

# DRD2 & SquareFrame

## Fixed Downlighting System

New Construction  
Square Junction Box



Project:	Type:
Product Code:	Date:

V051822

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

**Quick Install** Integrated driver and plug-and-play connection require no wiring

**High Performance** Precise lighting control without sacrificing stellar efficiency

**Enhanced Dimming** Smooth, flicker-free dimming down to 1%

### OPTICAL

#### Delivered Lumens (Power)

750 lm (9.5W), 1000 lm (12.5W),  
1250 lm (14.3W)

#### Color Quality

93+ CRI, 2-step SDCM

#### Color Temperature

- 2700K ● 3000K ○ 3500K
- 4000K ● Warm Dim (3000–1800K)

#### Beam Spread

- Narrow Spot (15°) General (90°+)
- Spot (25°) Linear (40° x 20°)
- Flood (40°) Soft Focus
- Wide Flood (60°)

### PHYSICAL

#### Application

New Construction, Poured Concrete

#### Aperture

4" Square Deep Junction Box

#### Ceiling Thickness

½" up to 1¾"

### TRIMS

#### Available Trims

Square, Round on Square, Pinhole, Beveled Pinhole, Wall Wash, Decorative, Flangeless, Dead Front

#### Trim Finish

White, Black, Silver, Custom

### ELECTRICAL & CONTROLS

#### Input Voltage

120 / 277V

#### 1% Dimming

TRIAC/ELV, 0-10V, Lutron EcoSystem

### RATINGS

#### Housing

- 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

- UL Listed for Wet Location



## PRODUCT BUILDER

### SQUAREFRAME HOUSING

PRODUCT CODE		APPLICATION		APERTURE		DIMMING		OPTION	
<b>DRDH</b>	Housing	<b>N</b>	New Construction	<b>JS</b>	Square Junction Box	<b>[Blank]</b>	Integrated	<b>[Blank]</b>	None
						<b>70</b>	0-10V <sup>1</sup> , 750 lm	<b>EM</b>	Emergency Battery <sup>3</sup> , Integrated Test Switch
						<b>100</b>	0-10V <sup>1</sup> , 1000 lm	<b>EMS</b>	Emergency Battery <sup>3</sup> , Remote Test Switch
						<b>100W</b>	0-10V <sup>1</sup> , 1000 lm, Warm Dim		
						<b>120</b>	0-10V <sup>1</sup> , 1250 lm		
						<b>7C</b>	Lutron EcoSystem <sup>2</sup> , 750 lm		
						<b>10C</b>	Lutron EcoSystem <sup>2</sup> , 1000 lm		
						<b>10CW</b>	Lutron EcoSystem <sup>2</sup> , 1000 lm, Warm Dim		
						<b>12C</b>	Lutron EcoSystem <sup>2</sup> , 1250 lm		

### DRD2 MODULE

PRODUCT CODE		LUMENS		CRI		CCT		BEAM SPREAD		DIMMING	
<b>DRD2M</b>	Module	<b>07</b>	750 lm	<b>9</b>	93+ CRI	<b>27</b>	2700K	<b>GA</b>	General Ambient (90°+)	<b>T</b>	Integrated TRIAC/ELV
		<b>10</b>	1000 lm			<b>30</b>	3000K	<b>NS</b>	Narrow Spot (15°) <sup>5</sup>		
		<b>12</b>	1250 lm			<b>35</b>	3500K	<b>SP</b>	Spot (25°)	<b>O</b>	Integrated 0-10V
						<b>40</b>	4000K	<b>FL</b>	Flood (40°)		
						<b>3W</b>	Warm Dim <sup>4</sup>	<b>WF</b>	Wide Flood (60°)	<b>A</b>	Alternate for use with EM or Lutron EcoSystem
								<b>LS</b>	Linear Spread (40° x 20°)		
								<b>SF</b>	Soft Focus		

