

# Multiple Layers of Light















## **General Illumination Shower Downlight with nTune**

4"

#### **Feature Set**

- 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
- · Non-conductive dead-front trim
- Flush or regressed lensed trim with antimicrobial finish for wipe-down areas
- Rated 65,000 hours (L80) at 25°C ambient temperature
- Dim to Dark 100% 0.1%



#### Distribution



## **Superior Perfomance**

Nominal lumens	750	1000	1500	2000	2500
Delivered	724	1006	1409	1818	2165
Wattage	11	14	19	24	29
Efficacy	69	72	74	76	75
*80 CRI, 3500	K				

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



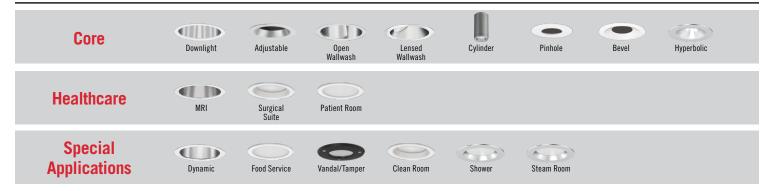




**High Center Beam Layer I Incito** 



EVO + Incito — Multiple Layers of Light





Luminaire Type:
Catalog Number:

#### **EXAMPLE: EVO4SH TUWH RHYR/10 DFF SMO MVOLT NLT**

Series		Dynam	ic Feature	Dynamic Range <sup>1</sup>		Nominal lumens values <sup>2</sup>		Reflector/Lens Setting/Flange Color		Lens	
EVO4SH 4" Ro Show Down	ver	TUWH WDIM	Tunable White Warm Dimming	PROR RHYR HALR	Productivity Range (3000K-5000K) Rhythm Range (2700K-6500K) Halogen Range (3000K-1800K)	/10 /15 /20 /25 /30	1000 lumens 1500 lumens 2000 lumens 2500 lumens 3000 lumens	DFR DFF DFRAMF DFFAMF	Regressed lensed white trim Flush lensed white trim Regressed lensed white trim with antimicrobial finish Flush lensed white trim with antimicrobial finish	SOL SMO	Textured Lens Smooth Clear Lens

Voltage	Control Interface Type	Options
MVOLT         Multi-Volt           120         120V           277         277V	NLT3 nLight nTune interface NLTER3 nLight nTune interface with emergency circuit ZT 0-10V dimming DALI logarithmic dimming to <1%.	SF Single fuse. Specify 120V or 277V. E10WCPR <sup>4</sup> Emergency battery pack, 10W Constant Power, CA Title 20 compliant with remote test switch BGTD Bodine generator transfer device  90CRI High CRI (90+) CP <sup>5</sup> Chicago Plenum

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

SCA4 Sloped ceiling adapter. Degree of slope must be specified (5D, 10D, 15D, 20D, 25D, 30D). Ex: SCA4 10D. Refer to <u>TECH-190</u>.

CTA4-8 YK

Ceiling thickness adapter (extends mounting frame to accommodate ceiling thickness up to 5"). Adds 1" to fixture height.

FCS 7TSN XXX

Fresco Lighting Control; XXX = Color. Refer to FRESCO spec sheet for additional options.

nPODM 2P DX CCT XX

nLight 2 Channels, On/off + raise/lower control, CCT, XX = Color

nLight 4 Scene Control, On/off + raise/lower control, XX = Color

nPODM 4S XX nLight 4 Scene Control, XX = Color

## ORDERING NOTES

- PROR and RHYR available only with TUWH. HALR available only with WDIM.
- Nominal lumen values when tested at 3500K.
- 3. Requires power from nLight network bridge or nPS 80.
- 11" of plenum depth or top access required for battery pack maintenance
- 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.

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

#### 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. 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  $1\frac{1}{2}$ " 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 otherwise).

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 <a href="https://www.acuitybrands.com/buy-american">www.acuitybrands.com/buy-american</a> for additional information.

#### Warranty

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

#### 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 www.acuitybrands.com/aplus.

\*See ordering tree for details



DFF SMO (Flush, Clear lens)									
Nominal Lumens 750 1000 1500 2000 2500									
Delivered	724	1006	1409	1818	2165				
Wattage	11	14	19	24	29				
Efficacy	69	72	74	76	75				

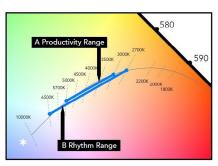
\*80 CRI, 3500K

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

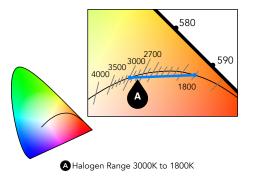
Lumen Output Multiplier									
CRI	CCT	Multplier							
	2700K	0.96							
	3000K	0.97							
80	3500K	1.00							
	4000K	1.01							
	5000K	1.07							
	2700K	0.80							
	3000K	0.83							
90	3500K	0.85							
	4000K	0.87							
	5000K	0.91							

Reflector Finish Multiplier							
Reflector Finish	Multiplier						
LS - Specular	1						
LSS - Semi Specular	0.956						
WR - White	0.87						
LD - Matte Diffuse	0.85						
BR - Black	0.73						

