



MODULAR[®]
LIGHTING INSTRUMENTS

SPOCK SCOTTY

EVERYTHING IS DESIGNED, FEW THINGS ARE DESIGNED WELL

- BRIAN REED

INDEX

ECOLOGY | 10 - 13 |

SCOTTY DESIGN | 14 - 21 |

SCOTTY FLEXIBILITY | 22 - 29 |

SCOTTY REFERENCES | 30 - 33 |

SPOCK DESIGN | 34 - 41 |

SPOCK FLEXIBILITY | 42 - 47 |

SPOCK REFERENCES | 48 - 57 |

LED DISC TECHNOLOGY | 58 - 73 |

TECHNICAL DATA | 74 - 78 |



"You might not realize it, but now, at the beginning of the 21st century, we are facing one of the biggest challenges since the advent of mankind"

Beaming you up into the new era

Ours are definitely times of major changes. In the past few years, technology has changed at a very fast pace. If you don't keep up in the lighting industry more specifically, "one day you are in and one day you are out".

True to its pioneering goals, Modular redefined lighting: Spock, our first invention, paved the way for a new lighting generation with its ingenious LED disc. Today, we are once more aiming for the final frontier: Scotty will astonish you even more.

With Spock and Scotty, enjoy the journey!









SCOTTY

WHAT MAKES THE UNIVERSE SO HARD TO COMPREHEND
IS THAT THERE'S NOTHING TO COMPARE IT WITH

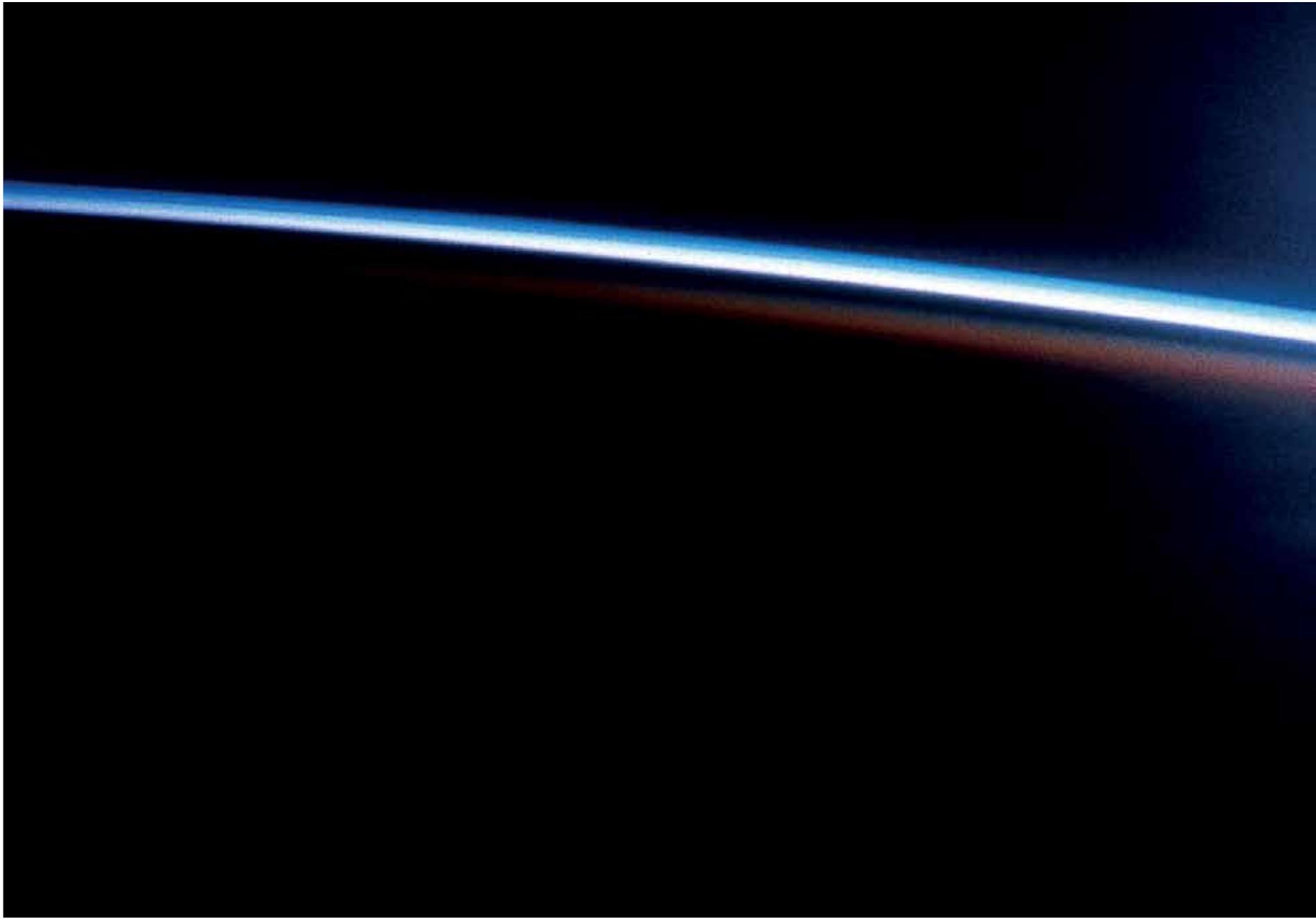
- E. CASSETOU





SPOCK

CHANGE IS THE ESSENTIAL PROCESS OF ALL EXISTENCE
- SPOCK IN "STAR TREK"





ECOLOGY

WHAT WE TAKE FOR GRANTED MIGHT NOT
BE HERE FOR OUR CHILDREN

- AL GORE

"Where the traditional halogen spot gives up the ghost after 5000 hours, Scotty and Spock keep on burning for no less than 50 000 hours."

GREEN IS THE FUTURE

With the disappearance of 'traditional' lights, lighting manufacturers such as Modular are facing an enormous challenge: they need to reinvent light, a basic need in our society.

By making use of cutting-edge LED technologies and anticipating future energy trends, we remain faithful to our global pioneering role in the industry, always keeping one step ahead. With Scotty and Spock, Modular is taking a giant step by introducing the light of the future into our homes and offices.

Equipped with a revolutionary flat LED disc, the elegant shaped Scotty and Spock are the first fully fledged eco-friendly substitutes for the classic halogen spot. They generate a luminous intensity up to 1400 lumens which is comparable to the widespread classic halogen spot of up to 75 Watt. With a consumption between 22 and 34 Watt they perform at least three times better, which can only benefit our environment and our energy bills. Thanks to this rapid evolution, consumption is expected to decrease even further.

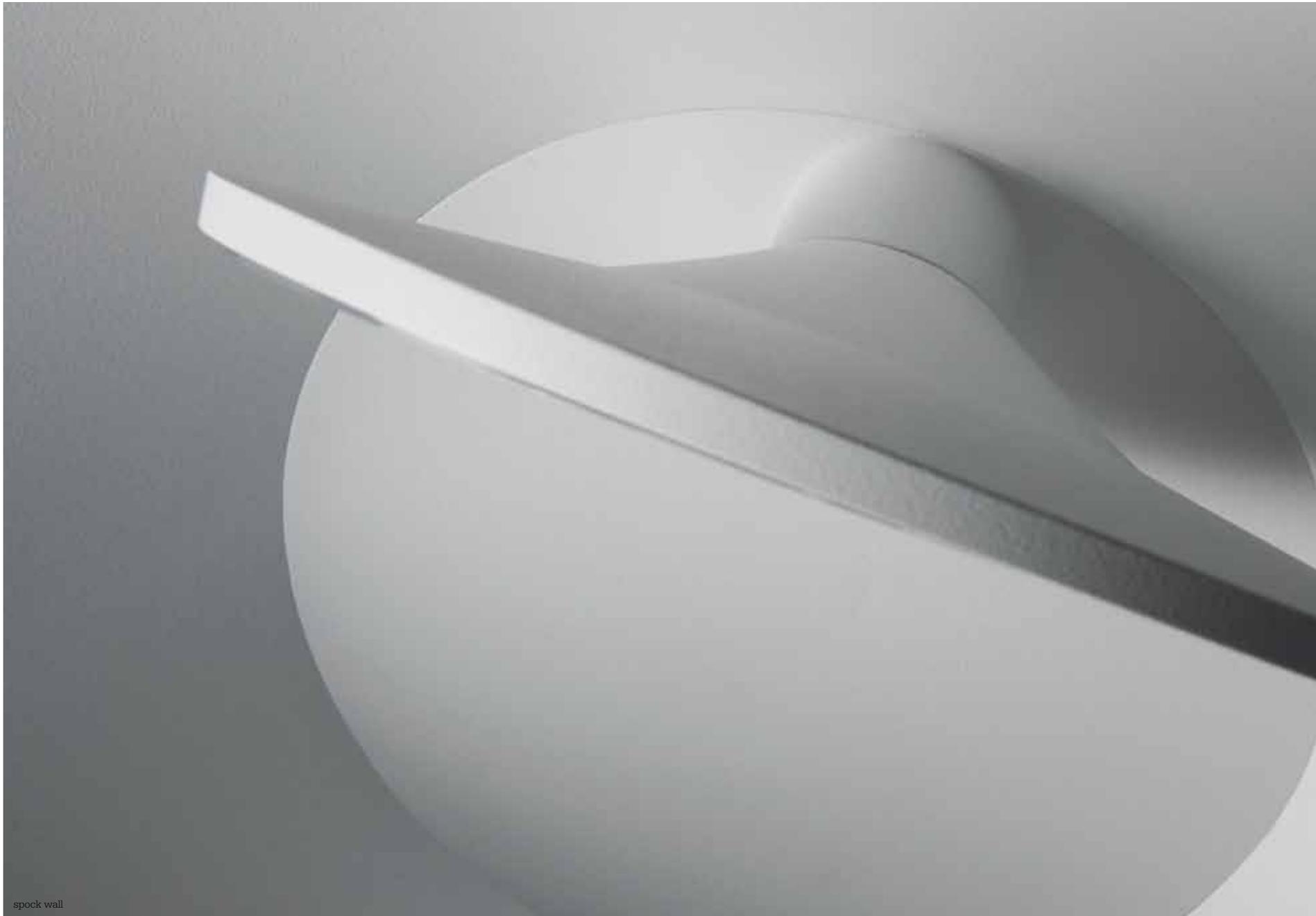
Where the traditional halogen spot gives up the ghost after 5000 hours, Scotty and Spock keep on burning for no less than 50 000 hours. (4166 12-hour days)

In other words, both Scotty and Spock have the same luminous intensity as the earlier conventional halogen light, but are much kinder to our planet and our wallets in terms of consumption and lifetime.

After all, the light of the future should make a difference.

