



UFO LIGHTING

FIBRE OPTIC & LED LIGHTING SYSTEMS

ILLUMINATING THE WORLD FOR OVER 25 YEARS

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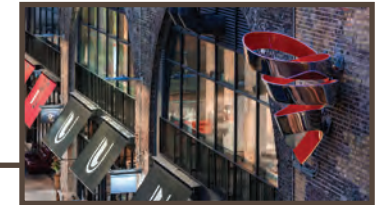


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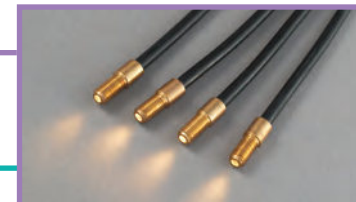


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# WHO ARE UFO?

## We've been manufacturing high quality lighting products for over 25 years.

As complete system manufacturers UFO has the knowledge, skills and people to turn your lighting concepts into a reality. Since starting out in the industry over 25 years ago, we have developed an extensive range of fibre optic and LED lighting systems and with it a reputation for quality and excellence.

Clients choose to work with us because they favour our innovative high quality products and the outstanding levels of service that we provide.

We have one of the widest ranges available and are extremely proud of the fact that our fibre optic and LED lighting products are designed, manufactured and assembled in-house at our 69,000 square foot headquarters in Coldstream in the UK.

Whether you are an OEM client interested in purchasing reels of fibre, a lighting designer in need of a bespoke lighting system for an architectural application, or a member of the public who wants to install a star ceiling or downlighters in your home, we can develop a solution to your exact specifications, on time and in budget.

Our continued investment in the latest technologies and strategic vision for growth has led us to more recently expand our product range. The addition of our energy efficient LED light sources and luminaires, all of which have been designed and are manufactured by us, gives our clients more choice than ever before for illumination.



DESIGN



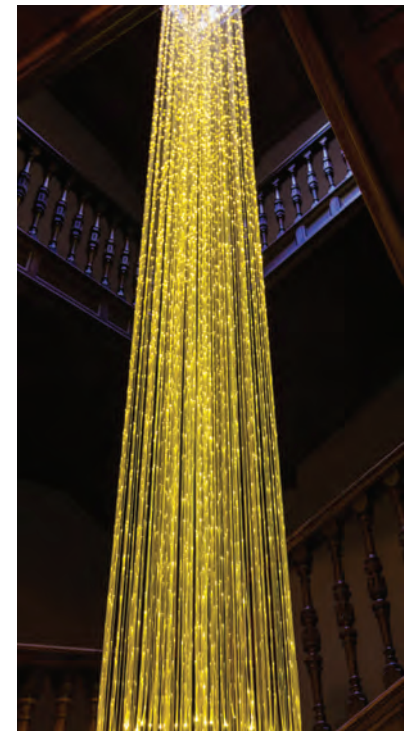
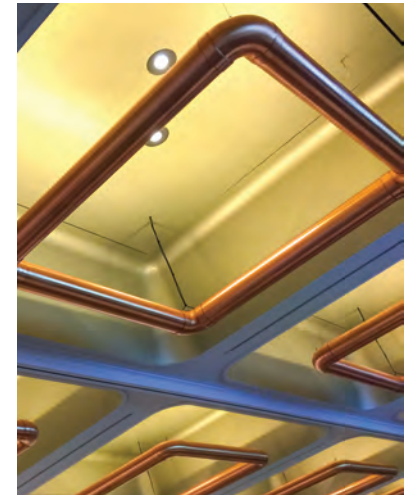
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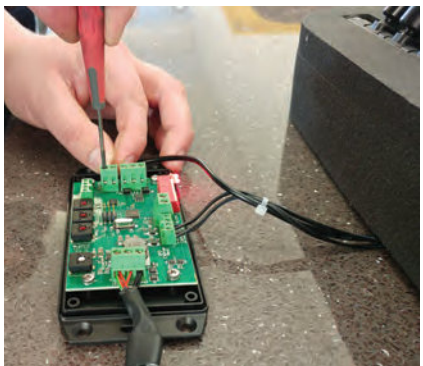
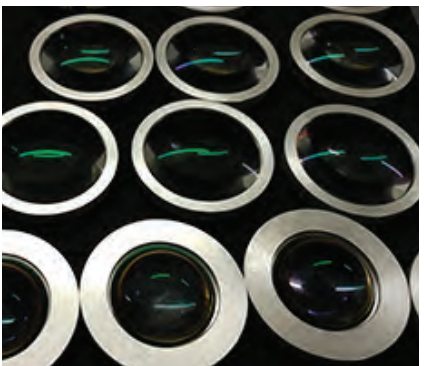
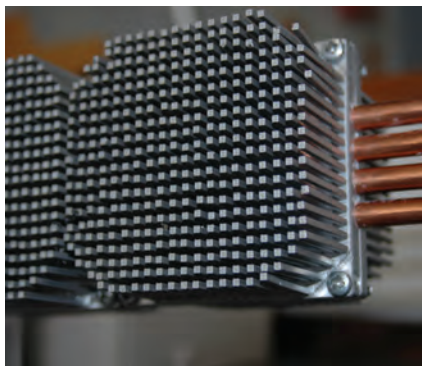
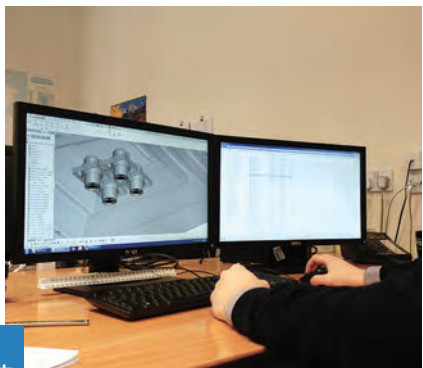
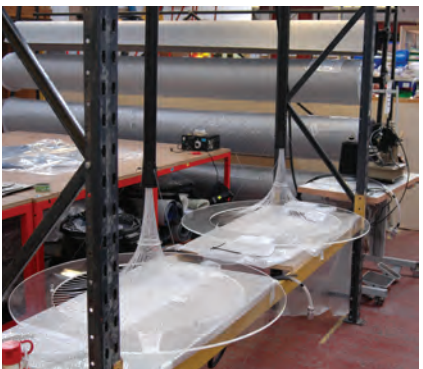
BUILD



INSTALL









# COMPLETE LIGHTING SYSTEMS MANUFACTURERS

We can fabricate and assemble many items from small luminaire fittings to large decorative ceiling fixtures. Our fabrication capabilities are not limited to lighting components though.

We can make parts from small simple brackets to machine frames. Working with sheet and bar metals, tubes, boards, laminates and plastics to create your finished goods ready for packaging and sale.

Our assembly operators are used to working with small components and we have handling equipment to deal with large items up to several metres across.

Having spent many years serving the needs of UFO by providing custom one-off and small batch production runs, our manual machining department is used to providing quick turnaround on milled, drilled and tapped quality components in a number of engineering materials.

We can produce jigs, fixtures and special purpose machines. These can speed up production and improve repeat accuracy. Linking this to our fabrication and assembly shop will make most things possible and finishing in our paint / powder coating shop can enhance the appearance of your product.

On our Swiss type CNC automatics we can manufacture straight turned components or more intricate geometrical shapes by utilising driven tooling integral to the lathe.

Due to the nature of these machines they can rapidly turn, mill, drill, tap and bore a component from both sides, negating the use of a second operation machining or set up.

This results in short lead times and keeps part costs down while delivering repeatable accuracy measured in micro metres rather than millimetres over the whole batch run.

We can offer powder coating for a wide variety of components in a variety of shapes and sizes. Our trained finishing personnel and modern spray booths ensure a first class finish every time.

We have an electrostatic corona charge system for powder coating which can give a finished thickness of 30µm to over 70µm. We can accommodate up to a maximum component size of 800mm x 800mm x 4000mm in our large oven.

Powder coating is available in all standard RAL colours and in epoxy for indoor use or polyester for outdoor use.

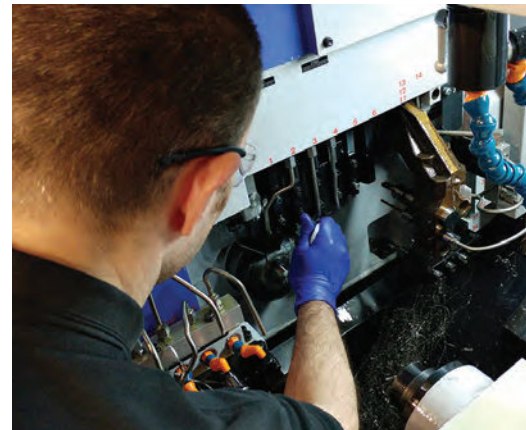
## FABRICATION



## MACHINING



## CNC OPERATIONS

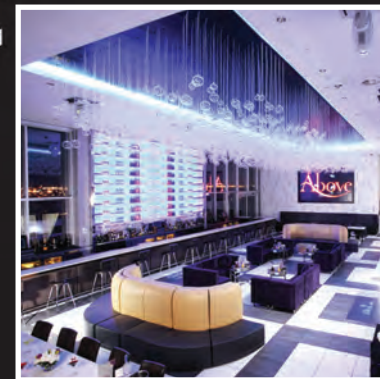
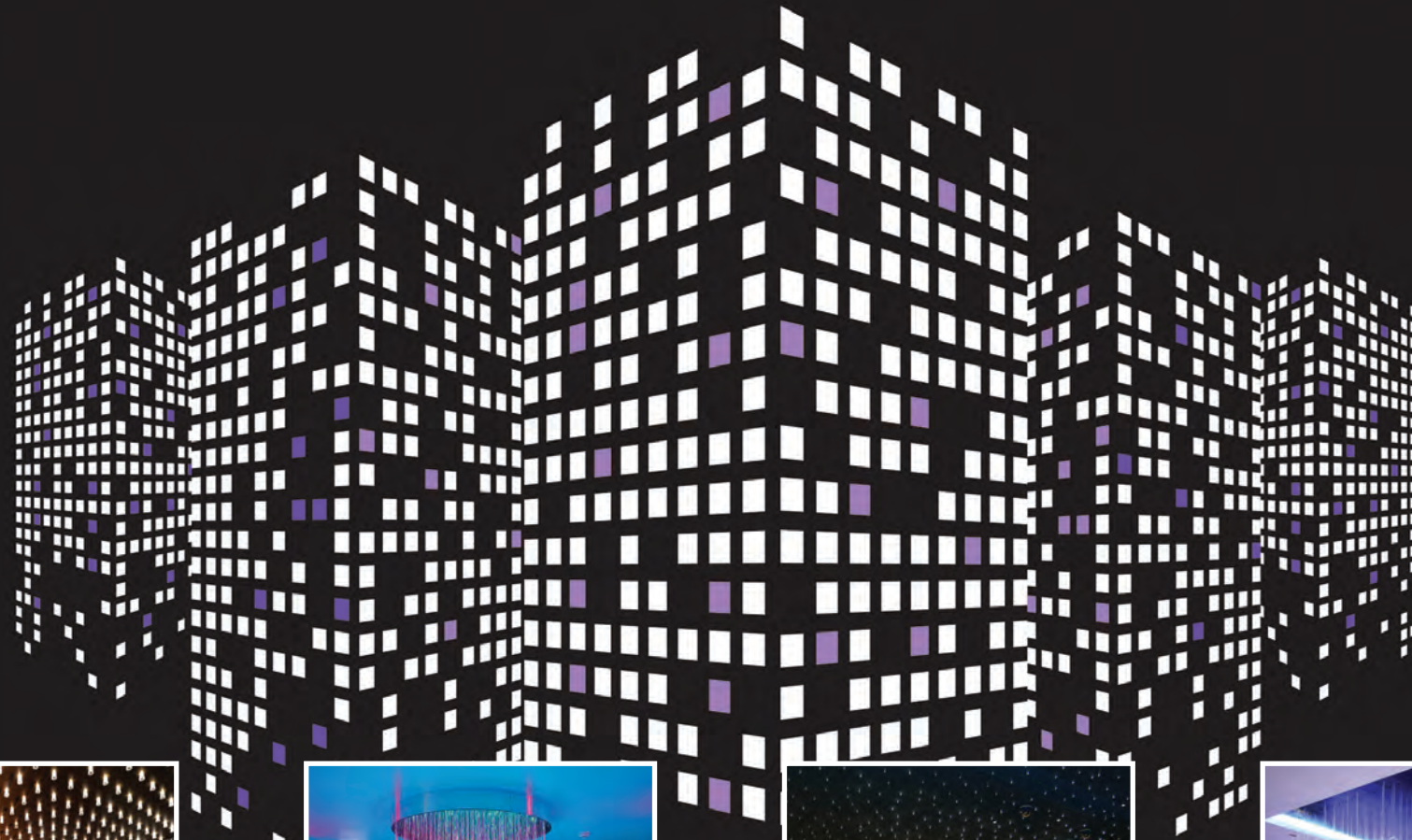


## FINISHING





# WE ILLUMINATE





# ENTERTAINMENT & HOSPITALITY VENUES

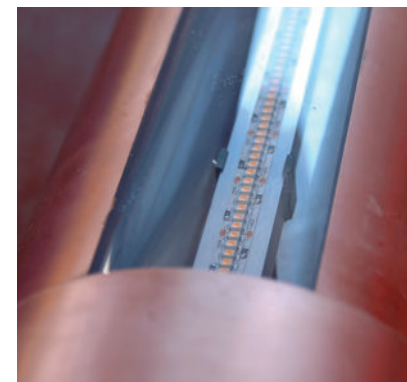
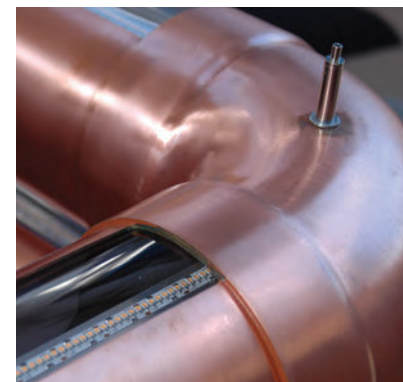
Entertainment and hospitality venues can all benefit from the wide range of decorative effects that UFO's fibre optic and LED lighting systems generate. The mood and ambience of a hotel, restaurant, casino or cinema can easily be altered with the addition of a star curtain or cloth, a one-of-a-kind chandelier, atmospheric back-lit bar, or walls washed with scallops of light from our paver and downlight fittings.

A change to the colour temperature and beam angle of fittings, or the injection of coloured or twinkling light to a system can add a new dimension to a venue, dramatically improving its visual appearance. We work closely with every lighting designer, architect and interior designer to ensure that our systems meet their individual requirements, illuminating their hospitality and entertainment venues in the best possible way.

Over the next few pages we highlight some of the unique and decorative lighting systems that we have created for a number of well-known hospitality and entertainment venues including Madame Tussauds, Rosewood London, Hotel Bloom, Hilton Glasgow Grosvenor and The Hippodrome Casino.









# HOTEL BLOOM LED CHANDELIER UPLIGHTERS



When UFO was asked by Kate & Sam Lighting Designers to manufacture a series of bespoke chandeliers for the contemporary Hotel Bloom we jumped at the chance.

Based in Brussels, the trendy hotel combines plush hospitality with art and creativity at every turn. Unique frescos which have been hand painted by young and emerging European art students adorn the walls in the hotel's 305 bedrooms, whilst the informal and colourful meeting areas provide relaxed environments where companies can brainstorm and let their creativity flow.

It is here in one of the 12 meeting rooms that all 25 of our custom chandeliers can be found creating a grid-like formation in the room's vast ceiling. Spanning more than 2000mm in width, the identical chandeliers have been fabricated from copper pipe and hand polished in-house by us.

We installed a steel wire assembly in to each of the chandeliers' copper elbows allowing the large copper units to be securely suspended from eyebolts in the ceiling, and also fitted 4000K linear LED lights and diffusers in to the top of the pipes providing neutral ambient lighting onto the recessed ceiling cavities above.

## Project Information

### 📍 Copper Chandelier Uplights

25 x custom copper chandelier uplights. Over 2000mm square and fitted with LED lighting.

Manufactured from 159mm diameter copper pipe.

📍 **Location:** Brussels, Belgium

📋 **Category:** Commercial, decorative lighting

👤 **Client:** Kate & Sam Lighting Design

📅 **Project completed:** 2016

📷 **Images:** Hotel Bloom



# MADAME TUSSAUDS STAR WARS STUNNING FIBRE OPTIC EFFECT LIGHTING



## Project Information

### 📍 Throne Room & Trade Federation Ship

2 x Luna Decorative LED light sources with DMX controlled twinkle effects.

2 x star effect curtains, each with 12 - 14 points of mixed diameter fibre per square metre.

### 📍 Duel of the Fates Scene

8 x Sirius LED light sources with DMX controlled twinkle effects.

4 x 400 tail fibre harnesses, manufactured from 2.2mm diameter cracked glass sideglow. All harnesses are 7 metres in length.

📍 **Location:** London, England

📋 **Category:** Decorative, effect lighting

👤 **Client:** Full On Lighting Design

📅 **Project completed:** 2015

📷 **Images:** David Hurst / Full On Lighting Design  
Madame Tussauds

The renowned waxworks museum, Madame Tussauds in London, set Star Wars' fanatics into overdrive with the addition of a multi-million pound Star Wars collection.

The new and interactive attraction brings to life some of the most iconic moments in the films' history. Fans can star alongside their favourite heroes and villains of Star Wars episodes I-VI, and immerse themselves in the outstanding special effects and dramatic theming that brings eleven of the iconic sets to life.

In the Death Star Throne Room, Luke Skywalker and Darth Vader embark on their final duel under the menacing gaze of Emperor Palpatine.

Outside the Trade Federation fans come face-to-face with one of Star Wars' most epic lightsaber battles in which Qui-Gon Jinn and Obi-Wan Kenobi clash with Darth Maul in the Duel of Fates scene, dramatically brought to life with the addition of a gigantic light cylinder that was created by UFO and forms the backdrop to much of the battle.

A fibre optic Star Curtain has been used to create the dramatic night sky speckled with diamond bright stars that can be seen through the large circular windows that frame the Emperor's black throne in the Death Star throne room.











# WALPOLE CINEMA ROOM & STAIRWELL

FIBRE OPTICS IN THIS STYLISH RESIDENCE



Occupying one of London's most exclusive addresses and just a stone's throw from The Ritz and Fortnum & Mason is this exclusive Mayfair private residence. Once home to Britain's first Prime Minister Sir Robert Walpole and his youngest son Horace Walpole, the beautiful listed Georgian residence exudes style and opulence throughout.

Internally a 15m long crystal chandelier creates a breathtaking centrepiece in the residence's grand spiral stair case. UFO was asked to supply and install a fibre optic lighting system which would illuminate the large chandelier. We opted to install multiple lengths of our glass fibre and P17T fittings within the chandelier, not only concealing the end fittings and fibre from view but also ensuring that the entire drop was lit for dramatic effect. Several of our 150W Compact metal halide light sources are used to power the fibre optics with bright white light and are stored out of view.

In the residence's private bar and cinema room a cloud-like formation of sparkling Swarovski crystals adorn part of the ceiling. The crystals are illuminated with 240 tails of our polymer fibre and miniature downlights, all of which were fitted in a grid formation above the cloud by our installation engineers. Our 150W QFX metal halide lights sources provide the fibre optics with the bright white light that can be seen in the image opposite.

## Project Information

### 📍 Stairwell Chandelier

6 x 150W Compact metal halide light sources

6 x 4.5mm glass fibre harnesses at various lengths

114 x P17T paver fittings with M16 back nut

### 📍 Cinema Room Lighting

4 x 150W QFX DMX metal halide light sources

4 x 60 tail harnesses of 3mm PMMA fibre

240 x 21D miniature recessed downlights

📍 **Location:** London, England

📋 **Category:** Decorative lighting

👤 **Client:** FOLI

📅 **Project completed:** 2013

📷 **Images:** Fibre Optic Lighting International



# THE ROSEWOOD HOTEL

## CUSTOM MANUFACTURED CUBE SHAPED LED DOWNLIGHTS



### Project Information

#### 📍 Custom Fittings

Custom anodised aluminium cube fittings with an internal insert.

Powered by a 1W Cree LED

📍 **Location:** London, England

📋 **Category:** Commercial, decorative lighting

👤 **Client:** Foundry Light+Design

📅 **Project completed:** 2015

📷 **Images:** James Newton Photographs  
Foundry Light+Design

The opulent Rosewood in London has unveiled its latest drinking and dining destination, The Terrace. Transformed by award-winning landscape designer Luciano Giubbilei, the year-round garden is reminiscent of a quintessential English garden with seasonal flowering plants in textural woven willow baskets throughout.

Classically pruned London plane trees form the overhead greenery while the intimate yet dramatic lighting scheme which was designed by Foundry, creates an inviting and stylish destination for guests to socialise in after dark.

A stainless steel structure fabricated from solid 50x50mm profile material provides an elegant foundation in which the majority of the lighting has been subtly incorporated, while custom trunking discreetly conceals the cable routing and keeps the visual impact of the lighting equipment to a minimum.

Bespoke frame-mounted LED downlight fittings which were designed by Foundry and manufactured in-house by UFO are used throughout to highlight the stainless steel structure and tables below.

Having been specifically fashioned to the same specification as the 50x50mm profile and powder coated to match, the cube-shaped fittings blend so seamlessly with their surrounding environment that they appear as being a streamlined extension of the structure.

Each fitting has been fabricated from anodised aluminium and fitted with a brass insert for added warmth. Internally the narrow optics provide the tight beam and quality of light needed to create dramatic pools of light on the tables below.











# THE HILTON GLASGOW GROSVENOR ELEGANT FIBRE OPTIC CHANDELIER

Situated in the heart of Glasgow's vibrant West End and only a stone's throw from the city's top tourist attractions is the Hilton Glasgow Grosvenor. The stunning 4-star hotel recently went through a considerable refurbishment including revamping the lighting in its main foyer to give it a more boutique and welcoming feel.

The hotel lighting specialists, R+S Robertson, responsible for the makeover, contracted UFO to design and manufacture a bespoke fibre optic chandelier that would fill the large space in-front of the staircase in the main foyer of the hotel. Whilst filling the space it was vital that the chandelier acted as a focal point for hotel guests relaxing and enjoying refreshments in the nearby seating area.

In keeping with these requirements we created a chandelier spanning four metres in length and approximately one metre in width. Suspended from the ceiling are 300 hand blown glass balls and 175 Bohemian cut crystals each of which are fixed to individual tails of end-lit fibre that vary in length.

Then fibre optic downlights are also mounted in the chandelier's decorative base and project ambient light on the crystals and glass balls below. The base itself is colour coded with the ceiling paint allowing it to blend seamlessly with the hotel's décor and ensure that it doesn't detract attention from the fibre optics and glass balls that are on display below.

A UFO Vega Decorative LED light source complete with twinkle wheel is used to power the fibre optics and give the light a charming twinkling effect. The LED light source, which was favoured over tungsten halogen models due to the high light output, low power consumption and long life characteristics that it offers, is stored three metres away in a location that can easily be accessed by the hotel's maintenance staff.



## Project Information

### 📍 Glass Ball & Crystal Chandelier

Vega Decorative LED light source fitted with twinkle wheel.

300 x hand blown glass balls.

175 x Bohemian cut glass crystals

475 tails of clear sheathed end-lit glass fibre

📍 **Location:** Glasgow, Scotland

🏢 **Category:** Commercial, decorative chandelier

👤 **Client:** R+S Robertson

📅 **Project completed:** 2014

📷 **Images:** Angus Bremner Photography



# THE HIPPODROME CASINO

SPARKLING CRYSTALS ILLUMINATED BY FIBRE OPTICS



## Project Information

### Ground Floor Bar

2 x 150W metal halide light sources with colour, twinkle and dimming effects.

1 x 240 tail fibre optic harness manufactured from 2mm PMMA fibre.

1 x 220 tail fibre optic harness manufactured from 1.5mm PMMA fibre.

### First Floor Bar

4 x 150W metal halide light sources with colour, twinkle and dimming effects.

4 x 155 tail fibre optic harness manufactured from 2mm PMMA fibre.

### Both Floors

UFO CR1 crystal fittings - 1080 in total are used across both floors of the casino.

**Location:** London, England

**Category:** Commercial, decorative lighting

**Client:** Into Lighting

**Project completed:** 2011

**Images:** Emphasis Photography

The Hippodrome Casino in the busy London borough of Westminster opened its doors in 2012 after undergoing an extensive renovation of the former iconic Hippodrome Theatre. The project took 36 months to complete and cost father and son team, Jimmy and Simon Thomas, upwards of £40 million to create their vision of the UK's first international style casino.

With more than 45 live tables and slot machines to choose from, a cabaret theatre which is home to Boom and Bang Circus and Soho Burlesque, a steak house restaurant, five bars and a smoking terrace, The Hippodrome is much more than your average casino. It offers one of the best nights out in London and is guaranteed to keep you entertained until the small hours.

UFO was chosen by lighting design consultancy, Into, to create and supply lighting for the bar area of the casino. Into's client wanted a lighting system that would not only provide a dramatic and unique effect but one which would also operate efficiently all day every day without fail. As fibre optic lighting has a lengthy lifespan and is extremely easy to maintain, our products featured heavily in the project.

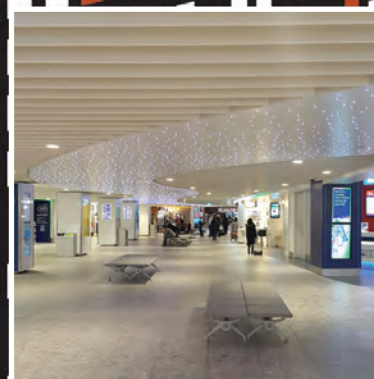
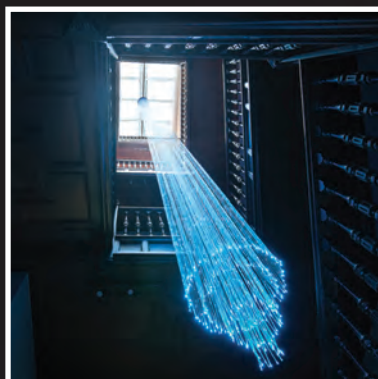
The glass blocks which were installed in front of and above the bar areas, were each fitted with one of our crystal fittings. The fittings were made from the finest European cut crystal to give off the amazing sparkling effect that can be seen in the photos. The fibre optics bring a real feeling of lavishness and excitement to the grand venue.







# WE ILLUMINATE





# COMMERCIAL PREMISES

An impression of a company is made within the first few seconds of entering its premises, so it's particularly important to get the look and feel right from the outset. With the right lighting system in place you can do just that, turning a business or retail site into a well-lit atmospheric environment that will transform the customer journey into a positive and enjoyable experience.

Whether you want to create a captivating focal point in a retail site with a bespoke fibre optic chandelier, install energy efficient LED lights in a lobby, or illuminate a vast ceiling with colour-changing star effect lighting, UFO can provide you with a tailor made solution to meet your particular requirements on time and in budget.

Over the next few pages you will see examples of some of the decorative lighting systems that we have had the pleasure of designing and manufacturing for the commercial sector. If you would like to know more about these lighting systems or have a project that our lighting would be perfect for then don't hesitate to get in touch.



Image courtesy of James Newton Photography



Image courtesy of Sutton Vane Associates









# CENTRAL CROSS DESIGN AND RETRO-FIT LED LIGHTING



Located in the busy borough of Camden in North West London is the large office complex Central Cross.

Lighting designers Pritchard Themis were employed to design the lighting scheme for the 57,000 square foot commercial premises at 1+2 Stephen Street and enlisted UFO to assist in fabricating the pendant fittings that feature throughout the property's vast reception and lobby areas.

When they approached us Pritchard Themis already had stock of the 900mm diameter circular pendants but needed our help in illuminating them, so we set about designing and fabricating the rest of the concept. We began by creating the metal brackets which hold in place the Xicato LED modules that illuminate the gold interior of each pendant.

The small opaque acrylic diffusers which emit warm ambient light onto the area below were then added. These are double skinned to prevent the LEDs from being seen from below, thus creating a more aesthetic appearance.

We then fabricated the hollow, metal central arms which house the electrical wiring and control gear for each pendant. The upper section of each arm spans 900mm in length and connects to the ceiling rose and plaster in ring, whilst the lower section supports the metal bracket and LEDs within the pendant bowl. A spigot joining piece connects the two sections of arms and bowl in place.

The central arms were powder coated in-house in a polished brass finish to match the interior shade of each pendant bowl, completing the overall look.

## Project Information

### **Mamma Lampa Pendant Retro-fit**

Retro-fitting custom designed lighting components to existing pendant lights

 **Location:** London, England

 **Category:** Commercial, decorative lighting

 **Client:** Pritchard Themis

 **Project completed:** 2014

 **Images:** Nick Rochowski



# THE GATE HUGE FIBRE OPTIC CEILING STAR CLOTH



## Project Information

### **Decorative Star Cloth**

6 x Nova RGBW DMX LED light sources with  
twinkle wheel

4 x 350 tail harnesses of 0.75mm PMMA fibre  
2 x 300 tail harnesses of 0.75mm PMMA fibre

Custom 30m x 8m black star cloth

 **Location:** Newcastle Upon Tyne, England

 **Category:** Decorative lighting

 **Client:** SKR Lighting Design

 **Project completed:** 2017

 **Images:** Jill Tate Photography

**T**he Gate is a leading leisure and entertainment venue housing a host of well-known bars, restaurants, clubs, a cinema and a casino right in the heart of Newcastle upon Tyne. Open 7 days a week, the venue recently went through a multi-million pound refurbishment that included the addition of a new cocktail bar, lobby area and mood lighting throughout.

**U**FO was approached and asked by the designer of the lighting scheme, SKR Lighting Design, to manufacture a fibre optic lighting system for the venue's vast ceiling space.

**I**n response we created a 30m x 8m star cloth and filled it with 2000 points of colour-changing light, to create a really dramatic focal point that is visible from the ground and first floors.

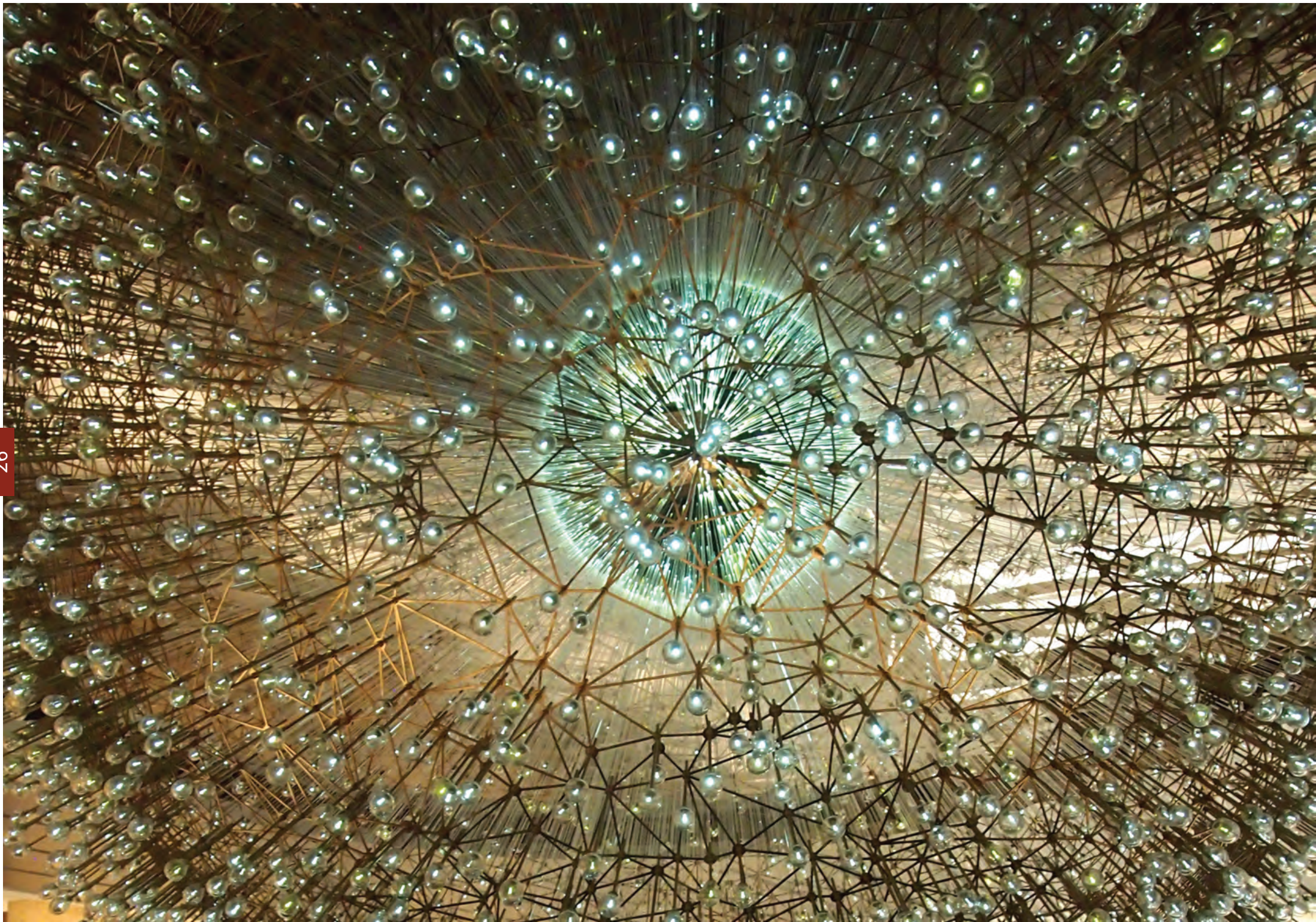
**S**ix of our Nova LED light sources with twinkle wheel and DMX control are used to power the fibre optics and give the points of light their twinkling, colour-changing effect. The light sources are stored out of sight in a location that is easily accessible to The Gate's maintenance personnel.

**A**s The Gate remained open throughout the refurbishment period our installation team was able to fit the star cloth and light sources out of hours, over several consecutive nights.











# THE HANCOCK CENTER

## AMAZING 3D FIBRE OPTIC STAR MAP

Luculent is the newest addition to the iconic John Hancock Center in Chicago, Illinois. Designed by UK artist Wolfgang Buttress, the breathtaking installation is the central feature within the refurbished lobby area of the grand skyscraper.

With its delicately detailed composition you may at first believe that you are looking at a dandelion comprising of thousands of small seed heads, but the sculpture is actually much more complex than that, it is an astronomy inspired star map.

Spanning four metres in diameter the semi-spherical structure consists of 3,115 perforated holes which accurately map each of the stars in the northern hemisphere that can be seen with the naked eye.

Emerging from each triangulated hole are strands of our PMMA fibre which emit glowing ambient light that pulsates throughout the day. Hand blown glass orbs are attached to the ends of the fibre points to diffuse the light and embody each of the stars. Our Sirius LED light sources with full DMX control are used to power the fibre that runs throughout the installation and give it the pulsating appearance.

The sculpture has been cleverly installed on a mirrored ceiling to give the impression of a complete sphere, while the polished black granite pool of water that sits below reflects the structure and creates a sense of infinity.



## Project Information

### 📍 Fibre Optic Star Map

Sirius 90W LED light sources outputting white light and with full DMX control

PMMA fibre harnesses

Hand blown glass balls fitted to the end of the fibre optic tails.

📍 **Location:** Chicago, Illinois, USA

📋 **Category:** Commercial, decorative lighting

👤 **Client:** Wolfgang Buttress

📅 **Project completed:** 2015

📷 **Images:** Susan Aurinko & Wolfgang Buttress



# BERRY BROS. & RUDD WINE MERCHANTS FIBRE OPTIC STAR EFFECTS



## Project Information

### 📍 Ceiling Lighting

12 x Sirius 90W LED light sources with 3000K high CRI output. White light only.

Custom designed ferrules and end fittings.

📍 **Location:** London, England

🏠 **Category:** Commercial, decorative lighting

👤 **Client:** Sutton Vane Associates

📅 **Project completed:** 2015

📷 **Images:** Sutton Vane Associates

Founded by Widow Bourne in 1698, Berry Bros. & Rudd is one of the oldest wine merchants in the UK. With a colourful history that encompasses wines on board the Titanic and sheltering Napoleon III in the cellars beneath the shop, two Royal Warrants, eight Masters of Wine and multiple other accolades under their belt, Berry Bros. & Rudd are justly proud of their past.

Mark Sutton Vane, the world class lighting designer, wanted to light the amazing space with no visible light fittings and decided to use tiny fibre optics hidden in the grout between the hand made tiles of the ceiling. He also wanted the system to provide the emergency lighting which was another challenge. We were very excited to be asked to supply the fibre optic lighting system and to help solve the challenges. We had previously supplied fibre optics for Mark Sutton Vane's design of the lighting of the Crown Jewels, so had experience of his very high standards.

In keeping with these requirements we created a custom end ferrule and fitting which was installed in the grout between the tiles. The fittings were finished in black to allow them to blend in with their surrounding environment and to ensure that they went unnoticed when the fibre optics were switched off.

Twelve of our Sirius LED light sources were used to power the fibre optics and these were specially programmed to ensure that they would carry on running in the event of a power failure. We supplied units with Sutton Vane Associates' requirement for 3000K colour temperature and high CRI which would not distort the colour of the wine on display.











# CP HART BATHROOM SHOWROOM

## FIBRE OPTIC & LED COPPER LIGHTING SYSTEMS



During 2015 the award-winning luxury bathroom retailer conducted a major overhaul of its Waterloo showroom, almost doubling the size of its premises and transforming the space into a stylish haven where the architect and design community can take inspiration from the latest products and samples.

Specialist lighting design practice Studio Fractal, were tasked with designing the large fibre optic and LED lighting features that occupy the reception area to the front of the showroom and coffee bar to the rear, and approached UFO to carry out the manufacturing and installation of the bespoke pieces.

On entering the showroom customers pass below the impressive copper chandelier which measures 4500mm in diameter and contains both UFO fibre optics and LED lights. Protruding from the mirror polished stainless steel base are two hundred pieces of copper pipe which vary in length.

Four of our 90w Sirius LED light sources are used to power the fibre optics and give the light its atmospheric twinkling white glow, while fifty of our LD2 LED downlights are set into the base of the chandelier and provide functional lighting onto the floor below.

Situated above the coffee bar at the rear of the showroom is the large eye-catching copper maze which we custom made to perfectly fit the building's exposed brick archways. Spanning more than 7500mm wide the structure comprises of three layers of support frames and more than sixty copper pipes which were manipulated into shape before sixty custom lamp holders and LED eco filaments were applied. Due to the sheer size of the structure it was transported in multiple sections and constructed on site by our installation team.

### Project Information

#### 📍 Copper Chandelier

4 x Sirius 90W LED light sources with built in twinkle wheel.

4 x 50 tail fibre harness manufactured from PMMA with 3mm active diameter.

50 x UFO LD2 LED downlights, 5 x LED drivers and 5 x splitter/junction boxes.

#### 📍 Copper Maze

3 x Bespoke support frames.

60 x Bespoke copper pipes with LED filaments.

60 x Urban Cottage large globe eco-filament light bulbs with E27 screw fitting.

60 x Custom copper E27 lamp holders.