### SQUAREFRAME TRIM

PRODUCT CODE		SHAPE		APERTURE		STYLE		FINISH		OPTION	
<b>DRD2T</b>	Trim	<b>S</b>	Square	<b>JS</b>	Deep Junction Box	<b>S</b>	Beveled	<b>WH</b>	White	<b>[Blank]</b>	None
						<b>Q</b>	Round on Square	<b>BK</b>	Black	<b>DCF</b>	Decorative: Closed, Frosted <sup>6,7</sup>
						<b>P</b>	Pinhole <sup>6</sup>	<b>SW</b>	Silver Reflector, White Flange	<b>DCCF</b>	Decorative: Closed, Clear, Frosted inside <sup>6,7</sup>
						<b>B</b>	Beveled Pinhole <sup>6</sup>	<b>CC</b>	Custom Color	<b>FL</b>	Flangeless <sup>6,8</sup>
						<b>W</b>	Wall Wash <sup>6</sup>			<b>DF</b>	Dead Front <sup>6,7,9</sup>
										<b>EM</b>	Emergency <sup>6,7</sup>

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

<sup>1</sup> Only available in Emergency Battery option

<sup>2</sup> Lutron EcoSystem refers to LDE1 Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black™

<sup>3</sup> Only available in 0-10V or Lutron EcoSystem dimming

<sup>4</sup> Only available in 1000 lm

<sup>5</sup> Not available in Warm Dim CCT

<sup>6</sup> Only available in White or Custom Color finish

<sup>7</sup> Only available in Beveled style

<sup>8</sup> Requires DRDHX-MUD-SFL Mud Plate

<sup>9</sup> Only available in 750 lm

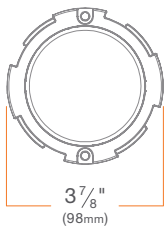
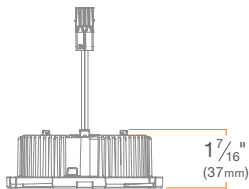
## PRODUCT BUILDER

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### OPTICS ACCESSORIES

PRODUCT CODE	
<input type="text"/>	
<b>DRD2X-GA</b>	Conversion Kit: DRD2 Module to General Ambient (90°+)
<b>DRD2X-NS</b>	Narrow Spot (15°)
<b>DRD2X-SP</b>	Spot (25°)
<b>DRD2X-FL</b>	Flood (40°)
<b>DRD2X-WF</b>	Wide Flood (60°)
<b>DRD2X-LS</b>	Linear Spread (40° x 20°)
<b>DRD2X-SF</b>	Soft Focus
<b>DRD2X-OP</b>	Optics Kit: Narrow Spot (15°), Spot (25°), Flood (40°), Wide Flood (60°), Linear Spread (40° x 20°), Soft Focus

## MODULE



## DRD2

Fixed Downlight

### DRD2M

#### SUMMARY

**LED CHIP:** Cree

**DELIVERED LUMENS (w Trim):** 750 lm (9.5W), 1000 lm (12.5W), 1250 lm (14.3W)

**EFFICACY:** 79 lm/W, 80 lm/W, 87 lm/W

**COLOR QUALITY:** 93+ CRI, 2-step SDCM

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

**BEAM SPREAD:** General Ambient (90°+), Narrow Spot (15°), Spot (25°), Flood (40°), Wide Flood (60°), Linear Spread (40° x 20°), 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 Wet Location (flanged trims only), 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 and Wall Wash 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.

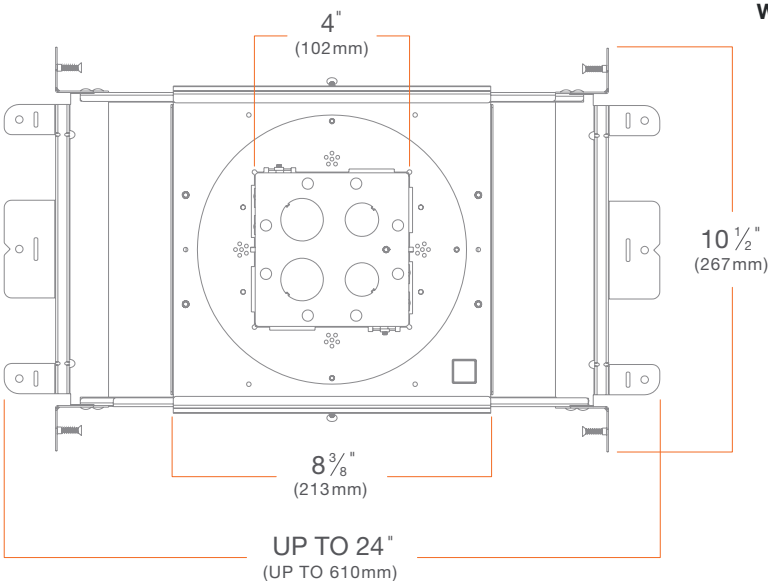
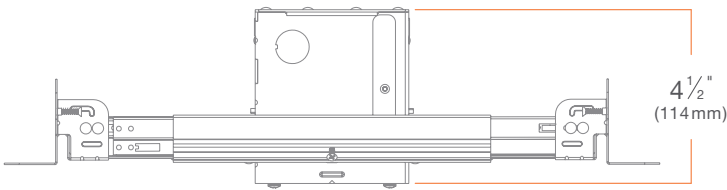
**MOUNTING:** Pre-installed mounting brackets allow vertical adjustment of bar hangers up to 1".

