

HÄFELE

ARCHITECTURAL  
LIGHTS



**The**  
**first**  
**100**  
**years.**

The background features a large, light tan triangle pointing upwards, partially overlapping a dark blue circle on the right side. The text is positioned in the upper left quadrant, overlaid on the white background.



Dear Reader,

2023 marks a huge **milestone in the history** of our company. Häfele is now **one hundred years old**, and we are taking the opportunity of this extraordinary anniversary to pause and reflect intensively on the growth that's taken us from a small hardware store in the Black Forest (Germany) to a global company.

In addition to extraordinary people who have guided the company's fortunes with far-sightedness, what stood out prominently for us was our ability to forge **strong partnerships** that have been fundamental in shaping our progress and achieving the milestones we stand before today. We sought to build an ecosystem that fostered a sense of community, respect, and shared purpose and over the years, this approach has proven to be the cornerstone of our achievements. Together, we have weathered economic downturns, navigated shifting market trends, and embraced technological advancements.

Therefore, it wouldn't be incorrect to state that it has been **courage and optimism**, above all that have carried us as an organization through stormy times. These qualities have also defined Häfele from the very beginning and characterised the founders back in the day. The original 2-man business which was a specialist hardware store led by **Adolf Häfele and Hermann Funk**, has developed into a global company, Häfele SE & Co KG, with subsidiaries in **38 countries, 8,000 employees** and more than **1,50,000 customers**.

Standing on the threshold of the next phase of our journey, we realise that it was courage and optimism along with an **unwavering alliance with our employees, vendors, suppliers and above all our customers**, that enabled us to change continuously, to break new ground and not only to think ahead, but also to actively implement these forward-thinking ideas.

As we foray into the next 100 years, Häfele presents its future-oriented brand purpose (which will be at the very core of our strategic outlook) - **"Maximising the value of space. Together."** The new brand claim aims to consolidate our attitude, our competences, the developments inside and outside of our company and the strategic decisions we have made in the past years and decades. And as we transition between the first and second century, we aim to pour our collective experiences that have brought us here into a connected mould – our purpose, that will function as a starting point for a shared journey into the future and will act as a powerful compass for us.

**Needless to say, we excitedly look forward to shaping this - perhaps new, different, surprising - future together with you!**

With Best Regards,

A handwritten signature in black ink, appearing to read 'Schloeder'.

Frank Schloeder  
Managing Director, Häfele South Asia



# THE PATH OF HÄFELE THAT TRANSLATED INTO SYMBOLS

For the 100-year anniversary of Häfele, we have expressed two things: The pride in the successful path that the company has taken up to today, and optimism that the path to the future will be just as successful because we have the courage to continuously reinvent ourselves. This is why the anniversary design is based on the roots of the company and is at the same time open and flexible. A modern forward-looking code that gives our ambitions a visual expression



# MAXIMIZING THE VALUE OF SPACE. **TOGETHER.**

In conjunction with its 100-year anniversary celebrations this year, that kicked off at Interzum 2023, Hafele unveiled a new purpose line “**Maximizing the value of Space. Together.**”, which resonates strongly with us. We aim to strengthen our brand position in South Asia by emphasizing on the meaning of this purpose line, i.e. Hafele strives to provide the best of the best (**maximizing**) benefits (**value**) through its versatile solutions and services for different living and working spaces ranging from hotels, offices, institutes and homes as well as different interior applications like kitchens, living rooms & bedroom furniture, doors and interior partitions, wardrobes as well as furniture and room lighting. And this we strive to achieve in partnership (**together**) with all entities within our ecosystem from our suppliers, partners (Industry and Project), channels (distributors, dealers and franchisees), influencers (architects, designers, contractors and carpenters) right up to the final beneficiary i.e., our end customer.

In short, with our new purpose line we aim to co-create an environment for our endearing customers where they can enjoy the multiplied benefits of their living and working spaces.

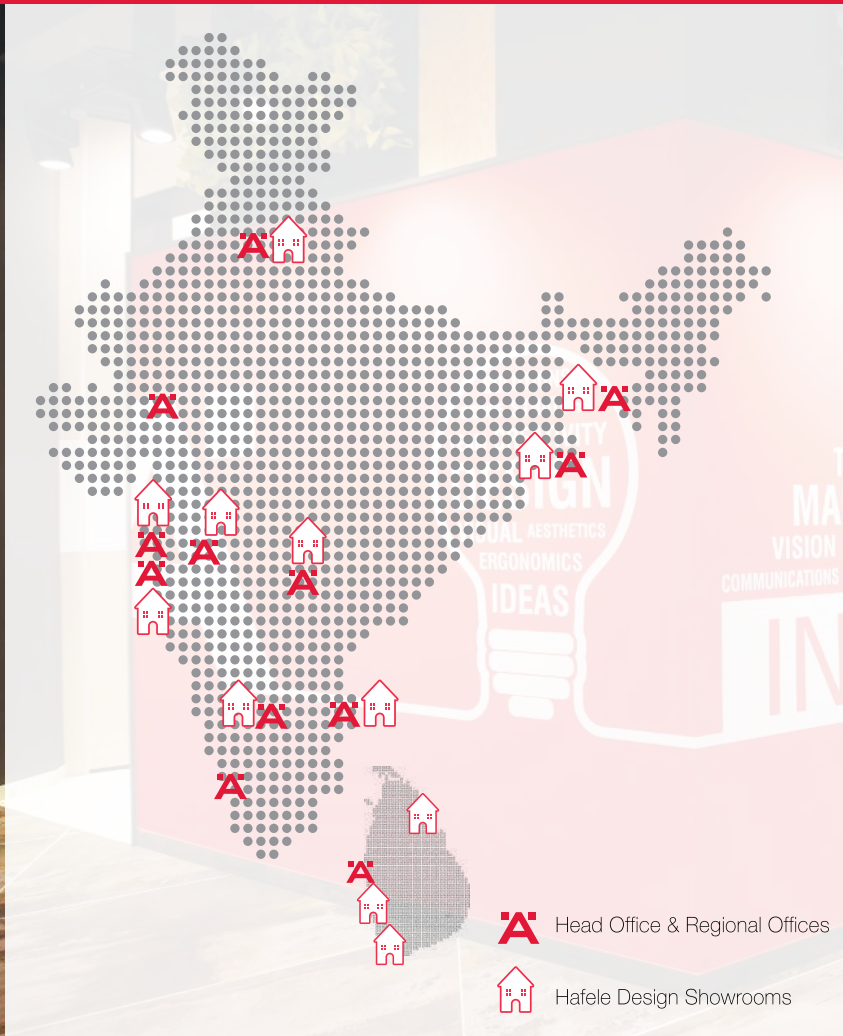
# Häfele Worldwide



With its origin in 1923 in a small town named 'Nagold' from the Swabian region of Germany that nurses a passion for hardware technology, it is no surprise that Häfele has lived up to its roots through a successful presence in the architectural and furniture hardware industry for almost 10 decades now. Today, Häfele's worldwide penetration includes 38 subsidiaries across Europe, America, Asia, Australia and New Zealand. With these subsidiaries and numerous other sales organisations, Häfele operates in over 150 countries. The Häfele headquarters, 4 manufacturing units and 10 sales offices are located within Germany; while 1 manufacturing unit is located at Budapest, Hungary. The company also owns one of the largest and most sophisticated warehouses in its home country. The Häfele worldwide workforce is empowered by a base of over 8100 employees.

The group services over 150,000 customers across the globe through its extensive range of hardware products and a comprehensive logistics system. In addition to this, Häfele also provides consultative services to its customers, educating and advising them about buying the correct hardware as per their requirements. With this level of market penetration and ability to handle worldwide demand, it comes as no surprise that the company is an authority in the segment of home interior solutions; what is pleasantly surprising, though, is that in spite of its size, Häfele still remains a family owned and run business with a unique, friendly and value-centric work culture which is strongly followed among all its subsidiaries.

# Hafele India



Häfele India is a wholly-owned subsidiary of the Häfele Global network and has been operating in India since 2003. The ability of the company to understand the diverse Indian market has made it an authority in the field of architectural hardware, furniture and kitchen fittings and accessories. The company also has a strong presence in synergized product categories namely Home Appliances, Furniture Lighting, Sanitary and Surfaces catering to the focused demand from these industries.

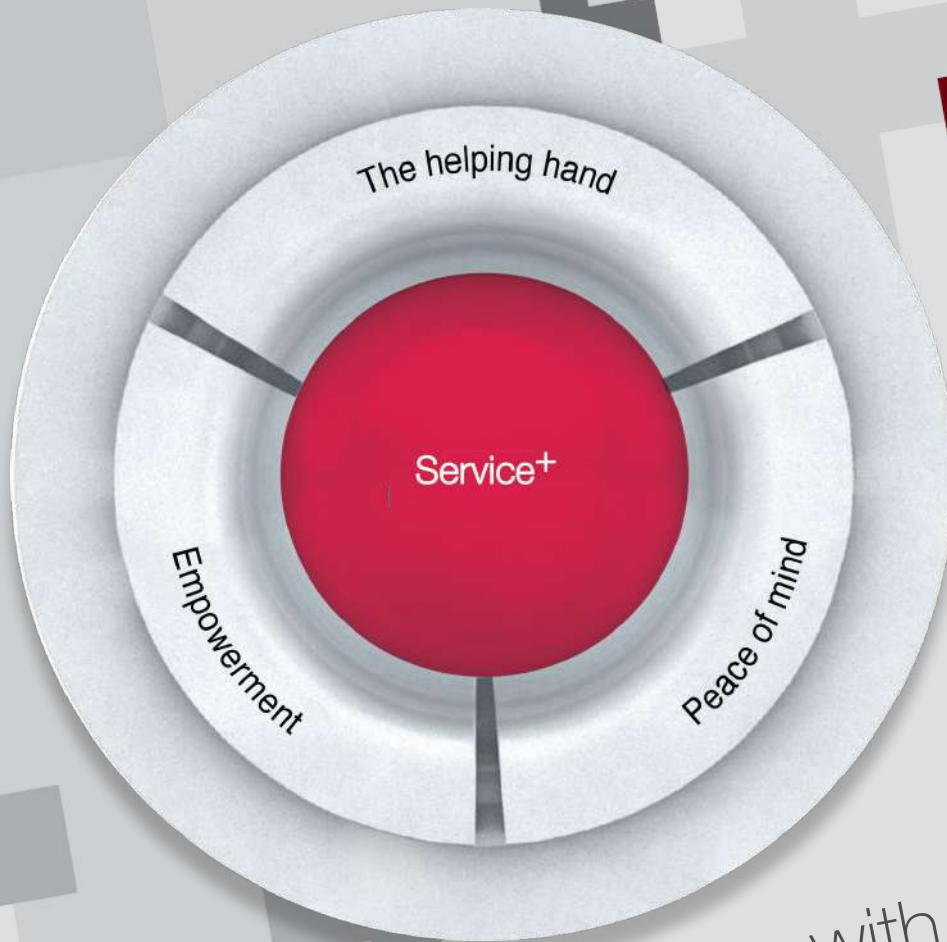
The subsidiary has a strong nation-wide presence with offices in Mumbai, Pune, Ahmedabad, Bangalore, Chennai, Hyderabad, Delhi, Kolkata and Cochin. It has full-scale operations in Sri Lanka and Bangladesh with Regional offices and Design Showrooms in both the countries; and has also spread its operations to other regions of South Asia including Nepal, Bhutan and Maldives.

Häfele's design showrooms are hubs of international home interior trends and cutting-edge designs presented in a world-class environment, where customers can see home solutions in their inherent applications. These showrooms function as a one-stop-shop for all home interior and improvement needs - from providing in-depth technical advice to kitchen and wardrobe designing services through a team of experts stationed at the showroom.

Häfele India services its customers with a base of 1500 employees, a well-networked Franchise base of over 180 shops along with over 500 direct dealers and 90+ distributors who in turn cater to over 10000 satellite dealers. The subsidiary has a sophisticated Logistics centre in Mumbai along with distribution centres in Delhi, Bangalore, Kolkata and Colombo respectively.







## Experience More with **Service+**

Our customers' working environment is becoming increasingly complex and their market is becoming ever more demanding. This drives our motivation to do everything in our power to help our customers be successful. And to demonstrate that Häfele is the right partner in these challenging times, we want to accompany our customers throughout their entire business process and give them added strength in every phase of their business. We don't just want to sell our products, we also want to provide the highest level of service.

We have now divided our services into two categories: **Standard Services** which we provide to our customers as a matter of course when they choose our products. For example, a high availability of our goods and punctual delivery. And then there is **Service+** which constitutes of services that give our customers considerable added value in terms of building expertise, increasing productivity or providing individual customised solutions. These services require a considerable amount of time and effort to develop and implement and are designed to enable our customers to regard them as worthwhile investments.

The aim is to create solid long-term foundations for our comprehensive service promise and to make Häfele an indispensable partner for our customers. The focus here lies not so much on us and on what we do – but rather, on the benefits derived by our customers. We want to **empower** them with opportunities to develop and expand their skills – both as masters of their trade and as entrepreneurs. We want to support them in the planning and realisation of their projects and relieve them of as much work as possible, thereby providing them with a **helping hand** to use their most valuable resource – time – as efficiently as possible. And we aim to give our customers **peace of mind** and the assurance that even after the end of a successful project completion, we will continue to be there for them as a reliable partner, shouldering responsibility.



The Pillars of  
**Service+**

In order to support you as comprehensively as possible, we have assigned the Plus Services to individual stages of your work process in a total of four themed pillars. We start with the transfer of knowledge and accompany you via planning and production to installation and maintenance.



Empowering customers with

## Service+ Knowledge

Includes service offerings that provide inspiration and expertise to our customers about the Häfele product range. Through these, we enable our customers to use Häfele products profitably and at the same time remain at the cutting edge of technological development. One example of this is the Häfele Academy, which imparts knowledge about complex products and new technologies to our customers via seminars and trainings.

Providing a helping hand to customers with

## Service+ Planning & Customised

Includes service offerings like space, design planning and customisations that make life easier for our customers and support their design vision. An example of this is Häfele's Lighting Design Service which helps our customers curate a lighting xplan, following a customised approach, that enhances and brings out the true functionality of the interior space as per requirement.



Lending a "Peace-of-mind" experience through

## Service+ Assist

Includes service offerings that provide support and assistance to our customers, whether digitally or on site. An example of this is the complete assembly and installation service for more complex and maintenance-intensive products done by our Meister certified and trained technicians.

# Lighting Design Services



You are planning a light project and have your initial ideas about the illumination and effects you want to achieve? Are you confused on how to go about with the detailed planning? Let us make your work easier with Häfele's Lighting Design Service. The Lighting Design Service offers a bespoke design approach that ensures you have the right light fittings for the right task or application. Our team of design experts curate a lighting solution that enhances and brings out true functionality of your living spaces as per your requirement.

By request, you will first receive a proposal from our lighting experts as to how the solution can be optimised. Followed by a finished circuit diagram including a parts list, and even an installation plan in the form of individual assembly instructions. This will allow you to save time during planning as well as on site.



To learn more about Lighting Design Service, please contact our team by scanning this QR code or call us at 1800 266 6667



## Häfele Academy

**Service+**  
Knowledge

New technologies throwing up new challenges? Is incorporating lighting in furniture difficult? Light in furniture is no longer an accessory, it has now becoming an essential function.

Häfele supports its customers with a comprehensive range of lighting workshops and trainings. The Häfele Academy creates an environment where we can work together with our customers to help them have a deeper understanding of our products, new innovations and strengthen the relationship we have with them.

SPOTLIGHTS  
DOWNLIGHTS  
WALLWASHER

CONTENTS

Introduction .....	16-17
Delft Series .....	20-29
Oxford Series .....	30-51
Stanford Series .....	52-71
Imperial Series .....	72-83
Princeton Series .....	84-93
McGill Series .....	94-101
Cambridge Series .....	102-121
Edinburgh Series .....	122-149

LINEAR LIGHTS

Linear Lens .....	152-155
15° Linear Lens .....	156-161





ARCHITECTURAL  
LIGHTS





THE DELFT SERIES



THE OXFORD SERIES



THE PRINCETON SERIES



THE MCGILL SERIES

## HÄFELE ARCHITECTURAL LIGHTS

Häfele's Loox Range has been meeting the demands for lighting in furniture as well as the growing needs for networking and digitalization since the last 10 years. The solutions offered within this range maximize simplicity and flexibility as well as assure high reliability. The range presents itself as a unique combination of elegant design and state of the art technology making it the perfect choice for any home furniture application, be it Task Lighting for Kitchen cabinets and plinths, Decorative Lighting for Living Room Showcases, Mood Lighting for Bedroom Applications or pure Functional Lighting in Wardrobes.

With the ever increasing demands for quality and specialized lighting solutions not just for furniture but also for rooms, Häfele in 2019 expanded its range offering to include ceiling cove lighting which incorporates our high quality strip lights. It was during this period that we realized that among the numerous ceiling light

types available in the market, interior architectural lighting had a huge demand, however there weren't many prominent brands that offered these solutions. On one side, there existed local market players that offered these solutions without effective quality assurances, while on the other there were international brands that only catered to projects with no stable price offering or service support. This left majority of the customers without a viable choice in the market.

Identifying this distinct gap early on as an opportunity, Häfele initiated the research and engineering for a range of lights that enhances the design of architectural spaces as well as provides opportunities of achieving different illumination techniques and functionalities. As a brand, Häfele understands design and is known for its bend towards innovation. It also understands the importance of home ergonomics, lifestyle conveniences and





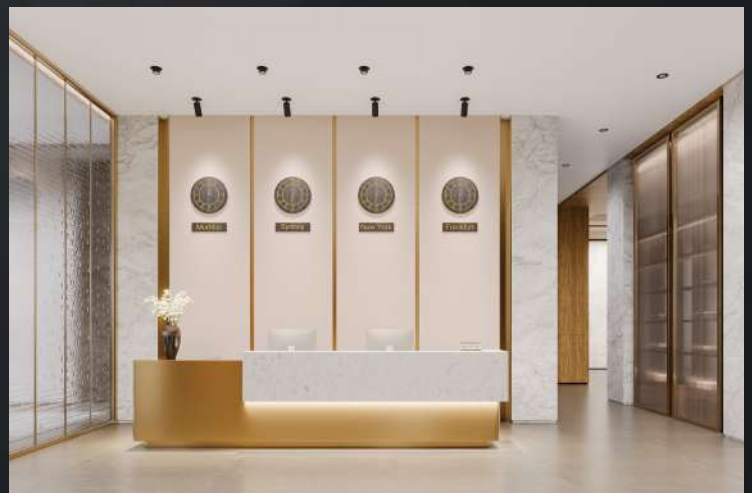
THE STANFORD SERIES



THE IMPERIAL SERIES



THE CAMBRIDGE SERIES



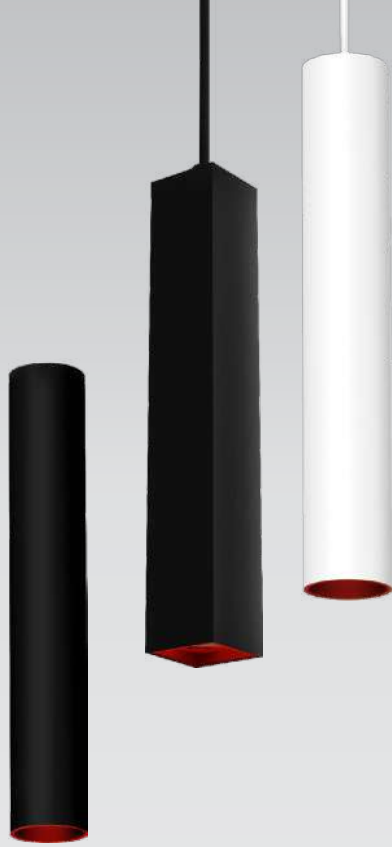
THE EDINBURGH SERIES

ease of mobility within your surroundings. Our efforts towards this exercise led to the development of a versatile range of architectural lights; Häfele Architectural Lights was brought into existence.

With Häfele's New Architectural Lights Range, you will find all your lighting needs taken care of. Whether it is lighting up a small area, highlighting a wall texture, emphasizing on a work of art, illuminating the floor space at night or simply ensuring even distribution of light across the entire space - these lights have got you covered. The range covers various applications, installation techniques and design themes. Each series comes with a comprehensive offering of the different types of interior lights, be it downlights, spotlight or wall washers, which allows you to implement a consistent design theme (in terms of the lighting fixtures) across the space available, even with differentiated illumination techniques. The biggest advantage this range carries is the absolutely low Unified Glare

Rating (UGR). The lower the UGR rating, the lower the glare from the light fittings which therefore results in comfortable illumination in your living spaces.

The convenient plug and play assembly, impressive product specifications, flexibility in ordering components, luminaire finishes, and availability of glare reduction accessories provide an overall customized option tailored to your specific requirements. Engineered on the same philosophy of 'easiness' and 'flexibility' as the Loox furniture lighting system, Häfele can now be your holistic lighting solutions provider, delivering premium ambient, task and accent lighting for your living spaces.





SPOTLIGHTS  
DOWNLIGHTS  
WALLWASHER



## DELFT

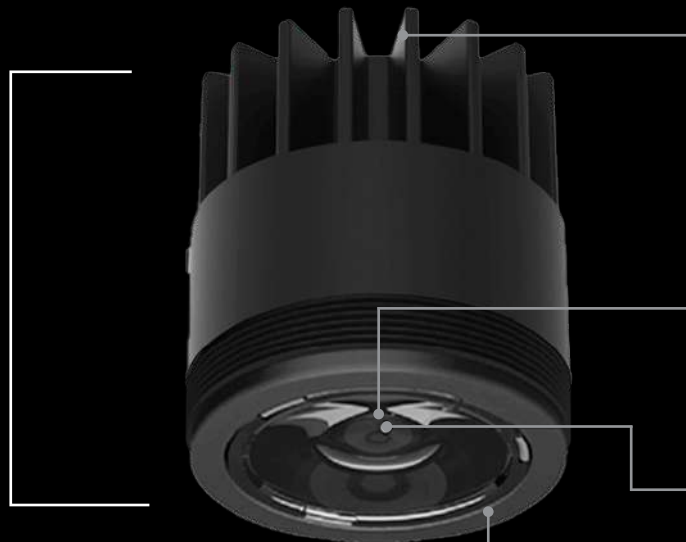
Recent preferences among architects in the industry have evolved more in favour of having compact, minimal light fixtures that do not interfere with the overall design theme. Additionally, there is a strong inclination towards installing fewer luminaires that cover a significant portion of the ceiling space and illuminate a given area effectively. The Delft series of architectural lights was developed to cater to higher illumination in the downlight and spotlight series with its small and exquisite design.

Available in two colours, black and white, the Delft series is best suitable for dining rooms, hotel rooms, bedrooms, living rooms, and display areas with its deep baffle design which equally distributes the light toward the center. With the help of a simple plug-and-play concept, the luminaires from the Delft Series have an entirely tool-free installation.

**THE DELFT SERIES: MODULARIZATION CONCEPT**



**LIGHT ENGINE**



**Heat sink**  
Absorbs the heat generated by the light engine and dissipates it into the environment, maintaining the required operating temperature.

**LED holder with LED chip**  
Designed to mount the LED onto the fixture and to integrate it into the circuit.

**Lens**  
Amplifies the light output from the LED.

**Rubber Gasket**  
Prevents proliferation of moisture and dust particles.

**Housing With Integrated Mounting Bracket**  
Provides support to attach the luminaire to the false ceiling structure.



**Mounting bracket types:**



Trim



Trimless

# THE DELFT SERIES: FEATURES

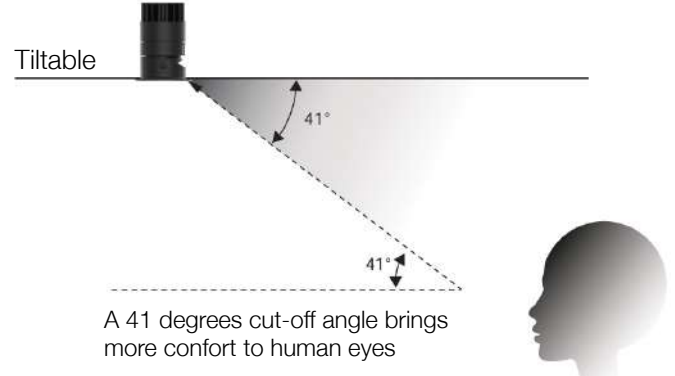
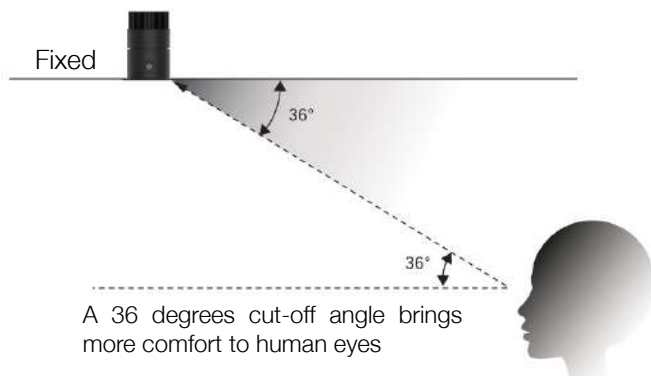
## 1. Modularization concept

The Delft series delivers flexibility and a variety of options for the customer to choose from. The ordering process involves building on the light engine as per installation preference.

Mentioned below are all the choices a customer can detail to arrive at a solution tailored to his/her specific requirements

Types:	Spotlight and Downlight
Wattage options:	5 W and 7 W
Beam angles:	20°, 35°, 50°
Colour of the luminaire	Black and White
Housing types:	Fixed and tiltable
Mounting bracket installation:	Trim and trimless
Colour temperature:	2700K, 3000K, and 4000K

## 2. Low glare fixture

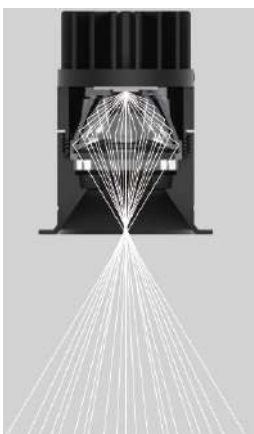


If the cut-off angle is higher, the luminaire's visual comfort will also increase due to the glare\* reduction. The luminaires from the Delft Series ensure a low glare function that helps produce a pleasant visual impact. They are designed with a 36° cut-off angle for fixed housing and a 41° cut-off angle for tiltable housing.

\*Glare is a visual sensation caused by excessive and uncontrolled brightness at the light source.

## 3. Deep baffle design

The Delft series luminaires, deep baffle design reduces glare. Additionally, they have specialized lenses that offer numerous internal reflection spots to guarantee a beam angle that is equally distributed toward the center.



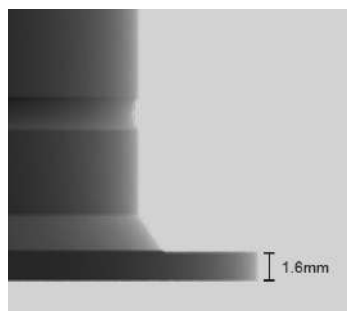
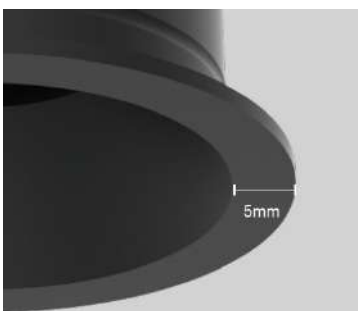
## 4. Unified Glare Rating (UGR) of < 14

The lower the UGR rating, the lower the glare. To achieve comfortable illumination in your living spaces, the UGR of the luminaires is recommended to be below 20 which is possible to achieve with the Delft Series. UGR values range from 40 (extremely high glare) to 5 (very low glare).



## 5. Small and exquisite design

With a thin frame design of 1.6 mm in height and 5 mm in width, these fixtures are small, compact, and blend into the ceiling perfectly.



## THE DELFT SERIES: DECODING THE NOMENCLATURE

Delft	5W	.25A	TLT	RD	TR	20°	30K	WH
	1	2	3	4	5	6	7	8

Number	Category	Abbreviation	Possibilities
1	Output	W	5 Watts
			7 Watts
2	Current	.25A	250mA
		.7A	700mA
3	Housing type	TLT	Tilt
		DL	Fixed Downlight
4	Shape	RD	Round
5	Mounting bracket type	TR	Trim
		TL	Trimless
6	Beam angle	°	20°
			35°
			50°
7	Colour temperature	27K	2700K
		30K	3000K
		40K	4000K
8	Finish	WH	White
		BLK	Black

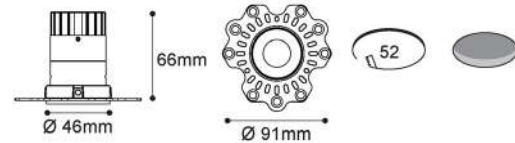
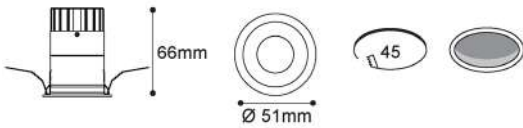
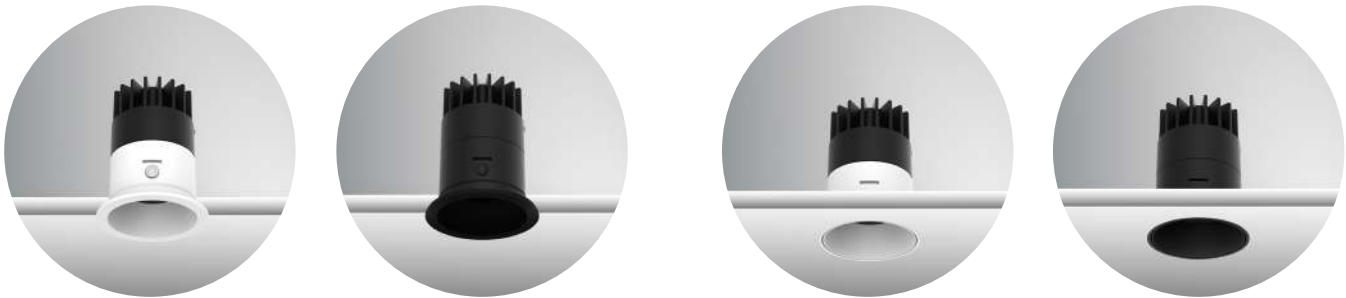
## THE DELFT SERIES: RANGE SPECIFICATIONS

Luminaire type	Spotlight, Downlight
Colour temperature	2700K, 3000K, 4000K
CRI	>95
Wattage	5W, 7W
Current	250mA (5W), 700mA (7W)
Maximum ambient temperature	45° C
Material	Die cast aluminium
Beam angle	20°, 35°, 50°
Finish	Black, White
Average rated life	> 60,000 hrs.
Mounting technique	Recess
Degree of protection	IP44
Certification	BIS (Bureau of Indian Standards)
Applications	Indoor - Dining rooms, hotel rooms, bedrooms, living rooms, display areas



## THE DELFT SERIES: RANGE SPECIFICATIONS

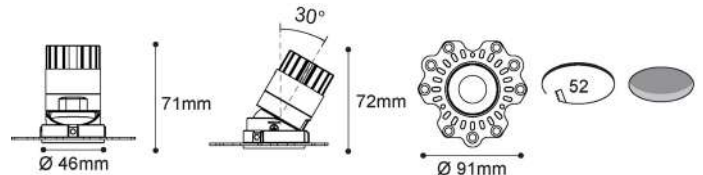
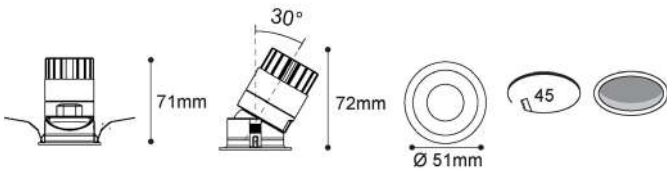
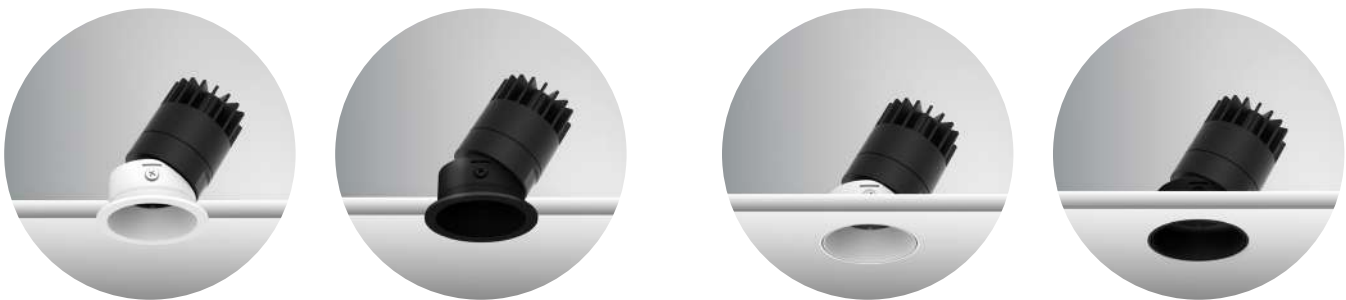
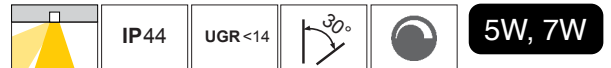
### FIXED RECESSED SPOTLIGHTS / DOWNLIGHTS - ROUND



Housing type	Fixed
Description	Delft RD TR
Mounting brackets	Trim
Wattage	5W, 7W
Current	250mA (5W), 700mA (7W)
Beam angle	20°, 35°, 50°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	85 (5W) lm/W, 79 (7W) lm/W

Housing type	Fixed
Description	Delft RD TL
Mounting brackets	Trimless
Wattage	5W, 7W
Current	250mA (5W), 700mA (7W)
Beam angle	20°, 35°, 50°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	85 (5W) lm/W, 79 (7W) lm/W

### TILTABLE RECESSED SPOTLIGHTS / DOWNLIGHTS - ROUND



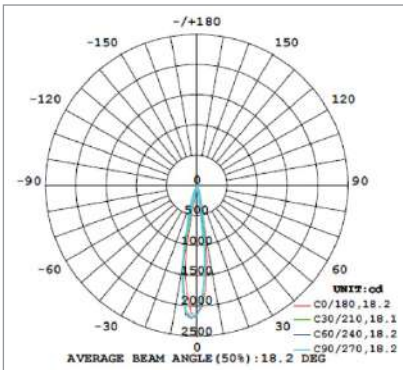
Housing type	Tiltable
Description	Delft TLT RD TR
Mounting brackets	Trim
Wattage	5W, 7W
Current	250mA (5W), 700mA (7W)
Beam angle	20°, 35°, 50°
Housing Colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	85 (5W) lm/W, 79 (7W) lm/W

Housing type	Tiltable
Description	Delft TLT RD TL
Mounting brackets	Trimless
Wattage	5W, 7W
Current	250mA (5W), 700mA (7W)
Beam angle	20°, 35°, 50°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	85 (5W) lm/W, 79 (7W) lm/W

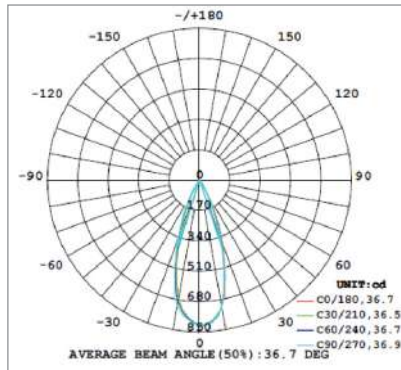
# THE DELFT SERIES: LIGHT DISTRIBUTION AND AAI GRAPHS

## 5W Luminaires

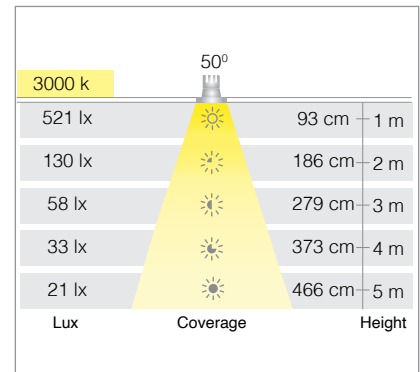
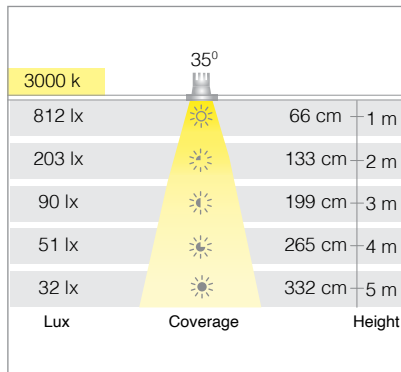
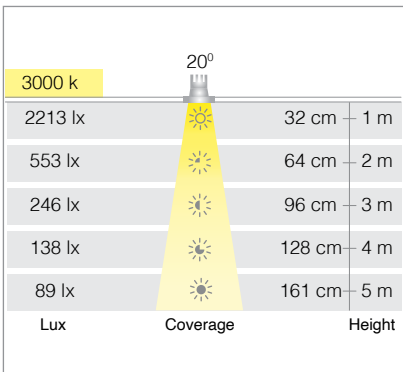
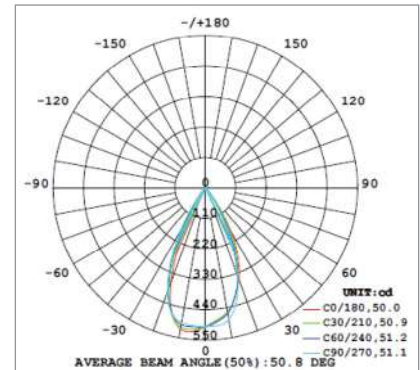
20° BEAM ANGLE



35° BEAM ANGLE

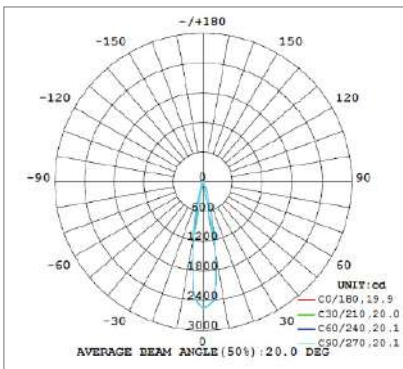


50° BEAM ANGLE

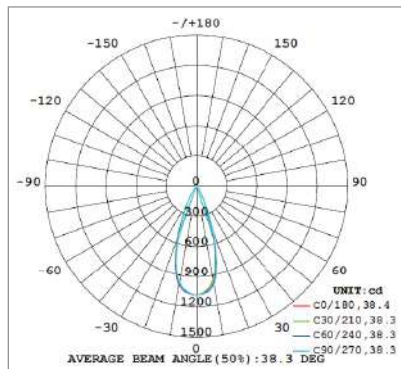


## 7W Luminaires

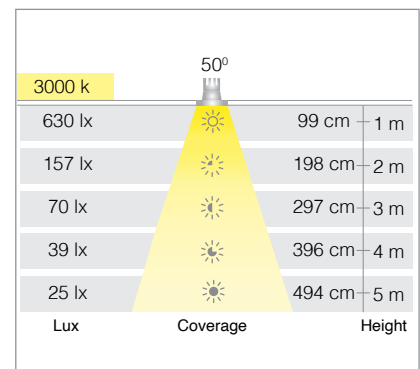
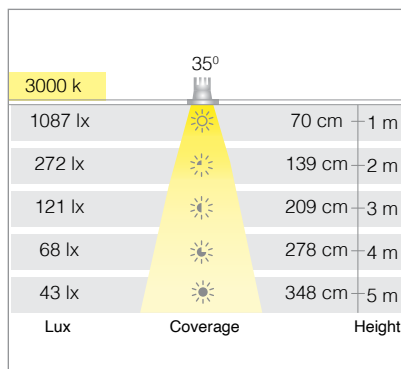
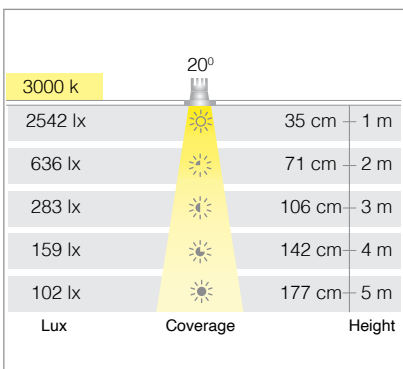
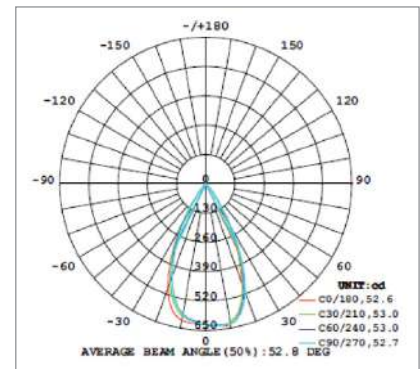
20° BEAM ANGLE



35° BEAM ANGLE



50° BEAM ANGLE



Note: The curves indicate the illuminated area and the average illumination when the luminaire is at a different distance.

## THE DELFT SERIES: CONSTANT CURRENT DRIVERS

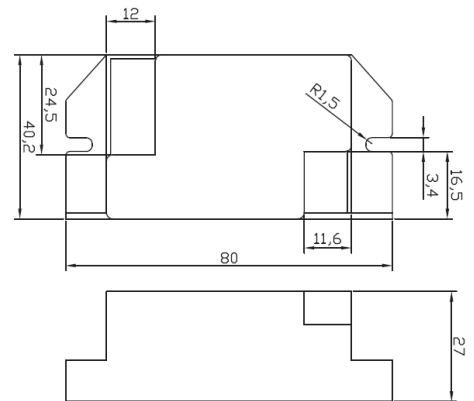
### KNIGHT 250, 5W - CONSTANT SINGLE CURRENT LED DRIVER, 250mA

IP20

- SELV equivalent
- Flicker-free output
- Suitable for dry locations
- Average rated life: 50,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.
- 1 channel output



Technical Specifications	
Article No.	833.13.643
Input Voltage	240VAC ±10% 50Hz
Input Current	0.03A Max.
Input Power	6W Max.
Output Current	250mA
Output Voltage	9 - 18VDC
Output Power	4.5W
Power Factor	>0.85
Ambient Operating Temperature Range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV DM)



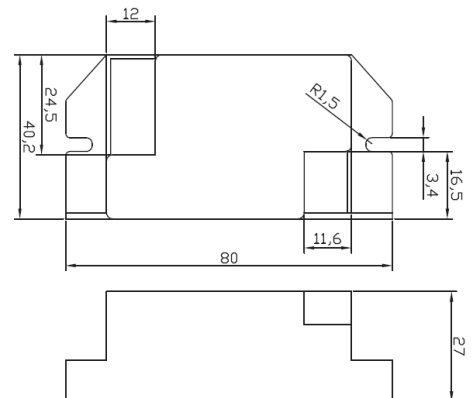
### KNIGHT 700 - CONSTANT SINGLE CURRENT LED DRIVER, 700mA

IP20

- SELV equivalent
- Flicker-free output
- Suitable for dry locations
- Average rated life: 50,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.
- 1 channel output



Technical Specifications	
Article No.	833.30.969
Input Voltage	240VAC ±10% 50Hz
Input Current	0.06A Max.
Input Power	11W Max.
Output Current	700mA
Output Voltage	7 - 12VDC
Output Power	8.4W
Power Factor	>0.85
Ambient Operating Temperature Range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3 kV DM)



## THE DELFT SERIES: CONSTANT CURRENT DRIVERS

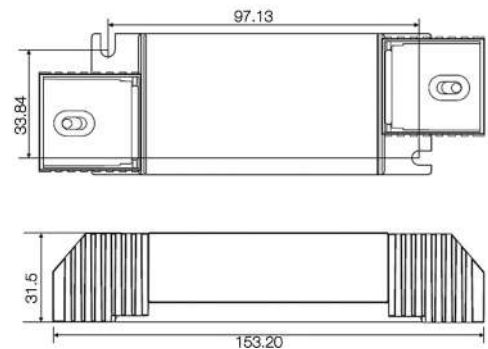
### DUKE 700 - CONSTANT MULTI-CURRENT LED DRIVER, 400mA, 500mA, 600mA, 700mA

IP20

- SELV equivalent
- CE certified
- Suitable for Class II fixtures
- Flicker-free output
- Multiple current selection through DIP switch
- Overload and short circuit protection
- Input over-voltage and under-voltage protection
- Suitable for dry locations
- Average rated life: 50,000 hours
- Sustains at 320VAC for 48 hours & 440VAC for 8 hours
- 1 channel output

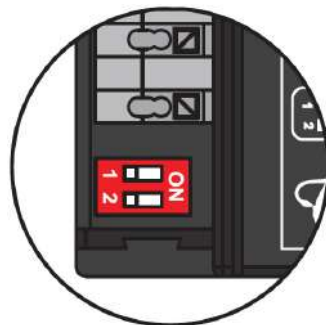


Technical Specifications	
Article No.	833.30.976
Input Voltage	240VAC ±20% 50Hz
Input Current	0.16A Max.
Input Power	36W Max.
Output Current	400mA, 500mA, 600mA, 700mA (±7%)
Output Voltage	30 - 43VDC
Output Power	30.1W
Power Factor	>0.95
Ambient Operating Temperature Range	-20°C to +50°C
Input Surge Protection	Yes (Line-Neutral 4kV)



### DUKE 700 DIP SWITCH CURRENT SELECTION CHART

DIP Switch		Output Current (mA)
PIN 1	PIN 2	
ON	ON	700
ON	OFF	600
OFF	ON	500
OFF	OFF	400

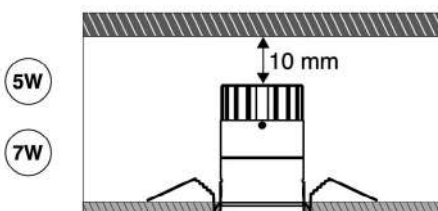


#### NOTE:

1. You can order the Knight Series or the Duke Series drivers, as per your requirement, by checking the suitable current ratings.
2. For Duke drivers: Please set the dip switch setting as indicated on the driver to activate the desired current rating out of the 4 options available.
3. The Delft series downlights allow automation by connecting to Dali compatible drivers.

## THE DELFT SERIES: INSTALLATION DETAILS

### GAP BETWEEN TRUE CEILING AND LUMINAIRE



Minimum 10 mm of gap from the true ceiling to the top edge of the luminaire is required for installation of all luminaires under the Delft series, irrespective of their wattage.

