

INVUE™

ENTRI Series ARCHITECTURAL WALL LUMINAIRE

ENTRI Series

ARCHITECTURAL WALL LUMINAIRE

DOWN MOUNT

- Walkways
- Entryways
- Wall Surfaces
- Parking Areas
- Roadways

UP MOUNT

- Canopies
- Ceilings
- Cornices + Columns
- Wall Surfaces
- Architectural Highlights

MODULAR FORM AND APPLICATION

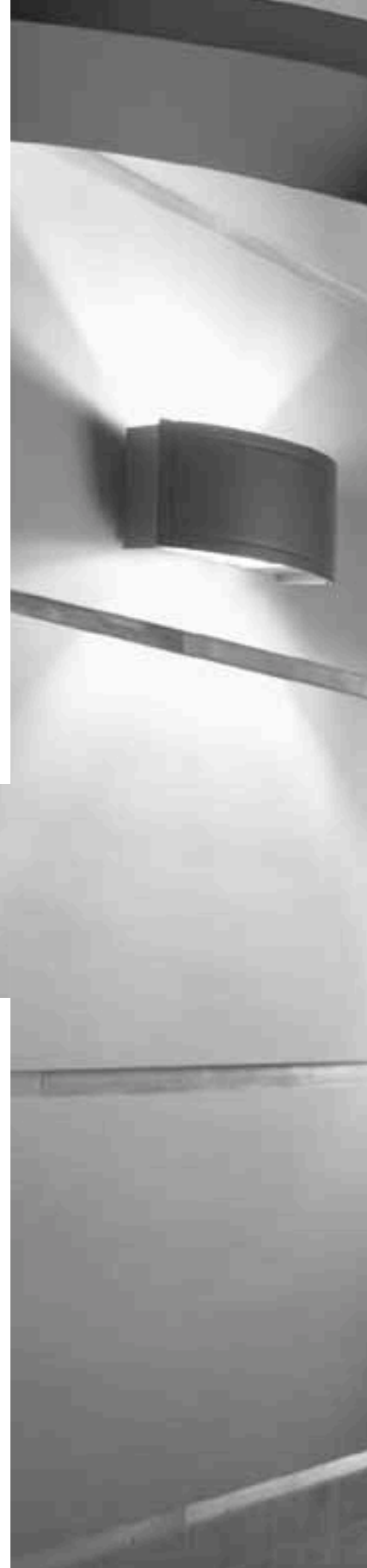
ENTRI Series' family of modular faceplate designs provide a tasteful architectural statement equally suitable for indoor and outdoor environments. Available luminous faceplate window adds a signature look, while affording custom color capability.

EXCEPTIONAL CONSTRUCTION

Designed to sustain a lifetime of tough environmental conditions, ENTRI Series' precisely engineered die-cast aluminum housing and faceplates integrate IP66 rated gasketing strategies that combined with a 5 stage premium TGIC polyester powder coat finish, seal out performance degrading contaminants.

OPTICAL FLEXIBILITY

Whether providing community friendly full cutoff performance in downlighting applications, or showcasing architectural features through available up or up/down combination configurations, the ENTRI Series provides a palette of optical solutions to paint any surface in the right light.





The ENTRI Series symmetrical form can be mounted either Up
or Down with no modifications to the door or housing.

UNIVERSAL MOUNTING

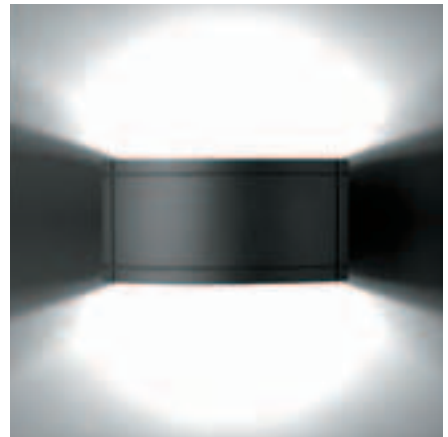
- Downlight
- Uplight
- Downlight + Uplight



DOWNLIGHT



UPLIGHT

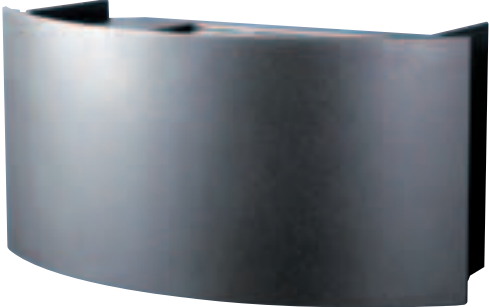


DOWNLIGHT + UPLIGHT

MODULAR FORM

FACEPLATES

A choice of six (6) architectural faceplate designs allows the matching of fixture style to surrounding environment.



ENC



ENC-LG



ENV



ENV-LG



ENT



ENT-LG

Emerging trends in light control and environmental preservation require innovative design solutions. ENTRI Series responds.

