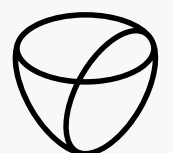


LICHTKANAL FAMILY

STRAIGHT AND FLEXIBLE



LTS



For a comprehensive product overview, please visit:
www.lts-light.com/en/products/lichtkanal/

LIGHT ALL ALONG THE LINE

With its stylishly stripped-down design language, the light line accentuates the forms of the architecture. It fits subtly into the building structures or deliberately stages each of them according to their chosen arrangement. Individuality is the design quality that is given maximum expression in the Lichtkanal family. By individually configuring the Lichtkanal, construction conditions are observed and requirements are fulfilled in terms of the lighting situation, features and controls.

Lichtkanal Comparison Page 4

Lichtkanal Configurator Page 6

Overview Page 8

In Detail

Lichtkanal 045 Page 10

Lichtkanal 060 Page 16

Lichtkanal 060 Direct-Indirect Page 22

Lichtkanal Curved Page 26

Lichtkanal 070 Page 28

Accessories Page 34

Covers Page 35

nanoOptix Page 36

Custom Solutions Page 40

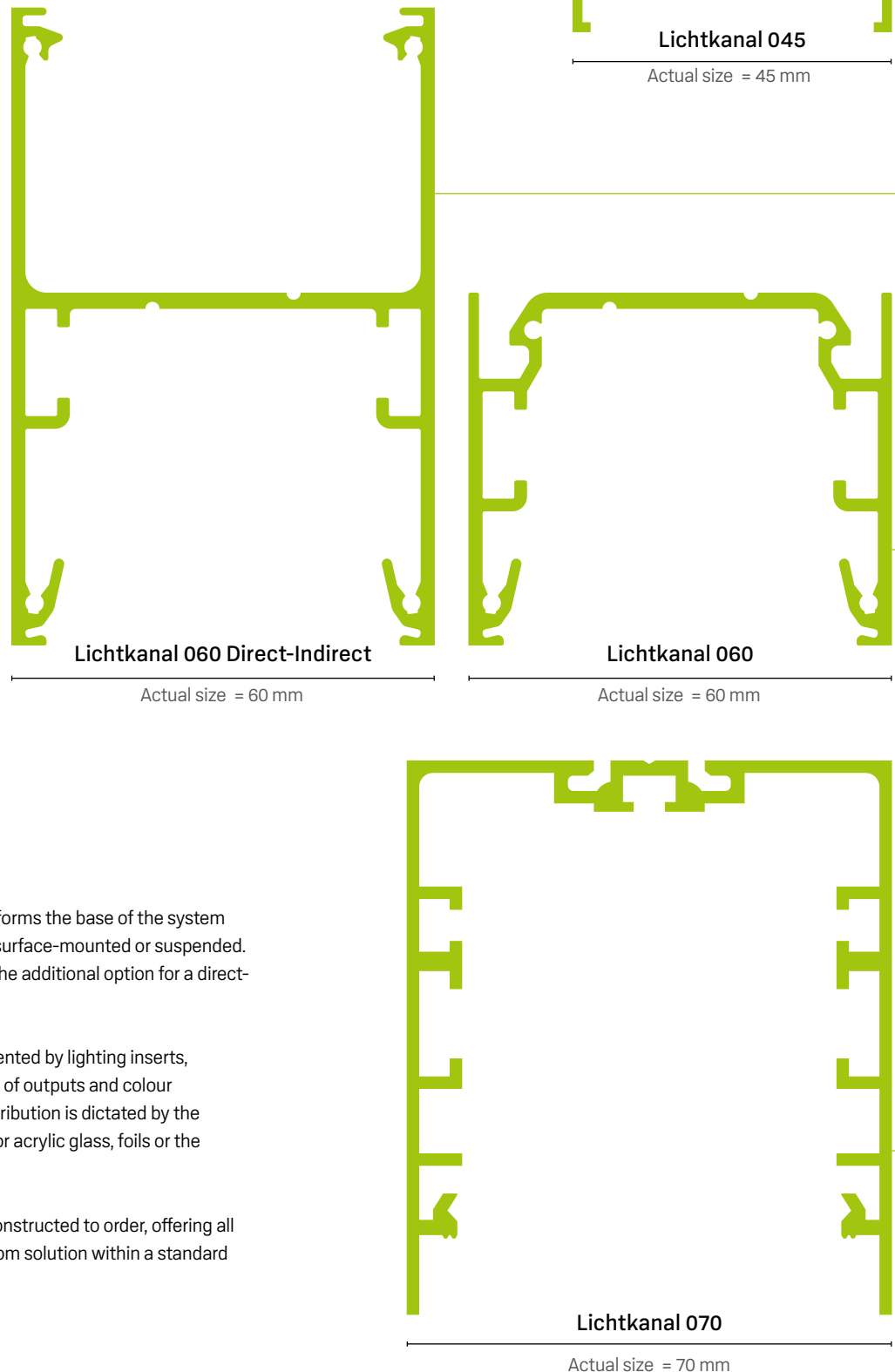
Refurbishment Page 42



Lichtkanal comparison

3 widths 4 types 1,000 of possibilities

Lichtkanal profiles are the base of the system



The Lichtkanal profile forms the base of the system and can be recessed, surface-mounted or suspended. Lichtkanal 060 offers the additional option for a direct-indirect distribution.

The profile is supplemented by lighting inserts, providing a wide range of outputs and colour temperatures. The distribution is dictated by the diffuser with options for acrylic glass, foils or the patented nanoOptix.

Lichtkanal is always constructed to order, offering all the flexibility of a custom solution within a standard range.



Modularity made easy

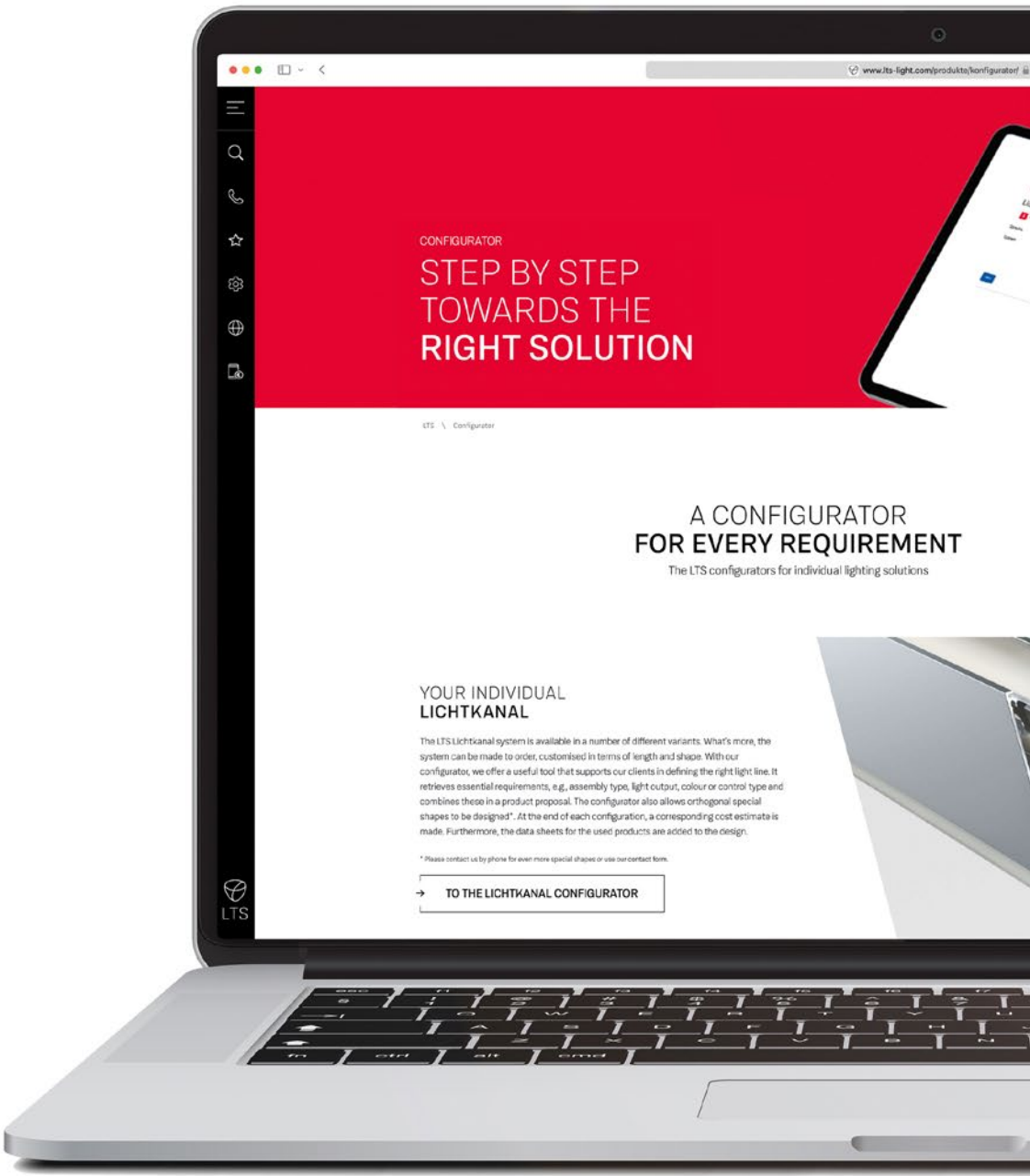
Step-by-step towards the right solution

With so many options at your disposal, the configurator helps you easily define the right solution for your specific application. Key requirements, such as mounting type, colour temperature, colour or controls are obtained and summarised in a product proposal. Furthermore, it enables orthogonal special variants to be created. Each design also comes with the data sheets of the items used and a cost estimate.

