent of the data that are missing. Each utility having a substantial quantity of data missing for any of its stations has been contacted by Southern California Edison personnel to identify ways to mutually improve the overall quality of the collected data.

TABLE 7

SUMMARY OF MISSING DATA - 1978  
TOTAL INSOLATION

STATION NAME	% MISSING	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ARIZONA PUBLIC SERVICE													
GILA BEND	46												
PHOENIX	48												
IMPERIAL IRRIGATION DISTRICT													
IMPERIAL	1												
LOS ANGELES DEPT WATER & POWER													
LOS ANGELES	1												
SUN VALLEY	1												
UNIV CA LOS ANGELES	0												
NEVADA POWER COMPANY													
BOULDER CITY (DRI)	72												
LAS VEGAS	0												
PUBLIC SERVICE OF COLORADO													
ALAMOSA	12												
CHEYENNE	0												
DENVER 1 (SOUTHEAST)	1												
DENVER 2 (HOLLY)	3												
PUEBLO	1												
PUBLIC SERVICE NEW MEXICO													
ALBUQUERQUE	15												
SAN DIEGO GAS & ELECTRIC													
ALPINE	12												
CHULA VISTA	1												
CARLSBAD	2												
EL CAJON	1												
ESCONDIDO	1												
RAMONA	4												
SPRING VALLEY	3												

▲ STATION INSTALLATION DATE

TABLE 7 - CONTINUED  
TOTAL INSOLATION

STATION NAME	% MISSING	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SOUTHERN CALIFORNIA EDISON													
ALHAMBRA	0					△							
ARROWHEAD	0												
BARSTOW	0												
BLYTHE	9												
ELDORADO	0												
EL SEGUNDO	0												
EL TORO	1												
HUNTINGTON BEACH	1												
LAGUNA BELL	0												
LANCASTER	1												
MANDALAY	4												
MOORPARK	0												
PALM SPRINGS	3												
PARDEE	0												
RIALTO	0												
RIDGECREST	1												
VICTORVILLE	1												
VILLA PARK	0												
VISALIA	4												
WALNUT	0												
YUCCA VALLEY	3												
TUCSON GAS & ELECTRIC													
TUCSON	6												

△ STATION INSTALLATION DATE

TABLE 8

SUMMARY OF MISSING DATA - 1978  
DIRECT INSOLATION

STATION NAME	% MISSING	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ARIZONA PUBLIC SERVICE GILA BEND	58			-					-	-	-	-	-
LOS ANGELES DEPT WATER & POWER LOS ANGELES	9						△						
SUN VALLEY	11									△			
UNIV CA LOS ANGELES	0											△	
NEVADA POWER COMPANY BOULDER CITY (DRI)	74							△					
LAS VEGAS	53							-	-				
PUBLIC SERVICE COLORADO ALAMOSA	12												
PUBLIC SERVICE NEW MEXICO ALBUQUERQUE	8												
SAN DIEGO GAS & ELECTRIC ESCONDIDO	14												
SOUTHERN CALIFORNIA EDISON ALHAMBRA	1						△						
BARSTON	0												
BLYTHE	28												
LANCASTER	2												
PALM SPRINGS	6												
RIDGECREST	20												
VICTORVILLE	2												
YUCCA VALLEY	3												
TUCSON GAS & ELECTRIC TUCSON	13			-									

△ STATION INSTALLATION DATE

TABLE 9

SUMMARY OF MISSING DATA - 1978  
 DRY BULB TEMPERATURE

STATION NAME	% MISSING	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ARIZONA PUBLIC SERVICE GILA BEND	17												
IMPERIAL IRRIGATION DISTRICT IMPERIAL	1												
LOS ANGELES DEPT WATER & POWER LOS ANGELES	1						△						
SUN VALLEY	1									△			
UNIV CA LOS ANGELES	0											△	
NEVADA POWER COMPANY BOULDER CITY (DRI)	2							△					
LAS VEGAS	0												
PUBLIC SERVICE OF COLORADO ALAMOSA	12												
CHEYENNE	1												
DENVER 1 (SOUTHEAST)	1												
DENVER 2 (HOLLY)	3												
PUEBLO	1												
PUBLIC SERVICE NEW MEXICO ALBUQUERQUE	1												
SAN DIEGO GAS & ELECTRIC ALPINE	8												
CHULA VISTA	1												
CARLSBAD	2												
EL CAJON	1												
ESCONDIDO	1												
RAMONA	2												
SPRING VALLEY	8												

△ STATION INSTALLATION DATE

TABLE 9 - CONTINUED  
 DRY BULB TEMPERATURE

STATION NAME	% MISSING	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SOUTHERN CALIFORNIA EDISON													
ALHAMBRA	1				△								
ARROWHEAD	1												
BARSTOW	1												
BLYTHE	9												
ELDORADO	1												
EL SEGUNDO	10												
EL TORO	1												
HUNTINGTON BEACH	1												
LAGUNA BELL	1												
LANCASTER	1												
MANDALAY	7												
MOCR PARK	1												
PALM SPRINGS	1												
PARDEE	1												
RIALTO	1												
RIDGECREST	9												
VICTORVILLE	1												
VILLA PARK	1												
VISALIA	4												
WALNUT	1												
YUCCA VALLEY	2												
TUCSON GAS & ELECTRIC													
TUCSON	26												

△ STATION INSTALLATION DATE

APPENDIX C

LATITUDE, LONGITUDE AND ELEVATION OF  
SOLAR MONITORING STATIONS

	Latitude		Longitude		Elevation
	(Deg	Min)	(Deg	Min)	(Feet)
Arizona Public Service					
Gila Bend	32	56	112	43	735
Phoenix	33	27	112	5	1075
Imperial Irrigation District					
Imperial	32	49	115	23	-20
Los Angeles Dept. Water & Power					
Los Angeles	34	4	118	14	290
Sun Valley	34	15	118	23	910
Univ. California Los Angeles	34	4	118	27	400
Nevada Power Company					
Boulder City (DRI)	36	1	114	46	1500
Las Vegas	36	9	115	10	2080
Public Service Co. of Colorado					
Alamosa	37	29	105	52	7560
Cheyenne	41	8	104	49	6155
Denver 1 (Southeast)	39	39	104	51	5340
Denver 2 (Holly)	39	45	104	54	5330
Pueblo	38	16	104	37	4860
Public Service Co. of New Mexico					
Albuquerque	35	10	106	36	5175
San Diego Gas and Electric					
Alpine	32	51	116	6	2050
Carlsbad	33	8	117	20	75
Chula Vista	32	40	117	2	65
El Cajon	32	47	116	58	460
Escondido	33	8	117	6	710
Ramona	33	0	116	45	1730
Spring Valley	32	44	116	55	710
Southern California Edison					
Alhambra	34	5	118	9	470
Arrowhead	34	17	117	13	5060
Barstow	34	53	117	0	2180
Blythe	33	36	114	36	265
Eldorado	35	48	115	0	1795
El Segundo	33	54	118	25	40
El Toro	33	38	117	42	360
Huntington Beach	33	39	117	59	20
Laguna Bell	33	58	118	9	135
Lancaster	34	42	118	9	2345
Mandalay	34	12	119	15	20
Moorpark	34	17	118	54	460



APPENDIX C - Continued

SOLAR MONITORING STATIONS

	<u>Latitude</u>		<u>Longitude</u>		<u>Elevation</u>
	<u>(Deg</u>	<u>Min)</u>	<u>(Deg</u>	<u>Min)</u>	<u>(Feet)</u>
Southern California Edison - cont'd					
Palm Springs	33	47	116	28	305
Pardee	34	27	118	35	1035
Rialto	34	6	117	21	1210
Ridgecrest	35	37	117	40	2285
Victorville	34	33	117	17	2855
Villa Park	33	49	117	51	255
Visalia	36	20	119	17	335
Walnut	34	0	117	58	350
Yucca Valley	34	7	116	25	3360
Tucson Gas and Electric					
Tucson	32	10	110	54	2605

## APPENDIX D

### BUILDING APPLICATIONS SUMMARY

The Building Applications Summary has been designed to complement existing methods of presenting performance data for solar collectors. When this data is used in conjunction with generally available collector performance data, several solar system designs can be evaluated without the aid of a computer. Data from each of the 43 solar monitoring stations are included in this appendix. For each station, a Building Application Data table, an Annual Distribution curve and an Annual Solar Duration curve are included. Phoenix, Arizona does not have a Building Applications Data table because it did not measure dry bulb temperature in 1978. The locations of these stations are shown on Maps 1 and 2 of Appendix A (pp. 31-34).

#### Format Explanation of Building Applications Data Table

The Building Applications Data table is calculated by using both total insolation and dry bulb temperature data, so reference should be made to Appendix B (pp. 35-40) which details periods of missing data. The numbers on the example Building Applications Data table, which follows (pp. 44), correspond to the description given on pages 45 and 46.

EXAMPLE

BUILDING APPLICATIONS DATA FOR BARSTOW, CALIF.

ACCOUNT/ CHANNELS 72955611  
72955613

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSULATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER HOUR PER SQUARE FOOT						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/76	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	3.8 66.8	112.2 59.1	166.2 57.6	48.2	56.3	44.3	519.7	0.0	31	0	1071.
2/76	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.8 59.9	65.5 62.4	126.0 61.5	177.0 60.9	53.1	59.6	49.9	344.6	0.0	29	0	1225.
3/76	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	57.5 67.4	131.2 65.1	191.5 64.3	250.2 63.3	55.3	62.2	50.7	303.4	0.0	29	0	1728.
4/76	NUM OF HOURS AVG TEMP (F)	0.0 0.0	11.0 75.8	109.0 71.4	166.7 70.1	220.0 68.5	269.0 67.3	60.2	66.3	55.4	188.2	0.0	22	0	2094.
5/76	NUM OF HOURS AVG TEMP (F)	0.3 88.3	44.3 88.6	127.0 86.9	193.0 85.3	246.5 84.2	297.5 83.0	75.3	81.8	68.7	4.3	77.3	3	15	2351.
6/76	NUM OF HOURS AVG TEMP (F)	0.0 0.0	69.3 92.2	157.7 91.0	217.2 90.1	267.0 89.4	315.0 88.4	81.0	87.5	74.3	3.1	209.8	1	25	2595.
7/76	NUM OF HOURS AVG TEMP (F)	0.0 0.0	35.8 98.5	126.0 97.7	183.5 96.6	235.0 95.7	288.7 95.0	87.4	93.9	81.6	0.0	383.9	0	31	2244.
8/76	NUM OF HOURS AVG TEMP (F)	0.0 0.0	19.5 91.1	134.7 91.1	200.0 90.4	253.5 89.6	301.7 88.9	81.2	87.9	75.2	0.0	206.2	0	26	2312.
9/76	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	47.0 88.0	109.5 85.6	160.0 84.5	207.0 83.7	76.1	82.7	72.2	0.0	81.5	0	16	1528.
10/76	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	3.3 79.5	101.8 78.7	168.5 77.4	220.2 76.6	67.7	75.5	63.2	32.9	0.0	10	0	1461.
11/76	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	17.5 76.0	117.2 69.6	183.7 68.4	59.0	67.3	55.0	179.7	0.0	28	0	1118.
12/76	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	86.5 60.6	160.2 59.4	49.9	58.3	46.3	469.3	0.0	31	0	923.

\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSULATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSULATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

FORMAT EXPLANATION FOR  
BUILDING APPLICATIONS DATA TABLE

- ① Location of monitoring station
- ② Account/channel numbers of station instruments
- ③ Month and year
- ④ Number of hours above given insolation level
- ⑤ Average dry bulb temperature in degrees Fahrenheit (F) during period above given insolation level
- ⑥ Insolation level in BTU/hr - sq. ft.  
Example: There were 131.2 hours in March with insolation above 200 BTU/hr - sq. ft. with an average temperature of 65.1 degrees F during those hours.
- ⑦ Average Daily Temperature in degrees F - Arrived at by summing all temperatures and dividing by the number of temperature observations.
- ⑧ Average Daylight Temperature in degrees F - Arrived at by summing all temperatures during periods of daylight, defined as insolation above 50 BTU/hr - sq. ft., and dividing by number of such observations.
- ⑨ Average Night Temperature in degrees F - Same as 8 but using temperature intervals below 50 BTU/hr - sq. ft.

- ⑩ Monthly Heating Degree — Days (65F) - Sum of differences between average daily temperature and 65F for each day of the month with average temperature below 65F.
- ⑪ Monthly Cooling Degree — Days (75F) - Sum of differences between average daily temperature and 75F for each day of the month with average temperature above 75F.
- ⑫ Number of Heating — Days - Number of days per month with an average temperature less than 65F.
- ⑬ Number of Cooling — Days - Number of days per month with an average temperature greater than 75F.
- ⑭ Average Total Insolation Per Day in BTU/sq. ft. - Average energy received from total insolation in a day (count only insolation values above 50 BTU/hr - sq. ft.)

NOTE: On the Building Applications summary sheets that follow, the words "Insufficient Data" appear in a number of locations. This means that there was not enough data to give a good monthly summary. Most of these appearances are because many of the stations were not installed until mid-year.

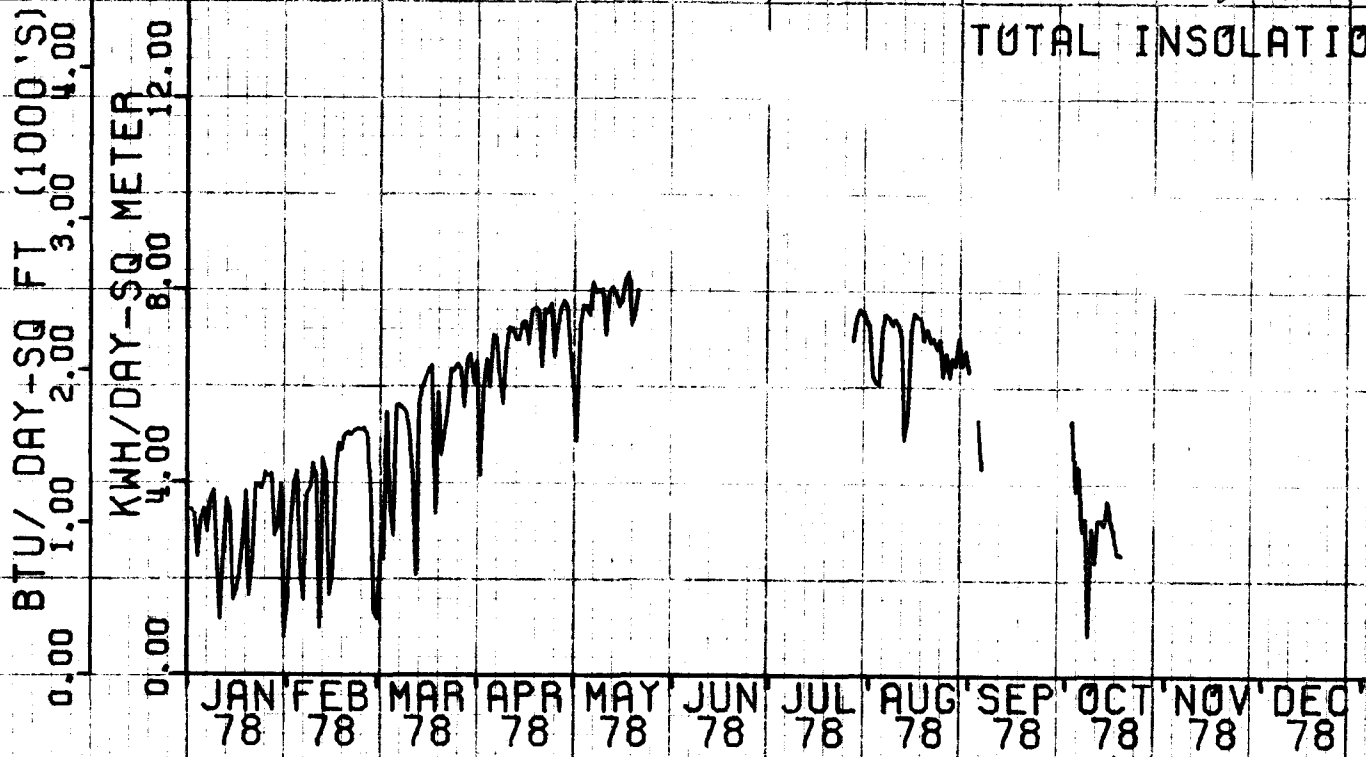
BUILDING APPLICATIONS  
SUMMARY FOR THE  
WEST SOLAR MONITORING NETWORK

(Arranged in the same order as Table 1, pp. 16-17)

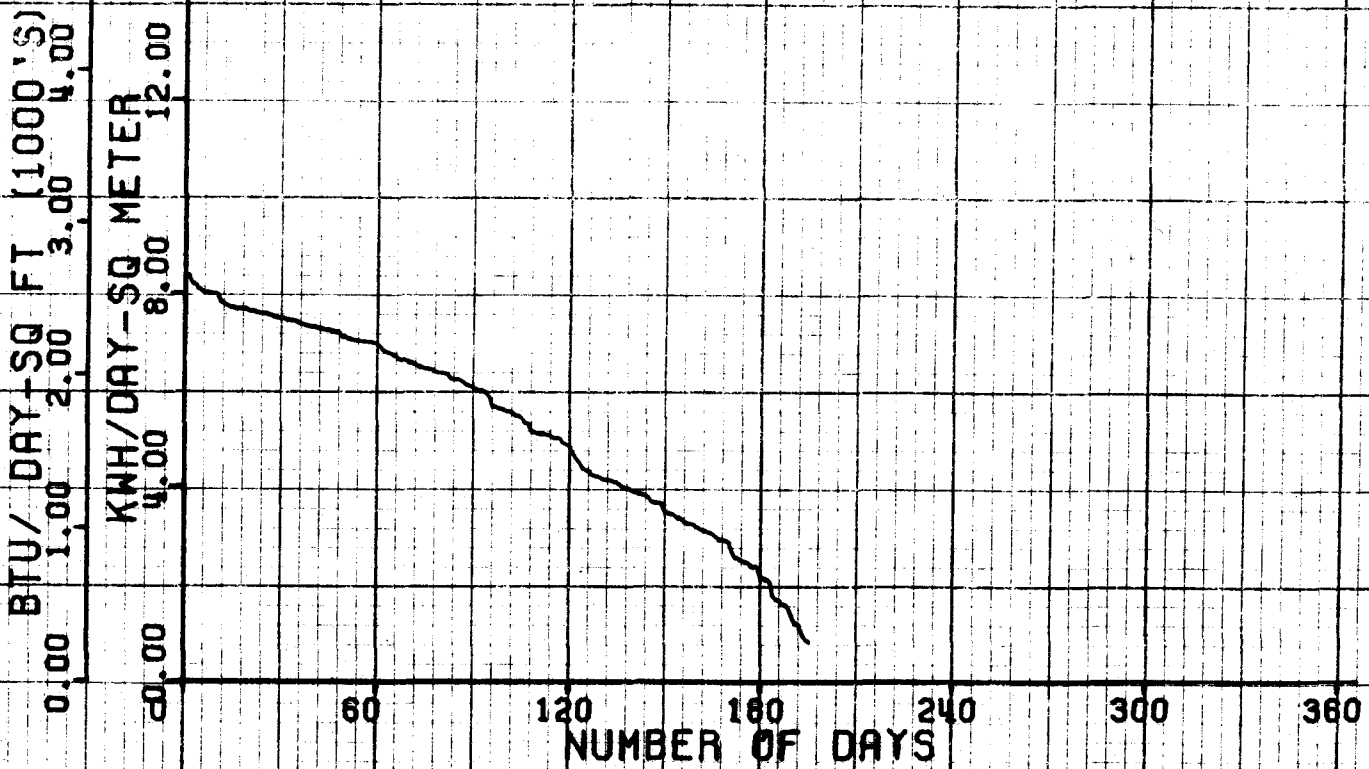
# ANNUAL DISTRIBUTION

GILA BEND, ARIZ.

TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR GILA BEND, ARIZ.

ACCOUNT/ 82830121  
CHANNELS 82830123

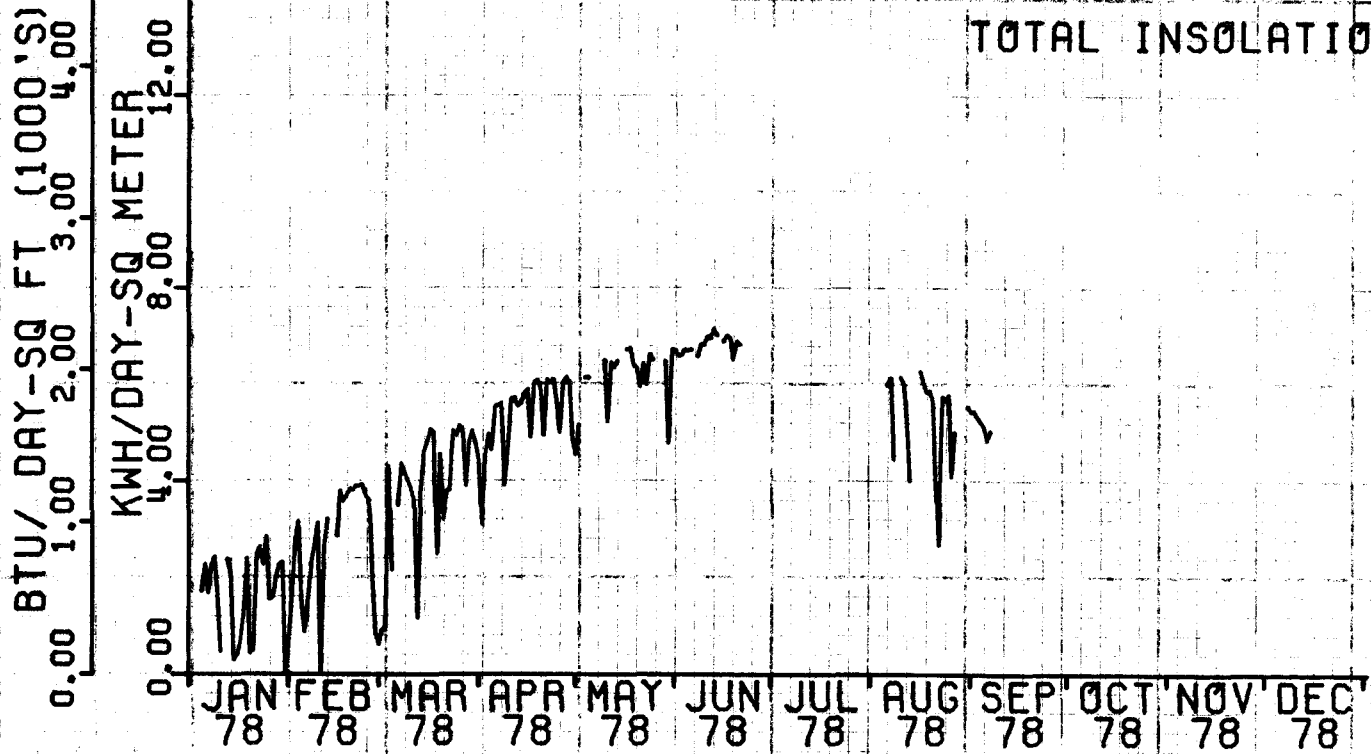
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	14.3 60.8	82.0 61.7	141.0 60.9	53.4	60.1	50.9	358.1	0.0	31	0	869.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.3 75.7	59.8 66.4	104.5 65.6	153.0 64.9	56.8	63.9	53.5	230.9	0.0	28	0	1119.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.8 85.8	63.5 78.3	120.7 76.6	171.7 75.8	226.0 74.6	65.3	73.2	60.6	79.1	0.2	16	1	1601.
4/78	NUM OF HOURS AVG TEMP (F)	0.3 63.3	43.8 80.5	119.0 79.1	173.0 78.6	222.5 77.8	264.5 77.1	68.7	76.2	63.0	29.1	6.3	8	2	2141.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	47.3 88.6	97.8 88.3	134.5 87.6	164.5 87.0	199.0 85.9	78.1	84.8	71.1	2.3	108.9	1	18	2386.
6/78	NUM OF HOURS AVG TEMP (F)	----- I N S U F F I C I E N T     D A T A     -----													
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	5.3 104.6	26.0 102.9	39.3 102.8	50.0 102.4	60.3 102.1	96.0	101.4	91.2	0.0	125.9	0	6	2290.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	11.0 100.9	104.0 101.5	170.7 100.8	229.2 100.0	283.0 99.3	91.7	98.4	86.3	0.0	519.2	0	31	2102.
9/78	NUM OF HOURS AVG TEMP (F)	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	85.4	8888.0	8888.0	0.0	307.8	0	27	8888.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	1.0 98.0	9.5 98.2	25.5 97.3	90.0 95.0	77.7	92.7	78.4	4.9	159.3	2	19	939.
11/78	NUM OF HOURS AVG TEMP (F)	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	59.6	8888.0	8888.0	198.8	0.0	21	0	8888.
12/78	NUM OF HOURS AVG TEMP (F)	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	49.3	8888.0	8888.0	472.4	0.0	30	0	8888.

\*NOTE\*  
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

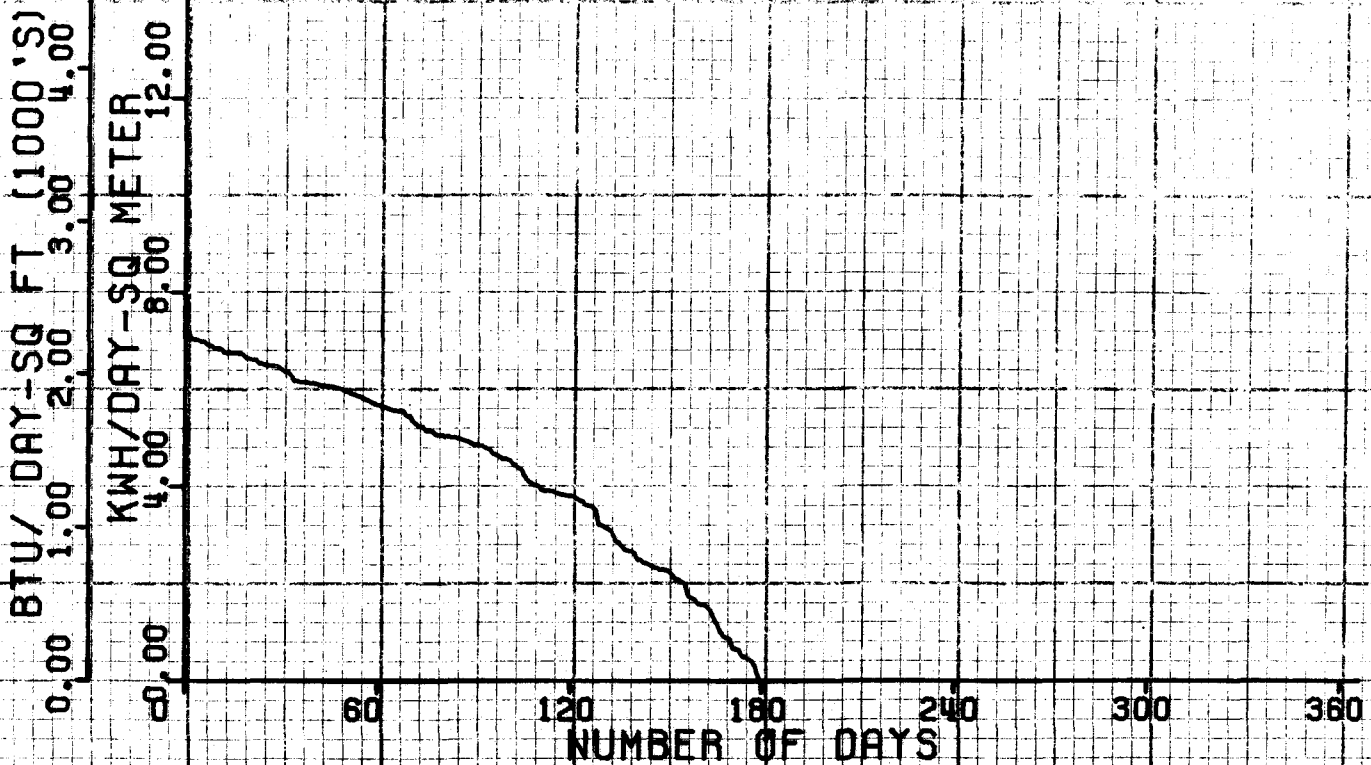


# ANNUAL DISTRIBUTION

PHOENIX, ARIZ.  
TOTAL INSOLATION



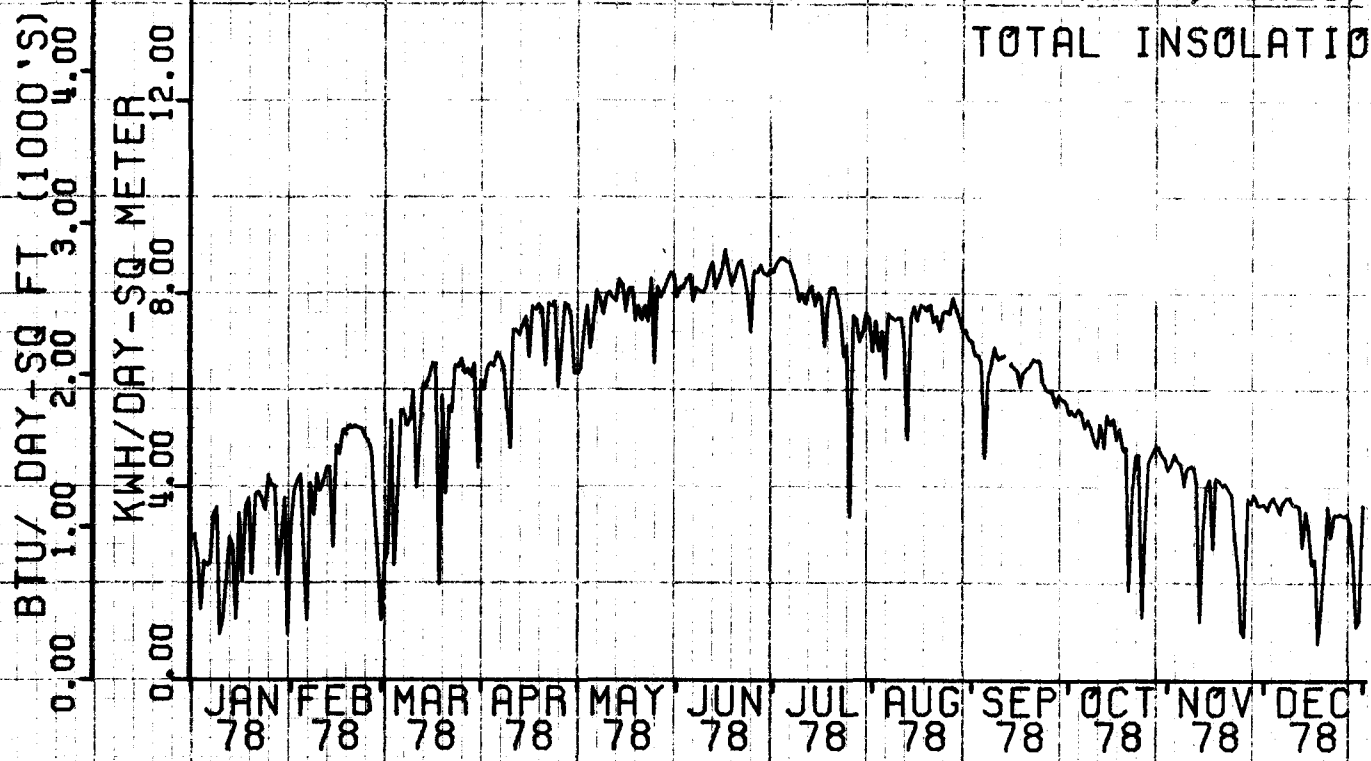
# ANNUAL SOLAR DURATION CURVE



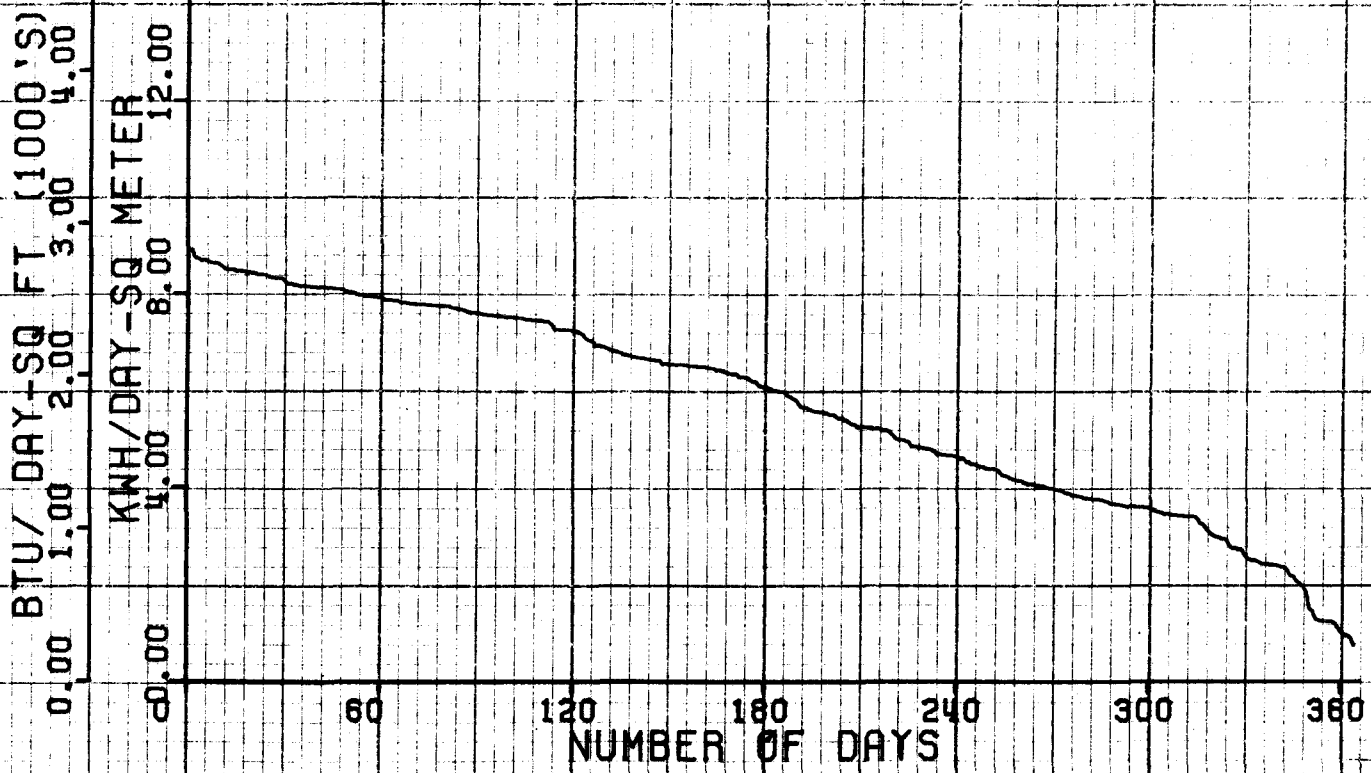
NO DRY BULB TEMPERATURE DATA  
MEASURED IN PHOENIX, ARIZONA  
DURING 1978

# ANNUAL DISTRIBUTION

IMPERIAL, CALIF.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR IMPERIAL, CALIF.

ACCOUNT/ 82822121  
CHANNELS 82822123

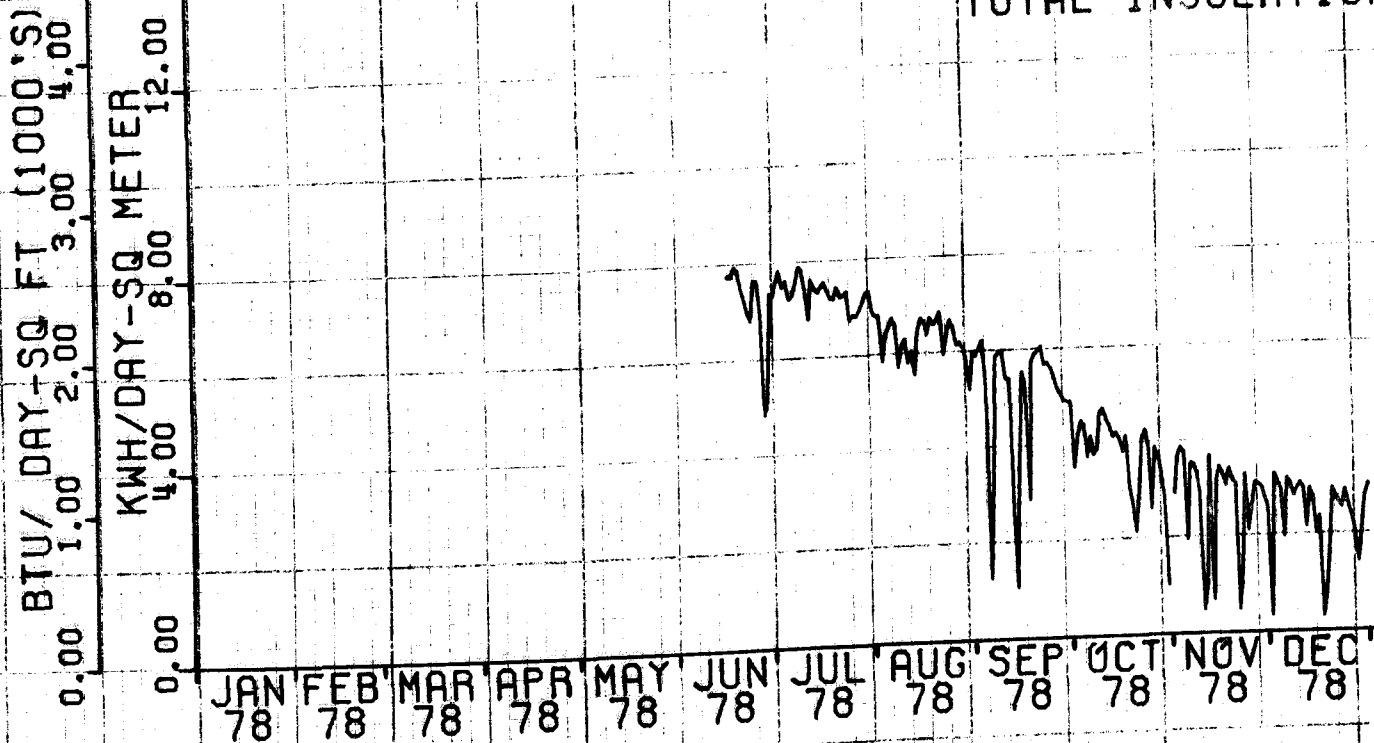
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	4.3 60.7	71.5 64.1	131.0 63.2	54.6	61.7	51.9	312.5	0.0	30	0	821.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	1.5 72.2	65.3 68.3	125.0 68.0	171.5 67.3	58.6	66.2	54.7	172.2	0.0	27	0	1245.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 83.4	62.5 77.4	118.0 76.1	171.7 75.0	226.5 74.0	65.3	72.8	60.6	50.3	0.5	15	1	1618.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	34.5 77.6	113.5 76.9	172.0 76.2	228.7 75.6	271.0 75.0	66.9	74.0	61.4	35.4	1.0	11	2	2157.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	48.8 89.5	145.5 88.7	208.7 87.8	261.5 87.0	308.0 86.2	77.0	85.0	69.9	0.1	108.4	1	18	2422.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	59.8 101.3	159.7 100.8	219.0 100.0	269.5 99.2	313.5 98.4	89.6	97.3	82.1	0.0	424.3	0	29	2589.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	34.0 103.5	141.0 103.4	207.2 102.8	259.5 102.1	308.7 101.2	93.3	100.3	86.9	0.0	547.6	0	30	2387.
8/78	NUM OF HOURS AVG TEMP (F)	0.5 99.2	24.0 99.4	134.7 100.7	198.0 100.1	249.7 99.5	294.2 98.9	90.8	97.9	84.9	0.0	474.7	0	30	2282.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	89.3 92.6	160.7 92.9	210.5 92.2	255.7 91.6	83.2	90.9	77.5	0.0	248.9	0	25	1942.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	8.8 96.0	99.8 90.3	163.7 88.9	218.5 87.7	78.2	87.0	72.7	0.0	160.4	0	19	1443.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	34.5 74.5	114.7 70.1	170.7 68.9	59.0	67.4	55.5	197.0	0.0	21	0	1082.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	88.8 57.8	155.2 57.4	48.6	56.7	45.3	509.0	0.0	31	0	905.

\*NOTE\*

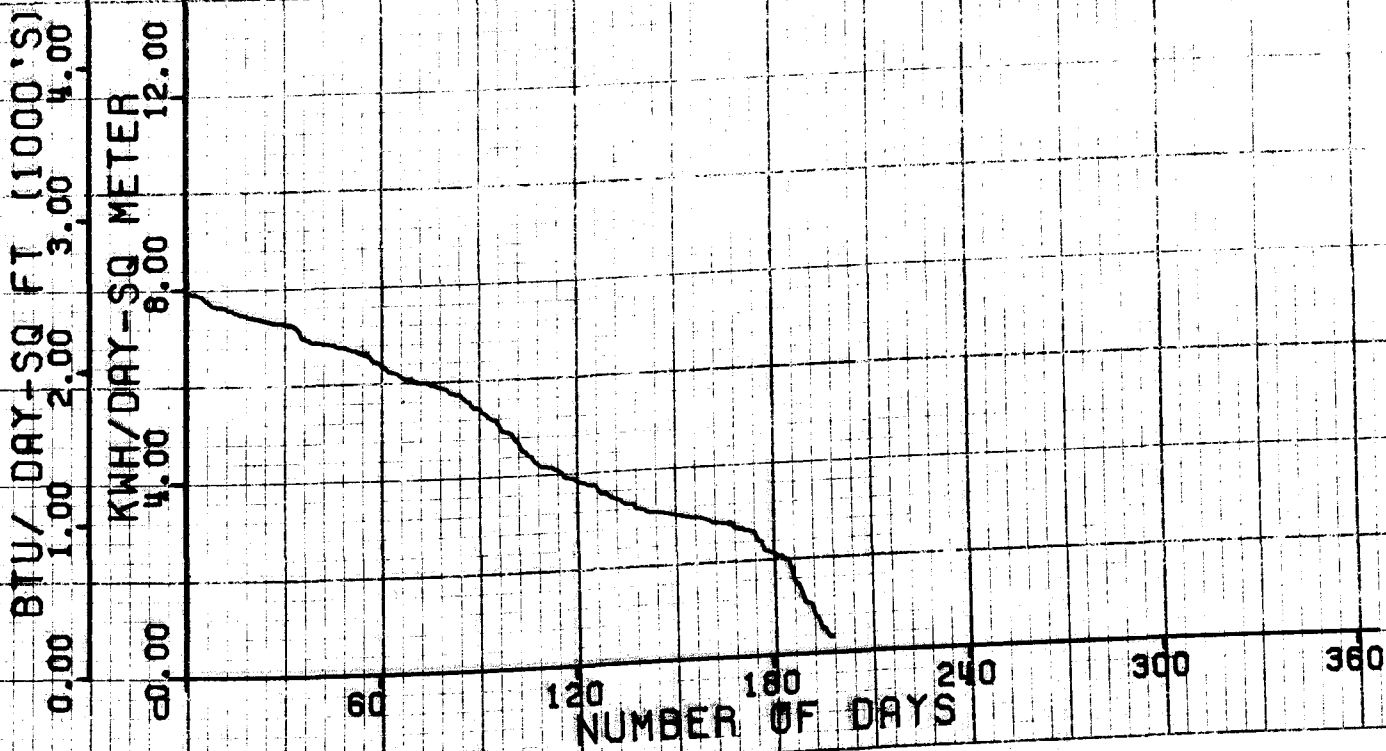
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

LOS ANGELES, CA.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR LOS ANGELES, CA.

ACCOUNT/ 82820141  
CHANNELS 82820143

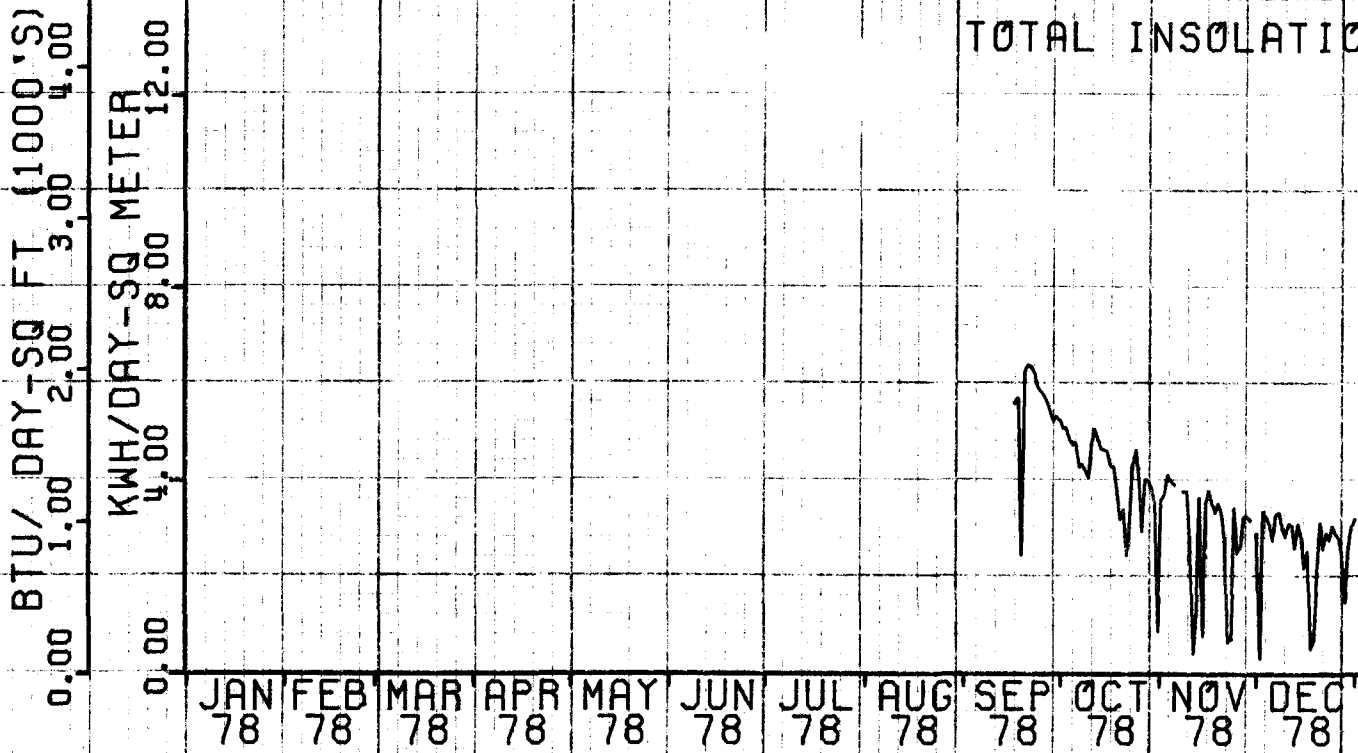
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA													
2/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA													
3/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA													
4/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA													
5/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA													
6/78	NUM OF HOURS AVG TEMP' (F)	0.0	7.0	58.3	90.0	118.0	142.2	71.5	77.9	65.9	0.9	4.8	2	3	2197.
55		0.0	84.2	81.7	81.0	80.1	79.2								
7/78	NUM OF HOURS AVG TEMP' (F)	0.0	3.8	127.5	196.7	251.7	299.7	71.7	78.1	65.9	0.0	19.5	0	7	2268.
		0.0	80.7	82.0	81.0	80.1	79.2								
8/78	NUM OF HOURS AVG TEMP' (F)	0.0	0.0	90.5	169.7	221.0	266.2	70.8	77.2	66.1	0.0	3.7	0	4	1939.
		0.0	0.0	81.0	80.1	79.1	78.3								
9/78	NUM OF HOURS AVG TEMP' (F)	0.0	0.0	29.0	110.0	165.5	210.7	73.7	81.4	69.3	0.0	73.5	0	10	1509.
		0.0	0.0	84.8	84.7	83.7	82.8								
10/78	NUM OF HOURS AVG TEMP' (F)	0.0	0.0	0.3	36.0	117.2	177.7	68.2	74.8	64.7	7.8	1.7	5	1	1109.
		0.0	0.0	82.3	79.8	77.2	76.2								
11/78	NUM OF HOURS AVG TEMP' (F)	0.0	0.0	0.0	0.3	62.0	132.7	57.2	64.6	54.6	236.3	0.0	26	0	797.
		0.0	0.0	0.0	68.3	66.9	65.9								
12/78	NUM OF HOURS AVG TEMP' (F)	0.0	0.0	0.0	0.0	35.8	118.2	51.9	58.6	49.6	406.0	0.0	31	0	696.
		0.0	0.0	0.0	0.0	60.6	59.8								

\*NOTEX

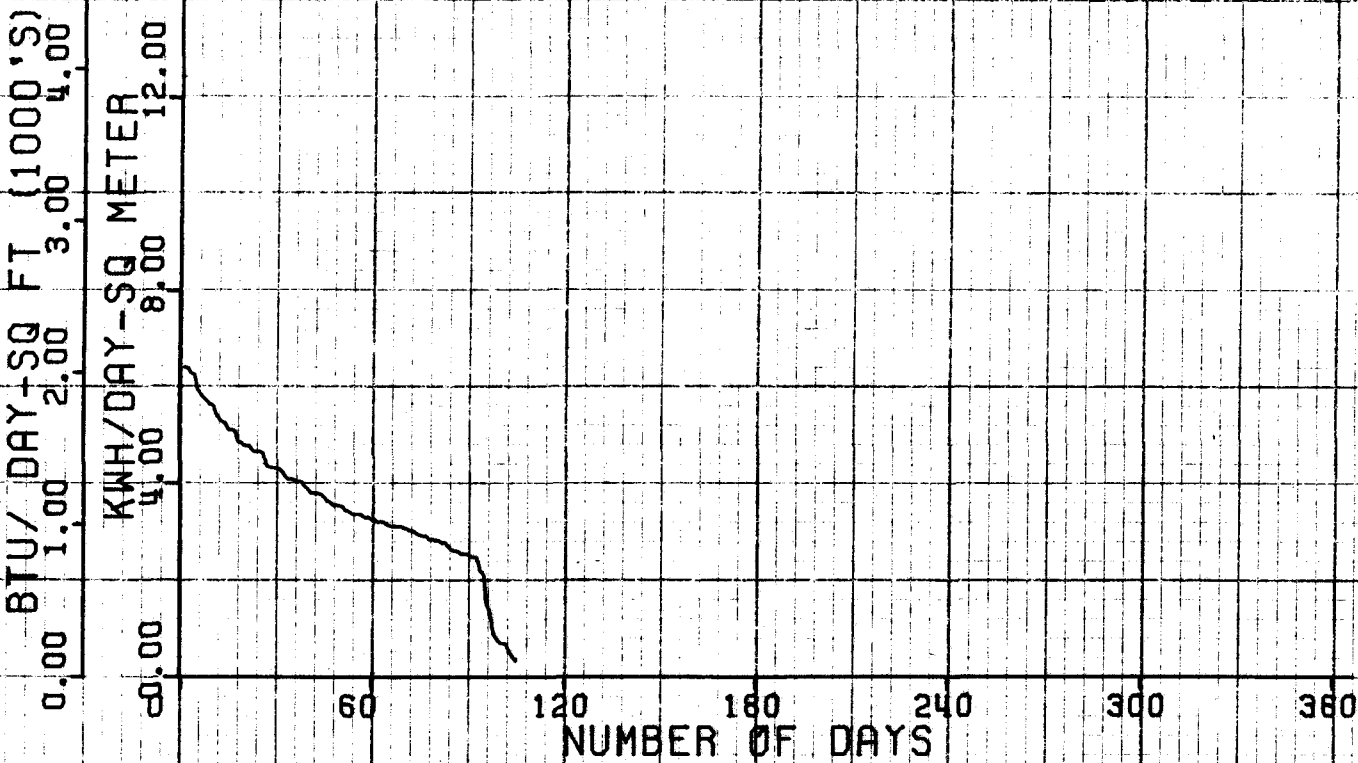
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

SUN VALLEY, CAL.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR SUN VALLEY, CAL.

ACCOUNT/ 82820301  
CHANNELS 82820303

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA													
2/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA													
3/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA													
4/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA													
5/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA													
6/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA													
57 7/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA													
8/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA													
9/78	NUM OF HOURS AVG TEMP (F)	0.0	0.0	25.5	75.8	105.8	132.0	76.5	85.7	70.5	1.6	69.7	2	9	1718.
		0.0	0.0	84.8	87.4	86.8	86.1								
10/78	NUM OF HOURS AVG TEMP (F)	0.0	0.0	0.0	61.3	138.2	194.5	68.5	77.7	63.9	19.9	4.1	7	3	1229.
		0.0	0.0	0.0	82.5	80.0	78.9								
11/78	NUM OF HOURS AVG TEMP (F)	0.0	0.0	0.0	4.5	79.3	141.2	55.4	65.6	52.0	267.6	0.0	25	0	856.
		0.0	0.0	0.0	73.0	69.2	67.6								
12/78	NUM OF HOURS AVG TEMP (F)	0.0	0.0	0.0	0.0	55.5	135.2	50.2	59.9	46.6	460.2	0.0	31	0	769.
		0.0	0.0	0.0	0.0	61.6	61.3								

\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH



# ANNUAL DISTRIBUTION

U C LOS ANGELES  
TOTAL INSOLATION

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00  
KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

JAN 78 FEB 78 MAR 78 APR 78 MAY 78 JUN 78 JUL 78 AUG 78 SEP 78 OCT 78 NOV 78 DEC 78

# ANNUAL SOLAR DURATION CURVE

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00  
KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

60 120 180 240 300 360  
NUMBER OF DAYS



BUILDING APPLICATIONS DATA FOR U C LOS ANGELES

ACCOUNT/ 82820551  
CHANNELS 82820553

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR					AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT	
		350	300	250	200	150									100
1/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
2/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
3/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
4/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
5/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
6/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
7/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
8/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
9/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
10/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
11/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
12/78	NUM OF HOURS AVG TEMP' (F)	0.0	0.0	0.0	0.0	44.5	125.0	53.3	60.3	50.9	362.5	0.0	31	0	728.
		0.0	0.0	0.0	0.0	61.7	61.4								

\*NOTE\*  
 AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

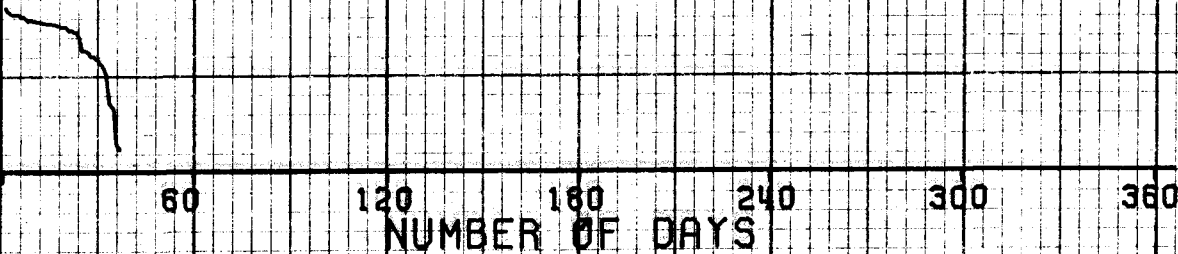
BOULDER CITY NEV  
TOTAL INSOLATION

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00  
KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

JAN '78 FEB '78 MAR '78 APR '78 MAY '78 JUN '78 JUL '78 AUG '78 SEP '78 OCT '78 NOV '78 DEC '78

# ANNUAL SOLAR DURATION CURVE

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00  
KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00



BUILDING APPLICATIONS DATA FOR BOULDER CITY NEV

ACCOUNT/ 82840281  
CHANNELS 82840283

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
2/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
3/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
4/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
5/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
6/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----													
7/78	NUM OF HOURS AVG TEMP (F)	888.8	888.8	888.8	888.8	888.8	888.8	90.4	8888.0	8888.0	0.0	92.6	0	6	8888.
8/78	NUM OF HOURS AVG TEMP (F)	888.8	888.8	888.8	888.8	888.8	888.8	87.3	8888.0	8888.0	0.0	358.1	0	29	8888.
9/78	NUM OF HOURS AVG TEMP (F)	888.8	888.8	888.8	888.8	888.8	888.8	77.8	8888.0	8888.0	10.3	146.8	3	19	8888.
10/78	NUM OF HOURS AVG TEMP (F)	888.8	888.8	888.8	888.8	888.8	888.8	73.4	8888.0	8888.0	14.1	76.1	8	15	8888.
11/78	NUM OF HOURS AVG TEMP (F)	0.0	0.0	0.0	0.5	14.5	28.5	51.1	47.7	43.3	346.8	0.0	24	0	735.
12/78	NUM OF HOURS AVG TEMP (F)	0.0	0.0	0.0	0.3	58.0	130.7	41.2	44.2	40.0	714.8	0.0	30	0	790.

