

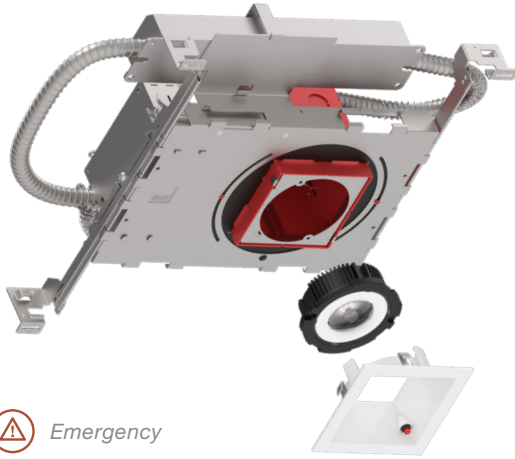
DRD2X & SquareFrame Alt/EM

Apex Series Recessed LED Downlight

Alternate Dimming and/or Emergency Lighting
DRDHNJS Square Junction Box

Project:	Type:
Product Code:	Date:

Spec Sheet V-07.01.20











Emergency



Alternate Dimming

- High-end, architectural-grade illumination with up to 4000 candelas of focused light
- Maintains all the standard SquareFrame features
- Offers enhanced dimming protocol compatibility including 0-10V and Lutron Hi-Lume® 1%
- Can provide lighting for more than 90 minutes after power failure - enough to meet common safety regulations like NFPA 101

Application New Construction		Aperture 4" Square Deep Junction Box	
Delivered Lumens 600 lm (10.0W), 750 lm (12.5W)		Color Quality 90+ CRI, 2-step SDCM	
Color Temperature  2700K 3000K 3500K 4000K		Optics  Spot (20°) Narrow Flood (30°) Flood (40°)	
Surround White, Black	Center Beam Candlepower 4000cd (Spot 750 lm)	Dimming 0-10V 1%, Lutron Hi-lume® 1%	Input Voltage 120/277V
Warm Dim Option  3000K – 1800K, 600 lm (12.0W), 93+ CRI, 3000cd		Emergency Lighting Option Emergency LED Driver for lighting up to 90 minutes in event of power failure	
Trims Emergency, Square, Round on Square, Pinhole, Beveled Pinhole, Wall Wash, Decorative, Flangeless, Dead Front		Trim Finish White, Black, Silver, Custom	
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 Wet Location

Standards



Guarantee

50,000 hrs | 5 years

Additional Options

TRIAC/ELV Dimming, General Lighting, Adjustable Lighting



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PRODUCT BUILDER

HOUSING

PRODUCT CODE		APPLICATION		APERTURE		DRIVER		OPTION	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
DRDH	Housing	N	New Construction	JS	Square Junction Box	60X	0-10V, 600 lm	[Blank]	None
						60W	0-10V, 600 lm, Warm Dim	EM	EM Driver, Integrated Test Switch
						70X	0-10V, 750 lm	EMS	EM Driver, Remote Test Switch
						6CX	Lutron LDE1 ¹ , 600 lm		
						6CW	Lutron LDE1 ¹ , 600 lm, Warm Dim		
						7CX	Lutron LDE1 ¹ , 750 lm		
						6LX	Lutron LTEA2W ² , 600 lm		
						6LW	Lutron LTEA2W ² , 600 lm, Warm Dim		
						7LX	Lutron LTEA2W ² , 750 lm		

MODULE

PRODUCT CODE		LUMENS		CRI		CCT		OPTICS		SURROUND		DRIVER	
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DRD2X	Module	06	600 lm	9	90+ CRI	27	2700K	SP	Spot	WH	White	A	Alternate
		07	750 lm			30	3000K	NF	Narrow Flood	BK	Black		
						35	3500K	FL	Flood				
						40	4000K						

Warm Dim Option

DRD2X	Module	06	600 lm	9	93+ CRI	3W	3000K - 1800K	SP	Spot	WH	White	A	Alternate
								NF	Narrow Flood	BK	Black		
								FL	Flood				

