# gotham® INCITO™ Multiple Layers of Light



Luminaire Type: Catalog Number:











# **High Center Beam Square Pinhole Adjustable Downlight**

1"

# **Feature Set**

- Eleven optimized distribution patterns allow designers to achieve tailored objectives
- Vertical tilt is self-locking from 0° 40°; 365° of horizontal rotation. Can be hot aimed from below ceiling.
- Field interchangeable optic
- Driver and LED light engine fully serviceable from below ceiling
- 70% lumen maintenance at 60,000 hours

- 2.5 SDCM; 85 CRI typical, 90+ CRI optional
- · Fixtures are wet location, covered ceiling
- ENERGY STAR® Certified product
- · Small low brightness aperture
- Flush mount option (FL option)
- Can be paired with complimentary pinhole downlight luminaries

# **Distribution**

	15° beam angle	20° beam angle	25° beam angle	30° beam angle	35° beam angle	40° beam angle	45° beam angle				
c	unorior Do	rformono			35°x15°	50°x20°	50°x60°	60°x70°			

# **Superior Performance**

Nominal lumens	250	500	750	1000	1500	2000
Delivered	198	421	645	884	1325	1673
Wattage	3.1	5.6	8.7	12.0	19.8	28.6
Efficacy	64	75	74	73	67	59

<sup>\*</sup>Based on 3500K 80CRI 15D

# **Coordinated Apertures | Multiple Layers of Light**





**General Illumination Layer I EVO** 







EVO + Incito — Multiple Layers of Light

Core	Downlight	Adjustable	Open Wallwash	Lensed Wallwash	Cylinder	Pinhole	Bevel	Hyperbolic
Healthcare	MRI	Surgical Suite	Patient Room					
Special Applications	Dynamic	Food Service	Vandal/Tamper	Clean Room	Shower	Steam Room		

ORDERING INFORMATION

Luminaire Type: Catalog Number:

# EXAMPLE: ICO1SQPINADJ 35/10 WR 20D MVOLT UGZ

gotham°| INCITO™

Series	Color Temperature L	Lumens	Reflector Color	Flange Type	Lensing	Beam
ICO1SQPINADJ Incito 1.5in Square Pinhole Adjustable Downlight	30/ 3000 K 0 35/ 3500 K 0 40/ 4000 K 1 50/' 5000 K 1	02 250 lumens 05 500 lumens 07 750 lumens 10 1000 lumens 15 1500 lumens 20 2000 lumens	WR White painted BR Black BZR Dark Bronze painted	(blank) Self-flanged FL Flush mount	(blank) Open  SOL Solite pattern lens  LTF Light frost lens  SMO Clear	15D 15° beam angle 20D 20° beam angle 25D 25° beam angle 30D 30° beam angle 35D 35° beam angle 40D 40° beam angle 45D 45° beam angle 3515D Elliptical 35° x 15° beam angle 5020D Elliptical 50° x 20° beam angle 5060D Elliptical 50° x 60° beam angle 6070D Elliptical 60° x 70° beam angle

Voltage	Driver	Control Interface <sup>4</sup>	Options					
MVOLT 120V - 277V 120 120V 277 277V	UGZ <sup>2</sup> Universal dimming to 1% (0-10V, 120V TRIAC or ELV)  ECOD <sup>3</sup> Lutron® EcoSystem® digital Hi- Lume <1% soft-on, fade to black. Min: 500LM; Max: 1500LM	(blank)  NLT  NLTER <sup>5</sup> NLTER <sup>5</sup> NLTAIR2  NLTAIRER2  NLTAIRER2 <sup>5</sup> NLTAIRER2  NLTAIRER12  NLTAIRER2  NLTAIRER2  NLTAIRER2  NLTAIRER12  NLTAIRER12	90CRI <sup>1</sup> High CRI (90+) NCH <sup>6</sup> Structural reinforcement pan ICAT <sup>7</sup> IC/Airtight housing construction CP <sup>7</sup> Chicago Plenum HA0 <sup>8</sup> High ambient (40°C) N80 <sup>9</sup> nLight Lumen Compensation WL <sup>10</sup> Wet Location					

# ACCESSORIES — order as separate catalog numbers (shipped separately)

ICO20PTC XXD Additional optics for field installation. Replace "XX" with beam angle.

