# Horizon II LED Product introduction August 2014

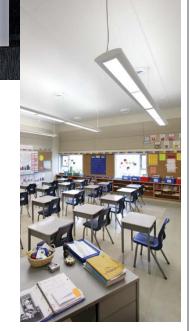


### Overview

- > Breadth of Line
  - Pendant: 4', 8', 12', and continuous rows
- ➤ Light Engine Choices
  - four Lumen Package Options
  - 3 CCTs: (3000K, 3500K, 4000K)
  - 83+ CRI
  - Binning: 3-step
  - L85 at 60,000 hours
- High Efficacy (4ft)
  - Up to 123 LPW
  - Ease of Installation
  - Quick-Grip field adjustable suspension system

- Control Flexibility
  - Standard 0-10V Dimming Driver
  - Occupancy sensor
  - Button PC Daylight sense
  - Motion sensor
  - DALI protocol
- New warranty
  - 5 year Warranty
- ➤ Listings/Compliances
  - cULus 1598
  - cULus Damp Location
  - IC Rated
  - DLC pending (October 2014)





Ideal for Office, Education, Healthcare



# Horizon II Series Suspended, Integral Driver

### Horizon II O5B& O5K LED

LED . Pendant . Indirect/Direct











- > Indirect/Direct Luminaire
- MetaLED Optical System
- 4', 8', 12' or continuous row.
- > 83+ CRI
- White finish (custom finish available)
- > 3000, 3500K & 4000K CCT
- Four lumen packages per model up to 11304 lumens
- Very High Efficacy
- Pendant application
- > 120-277V or 347V
- Class 2 Standard 0-10V Dimming (Down to 10%)
- > LM79 & LM80 compliant.
- L85 @ 60,000h By TM21
- > cULus certified
- > Suitable for dry locations.

O5B-LED35K-4-CL-OL-LL3

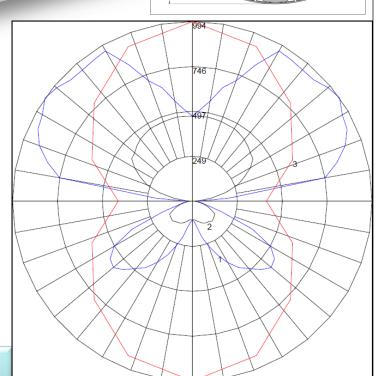
Luminaire Lumens: 5898

Total Watts: 48W

Efficacy (LPW): 123

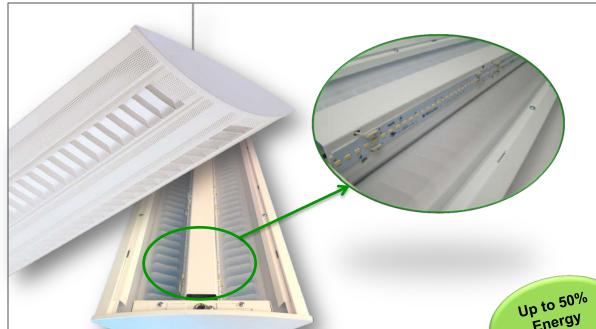
Maximum Candela = 994.48 Located At Horizontal Angle = 90, Vertical Angle = 125 #1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.) #2 - Vertical Plane Through Horizontal Angles (0 - 180)

