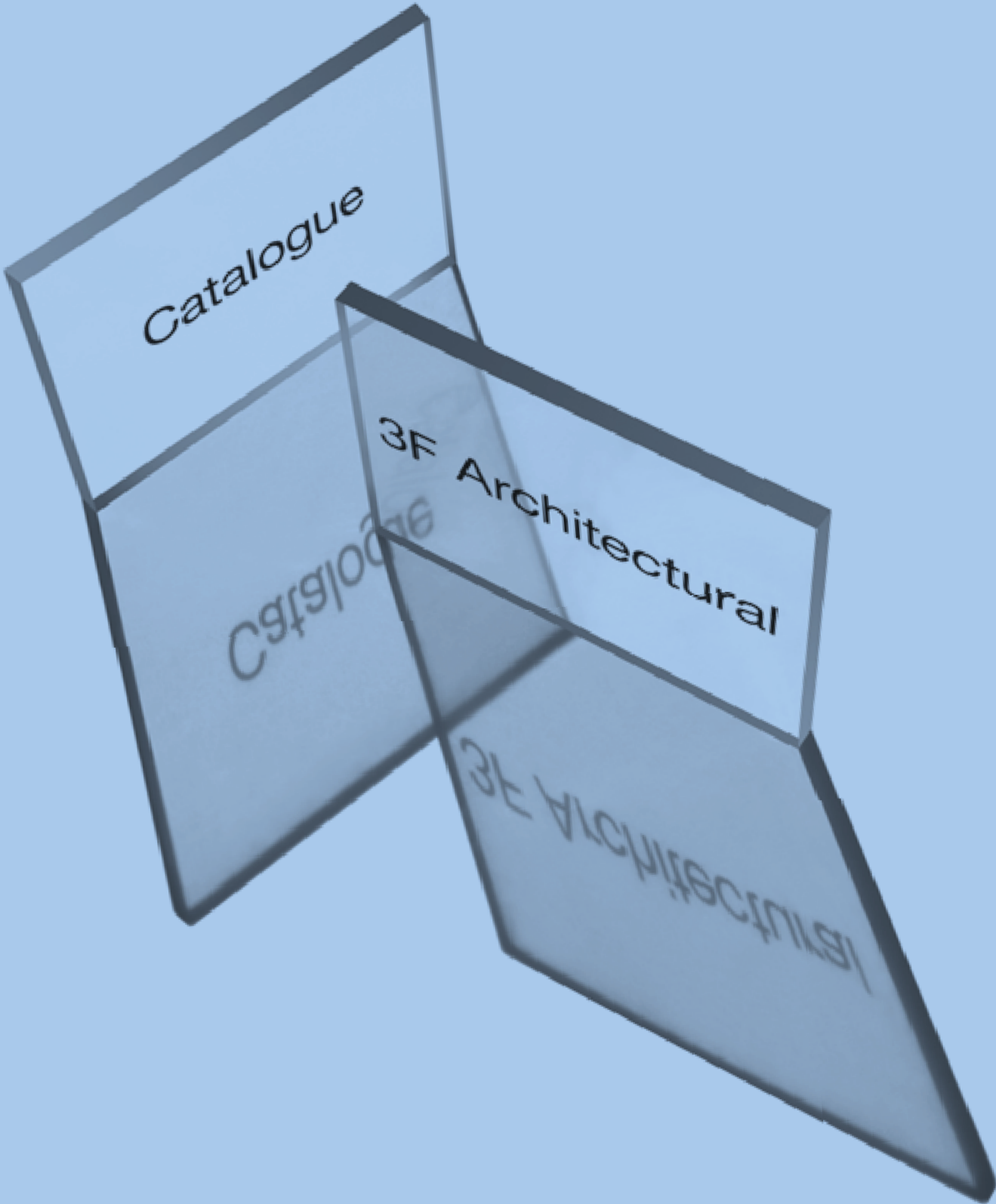


3F Architectural


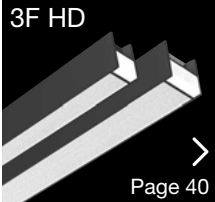



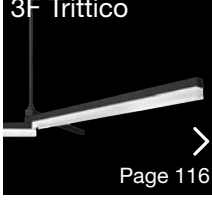

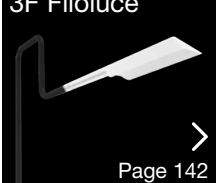
Light for  
active spaces



/ catalogue

## **\_3F Architectural**

/ 3F Filippi

<b>3F Hal</b>  Page 20	<b>3F Hal Direct</b> Page 30	<b>3F Hal Direct/Indirect</b> Page 34	<b>3F HD</b>  Page 40	<b>3F HD Direct Single</b> Page 54	<b>3F HD Direct Single Tunable White</b> Page 64
<b>3F HD Direct Channel</b> Page 68	<b>3F HD Direct/Indirect Single</b> Page 74	<b>3F HD Direct/Indirect Channel</b> Page 80	<b>3F HD R</b>  Page 88	<b>3F HD R Recessed Single</b> Page 88	<b>3F HD R Recessed Channel</b> Page 94
<b>3F Mirella</b>  Page 100	<b>3F Mirella Direct</b> Page 104	<b>3F Mirella Direct/Indirect</b> Page 108	<b>3F Mirella Floor</b>  Page 112	<b>3F Mirella Floor</b> Page 112	<b>3F Trittico</b>  Page 116
<b>3F Trittico</b> Page 122	<b>3F Solo</b>  Page 126	<b>3F Solo Direct</b> Page 132	<b>3F Solo Direct/Indirect</b> Page 136	<b>3F Filoluce</b>  Page 142	<b>3F Filoluce</b> Page 148

# / The Group

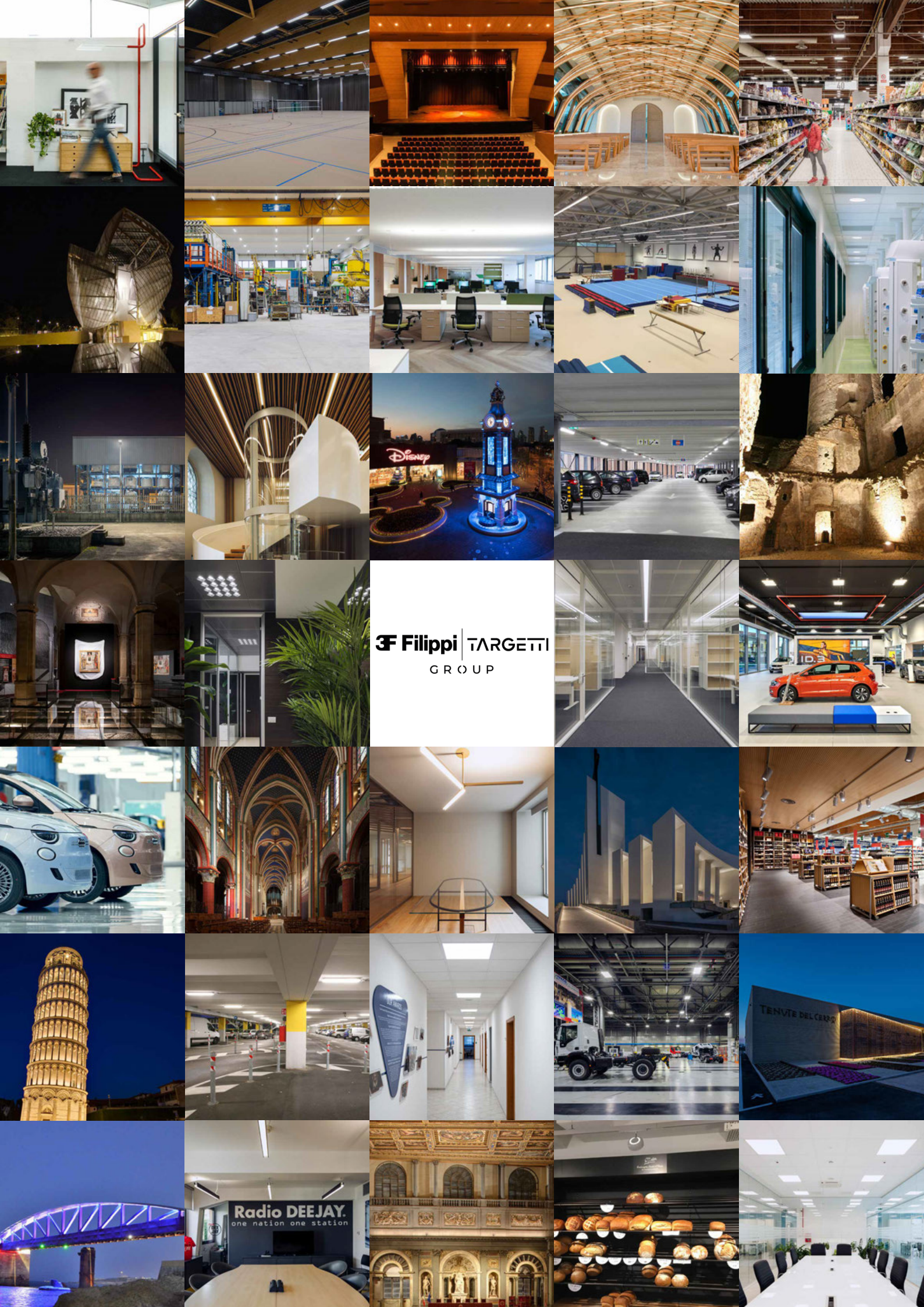
Three companies, one reality that shares common values, expressions of Made in Italy.

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With extensive experience and the combination of their respective expertise in technical and architectural lighting the three brands together provide a complete portfolio of products that proudly bring Made in Italy to more than 50 countries worldwide.

Today the Group can meet and satisfy any kind of design and project requirements. Our partners can choose from a huge selection of products and solutions; from high-tech and functional products from the 3F Filippi catalogue to indoor and outdoor architectural lighting fixtures designed by Targetti, right up to a wide range of LED lamps and fixtures from the Duralamp brand.









# / 3F Filippi

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**3F Filippi**, a Company that has shaped the history of lighting in Italy is now a reality at the service of professionals and designers looking for quality solutions.

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The most important value: absolute transparency with the market. Ever since it was founded, our company has always offered fixtures that offer guaranteed performance, establishing itself as a reliable partner for the creation of any lighting project.

# / Our values



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We want to contribute to spread and develop a new consumption model that is not based on a “disposable” economy but on products that can be updated over time.

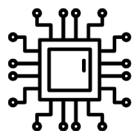
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Our products have always been built as platforms that can adapt to the customer's needs and technological development, for solutions that are always more efficient.

To reach this goal, we focus on increasing the performance of the products and reducing the environmental impact of the manufacturing processes.

**3F Filippi** actively collaborates with **Lighting Europe** to develop increasingly advanced systems, in line with European and International standards.

It is also a **member of ASSIL** (Italian Association of Lighting Manufacturers), a partner and institutional **supporter of IES** (Illuminating Engineering Society of North America), **AIDI** (Italian Lighting Association), and **APIL** (Association of Lighting Professionals) with whom it shares the values of the Carta della Luce (Light Charter).



/ **RELIABILITY** first of all

Our commitment is to offer its customers the best technology available on the market. commitment is to offer its customers the best **technology available** on the market in terms of **technical performance, reduced energy consumption, and reliability.**



/ **SAFETY** at the maximum level

All 3F Filippi products are tested in-house in special laboratories in accordance with the current national CEI 34-21, European EN 60598-1 and international IEC 60598-1 standards, guaranteeing the **safety, quality and long life** of the devices.



/ 100% **SUSTAINABLE**

We have always been **environmentally** sensitive: each product is designed as a platform adaptable to our customers' needs, so that it can be reused, reconditioned, improved (upgraded) and recycled.



/ **READY** for any emergency

3F Filippi is one of the few companies in Europe to have the tools to certify its products according to the recent standards UNI EN 13032 and IES LM-79 which determines the requirements for the **emergency lighting** with or without interchangeable luminous sources.





# / Ecodesign and sustainability

We use photovoltaic panels that cover 30% of the energy needs, with the remaining 70% from certified renewable energy sources.

---

At 3F Filippi, we make products that are increasingly efficient and less impactful on the environment, with the aim of achieving the goal of reducing greenhouse gas emissions by 2030.

For this reason, for several years now we have undertaken various actions that focus particularly on the application of **Lean Production** - a production system that aims to minimise waste to the point of eliminating it - and through the use of **Life Cycle Assessment**

- assessment of the life cycle of a product to achieve the highest possible energy efficiency and maximisation of its lifespan: we currently already reach 100,000 hours of operation, an important result that we intend to surpass in the coming years.

# / The laboratories

3F Filippi is one of the very few companies in Europe to own a Goniophotometer with a rotating mirror.

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The use of this technology allows us **to guarantee quality, reliability and authenticity of the data reported**, through tests such as: **photometric measurements** (intensity, distribution, luminance), **colorimetric measurements** (light spectrum, colour temperature, colour rendering) and punctual **thermal measurements** on the luminaire's internal components.

3F Filippi's **Photometric Laboratory** and **Testing Laboratory**, obtained the **Customer Testing Facilities CTF Stage2 recognition from IMQ S.p.A.** capable of carrying out its activities under the supervision of one of Italy's major certification bodies, IMQ S.p.A.

This makes it possible **to carry out**

**tests valid for product certification independently**, guaranteeing the quality and durability of products to the benefit of the customer.

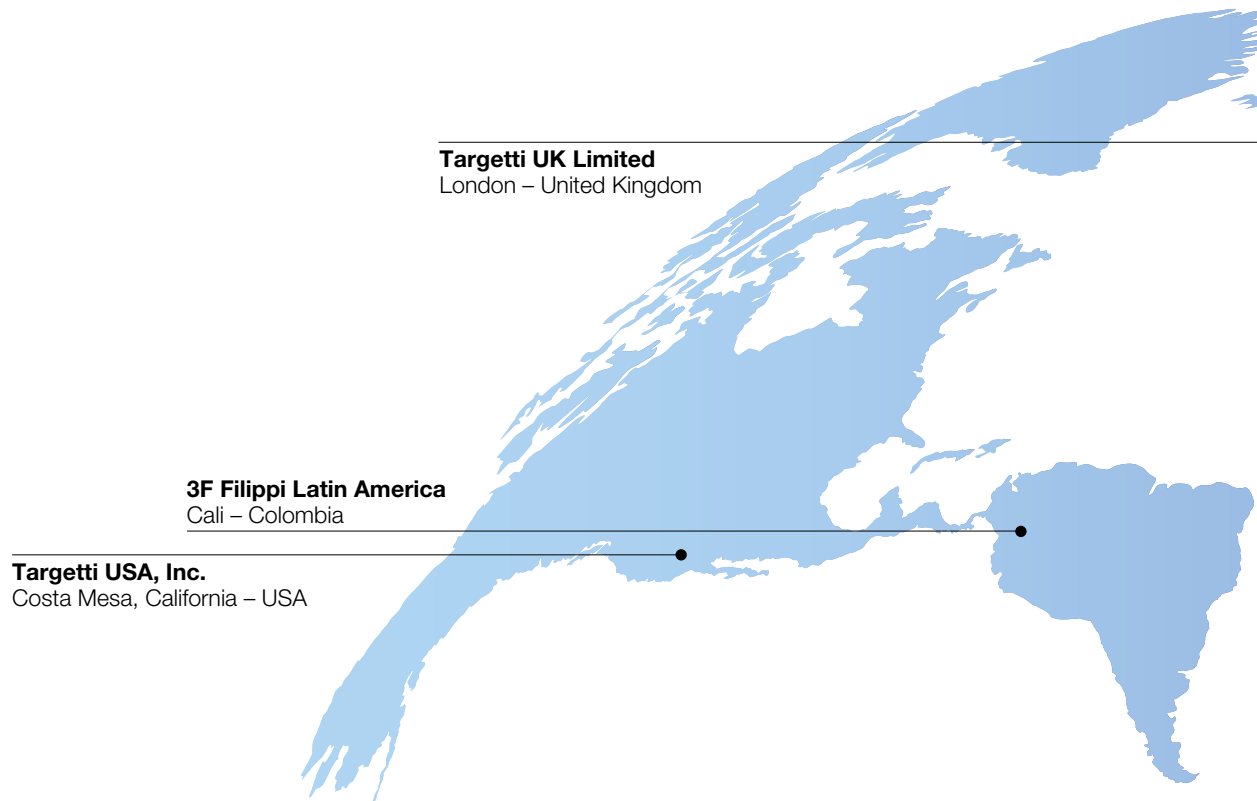
Within our laboratories, the following tests can be performed:

- Temperature
- Electromagnetic compatibility
- UL Conformity: Rain and Sprinkler
- EMC Compatibility: Burst and Surge
- Liquid seal tests
- Ball impact resistance (DIN 18032-3)
- Dust seal
- Resistance to salt spray
- Impact Resistance



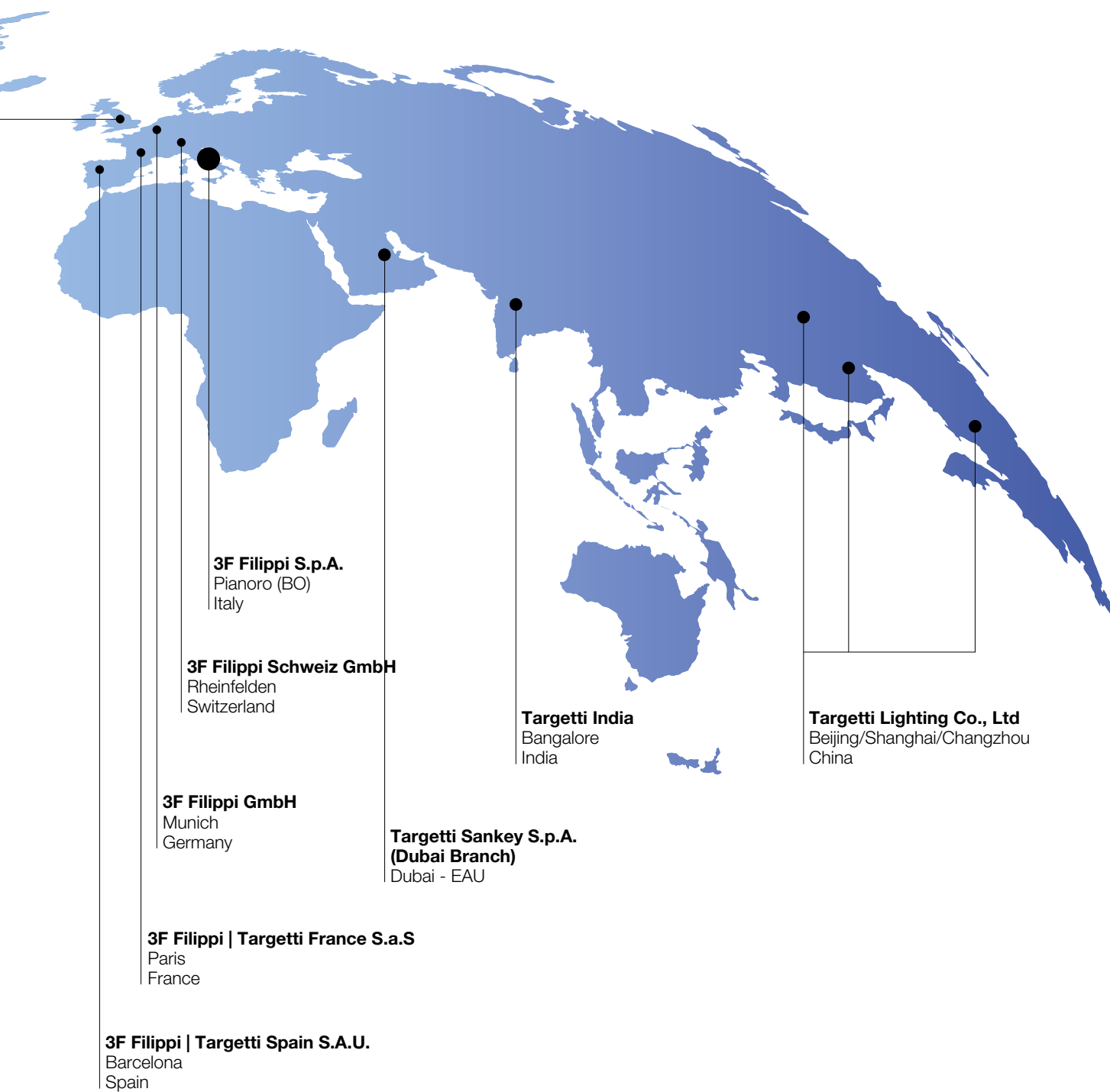


# / Connected. Everywhere.



The company works through a close-knit network of regional and foreign offices in the European, Latin American, Asian, and Oceanian markets.

The 3F Filippi | Targetetti group, represents a cohesive reality that presents itself as a unique partner at the service of professionals and designers in search of quality solutions, providing them with the most advanced tools and the support of our Sales Offices present all over the world.



# / Photobiological safety

Among 3F Filippi's top priorities there is the well-being of the people illuminated by our products: for this reason we use only the best sources with low health impact, paying the utmost attention to photobiological safety.

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Unfortunately, some less scrupulous manufacturers use low-quality sources during prolonged exposure, emit radiation which is damaging to organs of the human body, such as the eyes and skin.

A number of **Photobiological Safety Risk Groups (IEC62471)** have now been defined for the amount of radiation emitted from all sources in the range of wavelengths from 200 nm to 3000 nm, providing a clear indication of the limits of maximum exposure for each group.

Risk classes:

**RG0 (Risk Exempt)**

The source does not cause any photo-biological risk. Requirement met by any lamp that does not cause a blue light (BL) retinal risk with an exposure time of up to 10,000 s (about 2.8 h).

**RG1 (Low Risk)**

The source does not cause risk due to normal operating limitations on exposure. Requirement met by any source that exceeds the limits of the Exempt Group but does not cause a blue light (BL) retinal risk with an exposure time of up to 100 s.

**RG2 (Moderate Risk)**

The source does not cause a risk due to an instinctive reaction when looking at very bright light sources (or due to a sensation of thermal discomfort.) Requirement met by any source that exceeds the limits of Risk 1 Group but does not cause a blue light (BL) retinal risk with an exposure time of up to 0.25 s (aversion response).


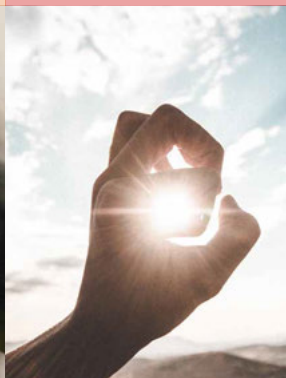
**RG3 (High Risk)**

The source can constitute a risk even due to momentary or brief exposure. Sources that exceed the limits of Risk Group 2 are included in Risk Group 3.

**Note:**

3F Filippi is committed to providing the most technologically advanced luminaires and always chooses the LED sources with the lowest photobiological risk group available on the market for its customers.

If customers are offered product solutions similar to those which 3F Filippi declares for a certain class (for example RG1 - low) but other manufacturers state as being of a lower class (e.g. RG0 – risk absent), they can protect themselves by requesting that those manufacturers provide the certificates proving that the sources actually meet this photobiological risk class.

RG0 (Risk Exempt)	RG1 (Low Risk)	RG2 (Moderate Risk)	RG3 (High Risk)
<p>The source does not cause any photo-biological risk. Requirement met by any lamp that does not cause a blue light (BL) retinal risk with an exposure time of up to <b>10,000 s</b> (about 2.8 h).</p>	<p>The source does not cause risk due to normal operating limitations on exposure. Requirement met by any source that exceeds the limits of the Exempt Group but does not cause a blue light (BL) retinal risk with an exposure time of up to <b>100 s</b>.</p>	<p>The source does not cause a risk due to an instinctive reaction when looking at very bright light sources (or due to a sensation of thermal discomfort.) Requirement met by any source that exceeds the limits of Risk 1 Group but does not cause a blue light (BL) retinal risk with an exposure time of up to <b>0.25 s</b> (aversion response).</p>	<p>The source can constitute a risk even due to momentary or brief exposure (like looking directly at the sun).</p>
			

The standard **EN 60598-1:2021** on indoor luminaires states in **paragraph 4.24.2**:

“For luminaires that use light sources from risk group RG1 (unlimited), in accordance with IEC/TR 62778, or which have been judged as being finished products ready for use, belonging to risk group RG1 (unlimited), the requirements concerning blue light retinal risk do not apply.”

For luminaires that have an ETHR illuminance threshold, evaluated in accordance with IEC/TR 62778, additional requirements are applied for evaluating how far the product is from the threshold between RG2 and RG1. In such cases, although the luminaire cannot be considered to be dangerous, warnings and markings are used to alert the installer or user to the possible risks associated with direct and prolonged viewing of the source.

Currently, therefore, there is no regulation that declares the various photo-biological risk groups to be equivalent, or indeed that united them, rendering both exempt.

Exposure to RG1-group luminaires is not considered dangerous under ordinary conditions of use, due to the fact that periods of exposure of over 100 seconds are considered to be “unlikely”, although not impossible, as this cannot be predicted in the design phase.

Risk group RG0, on the other hand, has a period of exposure greater than 2.8h and as such, it can be stated with greater confidence that a luminaire would not be viewed directly for this long.

The demand for RG0 light sources could be considered redundant, but it is not stated anywhere that it is prohibited to request the use of RG0 luminaires, or that these can be considered equivalent to those belonging to the RG1 risk category. As explained above, **the RG0 risk group represents a cautionary, optimal class of light source.**

A company that exhibits extra caution with regard to the safety of its operators, and decides to install equipment belonging to the risk-exempt RG0 category, could therefore be seen to be excessively conservative, but cannot certainly be criticised for having requested compliance with a parameter that provides greater safety for all involved.

# / Instruments

All the results we report are measurements made in full compliance with regulations. This way we provide lighting designers with absolutely real and reliable values.

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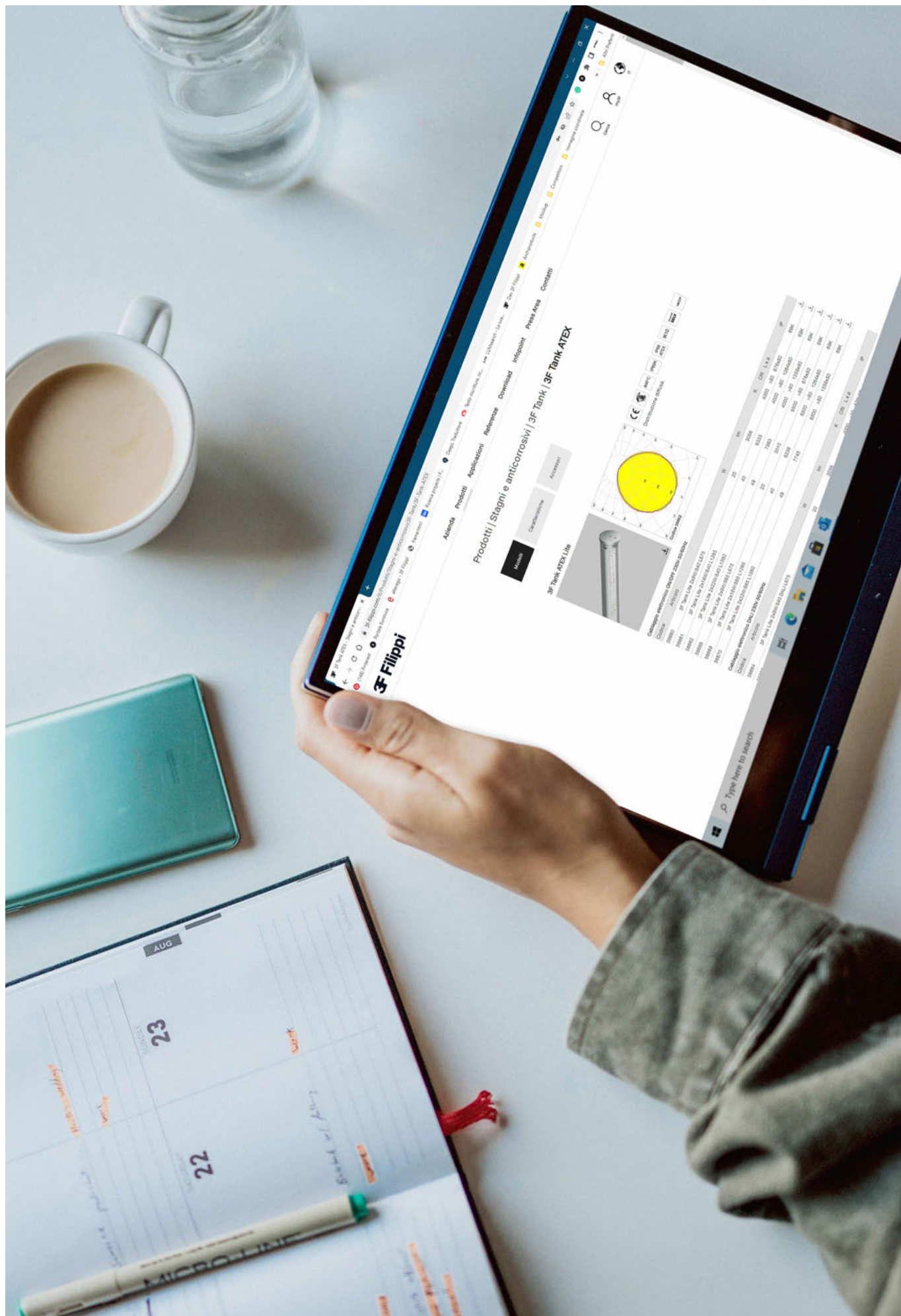
The **3f-filippi.com** website has been designed to make the research process more straightforward.

We decided to structure the information following the “**Research by code**” that leads directly to the item, the “**Product filter**” to choose the most suitable product from a dynamic screen and the ‘**Configurators**’ that also helps less practised users with guided creation of modular products.

All of our fixtures have identity cards showing their technical features and performance.

Once product has been selected on our website, it is possible to download its data sheet with all the required information.









# / 3F Hal

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**3F Hal** is the new product in the **3F Architectural** line, designed in collaboration with **[SCANDURRA]**.

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This luminaire is designed for the working and retail world, containing different types of light: diffuse and spot.

Inside, hidden, a spot source creates a beam of light on the screen, a mixture of light intensities with a technological heart, a novel combination reminiscent of a theatrical backstage, Bob Wilson's scenes and Kubrick-esque mystery technology.

## The **light** you don't expect.



This is a truly unique lighting product, thanks to its distinctive feature: a spotlight integrated into the fixture, with a dedicated ignition. The spot, inserted between body and screen, creates plays of light, becoming completely invisible when the product is switched off.

When the spot is switched on, an atmospheric lighting effect can be achieved, perfect for creating accent or courtesy lighting, while when only the screen is switched on, a uniform and comfortable light can be achieved, with a shadow area that characterises the product and reduces glare.

However, when both screen and spot are switched on, the result becomes striking: In fact, the spotlight remains clearly distinguishable, contributing to a light output of extraordinary quality.

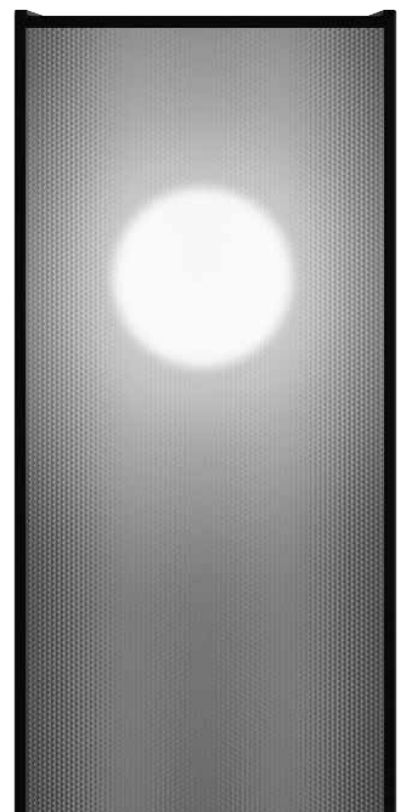
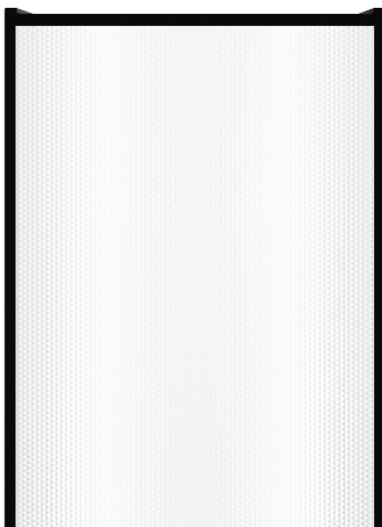
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### Finishes

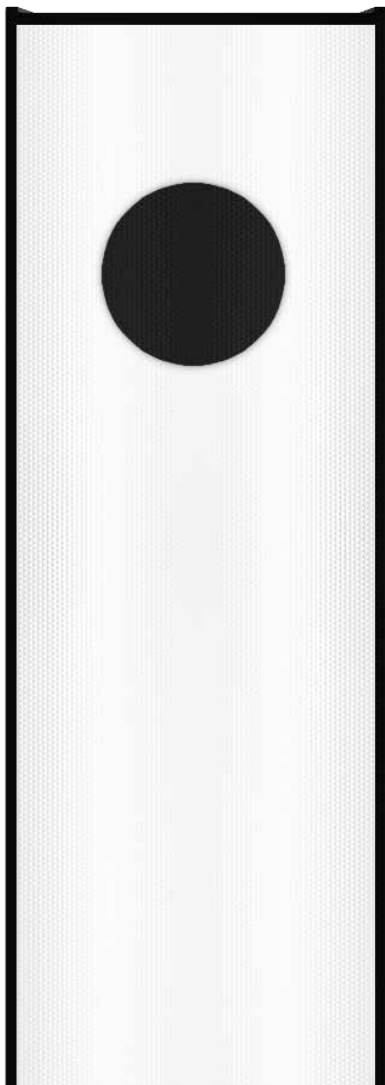
-  White
-  Black

### Interior spotlight accent lighting

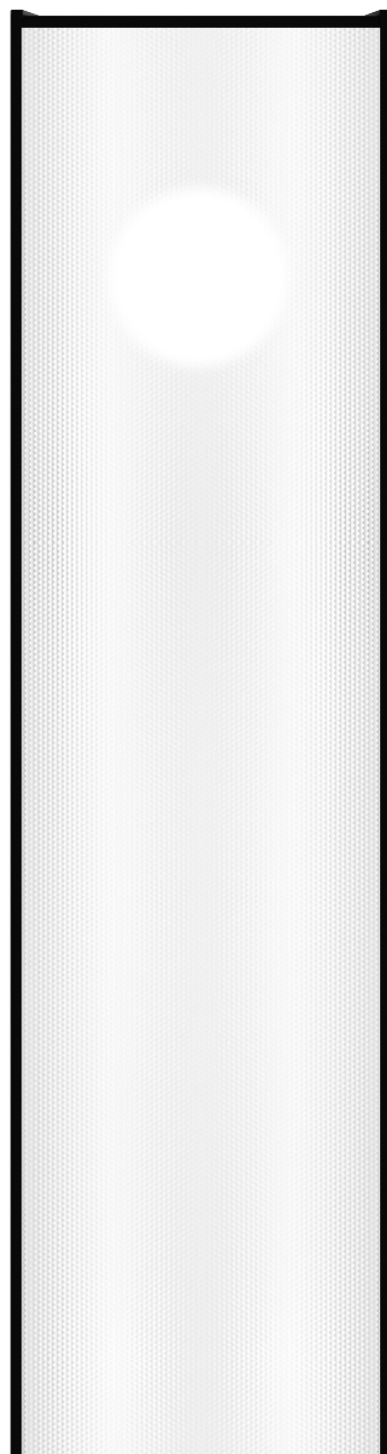
**3F Hal**  
LGS screen  
UGR <19

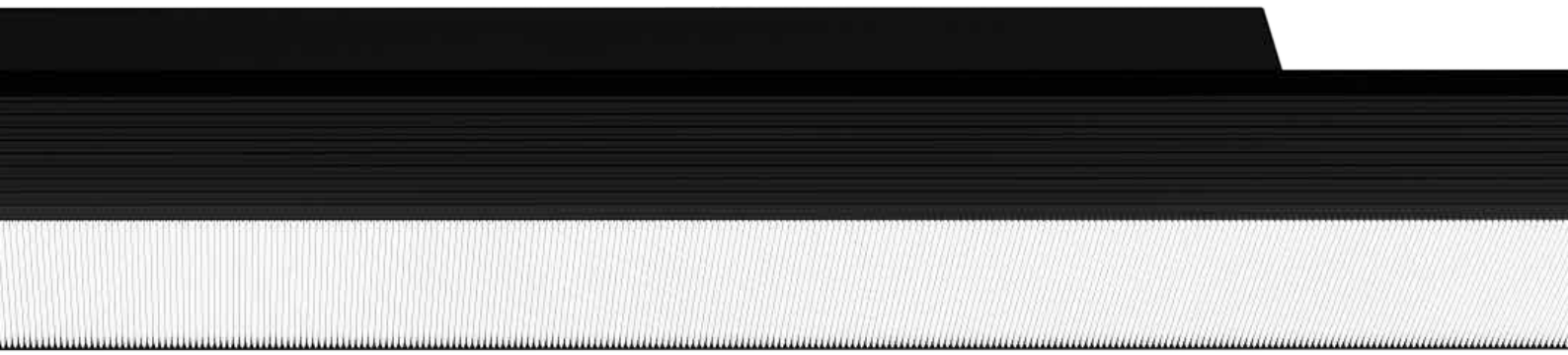


**LGS screen**  
comfortable lighting



**Interior spotlight + LGS screen**  
Full lighting





## A luminous **odyssey.**

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Combining innovation and versatility, 3F Hal is an ideal choice to enrich multifunctional spaces, both in terms of practicality and efficiency.

Its micro-prismatic **LGS screen** ensures luminous uniformity and luminance control  $<3000 \text{ cd/m}^2$ , thus guaranteeing perfect lighting in every situation.

The product also incorporates DALI, so that the **3 different emissions** (Direct, Indirect and Spot) can be controlled individually and independently.



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3F Hal is also available in a 'channel' version thanks to custommade brackets designed specifically for the three product versions (3F Hal 75, 150 and 300).

The brackets ensure the alignment and fixing of the individual products, regardless of the length chosen from the four available, making it easy to create customised light channels for different types of environment.

This simplicity of use translates into savings, making it easy and quick to mount the products, both surface-mounted and pendant, guaranteeing tailor-made solutions for all requirements.

## Many **sizes** and **lengths**.

3F Hal is designed to anticipate the many needs that affect each individual's daily life, taking care of the smallest details, making it more pleasant and comfortable according to their needs.

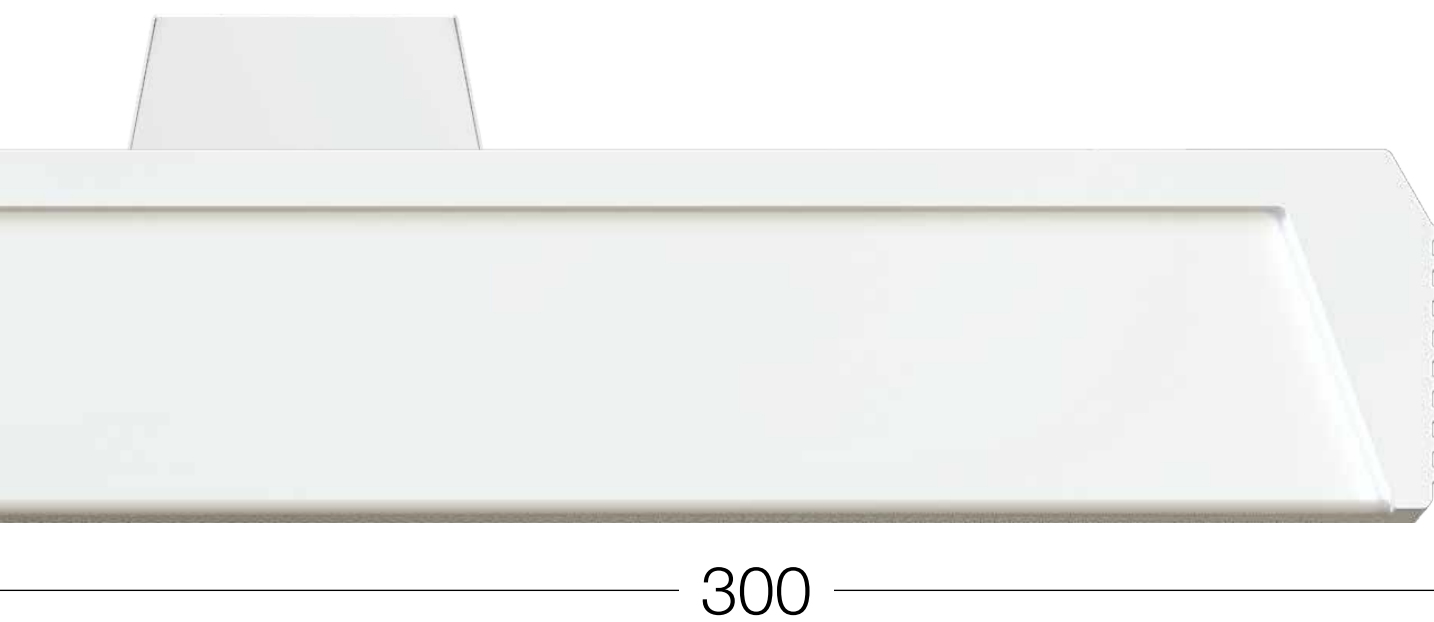
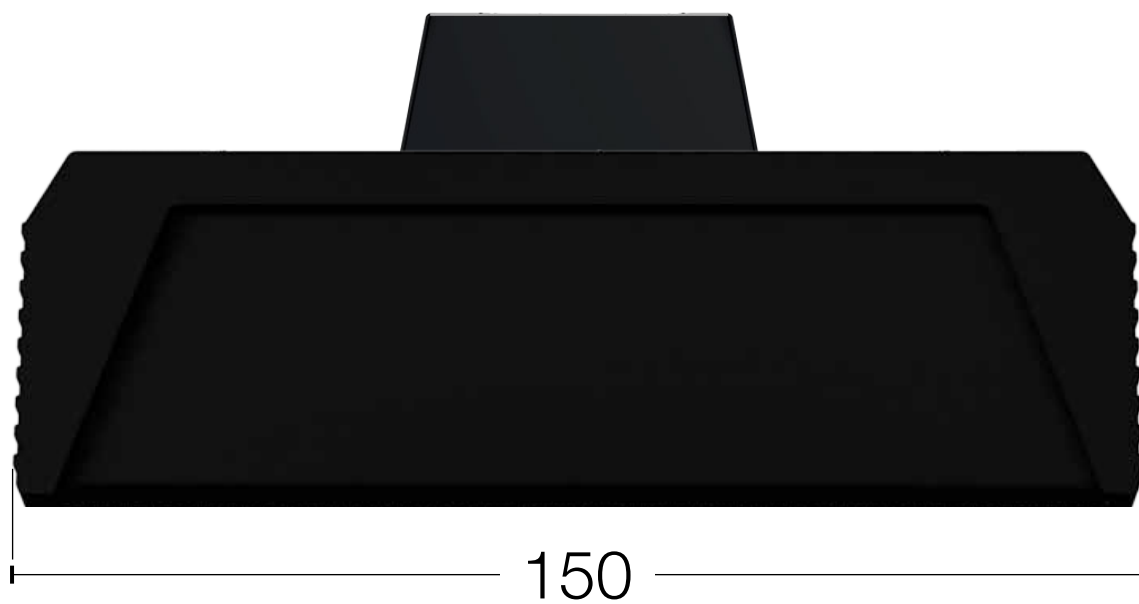
The luminaire is available in **3 widths** (75, 150 and 300 mm) **and 4 different lengths** (600, 1200, 1500 and 1800 mm), each characterised by a height of only 45 mm, thanks to the remote wiring above the product.

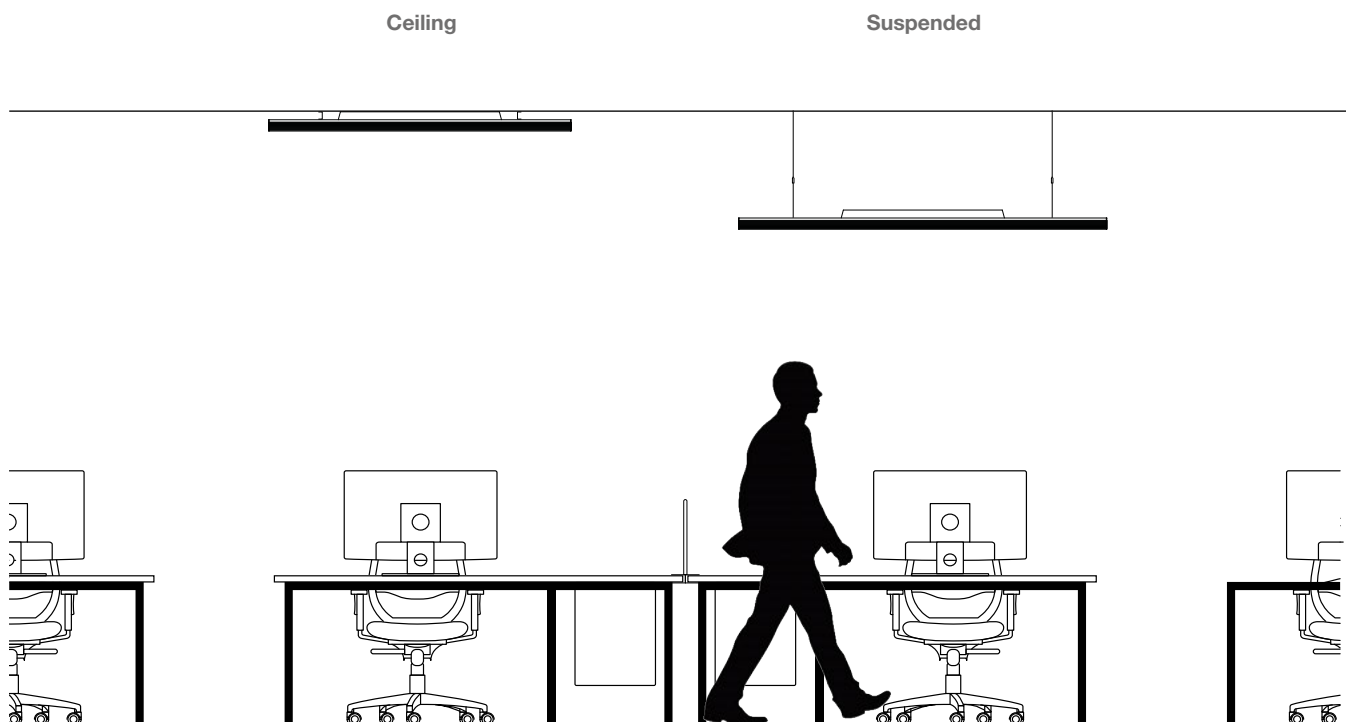
Inside, the spot is installed differently depending on the type of version. While in the 3F Hal 75 mm the spotlight is located in the centre, in the 150 and 300 mm versions, the spot is installed asymmetrically towards one of the two end caps.

This different setting enhances the versatility of the product, ensuring that 3F Hal can be configured as everyone wishes.

