

ACL5

ACL5 is a recessed luminaire tailored for LED lighting technology and fully capable of achieving pattern design due to its minimal housing shape, use of patented HE Tech™ lens, and excellent distribution.

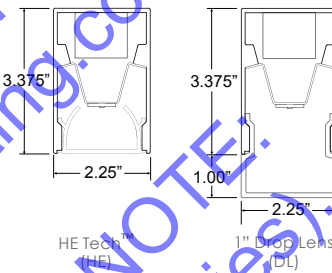


Performance

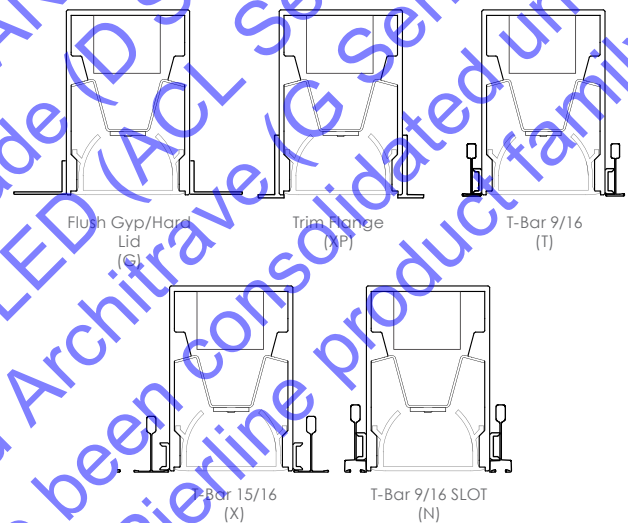
OUTPUT	DISTRIBUTION	DIRECT DELIVERED LUMEN OUTPUT	INPUT WATT	EFFICACY
LVH (Very high)	HE Tech™	1229 lm/ft	13.5 W / ft	91 lm / W
	Flat Blade Louvers	810 lm/ft	13.5 W / ft	60 lm / W
	1" Drop Lens	1148 lm/ft	13.5 W / ft	85 lm / W
	Wall wash	1188 lm/ft	13.5 W / ft	88 lm / W
	Batwing	1256 lm/ft	13.5 W / ft	93 lm / W
	Room Fill	1188 lm/ft	13.5 W / ft	88 lm / W

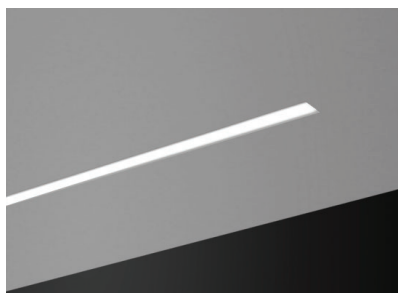
For the complete photometric data of this fixture refer to page 3 and 4.
*Flat Blade Louver calculated using the aluminum finish.

Dimensions



Mounting options





Need help?
Don't see what you need?
We know that having so many options can be overwhelming. Please reach out to our factory for any specific request or questions you have.

Our Design Assist team
(designassist@alights.com)
is here to make the process move smoothly.

ACLS							
SERIES	LENGTH OR PATTERN TYPE	INTERSECTION TYPE	OUTPUT	CCT	CRI		
ACLS	_ Nominal Length ¹ M_ Exact Length ² PL_ "L" Shape ³ PU_ "U" Shape ³ PR_ Rectangle/Square ³ CP_ Custom Pattern ⁴	IT "I" Intersection IX "X" Intersection IY "Y" Intersection ¹	LS Standard Output LH High Output LVH Very High Output C_ Custom Output	27 Direct 2700k 30 Direct 3000k 35 Direct 3500k 40 Direct 4000k DW Dim-to-warm ¹ TW Tunable White ^{1,2} RW RGBW (full color + 3000k White) ^{2,3}	_ 80+ CRI CRI 90+ CRI ¹		
¹Indicate length of each section of pattern either nominal or exact. ²Specify in feet to the nearest foot (i.e. 12'). ³Specify in inches to the nearest 1/8 (i.e. 180/128). ⁴Specify in inches to the nearest 1/8. ⁵Contact Design Assist		¹Not available with Drop Lens. Flat Blade Louvers only available in 90° degrees. ²Fully illuminated intersection available with HE Tech and Polycarbonate Flush Wisp optics only. Contact Design Assist.	¹Contact Design Assist for custom output and non-standard light outputs.	¹Standard CCT range is 27-50K. Contact Design Assist for custom range. ²Photometric data pending for Tunable White and RGBW. ³RGBW is UL pending and only available in DMX dimming. Contact Design Assist for white CCT's other than 3000k.	¹Not available with (TW) Tunable White or (DW) Dim-to-Warm. Contact Design Assist to discuss RGBW possibilities.		

