

We know how to create inspiring lighting

# FAGERHULT



# Welcome to the creative office!

Where is your office? Contemporary business cards help tell the tale of the changing world. Fewer companies display a fixed landline as more and more people prefer to be contacted by their mobile instead. The requirements of a visiting address are not the same when people can be contacted anywhere. A new generation of employees see their job in a different light, establishing their office onthe-move, at home, on a train or in a hotel lobby.

But despite, or maybe because, of this geographical freedom, the office has become more important than ever.



It's become a place for face-to-face interaction, where new ideas are born and job satisfaction is key. In the creative office we furnish unconventionally, meeting the changing needs within the space and increasing the workplaces appeal. With light we can help you create the office of the future. Using LEDs we can invoke varied, inspiring and motivational environments that enhance creativity at a lower energy cost. Wherever you chose to hang your hat, we have the solution for your office.



Alexandra Moore.

# Good design promotes creativity

Design at the workplace makes you more creative, reinforcing the company's attractiveness and brand. But just putting out a few beanbags, a game console and a table tennis table simply isn't enough.

"A creative office needs a holistic approach. Lighting, noise, colour and ventilation are all important factors that affect our wellbeing and our ability to perform," says Alexandra Moore, who is conducting research into the importance of design in the working environment.

# How does the design of the workplace affect our creativity?

"Light is one of the absolute key factors. It controls the production of hormones and consequently how we feel. However, it's not simply a question of providing enough light and avoiding the risk of glare, it's also about variation. When I design offices, I look at the light from three different perspectives: natural light, artificial light and the relationship between light and shadow. But the light has to be put into context. Noise, colour and ventilation are three other factors which play an incredibly important role in how we perceive our workplace."

# Is it possible to consciously increase creativity at the office using design and furnishings?

"Yes! Although we have only recently began to understand the link between how we are affected by our surroundings and its impact on how we feel and perform. A job used to be something you went to every day, almost like an administrative production line. Now, thanks to research, we know which factors have an impact – not just emotionally but also in pure biological terms.

This opens up interesting opportunities to make positive changes. In the long term, human wellbeing means greater profitability for the company as we will definitely be more productive. And if we're talking about creativity in terms of ingenuity and innovativeness, then it's essential for companies to invest in skills development. Creativity requires energy and this can be acquired through a good



# "A creative office needs a holistic approach. There is no 'quick fix' ...

working environment. Equally a well designed workspace can also strengthen the company's brand appeal and help attract new and creative employees."

# What is your approach to working with light?

"Lighting is really important for creating different moods. Wherever possible I try to use lighting control, especially in conference rooms. The lighting should be linked to the IT as there are so many different lighting scenarios and technical aids that feature in our meetings. I also like to work with LEDs. The initial investment costs are now at a reasonable level while the operating costs are minimal. From a creative perspective, LEDs are perfect as the technology provides so many opportunities to create beautiful effects, for example adding colour through glass."

## Is the office on its way out?

"No! The office will survive. But it's going through a major change in form. Nowadays we are just as likely to work at home as in a hotel lobby. And personally speaking, I think this is just the beginning. But even if we're not tied to our desks anymore, we still need to meet the requirements for ergonomics and proper equipment, not to mention the right working light. That will be the next big challenge."



Jonas Källberg, product manager at the office furniture company Martela.

# Trends in office planning

What's going on at the office? And what isn't? Working life is changing. In a world in which we are constantly connected, everything no longer revolves around a single desk or a single room. And yet we still need an anchor in life. The office is still here; it just looks a bit different nowadays. These are the current trends.

# Activity Based Working (ABW)

Now that technology no longer ties us to a specific place, the office is becoming activity based. Rather than simply using a desk as the starting point, it's the type of activity and tasks that govern where and how we work. Often the starting point is allocating every employee some space for personal storage and documentation. Between 10 and 20 employees then share an area for their different needs during the working day. It is generally considered that 70% of the employees can work without a dedicated desk, while 30% need a permanent workstation. The latter applies particularly to administrative staff. These figures do, of course, vary considerably between different functions at the company. As, in order for ABW to work, extremely good technology and IT support is also required, this type of planning is more common in organisations with a strong focus on IT and communications.



Jonas Källberg, product manager at the office furniture company Martela.

# Meeting place in focus

Large offices and greater mobility among staff has led to an increased demand for places where people can meet their colleagues in peace and quiet and to make plans. Having extra meeting rooms is a clear trend in new build offices, with the most common layout is for four to eight seats. Not that everyone is always physically present at the meeting of course. The need for meeting rooms is also driven by many people opting for video and phone conferencing rather than travelling.



# The office as part of the brand

An exciting interior which matches the company's identity has become ever more important when it comes to attracting new staff and reflecting the brand. Ergonomics and functionality are today viewed as natural parts of working life. An inspirational working environment has now become the new competitive edge.

Jonas Källberg, product manager at the office furniture company Martela.