📍 **Location:** London, England

🏠 **Category:** Commercial, decorative lighting

👤 **Client:** Studio Fractal

📅 **Project completed:** 2015

📷 **Images:** James Newton Photographs



# WE ILLUMINATE

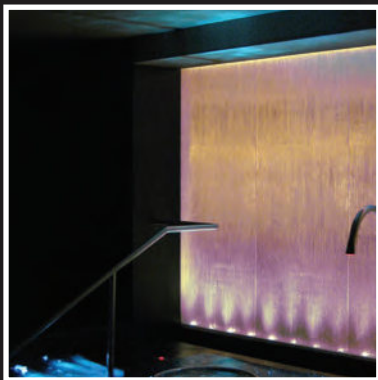
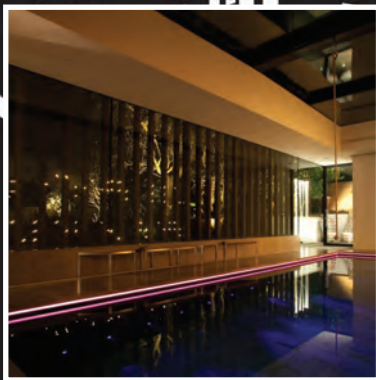


Image courtesy of Light IQ





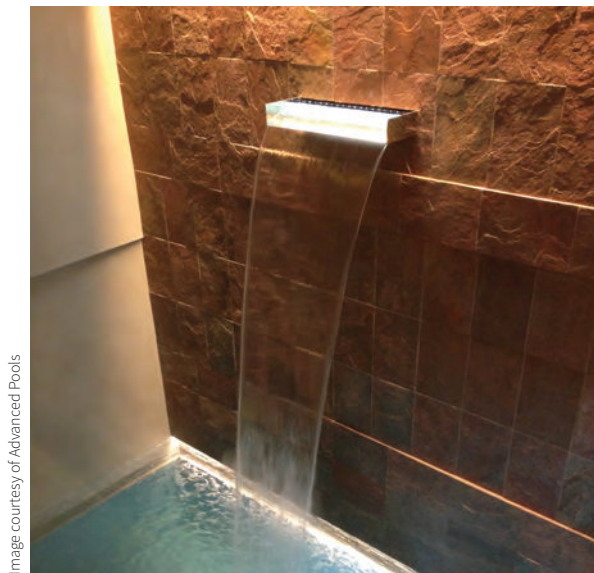
# POOLS, WET AREAS & WATER FEATURES

Our fibre optic lighting systems are chosen time and again to illuminate wet and humid areas, for the inherent safety features and effects that they generate.

Swimming pools, baths, spas, saunas, water features and fountains can all be beautifully transformed from bland spaces into relaxing aquatic havens with our fibre optics. The perimeter and interior of pools and Jacuzzis can be illuminated with white light as a safety marker or injected with colour changing light for a real mood enhancing effect, while saunas and steam rooms can be serenely lit with twinkling star and crystal lighting effects.

As there is no heat or electricity emitted from our fibre harnesses and end fittings they are extremely safe to use in wet and humid areas where they may be touched or stood on. The only component that does contain electricity is the light source and it can be stored a safe distance away in a dry location and accessed as and when any maintenance may be required.

Some examples of wet area lighting systems that we have manufactured and installed in homes, leisure centres and spas can be found on the next few pages.



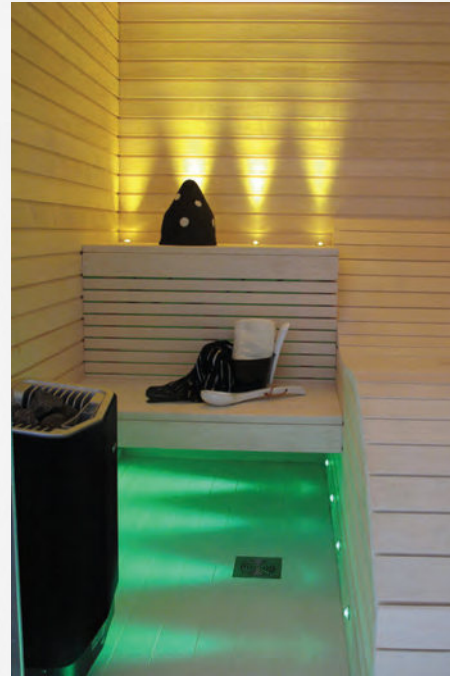






# ROEHAMPTON WET AREA

## DECORATIVE FIBRE OPTIC LIGHTING



## Project Information

### 📍 Pool, Sauna & Steam Room Are

A combination of MicroLED 4000 with remote control colour change, 150W metal halide and 100W slimline tungsten halogen light sources are used throughout the area.

End lit glass fibre optic harnesses with an active diameter of 6mm are used throughout.

The steam room and sauna use UFO P1 and P2 stainless steel pavers whilst the shower and plunge pool use 13D articulated downlights. All fittings are manufactured from marine grade stainless steel.

The impressive residential property which features in this project is located in the suburban district of Roehampton in South West London. The district has been a firm favoured residential area since the 18th century and is home to a number of well-known educational institutions including the University of Roehampton and Kingston University.

Drom UK, one of the world's leading specialists in custom saunas and steam rooms was tasked with creating a beautiful, relaxing leisure suite in the ground floor of this private residence and specified UFO products for the job. Our colour-changing fibre optic up-lighters have been used extensively throughout the stunning suite to create relaxing, mood enhancing lighting. In the sauna area our up-lighters have been installed in the upper Aspen bench and along the bottom of the ergonomic lounge to spread patterns of light over the rear wall and floor.

In the blue steam room our up-lighters have been installed in the back and bottom of the L-shaped bench, and on the suite's main feature wall. Elsewhere the plunge pool and shower has been lit with our colour changing articulated downlights for a really dramatic effect.

As the up and downlights are being used in a wet environment it was imperative that they don't corrode over time and so all of the end fittings have been specified in marine grade stainless steel for longevity.

📍 **Location:** London, England

📋 **Category:** Decorative, wet area lighting

👤 **Client:** Drom UK

📅 **Project completed:** 2013

📷 **Images:** Drom UK



# CHESHIRE SPA & POOLS LUXURY SUITE

DECORATIVE FIBRE OPTIC LIGHTING



Cheshire Spas & Pools design and build award winning, innovative spas, swimming pools and heat experience rooms for commercial and private clients throughout Europe, the USA, the Middle East and South America.

They offer a complete in-house service from initial concept right through to manufacturing. An installation service is also available for commercial and residential swimming pools, hydro spas, Hammam tables and all types of heat experience rooms from saunas to snow rooms.

Whilst designing this luxury suite they decided to incorporate mood-enhancing lighting and specified our fibre optic products for the job, due to the fact that they don't emit any scalding heat and elements containing electricity can be kept a safe distance away from the wet and humid areas.

In the spa area our star effect lighting adorns the ceiling creating a 'near and far' effect thanks to the mixed diameter fibre that has been used. Once the fibre has been fed through the ceiling a small conical end fitting, known as a star point, is attached to each individual tail to give the lighting a slightly softer look - ideal for areas of relaxation. A metal halide light source is used to power the fibre optics and creates the twinkling effect.

Over in the sauna, a stainless steel channel containing 106 tails of fibre has been installed in the underside of the wooden bench and projects scallops of colour-changing light onto the floor below. As with the star ceiling, a metal halide light source has also been used to power the lighting in the sauna, and is housed in an easily accessible location more than two metres away.

## Project Information

### Star Ceiling

1 x Compact DMX 150W metal halide light source.

306 tails of sheathed PMMA mixed diameter fibre which gives a unique near and far effect to the starry points.

306 x UFO star point end fittings.

### Sauna Room

1 x Compact DMX 150W metal halide light source.

106 tails of 2mm sheathed glass end lit fibre

The fibre tails are terminated within a resined stainless steel channel.

**Location:** Neston, England

**Category:** Decorative, wet area lighting

**Client:** Cheshire Spa & Pools

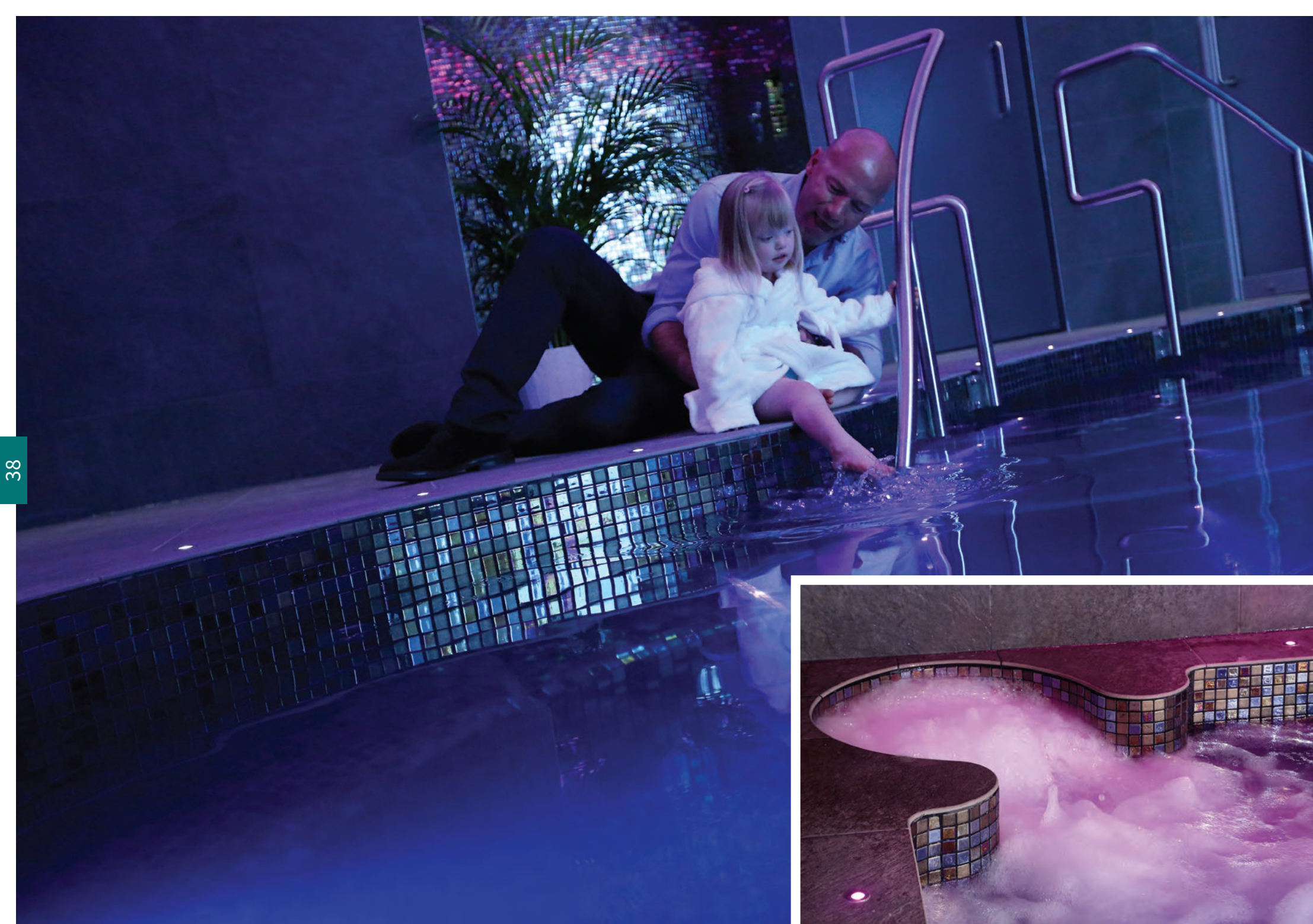
**Project completed:** 2012

**Images:** Cheshire Spa & Pools



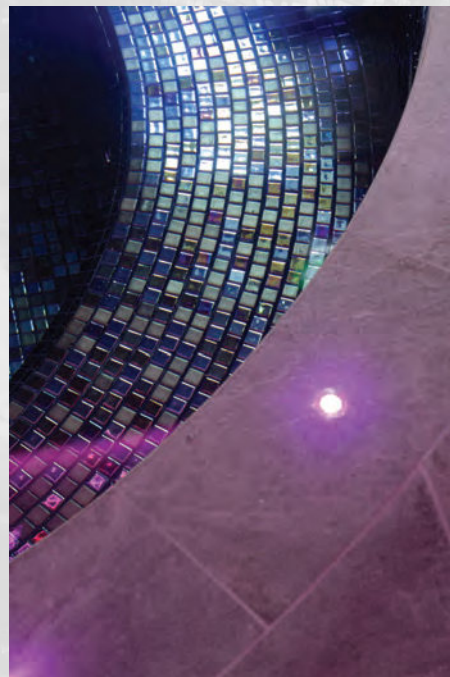








# THE ALAN SHEARER CENTRE SENSORY FIBRE OPTIC LIGHTING



The Alan Shearer Centre in the North East of England provides specialist recreational, sensory and social facilities to children and adults with acute sensory impairments and disabilities.

The centre recently enhanced its facilities with a new £500,000 hydrotherapy suite and we were delighted to be able to supply and install our fibre optic lighting products in and around the suite's pool.

Our PMMA fibre and 11D downlight fittings have been combined with the waterfall feature which resides at one end of the pool. The rhythm of the water hitting the skin provides visitors with a great tactile experience while the addition of the colour changing light appeals to the visual senses and aids colour recognition.

Around the perimeter of the pool we installed our PMMA fibre and P3 stainless steel pavers with frosted lenses, while our stainless steel E2 submersible eyeball fittings were fitted in the stair riser's enabling visitors to make their way in and out of the water safely.

In the ceiling above the pool we created a dramatic colour changing starry nightscape using our PMMA fibre, star lenses and crystal end fittings. The star lenses provide serene points of light whilst our crystal end fittings create eye-catching patterns of light on the surrounding ceiling space.

Our Cube RGBW LED light sources are used to power all of the fibre optics and give the light its colour changing effects.

## Project Information

### 📍 Sensory Pool Room

6 x Cube light sources were used throughout the project.

End lit PMMA fibre harnesses of various diameters were used for the crystal ceiling, the star ceiling, the pool stair lighting, the waterfall lighting and the pool perimeter lighting.

Pool Perimeter - 41 x UFO P3 pavers  
Pool Stairs - 25 x UFO E2 wet area fittings  
Star Ceiling - 336 x polycarbonate star lenses  
Crystal Ceiling - 35 x CR1 & 35 x CR2 crystals  
Waterfall Lighting - 9 x UFO 11D downlights

📍 **Location:** Newcastle Upon Tyne, England

📋 **Category:** Sensory, wet area lighting

👤 **Client:** Whitewaters

📅 **Project completed:** 2016

📷 **Images:** Whitewaters



# WEST LONDON RESIDENCE ILLUMINATING THIS POOL WITH FIBRE OPTICS



## Project Information

### 📍 Pool Area Lighting

3 x UFX 150W metal halide light sources with DMX control

3 x harnesses of 14.5mm stranded side glow fibre, mounted in 18m of clear channel.

1 x 12 tail glass fibre harness with 6mm active diameter.

📍 **Location:** London, England

📋 **Category:** Decorative, wet area lighting

👤 **Client:** Light IQ

📅 **Project completed:** 2011

📷 **Images:** Light IQ

Located just 15 miles south west of central London, the attractive borough of Richmond upon Thames is a popular stomping ground for the rich and famous that favours its green space and close proximity to the city centre.

With its beautiful parks, historic houses, galleries rich with exhibits and town centre overflowing with the latest shops and restaurants, Richmond upon Thames really does rival any other borough in London.

When it came to renovating the private residence that features in this project, the owners knew that they wanted to make the most of the space that they had. They envisioned creating an aquatic haven that would also double up as a quirky entertainment space at the touch of a few buttons.

Tasked with fulfilling the lighting element of the brief, Light IQ specified our fibre optic products for the pool area and on the feature wall behind the pool.

More than 22 metres of our side emitting fibre has been set into a clear channel and recessed into the interior walls of the swimming pool to create a vibrant effect within the large room. The fibre is lit using a metal halide light source with DMX capabilities that cycles through 9 different colour options.

On the wall adjoining the pool, our end lit fibre has been carefully fed through the mosaic tiles to write out a memorable family motto in braille. It's an entirely unique and quirky idea and highlights the countless ways in which fibre optics can be used to good effect.







# WE ILLUMINATE

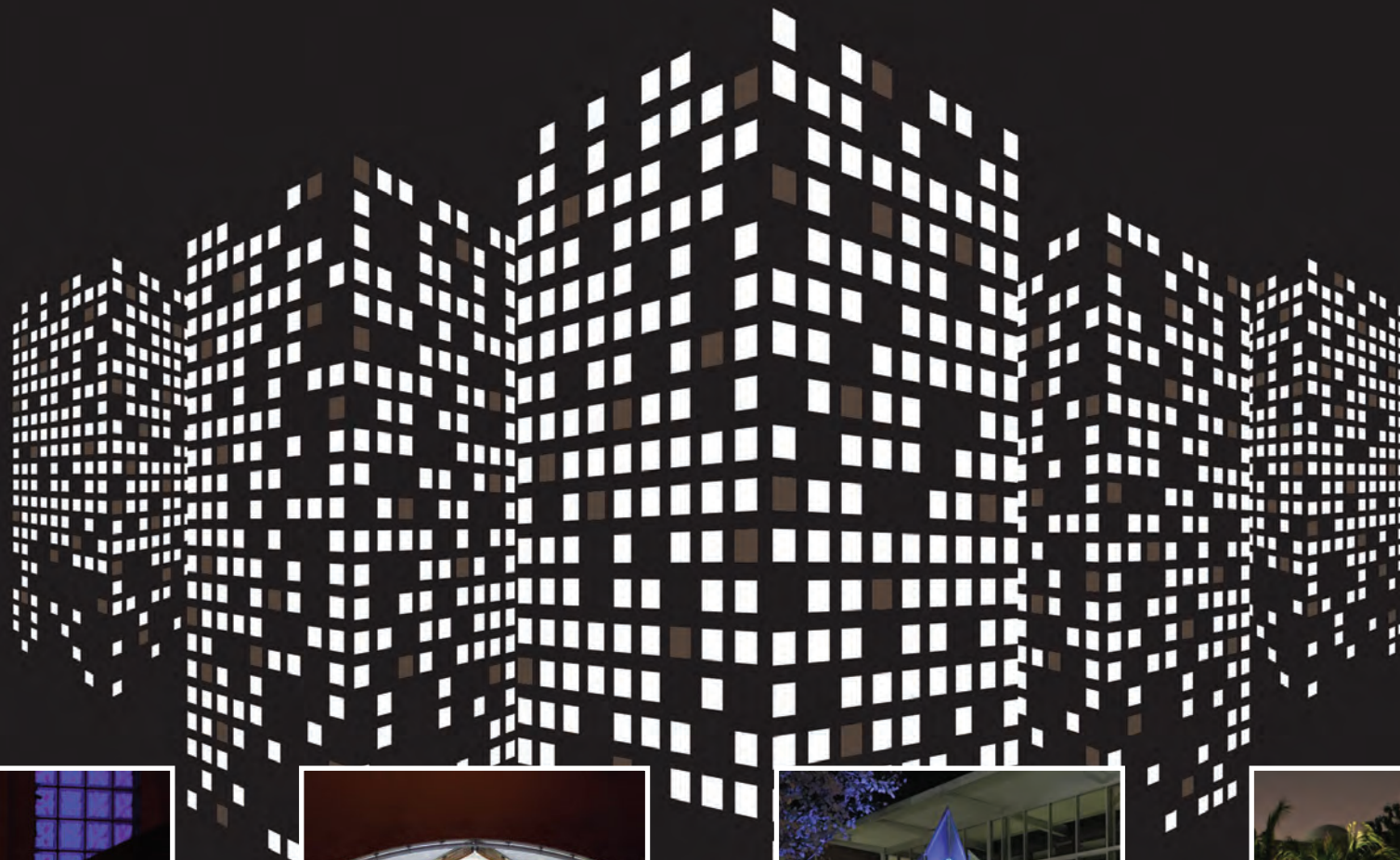


Image courtesy of Fossil Forge





# OUTDOOR AREAS & SIGNAGE

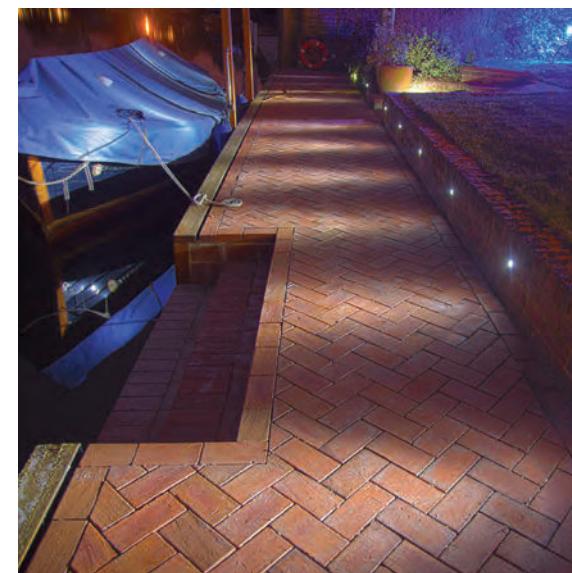
UFO is regularly asked to supply and install fibre optic and LED lighting systems for use in outdoor applications. Over the years the requests have ranged from pavers in walkways and garden paths, star effect lighting in decking, illuminating company signage and public areas, fitting out multi-million pound yachts and cruise ships with interior and exterior lighting, to manufacturing bespoke systems for outdoor art installations and large architectural structures.

We're just as comfortable installing a lighting system in the façade of a commercial building as we are scaling a historical site, or working onboard a moving cruise ship in all weather conditions. Our lighting systems aren't limited to the UK either, they can be found as far afield as Australia, America, Kazakhstan, Russia and throughout the Middle East. Our global client base chooses our high quality British-made systems for the energy efficiency, easy maintenance and control options that they offer.

Over the next few pages you can read about the varied outdoor lighting systems that we have created and installed at Birmingham NIA, Sir Walter Scott's former residence - Abbotsford House, Melrose Square, Prince Edward Theatre, Union Square, and onboard the Queen Mary 2 cruise ship.



Image courtesy of Marshalls









# PRINCE EDWARD THEATRE TORCHIERE REFURBISHMENT & LED RETRO-FIT



Prominently positioned on the corner of Old Compton Street and Greek Street, lies the well-known Prince Edward Theatre. Named after the then Prince of Wales, the historic playhouse has gone through a number of cosmetic changes over the years, including the refurbishment of its exterior torchieres which UFO were enlisted to assist with.

Pritchard Themis who designed the scheme wanted to replace the sodium based light sources in the torchieres with colour-changing LEDs which would not only have a considerably longer lifespan, but would also provide theatre personnel with greater flexibility over the building's exterior lighting effects.

In keeping with the brief, we stripped out the sodium sources and removed the existing coating from the surface of each fitting, before strengthening the wall plates and fabricating new metal mounting brackets and supports.

All of the components were powder coated at our in-house paintshop; the inside of the torchiere bowls were powder coated in white whilst the outer elements were coated in Californium to perfectly match the rest of the metal work on the theatre façade.

Each torchiere bowl was retrofitted with 3000K LED uplighters that had a lumen output of approximately 3500lms, whilst the Greek Street torchieres also benefitted from the addition of LED downlights in the same specification, providing functional lighting onto the pavement below. In the rear of each torchiere's shaft we removed a channel and fitted it with LED linear detail and control cables, which were completely concealed from public view and threw quality light out onto the façade below.



## Project Information

### 📍 Refurbished Torchieres

Complete strip down and restoration of multiple lighting fixtures from the outside of the theatre.

Retro-fit LED uplighters / downlighters to all units.

📍 **Location:** London, England

📋 **Category:** Outdoor lighting

👤 **Client:** Pritchard Themis

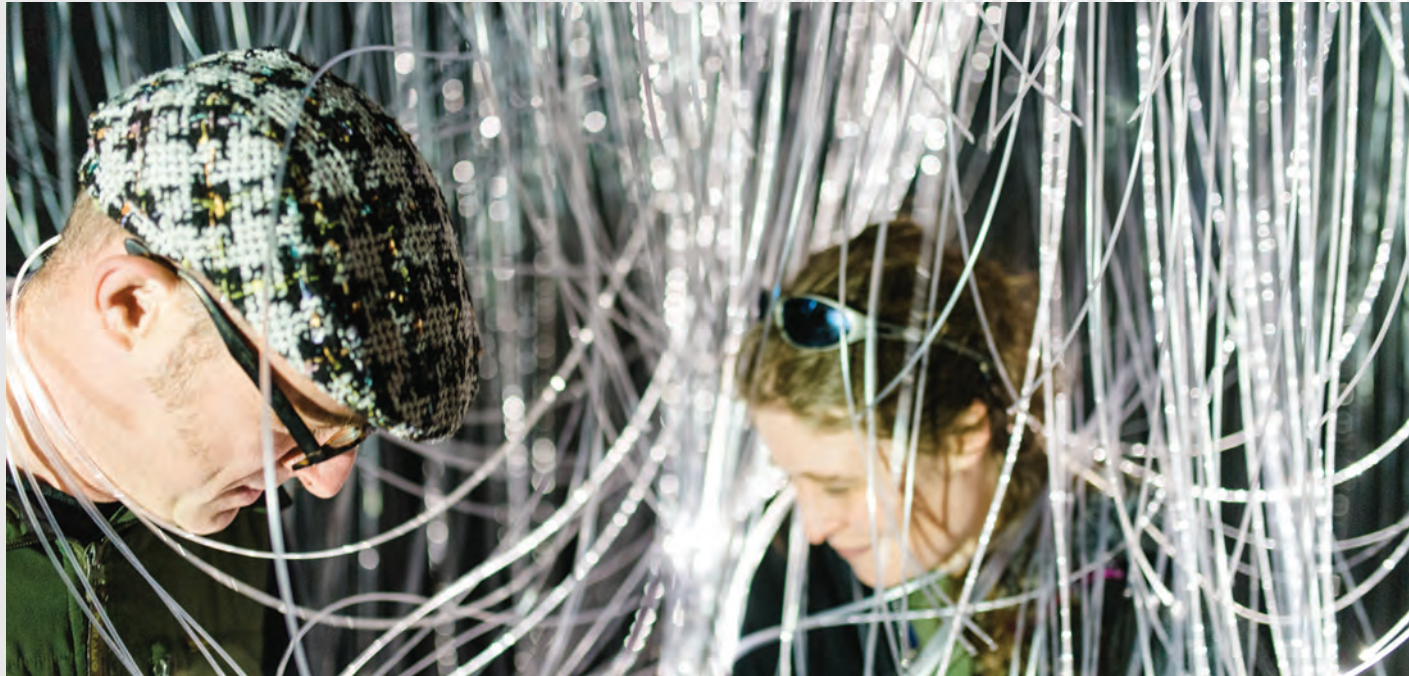
📅 **Project completed:** 2014

📷 **Images:** © Greg Townsend / Light Projects  
Pritchard Themis  
UFO



# BOURNEMOUTH GARDEN OF LIGHT

## INTERACTIVE FIBRE OPTIC LIGHTING SYSTEM



### Project Information

#### 📍 Beach Light House

2 x Compact 150W metal halide light sources outputting white light only.

700 tails of PMMA sideglow fibre with an outer diameter of 2.2mm

📍 **Location:** Bournemouth, England

📋 **Category:** Decorative, outdoor lighting

👤 **Client:** Michael Grubb Studio

📅 **Project completed:** 2013

📷 **Images:** Mike Massaro / Michael Grubb Studio

The Bournemouth Arts by the Sea Festival is an annual event which showcases some of the best regional, national and international arts across dance, performance, film, theatre, light installation, spoken word and music. Initially set up in 2010 by Arts Bournemouth to encourage a greater awareness of and participation in arts, the festival has now gone on to become a must-see event.

During 2013 Arts Bournemouth asked award-winning local lighting design agency, Michael Grubb Studio, to create a series of light houses for the town's lower gardens and beach front area. Five houses were created each one providing its own individual sensory experience and demonstrating how space can be sculpted and defined by light.

UFO was delighted to be asked to supply the fibre optic lighting for Michael Grubb Studio's Optical World pod.

The concept for their pod was to create a sensory environment in which the illusion of coloured clouds would be cast across the walls.

To achieve this, 700 strands of sideglow fibre were suspended from the ceiling of the beach house pod. The strands varied in length and when moved created a cloud-like burst on the three interior walls of the pods. Two metal halide light sources were used to power the fibre with each having been customised to aid the cloud-like effect that illuminated the walls of the pod.

As no heat was emitted from fibre it was completely safe for visitors to immerse themselves in the strands of fibre and create unusual patterns on the walls.











# RMS QUEEN MARY 2 FIBRE OPTICS BRING THIS LINERS SIGNAGE BACK TO LIFE



Cunard's Queen Mary 2 is a real awe-inspiring transatlantic ocean liner. Designed by a team of British naval architects and constructed in France in 2003 by Chantiers de l'Antique, it is the biggest passenger ship ever built, weighing in at an incredible 148,528 tonnes and measuring 1,132 feet in length. After being christened by Queen Elizabeth II in January 2004, the enormous vessel made its maiden voyage from its home in Southampton to Fort Lauderdale in the USA, later that month.

UFO was contracted by Offshore Lighting to replace another company's fibre optics, which had been installed in the ship's exterior 'Queen Mary 2' signage and had become damaged by the sea and harsh weather conditions.

Our team of engineers boarded the vessel at Southampton, en-route to Hamburg for its major internal refit.

Whilst at sea the team were able to remove all of the old optics from the signage on either side of the ship's funnel and measure up for the replacement items. The measurements were then emailed to our head office in Scotland where production began immediately.

More than 5,000 fibre tails were produced for use in the harnesses, whilst countless ferrules were custom designed specifically for the project and manufactured on our Star lathe. The finished products were sent directly to the shipyard in Hamburg where the ocean liner was dry docked and ready for the new fibre optics to be fitted.

In total, it took us less than 3 weeks to complete the project from start to finish. And once complete, the ship's signage could be seen from 20 miles away thanks to the increased brightness of our fibre optic lighting system.

## Project Information

### 📍 Queen Mary 2 Signage

150W Compact metal halide light sources, which output white light only were installed in the engine room behind the sign.

5000+ tails of fibre optics fitted with custom ferrules.

📍 **Location:** Southampton, England

📋 **Category:** Signage illumination

👤 **Client:** Offshore Lighting

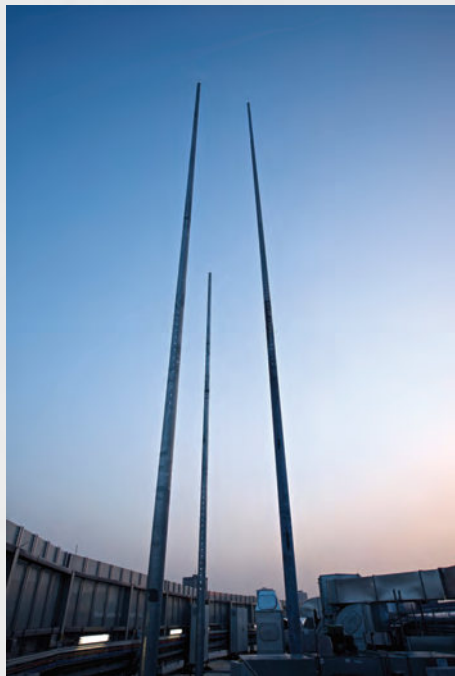
📅 **Project completed:** 2009

📷 **Images:** UFO



# BIRMINGHAM SKY NEEDLES

## FIBRE OPTICS LIGHT UP THE BIRMINGHAM SKYLINE



### Project Information

#### 📍 Sky Needles

3 x Ultima 250W metal halide light sources outputting white light only.

Over 600 tails of PMMA sideglow fibre with an outer diameter of 1.5mm.

P9 paver fittings mounted in the sky needles.

📍 **Location:** Birmingham, England

🏠 **Category:** Decorative, outdoor lighting

👤 **Client:** Marshalls

📅 **Project completed:** 2014

📷 **Images:** Marshalls

The National Indoor Arena is a state-of-the-art sporting and entertainment venue with a unique canal-side location in the heart of Birmingham.

Originally opened in 1991, the arena has recently undergone a £26 million redevelopment which saw all areas of the NIA upgraded and the city's skyline transformed with the installation of three striking sky needles.

We were approached by Marshalls, the fabricator of the needles, to supply and install a fibre optic lighting system that would effectively illuminate the needles and ensure that they could be seen some distance away from the arena.

Constructed from steel and lit with our fibre optics, the needles reflect the arena's sporting history and stand at 16m, 26m and 20m on top of the NIA.

The varied heights of the needles are designed to symbolise the winner's podium in athletics, with the tallest needle measuring 48m into the air from canal level.

Our installation team fed more than 600 tails of our 1.5mm diameter polymer fibre into the needles from the top down, before fixing our small round P9 paver fittings to the end points of light. We opted to manufacture the P9s in 316 stainless steel to prevent weathering from occurring and fitted each with high-quality toughened glass for added durability.

Three of our 250w Ultima metal halide light sources are used to power the fibre optics in the needles and are securely stored in a dry location 5m away. We selected the Ultima for its bright light output and ability to power long runs of fibre.





NATIONAL  
**SEA-LIFE**  
BIRMINGHAM

Over 2,000  
wildlife  
species

Book online  
for great savings  
[sealife.co.uk/birmingham](http://sealife.co.uk/birmingham)







# MELROSE TOWN CENTRE TOWN CENTRE STEPS ILLUMINATED WITH SIDEGLOW FIBRE



Lying at the base of the Eildon Hills in the Scottish Borders, the town of Melrose is a hub of activity. Visitors the world over descend on Melrose throughout the year to visit, amongst other things, its abbey which contains the buried heart of the Scottish King - Robert the Bruce, and the annual rugby sevens tournament which first originated in Melrose in 1883.

In 2007 the town went through a redevelopment that included the introduction of a new traffic flow system and partially pedestrianising the historic market square. A raised terrace area was constructed in the centre of the square, comprising of decorative flower beds and seating areas linked by steps.

Scottish Borders Council, the organisation responsible for carrying out the redevelopment, contracted UFO to supply and fit a fibre optic lighting solution that would illuminate the market square at night-time.

The risers of the steps that surrounded the terraced area were lit with marker lines of light, not only to act as a decorative feature but also as a precautionary safety measure. The marker lines were made from stranded sideglow fibre and set in 1" U-section metal channels using resin. Each of the channels was manufactured in our factory in Coldstream specifically for this project.

Five of our Compact 150W metal halide light sources were used to supply white light to the terrace area. The light sources were housed in weatherproof enclosures which were built into the walls of the terraced area by the council. The enclosures allow easy access to change lamps and each light source features an easy-change re-lamping feature.

## Project Information

### 📍 Melrose Town Centre

150W Compact metal halide light sources, which output white light only were installed in weatherproof enclosures built into the terrace walls.

15.8mm diameter stranded side glow fibre installed in 1" u-channel extrusion.

📍 **Location:** Melrose, Scotland

🏠 **Category:** Outdoor, decorative lighting

👤 **Client:** Scottish Borders Council

📅 **Project completed:** 2007

📷 **Images:** Calum Tait



# NETWORK RAIL CYCLORAMA VIBRANT FIBRE OPTIC FEATURE LIGHTING



Prominently positioned on the viaduct above the well-known Union Theatre in Bankside is the contemporary landmark artwork, Cyclorama. Commissioned by Network Rail and designed by British visual artist Rachel Wilberforce, the vibrant artwork is part of a project to regenerate the local area and features UFO's colour changing fibre optics.

The free-flowing spiral structure is constructed from stainless steel and comprises a mirror polish on one side and a vibrant red spray paint on the other. Along the curved edges of the structure are lengths of our 14.5mm diameter stranded sideglow fibre which project a specific sequence of colours that subtly change as the light moves in mirror-image reverse between the upper and lower sections of Cyclorama.

Powering the fibre optics are two of our 46W Nova LED light sources which have been specially programmed in-house, to generate the sequence of colours that are gently emitted throughout the day and night. The light sources, which were installed on-site by our installation engineers, are housed in weatherproof enclosures to protect them from the elements.

## Project Information

### 📍 Outdoor Lighting Feature

2 x Nova RGBW light sources, with custom DMX programming by UFO. Fitted with timer switch and installed in weatherproof IP enclosures.

2 x 14.5mm diameter stranded sideglow PMMA fibre harnesses. Each measuring 22m in length.

📍 **Location:** London, England

📋 **Category:** Decorative, outdoor lighting

👤 **Client:** Rachel Wilberforce

📅 **Project completed:** 2016

📷 **Images:** Adam Parker



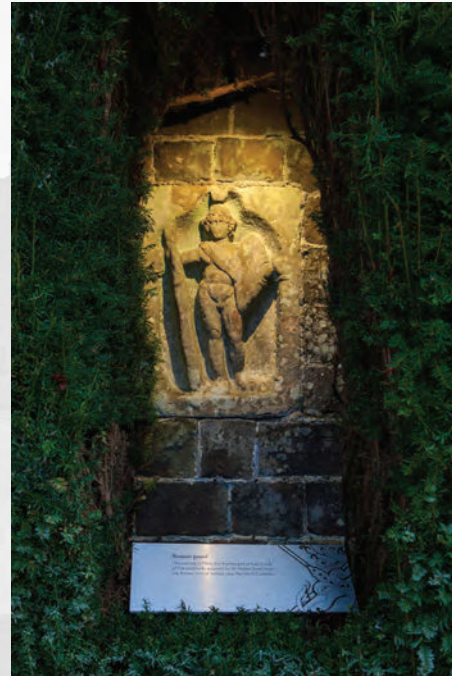








# ABBOTSFORD HOUSE CONTEMPORARY LED LIGHTING FOR THIS BARONIAL ESTATE



## Project Information

### 📍 Energy Efficient Outdoor LED Lighting

40 x UFO LP6 LED pavers

50 x UFO LB1 LED spotlights

📍 **Location:** Melrose, Scotland

📋 **Category:** Decorative, outdoor lighting

👤 **Client:** Abbotsford Trust

📅 **Project completed:** 2015

📷 **Images:** Angus Bremner Photography

Steeped in history and intrigue, Abbotsford House is a baronial estate that lies on the edge of the River Tweed in the Scottish Borders. It just so happens to also be the former residence of Sir Walter Scott, the historical novelist and poet who revolutionised the nineteenth century literary scene with his acclaimed novel, Waverley.

In his spare time Scott also possessed a great outdoor passion for forestry and tree-planting, and liked to break away from writing to turn his hand to horticulture. Much of the walled gardens and wider estate that he cultivated are to this day still fundamentally his own work.

UFO was approached by the Abbotsford Trust, the charitable organisation that manages Scott's former estate and asked to supply and install an energy efficient lighting system.

The system was needed to enhance and light the impressive archways and historical carvings that are scattered throughout the estate's beautiful, large walled gardens.

To meet with the Trust's request for energy efficiency, we utilised our LP6 LED paver and installed forty of the low power fittings in the base of the archways that line the garden's pathways. The fittings' warm white colour temperature blends perfectly with the dramatic backdrop of Abbotsford house.

The stone carvings that are scattered throughout the grounds of the estate are illuminated with our new LB1 LED light. Fifty of the articulated lights have been used and like the LP6s, these lights have also been specified with the warm white colour temperature to add an element of mystique to the gardens.