Scale 1:1  
mm





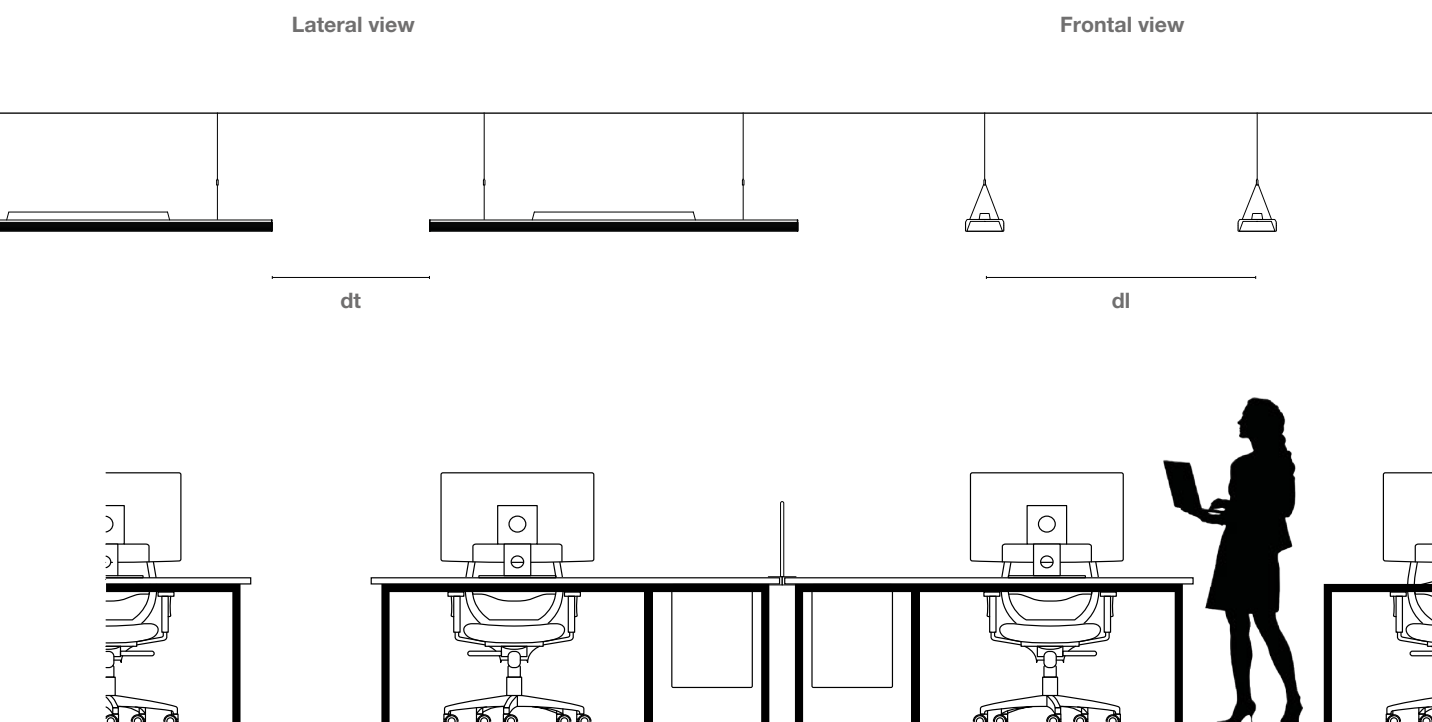


## 3F Hal

Range

	W	lm	LED	Wiring	Distribution	Dt x DI	L x B x H
3F Hal Spotlight 75 Direct	26 - 32,5	1764 - 2533	/830	DALI	Wide	1,11 x 1,16	1200 x 75 x 72 1500 x 75 x 72 1800 x 75 x 72
3F Hal Spotlight 150 Direct	26 - 49	2137 - 5213	/830	DALI	Wide	1,16 x 1,18	600 x 150 x 81 1200 x 150 x 81 1500 x 150 x 81 1800 x 150 x 81
3F Hal Spotlight 300 Direct	60 - 84	7112 - 10307	/830	DALI	Wide	1,17 x 1,18	1200 x 300 x 81 1500 x 300 x 81 1800 x 300 x 81
3F Hal 75 Direct	8,5 - 20,5	785 - 2356	/830	DALI	Wide	1,11 x 1,16	600 x 75 x 72 1200 x 75 x 72 1500 x 75 x 72 1800 x 75 x 72
3F Hal 150 Direct	14 - 37	1575 - 4712	/830	DALI	Wide	1,16 x 1,18	600 x 150 x 81 1200 x 150 x 81 1500 x 150 x 81 1800 x 150 x 81
3F Hal 300 Direct	48 - 72	6600 - 9900	/830	DALI	Wide	1,17 x 1,18	1200 x 300 x 81 1500 x 300 x 81 1800 x 300 x 81

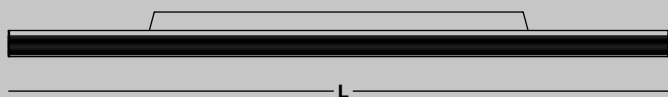
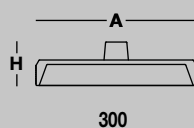
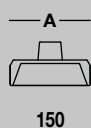
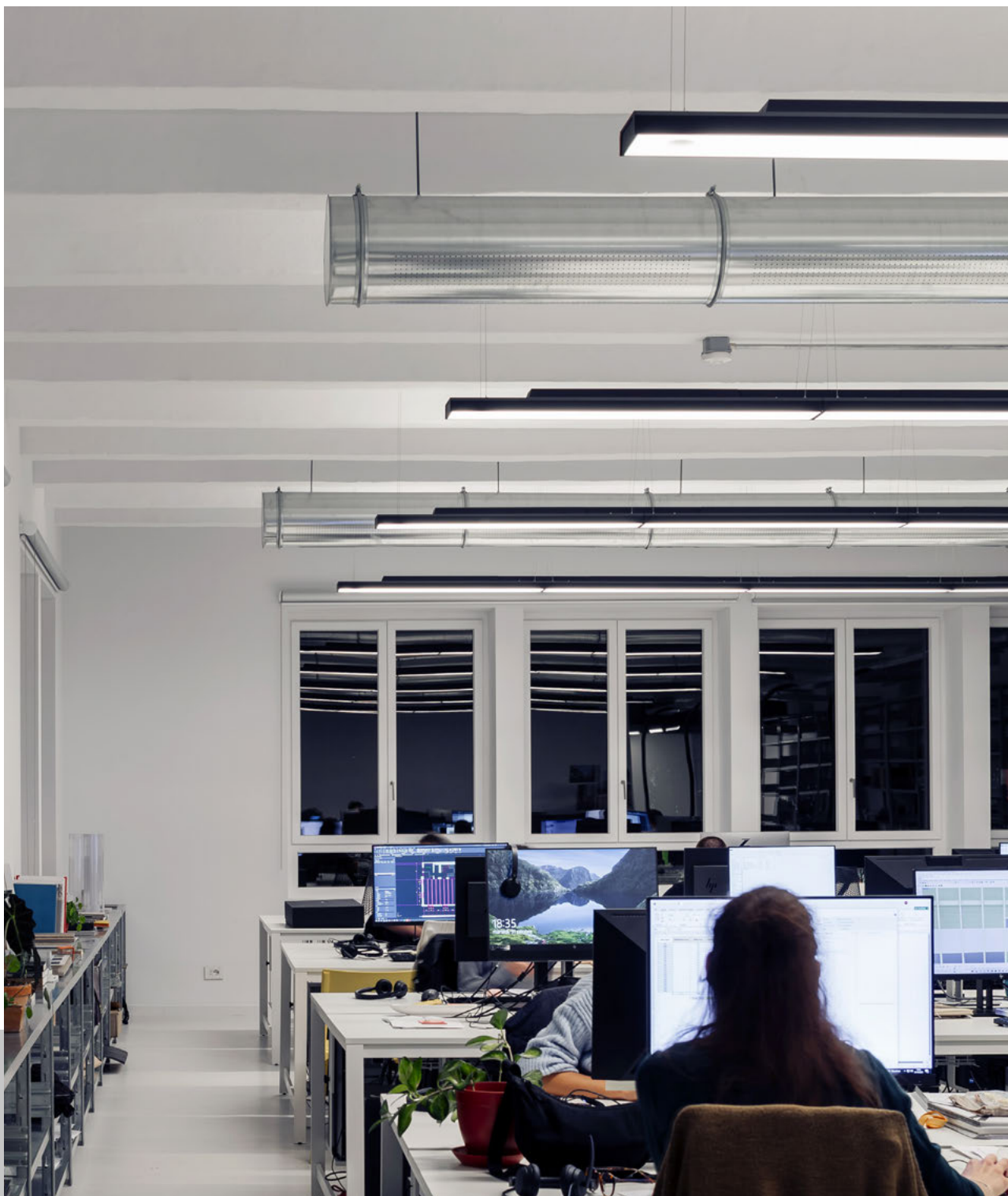




Range

## 3F Hal

	W	lm	LED	Wiring	Distribution	Dt x Dl	L x B x H
3F Hal Spotlight 75 Direct/Indirect	52 - 58	4903 - 5672	/830	DALI	Wide	1,11 x 1,16	1200 x 75 x 81 1500 x 75 x 81 1800 x 75 x 81
3F Hal Spotlight 150 Direct/Indirect	49 - 75	4865 - 8352	/830	DALI	Wide	1,16 x 1,18	600 x 150 x 81 1200 x 150 x 81 1500 x 150 x 81 1800 x 150 x 81
3F Hal Spotlight 300 Direct/Indirect	86 - 110	10251 - 13446	/830	DALI	Wide	1,17 x 1,18	1200 x 300 x 81 1500 x 300 x 81 1800 x 300 x 81
3F Hal 75 Direct/Indirect	40 - 46	4710 - 5495	/830	DALI	Wide	1,11 x 1,16	1200 x 75 x 81 1500 x 75 x 81 1800 x 75 x 81
3F Hal 150 Direct/Indirect	37 - 63	4303 - 7851	/830	DALI	Wide	1,16 x 1,18	600 x 150 x 81 1200 x 150 x 81 1500 x 150 x 81 1800 x 150 x 81
3F Hal 300 Direct/Indirect	74 - 98	9739 - 13039	/830	DALI	Wide	1,17 x 1,18	1200 x 300 x 81 1500 x 300 x 81 1800 x 300 x 81





## 3F Hal Direct

### ILLUMINOTECHNICAL

Direct symmetric distribution.  
Average luminance <3000 cd/m<sup>2</sup> for radial angles >65°.  
Lifetime (L80/B10): 100000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

### SOURCE

Linear LED modules and COBs.  
Colour initial tolerance (MacAdam): SDCM 3.

### MECHANICAL

Body and heads with embossed finish for maximum resistance to touch and scratches.  
Removable flow recuperator.  
LGS micro-prismatic flat diffuser in transparent methacrylate (PMMA), multi-lenticular exterior, anti-glare.  
Anti-glare opal polycarbonate filter for brightness uniformity.

#### Spotlight version

Invisible interior spot in central position (75 mm version) or lateral position (150 and 300 mm versions), for accent or service lighting.  
Internal parabolic element in black aluminium.

### ELECTRICAL

In compliance with EN 60598-1.  
Compliance with the EN 60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.  
5-pole terminal block, single 230V circuit, 2 DALI addresses (depending on the type of lighting fixture).  
5-pole transparent power cable protrudes by 1.5 m with sheared end.

### INSTALLATION

Ceiling mounted or suspension installation.

### APPLICATIONS

Environments: with VDTs, meeting rooms, offices.  
Environments: architectural, commercial, staterooms, banks.  
Environments where dynamic, soft and diffuse light is required for optimal visual comfort.

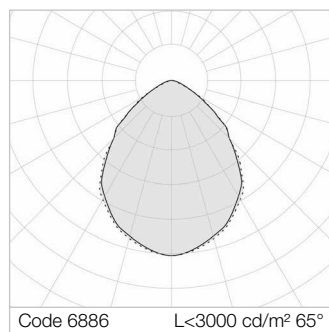
### LIGHT MANAGEMENT

The DALI products can be controlled with 3F Easy Dim (page 156) or 3F Smart Dimming technology (page 166).

### ON REQUEST

- different power levels, colour rendering indices and colour temperatures
- housing in different RAL colours
- wiring: CLO (page 188)
- emergency versions

## 3F Hal Spotlight



Version with central spot (SC) or side spot (SL).

### 3F Hal 75 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6880	3F Hal75 WH 12/830+1SC10 D LGS L12	26	1764	3000	>80	1200x75x72
○ 6881	3F Hal75 WH 16/830+1SC10 D LGS L15	31	2277	3000	>80	1500x75x72
○ 6882	3F Hal75 WH 18/830+1SC10 D LGS L18	32.5	2533	3000	>80	1800x75x72
● 6911	3F Hal75 BK 12/830+1SC10 D LGS L12	26	1764	3000	>80	1200x75x72
● 6912	3F Hal75 BK 16/830+1SC10 D LGS L15	31	2277	3000	>80	1500x75x72
● 6913	3F Hal75 BK 18/830+1SC10 D LGS L18	32.5	2533	3000	>80	1800x75x72

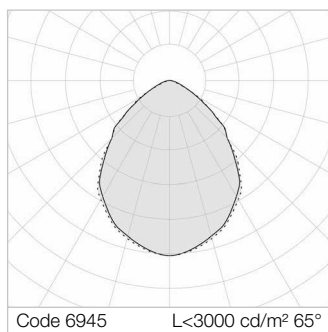
### 3F Hal 150 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6884	3F Hal150 WH 11/830+1SL10 D LGS L06	26	2137	3000	>80	600x150x81
○ 6885	3F Hal150 WH 22/830+1SL10 D LGS L12	38	3682	3000	>80	1200x150x81
○ 6886	3F Hal150 WH 28/830+1SL10 D LGS L15	44	4454	3000	>80	1500x150x81
○ 6887	3F Hal150 WH 33/830+1SL10 D LGS L18	49	5213	3000	>80	1800x150x81
● 6915	3F Hal150 BK 11/830+1SL10 D LGS L06	26	2137	3000	>80	600x150x81
● 6916	3F Hal150 BK 22/830+1SL10 D LGS L12	38	3682	3000	>80	1200x150x81
● 6917	3F Hal150 BK 28/830+1SL10 D LGS L15	44	4454	3000	>80	1500x150x81
● 6918	3F Hal150 BK 33/830+1SL10 D LGS L18	49	5213	3000	>80	1800x150x81

### 3F Hal 300 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6890	3F Hal300 WH 43/830+1SL10 D LGS L12	60	7112	3000	>80	1200x300x81
○ 6891	3F Hal300 WH 54/830+1SL10 D LGS L15	72	8710	3000	>80	1500x300x81
○ 6892	3F Hal300 WH 65/830+1SL10 D LGS L18	84	10307	3000	>80	1800x300x81
● 6921	3F Hal300 BK 43/830+1SL10 D LGS L12	60	7112	3000	>80	1200x300x81
● 6922	3F Hal300 BK 54/830+1SL10 D LGS L15	72	8710	3000	>80	1500x300x81
● 6923	3F Hal300 BK 65/830+1SL10 D LGS L18	84	10307	3000	>80	1800x300x81

## 3F Hal



Version without spot.

### 3F Hal 75 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6879	3F Hal75 WH 6/830 D LGS L06	8.5	785	3000	>80	600x75x72
○ 6940	3F Hal75 WH 12/830 D LGS L12	14	1571	3000	>80	1200x75x72
○ 6941	3F Hal75 WH 16/830 D LGS L15	19	2095	3000	>80	1500x75x72
○ 6942	3F Hal75 WH 18/830 D LGS L18	20.5	2356	3000	>80	1800x75x72
● 6910	3F Hal75 BK 6/830 D LGS L06	8.5	785	3000	>80	600x75x72
● 6960	3F Hal75 BK 12/830 D LGS L12	14	1571	3000	>80	1200x75x72
● 6961	3F Hal75 BK 16/830 D LGS L15	19	2095	3000	>80	1500x75x72
● 6962	3F Hal75 BK 18/830 D LGS L18	20.5	2356	3000	>80	1800x75x72

### 3F Hal 150 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6943	3F Hal150 WH 11/830 D LGS L06	14	1575	3000	>80	600x150x81
○ 6944	3F Hal150 WH 22/830 D LGS L12	26	3150	3000	>80	1200x150x81
○ 6945	3F Hal150 WH 28/830 D LGS L15	32	3938	3000	>80	1500x150x81
○ 6946	3F Hal150 WH 33/830 D LGS L18	37	4712	3000	>80	1800x150x81
● 6963	3F Hal150 BK 11/830 D LGS L06	14	1575	3000	>80	600x150x81
● 6964	3F Hal150 BK 22/830 D LGS L12	26	3150	3000	>80	1200x150x81
● 6965	3F Hal150 BK 28/830 D LGS L15	32	3938	3000	>80	1500x150x81
● 6966	3F Hal150 BK 33/830 D LGS L18	37	4712	3000	>80	1800x150x81


### 3F Hal 300 - DALI electronic wiring 230V-50/60Hz

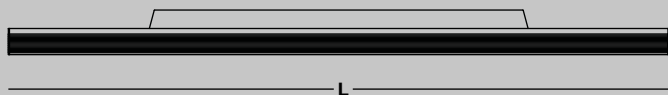
Code	Item	W	lm	K	CRI	L x A x H
○ 6947	3F Hal300 WH 43/830 D LGS L12	48	6600	3000	>80	1200x300x81
○ 6948	3F Hal300 WH 54/830 D LGS L15	60	8250	3000	>80	1500x300x81
○ 6949	3F Hal300 WH 65/830 D LGS L18	72	9900	3000	>80	1800x300x81
● 6967	3F Hal300 BK 43/830 D LGS L12	48	6600	3000	>80	1200x300x81
● 6968	3F Hal300 BK 54/830 D LGS L15	60	8250	3000	>80	1500x300x81
● 6969	3F Hal300 BK 65/830 D LGS L18	72	9900	3000	>80	1800x300x81



—A—  
  
75

—A—  
  
150

—A—  
H  
  
300







## 3F Hal Direct/Indirect

### ILLUMINOTECHNICAL

Symmetric direct-indirect distribution.  
Average luminance <3000 cd/m<sup>2</sup> for radial angles >65°.  
Lifetime (L80/B10): 100000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

### SOURCE

Linear LED modules and COBs.  
Colour initial tolerance (MacAdam): SDCM 3.

### MECHANICAL

Body and heads with embossed finish for maximum resistance to touch and scratches.  
Removable flow recuperator.  
LGS micro-prismatic flat diffuser in transparent methacrylate (PMMA), multi-lenticular exterior, anti-glare.  
Anti-glare opal polycarbonate filter for brightness uniformity.  
Translucent polycarbonate upper diffuser.

#### Spotlight version

Invisible interior spot in central position (75 mm version) or lateral position (150 and 300 mm versions), for accent or service lighting.  
Internal parabolic element in black aluminium.

### ELECTRICAL

In compliance with EN 60598-1.  
Compliance with the EN 60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.  
5-pole terminal block, single 230V circuit, 2 DALI addresses (depending on the type of lighting fixture).  
5-pole transparent power cable protrudes by 1.5 m with sheared end.

### INSTALLATION

Suspension installation.

### APPLICATIONS

Environments: with VDTs, meeting rooms, offices.  
Environments: architectural, commercial, staterooms, banks.  
Environments where dynamic, soft and diffuse light is required for optimal visual comfort.

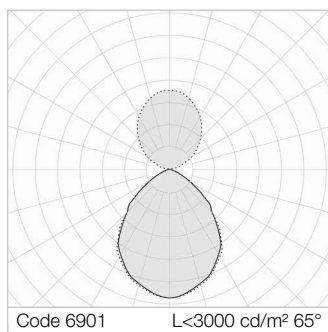
### LIGHT MANAGEMENT

The DALI products can be controlled with 3F Easy Dim (page 156) or 3F Smart Dimming technology (page 166).

### ON REQUEST

- different power levels, colour rendering indices and colour temperatures
- housing in different RAL colours
- wiring: CLO (page 188)
- emergency versions

## 3F Hal DI Spotlight



Version with central spot (SC) or side spot (SL).

### 3F Hal 75 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6895	3F Hal75DI WH 12+23/830+1SC10 D LGS L12	52	4903	3000	>80	1200x75x81
○ 6896	3F Hal75DI WH 16+23/830+1SC10 D LGS L15	57	5416	3000	>80	1500x75x81
○ 6897	3F Hal75DI WH 18+23/830+1SC10 D LGS L18	58	5672	3000	>80	1800x75x81
● 6926	3F Hal75DI BK 12+23/830+1SC10 D LGS L12	52	4903	3000	>80	1200x75x81
● 6927	3F Hal75DI BK 16+23/830+1SC10 D LGS L15	57	5416	3000	>80	1500x75x81
● 6928	3F Hal75DI BK 18+23/830+1SC10 D LGS L18	58	5672	3000	>80	1800x75x81

### 3F Hal 150 - DALI electronic wiring 230V-50/60Hz

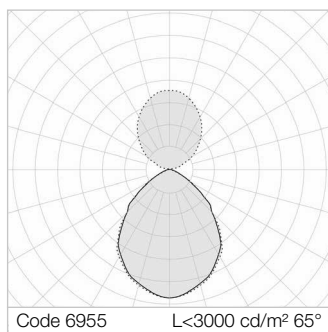
Code	Item	W	lm	K	CRI	L x A x H
○ 6899	3F Hal150DI WH 11+20/830+1SL10 D LGS L06	49	4865	3000	>80	600x150x81
○ 6900	3F Hal150DI WH 22+23/830+1SL10 D LGS L12	64	6821	3000	>80	1200x150x81
○ 6901	3F Hal150DI WH 28+23/830+1SL10 D LGS L15	69	7593	3000	>80	1500x150x81
○ 6902	3F Hal150DI WH 33+23/830+1SL10 D LGS L18	75	8352	3000	>80	1800x150x81
● 6930	3F Hal150DI BK 11+20/830+1SL10 D LGS L06	49	4865	3000	>80	600x150x81
● 6931	3F Hal150DI BK 22+23/830+1SL10 D LGS L12	64	6821	3000	>80	1200x150x81
● 6932	3F Hal150DI BK 28+23/830+1SL10 D LGS L15	69	7593	3000	>80	1500x150x81
● 6933	3F Hal150DI BK 33+23/830+1SL10 D LGS L18	75	8352	3000	>80	1800x150x81

### 3F Hal 300 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6905	3F Hal300DI WH 43+23/830+1SL10 D LGS L12	86	10251	3000	>80	1200x300x81
○ 6906	3F Hal300DI WH 54+23/830+1SL10 D LGS L15	98	11849	3000	>80	1500x300x81
○ 6907	3F Hal300DI WH 65+23/830+1SL10 D LGS L18	110	13446	3000	>80	1800x300x81
● 6936	3F Hal300DI BK 43+23/830+1SL10 D LGS L12	86	10251	3000	>80	1200x300x81
● 6937	3F Hal300DI BK 54+23/830+1SL10 D LGS L15	98	11849	3000	>80	1500x300x81
● 6938	3F Hal300DI BK 65+23/830+1SL10 D LGS L18	110	13446	3000	>80	1800x300x81



## 3F Hal DI



Version without spot.

### 3F Hal 75 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6950	3F Hal75DI WH 12+23/830 D LGS L12	40	4710	3000	>80	1200x75x81
○ 6951	3F Hal75DI WH 16+23/830 D LGS L15	45	5234	3000	>80	1500x75x81
○ 6952	3F Hal75DI WH 18+23/830 D LGS L18	46	5495	3000	>80	1800x75x81
● 6970	3F Hal75DI BK 12+23/830 D LGS L12	40	4710	3000	>80	1200x75x81
● 6971	3F Hal75DI BK 16+23/830 D LGS L15	45	5234	3000	>80	1500x75x81
● 6972	3F Hal75DI BK 18+23/830 D LGS L18	46	5495	3000	>80	1800x75x81

### 3F Hal 150 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6953	3F Hal150DI WH 11+20/830 D LGS L06	37	4303	3000	>80	600x150x81
○ 6954	3F Hal150DI WH 22+23/830 D LGS L12	52	6289	3000	>80	1200x150x81
○ 6955	3F Hal150DI WH 28+23/830 D LGS L15	57	7077	3000	>80	1500x150x81
○ 6956	3F Hal150DI WH 33+23/830 D LGS L18	63	7851	3000	>80	1800x150x81
● 6973	3F Hal150DI BK 11+20/830 D LGS L06	37	4303	3000	>80	600x150x81
● 6974	3F Hal150DI BK 22+23/830 D LGS L12	52	6289	3000	>80	1200x150x81
● 6975	3F Hal150DI BK 28+23/830 D LGS L15	57	7077	3000	>80	1500x150x81
● 6976	3F Hal150DI BK 33+23/830 D LGS L18	63	7851	3000	>80	1800x150x81

### 3F Hal 300 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6957	3F Hal300DI WH 43+23/830 D LGS L12	74	9739	3000	>80	1200x300x81
○ 6958	3F Hal300DI WH 54+23/830 D LGS L15	86	11389	3000	>80	1500x300x81
○ 6959	3F Hal300DI WH 65+23/830 D LGS L18	98	13039	3000	>80	1800x300x81
● 6977	3F Hal300DI BK 43+23/830 D LGS L12	74	9739	3000	>80	1200x300x81
● 6978	3F Hal300DI BK 54+23/830 D LGS L15	86	11389	3000	>80	1500x300x81
● 6979	3F Hal300DI BK 65+23/830 D LGS L18	98	13039	3000	>80	1800x300x81

## 3F Hal | Accessories



Code	Item
A01587	Slid.brack.w/reg.susp. 3F Hal 75

Free-position sliding bracket with regulator in galvanised steel. Accessory dedicated to suspended installation.

**In the case of purchase of only one sliding bracket with controller (code A01587), the suspension cable must be made of galvanised steel with 49 elementary wires of minimum 1.5 mm diameter (for a weight of 15 kg).**



Code	Item
A01588	kit 4 adjust. 1m susp. 3F Hal 150-300

Suspension installation kit consisting of 4 cables in galvanised steel and regulators.



Code	Item
A01591	Y-Susp. 3F Hal 150
A01592	Y-Susp. 3F Hal 300

Fixed suspension for Y-shaped installations.

**These accessories must ALWAYS be used with one of the following codes: A20485 - A20486.**



Code	Item
A20485	Suspension without adjustment - 0.5 m
A20486	Suspension without adjustment - 1 m

Suspension without controller, galvanised steel cable 1.5 mm diameter, load 15 kg.



Code	Item
A01593	5 pole round rose Ø90 (no cable) WH
A01594	5 pole round rose Ø90 (no cable) BK

Electric supply with polycarbonate case.



Code	Item
A01598	Conn. brack. for susp. 3F Hal 75
A01599	Conn. brack. for susp. 3F Hal 150
A01600	Conn. brack. for susp. 3F Hal 300

Pair of galvanised steel connecting brackets to form linear channels, for suspended installation.



Code	Item
A01595	Pair of brack. ceiling instal. 3F Hal 75
A01596	Pair of brack. ceiling instal. 3F Hal 150
A01597	Pair of brack. ceiling instal. 3F Hal 300

Free-position sliding brackets in galvanised steel. Accessory dedicated to ceiling installation.

**Accessory A01596 not compatible with 3F Hal150 L06 versions.**



Code	Item
A01672	Conn. brack. for ceiling instal. 3F Hal 75
A01673	Conn. brack. for ceiling instal. 3F Hal 150
A01674	Conn. brack. for ceiling instal. 3F Hal 300

Pair of galvanised steel connecting brackets to form linear channels, for ceiling installation.



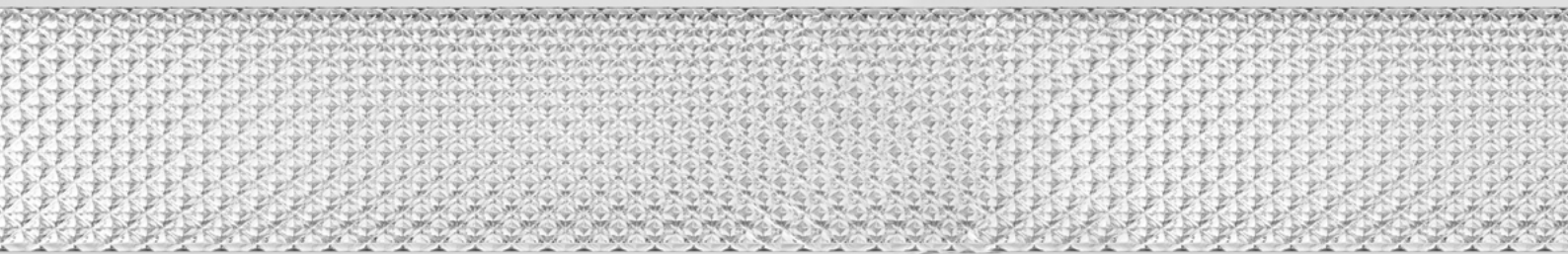
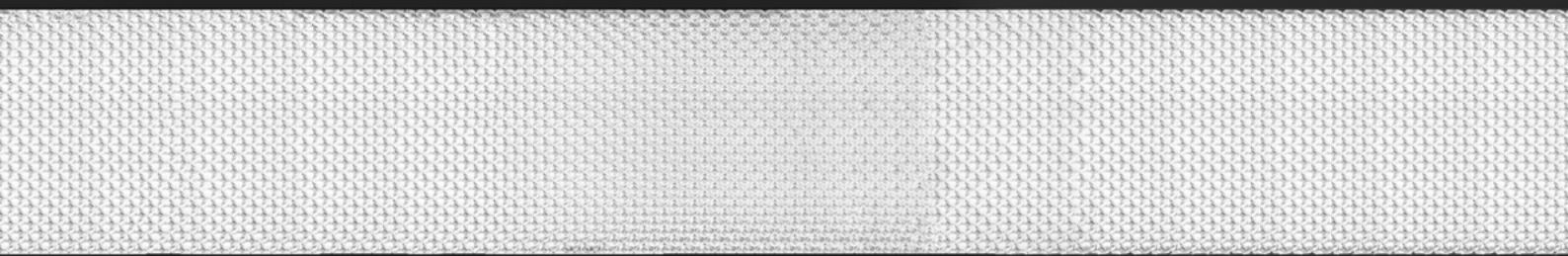
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**3F HD** was born from the desire to innovate the lighting of office spaces with a minimal, contemporary and highly technical linear system.

---

A true necessity, given the growing demand for solutions aimed at energy saving, visual comfort and the current LEED certification, especially in environments with the presence of video terminals.

Thanks to our consolidated expertise, we took up the challenge of designing an ideal lighting fixture for contemporary work spaces, in terms of performance and flexibility offered to the designer.



**3F HD OCW**

Optics Control White  
Complies with LEED  
regulations



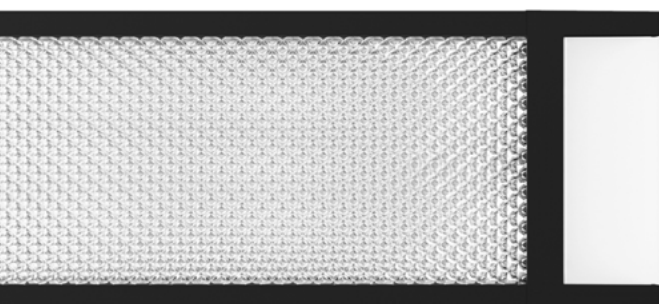
**3F HD OCB**

Optics Control Black  
Complies with LEED  
regulations

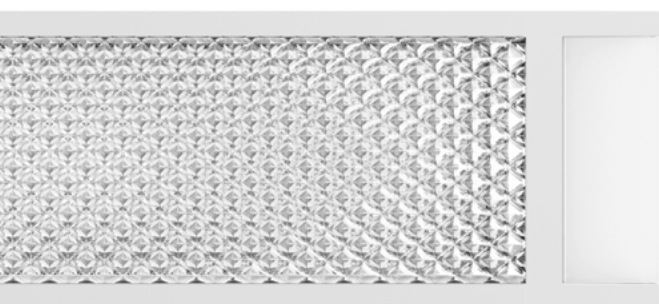




**3F HD FDO**  
Flat opal diffuser



**3F HD FDP**  
Flat micro prismatic diffuser



**3F HD GSP**  
Prismatic screen

## Room for **light...**

### **FDO screen**

The opal screen is indicated for areas where no visual engagement is required. This is why it finds application in waiting rooms and transit areas.

### **FDP screen**

This special micro-prismatic screen is designed and studied for office areas. For this reason it is used in areas where greater visual comfort on worktops is required.




### **GSP screen**

Also this screen, developed and designed entirely by our R&D department, is designed for work areas. It finds application in areas where greater visual comfort is required with reduced luminance values.

### **OC optics**

The luminaire is also available in a LEED compliant version, equipped with OC optics, an innovative and unique technical solution on the market for controlling luminance in work environments, in accordance with LEED specifications.

### **Finishes**

-  White
-  Aluminum
-  Black



## ... and shadows.

---

3F HD is a product created with two different types of **end caps**.

While the OC (Optic Control - OCB and OCW) have blind caps, given that lighting and lighting distribution control are managed completely by the cells, those with screens use lighted end caps those

equipped with screens use luminous end caps, designed to perform both an aesthetic function, eliminating the annoying 'cave' effect, and a functional one, significantly reducing luminance and UGR values.

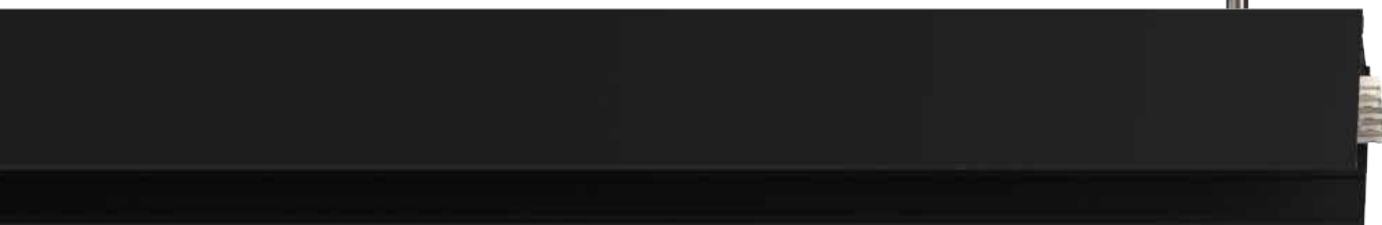
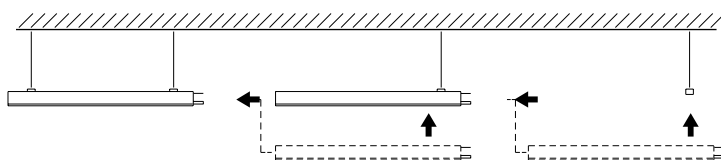


Scale 1:1  
mm



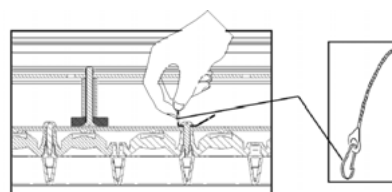
**Step 1:**

Install the structures by connecting them using the joining elements (pre-assembled) and connect the power lines.



**Step 3:**

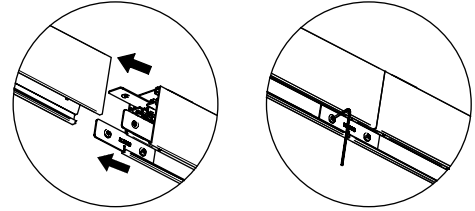
Insert the light element on the structure by making the two magnets of the optics coincide with those of the body.



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**Step 2:**

Connect the Fast Wiring plug by aligning the guides, sliding them into the body and tightening them with an Allen key.



## To infinity and **beyond.**

In the duct versions, the FastWiring system drastically reduces **installation time**.

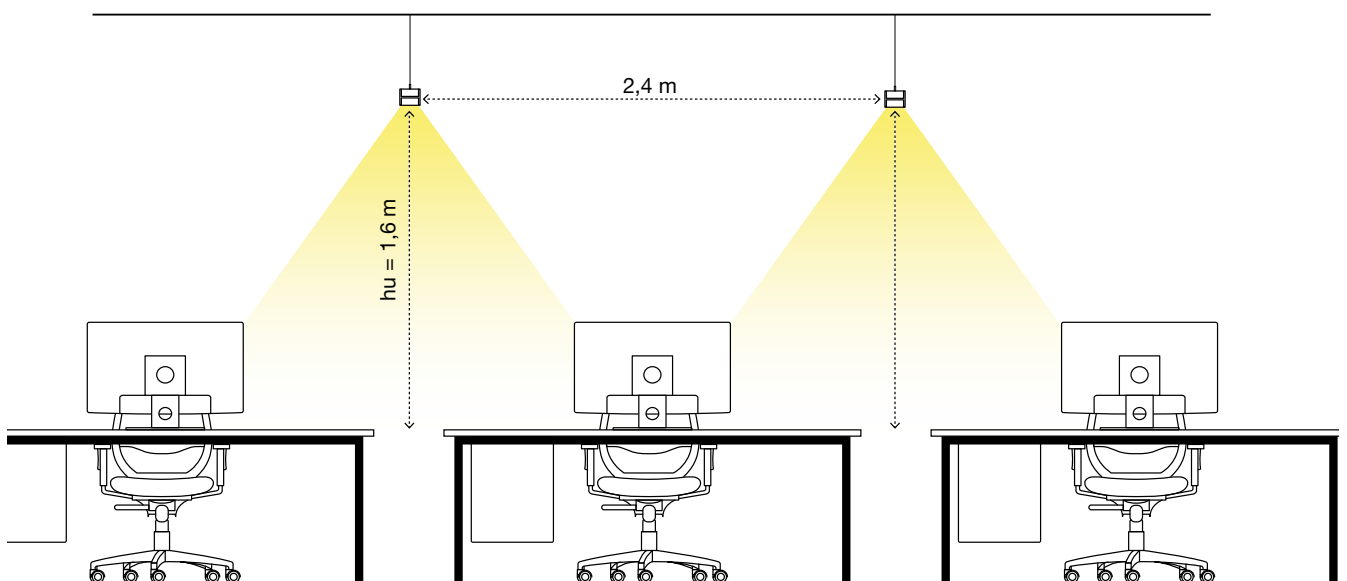
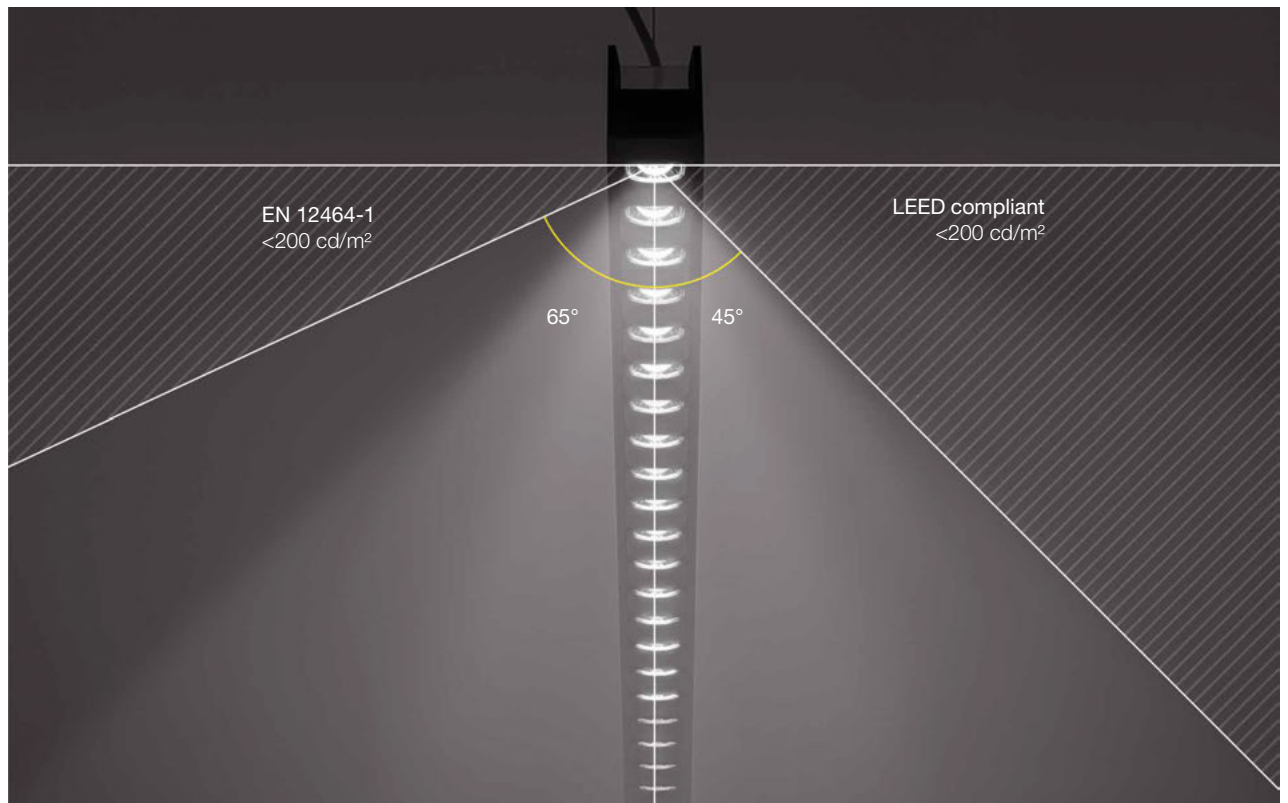
A plug and a socket are respectively mounted at the beginning and at the end of each bar: just push them together and the connection takes place automatically.

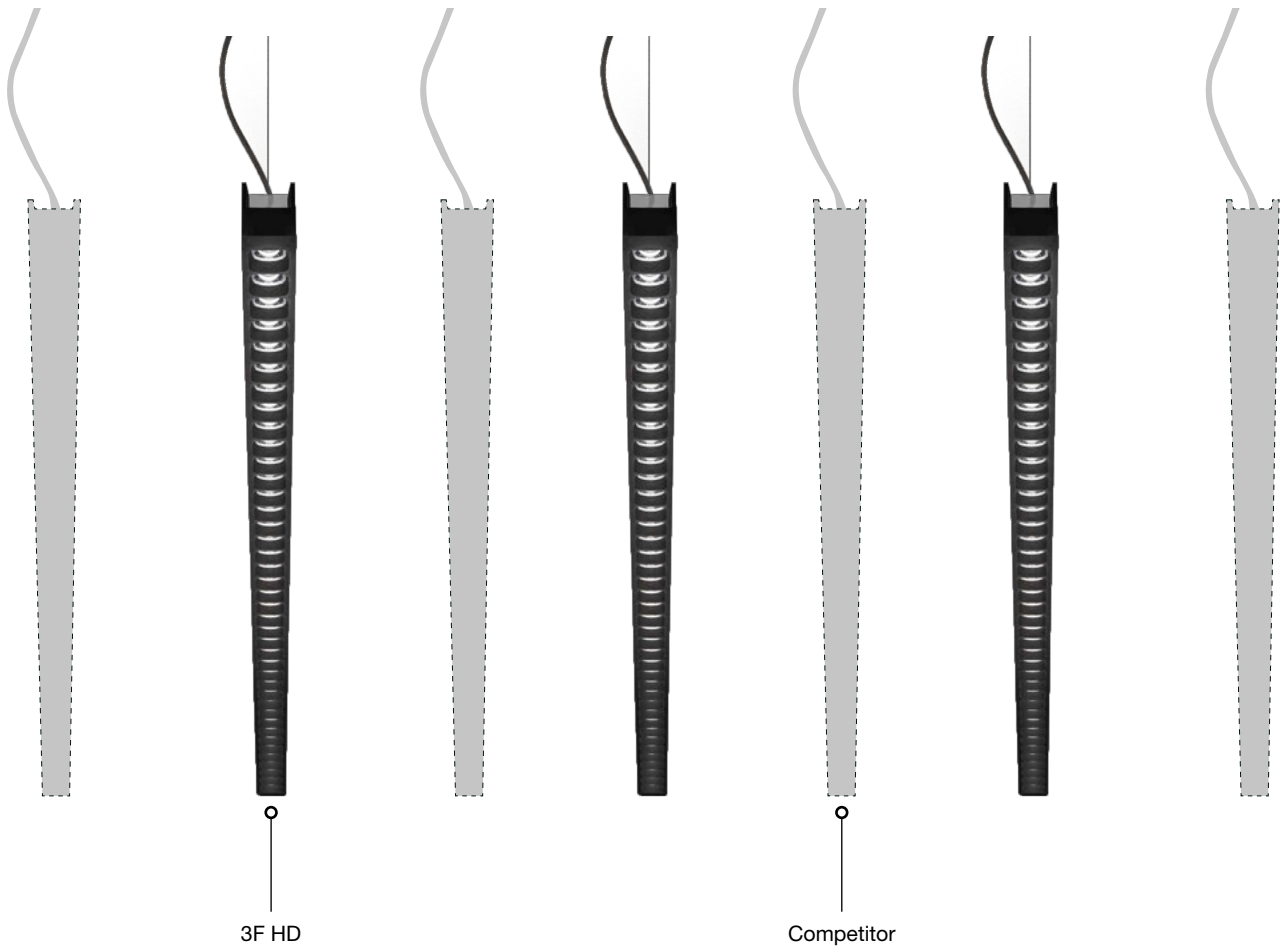
From a mechanical point of view, the connection is ensured thanks to the **joining elements** (already pre-assembled) inside the second body and the fixing of the safety screws.

Thanks to the innovative Optic Control optics, the **DT** (transversal installation pitch, i.e. the installation distance between the luminaires) offered by 3F HD OCB is up to 50% higher than the

average of similar products offered by the major brands on the market.

The performance is obtained by maintaining the 500 lux and guaranteeing, thanks to the direct emission alone, a complete **homogeneity** of the luminous flux on the work surface.





## + light - products.

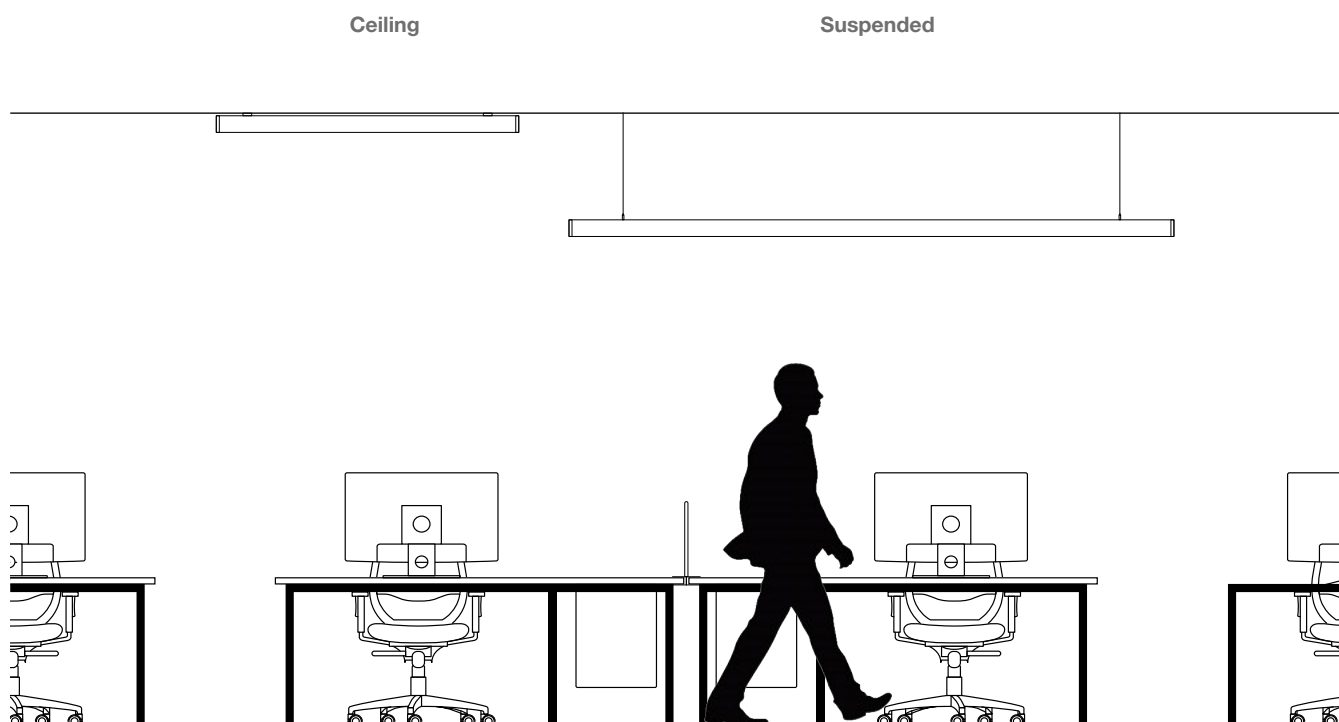
### OC optics

Available in OCW (Optic Control White) and OCB (Optic Control Black) versions, this optic is designed to fully meet the safety limits set by the **LEED certification**.

For angles above 45° and 65°, 3F HD OC drastically reduces glare levels by making the product appear dull, while still providing unprecedented levels of illuminance.

This unique feature makes it an extremely competitive product: installed in a generic environment, for the same luminous flux, the efficacy of three 3F HD OC is equal to that of five similar competitive products.

