

ESPRITE™
TRANSFERABLE ENGINE



ROBE®



ESPRITE™ PIONEERING A NEW ERA IN LUMINAIRES USING WHITE SOURCE LED ENGINES.

The Robe reputation for innovative design, earned over the last 25 years, is the result of asking questions, listening to customers and constantly redefining the boundaries of technology.

We have the most forward-thinking engineers and designers in our industry. We wanted to address the problem that white source LED engines cannot last forever and vary in colour consistency over time.

The result of this intensive, and indeed extensive process, is the ground-breaking TE™ 650W White LED Engine. We have designed, developed, patented, and manufactured an interchangeable module in our own factory, where we could ensure the very best performance and consistency.

This means, by having both a cost effective and easily changeable LED engine, we have removed the white source problems of unpredictable life and performance consistency.

Commensurate with this level of technology, the module holds not only its manufacturing date, serial number and hours used, but also other useful information, easily accessible via a simple, free, mobile App using Near Field Communication.

The first fixtures to use this new technology, and to replace old, entire fleets of workhorse discharge fixtures, are the all new, high performance ESPRITE™ automated luminaires.

With high output and precision optics, ESPRITE™ provides the perfect platform. Not only does it incorporate all the features you would expect from a fixture of its class, it has many design innovations including a new cooling system that removes any airflow over the optics resulting in reduced residue deposits and thus vastly extending periods between cleaning.

As the industry migrates from discharge to LED sources, the ability to provide solutions for the associated white LED source challenges is a monumental shift in LED technology and fixture design.

These factors ensure ESPRITE™ enjoys a long life while providing customers with a good return on their investment, a trait that has become synonymous with Robe products.

Josef Valchar
CEO

ROBE®

ESPRITE™

TRANSFERABLE ENGINE



Robe, the recognised leader in moving light technology, has made another major leap in innovation. The new ESPRITE™ Profile LED automated luminaire has a fast-change, low-cost, transferable light engine ingeniously solving the problem of performance longevity for those preferring the higher brightness of white source LEDs as an obvious replacement for their aging stock of discharge workhorses.

The self-referencing, data capturing TE™ 650W White LED engine, designed, developed and manufactured within our own factory, allows for rapid and economical “lamp-like” exchange to give the fixture a life well beyond those of non-user replaceable LED sources (Patents pending). Performance has not been compromised with the 27.000 lm fixture output producing a piercing 85.000 lux at 5 m. This is enhanced by our legendary precision optics to produce crystal clear white light. The comprehensive feature set includes: Flat field CMY mixing; variable CTO; remotely selectable CRI 70/80/90; two fast colour wheels; rotating and static gobo wheels; 6-facet rotating prism; 1° soft edge and 5° even wash frosts; an animation wheel and spectacular multi-colour effects. Quick, accurate, easy framing is provided via our patented fast framing shutter module with individual blade control and +/-60° rotation capability for extra fine control. The ESPRITE™ Profile by design removes any airflow over the optics, resulting in reduced residue deposits thus extending periods between cleaning.

Furthermore, the unique Hot-Spot feature allows you to move from a flat field beam to a 6:1 ratio hot-spot beam giving uniform intensity when overlaying beam edges to create smooth washes of light. The Cpulse™ flicker-free management system operates beautifully with the latest HD and UHD camera systems, and our L3™ Low Light Linearity dimming for ultra-smooth fade to black for seamless integration into traditional lighting rigs.

You have a feature rich, very high output, long lasting, future proof package all in a compact 28.2 kg housing.

Source

- Light source type: TE™ 650W White LED engine
- LED life expectancy: min. 20.000 hours
- CRI: 70 / 80 / 90, remotely selectable
- Colour temperature: 6.700 K

Optical System

- Robe's proprietary optical design
- High-efficiency zoom optical system, ratio 9:1
- Zoom range: 5.5°–50°
- Output lens diameter: 150 mm
- High efficient component optics
- Fixture total lumen output: up to 27.000 lm
- Brightness: 85.000 lx @ 5 m

Dynamic Effects

- Cyan: 0–100%
- Magenta: 0–100%
- Yellow: 0–100%
- Variable CTO: 3.000 K–6.700 K
- Colour Wheel 1: 5 fixed dichroic colours + white
- Colour Wheel 2: 5 fixed dichroic colours + white
- Framing shutters: Patented framing shutters module with 4 individually positionable blades plus rotation of the complete frame system +/-60°
- Rotating gobo wheel: 7 rotating, indexable and replaceable breakup and aerial gobos + open, patented slot & lock system
- Static gobo wheel: 9 static and replaceable gobos + open
- Animation wheel: Aluminium animation wheel, used alone or in combination with gobos, rotating in both directions at variable speed
- Prism: 6-facet prism rotating in both directions at variable speed
- Iris: Motorized, stepless, pulse effects up to 3 Hz
- Frost: light 1° for instant softening of the projected gobo or framing shutters and medium 5° for even wash
- Hot-Spot: from flat field to 6:1 hot-spot
- Motorized zoom and focus
- Electronic strobe effect with variable speed up to 20 Hz
- High resolution electronic dimming: 0–100 %
- L3™ - (Low Light Linearity) Imperceptible 18 bit dimming for ultra smooth fade to black
- Cpulse™ special flicker-free management for HD and UHD cameras, ready for 8 K and 16 K

