HCB15 | Swell

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

bartco
VISIONS BROUGHT TO LIGHT™

Project: _____ Type: _____

bios ILLUMINATED

shown with flange trim
and flush lens options

FEATURES

The Swell Series HCB15 is a linear recessed LED luminaire tailored for health-centric lighting installations. The 2" 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 HCB15 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.
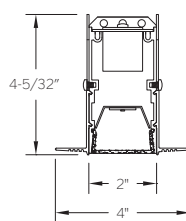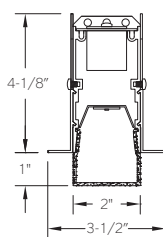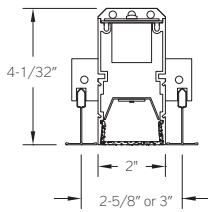
SECTION

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)

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 parabolic louver

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 615 and 820 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

Life: 50,000 hours L_{70}

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

PERFORMANCE

NOMINAL LENGTH	LENS	OUTPUT	LUMENS/ft.	WATTS/ft.	LUMINAIRE LUMENS	EFFICACY (LPW)
44"	FLUSH	R: regular	615	9.7	2274	63
		H: high	820	13.4	3032	61

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

HCB15 –

| – | – | – | – | – | – | – |

MOUNTING OPTION

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 – 615
H: high – 820
CF: consult factory for custom output

OPTIC OPTION

F1: frosted flush
F2: frosted drop
L: louver

RUN CONFIGURATION

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

OPTIONS

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 ‡
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

HCB15 | Swell

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

bartco
VISIONS BROUGHT TO LIGHT™

ORDERING CODE	DESCRIPTION	SPECIFICATIONS
T1 T2	T-grid ceiling 9/16" T-grid ceiling 15/16"	• 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

| FT | Flange - drywall ceiling or wall | • **For wall installations or special ceiling conditions, order accessory mounting brackets 420-WB**
• ¾" wide extruded aluminum trim flange in matte white finish
• Housing secured with support wires or ¼-20 threaded rod (by others) |

| TL | Trimless - drywall ceiling or wall | • Installs after 1/2" or 5/8" drywall
• Housing secured with self-tapping drywall screws (by others) into blocking as required |
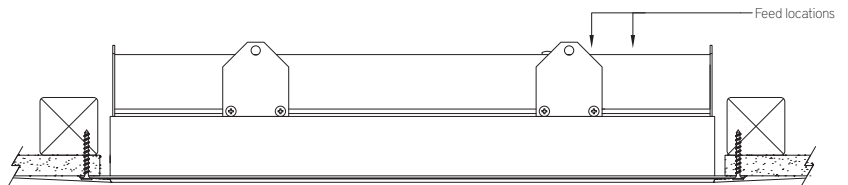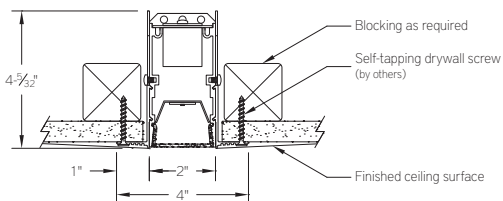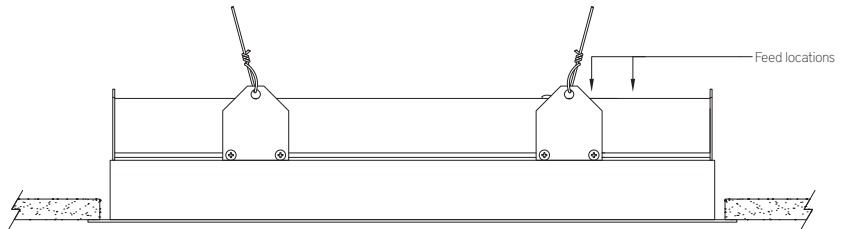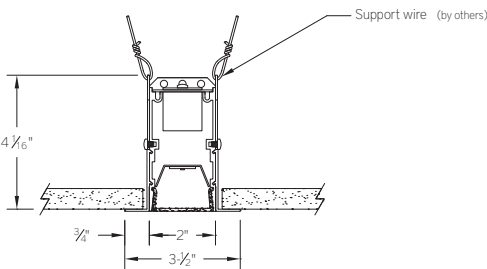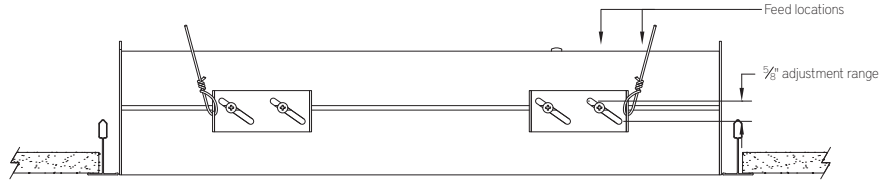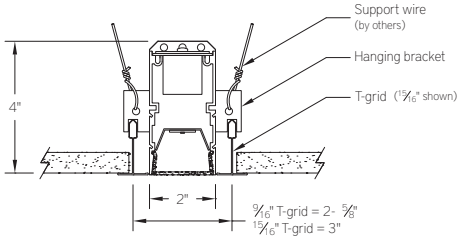
HCB15 | Swell