# 3 - Horizontal Cone Through Vertical Angle (125) (Through Max. Cd.)





#### **Horizon II Series** Suspended, Integral Driver



4', 8', 12' and Continuous

**Efficacy** 

Up to 123 LPW

**Lumen Packages** 

O5K: 3079 to 10775

O5B: 3230 to 11304

**Integral Controls** 

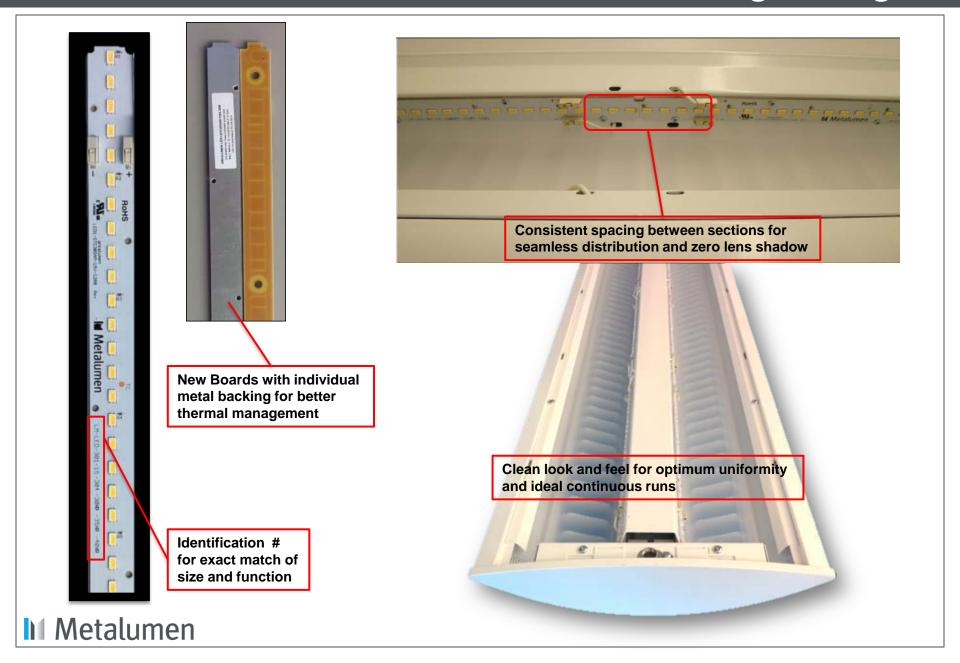
Energy Savings

|                    | 4' Ho            | orizon II Sus    | pended and      | surface LE      | D light Leve  | el Outputs                |                    |
|--------------------|------------------|------------------|-----------------|-----------------|---------------|---------------------------|--------------------|
| Light Level        | Wattage          | Lumens Delivered |                 | Efficacy (LPW)  |               | Fluorescent<br>Equivalent | Energy<br>Savings* |
|                    |                  | O5K              | O5B             | O5K             | O5B           |                           |                    |
| L1                 | 27               | 3079             | 3230            | 113             | 118           | 2T8/T5                    | 48%                |
| L2                 | 35               | 3924             | 4119            | 113             | 118           | 2T8/T5HO                  | 36%                |
| L3                 | 48               | 5621             | 5898            | 118             | 123           | 3T8/2T5/T5HO              | 50%                |
| L4                 | 96               | 10775            | 11304           | 113             | 118           | 3T5HO                     | 46%                |
| * Energy Savings b | ased upon stabdr | ad lamp/ballas   | t combination ( | ısing an equivi | lant 05K & 05 | B series with Opal inlay  |                    |

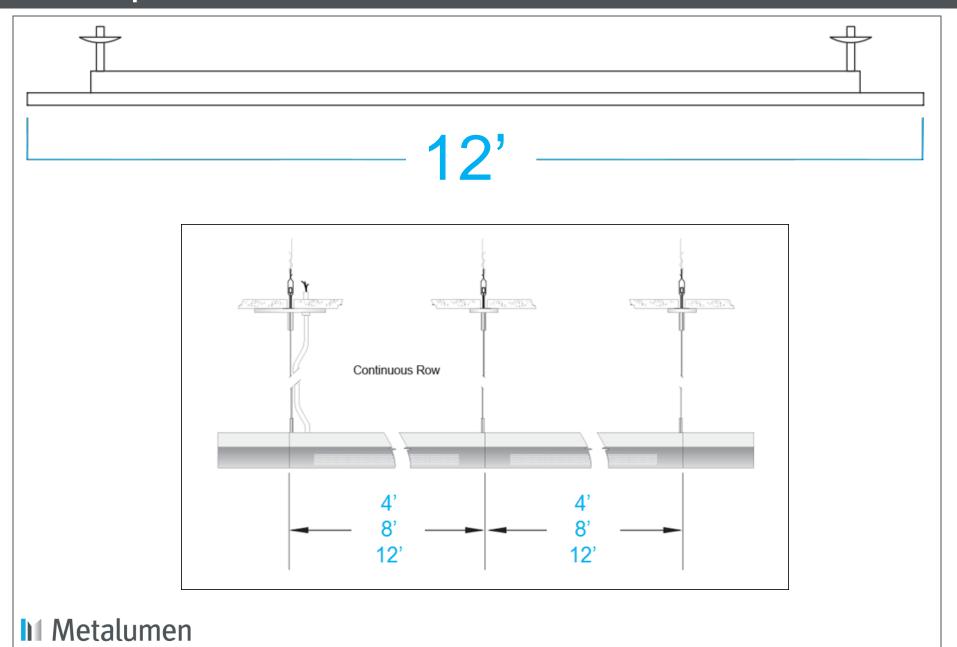
12.0" [305mm] 2.9" [73mm]



