

HCB16 | Swell

3" wide aperture recessed LED luminaire, Illuminated by BIOS®



Project: _____ Type: _____



FEATURES

The Swell Series HCB16 is a linear recessed LED luminaire tailored for health-centric lighting installations. The 3" wide aperture is available with multiple optic options and constructed for installation in common grid ceilings or in hard walls and ceilings with flange and trimless variants. The HCB16 is Controls Capable, being offered with a variety of integrated control options.

The HCB16 fixture is embedded with BIOS SkyBlue® circadian solutions to produce the healthy "blue sky" light signal needed to stimulate human circadian biology. This specific light wavelength communicates directly with human biology through a non-visual photoreceptor to regulate circadian rhythms, providing healthier sleep patterns and ultimately, better health.

SPECIFICATIONS

Fixture housing and trim elements made of extruded aluminum and 16 ga. sheet aluminum and steel parts.

Model options available for typical 9/16" and 15/16" grid ceilings or hard walls/ceilings with flange and trimless mounting (wall installation requires accessory mounting brackets).

Basic continuous run fixtures provided with 18 ga. wiring harness for 6 Amp maximum load (consult factory for runs requiring multiple circuits, sensor integration, etc.).

Optic options include a frosted flush or 1" drop acrylic lens and flat blade louver.

Standard integral 120-277V driver offered with 0-10V dimming or non-dim (consult factory regarding other dimming protocols).

Integral 120-277V emergency battery backup available for 44" or 88" fixtures (consult factory for all other lengths/drivers, supplied with remote test switch/indicator plate assembly).

Standard light outputs are 685 and 915 lumens per foot with the flush lens option.

BIOS LEDs have 80+ CRI, R9 90+ and are available in static 3000K, 3500K, 4000K and two dynamic options in 2700-3000K, 2700-3500K and 2700-4000K.

Bartco Lighting Controls Capable fixture available with integrated controls from a variety of suppliers.

Life: 50,000 hours L₇₀.

Chicago plenum rated option available.

Nominal weight is 2.8 lbs. per foot.

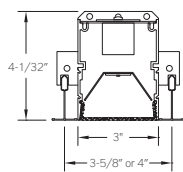
Limited five year warranty.

UL and C-UL listed for dry and damp locations.

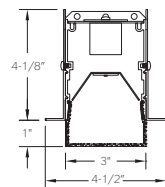


SECTIONS

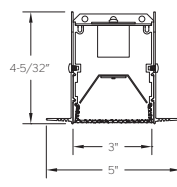
T1: T-grid 9/16"
T2: T-grid 15/16"
(flush lens option shown)



FT: Flange
(drop lens option shown)



TL: Trimless
(flush lens option shown)



PERFORMANCE

Note: All data reflects fixture with BIOS Static Spectrum 3500K LEDs.

NOMINAL LENGTH	OPTIC OPTION	OUTPUT	LUMENS /ft.	WATTS /ft.	LUMINAIRE LUMENS	EFFICACY (LPW)
44"	FLUSH	R: regular	685	9.7	2540	71
		H: high	915	13.3	3387	69