# WE ILLUMINATE

58

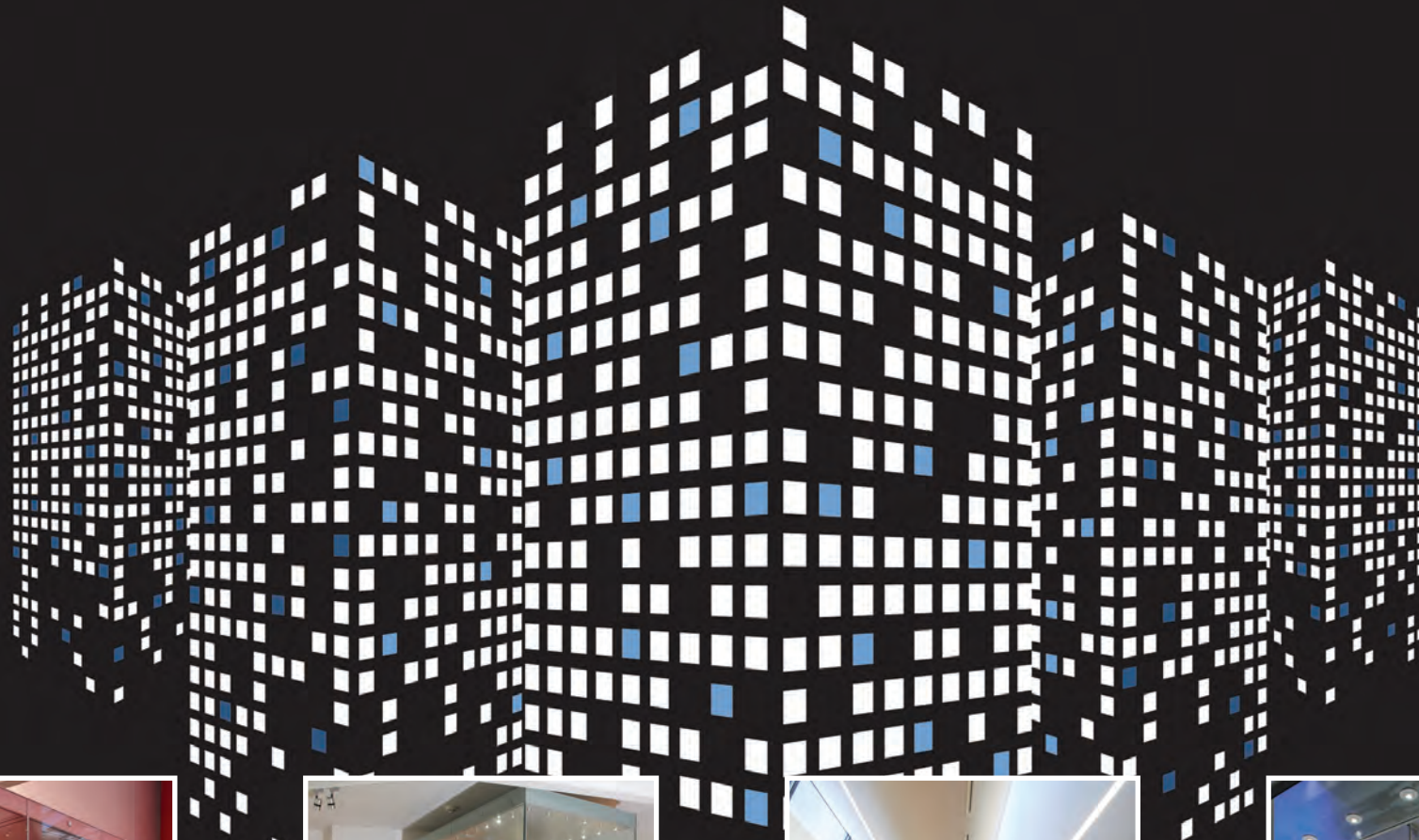
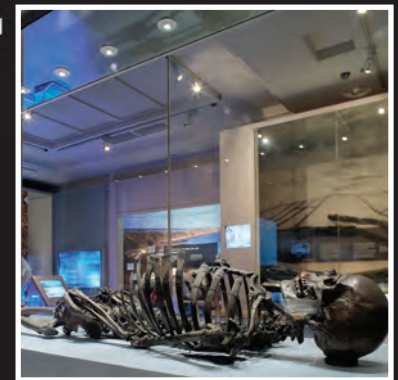


Image courtesy of Click Netherfield Ltd



Image courtesy of Hufton+Crow





# MUSEUM & GALLERY DISPLAY CASES

UFO offers one of the widest fibre optic and LED lighting ranges available for display illumination. Designed and manufactured in-house, our display lighting products combine functionality and aesthetic form, with the inherent safety and easy maintenance that is needed for illuminating precious objects and historic artefacts.

Whether you want to provide a wash of light across your display cases, accentuate specific details or combine the two, we can provide you with a tailor made display lighting system to meet your project requirements.

We have years of experience working with some of the highest profile case manufacturers and lighting designers, and our display lighting systems have been used to illuminate some of the world's finest museum, galleries and heritage sites.

Examples of the display lighting systems that we have created for the Cambridge Press Museum, National Museum of Scotland and Seattle EMP Museum can be viewed in detail over the next few pages.





*“Paper, letter, ink  
& workmanship”*  
John Boderville







Cambridge University is regarded the world over for its history and prestige. Its famous college and university buildings attract visitors from near and far, and hold many treasures which give an exciting insight into some of the scholarly activities of the university's academics and students.

ts Press Museum which is located on Shaftsbury Road, displays a large collection of original and facsimile copies of items relating to publishing, printing, bibles and prayer books.

When display case manufacturers, Click Netherfield, came to house several of the historic items they were faced with a challenge. The positioning of the display cabinets meant that they were unable to run power cables to them and so turned to UFO for assistance with the lighting element.

We were able to create a bespoke lighting solution that met the criteria of the brief. We did this by customising two of our MetroLED gantries to allow them to operate via battery power. When fully charged, the battery allows the LED lights to operate for a minimum of 200 hours. Once a re-charge was necessary, the museum personnel could simply run an extension cable to each display cabinet and charge the system through the night. It couldn't be any easier.

The other customisation to the MetroLED system included the LED spotlights being attached to the gantry via stalks. The flexible stalks can be moved to allow the stream of light to pinpoint specific details of the items on display.

## Project Information

### 📍 Display Case Lighting

2 x bespoke MetroLED gantries. Powered by rechargeable battery system, allowing for a cable free display case which can be positioned anywhere.

📍 **Location:** Cambridge, England

🏢 **Category:** Museum, display lighting

👤 **Client:** Click Netherfield

📅 **Project completed:** 2013

📷 **Images:** Click Netherfield



# NATIONAL MUSEUM OF SCOTLAND

## FIBRE OPTICS IN THIS SPECTACULAR MUSEUM



### Project Information

#### 📍 Display Case Lighting

100W Aurora tungsten halogen light source. White light output with built in manual dimming control.

12 tail fibre optic harnesses manufactured from glass, with an active diameter of 4mm.

Clients own end fittings were used in this project.

📍 **Location:** Edinburgh, Scotland

📋 **Category:** Museum, display lighting

👤 **Client:** Click Netherfield

📅 **Project completed:** 2011

📷 **Images:** Click Netherfield

Situated amongst the historic cobbled streets of Edinburgh's Old Town lies the National Museum of Scotland. The popular tourist attraction, which has undergone a £47 million redevelopment project that took three years to complete has been voted amongst the Top 10 visitor attractions in the UK.

Millions of visitors pass through the impressive museum's doors each year to view the spectacular collections of rare and priceless artefacts which will take them on an inspirational journey through the history of Scotland, the wonders of nature, a host of world cultures and the excitement of science and discovery.

Due to the lack of natural light in certain areas it was imperative that the cases incorporated lighting that wouldn't damage the artefacts in any way and so case manufacturers Click Netherfield turned to UFO for assistance.

We were able to supply them with our Aurora light source with an integral manual dimmer that proved extremely beneficial, as it meant that the museum staff could manually adjust the level of light in the display case to complement the items on display in the dark environment.

A series of directional downlights were installed in the ceiling and could easily be moved and angled to pinpoint and illuminate specific details of the display below. A UFO harness containing tails of glass fibre was used to connect each of the downlights to the light source in the base of the display case.









T-800 Collection  
The T-800 is a highly advanced  
robotic assassin.

Leather Jacket  
Worn by John Connor in  
the movie The Terminator.

T-800 Head  
The T-800 is a highly advanced  
robotic assassin.  
T-800 Head  
The T-800 is a highly advanced  
robotic assassin.  
T-800 Head  
The T-800 is a highly advanced  
robotic assassin.

Wookiee Head  
The Wookiee is a highly  
advanced alien species.  
Wookiee Head  
The Wookiee is a highly  
advanced alien species.

Terminator  
The Terminator is a highly  
advanced robotic assassin.  
The Terminator is a highly  
advanced robotic assassin.  
The Terminator is a highly  
advanced robotic assassin.





EMP is a vibrant and cutting edge museum dedicated to celebrating the ideas and adventurous nature of contemporary popular culture. Housed within a futuristic structure that evokes the energetic and fluid spirit of rock 'n' roll, the museum aims to enthrall multigenerational audiences with its collections, exhibitions, and educational programs.

UFO were approached by EMP and asked to supply a fibre optic lighting system for the exhibition's many display cabinets. It was important that the system incorporated a level of flexibility that would allow the museum staff to adjust the height and angle of the lights, and could be supplied within an extremely short time frame.

Our Rod & Clamp system offered all of the configurability that EMP needed and so was installed in the corners of each display case.

The rods were custom made to suit the specific height of the cabinets and were mounted on top of the cabinet floors using our mounting feet.

UFO clear focusing lenses were applied to the clamps before being attached to the individual rods. Once installed, tails of our end lit glass fibre were fed through the floor of the display cabinets and up to the rods, where each tail was securely connected to a UFO lens. EMP staff could then alter the height and angle of the lenses to ensure that they were illuminating the artefacts correctly.

Fourteen of our Mercury Slimline LED light sources were used to power the fibre optics and were stored in easily accessible locations out of view of the displays. The Mercury was favoured for the high CRI output and colour temperature options that it offers.

## Project Information

### 📍 Display Case Lighting

14 x Mercury Slimline LED light sources, outputting white light only.

9 x end lit glass fibre harnesses with an active diameter of 4.5mm.

60 x UFO rod and clamp systems at various lengths. Secured at both ends and fitted with UFO 25D trumpets and lenses.

📍 **Location:** Seattle, Washington, USA

📋 **Category:** Museum, display lighting

👤 **Client:** EMP Museum

📅 **Project completed:** 2015

📷 **Images:** Brady Harvey / EMP Museum



# WE MANUFACTURE



Constant investment in state of the art manufacturing equipment ensures we always provide the best quality parts in the industry.



# FIBRE OPTIC END FITTINGS

## An array of end fittings

UFO Lighting offers a wide range of paver, downlight and speciality fittings for use with fibre optic harnesses. All are manufactured in-house by our experienced engineers using the highest quality materials.

Some types serve the function of focussing and/or directing the light, while others give a purely decorative finish to the ends of the fibre.

Generally those with flat lenses do not alter the angle of the light cone, while those with domed lenses are focusable.

UFO fittings are available in many decorative finishes, and for larger quantities some can be supplied with a custom finish.

- 📍 **Style** - quality finishes in a range of materials and colours
- 📍 **Function** - focusable and articulated options are available
- 📍 **Choice** - one of the largest ranges in the industry
- 📍 **Quality** - thoroughly examined & tested before despatch

### DOWNLIGHT



### HERMETIC



### PAVER



### CRYSTAL



### SPARKLE



### WET AREA





# ABOUT FIBRE OPTIC DOWNLIGHT FITTINGS

Our range of downlight fittings are available in a range of styles and we have both articulated and fixed lens models.

Suitable for use in a variety of applications, we can supply downlight fittings manufactured in various materials, including aluminium, polycarbonate and stainless steel. A variety of finishes is also available as standard and we can anodise or powder coat in any custom RAL colour required.

Like all our end fittings, no heat or electricity is output from this range.

The diverse designs we have available means that this range of fittings is suitable for use in a wide range of applications, both indoor and out.

Typical uses include:

- 📍 Museum and gallery cabinet and display lighting
- 📍 Accentuation of pictures and other objects
- 📍 Illumination of shop displays
- 📍 Ceiling downlights in residential and commercial premises

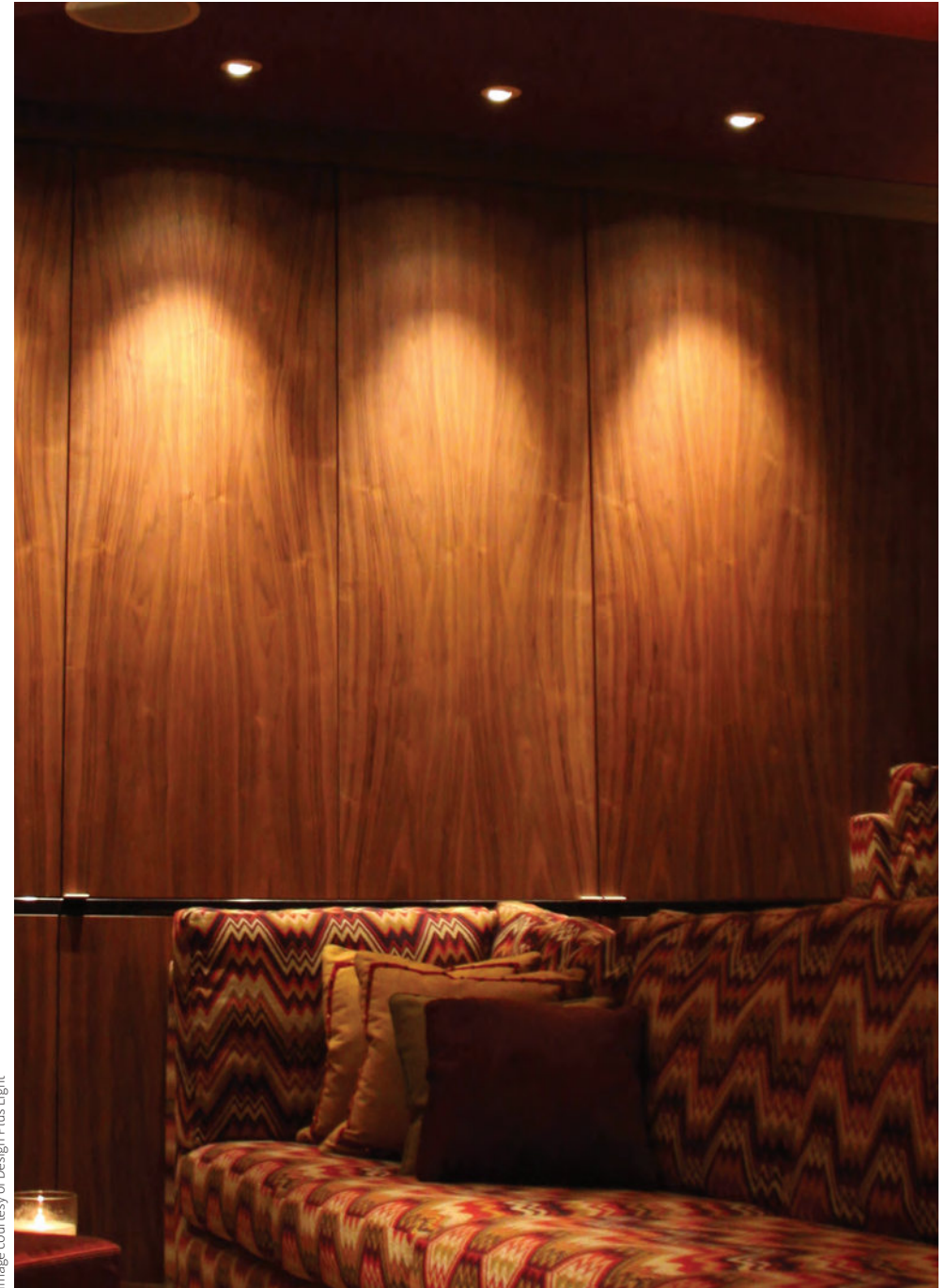
“

I HAVE USED UNIVERSAL FIBRE OPTICS  
FOR OVER 15 YEARS AND IN THAT TIME HAVE FOUND  
THEM FAULTLESS. THE EQUIPMENT IS SECOND TO  
NONE, COMPETITIVELY PRICED AND  
ARRIVES ON TIME, EVERY TIME.  
THEY HAVE NEVER LET ME DOWN.

– ROBERT TUCK – ARLICO LIGHTING

”

Image courtesy of Design Plus Light





# FIBRE OPTIC DOWNLIGHT FITTINGS

Visit our website or see datasheets for full product specifications.



**UFO 1D**

SHOWERPROOF SPOTLIGHT



**UFO 4D**

SURFACE MOUNT DOWNLIGHT



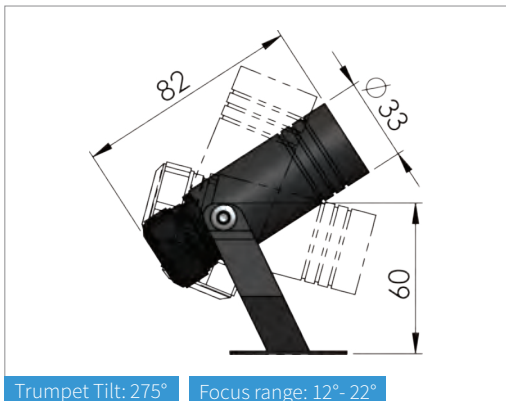
**UFO 9D**

ARTICULATED DOWNLIGHT

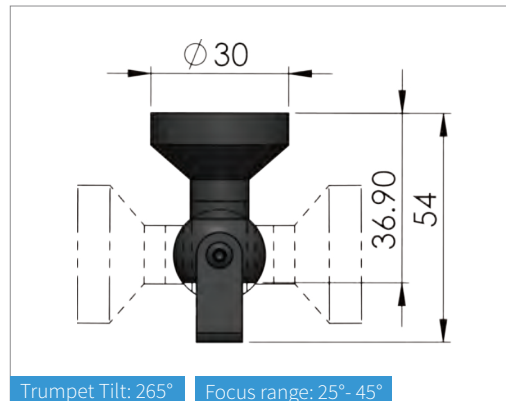


**UFO 10D**

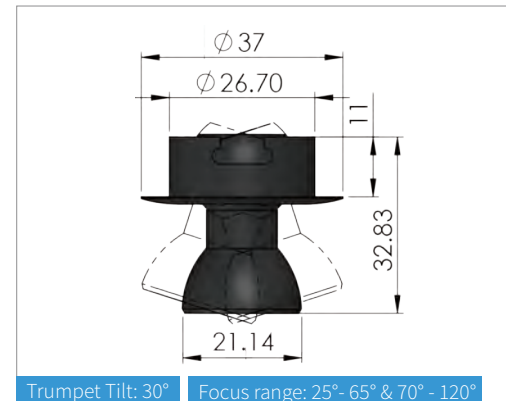
ARTICULATED DOWNLIGHT



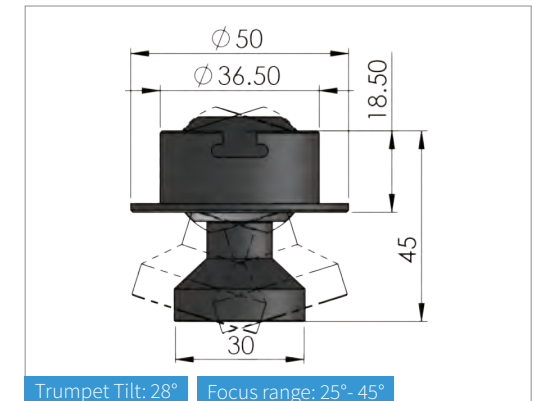
Trumpet Tilt: 275° Focus range: 12° - 22°



Trumpet Tilt: 265° Focus range: 25° - 45°



Trumpet Tilt: 30° Focus range: 25° - 65° & 70° - 120°



Trumpet Tilt: 28° Focus range: 25° - 45°

A wet area spotlight made from 316 stainless steel. Supplied with mounting bracket.

Use in water features, on walls, in gardens or in other areas where a spotlight or narrow beam of light is desired. Can be fixed to a ground spike.

Order code: 1D-SS - stainless steel

Mounting method: M6 or ground spike

Ferrule size: M10

A surface mounted downlight available in natural stainless steel or aluminium.

Black or white finish as standard on aluminium versions but can be powdercoated to any RAL colour at cost.

Order codes: 4D-SS - stainless steel  
4D-ALU+colour - aluminium

Mounting method: M6 or ground spike

Ferrule size: M8

A discrete recessed and articulated downlight which is supplied with 2 trumpets to allow variable focus ranges. Secured with spring clips.

Manufactured from aluminium and finished in black or white as standard or any RAL colour at cost.

Order code: 9D-ALU+colour - aluminium

Mounting hole size: 31mm

Ferrule size: M8

A recessed articulated trumpet which is available in raw stainless steel, white or black polycarbonate or aluminium. Secured with spring clips.

Aluminium is black or white as standard or any RAL colour at cost.

Order codes: 10D-SS - stainless steel

10D-ALU+colour - aluminium

10D-PC+colour - polycarb.

Mounting hole size: 40mm

Ferrule size: M10 or 8mm smooth



# FIBRE OPTIC DOWNLIGHT FITTINGS



UFO 10DA

ARTICULATED DOWNLIGHT



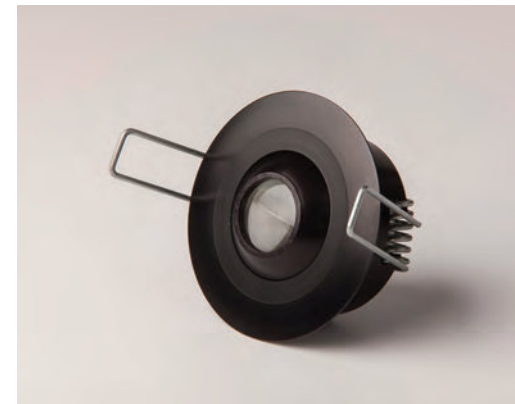
UFO 10DB

SURFACE MOUNT DOWNLIGHT



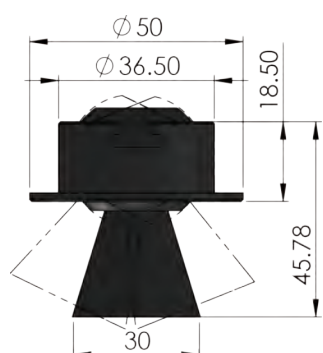
UFO 11D

ARTICULATED DOWNLIGHT

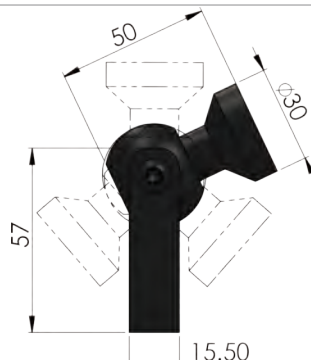


UFO 11DA

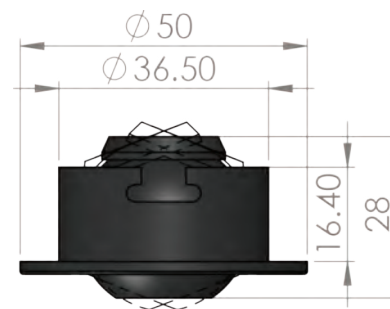
ARTICULATED DOWNLIGHT



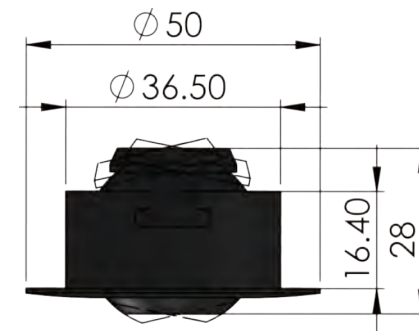
Trumpet Tilt: 28° Focus range: 40°- 75°



Trumpet Tilt: 360° Focus range: 25°- 45°



Eyeball Tilt: 20° Focus range: 30°- 50°



Eyeball Tilt: 20° Focus range: 30°- 50°

An adjustable downlight fitting with smooth cone effect trumpet which is available in raw stainless steel or black, white or custom RAL coloured aluminium. Secured with spring clips.

Order codes: 10DA-ALU+colour - aluminium  
10DA-SS - stainless steel

Mounting hole size: 40mm

Ferrule size: M10 or 8mm smooth

A surface mounted downlight fitting which is available in coloured aluminium, stainless steel or polycarbonate. Supplied with mounting bracket.

Can be tilted and rotated. The light beam from this fitting is also focusable.

Order codes: 10DBR-ALU+colour - alum.  
10DBR-PC+colour - polycarb.  
10DBR-SS - stainless steel

Mounting method: M6 or ground spike

Ferrule size: M10 or 8mm smooth

An adjustable recessed downlight fitting, secured through the mounting surface with spring clips.

Available in coloured aluminium, stainless steel or polycarbonate. Eyeball can be tilted and light beam is focusable.

Order codes: 11D-ALU+colour - aluminium  
11D-PC+colour - polycarb.  
11D-SS - stainless steel

Mounting hole size: 40mm

Ferrule size: M10 or 8mm smooth

An adjustable recessed downlight fitting with smooth flange, secured through the mounting surface with spring clips.

Available in coloured aluminium or stainless steel. Eyeball can be tilted and light beam is focusable.

Order codes: 11DA-ALU+colour - aluminium  
11DA-SS - stainless steel

Mounting hole size: 40mm

Ferrule size: M10 or 8mm smooth





**UFO 13D**

FIXED LENS DOWNLIGHT



**UFO 13DA**

FIXED LENS DOWNLIGHT



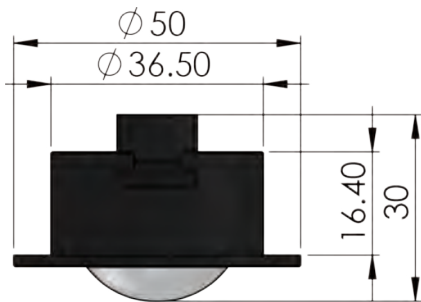
**UFO 20D**

ARTICULATED DOWNLIGHT

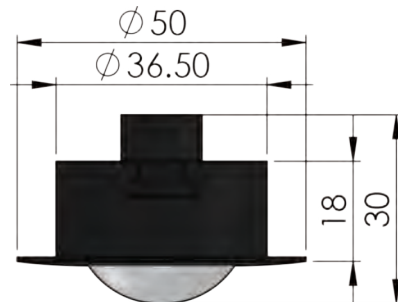


**UFO 21D**

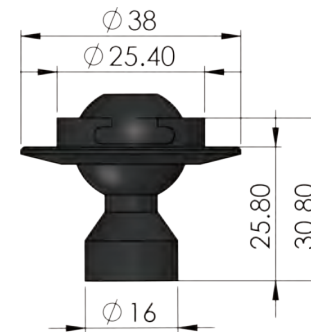
FIXED LENS DOWNLIGHT



Focus range: 20°- 45°

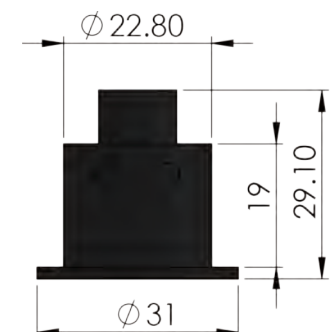


Focus range: 20°- 45°



Trumpet Tilt: 36°

Focus range: 15°- 30°



Focus range: 30°- 60°

A recessed downlight fitting, secured through the mounting surface with spring clips.

Available in coloured aluminium, stainless steel or polycarbonate. The light beam from this fitting is also focusable.

Order codes: 13D-ALU+colour - aluminium  
13D-PC+colour - polycarb.  
13D-SS - stainless steel

Mounting hole size: 40mm

Ferrule size: M10 or 8mm smooth

A recessed downlight fitting with a smooth flange, secured through the mounting surface with spring clips.

Available in coloured aluminium or stainless steel. The light beam from this fitting is also focusable.

Order codes: 13DA-ALU+colour - aluminium  
13DA-SS - stainless steel

Mounting hole size: 40mm

Ferrule size: M10 or 8mm smooth

A small adjustable downlight fitting with trumpet, secured through the mounting surface with spring clips.

Available in coloured aluminium, the fitting can be rotated and tilted to point directly at any objects to be illuminated. The light beam from this fitting is also focusable.

Order code: 20D-ALU+colour - aluminium

Mounting hole size: 30mm

Ferrule size: M7

A compact fixed lens downlight fitting, secured through the mounting surface with spring clips.

Available in coloured aluminium, the light beam from this fitting is also focusable.

Order code: 21D-ALU+colour - aluminium

Mounting hole size: 26mm

Ferrule size: M10 or 8mm smooth



# ABOUT FIBRE OPTIC HERMETIC FITTINGS

Our hermetic downlight fittings allow an airtight seal to be maintained within a display case when using fibre optics.

These fittings are made from aluminium and the air seal is maintained by a series of three o-rings around the flange, eyeball and ferrule.

In use, the ferrule is tightened onto the fitting and focus adjustment is made using the trumpet. The further onto the ferrule the trumpet is screwed, the wider the beam. The tight tolerances attained during manufacture help ensure many years of reliable operation.

Primarily used in museum and gallery display cases to help preserve precious artefacts on display.

Other typical uses include:

- 📍 Museum and gallery cabinet and display lighting
- 📍 Jewellery and watch displays
- 📍 Any location where an airtight seal is required

“

I HAVE WORKED WITH UFO FOR ABOUT 20 YEARS. WHAT I LIKE ABOUT THEM IS THAT THEY ARE CREATIVE SUPPLIERS: WHEN I LOOK FOR NEW AND DIFFERENT WAYS TO USE THEIR PRODUCTS THEY LISTEN, AND ALWAYS COME UP WITH GOOD SOLUTIONS.

– CHARLES MARSDEN-SMEDLEY – MUSEUM & EXHIBITION DESIGNER

”

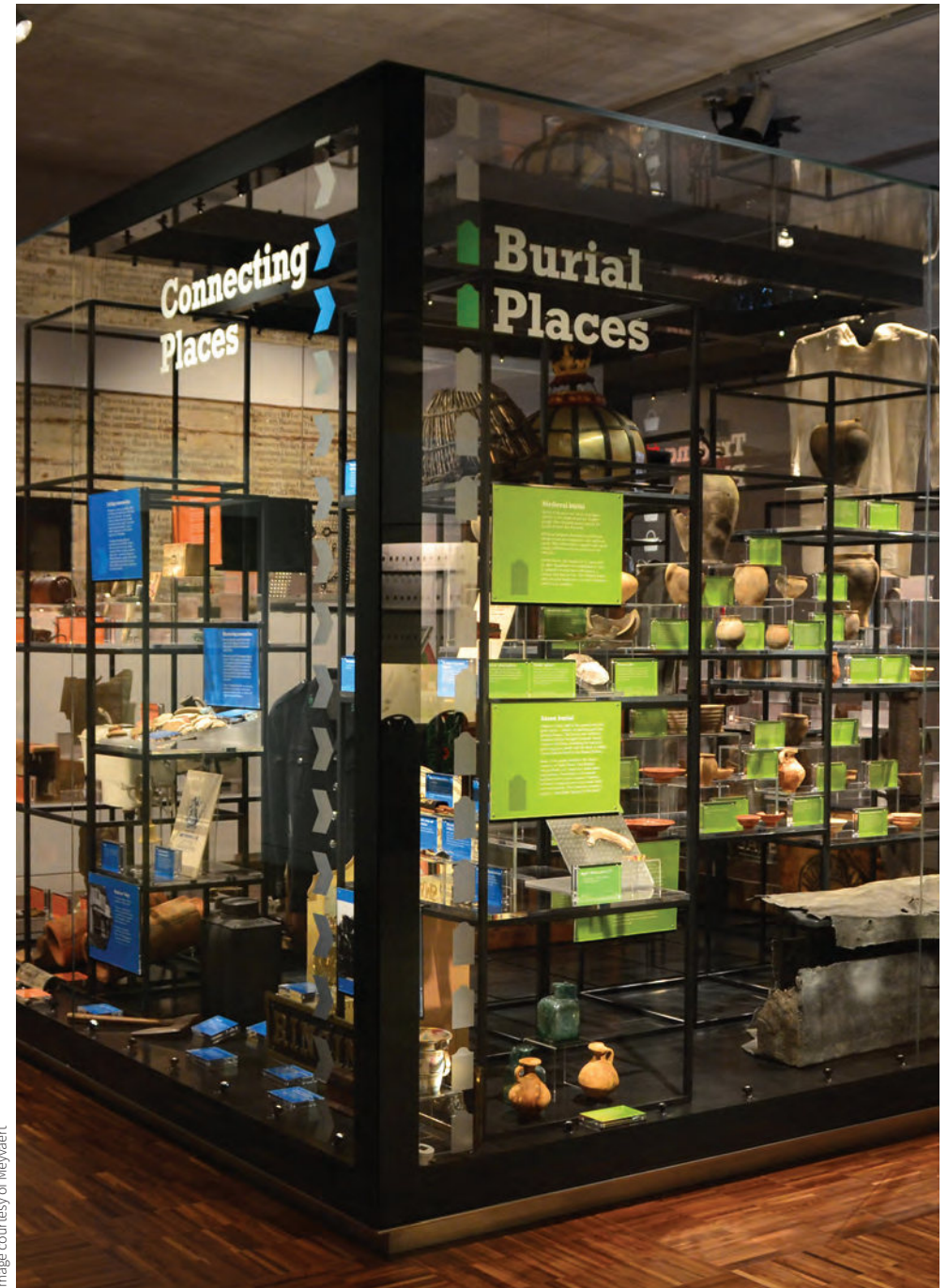


Image courtesy of Meyvaert



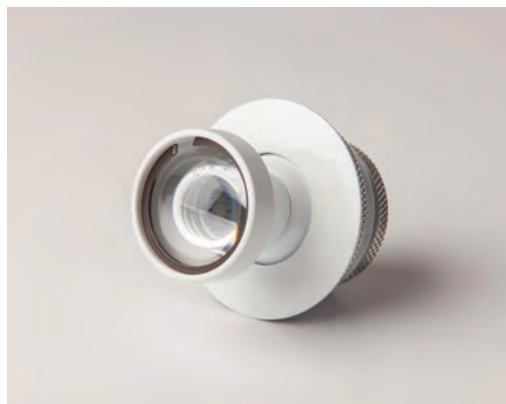
# FIBRE OPTIC HERMETIC FITTINGS

Visit our website or see datasheets for full product specifications.



**UFO 27H**

HERMETIC DOWNLIGHT



**UFO28H**

HERMETIC DOWNLIGHT



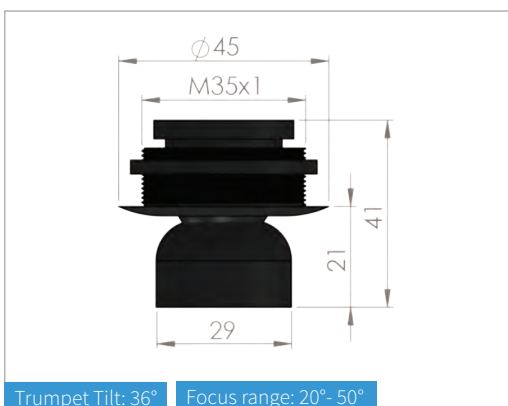
**UFO 29H**

HERMETIC DOWNLIGHT

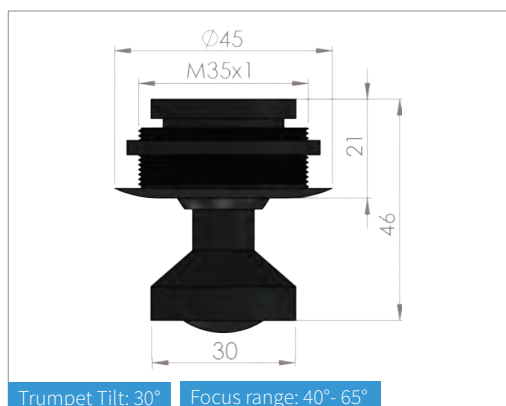


**UFO 30H**

HERMETIC DOWNLIGHT



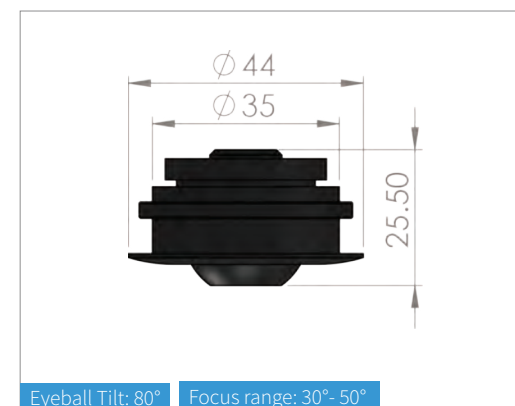
Trumpet Tilt: 36° Focus range: 20° - 50°



Trumpet Tilt: 30° Focus range: 40° - 65°



Trumpet Tilt: 60° Focus range: 25° - 65° & 70° - 120°



Eyeball Tilt: 80° Focus range: 30° - 50°

This downlight fitting allows an airtight seal to be maintained within a display case when using fibre optics.

With a directional and focusable trumpet, the light beam can be adjusted to perfectly light the desired object.

Order code: 27H-ALU+colour - aluminium

Mounting hole size: 38mm

Ferrule size: M10

This downlight fitting allows an airtight seal to be maintained within a display case when using fibre optics.

With a directional and focusable trumpet, the light beam can be adjusted to perfectly light the desired object.

Order code: 28H-ALU+colour - aluminium

Mounting hole size: 38mm

Ferrule size: M10

This mini hermetic downlight fitting is available with two trumpets, wide and narrow angled, to allow for extended focussing.

Highly suitable for use in museum or other display cases, these fittings use a series of o-rings around the flange, eyeball and ferrule.

Order code: 29H-ALU+colour - aluminium

Mounting hole size: 27mm

Ferrule size: M8

This downlight fitting which incorporates a recessed eyeball allows an airtight seal to be maintained within a display case when using fibre optics.

Highly suitable for use in museum or other display cases, these fittings use a series of o-rings around the flange, eyeball and ferrule.

Order code: 30H-ALU+colour - aluminium

Mounting hole size: 38mm

Ferrule size: M10



# Inside or Outside, Uplight or Down?

## With our versatile paver fittings, the choice is yours.

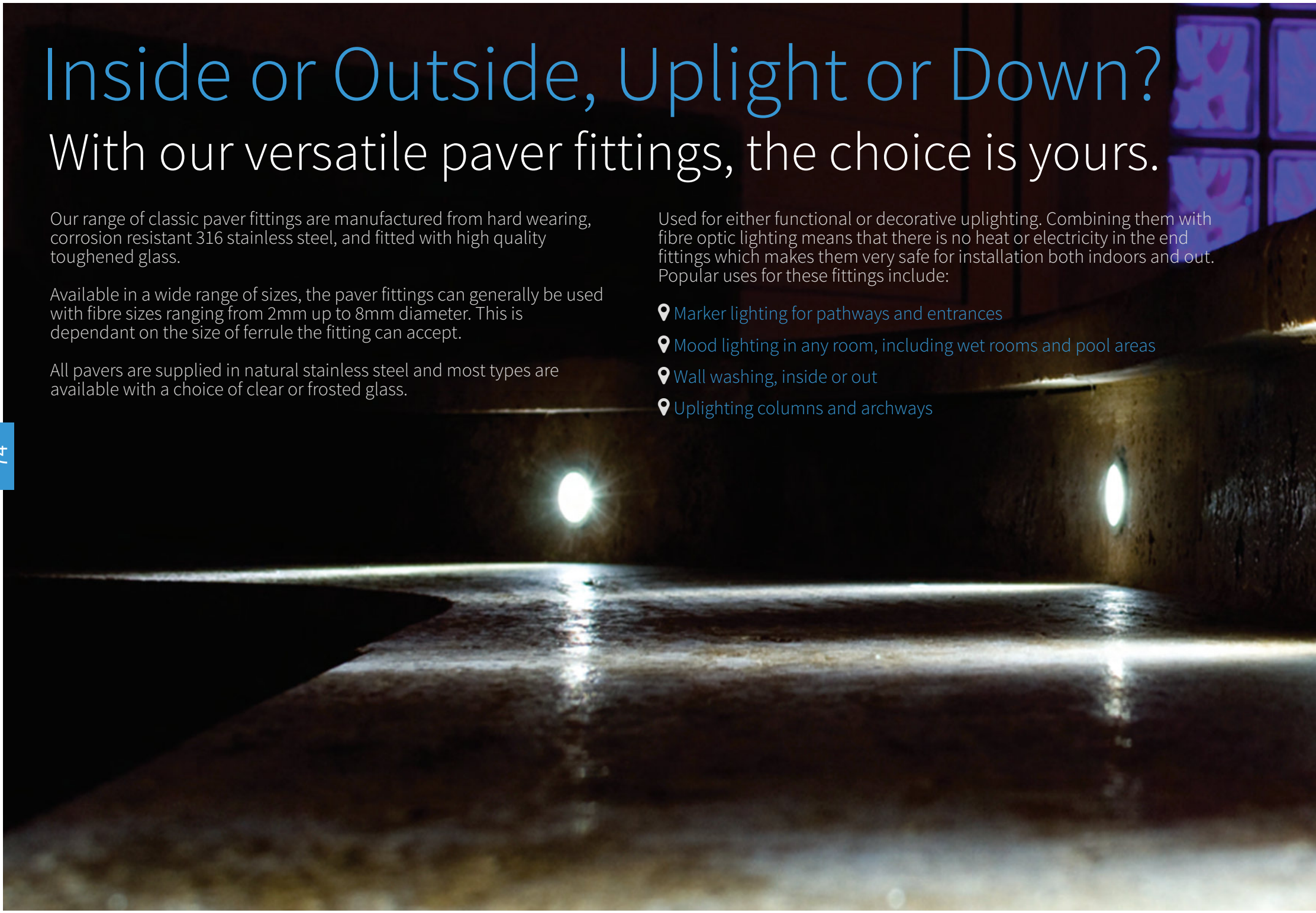
Our range of classic paver fittings are manufactured from hard wearing, corrosion resistant 316 stainless steel, and fitted with high quality toughened glass.