# Metalumen's **NEW** LED Light Engine

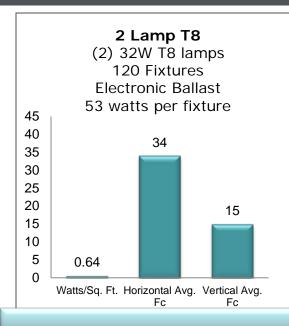


# Simple for the Contractor – Modular for Client

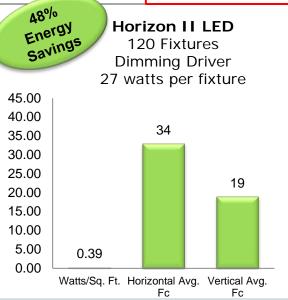


#### Horizon II LED/FL Comparison

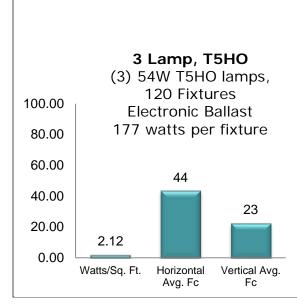
Room Size: 100' x 100' Ceiling Height: 9' Plane: 2.5' Reflectance: 80/50/20 Layout: 10x12 Centers 18" suspended height



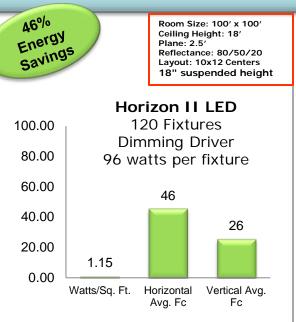
| 3112 | Delivered Lumens    | 3230 |
|------|---------------------|------|
| 53   | Input Power (Watts) | 27   |
| 59   | Delivered LPW       | 118  |
| 0.64 | Watts/Sq. Ft.       | 0.33 |
| 34   | Horizontal Avg. Fc  | 34   |
| 45   | Horizontal Max Fc   | 40   |
| 11   | Horizontal Min Fc   | 19   |
| 4    | Max/Min             | 2.11 |
| 15   | Vertical Avg. Fc    | 19   |
| 80   | CRI                 | 83   |



#### - All calculations are based on 4' fixtures -



| 11367 | Delivered Lumens    | 10775 |
|-------|---------------------|-------|
| 177   | Input Power (Watts) | 96    |
| 64    | Delivered LPW       | 113   |
| 2.12  | Watts/Sq. Ft.       | 1.15  |
| 43.5  | Horizontal Avg. Fc  | 45.5  |
| 55.5  | Horizontal Max Fc   | 56    |
| 26    | Horizontal Min Fc   | 26    |
| 2.13  | Max/Min             | 2.16  |
| 22.5  | Vertical Avg. Fc    | 25.5  |
| 80    | CRI                 | 83    |



### System energy Analysis

#### 11 Metalumen Lighting System Energy Analysis Ideas brought to light Customer Information **Facility Information**

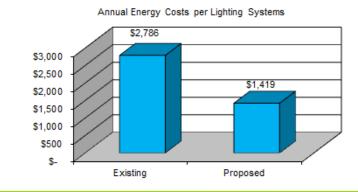
| Floject Name. |                      |      |      |
|---------------|----------------------|------|------|
|               | Cost Per kWh         | \$ 0 | .120 |
| Contact:      | Annual Operating Hrs | 3    | ,650 |
|               |                      |      |      |