Control and Programming

- Setting & Addressing: ROBE Navigation System 2 (RNS2)
- Display: QVGA Robe touch screen with battery backup, gravitation sensor for auto screen positioning, operation memory service log with RTC, stand-alone operation with 3 editable programs (each up to 100 steps), built-in analyser for easy fault finding
- Protocols: USITT DMX-512, RDM, ArtNet, MA Net, MA Net2, sACN
- Wireless CRMX™ technology from Lumen Radio: On request
- DMX Protocol modes: 2
- Control channels: 49, 42
- Pan/Tilt resolution: 16 bit
- CMY & CTO: 8 bit
- Colour wheel positioning: 8 or 16 bit
- Framing shutters module movement & rotation: 8 bit
- Rotating gobo wheel positioning: 8 bit
- Gobo indexing & rotation: 8 or 16 bit
- Static gobo wheel positioning: 8 bit
- Animation wheel: 8 bit
- Animation wheel rotation: 8 bit
- Iris: 8 or 16 bit
- Frost: 8 bit
- Zoom: 8 or 16 bit
- Focus: 8 or 16 bit
- Dimmer: 8 or 16 bit (internal 18 bit)

Movement

- Pan movement: 540°
- Tilt movement: 265°
- Movement control: Standard and Speed
- EMS™: Electronic Motion Stabilizer system for Pan & Tilt reducing beam deviation caused by truss movement or vibration (Patent pending)
- Automatic Pan/Tilt position correction

Rotating Gobos

- 7x rotating glass gobos
- Outside diameter: 26.8 mm
- Image diameter: 23.5 mm
- Thickness: 1.1 mm
- Max. thickness: 4 mm
- High temperature borofloat or better glass

Static Gobos

- 9x static glass gobos
- Outside diameter: 26.8 mm
- Image diameter: 23.5 mm
- Thickness: 1.1 mm
- Max. thickness: 3.5 mm
- High temperature borofloat or better glass

Effect Wheel

- Single animation wheel
- Material: Aluminium
- Can be used alone or in combination with rotating gobos
- Rotating in both directions, variable speed

Framing Shutters System

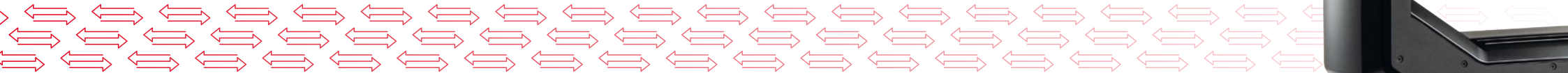
- 4 Blades, each with separate movement and rotation control
- Smooth movement with variable speed control ultra-fast blade movements for creating mid-air effects
- Pre-programmed Shape and blade sequences
- Rotation +/- 60° of the complete framing system

Thermal Specification

- Maximum ambient temperature: 45 °C (113 °F)
- Maximum surface temperature: 75 °C (167 °F)
- Minimum operating temperature: -5 °C (23 °F)

Electrical Specification and Connections

- Power supply: Electronic auto-ranging
- Input voltage range: 100–240 V, 50/60 Hz
- Power consumption: Standard mode max. 870 W at 230 V / 50 Hz High-power mode max. 950 W at 230 V / 50 Hz
- Power in connector: Neutrik powerCON TRUE1
- DMX and RDM data in/out: Locking 3-pin & 5-pin XLR
- Ethernet port in: RJ45



Approvals

- CE Compliant
- cETLus Compliant

Mechanical specification

- Height: 733 mm (28.9")
- head in vertical position
- Width: 443 mm (17.4")
- Depth: 264 mm (10.4")
- head in vertical position
- Weight: 28.2 kg (62.2 lbs)
- Ingress protection rating: IP20

Rigging

- Mounting positions:
Horizontally or vertically
- Universal operating position
- Mounting points:
5 pairs of 1/4-turn locking points
- 2x Omega adaptors
with 1/4-turn quick locks
- Safety cable attachment point
- Pan and Tilt transport locks

Included Items

- User Manual
- Omega Adaptor CL-regular 2 pcs
- Power cord including powerCON TRUE1 In connector

Accessories

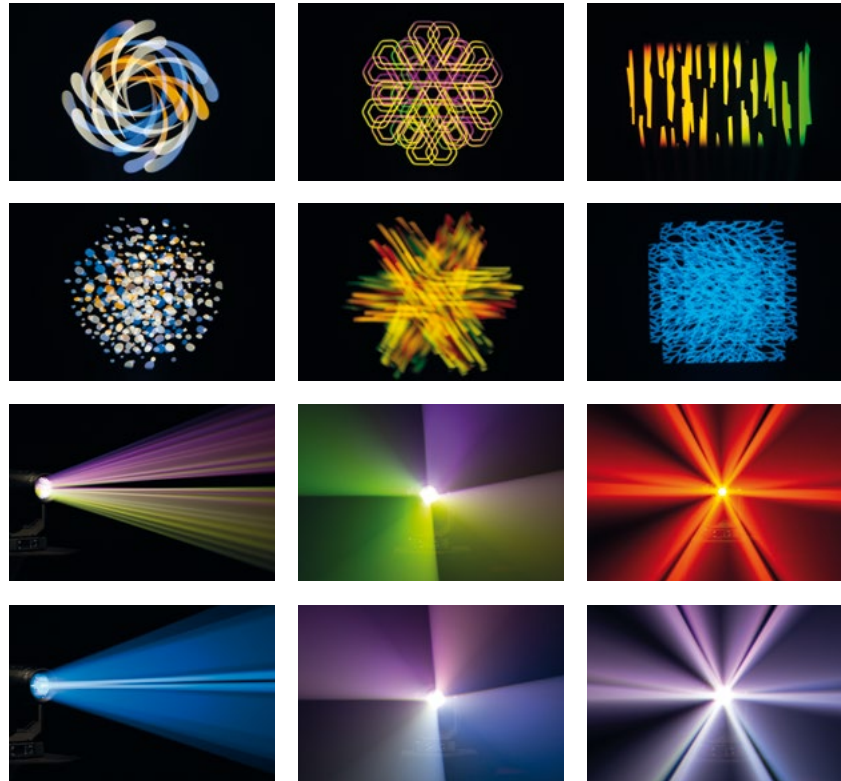
- Frost 10° (exchange)
assembled: 99016174
- Hot-Spot lens in gobo holder: 10980483
- Gel frame adaptor: 10980463
- Gel frame: 10980464
- Doughty Trigger Clamp: 17030386
- Omega Adaptor Tall CL-regular 2 pcs
in box: 10980501
- Safety wire 35 kg: 99011963
- Single Top Loader Case: 10120254
- Dual Top Loader Case: 10120255
- Foam Shell: 20020357

