

DRD2X & SquareFrame

Apex Series Recessed LED Downlight

New Construction









DRDHNJS Square Junction Box

Project:	Type:
Product Code:	Date:

Spec Sheet V-07.01.20



- High-end, architectural-grade illumination with up to 4000 candelas of focused light
- Precise, controlled optics put light exactly where you want it with 20°, 30° and 40° beam angles
- Square format that can deliver superior aesthetics and greater versatility
- Suite of installation features provide the perfect fit quickly and with less hassle

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)	
Input Voltage 120/277V	Dimming TRIAC/ELV 5%	Warm Dim Option  3000K – 1800K, 600 lm (12.0W), 93+ CRI, 3000cd	
Trims 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

0-10V Dimming, Lutron Hi-lume® Dimming, Emergency Lighting, General Lighting, Adjustable Lighting



PRODUCT BUILDER

HOUSING

PRODUCT CODE	APPLICATION	APERTURE
<input type="text"/>	<input type="text"/>	<input type="text"/>
DRDH Housing	N New Construction	JS Square Junction Box

MODULE

PRODUCT CODE	LUMENS	CRI	CCT	OPTICS	SURROUND
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
DRD2X Module	06 600 lm	9 90+ CRI	27 2700K	SP Spot	WH White
	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
				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 ^{1,2}
			P Pinhole ¹	SW Silver Reflector, White Flange	DCCF Decorative: Closed, Clear, Frosted inside ^{1,2}
			B Beveled Pinhole ¹	CC Custom Color	FL Flangeless ^{1,3}
			W Wall Wash ¹		DF Dead Front ^{1,2}

DRDHX-MUD-SFL	Flangeless Mud Plate (Required with Flangeless Trim)
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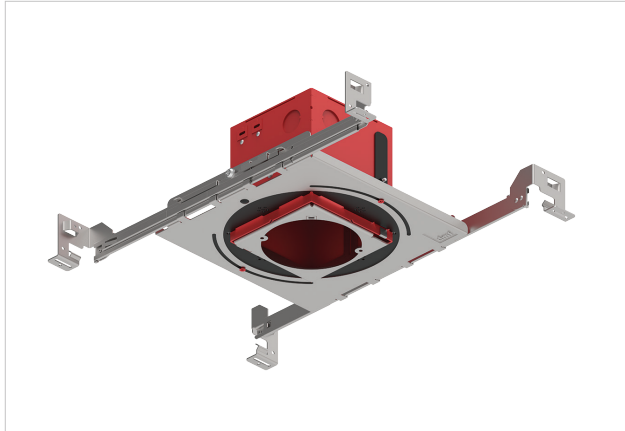
¹ Only available in White or Custom Color finish

² Only available in Standard style

³ Requires DRDHX-MUD-SFL Mud Plate



HOUSING



SquareFrame

New Construction 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.

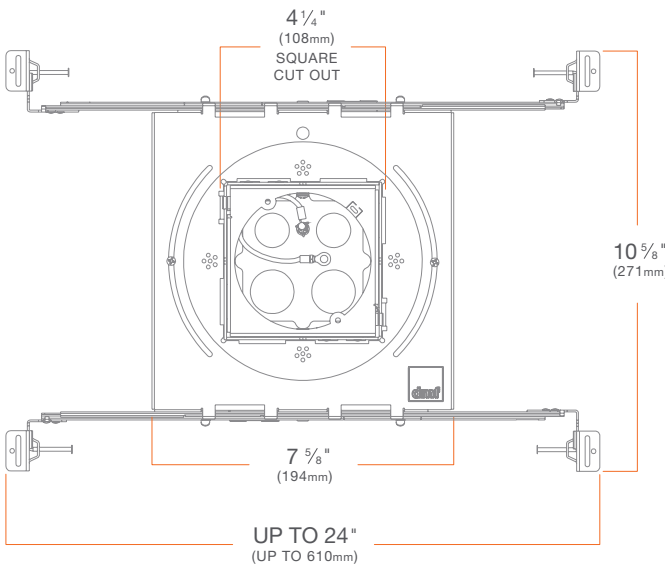
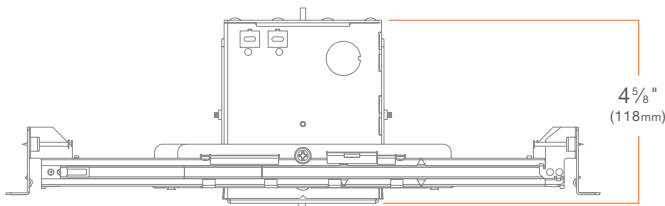
MOUNTING: Pre-installed mounting brackets allow vertical adjustment of bar hangers up to 1".