# New building and planning methods influence the type of lighting

More large offices, more open spaces with fewer walls and lots of glass are all clear trends in the open-plan office. Reorganisation is a part of everyday life and both employees and furniture swap places fairly regularly. This places totally different requirements for the lighting. Something which needs to be considered at the start!

# The flexible big office

Large offices have often been designed to allow for easy redecoration and new furnishings. The lighting needs to be planned at an early stage to reflect this flexibility. Where people are more mobile, and not just sitting at their desk, it would be advisable to opt for a recessed luminaire which provides not only a general light but also a decent working level. This approach avoids having to move the luminaires every time you rearrange or add new furniture in the space. Ideally the recessed solution should be supplemented by a good desk luminaire at each workstation, so that every employee is able to control their own light. The large open-plan office often presents a challenge when it comes to the vital ambient lighting. There are few walls, so it is a good idea to make the most of them and give them as much light as possible. If you are using a recessed solution, it is also important to try and get some indirect light on the ceiling, using luminaires placed on the wall or in the space where the ceiling and the wall meet.

# Large glazed areas

Glass is used regularly throughout contemporary buildings, in the form of both large window sections and glass



walls which screen off cellular offices and conference rooms. The window sections are excellent, since they give lots of incidental daylight with the opportunity to save energy using daylight control. The glazed areas inside the office are more deceptive. It's important not to aim light directly towards the glass, as spotlights or wall luminaires can dazzle the person sitting and working on the other side. For this reason you should work with indirect wall and ceiling lighting as much as possible.

## Colours and structures

Make the most of the contrasts between a calmer base and the increasingly popular statement walls by lighting them. Warmer colours, like beige and orange, work best with a light source that has a warmer colour temperature, around 3000 kelvin. Ideal for rooms intended for unwinding and time to think. Bold, plain colours look the best with a colder colour temperature of around 4000 kelvin. If you want to emphasise the texture of a wall, you can do this with direct-acting lighting, for instance spotlights.







# Creative Light Planning Back up the process with research

The message from the research is clear; if you light your premises in the right way, you achieve a working environment in which people feel at ease and think better. All you need is knowledge and good luminaires. Tommy Govén, head of research at Fagerhult, has identified the link between light and creativity.

# Does light really make us more creative?

"Research has shown this really is true. In 2009, we conducted a study at a primary school in London, in partnership with University College London and the Faculty of Engineering (LTH) at Lund University. We weren't satisfied with simply finding out how the pupils felt, but also gathered biological evidence in the form of cortisol measurements. The results showed that the pupils in the classrooms which were lit with a higher proportion of ambient light, i.e. more light on the walls and ceiling, actually performed better and got higher marks. In a room which is perceived as being bright, without dazzling us, we become more productive. Even if productivity shouldn't be confused with creativity, the link is obvious. In a room with poor lighting, which is inadequate or dazzling, the effect is the opposite. We become tired, unproductive and – in the worst case scenario – aggressive."

# Is the basis of this ambient light?

"Yes! The fact that we become more alert and happier when there is light around us goes without saying for most people. The best thing for us is the natural light which is, in fact, a type of ambient light. The 'light norm' of humans is the celestial sphere, which extends from the ground towards the horizon and then upwards. Yet we rarely look directly at the sun because it is unpleasant to do so and





we are dazzled by the glare. Instead, we absorb the light which arrives vertically, from the side and just above us. By planning the artificial light in an office in a similar way – allowing it to bounce off indirectly from walls and ceilings – we can achieve the same effect.

# Why are LEDs so good in the office?

LED technology has undergone incredible developments in terms of not only light quality, anti-glare and efficiency but also price. Now the technology has matured we wanted to find out what people think of LEDs compared to a traditional T5 light source. In our latest study with the Faculty of Engineering (LTH), at Lund University, we built two identical office rooms which were both equipped with direct light above the workstation and supplementary ambient light on the walls. In one of the rooms we used LED lighting and in the other T5. The result was very clear: the LED light was perceived as being brighter and more pleasant with ambient lighting of 100 cd/m2, a feeling which persisted right up to 300 cd/m2. Consequently, when using LED lighting in an office you achieve a brighter and better working environment while at the same time reducing your energy consumption. You could say that you get creativity for free!

# Are LEDs creative in other ways?

"In addition to having a better lit environment, which is perceived as being more attractive, LED technology provides more opportunities for variation and style. You can alter the light's colour temperature within the white field, known as 'tunable white', over the course of the day, depending on the daylight outside or according to your own daily routine. With LEDs it's possible to use an 'equaliser' for the light, just like with music, following the same principle that every office and space can have their own, individual tone. Another clear advantage is that you can work with coloured light and create accents and effects in the office design and also project different types of images. With LEDs the light really does become an integrated part of the interior design."



# How to make a creative lighting environment

There are many ways of coming up with creative lighting solutions using LED luminaires; from variations in light level and temperature to personal solutions based on shape and colour.