Legal

- ESPRITE™ is a Trademark of Robe lighting s. r. o.
- ESPRITE™ is patented by Robe lighting s. r. o. and protected by one or more pending or issued patents

Impressive Aerial and Graphic Effects

ESPRITE™ will excite you with numerous possibilities for animations and mid-air effects thanks to two gobo wheels with carefully selected break-up and aerial gobos which can be further combined with a 6-facet rotating prism, animation wheel, split colours and a special multi-colour filter. By using these features, you will achieve interesting animations and effects like clouds, rain, water, fire and more abstract morphing images.



Colour Wheel 1



Colour Wheel 2



Static Gobo Wheel



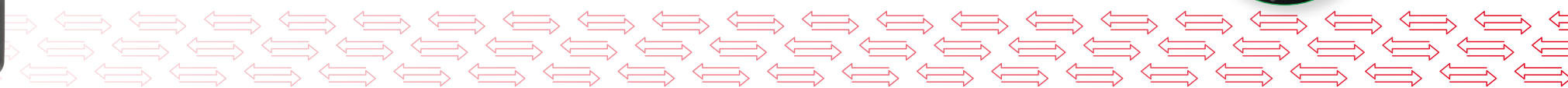
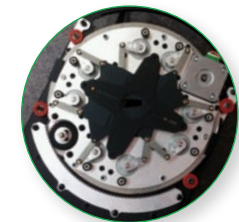
Rotating Gobo Wheel



Framing Shutters Module

ESPRITE™ uses Robe's patented system of four, fast, smooth moving, shutter blades, which can be individually angled and positioned. The whole module assembly can further rotate +- 60 degrees. Thanks to the unique design, all four blades can be focused at the same time and can be further softened by applying a light 1° frost giving the edges soft diffusion which is required in TV and Theatres.

Shutters are precisely calibrated in the factory to ensure maximum accuracy and repeatability of programmed framing shapes.





