

# ABT FEMIS

.04

GET MORE FROM SENSO

.19

INTRODUCING THE ARTEMIS FAMILY

.20

OVERVIEW

.22

TRIM OPTIONS

.24

ARTEMIS 2

.27

ARTEMIS 3

.30

ARTEMIS 5

.33

FIXED DOWNLIGHT

.34

WALL WASHER

.35

ADJUSTABLE

.36

HOUSING OPTIONS

.37

ACCESSORIES

.38

DAMP & WET LOCATIONS

.39

REFLECTORS

.40

LIGHT DISTRIBUTION

.43

GONIOPHOTOMETER

.44

LIGHT ENGINE & DRIVERS

.45

HUMAN CENTRIC LIGHTING & DIM TO WARM



## INTRODUCING THE **ARTEMIS**

Our Artemis family evokes the sleek beauty of apex predators. This series of downlights offers a range of applications, all with the keen efficiency and uncompromising high performance of nature's most formidable hunters.

This family of high-performance downlights features a unified design across three application types: wall washers, adjustable, and fixed downlights. Each application type is available in three sizes, designed to output a unified lighting effect—perfect for lighting large spaces.

# FLANGED

## ARTEMIS FAMILY OVERVIEW



AR2D-FL

Artemis 2  
Downlight, Flanged



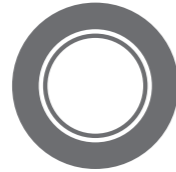
AR2W-FL

Artemis 2  
Wall-wash, Flanged



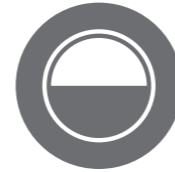
AR2A-FL

Artemis 2  
Adjustable, Flanged



AR3D-FL

Artemis 3  
Downlight, Flanged



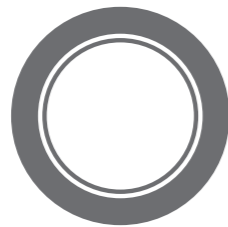
AR3W-FL

Artemis 3  
Wall-wash, Flanged



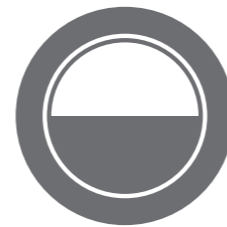
AR3A-FL

Artemis 3  
Adjustable, Flanged



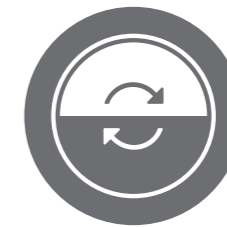
AR5D-FL

Artemis 5  
Downlight, Flanged



AR5W-FL

Artemis 5  
Wall-wash, Flanged



AR5A-FL

Artemis 5  
Adjustable, Flanged

# TRIMLESS

## ARTEMIS FAMILY OVERVIEW



AR2D-TL

Artemis 2  
Downlight, Trimless



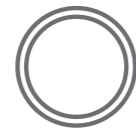
AR2W-TL

Artemis 2  
Wall-wash, Trimless



AR2A-TL

Artemis 2  
Adjustable, Trimless



AR3D-TL

Artemis 3  
Downlight, Trimless



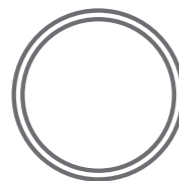
AR3W-TL

Artemis 3  
Wall-wash, Trimless



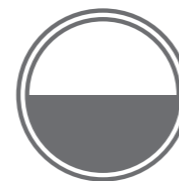
AR3A-TL

Artemis 3  
Adjustable, Trimless



AR5D-TL

Artemis 5  
Downlight, Trimless



AR5W-TL

Artemis 5  
Wall-wash, Trimless



AR5A-TL

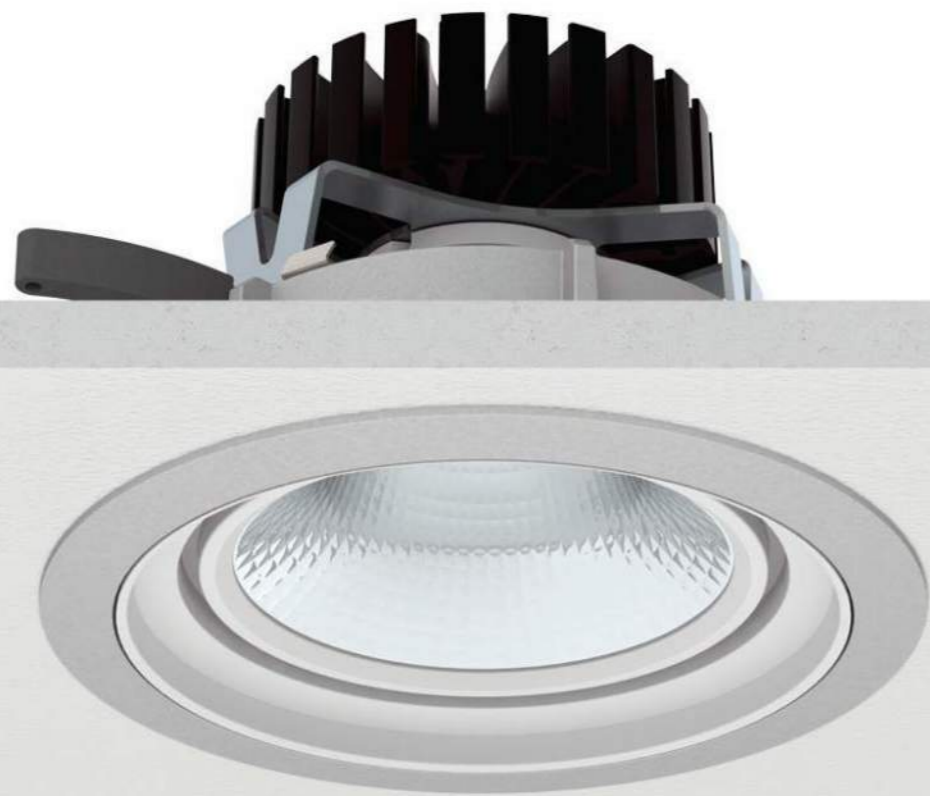
Artemis 5  
Adjustable, Trimless



FLANGED & TRIMLESS  
INSTALLATIONS  
AVAILABLE FOR ALL  
SIZES & APPLICATIONS

# FLANGED & TRIMLESS

All Artemis fixtures are available with a powder-coat painted flange or trimless installations. The flange is available in all our SENSO standard colours: white, black, or silver. The baffle for both the flanged and trimless options can be painted to match the flange or painted a custom colour using RAL codes.