ICO20PTC KIT Kit including a field interchangeable optic for each of the 13 preset beam distribution patterns

HS258 2-5/8" Hole saw

HS234FL  $\label{eq:hole saw for flush mount trim option} Hole saw for flush mount trim option$ 

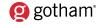
SDT 347/120 75VA 347V/120V, 75VA step down transformer. Must be remote mounted.

AW50 Allen wrench (.050") for adjusting tilt

# ORDERING NOTES

- 5000K CCT not available with 90CRI 1.
- 2. Not available with Reflector Finish
- Refer to Tech 240 for compatible dimmers.
- 4. Not available with Control Interfaces (nLight). Not compatible with spray foam with 1000LM, 1500LM, or 2000LM options.
- 5. Field installed. Access required to location of remote mounted device
- ER for use with generator supply power. Will require an emergency hot feed and 6. normal hot feed.
- NCH is required for T-grid ceilings or where code requires.

- Not available with 1500lm or 2000lm
- Not available with 2000lm
- For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not available with WR (White Reflector). Not available with FL.
- 11. For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not available with BR (Black Reflector). Not available with FL.
- 12. Requires NLT or NLTER.



# **Optical and Trim Assembly**

Fully serviceable and upgradeable lensed LED light engine suitable for field maintenance or service from above or below the ceiling.

Flangeless trim option includes proprietary Gotham mud ring enabling seamless integration into drywall applications. Mud ring ships separately. Superior 100% Virgin-silicone refractive optic, enables maximum dimensional stability and optical transmission with no discoloration over life. Field inter-changeable optics.

45° reverse knife edge along luminous aperture to eliminate flash.

Fully black interior to conceal hardware.

Wet paint finish.

# **Electrical**

The luminaire shall operate from a 50 or 60 Hz ±3 Hz AC line over a voltage ranging from 120 VAC to 277 VAC. Support 347V via remote-mounted stepdown transformer. The fluctuations of line voltage shall have no visible effect on the luminous output.

The luminaire shall have a power factor of 90% or greater at all standard operating voltages and full luminaire output.

Sound Rated A+. Driver shall be >80% efficient at full load across all input voltages.

### Controls

Luminaire shall be equipped with interface for nLight wired or nLight AIR networks with integral power supply as per specification.

# **Dimming**

The luminaire shall be capable of continuous dimming without perceivable stroboscopic flicker as measured by flicker index (ANSI/IES RP-16-10) over a range of 100 - 1.0% of rated lumen output with a smooth shut off function to step to 0%.

Driver is inaudible in 24dB environment, and stable when input voltage conditions fluctuate over what is typically experienced in a commercial environment.

### Construction

Light engine and driver are accessible from below ceiling.

Several additional mounting options available including a structural reinforcement pan, Chicago plenum, and Type IC.

Anodized extruded aluminum wiring compartment with hinged access. With two 1/2" trade-sized knockouts rated for 90°C.

Accommodates between 1/2" to 3/4"-thick ceilings.

## Listings

Fixtures are UL Certified to meet US and Canadian Standards: All fixtures manufactured in strict accordance with the appropriate and current requirements of the "Standards for Safety" to UL, wet location covered ceiling. ENERGY STAR® Certified product.

IC rated with ICAT option. Fixtures with ICAT option are compatible with spray foam insulation with an R-value of 4.3 per inch or less.

Luminaire configurations are Energy Star certified through testing in EPA-recognized laboratories, with the results reviewed by an independent, accredited certification organization. Visit <a href="https://www.energystar.gov">www.energystar.gov</a> for specific configurations listed

# **Photometrics**

LEDs tested to LM-80 standards. Measured by IESNA Standard LM-79-08 in an accredited lab. Lumen output shall not decrease by more than 30% over the minimum operational life of 60,000 hours.

Color appearance from luminaire to luminaire of the same type and in all configurations, shall be consistent both initially and at 6,000 hours and operate within a tolerance of <2.5 MacAdam ellipse as defined by the center of the quadrangles defined in ANSI C78.377-2015.

# **Buy American Act**

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to <a href="https://www.acuitybrands.com/buy-american">www.acuitybrands.com/buy-american</a> for additional information.

