

CATALOG #

PROJECT

TYPE



Construction:

The luminaire is die cast and permanent mold aluminum. The roof has an internal hinge, hidden from view. Roof and driver lids are sealed with silicone gaskets. All exposed hardware is weather resistant.

FINISH: The luminaire has a powder coat finish utilizing a premium TGIC polyester powder. The finish is a three-stage process that consists of drying, powder application and curing. Before coating, the parts are treated with a five-stage pretreatment process, consisting of a heated alkaline cleaner; rinse, phosphate coating, rinse, and sealant.

Optics:

The horizontal lens is tempered flat glass with a continuous seal. The luminaire utilizes a precision acrylic refractive optics for optimum light distribution through the flat glass lens. Available in Type II, III, IV, and V.

Electrical:

High-efficiency nominal 4000K, 65 CRI LEDs mounted to a metal-core circuit board and aluminum heat sink, ensuring optimal thermal management and long life. Designed to provide more than 60,000 hours of performance (L85) at 25C (77F) ambient temperatures. Maximum ambient 35C (95F). Standard and dimming drivers are available in 120-277V and 347-480V; 50/60 Hz. Drivers have power factor >90% and THD <20%. Expected driver life is over 60,000 hours, matching the light engine life. Integral surge protection tested in accordance with IEEE/ANSI C62.41.2 to Category C Low.

Installation:

The luminaire mounts on a 3" O.D. x 3" tall tenon with six, 1/4-20 socket set screws. The hinged roof/reflector housing is furnished with captive screws for access to the light engine. The light engine is furnished with a quick-disconnect plug. The driver assembly is furnished with a quick-disconnect plug and mounts on a bracket. The bracket is accessible by removing the driver lid fastened by a fastener.

Listings:

The luminaire is tested to and meets all NRTL's outdoor requirement standards, wet location use, through the fully accredited and approved CSA laboratory.

Max EPA: 1.8 sq feet
Max Height: 33" (83.8 cm)
Max Width: 19" (48.2 cm)
Max Weight: 46 lbs (20.8 kg)

Sample Catalog number:

TLRC15	49LED 350MA	30K	R2	120	GCF	SF	DWH
Series	Lumen Package	LED Color	Distribution	Voltage	Lens	Options	Finish



ENERGY INDEPENDENCE AND SECURITY ACT 2007 (EISA)



Ordering Guide:

Series	Lumen Package	LED Color	Distribution	Voltage	Lens	Options
TLRC15	49LED 350MA 49LED 530MA 49LED 700MA 63LED 350MA 63LED 530MA 63LED 700MA	30K 40K 50K	R2 TYPE 2 R3 TYPE 3 R4 TYPE 4 R5 TYPE 5	120 208 240 277 347 ¹ 480 ¹ MVOLT	GCF	SF SINGLE FUSE SF DOUBLE FUSE SPD6KV ² SURGE PROTECTION SPD10KV ² SURGE PROTECTION

Finish

DBL	BLACK
DBR	DARK BRONZE
DNA	NATURAL ALUMINUM
DWH	WHITE
CM	CUSTOM MATCH
CS	CUSTOM SELECT RAL COLORS

Notes:

- 347 and 480V not available with dimming
- Specific voltage required with surge protection

TLRC15 LED

SELECT YOUR OPTIONS FROM

- TLRC15** Tersen Luminaires-Resonance 1.5 LED

LUMEN PACKAGE

SELECT YOUR OPTIONS FROM

- 49LED** 350MA
- 49LED** 530MA
- 49LED** 700MA
- 63LED** 350MA
- 63LED** 530MA
- 63LED** 700MA

LED COLOR

SELECT YOUR OPTIONS FROM

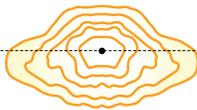
- 30K**
- 40K**
- 50K**

DISTRIBUTION

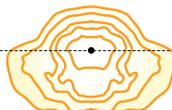
SELECT YOUR OPTIONS FROM

- R2** Type II
- R3** Type III
- R4** Type IV
- R5** Type V

House Side
Street Side



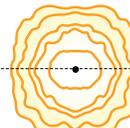
Type II
Distributes light slightly ahead of luminaire location with significant lateral spread.



Type III
Provides light farther ahead of the luminaire than a Type II pattern but maintains a significant lateral spread.



