



ENERGY-SAVING FLUORESCENT HIGH BAY LIGHTING SYSTEMS



Delivering Energy Efficiency,
Reliability and Lighting Quality



Fluorescent lighting has long been the benchmark for delivering reliable and efficient lighting in commercial office spaces. Now those same benefits translate to distribution centers, warehouses, industrial/manufacturing facilities and retail spaces.

FLUORESCENT LIGHTING SYSTEMS PROVIDE UP TO 50% ENERGY SAVINGS

Energy-efficient fluorescent luminaires are quickly becoming the choice for lighting spaces traditionally designed with HID fixtures.

- 25-50% energy savings over metal halide high bays
- Instant on-off
- Occupancy sensors and daylight harvesting capabilities

Other benefits due to advancements in lamp and ballast technology combined with superior optics include:

- Longer lamp life
- Ballasts are virtually sound-free
- 95% lumen retention versus 53% for metal halide
- Segmented optics for better vertical and horizontal illumination
- Improved color rendition

EPAct 2005 OFFERS ADDITIONAL SAVINGS

The Energy Policy Act of 2005 provides for an accelerated lighting tax deduction up to \$.60/sf for buildings that outperform the ASHRAE/IESNA 90.1-2001 power density limits by 50%. Lithonia Lighting offers many solutions that will help meet the tax deduction requirements for offices, schools, industrial applications, institutional facilities and retail stores.

**FOR MORE ABOUT THE ENERGY-EFFICIENT COMMERCIAL BUILDING TAX DEDUCTION,
PLEASE GO TO WWW.LITHONIA.COM/TAXDEDUCTION.**



TAKING THE RISK OUT OF HIGH-TEMPERATURE ENVIRONMENTS

Lithonia Lighting, developed T5HO COOL RUNNING™ Technology — an innovative thermal design system, to reduce ballast operating temperature.

By reducing the ballast operating temperature, COOL RUNNING™ Technology operates reliably in non-conditioned and partially conditioned spaces where temperatures can approach 149°F (65°C). Traditional fluorescent lighting systems are at risk of ballast failure in these environments.

COOL RUNNING systems are UL/C-UL Listed up to 65°C/149°F and feature an Industry-leading five-year ballast warranty up to 55°C/131°F (three-year warranty up to 65°C/149°F).

COOL RUNNING SOLUTION

To accomplish reduced ballast operating temperatures and improve thermal performance, three key elements are crucial to the design of COOL RUNNING ballasts:

- **EFFICIENCY** – Features like our highly efficient optical system generate far less heat around fixture components.
- **CONDUCTION** – The ballast incorporates an aluminum case with increased surface contact area to move heat quickly away from temperature-sensitive components.
- **CONVECTION** – Highly emissive, 20-gauge channel construction and air flow paths between the housing and lamps allow fixture heat to move to the surrounding air.

HIGH-EFFICIENCY BY:

COOL
RUNNING™
TECHNOLOGY

 **LITHONIA LIGHTING®**

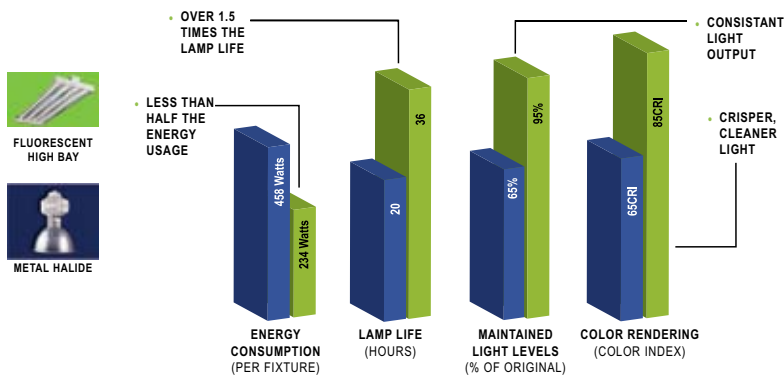
FLUORESCENT HIGH BAY FAMILY

Lithonia Lighting offers efficient fluorescent fixtures for any application, whether it's for low or high mounting heights, warehouses, distribution centers or retail facilities.

The innovative I-BEAM® fixture is the first fluorescent high bay to offer COOL RUNNING™ Technology. This technology dissipates fixture heat, making it suitable for high ambient applications in non-conditioned and partially conditioned spaces. The SPEC-BEAM™ full-body fluorescent high bay and the FAL fluorescent aisle lighter complete the line.

