

DRD4 & SquareFrame

Adjustable Downlighting System

New Construction
Square Junction Box



| | |
|---------------|-------|
| Project: | Type: |
| Product Code: | Date: |

V051822

Fully Adjustable 360° directional aiming for complete light coverage

Precise Control Class leading 45° tilt with 15°, 25° or 40° field-changeable light distributions

Dim to Dark Smooth, flicker-free dimming down to 1% with centralized or local control

Fast Install Integrated drive, plug-and-play connection, and Twist & Lock Trims

Modular Design Flexibility during and after installation with interchangeable modules, optics and trims

OPTICAL

Adjustment

360° directional aim, 45° tilt

Delivered Lumens (Power)

750 lm (9.7W), 1000 lm (12W)

Color Quality

93+ CRI, 2-step SDCM

Color Temperature

2700K 3000K 3500K
4000K Warm Dim (3000–1800K)

Beam Spread

Narrow Spot (15°) Linear (60° x 30°)
Spot (25°) Soft Focus
Flood (40°)

PHYSICAL

Application

New Construction

Aperture

4" Square Deep Junction Box

Ceiling Thickness

1/2" up to 1 3/4"

TRIMS

Available Trims

Round on Square, Pinhole, Beveled Pinhole, Flangeless

Trim Finish

White, Black, Silver, Custom

ELECTRICAL & CONTROLS

Input Voltage

120 / 277V

1% Dimming

TRIAC/ELV, 0-10V, Lutron EcoSystem

RATINGS

Housing Ratings

- Code compliant for use in fire-rated assemblies up to a maximum of 2-hours
- STC/IIC Sound Rated
- ASTM E283 Certified Air Tight
- IC (Insulation Contact) Rated

Module Ratings

- UL Listed for Damp Location



PRODUCT BUILDER

SQUAREFRAME HOUSING

| PRODUCT CODE | | APPLICATION | | APERTURE | | DIMMING | | OPTION | |
|--------------|---------|-------------|------------------|-----------|---------------------|----------------|---------------------------------------------------|----------------|---------------------------------------------------------|
| DRDH | Housing | N | New Construction | JS | Square Junction Box | [Blank] | Integrated | [Blank] | None |
| | | | | | | 704 | 0-10V ¹ , 750 lm | EM | Emergency Battery ³ , Integrated Test Switch |
| | | | | | | 1004 | 0-10V ¹ , 1000 lm | EMS | Emergency Battery ³ , Remote Test Switch |
| | | | | | | 100W4 | 0-10V ¹ , 1000 lm, Warm Dim | | |
| | | | | | | 7C4 | Lutron EcoSystem ² , 750 lm | | |
| | | | | | | 10C4 | Lutron EcoSystem ² , 1000 lm | | |
| | | | | | | 10CW4 | Lutron EcoSystem ² , 1000 lm, Warm Dim | | |

DRD4 MODULE

| PRODUCT CODE | | LUMENS | | CRI | | CCT | | BEAM SPREAD | | FINISH | | DIMMING | |
|--------------|--------|-----------|---------|----------|---------|-----------|-----------------------|-------------|--------------------------------|----------------|-------|----------|-----------------------------------------------|
| DRD4M | Module | 07 | 750 lm | 9 | 93+ CRI | 27 | 2700K | NS | Narrow Spot (15°) ⁵ | [Blank] | Black | T | Integrated TRIAC/ELV |
| | | 10 | 1000 lm | | | 30 | 3000K | SP | Spot (25°) | W | White | | |
| | | | | | | 35 | 3500K | FL | Flood (40°) | | | O | Integrated 0-10V |
| | | | | | | 40 | 4000K | LS | Linear (60° x 30°) | | | | |
| | | | | | | 3W | Warm Dim ⁴ | SF | Soft Focus | | | A | Alternate for use with EM or Lutron EcoSystem |
| | | | | | | | | | | | | | |