## THE DELFT SERIES: ORDERING INFORMATION

### 1. LIGHT ENGINE

Article No.	Wattage	Current	Colour Temperature	Beam angle	Dimensions (mm)
833.30.904	5W	250 mA	2700K	20°	Dia 41 x H 47
833.30.905	5W	250 mA	3000K	20°	Dia 41 x H 47
833.30.906	5W	250 mA	4000K	20°	Dia 41 x H 47
833.30.908	5W	250 mA	2700K	35°	Dia 41 x H 47
833.30.909	5W	250 mA	3000K	35°	Dia 41 x H 47
833.30.910	5W	250 mA	4000K	35°	Dia 41 x H 47
833.30.912	5W	250 mA	2700K	50°	Dia 41 x H 47
833.30.913	5W	250 mA	3000K	50°	Dia 41 x H 47
833.30.914	5W	250 mA	4000K	50°	Dia 41 x H 47
833.30.916	7W	700 mA	2700K	20°	Dia 41 x H 47
833.30.917	7W	700 mA	3000K	20°	Dia 41 x H 47
833.30.918	7W	700mA	4000K	20°	Dia 41 x H 47
833.30.920	7W	700mA	2700K	35°	Dia 41 x H 47
833.30.921	7W	700mA	3000K	35°	Dia 41 x H 47
833.30.922	7W	700mA	4000K	35°	Dia 41 x H 47
833.30.924	7W	700mA	2700K	50°	Dia 41 x H 47
833.30.925	7W	700mA	3000K	50°	Dia 41 x H 47
833.30.926	7W	700mA	4000K	50°	Dia 41 x H 47

### 2. HOUSING WITH MOUNTING BRACKET (SUITABLE FOR BOTH 5W/7W LUMINAIRES)

Article No.	Housing type	Mounting bracket type	Colour	Dimensions (mm)
833.30.928	Fixed	Trim	White	Dia 100 x H 29
833.30.929	Tiltable	Trim	White	Dia 100 x H 29
833.30.930	Fixed	Trim	Black	Dia 100 x H 29
833.30.931	Tiltable	Trim	Black	Dia 100 x H 29
833.30.932	Fixed	Trimless	White	Dia 90 x H 30
833.30.933	Tiltable	Trimless	White	Dia 90 x H 30
833.30.934	Fixed	Trimless	Black	Dia 90 x H 30
833.30.935	Tiltable	Trimless	Black	Dia 90 x H 30

### 3. DRIVERS

Article No.	Description	Current
833.13.643	Knight 250, 5W - Constant Single Current LED Driver, 250mA	250mA
833.30.969	Knight 700 - Constant Single Current LED Driver, 700mA	700mA
833.30.976	Duke 700 - Constant Multi-Current LED Driver, 400mA, 500mA, 600mA, 700mA	700mA Max.



## OXFORD

The Oxford series, designed on the concept of modularization, delivers flexibility and a variety of options for the customer to choose from. Right from the type of application to output options, choice of beam angles and colour temperatures to shape, finish, mounting and housing type and glare reduction accessories, every minute detail of an Oxford luminaire can be customized as per your individual requirement.

Be it a spotlight, downlight or wall washer, the minimalist design theme of the series remains seamless and consistent across. The inherent deep baffle design and a low UGR (Unified Glare Rating) help enhance the visual clarity and provide comfortable aesthetics in the living spaces.

**THE OXFORD SERIES: MODULARIZATION CONCEPT**



**LIGHT ENGINE**



**Heat Sink**

Absorbs the heat generated by the light engine and then dissipates this heat into the surrounding ambient air.

**LED Holder with LED Chip**

Designed to mount the LED onto the fixture and to integrate it into the circuit.

**Lens**

Amplifies the light output from the LED.

**Rubber Gasket**

Prevents proliferation of moisture and dust particles.

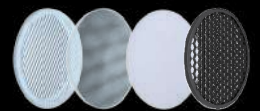


**Lens Protector**

Protects the lens from scratches and smudges ensuring an unhindered light output.

**Glare Reduction Add-ons**

Different louvers help achieve different light effects. They help reduce the glare and diffuse the beam angle.



**Housing**

Dissipates the heat that is emitted by the light engine and provides protection to the luminaire.

Fixed Tiltable Wall Wash



**Mounting Bracket**

Provides support to attach the luminaire to the false ceiling structure.

**Trim**



**Trimless**





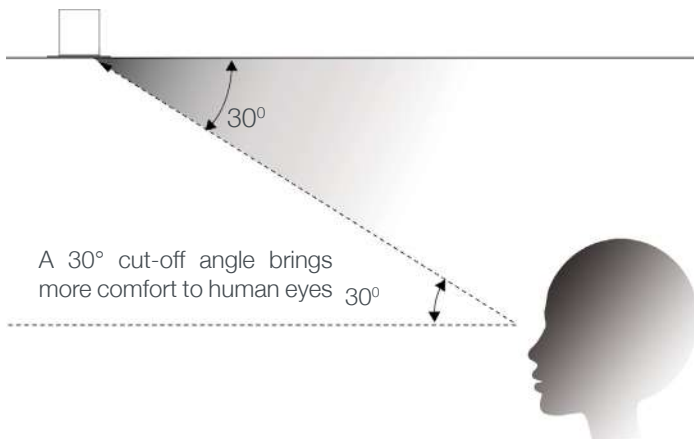
# THE OXFORD SERIES: FEATURES

## 1. Modularization concept

The Oxford series delivers flexibility and a variety of options for the customer to choose from. The ordering process involves building on the light engine as per installation preference which not only provides customization but also ensures ease in stock keeping and management. Mentioned below are all the choices a customer can detail to arrive at a solution tailored to his/her specific requirements.

Types:	Spotlight, downlight and wall washers
Wattage options:	10 W and 12 W
Beam angles:	20°, 30°, 40°, and 50° (for 10W) 30°, 47°, 57° (for 12W)
Shape of the luminaire:	Round and Square
Colour of the luminaire:	Black and White
Housing types:	Fixed, tiltable and wall wash
Mounting bracket installation:	Trim and trimless
Louver options:	Striped glass, woven glass, diffusion sheet and honeycomb louver
Colour temperature:	2700K, 3000K and 4000K

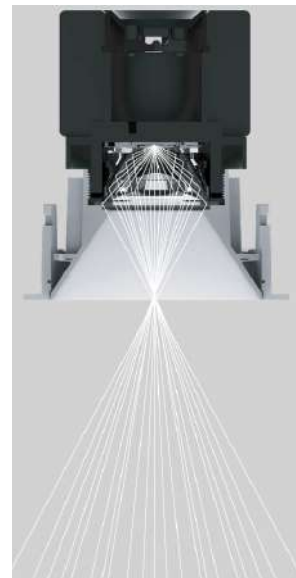
## 2. Low glare fixture



The greater the cut-off angle, the greater the visual comfort provided by the luminaire to the user due to glare\* reduction. Designed with a 30° cut-off angle the luminaires from the Oxford Series ensure low glare function that helps create a soft visual effect.

\*Glare is a visual sensation caused by excessive and uncontrolled brightness at the light source.

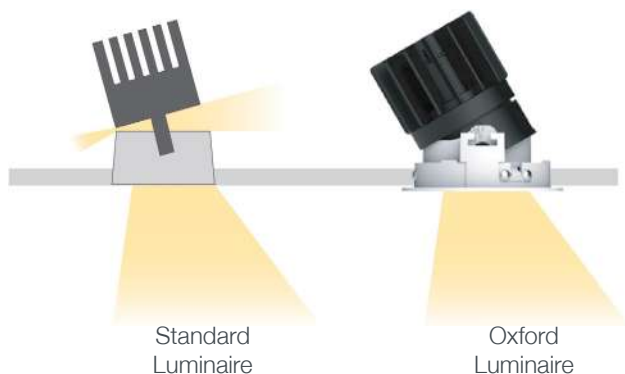
## 3. Deep baffle design



The deep baffle design of the Oxford luminaires helps reduce glare. Additionally, they are equipped with special lenses that provide multiple internal reflection points that ensure an evenly spread beam angle towards the centre.

## 4. Reduces light leakage

The tiltable luminaires from this series are constructed in a way that they prevent any kind of light leakage when in the tilt position. This ensures complete and uniform light output.



## 5. Unified Glare Rating (UGR) <19

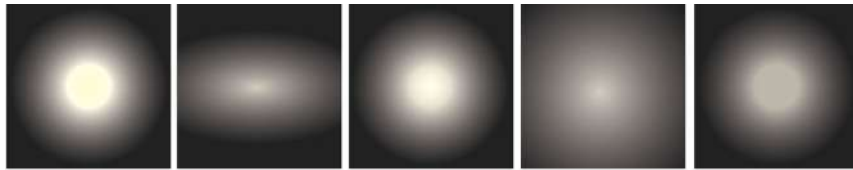
The lower the UGR rating, the lower the glare. In order to achieve comfortable illumination in your living spaces, the UGR of the luminaires is recommended to be below 20 which is possible to achieve with the Oxford Series. UGR values range from 40 (extremely high glare) to 5 (very low glare).



## THE OXFORD SERIES: FEATURES



Striped Glass      Woven Glass      Diffusion Sheet      Honeycomb Louver



Standard Lens Protector (Transparent glass)      Striped Glass      Woven Glass      Diffusion Sheet      Honeycomb Louver

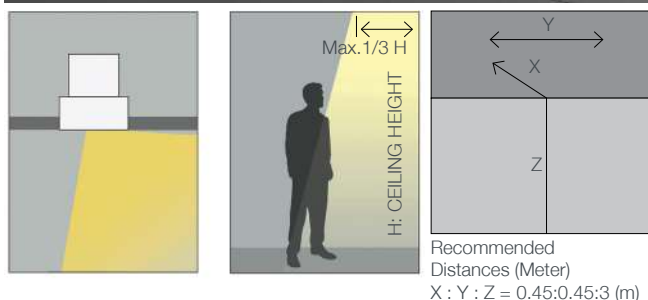
### 6. Glare reduction add-ons:

With numerous louver options to choose from, Oxford adds more flexibility and freedom for the lighting designer. The Honeycomb louver reduces glare; strip glass creates oval distribution; diffusion sheet & woven glass soften and spread the light.

### 7. Easy assembly



The luminaires from the Oxford Series follow the concept of plug-and-play and can be installed quickly and completely tool-free. Attach the mounting bracket to the false ceiling till the interior construction / renovation goes on. Once completed, simply connect the assembled luminaire to the driver lead and fix it into the mounting bracket.



### 8. Wall Washers

Oxford wall washers enable even illumination on the target wall without creating shadows. What needs to be taken into consideration for a clean light output is the distance of the wall washer from the wall (X) and the distance between two wall washers (Y). For Oxford, the recommended distance between X, Y and Z is 0.45:0.45:3. The special housing of these luminaires not only broadens the illumination effect with a seamless light flow but also makes the entire area brighter. They are designed not just to lighten up the wall but also the floors, which sets the wall washers from this range apart from those available in the market. The reflecting component in the housing ensures minimal loss of light output ensuring a uniform throw onto the wall and floor.

X: Height from wall washer to the wall  
Y: Distance between two wall washers  
Z: Ceiling height

## THE OXFORD SERIES: DECODING THE NOMENCLATURE

Oxford	10W	.3A	TLT	RD	TR	30°	30K	WH
	①	②	③	④	⑤	⑥	⑦	⑧

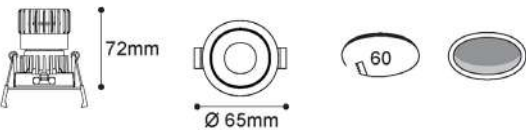
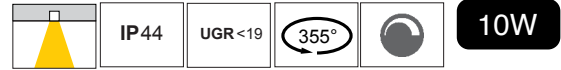
Number	Category	Abbreviation	Possibilities
1	Output	W	10 Watts
			12 Watts
			20 Watts
2	Current	.25A	250mA
		.3A	300mA
		.5A	500mA
3	Housing type	TLT	Tilt
		DL	Fixed Downlight
		WW	Wall Washer
4	Shape	RD	Round
		SQ	Square
5	Mounting Bracket Type	TR	Trim
		TL	Trimless
6	Beam Angle	°	20°, 30°, 40°, 50° (for 10W) 30°, 47°, 57° (for 12W) 32°, 42°, 52° (for 20W)
7	Colour Temperature	27 K	2700 K
		30 K	3000 K
		40 K	4000 K
8	Finish	WH	White
		BLK	Black

## THE OXFORD SERIES: RANGE SPECIFICATIONS

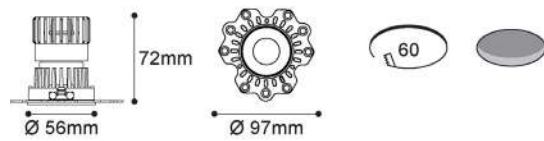
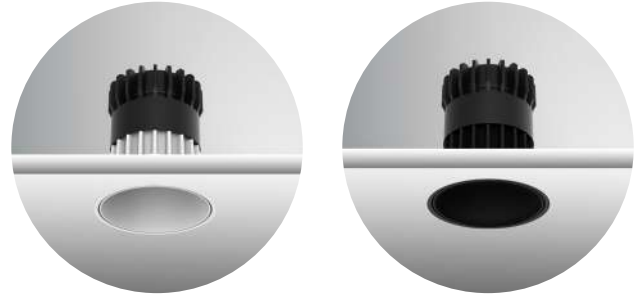
Luminaire type	Spotlight, Downlight and Wall Washer
Colour temperature	2700K, 3000K, 4000K
CRI	>95
Wattage	10W, 12W, 20W
Current	250mA (10W), 300mA (12W), 500mA (20W)
Lumen output at source (lm/W) for 3000K luminaire	82 lm/W (10W), 125 lm/W (12W), 88 lm/W (20W)
Maximum ambient temperature	45° C
Material	Die cast Aluminium
Beam angle	20°, 30°, 40°, 50° (10W), 30°, 47°, 57° (12W), 32°, 42°, 52° (20W)
Housing colour	Black
Average rated life	> 60,000 hrs.
Mounting technique	Recess
Degree of protection	IP44
Energy efficiency class	Class II
Certification	BIS (Bureau of Indian Standards)
Application	Indoor: Bed rooms, living rooms, galleries, showcases, conference rooms, restaurants, hotel rooms

## THE OXFORD SERIES: RANGE SPECIFICATIONS

### FIXED RECESSED SPOTLIGHTS / DOWNLIGHTS - ROUND

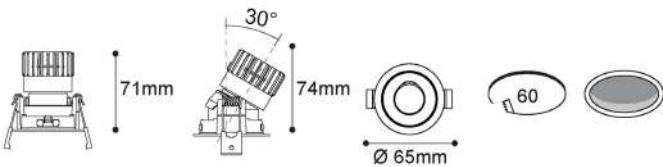
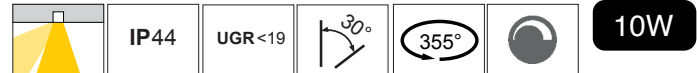


Housing type	Fixed
Description	Oxford RD TR
Mounting brackets	Trim
Wattage	10W
Current	250mA
Beam angle	20°, 30°, 40°, 50°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	82 lm/W

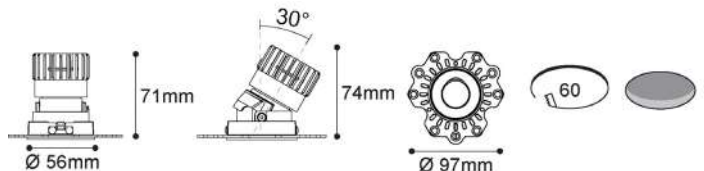
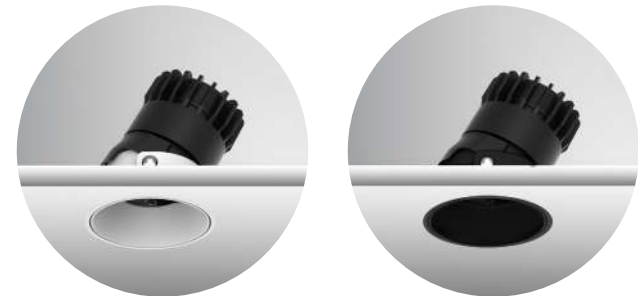


Housing type	Fixed
Description	Oxford RD TL
Mounting brackets	Trimless
Wattage	10W
Current	250mA
Beam angle	20°, 30°, 40°, 50°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	82 lm/W

### TILTABLE RECESSED SPOTLIGHTS / DOWNLIGHTS - ROUND



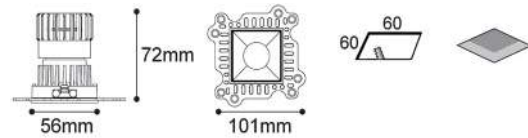
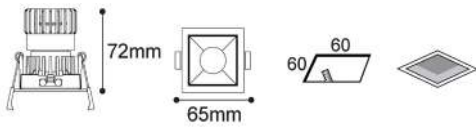
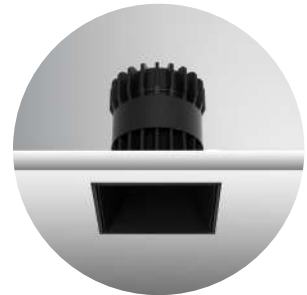
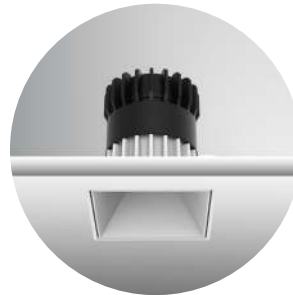
Housing type	Tiltable
Description	Oxford TLT RD TR
Mounting brackets	Trim
Wattage	10W
Current	250mA
Beam angle	20°, 30°, 40°, 50°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	82 lm/W



Housing type	Tiltable
Description	Oxford TLT RD TL
Mounting brackets	Trimless
Wattage	10W
Current	250mA
Beam angle	20°, 30°, 40°, 50°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	82 lm/W

## THE OXFORD SERIES: RANGE SPECIFICATIONS

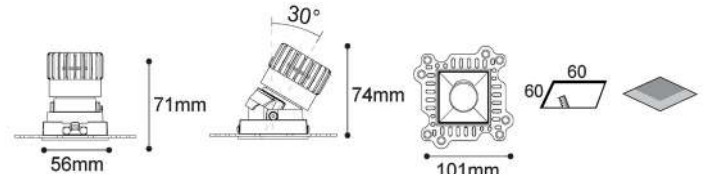
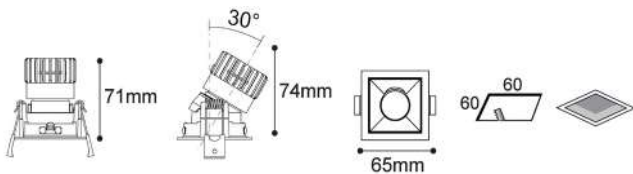
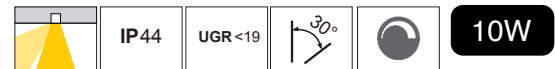
### FIXED RECESSED SPOTLIGHTS / DOWNLIGHTS - SQUARE



Housing type	Fixed
Description	Oxford SQ TR
Mounting brackets	Trim
Wattage	10W
Current	250mA
Beam angle	20°, 30°, 40°, 50°
Housing Colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	82 lm/W

Housing type	Fixed
Description	Oxford SQ TL
Mounting brackets	Trimless
Wattage	10W
Current	250mA
Beam angle	20°, 30°, 40°, 50°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	82 lm/W

### TILTABLE RECESSED SPOTLIGHTS / DOWNLIGHTS - SQUARE

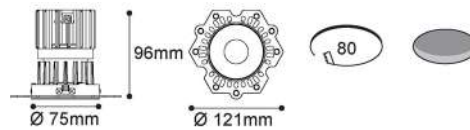
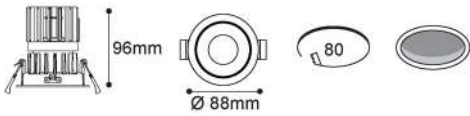
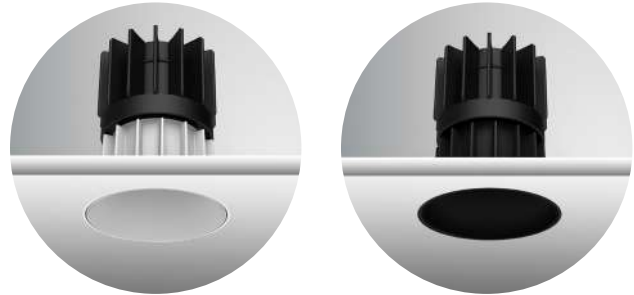


Housing type	Tiltable
Description	Oxford TLT SQ TR
Mounting brackets	Trim
Wattage	10W
Current	250mA
Beam angle	20°, 30°, 40°, 50°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	82 lm/W

Housing type	Tiltable
Description	Oxford TLT SQ TL
Mounting brackets	Trimless
Wattage	10W
Current	250mA
Beam angle	20°, 30°, 40°, 50°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	82 lm/W

## THE OXFORD SERIES: RANGE SPECIFICATIONS

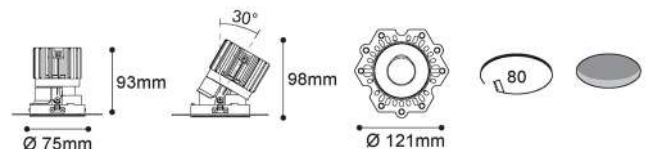
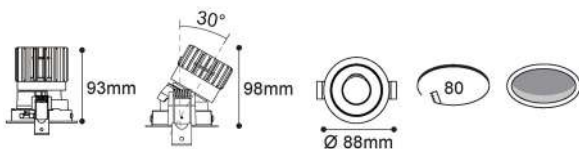
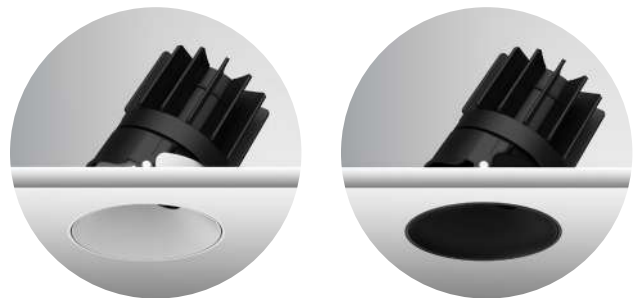
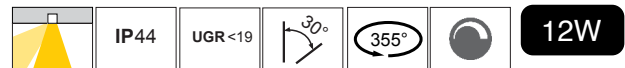
### FIXED RECESSED SPOTLIGHTS / DOWNLIGHTS - ROUND



Housing type	Fixed
Description	Oxford RD TR
Mounting brackets	Trim
Wattage	12W
Current	300mA
Beam angle	30°, 47°, 57°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	125 lm/W

Housing type	Fixed
Description	Oxford RD TL
Mounting brackets	Trimless
Wattage	12W
Current	300mA
Beam angle	30°, 47°, 57°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	125 lm/W

### TILTABLE RECESSED SPOTLIGHTS / DOWNLIGHTS - ROUND

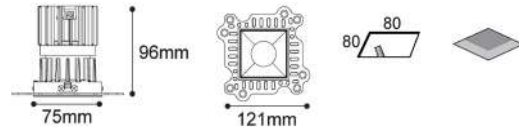
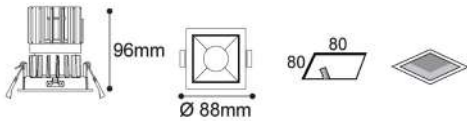
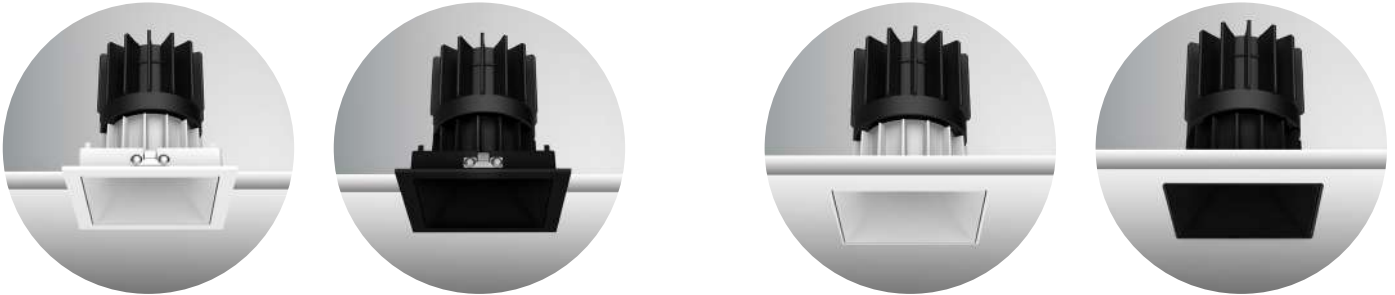


Housing type	Tiltable
Description	Oxford TLT RD TR
Mounting brackets	Trim
Wattage	12W
Current	300mA
Beam angle	30°, 47°, 57°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	125 lm/W

Housing type	Tiltable
Description	Oxford TLT RD TL
Mounting brackets	Trimless
Wattage	12W
Current	300mA
Beam angle	30°, 47°, 57°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	125 lm/W

## THE OXFORD SERIES: RANGE SPECIFICATIONS

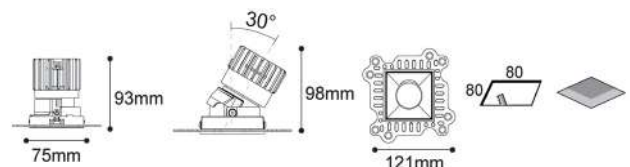
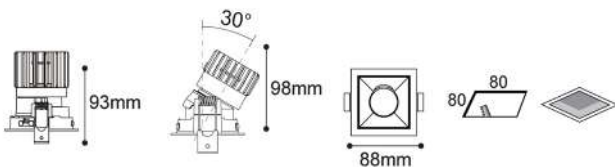
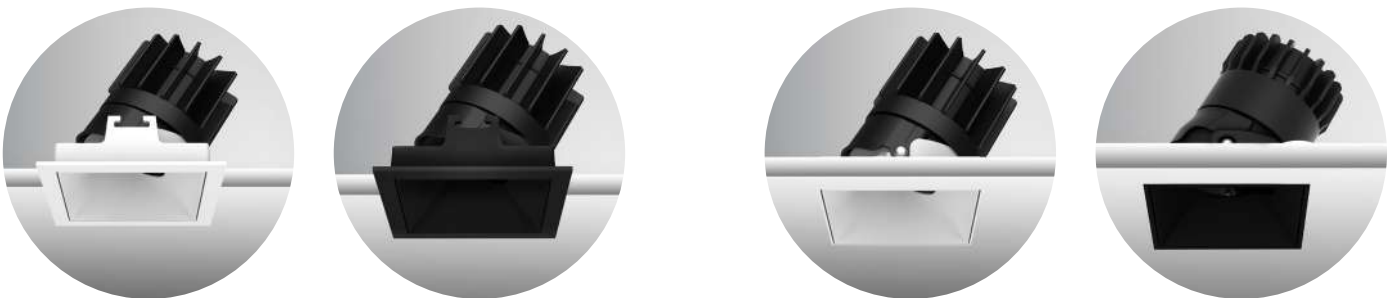
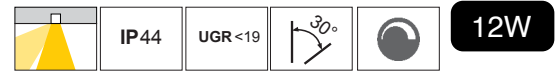
### FIXED RECESSED SPOTLIGHTS / DOWNLIGHTS - SQUARE



Housing Type	Fixed
Mounting Brackets	Trim
Description	Oxford SQ TR
Wattage	12W
Current	300mA
Beam Angle	30°, 47°, 57°
Body Colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	125 lm/W

Housing Type	Fixed
Mounting Brackets	Trimless
Description	Oxford SQ TL
Wattage	12W
Current	300mA
Beam Angle	30°, 47°, 57°
Body Colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	125 lm/W

### TILTABLE RECESSED SPOTLIGHTS / DOWNLIGHTS - SQUARE





Housing type	Tilttable
Description	Oxford TLT SQ TR
Mounting brackets	Trim
Wattage	12W
Current	300mA
Beam angle	30°, 47°, 57°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	125 lm/W

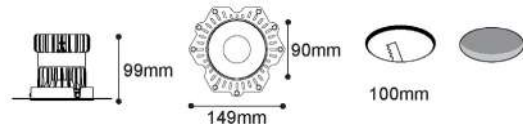
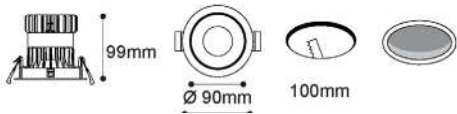
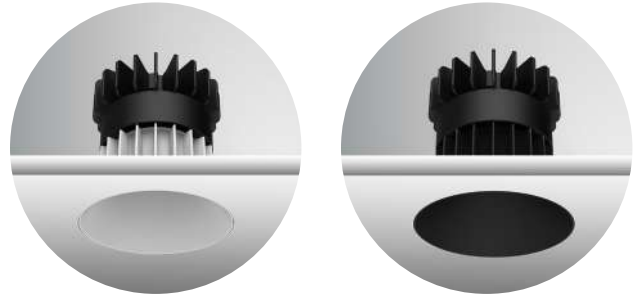
Housing type	Tilttable
Description	Oxford TLT SQ TL
Mounting brackets	Trimless
Wattage	12W
Current	300mA
Beam angle	30°, 47°, 57°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	125 lm/W

**THE OXFORD SERIES: RANGE SPECIFICATIONS**

**FIXED RECESSED SPOTLIGHTS /  
DOWNLIGHTS - ROUND**











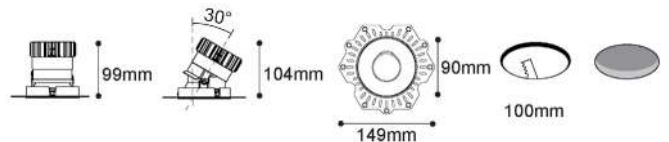
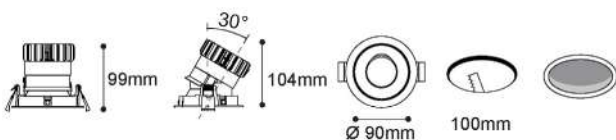
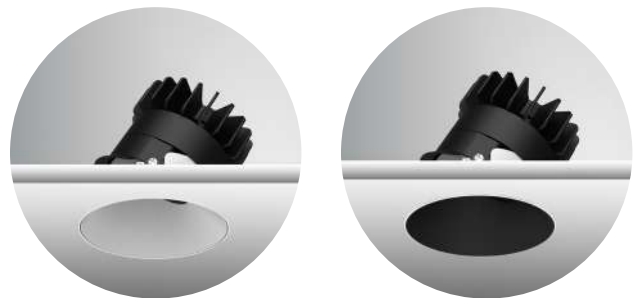
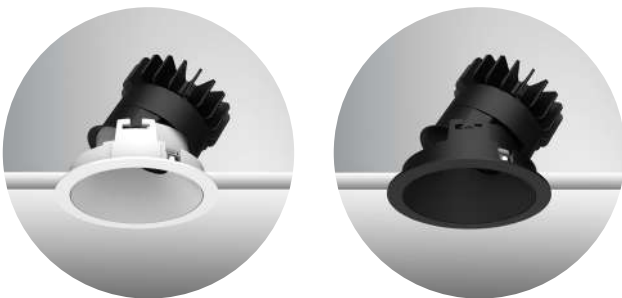



Housing type	Fixed
Description	Oxford RD TR
Mounting brackets	Trim
Wattage	20W
Current	500mA
Beam angle	32°, 42°, 52°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	88 lm/W

Housing type	Fixed
Description	Oxford RD TL
Mounting brackets	Trimless
Wattage	20W
Current	500mA
Beam angle	32°, 42°, 52
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	88 lm/W

**TILTABLE RECESSED SPOTLIGHTS /  
DOWNLIGHTS - ROUND**



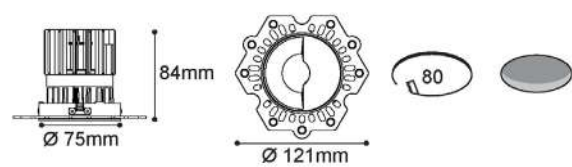
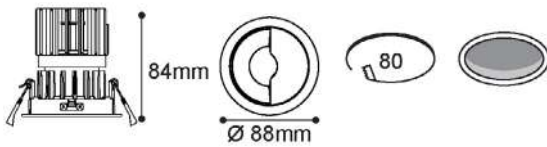
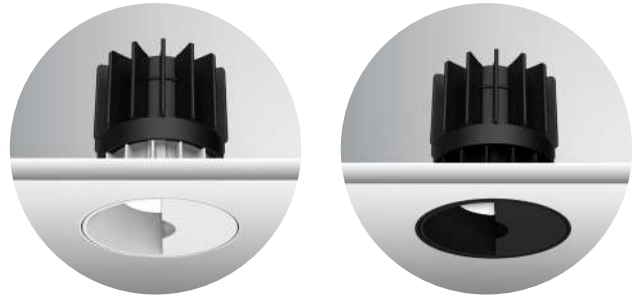
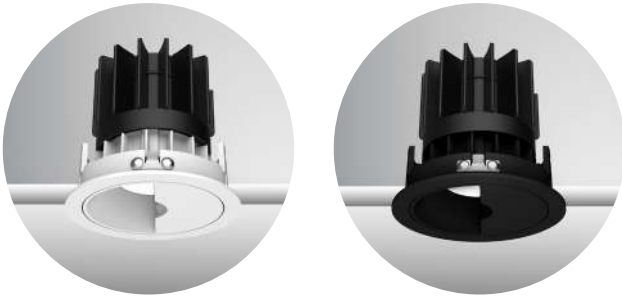
Housing type	Tiltable
Description	Oxford TLT RD TR
Mounting brackets	Trim
Wattage	20W
Current	500mA
Beam angle	32°, 42°, 52
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	88 lm/W

Housing type	Tiltable
Description	Oxford TLT RD TL
Mounting brackets	Trimless
Wattage	20W
Current	500mA
Beam angle	32°, 42°, 52
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	88 lm/W



## THE OXFORD SERIES: RANGE SPECIFICATIONS

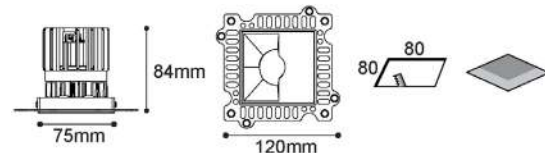
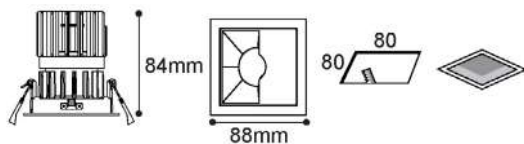
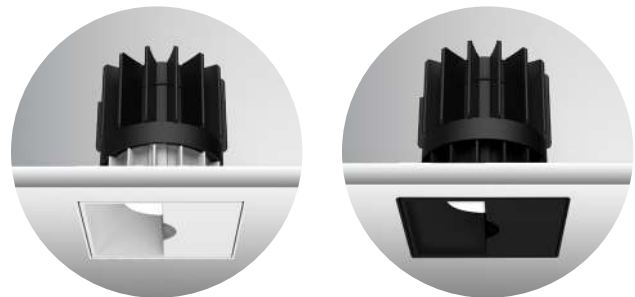
### FIXED RECESSED WALL WASHERS - ROUND



Housing type	Fixed
Description	Oxford WW RD TR
Mounting brackets	Trim
Wattage	12W
Current	300mA
Beam angle	57°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	125 lm/W

Housing type	Fixed
Description	Oxford WW RD TL
Mounting brackets	Trimless
Wattage	12W
Current	300mA
Beam angle	57°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	125 lm/W

### FIXED RECESSED WALL WASHERS - SQUARE

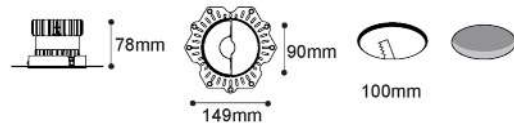
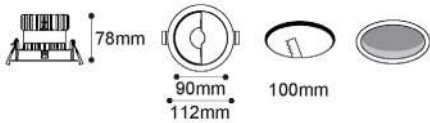
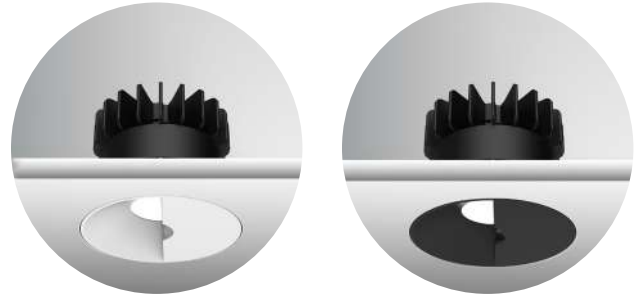
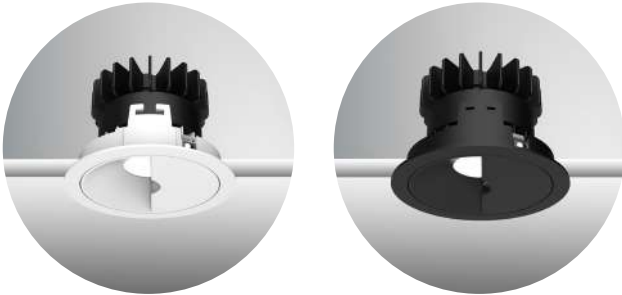
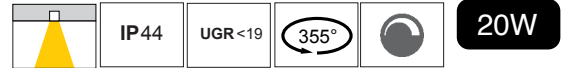


Housing type	Fixed
Description	Oxford WW SQ TR
Mounting brackets	Trim
Wattage	12W
Current	300mA
Beam angle	57°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	125 lm/W

Housing type	Fixed
Description	Oxford WW SQ TL
Mounting brackets	Trimless
Wattage	12W
Current	300mA
Beam angle	57°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	125 lm/W

## THE OXFORD SERIES: RANGE SPECIFICATIONS

### FIXED RECESSED WALL WASHERS - ROUND



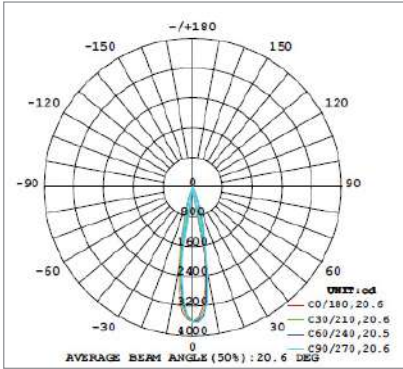
Housing type	Fixed
Description	Oxford RD TR
Mounting brackets	Trim
Wattage	20W
Current	500mA
Beam angle	52°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	88 lm/W

Housing type	Fixed
Description	Oxford RD TL
Mounting brackets	Trimless
Wattage	20W
Current	500mA
Beam angle	52°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire	88 lm/W

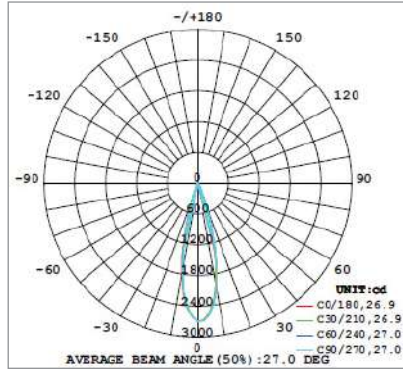
# THE OXFORD SERIES: LIGHT DISTRIBUTION AND AAI GRAPHS

## 10W Luminaires

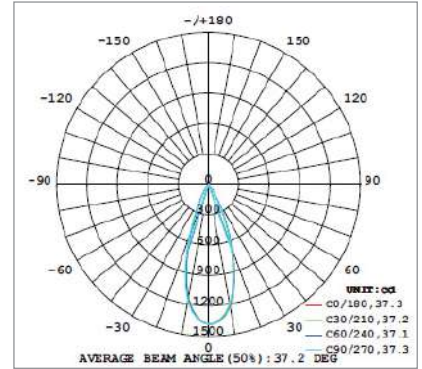
**20° BEAM ANGLE**



**30° BEAM ANGLE**



**40° BEAM ANGLE**

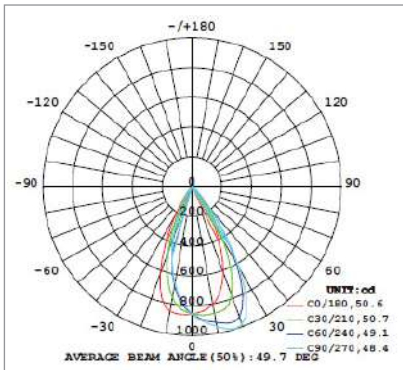


3000 k		20°		
3642 lx			36 cm	1 m
911 lx			73 cm	2 m
405 lx			109 cm	3 m
228 lx			145 cm	4 m
146 lx			182 cm	5 m
Lux	Coverage			Height

3000 k		30°		
2701 lx			48 cm	1 m
675 lx			96 cm	2 m
300 lx			144 cm	3 m
169 lx			192 cm	4 m
108 lx			240 cm	5 m
Lux	Coverage			Height

3000 k		40°		
1381 lx			67 cm	1 m
345 lx			135 cm	2 m
153 lx			202 cm	3 m
86 lx			270 cm	4 m
55 lx			337 cm	5 m
Lux	Coverage			Height

**50° BEAM ANGLE**

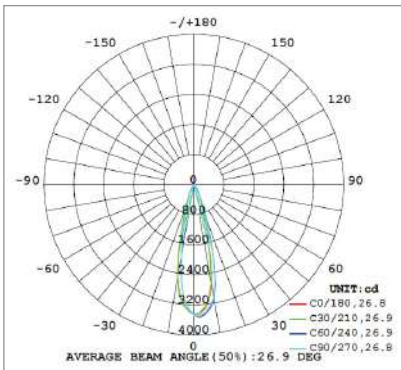


3000 k		50°		
894 lx			90 cm	1 m
223 lx			180 cm	2 m
99 lx			270 cm	3 m
56 lx			360 cm	4 m
36 lx			450 cm	5 m
Lux	Coverage			Height

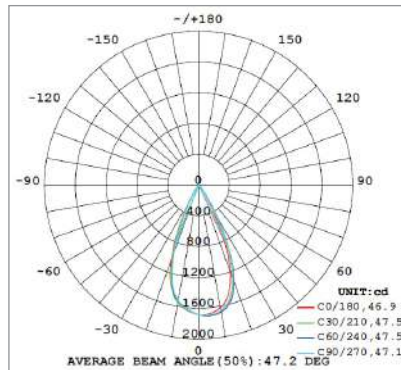
**THE OXFORD SERIES: LIGHT DISTRIBUTION AND AAI GRAPHS**

**12W Luminaires**

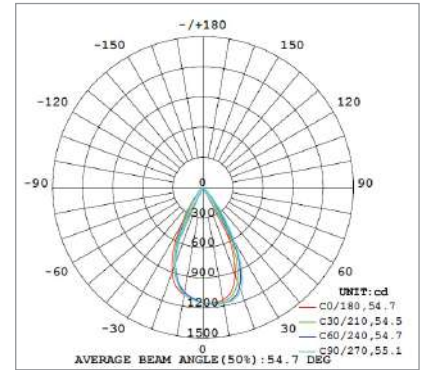
**30° BEAM ANGLE**



**47° BEAM ANGLE**



**57° BEAM ANGLE**



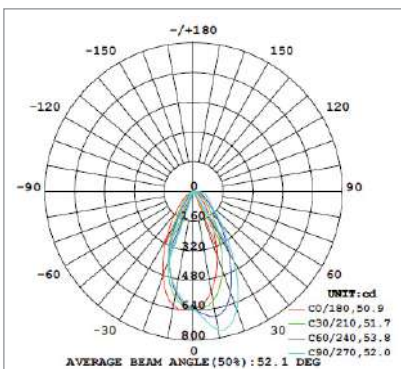
3000 k		30°		
3489 lx		48 cm	1 m	
872 lx		96 cm	2 m	
388 lx		144 cm	3 m	
218 lx		192 cm	4 m	
140 lx		239 cm	5 m	
Lux	Coverage		Height	

3000 k		47°		
1695 lx		87 cm	1 m	
424 lx		174 cm	2 m	
188 lx		260 cm	3 m	
106 lx		347 cm	4 m	
68 lx		434 cm	5 m	
Lux	Coverage		Height	

3000 k		57°		
1158 lx		103 cm	1 m	
290 lx		207 cm	2 m	
129 lx		310 cm	3 m	
72 lx		414 cm	4 m	
46 lx		517 cm	5 m	
Lux	Coverage		Height	

**12W Luminaires**

**WALL WASHER**



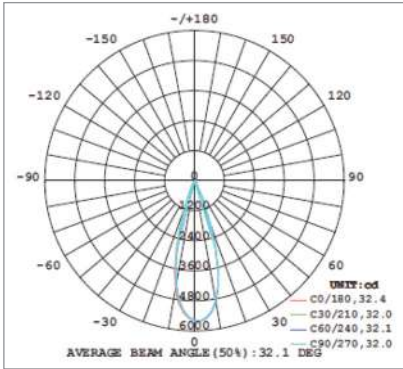
3000 k		WW		
733 lx		95 cm	1 m	
183 lx		190 cm	2 m	
81 lx		286 cm	3 m	
46 lx		381 cm	4 m	
29 lx		476 cm	5 m	
Lux	Coverage		Height	

Note: The curves indicate the illuminated area and the average illumination when the luminaire is at a different distance.

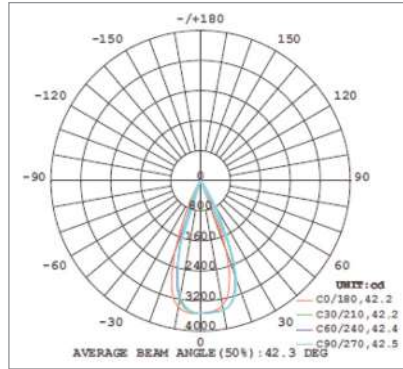
# THE OXFORD SERIES: LIGHT DISTRIBUTION AND AAI GRAPHS

## 20W Luminaires

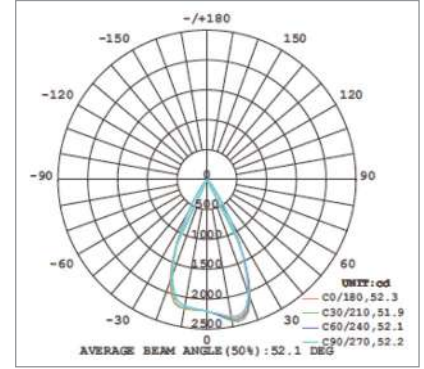
**32° BEAM ANGLE**



**42° BEAM ANGLE**



**52° BEAM ANGLE**



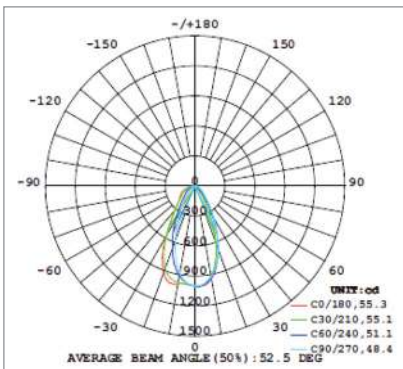
Lux	Coverage	Height
5615 lx	57 cm	1 m
1404 lx	115 cm	2 m
624 lx	172 cm	3 m
351 lx	229 cm	4 m
225 lx	287 cm	5 m

Lux	Coverage	Height
3547 lx	77 cm	1 m
887 lx	155 cm	2 m
394 lx	232 cm	3 m
222 lx	309 cm	4 m
142 lx	386 cm	5 m

Lux	Coverage	Height
2291 lx	98 cm	1 m
573 lx	196 cm	2 m
255 lx	294 cm	3 m
143 lx	392 cm	4 m
92 lx	491 cm	5 m

## 20W Luminaires

**WALL WASHER**



Lux	Coverage	Height
1008 lx	90 cm	1 m
252 lx	180 cm	2 m
112 lx	270 cm	3 m
63 lx	360 cm	4 m
40 lx	450 cm	5 m

Note: The curves indicate the illuminated area and the average illumination when the luminaire is at a different distance.