### Go beyond the standard.

All EU countries have a common standard for lighting of workplaces, EN 12464-1. For paper based activities the desk must be lit to 500lux, or 300 lux when working with monitors. The ambient light, that is the vertical light on walls and indirect light on the ceiling, must be at least 50 lux and 30 lux respectively. We don't think that's enough! Our research shows that a creative lit space requires an average illuminance of 250 lux both on the walls and in the ceiling. By opting for LED products you can give your staff more light without using more energy.

### Choose the right light.

It goes without saying that the amount of light is crucial for visual tasks and perception. However, it is by choosing the right type of light and varying it in the right way that the working environment becomes positive and inviting. Avoid having too much light directly at eye level, as it's easy to suffer from glare. The eye is more receptive to ambient light which enters from the sides than to light which is projected directly towards the eye.

#### Vary the light.

A room that enhances creativity must be well lit. Light the walls and ceiling as well as the work surface. This can be done in several ways, but an effective solution is combining a suspended luminaire, with a certain amount of indirect light, supplemented by wallwashers or downlights located along the wall. Don't put the luminaires in the traditional location in the middle of the room and try to avoid harsh shadows. LED technology has opened up the possibility to vary the intensity and colour of the light, in terms of both the colour temperature of white light or adding more drama with colour.

#### Work with textures.

What are you lighting? A wall with texture and interplay between light and shadow can be more interesting than a smooth wall. Statement walls with colour, wallpaper or pictures can also be accentuated using lighting. Research shows that motifs taken from nature, with plants and greenery, are perceived as being more positive and enhance the room's creative atmosphere.





# How to light the entrance

You never get a second chance to make a first impression. No matter how clichéd that may sound, it's still true. In the entrance, with adjoining reception, we have concentrated on creating a dynamic area where people first enter. Just inside the door we have 'painted with light' to create a decorative form which provides extra light at the entrance and emphasises the shape of the room. The luminaire (Freedom) is based on a modular concept which can be assembled in various configurations. In this application we have opted for a direct/indirect version which provides light both towards the floor and onto the ceiling, creating a sense of space. In the centre of the room we have suspended a cluster of large, round-beam luminaires (Tibi) which maximise the generous ceiling height to provide a general lighting solution. By combining different sizes close to the lounge furniture you can enhance the aesthetics within the space with a contemporary feel. The walls, with paintings and pieces of artwork, are accentuated with recessed

wallwashers (Pleiad G3) that provide comfortable ambient lighting and help define the room. In the reception area itself, it's essential there is a good working light and this is provided by circular, suspended luminaires (Appareo Circular), with a combination of direct and indirect light.

Within this building, based upon a converted industrial property, we have added a communication area between the entrance and the office. One of the walls is completely dominated by a generously proportioned window section, which lets in some welcome daylight. The round beam ceiling luminaire (Tibi) takes its design from the suspended luminaire in the reception, providing a consistent visual experience. A good direct light is complemented by indirect light towards the ceiling, further enhanced by the use of daylight control and presence sensors to optimise function and energy-saving.

# How to light communication areas

Further into the building the corridor consistent a long glass partition with meeting rooms and offices. The lighting in this area must not dazzle those working inside of the rooms, yet still provide an optimal journey through the space. Since we can only work with the ceiling and the wall opposite, we have opted for a corner-mounted luminaire (Vidi) that provides attractive incident light in the ceiling and on the wall. The art on the walls is accentuated with recessed spotlights (Easy LED). By focusing on both the ceiling and the walls it brings life to a space which may have been perceived as gloomy and boring.



# How to light the meeting room

In the small meeting room we have created an intimate and varied atmosphere that emphasises the relaxed design style. The suspended luminaire (Appareo Circular) links the furnishing of the seating group together and provides essential working light and a certain amount of indirect light up towards the ceiling. Wallwashers (Pleiad G3) along both of the walls makes for a creative ambient light which helps define the space. The decorative, tree-shaped coat stands can be accentuated by spotlights (Easy LED) to become a functional piece of art in the room. Natural shapes and greenery have a positive influence on creativity – even if the plants aren't alive...







# How to light the conference room

In the larger conference room, we have opted for an alternative to the more traditional suspended luminaire over the conference table. Two recessed luminaires (Notor) mounted in parallel above the table provide a good working light and form two distinct 'tracks' in the ceiling. One of the short walls is accentuated by two wallwashers (Pleiad G3). This helps create comfortable ambient lighting on the wall, making the room more pleasant to be in and raising levels of concentration. All lighting in the conference room has been synchronised with the IT system to ensure automatic regulation of the light levels for video and projector presentations.

# How to light an individual office

Equipped with an individual workstation, visitor chair and a nice sofa, this room is fully furnished. It feels like it is a separate space, but still avoids exclusion thanks to the glass partition. The workstation lighting (Appareo Rectangular) over the desk provides a good general light, as well as indirect light up towards the ceiling. Appareo is available in rectangular and circular models; using a luminaire family with several variants is a simple way to maintain the style yet still create variation in the office. Three wallwashers (Pleiad G3) provide comfortable ambient lighting for the opposite wall and accentuate the sofa. The treeshaped coat stands, this time in a different colour, can also be highlighted by spotlights (Easy LED). Appareo is available in rectangular and circular models; using a luminaire family with several variants is a simple way to maintain the style yet still create variation in the office.