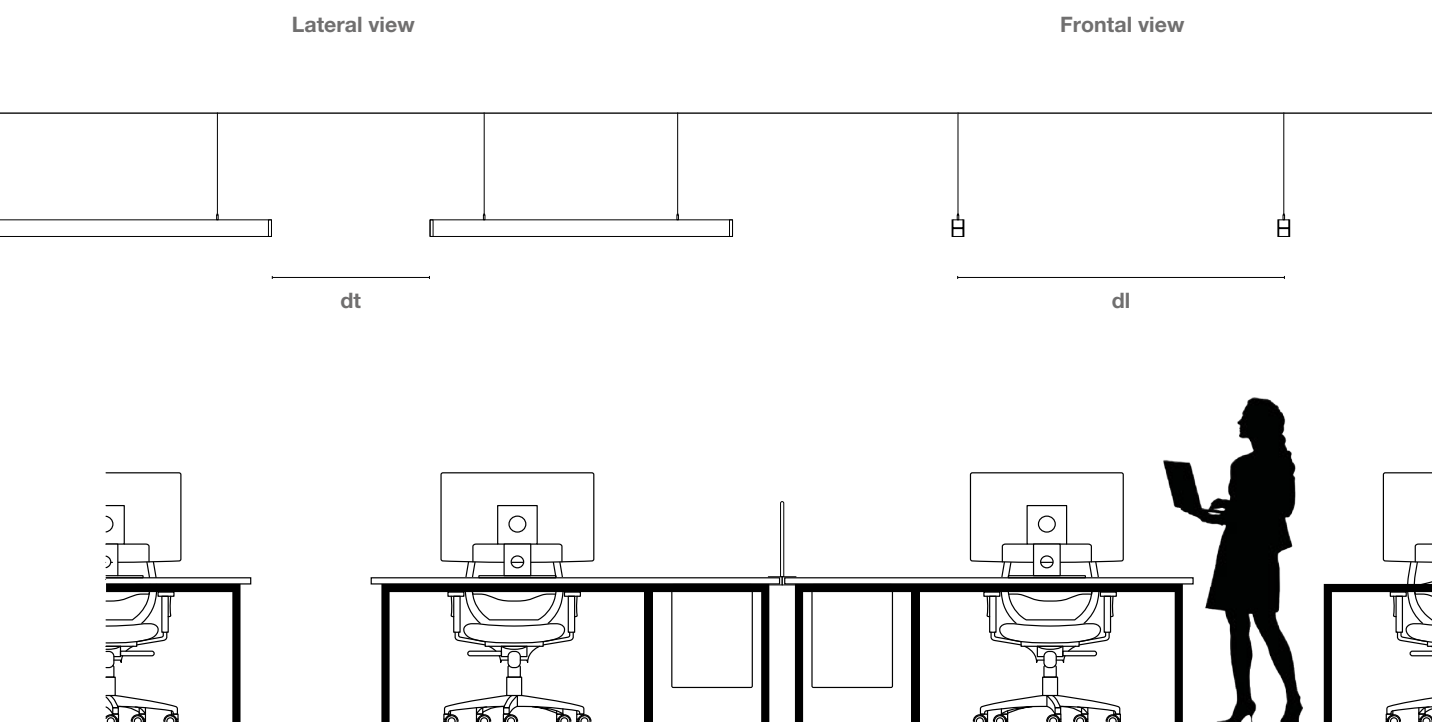




## 3F HD

Range

	W	lm	LED	Wiring	Installation	Dt x DI	L x B x H
3F HD Direct OCW	14,5 - 33	1713 - 4285	/830	DALI	Single Channel	1,32 x 1,00	1214 x 57 x 80 1508 x 57 x 80 2975 x 57 x 80
3F HD Direct OCW	14,5 - 33	1586 - 3967	/830	DALI	Single Channel	1,34 x 1,00	1214 x 57 x 80 1508 x 57 x 80 2975 x 57 x 80
3F HD Direct GSP	14 - 56	1374 - 6428	/840	DALI	Single Channel	1,14 x 1,18	1214 x 57/100 x 80 1508 x 57/100 x 80 2975 x 57/100 x 80
3F HD Direct HO GSP	25 - 98	2596 - 11085	/840	DALI	Single Channel	1,14 x 1,18	1214 x 57/100 x 80 1508 x 57/100 x 80 2975 x 57/100 x 80
3F HD Direct FDP	14 - 56	1292 - 6062	/840 /827 - 865	DALI DT8*	Single Channel	1,16 x 1,18	1214 x 57/100 x 80 1508 x 57/100 x 80 2975 x 57/100 x 80
3F HD Direct HO FDP	25 - 98	2448 - 10454	/840	DALI	Single Channel	1,16 x 1,18	1214 x 57/100 x 80 1508 x 57/100 x 80 2975 x 57/100 x 80
3F HD Direct FDO	14 - 56	1250 - 5660	/840	DALI	Single Channel	1,29 x 1,24	1214 x 57/100 x 80 1508 x 57/100 x 80 2975 x 57/100 x 80
3F HD Direct HO FDO	25 - 98	2286 - 9760	/840	DALI	Single Channel	1,29 x 1,24	1214 x 57/100 x 80 1508 x 57/100 x 80 2975 x 57/100 x 80



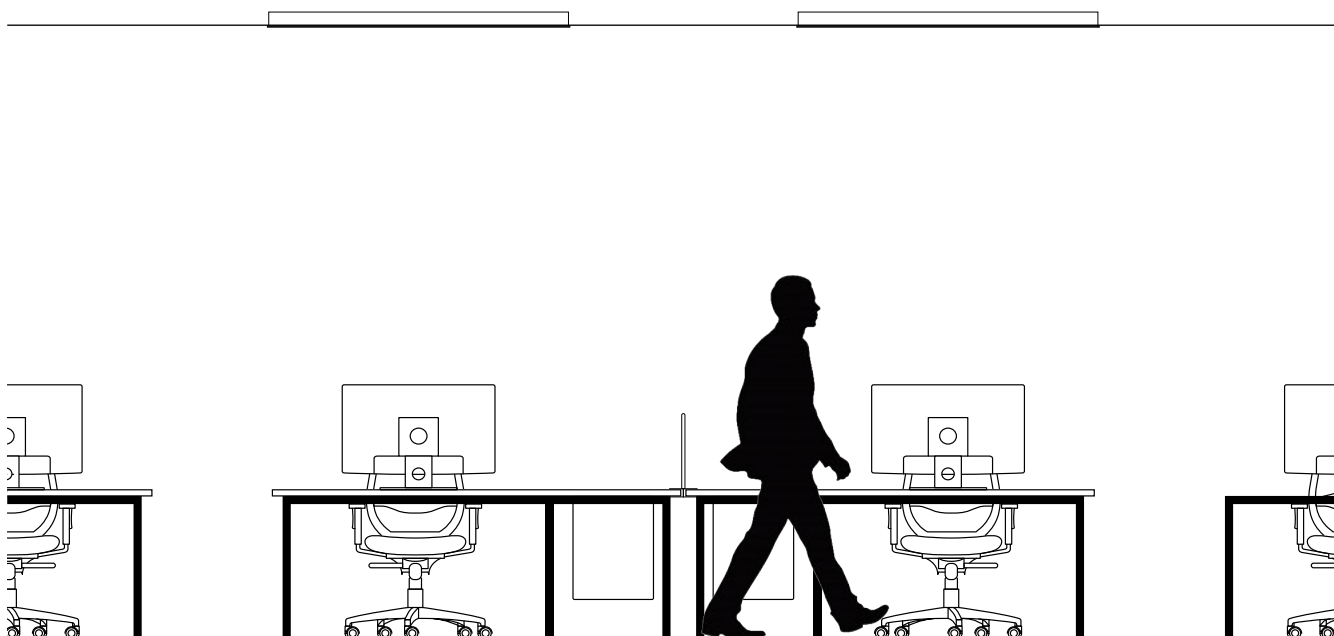
## 3F HD

Range

	W	lm	LED	Wiring	Installation	Dt x Dl	L x B x H
3F HD Direct/Indirect OCW	37 - 90	4312 - 10914	/830	DALI	Single Channel	1,50 x 1,20	1214 x 57 x 80 1508 x 57 x 80 2975 x 57 x 80
3F HD Direct/Indirect OCB	37 - 90	4185 - 10596	/830	DALI	Single Channel	1,50 x 1,20	1214 x 57 x 80 1508 x 57 x 80 2975 x 57 x 80
3F HD Direct/Indirect GSP	37 - 113	4081 - 13510	/840	DALI	Single Channel	1,45 x 1,25	1214 x 57/100 x 80 1508 x 57/100 x 80 2975 x 57/100 x 80
3F HD Direct/Indirect FDP	37 - 113	3999 - 13144	/840	DALI	Single Channel	1,50 x 1,25	1214 x 57/100 x 80 1508 x 57/100 x 80 2975 x 57/100 x 80
3F HD Direct/Indirect FDO	37 - 113	3957 - 12742	/840	DALI	Single Channel	1,40 x 1,20	1214 x 57/100 x 80 1508 x 57/100 x 80 2975 x 57/100 x 80

\*Tunable White version - only available for 'Single' installation

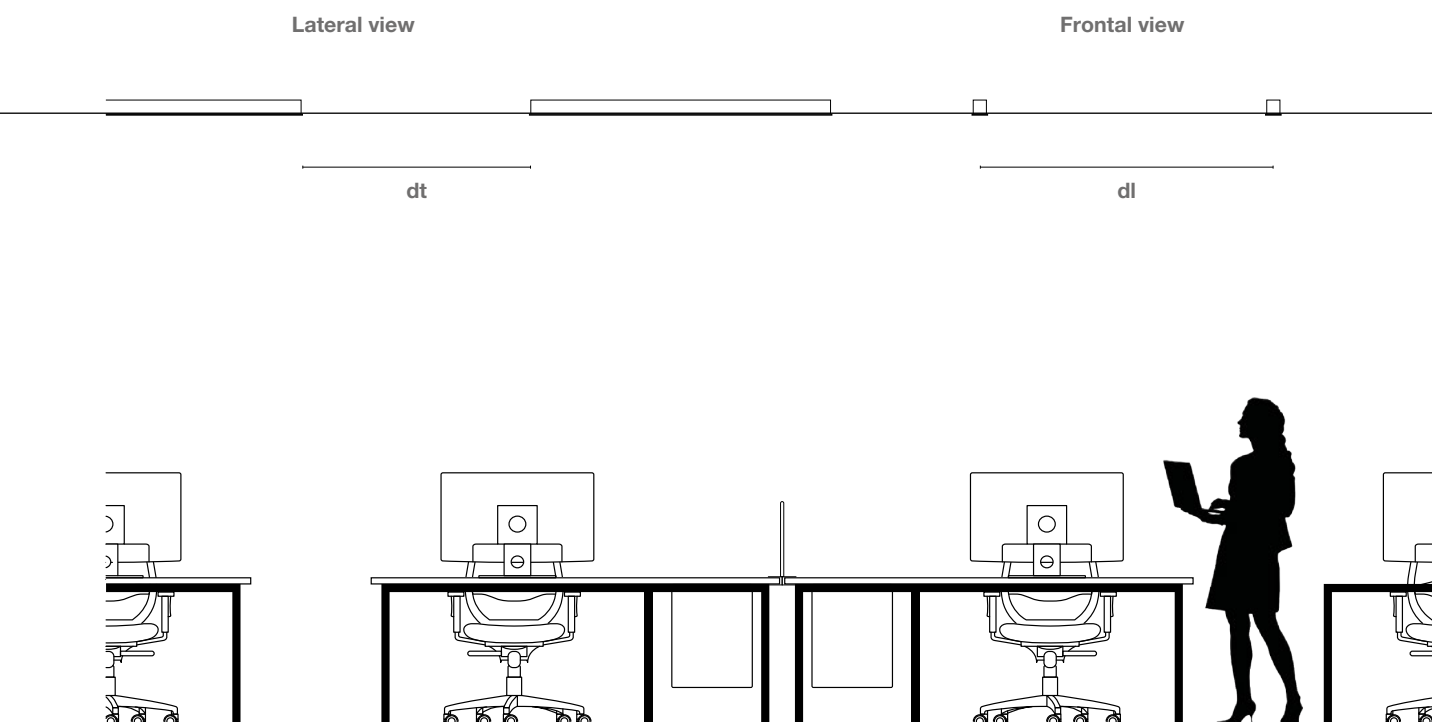
### 3F HD R



## 3F HD R

Range

	W	lm	LED	Wiring	Installation	Dt x DI	L x B x H
3F HD R OCW Single	14,5 - 33	1713 - 4285	/830	DALI	Recessed	1,32 x 1,00	1188 x 67 x 71 1482 x 67 x 71 2949 x 67 x 71
3F HD R GSP Single	14 - 56	1374 - 6428	/840	DALI	Recessed	1,14 x 1,18 1,45 x 1,25	1188 x 67/110 x 71 1482 x 67/110 x 71 2949 x 67/110 x 71
3F HD R HO GSP Single	25 - 98	2596 - 11085	/840	DALI	Recessed	1,14 x 1,18 1,45 x 1,25	1188 x 67/110 x 71 1482 x 67/110 x 71 2949 x 67/110 x 71
3F HD R FDP Single	14 - 56	1292 - 6062	/840	DALI	Recessed	1,16 x 1,18 1,50 x 1,25	1188 x 67/110 x 71 1482 x 67/110 x 71 2949 x 67/110 x 71
3F HD R HO FDP Single	25 - 98	2448 - 10454	/840	DALI	Recessed	1,16 x 1,18 1,50 x 1,25	1188 x 67/110 x 71 1482 x 67/110 x 71 2949 x 67/110 x 71
3F HD R FDO Single	14 - 56	1250 - 5660	/840	DALI	Recessed	1,29 x 1,24 1,40 x 1,20	1188 x 67/110 x 71 1482 x 67/110 x 71 2949 x 67/110 x 71
3F HD R HO FDO Single	25 - 98	2286 - 9760	/840	DALI	Recessed	1,29 x 1,24 1,40 x 1,20	1188 x 67/110 x 71 1482 x 67/110 x 71 2949 x 67/110 x 71



## 3F HD R

Range

	W	lm	LED	Wiring	Installation	Dt x Dl	L x B x H
3F HD R OCW Channel	14,5 - 33	1713 - 4285	/830	DALI	Recessed	1,32 x 1,00	1188 x 67 x 71 1482 x 67 x 71 2949 x 67 x 71
3F HD R GSP Channel	14 - 56	1374 - 6428	/840	DALI	Recessed	1,14 x 1,18 1,45 x 1,25	1188 x 67/110 x 71 1482 x 67/110 x 71 2949 x 67/110 x 71
3F HD R FDP Channel	14 - 56	1292 - 6062	/840	DALI	Recessed	1,16 x 1,18 1,50 x 1,25	1188 x 67/110 x 71 1482 x 67/110 x 71 2949 x 67/110 x 71
3F HD R FDO Channel	14 - 56	1250 - 5660	/840	DALI	Recessed	1,29 x 1,24 1,40 x 1,20	1188 x 67/110 x 71 1482 x 67/110 x 71 2949 x 67/110 x 71



Municipio di Bastia Umbra  
Bastia Umbra  
Italia/Italy





## 3F HD Direct - Single

### ILLUMINOTECHNICAL

Direct symmetric distribution.  
Lifetime (L80/B10): 100000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

### SOURCE

Linear LED modules.  
Colour initial tolerance (MacAdam): SDCM 3.

### MECHANICAL

Body and heads with embossed finish for maximum resistance to touch and scratches.  
Removable gear-tray.  
Lighting head caps with specular aluminium frieze.

### ELECTRICAL

In compliance with EN 60598-1.  
Compliance with the EN 60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.  
Entrance to the upper power supply in proximity to a power head.  
Branching via an irreversible quick coupling plug to connect the cable housing element to the socket.

### INSTALLATION

Ceiling mounted or suspension installation.

### APPLICATIONS

Environments: with VDTs, meeting rooms, offices.  
Environments: architectural, commercial, staterooms, banks.  
Environments where dynamic, soft and diffuse light is required for optimal visual comfort.

#### FDO version

Environments where soft diffuse light is required for optimal visual comfort and total shielding of the source.

### LIGHT MANAGEMENT

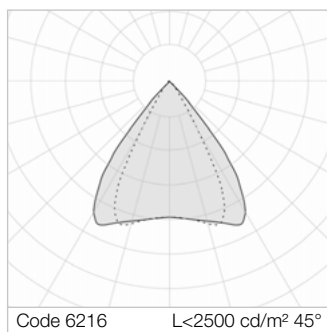
The DALI products can be controlled with 3F Easy Dim (page 156) or 3F Smart Dimming technology (page 166).

### ON REQUEST

- different power levels, colour rendering indices and colour temperatures
- housing in different RAL colours
- OC optic in different RAL colours
- wiring: CLO (page 188)
- emergency versions



## 3F HD OCW Single

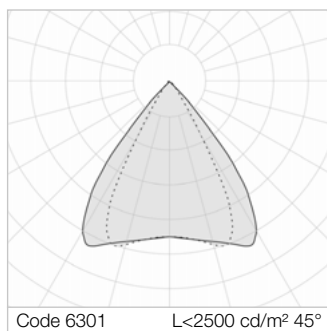


Average luminance <2500 cd/m<sup>2</sup> for angles >45°.  
Average luminance <1500 cd/m<sup>2</sup> for angles >65°.  
Environments with very exacting visual tasks and control of luminance at angles of >45° compared to the LEED certification. Offices with video terminals and administrative, information and school offices.  
Transparent methacrylate (PMMA) lenses with different facets to optimise the direction of the luminous flux.  
Anti-reflective white polycarbonate alveolar optic.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6215	3F HD50 WH 12/830 DALI OCW L1214	14.5	1713	3000	>80	1214x57x80
○ 6216	3F HD50 WH 15/830 DALI OCW L1508	18	2143	3000	>80	1508x57x80
○ 6217	3F HD50 WH 30/830 DALI OCW L2975	33	4285	3000	>80	2975x57x80

## 3F HD OCB Single

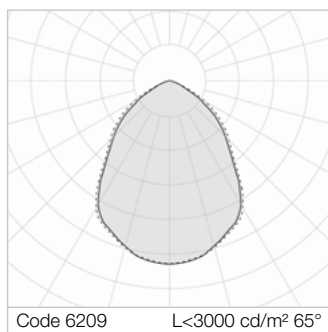
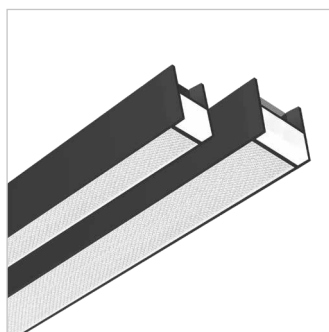


Average luminance <2500 cd/m<sup>2</sup> for angles >45°.  
Average luminance <200 cd/m<sup>2</sup> for angles >65°.  
Environments with very exacting visual tasks and control of luminance at angles of >45° compared to the LEED certification. Offices with video terminals and administrative, information and school offices.  
Transparent methacrylate (PMMA) lenses with different facets to optimise the direction of the luminous flux.  
Anti-reflective black polycarbonate alveolar optic.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
● 6300	3F HD50 BK 12/830 DALI OCB L1214	14.5	1586	3000	>80	1214x57x80
● 6301	3F HD50 BK 15/830 DALI OCB L1508	18	1984	3000	>80	1508x57x80
● 6302	3F HD50 BK 30/830 DALI OCB L2975	33	3967	3000	>80	2975x57x80
○ 6385	3F HD50 AL 12/830 DALI OCB L1214	14.5	1586	3000	>80	1214x57x80
○ 6386	3F HD50 AL 15/830 DALI OCB L1508	18	1984	3000	>80	1508x57x80
○ 6387	3F HD50 AL 30/830 DALI OCB L2975	33	3967	3000	>80	2975x57x80

## 3F HD GSP Single



Average luminance <3000 cd/m<sup>2</sup> for angles >65°.  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
SP flat diffuser in transparent methacrylate (PMMA), outside prismatic, anti-glare.  
Anti-glare opal polycarbonate filter for brightness uniformity.

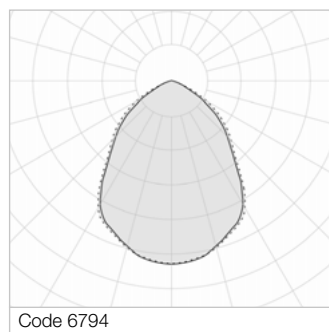
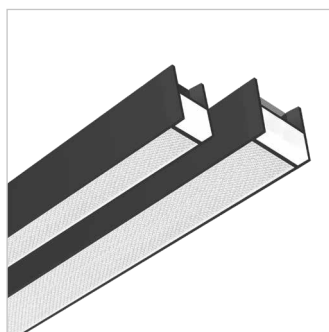
### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6208	3F HD50 WH 13/840 DALI GSP L1214	14	1374	4000	>80	1214x57x80
○ 6209	3F HD50 WH 16/840 DALI GSP L1508	18	1718	4000	>80	1508x57x80
○ 6210	3F HD50 WH 32/840 DALI GSP L2975	35	3435	4000	>80	2975x57x80
● 6293	3F HD50 BK 13/840 DALI GSP L1214	14	1374	4000	>80	1214x57x80
● 6294	3F HD50 BK 16/840 DALI GSP L1508	18	1718	4000	>80	1508x57x80
● 6295	3F HD50 BK 32/840 DALI GSP L2975	35	3435	4000	>80	2975x57x80
○ 6378	3F HD50 AL 13/840 DALI GSP L1214	14	1374	4000	>80	1214x57x80
○ 6379	3F HD50 AL 16/840 DALI GSP L1508	18	1718	4000	>80	1508x57x80
○ 6380	3F HD50 AL 32/840 DALI GSP L2975	35	3435	4000	>80	2975x57x80

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6227	3F HD100 WH 22/840 DALI GSP L1214	24	2617	4000	>80	1214x100x80
○ 6228	3F HD100 WH 26/840 DALI GSP L1508	29	3271	4000	>80	1508x100x80
○ 6229	3F HD100 WH 52/840 DALI GSP L2975	56	6428	4000	>80	2975x100x80
● 6312	3F HD100 BK 22/840 DALI GSP L1214	24	2617	4000	>80	1214x100x80
● 6313	3F HD100 BK 26/840 DALI GSP L1508	29	3271	4000	>80	1508x100x80
● 6314	3F HD100 BK 52/840 DALI GSP L2975	56	6428	4000	>80	2975x100x80
○ 6397	3F HD100 AL 22/840 DALI GSP L1214	24	2617	4000	>80	1214x100x80
○ 6398	3F HD100 AL 26/840 DALI GSP L1508	29	3271	4000	>80	1508x100x80
○ 6399	3F HD100 AL 52/840 DALI GSP L2975	56	6428	4000	>80	2975x100x80

## 3F HD HO GSP Single



Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
SP flat diffuser in transparent methacrylate (PMMA), outside prismatic, anti-glare.  
Anti-glare opal polycarbonate filter for brightness uniformity.

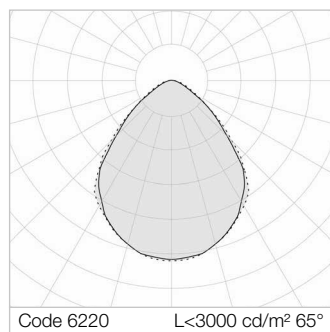
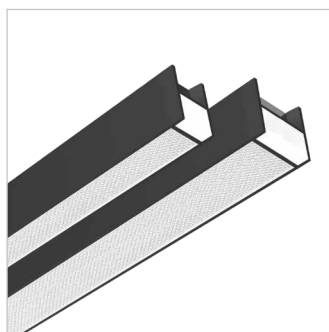
### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6793	3F HD50 WH HO 22/840 DALI GSP L1214	25	2596	4000	>80	1214x57x80
○ 6794	3F HD50 WH HO 26/840 DALI GSP L1508	30	3246	4000	>80	1508x57x80
○ 6795	3F HD50 WH HO 52/840 DALI GSP L2975	58	6492	4000	>80	2975x57x80
● 6799	3F HD50 BK HO 22/840 DALI GSP L1214	25	2596	4000	>80	1214x57x80
● 6800	3F HD50 BK HO 26/840 DALI GSP L1508	30	3246	4000	>80	1508x57x80
● 6801	3F HD50 BK HO 52/840 DALI GSP L2975	58	6492	4000	>80	2975x57x80
○ 6805	3F HD50 AL HO 22/840 DALI GSP L1214	25	2596	4000	>80	1214x57x80
○ 6806	3F HD50 AL HO 26/840 DALI GSP L1508	30	3246	4000	>80	1508x57x80
○ 6807	3F HD50 AL HO 52/840 DALI GSP L2975	58	6492	4000	>80	2975x57x80

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6796	3F HD100 WH HO 36/840 DALI GSP L1214	39	4434	4000	>80	1214x100x80
○ 6797	3F HD100 WH HO 44/840 DALI GSP L1508	49	5542	4000	>80	1508x100x80
○ 6798	3F HD100 WH HO 88/840 DALI GSP L2975	98	11085	4000	>80	2975x100x80
● 6802	3F HD100 BK HO 36/840 DALI GSP L1214	39	4434	4000	>80	1214x100x80
● 6803	3F HD100 BK HO 44/840 DALI GSP L1508	49	5542	4000	>80	1508x100x80
● 6804	3F HD100 BK HO 88/840 DALI GSP L2975	98	11085	4000	>80	2975x100x80
○ 6808	3F HD100 AL HO 36/840 DALI GSP L1214	39	4434	4000	>80	1214x100x80
○ 6809	3F HD100 AL HO 44/840 DALI GSP L1508	49	5542	4000	>80	1508x100x80
○ 6810	3F HD100 AL HO 88/840 DALI GSP L2975	98	11085	4000	>80	2975x100x80

## 3F HD FDP Single



Average luminance <3000 cd/m<sup>2</sup> for angles >65°.  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
Externally micro prismatic transparent flat anti-glare polycarbonate diffuser.  
Anti-glare opal polycarbonate filter for brightness uniformity.

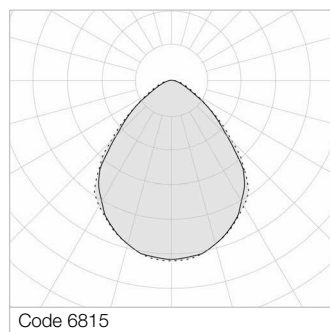
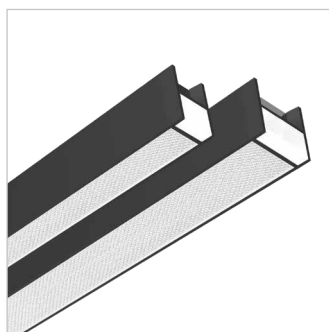
### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6200	3F HD50 WH 13/840 DALI FDP L1214	14	1292	4000	>80	1214x57x80
○ 6201	3F HD50 WH 16/840 DALI FDP L1508	18	1615	4000	>80	1508x57x80
○ 6202	3F HD50 WH 32/840 DALI FDP L2975	35	3229	4000	>80	2975x57x80
● 6285	3F HD50 BK 13/840 DALI FDP L1214	14	1292	4000	>80	1214x57x80
● 6286	3F HD50 BK 16/840 DALI FDP L1508	18	1615	4000	>80	1508x57x80
● 6287	3F HD50 BK 32/840 DALI FDP L2975	35	3229	4000	>80	2975x57x80
○ 6370	3F HD50 AL 13/840 DALI FDP L1214	14	1292	4000	>80	1214x57x80
○ 6371	3F HD50 AL 16/840 DALI FDP L1508	18	1615	4000	>80	1508x57x80
○ 6372	3F HD50 AL 32/840 DALI FDP L2975	35	3229	4000	>80	2975x57x80

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6219	3F HD100 WH 22/840 DALI FDP L1214	24	2468	4000	>80	1214x100x80
○ 6220	3F HD100 WH 26/840 DALI FDP L1508	29	3085	4000	>80	1508x100x80
○ 6221	3F HD100 WH 52/840 DALI FDP L2975	56	6062	4000	>80	2975x100x80
● 6304	3F HD100 BK 22/840 DALI FDP L1214	24	2468	4000	>80	1214x100x80
● 6305	3F HD100 BK 26/840 DALI FDP L1508	29	3085	4000	>80	1508x100x80
● 6306	3F HD100 BK 52/840 DALI FDP L2975	56	6062	4000	>80	2975x100x80
○ 6389	3F HD100 AL 22/840 DALI FDP L1214	24	2468	4000	>80	1214x100x80
○ 6390	3F HD100 AL 26/840 DALI FDP L1508	29	3085	4000	>80	1508x100x80
○ 6391	3F HD100 AL 52/840 DALI FDP L2975	56	6062	4000	>80	2975x100x80

## 3F HD HO FDP Single



Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
Externally micro prismatic transparent flat anti-glare polycarbonate diffuser.  
Anti-glare opal polycarbonate filter for brightness uniformity.

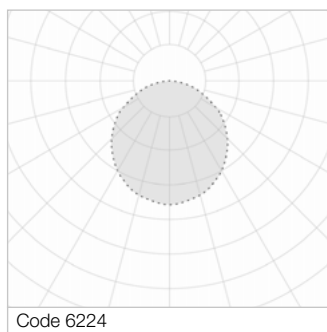
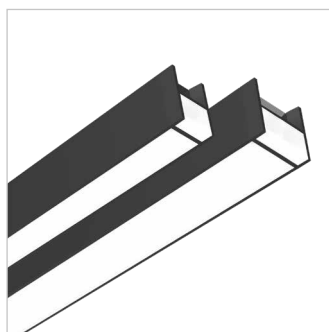
### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6811	3F HD50 WH HO 22/840 DALI FDP L1214	25	2448	4000	>80	1214x57x80
○ 6812	3F HD50 WH HO 26/840 DALI FDP L1508	30	3061	4000	>80	1508x57x80
○ 6813	3F HD50 WH HO 52/840 DALI FDP L2975	58	6122	4000	>80	2975x57x80
● 6817	3F HD50 BK HO 22/840 DALI FDP L1214	25	2448	4000	>80	1214x57x80
● 6818	3F HD50 BK HO 26/840 DALI FDP L1508	30	3061	4000	>80	1508x57x80
● 6819	3F HD50 BK HO 52/840 DALI FDP L2975	58	6122	4000	>80	2975x57x80
○ 6823	3F HD50 AL HO 22/840 DALI FDP L1214	25	2448	4000	>80	1214x57x80
○ 6824	3F HD50 AL HO 26/840 DALI FDP L1508	30	3061	4000	>80	1508x57x80
○ 6825	3F HD50 AL HO 52/840 DALI FDP L2975	58	6122	4000	>80	2975x57x80

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6814	3F HD100 WH HO 36/840 DALI FDP L1214	39	4182	4000	>80	1214x100x80
○ 6815	3F HD100 WH HO 44/840 DALI FDP L1508	49	5227	4000	>80	1508x100x80
○ 6816	3F HD100 WH HO 88/840 DALI FDP L2975	98	10454	4000	>80	2975x100x80
● 6820	3F HD100 BK HO 36/840 DALI FDP L1214	39	4182	4000	>80	1214x100x80
● 6821	3F HD100 BK HO 44/840 DALI FDP L1508	49	5227	4000	>80	1508x100x80
● 6822	3F HD100 BK HO 88/840 DALI FDP L2975	98	10454	4000	>80	2975x100x80
○ 6826	3F HD100 AL HO 36/840 DALI FDP L1214	39	4182	4000	>80	1214x100x80
○ 6827	3F HD100 AL HO 44/840 DALI FDP L1508	49	5227	4000	>80	1508x100x80
○ 6828	3F HD100 AL HO 88/840 DALI FDP L2975	98	10454	4000	>80	2975x100x80

## 3F HD FDO Single



Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
Flat opal anti-glare polycarbonate diffuser.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

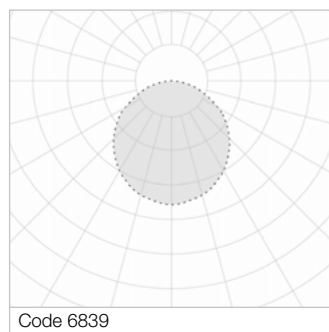
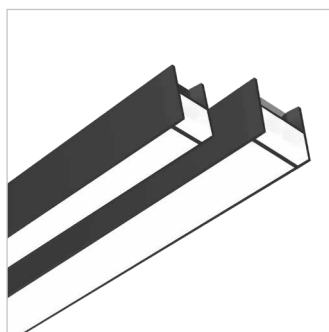
Code	Item	W	lm	K	CRI	L x A x H
○ 6204	3F HD50 WH 13/840 DALI FDO L1214	14	1250	4000	>80	1214x57x80
○ 6205	3F HD50 WH 16/840 DALI FDO L1508	18	1563	4000	>80	1508x57x80
○ 6206	3F HD50 WH 32/840 DALI FDO L2975	35	3126	4000	>80	2975x57x80
● 6289	3F HD50 BK 13/840 DALI FDO L1214	14	1250	4000	>80	1214x57x80
● 6290	3F HD50 BK 16/840 DALI FDO L1508	18	1563	4000	>80	1508x57x80
● 6291	3F HD50 BK 32/840 DALI FDO L2975	35	3126	4000	>80	2975x57x80
○ 6374	3F HD50 AL 13/840 DALI FDO L1214	14	1250	4000	>80	1214x57x80
○ 6375	3F HD50 AL 16/840 DALI FDO L1508	18	1563	4000	>80	1508x57x80
○ 6376	3F HD50 AL 32/840 DALI FDO L2975	35	3126	4000	>80	2975x57x80

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6223	3F HD100 WH 22/840 DALI FDO L1214	24	2304	4000	>80	1214x100x80
○ 6224	3F HD100 WH 26/840 DALI FDO L1508	29	2880	4000	>80	1508x100x80
○ 6225	3F HD100 WH 52/840 DALI FDO L2975	56	5660	4000	>80	2975x100x80
● 6308	3F HD100 BK 22/840 DALI FDO L1214	24	2304	4000	>80	1214x100x80
● 6309	3F HD100 BK 26/840 DALI FDO L1508	29	2880	4000	>80	1508x100x80
● 6310	3F HD100 BK 52/840 DALI FDO L2975	56	5660	4000	>80	2975x100x80
○ 6393	3F HD100 AL 22/840 DALI FDO L1214	24	2304	4000	>80	1214x100x80
○ 6394	3F HD100 AL 26/840 DALI FDO L1508	29	2880	4000	>80	1508x100x80
○ 6395	3F HD100 AL 52/840 DALI FDO L2975	56	5660	4000	>80	2975x100x80



## 3F HD HO FDO Single



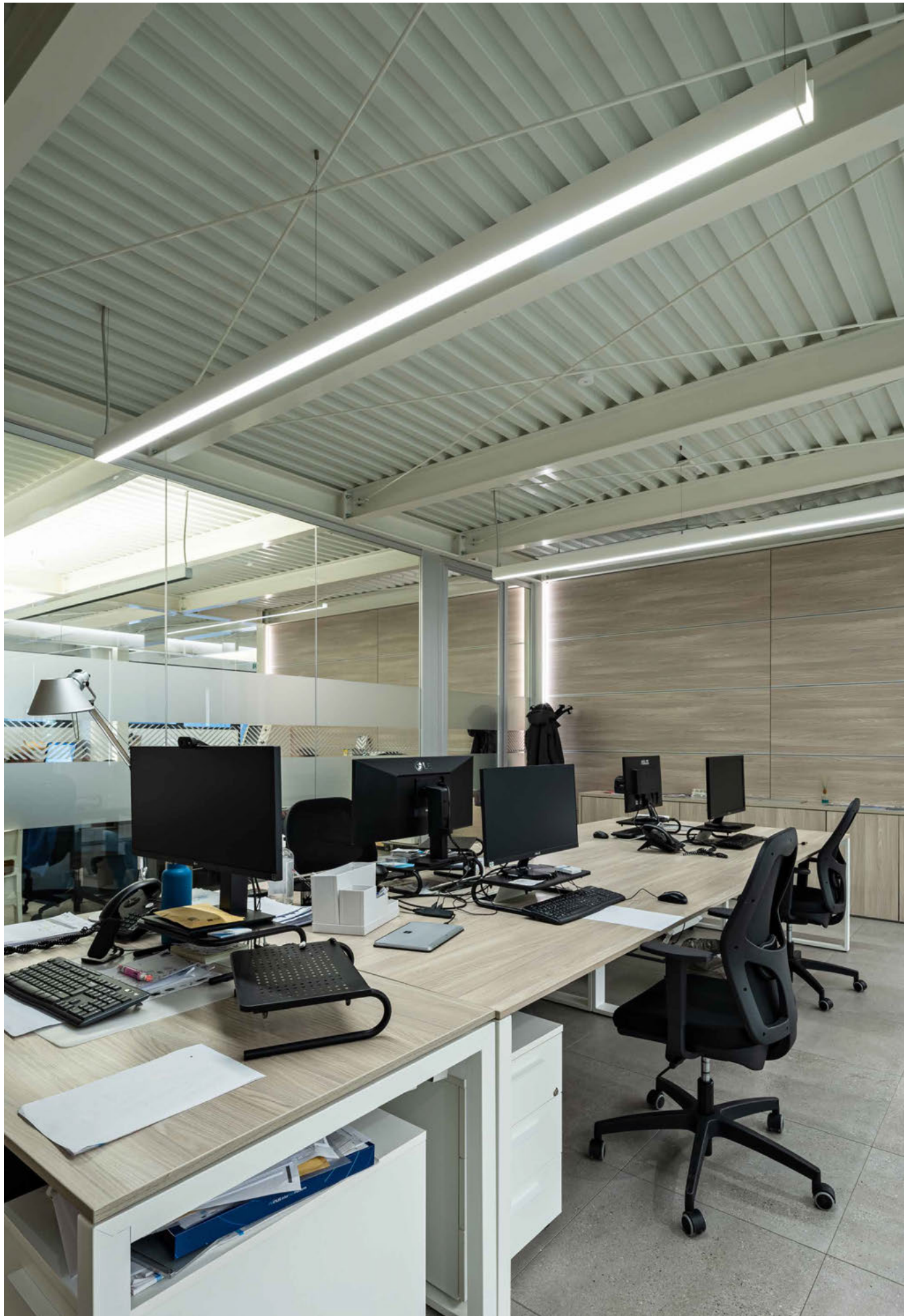
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
Flat opal anti-glare polycarbonate diffuser.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6829	3F HD50 WH HO 22/840 DALI FDO L1214	25	2286	4000	>80	1214x57x80
○ 6830	3F HD50 WH HO 26/840 DALI FDO L1508	30	2858	4000	>80	1508x57x80
○ 6831	3F HD50 WH HO 52/840 DALI FDO L2975	58	5716	4000	>80	2975x57x80
● 6835	3F HD50 BK HO 22/840 DALI FDO L1214	25	2286	4000	>80	1214x57x80
● 6836	3F HD50 BK HO 26/840 DALI FDO L1508	30	2858	4000	>80	1508x57x80
● 6837	3F HD50 BK HO 52/840 DALI FDO L2975	58	5716	4000	>80	2975x57x80
○ 6841	3F HD50 AL HO 22/840 DALI FDO L1214	25	2286	4000	>80	1214x57x80
○ 6842	3F HD50 AL HO 26/840 DALI FDO L1508	30	2858	4000	>80	1508x57x80
○ 6843	3F HD50 AL HO 52/840 DALI FDO L2975	58	5716	4000	>80	2975x57x80

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6832	3F HD100 WH HO 36/840 DALI FDO L1214	39	3904	4000	>80	1214x100x80
○ 6833	3F HD100 WH HO 44/840 DALI FDO L1508	49	4880	4000	>80	1508x100x80
○ 6834	3F HD100 WH HO 88/840 DALI FDO L2975	98	9760	4000	>80	2975x100x80
● 6838	3F HD100 BK HO 36/840 DALI FDO L1214	39	3904	4000	>80	1214x100x80
● 6839	3F HD100 BK HO 44/840 DALI FDO L1508	49	4880	4000	>80	1508x100x80
● 6840	3F HD100 BK HO 88/840 DALI FDO L2975	98	9760	4000	>80	2975x100x80
○ 6844	3F HD100 AL HO 36/840 DALI FDO L1214	39	3904	4000	>80	1214x100x80
○ 6845	3F HD100 AL HO 44/840 DALI FDO L1508	49	4880	4000	>80	1508x100x80
○ 6846	3F HD100 AL HO 88/840 DALI FDO L2975	98	9760	4000	>80	2975x100x80







Martignoni concessionario  
Volkswagen  
Gallarate (VA)  
Italia/Italy





## 3F HD Direct - Single - Tunable White

### ILLUMINOTECHNICAL

Direct symmetric distribution.  
Average luminance <3000 cd/m<sup>2</sup> for radial angles >65°.  
The colour temperature can be adjusted between 2700 K and 6500 K.  
Lifetime (L80/B10): 100000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

### SOURCE

Linear LED modules.  
Colour initial tolerance (MacAdam): SDCM 3.

### MECHANICAL

Body and heads with embossed finish for maximum resistance to touch and scratches.  
Removable gear-tray.  
Lighting end caps with mirrored aluminium frieze.  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
Externally micro prismatic transparent flat anti-glare polycarbonate diffuser.  
Anti-glare opal polycarbonate filter for brightness uniformity.

### ELECTRICAL

In compliance with EN 60598-1.  
Compliance with the EN 60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.  
Entrance to the upper power supply in proximity to a power head.  
Branching via an irreversible quick coupling plug to connect the cable housing element to the socket.  
Cable with a DALI DT8 driver.  
5-pole terminal block (L-N-PE-DA/DA) for line connection with connection capacity 2x2.5 mm<sup>2</sup> per poles.

### INSTALLATION

Ceiling mounted or suspension installation.

### APPLICATIONS

Any environments requiring light which aims for the wellness of people.  
Environments: with VDTs, meeting rooms, offices.  
Environments: architectural, commercial, staterooms, banks.  
Environments where dynamic, soft and diffuse light is required for optimal visual comfort.

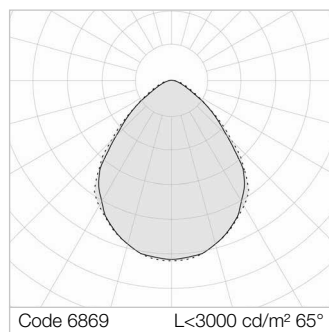
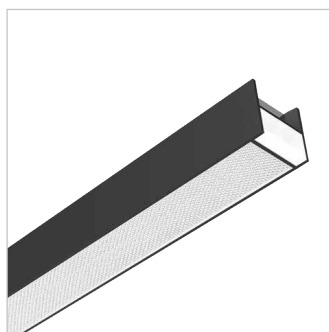
### LIGHT MANAGEMENT

Tunable White products can be controlled with wired control systems (page 178) or 3F & Casambi (page 182).

### ON REQUEST

- different power levels or colour rendering indices
- housing in different RAL colours
- emergency versions

## 3F HD Tunable White FDP



Variable light intensity and colour temperature.

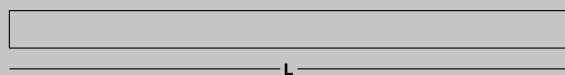
### 3F HD 100 - DALI DT8 electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6868	3F HD100 WH 22 DT8 TW FDP L1214	27 26 25	2387	2700 4000 6500	>80	1214x100x80
○ 6869	3F HD100 WH 26 DT8 TW FDP L1508	34 32.5 31	2984	2700 4000 6500	>80	1508x100x80
○ 6870	3F HD100 WH 52 DT8 TW FDP L2975	66 63 60	5967	2700 4000 6500	>80	2975x100x80
● 6871	3F HD100 BK 22 DT8 TW FDP L1214	27 26 25	2387	2700 4000 6500	>80	1214x100x80
● 6872	3F HD100 BK 26 DT8 TW FDP L1508	34 32.5 31	2984	2700 4000 6500	>80	1508x100x80
● 6873	3F HD100 BK 52 DT8 TW FDP L2975	66 63 60	5967	2700 4000 6500	>80	2975x100x80
○ 6874	3F HD100 AL 22 DT8 TW FDP L1214	27 26 25	2387	2700 4000 6500	>80	1214x100x80
○ 6875	3F HD100 AL 26 DT8 TW FDP L1508	34 32.5 31	2984	2700 4000 6500	>80	1508x100x80
○ 6876	3F HD100 AL 52 DT8 TW FDP L2975	66 63 60	5967	2700 4000 6500	>80	2975x100x80

COMUNE DI BASTIA UMBRA







Allen & Overy  
Milano  
Italia/Italy





## 3F HD Direct - Channel

### ILLUMINOTECHNICAL

Direct symmetric distribution.  
Lifetime (L80/B10): 100000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

### SOURCE

Linear LED modules.  
Colour initial tolerance (MacAdam): SDCM 3.

### MECHANICAL

Body and heads with embossed finish for maximum resistance to touch and scratches.  
Removable gear-tray.  
Hot-dip galvanised steel linear connecting element installed on the body for rapid mechanical connection.

### ELECTRICAL

In compliance with EN 60598-1.  
Compliance with the EN 60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.  
Entrance to the upper power supply in proximity to a power head.  
5 mm<sup>2</sup> section 2.5 pin through line with an irreversible quick coupling plug/socket fixed on the body for rapid electrical connection.  
Branching via an irreversible quick coupling plug to connect the cable housing element to the socket.

### INSTALLATION

Ceiling mounted or suspension installation.

### APPLICATIONS

Environments: with VDTs, meeting rooms, offices.  
Environments: architectural, commercial, staterooms, banks.  
Environments where dynamic, soft and diffuse light is required for optimal visual comfort.

#### FDO version

Environments where soft diffuse light is required for optimal visual comfort and total shielding of the source.

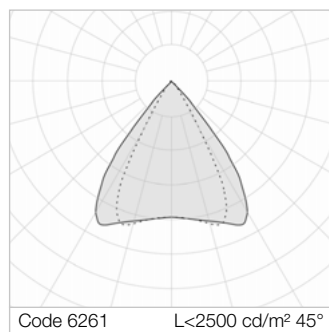
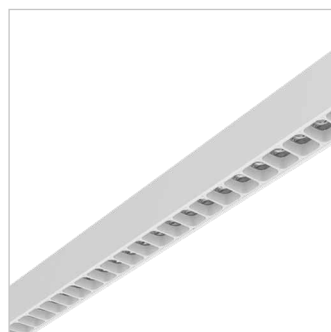
### LIGHT MANAGEMENT

The DALI products can be controlled with 3F Easy Dim (page 156) or 3F Smart Dimming technology (page 166).

### ON REQUEST

- different power levels, colour rendering indices and colour temperatures
- housing in different RAL colours
- OC optic in different RAL colours
- wiring: CLO (page 188)
- emergency versions

## 3F HD OCW Channel

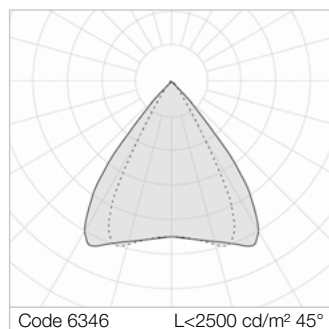
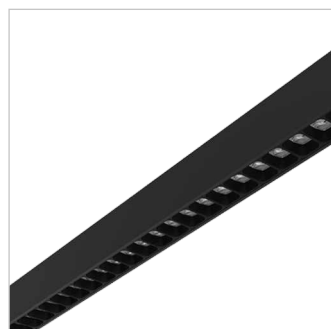


Average luminance <2500 cd/m<sup>2</sup> for angles >45°.  
Average luminance <1500 cd/m<sup>2</sup> for angles >65°.  
Environments with very exacting visual tasks and control of luminance at angles of >45° compared to the LEED certification. Offices with video terminals and administrative, information and school offices.  
Transparent methacrylate (PMMA) lenses with different facets to optimise the direction of the luminous flux.  
Anti-reflective white polycarbonate alveolar optic.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6260	3F HD50 WH 12/830 DALI 5P OCW L1174	14.5	1713	3000	>80	1174x57x80
○ 6261	3F HD50 WH 15/830 DALI 5P OCW L1468	18	2143	3000	>80	1468x57x80
○ 6262	3F HD50 WH 30/830 DALI 5P OCW L2935	33	4285	3000	>80	2935x57x80

## 3F HD OCB Channel

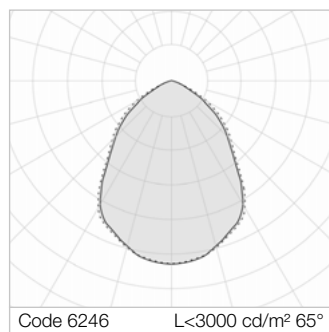
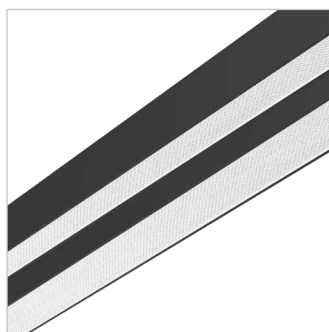


Average luminance <2500 cd/m<sup>2</sup> for angles >45°.  
Average luminance <200 cd/m<sup>2</sup> for angles >65°.  
Environments with very exacting visual tasks and control of luminance at angles of >45° compared to the LEED certification. Offices with video terminals and administrative, information and school offices.  
Transparent methacrylate (PMMA) lenses with different facets to optimise the direction of the luminous flux.  
Anti-reflective black polycarbonate alveolar optic.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
● 6345	3F HD50 BK 12/830 DALI 5P OCB L1174	14.5	1586	3000	>80	1174x57x80
● 6346	3F HD50 BK 15/830 DALI 5P OCB L1468	18	1984	3000	>80	1468x57x80
● 6347	3F HD50 BK 30/830 DALI 5P OCB L2935	33	3967	3000	>80	2935x57x80
○ 6430	3F HD50 AL 12/830 DALI 5P OCB L1174	14.5	1586	3000	>80	1174x57x80
○ 6431	3F HD50 AL 15/830 DALI 5P OCB L1468	18	1984	3000	>80	1468x57x80
○ 6432	3F HD50 AL 30/830 DALI 5P OCB L2935	33	3967	3000	>80	2935x57x80

## 3F HD GSP Channel



Average luminance <3000 cd/m<sup>2</sup> for angles >65°.  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
SP transparent methacrylate (PMMA) diffuser, prismatic outside, antiglare.  
Anti-glare opal polycarbonate filter for brightness uniformity.