Halogen	LED disc
5000	50 000 Lifetime (hours)
416	4166 Lifetime (days)
1.14	11.41 Lifetime (years)
3000	3000 Kelvin (color-temperature)





spock wall



DESIGN SCOTTY

SIMPLICITY IS THE ULTIMATE FORM
OF SOPHISTICATION
- LEONARDO DA VINCI

“An eye-catching, refined luminaire blending into the architecture.”

INTELLIGENCE MADE VISIBLE

Designers Couvreur & Devos have worked with Modular to create an architectural luminaire that gets back to bare basics: an asymmetric rotating, homogenous light source combined with an ingenious hinged joint enhanced by some perfectly executed fine details. Wiring and hinges are integrated seamlessly into the design so that the Scotty is an enhancement to any surroundings.

Following the successful launch of the Spock, Modular is now pushing the boundaries of the flat LED disc yet again. Meet Scotty, an eye-catching, refined luminaire that is able to blend into the architecture.





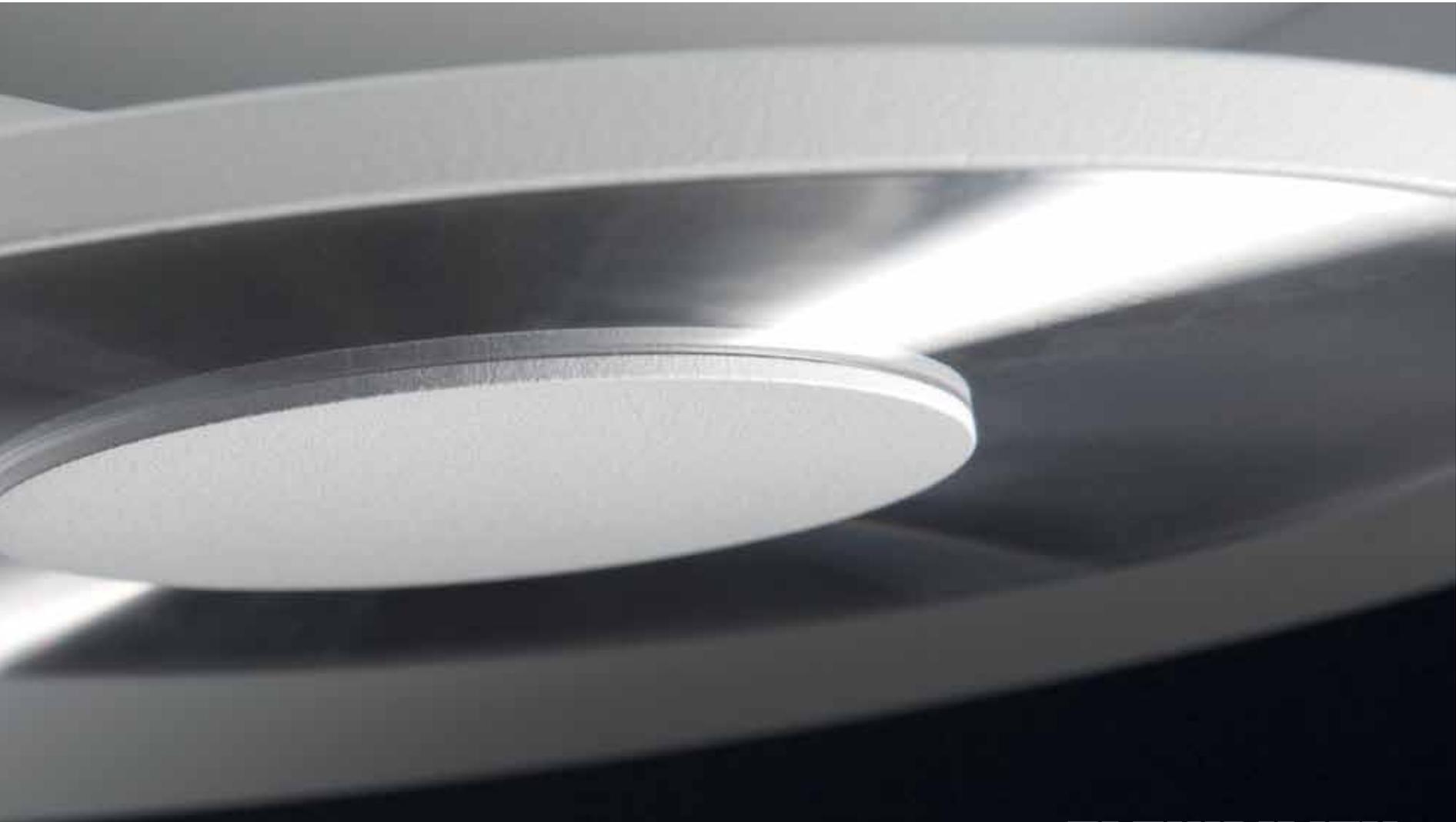












FLEXIBILITY SCOTTY

BE INFINITELY FLEXIBLE
AND CONSTANTLY AMAZED
- JASON KRAVITZ



SCOTTY

Scotty is what you would call a typical downlighter, a luminaire that aims its light beam downwards. Set deep inside and positioned asymmetrically in a chalice, its LED disc creates a powerful beam of light. The broad surface area helps cooling the LEDs and the light is never blinding because the optics prevent the light from shining directly into the eyes. This technical innovation gives Scotty a higher lumen output and longer service life.

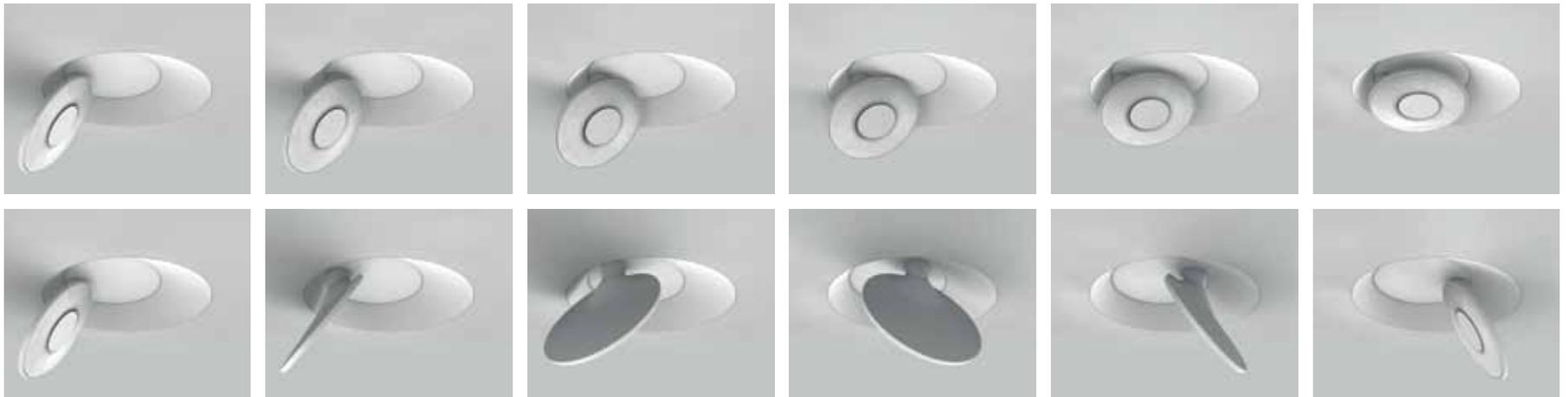


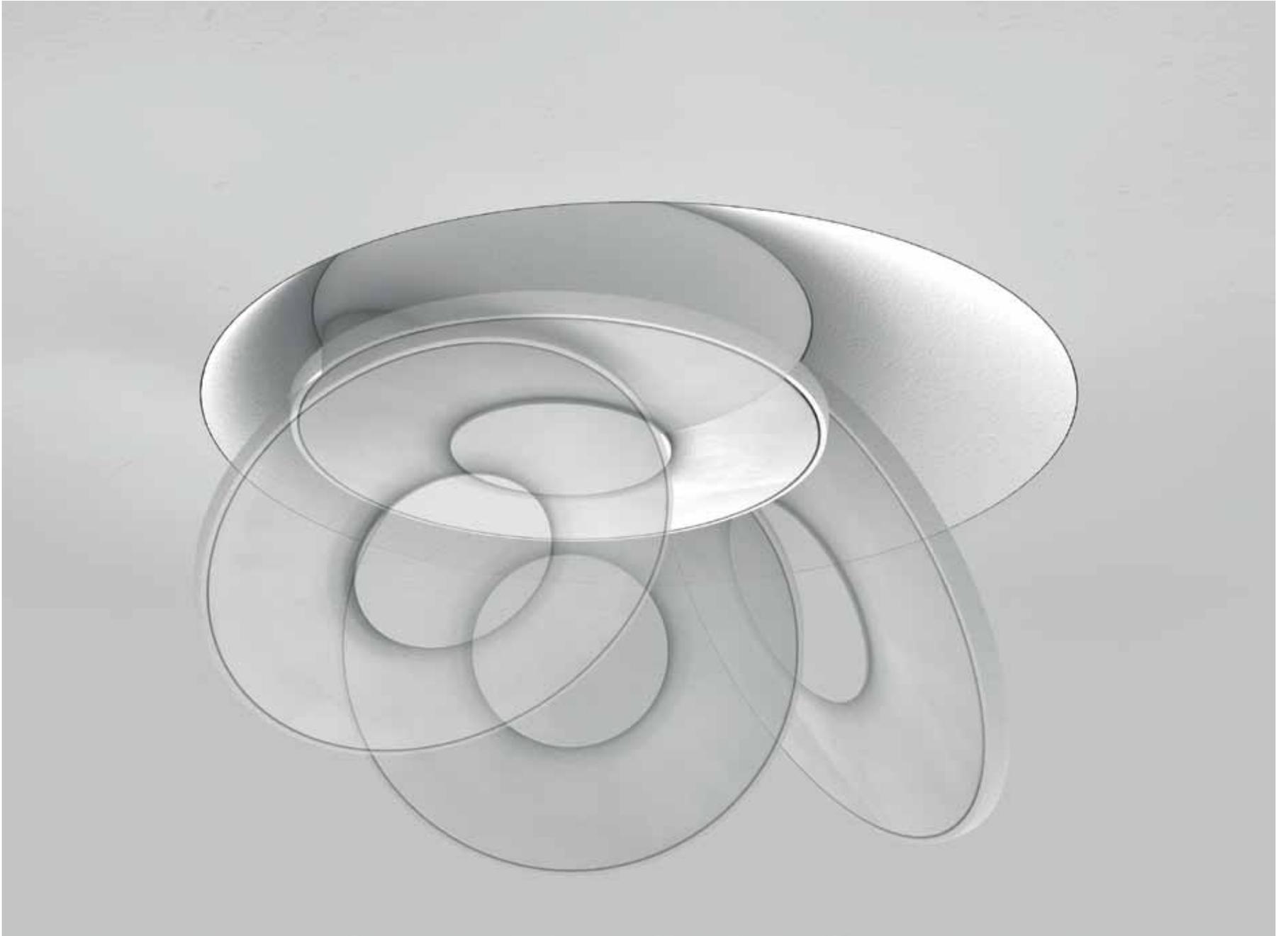
SCOTTY ADJUSTABLE

Scotty adjustable is suitable both as a downlighter and as a wall washer. The two rotation points of the Scotty adjustable truly are its dazzling feature: the asymmetrical hinge is a total new concept of rotation making sure the rotation of the LED disc doesn't spoil the clean design of the luminaire - on the contrary. Of course both LED disc and rotary plate are free to rotate independently from one another. A horizontal rotation of 360° and a vertical inclination of up to 60° provide unprecedented directionality. This flexibility guarantees an optimum wallwash effect or wall lighting.

