

Multiple Layers of Light















- Tunable White solution that reproduces natural light patterns and colors, complements materials, and supports productivity.
- Rhythm Range (2700K-6500K) follows the cycle of daylight
- Productivity Range (3000K-5000K) to re-energize and inspire, ideal for collaboration
- WARMDIM® Range (3000K-1800K) for relaxing; warm and comfortable when dimmed
- Bounding Ray™ Optical Principle design provides 45° cut-off to source and source image
- Rated 65,000 hours (L80) at 25°C ambient temperature
- Dim to Dark 100% 0.1%



Distribution



0.9 S:MH

medium wide 1.0 S:MH



wide 1.2 S:MH

Superior Perfomance

Nominal lumens	750	1000	1500	2000	2500	3000
Delivered	840	1012	1406	1872	2416	2878
Wattage	9	10	14	19	24	29
Efficacy	92	97	100	101	100	98
*80 CRI, 3500)K					

Coordinated Apertures | Multiple Layers of Light



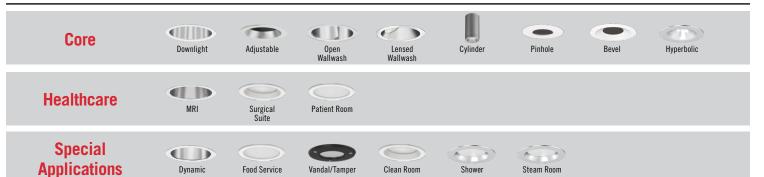




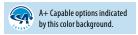
High Center Beam Layer I Incito



EVO + Incito — Multiple Layers of Light



4"



Luminaire Type:
Catalog Number:

EXAMPLE: EV04 TUWH PR0R/07 AR MD LD MV0LT NLT

Serie	S	Dynam	ic Feature	Dynam	Dynamic Range ¹		Nominal lumens values ²		ctor/Flang	ge Color		Trim St	yle
EV04	4" Round Downlight	TUWH	Tunable White Warm Dimming	PROR RHYR HALR	Productivity Range (3000K-5000K) Rhythm Range (2700K-6500K) Halogen Range (3000K-1800K)	/07 /10 /15 /20 /25 /30	750 lumens 1000 lumens 1500 lumens 2000 lumens 2500 lumens 3000 lumens	AR PR WTR GR	Clear Pewter Wheat Gold	WR ³ BR ³ WRAMF	White painted Black painted White painted antimicrobial finish	(blank)	Self- flanged Flangeless

Distribution	Aperture Finish	Voltage	Control Interface Type	Options
MD Medium (0.8 s/mh) MWD Medium wide (1.0 s/mh) WD Wide (1.2 s/mh)	LSS Semi-specular LD Matte-diffuse LS Specular	MVOLT 120 120V 277 277V	NLT4 NLTER4 NLIGHT nTune interface nLight nTune interface with emergency circuit ZT 0-10V dimming. Requires 2 controllers (one for intensity & one for CCT). DALI DALI logarithmic dimming to <1%.	SF Single fuse TRW ⁵ White painted flange TRBL ⁶ Black painted flange 90CRI High CRI (90+) E10WCP ⁷ Emergency battery pack, 10W Constant Power, CA Title 20 compliant with integral test switch E10WCPR ⁷ Emergency battery pack, 10W Constant Power, CA Title 20 compliant with remote test switch CP ⁶ Chicago Plenum BGTD Bodine Generator Transfer Device

ACCESSORIES — order as separate catalog numbers (shipped separately)

SCA4 CTA4-8 YK FCS 7TSN XXX nPODM 2P DX CCT XX nPODM 4S DX XX Sloped ceiling adapter. Degree of slope must be specified (5D, 10D, 15D, 20D, 25D, 30D). Ex: SCA4 10D. Refer to <u>TECH-190</u>. Ceiling thickness adapter (extends mounting frame to accommodate ceiling thickness up to 5"). Adds 1" to fixture height.

Fresco Lighting Control with DMX and ethernet; XXX = Color. Refer to <u>FRESCO</u> spec sheet for additional options.

nLight 2 Channels, On/off + raise/lower control, CCT, XX = Color. Refer to nLight. nLight 4 Scene Control, On/off + raise/lower control, XX = Color. Refer to nLight.

TILIBITE 4 Scelle Collitor, Univol + Taise/lower Collitor, AA = Color. Relet to <u>incignit</u>

nPODM 4S XX nLight 4 Scene Control, XX = Color. Refer to nLight.

