

# OPTIMAX®



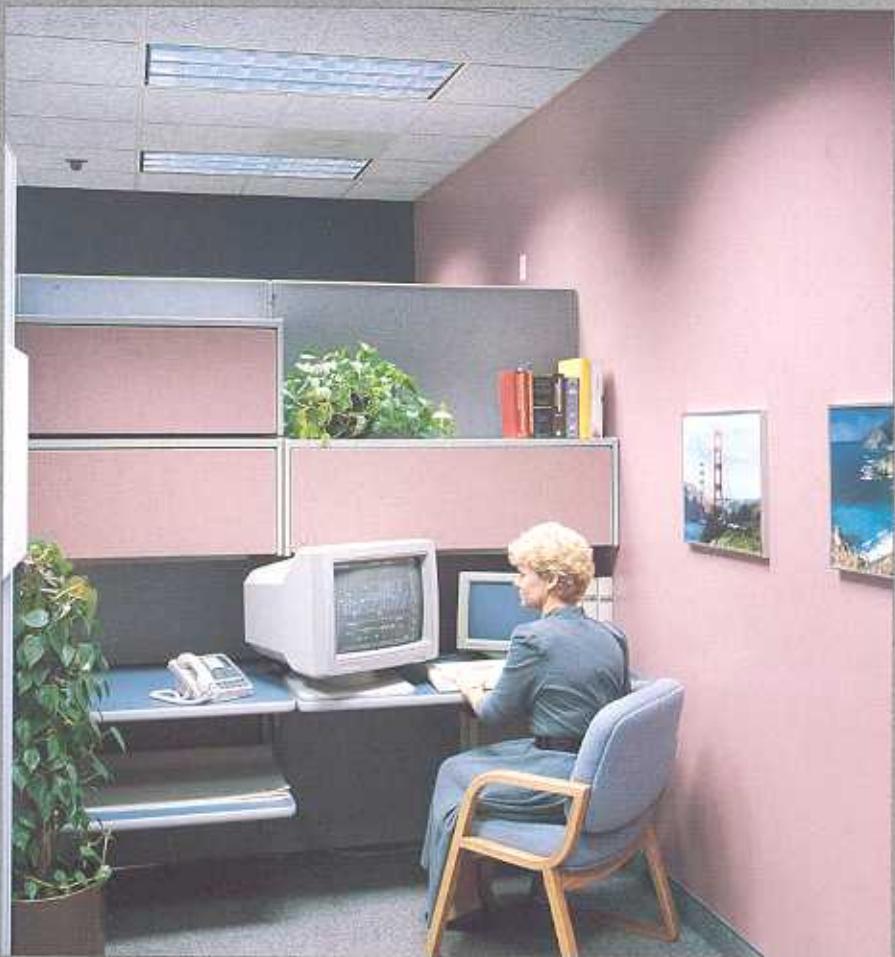
## The Design Challenge

In lighting today's modern workplace, the greatest challenge facing the designer is to create an environment that is *safe* and *comfortable*, and that *maximizes worker productivity*. This task becomes increasingly more difficult as the number of video display terminals in the workplace continues to rise.

The reason is *reflections from overhead lighting on VDT screens*. Reflected glare on a computer screen can blur text or graphics, increase the number of errors and cause a decrease in worker productivity. More importantly, reflected screen glare is a proven cause of eyestrain, irritability, fatigue and longer-term health problems.

Traditional lighting systems may no longer provide appropriate solutions to the lighting challenge because they cannot properly control reflected glare. With the unique Optimax Light Control System from Lithonia Lighting, designers finally have a solution.

# OPTIMAX



## Glare Control

Optimax is a fluorescent lighting system that eliminates objectionable reflected VDT screen glare\* caused by luminaire reflections. The key to Optimax performance is the combination of *optimum shielding design* that controls light at glare-producing angles and *precise optical assemblies* made of specially formulated, low iridescent, highly specular anodized aluminum.

As a result, Optimax encourages productivity by eliminating the reflected luminaire screen glare that workers find uncomfortable and irritating. In addition, Optimax provides the energy-efficient operation of a deep-cell parabolic. This efficient fixture design provides appropriate illumination levels for a variety of tasks while minimizing energy consumption.