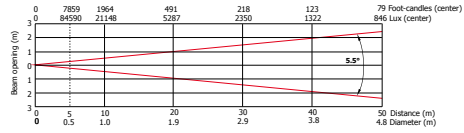
ESPRITE™

High-Power Mode – Min. Zoom

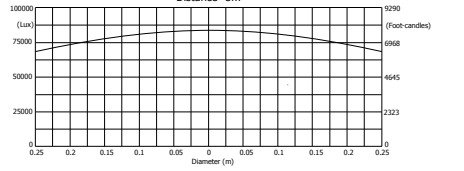
CRI 70

Beam angle 5.5°

Total Output: 15915 lumens



Illuminance distribution
Distance=5m

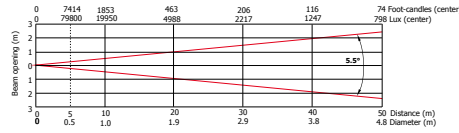


High Mode – Min. Zoom

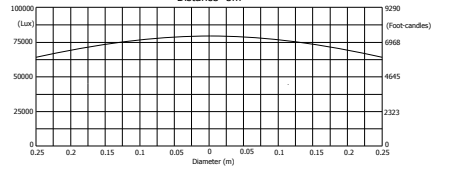
CRI 70

Beam angle 5.5°

Total Output: 15090 lumens



Illuminance distribution
Distance=5m

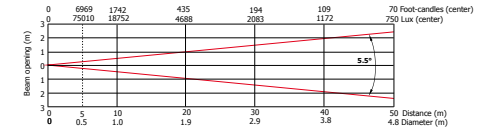


Auto Mode – Min. Zoom

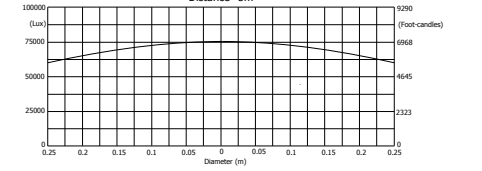
CRI 70

Beam angle 5.5°

Total Output: 14185 lumens



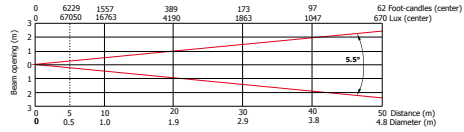
Illuminance distribution
Distance=5m



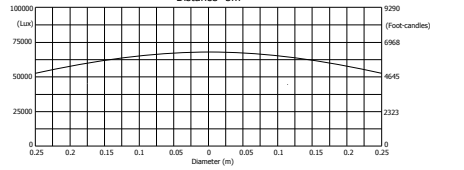
CRI 80

Beam angle 5.5°

Total Output: 15446 lumens



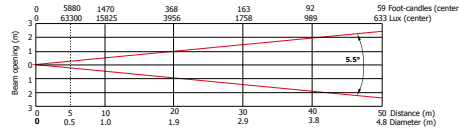
Illuminance distribution
Distance=5m



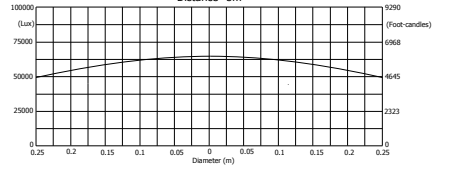
CRI 80

Beam angle 5.5°

Total Output: 14572 lumens



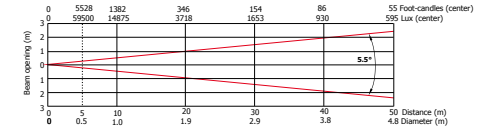
Illuminance distribution
Distance=5m



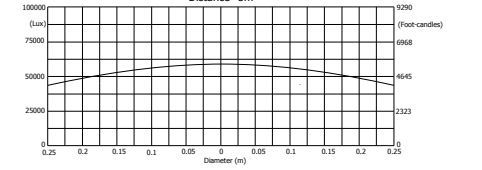
CRI 80

Beam angle 5.5°

Total Output: 13697 lumens



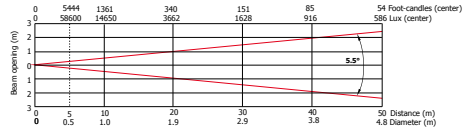
Illuminance distribution
Distance=5m



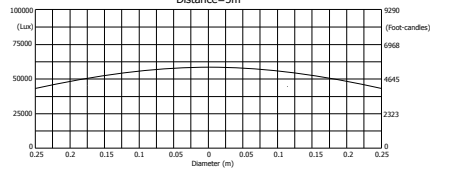
CRI 90

Beam angle 5.5°

Total Output: 11190 lumens



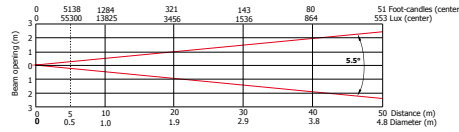
Illuminance distribution
Distance=5m



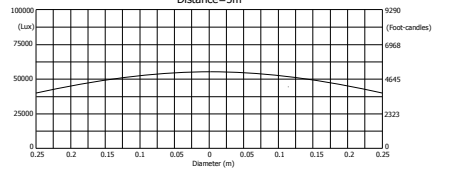
CRI 90

Beam angle 5.5°

Total Output: 10563 lumens



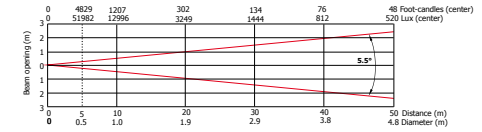
Illuminance distribution
Distance=5m



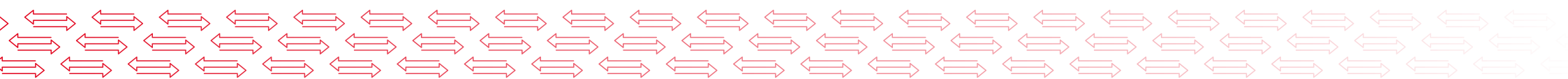
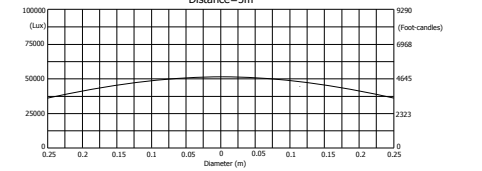
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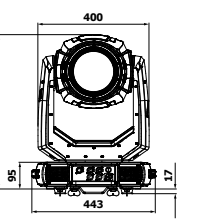
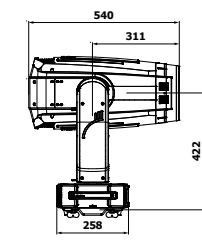
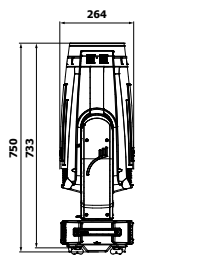
Beam angle 5.5°

Total Output: 10034 lumens

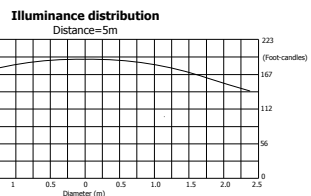
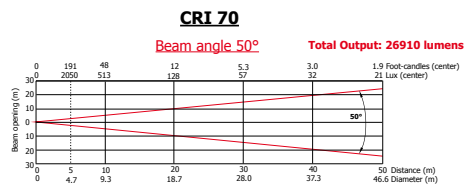


Illuminance distribution
Distance=5m

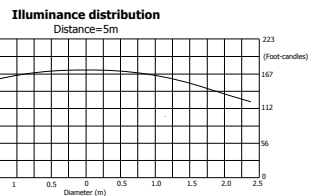
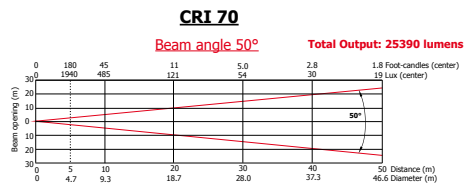