Also available are the MS5HB/MS8 shielded optical high bay and the MS5 fluorescent task light, which provide peak optical performance in climate-controlled spaces.

Fluorescent High Bay vs. Metal Halide Comparison



ADDITIONAL FLUORESCENT HIGH BAY ADVANTAGES

- Improved light distribution and uniformity
- Instant on-off
- Low profile: about 1/6 the height of HID fixtures
- Lower installation costs and lamp replacement costs compared to HID
- Onboard battery back-up option

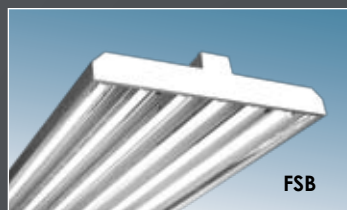
Energy-Saving Fluorescent Lighting Systems



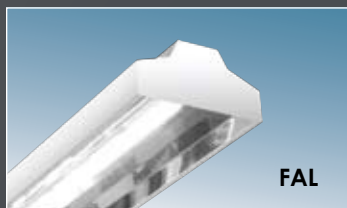
IBC



IB



FSB



FAL



MS5HB/MS8

I-BEAM® COMPACT A smaller, easy-to-handle four-lamp T5HO version of I-BEAM, designed for commercial, warehouse and industrial applications. Like its sibling, I-BEAM Compact features T5HO COOL RUNNING Technology with a five-year ballast warranty at 55°C/131°F, a three-year ballast warranty at 65°C/149°F, and is UL/C-UL Listed up to 65°C/149°F applications. **Example: IBC 454L**

I-BEAM® SERIES The workhorse of the high bay series of products. The I-BEAM fixture is the first fluorescent high bay to include COOL RUNNING™ Technology featuring a five-year ballast warranty at 55°C/131°F, a three-year ballast warranty at 65°C/149°F, and is UL/C-UL Listed up to 65°C/149°F applications. The series is ideal for applications such as manufacturing or warehousing where elevated ambient temperatures exist. Available in four- or six-lamp, T8 and T5HO configurations. **Example: IB 454L**

SPEC-BEAM™ SERIES Couples high performance in a rugged, full-body design with lens and distribution options for reliable performance in any application. SPEC-BEAM fixtures feature COOL RUNNING Technology with a five-year ballast warranty at 55°C/131°F (40°C/104°F with a lens on the fixture), a three-year ballast warranty at 65°C/149°F, and is UL/C-UL Listed up to 65°C/149°F. Applications include gymnasiums, warehouse, manufacturing and commercial. Available in two- to 6-lamp, T8 and T5HO configurations. **Example: FSB 654L**

FLUORESCENT AISLE LIGHTER Delivers peak optical performance in warehouse and aisle applications with maximum efficiency and beam control. High-performance optics maximize energy savings. Featuring T5HO COOL RUNNING Technology, a five-year ballast warranty at 55°C/131°F, and is UL/C-UL Listed up to 55°C/131°F. Available in single-lamp profile; 8', 12' and 16' sections for continuous row configurations. **Example: FAL 54L**

ARCHITECTURAL HIGH BAY The distinctive appearance of the MS5HB fixture is matched only by the reliable performance it provides. This series includes cross blades for additional shielding of the lamps. Ideal for climate-controlled spaces where shielding is desired such as assembly lines, retail or aisles. Available in two- and three-lamp crosssections; 4' and 8' lengths, and T8 and T5HO.

Example: TMS5HB3 54T5HO SBL ND MVOLT 1/4 1/2 GEB10PS



Offered with the following fixtures: IB, IBC, FSB, FAL



I-BEAM® ENERGY SAVING OPPORTUNITIES



AIRCRAFT CABLE



PENDANT MOUNT



HOOK MOUNT



WIREGUARD



MOTION SENSOR



RELOC® CORDS AND PLUGS



WAREHOUSE

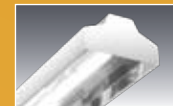
The linear nature of fluorescent lighting is especially suited for high-stack storage applications. Energy reductions of 40-60% are normal when replacing HID systems. The use of motion sensor control can further improve system efficiency.