## THE OXFORD SERIES: CONSTANT CURRENT DRIVERS

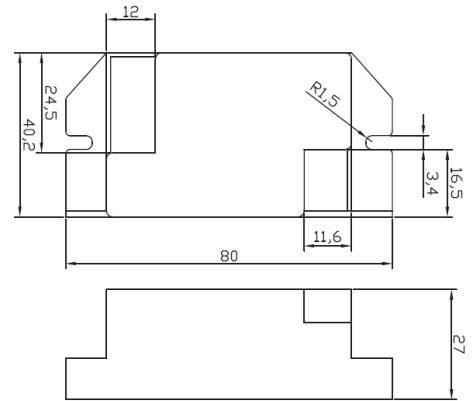
### KNIGHT 250, 10W - CONSTANT SINGLE CURRENT LED DRIVER, 250mA

- SELV equivalent
- Flicker-free output
- Suitable for dry locations
- Average rated life: 30,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.
- 1 channel output

IP20



Technical Specifications	
Article No.	833.30.974
Input Voltage	240VAC ±10% 50 Hz
Input Current	0.06A Max.
Input Power	13W Max.
Output Current	250mA
Output Voltage	21 - 42VDC
Output Power	10W
Power Factor	>0.95
Ambient Operating Temperature Range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV DM)



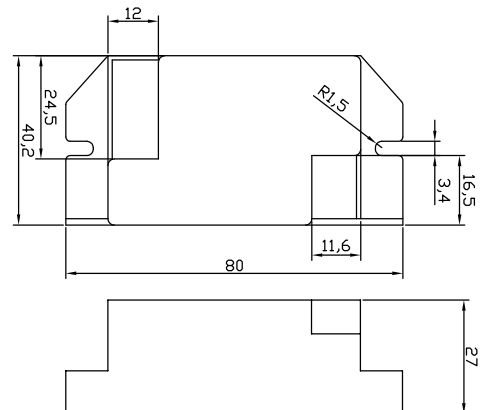
### KNIGHT 300 - CONSTANT SINGLE CURRENT LED DRIVER, 300mA

- SELV equivalent
- Suitable for Class II fixtures
- Flicker-free output
- Suitable for dry locations
- Average rated life: 30,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.

IP20



Technical Specifications	
Article No.	833.30.972
Input Voltage	240Vac ±10%,50/60Hz
Input Current	0.07A Max.
Input Power	15W Max.
Output Current	300mA
Output Voltage	21 - 42VDC
Output Power	12.6W
Power Factor	>0.95
Ambient Operating Temperature Range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV as per EN 61000-4-5)



## THE OXFORD SERIES: CONSTANT CURRENT DRIVERS

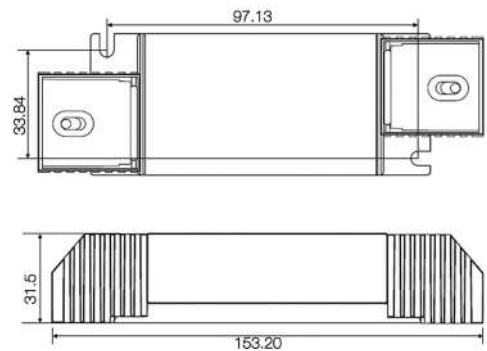
### DUKE 500 - CONSTANT MULTI-CURRENT LED DRIVER, 250mA, 350mA, 450mA, 500mA

IP20

- SELV equivalent
- CE certified
- Suitable for Class II fixtures
- Flicker-free output
- Multiple current selection through DIP switch
- Overload and short circuit protection
- Input over-voltage and under-voltage protection
- Suitable for dry locations
- Average rated life: 50,000 hours
- Sustains at 320VAC for 48 hours & 440VAC for 8 hours
- 1 channel output

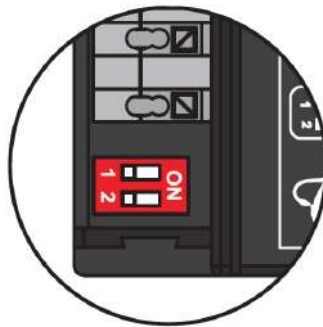


Technical Specifications	
Article No.	833.30.973
Input Voltage	240VAC ±20% 50Hz
Input Current	0.11A Max.
Input Power	27W Max.
Output Current	250mA, 350mA, 450mA, 500mA (±7%)
Output Voltage	33 - 43VDC
Output Power	22W
Power Factor	>0.95
Ambient Operating Temperature Range	-20°C to +50°C
Input Surge Protection	Yes (Line-Neutral 4kV)



### DUKE 500 DIP SWITCH CURRENT SELECTION CHART

DIP Switch		Output Current (mA)
PIN 1	PIN 2	
ON	ON	500
ON	OFF	450
OFF	ON	350
OFF	OFF	250

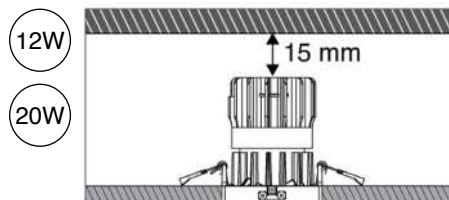
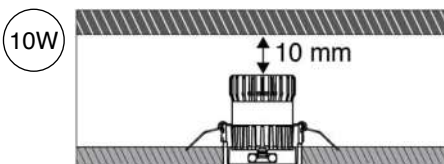


**NOTE:**

1. You can order the Knight Series or the Duke Series drivers, as per your requirement, by checking the suitable current ratings.
2. For Duke drivers: Please set the dip switch setting as indicated on the driver to activate the desired current rating out of the 4 options available.
3. The Oxford series downlights allow automation by connecting to Dali compatible drivers.

## THE OXFORD SERIES: INSTALLATION DETAILS

### GAP BETWEEN TRUE CEILING AND LUMINAIRE



A minimum gap of 10 mm for 10W Oxford luminaires and 15 mm for 12W and 20W Oxford luminaires from the true ceiling to the top edge of the luminaire is required for perfect installation.

## THE OXFORD SERIES: ORDERING INFORMATION

### 1. LIGHT ENGINE

Article No.	Wattage	Current	Beam Angle	Colour Temperature	Dimensions (mm)
833.30.000	10W	250mA	20°	2700K	Dia 47 x H 49
833.30.001	10W	250mA	20°	3000K	Dia 47 x H 49
833.30.002	10W	250mA	20°	4000K	Dia 47 x H 49
833.30.004	10W	250mA	30°	2700K	Dia 47 x H 49
833.30.005	10W	250mA	30°	3000K	Dia 47 x H 49
833.30.006	10W	250mA	30°	4000K	Dia 47 x H 49
833.30.008	10W	250mA	40°	2700K	Dia 47 x H 49
833.30.009	10W	250mA	40°	3000K	Dia 47 x H 49
833.30.010	10W	250mA	40°	4000K	Dia 47 x H 49
833.30.012	10W	250mA	50°	2700K	Dia 47 x H 49
833.30.013	10W	250mA	50°	3000K	Dia 47 x H 49
833.30.014	10W	250mA	50°	4000K	Dia 47 x H 49
833.30.016	12W	300mA	30°	2700K	Dia 65 x H 69
833.30.017	12W	300mA	30°	3000K	Dia 65 x H 69
833.30.018	12W	300mA	30°	4000K	Dia 65 x H 69
833.30.020	12W	300mA	47°	2700K	Dia 65 x H 69
833.30.021	12W	300mA	47°	3000K	Dia 65 x H 69
833.30.022	12W	300mA	47°	4000K	Dia 65 x H 69
833.30.024	12W	300mA	57°	2700K	Dia 65 x H 69
833.30.025	12W	300mA	57°	3000K	Dia 65 x H 69
833.30.026	12W	300mA	57°	4000K	Dia 65 x H 69
833.30.846	20W	500mA	32°	3000K	Dia 83 x H 59
833.30.847	20W	500mA	32°	4000K	Dia 83 x H 59
833.30.279	20W	500mA	42°	3000K	Dia 83 x H 59
833.30.283	20W	500mA	42°	3000K	Dia 83 x H 59
833.30.284	20W	500mA	52°	4000K	Dia 83 x H 59
833.30.285	20W	500mA	52°	4000K	Dia 83 x H 59

### 2. HOUSING

Article No.	Wattage	Housing Type	Colour	Shape	Dimensions (mm)
833.30.028	10W	Fixed	White	Round	Dia 52 x H 35
833.30.032	10W	Tiltable	White	Round	Dia 52 x H 35
833.30.029	10W	Fixed	Black	Round	Dia 52 x H 35
833.30.033	10W	Tiltable	Black	Round	Dia 52 x H 35
833.30.030	10W	Fixed	White	Square	51 x 51 x 35
833.30.034	10W	Tiltable	White	Square	51 x 51 x 35
833.30.031	10W	Fixed	Black	Square	51 x 51 x 35
833.30.035	10W	Tiltable	Black	Square	51 x 51 x 35
833.30.044	12W	Fixed	White	Round	Dia 71 x H 43
833.30.048	12W	Tiltable	White	Round	Dia 71 x H 43
833.30.045	12W	Fixed	Black	Round	Dia 52 x H 35



## THE OXFORD SERIES: ORDERING INFORMATION

### 1. HOUSING

Article No.	Wattage	Housing Type	Colour	Shape	Dimensions (mm)
833.30.049	12W	Tilttable	Black	Round	Dia 52 x H 35
833.30.046	12W	Fixed	White	Square	70 x 70 x 45
833.30.050	12W	Tilttable	White	Square	70 x 70 x 45
833.30.047	12W	Fixed	Black	Square	70 x 70 x 45
833.30.051	12W	Tilttable	Black	Square	70 x 70 x 45
833.30.286	20W	Fixed	White	Round	Dia 90 x H 53
833.30.288	20W	Tilttable	White	Round	Dia 90 x H 53
833.30.287	20W	Fixed	Black	Round	Dia 90 x H 53
833.30.280	20W	Tilttable	Black	Round	Dia 90 x H 53
833.30.060	12W	Wall Washer	White	Round	Dia 71 x H 35
833.30.062	12W	Wall Washer	White	Square	70 x 70 x 35
833.30.061	12W	Wall Washer	Black	Round	Dia 71 x H 35
833.30.063	12W	Wall Washer	Black	Square	70 x 70 x 35
833.30.291	20W	Wall Washer	White	Round	Dia 90 x H 53
833.30.292	20W	Wall Washer	Black	Round	Dia 90 x H 53

### 3. LOUVERS / GLARE REDUCTION ADD-ONS

Article No.	Description	Wattage
833.13.573	Diffusion Sheet	10W
833.13.574	Diffusion Sheet	12W
833.13.564	Honeycomb Louver	10W
833.13.565	Honeycomb Louver	12W
833.13.560	Striped Glass	10W
833.13.561	Striped Glass	12W
833.13.569	Woven Glass	10W
833.13.570	Woven Glass	12W

### 4. MOUNTING BRACKET

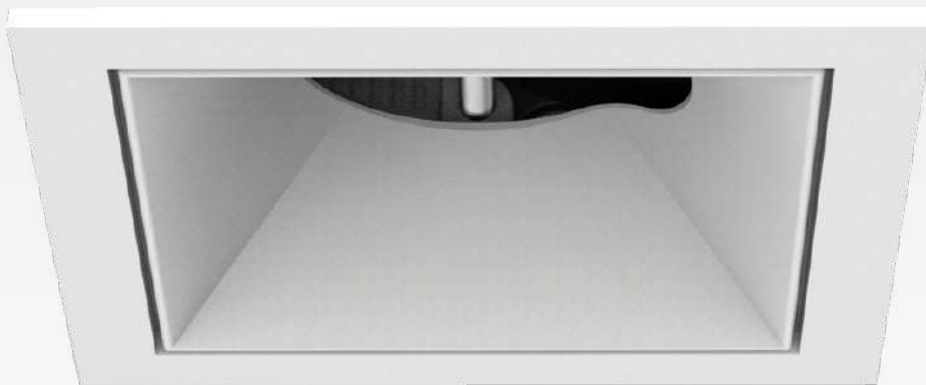
Article No.	Wattage	Mounting Bracket Type	Colour	Shape	Dimensions (mm)
833.30.036	10W	Trim	White	Round	Dia 77 x H 51
833.30.038	10W	Trimless	White	Round	Dia 110 x H 18
833.30.037	10W	Trim	Black	Round	Dia 77 x H 51
833.30.039	10W	Trimless	Black	Round	Dia 110 x H 18
833.30.040	10W	Trim	White	Square	77 x 66 x 51
833.30.042	10W	Trimless	White	Square	102 x 102 x 15
833.30.041	10W	Trim	Black	Square	77 x 66 x 51
833.30.043	10W	Trimless	Black	Square	102 x 102 x 15
833.30.052	12W	Trim	White	Round	Dia 100 x H 50
833.30.054	12W	Trimless	White	Round	Dia 122 x H 18
833.30.053	12W	Trim	Black	Round	Dia 100 x H 50
833.30.055	12W	Trimless	Black	Round	Dia 122 x H 18

#### 4. MOUNTING BRACKET

Article No.	Wattage	Mounting Bracket Type	Colour	Shape	Dimensions (mm)
833.30.056	12W	Trim	White	Square	100 x 100 x 50
833.30.058	12W	Trimless	White	Square	125 x 125 x 18
833.30.057	12W	Trim	Black	Square	100 x 100 x 50
833.30.059	12W	Trimless	Black	Square	125 x 125 x 18
833.30.281	20W	Trim	White	Round	Dia 112 x 51
833.30.289	20W	Trimless	White	Round	Dia 149 x 20
833.30.282	20W	Trim	Black	Round	Dia 112 x 51
833.30.290	20W	Trimless	Black	Round	Dia 149 x 20

#### 5. DRIVERS

Article No.	Description	Current
833.30.974	Knight 250, 10W Constant Current LED Driver	250mA
833.30.972	Knight 300 Constant Current LED Driver, 300mA	300mA



# STANFORD

Designed on the concept of modularization, Häfele's Stanford series offers you customization options like never before. The ordering process involves selecting the type of Light Engine, Baffle and Mounting Bracket, enabling the series to offer 42 different luminaire combinations. Selections in terms of wattage, beam angle, tilt angle and shape give you unmatched possibilities in ensuring a unified look for your interiors. The 7 trendy baffle colour options provide creative flexibility for incorporating elegant pops of colour that effortlessly highlight your ceiling or provide a seamless look that immaculately blends with your interior design.

The luminaires from the Stanford Series are suitable for use as spotlights and downlights. They have a low UGR (Unified Glare Rating) which enhances the visual clarity and provides comfortable aesthetics in the living spaces. With easy installation and wide customization options, the Stanford series is your ideal solution for contemporary aesthetics.





**THE STANFORD SERIES: MODULARIZATION CONCEPT**



**LIGHT ENGINE**



**Heat Sink**

Absorbs the heat generated by the light engine and dissipates it into the environment, maintaining the required operating temperature.

**LED Holder with LED Chip**

Designed to mount the LED onto the fixture and to integrate it into the circuit.

**Lens**

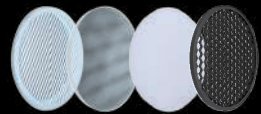
Amplifies the light output from the LED.

**Rubber Gasket**

Prevents proliferation of moisture and dust particles.

**Lens Protector**

Protects the lens from scratches and smudges ensuring an unhindered light output.



**Glare Reduction Add-ons**

Different louvers help achieve different light effects. They help reduce the glare and diffuse the beam angle.



Round



Square



**BAFFLE**

**Round or Square**

Available in the following colours:

- White
- Black (Matt)
- Piano Black (Glossy)
- Gold
- Champagne
- Chrome
- Bronze

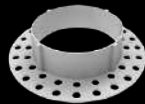


Square



Round

Trim



Trimless



**MOUNTING BRACKET**

Provides support to attach the luminaire to the false ceiling structure.

## THE STANFORD SERIES: FEATURES

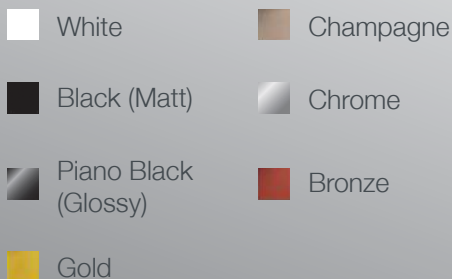
### 1. Modularization concept



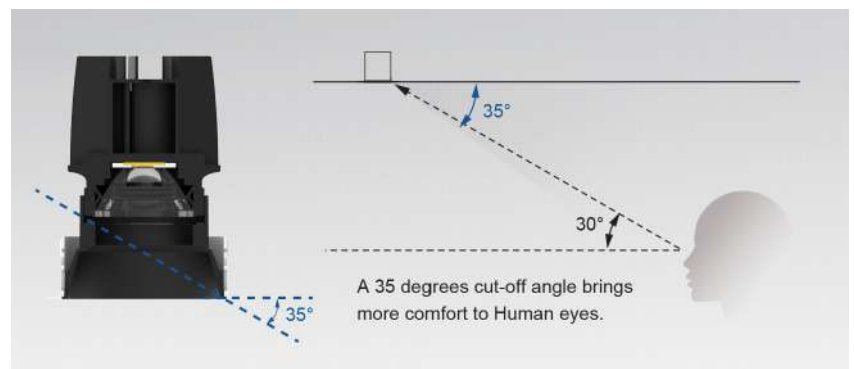
The Stanford series has been designed keeping flexibility in mind to give the customer a variety of options to choose from. The ordering process involves building up the luminaire by selecting different components as per your installation requirements. This modularization concept of selecting the type of Light Engine, Baffle and Mounting Bracket enables Stanford series to offer 42 different luminaire combinations.

### 2. Wide range of colour options

The Stanford Series offers 7 trendy baffle colour option for you to choose from. These options provide creative flexibility for incorporating elegant pops of colour that effortlessly highlight your ceiling or provide a seamless look that immaculately blends with your interior space.



### 3. Low glare fixture



The greater the cut-off angle, the greater the visual comfort provided by the luminaire to the user due to glare\* reduction. Designed with a 35° cut-off angle, the luminaires from the Stanford Series ensure lower glare function that helps create a soft visual effect.

\*Glare is a visual sensation caused by excessive and uncontrolled brightness at the light source.

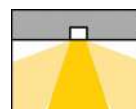
### 4. Unified Glare Rating (UGR) <19

The lower the UGR rating, the lower the glare. In order to achieve comfortable illumination in your living spaces, the UGR of the luminaires is recommended to be below 20 which is possible to achieve with the Stanford Series. UGR values range from 40 (extremely high glare) to 5 (very low glare).



### 5. Tilttable on both sides

Stanford series luminaires can be tilted on either sides. Additionally you can change and adjust the tilt angle effortlessly even after the luminaire has been installed which ensures flexibility.



## THE STANFORD SERIES: FEATURES



Striped Glass

Woven Glass

Diffusion Sheet

Honeycomb Louver

### 6. Glare reduction add-ons:

With numerous louver options to choose from, Stanford adds more flexibility and freedom for the lighting designer. The Honeycomb louver reduces glare, striped glass creates oval distribution, diffusion sheet and woven glass soften and spread the light.



Standard Lens Protector (Transparent glass)

Striped Glass

Woven Glass

Diffusion Sheet

Honeycomb Louver

### 7. Easy assembly



The luminaires from the Stanford Series follow the concept of plug and play and can be installed quickly and completely tool free. All you need to do is to assemble the luminaire by selecting the light engine, baffle and mounting bracket. Attach the mounting bracket to the false ceiling till the interior construction/renovation goes on. Once completed, simply connect the assembled luminaire to the driver lead and fix it into the mounting bracket.

Note: The images used above are for representational purposes only and for easy understanding of the assembly process. The Stanford series luminaires come with different design aesthetics.



## THE STANFORD SERIES: DECODING THE NOMENCLATURE

Stanford	9W	.2A	RD	TR	15°	27K	WH	GD
	1	2	3	4	5	6	7	8





Number	Category	Abbreviation	Possibilities
1	Output	W	9 Watts
			12 Watts
			14 Watts
2	Current	.2A	200mA
		.3A	300mA
		.35A	350mA
3	Baffle Shape	RD	Round
		SQ	Square
4	Mounting Bracket Type	TR	Trim
		TL	Trimless
5	Beam Angle	°	15°
			24°
			50°
6	Color Temperature	27K	2700 K
		30K	3000 K
		40K	4000 K
7	Mounting Bracket Finish	WH	White
		BLK	Black
8	Baffle Color	WH	White
		BLK	Black (Matt)
		PBLK	Piano Black (Glossy)
		GD	Gold
		CPGN	Champagne
		CM	Chrome
BZ	Bronze		

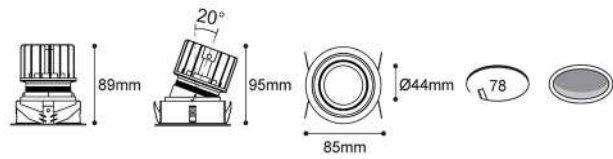
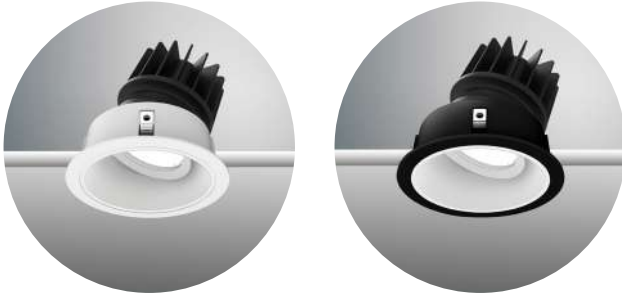
## THE STANFORD SERIES: RANGE SPECIFICATIONS

Luminaire type	Spotlight, Downlight
Color temperature	2700K, 3000K, 4000K
CRI	>95
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W
Maximum Ambient Temperature	45° C
Material	Die cast Aluminium
Beam Angle	15°, 24°, 50°
Baffle Color	White, Black, Piano Black, Gold, Champagne, Chrome, Bronze
Average rated life	> 60,000 hrs.
Mounting Technique	Recess
Degree of protection	IP44
Certification	BIS (Bureau of Indian Standards)
Application	Indoor - Residences, shops, offices, restaurant & bars, hotel rooms, showrooms

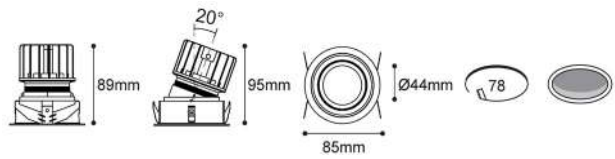
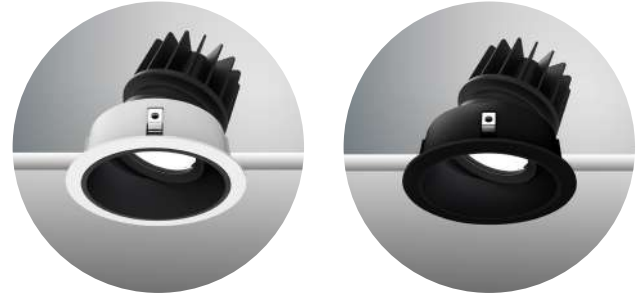
**THE STANFORD SERIES: RANGE SPECIFICATIONS**

**TILTABLE RECESSED SPOTLIGHTS /  
DOWNLIGHTS - ROUND**

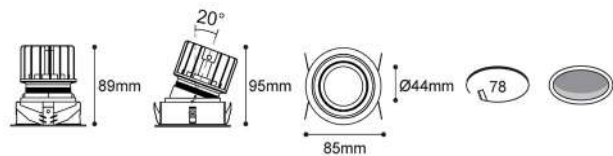





**9W, 12W, 14W**



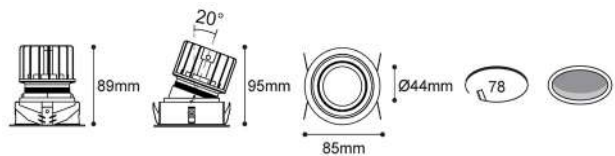
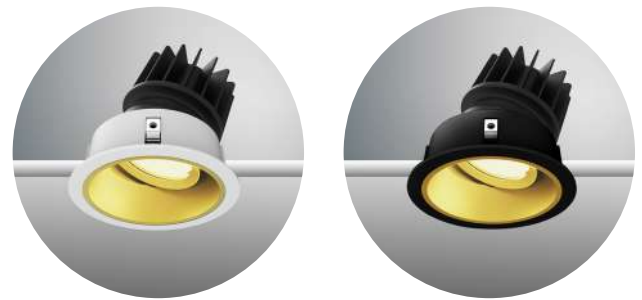
Housing type	Tiltable
Description	Stanford RD TR
Mounting bracket	Trim
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	White (WH)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W



Housing type	Tiltable
Description	Stanford RD TR
Mounting bracket	Trim
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Black (Matt) (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W








Housing type	Tiltable
Description	Stanford RD TR
Mounting bracket	Trim
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Piano Black (Glossy) (PBLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

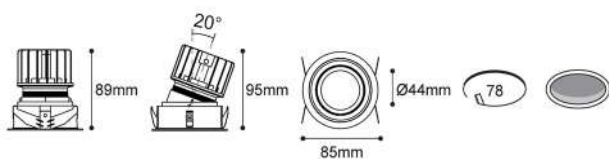
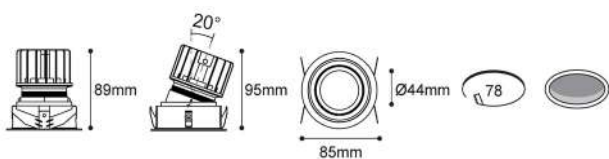
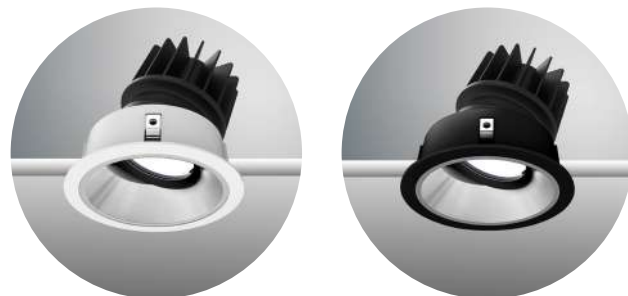


Housing type	Tiltable
Description	Stanford RD TR
Mounting bracket	Trim
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Gold (GD)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

**THE STANFORD SERIES: RANGE SPECIFICATIONS**

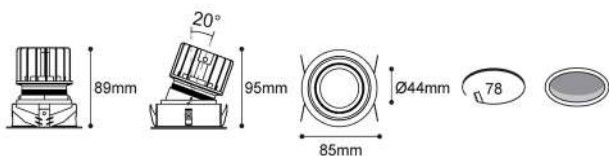
**TILTABLE RECESSED SPOTLIGHTS / DOWNLIGHTS - ROUND**






**9W, 12W, 14W**



Housing type	Tiltable
Description	Stanford RD TR
Mounting bracket	Trim
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Champagne (CPGN)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

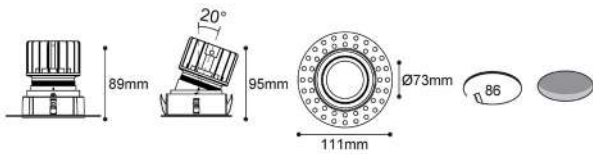
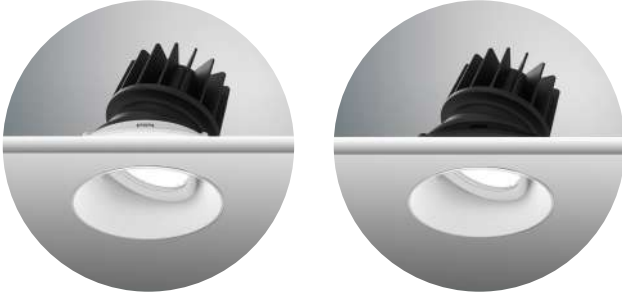
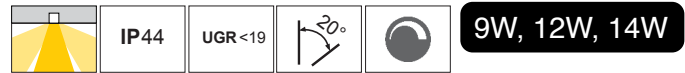
Housing type	Tiltable
Description	Stanford RD TR
Mounting bracket	Trim
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Chrome (CM)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W



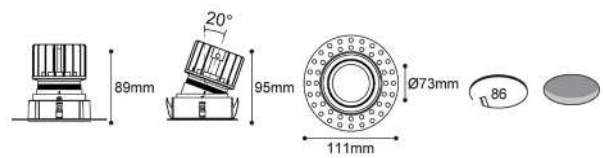
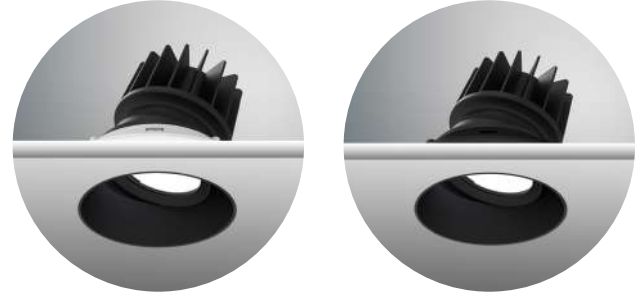
Housing type	Tiltable
Description	Stanford RD TR
Mounting bracket	Trim
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Bronze (BZ)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

## THE STANFORD SERIES: RANGE SPECIFICATIONS

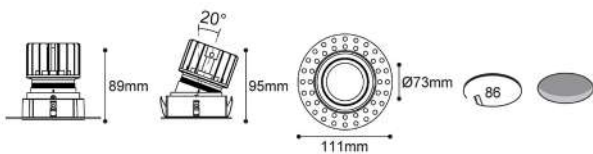
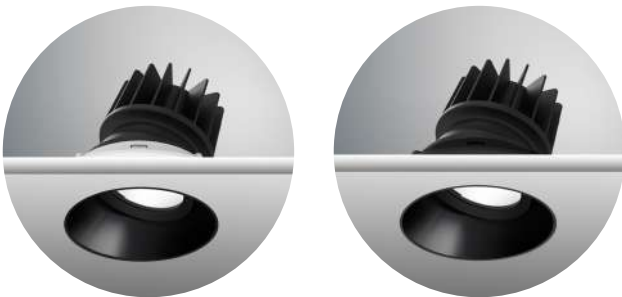
### TILTABLE RECESSED SPOTLIGHTS / DOWNLIGHTS - ROUND



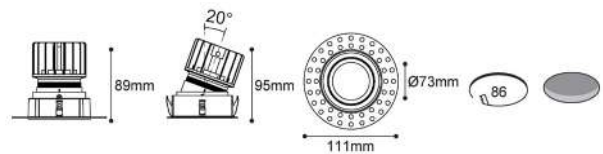
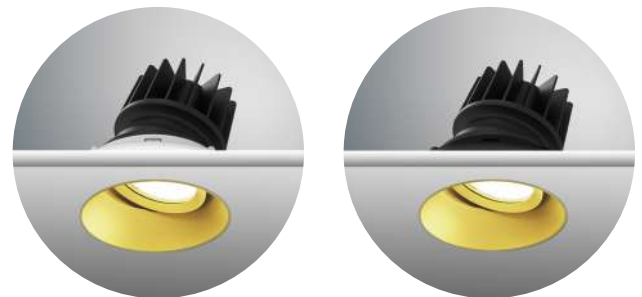
Housing type	Tiltable
Description	Stanford RD TL
Mounting bracket	Trimless
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	White (WH)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W



Housing type	Tiltable
Description	Stanford RD TL
Mounting bracket	Trimless
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Black (Matt) (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W



Housing type	Tiltable
Description	Stanford RD TL
Mounting bracket	Trimless
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Piano Black (Glossy) (PBLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W



Housing type	Tiltable
Description	Stanford RD TL
Mounting bracket	Trimless
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Gold (GD)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

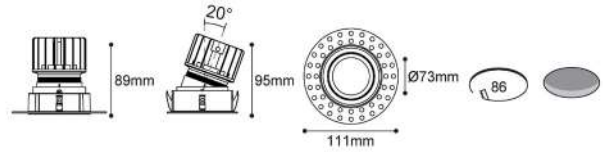
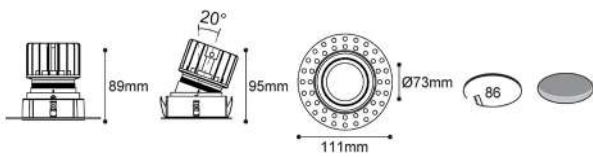
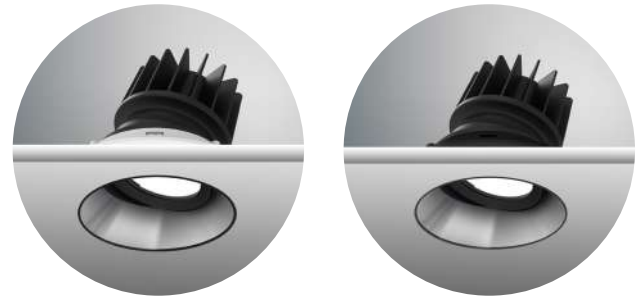
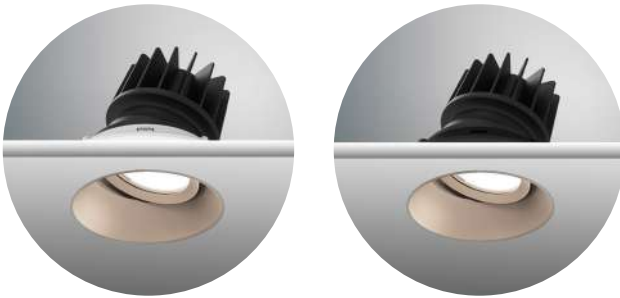
## THE STANFORD SERIES: RANGE SPECIFICATIONS

### TILTABLE RECESSED SPOTLIGHTS / DOWNLIGHTS - ROUND



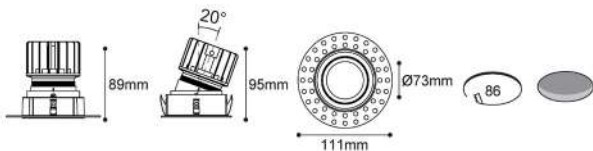
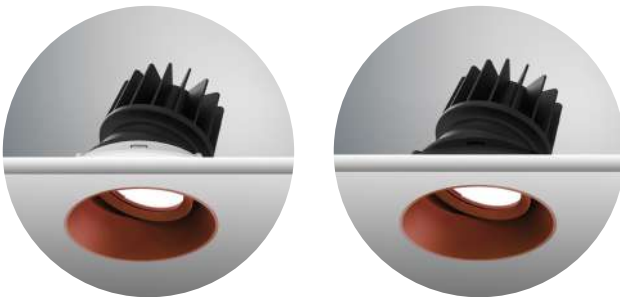



**9W, 12W, 14W**



Housing type	Tiltable
Description	Stanford RD TL
Mounting bracket	Trimless
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Champagne (CPGN)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

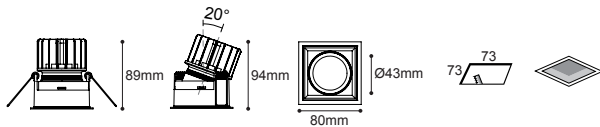
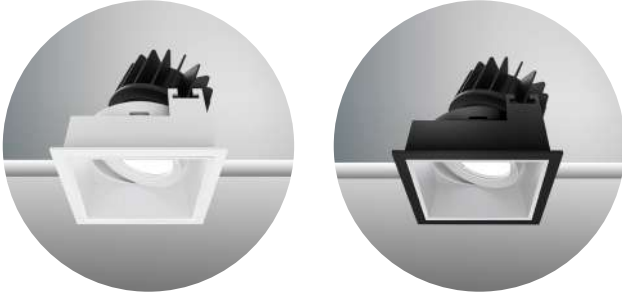
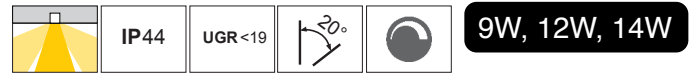
Housing type	Tiltable
Description	Stanford RD TL
Mounting bracket	Trimless
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Chrome (CM)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W



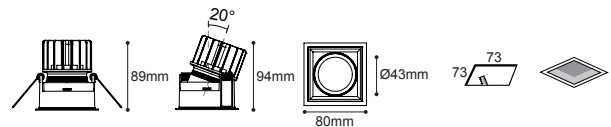
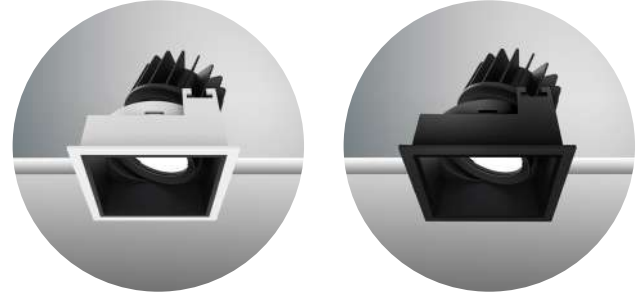
Housing type	Tiltable
Description	Stanford RD TL
Mounting bracket	Trimless
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Bronze (BZ)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

## THE STANFORD SERIES: RANGE SPECIFICATIONS

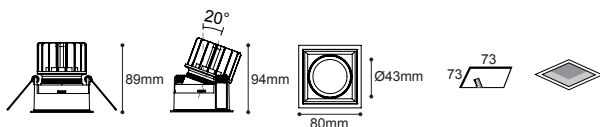
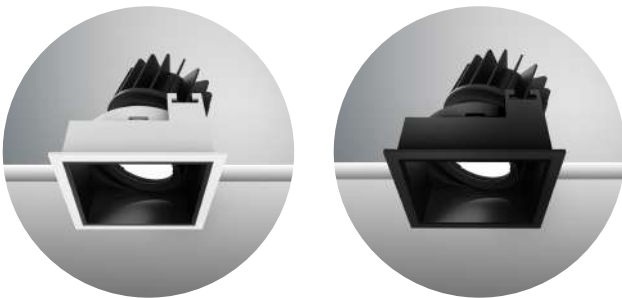
### TILTABLE RECESSED SPOTLIGHTS / DOWNLIGHTS - SQUARE



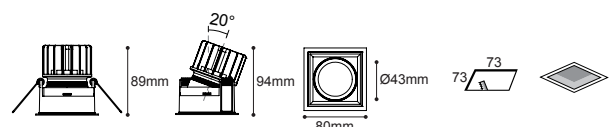
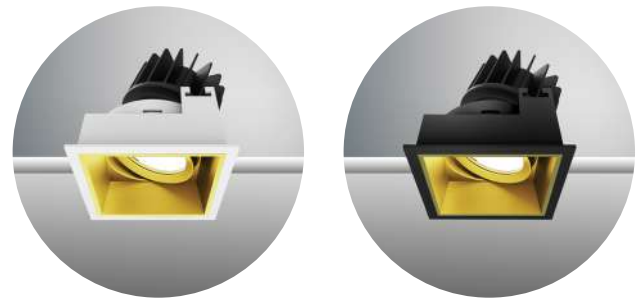
Housing type	Tiltable
Description	Stanford SQ TR
Mounting bracket	Trim
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	White (WH)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W



Housing type	Tiltable
Description	Stanford SQ TR
Mounting bracket	Trim
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Black (Matt) (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W



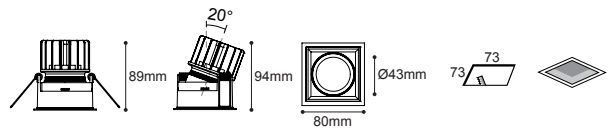
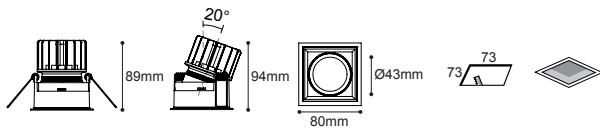
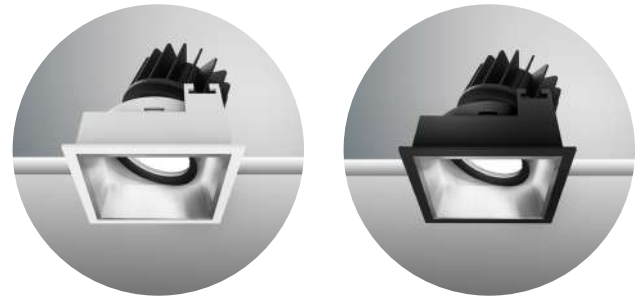
Housing type	Tiltable
Description	Stanford SQ TR
Mounting bracket	Trim
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Piano Black (Glossy) (PBLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W



Housing type	Tiltable
Description	Stanford SQ TR
Mounting bracket	Trim
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Gold (GD)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

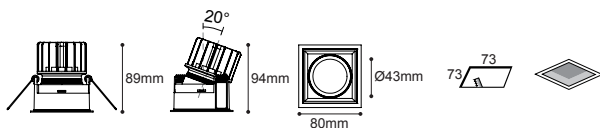
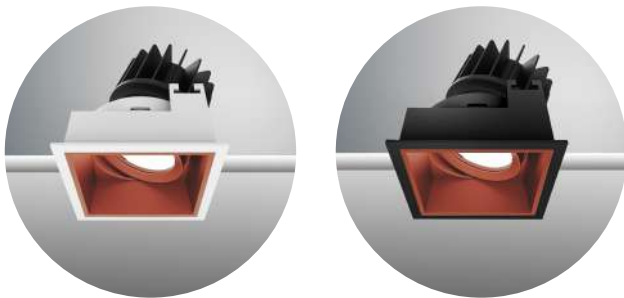
## THE STANFORD SERIES: RANGE SPECIFICATIONS

### TILTABLE RECESSED SPOTLIGHTS / DOWNLIGHTS - ROUND



Housing type	Tilttable
Description	Stanford SQ TR
Mounting bracket	Trim
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Champagne (CPGN)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

Housing type	Tilttable
Description	Stanford SQ TR
Mounting bracket	Trim
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Chrome (CM)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W



Housing type	Tilttable
Description	Stanford SQ TR
Mounting bracket	Trim
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Beam angle	15°, 24°, 50°
Baffle colour	Bronze (BZ)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

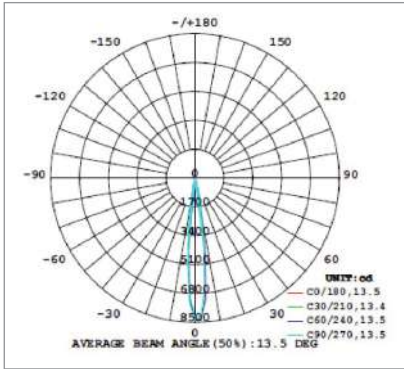




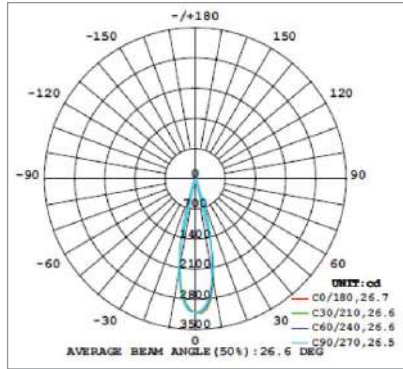
# THE STANFORD SERIES: LIGHT DISTRIBUTION and AAI GRAPHS

## 9W Luminaires

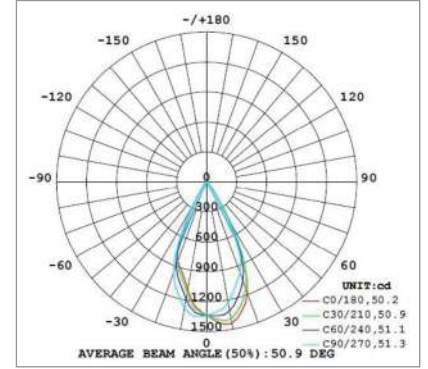
15° BEAM ANGLE



24° BEAM ANGLE



50° BEAM ANGLE



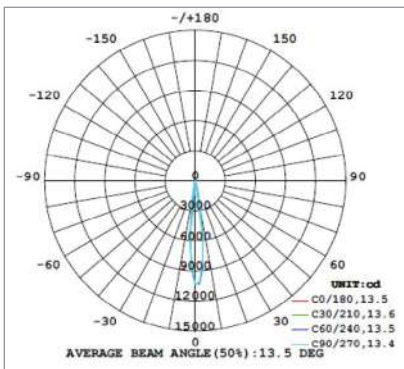
Lux	Coverage	Height
8420 lx		24 cm - 1 m
2105 lx		47 cm - 2 m
936 lx		71 cm - 3 m
526 lx		95 cm - 4 m
337 lx		119 cm - 5 m

Lux	Coverage	Height
3116 lx		47 cm - 1 m
779 lx		94 cm - 2 m
346 lx		142 cm - 3 m
195 lx		189 cm - 4 m
125 lx		236 cm - 5 m

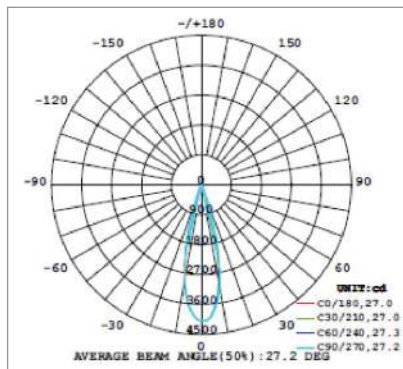
Lux	Coverage	Height
1178 lx		65 cm - 1 m
294 lx		130 cm - 2 m
131 lx		196 cm - 3 m
74 lx		261 cm - 4 m
47 lx		326 cm - 5 m

## 12W Luminaires

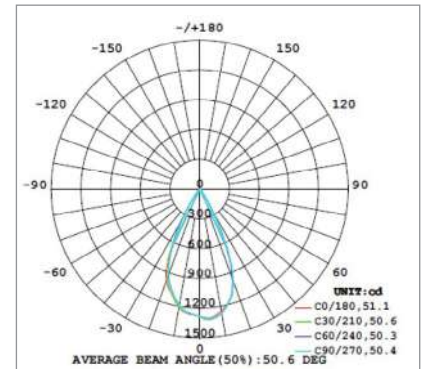
15° BEAM ANGLE



24° BEAM ANGLE



50° BEAM ANGLE



Lux	Coverage	Height
10443 lx		24 cm - 1 m
2611 lx		48 cm - 2 m
1160 lx		72 cm - 3 m
653 lx		95 cm - 4 m
418 lx		119 cm - 5 m

Lux	Coverage	Height
4108 lx		48 cm - 1 m
1027 lx		96 cm - 2 m
456 lx		144 cm - 3 m
257 lx		192 cm - 4 m
164 lx		240 cm - 5 m

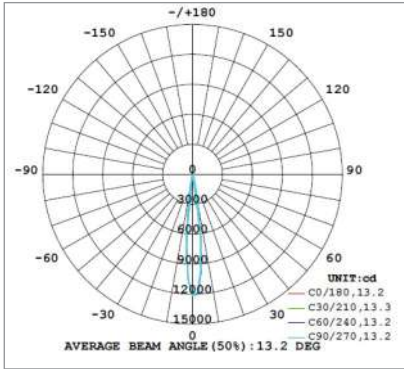
Lux	Coverage	Height
1305 lx		94 cm - 1 m
326 lx		188 cm - 2 m
145 lx		283 cm - 3 m
82 lx		377 cm - 4 m
52 lx		471 cm - 5 m

Note: The curves indicate the illuminated area and the average illumination when the luminaire is at a different distance.

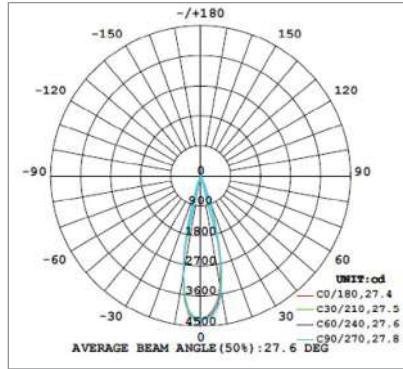
# THE STANFORD SERIES: LIGHT DISTRIBUTION AND AAI GRAPHS

## 14W Luminaires

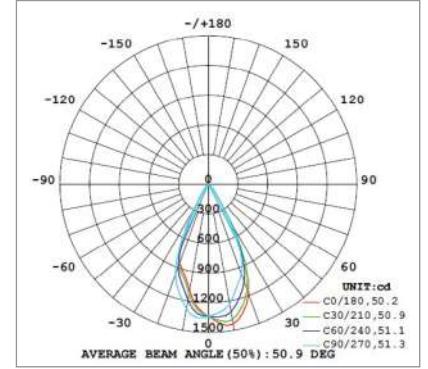
15° BEAM ANGLE



24° BEAM ANGLE



50° BEAM ANGLE



Lux	Coverage	Height
12226 lx		23 cm – 1 m
3056 lx		47 cm – 2 m
1358 lx		70 cm – 3 m
764 lx		93 cm – 4 m
489 lx		117 cm – 5 m

Lux	Coverage	Height
4336 lx		49 cm – 1 m
1084 lx		97 cm – 2 m
482 lx		146 cm – 3 m
271 lx		195 cm – 4 m
174 lx		244 cm – 5 m

Lux	Coverage	Height
1407 lx		93 cm – 1 m
352 lx		187 cm – 2 m
156 lx		280 cm – 3 m
88 lx		373 cm – 4 m
56 lx		467 cm – 5 m

Note: The curves indicate the illuminated area and the average illumination when the luminaire is at a different distance.