# How to light a big office

A large office with space for lots of workstations necessitates flexibility. To accommodate this, we have lit this office with a recessed luminaire (Multilume Flat) which provides the required general light without needing to be re-positioned should the layout change. Due to the ceiling level being 2.70 metres, it's important to select a luminaire with a powerful light distribution. To offer employees a greater control of their lit environment we have supplemented the general light with a workstation lighting solution (G5) at a local level. Installing wallwashers (Pleiad G3) across the short walls not only provides essential ambient light but also helps bring the designer's concept to life. The second half of the office has been designed to function as an area for informal meetings and as a social hub. The furniture creates several rooms within the room. A slightly higher ceiling height, 3.40 metres, dictates the choice of suspended luminaires (Appareo Circular) that provide both direct and indirect light. One of the room's short walls is accentuated by wallwashers (Pleiad G3) while the kitchenette, by the other short wall, has been given a functional and decorative solution with a suspended luminaire (Gaudi). Wallwashers (Pleiad G3) continues the theme of ambient lighting in other parts of this office. The result is a large and well-lit room with a complete lighting plan that can cope with changes.





# Appareo

It's magic. The luminaire is lit, but where is the light source? Appareo is a suspended luminaire that drives LED technology to the extreme limits of design -rectangular or circular- without compromising on the requirements for efficiency and ergonomics. Choose from two designs – rectangular or circular.

In Appareo we have successfully combined the need for work and ambient lighting in a single luminaire, thanks to new and exciting technology.

Appareo rectangular is available in black or white with 4000 K colour temperature and a luminous flux of 5210 lumen (efficacy 80 lm/W). Colour quality MacAdam 4 SDCM. DALI or e-Sense ActiLume as standard.

Appareo circular is available in black or white with 4000 K colour temperature and a luminous flux of 5000 lumen (efficacy 83 lm/W). Colour quality MacAdam 4 SDCM. DALI as standard.





Luminaire System, W	Colour temp., K	Lightdistr.	Luminous flux, Im	Efficiency, Im/W	kg	White	Black
Rectangular		0			0		
65	4000	40/60	5210	80	4.7	11070-* 🗖	11071-* 🗖
Circular							
54	4000	40/60	4966	92	4.6	53751-402	53752-402

\* Luminaire must be completed with desired function. See table with suffix codes. For current information on output and luminous flux, please refer to our website.

## LED information

Colour temp, (CCT)	Ra (CRI)	Life	Colour quality
4000 K	≥ 80	L <sub>70</sub> 50.000 h	MacAdam 4 SDCM

Sι	iffix code	
	-402 DALI	

-442 e-Sense ActiLume single luminaire

Add suffix code to the end of the luminaire part number to indicate required function. Only one suffix can be added.

# Multilume Flat



More energy efficient than T5 with equal lighting ergonomics! With Multilume Flat, LED technology takes the step from the downlights into a viable solution for complete general lighting. As part of a holistic approach, Multilume Flat has been designed to address the tight time requirements and restricted ceiling heights in many construction projects. Perfect for demanding lighting tasks in office environments.

Multilume Flat is available in three different sizes; 600 × 600, 1200 × 300 and 300 × 300 and 3000 or 4000 K colour temperature. Choose between an Opal or Delta louvre. Luminous flux up to 4481 lumen (efficacy 100 lm/W). Colour quality MacAdam 4 SDCM. Lighting control via DALI.





Luminaire								
LED-module, Im, W	Length	Width	Colour temp., K	Luminous flux, l	m Efficiency, Im/W	kg		
Visible T-bars (VTB)							Delta	Opal
1000, 15	300	300	3000			2.4	22405 🗖	22402 🗖
1000, 15	300	300	4000			2.4	22393 🗖	22390 🗖
4000, 45	600	600	3000			6.5	22407 🛄	22404 🗖
4000, 45	600	600	4000	4278*/4481**	96*/100**	6.5	22395 🗖	22392 🗖
4000, 45	1200	300	3000			6.2	22406 🗖	22403 🗖
4000, 45	1200	300	4000			6.2	22394 🗌	22391 🗖
Concealed T-bars (HB)	/D-edge, syn	nmetrical a	ttachment of ceiling	g boards				
4000, 45	600	600	3000			6.5	22409 🗖	22408 🗖
4000, 45	600	600	4000	4278*/4481**	96*/100**	6.5	22397 🗖	22396 🗖
* 0 // ** 0 /								

\* Delta. \*\* Opal.

For current information on output and luminous flux, please refer to our website.