OPTICAL SYSTEMS

- Full Cutoff Performance
- Lamp Options
- Color Capabilities

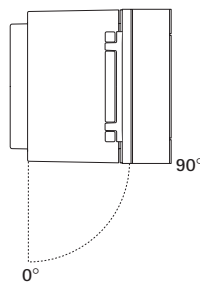


FULL CUTOFF PERFORMANCE

As the nations' respected authority on lighting standards and design recommendations the IESNA, Illuminating Engineering Society of North America, defines four (4) unique luminaire cutoff classifications to quantify the amount of light a fixture directs upward toward the sky.

ALLOWABLE CANDELA	@ 90°	@ 80°
Full Cutoff	0	10%
Cutoff	2.5%	10%
Semi-Cutoff	5%	20%
Non-Cutoff	No Limit	No Limit

In downlight only applications, each of the available ENTRI Series optical systems meets the strictest "Full Cutoff" classification requirements, insuring that zero measurable light is directed upward from the luminaire.



ENTRI Series presents an attractive alternative to traditional refractive based non-cutoff wall pack luminaires, which generate considerable amounts of glare while providing a less appealing form.



FULL CUTOFF

Full cutoff luminaires carry the endorsement of the International Dark Sky Association (IDA) for their usefulness in limiting the detrimental effects of sky glow, otherwise referred to as light pollution.

When faced with local or state adopted lighting ordinances, full cutoff luminaires offer direct compliance in most all circumstances.

LAMP OPTIONS

ENTRI Series optical systems are offered with a variety of high efficiency lamp sources.



T6 METAL HALIDE

FEATURES: Produces a whitish-blue light with excellent color rendition—up to 95 CRI, high efficacy (lumens per watt) and superior color consistency. For optimal efficacy and operating characteristics specify along with optional electronic ballast.

APPLICATION: Generally, Metal Halide sources best compliment concrete surfaces, light-colored masonry, foliage, and bright colored objects or surfaces.



WHITE SON HPS

FEATURES: Produces a warm 2500K color temperature light source with an 80 CRI, high efficacy (lumens per watt), and long life.

APPLICATION: Adds a richness and warmth that best compliments brick, wood, and dark-colored masonry or stone surfaces.



COMPACT FLUORESCENT

FEATURES: Energy conscious with excellent lumen maintenance. Available in a variety of color temperatures to suit varying applications.

APPLICATION: Compact Fluorescent sources can be used in indoor or outdoor environments to compliment any surface finish or environment.



QUARTZ HALOGEN

FEATURES: Ideal color rendition and a warm inviting color.

APPLICATION: Quartz Halogen sources can be used in indoor or outdoor environments to compliment any surface finish or environment.

AVAILABLE LAMP OPTIONS PER HOUSING

	ENC ENV ENT
Metal Halide	39, 70, 100, 150W
White Son HPS	100W
Compact Fluorescent	26, 32, 42, 57W
Dual Compact Fluorescent	(2) 26, (2) 32, (2) 42W
Quartz Halogen	100, 150, 250W

ELECTRONIC BALLASTS

Available electronic HID ballasts improve fixture efficiency, performance, and value.

Benefits include a 30-50% improvement in lumen maintenance over conventional magnetic ballasts, greatly improved color consistency, internal fusing and a reduction in total system energy usage.

COLOR CAPABILITIES

ENTRI faceplates can be enhanced by specifying the colored luminous insert option. Colored gel films are internally secured behind the glass insert, providing easy access for replacement or color changes. Standard colors include: Deep Green, Bright Blue, Red, and Warm Orange. Other colors available, consult your INVUE Lighting Systems representative for more information.



INVUE's commitment to optical research and precision build quality result in unequaled levels of performance and repeatability.

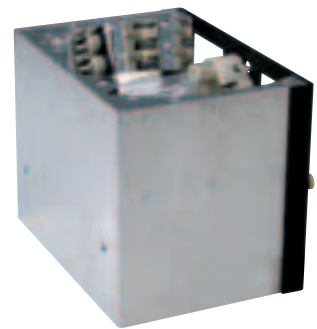
OPTICAL EXCELLENCE

- Flawless Facets
- Rigid Construction
- Premium Materials
- Frosted Lens



FLAWLESS FACETS

Reflector facets on the ENTRI Series segmented optical modules are flat and unobstructed, allowing for a perfect reflection of the lamp's arc tube. All segment faces are clean of rivet heads, tabs, or other means of attachment which may cause streaking on the wall, ground, or ceiling surface.