**THE STANFORD SERIES: CONSTANT CURRENT DRIVERS**

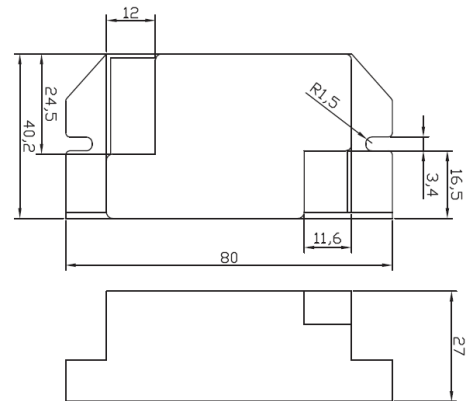
**KNIGHT 200 - CONSTANT SINGLE CURRENT LED DRIVER, 200mA**

IP20

- SELV equivalent
- Suitable for Class II fixtures
- Flicker-free output
- Suitable for dry locations
- Average rated life: 30,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.
- 1 channel output



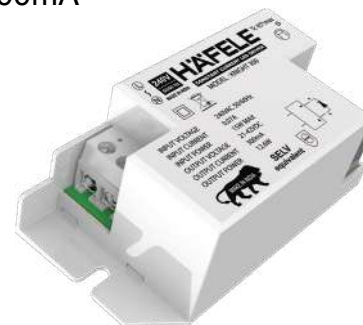
Technical Specifications	
Article No.	833.30.968
Input Voltage	240VAC ±10% 50/60 Hz
Input Current	0.05A Max.
Input Power	11W Max.
Output Current	200mA
Output Voltage	21 - 42VDC
Output Power	8.4W
Power Factor	>0.90
Ambient Operating Temperature Range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV as per EN 61000-4-5)



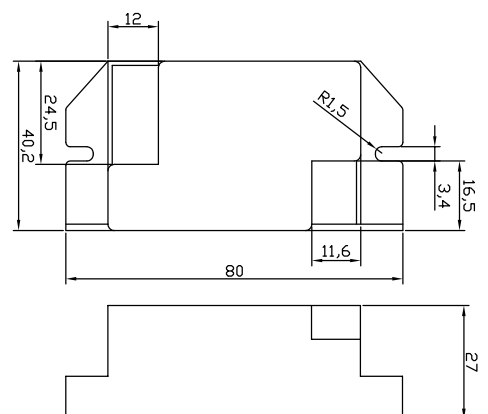
**KNIGHT 300 - CONSTANT SINGLE CURRENT LED DRIVER, 300mA**

IP20

- SELV equivalent
- Suitable for Class II fixtures
- Flicker-free output
- Suitable for dry locations
- Average rated life: 30,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.



Technical Specifications	
Article No.	833.30.972
Input Voltage	240Vac ± 10%,50/60Hz
Input Current	0.07A Max.
Input Power	15W Max.
Output Current	300mA
Output Voltage	21 - 42VDC
Output Power	12.6W
Power Factor	>0.95
Ambient Operating Temperature Range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV as per EN 61000-4-5)



## THE STANFORD SERIES: CONSTANT CURRENT DRIVERS

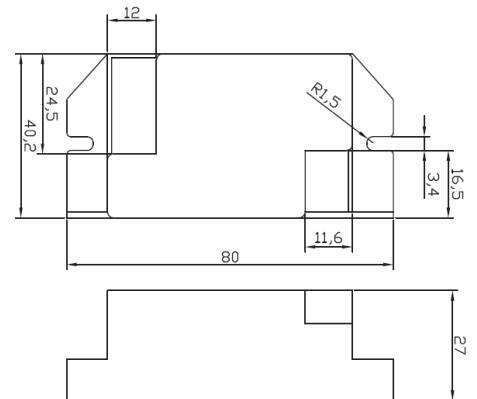
### KNIGHT 350 - CONSTANT SINGLE CURRENT LED DRIVER, 350mA

IP20

- SELV Equivalent
- Suitable for Class II Fixtures
- Flicker-free output
- Suitable for dry locations
- Average rated life: 30,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.
- 1 channel output



Technical Specifications	
Article No.	833.30.971
Input Voltage	240VAC ±10% 60 Hz
Input Current	0.10A Max.
Input Power	18W Max.
Output Current	350mA
Output Voltage	21 - 42VDC
Output Power	15W
Power Factor	>0.95
Ambient Operating Temperature Range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV As per EN 61000-4-5)



## THE STANFORD SERIES: CONSTANT CURRENT DRIVERS

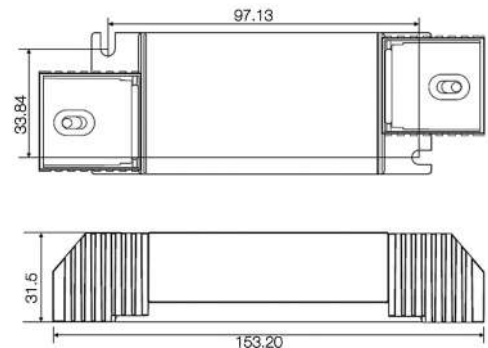
### DUKE 500 - CONSTANT MULTI-CURRENT LED DRIVER, 250mA, 350mA, 450mA, 500mA

IP20

- SELV equivalent
- CE certified
- Suitable for Class II fixtures
- Flicker-free output
- Multiple current selection through DIP switch
- Overload and short circuit protection
- Input over-voltage and under-voltage protection
- Suitable for dry locations
- Average rated life: 50,000 hours
- Sustains at 320VAC for 48 hours & 440VAC for 8 hours
- 1 channel output



Technical Specifications	
Article No.	833.30.973
Input Voltage	240VAC ±20% 50Hz
Input Current	0.11A Max.
Input Power	27W Max.
Output Current	250mA, 350mA, 450mA, 500mA (±7%)
Output Voltage	33 - 43VDC
Output Power	22W
Power Factor	>0.95
Ambient Operating Temperature Range	-20°C to +50°C
Input Surge Protection	Yes (Line-Neutral 4kV)



### DUKE 500 DIP SWITCH CURRENT SELECTION CHART

DIP Switch		Output Current (mA)
PIN 1	PIN 2	
ON	ON	500
ON	OFF	450
OFF	ON	350
OFF	OFF	250

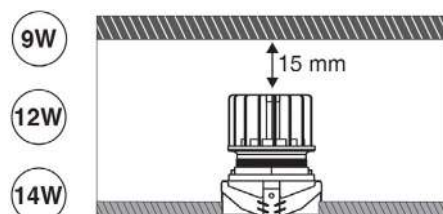


**NOTE:**

1. You can order the Knight Series or the Duke Series drivers, as per your requirement, by checking the suitable current ratings.
2. The Stanford series spotlights and downlights allow automation by connecting to Dali compatible drivers.

## THE STANFORD SERIES: INSTALLATION DETAILS

### GAP BETWEEN TRUE CEILING AND LUMINAIRE










Minimum 15 mm of gap from the true ceiling to the top edge of the luminaire is required for installation of all luminaires under the Stanford series, irrespective of their wattage.

## THE STANFORD SERIES: ORDERING INFORMATION

### 1. LIGHT ENGINE








Article No.	Wattage	Current	Color Temperature	Beam Angle	Dimensions (mm)
833.30.848	9W	200mA	2700K	15°	Dia 65 x H 65
833.30.849	9W	200mA	3000K	15°	Dia 65 x H 65
833.30.850	9W	200mA	4000K	15°	Dia 65 x H 65
833.30.852	9W	200mA	2700K	24°	Dia 65 x H 65
833.30.853	9W	200mA	3000K	24°	Dia 65 x H 65
833.30.854	9W	200mA	4000K	24°	Dia 65 x H 65
833.30.856	9W	200mA	2700K	50°	Dia 65 x H 65
833.30.857	9W	200mA	3000K	50°	Dia 65 x H 65
833.30.858	9W	200mA	4000K	50°	Dia 65 x H 65
833.30.860	12W	300mA	2700K	15°	Dia 65 x H 65
833.30.861	12W	300mA	3000K	15°	Dia 65 x H 65
833.30.862	12W	300mA	4000K	15°	Dia 65 x H 65
833.30.864	12W	300mA	2700K	24°	Dia 65 x H 65
833.30.865	12W	300mA	3000K	24°	Dia 65 x H 65
833.30.866	12W	300mA	4000K	24°	Dia 65 x H 65
833.30.868	12W	300mA	2700K	50°	Dia 65 x H 65
833.30.869	12W	300mA	3000K	50°	Dia 65 x H 65
833.30.870	12W	300mA	4000K	50°	Dia 65 x H 65
833.30.872	14W	350mA	2700K	15°	Dia 65 x H 65
833.30.873	14W	350mA	3000K	15°	Dia 65 x H 65
833.30.874	14W	350mA	4000K	15°	Dia 65 x H 65
833.30.876	14W	350mA	2700K	24°	Dia 65 x H 65
833.30.877	14W	350mA	3000K	24°	Dia 65 x H 65
833.30.878	14W	350mA	4000K	24°	Dia 65 x H 65
833.30.880	14W	350mA	2700K	50°	Dia 65 x H 65
833.30.881	14W	350mA	3000K	50°	Dia 65 x H 65
833.30.882	14W	350mA	4000K	50°	Dia 65 x H 65

### 2. BAFFLES

Article No	Shape	Colour	Dimensions (mm)
833.30.884	Round	 White	Dia 71 x H 37
833.30.885	Round	 Black (Matt)	Dia 71 x H 37
833.30.886	Round	 Piano Black (Glossy)	Dia 71 x H 37
833.30.887	Round	 Gold	Dia 71 x H 37
833.30.888	Round	 Champagne	Dia 71 x H 37
833.30.889	Round	 Chrome	Dia 71 x H 37
833.30.890	Round	 Bronze	Dia 71 x H 37

## THE STANFORD SERIES: ORDERING INFORMATION

### 2. BAFFLES

Article No	Shape	Colour	Dimensions (mm)
833.30.824	Square	 White	70 x 70 x 40
833.30.825	Square	 Black (Matt)	70 x 70 x 40
833.30.826	Square	 Piano Black (Glossy)	70 x 70 x 40
833.30.827	Square	 Gold	70 x 70 x 40
833.30.828	Square	 Champagne	70 x 70 x 40
833.30.829	Square	 Chrome	70 x 70 x 40
833.30.830	Square	 Bronze	70 x 70 x 40

### 3. LOUVERS / GLARE REDUCTION ADD-ONS

Article No.	Description
833.13.563	Stanford/Cambridge Striped Glass
833.13.566	Stanford/Cambridge Honeycomb Louver
833.13.571	Stanford/Cambridge Woven Glass
833.13.575	Stanford/Cambridge Diffusion Sheet

### 4. MOUNTING BRACKET

Article No.	Shape	Type	Colour	Dimensions (mm)
833.30.891	Round	Trim	White	Dia 85 x H 30
833.30.893	Round	Trimless	White	Dia 111 x H 30
833.30.892	Round	Trim	Black	Dia 85 x H 30
833.30.894	Round	Trimless	Black	Dia 111 x H 30
833.30.831	Square	Trim	White	81 x 81 x 50
833.30.832	Square	Trim	Black	81 x 81 x 50

### 5. DRIVERS

Article No.	Description	Current
833.30.968	Knight 200 - Constant Single Current LED Driver, 200mA	200mA
833.30.972	Knight 300 - Constant Single Current LED Driver, 300mA	300mA
833.30.971	Knight 350 - Constant Single Current LED Driver, 350mA	350mA
833.30.973	Duke 500 - Constant Multi-Current LED Driver, 250mA, 350mA, 450mA, 500mA	500mA Max.

# IMPERIAL

Porches, balconies, and bathrooms necessitate special considerations and extra planning when it comes to lighting because of the stark difference in their environmental conditions when compared to other indoor spaces. The Imperial Architectural Lights by Häfele are the best choice for meeting the illumination needs of such spaces.

These luminaires with a small design build and effortless aesthetics, come with an anti-glare feature that helps create a soft, soothing light effect for additional comfort. Owing to their IP65 Rating, the Imperial lights are best suited for areas that are continually exposed to dusty or humid environments. When in contact with dust, dirt, and debris, the high IP rating of the lights provides a great degree of protection and keeps the fixtures from getting damaged.







## THE IMPERIAL SERIES: FEATURES

### 1. Simple design fixture

Imperial is a compact fixture with a modern, minimalist design. The reflective material inside the reflector within the light fixture shapes and enhances the light to illuminate your space. It is a recessed downlight that features an anti-glare reflector and a transparent glass.



### 2. Higher IP rated light fixture

The Imperial series, with an IP65 rating, offers protection against water, dust, dirt, debris, and moisture. The light fixture is resistant to multi-directional, low-pressure water jets, making it suitable to be used in humid environments.

### 3. Deep recessed downlight

The deep recessed light fixtures have the light source regressed into the luminaire to enhance the glare reduction quality, while the luminaire itself is recessed into the ceiling for an unobtrusive look.



## THE IMPERIAL SERIES: DECODING THE NOMENCLATURE

Imperial	5W	.25A	TLT	RD	TR	40°	30K	WH
	①	②	③	④	⑤	⑥	⑦	⑧

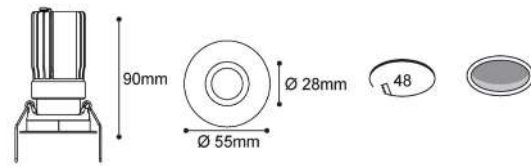
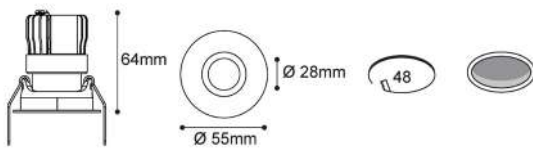
Number	Category	Abbreviation	Possibilities
1	Output	W	5 Watts
			7 Watts
			10 Watts
2	Current	.25A	250mA
		.7A	700mA
3	Housing type	TLT	Tilt
		DL	Fixed downlight
4	Shape	RD	Round
5	Mounting bracket type	TR	Trim
6	Beam angle	°	40°
7	Colour temperature	27K	2700 K
		30K	3000 K
		40K	4000 K
8	Finish	WH	White
		BLK	Black

## THE IMPERIAL SERIES: RANGE SPECIFICATIONS

Luminaire type	Downlight
Colour temperature	2700K, 3000K, 4000K
CRI	>95
Wattage	5W, 7W, 10W
Current	250mA (5W, 10W), 700mA (7W)
Maximum ambient temperature	45°C
Beam angle	40°
Material	Die cast aluminium
Finish	Black, White
Average rated life	> 60,000 hrs.
UGR	<19
Mounting technique	Recess
Degree of protection	IP65
Certification	BIS (Bureau of Indian Standards)
Energy efficiency class	Class II
Applications	Indoors and wet areas - Porch, laundry room, bathroom, balcony, hotel, kitchen

## THE IMPERIAL SERIES: RANGE SPECIFICATIONS

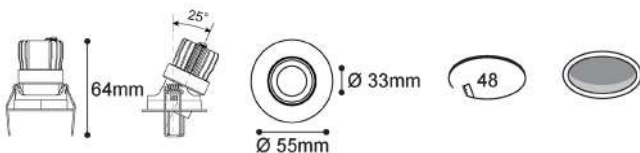
### FIXED RECESSED DOWNLIGHTS - ROUND



Housing type	Fixed
Description	Imperial RD TR
Mounting brackets	Trim
Wattage	5W, 7W
Current	250mA (5W), 700mA (7W)
Beam angle	40°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire (lm/W)	85 lm/w (5W), 79 lm/W (7W)

Housing type	Fixed
Description	Imperial RD TR
Mounting brackets	Trim
Wattage	10W
Current	250mA, 10W
Beam angle	40°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire (lm/W)	82 lm/W

### TILTABLE RECESSED DOWNLIGHTS - ROUND



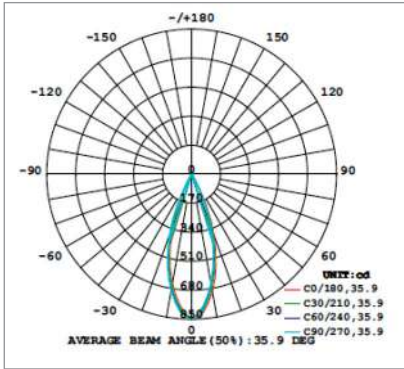
Housing type	Tiltable
Description	Imperial TLT RD TR
Mounting brackets	Trim
Wattage	5W, 7W
Current	250mA (5W), 700mA (7W)
Beam angle	40°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire (lm/W)	85 lm/w (5W), 79 lm/W (7W)

Housing type	Tiltable
Description	Imperial TLT RD TR
Mounting brackets	Trim
Wattage	10W
Current	250mA
Beam angle	40°
Housing colour	White (WH), Black (BLK)
Lumen output at source for 3000K luminaire (lm/W)	82 lm/w

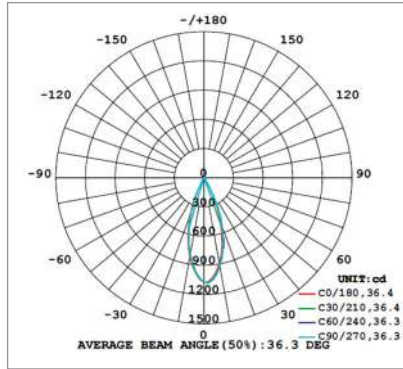
**THE IMPERIAL SERIES: LIGHT DISTRIBUTION AND AAI GRAPHS**

5W, 7W, 10W Luminaires

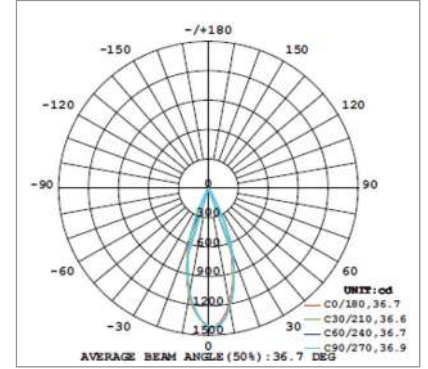
5W LUMINAIRE



7W LUMINAIRE



10W LUMINAIRE



Lux	Coverage	Height
844 lx	65 cm	1 m
211 lx	130 cm	2 m
94 lx	195 cm	3 m
53 lx	260 cm	4 m
34 lx	325 cm	5 m

3000 k, 40°

Lux	Coverage	Height
1077 lx	66 cm	1 m
269 lx	131 cm	2 m
120 lx	197 cm	3 m
67 lx	262 cm	4 m
43 lx	328 cm	5 m

3000 k, 40°

Lux	Coverage	Height
1420 lx	66 cm	1 m
355 lx	133 cm	2 m
158 lx	199 cm	3 m
89 lx	266 cm	4 m
57 lx	332 cm	5 m

3000 k, 40°

Note: The curves indicate the illuminated area and the average illumination when the luminaire is at a different distance.

## THE IMPERIAL SERIES: CONSTANT CURRENT DRIVERS

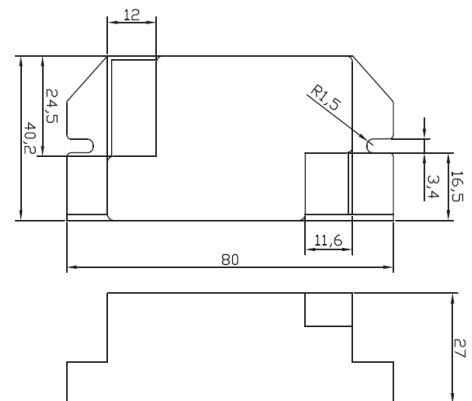
### KNIGHT 250, 5W - CONSTANT SINGLE CURRENT LED DRIVER, 250mA

- SELV equivalent
- Flicker-free output
- Suitable for dry locations
- Average rated life: 50,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.
- 1 channel output



IP20

Technical Specifications	
Article No.	833.13.643
Input Voltage	240VAC $\pm$ 10% 50 Hz
Input Current	0.03A Max.
Input Power	6W Max.
Output Current	250mA
Output Voltage	9 - 18VDC
Output Power	4.5W
Power Factor	>0.85
Ambient Operating Temperature Range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV DM)



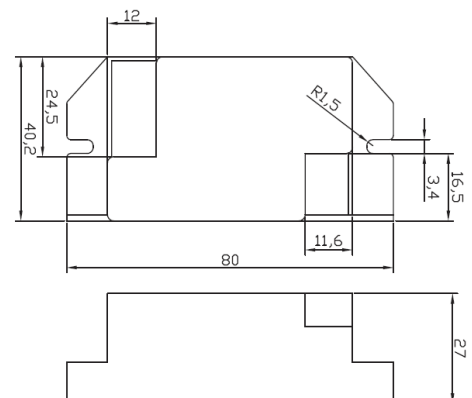
### KNIGHT 250, 10W - CONSTANT SINGLE CURRENT LED DRIVER, 250mA

- SELV equivalent
- Flicker-free output
- Suitable for dry locations
- Average rated life: 50,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.
- 1 channel output



IP20

Technical Specifications	
Article No.	833.30.974
Input Voltage	240VAC $\pm$ 10% 50 Hz
Input Current	0.06A Max.
Input Power	13W Max.
Output Current	250mA
Output Voltage	21 - 42VDC
Output Power	10W
Power Factor	>0.95
Ambient Operating Temperature Range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV As per EN 61000-4-5)

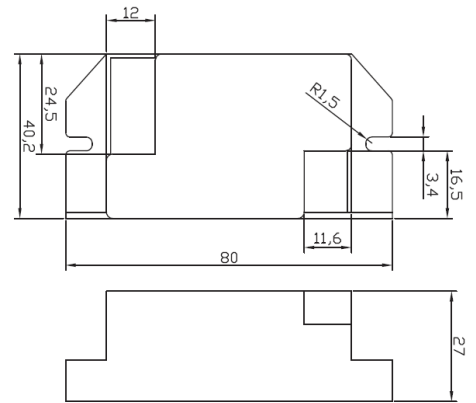


## THE IMPERIAL SERIES: CONSTANT CURRENT DRIVERS

### KNIGHT 700 - CONSTANT SINGLE CURRENT LED DRIVER, 700mA

IP20

- SELV equivalent
- Flicker-free output
- Suitable for dry locations
- Average rated life: 50,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.
- 1 channel output



#### Technical Specifications

Article No.	833.30.969
Input Voltage	240VAC $\pm$ 10% 50 Hz
Input Current	0.06A Max.
Input Power	11W Max.
Output Current	700mA
Output Voltage	7 - 12VDC
Output Power	8.4W
Power Factor	>0.85
Ambient Operating Temperature Range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV DM)

## THE IMPERIAL SERIES: CONSTANT CURRENT DRIVERS

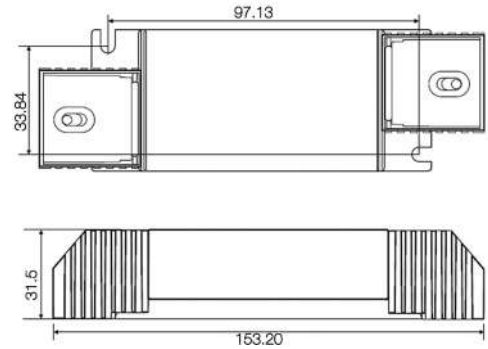
### DUKE 500 - CONSTANT MULTI-CURRENT LED DRIVER, 250mA, 350mA, 450mA, 500mA

IP20

- SELV equivalent
- CE certified
- Suitable for Class II fixtures
- Flicker-free output
- Multiple current selection through DIP switch
- Overload and short circuit protection
- Input over-voltage and under-voltage protection
- Suitable for dry locations
- Average rated life: 50,000 hours
- Sustains at 320VAC for 48 hours & 440VAC for 8 hours
- 1 channel output

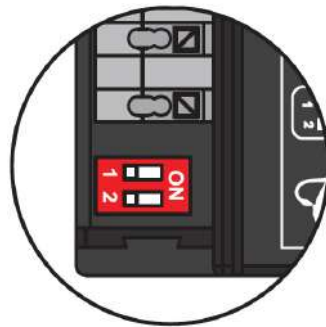


Technical Specifications	
Article No.	833.30.973
Input Voltage	240VAC ±20% 50Hz
Input Current	0.11A Max.
Input Power	27W Max.
Output Current	250mA, 350mA, 450mA, 500mA (±7%)
Output Voltage	33 - 43VDC
Output Power	22W
Power Factor	>0.95
Ambient Operating Temperature Range	-20°C to +50°C
Input Surge Protection	Yes (Line-Neutral 4kV)



### DUKE 500 DIP SWITCH CURRENT SELECTION CHART

DIP Switch		Output Current (mA)
PIN 1	PIN 2	
ON	ON	500
ON	OFF	450
OFF	ON	350
OFF	OFF	250





## THE IMPERIAL SERIES: CONSTANT CURRENT DRIVERS

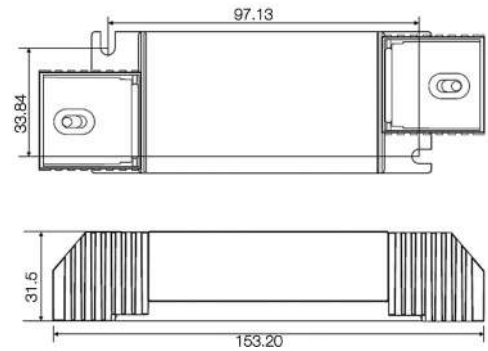
### DUKE 700 - CONSTANT MULTI-CURRENT LED DRIVER, 400mA, 500mA, 600mA, 700mA

IP20

- SELV equivalent
- CE certified
- Suitable for Class II fixtures
- Flicker-free output
- Multiple current selection through DIP switch
- Overload and short circuit protection
- Input over-voltage and under-voltage protection
- Suitable for dry locations
- Average rated life: 50,000 hours
- Sustains at 320VAC for 48 hours & 440VAC for 8 hours
- 1 channel output

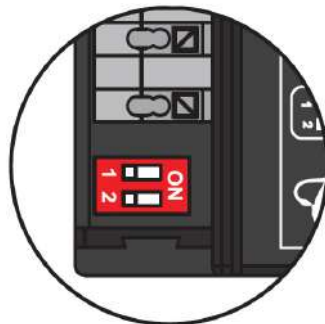


Technical Specifications	
Article No.	833.30.976
Input Voltage	240VAC ±20% 50Hz
Input Current	0.16A Max.
Input Power	36W Max.
Output Current	400mA, 500mA, 600mA, 700mA (±7%)
Output Voltage	30 - 43VDC
Output Power	30.1W
Power Factor	>0.95
Ambient Operating Temperature Range	-20°C to +50°C
Input Surge Protection	Yes (Line-Neutral 4kV)



### DUKE 700 DIP SWITCH CURRENT SELECTION CHART

DIP Switch		Output Current (mA)
PIN 1	PIN 2	
ON	ON	700
ON	OFF	600
OFF	ON	500
OFF	OFF	400

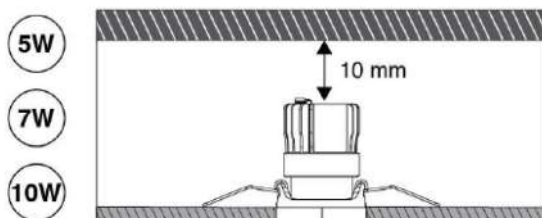


**NOTE:**

1. You can order the Knight Series or the Duke Series drivers, as per your requirement, by checking the suitable current ratings.
2. For Duke drivers: Please set the dip switch setting as indicated on the driver to activate the desired current rating out of the 4 options available
3. The Imperial series downlights allow automation by connecting to Dali compatible drivers.

## THE IMPERIAL SERIES: INSTALLATION DETAILS

### GAP BETWEEN TRUE CEILING AND LUMINAIRE



Minimum 10 mm of gap from the true ceiling to the top edge of the luminaire is required for installation of all luminaires under the Imperial series, irrespective of their wattage.

## THE IMPERIAL SERIES: ORDERING INFORMATION

### 1. LUMINAIRE

Article No.	Wattage	Current	Colour Temperature	Housing type	Colour	Dimensions (mm)
833.13.520	5W	250mA	2700K	Fixed	White	Dia 55 x H 64
833.13.521	5W	250mA	3000K	Fixed	White	Dia 55 x H 64
833.13.522	5W	250mA	4000K	Fixed	White	Dia 55 x H 64
833.13.524	5W	250mA	2700K	Fixed	Black	Dia 55 x H 64
833.13.525	5W	250mA	3000K	Fixed	Black	Dia 55 x H 64
833.13.526	5W	250mA	4000K	Fixed	Black	Dia 55 x H 64
833.13.528	5W	250mA	2700K	Tiltable	White	Dia 55 x H 64
833.13.529	5W	250mA	3000K	Tiltable	White	Dia 55 x H 64
833.13.530	5W	250mA	4000K	Tiltable	White	Dia 55 x H 64
833.13.532	5W	250mA	2700K	Tiltable	Black	Dia 55 x H 64
833.13.533	5W	250mA	3000K	Tiltable	Black	Dia 55 x H 64
833.13.534	5W	250mA	4000K	Tiltable	Black	Dia 55 x H 64
833.30.816	7W	700mA	2700K	Fixed	White	Dia 55 x H 64
833.30.817	7W	700mA	3000K	Fixed	White	Dia 55 x H 64
833.30.818	7W	700mA	4000K	Fixed	White	Dia 55 x H 64
833.30.820	7W	700mA	2700K	Fixed	Black	Dia 55 x H 64
833.30.821	7W	700mA	3000K	Fixed	Black	Dia 55 x H 64
833.30.822	7W	700mA	4000K	Fixed	Black	Dia 55 x H 64
833.13.536	7W	700mA	2700K	Tiltable	White	Dia 55 x H 64
833.13.537	7W	700mA	3000K	Tiltable	White	Dia 55 x H 64
833.13.538	7W	700mA	4000K	Tiltable	White	Dia 55 x H 64
833.13.540	7W	700mA	2700K	Tiltable	Black	Dia 55 x H 64
833.13.541	7W	700mA	3000K	Tiltable	Black	Dia 55 x H 64
833.13.542	7W	700mA	4000K	Tiltable	Black	Dia 55 x H 64
833.13.544	10W	250mA	2700K	Fixed	White	Dia 55 x H 90
833.13.545	10W	250mA	3000K	Fixed	White	Dia 55 x H 90
833.13.546	10W	250mA	4000K	Fixed	White	Dia 55 x H 90
833.13.548	10W	250mA	2700K	Fixed	Black	Dia 55 x H 90
833.13.549	10W	250mA	3000K	Fixed	Black	Dia 55 x H 90
833.13.550	10W	250mA	4000K	Fixed	Black	Dia 55 x H 90
833.13.552	10W	250mA	2700K	Tiltable	White	Dia 55 x H 90
833.13.553	10W	250mA	3000K	Tiltable	White	Dia 55 x H 90
833.13.554	10W	250mA	4000K	Tiltable	White	Dia 55 x H 90
833.13.556	10W	250mA	2700K	Tiltable	Black	Dia 55 x H 90
833.13.557	10W	250mA	3000K	Tiltable	Black	Dia 55 x H 90
833.13.558	10W	250mA	4000K	Tiltable	Black	Dia 55 x H 90

## THE IMPERIAL SERIES: ORDERING INFORMATION

### 2. DRIVERS

Article No.	Description	Current
833.13.643	Knight 250, 5W - Constant Single Current LED Driver, 250mA	250mA
833.30.974	Knight 250, 10W - Constant Single Current LED Driver, 250mA	250mA
833.30.969	Knight 700 - Constant Single Current LED Driver, 700mA	700mA
833.30.973	Duke 500 - Constant Multi-Current LED Driver, 250mA, 350mA, 450mA, 500mA	500mA Max.
833.30.976	Duke 700 - Constant Multi-Current LED Driver, 400mA, 500mA, 600mA, 700mA	700mA Max.



## PRINCETON

Wall washing is a special and unique effect that illuminates a vertical surface with flawless and even brightness. It is the element that draws attention to your textured wall, wall display, entrance or fireplace and makes it noticeable. The light fittings that deliver such effects not only need to produce a high quality light output but also need to be technically efficient.

It can therefore safely be said that achieving such a light effect and accurately installing a wall-washer is indeed an art and having a trusted brand deliver it quite rare. The Princeton series by Hafele brings you the perfect solution. The wall washers from this series give you a consistent wall illumination which reduces the effects of irregularities on the wall, provide smooth light transitions from ceiling to the wall, and an effortless gradient from the top to the bottom, presenting your wall with the elegance it deserves.

The luminaires from the Princeton series are made of Aluminium and are available in two colours - white and black. These are suitable for use in indoor applications like hotel lobbies, high-end residential apartments, offices etc.

## THE PRINCETON SERIES: FEATURES

### 1. Uniform wall washing

The precise light control of Princeton wall washers provides uniform light distribution that reduces the visibility of shadows and patches that arise due to irregularities present on the wall. Such irregularities may arise due to, for example, improper finishing of the wall surface or improper installation of wallpaper.



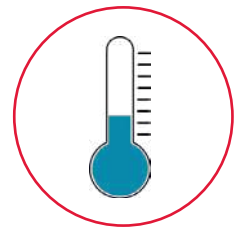
### 2. Hidden source of light that gives you harmonious visual experience

Multiple free form surface reflectors, also known as shells, together form a Princeton luminaire. Every shell has a reflective coating that directs the light output from the LED above. The LED in the luminaire is thus not directly visible to the naked eye, creating a hidden source of light and giving a harmonious visual experience.



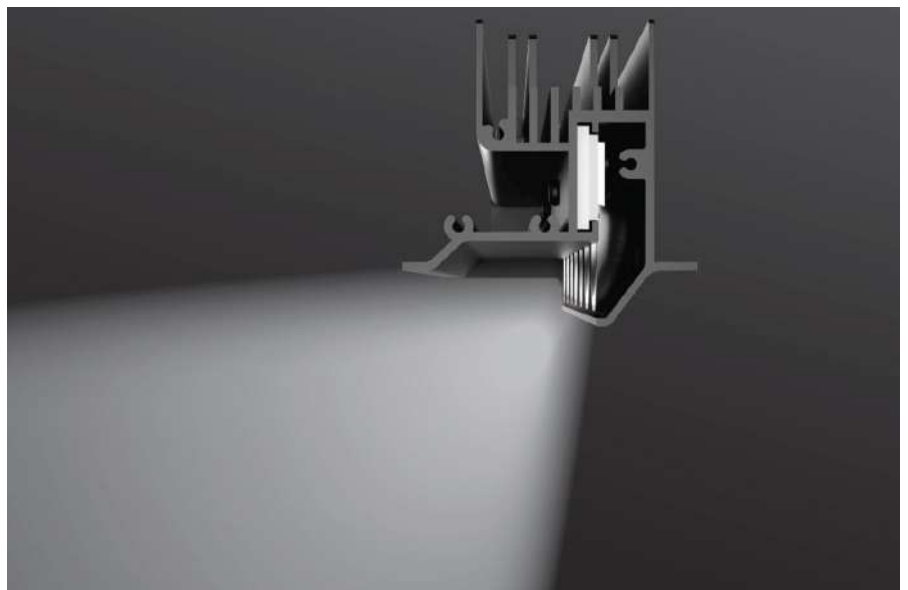
### 3. Optimized thermal properties that generate less heat

The innovative heat sink design optimizes the thermal properties of the Princeton luminaire, generating lesser heat even with prolonged usage. This increases the efficiency and life of the luminaire.



### 4. Sharp cut off angle with asymmetric light distribution

The shell design of the Princeton series luminaire provides an asymmetric light distribution that enables uniform light output starting from the top most edge of the wall. The sharp cut-off angle on both ends of the beam enables light output to evenly transition from the ceiling to the wall and transforms into a smooth gradient from the top most edge of the wall to the bottom edge offering a very comfortable visual experience.



## THE PRINCETON SERIES: DECODING THE NOMENCLATURE

Princeton	8W	.2A	TR	L	WW	30K	WH
	1	2	3	4	5	6	7

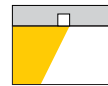
Number	Category	Abbreviation	Possibilities
1	Output	W	8 Watts
			15 Watts
			22 Watts
2	Current	.2A	200mA
		.3A	300mA
		.45A	450mA
3	Mounting bracket type	TR	Trim
4	Wall washer type	L	Linear
5	Type of luminaire	WW	Wall Washer
6	Colour temperature	27K	2700 K
		30K	3000 K
		40K	4000 K
7	Finish	WH	White
		BLK	Black

## THE PRINCETON SERIES: RANGE SPECIFICATIONS

Luminaire type	Wall Washer
Colour temperature	2700K, 3000K, 4000K
CRI	>95
Wattage	8W, 15W, 22W
Current	200mA (8W), 300mA (15W), 450mA (22W)
Maximum ambient temperature	45° C
Material	Aluminium
Finish	Black, White
Average rated life	> 60,000 hrs.
Mounting technique	Recess
Degree of protection	IP20
Certification	BIS (Bureau of Indian Standards)
Energy efficiency class	Class II
Applications	Indoor: Hotel lobbies, high-end residential apartments, museums and offices

## THE PRINCETON SERIES: RANGE SPECIFICATIONS

### FIXED RECESSED LINEAR WALL WASHERS

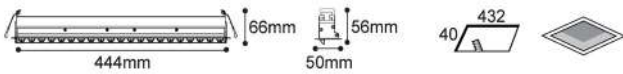
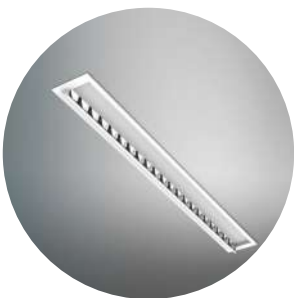


**8W, 15W, 22W**



Description	Princeton WW TR
Wattage	8W
Current	200mA
Total lumen output at source (lm) for 3000K luminaire	936 lm

Description	Princeton WW TR
Wattage	15W
Current	300mA
Total lumen output at source (lm) for 3000K luminaire	1485 lm

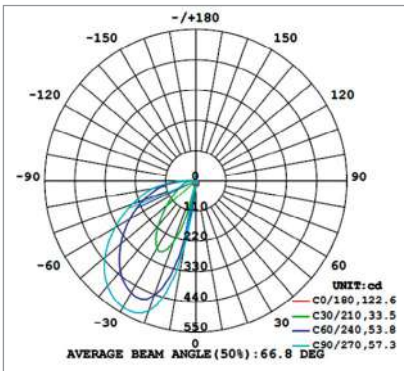


Description	Princeton WW TR
Wattage	22W
Current	450mA
Total lumen output at source (lm) for 3000K luminaire	2228 lm

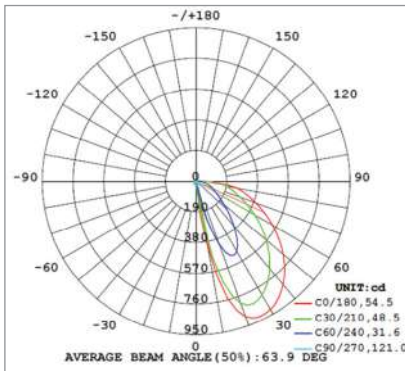


**THE PRINCETON SERIES: LIGHT DISTRIBUTION and AAI GRAPHS**

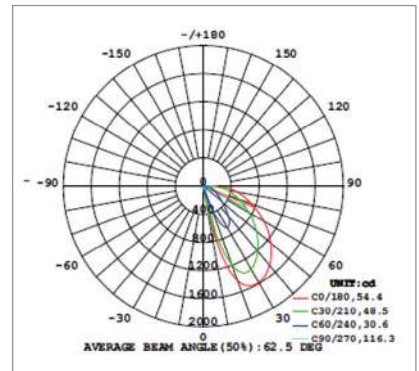
8W Luminaires



15W Luminaires



22W Luminaires



Lux	Coverage	Height
418 lx		109 cm - 1 m
104 lx		218 cm - 2 m
46 lx		328 cm - 3 m
26 lx		437 cm - 4 m
17 lx		546 cm - 5 m

Lux	Coverage	Height
736 lx		103 cm - 1 m
184 lx		206 cm - 2 m
82 lx		309 cm - 3 m
46 lx		412 cm - 4 m
29 lx		515 cm - 5 m

Lux	Coverage	Height
1146 lx		103 cm - 1 m
287 lx		205 cm - 2 m
127 lx		308 cm - 3 m
72 lx		411 cm - 4 m
46 lx		514 cm - 5 m

Note: The curves indicate the illuminated area and the average illumination when the luminaire is at a different distance.

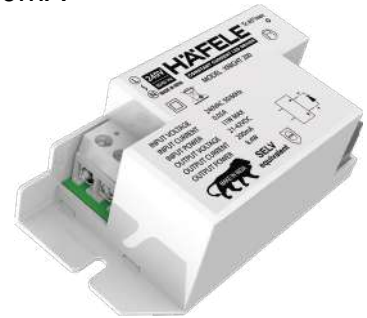


## THE PRINCETON SERIES: CONSTANT CURRENT DRIVERS

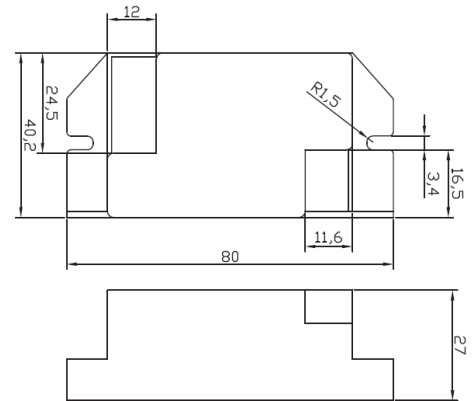
### KNIGHT 200 - CONSTANT SINGLE CURRENT LED DRIVER, 200mA

- SELV equivalent
- Suitable for Class II fixtures
- Flicker-free output
- Suitable for dry locations
- Average rated life: 30,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.
- 1 channel output

IP20



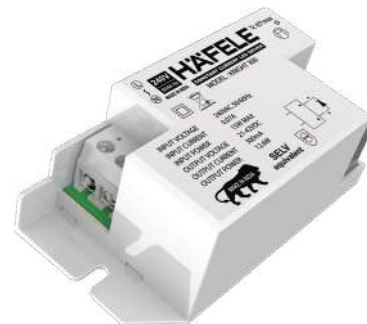
Technical Specifications	
Article No.	833.30.968
Input Voltage	240VAC ±10% 50/60 Hz
Input Current	0.05A Max.
Input Power	11W Max.
Output Current	200mA
Output Voltage	21 - 42VDC
Output Power	8.4W
Power Factor	>0.90
Ambient Operating Temperature Range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV as per EN 61000-4-5)



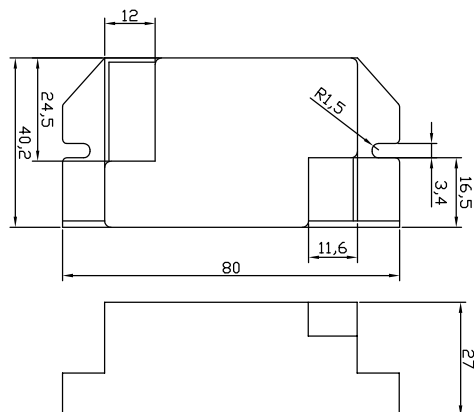
### KNIGHT 300 - CONSTANT SINGLE CURRENT LED DRIVER, 300mA

- SELV equivalent
- Suitable for Class II fixtures
- Flicker-free output
- Suitable for dry locations
- Average rated life: 30,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.

IP20



Technical Specifications	
Article No.	833.30.972
Input Voltage	240Vac ± 10%,50/60Hz
Input Current	0.07A Max.
Input Power	15W Max.
Output Current	300mA
Output Voltage	21 - 42VDC
Output Power	12.6W
Power Factor	>0.95
Ambient Operating Temperature Range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV as per EN 61000-4-5)



**THE PRINCETON SERIES: CONSTANT CURRENT DRIVERS**

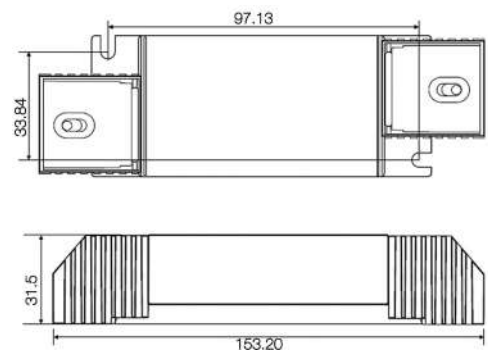
**DUKE 500 - CONSTANT MULTI-CURRENT LED DRIVER, 250mA, 350mA, 450mA, 500mA**

IP20

- SELV equivalent
- CE certified
- Suitable for Class II fixtures
- Flicker-free output
- Multiple current selection through DIP switch
- Overload and short circuit protection
- Input over-voltage and under-voltage protection
- Suitable for dry locations
- Average rated life: 50,000 hours
- Sustains at 320VAC for 48 hours & 440VAC for 8 hours
- 1 channel output



Technical Specifications	
Article No.	833.30.973
Input Voltage	240VAC ±20% 50Hz
Input Current	0.11A Max.
Input Power	27W Max.
Output Current	250mA, 350mA, 450mA, 500mA (±7%)
Output Voltage	33 - 43VDC
Output Power	22W
Power Factor	>0.95
Ambient Operating Temperature Range	-20°C to +50°C
Input Protection	Yes (Line-Neutral 4kV)



**DUKE 500 DIP SWITCH CURRENT SELECTION CHART**

DIP Switch		Output Current (mA)
PIN 1	PIN 2	
ON	ON	500
ON	OFF	450
OFF	ON	350
OFF	OFF	250



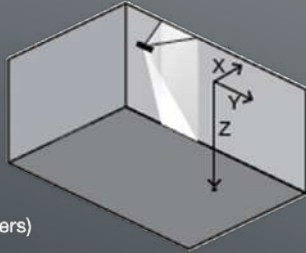
**NOTE:**

1. You can order the Knight Series or the Duke Series drivers, as per your requirement, by checking the suitable current ratings.
2. For Duke drivers: Please set the dip switch setting as indicated on the driver to activate the desired current rating out of the 4 options available
3. The Princeton series downlights allow automation by connecting to Dali compatible drivers.

## THE PRINCETON SERIES: INSTALLATION DETAILS

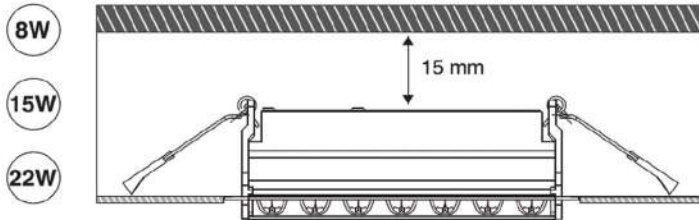
### IDEAL INSTALLATION DISTANCE

X: Lamp to Wall  
Y: Lamp to Lamp  
Z: Lamp to Floor  
X : Y : Z = 1 : 1 : 3 (Meters)



The distances from lamp to wall, lamp to lamp and lamp to floor should be in the ratio of 1:1:3 (meters). For example, if the lamp is installed at a height of 3 meters above the floor, then the distance of the lamp from the wall which the lamp is illuminating should be 1 meter and its distance from adjacent lamp should be 1 meter.