SQUAREFRAME TRIM

| PRODUCT CODE | | SHAPE | | APERTURE | | STYLE | | FINISH | | OPTION | |
|--------------|------|----------|--------|-----------|---------------------|----------|------------------------------|-----------|--------------------------------|----------------|---------------------------|
| DRD2T | Trim | S | Square | JS | Square Junction Box | Q | Round on Square | WH | White | [Blank] | None |
| | | | | | | P | Pinhole ⁶ | BK | Black | FL | Flangeless ^{6,7} |
| | | | | | | B | Beveled Pinhole ⁶ | SW | Silver Reflector, White Flange | | |
| | | | | | | | | CC | Custom Color | | |

DRDHX-MUD-SFL Flangeless Mud Plate (Required with Flangeless Trim)

¹ Only available in Emergency Battery option

² Lutron EcoSystem refers to LDE1 Hi-Lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black™

³ Only available in 0-10V or Lutron EcoSystem dimming

⁴ Only available in 1000 lm

⁵ Not available in Warm Dim CCT

⁶ Only available in White or Custom Color finish

⁷ Requires DRDHX-MUD-SFL Mud Plate

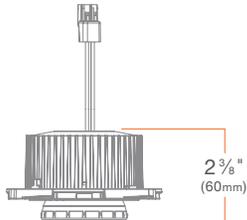


PRODUCT BUILDER

OPTICS ACCESSORIES

| | |
|----------------------|-----------------------------------------------------------------------------------------------|
| PRODUCT CODE | |
| <input type="text"/> | |
| DRD4X-NS | Narrow Spot (15°) |
| DRD4X-SP | Spot (25°) |
| DRD4X-FL | Flood (40°) |
| DRD4X-LS | Linear Spread (60° x 30°) |
| DRD4X-SF | Soft Focus |
| DRD4X-OP | Optics Kit: Narrow Spot (15°), Spot (25°), Flood (40°), Linear Spread (60° x 30°), Soft Focus |

MODULE



DRD4

Adjustable Downlight

DRD4M

SUMMARY

ADJUSTMENT: 360° directional aim, 45° tilt

SLOPE CEILING COMPATIBILITY: Up to 45°

LED CHIP: Cree

DELIVERED LUMENS (w Trim): 750 lm (9.7W), 1000 lm (12.0W)

EFFICACY: 82 lm/W

COLOR QUALITY: 93+ CRI, 2-step SDCM

CCT: 2700K, 3000K, 3500K, 4000K

BEAM SPREAD: Narrow Spot (15°), Spot (25°), Flood (40°), Linear Spread (60° x 30°), Soft Focus

CONNECTOR: PowerPlug® Luminaire Disconnect Model 182

INPUT VOLTAGE: 120/277V, 50/60Hz

DIMMING: Down to less than 1% for TRIAC/ELV at 120V, 0-10V or Lutron EcoSystem at 120/277V

MAX INPUT CURRENT (120V): 0.090 amps, 0.107 amps

MAX INPUT CURRENT (277V): 0.042 amps, 0.050 amps

POWER FACTOR: Greater than 0.9

TOTAL HARMONIC DISTORTION: Less than 20%

AMBIENT OPERATING TEMPERATURE: -20°C to 40°C

PHOTOMETRIC TESTING: Tested in accordance to IESNA LM-79-2008

LISTINGS: ENERGY STAR® qualified*, California Title 24 2016 JA8 compliant, UL Listed for Damp Location, cULus Listed, Declare

LIFETIME: 50,000 hours at 70% lumen maintenance

WARRANTY: 5 year limited warranty

WARM DIM OPTION

LED: Bridgelux LED, **DELIVERED LUMENS (w Trim):** 1000 lm (12.0W),

EFFICACY: 83 lm/W, **CCT RANGE:** 3000K - 1800K, **MAX INPUT**

CURRENT (120V): 0.11 amps, **MAX INPUT CURRENT (277V):** 0.047 amps

* Excludes Pinhole Trims

HOUSING



SquareFrame

New Construction

Deep Square Junction Box

DRDHNJS

SUMMARY

JUNCTION BOX: Equipped with (8) trade size knockouts (four (1/2") side, two (3/4") top, two (1/2") top) and (4) Romex knockouts (side) to allow straight conduit runs. Approved for 8 (four in, four out) #12 AWG 70°C.