# ARTEMIS 2

SMALL, TWO-INCH APERTURE



Artemis 2 Adjusta



# ARTEMIS 2



The smallest member of the Artemis family, Artemis 2 features SENSO-designed reflectors and a wide range of colour temperatures in a high-performance yet efficient and compact package. With the Artemis family of downlights, it's easy to get a cohesive design regardless of fixture size or style.

This fixture is available as a fixed downlight, a wall washer, and an adjustable fixture with 360° rotation and up to 30° angle adjustment.

## LIGHT ENGINE

- Output:** up to 2000lm
- High Efficacy:** up to 150 lumen/Watt
- Colour Options (CCT):** 2400K, 2700K, 3000K, 3500K, 4000K or 6500K
- Colour Consistency:** Range within a 3-MacAdam Ellipse
- Colour rendering (CRI):** 90 CRI & 50+ R9 Value

## CONSTRUCTION/FINISH

- Satin powder coated finish
- Custom finishes are available
- Cast aluminum trim
- Made in Canada

## HOUSING OPTIONS

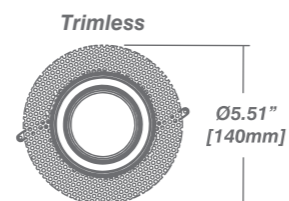
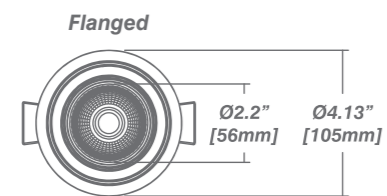
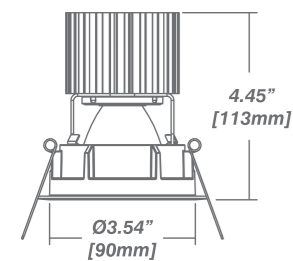
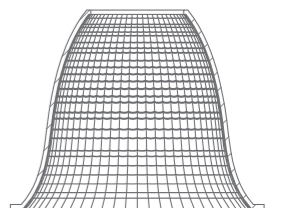
- Standard SENSO Housing
- New Construction
- IC Housing

## DRIVER

- Dimming:** 1% dimming standard with 0.1% option
- Ripple:** Industry-leading low ripple
- Efficiency:** Power Factor >0.9  
Efficiency over 85%  
Class 2 output for safety
- Installation:** Small footprint allows retrofit installations

## REFLECTOR

*Faceted Reflector*





## TWO-INCH APERTURE DOWNLIGHTS

Artemis 2 is a small yet powerful 2000 lumen 2 inch aperture Downlight available in 3 classic designs fixed, adjustable and wall wash. Manufactured and designed for efficiency, power consumption and price. It comes with SPR ( Senso Precision Reflector ) technology for perfect glare control and precise beam spread, High quality LED module, 90 + CRI, 150 lumens per watt, and six different colour temperatures! Be invited to use it for inspiring your lighting design in commercial and residential applications.

# ARTEMIS 3

MEDIUM, THREE-INCH APERTURE



Artemis 3 Wall Washer

# ARTEMIS 3



The middle child of the Artemis family, Artemis 3 features SENSO-designed reflectors and a wide range of colour temperatures in a high-performance yet efficient and compact package. With the Artemis family of downlights, it's easy to get a cohesive design regardless of fixture size or style.

This fixture is available as a fixed downlight, a wall washer, and an adjustable fixture with 360° rotation and up to 30° angle adjustment.

## LIGHT ENGINE

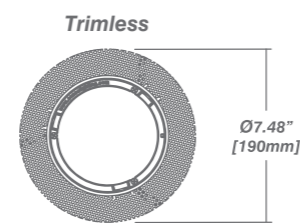
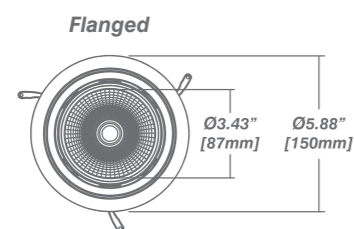
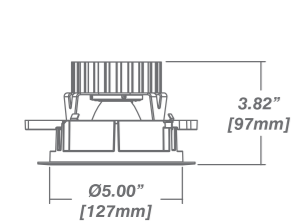
- Output:** up to 4000lm
- High Efficacy:** up to 150 lumen/Watt
- Colour Options (CCT):** 2400K, 2700K, 3000K, 3500K, 4000K or 6500K
- Colour Consistency:** Range within a 3-MacAdam Ellipse
- Colour rendering (CRI):** 90 CRI & 50+ R9 Value

## CONSTRUCTION/FINISH

- Satin powder coated finish
- Custom finishes are available
- Cast aluminum trim
- Made in Canada

## HOUSING OPTIONS

- Standard SENSO Housing
- New Construction
- IC Housing

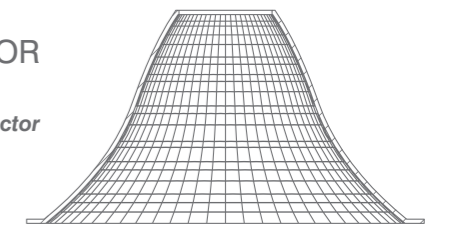


## DRIVER

- Dimming:** 1% dimming standard with 0.1% option
- Ripple:** Industry-leading low ripple
- Efficiency:** Power Factor >0.9  
Efficiency over 85%  
Class 2 output for safety
- Installation:** Small footprint allows retrofit installations