Input

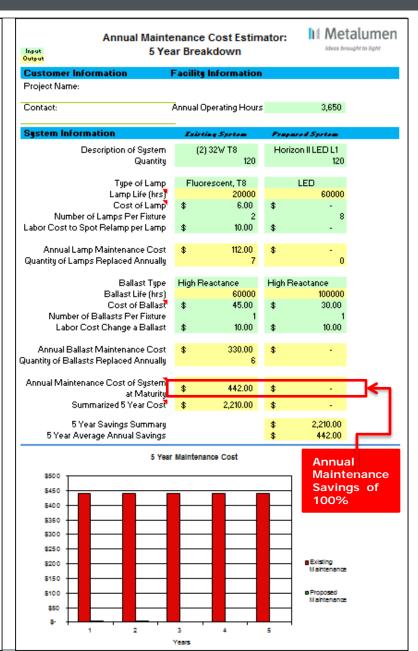
Output

Project Name:

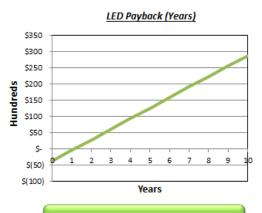
| System Information                                             | Ε   | xisting                | Proposed                       |
|----------------------------------------------------------------|-----|------------------------|--------------------------------|
| Luminaire Description<br>Input Watts Per Luminaire<br>Quantity | (2) | 32W T8<br>53<br>120    | Horizon II LED L1<br>27<br>120 |
| System Watts<br>System kW                                      |     | 6,360<br>6.36          | 3,240<br>3.24                  |
| Annual kWh<br>Annual Energy Costs<br>Monthly Costs             | \$  | 23,214<br>2,786<br>232 | \$<br>11,826<br>1,419<br>118   |
| Annual Energy Savings (\$)<br>Annual Energy Savings (%)        |     |                        | \$<br>1,367<br>49%             |
| Cost of Waiting (Monthly)                                      |     |                        | \$<br>114                      |



Note: These are estimated savings only. These annual and monthly savings are based on a number of variables and assumptions that could change over time. The actual savings derived by your firm may be higher or lower.



## System Energy & Maintenance Savings



#### System Energy & Maintenance Cost Summary

|                                             | LED      | Traditional |
|---------------------------------------------|----------|-------------|
| Total Initial Fixture/Installation Cost     | \$36,695 | \$33,000    |
| Total System kW                             | 3.24     | 6.36        |
| Annual kWh                                  | 11,826   | 23,214      |
| Cost of Energy per kWh                      | \$0.120  | \$0.120     |
| kWh Inflation Rate (%/yr)                   | 0.00%    | 0.00%       |
| Average Annual Energy Cost                  | \$1,419  | \$2,786     |
| Average Annual Maintenance Cost             | \$0      | \$1,886     |
| Average Annual Energy + Maintenance Costs   | \$1,419  | \$4,672     |
| Average Annual Energy & Maintenance Savings | \$3,253  |             |

| [         | Sav               | ings     | Cost/Year |             |  |
|-----------|-------------------|----------|-----------|-------------|--|
|           | Annual Cumulative |          | LED       | Traditional |  |
| 1st Year  | \$1,367           | \$1,367  | \$1,419   | \$2,786     |  |
| 5th Year  | \$2,624           | \$9,426  | \$1,419   | \$4,043     |  |
| 10th Year | \$3,253           | \$28,835 | \$1,419   | \$4,672     |  |

|               | Savings  |
|---------------|----------|
| 10 Year Total | \$32,530 |

| Cost     |             |  |
|----------|-------------|--|
| LED      | Traditional |  |
| \$14,191 | \$46,721    |  |