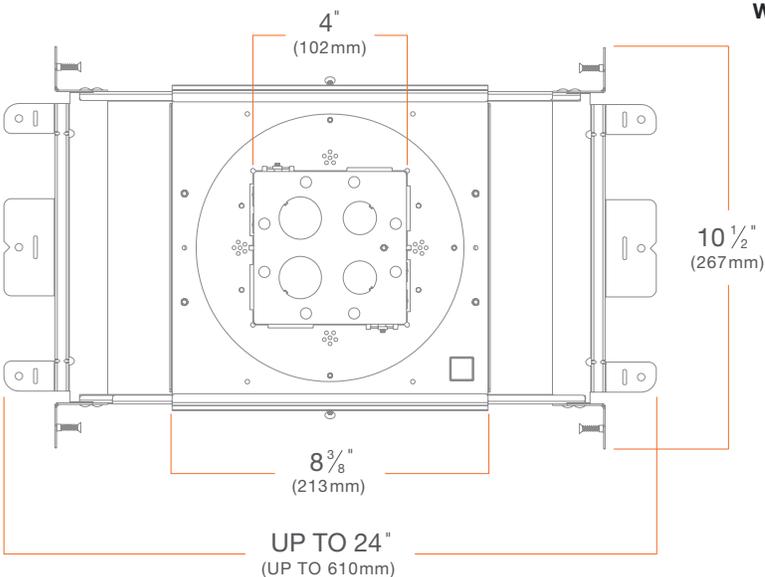
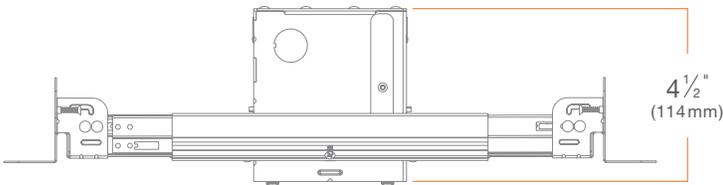
MOUNTING: Pre-installed mounting brackets allow vertical adjustment of bar hangers up to 1".

CEILING: 1/2" up to 1 3/4"

CUTOUT: 4 1/4" (108mm) square opening

LISTINGS: Metallic outlet box certified UL514A, code compliant for use in appropriate fire-rated assemblies for up to 2-hours, STC/IIC Sound Rated, ASTM E283 certified Air Tight, IC (Insulation Contact) rated

WARRANTY: 5 year limited warranty



HOUSING - Emergency Lighting or Lutron EcoSystem Dimming



SquareFrame

Emergency Lighting or Lutron EcoSystem Dimming
Deep Square Junction Box

DRDHNJS

- Offers compatible dimming with Emergency Lighting or Lutron EcoSystem Hi-Lume® 1% protocol

SUMMARY

JUNCTION BOX: Equipped with (8) trade size knockouts (four (1/2") side, two (3/4") top, two (1/2") top) and (4) Romex knockouts (side) to allow straight conduit runs. Approved for 8 (four in, four out) #12 AWG 70°C.

MOUNTING: Pre-installed mounting brackets allow vertical adjustment of bar hangers up to 1".