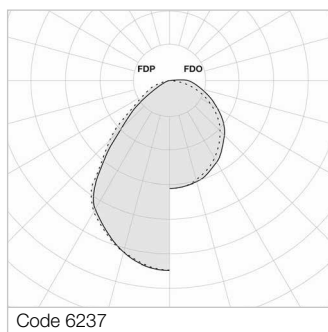
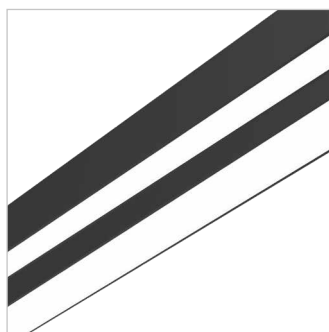
### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6245	3F HD50 WH 13/840 DALI 5P GSP L1174	14	1374	4000	>80	1174x57x80
○ 6246	3F HD50 WH 16/840 DALI 5P GSP L1468	18	1718	4000	>80	1468x57x80
○ 6250	3F HD50 WH 32/840 DALI 5P GSP L2935	35	3435	4000	>80	2935x57x80
● 6330	3F HD50 BK 13/840 DALI 5P GSP L1174	14	1374	4000	>80	1174x57x80
● 6331	3F HD50 BK 16/840 DALI 5P GSP L1468	18	1718	4000	>80	1468x57x80
● 6335	3F HD50 BK 32/840 DALI 5P GSP L2935	35	3435	4000	>80	2935x57x80
○ 6415	3F HD50 AL 13/840 DALI 5P GSP L1174	14	1374	4000	>80	1174x57x80
○ 6416	3F HD50 AL 16/840 DALI 5P GSP L1468	18	1718	4000	>80	1468x57x80
○ 6420	3F HD50 AL 32/840 DALI 5P GSP L2935	35	3435	4000	>80	2935x57x80

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6275	3F HD100 WH 22/840 DALI 5P GSP L1174	24	2617	4000	>80	1174x100x80
○ 6276	3F HD100 WH 26/840 DALI 5P GSP L1468	29	3271	4000	>80	1468x100x80
○ 6280	3F HD100 WH 52/840 DALI 5P GSP L2935	56	6428	4000	>80	2935x100x80
● 6360	3F HD100 BK 22/840 DALI 5P GSP L1174	24	2617	4000	>80	1174x100x80
● 6361	3F HD100 BK 26/840 DALI 5P GSP L1468	29	3271	4000	>80	1468x100x80
● 6365	3F HD100 BK 52/840 DALI 5P GSP L2935	56	6428	4000	>80	2935x100x80
○ 6445	3F HD100 AL 22/840 DALI 5P GSP L1174	24	2617	4000	>80	1174x100x80
○ 6446	3F HD100 AL 26/840 DALI 5P GSP L1468	29	3271	4000	>80	1468x100x80
○ 6450	3F HD100 AL 52/840 DALI 5P GSP L2935	56	6428	4000	>80	2935x100x80

## 3F HD FD Channel



Average luminance <3000 cd/m<sup>2</sup> for angles >65° (FDP).  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
For diffusers see accessories (page 85).  
FDP: luminaire suitable for offices.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6236	3F HD50 WH 13/840 DALI 5P FD L1174	14	1292 FDP 1250 FDO	4000	>80	1174x57x80
○ 6237	3F HD50 WH 16/840 DALI 5P FD L1468	18	1615 FDP 1563 FDO	4000	>80	1468x57x80
○ 6241	3F HD50 WH 32/840 DALI 5P FD L2935	35	3229 FDP 3126 FDO	4000	>80	2935x57x80
● 6321	3F HD50 BK 13/840 DALI 5P FD L1174	14	1292 FDP 1250 FDO	4000	>80	1174x57x80
● 6322	3F HD50 BK 16/840 DALI 5P FD L1468	18	1615 FDP 1563 FDO	4000	>80	1468x57x80
● 6326	3F HD50 BK 32/840 DALI 5P FD L2935	35	3229 FDP 3126 FDO	4000	>80	2935x57x80
○ 6406	3F HD50 AL 13/840 DALI 5P FD L1174	14	1292 FDP 1250 FDO	4000	>80	1174x57x80
○ 6407	3F HD50 AL 16/840 DALI 5P FD L1468	18	1615 FDP 1563 FDO	4000	>80	1468x57x80
○ 6411	3F HD50 AL 32/840 DALI 5P FD L2935	35	3229 FDP 3126 FDO	4000	>80	2935x57x80

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6266	3F HD100 WH 22/840 DALI 5P FD L1174	24	2468 FDP 2304 FDO	4000	>80	1174x100x80
○ 6267	3F HD100 WH 26/840 DALI 5P FD L1468	29	3085 FDP 2880 FDO	4000	>80	1468x100x80
○ 6271	3F HD100 WH 52/840 DALI 5P FD L2935	56	6062 FDP 5660 FDO	4000	>80	2935x100x80
● 6351	3F HD100 BK 22/840 DALI 5P FD L1174	24	2468 FDP 2304 FDO	4000	>80	1174x100x80
● 6352	3F HD100 BK 26/840 DALI 5P FD L1468	29	3085 FDP 2880 FDO	4000	>80	1468x100x80
● 6356	3F HD100 BK 52/840 DALI 5P FD L2935	56	6062 FDP 5660 FDO	4000	>80	2935x100x80
○ 6436	3F HD100 AL 22/840 DALI 5P FD L1174	24	2468 FDP 2304 FDO	4000	>80	1174x100x80
○ 6437	3F HD100 AL 26/840 DALI 5P FD L1468	29	3085 FDP 2880 FDO	4000	>80	1468x100x80
○ 6441	3F HD100 AL 52/840 DALI 5P FD L2935	56	6062 FDP 5660 FDO	4000	>80	2935x100x80







Radio DeeJay  
Milano  
Italia/Italy







## 3F HD Direct/Indirect - Single

### ILLUMINOTECHNICAL

Direct-indirect distribution.  
Lifetime (L80/B10): 100000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

### SOURCE

Linear LED modules.  
Colour initial tolerance (MacAdam): SDCM 3.

### MECHANICAL

Body and heads with embossed finish for maximum resistance to touch and scratches.  
Removable gear-tray.  
Translucent polycarbonate upper diffuser.  
Lighting head caps with specular aluminium frieze.

### ELECTRICAL

In compliance with EN 60598-1.  
Compliance with the EN 60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.  
5-pole terminal block, single 230V circuit, 2 DALI addresses (depending on the type of lighting fixture).  
Entrance to the upper power supply in proximity to a power head.  
Branching via an irreversible quick coupling plug to connect the cable housing element to the socket.

### INSTALLATION

Suspension installation.

### APPLICATIONS

Environments: with VDTs, meeting rooms, offices.  
Environments: architectural, commercial, staterooms, banks.  
Environments where dynamic, soft and diffuse light is required for optimal visual comfort.

#### FDO version

Environments where soft diffuse light is required for optimal visual comfort and total shielding of the source.

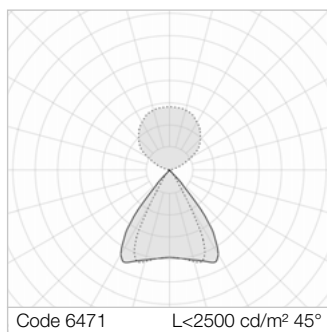
### LIGHT MANAGEMENT

The DALI products can be controlled with 3F Easy Dim (page 156) or 3F Smart Dimming technology (page 166).

### ON REQUEST

- different power levels, colour rendering indices and colour temperatures
- housing in different RAL colours
- OC optic in different RAL colours
- wiring: CLO (page 188)
- emergency versions

## 3F HD DI OCW Single

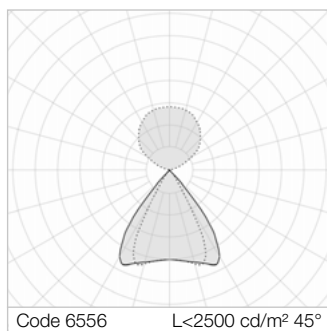


Average luminance <2500 cd/m² for angles >45°.  
Average luminance <1500 cd/m² for angles >65°.  
Environments with very exacting visual tasks and control of luminance at angles of >45° compared to the LEED certification. Offices with video terminals and administrative, information and school offices.  
Transparent methacrylate (PMMA) lenses with different facets to optimise the direction of the luminous flux.  
Anti-reflective white polycarbonate alveolar optic.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6470	3F HD50DI WH 12+20/830 DALI OCW L1214	37	4312	3000	>80	1214x57x80
○ 6471	3F HD50DI WH 15+26/830 DALI OCW L1508	48	5451	3000	>80	1508x57x80
○ 6472	3F HD50DI WH 30+52/830 DALI OCW L2975	90	10914	3000	>80	2975x57x80

## 3F HD DI OCB Single

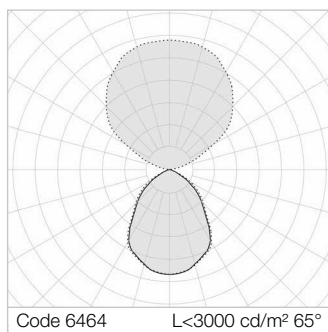
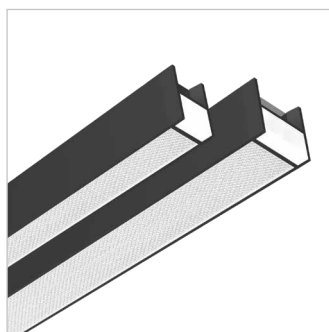


Average luminance <2500 cd/m² for angles >45°.  
Average luminance <200 cd/m² for angles >65°.  
Environments with very exacting visual tasks and control of luminance at angles of >45° compared to the LEED certification. Offices with video terminals and administrative, information and school offices.  
Transparent methacrylate (PMMA) lenses with different facets to optimise the direction of the luminous flux.  
Anti-reflective black polycarbonate alveolar optic.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
● 6555	3F HD50DI BK 12+20/830 DALI OCB L1214	37	4185	3000	>80	1214x57x80
● 6556	3F HD50DI BK 15+26/830 DALI OCB L1508	48	5292	3000	>80	1508x57x80
● 6557	3F HD50DI BK 30+52/830 DALI OCB L2975	90	10596	3000	>80	2975x57x80
○ 6640	3F HD50DI AL 12+20/830 DALI OCB L1214	37	4185	3000	>80	1214x57x80
○ 6641	3F HD50DI AL 15+26/830 DALI OCB L1508	48	5292	3000	>80	1508x57x80
○ 6642	3F HD50DI AL 30+52/830 DALI OCB L2975	90	10596	3000	>80	2975x57x80

## 3F HD DI GSP Single



Average luminance <3000 cd/m² for angles >65°.  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
SP transparent methacrylate (PMMA) diffuser, prismatic outside, antiglare.  
Anti-glare opal polycarbonate filter for brightness uniformity.

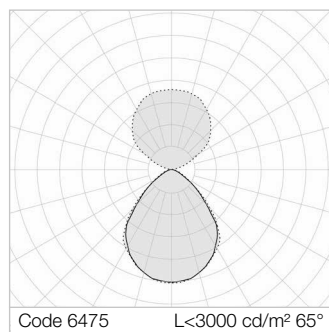
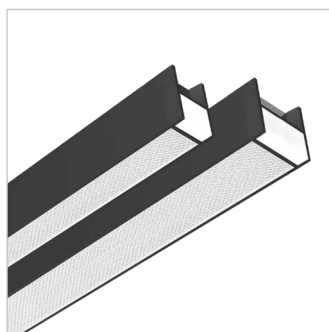
### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6463	3F HD50DI WH 13+20/840 DALI GSP L1214	37	4081	4000	>80	1214x57x80
○ 6464	3F HD50DI WH 16+26/840 DALI GSP L1508	46	5164	4000	>80	1508x57x80
○ 6465	3F HD50DI WH 32+52/840 DALI GSP L2975	91	10340	4000	>80	2975x57x80
● 6548	3F HD50DI BK 13+20/840 DALI GSP L1214	37	4081	4000	>80	1214x57x80
● 6549	3F HD50DI BK 16+26/840 DALI GSP L1508	46	5164	4000	>80	1508x57x80
● 6550	3F HD50DI BK 32+52/840 DALI GSP L2975	91	10340	4000	>80	2975x57x80
○ 6633	3F HD50DI AL 13+20/840 DALI GSP L1214	37	4081	4000	>80	1214x57x80
○ 6634	3F HD50DI AL 16+26/840 DALI GSP L1508	46	5164	4000	>80	1508x57x80
○ 6635	3F HD50DI AL 32+52/840 DALI GSP L2975	91	10340	4000	>80	2975x57x80

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6482	3F HD100DI WH 22+20/840 DALI GSP L1214	46	5394	4000	>80	1214x100x80
○ 6483	3F HD100DI WH 26+26/840 DALI GSP L1508	61	6805	4000	>80	1508x100x80
○ 6484	3F HD100DI WH 52+52/840 DALI GSP L2975	113	13510	4000	>80	2975x100x80
● 6567	3F HD100DI BK 22+20/840 DALI GSP L1214	46	5394	4000	>80	1214x100x80
● 6568	3F HD100DI BK 26+26/840 DALI GSP L1508	61	6805	4000	>80	1508x100x80
● 6569	3F HD100DI BK 52+52/840 DALI GSP L2975	113	13510	4000	>80	2975x100x80
○ 6652	3F HD100DI AL 22+20/840 DALI GSP L1214	46	5394	4000	>80	1214x100x80
○ 6653	3F HD100DI AL 26+26/840 DALI GSP L1508	61	6805	4000	>80	1508x100x80
○ 6654	3F HD100DI AL 52+52/840 DALI GSP L2975	113	13510	4000	>80	2975x100x80

## 3F HD DI FDP Single



Average luminance <3000 cd/m² for angles >65°.  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
Externally micro prismatic transparent flat anti-glare polycarbonate diffuser.  
Opal polycarbonate internal anti-glare filter for lighting uniformity.

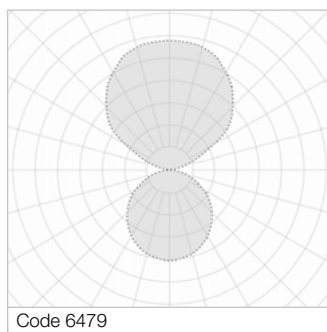
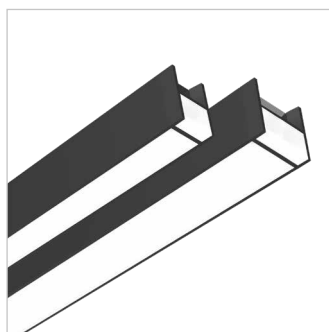
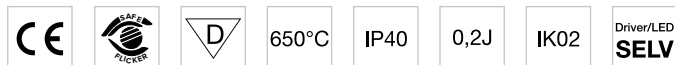
### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6455	3F HD50DI WH 13+20/840 DALI FDP L1214	37	3999	4000	>80	1214x57x80
○ 6456	3F HD50DI WH 16+26/840 DALI FDP L1508	46	5061	4000	>80	1508x57x80
○ 6457	3F HD50DI WH 32+52/840 DALI FDP L2975	91	10134	4000	>80	2975x57x80
● 6540	3F HD50DI BK 13+20/840 DALI FDP L1214	37	3999	4000	>80	1214x57x80
● 6541	3F HD50DI BK 16+26/840 DALI FDP L1508	46	5061	4000	>80	1508x57x80
● 6542	3F HD50DI BK 32+52/840 DALI FDP L2975	91	10134	4000	>80	2975x57x80
○ 6625	3F HD50DI AL 13+20/840 DALI FDP L1214	37	3999	4000	>80	1214x57x80
○ 6626	3F HD50DI AL 16+26/840 DALI FDP L1508	46	5061	4000	>80	1508x57x80
○ 6627	3F HD50DI AL 32+52/840 DALI FDP L2975	91	10134	4000	>80	2975x57x80

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6474	3F HD100DI WH 22+20/840 DALI FDP L1214	46	5245	4000	>80	1214x100x80
○ 6475	3F HD100DI WH 26+26/840 DALI FDP L1508	61	6619	4000	>80	1508x100x80
○ 6476	3F HD100DI WH 52+52/840 DALI FDP L2975	113	13144	4000	>80	2975x100x80
● 6559	3F HD100DI BK 22+20/840 DALI FDP L1214	46	5245	4000	>80	1214x100x80
● 6560	3F HD100DI BK 26+26/840 DALI FDP L1508	61	6619	4000	>80	1508x100x80
● 6561	3F HD100DI BK 52+52/840 DALI FDP L2975	113	13144	4000	>80	2975x100x80
○ 6644	3F HD100DI AL 22+20/840 DALI FDP L1214	46	5245	4000	>80	1214x100x80
○ 6645	3F HD100DI AL 26+26/840 DALI FDP L1508	61	6619	4000	>80	1508x100x80
○ 6646	3F HD100DI AL 52+52/840 DALI FDP L2975	113	13144	4000	>80	2975x100x80

## 3F HD DI FDO Single



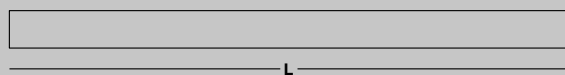
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
Flat opal anti-glare polycarbonate diffuser.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6459	3F HD50DI WH 13+20/840 DALI FDO L1214	37	3957	4000	>80	1214x57x80
○ 6460	3F HD50DI WH 16+26/840 DALI FDO L1508	46	5009	4000	>80	1508x57x80
○ 6461	3F HD50DI WH 32+52/840 DALI FDO L2975	91	10031	4000	>80	2975x57x80
● 6544	3F HD50DI BK 13+20/840 DALI FDO L1214	37	3957	4000	>80	1214x57x80
● 6545	3F HD50DI BK 16+26/840 DALI FDO L1508	46	5009	4000	>80	1508x57x80
● 6546	3F HD50DI BK 32+52/840 DALI FDO L2975	91	10031	4000	>80	2975x57x80
○ 6629	3F HD50DI AL 13+20/840 DALI FDO L1214	37	3957	4000	>80	1214x57x80
○ 6630	3F HD50DI AL 16+26/840 DALI FDO L1508	46	5009	4000	>80	1508x57x80
○ 6631	3F HD50DI AL 32+52/840 DALI FDO L2975	91	10031	4000	>80	2975x57x80

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

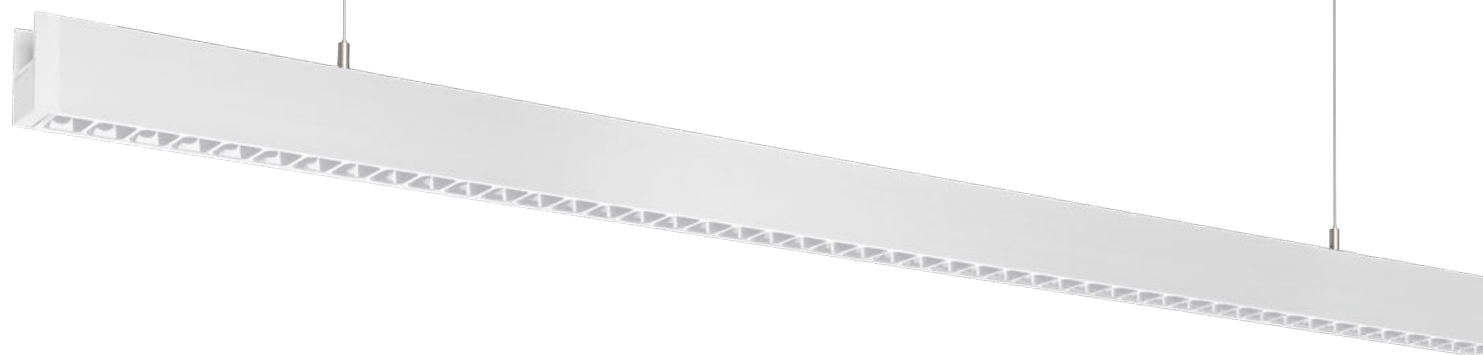
Code	Item	W	lm	K	CRI	L x A x H
○ 6478	3F HD100DI WH 22+20/840 DALI FDO L1214	46	5081	4000	>80	1214x100x80
○ 6479	3F HD100DI WH 26+26/840 DALI FDO L1508	61	6414	4000	>80	1508x100x80
○ 6480	3F HD100DI WH 52+52/840 DALI FDO L2975	113	12742	4000	>80	2975x100x80
● 6563	3F HD100DI BK 22+20/840 DALI FDO L1214	46	5081	4000	>80	1214x100x80
● 6564	3F HD100DI BK 26+26/840 DALI FDO L1508	61	6414	4000	>80	1508x100x80
● 6565	3F HD100DI BK 52+52/840 DALI FDO L2975	113	12742	4000	>80	2975x100x80
○ 6648	3F HD100DI AL 22+20/840 DALI FDO L1214	46	5081	4000	>80	1214x100x80
○ 6649	3F HD100DI AL 26+26/840 DALI FDO L1508	61	6414	4000	>80	1508x100x80
○ 6650	3F HD100DI AL 52+52/840 DALI FDO L2975	113	12742	4000	>80	2975x100x80



HDI Assicurazioni  
Roma  
Italia/Italy







## 3F HD Direct/Indirect - Channel

### ILLUMINOTECHNICAL

Direct-indirect distribution.  
Lifetime (L80/B10): 100000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

### SOURCE

Linear LED modules.  
Colour initial tolerance (MacAdam): SDCM 3.

### MECHANICAL

Body and heads with embossed finish for maximum resistance to touch and scratches.  
Removable gear-tray.  
Hot-dip galvanised steel linear connecting element installed on the body for rapid mechanical connection.  
Translucent polycarbonate upper diffuser.

### ELECTRICAL

In compliance with EN 60598-1.  
Compliance with the EN 60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.  
5-pole terminal block, single 230V circuit, 2 DALI addresses (depending on the type of lighting fixture).  
Entrance to the upper power supply in proximity to a power head.  
Branching via an irreversible quick coupling plug to connect the cable housing element to the socket.

### INSTALLATION

Suspension installation.

### APPLICATIONS

Environments: with VDTs, meeting rooms, offices.  
Environments: architectural, commercial, staterooms, banks.  
Environments where dynamic, soft and diffuse light is required for optimal visual comfort.

#### FDO version

Environments where soft diffuse light is required for optimal visual comfort and total shielding of the source.

### LIGHT MANAGEMENT

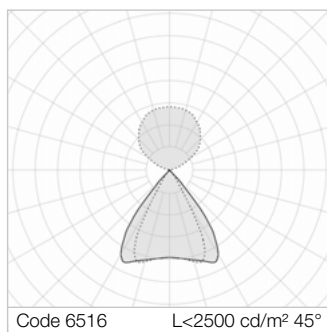
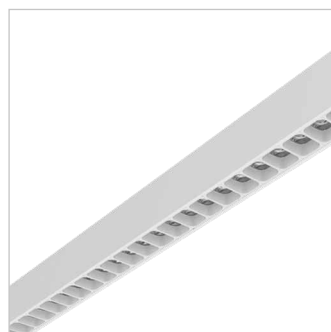
The DALI products can be controlled with 3F Easy Dim (page 156) or 3F Smart Dimming technology (page 166).

### ON REQUEST

- different power levels, colour rendering indices and colour temperatures
- housing in different RAL colours
- OC optic in different RAL colours
- wiring: CLO (page 188)
- emergency versions



## 3F HD DI OCW Channel

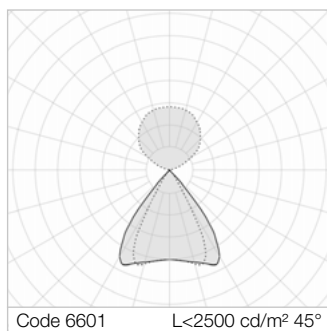
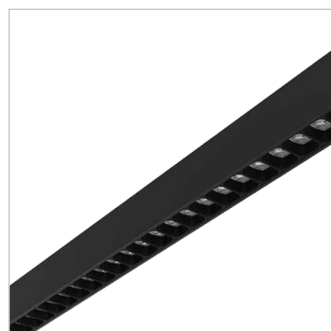


Average luminance <2500 cd/m² for angles >45°.  
Average luminance <1500 cd/m² for angles >65°.  
Environments with very exacting visual tasks and control of luminance at angles of >45° compared to the LEED certification. Offices with video terminals and administrative, information and school offices.  
Transparent methacrylate (PMMA) lenses with different facets to optimise the direction of the luminous flux.  
Anti-reflective white polycarbonate alveolar optic.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6515	3F HD50DI WH 12+20/830 DALI 5P OCW L1174	37	4312	3000	>80	1174x57x80
○ 6516	3F HD50DI WH 15+26/830 DALI 5P OCW L1468	48	5451	3000	>80	1468x57x80
○ 6517	3F HD50DI WH 30+52/830 DALI 5P OCW L2935	90	10914	3000	>80	2935x57x80

## 3F HD DI OCB Channel

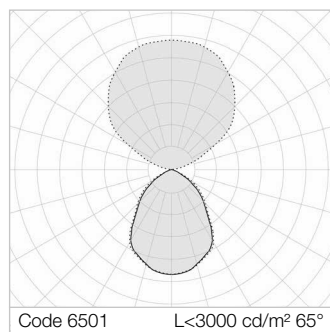
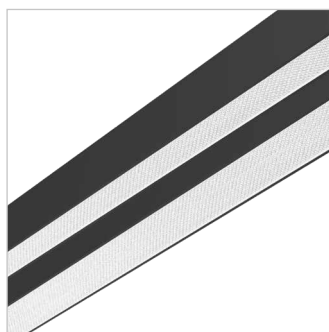


Average luminance <2500 cd/m² for angles >45°.  
Average luminance <200 cd/m² for angles >65°.  
Environments with very exacting visual tasks and control of luminance at angles of >45° compared to the LEED certification. Offices with video terminals and administrative, information and school offices.  
Transparent methacrylate (PMMA) lenses with different facets to optimise the direction of the luminous flux.  
Anti-reflective black polycarbonate alveolar optic.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
● 6600	3F HD50DI BK 12+20/830 DALI 5P OCB L1174	37	4185	3000	>80	1174x57x80
● 6601	3F HD50DI BK 15+26/830 DALI 5P OCB L1468	48	5292	3000	>80	1468x57x80
● 6602	3F HD50DI BK 30+52/830 DALI 5P OCB L2935	90	10596	3000	>80	2935x57x80
○ 6685	3F HD50DI AL 12+20/830 DALI 5P OCB L1174	37	4185	3000	>80	1174x57x80
○ 6686	3F HD50DI AL 15+26/830 DALI 5P OCB L1468	48	5292	3000	>80	1468x57x80
○ 6687	3F HD50DI AL 30+52/830 DALI 5P OCB L2935	90	10596	3000	>80	2935x57x80

## 3F HD DI GSP Channel



Average luminance <3000 cd/m² for angles >65°.  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
SP transparent methacrylate (PMMA) diffuser, prismatic outside, antiglare.  
Anti-glare opal polycarbonate filter for brightness uniformity.

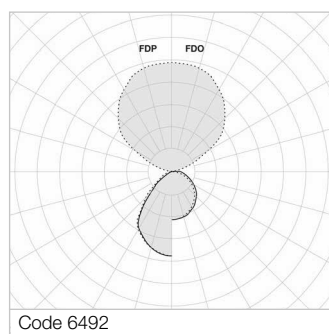
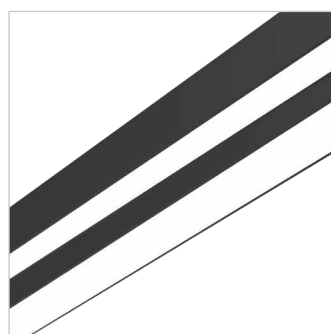
### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6500	3F HD50DI WH 13+20/840 DALI 5P GSP L1174	37	4081	4000	>80	1174x57x80
○ 6501	3F HD50DI WH 16+26/840 DALI 5P GSP L1468	46	5164	4000	>80	1468x57x80
○ 6505	3F HD50DI WH 32+52/840 DALI 5P GSP L2935	91	10340	4000	>80	2935x57x80
● 6585	3F HD50DI BK 13+20/840 DALI 5P GSP L1174	37	4081	4000	>80	1174x57x80
● 6586	3F HD50DI BK 16+26/840 DALI 5P GSP L1468	46	5164	4000	>80	1468x57x80
● 6590	3F HD50DI BK 32+52/840 DALI 5P GSP L2935	91	10340	4000	>80	2935x57x80
○ 6670	3F HD50DI AL 13+20/840 DALI 5P GSP L1174	37	4081	4000	>80	1174x57x80
○ 6671	3F HD50DI AL 16+26/840 DALI 5P GSP L1468	46	5164	4000	>80	1468x57x80
○ 6675	3F HD50DI AL 32+52/840 DALI 5P GSP L2935	91	10340	4000	>80	2935x57x80

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6530	3F HD100DI WH 22+20/840 DALI 5P GSP L1174	46	5394	4000	>80	1174x100x80
○ 6531	3F HD100DI WH 26+26/840 DALI 5P GSP L1468	61	6805	4000	>80	1468x100x80
○ 6535	3F HD100DI WH 52+52/840 DALI 5P GSP L2935	113	13510	4000	>80	2935x100x80
● 6615	3F HD100DI BK 22+20/840 DALI 5P GSP L1174	46	5394	4000	>80	1174x100x80
● 6616	3F HD100DI BK 26+26/840 DALI 5P GSP L1468	61	6805	4000	>80	1468x100x80
● 6620	3F HD100DI BK 52+52/840 DALI 5P GSP L2935	113	13510	4000	>80	2935x100x80
○ 6700	3F HD100DI AL 22+20/840 DALI 5P GSP L1174	46	5394	4000	>80	1174x100x80
○ 6701	3F HD100DI AL 26+26/840 DALI 5P GSP L1468	61	6805	4000	>80	1468x100x80
○ 6705	3F HD100DI AL 52+52/840 DALI 5P GSP L2935	113	13510	4000	>80	2935x100x80

## 3F HD DI FD Channel



Average luminance <3000 cd/m<sup>2</sup> for angles >65° (FDP).  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
For diffusers see accessories (page 85).  
FDP: luminaire suitable for offices.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H	
○ 6491	3F HD50DI WH 13+20/840 DALI 5P FD L1174	37	3999 3957	FDP FDO	4000	>80	1174x57x80
○ 6492	3F HD50DI WH 16+26/840 DALI 5P FD L1468	46	5061 5009	FDP FDO	4000	>80	1468x57x80
○ 6496	3F HD50DI WH 32+52/840 DALI 5P FD L2935	91	10134 10031	FDP FDO	4000	>80	2935x57x80
● 6576	3F HD50DI BK 13+20/840 DALI 5P FD L1174	37	3999 3957	FDP FDO	4000	>80	1174x57x80
● 6577	3F HD50DI BK 16+26/840 DALI 5P FD L1468	46	5061 5009	FDP FDO	4000	>80	1468x57x80
● 6581	3F HD50DI BK 32+52/840 DALI 5P FD L2935	91	10134 10031	FDP FDO	4000	>80	2935x57x80
○ 6661	3F HD50DI AL 13+20/840 DALI 5P FD L1174	37	3999 3957	FDP FDO	4000	>80	1174x57x80
○ 6662	3F HD50DI AL 16+26/840 DALI 5P FD L1468	46	5061 5009	FDP FDO	4000	>80	1468x57x80
○ 6666	3F HD50DI AL 32+52/840 DALI 5P FD L2935	91	10134 10031	FDP FDO	4000	>80	2935x57x80

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H	
○ 6521	3F HD100DI WH 22+20/840 DALI 5P FD L1174	46	5245 5081	FDP FDO	4000	>80	1174x100x80
○ 6522	3F HD100DI WH 26+26/840 DALI 5P FD L1468	61	6619 6414	FDP FDO	4000	>80	1468x100x80
○ 6526	3F HD100DI WH 52+52/840 DALI 5P FD L2935	113	13144 12742	FDP FDO	4000	>80	2935x100x80
● 6606	3F HD100DI BK 22+20/840 DALI 5P FD L1174	46	5245 5081	FDP FDO	4000	>80	1174x100x80
● 6607	3F HD100DI BK 26+26/840 DALI 5P FD L1468	61	6619 6414	FDP FDO	4000	>80	1468x100x80
● 6611	3F HD100DI BK 52+52/840 DALI 5P FD L2935	113	13144 12742	FDP FDO	4000	>80	2935x100x80
○ 6691	3F HD100DI AL 22+20/840 DALI 5P FD L1174	46	5245 5081	FDP FDO	4000	>80	1174x100x80
○ 6692	3F HD100DI AL 26+26/840 DALI 5P FD L1468	61	6619 6414	FDP FDO	4000	>80	1468x100x80
○ 6696	3F HD100DI AL 52+52/840 DALI 5P FD L2935	113	13144 12742	FDP FDO	4000	>80	2935x100x80



850°C



Code	Item
A01536	Channels diffusers 3F HD50 - FDP - 6m
A01537	Channels diffusers 3F HD50 - FDP - 9m
A01538	Channels diffusers 3F HD50 - FDP - 15m
A01544	Channels diffusers 3F HD100 - FDP - 6m
A01545	Channels diffusers 3F HD100 - FDP - 9m
A01546	Channels diffusers 3F HD100 - FDP - 15m

FDP Flat diffuser, externally microprismatic and made of transparent polycarbonate, with internal anti-glare opal polycarbonate filter for luminous uniformity. Supplied in roll.

**Accessory compatible with 3F HD FD Channel and 3F HD DI FD Channel.**



850°C

Code	Item
A01540	Channels diffusers 3F HD50 - FDO - 6m
A01541	Channels diffusers 3F HD50 - FDO - 9m
A01542	Channels diffusers 3F HD50 - FDO - 15m
A01548	Channels diffusers 3F HD100 - FDO - 6m
A01549	Channels diffusers 3F HD100 - FDO - 9m
A01550	Channels diffusers 3F HD100 - FDO - 15m

FDO Flat diffuser, smooth outside and made of opal polycarbonate. Supplied in roll.

**Accessory compatible with 3F HD FD Channel and 3F HD DI FD Channel.**



Code	Item
A01563	Dilator joint FD channels>15m - HD50 WH
A01564	Dilator joint FD channels>15m - HD100 WH
A01568	Dilator joint FD channels>15m - HD50 BK
A01569	Dilator joint FD channels>15m - HD100 BK
A01570	Dilator joint FD channels>15m - HD50 AL
A01571	Pair of end caps 3F HD50R WH channel GSP

Dilator coupling to connect flat diffusers FDP or FDO.

**Accessory compatible with 3F HD FD Channel and 3F HD DI FD Channel.**

**To be used for channels longer than 15 metres.**



Code	Item
A0254 <sup>NEW</sup>	Blackout tape to join 5 channels
A0255 <sup>NEW</sup>	Blackout tape to join 25 channels

Blackout tape to join channels.

**Accessory compatible with 3F HD - Direct - Channel, 3F HD - Direct/Indirect - Channel.**



Code	Item
A01558	Pair end caps for 3F HD50 WH channel OC
A01559	Pair end caps for 3F HD50 BK channel OC
A01560	Pair end caps for 3F HD50 AL channel OC

Pair of end caps for light channels equipped with OCB and OCW optics; made of plastic material reinforced with fibreglass and supplied with fixing screws. Thickness: 20 mm each cap.

**Accessory compatible with 3F HD OCW Channel, 3F HD OCB Channel, 3F HD DI OCW Channel and 3F HD DI OCB Channel.**

**These accessories are not suitable for single-unit installation.**



Code	Item
A01578	Pair of end caps for 3F HD50 WH channel GSP
A01579	Pair of end caps for 3F HD50 BK channel GSP
A01580	Pair of end caps for 3F HD50 AL channel GSP
A01581	Pair of end caps for 3F HD100 WH channel GSP
A01582	Pair of end caps for 3F HD100 BK channel GSP
A01583	Pair of end caps for 3F HD100 AL channel GSP

Pair of end caps for light channels equipped with GSP screens; made of plastic material reinforced with fibreglass and supplied with fixing screws. Thickness: 20 mm each cap.

**Accessory compatible with 3F HD GSP Channel and 3F HD DI GSP Channel.**  
**These accessories are not suitable for single-unit installation.**



Code	Item
A01552	Pair of end caps for 3F HD50 WH channel FD
A01553	Pair of end caps for 3F HD50 BK channel FD
A01554	Pair of end caps for 3F HD50 AL channel FD
A01555	Pair of end caps for 3F HD100 WH channel FD
A01556	Pair of end caps for 3F HD100 BK channel FD
A01557	Pair of end caps for 3F HD100 AL channel FD

Pair of end caps for light channels equipped with FDP and FDO screens; made of plastic material reinforced with fibreglass and supplied with fixing screws. Thickness: 20 mm each cap.

**Accessory compatible with 3F HD FD Channel and 3F HD DI FD Channel.**  
**These accessories are not suitable for single-unit installation.**



Code	Item
A01530	Ceiling/recessed sliding bracket. 3F HD50
A01531	Ceiling/recessed sliding bracket. 3F HD100

Stainless steel sliding bracket that can be positioned freely. Accessory dedicated to ceiling installation.



Code	Item
A01532	Slid.brack.w/reg.susp.instal. 3F HD50
A01528	Slid.brack.w/reg.susp.instal. 3F HD100

Free-position sliding bracket with regulator in stainless steel. Accessory dedicated to suspended installation.

**In the event of buying the sliding bracket with a regulator (code A01532 - A01528) on its own, the suspension cable must be made of galvanised steel with 49 elementary wires with a minimum diameter of 1,5 mm<sup>2</sup> (for a load of 15 kg).**



Code	Item
A20485	Suspension without adjustment - 0.5 m
A20486	Suspension without adjustment - 1 m
A20487	Suspension without adjustment - 2 m
A20488	Suspension without adjustment - 3 m
A20489	Suspension without adjustment - 4 m
A20490	Suspension without adjustment - 5 m
A20491	Suspension without adjustment - 6 m

Suspension without controller, galvanised steel cable 1.5 mm diameter, load 15 kg.

**Accessory compatible with sliding bracket code A01532 and A01528.**

**In the case of purchase of only one sliding bracket with controller (codes A01532 - A01528), the suspension cable must be made of galvanised steel with 49 elementary wires of minimum 1.5 mm diameter (for a weight of 15 kg).**



Code	Item
A0716	Coil galv. cable diam. 1.5mm - 100m The pack contains 100 metres.
A0717	Coil galv. cable diam. 1.5mm - 500m The pack contains 500 metres.
A0718	Coil galv. cable diam. 1.5mm - 1000m The pack contains 1000 metres.

Galvanised steel cable, diameter 1.5 mm, composed of 49 wires. 15 kg capacity (ratio 5:1).

**Accessory compatible with one of the following codes: A01532 - A01528 - A0714.**



Code	Item
A0714	Clamp 2 holes susp.- 100 pcs The pack contains 100 pieces.

Clamp in nickel-plated brass suitable for fixing and adjustment of galvanised steel wire (diameter 1,25 mm 1,5 mm - 2 mm), complete with locking screws. The 2 hole clamp allows to block and adjust the cable on a bearing element (part of the building) or on rounded eye bolt.

**Accessory compatible with one of the following codes: A0716 - A0717 - A0718.**



Code	Item
A01567	3F HD - 5P socket/plug terminal block

Terminal block (plug/socket) with irreversible snap-in double clamp, for power-supply connection at beginning and end of the channel, 5 poles.

**Accessory compatible with 3F HD - Direct - Single - Tunable White, 3F HD - Direct - Channel, 3F HD - Direct/Indirect - Channel.**

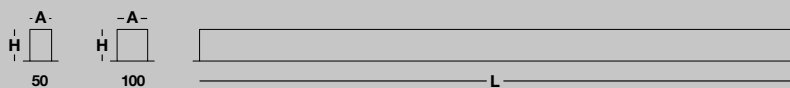


Code	Item
A0679	5 pole rectangular rose (no cable) WH

Electric supply with white polycarbonate case, internal bracket in galvanised steel.

**Accessory compatible with 3F HD - Direct - Single, 3F HD - Direct - Single - Tunable White, 3F HD - Direct/Indirect - Single, 3F HD - Direct/Indirect - Channel.**









## 3F HD R Recessed - Single

### ILLUMINOTECHNICAL

Direct symmetric distribution.  
Lifetime (L80/B10): 100000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

### SOURCE

Linear LED modules.  
Colour initial tolerance (MacAdam): SDCM 3.

### MECHANICAL

White colour body RAL 9003 matt with embossed finish for maximum resistance to touch and scratches.  
Removable gear-tray.  
End caps in white steel.

### ELECTRICAL

In compliance with EN 60598-1.  
Compliance with the EN 60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.  
Entrance to the upper power supply in proximity to a power head.  
Branching via an irreversible quick coupling plug to connect the cable housing element to the socket.

### INSTALLATION

Recessed installation.

### APPLICATIONS

Environments: with VDTs, meeting rooms, offices.  
Environments: architectural, commercial, staterooms, banks.  
Environments where dynamic, soft and diffuse light is required for optimal visual comfort.

#### FDO version

Environments where soft diffuse light is required for optimal visual comfort and total shielding of the source.

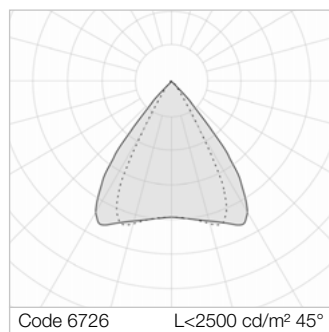
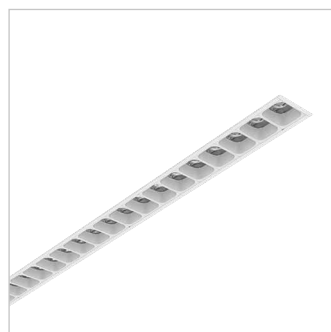
### LIGHT MANAGEMENT

The DALI products can be controlled with 3F Easy Dim (page 156) or 3F Smart Dimming technology (page 166).

### ON REQUEST

- different power levels, colour rendering indices and colour temperatures
- housing in different RAL colours
- optic in different RAL colours
- wiring: CLO (page 188)
- Optics Control Black
- emergency versions

## 3F HD R OCW Single

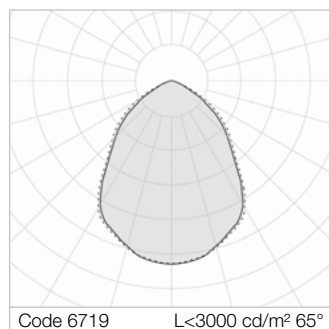
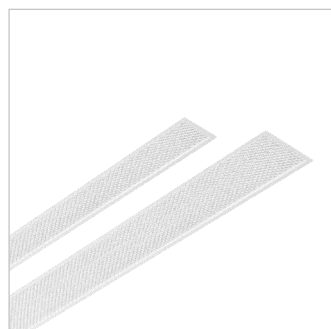


Average luminance <2500 cd/m<sup>2</sup> for angles >45°.  
Average luminance <1500 cd/m<sup>2</sup> for angles >65°.  
Environments with very exacting visual tasks and control of luminance at angles of >45° compared to the LEED certification. Offices with video terminals and administrative, information and school offices.  
Transparent methacrylate (PMMA) lenses with different facets to optimise the direction of the luminous flux.  
Anti-reflective white polycarbonate alveolar optic.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6725	3F HD50R WH 12/830 DALI OCW L1188	14.5	1713	3000	>80	1188x67x71
6726	3F HD50R WH 15/830 DALI OCW L1482	18	2143	3000	>80	1482x67x71
6727	3F HD50R WH 30/830 DALI OCW L2949	33	4285	3000	>80	2949x67x71

## 3F HD R GSP Single



Average luminance <3000 cd/m<sup>2</sup> for angles >65°.  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
SP flat diffuser in transparent methacrylate (PMMA), outside prismatic, anti-glare.  
Anti-glare opal polycarbonate filter for brightness uniformity.

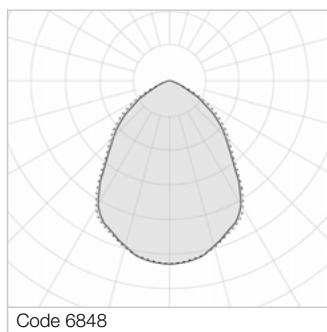
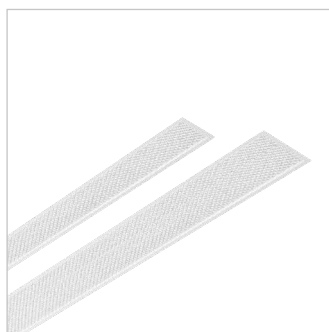
### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6718	3F HD50R WH 13/840 DALI GSP L1188	14	1374	4000	>80	1188x67x71
6719	3F HD50R WH 16/840 DALI GSP L1482	18	1718	4000	>80	1482x67x71
6720	3F HD50R WH 32/840 DALI GSP L2949	35	3435	4000	>80	2949x67x71

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6737	3F HD100R WH 22/840 DALI GSP L1188	24	2617	4000	>80	1188x110x71
6738	3F HD100R WH 26/840 DALI GSP L1482	29	3271	4000	>80	1482x110x71
6739	3F HD100R WH 52/840 DALI GSP L2949	56	6428	4000	>80	2949x110x71

## 3F HD R HO GSP Single



Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
SP flat diffuser in transparent methacrylate (PMMA), outside prismatic, anti-glare.  
Anti-glare opal polycarbonate filter for brightness uniformity.

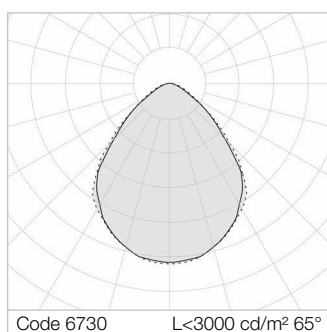
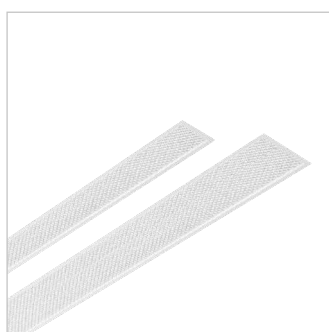
### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6847	3F HD50R WH HO 22/840 DALI GSP L1188	25	2596	4000	>80	1188x67x71
6848	3F HD50R WH HO 26/840 DALI GSP L1482	30	3246	4000	>80	1482x67x71
6849	3F HD50R WH HO 52/840 DALI GSP L2949	58	6492	4000	>80	2949x67x71

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6850	3F HD100R WH HO 36/840 DALI GSP L1188	39	4434	4000	>80	1188x110x71
6851	3F HD100R WH HO 44/840 DALI GSP L1482	49	5542	4000	>80	1482x110x71
6852	3F HD100R WH HO 88/840 DALI GSP L2949	98	11085	4000	>80	2949x110x71

## 3F HD R FDP Single



Average luminance <3000 cd/m² for angles >65°.  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
Externally micro prismatic transparent flat anti-glare polycarbonate diffuser.  
Anti-glare opal polycarbonate filter for brightness uniformity.

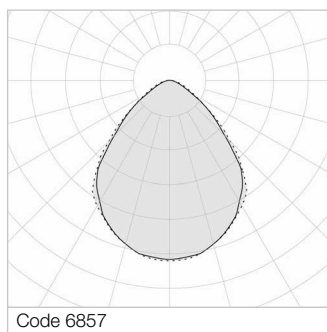
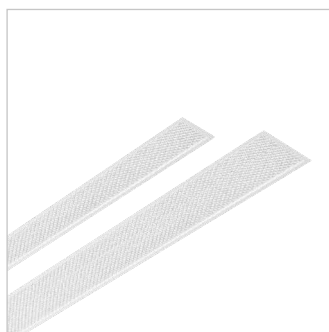
### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6710	3F HD50R WH 13/840 DALI FDP L1188	14	1292	4000	>80	1188x67x71
6711	3F HD50R WH 16/840 DALI FDP L1482	18	1615	4000	>80	1482x67x71
6712	3F HD50R WH 32/840 DALI FDP L2949	35	3229	4000	>80	2949x67x71

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6729	3F HD100R WH 22/840 DALI FDP L1188	24	2468	4000	>80	1188x110x71
6730	3F HD100R WH 26/840 DALI FDP L1482	29	3085	4000	>80	1482x110x71
6731	3F HD100R WH 52/840 DALI FDP L2949	56	6062	4000	>80	2949x110x71

## 3F HD R HO FDP Single



Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
Externally micro prismatic transparent flat anti-glare polycarbonate diffuser.  
Anti-glare opal polycarbonate filter for brightness uniformity.

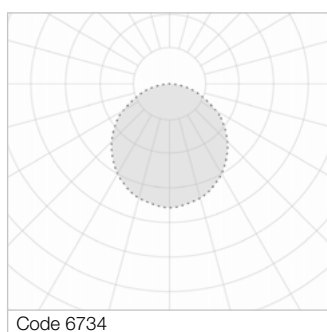
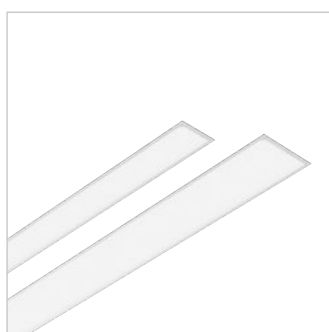
### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6853	3F HD50R WH HO 22/840 DALI FDP L1188	25	2448	4000	>80	1188x67x71
6854	3F HD50R WH HO 26/840 DALI FDP L1482	30	3061	4000	>80	1482x67x71
6855	3F HD50R WH HO 52/840 DALI FDP L2949	58	6122	4000	>80	2949x67x71

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6856	3F HD100R WH HO 36/840 DALI FDP L1188	39	4182	4000	>80	1188x110x71
6857	3F HD100R WH HO 44/840 DALI FDP L1482	49	5227	4000	>80	1482x110x71
6858	3F HD100R WH HO 88/840 DALI FDP L2949	98	10454	4000	>80	2949x110x71

## 3F HD R FDO Single



Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
Flat opal anti-glare polycarbonate diffuser.

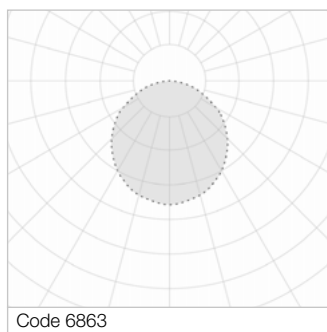
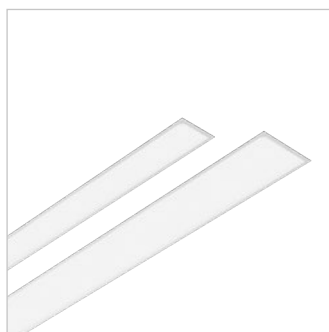
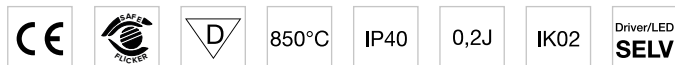
### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6714	3F HD50R WH 13/840 DALI FDO L1188	14	1250	4000	>80	1188x67x71
6715	3F HD50R WH 16/840 DALI FDO L1482	18	1563	4000	>80	1482x67x71
6716	3F HD50R WH 32/840 DALI FDO L2949	35	3126	4000	>80	2949x67x71

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6733	3F HD100R WH 22/840 DALI FDO L1188	24	2304	4000	>80	1188x110x71
6734	3F HD100R WH 26/840 DALI FDO L1482	29	2880	4000	>80	1482x110x71
6735	3F HD100R WH 52/840 DALI FDO L2949	56	5660	4000	>80	2949x110x71

## 3F HD R HO FDO Single



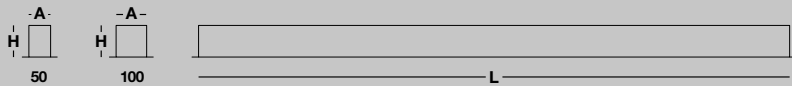
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
Flat opal anti-glare polycarbonate diffuser.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6859	3F HD50R WH HO 22/840 DALI FDO L1188	25	2286	4000	>80	1188x67x71
6860	3F HD50R WH HO 26/840 DALI FDO L1482	30	2858	4000	>80	1482x67x71
6861	3F HD50R WH HO 52/840 DALI FDO L2949	58	5716	4000	>80	2949x67x71

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6862	3F HD100R WH HO 36/840 DALI FDO L1188	39	3904	4000	>80	1188x110x71
6863	3F HD100R WH HO 44/840 DALI FDO L1482	49	4880	4000	>80	1482x110x71
6864	3F HD100R WH HO 88/840 DALI FDO L2949	98	9760	4000	>80	2949x110x71







# 3F HD R Recessed - Channel

## ILLUMINOTECHNICAL

Direct symmetric distribution.  
Lifetime (L80/B10): 100000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

## SOURCE

Linear LED modules.  
Colour initial tolerance (MacAdam): SDCM 3.