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

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	• Static color temperature • 490nm SkyBlue® LED is always on	• Non-dimming or 0-10V • No BIO-Dimming module required	0-10V — Luminaire
BD30 BD35 BD40	BIOS Dynamic	• 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	• 0-10V • Includes integral Bio-Dimming module	0-10V — Luminaire w/integral BIO-Dimmer module
BDTW30 BDTW35 BDTW40	BIOS Dynamic Tunable White	• CCT and Light output can be controlled separately with appropriate driver • 3000K, 3500K and 4100K modules all transition to 2700K when dimmed.	• 0-10V two-channel driver • No BIO-Dimming module required	0-10V — Luminaire w/two-channel driver

OPTIC OPTIONS

	ORDERING CODE	DESCRIPTION	SPECIFICATIONS	
shown with flange trim option	F1	FROSTED FLUSH LENS	2" W frosted acrylic extrusion	2"
shown with flange trim option	F2	FROSTED DROP LENS	2" W x 1" H frosted acrylic extrusion with matching acrylic end caps	1" / 2"
	L	LOUVER	Parabolic louver with 5/8" blades at 1" spacing, formed from diffuse, high reflectance aluminum and supplied with light diffusion film	

HCB15 | Swell

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

bartco
VISIONS BROUGHT TO LIGHT™

OPTIONS

	ORDERING CODE	DESCRIPTION	SPECIFICATIONS
	ED	EMERGENCY LED DRIVER	• Universal 120-277V input voltage emergency driver delivers initial minimum power of 10W for 90 minutes • Available for 44-88" fixtures • Provided with combination test switch/indicator light mounted to wall plate for remote installation

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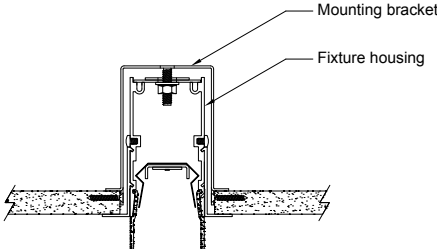
INTEGRATED SENSORS

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
Mounting bracket Fixture housing	420-WB	WALL MOUNT BRACKET	• 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

HCB15 | Swell

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

MOUNTING DIMENSIONS

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

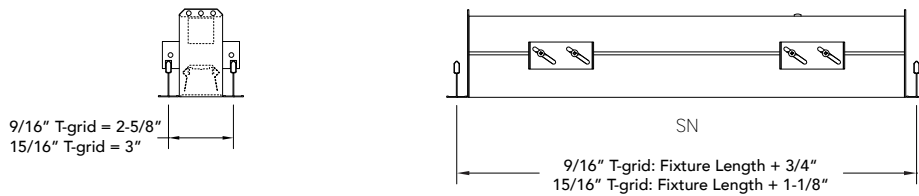| ORDER CODE	HOUSING LENGTH 9/16" T-GRID	HOUSING LENGTH 15/16" T-GRID
24	23-1/4"	22-7/8"
48	47-1/4"	46-7/8"

FOR T-GRID WITH CUSTOM CENTERS OR FLANGE AND TRIMLESS MOUNTING OPTIONS
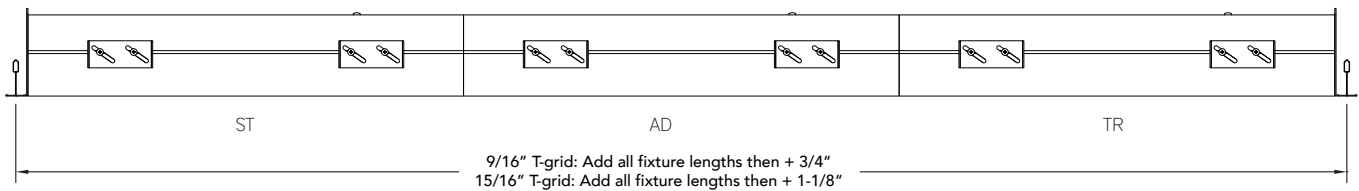SINGLE (SN), STARTER (ST), ADDER (AD), TERMINATOR (TR) CONFIGURATIONS

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

9/16" T-grid = 2-5/8"
15/16" T-grid = 3"

SN

9/16" T-grid: Fixture Length + 3/4"
15/16" T-grid: Fixture Length + 1-1/8"

Continuous Runs

ST   AD   TR

9/16" T-grid: Add all fixture lengths then + 3/4"
15/16" T-grid: Add all fixture lengths then + 1-1/8"

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

Single Fixtures

2-1/2" cut out width

SN

Flange or Trimless: Fixture Length + 5/8"

Continuous Runs

ST   AD   TR

Flange or Trimless: Add all fixture lengths then + 5/8"