ROTATION & INCLINATION

Scotty's adjustability offers huge modularity. The back plate as well as the special hinge each have a rotation of 360°. A maximum LED disc rotation of 60° is achieved thanks to the pivoting hinge.







Scotty **concrete** ceiling
Trimless / Plaster Finish

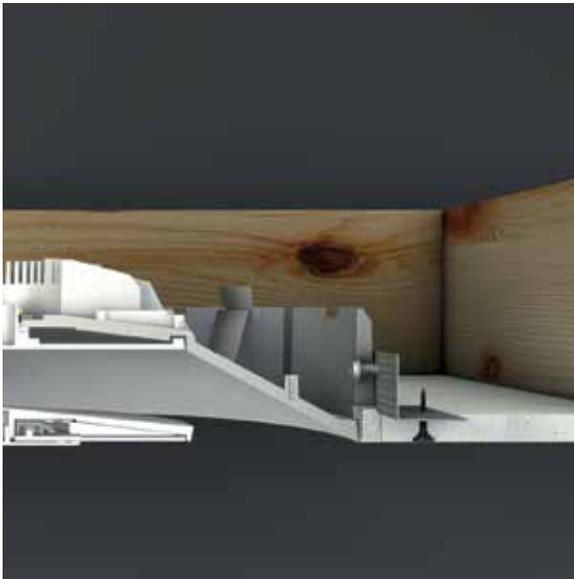
! requires conbox plaster finish trimless - 11799530



Scotty **concrete** ceiling
Trimless / Concrete Finish

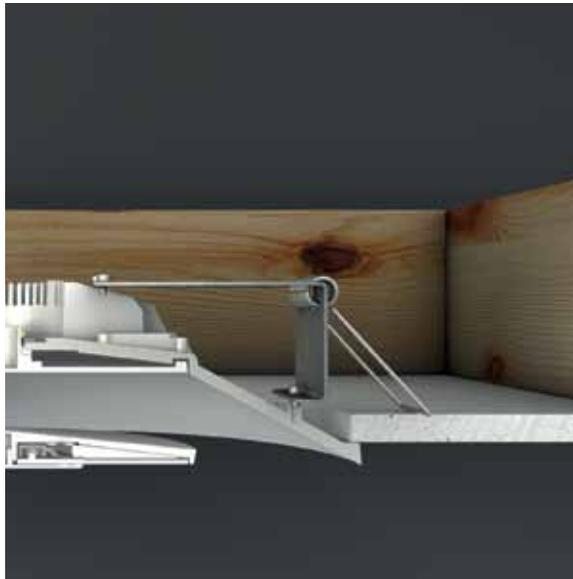
! requires conbox concrete finish trimless - 11799730





Scotty **false** ceiling
Trimless / Plaster Finish

! requires recessed ring trimless - 11799430



Scotty **false** ceiling
Flange / Plaster Finish

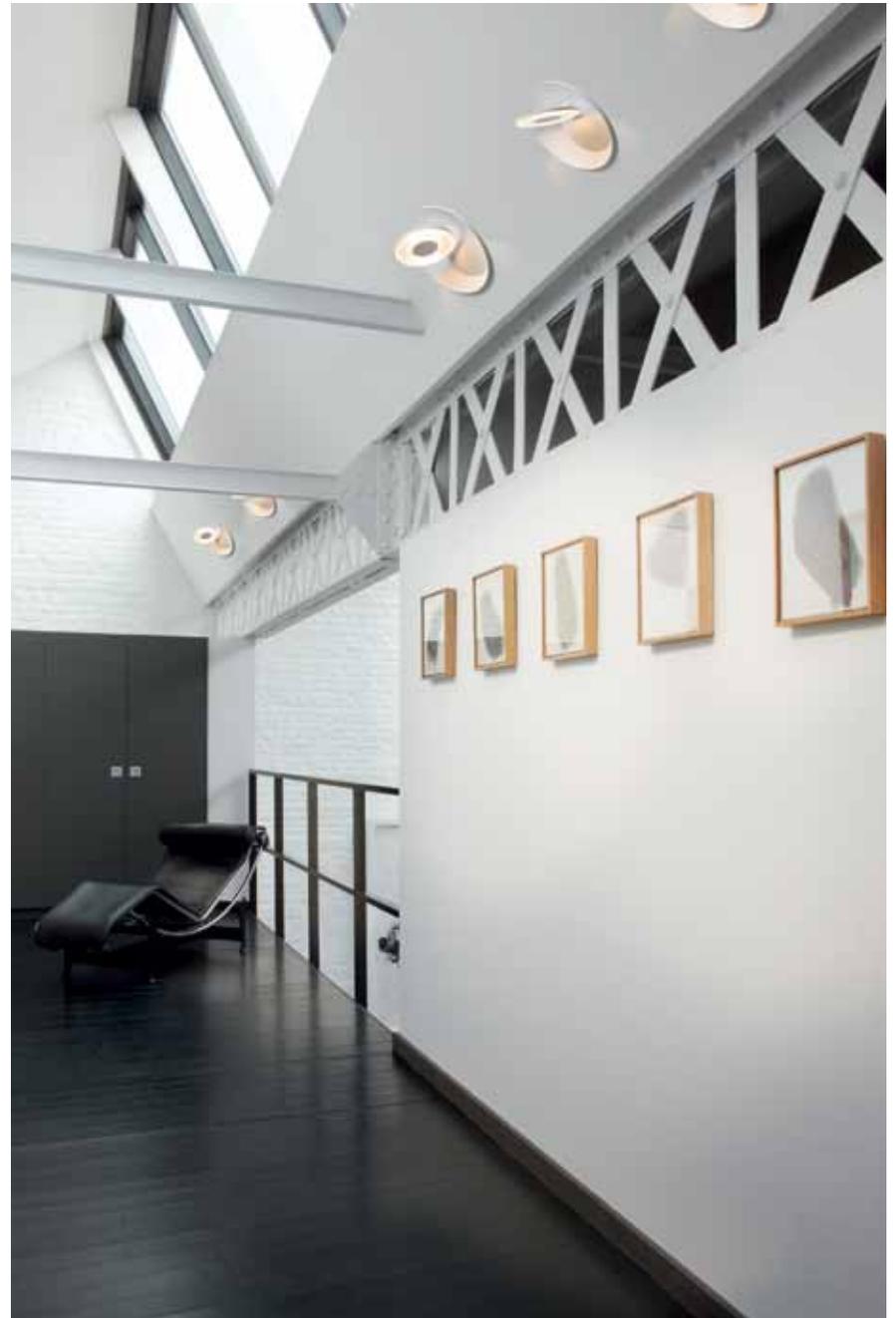


FINISHING POSSIBILITIES

Both Scotty and Scotty adjustable can be recessed in different ways, clearly demonstrating their modular character. When fully recessed (also known as trimless), the luminaire transitions seamlessly with the ceiling as though forming one whole, a revolution in architectural lighting. This edgeless version can be recessed in a false ceiling or a concrete structure. The Scotty can also be easily fitted partially flush in a false ceiling so that the luminaire is not as recessed and a subtly protruding edge remains visible on the ceiling.



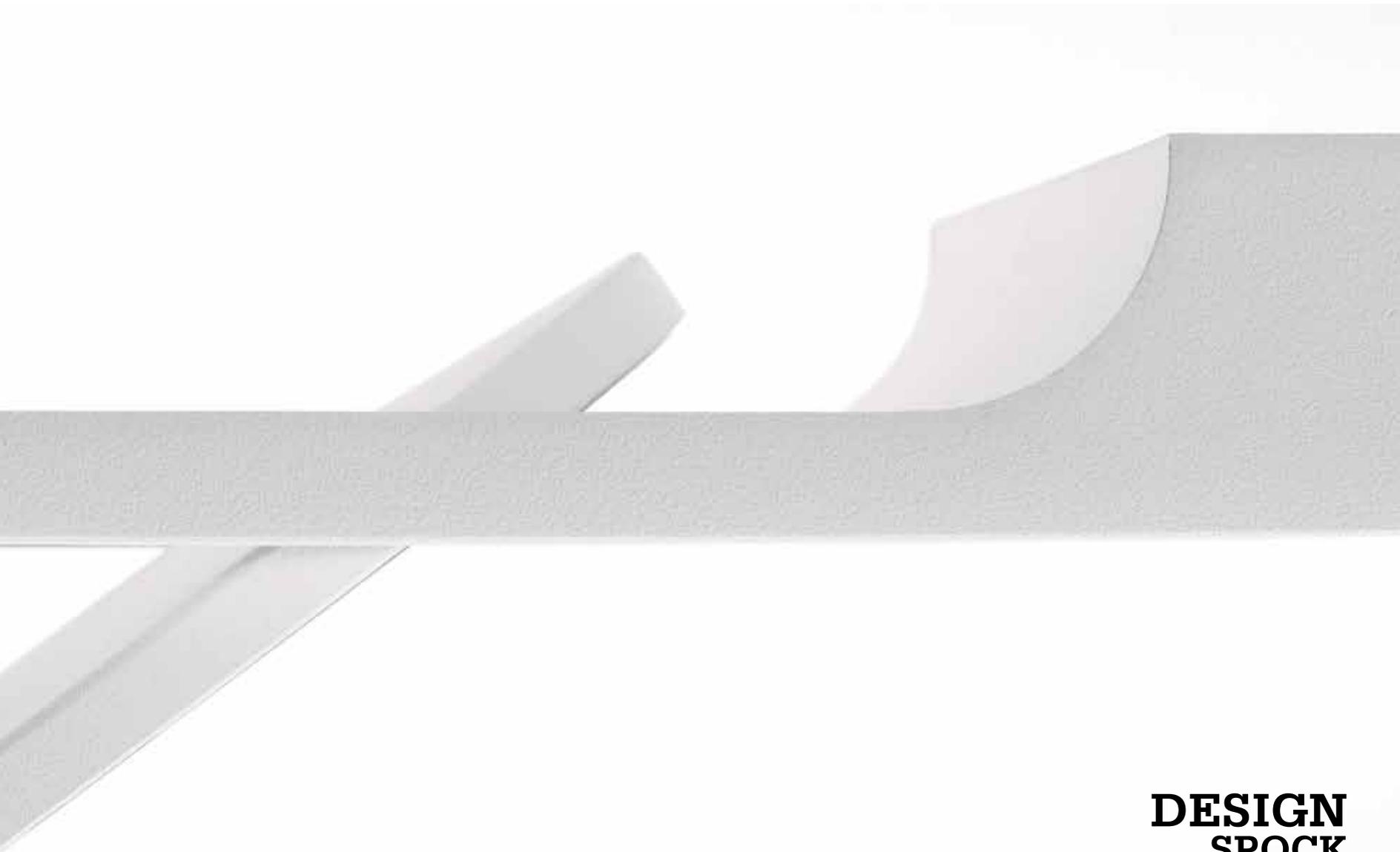








spock wall



DESIGN SPOCK

FASCINATING IS A WORD
I USE FOR THE UNEXPECTED
- SPOCK IN "STAR TREK - THE SQUIRE OF GOTHOS"



“Spock shines through an ingenious design, refined to the last detail.”