You can find the configurator online at:
app.lts-light.com/lichtkanal-en



Save time in lighting design:
You can now transfer ROLFz files directly from the configurator to your Relux design using drag-and-drop.

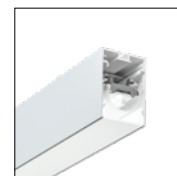


9 steps of configuration



- System 01
- Mounting type 02
- Radiation characteristic 03
- Colour 04
- Control 05
- Colour temperature 06
- Wattage & luminous flux 07
- Shape 08
- Outer length 09

Everything at a glance



Options for the Lichtkanal family

The Lichtkanal family is characterised by its modularity. For a simple overview, this matrix outlines which options are available in the standard range of the Lichtkanal 045, 060 and Lichtkanal 070 lighting systems.

Please contact us for any special requests that go beyond the scope of the standard product series and range of options. For more detailed information please see page 40.

Lichtkanal 045

| Mounting styles | Surface-Mounted | Pendant | Wall | Plasterboard Recessed | Concrete Recessed | Plasterboard Recessed Trimless | Concrete Recessed Trimless |
|---------------------------------------|---|---------|---------|-----------------------|-------------------|--------------------------------|----------------------------|
| Cover | | | | | | | |
| Acrylic opal glass flush | • | • | • | • | • | • | • |
| Acrylic opal glass protruding | • | • | • | • | • | • | • |
| Acrylic prismatic glass flush | • | • | • | • | • | • | • |
| Wide beam diffuser foil | | | | | | | |
| nanoOptix foil | | | | | | | |
| Choc lighting module | • | • | • | • | • | • | • |
| Colour | | | | | | | |
| black | • | • | • | • | • | • | • |
| silver anodised | • | • | • | • | • | • | • |
| white | • | • | • | • | • | • | • |
| RAL | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| Colour temperature | | | | | | | |
| 2700 K | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 3000 K | • | • | • | • | • | • | • |
| 4000 K | • | • | • | • | • | • | • |
| 5000 K | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| Controls | | | | | | | |
| DALI | • | • | • | • | • | • | • |
| Tunable White Light (TWL) | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| PiLED (TWPI) | | | | | | | |
| Emergency Lighting* | | | | | | | |
| Outer dimensions (W x H in mm) | | | | | | | |
| | 45 x 60 | 45 x 60 | 45 x 60 | 54 x 60 | 54 x 60 | 45 x 60 | 45 x 60 |
| | + 15 with Acrylic opal glass protruding (AOV) | | | | | | |
| Recess depth (in mm) | | | | | | | |
| | | | | 90 | 82 | 98 | 82 |
| Weight/meter (in kg) | | | | | | | |
| | 2.0 | 2.0 | 2.2 | 2.1 | 4.3 | 3.8 | 4.2 |

• = Standard options
◦ = Special options

* with single battery
** also available with higher IP protection thanks to separate IP lighting insert



Lichtkanal 060

| | | | |
|-----------------|---------|------|-----------------------|
| Surface-Mounted | Pendant | Wall | Plasterboard Recessed |
|-----------------|---------|------|-----------------------|

Lichtkanal 060 Direct-Indirect

| | |
|------------------------------|-----------|
| Direct-Indirect Pendant/Wall | LK Curved |
|------------------------------|-----------|

Lichtkanal 070

| | | | | | | |
|-------------------|-----------|--------|-------------------------|---------------------|--------------------------------|------------------------------|
| Surface-Mounted** | Pendant** | Wall** | Plasterboard Recessed** | Concrete Recessed** | Plasterboard Recessed Trimless | Concrete Recessed Trimless** |
|-------------------|-----------|--------|-------------------------|---------------------|--------------------------------|------------------------------|

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|--------|----------|--------|----------|
| Direct | Indirect | Direct | Indirect |
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| • | • | • | • |
| ○ | ○ | ○ | ○ |

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| • | • | • | • | • | • | • |
| • | • | • | • | • | • | • |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |

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|---|---|---|---|---|---|---|
| • | • | • | • | • | • | • |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |

| | | | |
|---------------|---------|---------|---------|
| 60 x 50 | 60 x 50 | 60 x 50 | 69 x 55 |
| + 10 with AOV | | | |

| | |
|---------------|---------|
| 60 x 90 | 60 x 90 |
| + 10 with AOV | |

| | | | | | | |
|---|---------|---------|---------|---------|---------|---------|
| 70 x 80 | 70 x 80 | 70 x 80 | 80 x 80 | 80 x 80 | 70 x 80 | 70 x 80 |
| + 19 with Acrylic opal glass protruding (AOV) | | | | | | |

| | | | |
|--|--|--|----|
| | | | 82 |
|--|--|--|----|

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|--|--|--|-----|-----|-----|-----|
| | | | 100 | 112 | 125 | 112 |
|--|--|--|-----|-----|-----|-----|

| | | | |
|-----|-----|-----|-----|
| 2.1 | 2.1 | 2.4 | 2.4 |
|-----|-----|-----|-----|

| | |
|---------|-----|
| 3.2/3.5 | 3.2 |
|---------|-----|

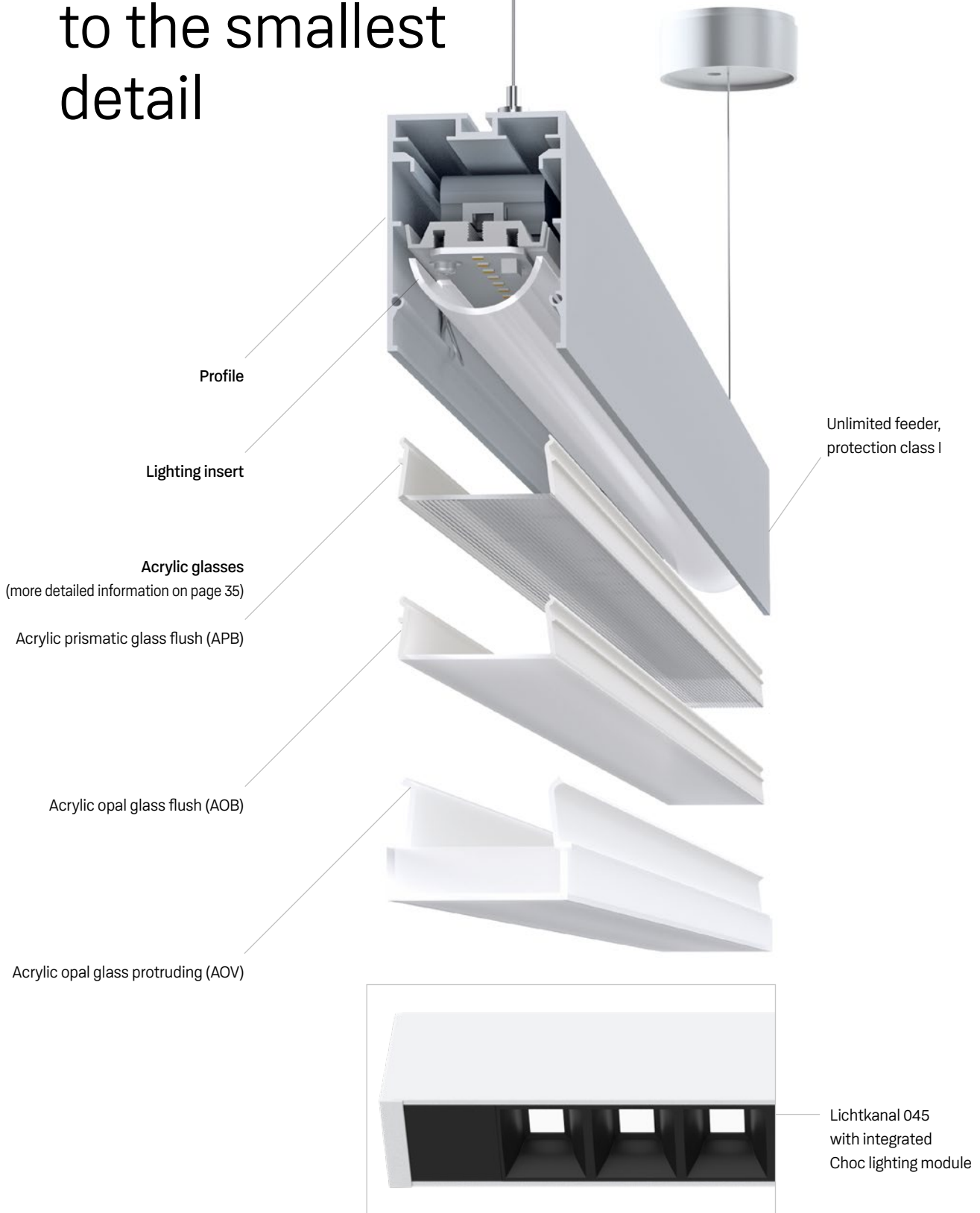
| | | | | | | |
|-----|-----|-----|---|-----|-----|-----|
| 3.5 | 3.5 | 3.7 | 4 | 6.7 | 5.3 | 6.2 |
|-----|-----|-----|---|-----|-----|-----|