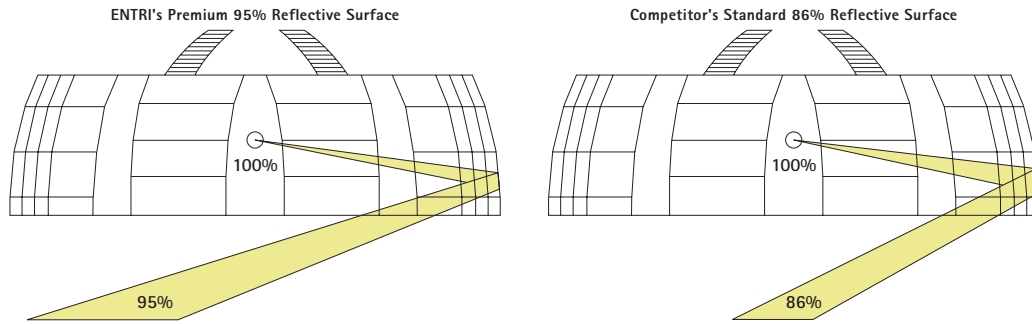


RIGID CONSTRUCTION

A rigid box enclosure shields optical facets on all sides from performance degrading damage. Each facet bank is secured to both top and bottom of the enclosure for repeatable facet orientation relative to light center.

PREMIUM MATERIALS

A commitment to using premium 95% reflective aluminum sheet on all segmented optical systems allows for efficiency gains of up to 10%.



PREMIUM MATERIAL

Premium material reflects a higher intensity of light in a more controllable fashion.

STANDARD MATERIAL

Standard material reflects a lower intensity of light.



FROSTED LENS

Available frosted lens reduces fixture brightness while visually softening the light distribution. Particularly useful in low mounting height applications, and in public environments where pedestrians may have direct line-of-sight exposure to lamp brightness. Distributions featuring a 10% secondary glow utilize a standard frosted lens to achieve a soft, even glow.







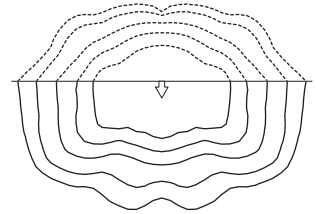
OPTICAL CONFIGURATIONS

TEN (10) UNIQUE OPTICS

ENTRI Series offers a versatile family of high performance distribution patterns to suit varying design goals. With ten (10) unique optical selections featuring down only, up only, and up/down combinations, the ENTRI Series provides targeted lighting solutions for wall, roadway, canopy, architectural highlighting, and more.

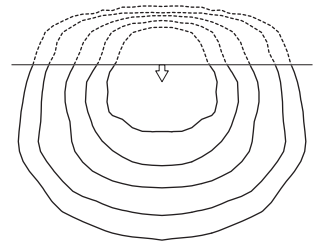
TYPE III [3S, 3SG, 3SP]

In downlighting applications, the Type III optic is ideal for indoor or outdoor lighting of corridors, walkways, and general areas. In uplighting applications, the Type III evenly illuminates canopies, ceilings, and overhangs. Available 10% secondary glow provides soft even illumination, while available pencil distribution provides a sharp 4° spike of light



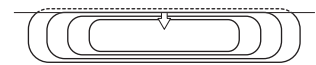
FORWARD THROW [FT, FTG, FTP]

In downlighting applications, the FT can provide illumination well into indoor entryways, or outdoor roadways and parking areas commonly adjacent to building surfaces. In uplighting applications, the Type IV provides exceptional forward throw to evenly illuminate large canopies, ceilings and overhangs. Available 10% secondary glow provides soft even illumination, while available pencil distribution provides a sharp 4° spike of light.



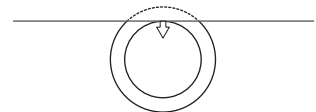
FX GRAZING OPTIC [FX, FXF]

The FX optic provides a narrow band of light that has exceptional side throw along the building surface to maximize fixture spacings. Intended to graze the vertical surface, this optic accentuates architecture by creating shadows and bold contrasts. Available 50/50 FXF wall grazing optic provides up/down grazing illumination. Integral optical louvers minimize surface brightness on wall surface immediately above (or below) the fixture aperture.



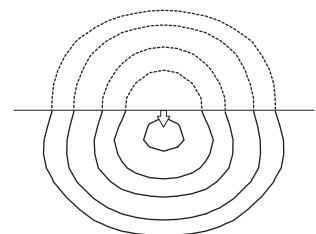
TIGHT SPOT [TS, TSF]

The Tight Spot optic is designed to produce an extremely tight vertical beam of light while eliminating all spill light immediately outside the main beam. In up or downlighting applications, this concentrated beam is ideal for highlighting columns and other vertical design elements. Available 50/50 TSF tight spot optic provides up/down column illumination. Integral optical louvers minimize surface brightness on wall surface immediately above (or below) fixture aperture, and control unwanted spill light.



COMPACT FLUORESCENT [CFM, CFG]

In downlighting applications, the CFM optic provides a general Type III distribution ideal for indoor or outdoor lighting of corridors, walkways, and general areas. In uplighting applications, the Type III evenly illuminates canopies, ceilings, and overhangs. Available with single 26, 32, 42, or 57W lamp, or dual 26, 32, or 42W lamps. Available 10% secondary glow provides soft even illumination.