### GAP BETWEEN TRUE CEILING AND LUMINAIRE



Minimum 15 mm of gap from the true ceiling to the top edge of the luminaire is required for installation of all luminaires under the Princeton series, irrespective of their wattage.

#### IMPORTANT INFORMATION

1. Do not use the luminaires from Princeton series to illuminate windows or mirrors because the light output from the luminaires could get reflected off such surfaces causing high degree of glare.
2. Dark surfaces reflect far less light as compared to lighter surfaces, hence more light should be directed at these surfaces if they are to be wall washed.
3. Fixtures mounted close to the wall create a grazing effect (light technique that accentuates wall textures or architectural elements by creating shadows) on textured surfaces. This can be an advantage if the texture is attractive, but should be avoided if the wall has surface irregularities. For a proper wall wash, always install Princeton luminaires in the ratio of 1:1:3 as shown above.
4. Note that wall washing is a special and unique effect. It is advised to consult an expert while selecting, planning and installing a wall washer.

## THE PRINCETON SERIES: ORDERING INFORMATION

### 1. LUMINAIRE

Article No.	Wattage	Current	Colour Temperature	Colour	Dimensions (mm)
833.12.892	8W	200mA	2700K	White	165 x 50 x 50
833.12.893	8W	200mA	3000K	White	165 x 50 x 50
833.12.894	8W	200mA	4000K	White	165 x 50 x 50
833.12.896	8W	200mA	2700K	Black	165 x 50 x 50
833.12.897	8W	200mA	3000K	Black	165 x 50 x 50
833.12.898	8W	200mA	4000K	Black	165 x 50 x 50
833.12.900	15W	300mA	2700K	White	305 x 50 x 50
833.12.901	15W	300mA	3000K	White	305 x 50 x 50
833.12.902	15W	300mA	4000K	White	305 x 50 x 50
833.12.904	15W	300mA	2700K	Black	305 x 50 x 50
833.12.905	15W	300mA	3000K	Black	305 x 50 x 50
833.12.906	15W	300mA	4000K	Black	305 x 50 x 50
833.12.908	22W	450mA	2700K	White	445 x 50 x 50
833.12.909	22W	450mA	3000K	White	445 x 50 x 50
833.12.910	22W	450mA	4000K	White	445 x 50 x 50
833.12.912	22W	450mA	2700K	Black	445 x 50 x 50
833.12.913	22W	450mA	3000K	Black	445 x 50 x 50
833.12.914	22W	450mA	4000K	Black	445 x 50 x 50

### 2. DRIVERS

Article No.	Description	Current
833.30.968	Knight 200 - Constant Single Current LED Driver, 200mA	200mA
833.30.972	Knight 300 - Constant Single Current LED Driver, 300mA	300mA
833.30.973	Duke 500 - Constant Multi-Current LED Driver, 250mA, 350mA, 450mA, 500mA	500mA Max.



## MCGILL

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In corridors and along the stairways, floor washers are used to not only illuminate the surroundings but also to create soft lighting effects that subtly enhance the floor textures. Hafele's McGill floor washer light evenly across the floor while their concealed light source and minimal build enhance the aesthetics of the interior space.

These luminaires provide a glare-free illumination in areas with limited brightness and help avoid injuries or tripping especially in places where there are changes in the elevations. With an easy plug-and-play concept, installation of these lights is easy and entirely tool-free.

## THE MCGILL SERIES: FEATURES

### 1. Even glare-free illumination

In corridors and along the staircase, floor washer luminaires add subtle, glare\*-free illumination at a lower level. These luminaires wash the light evenly across the floor which helps highlight the floor textures as well as guides people through the area.

\*Glare is a visual sensation caused by excessive and uncontrolled brightness at the light source.



### 2. Illumination for safety

Floor washers make the perfect solutions to light up the corridors and staircases under limited brightness conditions. These ensure higher safety especially at night. These luminaires also provide an estimation of different elevation levels to avoid tripping or injury, for e.g. on the stairway.

## THE MCGILL SERIES: DECODING THE NOMENCLATURE

McGill	7W	.7A	SQ	TR	FW	30K	WH
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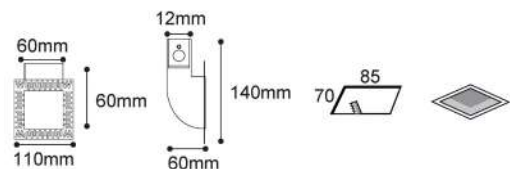
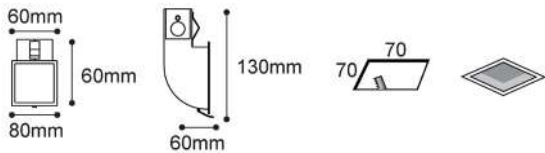
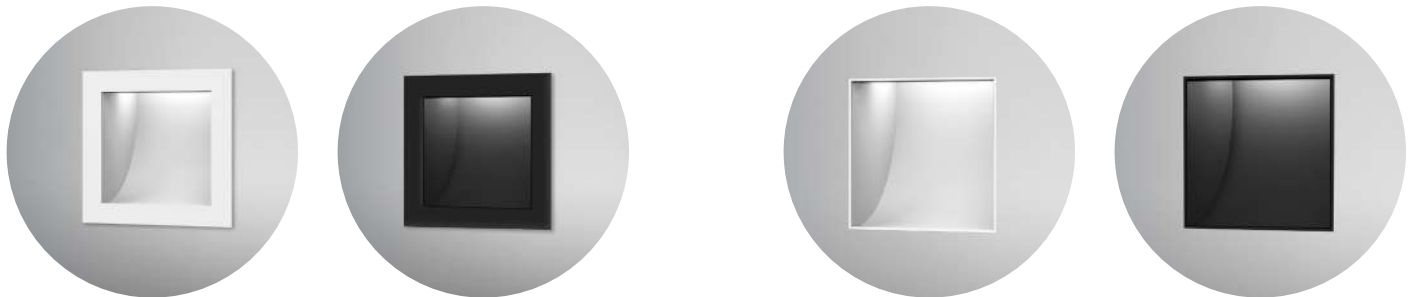
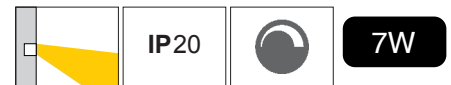
Number	Category	Abbreviation	Possibilities
1	Output	W	7 Watts
2	Current	.7A	700mA
3	Shape	SQ	Square
4	Mounting bracket type	TR	Trim
		TL	Trimless
5	Type of luminaire	FW	Floor Washer
6	Colour temperature	27K	2700 K
		30K	3000 K
		40K	4000 K
7	Finish	WH	White
		BLK	Black



**THE MCGILL SERIES: RANGE SPECIFICATIONS**

Luminaire type	Floor Washer
CRI	>95
Maximum ambient temperature	45° C
Material	Die cast Aluminium
Finish	White, Black
Average rated life	> 60,000 hrs.
Mounting technique	Recess
Degree of protection	IP20
Certification	BIS (Bureau of Indian Standards)
Energy efficiency class	Class II
Applications	Indoor: Corridors and stairways

**FLOOR WASHER - SQUARE**

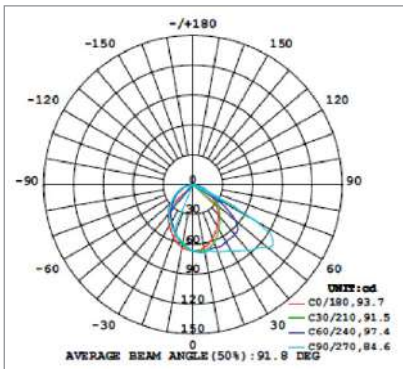


Description	McGill FW SQ TR
Mounting brackets	Trim
Wattage	7W
Current	700mA
Lumen output at source (lm/W) for 3000K luminaire	79 lm/W

Description	McGill FW SQ TL
Mounting brackets	Trimless
Wattage	7W
Current	700mA
Lumen output at source (lm/W) for 3000K luminaire	79 lm/W

## THE MCGILL SERIES: LIGHT DISTRIBUTION AND AAI GRAPHS

### 7W Luminaires



Lux	Coverage	Height
68 lx	182 cm	1 m
17 lx	364 cm	2 m
08 lx	546 cm	3 m
04 lx	728 cm	4 m
03 lx	910 cm	5 m

Note: The curves indicate the illuminated area and the average illumination when the luminaire is at a different distance.

## THE MCGILL SERIES: CONSTANT CURRENT DRIVERS

### KNIGHT 700 - CONSTANT SINGLE CURRENT LED DRIVER, 700mA

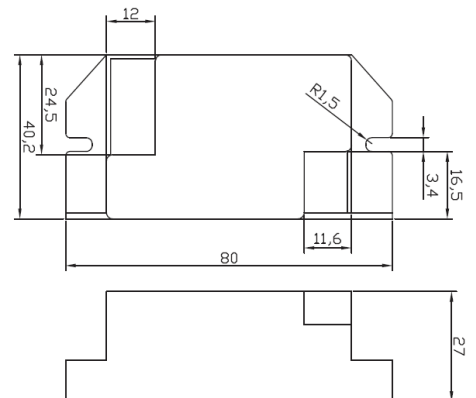
- SELV equivalent
- Flicker-free output
- Suitable for dry locations
- Average rated life: 50,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.
- 1 channel output

IP20



#### Technical Specifications

Article No.	833.30.969
Input Voltage	240VAC ±10% 50 Hz
Input Current	0.06A Max.
Input Power	11W Max.
Output Current	700mA
Output Voltage	7 - 12VDC
Output Power	8.4W
Power Factor	>0.85
Ambient Operating Temperature Range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV DM)



## THE MCGILL SERIES: CONSTANT CURRENT DRIVERS

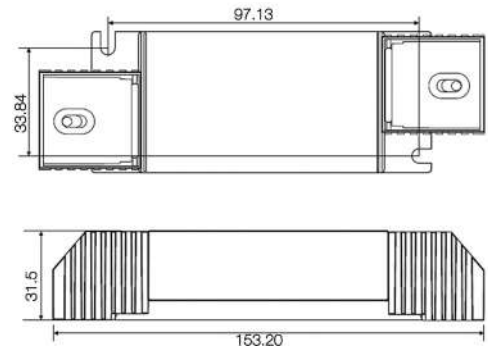
### DUKE 700 - CONSTANT MULTI-CURRENT LED DRIVER, 400mA, 500mA, 600mA, 700mA

IP20

- SELV equivalent
- CE certified
- Suitable for Class II fixtures
- Flicker-free output
- Multiple current selection through DIP switch
- Overload and short circuit protection
- Input over-voltage and under-voltage protection
- Suitable for dry locations
- Average rated life: 50,000 hours
- Sustains at 320VAC for 48 hours & 440VAC for 8 hours
- 1 channel output



Technical Specifications	
Article No.	833.30.976
Input Voltage	240VAC ±20% 50Hz
Input Current	0.16A Max.
Input Power	36W Max.
Output Current	400mA,500mA,600mA,700mA (±7%)
Output Voltage	33 - 43VDC
Output Power	30.1W
Power Factor	>0.95
Ambient Operating Temperature Range	-20°C to +50°C
Input Surge Protection	Yes (Line-Neutral 4kV)



### DUKE 700 DIP SWITCH CURRENT SELECTION CHART

DIP Switch		Output Current (mA)
PIN 1	PIN 2	
ON	ON	700
ON	OFF	600
OFF	ON	500
OFF	OFF	400



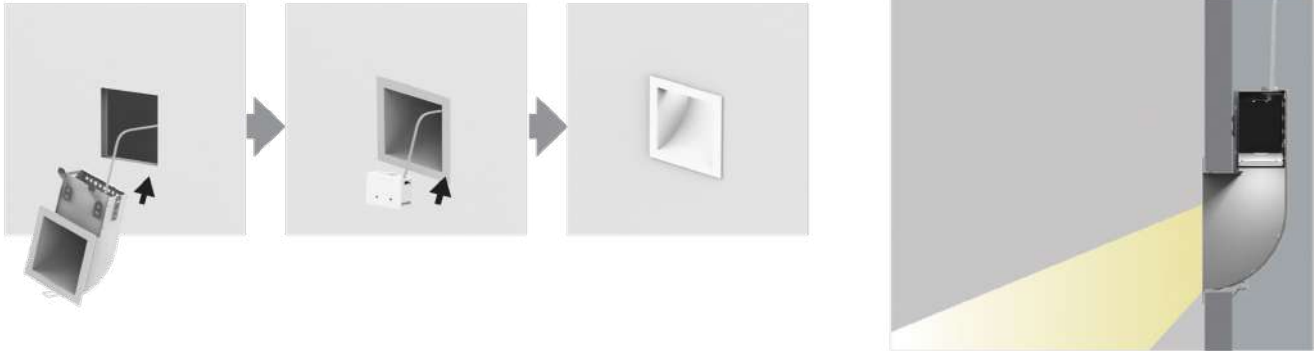
**NOTE:**

1. You can order the Knight Series or the Duke Series drivers, as per your requirement, by checking the suitable current ratings.
2. For Duke drivers: Please set the dip switch setting as indicated on the driver to activate the desired current rating out of the 4 options available
3. The McGill series downlights allow automation by connecting to Dali compatible drivers.

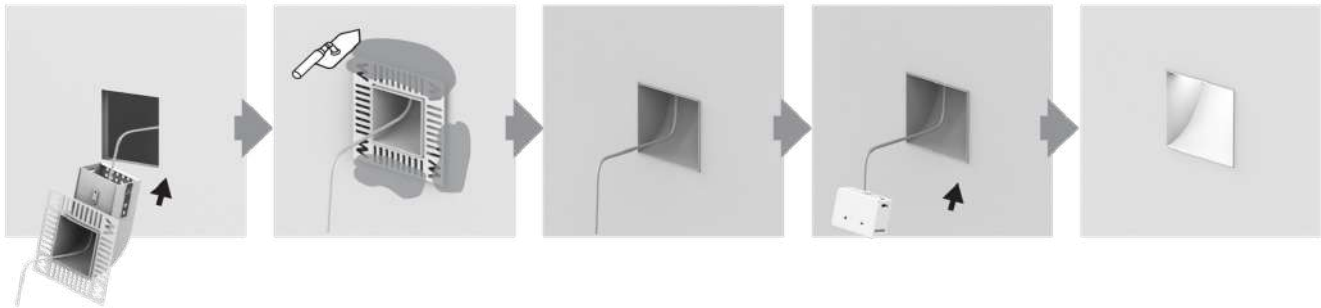
## THE MCGILL SERIES: INSTALLATION DETAILS

The plug-and-play concept of the luminaires from the McGill Series enables tool-free installation. Insert the luminaire housing into the cut-out made in the wall till the interior construction/renovation goes on. Simply insert the light engine, connect it to the driver lead and secure it in place once the renovation has been completed.

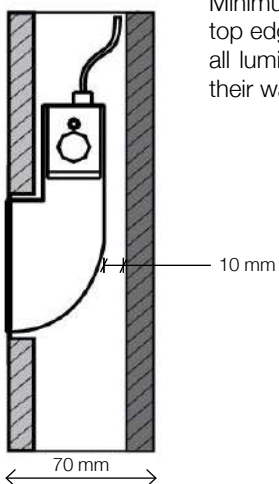
Floor washer installation with trim mounting bracket



Floor washer installation with trimless mounting bracket



### GAP REQUIRED FOR LUMINAIRE INSIDE WALL



Minimum 10 mm of gap from the true ceiling to the top edge of the luminaire is required for installation of all luminaires under the McGill series, irrespective of their wattage.

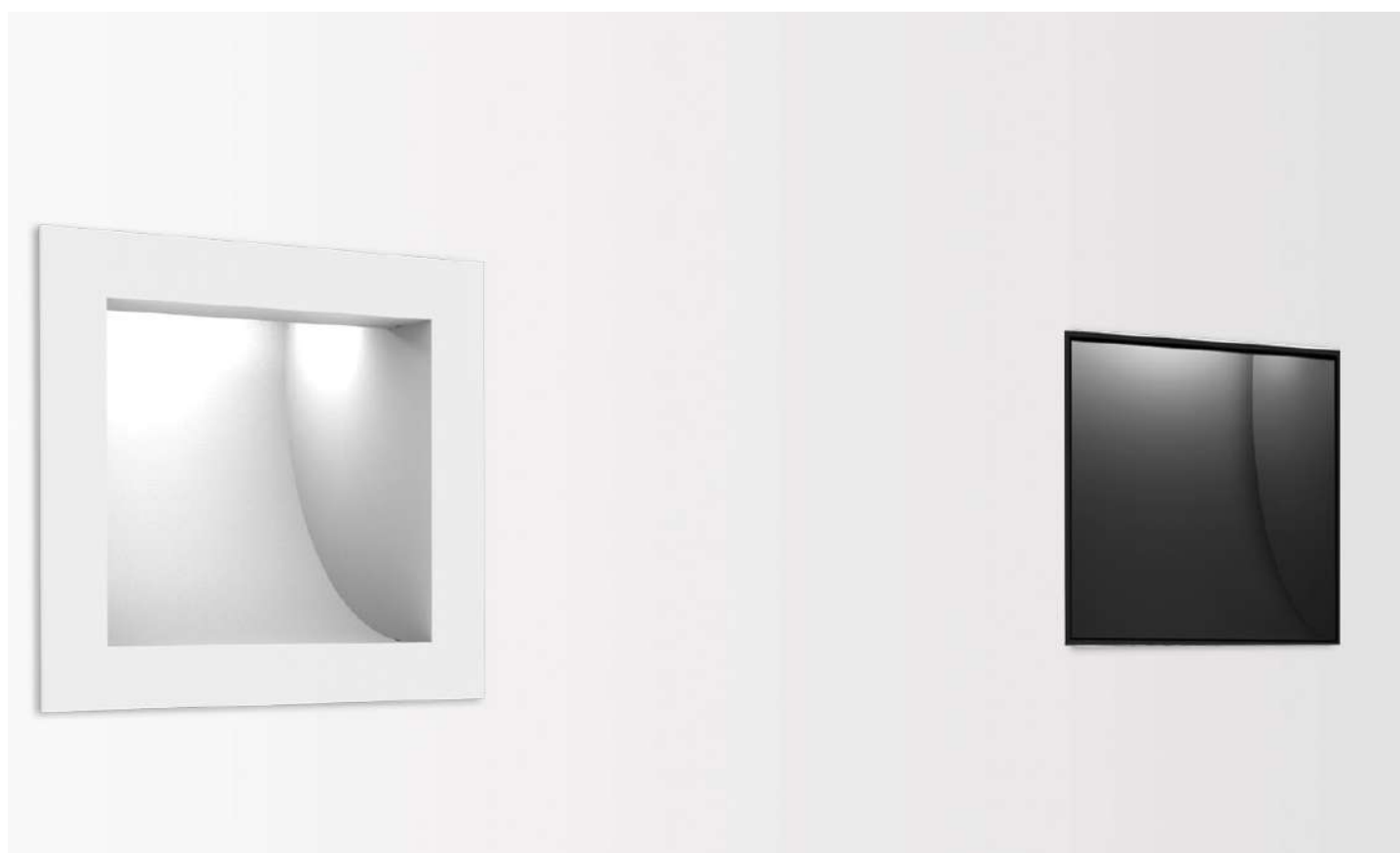
## THE MCGILL SERIES: ORDERING INFORMATION

### 1. LUMINAIRE

Article No.	Wattage	Current	Mounting Bracket Type	Colour Temperature	Colour	Dimensions (mm)
833.12.630	7W	700mA	Trim	2700K	White	80 X 80 X 130
833.12.631	7W	700mA	Trim	3000K	White	80 X 80 X 130
833.12.632	7W	700mA	Trim	4000K	White	80 X 80 X 130
833.12.634	7W	700mA	Trim	2700K	Black	80 X 80 X 130
833.12.635	7W	700mA	Trim	3000K	Black	80 X 80 X 130
833.12.636	7W	700mA	Trim	4000K	Black	80 X 80 X 130
833.12.860	7W	700mA	Trimless	2700K	White	110 X 110 X 140
833.12.861	7W	700mA	Trimless	3000K	White	110 X 110 X 140
833.12.862	7W	700mA	Trimless	4000K	White	110 X 110 X 140
833.12.864	7W	700mA	Trimless	2700K	Black	110 X 110 X 140
833.12.865	7W	700mA	Trimless	3000K	Black	110 X 110 X 140
833.12.866	7W	700mA	Trimless	4000K	Black	110 X 110 X 140

### 2. DRIVERS

Article No.	Description	Current
833.30.969	Knight 700 - Constant Single Current LED Driver, 700mA	700mA
833.30.976	Duke 700 - Constant Multi-Current LED Driver, 400mA, 500mA, 600mA, 700mA	700mA Max.



# CAMBRIDGE

Creating appealing interiors requires a combination of both, a well focused light highlighting specific areas or places of interest and a well spread out light illuminating other areas. This demands luminaires which offer visual precision by giving a precisely focused beam and those which offer a wider beam by giving an even light distribution. It thus becomes critical to carefully select the perfect downlight and spotlight that does justice to your interiors.

The Cambridge series downlights and spotlights offer this visual appeal and functionality by giving a focused beam of light with the pinhole variant and a more spread out beam using the cone variant. These luminaires have a lower unified glare rating (UGR) which enhances the visual experience.

Häfele's Cambridge series is a sleek and modern lighting solution that can be used for general lighting, task lighting and accent lighting, offering enhanced aesthetics, functionality and energy efficiency for both residential and commercial spaces giving you a well-illuminated and visually appealing environment.



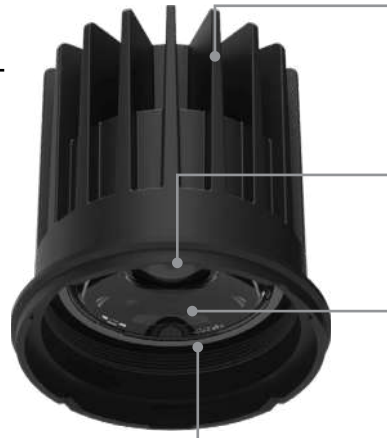


**THE CAMBRIDGE SERIES: MODULARIZATION CONCEPT**

**EXPLODED VIEW FOR FIXED LUMINAIRES (9W & 12W)**



**LIGHT ENGINE**



**Heat Sink**

Absorbs the heat generated by the light engine and dissipates it into the environment, maintaining the required operating temperature.

**LED Holder with LED Chip**

Designed to mount the LED onto the fixture and to integrate it into the circuit.

**Lens**

Amplifies the light output from the LED.

**Rubber Gasket**

Prevents proliferation of moisture and dust particles.

**Lens Protector**

Protects the lens from scratches and smudges ensuring an unhindered light output.



**Glare Reduction Add-ons**

Different louvers help achieve different light effects. They help reduce the glare and diffuse the beam angle.



Round

Square

Pin Hole

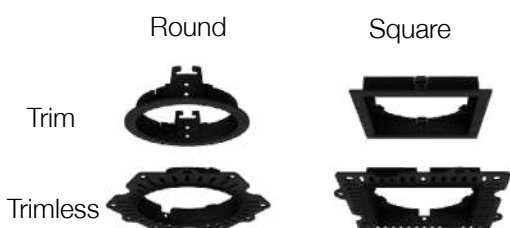
Cone



**HOUSING (PINHOLE AND CONE)**

**Round or Square**

The pinhole housing gives you a more focused beam by cutting off the additional light gradient outside the main beam, whereas the cone housing gives you a more spread out beam which is ideal for general lighting.



Round

Square

Trim

Trimless



**MOUNTING BRACKET**

Provides support to attach the luminaire to the false ceiling structure.



**THE CAMBRIDGE SERIES: MODULARIZATION CONCEPT**

**EXPLODED VIEW FOR TILTABLE LUMINAIRES (14W)**



**LIGHT ENGINE**



**Heat Sink**

Absorbs the heat generated by the light engine and dissipates it into the environment, maintaining the required operating temperature.

**LED Holder with LED Chip**

Designed to mount the LED onto the fixture and to integrate it into the circuit.

**Lens**

Amplifies the light output from the LED.

**Rubber Gasket**

Prevents proliferation of moisture and dust particles.

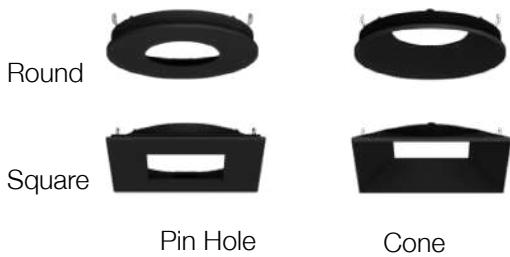
**Lens Protector**

Protects the lens from scratches and smudges ensuring an unhindered light output.



**Glare Reduction Add-ons**

Different louvers help achieve different light effects. They help reduce the glare and diffuse the beam angle.



**HOUSING (PINHOLE AND CONE)**

**Round or Square**

The pinhole housing gives you a more focused beam by cutting off the additional light gradient outside the main beam, whereas the cone housing gives you a more spread out beam which is ideal for general lighting.



**MOUNTING BRACKET**

Provides support to attach the luminaire to the false ceiling structure.

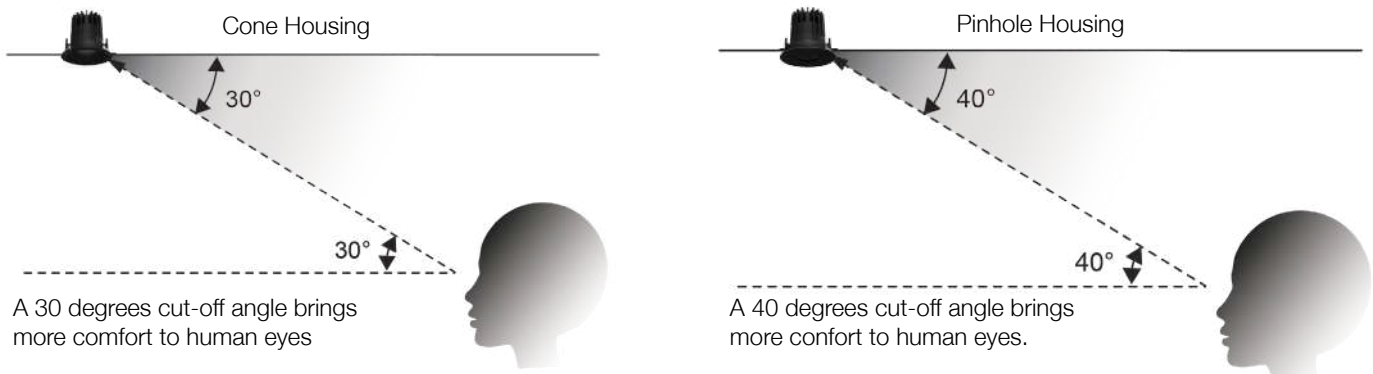
## THE CAMBRIDGE SERIES: FEATURES

### 1. Modularization concept



The Cambridge series delivers flexibility and a variety of options for the customer to choose from. It comes with a modular design which enables you to independently select the light engine, housing and mounting bracket so as to assemble a luminaire configuration that best suits your installation requirement. The Cambridge series comes with square or round mounting brackets with trim or trimless installation options, fixed or tiltable cone and pinhole housing options and various glare reduction add-ons giving you flexibility not only in terms of aesthetics but also in terms of light distribution.

### 2. Low glare fixture



The greater the cut-off angle, the greater the visual comfort provided by the luminaire to the user due to glare\* reduction. Designed with a 30° cut-off angle in case of cone housing and 40° in case of pinhole housing, the luminaires from the Cambridge Series ensure lower glare function that helps create a soft visual effect.

\*Glare is a visual sensation caused by excessive and uncontrolled brightness at the light source.

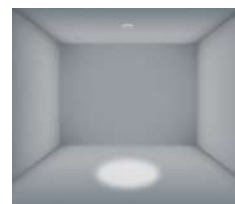


### 3. Unified Glare Rating (UGR) of <19

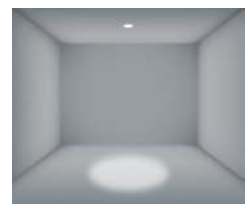
The lower the UGR rating, the lower the glare. In order to achieve comfortable illumination in your living spaces, the UGR of the luminaires is recommended to be below 20 which is easily achievable using Cambridge series luminaires since these have UGR rating of less than 19. UGR values range from 40 (extremely high glare) to 5 (very low glare).

### 4. Varied illumination outcomes

The smart pinhole housing design provides a narrow, concentrated light beam that limits the light spill outside the beam angle. Luminaires with pinhole housing are best used when you want to highlight an architectural feature or specific design element. The cone housing on the other hand offers a wider light beam with a gradient light spill which is perfect for general illumination.



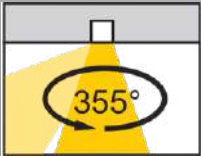
Luminaire with pinhole housing



Luminaire with cone housing

## THE CAMBRIDGE SERIES: FEATURES

### 5. Swivel system



Round and tiltable luminaires in the Cambridge series can be tilted 30° as well as turned 355°. This gives you additional flexibility in adjusting the beam even after installing the luminaire.

### 6. Glare reduction add-ons



Striped  
Glass

Woven  
Glass

Diffusion  
Sheet

Honeycomb  
Louver



Standard Lens  
Protector  
(Transparent glass)

Striped Glass

Woven Glass

Diffusion  
Sheet

Honeycomb  
Louver

With numerous louver options to choose from, Cambridge adds more flexibility and freedom for the lighting designer. The Honeycomb louver reduces glare, striped glass creates oval distribution, diffusion sheet and woven glass soften and spread the light.

### 7. Easy assembly



The luminaires from the Cambridge Series follow the concept of plug and play and can be installed quickly and completely tool free. All you need to do is to assemble the luminaire by selecting the light engine, housing and mounting bracket. Attach the mounting bracket to the false ceiling till the interior construction/renovation goes on. Once completed, simply connect the assembled luminaire to the driver lead and fix it into the mounting bracket.

Note: The images used above are for representational purposes only and for easy understanding of the assembly process. The Cambridge series luminaires come with different design aesthetics.

## THE CAMBRIDGE SERIES: DECODING THE NOMENCLATURE

Cambridge	9W	.2A	RD	TR	15°	27K	CN	BLK
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- ①      ②      ③      ④      ⑤      ⑥      ⑦      ⑧

Number	Category	Abbreviation	Possibilities
1	Output	W	9 Watts
			12 Watts
			14 Watts
2	Current	.2A	200mA
		.3A	300mA
		.35A	350mA
3	Shape	RD	Round
		SQ	Square
4	Mounting Bracket Type	TR	Trim
		TL	Trimless
5	Beam Angle	°	15°
			20°
			24°
			30°
			50°
6	Colour Temperature	27K	2700 K
		30K	3000 K
		40K	4000 K
7	Housing Type	CN	Cone
		PH	Pin hole
8	Housing Colour	BLK	Black

## THE CAMBRIDGE SERIES: RANGE SPECIFICATIONS

Luminaire type	Downlight and Spotlight
Colour temperature	2700K, 3000K, 4000K
CRI	>95
Wattage	9W, 12W, 14W
Current	200mA (9W), 300mA (12W), 350mA (14W)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W
Maximum ambient temperature	45° C
Material	Die cast Aluminium
Beam angle	15°, 20°, 24°, 30°, 50°
Body colour	Black
Average rated life	> 60,000 hrs.
Mounting technique	Recess
Degree of protection	IP44
Energy efficiency class	Class II
Certification	BIS (Bureau of Indian Standards)
Application	Indoors: Hotels, restaurants, residences, museums, galleries, showcases, conference rooms, etc.

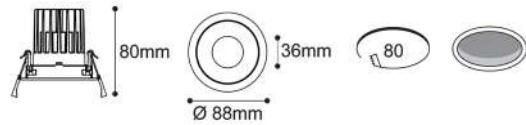
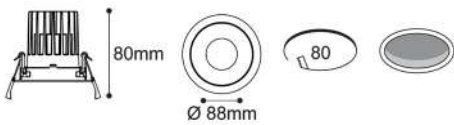
**THE CAMBRIDGE SERIES: RANGE SPECIFICATIONS**

**FIXED RECESSED SPOTLIGHTS / DOWNLIGHTS - ROUND**



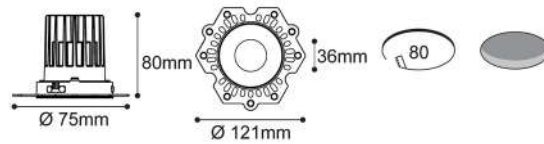
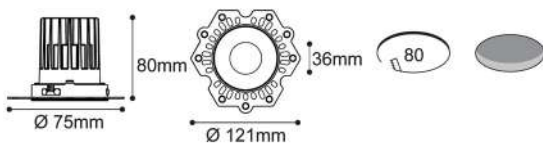
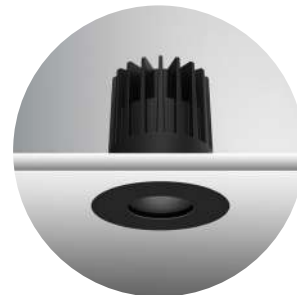



**9W, 12W**



Housing type	Fixed
Description	Cambridge RD TR CN
Mounting brackets	Trim
Wattage	9W, 12W
Current	200mA (9W), 300mA (12W)
Beam angle	20°, 30°, 50°
Housing shape	Cone (CN)
Housing color	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

Housing type	Fixed
Description	Cambridge RD TR PH
Mounting brackets	Trim
Wattage	9W, 12W
Current	200mA (9W), 300mA (12W)
Beam angle	20°, 30°, 50°
Housing shape	Pinhole (PH)
Housing color	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

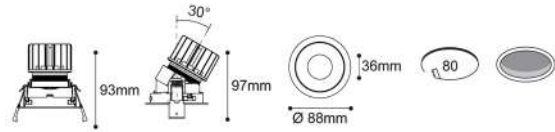
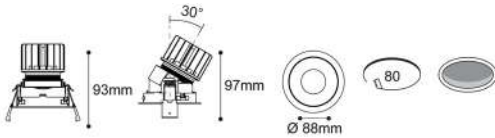


Housing type	Fixed
Description	Cambridge RD TL CN
Mounting brackets	Trimless
Wattage	9W, 12W
Current	200mA (9W), 300mA (12W)
Beam angle	20°, 30°, 50°
Housing shape	Cone (CN)
Housing colour	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

Housing type	Fixed
Description	Cambridge RD TL PH
Mounting brackets	Trimless
Wattage	9W, 12W
Current	200mA (9W), 300mA (12W)
Beam angle	20°, 30°, 50°
Housing shape	Pinhole (PH)
Housing colour	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

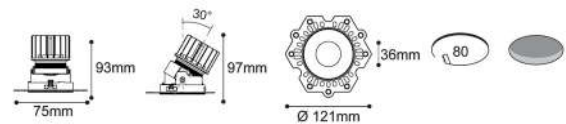
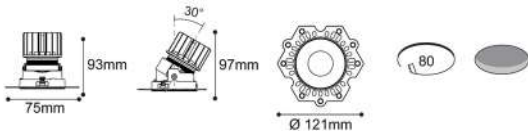
## THE CAMBRIDGE SERIES: RANGE SPECIFICATIONS

### TILTABLE RECESSED SPOTLIGHT AND DOWNLIGHT - ROUND



Housing type	Tiltable
Description	Cambridge TLT RD TR CN
Mounting brackets	Trim
Wattage	14W
Current	350mA
Beam angle	15°, 24°, 50°
Housing shape	Cone (CN)
Housing colour	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

Housing type	Tiltable
Description	Cambridge TLT RD TR PH
Mounting bracket	Trim
Wattage	14W
Current	350mA
Beam angle	15°, 24°, 50°
Housing shape	Pinhole (PH)
Housing colour	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

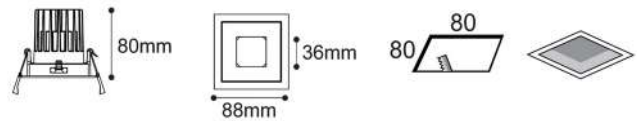
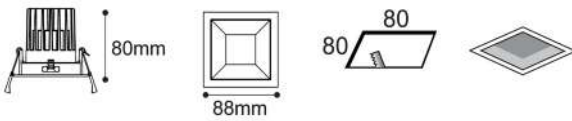
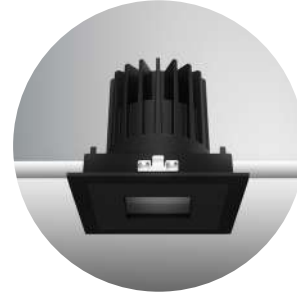
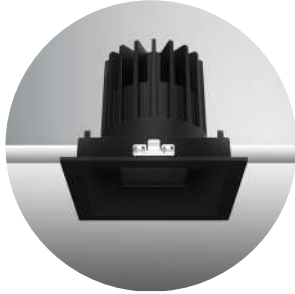


Housing type	Tiltable
Description	Cambridge TLT RD TL CN
Mounting brackets	Trimless
Wattage	14W
Current	350mA
Beam angle	15°, 24°, 50°
Housing shape	Cone (CN)
Housing colour	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

Housing type	Tiltable
Description	Cambridge TLT RD TL PH
Mounting brackets	Trimless
Wattage	14W
Current	350mA
Beam angle	15°, 24°, 50°
Housing shape	Pinhole (PH)
Housing colour	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

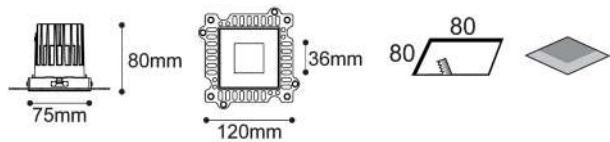
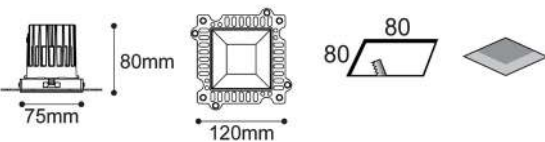
## THE CAMBRIDGE SERIES: RANGE SPECIFICATIONS

### FIXED RECESSED SPOTLIGHT AND DOWNLIGHT - SQUARE



Housing type	Fixed
Description	Cambridge SQ TR CN
Mounting brackets	Trim
Wattage	9W, 12W
Current	200mA (9W), 300mA (12W)
Beam angle	20°, 30°, 50°
Housing shape	Cone (CN)
Housing colour	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

Housing type	Fixed
Description	Cambridge SQ TR PH
Mounting brackets	Trim
Wattage	9W, 12W
Current	200mA (9W), 300mA (12W)
Beam angle	20°, 30°, 50°
Housing shape	Pinhole (PH)
Housing colour	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W



Housing type	Fixed
Description	Cambridge SQ TL CN
Mounting brackets	Trimless
Wattage	9W, 12W
Current	200mA (9W), 300mA (12W)
Beam angle	20°, 30°, 50°
Housing shape	Cone (CN)
Housing colour	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

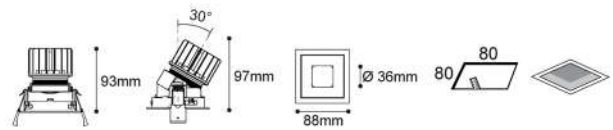
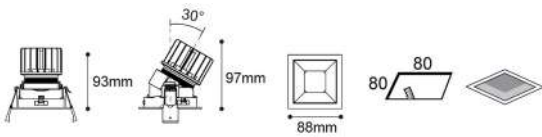
Housing type	Fixed
Description	Cambridge SQ TL PH
Mounting brackets	Trimless
Wattage	9W, 12W
Current	200mA (9W), 300mA (12W)
Beam angle	20°, 30°, 50°
Housing shape	Pinhole (PH)
Housing colour	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

## THE CAMBRIDGE SERIES: RANGE SPECIFICATIONS

### TILTABLE RECESSED SPOTLIGHTS / DOWNLIGHTS - ROUND

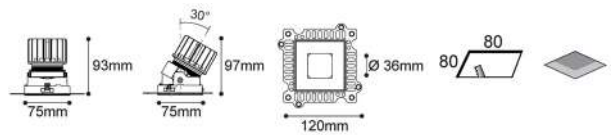
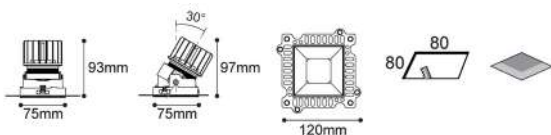


14W



Housing type	Tiltable
Description	Cambridge TLT SQ TR CN
Mounting bracket	Trim
Wattage	14W
Current	350mA
Beam angle	15°, 24°, 50°
Housing shape	Cone (CN)
Housing colour	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

Housing type	Tiltable
Description	Cambridge TLT SQ TR PH
Mounting bracket	Trim
Wattage	14W
Current	350mA
Beam angle	15°, 24°, 50°
Housing shape	Pinhole (PH)
Housing colour	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W



Housing type	Tiltable
Description	Cambridge TLT SQ TL CN
Mounting bracket	Trimless
Wattage	14W
Current	350mA
Beam angle	15°, 24°, 50°
Housing shape	Cone (CN)
Housing colour	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W

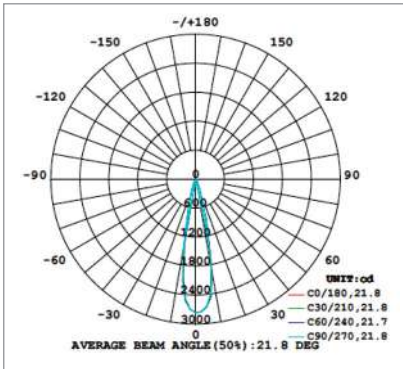
Housing type	Tiltable
Description	Cambridge TLT SQ TL PH
Mounting bracket	Trimless
Wattage	14W
Current	350mA
Beam angle	15°, 24°, 50°
Housing shape	Pinhole (PH)
Housing colour	Black (BLK)
Lumen output at source (lm/W) for 3000K luminaire	94 lm/W



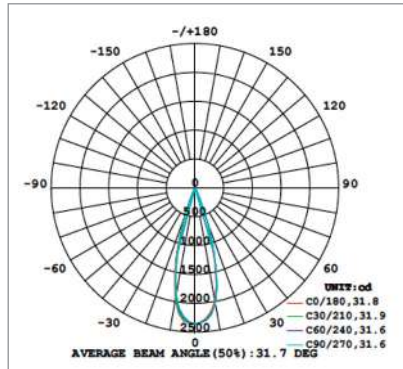
**THE CAMBRIDGE SERIES: LIGHT DISTRIBUTION AND AAI GRAPHS**

**9W Luminaires**

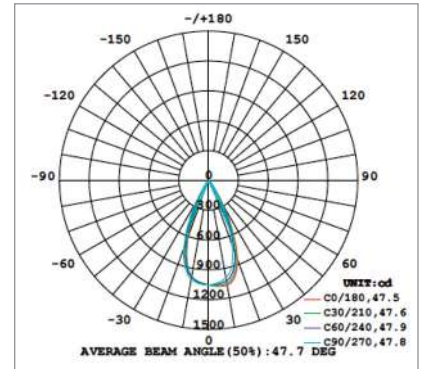
**20° BEAM ANGLE, CONE**



**30° BEAM ANGLE, CONE**



**50° BEAM ANGLE, CONE**

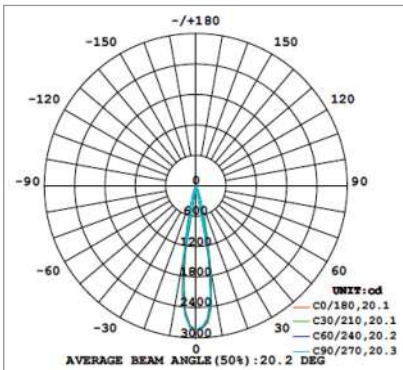


Lux	Coverage	Height
3000 k		
2771 lx		39 cm – 1 m
693 lx		77 cm – 2 m
308 lx		116 cm – 3 m
173 lx		155 cm – 4 m
111 lx		193 cm – 5 m

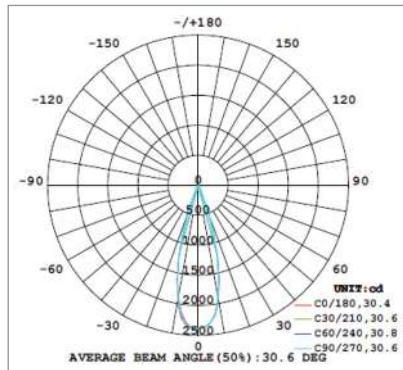
Lux	Coverage	Height
3000 k		
2355 lx		57 cm – 1 m
589 lx		113 cm – 2 m
262 lx		170 cm – 3 m
147 lx		226 cm – 4 m
94 lx		283 cm – 5 m

Lux	Coverage	Height
3000 k		
1061 lx		88 cm – 1 m
265 lx		176 cm – 2 m
118 lx		264 cm – 3 m
66 lx		352 cm – 4 m
42 lx		440 cm – 5 m

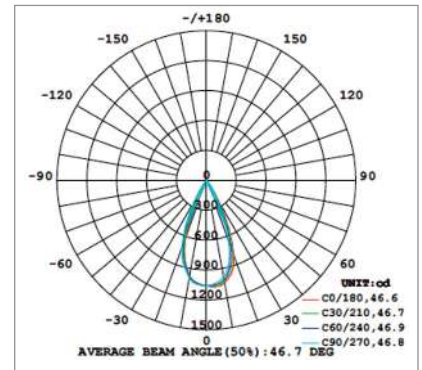
**20° BEAM ANGLE, PINHOLE**



**30° BEAM ANGLE, PINHOLE**



**50° BEAM ANGLE, PINHOLE**



Lux	Coverage	Height
3000 k		
2839 lx		36 cm – 1 m
710 lx		72 cm – 2 m
316 lx		107 cm – 3 m
177 lx		143 cm – 4 m
114 lx		179 cm – 5 m

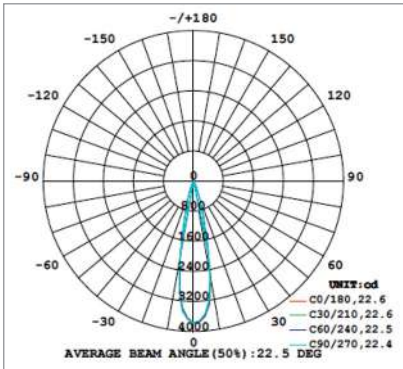
Lux	Coverage	Height
3000 k		
2393 lx		54 cm – 1 m
598 lx		109 cm – 2 m
266 lx		163 cm – 3 m
150 lx		218 cm – 4 m
96 lx		272 cm – 5 m

Lux	Coverage	Height
3000 k		
1065 lx		86 cm – 1 m
266 lx		172 cm – 2 m
118 lx		258 cm – 3 m
67 lx		345 cm – 4 m
43 lx		431 cm – 5 m

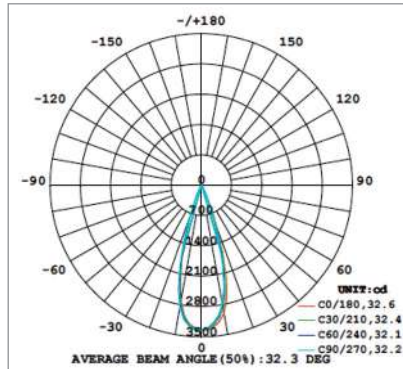
**THE CAMBRIDGE SERIES: LIGHT DISTRIBUTION AND AAI GRAPHS**