ORDERING NOTES

- 1. PROR and RHYR available only with TUWH. HALR available only with WDIM.
- 2. Nominal lumen values when tested at 3500K.
- Not available with aperture finishes.
- TUWH + NLT/NLTER requires RGH mounting and power from nLight network bridge or nPS 80. WDIM + NLT/NLTER available factory installed with RGH; nLight field installed with other mounting types. Access required to location of remote mounted.
- For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with WR (white reflector) or FL (flangeless) option.
- For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with BR (black reflector) or FL (flangeless) option.
- 7. 11" of plenum depth or top access required for battery pack maintenance.
- 8. Voltage-specific (120 or 277V). Not available with battery pack options.







Optical Assemby

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

Optical design is a Bounding Ray™ design with 45° cutoff to source and source image. Top-down flash characteristic for superior glare control.

Unitized optics shall have mechanical attachment of the light engine to the lower reflector for complete optical alignment.

Flectrical

The luminaire shall operate from a 50 or 60 Hz ±3 Hz AC line over a voltage ranging from 120 VAC to 277 VAC. 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.

Input wires shall be 18AWG, 300V minimum, solid copper.

Controls

Tunable white nTune™ is an all-digital light color temperature control within an nLight enabled luminaire.

nTune™ allows color temperature settings through the Productivity Range of 3000K to 5000K or Rhythm Range of 2700K to 6500K.

Refer to nLight Programming User's Guide for instructions on customizing your application with SensorView™.

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 – 0.1% of rated lumen output with a smooth shut off function to step to 0%.

Construction

Luminaire housing shall be constructed of 16-gauge galvanized steel and have preinstalled telescopic mounting bars with maximum 32" and minimum 15" extension and 4" vertical adjustment.

Luminaires shall be suitable for installation in ceilings up to 1½" thick. (specify ceiling thickness adapter to extend frame to accommodate ceiling thickness up to 5").

Tool-less adjustments shall be possible after installation.

The assembly and manufacturing process for the luminaire shall be designed to assure all internal components are adequately supported to withstand mechanical shock and vibration.

25°C ambient temperature standard (1/2" clearance on all sides from non-combustible materials in non-IC applications, unless marked spacing noted other-

For use in insulated ceilings, a 3" clearance on all sides from insulation is required (unless marked spacing noted otherwise).

Listings

Fixtures are CSA 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.

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 20% over the minimum operational life of 60,000 hours.

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 www.acuitybrands.com/buy-american for additional information.

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

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*

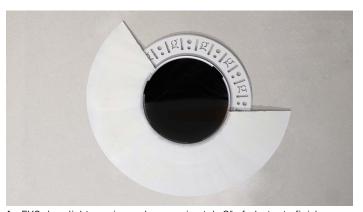
To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details





Partially finished mud ring, showing cross-section detail.



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



EVO with flangeless trim

Flangeless Installation

Gotham's flangeless 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 flangeless 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.



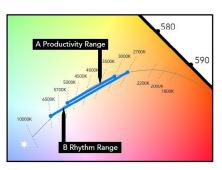
CC	CCT/CRI Multiplier Table											
CRI	CCT	Multiplier										
	2700K	0.96										
	3000K	0.97										
80	3500K	1.00										
	4000K	1.01										
	5000K	1.07										
	2700K	0.80										
	3000K	0.83										
90	3500K	0.85										
	4000K	0.87										
	5000K	0.91										

Lumen Output Multiplier - Finish Trim												
Finish Clear (AR) Pewter (PR) Wheat (WTR) Gold (GR) White (WR/WRAMF) Black (BR)												
Specular (LS)	1.00	0.88	0.83	0.95	N/A	N/A						
Semi-specular (LSS)	0.95	0.84	0.79	0.90	N/A	N/A						
Matte-diffuse (LD)	0.85	0.73	0.69	0.80	N/A	N/A						
Paint	N/A	N/A	N/A	N/A	0.87	0.73						

Driver Default Dimming Curve											
Nomenclature	Min Dimming	Driver Dim Curve	Control Dim Curve								
ZT	0.1%	Linear	Linear/Logarithmic								
DALI	0.1%	Linear	Linear/Logarithmic								

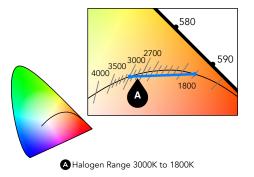
Distributions									
Distribution	Beam								
MD	51								
MWD	57								
WD	73								

