

# 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 lens options and constructed for installation in common grid ceilings or in hard walls and ceilings with flange and trimless variants.

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.)

Lens options include frosted acrylic flush fit or 1" drop style with lensed ends

Standard integral 120-277V driver offered with 0-10V dimming or non-dim

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 Static Spectrum or Dynamic LEDs available in 3000K, 3500K and 4000K, with a CRI of 80+ to 90 depending on color

Life: 50,000 hours L<sub>70</sub>

Chicago plenum rated option available

Nominal weight is 3.1 lbs. per foot

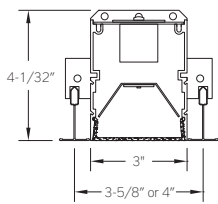
Limited five year warranty

UL and C-UL listed for dry and damp locations

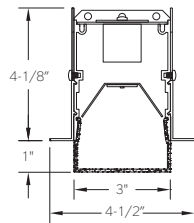


## SECTIONS

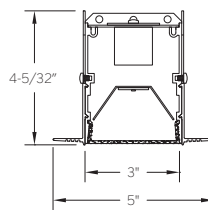
T1: T-grid 9/16"  
T2: T-grid 15/16"  
(flush lens option shown)



FT: Flange  
(drop lens option shown)



TL: Trimless  
(flush lens option shown)



## PERFORMANCE

NOMINAL LENGTH	LENS	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

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

## HCB16 -

### MOUNTING

T1: T-grid 9/16"  
T2: T-grid 15/16"  
FT: Flange trim  
TL: Trimless  
CF: consult factory for custom mounting

### NOMINAL FIXTURE LENGTH\*

22: 22"  
24: 24" (T1 or T2 w/SN ONLY)  
33: 33"  
44: 44"  
48: 48" (T1 or T2 w/SN ONLY)  
55: 55"  
66: 66"  
77: 77"  
88: 88"

### CORRELATED COLOR TEMPERATURE

**[BIOS static]**  
BS30: 3000K  
BS35: 3500K  
BS40: 4000K  
**[BIOS dynamic]**  
BD30: 2700K-3000K  
BD35: 2700K-3500K  
BD40: 2700K-4000K  
**[BIOS dynamic TW]**  
BDTW30: 2700K-3000K  
BDTW35: 2700K-3500K  
BDTW40: 2700K-4000K

### DRIVER

ND: non-dimming  
**[Dimming]**  
D: 0-10V, 1%

### LIGHT OUTPUT (lumens per foot w/flush lens)

R: regular - 685  
H: high - 915  
CF: consult factory for custom output

### RUN CONFIGURATION

SN: single  
ST: starter  
AD: adder  
TR: terminator

### OPTIC OPTION

F1: frosted flush  
F2: frosted drop

### OPTIONS

CP: Chicago plenum  
ED: emergency driver (44"-88" fixtures)  
WS1A: Wattstopper FS-205, 100%-0% ‡  
WS1B: Wattstopper FS-205, 100%-50% ‡  
EN1: Enlighted FS-D22 ‡  
ES1A: EasySense SNS102, 100%-0% ‡  
ES1B: EasySense SNS102, 100%-50% ‡  
ES2A: EasySense SNS200, 100%-0% ‡  
ES2B: EasySense SNS200, 100%-50% ‡  
ES3A: EasySense SNS300, 100%-0% ‡  
ES3B: EasySense SNS300, 100%-50% ‡  
CF: consult factory for custom finish options

\* Actual dimension dependent on mounting option and run configuration  
‡ See sensor section for driver compatibility information

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

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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/](http://www.bartcolighting.com/series/swell/)

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

## OPTIC OPTIONS

	ORDERING CODE	DESCRIPTION	SPECIFICATIONS	
	F1	FROSTED FLUSH LENS	3" W frosted acrylic extrusion	
	F2	FROSTED DROP LENS	3" W x 1" H frosted acrylic extrusion with matching acrylic end caps	

## OPTIONS

	ORDERING CODE	DESCRIPTION	SPECIFICATIONS
	ED	EMERGENCY LED DRIVER	<ul style="list-style-type: none"> <li>Universal 120-277V input voltage emergency driver of 10W for 90 minutes</li> <li>Available for 44-88" fixtures</li> <li>Provided with combination test switch/indicator light mounted to wall plate for remote installation</li> </ul>




Note: remote battery backup available for shorter fixture lengths - ordered separately, consult factory for details

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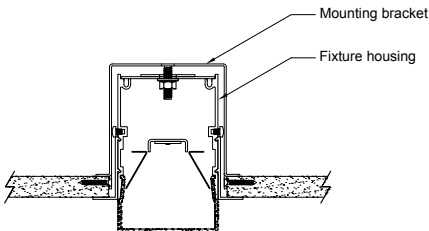
## INTEGRATED SENSORS

Note: Overall fixture length remains the same as models without a sensor. Total illuminated length is reduced by 5" nominal.  
For F1 flush lens option, sensors are mounted to flush filler piece. For F2 drop lens option, sensors are mounted to 1" H sheet formed cover.  
Consult factory for custom light output setting.