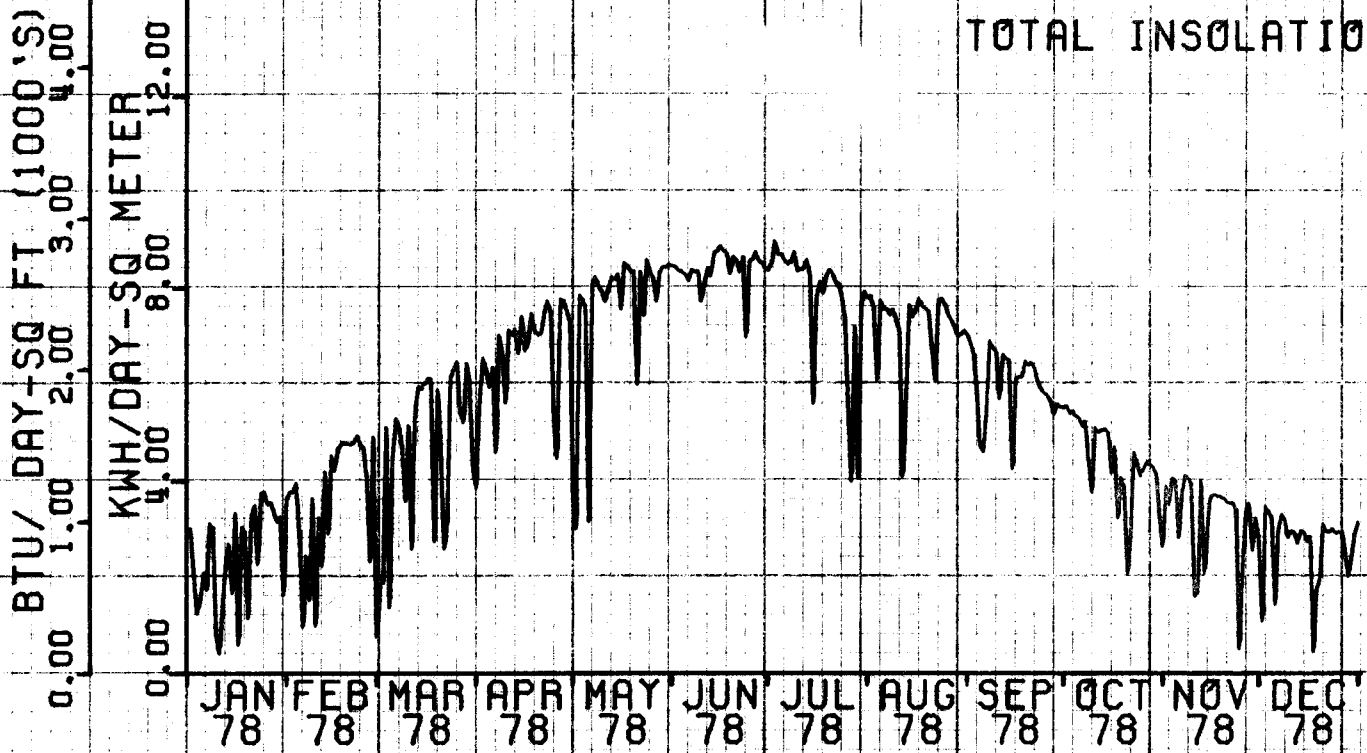
61

\*NOTE\*

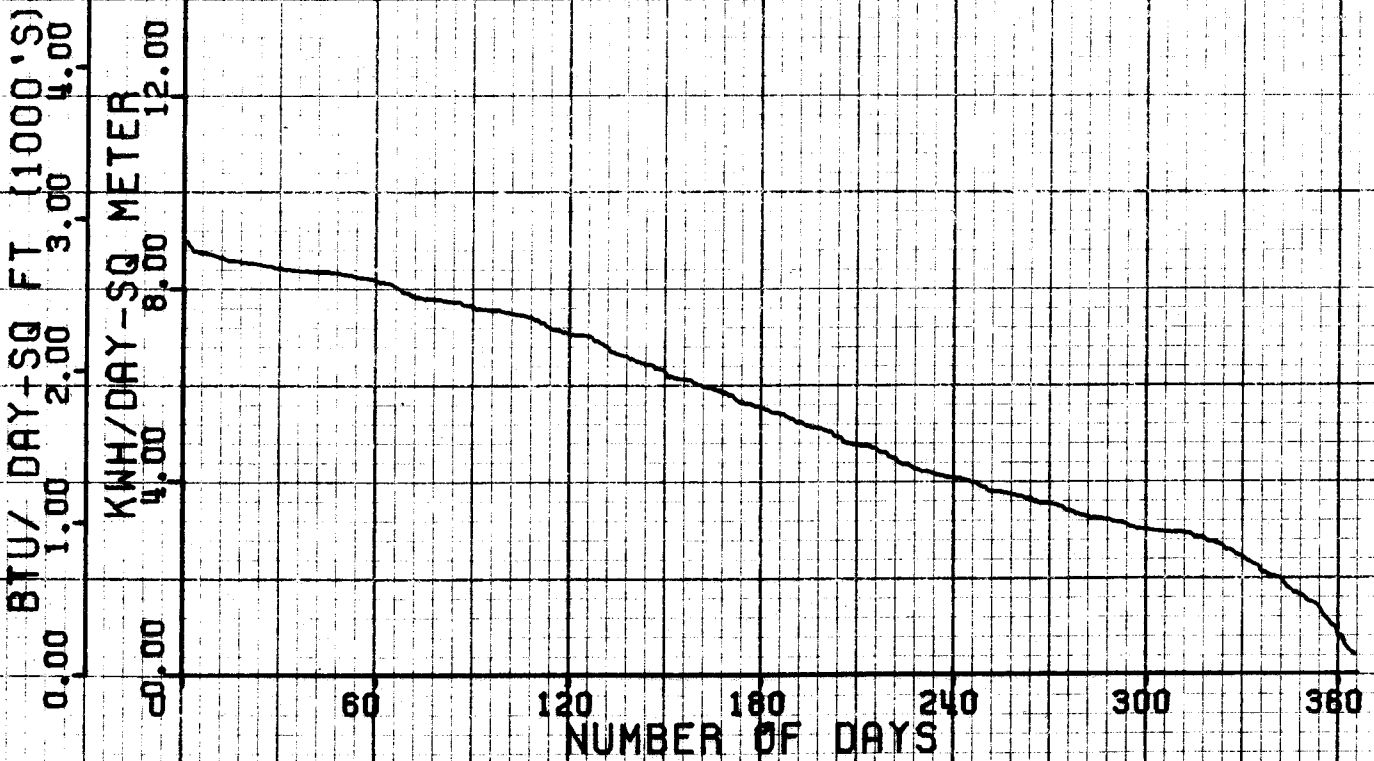
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

LAS VEGAS, NEV.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR LAS VEGAS, NEV.

ACCOUNT/ 82840101  
CHANNELS 82840103

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.3 61.3	55.8 55.3	110.8 54.9	47.4	53.9	45.3	545.3	0.0	31	0	702.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.8 65.9	45.8 58.9	97.8 58.9	146.2 58.6	51.6	57.6	49.1	374.0	0.0	28	0	1056.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.8 61.9	45.5 68.5	101.5 67.8	144.5 67.6	197.2 66.9	58.9	65.6	55.1	196.3	0.0	27	0	1426.
4/78	NUM OF HOURS AVG TEMP (F)	1.0 68.0	28.8 70.9	106.5 69.8	161.7 69.5	210.7 69.2	260.7 68.8	62.4	68.1	58.1	113.2	0.0	18	0	2044.
5/78	NUM OF HOURS AVG TEMP (F)	0.3 85.5	78.0 81.7	147.0 81.7	203.2 81.4	248.7 80.8	296.0 80.3	73.1	79.3	67.6	19.3	58.6	3	15	2399.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	89.5 94.3	161.2 94.1	217.7 93.7	263.5 93.2	311.2 92.6	86.3	91.9	80.7	0.0	340.2	0	30	2615.
7/78	NUM OF HOURS AVG TEMP (F)	0.3 102.2	67.5 99.5	144.2 99.7	201.2 99.1	251.5 98.6	302.7 97.8	90.7	96.8	84.9	0.0	485.5	0	31	2407.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	27.0 94.8	131.5 96.3	187.7 96.0	237.7 95.5	288.2 94.9	87.9	94.2	82.5	0.0	398.5	0	31	2229.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	1.3 88.6	74.5 84.3	144.2 84.9	199.2 84.9	247.2 84.7	77.8	84.1	73.3	4.5	139.4	3	21	1847.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	1.5 88.8	79.8 83.9	146.7 82.3	209.0 81.1	71.4	80.1	66.6	16.7	36.0	9	13	1342.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	9.8 68.2	95.3 61.8	158.0 61.0	52.7	60.0	49.6	369.7	0.0	28	0	969.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.8 52.1	60.5 49.1	136.2 49.4	41.4	48.6	38.8	731.3	0.0	31	0	784.

\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

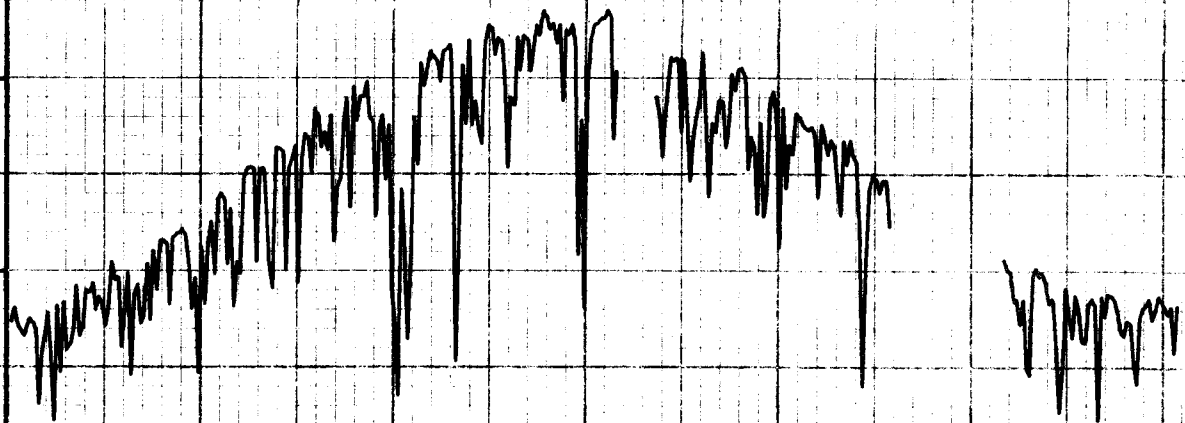
# ANNUAL DISTRIBUTION

ALAMOSA, COLO.  
TOTAL INSOLATION

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

JAN '78 FEB '78 MAR '78 APR '78 MAY '78 JUN '78 JUL '78 AUG '78 SEP '78 OCT '78 NOV '78 DEC '78

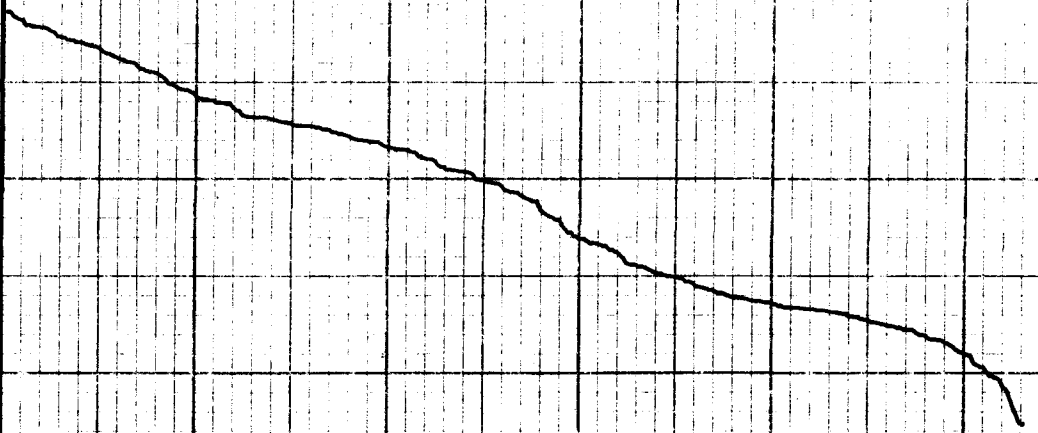


# ANNUAL SOLAR DURATION CURVE

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

60 120 180 240 300 360  
NUMBER OF DAYS



BUILDING APPLICATIONS DATA FOR ALAMOSA, COLO.

ACCOUNT/ 82850171  
CHANNELS 82850173

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	1.0 32.3	71.3 36.3	140.5 35.4	27.1	34.3	24.3	1137.8	0.0	30	0	837.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	1.5 46.1	41.8 40.5	108.8 39.5	164.7 38.7	30.7	37.6	27.0	927.2	0.0	27	0	1163.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 59.3	50.3 58.5	111.0 56.0	167.2 55.2	219.7 54.2	44.2	52.8	39.0	601.9	0.0	29	0	1551.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	33.5 63.6	105.8 63.6	156.2 62.6	204.0 61.7	252.5 61.0	52.3	60.2	46.2	355.2	0.0	28	0	2021.
5/78	NUM OF HOURS AVG TEMP (F)	0.8 67.7	58.3 71.7	115.2 70.6	164.0 69.7	216.7 68.5	263.0 67.2	56.6	65.0	50.0	277.3	0.0	25	0	2100.
6/78	NUM OF HOURS AVG TEMP (F)	1.3 81.4	90.3 83.6	155.0 82.9	203.5 81.9	250.7 80.8	301.7 79.8	68.4	76.8	61.4	15.5	2.8	4	1	2542.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	62.3 86.3	107.0 85.5	143.5 84.6	174.2 83.8	204.5 82.8	73.8	81.2	66.6	0.0	5.7	0	7	2540.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	60.8 82.4	121.7 81.2	173.7 80.3	222.0 79.3	270.5 78.4	69.1	77.3	62.8	2.2	0.0	2	0	2131.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	4.0 80.6	94.0 77.0	153.2 76.2	200.0 75.5	246.5 74.5	64.5	73.0	58.8	64.3	0.0	17	0	1899.
10/78	NUM OF HOURS AVG TEMP (F)	888.8 888.8	888.8 888.3	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	63.1	8888.0	8888.0	3.8	0.0	2	0	8888.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	11.5 50.0	76.5 45.5	119.5 44.9	36.7	43.5	33.8	679.2	0.0	24	0	967.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	7.0 19.5	75.3 23.3	151.0 21.2	14.2	20.6	11.6	1573.5	0.0	31	0	895.

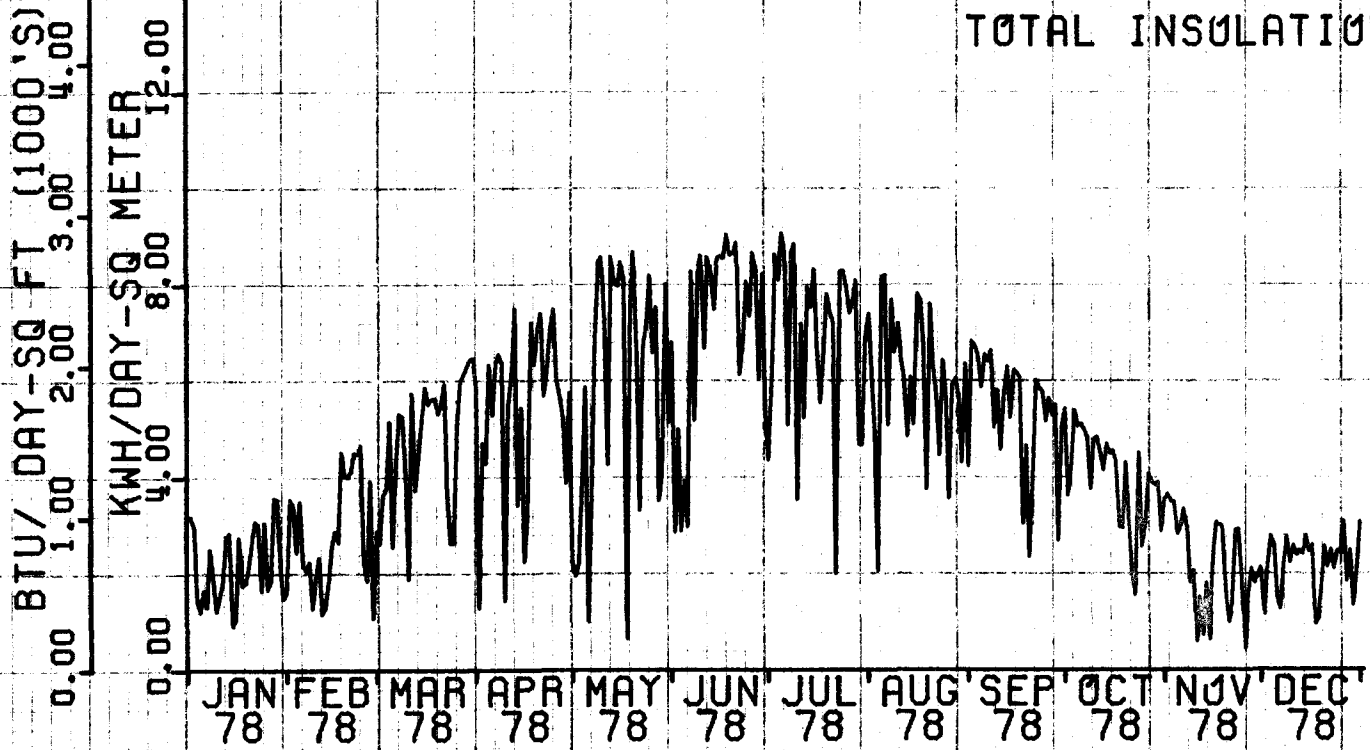
\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

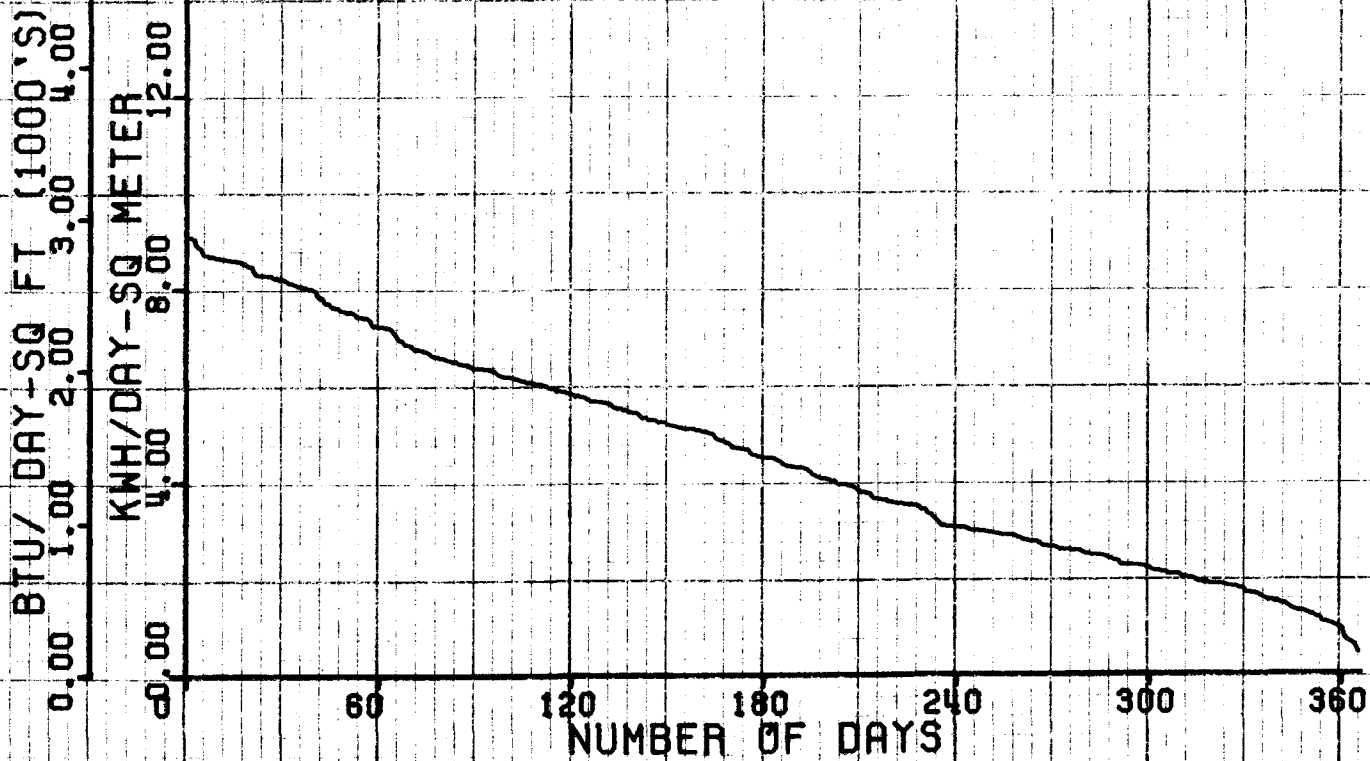


# ANNUAL DISTRIBUTION

CHEYENNE, WYO.  
TOTAL INSULATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR CHEYENNE, WYO.

ACCOUNT/ 82850581  
CHANNELS 82850583

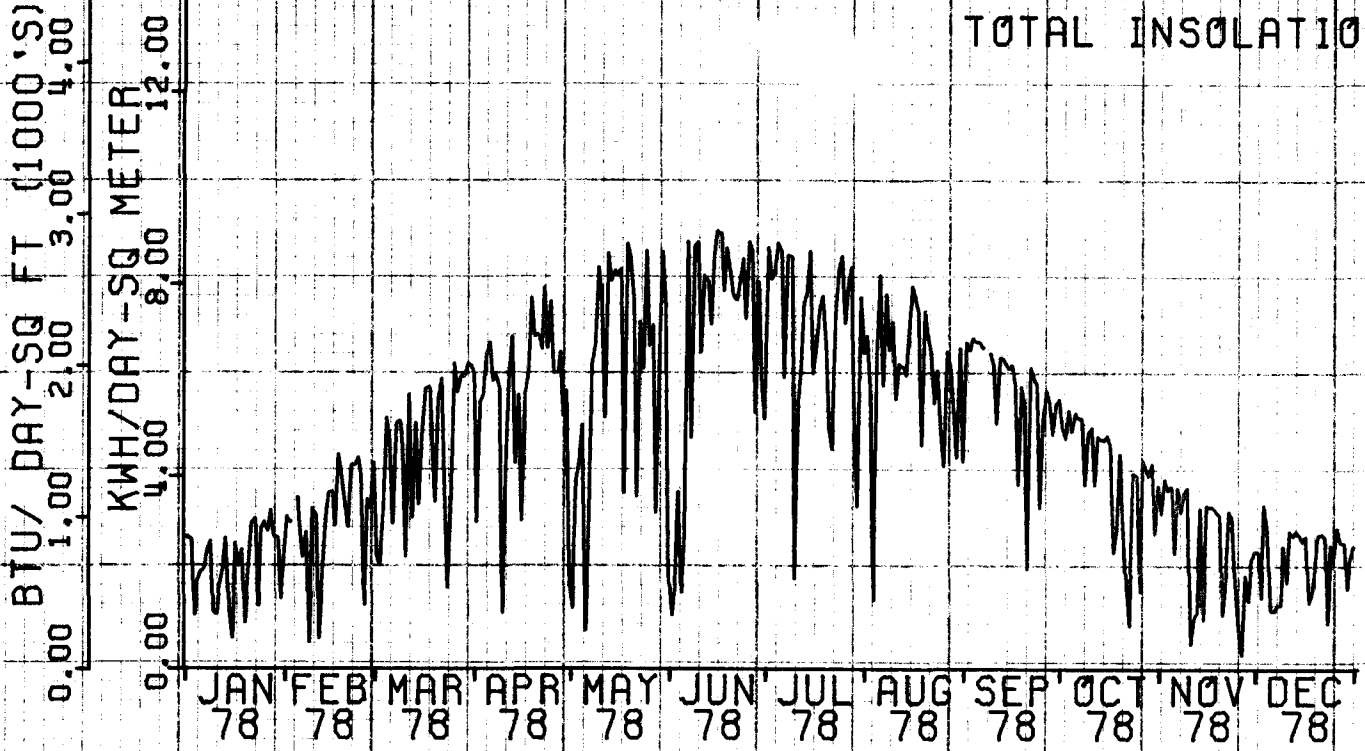
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
		NUM OF HOURS	AVG TEMP (F)	NUM OF HOURS	AVG TEMP (F)	NUM OF HOURS	AVG TEMP (F)								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	30.0 28.5	83.3 28.6	22.4	27.9	20.7	1320.2	0.0	31	0	589.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	21.3 35.3	58.5 35.6	108.0 34.3	25.5	31.9	23.0	1106.1	0.0	28	0	820.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.3 62.3	31.3 56.5	95.5 52.7	150.2 49.9	208.2 47.9	38.4	45.7	34.0	825.9	0.0	31	0	1451.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	14.3 51.0	70.3 53.4	109.5 53.4	154.5 53.0	203.0 52.2	44.0	50.3	40.0	630.4	0.0	30	0	1599.
5/78	NUM OF HOURS AVG TEMP (F)	0.5 49.6	45.8 62.8	87.5 63.6	130.7 63.0	174.2 62.4	236.7 60.6	50.5	58.3	45.1	454.8	0.0	28	0	1810.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	59.0 77.3	113.2 76.8	156.2 75.8	203.0 74.9	257.0 73.8	64.4	71.7	57.4	113.3	0.3	12	1	2121.
7/78	NUM OF HOURS AVG TEMP (F)	0.5 85.9	58.5 83.7	119.7 83.1	168.2 82.4	221.0 81.6	272.0 80.7	71.1	79.2	64.5	19.8	12.4	4	8	2147.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	18.3 79.1	82.5 78.3	134.0 77.6	183.7 77.0	236.2 76.4	65.9	74.7	59.7	64.3	0.0	10	0	1789.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	1.3 74.7	48.0 78.0	120.0 75.5	172.2 74.1	229.0 72.7	60.9	71.2	54.0	191.2	0.6	18	1	1663.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.5 62.8	53.3 60.7	127.2 60.5	186.2 59.5	48.0	57.7	43.1	526.5	0.0	31	0	1190.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	2.0 64.4	33.8 52.1	82.3 49.7	31.8	44.0	28.3	994.8	0.0	30	0	593.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	18.3 20.9	100.3 26.7	20.3	25.0	18.9	1384.3	0.0	31	0	619.

\*NOTE\*

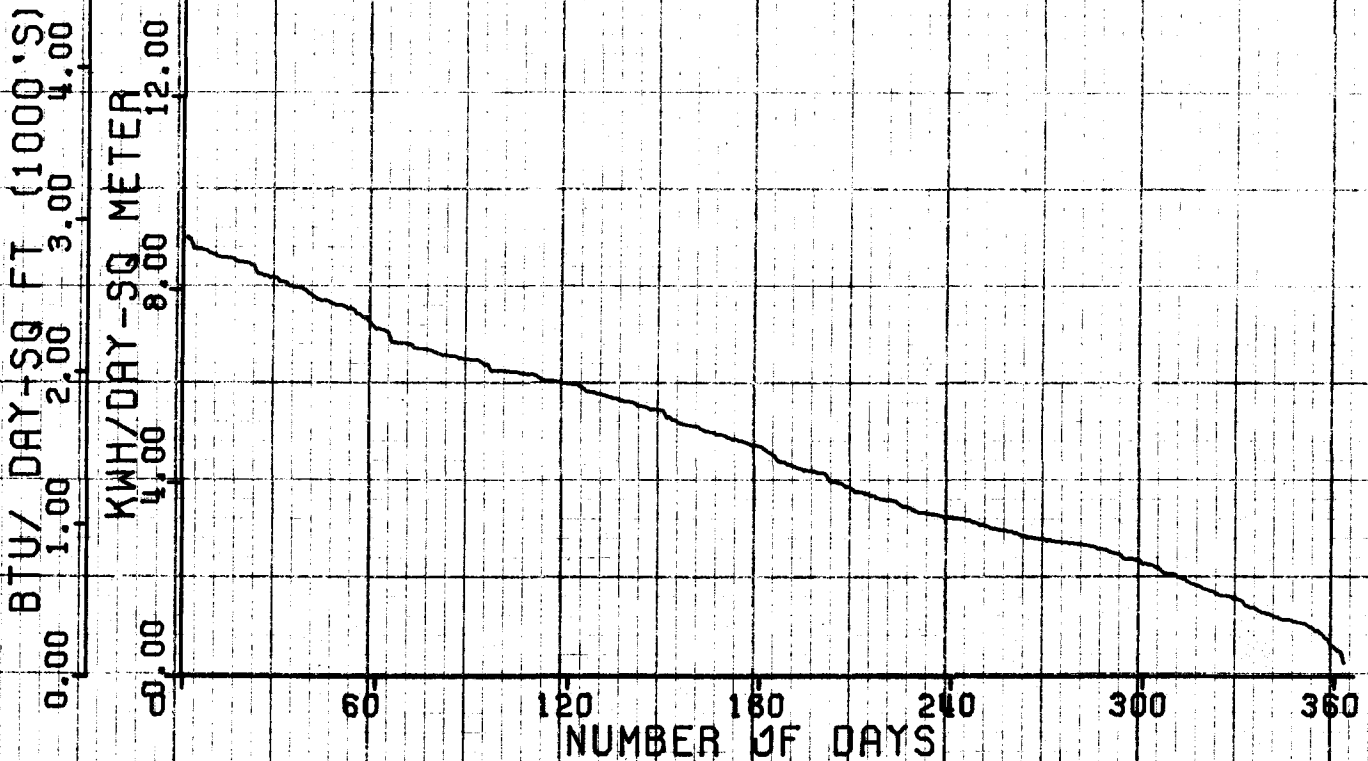
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

DENVER 1, COLO.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR DENVER 1, COLO.

ACCOUNT/ 82850251  
CHANNELS 82850253

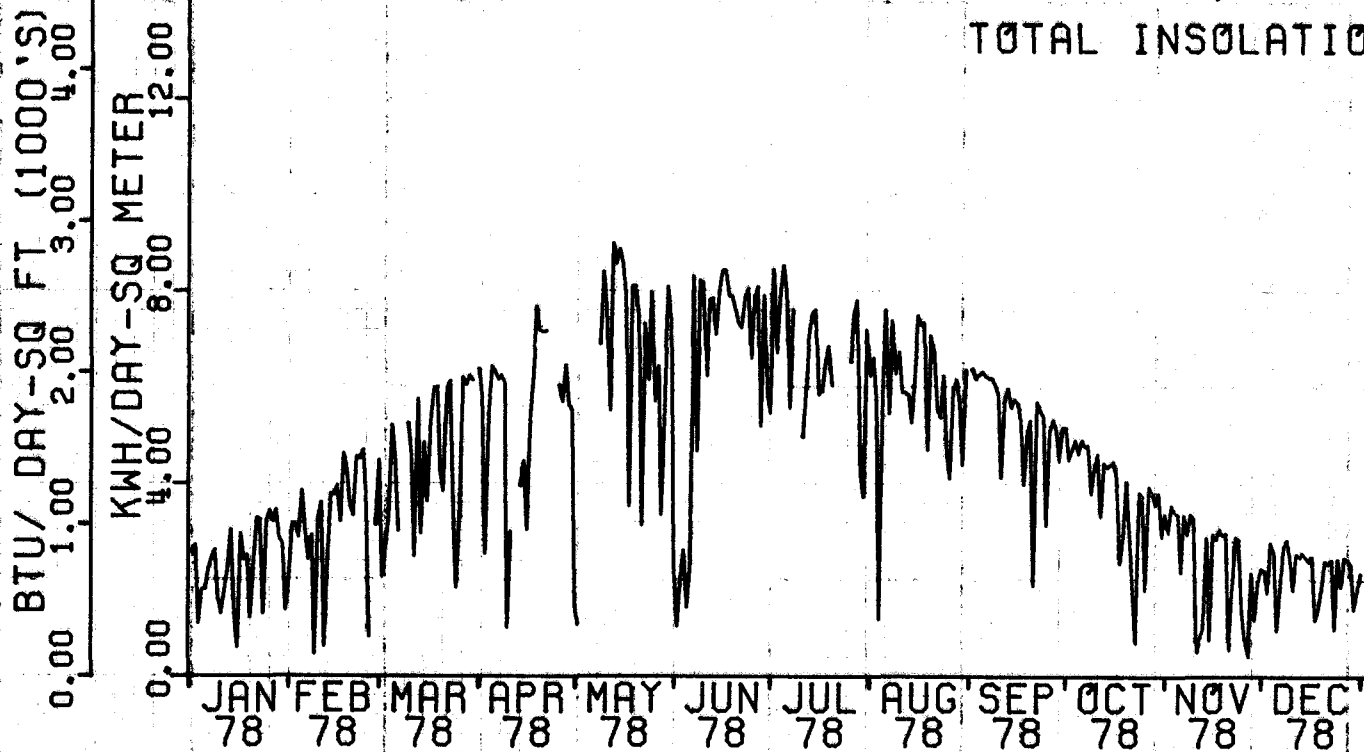
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	25.0 32.6	94.3 35.2	26.8	34.5	24.3	1145.5	0.0	30	0	593.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.3 63.2	11.8 47.9	77.3 43.7	134.5 41.6	30.7	39.6	27.4	890.9	0.0	26	0	921.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	32.3 64.5	94.3 60.6	141.0 58.1	202.0 55.6	44.2	53.2	39.2	624.5	0.0	29	0	1392.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	12.5 61.6	77.8 62.9	123.0 61.7	175.2 60.6	223.7 59.6	51.6	58.3	47.2	402.1	0.0	30	0	1728.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	43.3 74.2	97.0 73.5	138.2 72.3	183.2 70.8	238.5 68.8	57.6	66.4	51.4	273.2	1.3	23	1	1853.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	62.0 86.0	118.2 85.6	162.0 84.8	203.7 83.4	246.7 81.9	71.2	80.0	64.1	62.7	54.7	6	13	2072.
7/78	NUM OF HOURS AVG TEMP (F)	0.3 79.3	55.5 92.1	124.7 90.7	177.2 89.7	222.5 88.9	271.0 87.7	78.1	86.2	71.6	0.0	119.3	0	21	2155.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	22.0 87.8	101.3 86.5	149.5 85.4	193.0 84.6	239.0 83.0	72.8	81.3	66.4	12.0	28.9	2	11	1879.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	71.8 82.9	135.7 81.7	183.2 80.6	230.7 79.1	67.2	76.9	61.0	67.0	15.8	11	6	1780.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	2.3 75.1	70.8 67.7	132.2 66.9	185.2 66.1	53.9	64.6	48.7	337.1	0.0	28	0	1215.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	1.8 68.7	62.3 58.0	111.3 55.6	38.1	51.3	33.9	807.5	0.0	30	0	710.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	32.8 37.4	100.5 39.7	25.5	35.4	22.4	1223.2	0.0	31	0	641.

\*NOTE\*

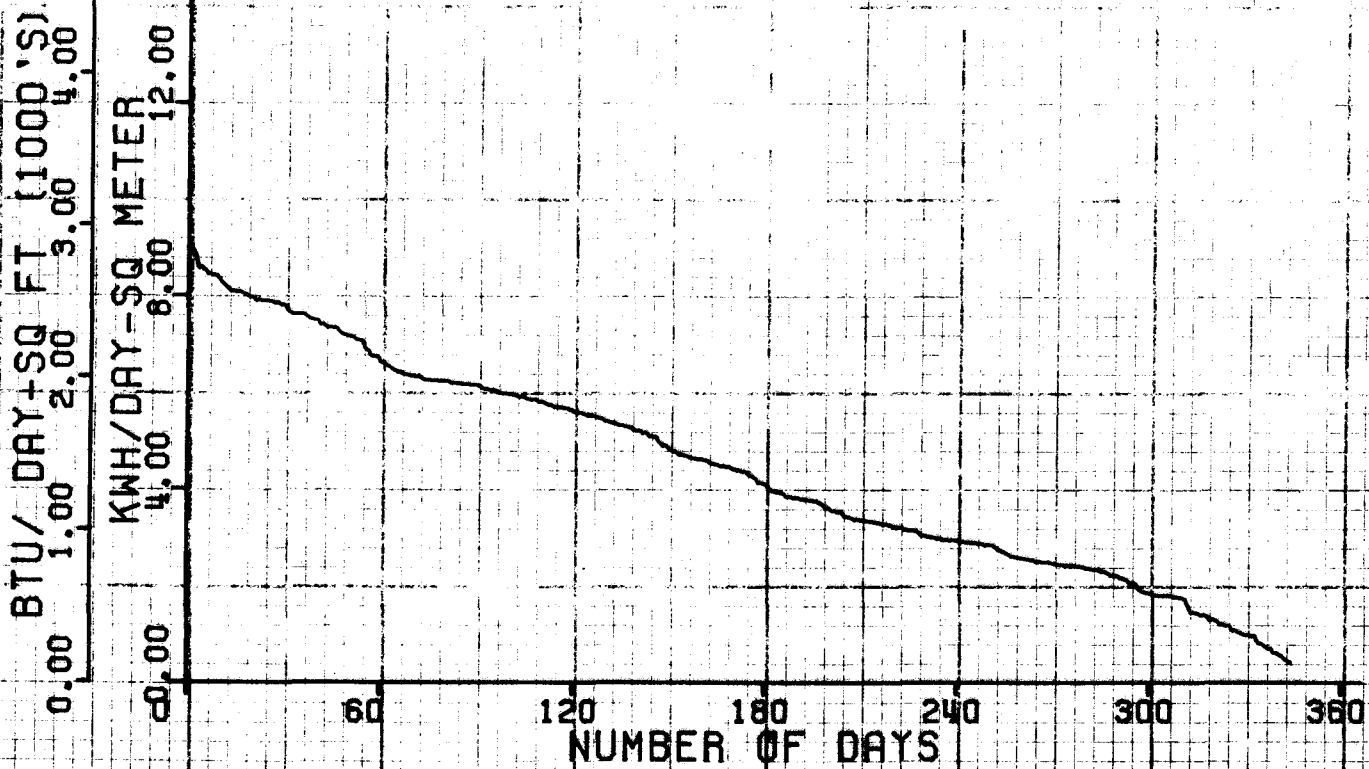
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

DENVER 2, COLO.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR DENVER 2, COLO.

ACCOUNT/ 82850331  
CHANNELS 82850333

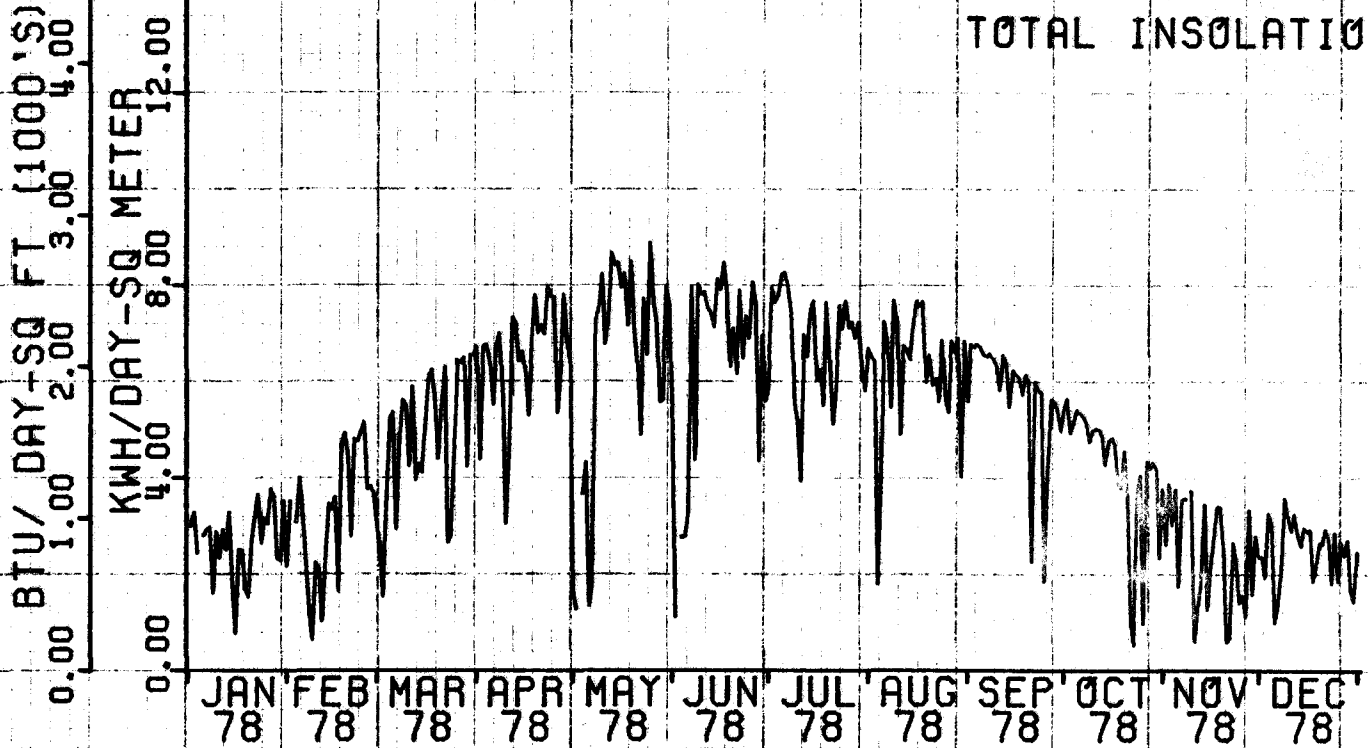
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.3 22.2	38.8 32.6	100.8 33.6	27.9	33.0	26.3	1149.0	0.0	31	0	640.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.5 63.5	27.5 44.5	90.3 41.2	144.5 40.5	31.5	38.7	29.0	871.1	0.0	26	0	964.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	32.3 63.2	88.3 59.3	140.5 56.3	197.2 54.1	44.7	52.1	41.0	568.9	0.0	28	0	1385.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	10.3 65.0	70.8 63.4	113.7 62.7	159.2 61.4	205.0 60.1	53.1	58.6	49.5	266.6	0.0	20	0	1606.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	35.8 76.0	86.8 74.9	122.2 74.0	162.0 73.2	205.7 71.9	61.1	71.1	56.0	159.9	3.9	16	1	1922.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	35.5 86.4	106.3 85.6	151.2 84.8	194.2 83.8	238.0 82.8	71.7	80.1	65.9	63.9	65.7	7	13	1950.
7/78	NUM OF HOURS AVG TEMP (F)	1.0 95.0	22.5 93.8	94.5 91.8	142.2 90.6	181.2 89.5	227.0 88.3	79.8	86.7	74.2	0.0	122.4	0	20	2005.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	3.8 85.4	88.5 86.1	139.0 85.3	185.7 84.6	232.7 83.3	74.0	81.9	68.3	11.0	46.6	2	17	1805.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	30.8 86.4	122.0 81.8	179.5 80.7	231.5 79.2	69.7	77.7	64.5	55.2	39.2	9	11	1639.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.5 85.8	41.3 67.3	118.7 66.6	180.2 65.5	56.0	64.5	51.8	294.8	0.0	27	0	1129.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	41.3 58.6	99.3 55.3	39.8	52.4	36.2	755.6	0.0	30	0	620.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	6.0 18.3	100.5 36.7	27.6	35.3	25.1	1159.5	0.0	31	0	599.

\*NOTE\*

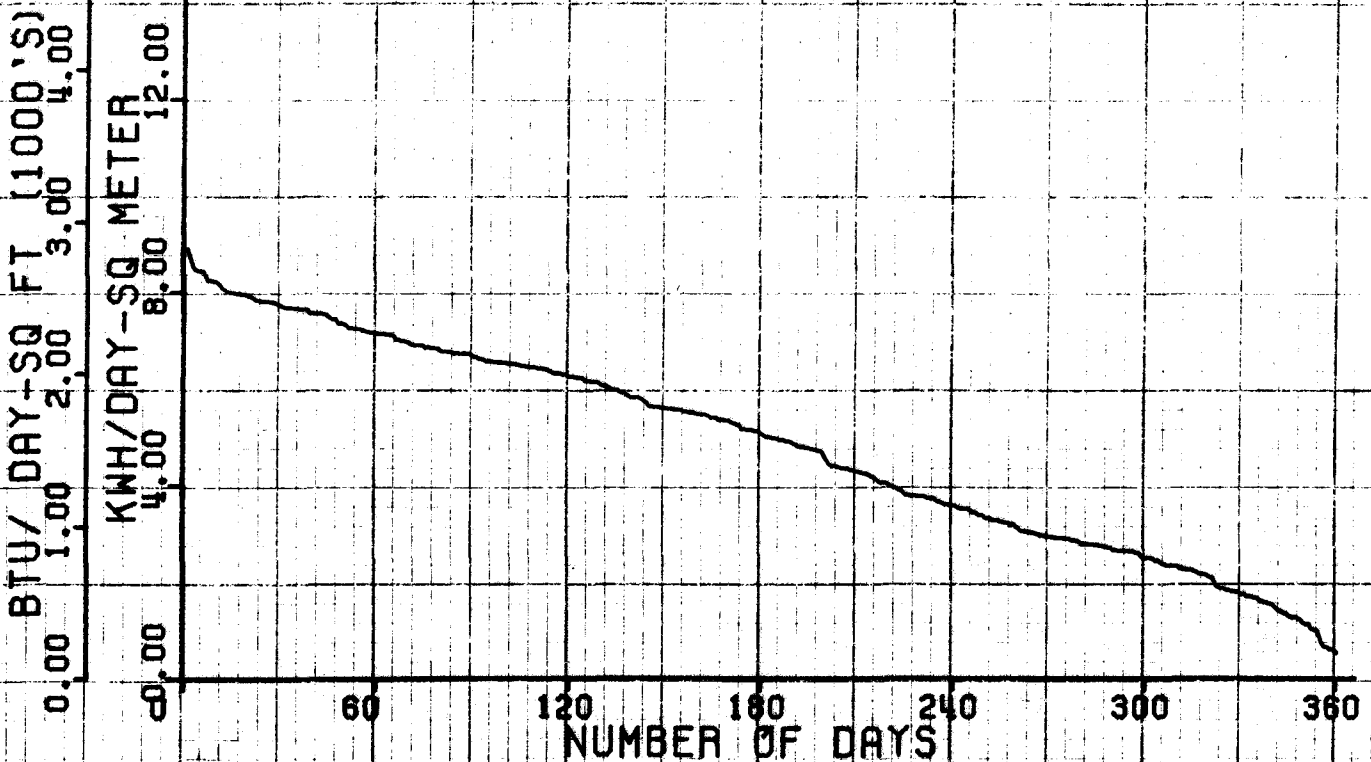
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

PUEBLO, COLO.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR PUEBLO, COLO.

ACCOUNT/ 82850661  
CHANNELS 82850663

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.5 32.1	59.3 40.2	128.5 37.9	29.4	35.7	27.3	1069.2	0.0	30	0	773.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	38.8 47.2	87.0 45.7	132.2 43.8	33.3	40.6	30.4	854.7	0.0	27	0	960.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	49.0 67.5	108.5 63.7	159.5 61.3	212.2 59.4	49.4	57.6	44.5	480.0	0.0	27	0	1498.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	20.0 66.8	106.5 67.7	153.2 67.2	200.0 66.8	242.7 66.0	58.9	64.8	54.7	197.7	0.0	24	0	1942.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	44.3 78.7	99.8 78.7	145.2 77.9	192.7 77.0	249.5 75.5	64.9	72.9	58.5	135.0	9.3	11	4	1991.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	12.8 90.3	103.3 89.9	145.5 89.5	191.7 88.3	242.5 87.0	77.6	85.5	71.4	21.2	161.8	4	21	1958.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	9.3 99.8	109.8 95.5	173.7 94.7	221.0 93.7	276.0 92.7	84.2	91.1	78.6	0.0	276.0	0	29	2093.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	12.5 94.1	99.8 90.4	155.0 89.5	202.2 88.7	251.0 87.6	78.9	86.0	73.9	0.0	149.5	0	24	1906.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	63.0 86.7	138.5 84.9	189.0 83.9	239.7 82.5	73.1	80.8	67.8	24.4	68.0	4	13	1774.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	2.8 85.8	74.8 74.8	145.0 72.4	195.7 71.3	59.0	69.4	53.8	209.1	0.0	24	0	1264.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.8 37.8	47.8 58.1	96.5 56.7	42.8	53.1	39.8	643.6	0.0	29	0	662.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	1.5 6.6	39.8 37.6	118.7 39.4	31.8	37.1	29.2	995.6	0.0	30	0	725.

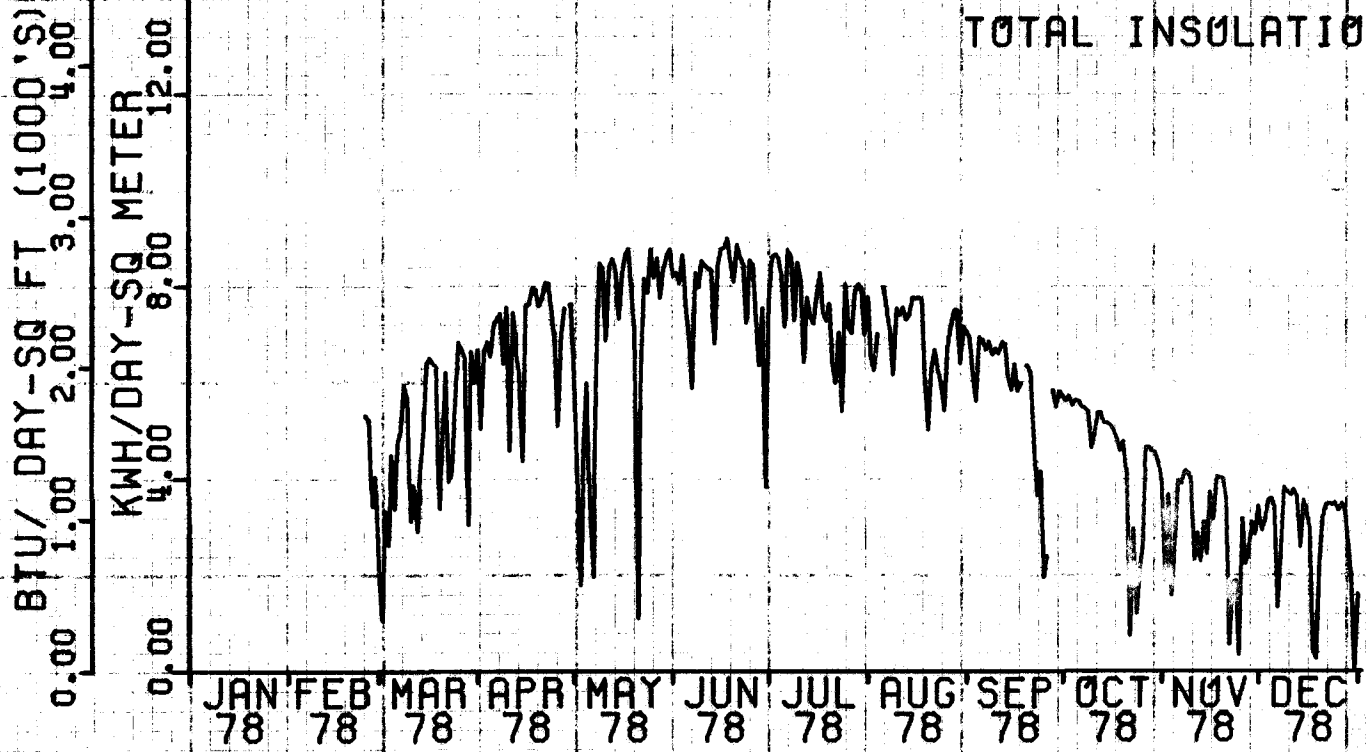
\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

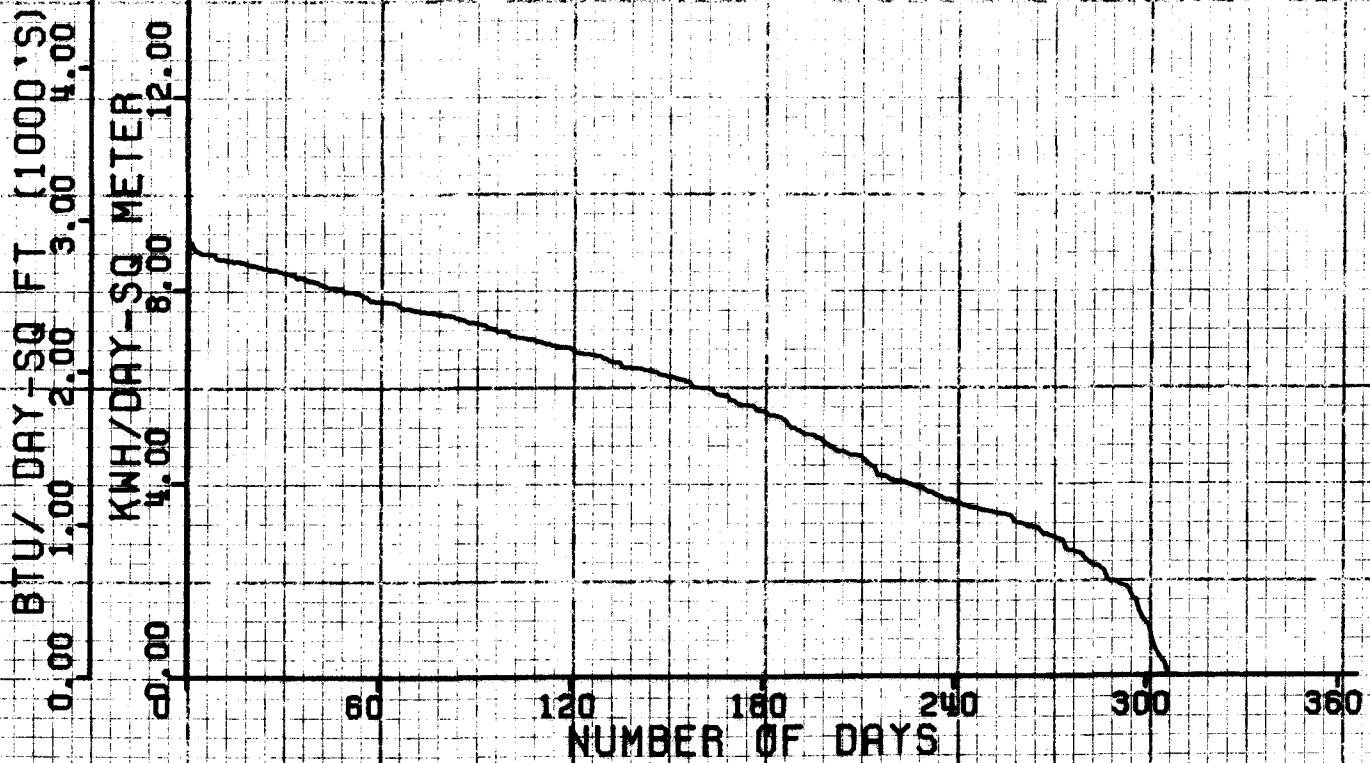


# ANNUAL DISTRIBUTION

ALBUQUERQUE, N.M.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR ALBUQUERQUE, N.M.

ACCOUNT/  
CHANNELS 82860151  
82860153

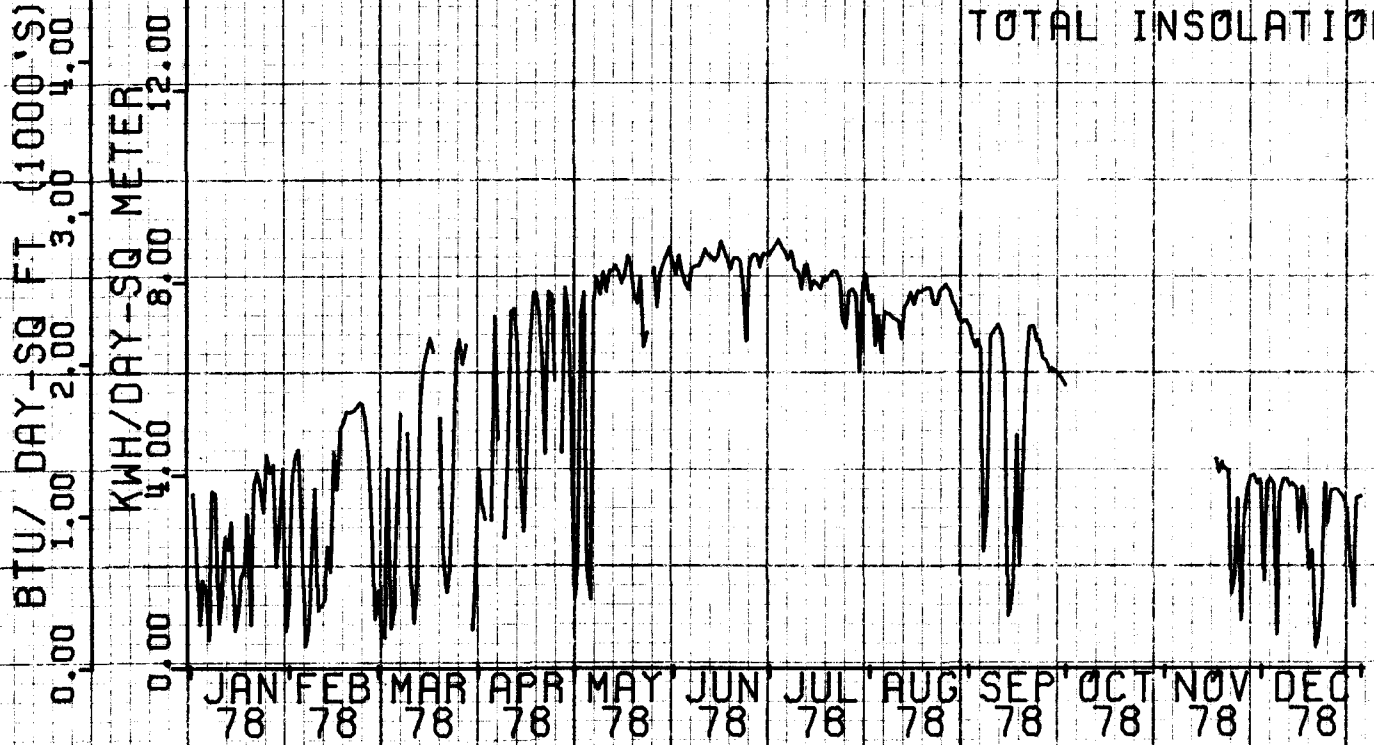
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	36.7	8888.0	8888.0	878.7	0.0	31	0	8888.
2/78	NUM OF HOURS AVG TEMP (F)	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	38.9	8888.0	8888.0	730.8	0.0	28	0	8888.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 51.8	53.3 59.3	103.0 58.8	149.2 57.6	204.7 56.4	48.8	55.1	45.3	500.8	0.0	31	0	1473.
4/78	NUM OF HOURS AVG TEMP (F)	0.3 70.0	52.5 67.5	118.7 67.4	169.0 67.1	216.2 66.4	264.5 65.7	57.8	64.6	52.6	202.9	0.0	27	0	2133.
5/78	NUM OF HOURS AVG TEMP (F)	0.8 60.5	72.8 74.4	125.7 74.0	170.5 73.0	216.0 72.0	262.0 70.6	61.7	68.9	56.3	166.0	0.0	14	0	2131.
6/78	NUM OF HOURS AVG TEMP (F)	1.5 82.9	83.5 85.9	143.0 85.3	192.0 84.6	242.2 83.9	289.5 83.0	75.6	81.6	70.1	2.3	83.4	1	15	2441.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	78.8 89.6	153.0 89.3	198.7 88.5	240.7 87.6	286.2 86.7	79.4	85.6	74.2	0.0	143.9	0	28	2343.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	34.0 84.7	125.2 83.3	181.2 82.6	227.7 81.8	268.2 81.1	73.7	79.9	69.3	0.0	26.6	0	12	2134.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	1.5 74.4	78.0 77.9	136.7 77.2	186.0 76.5	231.5 75.5	68.1	74.0	63.9	33.7	0.0	8	0	1777.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	10.5 72.9	97.5 69.1	153.0 68.1	205.5 67.2	58.5	65.8	54.7	212.5	0.0	25	0	1369.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	19.5 53.1	75.8 52.3	128.5 51.5	45.6	50.9	43.6	581.2	0.0	30	0	851.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	1.8 23.0	87.3 36.1	140.2 36.1	31.6	35.9	30.1	1034.6	0.0	31	0	838.

