

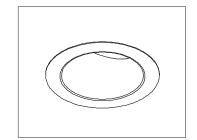
| CATALOG # |         | TYPE    |  |
|-----------|---------|---------|--|
| JOB NAME  | WATTAGE | VOLTAGE |  |

4" 4 LED 12 SYSTEM WATTS

LRR-04031

# Lensed Adjustable • LED • Type IC

50,000+ Hour Life • 82 CRI • 3 Distributions • Air Tight Optional



# **Specifications**

### **LED Light Engine**

- 12 watt LED array. 3500°K standard (or see Options -30K or -41K).
- 450\* lumens, 38 lumens per watt (total system).
- 82 CRI, 50,000+ hour life.\*\*
- Fully sustainable: removable for servicing.

### **Center Beam Optics**

- Narrow flood (NFL) standard. Optional: spot (SPT) or medium flood (MFL).
- Self-aligns with trim for optimal performance.
- Hot aiming by hand or screwdriver.
- Tilts from 0° to 45° in 1° increments and locks in place.
- Rotates full 365° and locks in place
- Accommodates sloped ceilings up to 45°.

### Thermal Management System

 All-aluminum proprietary heat sink components and housing maximize luminaire's cool operation and long life while minimizing maintenance.

### **LED Power Supply**

- Suitable for outdoor / indoor use: -40°C (-40°F) to 60°C (140°F).
- 120-277V / 50-60Hz standard. Load insensitive.
- Dimming available, see Option -39.
- Kirlin remote SmartSupply<sup>™</sup> driver instead see Option -SS.

### **Electrically Isolated Trim**

- Specular clear aluminum self-flanged and gasketed angle cut cone with lens on top.
- Non-conductive vinyl coated trim spring clip minimize risk of electric shock
- Colors and specular finishes available.

### Acrylic Enameled Aluminum Housing

- Rustproof and corrosion resistant: Exceeds 1000 hour ASTM 5% salt spray test.
- Shallow depth fits restricted plenums.
- Cool operation: Extends life of all components
- Fully sustainable: Entire luminaire, including LED light engine, easily visible and serviced through a perture.
- Built-in plaster flange.
- Air Tight design available, see Option -AT.

### **Outlet Box**

• UL tisted J-box with insulated removable cover. Prewired 14 GA (NEC) with ½" and ¾" knockouts.

#### Installation

- Recesses indoor/outdoor in covered locations.
- Accommodates ceilings up to 1-1/8" thick.
- 27" galvanized hanger bars with adjustable mounting brackets (2) supplied.
- For residential mounting hardware for wood aist ceilings, see Option -RH.

### UL, C-UL (Canada) Listings

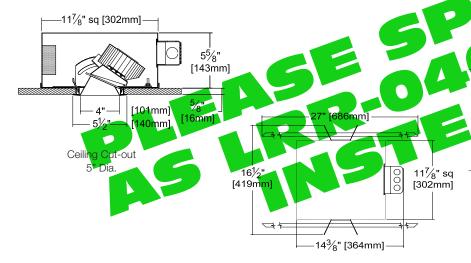
- Wet, damp or dry locations, covered ceilings.
- Type IC: for direct contact with insulation.
- Through-branch conductors (4 #12 AWG 90°C) for Type IC Listing.



### FIVE YEAR Limited Warranty

Complete standard fixture

# Performance at a Glance



### Standard (NFL)

|             | 30°   | 45°           | Jt.  |
|-------------|-------|---------------|------|
| Lumens:     | 324   | 301           | 2000 |
| Efficiency: | 77.7% | <b>72.2</b> % | 800  |
| Beam:       | ~3    | 1°            | 1200 |
|             |       |               | · .  |



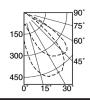
### Option -SPT

|             |       | ,     |    |
|-------------|-------|-------|----|
|             | 30°   | 45°   |    |
| Lumens:     | 312   | 288   | ١. |
| Efficiency: | 74.8% | 69.1% | 1  |
| Beam:       | ~1    | 6°    | 2  |
|             |       |       |    |



### Option -MFL

|             | 30°   | 45°   |
|-------------|-------|-------|
| Lumens:     | 286   | 257   |
| Efficiency: | 68.6% | 61.6% |
| Beam:       | ~49°  |       |



# THE KIRLIN COMPANY

3401 EAST JEFFERSON AVENUE • DETROIT, MICHIGAN 48207-4232 (313) 259-6400 • Fax: (313) 259-9409 or (313) 259-3121 • www.kirlinlighting.com

SYSTEM WATTS

CATALOG NUMBER

LRR-04031

# Since 1895

## **Photometry - Installed Fixture**

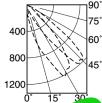
Photometry from I.T.L., Boulder, CO Photometric testing done in accordance with IESNA LM-79-08

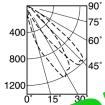
D: Distance (in feet) to floor or wall.

- Max. footcandles on surface within effective visual beam. (Visual beam is 50% of max. FC.)
- Effective visual beam length in feet.
- Effective visual beam width (in feet).
- Distance (in feet) to center beam.