Type IV
Sharp Cutoff
Distributes light almost exclusively forward with an emphasis on eliminating light trespass and spill light behind the pole.



Type V
Provides improved uniformity with a variance of the Type V distribution with a slightly square pattern compared to the regular Type V.

VOLTAGE

SELECT YOUR OPTIONS FROM

- 120 120 Volt
- 208 208 Volt
- 240 240 Volt
- 277 277 Volt
- 347¹ 347 Volt
- 480¹ 480 Volt
- MVOLT

Notes:

1. 347 and 480V not available with dimming

LENS

SELECT YOUR OPTIONS FROM

- GCF Glass Flat Lens

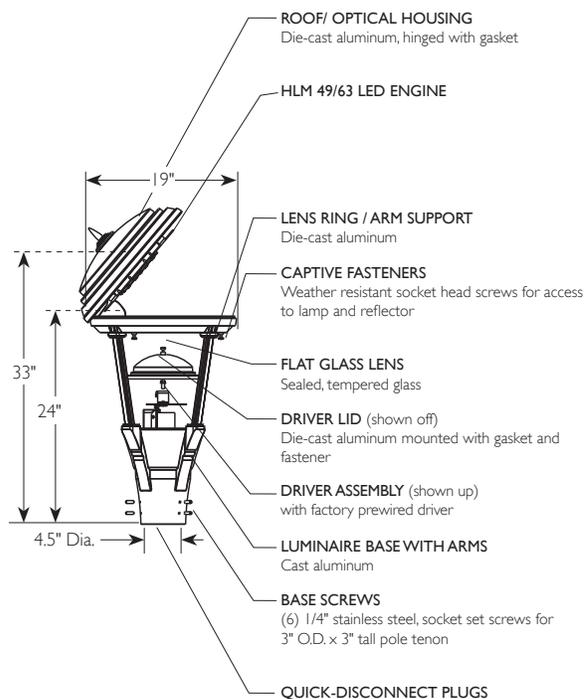
OPTIONS

SELECT YOUR OPTIONS FROM

- SF Single Fusing
- DF Double Fusing
- SPD6KV² Surge Protection
- SPD10KV² Surge Protection

Notes:

2. Specific voltage required with surge protection



TLRC15 LED

The luminaire has a powder coat finish utilizing a premium TGIC polyester powder. The finish is a three-stage process which consists of drying, powder application and curing. Before coating, the parts are treated with a five-stage pretreatment process, consisting of a heated alkaline cleaner, rinse, phosphate coating, rinse and sealant.

For a complete listing of colors, visit:
www.acuitybrandslighting.com/architecturalcolors

SELECT YOUR OPTIONS FROM

- | | | | |
|--------------------------|------------|----------------------------|---|
| <input type="checkbox"/> | DBL | Black |  |
| <input type="checkbox"/> | DDB | Dark Bronze |  |
| <input type="checkbox"/> | DNA | Natural Aluminum |  |
| <input type="checkbox"/> | DWH | White |  |
| <input type="checkbox"/> | CM | Custom Match | |
| <input type="checkbox"/> | CS | Custom Select (RAL colors) | |

Notes:

CS: This choice requires that a custom powder be manufactured to match a specific color chip provided by the specifier

CM: ASL offers custom selected RAL powder coat colors. See chart (form 794.3) for cataloged optional colors or contact the factory.

CATALOG #

PROJECT

TYPE



Construction:

The luminaire is die cast and permanent mold aluminum. The roof has an internal hinge, hidden from view. Roof and ballast lids are sealed with silicone gaskets. All exposed hardware is weather resistant. FINISH: The luminaire has a powder coat finish utilizing a premium TGIC polyester powder. The finish is a three-stage process that consists of drying, powder application and curing. Before coating, the parts are treated with a five-stage pretreatment process, consisting of a heated alkaline cleaner, rinse, phosphate coating, rinse and sealant.

Optics:

Individual precision-molded acrylic lenses provide optimal luminaire spacing and improved uniformity. Lenses are indexed to the circuit board to ensure consistent optical alignment on each, delivering repeatable photometric performance. Choice of three optimized distributions: Type III, Type IV, and Type V. The optical system controls light above 90 degrees, eliminating wasteful up light.

Electrical:

Standard and dimming drivers are available in 120-277V; 50/60 Hz. Drivers have power factor >90% and THD <20%. Thermal isolation results in expected driver life of over 60,000 hours. Integral surge protection in accordance with IEEE/ANSI C62.41.2 Category C Low is standard.