\*NOTE\*

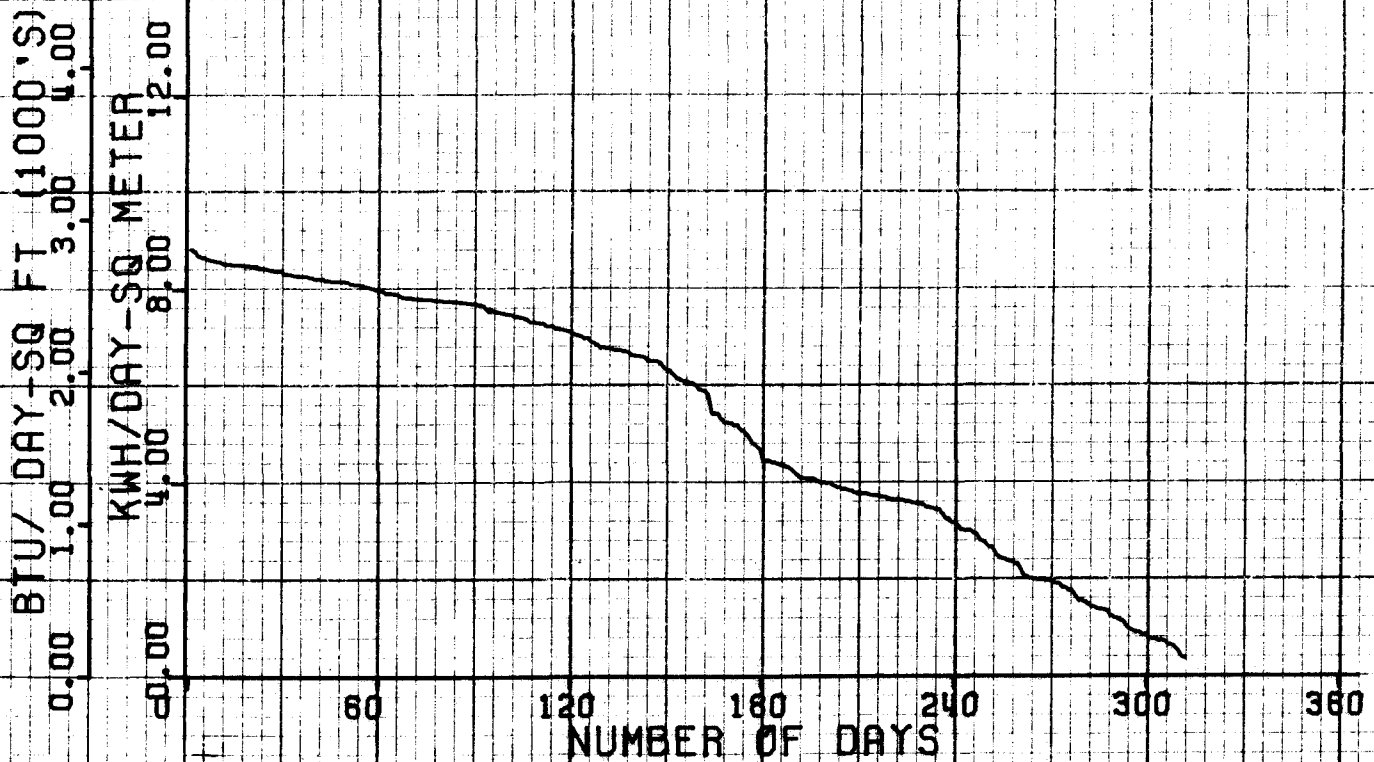
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

ALPINE, CALIF.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR ALPINE, CALIF.

ACCOUNT/ 82824101  
CHANNELS 82824103

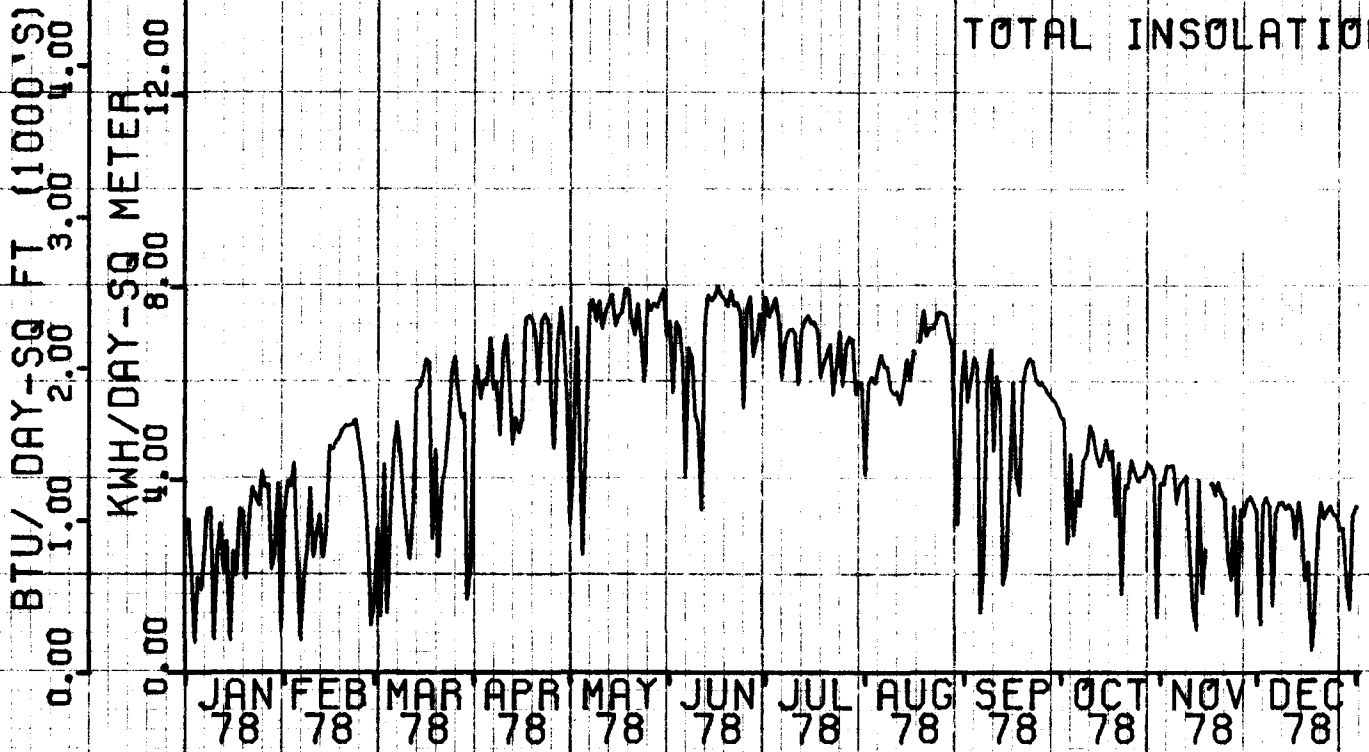
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.3 58.2	14.0 60.5	59.0 61.1	107.3 60.5	53.2	59.3	51.4	355.0	0.0	30	0	689.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	2.8 70.2	52.8 63.7	93.8 62.5	136.2 61.2	53.2	59.9	50.6	318.8	0.0	26	0	1003.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.3 55.8	39.5 69.8	77.5 67.9	111.5 66.4	149.0 64.9	55.6	62.6	52.8	286.1	0.2	24	1	1093.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	25.5 69.0	72.8 68.4	112.0 66.9	157.2 65.3	204.0 63.9	55.9	62.5	51.5	226.4	0.0	25	0	1676.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	72.0 78.6	140.0 77.6	190.7 76.6	235.0 75.5	280.5 74.3	65.3	73.0	59.0	99.5	14.8	17	5	2270.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	84.3 86.6	164.2 85.4	221.2 84.4	267.2 83.4	309.2 82.5	73.6	81.3	66.6	10.4	74.5	6	13	2598.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	64.0 89.2	156.5 89.4	215.2 88.6	267.7 87.8	314.5 86.8	78.4	85.7	71.6	0.0	130.2	0	22	2503.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	29.8 86.1	141.0 87.3	200.7 86.4	251.5 85.5	297.0 84.6	75.3	83.4	68.2	0.0	50.4	0	14	2313.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	1.3 74.3	76.0 87.9	130.5 87.6	174.7 86.5	213.2 85.4	73.4	83.1	67.7	24.0	115.5	7	13	1660.
10/78	NUM OF HOURS AVG TEMP (F)	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	888.8 888.8	66.6	8888.0	8888.0	8.9	0.0	3	0	8888.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	15.0 68.0	55.8 68.0	80.0 67.0	55.1	65.3	50.9	148.8	0.0	15	0	1005.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.3 60.0	84.3 65.2	144.0 65.1	52.7	63.7	48.7	369.7	0.0	30	0	871.

\*NOTEX

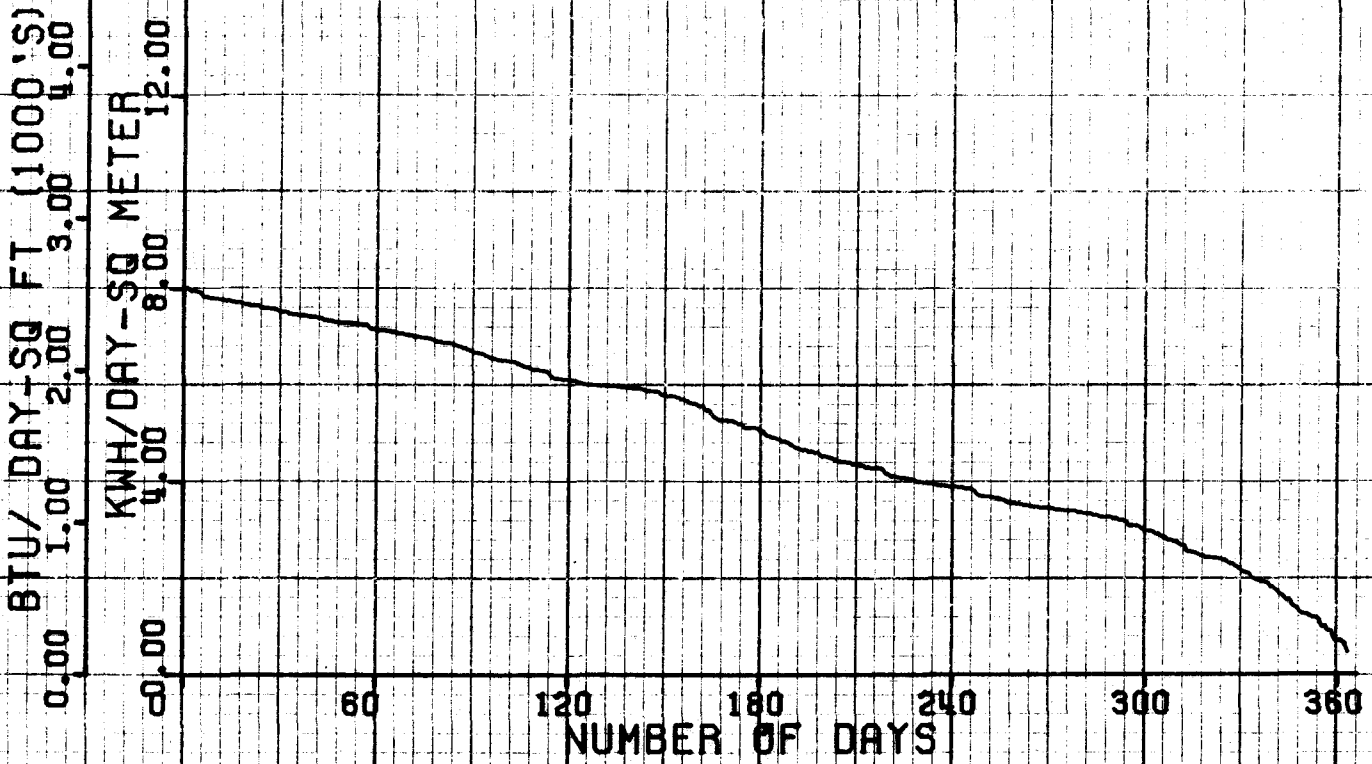
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

CHULA VISTA, CA.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR CHULA VISTA, CA.

ACCOUNT/ 82824281  
CHANNELS 82824283

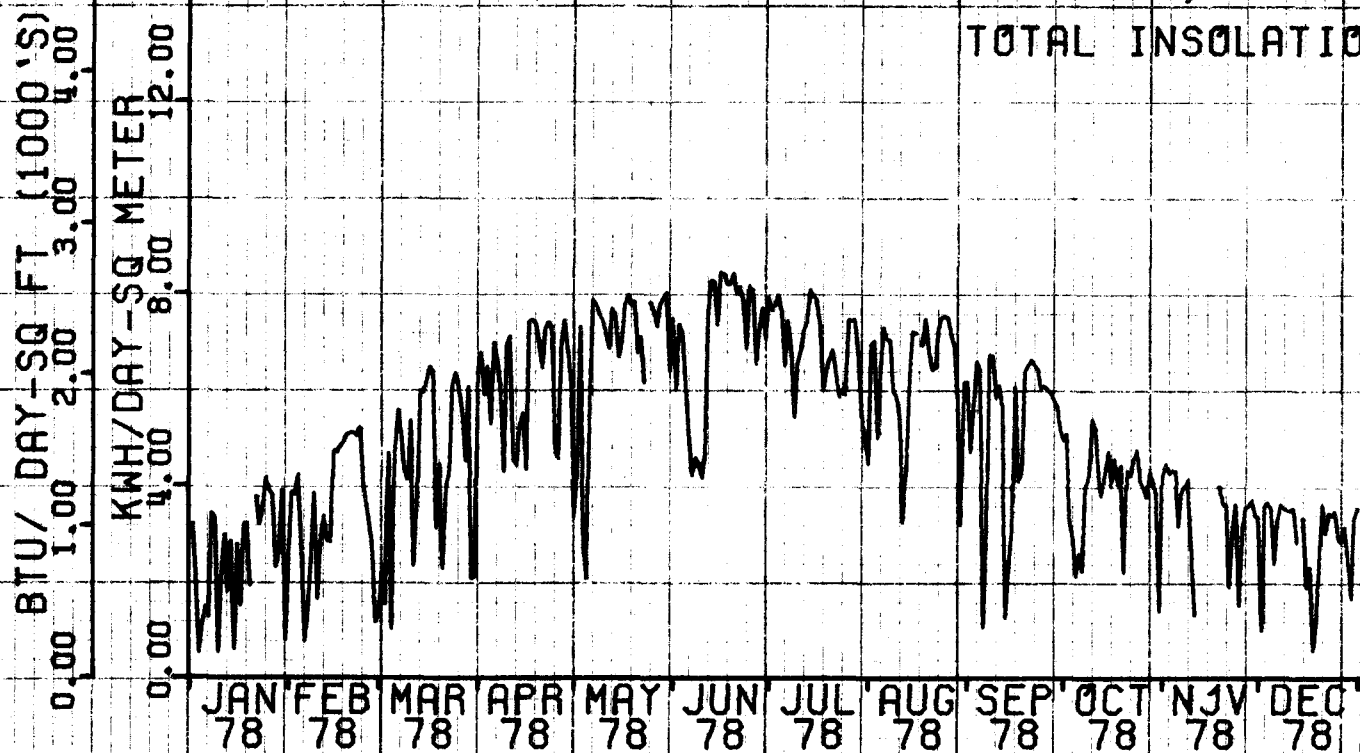
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	7.3 66.9	64.5 67.4	119.5 66.7	57.7	65.1	55.1	217.8	0.0	30	0	768.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	49.8 68.9	96.5 67.3	144.5 66.1	57.7	64.6	54.7	196.7	0.0	27	0	1062.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	36.0 74.1	84.3 71.9	125.5 70.6	179.7 69.1	61.2	67.5	57.8	125.6	0.0	26	0	1281.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	8.3 66.9	95.8 67.3	147.7 67.1	196.7 66.7	240.7 66.3	60.1	65.3	56.5	140.9	0.0	29	0	1902.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	24.0 74.3	122.7 72.6	181.7 72.4	233.5 72.0	280.0 71.2	64.9	70.2	60.2	46.5	0.0	16	0	2181.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	19.0 76.5	119.0 75.5	173.7 75.4	215.2 75.1	264.0 74.5	67.9	73.3	63.7	5.8	0.0	6	0	2120.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	10.8 70.9	112.7 74.3	175.7 74.3	221.0 74.1	264.0 73.8	68.6	73.0	65.0	1.4	0.1	3	1	2057.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	3.8 75.5	104.0 75.3	169.0 75.4	216.7 75.2	262.5 74.8	69.6	74.2	66.2	0.0	0.0	0	0	1962.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	56.8 80.7	117.5 80.9	165.0 80.5	211.7 79.6	71.3	78.0	67.1	0.2	29.3	2	5	1589.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.3 74.2	64.5 75.9	131.0 75.4	188.5 74.6	67.5	73.6	64.4	5.1	0.0	5	0	1202.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	15.5 70.2	98.0 69.2	150.7 68.0	58.0	66.2	54.7	195.4	0.0	28	0	958.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.3 64.7	73.0 64.2	138.7 63.3	52.3	61.4	49.0	381.2	0.0	30	0	824.

\*NOTE\*

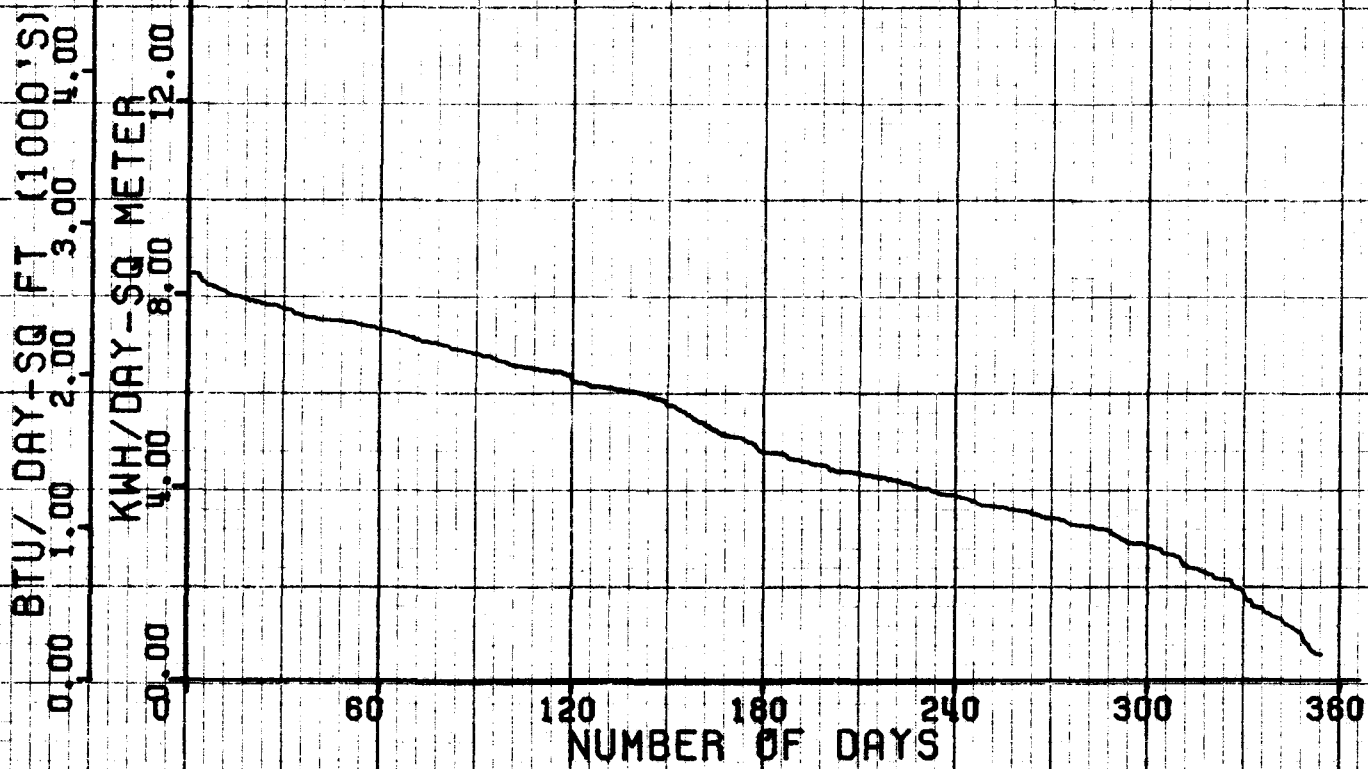
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

CARLSBAD, CALIF.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR CARLSBAD, CALIF.

ACCOUNT/ 82824511  
CHANNELS 82824513

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	6.3 66.3	58.0 65.0	107.0 64.3	57.6	63.0	55.9	213.8	0.0	29	0	693.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	46.8 66.5	94.5 65.6	139.0 64.8	58.8	63.7	56.9	167.7	0.0	26	0	1023.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	40.0 71.0	91.3 70.0	137.7 69.3	185.2 68.6	62.7	67.6	60.0	82.6	0.0	22	0	1339.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	9.5 67.4	96.5 67.6	148.2 67.5	194.2 67.3	240.2 66.8	61.6	66.0	58.6	98.6	0.0	29	0	1879.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	22.0 71.7	132.7 72.0	180.5 71.9	222.5 71.7	268.2 71.1	65.5	70.2	61.8	25.3	0.0	12	0	2132.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	43.0 74.7	119.5 74.1	173.0 73.7	221.5 73.3	263.0 72.9	67.9	72.1	64.7	0.0	0.0	0	0	2148.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	25.0 74.1	112.5 74.8	175.5 74.5	227.2 74.2	270.2 73.9	69.6	73.3	66.7	0.0	0.0	0	0	2083.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	12.0 76.0	110.3 76.3	170.2 76.1	210.7 76.0	251.5 75.7	71.1	75.1	68.3	0.0	0.0	0	1	1955.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	62.8 78.5	120.0 78.8	164.7 78.5	211.0 78.0	72.1	77.0	69.1	0.0	17.4	0	5	1586.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	1.8 76.7	62.8 75.1	117.2 74.5	179.2 73.8	68.4	73.0	66.1	1.3	0.0	1	0	1161.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	13.3 71.4	82.8 68.6	132.2 67.6	60.5	66.4	57.9	103.7	0.0	22	0	1021.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.3 58.8	77.8 62.6	142.2 61.9	54.1	61.0	51.3	304.0	0.0	28	0	839.

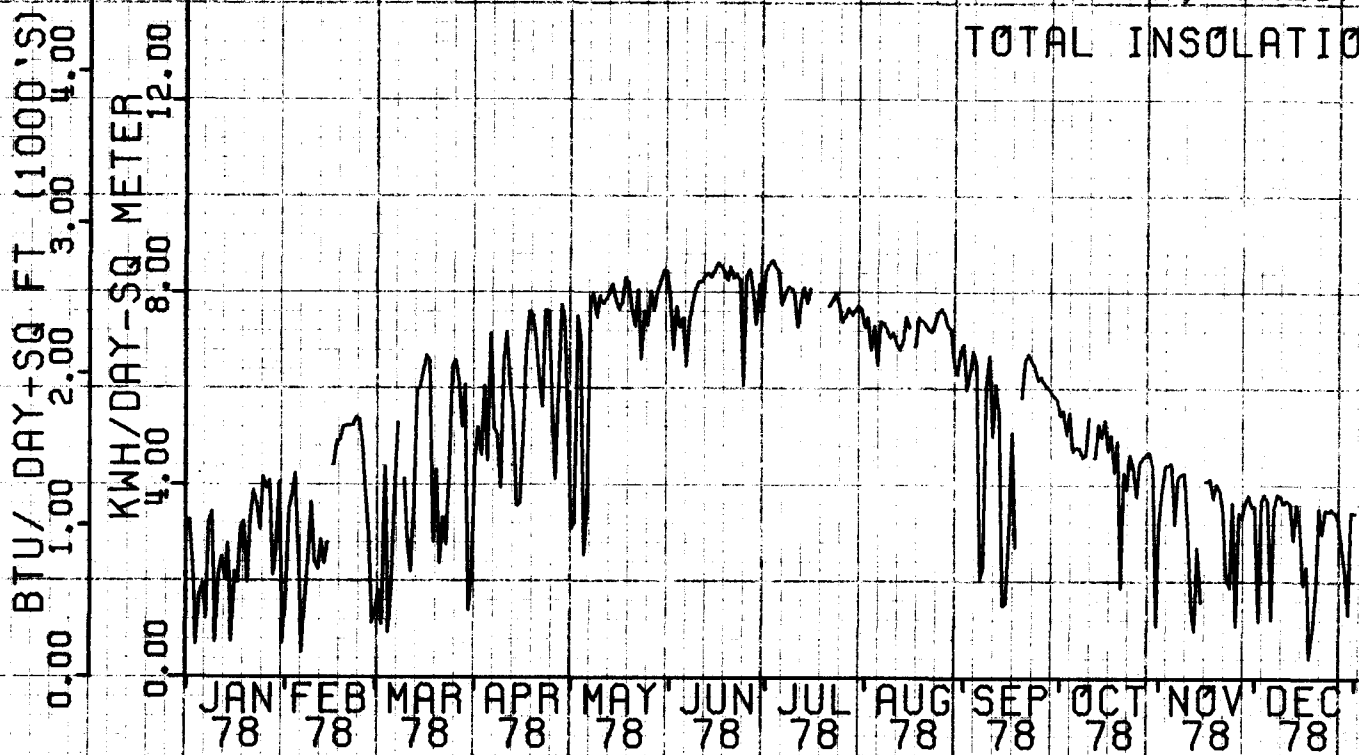
\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

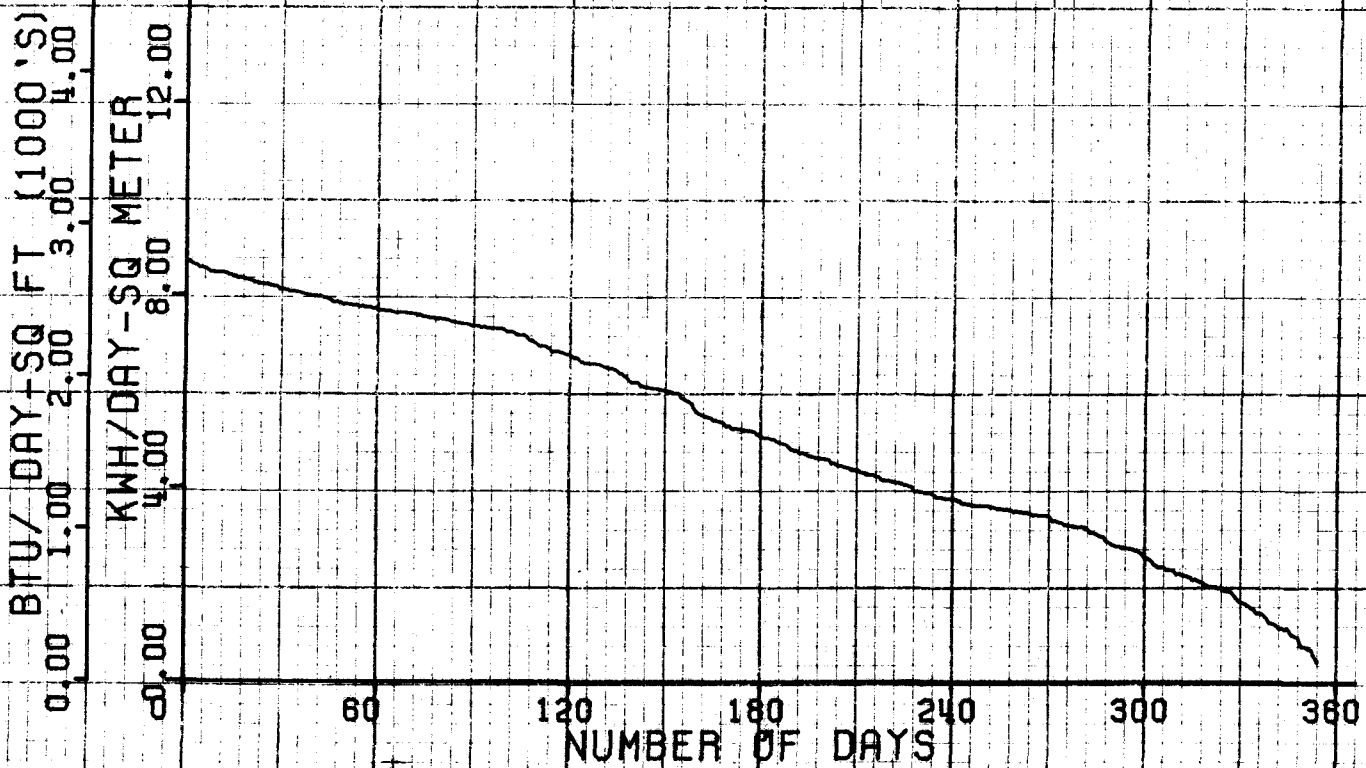


# ANNUAL DISTRIBUTION

EL CAJON, CALIF.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



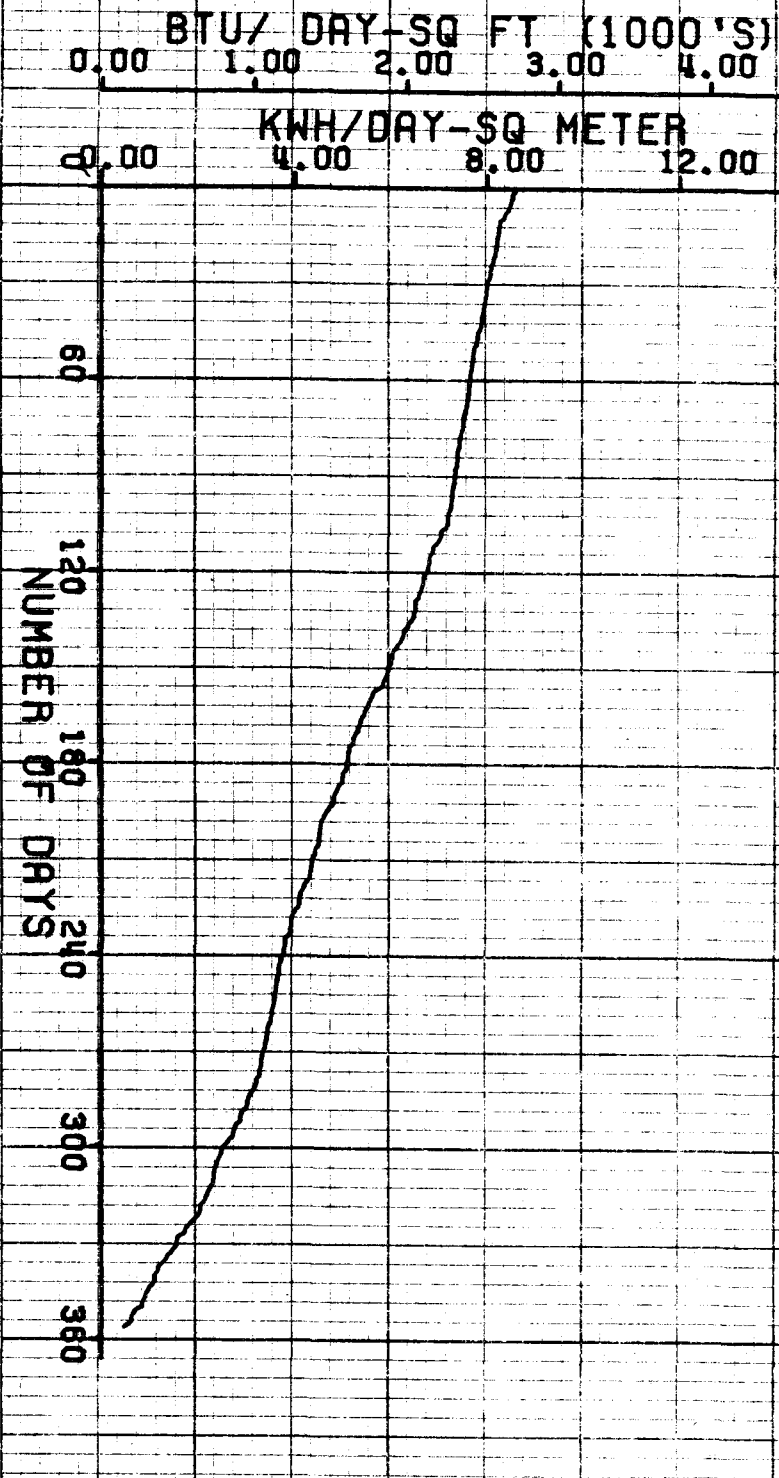
BUILDING APPLICATIONS DATA FOR EL CAJON, CALIF.

ACCOUNT/  
CHANNELS 82824441  
82824443

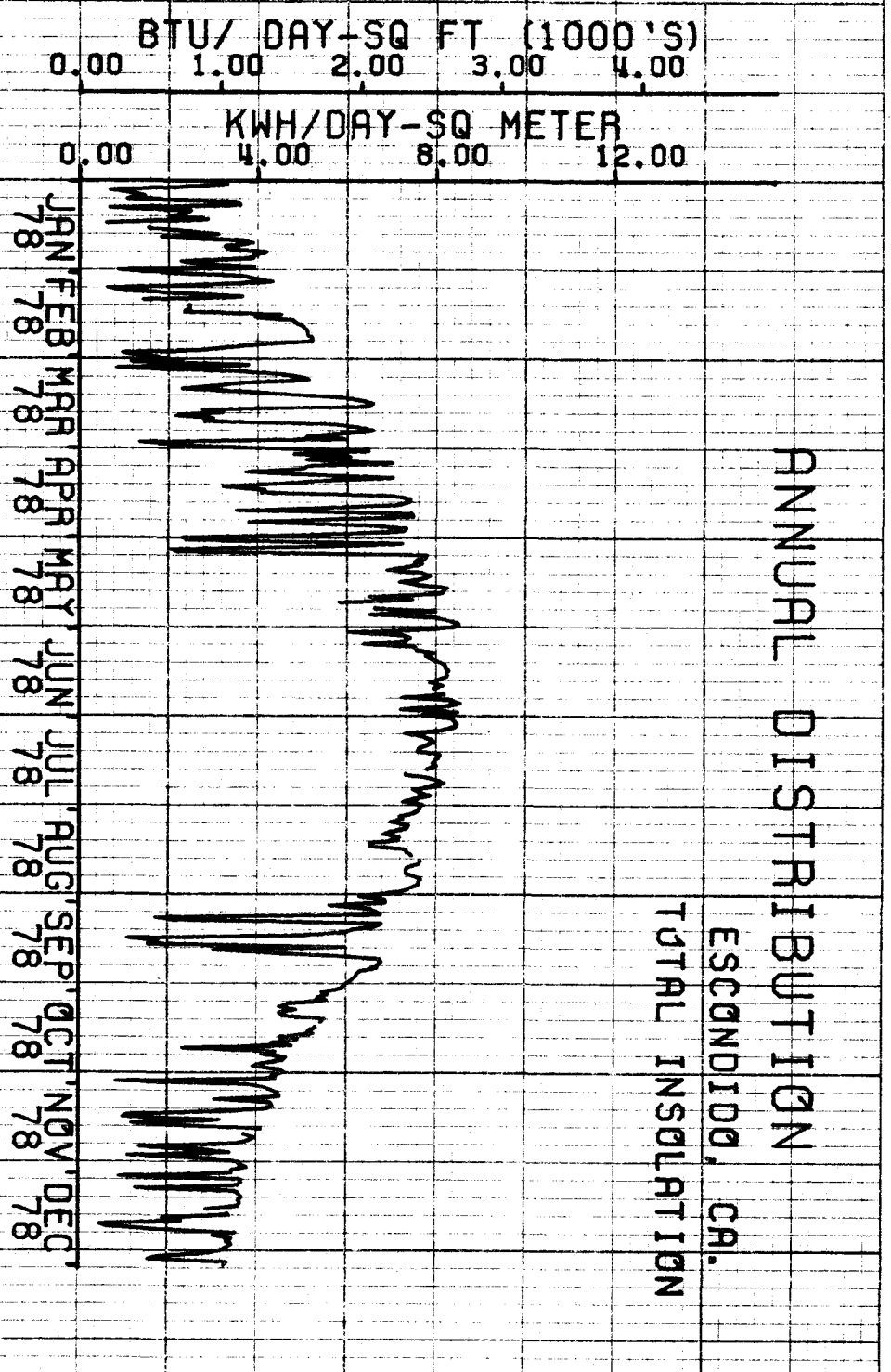
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	9.3 69.2	58.8 68.4	106.3 67.0	55.9	64.4	53.0	274.3	0.0	30	0	714.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.3 76.7	48.0 72.5	91.3 70.2	140.7 67.8	56.4	65.6	52.3	224.2	0.0	26	0	1037.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.8 66.9	38.8 77.8	76.5 75.4	114.7 73.0	164.5 70.6	60.3	68.1	56.4	145.1	0.0	24	0	1202.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	15.5 69.8	83.5 69.7	131.2 68.7	175.7 67.7	226.0 66.6	58.9	65.2	54.6	176.4	0.0	29	0	1780.
5/78	NUM OF HOURS AVG TEMP (F)	0.3 70.3	58.8 79.0	140.2 78.2	190.2 77.3	239.0 76.3	283.5 75.0	66.0	73.5	59.6	47.9	5.2	13	2	2279.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	71.3 84.2	158.0 83.0	209.5 82.3	254.0 81.4	296.2 80.5	71.0	79.2	64.2	1.2	26.9	2	8	2473.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	47.3 82.8	143.7 82.5	196.2 81.8	238.5 81.1	278.0 80.4	71.8	79.4	65.1	0.0	11.8	0	4	2451.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	18.3 82.6	135.7 82.1	198.2 81.2	245.0 80.5	286.7 79.8	71.6	78.8	65.9	0.0	4.3	0	4	2220.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	2.3 74.9	67.3 88.3	120.7 87.3	158.2 86.1	200.7 84.2	72.6	81.5	67.4	0.2	57.9	2	9	1601.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	4.5 85.2	93.8 81.1	156.2 79.9	203.2 78.6	68.3	77.0	63.6	7.2	0.0	6	0	1359.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	24.0 75.3	98.3 72.0	147.7 69.9	57.0	66.8	52.7	233.0	0.0	26	0	989.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	81.0 65.7	140.0 64.2	50.5	61.8	46.2	449.5	0.0	31	0	852.

\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH



ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR ESCONDIDO, CA.

ACCOUNT/ 82824691  
CHANNELS 82824693

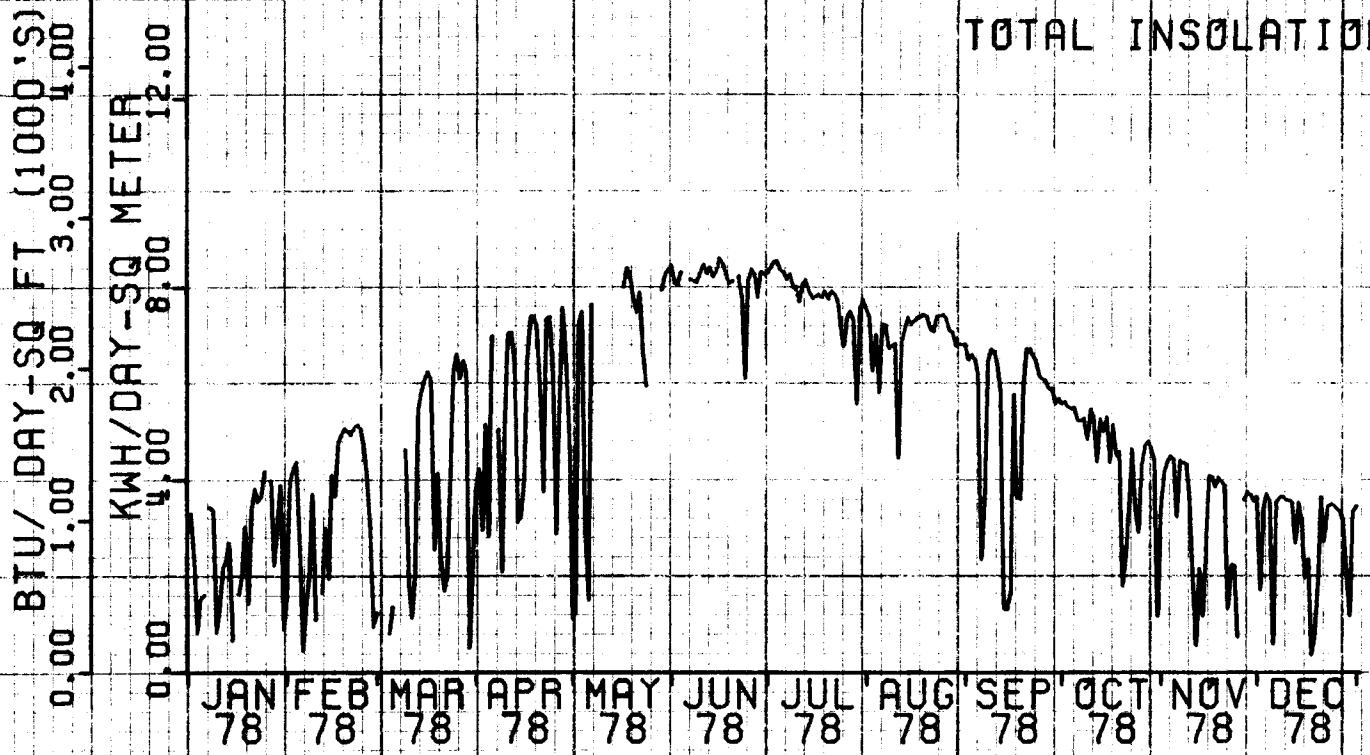
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	4.8 63.8	56.8 64.9	105.0 63.9	53.9	61.8	51.4	322.0	0.0	29	0	694.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	42.5 69.0	89.8 66.0	136.0 64.0	54.3	62.4	51.0	288.3	0.0	27	0	1005.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 64.0	31.5 75.6	73.0 72.2	113.0 70.1	167.0 68.1	58.0	65.3	54.8	184.0	0.0	25	0	1193.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	8.5 65.8	72.0 67.4	121.2 66.4	164.7 65.7	223.0 64.3	56.9	63.1	52.7	235.4	0.0	29	0	1705.
5/78	NUM OF HOURS AVG TEMP (F)	0.8 69.3	38.3 79.5	125.2 77.8	182.5 76.4	227.0 75.4	268.7 74.3	63.9	72.6	57.1	82.7	1.7	19	1	2138.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	45.8 82.8	152.2 82.0	207.7 81.4	251.7 80.4	295.0 79.3	68.9	77.7	61.1	7.9	4.3	8	3	2419.
7/78	NUM OF HOURS AVG TEMP (F)	0.3 84.5	52.5 83.1	156.7 83.4	218.2 82.5	263.5 81.7	302.2 80.8	70.4	79.5	62.5	0.0	13.3	1	4	2426.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	13.8 81.2	138.2 82.3	199.5 81.3	246.0 80.2	282.7 79.4	69.9	78.3	63.3	1.1	2.2	2	2	2226.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	66.8 87.0	127.0 85.6	166.5 84.6	204.7 83.2	71.1	80.7	64.9	6.3	39.7	5	9	1597.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	6.0 83.3	94.3 80.4	154.7 78.6	204.7 77.3	66.0	75.5	60.9	28.9	0.0	12	0	1370.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	21.5 74.7	97.8 69.3	149.7 67.1	54.7	64.8	50.5	299.1	0.0	29	0	952.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	76.5 63.0	134.5 61.7	48.4	59.6	44.3	497.4	0.0	30	0	815.

\*NOTE\*

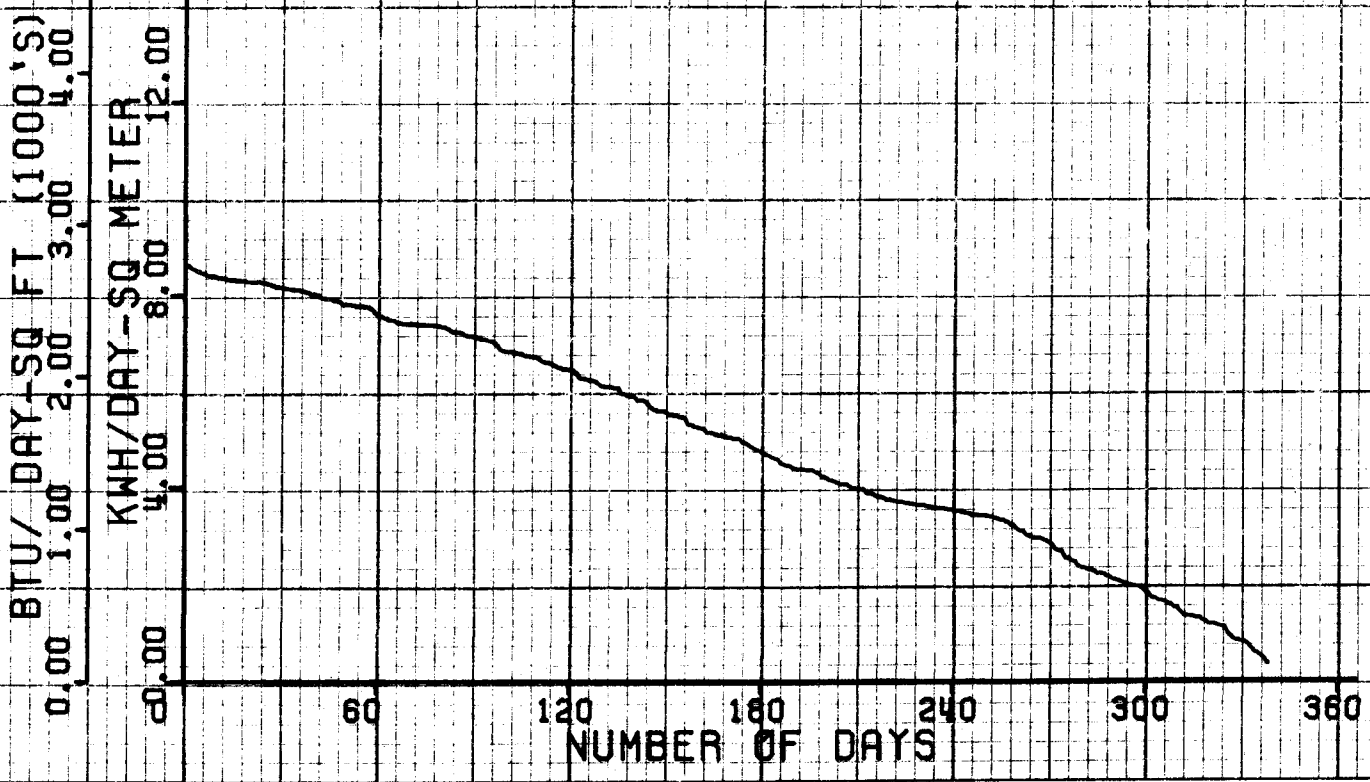
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

RAMONA, CALIF.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR RAMONA, CALIF.

ACCOUNT/ 82824771  
CHANNELS 82824773

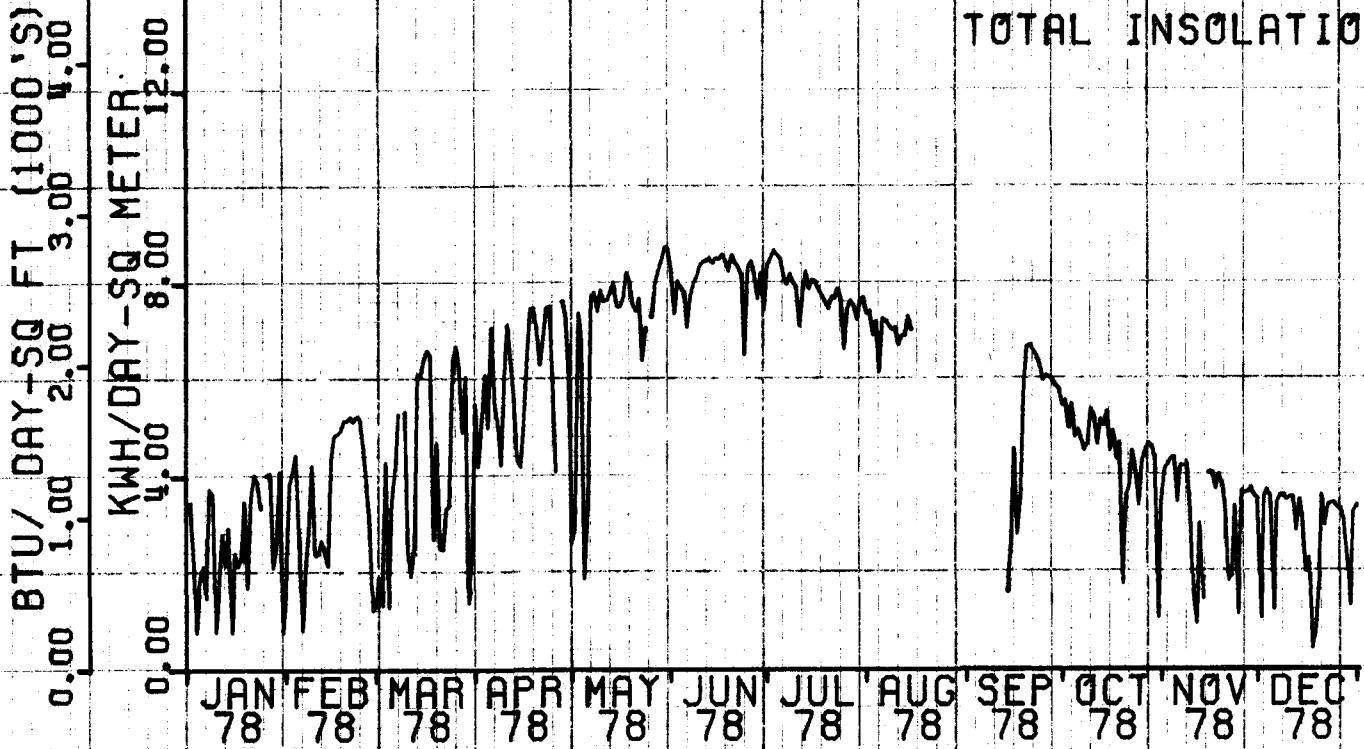
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
		NUM OF HOURS	AVG TEMP (F)	NUM OF HOURS	AVG TEMP (F)	NUM OF HOURS	AVG TEMP (F)								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	7.0 61.9	53.5 60.3	100.5 59.7	50.3	57.8	48.0	410.6	0.0	28	0	687.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	1.0 60.3	43.8 63.8	89.8 62.2	132.0 60.7	51.3	58.9	48.3	355.0	0.0	26	0	996.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.3 56.7	30.5 70.6	67.3 69.2	102.0 67.4	143.2 65.4	55.3	62.8	51.5	253.1	0.0	22	0	1138.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	8.8 66.8	63.3 65.9	107.5 64.4	152.7 63.0	207.0 61.5	52.9	60.0	48.6	350.2	0.0	29	0	1576.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	34.3 78.4	76.3 77.3	106.5 75.7	134.0 74.3	160.7 73.0	61.9	71.0	54.4	133.9	1.6	19	1	2064.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	66.8 84.2	154.2 83.9	207.5 83.3	253.7 82.1	296.2 80.9	69.3	79.5	59.7	27.2	8.1	8	6	2535.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	39.8 87.6	145.0 89.2	208.7 88.4	261.2 87.2	312.0 85.8	74.0	84.2	64.5	0.0	42.3	0	14	2423.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	4.8 83.2	115.5 86.1	187.2 85.2	238.0 83.9	285.7 82.6	71.0	80.9	62.8	1.4	11.8	2	5	2164.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.8 79.4	68.0 82.2	127.5 83.0	171.0 82.1	214.7 80.8	68.8	78.4	63.1	44.0	30.1	12	9	1620.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	6.8 86.5	91.3 81.8	147.2 80.5	203.5 78.7	65.9	76.8	59.8	63.3	0.0	15	0	1350.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	28.0 70.0	94.0 64.4	144.7 62.4	51.5	60.6	47.9	377.0	0.0	27	0	965.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.5 51.2	78.5 55.5	139.0 54.7	46.1	53.8	43.2	566.9	0.0	30	0	832.

\*NOTE\*

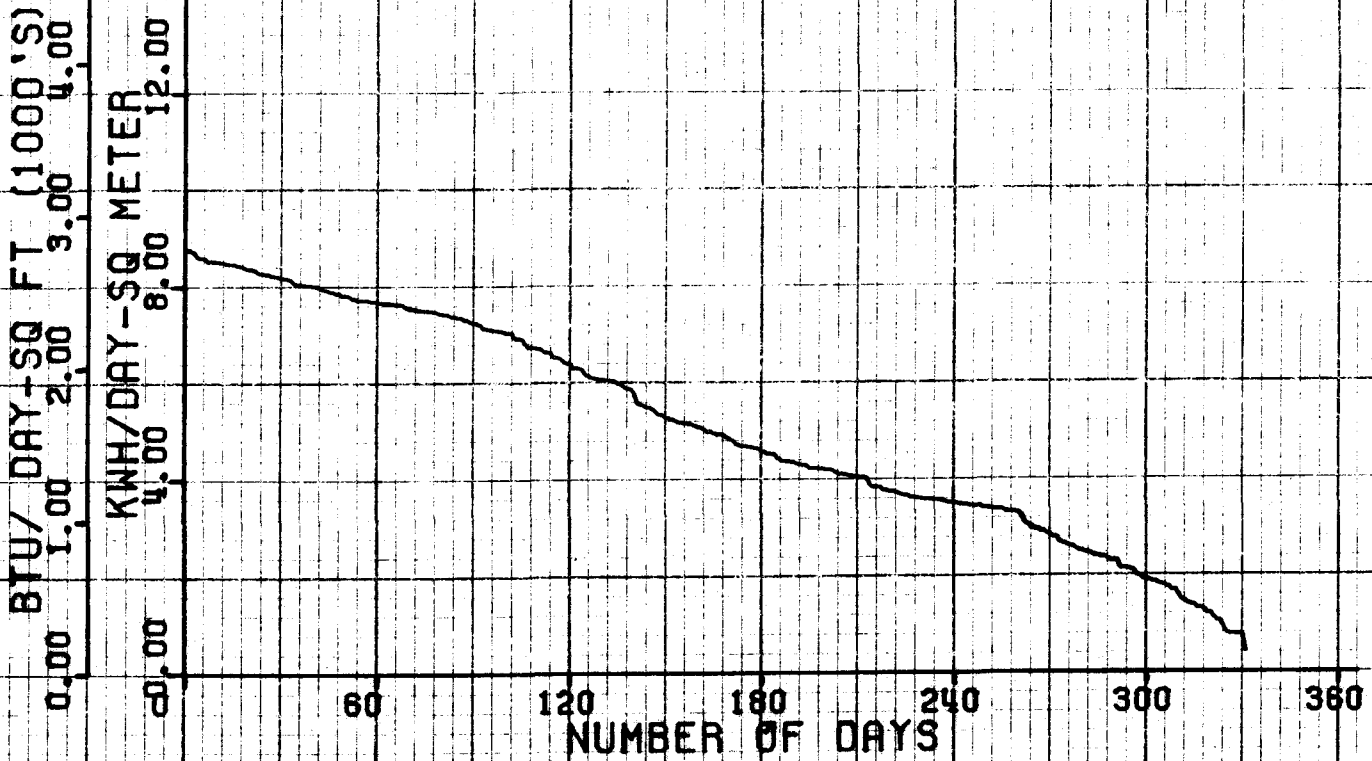
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

SPRING VALLEY, CA  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR SPRING VALLEY, CA

ACCOUNT/ 82824361  
CHANNELS 82824363

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.3 61.2	16.5 64.4	63.0 64.5	112.7 63.6	55.6	62.5	53.5	290.6	0.0	31	0	723.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	2.8 69.7	55.3 67.0	94.0 65.7	141.7 64.2	55.8	62.6	52.8	248.9	0.0	27	0	1070.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.3 66.3	43.3 74.6	82.5 72.3	116.7 70.8	167.5 68.7	59.6	66.3	55.8	173.6	0.7	24	1	1235.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	16.5 67.7	81.5 68.1	133.5 66.9	182.7 65.8	230.5 64.9	57.2	63.6	52.7	226.7	0.0	29	0	1814.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	56.8 79.4	136.7 77.3	190.0 76.1	232.2 75.3	278.2 74.1	64.7	72.8	58.0	74.0	4.7	18	1	2234.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	84.3 83.3	164.5 82.6	213.7 81.6	257.2 80.7	296.7 79.9	69.9	78.5	62.4	7.5	24.1	6	8	2524.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	58.0 82.7	153.7 82.5	214.7 81.6	264.5 80.7	304.0 80.0	70.8	79.1	63.5	1.7	16.0	2	3	2432.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	3.5 81.5	56.5 82.4	86.0 81.6	108.8 80.6	129.0 79.8	72.1	79.0	66.5	0.0	0.2	0	1	2169.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.3 73.7	37.3 91.8	72.8 90.4	98.8 89.2	125.5 87.3	74.1	83.8	68.0	4.3	62.2	5	8	1619.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	6.5 85.8	95.3 79.9	153.2 78.7	201.2 77.5	67.0	75.9	62.2	25.8	0.0	9	0	1349.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	28.8 73.0	96.5 68.8	151.0 67.1	56.5	65.5	52.4	246.4	0.0	25	0	996.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	77.8 60.8	140.2 60.5	50.3	59.1	47.2	439.9	0.0	30	0	834.