# Warranty

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: <a href="https://www.acuitybrands.com/support/warranty/terms-and-conditions">www.acuitybrands.com/support/warranty/terms-and-conditions</a>

# Note:

Actual performance may differ as a result of end user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C.

# \*\* Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight\* control networks when ordered with drivers marked by a shaded background\*
- This luminaire is part of an A+ Certified solution for nLight\* control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background\*

To learn more about A+, visit <a href="https://www.acuitybrands.com/aplus">www.acuitybrands.com/aplus</a>.

\*See ordering tree for details



Lumen Output Multiplier											
CRI	CCT	Multplier									
	2700K	0.910									
	3000K	0.946									
80	3500K	1.000									
	4000K	1.027									
	5000K	1.054									
	2700K	0.784									
90	3000K	0.847									
90	3500K	0.874									
	4000K	0.946									

Reflector Finish M	ultiplier
Reflector Finish	Multiplier
LSS - Semi Specular	1.00
LD - Matte Diffuse	0.98
Reflector Color	Multiplier
WR - White	0.98
BR - Black	0.92
BZR - Bronze	0.91
AR - Clear	1.00
GR - Gold	0.99
PR - Pewter	0.99
WTR - Wheat	0.98

	Driver		Control Provided								
Nomenclature	Description	NLT	NLTER	NLTAIR2	NLTAIREM2	NLTAIRER2					
UGZ	0-10V driver dims to 1%	nPP16 D EFP	nPP16 D ER EFP	RPP20 D 24V G2	RPP20 D 24V EM G2	RPP20 D 24V ER G2					

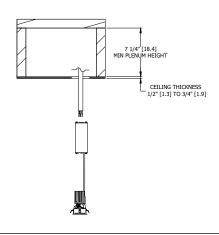
Marked Spacing in Inches 25°C Ambient													
Lumen Package	Fixed Center to Center MIN	Fixture Center to Building Member MIN	Space Above Fixture										
2000	18	9	3										
1500 (HAO)	18	9	3										

\*Dimensions in inches [centimeters]

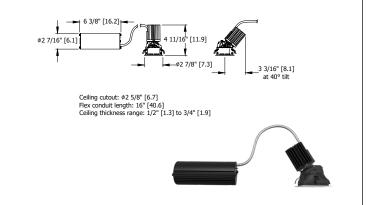
Aperture: 2-1/4" [5.7] Ceiling Opening: 2-5/8" [6.7] self-flanged

Overlap Trim: 3" [7.6] 2-3/4" [7] flangeless

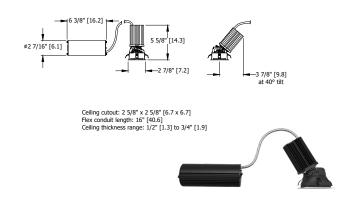
# **Recessed Application - Minimum Clearance Requirements**



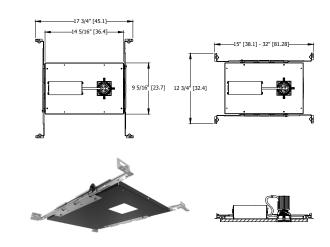
# 1500 Lumen and Below Install-from-Below Construction



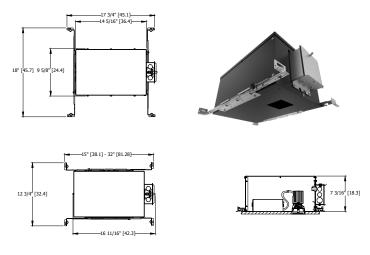
# 2000 Lumen or High Ambient Option Install-from-Below Construction



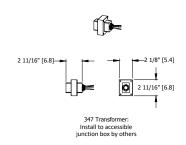
# Structural Reinforcement Pan



# **IC / Airtight Housing / Chicago Plenum Construction**



# **347V Transformer**





Partially finished mud ring, showing cross-section detail.



An ICO downlight requires only approximately 3" of plaster to finish.



ICO with flangeless trim

# **Flush Mount Installation**

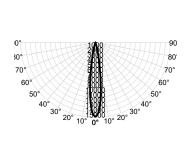
Gotham's flush mount option utilizes a micro-thin polymer mud ring that minimizes the amount of drywall compound required to finish the ceiling. The end result is a virtually undetectable flush mount downlight installation.