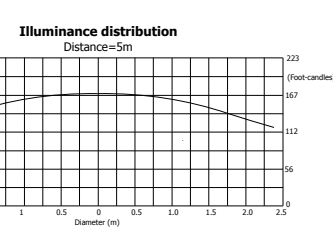
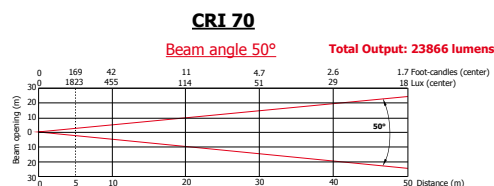
High-Power Mode – Max. Zoom



High Mode – Max. Zoom

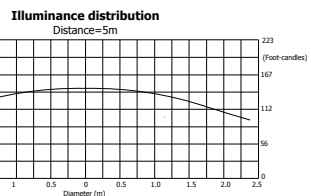
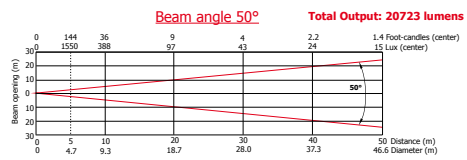


Auto Mode – Max. Zoom

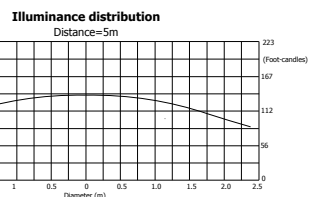
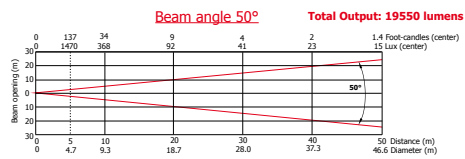


ESPRITE™

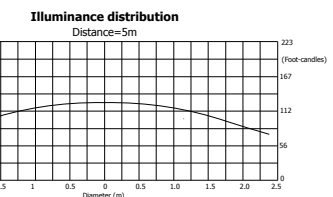
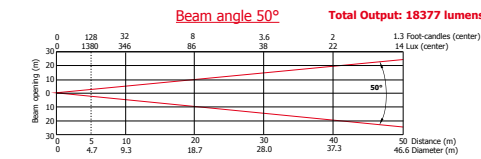
CRI 80



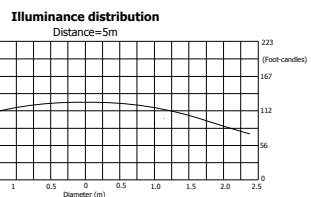
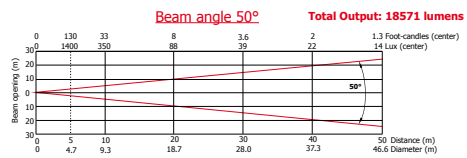
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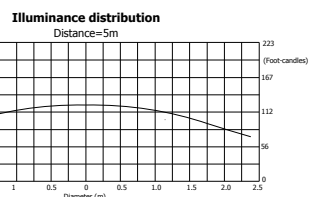
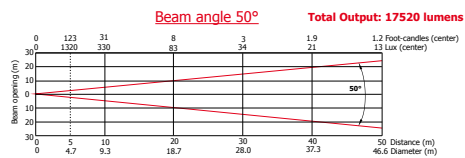
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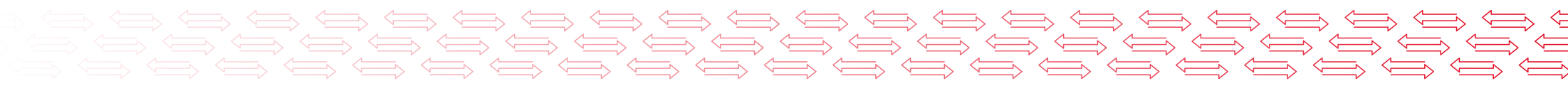
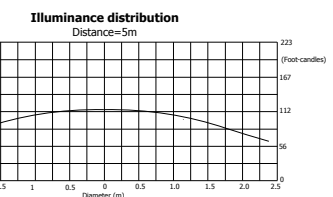
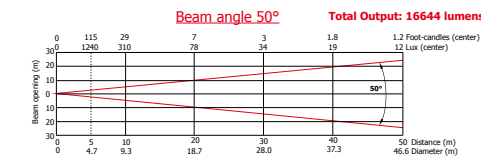
CRI 90



CRI 90



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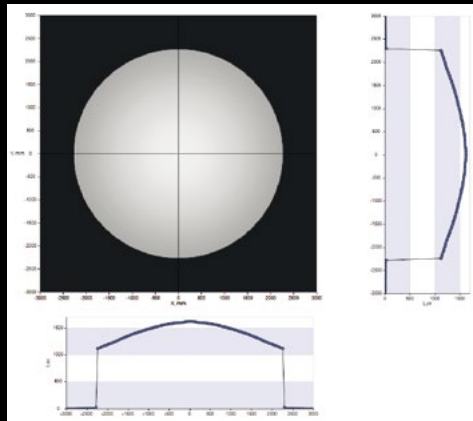