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LISTINGS: Metallic outlet box certified UL514A, code compliant for use in appropriate fire-rated assemblies for up to 2-hours, STC/IIC Sound Rated, ASTM E283 certified Air Tight, IC (Insulation Contact) rated

INPUT VOLTAGE: 120/277V, 50/60Hz

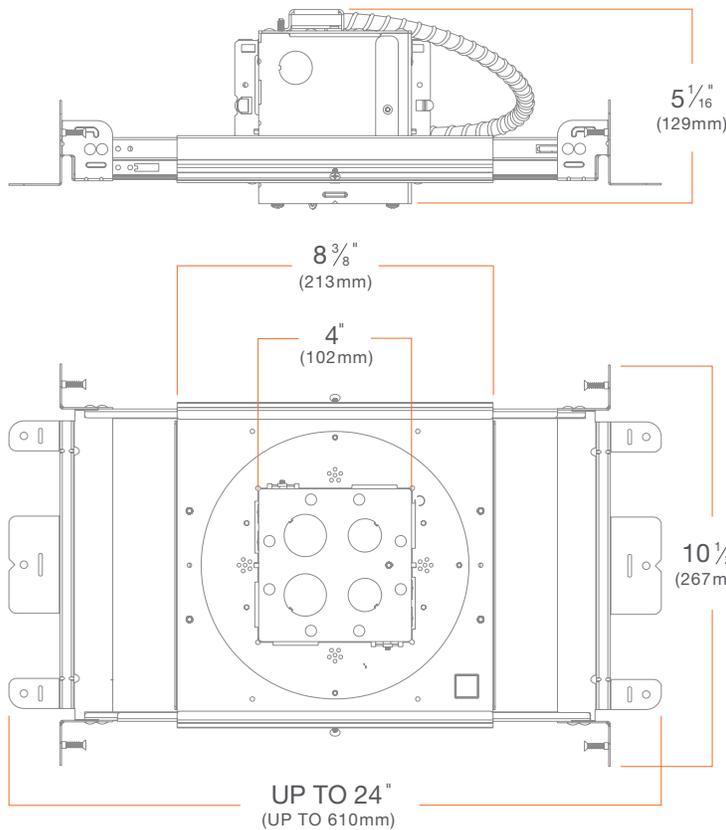
MAX INPUT CURRENT (120V): 0.090 amps (750 lm), 0.107 amps (1000 lm), 0.11 amps (1000 lm Warm Dim)

MAX INPUT CURRENT (277V): 0.042 amps (750 lm), 0.050 amps (1000 lm), 0.047 amps (1000 lm Warm Dim)

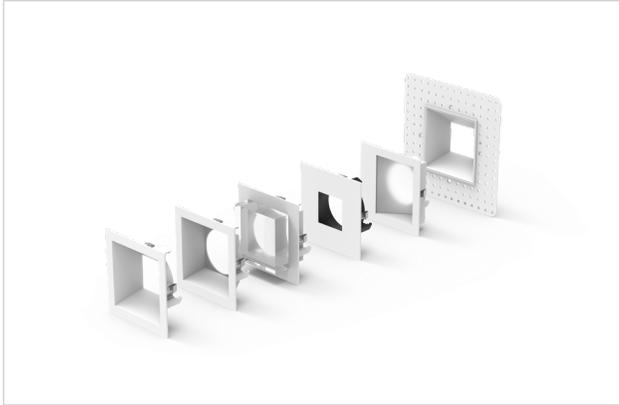
POWER FACTOR: Greater than 0.9

TOTAL HARMONIC DISTORTION: Less than 20%

WARRANTY: 5 year limited warranty



TRIM



SquareFrame Trims

Recessed LED Downlight Trims

DRD2T

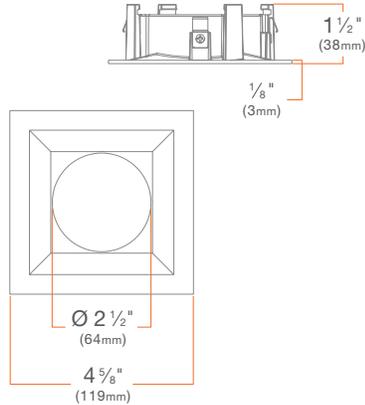
SUMMARY

CONSTRUCTION: Die-cast aluminum

INSTALLATION: Twist & Lock (flanged trims only)