TRIM

PRODUCT CODE		SHAPE		APERTURE		STYLE		FINISH		OPTION	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
DRD2T	Trim	S	Square	JS	Square Junction Box	S	Standard	WH	White	[Blank]	None
						Q	Round on Square	BK	Black	DCF	Decorative: Closed, Frosted ^{3,4}
						P	Pinhole ³	SW	Silver Reflector, White Flange	DCCF	Decorative: Closed, Clear, Frosted inside ^{3,4}
						B	Beveled Pinhole ³	CC	Custom Color	FL	Flangeless ^{3,5}
						W	Wall Wash ³			EM	Emergency ^{3,4}
										DF	Dead Front ^{3,4}

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

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

² Lutron LTEA2W refers to Lutron Hi-lume 1% 2-wire LED driver, 120V only

³ Only available in White or Custom Color finish

⁴ Only available in Standard style

⁵ Requires DRDHX-MUD-SFL Mud Plate

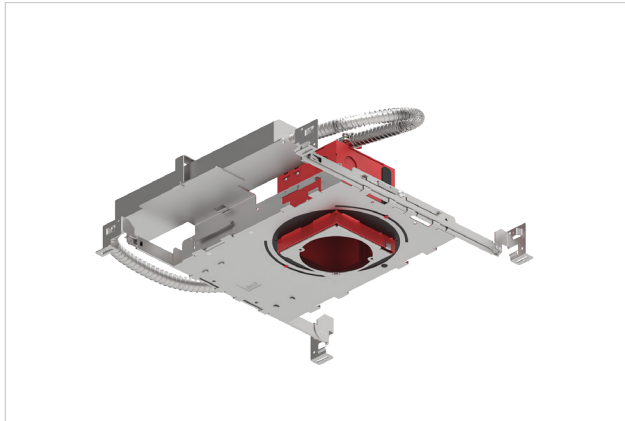


DRD2X & SquareFrame Alt/EM

Apex Series Recessed LED Downlight

Alternate Dimming and/or Emergency Lighting
DRDHNJS Square Junction Box

HOUSING



SquareFrame

Alternate Dimming and/or Emergency Lighting
Deep 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.

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 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

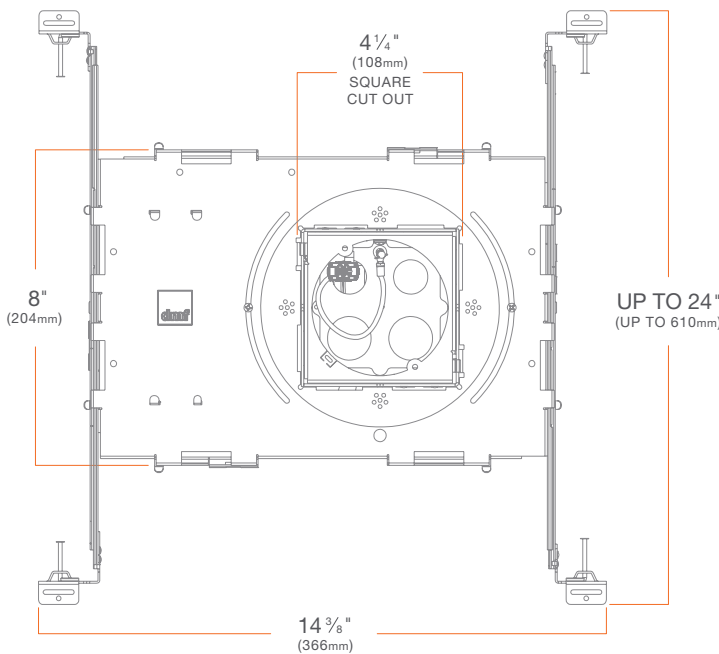
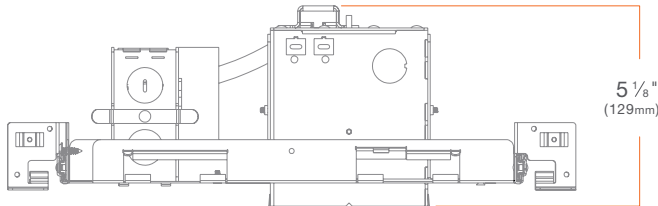
MAX INPUT CURRENT (120V): 0.090 amps (600 lm), 0.107 amps (750 lm), 0.11 amps (600 lm Warm Dim)

MAX INPUT CURRENT (277V): 0.042 amps (600 lm), 0.050 amps (750 lm), 0.047 amps (600 lm Warm Dim)