## MECHANICAL

White colour body RAL 9003 matt with embossed finish for maximum resistance to touch and scratches.  
Removable gear-tray.  
Hot-dip galvanised steel linear connecting element installed on the body for rapid mechanical connection.

## ELECTRICAL

In compliance with EN 60598-1.  
Compliance with the EN 60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.  
Entrance to the upper power supply in proximity to a power head.  
5 mm² section 2.5 pin through line with an irreversible quick coupling plug/socket fixed on the body for rapid electrical connection.  
Branching via an irreversible quick coupling plug to connect the cable housing element to the socket.

## INSTALLATION

Recessed installation.

## APPLICATIONS

Environments: with VDTs, meeting rooms, offices.  
Environments: architectural, commercial, staterooms, banks.  
Environments where dynamic, soft and diffuse light is required for optimal visual comfort.

### FDO version

Environments where soft diffuse light is required for optimal visual comfort and total shielding of the source.

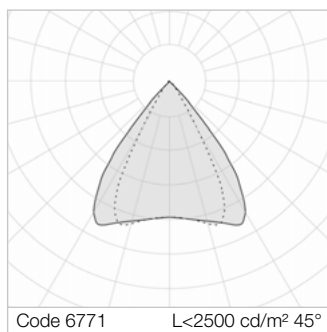
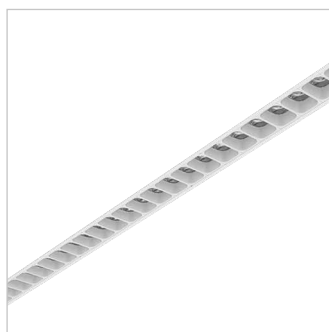
## LIGHT MANAGEMENT

The DALI products can be controlled with 3F Easy Dim (page 156) or 3F Smart Dimming technology (page 166).

## ON REQUEST

- different power levels, colour rendering indices and colour temperatures
- housing in different RAL colours
- OC optic in different RAL colours
- wiring: CLO (page 188)
- emergency versions

## 3F HD R OCW Channel

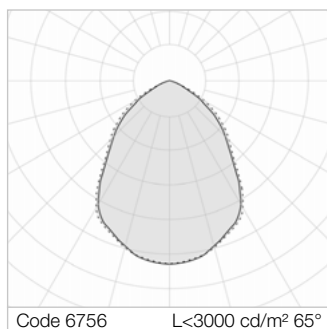
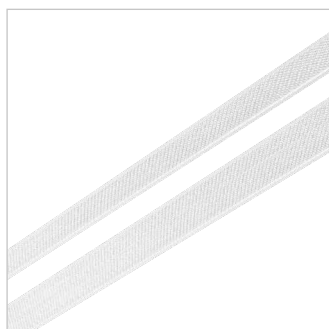


Average luminance <2500 cd/m² for angles >45°.  
Average luminance <1500 cd/m² for angles >65°.  
Environments with very exacting visual tasks and control of luminance at angles of >45° compared to the LEED certification. Offices with video terminals and administrative, information and school offices.  
Transparent methacrylate (PMMA) lenses with different facets to optimise the direction of the luminous flux.  
Anti-reflective white polycarbonate alveolar optic.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6770	3F HD50R WH 12/830 DALI 5P OCW L1174	14.5	1713	3000	>80	1174x67x71
6771	3F HD50R WH 15/830 DALI 5P OCW L1468	18	2143	3000	>80	1468x67x71
6772	3F HD50R WH 30/830 DALI 5P OCW L2935	33	4285	3000	>80	2935x67x71

## 3F HD R GSP Channel



Average luminance <3000 cd/m² for angles >65°.  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
SP flat diffuser in transparent methacrylate (PMMA), outside prismatic, anti-glare.  
Anti-glare opal polycarbonate filter for brightness uniformity.

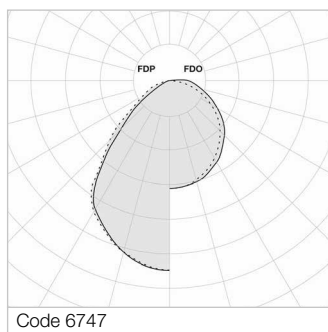
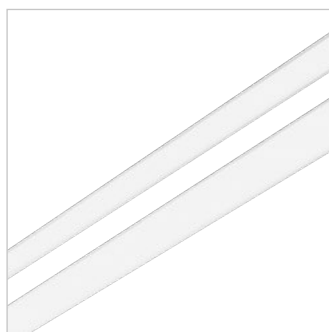
### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6755	3F HD50R WH 13/840 DALI 5P GSP L1174	14	1374	4000	>80	1174x67x71
6756	3F HD50R WH 16/840 DALI 5P GSP L1468	18	1718	4000	>80	1468x67x71
6760	3F HD50R WH 32/840 DALI 5P GSP L2935	35	3435	4000	>80	2935x67x71

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6785	3F HD100R WH 22/840 DALI 5P GSP L1174	24	2617	4000	>80	1174x110x71
6786	3F HD100R WH 26/840 DALI 5P GSP L1468	29	3271	4000	>80	1468x110x71
6790	3F HD100R WH 52/840 DALI 5P GSP L2935	56	6428	4000	>80	2935x110x71

## 3F HD R FD Channel



Average luminance <3000 cd/m<sup>2</sup> for angles >65° (FDP).  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.  
For diffusers see accessories (page 98).  
FDP: luminaire suitable for offices.

### 3F HD 50 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6746	3F HD50R WH 13/840 DALI 5P FD L1174	14	1292 FDP 1250 FDO	4000	>80	1174x67x71
6747	3F HD50R WH 16/840 DALI 5P FD L1468	18	1615 FDP 1563 FDO	4000	>80	1468x67x71
6751	3F HD50R WH 32/840 DALI 5P FD L2935	35	3229 FDP 3126 FDO	4000	>80	2935x67x71

### 3F HD 100 - DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
6776	3F HD100R WH 22/840 DALI 5P FD L1174	24	2468 FDP 2304 FDO	4000	>80	1174x110x71
6777	3F HD100R WH 26/840 DALI 5P FD L1468	29	3085 FDP 2880 FDO	4000	>80	1468x110x71
6781	3F HD100R WH 52/840 DALI 5P FD L2935	56	6062 FDP 5660 FDO	4000	>80	2935x110x71

## 3F HD R | Accessories



850°C



Code	Item
A01536	Channels diffusers 3F HD50 - FDP - 6m
A01537	Channels diffusers 3F HD50 - FDP - 9m
A01538	Channels diffusers 3F HD50 - FDP - 15m
A01544	Channels diffusers 3F HD100 - FDP - 6m
A01545	Channels diffusers 3F HD100 - FDP - 9m
A01546	Channels diffusers 3F HD100 - FDP - 15m

FDP Flat diffuser, externally microprismatic and made of transparent polycarbonate, with internal anti-glare opal polycarbonate filter for luminous uniformity. Supplied in roll.

**Accessory compatible with 3F HD R FD Channel.**

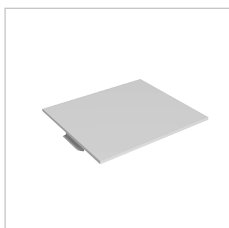


850°C

Code	Item
A01540	Channels diffusers 3F HD50 - FDO - 6m
A01541	Channels diffusers 3F HD50 - FDO - 9m
A01542	Channels diffusers 3F HD50 - FDO - 15m
A01548	Channels diffusers 3F HD100 - FDO - 6m
A01549	Channels diffusers 3F HD100 - FDO - 9m
A01550	Channels diffusers 3F HD100 - FDO - 15m

FDO Flat diffuser, smooth outside and made of opal polycarbonate. Supplied in roll.

**Accessory compatible with 3F HD R FD Channel.**



Code	Item
A01563	Dilator joint FD channels>15m - HD50 WH
A01564	Dilator joint FD channels>15m - HD100 WH
A01568	Dilator joint FD channels>15m - HD50 BK
A01569	Dilator joint FD channels>15m - HD100 BK
A01570	Dilator joint FD channels>15m - HD50 AL
A01571	Pair of end caps 3F HD50R WH channel GSP

Dilator coupling to connect flat diffusers FDP or FDO.

**Accessory compatible with 3F HD R FD Channel.**

**To be used for channels longer than 15 metres.**



Code	Item
A01561	Pair end caps 3F HD50R WH chan. FD
A01562	Pair end caps 3F HD100R WH chan. FD
A01572	Dilator joint FD channels>15m - HD100 AL
A01573	Pair of end caps 3F HD100R WH chann GSP
A01574	Pair of end caps 3F HD50R WH channel OCW

Pair of end caps for channels, in grey painted aluminium, with screws for fixing to housing, always required. Thickness: 10 mm each cap.

**Accessory compatible with 3F HD R FD Channel.**

**These accessories are not suitable for single-unit installation.**



Code	Item
A01565	Pair fixing brack. plasterboard 3F HD50R
A01566	Pair fixing brack.plasterboard 3F HD100R

Set of galvanised steel brackets necessary to recess install the fixture in plasterboard.



Code	Item
A01567	3F HD - 5P socket/plug terminal block
<p>Terminal block (plug/socket) with irreversible snap-in double clamp, for power-supply connection at beginning and end of the channel, 5 poles.</p> <p><b>Accessory compatible with 3F HD R - Recessed - Channel.</b></p>	







# / 3F Mirella

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**3F Mirella** is the essential synthesis of space, transversal to all languages and always performing to ensure environmental and visual comfort. A discreet presence with a precise archetypal sign, a light in continuous dialogue with the architecture that hosts it.

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the fixture is composed of an aluminium body that houses the LED technology and a shaped methacrylate (PMMA) part that accompanies the luminous flux. Available in various models and finishes the new system is designed to integrate discreetly in professional or residential contexts.

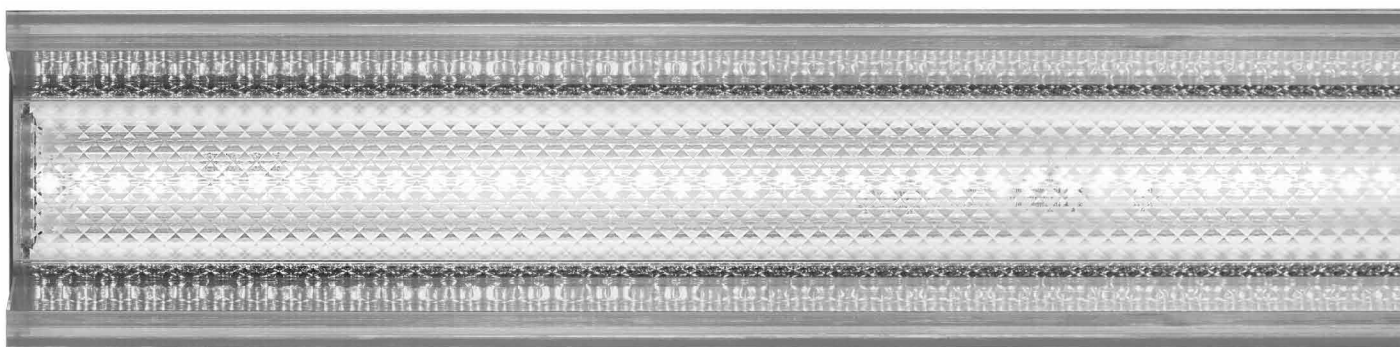
The integration of the two elements makes the visual perception of the light source change inside the space during the day.



**3F Mirella OP**  
Lens in satin PMMA



**3F Mirella SP**  
Transparent PMMA lens






## Quality of details.

Elaborate, essential and flexible, **3F Mirella** is a solution suited to the multiple configurations of contemporary architectural spaces.

Available in two lengths (1500 and 2200 mm) and in three colour finishes, the product can be equipped with diffusers of two different types, inserted into a transparent PMMA lens, thus offering the customer the possibility of selecting the best quality of light and the desired visual comfort.

**The SP screen** has been designed and developed for work areas where greater visual comfort is required with reduced luminance values, while **the OP screen** is suitable for non-visually demanding areas. This is why it finds its application in waiting rooms and/or transit areas.

### Finishes

-  White
-  Aluminum
-  Black



Ciotti Associates  
Varese  
Italia/Italy





## 3F Mirella Direct

### ILLUMINOTECHNICAL

Controlled symmetric distribution.  
Lifetime (L80/B10): 100000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

### SOURCE

Linear LED modules.  
Colour initial tolerance (MacAdam): SDCM 3.

### MECHANICAL

Extruded aluminium body, zamak heads.  
External lens of particular aesthetic value in transparent methacrylate (PMMA).  
Adjustable suspension fixtures with chrome studs and rapid adjusters, galvanised steel cable of 2 m long.

### ELECTRICAL

In compliance with EN 60598-1.  
Compliance with the EN 60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.

#### ON/OFF versions

Transparent 3-pole power cable with white ceiling power supply case.

#### DALI versions

Transparent 5-pole power cable with white ceiling power supply case.

### INSTALLATION

Suspension installation.

### APPLICATIONS

Environments involving accurate visual tasks where a diffused and soft light for an optimum visual comfort and the source total shielding are required.  
In environments with VDTs, managerial offices and staterooms.

#### OP version

Environments where soft diffuse light is required for optimal visual comfort and total shielding of the source.

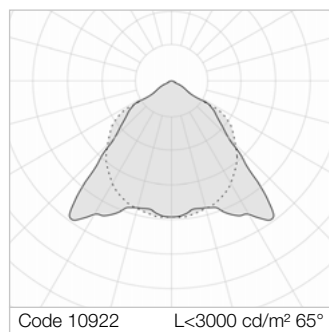
### LIGHT MANAGEMENT

The DALI products can be controlled with 3F Easy Dim (page 156) or 3F Smart Dimming technology (page 166).

### ON REQUEST

- different power levels, colour rendering indices and colour temperatures
- wiring: CLO (page 188)
- power and suspension cables of >2 m long
- emergency versions

## 3F Mirella SP



Average luminance <3000 cd/m² for radial angles >65°. Methacrylate (PMMA) primary lens for total source shielding. Flat transparent prismatic methacrylate (PMMA) filter, multi-lenticular exterior, anti-glare.

### ON/OFF electronic wiring 230V-50/60Hz

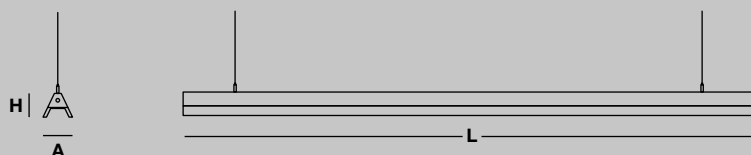
Code	Item	W	lm	K	CRI	L x A x H
○ 10920	3F Mirella WH 40 SP L1480	47	4741	4000	>80	1480x112x91
○ 10921	3F Mirella WH 60 SP L2200	68	7112	4000	>80	2200x112x91
● 10898	3F Mirella BK 40 SP L1480	47	4741	4000	>80	1480x112x91
● 10899	3F Mirella BK 60 SP L2200	68	7112	4000	>80	2200x112x91
○ 10942	3F Mirella AL 40 SP L1480	47	4741	4000	>80	1480x112x91
○ 10943	3F Mirella AL 60 SP L2200	68	7112	4000	>80	2200x112x91

### DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 10922	3F Mirella WH 40 DALI SP L1480	45	4741	4000	>80	1480x112x91
○ 10923	3F Mirella WH 60 DALI SP L2200	66	7112	4000	>80	2200x112x91
● 10900	3F Mirella BK 40 DALI SP L1480	45	4741	4000	>80	1480x112x91
● 10901	3F Mirella BK 60 DALI SP L2200	66	7112	4000	>80	2200x112x91
○ 10944	3F Mirella AL 40 DALI SP L1480	45	4741	4000	>80	1480x112x91
○ 10945	3F Mirella AL 60 DALI SP L2200	66	7112	4000	>80	2200x112x91







LCA Architetti  
Varese  
Italia/Italy





## 3F Mirella Direct/Indirect

### ILLUMINOTECHNICAL

Direct-indirect distribution.  
Lifetime (L80/B10): 100000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

### SOURCE

Linear LED modules.  
Colour initial tolerance (MacAdam): SDCM 3.

### MECHANICAL

Extruded aluminium body, zamak heads.  
External lens of particular aesthetic value in transparent methacrylate (PMMA).  
Adjustable suspension fixtures with chrome studs and rapid adjusters, galvanised steel cable of 2 m long.

### ELECTRICAL

In compliance with EN 60598-1.  
Compliance with the EN 60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.

#### ON/OFF versions

Transparent 3-pole power cable with white ceiling power supply case, single ignition.

#### DALI versions

5-pole transparent power cable with white power supply case for ceiling, single 230V circuit, 2 DALI addresses.

### INSTALLATION

Suspension installation.

### APPLICATIONS

Environments involving accurate visual tasks where a diffused and soft light for an optimum visual comfort and the source total shielding are required.  
In environments with VDTs, managerial offices and staterooms.

#### OP version

Environments where soft diffuse light is required for optimal visual comfort and total shielding of the source.

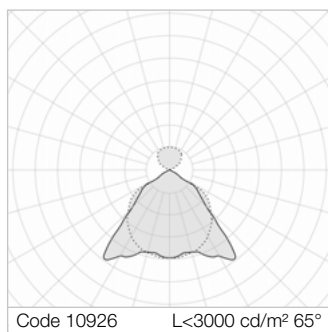
### LIGHT MANAGEMENT

The DALI products can be controlled with 3F Easy Dim (page 156) or 3F Smart Dimming technology (page 166).

### ON REQUEST

- different power levels, colour rendering indices and colour temperatures
- power and suspension cables of >2 m long
- twin-circuit
- wiring: CLO (page 188)
- emergency versions

## 3F Mirella DI SP



Methacrylate (PMMA) primary lens for total source shielding.  
Flat transparent prismatic methacrylate (PMMA) filter,  
multi-lenticular exterior, anti-glare.  
Average luminance <3000 cd/m² for radial angles >65°.

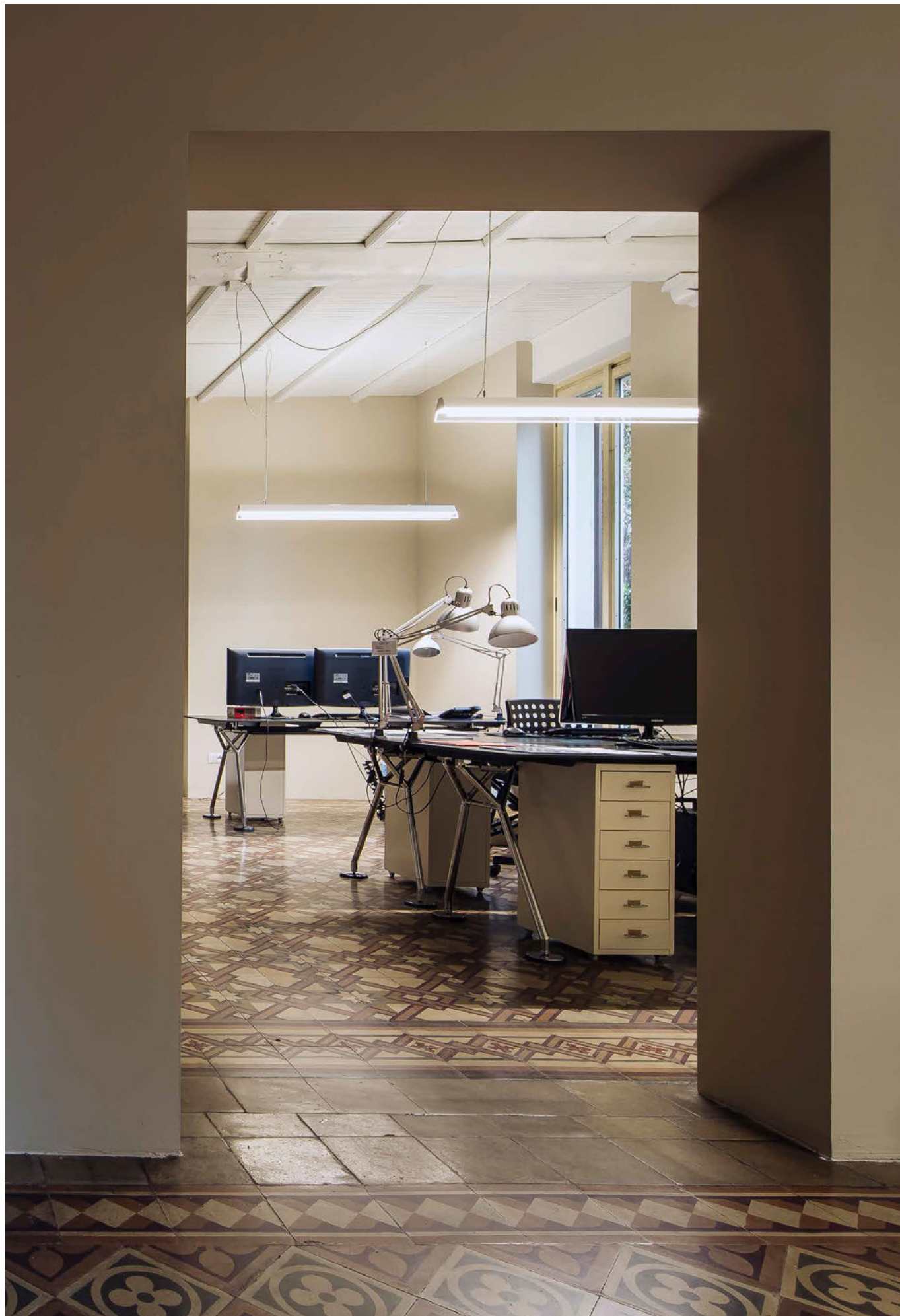
### ON/OFF electronic wiring 230V-50/60Hz

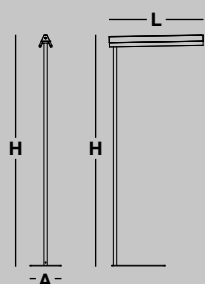
Code	Item	W	lm	K	CRI	L x A x H
○ 10924	3F Mirella WH DI 40+8 SP L1480	58	5849	4000	>80	1480x112x91
○ 10925	3F Mirella WH DI 60+14 SP L2200	84	8907	4000	>80	2200x112x91
● 10902	3F Mirella BK DI 40+8 SP L1480	58	5849	4000	>80	1480x112x91
● 10903	3F Mirella BK DI 60+14 SP L2200	84	8907	4000	>80	2200x112x91
○ 10946	3F Mirella AL DI 40+8 SP L1480	58	5849	4000	>80	1480x112x91
○ 10947	3F Mirella AL DI 60+14 SP L2200	84	8907	4000	>80	2200x112x91

### DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 10926	3F Mirella WH DI 40+8 DALI SP L1480	58	5849	4000	>80	1480x112x91
○ 10927	3F Mirella WH DI 60+14 DALI SP L2200	84	8907	4000	>80	2200x112x91
● 10904	3F Mirella BK DI 40+8 DALI SP L1480	58	5849	4000	>80	1480x112x91
● 10905	3F Mirella BK DI 60+14 DALI SP L2200	84	8907	4000	>80	2200x112x91
○ 10948	3F Mirella AL DI 40+8 DALI SP L1480	58	5849	4000	>80	1480x112x91
○ 10949	3F Mirella AL DI 60+14 DALI SP L2200	84	8907	4000	>80	2200x112x91











# 3F Mirella Floor

## ILLUMINOTECHNICAL

Direct-indirect distribution.  
Average luminance <3000 cd/m<sup>2</sup> for radial angles >65°.  
Lifetime (L80/B10): 100000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

## SOURCE

Linear LED modules.  
Colour initial tolerance (MacAdam): SDCM 3.

## MECHANICAL

Extruded aluminium body, zamak heads.  
Transparent methacrylate (PMMA) micro prismatic primary anti-glare lens, multi lenticular on the outside.  
Anti-glare opal polycarbonate filter for brightness uniformity.  
External lens of particular aesthetic value in satin methacrylate (PMMA).  
Painted stainless steel square section pole.  
Base in painted steel.

## ELECTRICAL

In compliance with EN 60598-1.  
Compliance with the EN 60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.  
Power supply with a 2.5 m long transparent cable, schuko plug.

### ON/OFF versions

Foot switch, single switch-on.

### DALI versions

TOUCH DALI control integrated in the stem.

## INSTALLATION

Floor installation.

## APPLICATIONS

Environments which cannot, for technical reasons, be equipped with points of light directed onto the ceiling.  
Open-space offices and environments in which a high degree of workstation flexibility is required.  
Environments: staterooms, with VDTs, offices.  
Environments where soft diffuse light is required for optimal visual comfort.

## LIGHT MANAGEMENT

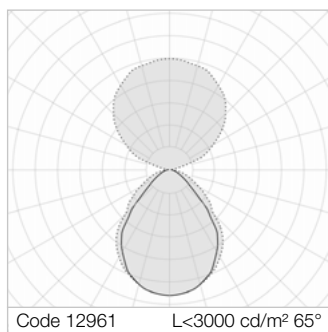
### DALI versions

The TOUCH DALI control integrated in the stem, allows independent switching on, off and adjustment of the two emissions.

## ON REQUEST

- different power levels, colour rendering indices and colour temperatures
- body, pole and base in different RAL colours
- wiring: CLO (page 188)
- different power cables

## 3F Mirella Floor



### ON/OFF electronic wiring 230V-50/60Hz

	Code	Item	W	lm	K	CRI	L x A x H
○	12961	3F Mirella Floor SF WH 23+23	52	7042	4000	>80	843x280x2060
●	12960	3F Mirella Floor SF BK 23+23	52	7042	4000	>80	843x280x2060

### TOUCH DALI electronic wiring 230V-50/60Hz

	Code	Item	W	lm	K	CRI	L x A x H
○	12965	3F Mirella Floor SF WH 23+23 Touch DALI	52	7042	4000	>80	843x280x2060
●	12964	3F Mirella Floor SF BK 23+23 Touch DALI	52	7042	4000	>80	843x280x2060







# / 3<sup>F</sup> Trittico

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**3F Trittico** is a luminaire that is defined by three lines of light, linked together to determine affinities, independent in space.

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The three arms, two for direct lighting and one for indirect lighting, can rotate perpendicularly to the support rod to provide the best possible lighting according to the activity being carried out and the position of the furniture.

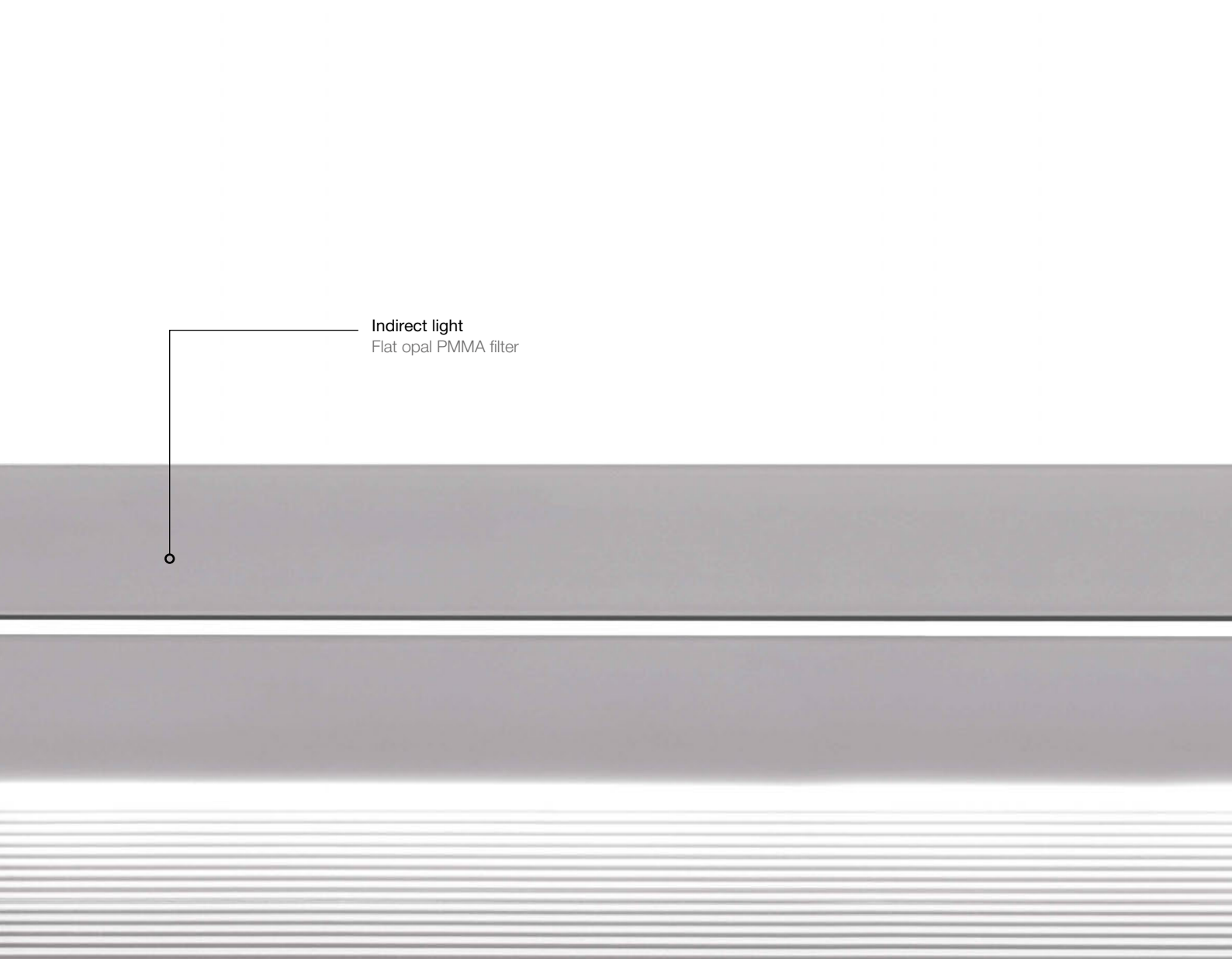
The luminaire can therefore be and adapt to changes in interior layout.





**Direct light**  
Hybrid optic with extruded lens  
and an anti-glare filter

Scale 1:1  
mm






Indirect light  
Flat opal PMMA filter

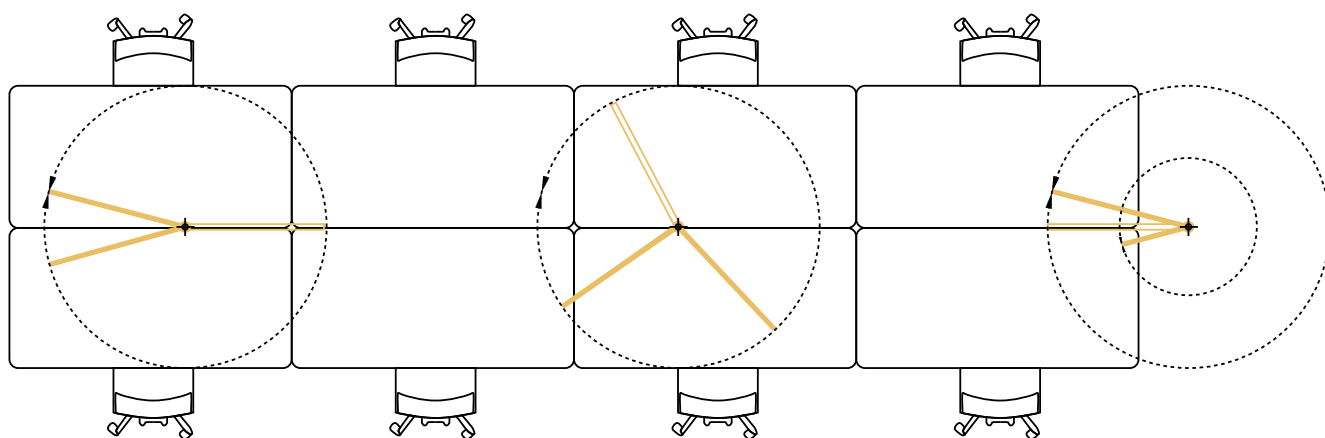
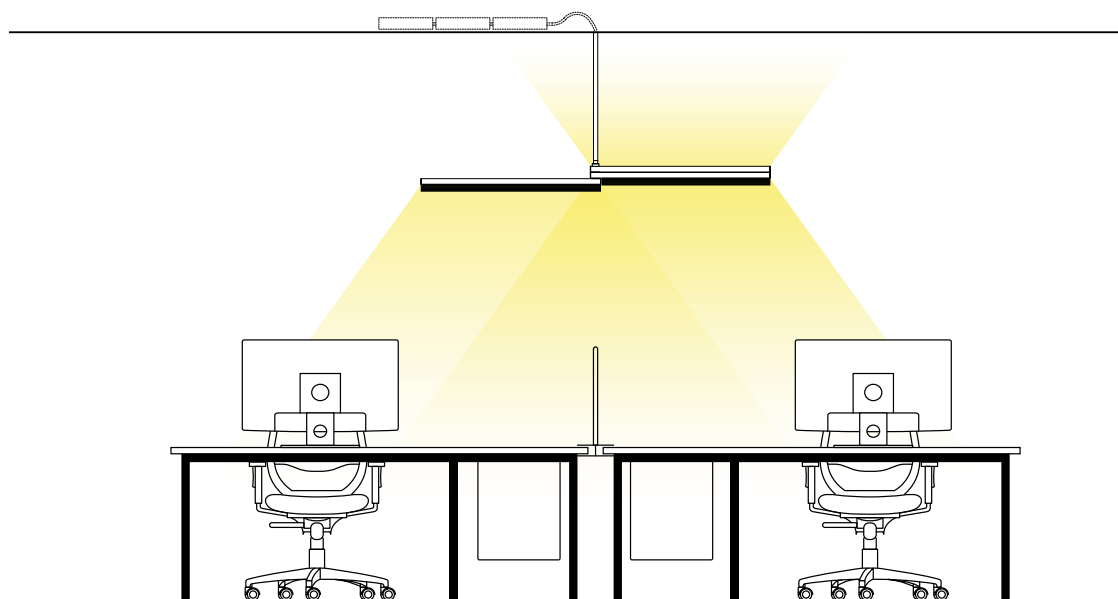
## The **structure** of light.

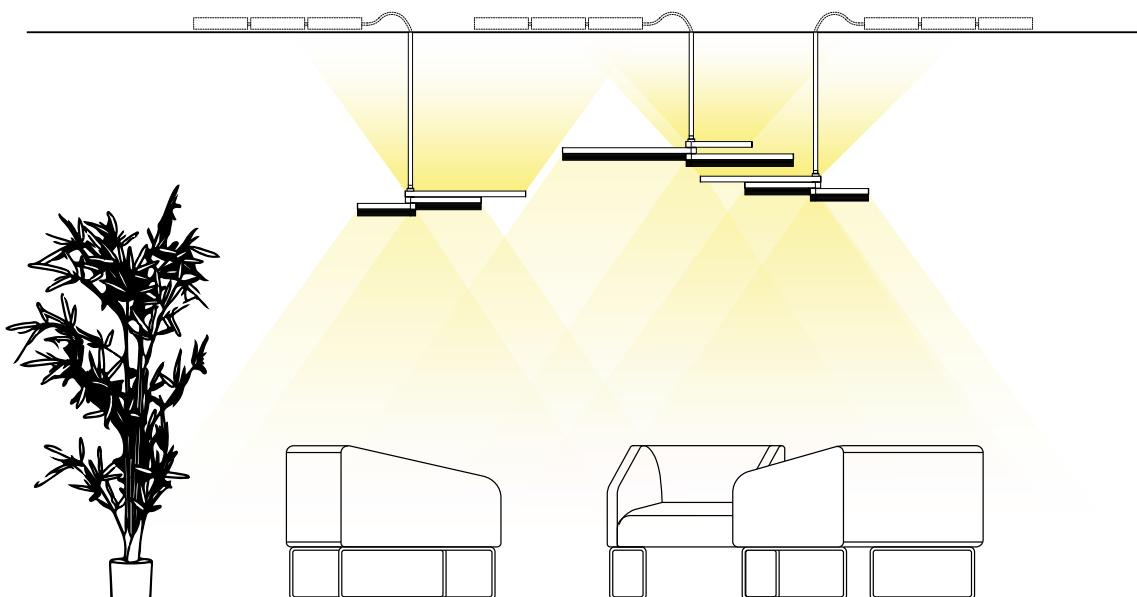
3F Trittico was created as a flexible technical solution that can adapt to changing interior layouts.

Its three independently manageable arms can rotate and offer indirect lighting, filtered by a translucent PMMA screen, and direct lighting on the work surface, diffused through a satinised PMMA lens designed to minimise glare.

### Finishes

-  White
-  Black
-  Champagne (on request)





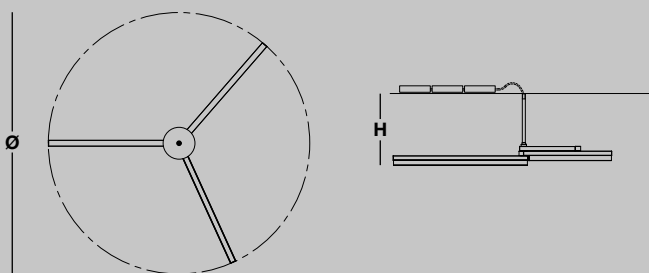
## Suitable. Everywhere.

This luminaire has been designed for every type of space, obviously starting from the operational space of the office, in the contemporary sense of workplace 3.0, to the home.

In the context of the modern office, where the productivity and well-being of employees is a priority, the product offers a balanced and comfortable light that contributes to a healthier and more efficient working environment.

3F Trittico, however, is equally suited to transforming the atmosphere of a home environment, adding a touch of elegance and functionality, with light that highlights and enhances the surrounding elements.

Its great flexibility and ability to adapt to enhance any space it is in make 3F Trittico a valuable addition to any lighting project.



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## 3F Trittico

### ILLUMINOTECHNICAL

Direct-indirect distribution.  
Lifetime (L85/B10): 50000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

### SOURCE

Linear LED modules.  
Colour initial tolerance (MacAdam): SDCM 3.

### MECHANICAL

Extruded aluminium housing with horizontal side stripes.  
Fixture composed of three independent adjustable arms that can be moved separately.  
Non-iridescent high efficiency aluminium with a titanium and magnesium surface treatment flow recuperator.  
Transparent methacrylate (PMMA) anti-glare filter.  
Arms for direct lighting with U-shaped lens made in methacrylate (PMMA) characterised by satin-finished inner etchings and a polished outer surface, designed to maximise the light output.  
Arm for indirect lighting with a translucent polycarbonate screen.  
Polycarbonate heads.  
Steel suspension fixture with poles H 300-500-800 mm with a brass rotation mechanism.

### ELECTRICAL

In compliance with EN 60598-1.  
Compliance with the EN 60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.  
**Peripheral cabling unit to recess into the ceiling.**  
Class II.  
4-pole terminal block, single 230V circuit, 2 DALI addresses.

### INSTALLATION

Installing mineral fibre or metal panels in plasterboard ceilings.  
Warning: to install this fixture it is necessary to buy one of the following four accessories (A0828 / A0829 / A0830 / A0831) depending on the kind of ceiling to be used.

### APPLICATIONS

Environments: with VDTs, meeting rooms, offices.  
Environments: architectural, commercial, staterooms, banks.  
Environments where dynamic, soft and diffuse light is required for optimal visual comfort.

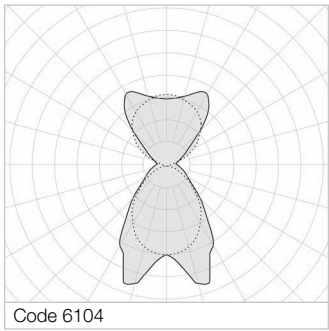
### LIGHT MANAGEMENT

The DALI products can be controlled with 3F Easy Dim (page 156) or 3F Smart Dimming technology (page 166).

### ON REQUEST

- different colour rendering indices and colour temperatures
- housing in different RAL colours
- wiring: CLO (page 188)
- version for ceiling installation
- maximum pole height 1.3 m
- emergency versions

# 3F Trittico

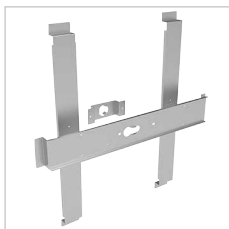


## DALI electronic wiring 230V-50/60Hz

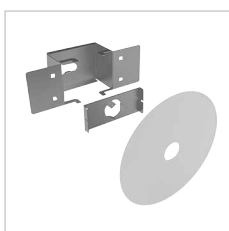
Code	Item	W	lm	K	CRI	ø x H
○ 6157	3F Trittico WH 12+12+15/830 DALI H300	45	5901	3000	>80	1560x300
○ 6160	3F Trittico WH 12+12+15/830 DALI H500	45	5901	3000	>80	1560x500
○ 6163	3F Trittico WH 12+12+15/830 DALI H800	45	5901	3000	>80	1560x800
● 6158	3F Trittico BK 12+12+15/830 DALI H300	45	5901	3000	>80	1560x300
● 6161	3F Trittico BK 12+12+15/830 DALI H500	45	5901	3000	>80	1560x500
● 6164	3F Trittico BK 12+12+15/830 DALI H800	45	5901	3000	>80	1560x800



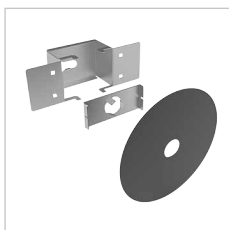
Code	Item
A0828	Trittico fixing metal panels 60x60
Hot-dip galvanised steel fixture installation bracket for metal panel false ceilings 600x600 with hidden structure with perpendicular adjustment rod screws.	



Code	Item
A0829	Trittico fixing mineral fiber pan. 60x60
Hot-dip galvanised steel fixture installation bracket for mineral fibre panel false ceilings 600x600 with visible structure with perpendicular adjustment rod screws.	



Code	Item
A0830	Fixing Trittico plasterboard WH
Hot-dip galvanised steel fixture installation bracket for plasterboard false ceilings with perpendicular adjustment rod screws. White painted canopy with a Ø 120 mm hole.	



Code	Item
A0831	Fixing Trittico plasterboard BK
Hot-dip galvanised steel fixture installation bracket for plasterboard false ceilings with perpendicular adjustment rod screws. Black painted canopy with a Ø 120 mm hole.	



# / 3F Solo

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The excellence of light combined with the elegance of form.

**3F Solo** is the result of the thinking behind the creation of 3F Trittico.

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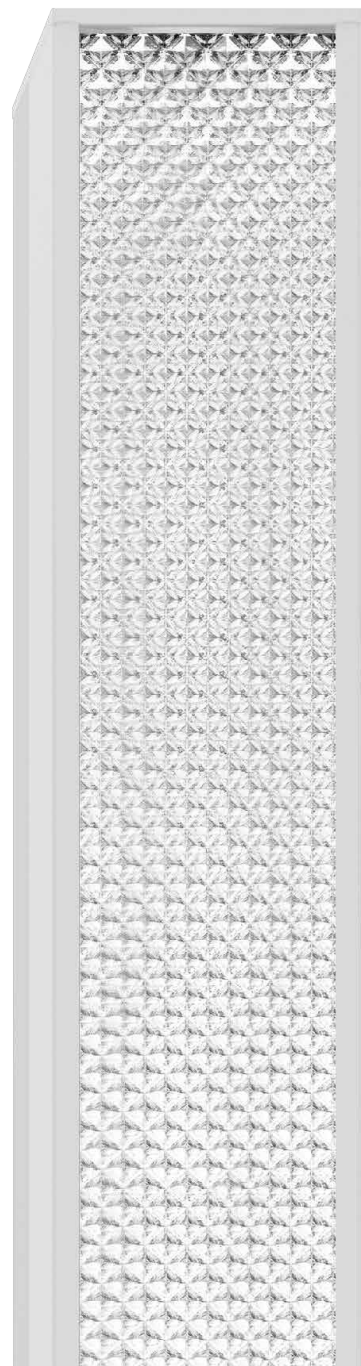
3F Solo is a line, a simple element that fits discreetly into any environment.

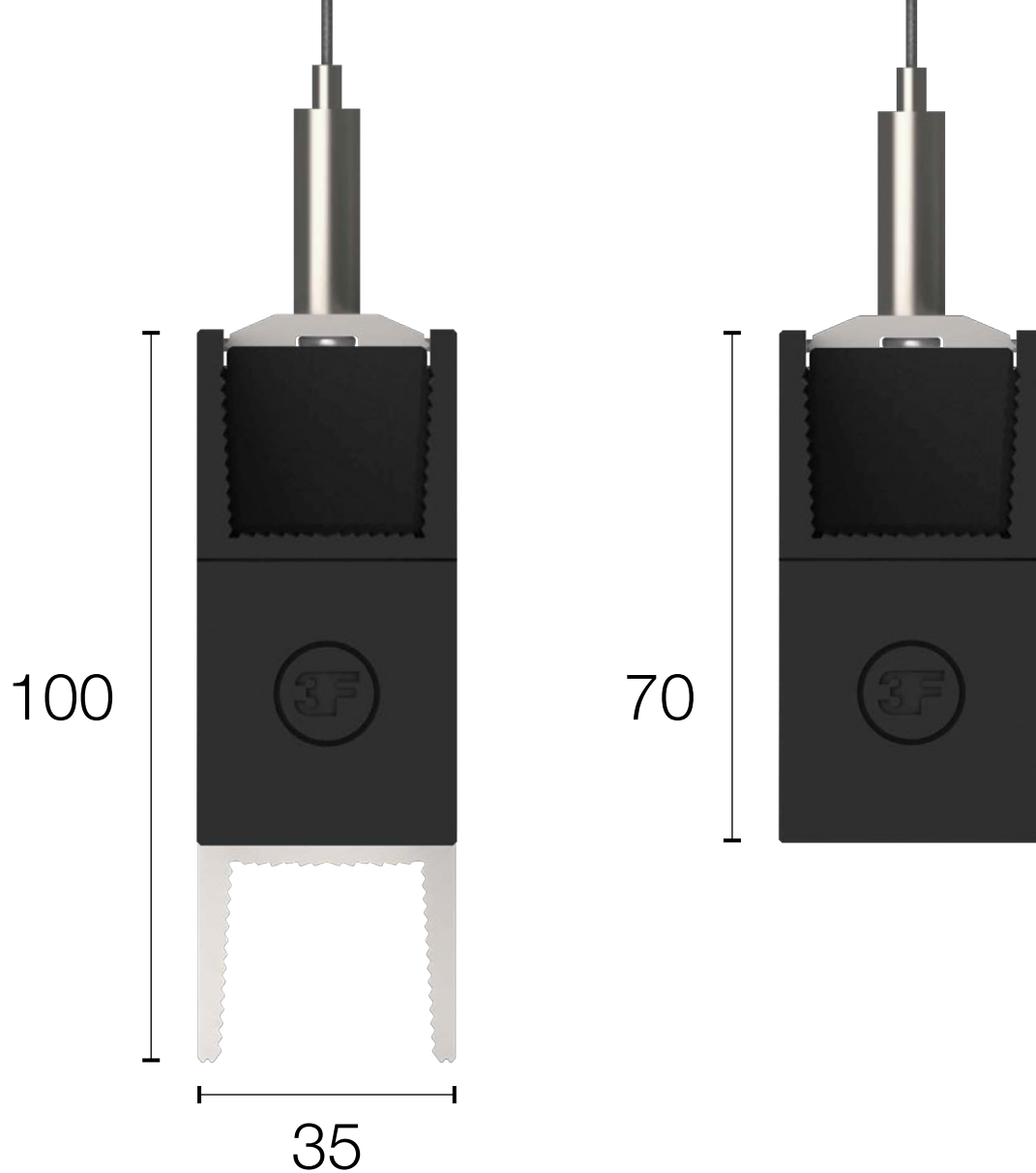


**3F Solo L**  
Lens in frosted PMMA



**3F Solo SP**  
Flat PMMA prismatic diffuser





Scale 1:1  
mm

## Technical of spirit.




In the prismatic version, the contrast between the smooth surface of the body and the fluted diffuser creates a dualism that enhances its technical spirit.