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

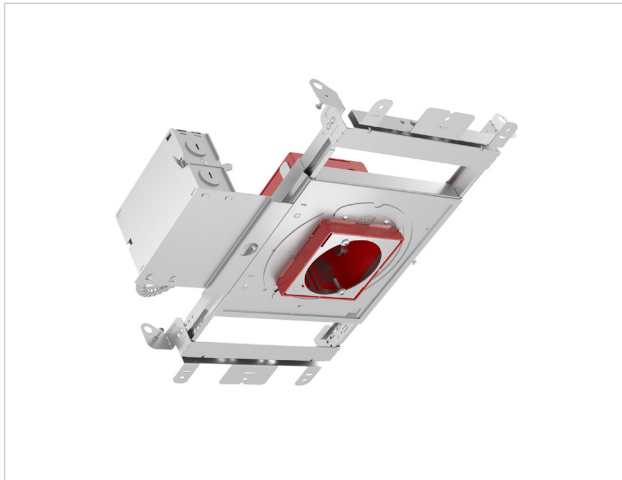
**CUTOUT:** 4 1/4" (108mm) square opening

**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".

**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

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

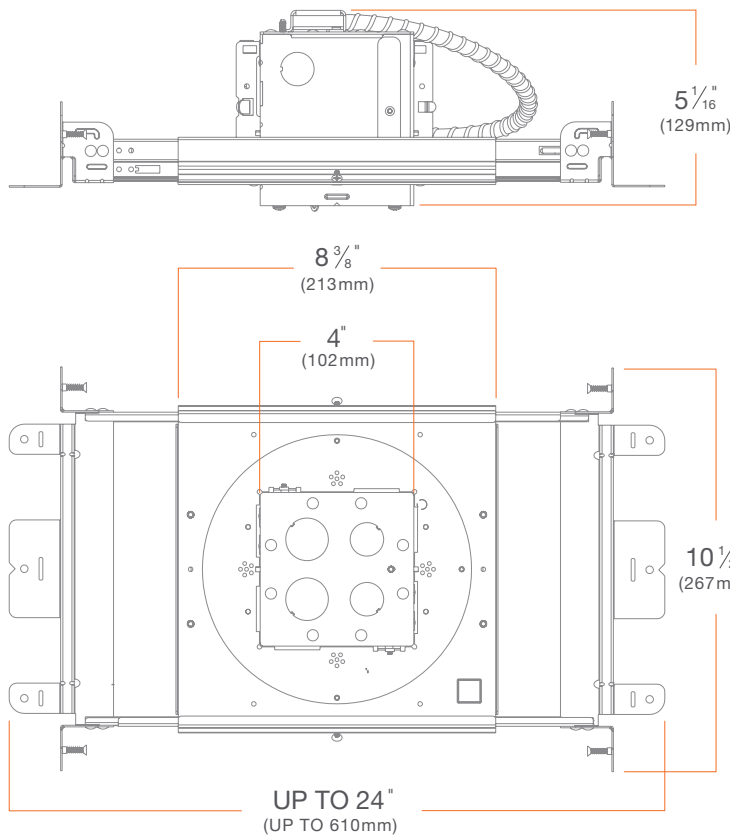
**MAX INPUT CURRENT (120V):** 0.090 amps (750 lm), 0.107 amps (1000 lm), 0.11 amps (1000 lm Warm Dim)