OPTICAL CONFIGURATIONS



3S [Downlight]



3S [Uplight]



3SG



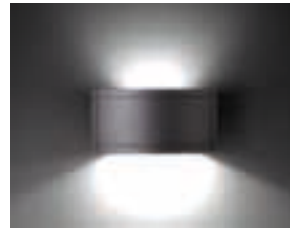
3SP



FT [Downlight]



FT [Uplight]



FTG



FTP



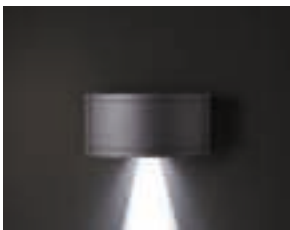
FX [Downlight]



FX [Uplight]



FXF



TS [Downlight]



TS [Uplight]



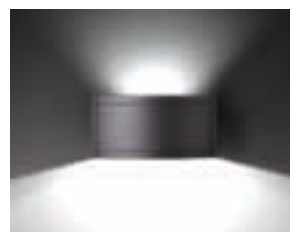
TSF



CFM [Downlight]



CFM [Uplight]



CFG

ENTRI Series luminaires provide unsurpassed levels of protection against entry of airborne contaminants. With a IP66 fixture rating in both up and down mounting applications, dust, insects, and moisture simply have no chance of penetrating the fixture's outer enclosure.

FIXTURE SEALING

- IP Rating
- Egress Emergency Lighting
- Dual Switching Control



IP RATING

"IP" stands for Ingress Protection and is a rating system established by the European organization IEC, International Electrotechnical Commission. Over 50 countries strong, this organization publishes international standards for electrical products and other related technologies. The two numbers proceeding the "IP" individually callout the fixture's protection ratings against solid objects (such as airborne particulates) and moisture respectively.

I	P	6	6
Ingress	Protection	Complete protection against dust entry	No moisture within fixture after a constant 100L/min. high pressure jet spray from all practical directions

EGRESS EMERGENCY LIGHTING

EGRESS EMERGENCY LIGHTING

ENTRI Series offers (2) unique solutions to provide uninterrupted illumination to the Path of Egress under emergency conditions.

CF/EMAB

Internal battery pack located in accessory adapter box supplies 60% of the lamp's initial rated lumens for a period of ninety minutes in the event of power failure. Battery supplies power to single or dual 26, 32, or 42W Compact Fluorescent lamps. Features externally accessible LED status indicator light and battery test switch for system checks.

EM/SCAB

Auxiliary quartz lamp and optic mounted in accessory adapter box. Socket is wired to separate relay controlled emergency power source.

DUAL SWITCHING CONTROL [DSAB]

For applications requiring curfew compliance through reduced lighting levels and power systems draw, ENTRI offers the DSAB dual switching option. Utilizing dual Compact Fluorescent lamps and independent ballasts, total luminaire output and power consumption can be reduced by 50%.



ENTRI Series offers (3) additional egress options which provide immediate light output upon power system reactivation.

SINGLE 26, 32, 42, 57W CFL DUAL 26, 32, 42W CLF

Fluorescent lamp source(s) combined with electronic ballast achieves full brightness within seconds of reactivation.

QAB

Auxiliary quartz lamp and optic mounted in accessory adapter box. Quartz lamp energizes upon power reactivation and extinguishes once HID lamp re-ignites.

EMAB

Auxiliary quartz lamp and optic mounted in accessory adapter box. Quartz lamp energizes upon cold start and power reactivation, extinguishing once HID lamp has achieved partial brightness.

HOUSING

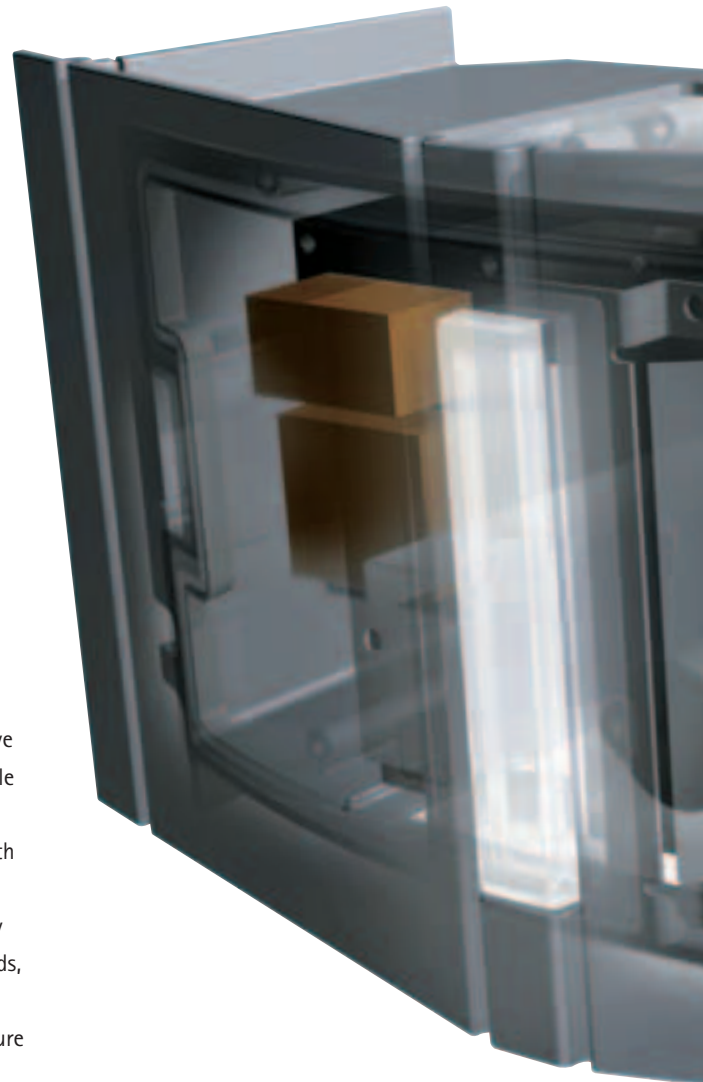
One piece die-cast aluminum construction for precise tolerance control and repeatability in manufacturing. Accommodates either up or down mounting configurations with no modifications. Downlight and uplight lens' are impact resistant 5/32" thick tempered clear or frosted flat glass, sealed to the housing with high strength VHB adhesive tape and a continuous silicone bead gasket. Silicone wireway plug on housing back wall seals incoming electrical leads to prevent moisture or dust entry.