Lichtkanal 045



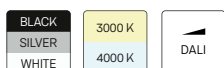


Precision down to the smallest detail



Standard options

Range of options within the portfolio with standard delivery times



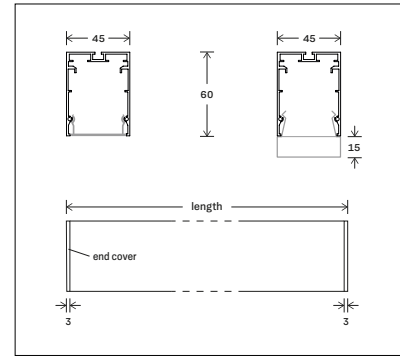
Special options

Available upon request



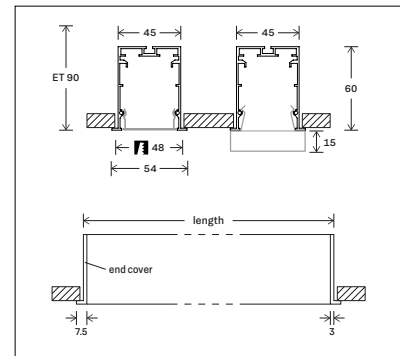
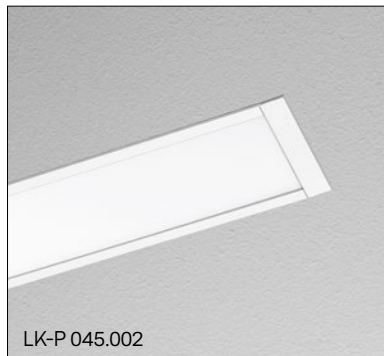
Surface-mounted / Pendant / Wall

For surface, wall or suspended mounting, high-quality aluminium profile, possible mitre cuts for surfaces, wall-ceiling inside, edge outside/inside*



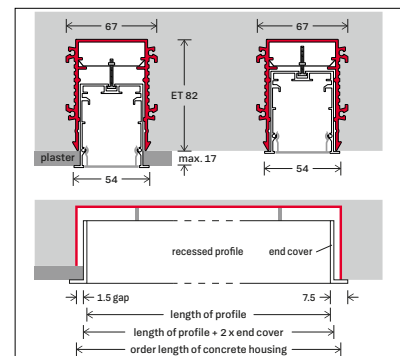
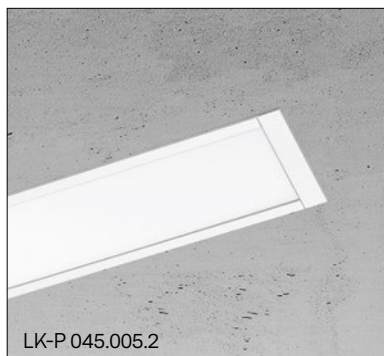
Plasterboard recessed

For recessed mounting into plasterboard, high-quality aluminium profile with discreet trim (4.5 mm), possible mitre cuts for surfaces, wall-ceiling inside, edge outside/inside*



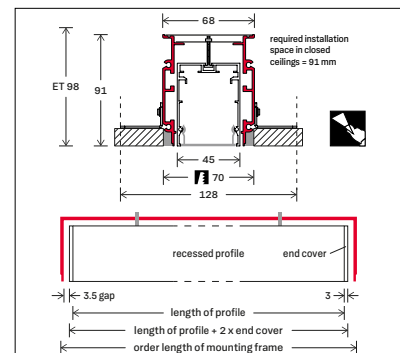
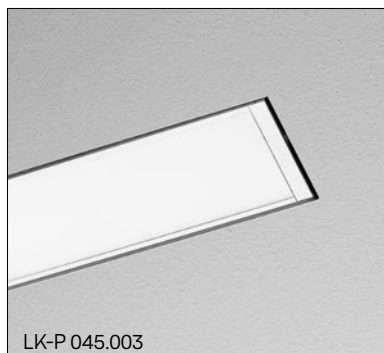
Concrete recessed

For recessed mounting into fairfaced concrete or concrete with plaster, high-quality aluminium profile with discreet trim (4.5 mm)*



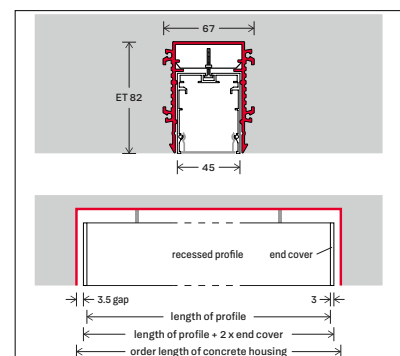
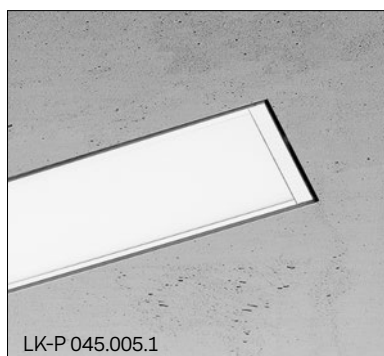
Plasterboard recessed trimless

For recessed mounting with gap into plasterboard flush with ceiling, high-quality aluminium profile for fixing into trimless mounting frame, possible mitre cuts for surfaces, wall-ceiling inside, edge outside/inside*



Concrete recessed trimless

For recessed mounting with gap into fairfaced concrete flush with ceiling, high-quality aluminium profile for fixing into concrete recessed housing*



* Please order lighting inserts and (necessary) accessories separately. You will find more detailed information about accessories on page 34.



Quick and easy configuration:
app.lts-light.com/lichtkanal-en





Lichtkanal 060





Square, practical and flexible

Unlimited feeder,
protection class I

Profile

Lighting insert

Acrylic opal glass protruding (AOV)
(more detailed information on page 35)

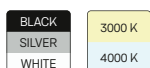
Diffuser foils
(more detailed information
on page 35)

Wide beam diffuser foil

nanoOptix diffuser foil
(more detailed information
on page 35)

Standard options

Range of options within the portfolio with standard delivery times



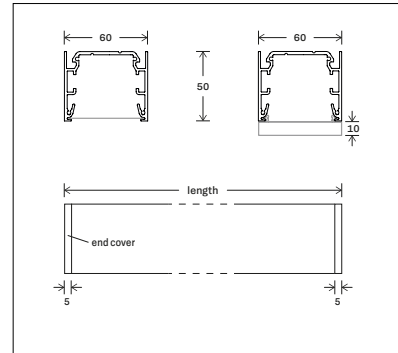
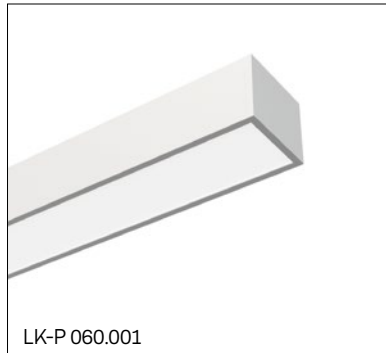
Special options

Available upon request



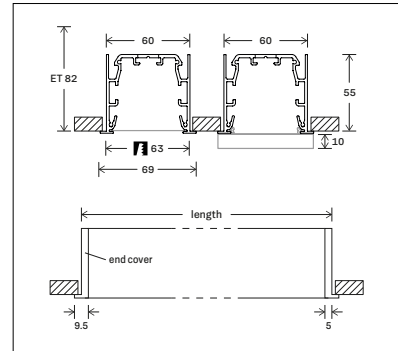
Surface-mounted / Pendant / Wall

For surface, wall or suspended mounting, suitable for diffuser foils and acrylic opal glass protruding, high-quality aluminium profile, possible mitre cuts for surfaces, wall-ceiling inside, edge outside/inside*



Plasterboard recessed

For recessed mounting into plasterboard, suitable for diffuser foils and acrylic opal glass flush protruding, high-quality aluminium profile with trim (9.5 mm), possible mitre cuts for surfaces, wall-ceiling inside, edge outside/inside*



* Please order lighting inserts and (necessary) accessories separately. You will find more detailed information about accessories on page 34.