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

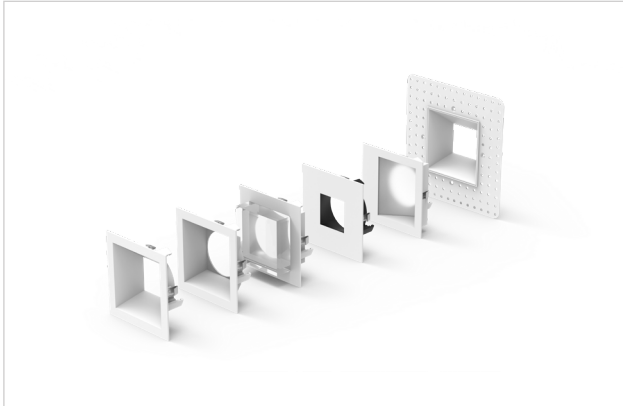
**POWER FACTOR:** Greater than 0.9

**TOTAL HARMONIC DISTORTION:** Less than 20%

**WARRANTY:** 5 year limited warranty



## TRIM



## SquareFrame Trims

Recessed LED Downlight Trims

**DRD2T**

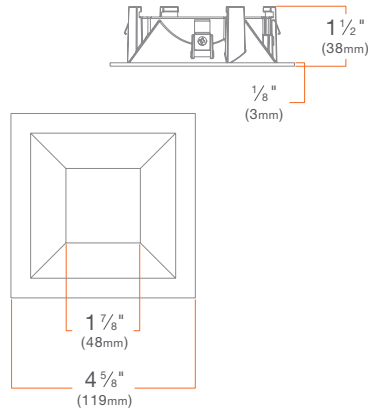
### SUMMARY

**CONSTRUCTION:** Die-cast aluminum

**INSTALLATION:** Twist & Lock (flanged trims only)

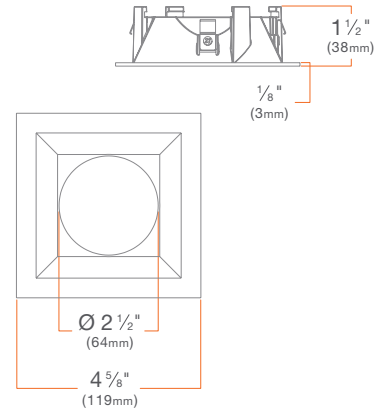
### Beveled Trim

**DRD2TSJSSWH**



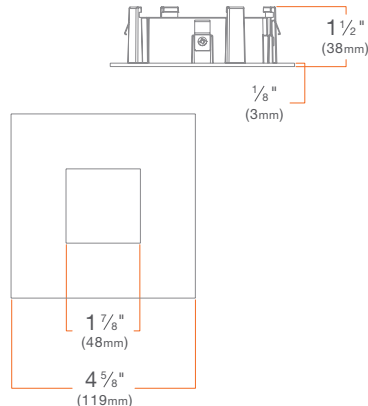
### Round on Square Trim

**DRD2TSJSQWH**



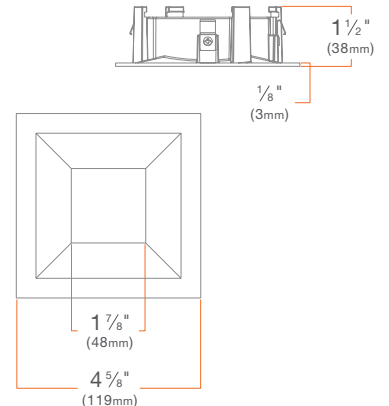