Available in a wide range of sizes, the paver fittings can generally be used with fibre sizes ranging from 2mm up to 8mm diameter. This is dependant on the size of ferrule the fitting can accept.

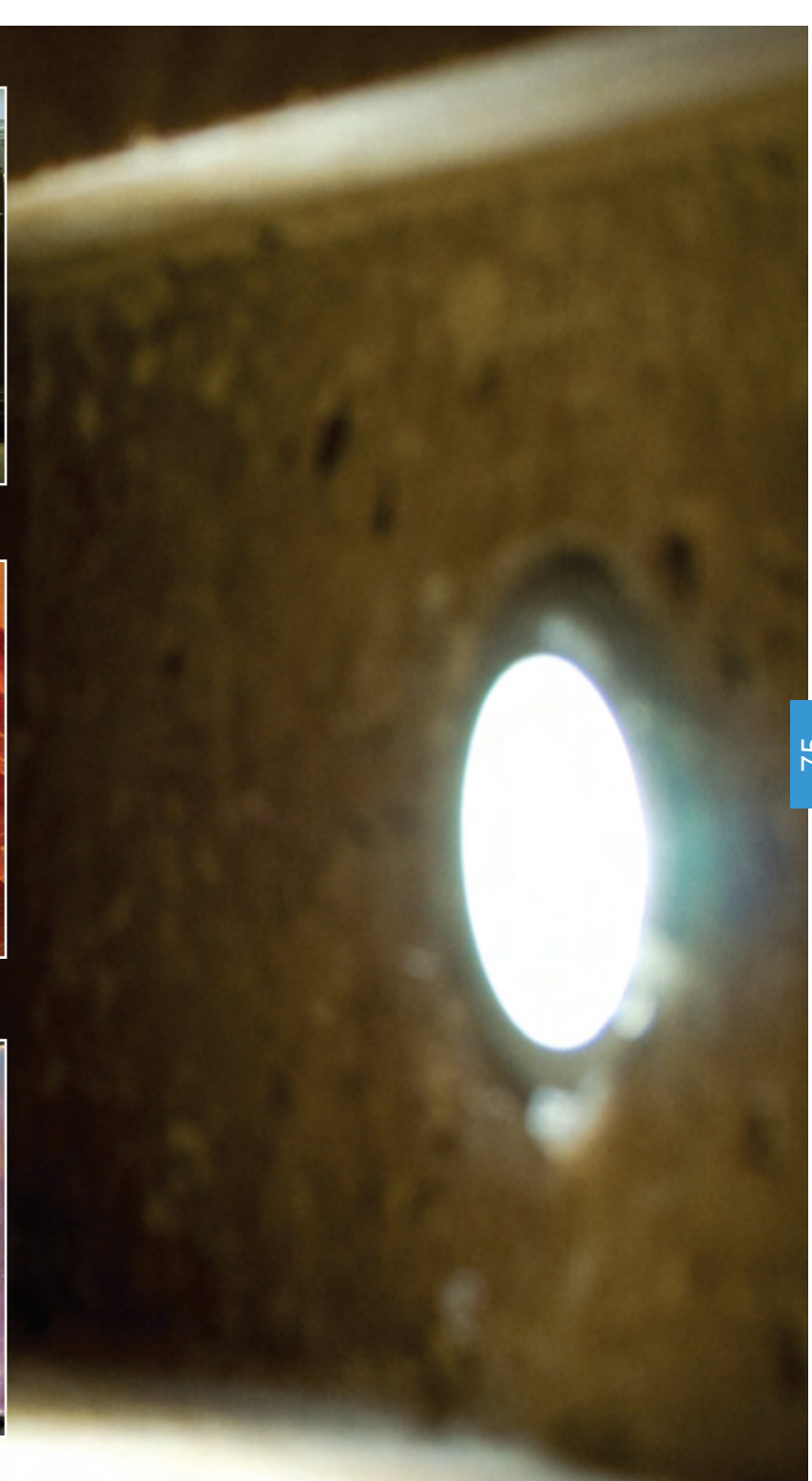
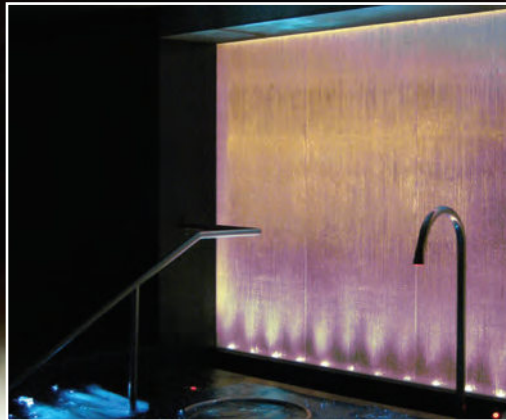
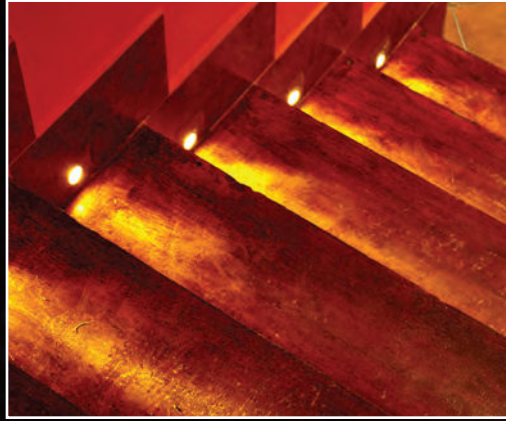
All pavers are supplied in natural stainless steel and most types are available with a choice of clear or frosted glass.

Used for either functional or decorative uplighting. Combining them with fibre optic lighting means that there is no heat or electricity in the end fittings which makes them very safe for installation both indoors and out. Popular uses for these fittings include:

- 📍 Marker lighting for pathways and entrances
- 📍 Mood lighting in any room, including wet rooms and pool areas
- 📍 Wall washing, inside or out
- 📍 Uplighting columns and archways









# FIBRE OPTIC PAVER FITTINGS



UFO P1

OUR BEST SELLING PAVER



UFO P2

PAVER WITH FOCUSING LENS



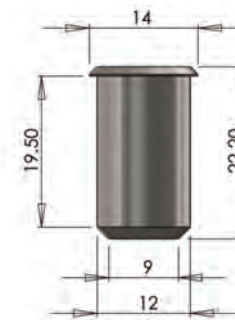
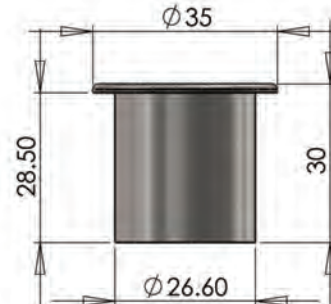
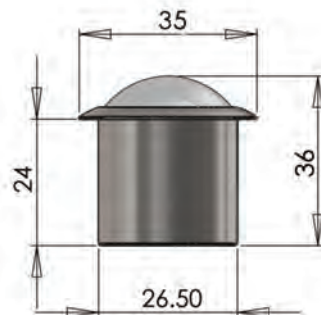
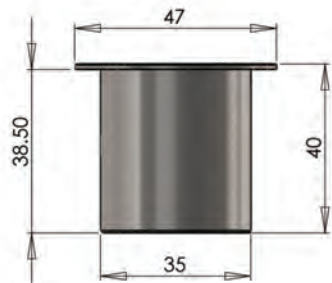
UFO P3

SMALL ROUND PAVER



UFO P4

MINIATURE ROUND PAVER



A round walkover paver manufactured from 316 stainless steel and available with either clear or frosted glass.

The clear glass option gives greater light output and also allows the light to travel further whilst the frosted glass creates more of a marker light effect.

Order codes: P1C - clear glass  
P1F - frosted glass

Mounting hole size: 38mm

Ferrule size: M10 or 8mm smooth

A round paver with a domed lens manufactured from 316 stainless steel with either clear or frosted glass.

The use of domed glass means that the light output from this paver is focusable.

Order codes: P2C - clear glass  
P2F - frosted glass

Mounting hole size: 27mm

Ferrule size: M10 or 8mm smooth

A small round walkover paver manufactured from 316 stainless steel with either clear or frosted glass.

The clear glass option gives greater light output and also allows the light to travel further whilst the frosted glass creates more of a marker light effect.

Order codes: P3C - clear glass  
P3F - frosted glass

Mounting hole size: 28mm

Ferrule size: M10 or 8mm smooth

A very small round walkover paver manufactured from 316 stainless steel with either clear or frosted glass.

The clear glass option gives greater light output and also allows the light to travel further whilst the frosted glass creates more of a marker light effect.

Order codes: P4C - clear glass  
P4F - frosted glass

Mounting hole size: 13mm

Ferrule size: M8





**UFO P4G**

SUBMERSIBLE PAVER



**UFO P9**

MINIATURE FOCUSING PAVER



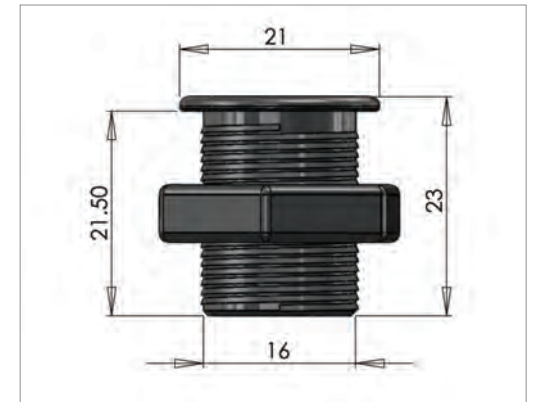
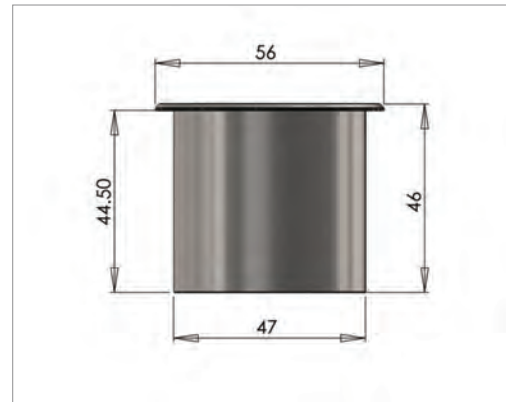
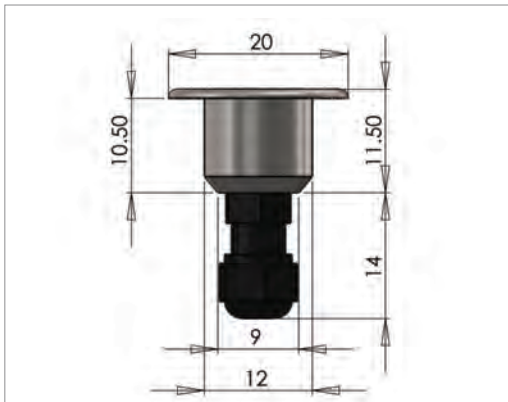
**UFO P11**

LARGE ROUND PAVER



**UFO P17T**

SUBMERSIBLE AND FOCUSABLE



A small stainless steel paver with clear glass window for sheathed polymer fibre of 1.5mm to 2mm active diameter. Suitable for use in swimming pool floors. Comes fitted with a nickel plated brass gland to allow for connection to the fibre and to prevent moisture ingress.

Order codes: P4GC - clear glass  
P4GF - frosted glass

Mounting hole size: 12.5mm

Ferrule size: None, uses fitted gland

A small round paver with a domed focusing lens. Manufactured from 316 stainless steel with clear or frosted glass. Ideal for lighting stair treads or creating scalloped uplighting effects as the beam can be focused.

Order codes: P9C - clear lens  
P9F - frosted lens

Mounting hole size: 15mm

Ferrule size: M8

A large walkover paver manufactured from 316 stainless steel with either clear or frosted glass.

The clear glass option gives greater light output and also allows the light to travel further whilst the frosted glass creates more of a marker light effect.

Order codes: P11C - clear glass  
P11F - frosted glass

Mounting hole size: 48mm

Ferrule size: M10 or 8mm smooth

Popular in spa pools and baths where the nut can be used to fix it through the typically thin surface of either.

Whilst this fitting can be used in constant immersion conditions, it is not suitable for installation where it will be under significant pressure.

Order code: P17T - clear glass

Mounting hole size: 17mm

Ferrule size: M10 or 8mm smooth

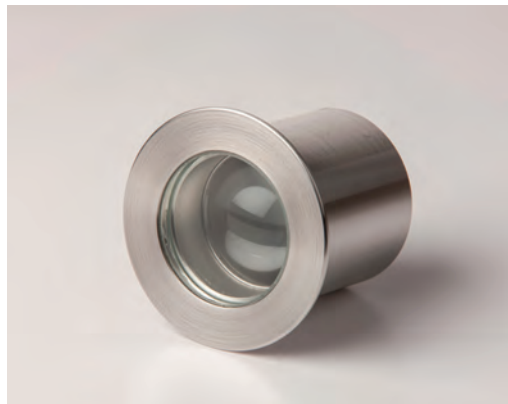


# FIBRE OPTIC PAVER FITTINGS



UFO P18

RIBBED ANT-SLIP PAVER



UFO P19

PAVER WITH INTERNAL LENS



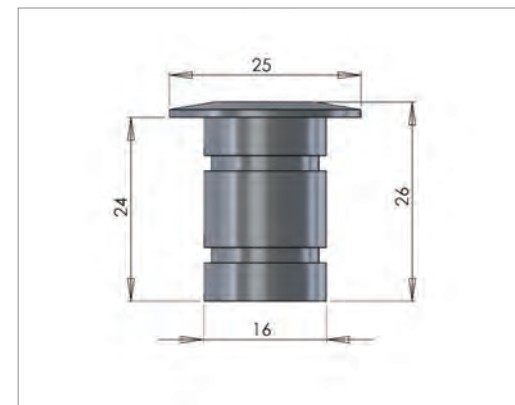
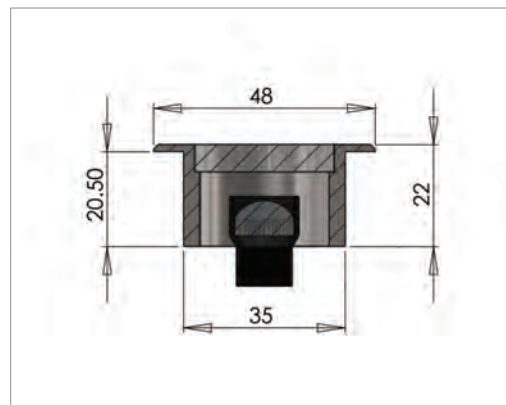
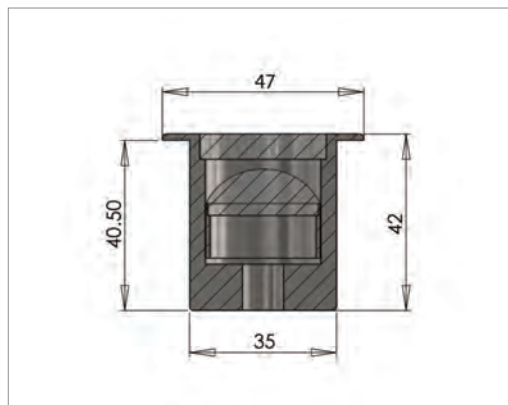
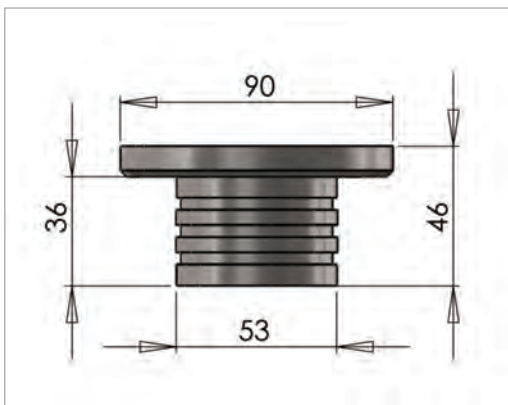
UFO P20

DIRECTIONAL PAVER



UFO P21

SMALL BEVELLED PAVER



A heavy duty round walkover paver manufactured from 316 stainless steel with toughened clear or frosted glass.

The P18 is especially useful in high traffic areas, as it has a ribbed flange to help prevent slipping in wet areas. Can be used with CP2 pool pipe to aid installation.

Order codes: P18C - clear glass  
P18F - frosted glass

Mounting hole size: 54mm

Ferrule size: M10 or 8mm smooth

A round walkover paver manufactured from 316 stainless steel with clear glass front and internal domed lens.

The internal lens allows the light beam to be focused. The clear glass front gives greater light output and also allows the light to travel further.

Order code: P19 - clear glass

Mounting hole size: 36mm

Ferrule size: M10 or 8mm smooth

A round walkover paver manufactured from 316 stainless steel with clear glass front and internal adjustable lens.

Suitable for use in walkover situations. A separate internal lens allows for the light beam to be focused.

Order code: P20 - clear glass

Mounting hole size: 36mm

Ferrule size: M10 or 8mm smooth

A small round walkover paver manufactured from 316 stainless steel with clear or frosted glass.

For use with an 8mm smooth ferrule - an M4 grub screw is used to secure the ferrule in place. Fixings are available to secure this fitting in a ceiling, hollow wall or floor.

Order codes: P21C - clear glass  
P21F - frosted glass

Mounting hole size: 19mm

Ferrule size: 8mm smooth





**UFO P22**

PAVER WITH 54° BEAM ANGLE



**UFO P13**

SMALL SQUARE PAVER



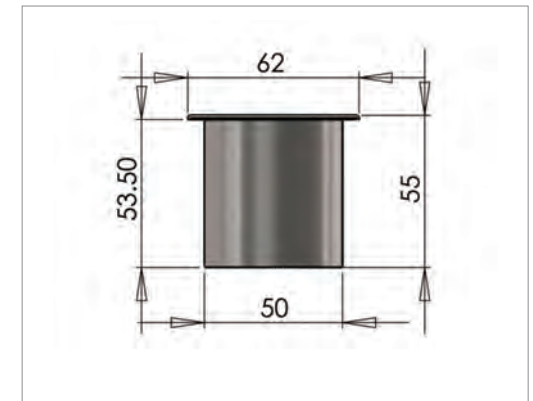
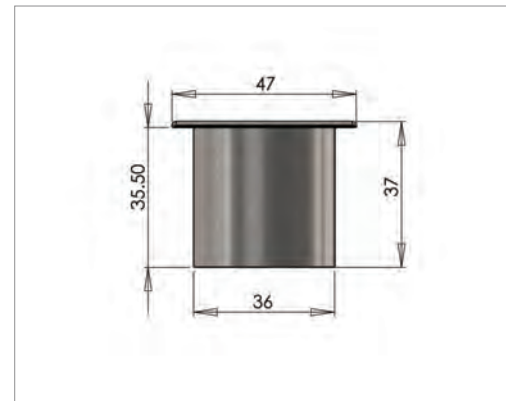
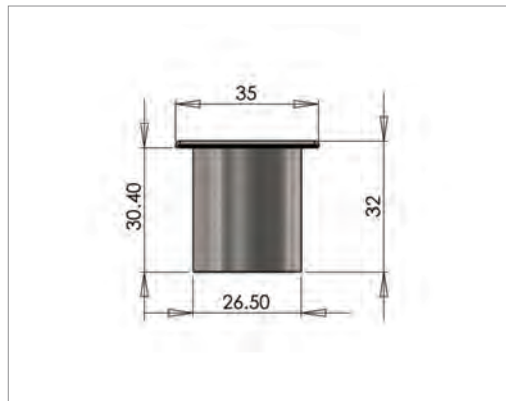
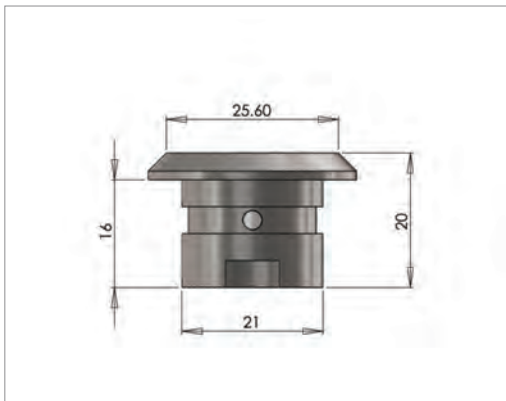
**UFO P14**

MEDIUM SQUARE PAVER



**UFO P15**

LARGE SQUARE PAVER



A small round paver manufactured from stainless steel with clear glass which accepts a 6mm smooth ferrule.

The ferrule is fitted to the paver at a 30 degree angle which allows the light to be guided diagonally. A M3 grub screw is used to secure the ferrule in place.

Order code: P22 - clear glass

Mounting hole size: 22mm

Ferrule size: 6mm smooth

A square shaped decorative walkover paver manufactured from 316 stainless steel with either clear or frosted glass.

The clear glass option gives greater light output and also allows the light to travel further whilst the frosted glass creates more of a marker light effect.

Order codes: P13C - clear glass

P13F - frosted glass

Mounting hole size: 28mm

Ferrule size: M10 or 8mm smooth

A square shaped decorative walkover paver manufactured from 316 stainless steel with either clear or frosted glass.

The clear glass option gives greater light output and also allows the light to travel further whilst the frosted glass creates more of a marker light effect.

Order codes: P14C - clear glass

P14F - frosted glass

Mounting hole size: 38mm

Ferrule size: M10 or 8mm smooth

A square shaped decorative walkover paver manufactured from 316 stainless steel with either clear or frosted glass.

The clear glass option gives greater light output and also allows the light to travel further whilst the frosted glass creates more of a marker light effect.

Order codes: P15C - clear glass

P15F - frosted glass

Mounting hole size: 51mm

Ferrule size: M10 or 8mm smooth



# ABOUT SUBMERSIBLE FITTINGS

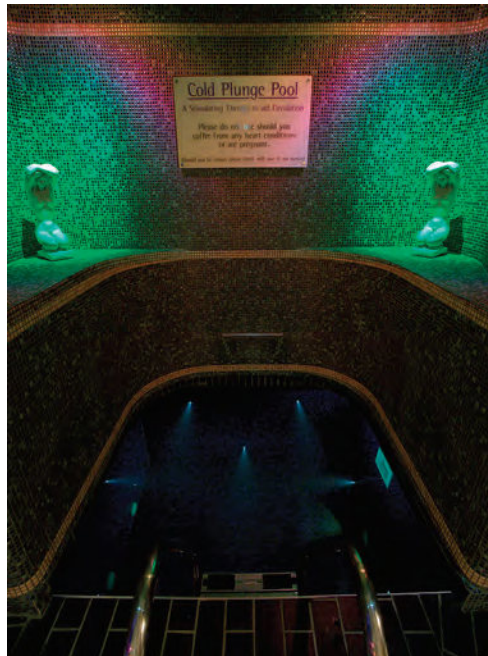
Our submersible eyeball fitting range, which are all manufactured from 316 stainless steel, are suitable for installation in constant immersion environments such as swimming pools, ponds and water features.

These fittings are generally used to provide side lighting - they project a beam of light from the mounting surface through the water.

The use of a separate backbox on selected fittings means that they can be pre-fitted when concrete is being poured or retro fitted into existing stone or concrete. A wide flange allows superior sealing against smooth surfaces such as a tiled pool wall. Typical uses for these fittings include:

- 📍 Swimming pools, either indoor or outdoor
- 📍 Baths and spas
- 📍 Ponds, fountains and other aquatic features

Please see the paver fitting section of this brochure for our P4G fitting which is regularly used to create star effect floors in swimming pools.



“ APS HAS WORKED WITH UFO FOR OVER 10 YEARS USING THEIR FIBRE OPTIC SYSTEMS IN SWIMMING POOLS THROUGHOUT LONDON. I WOULD RECOMMEND UFO TO ANY POOL INSTALLER, ARCHITECT OR INTERIOR DESIGNER WHO IS LOOKING FOR HIGH QUALITY, COMPETITIVE PRICING AND EXCELLENT AFTERSALES CARE.

– ROB PERRY – ADVANCED POOLS

”



# FIBRE OPTIC SUBMERSIBLE FITTINGS

Visit our website or see datasheets for full product specifications.



UFO E1

LARGE SUBMERSIBLE FITTING



UFO E2

SMALL SUBMERSIBLE FITTING



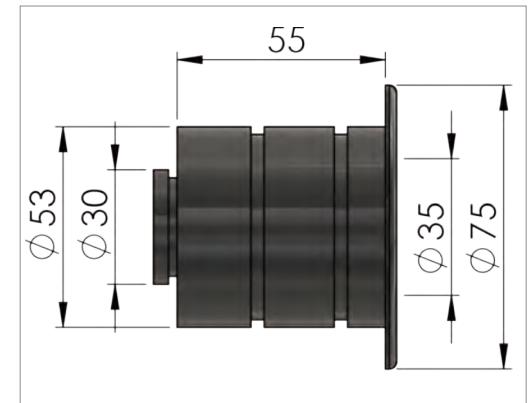
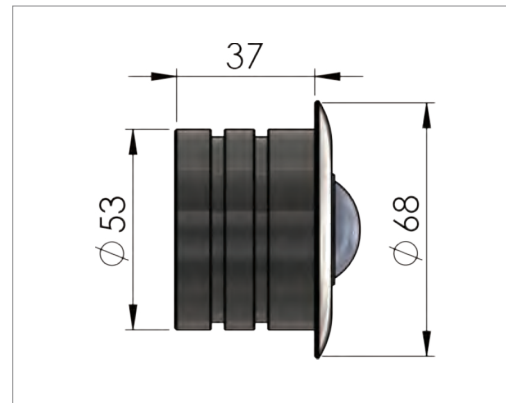
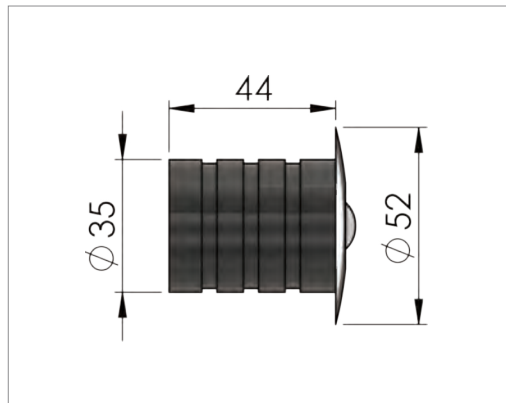
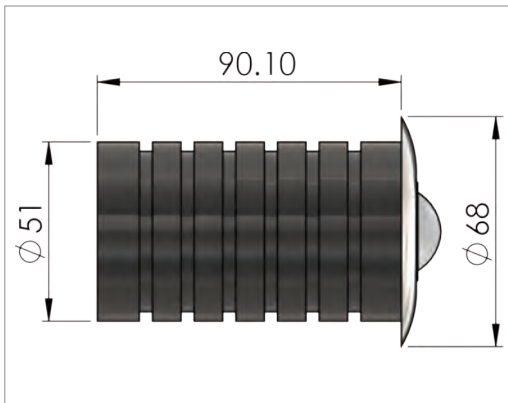
UFO E3

EYEBALL WITH BACK BUNG



UFO E4

FITTING WITH REAR EYEBALL



A large adjustable submersible eyeball fitting manufactured from 316 stainless steel with a clear focusing lens.

Available with a back nut for fixing through a panel or a back box for fitting into CP2 pool pipe for more accurate and easier installation.

Order codes: E1-BB - includes back box  
E1-BN - includes back nut

Ferrule size: M10

A small adjustable submersible eyeball fitting manufactured from 316 stainless steel with a clear focusing lens.

Available with a backnut for fixing through a panel or a backbox for fitting into pool pipe for more accurate and easier installation.

Order codes: E2-BB - includes back box  
E2-BN - includes back nut

Ferrule size: M10 or M8

A large submersible eyeball fitting which is manufactured from 316 stainless steel and incorporates a clear focusing lens.

A water resistant bung is also available for fitting in the end of the pool pipe to provide protection against water ingress.

Order codes: E3 - no back bung  
E3-BNG - includes back bung

Ferrule size: M10

A large submersible eyeball fitting manufactured from 316 stainless steel with a front mounted flat lens and a rear focusable and adjustable eyeball.

Suitable for fitting into CP2 pool pipe for more accurate and easier installation.

Can be installed in constant immersion settings such as swimming pools, ponds and water features.

Order code: E4

Ferrule size: M10 or 8mm smooth



# ABOUT CRYSTAL & SPARKLE FITTINGS

UFO offers an extensive range of sparkle and crystal end fittings for commercial and domestic applications. All of the fittings are manufactured in-house by our highly skilled staff and use the finest quality materials.

When applied to the ends of our glass and polymer fibre the end fittings provide a highly decorative finish, and as no heat or electricity is emitted from the end of the fibre they are safe to touch.

Typically known for being used to create star effect lighting scenes in bedrooms, bathrooms, bars, stage shows and sensory rooms, our sparkle and crystal end fittings are also particularly well suited for use in saunas and steam rooms, hallways and entrances, and in commercial signage for a truly decorative lighting effect.

Our wide range of sparkle end fittings includes our bullet, mushroom and sparkle lenses, all of which provide sharp points of light on the surrounding surface area. They can be used with our sheathed and unsheathed fibre, ranging from the diminutive 0.75mm right through to the large 8mm diameter fibre size, depending upon the chosen fitting.

Our crystal end fittings offer a slightly enhanced lighting experience as they create bright sparkling points of light and captivating patterned casts onto the surrounding ceiling, wall or entrance space. There are four different sized crystal fittings to select from and each is manufactured from the finest European crystal. The fittings are available with gold, silver or white effect flanges, and can be used with our 1.5mm – 2.0mm diameter sheathed and unsheathed fibre depending upon your requirements.



As shown in the image on the left, each of the 4 crystal fitting types create their own distinctive light pattern which surrounds them in the mounting surface.

Crystals, from top running clockwise;

CR4, CR1, CR3, CR2

If you would like a crystal display board to show to prospective clients, please get in touch with our sales team.



“ UFO'S ATTENTION TO DETAIL AND CLIENT LED SERVICE APPROACH HAS SECURED THEIR LOYALTY FROM OUR DESIGNERS WITH EXCEPTIONAL INSTALLATIONS IN A NUMBER OF HIGH PROFILE RESIDENTIAL PROJECTS. FROM CUTTING EDGE MASTERPIECES TO SIMPLER STARRY SKIES YOU CAN GUARANTEE THEIR COMMITMENT.

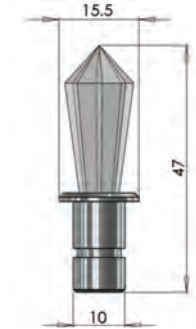
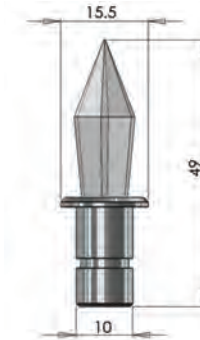
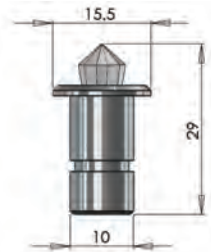
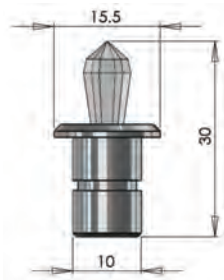
– REBECCA WEIR - LIGHT IQ

”



# FIBRE OPTIC CRYSTAL FITTINGS

Visit our website or see datasheets for full product specifications.



## UFO CR1

CRYSTAL CEILING FITTING

Manufactured from brass and available in two different finishes.

Size of cutout required:  
11mm or 12mm with mounting tube

Order codes:  
CR1-BR-C - brass, chrome plated  
CR1-BR-G - brass, gold effect plated  
Also available in white finish

## UFO CR2

CRYSTAL CEILING FITTING

Manufactured from brass and available in two different finishes

Size of cutout required:  
11mm or 12mm with mounting tube

Order codes:  
CR2-BR-C - brass, chrome plated  
CR2-BR-G - brass, gold effect plated  
Also available in white finish

## UFO CR3

CRYSTAL CEILING FITTING

Manufactured from brass and available in two different finishes

Size of cutout required:  
11mm or 12mm with mounting tube

Order codes:  
CR3-BR-C - brass, chrome plated  
CR3-BR-G - brass, gold effect plated

## UFO CR4

CRYSTAL CEILING FITTING

Manufactured from brass and available in two different finishes

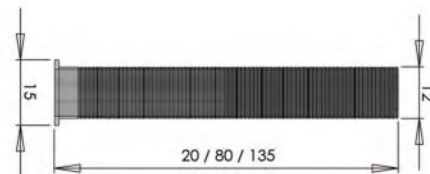
Size of cutout required:  
11mm or 12mm with mounting tube

Order codes:  
CR4-BR-C - brass, chrome plated  
CR4-BR-G - brass, gold effect plated

## MOUNTING TUBES

To aid with installation, we can also supply mounting tubes in lengths of 25mm, 80mm or 135mm. These allow the crystals to be mounted through single or double skinned ceilings or insulation in sauna rooms.

Order Code	Length
ATCR25	25mm
ATCR80	80mm
ATCR135	135mm





# FIBRE OPTIC SPARKLE FITTINGS



UFO 12D

SPARKLE POINT WITH FLANGE



UFO 12DS

SPARKLE POINT FITTING



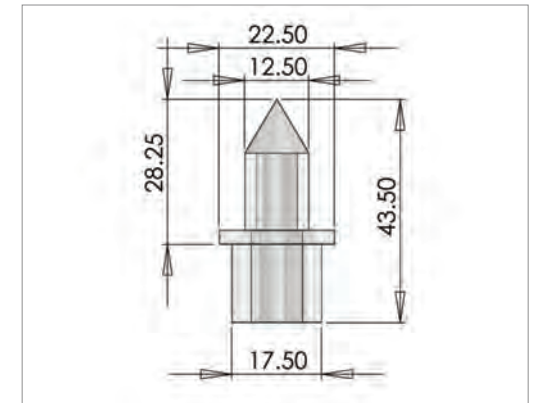
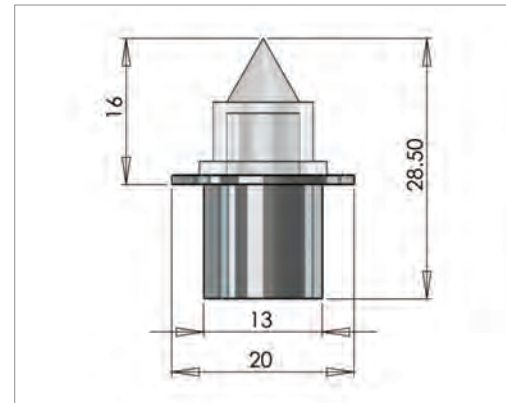
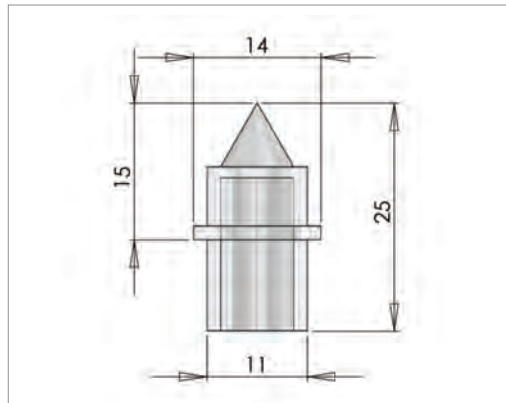
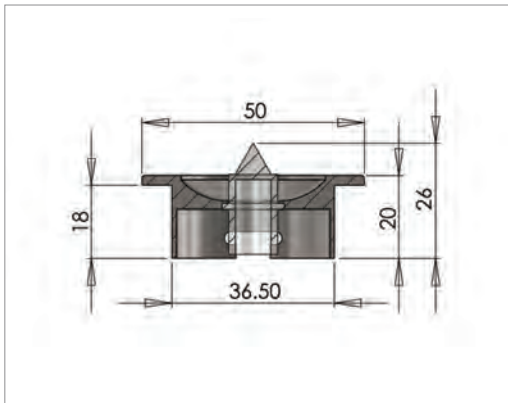
UFO 12DSF

SPARKLE POINT FITTING



UFO 12DM

SPARKLE POINT FITTING



A large sparkle point with a recessed flange. Supplied with spring clips for securing through a ceiling.

Features a large flange which is available in aluminium or polycarbonate in a range of finishes.

Order codes: 12D-ALU+colour - aluminium  
12D-PC+colour - polycarb.

Mounting hole size: 40mm

Ferrule size: 8mm smooth

Small sparkle point which fits an 8mm smooth ferrule.

This polycarbonate fitting is ideal for internal signage and for creating effects on high ceilings.

Order code: 12DS

Mounting hole size: 11mm

Ferrule size: 8mm smooth

Small sparkle point which fits an 8mm smooth ferrule. Mounted in a small black or white flange.

This polycarbonate fitting is ideal for internal signage and for creating effects on high ceilings.

Order code: 12DSF+colour

Mounting hole size: 13mm

Ferrule size: 8mm smooth

Large sparkle point which fits an M10 ferrule.

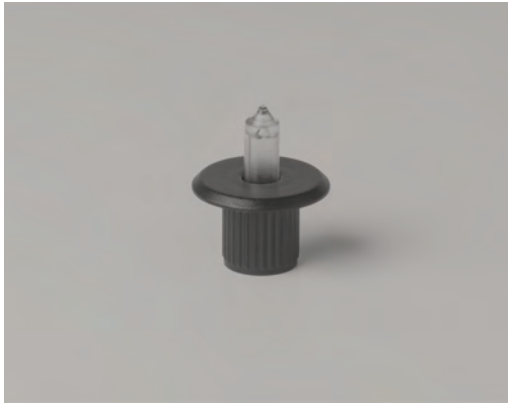
This polycarbonate fitting is ideal for internal signage and for creating effects on high ceilings.

Order code: 12DM

Mounting hole size: 18mm

Ferrule size: M10





**UFO S1**

SPARKLE BULLET FITTING



**SPARKLE FLUSH**

FOR STAR FLOORS



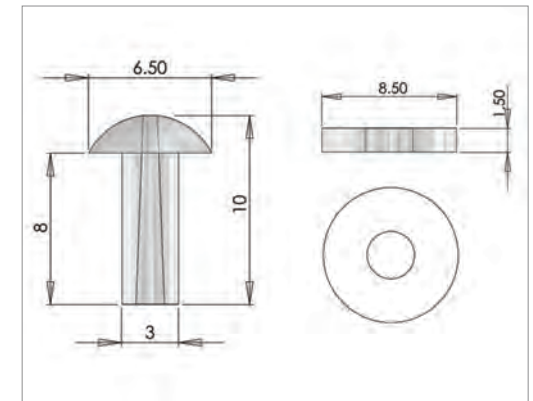
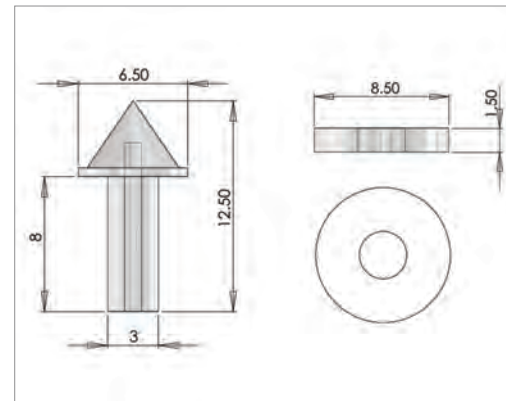
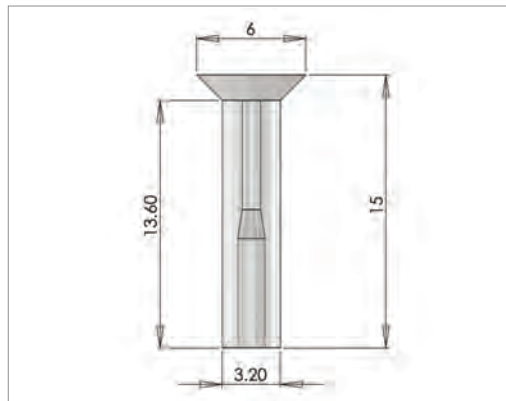
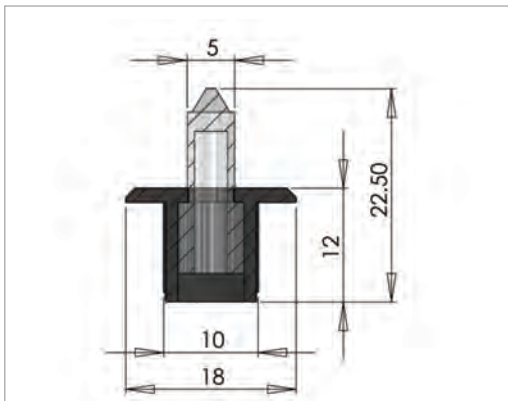
**STAR LENS**

FOR STAR CEILINGS



**MUSHROOM LENS**

FOR STAR CEILINGS



A flanged sparkle point fitting which is available in plastic or stainless steel. Popular with signmakers and for ease of installation in ceilings.