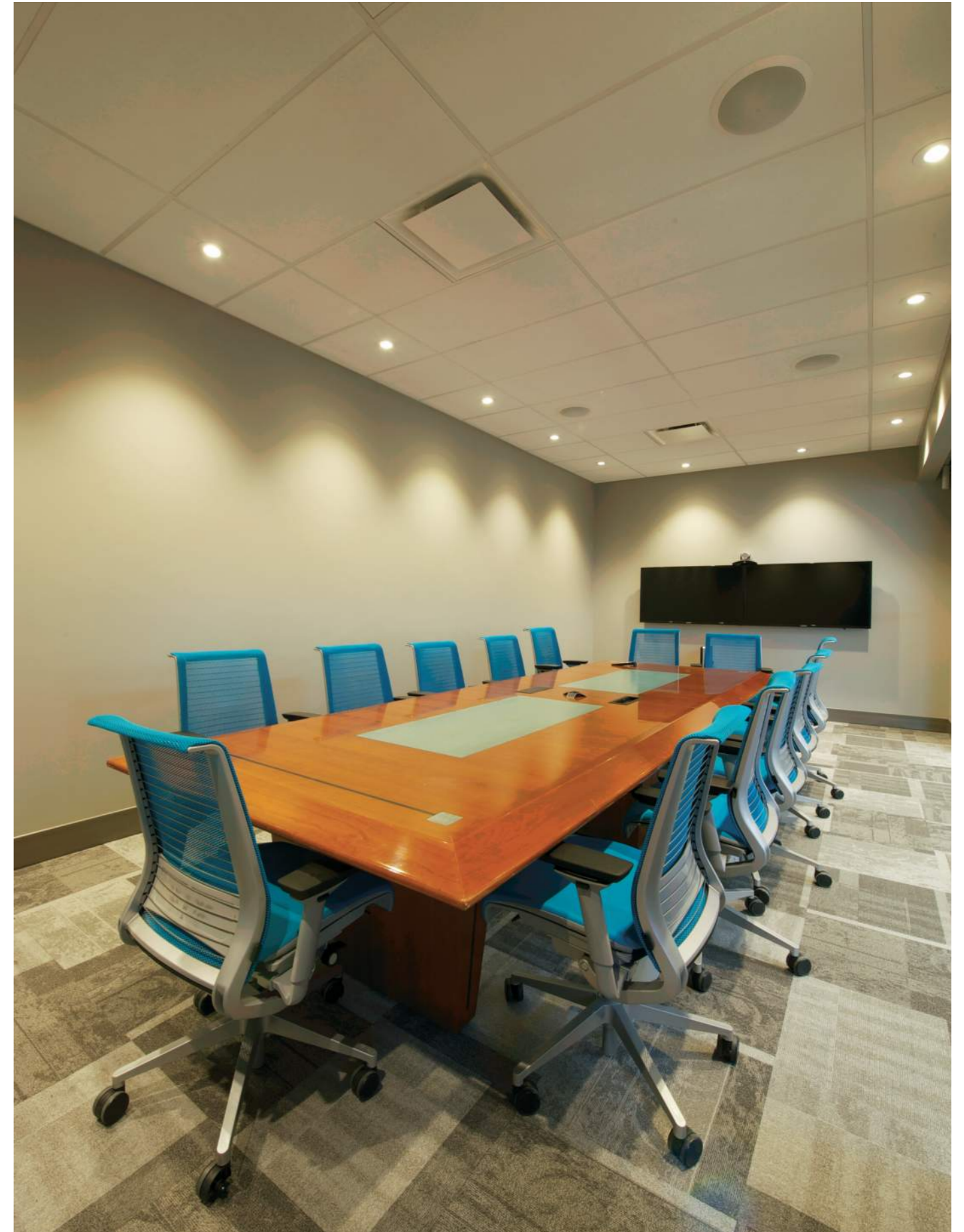
## REFLECTOR

Faceted Reflector



### THREE-INCH APERTURE DOWNLIGHTS

Artemis 3 is a mid sized downlight with powerful 3000 lumen 3 inch aperture. It is available in 3 classic designs fixed, adjustable and wall wash. Manufactured and designed for efficiency, power consumption and price. It comes with SPR ( Senso Precision Reflector ) technology for perfect glare control and precise beam spread, High quality LED module, 90 + CRI, 150 lumens per watt, and six different colour temperatures! Be invited to use it for inspiring your lighting design in commercial and residential applications.



# ARTEMIS 5

LARGE, FIVE-INCH APERTURE



Artemis 5 Fixed Downlight

# ARTEMIS 5



The largest member of the Artemis family, Artemis 5 features SENSO-designed reflectors and a wide range of colour temperatures in a high-performance yet efficient and compact package. With the Artemis family of downlights, it's easy to get a cohesive design regardless of fixture size or style.

This fixture is available as a fixed downlight, a wall washer, and an adjustable fixture with 360° rotation and up to 30° angle adjustment.

## LIGHT ENGINE

- Output:** up to 6500lm
- High Efficacy:** up to 150 lumen/Watt
- Colour Options (CCT):** 2400K, 2700K, 3000K, 3500K, 4000K or 6500K
- Colour Consistency:** Range within a 3-MacAdam Ellipse
- Colour rendering (CRI):** 90 CRI & 50+ R9 Value

## CONSTRUCTION/FINISH

- Satin powder coated finish
- Custom finishes are available
- Cast aluminum trim
- Made in Canada