SLEEK INTELLIGENCE

The technological revolution taking place inside Spock does not imply aesthetics should suffer. Quite the reverse. Produced in cast aluminum with tactile powdercoating, Spock is a perfect example of minimalistic design by Couvreur & Devos.

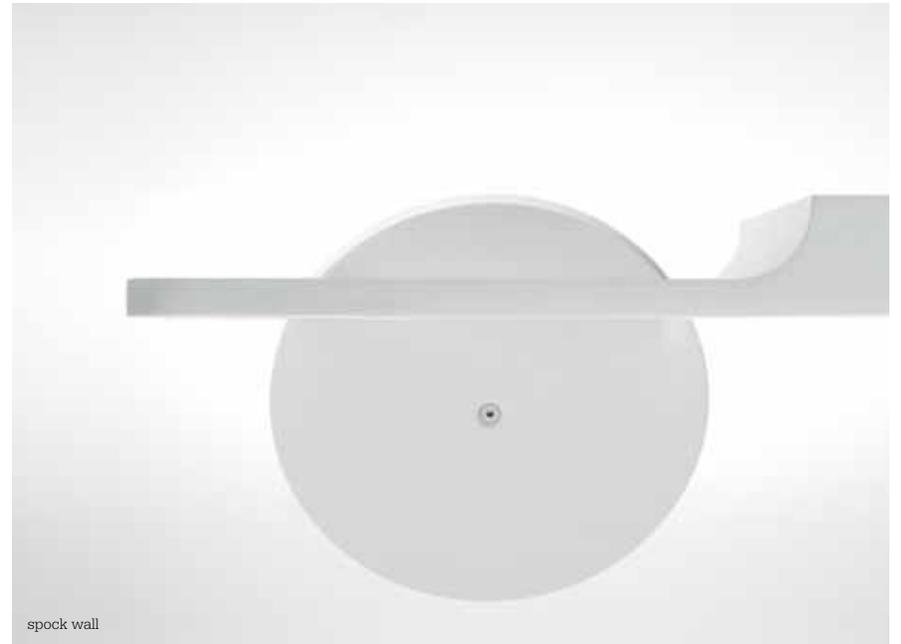
The result of painstaking design, it does not leave a single lead showing: either on the rotating LED disc incorporated into an attractive, chrome plated ring hinge, or at the mains connection at the base of the fitting. Spock shines through an ingenious design, refined to the last detail.

After all, the light of the future should make a difference.

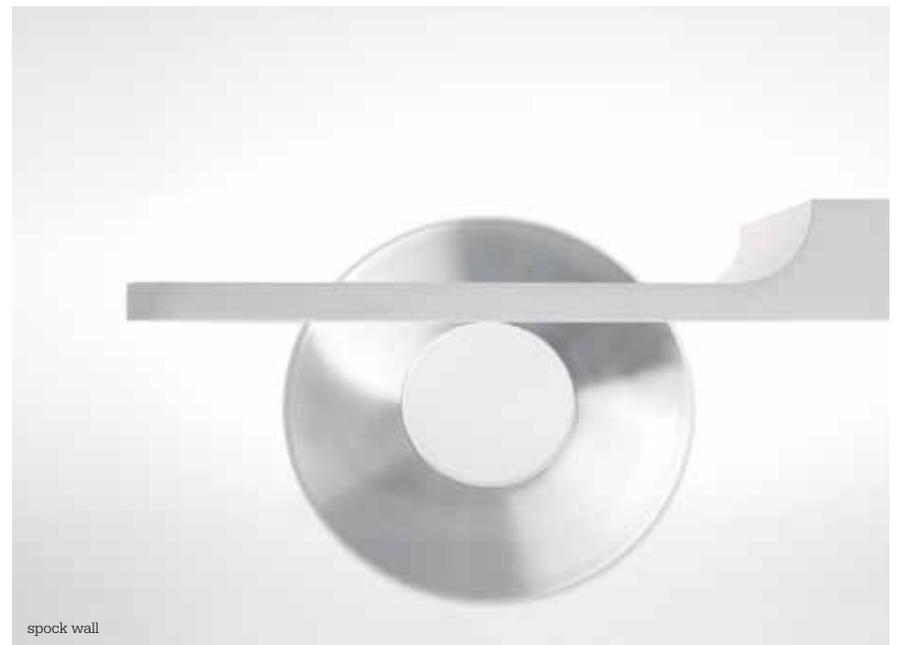




spock foot



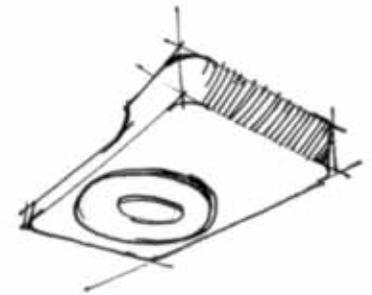
spock wall



spock wall







"The light of the future is a recognizable Modular concept: innovative, qualitative and contemporary."

FORM FOLLOWS FUNCTION

The designers' brief was to build a fixture that would push the boundaries in terms of design and modularity, as well as reinforce the new technology.

To achieve a perfect symbiosis, it was essential to combine the shape of Spock and the technology of the disc. In other words: the form follows the function of the technology, so that the slimness of the disc is accentuated even more.

Spock is to become a Modular icon, a stylish and timeless design with a high level of finish. The light of the future is a recognizable Modular concept: innovative, qualitative and contemporary.





FLEXIBILITY SPOCK

I'M SO FAST THAT LAST NIGHT
I TURNED OFF THE LIGHT SWITCH
IN MY HOTEL ROOM
AND WAS IN BED BEFORE
THE ROOM WAS DARK
- MUHAMMAD ALI



FLEXIBLE LIVING AND WORKING

Spock has been designed to take the flexible needs of modern users into account. The flat light disc can be turned 359° and pointed up or down. As a result, Spock will keep casting just the right amount of light on your desk at the office or at home in the living room, even if you move it. Furthermore, it can easily be fitted on walls, ceilings or a track system.

As you adapt to the times, so does Spock. Flexibility and timeless design are rolled into one and the same fixture to meet the new needs of this era.



ROTATION & INCLINATION

As truly befits the light of the future, the Spock offers huge modularity. The light disc of the Spock is mounted in a unique asymmetrical hinge so that it not only rotates 359° around its own axis, but also moves upwards and downwards by -10 /+45°.