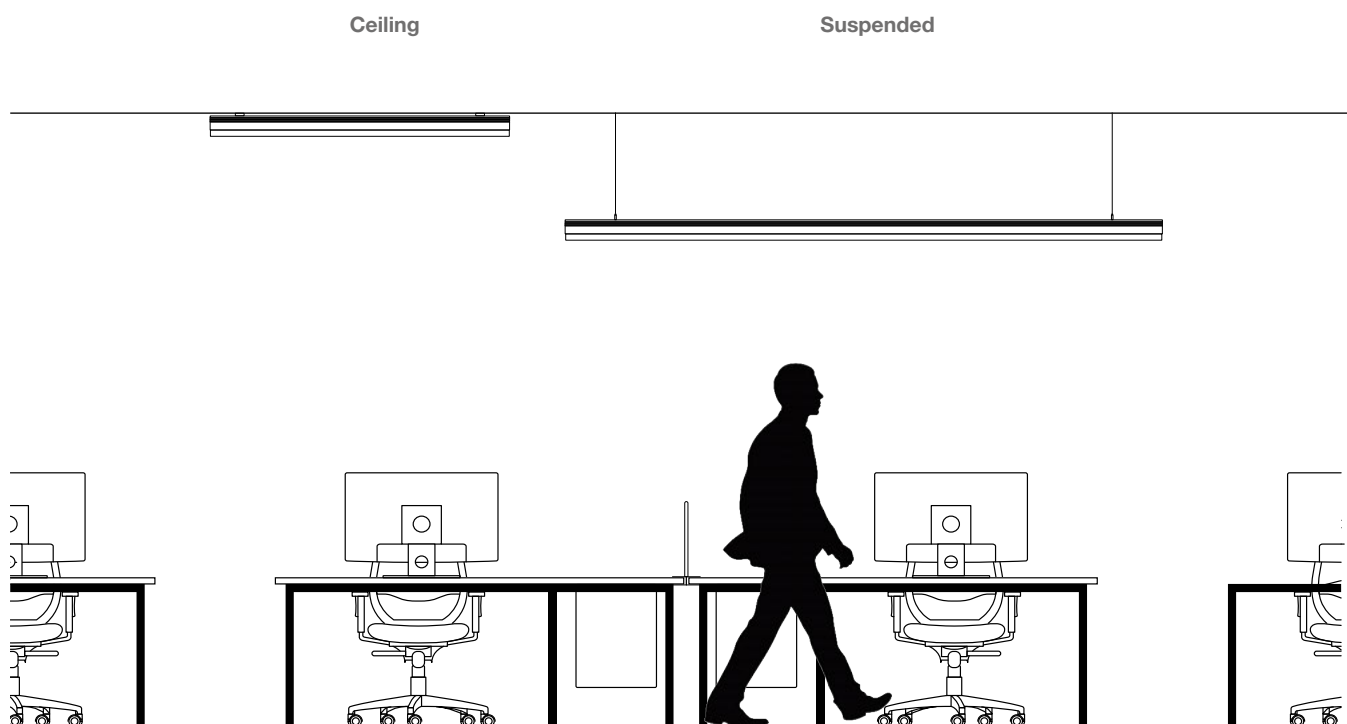
The direct and indirect versions create a sense of greater space in the environment and make the product **appear even more** in the room.

3F Solo is designed to be a **flexible element** thanks to the different options available to the designer.

In addition to the prismatic or U-ribbed lens versions, lighting designers can choose between a black or white finish to make it easier to integrate the luminaire into the architectural context of the workplace into the architectural context of the workstation.

### Finishes

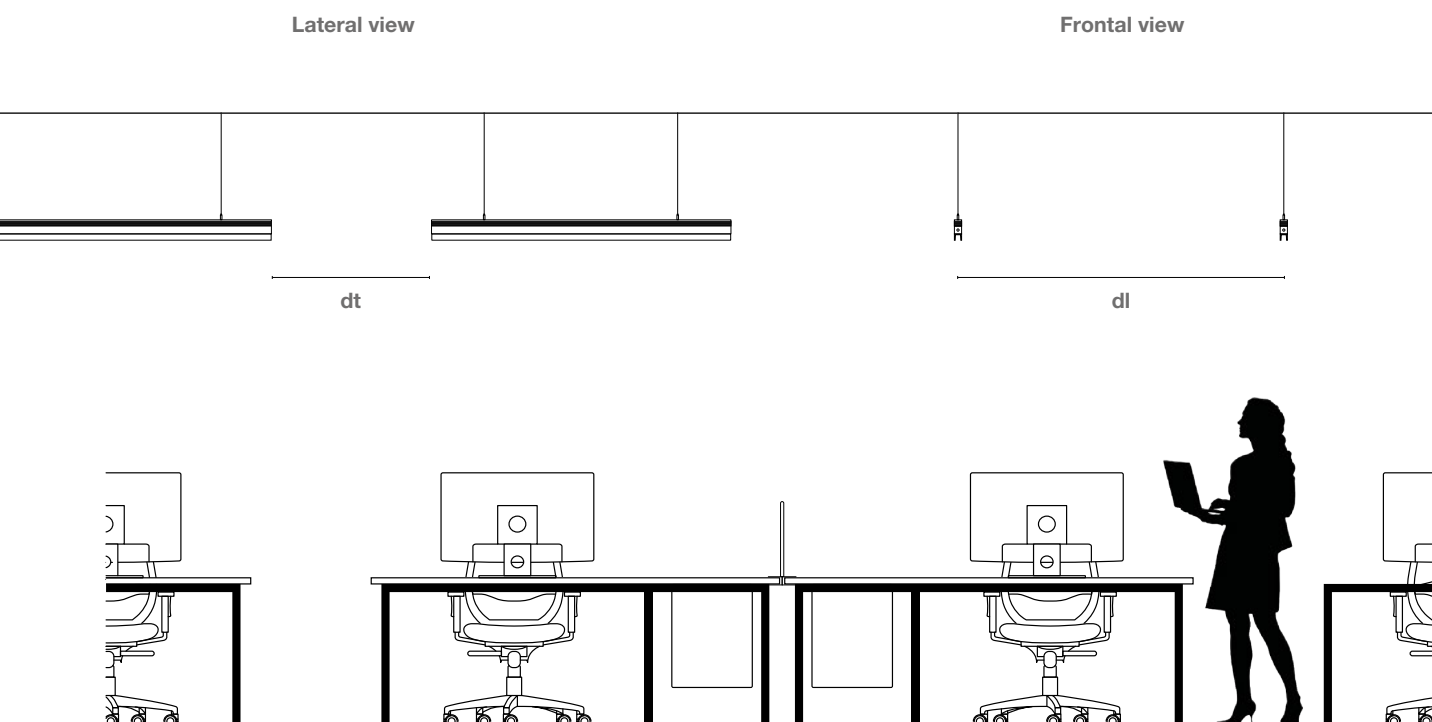
-  White
-  Black
-  Champagne (on request)



## 3F Solo

Range

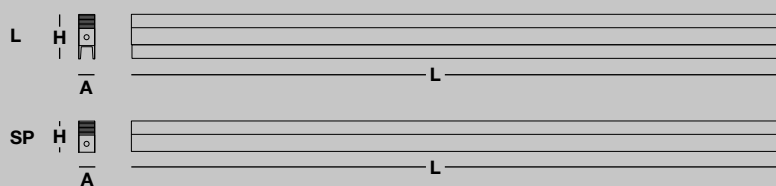
	W	lm	LED	Wiring	Distribution	Dt x DI	L x B x H
3F Solo Direct L	17 - 32	1845 - 3690	/830	DALI	Wide	1,35 x 1,13	1475 x 35 x 100 2205 x 35 x 100 2935 x 35 x 100
3F Solo Direct L HO	33 - 58	3510 - 6660	/830	DALI	Wide	1,35 x 1,13	1475 x 35 x 100 2205 x 35 x 100 2935 x 35 x 100
3F Solo Direct SP HO	33 - 58	3505 - 6651	/830	DALI	Wide	1,06 x 1,25	1475 x 35 x 70 2205 x 35 x 70 2935 x 35 x 70



## 3F Solo

Range

	W	lm	LED	Wiring	Distribution	Dt x Dl	L x B x H
3F Solo Direct/Indirect L	57 - 99	7022 - 12884	/830	DALI	Wide	1,35 x 1,13	1475 x 35 x 100 2205 x 35 x 100 2935 x 35 x 100
3F Solo Direct/Indirect L HO	73 - 127	8687 - 15854	/830	DALI	Wide	1,35 x 1,13	1475 x 35 x 100 2205 x 35 x 100 2935 x 35 x 100
3F Solo Direct/Indirect SP HO	73 - 127	8682 - 15845	/830	DALI	Wide	1,06 x 1,25	1475 x 35 x 70 2205 x 35 x 70 2935 x 35 x 70



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# 3F Solo Direct

## ILLUMINOTECHNICAL

Direct symmetric distribution.  
Lifetime (L90/B10): 50000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

## SOURCE

Linear LED modules.  
Colour initial tolerance (MacAdam): SDCM 3.

## MECHANICAL

Extruded aluminium housing with horizontal side stripes and end caps with embossed finish for maximum resistance to touch and scratches. Upper film in translucent polycarbonate, self-extinguishing, UV stabilised.

## ELECTRICAL

In compliance with EN 60598-1.  
Compliance with the EN 60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.  
5-pole terminal block, single 230V circuit.  
5-pole transparent power cable of 2 m long.

## INSTALLATION

Ceiling mounted or suspension installation.  
Warning: to install this fixture it is necessary to buy the accessory (A0820 - A0821), according to the type of installation.

## APPLICATIONS

Environments: with VDTs, meeting rooms, offices.  
Environments: architectural, commercial, staterooms, banks.  
Environments where soft diffuse light is required for optimal visual comfort.

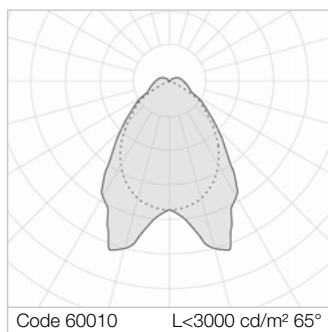
## LIGHT MANAGEMENT

The DALI products can be controlled with 3F Easy Dim (page 156) or 3F Smart Dimming technology (page 166).

## ON REQUEST

- different colour rendering indices and colour temperatures
- housing in different RAL colours
- wiring: CLO (page 188)
- emergency versions

## 3F Solo L

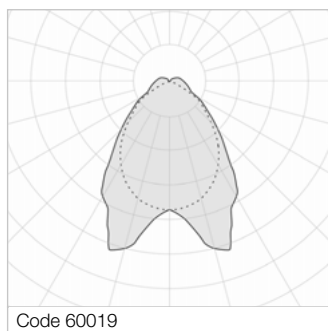


Average luminance <3000 cd/m² for radial angles >65°.  
Transparent methacrylate (PMMA) anti-glare filter.  
U-shaped lens made in methacrylate (PMMA) characterised by satin-finished inner etchings and a polished outer surface, designed to maximise the light output.  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.

### DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 60010	3F Solo L WH 14/830 DALI L1475	17	1845	3000	>80	1475x35x100
● 60011	3F Solo L BK 14/830 DALI L1475	17	1845	3000	>80	1475x35x100
○ 60013	3F Solo L WH 21/830 DALI L2205	24	2768	3000	>80	2205x35x100
● 60014	3F Solo L BK 21/830 DALI L2205	24	2768	3000	>80	2205x35x100
○ 60016	3F Solo L WH 28/830 DALI L2935	32	3690	3000	>80	2935x35x100
● 60017	3F Solo L BK 28/830 DALI L2935	32	3690	3000	>80	2935x35x100

## 3F Solo L HO

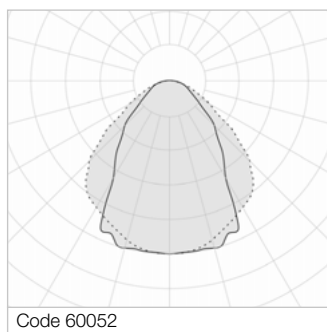
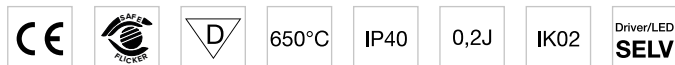


Transparent methacrylate (PMMA) anti-glare filter.  
U-shaped lens made in methacrylate (PMMA) characterised by satin-finished inner etchings and a polished outer surface, designed to maximise the light output.  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.

### DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 60019	3F Solo L WH HO 28/830 DALI L1475	33	3510	3000	>80	1475x35x100
● 60020	3F Solo L BK HO 28/830 DALI L1475	33	3510	3000	>80	1475x35x100
○ 60022	3F Solo L WH HO 41/830 DALI L2205	46	5265	3000	>80	2205x35x100
● 60023	3F Solo L BK HO 41/830 DALI L2205	46	5265	3000	>80	2205x35x100
○ 60025	3F Solo L WH HO 54/830 DALI L2935	58	6660	3000	>80	2935x35x100
● 60026	3F Solo L BK HO 54/830 DALI L2935	58	6660	3000	>80	2935x35x100

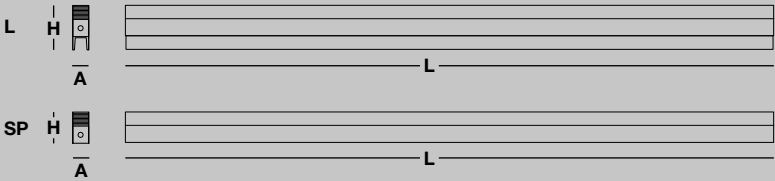
## 3F Solo HO SP



SP flat diffuser in transparent methacrylate (PMMA), outside prismatic, anti-glare.  
White aluminium non-iridescent high efficiency.

### DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 60052	3F Solo WH HO 28/830 DALI SP L1475	33	3505	3000	>80	1475x35x70
● 60053	3F Solo BK HO 28/830 DALI SP L1475	33	3505	3000	>80	1475x35x70
○ 60055	3F Solo WH HO 41/830 DALI SP L2205	46	5258	3000	>80	2205x35x70
● 60056	3F Solo BK HO 41/830 DALI SP L2205	46	5258	3000	>80	2205x35x70
○ 60058	3F Solo WH HO 54/830 DALI SP L2935	58	6651	3000	>80	2935x35x70
● 60059	3F Solo BK HO 54/830 DALI SP L2935	58	6651	3000	>80	2935x35x70



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## 3F Solo Direct/Indirect

### ILLUMINOTECHNICAL

Symmetric direct-indirect distribution.  
Lifetime (L90/B10): 50000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

### SOURCE

Linear LED modules.  
Colour initial tolerance (MacAdam): SDCM 3.

### MECHANICAL

Extruded aluminium housing with horizontal side stripes and end caps with embossed finish for maximum resistance to touch and scratches. Upper film in translucent polycarbonate, self-extinguishing, UV stabilised.

### ELECTRICAL

In compliance with EN 60598-1.  
Compliance with the EN 60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.  
5-pole terminal block, single 230V circuit.  
5-pole transparent power cable of 2 m long.

### INSTALLATION

Suspension installation.  
Warning: to install this fixture it is necessary to buy the accessory A0820.

### APPLICATIONS

Environments: with VDTs, meeting rooms, offices.  
Environments: architectural, commercial, staterooms, banks.  
Environments where soft diffuse light is required for optimal visual comfort.

### LIGHT MANAGEMENT

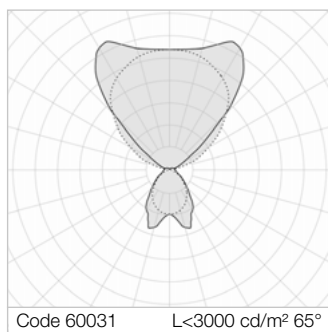
The DALI products can be controlled with 3F Easy Dim (page 156) or 3F Smart Dimming technology (page 166).

### ON REQUEST

- different colour rendering indices and colour temperatures
- housing in different RAL colours
- wiring: CLO (page 188)
- emergency versions



## 3F Solo L DI

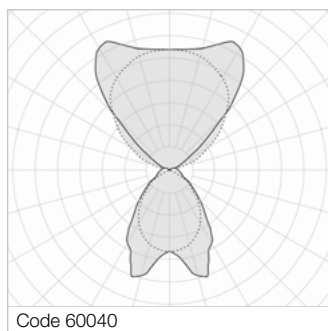


Average luminance <3000 cd/m² for radial angles >65°.  
Transparent methacrylate (PMMA) anti-glare filter.  
U-shaped lens made in methacrylate (PMMA) characterised by satin-finished inner etchings and a polished outer surface, designed to maximise the light output.  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.

### DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 60031	3F Solo L WH DI 14+38/830 DALI L1475	57	7022	3000	>80	1475x35x100
● 60032	3F Solo L BK DI 14+38/830 DALI L1475	57	7022	3000	>80	1475x35x100
○ 60034	3F Solo L WH DI 21+58/830 DALI L2205	92	10900	3000	>80	2205x35x100
● 60035	3F Solo L BK DI 21+58/830 DALI L2205	92	10900	3000	>80	2205x35x100
○ 60037	3F Solo L WH DI 28+67/830 DALI L2935	99	12884	3000	>80	2935x35x100
● 60038	3F Solo L BK DI 28+67/830 DALI L2935	99	12884	3000	>80	2935x35x100

## 3F Solo L DI HO

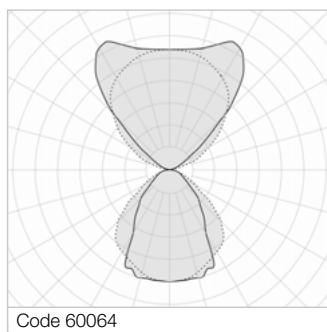


Transparent methacrylate (PMMA) anti-glare filter.  
U-shaped lens made in methacrylate (PMMA) characterised by satin-finished inner etchings and a polished outer surface, designed to maximise the light output.  
Non-iridescent high efficiency specular aluminium with a titanium and magnesium surface treatment flow recuperator.

### DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 60040	3F Solo L WH DI HO 28+38/830 DALI L1475	73	8687	3000	>80	1475x35x100
● 60041	3F Solo L BK DI HO 28+38/830 DALI L1475	73	8687	3000	>80	1475x35x100
○ 60043	3F Solo L WH DI HO 41+58/830 DALI L2205	115	13397	3000	>80	2205x35x100
● 60044	3F Solo L BK DI HO 41+58/830 DALI L2205	115	13397	3000	>80	2205x35x100
○ 60046	3F Solo L WH DI HO 54+67/830 DALI L2935	127	15854	3000	>80	2935x35x100
● 60047	3F Solo L BK DI HO 54+67/830 DALI L2935	127	15854	3000	>80	2935x35x100

## 3F Solo DI HO SP



SP flat diffuser in transparent methacrylate (PMMA), outside prismatic, anti-glare.  
White aluminium non-iridescent high efficiency.

### DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 60064	3F Solo WH DI HO 28+38/830 DALI SP L1475	73	8682	3000	>80	1475x35x70
● 60065	3F Solo BK DI HO 28+38/830 DALI SP L1475	73	8682	3000	>80	1475x35x70
○ 60067	3F Solo WH DI HO 41+58/830 DALI SP L2205	115	13390	3000	>80	2205x35x70
● 60068	3F Solo BK DI HO 41+58/830 DALI SP L2205	115	13390	3000	>80	2205x35x70
○ 60070	3F Solo WH DI HO 54+67/830 DALI SP L2935	127	15845	3000	>80	2935x35x70
● 60071	3F Solo BK DI HO 54+67/830 DALI SP L2935	127	15845	3000	>80	2935x35x70

## 3F Solo | Accessories



Code	Item
A0820	Pair of sliding brack. + reg. susp. 3F Solo

Free-position sliding bracket with regulator in stainless steel. Accessory dedicated to suspended installation.  
**This accessory must ALWAYS be used with one of the following codes: A20485 - A20486 - A20487.**



Code	Item
A0821	Pair of sliding brack. ceiling 3F Solo

Stainless steel sliding bracket that can be positioned freely. Accessory dedicated to ceiling installation.



Code	Item
A20485	Suspension without adjustment - 0.5 m
A20486	Suspension without adjustment - 1 m
A20487	Suspension without adjustment - 2 m

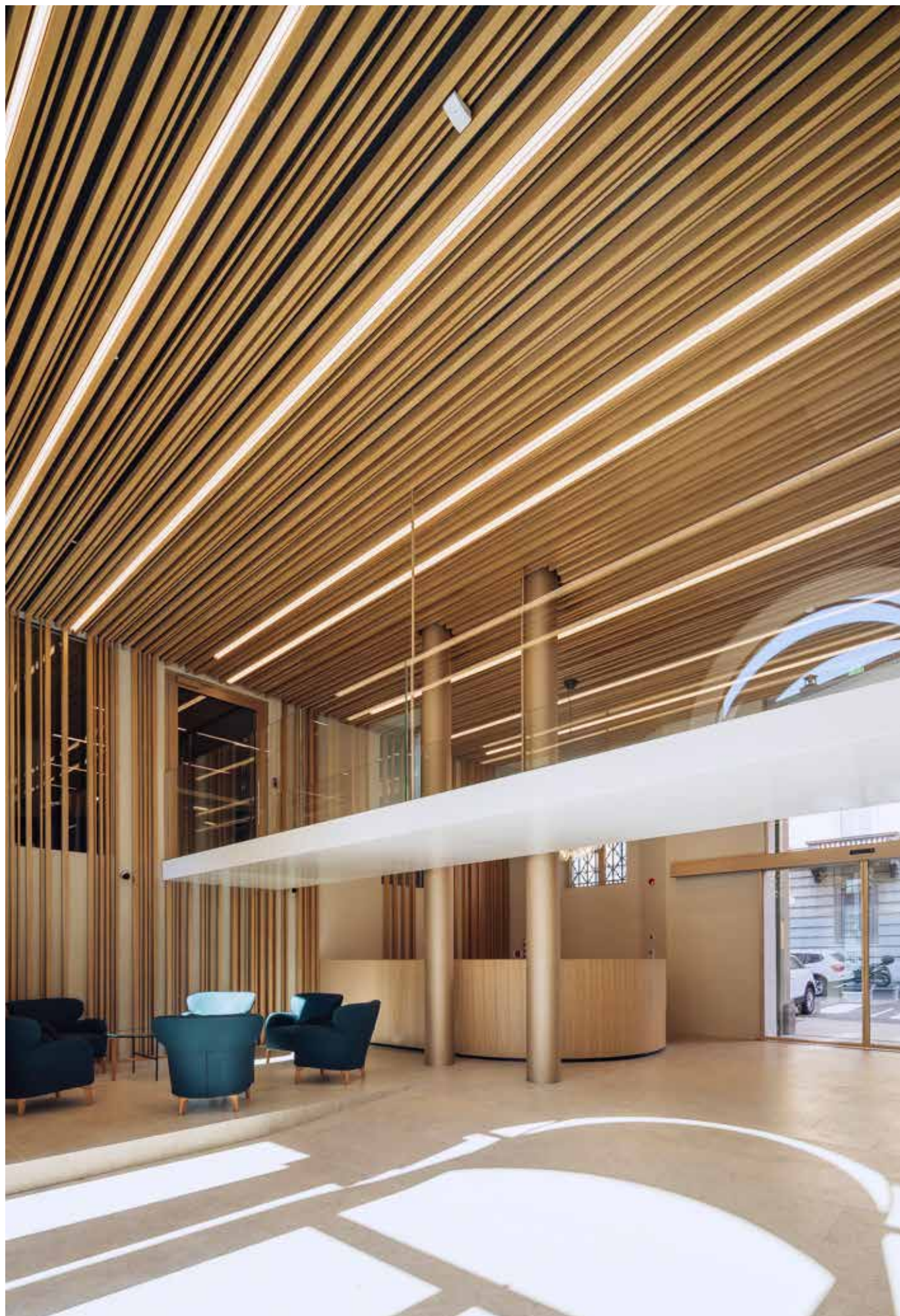
Suspension without controller, galvanised steel cable 1.5 mm diameter, load 15 kg.  
**Attention: each product requires two suspensions with regulator.**



Code	Item
A0679	5 pole rectangular rose (no cable) WH

Electric supply with white polycarbonate case, internal bracket in galvanised steel.











# / 3F Filoluce

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Light as a free and organic instrument that inhabits space in an architectural manner. It is this concept that inspired the creation of **3F Filoluce**.

---

The lightness of the form allows 3F Filoluce to be easily integrated into any context, establishing a relationship with it through the different curves that form the sinuous vertical arm with a constant diameter of 38 mm, from the base to the diffuser.



## In relationship with the **environment.**





The workstation remains the keystone of everyday life in the office.

This is why lighting management becomes a significant aspect for comfort and well-being of those who live in this context every day.

This is where 3F Filoluce finds its natural fit, establishing a relationship with the space it has to illuminate, without lacking the technicality and construction quality that characterise all 3F Filippi products.

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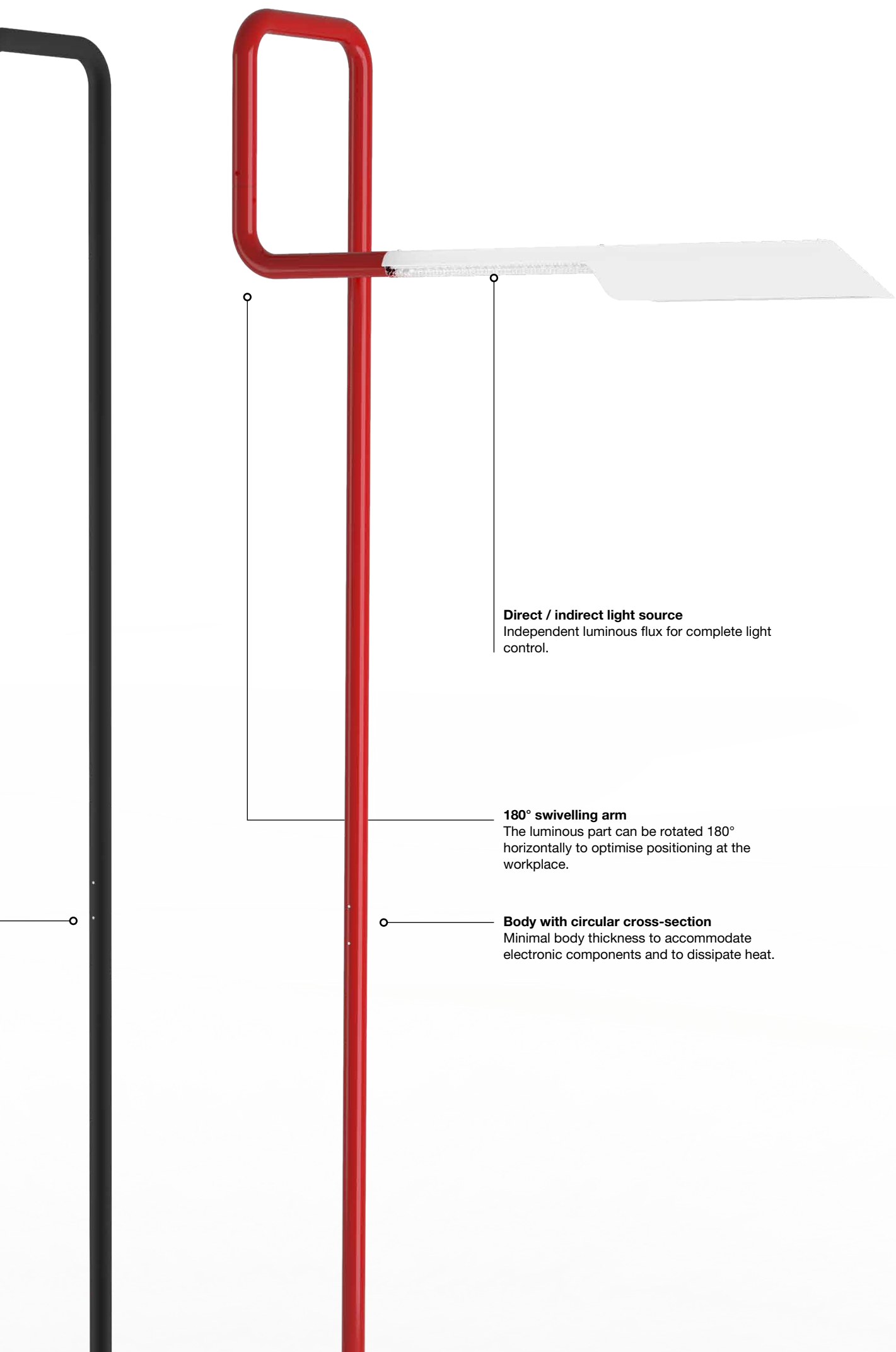
### Finishes

-  White
-  Black
-  Anthracite
-  Red

### Touch lighting

TouchDALI touch system for switching and dimming direct and indirect light.





**Direct / indirect light source**

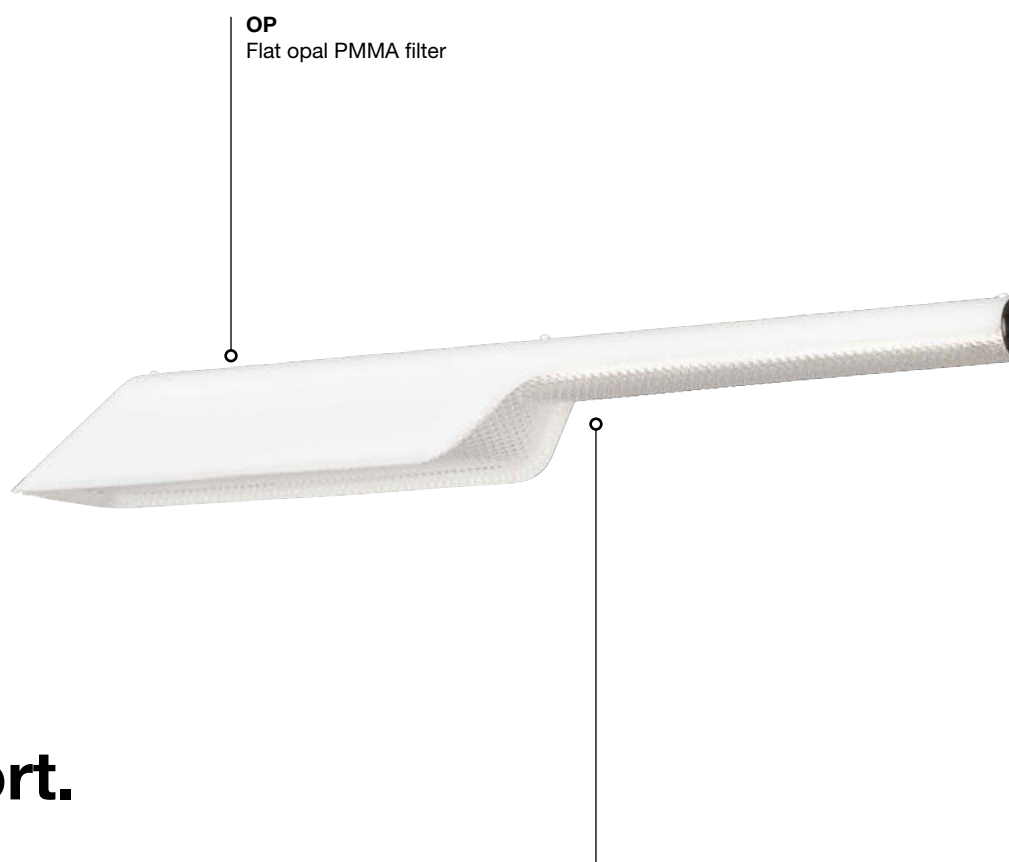
Independent luminous flux for complete light control.

**180° swivelling arm**

The luminous part can be rotated 180° horizontally to optimise positioning at the workplace.

**Body with circular cross-section**

Minimal body thickness to accommodate electronic components and to dissipate heat.



## Elegant **comfort.**

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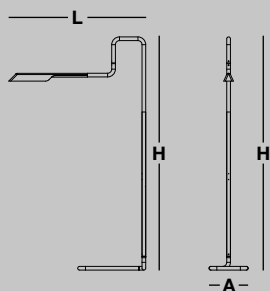
3F Filoluce is a **floor-standing luminaire** which can be used as a single element, positioned freely in the room or in a series to give rhythm to architectural spaces.

Its **direct and indirect light** is distributed downwards by a trapezoidal prismatic diffuser and upwards by an opal element: a mix that makes the working environment relaxing and at the same time ensures excellent visual comfort at the workstations.



**SP**  
Prismatic PMMA filter







## 3F Filoluce

### ILLUMINOTECHNICAL

Direct-indirect distribution.  
Average luminance <3000 cd/m<sup>2</sup> for radial angles >65° (direct emission).  
Lifetime (L85/B10): 50000 h. (tq+25°C)  
Photobiological safety RG0 (page 16).

### SOURCE

Linear LED modules.  
Colour initial tolerance (MacAdam): SDCM 3.

### MECHANICAL

Painted steel filiform tubular body.  
Aluminium LED housing compartment with a thermal heat sink function.  
Particularly eye-catching opal and transparent prismatic methacrylate (PMMA) diffuser to optimise light distribution.  
The luminous part can be rotated 180° horizontally to optimise positioning in the workplace.

### ELECTRICAL

In compliance with EN 60598-1.  
TOUCH DALI control integrated in the stem.  
Power supply with a 2.5 m long transparent cable, schuko plug.

### INSTALLATION

Floor installation.

### APPLICATIONS

Environments which cannot, for technical reasons, be equipped with points of light directed onto the ceiling.  
Open-space offices and environments in which a high degree of workstation flexibility is required.  
Environments: staterooms, with VDTs, offices.  
Environments where soft diffuse light is required for optimal visual comfort.

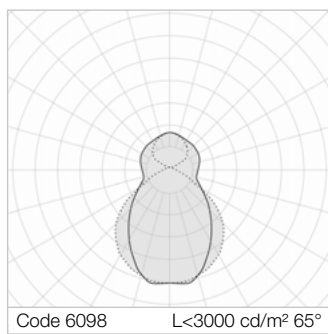
### LIGHT MANAGEMENT

The TOUCH DALI control integrated in the stem, allows independent switching on, off and adjustment of the two emissions.

### ON REQUEST

- different power levels, colour rendering indices and colour temperatures
- single-circuit wiring
- different power cables

## 3F Filoluce



### TOUCH DALI electronic wiring 230V-50/60Hz

Code	Item	W	lm	K	CRI	L x A x H
○ 6063	3F Filoluce WH 16+23W/830 Touch DALI	45	4754	3000	>80	1410x400x2400
○ 6098	3F Filoluce WH 16+23W/840 Touch DALI	45	4953	4000	>80	1410x400x2400
● 6064	3F Filoluce BK 16+23W/830 Touch DALI	45	4754	3000	>80	1410x400x2400
● 6099	3F Filoluce BK 16+23W/840 Touch DALI	45	4953	4000	>80	1410x400x2400
● 6065	3F Filoluce AN 16+23W/830 Touch DALI	45	4754	3000	>80	1410x400x2400
● 6100	3F Filoluce AN 16+23W/840 Touch DALI	45	4953	4000	>80	1410x400x2400
● 6066	3F Filoluce RD 16+23W/830 Touch DALI	45	4754	3000	>80	1410x400x2400
● 6101	3F Filoluce RD 16+23W/840 Touch DALI	45	4953	4000	>80	1410x400x2400





/ catalogue

## **\_Light Management**

/ 3F Filippi



## **628**   **Light Management**

628   Overview

## **630**   **3F Easy Dim**

630   Overview

630   Installation examples

632   Accessories

## **634**   **3F Sensor**

634   Overview 3F Sensor / 3F Sensor CF

636   Overview 3F Sensor Bluetooth

638   Overview 3F DALI Sensor

## **640**   **3F Smart Dimming**

640   Overview

641   Installation Reference - Office / Open space

642   Installation Reference - Industrial / Gymnasiums

643   Installation Reference - School classroom

646   Accessories

## **652**   **3F HCL**

652   Overview

655   Accessories

## **656**   **3F & Casambi**

656   Overview

658   Accessories

## **660**   **3F & KNX**

660   Overview

## **662**   **3F CLO**

662   Overview

## **664**   **3F Wireless ZQ**

664   Overview

670   Accessories

# / Light Management

3F Smart Lighting. Good for you, excellent for the environment.

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**3F Filippi** is always at the forefront when it comes to proposing quality and comfortable lighting while respecting the energy impact and the environment, proposing lighting management systems in accordance with the UNI EN 15232 standard, which introduces a division into 4 energy efficiency classes for the control functions of technical installations in buildings.

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3F Filippi uses the following tools to improve everyday life in the workspace:

- 3F Easy Dim
- 3F Smart Dimming
- 3F Sensor (BT)
- 3F DALI Sensor
- 3F HCL for TW fixtures
- 3F CLO
- 3F & Casambi
- 3F & KNX
- 3F Wireless

The implementation costs of these solutions are largely absorbed by the **simplification** of the electrical wiring and installation: the **reduction** in the number of conductors required, conduits, power and control panels means that the payback time of the investment is drastically reduced.

**Note:**

Our sales and technical departments are at your disposal to support you in choosing the best available solutions, which can also be tailor-made for your application.







# / 3F Easy Dim

## SAVINGS in your hands.

### CHARACTERISTICS

3F Easy Dim technology lets you regulate luminous flux in an easy, low-cost and customisable manner. In terms of the system, it is composed of a commercially available push-button (up to 6 ballasts) and a DALI repeater/interface (to manage more than 6 DALI drivers). This mode allows you to perform the following functions:

- Turning the luminaire **ON/OFF**.
- **Manual regulation of the luminaire's luminous flux** on the basis of specific requirements.

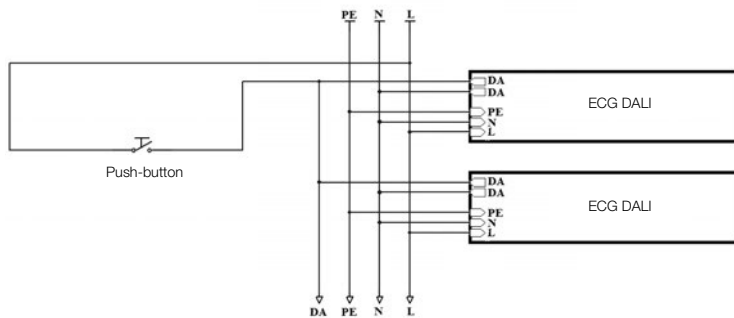
### ADVANTAGES

The advantage of this technology is that it gives the user the possibility to customise the quantity of light present in the environment depending on taste and requirements, while using genuinely low-cost components. The control provided is manual, and as such savings will depend on how it is managed.

### SAVINGS

- **Installation phase:** up to 6 ballasts with PUSH DIM function, controlled via a commercially available push-button (environments without interference). Between 7 and 64 ballasts requires a DALI repeater.
- **Use:** if the luminous flux output is below 100%, power consumption of the luminaire is significantly reduced.

## Up to 6 ballasts



### Results obtainable

- **Manually turning the luminaire ON/OFF.**
- **Manual regulation of the luminaire's luminous flux** on the basis of user requirements.

### Compatible luminaires

Any luminaire from the 3F Filippi range, as long as it is equipped with DALI PUSH DIM ballast.

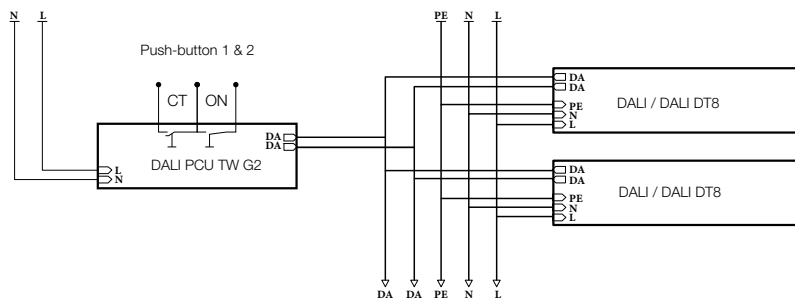
### Components required

- 1 commercial push-button.

#### Note:

in environments where there is signal interference present, and with dimmer wire lengths of over 20 metres, the installation of a DALI repeater is advisable.

## Up to 25 ballasts



### Results obtainable

- **Manually turning the luminaire ON/OFF.**
- **Manual regulation of the luminaire's luminous flux** on the basis of user requirements.
- **Manual adjustment of luminaire colour** according to user requirements (for DALI DT8 drivers only).

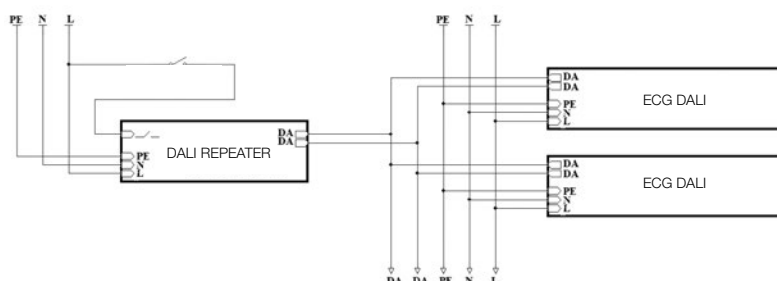
### Compatible luminaires

Any luminaire from the 3F Filippi range, as long as it is equipped with DALI or DALI DT8 ballast.

### Components required

- 1 commercial push-button for flux control and/or 1 button for colour control (DALI DT8 driver only).
- 1 DALI PCU fixture.

## Up to 64 ballasts



### Results obtainable

- **Manually turning the luminaire ON/OFF.**
- **Manual regulation of the luminaire's luminous flux** on the basis of user requirements.

### Compatible luminaires

Any luminaire from the 3F Filippi range, as long as it is equipped with DALI ballast.

### Components required

- 1 commercial push-button.
- 1 DALI repeater.





## 3F Easy Dim | Accessories



Code	Item
A3008	DALI ext - Repeater

Signal Repeater for expansion of DALI systems (64 drivers 300 metres of line), size 189x30x21 mm, integrated installation into the device or into the Box (cod. A3010).



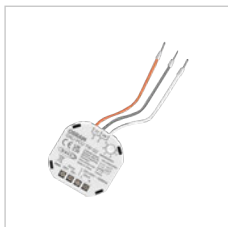
Code	Item
A3009	DALI DIN - Repeater

Signal Repeater for expansion of DALI systems (64 drivers 300 metres of line), size 96x72x62 mm, DIN rail mounting.



Code	Item
A3010	DALI - Box for repeater

Box mounted housing DALI Repeater ext (cod. A3008), size 261x71x27 mm.



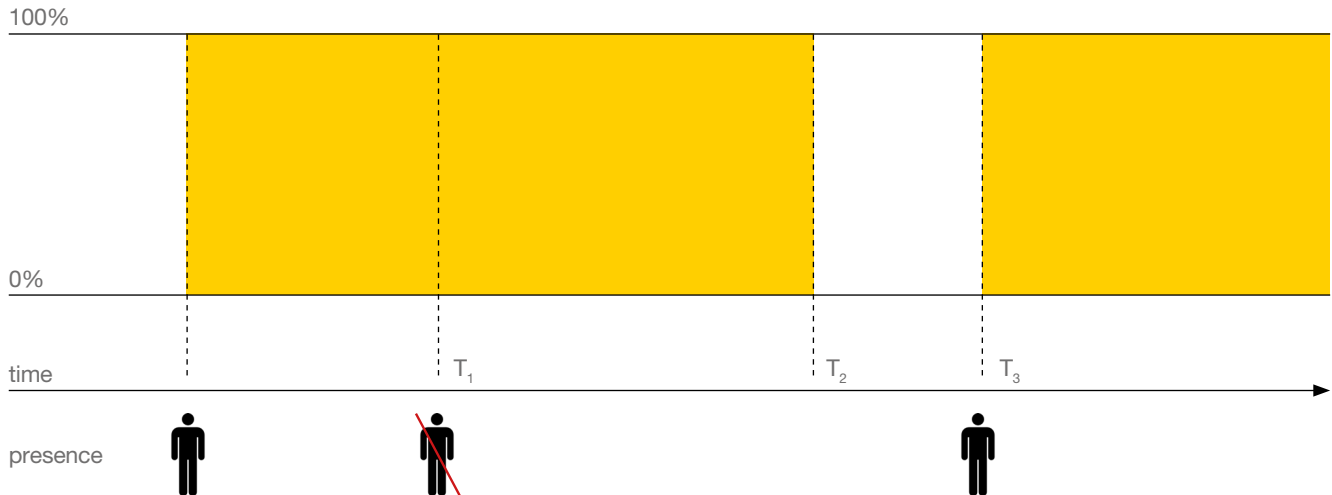
Code	Item
A3064	DALI PCU TW G2 - push button interface

DALI-2 control panel for recessed installation, dimensions 48x49x22 mm, allows to regulate the flow power on/off of a up to a maximum of 25 DALI or DALI DT8 drivers (max 300 m in a line) with just one commercial button (normally open).



# / 3F Sensor

3F Sensor



Legend:

$T_1 \rightarrow T_2$  - switch-off delay - **default 10s**

$T_2 \rightarrow T_3$  - period of zero luminous flux

## A **SMALL** revolution. Great advantages.

### CHARACTERISTICS

Sensor technology allows you to make savings and manage your lighting systems in an easy, low-cost and customisable manner without investing significant capital in costly systems.

What we have done is extremely simple: we have incorporated an ON/OFF high-frequency (HF) 5.8GHz radar movement sensor inside the luminaire.

### ADVANTAGES

The advantages of this technology create significant savings for the end customer:

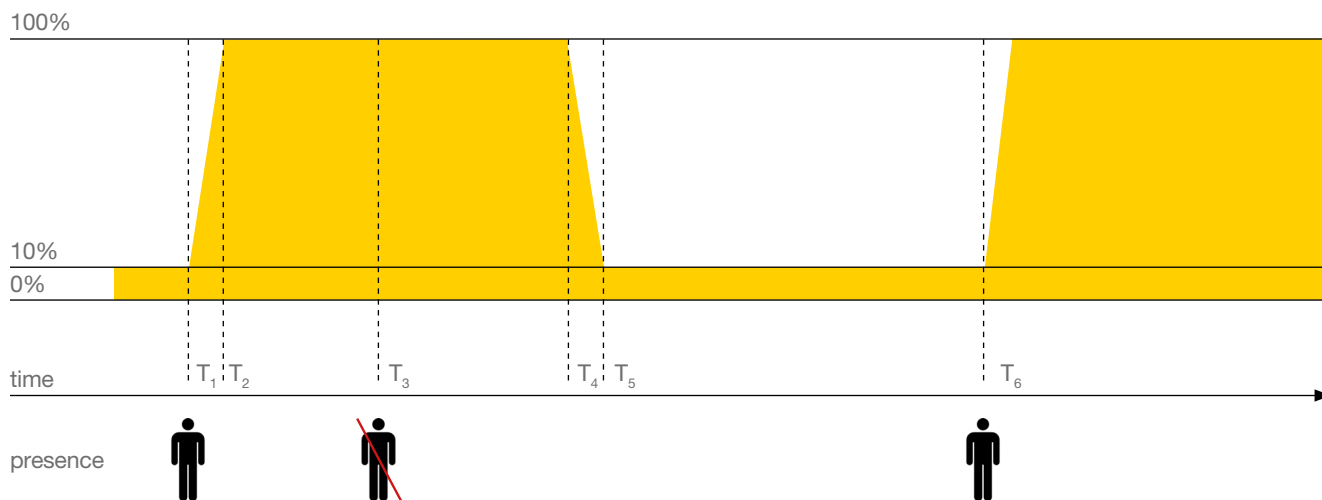
- **Time savings during installation:** no sensor network required.
- **Cost savings:** fewer materials and reduced calibration times.
- **Ease of installation:** existing installations are not modified. Simply connect the devices to the mains.
- **Customisation of brightness levels:** each unit is independent of the others.

### SAVINGS

For the customer the benefits are tangible:

- **Installation:** no expenditure on electrical equipment.
- **Independence and precision:** each luminaire manages itself.
- **Simplicity:** no loss of time when adjusting the system.
- **Integration with existing installations:** no expenditure on adapting installations.

### 3F Sensor CF



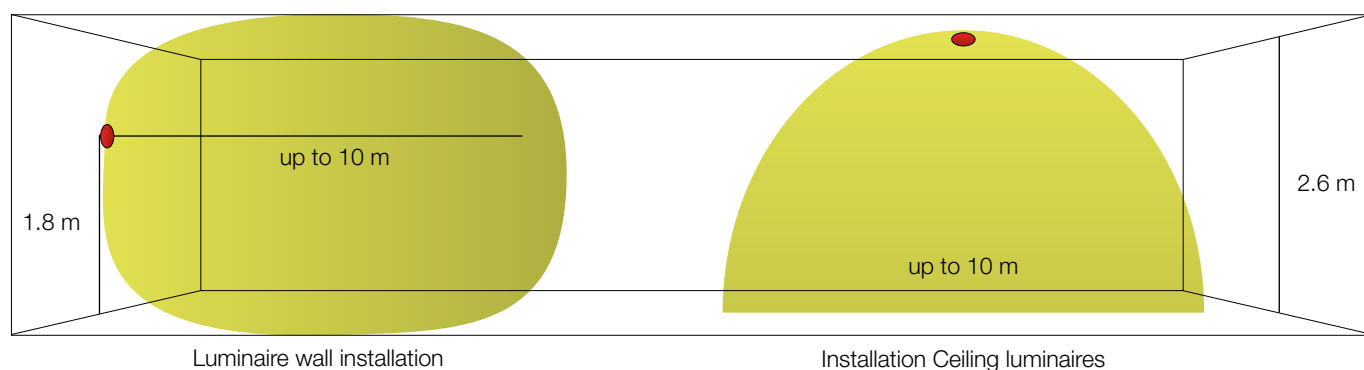
#### Legend:

$T_1 \rightarrow T_2$  - luminous flux increase time

$T_3 \rightarrow T_4$  - switch-off delay - **default 10s**

$T_4 \rightarrow T_5$  - luminous flux decrease time

$T_5 \rightarrow T_6$  - luminous flux reduced 10%



#### Note:

RADAR technology goes beyond glass, wood and plasterboard, therefore for the correct functioning of the luminaire, the sensor detection field (see instruction sheet) must be adjusted according to the type of installation/room.

Versions	Sensor	Corridor Sensor Function
Standard position (no movement)	Luminaire off	Kept on at 10% power
Automatic	Via ON/OFF high-frequency (HF) 5.8GHz radar movement sensor	
Mounting height	Wall installation at max 2.7 metres - Ceiling installation at max 4 metres	
Twilight function	Daylight / 300 lux / 150 lux / Twilight / Night / Programmable mode <b>(default setting "daylight")</b>	
Switch-off delay	From 10 seconds to 30 minutes <b>(default setting 10s)</b>	
Sensitivity/detection field	20% - 30% - 50% - 75% - 100% <b>(default setting 75%)</b>	



# / 3F Sensor Bluetooth



## CHARACTERISTICS

We have integrated a high frequency DALI radar motion detector (HF) 5.8GHz inside the 3F Linda Sensor DALI-BLE that operates Bluetooth with other DALI-BLE fixtures. The onboard sensor makes it possible to regulate individual or groups of fixtures or profiles for a complete installation.