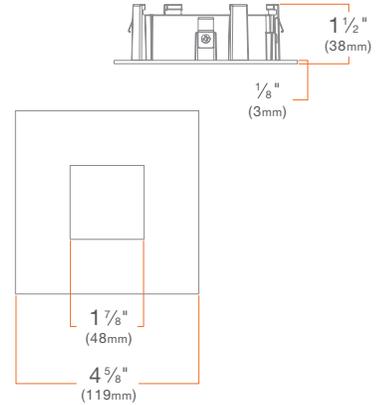
Round on Square Trim

DRD2TSJSQWH



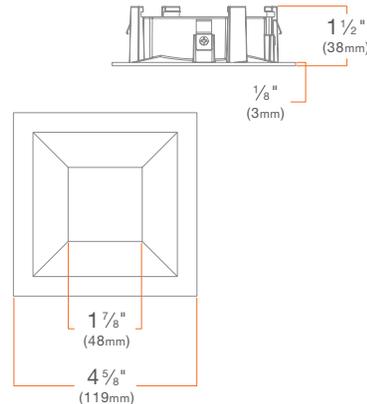
Pinhole Trim

DRD2TSJSPWH



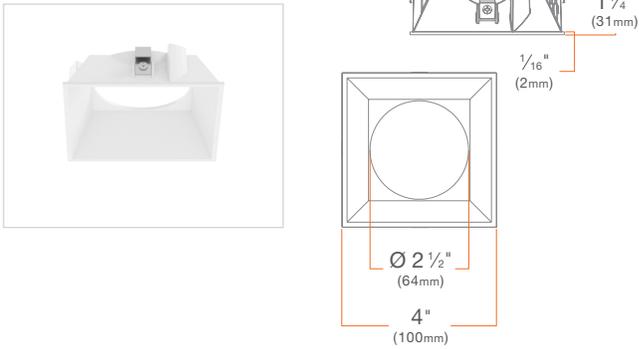
Beveled Pinhole Trim

DRD2TSJSBWH



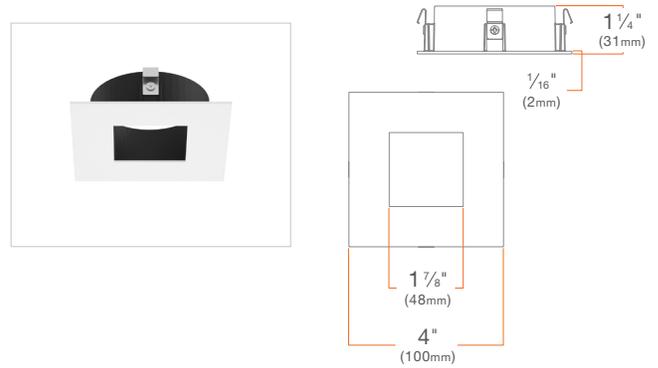
Round on Square Flangeless Trim Insert

DRD2TSJSQWHFL



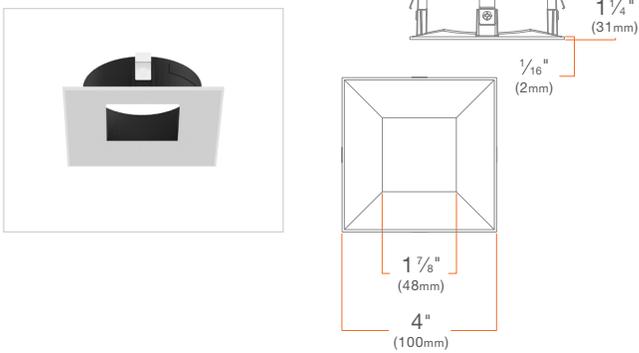
Pinhole Flangeless Trim Insert

DRD2TSJSPWHFL



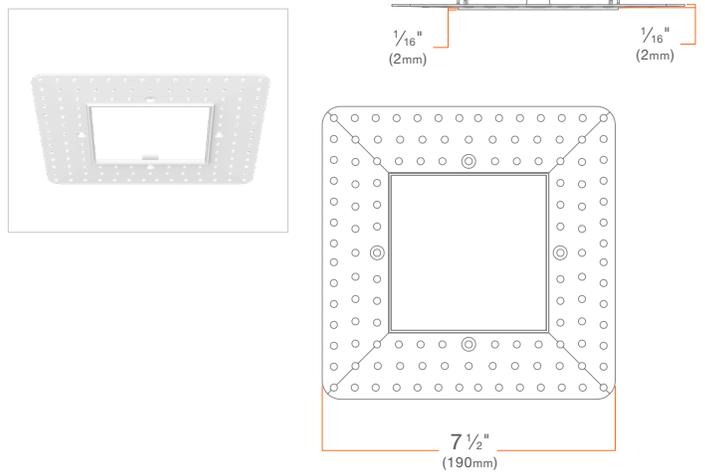
Beveled Pinhole Flangeless Trim Insert

DRD2TSJSBWHFL



Flangeless Mud Plate

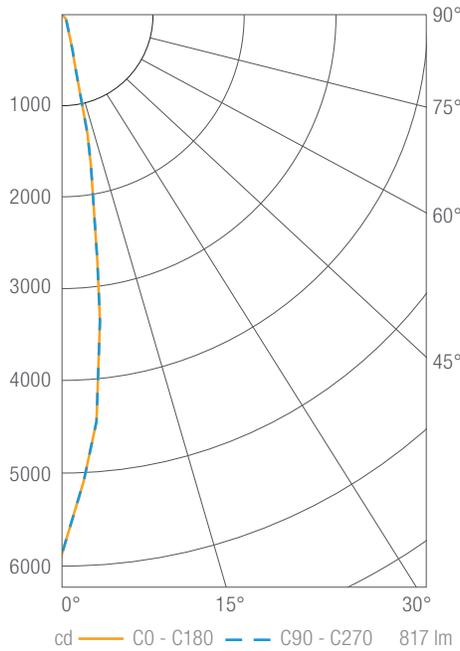
DRDHX-MUD-SFL



PHOTOMETRY

DRD4 750 lm, 3000K, Narrow Spot

DRD4M07930NS



Luminous Intensity

| Gamma | C 0° |
|-------|------|