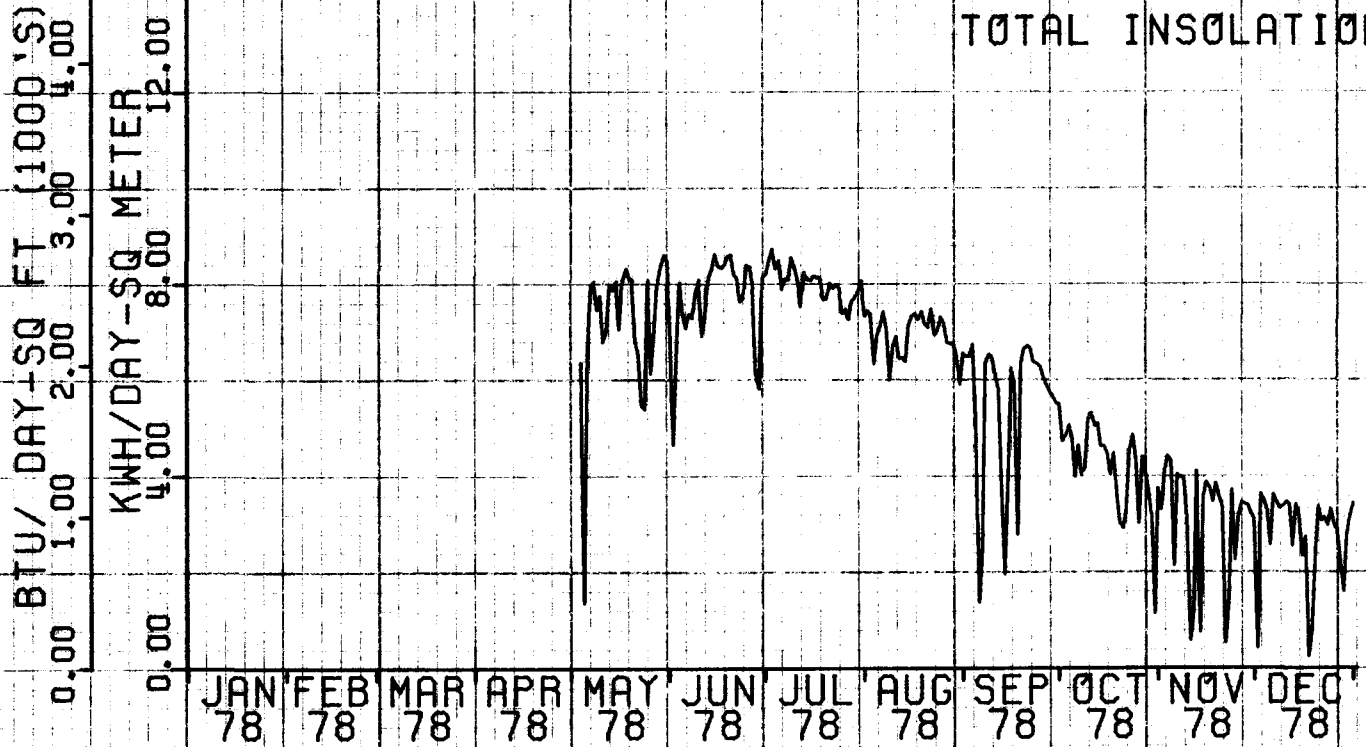
\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

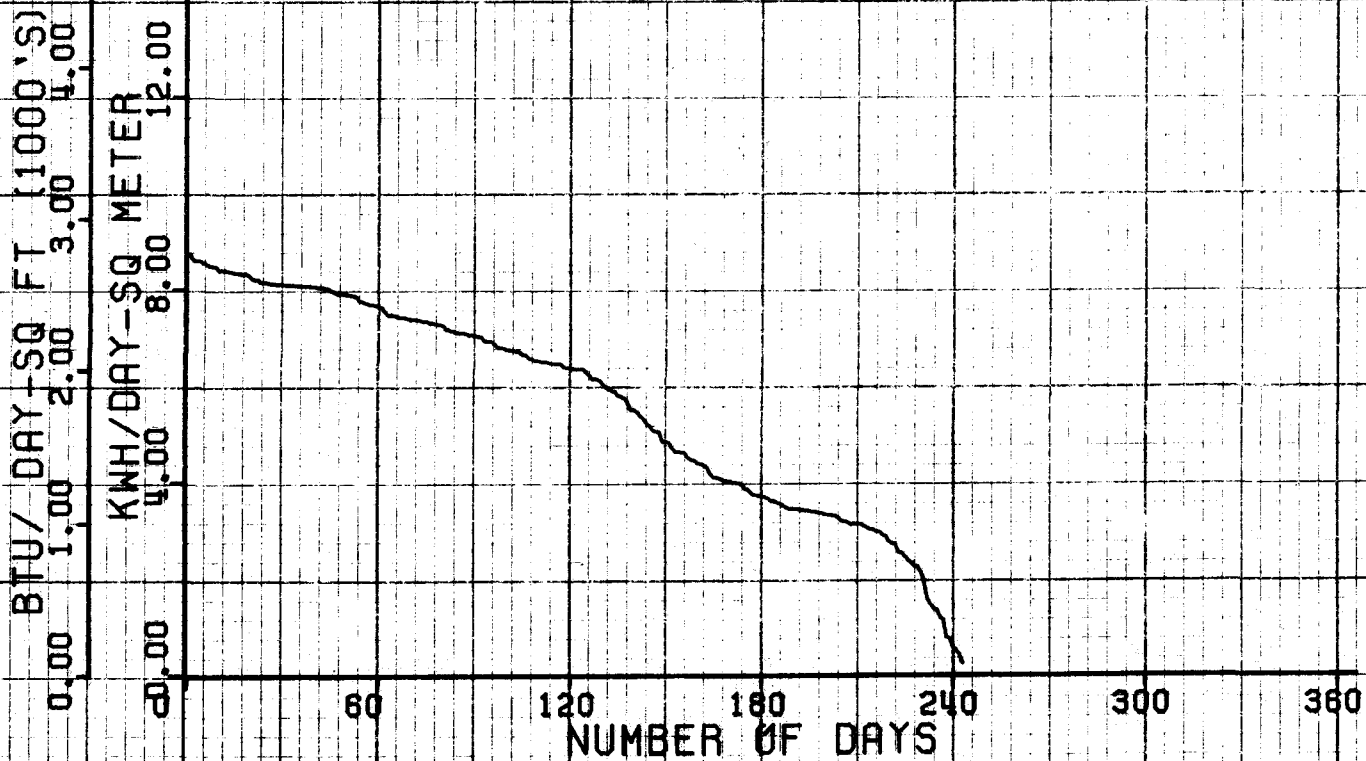


# ANNUAL DISTRIBUTION

ALHAMBRA, CAL.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR ALHAMBRA, CAL.

ACCOUNT/ 22955091  
CHANNELS 22955093

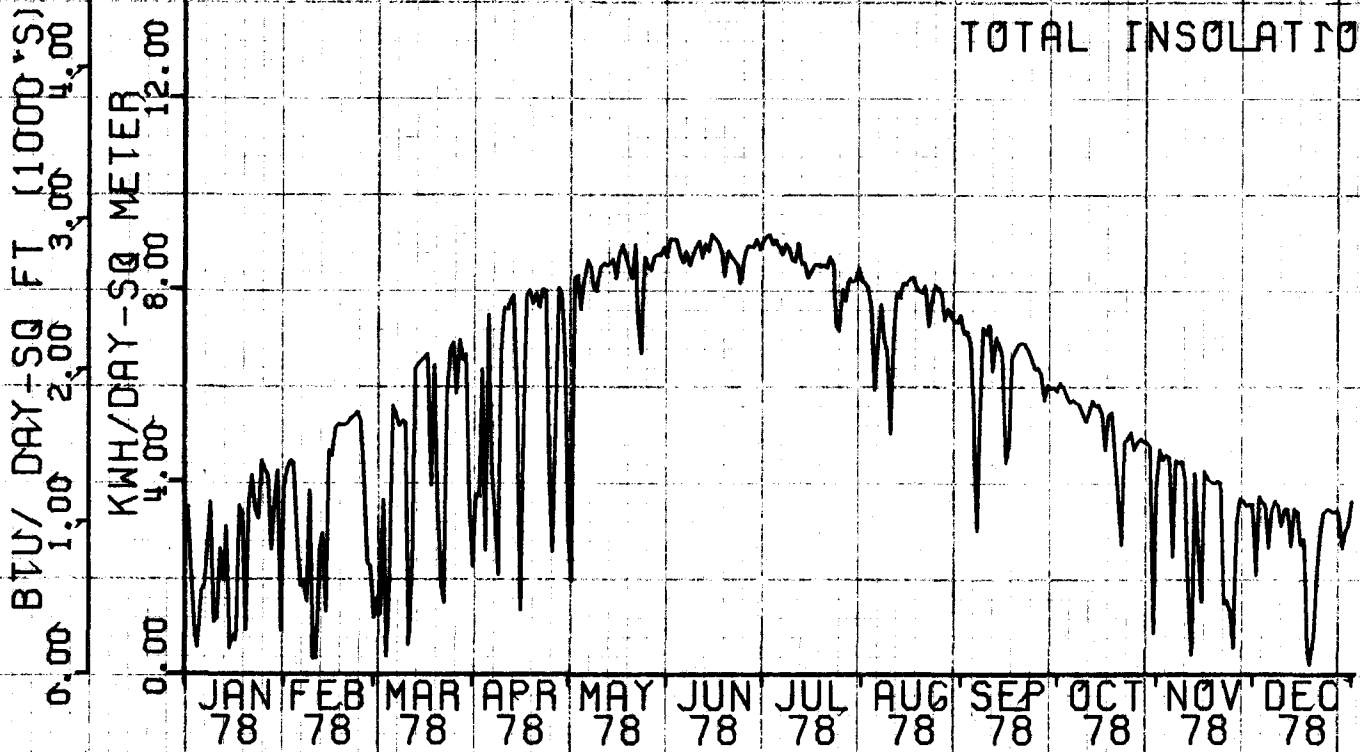
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT	
		350	300	250	200	150	100									
1/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----														
2/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----														
3/78	NUM OF HOURS AVG TEMP' (F)	----- INSUFFICIENT DATA -----														
4/78	NUM OF HOURS AVG TEMP (F)	888.8	888.8	888.8	888.8	888.8	888.8	60.7	8888.0	8888.0	47.5	0.0	11	0	8888.	
5/78	NUM OF HOURS AVG TEMP (F)	0.3 68.7	45.8 83.2	127.5 80.9	177.7 79.6	223.0 78.3	266.2 76.9	66.7	75.1	60.6	49.5	14.2	14	5	2224.	
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	47.8 84.3	143.0 83.2	198.5 82.2	245.7 81.0	290.2 79.9	70.3	78.4	63.1	7.0	9.4	5	5	2378.	
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	50.0 86.1	157.2 85.9	217.2 84.7	269.0 83.5	313.5 82.4	72.7	81.1	64.8	0.0	26.5	0	7	2482.	
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	5.5 82.4	128.5 84.6	190.2 83.5	237.2 82.2	277.5 81.2	71.6	80.1	65.2	0.0	10.1	0	5	2137.	
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 74.6	62.0 87.5	129.7 86.9	176.7 85.7	225.0 84.2	73.5	82.4	67.8	0.0	72.0	0	10	1679.	
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.8 81.8	71.3 82.1	138.7 80.2	196.7 78.8	68.0	77.1	63.2	16.1	1.5	6	1	1257.	
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	6.8 74.3	92.5 69.7	148.7 68.2	56.7	66.5	53.0	255.9	0.0	26	0	909.	
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.8 60.4	69.0 63.3	142.7 62.4	51.9	60.9	48.5	406.4	0.0	31	0	823.	

\*NOTE\*

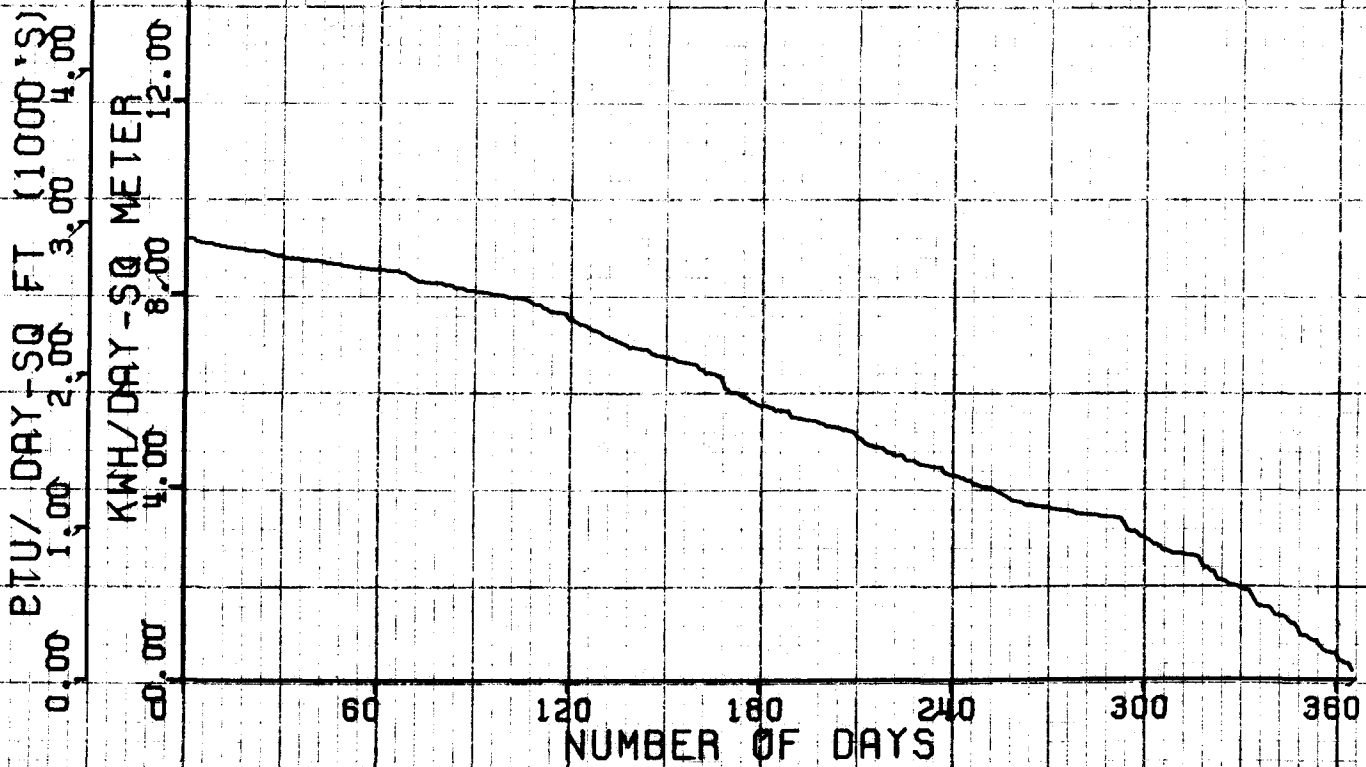
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

ARROWHEAD, CAL.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR ARROWHEAD, CAL.

ACCOUNT/  
CHANNELS 40955011  
40955013

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
		NUM OF HOURS	AVG TEMP (F)	NUM OF HOURS	AVG TEMP (F)	NUM OF HOURS	AVG TEMP (F)								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	22.5 49.2	69.0 50.0	105.0 49.1	42.0	47.4	40.4	689.1	0.0	30	0	705.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	6.3 57.0	58.0 51.8	98.3 51.1	140.0 49.9	43.0	48.5	40.7	593.9	0.0	27	0	1053.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	2.0 63.3	57.5 59.8	97.5 59.1	136.5 58.5	182.5 57.2	47.8	54.8	44.4	517.4	0.0	30	0	1340.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	39.8 59.4	90.0 58.7	131.7 57.8	174.5 56.4	220.0 54.9	46.5	53.0	42.7	535.2	0.0	29	0	1777.
5/78	NUM OF HOURS AVG TEMP (F)	0.3 73.7	93.5 70.5	162.7 70.0	219.7 69.3	265.2 68.7	308.0 67.9	59.7	66.6	53.2	185.2	0.0	23	0	2550.
6/78	NUM OF HOURS AVG TEMP (F)	0.5 86.3	104.8 77.0	176.2 77.2	232.0 76.9	277.0 76.5	321.5 75.8	68.1	74.6	62.0	28.6	1.7	9	2	2750.
7/78	NUM OF HOURS AVG TEMP (F)	0.3 83.8	92.5 82.1	171.7 82.6	229.0 82.4	279.2 82.0	326.7 81.5	74.4	80.7	68.1	4.5	55.1	4	19	2648.
8/78	NUM OF HOURS AVG TEMP (F)	0.3 83.3	58.0 78.9	144.2 80.2	205.0 80.0	250.5 79.7	294.5 79.0	71.8	78.3	66.1	3.8	27.7	4	10	2345.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	4.0 71.2	95.8 73.9	156.2 74.4	205.7 73.8	255.5 72.9	65.5	71.9	60.7	99.8	2.0	15	3	1941.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	31.8 79.2	115.0 75.6	173.5 74.7	225.0 73.4	64.0	71.9	59.3	114.1	0.0	17	0	1523.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.5 64.7	36.8 58.3	101.5 55.3	140.5 54.3	44.8	52.1	41.9	606.5	0.0	30	0	964.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	86.3 45.9	147.7 45.7	38.3	44.7	36.0	827.0	0.0	31	0	851.

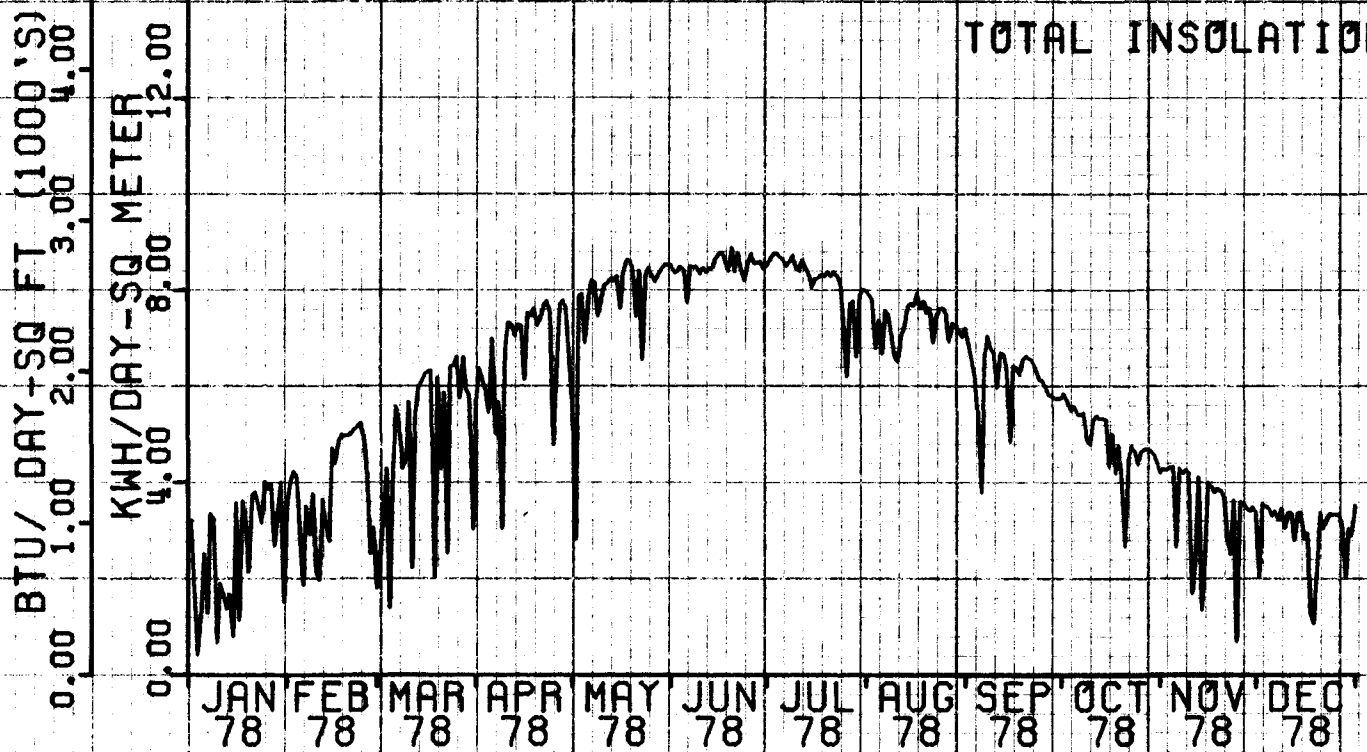
93

\*NOTE\*

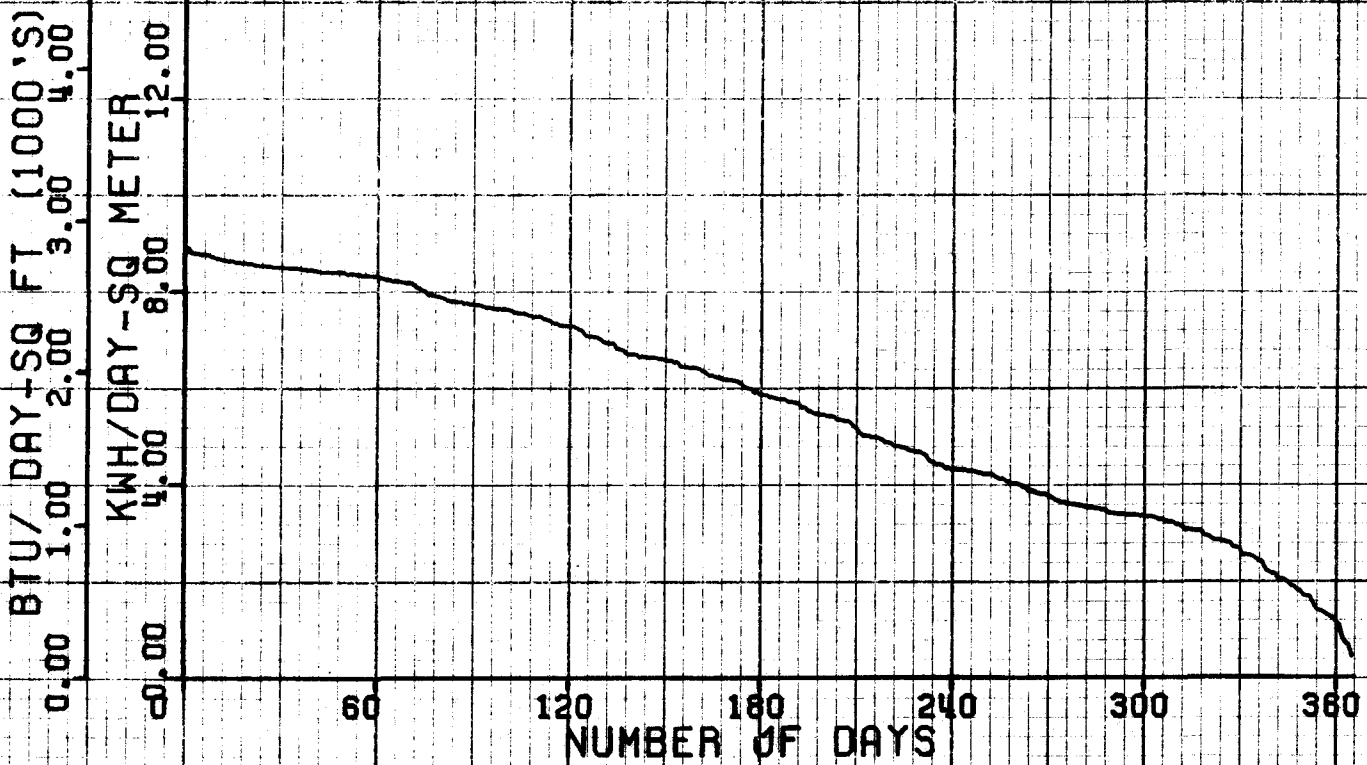
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

BARSTOW, CALIF.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR BARSTOW, CALIF.

ACCOUNT/ 72955611  
CHANNELS 72955613

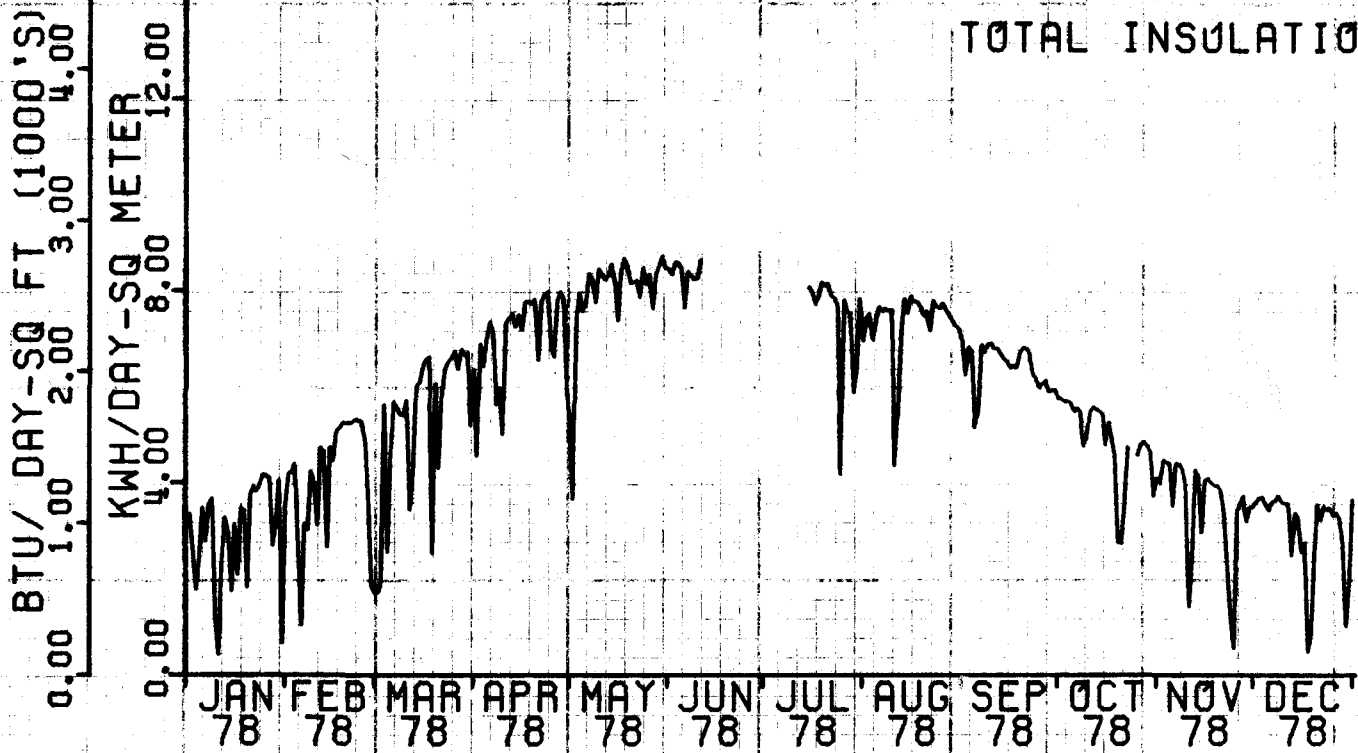
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
		NUM OF HOURS	AVG TEMP (F)	NUM OF HOURS	AVG TEMP (F)	NUM OF HOURS	AVG TEMP (F)								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	7.0 64.1	63.0 62.6	115.2 61.9	54.9	60.7	53.0	313.6	0.0	31	0	735.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.3 70.5	56.8 66.8	106.3 66.1	157.2 65.6	58.5	64.6	55.6	176.8	0.0	27	0	1144.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 68.5	48.5 74.1	107.3 73.4	159.2 72.4	213.0 71.4	64.0	70.3	60.4	66.4	0.0	18	0	1496.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	20.0 75.3	103.5 74.6	161.5 73.7	213.5 73.0	264.7 71.9	65.0	71.0	59.9	61.9	0.0	16	0	2063.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	68.5 86.5	156.2 85.6	210.0 84.9	261.0 84.1	304.5 83.2	75.1	82.0	68.6	3.2	75.3	1	14	2461.
6/78	NUM OF HOURS AVG TEMP (F)	0.5 100.4	82.0 95.9	164.5 95.2	221.7 94.3	270.2 93.5	315.2 92.6	84.8	91.6	78.0	0.0	295.1	0	30	2643.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	70.0 100.4	159.7 100.2	221.5 99.5	271.0 98.7	316.2 97.8	90.0	97.1	82.9	0.0	450.5	0	30	2549.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	20.8 96.8	135.0 98.7	196.2 97.8	248.2 96.8	293.7 95.9	87.7	94.8	81.5	0.0	367.6	0	29	2276.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.3 90.4	81.5 89.3	155.5 89.3	208.2 88.5	255.5 87.8	80.0	87.1	74.8	0.0	168.8	0	23	1914.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	8.0 93.9	103.3 88.5	172.0 86.9	228.7 85.6	76.6	84.2	72.2	4.5	101.8	2	18	1491.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	20.8 74.6	103.3 69.0	159.7 67.8	59.7	66.6	56.6	185.5	0.0	22	0	1016.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	81.3 58.9	153.2 58.1	51.3	57.4	48.8	423.4	0.0	31	0	890.

\*NOTEX

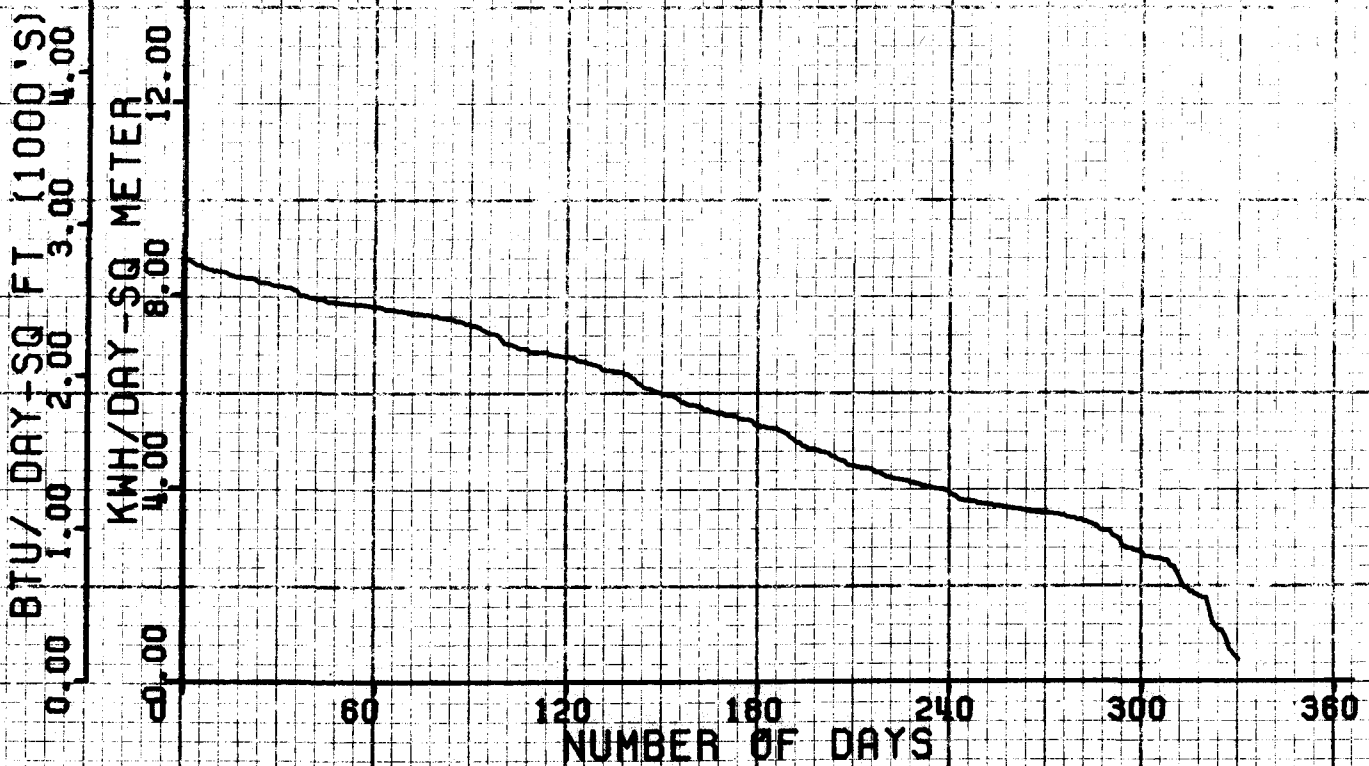
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

BLYTHE, CALIF.  
TOTAL INSULATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR BLYTHE, CALIF.

ACCOUNT/ 87955281  
CHANNELS 87955283

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	9.8 62.8	77.5 63.9	141.5 62.9	54.5	61.5	51.7	313.8	0.0	30	0	861.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	1.3 71.6	67.3 68.8	118.2 67.9	167.5 67.0	58.3	65.6	55.0	180.9	0.0	24	0	1220.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 78.8	66.3 79.6	128.0 77.9	178.2 76.7	226.0 75.6	66.5	74.0	62.0	46.0	0.0	15	0	1639.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	38.0 81.5	116.0 80.0	171.7 79.2	223.7 78.4	272.7 77.5	69.0	76.2	63.0	19.4	7.5	6	5	2167.
5/78	NUM OF HOURS AVG TEMP (F)	1.0 87.4	76.8 92.8	157.5 91.8	214.5 90.8	262.7 90.0	311.0 88.9	79.9	87.7	72.6	2.8	176.9	1	24	2500.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	22.3 102.3	57.5 102.6	78.3 101.6	95.3 100.3	111.8 99.1	90.3	97.9	82.0	0.0	152.8	0	10	2597.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	21.8 109.3	79.5 107.4	114.7 106.8	147.5 106.3	173.7 105.6	97.5	104.6	91.3	0.0	382.0	0	17	2296.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	30.3 104.3	137.0 104.1	197.5 103.3	245.5 102.4	294.0 101.5	92.5	100.5	85.8	0.0	472.0	0	27	2283.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.8 101.8	91.8 97.4	164.7 97.1	217.0 96.3	263.0 95.4	85.7	94.3	79.5	0.0	313.1	0	28	1977.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	9.5 100.2	98.8 93.8	158.7 91.9	211.0 90.5	79.5	89.2	73.9	0.0	176.5	0	19	1495.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	25.5 75.7	107.8 71.3	168.5 70.3	60.2	68.7	56.3	185.1	0.0	20	0	1053.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.5 65.3	88.0 58.2	154.0 57.6	49.6	56.7	46.7	477.6	0.0	31	0	902.

\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH



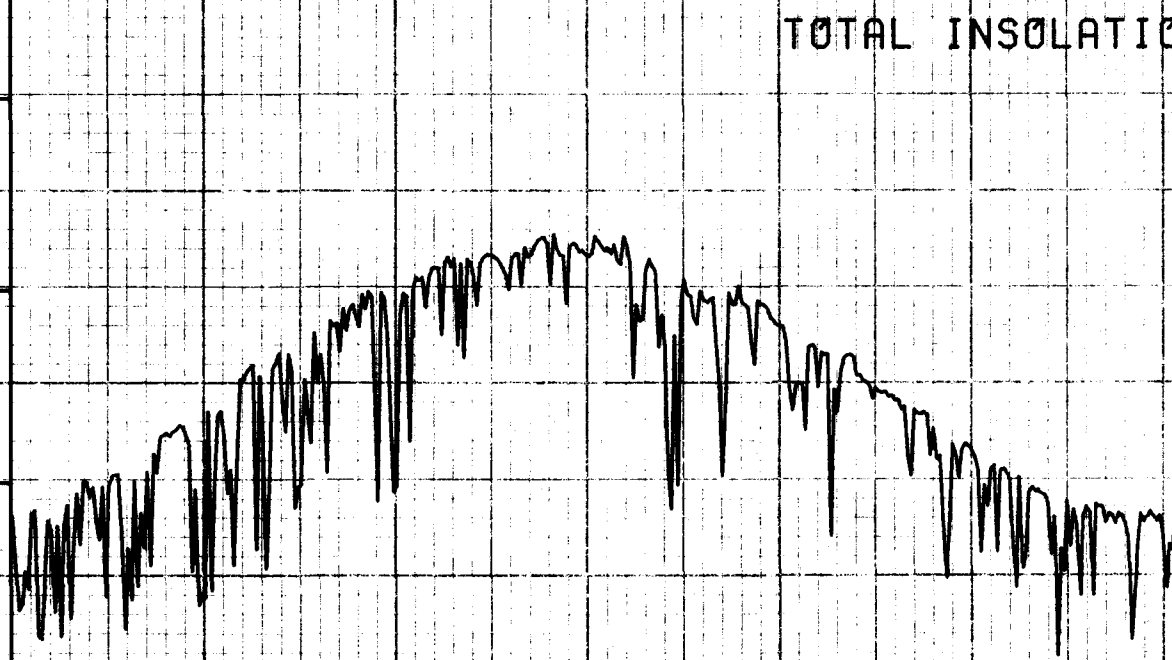
# ANNUAL DISTRIBUTION

ELDORADO, NEV.  
TOTAL INSOLATION

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

JAN '78 FEB '78 MAR '78 APR '78 MAY '78 JUN '78 JUL '78 AUG '78 SEP '78 OCT '78 NOV '78 DEC '78

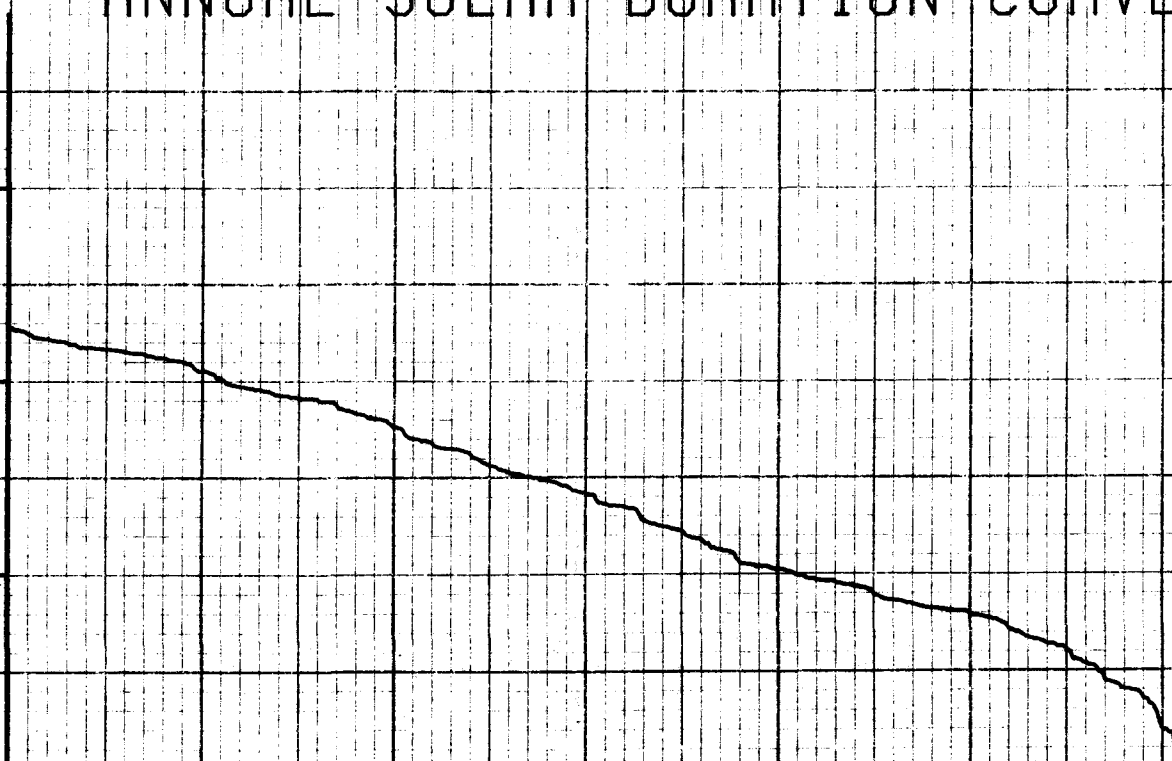


# ANNUAL SOLAR DURATION CURVE

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

60 120 180 240 300 360  
NUMBER OF DAYS



BUILDING APPLICATIONS DATA FOR ELDORADO, NEV.

ACCOUNT/ 72955951  
CHANNELS 72955953

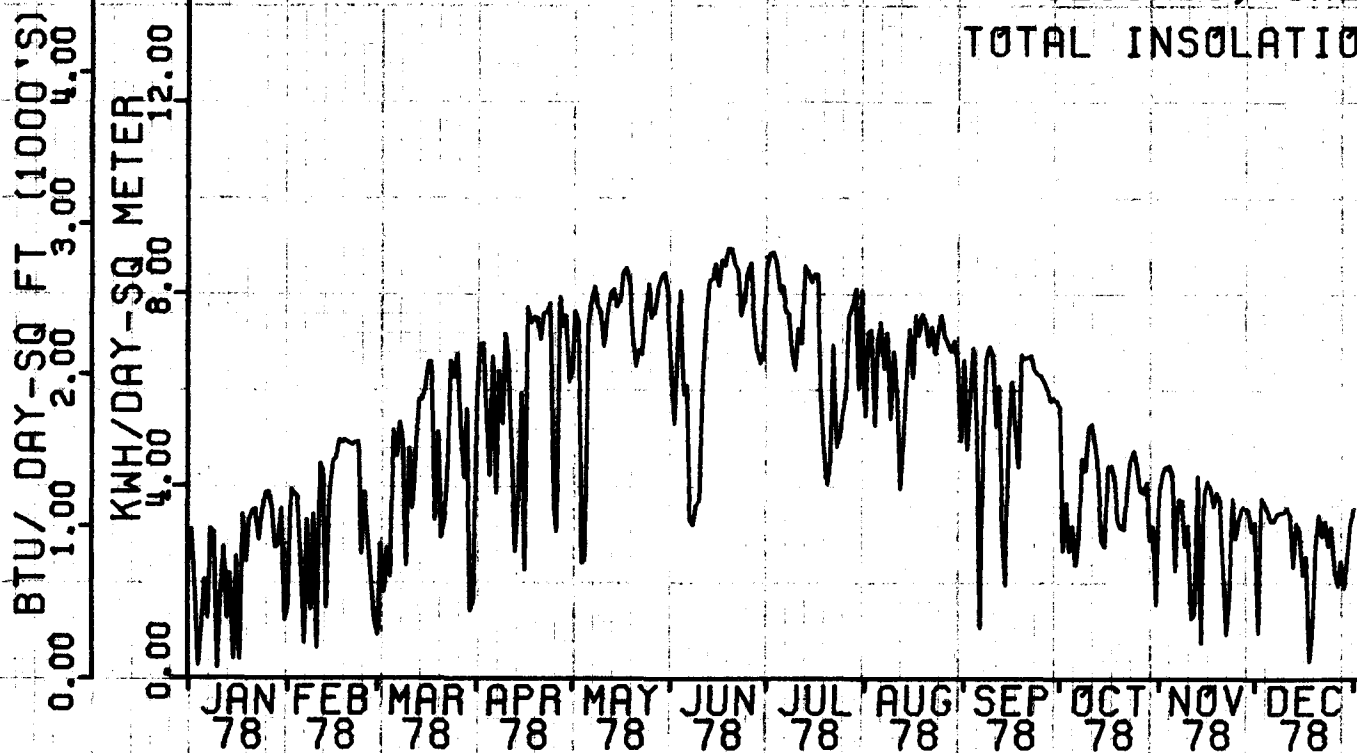
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	2.0 53.8	62.5 49.7	117.0 48.8	43.5	48.1	41.9	666.8	0.0	31	0	742.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.8 60.8	51.3 55.1	103.0 54.5	151.0 53.6	48.1	52.8	46.0	457.6	0.0	27	0	1099.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.3 70.9	48.3 65.3	102.0 64.0	145.5 63.2	194.0 62.3	55.3	61.1	52.1	300.9	0.0	31	0	1412.
4/78	NUM OF HOURS AVG TEMP (F)	0.8 76.0	28.8 68.4	103.0 68.2	155.5 67.8	207.0 67.3	252.5 66.6	60.2	65.7	56.0	162.4	0.0	22	0	2001.
5/78	NUM OF HOURS AVG TEMP (F)	0.3 84.8	72.8 80.3	153.5 79.6	208.0 79.2	259.0 78.6	303.7 77.9	70.7	77.0	64.9	31.4	31.2	6	8	2446.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	93.5 94.0	172.7 93.5	224.7 93.0	271.2 92.4	319.2 91.7	85.0	90.9	79.0	0.0	299.5	0	30	2693.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	72.0 99.3	144.5 99.1	195.0 98.5	247.0 97.8	297.2 96.9	89.4	95.8	83.4	0.0	445.8	0	31	2395.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	12.8 96.9	133.2 94.9	192.5 94.3	244.2 93.7	293.5 93.0	85.9	92.1	80.5	0.0	326.9	0	30	2253.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.3 0.0	71.0 82.4	150.7 83.0	205.0 82.5	252.0 81.8	75.2	80.9	70.9	15.4	92.7	4	16	1860.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	7.3 85.7	93.0 79.5	161.5 77.5	217.2 76.1	67.7	74.6	63.6	46.2	5.6	13	4	1429.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	13.5 66.3	90.8 57.2	152.5 56.1	49.0	54.6	46.6	479.7	0.0	30	0	966.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	73.3 43.3	147.5 42.7	36.9	41.8	34.9	872.2	0.0	31	0	857.

\*NOTEX

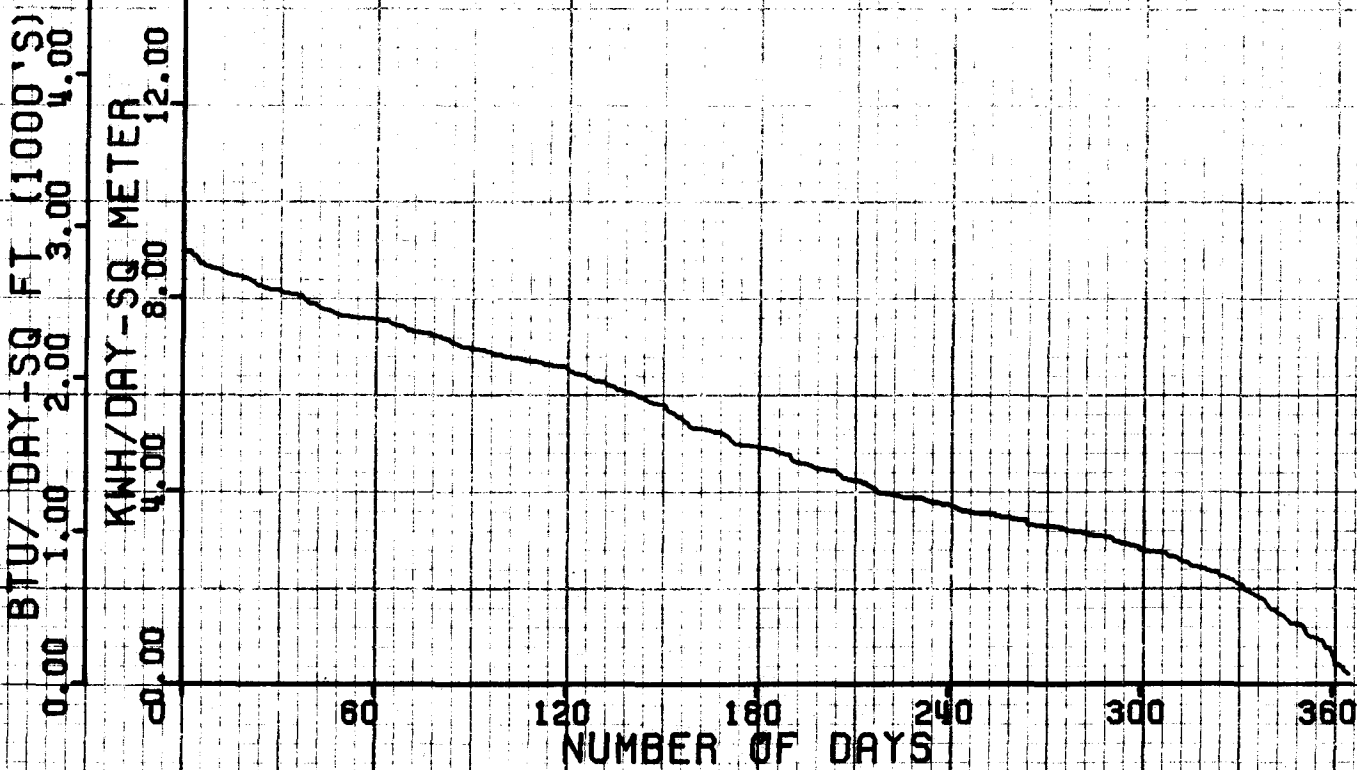
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

EL SEGUNDO, CAL.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR EL SEGUNDO, CAL.

ACCOUNT/ CHANNELS 44950813  
44950992

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	1.0 67.9	51.3 67.0	106.8 65.9	58.8	64.7	57.0	184.8	0.0	30	0	661.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	49.0 67.1	91.3 66.6	136.7 65.7	58.9	64.3	56.7	170.3	0.0	25	0	996.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	1.8 67.7	51.0 71.4	94.8 70.6	136.0 70.1	183.7 69.0	61.9	67.5	59.4	118.0	0.0	25	0	1338.
4/78	NUM OF HOURS AVG TEMP (F)	0.3 63.8	35.0 68.5	95.3 68.3	138.2 67.8	179.0 67.2	231.2 66.3	60.3	65.2	56.8	137.3	0.0	29	0	1852.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	72.0 72.8	142.2 72.4	188.5 72.0	234.5 71.5	282.7 70.8	64.4	69.8	60.2	46.3	0.0	20	0	2271.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	60.5 73.9	123.5 73.7	171.5 73.2	213.0 72.7	270.2 72.0	65.9	71.0	61.8	7.1	0.0	10	0	2198.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	51.3 74.2	111.3 74.8	164.7 74.6	230.5 74.0	285.0 73.2	66.7	72.1	62.2	5.0	0.0	8	0	2172.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	35.0 76.6	122.0 77.1	178.2 77.0	220.2 76.6	257.7 76.1	69.2	75.1	65.0	0.0	0.0	0	0	2048.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	1.3 76.3	81.8 79.1	137.0 78.6	180.0 78.2	222.5 77.5	70.4	76.3	66.8	0.0	6.3	0	1	1712.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	1.3 0.0	53.3 69.9	111.3 68.8	173.7 68.2	65.1	67.6	63.9	17.1	0.0	11	0	1112.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	19.0 63.8	92.5 63.0	147.0 62.6	58.9	61.9	57.7	182.3	0.0	30	0	933.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.8 59.3	67.8 59.5	141.2 58.2	54.6	57.3	53.4	135.2	0.0	13	0	822.

101

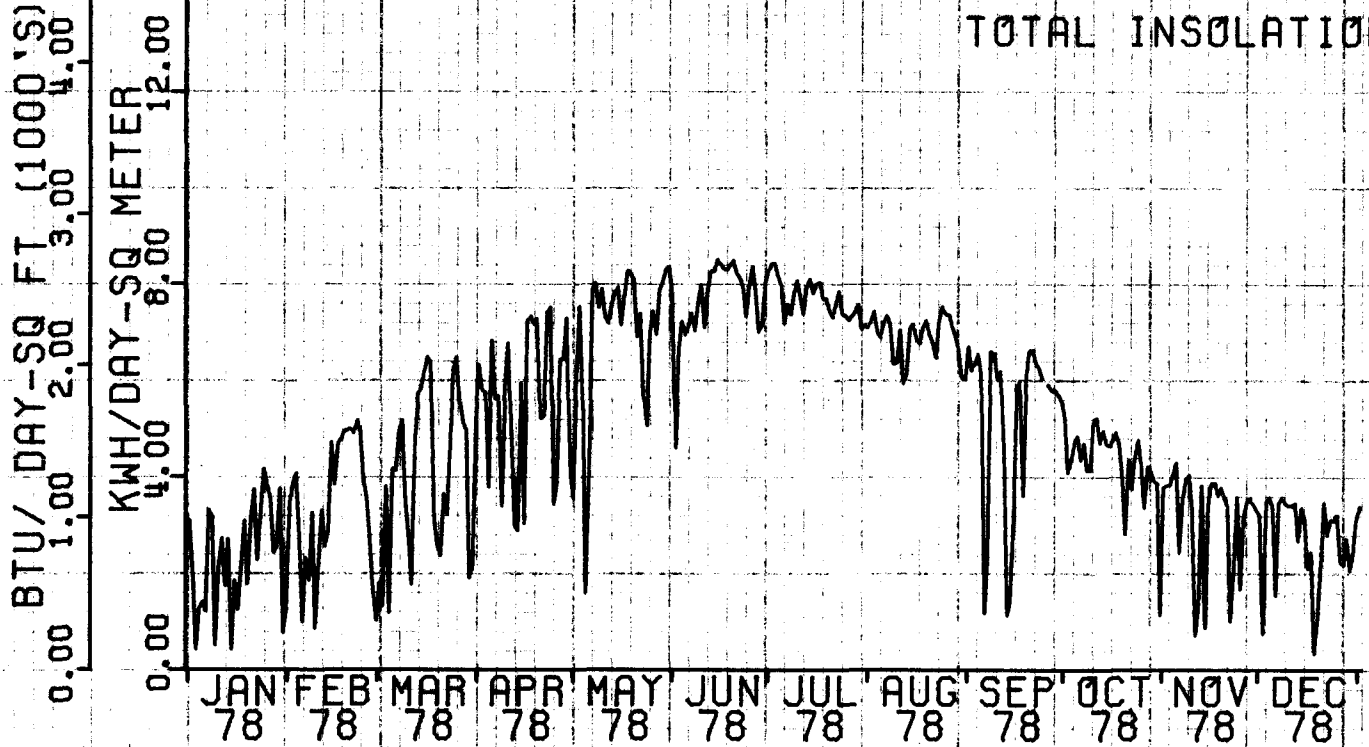
\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

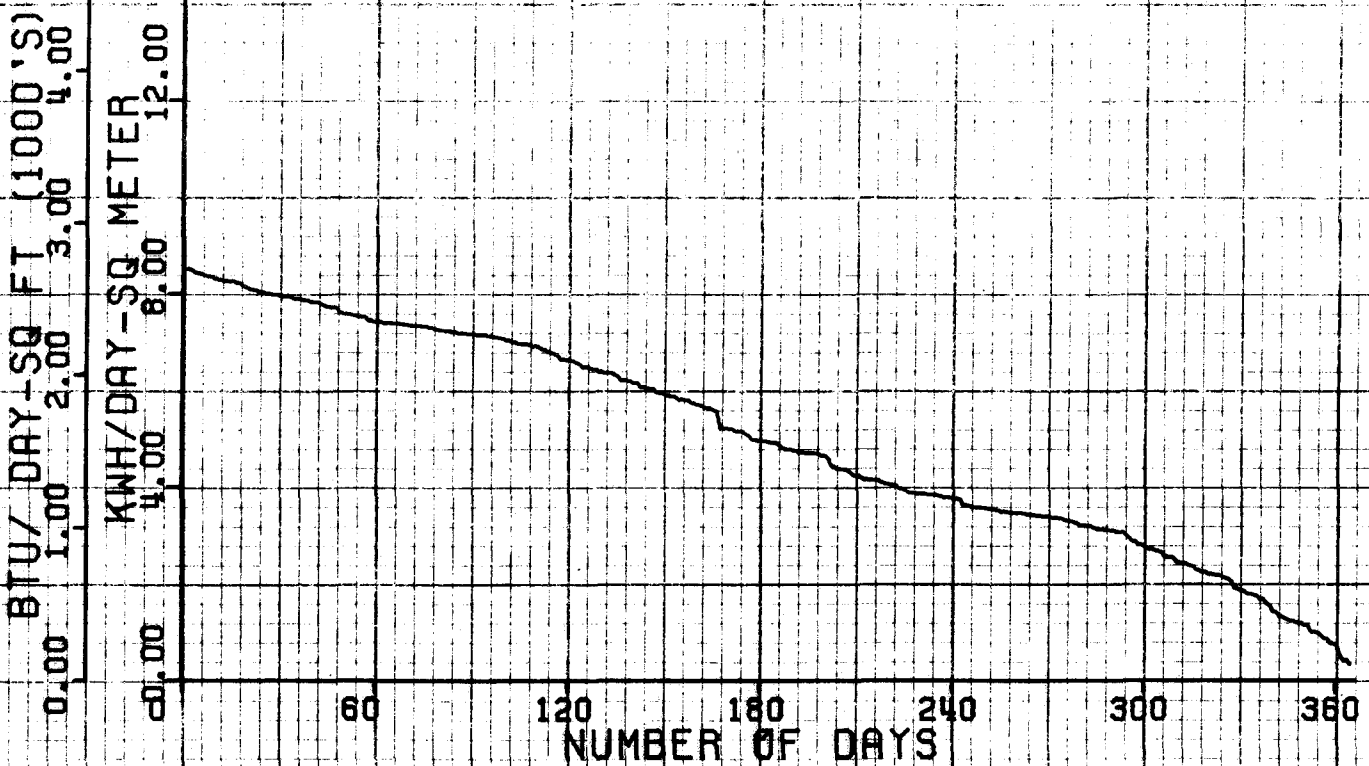
# ANNUAL DISTRIBUTION

EL TORO, CALIF.

TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR EL TORO, CALIF.

ACCOUNT/ CHANNELS 43951901  
43951903

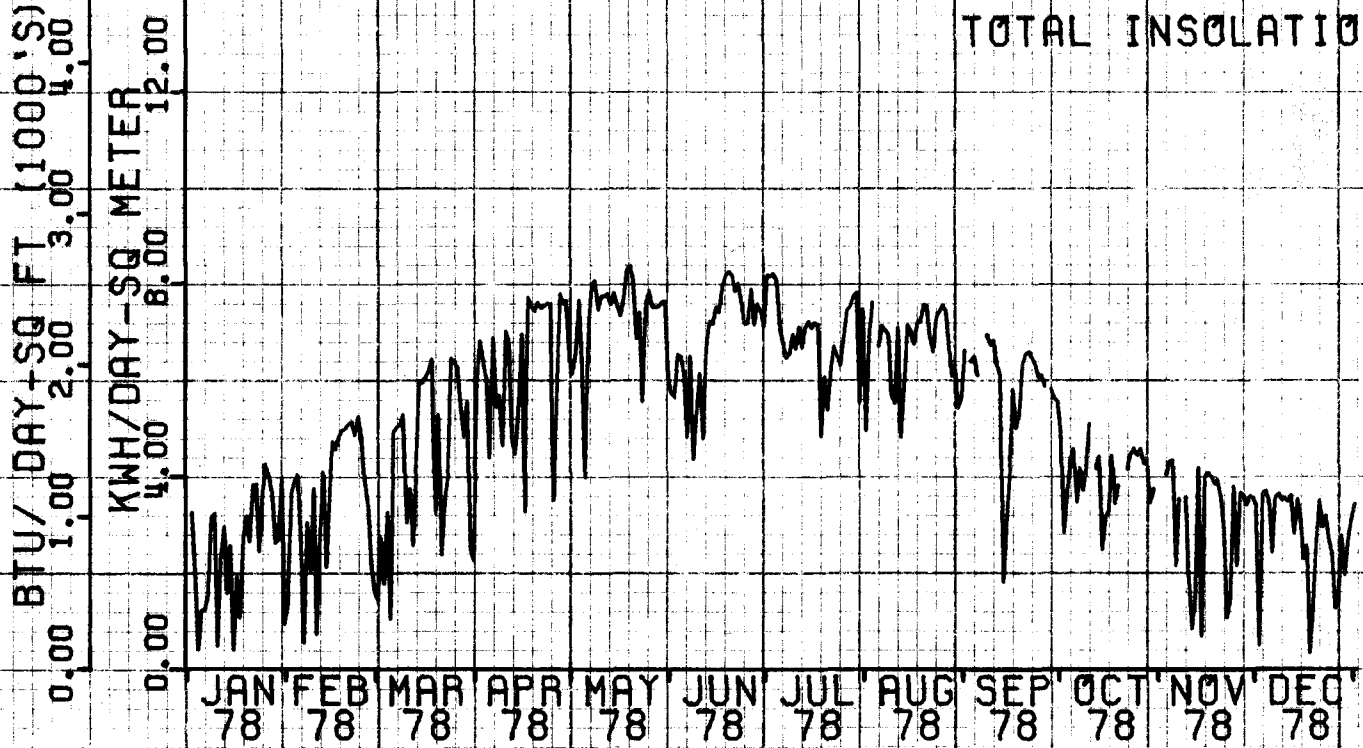
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	3.0 69.1	44.0 70.0	96.8 68.3	56.1	65.5	53.3	257.3	0.0	29	0	625.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.5 69.3	41.3 75.6	89.3 72.2	138.7 69.9	57.9	67.4	53.8	191.8	0.0	26	0	995.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	1.0 67.0	34.0 80.3	72.8 78.8	115.2 76.3	163.5 73.6	62.0	70.5	57.6	125.9	1.0	23	1	1213.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	14.8 71.4	68.0 73.4	113.2 72.2	158.0 70.9	220.0 69.3	60.2	67.6	55.1	142.0	0.0	27	0	1677.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	45.5 85.2	127.0 83.8	182.5 82.4	230.7 81.0	279.0 79.4	68.7	77.5	61.2	29.8	25.5	11	6	2190.
6/78	NUM OF HOURS AVG TEMP (F)	0.3 101.5	53.3 90.0	149.2 89.2	200.0 88.3	245.2 87.2	285.7 85.9	73.4	84.0	64.1	0.8	43.6	1	11	2376.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	38.5 93.1	152.2 92.4	213.0 91.0	259.0 89.7	297.5 88.7	75.7	87.0	65.9	0.0	59.9	0	14	2368.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	5.3 86.7	131.5 90.6	192.0 89.3	233.2 88.4	270.5 87.3	74.4	85.5	66.3	0.0	28.5	0	12	2124.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 85.0	57.3 93.8	123.2 92.9	169.5 91.3	212.7 89.5	75.3	86.9	68.8	0.0	88.3	0	15	1585.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	1.3 86.8	85.0 86.5	143.7 84.7	195.0 83.5	70.6	81.6	65.1	6.9	1.9	2	3	1282.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	11.0 79.5	89.8 75.4	147.7 73.0	59.1	70.6	54.5	189.6	0.0	26	0	925.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.3 57.0	64.8 69.6	135.2 67.5	53.7	65.3	49.5	350.0	0.0	31	0	796.

\*NOTE\*

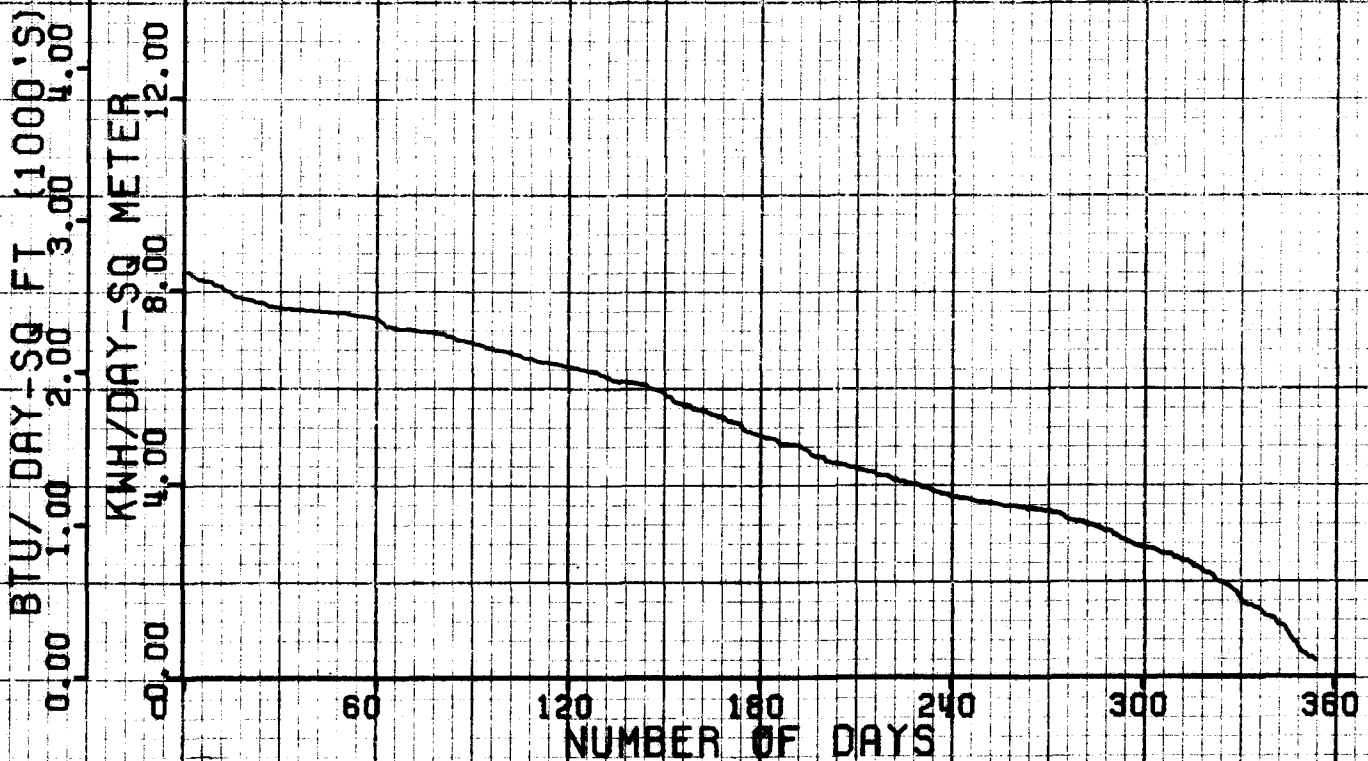
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

HUNTINGTON BEACH  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR HUNTINGTON BEACH

ACCOUNT/ 33951003  
CHANNELS 33951182

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	6.3 59.5	54.5 60.2	102.0 60.0	56.5	59.4	55.6	255.3	0.0	30	0	664.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.5 57.2	53.3 59.8	95.8 59.5	140.5 59.1	56.4	58.6	55.4	231.1	0.0	27	0	1036.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.8 62.8	47.3 64.9	97.0 64.2	133.0 63.8	180.5 63.3	59.8	62.3	58.6	159.1	0.0	29	0	1322.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	40.3 62.1	104.3 62.0	150.0 61.9	194.0 61.7	244.5 61.4	58.6	61.1	56.8	186.1	0.0	29	0	1942.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	54.0 66.0	139.2 66.1	194.0 66.1	243.5 65.9	283.2 65.7	62.5	65.2	60.6	81.6	0.0	25	0	2251.
6/78	NUM OF HOURS AVG TEMP (F)	0.3 67.2	32.5 67.8	116.5 67.6	176.7 67.5	224.2 67.3	269.5 67.1	64.4	66.8	62.6	26.3	0.0	23	0	2131.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	30.0 67.8	118.5 67.8	181.0 67.9	228.0 67.7	271.0 67.5	65.0	67.2	63.4	22.2	0.0	18	0	2096.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	33.3 69.0	126.0 69.5	180.7 69.5	220.0 69.5	259.2 69.3	66.8	69.0	65.1	2.7	0.0	5	0	2068.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	1.5 67.9	77.3 73.5	136.7 73.2	179.0 72.9	220.7 72.6	69.5	72.4	67.5	0.0	3.2	0	2	1760.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	1.5 68.4	65.8 69.1	122.7 68.7	169.2 68.4	65.5	67.9	64.3	20.5	0.2	12	1	1190.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	20.0 62.1	88.0 61.7	133.5 61.2	57.1	60.4	55.8	165.2	0.0	21	0	906.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.3 56.4	70.0 57.2	135.7 56.4	51.8	55.3	50.6	408.0	0.0	31	0	799.

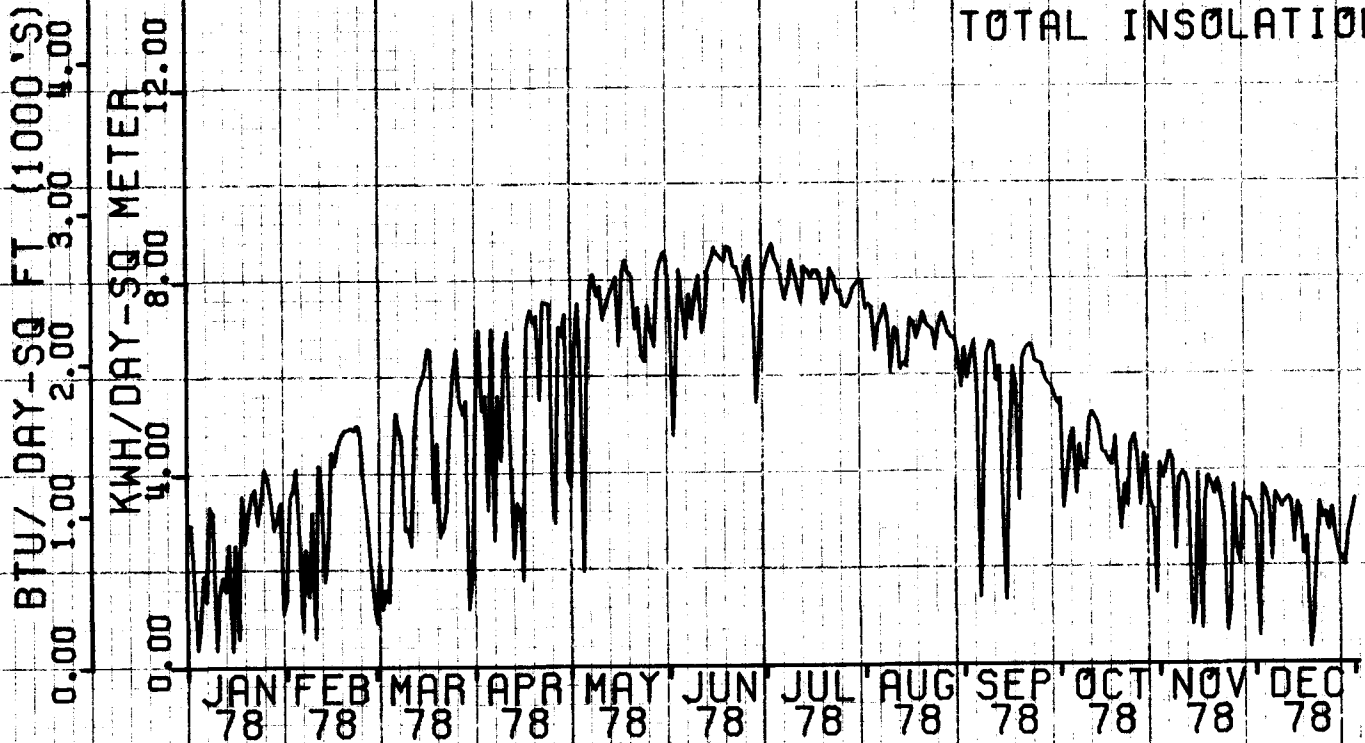
\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

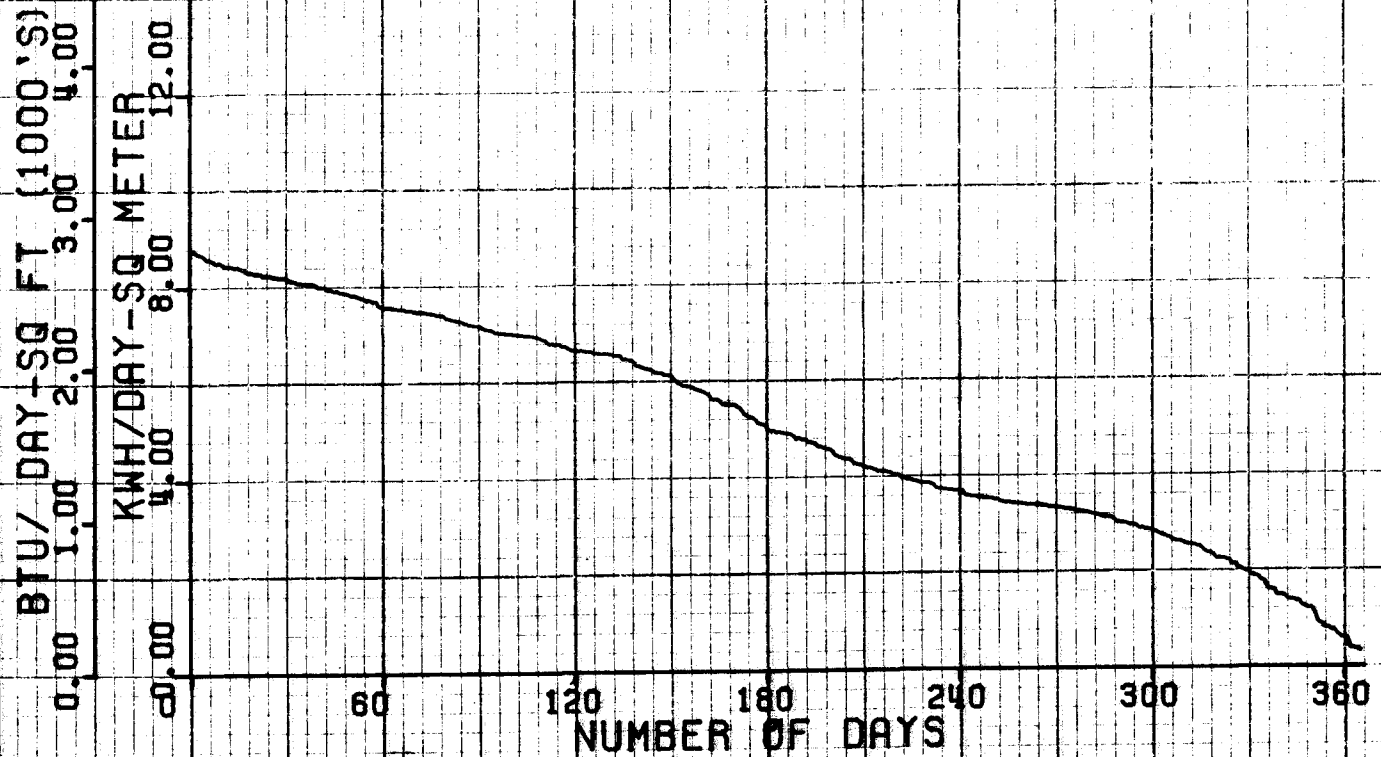


# ANNUAL DISTRIBUTION

LAGUNA BELL, CAL  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR LAGUNA BELL, CAL

ACCOUNT/ 60950533  
CHANNELS 60950791

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	5.3 64.5	54.0 65.8	102.5 65.5	59.9	64.8	58.4	161.1	0.0	29	0	657.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.3 76.8	44.8 68.7	91.5 67.4	137.5 66.2	60.0	65.2	58.0	145.8	0.0	24	0	985.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	2.0 67.6	37.3 75.2	79.0 73.8	118.5 72.3	171.0 70.8	64.3	69.3	61.9	78.5	6.2	21	2	1228.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	12.0 69.3	69.8 69.4	110.5 68.4	151.5 67.5	209.7 66.6	61.7	65.7	59.1	100.8	0.0	27	0	1631.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	52.3 80.1	136.0 78.8	191.7 77.6	239.7 76.6	284.5 75.7	68.8	74.2	64.4	10.3	17.8	8	5	2264.
6/78	NUM OF HOURS AVG TEMP (F)	0.3 70.8	65.8 82.1	148.2 81.7	199.2 80.8	244.0 80.0	289.0 79.1	72.2	78.0	67.2	0.0	17.0	0	10	2393.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	58.3 84.3	162.0 83.3	221.5 82.2	267.7 81.4	309.2 80.6	73.5	79.7	68.0	0.0	28.5	0	7	2474.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	6.3 82.2	130.2 82.4	188.7 81.5	232.2 80.8	270.7 80.1	73.4	79.2	69.2	0.0	15.1	0	9	2111.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 82.6	66.3 86.2	131.7 86.0	179.5 84.9	224.2 83.9	76.2	82.5	72.2	0.0	98.0	0	14	1684.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	1.5 77.8	72.5 80.0	133.0 78.5	187.5 77.5	70.6	76.5	67.6	1.7	3.8	1	1	1224.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	12.3 71.9	88.0 68.8	141.0 67.8	60.6	66.5	58.3	145.4	0.0	23	0	898.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.3 53.6	60.3 62.5	137.7 61.9	55.5	61.1	53.5	293.4	0.0	30	0	796.

\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

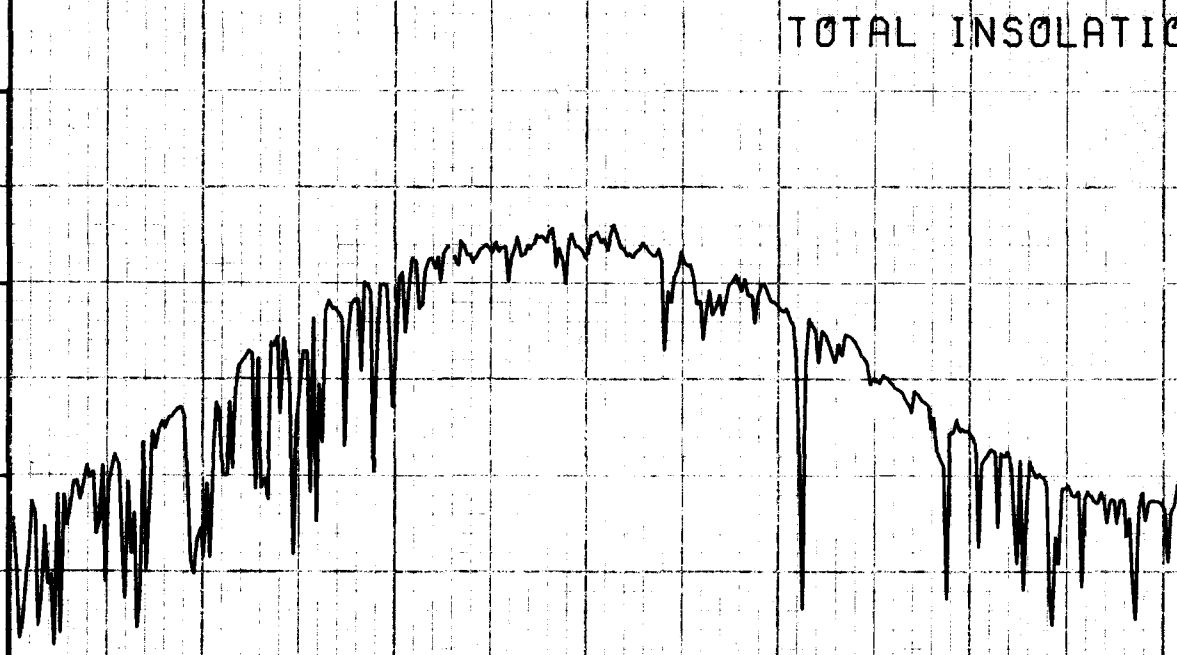
# ANNUAL DISTRIBUTION

LANCASTER, CALIF  
TOTAL INSOLATION

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

JAN '78 FEB '78 MAR '78 APR '78 MAY '78 JUN '78 JUL '78 AUG '78 SEP '78 OCT '78 NOV '78 DEC '78

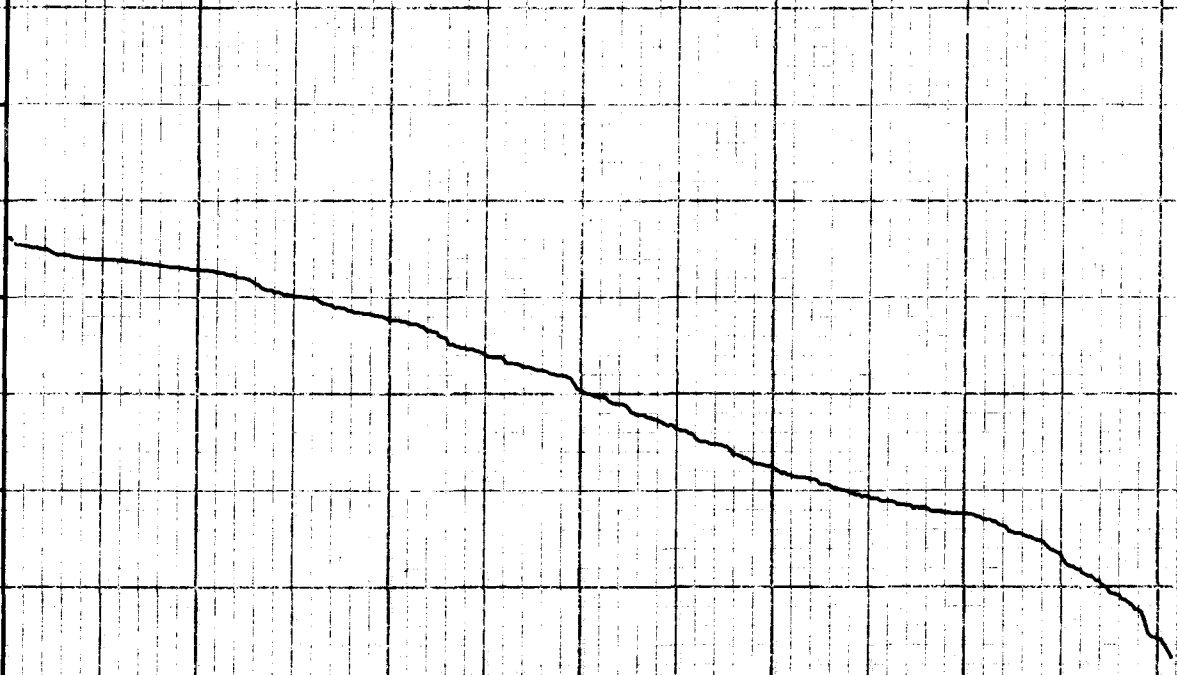


# ANNUAL SOLAR DURATION CURVE

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

60 120 180 240 300 360  
NUMBER OF DAYS



BUILDING APPLICATIONS DATA FOR LANCASTER, CALIF

ACCOUNT/ 36955581  
CHANNELS 36955583

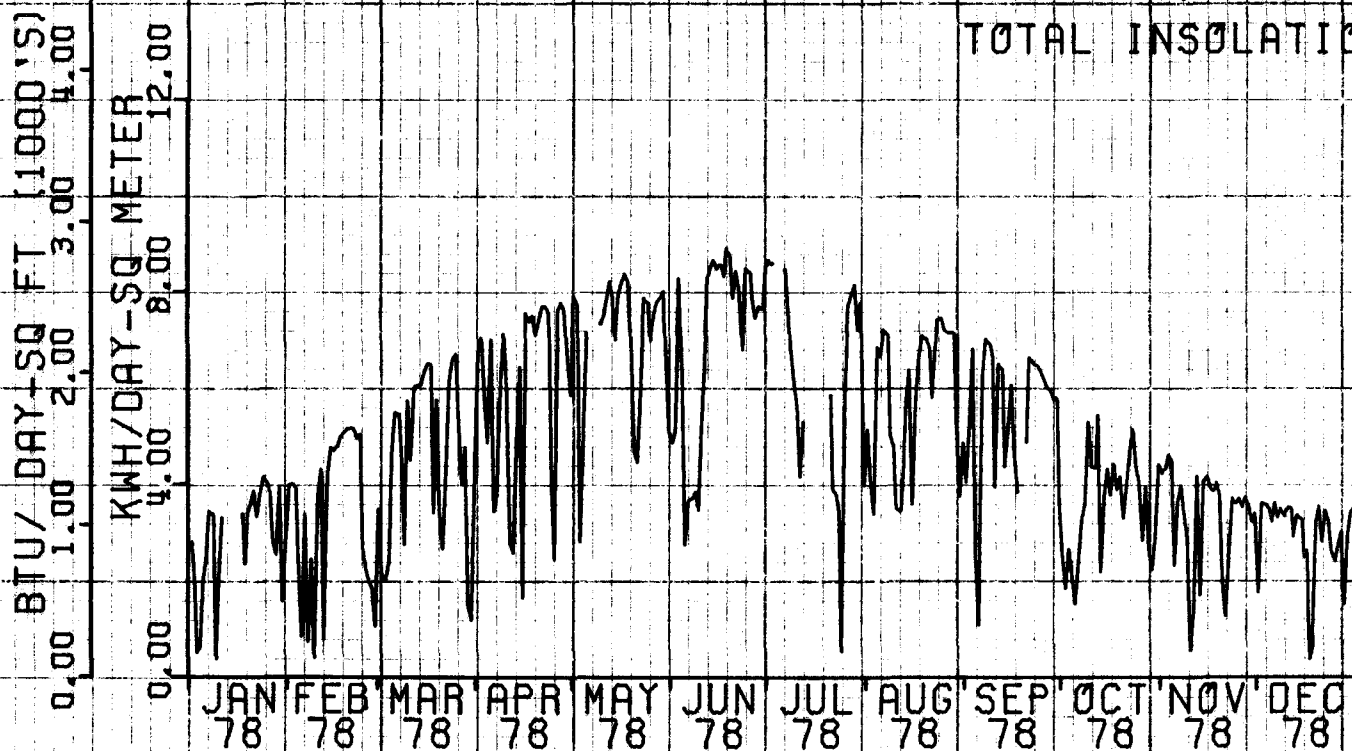
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	11.8 47.2	74.5 47.4	123.2 46.7	38.9	45.2	36.8	807.7	0.0	31	0	791.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	2.3 60.8	62.3 51.4	110.5 50.6	152.0 49.4	41.5	48.0	38.5	658.8	0.0	28	0	1137.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	1.8 60.5	56.3 59.3	113.7 58.3	164.5 57.2	212.2 56.0	47.0	54.4	42.6	559.1	0.0	31	0	1536.
4/78	NUM OF HOURS AVG TEMP (F)	0.3 54.8	43.8 59.7	110.5 58.3	160.0 57.3	207.2 56.2	257.5 54.9	47.0	53.8	41.8	539.5	0.0	30	0	2058.
5/78	NUM OF HOURS AVG TEMP (F)	0.5 72.1	99.3 73.1	169.0 72.3	222.5 71.7	270.7 70.8	314.7 69.7	59.5	68.2	51.8	187.4	1.5	20	1	2603.
6/78	NUM OF HOURS AVG TEMP (F)	1.0 89.2	104.3 82.9	172.5 82.5	227.2 81.8	273.2 81.0	320.0 80.1	71.7	79.0	63.7	15.2	30.3	5	9	2729.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	108.5 90.1	178.2 89.6	230.7 88.8	277.2 87.8	322.5 86.7	76.1	85.2	67.4	2.1	81.6	2	17	2681.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	66.0 87.1	154.0 87.2	207.7 86.5	256.0 85.5	300.5 84.5	74.6	83.2	66.7	1.8	84.2	2	11	2404.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	3.5 78.1	105.5 76.5	166.2 76.2	210.7 75.7	251.0 74.8	64.2	73.5	57.3	122.1	5.8	17	2	1975.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	29.5 84.3	117.7 77.8	174.2 75.8	225.7 74.4	60.3	72.3	53.1	176.4	0.0	23	0	1543.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	31.3 59.4	111.5 54.6	168.7 52.9	41.8	51.1	37.6	695.9	0.0	30	0	1063.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.3 32.3	90.8 41.5	163.7 40.8	33.0	40.4	29.8	991.5	0.0	31	0	955.

\*NOTEX

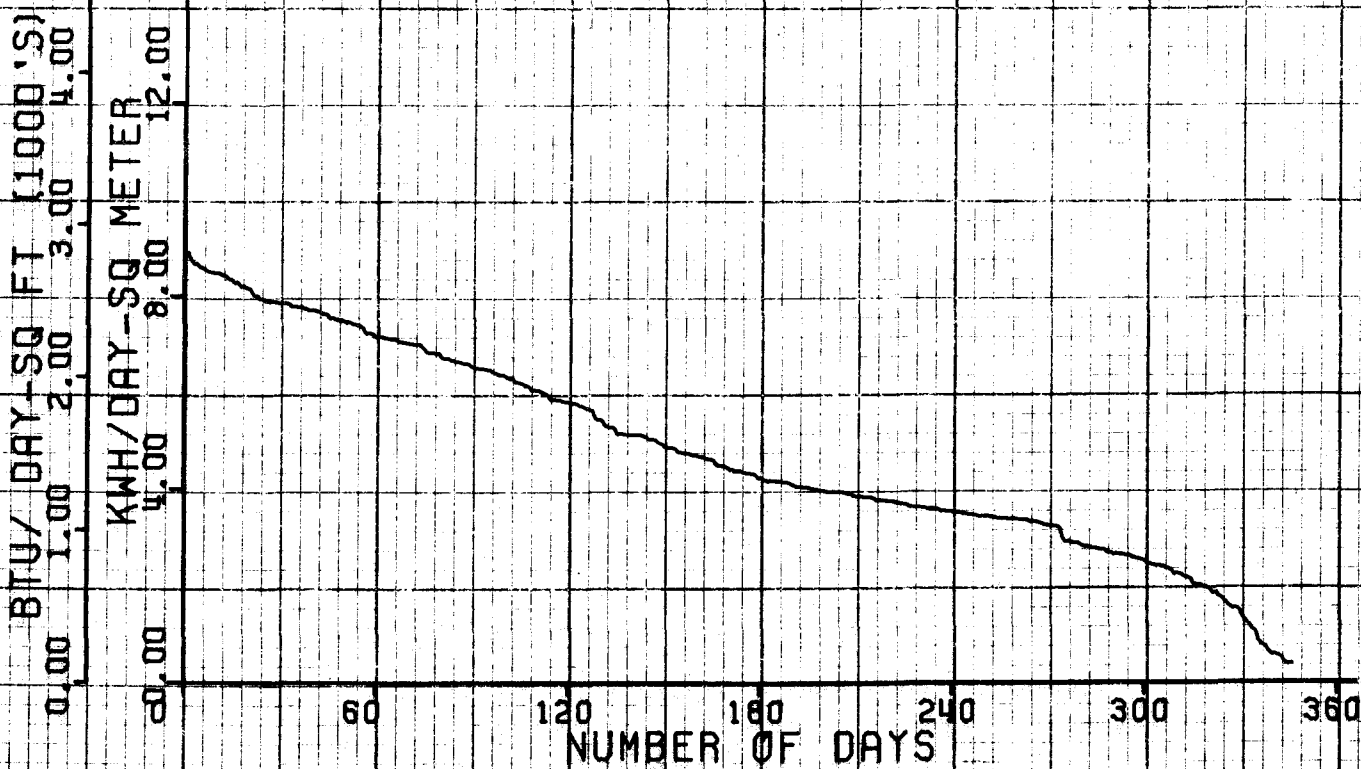
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

MANDALAY, CALIF.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR MANDALAY, CALIF.

ACCOUNT/ 39950163  
CHANNELS 39950322

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	4.3 54.7	58.0 59.0	109.8 59.7	61.3	60.1	61.8	96.1	0.0	24	0	809.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	48.3 65.1	94.8 63.6	133.0 63.1	60.3	62.5	59.3	104.7	0.0	21	0	983.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.3 65.6	49.3 70.3	96.0 69.5	136.7 69.0	188.0 68.5	64.6	67.8	62.9	48.8	5.1	22	2	1354.
4/78	NUM OF HOURS AVG TEMP (F)	0.3 68.1	24.3 65.7	91.3 65.7	136.2 65.5	178.5 65.2	229.5 64.7	61.8	64.2	60.1	97.2	0.0	30	0	1803.
5/78	NUM OF HOURS AVG TEMP (F)	0.3 67.8	32.5 69.6	105.0 68.7	160.2 68.4	211.2 68.2	257.2 67.9	64.8	67.4	62.6	37.4	0.0	16	0	2161.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	50.0 68.2	112.5 68.1	159.2 68.0	213.0 67.8	271.0 67.5	65.3	67.1	63.7	8.5	0.0	13	0	2142.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	24.0 68.6	57.3 68.1	96.0 67.5	147.5 67.0	190.2 66.5	64.3	66.1	62.8	18.4	0.0	14	0	1864.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	14.3 72.3	81.3 72.6	132.5 72.3	187.0 72.0	240.0 71.7	68.8	71.2	67.2	0.0	0.0	0	0	1772.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 72.3	69.5 74.1	124.7 73.9	169.2 73.8	212.0 73.6	70.7	73.2	69.1	0.0	8.6	0	3	1665.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	2.0 74.1	48.8 72.5	99.0 71.6	158.2 71.1	67.8	70.4	66.6	1.8	0.0	2	0	1052.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	24.0 67.8	98.3 67.1	155.5 66.5	61.2	65.6	59.3	117.3	0.0	27	0	987.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.3 62.5	75.5 62.8	147.5 62.1	56.9	61.4	55.2	244.5	0.0	30	0	859.

\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

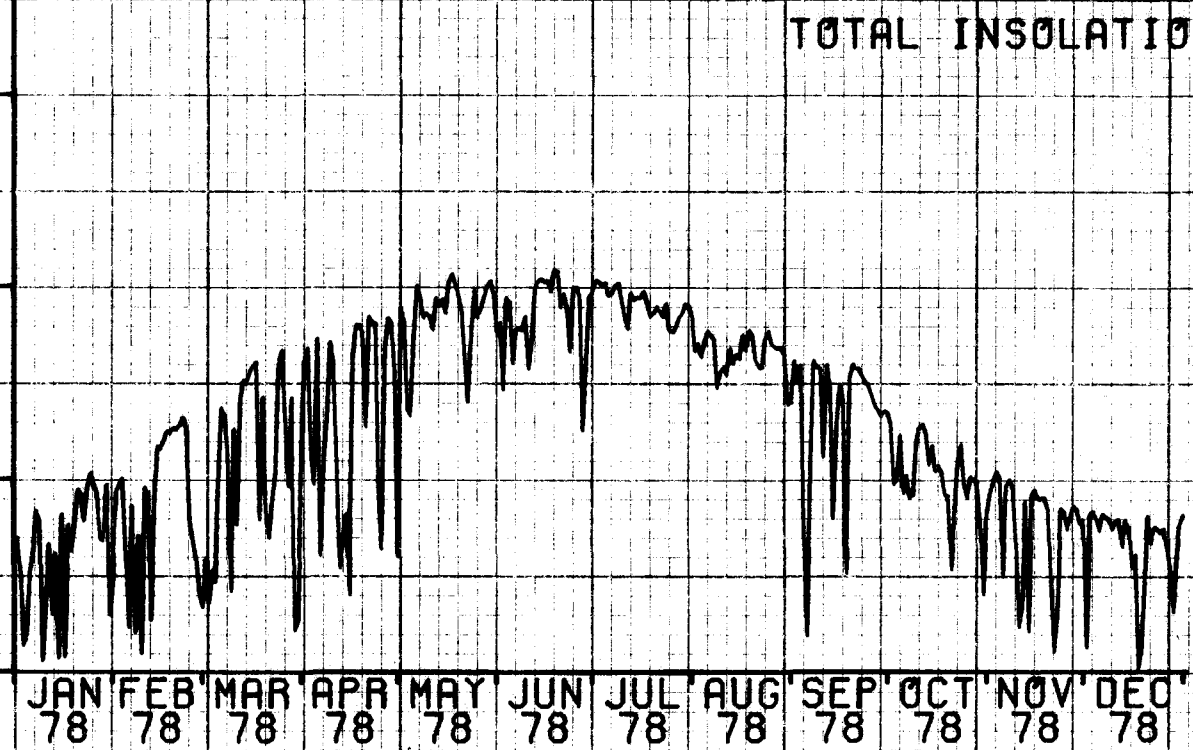
# ANNUAL DISTRIBUTION

MOORPARK, CALIF.  
TOTAL INSOLATION

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

JAN '78 FEB '78 MAR '78 APR '78 MAY '78 JUN '78 JUL '78 AUG '78 SEP '78 OCT '78 NOV '78 DEC '78

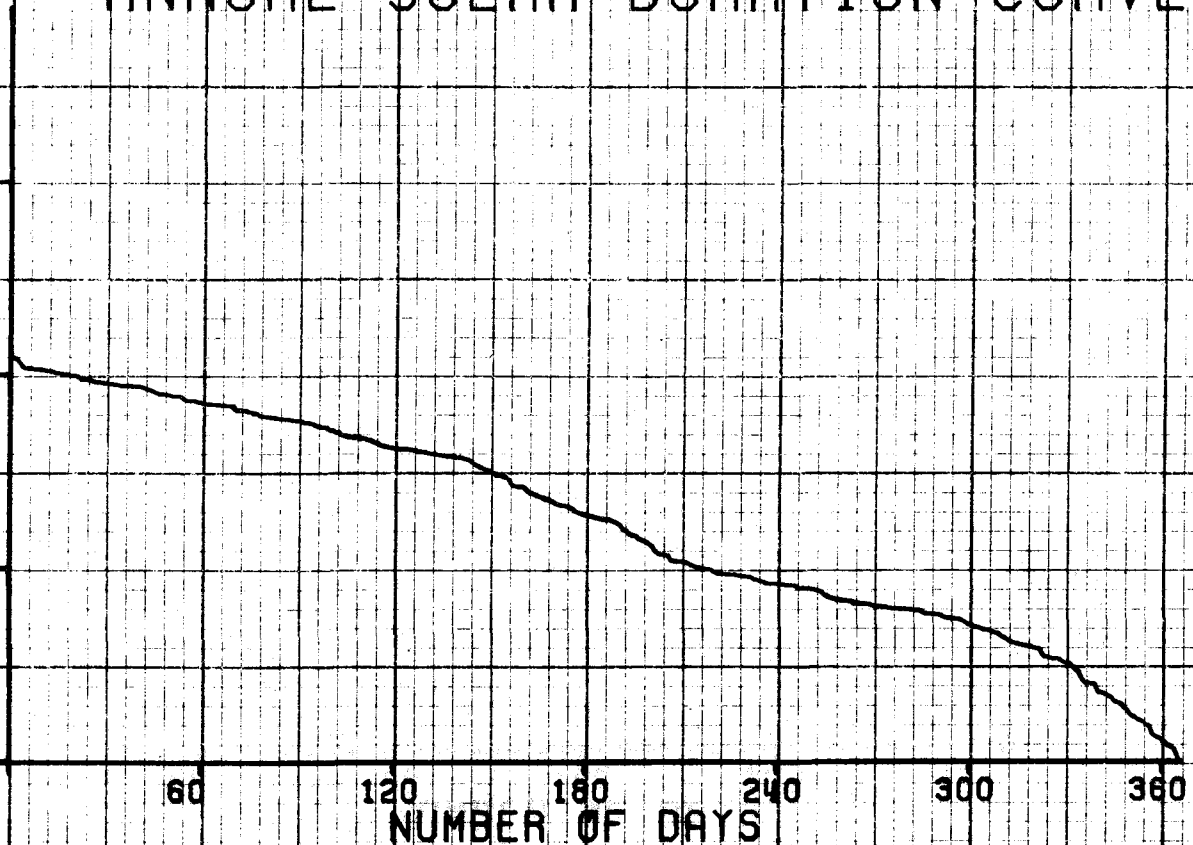


# ANNUAL SOLAR DURATION CURVE

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

60 120 180 240 300 360  
NUMBER OF DAYS



BUILDING APPLICATIONS DATA FOR MOORPARK, CALIF.

ACCOUNT/ 35955011  
CHANNELS 35955013

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	2.3 62.4	58.0 64.1	109.5 63.4	54.5	62.3	52.0	315.8	0.0	30	0	693.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	46.3 66.3	93.8 65.0	135.5 63.9	55.0	62.3	52.1	279.5	0.0	28	0	1005.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 61.0	31.5 72.2	80.8 69.2	126.0 68.2	174.2 66.9	58.8	65.5	55.4	209.5	0.0	26	0	1247.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	5.0 66.2	69.5 66.0	116.0 64.9	159.2 64.3	204.7 63.5	55.4	62.1	51.4	277.5	0.0	29	0	1610.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	37.8 78.0	141.0 75.4	200.2 74.7	249.5 74.0	289.5 73.2	63.3	72.0	56.0	103.7	2.8	20	2	2294.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	32.0 77.0	135.7 75.8	193.2 75.3	237.2 74.8	281.2 74.2	65.1	73.1	58.1	38.8	0.0	16	0	2302.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	22.8 75.0	147.0 76.7	210.2 76.2	259.7 75.6	301.5 75.0	66.2	74.0	59.4	27.7	4.1	15	2	2378.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.8 73.9	115.2 76.0	179.5 75.5	228.2 74.9	270.2 74.4	65.9	73.3	60.6	28.0	0.0	13	0	2041.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	54.3 81.3	128.2 81.6	180.2 80.8	226.5 79.8	69.7	78.7	64.2	17.4	25.3	10	10	1646.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.3 77.6	66.8 76.1	134.5 74.4	187.0 73.2	62.7	71.7	58.4	84.4	0.0	23	0	1205.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	4.5 74.1	86.5 68.4	144.2 66.3	54.0	64.5	49.9	331.2	0.0	30	0	889.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	58.5 61.5	137.5 61.1	51.3	60.0	48.3	424.3	0.0	30	0	765.

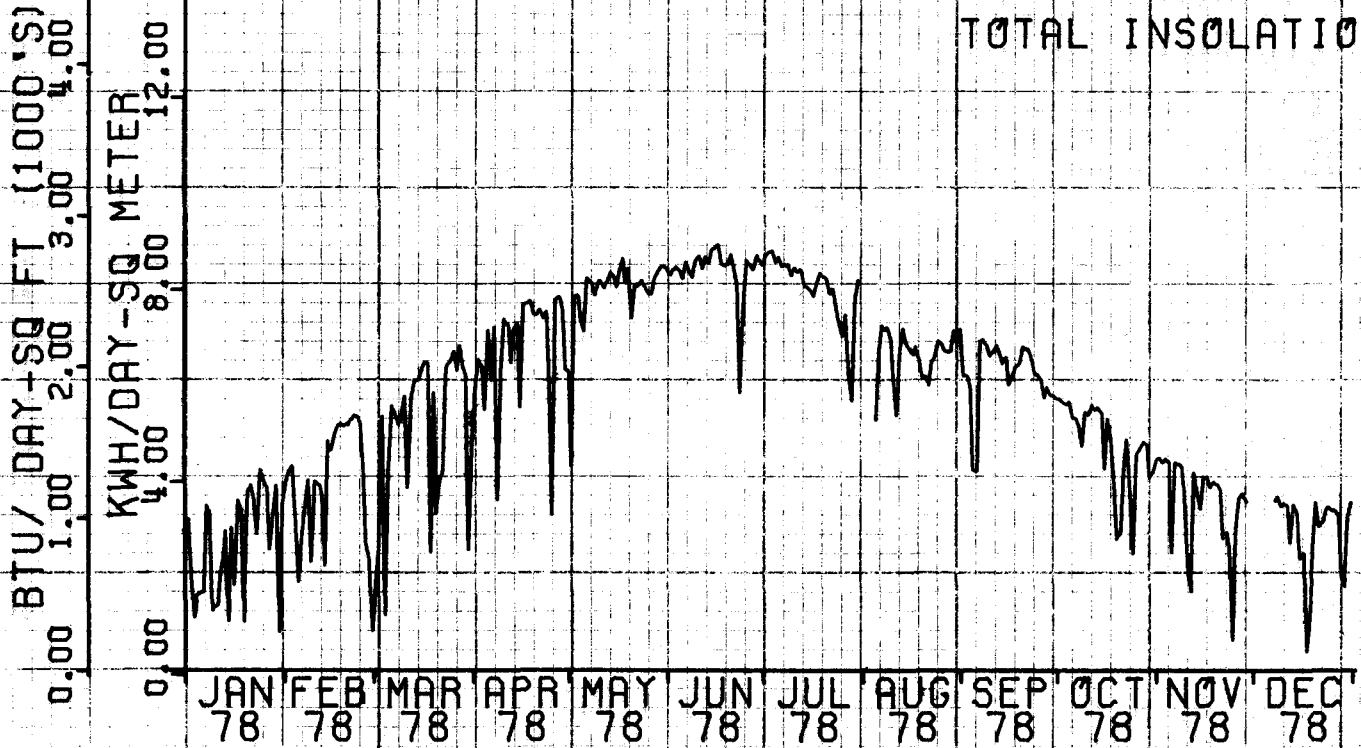
\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

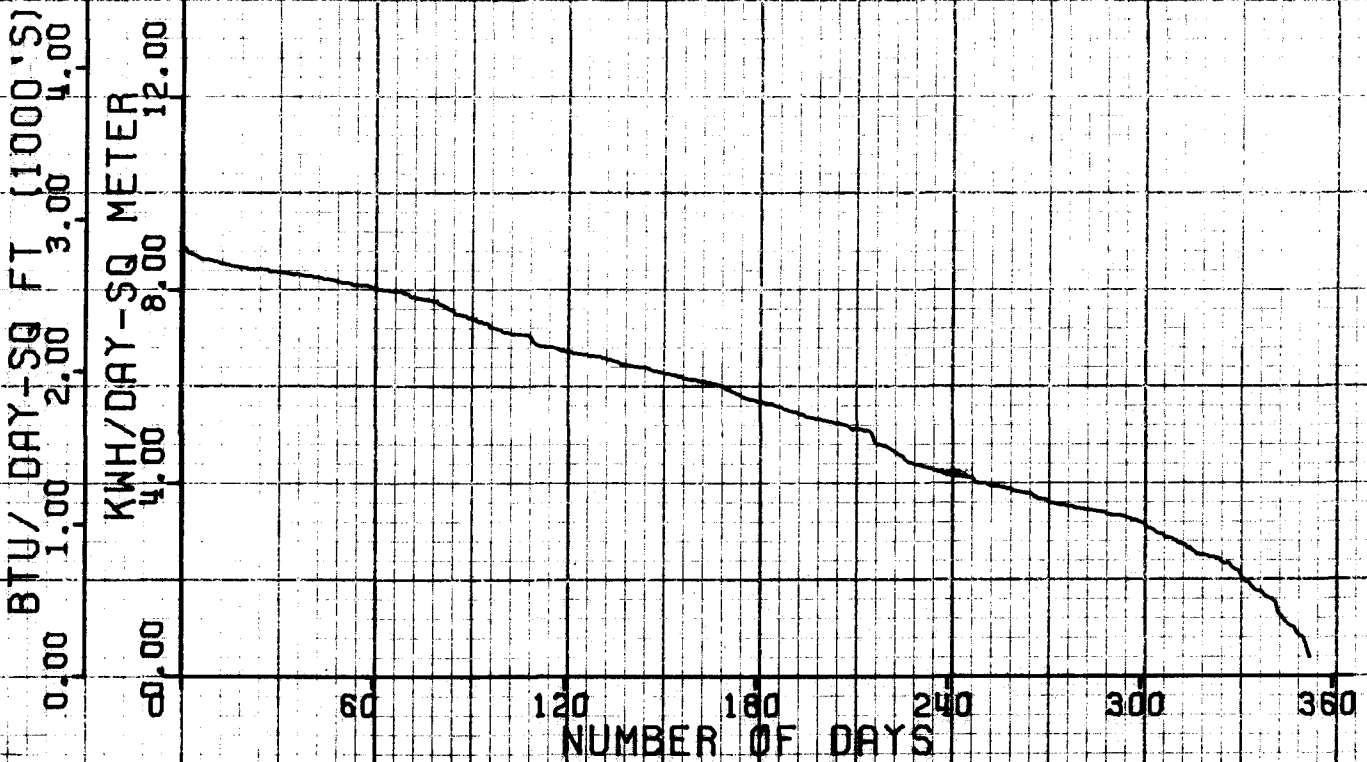


# ANNUAL DISTRIBUTION

PALM SPRINGS, CA  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR PALM SPRINGS, CA

ACCOUNT/ 79951861  
CHANNELS 79951863

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	4.5 68.1	58.8 68.5	116.5 66.8	54.2	64.3	50.6	313.6	0.0	29	0	749.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.3 75.0	57.8 75.1	109.8 73.4	157.7 71.7	58.8	69.5	53.5	174.6	0.0	26	0	1172.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 85.3	51.3 84.5	107.0 82.6	159.7 80.9	213.7 79.4	65.8	77.2	59.1	57.3	2.5	16	3	1515.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	18.8 83.6	112.0 82.7	165.2 82.0	210.2 81.1	259.0 79.8	68.3	78.3	60.3	27.2	2.9	9	2	2055.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	64.5 97.8	153.5 96.2	212.5 95.3	260.5 94.4	309.0 92.8	80.1	91.1	70.2	0.0	166.7	0	21	2460.
6/78	NUM OF HOURS AVG TEMP (F)	0.8 115.2	84.8 106.9	160.5 106.2	215.0 105.3	260.0 104.4	308.0 103.3	91.3	101.8	80.6	0.0	472.3	0	29	2593.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	59.0 108.7	151.7 108.3	210.5 107.7	260.7 107.0	308.2 106.1	95.2	104.8	86.0	0.0	606.8	0	30	2475.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	11.3 104.6	88.5 105.5	142.2 105.1	196.5 104.4	248.7 103.4	91.5	102.1	82.3	0.0	495.7	0	30	2038.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	1.5 101.3	83.5 98.1	156.2 98.8	206.7 98.3	251.0 97.4	84.9	96.0	77.0	0.0	297.9	0	29	1907.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	8.5 103.3	99.3 97.5	163.5 95.5	214.7 93.9	78.9	91.8	71.5	0.0	179.1	0	20	1435.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	24.8 82.1	102.8 75.8	157.0 74.1	59.5	72.0	54.2	203.5	0.0	22	0	1043.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	63.3 63.2	116.0 62.4	49.1	60.6	44.0	492.5	0.0	31	0	851.

\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

PARDEE, CALIF.  
TOTAL INSOLATION

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

JAN '78 FEB '78 MAR '78 APR '78 MAY '78 JUN '78 JUL '78 AUG '78 SEP '78 OCT '78 NOV '78 DEC '78

# ANNUAL SOLAR DURATION CURVE

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

60 120 180 240 300 360  
NUMBER OF DAYS

BUILDING APPLICATIONS DATA FOR PARDEE, CALIF.

ACCOUNT/ 59956001  
CHANNELS 59956003

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	7.0 62.7	64.5 62.7	114.7 61.3	50.7	59.7	48.1	413.9	0.0	29	0	703.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	1.0 56.3	50.8 66.3	95.3 64.3	136.0 62.5	51.9	60.5	48.4	354.2	0.0	27	0	1011.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 58.8	42.0 71.1	87.0 69.7	132.0 68.5	177.2 66.8	56.7	65.0	52.7	240.9	0.0	28	0	1255.
4/78	NUM OF HOURS AVG TEMP (F)	0.3 67.0	14.8 69.2	72.0 69.2	112.5 68.1	155.7 66.3	205.7 64.7	55.1	62.6	50.6	287.1	0.0	29	0	1605.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	64.0 80.9	152.5 79.8	212.2 78.5	264.5 77.2	308.0 76.0	64.7	74.0	56.1	73.3	5.5	18	2	2467.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	64.8 88.7	151.5 86.9	210.7 85.6	260.0 84.4	307.5 82.9	71.3	81.2	61.4	8.3	14.1	5	10	2519.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	66.5 93.4	162.5 92.5	223.2 91.2	274.7 89.8	322.0 88.2	75.5	86.2	65.1	0.0	62.7	0	17	2563.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	9.8 88.5	128.0 89.4	193.2 88.3	248.5 86.9	296.2 85.4	73.0	83.8	63.7	0.0	40.7	0	7	2246.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	76.5 88.1	138.7 87.4	183.7 86.0	231.7 84.2	71.0	82.2	64.1	5.4	29.0	5	8	1742.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	9.0 90.3	90.5 86.8	160.0 83.6	210.5 81.7	65.4	78.9	58.2	50.9	0.0	12	0	1405.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	22.5 75.4	98.0 69.6	151.7 66.8	52.2	64.4	47.3	385.2	0.0	30	0	959.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.5 48.6	81.5 60.0	145.7 58.6	46.4	56.5	42.5	576.1	0.0	31	0	866.