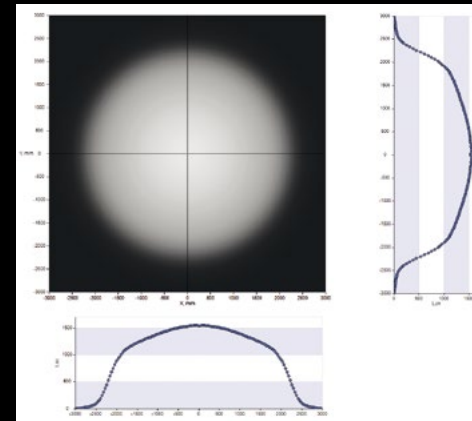
Hot-Spot

ESPRITE™ Profile produce a beautifully even, flat field of light. Whilst ideal for most applications, the perfect field makes it difficult to achieve smooth, continuous washes of light when the beam edges of multiple fixtures are overlapped.

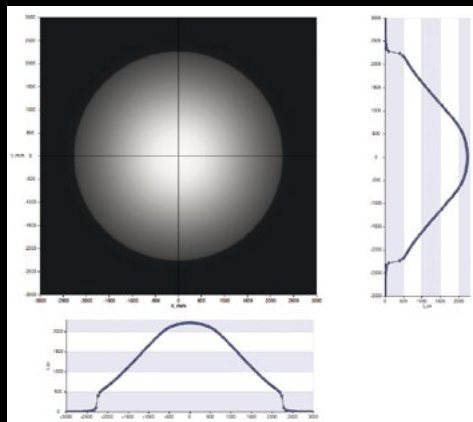
By introducing our unique, patented, 6:1 ratio Hot-Spot lens, we can alter the field characteristics creating a centre weighted, peaked beam. With the addition of the frost filter, you can now effortlessly achieve silky smooth washes. This exclusive lens further enhances the feature rich ESPRITE™ Profile, making it the most versatile Profile available.



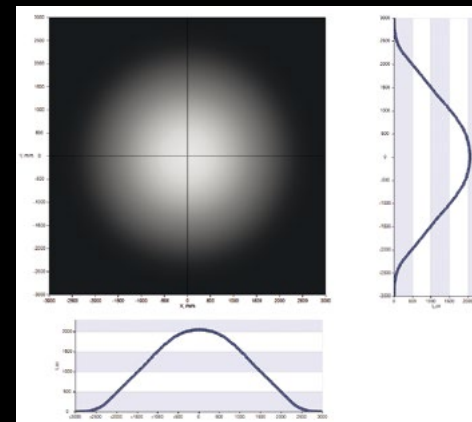
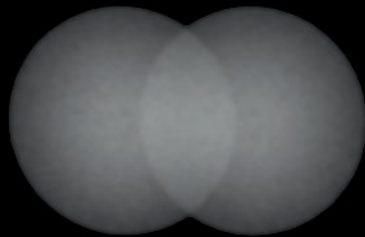
Flat field beams without Frost