VOLTAGE	DIRECT OPTICS	MOUNTING	FINISH	DIMMING
U 120-277V 3 347V ¹	HE HE Tech DL 1" Drop Lens ¹ LV Flat blade louvers ² PFW Polycarbonate Flush Wisp Lens ³ WW Wall Wash BW Batwing Wide RF Room Fill	G Flush Cyp / Mud Over Flange RG 1" Regressed Cyp / Mud Over Flange ¹ XP 1/2" Trim Flange T T-Bar 9/16" X T-Bar 15/16" N T-Bar 9/16 Slot	W White B Black T Titanium O Other CBD SFB SPN SDW SCY LME SMN	D Standard 0-10V dimming ¹ D2 Phase dimming ² D3 DMX 0.1% dim-to-dark D4 DALI dim-to-off (EldoLED) NAIR nLight @AIR (dim-to-off) ³ NWIR nLight @Wired (dim-to-off)
¹Not available with LEDcode or EM. ²Not available in Wet Location. ³Aluminum Standard. Not available in Wet Location. ⁴IK 10 Rated		¹Trim required for RG and XP only.	¹Specify RAL or other custom color.	¹0-10V dimming standard unless otherwise specified. ²Reference ERP-PHB driver for compatible dimmers. ³nLight AIR components have only integrated into fixtures. Not available with 347V LEDcode or EM. If 347V, only available in 0-10V.

EMERGENCY	SENSORS	OPTIONS
EC Circuited ¹ E_ Battery ²	OF Occupancy Sensor - Fixture PF Photocell / Daylight Sensor - Fixture OPF Occupancy / daylight Sensor - Fixture	M Multi-Circuit ¹ K Natatorium application ² Q Wet location ³ CP Chicago Plenum MRI MRI ⁴
¹Not available for 347V. See technical data for more information. ²Not available on fixtures < 4' length. ³Indicate length of separate EM circuit. If unknown, a 4' circuit will be provided by default. For full-length EM fixtures, no need to indicate EC. 4' fixtures will have a separate 2' EM circuit section. ⁴Factory-installed emergency battery pack. Specify desired quantity of batteries.	¹Specify quantity of sensors per fixture. Sensor will be matched to dimming input. All sensors to be integral to fixture. Remote sensors are to be provided by others.	¹Submit building approval requirements. ²See guide and contact Design Assist. Not compatible with Drop Lens or Flat Blade Louvers Optics. ³Wet location suitable in full coverage and/or mullion mounted applications (direct to sky not recommended); not suitable for large weather applications. See Wet Location brochure and contact Design Assist for more information. Not compatible with Drop Lens, Flat Blade Louvers optics. ⁴Review MRI brochure for more information.

Light distribution

OUTPUT (DC)

LVH: Very high output - 13.5 W/ft

LH: High output - 10 W/ft

LS: Standard output - 5 W/ft

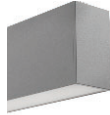
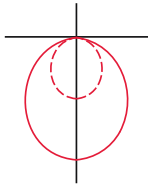
C: Custom tuned output - Contact Design Assist

Photometric data

HE TECH™

LVH- 4FT- 3500K

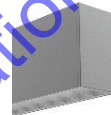
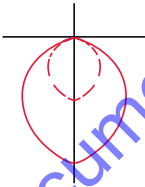
Lumens: 1229 lm/ft
Input watts: 13.5 W/ft
Efficacy: 91 lm/W



DIRECT FLAT BLADE LOUVERS

LVH- 4FT- 3500K

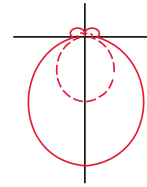
Lumens: 810 lm/ft
Input watts: 13.5 W/ft
Efficacy: 60 lm/W



DIRECT 1" DROP-LENS

LVH- 4FT- 3500K

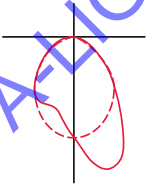
Lumens: 1148 lm/ft
Input watts: 13.5 W/ft
Efficacy: 85 lm/W