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

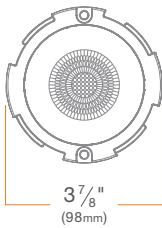
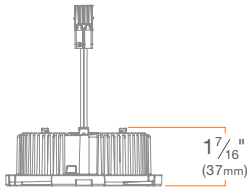
CUTOUT: 4 1/4" (108mm) square opening

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

WARRANTY: 5 year limited warranty



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 182

DIMMING: Down to less than 5% for TRIAC/ELV at 120V

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

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

LIFETIME: 50,000 hours at 70% lumen maintenance

WARRANTY: 5 year limited warranty

● WARM DIM OPTION

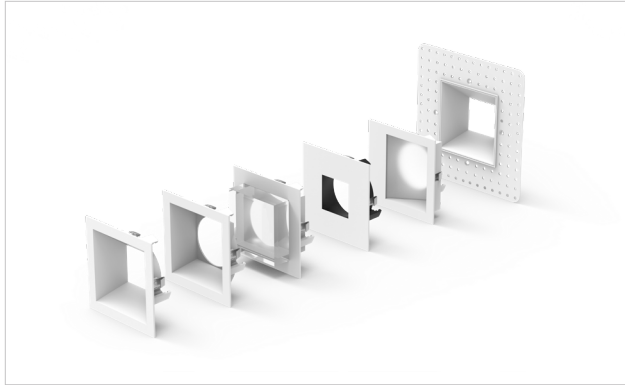
LED: Bridgelux LED, **DELIVERED LUMENS (w Trim):** 600 lm (12.0W),

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

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

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

TRIM



SquareFrame Trims

Recessed LED Downlight Trims

DRD2T

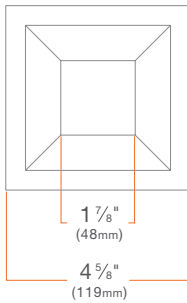
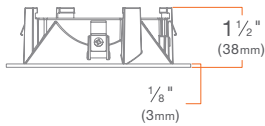
SUMMARY

CONSTRUCTION: Die-cast aluminum

INSTALLATION: Twist & Lock (flanged trims only)

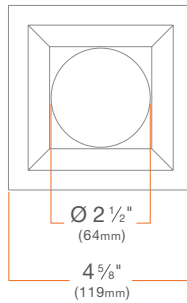
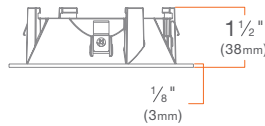
Square Trim

DRD2TSJSSWH



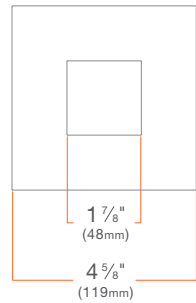
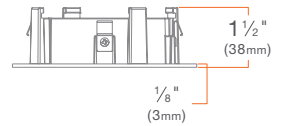
Round on Square Trim

DRD2TSJSQWH



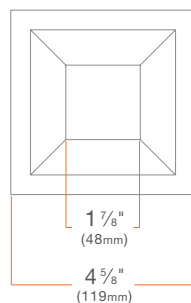
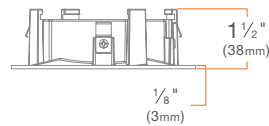
Pinhole Trim

DRD2TSJSPWH



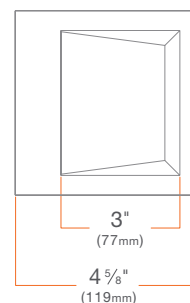
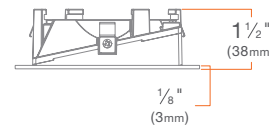
Beveled Pinhole Trim

DRD2TSJSBWH



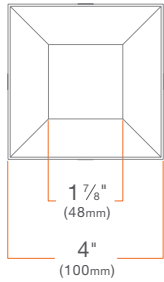
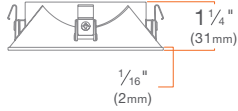
Wall Wash Trim

DRD2TSJSWWH



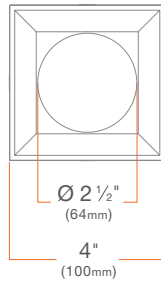
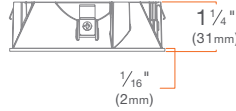
Square Flangeless Trim Insert

