DDA3 3" ICAT Downlight

Specification Grade ICAT Remodel Downlight

Product Description

The DDA3 is a 3" downlight in NICOR's Paragon series of specification grade downlights. The DDA3 offers downlight and wall wash reflector options to fit any residential or architectural installation. 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. A plaster frame option is available for new construction applications.

Trim

The DDA3 trims and reflectors are made from die-cast aluminum and are available in square or round options. The DDA3 features downlight and wall wash trims to accent any architectural space (wall wash available in round damp location 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.

Optics

The DDA3 family features four standard optics: spot, narrow, medium, and wide distributions. The DDA3 Remodel fixture ships with the wide 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 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.

Flectrica

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. The ICAT Remodel housing is rated for direct contact with insulation and air-tight installations. Installation brackets are adjustable for up to 1 ½" ceiling thickness. The attached J-box allows for easy installation in remodel and new construction applications. Shipped with each unit are gaskets to make the DDA3 Remodel ICAT compliant. The optional plaster frame comes with adjustable, stamped bar hangers to fit a range of joist spacings between 14 ½" and 25". The junction box features four ½" knockouts and four non-metallic sheathed cable knockouts. Junction boxes are rated for (6) 12AWG 90°C rated wires.

Installation

The DDA3's design is focused on ease of installation as either a remodel or a new construction installation when utilizing the plaster frame accessory. The ICAT housing is rated for direct contact with insulation and air-tight applications. 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













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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%

Cone of Light Tabulation		
Mounted height (Feet)	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.

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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%				

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

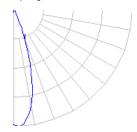
Performance Data			
CCT and CRI	Lumens	Watts	Lumens/Watt
DDA3 3000K 90CRI	1776.1	21	84.6
DDA3 3000K 80CRI	1500.9	15	100.1
DDW2 2000K 80CKI	2132.3	21	101.5

Zonal Lumen Summary			
Zone Lumens %of Luminai			
0-30	1282.1	95.1%	
0-40	1312.9	97.3%	
0-60	1336.2	99.1%	
0-90	1348.6	100.0%	

Cone of Light Tabulation			
Mounted height Footcandles Diameter (Feet) Beam Center (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	342.3	
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.



Adjustment Multipliers						
ССТ	Wattage	CRI				
27K = 98%	15W = 100%	80 =117%				
30K = 100%	21W = 142%	90 = 100%				
35K = 102%						
40K = 104%						
50K = 105%						
	CCT 27K = 98% 30K = 100% 35K = 102% 40K = 104%	27K = 98% 15W = 100% 30K = 100% 21W = 142% 35K = 102% 40K = 104%				

DDA3 V	Vide	Optic
3000K	15W	90 <i>C</i> RI

3000K 13W 900	CUI
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			
DDA3 3000K 60CKI	1909.3	21	90.9			

Zonal Lumen Summary					
Zone	Lumens	% of Luminaire			
0-30	967.8	79.4%			
0-40	1049.9	86.1%			
0-60	1139.8	93.5%			
0-90	1218.8	100.0%			

Zonal Lumen Summary			
Zone	Lumens	% of Luminaire	
0-30	967.8	79.4%	
0-40	1049.9	86.1%	
0-60	1139.8	93.5%	
0-90	1218.8	100.0%	

Cone of Light Tabulation					
ootcandles eam Center	Diameter (Feet)				
93.2	2.7				
41.4	5.6				
23.3	7.2				
14.9	9.0				
10.3	11.0				
7.6	12.6				
5.8	14.6				
	93.2 41.4 23.3 14.9 10.3 7.6				

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.

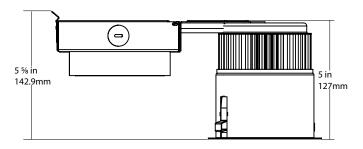


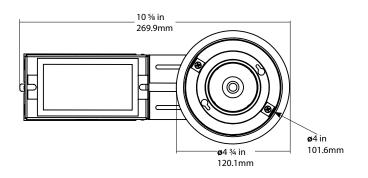
Adjustment Multipliers							
Reflector Color	Reflector Color CCT Wattage CRI						
WH = 100%	27K = 98%	15W = 100%	80 =117%				
BK = 95%	30K = 100%	21W = 142%	90 = 100%				
	35K = 102%						
	40K = 104%						
	50K = 105%						

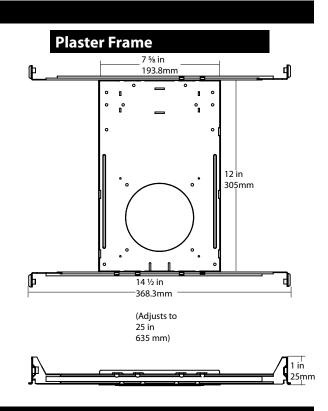


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Light Engine Housing

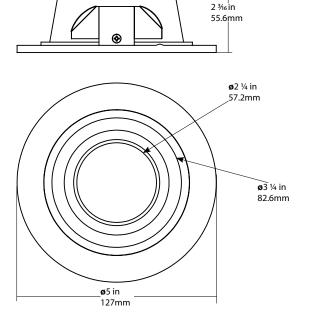






Trims

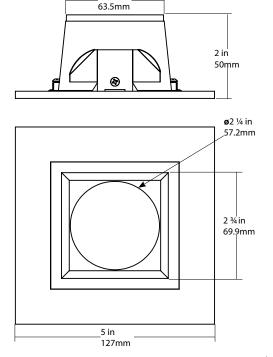
Round Trim



ø2 ½ in

63.5mm

Square Trim



ø2 ⅓ in



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Ordering Information

Light Er	Light Engine Example: DDA3LE2015U278						
Series	Version	Wattage	Voltage	сст	CRI		
DDA3LE	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	Trim and Optic Example: DDA3TR2LRWHW						
Series	Version	Туре	Shape	Reflector Color	Flange Color	Location	Reflector Type
DDA3TR	2	L (Downlight)	R (Round)	WH (White)	WH (White)	_ (Dry/Damp)	(Smooth)
			Q (Square)	BK (Black)	BK (Black)	G (Wet Location)	BF (Baffle)

Wall Wash Trim and Optic** Example: DDA3TR2WRWF					
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)	

^{**|}ES Files based on use with 15° optic. For optimal Wall Wash performance use degree optic (ordered separately).

Optional Accessories

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

Plaster Frame
Series
DDA3HS2F