DIRECT WALL WASH

LVH- 4FT- 3500K

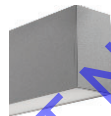
Lumens: 1188 lm/ft
Input watts: 13.5 W/ft
Efficacy: 88 lm/W



DIRECT BATWING

LVH- 4FT- 3500K

Lumens: 1256 lm/ft
Input watts: 13.5 W/ft
Efficacy: 93 lm/W



DIRECT ROOM FILL

LVH- 4FT- 3500K

Lumens: 1188 lm/ft
Input watts: 13.5 W/ft
Efficacy: 88 lm/W



Sample installation - Workspace

LH DOWN - 3500K

Room dimensions: 30'L x 20'W x 12'H

Reflectance: 80% / 50% / 20%

Mounting height: 9 ft A.F.F.

Fixture length: 4 ft

Calculation grid: 2 ft x 2 ft

Calculation plane (horizontal): 2.5 ft A.F.F.

Average Illuminance: 36 fc

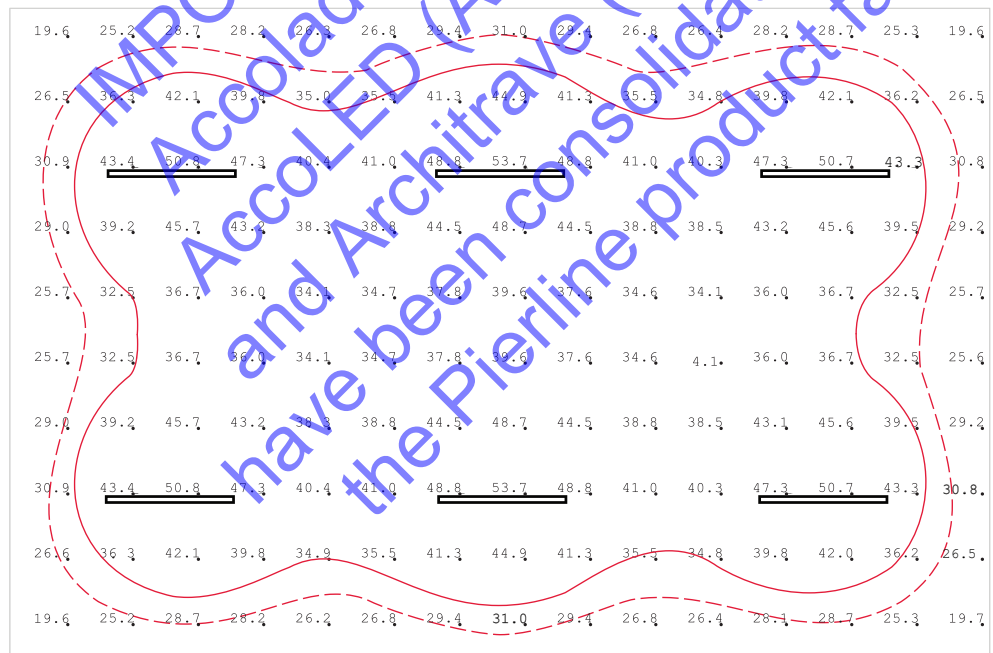
Fixture spacing: 10 ft x 10 ft

Uniformity: 1.9:1 (avg/min)

TOP VIEW

30 fc: ———

25 fc: - - - - -

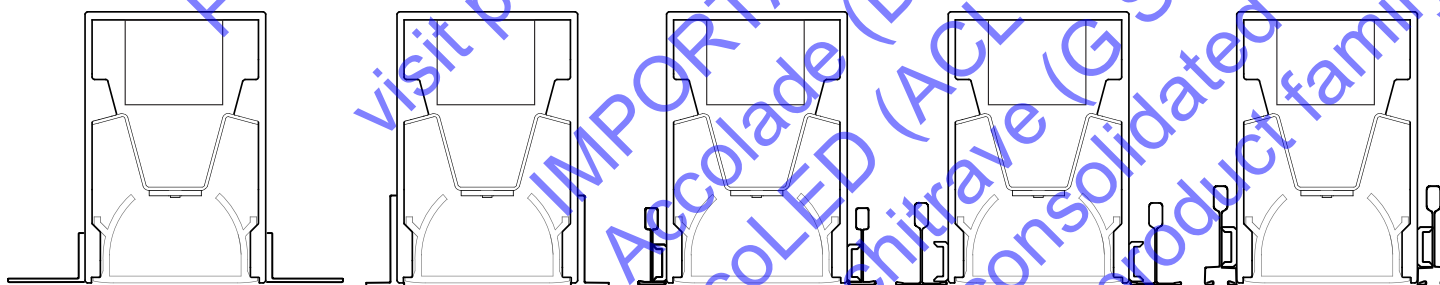


Light loss factors (LLF)