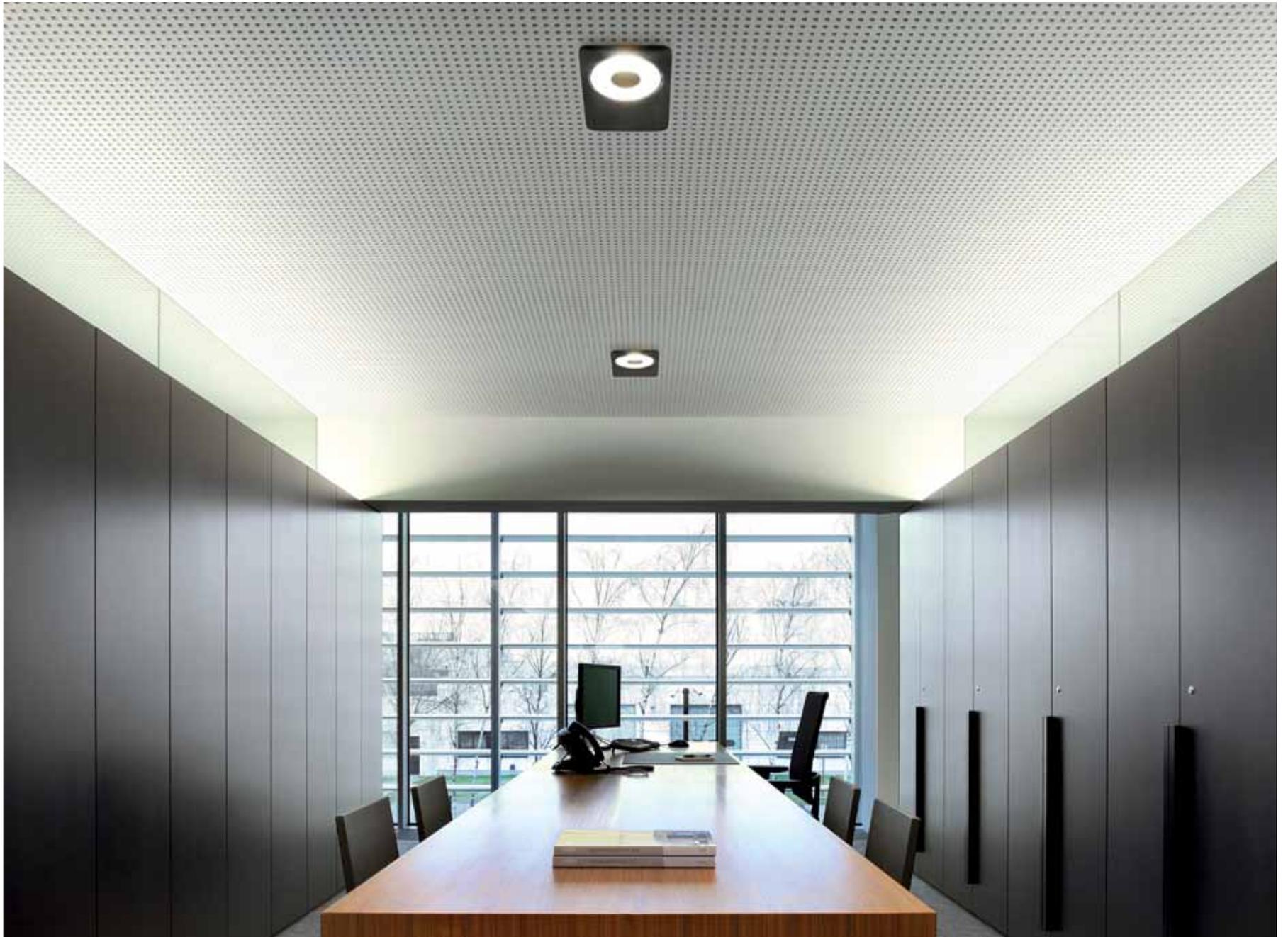
FOOT, TRACK & WALL

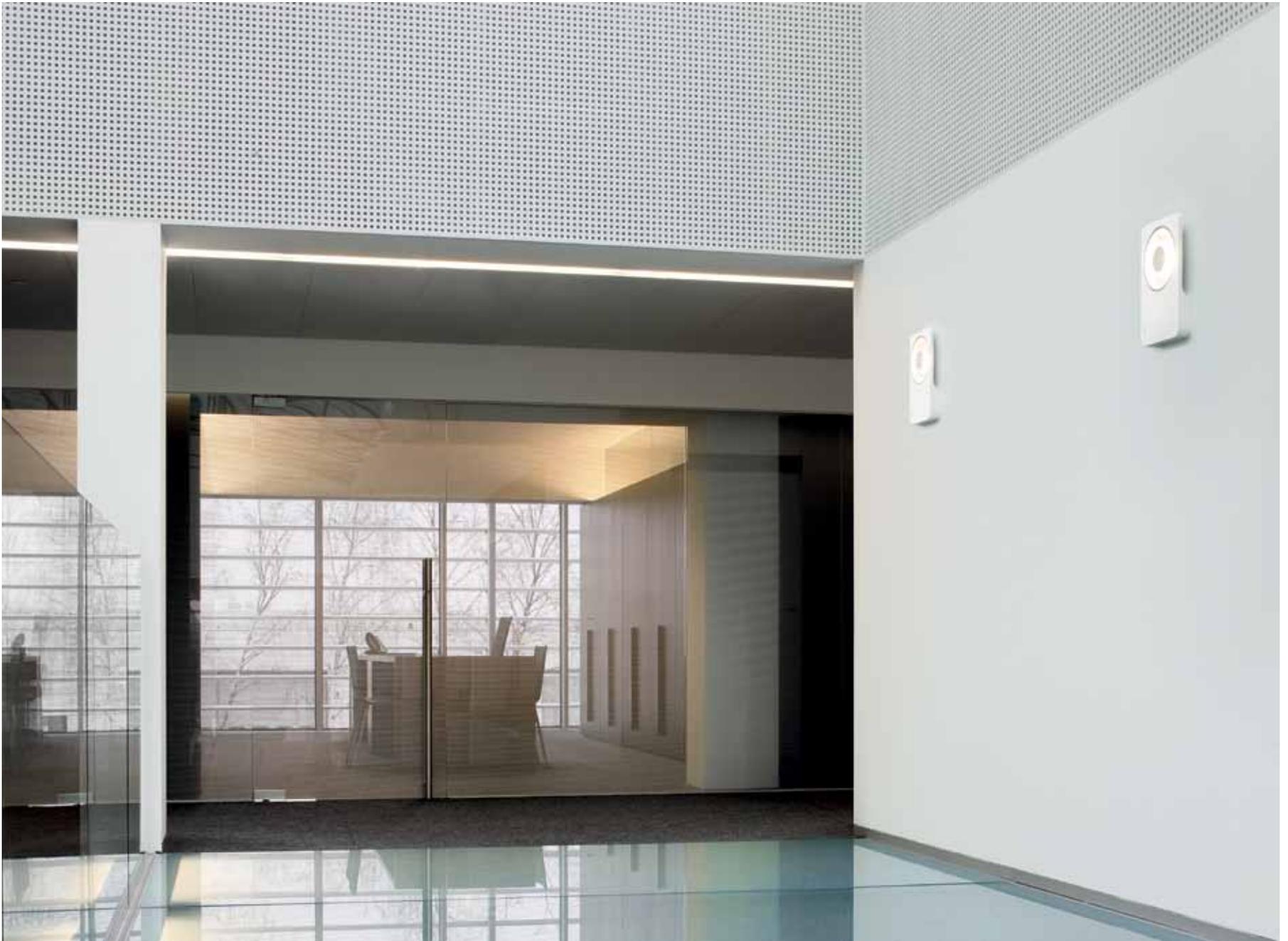
Do you intend to place a number of Spocks next to each other horizontally on a wall? Or would you prefer them on the ceiling, with or without a track? All these configurations are possible. This revolutionary fixture comes in three versions, all in black or white finish: foot, track and wall. The whole base of the fixture is attached to the surface, whether it is a wall, ceiling or track, so that all elements are neatly concealed.





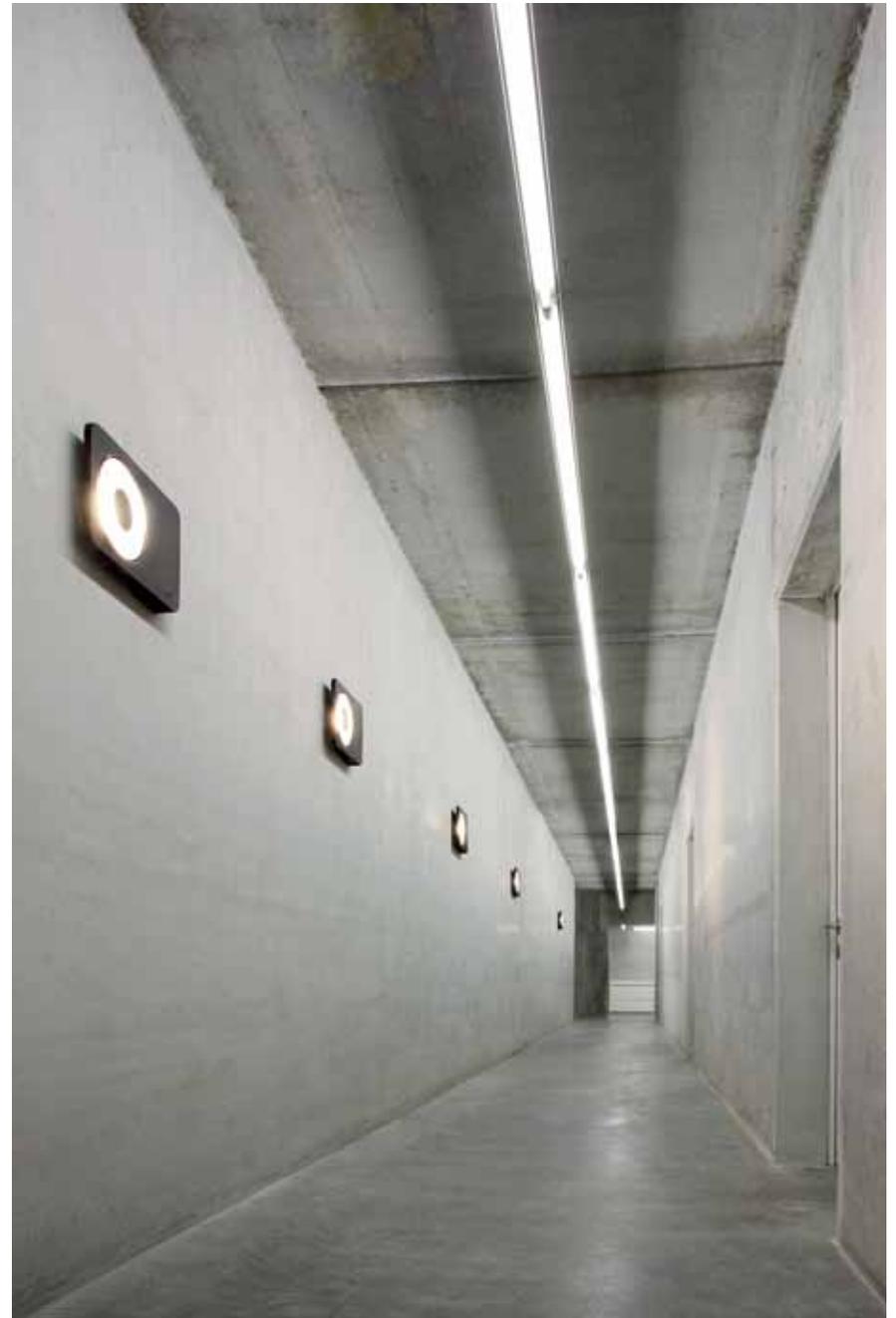






















TECHNOLOGY

I START WHERE THE
LAST MAN LEFT OFF
- THOMAS A. EDISON

"The thin LED housing, with a cross-section of barely 12.5 mm, contains 16 high-quality LEDs."

INVISIBLY INGENIOUS

The LED technology and the design are the result of years of research. In addition to its revolutionary inner works, the LED disc is incorporated into a truly innovative design. An asymmetrical hinge joint allows it to rotate horizontally over 359° and vertically over -10°/+45° for Spock and 60° for Scotty. This may turn out to be the first valid substitute for the well-established halogen spotlight.

The thin LED housing, with a cross-section of barely 12.5 mm, contains 16 high-quality LEDs, aligned flat towards the outer edge of the circumference so that they are concealed from the eye. Using a reflector and redirecting plate, the light is diverted and focused via a lens into a powerful beam with an angle of 32° or 56°.

Thanks to its large emitting surface, the disc's light is less intense and therefore not harmful to the eye, a problem that frequently plagues current LED lighting. What is more, the large surface of the disc enables optimum cooling for the LEDs, ensuring a long life of 50 000 hours. The LED engine is fitted with a built-in thermal sensor. When it exceeds a certain temperature under extreme conditions, the LED disc is dimmed, so that durability is guaranteed even under exceptional circumstances.

