

DDA3 3" ICAT Adjustable Downlight

Specification Grade ICAT Adjustable Downlight

Product Description

The DDA3 is a 3" adjustable downlight in NICOR's Paragon series of specification grade downlights. The DDA3 Adjustable offers a variety of reflector and flange options to fit any residential or architectural installation, including downlight, adjustable accent, and wall wash. Spot, narrow, medium, and wide optics are field interchangeable to customize any space. The DDA3 line features Tri dimming on every fixture, allowing the luminaires to interface with TRIAC, ELV, and 0-10V dimmers down to 1% dimming (with select dimmers). The DDA3 light engines come in 15W and 21W packages, with color temperatures ranging from 2700K to 5000K at 80 or 90CRI. The dim-to-warm option provides 3000K full illumination, dimming down to a very warm 1800K at 90CRI. The ICAT adjustable housing features both stamped bar hangers and architectural butterfly brackets.

Trim

The DDA3 trims and reflectors are made from die-cast aluminum and are available in square or round options. The Adjustable features downlight, adjustable, and wall wash trims to accent any architectural space (wall wash available in round only). The deep reflectors provide 55° cutoff for excellent glare control. The trims and reflectors are powder coated in either black or white finishes. Solite® lenses are standard on all wet location trims. An optional quiet ceiling mudring allows for recessing the trim level with the ceiling for a clean, architectural look with no trim visible below the ceiling line.

Optics

The DDA3 family features four standard optics: spot, narrow, medium, and wide distributions. The DDA3 adjustable downlight ships with the narrow, 25°, optic standard. The optics are field interchangeable to customize any space.

Light Engine

The DDA3 light engine is built from extruded and stamped aluminum to effectively and efficiently cool the LED. All light engines on the DDA3 are rated for 50,000 hours lifetime at L70. The Adjustable light engine allows for proper aiming of the LED for adjustable accent and wall wash trims. The DDA3 light engine is available in lumen outputs ranging from 1200 to 2200 lumens. Color temperature options include 2700K, 3000K, 3500K, 4000K, and 5000K at 80 or 90CRI. The dim-to-warm option dims from 3000K to 1800K at 90CRI. Color variation on the LED is selected within a 3-step MacAdam ellipse for consistency across fixtures.

Electrical

Drivers in the series operate on 120-277VAC. The high-efficiency drivers feature Tri dimming, seamlessly interfacing with TRIAC & ELV dimmers on 120VAC input, and 0-10V systems on 120-277VAC (down to 1% with select dimmers). The DDA3 Class 2 drivers are available in 15W and 21W packages with a power factor of >.90.

Housings

DDA3 housings are made from stamped galvanized steel and feature ICAT construction. The attached J-box allows for easy installation in new construction applications. The DDA3 Adjustable features stamped bar hangers to fit a range of joist spacings between 14 1/2" and 25", as well as butterfly brackets for architectural drop ceiling installations. The junction box features four 1/2" knockouts and four non-metallic sheathed cable knockouts. Junction boxes are rated for (6) 12AWG 90°C rated wires. The adjustable housing comes standard with a 1/2" collar with optional 1" and 1 1/2" collars for a variety of ceiling thicknesses/

Installation

The DDA3's design is focused on ease of installation. The trim friction fits onto the light engine with two wing springs.

Warranty

The NICOR Paragon family comes with our standard 5-year limited system warranty.

Code Compliance

UL Listed for wet locations in covered ceilings only. Non-IC rated, insulation must be kept 3" away from the top and sides of the housing. Photometric testing completed in accordance with IES LM-79

Project

Catalog

Type

Date



NICOR LED
Paragon

DDA3 3" ICAT Adjustable Downlight

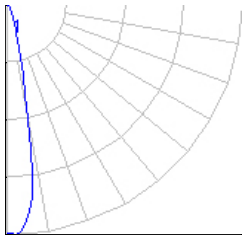
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Photometric Data

DDA3 Spot Optic

3000K 15W 90CRI

Input Voltage (VAC)	120-277
System Level Power (W)	14.2
Delivered Lumens (Lm)	1279.1
System Efficacy (Lm/W)	90.1
Correlated Color Temp (K)	3026
Color Rendering Index (CRI)	92.8
Beam Angle	18.0
Spacing Criteria	0.34



Performance Data

CCT and CRI	Lumens	Watts	Lumens/Watt
DDA3 3000K 90CRI	1677.9	21	79.9
DDA3 3000K 80CRI	1417.9	15	94.5
	2013.5	21	95.9

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	1190.2	93.0%
0-40	1232.3	96.3%
0-60	1261.6	98.6%
0-90	1279.1	100.0%

Adjustment Multipliers

Reflector Color	CCT	Wattage	CRI
WH = 100%	27K = 98%	15W = 100%	80 = 117%
BK = 95%	30K = 100%	21W = 142%	90 = 100%
	35K = 102%		
	40K = 104%		
	50K = 105%		