POWER FACTOR: Greater than 0.9

TOTAL HARMONIC DISTORTION: Less than 20%

WARRANTY: 5 year limited warranty





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DRDHNJS Square Junction Box

MODULE



DRD2X

Apex Series LED Module

DRD2X

SUMMARY

LED: Cree® LED

DELIVERED LUMENS (w Trim): 600 lm (10.0W), 750 lm (12.5W)

EFFICACY: 60 lm/W

COLOR QUALITY: 90+ CRI, 2-step SDCM

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

OPTICS: Spot (20°), Narrow Flood (30°), Flood (40°)

SURROUND: White, Black

CENTER BEAM CANDLEPOWER: 4000cd (Spot 750 lm)

CONNECTOR: PowerPlug® Luminaire Disconnect Model 102

DIMMING: Down to less than 1% for 0-10V or Lutron Hi-lume® 1%

EMERGENCY LIGHTING: Optional Emergency LED Driver for lighting up to 90 minutes in event of power failure

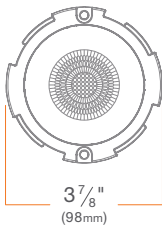
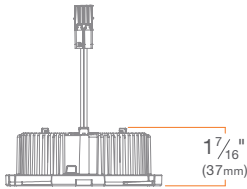
AMBIENT OPERATING TEMPERATURE: -20°C to 40°C

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 and non-EM trims only), cULus Listed

LIFETIME: 50,000 hours at 70% lumen maintenance

WARRANTY: 5 year limited warranty



● WARM DIM OPTION

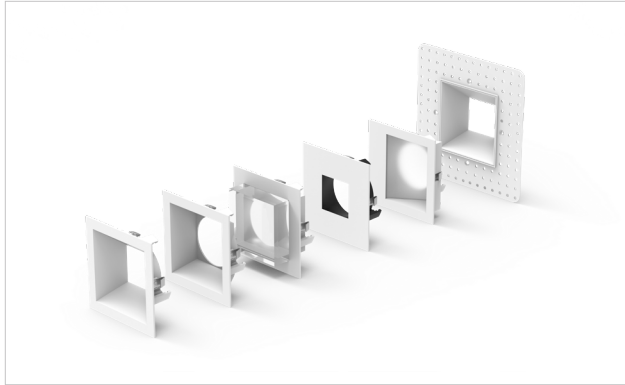
LED: Bridgelux LED, **DELIVERED LUMENS (w Trim):** 600 lm (12.0W),

EFFICACY: 50 lm/W, **COLOR QUALITY:** 93+ CRI, **CCT RANGE:** 3000K -

1800K, **CENTER BEAM CANDLEPOWER:** 3000cd (Spot)



TRIM



SquareFrame Trims

Recessed LED Downlight Trims

DRD2T

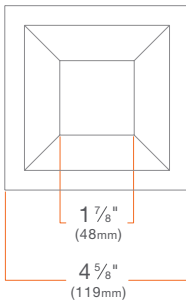
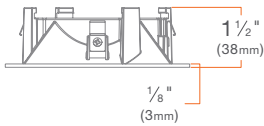
SUMMARY

CONSTRUCTION: Die-cast aluminum

INSTALLATION: Twist & Lock (flanged trims only)

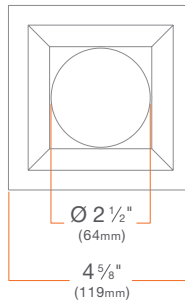
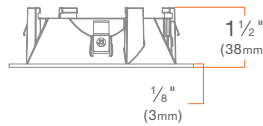
Square Trim

DRD2TSJSSWH



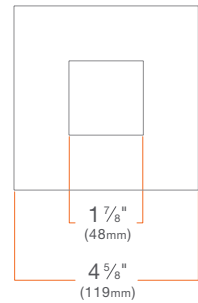
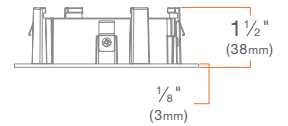
Round on Square Trim

DRD2TSJSQWH



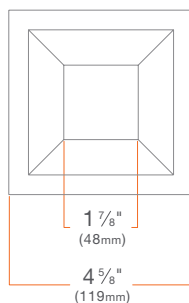
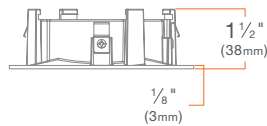
Pinhole Trim