Installation:

The Resonance Bollard offers a patented impact resistant mounting and leveling design ensuring lifelong performance. Three leveling pads within the base mounting plate are easily accessible through the access panel. The leveling pads provide full contact with the concrete pad, providing a high degree of stability. The base mounting plate is fully welded to the bollard post, providing complete structural support from all directions, giving the bollard superior vandal resistance.

Listings:

The luminaire is tested to and meets all NRTL's outdoor requirement standards, wet location use, through the fully accredited and approved CSA laboratory. DesignLights™ Consortium qualified product.

Max EPA: 1.8 sq feet
 Max Height: 3' 8" (111.8 cm)
 Max Width: 1' 1" (33 cm)
 Max Weight: 30 lbs (13.6 kg)

Sample Catalog number:

TLRCB10	18LED 350MA	41K	GCF	R3	MVOLT	SF
Series	Lumen Package	LED Color	Lens	Distribution	Voltage	Electrical Options

DWH
Finish



ENERGY INDEPENDENCE AND SECURITY ACT 2007 (EISA)

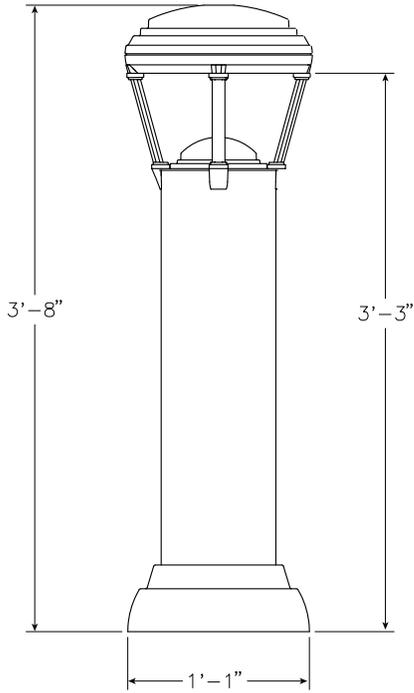


Ordering Guide:

Series	Lumen Package	LED Color	Lens	Distribution	Voltage	Electrical Options
TLRCB10	18LED 350MA 18LED 700MA	35K 41K 56K	GCF	R3 TYPE 3 R4 TYPE 4 R5 TYPE 5	MVOLT	SF DF SPD6KV SINGLE FUSE DOUBLE FUSE SURGE PROTECTION

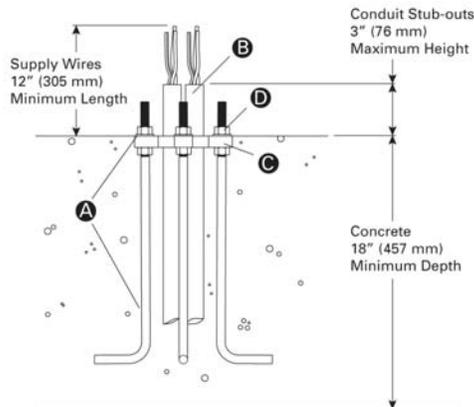
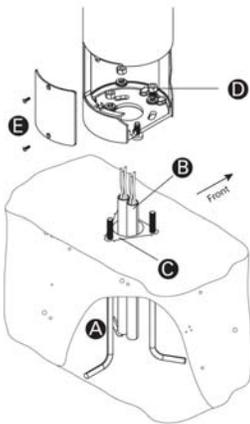
Finish

- DBL BLACK
- DBR DARK BRONZE
- DNA NATURAL ALUMINUM
- DWH WHITE
- CM CUSTOM MATCH
- CS CUSTOM SELECT RAL COLORS



SELECT YOUR OPTIONS FROM

- TLRCB10** Luminaires-Resonance Bollard I.0



- A** J-Bolt Assembly (galvanized J-bolt 1/2-13 thread, 14 inches long)
- B** Electrical Conduit Stub-Out
- C** Anchor Template Bracket
- D** Anchor Bolt Top Fasteners
- E** Access Door