\* Optimax effectively controls reflected glare in all workstations that meet ANSI/HFS Standard No. 100-1988 for operator and VDT positions.

# OPTIMAX

## Designing with Optimax

Optimax was created to provide appropriate lighting levels for large open office areas where VDTs are used. Optimax is available in a wide variety of sizes, air-handling functions, ceiling trim types and surface mounted configurations that allow you to choose the appropriate luminaire for a specific application need. Small office areas and spaces that are adjacent to open areas are ideal for low-brightness Paramax® fixtures as a complement to Optimax.

### *Illuminance*

Today, there are almost as many ambient lighting level needs as there are lighting applications. An Optimax system is available to meet any target illuminance.

- *3-lamp systems for high illuminance levels.*
- *2-lamp systems for intermediate to high illuminance levels.*
- *1-lamp systems for low to intermediate illuminance levels.*

### ***Lighting Energy Consumption***

Depending on the lamp and ballast combination selected, Optimax system energy consumption ranges from less than 1 watt per square foot to 1.6 watts per square foot to meet today's stringent lighting energy guidelines.

For more detailed comparisons of the Optimax systems see published photometric data, or use OptiGuide, the Optimax application guide software program available from a Lithonia Lighting representative. For the name of your local representative, please call the Lithonia Fluorescent Marketing Department, (404) 922-9000, ext. 2289.

**3-LAMP  
SYSTEMS  
FOR HIGH  
ILLUMINANCE**

**2' x 4'**

**O P T I M A X**



- Recommended illuminance range 60-75+ maintained footcandles.
- 2' x 4' size on 10' x 8' spacings is designed to provide low initial and operating costs.
- Choice of T8, T10 or T12 lamps.
- 27-cell Optimax louver for optimal VDT glare control.
- Tandem-wired configurations offer maximum energy efficiency.

# OPTIMAX



3-LAMP  
SYSTEMS  
FOR HIGH  
ILLUMINANCE

2' x 2'

- Architecturally pleasing, symmetric, modular configuration.
- Recommended illuminance range 60-75+ maintained footcandles.
- Designed to provide optimal light control for high lumen compact lamps. Choice of T15 or T8-U lamps for general illumination. T8 or T12 low-wattage straight lamps for companion applications are also available.
- 12-cell Optimax louver for optimal VDT glare control.

**2-LAMP  
SYSTEMS**  
FOR  
INTERMEDIATE  
TO HIGH  
ILLUMINANCE

20" x 4"

20" x 2'

1" x 4"

# OPTIMAX



## 20" Wide Fixture

- Compatible with 2' x 4' and 5' modular ceiling systems. A variety of ceiling trim accessories is available to fill 2' wide and 5' long grid systems.
- 18-cell Optimax louver for optimal VDT glare control standard in 20" x 4'; 8-cell in 20" x 2'.
- 20" x 4' available with two T8, T10 or T12 lamps. 20" x 2' available with two T15 or T8-U compact lamps. T8 or T12 low wattage straight lamps available for companion applications.
- Recommended illuminance range 45-70+ maintained footcandles.

## 1" Wide Fixture

- The appropriate selection for applications where optimum uniformity is critical.
- Recommended illuminance range 45-70+ maintained footcandles.
- 1" x 4' models available with two T8, T10 or T12 lamps or two T15 compact lamps.
- 9-cell Optimax louver for optimum VDT glare control in 1" x 4".

# OPTIMAX



## 1-LAMP SYSTEMS

FOR  
LOW TO  
INTERMEDIATE  
ILLUMINANCE

1' x 4'

1' x 2'

- Best choice for lower lighting levels or where uniformity is a critical design factor.
- 9-cell Optimax louver for optimal VDT glare control standard on 1' x 4'; 4-cell standard on 1' x 2'.
- Recommended illuminance range 30-60+ maintained footcandles.
- 1' x 4' models available with choice of one T8, T10 or T12 lamp. 1' x 2' models are available with one T15 or one T8-U compact fluorescent lamp. T8 or T12 low-wattage straight lamps for companion applications also are available.