#### LED information

Colour temp. (CCT)	Ra (CRI)	Life	Colour quality
3000 K	≥ 80	L <sub>70</sub> 50.000 h	MacAdam 4 SDCM
4000 K	≥ 80	L <sub>70</sub> 50.000 h	MacAdam 4 SDCM

Suffix code

-03	Connection cable with earthed plug, RKK 3×0.75 mm², L=2.5 m.
-402	2 DALI

Add suffix code to the end of the luminaire part number to indicate required function. Only one suffix can be added.

# Notor LED



Notors slim, minimalist profile has now been up-dated with an exciting modern twist. The original compact design has been equipped with LEDs to achieve the possibilities and demands for lines of light within a room. Surface mounted, recessed or suspended, each version is available with a range of connectors, with the scope to create various patterns and shapes with light.

Notor LED is available with 4000 K colour temperature and a luminous flux of 1800 lumen per 1200 mm (efficacy 82 lm/W). Colour quality MacAdam 4 SDCM.

The recessed variant is also available with 3000 K. Lighting control via DALI.







#### Notor LED, Pendant/Surface

NOLOI LED, PEN	uant/Sunace					
System, W	Colour temp., K	Luminous flux, Im	Efficiency, Im/W	kg	Start	Continuous
Straight lumina	ire					
11	4000	900	82	2.0	26370 🗖	26373 🗖
22	4000	1800	82	3.0	26371 🗖	26374 🗖
44	4000	3600	82	6.0	26372 🗖	26375 🗖
Illuminated cor	ner					
Right						
22	4000	1800	82	3.0	26392* 🗖	26390 🗖
Left						
22	4000	1800	82	3.0	26393* 🗖	26391 🗖
* - 1 6						

\* Only for suspension and in closed systems.

For current information on output and luminous flux, please refer to our website.

#### Notor recessed LED, Opal flush

LED-module, Im, W	Colour temp., K	Length	Luminous flux, Im	Efficiency, Im/W	kg	Single	Start	Continuous
Straight luminaire								
1250, 9.8	3000	600			1.9	22609* 🗖	22615 🔲	22621 🔲
2500, 19.6	3000	1200			3.7	22610 🗖	22616 🔲	22622 🔲
5000, 39.2	3000	2400			7.4	22611 📃	22617 🔲	22623 🔲
1250, 9.8	4000	600	874	73	1.9	22612* 🗖	22618 🔲	22624 🔲
2500, 19.6	4000	1200	1798	82	3.7	22613 🗖	22619 🗖	22625 🔲
5000, 39.2	4000	2400	3596	82	7.4	22614 📃	22620 🗖	22626 🔲
Illuminated corner		Module						
2500, 19.6	3000	600×600			3.5			22632 🔲
2500, 19.6	4000	600×600	1798	82	3.5			22633 🗖

\* Not possible to be mounted as single luminaire in ceilings with visible T-bars (VTB).

For current information on output and luminous flux, please refer to our website.

#### Notor recessed LED, Opal dropped

LED-module, Im, W	Colour temp., K	Length	Luminous flux, Im	Efficiency, Im/W	kg	Start	Single/Cont./End
Straight luminaire							
1250, 9.8	3000	600			1.9	22963 📃	22969* 🗖
2500, 19.6	3000	1200			3.7	22964 📃	22970 🗖
5000, 39.2	3000	2400			7.4	22965 📃	22971 🔲
1250, 9.8	4000	600	906	75	1.9	22966 📃	22972* 🗖
2500, 19.6	4000	1200	1856	84	3.7	22967 📃	22973 🛄
5000, 39.2	4000	2400	3712	84	7.4	22968 📃	22974 🗖
Illuminated corner		Module					Jono
2500, 19.6	3000	600×600			3.5		22630 🗌
2500, 19.6	4000	600×600	1856	84	3.5		22631 🗖

\* Not possible to be mounted as single luminaire in ceilings with visible T-bars (VTB). For current information on output and luminous flux, please refer to our website.

#### LED information

Colour temp, (CCT)	Ra (CRI)	Life	Colour quality
3000 K	≥ 85	L <sub>70</sub> 50.000 h	MacAdam 4 SDCM
4000 K	≥ 80*/≥ 85**	L <sub>70</sub> 50.000 h	MacAdam 4 SDCM
* Pendant/Surface. *	** Recessed.		

# Suffix code

Add suffix code to the end of the luminaire part number to indicate required function.

# Tibi

Tibi produces a crisp, radiant light, floating in the space with its distinct form. Its spherical shape is maximised with advanced LED technology to create a stunning light experience. An entire luminaire family consisting of pendant, ceiling and wall luminaires makes it possible to plan complete environments in a varied way that also takes ambient lighting into account. Its distinctive shape is inspired by a Scandinavian design classic: Piet Hein's super ellipse.

Tibi Pendant is available with 4000 K colour temperature in three sizes and a luminous flux between 1653 lumen ( $\emptyset$  400, 65 lm/W), 5414 lumen ( $\emptyset$  600, 83 lm/W) and 6328 lumen ( $\emptyset$  800, 87 lm/W). Colour quality MacAdam 4 SDCM. Tibi Pendant is supplied with DALI dimming as standard.