MAINSTREAM DYNAMIC TUNABLE WHITE WITH NTUNE TECHNOLOGY



A Productivity Range 3000K to 5000K

B Rhythm Range 2700K to 6500K



Tunable white nTune™ is an all digital light color temperature control wihin an nLight enabled luminaire. This brings tunable white lighting control into the mainstream with repeatable, consistent results in an economical luminaire form and system already familiar to schools. Designers and facility operators are granted the freedom to tie scenes to specific activities or to complement colors or materials within a visual environment. nTune™ allows color temperature settings through the Productivity Range of 3000K to 5000K or Rhythm Range of 2700K to 6500K. Refer to nLight Programming User's Guide for instructions on customizing to your application with SensorView™.

TUNABLE WHITE GPHD

Gamut: One dimensional warm-Cool

Path: Direct 3000K to 5000K (Productivity Range) or 2700K to 6500K (Rhythm Range)

Handle: Two Natural Language Handles: Intensity and CCT Data: nLight with nTune technology for both handles of control

How to Estimate Delivered Lumens in Emergency Mode

Delivered Lumens = 1.25 x P x LPW

P = Output power of emergency driver. P = 10W for PS1055CP

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

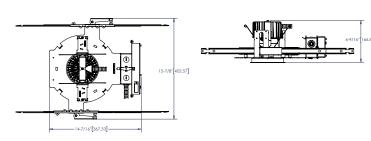
Aperture: 4-5/16" (11)

Ceiling Opening: 5-1/8" (13) self-flanged

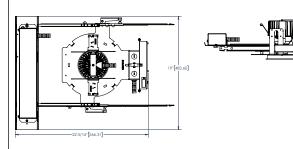
Overlap trim: 5-7/16" (13.8)

5-1/4" (13.3) flangeless

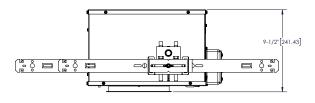
Standard

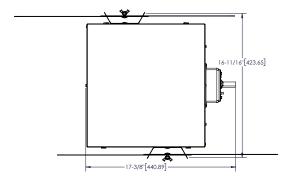


Battery Pack



CP Standard



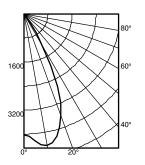


20% 70% 50% 30% 10%

116 116 116 109 107 106

EVO4 TUWH RHYR /30 4AR LS CRI80 2700K

INPUT WATTS: 29.3, DELIVERED LUMENS: 3105, LM/W=105.9, 0.80 S/MH, TEST NO. 19-032-01P61



	Ave	Lumens	Zone	Lumens	% Lamp	pw	50%	30%	10%	
0	4032		0° - 30°	2721.8	87.7	0	119	119	119	
5	4248	413	0° - 40°	3039.0	97.9	1	112	109	107	
15	4209	1160	0° - 60°	3101.5	99.9	2	105	101	98	
25	2659	1148	0° - 90°	3105.0	100.0	3	99	94	91	
35	429	317	90° - 180°	0.0	0.0	4	93	88	85	
45	81	57	0° - 180°	3105.0	*100.0	5	88	83	79	
55	5	5	*	Efficiency		6	84	78	75	
65	2	2				7	80	74	70	
75	1	1				8	76	70	67	
85	0	0				9	72	67	63	
90	0					10	69	64	60	

- 00	/0						
50% 30	%10%						
111 11	1 111			50% be		10% be	
105 10	4 102			49.7	10	66.1	0
100 97	7 95		Inital FC				
95 9	1 89	Mounting	Center				
90 86	83	Height	Beam	Diameter	FC	Diameter	FC
86 82		8.0	133.3	5.1	66.6	7.2	13.3
82 77	7 74	10.0	71.7	6.9	35.8	9.8	7.2
78 73	3 70	12.0	44.7	8.8	22.3	12.4	4.5
74 70	66	14.0	30.5	10.6	15.2	15.0	3.0
71 66		16.0	22.1	12.5	11.1	17.6	2.2
68 63							