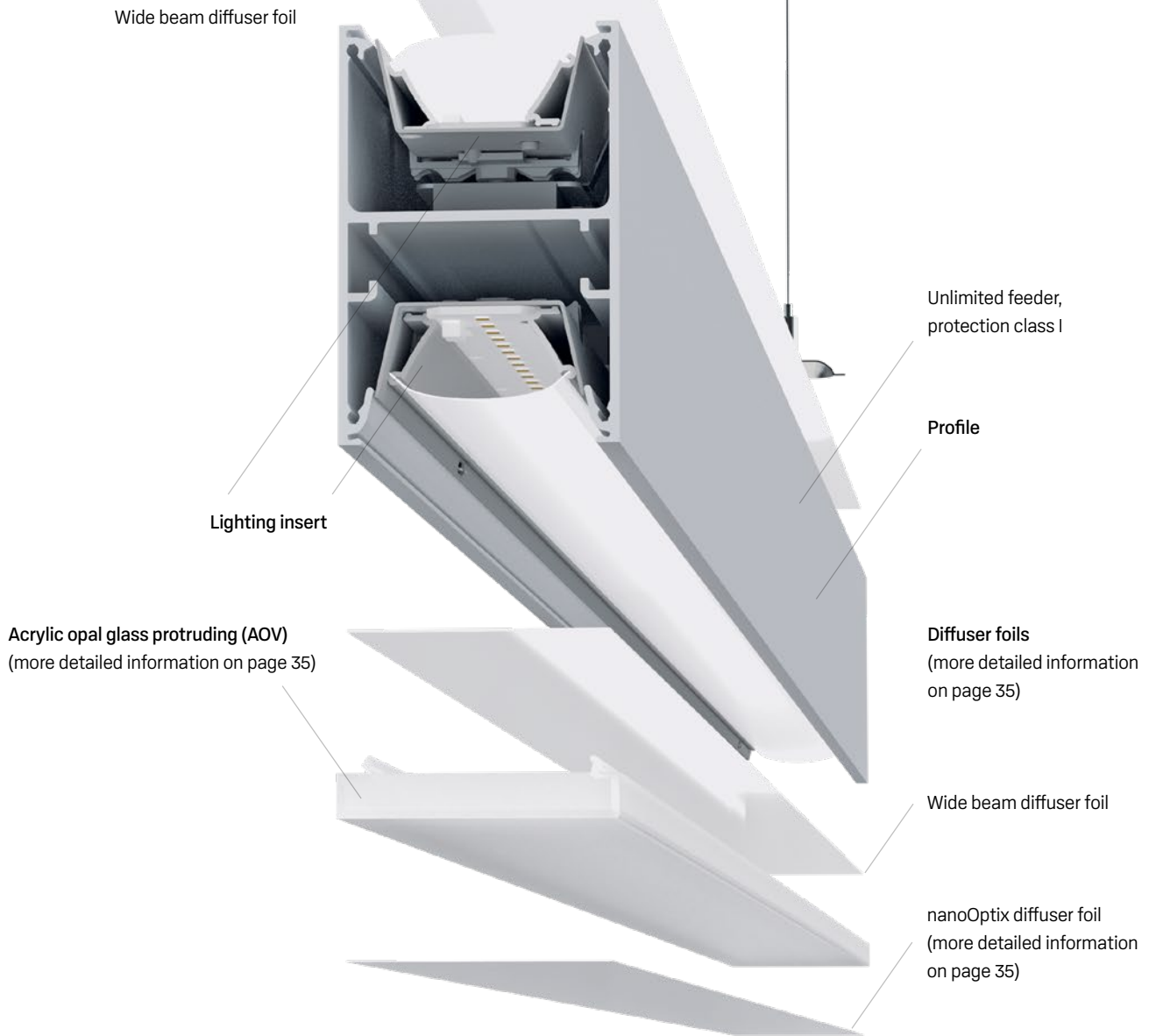


Quick and easy configuration:
app.lts-light.com/lichtkanal-en



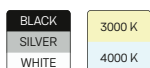


Twice as good



Standard options

Range of options within the portfolio with standard delivery times



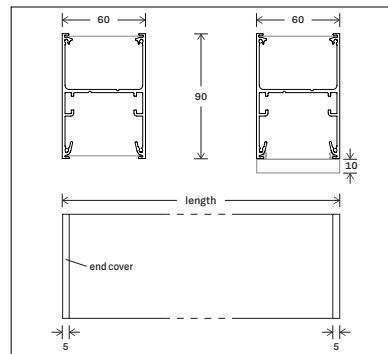
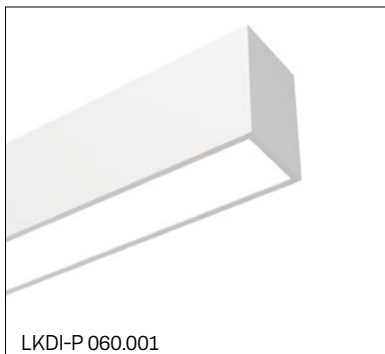
Special options

Available upon request



Pendant / Wall

With direct-indirect lighting for wall or suspended mounting, suitable for diffuser foils and acrylic opal glass protruding, high-quality aluminium profile, possible mitre cuts for 90° edges*



* Please order lighting inserts and (necessary) accessories separately. You will find more detailed information about accessories on page 34.

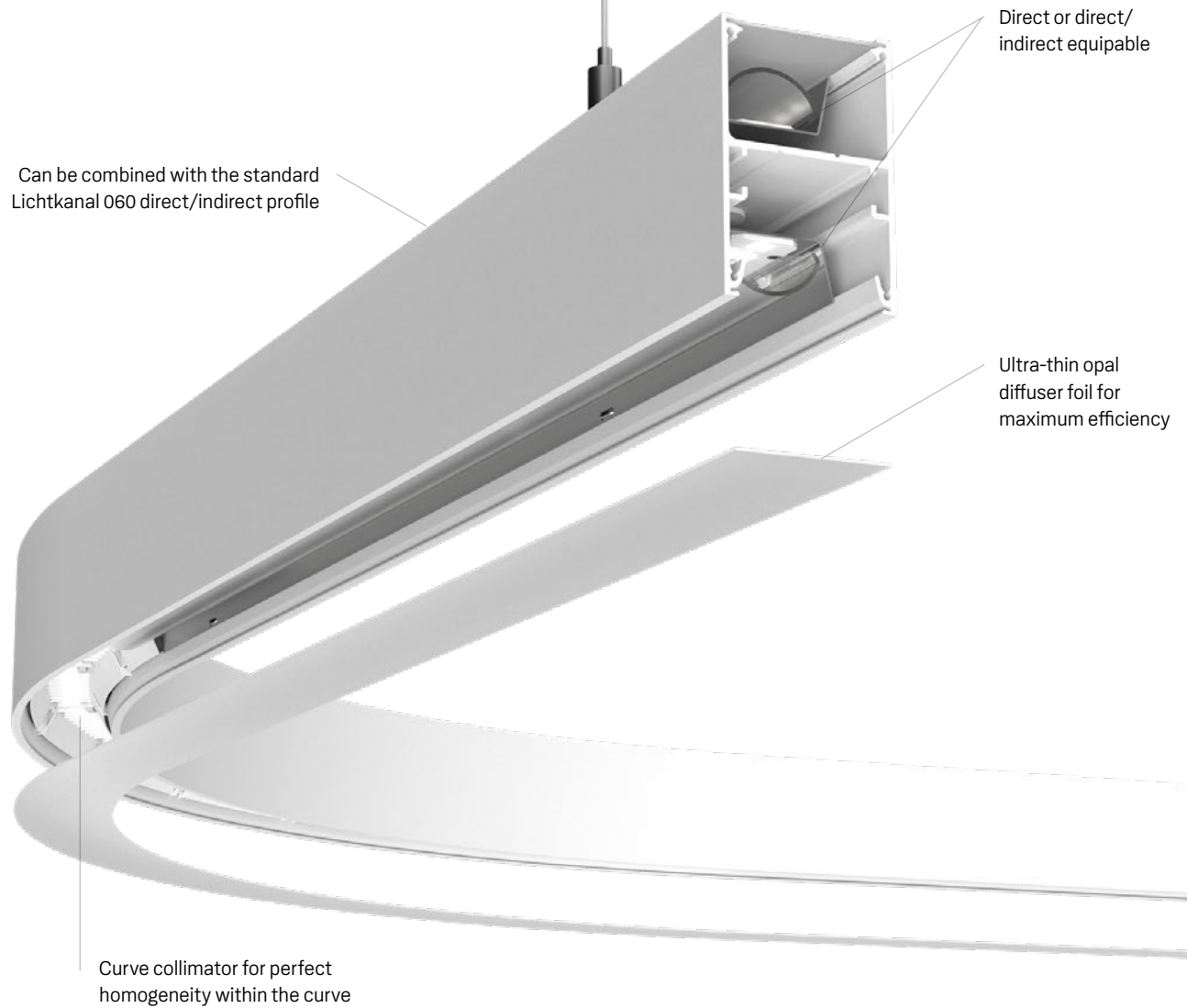


Quick and easy configuration:
app.lts-light.com/lichtkanal-en





Lichtkanal Curved



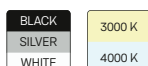
Flexible and unlimited

A successful endeavour – thanks to the curve collimators developed by LTS. They are capable of directing linear light in the shape of a curve absolutely homogeneously which has the enormous benefit that all the advantages of the standard Lichtkanal 060, such as light quality, efficiency, light colour, colour reproduction, homogeneity and controllability equally apply to the curved version.