Payback = 1.14 Years

PAYBACK ANALYSIS

ANNUALIZED SAVINGS PER YEAR

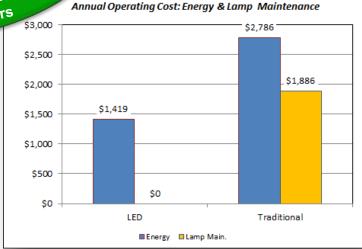
ANNUALIZED SAVINGS PER YEAR

ANNUALIZED SAVINGS PER YEAR

ANNUALIZED SAVINGS PER YEAR

AND SAVINGS PER YEAR

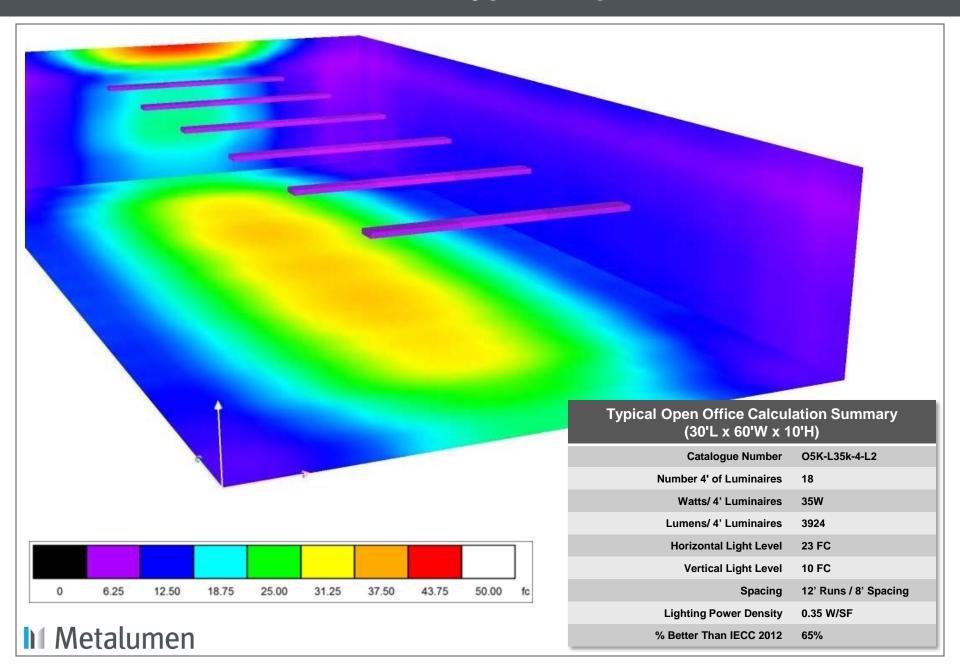




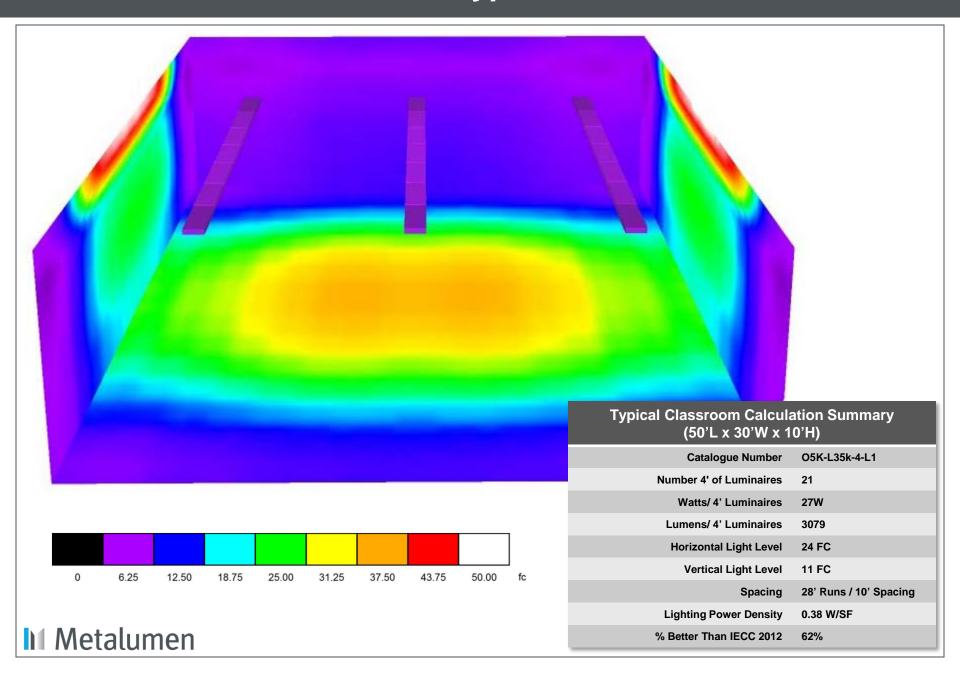
<sup>\*\*\*</sup> Calculation is based on actual Horizon II LED fixture used in comparison to a 2-T8 FL Horizon II fixture. Assumptions are \$0.12 per KWh and 10 operating Hours/day @ full power (dimming schedule will result in more savings). These are estimated savings only. Annual and monthly savings are based on a number of variables and assumptions that could change over time. The actual savings derived by our firm may be higher or lower. Metalumen's business does not imply a warranty of performance or savings as calculated and shown within this document.



