

InstantLight is a software product for lighting design developed as a tool that helps designers to perform their activities efficiently. It allows users to model indoor and outdoor spaces by simple operations and to easily know the distribution of light emitted from the lighting fixtures.

The simulation engine of InstantLight is fast, accurate and the same proven one used in INSPIRER, an advanced lighting simulator, for which a continuous improvement has been carried out. Because the engine processes any indoor and outdoor spaces completely three-dimensionally, the light distribution not only on base horizontal surface as floor but also on surface as wall and ceiling can be studied. In addition, the interreflection of light between objects is taken into consideration so that the effect of indirect lighting as architectural light can be examined.

◀ Easy operation to model space and to place lighting fixtures

## Applications

### Planning, verification and evaluation of lighting

- Investigation on illumination for existing constructions and constructions being planned
- Preparation of design materials such as illuminance distribution plot, uniformity, etc.
- Presentation of lighting by locating and changing lighting fixtures in front of client's eyes

### Reaching goals in lighting design

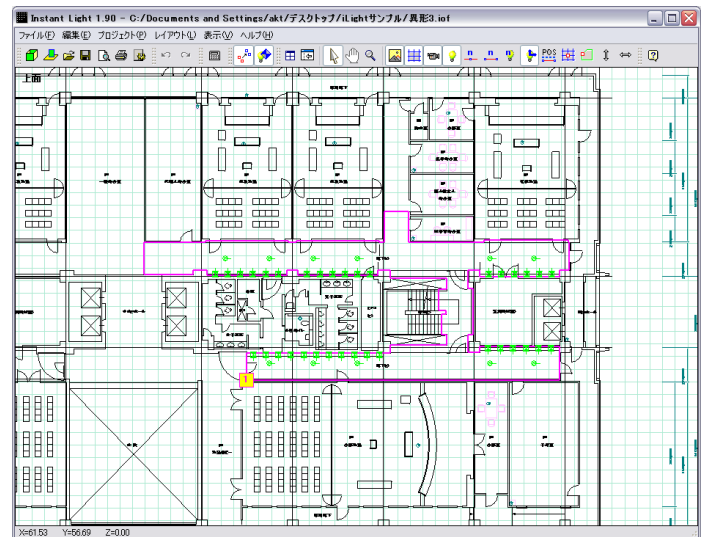
- Achieving target illuminance on specified surface
- Reduction of obtrusive light
- Economical improvement by optimizing number of lighting fixtures required

### Study of indoor illuminations

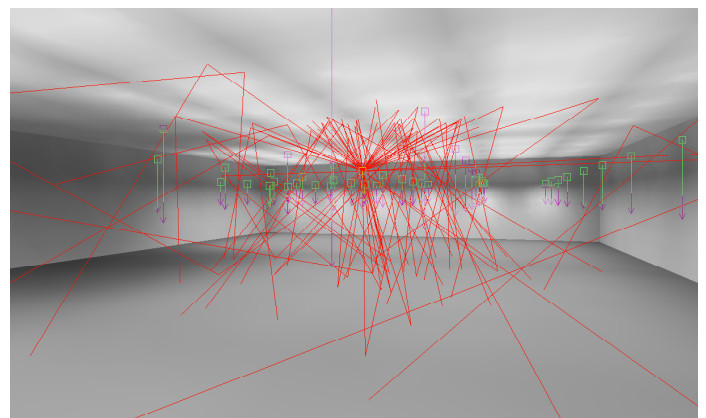
- Living spaces (house interior, lobbies, etc.)
- Working spaces (offices, schools, etc.)
- Commercial spaces (stores, restaurants, etc.)
- Exhibition spaces (museums, galleries, etc.)
- Large-scale spaces (gymnasiums, halls, factories, etc.)

### Study of outdoor illuminations

- Sports spaces (stadiums, pools, skiing grounds, etc.)
- Community spaces (parks, gardens, etc.)
- Vehicle spaces (parking lots, airports, etc.)
- Transport facilities (roads, tunnels, bridges, etc.)
- Others (architectural floodlighting, etc.)



▲ Import DXF file to use as outline for modeling



▲ Visualization by INSPIRER for rays emitted from lighting fixtures

\* Please feel free to consult us for customization and OEM supply.

## Features

### Simulation mechanisms

- Fast and accurate bi-directional Monte Carlo ray tracing method reproducing behavior of light in 3D space
- Consideration of interreflection enabling reproduction of indirect illumination such as architectural light
- 3D processing for behavior of light allowing users to know illuminance on walls, floors and ceilings at a time
- Unrestricted number of luminaires and objects\*1 to model and simulate large-scale spaces

### Building models

- Intuitive and simple user interface to build spaces where objects and luminaires are placed.
- Import of drawings in CAD formats (e.g. DXF) allowing users to trace them during modeling
- Snap-to-point feature assisting to point and pick vertices defined in the drawings imported from CAD
- Easy positioning and aiming of lighting fixtures using simple mouse operations such as drag-and-drop

### Presentation of simulation results

- Distribution, value and uniformity of illuminance on surfaces of objects such as floors, walls and ceilings
- Perspective illuminance distribution plot at arbitrary viewpoint, in addition to planar plot of distribution
- Export of illuminance distribution plot in format that can be loaded into external CAD (e.g. DXF)
- Superimposition of illuminance distribution plot over drawings imported from CAD