LUMEN PACKAGE

SELECT YOUR OPTIONS FROM

- 18LED 350MA**
- 18LED 700MA**

LED COLOR

SELECT YOUR OPTIONS FROM

- 35K** 3500K
- 41K** 4100K
- 56K** 5600K

TLRCB10 LED

LENS

SELECT YOUR OPTIONS FROM

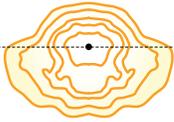
GCF Glass Flat Lens

DISTRIBUTION

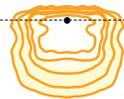
SELECT YOUR OPTIONS FROM

- R3** Type III
 R4 Type IV
 R5 Type V

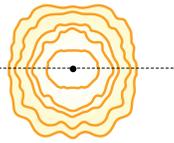
House Side
Street Side



Type III
Provides light farther ahead of the luminaire than a Type II pattern but maintains a significant lateral spread.



Type IV
Sharp Cutoff Distributes light almost exclusively forward with emphasis on eliminating light trespass and spill light behind pole.



Type V
Improved uniformity with variation of the Type V distribution; a slightly square pattern compared to regular Type V.

VOLTAGE

SELECT YOUR OPTIONS FROM

MVOLT 120-277 Volt

ELECTRICAL OPTIONS

SELECT YOUR OPTIONS FROM

- SF** Single Fusing 120, 277 or 347 volt only
 DF Double Fusing 208, 240 or 480 volt only
 SPD6KV Surge Protection

FINISH

The luminaire has a powder coat finish utilizing a premium TGIC polyester powder. The finish is a three-stage process which consists of drying, powder application and curing. Before coating, the parts are treated with a five-stage pretreatment process, consisting of a heated alkaline cleaner, rinse, phosphate coating, rinse and sealant.

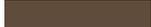
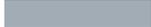
For a complete listing of colors, visit:
www.acuitybrandslighting.com/architecturalcolors

Notes:

CM: This choice requires that a custom powder be manufactured to match a specific color chip provided by the specifier

CS: ASL offers custom selected RAL powder coat colors. See chart (form 794.3) for cataloged optional colors or contact the factory.

SELECT YOUR OPTIONS FROM

- DBL** Black 
 DDB Dark Bronze 
 DNA Natural Aluminum 
 DWH White 
 CM Custom Match
 CS Custom Select (RAL colors)

TLRCB10 LED

Impact resistant LED ceiling and wall luminaires · unshielded

Housing: One piece die-cast aluminum for direct attachment to a standard 4" octagonal wiring box using supplied BEGA mounting kit. Die castings are marine grade, copper free ($\leq 0.3\%$ copper content) A360.0 aluminum alloy.

Enclosure: Crystal glass with white matte finish retained by one piece die-cast aluminum frame. Frame is secured by a single set screw threaded into a stainless steel insert. Fully gasketed for weather tight operation using molded silicone rubber gasket.

Electrical: 16.3W LED luminaire, 19.8 total system watts, -30°C start temperature. Integral 120V through 277V electronic LED driver, 0-10V dimming. LED module(s) are available from factory for easy replacement. Standard LED color temperature is 3000K with an >80 CRI. Available in 4000K (>80 CRI); add suffix K4 to order.

Note: LEDs supplied with luminaire. Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to www.bega-us.com.

Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order.

CSA certified to U.S. and Canadian standards, suitable for wet locations. Protection class IP65

Weight: 7.7 lbs.

Luminaire Lumens: 856
Tested in accordance with LM-79-08

Type:
BEGA Product:
Project:
Color: **BLACK**
Options:
Modified:



	Lamp	A	B
3509LED	16.3W LED		10 1/4 3/4

BeveLED^{2.0} WARM GLOW DIMMING



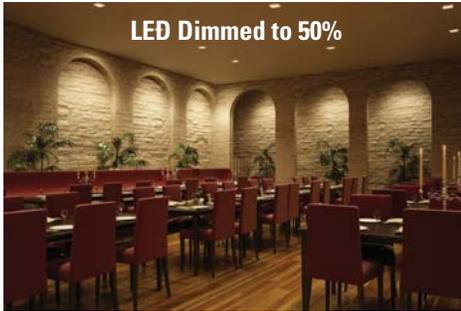
Covered By US Patent 8,456,109 and 8,581,520

DOWNLIGHT 3113



1" REGRESS

2-1/2" REGRESS



LED Dimmed to 50%



LED Dimmed to 20%



LED Dimmed to 1%

Warm Glow Dimming gradually transitions from 2700K, 3000K or 3500K down to 2200K - creating intimacy while enhancing the mood and feeling of the space.