### **Typical Open Office Calculation**



### **Typical Classroom Calculation**



## **Shipping**

**Standard Lead time:** 

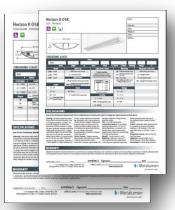
Ships in 6-8 weeks

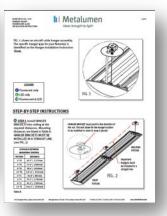
First 4 months of production: Ships in min 8 weeks

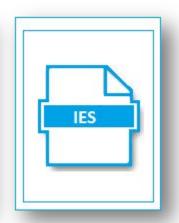


#### **Sales Tools**











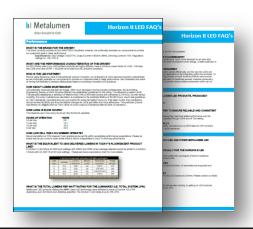
**Brochure** 

**Spec Sheet** 

**Installation Instructions** 

**IES Files** 

Price Guide (Agent Portal)





| Metalume                                     | en                            |                               |                                  | Horiz                                      | on II LEC          |
|----------------------------------------------|-------------------------------|-------------------------------|----------------------------------|--------------------------------------------|--------------------|
| mpetitor Featur                              | e Cross Reference             |                               |                                  |                                            |                    |
| Brand                                        | Metalumen                     | Cooper Lighting Corolina      | 64                               | Lanera                                     | Ledalite           |
|                                              | Morieon 8 OSK/OSB             | Divide Surpended              | Lumination Series                | Series L7                                  | Boldplay           |
|                                              | aminute:                      |                               |                                  | $ \bigcirc $                               |                    |
| Cross section Dimensions<br>(width X Weight) | 12.X33.                       | 12"X22"                       | 118" X 138"                      | 87X558*                                    | 94"X167"           |
| d' Longth                                    | Yes                           | Yes                           | Yes                              | Yes                                        | Yes                |
| Flength                                      | Yes                           | Yes                           | Yes                              | Yes                                        | Yes                |
| CBI                                          | 821                           | 62+                           | 801                              | M                                          | - 11               |
| 133                                          | 3000K, 3500K, 4000K           | 3080K, 2300K, 4000K           | 3000K, 3500K, 4000K              | 2300K, 4000K                               | 3000K, 3000K, 480K |
| Lunes Package                                | 2006, 3742, 5136, 16267       | 2000, 4600, 5600, 7100, 9700  | 4390                             | 3069                                       | 3399, 4797         |
| Input Watts                                  | 25.8, 32.9, 44.8, 89.6        | 31,45,57,74,94                | 55                               | 47                                         | 32.2,467           |
| Dffcacy (UPV)                                | Up to 115                     | Up to 106                     | 76<br>6-187 Street et TALL       | 69                                         | up to 105          |
| Direning                                     | 0.101/Standard, DRLI optional | 0-10Y Standard, DALI optional | 8-18V Standard, DALI<br>optional | 0.107                                      | 0.10%              |
| Orient Wounting                              | Integral or Remote            | Integral or Remote            | Remote Only                      | Remote Only                                | Integral           |
| Rated Life                                   | 60,000h                       | SI,000h                       | 56,8004                          | Stjoon Steam and LFD 3                     | 60,000h            |
| Warranty                                     | 5 Years                       | 5 Years                       | 5 Years                          | 5 Years fisture and LEO, 5<br>Years driver | 5 Years            |
| Directindrect                                | Yes                           | Yes                           | Yes                              | Yes                                        | Yes                |
| hispal tensors                               | Yes                           | Yes                           | No                               | No.                                        | Yes                |
| Integral Buttery                             | Yes                           | Yes                           | No.                              | No.                                        | Yes                |

FAQ Sizzle Sheet (Agent Portal)

**New Product Intro** 

Competitive Analysis (Agent Portal)