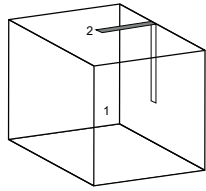
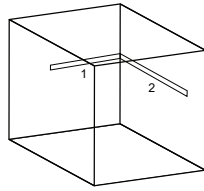
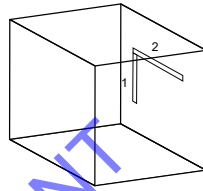
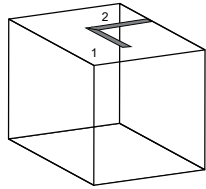
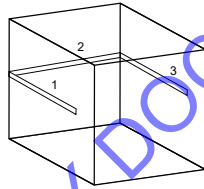
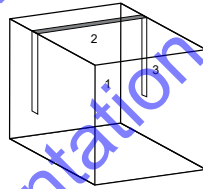
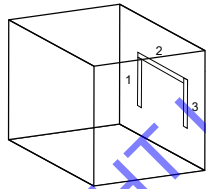
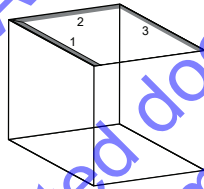
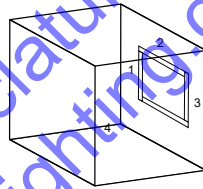
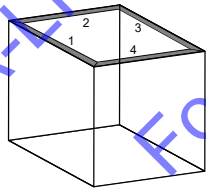
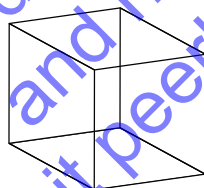
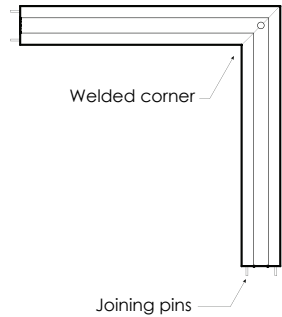
OUTPUT	CCT	LLF RATIO		DIRECT EFFICACY											
				HE TECH		FLAT BLADE LOUVER		1" DROP LENS		WALL WASH		BATWING		ROOM FILL	
		CRI 80	CRI 90	CRI 80	CRI 90	CRI 80	CRI 90	CRI 80	CRI 90	CRI 80	CRI 90	CRI 80	CRI 90	CRI 80	CRI 90
LVH (very high)	4000K	1.02	0.84	93 lm/W	76 lm/W	61 lm/W	50 lm/W	87 lm/W	71 lm/W	90 lm/W	74 lm/W	95 lm/W	78 lm/W	90 lm/W	74 lm/W
	3500K	1	0.83	91 lm/W	76 lm/W	60 lm/W	50 lm/W	85 lm/W	71 lm/W	88 lm/W	73 lm/W	93 lm/W	77 lm/W	88 lm/W	73 lm/W
	3000K	0.97	0.81	88 lm/W	74 lm/W	58 lm/W	49 lm/W	82 lm/W	69 lm/W	85 lm/W	71 lm/W	90 lm/W	75 lm/W	85 lm/W	71 lm/W
	2700K	0.94	0.79	86 lm/W	72 lm/W	56 lm/W	47 lm/W	80 lm/W	67 lm/W	83 lm/W	70 lm/W	87 lm/W	73 lm/W	83 lm/W	70 lm/W
LH (high)	4000K	1.02	0.84	98 lm/W	81 lm/W	62 lm/W	51 lm/W	92 lm/W	76 lm/W	90 lm/W	74 lm/W	99 lm/W	81 lm/W	90 lm/W	74 lm/W
	3500K	1	0.83	96 lm/W	80 lm/W	61 lm/W	51 lm/W	90 lm/W	75 lm/W	88 lm/W	73 lm/W	97 lm/W	81 lm/W	88 lm/W	73 lm/W
	3000K	0.97	0.81	93 lm/W	78 lm/W	59 lm/W	49 lm/W	87 lm/W	73 lm/W	85 lm/W	71 lm/W	94 lm/W	79 lm/W	85 lm/W	71 lm/W
	2700K	0.94	0.79	90 lm/W	76 lm/W	57 lm/W	48 lm/W	85 lm/W	71 lm/W	83 lm/W	70 lm/W	91 lm/W	77 lm/W	83 lm/W	70 lm/W
LS (standard)	4000K	1.02	0.84	106 lm/W	87 lm/W	67 lm/W	55 lm/W	99 lm/W	81 lm/W	98 lm/W	81 lm/W	108 lm/W	89 lm/W	98 lm/W	81 lm/W
	3500K	1	0.83	104 lm/W	86 lm/W	66 lm/W	55 lm/W	97 lm/W	81 lm/W	96 lm/W	80 lm/W	106 lm/W	88 lm/W	96 lm/W	80 lm/W
	3000K	0.97	0.81	101 lm/W	84 lm/W	64 lm/W	53 lm/W	94 lm/W	79 lm/W	93 lm/W	78 lm/W	103 lm/W	86 lm/W	93 lm/W	78 lm/W
	2700K	0.94	0.79	98 lm/W	82 lm/W	62 lm/W	52 lm/W	91 lm/W	77 lm/W	90 lm/W	76 lm/W	100 lm/W	84 lm/W	90 lm/W	76 lm/W