### Pinhole Trim

**DRD2TSJSPWH**



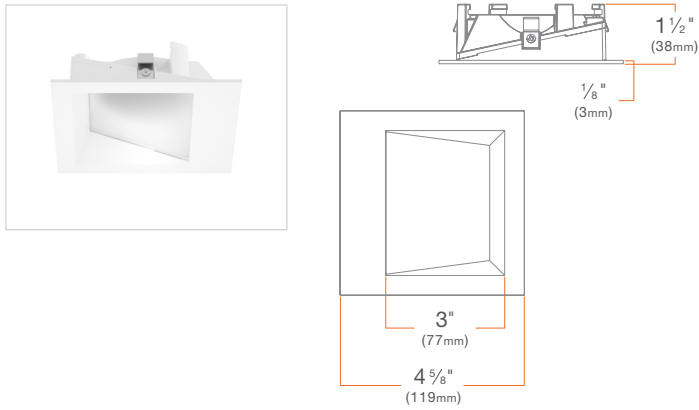
### Beveled Pinhole Trim

**DRD2TSJSBWH**



Wall Wash Trim

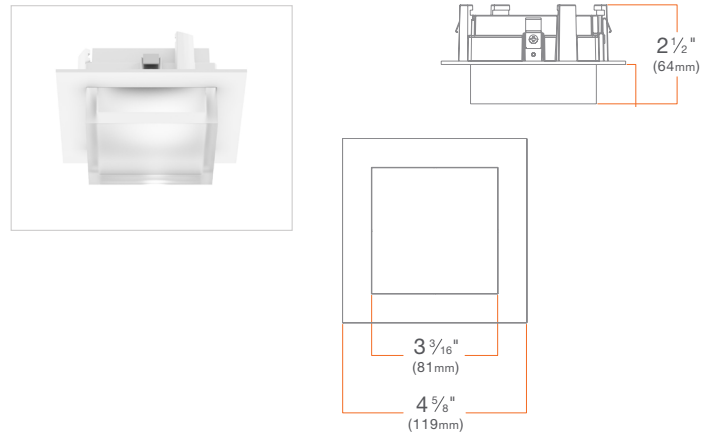
DRD2TSJSWWH



Decorative Trim

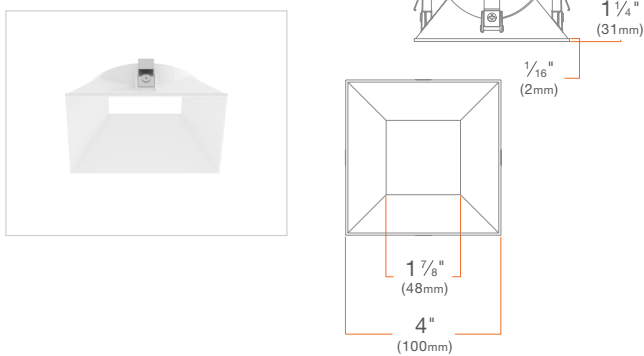
Frosted: DRD2TSJSSWHDCF

Clear, Frosted Sides: DRD2TSJSSWHDCCF



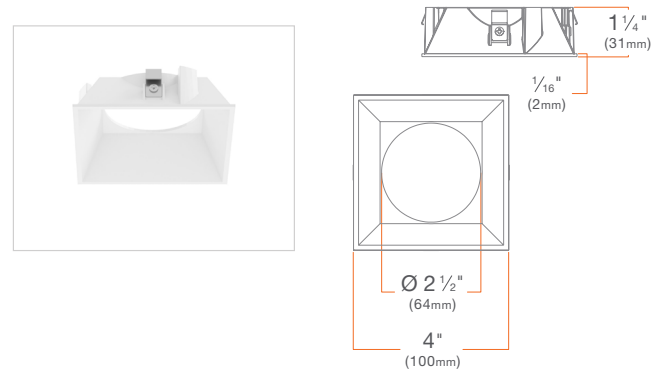
Beveled Flangeless Trim Insert

DRD2TSJSSWHFL



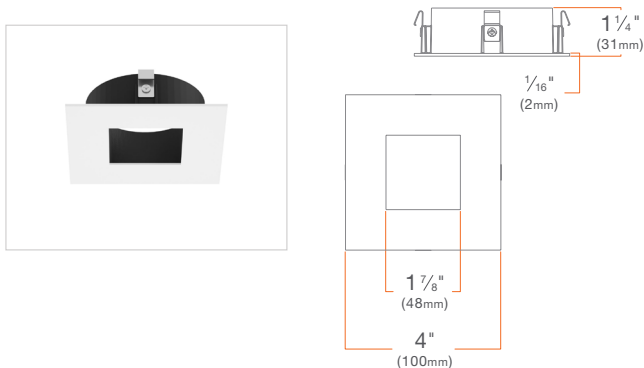
Round on Square Flangeless Trim Insert

DRD2TSJSQWHFL



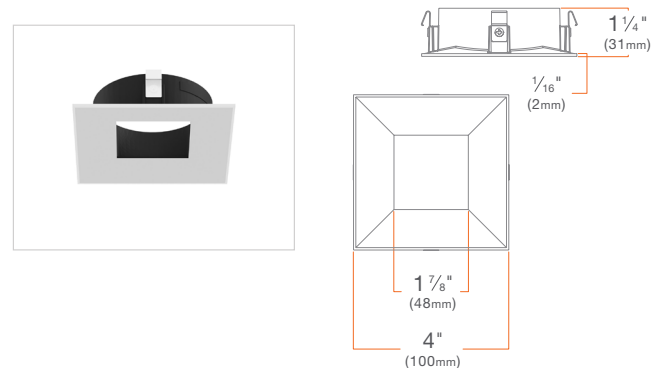
Pinhole Flangeless Trim Insert

DRD2TSJSPWHFL



Beveled Pinhole Flangeless Trim Insert

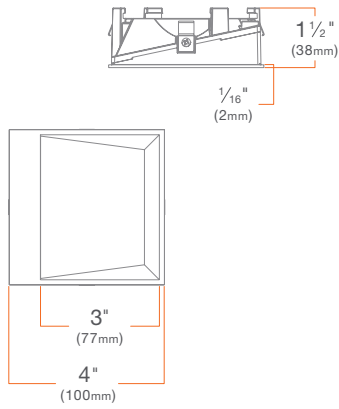
