

THORN
LIGHTING



AVENUE

Sustainable urban lighting without compromise



**WE
MAKE
LIGHT
WORK**

MODULAR INNOVATION

DESIGNED FOR URBAN SPACES

Avenue's clever modular concept welcomes in a new era of design innovation. Driven by decades of excellence in outdoor luminaires, this is the urban lighting solution designed to meet the needs of today – with the flexibility to meet the needs of the future.

The Avenue family consists of four product types: post-top, lateral arm, post-top lateral and suspended, all developed on the same connected modular platform.



Building
surrounds



Parks &
plazas



Urban &
residential
streets



Pathways and
pedestrian
areas



Car parks



THORN
LIGHTING

LyhneDesign

ONE MODULAR PLATFORM, UNLIMITED POSSIBILITIES

AVENUE LATERAL ARM



AVENUE LATERAL POST-TOP



AVENUE SUSPENDED



AVENUE POST-TOP

BUILT FOR SUSTAINABILITY



QUAD DESIGN INNOVATION

All products in the Avenue family are built on Thorn's innovative Quad modular platform (patent pending). Designed to take outdoor sustainability to the next level, the Quad platform enhances upgradability and optimises refurbishment to extend the product lifecycle.



UPGRADABILITY

Prepare your project for evolving urban IoT and connectivity strategies with Thorn's Quad platform. The modular design enables any Avenue product to be easily upgraded to include Zhaga Down in the future. Simply replace the relevant Quad section quickly and easily on-site.



REFURBISHMENT

Avenue features an all-in-one internal gear tray and light engine that can be accessed and removed with just a single tool. This design simplifies maintenance, refurbishment, and upgrades, providing a solution that can be maintained indefinitely. By reducing material waste, it minimises the environmental impact.



SUSTAINABILITY

Aligned with Zumtobel Group's Circular Design Rules, Thorn's Quad modular platform is designed for easy disassembly if maintenance or upgrade of the solution is no longer desired. This gives peace of mind that Avenue can be easily and responsibly recycled, and material content re-used. Avenue is consciously developed to minimise environmental impact, incorporating 68 % recycled materials and achieving 82 % recyclability.

CIRCULAR DESIGN

- Design for disassembly
- Facilitating long product lifetime
- Creating the foundation of ease of maintenance and future upgrade

CIRCULAR SOURCING

- High percentage recycled material content
- Ensuring the highest level of future recyclability
- Removal of substances that are contradictory to circularity and health

CIRCULAR SYSTEMS

- Maintenance & upgrade / refurbishment kits
- Reusability / remanufacturing
- High Value Recycling

68 %
RECYCLED
MATERIALS

82 %
RECYCLABILITY



MODULAR UPGRADABILITY



FLEXIBLE TO CHANGES IN YOUR IOT & CONNECTIVITY STRATEGY

Thanks to Avenue's modular design, all four variants of Avenue can be easily upgraded at any time throughout the product's lifespan, ensuring the luminaire can evolve to meet changing future needs. Not only is the all-in-one LED light engine and gear tray fully replaceable, but Avenue's unique quad design provides the opportunity for future connectivity upgrades through the addition of a Zhaga Down node with a compatible quad section.

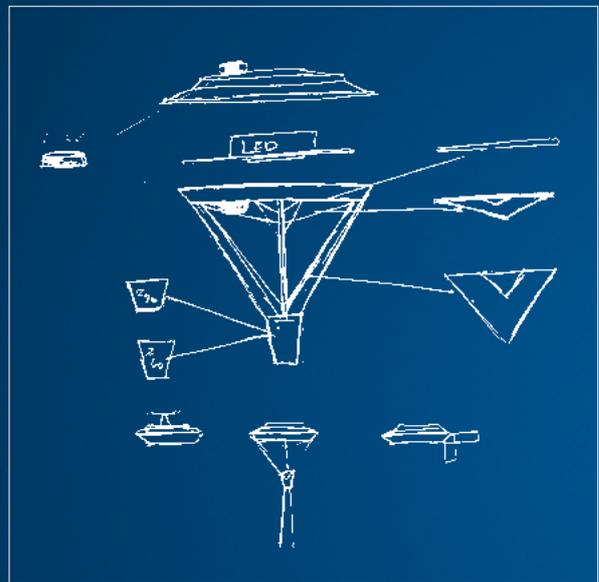


AVENUE

DESIGNED EXCLUSIVELY FOR THORN BY LYHNE DESIGN

Avenue is a unique collaboration, combining Thorn's expertise in technological innovation and sustainable manufacturing with the Scandinavian influence and design finesse of Denmark's Lyhne Design.

Lyhne Design specialises in creating intelligent, aesthetic, technically robust and sustainable designs, and is particularly strong in the development of technical lighting fixtures with a high degree of Nordic aesthetics.



DESIGN WITH PURPOSE

As a Danish designer, Morten Lyhne is shaped by Danish design tradition, emphasising good craftsmanship with a focus is on functionality, minimalism and aesthetics. The basic principle is therefore always to keep the design as simple as possible.

Every design feature makes sense in relation to functionality, construction and production methods, and the design consists of as few parts as possible in high quality, reusable or recyclable materials. The visual design features clean, harmonious lines, transforming a highly technical and functional product into something simultaneously poetic.

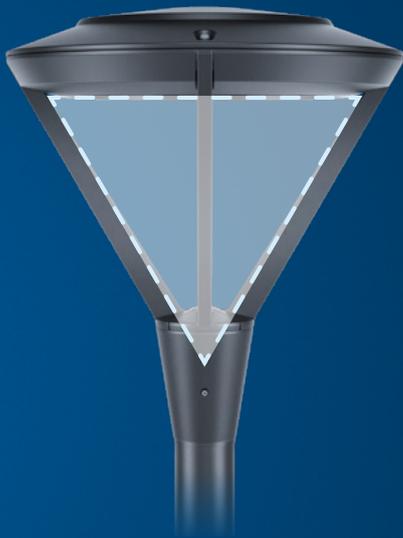
GUIDING PRINCIPLES

Avenue is thoughtfully designed with a focus on Nordic aesthetics and lighting comfort – important parameters in the Nordic region. We have always gathered around the light, which represents safety, comfort and social gathering. With our outdoor luminaires we strive to embody these values, providing lighting solutions that enhance both safety and comfort in outdoor spaces, for the residents of the Nordics and all around the globe.