## HOUSING OPTIONS

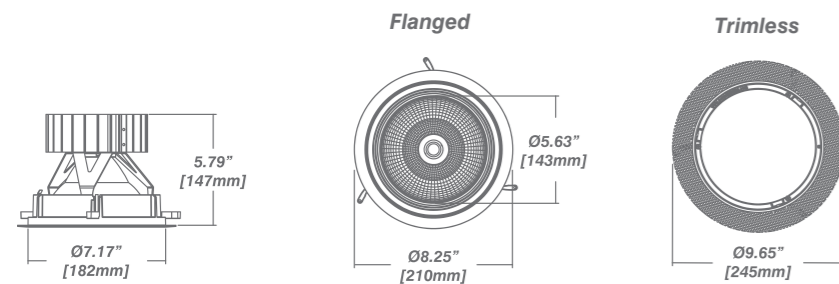
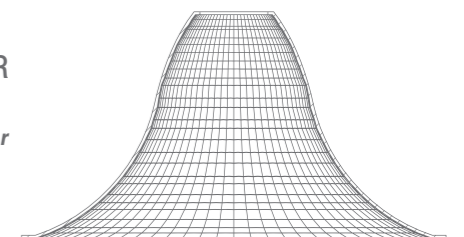
- Standard SENSO Housing
- New Construction

## DRIVER

- Dimming:** 1% dimming standard with 0.1% option
- Ripple:** Industry-leading low ripple
- Efficiency:** Power Factor >0.9  
Efficiency over 85%  
Class 2 output for safety
- Installation:** Small footprint allows retrofit installations

## REFLECTOR

*Faceted Reflector*





### FIVE-INCH APERTURE DOWNLIGHTS

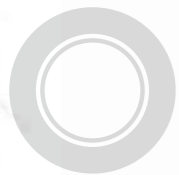
Artemis 5 is a large and powerful 6000 lumen 5 inch aperture Downlight available in 3 classic designs fixed, adjustable and wall wash. Manufactured and designed for efficiency, power consumption and price. It comes with SPR ( Senso Precision Reflector ) technology for perfect glare control and precise beam spread, High quality LED module, 90 + CRI, 150 lumens per watt, and six different colour temperatures! Be invited to use it for inspiring your lighting design in commercial and residential applications.





## FIXED DOWNLIGHT

- Wet-rated option available
- 15°, 30°, 45°, and 60° beam angles
- SENSO-designed reflectors to match SENSO product collections

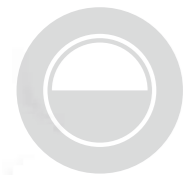


Artemis 3 Fixed Downlight



## WALL WASH

- Optimized for Wall Washing application
- 18° fixed tilt angle
- Wet-rated option available
- SENSO-designed reflectors to match SENSO product collections



Artemis 3 Wall Wash

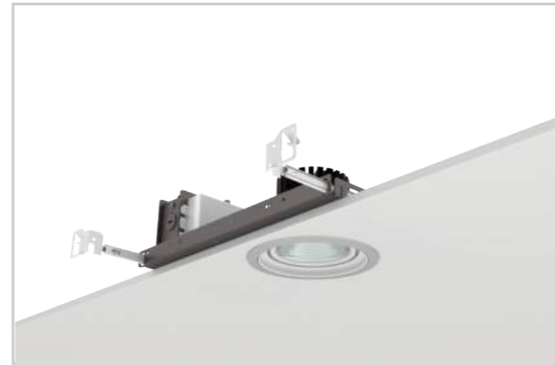


## ADJUSTABLE

- 0° to 30° adjustable tilt angle
- 360° horizontal rotation
- SENSO-designed reflectors to match SENSO product collections

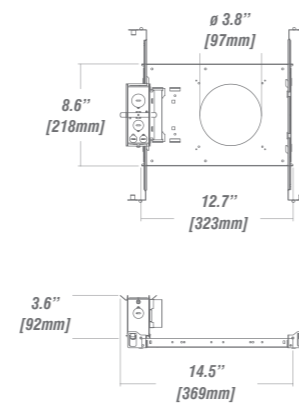


# RECESSED HOUSING OPTIONS



## NEW CONSTRUCTION HOUSING

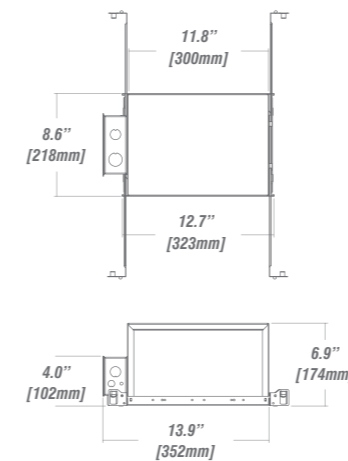
- Plaster Frame
- Galvanized steel construction with cut-out
- Bar Hanger Length: from 14-3/16" to 26"
- Outlet Box Included



## IC HOUSING

- Galvanized steel construction
- Airtight
- Includes gasketed junction box
- Plaster Frame option
- Bar Hanger Length: from 14-3/16" to 26"

\* use only with LED modules up to 1000lm.

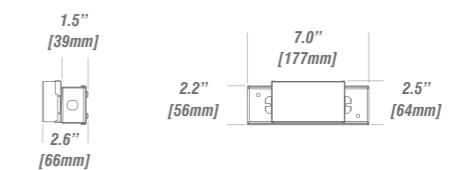


## SENSO STANDARD HOUSING

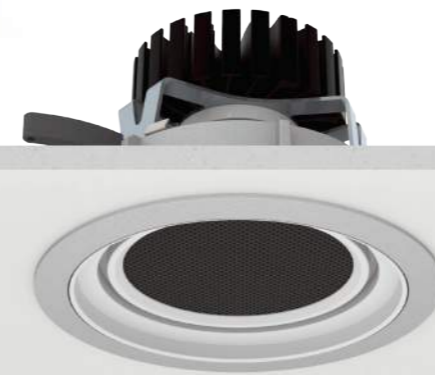
- Bar Hanger Length: from 14-3/16" to 26"
- Galvanized steel enclosure
- Multiple driver installation options

\* driver can be installed either:

- (A) laying on top of ceiling.
- (B) mounted to the bar hanger and fixed to the ceiling.
- (C) remote from the fixture, with the bar hanger still used if desired to secure the fixture



# ACCESSORIES



**HONEYCOMB MESH**

The honeycomb mesh is a black grid inserted at the opening of the fixture to direct the light more precisely. It reduces glare and wide-beam light.