DRD2TSJSPWH



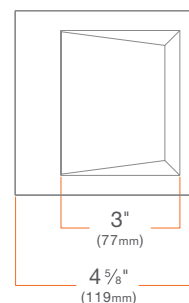
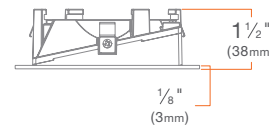
Beveled Pinhole Trim

DRD2TSJSBWH



Wall Wash Trim

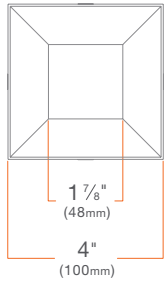
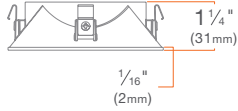
DRD2TSJSWWH



TRIM

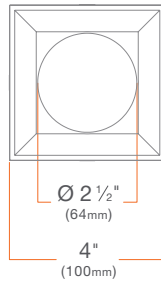
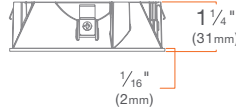
Square Flangeless Trim Insert

DRD2TSJSSWHFL



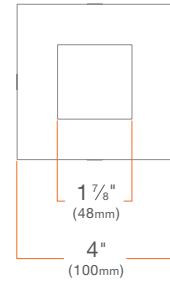
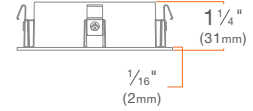
Round on Square Flangeless Trim Insert

DRD2TSJSQWHFL



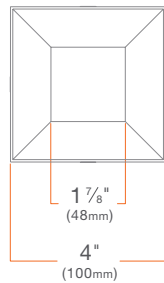
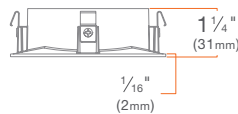
Pinhole Flangeless Trim Insert

DRD2TSJSPWHFL



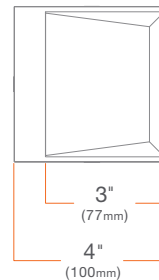
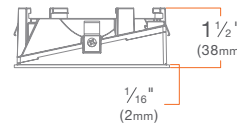
Beveled Pinhole Flangeless Trim Insert

DRD2TSJSBWHFL



Wall Wash Flangeless Trim Insert

DRD2TSJSWWHFL

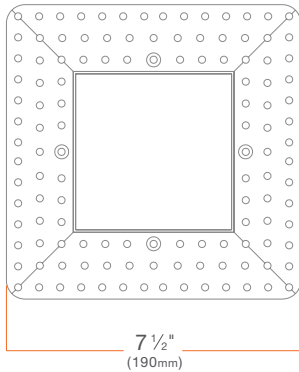




TRIM

Flangeless Mud Plate

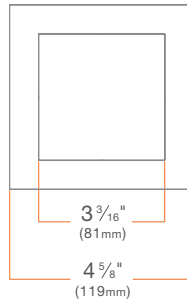
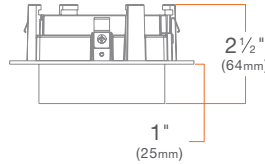
DRDHX-MUD-SFL



Decorative Closed Trim

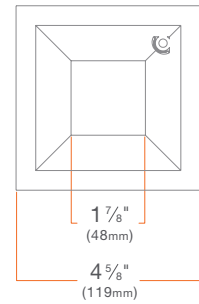
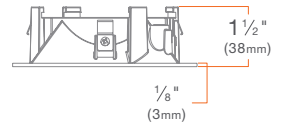
Frosted: DRD2TRJDSWHDCF