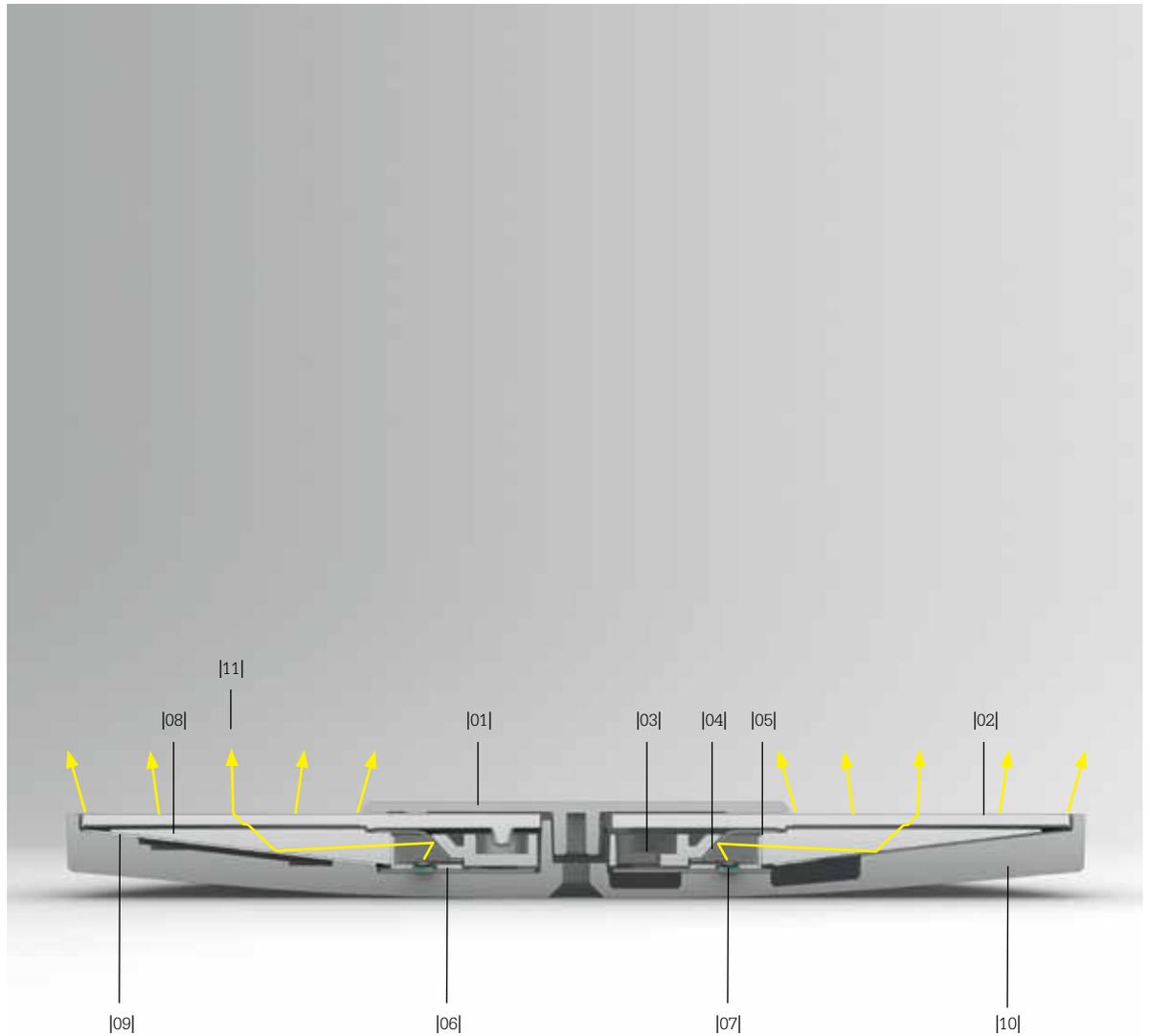
After all, the light of the future should make a difference.



THE GENESIS OF THE LED DISC

The LED disc really heralds a true revolution: while previously light could only be focused by a point light source, we have succeeded in generating a clearly outlined light bundle out of a broad emission surface. It contains new technology and fulfils the classic requirements of a lighting system: modular in use, a steady light source and high-end design to top it all.

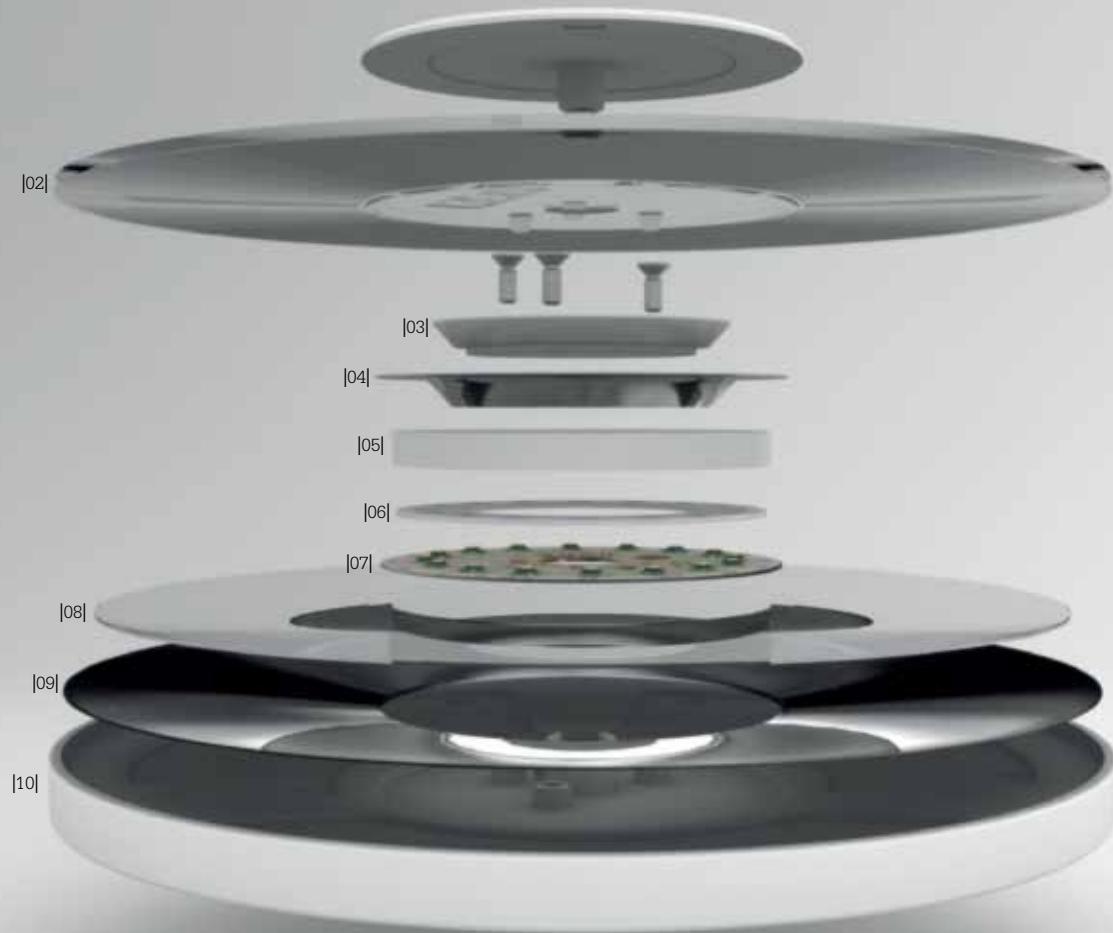
What's more, because the LED disc is energy conscious and therefore kind to our planet, it complies with standards for a greener tomorrow.



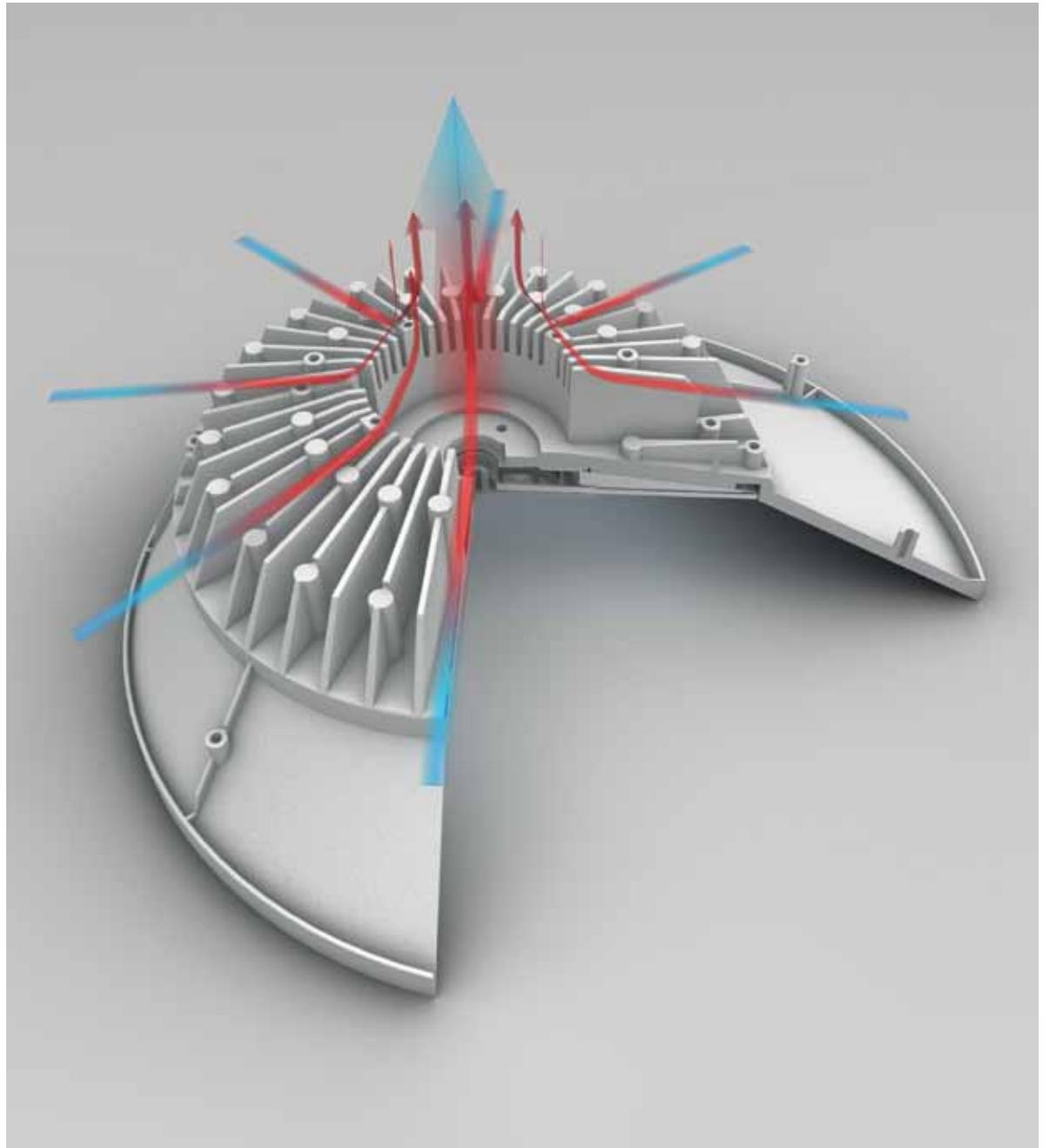
- 01| CAP
- 02| REDIRECTION PLATE
- 03| CLAMPING PART
- 04| CENTRAL REFLECTOR

- 05| DIFFUSER
- 06| REFLECTING PLATE
- 07| PCB + LEDs
- 08| WEDGE DIFFUSER

- 09| WEDGE REFLECTOR
- 10| HOUSING
- 11| LIGHTBEAM



exploded view



KEEPING SCOTTY COOL

The cleverly engineered heat sink enables better heat dissipation, resulting in higher efficiency and light output. The blades give extra cooling surface and therefore act as the main heat sink.