FACEPLATE

One piece die-cast aluminum faceplate utilizes a continuous silicone gasket to seal securely to housing. Side hinged faceplate swings open via release of one (1) flush mount die-cast aluminum latch on housing side panel. Available luminous glass insert is .16" thick frosted glass, secured to back of faceplate with a continuous EPDM gasket. Available colored gel film secures behind glass.

PRODUCT SPECIFICATIONS

- Features + Benefits



OPTICAL SYSTEMS

Choice of ten (10) high efficiency optical systems constructed of premium 95% reflective anodized aluminum sheet, or bright specular anodized polished spun aluminum. Available distributions include Type III, Type III with 10% secondary glow, Type III with 4° pencil secondary, Forward Throw, Forward Throw with 10% secondary glow, Forward Throw with 4° pencil secondary, FX grazing optic, FXF 50% up/50% down grazing optic, Tight Spot, and 50% up/50% down Tight Spot. Optical segments are rigidly mounted inside a heavy wall aluminum housing for superior protection. All segment faces are clean of rivet heads, tabs, or other means of attachment which may cause streaking in the light distribution. All reflector modules feature quick disconnect wiring plugs. T6 Metal Halide lamps feature G12 lampholders, White Son™ High Pressure Sodium lamp features a GX12 lampholder, Quartz Halogen lamps feature mini-can screw based lampholders, and Compact Fluorescent lamps feature GX24q-(3,4,5) 4-pin lampholders.

MOUNTING

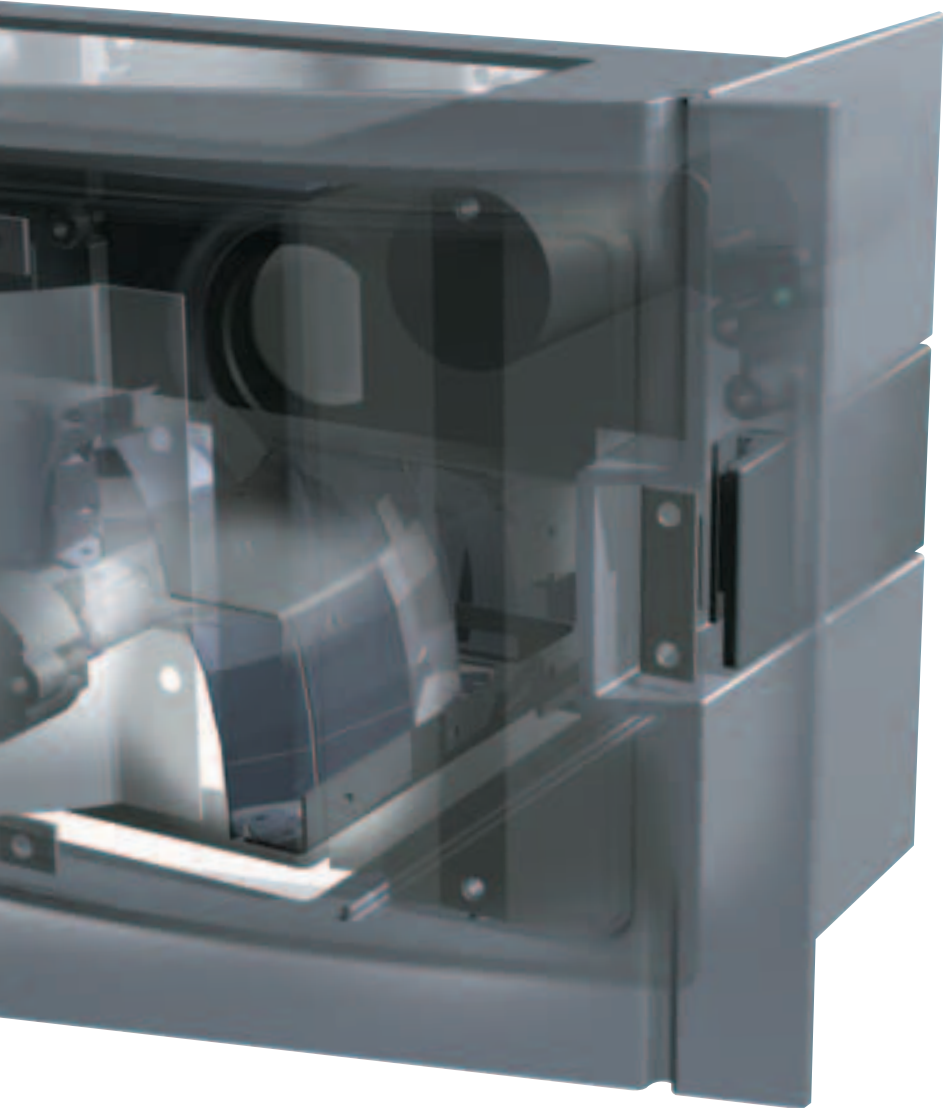
Standard zinc plated attachment plate mounts directly to 4" J-Box. Fixture slides over mounting plate and is secured with two (2) concealed stainless steel fasteners. Mounting plate features one-piece, EPDM gaskets on either side of plate to firmly seal fixture to wall surface, forbidding entry of moisture and particulates. Optional mounting arrangements utilize a die-cast aluminum adapter box to allow for surface conduit wiring, quartz lamp options, and emergency battery pack capability.