Clear, Frosted Sides: DRD2TRJDSWHDCCF



Emergency Trim

DRD2TSJSSWHEM





DRD2X & SquareFrame Alt/EM

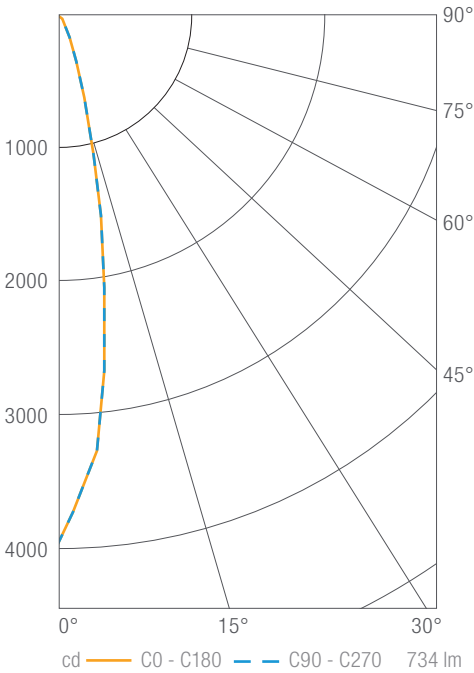
Apex Series Recessed LED Downlight

Alternate Dimming and/or Emergency Lighting

DRDHNJS Square Junction Box

PHOTOMETRY

DRD2X 750 lm, 3000K, Spot, White DRD2X07930SPWH / **Round on Square Trim White** DRD2TSJSQWH



Luminous Intensity

Gamma	C 0°
0°	3949
5°	3303
10°	1934
15°	877
20°	387
25°	183
30°	111
35°	79
40°	56
45°	37
50°	21
55°	11
60°	7
65°	3
70°	3
75°	3
80°	1
85°	1
90°	0

Values in candela

Zonal Lumen Summary

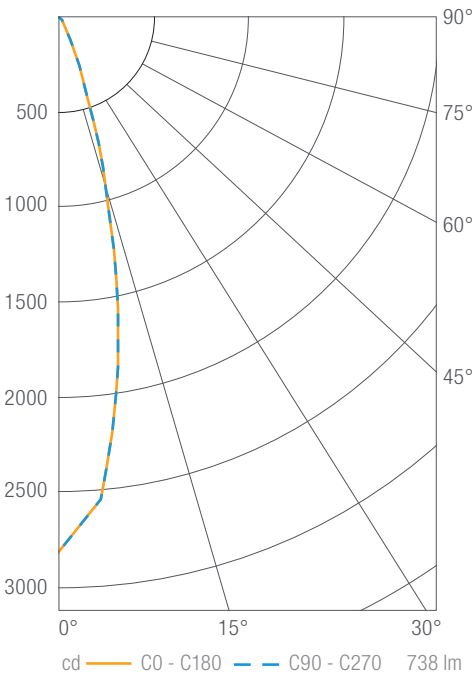
Zone	Lumens	Luminaire %
0-30	640	87
0-40	689	94
0-60	728	99
0-90	734	100
0-180	734	100

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	439	1.0'
6'	110	2.1'
9'	49	3.1'
12'	27	4.1'

Beam Angle: 20°

DRD2X 750 lm, 3000K, N Flood, White DRD2X07930NFWH / **Round on Square Trim White** DRD2TSJSQWH



Luminous Intensity

Gamma	C 0°
0°	2827
5°	2575
10°	1845
15°	1032
20°	499
25°	213
30°	119
35°	76
40°	53
45°	38
50°	24
55°	15
60°	7
65°	5
70°	4
75°	3
80°	1
85°	1
90°	0

Values in candela

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	636	86
0-40	687	93
0-60	729	99
0-90	738	100
0-180	738	100

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	314	1.4'
6'	79	2.7'
9'	35	4.1'
12'	20	5.4'

Beam Angle: 26°



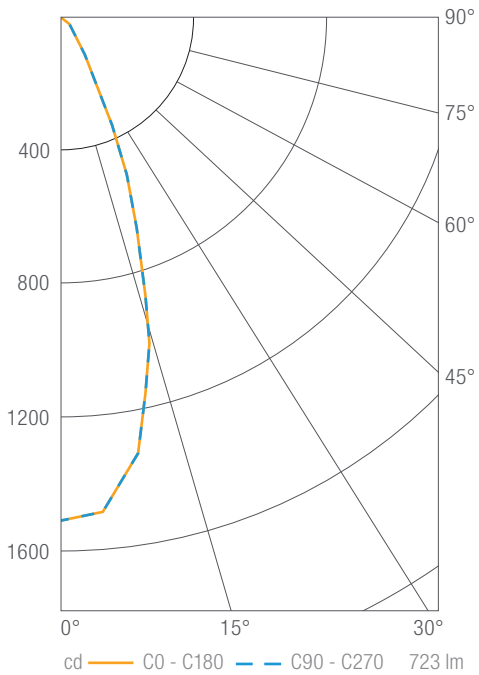
DRD2X & SquareFrame Alt/EM

Apex Series Recessed LED Downlight

Alternate Dimming and/or Emergency Lighting
DRDHNJS Square Junction Box

PHOTOMETRY

DRD2X 750 lm, 3000K, Flood, White DRD2X07930FLWH / Round on Square Trim White DRD2TSJSQWH