DELIVERED PERFORMANCE

DOWNLIGHT	16 Watts Max					32 Watts Max				
	2700K		3000K		3500K	2700K		3000K		3500K
Max Color Temperature	2700K		3000K		3500K	2700K		3000K		3500K
Color Rendering Index	80+ CRI	90+ CRI	80+ CRI	90+ CRI	80+ CRI	80+ CRI	90+ CRI	80+ CRI	90+ CRI	80+ CRI
Lumens per Watt	52	41	56	45	59	47	37	50	40	53
Source Lumens	1000	800	1075	875	1150	1700	1325	1800	1450	1925
Delivered Lumens	825	650	900	725	950	1400	1100	1500	1200	1600

HOW TO SPECIFY

Ordering Example: Specify trim code and housing code to order:

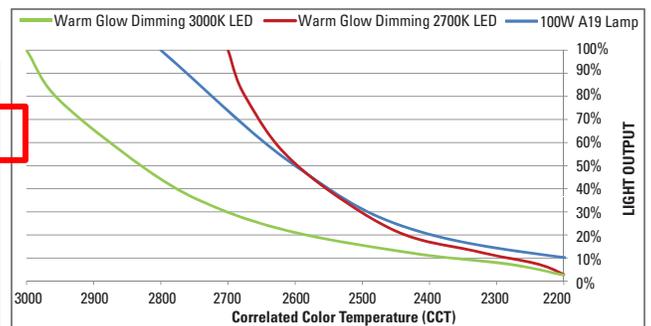
Example : **3113W - B1 - S - 10 - LSTD4 - 9016 - WGD1 - 2722KS - 30 - NC - 277V - DIML4 - CB27**

TRIM ORDERING INFORMATION

TRIM	OPTION	BEVEL STYLE	LENS	FLANGE FINISH
3113				
3113 Square Downlight 1" or 2-1/2" Regress	W Wet location ¹	B1 1" Regress Bevel, Painted Die Cast Matches Flange Finish	F Frosted S Solite (provided standard)	01 Clear Matte ⁴ (AC Bevel Only)
	EML Integral Emergency Test Switch ²			02 Black Anodized ⁴ (AB Bevel only)
	TZ TechZone (NCSM only)	AB1 1" Regress Bevel, Black Anodized		10 White
		AC1 1" Regress Bevel, Clear Matte Anodized		13 Statuary Bronze
		AB2 2-1/2" Regress Bevel, Black Anodized ³	21 Black	
		AC2 2-1/2" Regress Bevel, Clear Matte Anodized ³	28 Metalized Grey	
			RAL Custom Color (specify RAL #)	

¹ Wet location, use with B1 trims only.
² For use with NC housing only.
³ Not for use with NCSM or FT housing.
⁴ Not available with 2-1/2" regress trims

BeveLED 2.0 Warm Glow Dimming Curve vs. Actual Incandescent Dimming Curve



HOUSING ORDERING INFORMATION

HOUSING CODE	WATTAGE	ENGINE CODE	COLOR	REFLECTOR	HOUSING TYPE	VOLTAGE	DIMMING DRIVER OPTIONS	ACCESSORIES
LSTD4		WGD1						
LSTD4	9016 16W LED, 900 lumens	WGD1	2722KS - 2700K-2200K, 80+ CRI	30 30° beam	NC New Construction	120V 277V	DIML2 0-10V dim, 15% (provided standard)	CB27 27" C-Channel Bars CB52 52" C-Channel Bars EML Emergency battery ⁶ EMLW Emergency battery, wet location ⁶ TZ TechZone ceiling compatible ⁷
	3032 32W LED, 1500 lumens		3022KS - 3000K-2200K, 80+ CRI	50 50° beam	FT Flat Housing New Construction		DIML4 Lutron Hi-Lume 1% 3-wire/ECO	
			3522KS - 3500K-2200K, 80+ CRI	80 80° beam	NCSM Narrow Width		DIML6A ELDO 0-10V 0.1%, logarithmic	
			2722KH - 2700K-2200K, 90+ CRI		CP Chicago Plenum		DIML6B ELDO 0-10V 0.1%, linear	
			3022KH - 3000K-2200K, 90+ CRI		IC Insulation-Contact Rated / Airtight		DIML7 ELDO DALI 0.1%	
			2 Step MacAdam ellipse is standard for all		See emergency solutions chart for EM options with these housings		DIML8 ELDO DMX 0.1% ⁵	