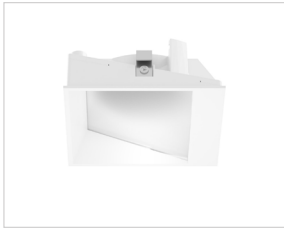
DRD2TSJSBWHFL





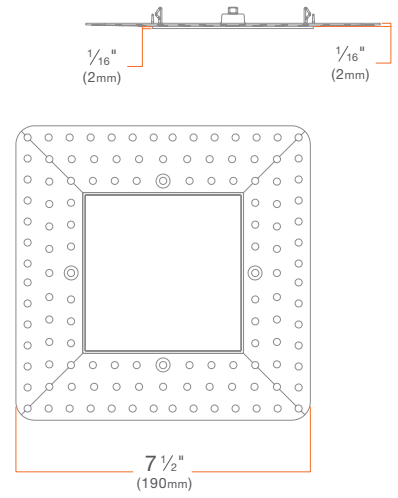
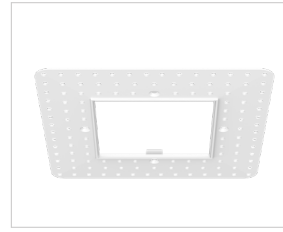
Wall Wash Flangeless Trim Insert

DRD2TSJSBWH



Flangeless Mud Plate

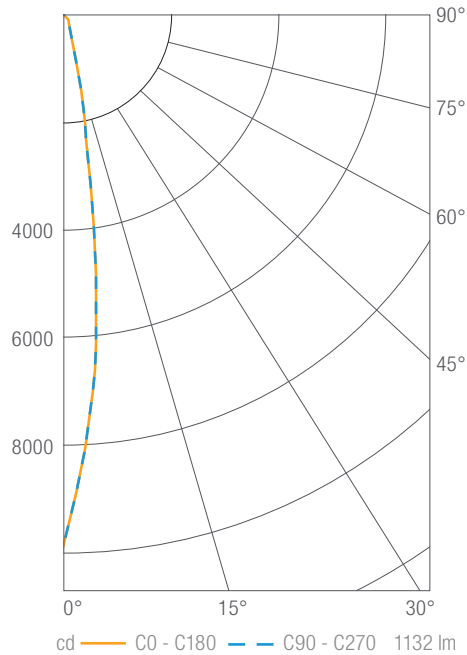
DRDHX-MUD-SFL



## PHOTOMETRY

### DRD2 1000 lm, 3000K, Narrow Spot

DRD2M10930NS



#### Luminous Intensity

Gamma	C 0°
0°	9823
5°	6600
10°	2335
15°	734
20°	357
25°	244
30°	195
35°	159
40°	116
45°	85
50°	61
55°	42
60°	28
65°	16
70°	7
75°	4
80°	2
85°	1
90°	0

Values in candela

#### Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	906	80
0-40	1004	89
0-60	1110	98
0-90	1131	100
0-180	1132	100