The H profile of Lichtkanal 060 is available in three different radii of 513 mm, 692 mm and 1230 mm. Individual radii are also possible on request. Lichtkanal Curved means no more limits to planning and design.

Standard options

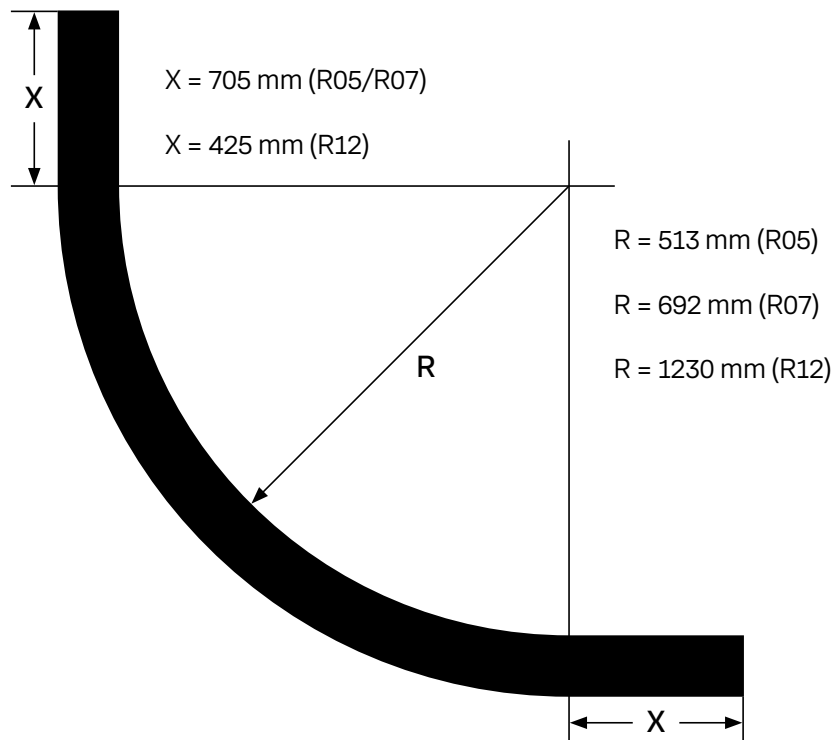
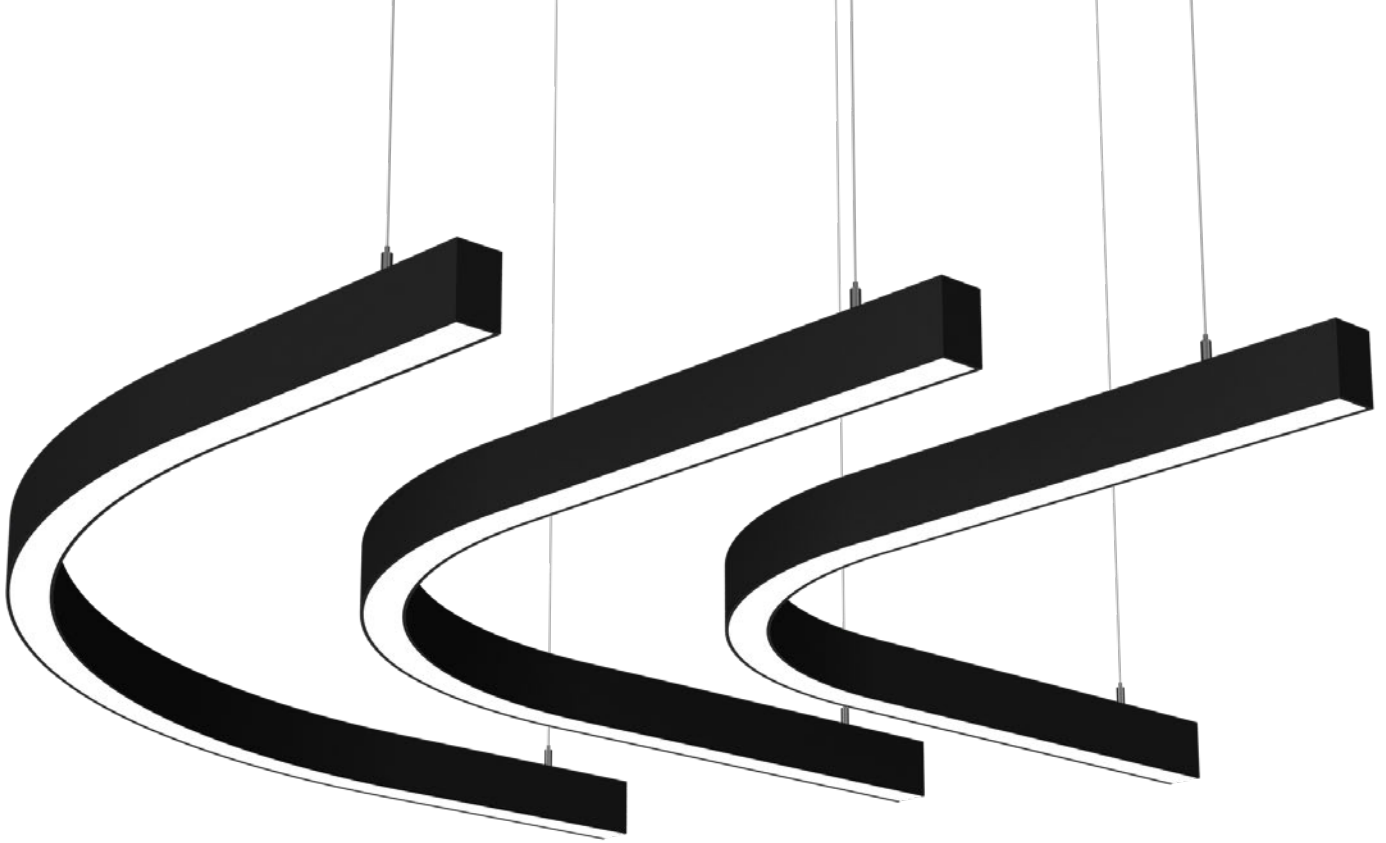
Range of options within the portfolio with standard delivery times