\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

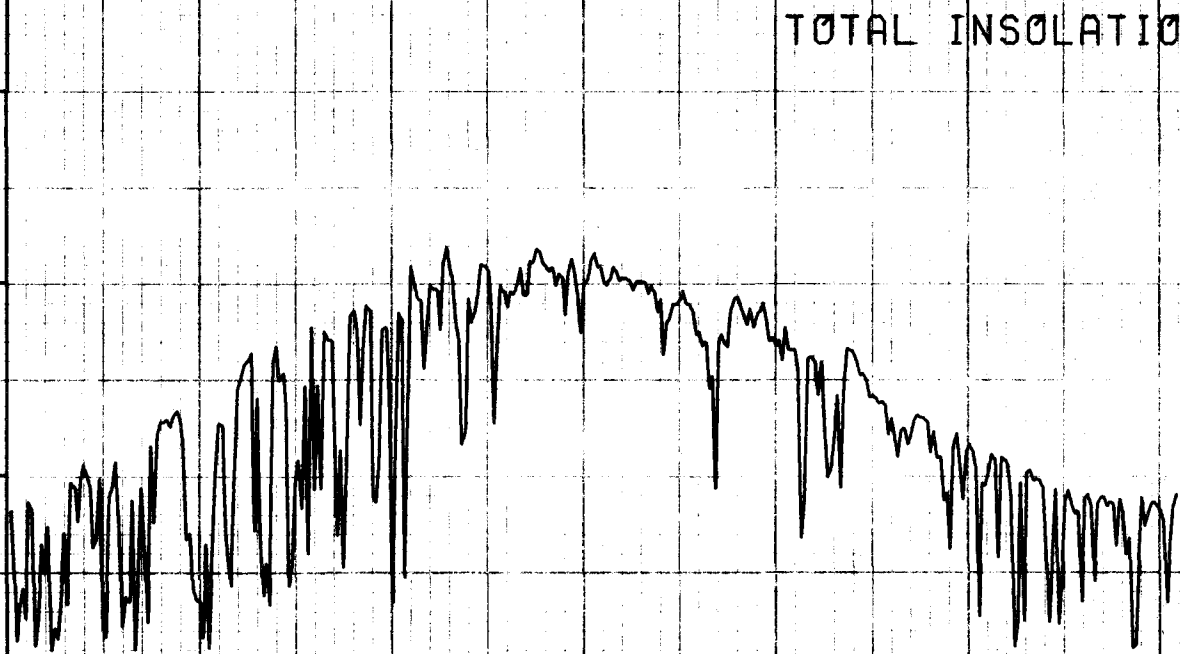
# ANNUAL DISTRIBUTION

RIALTO, CALIF.  
TOTAL INSOLATION

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

JAN '78 FEB '78 MAR '78 APR '78 MAY '78 JUN '78 JUL '78 AUG '78 SEP '78 OCT '78 NOV '78 DEC '78

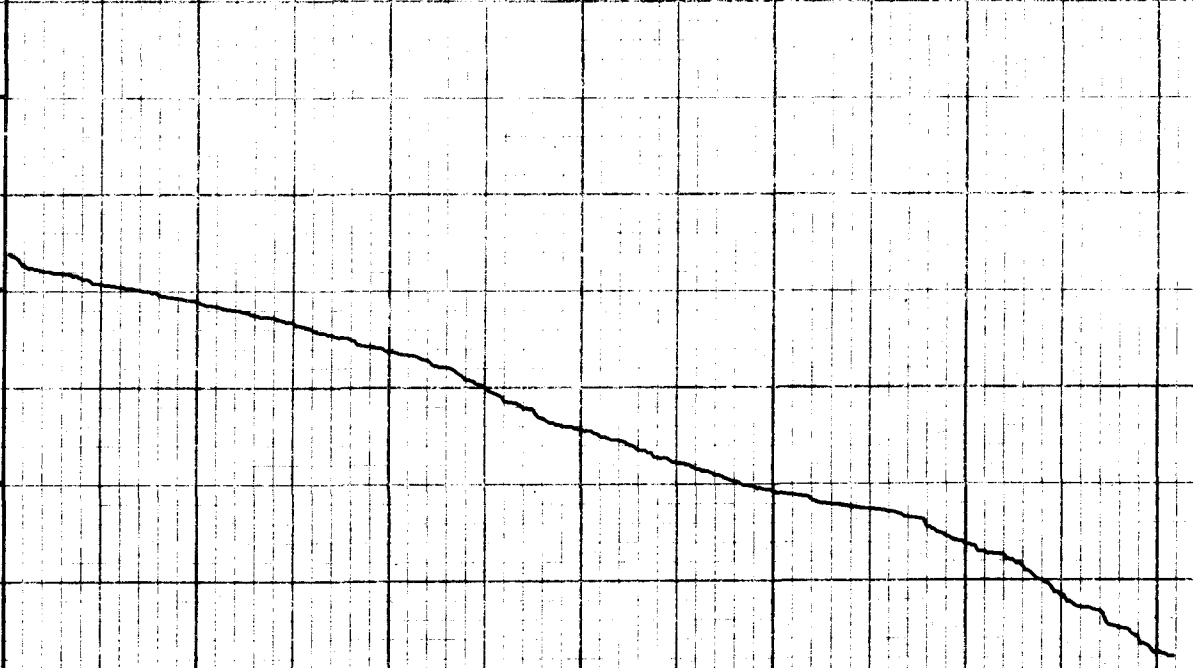


# ANNUAL SOLAR DURATION CURVE

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

60 120 180 240 300 360  
NUMBER OF DAYS



BUILDING APPLICATIONS DATA FOR RIALTO, CALIF.

ACCOUNT/ CHANNELS 30955021  
30955023

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	5.0 62.5	51.0 62.0	98.5 61.4	52.5	59.8	50.4	376.3	0.0	30	0	615.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	46.5 65.5	88.5 63.6	131.0 62.3	53.3	60.5	50.7	315.5	0.0	27	0	968.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.3 58.2	31.5 72.8	68.8 70.3	106.3 68.5	153.5 66.4	56.7	64.2	53.6	252.8	0.0	26	0	1106.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	7.8 67.3	65.0 67.1	107.0 66.2	152.5 65.1	202.0 63.9	55.7	62.4	51.7	269.5	0.0	29	0	1555.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	42.3 83.2	129.5 80.1	184.5 78.8	233.0 77.7	279.5 76.6	66.3	75.1	59.0	75.7	16.6	14	5	2205.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	50.5 88.3	149.5 86.3	207.2 85.5	255.0 84.7	297.7 83.8	73.1	82.4	63.9	4.1	41.8	2	13	2450.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	42.0 90.8	148.0 91.8	212.2 90.7	265.5 89.6	313.2 88.4	77.6	87.0	68.7	0.0	109.6	0	21	2447.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	10.5 86.9	119.0 87.4	186.7 86.6	235.0 85.6	280.2 84.5	73.6	83.0	66.3	0.0	30.5	0	9	2136.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	60.3 83.6	133.7 83.7	186.5 82.8	235.0 81.7	72.4	80.3	67.2	9.0	74.7	8	12	1729.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	1.3 88.4	87.3 82.5	151.0 80.9	207.0 79.5	68.5	78.0	63.4	31.2	4.6	8	3	1346.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	20.8 73.1	95.8 66.4	146.5 64.8	54.6	63.2	51.3	328.6	0.0	26	0	932.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.3 61.8	78.3 58.1	148.2 57.6	49.7	56.5	47.1	474.6	0.0	31	0	855.

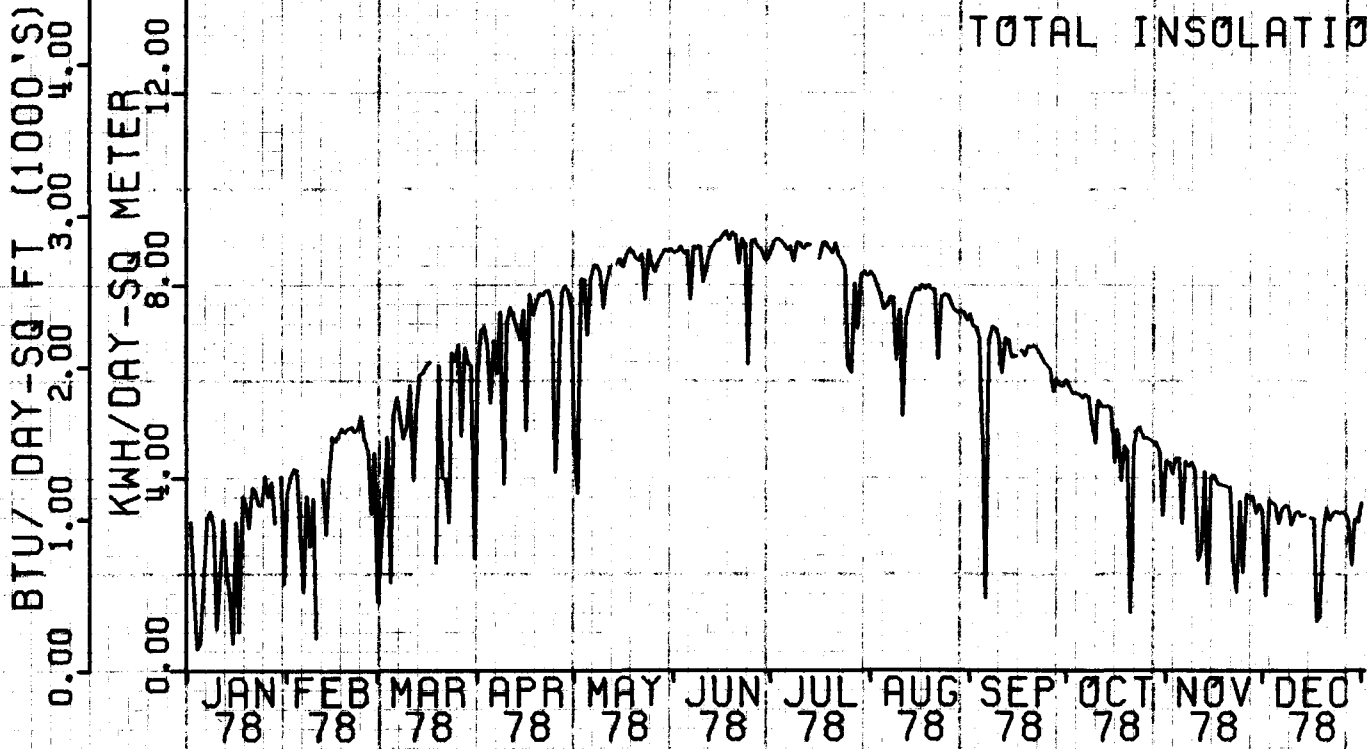
611

\*NOTE\*

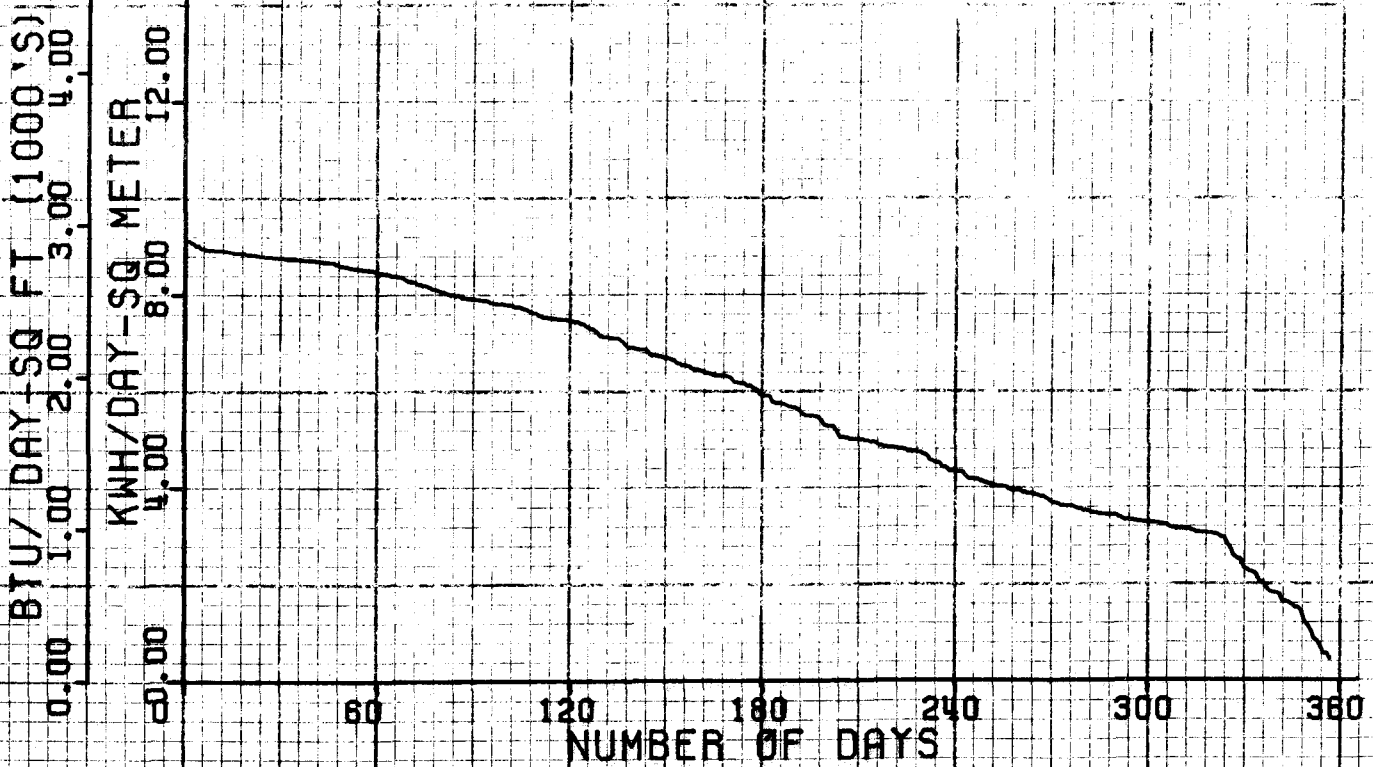
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

RIDGECREST, CAL.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR RIDGECREST, CAL.

ACCOUNT/ CHANNELS 86955381  
86955383

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	4.3 65.0	62.0 65.0	119.0 63.9	53.0	62.2	50.0	335.9	0.0	28	0	763.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	2.3 72.5	59.8 70.0	114.5 68.6	161.7 67.7	57.5	66.5	53.1	195.2	0.0	26	0	1188.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	58.0 79.1	116.5 77.7	163.5 76.6	214.5 75.2	64.2	73.3	58.8	62.3	0.1	17	1	1527.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	36.5 77.6	116.2 77.8	169.0 76.9	214.0 76.0	270.2 74.8	66.2	73.3	60.7	64.5	7.4	12	3	2130.
5/78	NUM OF HOURS AVG TEMP (F)	0.8 95.3	90.0 92.5	166.2 92.2	219.0 91.5	266.5 90.8	311.2 89.9	80.0	88.3	72.8	0.0	159.9	0	18	2548.
6/78	NUM OF HOURS AVG TEMP (F)	1.3 105.5	99.0 105.1	168.2 104.1	222.5 103.5	270.5 102.7	316.7 101.4	91.2	100.0	83.5	0.0	97.2	0	6	2692.
7/78	NUM OF HOURS AVG TEMP (F)	0.3 101.4	98.3 104.8	170.7 104.1	225.0 103.2	274.7 102.3	321.7 101.2	92.1	100.0	84.4	0.0	359.5	0	21	2625.
8/78	NUM OF HOURS AVG TEMP (F)	0.3 110.5	46.0 99.3	143.5 100.1	204.0 99.6	252.7 98.7	299.5 97.7	87.9	96.4	80.9	0.0	387.4	0	30	2349.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	2.3 87.7	99.5 89.2	162.0 89.1	210.0 88.5	255.2 87.6	77.6	86.8	70.5	1.8	121.9	2	13	1962.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.3 90.6	16.8 96.0	109.5 89.5	173.7 87.7	226.0 86.2	72.9	84.4	66.1	26.5	68.0	5	14	1505.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	21.8 71.2	106.0 65.4	165.2 63.9	51.1	61.7	46.1	416.6	0.0	30	0	1061.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.3 49.6	84.5 54.1	158.5 53.3	40.5	51.4	36.0	711.5	0.0	29	0	897.

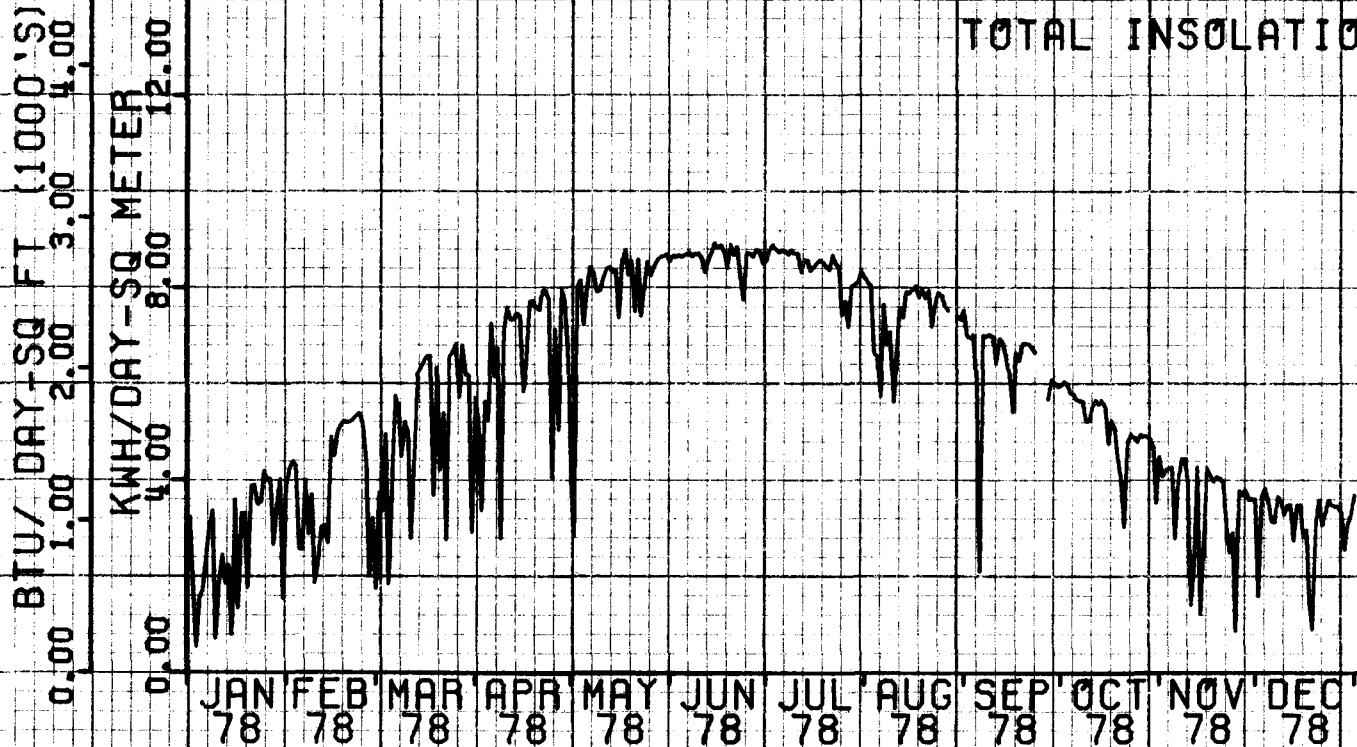
\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

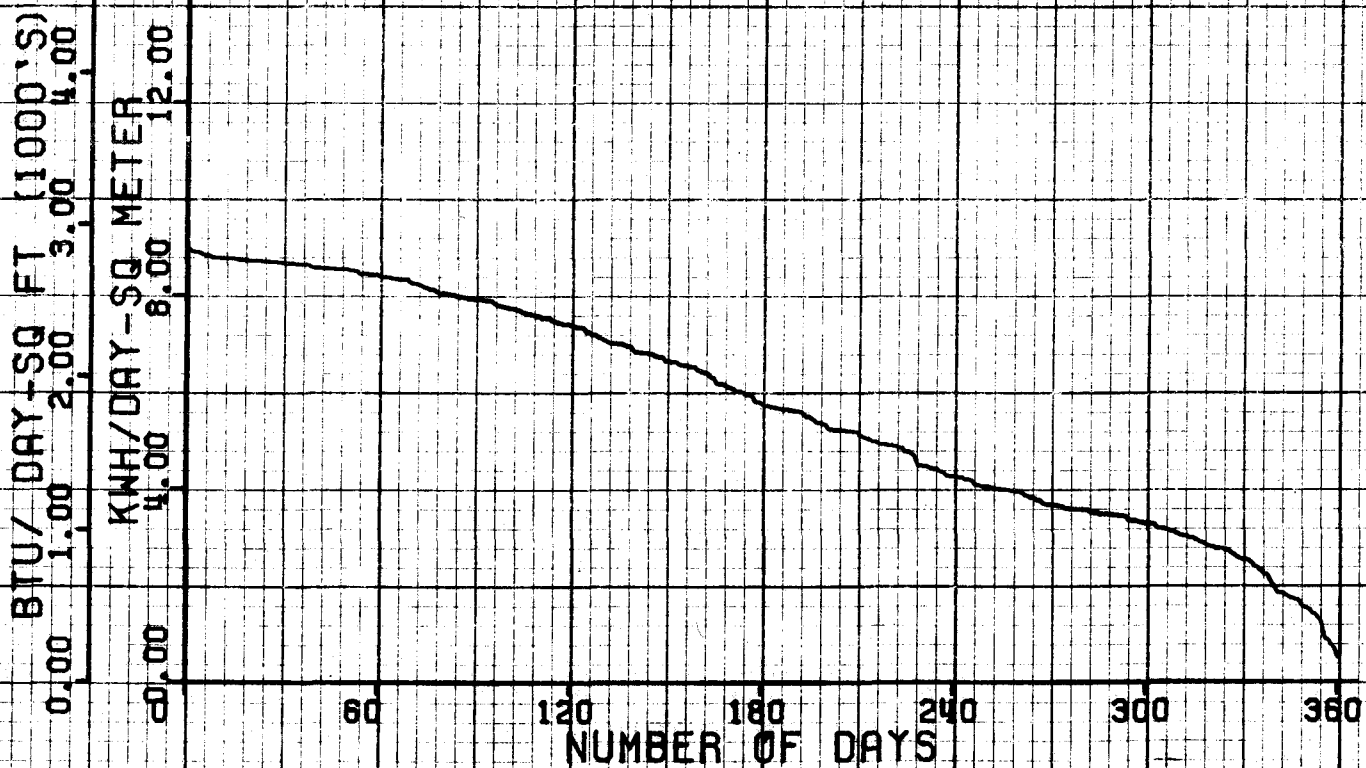


# ANNUAL DISTRIBUTION

VICTORVILLE, CAL  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR VICTORVILLE, CAL

ACCOUNT/  
CHANNELS 73955101  
73955103

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	8.3 64.6	65.3 64.7	120.5 63.4	54.7	62.0	52.2	320.1	0.0	31	0	762.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.3 72.3	59.3 68.6	110.3 67.1	159.2 65.8	56.8	64.1	53.3	230.2	0.0	28	0	1163.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 83.1	55.0 74.2	115.2 72.9	164.5 71.9	219.7 70.7	62.0	69.0	57.7	111.2	0.0	20	0	1560.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	33.0 73.9	103.0 72.8	153.0 71.8	203.2 70.7	254.5 69.7	62.1	68.9	56.6	107.8	0.0	19	0	2014.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	87.5 84.8	160.2 84.1	214.0 83.4	261.7 82.6	305.2 81.7	71.8	80.0	64.1	7.2	31.1	4	9	2507.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	92.8 92.6	171.0 92.0	226.7 91.3	273.7 90.5	318.0 89.5	80.3	88.0	72.8	0.0	161.6	0	25	2694.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	92.8 98.4	171.0 97.9	226.7 97.1	275.0 96.3	321.2 95.1	85.5	93.8	77.3	0.0	314.1	0	30	2625.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	52.5 95.9	138.0 95.7	194.7 95.0	240.7 94.2	284.5 93.3	83.2	91.6	76.5	0.0	230.4	0	25	2302.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	1.3 88.1	95.5 87.3	158.2 87.4	202.7 86.8	245.7 86.0	75.8	84.8	69.3	2.0	84.0	1	11	1972.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	22.0 94.9	114.5 88.9	180.7 87.3	233.2 85.8	73.2	84.2	66.4	11.0	48.0	2	14	1561.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	21.0 74.2	106.0 70.0	161.0 68.4	56.3	66.4	51.8	264.4	0.0	26	0	1030.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	1.0 55.8	86.3 60.6	161.0 59.3	47.8	58.0	43.3	533.0	0.0	31	0	939.

\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

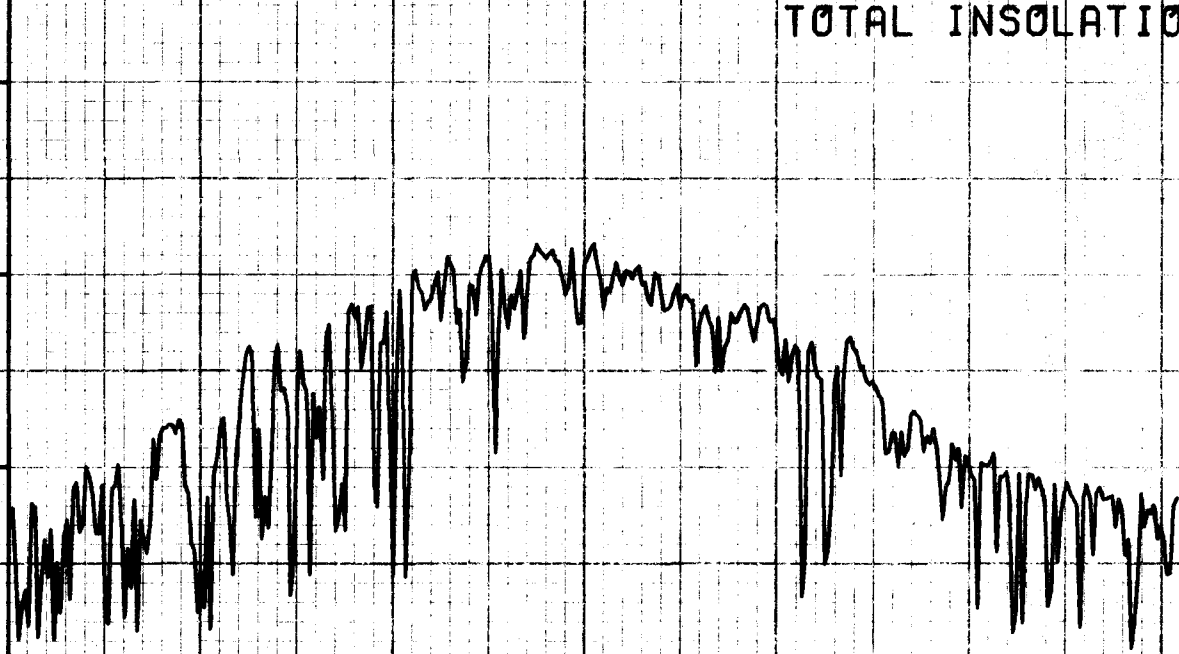
# ANNUAL DISTRIBUTION

VILLA PARK, CAL.  
TOTAL INSOLATION

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

JAN '78 FEB '78 MAR '78 APR '78 MAY '78 JUN '78 JUL '78 AUG '78 SEP '78 OCT '78 NOV '78 DEC '78

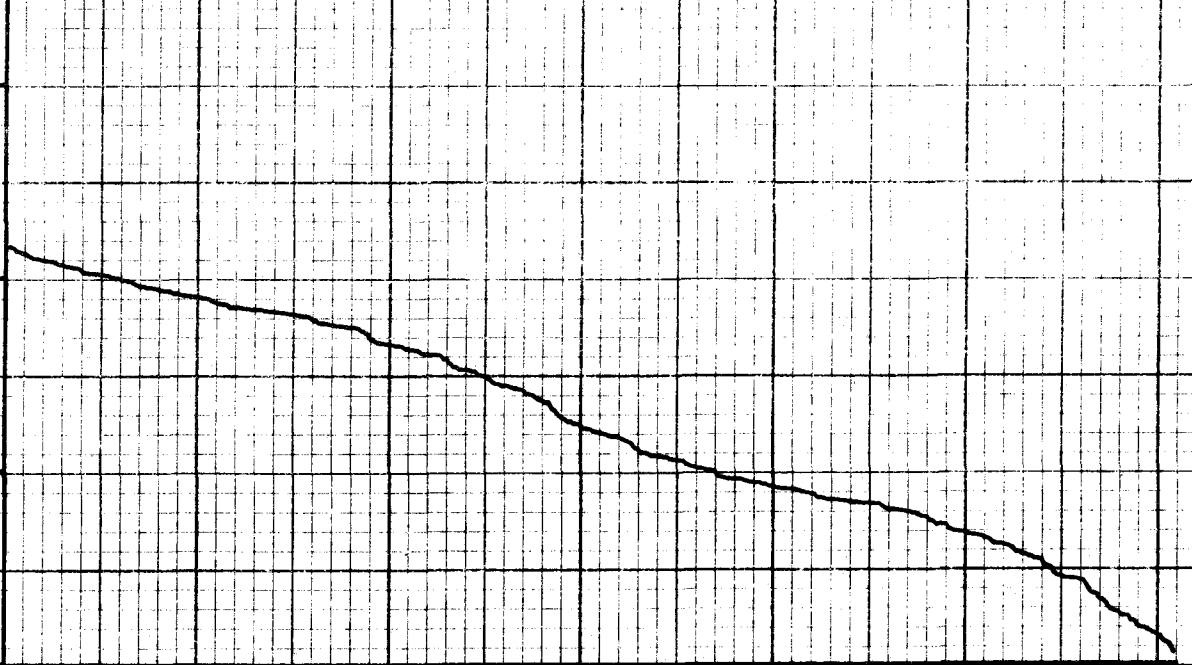


# ANNUAL SOLAR DURATION CURVE

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

60 120 180 240 300 360  
NUMBER OF DAYS



BUILDING APPLICATIONS DATA FOR VILLA PARK, CAL.

ACCOUNT/ 29955041  
CHANNELS 29955043

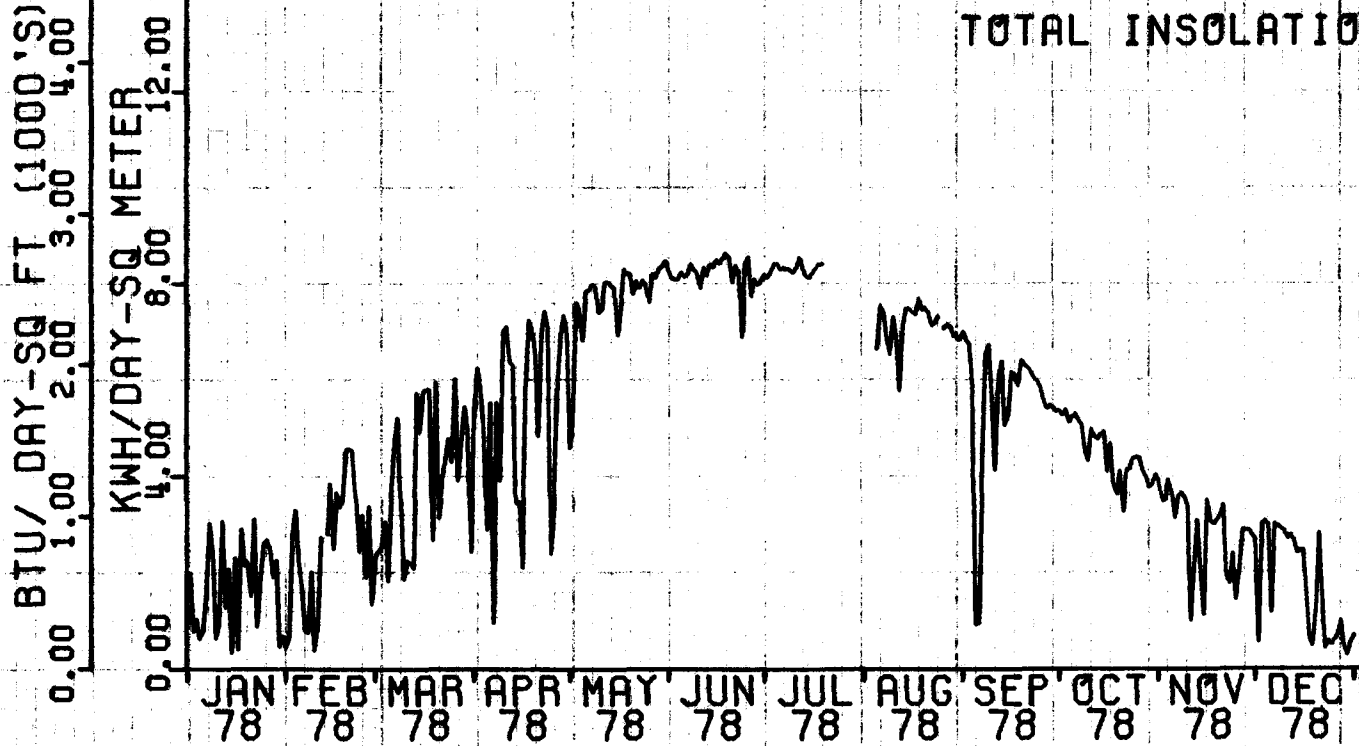
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	1.8 62.6	42.3 64.2	95.0 63.6	55.2	61.7	53.4	293.1	0.0	30	0	612.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	40.3 67.0	87.3 65.4	134.7 64.0	55.9	62.5	53.2	246.4	0.0	27	0	970.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 63.9	31.3 72.8	75.3 70.8	117.0 69.2	168.5 67.8	60.1	66.2	56.9	171.3	0.7	23	2	1198.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	13.3 65.1	67.0 66.2	109.5 65.5	155.2 64.7	205.2 63.8	57.6	62.6	54.3	200.1	0.0	27	0	1606.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	54.3 76.9	130.5 75.4	184.0 74.4	234.5 73.4	283.7 72.4	65.1	71.3	59.9	68.3	5.1	18	2	2227.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	62.8 78.0	143.7 77.7	200.5 77.1	248.0 76.5	293.7 75.7	68.6	74.7	63.0	11.8	3.9	8	2	2400.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	54.8 78.4	155.5 78.5	215.0 77.9	261.5 77.5	303.7 77.0	69.8	76.1	64.3	0.0	11.6	0	3	2423.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	10.0 76.5	130.5 77.8	190.2 77.3	234.5 76.7	272.0 76.2	69.0	75.3	64.3	0.0	0.0	0	0	2129.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	63.3 82.1	127.7 82.2	171.2 81.7	215.2 80.7	71.9	78.9	67.7	0.9	46.5	2	10	1632.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	2.3 77.0	81.0 76.1	140.2 75.1	193.7 74.4	66.6	73.5	63.1	22.7	0.4	12	1	1260.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	8.5 66.9	90.0 66.5	143.5 65.6	56.4	64.1	53.4	256.7	0.0	30	0	913.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.3 52.2	65.8 60.1	136.7 59.8	51.5	58.9	48.9	418.2	0.0	31	0	786.

\*NOTE\*

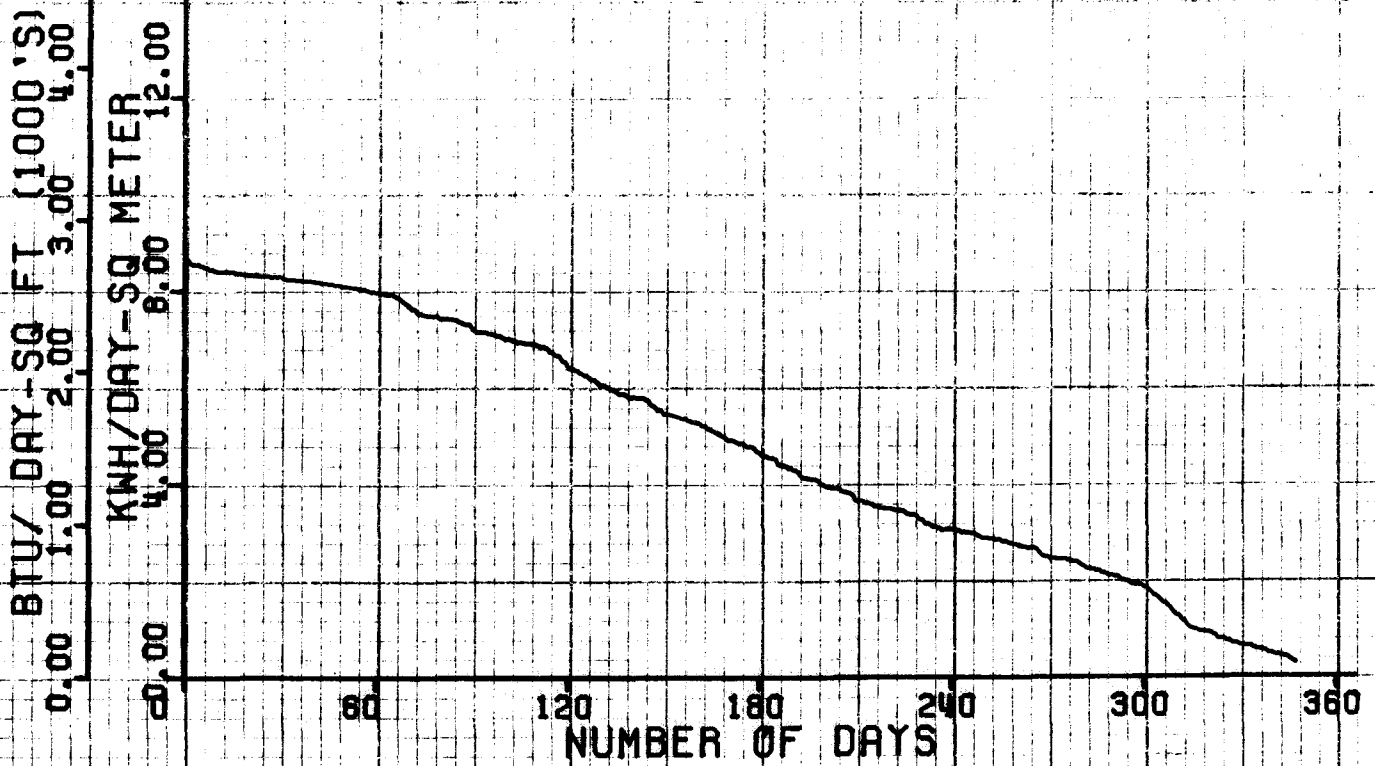
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

VISALIA, CALIF.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR VISALIA, CALIF.

ACCOUNT/ 50955001  
CHANNELS 50955003

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.3 62.5	21.3 56.5	57.0 56.2	50.8	56.0	49.8	426.8	0.0	30	0	403.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	17.8 60.9	54.0 59.5	90.5 59.1	52.6	57.9	50.9	334.3	0.0	27	0	716.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.3 65.3	19.0 68.6	68.3 68.4	113.0 67.9	173.2 67.3	60.5	65.9	57.6	139.2	0.0	27	0	1202.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	8.3 65.9	64.0 67.6	117.5 67.3	165.5 66.8	217.0 66.1	59.8	65.2	56.4	166.6	0.0	26	0	1635.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	46.8 79.5	146.2 78.7	208.2 78.3	262.0 77.8	309.7 77.2	70.9	76.5	65.7	16.5	32.0	6	9	2423.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	55.5 83.0	152.2 83.0	214.0 82.6	264.5 82.3	311.5 81.8	76.4	81.2	71.6	0.0	66.0	0	17	2552.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	38.8 86.8	94.5 86.3	130.2 85.8	161.0 85.3	188.7 84.8	79.6	84.3	74.9	0.0	94.8	0	15	2580.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	3.5 85.8	114.5 86.4	178.0 86.0	226.7 85.7	272.0 85.5	79.6	85.0	74.8	0.0	147.9	0	20	2212.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	51.5 78.9	130.5 80.1	182.7 79.8	230.7 79.0	72.2	78.3	68.3	4.7	38.0	2	9	1683.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.5 70.1	70.0 80.8	155.7 78.5	214.0 77.6	69.2	76.4	65.0	29.9	16.4	5	7	1366.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	2.5 59.8	64.5 63.0	131.7 61.4	52.3	59.9	49.5	367.2	0.0	29	0	802.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	19.8 48.6	75.0 49.4	42.7	48.7	41.7	689.9	0.0	31	0	418.

\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

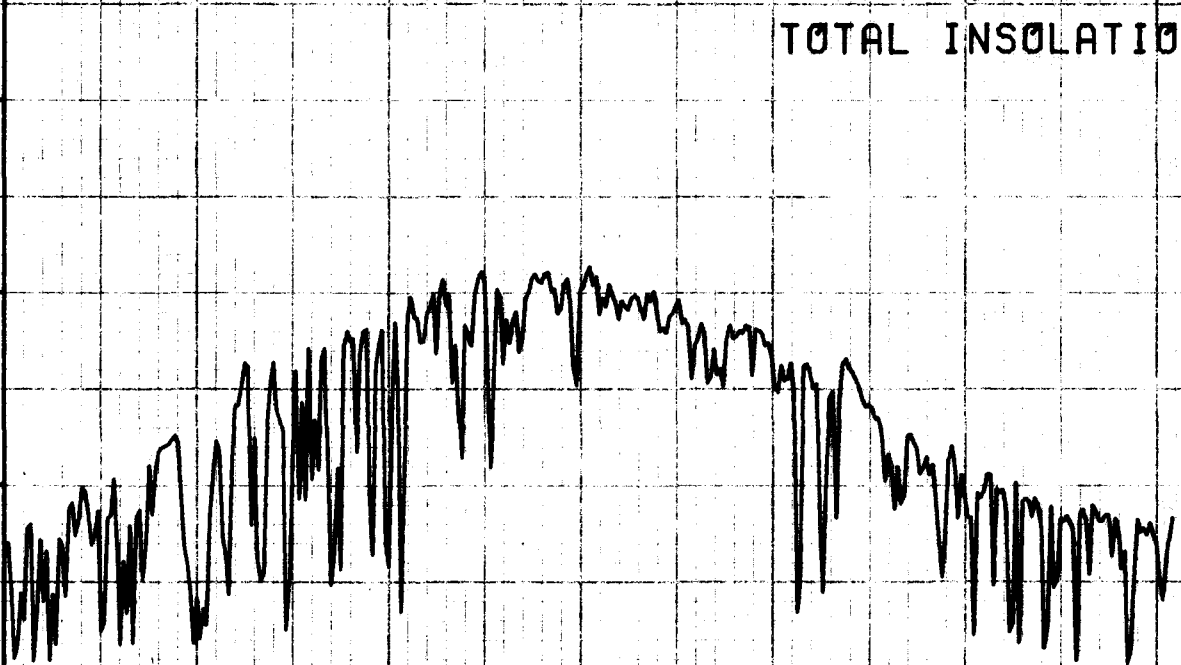
# ANNUAL DISTRIBUTION

WALNUT, CALIF.  
TOTAL INSOLATION

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

JAN '78 FEB '78 MAR '78 APR '78 MAY '78 JUN '78 JUL '78 AUG '78 SEP '78 OCT '78 NOV '78 DEC '78

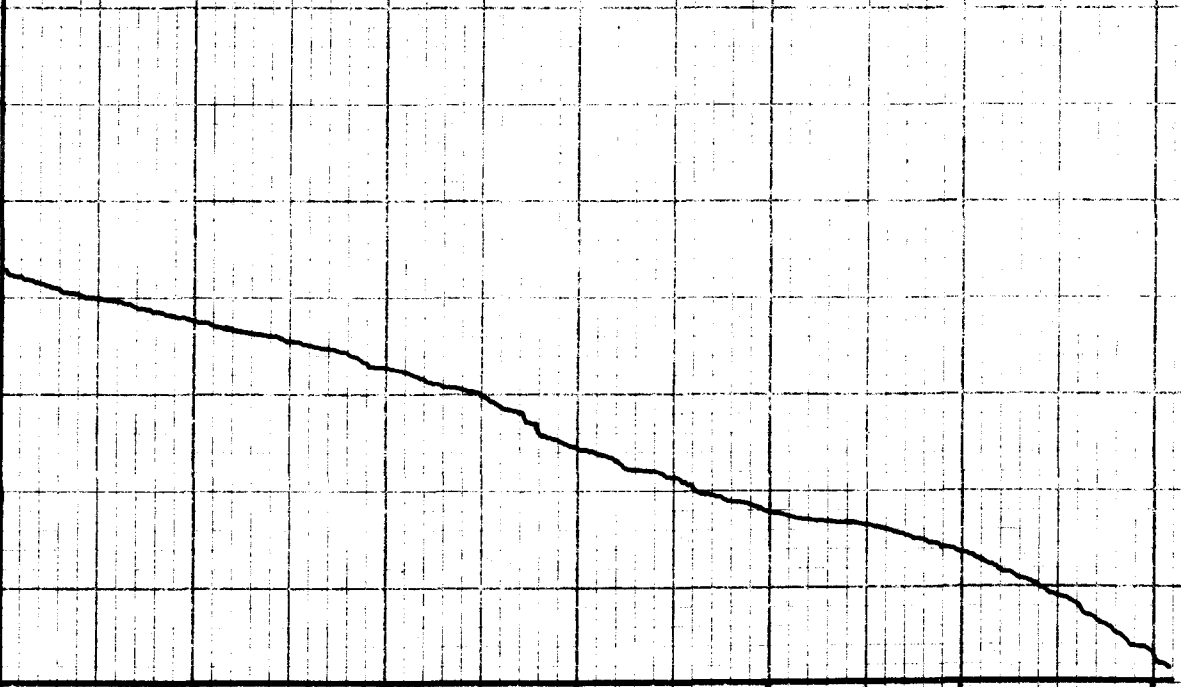


# ANNUAL SOLAR DURATION CURVE

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00

60 120 180 240 300 360  
NUMBER OF DAYS



BUILDING APPLICATIONS DATA FOR WALNUT, CALIF.

ACCOUNT/ 26955831  
CHANNELS 26955833

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.3 57.0	50.5 68.4	98.3 67.2	56.7	65.5	54.3	248.8	0.0	30	0	614.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	41.0 72.8	87.5 70.3	134.0 68.3	57.8	66.7	54.5	201.7	0.0	27	0	944.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.8 69.8	34.5 77.6	74.5 76.6	113.0 74.9	153.7 73.2	62.0	70.8	58.3	121.1	0.0	24	0	1134.
4/78	NUM OF HOURS AVG TEMP (F)	0.8 71.7	10.8 71.6	62.8 72.8	101.5 71.8	143.7 70.5	201.0 69.0	60.2	67.2	55.9	140.7	0.0	28	0	1556.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	42.3 86.1	125.7 83.8	176.2 82.6	225.2 81.1	271.2 79.7	68.7	77.9	61.5	22.1	18.4	10	5	2130.
6/78	NUM OF HOURS AVG TEMP (F)	0.3 74.6	39.8 87.7	141.2 87.0	196.5 86.1	240.5 85.1	283.0 84.0	72.7	82.3	64.6	0.0	21.6	0	9	2329.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	35.0 87.9	148.2 89.1	212.2 88.0	262.2 86.9	307.2 85.8	75.5	84.4	66.8	0.0	53.1	0	13	2410.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	6.3 89.1	124.0 87.6	185.5 86.5	232.2 85.5	275.2 84.5	73.9	83.2	66.9	0.0	25.6	0	9	2105.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 88.7	59.5 90.2	129.2 89.4	174.5 88.4	216.2 87.0	74.6	84.8	68.5	0.0	76.6	0	11	1637.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.3 91.0	62.8 84.4	131.0 82.5	185.5 81.4	69.6	79.8	64.6	8.2	0.0	3	0	1190.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	7.0 70.4	84.8 69.9	141.2 68.4	56.9	66.5	53.3	251.1	0.0	26	0	868.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	60.8 56.5	136.2 55.6	45.1	54.0	41.8	397.8	0.0	20	0	783.

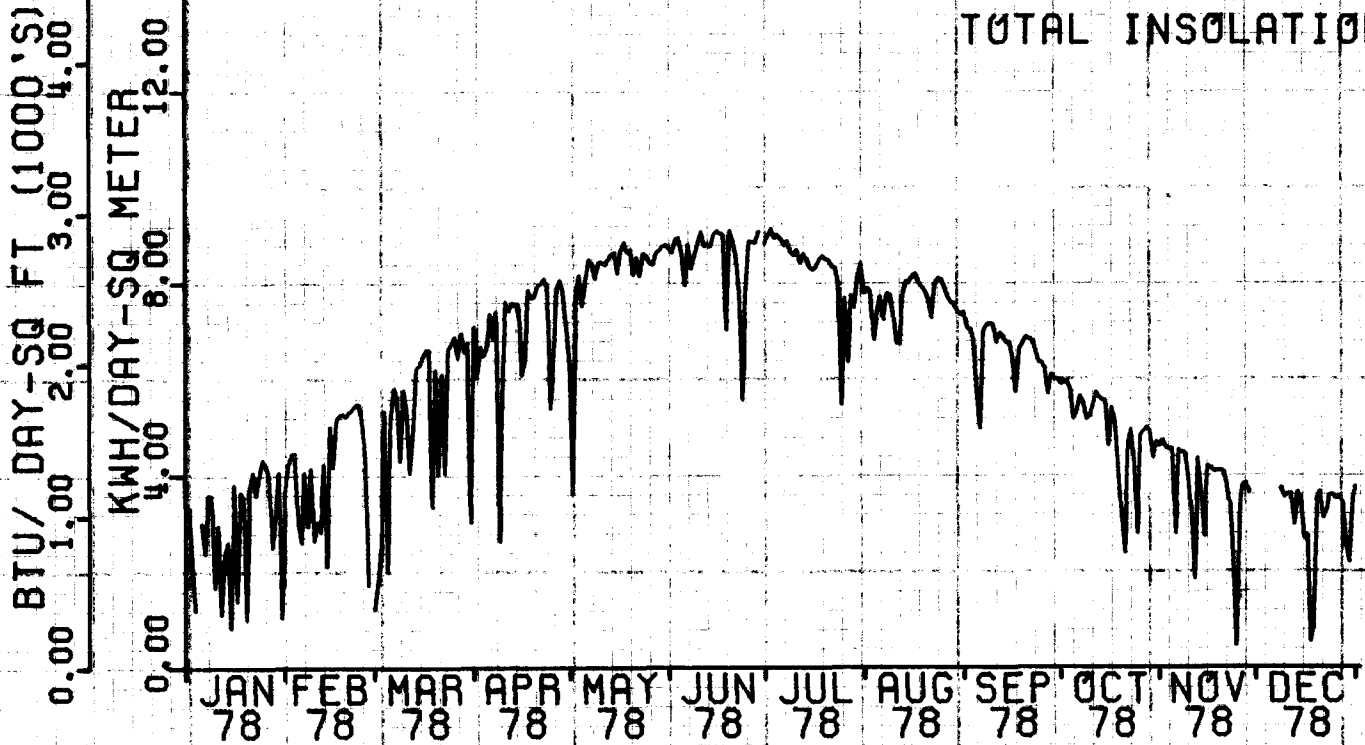
\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

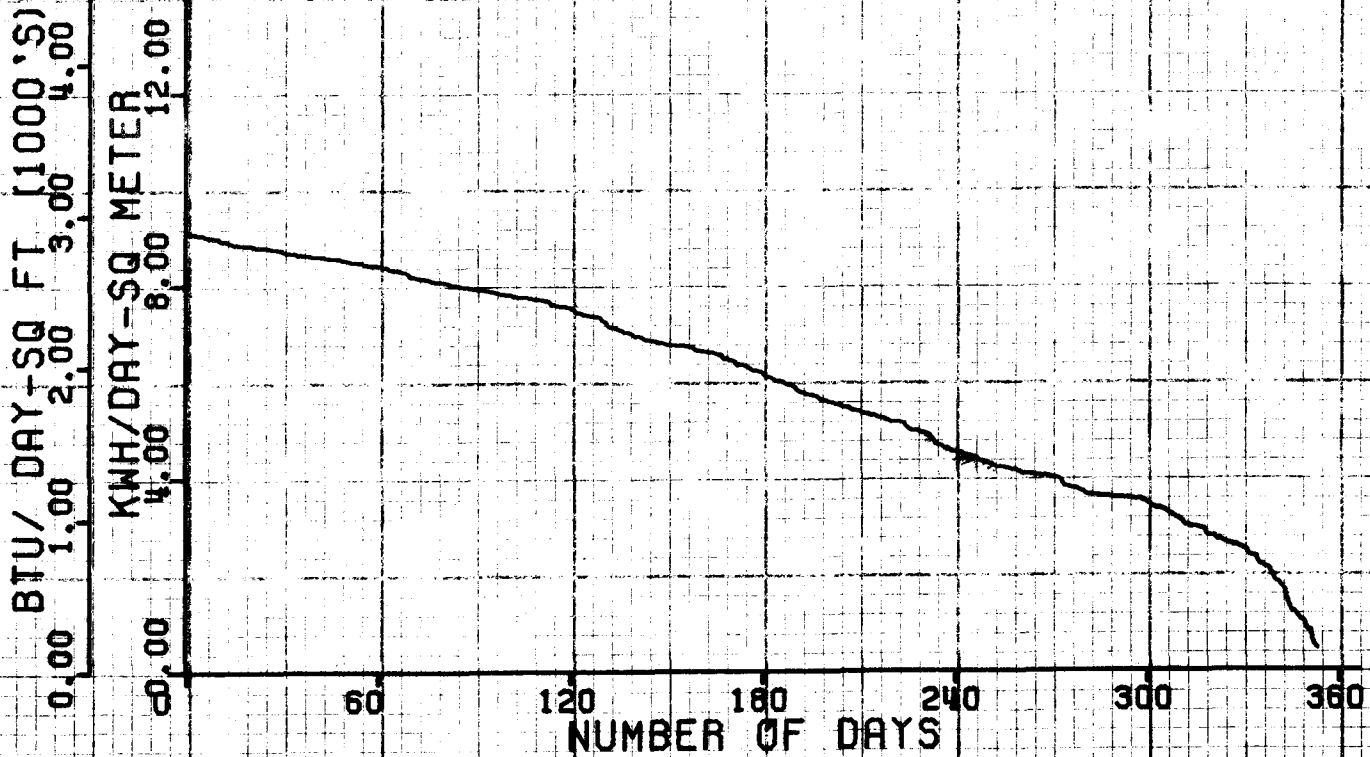


# ANNUAL DISTRIBUTION

YUCCA VALLEY, CA  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR YUCCA VALLEY, CA

ACCOUNT/ 84956321  
CHANNELS 84956323

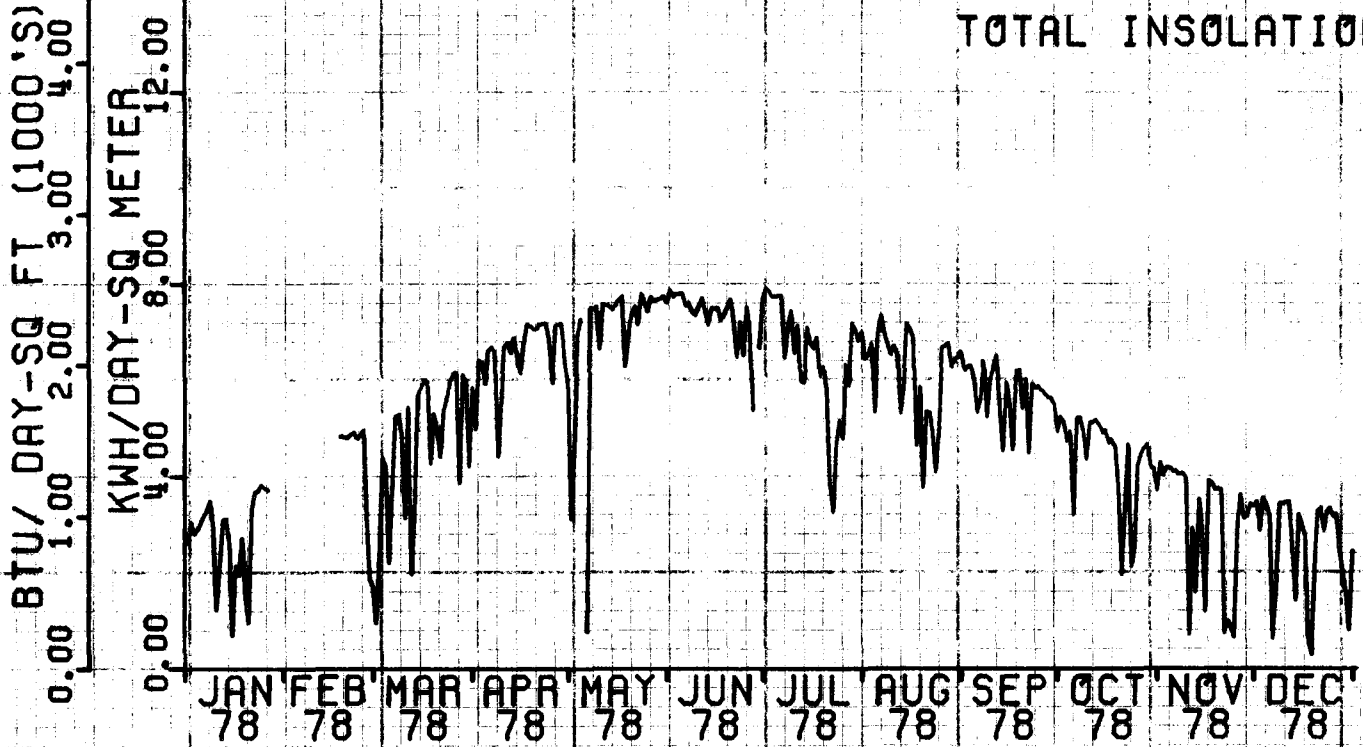
DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.8 54.8	16.8 52.4	76.3 53.9	131.7 53.3	44.8	52.2	42.2	584.9	0.0	29	0	836.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	5.5 64.3	68.3 57.8	109.3 57.2	157.2 56.0	47.3	54.7	43.7	496.0	0.0	28	0	1210.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	3.5 60.2	69.8 65.0	123.0 64.0	172.7 63.4	227.0 62.5	53.7	61.2	48.8	326.7	0.0	29	0	1640.
4/78	NUM OF HOURS AVG TEMP (F)	0.3 70.0	47.8 65.9	122.7 65.0	172.7 64.7	222.2 64.2	268.5 63.3	54.8	61.9	49.1	306.9	0.0	30	0	2171.
5/78	NUM OF HOURS AVG TEMP (F)	0.5 83.0	92.0 77.9	168.2 77.7	221.0 77.3	269.7 76.6	311.7 75.9	66.5	74.6	58.8	53.4	5.3	12	2	2574.
6/78	NUM OF HOURS AVG TEMP (F)	0.5 94.5	90.3 88.8	162.7 88.5	218.0 88.1	270.7 87.5	317.0 86.8	78.2	85.6	70.3	0.0	120.9	0	21	2665.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	81.3 94.2	162.2 93.9	221.5 93.2	273.0 92.5	318.7 91.7	83.2	90.3	76.0	0.0	254.7	0	26	2577.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	54.5 90.4	148.0 90.7	204.7 90.2	255.0 89.6	298.5 88.7	79.8	87.4	73.2	0.0	159.6	0	23	2380.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	4.8 86.9	102.8 81.7	166.0 81.9	216.5 81.8	263.0 81.2	72.3	80.2	66.4	11.9	55.4	4	11	2019.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	26.3 88.5	109.5 82.7	170.7 81.4	224.5 80.2	68.2	78.7	62.0	55.1	15.2	12	7	1510.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	43.5 63.9	113.2 60.6	160.5 59.7	50.0	58.5	46.1	423.5	0.0	27	0	1114.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.5 57.3	75.8 50.0	124.5 50.0	40.3	49.7	36.5	592.6	0.0	24	0	922.

