## **Apex Series Shallow Recessed LED Downlight**

**New Construction DRDHNJO Octagonal Junction Box** 

Project:	Туре:
Product Code:	Date:

Spec Sheet V-08.15.19



- · 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
- · Features multiple ratings to meet the demands of a wide range of situations
- · Ultra-low profile allows it to install in as little as 2" of ceiling space when 5/8" drywall is used

Application		Aperture					
New Construction		4" Octagonal Junction Box					
Delivered Lumens		Color Quality					
600 lm (10.0W), 750 lm	(12.5W)	90+ CRI, 2-step SDCM					
Color Temperature		Optics					
2700K 3000K 350	0К 4000К	Spot (20°) Narrow Flood (30°) Flood (40°)					
Surround		Center Beam Candlepower					
White, Black		4000cd (Spot 750 lm)					
Input Voltage	Dimming	Warm Dim Option					
120/277V	TRIAC/ELV 5%	3000K - 1800K, 600 lm (12.0W), 93+ CRI, 3000cd					
Trim		Trim Finish					
Surface Mount		White					
Housing Ratings		Module Ratings					
Code compliant for fire-rated assemb to a maximum of 2	lies up Sound Rated	ASTM E283 Certified Air Tight  IC (Insulation Contact) Rated Wet Locati					
	Guarantee	Additional Options					









50,000 hrs | 5 years

#### **Additional Options**

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





## Apex Series Shallow Recessed LED Downlight

New Construction DRDHNJO Octagonal Junction Box

#### PRODUCT BUILDER

#### HOUSING

PRODUC	T CODE	APPLICATION			APERTURE			
DRDH	Housing	N	New Construction	JO	Octagonal Junction Box			

#### MODULE

PRODUCT	r CODE	LUMENS CRI		CRI		OPTICS		SURROUND			
DRD2X	Module	06	600 lm	9	90+ CRI	27	2700K	SP	Spot	WH	White
		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
								NF	Narrow Flood	вк	Black
								FL	Flood		

#### **TRIM**

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



## HOUSING

## **DRD2X & SurfaceFrame**

Apex Series Shallow Recessed LED Downlight

New Construction DRDHNJO Octagonal Junction Box

## **SurfaceFrame**

New Construction Octagonal Junction Box **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.

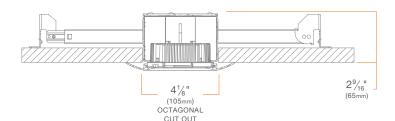
**MOUNTING:** Pre-installed mounting brackets allow vertical adjustment of bar hangers up to 1"

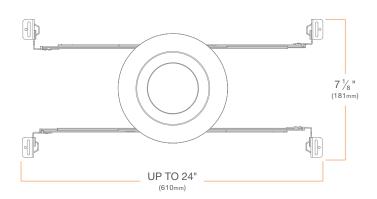
**CEILING:** 1/2" up to 1 3/4"

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

**WARRANTY:** 5 year limited warranty





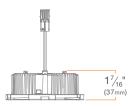


#### Apex Series Shallow Recessed LED Downlight

New Construction DRDHNJO Octagonal 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 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, 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



Apex Series Shallow Recessed LED Downlight

New Construction DRDHNJO Octagonal Junction Box

**TRIM** 



## **SurfaceFrame Trim**

Junction Box DRD2TRJ

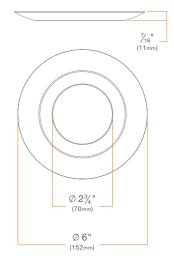
**SUMMARY** 

**CONSTRUCTION:** Die-cast aluminum

**INSTALLATION:** Twist & Lock

## **Surface Mount Trim**

DRD2TRJSWH

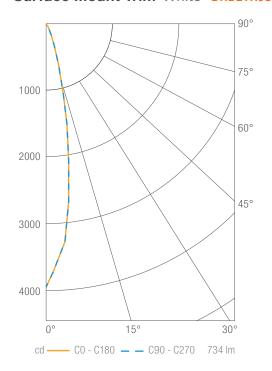


#### Apex Series Shallow Recessed LED Downlight

New Construction DRDHNJO Octagonal Junction Box

#### **PHOTOMETRY**

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



#### Luminous Intensity

Gamma	C O°		
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

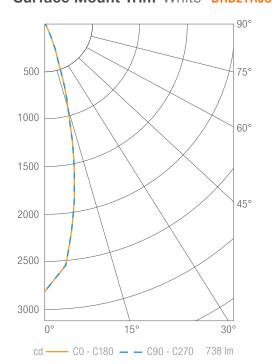
Zone	Lumens	Luminaire %
0-30	640	87
0-40	689	94
0-60	728	99
0-90	734	100
0-180	734	100

#### 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 O°
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°

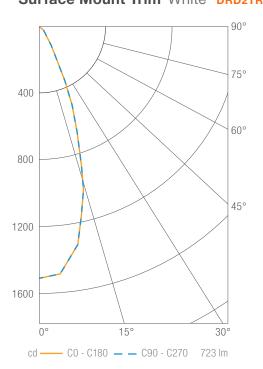


## Apex Series Shallow Recessed LED Downlight

New Construction DRDHNJO Octagonal Junction Box

#### **PHOTOMETRY**

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



#### Luminous Intensity

Luminous	sintensit
Gamma	C O°
0°	1514
5⁰	1495
10°	1336
15°	1010
20°	634
25°	347
30°	183
35⁰	102
40°	62
45°	38
50°	21
55⁰	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

<b>DRD2X06</b> (600 lm)	<b>DRD2X07</b> (750 lm)	
0.80	1.00	

## **CCT Scaling**

<b>DRD2X07927</b> (2700K)	<b>DRD2X07930</b> (3000K)	<b>DRD2X07935</b> (3500K)	<b>DRD2X07940</b> (4000K)
0.93	1.00	1.00	1.07



#### Apex Series Shallow Recessed LED Downlight

New Construction DRDHNJO Octagonal Junction Box

#### 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
	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
Lutron	Grafik Sys / Homeworks	RPM-4A	25	20
	Grafik Sys / Homeworks	RPM-4U	30	25
	Maestro CL	MACL-153M, MSCL-0P153M, 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 Dimmers<sup>1</sup> (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
Lauthau	IllumaTech Slide	IPE04	25	20
Leviton	SureSlide	6621, 6674	10	10
	Diva	DV-600	12	10
	Maestro	MA-600	12	9
Lutron	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
Wett Ctenner	Digital Light Management	LMRC-221	160	150
Watt Stopper	Dimming Sensor	PW-100D	14	12

<sup>&</sup>lt;sup>1</sup> Dimmer compatibility reflects performance compatibility only. Please reference your local codes for application.



## Apex Series Shallow Recessed LED Downlight

New Construction DRDHNJO Octagonal Junction Box

#### DIMMER COMPATIBILITY

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

Brand	Series	Model Number	Max Load
0	Decorator	DAL06P, DLC03P	20
Cooper	Slide	SLC03P	20
Leviton	Sure Slide	6621, 6631	10
	Diva CL	DVCL-153P	10
	Diva CL	DVCL-253P	15
	Grafik	GTJ-150-WH	10
	Maestro	MRF2-6ND	10
Lutron	Maestro CL	MACL-153	10
	Maestro CL	MA-PRO-WH	15
	Maestro CL	MACL-153M, MSCL-0P153M, MSCL-VP153M	10
	Radio RA	RRD-6NA, RRD-6ND	10
	Skylark	SELV-300P	20



## 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