We can supply accessory tubes which allow mounting these fittings through single or double skinned ceilings.

Order codes: S1-PC+colour - polycarb.  
S1-SS - stainless steel

Mounting hole size: 10mm

Ferrule size: Size 1 crimp

Miniature lens made from UV stabilised polycarbonate.

Suitable for use in floors and decking, indoors and out. Can also be set into stone or mortar for star paving effects. Not as suitable for ceilings as the fibre is slightly recessed and will not be as visible from head height unless the ceiling is high.

Order code: SPF+fibre size (075, 10, 15)

Mounting hole size: 3.2mm

Fibre sizes: 0.75mm, 1mm or 1.5mm

Small conical fittings for star effects. Manufactured from polycarbonate.

Makes it easier to drill the holes required for small fibres from 0.75mm to 1.5mm, while giving a softer look to the light.

Helps hide uneven holes and makes it easier to seal when used in a humid area.

Order code: STAR+fibre size (075,10,15)

Mounting hole size: 3mm

Fibre sizes: 0.75mm, 1mm or 1.5mm

Small round lens, similar to the star lens but with a hole all the way through for star effects. Has a dome shaped profile.

Makes it easier to drill the holes required for small fibres from 0.75mm to 1.5mm, while giving a softer look to the light.

Order code: MUSH+fibre size (075,10,15)

Mounting hole size: 3mm

Fibre sizes: 0.75mm, 1mm or 1.5mm



# WE MANUFACTURE



Certified safe, UK manufactured light sources for all sizes of project. From cool & quiet LED models to our classic metal halide options.



# FIBRE OPTIC LIGHT SOURCES



## Illuminating Options

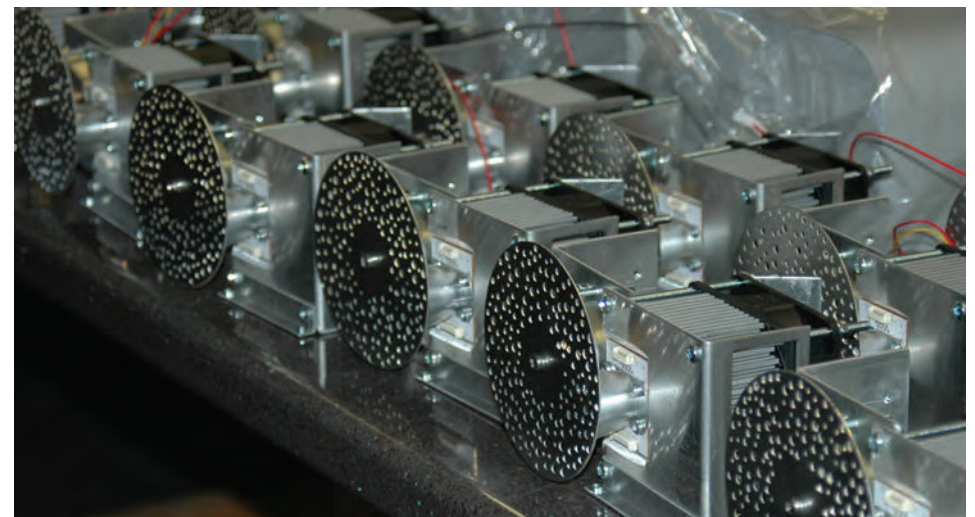
From high powered metal halide to cool & quiet LED models, our range of light sources is unsurpassed in the industry.

The light source (which is often also called a fibre optic projector or fibre optic illuminator) provides the illumination to any fibre optic lighting system. They contain the lamp or LED and any additional control gear to provide special lighting effects.

Light sources are the only part of a fibre optic system which contains electricity, and they are the only part that, depending on the type, can get warm to the touch.

Unlike many other suppliers, we design and manufacture all of our light sources in-house in our UK premises. We do not rely on generic imported units.

- 📍 **Style** - everything from standalone to full DMX
- 📍 **Function** - colour change, twinkle and dimming
- 📍 **Choice** - one of the largest ranges in the industry
- 📍 **Reliability** - thoroughly tested before despatch
- 📍 **Approved** - our light sources are CE and UL approved and can be used in many countries throughout the world



# WHY SPECIFY AN LED LIGHT SOURCE?

## The Ultimate Lighting Technology

Small, quiet and suitable for use in multiple applications, these fibre optic LED light sources offer the ultimate in fibre optic illumination.

The UFO range of LED light sources is broadly split into three categories - RGBW units which are suitable for sensory and decorative lighting systems; white light only which are great for illumination inside display cabinets and for architectural lighting systems. Finally we also offer white light models with traditional effect wheels.

LED is the modern, environmentally friendly, cost effective way to light fibre optics and our light sources all feature industry standard 30mm fibre ports, so can be retro-fitted to existing projects as well as being used in new installations.

RANGE OF COLOUR TEMPERATURES

COLOUR CHANGE

REMOTE CONTROL ON SELECTED MODELS

TWINKLE

DMX & 0-10V ON SELECTED MODELS

COST EFFECTIVE

HIGH CRI MODELS FOR DISPLAY LIGHTING

DIMMING

ENVIRONMENTALLY FRIENDLY

50,000 HOUR TYPICAL LED LIFE





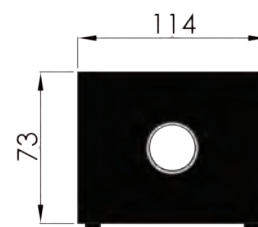
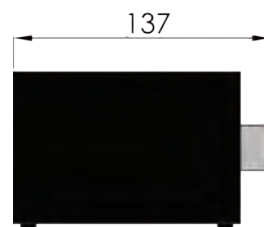
## MICROLED 100P

WHITE LIGHT OUTPUT WITH CHOICE OF COLOUR TEMPERATURES



A basic white light LED light source which is completely silent in operation.

Manufactured from durable ABS and supplied as standard in a black finish. White and grey enclosures are available to special order.



Fibre Type	Glass or PMMA
Supply Voltage	110-240VAC, 50-60Hz
Power Supply	External 12VDC, 1.5A, 18W max.
Power Consumption	4.5W
LED Type & Power	White light / 3W
Colour Temperatures	3000K, 4000K or 6000K
LED Life	50,000 hours in ambient 25°C
Effects	None
Material & Finish	ABS, black (silver or white to order)
Dimensions / Weight	137 x 114 x 73mm / 480g

## MICROLED 100PC / 100PT / 100PCT

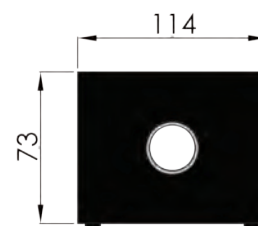
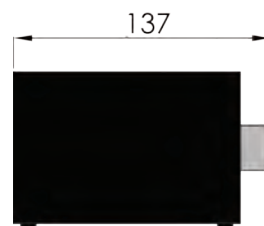
COLOUR CHANGE AND/OR TWINKLE + DIMMING WITH PUSH BUTTON CONTROL AND A CHOICE OF COLOUR TEMPERATURES



This light source utilises a white light LED array and is suitable for use with either glass or PMMA fibre.

An inbuilt decorative wheel allows for the creation of sparkling light and/or colour effects.

Manual control is provided for dimming and varying the motor speed of the effects wheel.



Fibre Type	Glass or PMMA
Supply Voltage	110-240VAC, 50-60Hz
Power Supply	External 12VDC, 1.5A, 18W max.
Power Consumption	4.5W
LED Type & Power	White light / 3W
Colour Temperatures	3000K, 4000K or 6000K
LED Life	50,000 hours in ambient 25°C
Effects	Constant colour change, twinkle or both
Effect Control	Manual for dimming and effects
Material & Finish	ABS, black (silver or white to order)
Dimensions / Weight	137 x 114 x 73mm / 480g

# LED LIGHT SOURCES

## MICROLED 1000

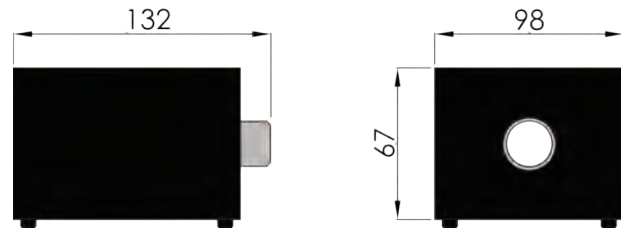
DECORATIVE LED LIGHT SOURCE WITH PUSH BUTTON CONTROLLED COLOUR CHANGE



Manufactured from durable ABS, the MicroLED 1000 is available in a choice of 3 colours - black, white or silver.

It offers complete two-button control over light output, with the ability to stop on the four main colours (white, red, green and blue).

It also allows colour cycling at a choice of three speeds.



Fibre Type	Glass or PMMA
Supply Voltage	110-240VAC, 47-63Hz, 0.58A
Power Supply	External 12VDC, 2A, 24W max.
Power Consumption	2-5W in colour cycle mode
LED Type	RGBW
LED Life	50,000 hours in ambient 25°C
Effects	Colour change
Effect Control	Push button manual control
Material & Finish	ABS, black, silver or white
Dimensions / Weight	132 x 98 x 67mm / 316g

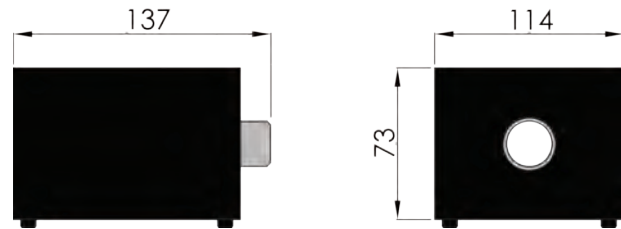
## MICROLED 4000

DECORATIVE LED LIGHT SOURCE WITH DMX & RF REMOTE CONTROL



Utilising a powerful RGBW LED array and featuring full remote control over its light output, the MicroLED 4000 is perfect for decorative effects and sensory lighting systems.

MicroLED 4000 master units can be daisy chained with multiple slave units allowing all to be operated from the same remote control. This allows for easy, controllable synchronisation.



Fibre Type	Glass or PMMA
Supply Voltage	110-240VAC, 47-63Hz, 0.58A
Power Supply	External 12VDC, 2A, 24W max.
Power Consumption	2-5W in colour cycle mode
LED Type	RGBW
LED Life	50,000 hours in ambient 25°C
Effects	Colour change
Effect Control	RF remote & manual control
Material & Finish	ABS, black, silver or white
Dimensions / Weight	137 x 114 x 73mm / 389g

Visit our website or see datasheets for full product specifications.



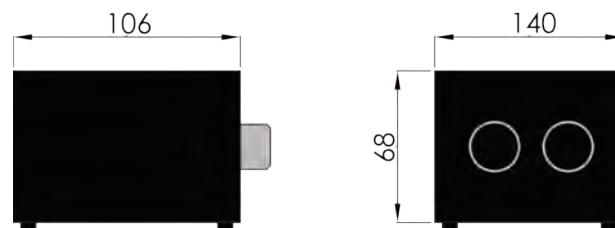
## MICROLED 2000 / 3000

DUAL OUTPUT RGBW LIGHT SOURCE OFFERING DMX AND REMOTE CONTROL



Offering a unique dual port design and full RF remote and DMX control over its in-built functions, the MicroLED 3000 is perfect for settings where two fibre effects need to be synchronised. The MicroLED 2000 is a slave unit which can be connected in series to the 3000 and follows its actions.

Very popular in the sensory and home decor sectors where, for example, a star effect ceiling can be easily synchronised with accent downlighting.



Fibre Type	Glass or PMMA
Supply Voltage	110-240VAC, 47-63Hz, 0.58A
Power Supply	External 12VDC, 2A, 24W max.
Power Consumption	4-10W in colour cycle mode
LED Type	RGBW
LED Life	50,000 hours in ambient 25°C
Effects	Colour change
Effect Control	DMX, RF remote & manual control
Material & Finish	Aluminium, anodised silver
Dimensions / Weight	140 x 106 x 68mm / 612g

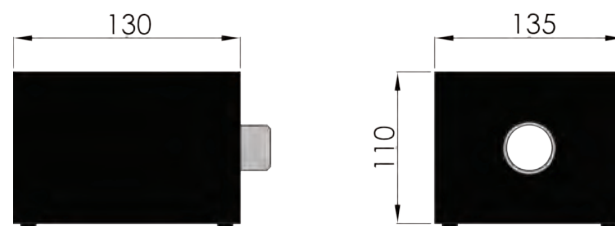
## MICROLED 5000T

COLOURED LIGHT OUTPUT WITH DMX CONTROL AND TWINKLE WHEEL



Featuring the same RGBW array as used in the MicroLED 4000, this light source also offers the same colour changing facilities as that unit.

The MicroLED 5000T also features a built in twinkle wheel and full DMX control, so that colour change and twinkle effects can be easily synchronised with other lighting.



Fibre Type	Glass or PMMA
Supply Voltage	110-240VAC, 47-63Hz, 0.58A
Power Supply	External 12VDC, 2A, 24W max.
Power Consumption	2-5W in colour cycle mode
LED Type	RGBW
LED Life	50,000 hours in ambient 25°C
Effects	Colour change & twinkle
Effect Control	DMX & manual control
Material & Finish	Aluminium, powdercoated grey
Dimensions / Weight	130 x 135 x 110mm / 790g

# LED LIGHT SOURCES

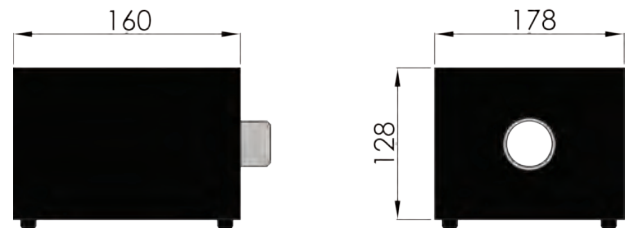
## NOVA RGBW

DECORATIVE LED LIGHT SOURCE WITH DMX & OPTIONAL REMOTE



The Nova, which is our highest powered RGBW light source, offers extremely bright light output which makes it capable of competing with all traditional light source types.

Featuring in-built DMX as standard to control the unit's colour mixing capabilities, the Nova can also be specified with an optional twinkle wheel. An optional remote control is also available for this light source. These units can also be connected master/slave for easy synchronisation.



Fibre Type	Glass or PMMA
Supply Voltage	110-240VAC, 50-60Hz
Power Supply	External 24VDC, 2.5A
LED Power & Type	46W RGBW
LED Life	50,000 hours in ambient 25°C
Effects	Colour change with optional twinkle
Effect Control	DMX, manual control, remote control
DMX	User addressable 6 channel (0-255)
Material & Finish	Aluminium, powdercoated grey
Dimensions / Weight	160 x 178 x 128mm / 1.7kg

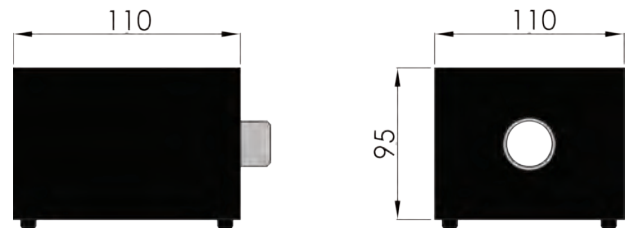
## CUBE RGBW

DECORATIVE LED LIGHT SOURCE WITH DMX & OPTIONAL REMOTE



Featuring all the control options and the colourful light output of the Nova, the Cube's power belies its size.

Small enough to hold in one hand, yet featuring full DMX control over its colour change abilities to allow for multiple units to be synchronised. For standalone installations full remote control is also built in. An optional remote control is also available for this light source. These units can also be connected master/slave for easy synchronisation.



Fibre Type	Glass or PMMA
Supply Voltage	110-240VAC, 47-63Hz
Power Supply	External 24VDC, 2.5A
Mains Running Current	0.3A max.
LED Power & Type	35W RGBW
LED Life	50,000 hours in ambient 25°C
Effects	Colour change
Effect Control	DMX, manual control, remote control
DMX	User addressable 6 channel (0-255)
Material & Finish	Aluminium, powdercoated grey
Dimensions / Weight	110 x 110 x 95mm / 607g

Visit our website or see datasheets for full product specifications.

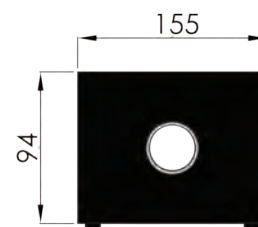
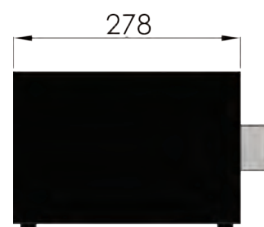


## SIRIUS WHITE LIGHT

HIGH POWERED WHITE LIGHT OUTPUT WITH DMX & INBUILT DIMMER

As part of our most powerful LED range, the Sirius White Light offers light output which, depending on colour temperature specified, is similar to that of a 150W metal halide light source.

With full DMX, 0-10V and manual control over the in-built dimming functionality, the Sirius range offers the ultimate in LED fibre optic illumination.



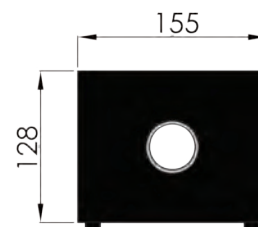
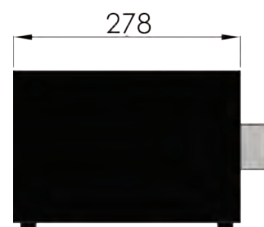
Fibre Type	Glass or PMMA				
Supply Voltage	110-240VAC, 47-63Hz				
Power Supply	External 24VDC, 3.5A				
LED Power & Type	Up to 90W white light				
Colour Temperature	5500K	5300K	4000K	3000K	3000K
CRI	75CRI	88CRI	82CRI	83CRI	98CRI
LED Life	50,000 hours in ambient 25°C				
Effects	Dimming				
Effect Control	DMX, 0-10V, manual control				
Material & Finish	Aluminium, powdercoated dark grey				
Dimensions / Weight	278 x 155 x 94mm / 2.22kg				

## SIRIUS DECORATIVE

HIGH POWERED DECORATIVE LIGHT OUTPUT WITH DMX & INBUILT DIMMER

The Sirius Decorative offers the same high power output, control functionality, dimming and varied choice of colour temperatures as the white light model, but with the addition of either a colour change wheel or a twinkle wheel.

With full DMX, 0-10V and manual control over the in-built dimming functionality, the Sirius range offers the ultimate in LED fibre optic illumination.



Fibre Type	Glass or PMMA				
Supply Voltage	110-240VAC, 47-63Hz				
Power Supply	External 24VDC, 3.5A				
LED Power & Type	Up to 90W white light				
Colour Temperature	5500K	5300K	4000K	3000K	3000K
CRI	75CRI	88CRI	82CRI	83CRI	98CRI
LED Life	50,000 hours in ambient 25°C				
Effects	Colour or twinkle wheel + dimming				
Effect Control	DMX, 0-10V, manual control				
Material & Finish	Aluminium, powdercoated dark grey				
Dimensions / Weight	278 x 155 x 128mm / 2.41kg				

# LED LIGHT SOURCES

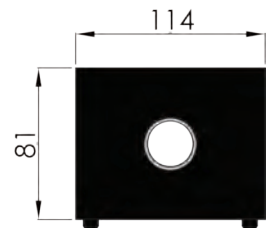
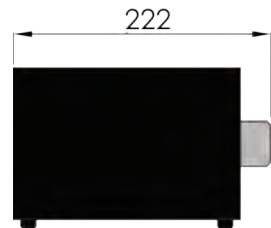
## LUNA SLIMLINE P

CONTROLLABLE WHITE LIGHT OUTPUT IN A COOL AND QUIET PACKAGE



The Luna light source features inbuilt DMX, 0-10V or manually controlled dimming.

Available with either 3000K or 4000K colour temperatures, and fitted with a standard 30mm fibre port connector, this light source is suitable for both new projects and retro-fitting to existing fibre optic installations.



Fibre Type	Glass or PMMA
Supply Voltage	110-240VAC, 47-63Hz
Power Supply	External 24VDC, 0.75A, 18W Max.
Power Consumption	12W (3000K) / 13W (4000K)
LED Power & Type	11.5W white light
Colour Temp / CRI	3000K / >80CRI or 4000K / >75 CRI
LED Life	50,000 hours in ambient 25°C
Effect & Control	Dimming - DMX, 0-10V, manual control
DMX	User addressable 1 channel
0-10V Dimming	0-10V receiving
Material & Finish	ABS, grey
Dimensions / Weight	222 x 114 x 81mm / 842g

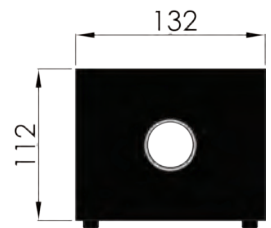
## LUNA DECORATIVE

TWINKLE OR COLOUR CHANGE WITH DMX, 0-10V OR MANUAL CONTROL



Featuring the same fanless internals as its sister, shown above, this units larger shell conceals a built in effects wheel offering either colour change or twinkle effects.

Control options for the wheel are either DMX, 0-10V or manual control using the rear mounted potentiometer. Dimming is also available on all models and is controlled via the same method as the effects wheel.



Fibre Type	Glass or PMMA
Supply Voltage	110-240VAC, 47-63Hz
Power Supply	External 24VDC, 0.75A, 18W Max.
Power Consumption	12W (3000K) / 13W (4000K)
LED Power & Type	11.5W white light
Colour Temp / CRI	3000K / >80CRI or 4000K / >75 CRI
LED Life	50,000 hours in ambient 25°C
Effects	Colour or twinkle wheel + dimming
Effect Control	DMX, 0-10V, manual control
Material & Finish	Aluminium, powdercoated grey
Dimensions / Weight	152 x 132 x 112mm / 1.18kg

Visit our website or see datasheets for full product specifications.



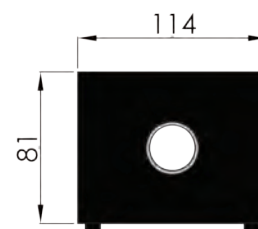
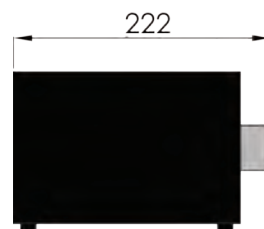
## VEGA SLIMLINE P

HIGH POWERED WHITE LIGHT OUTPUT WITH MULTIPLE DIMMING OPTIONS



The Vega light source offers high powered output and a choice of two colour temperatures and is available in a slim ABS enclosure for where space is at a premium.

Dimming is provided via either DMX, 0-10V or by using the manual control on the rear of the unit. The Vega is perfect for use in architectural applications where space can be restricted.



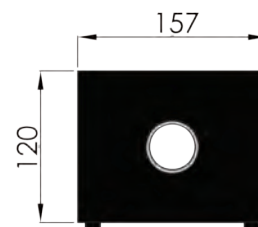
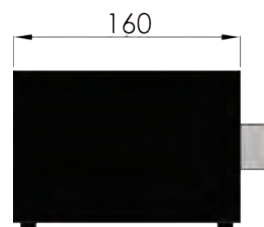
Fibre Type	Glass or PMMA
Supply Voltage	110-240VAC, 50-60Hz, 1.8A
Power Supply	External 24VDC, 2.5A, 60W Max.
LED Power & Type	Max. 20W white light
Equivalent Halogen Output	120W
Colour Temp / CRI	3000K or 4000K / 82 CRI (typical)
LED Life	50,000 hours in ambient 25°C
Effect & Control	Dimming - DMX, 0-10V, manual control
DMX	User addressable 1 channel
0-10V Dimming	0-10V receiving
Material & Finish	ABS, grey
Dimensions / Weight	222 x 114 x 75mm / 920g

## VEGA DECORATIVE

HIGH POWERED LIGHT OUTPUT WITH COLOUR OR TWINKLE AND DIMMING

The Vega Decorative offers the same powerful light output and dimming functionality as its white light sibling, with the added benefit of either a colour or twinkle wheel to provide decorative lighting effects.

The effects wheel offers the same level of control as dimming - either DMX, 0-10V or manually via rear mounted controls.



Fibre Type	Glass or PMMA
Supply Voltage	110-240VAC, 50-60Hz, 1.8A
Power Supply	External 24VDC, 2.5A, 60W Max.
LED Power & Type	Max. 20W white light
Equivalent Halogen Output	120W
Colour Temp / CRI	3000K or 4000K / 82 CRI (typical)
LED Life	50,000 hours in ambient 25°C
Effects	Colour or twinkle wheel + dimming
Effect Control	DMX, 0-10V, manual control
Material & Finish	Aluminium, powdercoated grey
Dimensions / Weight	160 x 157 x 120mm / 1.35kg

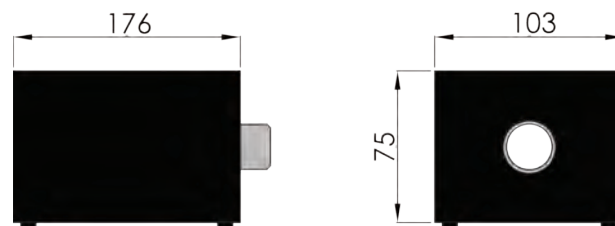
## MERCURY SLIMLINE

HIGH CRI WHITE LIGHT OUTPUT WITH A CHOICE OF COLOUR TEMPERATURES



A low noise light source with two colour temperature options, both of which offer a high colour rendering index of over 90. The Mercury is perfect for use in museum and other display applications, where the colour of the light is of vital importance.

Of course, it also offers full control over dimming with DMX, 0-10V and manual control options.



Fibre Type	Glass or PMMA
Supply Voltage	110-240VAC, 50-60Hz, 1.8A
Power Supply	External 36VDC, 1.66A, 60W Max.
LED Power & Type	44W white light
Colour Temp / CRI	2700K or 3050K / >90 CRI
LED Life	50,000 hours in ambient 25°C
Control / Effects	Dimming via DMX, 0-10V or manual
DMX	User addressable 1 channel dimming
0-10V Dimming	0-10V receiving
Material & Finish	Aluminium, powdercoated grey
Dimensions / Weight	176 x 103 x 75mm / 884g

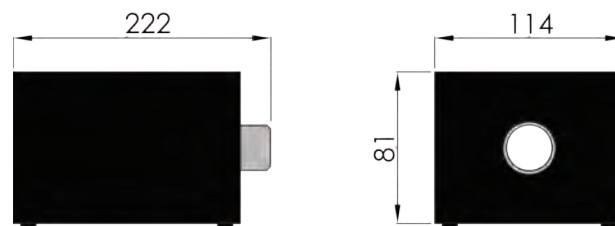
## GEMINI

HIGH CRI WHITE LIGHT OUTPUT WITH CHOICE OF COLOUR TEMPERATURES - IDEAL FOR DISPLAY LIGHTING



A slimline light source with a High Colour Rendering Index, making it very suitable for display case illumination.

Powerful light output combined with a very high colour rendering index of >93, as well as cool and near silent operation make this unit the obvious choice when using fibre optics to illuminate exhibits in museum and gallery display cases.



Fibre Type	Glass or PMMA
Supply Voltage	110-240VAC, 50-60Hz, 0.12A
Power Supply	External 12VDC, 5A
LED Power & Type	20W white light
Colour Temp / CRI	3000K or 4000K / >93 CRI
LED Life	50,000 hours in ambient 25°C
Control / Effects	Dimming via DMX, 0-10V or manual
DMX	User addressable 1 channel dimming
0-10V Dimming	0-10V receiving
Material & Finish	ABS, grey
Dimensions / Weight	222 x 114 x 81mm / 900g



# WEATHER RESISTANT ENCLOSURES

A range of weather resistant enclosures suitable for the entire UFO range of light sources. These enclosures are manufactured from sheet steel and are finished in RAL7032 powdercoat.

These enclosures can be used to locate a light source outside, but cannot be submersed.

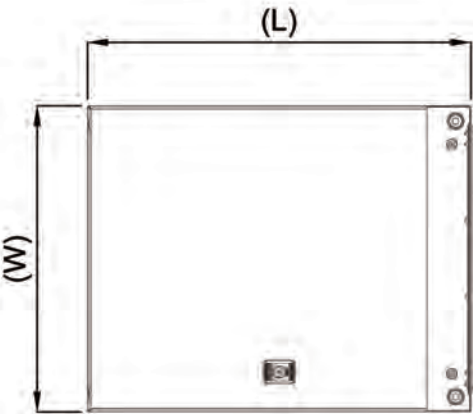
Light sources are securely mounted inside the enclosure on a sheet steel plate.

Weather resistant enclosures are built to your specification with regards to position of the vents, fans and fibre exit. This is dependant on the orientation required.

Please contact us to discuss your requirements.

## Ordering Codes

Ordering Code	Compatible Light Sources	Dimensions (L x W x H)	No. of fans	No. of Vents
MAS0302515R5	MicroLED 1000, 2/3000, 4000	300 x 250 x 155mm	0	2
MAS0403021R5	Mercury, Gemini, Vega, Luna Cube, Nova, MicroLED 5000T	400 x 300 x 210mm	1	1
MAS0504021R5	Sirius, Compact White Light Compact DMX, Compact Decorative	500 x 400 x 210mm	1	1
MAS0605030R5	Compact DMX+ 150W	600 x 500 x 300mm	1	1
MAS0605030R5	Ultima	600 x 500 x 300mm	2	2
MAS0606030R5	Compact DMX+ 250W	600 x 600 x 300mm	2	2



# WHY SPECIFY A METAL HALIDE LIGHT SOURCE?

## The classic alternative to LED systems

Metal halide units are powered by discharge lamps, which are not dimmable but our decorative and DMX controlled light sources can be supplied with a dimmer wheel. This is best used with larger diameters of fibre and is controlled by a separate electrical feed or by a switch on the light source.

All other effects are also based on an internal wheel and depending on the unit we offer a combination of colour changing and twinkle effects as well as dimming.

In light of both the popularity and performance of our LED light sources, we have taken the decision to start phasing out production of the majority of our classic range of metal halide light sources.

For now, we still carry stock of all units, but going forward we will be developing only the higher powered 250W models.

The higher powered metal halide light sources are still popular in certain sectors and are widely supplied to the retro-fit market, where a replacement light source is required that matches the already installed specification.

BRIGHT AND POWERFUL

RANGE OF BUILT-IN EFFECTS

WHITE LIGHT MODELS ALSO AVAILABLE

LONG LAMP LIFE

70W, 150W OR 250W LAMPS

DMX ON SELECTED MODELS

COLOUR CHANGE, TWINKLE, DIMMING





# METAL HALIDE LIGHT SOURCES



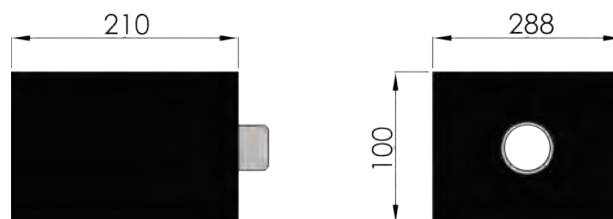
## COMPACT WHITE LIGHT

WHITE LIGHT OUTPUT WITH CHOICE OF COLOUR TEMPERATURES IN A LOW PROFILE PACKAGE



This is a low profile light source which uses either a 70W or a 150W metal halide discharge lamp. These units output white light only and there are no decorative effects, although a colour filter can be specified to change the colour of light output.

Like all the Compact range, this light source features a fast re-lamping system via a pull-out hatch on the rear.



Fibre Type	Glass or PMMA
Supply Voltage	240V AC 50Hz / 110V AC 60Hz
Lamp Power	150W or 70W
Lamp Models	Philips CDM-SA/T or CDM
Input Power	180VA @ 240VAC
Start Up Current	0.3A
Running Current	0.75A
Colour Temp / CRI	4200K @ 95CRI / 3000K @ 88CRI
Effects	None, but a colour filter can be fitted
Material & Finish	Sheet steel, powdercoat black
Dimensions / Weight	288 x 210 x 100mm / 3.2kg

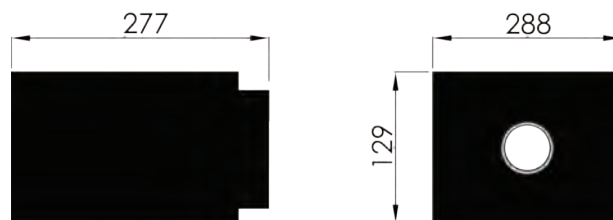
## COMPACT DECORATIVE

METAL HALIDE LIGHT SOURCE WITH BUILT IN DECORATIVE WHEEL IN A LOW PROFILE PACKAGE



This is a low profile light source which uses either a 70W or a 150W metal halide discharge lamp. These units output white light and are fitted with an effects wheel to allow either colour change, twinkling effects or dimming.

Like all the Compact range, this light source features a fast re-lamping system via a pull-out hatch on the rear.



Fibre Type	Glass or PMMA
Supply Voltage	240V AC 50Hz / 110V AC 60Hz
Lamp Power	150W or 70W
Lamp Models	Philips CDM-SA/T or CDM
Input Power	180VA @ 240VAC
Start Up Current	0.3A
Running Current	0.75A
Colour Temp / CRI	4200K @ 95CRI / 3000K @ 88CRI
Effects	1 from colour change, twinkle, dimming
Material & Finish	Sheet steel, powdercoat black
Dimensions / Weight	288 x 277 x 129mm / 3.5kg

Visit our website or see datasheets for full product specifications.

# METAL HALIDE LIGHT SOURCES

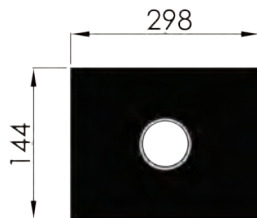
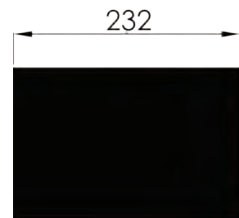
## COMPACT DMX

150W METAL HALIDE LIGHT SOURCE OFFERING FULL DMX CONTROL OVER COLOUR CHANGE EFFECTS



This is low profile light source which uses a 150W metal halide discharge lamp. Features full DMX control through either the front mounted controls or can be connected to a standalone DMX controller.

This model has a fast re-lamping feature via a rear mounted pull-out hatch and comes fitted with a colour wheel which includes seven colours plus white.



Fibre Type	Glass or PMMA
Supply Voltage	240V AC 50Hz / 110V AC 60Hz
Lamp Power	150W or 70W
Lamp Models	Philips CDM-SA/T or CDM
Input Power	180VA @ 240VAC
Start Up Current	0.3A
Running Current	0.75A
Colour Temp / CRI	4200K @ 95CRI / 3000K @ 88CRI
Effects	8 colour wheel with DMX control
Material & Finish	Sheet steel, powdercoat black
Dimensions / Weight	298 x 232 x 144mm / 4.4kg

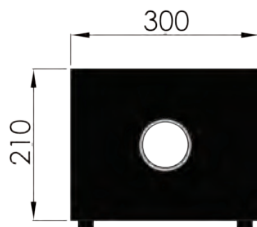
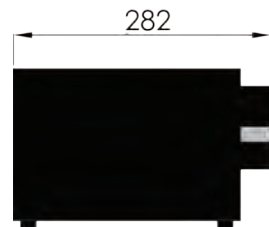
## COMPACT DMX+ 150W

150W METAL HALIDE LIGHT SOURCE OFFERING A COMBINATION OF COLOUR CHANGE, TWINKLE AND DIMMING EFFECTS, ALL CONTROLLED BY DMX



These 150W units can be controlled either by the rear mounted push button controls, or they can be connected to a standard DMX controller and integrated into either new or existing lighting setups.

As standard these light sources are fitted with a 9 colour (plus white) colour wheel, a twinkle effect wheel and a dimmer wheel.



Fibre Type	Glass or PMMA
Supply Voltage	240V AC 50Hz / 110V AC 60Hz
Lamp Power	150W or 70W
Lamp Models	Philips CDM-SA/T or CDM
Input Power	180VA @ 240VAC
Current	Start up: 0.5A   Running: 1.05A
Colour Temp / CRI	4200K @ 95CRI / 3000K @ 88CRI
Effects	DMX/master-slave/standalone control over colour change, twinkle & dimming, lamp and fan on/off
Material & Finish	Sheet steel, powdercoat black
Dimensions / Weight	282 x 300 x 210mm / 7.66kg

Visit our website or see datasheets for full product specifications.



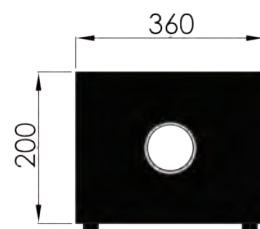
## COMPACT DMX+ 250W

POWERFUL 250W LIGHT OUTPUT WITH COLOUR CHANGE, TWINKLE AND DIMMING EFFECTS, ALL CONTROLLED BY DMX



An extremely powerful 250W metal halide light source offering a combination of colour change, twinkle and dimming effects, all controlled by DMX.

These units can be controlled either by the rear mounted push button controls, or they can be connected to a standard DMX controller and integrated into either new or existing lighting setups.



Fibre Type	Glass or PMMA
Supply Voltage	240V AC 50Hz / 110V AC 60Hz
Lamp Power	250W
Lamp Models	Philips MSD250 or BLV MHR250N
Input Power	450VA @ 240VAC
Current	Start up: 3A   Running: 1.85A
Colour Temp / CRI	8500K @ 70CRI / 4200K @ 72CRI
Effects	DMX/master-slave/standalone control over colour change, twinkle & dimming, fan and lamp on/off
Material & Finish	Sheet steel, powdercoat black
Dimensions / Weight	390 x 360 x 200mm / 16.68kg

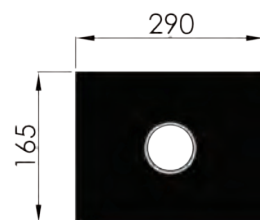
## ULTIMA 250W

POWERFUL 250W METAL HALIDE LIGHT SOURCE WHICH CAN BE SPECIFIED WITH A CHOICE OF ONE OR TWO EFFECTS WHEELS



An extremely powerful 250W metal halide light source which can be specified with one or two effects wheels. These units can be controlled by the rear mounted switches or by a separate electrical feed.

Either one or two effects wheels can be fitted - choose from a 9 colour (plus white) colour wheel, a twinkle effect wheel or a dimmer wheel.



Fibre Type	Glass or PMMA
Supply Voltage	240V AC 50Hz / 110V AC 60Hz
Lamp Power	250W
Lamp Models	Philips MSD250 or BLV MHR250N
Input Power	360VA @ 240VAC
Start Up Current	8.7A
Running Current	1.5A
Colour Temp / CRI	8500K @ 70CRI / 4200K @ 72CRI
Effects	2 from colour change, twinkle, dimming
Material & Finish	Sheet steel, powdercoat black
Dimensions / Weight	407 x 290 x 165mm / 13.84kg

# WE MANUFACTURE

Image courtesy of Click Netherfield Ltd



We also manufacture a range of easy-install cabinet lighting kits. Please request a copy of our detailed brochure for this range.