DESIGN PROCESS

Lyhne Design embraced the challenge of meeting the project's many, varied criteria. These included designing for diverse markets, developing multiple versions using shared components, ensuring high lighting comfort with 0% ULOR, and creating a solution that is both sustainable and futureproof.

Morten Lyhne anchored the design in the equilateral triangle, a geometric shape that creates harmony and naturally appeals to the eye. From this foundational principle, he tackled the challenge of balancing technical functionality with aesthetics. This involved seamlessly integrating features such as the Zhaga Up and Down modules, harmonising the product's arms with the Canopy and spigot, and ensuring the spigot's compatibility with various pole mounts.



THE PERFECT TRIANGLE

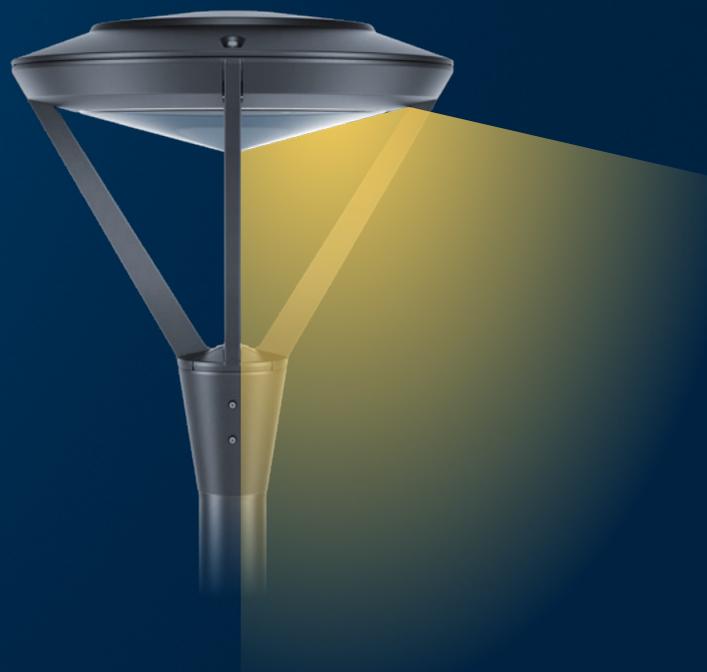
Avenue was designed around the concept of the perfect triangle. One of the most fundamental and familiar geometric shapes, the equilateral triangle forms the silhouette of Avenue.

DARK SKY RESPONSIBILITY

Urban environments demand a warm and inviting aesthetic to increase the sense of comfort for users in the outdoor space. For post-top luminaires, the addition of a plastic bowl enhances this positive emotional response. However, bowls have a negative impact on the night-time environment and typically create a higher percentage of upward light pollution.

Avenue balances the human need with responsibility to protect the night-time environment with a new approach to the post-top plastic bowl. Designed by Lyhne Design to be shallow and tapered, it delivers a sense of comfort whilst ensuring less than 1% ULOR.

Lateral mounted and suspended versions of Avenue are also available with 0% ULOR.



AVENUE

DESIGNED EXCLUSIVELY FOR THORN BY LYHNE DESIGN

Together with the basic principles of functional design, Thorn's Circular Design Rules have been central to the development of Avenue. Key features like modularity and Quad platform design lie at its core, enabling easy upgrades and versatile use. For example, the all-in-one gear tray and light engine can be replaced with a single tool for ease of refurbishment, ensuring flexibility and longevity.

Avenue's standout design feature is its high level of lighting comfort. Traditionally in Denmark, a large bowl has been used to achieve this comfort, but such a design consumes excessive material. Instead, we selected a shallower bowl combined with a diffuser, which delivers the required level of lighting comfort while significantly reducing material use. With this bowl we also achieve a ULOR of close to 0%, which would not have been possible with a large bowl. Even though Avenue delivers direct light, it gives the appearance of indirect light, balancing high performance with high comfort.

VERSATILE POST-TOP MOUNTING

A good transition from the luminaire to the pole is important for the overall aesthetics and ease of installation. In Avenue we designed the spigot, so it can easily be mounted on a variety of pole dimensions, and it can align flush with the pole to achieve a sleek, cohesive appearance.

The post-top spigot can be mounted onto 60 and 76 mm poles and, with rod accessory, flush mounted onto 76 mm poles, giving flexibility even without knowing the pole diameter you wish to install onto in advance.



Ø 76 MM



Ø 76 MM WITH FLUSH
MOUNT ACCESSORY



Ø 60 MM

SEAMLESS LATERAL MOUNTING

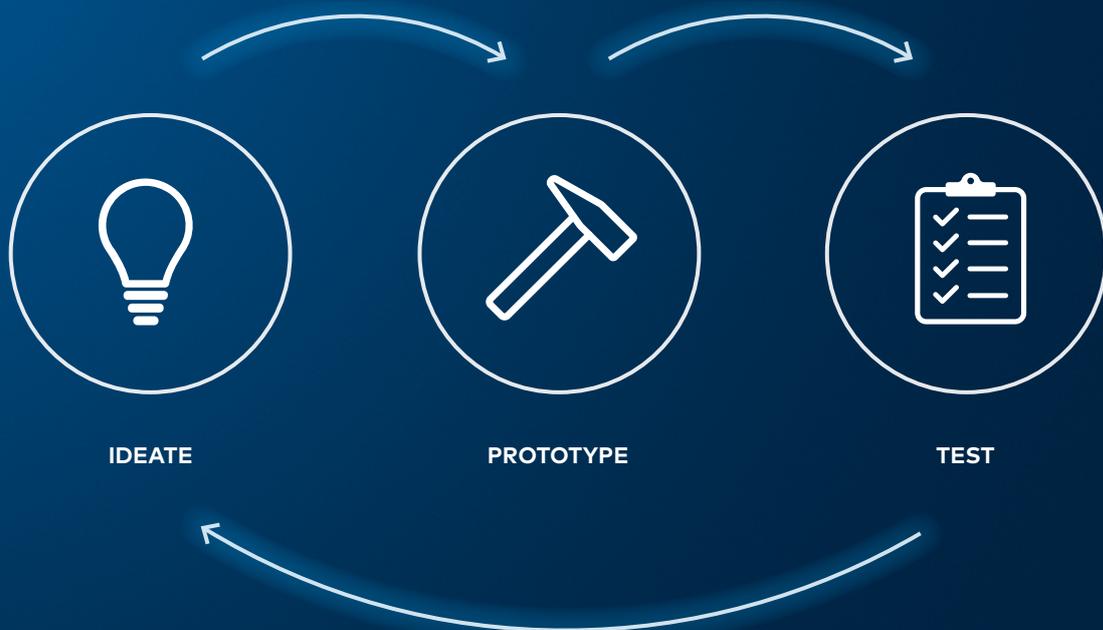
The lateral post-top and lateral arm mounting spigots are designed to ensure a single clean line from the luminaire to the supporting pole / column. Lateral arm variants flush mount as standard onto 42 mm poles.