The polymer mud ring is installed independent of the of the recessed frame, therefore floating with the ceiling. This innovation minimizes any surface cracks during reflector installation, ceiling movement and any future service to the recessed frame, wiring, electronics, etc.



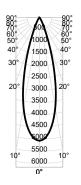
# CONSULT WWW.GOTHAMLIGHTING.COM FOR ADDITIONAL PHOTOMETRY

ICO1SQPINADJ 35/15 WR 15D @ 0DEG TILT Input Watts: 19.8, Delivered Lumens: 1492, LPW: 75.4, S/MH: 0.27, Test No: 19-412-01P345



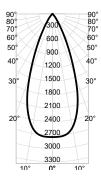
CP Summary		Zonal Lumen Summary				Coefficients of Utilization										ne of Li	Luminance (cd/sq.m)		
	0°	Zone	Lumens	% Fixture	ρf ρc ρw	50%	80% 30%	10%	50%	20% 70% 30%	10%	50%	50% 30%		Mounting Height		Beam Diameter		Average Luminance
0°	14,837	0° - 30°	1,460	98%	0	123	123	123	120	120	120	115	115	115	6.0	412.1	1.7	0°	11,090,577
5°	11,584	0° - 40°	1,484	99%	1	118	116	115	116	114	113	112	110	109	8.0	231.8	2.2	45°	8,437
15°	1,299	0° - 60°	1,491	100%	2	114	111	109	112	110	108	109	107	105	10.0	148.4	2.8	55°	693
25°	117	0° - 90°	1,492	100%	3	110	107	105	109	106	104	106	104	102	12.0	103.0	3.4	65°	753
35°	30	90° - 180°	0	0%	4	107	104	101	106	103	101	104	102	100	14.0	75.7	3.9	75°	615
45°	8	0° - 180°	1,492	100%	5	104	101	99	104	101	98	102	99	97				85°	913
55°	1				6	102	99	96	102	98	96	100	98	96	Beam Ang	gle: 16.0	l°		
65°	0				7	100	97	94	100	96	94	99	96	94	Field Ang	e: 29.3°			
75°	0				8	98	95	93	98	95	93	97	94	92					
85°	0				9	97	93	91	96	93	91	96	93	91					
90°	1				10	95	92	90	95	92	90	94	91	90					

ICO1SQPINADJ 35/15 WR 30D @ 0DEG TILT Input Watts: 19.8, Delivered Lumens: 1414, LPW: 71.4, S/MH: 0.48, Test No: 19-412-04P345



CP Summary		Zonal Lumen Summary				Coefficients of Utilization									Cone of Light				Luminance (cd/sq.m)		
	0°	Zone	Lumens	% Fixture	ρf ρc ρw	50%	80% 30%	10%	50%	20% 70% 30%		50%	50% 30%	10%	Mounting Height		Beam Diameter		Average Luminance		
0°	5,068	0° - 30°	1,324	94%	0	120	120	120	118	118	118	112	112	112	6.0	140.8	3.1	0°	3,788,625		
5°	4,712	0° - 40°	1,394	99%	1	114	112	110	112	110	109	108	106	105	8.0	79.2	4.2	45°	21,823		
15°	2,408	0° - 60°	1,413	100%	2	108	105	103	107	104	102	104	101	99	10.0	50.7	5.2	55°	1,109		
25°	476	0° - 90°	1,414	100%	3	104	100	97	102	99	96	100	97	95	12.0	35.2	6.2	65°	1,129		
35°	105	90° - 180°	0	0%	4	99	95	92	98	94	91	96	93	90	14.0	25.9	7.3	75°	615		
45°	21	0° - 180°	1,414	100%	5	95	91	88	95	91	88	93	89	87				85°	913		
55°	1				6	92	88	84	91	87	84	90	86	84	Beam Ang	gle: 29.1	0				
65°	1				7	89	84	81	88	84	81	87	83	81	Field Angle: 49.4°						
75°	0				8	86	81	78	85	81	78	84	81	78							
85°	0				9	83	79	76	83	78	76	82	78	75							
90°	1				10	80	76	73	80	76	73	79	76	73							

