Apex Series Shallow Recessed LED Downlight

Alternate Dimming and/or Emergency Lighting



Project:	Туре:
Product Code:	Date:

Spec Sheet V-08.15.19

- High-end, architectural-grade illumination with up to 4000 candelas of focused light
- Maintains all the standard SurfaceFrame ratings
- 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		Aperture				
New Construction		4" Octagonal Junction Box				
Delivered Lumens		Color Quality				
600 lm (10.0W), 750 lm (12.5°	W)	90+ CRI, 2-step SDCM				
Color Temperature		Optics				
2700K 3000K 3500K	4000K	Spot (20°) Narrow Flood (30°) Flood (40°)				
Surround	Center Beam Candlepower	Dimming	Input Voltage			
White, Black	4000cd (Spot 750 lm)	0-10V 1%, Lutron Hi-lume® 1%	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				
Trim		Trim Finish				
Surface Mount		White				
Housing Ratings			Module Ratings			
Code compliant for use fire-rated assemblies up to a maximum of 2-hour	Sound Rated	ASTM E283 (IC (Insulation Certified Contact) Rated	UL Listed for Wet Location			

Additional Options

TRIAC/ELV Dimming, General Lighting

Guarantee

50,000 hrs | 5 years



Standards



Apex Series Recessed LED Downlight

Alternate Dimming and/or Emergency Lighting DRDHNJO Octagonal Junction Box

PRODUCT BUILDER

HOUSING

PRODUC	PRODUCT CODE		APPLICATION		APERTURE		R	OPTION		
DRDH	Housing	N	New Construction	JO	Octagonal Junction Box	6OX	0-10V, 600 lm	EM	EM Driver	
						60W	0-10V, 600 lm, Warm Dim			
						70X	0-10V, 750 lm			
						6CX	Lutron LDE1 ¹ , 600 lm			
						6CW	Lutron LDE11, 600 lm, Warm Dim			
						7CX	Lutron LDE1 ¹ , 750 lm			
						6LX	Lutron LTEA2W ² , 600 lm			
						6LW	Lutron LTEA2W2, 600 lm, Warm Dim			
						7LX	Lutron LTEA2W ² , 750 lm			

MODULE

PRODUCT	CODE	LUM	MENS	CF	RI	ССТ		ОРТ	ICS	SURF	ROUND	DRI	IVER
DRD2X	Module	06	600 lm	9	90+ CRI	27	2700K	SP	Spot	WH	White	Α	Alternate
		07	750 lm			30	3000K	NF	Narrow Flood	вк	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	Α	Alternate
								NF	Narrow Flood	вк	Black		
								FL	Flood				

TRIM

PRODUCT CODE SHAPE		APERTURE	STYLE	FINISH
DRD2T Trim	R Round	J Junction Box	S Surface Mount	WH White

 $^{^1}$ Lutron LDE1 refers to Lutron Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black $^{\!T\!M}$

 $^{^{\}rm 2}$ Lutron LTEA2W refers to Lutron Hi-lume 1% 2-wire LED driver, 120V only



HOUSING

DRD2X & SurfaceFrame Alt/EM

Apex Series Recessed LED Downlight

Alternate Dimming and/or Emergency Lighting DRDHNJO Octagonal Junction Box

SurfaceFrame

Octagonal Junction Box with Alternate Dimming and/or Emergency Lighting

DRDHNJO

SUMMARY

JUNCTION BOX: Equipped with (4) ½" trade size knockouts (two side, two top) to allow straight conduit runs. Approved for 6 (three in, three out) #12 AWG 70°C through wiring conductors.

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

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

CUTOUT: 4 1/8" (105mm) octagonal 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 (600 lm), 0.107 amps

(750 lm), 0.11 amps (600 lm Warm Dim)

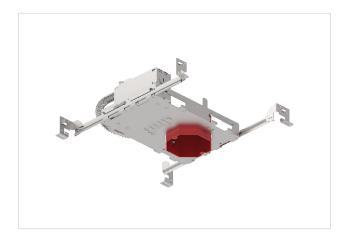
MAX INPUT CURRENT (277V): 0.042 amps (600 lm), 0.050 amps

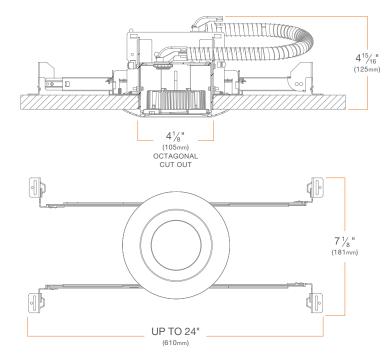
(750 lm), 0.047 amps (600 lm Warm Dim)