With his strong technical expertise, Morten Lyhne brought a deep understanding of construction and production challenges. Collaborating closely with Thorn Lighting's R&D team, we identified solutions that strike an optimal balance between functionality and visual appeal.

The best designs emerge from collaboration, and engaging end-users in the process was integral to the development of Avenue. Lyhne Design showcased the concept using physical prototypes during workshops in Denmark, Sweden, France, and the UK. Market feedback during these sessions proved invaluable, helping us refine and tailor the design to meet customer and end user needs effectively.

DEVELOP



EVALUATE & DOCUMENT

CONNECTIVITY

Avenue brings to market one of the world's first urban solutions with Zhaga Down node capability. As an added bonus, Thorn's Quad modular innovation means you can upgrade to Zhaga Down capability, even if you have already invested in Avenue without this connected facility.



URBASENS DETECT

APPLICATION: Urban communities, pedestrianised zones, schools, city landmarks, bus and tram stations, small parking lots

SCALE: Single lighting point (standalone)

TECHNOLOGY: PIR, radar, Zhaga interface

UrbaSens DETECT is a standalone (i. e. point-to-point level) outdoor lighting control system that utilises MovU components such as PIR detectors, vehicle radar or a separate Zhaga interface. Designed for targeted lighting applications, it is ideal for urban communities and areas with high pedestrian traffic.



URBASENS MOVE

APPLICATION: Pedestrian paths & cycle paths, small to medium car parks, building surrounds

SCALE: Recommended up to 60 luminaires per network group, limitless groups

TECHNOLOGY: Tridonic BasicDIM Wireless – 2.4 GHz free band mesh network

UrbaSens MOVE is an advanced wireless local group control system, with simple Bluetooth-based configuration and no recurring fees. Using motion detection and ambient light triggers, luminaires can respond and adapt either as single light points or groups for predefined scenarios, providing comfortable and safe visibility to pedestrians, cyclists or vehicles in a parking lot. It even integrates with Litecom from Zumtobel to harmonise indoor and outdoor lighting control. UrbaSens MOVE gives you the ability to deliver the right light, in the right place, at the right time – balancing the need for user comfort with environmental considerations.



URBASENS CIVIC CONNECT

APPLICATION: Towns, suburban areas, car parks and transportation hubs

SCALE: Small-to-medium lighting networks

TECHNOLOGY: M2M (Machine to Machine) network. Communication without direct human intervention.

UrbaSens CIVIC CONNECT is the cutting-edge outdoor lighting control system that utilises M2M network technology such as NB-IoT (narrowband Internet of Things) or Cat-M1 (low power wide area network). Specifically designed for towns and suburban areas, our system seamlessly integrates with these networks, allowing you to effortlessly manage and optimise your lighting infrastructure.



URBASENS CITY CONNECT

APPLICATION: Cities and city centres, large car parks, major transportation hubs

SCALE: Medium-to-large lighting networks

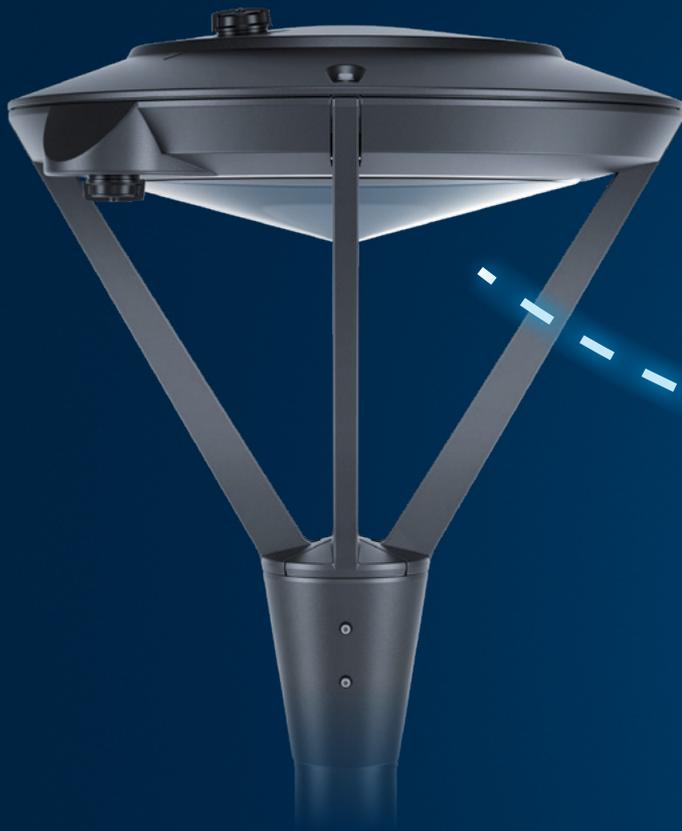
TECHNOLOGY: Mobile network, internet, ethernet, mesh network

UrbaSens CITY CONNECT is the ultimate outdoor lighting control system, tailored for cities and high traffic areas. With a single point of internet connection and advanced 2.4 GHz mesh network, our system effortlessly connects up to 200 devices to a gateway, ensuring seamless control and unmatched efficiency.



URBASENS CIVIC CONNECT

LIGHTING CONTROL FOR TOWNS AND FEATURE AREAS



FEATURES OF CIVIC CONNECT



NIGHTTUNE

Advanced technologies are now further optimised through DALI Addressing.



AUTOMATIC LOCALISATION

Integrated GPS for easier commissioning.



INTEGRATED CONNECTIVITY

10 years of network connectivity included with IoT network (NB-IOT, CAT-M1).



INTEGRATED SIM

Sim is preloaded in the node ready for commissioning.

SHARED FEATURES



WEEKLY CALENDAR

7 day week calendar to best reflect site specific behaviours.



OVER THE AIR UPDATE

The system can be updated wirelessly once installed.