Special options

Available upon request





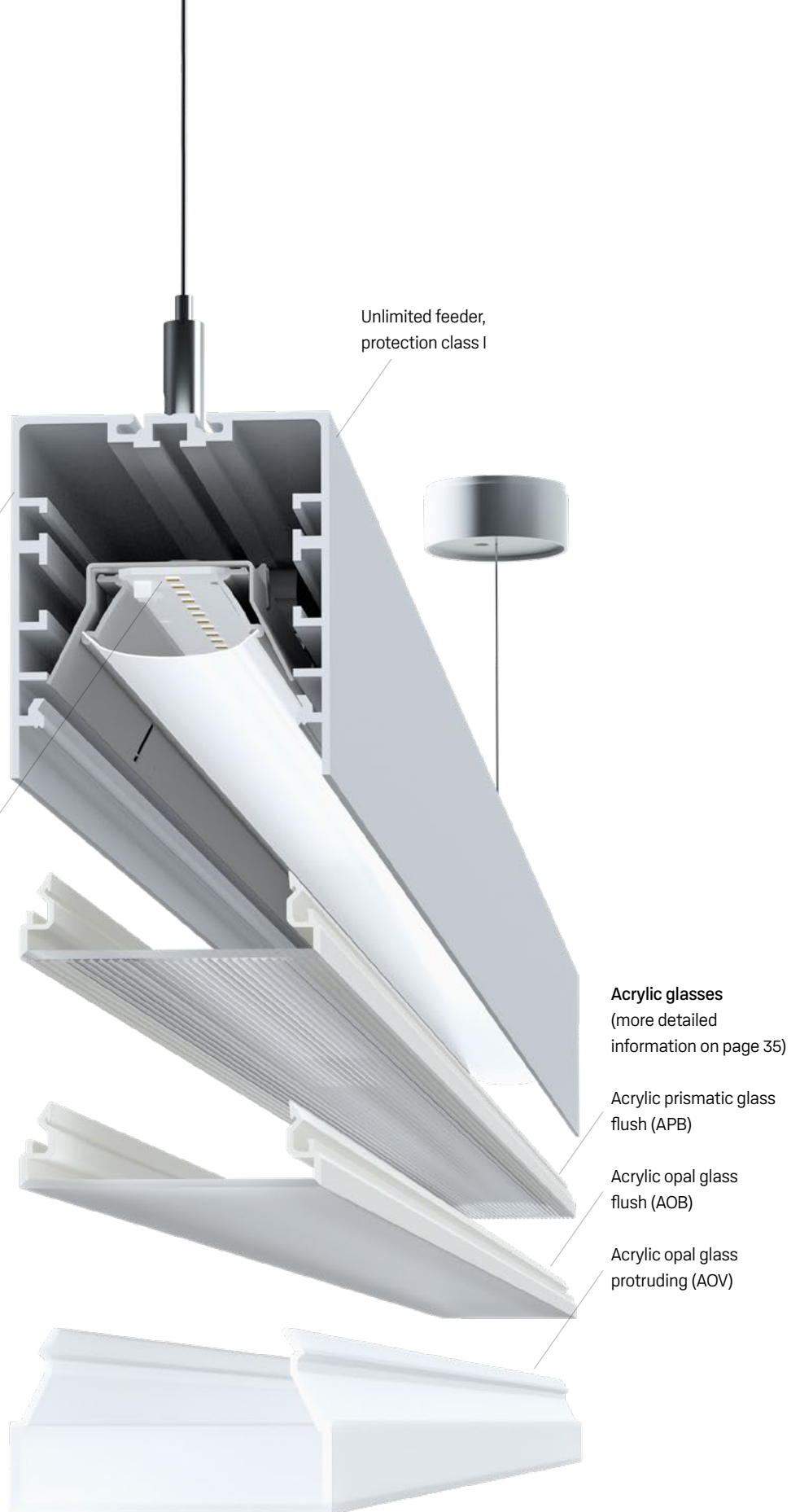
You can find all the information at
www.lts-light.com/en/lk-curved

Lichtkanal 070





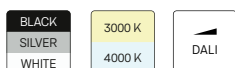
For big solutions



Also available with higher IP protection thanks to separate IP lighting insert

Standard options

Range of options within the portfolio with standard delivery times



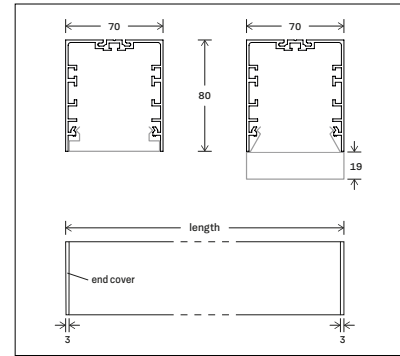
Special options

Available upon request



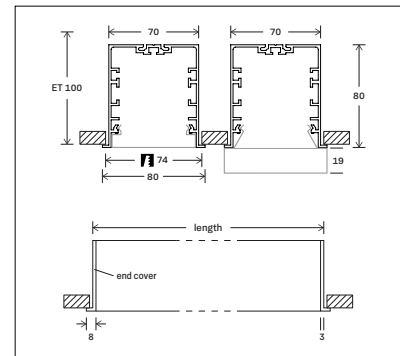
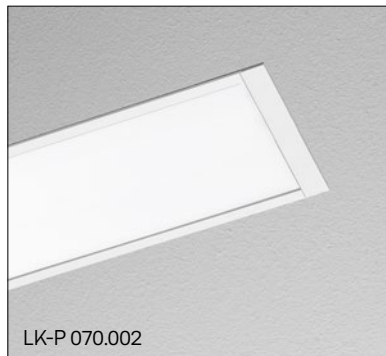
Surface-Mounted / Pendant / Wall**

For surface, wall or suspended mounting, high-quality aluminium profile, possible mitre cuts for surfaces, wall-ceiling inside, edge outside/inside*



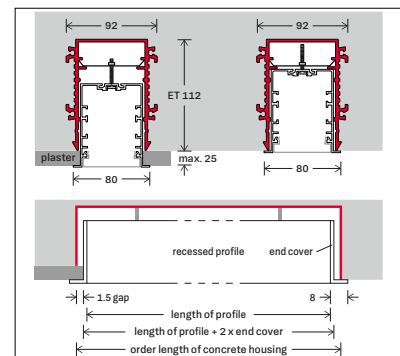
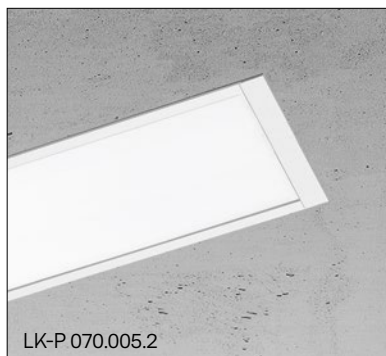
Plasterboard recessed**

For recessed mounting into plasterboard, high-quality aluminium profile with discreet trim (5 mm), possible mitre cuts for surfaces, wall-ceiling inside, edge outside/inside*



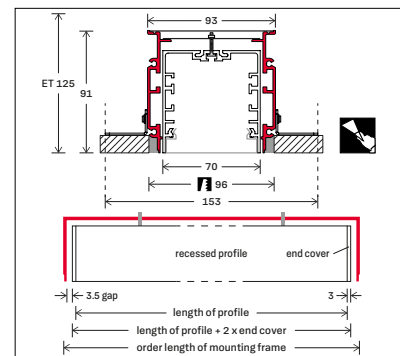
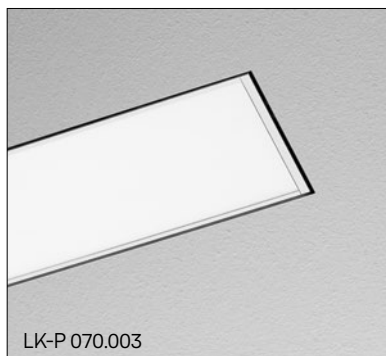
Concrete recessed**

For recessed mounting into fairfaced concrete or concrete with plaster, high-quality aluminium profile with discreet trim (5 mm)*



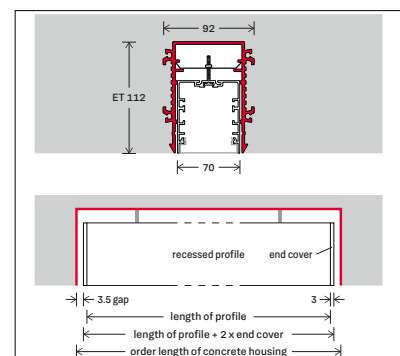
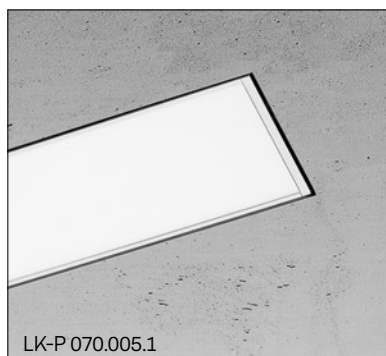
Plasterboard recessed trimless

For recessed mounting with gap into plasterboard flush with ceiling, high-quality aluminium profile for fixing into trimless mounting frame, possible mitre cuts for surfaces, wall-ceiling inside, edge outside/inside*



Concrete recessed trimless**

For recessed mounting with gap into fairfaced concrete flush with ceiling, high-quality aluminium profile for fixing into concrete recessed housing*



* Please order lighting inserts and (necessary) accessories separately. You will find more detailed information about accessories on page 34