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MOUNTING OPTION	NOMINAL FIXTURE LENGTH*	CORRELATED COLOR TEMPERATURE	DRIVER	LIGHT OUTPUT (lumens per foot w/optic F1)	RUN CONFIGURATION	OPTIONS
T1: T-grid 9/16"	22: 22"	[BIOS static] BS30: 3000K BS35: 3500K BS40: 4000K	ND: non-dimming [Dimming] D: 0-10V, 1% DTR: triac, 1%, (120V ONLY) ** DLV: electronic low voltage, 1%, (120V ONLY) ** HES: Lutron EcoSystem, soft-on/fade-to-black, 1% **	R: regular - 685 H: high - 915 CF: consult factory for custom output	SN: single ST: starter AD: adder TR: terminator	CP: Chicago plenum ED: emergency driver (44" or 88" fixtures) WS1A: Wattstopper FS-205, 100%-0% ‡ WS1B: Wattstopper FS-205, 100%-50% ‡ EN1: Enlighted FS-D22 ‡ ES4: Philips EasySense SNS211 MC ‡ CA1: Casambi CBU-A2D ‡ NL1: nLight RES7 ‡ NL2: nLight RIO ‡ LA1: Lutron Athena A-WN-D01-RF-WH ‡ LA2: Lutron Athena A-WN-D01-OCC-WH ‡ CF: consult factory for custom finish options
T2: T-grid 15/16"	24: 24" (T1 or T2 w/SN ONLY)	[BIOS dynamic] BD30: 2700K-3000K BD35: 2700K-3500K BD40: 2700K-4000K	EL: eldoLED ECOdrive 0-10V, 1% ES: eldoLED SOLOdrive 0-10V, 0.1% ELD: eldoLED ECOdrive DALI, 1% ** ESD: eldoLED SOLOdrive DALI, 0.1% **			
FT: Flange trim	33: 33"	[BIOS dynamic TW] BDTW30: 2700K-3000K BDTW35: 2700K-3500K BDTW40: 2700K-4000K				
TL: Trimless	44: 44"					
CF: consult factory for custom mounting	48: 48" (T1 or T2 w/SN ONLY)					
	55: 55"					
	66: 66"					
	77: 77"					
	88: 88"					

* Actual dimension dependent on mounting option and run configuration.

** Consult factory for dimming protocols other than 0-10V.

‡ See Integrated Controls section for driver compatibility information.

MOUNTING

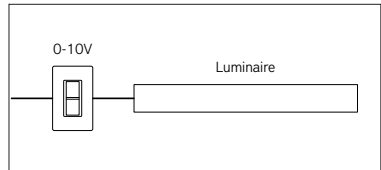
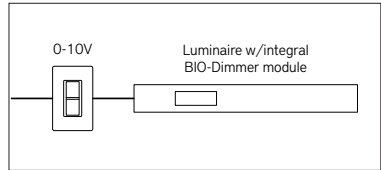
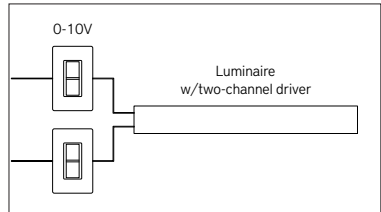
ORDERING CODE	DESCRIPTION	SPECIFICATIONS
<p>T1 T2</p>	<p>T-grid ceiling 9/16" T-grid ceiling 15/16"</p>	<ul style="list-style-type: none"> • 16 ga. brackets locate housing onto T-bar and allow 5/8" of vertical adjustment to accommodate various height T-bar. • Housing secured with support wires (by others). • Exposed flange trim in matte white finish.
<p>FT</p>	<p>Flange- drywall ceiling or wall</p>	<ul style="list-style-type: none"> • For wall installations or special ceiling conditions, order accessory mounting brackets 430-WB. • 3/4" wide extruded aluminum trim flange in matte white finish. • Housing secured with support wires or 1/4-20 threaded rod (by others).
<p>TL</p>	<p>Trimless - drywall ceiling or wall</p>	<ul style="list-style-type: none"> • Installs after 1/2" or 5/8" drywall. • Housing secured with self-tapping drywall screws (by others) into blocking as required.

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CORRELATED COLOR TEMPERATURE

Consult factory for specifics when using dimming protocols other than 0-10V.
For additional information about BIOS LED modules, visit www.bartcolighting.com/series/swell/