REALTIME CONNECTIVITY

With UrbaSens CIVIC CONNECT and CITY CONNECT you can send commands and retrieve information almost instantly.

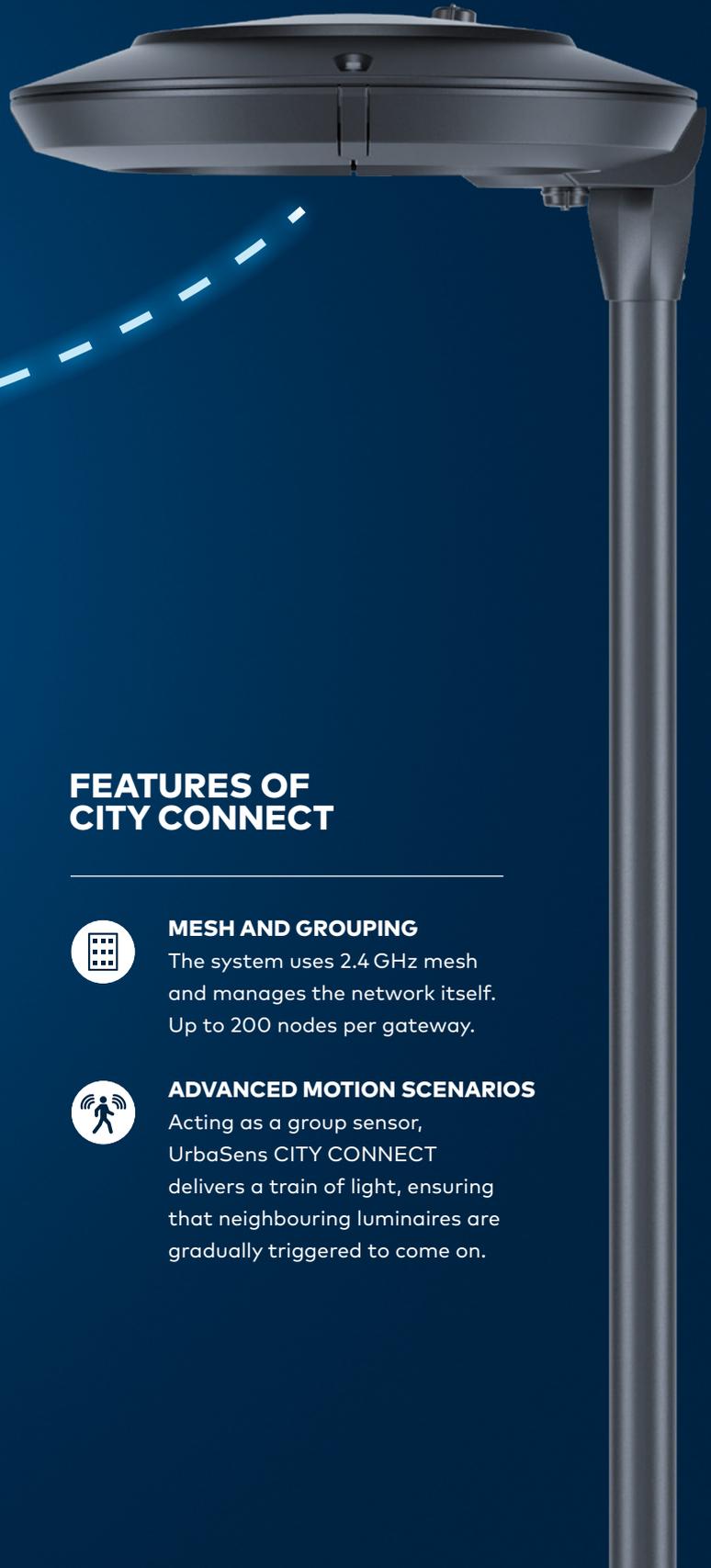


LIGHT SENSOR

Advanced lux level based switching.

URBASENS CITY CONNECT

LIGHTING CONTROL FOR CITIES



FEATURES OF CITY CONNECT



MOTION SENSING

Precision based presence detection via a D4i motion sensor.



ASTRO CLOCK

Switching via local sunset and sunrise.



ENERGY REPORTING

Get exact energy saving reports.



FAULT NOTIFICATION

Alerts are available on the platform and a daily notification email is possible.



MESH AND GROUPING

The system uses 2.4 GHz mesh and manages the network itself. Up to 200 nodes per gateway.



ADVANCED MOTION SCENARIOS

Acting as a group sensor, UrbaSens CITY CONNECT delivers a train of light, ensuring that neighbouring luminaires are gradually triggered to come on.

NIGHTTUNE

NIGHTTUNE CREATES THE PERFECT BALANCE IN LIGHTING AT NIGHT

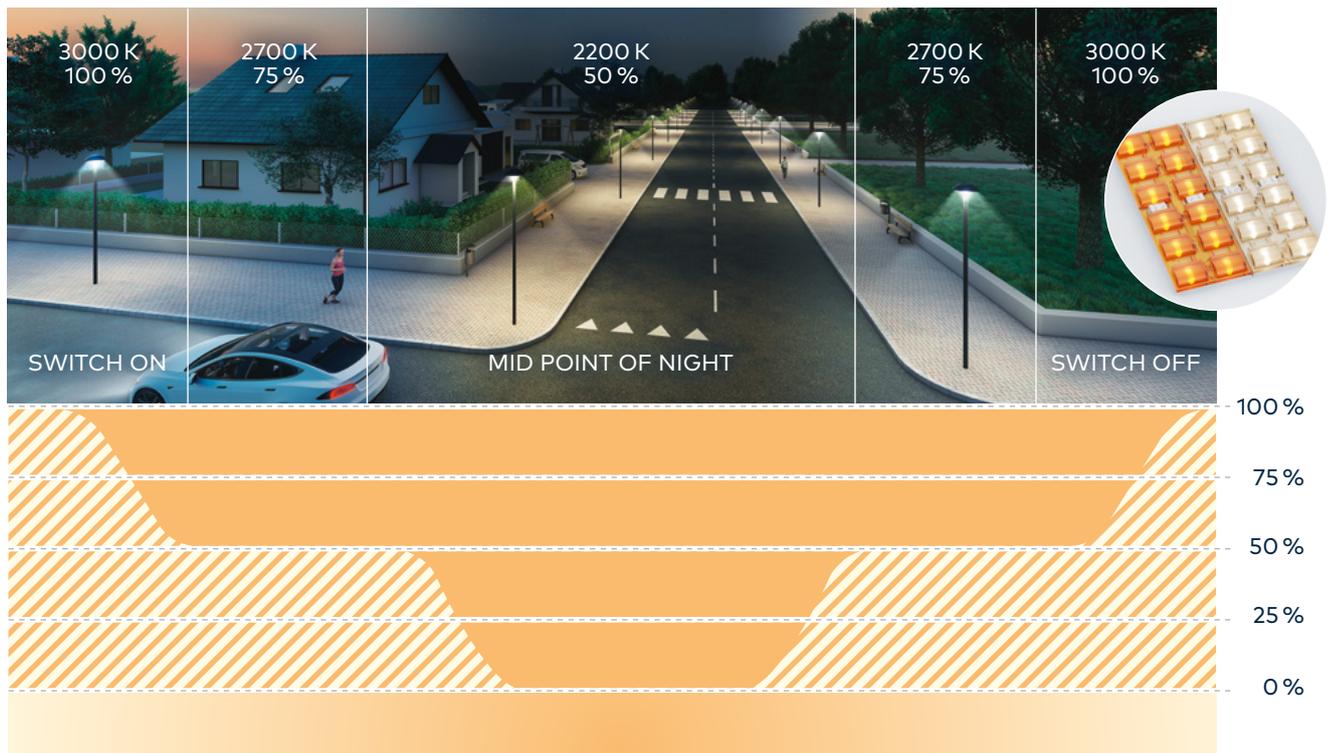
In the evening, urban areas often become mixed use spaces, with vehicles and pedestrians moving around, and dining and socialising taking place as daytime use of space transitions into the night-time economy. During this time period, NightTune provides a moderate colour temperature.