Luminous Intensity

Gamma	C 0°
0°	1514
5°	1495
10°	1336
15°	1010
20°	634
25°	347
30°	183
35°	102
40°	62
45°	38
50°	21
55°	11
60°	6
65°	5
70°	3
75°	2
80°	2
85°	1
90°	0

Values in candela

Zonal Lumen Summary

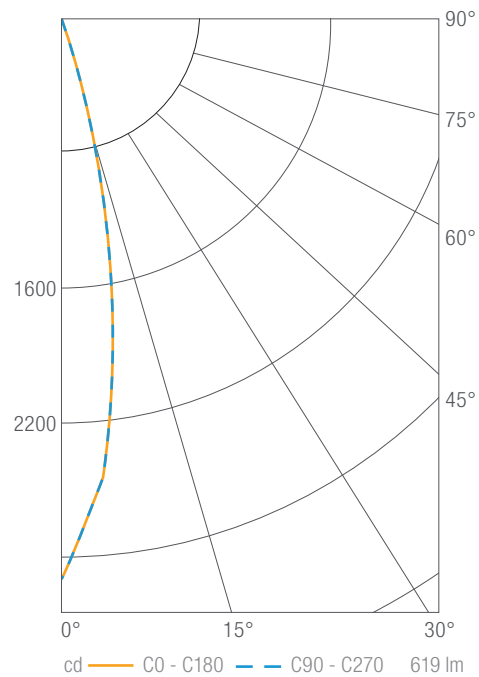
Zone	Lumens	Luminaire %
0-30	599	83
0-40	673	93
0-60	715	99
0-90	723	100
0-180	723	100

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	168	2.1'
6'	42	4.1'
9'	19	6.2'
12'	11	8.2'

Beam Angle: 38°

DRD2X Warm Dim 600 lm, 3000K, Spot, White / Round on Square Trim White



Luminous Intensity

Gamma	C 0°
0°	3329
5°	2752
10°	1608
15°	733
20°	319
25°	151
30°	91
35°	63
40°	46
45°	30
50°	17
55°	9
60°	5
65°	3
70°	2
75°	2
80°	2
85°	0
90°	0

Values in candela

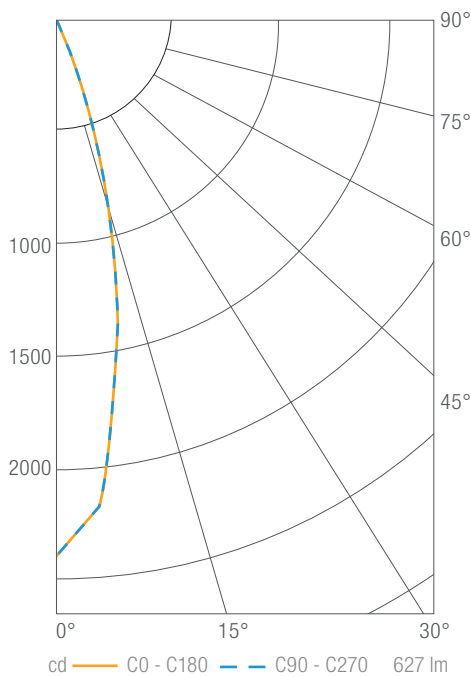
Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	539	87
0-40	581	94
0-60	613	99
0-90	619	100
0-180	619	100

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	370	1.0'
6'	92	2.1'
9'	41	3.1'
12'	23	4.2'

Beam Angle: 19°

PHOTOMETRY
DRD2X Warm Dim 600 lm, 3000K, Narrow Flood, White / Round on Square Trim White

Luminous Intensity

Gamma	C 0°
0°	2402
5°	2175
10°	1567
15°	892
20°	415
25°	187
30°	103
35°	66
40°	46
45°	32
50°	19
55°	11
60°	7
65°	4
70°	3
75°	2
80°	1
85°	0
90°	0