ELECTRICAL COMPONENTS

Ballast and related electrical componentry are heat sunk to the housing for cooler operation and prolonged life.

FINISH

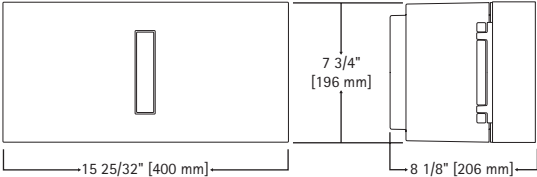
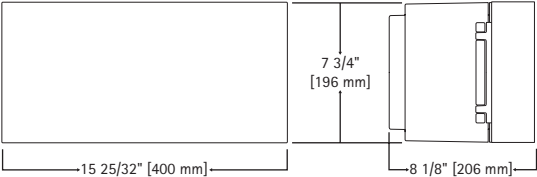
Housing finished in a 5 stage premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum, and graphite metallic. RAL and custom color matches available. Consult your INVUE Lighting Systems Representative for more information.



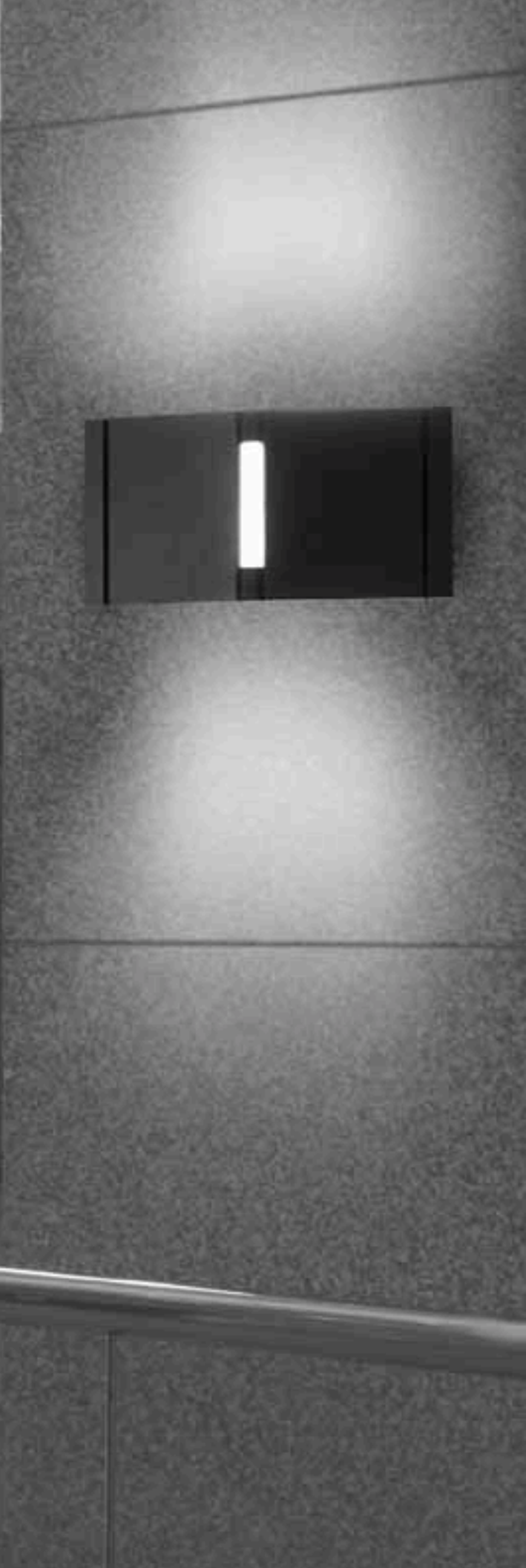
Certifications

IP66 Rated	U.L. 1598 Listed		FCO Full Cutoff
CSA Listed	25°C Ambient	ISO 9001	

DIMENSIONS [ENC | ENV | ENT]