As the night progresses, roads, pavements and public spaces become quieter, and the output of the cool LEDs is reduced, resulting in a dimmer, warmer light. It creates a more comfortable atmosphere while saving energy, preserving safety perception and respecting the nocturnal ecosystem.

As morning approaches and traffic returns to the streets, the output of the cool LEDs increases to provide brighter, natural light that meets the higher safety demands.

Dark Sky Approved
design with just
0.4% upward light





Use case example

2200 K Channel 1: Always at 100 %

4000 K Channel 2: Dimming

2200 K
3000 K Result: Changing colour temp and luminous flux adj

Avenue utilises the latest Tridonic dual channel driver innovation to reduce number of components and enable ease of commissioning to meet the demands of your application.

OPTICAL EXCELLENCE

The optical system of an outdoor luminaire must be designed to satisfy several criteria in terms of luminaire performance (P) and efficiency (E), visual comfort (C) and, of course, to respect the environment as well.

Consequently, we have developed the R-PEC and the A-PEC LED optical systems, respectively for Road (R) and Amenity (A) lighting.

Integrating Thorn's in house developed optical platform enhances the application use cases of the Avenue family, with optic solutions catering for major and minor roads as well as urban spaces, parks, car parks and building surrounds.

A-PEC

Amenity lighting optics



R-PEC

Road lighting optics





OPTICAL EXCELLENCE

Visual comfort is key for the urban environment. Increasing human perception of well-being and safety by avoiding glare and harsh lit effects. Thorn is proud to have an in-house team of optical experts, dedicated to outdoor optical developments to bring excellence in outdoor lighting design.

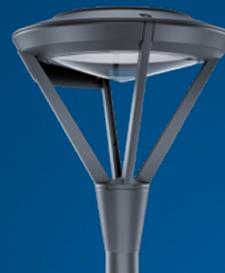
COMFORT OPTIC

Avenue's optional comfort optic further enhances visual comfort, in conjunction with Avenue's new responsible approach to plastic bowl design that minimises ULOR. The comfort optic is designed to deliver a soft, inviting illumination to the urban space, eliminating glare.



