

DRAGONS BREATH

Solar orientation

Solar orientation is the method of pointing an object towards the sun. As the seasons change so then will the position of the suns geometry in the sky. During the summer solstice as the longest day of the year approaches, the sun will then reach its highest point in the sky. Ultimately this will provide longer days and shorter nights. As the sun rises in the east and sets in the west moving through the year, the suns path in the northern hemisphere then starts to move lower in the sky towards the South Pole. Ultimately reaching a point called the autumnal equinox where day and night become equal length in winter. As winter season continues the suns orbit then creates shorter day light times and longer nights. Climatic conditions also change, making it impossible to make solid predictions into the future as far as daily sun light in concerned. We therefore rely on scientific data, so historical meteorological evidence is used to provide a guide as of what to expect.

Calculating the orbit of the Sun's path from a static point can be done with a degree of expectation, as the future is not always possible to predict, we use a formula that can be used as an alternative to this calculation making sure a maximum iridescence is optimised.

Ways of measuring the sun light.

Luminance or photometers are available to measure the suns intensity at a given point. The general rule of thumb is that an average of 1Kw of solar energy per square meter is absorbed onto the earth from the sun. Calculations can then be estimated depending on position; air pollution, fog and cloud cover during these times. Other possible restrictions could be trees, buildings and debris that impart on the refractive angles during the seasons. If this happens then as much as 70% irradiance can be lost over this time.

Make sure you optimise a given geographical position where any object receives the greatest degree of sunlight at any given point in time..

	Sun rise	Sun set	Day light	Darkness
January	07:53	16:30	8	16
February	07:02	17:26	10	14
March	05:58	18:16	12	12
April	05:49	20:08	14	10
May	04:58	20:55	16	8
June	04:34	21:21	17	7
July	05:09	21:04	16	8
August	05:57	20:09	14	10
September	06:46	18:59	12	12
October	07:36	17:53	10	14
November	07:30	16:03	7	17
December	08:08	15:54	7	17

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