MOUNTING OPTIONS SPECIFICATIONS

- Specifications + Dimensions

THRU-WAY BOX

Die-cast aluminum thru-way box provides means for surface mount conduit runs through 3/4" clearance holes on either side of casting. Box attaches to 4" J-Box or direct to wall surface. Finished to match luminaire.



CF/EMAB ADAPTER BOX

Die-cast aluminum adapter box houses a Compact Fluorescent emergency battery pack. Features externally accessible LED status indicator light and battery test switch for system checks. Also allows for 3/4" surface mount conduit runs. Finished to match luminaire.



QAB/EMAB/EM/SCAB ADAPTER BOX

Die-cast aluminum adapter box features a stand alone T4 Halogen lamp and optic for emergency applications. Also allows for 3/4" surface mount conduit runs. Finished to match luminaire.



OPTIONS + ACCESSORIES SPECIFICATIONS

- Specifications + Dimensions

LUMINOUS GLASS INSERT [LG]

Luminous glass insert is .16" thick frosted glass, secured to back of faceplate with a continuous EPDM gasket. Available colored gel film secures behind glass insert.



FROSTED LENS [FRM | FRS]

Frosted impact resistant 5/32" thick tempered flat glass lens reduces fixture brightness while visually softening the light distribution. Particularly useful in low mounting height applications, and in public environments where pedestrians may have direct line-of-sight exposure to lamp brightness. Distributions featuring 10% secondary glow utilize a standard frosted lens to achieve a soft, even glow.



WIRE GUARD [WG]

Wire guard assembly provides protection against glass breakage. Wire guard attaches to doorframe through four (4) pts of attachment and is finished in black powder coat paint.



PHOTOCONTROL

Internal button-style photocell with sensor located on housing side panel.



INSTALLATION

- Mounting
- Fixture

MOUNTING

Zinc plated steel mounting plate attaches directly to 4" standard J-Box or direct to wall surface.



FIXTURE

Fixture slides over top of mounting plate. Mounting plate features one-piece EPDM gasket on back side of plate to firmly seal fixture to wall surface, forbidding entry of moisture and particulates.



TAMPER RESISTANT

Fixture secures to mounting plate with two (2) tamper resistant concealed stainless steel fastener's.



ORDERING INFORMATION

Sample Number: ENC-150-MH-120-EB-3S-BK-LG-L

Product Family ENC=ENTRI Round Clean ENV=ENTRI Round Reveals ENT=ENTRI Triangle Reveals	Lamp Wattage ¹ HID 39=39W 70=70W 100=100W 150=150W Compact Fluorescent ² 26=26W 32=32W 42=42W 52=(2)26W ³ 57=57W ⁴ 64=(2)32W ³ 84=(2)42W ³ Quartz Halogen ⁵ 100=100W 150=150W 250=250W Lamp Type MH=Metal Halide WS=WhiteSON HPS ⁶ CF=Compact Fluorescent ⁷ HL=Quartz Halogen	Voltage ⁸ 120=120V 208=208V 240=240V 277=277V 347=347V DT=Dual-Tap Wired 277V ⁹ MT=Multi-Tap Wired 277V ⁹ TT=Triple-Tap Wired 347V ⁹ Ballast MB=Magnetic (MH only) EB=Electronic ¹⁰ X=None (for Halogen Lamp)	Distribution Up or Down HID and Quartz Halogen 3S=Type III FT=Forward Throw FX=Wall Grazing Optic TS=Tight Spot Up/Down HID and Quartz Halogen 3SG=Type III, 90% Main/10% Secondary Glow 3SP=Type III Main/ Pencil Secondary FTG=Forward Throw, 90% Main/ 10% Secondary Glow FTP=Forward Throw Main/ Pencil Secondary FXF=Wall Grazing Optic, 50% Up/50% Down TSF=Tight Spot, 50% Up/50% Down Compact Fluorescent CFM=100% Main, Up or Downlighting CFG=90% Main/10% Secondary Glow	Colors (add as suffix/must specify) ¹¹ BK=Black AP=Grey BZ=Bronze WH=White DP=Dark Platinum GM=Graphite Metallic Optional Luminous Faceplate Insert (add as suffix) LG=Luminous Glass Insert LGO=Luminous Glass Insert with Warm Orange Gel LGR=Luminous Glass Insert with Red Gel LGB=Luminous Glass Insert with Bright Blue Gel LGG=Luminous Glass Insert with Deep Green Gel	Options (add as suffix) F=Single Fuse (120, 277, or 347V) Specify Voltage FF=Double Fused (208V, 240V or 480V) Specify Voltage DSAB=Dual Fluorescent Switching Control Adapter Box ¹² QAB=Quartz Restrike Adapter Box EMAB=Quartz Restrike with Delay Adapter Box (Also Strikes at Cold Start) EM/SCAB=Quartz Emergency Separate Circuit Adapter Box CF/EMAB=Emergency Battery Backup Adapter Box ¹³ PC=Button Type Photocontrol (Specify Voltage) WG=Wire Guard FRM=Frosted Main Flat Glass FRS=Frosted Secondary Flat Glass ¹⁴ L=Lamp Included (Standard for all Quartz Halogen lamps)	Accessories (order separately/add color suffix) VA2001-XX=Thru-way Box
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WATTAGE TABLE