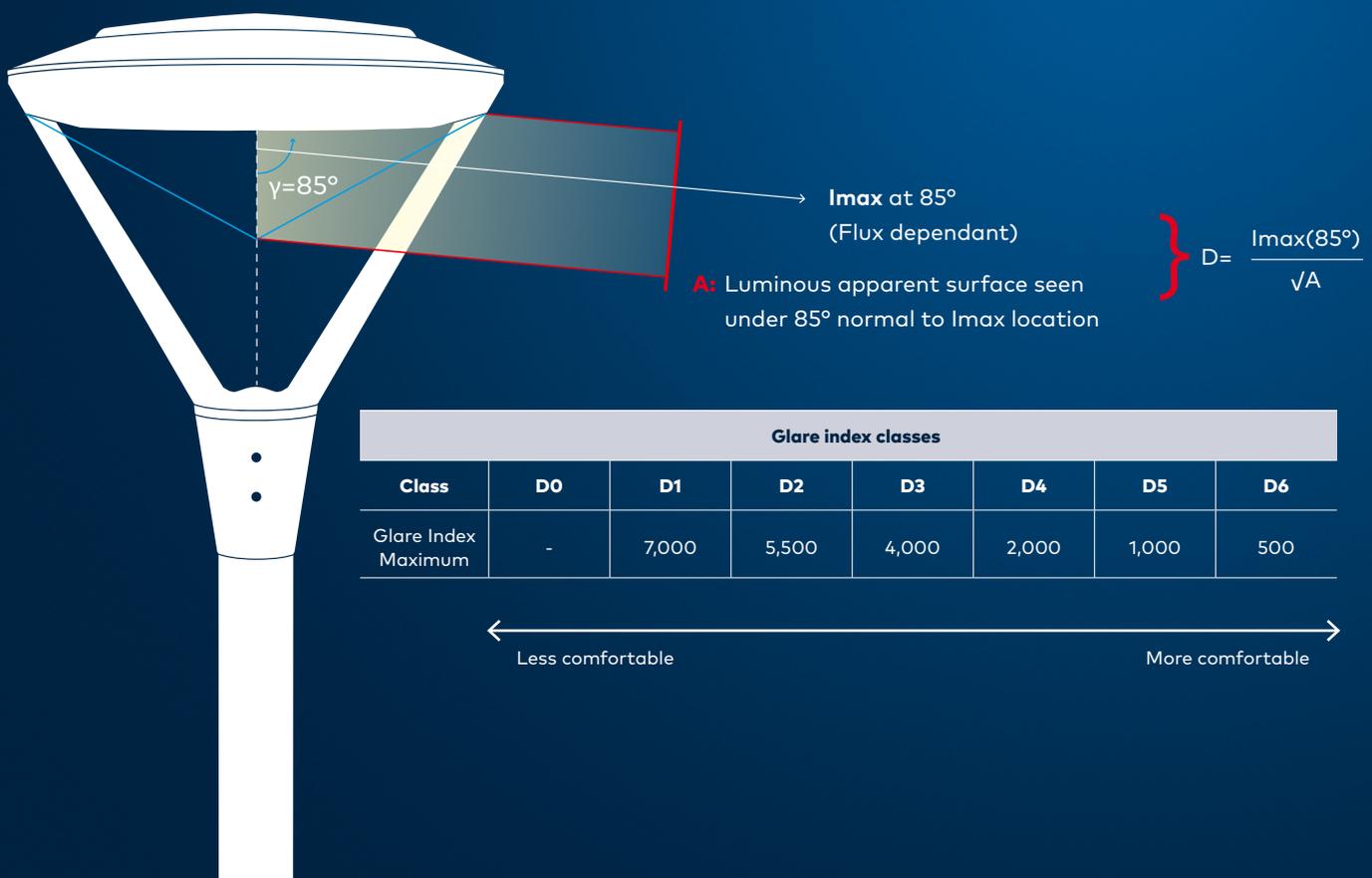
EXTERNAL VISOR ACCESSORY

For applications where a physical cut off is required, Avenue is available with an optional external visor.



GLARE CONTROL

Avenue achieves an excellent glare rating of D6 – very low glare, giving peace of mind that with the Avenue solution, best in class visual comfort is guaranteed.



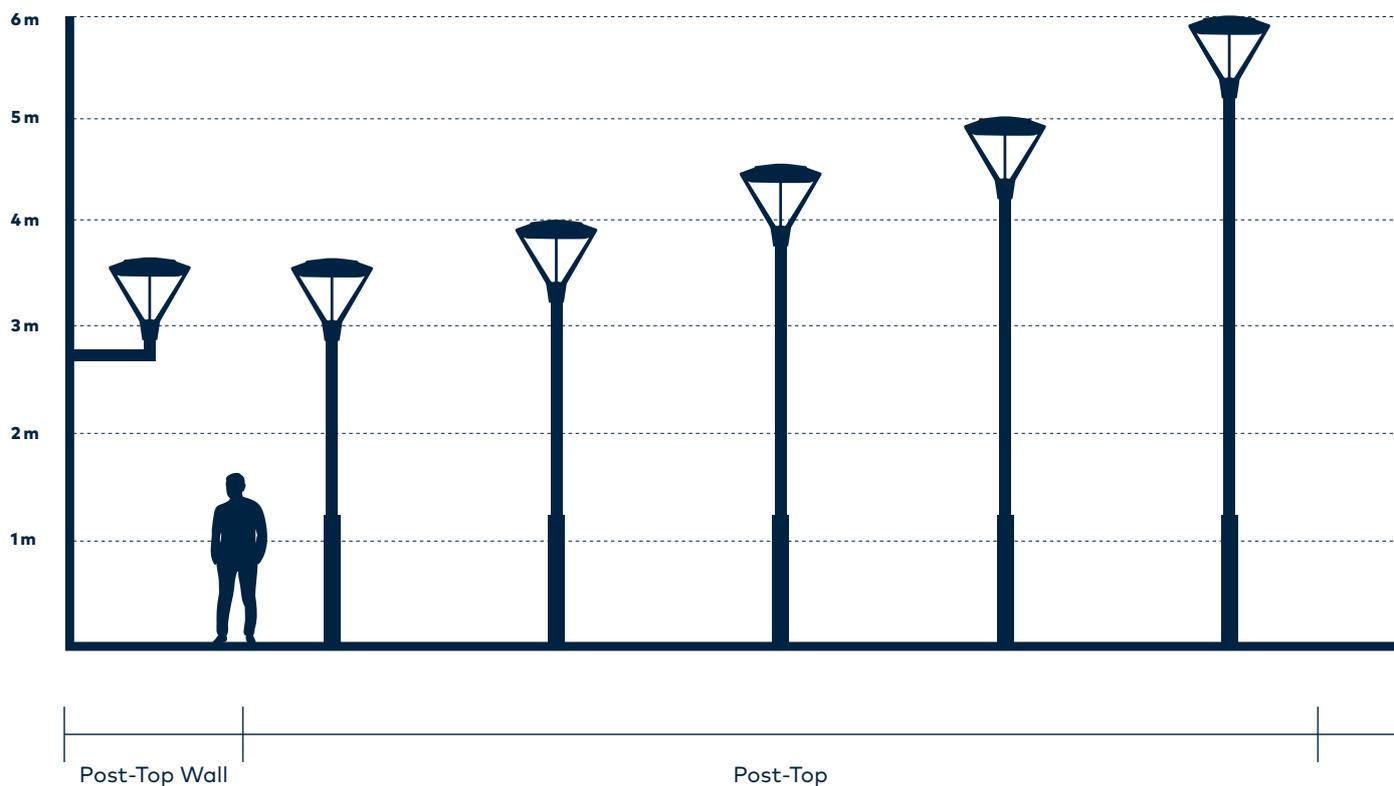
Glare index classes							
Class	D0	D1	D2	D3	D4	D5	D6
Glare Index Maximum	-	7,000	5,500	4,000	2,000	1,000	500

← Less comfortable → More comfortable



INSTALLATION POSSIBILITIES

With lumen packages from 800 to 9000 lm, Avenue offers a wide range of mounting configurations, styles and heights, ensuring the perfect solution for all projects. This is supported by the suite of in-house produced optics to offer a toolbox of lit effect possibilities to meet your design intent.