**12W Luminaires**

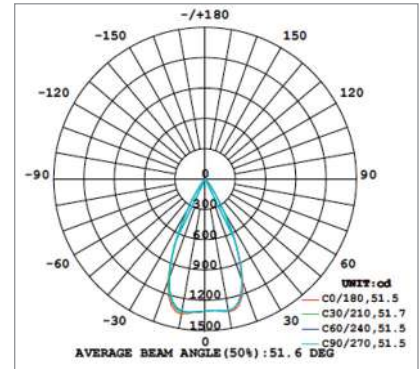
**20° BEAM ANGLE, CONE**



**30° BEAM ANGLE, CONE**



**50° BEAM ANGLE, CONE**

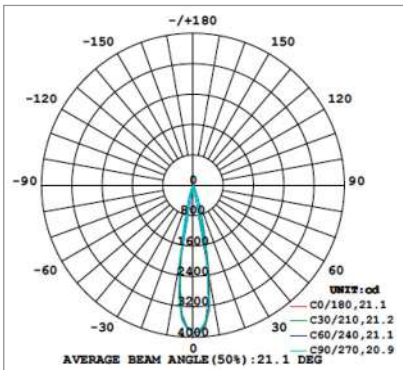


3000 k		
3772 lx		40 cm – 1 m
943 lx		80 cm – 2 m
419 lx		119 cm – 3 m
236 lx		159 cm – 4 m
151 lx		199 cm – 5 m
Lux	Coverage	Height

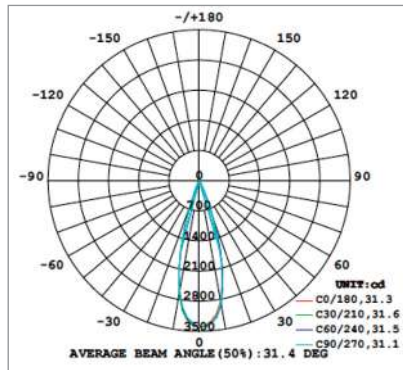
3000 k		
3354 lx		58 cm – 1 m
838 lx		116 cm – 2 m
373 lx		173 cm – 3 m
210 lx		231 cm – 4 m
134 lx		289 cm – 5 m
Lux	Coverage	Height

3000 k		
1312 lx		96 cm – 1 m
328 lx		193 cm – 2 m
146 lx		289 cm – 3 m
82 lx		386 cm – 4 m
52 lx		482 cm – 5 m
Lux	Coverage	Height

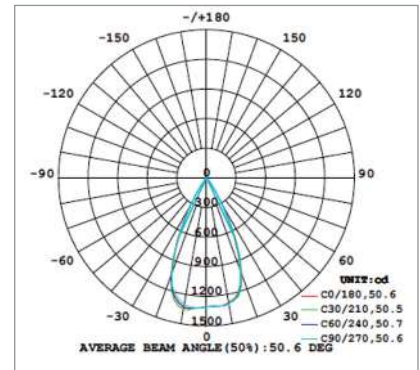
**20° BEAM ANGLE, PINHOLE**



**30° BEAM ANGLE, PINHOLE**



**50° BEAM ANGLE, PINHOLE**



3000 k		
3877 lx		37 cm – 1 m
969 lx		74 cm – 2 m
431 lx		111 cm – 3 m
242 lx		149 cm – 4 m
155 lx		186 cm – 5 m
Lux	Coverage	Height

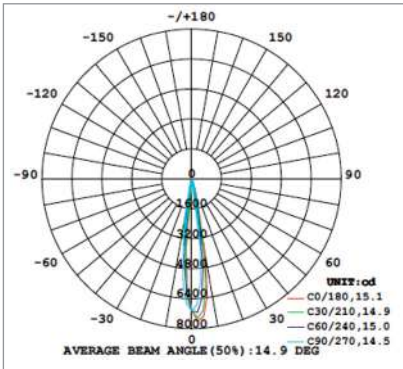
3000 k		
3422 lx		56 cm – 1 m
856 lx		111 cm – 2 m
380 lx		167 cm – 3 m
214 lx		223 cm – 4 m
137 lx		278 cm – 5 m
Lux	Coverage	Height

3000 k		
1314 lx		95 cm – 1 m
329 lx		189 cm – 2 m
146 lx		284 cm – 3 m
82 lx		378 cm – 4 m
53 lx		473 cm – 5 m
Lux	Coverage	Height

# THE CAMBRIDGE SERIES: LIGHT DISTRIBUTION AND AAI GRAPHS

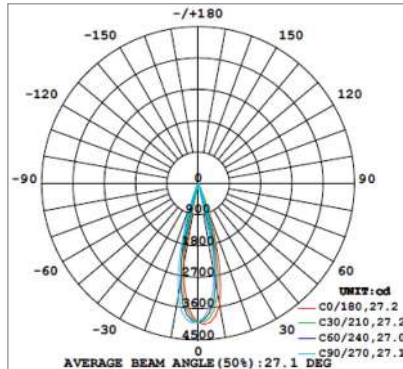
## 14W Luminaires

15° BEAM ANGLE, CONE



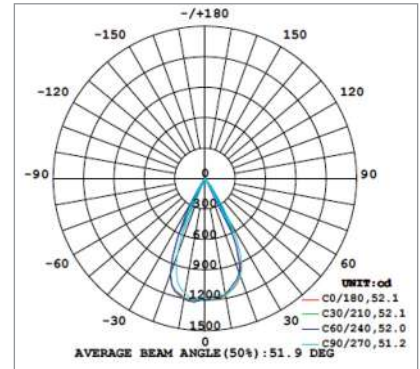
Lux	Coverage	Height
7483 lx		26 cm   1 m
1871 lx		51 cm   2 m
831 lx		77 cm   3 m
468 lx		102 cm   4 m
299 lx		128 cm   5 m

24° BEAM ANGLE, CONE



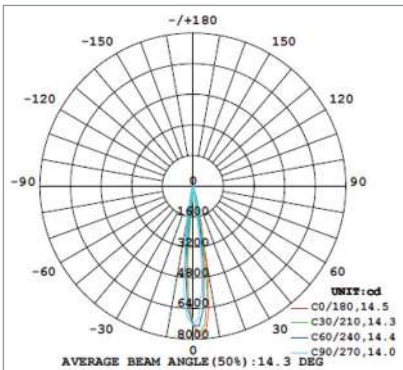
Lux	Coverage	Height
4054 lx		48 cm   1 m
1013 lx		96 cm   2 m
450 lx		144 cm   3 m
253 lx		192 cm   4 m
162 lx		240 cm   5 m

50° BEAM ANGLE, CONE



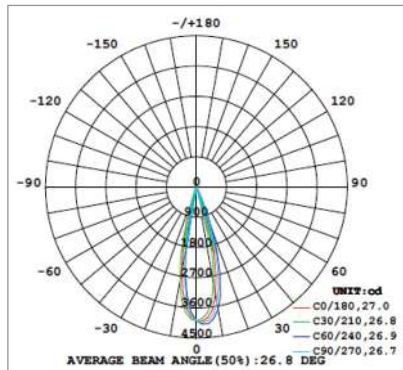
Lux	Coverage	Height
1203 lx		96 cm   1 m
301 lx		192 cm   2 m
134 lx		288 cm   3 m
75 lx		384 cm   4 m
48 lx		480 cm   5 m

15° BEAM ANGLE, PINHOLE



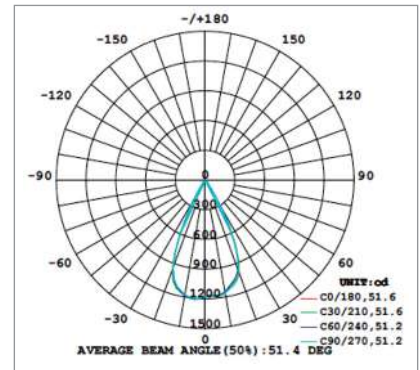
Lux	Coverage	Height
7700 lx		25 cm   1 m
1925 lx		49 cm   2 m
856 lx		74 cm   3 m
481 lx		99 cm   4 m
308 lx		124 cm   5 m

24° BEAM ANGLE, PINHOLE



Lux	Coverage	Height
4067 lx		48 cm   1 m
1017 lx		95 cm   2 m
452 lx		143 cm   3 m
254 lx		190 cm   4 m
163 lx		238 cm   5 m

50° BEAM ANGLE, PINHOLE



Lux	Coverage	Height
1197 lx		96 cm   1 m
299 lx		192 cm   2 m
133 lx		287 cm   3 m
75 lx		383 cm   4 m
48 lx		479 cm   5 m

## THE CAMBRIDGE SERIES: CONSTANT CURRENT DRIVERS

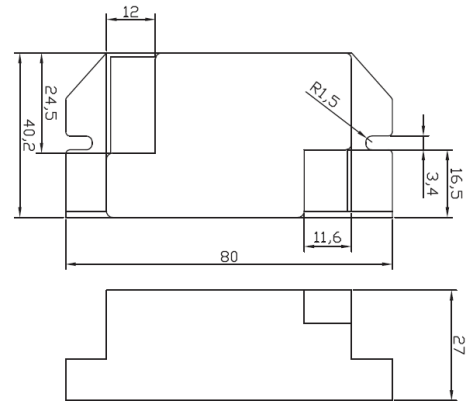
### KNIGHT 200 - CONSTANT SINGLE CURRENT LED DRIVER, 200mA

- SELV equivalent
- Suitable for Class II fixtures
- Flicker-free output
- Suitable for dry locations
- Average rated life: 30,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.
- 1 channel output



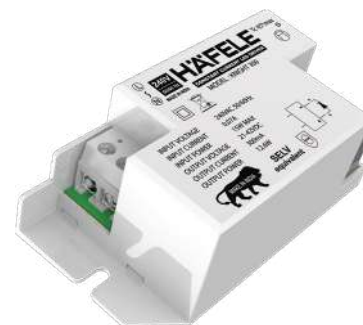
IP20

Technical Specifications	
Article No.	833.30.968
Input Voltage	240VAC ±10% 50/60 Hz
Input Current	0.05A Max.
Input Power	11W Max.
Output Current	200mA
Output Voltage	21 - 42VDC
Output Power	8.4W
Power Factor	>0.90
Ambient Operating Temperature Range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV as per EN 61000-4-5)



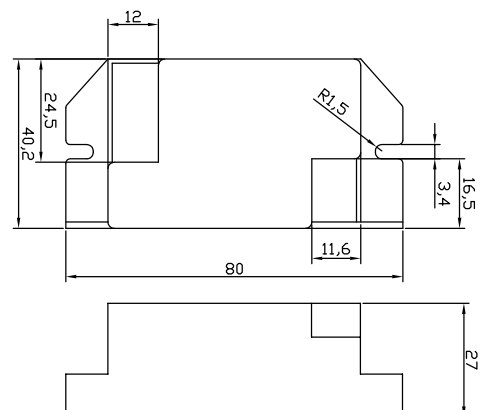
### KNIGHT 300 - CONSTANT SINGLE CURRENT LED DRIVER, 300mA

- SELV equivalent
- Suitable for Class II fixtures
- Flicker-free output
- Suitable for dry locations
- Average rated life: 30,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.



IP20

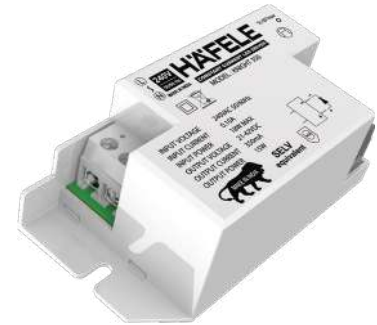
Technical Specifications	
Article No.	833.30.972
Input Voltage	240Vac ± 10%,50/60Hz
Input Current	0.07A Max.
Input Power	15W Max.
Output Current	300mA
Output Voltage	21 - 42VDC
Output Power	12.6W
Power Factor	>0.95
Ambient Operating Temperature Range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV as per EN 61000-4-5)



## THE CAMBRIDGE SERIES: CONSTANT CURRENT DRIVERS

### KNIGHT 350 - CONSTANT SINGLE CURRENT LED DRIVER, 350mA

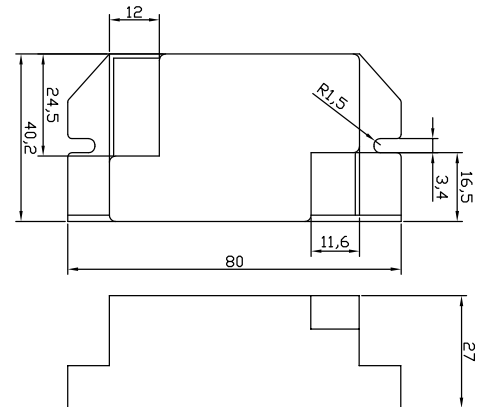
- SELV Equivalent
- Suitable for Class II Fixtures
- Flicker-free output
- Suitable for dry locations
- Average rated life: 30,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.
- 1 channel output



IP20

#### Technical Specifications

Article No.	833.30.971
Input Voltage	240VAC $\pm$ 10% 50/60 Hz
Input Current	0.10A Max.
Input Power	18W Max.
Output Current	350mA
Output Voltage	21 - 42VDC
Output Power	15W
Power Factor	>0.95
Ambient operating temperature range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV As per EN 61000-4-5)



## THE CAMBRIDGE SERIES: CONSTANT CURRENT DRIVERS

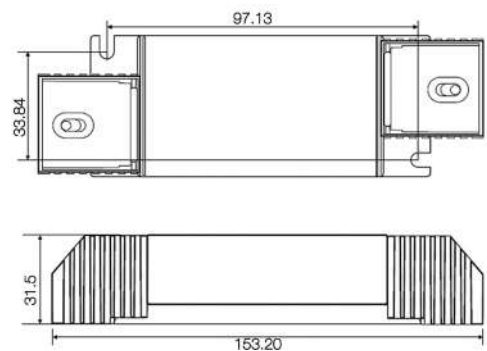
### DUKE 500 - CONSTANT MULTI-CURRENT LED DRIVER, 250mA, 350mA, 450mA, 500mA

IP20

- SELV equivalent
- CE certified
- Suitable for Class II fixtures
- Flicker-free output
- Multiple current selection through DIP switch
- Overload and short circuit protection
- Input over-voltage and under-voltage protection
- Suitable for dry locations
- Average rated life: 50,000 hours
- Sustains at 320VAC for 48 hours & 440VAC for 8 hours
- 1 channel output



Technical Specifications	
Article No.	833.30.973
Input Voltage	240VAC ±20% 50Hz
Input Current	0.11A Max.
Input Power	27W Max.
Output Current	250mA, 350mA, 450mA, 500mA (±7%)
Output Voltage	33 - 43VDC
Output Power	22W
Power Factor	>0.95
Ambient Operating Temperature Range	-20°C to +50°C
Input Protection	Yes (Line-Neutral 4kV)



### DUKE 500 DIP SWITCH CURRENT SELECTION CHART

DIP Switch		Output Current (mA)
PIN 1	PIN 2	
ON	ON	500
ON	OFF	450
OFF	ON	350
OFF	OFF	250

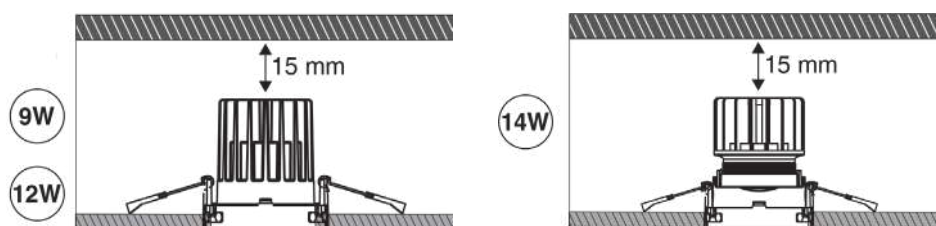


**NOTE:**

1. You can order the Knight Series or the Duke Series drivers, as per your requirement, by checking the suitable current ratings.
2. For Duke drivers: Please set the dip switch setting as indicated on the driver to activate the desired current rating out of the 4 options available
3. The Cambridge series downlights allow automation by connecting to Dali compatible drivers.

## THE CAMBRIDGE SERIES: INSTALLATION DETAILS

### GAP BETWEEN TRUE CEILING AND LUMINAIRE



Minimum 15 mm of gap from the true ceiling to the top edge of the luminaire is required for installation of all luminaires under the Cambridge series, irrespective of their wattage.

## THE CAMBRIDGE SERIES: ORDERING INFORMATION

### 1. LIGHT ENGINE

Article No.	Wattage	Current	Color Temperature	Beam Angle	Dimensions (mm)
833.12.916	9W	200mA	2700K	20°	Dia 70 x H 70
833.12.917	9W	200mA	3000K	20°	Dia 70 x H 70
833.12.918	9W	200mA	4000K	20°	Dia 70 x H 70
833.12.920	9W	200mA	2700K	30°	Dia 70 x H 70
833.12.921	9W	200mA	3000K	30°	Dia 70 x H 70
833.12.922	9W	200mA	4000K	30°	Dia 70 x H 70
833.12.924	9W	200mA	2700K	50°	Dia 70 x H 70
833.12.925	9W	200mA	3000K	50°	Dia 70 x H 70
833.12.926	9W	200mA	4000K	50°	Dia 70 x H 70
833.12.928	12W	300mA	2700K	20°	Dia 70 x H 70
833.12.929	12W	300mA	3000K	20°	Dia 70 x H 70
833.12.930	12W	300mA	4000K	20°	Dia 70 x H 70
833.12.932	12W	300mA	2700K	30°	Dia 70 x H 70
833.12.933	12W	300mA	3000K	30°	Dia 70 x H 70
833.12.934	12W	300mA	4000K	30°	Dia 70 x H 70
833.12.936	12W	300mA	2700K	50°	Dia 70 x H 70
833.12.937	12W	300mA	3000K	50°	Dia 70 x H 70
833.12.938	12W	300mA	4000K	50°	Dia 70 x H 70
833.12.956	14W	350mA	2700K	15°	Dia 63 x H 65
833.12.957	14W	350mA	3000K	15°	Dia 63 x H 65
833.12.958	14W	350mA	4000K	15°	Dia 63 x H 65
833.12.960	14W	350mA	2700K	24°	Dia 63 x H 65
833.12.961	14W	350mA	3000K	24°	Dia 63 x H 65
833.12.962	14W	350mA	4000K	24°	Dia 63 x H 65
833.12.964	14W	350mA	2700K	50°	Dia 63 x H 65
833.13.500	14W	350mA	3000K	50°	Dia 63 x H 65
833.13.501	14W	350mA	4000K	50°	Dia 63 x H 65

## THE CAMBRIDGE SERIES: ORDERING INFORMATION

### 2. LOUVERS / GLARE REDUCTION ADD-ONS

Article No.	Description
833.13.563	Stanford/Cambridge Stripped Glass
833.13.566	Stanford/Cambridge Honeycomb Louver
833.13.571	Stanford/Cambridge Woven Glass
833.13.575	Stanford/Cambridge Diffusion Sheet

### 3. HOUSING

Article No	Wattage	Shape	Housing type	Baffle Type	Dimensions (mm)
833.12.944	9W, 12W	Round	Fixed	Cone	Dia 70 x H 20
833.12.945	9W, 12W	Round	Fixed	Pinhole	Dia 70 x H 23
833.12.946	9W, 12W	Square	Fixed	Cone	70 x 70 x 20
833.12.947	9W, 12W	Square	Fixed	Pinhole	70 x 70 x 20
833.13.507	14W	Round	Tilttable	Cone	Dia 70 x H 25
833.13.508	14W	Round	Tilttable	Pinhole	Dia 70 x H 23
833.13.509	14W	Square	Tilttable	Cone	70 x 70 x 20
833.13.510	14W	Square	Tilttable	Pinhole	70 x 70 x 23

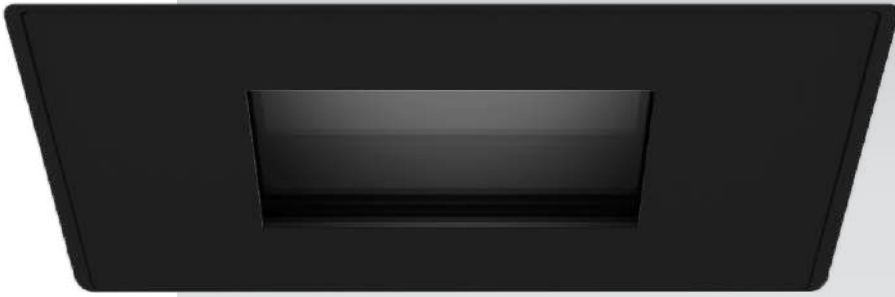
### 4. MOUNTING BRACKET

Article No.	Shape	Type	Wattage	Dimensions (mm)
833.12.949	Round	Trim	9W, 12W	Dia 100 x H 50
833.12.953	Square	Trim	9W, 12W	100 x 100 x 50
833.12.951	Round	Trimless	9W, 12W	Dia 122 x H 18
833.12.955	Square	Trimless	9W, 12W	125 x 125 x 18
833.13.512	Round	Trim	14W	Dia 100 x H 50
833.13.517	Square	Trim	14W	100 x 100 x 50
833.13.514	Round	Trimless	14W	Dia 122 x H 18
833.13.519	Square	Trimless	14W	125 x 125 x 18

### 5. DRIVERS

Article No.	Description	Current
833.30.968	Knight 200 - Constant Single Current LED Driver, 200mA	200mA
833.30.972	Knight 300 - Constant Single Current LED Driver, 300mA	300mA
833.30.971	Knight 350 - Constant Single Current LED Driver, 350mA	350mA
833.30.973	Duke 500 - Constant Multi-Current LED Driver, 250mA, 350mA, 450mA, 500mA	500mA Max.







Mumbai



Sydney



New York



## EDINBURGH

Harmony in interior design is achieved by using colours that go well with each other. The element that further enhances this harmony is a lighting range that fulfills all of your interior lighting needs with a uniform luminaire design.

The Edinburgh series from Hafele's Architectural Lights range makes your interior design complete by offering light fixtures with a similar design that can be used for true ceiling as well as false ceiling installations. Drivers already built into the luminaires increase the ease of installation, whereas multiple design options like recess mounted lights with multiple application possibilities that go into false ceiling, surface mounted lights with swivel motion and suspended lights that go on true ceiling give you the freedom of installation. Offering a low UGR, the light output of this series gives you a comfortable visual experience.

These luminaires, available in natural white, warm white and cool white light colours, along with baffle colour options of black, white and bronze, are the perfect solution for creating the ultimate harmony in your interiors.

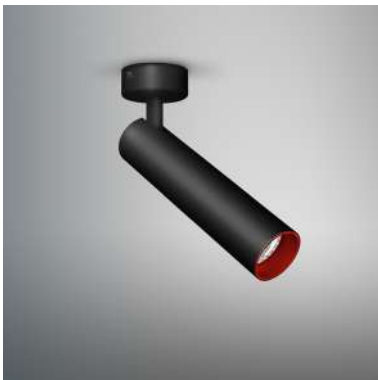
## THE EDINBURGH SERIES: FEATURES

### 1. Recess mounted fixtures with multiple application possibilities



The same fixture of recess mounted luminaires can be used as surface mounted light, recess mounted light and surface mounted light with swivel motion. The luminaire can be used as recess mounted light by completely pushing it in, as surface mounted light by partially pulling it out and as surface mounted light with swivel motion by completely pulling it out.

### 2. Diverse range of applications



Surface mounted swivel



Surface mounted (fixed)

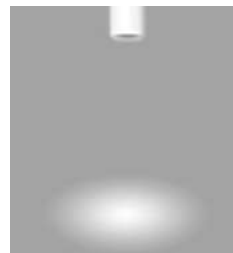
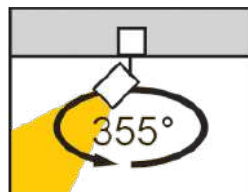


Suspended

In addition to recess mounted, luminaires from this series are also available in various fixture options like surface mounted swivel, surface mounted (fixed) and suspended. Edinburgh series thus offers you diverse applications by providing you different lighting options. These luminaires can be used as downlights and spotlights with the exception of surface mounted swivel where, in addition, you can also adjust the beam to focus on the wall, thereby illuminating every aspect of your interior. Also, these luminaires are available in different baffle colours - white, black and bronze, and body colours - black and white.

### 3. Swivel system

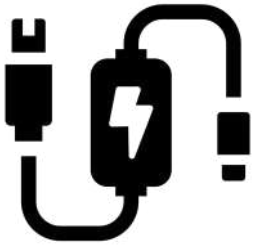
Recess mounted and surface mounted swivel luminaires from Edinburgh series can be tilted to up to 90° as well as turned 355°. This gives you additional flexibility in adjusting the beam even after installing the luminaires.



### 4. Uniform light distribution

Luminaires from this series offer a uniform light distribution with a smooth gradient. This highlights the interiors evenly and gives a comfortable visual experience.

## THE EDINBURGH SERIES: FEATURES



### 5. In-built drivers

Surface mounted swivel, surface mounted (fixed) and suspended luminaires from this series come with in-built drivers and thus can be directly connected to the 230VAC mains power supply. This makes Edinburgh series luminaires easy and convenient to install and require less space.

Note: Recess mounted swivel luminaires require external drivers.



### 6. Unified Glare Rating (UGR) of <19

The lower the UGR rating, the lower the glare. In order to achieve comfortable illumination in your living spaces, the UGR of the luminaires is recommended to be below 20 which is easily achievable using Edinburgh series luminaires since these have UGR rating of less than 19. UGR values range from 40 (extremely high glare) to 5 (very low glare).

### 7. Glare reduction add-ons



Striped Glass



Woven Glass



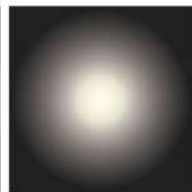
Honeycomb louver



Standard Lens Protector  
(Transparent glass)



Striped Glass



Woven Glass



Honeycomb Louver

With numerous louver options to choose from, 15W luminaires from Edinburgh series add more flexibility and freedom for the lighting designer. The honeycomb louver reduces glare, striped glass creates oval distribution and woven glass softens and spreads the light.

### 8. Easy assembly

The luminaires from the Edinburgh Series follow the concept of plug and play and can be installed quickly and completely tool free. All you need to do is to attach the mounting bracket (in case of recessed lights) to the false ceiling till the interior construction/renovation goes on. Once the interior work is done, simply connect the luminaire to the 230VAC supply or to the compatible driver and insert the luminaire into the mounting bracket (in case of recessed lights) or fix them directly on the surface (in case of surface mounted lights).

## THE EDINBURGH SERIES: DECODING THE NOMENCLATURE

Edinburgh	7W	.7A	RD	TR	SW	18°	27K	WH	BZ
	①	②	③	④	⑤	⑥	⑦	⑧	⑨

Number	Category	Abbreviation	Possibilities
1	Output	W	7 Watts
			13 Watts
			15 Watts
2	Current	.7A	700mA
		.3A	300mA
		.35A	350mA
3	Shape	RD	Round
		SQ	Square
4	Mounting Bracket Type	TR	Trim
		TL	Trimless
5	Mounting Technique	SWL	Swivel
		SM	Surface Mounted
		SS	Suspended
6	Beam Angle	18°	18 degree
		24°	24 degree
		36°	36 degree
7	Colour Temperature	27K	2700 K
		30K	3000 K
		40K	4000 K
8	Body Colour	BLK	Black
		WH	White
9	Baffle Colour	BLK	Black
		WH	White
		BZ	Bronze

## THE EDINBURGH SERIES: RANGE SPECIFICATIONS

Luminaire type	Downlight and Spotlight
Colour temperature	2700K, 3000K, 4000K
CRI	>95
Wattage	7W, 13W, 15W
Current	300mA (13W), 350mA (7W, 15W), 700mA (7W)
Lumen output at source (lm/W) for 3000K luminaire	110 lm/W (7W), 105 lm/W (13W), 95 lm/W (15W)
Maximum ambient temperature	45° C
Material	Die cast aluminium
Beam angle	18°, 24°, 36°
Body colour	White, Black
Baffle colour	White, Black, Bronze
Average rated life	> 60,000 hrs.
Degree of protection	IP44
Energy efficiency class	Class II
Certification	BIS (Bureau of Indian Standards)
Applications	Indoors: Residential areas, shopping malls, shops, hotel rooms, restaurants & bars, showrooms, offices

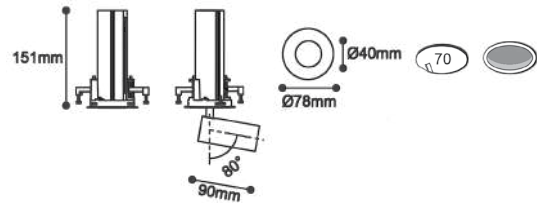
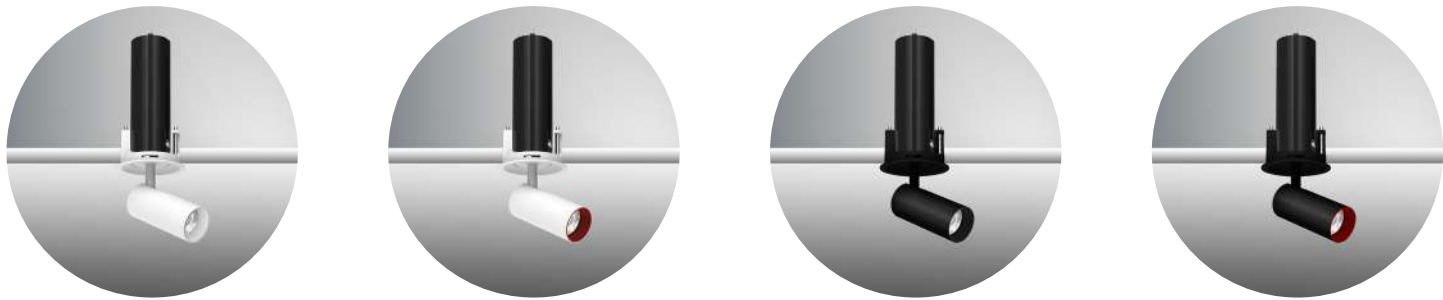
**THE EDINBURGH SERIES: RANGE SPECIFICATIONS**

RECESS MOUNTED SWIVEL DOWNLIGHT AND SPOTLIGHT - ROUND

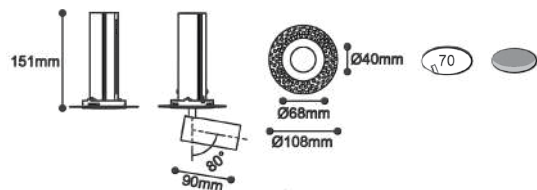
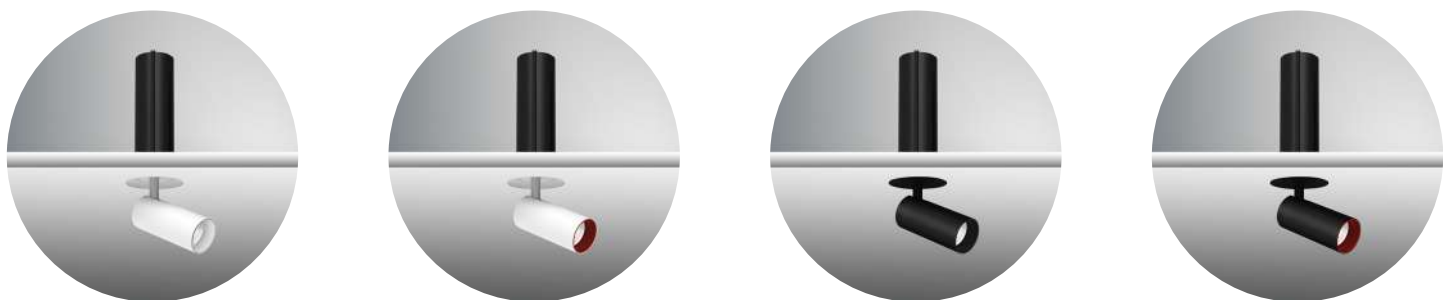






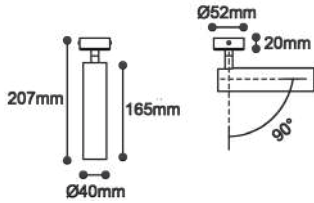
Description	Edinburgh RD TR SWL
Mounting technique	Recess
Mounting bracket type	Trim
Housing type	Swivel
Wattage	7W
Current	700mA
Beam angle	18°, 24°, 36°
Body colour	White, Black
Baffle colour	White (WH), Black (BLK), Bronze (BZ)
Lumen output at source (lm/W) for 3000K luminaire	110 lm/W
Driver	Knight 700 Constant Current LED Driver, 700mA



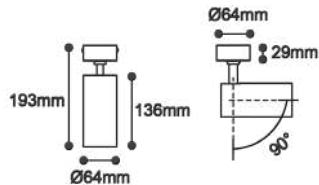
Description	Edinburgh RD TL SWL
Mounting technique	Recess
Mounting bracket type	Trimless
Housing type	Swivel
Wattage	7W
Current	700mA
Beam angle	18°, 24°, 36°
Body colour	White, Black
Baffle colour	White (WH), Black (BLK), Bronze (BZ)
Lumen output at source (lm/W) for 3000K luminaire	110 lm/W
Driver	Knight 700 Constant Current LED Driver, 700mA

## THE EDINBURGH SERIES: RANGE SPECIFICATIONS

SURFACE MOUNTED SWIVEL DOWNLIGHT AND SPOTLIGHT - ROUND



Description	Edinburgh RD SM SWL
Mounting technique	Surface Mounted
Housing type	Swivel
Wattage	7W
Current	350mA
Beam angle	18°, 24°, 36°
Body colour	White, Black
Baffle colour	White (WH), Black (BLK), Bronze (BZ)
Lumen output at source (lm/W) for 3000K luminaire	110 lm/W
Driver	In-built - direct connection to 230VAC, 50Hz power supply



Description	Edinburgh RD SM SWL
Mounting technique	Surface Mounted
Housing type	Swivel
Wattage	15W
Current	350mA
Beam angle	18°, 24°, 36°
Body colour	White, Black
Baffle colour	White (WH), Black (BLK), Bronze (BZ)
Lumen output at source (lm/W) for 3000K luminaire	95 lm/W
Driver	In-built - direct connection to 230VAC, 50Hz power supply

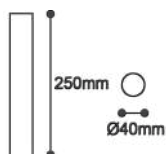


**THE EDINBURGH SERIES: RANGE SPECIFICATIONS**

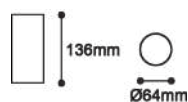
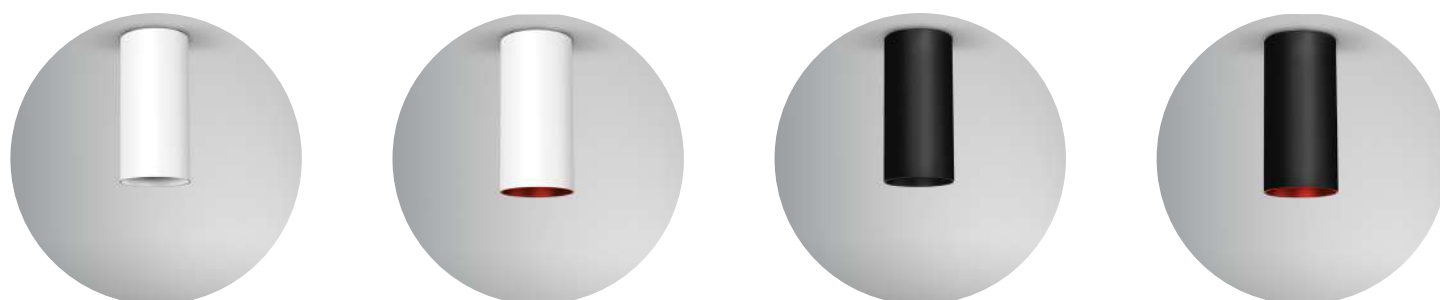
**SURFACE MOUNTED (FIXED) DOWNLIGHT AND SPOTLIGHT - ROUND**





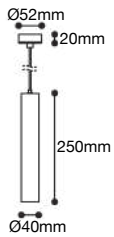
Description	Edinburgh RD SM
Mounting technique	Surface Mounted
Housing type	Fixed
Wattage	7W
Current	350mA
Beam angle	18°, 24°, 36°
Body colour	White, Black
Baffle colour	White (WH), Black (BLK), Bronze (BZ)
Lumen output at source (lm/W) for 3000K luminaire	110 lm/W
Driver	In-built - direct connection to 230VAC, 50Hz power supply



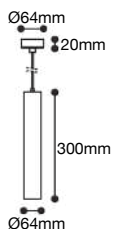
Description	Edinburgh RD SM
Mounting technique	Surface Mounted
Housing type	Fixed
Wattage	15W
Current	350mA
Beam angle	18°, 24°, 36°
Body colour	White, Black
Baffle colour	White (WH), Black (BLK), Bronze (BZ)
Lumen output at source (lm/W) for 3000K luminaire	95 lm/W
Driver	In-built - direct connection to 230VAC, 50Hz power supply

## THE EDINBURGH SERIES: RANGE SPECIFICATIONS

### SUSPENDED DOWNLIGHT AND SPOTLIGHT - ROUND



Description	Edinburgh RD SS
Mounting technique	Suspended
Housing type	Fixed
Wattage	7W
Current	350mA
Beam angle	18°, 24°, 36°
Body colour	White, Black
Baffle colour	White (WH), Black (BLK), Bronze (BZ)
Lumen output at source (lm/W) for 3000K luminaire	110 lm/W
Suspension cable length (supplied with luminaire)	2 m
Driver	In-built - direct connection to 230VAC, 50Hz power supply



Description	Edinburgh RD SS
Mounting technique	Suspended
Housing type	Fixed
Wattage	13W
Current	300mA
Beam angle	18°, 24°, 36°
Body colour	White, Black
Baffle colour	White (WH), Black (BLK), Bronze (BZ)
Lumen output at source (lm/W) for 3000K luminaire	105 lm/W
Suspension cable length (supplied with luminaire)	2 m
Driver	In-built - direct connection to 230VAC, 50Hz power supply

## THE EDINBURGH SERIES: RANGE SPECIFICATIONS

### SURFACE MOUNTED (FIXED) DOWNLIGHT AND SPOTLIGHT - SQUARE

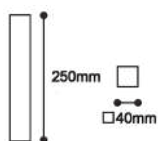


IP20

UGR <19



7W



Description	Edinburgh SQ SM
Mounting technique	Surface Mounted
Housing type	Fixed
Wattage	7W
Current	350mA
Beam angle	18°, 24°, 36°
Body colour	White, Black
Baffle colour	White (WH), Black (BLK), Bronze (BZ)
Lumen output at source (lm/W) for 3000K luminaire	110 lm/W
Driver	In-built - direct connection to 230VAC, 50Hz power supply

### SUSPENDED DOWNLIGHT AND SPOTLIGHT - SQUARE

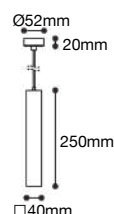


IP20

UGR <19



7W

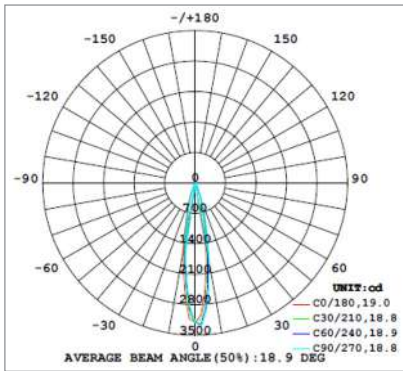


Description	Edinburgh SQ SS
Mounting technique	Suspended
Housing type	Fixed
Wattage	7W
Current	350mA
Beam angle	18°, 24°, 36°
Body colour	White, Black
Baffle colour	White (WH), Black (BLK), Bronze (BZ)
Lumen output at source (lm/W) for 3000K luminaire	110 lm/W
Suspension cable length (supplied with luminaire)	2 m
Driver	In-built - direct connection to 230VAC, 50Hz power supply

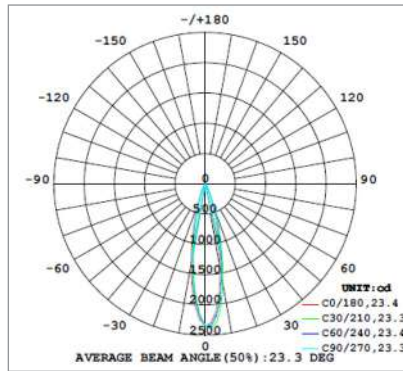
# THE EDINBURGH SERIES: LIGHT DISTRIBUTION AND AAI GRAPHS

## Recess mounted swivel, 7W - Edinburgh 7W SWL

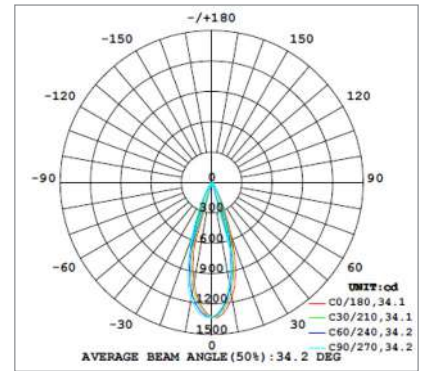
18° BEAM ANGLE



24° BEAM ANGLE



36° BEAM ANGLE



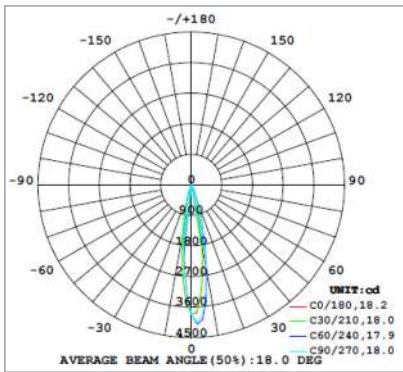
3000 k		18°
3281 lx	Coverage	33 cm – 1 m
820 lx	Coverage	67 cm – 2 m
365 lx	Coverage	100 cm – 3 m
205 lx	Coverage	133 cm – 4 m
131 lx	Coverage	167 cm – 5 m
Lux	Coverage	Height

3000 k		24°
2394 lx	Coverage	41 cm – 1 m
598 lx	Coverage	83 cm – 2 m
266 lx	Coverage	124 cm – 3 m
150 lx	Coverage	166 cm – 4 m
96 lx	Coverage	207 cm – 5 m
Lux	Coverage	Height

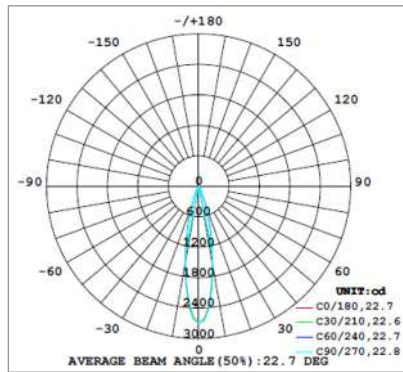
3000 k		36°
1339 lx	Coverage	61 cm – 1 m
335 lx	Coverage	123 cm – 2 m
149 lx	Coverage	184 cm – 3 m
84 lx	Coverage	246 cm – 4 m
54 lx	Coverage	307 cm – 5 m
Lux	Coverage	Height

## Surface mounted swivel, 7W - Edinburgh 7W SM SWL

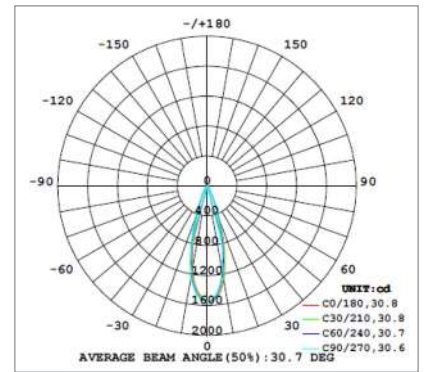
18° BEAM ANGLE



24° BEAM ANGLE



36° BEAM ANGLE



3000 k		18°
3988 lx	Coverage	32 cm – 1 m
997 lx	Coverage	64 cm – 2 m
443 lx	Coverage	96 cm – 3 m
249 lx	Coverage	128 cm – 4 m
160 lx	Coverage	159 cm – 5 m
Lux	Coverage	Height

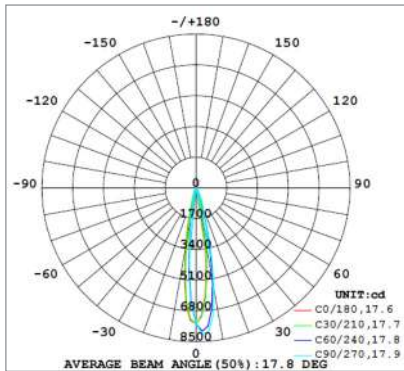
3000 k		24°
2702 lx	Coverage	40 cm – 1 m
676 lx	Coverage	81 cm – 2 m
300 lx	Coverage	121 cm – 3 m
169 lx	Coverage	161 cm – 4 m
108 lx	Coverage	201 cm – 5 m
Lux	Coverage	Height

3000 k		36°
1552 lx	Coverage	55 cm – 1 m
388 lx	Coverage	110 cm – 2 m
173 lx	Coverage	165 cm – 3 m
97 lx	Coverage	219 cm – 4 m
62 lx	Coverage	274 cm – 5 m
Lux	Coverage	Height

# THE EDINBURGH SERIES: LIGHT DISTRIBUTION AND AAI GRAPHS

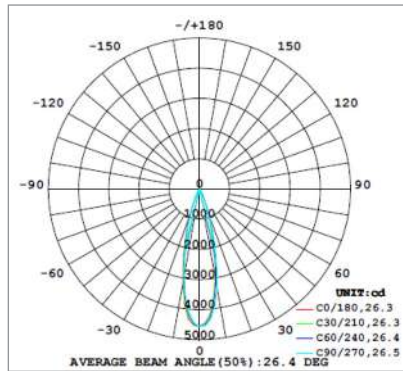
## Surface mounted swivel, 15W - Edinburgh 15W SM SWL

18° BEAM ANGLE



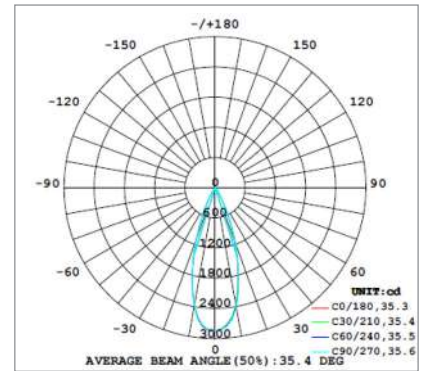
3000 k		18°
Lux	Coverage	Height
7982 lx	31 cm	1 m
1996 lx	63 cm	2 m
887 lx	94 cm	3 m
499 lx	125 cm	4 m
319 lx	156 cm	5 m

24° BEAM ANGLE



3000 k		24°
Lux	Coverage	Height
4667 lx	47 cm	1 m
1167 lx	93 cm	2 m
519 lx	140 cm	3 m
292 lx	187 cm	4 m
187 lx	233 cm	5 m

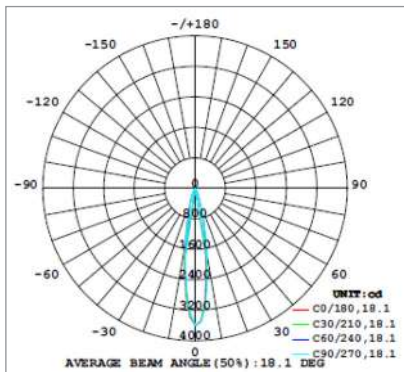
36° BEAM ANGLE



3000 k		36°
Lux	Coverage	Height
2871 lx	64 cm	1 m
718 lx	127 cm	2 m
319 lx	191 cm	3 m
179 lx	255 cm	4 m
115 lx	319 cm	5 m

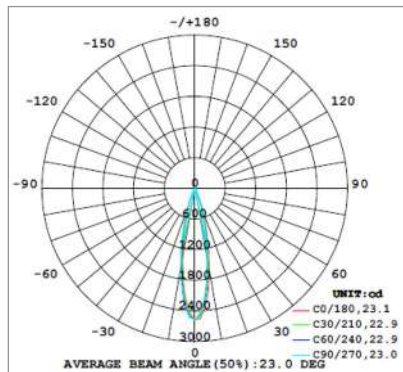
## Surface mounted (fixed), round, 7W - Edinburgh 7W RD SM