MANUFACTURING

Fluorescent T5HO and T8 luminaires provide a wide variety of lamp combinations and photometric distributions. This feature allows for maximum flexibility in creating application-specific design solutions for mounting heights of 18 to 50 feet.

aisle footcandle estimator



	I-BEAM COMPACT		I-BEAM		SPEC-BEAM			MS5HB AND MS8		FAL
MOUNTING HEIGHT	IBC	IB	IB	IB	FSB	FSB	FSB	TMS5HB	TMSB	FAL
	4-lamp	6-lamp	6-lamp	4-lamp	6-lamp	6-lamp	4-lamp	6-lamp	6-lamp	Continuous Row
	T5HO	T5HO	T8	T5HO	T5HO	T8	T5HO	T5HO	T8	1-lamp T5HO
20'	17 (11)	32 (17)	23 (14)	26 (9)	34 (15)	23 (11)	22 (10)	33 (15)	20 (10)	38 (12)
30'	11 (7)	22 (12)	14 (9)	18 (7)	23 (11)	15 (8)	15 (7)	23 (11)	14 (8)	28 (11)
40'	9 (6)	15 (9)	10 (7)	13 (6)	16 (9)	11 (6)	10 (6)	17 (9)	11 (6)	20 (8)
50'	6 (5)	12 (8)	7 (6)	10 (5)	13 (7)	8 (5)	8 (5)	13 (8)	7 (5)	16 (7)

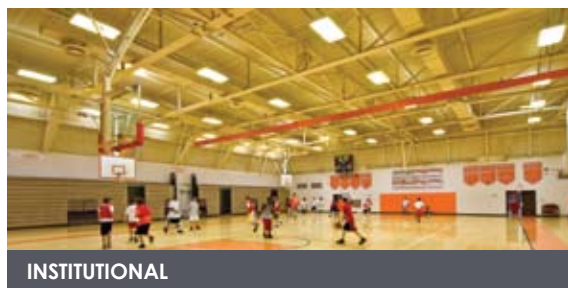
(Vertical footcandles in parenthesis)

OPEN AREA FOOTCANDLE ESTIMATOR



	I-BEAM COMPACT		I-BEAM		SPEC-BEAM			MS5HB	MS8
MOUNTING HEIGHT	IBC	IB	IB	IB	FSB	FSB	FSB	TMS5HB	TMS8
	4-lamp	6-lamp	6-lamp	4-lamp	6-lamp	6-lamp	4-lamp	6-lamp	6-lamp
	T5HO	T5HO	T8	T5HO	T5HO	T8	T5HO	T5HO	T8
20'	22	32	24	22	31	25	22	31	23
30'	21	32	24	22	31	23	22	31	21
40'	19	30	22	21	28	22	21	29	20
50'	18	28	21	20	27	21	19	28	18

Aisle calculations are based on a 12' wide aisle with fixtures at 25' spacing. Open area calculations are based on an area of 250' X 250' with fixtures at 25' spacing. Narrow distributions have been used in aisles and higher mounting heights; wider distributions have been used at 20' open spaces. Work plane is at 30" above the floor. Published standard lamp data and industry standard light loss factors have been used. Note: T5HO fixtures have a 1.0 ballast factor and T8 examples have a 1.2 ballast factor.



INSTITUTIONAL

A current trend in school gymnasiums is the replacement of metal halide lighting systems with fluorescent luminaires. The higher efficiency of fluorescent provides the opportunity to increase or maintain light levels with a one-for-one replacement.



COMMERCIAL

Big box retail, grocery stores, offices and indoor sporting facilities benefit from better uniformity and increased illumination levels when using high-efficiency fluorescent luminaires.

HIGH-EFFICIENCY FLUORESCENT PRODUCTS FOR SPECIAL APPLICATIONS

Food Processing/High-Pressure Hose-Down

Cold Storage



FHE-Enclosed and Gasketed

- 5VA-rated fiberglass housing
- Acrylic or polycarbonate lens
- Stainless steel latches
- Specular aluminum reflectors
- Wet location IP65, IP66, IP67
- NSF Splash Zone 2, NEMA 4X
- PSI 1300



FHH-Aluminum High Bay

- Polyester powder-coated aluminum
- Acrylic or polycarbonate lens
- Stainless steel captive bolts
- Specular aluminum reflectors
- Wet location IP55
- NSF Splash Zone 2
- PSI 1300
- 6' cord



FFB-Cold Storage Luminaire

- Polyester powder coated steel
- Acrylic or polycarbonate lens
- Specular aluminum reflectors
- Cold environments down to -20°F/-29°C ambient
- Motion sensor control options
- Double-gasketed door and housing contain lamp heat energy

Also available for food-processing and hose-down applications:



FEM



FEN



EIS



DMSW



EFT



TXF



DMW



EFS



SRT



SSH



SRH