DRD2TSJSSWHFL



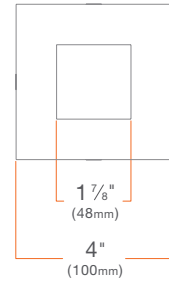
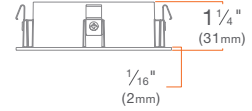
Round on Square Flangeless Trim Insert

DRD2TSJSQWHFL



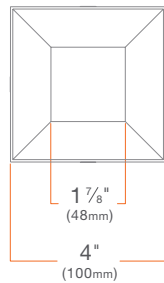
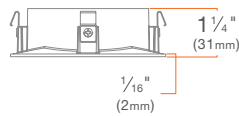
Pinhole Flangeless Trim Insert

DRD2TSJSPWHFL



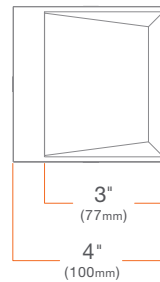
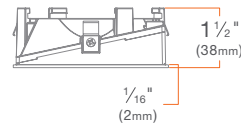
Beveled Pinhole Flangeless Trim Insert

DRD2TSJSBWHFL



Wall Wash Flangeless Trim Insert

DRD2TSJSWWHFL

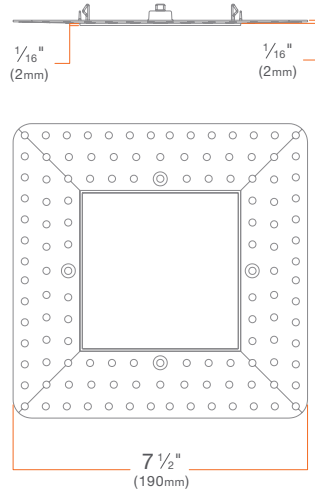




TRIM

Flangeless Mud Plate

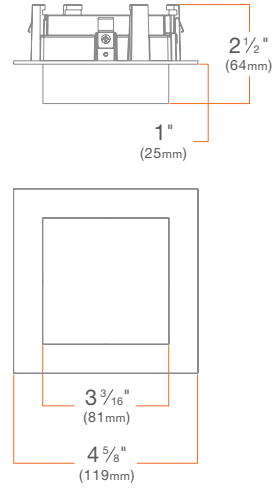
DRDHX-MUD-SFL



Decorative Closed Trim

Frosted: DRD2TRJDSWHDCF

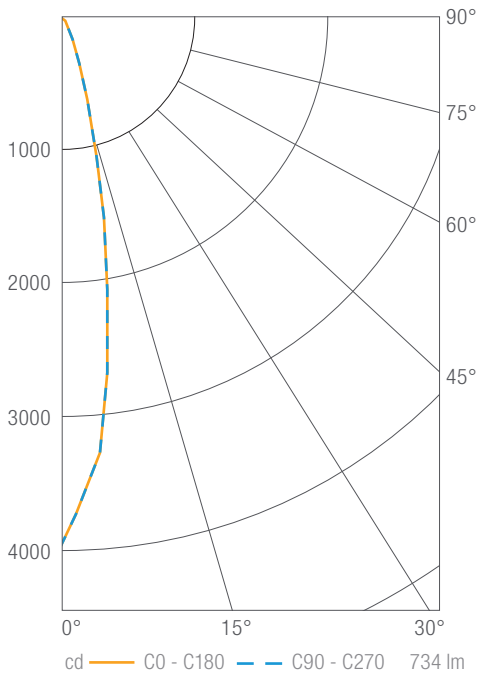
Clear, Frosted Sides: DRD2TRJDSWHDCCF





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

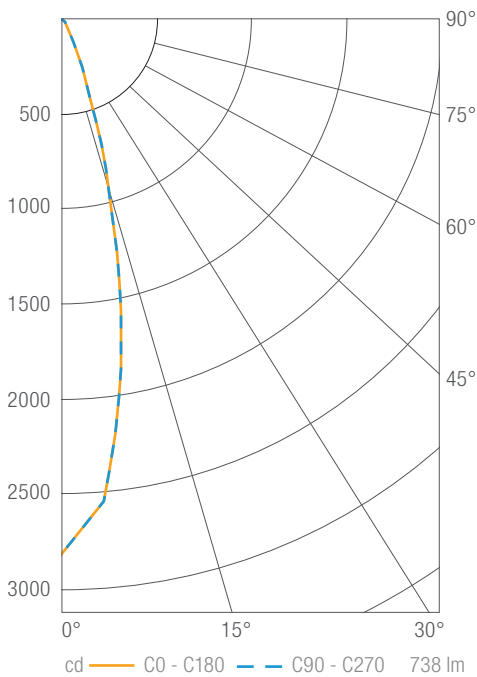
Zone	Lumens	Luminaire %
0-30	640	87
0-40	689	94
0-60	728	99
0-90	734	100
0-180	734	100