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	603.8	2.3
6	268.3	2.4
8	150.9	3.2
10	96.6	3.4
12	67.1	3.6
14	49.3	4.0
16	37.7	4.4

Intensity Summary (Candle Power)

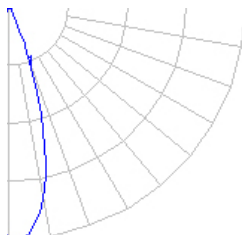
Angle	Mean CP
0	9661.0
5	8501.1
15	1287.1
25	293.8
35	61.6
45	22.5
55	12.6
65	8.9
75	4.8
85	1.3
90	0.0

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

DDA3 Narrow Optic

3000K 15W 90CRI

Input Voltage (VAC)	120-277
System Level Power (W)	14.2
Delivered Lumens (Lm)	1348.6
System Efficacy (Lm/W)	95.0
Correlated Color Temp (K)	3035
Color Rendering Index (CRI)	92.6
Beam Angle	28.8
Spacing Criteria	0.52



Performance Data

CCT and CRI	Lumens	Watts	Lumens/Watt
DDA3 3000K 90CRI	1776.1	21	84.6
DDA3 3000K 80CRI	1500.9	15	100.1
	2132.3	21	101.5

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	1282.1	95.1%
0-40	1312.9	97.3%
0-60	1336.2	99.1%
0-90	1348.6	100.0%

Adjustment Multipliers

Reflector Color	CCT	Wattage	CRI
WH = 100%	27K = 98%	15W = 100%	80 = 117%
BK = 95%	30K = 100%	21W = 142%	90 = 100%
	35K = 102%		
	40K = 104%		
	50K = 105%		

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	336.3	2.28
6	149.5	2.4
8	84.1	3.2
10	53.8	4.0
12	37.4	5.6
14	27.5	6.6
16	21.1	6.8

Intensity Summary (Candle Power)

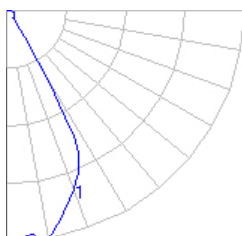
Angle	Mean CP
0	5380.1
5	5006.2
15	2423.6
25	342.1
35	45.1
45	19.3
55	8.7
65	6.0
75	3.1
85	0.8
90	0.0

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

DDA3 Wide Optic

3000K 15W 90CRI

Input Voltage (VAC)	120-277
System Level Power (W)	14.2
Delivered Lumens (Lm)	1218.8
System Efficacy (Lm/W)	85.8
Correlated Color Temp (K)	3016
Color Rendering Index (CRI)	92.6
Beam Angle	56.4
Spacing Criteria	0.99



Performance Data

CCT and CRI	Lumens	Watts	Lumens/Watt
DDA3 3000K 90CRI	1591.1	21	75.8
DDA3 3000K 80CRI	1344.6	15	89.6
	1909.3	21	90.9

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	967.8	79.5%
0-40	1049.9	86.1%
0-60	1139.8	93.5%
0-90	1218.8	100.0%

Adjustment Multipliers

Reflector Color	CCT	Wattage	CRI
WH = 100%	27K = 98%	15W = 100%	80 = 117%
BK = 95%	30K = 100%	21W = 142%	90 = 100%
	35K = 102%		
	40K = 104%		
	50K = 105%		

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	93.2	2.7
6	41.4	5.6
8	23.3	7.2
10	14.9	9.0
12	10.3	11.0
14	7.6	12.6
16	5.8	14.6

Intensity Summary (Candle Power)

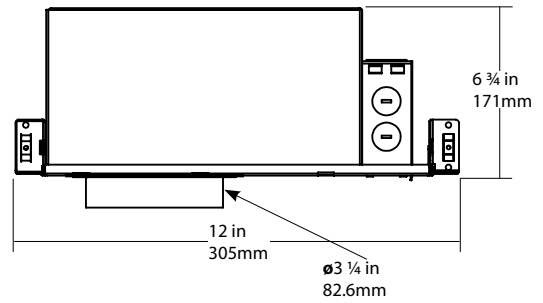
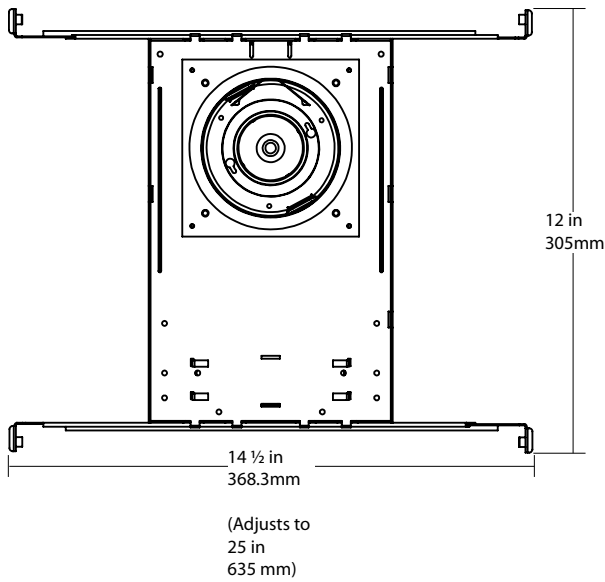
Angle	Mean CP
0	1491.0
5	1460.0
15	1352.9
25	1067.4
35	70.9
45	57.1
55	50.9
65	42.9
75	26.0
85	7.1
90	0.0