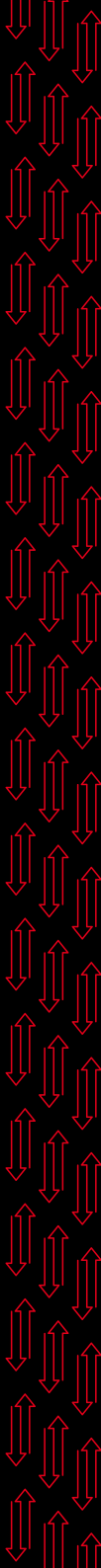
Flat field beams with Frost

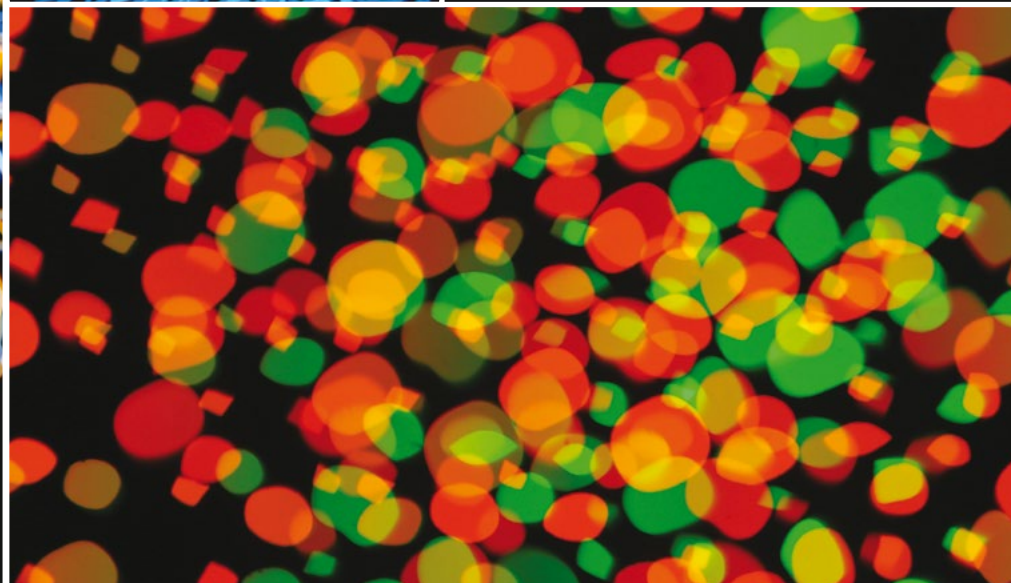
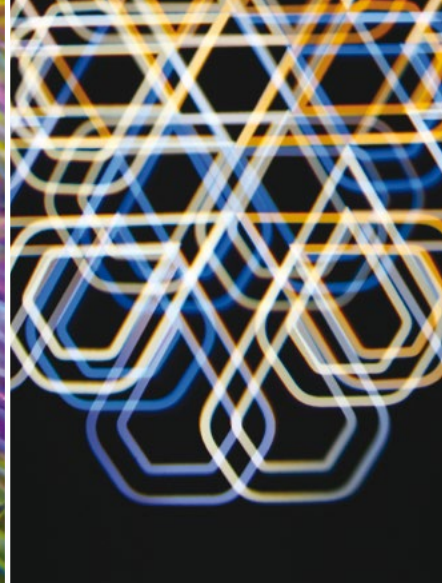
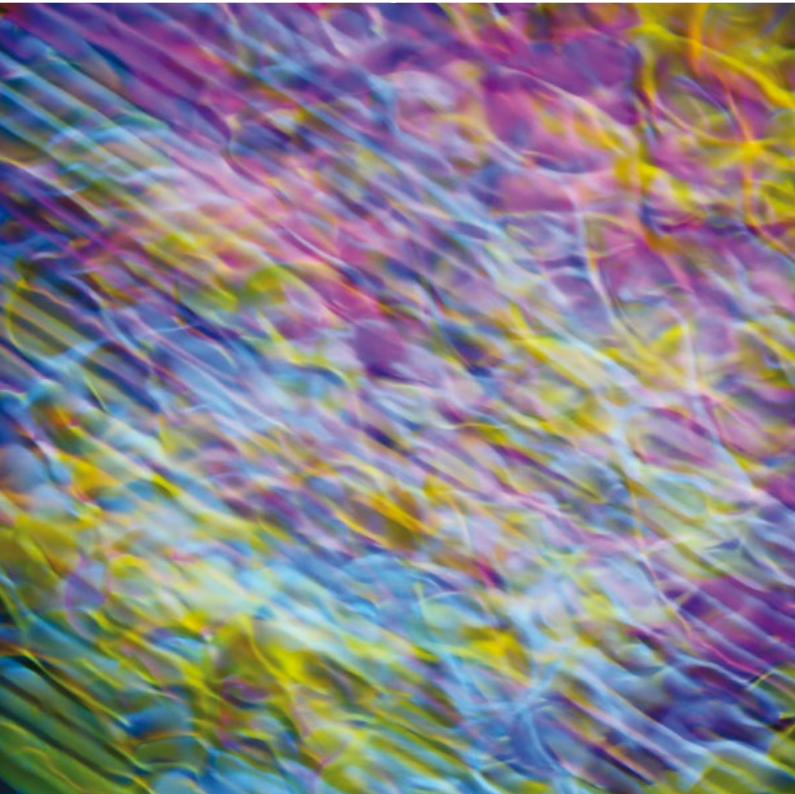
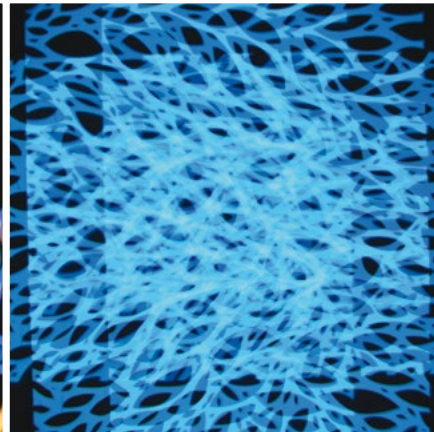
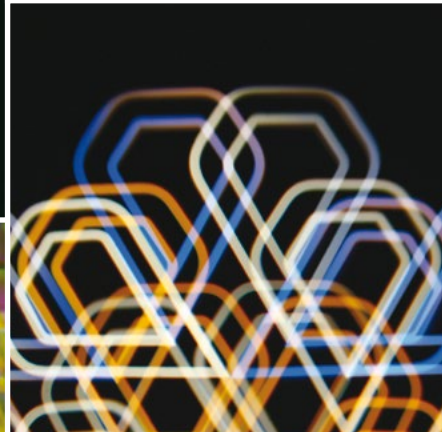
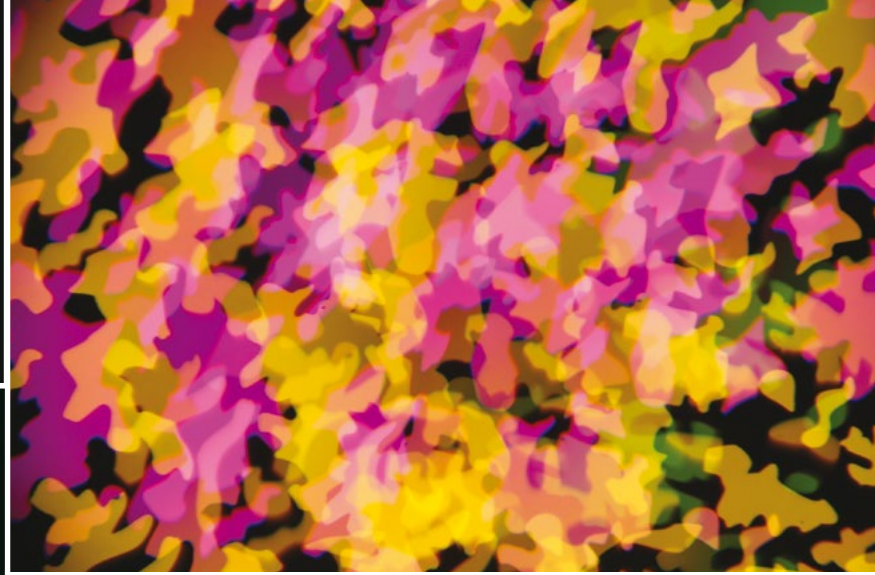
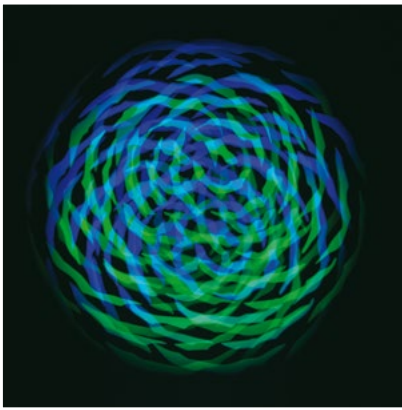
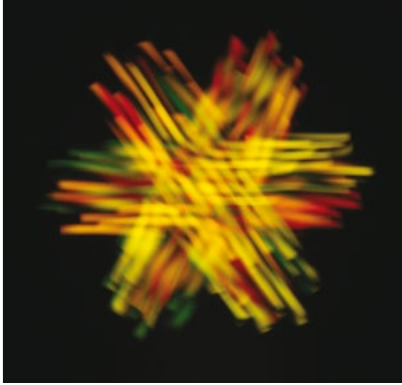