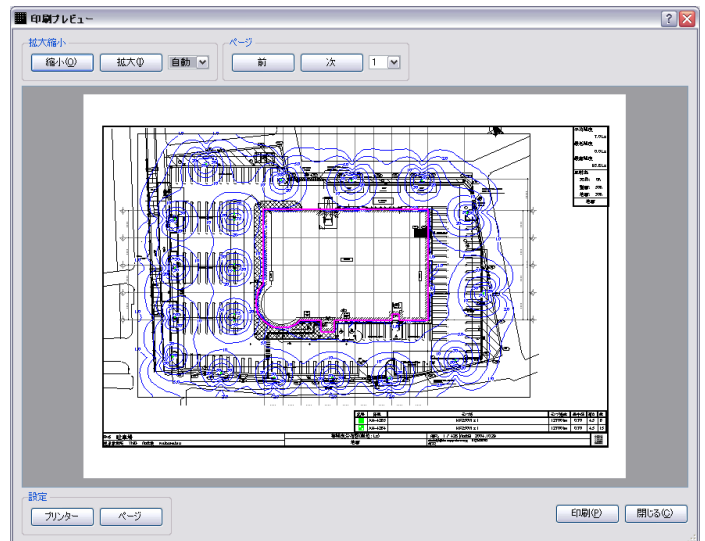
### Other features

- Loading InstantLight data into INSPIRER\*2 to perform advanced lighting simulation
- Use and building of luminaire library in industry-standard IES format

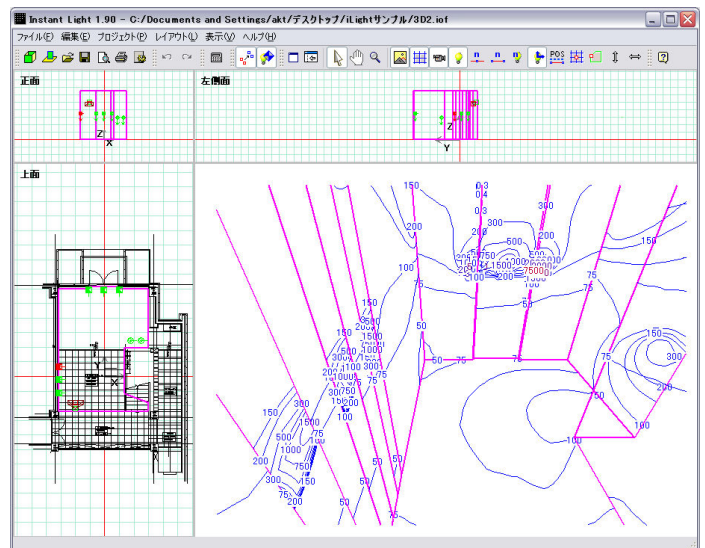
## System Requirements

CPU	Intel® Pentium® 4 or equivalents
RAM	512 Mbytes or greater
HDD	1 Gbytes or greater free area
OS	Microsoft® Windows® 2000/XP
Display	1024 by 768 pixels, True Color (24 bit) or greater

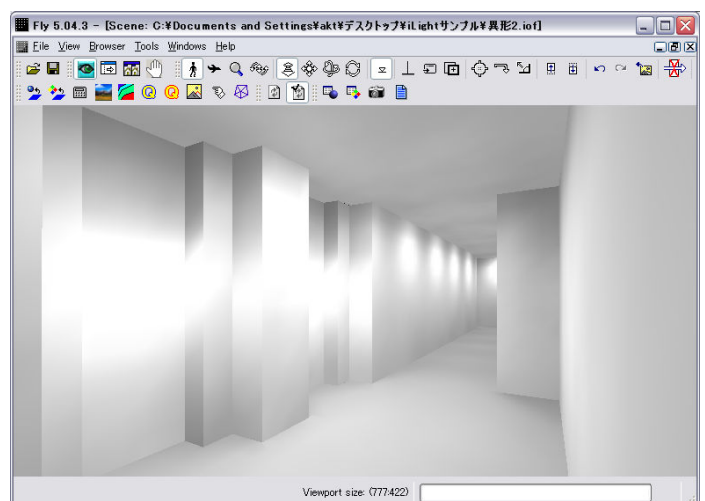
\*1 Restricted by available memory and storage space of the system.  
\*2 INSPIRER is sold separately and not included in this product.



▲ Plot of illuminance distribution in outdoor space (parking lot)



▲ Perspective view of illuminance distribution on walls and floors



▲ Example of lighting simulation using INSPIRER

The data used to generate images shown in this brochure is courtesy of Yamada Shomei Lighting Co., Ltd.

## Integra Inc.

Bureau Shinagawa, 4-1-6 Konan, Minato-ku, Tokyo, 108-0075, Japan

tel: +81-3-6712-8886

fax: +81-3-5204-9158

e-mail: [info@integra.jp](mailto:info@integra.jp)

[www.integra.jp](http://www.integra.jp)

Microsoft and Windows are registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. OpenGL is a registered trademark of Silicon Graphics, Inc. Intel and Pentium are registered trademarks of Intel Corporation.  
Unauthorized use of any texts, images and other materials contained in this brochure is strictly prohibited. Copyright © 2006-2010 Integra Inc. All Rights Reserved.