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

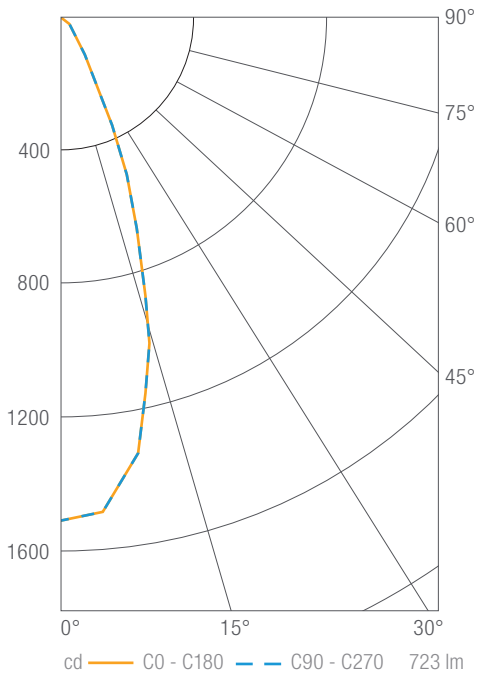
Distance from LED	Foot Candles	Diameter
3'	314	1.4'
6'	79	2.7'
9'	35	4.1'
12'	20	5.4'

Beam Angle: 26°



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

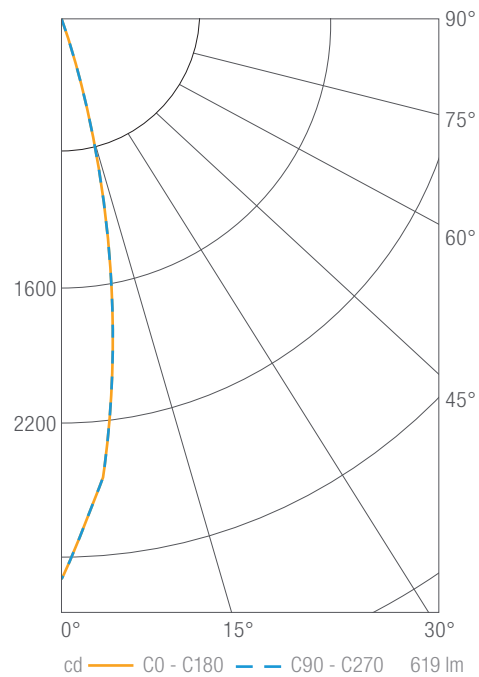
Zone	Lumens	Luminaire %
0-30	599	83
0-40	673	93
0-60	715	99
0-90	723	100
0-180	723	100