⁵ Note: N/A with FT housing
⁶ For use with NC or NCSM housings only. NCSM housing requires above ceiling access.
⁷ With NCSM housing only

BeveLED^{2.0}

WARM GLOW DIMMING

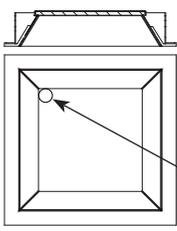
Covered By US Patent 8,456,109 and 8,581,520

TRIM INFORMATION



DOWNLIGHT 3113

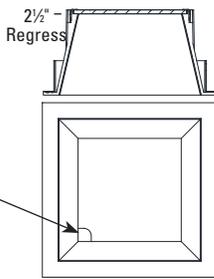
1" Regress



3 1/2" x 3 1/2"
4 1/2" x 4 1/2"
5 1/2" x 5 1/2"

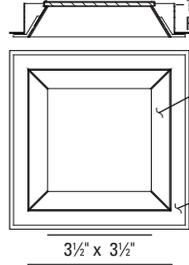
EM fixtures that are provided with an integral test switch are shipped with a hole in the glass lens for access. Refer to "EMERGENCY SOLUTIONS" chart to find out which fixtures have an integral test switch.

2-1/2" Regress



3 1/2" x 3 1/2"
4 1/2" x 4 1/2"
5 1/2" x 5 1/2"

1" Regress - TechZone Compatible



3 1/2" x 3 1/2"
4 1/2" x 4 1/2"
5 1/2" x 5 1/2"

Bevel Finish Color area (B1, AB1, AC1)
Flange Finish Color area (10, 13, 21, 28, RAL)

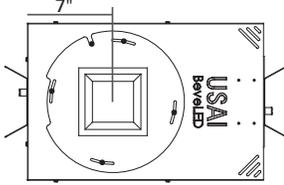
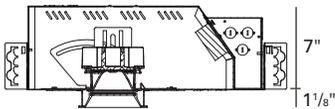
3113 Emergency Solutions

Housing	EM SERVICE	Integral Test Switch	Remote Test Switch	Inverter By Others
FT	N/A			X
NCSM*	Above ceiling access required		X	
NC	Through aperture	X		
NC Wet Location	Through aperture		X	
CP	N/A			X
IC	N/A			X

* NCSM + DIML8 cannot be offered with EM

HOUSING INFORMATION

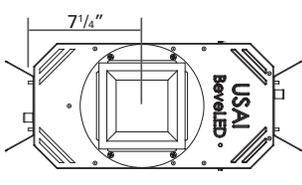
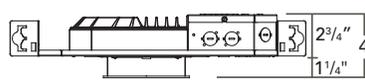
New Construction Universal Style Housing - NC



18 5/8" (Plan View)

22 1/8" (Plan View)

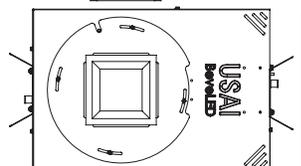
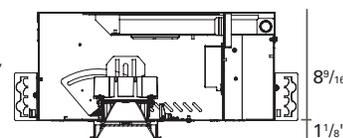
New Construction Flat Housing - FT For Downlight Only



16" (Plan View)

19" (Plan View)

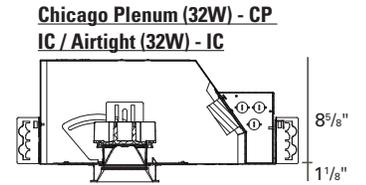
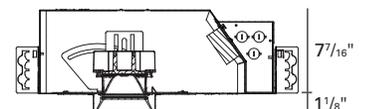
New Construction w/ Emergency - EM



18 5/8" (Plan View)

22 1/8" (Plan View)

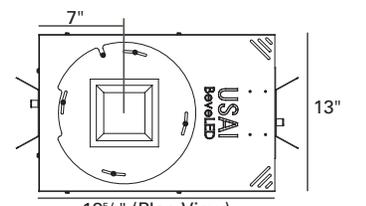
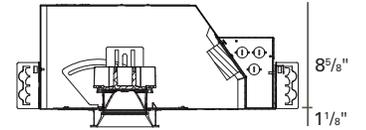
Chicago Plenum 16W) - CP IC / Airtight (16W) - IC