Values in candela

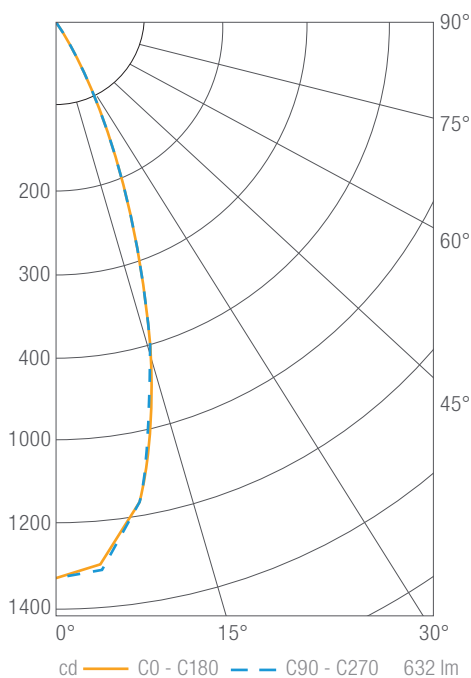
Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	541	86
0-40	584	93
0-60	619	99
0-90	627	100
0-180	627	100

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	267	1.3
6'	67	2.7
9'	30	4.0
12'	17	5.4

Beam Angle: 26°

DRD2X Warm Dim 600 lm, 3000K, Flood, White / Round on Square Trim White

Luminous Intensity

Gamma	C 0°
0°	1324
5°	1293
10°	1166
15°	909
20°	595
25°	335
30°	179
35°	97
40°	58
45°	35
50°	19
55°	8
60°	5
65°	3
70°	2
75°	1
80°	1
85°	1
90°	0

Values in candela

Zonal Lumen Summary

Zone	Lumens	Luminaire %
0-30	524	83
0-40	588	93
0-60	625	99
0-90	632	100
0-180	632	100

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3'	147	2.0'
6'	37	4.0'
9'	16	6.0'
12'	9	8.0'

Beam Angle: 39°

Lumen Scaling

DRD2X06 (600 lm)	DRD2X07 (750 lm)
0.80	1.00

CCT Scaling

DRD2X07927 (2700K)	DRD2X07930 (3000K)	DRD2X07935 (3500K)	DRD2X07940 (4000K)
0.93	1.00	1.00	1.07



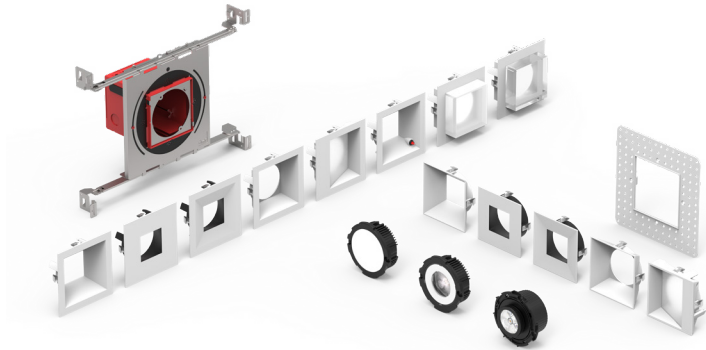
0-10V DIMMER COMPATIBILITY

Recommended 0-10V Dimmers (Dims down to 1% nominal measured light output)

Brand	Series	Model Number	Max Load DRD2X06	Max Load DRD2X07
Legrand	Titan	CD4FB	80	65
Leviton	IllumaTech	IP710-DLZ	40	30
Lithonia	Synergy	ISD BC	35	30
Lutron	Diva	DVTV	60	50
	Nova	NFTV	60	50
	Nova	NTSTV-DV	60	50
	PowPak	RMJ-5T-DV	60	50

SquareFrame System Options

The Perfect Square



General Recessed LED Downlight

DRD2 & SquareFrame

DRDHNJS Square Junction Box

DRD2 & SquareFrame Alt/EM

Alternate Dimming and/or Emergency Lighting

DRDHNJS Square Junction Box

Apex Series Recessed LED Downlight

DRD2X & SquareFrame

DRDHNJS Square Junction Box

DRD2X & SquareFrame Alt/EM

Alternate Dimming and/or Emergency Lighting

DRDHNJS Square Junction Box

Adjustable Recessed LED Downlight

DRD4 & SquareFrame

DRDHNJS Square Junction Box

DRD4 & SquareFrame Alt/EM

Alternate Dimming and/or Emergency Lighting

DRDHNJS Square Junction Box