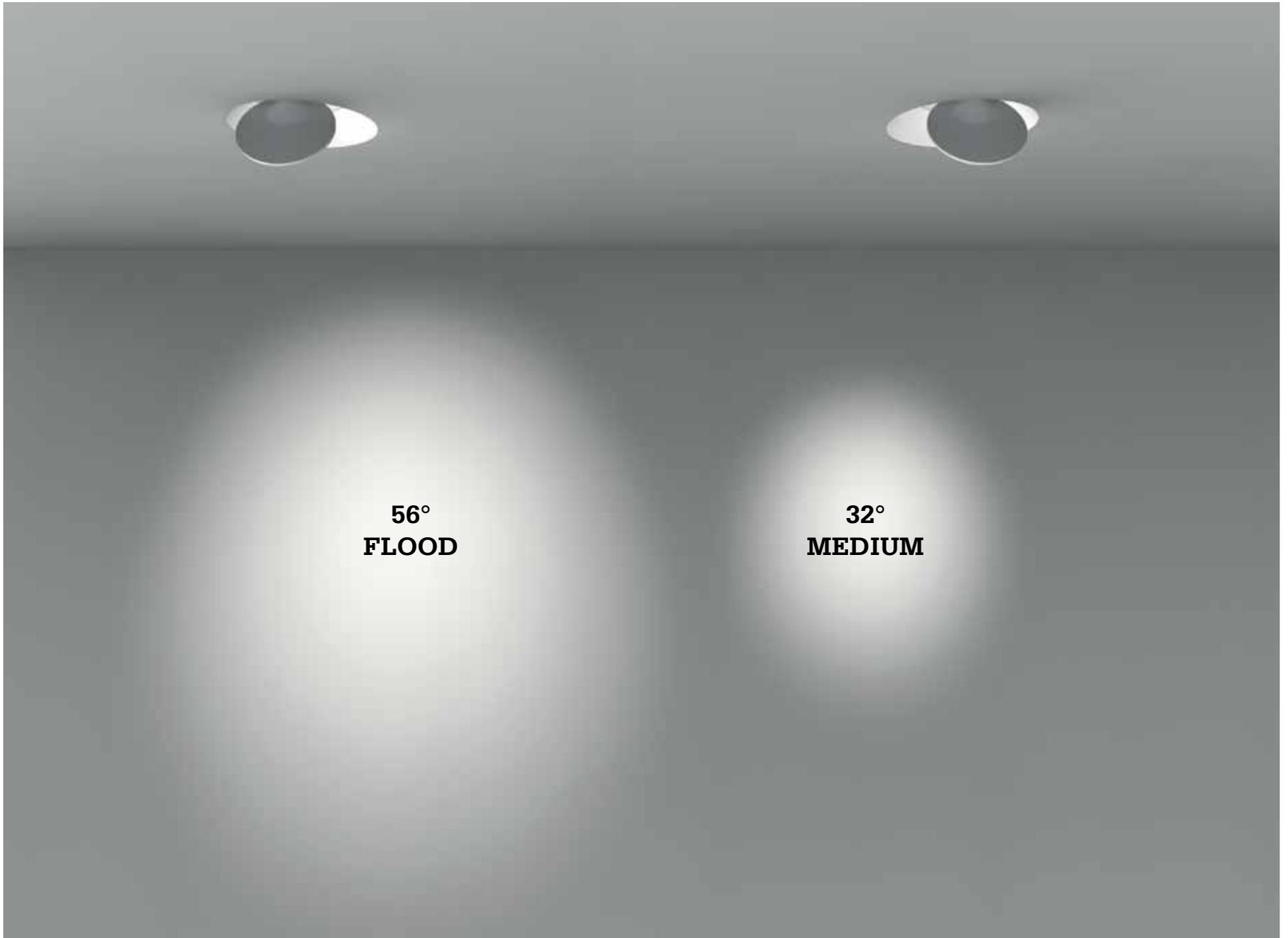


exploded view

01| CHALICE
02| WEDGE REFLECTOR
03| WEDGE DIFFUSER
04| REFLECTING PLATE

05| DIFFUSER
06| CENTRAL REFLECTOR
07| CLAMPING PART
08| SCREWS

09| REDIRECTION PLATE
10| CAP





MEDIUM OR FLOOD

The LED disc is available in medium and flood versions. The flood is mainly designed for more general lighting effects, while the medium version is ideal to cast light at the walls or at different art objects in a room.





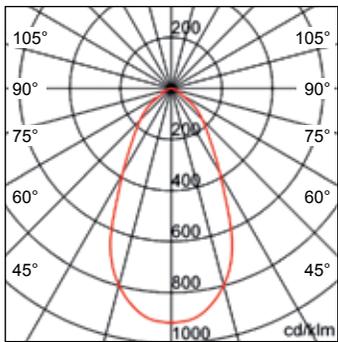
WARM & NEUTRAL

In line with contemporary lighting trends, Scotty and Spock are available in a 3000 Kelvin version (warm white) as well as a 4000 Kelvin (neutral white); these values indicate the color temperature. As a comparison: a classic household halogen gives off a light warmth of 3000 Kelvin.

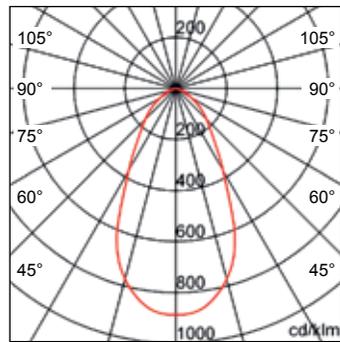
SCOTTY BEAM & POLAR DIAGRAMS

H(m) - distance in meter between the light source and the reference level
 Eav(lx) - average illuminance level
 D(m) - diameter of the light source at half intensity
 η - efficiency

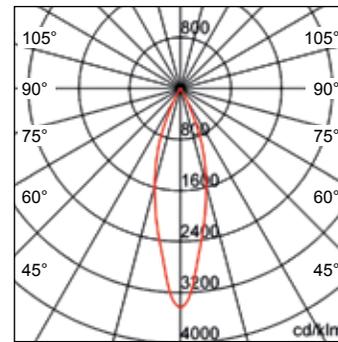
neutral white flood 1200lm



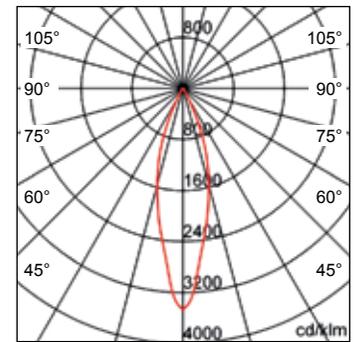
neutral white flood 1400lm



neutral white medium 1200lm



neutral white medium 1400lm



H(m)	Eav(lx)	D(m)
1.00	561	1.02
2.00	140	2.04
3.00	62	3.06
4.00	35	4.08
5.00	22	5.10

1090 lm half-value angle 54.1° $\eta=100\%$

H(m)	Eav(lx)	D(m)
1.00	623	1.02
2.00	156	2.04
3.00	69	3.07
4.00	39	4.09
5.00	25	5.11

1251 lm half-value angle 54.2° $\eta=100\%$

H(m)	Eav(lx)	D(m)
1.00	2224	0.48
2.00	556	0.96
3.00	247	1.45
4.00	139	1.93
5.00	89	2.41

1107 lm half-value angle 27.1° $\eta=100\%$

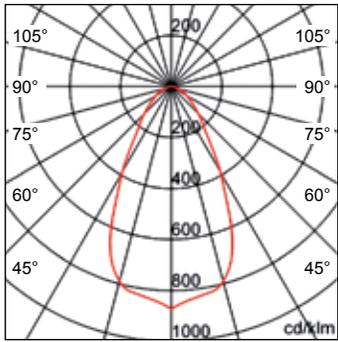
H(m)	Eav(lx)	D(m)
1.00	2527	0.48
2.00	632	0.96
3.00	281	1.43
4.00	158	1.91
5.00	101	2.39

1255 lm half-value angle 26.9° $\eta=100\%$

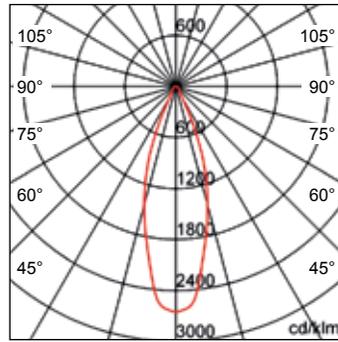
SPOCK BEAM & POLAR DIAGRAMS

H(m) - distance in meter between the light source and the reference level
 Eav(lx) - average illuminance level
 D(m) - diameter of the light source at half intensity
 η - efficiency

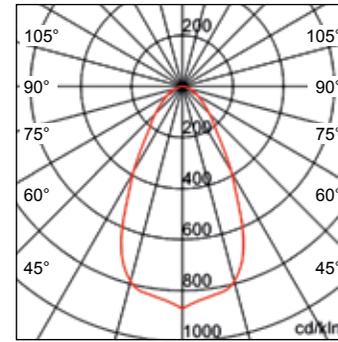
neutral white flood 1200lm



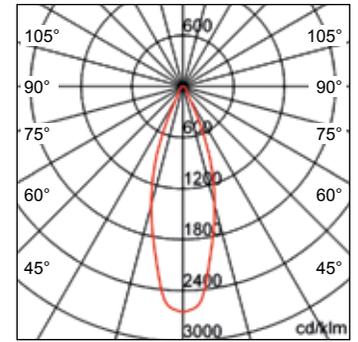
neutral white medium 1200lm



warm white flood 1200lm



warm white medium 1200lm



H(m)	Eav(lx)	D(m)
1.00	389	1.06
2.00	97	2.13
3.00	43	3.19
4.00	24	4.26
5.00	16	5.32

801 lm half-value angle 56.1° $\eta=100\%$

H(m)	Eav(lx)	D(m)
1.00	1257	0.58
2.00	314	1.16
3.00	140	1.74
4.00	79	2.32
5.00	50	2.89