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

DDA3 3" ICAT Adjustable Downlight

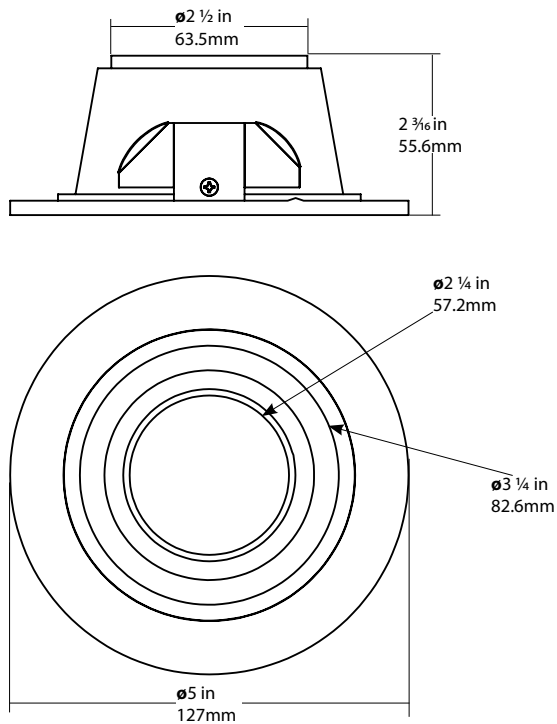
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Light Engine Housing

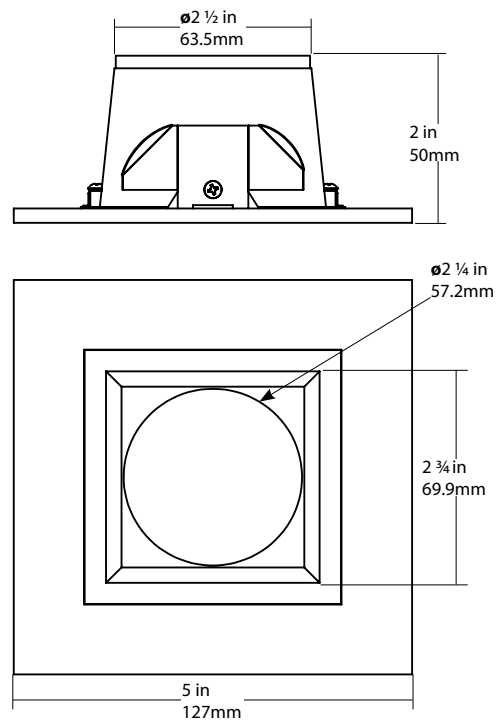


Trims

Round Trim



Square Trim



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Ordering Information

Light Engine						Example: DDA3IC2015U278
Series	Version	Wattage	Voltage	CCT	CRI	
DDA3IC	2	015 (15 Watts)	U (120-277VAC)	27 (2700 K)	8 (80 CRI)	
		021 (21 Watts)		30 (3000 K)	9 (90 CRI)	
				35 (3500 K)		
				40 (4000 K)		
				50 (5000 K)		
				DW (Dim to Warm)*		

*Dim to Warm only available on in 15W at 90CRI

Trim and Optic

Example: DDA3TR2LRWHWH

Series	Version	Type	Shape	Reflector Color	Flange Color	Location	Reflector Type
DDA3TR	2	L (Downlight)	R (Round)	WH (White)	WH (White)	_ (Dry/Damp)	__ (Smooth)
		A (Adjustable)	Q (Square)	BK (Black)	BK (Black)	G (Wet Location)	BF (Baffle)

Wall Wash Trim and Optic**

Example: DDA3TR2WRWHWH

Series	Version	Type	Shape	Insert Color	Flange Color
DDA3TR	2	W (Wall Wash)	R (Round)	WH (White)	WH (White)
				BK (Black)	BK (Black)
				SC (Specular Clear)	

**IES Files based on use with 15° optic (ordered separately).

Optional Accessories

Optics

Series	Version	Style
DDA3OP	2	15 (Spot Optic)
		25 (Narrow Optic)
		36 (Medium Optic)
		60 (Wide Optic)

Ceiling Collar Adapter

Series	Version	Style
DDA3AD	2	A (½" Collar)
		B (1" Collar)
		C (1 ½" Collar)

Quiet Ceiling Mudring

Series	Version	Style
DDA3MR	2	RND (Round Trim)
		SQR (Square Trim)