INSTALLATION



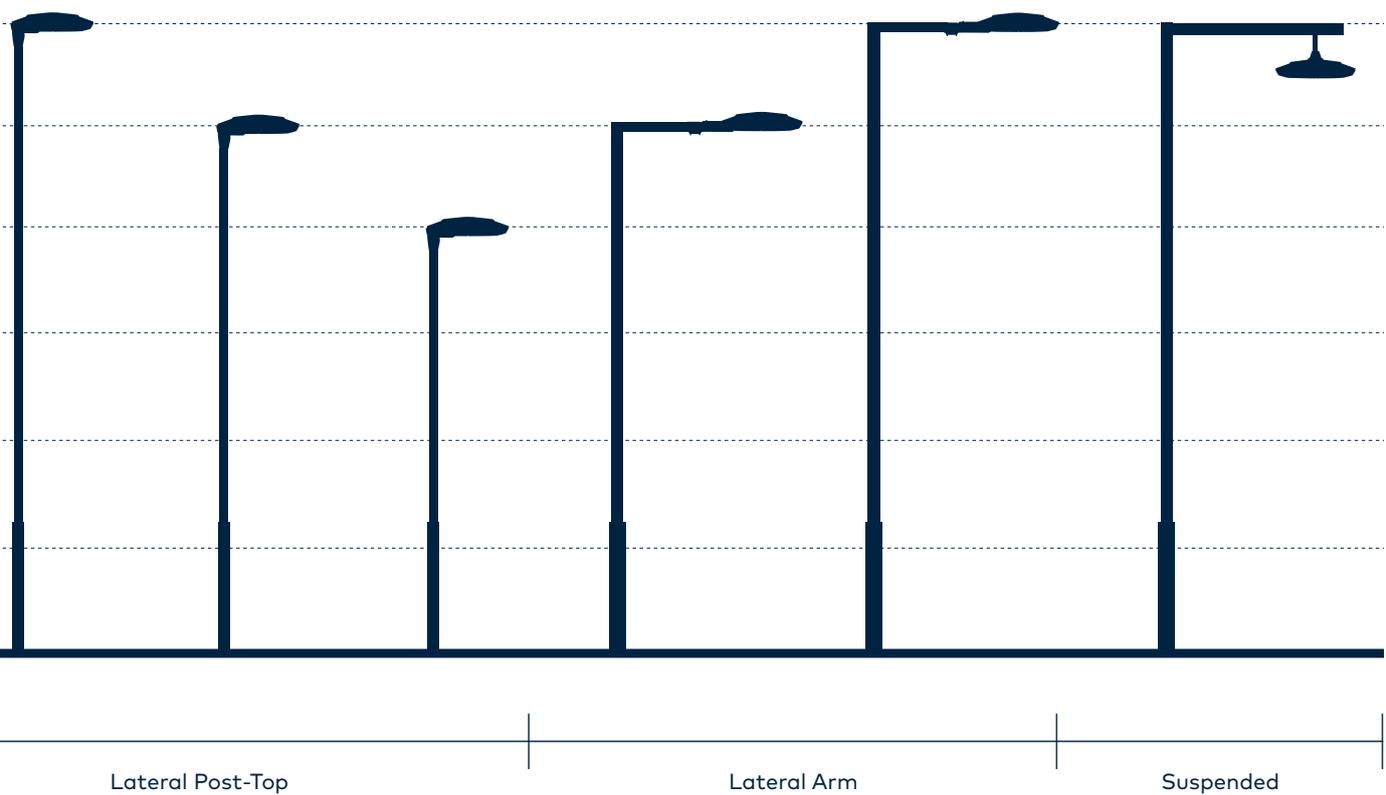
Luminaire accessible with single tool for ease on maintenance and future upgradeability



10 Degree of tilt on lateral types



Pre-wired as standard for ease of installation



BUILT TO LAST



Using the highest quality, sustainable materials and rigorous testing, all Avenue solutions are C5 corrosion resistant



Suitable for the toughest coastal environments



IK10 rated, Avenue is robust for the most challenging public environments

DISCOVER

thornlighting.com/AVEN

AVENUE



12 LEDs / 18 LEDs / 24 LEDs / 36 LEDs



2200 K / 2700 K / 3000 K / 4000 K / NightTune



800 lm to 9000 lm



Up to 150 lm/W



CRI

70 / 80



ULOR

0% for Suspended and Lateral Mount / <1% for Post-Top



0.3 m to 7 m pre-wired cable



IP66



-30 °C to 35 °C



IK10



C5 corrosion resistance ISO 9223 – suitable for coastal and tropical installation



UV Resistant



100,000 h B10L90 @ 35 °C for 350 mA / 500 mA / 700 mA | 100,000 h B10L90 @ 25 °C for 1050 mA



A-PEC / R-PEC / Comfort Optic Diffuser (Bowl variants only) / Prismatic Foil (Flat Glass variants only)



T42 / T60 / T76



Texturised Anthracite / Texturised Light Grey / Texturised Black / Texturised White / 44 RAL finishes on request



10 kV



Bi-Power Line / Light Reduction Twin Phases / Bi-Power Switchable / Multi-Layer Dimming / CLO / Integral Mini Photocell / Integral Nema Photocell facility / DALI-2 / Zhaga Up socket / Zhaga Down socket / Zhaga Up/Down socket