**DIFFUSING LENS**

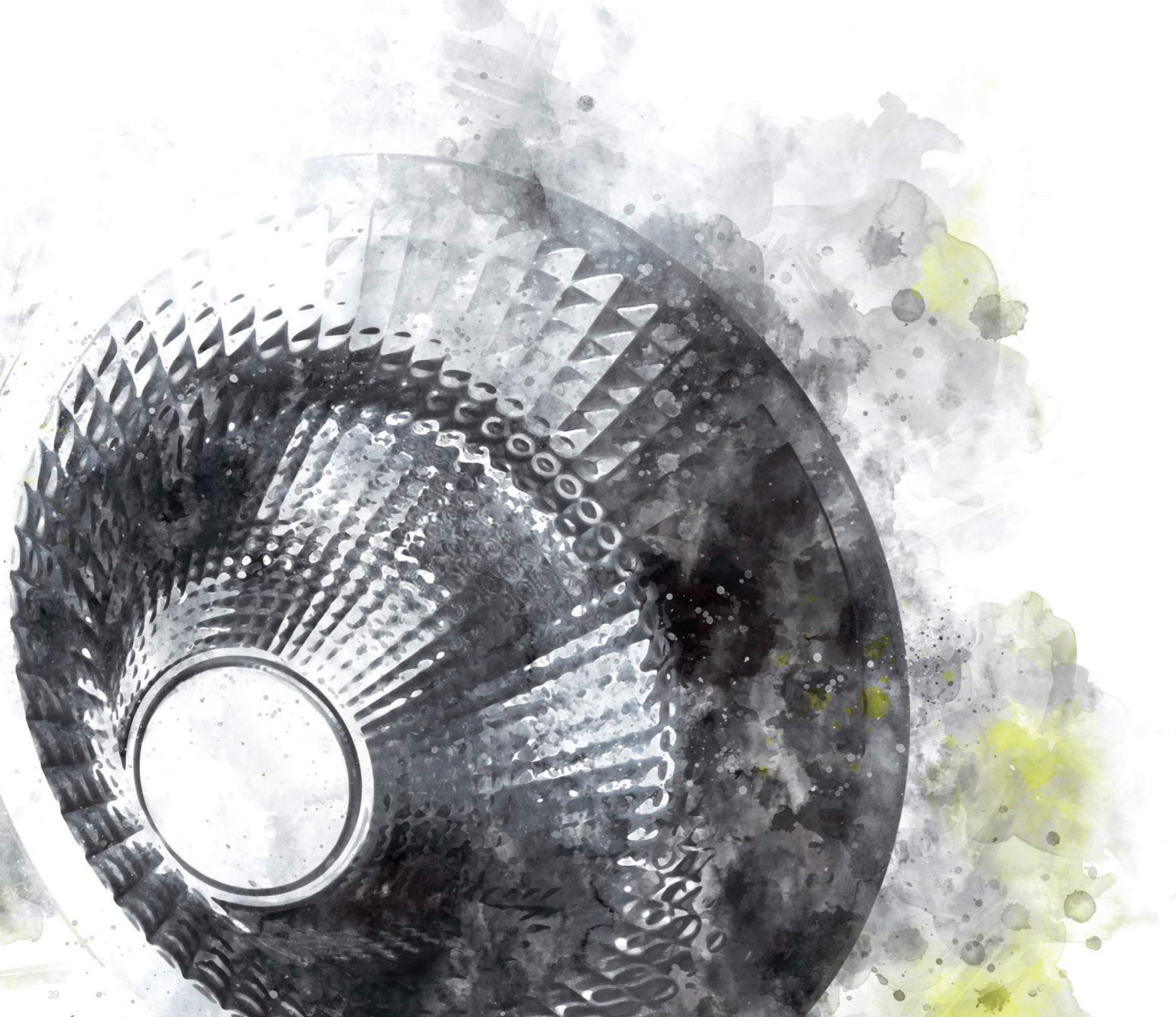
The diffusing lens eliminates glare by creating a glowing, flat surface at the opening of the fixture. By dispersing the light, this lens smooths out light distribution.

# DAMP AND WET RATING

Like nature's fiercest hunters, the Artemis performance is uncompromised by dry or damp locations. The entire Artemis family comes with a standard damp rating, suitable for locations with moderate humidity, such as bathrooms, laundry rooms, and kitchens.

For more extreme environments, the fixed downlight and wall washing versions of the Artemis are available with a wet rating option in all sizes.





# SENSO DESIGNED REFLECTORS

The reflector is designed as an array of flat polished surfaces, rather than a smooth seamless curve. A faceted design increases the efficiency of the reflector, losing less light. With such small flat surfaces, it doesn't create any artifacts in the light distribution so you still get a perfectly even output. This allows us to use shorter reflectors and produce a more compact product, which reduces the amount of space required in the ceiling. Reflectors eliminate rings or other lines even at wide flood beam angles.