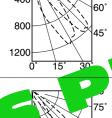
## LRR-04031 (NFL)

| 30°   | 45°          |
|-------|--------------|
| 324   | 301          |
| 77.7% | 72.2%        |
| ~31°  |              |
|       | 324<br>77.7% |





Lamp Angle





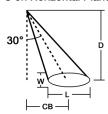


# LRR-04031 (Option -MFL)

|             | 30°   | 45°   |  |
|-------------|-------|-------|--|
| Lumens:     | 286   | 257   |  |
| Efficiency: | 68.6% | 61.6% |  |
| Beam:       | ~49°  |       |  |



### FC on Horizontal Plane



| D     | FC   | L     | W   | CB  |
|-------|------|-------|-----|-----|
| 4.0   | 53   | 2.4   | 2.1 | 2.8 |
| 6.0   | 23   | 3.6   | 3.1 | 3.2 |
| 7.0   | 17   | 4.2   | 3.6 | 3.7 |
| 8.0   | 13   | 4.8   | 4.2 | 4.3 |
| 9.0   | 10   | 5.3   | 4.7 | 4.8 |
| 10.0  | 8    | 5.9   | 5.2 | 5.3 |
| 12.0  | 6    | 7.1   | 6.2 | 6.4 |
| 14.0  | 4    | 8.3   | 7.3 | 7.4 |
| IFL T | EST: | #6222 | 9   |     |
|       |      |       | _   |     |
| D     | FC   |       | W   | CB  |

| D           | FC                 | L     | w   | СВ  |
|-------------|--------------------|-------|-----|-----|
| 4.0         | 86                 | 1.5   | 1.3 | 2.2 |
| <b>6.</b> 0 | 38                 | 2.2   | 1,9 | 3.3 |
| 7.0         | 28                 | 2.6   | 2.2 | 3,9 |
|             | 22                 | 3.0   | 2.5 | 4.4 |
| 9.0         | 17                 | 3.4   | 2.8 | 5.0 |
| 10.0        | 14                 | 3.7   | 3.1 | 5.0 |
| 12.0        | 10                 | 4.5   | 3.8 | 6.7 |
| 14.0        | 7                  | 5.2   | 4.4 | 7.8 |
| ITL T       | E <mark>ST:</mark> | #6222 | 8   |     |
|             |                    |       |     |     |

| D     | 10   | _     | vv  | CD  |
|-------|------|-------|-----|-----|
| 4.0   | 25   | 3.3   | 2.8 | 2.5 |
| 6.0   | 11   | 5.0   | 4.2 | 3.7 |
| 7.0   | 8    | 5.8   | 4.9 | 4.3 |
| 8.0   | 6    | 6.6   | 5.7 | 4.9 |
| 9.0   | 5    | 7.5   | 6.4 | 5.5 |
| 10,0  | 4    | 8.3   | 7.1 | 6.1 |
| 12.0  | 3    | 9.9   | 8.5 | 7.4 |
| 14.0  | 2    | 11.6  | 9.9 | 8.6 |
| UTL T | FST: | #6223 | 0   |     |

### FC on Vertical Plane



| D    | FC | L    | W   | СВ   |
|------|----|------|-----|------|
| 2.0  | 55 | 2.1  | 1.6 | 3.8  |
| 3.0  | 24 | 3.2  | 2.4 | 5.6  |
| 4.0  | 14 | 4.2  | 3.2 | 7.5  |
| 5.0  | 9  | 5.3  | 3.9 | 9.4  |
| 6.0  | 6  | 6.3  | 4.7 | 11.3 |
| 8.0  | 3  | 8.5  | 6.3 | 15.0 |
| 10.0 | 2  | 10.6 | 7.9 | 18.8 |
| 20   | O  | 19.7 | 0.5 | 22.6 |

| HEI   | ESI:       | #6222 | 9   |      |
|-------|------------|-------|-----|------|
| D     | FC         | 1     | W   | СВ   |
| 2.0   | 65         | 2.2   | 1.0 | 3.6  |
| 3.0   | <b>2</b> 9 | 3,3   | 1.6 | 5.4  |
| 4.0   | 16         | 4.4   | 2.1 | 7.2  |
| 5.0   | 10         | 5.5   | 2.6 | 9.0  |
| 6.0   | 7          | 6.6   | 3.1 | 10.8 |
| 8.0   | 4          | 8.7   | 4.2 | 14.4 |
| 10.0  | 3          | 10.9  | 5.2 | 18.0 |
| 12.0  | 2          | 13.1  | 6.3 | 21.6 |
| ITI T | FST.       | #6222 | R 🚄 |      |