** also available with higher IP protection thanks to separate IP lighting insert



Quick and easy configuration:
app.lts-light.com/lichtkanal-en



GUVRY SPEICHER

SAE



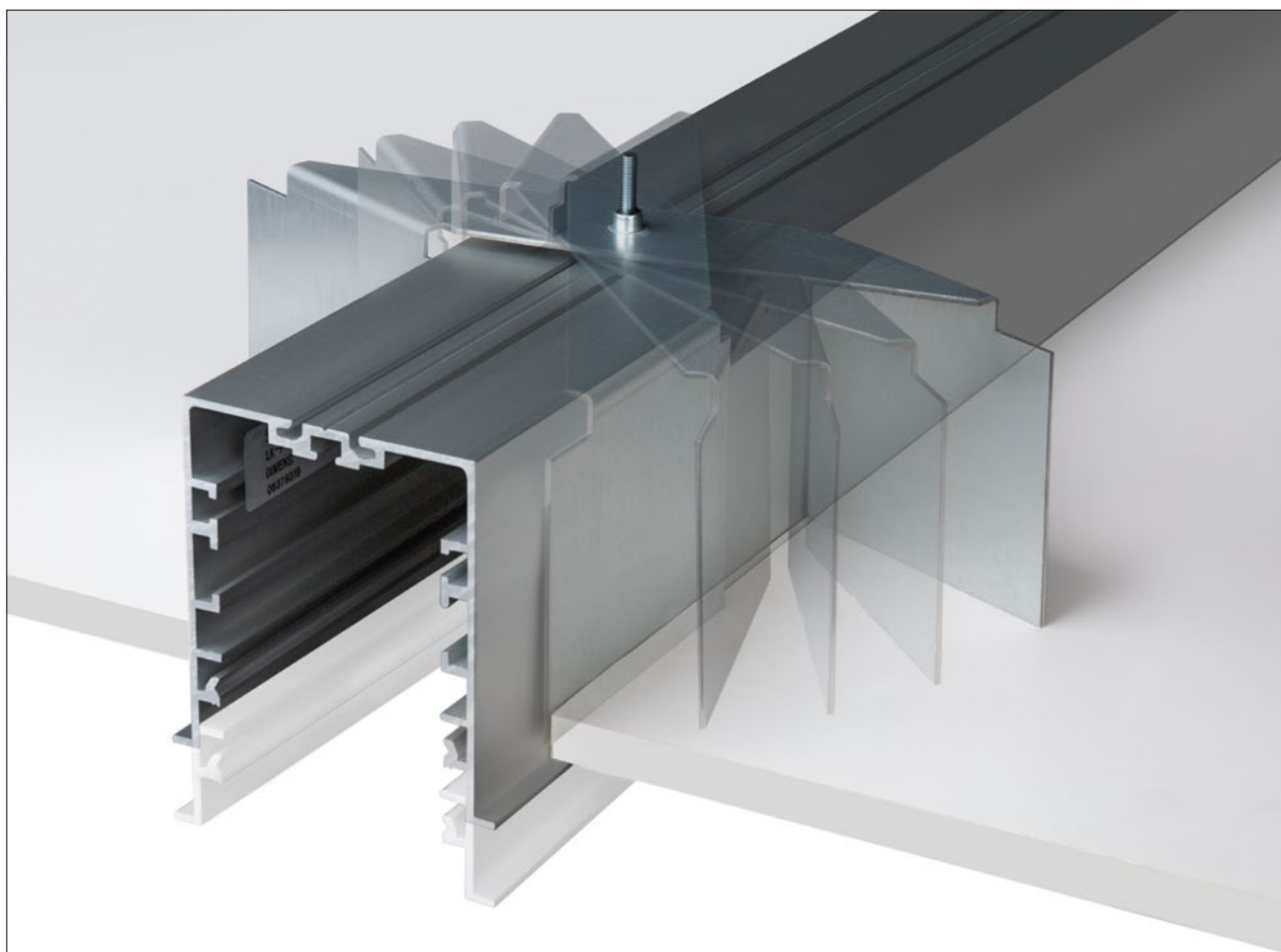
SAE Institute, Berlin, Germany · Lichtkanal 070 Concrete Recessed (left), Lichtkanal 070 Pendant (right)
Architect: stark design · Photo by: Daniel Horn Photography

Swabian diligence

Well thought-out from design to assembly

The holistic development process is focused on ensuring your system is as easy to install as possible. Perfect joins between each Lichtkanal – even at the corners – enable a straightforward recessed installation in hollow ceilings and holders for ceiling

and wall mounting, which can also be selected later from the accessories range. We offer complete support throughout the process to ensure you get the light just right.



Easy mounting

Thanks to a prepared setting screw on recessed installation profiles for concrete and plasterboard ceilings.



Wall mount

The wall connector, which is available as an accessory, enables the surface-mounting profile to become a wall luminaire.



Pendant installation

The surface-mounting profile is converted into the pendant profile using wire-rope suspension. Available as an accessory in 3 m or 5 m, and with or without a feeder.



Connector set

Made of die-cast zinc, the connector set enables Lichtkanal profiles of the same type to be seamlessly joined.

Optically variable

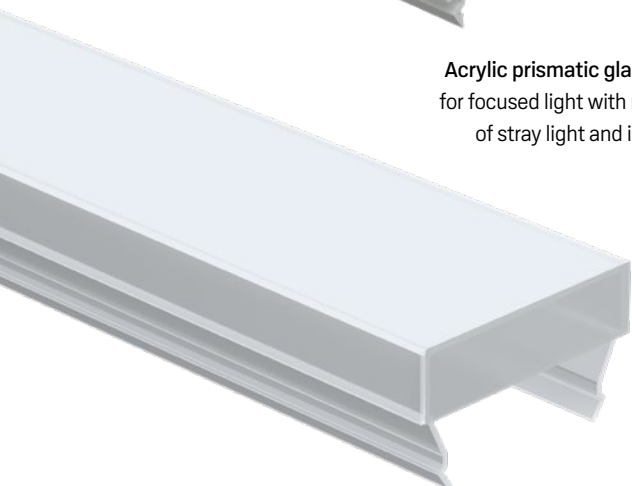
Glasses and foils complete the system

Covers provide the finishing touch to the optics of the Lichtkanal. They are the result of individual development and many years of experience and differ in terms of construction, material and surface quality. Whether they are protruding, flush or inserted into the profile, the covers play a crucial role in modifying the

lighting characteristics. While the prismatic acrylic glass provides a focused, glare-free light, the opal cover delivers a uniform illumination. The nanoOptix micro-structured foil allows for greater lengths without the impact of visible edges and with a defined beam angle.



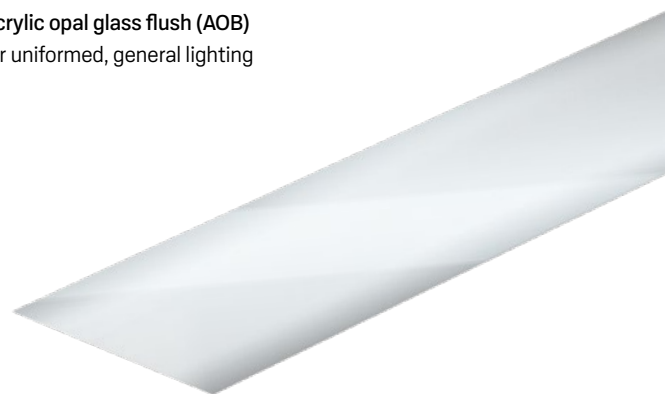
Acrylic prismatic glass flush (APB)
for focused light with reduced levels
of stray light and improved glare
control



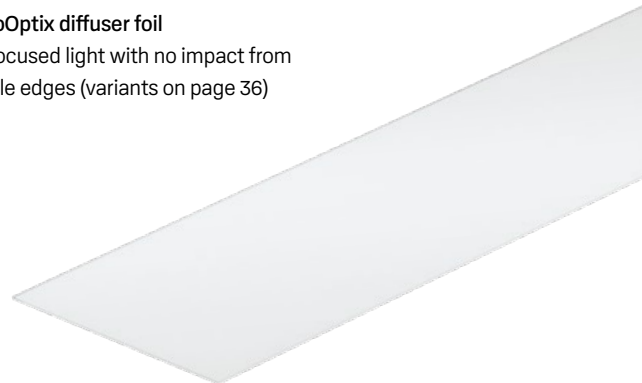
Acrylic opal glass protruding (AOV)
for uniformed, general lighting



Acrylic opal glass flush (AOB)
for uniformed, general lighting



nanoOptix diffuser foil
for focused light with no impact from
visible edges (variants on page 36)



Wide beam diffuser foil
for efficient, uniform basic lighting
with no impact from visible edges
(more detailed information on page 36)

You can find more information in our configurator. The configurator helps you easily define the right solution for your specific application. Key requirements, such as mounting type, colour temperature, colour or controls are obtained and summarised in a product proposal. Furthermore, it enables orthogonal special variants to be created. Each design also comes with the data sheets of the items used and a cost estimate.



You can find the configurator online at:
app.its-light.com/lichtkanal-en

Linear, directed light

Perhaps the thinnest lens in the world

With nanoOptix, we have managed to transfer the functionality of lens optics onto an ultra-thin film of just 0.6 mm. Depending on its composition, the lens film generates specific beam characteristics according to the desired light distribution in the space. nanoOptix impresses with its low use of resources in production and with high

system efficiency in the luminaires in which it is fitted. Given that nanoOptix can be produced in lengths of up to 150 m, this technology also offers an aesthetic advantage: a continuous, uninterrupted lighting pattern with no impact from visible edges.



nanoOptix allows for greater design freedom with linear, directed light in all areas. There is no limit to the possible range of applications for nanoOptix within architectural lighting, be it general lighting, product presentation or a glare-free workspace. With its light-scattering agent, this film achieves uniform area lighting. The function is very simple, being easily inserted into the Lichtkanal profile.