	ORDERING CODE	LIGHT OUTPUT SETTING	BRAND AND MODEL	FUNCTIONS	NOTES
	WS1A	100% – 0%	Wattstopper FS-205	Occupancy and light level sensor	For use with on/off or 0-10V dimming drivers only
	WS1B	100% – 50%			
	EN1	Set during commissioning	Enlighted FS-D22	Occupancy, ambient light sensing, daylight harvesting, and environment monitoring for Enlighted control network	Provided with Advance sensor ready series 0-10V dimming drivers
	ES1A	100% – 0%	Philips EasySense SNS102	Occupancy, daylight harvesting and task tuning sensor with simple grouping	Provided with Advance sensor ready series 0-10V dimming drivers
	ES1B	100% – 50%			
	ES2A	100% – 0%	Philips EasySense SNS200	Occupancy, daylight harvesting and task tuning sensor with advance grouping	Provided with Advance sensor ready series 0-10V dimming drivers
	ES2B	100% – 50%			
	ES3A	100% – 0%	Philips EasySense SNS300	Occupancy, daylight harvesting sensor for integration with Zigbee control networks	Provided with Advance sensor ready series 0-10V dimming drivers
	ES3B	100% – 50%			

## ACCESSORIES

Note: Accessories sold separately

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

## 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"

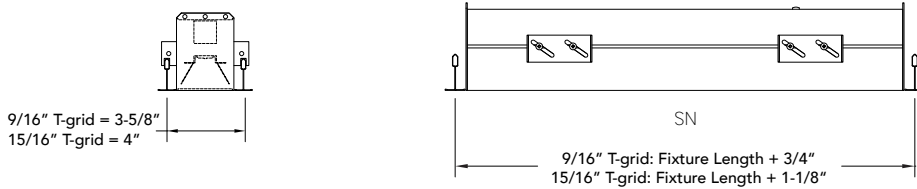
FOR T-GRID WITH CUSTOM CENTERS OR FLANGE AND TRIMLESS MOUNTING OPTIONS

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

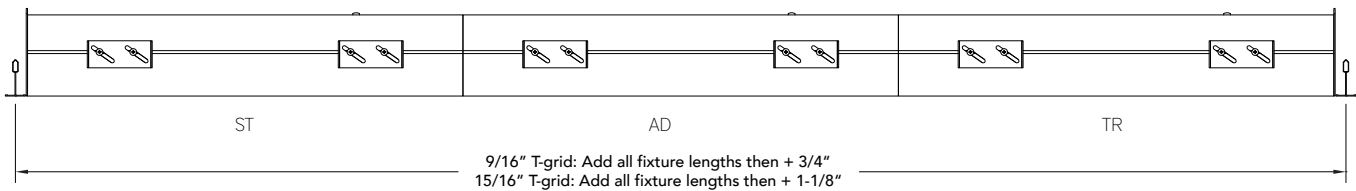
ORDER CODE	HOUSING LENGTH	ORDER CODE	HOUSING LENGTH
22	22-1/8"	66	66-1/8"
33	33-1/8"	77	77-1/8"
44	44-1/8"	88	88-1/8"
55	55-1/8"		

### TO DETERMINE CUSTOM GRID CENTERS FOR T-GRID CEILING MOUNTING

#### Single Fixtures

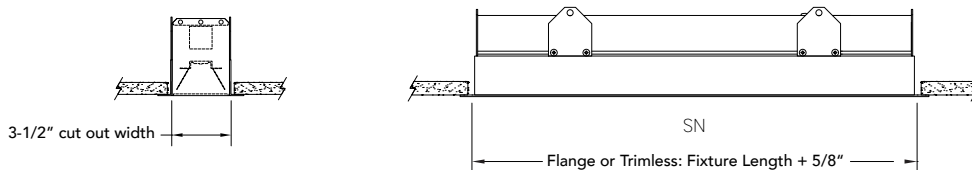


#### Continuous Runs



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

#### Single Fixtures



#### Continuous Runs