FC on Vertical Plane



| D    | FC  | L   | W   | CB   |
|------|-----|-----|-----|------|
| 2.0  | 114 | 1.2 | 1.2 | 2.1  |
| 3.0  | 51  | 1.8 | 1.8 | 3.1  |
| 4.0  | 28  | 2.4 | 2.4 | 4.1  |
| 5.0  | 18  | 3.0 | 2.9 | 5.2  |
| 6.0  | 13  | 3.6 | 3.5 | 6.2  |
| 8.0  | 7   | 4.8 | 4.7 | 8.3  |
| 10.0 | 5   | 6.1 | 5.9 | 10.4 |
| 12.0 | 3   | 7.3 | 7.1 | 12.4 |
|      |     |     |     |      |

| ITL | TEST: | #62232 |
|-----|-------|--------|
|     |       |        |

| D    | FC   | L     | W           | СВ   |
|------|------|-------|-------------|------|
| 2.0  | 183  | 0.9   | 0.8         | 2.0  |
| 3.0  | 82   | 1.3   | 1.1         | 3.1  |
| 4.0  | 46   | 1.8   | 1.5         | 4.1  |
| 5.0  | 29   | 2.2   | 1.9         | 5.1  |
| 6.0  | 20   | 2.7   | 2.8         | 3.1  |
| 8.0  | 11   | 3.5   | <b>3</b> .0 | 8.1  |
| 10.0 | 7    | 4.4   | <b>3</b> .8 | 10.2 |
| 12.0 | 5    | 5.3   | 4.5         | 12.2 |
| TLT  | EST: | #6223 | 1           |      |

DEFECTS IN WORKMANSHIP OR MATERIAL FOR THREE ent. Liability of manufacturer is limited to the foregoing, and manufacturer s

YEARS FROM DATE OF PURCHASE, INSTALLED TO N.E.C., YEARS FROM DATE OF PURCHASE, INSTALLED TO N.E.C., stall not be liable for any other damages, direct or indirect, sustained or suffout prior ture, improper installation, or repair, or modification of the fixture without prior

, IN NORMAL USE. Manufacturer at his a red by purchaser or any person. This warranty are an authorization from the manufacturer a

will replace or repair such fixture or refund the purchase price on present plied to the buyer in place of all other warranties, expressed or implied. Her the warranty void.

| D    | FC | L   | W   | СВ   |
|------|----|-----|-----|------|
| 2.0  | 46 | 1.5 | 1.6 | 2.1  |
| 3.0  | 20 | 2.3 | 2.4 | 3.1  |
| 4.0  | 12 | 3.0 | 3.2 | 4.1  |
| 5.0  | 7  | 3.8 | 1.0 | 5.2  |
| 6.0  | 5  | 4.5 | 4.7 | 6.2  |
| 8.0  | 3  | 6.0 | 6.3 | 8.3  |
| 10.0 | 2  | 7.6 | 7.9 | 10.4 |
| 12.0 | 1  | 9.1 | 9.5 | 12.4 |

ITL TEST: #62233

- LED manufacturers maintain a toleran from Independent Testing atories netry was light engines
- \*\* LED Operation at 70% lumen ma

# **Options**

### **LED Power Supply**

- Dimmable power st standard. Specify v sult factory for brand availability and pricing.
- Specify other voltage. Consult factory.
  Remote mounted Kirlin SmartSupply™ driver, sold separately. Drives up to 12 fixtures at 20 watts each. Order LPS-1220A (0-10V analog dimming) or LPS-1220D (DMX dimming). See kirlinlighting.com or CF for more information.

### **Optics**

-MFL Medium flood. (~49° distribution) -SPT Spot. (~16° distribution)

All white acrylic enameled cone. (CP x .95)

- √hite açryl
- cify O.D. 32 Whit
- -46 i<mark>m an</mark>d lens.
- -59 ecular self-flanged cone. (CP x .80)
- -60 x Dark Bronze self-flanged cone. (CP x .75)
- -63 Dune specular self-flanged cone. (CP x .93)
- Matte black self-flanged cone. (CP x .70) -68
- -69 Wheat specular self-flanged cone. (CP x .92)
- SofTex Clear self-flanged cone. (CP x .93)
- -71 SofTex Dune self-flanged cone. (CP x .89) Black specular self-flanged cone. (CP x .80) -72
- SofTex Pewter self-flanged cone. (CP x .85) -77
- -91 SofTex Wheat self-flanged cone. (CP x .88)
- Pewter specular self-flanged cone. (CP x .88) -93 Custom color/finish. Specify. Consult factory. -94

### Filter

- -AM Amber filter.
- -DP Dichroic Peach filter.

- Green / Botanical filter.
- -HX Hexcel louver.
- -MB Medium Blue filter.
- Pink / Rose filter.
- -XF Custom filter other than shown. Specify.

### Other

- Special modification. Consult factory. -99
- Air tight version. Meets ASTM E283 restricted airflow of 2 CFM maximum.
- Downlight cone instead. Clear specular finish standard or add optional trim selection.
- -30K Color temperature 3000°K instead.
- -41K Color temperature 4100°K. Consult factory.
- -RH Residential mounting hardware instead. Suitable for wood joist ceilings with spacing from 141/8" to 251/8" with 5/8" vertical adjustability.

# SUBMITTAL DATA

APPROVAL STAMP

JOB NAME

TYPE

WATTAGE

**VOLTAGE** 

CATALOG NUMBER