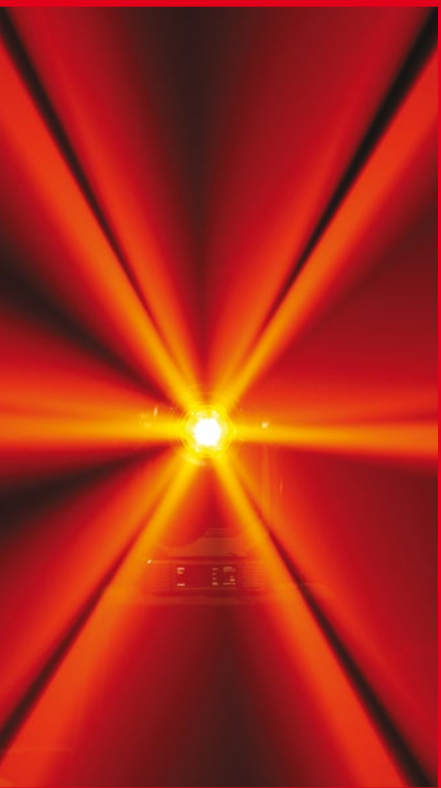
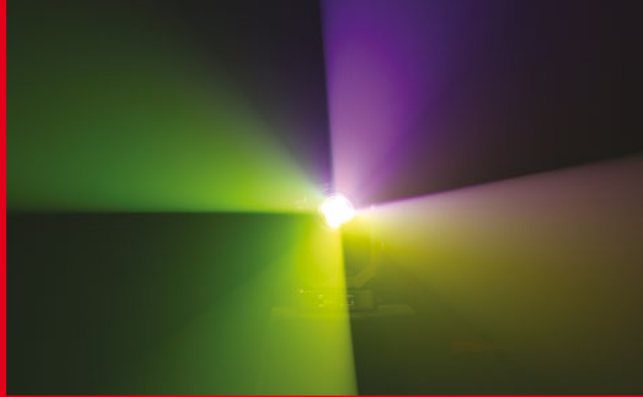
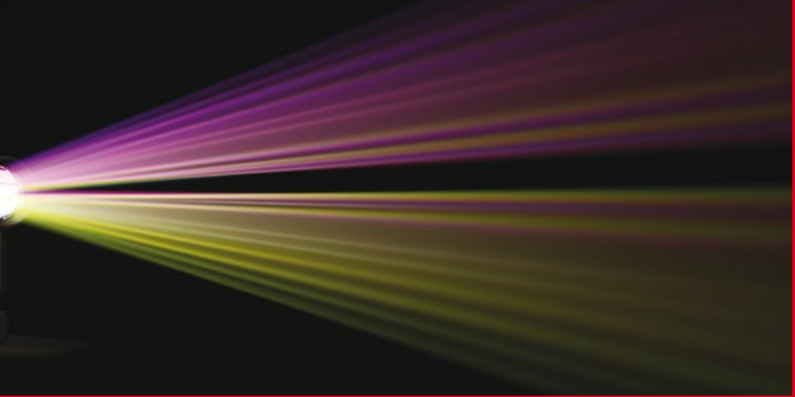
Hot-Spot beams without Frost



Hot-Spot beams with Frost







ESPRITE™

Packaging

ESPRITE™ is supplied in a cardboard box or in two different types of custom flight cases – Single Top Loader Case or Dual Top Loader Case. Both cases are equipped with a specially designed soft rubber insert for maximum protection of the light during transport and handling.

Cardboard box for ESPRITE™



820 x 520 x 400 mm
(32.3" x 20.5" x 15.7")

Single Top Loader Case for ESPRITE™



790 x 680 x 600 mm
(31.1" x 26.8" x 23.6")

Dual Top Loader Case for ESPRITE™



790 x 1330 x 600 mm
(31.1" x 52.4" x 23.6")

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ROBE®

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