795 lm half-value angle 32.3° $\eta=100\%$

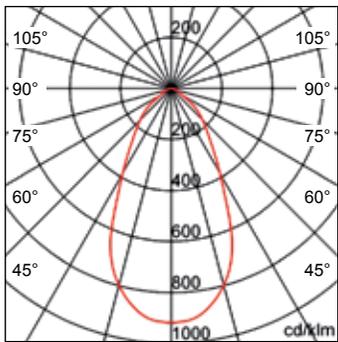
H(m)	Eav(lx)	D(m)
1.00	339	1.06
2.00	85	2.13
3.00	38	3.19
4.00	21	4.26
5.00	14	5.32

697 lm half-value angle 56.1° $\eta=100\%$

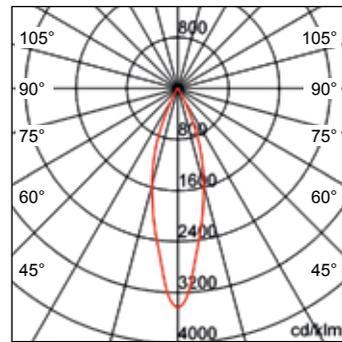
H(m)	Eav(lx)	D(m)
1.00	1094	0.58
2.00	273	1.16
3.00	122	1.74
4.00	68	2.32
5.00	44	2.89

692 lm half-value angle 32.3° $\eta=100\%$

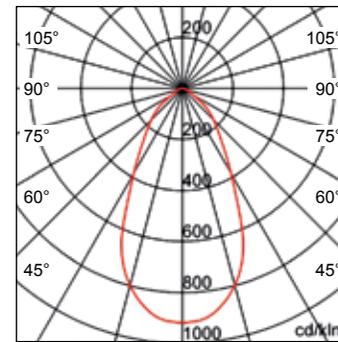
**warm white flood 1200lm
dimmable**



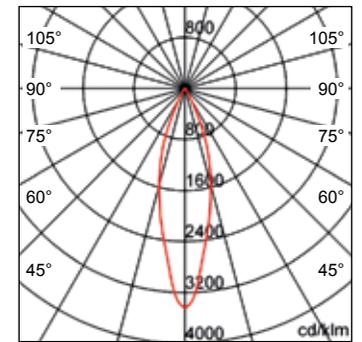
**warm white flood 1400lm
dimmable**



**warm white medium 1200lm
dimmable**



**warm white medium 1400lm
dimmable**



H(m)	Eav(lx)	D(m)
1.00	561	1.02
2.00	140	2.04
3.00	62	3.06
4.00	35	4.08
5.00	22	5.10

1090 lm half-value angle 54.1° η=100 %

H(m)	Eav(lx)	D(m)
1.00	2224	0.48
2.00	556	0.96
3.00	247	1.45
4.00	139	1.93
5.00	89	2.41

1107 lm half-value angle 27.1° η=100 %

H(m)	Eav(lx)	D(m)
1.00	573	1.02
2.00	143	2.04
3.00	64	3.06
4.00	36	4.08
5.00	23	5.10

1112 lm half-value angle 54.1° η=100 %

H(m)	Eav(lx)	D(m)
1.00	1947	0.48
2.00	487	0.96
3.00	216	1.45
4.00	122	1.93
5.00	78	2.41

969 lm half-value angle 27.1° η=100 %





PRODUCT OVERVIEW

Spock foot LED <1200lm GI



1x LED-disc incl.
LED gear incl.
adjustability h 359° v -10°/+45°

	not dimmable				Dali/Pushdim			
	warm white		neutral white		warm white		neutral white	
	medium	flood	medium	flood	medium	flood	medium	flood
black struc	11390132	11390232	11390332	11390432	11390532	11390632	11390732	11390832
white struc	11390109	11390209	11390309	11390409	11390509	11390609	11390709	11390809

Spock wall LED <1200lm GI



1x LED-disc incl.
LED gear incl.
adjustability h 359° v -10°/+45°

	not dimmable				Dali/Pushdim			
	warm white		neutral white		warm white		neutral white	
	medium	flood	medium	flood	medium	flood	medium	flood
black struc	11391132	11391232	11391332	11391432	11391532	11391632	11391732	11391832
white struc	11391109	11391209	11391309	11391409	11391509	11391609	11391709	11391809

Spock track LED <1200lm GI



1x LED-disc incl.
LED gear incl.
adjustability h 359° v -10°/+45°

! not applicable with suspended track

	warm white		neutral white	
	medium	flood	medium	flood
	black struc	11392132	11392232	11392332
white struc	11392109	11392209	11392309	11392409

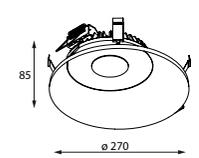




Scotty LED 1400lm

1x LED-disc incl.
LED gear not incl.
aperture \varnothing 288 h 110 (trimless) / \varnothing 258 h 100 (non-trimless)

! 11799830 LED gear 80V/45W max. 700mA
! 11799930 LED gear Dali/Pushdim 80V/45W max. 700mA
! recessed frame/conbox - see accessories



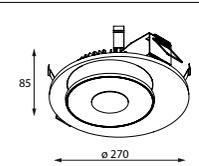
	warm white		neutral white	
	medium	flood	medium	flood
black struc	11790032	11790132	11790232	11790332
white struc	11790009	11790109	11790209	11790309

eco 1.60 960°C

Scotty adjustable LED 1200lm

1x LED-disc incl.
LED gear not incl.
adjustability h 360° v 60°
aperture \varnothing 288 h 90 (trimless) / \varnothing 258 h 80 (non-trimless)

! 11799830 LED gear 80V/45W max. 700mA
! 11799930 LED gear Dali/Pushdim 80V/45W max. 700mA
! recessed frame/conbox - see accessories



	warm white		neutral white	
	medium	flood	medium	flood
black struc	11793032	11793132	11793232	11793332
white struc	11793009	11793109	11793209	11793309

eco 2.00 960°C

Scotty accessories**False ceiling - trimless installation & plaster finish**

11799430 recessed ring \varnothing 245

Concrete ceiling - trimless installation & plaster finish

11799530 conbox plaster finish trimless
(recessed frame included)

Concrete ceiling - trimless installation & concrete finish

11799730 conbox concrete finish trimless
(recessed frame included)



MODULAR DISTRIBUTION LIST

Main office – Belgium

(for general information and sales network addresses in other countries)

Modular Lighting Instruments nv | Armoedestraat 71 | 8800 Roeselare | Belgium

Tel: +32 (0)51 26 56 56 Fax: +32 (0)51 22 80 04

welcome@supermodular.com | www.supermodular.com

Denmark

Luceplan Scandinavia | Klubjensvej 22, Pakhus 48 – Frihavnen | 2100 Copenhagen

Tel: +45 3613 2100 Fax: +45 3613 2101

info@luceplan.net | www.supermodular.dk

France

Modular Lighting Paris | 31, rue du Mail | 75002 Paris | France

Tel: +33 1 45 42 24 25 Fax: +33 1 45 42 43 20

bonjour@supermodular.com | www.supermodular.fr

Italy

Luceplan SpA | Via E.T. Moneta 40 | 20161 Milano | Italy

Tel: +39 02 662421 Fax: +39 02 66203400

info@luceplan.com | www.supermodular.it

Showroom:

Via Tortona 37 | 20144 Milano | Italy

Japan

Modular Lighting Japan | Nakazawa Bldg. 1-15-16-4F | Nishiazabu, Minato-ku | Tokyo 106-0031 |

Japan

Tel: +81-357 75 25 11 Fax: +81-357 75 25 12

welcome@modularjp.com

The Netherlands

Modular Lighting Nederland BV | Bouwerij 54 | 1185 XX Amstelveen | The Netherlands

Tel: +31 (0)20 347 30 47 Fax: +31 (0)20 347 30 48

info@modular.nl | www.modular.nl

Norway

Modular Lighting Norway AS | Østre Aker vei 207 | 0975 Oslo | Norway

Tel: +47 22 90 25 00 Fax: +47 22 90 25 25

post@eurolys.no

Russian Federation

Modular Lighting Instruments (Representation) | Mr. Rudy Van Hoof | Moscow

Tel: +7 919 991 30 73

rudy.vanhoof@supermodular.com

Spain

Modular Lighting Spain | P.G. Sant Joan 10 | 08010 Barcelona | Spain

Tel: +34 93 244 43 43 Fax: +34 93 265 59 63

modularspain@ca2l.com

Sweden

Modular Lighting Sweden | Stenyxegatan 17 | Box 9134 | 200 39 Malmö

Tel: +46 40-22 41 00 Fax: +46 40-22 12 85

office@ljusgruppen.se | www.supermodular.se

Showroom Stockholm:

Studio B3 | Barnhusgatan 3 | 111 23 Stockholm | Sweden

Switzerland

Modular Lighting Switzerland AG | Binzstrasse 23 | 8045 Zürich | Switzerland

Tel: +41 44 4564400 Fax: +41 44 4564409

info@modular-lighting.ch | www.modular-lighting.ch

United Kingdom

Modular Lighting U.K. | 22-24 St. Giles High Street | London WC2H 8TA | United Kingdom

Tel: +44 (0)20 7681 9933 Fax: +44 (0)20 7681 9943

all@modular-lighting.co.uk | www.modular-lighting.co.uk

Australia & New Zealand

Modular Lighting Australia | 189a St Johns Road | Glebe NSW 2037 | Australia

Tel: +61 2 9571 8800 Fax: +61 2 9571 8811

welcome@modularlighting.com.au

USA

Modular Lighting USA | 26 Broadway | NY 10004 New York | USA

Tel: +1 212 98.96.265 Fax: +1 212 46.24.349

info@luceplanusa.com

Showroom:

Luceplan Store | 47-49 Green Street | NY 10013 New York | USA

Tel: + 212 98.96.265 Fax: + 212 46.24.349

© Modular Lighting Instruments
April 2011
all rights reserved

Product design in cooperation with
CouvreurDevos.be

Contributing photography
References by Filip Dujardin & Studio BOA
Product photography by Frederik Vercruysse & Studio BOA
Studio photography Studio BOA

Copywriting: King George

maister[™]
concept & graphics by maister
www.maister.be

All models © by Modular Lighting Instruments NV – April 2011

Modular reserves the right to alter material, dimensions and characteristics without prior notice. Read installation instructions carefully. Technical information on the installation-instruction has precedence over the information in the catalogue and the legend. Weights indicated are fixture including packaging. Our general terms and conditions shall apply notwithstanding any stipulation to the contrary to all the orders and agreements with Modular. You can obtain a copy of these conditions on demand.

For information on the full Modular range, don't hesitate to contact us via
welcome@supermodular.com