OUTPUT	CCT	LLF RATIO		DIRECT LUMEN OUTPUT											
				HE TECH		FLAT BLADE LOUVER		1" DROP LENS		WALL WASH		BATWING		ROOM FILL	
		CRI 80	CRI 90	CRI 80	CRI 90	CRI 80	CRI 90	CRI 80	CRI 90	CRI 80	CRI 90	CRI 80	CRI 90	CRI 80	CRI 90
LVH (very high)	4000K	1.02	0.84	1253 lm/ft	1032 lm/ft	826 lm/ft	680 lm/ft	1170 lm/ft	964 lm/ft	1212 lm/ft	998 lm/ft	1281 lm/ft	1055 lm/ft	1212 lm/ft	998 lm/ft
	3500K	1	0.83	1229 lm/ft	1020 lm/ft	810 lm/ft	672 lm/ft	1148 lm/ft	952 lm/ft	1188 lm/ft	986 lm/ft	1256 lm/ft	1042 lm/ft	1188 lm/ft	986 lm/ft
	3000K	0.97	0.81	1192 lm/ft	995 lm/ft	786 lm/ft	656 lm/ft	1113 lm/ft	929 lm/ft	1152 lm/ft	962 lm/ft	1218 lm/ft	1017 lm/ft	1152 lm/ft	962 lm/ft
	2700K	0.94	0.79	1155 lm/ft	971 lm/ft	761 lm/ft	640 lm/ft	1079 lm/ft	907 lm/ft	1117 lm/ft	939 lm/ft	1180 lm/ft	992 lm/ft	1117 lm/ft	939 lm/ft
LH (high)	4000K	1.02	0.84	979 lm/ft	806 lm/ft	622 lm/ft	512 lm/ft	918 lm/ft	756 lm/ft	898 lm/ft	739 lm/ft	989 lm/ft	815 lm/ft	898 lm/ft	739 lm/ft
	3500K	1	0.83	960 lm/ft	797 lm/ft	610 lm/ft	506 lm/ft	900 lm/ft	747 lm/ft	880 lm/ft	730 lm/ft	970 lm/ft	805 lm/ft	880 lm/ft	730 lm/ft
	3000K	0.97	0.81	931 lm/ft	778 lm/ft	592 lm/ft	494 lm/ft	873 lm/ft	729 lm/ft	854 lm/ft	713 lm/ft	941 lm/ft	786 lm/ft	854 lm/ft	713 lm/ft
	2700K	0.94	0.79	902 lm/ft	758 lm/ft	573 lm/ft	482 lm/ft	846 lm/ft	711 lm/ft	827 lm/ft	695 lm/ft	912 lm/ft	766 lm/ft	827 lm/ft	695 lm/ft
LS (standard)	4000K	1.02	0.84	530 lm/ft	437 lm/ft	337 lm/ft	277 lm/ft	495 lm/ft	407 lm/ft	490 lm/ft	403 lm/ft	541 lm/ft	445 lm/ft	490 lm/ft	403 lm/ft
	3500K	1	0.83	520 lm/ft	432 lm/ft	330 lm/ft	274 lm/ft	485 lm/ft	403 lm/ft	480 lm/ft	398 lm/ft	530 lm/ft	440 lm/ft	480 lm/ft	398 lm/ft
	3000K	0.97	0.81	504 lm/ft	421 lm/ft	320 lm/ft	267 lm/ft	470 lm/ft	393 lm/ft	466 lm/ft	389 lm/ft	514 lm/ft	429 lm/ft	466 lm/ft	389 lm/ft
	2700K	0.94	0.79	489 lm/ft	411 lm/ft	310 lm/ft	261 lm/ft	456 lm/ft	383 lm/ft	451 lm/ft	379 lm/ft	498 lm/ft	419 lm/ft	451 lm/ft	379 lm/ft