| 0° | 5897 |
| 5° | 4418 |
| 10° | 1911 |
| 15° | 561 |
| 20° | 280 |
| 25° | 165 |
| 30° | 117 |
| 35° | 87 |
| 40° | 69 |
| 45° | 57 |
| 50° | 47 |
| 55° | 38 |
| 60° | 31 |
| 65° | 23 |
| 70° | 16 |
| 75° | 10 |
| 80° | 4 |
| 85° | 1 |
| 90° | 0 |

Values in candela

Zonal Lumen Summary

| Zone | Lumens | Luminaire % |
|-------|--------|-------------|
| 0-30 | 645 | 79 |
| 0-40 | 701 | 86 |
| 0-60 | 781 | 96 |
| 0-90 | 817 | 100 |
| 0-180 | 817 | 100 |

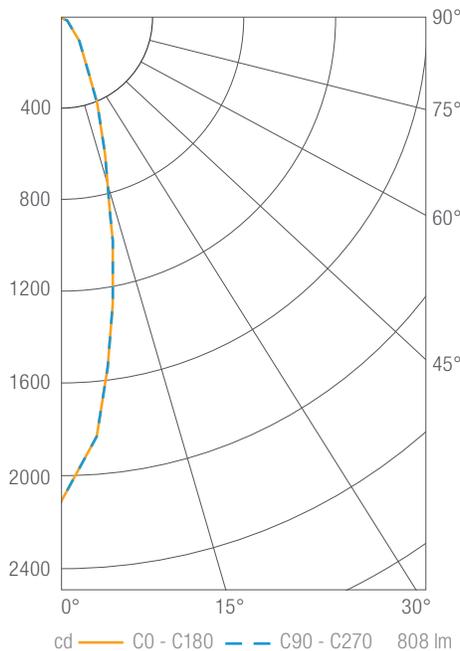
Illuminance Chart

| Distance from LED | Foot Candles | Diameter |
|-------------------|--------------|----------|
| 3' | 655 | 0.8' |
| 6' | 164 | 1.7' |
| 9' | 73 | 2.5' |
| 12' | 41 | 3.3' |