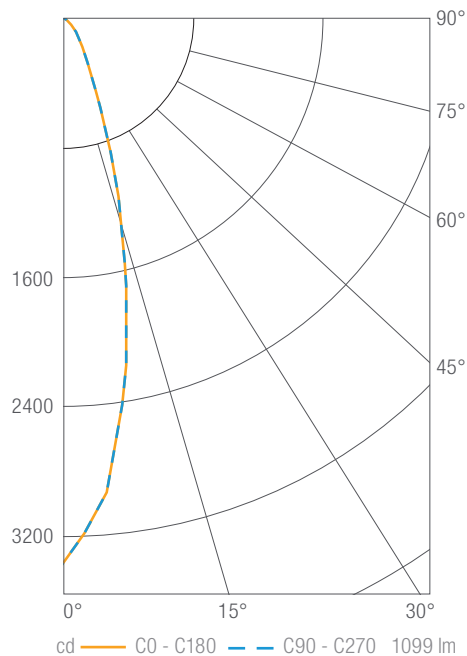
#### Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	1091	0.7'
6'	273	1.5'
9'	121	2.2'
12'	68	2.9'

Beam Angle: 14°

### DRD2 1000 lm, 3000K, Spot

DRD2M10930SP



#### Luminous Intensity

Gamma	C 0°
0°	3366
5°	2967
10°	2203
15°	1391
20°	775
25°	419
30°	248
35°	167
40°	119
45°	87
50°	62
55°	43
60°	26
65°	15
70°	7
75°	4
80°	2
85°	1
90°	0

Values in candela

#### Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	862	78
0-40	971	88
0-60	1078	98
0-90	1098	100
0-180	1099	100

#### Illuminance Chart

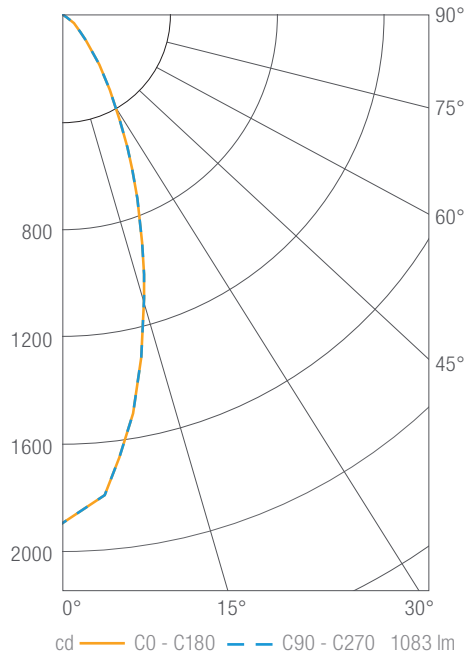
Distance from LED	Foot Candles	Diameter
3'	374	1.4'
6'	93	2.8'
9'	42	4.2'
12'	23	5.6'

Beam Angle: 26°

## PHOTOMETRY

### DRD2 1000 lm, 3000K, Flood

DRD2M10930FL



#### Luminous Intensity

Gamma	C 0°
0°	1890
5°	1792
10°	1503
15°	1161
20°	849
25°	589
30°	391
35°	256
40°	162
45°	107
50°	74
55°	51
60°	30
65°	18
70°	8
75°	5
80°	3
85°	1
90°	0

Values in candela

#### Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	760	70
0-40	925	85
0-60	1058	98
0-90	1081	100
0-180	1083	100

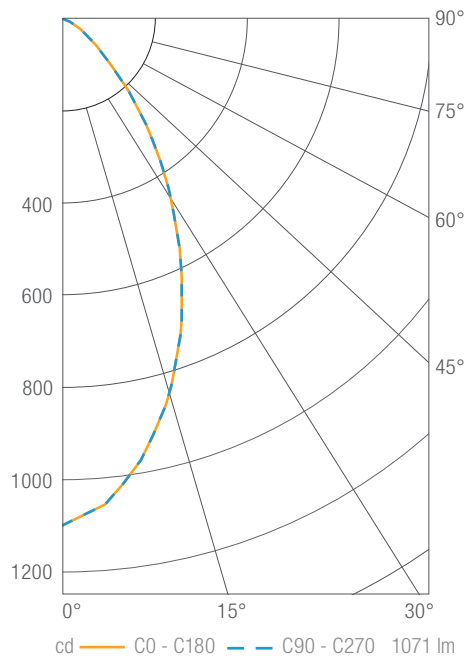
#### Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	210	2.0'
6'	52	4.0'
9'	23	6.0'
12'	13	8.0'