18 5/8" (Plan View)

22 1/8" (Plan View)

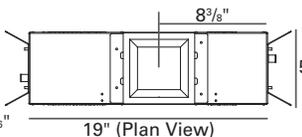
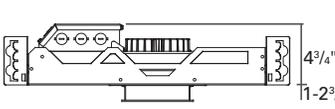
Chicago Plenum (32W) - CP IC / Airtight (32W) - IC



18 5/8" (Plan View)

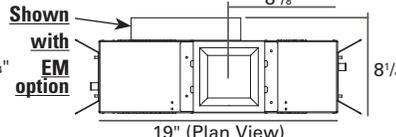
22 1/8" (Plan View)

New Construction - Narrow Width



19" (Plan View)

22" (Plan View)



19" (Plan View)

22" (Plan View)

SPECIFICATIONS

TRIM: 4-1/2" square aperture with a 1" regressed bevel and 1/2" flange, retained by two mounting clips. Die cast aluminum bevel is self-flanged and is available in white, statuary bronze, black, and metalized grey finishes. Also available in black or clear matte bevel, with self finish or painted flange. 2-1/2" regress available for maximum glare control. Custom color flanges available (provide RAL#).

TRIM LENS: Trim is shipped with integral solite lens standard; frosted lens available as an option.

REFLECTOR: Interchangeable precision injection molded specular polycarbonate reflector optimized for 30°, 50° or 80° beam distribution.

FIELD REPLACEABLE LIGHT ENGINE: Available in 2 lumen packages: 16W (900 lm) and 32W (1500 lm). Engine is field replaceable through the aperture without tools.

COLOR: BeveLED is available in 3 color temperatures with Warm Glow dimming. All color temperatures will dim down from initial CCT at 100% output to 2200K at minimum output. All color options are tightly binned for fixture-to-fixture color consistency within a 2-Step MacAdam Ellipse. 80+ color rendering index provided standard. 90+ CRI also available.

RATED LIFE: Based on IESNA LM80-2008 50,000 hours at 70% lumen maintenance (L70).

THERMAL MANAGEMENT: Proprietary high performance aluminum die cast heatsink for maximum LED life. Ambient temperatures at fixture location should not exceed 40°C during normal operation.

FIELD REPLACEABLE DIMMING DRIVER: 0-10V, 100%-15% DIML2 solid state electronic constant current driver with a high power factor provided standard. Specify 120V or 277V. Driver complies with IEEE C62.41 surge protection.

DIMMING OPTIONS: Multiple dimming drivers available. See compatibility chart attached. Note: DIML6A logarithmic control is intended for use with Lutron control systems; DIML6B linear control is intended for use with non-Lutron controls. DIML2 and DIML6 dimming drivers source 2mA.

EMERGENCY: Fixtures provided with an integral test switch are provided with a hole in the glass lens as per the drawing above. Fixtures provided with a remote test switch are provided with a 24" lead length for location of the test switch. Fixtures that have no USAI EM option may be connected to an inverter (by others) for emergency lighting. **SPECIAL NOTE FOR NCSM HOUSING:** DIML8 cannot be combined with EM options in NCSM housing. See emergency solutions chart for more information on EM test switches and servicing.

MOUNTING: Butterfly brackets and adjustable nailer bars with integral nails provided. Nailer bars are extendible from 14" to 24" centers.

HOUSING: All-Ways Square® (covered by US Pat. No: US 7,832,889) housing allows alignment of square aperture (up to 20° rotation) after housing installation and prior to finish ceiling installation. Fabricated of 20 ga. galvanized steel with thru wire J-box, 4 in 4 out at min. 90°C, #12 AWG thru branch circuit wiring. NCSM with TZ option is compatible with TechZone ceiling systems.

MAXIMUM CEILING THICKNESS: As per drawings above.

CEILING CUT OUT: 5-1/16" x 5-1/16"

LISTINGS: Dry/Damp. Wet location option available with B1 trim only. NRTL/CSA-US tested to UL standards. IBEW union made.

WARRANTY: 5 years



NOTES:

- Not for use in corrosive environment.
- Use of pressure washer voids warranty.

PHOTOMETRICS: Consult factory or website for IES files. Tested in accordance with IESNA LM79-2008.