POWER FACTOR: Greater than 0.9

TOTAL HARMONIC DISTORTION: Less than 20%

WARRANTY: 5 year limited warranty







MODULE

DRD2X & SurfaceFrame Alt/EM

Apex Series Recessed LED Downlight

Alternate Dimming and/or Emergency Lighting DRDHNJO Octagonal Junction Box

DRD2X

Apex Series LED Module DRD2X



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

DRD2X & SurfaceFrame Alt/EM

Apex Series Recessed LED Downlight

Alternate Dimming and/or Emergency Lighting **DRDHNJO** Octagonal Junction Box

SurfaceFrame Trim

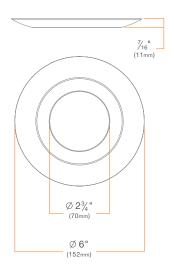
Junction Box **DRD2TRJ**

SUMMARY

CONSTRUCTION: Die-cast aluminum

INSTALLATION: Twist & Lock

Surface Mount Trim DRD2TRJSWH





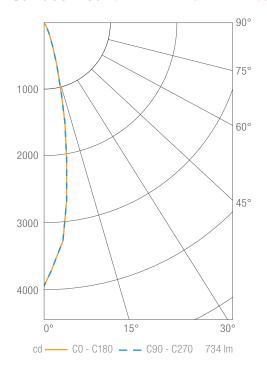
PHOTOMETRY

DRD2X & SurfaceFrame Alt/EM

Apex Series Recessed LED Downlight

Alternate Dimming and/or Emergency Lighting DRDHNJO Octagonal Junction Box

DRD2X 750 lm, 3000K, Spot, White DRD2X07930SPWH Surface Mount Trim White DRD2TRJSWH



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

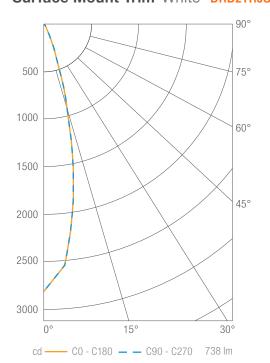
Zone	Lumens	Luminaire %
0-30	640	87
0-40	689	94
0-60	728	99
0-90	734	100
0-180	734	100

Illuminance Chart

Distance from LED	Foot Candles	Diameter
3.0'	439	1.0'
6.0'	110	2.1'
9.0'	49	3.1'
12.0'	27	4.1'

Beam Angle: 20°

DRD2X 750 lm, 3000K, Narrow Flood, White DRD2X07930NFWH Surface Mount Trim White DRD2TRJSWH



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
3.0'	314	1.4'
6.0'	79	2.7'
9.0'	35	4.1'
12.0'	20	5.4'

Beam Angle: 26°

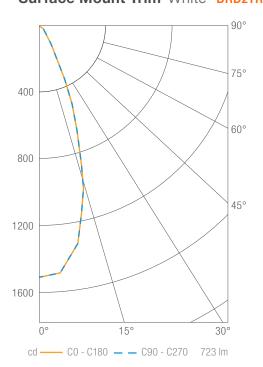


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Alternate Dimming and/or Emergency Lighting DRDHNJO Octagonal Junction Box

PHOTOMETRY

DRD2X 750 lm, 90 CRI, 3000K, Flood, White DRD2X07930FLWH Surface Mount Trim White DRD2TRJSWH



Luminous Intensity

Lummous	S IIIIGIISIL
Gamma	C O°
0°	1514
5°	1495
10°	1336
15°	1010
20°	634
25°	347
30°	183
35⁰	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
3.0'	168	2.1'
6.0'	42	4.1'
9.0'	19	6.2'
12.0'	11	8.2'

Beam Angle: 38°

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



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Alternate Dimming and/or Emergency Lighting DRDHNJO Octagonal Junction Box

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
	Diva	DVTV	60	50
Luduan	Nova	NFTV	60	50
Lutron	Nova	NTSTV-DV	60	50
	PowPak	RMJ-5T-DV	60	50



SurfaceFrame Options

Shallow Recessed LED Downlight

DRD2 & SurfaceFrame

DRDHNJO Octagonal Junction Box

DRD2 & SurfaceFrame Alt/EM

Alternate Dimming and/or Emergency Lighting DRDHNJO Octagonal Junction Box

Apex Series Shallow Recessed LED Downlight

DRD2X & SurfaceFrame

DRDHNJO Octagonal Junction Box

DRD2X & SurfaceFrame Alt/EM

Alternate Dimming and/or Emergency Lighting DRDHNJO Octagonal Junction Box

Surface Mount LED Downlight

DRD5S & SurfaceFrame

DRDHNJO Octagonal Junction Box

DRD5S & SurfaceFrame Alt/EM

Alternate Dimming and/or Emergency Lighting DRDHNJO Octagonal Junction Box