\*NOTE\*

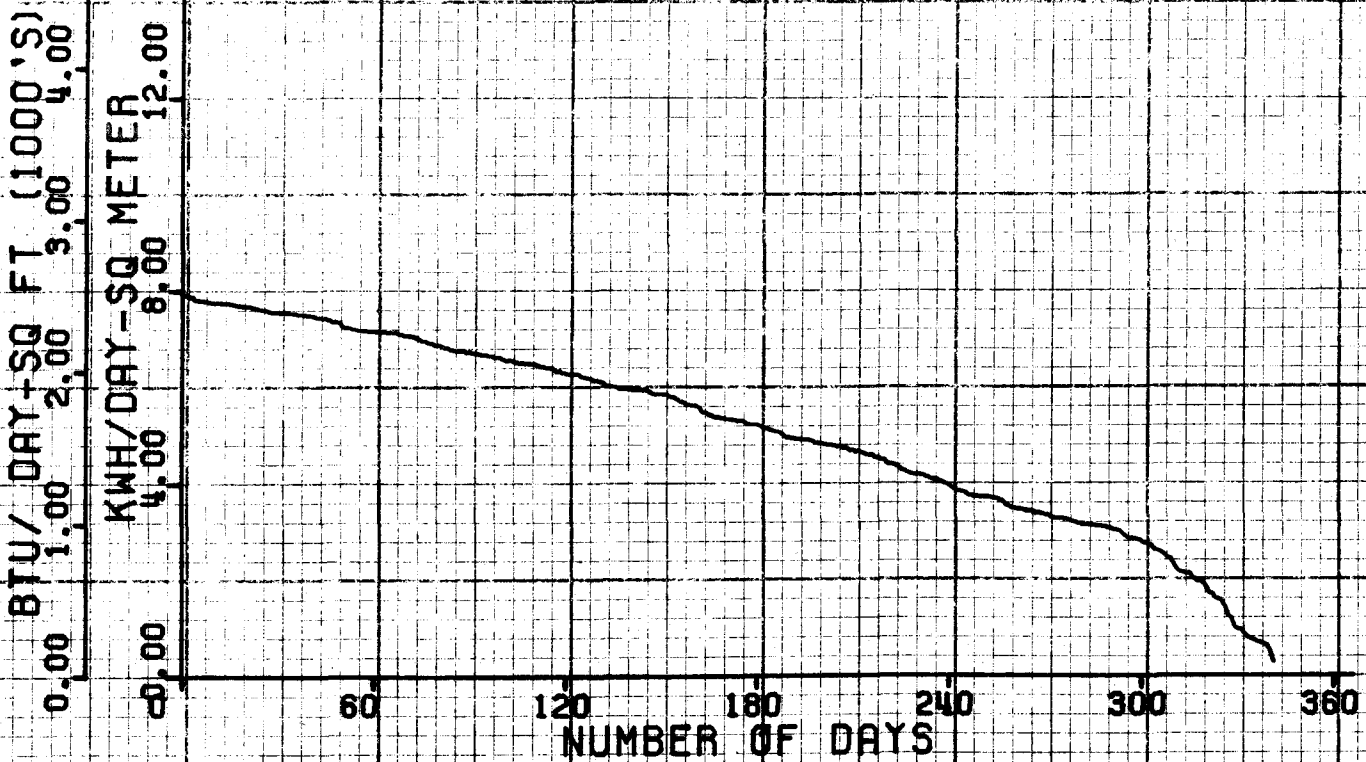
AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

# ANNUAL DISTRIBUTION

TUCSON, ARIZ.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



BUILDING APPLICATIONS DATA FOR TUCSON, ARIZ.

ACCOUNT/ 82832101  
CHANNELS 82832103

DATE MO/YR	NUMBER OF HOURS ABOVE GIVEN TOTAL INSOLATION LEVEL AND THE AVERAGE TEMPERATURE DURING THOSE HOURS	BTU'S PER SQUARE FOOT PER HOUR						AVG DAILY TEMP DEG F	AVG DAYLT TEMP* DEG F	AVG NIGHT TEMP* DEG F	MONTHLY HEATING DEG-DAYS (65 F)	MONTHLY COOLING DEG-DAYS (75 F)	NUMBER OF HEATING DAYS	NUMBER OF COOLING DAYS	AVG TOTAL INSOL PER DAY* BTU/SQ FT
		350	300	250	200	150	100								
1/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.8 55.0	54.3 58.2	112.0 58.0	50.4	57.2	47.8	363.8	0.0	25	0	797.
2/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	27.5 65.7	48.5 64.7	68.0 63.8	53.6	62.6	49.3	102.2	0.0	9	0	1253.
3/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	31.5 76.0	90.8 74.3	151.5 73.6	207.7 72.3	63.3	70.7	58.7	61.7	0.0	8	0	1419.
4/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 68.0	101.8 77.1	163.0 76.4	214.2 75.4	261.5 74.3	66.4	73.6	60.9	7.1	0.0	3	0	2024.
5/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	16.5 82.5	120.5 84.6	181.5 84.3	231.7 83.8	279.7 83.0	74.0	82.1	67.0	28.8	77.9	4	14	2153.
6/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	9.0 100.4	116.7 97.2	180.2 96.7	237.7 95.8	289.5 94.8	84.5	93.0	78.0	0.0	113.4	0	12	2277.
7/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	1.5 94.8	100.8 96.7	164.7 95.7	216.2 94.5	265.7 93.2	84.7	91.8	79.1	0.0	154.6	0	16	1997.
8/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.8 90.5	85.3 92.3	151.7 91.6	206.5 91.0	260.5 90.2	82.8	89.4	78.1	0.0	210.3	0	27	1878.
9/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.5 84.0	56.5 86.6	132.5 86.5	192.0 86.0	243.0 85.4	79.0	84.7	74.6	0.0	120.1	0	23	1761.
10/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	2.0 84.1	86.8 84.4	149.2 82.8	203.5 81.6	72.6	80.3	68.2	25.6	47.4	7	18	1326.
11/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	15.5 71.9	93.0 68.0	138.7 67.1	58.2	65.4	55.1	196.4	0.0	24	0	884.
12/78	NUM OF HOURS AVG TEMP (F)	0.0 0.0	0.0 0.0	0.0 0.0	0.5 44.8	56.5 51.4	126.5 51.5	43.2	50.3	39.7	130.5	0.0	6	0	746.

\*NOTE\*

AVERAGE DAYLIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS ABOVE 50 BTU/SQ.FT-HR  
 AVERAGE NIGHT TEMPERATURE--TEMPERATURE AVERAGED OVER THE INTERVALS WHEN THE TOTAL INSOLATION IS BELOW 50 BTU/SQ.FT-HR  
 AVG TOTAL INSOL. PER DAY--SUM OF TOTAL INSOL. VALUES ABOVE 50 BTU/SQ.FT-HR DIVIDED BY THE NUMBER OF DAYS IN THE MONTH

## APPENDIX E

### DETAILED STATISTICAL SUMMARY

The Detailed Statistical Summary is designed to provide information in a concise manner while maintaining the high degree of time resolution that is possible from 15-minute interval data. Such information would be useful to those interested in examining the daily, monthly and annual patterns of insolation and temperature.

For each station a separate booklet is produced. The information is presented as follows:

- I Building Applications
  - 1 Building Applications Data Table
- II Total Insolation Plots
  - 1 Annual Distribution and Annual Solar Duration Curve
  - 12 Monthly Distributions and Monthly Solar Duration Curves
  - 12 Daily Profiles and Daily Solar Duration Curves
- III Total Insolation Tables
  - 1 Annual Solar Duration Curve
  - 12 Monthly Distributions
  - 12 Monthly Solar Duration Curves
  - 12 Daily Profiles
  - 12 Daily Solar Duration Curves

IV Direct Insolation Plots (if measured)

25 Plots, same as Total Insolation

V Direct Insolation Tables (if measured)

49 Tables, same as Total Insolation

12 Interruption Tables

VI Dry Bulb Temperature Tables

12 Monthly Distributions

12 Daily Profiles

This section contains a sample of Barstow data in each format. One sample has been included for each plot and table. The complete Detailed Statistical Summary for a station may be ordered as set forth in Section III, "Cost and Ordering Procedures."

RY:31-2

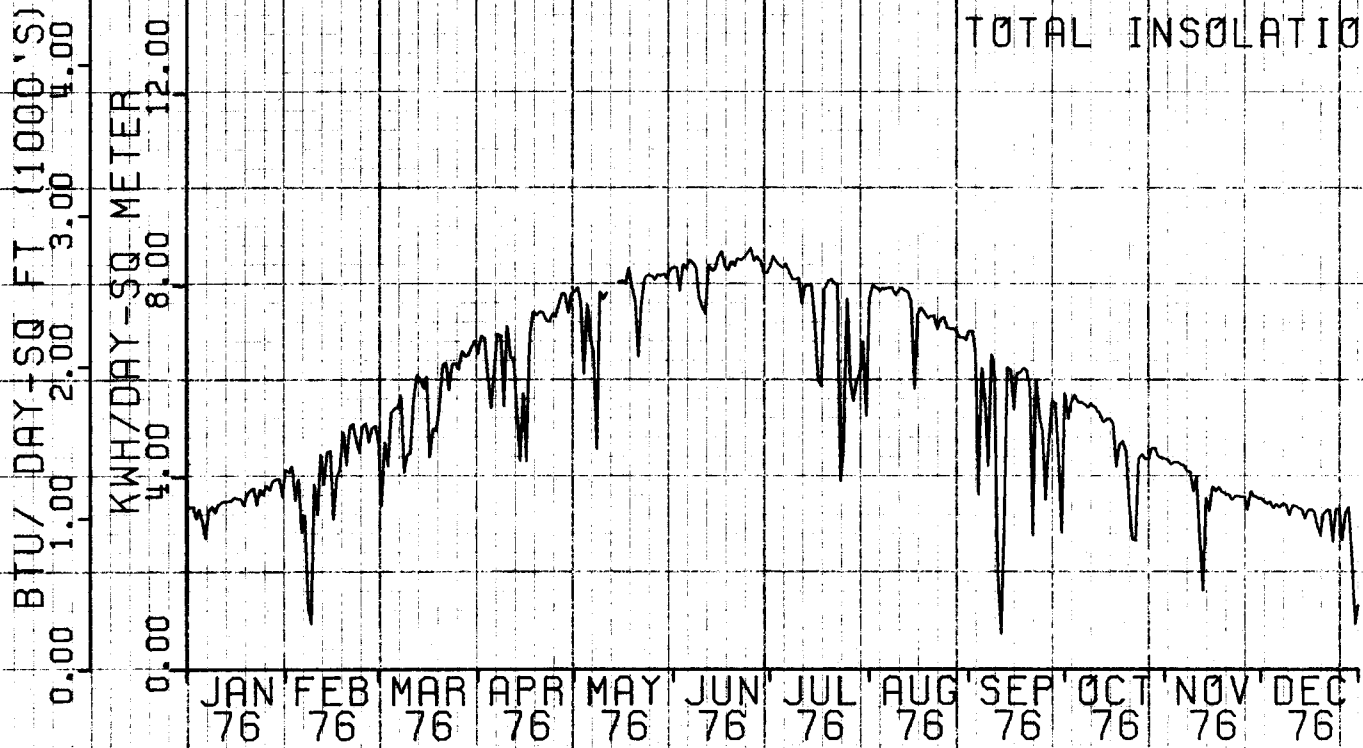
EXAMPLE OF  
DETAILED STATISTICAL SUMMARY

TOTAL INSOLATION  
ON A HORIZONTAL SURFACE

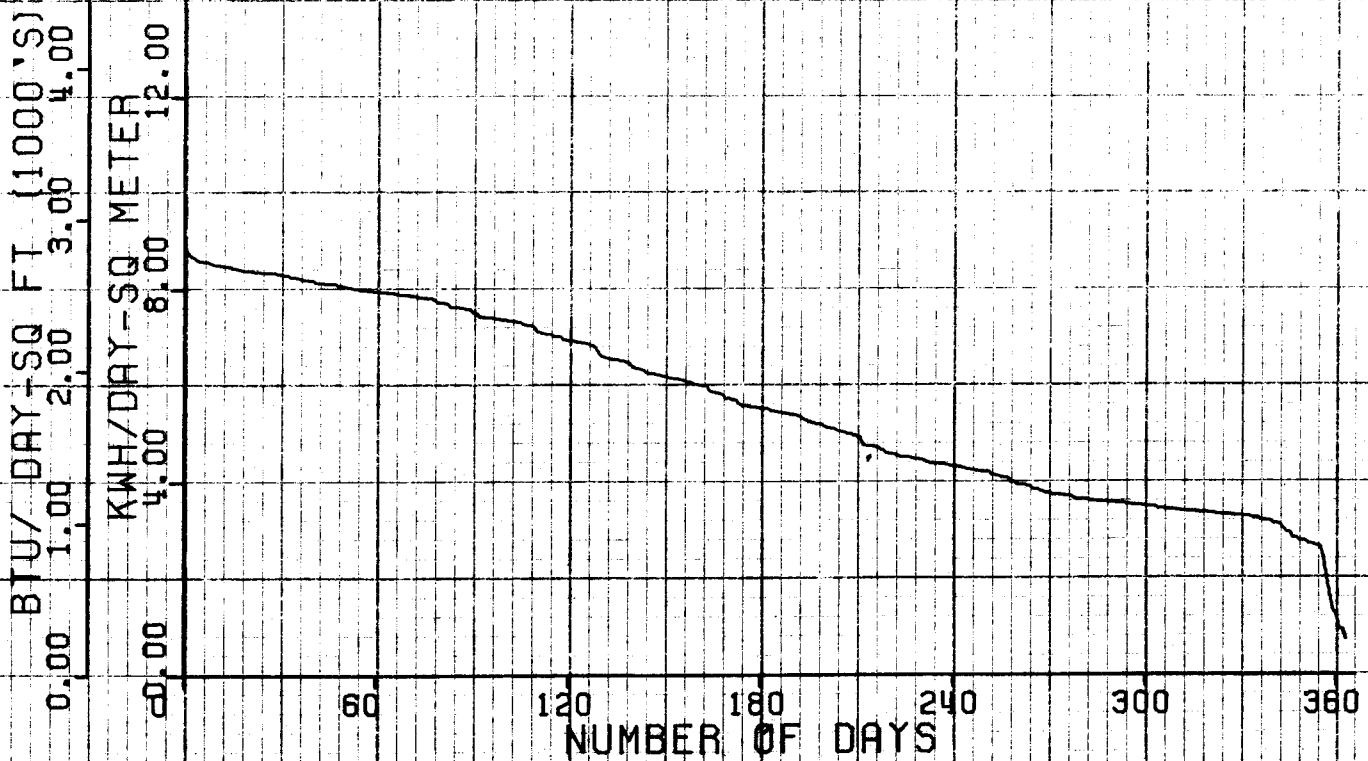


# ANNUAL DISTRIBUTION

BARSTOW, CALIF.  
TOTAL INSOLATION



# ANNUAL SOLAR DURATION CURVE



ANNUAL SOLAR DURATION CURVE FROM 1/76 THRU 12/76  
 BARSTOW, CALIF. --TOTAL INSOLATION--WATTS/ SQ METER

ACCOUNT = 7295561  
 CHANNEL = 1

KWH/DAY-SQ M	DAYS	PERCENT DAYS	KWH/DAY-SQ M	DAYS	PERCENT DAYS	KWH/DAY-SQ M	DAYS	PERCENT DAYS
ABOVE 12.1	0	0.0	8.0	54	14.9	3.9	264	72.7
12.0	0	0.0	7.9	66	18.2	3.8	268	73.8
11.9	0	0.0	7.8	77	21.2	3.7	277	76.3
11.8	0	0.0	7.7	82	22.6	3.6	284	78.2
11.7	0	0.0	7.6	87	24.0	3.5	300	82.6
11.6	0	0.0	7.5	91	25.1	3.4	313	86.2
11.5	0	0.0	7.4	97	26.7	3.3	330	90.9
11.4	0	0.0	7.3	105	28.9	3.2	338	93.1
11.3	0	0.0	7.2	109	30.0	3.1	342	94.2
11.2	0	0.0	7.1	111	30.6	3.0	343	94.5
11.1	0	0.0	7.0	117	32.2	2.9	345	95.0
11.0	0	0.0	6.9	123	33.9	2.8	347	95.6
10.9	0	0.0	6.8	128	35.3	2.7	352	97.0
10.8	0	0.0	6.7	129	35.5	2.6	355	97.8
10.7	0	0.0	6.6	130	35.8	2.5	355	97.8
10.6	0	0.0	6.5	137	37.7	2.4	356	98.1
10.5	0	0.0	6.4	139	38.3	2.3	356	98.1
10.4	0	0.0	6.3	143	39.4	2.2	356	98.1
10.3	0	0.0	6.2	149	41.0	2.1	356	98.1
10.2	0	0.0	6.1	156	43.0	2.0	356	98.1
10.1	0	0.0	6.0	163	44.9	1.9	357	98.3
10.0	0	0.0	5.9	163	44.9	1.8	357	98.3
9.9	0	0.0	5.8	168	46.3	1.7	357	98.3
9.8	0	0.0	5.7	172	47.4	1.6	358	98.6
9.7	0	0.0	5.6	173	47.7	1.5	358	98.6
9.6	0	0.0	5.5	182	50.1	1.4	358	98.6
9.5	0	0.0	5.4	190	52.3	1.3	359	98.9
9.4	0	0.0	5.3	193	53.2	1.2	360	99.2
9.3	0	0.0	5.2	198	54.5	1.1	360	99.2
9.2	0	0.0	5.1	203	55.9	1.0	360	99.2
9.1	0	0.0	5.0	208	57.3	0.9	362	99.7
9.0	0	0.0	4.9	211	58.1	0.8	362	99.7
8.9	0	0.0	4.8	211	58.1	0.7	363	100.0
8.8	0	0.0	4.7	217	59.8	0.6	363	100.0
8.7	2	0.6	4.6	219	60.3	0.5	363	100.0
8.6	4	1.1	4.5	227	62.5	0.4	363	100.0
8.5	12	3.3	4.4	232	63.9	0.3	363	100.0
8.4	20	5.5	4.3	243	66.9	0.2	363	100.0
8.3	32	8.8	4.2	251	69.1	0.1	363	100.0
8.2	38	10.5	4.1	256	70.5	0.0	363	100.0
8.1	47	12.9	4.0	259	71.3			

# MONTHLY DISTRIBUTION

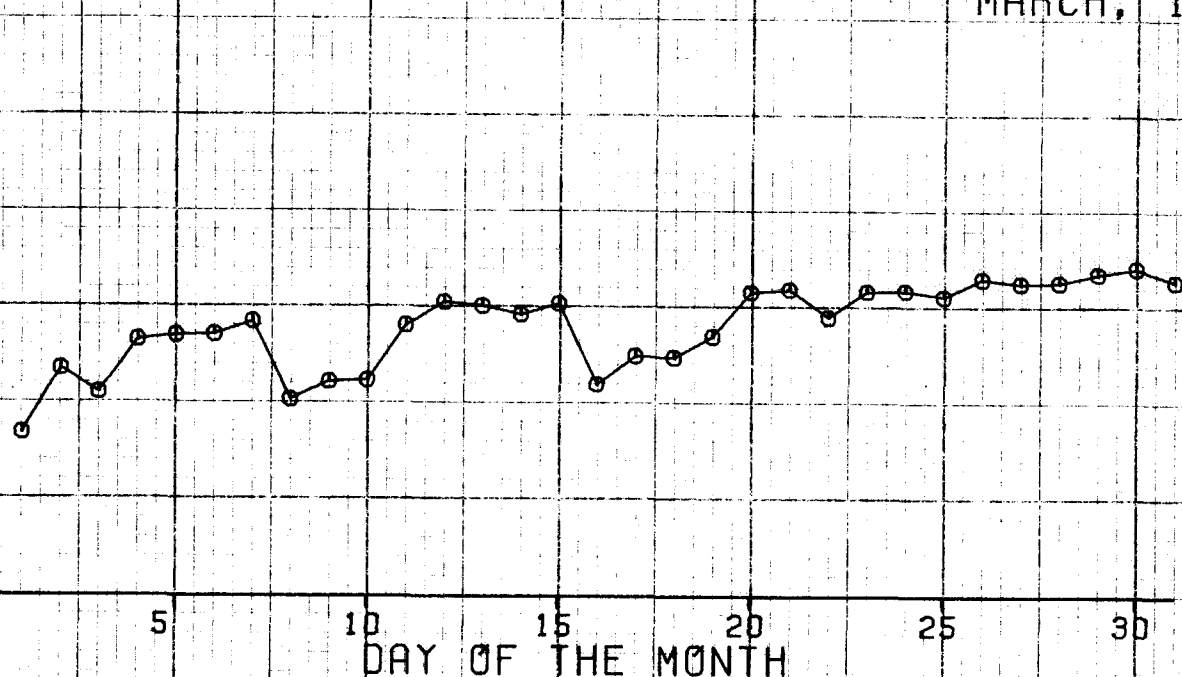
BARSTOW, CALIF.

TOTAL INSOLATION

MARCH, 1976

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

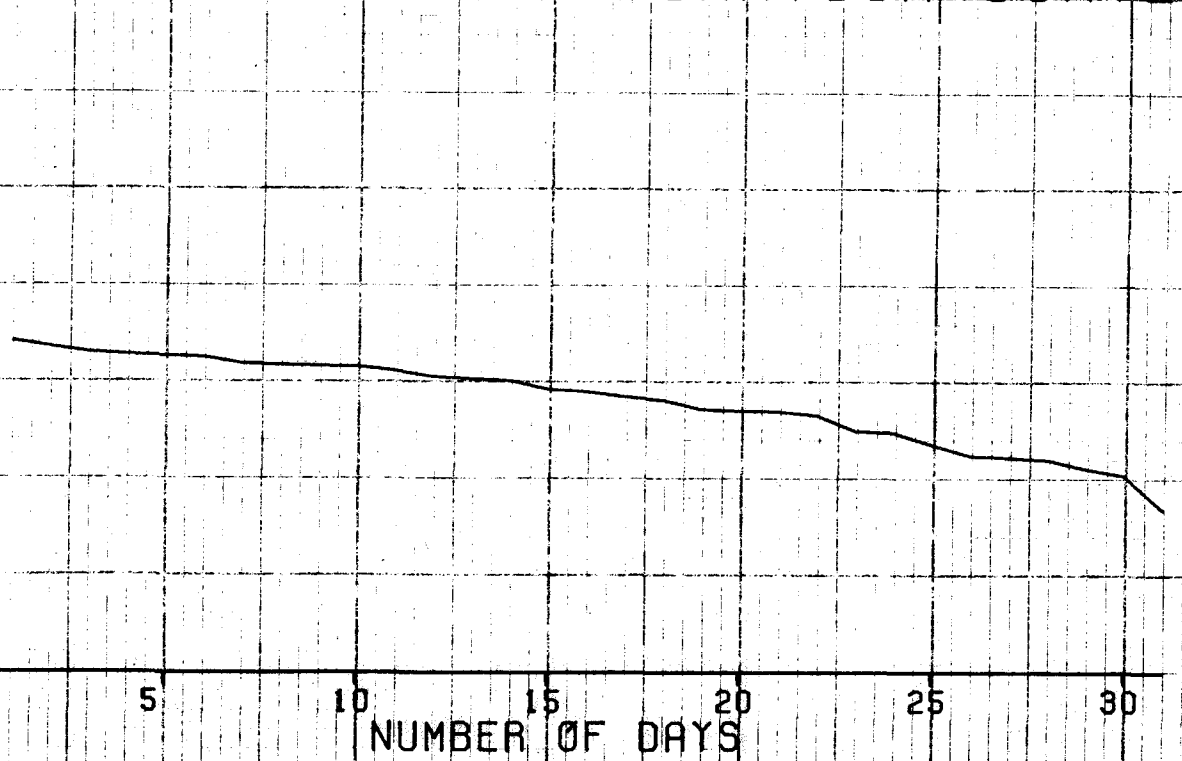
KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00



# MONTHLY SOLAR DURATION CURVE

BTU/ DAY-SQ FT (1000'S)  
0.00 1.00 2.00 3.00 4.00

KWH/DAY-SQ METER  
0.00 4.00 8.00 12.00



MONTHLY DISTRIBUTION

DETAILED STATISTICAL SUMMARY FOR MARCH, 1976  
 BARSTOW, CALIF. --TOTAL INSOLATION--WATTS/ SQ METER

ACCOUNT = 7295561  
 CHANNEL = 1

DAY	DATE	DAY OF YEAR	BTU/ DAY-SQ FT	KWH/ DAY-SQ M	MAXIMUM VALUE	TIME OF MAX	MINIMUM VALUE	TIME OF MIN	NUM OF OBSERV	DAY	DATE
SUN	1	60	1075.	3.39	891.	1146	0.	16	96	SUN	1
MON	2	61	1459.	4.73	890.	1146	0.	16	96	MON	2
TUE	3	62	1342.	4.23	720.	1031	0.	31	96	TUE	3
WED	4	63	1090.	3.33	776.	1201	0.	16	96	WED	4
THU	5	64	1720.	5.43	795.	1146	0.	16	96	THU	5
FRI	6	65	1727.	5.45	797.	1216	0.	1	96	FRI	6
SAT	7	66	1812.	5.71	807.	1201	0.	1	96	SAT	7
SUN	8	67	1298.	4.10	799.	1246	0.	16	96	SUN	8
MON	9	68	1417.	4.47	756.	1146	0.	16	96	MON	9
TUE	10	69	1426.	4.50	808.	1201	0.	1	96	TUE	10
WED	11	70	1789.	5.04	811.	1201	0.	1	96	WED	11
THU	12	71	1942.	6.12	852.	1146	0.	16	96	THU	12
FRI	13	72	1917.	6.05	848.	1146	0.	16	96	FRI	13
SAT	14	73	1800.	5.87	873.	1116	0.	1	96	SAT	14
SUN	15	74	1951.	6.09	849.	1146	0.	16	96	SUN	15
MON	16	75	1401.	4.42	818.	1301	0.	1	96	MON	16
TUE	17	76	1588.	5.01	883.	1146	0.	16	96	TUE	17
WED	18	77	1578.	4.96	842.	1046	0.	1	96	WED	18
THU	19	78	1714.	5.41	850.	1101	0.	1	96	THU	19
FRI	20	79	2009.	6.34	892.	1146	0.	16	96	FRI	20
SAT	21	80	2027.	6.40	868.	1201	0.	16	96	SAT	21
SUN	22	81	1843.	5.81	891.	1146	0.	31	96	SUN	22
MON	23	82	2014.	6.35	870.	1201	0.	16	96	MON	23
TUE	24	83	2020.	6.37	870.	1146	0.	1	96	TUE	24
WED	25	84	1900.	6.25	880.	1116	0.	16	96	WED	25
THU	26	85	2099.	6.62	888.	1146	0.	1	96	THU	26
FRI	27	86	2070.	6.55	890.	1131	0.	1	96	FRI	27
SAT	28	87	2076.	6.55	884.	1201	0.	1	96	SAT	28
SUN	29	88	2133.	6.73	899.	1201	0.	1	96	SUN	29
MON	30	89	2171.	6.85	905.	1146	0.	1	96	MON	30
TUE	31	90	2034.	6.57	896.	1131	0.	16	96	TUE	31
DAY	DATE	DAY OF YEAR	BTU/ DAY-SQ FT	KWH/ DAY-SQ M	MAXIMUM VALUE	TIME OF MAX	MINIMUM VALUE	TIME OF MIN	NUM OF OBSERV	DAY	DATE

MONTHLY STATISTICS

MEAN = 5.62 KWH/SQ M = 1782. BTU/SQ FT  
 TOTAL ENERGY FOR MONTH = 174.30 KWH/SQ M  
 = 55252. BTU/SQ FT

MAXIMUM FOR MONTH 905. ON MON 30 AT 1146 HOURS  
 MINIMUM FOR MONTH 0. ON SUN 1 AT 16 HOURS  
 NUMBER OF OBSERVATIONS = 2976

MONTHLY SOLAR DURATION CURVE FOR MARCH, 1976  
 BARSTOW, CALIF. --TOTAL INSOLATION--WATTS/ SQ METER

ACCOUNT = 7295561  
 CHANNEL = 1

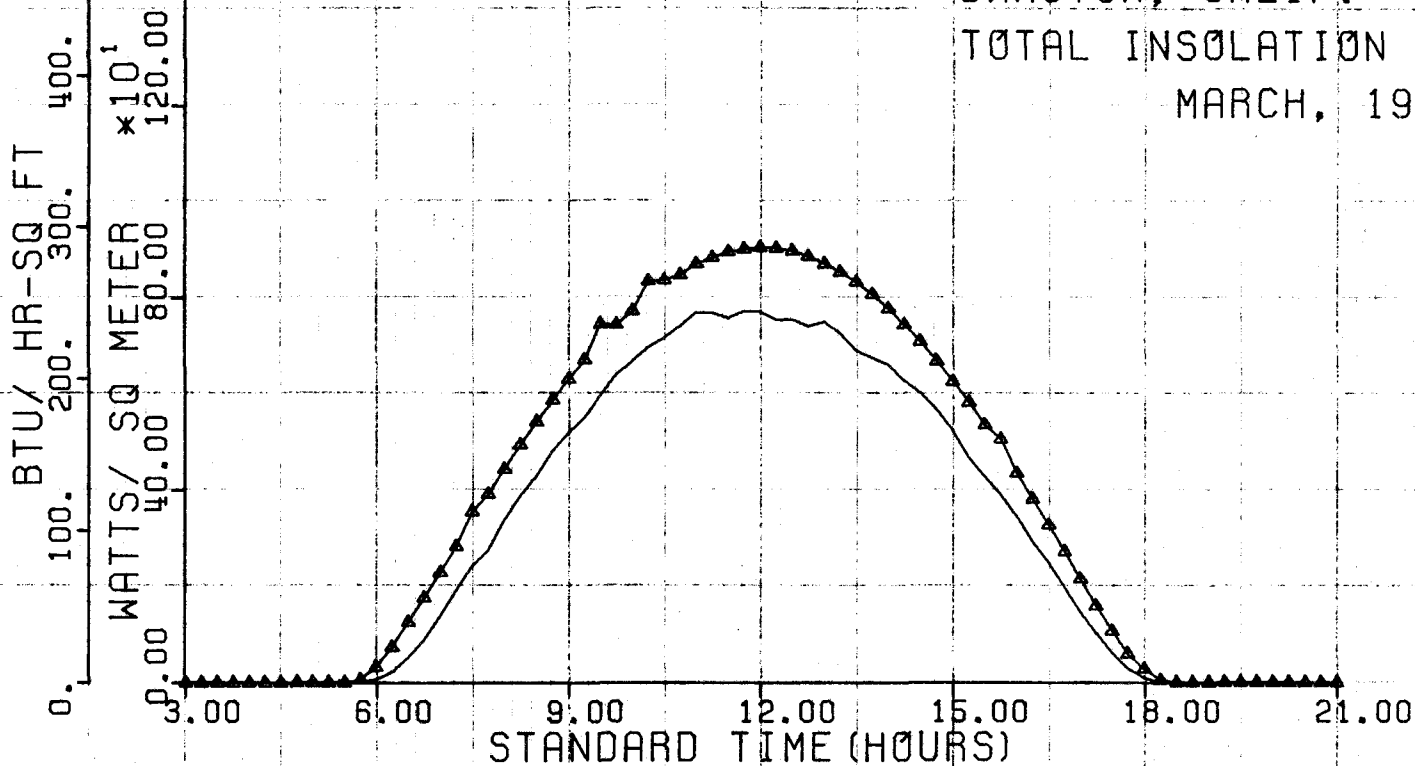
KWH/DAY-SQ M	DAYS	PERCENT DAYS	KWH/DAY-SQ M	DAYS	PERCENT DAYS	KWH/DAY-SQ M	DAYS	PERCENT DAYS
ABOVE	12.1	0	0.0	0	0.0	3.9	30	96.8
	12.0	0	0.0	0	0.0	3.8	30	96.8
	11.9	0	0.0	0	0.0	3.7	30	96.8
	11.8	0	0.0	0	0.0	3.6	30	96.8
	11.7	0	0.0	0	0.0	3.5	30	96.8
	11.6	0	0.0	0	0.0	3.4	30	96.8
	11.5	0	0.0	0	0.0	3.3	31	100.0
	11.4	0	0.0	0	0.0	3.2	31	100.0
	11.3	0	0.0	0	0.0	3.1	31	100.0
	11.2	0	0.0	0	0.0	3.0	31	100.0
	11.1	0	0.0	0	0.0	2.9	31	100.0
	11.0	0	0.0	0	0.0	2.8	31	100.0
	10.9	0	0.0	1	3.2	2.7	31	100.0
	10.8	0	0.0	2	6.5	2.6	31	100.0
	10.7	0	0.0	3	9.7	2.5	31	100.0
	10.6	0	0.0	6	19.4	2.4	31	100.0
	10.5	0	0.0	6	19.4	2.3	31	100.0
	10.4	0	0.0	10	32.3	2.2	31	100.0
	10.3	0	0.0	11	35.5	2.1	31	100.0
	10.2	0	0.0	12	38.7	2.0	31	100.0
	10.1	0	0.0	14	45.2	1.9	31	100.0
	10.0	0	0.0	14	45.2	1.8	31	100.0
	9.9	0	0.0	16	51.6	1.7	31	100.0
	9.8	0	0.0	17	54.8	1.6	31	100.0
	9.7	0	0.0	18	58.1	1.5	31	100.0
	9.6	0	0.0	18	58.1	1.4	31	100.0
	9.5	0	0.0	21	67.7	1.3	31	100.0
	9.4	0	0.0	22	71.0	1.2	31	100.0
	9.3	0	0.0	22	71.0	1.1	31	100.0
	9.2	0	0.0	22	71.0	1.0	31	100.0
	9.1	0	0.0	23	74.2	0.9	31	100.0
	9.0	0	0.0	24	77.4	0.8	31	100.0
	8.9	0	0.0	24	77.4	0.7	31	100.0
	8.8	0	0.0	25	80.6	0.6	31	100.0
	8.7	0	0.0	25	80.6	0.5	31	100.0
	8.6	0	0.0	26	83.9	0.4	31	100.0
	8.5	0	0.0	28	90.3	0.3	31	100.0
	8.4	0	0.0	28	90.3	0.2	31	100.0
	8.3	0	0.0	29	93.5	0.1	31	100.0
	8.2	0	0.0	29	93.5	0.0	31	100.0
	8.1	0	0.0	30	96.8			

# DAILY PROFILE

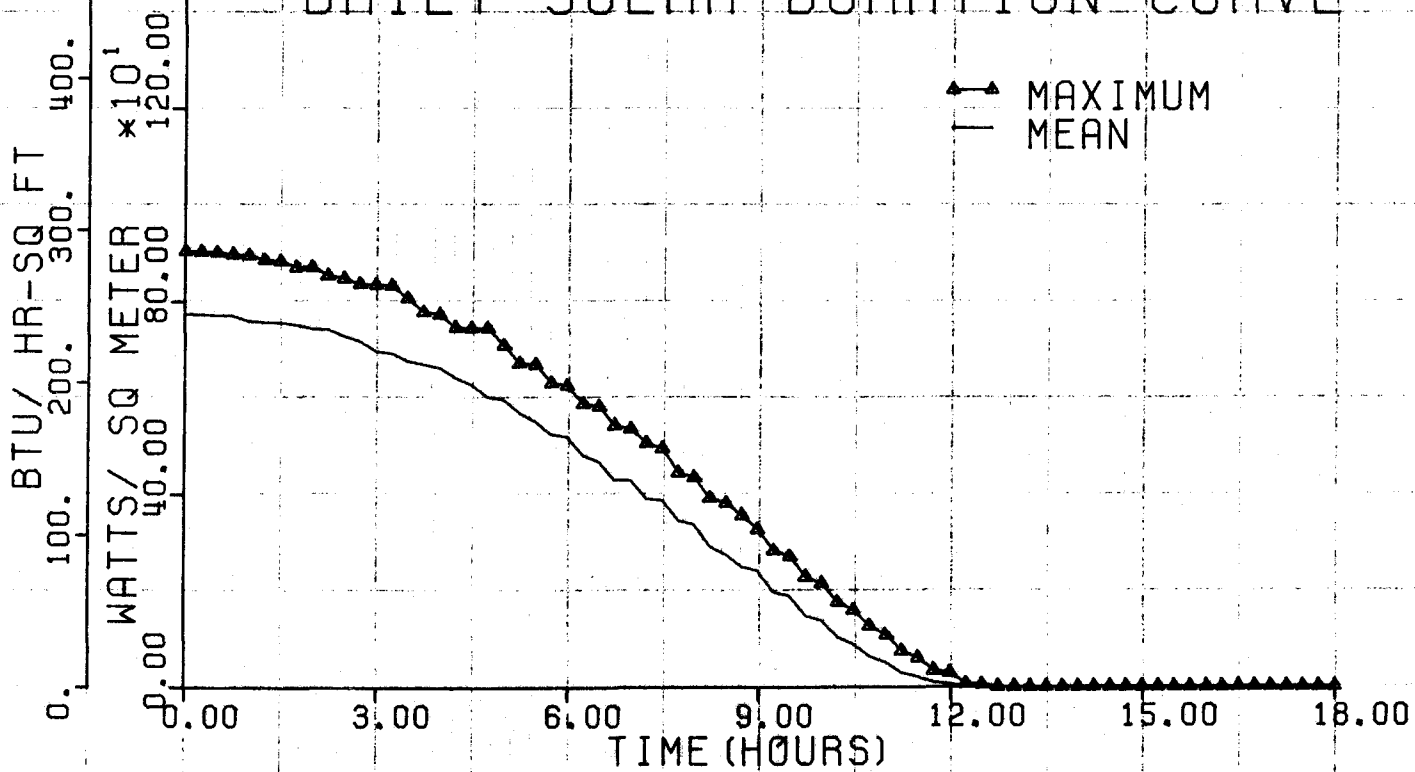
BARSTOW, CALIF.

TOTAL INSOLATION

MARCH, 1976



# DAILY SOLAR DURATION CURVE



DAILY PROFILE  
 DETAILED STATISTICAL SUMMARY FOR      MARCH, 1976  
 BAKSTOW, CALIF. —TOTAL INSULATION—WATTS/ SQ METER

ACCOUNT = 7295561  
 CHANNEL = 1

INT	INTERVAL FROM TO	MEAN BTU/HR/ SQ FT	MEAN W/SQ M	STAND DEV	MAXIMUM VALUE	DAY OF MAX	MINIMUM VALUE	DAY OF MIN	NUM OF OBSERV	INTERVAL FROM TO	INT NUM
1	1 15	0.	0.	0.	1.	1	0.	6	31	1 15	1
2	16 30	0.	0.	0.	1.	3	0.	1	31	16 30	2
3	31 45	0.	0.	0.	1.	1	0.	3	31	31 45	3
4	46 100	0.	0.	0.	1.	7	0.	1	31	46 100	4
5	101 115	0.	0.	0.	1.	2	0.	1	31	101 115	5
6	116 150	0.	0.	0.	1.	1	0.	2	31	116 150	6
7	151 145	0.	0.	0.	1.	2	0.	1	31	151 145	7
8	146 200	0.	1.	0.	1.	1	0.	2	31	146 200	8
9	201 215	0.	0.	0.	1.	2	0.	1	31	201 215	9
10	216 230	0.	0.	0.	1.	1	0.	2	31	216 230	10
11	231 245	0.	0.	0.	1.	2	0.	1	31	231 245	11
12	246 300	0.	0.	0.	1.	1	0.	2	31	246 300	12
13	301 315	0.	0.	0.	1.	2	0.	1	31	301 315	13
14	316 330	0.	1.	0.	1.	1	0.	3	31	316 330	14
15	331 345	0.	0.	0.	1.	3	0.	1	31	331 345	15
16	346 400	0.	1.	0.	1.	1	0.	5	31	346 400	16
17	401 415	0.	0.	0.	1.	4	0.	1	31	401 415	17
18	416 430	0.	1.	0.	1.	1	0.	4	31	416 430	18
19	431 445	0.	0.	0.	1.	4	0.	1	31	431 445	19
20	446 500	0.	0.	0.	1.	1	0.	5	31	446 500	20
21	501 515	0.	0.	0.	1.	3	0.	1	31	501 515	21
22	516 530	0.	1.	0.	1.	1	0.	5	31	516 530	22
23	531 545	1.	2.	2.	7.	31	0.	3	31	531 545	23
24	546 600	2.	7.	9.	34.	31	0.	1	31	546 600	24
25	601 615	7.	22.	21.	75.	30	2.	1	31	601 615	25
26	616 630	10.	52.	35.	126.	30	7.	1	31	616 630	26
27	631 645	28.	89.	45.	177.	30	20.	5	31	631 645	27
28	646 700	44.	138.	53.	230.	30	35.	5	31	646 700	28
29	701 715	60.	190.	63.	264.	30	57.	5	31	701 715	29
30	716 730	77.	242.	75.	357.	27	90.	5	31	716 730	30
31	731 745	87.	275.	77.	393.	30	127.	17	31	731 745	31
32	746 800	107.	358.	85.	445.	30	147.	17	31	746 800	32

DETAILED STATISTICAL SUMMARY FOR      MARCH, 1976 (CON'T)

ACCOUNT = 7295561  
 CHANNEL = 1

INT	INTERVAL FROM TO	MEAN BTU/HR/ SQ FT	MEAN W/SQ M	STAND DEV	MAXIMUM VALUE	DAY OF MAX	MINIMUM VALUE	DAY OF MIN	NUM OF OBSERV	INTERVAL FROM TO	INT NUM
33	801 815	123.	368.	81.	496.	30	180.	16	31	801 815	33
34	816 830	136.	430.	84.	543.	30	248.	16	31	816 830	34
35	831 845	153.	483.	80.	588.	30	266.	3	31	831 845	35
36	846 900	165.	520.	85.	632.	30	323.	10	31	846 900	36
37	901 915	175.	552.	98.	672.	30	293.	3	31	901 915	37
38	916 930	189.	597.	93.	746.	27	408.	9	31	916 930	38
39	931 945	204.	643.	84.	746.	30	396.	9	31	931 945	39
40	946 1000	212.	669.	87.	774.	31	363.	9	31	946 1000	40
41	1001 1015	221.	698.	97.	836.	25	442.	17	31	1001 1015	41
42	1016 1030	228.	718.	105.	837.	25	415.	16	31	1016 1030	42
43	1031 1045	235.	743.	99.	849.	27	466.	16	31	1031 1045	43
44	1046 1100	244.	770.	90.	872.	30	470.	16	31	1046 1100	44
45	1101 1115	244.	770.	118.	884.	30	407.	8	31	1101 1115	45
46	1116 1130	241.	759.	152.	897.	30	412.	18	31	1116 1130	46
47	1131 1145	245.	773.	124.	902.	30	382.	3	31	1131 1145	47
48	1146 1200	245.	773.	144.	905.	30	344.	3	31	1146 1200	48
49	1201 1215	240.	756.	165.	904.	30	284.	3	31	1201 1215	49
50	1216 1230	240.	757.	153.	898.	30	324.	8	31	1216 1230	50
51	1231 1245	236.	743.	160.	887.	30	319.	2	31	1231 1245	51
52	1246 1300	239.	752.	155.	872.	30	318.	1	31	1246 1300	52
53	1301 1315	231.	728.	160.	855.	30	93.	1	31	1301 1315	53
54	1316 1330	220.	693.	195.	834.	30	143.	1	31	1316 1330	54
55	1331 1345	215.	677.	172.	808.	30	72.	1	31	1331 1345	55
56	1346 1400	210.	662.	157.	779.	30	138.	1	31	1346 1400	56
57	1401 1415	199.	628.	134.	746.	30	117.	1	31	1401 1415	57
58	1416 1430	191.	603.	133.	710.	30	88.	1	31	1416 1430	58
59	1431 1445	181.	570.	119.	670.	30	223.	1	31	1431 1445	59
60	1446 1500	167.	526.	120.	626.	30	103.	1	31	1446 1500	60
61	1501 1515	148.	468.	128.	583.	30	120.	1	31	1501 1515	61
62	1516 1530	136.	429.	114.	536.	30	72.	10	31	1516 1530	62
63	1531 1545	124.	392.	111.	507.	22	36.	10	31	1531 1545	63
64	1546 1600	110.	346.	94.	436.	30	38.	10	31	1546 1600	64
65	1601 1615	93.	294.	79.	383.	30	32.	10	31	1601 1615	65
66	1616 1630	79.	250.	71.	328.	30	20.	10	31	1616 1630	66
67	1631 1645	63.	196.	57.	272.	30	12.	10	31	1631 1645	67
68	1646 1700	47.	148.	46.	216.	30	7.	10	31	1646 1700	68

DETAILED STATISTICAL SUMMARY FOR

MARCH, 1976 (CON'T)

ACCOUNT = 7295561  
CHANNEL = 1

INT	INTERVAL FROM TO	MEAN BTU/HR/ SQ FT	W/SQ M	STAND DEV	MAXIMUM VALUE	DAY OF MAX	MINIMUM VALUE	DAY OF MIN	NUM OF OBSERV	INTERVAL FROM TO	INT NUM
69	1701 1715	33.	104.	35.	160.	30	11.	10	31	1701 1715	69
70	1716 1730	20.	64.	24.	108.	30	19.	10	31	1716 1730	70
71	1731 1745	19.	30.	15.	61.	30	10.	1	31	1731 1745	71
72	1746 1800	3.	10.	7.	29.	31	2.	2	31	1746 1800	72
73	1801 1815	1.	2.	2.	5.	26	0.	1	31	1801 1815	73
74	1816 1830	0.	0.	0.	1.	1	0.	2	31	1816 1830	74
75	1831 1845	0.	0.	0.	1.	2	0.	1	31	1831 1845	75
76	1846 1900	0.	0.	0.	1.	1	0.	2	31	1846 1900	76
77	1901 1915	0.	0.	0.	1.	2	0.	1	31	1901 1915	77
78	1916 1930	0.	0.	0.	1.	1	0.	4	31	1916 1930	78
79	1931 1945	0.	0.	0.	1.	7	0.	1	31	1931 1945	79
80	1946 2000	0.	0.	0.	1.	1	0.	4	31	1946 2000	80
81	2001 2015	0.	0.	0.	1.	4	0.	1	31	2001 2015	81
82	2016 2030	0.	0.	0.	1.	2	0.	1	31	2016 2030	82
83	2031 2045	0.	0.	0.	1.	1	0.	4	31	2031 2045	83
84	2046 2100	0.	0.	0.	1.	4	0.	1	31	2046 2100	84
85	2101 2115	0.	0.	0.	1.	1	0.	2	31	2101 2115	85
86	2116 2130	0.	0.	0.	1.	2	0.	1	31	2116 2130	86
87	2131 2145	0.	0.	0.	1.	1	0.	2	31	2131 2145	87
88	2146 2200	0.	0.	0.	1.	2	0.	1	31	2146 2200	88
89	2201 2215	0.	0.	0.	1.	1	0.	2	31	2201 2215	89
90	2216 2230	0.	0.	0.	1.	4	0.	1	31	2216 2230	90
91	2231 2245	0.	0.	0.	1.	1	0.	4	31	2231 2245	91
92	2246 2300	0.	0.	0.	1.	6	0.	1	31	2246 2300	92
93	2301 2315	0.	0.	0.	1.	1	0.	4	31	2301 2315	93
94	2316 2330	0.	0.	0.	1.	3	0.	1	31	2316 2330	94
95	2331 2345	0.	0.	0.	1.	1	0.	3	31	2331 2345	95
96	2346 2400	0.	0.	0.	1.	3	0.	1	31	2346 2400	96

INT	INTERVAL FROM TO	MEAN BTU/HR/ SQ FT	W/SQ M	STAND DEV	MAXIMUM VALUE	DAY OF MAX	MINIMUM VALUE	DAY OF MIN	NUM OF OBSERV	INTERVAL FROM TO	INT NUM
-----	------------------	--------------------	--------	-----------	---------------	------------	---------------	------------	---------------	------------------	---------

MONTHLY STATISTICS

MEAN = 5.62 KWH/SQ M = 1782. BTU/SQ FT      MAXIMUM FOR MONTH 905. FROM 1146 TO 1200 TUE 30  
 TOTAL ENERGY FOR MONTH = 174.30 KWH/SQ M      MINIMUM FOR MONTH 0. FROM 1 TO 15 SAT 6  
 = 55252. BTU/SQ FT      NUMBER OF OBSERVATIONS = 2976

MEAN DAILY SOLAR DURATION CURVE FOR MARCH, 1976  
 BARSTOW, CALIF. --TOTAL INSULATION--WATTS/ SQ METER

ACCOUNT = 7295561  
CHANNEL = 1

WATTS/SQ M	HOURS	PERCENT HOURS	WATTS/SQ M	HOURS	PERCENT HOURS	WATTS/SQ M	HOURS	PERCENT HOURS
ABOVE 1210.	0.0	0.0	800.	0.0	0.0	390.	7.50	31.3
1200.	0.0	0.0	790.	0.0	0.0	380.	7.75	32.3
1190.	0.0	0.0	780.	0.0	0.0	370.	7.75	32.3
1180.	0.0	0.0	770.	1.00	4.2	360.	7.75	32.3
1170.	0.0	0.0	760.	1.00	4.2	350.	7.75	32.3
1160.	0.0	0.0	750.	2.00	8.3	340.	8.00	33.3
1150.	0.0	0.0	740.	2.50	10.4	330.	8.25	34.4
1140.	0.0	0.0	730.	2.50	10.4	320.	8.25	34.4
1130.	0.0	0.0	720.	2.75	11.5	310.	8.25	34.4
1120.	0.0	0.0	710.	3.00	12.5	300.	8.25	34.4
1110.	0.0	0.0	700.	3.00	12.5	290.	8.50	35.4
1100.	0.0	0.0	690.	3.50	14.6	280.	8.50	35.4
1090.	0.0	0.0	680.	3.50	14.6	270.	8.75	36.5
1080.	0.0	0.0	670.	3.75	15.6	260.	8.75	36.5
1070.	0.0	0.0	660.	4.25	17.7	250.	9.00	37.5
1060.	0.0	0.0	650.	4.25	17.7	240.	9.25	38.5
1050.	0.0	0.0	640.	4.50	18.8	230.	9.25	38.5
1040.	0.0	0.0	630.	4.50	18.8	220.	9.25	38.5
1030.	0.0	0.0	620.	4.75	19.8	210.	9.25	38.5
1020.	0.0	0.0	610.	4.75	19.8	200.	9.25	38.5
1010.	0.0	0.0	600.	5.00	20.8	190.	9.75	40.6
1000.	0.0	0.0	590.	5.25	21.9	180.	9.75	40.6
990.	0.0	0.0	580.	5.25	21.9	170.	9.75	40.6
980.	0.0	0.0	570.	5.25	21.9	160.	9.75	40.6
970.	0.0	0.0	560.	5.50	22.9	150.	9.75	40.6
960.	0.0	0.0	550.	5.75	24.0	140.	10.00	41.7
950.	0.0	0.0	540.	5.75	24.0	130.	10.25	42.7
940.	0.0	0.0	530.	5.75	24.0	120.	10.25	42.7
930.	0.0	0.0	520.	6.25	26.0	110.	10.25	42.7
920.	0.0	0.0	510.	6.25	26.0	100.	10.50	43.8
910.	0.0	0.0	500.	6.25	26.0	90.	10.50	43.8
900.	0.0	0.0	490.	6.25	26.0	80.	10.75	44.8
890.	0.0	0.0	480.	6.25	26.0	70.	10.75	44.8
880.	0.0	0.0	470.	6.50	27.1	60.	11.00	45.6
870.	0.0	0.0	460.	6.75	28.1	50.	11.25	46.9
860.	0.0	0.0	450.	6.75	28.1	40.	11.25	46.9
850.	0.0	0.0	440.	6.75	28.1	30.	11.50	47.9
840.	0.0	0.0	430.	7.00	29.2	20.	11.75	49.0
830.	0.0	0.0	420.	7.25	30.2	10.	12.00	50.0
820.	0.0	0.0	410.	7.25	30.2	0.	24.00	100.0
810.	0.0	0.0	400.	7.25	30.2			

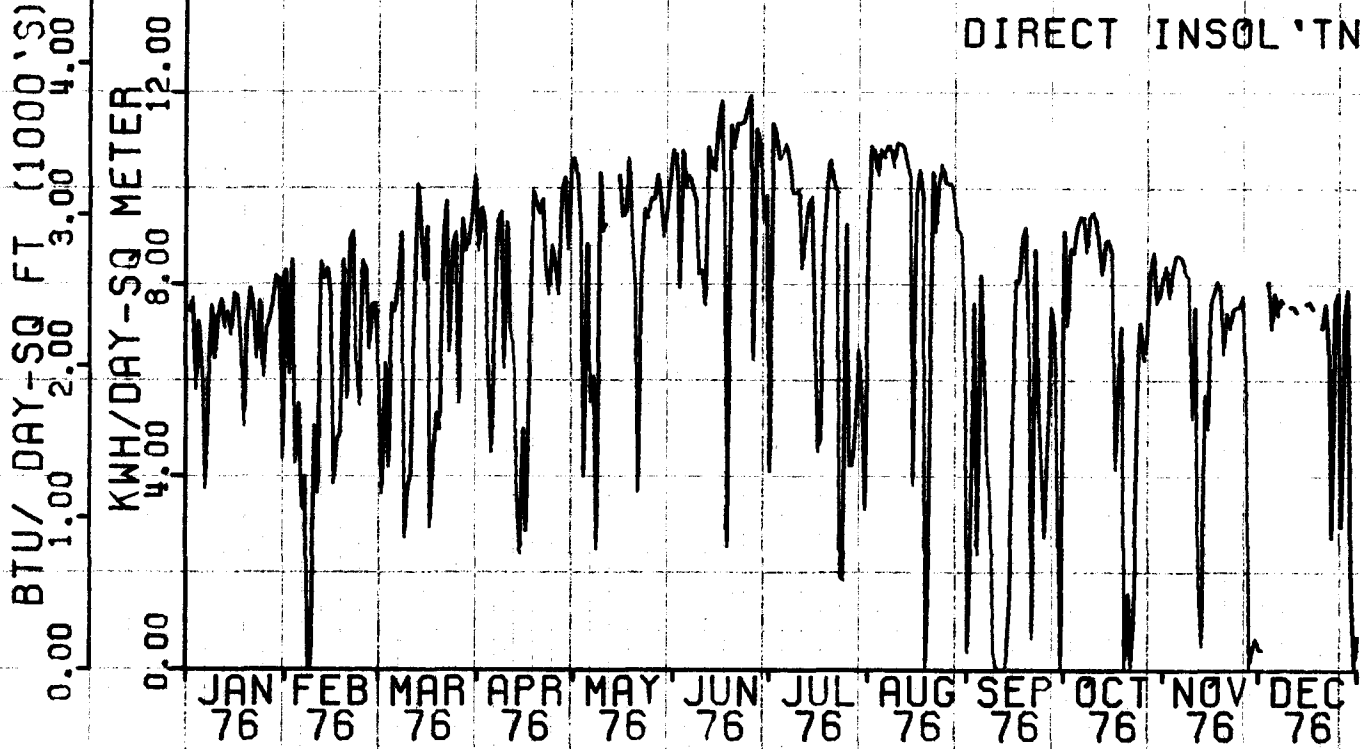
DIRECT INSOLATION



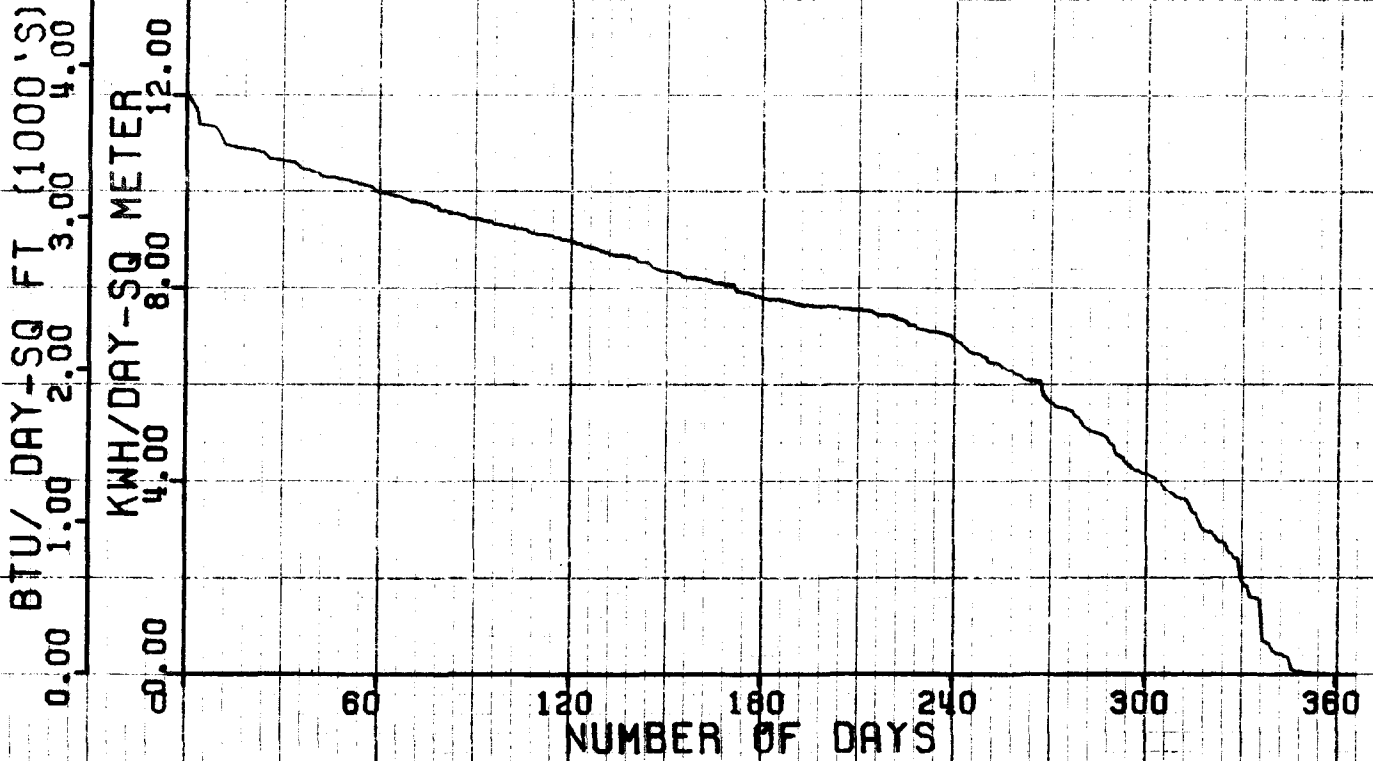
# ANNUAL DISTRIBUTION

BARSTOW, CALIF.