ORDERING CODE	MODULE TYPE	LIGHT EFFECT	CONTROL METHOD	
BS30 BS35 BS40	BIOS Static	<ul style="list-style-type: none"> Static color temperature 490nm SkyBlue® LED is always on. 	<ul style="list-style-type: none"> Non-dimming or 0-10V No BIO-Dimming module required. 	
BD30 BD35 BD40	BIOS Dynamic	<ul style="list-style-type: none"> 490nm SkyBlue® LED can be BIO dimmed out with most driver/dimmer combinations. 490nm SkyBlue® wavelengths removed through first 20% of dimming range, followed by a CCT transition to 2700K. 	<ul style="list-style-type: none"> 0-10V Includes integral Bio-Dimming module. 	
BDTW30 BDTW35 BDTW40	BIOS Dynamic Tunable White	<ul style="list-style-type: none"> CCT and Light output can be controlled separately with appropriate driver. 3000K, 3500K and 4100K modules all transition to 2700K when dimmed. 	<ul style="list-style-type: none"> 0-10V two-channel driver No BIO-Dimming module required. 	


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OPTIC

	ORDERING CODE	DESCRIPTION	SPECIFICATIONS
	F1	FROSTED FLUSH LENS	3" W frosted acrylic extrusion
<small>shown with flange trim option</small>			
	F2	FROSTED DROP LENS	3" W x 1" H frosted acrylic extrusion with matching acrylic end caps
<small>shown with flange trim option</small>			
	L	LOUVER	<p>3" W Flat blade louver with 5/8" blades at 7/8" spacing, formed from sheet steel.</p> <p>Finish is Environmental Satin Silver (consult factory for alternate finishes).</p> <p>Supplied with light diffusion film.</p>





OPTIONS

	ORDERING CODE	DESCRIPTION	SPECIFICATIONS
	ED	EMERGENCY LED DRIVER	<ul style="list-style-type: none"> • Universal 120-277V input voltage emergency driver delivers initial minimum power of 10W for 90 minutes. • Available for 44" or 88" fixtures. • Provided with combination test switch/indicator light for remote mount installation.
<small>Note: remote battery backup available for shorter fixture lengths - ordered separately, consult factory for details.</small>			

OPTIONS - INTEGRATED CONTROLS

Note: Control option takes up 4" of the overall lens length. For "F1" and "L" optic option, controls are mounted to flush filler piece. For "F2" optic option, controls are mounted to 1" H sheet formed cover.



	ORDERING CODE	LIGHT OUTPUT SETTING	MODEL	CONTROL PROTOCOL	FUNCTIONS	COMPATIBLE DRIVERS
 WATTSTOPPER®	WS1A	100% – 0% ¹	FS-205	N/A	PIR occupancy and light level sensor.	For use with on/off or 0-10V dimming drivers only.
	WS1B	100% – 50% ¹				
	EN1	Set during commissioning	FS-D22	Bluetooth Wireless	PIR occupancy, ambient light sensing, daylight harvesting, and environment monitoring for use within an Enlighted control network.	Provided with Advance sensor ready series 0-10V dimming drivers.
 EasySense	ES4	Set during commissioning	SNS211 MC	Bluetooth Wireless	Occupancy, daylight harvesting and task tuning sensor with advance grouping, for use within a MasterConnect network.	Provided with Advance sensor ready series 0-10V dimming drivers.
	CA1	Set during commissioning	CBU-A2D	Bluetooth Wireless	0-10V/DALI driver controller, for use within a Casambi ecosystem.	For use with 0-10V or DALI drivers. Consult factory for details.
	NL1	Set during commissioning	RES7 ²	Radio Wireless	Dimming, PIR occupancy detection and daylight harvesting, for use within an nLight AIR network.	Provided with Advance sensor ready series or eldoLED 0-10V drivers.
	NL2		RIO ²		Dimming, for use within an nLight AIR network.	
	LA1	Set during commissioning	A-WN-D01-RF-WH	Radio Wireless	Dimming only for use with an Athena control system.	Provided with Advance sensor ready series or eldoLED 0-10V or eldoLED DALI-2 drivers.
	LA2		A-WN-D01-OCC-WH		Dimming, PIR occupancy and daylight sensor for use with an Athena control system.	