# FIBRE OPTIC DISPLAY LIGHTING

## Show your items in their best possible light

UFO lighting offers one of the largest and most diverse range of products specially manufactured to safely illuminate display cabinets and their contents.

With over 20 years' experience in working with some of the world's most highly regarded display case manufacturers, we have provided display illumination in museums and galleries worldwide.

Our range of specialist display lighting components are stylish and functional yet can be amazingly discrete, and with the safety features and easy maintenance that only fibre optic lighting can offer, you can be assured that you are investing in the best possible lighting solution.

As we are a complete systems manufacturer, we are also able to offer custom designed components unique to your installation. If you do not see what you require on our site, or have your own ideas for your system, please get in touch with us and we will do our best to help.

- 📍 **Style** - high quality finishes in a range of materials and colours
- 📍 **Discrete** - can be hidden from view but still impress
- 📍 **Function** - focusable and articulated options are available
- 📍 **Choice** - one of the largest ranges in the industry
- 📍 **Quality** - thoroughly examined and tested before despatch



Image courtesy of RS Displays

“ WE HAVE BEEN WORKING WITH  
UFO ON SEVERAL PROJECTS MOSTLY IN THE UK  
FOR ALMOST 10 YEARS, AND IT HAS ALWAYS BEEN  
A PLEASURE. WE WOULD NOT HESITATE TO  
RECOMMEND THEM AS A SUPPLIER.

- CHRISTIANE DÜFFORT - REIER GMBH

”

# FIBRE OPTIC LIGHT TUBES

Light Tubes provide a versatile method to give a general wash of light and can be either be provided in a natural finish and easily hidden from view or colour matched to become an integral part of the display case design.

Available in three diameters, 32mm, 38mm and 52mm, they consist of an aluminium tube which holds end emitting fibres at close spacings to give an even light.

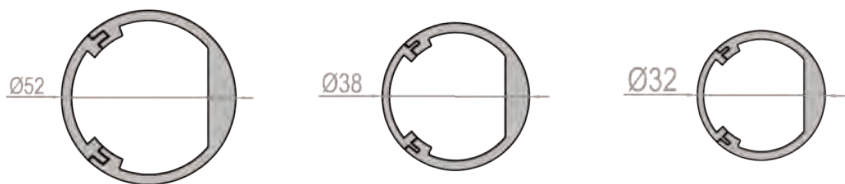
The points of light can be staggered if required to give light coverage to a wider area.

Light Tubes can be supplied as a straight tube with the fibre optic tails emerging from one end or as a u-shaped gantry which can be surface mounted

A range of mounting brackets are also available which allow for the horizontal or vertical mounting of tubes. When these are used, the tube is secured with a grub screw which allows for easy rotation and positioning.

Light Tubes can be custom painted in-house and are manufactured to order at the lengths specified.

## Available Profiles



Maximum points of light per Light Tube, when lit from one end using a standard 30mm common end.

Profile	1.8mm fibre	2.0mm fibre	3.0mm fibre
32mm	45	20	14
38mm	70	35	23
52mm	115	54	40

Maximum points of light per Light Tube, when lit from one end using a mini common end.

Fibre Size	Max. Tails
1.8mm	31
2.0mm	26
3.0mm	10





# FIBRE OPTIC LIGHT BARS

The UFO Light Bar system is a custom aluminium lighting fixture which uses either the UFO34DA or UFO34DB articulated mini trumpet fitting.

The fittings and optionally small interspersed points of light can be placed at regular or irregular intervals to suit what is being illuminated.

Light Bars are available in four profiles - 27mm, 32mm, 38mm and 44mm diameters. Typical spacings for the 34D fittings are between 50mm and 100mm .

Light Bars can be supplied as a straight tube with the fibre tails emerging from one or both ends, or can be manufactured as part of a gantry system.

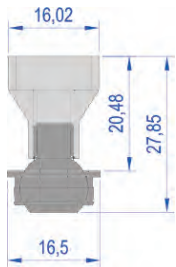
Our range of Light Bars are made to order, to the sizes you specify and come as standard in either black or white or they can be powder coated to your specified RAL colour.

The UFO34D eyeball is always supplied in black, however the trumpets can be painted to a custom colour to match the light bar.

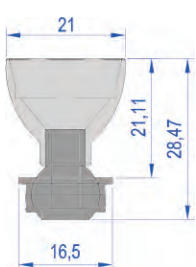
## Available Profiles



## UFO 34DA Narrow Beam Fittings



## UFO 34DB Wide Beam Fittings



Maximum points of light per Light Bar using 2mm or 3mm fibre in fittings with optional 1.5mm or 1.8mm points for infill with a single 30mm mini common end and tails from one end.

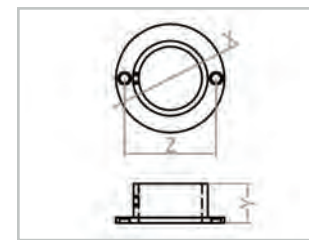
Profile	Infill Points		Fittings	
	1.5mm fibre	1.8mm fibre	2.0mm fibre	3.0mm fibre
27mm	35	30	15	10
32mm	50	45	22	12
38mm	70	65	35	18
52mm	100	90	55	34

When using a mini common end connector, the maximum tails per bar is ten of 3mm fibre or 26 of 2mm fibre. Where infill points are used, reduce the maximum number of fittings proportionally.

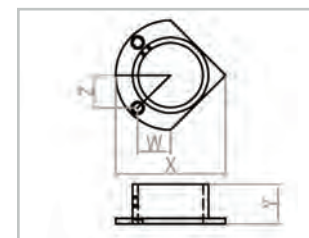


# MOUNTING BRACKETS & COMMON ENDS

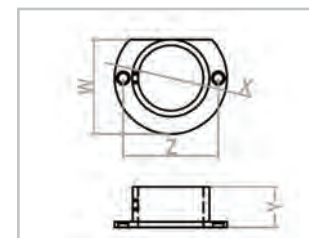
ROUND BRACKET	Tube Size	Part No.	Dim X	Dim Y	Dim Z
	27mm	ABR27R	50	20	41.5
	32mm	ABR32R	55	20	46.5
	38mm	ABR38R	62	20	53
	44mm	ABR44R	67	20	53
	52mm	ABR52R	75.5	20	67



CORNER BRACKET	Tube Size	Part No.	Dim W	Dim X	Dim Y	Dim Z
	27mm	ABR27C	10.25	50	20	14.5
	32mm	ABR32C	16.5	55	20	16.5
	38mm	ABR38C	19.5	62	20	18
	44mm	ABR44C	20.5	67	20	20.5
	52mm	ABR52C	25.25	84.5	20	25.25

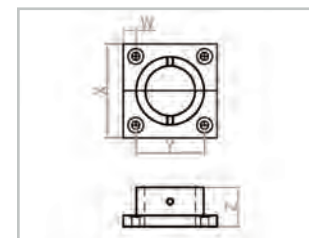
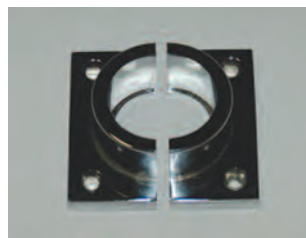


FLAT BRACKET	Tube Size	Part No.	Dim W	Dim X	Dim Y	Dim Z
	27mm	ABR27F	41.5	50	20	41.5
	32mm	ABR32F	46.5	55	20	46.5
	38mm	ABR38F	53	62	20	53
	44mm	ABR44F	58.5	67	20	58.5
	52mm	ABR52F	67	75.5	20	67

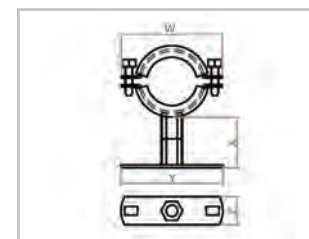


SQUARE BRACKET	Tube Size	Part No.	Dim W	Dim X	Dim Y	Dim Z
	32mm	ABR32S	8	60	44	25
	38mm	ABR38S	8	66	50	25

Please note that square brackets are only available for 32mm and 38mm extrusions.



CLIP BRACKET	Tube Size	Part No.	Dim W	Dim X	Dim Y	Dim Z
	27/32mm	ABR32N	81.5	34	70	19.5
	38/44mm	ABR40N	92	34	70	19.5
	52mm	ABR48N	100	34	70	19.5



## COMMON ENDS

Light Tubes, Bars and Wands can be supplied with either standard 30mm or 12.5mm or 14mm mini common ends.

Where a mini common end is used, a 30mm adaptor is required to fit to a standard light source. Mini common ends allow for more than one independently removable tube to be connected to a light source and require a smaller hole to pass through for easier installation.





# FIBRE OPTIC LIGHT WANDS

Light Wands are a smaller version of the Light Tubes, which use polymer fibre at close spacings to give a very even wash of light, and are ideally suited to small display cases or to light pictures or information boards.

Light Wands are supplied in either a black or silver anodised finish but they can also be painted to a custom colour of your specification.

Fibre choice for Light Wands is 0.75mm, 1.0mm or 1.5mm and this is determined by the throw of light needed and how closely together the scallops of light need to merge.

As with the Light Bars & Light Tubes, Wands can be supplied straight, with fibre exiting from one or both ends, or as part of a gantry system.

## Maximum Wand Lengths

These tables show the maximum length of Light Wands achievable, when lit from one end.

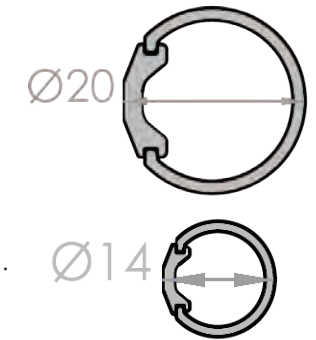
20mm wand with 30mm common end			
Fibre Size	Max. tails	Centres	Max. Wand Length
0.75mm	200	12mm	2.4m
0.75mm	200	15mm	3.0m
0.75mm	200	20mm	4.0m
1.0mm	150	12mm	1.8m
1.0mm	150	15mm	2.25m
1.0mm	150	20mm	3.0m
1.5mm	50	12mm	0.6m
1.5mm	50	15mm	0.75m
1.5mm	50	20mm	1.0m

20mm wand with 14mm mini common end			
Fibre Size	Max. tails	Centres	Max. Wand Length
0.75mm	198	12mm	2.37m
0.75mm	198	15mm	2.97m
0.75mm	198	20mm	3.96m
1.0mm	115	12mm	1.38m
1.0mm	115	15mm	1.72m
1.0mm	115	20mm	2.3m
1.5mm	46	12mm	0.55m
1.5mm	46	15mm	0.69m
1.5mm	46	20mm	0.92m

20mm wand with 12.5mm mini common end			
Fibre Size	Max. tails	Centres	Max. Wand Length
0.75mm	156	12mm	1.87m
0.75mm	156	15mm	2.34m
0.75mm	156	20mm	3.12m
1.0mm	85	12mm	1.02m
1.0mm	85	15mm	1.27m
1.0mm	85	20mm	1.7m
1.5mm	36	12mm	0.43m
1.5mm	36	15mm	0.54m
1.5mm	36	20mm	0.72m

14mm wand with 30mm or 12.5mm mini common end			
Fibre Size	Max. tails	Centres	Max. Wand Length
0.75mm	120	12mm	1.44m
0.75mm	120	15mm	1.8m
0.75mm	120	20mm	2.4m

## Available Profiles



# CABINET EXTRUSIONS

Cabinet mounting extrusions allow the use of conventional recessed downlight type fittings where it is only possible to surface mount.

The extrusion forms a conduit which conceals the fibre tails until they can be exited from the end. We normally supply the harness pre-fitted to the extrusion or we can supply the extrusion on its own.

There are five different sizes of extrusion available, from the largest CX1, to the smallest CX5.

All our extrusions have sliding front faces to allow fibre and fittings to be mounted easily.

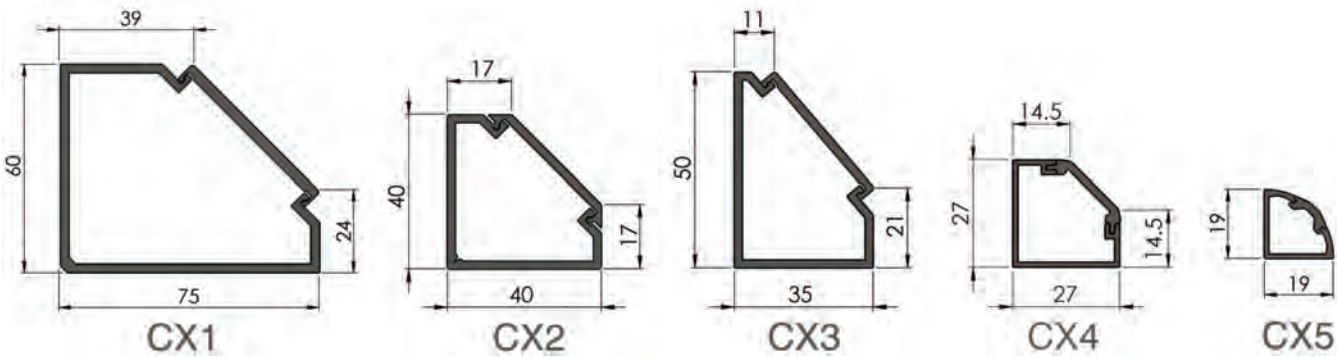
The small CX5 extrusion is unique in that it does not allow for downlights to be fitted to it. Instead it allows for the mounting of fibre tails which shine out through the small holes in the extrusion's surface.



## Ordering Codes

Extrusions come as standard in the maximum lengths below. They can be cut to size required, or joined to make longer lengths.

Product Code	Standard Length
CX1	6 metres
CX2	4 metres
CX3	3 metres
CX4	3 metres
CX5	3 metres





# MINI CROOK

The UFO Mini Crook is an optional termination to a fibre tail which holds the fibre at an angle from vertical and is very useful for illuminating a static arrangement of objects.

There are 4 configurations of the Mini Crook available as standard (see table below) which allow for variation in the overall height of the Crook and the angle of the light output.

Mounting feet, part number ABR06, are also available. These provide a decorative flange around the base of the crook as well as allowing for adjustment to be made from underneath the display case mounting surface.

We can also supply trumpets which are secured to the mini crook and are fitted with a focusable lens.

Please note that the Mini Crook is attached to a harness and is not an interchangeable fitting.

## Ordering Codes

Product Code	Dimension A	Dimension B
MC45-180	45°	180mm
MC45-305	45°	305mm
MC65-180	65°	180mm
MC65-305	65°	305mm

## Technical Specification

Material & Finish	Natural stainless steel or custom powdercoat
Mounting Method	Mounting foot supplied, secured from underside
Fibre Size	4.3mm diameter



# ROD & CLAMP SYSTEM

The Rod and Clamp assembly allows fibres and lenses to be surface mounted to a shelf or to the sides or bottom of a cabinet.

Rods are made to the customers specified length and come as standard in black although they and the clamps can be custom painted to any standard RAL colour as required.

The rods are typically mounted using a foot on the top or underside of the mounting surface.

A number of lenses can be supported by one rod, depending on the length of rod used. The fibre tails run separately to each lens.

Lenses normally used with the rod and clamp are the UFO25D and the UFO26D, however, being special assemblies made to order, the rod and clamp system can be adapted to the required application

Rod length and number of fittings can be supplied to specification. One fibre optic tail is required per fitting.

## Technical Specification

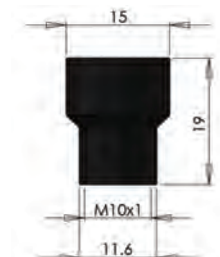
Trumpet	UFO 25D or 26D. Custom options also available
Focus Range	UFO 25D - 40° to 60° / UFO 26D - 25° to 45°
Material & Finish	Aluminium, powdercoated to customer specification
Weight	Varies depending on number of fittings and length
Mounting Method	Surface mount foot supplied
Ferrule Size	M10
Fibre Sizes	2mm to 8mm
Ordering Code	UFO RC



UFO 26D Trumpet



UFO 25D Trumpet





# FLEX & STAY SYSTEM

UFO flex and stay systems are terminations which are integral to the harness which are flexible but stay in position where pointed.

As detailed, 6 standard sizes of system are available, all in a chrome or black finish. We can also manufacture custom sizes to suit your application - please contact us with required dimensions for a quote.

Standard flex and stays are fitted with either the UFO 25D or 26D trumpet and lens, however as shown in the photo, we can also manufacture custom ends for use in light guide applications.

The flex and stay systems are suitable for indoor use only.

Matching mounting feet are also available and these are supplied pre-mounted onto the harness.

## Ordering Codes

Product Code	Length	Flex Diameter	Active Diameter	Standard Lens
UFS-103	300mm	11mm	4.5mm	UFO 25D or 26D
UFS-110	1000mm	11mm	4.5mm	UFO 25D or 26D
UFS-203	300mm	14mm	6mm	UFO 25D or 26D
UFS-210	1000mm	14mm	6mm	UFO 25D or 26D
UFS-303	300mm	15mm	7mm	UFO 25D or 26D
UFS-310	1000mm	15mm	7mm	UFO 25D or 26D

## Technical Specification

Material & Finish	Brass & black anodised or chromed aluminium
Mounting Method	Surface Mount foot supplied
Fibre Size	4.5 - 7mm diameter



# WE MANUFACTURE



The fibre harness carries the light from the source to the end point. No heat or electricity is carried in the harness so it is always safe to touch.



# FIBRE OPTIC HARNESSSES

## The only UK manufacturer of raw fibre for lighting

UFO is the only manufacturer of raw fibre for lighting in the United Kingdom. Our harnesses are UK made and our manufacturing team have years of experience in building, randomising and polishing. This means you can be sure that you are purchasing a top quality product.

There are two general types of harnesses available - glass and PMMA, and these are further broken down into end lit or side emitting types.

Harnesses comprise one or more tails (or cables) of fibre optics which transmit the light from the light source over a distance.

The tails are joined together in a connector (the common end) which plugs into the light source, and are normally loose at the other end. Harnesses may be terminated with ferrules or other end fittings at the loose end depending on the type of fibre used.

### Bulk PMMA Fibre

We can also supply PMMA fibre on rolls to manufacturers and installers. We have unsheathed and sheathed single fibres and sheathed bundles of 0.75mm fibre, normally held in stock for rapid delivery.

We can also make runs of special bundles to your specification. The normal sheathing material is low smoke halogen free Megalon.



# END LIT PMMA FIBRE HARNESSES

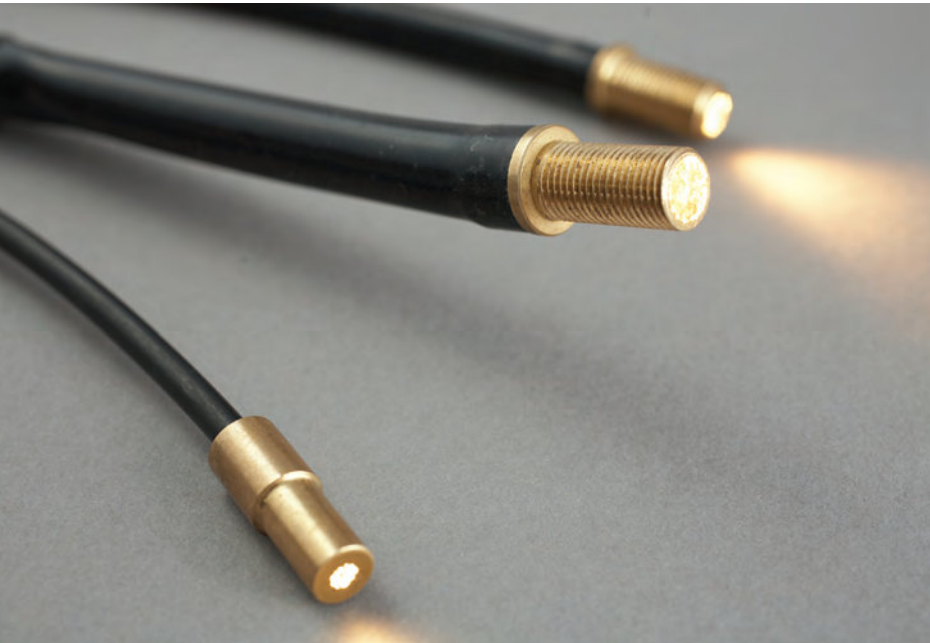
Our range of standard PMMA end lit harnesses are available in either single or multi-strand configurations. We can also make custom harnesses with larger diameter fibre if required.

Our PMMA fibre products are manufactured from Mitsubishi / ESKA raw fibre. We are an officially authorised supplier of Mitsubishi fibre products.

End lit PMMA fibre comes in two configurations - single sheathed or unsheathed strands of 0.75mm, 1mm, 1.5mm or 2mm diameter fibre, or as multiple sheathed strands of 0.75mm fibre.

Single strands of fibre give starry points of light and normally require no termination, whilst multi-stranded varieties are normally terminated with a ferrule to allow the attachment of an end fitting.

Larger diameters are available on request with soft silicone at the ends of the tails for use when articulated fittings are used in a tight space for the fibre bend radius.



## Technical Specifications

	End Lit PMMA Fibre
Core Material	Polymethyl Methacrylate
Cladding Material	Fluorinated Polymer
Refractive Index	1.49
Numerical Aperture	0.5
Refractive Index Profile	Step index
Operation Temperature Range	-55°C to +70°C in low humidity; <60°C at 95% RH (attenuation change is within 10% after 1000 hours except for that due to absorbed water). Please note that fibre can become brittle at lower temperatures.
Sheathing Specifications	Outer sheathing material TP519 is a thermoplastic low-smoke halogen-free flame retardant compound with low toxic fume emission.
TP519 Toxicity Index (NES713)	1.3
TP519 Halogen Acid Gas Evolution (BS EN 50267-2-1)	<0.5%
TP519 Smoke Emission 3m Cube Test (BS 7622)	Pass



## Ordering Codes

Ordering Code	Fibre Size	Approx. Active Diameter	Approx. Outer Diameter	Max. Tails / Light Source	Min. Bend Radius	Ferrule Options
FSPT-1-25-U	CK10	0.25mm	unsheathed	9150	10mm	none
FSPT-1-50*	CK20	0.5mm	unsheathed / 1.09mm	2100	10mm / 15mm	none
FSPT-1-75*	CK30	0.75mm	unsheathed / 2mm	1100	10mm / 15mm	none / tube
FSPT-1-1*	CK40	1mm	unsheathed / 2.2mm	600	15mm / 20mm	crimp / tube
FSPT-1-15*	CK60	1.5mm	unsheathed / 2.6mm	250	25mm / 40mm	crimp / tube
FSPT-1-2*	CK80	2mm	unsheathed / 3mm	150	30mm / 60mm	crimp / tube
FSPT-2	2	1.2mm	2.35mm	550	15mm	tube
FSPT-3	3	1.5mm	2.7mm	366	18mm	tube
FSPT-4	4	1.8mm	3.1mm	275	20mm	tube
FSPT-5	5	2mm	3.7mm	220	20mm	5mm smooth / tube
FSPT-6	6	2.2mm	4.1mm	183	20mm	5mm smooth / tube
FSPT-7	7	2.4mm	4.4mm	150	25mm	5mm smooth / tube
FSPT-8	8	2.5mm	4.5mm	135	25mm	5mm smooth / tube
FSPT-12	12	3.1mm	4.85mm	85	25mm	M8 / M10 / 5mm / 8mm
FSPT-21	21	4mm	6mm	50	28mm	M8 / M10 / 6mm / 8mm
FSPT-25	25	4.3mm	6.35mm	40	30mm	M8 / M10 / 6mm / 8mm
FSPT-33	33	5mm	7.4mm	30	50mm	M8 / M10 / 6mm / 8mm
FSPT-50	50	6mm	8.7mm	20	60mm	M8 / M10 / 6mm / 8mm
FSPT-67	67	7mm	10.1mm	14	80mm	M10 / 8mm smooth
FSPT-75	75	7.5mm	10.1mm	13	90mm	M10 / 8mm smooth
FSPT-88	88	8mm	10.7mm	11	100mm	M10 / 8mm smooth

\*Codes refer to sheathed product. For unsheathed please suffix code with '-U'

Custom ferrule options also available - contact us for details.

## 116

The ends are finished with crimp terminations for small diameters and with brass or stainless steel ferrules for larger diameters. Ferrules allow end fittings to be attached to the fibre tails.

Larger diameters are available on request with soft silicone at the ends of the tails for use when articulated fittings are used in a tight space for the fibre bend radius.

Standard ferrule options are shown in the ordering codes table below, however, other options are available including 1/4" smooth, M7 and 8mm smooth. Ferrules are supplied in brass as standard or in stainless steel for use outdoors or in damp areas.

- Unique fused technology
- Resistance to high temperatures which offers the greatest possible light output without heat filters
- UV resistant common end
- Flexible multi-fibre construction
- High packing density which ensures compatibility with tightly focussed light sources
- High quality glass fibres offering exceptional transmission and colour characteristics
- Factory terminated common ends for superior quality, performance and longevity

Fibre Size	1	1.5	1.8	2	8	12	18	24	36	42	72	---
Approx. Outer Diameter	2.3mm	2.7mm	2.6mm	3.9mm	4.9mm	6.4mm	7.4mm	8.7mm	10.1mm	*	**	10.5mm
Approx. Active Diameter	1mm	1.5mm	1.8mm	2mm	3mm	4.3mm	5mm	6mm	7mm	7.75mm	10mm	7.5mm
Minimum Bend Radius	7mm	8mm	10mm	15mm	18mm	20mm	40mm	50mm	70mm	80mm	100mm	80mm
Maximum Number of Tails	400	270	160	135	68	38	25	17	12	10	8	10
Ferrule Options	crimp	crimp tube	crimp tube	crimp tube 3mm	M8 M10	M8 M10	M8 M10	M8 M10	M10	M10	M10	M10
Common End	30mm fused technology process											
Flexible Outer Sheathing	HFFR compounds - halogen free and flame retardant to IEC 60332-1-2											
Operating Temperature	Common end face: 0°C - 350°C   Flexible tube: 0°C - 150°C   Flexible sheathing: 0°C - 70°C											



# FERRULES & COMMON ENDS

## FERRULES

A SEALED END TERMINATION TO A FIBRE TAIL

Ferrules provide a sealed end termination to a fibre tail. They also allow for end fittings and lenses to be connected. Larger ferrules are threaded or push-fit onto the end fittings, whilst smaller ones are push-fit only.

M10, M8 and 8mm smooth ferrules are available in natural brass for indoor use, or for outdoor use in stainless steel. Smaller sizes are generally only used indoors and are normally manufactured in natural brass only.

As well as our standard ferrules, we are able to manufacture custom ferrules to suit your application - contact us for more details.



Ferrules shown are the largest sizes of a particular type. Ferrules to take smaller fibre sizes will vary in proportion.

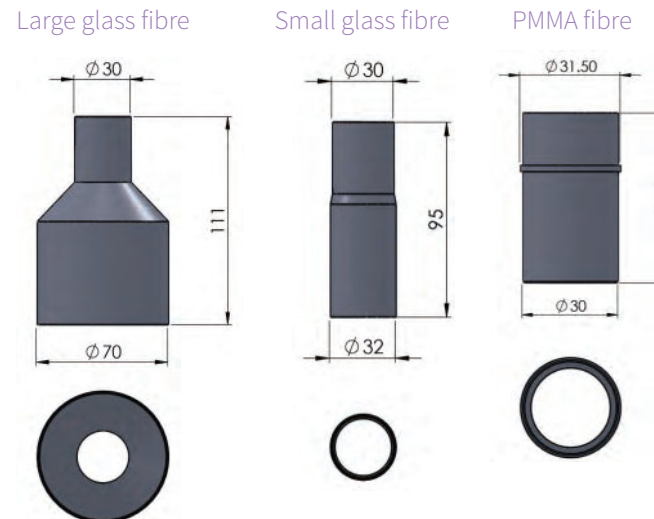
## COMMON ENDS

TO BIND ALL THE FIBRE TAILS TOGETHER IN A SINGLE CONNECTION

The common end is used to bind all the fibre tails together in a single connection, which can then be plugged into a standard 30mm diameter fibre port on a light source.

Available in various diameters, common ends are different for glass and PMMA fibre, with those for glass being larger. We also offer 12.5mm and 14mm mini common ends which are particularly useful in display cases where it may not be possible to drill a hole large enough to take a full size 30mm common end.

Adaptors are also available to allow multiple mini common ends to be plugged together into one light source.



Common ends for glass fibre are manufactured from aluminium and anodised black, whereas the type used for PMMA fibre are raw aluminium. The 30mm diameter section provides a snug fit in any standard 30mm light source port.

## THE EZEFIX SYSTEM

The Ezefix termination system makes it quick and simple to terminate PMMA optical fibre for lighting applications without the use of specialist equipment.

It consists of a range of port connectors for connection of the fibre to a light source and ferrule connectors to finish end lit fibre and allow attachment of end fittings.

While factory termination is always recommended for PMMA fibre and is necessary for glass fibre, this connector system will give adequate results where maximum light output or evenness are not required.



# STRANDED SIDE GLOW PMMA FIBRE HARNESSSES

UFO side sparkle side glow fibre can be used to highlight the perimeter of pools, decks and walkways. It is also often used for illuminating the edges of steps.

Suitable for interior or exterior applications, the fibre is UV protected and has an algaecide and fungicide treated exterior jacket for maximum durability against the elements.

Our stranded side glow fibre is strong enough for use in pools or extremely cold environments and with no heat or electricity running through the cable typical lighting design restrictions are eliminated allowing for an almost unlimited range of design possibilities.

Constructed from 0.75mm diameter PMMA acrylic optical fibres of twisted sub-bundles within a flexible clear jacket. The fibres are twisted around a highly reflective PVC internal core that offers flexible stability combined with maximum light output.

## Mounting Track

Three sizes of mounting track are available for this fibre. All are manufactured from UV resistant polycarbonate.

### Ordering Codes

SGMT-145 - suitable for use with NSG145 fibre

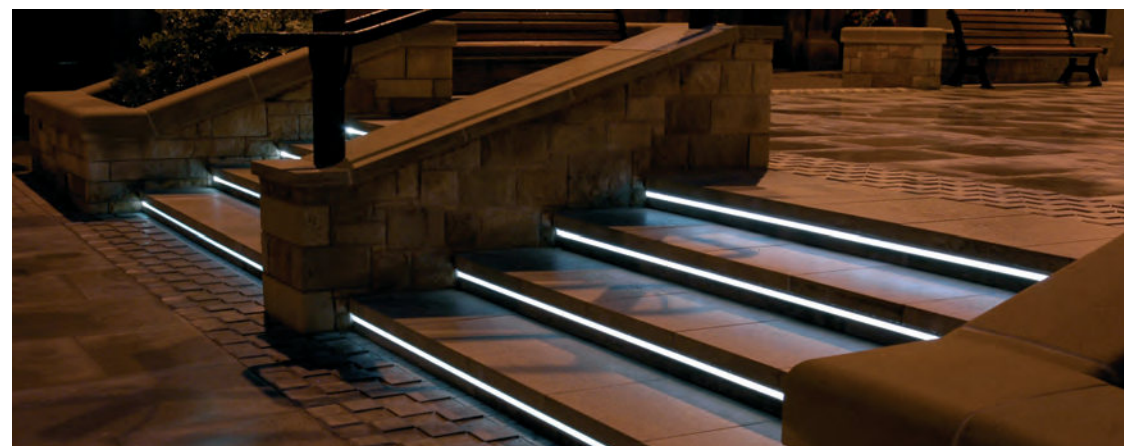
SGMT-127 - suitable for use with NSG127 fibre

SGMT-095 - suitable for use with NSG095 fibre



### Ordering Codes

Ordering Code	Outer Diameter	No. of Fibres	Max. Tails per Harness	Min. bend radius
NSG145	14.5mm	126	7	64mm
NSG127	12.7mm	84	11	52mm
NSG095	8mm	42	22	40mm



### Maximum Run Lengths

When lit from one end - 20m maximum

When lit from both ends - 40m maximum

Figures based on 250W metal halide light source. Lower powered units will illuminate shorter distances.



# GLASS SIDE GLOW FIBRE HARNESSES

UFO glass fibre optic harnesses offer unparalleled light output, very long life and extraordinary colour characteristics.

Glass side glow harnesses are very popular in chandeliers where the tails provide a brighter effect and hang straighter than PMMA equivalents.

Benefits of UFO side glow glass fibre include:

- Unique fused technology
- Resistance to high temperatures which offers the greatest possible light output without heat filters
- UV resistant common end
- Flexible multi-fibre construction
- High packing density which ensures compatibility with tightly focussed light sources
- High quality glass fibres offering exceptional transmission and colour characteristics
- Factory terminated common ends for superior quality, performance and longevity

We can manufacture glass side glow harnesses to any length required, but please contact us to discuss maximum run lengths for the various light source types before ordering.

## Technical Specifications

	2.2mm Glass Side Glow
Outer Diameter	2.2mm
Fibre Core	1.1mm cracked fibre bundle
Sheathing Material	Transparent PVC
Max. Tails in Harness	450
Max. Run Length	10m with 150W metal halide or Sirius LED light source
Common End	30mm fused technology



# SENSORY SIDESPARKLE PMMA FIBRE HARNESSES

Super safe side sparkle PMMA fibre optic harnesses for decorative and sensory use.

UFO manufacture a range of certified safe fibre harnesses which can be supplied in either a clear or a multi-coloured UV reactive sheathing.

The PVC in these harnesses is phthalate free and the harnesses themselves have CPSIA and EN71 toy certifications so you can be sure you are purchasing a safe, high quality, UK made product.

All harnesses are fitted with a standard 30mm common end for connection to a fibre optic light source.

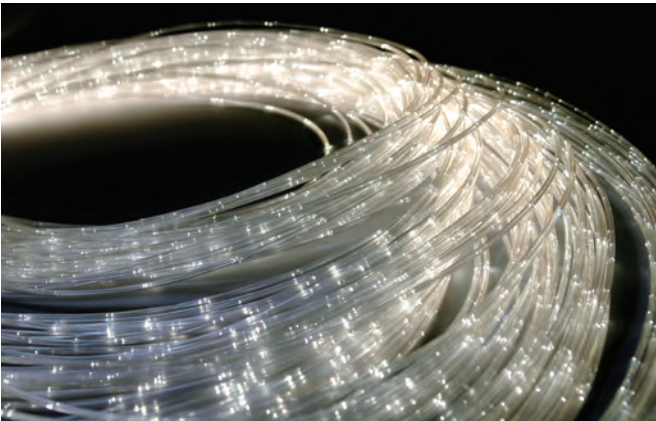
## Ordering Codes

No. of Tails & Length	2 Strand Clear	2 Strand UV	3 Strand Clear	3 Strand UV	6 Strand Clear
100 tails at 1 metre	SEN2-100-1-CL	SEN2-100-1-UV	SEN-100-1-CL	SEN-100-1-UV	SEN6-100-1-CL
100 tails at 2 metres	SEN2-100-2-CL	SEN2-100-2-UV	SEN-100-2-CL	SEN-100-2-UV	SEN6-100-2-CL
100 tails at 3 metres	SEN2-100-3-CL	SEN2-100-3-UV	SEN-100-3-CL	SEN-100-3-UV	SEN6-100-3-CL
100 tails at 3.5 metres	SEN2-100-35-CL	SEN2-100-35-UV	SEN-100-35-CL	SEN-100-35-UV	---
150 tails at 1 metre	SEN2-150-1-CL	SEN2-150-1-UV	SEN-150-1-CL	SEN-150-1-UV	SEN6-150-1-CL
150 tails at 2 metres	SEN2-150-2-CL	SEN2-150-2-UV	SEN-150-2-CL	SEN-150-2-UV	SEN6-150-2-CL
150 tails at 3 metres	SEN2-150-3-CL	SEN2-150-3-UV	SEN-150-3-CL	SEN-150-3-UV	SEN6-150-3-CL
200 tails at 1 metre	SEN2-200-1-CL	SEN2-200-1-UV	SEN-200-1-CL	SEN-200-1-UV	---
200 tails at 2 metres	SEN2-200-2-CL	SEN2-200-2-UV	SEN-200-2-CL	SEN-200-2-UV	---
200 tails at 3 metres	SEN2-200-3-CL	SEN2-200-3-UV	SEN-200-3-CL	SEN-200-3-UV	---

Please contact us for information on other harness lengths and larger tail numbers.

## Technical Specifications

	2 Strand Fibre	3 Strand Fibre	6 Strand Fibre
Outer Diameter	2.35mm	2.6mm	3.2mm
Fibre Core	2 x 0.75mm fibres	3 x 0.75mm fibres	6 x 0.75mm fibres
Outer Sheathing	Phthalate free PVC clear or UV reactive coloured		
Max. Tails in Harness	550	350	150
Max. Run Length	10m depending on light source output		
Certifications	These products have EN71 and CPSIA toy certifications		





# STARIFLEX & OPULENCE PMMA FIBRE HARNESSSES

Two decorative effect fibre types for indoor use with the added safety of a PMMA fibre core. Stariflex has a wide outer diameter of 7mm and is constructed from 12 tails of 1mm fibre. Opulence has a 'knobbly', textured outer sheathing to provide touch stimulation when used in sensory environments.

The PVC in these harnesses is phthalate free and the harnesses themselves have CPSIA and EN71 toy certifications so you can be sure you are purchasing a safe, high quality, UK made product.

All harnesses are fitted with a standard 30mm common end for connection to a fibre optic light source.

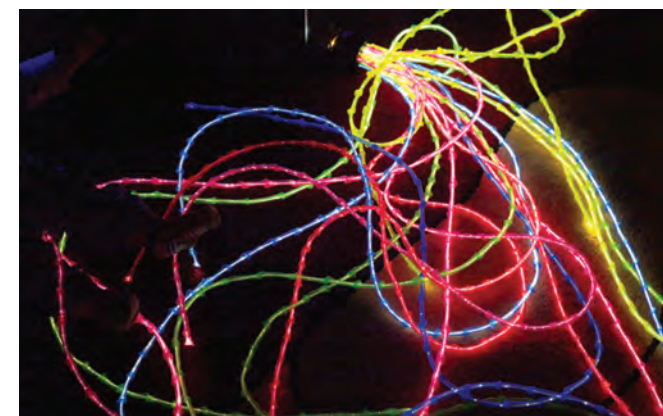
## Technical Specifications

	Stariflex	Opulence
Outer Diameter	7mm	7mm on straight sections
Fibre Core	12 x 1mm fibres	5 x 0.75mm fibres
Outer Sheathing	Phthalate free PVC clear or UV reactive coloured	
Max. Tails in Harness	40	20
Max. Run Length	8m depending on light source output	10m depending on light source output
Certifications	These products have EN71 and CPSIA toy certifications	

## Ordering Codes

No. of Tails & Length	Stariflex Clear	Stariflex UV	Opulence Clear	Opulence UV Clear	Opulence UV Multicolour
8 tails at 1 metre	STF-8-1-CL	STF-8-1-UV	OPU-8-1-CL	OPU-8-1-UCL	OPU-8-1-UV
8 tails at 2 metres	STF-8-2-CL	STF-8-2-UV	OPU-8-2-CL	OPU-8-2-UCL	OPU-8-2-UV
12 tails at 1 metre	STF-12-1-CL	STF-12-1-UV	OPU-12-1-CL	OPU-12-1-UCL	OPU-12-1-UV
12 tails at 2 metre	STF-12-2-CL	STF-12-2-UV	OPU-12-2-CL	OPU-12-2-UCL	OPU-12-2-UV
15 tails at 1 metre	STF-15-1-CL	STF-15-1-UV	OPU-15-1-CL	OPU-15-1-UCL	OPU-15-1-UV
15 tails at 2 metres	STF-15-2-CL	STF-15-2-UV	OPU-15-2-CL	OPU-15-2-UCL	OPU-15-2-UV
18 tails at 1 metre	---	---	OPU-18-1-CL	OPU-18-1-UCL	OPU-18-1-UV
18 tails at 2 metres	---	---	OPU-18-2-CL	OPU-18-2-UCL	OPU-18-2-UV
20 tails at 1 metre	STF-20-1-CL	STF-20-1-UV	OPU-20-1-CL	OPU-20-1-UCL	OPU-20-1-UV
20 tails at 2 metres	STF-20-2-CL	STF-20-2-UV	OPU-20-2-CL	OPU-20-2-UCL	OPU-20-2-UV

Please contact us for information on other harness lengths and larger tail numbers.