The distance between the fixtures can be up to 20 m for indoor installations. Fixtures with 3F Sensor Bluetooth technology can be managed in the following way:

- Individually - every fixture turns on/off according to movement and adjusts according to programmed behaviour on the APP.
- Master-Slave configuration --- using the APP it is possible to create groups of fixtures to manage each area.

## ADVANTAGES

It is not necessary to modify the existing electrical system, you just need to connect the fixtures to the power grid, saving on installation time.

3F Sensor DALI-BLE technology unlike 3F Sensor allows for: Bluetooth communication between fixtures.

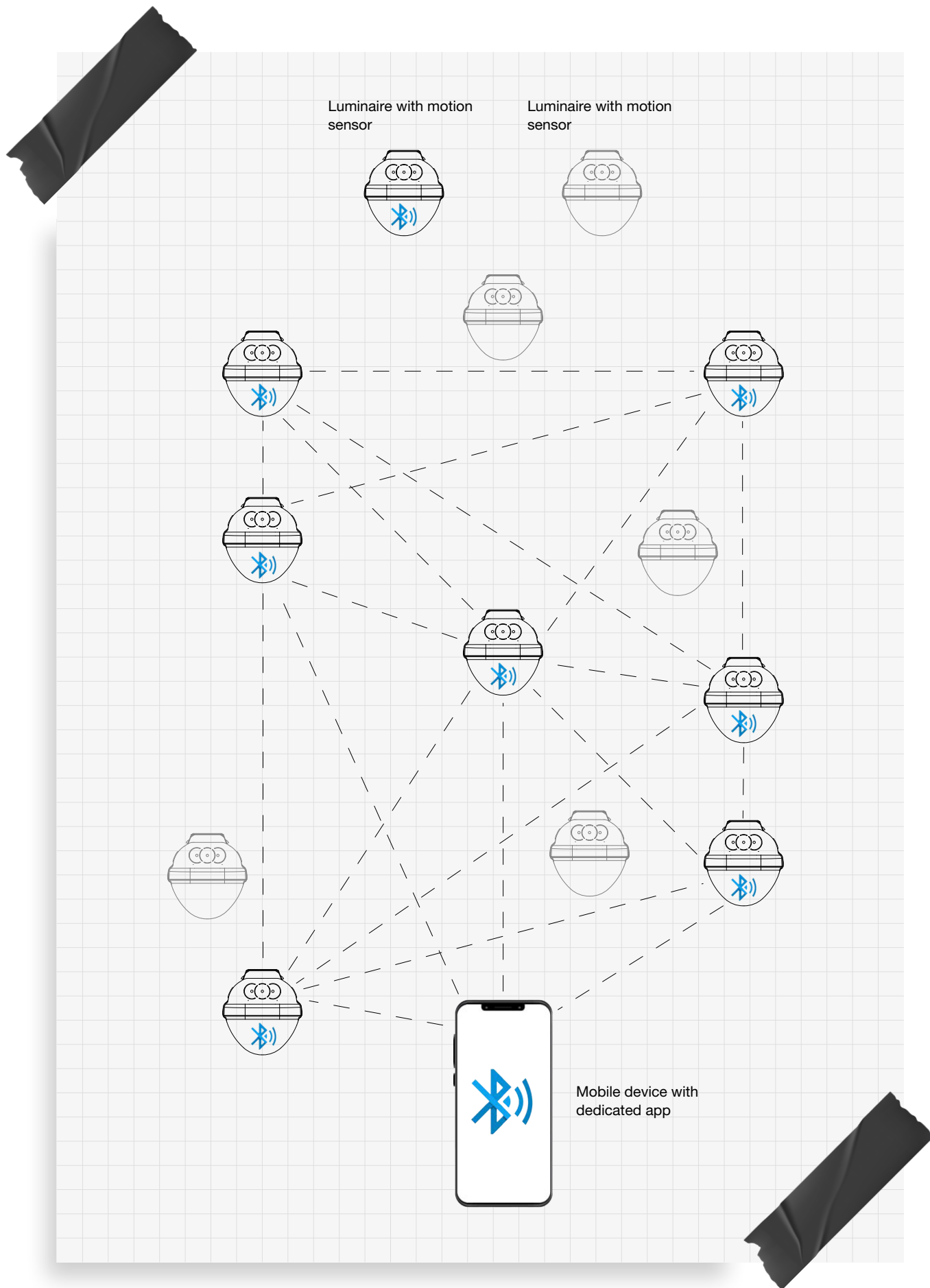
The creation of groups of fixtures without any other physical connections.

Different function profiles that can be easily programmed by the end user using an APP on a Tablet or Smartphone (available for iOS and Android) for example:

- Sensitivity 10 ... 100%.
- Hold time 5 seconds ... 60 minutes.
- Daylight sensor 1 Lux ... 500 Lux; teach in.
- DIM level 0 ... 100%.

- Program Mode On / Off, Permanent, Corridor.
- Soft-Dim: active / inactive.





**IMPORTANT:**

RADAR technology goes beyond glass, wood and plasterboard; therefore for the correct functioning of the luminaire, the sensor detection field (see instruction sheet) must be adjusted according to the type of installation/room.



# / 3F DALI Sensor



## CHARACTERISTICS

Luminaires with 3F DALI Sensor technology are equipped with a DALI brightness and presence sensor which allows the luminous flux to be switched on/off and regulated automatically on the basis of the natural light (to exclude the presence detection, accessory A3047 and the BEG APP are required).

Luminaires with 3F DALI Sensor technology can be installed in the two following ways:

**Individually** - each luminaire switches on/off and regulates its flow independently with respect to the other luminaires, and it is therefore no longer necessary to create or modify existing electrical systems, only to connect the luminaires to the mains supply, thus reducing installation times.

**Master - Slave configuration** – each 3F DALI Sensor luminaire can be connected to other standard 3F dimmable DALI luminaires by following the method given in the application examples. In this case, switching on/off and regulation of the luminous flux will be managed in zones/groups of luminaires, saving on the number of sensors in the field.

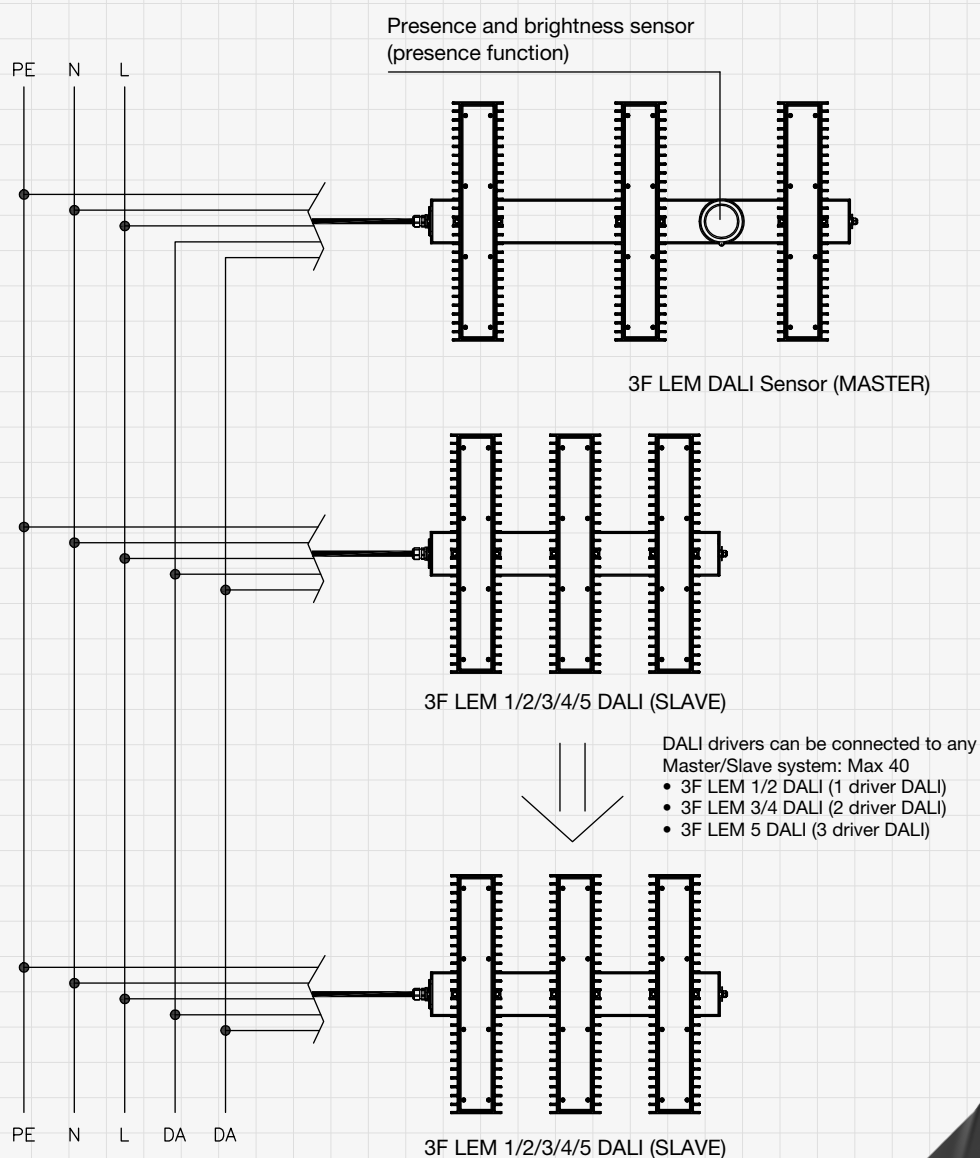
In both solutions, the initial programming of the sensor can be performed simply and conveniently with the use of the DALI IR programmer (code A3020) or the BLE IR adapter for Smartphones (code A3047).

For technical specifications and for further information, see the details in the “**3F Smart Dimming accessories**” chapter, or contact our technical department.

### Typical application example for 3F LEM DALI Sensor:

Connection diagram for broadcast operation, between the 3F Travetta LED DALI LS luminaire (with integrated DALI presence and brightness sensor - MASTER function) and 3F Travetta LED DALI luminaires (equipped with DALI drivers - SLAVE function).

Allows the level of lighting to be kept constant between all connected luminaires, on the basis of the natural light, as well as centralised on/off commands when motion is detected and with the twilight threshold set. (to exclude the presence detection, accessory A3047 and the BEG APP are required).



### IMPORTANT:

the DALI line of the MASTER luminaires cannot be connected to buttons! If you require manual regulation, contact our technical department.



# / 3F Smart Dimming



## CHARACTERISTICS

Smart Dimming technology allows you to make savings and manage your lighting systems in an easy, low-cost and customisable manner without investing significant capital in costly systems.

Products in this range have functions such as:

- Turning on and automatically regulating the luminaire **on the basis of the chosen level of brightness.**
- Luminaire switching **on the basis of presence** of persons in the radius of operation of the luminaire (the detection area can be extended using slave sensors).
- **Manual regulation and ON/OFF** via accessory remote controls or push-buttons.

## ADVANTAGES

The advantages of this technology offer significant energy savings for the end customer, calculated as being up to 80% compared to an on-off solution with combined sensors for light and presence regulation. It is also possible to create made-to-measure lighting based on the requirements of the environment and the light level required.

## SAVINGS

The advantages are real and tangible in these aspects for the end customer:

- **Quick, simple installation.**
- **Energy savings.**
- **Reduced time to see return on investment.**

## Installation Reference - Office / Open space

Up to 50 drivers/ballasts - Installation height up to 4 metres

### Results obtainable

- **Manual ON/OFF/regulation** of the luminaire via optional remote control or push-button.
- **Automatic regulation of the luminaire's light flow** depending on the amount of natural light and/or presence of personnel.
- Extension of the presence detection area through the use of slave sensors.

### Compatible luminaires

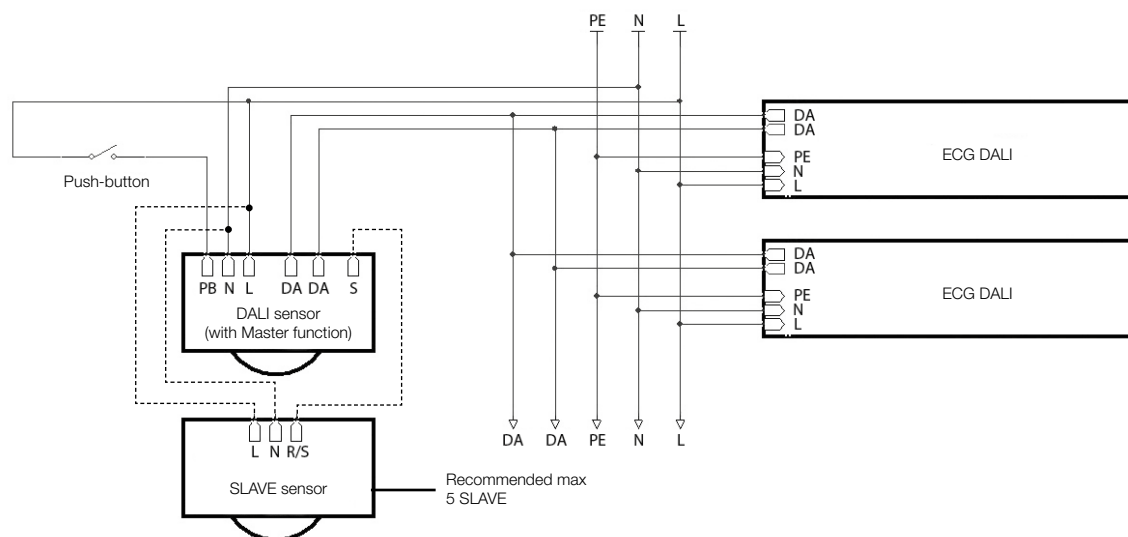
Any luminaire from the 3F Filippi range, as long as it is equipped with DALI ballast.

On request, can also be implemented with 1-10V components (drivers and sensors).

### Components required

- 1 commercially available push-button (optional).
- Luminaire with DALI driver.
- 1 DALI Sensor A (recessed) or DALI ext Sensor A (ceiling mount).
- IR adaptor for Smartphones (optional).
- DALI BLE IR programmer (optional).
- DALI IR remote control (optional).
- 1 Sensor A SLAVE or 1 Sensor A SLAVE-ext (optional for extending the presence detection area).

## Wiring diagram



**Note:** to deactivate presence sensing, accessory A3047 and the BEG APP are required.





# / 3F Smart Dimming

## Installation Reference - Industrial / Gymnasiums

Up to 50 ballasts - Installation height between 4 and 9 metres

### Results obtainable

- **Manual ON/OFF/regulation** of the luminaire via optional remote control or push-button.
- **Automatic regulation of the luminaire's light flow** depending on the amount of natural light and/or presence of personnel.
- Extension of the presence detection area through the use of slave sensors.

### Compatible luminaires

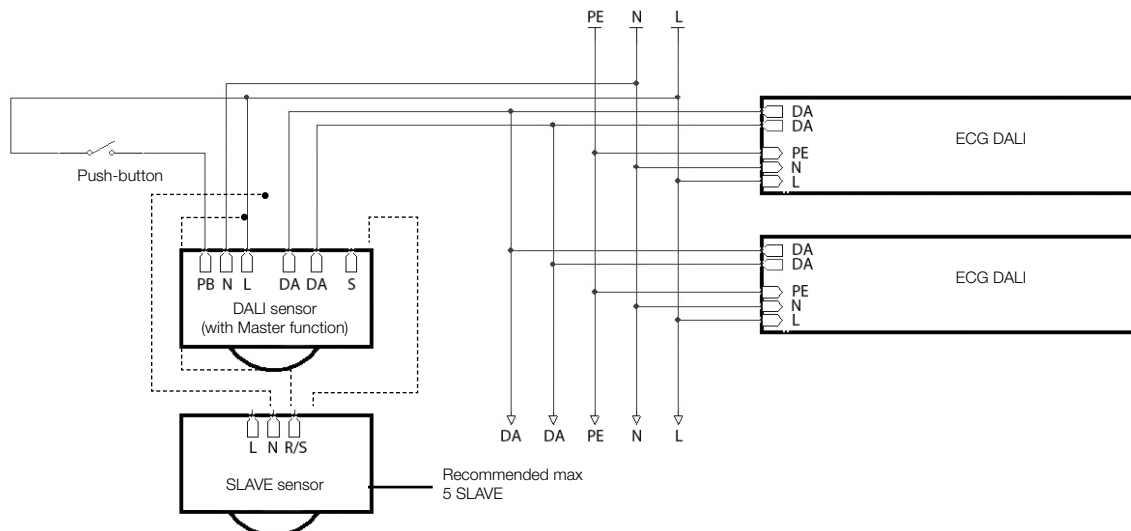
Any luminaire from the 3F Filippi range, as long as it is equipped with DALI ballast.

On request, can also be implemented with 1-10V components (drivers and sensors).

### Components required

- 1 commercially available push-button (optional).
- Luminaire with DALI driver.
- 1 DALI Sensor B (recessed) or DALI ext Sensor B (ceiling mount).
- IR adaptor for Smartphones (optional).
- DALI BLE IR programmer (optional).
- DALI IR remote control (optional).
- 1 Sensor B SLAVE or 1 Sensor B SLAVE-ext (optional for extending the presence detection area).

## Wiring diagram



**N.b.:** to deactivate presence sensing, accessory A3047 and the BEG APP are required.

## Installation Reference - School classroom

### Up to 50 ballasts

#### Results obtainable

- **Manual ON/OFF/regulation** of the luminaire via optional remote control or push-button.
- **Automatic regulation of the luminous flux** of the luminaires in a differentiated manner depending on the natural light present in two different areas: the sensor measures the brightness at two points (for example, near the window and in the darkest area of the classroom), and adjusts the fluxes of the luminaires lighting those areas as a consequence.
- Extension of the presence detection area through the use of slave sensors.

#### Compatible luminaires

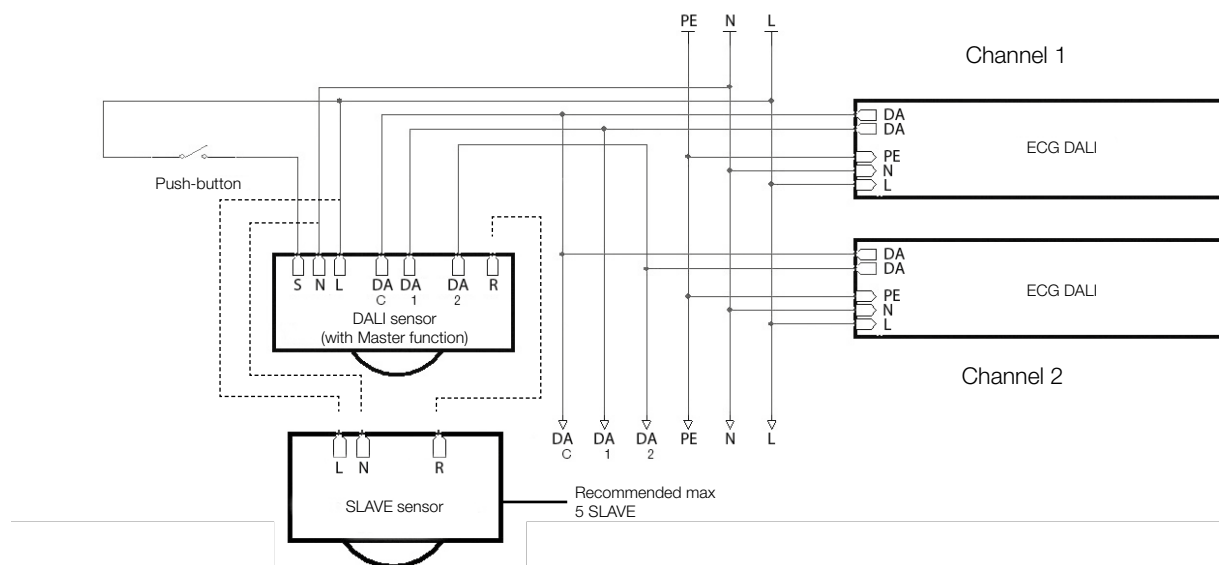
Any luminaire from the 3F Filippi range, as long as it is equipped with DALI ballast.

On request, can also be implemented with 1-10V components (drivers and sensors).

#### Components required

- 1 commercially available push-button (optional).
- Luminaire with DALI driver.
- 1 Dual-DALI Sensor B.
- IR adaptor for Smartphones (optional).
- DALI BLE IR programmer (optional).
- DALI IR remote control (optional).
- 1 Sensor B SLAVE or 1 Sensor B SLAVE-ext (optional for extending the presence detection area).

### Wiring diagram



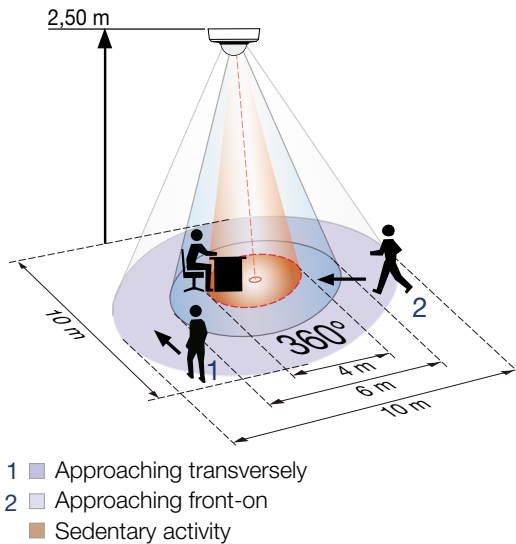
**N.b.:** to deactivate presence sensing, accessory A3047 and the BEG APP are required.



# / 3F Smart Dimming

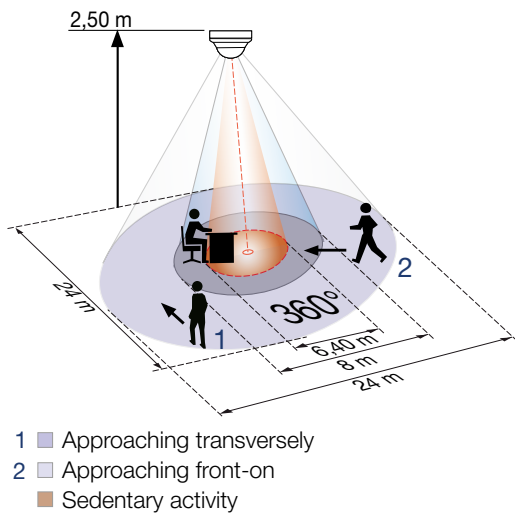
## Detection field

Sensor A DALI, Sensor A ON/OFF, Sensor A SLAVE



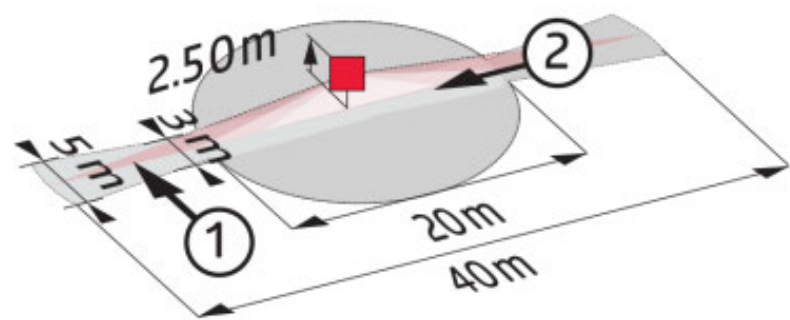
Range of action (circular detection area) with T=18°			
Mounting height	Fixed position	Transverse movement	Approaching the detector front-on
2.00 m	r=1.60	r=4.00	r=2.50
2.50 m	r=2.40	r=5.00	r=3.00
3.00 m	-	r=6.00	r=3.70
3.50 m	-	r=7.00	r=4.30
4.00 m	-	r=8.00	r=4.80
4.50 m	-	r=9.00	r=5.40
5.00 m	-	r=10.00 m	r=6.00

Sensor B DALI, Sensor B ON/OFF, Sensor B SLAVE, Sensor B Dual



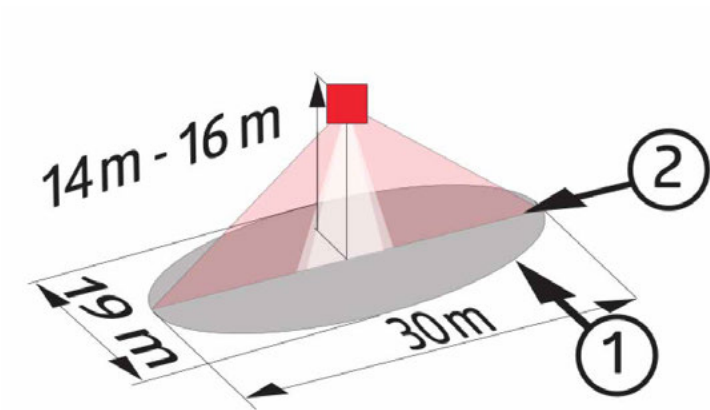
Range of action (circular detection area) with T=18°			
Mounting height	Fixed position	Transverse movement	Approaching the detector front-on
2.00 m	r=2.60	r=8.50	r=3.20
2.50 m	r=3.20	r=12.00	r=4.00
3.00 m	r=3.80	r=14.50	r=4.80
3.50 m	r=4.50	r=17.00	r=5.50
4.00 m	-	r=19.50	r=6.80
4.50 m	-	r=22.00	r=7.20
5.00 m	-	r=24.00 m	r=8.00
10.00 m	-	r=24.00 m	r=8.00

Sensor Corr, Sensor Corr Slave



- 1 Approaching the detector diagonally
- 2 Approaching the detector front-on

Sensore B GH



- 1 Approaching the detector diagonally
- 2 Approaching the detector front-on

I <sub>h</sub>	L	B
5.0 m	26.0 m	18.0 m
6.0 m	26.0 m	18.0 m
7.0 m	28.0 m	19.0 m
8.0 m	28.0 m	19.0 m
9.0 - 16.0 m	30.0 m	19.0 m



## 3F Smart Dimming | Accessories

### Type A sensors (H max = 5mt)



IP20

Code	Item
A3013	A on/off - Sensor

Presence detector On/Off, recessed, single channel (normally open, potential free) with a maximum load of 2 kW (with power factor 0.9), can be controlled remotely, circular detection area Ø 10 m, with Master function. Integrated twilight sensor. IP20 protection degree.

**On request: programming with remote control code A3023 or with smartphone via accessory code A3047.**



IP20  
IP54

Code	Item
A3014	A on/off-ext - Sensor

Presence detector On/Off, ceiling mounted, single channel (normally open, potential free) with a maximum load of 2 kW (with power factor 0.9), can be controlled remotely, circular detection area Ø 10 m, with Master function. Integrated twilight sensor. IP20/IP54 rated (exposed part).

**On request: programming with remote control code A3023 or with smartphone via accessory code A3047. On request: IP54 cap code A3024, to obtain total IP54 rating.**



IP20

Code	Item
A3039	A DALI-2 - Sensor

Presence detector On/Off, recessed, with one DALI-2 interface, can be controlled remotely, circular detection area Ø 10 m, with Master function. Integrated light sensor for automatic constant light control. Drive up to 40 DALI drivers. IP20 protection degree.

**On request: programming/regulation with remote control code A3020 and A3021 or with Smartphone via accessory code A3047.**



IP54

Code	Item
A3040	IP54 ceiling base for A DALI-2 sensor

IP54 base for ceiling installation of A DALI-2 Sensor.



IP20

Code	Item
A3025	A SLAVE - Sensor

Recessed Slave presence detector, compatible with sensors with Master function, such as Sensor A DALI-2 and Sensor A on/off, circular detection area Ø 10 m. IP20 protection degree.



## Type A sensors (H max = 5mt)



Code	Item
A3026	A SLAVE-ext - Sensor

Ceiling mounted Slave presence detector, compatible with sensors with Master function, such as Sensor A DALI-2 and Sensor A on/off, circular detection area Ø 10 m. IP20/IP54 rated (exposed part).

**On request: IP54 cap code A3024, to obtain total IP54 rating.**



IP20  
IP54

## Type B sensors (H max = 10mt)



Code	Item
A3018	B on/off - Sensor

Presence detector On/Off, recessed, single channel (normally open, potential free) with a maximum load of 2 kW (with power factor 0.9), can be controlled remotely, circular detection area Ø 24 m, with Master function. Integrated twilight sensor. IP20 protection degree.

**On request: programming with remote control code A3023 or with smartphone via accessory code A3047.**



IP20



Code	Item
A3019	B on/off-ext - Sensor

Presence detector On/Off, ceiling mounted, single channel (normally open, potential free) with a maximum load of 2 kW (with power factor 0.9), can be controlled remotely, circular detection area Ø 24 m, with Master function. Integrated twilight sensor. IP20/IP54 rated (exposed part).

**On request: IP54 cap code A3024, to obtain total IP54 rating. On request: programming with remote control code A3023 or with smartphone via accessory code A3047.**



IP20  
IP54



Code	Item
A3041	B DALI-2 - Sensor

Presence detector On/Off, recessed, with one DALI-2 interface, can be controlled remotely, circular detection area Ø 24 m, with Master function. Integrated light sensor for automatic constant light control. Drive up to 40 DALI drivers. IP20 protection degree.

**On request: programming/regulation with remote control code A3020 and A3021 or with Smartphone via accessory code A3047.**



IP20



Code	Item
A3042	IP54 ceiling base for B DALI-2 sensor

IP54 base for ceiling installation of B DALI-2 Sensor.



IP54



## Type B sensors (H max = 10mt)



IP20

Code	Item
A3027	B SLAVE - Sensor

Recessed Slave presence detector, compatible with sensors with Master function, such as Sensor B DALI-2 and Sensor B on/off, circular detection area Ø 24 m. IP20 protection degree.



IP54

Code	Item
A3028	B SLAVE-ext - Sensor

Ceiling mounted Slave presence detector, compatible with sensors with Master function, such as Sensor B DALI-2 and Sensor B on/off, circular detection area Ø 24 m. IP54 protection degree.



IP20

Code	Item
A3015	B Dual-DALI - Sensor

Presence detector, recessed, with two DALI interfaces, can be controlled remotely, circular detection area Ø 24 m, with Master function. Two integrated light sensors for automatic constant light control. Drive up to 50 digital electronic drivers for each channel. IP20 protection degree.

**On request: programming/regulation with remote control code A3020 and A3021 or with Smartphone via accessory code A3047.**

## Type B GH sensors (H max = 16mt)



IP54

Code	Item
A3043	DALI-2 Sensor - Type B - GH

Presence detector with one DALI-2 interface, ceiling mounted, for mounting at great heights, transverse detection area Ø 30 m, with Master function. Maximum installation height 16 m. Telescopic external light sensor for precise light measurement in a single application. Integrated twilight sensor. IP54 protection degree.

**On request: programming with remote control code A3038 or with smartphone via accessory code A3047.**



Code	Item
A3038	IR DALI GH - Programmer

IR remote control for programmer, compatible with DALI sensors (incompatible with On-Off and Slave sensors), especially for long distances.

## Type Corr sensors



IP20

Code	Item
A3029	Corridor on/off - Sensor

Presence detector On/Off, recessed, special for corridors, single channel (normally open, potential free) with a maximum load of 2 kW (with power factor 0.9), can be controlled remotely, detection area tangential Ø 40 m, frontal Ø 20 m, with Master function. Maximum installation height 2.70 m. Integrated twilight sensor. IP20 protection degree.

**On request: programming with remote control code A3023 or with smartphone via accessory code A3047.**



IP54

Code	Item
A3030	Corridor on/off-ext - Sensor

Presence detector On/Off, ceiling mounted, special for corridors, single channel (normally open, potential free) with a maximum load of 2 kW (with power factor 0.9), can be controlled remotely, detection area tangential Ø 40 m, frontal Ø 20 m, with Master function. Maximum installation height 2.70 m. Integrated twilight sensor. IP54 protection degree.

**On request: programming with remote control code A3023 or with smartphone via accessory code A3047.**



Code	Item
A3044	Corridor det. lens for B DALI-2 sensor

Corridors detection area lens for B DALI-2 recessed and/or surface mounted sensors.



IP20

Code	Item
A3033	Corridor SLAVE - Sensor

Recessed Slave presence detector, special for corridors, compatible with sensors with Master function, such as Sensor Corr DALI and Sensor Corr on/off, tangential detection area Ø 40 m, frontal Ø 20 m. IP20 protection degree. Maximum installation height 2.70 m.



IP54

Code	Item
A3034	Corridor SLAVE-ext - Sensor

Ceiling mounted Slave presence detector, special for corridors, compatible with sensors with Master function, such as DALI Corr sensor and Corr sensor on/off, tangential detection area Ø 40 m, frontal Ø 20 m. IP54 protection degree. Maximum installation height 2.70 m.



## Cap for ceiling mounted sensors



IP54

Code	Item
A3024	IP54 White fixing

Cap for ceiling mounted sensors, to obtain IP54 rating (total) for H 15 mm. Compatible with the following sensors:

- Sensor A on/off ext code A3014
- Sensor B on/off ext code A3019
- Sensor A SLAVE ext code A3026

## Sensor programmers



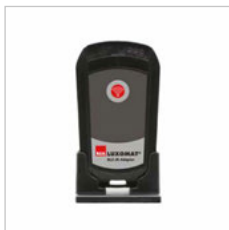
Code	Item
A3020	IR DALI - Programmer

IR remote control for programmer, compatible with DALI sensors (incompatible with On-Off and Slave sensors).



Code	Item
A3021	IR DALI - Remote controller

IR remote control for user, compatible with DALI sensors (incompatible with On-Off and Slave sensors).



Code	Item
A3047 <sup>NEW</sup>	BLE-IR - Adapter for Smartphone

BLE-IR adapter for Smartphones, compatible with all programmable sensors. Free App available for Android and iOS devices.



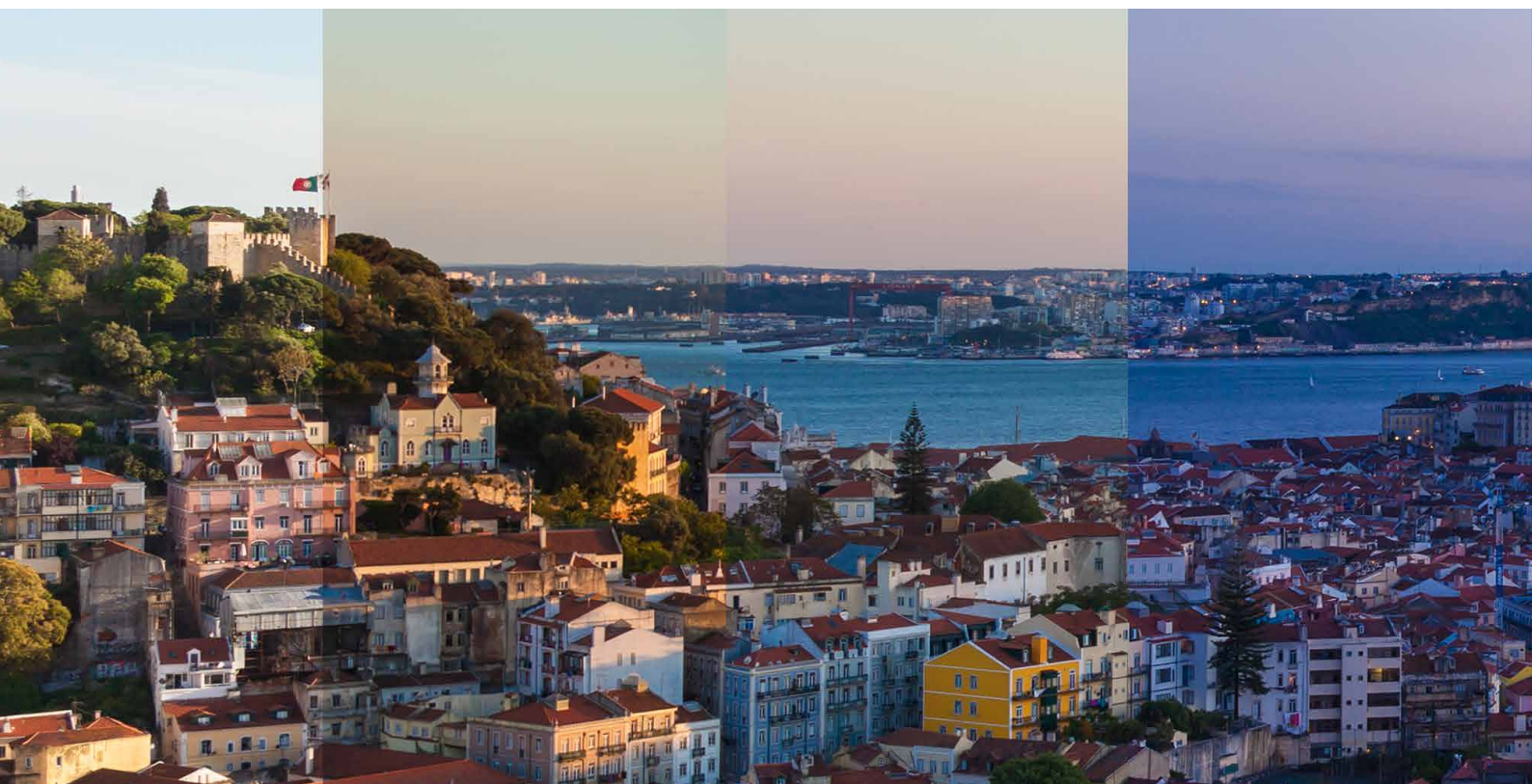
Code	Item
A3023	IR on/off - Programmer

IR remote control for programming on/off sensors incompatible with DALI and Slave sensors).





# / 3F HCL for Tunable White fixtures



## Colour **TEMPERATURE** variation.

The new standard EN 12464-1:2021 elaborates on the importance of lighting concepts in the workplace and the impact lighting has on circadian rhythms and moods leading to improved performance and well-being of people.

Natural light is one of the most important sensory stimuli for our body, and it also has an enormous effect on our mental and emotional state. For this reason, HCL luminaires have been designed to replicate natural light, taking the following requirements into consideration:

- Dynamism of light over time.
- Dynamism of colour temperature over time.

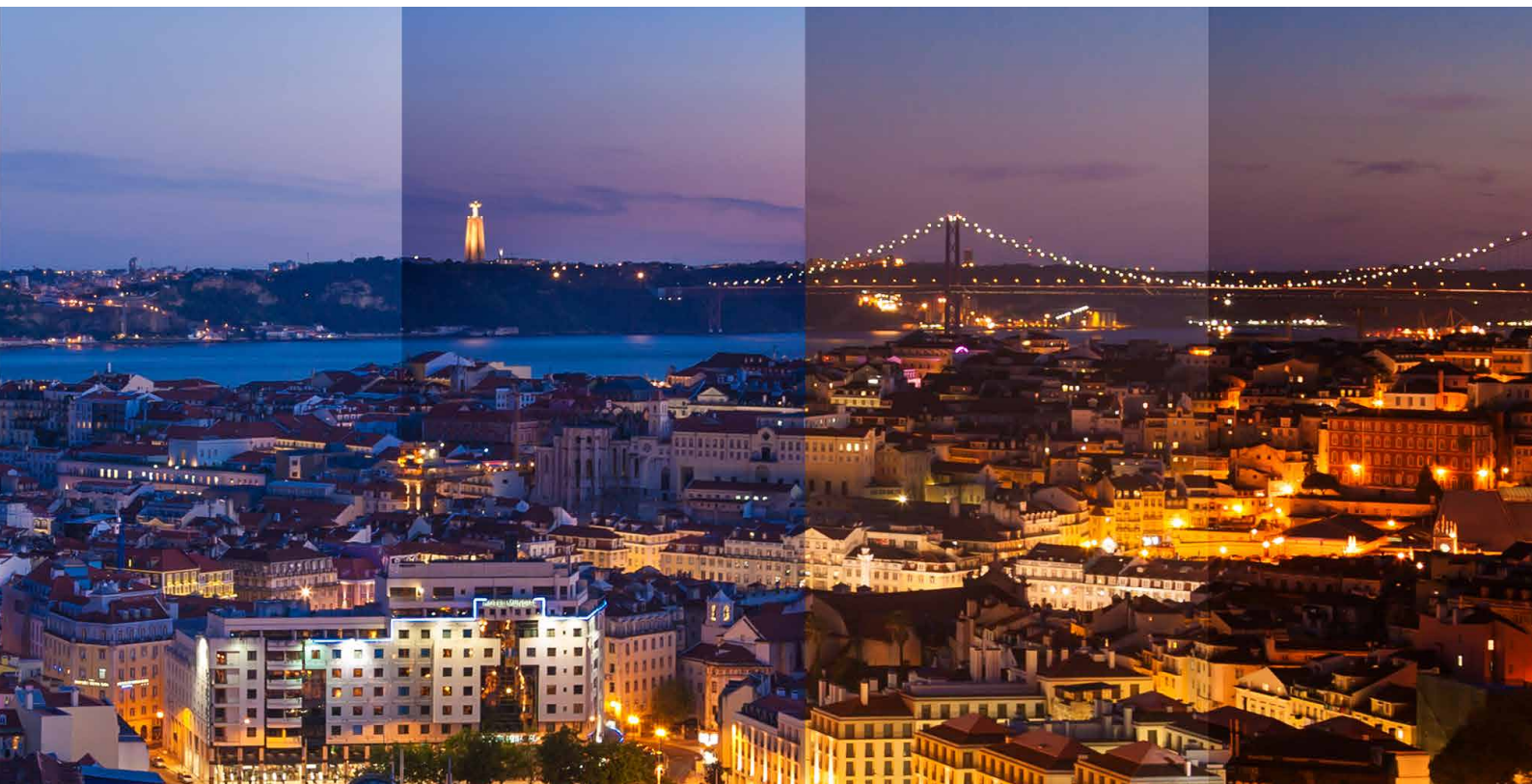
- Symmetrical light diffusion.
- Freedom of use for each individual.

HCL luminaires allow users to change both intensity and temperature of the emitted light, thus improving comfort and increasing the feeling of well-being.

Recent studies (performed by Lighting Europe) have shown that HCL luminaires improve concentration as well as the safety and efficiency of the workplace or training and school environments. For this reason, 3F Filippi has decided to create a series of new luminaires to help people feel better by putting their requirements at the centre of the design, also from a biological point of view.

**Note:**

If you require more information, do not hesitate to contact our Sales Network or our Technical Offices.



In order to take proper advantage of these luminaires, it is essential that:

- The artificial light follows the cycle of the natural light.
- The management systems can also be manually adjusted, according to each user's sensitivity.
- Right from the lighting design stage, factors such as exposure of the environment to natural light, the users' biological situations and the tasks they must perform are taken into account.
- Always consult a qualified and reliable lighting designer.

HCL technology allows for:

- Control of variation of the white colour temperature (Tunable-white).
- Simulated changing of daylight over the course of the day.
- Modulation of the colour temperature along the Planck curve from 2700K to 6500K.
- Colour rendering index CRI >80.
- Colour tolerance: 3 MacAdam ellipses.
- LED source luminous efficiency - up to 155 lm/W.

**ATTENTION: 2-channel DT8 driver - constant colorimetric on all attenuation levels:**

The TW Tunable White fixtures can be regulated using two different systems:

Wired automatic control system.

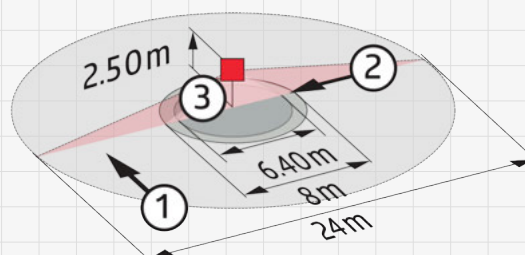
3F Casambi control system.

## Detection scheme

The HCL DT8 presence and light sensors allow the management of a group of Tunable White (TW) devices, up to a maximum of 50 drivers.

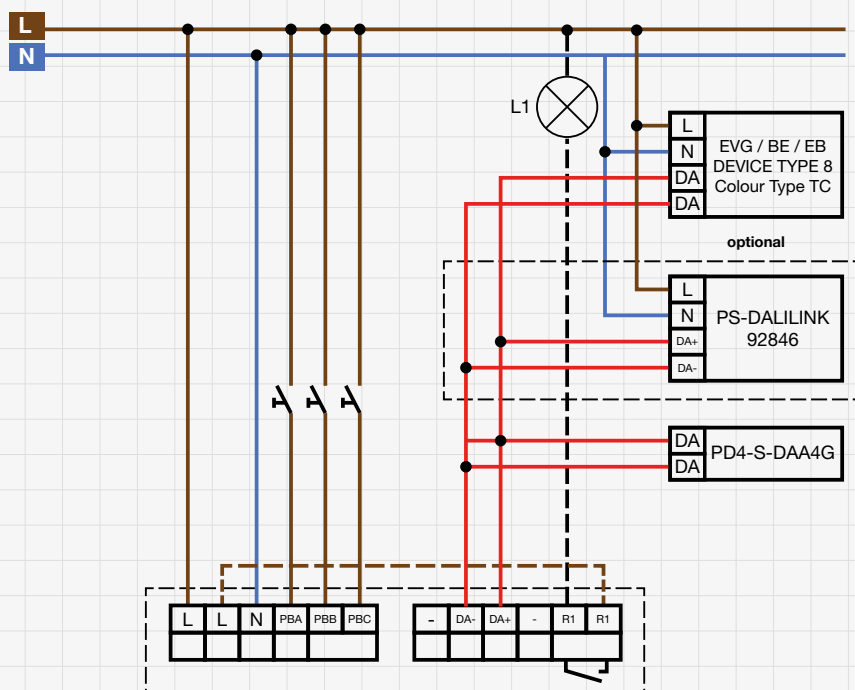
The sensors have the following characteristics:

- Integrated presence detector capable of controlling up to 50 DALI DT8 devices
- Integrated brightness detected for automatic adjustment of the luminous flux of the luminaires, based on the supply of natural light
- Integrated clock for automatically adjusting the color temperature following the circadian rhythm by programming from the free APP
- n. 3 output channels for HCL control of 3 groups of TW devices
- n. 1 DALI output channel
- n. 1 relay output channel (max 300W LED)
- n. 3 NO button inputs: 1 button to adjust the luminous flux of the HCL channel, 1 button for DALI channel control and 1 button for relay channel control



1. Transversal approach to the detector
2. Frontal approach to the detector
3. Fixed position: h 2,5 m

## Electrical connection diagram



## 3F HCL | Accessories



Code	Item
A3045	HCL2 DT8 - Sensor

Recessed presence detector with integrated clock for the management and control of Tunable White (TW) devices, remotely controllable, circular detection area Ø 24 m, equipped with Master function. Integrated light sensor for automatic regulation of constant light n. 3 output channels for HCL control of n. 3 groups of TW appliances, n. 1 DALI output channel, n. 1 relay output channel (max 300 W LED). Drive up to 50 DALI drivers. Maximum installation height 10 m.



IP20



Code	Item
A3046	HCL2 DT8-ext - Sensor

Ceiling presence detector with integrated clock for the management and control of Tunable White (TW) devices, remotely controllable, circular detection area Ø 24 m, equipped with Master function. Integrated light sensor for automatic regulation of constant light n. 3 output channels for HCL control of n. 3 groups of TW appliances, n. 1 DALI output channel, n. 1 relay output channel (max 300 W LED). Drive up to 50 DALI drivers. Maximum installation height 10 m.



Code	Item
A3047 <sup>NEW</sup>	BLE-IR - Adapter for Smartphone

BLE-IR adapter for Smartphones, compatible with all programmable sensors. Free App available for Android and iOS devices.

**Mandatory accessory for programming the HCL DT8 sensors.**





# / 3F & Casambi

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## FUNCTIONS

### Control Type:

Casambi control can be done using:

- Buttons and switches (manual control).
- App (manual digital control).
- Sensors and timers (automatic digital control).

### Grouping:

Different fixtures can be grouped together to be managed all together or individually. Grouping is easy and the same as grouping apps on smart devices.

### Scenes:

It is possible to:

- Create lighting scenes for different occasions.
- Manage several fixtures with just one touch to create the perfect atmosphere for specific needs.
- Use the same fixture in different scenes.

### Tunable control:

Casambi provides complete colour temperature control for those permitted in the range for LED sources. Just swipe your finger over the icon for the source to change the colour temperature.

### Animation:

It is possible to create dynamic scenes with fades from scene to scene. Animated scenes can be recalled again or repeated as required. It is possible to set both the duration of each scene and fade times between scenes.

### Gallery:

The exclusive gallery function makes control intuitive. Taking a photo of an environment or uploading a floor plan on the app it is possible to mark the fixtures and then recall them. Images are saved in a special gallery on the app with the fixtures displayed. Users only have to touch the ones they want to manage.

### Gateway:

With the gateway function it is possible to access a Casambi network remotely. Casambi enabled fixtures can be managed and network settings (administration rights required) can be changed. To enable the remote access feature, an iOS or Android device must act as a gateway on the Casambi network.