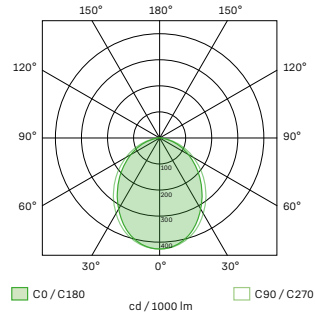


You will find more detailed information at www.lts-light.com/en/nanoOptix



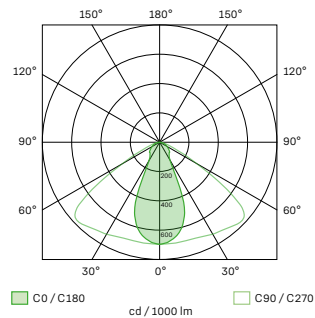
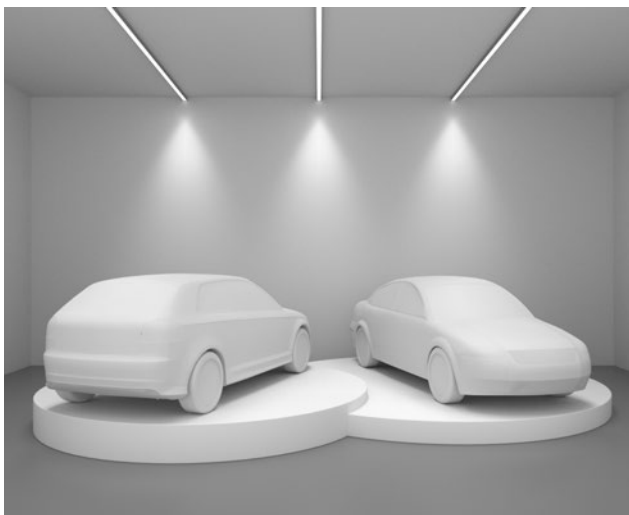
Thin, efficient and versatile

The right light for every application



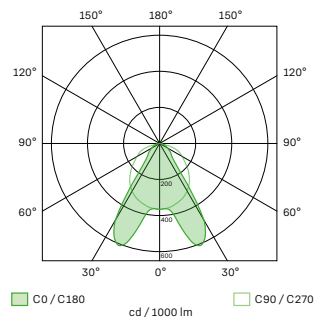
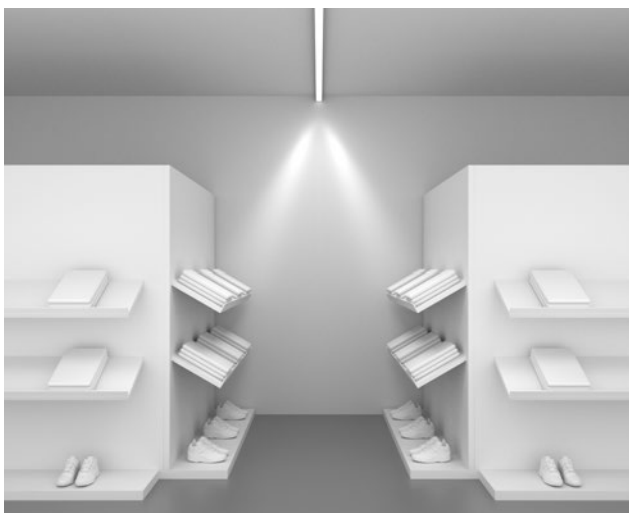
Opal diffused

Wide-angle, diffused light for general applications. Attractive light lines for uniform lighting in a space form the basis for comfortable interior lighting.



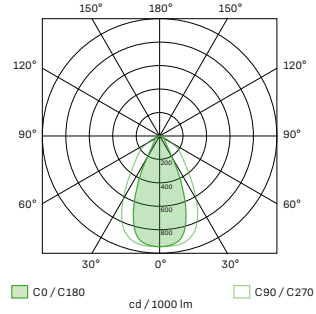
Narrow angle

The narrow-angle film manages to bring lots of light down from great ceiling heights to the usable space. Be it tall entrance halls, car dealerships or salesrooms with general lighting. The beam characteristics are ideally suited for all areas.



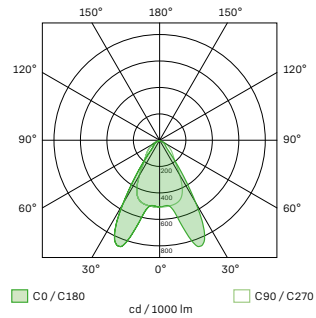
Double asymmetric

From large supermarkets to individual retailers. With a focus on illuminating shelving systems and aisles, products are perfectly illuminated over the entire height of the displays.



Narrow angle BAB/GC

For tall office spaces ($H > 3.0$ m) or for individual workstations. The combination of the nanoOptix film with light inserts U19 ($UGR \leq 19$) or U16 ($UGR \leq 16$) creates narrow-angle, almost glare-free and homogenous working lighting.

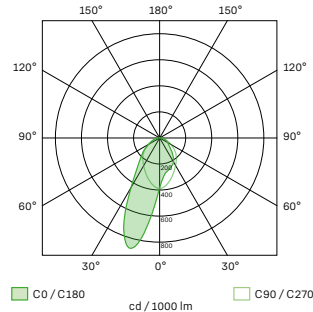


Wide angle BAP/GC

For normal-height office spaces ($H \leq 3.0$ m) or for double workstations. The combination of the nanoOptix film with light inserts U19 ($UGR \leq 19$) or U16 ($UGR \leq 16$) creates wide-angle, almost glare-free and homogenous working lighting.

The Wallwasher for maximum precision

A soft and linear lighting pattern



Wallwasher

The Wallwasher allows for continuous, homogeneous wall washing in spaces of differing. Indeed, in meeting rooms and office spaces, a homogeneously illuminated back wall supports visual communication.

A soft lighting pattern with maximum precision. Thanks to innovative research and ingenuity, LTS has created the nanoOptix Wallwasher for a soft, totally homogeneous and linear lighting pattern. The perfect complement to the LTS nanoOptix portfolio. With very good efficiency of >120lm/W, the film is also suitable for use in eligible construction and conversion projects. Highly efficient in two senses, not just in terms of energy consumption. Higher-level interior lighting quality, e.g. in the form of uniformly illuminated vertical surfaces, provides the basis for increased wellbeing, sharpened visibility and more comfortable working. The broad scope of application provides unlimited possibilities in architectural lighting, depending on the wall clearance and ceiling height.

Thanks to the simple and modular structure, any beam characteristic can be achieved as required with the standard Lichtkanal and the right nanoOptix film. This provides a flexible and sustainable solution for any lighting situation.

Ceiling height: 250 cm
Wall distance: ≤ 80 cm



Ceiling height: 300 cm
Wall distance: ca. 80 cm



Ceiling height: 400 cm
Wall distance: ca. 100 cm



Ceiling height: 500 cm
Wall distance: ca. 120 cm



Find out more about the nanoOptix Wallwasher and its possible applications:
www.lts-light.com/en/nanooptix

Custom solutions

For 100% creative solutions

There's no such thing as impossible!

With Lichtkanal it is possible to go beyond the norm and leave your own mark on your projects. Think triangles, wall-ceiling solutions or jagged polygons. We take on the challenge of creating special shapes that go beyond the orthogonal arrangement of light lines or, when the extensive system of standard and optional solutions needs to be extended, with special solutions. With

a wealth of experience in product and project development, our workshops are ready and waiting for custom requests and enquiries.

We give ideas free rein to develop.
Speak to us on: +49 7542 9307-506





An LTS Lichtkanal is always up to date – even after 20 years

Renovating light pays off – for you and the environment

All LTS Lichtkanal can be easily converted to LED, even if they were among the first light channels supplied 20 years ago. The Lichtkanal as such remains, only the inserts are replaced. The standard feed-through wiring of the new LED lighting inserts guarantees an easy replacement.

Benefit from the many advantages of converting your Lichtkanal to modern, sustainable LED technology:

- Reduction of energy cost of your lighting by up to 75 %
- Increased efficiency by improving light quality and distribution
- Compliance with RoHS Directives and the EU Ecodesign Directives
- Quick pay-off and eligible for energy-efficient illumination funding (e.g., funding of energy-efficient buildings amounting to 15 % of the total eligible investment)
- Sustainable solution thanks to LEDs with a long service life (50,000 operating hours instead of the previous 5,000 to 20,000 operating hours for fluorescent tubes) and virtually maintenance-free
- Same warranty and guarantee for your refurbished Lichtkanal as for a new product



Learn more about refurbishment



Besucherzentrum Ruhestein, Nationalpark Schwarzwald, Germany | Lichtkanal 070 Recessed
Photo by: Henrik Schipper



ZfP Biberach, Germany · Lichtkanal 070 Recessed
Photo by: Conné van d' Grachten



Marc Cain, Aachen, Germany · Lichtkanal 070 Pendant
Photo by: Marc Cain



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