DIRECT INSOL'TN



# ANNUAL SOLAR DURATION CURVE



ANNUAL SOLAR DURATION CURVE FROM 1/76 THRU 12/76  
 BARSTOW, CALIF. --DIRECT INSOL\*TN --WATTS/ SQ METER

ACCOUNT = 7295561  
 CHANNEL = 2

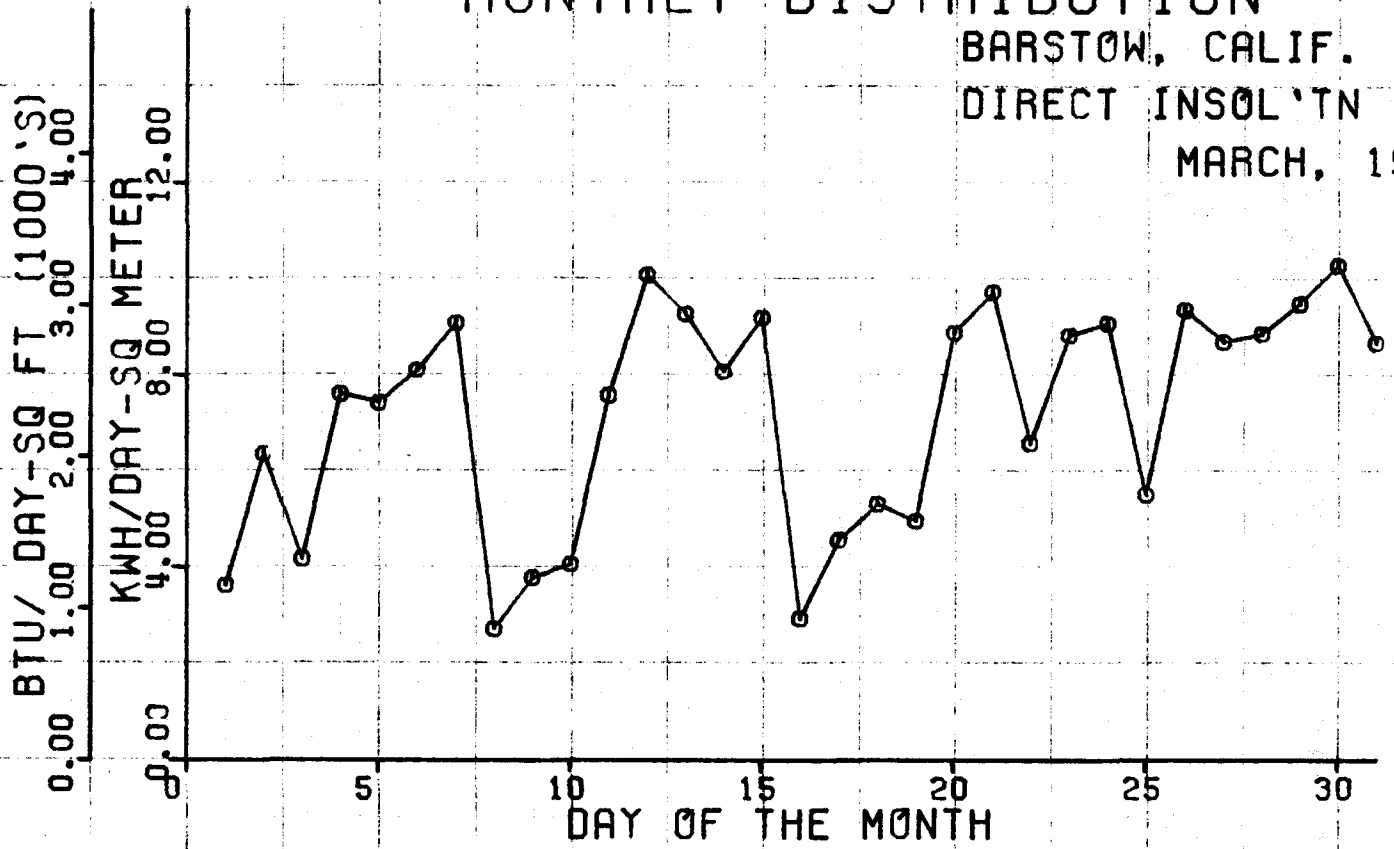
KWH/DAY-SQ M	DAYS	PERCENT DAYS	KWH/DAY-SQ M	DAYS	PERCENT DAYS	KWH/DAY-SQ M	DAYS	PERCENT DAYS
ABOVE 12.1	0	0.0	8.0	171	47.9	3.9	305	85.4
12.0	0	0.0	7.9	175	49.0	3.8	307	86.0
11.9	1	0.3	7.8	180	50.4	3.7	309	86.6
11.8	2	0.6	7.7	189	52.9	3.6	313	87.7
11.7	3	0.8	7.6	203	56.9	3.5	313	87.7
11.6	3	0.8	7.5	215	60.2	3.4	314	88.0
11.5	3	0.8	7.4	221	61.9	3.3	316	88.5
11.4	3	0.8	7.3	225	63.0	3.2	316	88.5
11.3	9	2.5	7.2	228	63.9	3.1	317	88.8
11.2	10	2.8	7.1	234	65.5	3.0	318	89.1
11.1	11	3.1	7.0	239	66.9	2.9	321	89.9
11.0	11	3.1	6.9	241	67.5	2.8	322	90.2
10.9	17	4.8	6.8	243	68.1	2.7	325	91.0
10.8	21	6.7	6.7	244	68.3	2.6	325	91.0
10.7	25	7.0	6.6	248	69.5	2.5	326	91.3
10.6	34	9.5	6.5	250	70.0	2.4	327	91.6
10.5	35	9.8	6.4	254	71.1	2.3	329	92.2
10.4	40	11.2	6.3	257	72.0	2.2	329	92.2
10.3	46	12.9	6.2	261	73.1	2.1	329	92.2
10.2	51	14.3	6.1	265	74.2	2.0	329	92.2
10.1	57	16.0	6.0	267	74.8	1.9	330	92.4
10.0	59	16.5	5.9	267	74.8	1.8	332	93.0
9.9	67	18.8	5.8	268	75.1	1.7	332	93.0
9.8	71	19.9	5.7	269	75.4	1.6	332	93.0
9.7	76	21.3	5.6	271	75.9	1.5	336	94.1
9.6	80	22.4	5.5	275	77.0	1.4	336	94.1
9.5	87	24.4	5.4	277	77.6	1.3	336	94.1
9.4	92	25.8	5.3	279	78.2	1.2	336	94.1
9.3	98	27.5	5.2	280	78.4	1.1	336	94.1
9.2	106	29.7	5.1	281	78.7	1.0	336	94.1
9.1	113	31.7	5.0	285	79.8	0.9	336	94.1
9.0	117	32.8	4.9	288	80.7	0.8	336	94.1
8.9	123	34.5	4.8	288	80.7	0.7	336	94.1
8.8	128	35.9	4.7	290	81.2	0.6	339	95.0
8.7	133	37.3	4.6	290	81.2	0.5	339	95.0
8.6	140	39.2	4.5	292	81.8	0.4	343	96.1
8.5	144	40.3	4.4	293	82.1	0.3	345	96.6
8.4	146	40.9	4.3	295	82.6	0.2	345	96.6
8.3	154	43.1	4.2	298	83.5	0.1	345	96.6
8.2	160	44.8	4.1	302	84.6	0.0	357	100.0
8.1	167	46.8	4.0	303	84.9			

# MONTHLY DISTRIBUTION

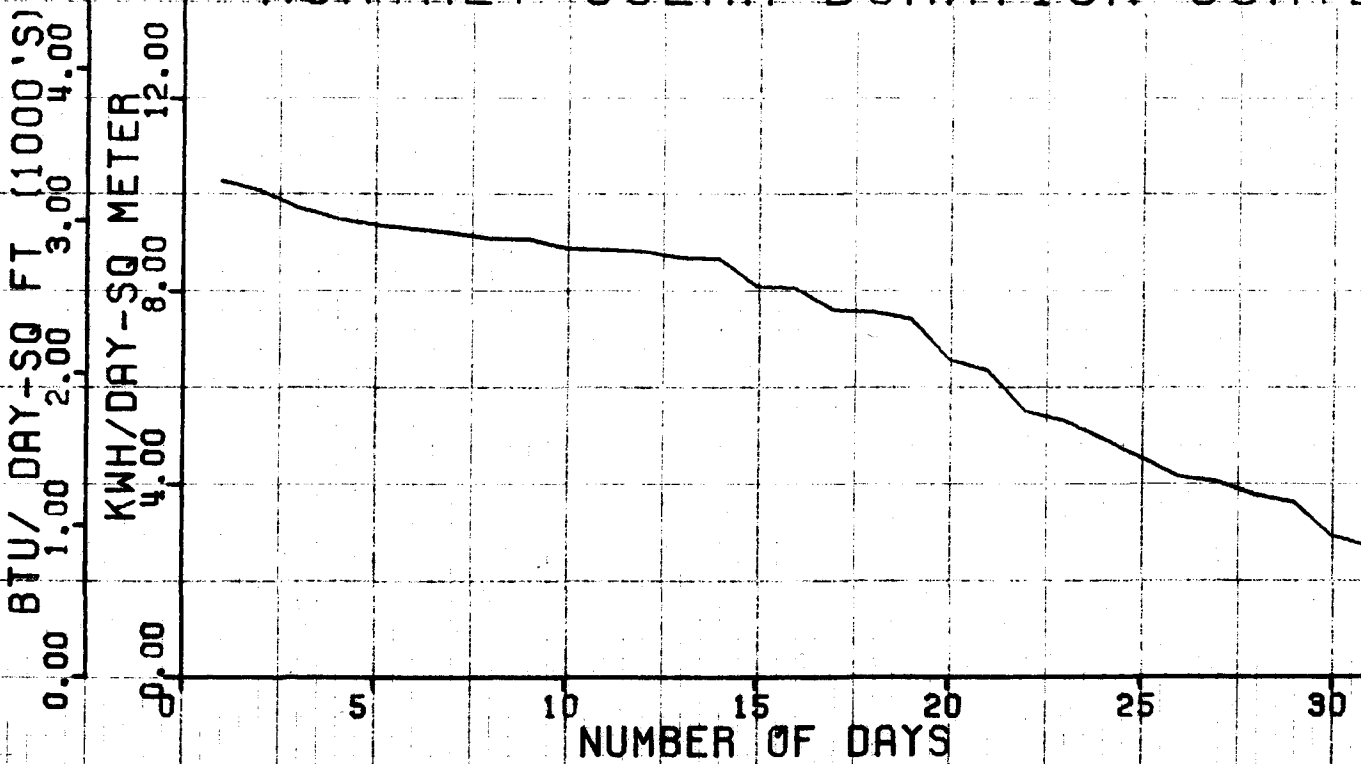
BARSTOW, CALIF.

DIRECT INSOL'TN

MARCH, 1976



# MONTHLY SOLAR DURATION CURVE



MONTHLY DISTRIBUTION  
 DETAILED STATISTICAL SUMMARY FOR MARCH, 1976  
 BANSTON, CALIF. —DIRECT INSOL\*TN —WATTS/ SQ METER

ACCOUNT = 7295561  
 CHANNEL = 2

DAY	DATE	JAY LF YEAR	BTU/ DAY-SQ FT	KWH/ DAY-SQ M	MAXIMUM VALUE	TIME OF MAX	MINIMUM VALUE	TIME OF MIN	NUM OF OBSERV	DAY	DATE
SUN	1	60	1151.	3.63	943.	1001	0.	1	96	SUN	1
MON	2	61	2020.	6.37	981.	1116	0.	101	96	MON	2
TUE	3	62	1325.	4.18	979.	1001	0.	1	96	TUE	3
WED	4	63	2414.	7.61	903.	1231	0.	1	96	WED	4
THU	5	64	2356.	7.44	929.	1146	0.	1	96	THU	5
FRI	6	65	2572.	8.11	962.	1231	0.	16	96	FRI	6
SAT	7	66	2885.	9.10	970.	1146	0.	1	96	SAT	7
SUN	8	67	884.	2.73	751.	1046	0.	31	96	SUN	8
MON	9	68	1200.	3.79	835.	831	0.	1	96	MON	9
TUE	10	69	1289.	4.07	873.	1216	0.	1	96	TUE	10
WED	11	70	2404.	7.59	934.	1231	0.	1	96	WED	11
THU	12	71	3200.	10.10	1036.	1131	0.	1	96	THU	12
FRI	13	72	2946.	9.29	1023.	1146	0.	16	96	FRI	13
SAT	14	73	2562.	8.08	979.	1231	0.	1	96	SAT	14
SUN	15	74	2921.	9.21	991.	1146	0.	16	96	SUN	15
MON	16	75	931.	2.94	759.	1301	0.	1	96	MON	16
TUE	17	76	1447.	4.57	959.	1316	0.	1	96	TUE	17
WED	18	77	1668.	5.32	942.	1046	0.	1	96	WED	18
THU	19	78	1575.	4.97	960.	1246	0.	1	96	THU	19
FRI	20	79	2819.	8.69	977.	1246	0.	1	96	FRI	20
SAT	21	80	3090.	9.75	974.	1146	0.	16	96	SAT	21
SUN	22	81	2091.	6.60	991.	1046	0.	46	96	SUN	22
MON	23	82	2862.	8.64	952.	1201	0.	16	96	MON	23
TUE	24	83	2633.	9.10	961.	1146	0.	1	96	TUE	24
WED	25	84	1749.	5.52	744.	1301	0.	16	96	WED	25
THU	26	85	2974.	9.36	960.	1046	0.	1	96	THU	26
FRI	27	86	2762.	8.71	963.	1131	0.	1	96	FRI	27
SAT	28	87	2813.	8.67	969.	1116	0.	1	96	SAT	28
SUN	29	88	3014.	9.51	984.	1201	0.	1	96	SUN	29
MON	30	89	3265.	10.30	1005.	1131	0.	1	96	MON	30
TUE	31	90	2754.	8.69	968.	1101	0.	1	96	TUE	31

DAY	DATE	JAY LF YEAR	BTU/ DAY-SQ FT	KWH/ DAY-SQ M	MAXIMUM VALUE	TIME OF MAX	MINIMUM VALUE	TIME OF MIN	NUM OF OBSERV	DAY	DATE
-----	------	-------------	----------------	---------------	---------------	-------------	---------------	-------------	---------------	-----	------

MONTHLY STATISTICS

MEAN = 7.20 KWH/SQ M = 2283. BTU/SQ FT  
 TOTAL ENERGY FOR MONTH = 223.25 KWH/SQ M  
 = 70771. BTU/SQ FT  
 MAXIMUM FOR MONTH 1036. ON THU 12 AT 1131 HOURS  
 MINIMUM FOR MONTH 0. ON SUN 1 AT 1 HOURS  
 NUMBER OF OBSERVATIONS = 2976

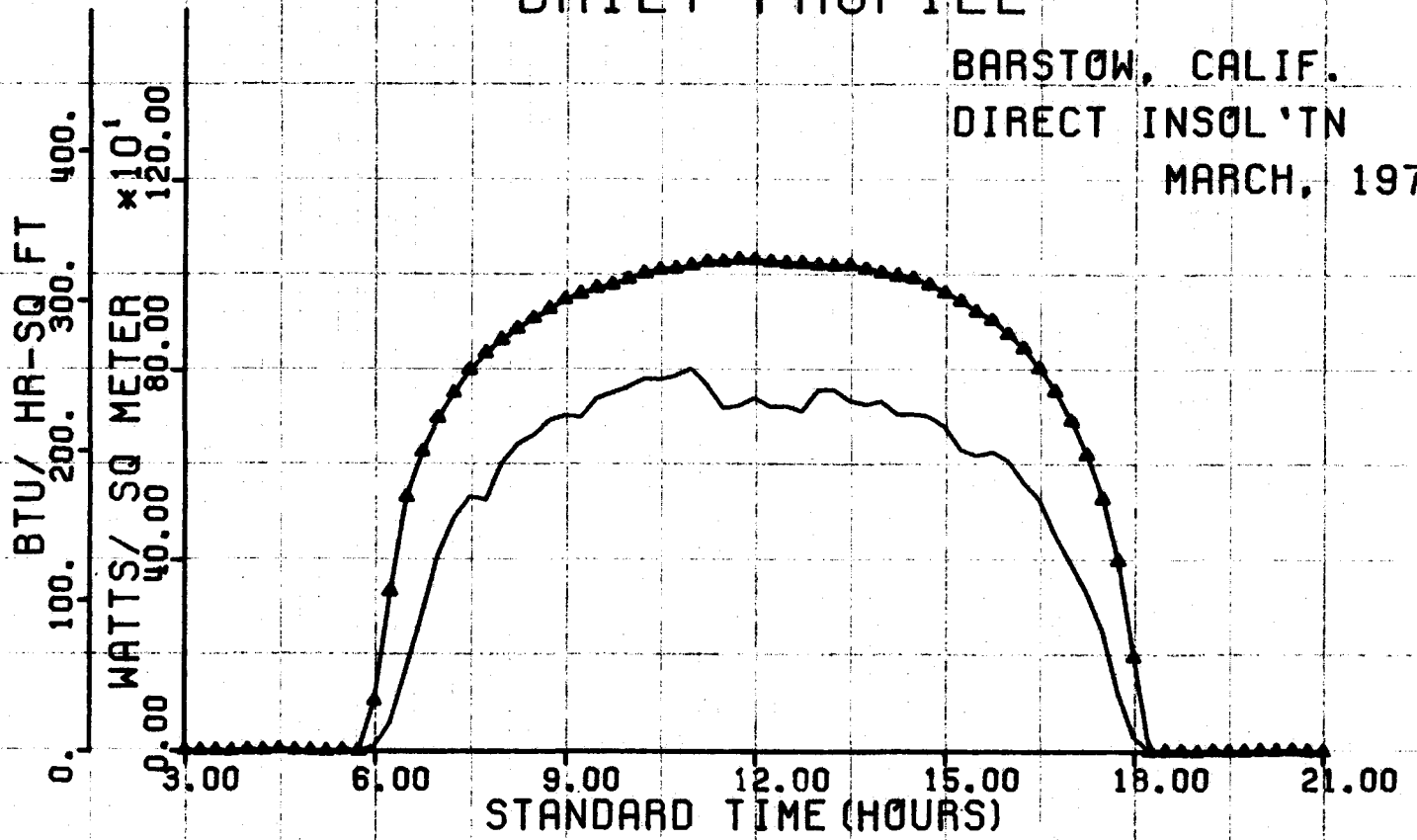
MONTHLY SOLAR DURATION CURVE FOR MARCH, 1976  
 BANSTON, CALIF. —DIRECT INSOL\*TN —WATTS/ SQ METER

ACCOUNT = 7295561  
 CHANNEL = 2

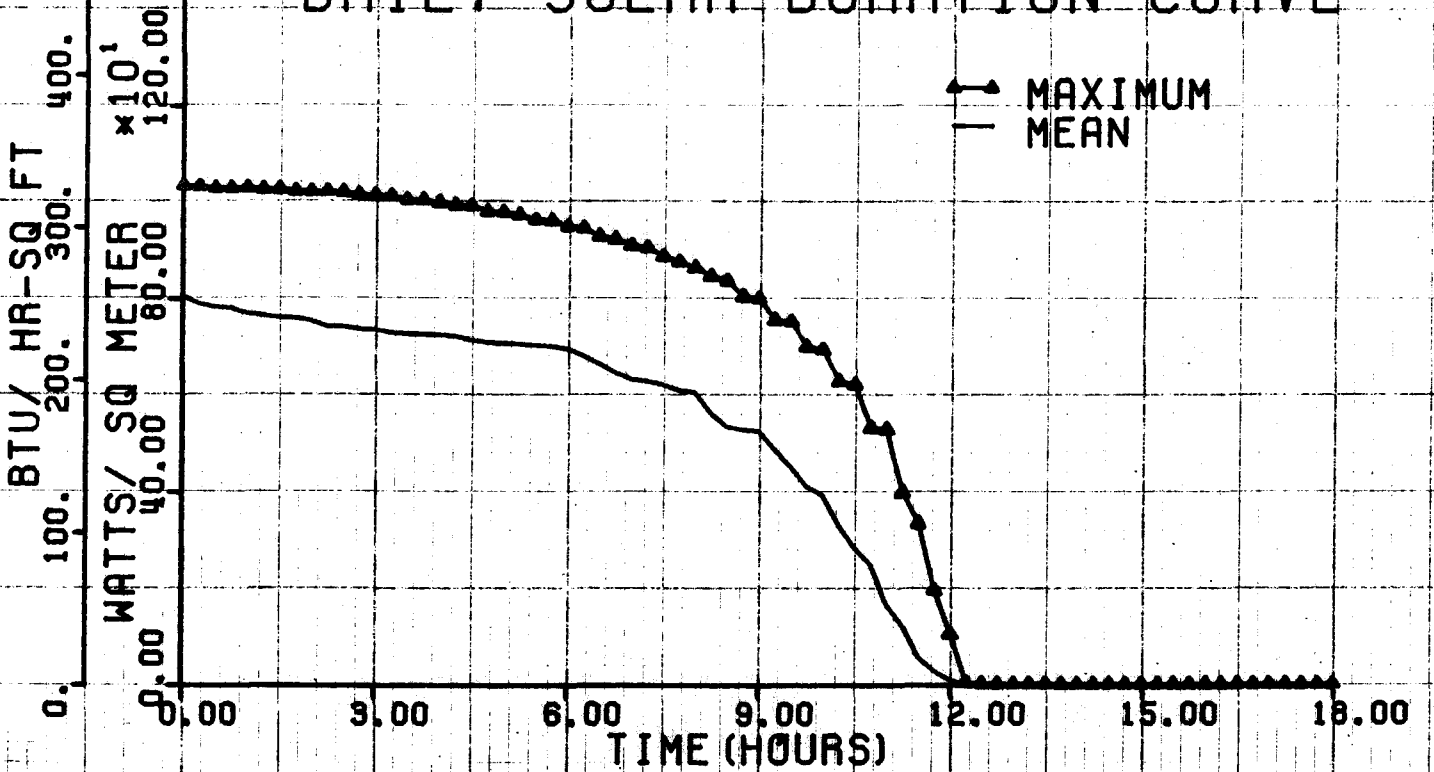
KWH/DAY-SQ M	DAYS	PERCENT DAYS	KWH/DAY-SQ M	DAYS	PERCENT DAYS	KWH/DAY-SQ M	DAYS	PERCENT DAYS
ABOVE 12.1	0	0.0	8.0	16	51.6	3.9	27	87.1
12.0	0	0.0	7.9	16	51.6	3.8	27	87.1
11.9	0	0.0	7.8	16	51.6	3.7	28	90.3
11.8	0	0.0	7.7	16	51.6	3.6	29	93.5
11.7	0	0.0	7.6	17	54.8	3.5	29	93.5
11.6	0	0.0	7.5	18	58.1	3.4	29	93.5
11.5	0	0.0	7.4	19	61.3	3.3	29	93.5
11.4	0	0.0	7.3	19	61.3	3.2	29	93.5
11.3	0	0.0	7.2	19	61.3	3.1	29	93.5
11.2	0	0.0	7.1	19	61.3	3.0	29	93.5
11.1	0	0.0	7.0	19	61.3	2.9	30	96.8
11.0	0	0.0	6.9	19	61.3	2.8	30	96.8
10.9	0	0.0	6.8	19	61.3	2.7	31	100.0
10.8	0	0.0	6.7	19	61.3	2.6	31	100.0
10.7	0	0.0	6.6	19	61.3	2.5	31	100.0
10.6	0	0.0	6.5	20	64.5	2.4	31	100.0
10.5	0	0.0	6.4	20	64.5	2.3	31	100.0
10.4	0	0.0	6.3	21	67.7	2.2	31	100.0
10.3	1	3.2	6.2	21	67.7	2.1	31	100.0
10.2	1	3.2	6.1	21	67.7	2.0	31	100.0
10.1	1	3.2	6.0	21	67.7	1.9	31	100.0
10.0	2	6.5	5.9	21	67.7	1.8	31	100.0
9.9	2	6.5	5.8	21	67.7	1.7	31	100.0
9.8	2	6.5	5.7	21	67.7	1.6	31	100.0
9.7	3	9.7	5.6	21	67.7	1.5	31	100.0
9.6	3	9.7	5.5	22	71.0	1.4	31	100.0
9.5	4	12.9	5.4	22	71.0	1.3	31	100.0
9.4	4	12.9	5.3	23	74.2	1.2	31	100.0
9.3	5	16.1	5.2	23	74.2	1.1	31	100.0
9.2	7	22.6	5.1	23	74.2	1.0	31	100.0
9.1	8	25.8	5.0	23	74.2	0.9	31	100.0
9.0	9	29.0	4.9	24	77.4	0.8	31	100.0
8.9	9	29.0	4.8	24	77.4	0.7	31	100.0
8.8	12	38.7	4.7	24	77.4	0.6	31	100.0
8.7	13	41.9	4.6	24	77.4	0.5	31	100.0
8.6	14	45.2	4.5	25	80.6	0.4	31	100.0
8.5	14	45.2	4.4	25	80.6	0.3	31	100.0
8.4	14	45.2	4.3	25	80.6	0.2	31	100.0
8.3	14	45.2	4.2	25	80.6	0.1	31	100.0
8.2	14	45.2	4.1	26	83.9	0.0	31	100.0
8.1	15	48.4	4.0	27	87.1			

# DAILY PROFILE

BARSTOW, CALIF.  
DIRECT INSOL'TN  
MARCH, 1976



# DAILY SOLAR DURATION CURVE



DAILY PROFILE  
 DETAILED STATISTICAL SUMMARY FOR MARCH, 1976  
 BARSTOW, CALIF. --DIRECT INSOL\*TN --WATTS/ SQ METER

ACCOUNT = 7295561  
 CHANNEL = 2

INT	INTERVAL FROM TO	MEAN BTU/HR/ SQ FT	MEAN W/SQ M	STAND DEV	MAXIMUM VALUE	DAY OF MAX	MINIMUM VALUE	DAY OF MIN	NUM OF OBSERV	INTERVAL FROM TO	INT NUM
1	1 15	0.	0.	0.	2.	22	0.	1	31	1 15	1
2	16 30	0.	0.	0.	1.	1	0.	3	31	16 30	2
3	31 45	0.	0.	1.	2.	24	0.	1	31	31 45	3
4	46 100	0.	0.	1.	2.	31	0.	1	31	46 100	4
5	101 115	0.	1.	1.	2.	15	0.	1	31	101 115	5
6	116 130	0.	0.	0.	2.	7	0.	1	31	116 130	6
7	131 145	0.	1.	1.	3.	23	0.	1	31	131 145	7
8	146 200	0.	1.	1.	3.	30	0.	1	31	146 200	8
9	201 215	0.	1.	1.	2.	7	0.	1	31	201 215	9
10	216 230	0.	0.	0.	1.	1	0.	2	31	216 230	10
11	231 245	0.	1.	1.	2.	4	0.	1	31	231 245	11
12	246 300	0.	0.	0.	2.	12	0.	1	31	246 300	12
13	301 315	0.	0.	1.	2.	12	0.	3	31	301 315	13
14	316 330	0.	0.	1.	2.	7	0.	1	31	316 330	14
15	331 345	0.	0.	0.	1.	5	0.	1	31	331 345	15
16	346 400	0.	0.	1.	3.	12	0.	1	31	346 400	16
17	401 415	0.	0.	1.	2.	14	0.	2	31	401 415	17
18	416 430	0.	0.	1.	5.	30	0.	1	31	416 430	18
19	431 445	0.	0.	0.	2.	30	0.	1	31	431 445	19
20	446 500	0.	0.	0.	2.	8	0.	1	31	446 500	20
21	501 515	0.	0.	0.	1.	3	0.	1	31	501 515	21
22	516 530	0.	0.	1.	3.	23	0.	3	31	516 530	22
23	531 545	0.	0.	0.	1.	7	0.	1	31	531 545	23
24	546 600	3.	11.	27.	106.	30	0.	2	31	546 600	24
25	601 615	18.	58.	97.	336.	30	0.	1	31	601 615	25
26	616 630	53.	168.	166.	534.	30	0.	1	31	616 630	26
27	631 645	91.	286.	190.	631.	30	0.	5	31	631 645	27
28	646 700	131.	413.	205.	701.	30	1.	17	31	646 700	28
29	701 715	155.	489.	224.	754.	30	1.	5	31	701 715	29
30	716 730	170.	536.	253.	802.	30	1.	17	31	716 730	30
31	731 745	167.	528.	286.	839.	30	2.	10	31	731 745	31
32	746 800	193.	608.	271.	866.	30	3.	16	31	746 800	32

INT	INTERVAL FROM TO	MEAN BTU/HR/ SQ FT	MEAN W/SQ M	STAND DEV	MAXIMUM VALUE	DAY OF MAX	MINIMUM VALUE	DAY OF MIN	NUM OF OBSERV	INTERVAL FROM TO	INT NUM
-----	------------------	--------------------	-------------	-----------	---------------	------------	---------------	------------	---------------	------------------	---------

DETAILED STATISTICAL SUMMARY FOR MARCH, 1976 (CON'T)

ACCOUNT = 7295561  
 CHANNEL = 2

INT	INTERVAL FROM TO	MEAN BTU/HR/ SQ FT	MEAN W/SQ M	STAND DEV	MAXIMUM VALUE	DAY OF MAX	MINIMUM VALUE	DAY OF MIN	NUM OF OBSERV	INTERVAL FROM TO	INT NUM
33	801 815	206.	649.	259.	889.	13	4.	16	31	801 815	33
34	816 830	211.	667.	269.	912.	13	28.	16	31	816 830	34
35	831 845	221.	697.	250.	931.	13	69.	16	31	831 845	35
36	846 900	224.	707.	273.	951.	13	85.	19	31	846 900	36
37	901 915	223.	702.	305.	963.	13	42.	3	31	901 915	37
38	916 930	236.	743.	277.	976.	13	61.	19	31	916 930	38
39	931 945	239.	758.	259.	982.	13	108.	19	31	931 945	39
40	946 1000	243.	767.	267.	994.	12	103.	16	31	946 1000	40
41	1001 1015	248.	784.	273.	1007.	12	14.	17	31	1001 1015	41
42	1016 1030	248.	783.	277.	1014.	12	19.	17	31	1016 1030	42
43	1031 1045	251.	791.	277.	1017.	12	26.	17	31	1031 1045	43
44	1046 1100	255.	806.	264.	1023.	12	42.	16	31	1046 1100	44
45	1101 1115	244.	770.	299.	1031.	12	61.	17	31	1101 1115	45
46	1116 1130	229.	722.	358.	1031.	12	8.	17	31	1116 1130	46
47	1131 1145	231.	728.	312.	1036.	12	144.	16	31	1131 1145	47
48	1146 1200	236.	744.	307.	1035.	12	118.	3	31	1146 1200	48
49	1201 1215	230.	724.	339.	1031.	12	26.	1	31	1201 1215	49
50	1216 1230	230.	727.	340.	1028.	12	1.	8	31	1216 1230	50
51	1231 1245	227.	715.	350.	1028.	12	10.	2	31	1231 1245	51
52	1246 1300	241.	761.	316.	1024.	12	55.	18	31	1246 1300	52
53	1301 1315	241.	762.	330.	1023.	12	0.	1	31	1301 1315	53
54	1316 1330	234.	738.	349.	1023.	12	2.	2	31	1316 1330	54
55	1331 1345	231.	730.	339.	1016.	12	1.	1	31	1331 1345	55
56	1346 1400	233.	736.	309.	1007.	12	1.	1	31	1346 1400	56
57	1401 1415	225.	709.	307.	1000.	12	2.	1	31	1401 1415	57
58	1416 1430	225.	709.	296.	995.	12	2.	1	31	1416 1430	58
59	1431 1445	223.	704.	314.	981.	12	3.	1	31	1431 1445	59
60	1446 1500	216.	682.	307.	965.	12	1.	1	31	1446 1500	60
61	1501 1515	201.	634.	318.	947.	12	0.	1	31	1501 1515	61
62	1516 1530	198.	624.	289.	925.	12	0.	10	31	1516 1530	62
63	1531 1545	200.	632.	273.	907.	12	0.	1	31	1531 1545	63
64	1546 1600	194.	612.	267.	878.	12	0.	1	31	1546 1600	64
65	1601 1615	179.	565.	267.	848.	12	0.	10	31	1601 1615	65
66	1616 1630	168.	529.	255.	806.	12	0.	10	31	1616 1630	66
67	1631 1645	144.	454.	239.	757.	12	0.	10	31	1631 1645	67
68	1646 1700	125.	395.	224.	696.	30	0.	10	31	1646 1700	68

INT	INTERVAL FROM TO	MEAN BTU/HR/ SQ FT	MEAN W/SQ M	STAND DEV	MAXIMUM VALUE	DAY OF MAX	MINIMUM VALUE	DAY OF MIN	NUM OF OBSERV	INTERVAL FROM TO	INT NUM
-----	------------------	--------------------	-------------	-----------	---------------	------------	---------------	------------	---------------	------------------	---------

DETAILED STATISTICAL SUMMARY FOR

MARCH, 1976 (CON'T)

ACCOUNT = 7295561  
CHANNEL = 2

INT	INTERVAL FROM TO	MEAN BTU/HR/SQ FT	MEAN W/SQ M	STAND DEV	MAXIMUM VALUE	DAY OF MAX	MINIMUM VALUE	DAY OF MIN	NUM OF OBSERV	INTERVAL FROM TO	INT NUM
69	1701 1715	106.	333.	198.	623.	30	0.	10	31	1701 1715	69
70	1716 1730	80.	252.	157.	531.	30	0.	22	31	1716 1730	70
71	1731 1745	39.	124.	113.	400.	30	0.	1	31	1731 1745	71
72	1746 1800	9.	29.	44.	197.	30	0.	1	31	1746 1800	72
73	1801 1815	0.	0.	0.	1.	1	0.	2	31	1801 1815	73
74	1816 1830	0.	0.	0.	1.	5	0.	1	31	1816 1830	74
75	1831 1845	0.	0.	0.	1.	10	0.	1	31	1831 1845	75
76	1846 1900	0.	0.	0.	0.	1	0.	1	31	1846 1900	76
77	1901 1915	0.	0.	0.	1.	1	0.	3	31	1901 1915	77
78	1916 1930	0.	0.	0.	0.	1	0.	1	31	1916 1930	78
79	1931 1945	0.	0.	0.	1.	2	0.	1	31	1931 1945	79
80	1946 2000	0.	0.	0.	2.	22	0.	1	31	1946 2000	80
81	2001 2015	0.	0.	0.	2.	26	0.	1	31	2001 2015	81
82	2016 2030	0.	0.	1.	3.	5	0.	1	31	2016 2030	82
83	2031 2045	0.	0.	0.	1.	3	0.	1	31	2031 2045	83
84	2046 2100	0.	0.	0.	1.	11	0.	1	31	2046 2100	84
85	2101 2115	0.	0.	0.	1.	13	0.	2	31	2101 2115	85
86	2116 2130	0.	0.	0.	2.	13	0.	1	31	2116 2130	86
87	2131 2145	0.	0.	1.	2.	13	0.	1	31	2131 2145	87
88	2146 2200	0.	0.	0.	1.	8	0.	1	31	2146 2200	88
89	2201 2215	0.	0.	0.	2.	13	0.	1	31	2201 2215	89
90	2216 2230	0.	0.	1.	2.	17	0.	1	31	2216 2230	90
91	2231 2245	0.	0.	0.	1.	1	0.	2	31	2231 2245	91
92	2246 2300	0.	0.	0.	1.	1	0.	2	31	2246 2300	92
93	2301 2315	0.	0.	0.	1.	1	0.	3	31	2301 2315	93
94	2316 2330	0.	0.	0.	1.	3	0.	1	31	2316 2330	94
95	2331 2345	0.	0.	0.	1.	4	0.	1	31	2331 2345	95
96	2346 2400	0.	0.	0.	1.	2	0.	1	31	2346 2400	96

INT	INTERVAL FROM TO	MEAN BTU/HR/SQ FT	MEAN W/SQ M	STAND DEV	MAXIMUM VALUE	DAY OF MAX	MINIMUM VALUE	DAY OF MIN	NUM OF OBSERV	INTERVAL FROM TO	INT NUM
-----	------------------	-------------------	-------------	-----------	---------------	------------	---------------	------------	---------------	------------------	---------

MONTHLY STATISTICS

MEAN = 7.20 KWH/SQ M = 2263. BTU/SQ FT

MAXIMUM FOR MONTH 1036. FROM 1131 TO 1145 FRI 12

TOTAL ENERGY FOR MONTH = 223.25 KWH/SQ M  
= 70771. BTU/SQ FT

MINIMUM FOR MONTH 0. FROM 1 TO 15 MON 1

NUMBER OF OBSERVATIONS = 2976

MEAN DAILY SOLAR DURATION CURVE FOR MARCH, 1976  
BARSTOW, CALIF. --DIRECT INSOL\*TN --WATTS/SQ METER

ACCOUNT = 7295561  
CHANNEL = 2

WATTS/SQ M	HOURS	PERCENT HOURS	WATTS/SQ M	HOURS	PERCENT HOURS	WATTS/SQ M	HOURS	PERCENT HOURS
ABOVE 1210.	0.0	0.0	800.	0.25	1.0	390.	10.25	42.7
1200.	0.0	0.0	790.	0.50	2.1	380.	10.25	42.7
1190.	0.0	0.0	780.	1.00	4.2	370.	10.25	42.7
1180.	0.0	0.0	770.	1.25	5.2	360.	10.25	42.7
1170.	0.0	0.0	760.	2.00	8.3	350.	10.25	42.7
1160.	0.0	0.0	750.	2.25	9.4	340.	10.25	42.7
1150.	0.0	0.0	740.	2.75	11.5	330.	10.50	43.8
1140.	0.0	0.0	730.	3.25	13.5	320.	10.50	43.8
1130.	0.0	0.0	720.	4.50	18.8	310.	10.50	43.8
1120.	0.0	0.0	710.	4.75	19.8	300.	10.50	43.8
1110.	0.0	0.0	700.	6.00	25.0	290.	10.50	43.8
1100.	0.0	0.0	690.	6.25	26.0	280.	10.75	44.8
1090.	0.0	0.0	680.	6.50	27.1	270.	10.75	44.8
1080.	0.0	0.0	670.	6.75	28.1	260.	10.75	44.8
1070.	0.0	0.0	660.	7.00	29.2	250.	11.00	45.8
1060.	0.0	0.0	650.	7.25	30.3	240.	11.00	45.8
1050.	0.0	0.0	640.	7.50	31.3	230.	11.00	45.8
1040.	0.0	0.0	630.	7.75	32.3	220.	11.00	45.8
1030.	0.0	0.0	620.	8.00	33.3	210.	11.00	45.8
1020.	0.0	0.0	610.	8.25	34.4	200.	11.00	45.8
1010.	0.0	0.0	600.	8.50	35.4	190.	11.00	45.8
1000.	0.0	0.0	590.	8.75	36.5	180.	11.00	45.8
990.	0.0	0.0	580.	9.00	37.5	170.	11.00	45.8
980.	0.0	0.0	570.	9.25	38.5	160.	11.25	46.9
970.	0.0	0.0	560.	9.50	39.6	150.	11.25	46.9
960.	0.0	0.0	550.	9.75	40.6	140.	11.25	46.9
950.	0.0	0.0	540.	10.00	41.7	130.	11.25	46.9
940.	0.0	0.0	530.	10.25	42.7	120.	11.50	47.9
930.	0.0	0.0	520.	10.50	43.8	110.	11.50	47.9
920.	0.0	0.0	510.	10.75	44.8	100.	11.50	47.9
910.	0.0	0.0	500.	11.00	45.8	90.	11.50	47.9
900.	0.0	0.0	490.	11.25	46.9	80.	11.50	47.9
890.	0.0	0.0	480.	11.50	47.9	70.	11.50	47.9
880.	0.0	0.0	470.	11.75	49.0	60.	11.50	47.9
870.	0.0	0.0	460.	12.00	50.0	50.	11.75	49.0
860.	0.0	0.0	450.	12.25	51.0	40.	11.75	49.0
850.	0.0	0.0	440.	12.50	52.1	30.	11.75	49.0
840.	0.0	0.0	430.	12.75	53.1	20.	12.00	50.0
830.	0.0	0.0	420.	13.00	54.2	10.	12.25	51.0
820.	0.0	0.0	410.	13.25	55.2	0.	12.50	52.1
810.	0.0	0.0	400.	13.50	56.2		12.75	53.1

INTERRUPTIONS

DETAILED DISTRIBUTION FOR MARCH, 1976  
 EARSTOW, CALIF. --DIRECT INSOL'TN --WATTS/ SQ METER

ACCOUNT = 7295561  
 CHANNEL = 2

LENGTH OF INTERR. (HOURS)	NUMBER OF INTERR.	LENGTH OF INTERR. (HOURS)	NUMBER OF INTERR.	LENGTH OF INTERR. (HOURS)	NUMBER OF INTERR.
.25	10	.25	0	.25	0
.50	8	.50	0	.50	0
.75	5	.75	0	.75	0
1.00	5	6.00	1	11.00	0
.25	2	.25	0	.25	0
.50	0	.50	0	.50	0
.75	2	.75	0	.75	0
2.00	1	7.00	0	12.00	0
.25	3	.25	0	.25	0
.50	0	.50	0	.50	0
.75	0	.75	0	.75	0
3.00	0	8.00	0	13.00	0
.25	0	.25	0	.25	0
.50	1	.50	0	.50	0
.75	0	.75	0	.75	0
4.00	0	9.00	0	14.00	0
.25	1	.25	0	.25	0
.50	0	.50	0	.50	0
.75	1	.75	0	.75	0
5.00	1	10.00	0	15.00	0

THE TOTAL NUMBER OF INTERRUPTIONS OF ANY LENGTH FOR THE MONTH 41

THE ANALYSIS WAS PERFORMED ON 2976 OF A POSSIBLE 2976 OBSERVATIONS FOR THE MONTH

NOTE: AN INTERRUPTION IS DEFINED AS THAT CONTINUOUS SPAN OF TIME, MEASURED IN 15-MINUTE INTERVALS, DURING WHICH THE INSULATION FALLS BELOW FIFTY PERCENT OF THE MONTHLY MEAN VALUE FOR THE TIME INTERVAL UNDER CONSIDERATION. THE ANALYSIS IS PERFORMED ON THOSE TIME INTERVALS FOR WHICH THE MONTHLY MEAN EXCEEDS 400 W/SQ M. THIS IS NOT A CUMULATIVE DISTRIBUTION.



DRY BULB TEMPERATURE

MONTHLY DISTRIBUTION

DETAILED STATISTICAL SUMMARY FOR MARCH, 1976  
 BAKSTON, CALIF. -- DRY BULB TEMP. -- DEGREES FAHR.

ACCOUNT = 7295561  
 CHANNEL = 3

DAY	DATE	DAY OF YEAR	MEAN	STAND DEVIATION	MAXIMUM VALUE	TIME OF MAX	MINIMUM VALUE	TIME OF MIN	NUM OF OBSERV	DAY	DATE
SUN	1	60	53.7	5.7	62.8	1101	41.5	2346	96	SUN	1
MON	2	61	44.0	5.4	53.3	1446	35.1	616	96	MON	2
TUE	3	62	39.8	3.9	47.0	1546	33.4	916	96	TUE	3
WED	4	63	43.2	8.1	59.1	1516	30.1	601	96	WED	4
THU	5	64	47.5	5.6	57.1	1346	39.9	531	96	THU	5
FRI	6	65	50.5	6.9	63.0	1401	41.3	331	96	FRI	6
SAT	7	66	50.5	10.9	67.4	1601	34.9	531	96	SAT	7
SUN	8	67	52.7	6.2	64.0	1516	37.9	616	96	SUN	8
MON	9	68	52.3	10.2	67.0	1401	36.8	601	96	MON	9
TUE	10	69	51.4	7.0	65.9	1331	42.4	516	96	TUE	10
WED	11	70	55.2	7.5	69.6	1401	47.1	2346	96	WED	11
THU	12	71	53.1	7.1	65.0	1346	43.0	2331	96	THU	12
FRI	13	72	53.3	13.3	75.3	1431	33.5	531	96	FRI	13
SAT	14	73	59.0	11.7	79.4	1546	41.9	501	96	SAT	14
SUN	15	74	59.8	11.1	75.9	1546	43.3	601	96	SUN	15
MON	16	75	61.3	10.0	76.6	1446	47.9	601	96	MON	16
TUE	17	76	66.9	12.5	86.4	1331	51.0	331	96	TUE	17
WED	18	77	63.0	9.1	80.1	1401	51.5	601	96	WED	18
THU	19	78	55.7	6.7	67.1	1446	44.3	2346	96	THU	19
FRI	20	79	52.5	10.3	67.5	1601	35.4	601	96	FRI	20
SAT	21	80	57.6	13.6	76.4	1446	38.8	446	96	SAT	21
SUN	22	81	61.9	13.8	82.1	1316	41.0	501	96	SUN	22
MON	23	82	65.1	9.6	81.0	1431	51.4	446	96	MON	23
TUE	24	83	64.1	12.4	84.4	1401	46.5	531	96	TUE	24
WED	25	84	58.9	7.6	72.1	1331	47.3	616	96	WED	25
THU	26	85	57.9	8.9	73.4	1631	42.3	546	96	THU	26
FRI	27	86	55.2	6.3	66.8	1316	47.3	2346	96	FRI	27
SAT	28	87	53.1	7.1	65.3	1501	42.6	531	96	SAT	28
SUN	29	88	56.1	9.3	70.5	1546	41.0	501	96	SUN	29
MON	30	89	58.1	9.4	72.1	1446	42.4	346	96	MON	30
TUE	31	90	62.4	13.6	83.0	1416	42.1	546	96	TUE	31

DAY	DATE	DAY OF YEAR	MEAN	STAND DEVIATION	MAXIMUM VALUE	TIME OF MAX	MINIMUM VALUE	TIME OF MIN	NUM OF OBSERV	DAY	DATE
-----	------	-------------	------	-----------------	---------------	-------------	---------------	-------------	---------------	-----	------

MONTHLY STATISTICS

MEAN = 55.3  
 STAND DEVIATION = 11.4  
 NUMBER OF OBSERVATIONS = 2976  
 MAXIMUM FOR MONTH 86.4 ON TUE 17 AT 1331 HOURS  
 MINIMUM FOR MONTH 30.1 ON WED 4 AT 601 HOURS

DAILY PROFILE

DETAILED STATISTICAL SUMMARY FOR MARCH, 1976  
 BAKSTON, CALIF. -- DRY BULB TEMP. -- DEGREES FAHR.

ACCOUNT = 7295561  
 CHANNEL = 3

INT NUM	INTERVAL FROM	TO	MEAN	STANDARD DEVIATION	MAXIMUM VALUE	DAY OF MAX	MINIMUM VALUE	DAY OF MIN	NUM OF OBSERV	INTERVAL FROM	TO	INT NUM
1	1	15	48.7	5.7	60.5	18	36.9	4	31	1	15	1
2	16	30	48.3	5.6	59.8	18	37.0	4	31	16	30	2
3	31	45	48.0	5.5	58.6	18	37.0	4	31	31	45	3
4	46	100	47.7	5.7	58.0	18	36.5	3	31	46	100	4
5	101	115	47.4	5.7	57.9	18	35.3	3	31	101	115	5
6	116	130	47.1	5.6	57.9	16	36.0	3	31	116	130	6
7	131	145	46.8	5.6	57.4	23	36.6	4	31	131	145	7
8	146	200	46.7	5.5	56.9	23	36.5	4	31	146	200	8
9	201	215	46.5	5.4	56.8	18	36.4	4	31	201	215	9
10	216	230	46.1	5.4	56.6	18	35.8	4	31	216	230	10
11	231	245	45.9	5.5	57.1	23	35.5	4	31	231	245	11
12	246	300	45.6	5.6	57.5	23	35.4	4	31	246	300	12
13	301	315	45.4	5.6	56.9	23	34.6	4	31	301	315	13
14	316	330	45.1	5.5	56.6	23	34.5	4	31	316	330	14
15	331	345	44.8	5.5	56.4	23	33.9	4	31	331	345	15
16	346	400	44.5	5.6	56.1	23	33.1	4	31	346	400	16
17	401	415	44.3	5.5	54.4	23	32.6	4	31	401	415	17
18	416	430	44.1	5.4	53.0	18	32.5	4	31	416	430	18
19	431	445	43.9	5.4	52.3	18	32.1	4	31	431	445	19
20	446	500	43.6	5.4	52.0	18	31.6	4	31	446	500	20
21	501	515	43.4	5.5	52.5	18	31.8	4	31	501	515	21
22	516	530	43.3	5.6	53.5	23	31.5	4	31	516	530	22
23	531	545	43.2	5.7	53.6	23	30.9	4	31	531	545	23
24	546	600	43.1	5.8	53.8	23	30.4	4	31	546	600	24
25	601	615	43.0	5.9	53.5	23	30.1	4	31	601	615	25
26	616	630	43.4	6.0	54.4	23	30.3	4	31	616	630	26
27	631	645	44.0	6.2	55.0	23	30.4	4	31	631	645	27
28	646	700	44.9	6.1	56.4	23	31.5	4	31	646	700	28
29	701	715	45.8	6.1	58.9	23	32.6	4	31	701	715	29
30	716	730	46.9	6.1	60.0	23	34.0	4	31	716	730	30
31	731	745	47.9	6.0	59.6	23	35.4	4	31	731	745	31
32	746	800	49.1	6.0	62.3	23	37.0	4	31	746	800	32

DETAILED STATISTICAL SUMMARY FOR MARCH, 1976 (CON'T)

ACCOUNT = 7295561  
CHANNEL = 3

INT NUM	INTERVAL FROM TO	MEAN	STANDARD DEVIATION	MAXIMUM VALUE	DAY OF MAX	MINIMUM VALUE	DAY OF MIN	NUM OF OBSERV	INTERVAL FROM TO	INT NUM
33	801 815	50.5	6.0	63.8	23	38.4	4	31	801 815	33
34	816 830	51.7	6.2	65.0	23	38.9	4	31	816 830	34
35	831 845	52.8	6.3	66.4	18	39.4	3	31	831 845	35
36	846 900	54.2	6.5	67.4	18	39.6	3	31	846 900	36
37	901 915	55.4	6.7	67.9	18	40.3	3	31	901 915	37
38	916 930	56.2	7.0	69.3	18	33.4	3	31	916 930	38
39	931 945	57.4	7.0	69.8	18	40.8	3	31	931 945	39
40	946 1000	58.5	7.3	72.1	17	41.3	3	31	946 1000	40
41	1001 1015	59.6	7.5	73.3	17	41.6	3	31	1001 1015	41
42	1016 1030	60.5	7.5	73.8	17	42.5	3	31	1016 1030	42
43	1031 1045	61.3	7.7	74.6	17	43.3	3	31	1031 1045	43
44	1046 1100	62.1	7.9	75.6	17	44.4	3	31	1046 1100	44
45	1101 1115	62.9	8.0	76.0	17	44.5	3	31	1101 1115	45
46	1116 1130	63.6	8.1	77.6	17	44.6	3	31	1116 1130	46
47	1131 1145	64.1	8.2	78.5	17	44.4	3	31	1131 1145	47
48	1146 1200	64.9	8.6	80.5	17	43.6	3	31	1146 1200	48
49	1201 1215	65.4	8.8	81.6	17	43.8	3	31	1201 1215	49
50	1216 1230	65.8	8.6	80.1	17	44.9	3	31	1216 1230	50
51	1231 1245	66.4	8.9	82.0	17	45.0	3	31	1231 1245	51
52	1246 1300	67.0	8.9	83.9	17	45.1	3	31	1246 1300	52
53	1301 1315	67.5	9.1	84.5	17	45.3	3	31	1301 1315	53
54	1316 1330	67.8	9.6	86.0	17	44.6	3	31	1316 1330	54
55	1331 1345	68.2	9.5	86.4	17	44.6	3	31	1331 1345	55
56	1346 1400	68.6	9.4	85.4	17	44.9	3	31	1346 1400	56
57	1401 1415	68.8	9.5	84.8	17	44.9	3	31	1401 1415	57
58	1416 1430	69.0	9.2	84.4	24	45.6	3	31	1416 1430	58
59	1431 1445	69.2	9.1	84.8	17	46.4	3	31	1431 1445	59
60	1446 1500	69.2	9.2	85.0	17	46.1	3	31	1446 1500	60
61	1501 1515	69.1	9.3	84.8	17	45.6	3	31	1501 1515	61
62	1516 1530	69.1	9.3	86.4	17	46.1	3	31	1516 1530	62
63	1531 1545	68.8	9.2	85.8	17	46.8	3	31	1531 1545	63
64	1546 1600	68.8	9.4	86.4	17	47.0	3	31	1546 1600	64
65	1601 1615	68.0	9.4	84.8	17	45.6	3	31	1601 1615	65
66	1616 1630	67.7	9.2	84.1	17	45.9	3	31	1616 1630	66
67	1631 1645	67.1	9.2	83.9	17	45.9	3	31	1631 1645	67
68	1646 1700	66.3	9.3	82.9	17	45.1	3	31	1646 1700	68
INT NUM	INTERVAL FROM TO	MEAN	STANDARD DEVIATION	MAXIMUM VALUE	DAY OF MAX	MINIMUM VALUE	DAY OF MIN	NUM OF OBSERV	INTERVAL FROM TO	INT NUM

DETAILED STATISTICAL SUMMARY FOR MARCH, 1976 (CON'T)

ACCOUNT = 7295561  
CHANNEL = 3

INT NUM	INTERVAL FROM TO	MEAN	STANDARD DEVIATION	MAXIMUM VALUE	DAY OF MAX	MINIMUM VALUE	DAY OF MIN	NUM OF OBSERV	INTERVAL FROM TO	INT NUM
69	1701 1715	65.4	9.4	82.4	17	44.5	3	31	1701 1715	69
70	1716 1730	64.6	9.3	81.3	17	43.9	3	31	1716 1730	70
71	1731 1745	63.5	9.2	79.9	17	43.6	3	31	1731 1745	71
72	1746 1800	62.4	9.0	78.3	17	43.1	3	31	1746 1800	72
73	1801 1815	61.4	8.7	76.8	17	42.6	3	31	1801 1815	73
74	1816 1830	60.5	8.5	75.6	17	41.5	3	31	1816 1830	74
75	1831 1845	59.6	8.2	74.0	17	40.8	3	31	1831 1845	75
76	1846 1900	58.6	7.9	72.0	17	39.9	3	31	1846 1900	76
77	1901 1915	57.8	7.7	72.0	17	39.4	3	31	1901 1915	77
78	1916 1930	57.1	7.5	71.4	17	38.9	3	31	1916 1930	78
79	1931 1945	56.5	7.4	71.3	17	38.5	3	31	1931 1945	79
80	1946 2000	56.0	7.4	70.4	17	38.4	3	31	1946 2000	80
81	2001 2015	55.4	7.4	70.4	17	37.8	3	31	2001 2015	81
82	2016 2030	54.9	7.3	69.3	17	37.9	3	31	2016 2030	82
83	2031 2045	54.4	7.0	68.3	22	38.0	3	31	2031 2045	83
84	2046 2100	53.9	6.9	67.0	22	37.9	3	31	2046 2100	84
85	2101 2115	53.4	6.8	67.1	17	37.4	3	31	2101 2115	85
86	2116 2130	53.0	6.8	67.1	17	37.3	3	31	2116 2130	86
87	2131 2145	52.8	6.6	65.9	17	37.4	3	31	2131 2145	87
88	2146 2200	52.1	6.4	64.5	17	37.1	3	31	2146 2200	88
89	2201 2215	51.6	6.2	62.8	22	37.5	3	31	2201 2215	89
90	2216 2230	51.2	6.2	62.4	17	37.5	3	31	2216 2230	90
91	2231 2245	50.8	6.3	62.6	17	37.0	3	31	2231 2245	91
92	2246 2300	50.4	6.3	61.8	31	36.6	3	31	2246 2300	92
93	2301 2315	50.0	6.0	61.3	17	36.6	3	31	2301 2315	93
94	2316 2330	49.7	5.9	60.9	17	37.0	3	31	2316 2330	94
95	2331 2345	49.4	5.9	61.6	17	36.9	3	31	2331 2345	95
96	2346 2400	49.0	5.7	61.3	17	37.0	3	31	2346 2400	96
INT NUM	INTERVAL FROM TO	MEAN	STANDARD DEVIATION	MAXIMUM VALUE	DAY OF MAX	MINIMUM VALUE	DAY OF MIN	NUM OF OBSERV	INTERVAL FROM TO	INT NUM

MONTHLY STATISTICS

MEAN = 55.3

STAND DEVIATION = 11.4

MAXIMUM FOR MONTH 86.4 FROM 1331 TO 1345 WED 17

MINIMUM FOR MONTH 30.1 FROM 601 TO 615 THU 4

NUMBER OF OBSERVATIONS = 2976