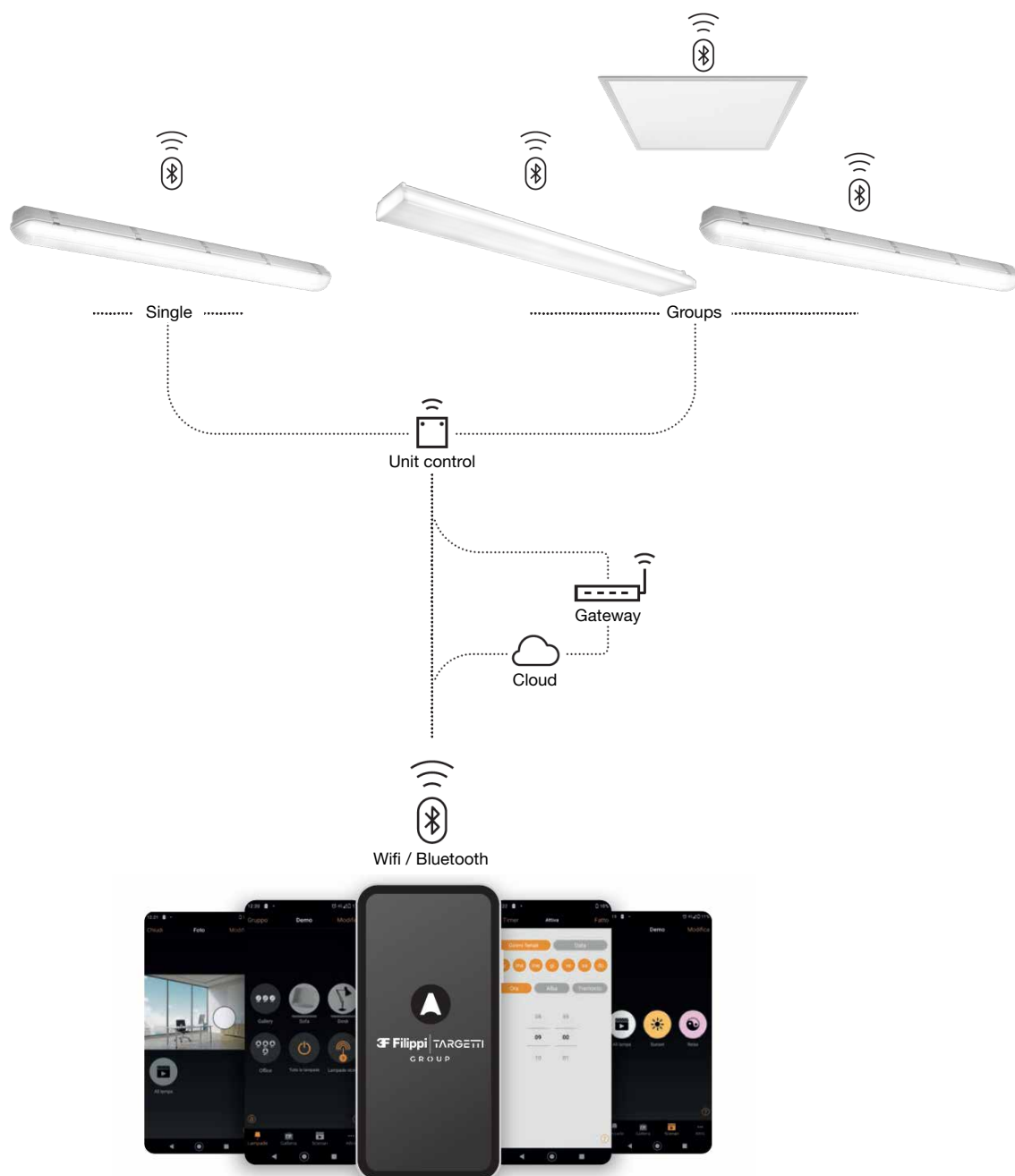
### Adaptable:

The Casambi system is adaptable to both simple as well as more complex projects. It is based on the possibility to create an unlimited number of networks that can be turned on and off.

### Calendar:

With the calendar and timer function it is possible to activate and deactivate scenes and animated scenes based on parameters such as: timetables, weekly scheduling, seasonality etc. This makes it possible to meet the needs of different users and the environments to be lit. All Casambi units keep track of time.





## INSTALLATION SEQUENCE

**1**

Choose 3F Filippi fixtures by opting for the 3F Filippi Casambi Ready package or Casambi accessory components.

**2**

Download the Casambi iOS or Android App depending on the device used.

**3**

Launch the App: the fixtures in operation will be detected automatically.

**4**

Create one or two networks depending on the characteristics of the environment.

**5**

Create groups of devices as needed.

**6**

Program scenes and/or sequences.

**7**

Set the level of network sharing.



## 3F & Casambi | Accessories



IP20

Code	Item
1T5349 <sup>NEW</sup>	CASAMBI DALI CONTROL UNIT IP20

IP20 wireless control unit with DALI interface. It generates a local DALI-2 bus, enabling a direct connection to a DALI interface LED driver. The module can only be used in a closed system and must not be connected to an existing DALI network. The module is wireless controlled using a Casambi app for smartphones and tablets using Bluetooth 4.0 technology. The devices automatically create an adaptive, robust, and reliable wireless mesh network, allowing for the easy and efficient management of a high number of fixtures. The control unit is preset to the DALI 1CH profile, meaning the device can control a single DALI driver with broadcast commands. In addition to the DALI broadcast, other operating modes are available, such as:

- Button (normally open)
- Control unit 0/1-10V
- Control unit DALI Tunable White DT8
- Presence sensor



IP20

Code	Item
2T0131 <sup>NEW</sup>	CASAMBI EXTENDER IP20 V.2

IP20 Extender for wireless control of LED driver with dimming DALI (or 1-10V) interface based on Casambi technology. It has a DALI-2 output with the capacity to control up to 40 lighting fixtures. With the addition of a further external BUS DALI power supply it is possible to control up to 64 fixtures. IP20 Extender is preset to the DALI broadcast profile, meaning all the luminaires connected to it are dimmable at the same level. In addition to the DALI broadcast other operating modes are available, such as:

- EXTENDER DALI 8CH
- EXTENDER DALI Tunable White
- EXTENDER 0/1-10V
- EXTENDER DALI 4CH
- EXTENDER DALI DT8 Tunable White



IP67

Code	Item
1E4369 <sup>NEW</sup>	CASAMBI EXTENDER IP67 V.2

IP67 Extender for wireless control of LED driver with dimming DALI (or 1-10V) interface based on Casambi technology. It has a DALI-2 output with the capacity to control up to 40 lighting fixtures. With the addition of a further external BUS DALI power supply it is possible to control up to 64 fixtures. IP67 Extender is preset to the DALI broadcast profile, meaning all the luminaires connected to it are dimmable at the same level. In addition to the DALI broadcast other operating modes are available, such as:

- EXTENDER DALI 8CH
- EXTENDER DALI Tunable White
- EXTENDER 0/1-10V
- EXTENDER DALI 4CH
- EXTENDER DALI DT8 Tunable White



IP67

Code	Item
1E3048 <sup>NEW</sup>	CASAMBI DALI CONTROL UNIT IP67

IP67 wireless control unit with DALI interface. It generates a local DALI-2 bus, enabling a direct connection to a DALI interface LED driver. The module can only be used in a closed system and must not be connected to an existing DALI network. The module is wireless controlled using a Casambi app for smartphones and tablets using Bluetooth 4.0 technology. The devices automatically create an adaptive, robust, and reliable wireless mesh network, allowing for the easy and efficient management of a high number of fixtures. The control unit is preset to the DALI 1CH profile, meaning the device can control a single DALI driver with broadcast commands. In addition to the DALI broadcast, other operating modes are available, such as:

- Button (normally open)
- Control unit 0/1-10V
- Control unit DALI Tunable White DT8
- Presence sensor



IP20

Code	Item
1T5351 <sup>NEW</sup>	CASAMBI PHASE CUT CONTROL UNIT IP20

A Wireless Trailing Edge / IGBT dimmer managed using Bluetooth 4.0 technology. It works with LED 230V-AC modules, dimmable LED sources and halogen lamps. It can be installed inside a standard 503 wall switch box, lighting fixtures or ceiling canopies. It can manage systems with a maximum absorption of 150W. The module is wireless controlled using a Casambi app for smartphones and tablets or traditional wall switches. IP20.



IP20

Code	Item
1T7944 <sup>NEW</sup>	CASAMBI DIMMER BLUETOOTH 24V PWM

Wireless Bluetooth Dimmer capable of handling constant voltage loads of 12V or 24V subdivided into 4 channels with PWM output. This dimmer must be connected between the 12V or 24V power supply and the constant voltage LED module. The maximum total current that can be supplied by the control unit is 6A (equivalent to a total of 144W) that can be divided between the 4 outputs. IP20.



Code	Item
1T8173CA <sup>NEW</sup>	BRIDGE DALI/CASAMBI

Bridge DALI/Casambi: a fixture that allows fixtures equipped with mesh Bluetooth Casambi to interface with a traditional DALI system and to be adjusted by a DALI control unit. Inside the usual DALI circuit it is possible to have a maximum of 64 cabled DALI and Casambi wireless devices. It only works with Casambi Evolution networks. The DALI Bridge is transparent in the DALI system, and therefore does not require an address. There is no need for a power supply given that it is supplied directly by the DALI bus.



Code	Item
1T5350 <sup>NEW</sup>	CASAMBI WALL SWITCH XPRESS BLK
2T0132 <sup>NEW</sup>	CASAMBI WALL SWITCH XPRESS WHT

Xpress is a wall mounted wireless user interface; it can be installed wherever the user chooses thanks to battery power with autonomy of 2-3 years providing direct access to all the most important Casambi system control functions. As well as switching the fixtures on and off, Xpress controls dimming, colour temperature change in fixtures equipped with this technology, and control of individual fixtures and lighting scenes or sequence management.



# / 3F & KNX

## Building automation



## BUILDING management.

### CHARACTERISTICS

KNX is a worldwide open standard which meets the most important European and international standards and offers automated and decentralised management of technological systems for: commercial, industrial, public and office buildings, schools and many other structures besides.

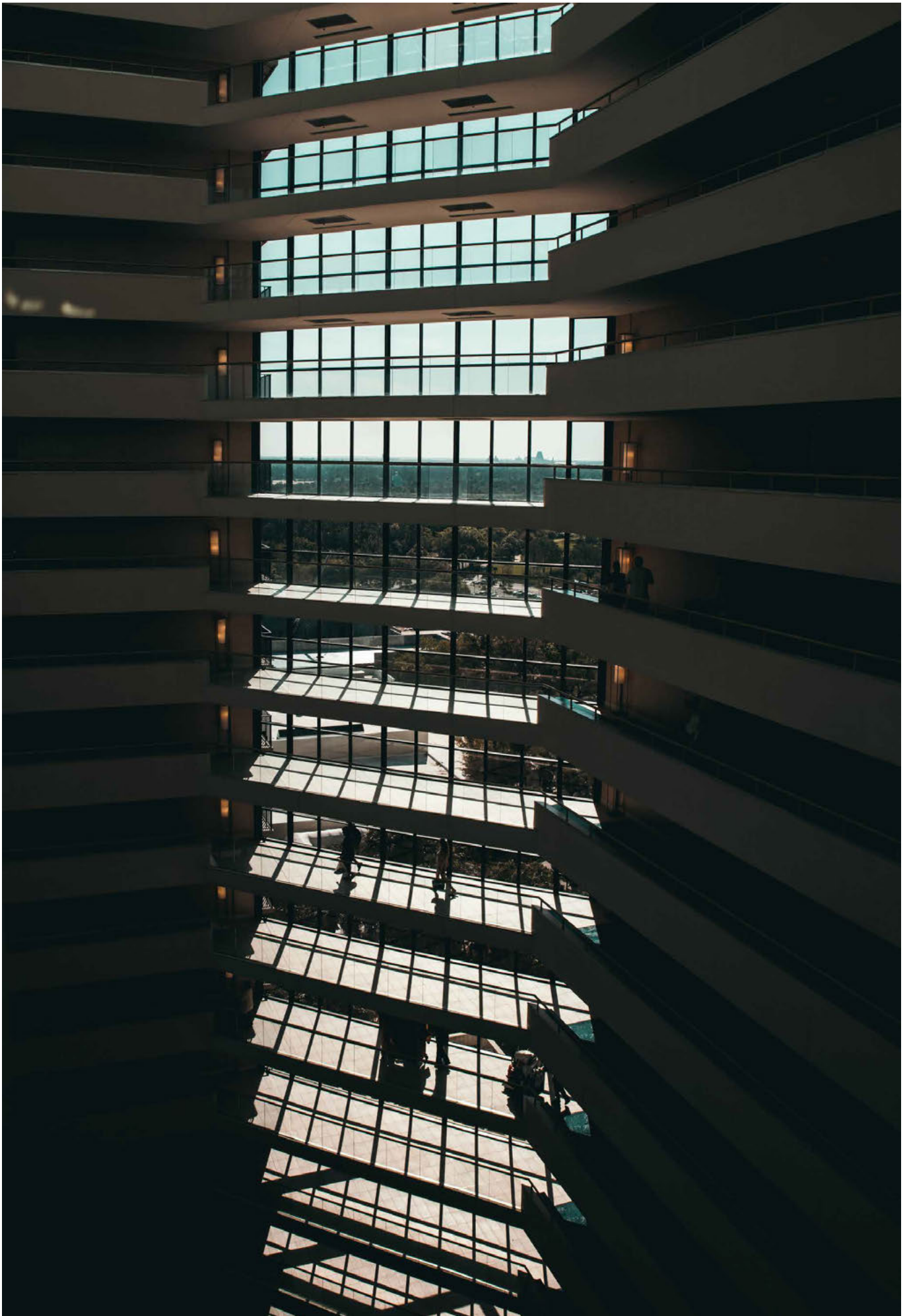
KNX can be used in all applications and for control functions in buildings: from lighting to blinds, security, HVAC supervision, control of plumbing and alarms, energy management, electricity meters, domestic appliances, audio systems etc.

KNX improves comfort and security, as well as providing a strong contribution to energy savings (up to 50% for lighting and heating management) and to reducing environmental impact. The KNX system can be used both in new and existing buildings.

KNX installations can be easily expanded and adapted to meet new requirements, quickly and with minimal financial investment (for example when new tenants enter a commercial building).

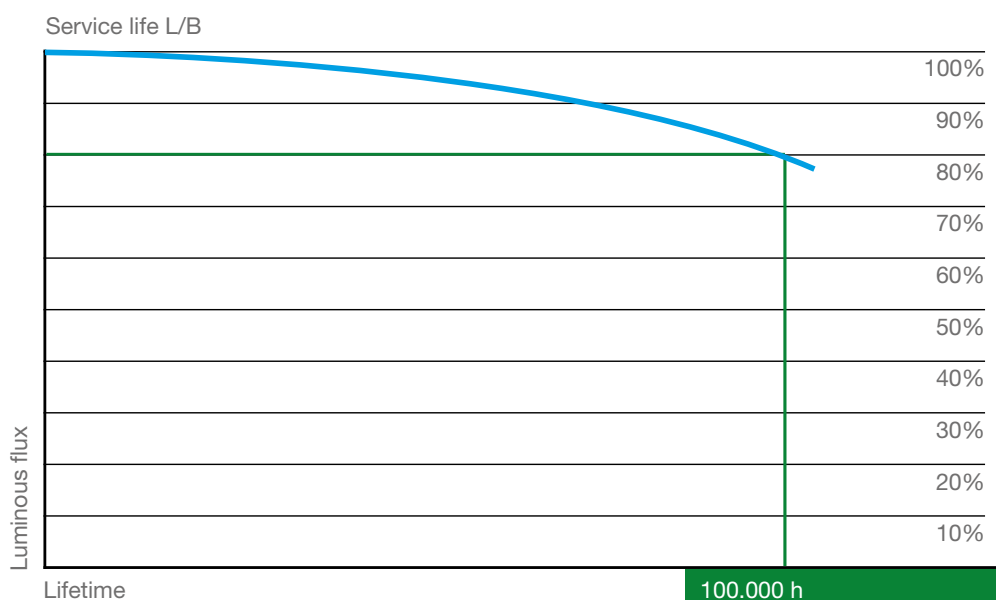
3F Filippi really believes in this standard, and it is for this reason that we offer a range of luminaires equipped with DALI ballasts which are able to interface with KNX systems seamlessly: the connection between the network and the luminaire occurs via gateways which allow information and commands to be transmitted via the LAN network.







# / 3F CLO



## TIME passes. Light remains.

### INTRODUCTION

The initial luminous flux of light sources diminishes gradually over time.

The percentage of decay of the luminous output referred to the hours of useful operation (50,000 hours) is determined with the parameter "L". LED sources classified as L85 (\*) when they reach 50,000 hours will supply 85% of the initial output.

The task of the lighting designer is to look at all possible systems that can achieve energy savings for the final customer.

3F Filippi has always worked alongside professionals in the industry to find and transmit knowledge for a greener future.

### WHAT IS CLO

CLO is the acronym of Constant Light Output which is a function of the most evolved drivers to allow fixtures to emit constant output, following natural decay of LED source due to ageing.

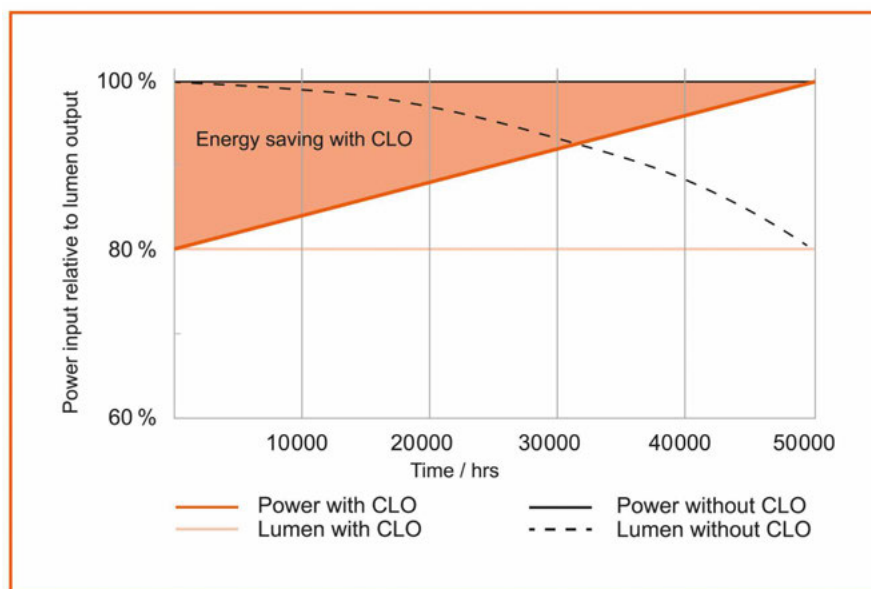
Fixtures equipped with this function initially emit, and subsequently in a constant way, a luminous output decreased by 15% in consideration of the decay of the light.

At the same time the fixture has a reduced initial energy consumption (on average 15%) and an increasing regular consumption until it reaches the declared 100%.

The datasheets of fixtures equipped with this technology will show the initial Power and the final Power (for normal size electrical system).

### Note:

(\*) data extrapolated from LM-80 (IES - Illuminating Engineering Society of North America) tests, performed as per standards after 6,000 hours of operation and calculated on the basis of the IESNA TM-21-11 guideline "Projecting Long Term Lumen Maintenance of LED Light Sources".



#### THE ADVANTAGES OF CLO

- **Constant L100 luminous output for the entire life of the fixture.**

Thanks to this technology adopted by 3F Filippi, it is no longer necessary to oversize from the first day of use the lighting system (on average 15%) as was done in the past, with an unprovoked energy expenditure.

This makes it possible to design lighting projects with  $K=1.00$  maintenance factors, given that the fixture considers this integrated decay factor right from the first time it is turned on.

- **Energy savings**

The drivers are designed in the Company to feed the LED sources initially at reduced power to then increase gradually over time. Using the CLO function the energy savings that can be achieved over the life of the fixture is around 10% without any manual or system maintenance. You save simply without realising it.

#### CLO AND LIGHTING DESIGN

The light fixtures will be constant throughout their entire life. Drivers with the CLO function are able to compensate for the decay in luminous output of the LED sources and avoid output peaks/excess power at the beginning of the installation while maintaining the required luminance values constant over time.

Energy consumption will increase over time to reach maximum consumption which would normally occur when first turned on, only after 100,000 operating hours.

Lighting levels required by regulations are ensured from the first to the last day without wasting any energy. If you require more information, do not hesitate to contact our Sales Network or our Technical Offices.



# / 3F Wireless ZQ



Wireless Mesh Network 2.4  
GHz Bluetooth LE/Zigbee  
compatible multisensor.

## WIRELESS lighting systems.

3F Filippi fixtures with wireless ZQ technology are equipped with 2.4 GHz **Wireless Mesh Network devices with dual Bluetooth LE/Zigbee 3.0 technology**, which simultaneously allows the connection of mobile devices via Bluetooth LE and the interconnection of the system nodes thanks to the standard Zigbee protocol 3.0, enabling them to integrate with the entire ecosystem of compatible products, such as home assistants and other devices for home and building automation.

Each device in the Zigbee 3.0 network receives, regenerates and sends the signal again to the subsequent nodes, thus creating a wireless **Mesh Network**.

### BENEFITS

3F Wireless ZQ technology is particularly suitable for the retrofit of existing systems without a regulation system.

- **IoT Ready:** devices (sensors or nodes) integrated into the luminaires allow the creation of intelligent systems without having to make changes to the existing electrical system (for example the addition of the DALI backbone).
- **Mesh Network:** communication between the devices of the 3F Wireless ZQ system occurs via radio frequency signals with Mesh Network technology (extremely robust and encrypted) which allows the creation of very large systems, overcoming the "limits" of wired DALI systems.
- **Energy saving:** up to 80% thanks to the automation system.
- **Plug&play:** configurable via App

by non-specialised personnel, significantly reducing commissioning times and commission costs.

- **Consumption monitoring:** measurement of energy consumption, also MID certified.
- **Emergency:** centralised diagnostics of the emergency system.
- **Flexibility:** the system can be used in both simple and more complex projects.
- **Cloud Lighting:** devices management on a local network or via Cloud.

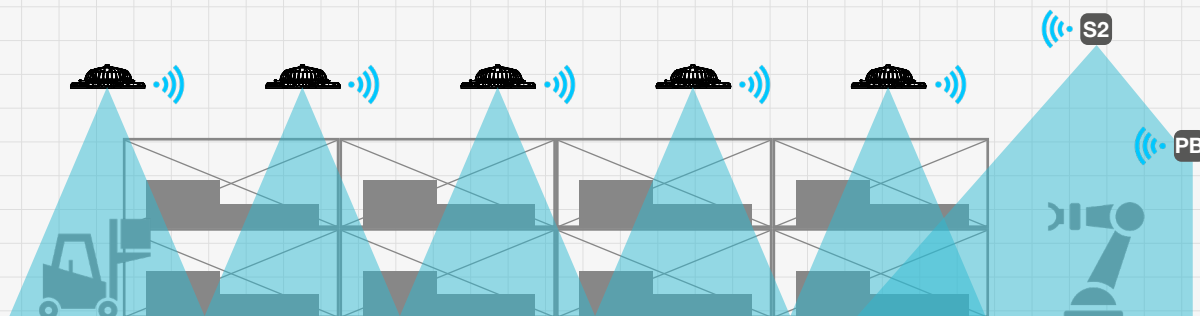
### Stand-Alone systems

Devices, sensors and control modules, wired together or wireless connected are configured via App or other simple and intuitive application. Once the setup is completed, the various portions of the system work independently without interacting each other. This architecture allows you to optimise construction and configuration costs of the system.

The control system requires initial programming and commissioning. This service can be carried out directly by the installer/end customer via the free APP available for Android and iOS. On request we can offer a telephone support service for training the installer or for on-site intervention by a specialist technician.

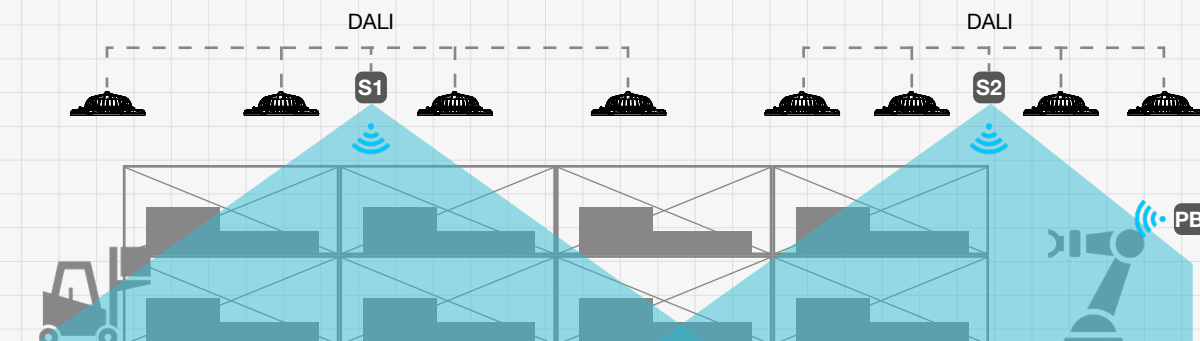
### Entirely WIRELESS system

Each device can be equipped with a presence and brightness sensor ensuring complete and total flexibility. During the commissioning phase, via the Light360 app, it will be possible to define the automatisms (groups, scenes, etc.) and the operating logics of each individual sensor, for example: presence and brightness, brightness only, transmission node only, etc. The system can be integrated by adding stand alone sensors (S2) or manual buttons via the appropriate interface (PB).



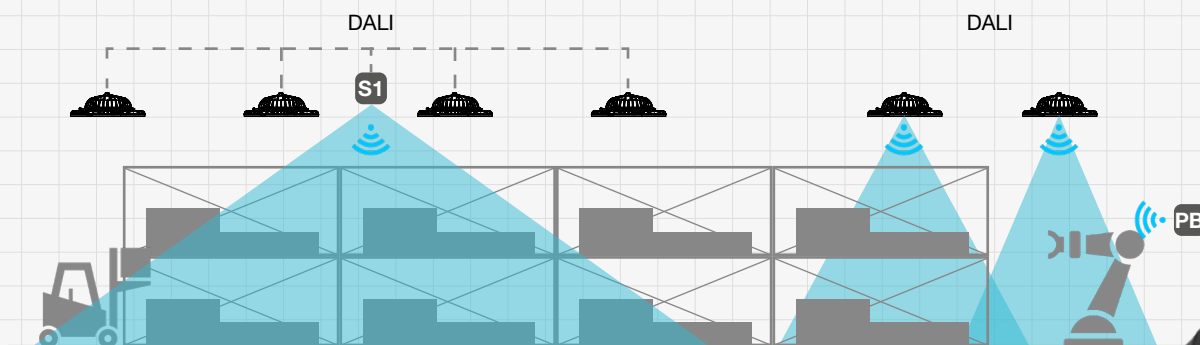
### HYBRID system (wireless/wired)

It is possible to optimise construction costs by creating hybrid systems (wireless/wired). Presence and brightness sensors can be installed in the room and control a more or less large group of devices via cable, up to a maximum of 32 drivers. During the commissioning phase, via the Light360 app, it will be possible to define the group operating logics. The system can be integrated, at your discretion, possibly adding stand alone sensors (S2) or manual buttons via the appropriate interface (PB).

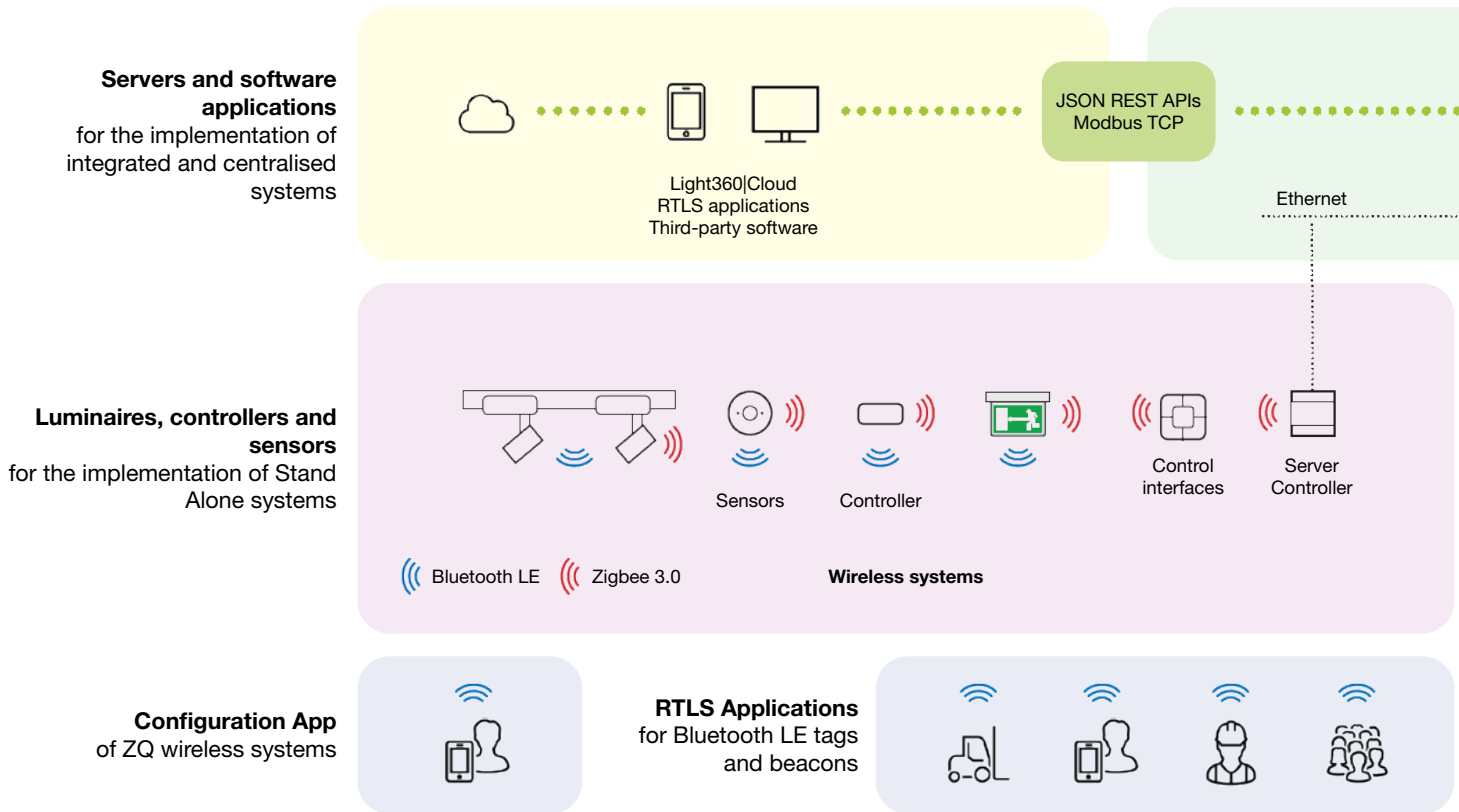


### MIXED system

The entirely wireless system and the hybrid system can coexist in the same system/area, maximising the functionality and exploiting the advantages of each individual system.



# / 3F Wireless ZQ



## CENTRALISED SYSTEM

The system in Stand Alone mode can be centralised via Ethernet network, in order to obtain synergistic management and supervision via local software applications (on-premises) or in the Cloud.

This architecture also allows integration with other Building Automation systems and third-party software applications.



Energy saving



Luminous scenography



Colour management

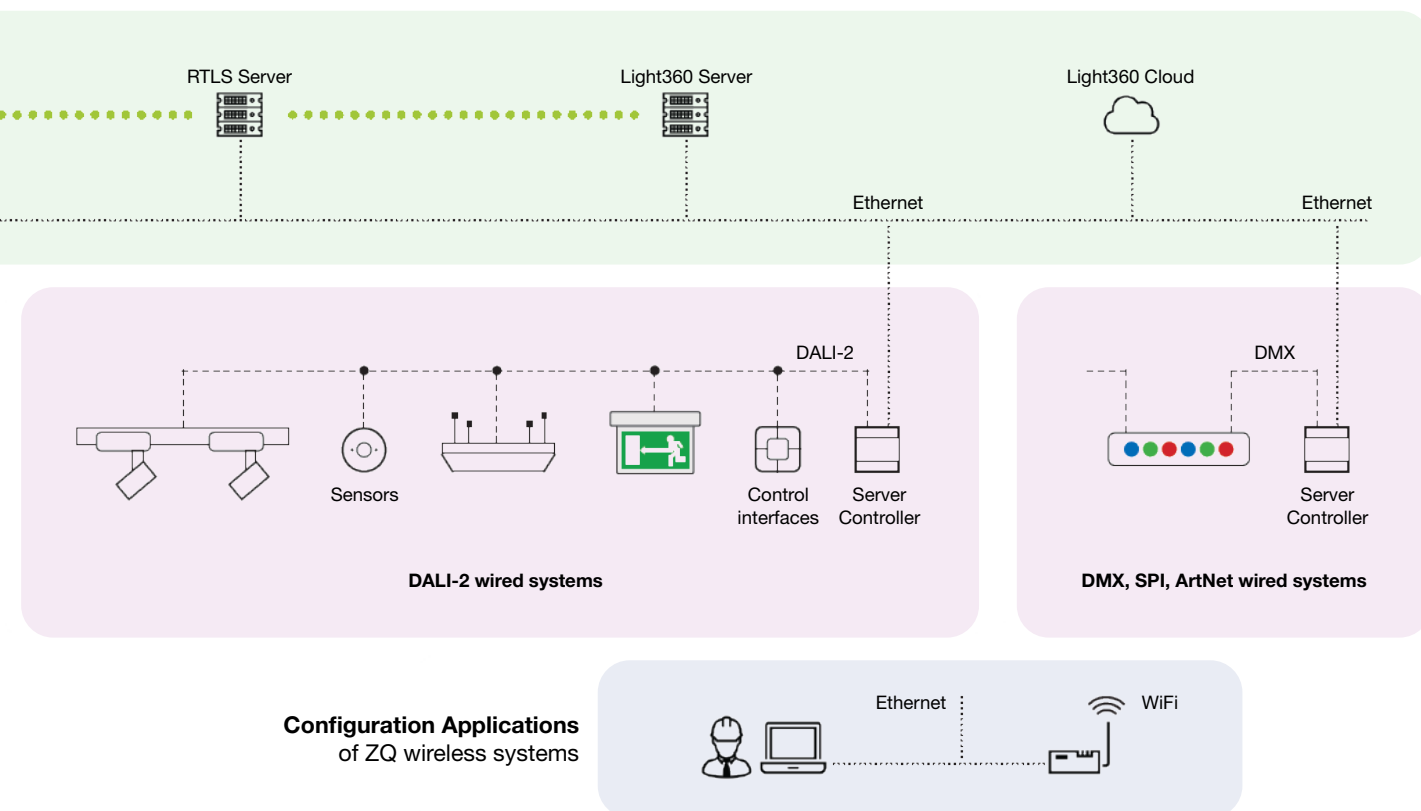


Diagnostics of the emergency system



Supervision and remote maintenance





## CLOUD SUPERVISION

Light360 Cloud is the software that allows you to manage and control the status of the appliances in accordance with the EN50172 standard, obtaining a mapping of the space covered by appliances, a diagram of the overheating status and an overview of the position of the assets included in the system.

Characteristics:

- Multi-site and multi-user systems
- Custom maps, charts and widgets
- Remote maintenance and diagnostics
- Emergency lighting management
- Energy consumption management

This provides the following advantages:

- Centralised systems management
- Reduction of maintenance costs, especially in case of emergency
- Verification of energy consumption and savings
- IoT sensors
- Check of space occupancy
- Tracking of assets and personnel via RTLS applications
- Integration with other Building Automation systems



Lanes

**80%**  
energy saving



Warehouses

**65%**  
energy saving



Production areas

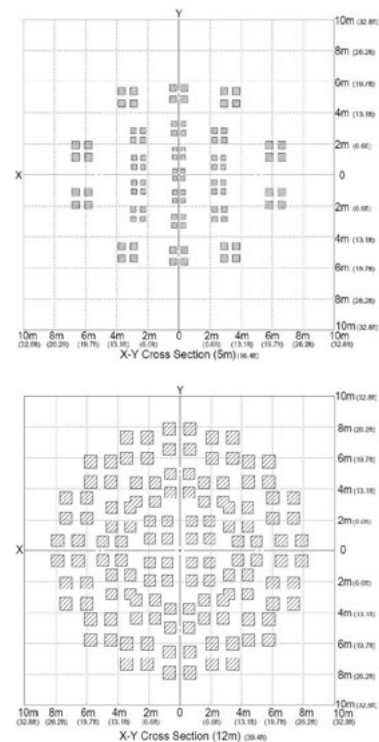
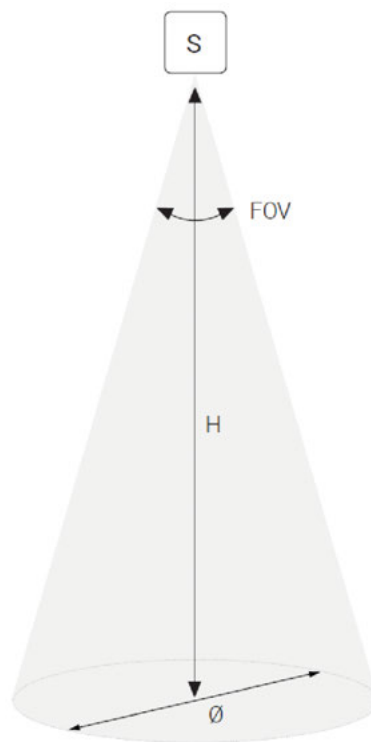
**45%**  
energy saving



# / 3F Wireless ZQ

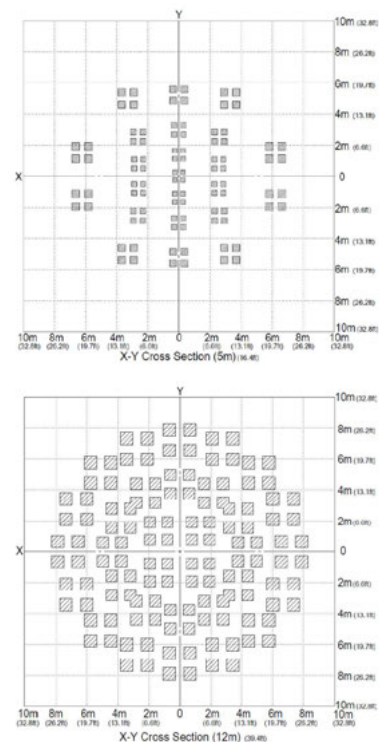
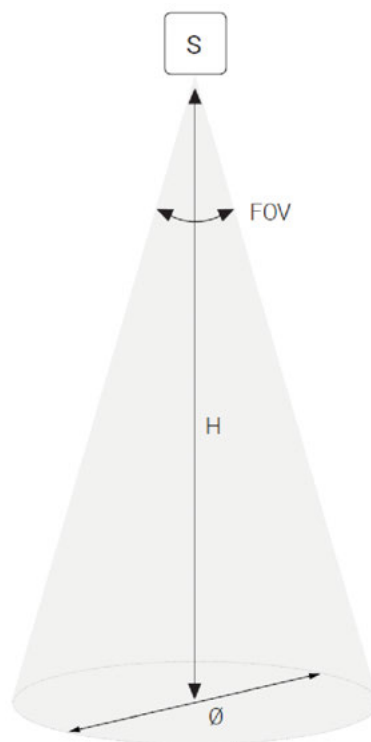
## Detection field SENSEZQ Industry IP65 - built-in

	<b>A3102 SENSEZQ-10m built-in</b>	<b>A3106 SENSEZQ-17m built-in</b>
<b>H</b>	<b>MB <math>\phi</math> FOV 108°</b>	<b>HB <math>\phi</math> FOV 62°</b>
3 m	8,3 m	3,6 m
4 m	11,0 m	4,8 m
5 m	13,8 m	6,0 m
6 m	16,5 m	7,2 m
7 m	19,3 m	8,4 m
8 m	22,0 m	9,6 m
9 m	24,8 m	10,8 m
10 m	27,5 m	12,0 m
11 m		13,2 m
12 m		14,4 m
13 m		15,6 m
14 m		16,8 m
15 m		18,0 m
16 m		19,2 m
17 m		20,4 m



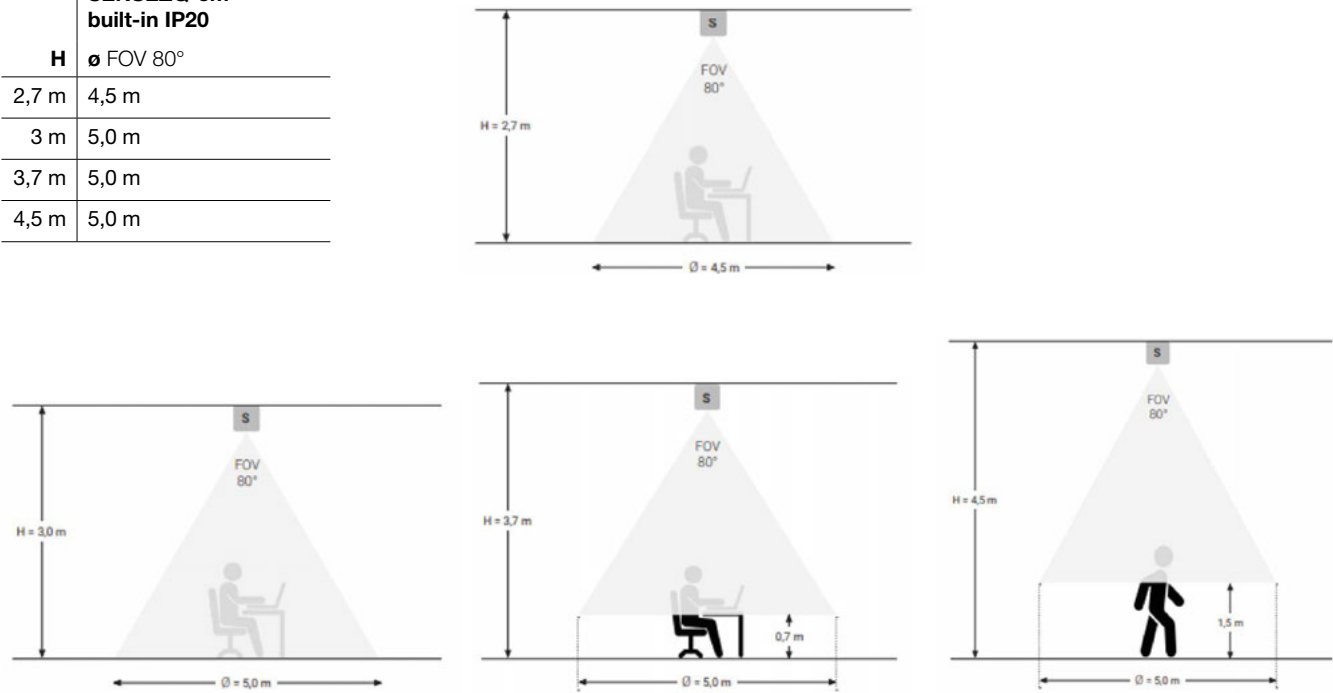
## Detection field SENSEZQ Industry IP65 - outside the luminaire

	<b>A3107 SENSEZQ-10m built-in</b>	<b>A3108 SENSEZQ-17m built-in</b>
<b>H</b>	<b>MB <math>\phi</math> FOV 108°</b>	<b>HB <math>\phi</math> FOV 62°</b>
3 m	8,3 m	3,6 m
4 m	11,0 m	4,8 m
5 m	13,8 m	6,0 m
6 m	16,5 m	7,2 m
7 m	19,3 m	8,4 m
8 m	22,0 m	9,6 m
9 m	24,8 m	10,8 m
10 m	27,5 m	12,0 m
11 m		13,2 m
12 m		14,4 m
13 m		15,6 m
14 m		16,8 m
15 m		18,0 m
16 m		19,2 m
17 m		20,4 m



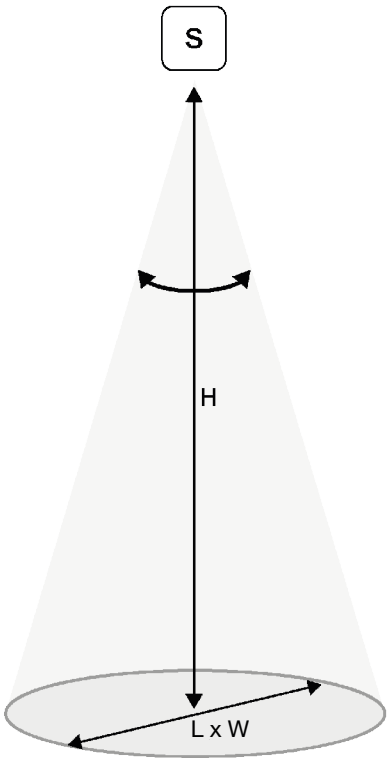
Detection field SENSEZQ Office IP20 - built-in

	<b>A3113 SENSEZQ-5m built-in IP20</b>
<b>H</b>	<b>Ø FOV 80°</b>
2,7 m	4,5 m
3 m	5,0 m
3,7 m	5,0 m
4,5 m	5,0 m



Detection field SENSEZQ Office IP20 - outside the luminaire

	<b>A3109 SENSEZQ-5m IP20</b>
<b>H</b>	<b>L x W FOV 82° x 94°</b>
2,5 m	4,3 x 5,4 m
2,7 m	4,7 x 5,8 m
3 m	5,2 x 6,4 m
4 m	7,0 x 8,6 m
5 m	8,7 x 10,7 m



## 3F Wireless ZQ | Accessories



IP20

Code	Item
A3103 <sup>NEW</sup>	NODEZQ-4 IP20

NODEZQ wireless Mesh Network 2.4 GHz Bluetooth LE/Zigbee controller, installation outside the indoor luminaire. It controls up to 4 standard DALI and/or D4i drivers in regulation. Integrated antenna. Autosensing supply from 230Vac or from DALI line according to DALI-2 D4i specifications. I/O connector for external sensor.



IP20

Code	Item
A3104 <sup>NEW</sup>	NODEZQ-32 IP20

NODEZQ wireless Mesh Network 2.4 GHz Bluetooth LE/Zigbee controller, installation outside the indoor luminaire. It controls up to 32 standard DALI drivers in regulation. Integrated antenna. Autosensing supply from 230Vac. I/O connector for external sensor.



IP66

Code	Item
A3105 <sup>NEW</sup>	NODEZQ-4 Zhaga IP66

NODEZQ wireless Mesh Network 2.4 GHz Bluetooth LE/Zigbee controller, installation incorporated into the outdoor luminaire. It controls up to 4 standard DALI drivers in regulation. Integrated antenna. Zhaga Book 18. Autosensing supply from 24Vdc or from DALI line according to DALI-2 D4i specifications.



IP65

Code	Item
A3102 <sup>NEW</sup>	SENSEZQ-10m built-in IP65
A3106 <sup>NEW</sup>	SENSEZQ-17m built-in IP65

SENSEZQ wireless Mesh Network 2.4 GHz Bluetooth LE/Zigbee presence and brightness multisensor, installation incorporated into the indoor luminaire. It controls up to 4 standard DALI and/or D4i drivers in regulation. Integrated antenna. Maximum installation height 10 m FOV 108° (cod. A3102) and 17 m - FOV 62° (cod. A3106). Autosensing supply from 12..15Vdc or from DALI line according to DALI-2 D4i specifications.



IP52

Code	Item
A3107 <sup>NEW</sup>	SENSEZQ-10m IP52
A3108 <sup>NEW</sup>	SENSEZQ-17m IP52

SENSEZQ wireless Mesh Network 2.4 GHz Bluetooth LE/Zigbee presence and brightness multisensor, installation outside the luminaire. It controls up to 32 standard DALI and/or D4i drivers in regulation. Integrated antenna. Maximum installation height 10 m FOV 108° (cod. A3107) and 17 m - FOV 62° (cod. A3108). 5A relay. Power supply 230Vac.



Code	Item
A3109 <sup>NEW</sup>	SENSEZQ-5m IP20

SENSEZQ wireless Mesh Network 2.4 GHz Bluetooth LE/Zigbee presence and brightness multisensor, installation outside the luminaire. It controls up to 32 standard DALI drivers in broadcast or addressed mode. Integrated antenna. Maximum installation height 5 m FOV 106°. Power supply 230Vac.



Code	Item
A3113 <sup>NEW</sup>	SENSEZQ-5m built-in IP20

SENSEZQ wireless Mesh Network 2.4 GHz Bluetooth LE/Zigbee presence and brightness multisensor, installation incorporated into the indoor luminaire. It controls up to 4 standard DALI and/or D4i drivers in regulation. Integrated antenna. Maximum installation height 5 m FOV 80°. Autosensing supply from 12..15Vdc or from DALI line according to DALI-2 D4i specifications.



Code	Item
A3110 <sup>NEW</sup>	ZQ buttons interface

Mesh Network 2.4 GHz Bluetooth LE/Zigbee 3.0 wireless buttons interface. It controls 4 configurable digital inputs for standard push-buttons and switches. Integrated antenna. Power supply 230Vac.



Code	Item
A3111 <sup>NEW</sup>	ZQ Ethernet Gateway

Ethernet gateway for 2.4 GHz Zigbee/Bluetooth wireless nodes. RTC and integrated antenna. PoE supply or 12-24Vdc.



Code	Item
A3112 <sup>NEW</sup>	ZQ control unit

Control unit for ZQ system management. Ethernet Interfaces, RS232, RS485, USB, I/O. Integrated LTE modem (SIM not included). Astronomical Clock (RTC). Integrated web server and xSETUP application for system configuration. Power supply 10-30Vdc. DIN 6-module box.







Free app for configuration of ZQ devices, available for Apple (iOS) and Android smartphones and tablets. Light360|Setup allows the installation to be split into groups of luminaires and sensors and to set control logics and operating parameters (reference light levels for constant light control, timeout for motion sensor power-off, etc.).



Web-based application for control of installations via Touch Panel. Single Touch device licence.



On-premises and cloud software application for centralised control and supervision of lighting installations.

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REA (economic administrative index) No. 234613

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