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

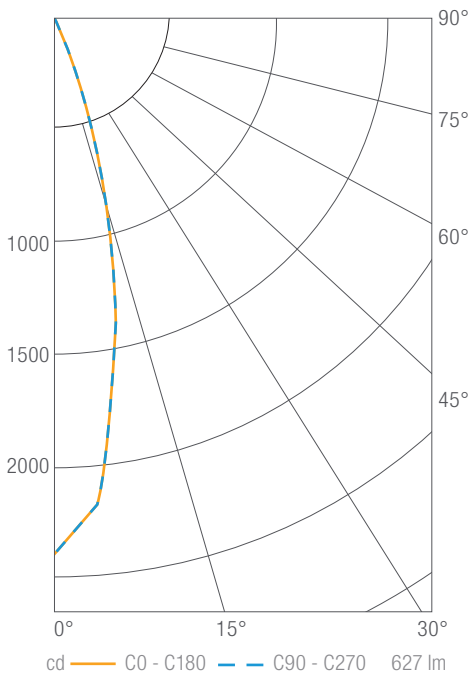
Zonal Lumen Summary

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

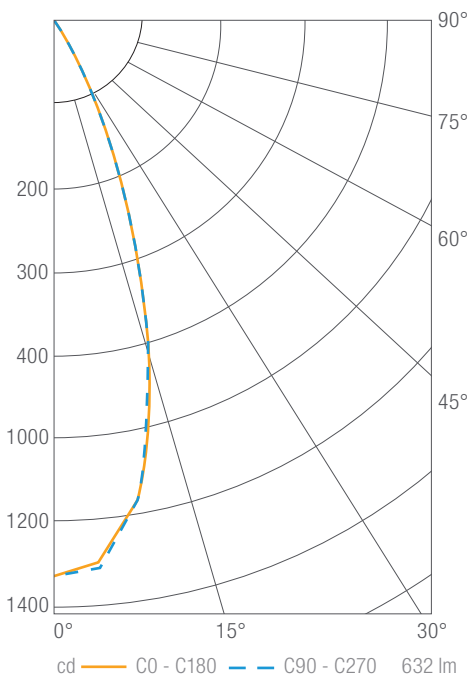
Zonal Lumen Summary

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

**DIMMER COMPATIBILITY****Recommended Phase-control Dimmers** (Dims down to 5% nominal measured light output)

Brand	Series	Model Number	Max Load DRD2X06	Max Load DRD2X07
Control 4	Control 4	C4-APD120	10	9
Cooper	Decorator	DLC03P, DAL06P	25	20
Legrand	Adorne	ADTP703TU	35	30
Lutron	Caseta	PD-6WCL	12	10
	CL Series	AYCL-153, CTCL-153, DVCL-153, LGCL-513, SCL-153, TGCL-513	12	10
	CL Series	AYCL-253, DVCL-253	20	15
	Grafik Eye 3000	QSGR-3P	30	25
	Grafik Sys / Homeworks	RPM-4A	25	20
	Grafik Sys / Homeworks	RPM-4U	30	25
	Maestro CL	MACL-153M, MSCL-OP153M, MSCL-VP153M	12	10
	Maestro Wireless	MRF2-6ELV, MRF2-6CL	12	10
	Radio RA	RRD-6NA, RRD-6CL, RRD-6D	12	10

Compatible Phase-control Dimmers¹ (Dims down to 20% nominal measured light output)

Brand	Series	Model Number	Max Load DRD2X06	Max Load DRD2X07
Cooper	Slide	SLC03P, SAL06P	25	20
Legrand	Harmony	H703PTU, HCL453P	30	25
Leviton	IllumaTech Slide	IPE04	25	20
	SureSlide	6621, 6674	10	10
Lutron	Diva	DV-600	12	10
	Maestro	MA-600	12	9
	Maestro ELV	MAELV-600, MSCELV-600	35	30
	Maestro Wireless	MRF2-6ND	12	10
	Power Booster	PHPM-PA, PHPM-WBX	25	20
Philips	Sunrise	SR400RPC120, ZP260QEW	20	15
Watt Stopper	Digital Light Management	LMRC-221	160	150
	Dimming Sensor	PW-100D	14	12

¹ Dimmer compatibility reflects performance compatibility only. Please reference your local codes for application.

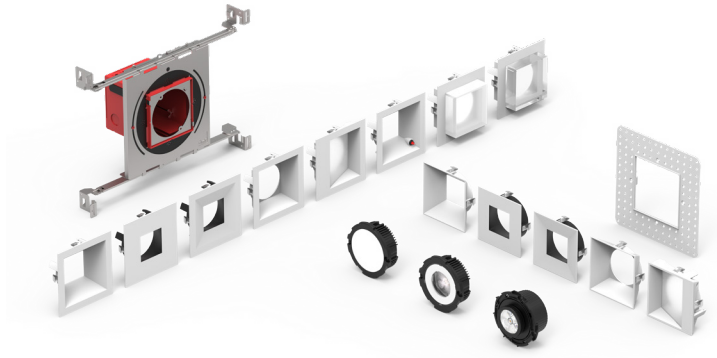
**DIMMER COMPATIBILITY****Recommended Phase-control Dimmers - Warm Dim** (Dims down to 5% nominal measured light output)

Brand	Series	Model Number	Max Load
Cooper	Decorator	DAL06P, DLC03P	20
	Slide	SLC03P	20
Leviton	Sure Slide	6621, 6631	10
Lutron	Diva CL	DVCL-153P	10
	Diva CL	DVCL-253P	15
	Grafik	GTJ-150-WH	10
	Maestro	MRF2-6ND	10
	Maestro CL	MACL-153	10
	Maestro CL	MA-PRO-WH	15
	Maestro CL	MACL-153M, MSCL-OP153M, MSCL-VP153M	10
	Radio RA	RRD-6NA, RRD-6ND	10
	Skylark	SELV-300P	20



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