18° BEAM ANGLE



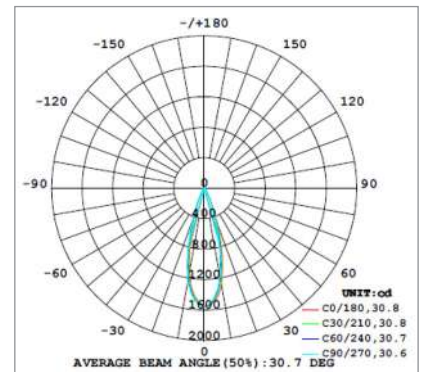
3000 k		18°
Lux	Coverage	Height
3602 lx	32 cm	1 m
901 lx	64 cm	2 m
400 lx	96 cm	3 m
225 lx	128 cm	4 m
144 lx	160 cm	5 m

24° BEAM ANGLE



3000 k		24°
Lux	Coverage	Height
2576 lx	41 cm	1 m
644 lx	82 cm	2 m
286 lx	123 cm	3 m
161 lx	163 cm	4 m
103 lx	204 cm	5 m

36° BEAM ANGLE

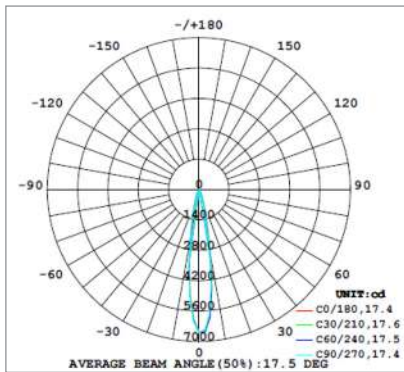


3000 k		36°
Lux	Coverage	Height
1552 lx	55 cm	1 m
388 lx	110 cm	2 m
173 lx	165 cm	3 m
97 lx	219 cm	4 m
62 lx	274 cm	5 m

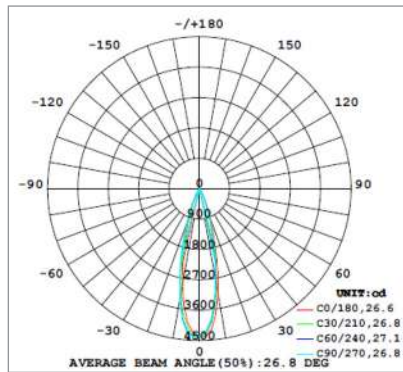
# THE EDINBURGH SERIES: LIGHT DISTRIBUTION AND AAI GRAPHS

Surface mounted (fixed), round, 15W - Edinburgh 15W RD SM

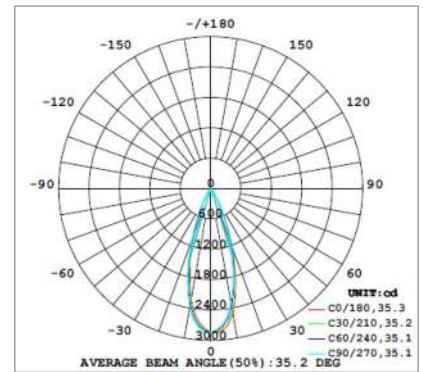
18° BEAM ANGLE



24° BEAM ANGLE



36° BEAM ANGLE



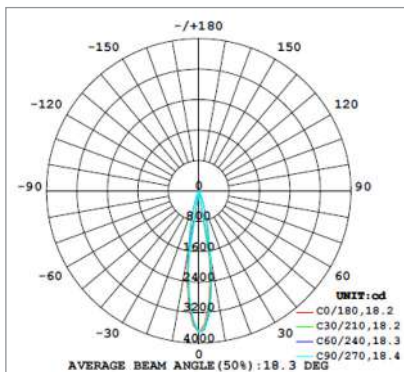
Lux	Coverage	Height
6611 lx	31 cm	1 m
1653 lx	61 cm	2 m
735 lx	92 cm	3 m
413 lx	123 cm	4 m
264 lx	154 cm	5 m

Lux	Coverage	Height
4412 lx	47 cm	1 m
1103 lx	95 cm	2 m
490 lx	142 cm	3 m
276 lx	189 cm	4 m
177 lx	237 cm	5 m

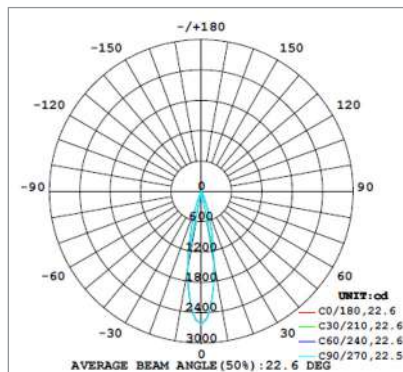
Lux	Coverage	Height
2852 lx	63 cm	1 m
713 lx	127 cm	2 m
317 lx	190 cm	3 m
178 lx	253 cm	4 m
114 lx	317 cm	5 m

Suspended, round, 7W - Edinburgh 7W RD SS

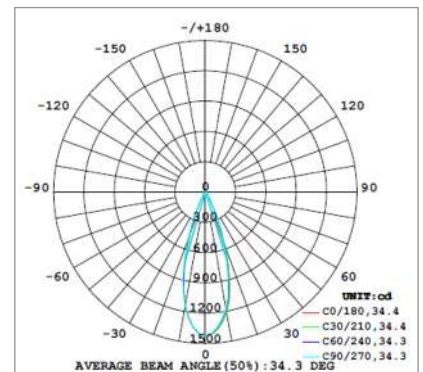
18° BEAM ANGLE



24° BEAM ANGLE



36° BEAM ANGLE



Lux	Coverage	Height
3728 lx	32 cm	1 m
932 lx	64 cm	2 m
414 lx	96 cm	3 m
233 lx	129 cm	4 m
149 lx	161 cm	5 m

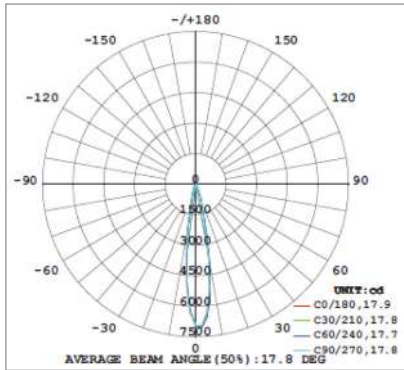
Lux	Coverage	Height
2624 lx	40 cm	1 m
656 lx	80 cm	2 m
292 lx	120 cm	3 m
164 lx	160 cm	4 m
105 lx	200 cm	5 m

Lux	Coverage	Height
1423 lx	62 cm	1 m
356 lx	123 cm	2 m
158 lx	185 cm	3 m
89 lx	247 cm	4 m
57 lx	309 cm	5 m

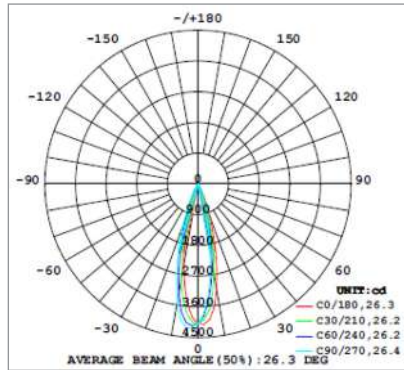
**THE EDINBURGH SERIES: LIGHT DISTRIBUTION AND AAI GRAPHS**

**Suspended, round, 13W - Edinburgh 13W RD SS**

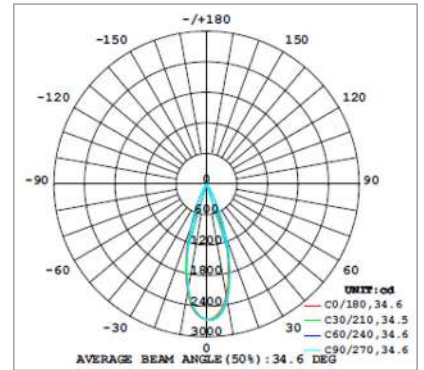
18° BEAM ANGLE



24° BEAM ANGLE



36° BEAM ANGLE



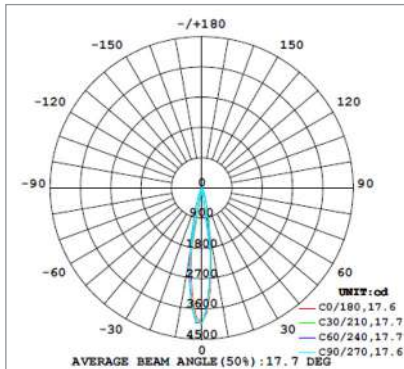
3000 k		
7017 lx		31 cm   1 m
1754 lx		63 cm   2 m
780 lx		94 cm   3 m
439 lx		125 cm   4 m
281 lx		157 cm   5 m
Lux	Coverage	Height

3000 k		
4209 lx		47 cm   1 m
1052 lx		93 cm   2 m
468 lx		140 cm   3 m
263 lx		187 cm   4 m
168 lx		234 cm   5 m
Lux	Coverage	Height

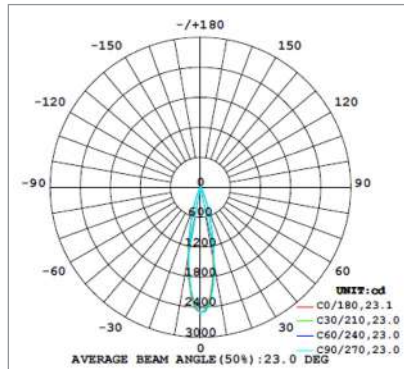
3000 k		
2676 lx		62 cm   1 m
669 lx		124 cm   2 m
297 lx		187 cm   3 m
167 lx		249 cm   4 m
107 lx		311 cm   5 m
Lux	Coverage	Height

**Surface mounted (fixed), square, 7W - Edinburgh 7W SQ SM**

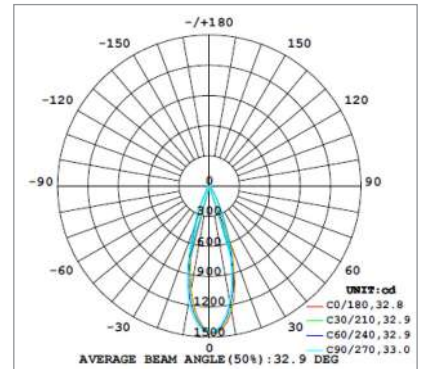
18° BEAM ANGLE



24° BEAM ANGLE



36° BEAM ANGLE



3000 k		
4042 lx		31 cm   1 m
1011 lx		62 cm   2 m
449 lx		93 cm   3 m
253 lx		124 cm   4 m
162 lx		155 cm   5 m
Lux	Coverage	Height

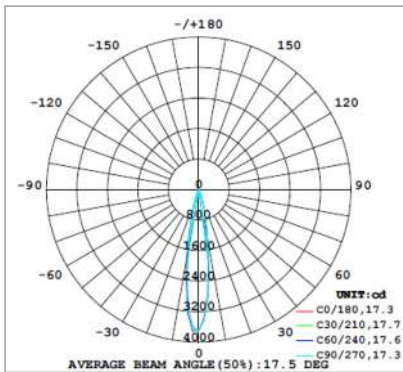
3000 k		
2520 lx		41 cm   1 m
630 lx		81 cm   2 m
280 lx		122 cm   3 m
158 lx		162 cm   4 m
111 lx		203 cm   5 m
Lux	Coverage	Height

3000 k		
1462 lx		59 cm   1 m
366 lx		118 cm   2 m
162 lx		177 cm   3 m
91 lx		236 cm   4 m
58 lx		295 cm   5 m
Lux	Coverage	Height

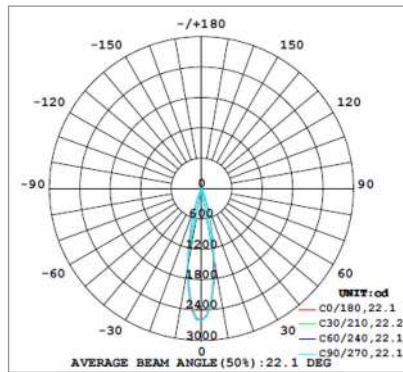
## THE EDINBURGH SERIES: LIGHT DISTRIBUTION AND AAI GRAPHS

Suspended, square, 7W - Edinburgh 7W SQ SS

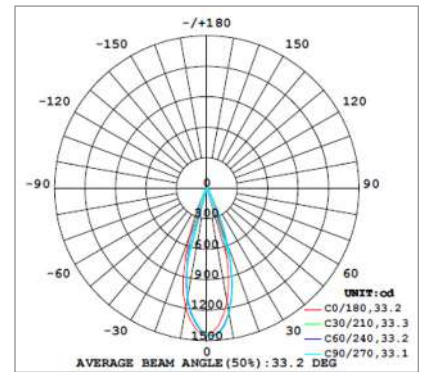
18° BEAM ANGLE



24° BEAM ANGLE



36° BEAM ANGLE



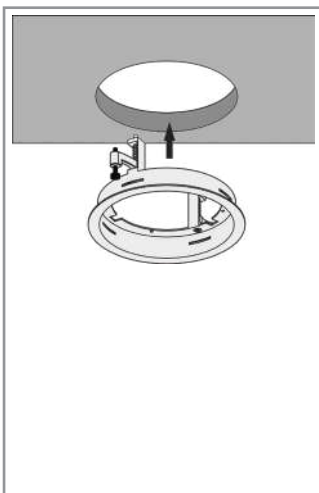
3000 k		18°	
3719 lx		31 cm	1 m
930 lx		61 cm	2 m
413 lx		92 cm	3 m
232 lx		123 cm	4 m
149 lx		153 cm	5 m
Lux	Coverage	Height	

3000 k		24°	
2621 lx		39 cm	1 m
655 lx		79 cm	2 m
291 lx		118 cm	3 m
164 lx		157 cm	4 m
105 lx		196 cm	5 m
Lux	Coverage	Height	

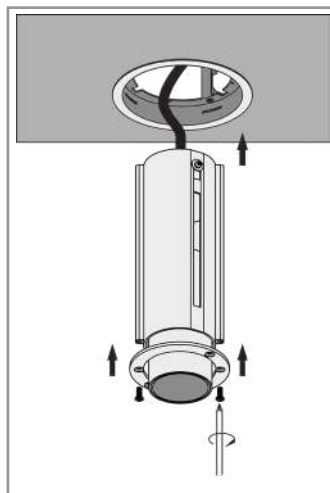
3000 k		36°	
1459 lx		59 cm	1 m
365 lx		119 cm	2 m
162 lx		178 cm	3 m
91 lx		238 cm	4 m
58 lx		297 cm	5 m
Lux	Coverage	Height	

## THE EDINBURGH SERIES: INSTALLATION DETAILS

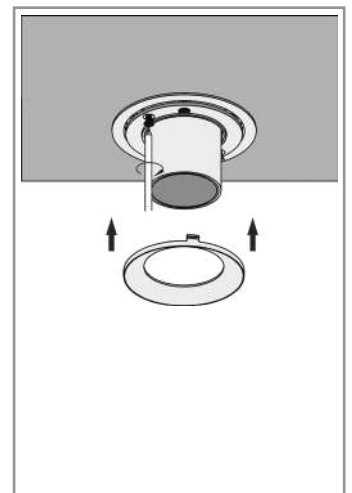
### RECESS MOUNTED SWIVEL DOWNLIGHT AND SPOTLIGHT WITH TRIM MOUNTING



1. Install the mounting bracket on to the false ceiling.



2. Once the interior work is done, connect the light engine to the driver and insert it into the mounting bracket and fix it using screws.

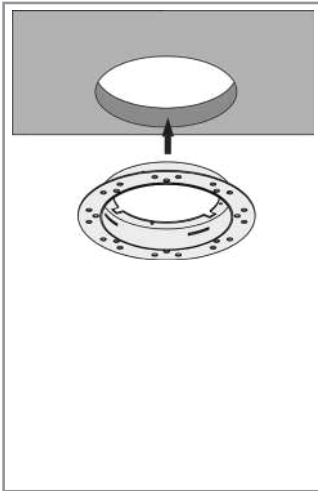


3. Finally press fit the baffle on to the light engine. Your luminaire is ready to use.

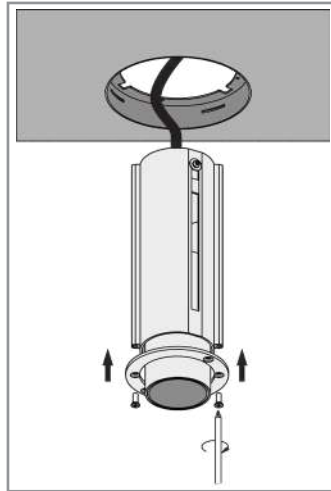


## THE EDINBURGH SERIES: INSTALLATION DETAILS

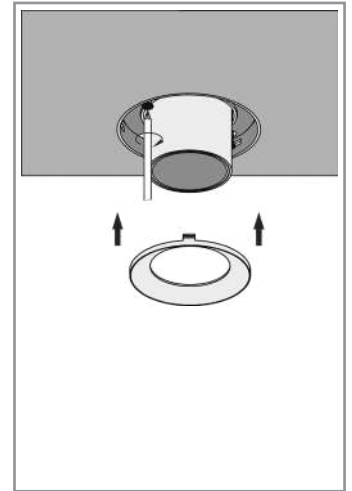
### RECESS MOUNTED SWIVEL DOWNLIGHT AND SPOTLIGHT WITH TRIMLESS MOUNTING



1. Fix the mounting bracket on to the false ceiling with the help of screws and cover the edges of the bracket using PoP so that it is not visible on the ceiling.

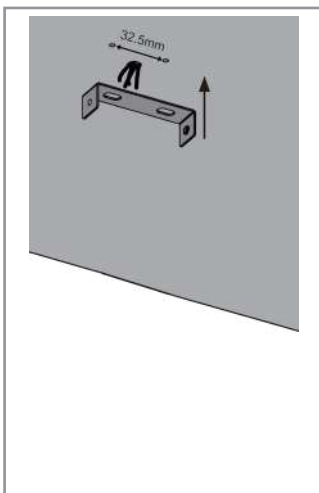


2. Once the interior work is done, connect the light engine to the driver and insert it into the mounting bracket and fix it using screws.

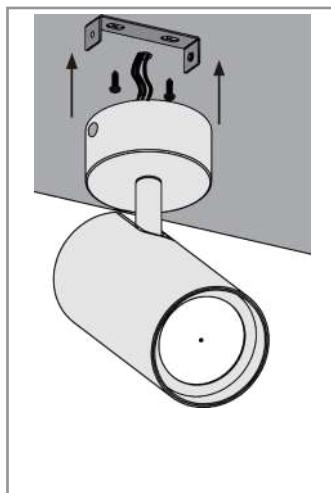


3. Finally press fit the baffle on to the light engine. Your luminaire is ready to use.

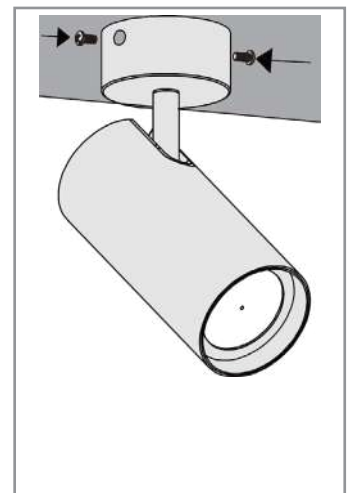
### SURFACE MOUNTED SWIVEL DOWNLIGHT AND SPOTLIGHT



1. Install the mounting bracket on to the false ceiling.



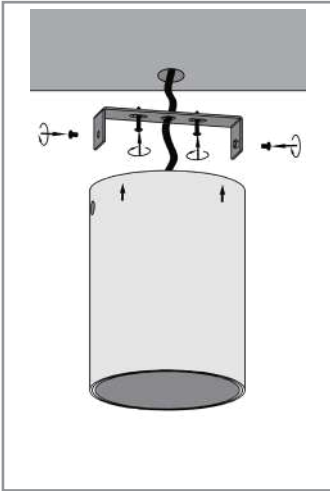
2. Connect the housing to the AC mains power supply.



3. Finally insert the luminaire on to the mounting bracket and fix it using screws. Your luminaire is ready to use.

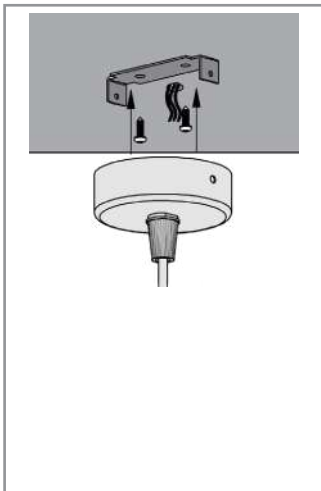
## THE EDINBURGH SERIES: INSTALLATION DETAILS

### SURFACE MOUNTED (FIXED) DOWNLIGHT AND SPOTLIGHT

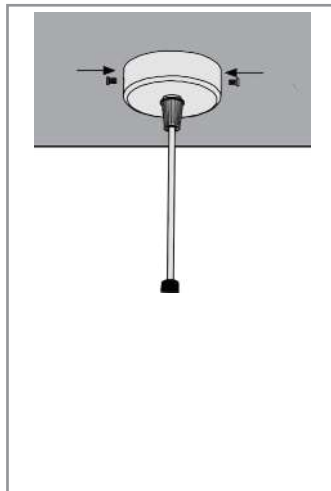


1. Fix the mounting bracket on to the false ceiling with the help of screws. Connect the luminaire to the AC mains power supply and slide the luminaire on to the mounting bracket and fix it with the help of screws. Your luminaire is now ready to use.

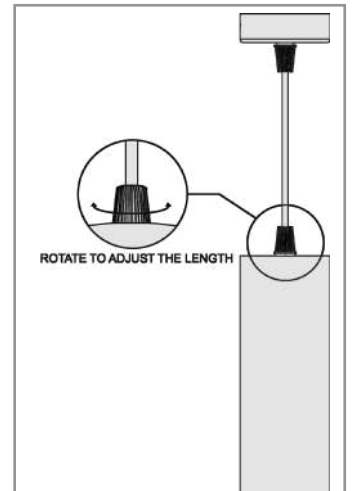
### SUSPENDED DOWNLIGHT AND SPOTLIGHT - SQUARE



1. Fix the mounting bracket on to the false ceiling with the help of screws.



2. Connect the housing to the AC mains power supply and slide it on to the mounting bracket and fix it using screws.



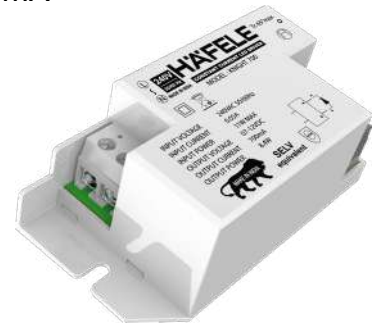
3. Adjust the length of the cable by rotating the screw on the luminaire. Your luminaire is now installed and ready to use.

## THE EDINBURGH SERIES: CONSTANT CURRENT DRIVERS

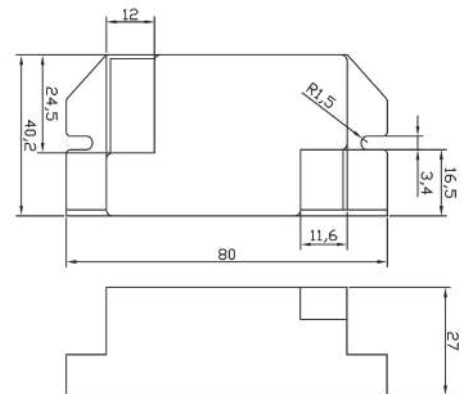
### KNIGHT 700 - CONSTANT SINGLE CURRENT LED DRIVER, 700mA

IP20

- SELV Equivalent
- Flicker-free output
- Suitable for dry locations
- Average rated life: 50,000 hours
- Sustains at 320VAC for 48 hrs. and 360VAC for 2 hrs.
- 1 channel output



Technical Specifications	
Article No.	833.30.969
Input Voltage	240VAC ±10% 50 Hz
Input Current	0.06A Max.
Input Power	11W Max.
Output Current	700mA
Output Voltage	7 - 12VDC
Output Power	8.4W
Power Factor	>0.85
Ambient operating temperature range	-10°C to +50°C
Input Surge Protection	Yes (Line-Neutral 3kV DM)



Note: This driver is compatible with recess mounted swivel luminaires.

## THE EDINBURGH SERIES: ORDERING INFORMATION

### 1. RECESS MOUNTED LUMINAIRES

Article No.	Wattage	Current	Colour Temperature	Beam Angle	Mounting Technique	Body Colour	Baffle Colour	Shape	Dimensions (mm)
833.30.624	7W	700mA	2700K	18°	Recess Mounted Swivel Trim	White	White	Round	Dia 78 x H 151
833.30.625	7W	700mA	3000K	18°	Recess Mounted Swivel Trim	White	White	Round	Dia 78 x H 151
833.30.626	7W	700mA	4000K	18°	Recess Mounted Swivel Trim	White	White	Round	Dia 78 x H 151
833.30.628	7W	700mA	2700K	24°	Recess Mounted Swivel Trim	White	White	Round	Dia 78 x H 151
833.30.629	7W	700mA	3000K	24°	Recess Mounted Swivel Trim	White	White	Round	Dia 78 x H 151
833.30.630	7W	700mA	4000K	24°	Recess Mounted Swivel Trim	White	White	Round	Dia 78 x H 151
833.30.632	7W	700mA	2700K	36°	Recess Mounted Swivel Trim	White	White	Round	Dia 78 x H 151
833.30.633	7W	700mA	3000K	36°	Recess Mounted Swivel Trim	White	White	Round	Dia 78 x H 151
833.30.634	7W	700mA	4000K	36°	Recess Mounted Swivel Trim	White	White	Round	Dia 78 x H 151
833.30.636	7W	700mA	2700K	18°	Recess Mounted Swivel Trim	Black	Black	Round	Dia 78 x H 151
833.30.637	7W	700mA	3000K	18°	Recess Mounted Swivel Trim	Black	Black	Round	Dia 78 x H 151
833.30.638	7W	700mA	4000K	18°	Recess Mounted Swivel Trim	Black	Black	Round	Dia 78 x H 151
833.30.640	7W	700mA	2700K	24°	Recess Mounted Swivel Trim	Black	Black	Round	Dia 78 x H 151
833.30.641	7W	700mA	3000K	24°	Recess Mounted Swivel Trim	Black	Black	Round	Dia 78 x H 151
833.30.642	7W	700mA	4000K	24°	Recess Mounted Swivel Trim	Black	Black	Round	Dia 78 x H 151
833.30.644	7W	700mA	2700K	36°	Recess Mounted Swivel Trim	Black	Black	Round	Dia 78 x H 151
833.30.645	7W	700mA	3000K	36°	Recess Mounted Swivel Trim	Black	Black	Round	Dia 78 x H 151
833.30.646	7W	700mA	4000K	36°	Recess Mounted Swivel Trim	Black	Black	Round	Dia 78 x H 151
833.30.114	7W	700mA	2700K	18°	Recess Mounted Swivel Trim	White	Bronze	Round	Dia 78 x H 151
833.30.115	7W	700mA	3000K	18°	Recess Mounted Swivel Trim	White	Bronze	Round	Dia 78 x H 151
833.30.116	7W	700mA	4000K	18°	Recess Mounted Swivel Trim	White	Bronze	Round	Dia 78 x H 151
833.30.117	7W	700mA	2700K	24°	Recess Mounted Swivel Trim	White	Bronze	Round	Dia 78 x H 151
833.30.118	7W	700mA	3000K	24°	Recess Mounted Swivel Trim	White	Bronze	Round	Dia 78 x H 151
833.30.119	7W	700mA	4000K	24°	Recess Mounted Swivel Trim	White	Bronze	Round	Dia 78 x H 151
833.30.120	7W	700mA	2700K	36°	Recess Mounted Swivel Trim	White	Bronze	Round	Dia 78 x H 151
833.30.121	7W	700mA	3000K	36°	Recess Mounted Swivel Trim	White	Bronze	Round	Dia 78 x H 151
833.30.122	7W	700mA	4000K	36°	Recess Mounted Swivel Trim	White	Bronze	Round	Dia 78 x H 151
833.30.123	7W	700mA	2700K	18°	Recess Mounted Swivel Trim	Black	Bronze	Round	Dia 78 x H 151
833.30.124	7W	700mA	3000K	18°	Recess Mounted Swivel Trim	Black	Bronze	Round	Dia 78 x H 151
833.30.125	7W	700mA	4000K	18°	Recess Mounted Swivel Trim	Black	Bronze	Round	Dia 78 x H 151
833.30.126	7W	700mA	2700K	24°	Recess Mounted Swivel Trim	Black	Bronze	Round	Dia 78 x H 151
833.30.127	7W	700mA	3000K	24°	Recess Mounted Swivel Trim	Black	Bronze	Round	Dia 78 x H 151
833.30.128	7W	700mA	4000K	24°	Recess Mounted Swivel Trim	Black	Bronze	Round	Dia 78 x H 151
833.30.129	7W	700mA	2700K	36°	Recess Mounted Swivel Trim	Black	Bronze	Round	Dia 78 x H 151
833.30.130	7W	700mA	3000K	36°	Recess Mounted Swivel Trim	Black	Bronze	Round	Dia 78 x H 151
833.30.131	7W	700mA	4000K	36°	Recess Mounted Swivel Trim	Black	Bronze	Round	Dia 78 x H 151
833.30.648	7W	700mA	2700K	18°	Recess Mounted Swivel Trimless	White	White	Round	Dia 109 x H 151
833.30.649	7W	700mA	3000K	18°	Recess Mounted Swivel Trimless	White	White	Round	Dia 109 x H 151
833.30.650	7W	700mA	4000K	18°	Recess Mounted Swivel Trimless	White	White	Round	Dia 109 x H 151
833.30.652	7W	700mA	2700K	24°	Recess Mounted Swivel Trimless	White	White	Round	Dia 109 x H 151
833.30.653	7W	700mA	3000K	24°	Recess Mounted Swivel Trimless	White	White	Round	Dia 109 x H 151
833.30.654	7W	700mA	4000K	24°	Recess Mounted Swivel Trimless	White	White	Round	Dia 109 x H 151
833.30.656	7W	700mA	2700K	36°	Recess Mounted Swivel Trimless	White	White	Round	Dia 109 x H 151
833.30.657	7W	700mA	3000K	36°	Recess Mounted Swivel Trimless	White	White	Round	Dia 109 x H 151
833.30.658	7W	700mA	4000K	36°	Recess Mounted Swivel Trimless	White	White	Round	Dia 109 x H 151

## THE EDINBURGH SERIES: ORDERING INFORMATION

### 1. RECESS MOUNTED LUMINAIRES

Article No.	Wattage	Current	Colour Temperature	Beam Angle	Mounting Technique	Body Colour	Baffle Colour	Shape	Dimensions (mm)
833.30.660	7W	700mA	2700K	18°	Recess Mounted Swivel Trimless	Black	Black	Round	Dia 109 x H 151
833.30.661	7W	700mA	3000K	18°	Recess Mounted Swivel Trimless	Black	Black	Round	Dia 109 x H 151
833.30.662	7W	700mA	4000K	18°	Recess Mounted Swivel Trimless	Black	Black	Round	Dia 109 x H 151
833.30.664	7W	700mA	2700K	24°	Recess Mounted Swivel Trimless	Black	Black	Round	Dia 109 x H 151
833.30.665	7W	700mA	3000K	24°	Recess Mounted Swivel Trimless	Black	Black	Round	Dia 109 x H 151
833.30.666	7W	700mA	4000K	24°	Recess Mounted Swivel Trimless	Black	Black	Round	Dia 109 x H 151
833.30.668	7W	700mA	2700K	36°	Recess Mounted Swivel Trimless	Black	Black	Round	Dia 109 x H 151
833.30.669	7W	700mA	3000K	36°	Recess Mounted Swivel Trimless	Black	Black	Round	Dia 109 x H 151
833.30.670	7W	700mA	4000K	36°	Recess Mounted Swivel Trimless	Black	Black	Round	Dia 109 x H 151
833.30.132	7W	700mA	2700K	18°	Recess Mounted Swivel Trimless	White	Bronze	Round	Dia 109 x H 151
833.30.133	7W	700mA	3000K	18°	Recess Mounted Swivel Trimless	White	Bronze	Round	Dia 109 x H 151
833.30.134	7W	700mA	4000K	18°	Recess Mounted Swivel Trimless	White	Bronze	Round	Dia 109 x H 151
833.30.135	7W	700mA	2700K	24°	Recess Mounted Swivel Trimless	White	Bronze	Round	Dia 109 x H 151
833.30.136	7W	700mA	3000K	24°	Recess Mounted Swivel Trimless	White	Bronze	Round	Dia 109 x H 151
833.30.137	7W	700mA	4000K	24°	Recess Mounted Swivel Trimless	White	Bronze	Round	Dia 109 x H 151
833.30.138	7W	700mA	2700K	36°	Recess Mounted Swivel Trimless	White	Bronze	Round	Dia 109 x H 151
833.30.139	7W	700mA	3000K	36°	Recess Mounted Swivel Trimless	White	Bronze	Round	Dia 109 x H 151
833.30.140	7W	700mA	4000K	36°	Recess Mounted Swivel Trimless	White	Bronze	Round	Dia 109 x H 151
833.30.141	7W	700mA	2700K	18°	Recess Mounted Swivel Trimless	Black	Bronze	Round	Dia 109 x H 151
833.30.142	7W	700mA	3000K	18°	Recess Mounted Swivel Trimless	Black	Bronze	Round	Dia 109 x H 151
833.30.143	7W	700mA	4000K	18°	Recess Mounted Swivel Trimless	Black	Bronze	Round	Dia 109 x H 151
833.30.144	7W	700mA	2700K	24°	Recess Mounted Swivel Trimless	Black	Bronze	Round	Dia 109 x H 151
833.30.145	7W	700mA	3000K	24°	Recess Mounted Swivel Trimless	Black	Bronze	Round	Dia 109 x H 151
833.30.146	7W	700mA	4000K	24°	Recess Mounted Swivel Trimless	Black	Bronze	Round	Dia 109 x H 151
833.30.147	7W	700mA	2700K	36°	Recess Mounted Swivel Trimless	Black	Bronze	Round	Dia 109 x H 151
833.30.148	7W	700mA	3000K	36°	Recess Mounted Swivel Trimless	Black	Bronze	Round	Dia 109 x H 151
833.30.149	7W	700mA	4000K	36°	Recess Mounted Swivel Trimless	Black	Bronze	Round	Dia 109 x H 151

### 2. SURFACE MOUNTED (FIXED) LUMINAIRES

Article No.	Wattage	Current	Colour Temperature	Beam Angle	Mounting Technique	Body Colour	Baffle Colour	Shape	Dimensions (mm)
833.30.576	7W	350mA	2700K	18°	Surface Mounted	White	White	Round	Dia 40 x H 250
833.30.577	7W	350mA	3000K	18°	Surface Mounted	White	White	Round	Dia 40 x H 250
833.30.578	7W	350mA	4000K	18°	Surface Mounted	White	White	Round	Dia 40 x H 250
833.30.580	7W	350mA	2700K	24°	Surface Mounted	White	White	Round	Dia 40 x H 250
833.30.581	7W	350mA	3000K	24°	Surface Mounted	White	White	Round	Dia 40 x H 250
833.30.582	7W	350mA	4000K	24°	Surface Mounted	White	White	Round	Dia 40 x H 250
833.30.584	7W	350mA	2700K	36°	Surface Mounted	White	White	Round	Dia 40 x H 250
833.30.585	7W	350mA	3000K	36°	Surface Mounted	White	White	Round	Dia 40 x H 250
833.30.586	7W	350mA	4000K	36°	Surface Mounted	White	White	Round	Dia 40 x H 250
833.30.588	7W	350mA	2700K	18°	Surface Mounted	Black	Black	Round	Dia 40 x H 250
833.30.589	7W	350mA	3000K	18°	Surface Mounted	Black	Black	Round	Dia 40 x H 250
833.30.590	7W	350mA	4000K	18°	Surface Mounted	Black	Black	Round	Dia 40 x H 250

## THE EDINBURGH SERIES: ORDERING INFORMATION

### 2. SURFACE MOUNTED (FIXED) LUMINAIRES

Article No.	Wattage	Current	Colour Temperature	Beam Angle	Mounting Technique	Body Colour	Baffle Colour	Shape	Dimensions (mm)
833.30.592	7W	350mA	2700K	24°	Surface Mounted	Black	Black	Round	Dia 40 x H 250
833.30.593	7W	350mA	3000K	24°	Surface Mounted	Black	Black	Round	Dia 40 x H 250
833.30.594	7W	350mA	4000K	24°	Surface Mounted	Black	Black	Round	Dia 40 x H 250
833.30.596	7W	350mA	2700K	36°	Surface Mounted	Black	Black	Round	Dia 40 x H 250
833.30.597	7W	350mA	3000K	36°	Surface Mounted	Black	Black	Round	Dia 40 x H 250
833.30.598	7W	350mA	4000K	36°	Surface Mounted	Black	Black	Round	Dia 40 x H 250
833.30.078	7W	350mA	2700K	18°	Surface Mounted	White	Bronze	Round	Dia 40 x H 250
833.30.079	7W	350mA	3000K	18°	Surface Mounted	White	Bronze	Round	Dia 40 x H 250
833.30.080	7W	350mA	4000K	18°	Surface Mounted	White	Bronze	Round	Dia 40 x H 250
833.30.081	7W	350mA	2700K	24°	Surface Mounted	White	Bronze	Round	Dia 40 x H 250
833.30.082	7W	350mA	3000K	24°	Surface Mounted	White	Bronze	Round	Dia 40 x H 250
833.30.083	7W	350mA	4000K	24°	Surface Mounted	White	Bronze	Round	Dia 40 x H 250
833.30.084	7W	350mA	2700K	36°	Surface Mounted	White	Bronze	Round	Dia 40 x H 250
833.30.085	7W	350mA	3000K	36°	Surface Mounted	White	Bronze	Round	Dia 40 x H 250
833.30.086	7W	350mA	4000K	36°	Surface Mounted	White	Bronze	Round	Dia 40 x H 250
833.30.087	7W	350mA	2700K	18°	Surface Mounted	Black	Bronze	Round	Dia 40 x H 250
833.30.088	7W	350mA	3000K	18°	Surface Mounted	Black	Bronze	Round	Dia 40 x H 250
833.30.089	7W	350mA	4000K	18°	Surface Mounted	Black	Bronze	Round	Dia 40 x H 250
833.30.090	7W	350mA	2700K	24°	Surface Mounted	Black	Bronze	Round	Dia 40 x H 250
833.30.091	7W	350mA	3000K	24°	Surface Mounted	Black	Bronze	Round	Dia 40 x H 250
833.30.092	7W	350mA	4000K	24°	Surface Mounted	Black	Bronze	Round	Dia 40 x H 250
833.30.093	7W	350mA	2700K	36°	Surface Mounted	Black	Bronze	Round	Dia 40 x H 250
833.30.094	7W	350mA	3000K	36°	Surface Mounted	Black	Bronze	Round	Dia 40 x H 250
833.30.095	7W	350mA	4000K	36°	Surface Mounted	Black	Bronze	Round	Dia 40 x H 250
833.30.744	15W	350mA	2700K	18°	Surface Mounted	White	White	Round	Dia 64 x H 136
833.30.745	15W	350mA	3000K	18°	Surface Mounted	White	White	Round	Dia 64 x H 136
833.30.746	15W	350mA	4000K	18°	Surface Mounted	White	White	Round	Dia 64 x H 136
833.30.748	15W	350mA	2700K	24°	Surface Mounted	White	White	Round	Dia 64 x H 136
833.30.749	15W	350mA	3000K	24°	Surface Mounted	White	White	Round	Dia 64 x H 136
833.30.750	15W	350mA	4000K	24°	Surface Mounted	White	White	Round	Dia 64 x H 136
833.30.752	15W	350mA	2700K	36°	Surface Mounted	White	White	Round	Dia 64 x H 136
833.30.753	15W	350mA	3000K	36°	Surface Mounted	White	White	Round	Dia 64 x H 136
833.30.754	15W	350mA	4000K	36°	Surface Mounted	White	White	Round	Dia 64 x H 136
833.30.756	15W	350mA	2700K	18°	Surface Mounted	Black	Black	Round	Dia 64 x H 136
833.30.757	15W	350mA	3000K	18°	Surface Mounted	Black	Black	Round	Dia 64 x H 136
833.30.758	15W	350mA	4000K	18°	Surface Mounted	Black	Black	Round	Dia 64 x H 136
833.30.760	15W	350mA	2700K	24°	Surface Mounted	Black	Black	Round	Dia 64 x H 136
833.30.761	15W	350mA	3000K	24°	Surface Mounted	Black	Black	Round	Dia 64 x H 136
833.30.762	15W	350mA	4000K	24°	Surface Mounted	Black	Black	Round	Dia 64 x H 136
833.30.764	15W	350mA	2700K	36°	Surface Mounted	Black	Black	Round	Dia 64 x H 136
833.30.765	15W	350mA	3000K	36°	Surface Mounted	Black	Black	Round	Dia 64 x H 136
833.30.766	15W	350mA	4000K	36°	Surface Mounted	Black	Black	Round	Dia 64 x H 136
833.30.204	15W	350mA	2700K	18°	Surface Mounted	White	Bronze	Round	Dia 64 x H 136
833.30.205	15W	350mA	3000K	18°	Surface Mounted	White	Bronze	Round	Dia 64 x H 136
833.30.206	15W	350mA	4000K	18°	Surface Mounted	White	Bronze	Round	Dia 64 x H 136

## THE EDINBURGH SERIES: ORDERING INFORMATION

### 2. SURFACE MOUNTED (FIXED) LUMINAIRES

Article No.	Wattage	Current	Colour Temperature	Beam Angle	Mounting Technique	Body Colour	Baffle Colour	Shape	Dimensions (mm)
833.30.207	15W	350mA	2700K	24°	Surface Mounted	White	Bronze	Round	Dia 64 x H 136
833.30.208	15W	350mA	3000K	24°	Surface Mounted	White	Bronze	Round	Dia 64 x H 136
833.30.209	15W	350mA	4000K	24°	Surface Mounted	White	Bronze	Round	Dia 64 x H 136
833.30.210	15W	350mA	2700K	36°	Surface Mounted	White	Bronze	Round	Dia 64 x H 136
833.30.211	15W	350mA	3000K	36°	Surface Mounted	White	Bronze	Round	Dia 64 x H 136
833.30.212	15W	350mA	4000K	36°	Surface Mounted	White	Bronze	Round	Dia 64 x H 136
833.30.213	15W	350mA	2700K	18°	Surface Mounted	Black	Bronze	Round	Dia 64 x H 136
833.30.214	15W	350mA	3000K	18°	Surface Mounted	Black	Bronze	Round	Dia 64 x H 136
833.30.215	15W	350mA	4000K	18°	Surface Mounted	Black	Bronze	Round	Dia 64 x H 136
833.30.216	15W	350mA	2700K	24°	Surface Mounted	Black	Bronze	Round	Dia 64 x H 136
833.30.217	15W	350mA	3000K	24°	Surface Mounted	Black	Bronze	Round	Dia 64 x H 136
833.30.218	15W	350mA	4000K	24°	Surface Mounted	Black	Bronze	Round	Dia 64 x H 136
833.30.219	15W	350mA	2700K	36°	Surface Mounted	Black	Bronze	Round	Dia 64 x H 136
833.30.220	15W	350mA	3000K	36°	Surface Mounted	Black	Bronze	Round	Dia 64 x H 136
833.30.221	15W	350mA	4000K	36°	Surface Mounted	Black	Bronze	Round	Dia 64 x H 136
833.30.696	7W	350mA	2700K	18°	Surface Mounted	White	White	Square	40 x 40 x 250
833.30.697	7W	350mA	3000K	18°	Surface Mounted	White	White	Square	40 x 40 x 250
833.30.698	7W	350mA	4000K	18°	Surface Mounted	White	White	Square	40 x 40 x 250
833.30.700	7W	350mA	2700K	24°	Surface Mounted	White	White	Square	40 x 40 x 250
833.30.701	7W	350mA	3000K	24°	Surface Mounted	White	White	Square	40 x 40 x 250
833.30.702	7W	350mA	4000K	24°	Surface Mounted	White	White	Square	40 x 40 x 250
833.30.704	7W	350mA	2700K	36°	Surface Mounted	White	White	Square	40 x 40 x 250
833.30.705	7W	350mA	3000K	36°	Surface Mounted	White	White	Square	40 x 40 x 250
833.30.706	7W	350mA	4000K	36°	Surface Mounted	White	White	Square	40 x 40 x 250
833.30.708	7W	350mA	2700K	18°	Surface Mounted	Black	Black	Square	40 x 40 x 250
833.30.709	7W	350mA	3000K	18°	Surface Mounted	Black	Black	Square	40 x 40 x 250
833.30.710	7W	350mA	4000K	18°	Surface Mounted	Black	Black	Square	40 x 40 x 250
833.30.712	7W	350mA	2700K	24°	Surface Mounted	Black	Black	Square	40 x 40 x 250
833.30.713	7W	350mA	3000K	24°	Surface Mounted	Black	Black	Square	40 x 40 x 250
833.30.714	7W	350mA	4000K	24°	Surface Mounted	Black	Black	Square	40 x 40 x 250
833.30.716	7W	350mA	2700K	36°	Surface Mounted	Black	Black	Square	40 x 40 x 250
833.30.717	7W	350mA	3000K	36°	Surface Mounted	Black	Black	Square	40 x 40 x 250
833.30.718	7W	350mA	4000K	36°	Surface Mounted	Black	Black	Square	40 x 40 x 250
833.30.168	7W	350mA	2700K	18°	Surface Mounted	White	Bronze	Square	40 x 40 x 250
833.30.169	7W	350mA	3000K	18°	Surface Mounted	White	Bronze	Square	40 x 40 x 250
833.30.170	7W	350mA	4000K	18°	Surface Mounted	White	Bronze	Square	40 x 40 x 250
833.30.171	7W	350mA	2700K	24°	Surface Mounted	White	Bronze	Square	40 x 40 x 250
833.30.172	7W	350mA	3000K	24°	Surface Mounted	White	Bronze	Square	40 x 40 x 250
833.30.173	7W	350mA	4000K	24°	Surface Mounted	White	Bronze	Square	40 x 40 x 250
833.30.174	7W	350mA	2700K	36°	Surface Mounted	White	Bronze	Square	40 x 40 x 250
833.30.175	7W	350mA	3000K	36°	Surface Mounted	White	Bronze	Square	40 x 40 x 250
833.30.176	7W	350mA	4000K	36°	Surface Mounted	White	Bronze	Square	40 x 40 x 250
833.30.177	7W	350mA	2700K	18°	Surface Mounted	Black	Bronze	Square	40 x 40 x 250
833.30.178	7W	350mA	3000K	18°	Surface Mounted	Black	Bronze	Square	40 x 40 x 250
833.30.179	7W	350mA	4000K	18°	Surface Mounted	Black	Bronze	Square	40 x 40 x 250