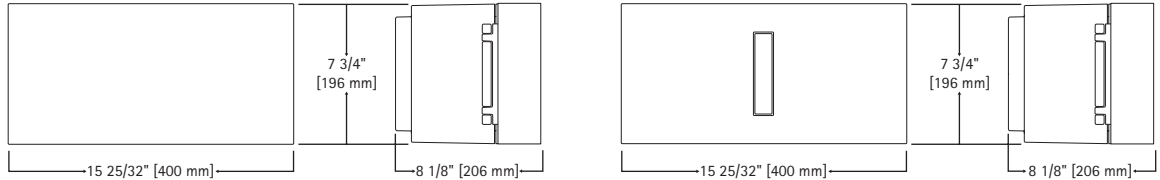
	ENC ENV ENT
Metal Halide	39, 70, 100, 150W
White Son HPS	100W
Compact Fluorescent	26, 32, 42, 57W
Dual Compact Fluorescent	(2) 26, (2) 32, (2) 42W
Quartz Halogen	100, 150, 250W

SHIPPING DATA



	ENC ENV ENT
Net. Weight (lbs.)	17
Volume (cu. ft.)	1.64

NOTES: 1 All MH lamps are T6 envelope with G12 lamp base. White SON HPS lamp is T6 envelope with GX12 lamp base. 2 All 26/32/42/57W CF lamps feature a 4-pin lamp base. Available in CFM and CFG distributions only. 3 Dual compact fluorescent lamps. 4 Nominal M.O.L lamp length of 57W CFL not to exceed 7". 5 All Halogen lamps are T4 envelope with mini-can screw base. 6 White SON HPS lamp available in 100W only. Requires electronic ballast. 120 through 277V only. Requires use of VA2001 accessory Thru-way Box. 7 Compact Fluorescent ballasts contain internal fusing. No supplemental fusing is necessary. CF ballasts are 120 through 277V. 8 Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information. 9 Dual-tap is 120/277V wired 277V. Multi-tap is 120/208/240/277V wired 277V. Triple-tap is 120/277/347V wired 347V. 10 120 through 277V only. Electronic ballast available with all CF lamps, and 39/70/100W MH lamps. Available with 150W MH lamp with use of VA2001 accessory Thru-way Box. 11 RAL and custom color matches available upon request. Consult your INVUE Lighting Systems Representative for more information. 12 Dual switching requires dual 26, 32 or 42W CF lamps. Allows independent switching control of each lamp through use of two (2) electronic ballasts. Allows 50% power reduction when dual ballasts are independently wired and controlled. 13 Battery backup provides 90 minutes of supplemental light at 60% of initial rated lamp lumens. Must specify 26/32/42W Compact Fluorescent lamps. 14 Frosted secondary lens standard on 3SG, FTG, and CFG distributions.

DIMENSIONS [ENC | ENV | ENT]



STANDARD COLORS

					
BK Black	AP Grey	BZ Bronze	WH White	DP Dark Platinum	GM Graphite Metallic



APPLICATIONS DEPARTMENT

Let the application experts at Cooper Lighting design your next lighting layout. Aided by the latest computer simulation software and a comprehensive lighting background, our Application Engineers can design, analyze, and provide statistical layouts for any lighting application. Whether the design criteria calls for Illuminance, Luminance, or Small Target Visibility (STV) compliance, Cooper Lighting can provide the fixture layout and supporting documentation necessary to help secure your next project.



INVUE WEBSITE

Visit invuelighting.com for the latest product information from INVUE Lighting Systems. With instant access to IES photometric files, PDF product specification sheets, new product announcements, and other helpful specification tools, the INVUE Lighting website is an invaluable resource for getting information to customers-quickly.



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- McGraw-Edison
- Streetworks
- Sure-Lites
- Fail-Safe
- Shaper
- Iris
- Lumière
- MWS

ENTRI Series

ARCHITECTURAL WALL LUMINAIRE