Tibi Ceiling/Wall is available with 4000 K colour temperature in two sizes and a luminous flux between 1708 lumen (Ø 400, 63 lm/W) and 3744 lumen (Ø 600, 76 lm/W). Colour quality MacAdam 4 SDCM. e-Sense Detect or e-Sense Move are available for lighting control.





Luminaire							
System, W	Colour temp., K	Ø	Luminous flux, Im	Efficiency	, lm/W	Brushed aluminium	Black
Pendant							
25	4000	400	1653	65	3.3	54770-402	54775-402
65	4000	600	5414	83	5.7	54771-402	54776-402
72	4000	800	6328	87	9.0	54772-402	54777-402
Ceiling/Wall							
27	4000	400	1708	63	3.0	56770-402* 🗖	56775-402* 🗖
49	4000	600	3744	76	6.0	56771-402* 🗖	56776-402* 📃

\* Other suffix code replaces -402.

For current information on output and luminous flux, please refer to our website.

#### LED information

Colour temp, (CCT)	Ra (CRI)	Life	Colour quality
4000 к	> 80	1 70 50.000 h	MacAdam 4 SDCM
4000 K	2 00	L <sub>70</sub> 30.000 H	MucAuum 4 SDCM

Suffix code

-439 e-Sense Detect absence dampening
-440 e-Sense Move absence dampening

Add suffix code to the end of the luminaire part number to indicate required function. Only one suffix can be added.



# Pleiad G3



Pleiad G3 is a complete LED lighting concept. Focusing on light quality, ergonomics and energy efficiency, G3 has now been expanded to include a surface mounted version. Its innovative reflector technology harnesses the efficiency of the LED light source without affecting the perception and quality of the light. Longevity and performance is complimented with a time conscious, tool-free assembly to offer a truly economical solution with a realistic payback time.

Pleiad G3 is available in recessed or surface mounted installation with 3000 or 4000 K colour temperature or tunable white. The luminous flux ranges from 900 lumen up to 1580 lumen (efficacy approx. 60 lm/W). Matt or specular reflector. Colour quality MacAdam 3 SDCM. Light control via TouchDIM/DALI.





#### Pleiad SLD G3, recessed

Fieldu SLD US, IECES	seu					
LED module, Im, W	Colour temp, K	Luminous flux, Im	Efficiency, Im/W	Reflector		
1100, 12	3000	890	60	Specular	77950	
1100, 12	3000	845	57	Matt	77951	
1100, 11	4000	850	57	Specular	77952	
1100, 11	4000	811	55	Matt	77953	
2000, 24	3000	1454	57	Specular	77955	
2000, 24	3000	1392	56	Matt	77956	
2000, 22	4000	1579	62	Specular	77957	
2000, 22	4000	1558	61	Matt	77958	
2000, 30	2700-6500			Specular	77975	
2000, 30	2700-6500			Matt	77976	
3000, 39	3000	2162	54	Specular	77960	
3000, 39	3000	2156	54	Matt	77961	
3000, 35	4000	2198	59	Specular	77962	
3000, 35	4000	2172	59	Matt	77963	
E 1: C 1:						

For current information on output and luminous flux, please refer to our website.

#### Pleiad Compact G3, recessed

LED module, Im, W	Colour temp, K	Luminous flux, Im	Efficiency, Im/W	Reflector		
1100, 12	3000	868	59	Specular	77930	
1100, 12	3000	852	58	Matt	77931	
1100, 11	4000	834	56	Specular	77932	
1100, 11	4000	818	55	Matt	77933	
2000, 24	3000	1499	59	Specular	77935	
2000, 24	3000	1466	57	Matt	77936	
2000, 22	4000	1583	62	Specular	77937	
2000, 22	4000	1569	62	Matt	77938	

For current information on output and luminous flux, please refer to our website.

#### Pleiad Compact Basic G3, recessed

LED module, Im, W	Colour temp, K	Luminous flux, Im	Efficiency, Im/W	Reflector		
1100, 20	3000	715	37	Specular	77880	•
1100, 20	3000	705	36	Matt	77881	•
1100, 18	4000	740	38	Specular	77882	•
1100, 18	4000	725	37	Matt	77883	•

For current information on output and luminous flux, please refer to our website.

#### Pleiad Comfort G3, surface mounted

LED module, Im, W	Colour temp, K	Luminous flux, Im	Efficiency, lm/W	Reflector		
1100, 12	3000	890	60	Specular	72460	
1100, 12	3000	845	57	Matt	72461	
1100, 11	4000	850	57	Specular	72462	
1100, 11	4000	811	55	Matt	72463	
2000, 24	3000	1454	57	Specular	72464	
2000, 24	3000	1392	56	Matt	72465	
2000, 22	4000	1579	62	Specular	72466	
2000, 22	4000	1558	61	Matt	72467	

For current information on output and luminous flux, please refer to our website.