## ORDERING INFORMATION

# OPTIMAX

### Optimax Catalog Number

2 PMO G A 3 40 27 LS 120 ES

#### Fixture Width

- Blank — 1 foot
- 2 — 2 feet
- 20 — 20 inches

#### Series - PMO

#### Mounting Trim

- G — Grid
- F — Flanged
- MT — Modular Fit-in
- ST — Screw Slot
- X — Surface-mounting

#### Air Function

- A — Air supply/return
- H — Heat-removal
- D — Dual A & H
- B — Static

#### Number of Lamps (not included) 1, 2, 3

#### Lamp Type

- 17 — Nominal 17W T8 (24")
- 20 — Nominal 20W T12 (24")
- U31 — Nominal 31W T8 U-lamp (24")
- 32 — Nominal 32W T8 (48")
- 40 — Nominal 40W T12 (48")
- CF40 — Nominal 40W TT5 Compact Fl. (24")

#### Number of Louver Cells

- 4 — 1 row of 4 (1 x 2 models)
- 8 — 2 rows of 4 (20" x 2 models)
- 9 — 1 row of 9 (1 x 4 models)
- 12 — 3 rows of 4 (2 x 2 models)
- 18 — 2 rows of 9 (20" x 4 models)
- 27 — 3 rows of 9 (2 x 4 models)

#### Louver Finish

- LS — Low-iridescent specular silver

#### Voltage

120, 277 or 347

(Others available. Consult Lithonia Lighting sales representative)

#### Options

- ES — 40W energy-saving ballast (Meets federal requirements)
- LST — Labor-Saving Tandem (prewired pairs)
- APB — Air pattern control blades (A & D models)
- HRD — Heat-removal dampers (H & D models)

# OPTIMAX

## MOUNTING & AIR FUNCTIONS

### Mounting Data

Ceiling Type	Appropriate Trim Type
Exposed grid tee	G
Concealed grid tee	G, ST
Concealed Z-spline	F, MT
Metal pan (consult factory)	MT
Screw slot (consult factory)	ST
Plaster or plasterboard on rigid supports parallel to lamps	F

**G** LAY-IN TRIM, exposed grid tee.

**F** OVERLAPPING FLANGED TRIM with swing-gate hangers

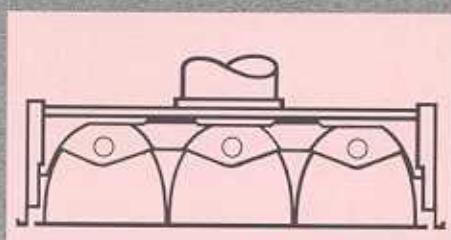
**MT** MODULAR FIT-IN TRIM with swing-gate hangers

**ST** SCREW SLOT TRIM, louver flush to ceiling.

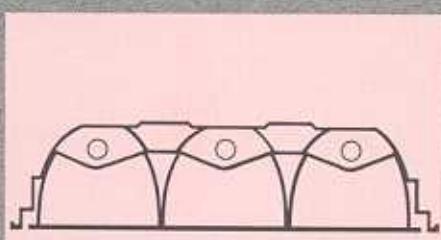
All Optimax models also available in surface-mounted configuration.  
For more information consult Lithonia Lighting sales representative.

### Air Functions

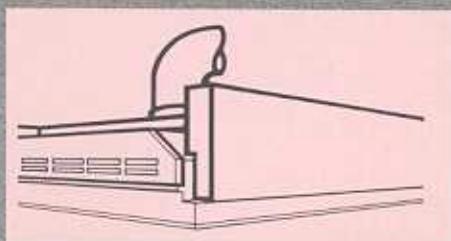
Optimax recessed luminaires can be specified with any combination of air functions desired. Air pattern control blades and heat-removal dampers are available as options.



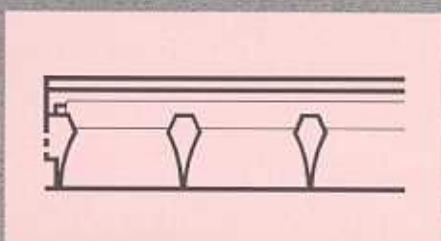
**A** - Air Supply/Air Return. Air flow through side slots.



**B** - Static. No air function, matching appearance.



**D** - All Air Functions. Dual air supply/air return and heat removal.



**H** - Heat Removal. Heat extracted through lamp cavity. Adjustable dampers available.