Class I / Class II



5 SDCM

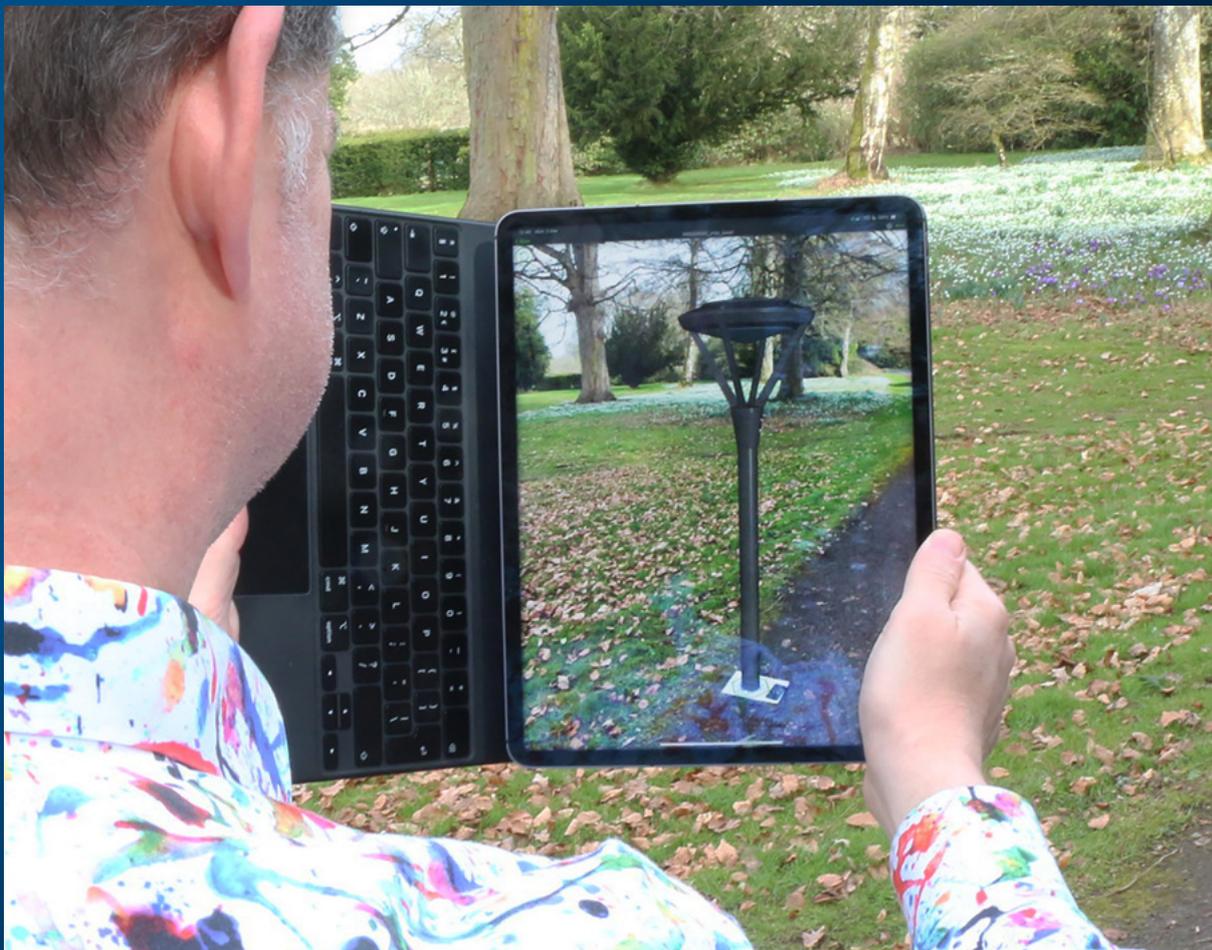


Up to D6

SEE AVENUE IN AUGMENTED REALITY

**VIRTUAL PRODUCT SAMPLES,
STRAIGHT FROM YOUR DEVICE**

You can now see Avenue in 3D anywhere you choose! Turn your office into a virtual showroom, or preview the augmented reality luminaire outside in its natural environment. All you need is a mobile device or tablet and this brochure.



Turn the page to begin...

STEP 1 – DOWNLOAD THE VUFORIA VIEW APP

Using a phone or tablet, scan any of the QR codes below to download the app, or search 'Vuforia View' on the Apple or Google Play app store.

STEP 2 – DISPLAY THE 'THINGMARK'

The 'Thingmark' guides where you will see your virtual Avenue come to life.

Printed brochure: Place the brochure on the floor or another suitable flat surface with the large Thingmark on the page opposite clearly visible.

Digital brochure: Print the Thingmark on the opposite page or display full screen on a second mobile device or tablet.



THINGMARK

STEP 3 – OPEN THE APP'S QR CODE SCANNER

Open the Vuforia View app. Select this icon from the bottom toolbar to open the QR code scanner.



Scan your chosen QR code.

STEP 4 – SEE AVENUE COME TO LIFE!

Align the virtual 'Thingmark' on your device screen with the one on the brochure page opposite and see your virtual Avenue come to life!

AVENUE
Post-Top



AVENUE
Lateral Post-Top



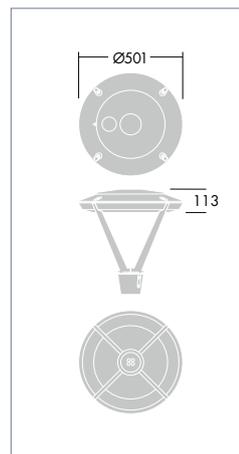
AVENUE
Lateral Arm



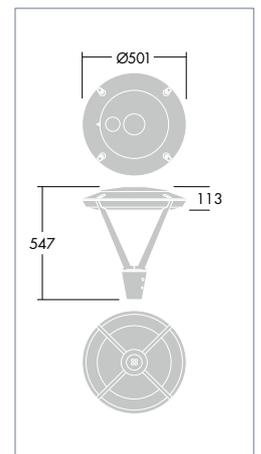
AVENUE
Suspended



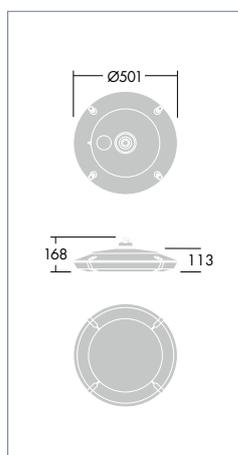




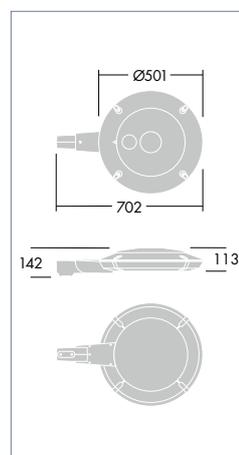
Post-Top D76 Spigot



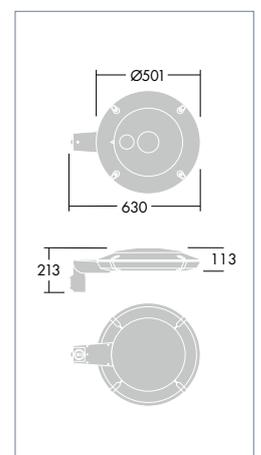
Post-Top D60 Spigot



Suspended



Lateral Arm



Lateral Post-Top

Configure the ideal product solution with myProduct. The myProduct configurator allows you to easily configure a luminaire according to your needs. Try it now at www.thornlighting.com/myproduct



GET IN TOUCH

www.thornlighting.com/contacts



**5 YEAR
GUARANTEE**

As a globally leading luminaire manufacturer, Thorn Lighting provides a five-year warranty for its complete product range within all European Countries.
thornlighting.com/guarantee

Thorn Lighting is constantly developing and improving its products. All descriptions, illustrations, drawings and specifications in this publication present only general particulars and shall not form part of any contract. The right is reserved to change specifications without prior notification or public announcement. All goods supplied by the company are supplied subject to the company's General Conditions of Sale, a copy of which is available on request. All measurements are in millimetres and weights in kilograms unless otherwise stated.
05/2025 (INT)

**WE
MAKE
LIGHT
WORK**