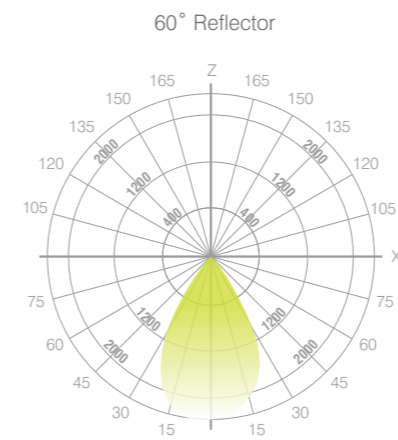
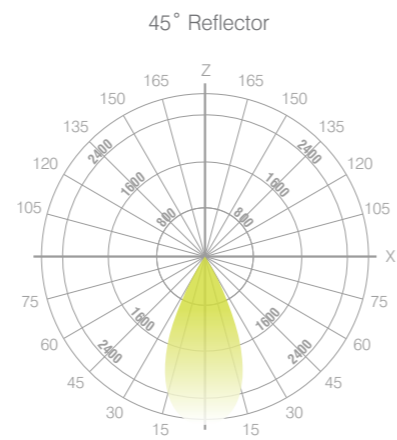
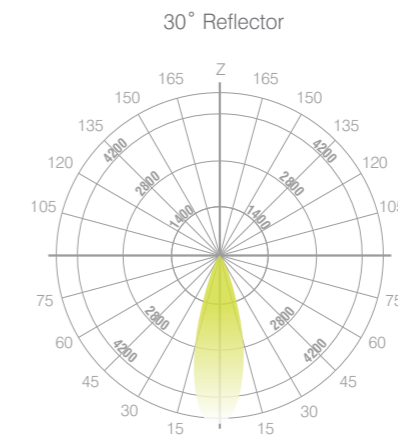
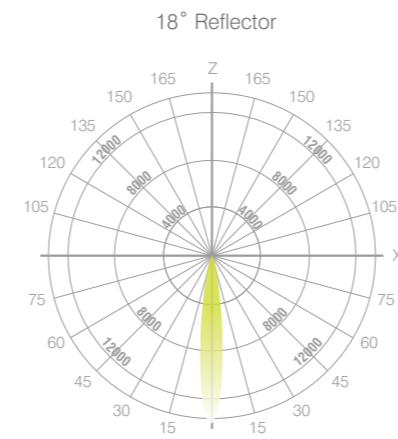
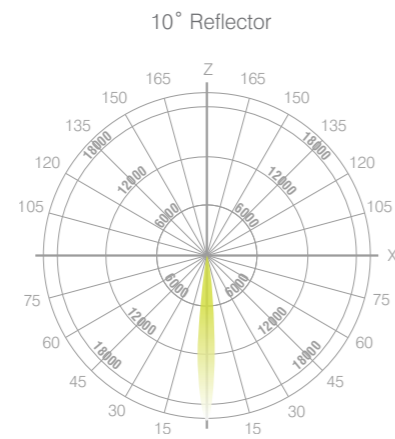
With less light being lost in the reflector, we've created a more efficient fixture with a higher lumen/watt rating. More light, with less power.

Each reflector designed for the Artemis family has been optimized for anti-glare lighting, perfect for silent ceiling design. Glare-free lighting is becoming more and more popular as designers aim to create natural and innovative lighting environments for both professional and residential spaces. For visible light, you can add a frosted acrylic lens as an option.

Providing consistent and precise light distribution is vital when creating an efficient workspace. The Artemis reflectors have been painstakingly designed to match beam angles and light distribution between each Artemis aperture size and application. Precise light distribution is essential for creating accent spaces as well as work space illumination without causing glare.

The metal spun reflectors offer superior performance, not only keeping their shape when heated, but also maintain their shine thanks to their durable, less porous design. This also reduces the need for cleaning and maintenance.

# LIGHT DISTRIBUTION

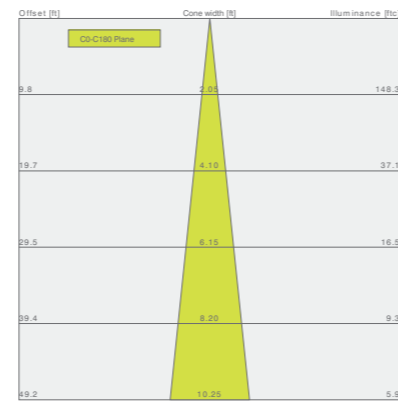




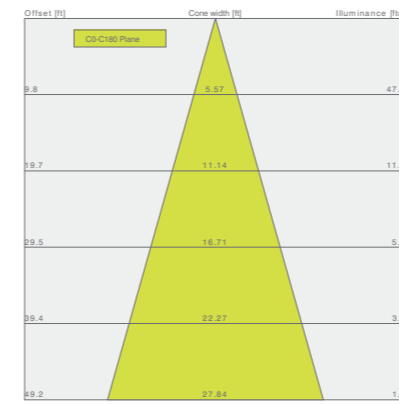
# AR2

These charts show the efficiency factor, luminaire efficacy, light distribution, and beam angle. From left to right the reflectors used are: 15°, 30°, 45°, 60°

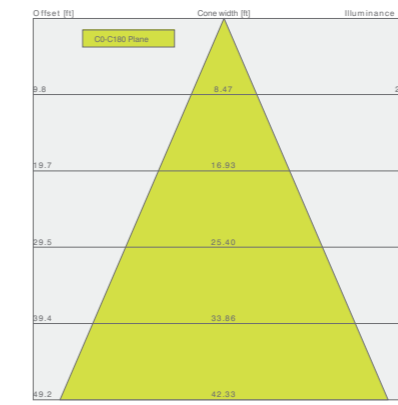
15° Reflector



30° Reflector



45° Reflector



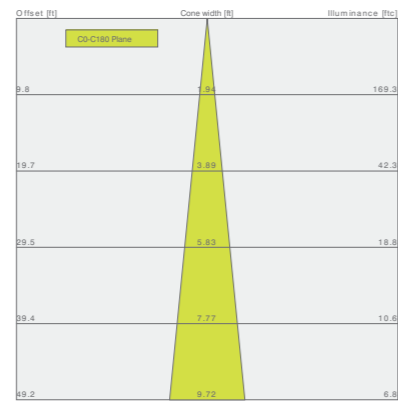
60° Reflector



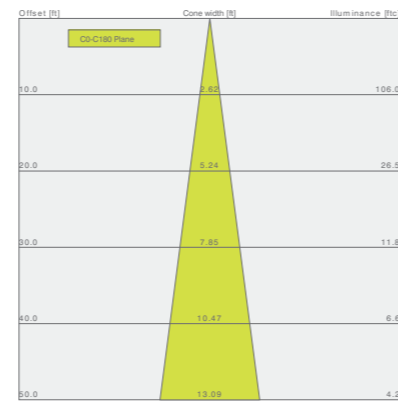
# AR3

These charts show the efficiency factor, luminaire efficacy, light distribution, and beam angle. From left to right the reflectors used are: 10°, 18°, 30°, 45°, 60°