Beam Angle: 16°

DRD4 750 lm, 3000K, Spot

DRD4M07930SP



Luminous Intensity

| Gamma | C 0° |
|-------|------|
| 0° | 2105 |
| 5° | 1826 |
| 10° | 1282 |
| 15° | 800 |
| 20° | 497 |
| 25° | 310 |
| 30° | 201 |
| 35° | 137 |
| 40° | 98 |
| 45° | 73 |
| 50° | 57 |
| 55° | 45 |
| 60° | 35 |
| 65° | 23 |
| 70° | 12 |
| 75° | 5 |
| 80° | 3 |
| 85° | 2 |
| 90° | 0 |

Values in candela

Zonal Lumen Summary

| Zone | Lumens | Luminaire % |
|-------|--------|-------------|
| 0-30 | 573 | 71 |
| 0-40 | 668 | 83 |
| 0-60 | 773 | 96 |
| 0-90 | 808 | 100 |
| 0-180 | 808 | 100 |

Illuminance Chart

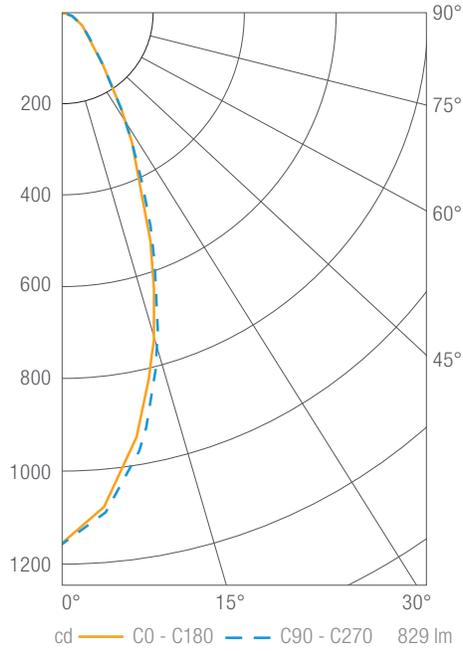
| Distance from LED | Foot Candles | Diameter |
|-------------------|--------------|----------|
| 3' | 234 | 1.3' |
| 6' | 58 | 2.6' |
| 9' | 26 | 3.9' |
| 12' | 15 | 5.2' |

Beam Angle: 28°

PHOTOMETRY

DRD4 750 lm, 3000K, Flood

DRD4M07930FL



Luminous Intensity

| Gamma | C 0° |
|-------|------|
| 0° | 1158 |
| 5° | 1081 |
| 10° | 941 |
| 15° | 765 |
| 20° | 576 |
| 25° | 414 |
| 30° | 288 |
| 35° | 192 |
| 40° | 130 |
| 45° | 96 |
| 50° | 76 |
| 55° | 61 |
| 60° | 49 |
| 65° | 38 |
| 70° | 28 |
| 75° | 18 |
| 80° | 10 |
| 85° | 4 |
| 90° | 0 |

Values in candela

Zonal Lumen Summary

| Zone | Lumens | Luminaire % |
|-------|--------|-------------|
| 0-30 | 510 | 62 |
| 0-40 | 633 | 76 |
| 0-60 | 766 | 92 |
| 0-90 | 829 | 100 |
| 0-180 | 829 | 100 |

Illuminance Chart

| Distance from LED | Foot Candles | Diameter |
|-------------------|--------------|----------|
| 3' | 129 | 2.2' |
| 6' | 32 | 4.5' |
| 9' | 14 | 6.7' |
| 12' | 8 | 9.0' |

Beam Angle: 41°