# BULK FIBRE ON REELS

## Sheathed, Single Strand PMMA Fibre

Ordering Code	Fibre Diameter	Outer Diameter	Diameter Tolerance	Reel Length	Approx Weight	Min. Bend Radius
CK20S	0.5mm	1.1mm	±0.15mm	6000m	0.96g/m	15mm
CK30S	0.75mm	2.0mm	±0.3mm	2700m	3.9g/m	15mm
CK40S	1.0mm	2.2mm	±0.3mm	1500m	4.9g/m	20mm
CK60S	1.5mm	2.6mm	±0.3mm	700m	6.6g/m	40mm
CK80S	2.0mm	3.1mm	±0.4mm	250m	12.8g/m	60mm

## Sheathed, Multi Strand PMMA Fibre

Ordering Code	No. Strands	Strand Diameter	Approx. Active Diameter	Approx. Outer Diameter	Min. Bend Radius	Reel Length
2EG075	2	0.75mm	1.2mm	2.35mm	15mm	500m
3EG075	3	0.75mm	1.5mm	2.7mm	18mm	500m
4EG075	4	0.75mm	1.8mm	3.1mm	20mm	500m
5EG075	5	0.75mm	2mm	3.7mm	20mm	500m
6EG075	6	0.75mm	2.2mm	4.1mm	20mm	500m
7EG075	7	0.75mm	2.4mm	4.4mm	25mm	500m
8EG075	8	0.75mm	2.5mm	4.5mm	25mm	300m
12EG075	12	0.75mm	3.1mm	4.85mm	25mm	300m
21EG075	21	0.75mm	4mm	6mm	28mm	300m
25EG075	25	0.75mm	4.3mm	6.35mm	30mm	300m
33EG075	33	0.75mm	5mm	7.4mm	50mm	200m
50EG075	50	0.75mm	6mm	8.7mm	60mm	150m
67EG075	67	0.75mm	7mm	10.1mm	80mm	100m
75EG075	75	0.75mm	7.5mm	10.1mm	90mm	100m
88EG075	88	0.75mm	8mm	10.7mm	100mm	100m
100EG075	100	0.75mm	8.4mm	11.3mm	105mm	100m



Unsheathed, Single Strand PMMA Fibre

Ordering Code	Fibre Diameter	Diameter Tolerance	Reel Length	Approx Weight	Min. Bend Radius	Approx Transmission Loss
CK10U	0.25mm	±0.023mm	12000m	0.06g/m	5mm	350dB/km
CK20U	0.5mm	±0.03mm	6000m	0.4g/m	10mm	250dB/km
CK30U	0.75mm	±0.045mm	2700m	0.9g/m	15mm	200dB/km
CK40U	1.0mm	±0.06mm	1500m	1.5g/m	20mm	200dB/km
CK60U	1.5mm	±0.09mm	700m	3.26g/m	30mm	200dB/km
CK80U	2.0mm	±0.12mm	250m	4.06g/m	40mm	200dB/km

Sensory Side Sparkle PMMA Fibre

Ordering Code	No. Strands	Strand Diameter	Approx. Active Diameter	Approx. Outer Diameter	Min. Bend Radius	Reel Length
SEN2-3	2	0.75mm	1.2mm	2.35mm	15mm	2000m
SEN3-3	3	0.75mm	1.5mm	2.6mm	18mm	2000m
SEN3-5	3	0.75mm	1.5mm	2.6mm	18mm	2000m
SEN3-7	3	0.75mm	1.5mm	2.6mm	18mm	2000m
SEN12-3	12	1.0mm	3.1mm	6.9mm	50mm	200m

PMMA Stranded Side Glow Fibre

Ordering Code	No. Strands	Outer Diameter	Min. Bend Radius	Reel Length
NSG-145-REEL	126	14.5mm	64mm	396m
NSG-127-REEL	84	12.7mm	52mm	305m
NSG-095-REEL	42	8mm	40mm	518m

Smooth Solid Core PMMA Fibre

Ordering Code	Outer Diameter	Reel Length
SSC-SG6	6mm	60m
SSC-SG8	8.8mm	60m
SSC-SG14	14mm	60m
SSC-SG17	17.3mm	60m

CONTACT A UFO SALES  
REPRESENTATIVE FOR PRICING AND  
TO DISCUSS WHICH FIBRE IS MOST  
SUITABLE FOR YOUR PROJECT.

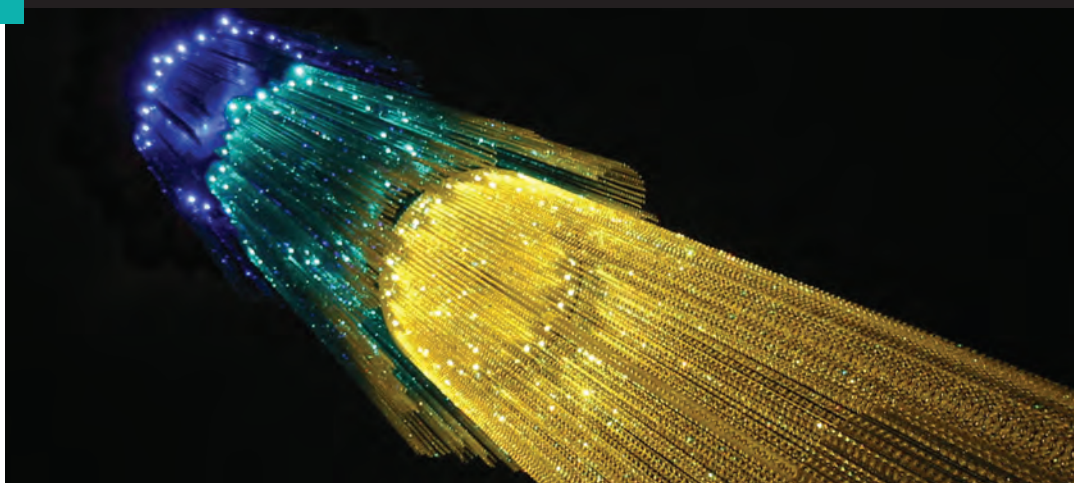
# OUR LIGHTING SYSTEMS...



Image courtesy of Jill Tate Photography



Image courtesy of Qdos Entertainment Ltd



We also manufacture many custom lighting solutions for clients around the world. Ask for a copy of our Special Projects brochure for information.



# ...WILL INSPIRE AND DELIGHT

## From stunning chandeliers to relaxing sauna lights

At UFO we don't just manufacture functional and display lighting systems, we also fabricate a range of creative lighting systems that ignite the imagination.

Whether you require a colour-changing or UV-reactive sensory therapy lighting system that stimulates the senses, a backdrop resembling a theatrical arena of twinkling stars, a stunning fibre optic chandelier programmed to change colour in time to music, a 20ft tall fibre optic light cylinder that emits white strobing light, or a field filled with fibre optic illuminated acrylic rods that glow and sway with the breeze, we can provide the right system for your needs.

You can find out more about our range of imaginative lighting systems and the effects that they generate over the next few pages. They include our Corona and futuristic Halo chandeliers, our ocean-inspired Jellyfish installation, star cloths and curtains, lollipop and acrylic rod installations together with our sensory therapy lighting range which is proven to be beneficial to those with special needs, autism, dementia, sensory processing issues and even depression.

If you don't happen to see what you are looking for why not get in touch and let us know. We regularly work with some of the biggest entertainment companies, theme parks and theatrical organisations in the world, so chances are that we will have already created a similar lighting system for them in the past.



Image courtesy of Paul Collias / Qeios Entertainment Ltd

# CORONA FIBRE OPTIC CHANDELIERS

Corona fibre optic chandeliers - designed and manufactured in-house by UFO.

A range of three standard chandelier base shapes, available in various sizes and all manufactured from brushed stainless steel and installed with cracked glass side glow fibre.

As standard these bases are supplied in brushed effect finish, however we can custom paint them to any RAL colour to suit individual specifications.

All bases are available with a choice of fibre drop lengths ranging from the shortest one metre drop to the long ten metre drop.

The bases are all available with a choice of a 150mm or a 77mm tall upstand and have an internal framework which has mounting points for attaching to the ceiling and a secure tray for locating the light source.

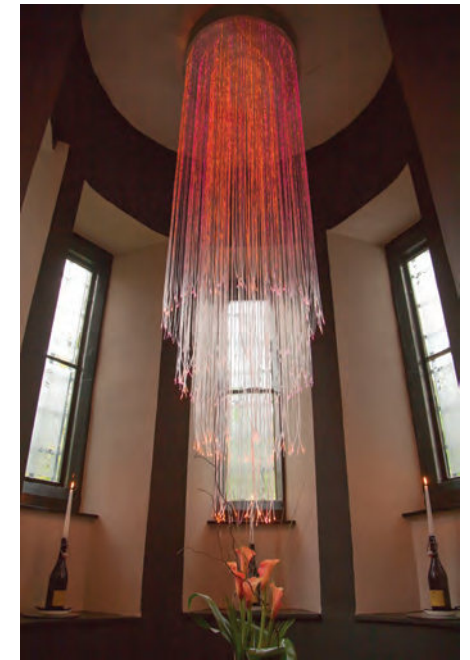
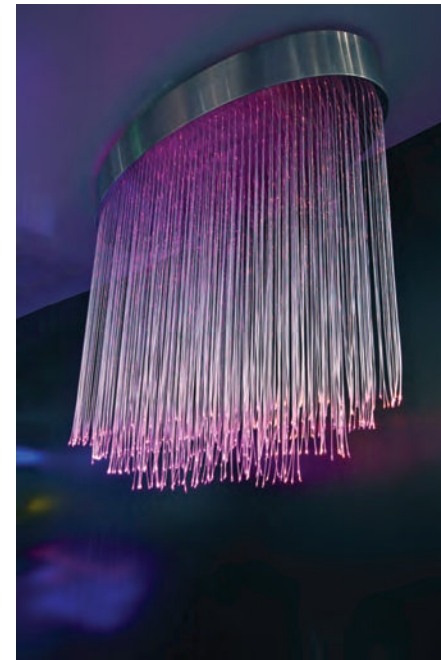


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UFO PRODUCE FANTASTIC PRODUCTS  
WITH SAFETY AND QUALITY A PRIORITY.  
BACKING THIS UP WITH GREAT  
CUSTOMER SERVICE MAKES WORKING  
WITH THIS COMPANY A JOY.

- LORRAINE McALEER - LEARNING SPACE

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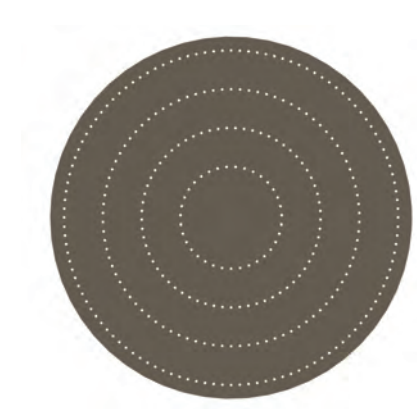




## CORONA CIRCLE

AVAILABLE IN 3 BASE DIAMETERS AND 2 HEIGHTS

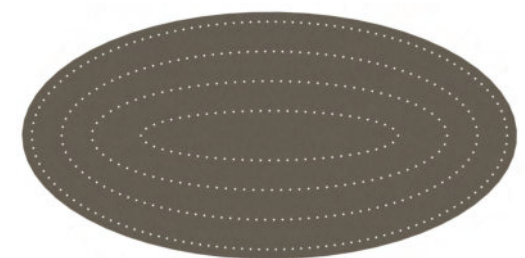
Part Number	Diameter	Height	Light Source	Total Fibre Tails
COR-CS-150	450mm	150mm	Compact Decorative	198 in 4 rings
COR-CS-77	450mm	77mm	MicroLED 4000	198 in 4 rings
COR-CM-150	700mm	150mm	Compact Decorative	310 in 4 rings
COR-CM-77	700mm	77mm	MicroLED 4000	310 in 4 rings
COR-CL-150	1450mm	150mm	Compact Decorative	605 in 4 rings
COR-CL-77	1450mm	77mm	MicroLED 4000	605 in 4 rings



## CORONA ELLIPSE

AVAILABLE IN 1 BASE SIZE AND 2 HEIGHTS

Part Number	Size	Height	Light Source	Total Fibre Tails
COR-EL-150	1250 x 625mm	150mm	Compact Decorative	390 in 4 rings
COR-EL-77	1250 x 625mm	77mm	MicroLED 4000	390 in 4 rings



## CORONA RECTANGLE

AVAILABLE IN 2 BASE SIZES AND 2 HEIGHTS

Part Number	Diameter	Height	Light Source	Total Fibre Tails
COR-RS-150	950 x 325mm	150mm	Compact Decorative	294 in 4 steps
COR-RS-77	950 x 325mm	77mm	MicroLED 4000	294 in 4 steps
COR-RL-150	2200 x 325mm	150mm	Compact Decorative	404 in 4 steps
COR-RL-77	2200 x 325mm	77mm	MicroLED 4000	404 in 4 steps



# FIBRE OPTIC JELLYFISH CHANDELIER

Inspired by ocean life the custom-made light sculpture creates a unique and eye-catching focal point in any commercial setting whether it be a bar, restaurant or hotel lobby.

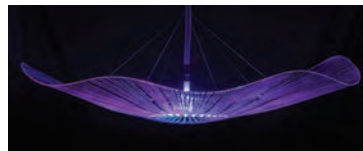
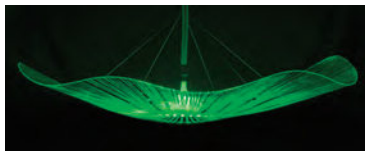
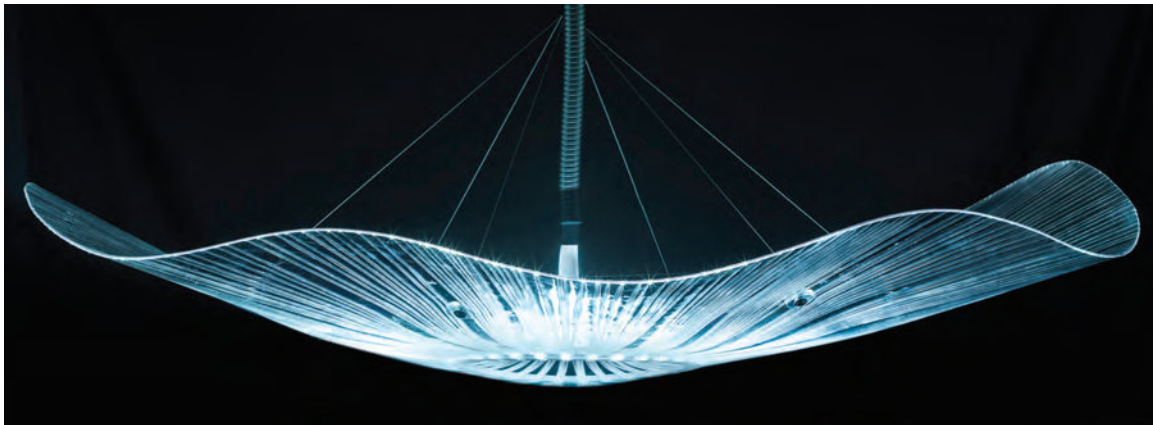
300 fibre optic tails are infused within the Jellyfish's large transparent body and transition through a series of colours when connected to a UFO RGBW LED light source. The arrangement of fibre allows the colour and intensity of light to vary throughout the sculpture, creating a truly mesmerizing light scene.

The ceiling-mounted Jellyfish is available with a diameter of 1500mm.

## Ordering Code

Ordering Code	Diameter	No. of Tails	Tail length to light source
JEL-150	1500mm	300 tails of 1mm PMMA fibre	Up to 8m long*

\*tail length can be specified when ordering





# UFO HALO CHANDELIERS

The UFO Halo is the newest addition to our chandelier range. Whether being installed in a residential property, bar, lounge, hotel lobby or commercial setting, the UFO Halo will add a decorative element to any space, large or small.

Its streamlined structure comprises of a large circular base spanning 1000mm in diameter and cast from clear acrylic. Seventy tails of UFO end lit PMMA fibre are set into the acrylic and emit a glow of light throughout the perimeter of the base for a truly striking halo-like effect.

A black tubular shaft measuring 50mm in diameter houses the tails of end lit fibre and connects them to a UFO light source. Supplied with the UFO Halo is a top hat mounting mechanism that enables the chandelier to be secured onto the ceiling space.

## Ordering Code

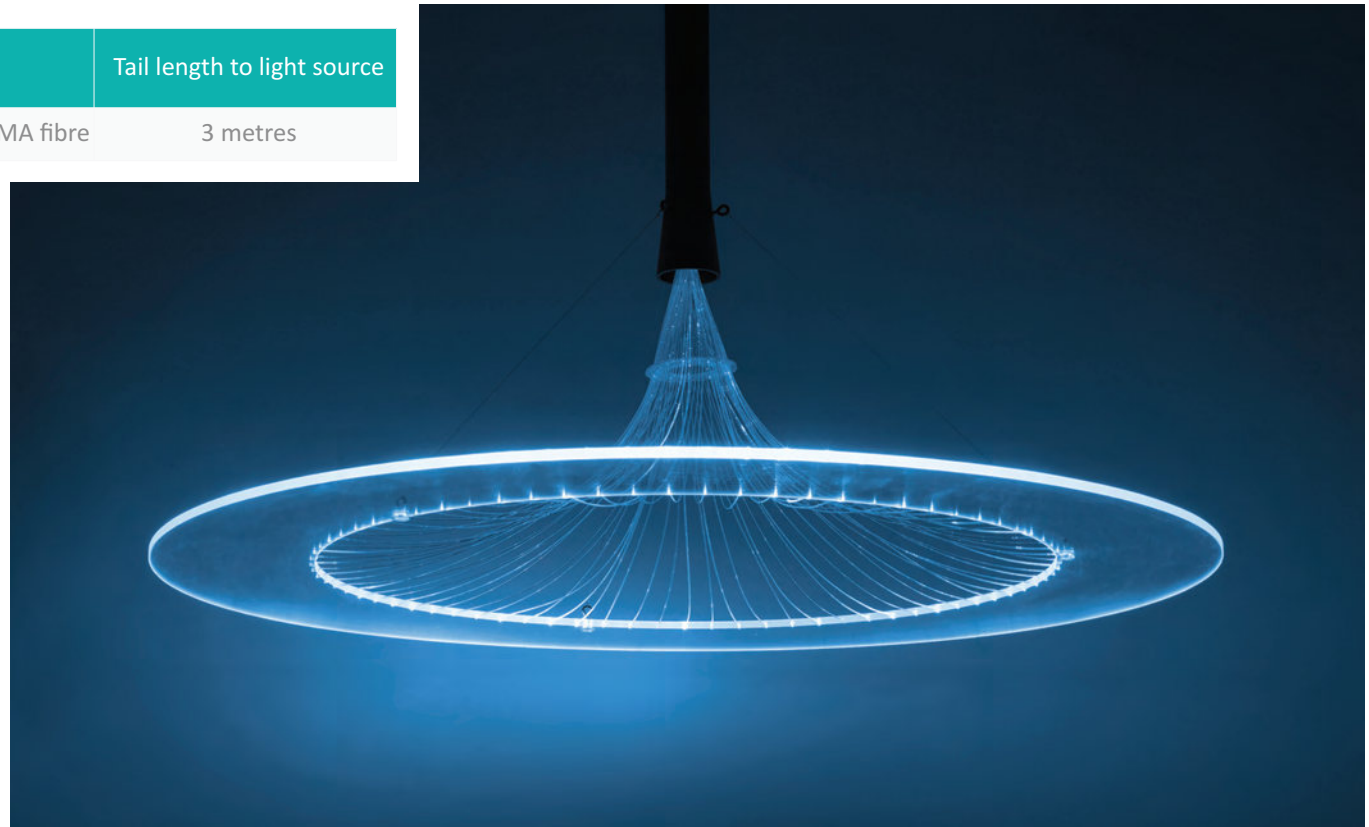
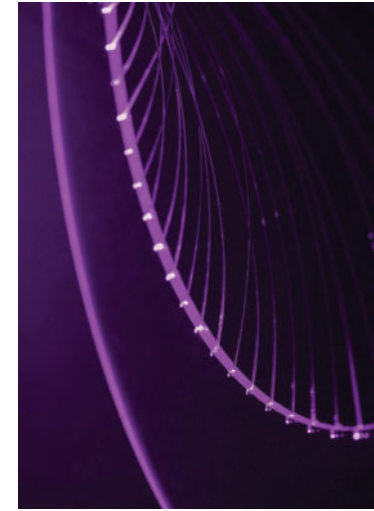
Ordering Code	Diameter	No. of Tails	Tail length to light source
HAL-1000	1000mm	70 tails of 1.5mm PMMA fibre	3 metres

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THE FRIENDLY, INFORMATIVE STAFF AT UFO ALWAYS PROVIDE US WITH GREAT TECHNICAL ASSISTANCE WHEN REQUIRED AND HAVE A WEALTH OF PRODUCT KNOWLEDGE TO HELP US WITH ALL OUR HIGH END PROJECTS.

– SARAH GIBSON – DRÖM UK

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# CUSTOM FIBRE OPTIC CHANDELIERS

Working from architectural plans, sketches or just general dimensions, we have the ability to make circular fibre optic chandeliers of almost any diameter.

In addition to the classic circular shape, many customers request elliptical, square or rectangular shaped installations. These can provide an interesting and very different effect to the circular designs.

For large projects, we can arrange for an experienced member of our sales & design team to visit the site and advise you on which type of installation would best suit your requirements, as well as measure up required tail lengths and assist in planning cable routes.

Using different lengths and patterns of fibre optic tails, each chandelier is custom designed to your particular requirements.

## Installation Options

Some of our previous chandeliers have been very large - with sizes reaching up to 6 metres in diameter. With structures like these, you will more than likely need a team of professional installation engineers to undertake the fitting of the chandelier.

UFO has a team of experienced installers who are fully trained in all aspect of fibre optic lighting installation.

For larger chandeliers, the installation normally takes place during the construction phase of a building, as it is usually preferable to have access above the ceiling for the locating of light sources and fibre optic cable runs. Depending on the chandelier's size and the complexity of the design, it is sometimes also necessary to complete its construction on site.

This approach can help avoid damage to the fibre and the chandelier base in transit. For example, in one recent case, the chandelier was so large that it was constructed in four pieces. The chandelier was assembled in our factory for testing purposes, disassembled for transportation, and then rebuilt by our team on site.



Image courtesy of Inscape Ltd



# DESIGN, MANUFACTURE AND INSTALLATION



“

AS VERY FUSSY AND DEMANDING LIGHTING DESIGNERS AT SUTTON VANE ASSOCIATES WE ARE NOT EASILY PLEASED! THEREFORE IT IS PRAISE INDEED WHEN WE SAY THAT IT IS ALWAYS A GREAT PLEASURE TO WORK WITH THE TEAM AT UFO AS THEY ARE PREPARED TO GO THE EXTRA MILE TO DELIVER A GREAT PRODUCT.

– JULIE O'REILLY, SUTTON VANE ASSOCIATES

”



DO YOU HAVE AN IDEA FOR A CUSTOM FIBRE OPTIC OR LED CHANDELIER?  
GET IN TOUCH AND LET US HELP YOU MAKE IT A REALITY.

# FIBRE OPTIC LOLLIPOPS & ACRYLIC RODS

Whether you want to create an enchanting field of light or colour-changing water feature, our Acrylic Rods and Lollipops offer the ideal solution for installing decorative features in outdoor environments.

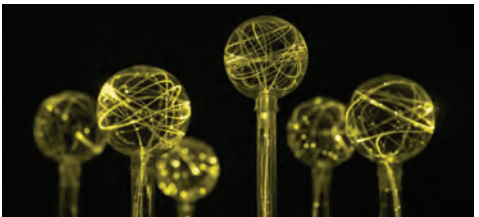
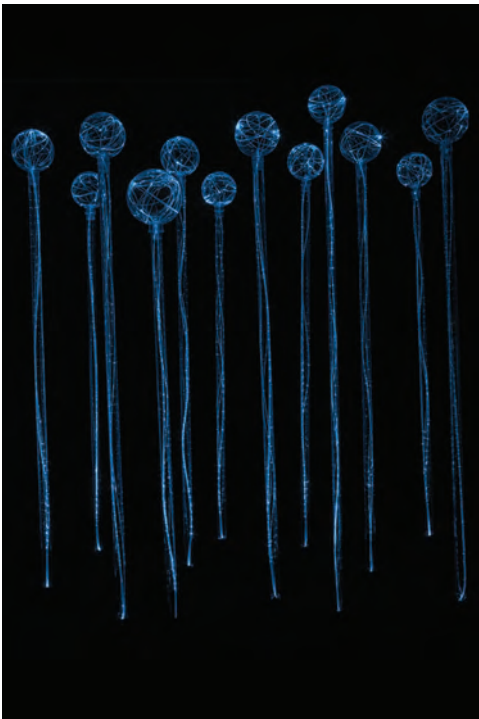
The Acrylic Rods are constructed from 10.5mm diameter UV stable acrylic and contain our smooth solid core PMMA fibre, which emits a smooth line of light onto the surrounding space. They are available in a range of lengths and can be supplied as standalone items or in configurations to suit all manner of requirements.

Providing a slightly enhanced lighting effect are our fibre optic Lollipops. Each Lollipop contains six tails of our side sparkle PMMA fibre which has been set into the UV stable acrylic rod and polyethylene terephthalate ball.

The balls are available in 65mm, 80mm and 100mm diameters, and as standard the rods are either 1000mm or 1500mm in length. The Lollipops can also be supplied as a standalone item or in configurations depending upon your specific requirements.

## Ordering Codes

Ordering Code	Type	Ball Diameter	Length
LOL-65-1000	Lollipop	65mm	1000mm
LOL-80-1000	Lollipop	80mm	1000mm
LOL-100-1000	Lollipop	100mm	1000mm
LOL-65-1500	Lollipop	65mm	1500mm
LOL-80-1500	Lollipop	80mm	1500mm
LOL-100-1500	Lollipop	100mm	1500mm
ARD-1500	Acrylic Rod	N/A	1500mm





# FIBRE OPTIC STAR CLOTHS & CURTAINS

With a bespoke fibre optic star cloth from UFO you can create a stunning visual lighting effect in any manner of indoor settings. Theatre sets, stage productions, wedding venues, sensory rooms, retail sites, clubs, bars, casinos and restaurants can all be transformed into eye-catching focal points with our durable star cloths.

Multiple tails of our end lit PMMA fibre are woven into the flame retardant wool serge cloths to create bright star-like points of light, and depending upon which UFO light source you pair the cloth with, the points of light can either continuously change colour, be set to one static colour or twinkle.

Our star cloths are easy to install and can be used on walls and floors, fitted flush on ceilings, or even be draped and gathered for a more voluminous and dramatic lighting effect in theatrical, hospitality and commercial venues. They are also proven to be extremely popular with those who require star effect lighting but don't have access above their ceiling.

Available in a range of other colours, our star cloths can be made to measure in any length and width required. We're just as experienced at producing 1m square cloths for sensory environments as we are at 30m square versions for commercial settings.

Why not give us a call to discuss your specific requirements with a member of our sales team.

THE MATERIAL WE USE FOR  
OUR FIBRE OPTIC CLOTHS IS  
IFR WOOL WHICH CONFORMS  
TO THE BS5867 FLAMMABILITY  
STANDARD.



# SENSORY LIGHTING SYSTEMS

UFO manufacture and supply a wide range of sensory lighting products to the OEM and distributor market. Please get in touch to discuss adding our unique product ranges to your catalogue.

- 📍 We manufacture all our own products in our UK factory
- 📍 We can offer short lead times on bulk purchases
- 📍 We offer a full rebranding service to suit your needs
- 📍 We hold stock of most of products and can offer quick delivery on most items
- 📍 We can hold stock on a call-off basis if required
- 📍 We can create custom designs and products at competitive prices

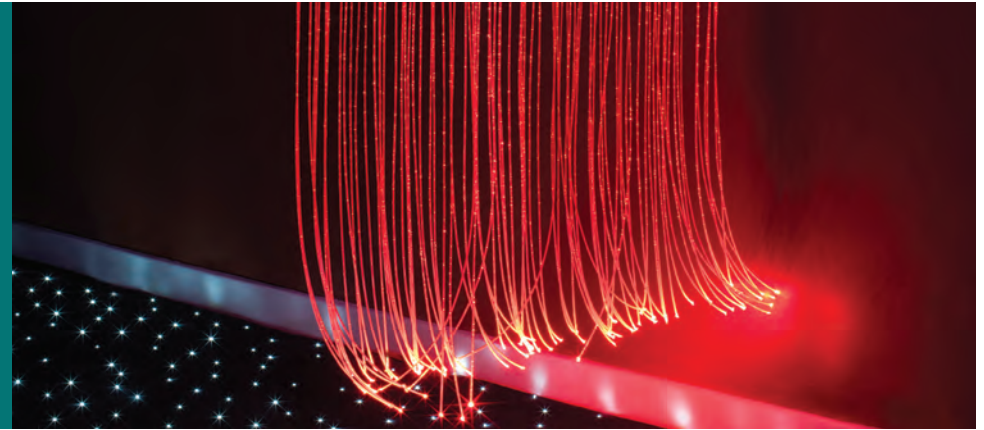
Applicable products are fully certified and safety tested, so purchasing from us means you can be sure you are buying a safe, high quality, UK manufactured product.

Visit our website or request a copy of our Sensory Lighting Systems brochure for full details of these products.

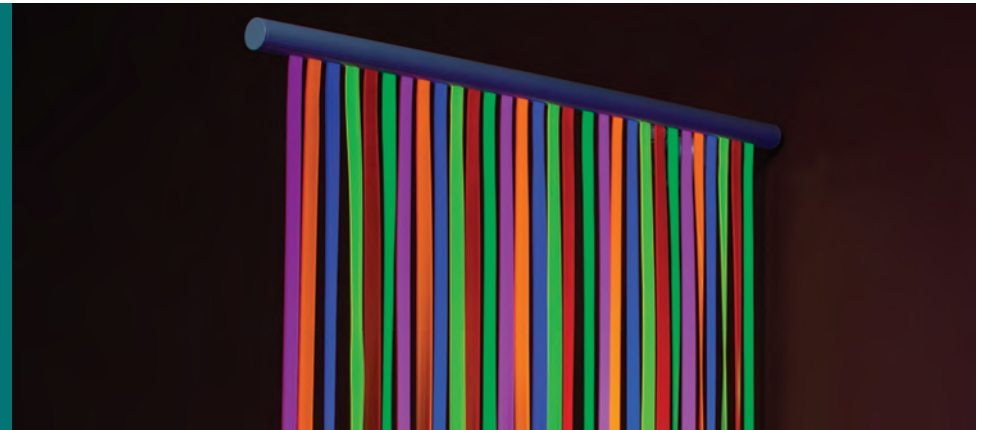
STAR EFFECT CEILINGS



SENSORY WALL CASCADE



SENSORY UV WATERFALL

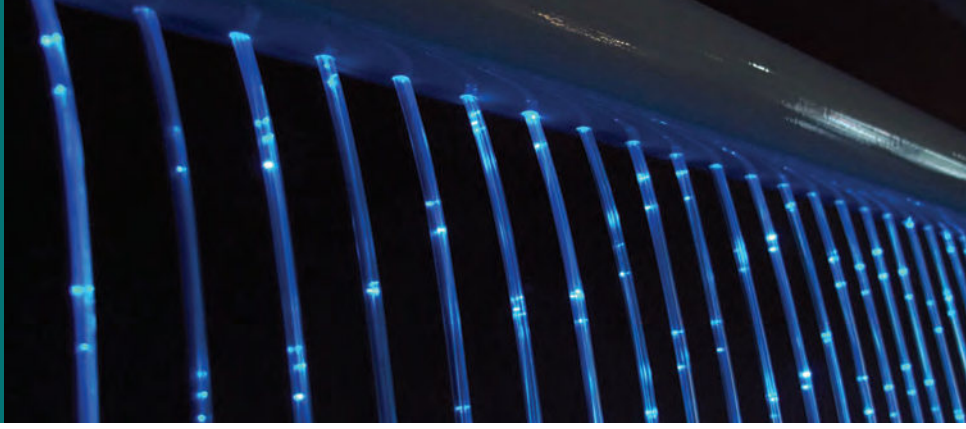


FIBRE OPTIC STAR CARPET





SENSORY WALL TUBE



SENSORY FIBRE HARNESES



SENSORY UV PLAY MAT



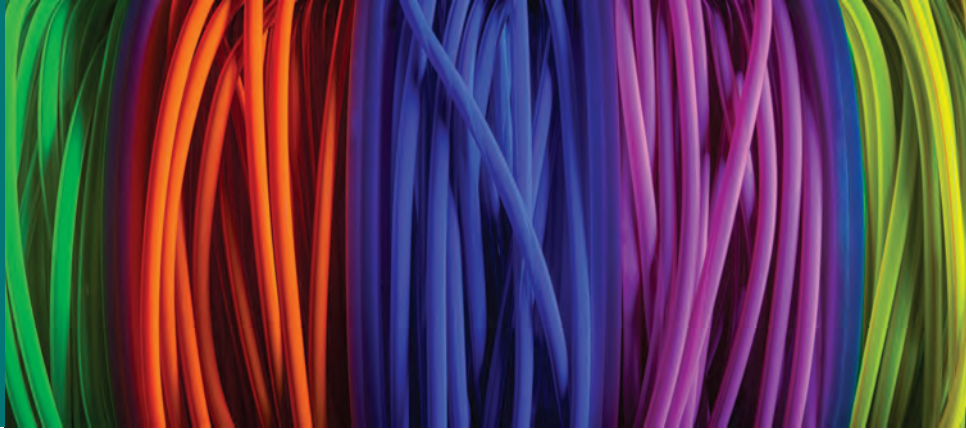
SENSORY LIGHT SOURCES



STAR CEILING RINGS



UV REACTIVE TUBE & CABLE



# WE MANUFACTURE



Choosing between an LED or a fibre optic lighting system can often be challenging. Contact us today to discuss your project and the options.



# LED FITTINGS AND SYSTEMS

## Downlights, pavers and complete cabinet lighting solutions

With their low power consumption and minimal maintenance requirements, our range of energy efficient LED luminaires offer the ideal solution for decorative illumination in residential, architectural and retail applications, or when replacing traditional energy hungry metal halide lamps.

Each luminaire has been designed and engineered to the highest standard at our manufacturing facility in the UK. We have used only the finest materials and state-of-the-art technology to create durable quality products that will add drama to any lit environment.

Our low glare recessed downlights are perfectly suited for providing decorative illumination in indoor settings including hallways, livingrooms and bathrooms. Each fitting features a discreet design that allows your eyes to be drawn to the items and areas being illuminated and not on the fittings themselves. They are available in a range of colour temperatures, high colour rendition and with a choice of beam options to suit all manner of requirements.

Designed to enhance the visual appearance and safety of indoor and outdoor settings, our robust and versatile pavers easily fulfil a variety of design requirements, from dramatically illuminating archways, entrances and columns, to providing functional marker lighting on walkways, driveways or stairs. Our pavers are also available in a range of colour temperatures and can be supplied with frosted glass or internal lenses to suit your specifications.



LD1 LED DOWNLIGHT

RECESSED LED DOWNLIGHT WITH ANGULAR FLANGE



The LD1 comes with a choice of colour temperatures, high colour rendition and narrow, medium and wide beam options to suit varying requirements. Multiple methods of dimming are also available to provide greater functionality and control over your luminaires.

Whether you want to gently wash a wall or highlight specific areas or niches, it is achievable with the LD1.

Ordering Codes

MODEL	OPTICS	COLOUR TEMP	FLANGE COLOUR
UFO LD1	13.5° 13	2700°K 27	Black BL
	19° 19	3000°K 30	Silver SV
	28° 28	4000°K 40	White WH
		5700°K 57	Custom CU

Colour Temperatures & Typical CRI Values	2700K - 98CRI 4000K - 97CRI	3000K - 98CRI 5700K - 91CRI
Power Consumption	1.12W per fitting, not inc. driver	
Voltage	3.2V nominal	
Driver Options	No dimming Local dimming	0-10V dimming Remote dimming
Lumens per Watt <sup>(19° lens)</sup>	2700K - 61lm/w 4000K - 72lm/w	3000K - 65lm/w 5700K - 96lm/w
Lumen Output <sup>(19° lens)</sup>	2700K - 69lm 4000K - 78lm	3000K - 73lm 5700K - 107lm
Lens Options	13.5° / 19° / 28°	
LED Life	50,000 hours	
Material	Aluminium	
Colours	Black body Black, white, silver or custom flange	
Mounting Hole Size	36mm	

LD2 LED DOWNLIGHT

RECESSED LED DOWNLIGHT WITH SMOOTH FLANGE



Features a bezel spanning 48mm in diameter and a recess depth of 35.50mm, the LD2 is slightly larger in stature than the LD1. This aluminium fitting comes with a flush bezel for those requiring an unobtrusive transition between downlight and ceiling.

The LD2 is available with a choice of colour temperatures, beam angle options and dimming functionality to provide greater control over your lighting.

Ordering Codes

MODEL	OPTICS	COLOUR TEMP	FLANGE COLOUR
UFO LD2	13.5° 13	2700°K 27	Black BL
	19° 19	3000°K 30	Silver SV
	28° 28	4000°K 40	White WH
		5700°K 57	Custom CU

Colour Temperatures & Typical CRI Values	2700K - 98CRI 4000K - 97CRI	3000K - 98CRI 5700K - 91CRI
Power Consumption	1.12W per fitting, not inc. driver	
Voltage	3.2V nominal	
Driver Options	No dimming Local dimming	0-10V dimming Remote dimming
Lumens per Watt <sup>(19° lens)</sup>	2700K - 61lm/w 4000K - 72lm/w	3000K - 65lm/w 5700K - 96lm/w
Lumen Output <sup>(19° lens)</sup>	2700K - 69lm 4000K - 78lm	3000K - 73lm 5700K - 107lm
Lens Options	13.5° / 19° / 28°	
LED Life	50,000 hours	
Material	Aluminium	
Colours	Black body Black, white, silver or custom flange	
Mounting Hole Size	36mm	



## LD3 LED DOWNLIGHT

### RECESSED LED DOWNLIGHT WITH SMOOTH FLANGE



The versatile LD3, which can tilt up to 27°, comes with a choice of narrow, medium and wide beam options to allow you to direct the light exactly where it is needed.

Available in a range of colour temperatures with a high colour rendition and multiple methods of dimming, the aluminium fitting is ideally suited for indoor use in residential and architectural sectors amongst others.

#### Ordering Codes

MODEL	OPTICS	COLOUR TEMP	FLANGE COLOUR
UFO LD3	13.5° 13	2700°K 27	Black BL
	19° 19	3000°K 30	Silver SV
	28° 28	4000°K 40	White WH
		5700°K 57	Custom CU

Colour Temperatures & Typical CRI Values	2700K - 97CRI 4000K - 96CRI	3000K - 98CRI 5700K - 91CRI
Power Consumption	1.12W per fitting, not inc. driver	
Voltage	3.2V nominal	
Driver Options	No dimming Local dimming	0-10V dimming Remote dimming
Lumens per Watt <sup>(19° lens)</sup>	2700K - 67lm/w 4000K - 72lm/w	3000K - 65lm/w 5700K - 89lm/w
Lumen Output <sup>(19° lens)</sup>	2700K - 75lm 4000K - 73lm	3000K - 71lm 5700K - 100lm
Lens Options	13.5° / 19° / 28°	
LED Life	50,000 hours	
Material	Aluminium	
Colours	Black body Black, white, silver or custom flange	
Mounting Hole Size	50mm	

## LD5 LED DOWNLIGHT

### RECESSED LED DOWNLIGHT WITH ARTICULATED SNOOT



Supplied with a warm white or neutral white LED light and a CRI of >95 that ensures colours are shown in their true light, the LD5 is particularly useful for illuminating static objects within display cabinets and fixtures due to its adjustable nature.