Beam Angle: 37°

### DRD2 1000 lm, 3000K, Wide Flood

DRD2M10930WF



#### Luminous Intensity

Gamma	C 0°
0°	1100
5°	1058
10°	973
15°	866
20°	743
25°	609
30°	478
35°	361
40°	252
45°	161
50°	102
55°	68
60°	41
65°	24
70°	11
75°	6
80°	4
85°	2
90°	0

Values in candela

#### Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	620	58
0-40	845	79
0-60	1037	97
0-90	1069	100
0-180	1071	100

#### Illuminance Chart

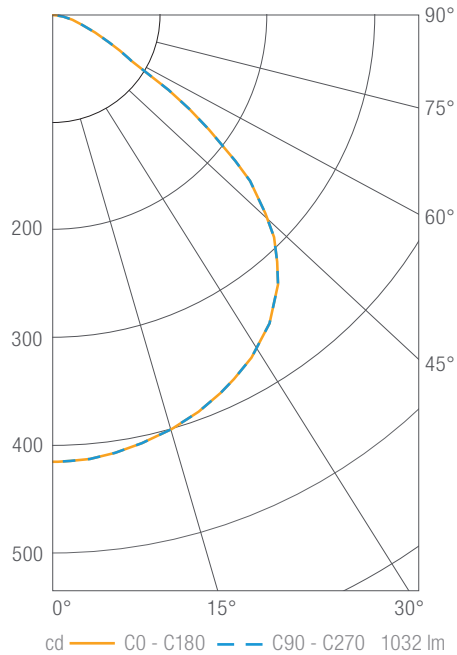
Distance from LED	Foot Candles	Diameter
3'	122	3.1'
6'	31	6.2'
9'	14	9.3'
12'	8	12.3'

Beam Angle: 55°

## PHOTOMETRY

### DRD2 1000 lm, 3000K, General Ambient

DRD2M10930GA



Luminous Intensity

Gamma	C 0°
0°	416
5°	415
10°	410
15°	403
20°	394
25°	382
30°	369
35°	351
40°	327
45°	291
50°	240
55°	162
60°	84
65°	54
70°	33
75°	21
80°	12
85°	6
90°	1

Values in candela

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	333	32
0-40	557	54
0-60	942	91
0-90	1024	99
0-180	1032	100

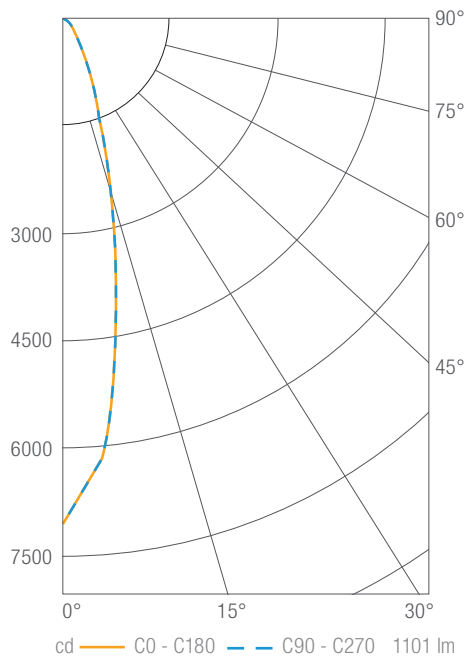
Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	46	7.8'
6'	12	15.5'
9'	5	23.3'
12'	3	31.1'

Beam Angle: 100°

### DRD2 1000 lm, 3000K, Soft Focus

DRD2M10930SF



Luminous Intensity

Gamma	C 0°
0°	7280
5°	5603
10°	2489
15°	875
20°	381
25°	247
30°	194
35°	161
40°	122
45°	90
50°	64
55°	45
60°	28
65°	16
70°	7
75°	4
80°	2
85°	1
90°	0

Values in candela

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	868	79
0-40	968	88
0-60	1078	98
0-90	1100	100
0-180	1101	100

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	809	0.9'
6'	202	1.7'
9'	90	2.6'
12'	51	3.4'

Beam Angle: 16°