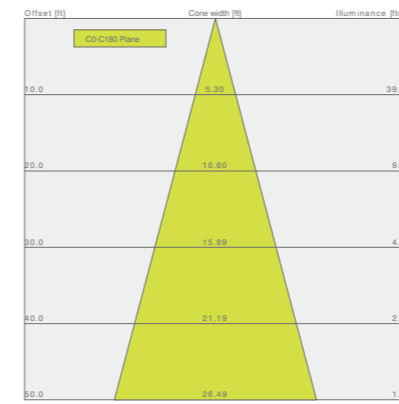
10° Reflector



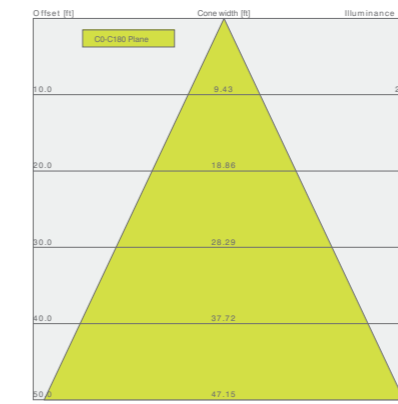
18° Reflector



30° Reflector



45° Reflector

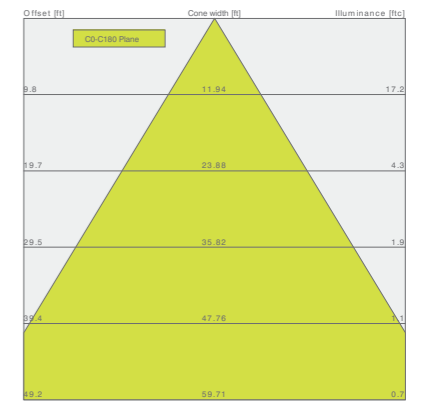
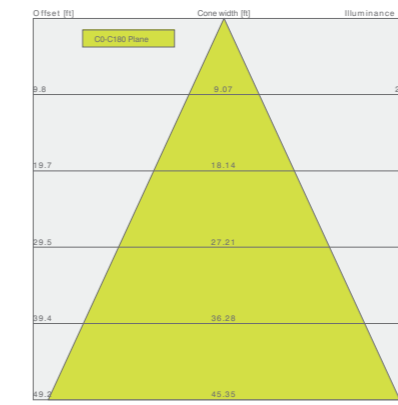
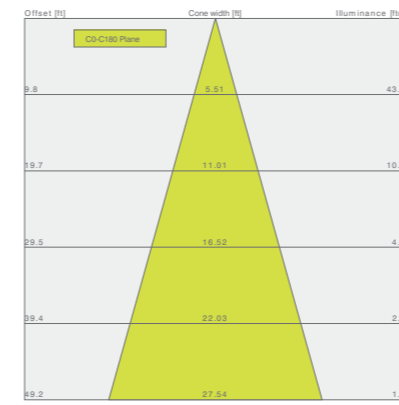
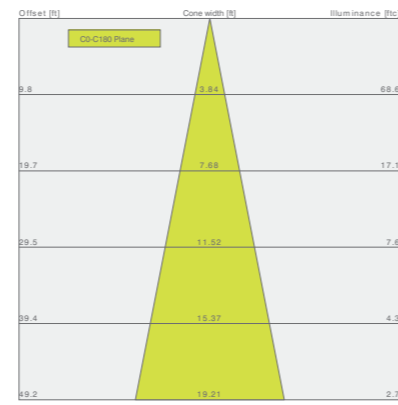
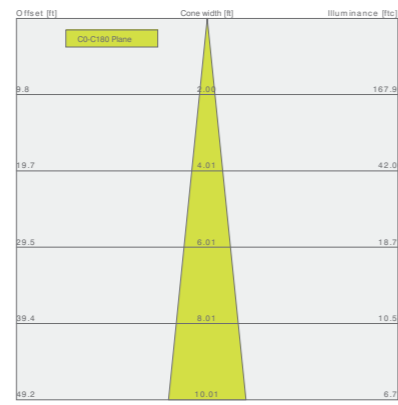


60° Reflector



# AR5

These charts show the efficiency factor, luminaire efficacy, light distribution, and beam angle. From left to right the reflectors used are: 10°, 18°, 30°, 45°, 60°



\* The illuminance is calculated with  $I(\gamma=0)$



## CROSS-COLLECTION CONSISTENCY

SENSO's lighting design team aims to deliver a consistent lighting effect for your entire space regardless of the product type you need. When moving from space to space in your office, art gallery, public centre, warehouse, or home, you always want to have a unified lighting experience.

To that end, we have designed the Artemis to create a lighting effect that matches our other popular product lines, such as the Leto 11 collection.

Use both to create an inviting contrast of recessed and pendant fixtures while retaining the comfort of consistent light.



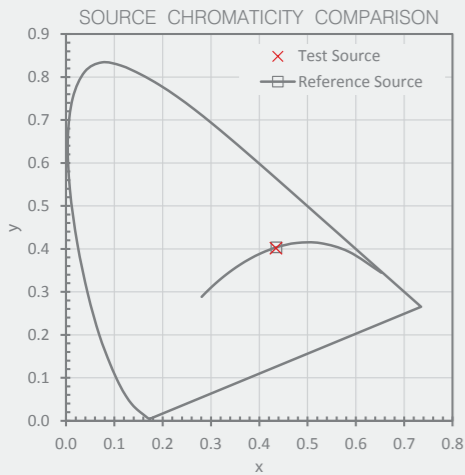


# ABSOLUTE PHOTOMETRY WITH GONIOPHOTOMETER

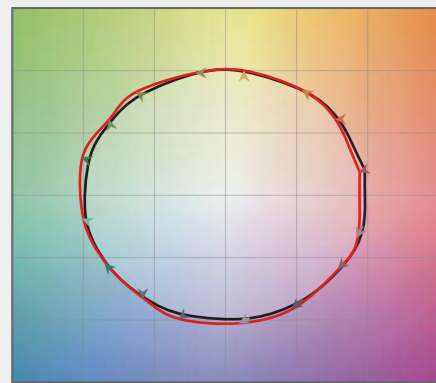
SENSO's in-house photometric testing ensures that our lighting design can match your needs precisely.