Integral to the front of the fitting is a slim snoot that can tilt up to 35°, allowing you to focus a concentrated beam of light in almost any direction required.

#### Ordering Codes

MODEL	OPTICS	COLOUR TEMP	COLOUR
UFO LD5	16° 16	2700°K 27	Black BL
	23° 23	3000°K 30	Silver SV
	36° 36	4000°K 40	White WH
	61° 61		Custom CU

Colour Temperatures & Typical CRI Values	2700K - 98CRI 4000K - 97CRI	3000K - 98CRI
Power Consumption	1.12W per fitting, not inc. driver	
Voltage	2.75V (min), 3.2V (typ), 3.5V (max)	
Driver Options	No dimming Local dimming	0-10V dimming Remote dimming
Lumens per Watt <sup>(23° lens)</sup>	2700K - 55lm/w 3000K - 58lm/w	4000K - 63lm/w
Lumen Output <sup>(23° lens)</sup>	2700K - 62lm 3000K - 64lm	4000K - 67lm
Lens Options	16° / 23° / 36° / 61°	
LED Life	50,000 hours	
Material	Aluminium	
Colours	Black, white, silver or custom	
Mounting Hole Size	32mm	

MBL1 LED DOWNLIGHT

SMALL SURFACE MOUNTED ARTICULATED FITTING



The UFO MBL range of high performance fittings features a sleek design and the latest magnetic articulation for 360° rotation.

The surface mountable MBL1 is the smaller of the two fittings in this range. It features a cleverly designed magnetic ball joint that provides complete freedom of movement, allowing the luminaire to be fully rotated and tilted to point the light in almost any direction.

Ordering Codes

MODEL	OPTICS		COLOUR TEMP		COLOUR
UFO MBL1	16°	16	3000°K	30	Black BL
	23°	23	4000°K	40	Silver SV
	36°	36	6500°K	65	Custom CU
	61°	61			

Colour Temperatures & Typical CRI Values	3000K - 98CRI 6500K - 90CRI	4000K - 95CRI
Driver Working Current	1500mA per channel	
Voltage	5V DC 4A or 5V DC 6A	
Driver Options	No dimming Local dimming	0-10V dimming Remote dimming
Lumens per Watt <sup>(23° lens)</sup>	3000K - 42lm/w 6500K - 74lm/w	4000K - 54lm/w
Lumen Output <sup>(23° lens)</sup>	3000K - 25lm 6500K - 37lm	4000K - 27lm
Lens Options	16° / 23° / 36° / 61°	
LED Life	50,000 hours	
Material	Aluminium	
Colours	Black, silver or custom	

MBL2 LED DOWNLIGHT

LARGE SURFACE MOUNTED ARTICULATED FINISH



The magnetic ball that is present in the fitting provides complete freedom of movement so that the luminaire can be rotated 360° and tilted to point the light exactly where it is needed most.

With a choice of colour temperatures with high colour rendition and a selection of optics, the fitting can be used to provide contemporary, functional lighting in any environment.

Ordering Codes

MODEL	OPTICS		COLOUR TEMP		COLOUR
UFO MBL2	13.5°	13	2700°K	27	Black BL
	19°	19	3000°K	30	Silver SV
	28°	28	4000°K	40	Custom CU
			5700°K	57	

Colour Temperatures & Typical CRI Values	2700K - 98CRI 4000K - 95CRI	3000K - 96CRI 5700K - 91CRI
Power Consumption	1.12W per fitting, not inc. driver	
Voltage	3.2V nominal	
Driver Options	No dimming Local dimming	0-10V dimming Remote dimming
Lumens per Watt <sup>(13.5° lens)</sup>	2700K - 46lm/w 4000K - 54lm/w	3000K - 51lm/w 5700K - 73lm/w
Lumen Output <sup>(13.5° lens)</sup>	2700K - 52lm 4000K - 60lm	3000K - 55lm 5700K - 82lm
Lens Options	13.5° / 19° / 28°	
LED Life	50,000 hours	
Material	Aluminium	
Colours	Black, silver or custom	



## LD8 LED DOWNLIGHT

### CUBE SHAPED SURFACE MOUNTED DOWNLIGHT



A stylish 50mm cube which is designed to illuminate pillars and walls with glowing light. Fitted with a Cree LED and manufactured from materials which ensure it is suitable for use outdoors as well as in.

The LD8 is available in either a straight or angled version and comes with a choice of colour temperatures and narrow or wide optics that allow you to direct the light where it is needed most.

#### Ordering Codes

MODEL	OPTICS	COLOUR TEMP	FINISHES	COLOUR	STYLE
UFO LD8	15° 15	3000°K 30	Anodised AN	Black BL	Straight ST
	51° 51	4000°K 40	Powdercoat PC	Silver SV	Angled AN
				White WT	
				Custom CU	

Colour Temperatures & Typical CRI Values	3000K - 96CRI 4000K - 95CRI
Power Consumption	1.12W per fitting, not inc. driver
Voltage	3.2V nominal
Driver Options	No dimming 0-10V dimming Local dimming Remote dimming
Lumens per Watt (15° lens)	3000K - 64lm/w 4000K - 77lm/w
Lumen Output (15° lens)	3000K - 78lm 4000K - 90lm
Lens Options	15° / 51°
LED Life	50,000 hours
Material	External cube - hard anodised alu Internal body - 316 stainless steel Decorative flange - brass
Colours	Cube - black or silver anodised with optional powder coat

## LB1 LED SPOTLIGHT

### SURFACE MOUNTED SPOTLIGHT



As one of our more flexible LED fittings, the LB1 combines 360° rotation and vertical articulation, allowing you to navigate the light stream in almost any direction required.

It is suitable for use in all manner of indoor and outdoor applications, from the illumination of fountains and statues to commercial facades and residential landscaping.

Comes mounted on a screw down foot, for easy installation.

#### Ordering Codes

MODEL	OPTICS	COLOUR TEMP	FINISHES	COLOUR
UFO LB1	13.5° 13	2700°K 27	Hard Anodised HA	Black BL
	19° 19	3000°K 30		Silver SV
	28° 28	4000°K 40		Custom CU
		5700°K 57		

Colour Temperatures & Typical CRI Values	2700K - 98CRI 3000K - 98CRI 4000K - 95CRI 5700K - 91CRI
Power Consumption	1.12W per fitting, not inc. driver
Voltage	3.2V nominal
Driver Options	No dimming 0-10V dimming Local dimming Remote dimming
Lumens per Watt (13.5° lens)	2700K - 54lm/w 3000K - 57lm/w 4000K - 63lm/w 5700K - 86lm/w
Lumen Output (13.5° lens)	2700K - 60lm 3000K - 64lm 4000K - 70lm 5700K - 96lm
Lens Options	13.5° / 19° / 28°
LED Life	50,000 hours
Material	Aluminium
Colours	Black, silver or custom

## LP1 LED PAVER

LARGE LED PAVER WITH CHOICE OF LENS



This fitting can be specified with a warm white or neutral white LED light and a narrow or wide optic allowing for a choice of light spread. Multiple dimming options are also supported with a UFO approved dimmer switch giving you greater control over your lighting.

Internally, the LP1 contains a lens that allows you to focus the light where it is needed most and a recessed dark cone that reduces glare for applications where walkover is expected.

Ordering Codes

MODEL	OPTICS	COLOUR TEMP	FINISHES	COLOUR
UFO LP1	15° 15	3000°K 30	Stainless Steel SS	No Colour NC
	51° 51	4000°K 40	Hard Anodised HA	Black BL Silver SV Custom CU

Colour Temperatures & Typical CRI Values	3000K - 96CRI	4000K - 96CRI
Power Consumption	1.12W per fitting, not inc. driver	
Voltage	3.2V nominal	
Driver Options	No dimming Local dimming	0-10V dimming Remote dimming
Lumens per Watt <sup>(51° lens)</sup>	3000K - 76lm/w	4000K - 87lm/w
Lumen Output <sup>(51° lens)</sup>	3000K - 80lm	4000K - 86lm
Lens Options	15° / 51°	
LED Life	50,000 hours	
Material	316 stainless steel or hard anodised aluminium	
Colours	Hard anodised - black, silver, custom. Stainless steel - natural	
Mounting Hole Size	42mm	

## LP2 LED PAVER

LARGE LED PAVER WITH FROSTED GLASS



The LP2, which is identical in size and shape to its counterpart the LP1, can be supplied in 316 stainless steel or anodised aluminium.

The internal lens has been replaced with a frosted glass cover to provide a soft wash of light across the area or object being illuminated. The fitting comes with a warm white or neutral white LED light and optional dimming functionality, for added control over your lighting.

Ordering Codes

MODEL	OPTICS	COLOUR TEMP	FINISHES	COLOUR
UFO LP2	NONE NL	3000°K 30	Stainless Steel SS	No Colour NC
		4000°K 40	Hard Anodised HA	Black BL Silver SV Custom CU

Colour Temperatures & Typical CRI Values	3000K - 96CRI	4000K - 95CRI
Power Consumption	1.12W per fitting, not inc. driver	
Voltage	3.2V nominal	
Driver Options	No dimming Local dimming	0-10V dimming Remote dimming
Lumens per Watt	3000K - 38lm/w	4000K - 39lm/w
Lumen Output	3000K - 40lm	4000K - 44lm
Glass	Frosted glass front	
LED Life	50,000 hours	
Material	316 stainless steel or hard anodised aluminium	
Colours	Hard anodised - black, silver, custom. Stainless steel - natural	
Mounting Hole Size	42mm	



## LP3 LED PAVER

### LARGE LED PAVER WITH CHOICE OF LENS



Comprising of a flush bezel of 47mm in diameter and a recess depth of 38.50mm, the aluminium fitting is available in a range of finishes and colours.

This paver features an internal lens that can be used to focus the light on areas and objects requiring accentuating. It comes with a recessed dark cone that reduces glare, making it a suitable choice for installation in areas where human footfall is commonplace, such as pathways and stairwells.

#### Ordering Codes

MODEL	OPTICS	COLOUR TEMP	FINISHES	COLOUR
UFO LP3	15° 15	3000°K 30	Stainless Steel SS	No Colour NC
	51° 51	4000°K 40	Hard Anodised HA	Black BL
				Silver SV
				Custom CU

Colour Temperatures & Typical CRI Values	3000K - 96CRI 4000K - 95CRI
Power Consumption	1.12W per fitting, not inc. driver
Voltage	3.2V nominal
Driver Options	No dimming 0-10V dimming Local dimming Remote dimming
Lumens per Watt (15° lens)	3000K - 84lm/w 4000K - 88lm/w
Lumen Output (15° lens)	3000K - 91lm 4000K - 99lm
Lens Options	15° / 51°
LED Life	50,000 hours
Material	316 stainless steel or hard anodised aluminium
Colours	Hard anodised - black, silver, custom. Stainless steel - natural
Mounting Hole Size	36mm

## LP4 LED PAVER

### LARGE LED PAVER WITH FROSTED GLASS FRONT



As one of our large pavers, the LP4 is well placed for providing mood enhancing lighting in indoor and outdoor areas. With a flush bezel measuring 47mm in diameter and a recess depth of 38.50mm.

It can be specified with full dimming capabilities when used in conjunction with a UFO approved dimmer switch. This allows you to adjust the intensity of the light to complement the objects and areas on display.

#### Ordering Codes

MODEL	OPTICS	COLOUR TEMP	FINISHES	COLOUR
UFO LP4	NONE NL	3000°K 30	Stainless Steel SS	No Colour NC
		4000°K 40	Hard Anodised HA	Black BL
				Silver SV
				Custom CU

Colour Temperatures & Typical CRI Values	3000K - 97CRI 4000K - 95CRI
Power Consumption	1.12W per fitting, not inc. driver
Voltage	3.2V nominal
Driver Options	No dimming 0-10V dimming Local dimming Remote dimming
Lumens per Watt	3000K - 50lm/w 4000K - 51lm/w
Lumen Output	3000K - 52lm 4000K - 57lm
Glass	Frosted glass front
LED Life	50,000 hours
Material	316 stainless steel or hard anodised aluminium
Colours	Hard anodised - black, silver, custom. Stainless steel - natural
Mounting Hole Size	36mm

LP5 LED PAVER

SMALL LED PAVER WITH CHOICE OF LENS



At just 34mm in diameter and 27mm in length, the LP5 packs a punch as the smallest of all of our pavers. Its compact stature means that the fitting can be installed in the shallowest of recesses or when space is at a premium.

Available with a choice of colour temperatures and narrow or wide optics that allow you to direct the light where it is needed most. Dimming functionality is also supported using a UFO approved dimmer.

Ordering Codes

MODEL	OPTICS		COLOUR TEMP		FINISHES	COLOUR
UFO LP5	15°	15	3000°K	30	Stainless Steel	No Colour NC
	51°	51	4000°K	40	Hard Anodised	Black BL
						Silver SV
						Custom CU

Colour Temperatures & Typical CRI Values	3000K - 95CRI	4000K - 95CRI
Power Consumption	1.12W per fitting, not inc. driver	
Voltage	3.2V nominal	
Driver Options	No dimming Local dimming	0-10V dimming Remote dimming
Lumens per Watt (15° lens)	3000K - 83lm/w	4000K - 89lm/w
Lumen Output (15° lens)	3000K - 92lm	4000K - 100lm
Lens Options	15° / 51°	
LED Life	50,000 hours	
Material	316 stainless steel or hard anodised aluminium	
Colours	Hard anodised - black, silver, custom. Stainless steel - natural	
Mounting Hole Size	29mm	

LP6 LED PAVER

SMALL LED PAVER WITH CHOICE OF LENS AND EXTENDED BARREL



With an extended barrel measuring 47mm in length, the LP6 is the ideal fitting for applications where a deep recess exists.

It comes with an internal lens for reduced glare, and can be specified with a warm white or neutral white LED light and a choice of optics for a greater spread of light. Dimming functionality is also supported with a UFO approved dimmer module.

Ordering Codes

MODEL	OPTICS		COLOUR TEMP		FINISHES	COLOUR
UFO LP6	15°	15	3000°K	30	Stainless Steel	No Colour NC
	51°	51	4000°K	40	Hard Anodised	Black BL
						Silver SV
						Custom CU

Colour Temperatures & Typical CRI Values	3000K - 96CRI	4000K - 97CRI
Power Consumption	1.12W per fitting, not inc. driver	
Voltage	3.2V nominal	
Driver Options	No dimming Local dimming	0-10V dimming Remote dimming
Lumens per Watt (15° lens)	3000K - 47lm/w	4000K - 53lm/w
Lumen Output (15° lens)	3000K - 51lm	4000K - 55lm
Lens Options	15° / 51°	
LED Life	50,000 hours	
Material	316 stainless steel or hard anodised aluminium	
Colours	Hard anodised - black, silver, custom. Stainless steel - natural	
Mounting Hole Size	29mm	



## LP7 LED DOWNLIGHT

SMALL LED PAVER WITH FROSTED GLASS FRONT



At just 35mm in diameter, this is one of the smaller LED pavers in our range. It comes with a warm white or neutral white LED light and a frosted glass front to provide a soft wash of light across indoor and outdoor spaces. Multiple methods of dimming are supported including 1-10v and mains dimming when used with a UFO approved dimmer.

With a recess depth of 28.50mm the aluminium fitting can be installed in the shallowest of spaces.

Ordering Codes

MODEL	OPTICS	COLOUR TEMP	FINISHES	COLOUR
UFO LP7	NONE NL	3000°K 30	Stainless Steel SS	No Colour NC
		4000°K 40	Hard Anodised HA	Black BL
				Silver SV
				Custom CU

Colour Temperatures & Typical CRI Values	3000K - 98CRI / 4000K - 96CRI
Power Consumption	1.12W per fitting, not inc. driver
Voltage	3.2V nominal
Driver Options	No dimming 0-10V dimming Local dimming Remote dimming
Lumens per Watt	3000K - 68lm/w 4000K - 72lm/w
Lumen Output	3000K - 76lm 4000K - 83lm
Glass	Frosted glass front
LED Life	50,000 hours
Material	316 stainless steel or hard anodised aluminium
Colours	Hard anodised - black, silver, custom. Stainless steel - natural
Mounting Hole Size	28mm

## LMC1 LED MINI CROOK

DIRECTIONAL LED FOR CABINET LIGHTING



LED and fibre optic is cleverly combined within the LMC1 to provide a heat and UV free means of illuminating static objects.

Internally glass fibre transports light from the LED in the base of the fitting up to the angled opening at the end of the mini crook. The LED light comes with a choice of colour temperatures, a high CRI of 95 and dimming functionality when used with a UFO approved dimmer.

Ordering Codes

MODEL	OPTICS	COLOUR TEMP	FINISHES	ANGLE	LENGTH
UFO LMC1	NONE NL	3000°K 30	Stainless St SS	45° 45	173mm 18
		4000°K 40		65° 65	293mm 30

Colour Temperatures & Typical CRI Values	3000K - 97CRI 4000K - 95CRI
Power Consumption	1.12W per fitting, not inc. driver
Voltage	3.2V nominal
Driver Options	No dimming 0-10V dimming Local dimming Remote dimming
Lumens per Watt	3000K - 9lm/w 4000K - 9lm/w
Lumen Output	3000K - 9lm 4000K - 10lm
LED Life	50,000 hours
Material & Finish	Natural stainless steel
Crook Angle Options	45° / 65°
Crook Length Options	173mm / 293mm
Mounting Hole Size	20mm

MetroLED systems offer versatility combined with the efficiency and power of LED modules, ease of installation and very low maintenance requirements.

With a choice of fully positionable spotlights and a linear array of LED modules at close spacings which provides a complete wash of light, this product offers all the flexibility you need for illuminating display cases. Linear strips and spotlights can be freely mixed as required.

Linear modules are available in 4 different lengths allowing for maximum flexibility when designing the lighting fixture.

Spotlights are fully tiltable and can be independently moved along the fixture and pointed exactly where you need them. There is also a choice of trumpets which offer either wide or narrow beam angles.

Gantry systems also feature rotating corners so that the complete light bar can be rotated by 350°. The system runs on dual circuit power, allowing for 2 independent dimming levels and has the option of using either 3000K or 4000K LED's.

## Technical Specifications

Main Supply Voltage	100-240V AC, 50/60Hz
PSU Output	5V DC
LED Type	White Light
Linear LED CRI	>92
Linear LED Colour Temp.	3000K or 4000K
Linear LED Optical Efficiency	3000K - 65lm/w    4000K - 67lm/w
Linear LED Current	10mA
Spot LED CRI	>95
Spot LED Colour Temp.	3000K or 4000K
Spot LED Optical Efficiency	3000K - 44lm/w    4000K - 38lm/w
Spot LED Current	100mA
LED Life	50,000 hours in ambient 25°C

Spot optical efficiency measured with modern, wide trumpet







Plug and Play Stalk<sup>[5]</sup>  
MTL-PPS-150-3K/4K



Plug and Play Stalk<sup>[5]</sup>  
MTL-PPS-200-3K/4K



Twistlock Spot Fitting<sup>[3][6]</sup>  
MTL-SL-3K / MTL-SL-4K



Gooseneck Fitting<sup>[6]</sup>  
MTL-GS-3K / MTL-GS-4K



45° Elbow Fitting<sup>[6]</sup>  
MTL-EB-3K / MTL-EB-4K



Rotating Corner Type A<sup>[1]</sup>  
MTL-RCA-L / MTL-RCA-R



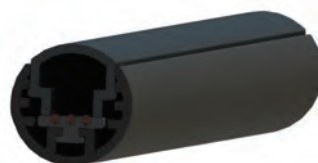
Rotating Corner Type B  
MTL-RCB



Three Way Corner  
MTL-TWC/ MTL-TWC-PWR



Round Extrusion & Infill  
MTL-EI



20mm Round Extrusion  
MTL-E



Rectangular Extrusion  
MTL-RE





# CHOOSE COMPONENTS AND BUILD A SYSTEM

Round End Cap  
MTL-EC



Trumpets & Lenses<sup>[2]</sup>  
MTL-LNS-CL-W/N-C/F  
MTL-LNS-MO-W/N-C/D



Mounting Feet  
MTL-MF-RT/RS/CS



Plug & Play Power In  
MTL-PPPI



Plug & Play Foot  
MTL-PPF



Round Power In  
MTL-PIC



Rectangular Power In  
MTL-RPIC



Dimmer  
MTL-DIM



Driver, Dimmer & PSU<sup>[4][7][8]</sup>  
MTL-D4 / MTL-D7



Driver Solo or with PSU<sup>[4][7][8]</sup>  
MTL-DRIVE  
MTL-ND4 / MTL-ND7



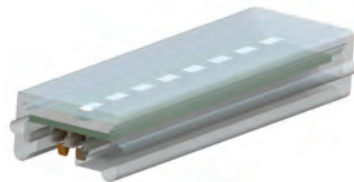
Round Wall Clip  
MTL-CLP



Rectangular Wall Clip  
MTL-RCLP



Linear Strip, 45/95/245/450mm<sup>[3]</sup>  
MTL-LS-45/95/245/450-3K/4K



## Ordering notes

- [1] Rotating corners type A are available in left and right handed versions. Please suffix code with L or R to signify.
- [2] Two ranges of trumpets are available. Classic (CL) & Modern (MO). Classic trumpets have clear or frosted lenses whilst modern are clear or diffused. Both trumpet ranges are available with wide or narrow angled lenses.
- [3] Twistlock spot fittings, gooseneck, elbow and linear strip modules are available in both 3K & 4K colour temperature variants.
- [4] Power supply unit has fittings for UK, US and EU sockets.
- [5] Plug and Play stalks are supplied with mounting foot and power supply.
- [6] Twistlock spots, the gooseneck and elbow fitting are supplied without trumpets. Please specify separately as required.
- [7] PSU's are available in 4A and 7A versions. Contact UFO to discuss power requirements for the system you are specifying
- [8] For further functionality including DMX & 0-10V control, see our CV2 driver on page 155

All round parts are available in black, white or grey. Please specify when ordering. Rectangular parts are in black only.

# ATTRACTA MAGNETIC TRACK LIGHTING SYSTEMS



Offering the ultimate in versatility, the system comprises an extruded aluminium track, available in either surface or corner mount versions, which is paired with any number of magnetic Attracta fittings.

The fittings' magnetic attraction to the track allows them to be freely placed, moved, slid and removed without any interference from wires or cables.

Two spotlight designs are available, each offering a choice of colour temperatures. The larger F2 fitting also offers brighter output. We also offer 2 systems for linear lighting - a stalk system (F3) available in both round and rectangular versions, and a rectangular bridge system (F4).

The Attracta fittings offer full 360° rotation as well as 180° of tilt - they really can be pointed in almost any direction imaginable. Five colour temperatures for all fittings and for the F1 and F2 spotlights, a variety of lens types, from narrow to wide angled, are available and all can be mixed and matched within the system.

The Attracta track can be powered directly from a DC power supply unit or for complete functionality, should be connected to UFO Unidrive CV2 multi-function driver.

Attracta F1 Fitting



Attracta F2 Fitting



Attracta F3 Stalk



Attracta F4 Bridge





# ATTRACTA F1 FITTING SPECIFICATION

	F1 / 2700K	F1 / 3000K	F1 / 4000K	F1 / 5000K	F1 / 6500K
Light Source	LED	LED	LED	LED	LED
Colour Temperature	2700K	3000K	4000K	5000K	6500K
Lux Levels <sup>[1]</sup>	0.5m - 662 lux 1.0m - 173 lux 1.5m - 78 lux	0.5m - 827 lux 1.0m - 206 lux 1.5m - 90 lux	0.5m - 809 lux 1.0m - 203 lux 1.5m - 91 lux	0.5m - 800 lux 1.0m - 200 lux 1.5m - 90 lux	0.5m - 800 lux 1.0m - 200 lux 1.5m - 90 lux
Drive Current	150mA				
CRI	98 (typical)	98 (typical)	97 (typical)	92 (typical)	90 (typical)
Optics	16° / 23° / 36° / 70°				
Typical Luminous Flux <sup>[2]</sup>	2700K - 38lm/w	3000K - 50lm/w	4000K - 47lm/w	5000K - 55lm/w	6500K - 64lm/w
Track Supply Voltage	5V DC				
Material	Aluminium with chrome magnetic ball				
Driver Working Current	6A				
Driver Functionality	Manual dimming, DMX, 0-10V, sensor input				
Driver Dimensions	146mm x 68mm x 40mm				

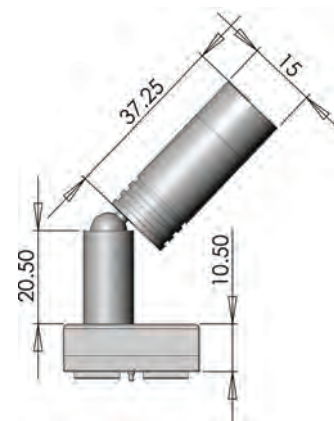
[1] F2 fittings measured with 23° optic at specified distances. [2] Measured using 23° optic. Nominal values are used for 5000K & 6500K fittings.



Attracta F1 fitting shown mounted in rectangular track

## Ordering Codes

MODEL	OPTICS		COLOUR TEMP		COLOUR	
UFO ATR-F1	16°	16	2700k	27	Black	BL
	23°	23	3000k	30	Silver	SV
	36°	36	4000k	40	White	WT
	61°	61	5000k	50		
			6500k	65		



# ATTRACTA F2 FITTING SPECIFICATIONS

	F2 / 2700K	F2 / 3000K	F2 / 4000K	F2 / 5000K	F2 / 6500K
Light Source	LED	LED	LED	LED	LED
Colour Temperature	2700K	3000K	4000K	5000K	6500K
Lux Levels <sup>[1]</sup>	0.5m - 1392 lux 1.0m - 427 lux 1.5m - 205 lux	0.5m - 2061 lux 1.0m - 575 lux 1.5m - 258 lux	0.5m - 1237 lux 1.0m - 461 lux 1.5m - 238 lux	0.5m - 1500 lux 1.0m - 500 lux 1.5m - 250 lux	0.5m - 1500 lux 1.0m - 500 lux 1.5m - 250 lux
Drive Current	400mA	400mA	400mA	400mA	400mA
CRI	98 (typical)	98 (typical)	97 (typical)	92 (typical)	90 (typical)
Optics	13.5° / 19° / 28°				
Typical Luminous Flux <sup>[2]</sup>	2700K - 29lm/w	3000K - 43lm/w	4000K - 45lm/w	5000K - 53lm/w	6500K - 62lm/w
Track Supply Voltage	5V DC				
Material	Aluminium				
Driver Working Current	6A				
Driver Functionality	Manual dimming, DMX, 0-10V, sensor input				
Driver Dimensions	146mm x 68mm x 40mm				

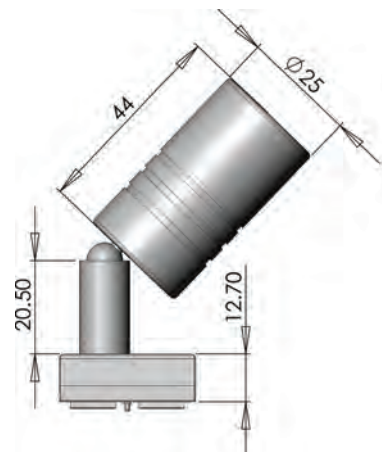
[1] F2 fittings measured with 19° optic at specified distances. [2] Measured using 13.5° optics. Nominal values are used for 5000K & 6500K fittings.



Attracta F2 fitting shown mounted in rectangular track

## Ordering Codes

MODEL	OPTICS		COLOUR TEMP		COLOUR	
UFO ATR-F2	13.5°	13	2700k	27	Black	BL
	19°	19	3000k	30	Silver	SV
	28°	28	4000k	40	White	WT
			5000k	50		
			6500k	65		





# ATTRACTA F3 STALK SPECIFICATIONS

		F3 / 3000K		F3 / 4000K	
LED Strip Lengths		45mm & 95mm. Actual lengths of fitting are detailed below under drawing			
Light Source		LED		LED	
Colour Temperature		3000K		4000K	
Lux Levels at specified lengths by strip length	0.5m	45mm	95mm	45mm	95mm
	1.0m	43 lux	88 lux	40 lux	87 lux
	1.0m	9 lux	20 lux	8 lux	20 lux
	1.5m	3 lux	8 lux	2 lux	8 lux
Working Current & Power		45mm long strip - 90mA / 0.4W   95mm long strip - 170mA / 0.8W			
CRI		>92 (typical)		>92 (typical)	
Typical Luminous Flux		65lm/w		67lm/w	
Track Supply Voltage		5V DC			
Material & Finish <sup>[1]</sup>		Aluminium & ABS in black, grey or white with chrome magnetic ball			
Driver Working Current		6A			
Driver Functionality		Manual dimming, DMX, 0-10V, sensor input			
Driver Dimensions		146mm x 68mm x 40mm			

[1] Models based on round profile are available in black, white or grey. Models based on rectangular profile are available in black only.

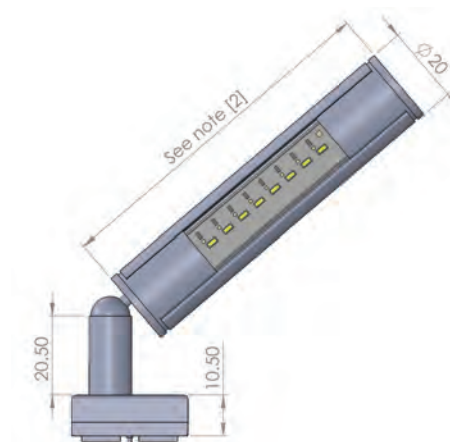
## Ordering Codes

MODEL	LED STRIP LENGTH		EXTRUSION SHAPE		COLOUR TEMP		COLOUR <sup>[3]</sup>	
UFO ATR-F3	45mm	45	Round	RD	3000k	30	Black	BL
	95mm	95	Rectangular	RE	4000k	40	Grey	GR
							White	WT

[3] Models based on round profile are available in black, white or grey. Models based on rectangular profile are available in black only.



Attracta F3 stalk shown mounted in rectangular track



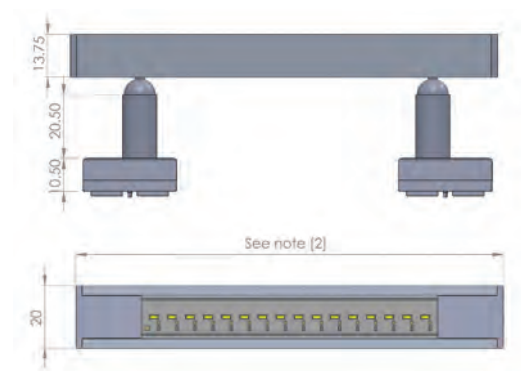
[2] Led strips are available in 45mm and 95mm variations. Actual fitting length is longer than strips:  
 45mm LED - total length = 90mm  
 95mm LED - total length = 140mm.

# ATTRACTA F4 BRIDGE SPECIFICATIONS

		F4 / 3000K			F4 / 4000K		
LED Strip Lengths		45mm, 95mm & 245mm. Actual lengths of fitting are detailed below under drawing					
Light Source		LED			LED		
Colour Temperature		3000K			4000K		
Lux Levels at specified lengths by strip length	0.5m	45mm 43 lux	95mm 88 lux	245mm 196 lux	45mm 40 lux	95mm 87 lux	245mm 191 lux
	1.0m	9 lux	20 lux	52 lux	8 lux	19 lux	51 lux
	1.5m	3 lux	8 lux	23 lux	2 lux	8 lux	22 lux
Working Current & Power		45mm long strip - 90mA / 0.4W   95mm long strip - 170mA / 0.8W   245mm long strip - 410mA / 2.3W					
CRI		>92 (typical)			>92 (typical)		
Typical Luminous Flux		65lm/w			67lm/w		
Track Supply Voltage		5V DC					
Material & Finish		Aluminium & ABS in black with chrome magnetic ball					
Driver Working Current		6A					
Driver Functionality		Manual dimming, DMX, 0-10V, sensor input					
Driver Dimensions		146mm x 68mm x 40mm					

## Ordering Codes

MODEL	LED STRIP LENGTH		COLOUR TEMP		COLOUR	
UFO ATR-F4	45mm	45	3000k	30	Black	BL
	95mm	95	4000k	40		
	245mm	245				



[2] Led strips are available in 45mm, 95mm and 245mm variations.  
Actual fitting length is longer than strips:  
45mm LED strip - total length = 97mm  
95mm LED strip - total length = 137mm  
245mm LED strip - total length = 287mm



Attracta F4 bridge shown mounted in rectangular track

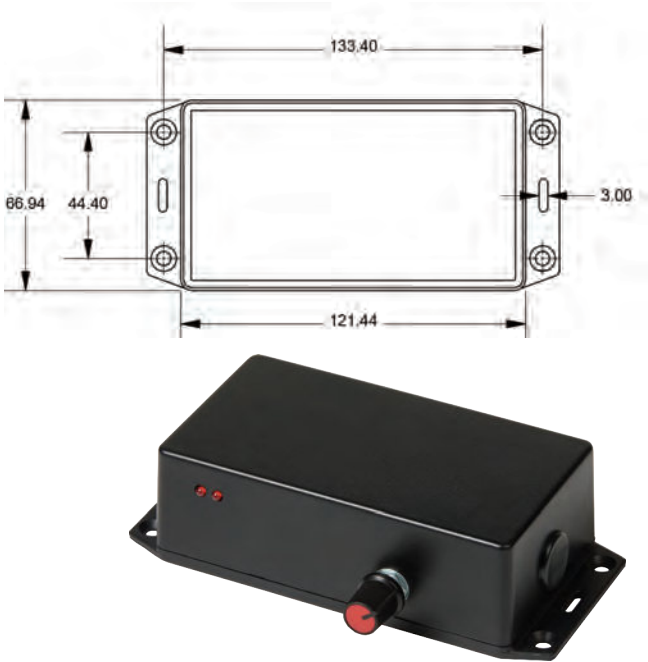


# CV2 DRIVER SPECIFICATIONS

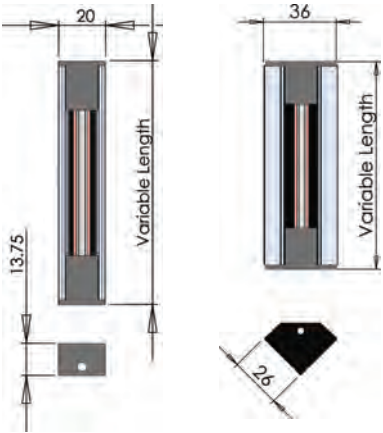
The Unidrive CV2 is a compact constant voltage multi-function driver capable of driving both Attracta and MetroLED LED modules up to 30W.

## Technical Specifications

Product Codes	DR-CV-DC-5-30-D-CU - driver with single integral dimming potentiometer DR-CV-DC-5-30-DD-CU - driver with dual integral dimming potentiometers DR-CV-DC-5-30-ALL-CU - driver with full functionality (manual / 0-10V / DMX / sensor)
Description	5V, 30W, 2 channel dimmable constant voltage driver (MetroLED & Attracta)
Functionality	- 0-10V (current source) output dimming - controls both LED outputs - DMX with 4 channels (LED 1 dimming & on/off, LED 2 dimming & on/off). Controllable from DMX system or can operate standalone master/slave with other CV2 drivers. - 2 channels (N/O & N/C) sensor input to trigger LED 1 & LED 2 output simultaneously with fade in, delay and fade out controls.
Accessories	Unidim CVD3 (DM-ELEC-XX-XX-XX-D) - single electronic (current sink) potentiometer Unidim CVD4 (DM-ELEC-XX-XX-XX-DD) - dual electronic (current sink) potentiometers (Both CVD3 & CVD4 are supplied on mounting plates)
Dimensions	146mm x 68mm x 40mm

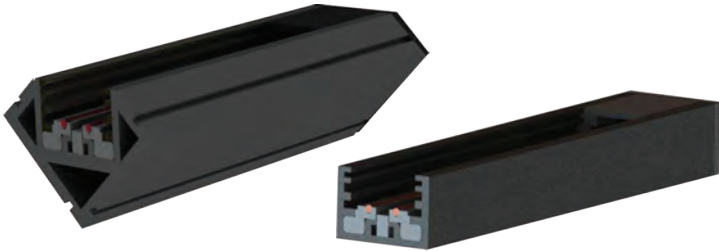


# ATTRACTA TRACK



All Attracta fittings are powered by the track in which they sit. Track is available in 2 profiles - rectangular for surface or recessed mounting, and triangular for corner mounting.

Power is supplied via two internal tracks which run along the bottom of the track extrusion. Between the two power tracks is a stainless steel insert which provides the surface for the magnetic fittings to stick to.



Order Code	Description
UFO ATR-B-[1]-BL-[2]-[3]	Surface mounted track, black with choice of length, psu ampage and dimming
UFO ATR-C-[1]-BL-[2]-[3]	Corner mounted track, black with choice of length, psu ampage and dimming

[1] length, up to 2.3m max. | [2] 4A or 6A for PSU power | [3]YD or ND for dimming or no dimming

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In addition to our standardised and bespoke product ranges, we also manufacture self-install wet area and display lighting kits specifically for the OEM market. The kits are manufactured in-house using the finest quality materials and are held in stock so that we can offer short delivery times on all orders.

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Aimed at cabinet makers, retail merchandisers and museum exhibit designers, our Cabinet and Display Lighting Kits are stylish and functional yet amazingly discrete with the safety and easy maintenance that only fibre optic and low voltage LED lighting can offer. Our Fibre Optic Downlighting kits are cost effective to install and easy to control, and offer clean crisp light output and a colour rendering index of over 90. For those who prefer to use LEDs to illuminate their displays we offer a choice of energy efficient LED Downlighting kits, MBL Downlighting kits with magnetic articulation, MetroLED gantry and linear lighting kits, and our versatile Attracta magnetic track lighting kit.

For any members of the public who want to install fibre optic and LED lighting systems in their homes or businesses, our sister company – Unlimited Light, offers a range of self-install lighting kits, sensory lighting kits and chandeliers. All are manufactured in-house and come with full instructions for ease of installation. You can find out more about the range of kits available and purchase them online at [www.unlimitedlight.com](http://www.unlimitedlight.com).



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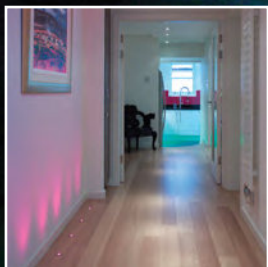
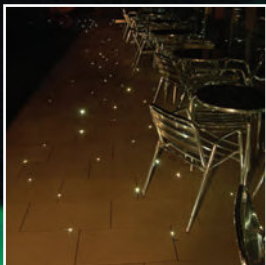
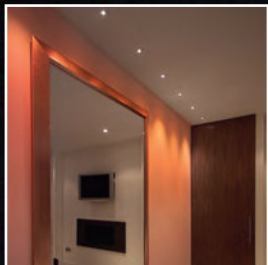
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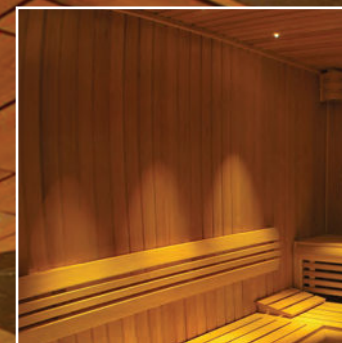
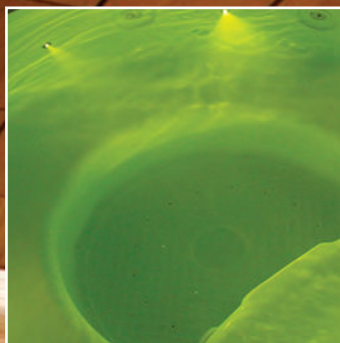
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