50% beam -

49.7°

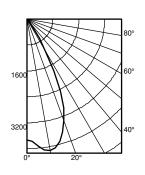
Mounting Center

10% beam -

66.1°

EV04 TUWH RHYR /30 4AR LS CRI80 3500K

INPUT WATTS: 29.3, DELIVERED LUMENS: 2880, LM/W=98.3, 0.80S S/MH, TEST NO. 19-032-01P63

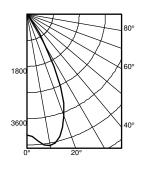


						рс		80%			70%			50%	
	Ave	Lumens	Zone	Lumens	% Lamp	pw	50%	30%	10%	50%	30%	10%	50%	30%	10%
0	3740		0° - 30°	2524.6	87.7	0	119	119	119	116	116	116	111	111	111
5	3941	383	0° - 40°	2818.8	97.9	1	112	109	107	109	107	106	105	104	102
15	3904	1076	0° - 60°	2876.8	99.9	2	105	101	98	103	100	97	100	97	95
25	2466	1065	0° - 90°	2880.1	100.0	3	99	94	91	97	93	90	95	91	89
35	398	294	90° - 180°	0.0	0.0	4	93	88	85	92	88	84	90	86	83
45	75	53	0° - 180°	2880.1	*100.0	5	88	83	79	87	83	79	86	82	78
55	5	5	*	Efficiency		6	84	78	75	83	78	74	82	77	74
65	2	2				7	80	74	70	79	74	70	78	73	70
75	1	1				8	76	70	67	75	70	67	74	70	66
85	0	0				9	72	67	63	72	67	63	71	66	63
90	0					10	69	64	60	68	63	60	68	63	60

.0	0.0	4	93	88	85	92	88	84	90	86	83	neigni	веат	Diameter	FU	Diameter	FU	
30.1	*100.0	5		83			83			82		8.0	123.6	5.1	61.8	7.2	12.4	
iency		6		78			78			77		10.0	66.5	6.9	33.2	9.8	6.6	
,		7		74				70		73		12.0	41.4	8.8	20.7	12.4	4.1	
		8		70			70			70		14.0	28.3	10.6	14.1	15.0	2.8	
		9		67			67			66		16.0	20.5	12.5	10.3	17.6	2.1	
		10	69	64	60		63			63								

EV04 TUWH RHYR /30 4AR LS CRI80 6500K

INPUT WATTS: 29.3, DELIVERED LUMENS: 3208, LM/W=109.5, 0.80 S/MH, TEST NO. 19-032-01P61



						рс		80%			70%			50%	
	Ave	Lumens	Zone	Lumens	% Lamp	pw	50%	30%	10%	50%	30%	10%	50%	30%	10%
0	4166		0° - 30°	2812.2	87.7	0	119	119	119	116	116	116	111	111	111
5	4389	427	0° - 40°	3139.9	97.9	1	112	109	107	109	107	106	105	104	102
15	4349	1199	0° - 60°	3204.4	99.9	2	105	101	98	103	100	97	100	97	95
25	2747	1187	0° - 90°	3208.1	100.0	3	99	94	91	97	93	90	95	91	89
35	443	328	90° - 180°	0.0	0.0	4	93	88	85	92	88	84	90	86	83
45	84	59	0° - 180°	3208.1	*100.0	5	88	83	79	87	83	79	86	82	78
55	5	6	*	Efficiency		6	84	78	75	83	78	74	82	77	74
65	2	2				7	80	74	70	79	74	70	78	73	70
75	1	1				8	76	70	67	75	70	67	74	70	66
85	0	0				9	72	67	63	72	67	63	71	66	63
90	0					10	69	64	60	68	63	60	68	63	60

		50% beam - 49.7°		10% beam - 66.1°	
	Inital FC				
Mounting	Center				
Height	Beam	Diameter	FC	Diameter	FC
8.0	137.7	5.1	68.9	7.2	13.8
10.0	74.1	6.9	37.0	9.8	7.4
12.0	46.2	8.8	23.1	12.4	4.6
14.0	31.5	10.6	15.8	15.0	3.1
16.0	22.9	12.5	11.4	17.6	2.3

nLight® 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 manual lighting control schemes.

nLight® Wired Control Accessories

Order as separate catalog number. Visit nLight.

Wall Switches Model Number On/Off single pole nPODM (color) On/Off two pole nPODM 2P (color) On/Off & raise/lower single pole nPOD DX (color) On/Off & raise/lower two pole nPODM 2P DX (color) Graphic touchscreen nPOD GFX (color)

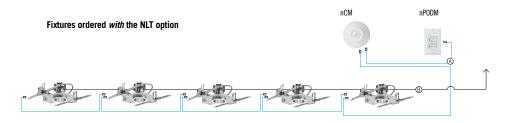
Photocell Controls

Dimming nCM ADCX

Possibilites for nLight® wired



nPS 80 EZ or nPP16 D



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)

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