Our Goniophotometer uses a CCD camera, photometer, and spectrometer that move on two finely controlled axes around the luminaire. The captured ray data is then transformed into a far-field luminous intensity distribution, which can yield absolute photometry IES files, complete LM-79 test reports, and accurate Spectrometer measurements, including CRI and CCT.

TM-30-15 is a new method for quantifying colour-rendering properties of light sources that was recently published by the Illuminating Engineering Society. It distinguishes both colour fidelity and color gamut and provides a framework for interpreting Chroma and hue shift associated with light sources. TM 30-15 allows us to measure both the R<sub>f</sub> value and the R<sub>g</sub> Gamut value, taking full advantage of the true colors available to experience. Here at SENSO, using our Goniophotometer we can provide TM 30-15 reports on request.



This chart plots the chromaticity of the test and reference sources in the CIE 1931 chromaticity diagram.



— Reference Source — Test Source

This chart shows the average chromaticity shift for the sample within each of 16 hue bins.

# LIGHT ENGINE

Offering dim to warm and dynamic white light, the entire Artemis family offers fiercely high performance, versatility, and exceptional efficiency.

## COLOURS

All Artemis fixtures come standard with R9050, meaning a colour rendering index (CRI) of at least 90 and an R9 value (specific to red) of at least 50. Red is fundamental to colour quality and tends to be lower even with a high CRI—closer to 10 or 20 than 50 and above. R9050 means that Artemis lights offer excellent performance when it comes to colour—far ahead of the pack.

## TEMPERATURE

The Artemis family has a superior colour temperature range of 2500K to 6500K, offering greater options and flexibility compared to more standard fixtures. For example, some jewellery stores require very white light (around 6500K) to properly exhibit the brilliance of their diamonds. Supporting its colour temperature range, Artemis features a three-step MacAdam ellipse, the industry standard on the tightness of the colour temperature spread.

## LUMEN OUTPUT AND EFFICIENCY

With a wide range of lumen output from 700lm to 6000lm, Artemis is adaptable to many different lighting requirements. Not only that, Artemis lights demonstrate outstanding lighting efficiency of up to 130lm/W—well above the industry benchmark of 100lm/W.

# DRIVER

SENSO prides itself on providing exceptional quality control, that includes minimizing flicker. Power is key, so we start by selecting industry-leading drivers and power supplies that provide clean DC power with low ripple. We test our modules for visible and invisible flicker to ensure that we're using the best components possible and confirm manufacturers' claims about their products. Our Goniophotometer's advanced optics and processing power is able to detect and measure flicker that is invisible to the naked eye. We want you to have the best experience possible with your lighting solutions.

For the Artemis family of downlights, we ship drivers that provide a standard dimming capability down to 1%, while maintaining a virtually flicker-free output (less than 1% VPP). Dimming of 0-10V comes standard with Artemis drivers.

## SUPPORTED DRIVER SYSTEMS

Artemis' technology supports three driver systems: Eldo (including Eldolc and Eldoled), DMX, and Lutron.

Eldolc uses a 0-10V dimming protocol with but with the dimming range and quality of Eldoled to a dimming percentage of 0.1% - ten times better than what's usually possible within this protocol. Eldo's phase dimming drivers are compatible with forward phase (TRIAC) or reverse phase (ELV) dimmers. Eldoled also supports Digital Addressable Lighting Interface (DALI) control. Each DALI device contains its own settings such as address, group assignments, scene level and fade rates, customizable through a DALI digital controller.

DMX is a digitally addressable control through a DMX512 system, which allows for complicated programming to communicate to DMX devices using 8/16-bit code packets.

Lutron dimming is available for Artemis in several ways. SENSO provides a two-wire forward phase dimming option, and a three-wire phase dimming option that's compatible with Lutron phase dimmer switches. Lutron uses Ecosystem digital options to control settings, and the options for Artemis include 1% and 5% dimming.



# HUMAN CENTRIC

Imagine that a room's lighting can change to match your desired mood. Do you want to be productive? Creative? Focused? Calm? Or maybe you want to be able to control your lighting for maximum energy efficiency? All of these are possible with the Artemis family by integrating human centric technologies into the core of the product.

Human centric lighting is about calibrating our lighting to support our needs. Humans have a physical relationship to light, having relied on the sun and the changing quality of light throughout the day to set our circadian rhythms. Brighter light rich in blue content can help us be more alert and productive, while dimmer, warmer light calms us down.

Today, we are surrounded by artificial light, and lighting designers and engineers are striving to create lighting that works with our biology. Controlling light dimming and colour temperature properly can have benefits for mood, performance and visual acuity, while also improving sustainability.

With its versatile design, and multiple installation options the Artemis family can bring a human touch to any space. The unique advantage human centric lighting has over traditional or dim to warm systems is controlling the color temperature while dimming.

# DIM-TO-WARM

Warm Dim technology allows LED lights to dim down to a warmer colour temperature, replicating the effect of incandescent and halogen light bulbs.

When a typical LED light is dimmed, it becomes cooler or bluer. These standard, Cold Dim LEDs affect our natural circadian rhythms and make us feel more awake when we want to wind down in the evening. Warm Dim LEDs change the game. Simply put, Warm Dim technology allows LED lights to dim down to a warmer color temperature, replicating the effect of incandescent and halogen light bulbs. With Warm Dim, your LEDs lights now provide that comforting, amber glow all while remaining energy-efficient.

Halogen and incandescent bulbs were highly inefficient compared to LED warm dim lights, which offer 3000K dimming to 1800K.



SENSO - PART OF YOUR PROJECT



302 50 Ave S.E.  
Calgary, Alberta  
T2G 2A9 Canada

[info@sensolighting.com](mailto:info@sensolighting.com)  
403.216.7013  
[www.sensolighting.com](http://www.sensolighting.com)