ICO1SQPINADJ 35/15 WR 45D @ 0DEG TILT Input Watts: 19.8, Delivered Lumens: 1416, LPW: 71.5, S/MH: 0.69, Test No: 19-412-07P345



	CP nmary	Zonal L		Coefficients of Utilization									Cone of Light				Luminance (cd/sq.m)		
					ρf ρc		80%			20% 70%			50%		Mounting Height		Beam Diameter		Average
	0°	Zone	Lumens	% Fixture	ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%		Beam			Luminance
0°	2,746	0° - 30°	1,249	88%	0	120	120	120	117	117	117	112	112	112	6.0	76.3	4.6	0°	2,052,603
5°	2,730	0° - 40°	1,381	98%	1	113	110	109	111	109	107	106	105	104	8.0	42.9	6.1	45°	36,447
15°	2,155	0° - 60°	1,415	100%	2	106	103	100	105	101	99	101	99	97	10.0	27.5	7.6	55°	1,109
25°	845	0° - 90°	1,416	100%	3	101	96	93	99	95	92	97	93	91	12.0	19.1	9.1	65°	1,129
35°	196	90° - 180°	0	0%	4	95	91	87	94	90	87	92	89	86	14.0	14.0	10.6	75°	615
45°	34	0° - 180°	1,416	100%	5	91	86	82	90	85	82	88	84	81				85°	1,825
55°	1				6	87	81	78	86	81	78	84	80	77	Beam Ang	•			
65°	1				7	83	78	74	82	77	74	81	77	73	Field Ang	le: 65.7°			
75°	0				8	79	74	71	79	74	70	77	73	70					
85°	0				9	76	71	67	75	71	67	74	70	67					
90°	1				10	73	68	64	72	68	64	72	67	64					

# nLight® AIR is the ideal solution for retrofit or new construction spaces where adding communication wiring is cost prohibitive. The integrated nLight AIR rPP20 Power Pack is part of each EVO Luminaire ordered with the NLTAIR option. These individually addressable controls offer the ultimate in flexibility during initial setup and for space repurposing.

# nLight® AIR Control Accessories

Order as separate catalog number. Visit nLight AIR.

 Wall Switches
 Model Number

 On/Off single pole
 rPODB (color) G2

 On/Off two pole
 rPODB 2P (color) G2

 On/Off & raise/lower single pole
 rPODB DX (color) G2

 On/Off & raise/lower two pole
 rPODB 2P DX (color) G2

# nLight® AIR Control Accessories (cont.)

 Occupancy Sensors (PIR/dual tech)
 Model Number

 Small motion 360°, ceiling
 rCMS 9 / rCMS PDT 9

 Large motion 360°, ceiling
 rCMS 10 / rCMS PDT 10

nLight® Wired The nLight® solution is a digital networked lighting control

system that provides both energy savings and increased user configurability by cost effectively integrating time-based, daylight-based, sensor-based and

Order as separate catalog number. Visit nLight.

**Model Number** 

nPODM (XX)

nPODM 2P (XX)

nPOD DX (XX) nPODM 2P DX (XX)

nPOD GFX (XX)

# Possibilites for nLight® AIR







# Possibilites for nLight® wired



nPS 80 EZ or nPP16 D (ordered as an accessory)

# Fixtures ordered with the NLT option

# Graphic touchscreen

On/Off & raise/lower single pole

On/Off & raise/lower two pole

**Photocell Controls** 

nLight® Wired Control Accessories

manual lighting control schemes.

Wall Switches
On/Off single pole

On/Off two pole

Dimming nCM ADCX

# nLight® Wired Control Accessories (cont.)

 Occupancy Sensors (PIR/dual tech)
 Model Number

 Small motion 360°, ceiling
 nCM 9 / nCM PDT 9

 Large motion 360°, ceiling
 nCM 10 / nCM PDT 10

 Wide View
 nWV 16 / nWV PDT 16

 Wall switch with raise/lower
 nWSX LV DX / nWSX PDT LV DX

Cat-5 Cables (plenum rated)

10', CAT5 CAT5 10FT J1 15', CAT5 CAT5 15FT J1



©

Wiring Key

-B-

(A)