## THE EDINBURGH SERIES: ORDERING INFORMATION

### 2. SURFACE MOUNTED (FIXED) LUMINAIRES

Article No.	Wattage	Current	Colour Temperature	Beam Angle	Mounting Technique	Body Colour	Baffle Colour	Shape	Dimensions (mm)
833.30.180	7W	350mA	2700K	24°	Surface Mounted	Black	Bronze	Square	40 x 40 x 250
833.30.181	7W	350mA	3000K	24°	Surface Mounted	Black	Bronze	Square	40 x 40 x 250
833.30.182	7W	350mA	4000K	24°	Surface Mounted	Black	Bronze	Square	40 x 40 x 250
833.30.183	7W	350mA	2700K	36°	Surface Mounted	Black	Bronze	Square	40 x 40 x 250
833.30.184	7W	350mA	3000K	36°	Surface Mounted	Black	Bronze	Square	40 x 40 x 250
833.30.185	7W	350mA	4000K	36°	Surface Mounted	Black	Bronze	Square	40 x 40 x 250

### 3. SURFACE MOUNTED SWIVEL LUMINAIRES

Article No.	Wattage	Current	Colour Temperature	Beam Angle	Mounting Technique	Body Colour	Baffle Colour	Shape	Dimensions (mm)
833.30.600	7W	350mA	2700K	18°	Surface Mounted Swivel	White	White	Round	Dia 40 x H 207
833.30.601	7W	350mA	3000K	18°	Surface Mounted Swivel	White	White	Round	Dia 40 x H 207
833.30.602	7W	350mA	4000K	18°	Surface Mounted Swivel	White	White	Round	Dia 40 x H 207
833.30.604	7W	350mA	2700K	24°	Surface Mounted Swivel	White	White	Round	Dia 40 x H 207
833.30.605	7W	350mA	3000K	24°	Surface Mounted Swivel	White	White	Round	Dia 40 x H 207
833.30.606	7W	350mA	4000K	24°	Surface Mounted Swivel	White	White	Round	Dia 40 x H 207
833.30.608	7W	350mA	2700K	36°	Surface Mounted Swivel	White	White	Round	Dia 40 x H 207
833.30.609	7W	350mA	3000K	36°	Surface Mounted Swivel	White	White	Round	Dia 40 x H 207
833.30.610	7W	350mA	4000K	36°	Surface Mounted Swivel	White	White	Round	Dia 40 x H 207
833.30.612	7W	350mA	2700K	18°	Surface Mounted Swivel	Black	Black	Round	Dia 40 x H 207
833.30.613	7W	350mA	3000K	18°	Surface Mounted Swivel	Black	Black	Round	Dia 40 x H 207
833.30.614	7W	350mA	4000K	18°	Surface Mounted Swivel	Black	Black	Round	Dia 40 x H 207
833.30.616	7W	350mA	2700K	24°	Surface Mounted Swivel	Black	Black	Round	Dia 40 x H 207
833.30.617	7W	350mA	3000K	24°	Surface Mounted Swivel	Black	Black	Round	Dia 40 x H 207
833.30.618	7W	350mA	4000K	24°	Surface Mounted Swivel	Black	Black	Round	Dia 40 x H 207
833.30.620	7W	350mA	2700K	36°	Surface Mounted Swivel	Black	Black	Round	Dia 40 x H 207
833.30.621	7W	350mA	3000K	36°	Surface Mounted Swivel	Black	Black	Round	Dia 40 x H 207
833.30.622	7W	350mA	4000K	36°	Surface Mounted Swivel	Black	Black	Round	Dia 40 x H 207
833.30.096	7W	350mA	2700K	18°	Surface Mounted Swivel	White	Bronze	Round	Dia 40 x H 207
833.30.097	7W	350mA	3000K	18°	Surface Mounted Swivel	White	Bronze	Round	Dia 40 x H 207
833.30.098	7W	350mA	4000K	18°	Surface Mounted Swivel	White	Bronze	Round	Dia 40 x H 207
833.30.099	7W	350mA	2700K	24°	Surface Mounted Swivel	White	Bronze	Round	Dia 40 x H 207
833.30.100	7W	350mA	3000K	24°	Surface Mounted Swivel	White	Bronze	Round	Dia 40 x H 207
833.30.101	7W	350mA	4000K	24°	Surface Mounted Swivel	White	Bronze	Round	Dia 40 x H 207
833.30.102	7W	350mA	2700K	36°	Surface Mounted Swivel	White	Bronze	Round	Dia 40 x H 207
833.30.103	7W	350mA	3000K	36°	Surface Mounted Swivel	White	Bronze	Round	Dia 40 x H 207
833.30.104	7W	350mA	4000K	36°	Surface Mounted Swivel	White	Bronze	Round	Dia 40 x H 207
833.30.105	7W	350mA	2700K	18°	Surface Mounted Swivel	Black	Bronze	Round	Dia 40 x H 207
833.30.106	7W	350mA	3000K	18°	Surface Mounted Swivel	Black	Bronze	Round	Dia 40 x H 207
833.30.107	7W	350mA	4000K	18°	Surface Mounted Swivel	Black	Bronze	Round	Dia 40 x H 207
833.30.108	7W	350mA	2700K	24°	Surface Mounted Swivel	Black	Bronze	Round	Dia 40 x H 207
833.30.109	7W	350mA	3000K	24°	Surface Mounted Swivel	Black	Bronze	Round	Dia 40 x H 207



## THE EDINBURGH SERIES: ORDERING INFORMATION

### 3. SURFACE MOUNTED SWIVEL LUMINAIRES

Article No.	Wattage	Current	Colour Temperature	Beam Angle	Mounting Technique	Body Colour	Baffle Colour	Shape	Dimensions (mm)
833.30.110	7W	350mA	4000K	24°	Surface Mounted Swivel	Black	Bronze	Round	Dia 40 x H 207
833.30.111	7W	350mA	2700K	36°	Surface Mounted Swivel	Black	Bronze	Round	Dia 40 x H 207
833.30.112	7W	350mA	3000K	36°	Surface Mounted Swivel	Black	Bronze	Round	Dia 40 x H 207
833.30.113	7W	350mA	4000K	36°	Surface Mounted Swivel	Black	Bronze	Round	Dia 40 x H 207
833.30.768	15W	350mA	2700K	18°	Surface Mounted Swivel	White	White	Round	Dia 64 x H 193
833.30.769	15W	350mA	3000K	18°	Surface Mounted Swivel	White	White	Round	Dia 64 x H 193
833.30.770	15W	350mA	4000K	18°	Surface Mounted Swivel	White	White	Round	Dia 64 x H 193
833.30.772	15W	350mA	2700K	24°	Surface Mounted Swivel	White	White	Round	Dia 64 x H 193
833.30.773	15W	350mA	3000K	24°	Surface Mounted Swivel	White	White	Round	Dia 64 x H 193
833.30.774	15W	350mA	4000K	24°	Surface Mounted Swivel	White	White	Round	Dia 64 x H 193
833.30.776	15W	350mA	2700K	36°	Surface Mounted Swivel	White	White	Round	Dia 64 x H 193
833.30.777	15W	350mA	3000K	36°	Surface Mounted Swivel	White	White	Round	Dia 64 x H 193
833.30.778	15W	350mA	4000K	36°	Surface Mounted Swivel	White	White	Round	Dia 64 x H 193
833.30.780	15W	350mA	2700K	18°	Surface Mounted Swivel	Black	Black	Round	Dia 64 x H 193
833.30.781	15W	350mA	3000K	18°	Surface Mounted Swivel	Black	Black	Round	Dia 64 x H 193
833.30.782	15W	350mA	4000K	18°	Surface Mounted Swivel	Black	Black	Round	Dia 64 x H 193
833.30.784	15W	350mA	2700K	24°	Surface Mounted Swivel	Black	Black	Round	Dia 64 x H 193
833.30.785	15W	350mA	3000K	24°	Surface Mounted Swivel	Black	Black	Round	Dia 64 x H 193
833.30.786	15W	350mA	4000K	24°	Surface Mounted Swivel	Black	Black	Round	Dia 64 x H 193
833.30.788	15W	350mA	2700K	36°	Surface Mounted Swivel	Black	Black	Round	Dia 64 x H 193
833.30.789	15W	350mA	3000K	36°	Surface Mounted Swivel	Black	Black	Round	Dia 64 x H 193
833.30.790	15W	350mA	4000K	36°	Surface Mounted Swivel	Black	Black	Round	Dia 64 x H 193
833.30.222	15W	350mA	2700K	18°	Surface Mounted Swivel	White	Bronze	Round	Dia 64 x H 193
833.30.223	15W	350mA	3000K	18°	Surface Mounted Swivel	White	Bronze	Round	Dia 64 x H 193
833.30.224	15W	350mA	4000K	18°	Surface Mounted Swivel	White	Bronze	Round	Dia 64 x H 193
833.30.225	15W	350mA	2700K	24°	Surface Mounted Swivel	White	Bronze	Round	Dia 64 x H 193
833.30.226	15W	350mA	3000K	24°	Surface Mounted Swivel	White	Bronze	Round	Dia 64 x H 193
833.30.227	15W	350mA	4000K	24°	Surface Mounted Swivel	White	Bronze	Round	Dia 64 x H 193
833.30.228	15W	350mA	2700K	36°	Surface Mounted Swivel	White	Bronze	Round	Dia 64 x H 193
833.30.229	15W	350mA	3000K	36°	Surface Mounted Swivel	White	Bronze	Round	Dia 64 x H 193
833.30.230	15W	350mA	4000K	36°	Surface Mounted Swivel	White	Bronze	Round	Dia 64 x H 193
833.30.231	15W	350mA	2700K	18°	Surface Mounted Swivel	Black	Bronze	Round	Dia 64 x H 193
833.30.232	15W	350mA	3000K	18°	Surface Mounted Swivel	Black	Bronze	Round	Dia 64 x H 193
833.30.233	15W	350mA	4000K	18°	Surface Mounted Swivel	Black	Bronze	Round	Dia 64 x H 193
833.30.234	15W	350mA	2700K	24°	Surface Mounted Swivel	Black	Bronze	Round	Dia 64 x H 193
833.30.235	15W	350mA	3000K	24°	Surface Mounted Swivel	Black	Bronze	Round	Dia 64 x H 193
833.30.236	15W	350mA	4000K	24°	Surface Mounted Swivel	Black	Bronze	Round	Dia 64 x H 193
833.30.237	15W	350mA	2700K	36°	Surface Mounted Swivel	Black	Bronze	Round	Dia 64 x H 193
833.30.238	15W	350mA	3000K	36°	Surface Mounted Swivel	Black	Bronze	Round	Dia 64 x H 193
833.30.239	15W	350mA	4000K	36°	Surface Mounted Swivel	Black	Bronze	Round	Dia 64 x H 193

## THE EDINBURGH SERIES: ORDERING INFORMATION

### 4. SUSPENDED LUMINAIRES

Article No.	Wattage	Current	Colour Temperature	Beam Angle	Mounting Technique	Body Colour	Baffle Colour	Shape	Dimensions (mm)
833.30.672	7W	350mA	2700K	18°	Suspended	White	White	Round	Dia 40 x H 250
833.30.673	7W	350mA	3000K	18°	Suspended	White	White	Round	Dia 40 x H 250
833.30.674	7W	350mA	4000K	18°	Suspended	White	White	Round	Dia 40 x H 250
833.30.676	7W	350mA	2700K	24°	Suspended	White	White	Round	Dia 40 x H 250
833.30.677	7W	350mA	3000K	24°	Suspended	White	White	Round	Dia 40 x H 250
833.30.678	7W	350mA	4000K	24°	Suspended	White	White	Round	Dia 40 x H 250
833.30.680	7W	350mA	2700K	36°	Suspended	White	White	Round	Dia 40 x H 250
833.30.681	7W	350mA	3000K	36°	Suspended	White	White	Round	Dia 40 x H 250
833.30.682	7W	350mA	4000K	36°	Suspended	White	White	Round	Dia 40 x H 250
833.30.684	7W	350mA	2700K	18°	Suspended	Black	Black	Round	Dia 40 x H 250
833.30.685	7W	350mA	3000K	18°	Suspended	Black	Black	Round	Dia 40 x H 250
833.30.686	7W	350mA	4000K	18°	Suspended	Black	Black	Round	Dia 40 x H 250
833.30.688	7W	350mA	2700K	24°	Suspended	Black	Black	Round	Dia 40 x H 250
833.30.689	7W	350mA	3000K	24°	Suspended	Black	Black	Round	Dia 40 x H 250
833.30.690	7W	350mA	4000K	24°	Suspended	Black	Black	Round	Dia 40 x H 250
833.30.692	7W	350mA	2700K	36°	Suspended	Black	Black	Round	Dia 40 x H 250
833.30.693	7W	350mA	3000K	36°	Suspended	Black	Black	Round	Dia 40 x H 250
833.30.694	7W	350mA	4000K	36°	Suspended	Black	Black	Round	Dia 40 x H 250
833.30.150	7W	350mA	2700K	18°	Suspended	White	Bronze	Round	Dia 40 x H 250
833.30.151	7W	350mA	3000K	18°	Suspended	White	Bronze	Round	Dia 40 x H 250
833.30.152	7W	350mA	4000K	18°	Suspended	White	Bronze	Round	Dia 40 x H 250
833.30.153	7W	350mA	2700K	24°	Suspended	White	Bronze	Round	Dia 40 x H 250
833.30.154	7W	350mA	3000K	24°	Suspended	White	Bronze	Round	Dia 40 x H 250
833.30.155	7W	350mA	4000K	24°	Suspended	White	Bronze	Round	Dia 40 x H 250
833.30.156	7W	350mA	2700K	36°	Suspended	White	Bronze	Round	Dia 40 x H 250
833.30.157	7W	350mA	3000K	36°	Suspended	White	Bronze	Round	Dia 40 x H 250
833.30.158	7W	350mA	4000K	36°	Suspended	White	Bronze	Round	Dia 40 x H 250
833.30.159	7W	350mA	2700K	18°	Suspended	Black	Bronze	Round	Dia 40 x H 250
833.30.160	7W	350mA	3000K	18°	Suspended	Black	Bronze	Round	Dia 40 x H 250
833.30.161	7W	350mA	4000K	18°	Suspended	Black	Bronze	Round	Dia 40 x H 250
833.30.162	7W	350mA	2700K	24°	Suspended	Black	Bronze	Round	Dia 40 x H 250
833.30.163	7W	350mA	3000K	24°	Suspended	Black	Bronze	Round	Dia 40 x H 250
833.30.164	7W	350mA	4000K	24°	Suspended	Black	Bronze	Round	Dia 40 x H 250
833.30.165	7W	350mA	2700K	36°	Suspended	Black	Bronze	Round	Dia 40 x H 250
833.30.166	7W	350mA	3000K	36°	Suspended	Black	Bronze	Round	Dia 40 x H 250
833.30.167	7W	350mA	4000K	36°	Suspended	Black	Bronze	Round	Dia 40 x H 250
833.30.792	13W	300mA	2700K	18°	Suspended	White	White	Round	Dia 64 x H 300
833.30.793	13W	300mA	3000K	18°	Suspended	White	White	Round	Dia 64 x H 300
833.30.794	13W	300mA	4000K	18°	Suspended	White	White	Round	Dia 64 x H 300
833.30.796	13W	300mA	2700K	24°	Suspended	White	White	Round	Dia 64 x H 300
833.30.797	13W	300mA	3000K	24°	Suspended	White	White	Round	Dia 64 x H 300
833.30.798	13W	300mA	4000K	24°	Suspended	White	White	Round	Dia 64 x H 300
833.30.800	13W	300mA	2700K	36°	Suspended	White	White	Round	Dia 64 x H 300
833.30.801	13W	300mA	3000K	36°	Suspended	White	White	Round	Dia 64 x H 300
833.30.802	13W	300mA	4000K	36°	Suspended	White	White	Round	Dia 64 x H 300

## THE EDINBURGH SERIES: ORDERING INFORMATION

### 4. SUSPENDED LUMINAIRES

Article No.	Wattage	Current	Colour Temperature	Beam Angle	Mounting Technique	Body Colour	Baffle Colour	Shape	Dimensions (mm)
833.30.804	13W	300mA	2700K	18°	Suspended	Black	Black	Round	Dia 64 x H 300
833.30.805	13W	300mA	3000K	18°	Suspended	Black	Black	Round	Dia 64 x H 300
833.30.806	13W	300mA	4000K	18°	Suspended	Black	Black	Round	Dia 64 x H 300
833.30.808	13W	300mA	2700K	24°	Suspended	Black	Black	Round	Dia 64 x H 300
833.30.809	13W	300mA	3000K	24°	Suspended	Black	Black	Round	Dia 64 x H 300
833.30.810	13W	300mA	4000K	24°	Suspended	Black	Black	Round	Dia 64 x H 300
833.30.812	13W	300mA	2700K	36°	Suspended	Black	Black	Round	Dia 64 x H 300
833.30.813	13W	300mA	3000K	36°	Suspended	Black	Black	Round	Dia 64 x H 300
833.30.814	13W	300mA	4000K	36°	Suspended	Black	Black	Round	Dia 64 x H 300
833.30.240	13W	300mA	2700K	18°	Suspended	White	Bronze	Round	Dia 64 x H 300
833.30.241	13W	300mA	3000K	18°	Suspended	White	Bronze	Round	Dia 64 x H 300
833.30.242	13W	300mA	4000K	18°	Suspended	White	Bronze	Round	Dia 64 x H 300
833.30.243	13W	300mA	2700K	24°	Suspended	White	Bronze	Round	Dia 64 x H 300
833.30.244	13W	300mA	3000K	24°	Suspended	White	Bronze	Round	Dia 64 x H 300
833.30.245	13W	300mA	4000K	24°	Suspended	White	Bronze	Round	Dia 64 x H 300
833.30.246	13W	300mA	2700K	36°	Suspended	White	Bronze	Round	Dia 64 x H 300
833.30.247	13W	300mA	3000K	36°	Suspended	White	Bronze	Round	Dia 64 x H 300
833.30.248	13W	300mA	4000K	36°	Suspended	White	Bronze	Round	Dia 64 x H 300
833.30.249	13W	300mA	2700K	18°	Suspended	Black	Bronze	Round	Dia 64 x H 300
833.30.250	13W	300mA	3000K	18°	Suspended	Black	Bronze	Round	Dia 64 x H 300
833.30.251	13W	300mA	4000K	18°	Suspended	Black	Bronze	Round	Dia 64 x H 300
833.30.252	13W	300mA	2700K	24°	Suspended	Black	Bronze	Round	Dia 64 x H 300
833.30.253	13W	300mA	3000K	24°	Suspended	Black	Bronze	Round	Dia 64 x H 300
833.30.254	13W	300mA	4000K	24°	Suspended	Black	Bronze	Round	Dia 64 x H 300
833.30.255	13W	300mA	2700K	36°	Suspended	Black	Bronze	Round	Dia 64 x H 300
833.30.256	13W	300mA	3000K	36°	Suspended	Black	Bronze	Round	Dia 64 x H 300
833.30.257	13W	300mA	4000K	36°	Suspended	Black	Bronze	Round	Dia 64 x H 300
833.30.720	7W	350mA	2700K	18°	Suspended	White	White	Square	40 x 40 x 250
833.30.721	7W	350mA	3000K	18°	Suspended	White	White	Square	40 x 40 x 250
833.30.722	7W	350mA	4000K	18°	Suspended	White	White	Square	40 x 40 x 250
833.30.724	7W	350mA	2700K	24°	Suspended	White	White	Square	40 x 40 x 250
833.30.725	7W	350mA	3000K	24°	Suspended	White	White	Square	40 x 40 x 250
833.30.726	7W	350mA	4000K	24°	Suspended	White	White	Square	40 x 40 x 250
833.30.728	7W	350mA	2700K	36°	Suspended	White	White	Square	40 x 40 x 250
833.30.729	7W	350mA	3000K	36°	Suspended	White	White	Square	40 x 40 x 250
833.30.730	7W	350mA	4000K	36°	Suspended	White	White	Square	40 x 40 x 250
833.30.732	7W	350mA	2700K	18°	Suspended	Black	Black	Square	40 x 40 x 250
833.30.733	7W	350mA	3000K	18°	Suspended	Black	Black	Square	40 x 40 x 250
833.30.734	7W	350mA	4000K	18°	Suspended	Black	Black	Square	40 x 40 x 250
833.30.736	7W	350mA	2700K	24°	Suspended	Black	Black	Square	40 x 40 x 250
833.30.737	7W	350mA	3000K	24°	Suspended	Black	Black	Square	40 x 40 x 250
833.30.738	7W	350mA	4000K	24°	Suspended	Black	Black	Square	40 x 40 x 250
833.30.740	7W	350mA	2700K	36°	Suspended	Black	Black	Square	40 x 40 x 250
833.30.741	7W	350mA	3000K	36°	Suspended	Black	Black	Square	40 x 40 x 250
833.30.742	7W	350mA	4000K	36°	Suspended	Black	Black	Square	40 x 40 x 250

## THE EDINBURGH SERIES: ORDERING INFORMATION

### 4. SUSPENDED LUMINAIRE

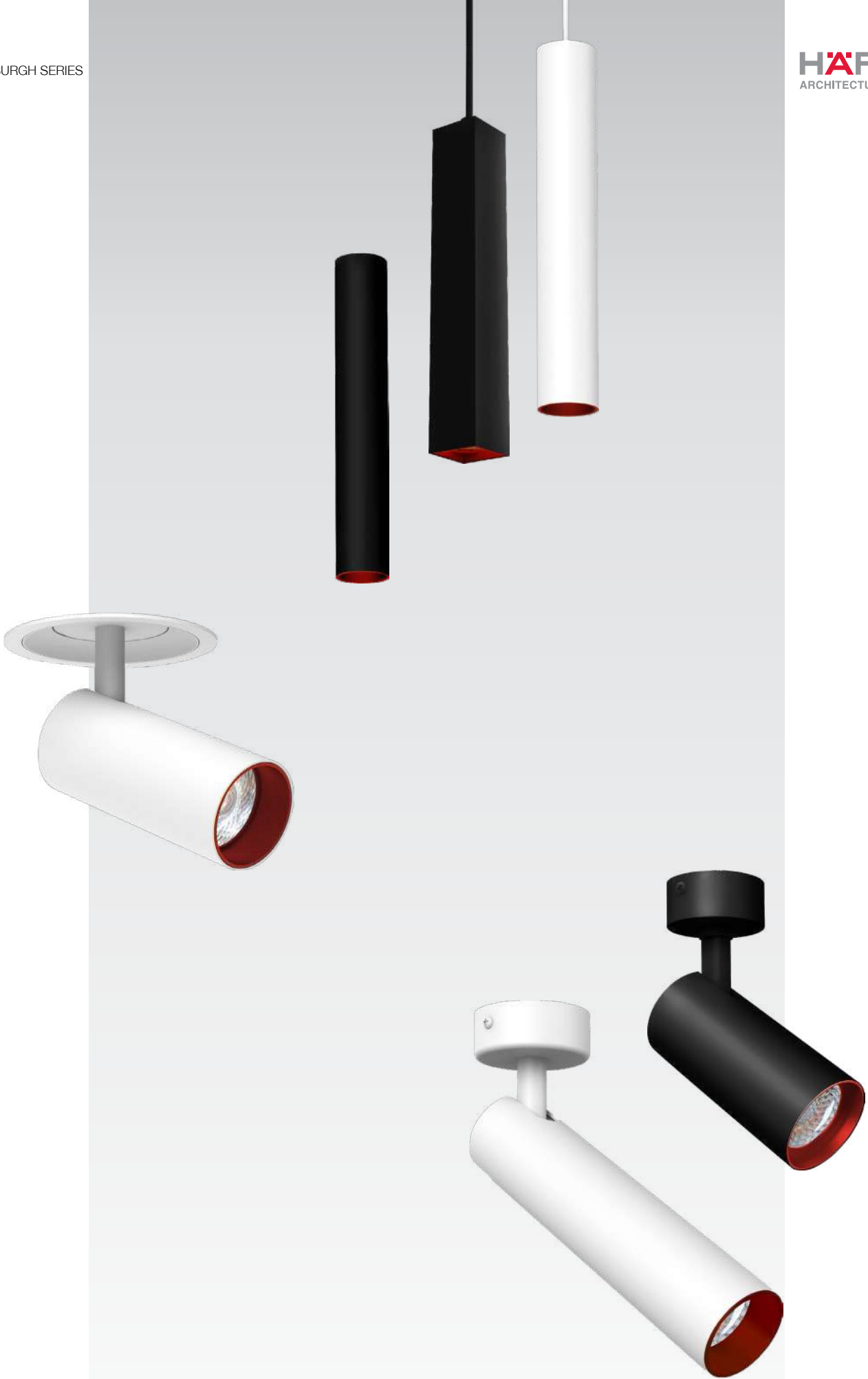
Article No.	Wattage	Current	Colour Temperature	Beam Angle	Mounting Technique	Body Colour	Baffle Colour	Shape	Dimensions (mm)
833.30.186	7W	350mA	2700K	18°	Suspended	White	Bronze	Square	40 x 40 x 250
833.30.187	7W	350mA	3000K	18°	Suspended	White	Bronze	Square	40 x 40 x 250
833.30.188	7W	350mA	4000K	18°	Suspended	White	Bronze	Square	40 x 40 x 250
833.30.189	7W	350mA	2700K	24°	Suspended	White	Bronze	Square	40 x 40 x 250
833.30.190	7W	350mA	3000K	24°	Suspended	White	Bronze	Square	40 x 40 x 250
833.30.191	7W	350mA	4000K	24°	Suspended	White	Bronze	Square	40 x 40 x 250
833.30.192	7W	350mA	2700K	36°	Suspended	White	Bronze	Square	40 x 40 x 250
833.30.193	7W	350mA	3000K	36°	Suspended	White	Bronze	Square	40 x 40 x 250
833.30.194	7W	350mA	4000K	36°	Suspended	White	Bronze	Square	40 x 40 x 250
833.30.195	7W	350mA	2700K	18°	Suspended	Black	Bronze	Square	40 x 40 x 250
833.30.196	7W	350mA	3000K	18°	Suspended	Black	Bronze	Square	40 x 40 x 250
833.30.197	7W	350mA	4000K	18°	Suspended	Black	Bronze	Square	40 x 40 x 250
833.30.198	7W	350mA	2700K	24°	Suspended	Black	Bronze	Square	40 x 40 x 250
833.30.199	7W	350mA	3000K	24°	Suspended	Black	Bronze	Square	40 x 40 x 250
833.30.200	7W	350mA	4000K	24°	Suspended	Black	Bronze	Square	40 x 40 x 250
833.30.201	7W	350mA	2700K	36°	Suspended	Black	Bronze	Square	40 x 40 x 250
833.30.202	7W	350mA	3000K	36°	Suspended	Black	Bronze	Square	40 x 40 x 250
833.30.203	7W	350mA	4000K	36°	Suspended	Black	Bronze	Square	40 x 40 x 250

### 5. DRIVERS

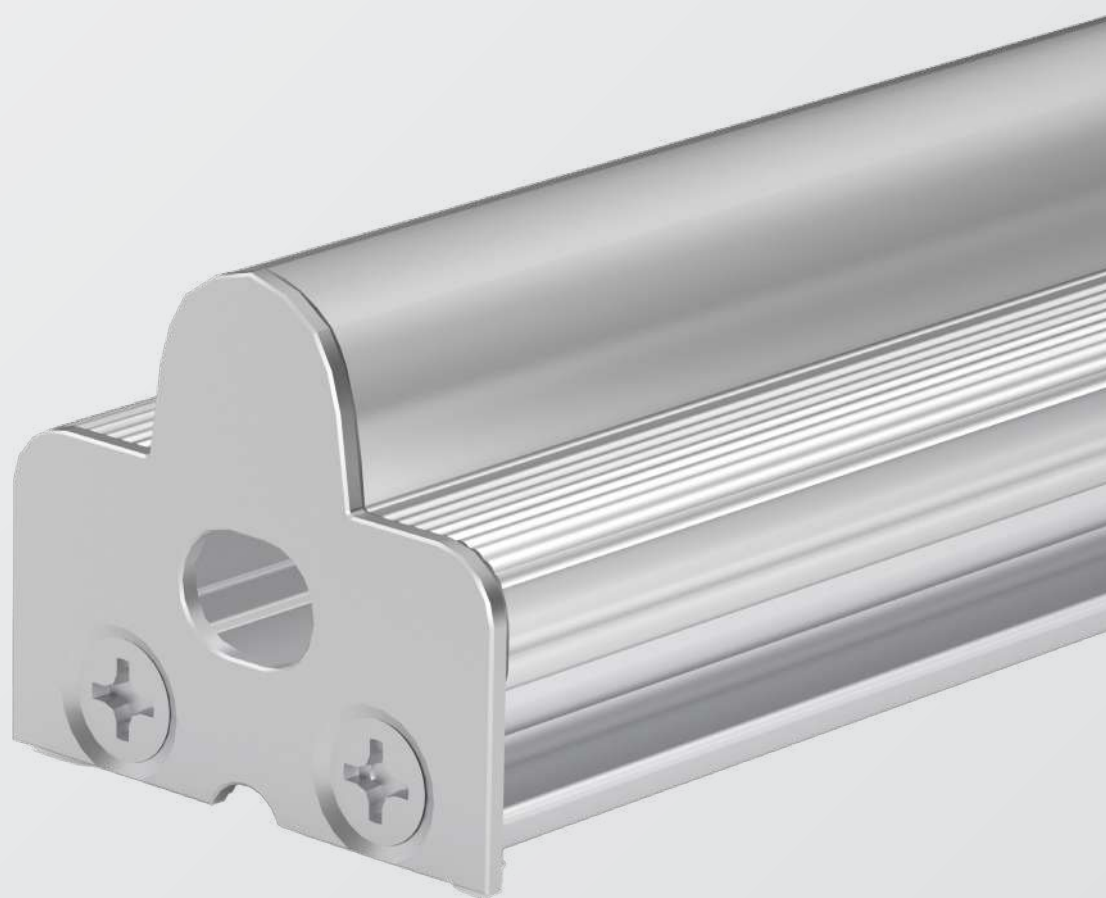
Article No.	Description	Current
833.30.969	Knight 700 - Constant Single Current LED Driver, 700mA	700mA

### 6. GLARE REDUCTION ADD-ONS

Article No.	Description
833.13.572	Edinburgh Woven Glass - 15W RD SM SWL
833.13.568	Edinburgh Honeycomb Louver - 13W RD SS
833.13.567	Edinburgh Honeycomb Louver - 15W RD SM SWL
833.13.562	Edinburgh Striped Glass - 15W RD SM SWL







# LINEAR LIGHTS





## LINEAR LENS

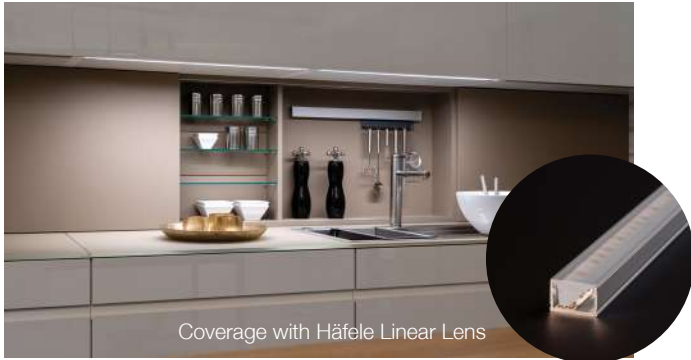
With Häfele's Linear Lens, experience brilliance like never! The well thought-out, patented lighting solution helps provide enhanced illumination in the targeted area and is ideal for kitchen worktops and for cupboard or shelf lighting applications. It can also function as wall washers in living areas.

While the Häfele Loox5 Range of Profiles and Strip Lights provide flawless accents that create a welcoming ambience, the new, made in Germany, linear lens presents a compelling take on task lighting. Its asymmetrical form bundles the light from the LED strip and directs it into a limiting angle which helps double its brightness in the desired focus area. Crafted exclusively to aid integration of lighting into furniture construction, the linear lens diffuses almost the entire light output onto the work area, with the slightest scatter loss and an extremely diminished glare effect.






## THE LINEAR LENS: FEATURES

### 1. The lens achieves the following improvement over a traditional profile light without a focusing lens

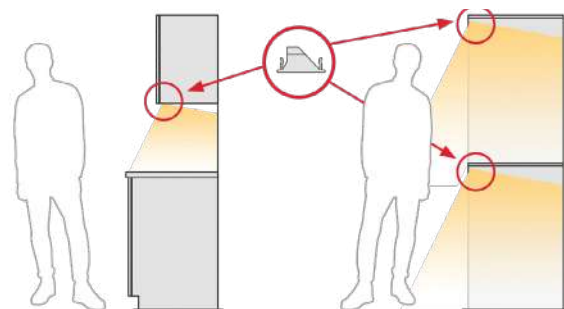
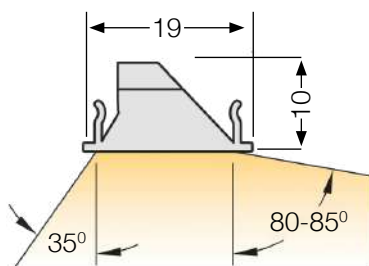
- Brighter: Increase in illuminance (in lx) by **100%** which means that the Linear Lens amplifies the light and, optimally distributes and guides it in the desired focused area.
- Glare-Free: Directed light distribution reduces glare by **85%** in undesirable areas.



### 2. Innovation. That's what the hafele linear lens stands for.

 <p><b>Product innovation:</b> The lens attacks the light directly above the LED chip which helps augment the overall light output. It also functions as a cover for the Linear Lens Aluminum Profile.</p>	 <p><b>Light innovation:</b> Currently, there exists no linear lens technology developed and optimised for the needs of furniture lighting. Häfele together with the renowned lighting technology institute, Bartenbach GmbH from Austria, has designed this lens with an objective of achieving targeted light diffusion over work surfaces.</p>
 <p><b>Craft innovation:</b> The lens is specifically tailored to the needs of the furniture installers. Although it functions differently as compared to a conventional profile light, it can be assembled and installed just as easily, ensuring error-free operations.</p>	 <p><b>Furniture innovation:</b> The development of this lens, makes light a fundamental extension to the way furniture is perceived. Almost the entire light output, with only the slightest scatter loss, is well distributed onto the work area.</p>
 <p><b>System innovation:</b> The Linear Lens works flawlessly with the Loox5 Strip Lights. The control takes place either via the Loox Switch Range or via the latest Häfele Connect System - BLE mesh technology (to be launched).</p>	

### 3. Application



Kitchen Countertops

Storage Spaces

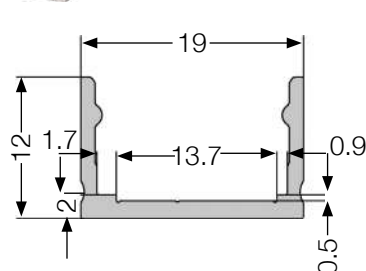
The linear lens has a beam angle of approximately 120° in cross-section (-35° to +85°). It provides 80 - 85° illumination in the functional area.

Recessed mounting; ideal for kitchen worktops and for cupboard or shelf lighting applications. Can also function as wall washers and curtain grazers in living areas.

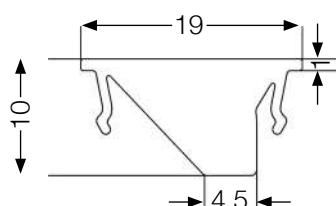
## THE LINEAR LENS: SPECIFICATIONS

Material	PMMA* (Lens), Aluminium (Profile) *Polymethyl Methacrylate Acrylic
Mounting	Recessed
Quality standards	Protected Häfele in-house assortment, made in Germany with certified Häfele standards
Compatibility	With the Häfele Loox5 Lighting System. Can be used with the standard 5 mm and 8 mm strip lights
Connectivity	Can be controlled via the BLE Mesh (to be launched) with the smartphone APP or Loox Range of Switches
Installation	Quick assembly, easy configuration and straight-forward operation
Applications	Indoor: Kitchen worktops, cupboard/shelf lighting, can also function as wall washers and curtain grazers in living areas

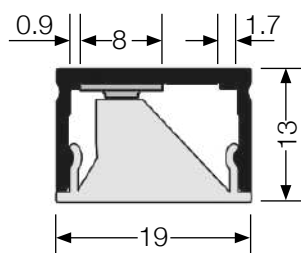
### PROFILE FOR RECESS MOUNTING WALL WASHERS



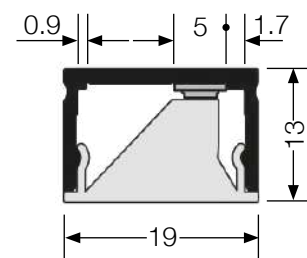
Profile: Cross section



Linear Lens: Cross section



With 8 mm strip light



With 5 mm strip light

Description	Linear lense
Beam angle	120° in cross-section (-35° to +85°)

## THE LINEAR LENS: ORDERING INFORMATION

Article No.	Material	Mounting Technique	Colour	Qty (Nos)	Description	Dimensions (mm)
833.89.300	PMMA	Recessed	Silver	1	LED Linear Lens	2500 x 19 x 10
833.01.870	Aluminium	Recessed	Silver	1	Linear Lens Profile	2500 x 19 x 12
833.01.764	ABS	Recessed	Silver	2	End Cap for Linear Lens	19 x 3 x 4



## 15° LINEAR LENS

---

With Häfele's 15° Linear Lens, your surroundings have never looked brighter!

The commitment to continuous innovation and technological advancement has led to the birth of Häfele's linear lens technology which provides a revolutionized approach towards both functional and accent lighting alike, in any area where enhanced illumination is desired.

Made in Germany in compliance with Häfele standards, the new 15° Linear Lens helps achieve brighter lighting over larger distances. The narrower angle of the lens makes it possible for the light to have a higher intensity and a better reach with minimum scatter loss. This makes it perfect for high ceiling applications in homes and other large spaces like shopping malls, airport terminals and offices. Dramatic light and shadow effects with wall and curtain grazing can be achieved in order to add depth to your surroundings - be it accentuating the texture of a stone or brick wall in a particular area of the house or attaining selective focus on valuable artifacts and paintings in homes, museums or galleries; the possibilities are endless.

The 15° Linear Lens can be easily controlled via the Häfele Connect Mesh Box through the smartphone application or with the Loox Range of Switches. Quick assembly, easy configuration and straight forward operation make this lens a must have product for your interiors.

## THE 15° LINEAR LENS: FEATURES

### 1. The lens achieves the following improvement over a traditional profile light without a focusing lens

- Brighter: Increase in illuminance (in lx) compared to standard diffuser-based profile lights which means that the 15°Linear Lens amplifies the light and owing to the narrow beam angle, guides it towards the desired area of focus with minimal scatter loss
- Versatile: Can be used in wall /curtain grazing and accent lighting applications in different residential and commercial areas.

### 2. Innovation. That's what the hafele linear lens stands for.

#### Product innovation:

While diffuser-based profile light is used for homogeneous lighting, lens-based profile lighting is better for applications that need brighter light intensity at a larger distance. The lens attacks the light directly above the LED chip which helps augment the overall light output. The smaller angle of the 15° Linear Lens provides a narrow light beam that travels more distance with minimal loss, compared to other conventional diffuser-based profile lights commonly available in the market.



#### Light innovation:

The products currently available in the market for ceiling lighting are not conducive to installations over larger lengths due to complexities in their construction and installation. Häfele's 15°Linear Lens with a length of 2000 mm makes continuous installation across the lengths of entire rooms not only possible but also simple.

#### System innovation:

The 15° Linear Lens works flawlessly with the Loox5 Strip Lights. The control takes place either via the Loox Switch Range or via the latest Häfele Connect Mesh Box System.

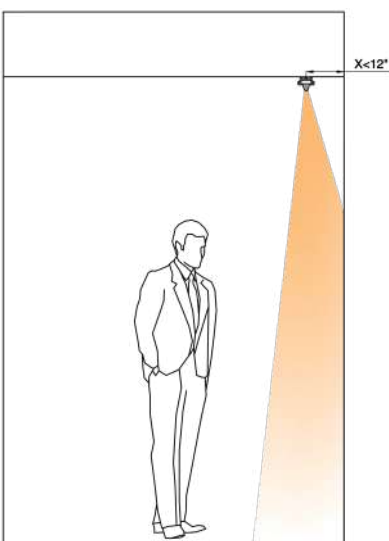


#### Craft innovation:

The lens is specifically tailored to cater wall and curtain grazing applications. Although it functions differently as compared to a conventional profile light, it can be assembled and installed just as easily, due to its plug and play system ensuring error-free operations.



### 3. Application



The linear lens has a beam angle of 15° causing the light intensity to be higher even at a farther distance.

### 4. Easy assembly



Aluminium Profile

+

15° Linear Lens

+

Pair of End Caps with Screws\*

=



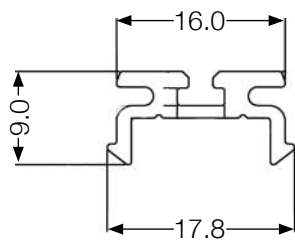
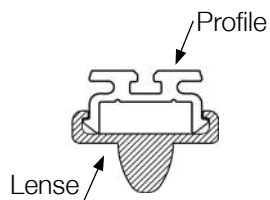
15° Linear Lens Profile

\* The pair includes one end cap with a slot to route electrical wires through it. This end cap can be installed on either side based on the electrical wiring and position of the power supply.

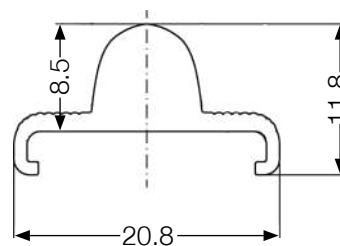
## THE 15° LINEAR LENS: SPECIFICATIONS

<b>Material</b>	PMMA* (Lens), Aluminium (Profile) *Polymethyl Methacrylate Acrylic
<b>Mounting</b>	Surface
<b>Quality standards</b>	In-house assortment manufactured in Germany adhering to certified Häfele standards
<b>Compatibility</b>	Fully compatible with the Häfele Loox5 lighting system. Can be used with Loox5 5 mm and 8 mm LED strip lights
<b>Connectivity</b>	Can be controlled via the BLE Mesh (to be launched) with the smartphone app or loox range of switches
	Operated via Häfele Connect Mesh through the smartphone application or switches from the loox range
<b>Installation</b>	Quick assembly, easy configuration and straight-forward operation
<b>Applications</b>	Surface mounting; ideal for wall and curtain grazing applications in residential spaces, retail shopping areas, airport terminals, commercial spaces, hotels and banquet halls, museums and galleries.

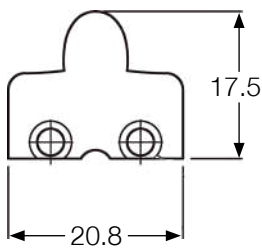
### PROFILE FOR SURFACE MOUNTING WALL WASHERS



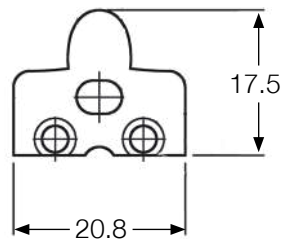
Profile: Cross Section



Linear Lens: Cross Section



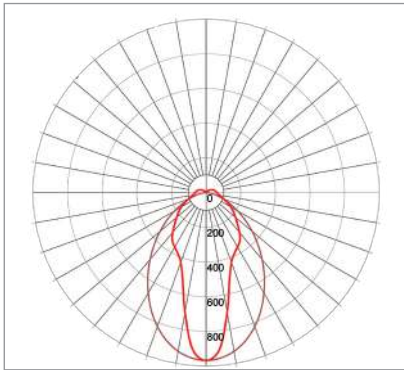
End Cap (Without Slot)




End Cap (With Slot)

## THE 15° LINEAR LENS: LIGHT DISTRIBUTION GRAPH

15° BEAM ANGLE



## THE 15° LINEAR LENS: ORDERING INFORMATION

Article No.	Material	Mounting Technique	Colour	Qty (Nos)	Description	Dimensions (mm)
833.72.959	Lens-PMMA, Profile-Aluminium	Surface	Silver	Profile- 1 Lense- 1	Linear Profile Lens15°	2000X21X12
833.01.942		NA	Silver	2	Set Of 2 End Caps For 15 Degree Lens	21x18x3





Wall Grazing:  
Residential Spaces / Museums / Galleries



Wall and Curtain Grazing:  
Bedrooms / Hotel Rooms

**Mumbai Design Centre:**

Haji Moosa Patrawala Ind.(SOBO)  
Estate, Near Famous Studio,  
Mahalaxmi (West), Mumbai - 400 011  
Tel.: 022 6264 7100.

**Mumbai Design Centre:**

#2 Filix Building, Opp. Asian Paints,  
L.B.S. Marg, Bhandup (West),  
Mumbai - 400 078  
Tel.: 022 2596 9660/  
2596 9787/2594 7305

**New Delhi Office & Design Centre:**

D-89 , 1<sup>st</sup> Floor, Okhla Phase-I,  
New Delhi - 110 020  
Tel.: 011-66574999  
Fax: 011-41605482

**Bangalore Office & Design Centre:**

Incubex Nestavera Spaces Pvt Ltd,  
No:13, Langford Place, Langford Road,  
Shanti Nagar, Bangalore - 560 025  
Tel.: 080 4132 6116  
Fax: 080 4132 6226

**Bangalore****Hafele Appliances Gallery:**

No. 2/1, Shiv Manor, Langford Road,  
Shantinagar, Bangalore - 560027  
Tel.: 080 - 4142 6336

**Sri Lanka:****Hafele Office and Design Centre:**

52, Nandana Gardens  
(On Duplication Road), Colombo 04.  
Tel: +94 112 500 501.  
Fax: +94 112 500 553.

**Hafele Design Centre:**

448, Galle Road, Rawathawatta,  
Moratuwa, Sri Lanka.  
Tel.: +94 112 644 600.

**Hafele Design Centre:**

752 Peradeniya Rd,  
Kandy,  
Sri Lanka.  
Tel.: +94 812 223 338

**Hyderabad Office & Design Centre:**

SJR Building - # 1-57/89/1 & 1-57/89/2  
Opp Allahabad Bank, Gachibowli,  
Hyderabad – 500032  
Tel.: 040 29557578 / 040 29557588

**Kolkata Design Centre:**

PS PACE, Premises No. 1/1A,  
Mahendra Roy Lane, Topsia,  
Kolkata - 700 046  
Tel.: 033 40086814 / 033 40089268  
Fax: 033 24988020

**Kolkata Office:**

Office No. 1001, PS Continental,  
10<sup>th</sup> Floor, 83/2/1 Topsia Road,  
Near Vishwakarma Building.  
South Kolkata - 700046  
Tel: 033-2285 0104 /  
033-2285 0105 / 033-2285 0106

**Chennai Office & Design Centre:**

1<sup>st</sup> Floor No.24, College Road,  
Nungambakkam, Chennai - 600 006  
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Fax: 044 2446 0922

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2<sup>nd</sup> Floor, House - 181, Road - 2,  
Mohakhali DOHS, Dhaka - 1206.  
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01844018433/ 01844018437.

**Bangladesh Design Center:**

House - 106, Road - 12,  
Block - E, Banani, Dhaka - 1213  
Tel.: 02-48810380-81

**Nepal:**

UHS Holdings Pvt., Ltd,  
Kathmandu-2, Gairidhara Chowk,  
Nepal.  
Mob.: +977 9802338800

**Pune Design Centre:**

Showroom No. 2, Ground Floor,  
F P no. 403, A/2, ICC Trade Tower,  
Senapati Bapat Marg,  
Shivaji Nagar, Pune -411016  
Tel.: 020 2563 3301  
Fax: 020 2563 3302

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Office No. 12, Vastushree Complex,  
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Hafele India Pvt. Ltd., Office No. 302,  
3<sup>rd</sup> Floor, Shangrila Arcade, Near  
Shyamal Cross Road, Satellite,  
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Tel.: +91 79695 55505 / 8866220505

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Jomer Symphony, 5<sup>th</sup> Floor, 48/1744  
C34, Chalikkavattom, North Ponnuranni,  
Vyttila, Cochin- 682010

**Bhutan:**

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77114228,1760063,17669840



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