#### 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.

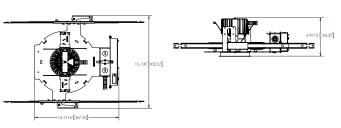
Aperture: 4-5/16" (11)

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

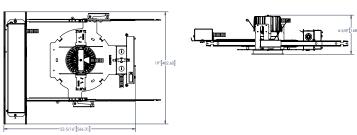
Overlap trim: 5-7/16" (13.8)

5-1/4" (13.3) flangeless

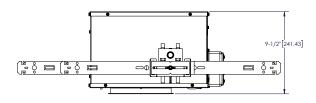
## **Standard**

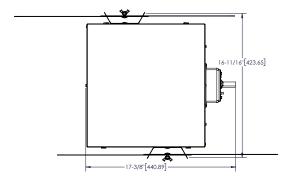


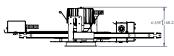
## **Battery Pack**



## **CP Standard**

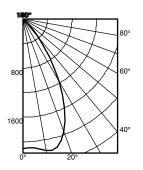






## EVO4SH TUWH RHYR /25 4DFF SMO CRI8O 3500K

INPUT WATTS: 29.5, DELIVERED LUMENS: 2165, LM/W=73.4, 1.0 S/MH, TEST NO. LTL29878P99

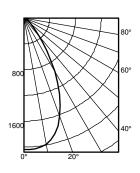


						pc		80%			70%			50%	
	Ave	Lumens	Zone	Lumens	% Lamp	pw	50%	30%	10%	50%	30%	10%	50%	30%	10%
0	2107		0° - 30°	1526.4	70.5	0	119	119	119	116	116	116	111	111	111
5	2110	204	0° - 40°	1992.2	92.0	1	111	108	106	108	106	104	104	103	101
15	2161	599	0° - 60°	2143.6	99.0	2	103	99	95	101	97	94	98	95	92
25	1601	723	0° - 90°	2164.1	100.0	3	96	91	87	94	90	86	92	88	85
35	748	466	90° - 120°	0.0	0.0	4	89	84	79	88	83	79	86	82	78
45	152	132	90° - 130°	0.0	0.0	5	84	78	73	83	77	73	81	76	72
55	18	20	90° - 150°	0.3	0.0	6	78	72	68	77	72	68	76	71	67
65	11	11	90° - 180°	0.9	0.0	7	74	67	63	73	67	63	72	66	63
75	6	7	0° - 180°	2165.0	*100.0	8	69	63	59	69	63	59	67	62	59
85	3	3	*	Efficiency		9	65	59	55	65	59	55	64	59	55
90	0					10	62	56	52	61	56	52	60	55	52

1		50% be		10% beam -		
1		53.1	0	78.0°		
2		Inital FC				
5	Mounting	Center				
3	Height	Beam	Diameter	FC	Diameter	FC
2	8.0	69.7	5.5	34.8	8.9	7.0
7	10.0	37.5	7.5	18.7	12.1	3.7
3	12.0	23.3	9.5	11.7	15.4	2.3
9	14.0	15.9	11.5	8.0	18.6	1.6
5	16.0	11.6	13.5	5.8	21.8	1.2

## EV04SH TUWH RHYR /25 4DFF SOL CRI80 3500K

INPUT WATTS: 29.5, DELIVERED LUMENS: 2059, LM/W=69.8, 0.91 S/MH, TEST NO. LTL29877P99



						ρı				20	/0				
						рс		80%			70%			50%	
	Ave	Lumens	Zone	Lumens	% Lamp	pw	50%	30%	10%	50%	30%	10%	50%	30%	109
0	2045		0° - 30°	1296.8	63.0	0	119	119	119	116	116	116	111	111	111
5	2038	193	0° - 40°	1692.6	82.2	1	109	106	104	107	105	102	103	101	99
15	1860	515	0° - 60°	1956.2	95.0	2	100	96	92	99	94	91	95	92	89
25	1298	589	0° - 90°	2059.4	100.0	3	93	87	83	91	86	82	89	84	81
35	629	396	90° - 180°	0.0	0.0	4	86	80	75	85	79	74	82	77	74
45	219	179	0° - 180°	2059.4	*100.0	5	80	73	69	79	73	68	77	72	68
55	92	85	*1	Efficiency		6	74	68	63	74	67	63	72	67	62
65	57	56				7	70	63	59	69	63	58	68	62	58
75	34	36				8	65	59	54	65	59	54	64	58	54
85	9	11				9	62	55	51	61	55	51	60	54	51
90	0					10	58	52	48	58	52	48	57	51	47

-			50% be		10% beam - 77.7°		
		Inital FC					
	Mounting	Center					
	Height	Beam	Diameter	FC	Diameter	FC	
	8.0	67.6	5.0	33.8	8.9	6.8	
	10.0	36.4	6.8	18.2	12.1	3.6	
	12.0	22.7	8.6	11.3	15.3	2.3	
	14.0	15.5	10.4	7.7	18.5	1.5	
	16.0	11.2	12.2	5.6	21.7	1.1	

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) nPOD GFX (color) Graphic touchscreen

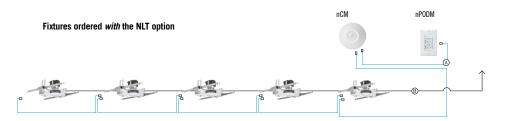
#### **Photocell Controls**

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