1. Consult factory for custom light output setting.

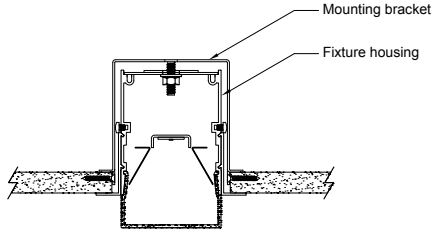
2. Consult your Acuity representative for application-specific model number.

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ACCESSORIES

Note: Accessories sold separately

	ORDERING CODE	DESCRIPTION	SPECIFICATIONS
	430-WB	WALL MOUNT BRACKET	<ul style="list-style-type: none">• For use when mounting fixtures with flange or trimless options in walls or restricted ceiling conditions.• 16 ga. bracket clamps fixture to the backside of the mounting surface with provided hardware.• Sold individually; two required for 22"–61" nom. fixtures, three required for 66"–88" nom. fixtures .

FIXTURE LENGTHS

FOR T-GRID WITH STANDARD 24" AND 48" CENTERS ONLY

ORDER CODE	HOUSING LENGTH 9/16" T-GRID	HOUSING LENGTH 15/16" T-GRID
24	23-1/4"	22-7/8"
48	47-1/4"	46-7/8"

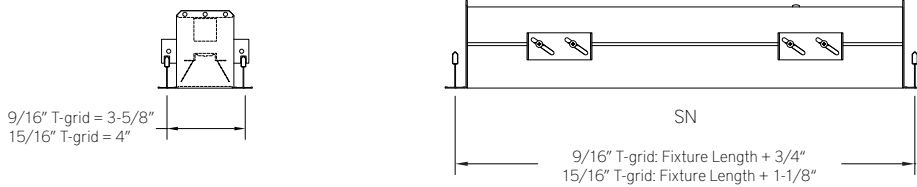
FOR T-GRID WITH CUSTOM CENTERS OR FLANGE AND TRIMLESS MOUNTING OPTIONS

SINGLE (SN), STARTER (ST), ADDER (AD), TERMINATOR (TR) CONFIGURATIONS

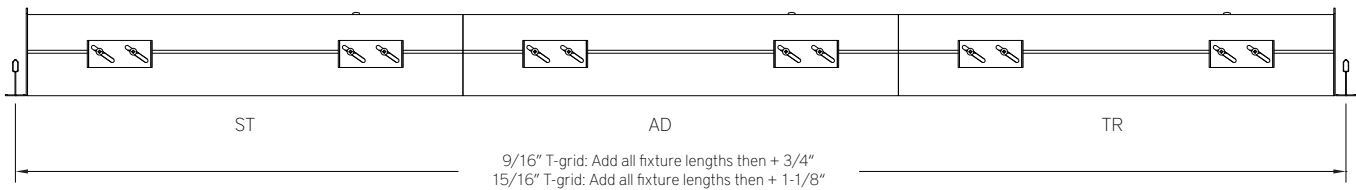
ORDER CODE	HOUSING LENGTH	ORDER CODE	HOUSING LENGTH
22	22-1/8"	66	66-1/8"
33	33-1/8"	77	77-1/8"
44	44-1/8"	88	88-1/8"
55	55-1/8"		

TO DETERMINE CUSTOM GRID CENTERS FOR T-GRID CEILING MOUNTING

Single Fixtures

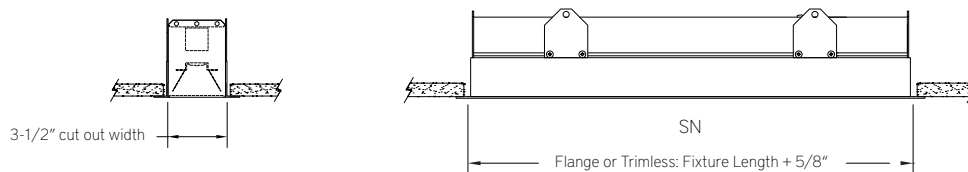


Continuous Runs



TO DETERMINE WALL / CEILING CUT OUT FOR FLANGE TRIM AND TRIMLESS MOUNTING

Single Fixtures



Continuous Runs