Mounting options

Flush Gyp/
Hard Lid
(G)Trim Flange
(XP)T-Bar 9/16
(N)T-Bar 5/16
(N)T-Bar 9/16 SLOT
(N)

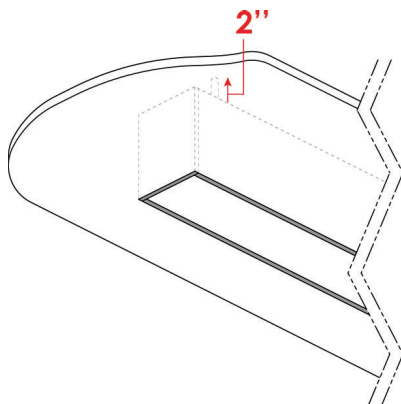
Standard patterns

Wall to ceiling
(PLCW)Wall to wall
(PLWW)Wall only
(PLW)Ceiling only
(PLC)Wall to wall
(PUWW)Wall to ceiling
to wall
(PLWC)Wall only
(PUW)Ceiling only
(PUC)Wall only
(PRW)Ceiling only
(PRC)Custom Pattern
(CP)

Corner detail

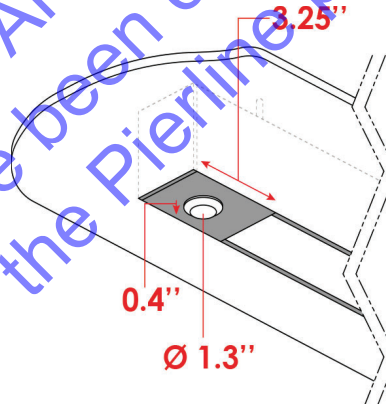
NLight® dimensions

AIR : rIO Recessed



*Fixture mounted module for nLight AIR only.

AIR : res7 Recessed



*Fixture mounted sensors and filler panel for nLight AIR only.

Project name

Type

Date

Quantities

LINEAR DIMENSIONS

Nominal or exact lengths to the nearest 1/8th of an inch available as individual fixtures or joined to create continuous row lengths, minimum fixture lengths is 12 feet. Patterns comprised of 90 degree precisely welded fully illuminated corners provide a multitude of geometric options and architectural transitions.

Custom - Contact [Design Assist](#) for modifications to product not detailed within specification sheets.

OPTICS

The high-efficiency extruded diffuse acrylic lens technology, patented HE Tech™, features an integrated opaque white reflector. It delivers superior lumen output with optimal uniform lens surface luminance for direct distribution.

Flat Blade Louvers are used to cut down on glare and better control the light source on ACL5. This option includes a linear film diffuser (inserted between the louvers and the LEDs), that enhances glare control. The louvers standard finish is aluminum. Other colors and custom finish options available, specify RAL# or contact factory regarding custom finish requirement.

Drop Lens is a light diffuser option for ACL5 that turns the luminaire into a decorative graphical statement. The diffuser drops down from the luminaire's main body of 1" and sits flush with the metal end caps. Once lit, the drop lens glows vividly and offers a wider diffusion pattern. For recessed mounts, the lens protrudes past the ceiling, and the ends are covered with a slim painted endcap.

Perimeter fill - Wall wash and Batwing wide for direct distributions are film optics that refract light along with an HE Tech™ extruded diffuse acrylic lens with integrated opaque white reflector.