#### Pleiad Comfort Basic G3, surface mounted

LED module, Im, W	Colour temp, K	Reflector	
1100, 12	3000	Specular	72470
1100, 12	3000	Matt	72471
1100, 11	4000	Specular	72472
1100, 11	4000	Matt	72473

For current information on output and luminous flux, please refer to our website.

LED information (P	LED information (Pleiad Comfort G3, Pleiad Compact G3)						
Colour temp, (CCT)	Ra (CRI)	Life	Colour quality				
3000 K	≥ 80	L <sub>70</sub> 50.000 h	MacAdam 3 SDCM				
4000 K	≥ 80	L <sub>70</sub> 50.000 h	MacAdam 3 SDCM				

#### LED information (Pleiad Comfort Basic G3, Pleiad Compact Basic G3)

Colour temp, (CCT)	Ra (CRI)	Life	Colour quality
3000 K	≥ 80	L <sub>70</sub> 50.000 h	MacAdam 5 SDCM
4000 K	≥ 80	L <sub>70</sub> 50.000 h	MacAdam 5 SDCM

## Suffix code

-365 TouchDIM/DALI

● -03 Liitosjohto ja maadoitettu pistotulppa RKK 3×0,75 mm, P=2,5 m

• -111 1 kpl Wieland-pistoliitin GST18i3 (3-napainen)

Add suffix code to the end of the luminaire part number to indicate required function. Only one suffix can be added.

# Pleiad Wallwasher G3



Pleiad Wallwasher G3 is the optimum solution for creative lighting environments which focus on a greater proportion of ambient lighting. Powerful and well shielded, the luminaire sends a cascade of light over the wall – while still maintaining the energy efficiency. The light's colour temperature can be adjusted from cold to warm and it's even possible to opt for RGB technology to create effects with coloured light.

Pleiad Wallwasher G3 is available with 3000 or 4000 K colour temperature or tunable white. Luminous flux up to 1572 lumen (efficacy approx. 54 lm/W). Colour quality MacAdam 3 SDCM. Light control via TouchDIM/DALI.





Luminaire				
LED module, Im, W	Colour temp, K	Reflector		
1100, 12	3000	Kirkas	77990	
1100, 11	4000	Kirkas	77992	
2000, 24	3000	Kirkas	77991	
2000, 22	4000	Kirkas	77993	
2000, 30	2700–6500	Kirkas	77994	

For current information on output and luminous flux, please refer to our website.

#### LED information

Colour temp, (CCT)	Ra (CRI)	Life	Colour quality
3000 K	≥ 80	L <sub>70</sub> 50.000 h	MacAdam 3 SDCM
4000 K	≥ 80	L <sub>70</sub> 50.000 h	MacAdam 3 SDCM

## Suffix code

**365** TouchDIM/DALI Add suffix code to the end of the luminaire part number to indicate required function.



G5 is an LED-based desk luminaire that provides supplementary working light and increases the employees' ability to influence their own lit environment. A discreet and stylish luminaire housing enables G5 to blend into many different types of environment and design themes. The user-friendly desk clamp makes it easy to move the luminaire when required.



System, W	Colour temp, K	Luminous flux, Im	Efficiency, Im/W	
8	3000	247	29	62005

LED information			
Colour temp, (CCT)	Ra (CRI)	Life	Colour quality
3000 K	≥ 80	L <sub>70</sub> 50.000 h	MacAdam 5 SDCM

# Easy LED



A discreet and energy-efficient alternative to small, recessed halogen downlights. Easy LED has a lifespan of 50,000 hours and is three times as energy-efficient as a traditional halogen spot, yet the sparkling light and exclusive feel are just the same. An attractive and smart solution for hotels, offices and other representative environments which demand longevity.

Easy LED is available in two different models; fixed or tiltable. Both are available with various distribution angles, 3000 or 4000 K colour temperature and luminous flux from 377 up to 600 lumen (efficacy 44–71 lm/W). Colour quality MacAdam 4 SDCM. Lighting control via DALI/DSI/switchDIM or 1–10 V.



Luminaire							
LED-module, Im, W	Colour temp., K	Luminous flux, Im	Efficiency, Im/W	kg	Turn/Tilt	White	Grey
Distribution angle 24°							
500, 7	3000	493	57	0.3	0°/0°	76840	76844
500, 7	4000	601	71	0.3	0°/0°	76841	76845
500, 7	3000	493	57	0.4	355°/30°	76890	76894
500, 7	4000	601	71	0.4	355°/30°	76891	76895
Distribution angle 38°							
500, 7	3000	377	44	0.3	0°/0°	76922	76924
500, 7	4000	449	53	0.3	0°/0°	76923	76925
500, 7	3000	377	44	0.4	355°/30°	76926	76928
500, 7	4000	449	53	0.4	355°/30°	76927	76929
Distribution angle 54°							
500, 7	3000	452	53	0.3	0°/0°	76842	76846
500, 7	4000	533	63	0.3	0°/0°	76843	76847
500, 7	3000	452	53	0.4	355°/30°	76892	76896
500, 7	4000	533	63	0.4	355°/30°	76893	76897

For current information on output and luminous flux, please refer to our website.