LED LIGHT SOURCE

Custom manufactured linear board array uses high performance Nichia® LED in combination with a performance driven heat sink technology. Tested in accordance with LM79 and LM-80; L70>60,000hr; operated at reduced output for high efficacy and lumen maintenance. 2700K, 3000K, 3500K, and 4000K with 80+ CRI standard; other color temperatures and 90+ CRI available upon request, contact factory. LED color variation maintained at a 3-step MacAdam ellipse (SDCM 3x). LEDs are available in Standard, High and Very High outputs. Refer to photometry for delivered lumens.

LED DIMMING DRIVER

Factory tuned constant current electronic 0-10V control dimming driver is standard. Specification grade dimming down to 1%. Driver life of 50,000 hrs with ambient operating temperature range of -20°C to 50°C, maximum case temperature of 80°C. Electrical specifications at maximum driver load: PF >0.9, THD <20%, >85% Efficiency.

EMERGENCY

This luminaire is provided with a factory installed LED emergency lighting battery pack for both normal and emergency operation, 120-277v only. This fixture integrated unit contains long-life Ni- Cad recyclable battery, 24 hour charger, and converter circuit. Test switch and charge indicator provided. Test button to be remote located within 3 feet of the luminaire, by others in accordance with local code. Emergency mode provides constant power to a nominal 12W LED load for a period of 90 minutes, delivering 1200 lumens of unwavering illumination throughout the full 90 minute emergency duration. Unless otherwise specified, the emergency battery pack will illuminate one 2 foot end in the direct portion of the fixture.

Emergency circuiting provided as a separate circuit from normal power circuit according to NEC requirements, specify circuit length and location.

CONTROLS

Low-profile integral occupancy and daylight sensors are available to deliver high performance control in an architecturally pleasing package.

Integrated nLight® for system networking wired and wireless:

nLIGHT® AIR WIRELESS

The integrated API smart sensor is part of each luminaire in the nLight® AIR network, which can be grouped to control multiple luminaires. The granularity of control with the digital PIR occupancy detection and daylight sensing makes a great solution for any application. Optionally you can order nLight® AIR less sensors for compatibility with an nLight Air wireless system. The rIO, rES7, rMSOD, and rCMS models are available for integration.

CONTROLS AND SYSTEM NETWORKING OPTIONS

For wired networking via Cat-5e, choose an nLight® wired module. The rIO EZ PH, rIO EZDL CCT, rES7 and rCM are available for integration.

nLight enabled, remote mounted controls provided by others. Please contact an Acuity controls representative for more information.

MOUNTING

Common recessed mounting options available. Contact factory for applications regarding modified recessed mounting conditions.

Flush Gypsum Flange: Raw aluminum flange is attached to blocking (by others), then mudded over and/or painted by installing contractor to provide a "flangeless" fixture appearance in recessed ceiling/wall applications.

Trim Flange: 1/2" wide visible powder coated flange, specify finish requirement. Fixture is mounted to structure using threaded rod or ceiling tie wires (provided by others). Use of a-clamp™ secures fixture trim and housing around ceiling/wall material. Use for any gypsum or hard ceiling/wall that requires a minimal flange covering the ceiling cut-out edge.

T-Bar/Grid Ceiling: 9/16" or 15/16" standard T-Bar or 9/16" slot ceiling. Raw aluminum flange sits on T-Bar and is concealed from view.

FINISH

Electrostatically applied powder coat finish. Standard finish options include titanium, white, and black. Other colors and custom finish options available, specify RAL# or contact factory regarding custom finish requirement.

LISTING

IC Rated for IC, Airtight, CCEA Ceilings. CCEA mark applied for Chicago Plenum applications. UL/CUL rated for Damp Locations. Tested in accordance with UL 1598 and certified to CEC/CSA C22.1, NEC, ANSI/NFPA 70, and NOM-001-SEDE.

UL Wet location label available. Complies with UL definition of wet locations to prevent accumulation of water on live parts, electrical components, or conductor not identified for use in contact with water through the provision of weep holes or through the lens. Waterproof connectors to be provided by others. Installing contractor responsible for properly sealing and waterproofing all field drilled mounting and power feed locations.

The ACL5 is assembled in America and complies with the Buy America(n) Act (BAA), Build America, Buy America (BABA) government procurement requirements under FAR, DFARS, and DOT.

WARRANTY

Please refer to the full terms and conditions on our website:
www.alights.com/downloads/warranty/