### LED information

Ra (CRI)	Life	Colour quality
≥ 80	L <sub>70</sub> 50.000 h	MacAdam 4 SDCM
≥ 80	L <sub>70</sub> 50.000 h	MacAdam 4 SDCM
		70

Accessories	
Assembly plate	41982
LED-driver 9 W/350 mA dimmable via 1–10 V	98178
LED-driver 15 W/350 mA dimmable via	
DALI/DSI/switchDIM	99003

# Gaudi

Gaudi is inspired by classical architectural principles; a sculptural form that defines both the room and the direction of the light. New technology meets timeless elegance as the traditional suspended luminaire has been brought right up-to-date, using the latest evolution of LEDs. Developed by the architect trio of Claesson, Koivisto and Rune, Gaudi is available in one linear and one circular design.

Gaudi Linear LED is available with 4000 K colour temperature. Luminous flux of 1980 lumen (efficacy 50 lm/W). Colour quality MacAdam 3.5 SDCM. DALI dimming as standard.

Gaudi Circular is available with 4000 K colour temperature. Luminous flux of 350 lumen (efficacy 20 lm/W). Colour quality MacAdam 3 SDCM. 1–10 V dimming as standard.





System, W	Colour temp., K	Luminous flux, Im	Efficiency, Im/W	kg	ø	Length	White	Black
Straight								
39	4000	1980	50	2.2		1500	54609	54610
Circular								
18	4000	350	20	2.6	700		54611	54612

#### LED information

Colour temp. (CCT)	Ra (CRI)	Life	Colour quality
4000 K	≥ 80	L <sub>70</sub> 50.000 h	MacAdam 3 SDCM

# Freedom



Freedom is a unique concept which takes flexibility onto the next level. With the help of two modules, one straight and one curved, the luminaire can be built up to follow the shape of the room or a creative concept. But Freedom is not just decorative! The LED modules, in combination with advanced reflector technology, provide a superb general lighting solution.

Freedom is available in three different black anodised models. Pendant with uplight and downlight, ceiling mounted with just downlight and a variant for wall mounting.

4000 K colour temperature and a luminous flux of approx. 1216 lumen per module. Colour quality MacAdam 5 SDCM. Light control via DALI or 1–10 V.



Lumina	aire			
System	i, W	Colour temp.,	K kg	
Pendar	nt/Ceiling			
40	Straight, direct/indirect, pendant	4000	1.5	16901
32	Straight, direct light, pendant, ceiling	4000	1.4	16902
40	Curved, direct/indirect, pendant	4000	1.6	16903
32	Curved, direct light, pendant, ceiling	4000	1.5	16904
Wall				
32	Straight luminaire	4000	1.4	16910
32	Curved luminaire	4000	1.5	16911
For curi	rent information on output and luminous flux, please refer t	o our website.		

LED information			
Colour temp. (CCT)	Ra (CRI)	Life	Colour quality
4000 K	≥ 80	L <sub>70</sub> 50.000 h	MacAdam 5 SDCM

#### Accessories

LED ballasts 300 W/24 V fitted in the installation box.

Max. 6 luminaires.	98011
LED ballasts 120 W/24 V. Max. 3 luminaires.	98198
LED PWM dimmer 120 W/24 V D 1–10 V	99110
LED PWM dimmer 120 W/24 V D DALI	99111
2 x wire and wire bracket for pendant installation	94021
2×end-caps	94022
Continuous coupler bracket, light trap, cable for continuous	
installation	94023
4 m power cable connection 2×conductors	94024
4 m power cable connection 4×conductors	94025
Please note: luminaires for dimmina require a ballast and dimmi	namodulo

Please note; luminaires for dimming require a ballast and dimming module, both ordered separately- i.e. 98198+99110 or 98198+99111.



Fagerhult develops, manufactures and markets professional lighting systems for public environments such as offices, schools, industries and hospitals. Our operations are run with a constant focus on design, function, flexibility and energy saving solutions.

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UNITED KINGDOM Fagerhult Lighting Ltd 50 Southwark Street London, SE1 1UN Tel +44 (0) 207 403 4123 Fax +44 (0) 207 378 0906 light@fagerhult.co.uk www.fagerhult.co.uk

IRELAND Project Lighting Ltd Unit F1, Calmont Park Ballymount Dublin 12 Tel +353 1 426 0200 Fax +353 1 429 9606 info@projectlighting.com www.projectlighting.com

UNITED ARAB EMIRATES Fagerhult Lighting P.O Box 126287 Dubai Tel +971 0 4 3297120 Fax +971 0 4 3297130 info@fagerhult.ae www.fagerhult.ae

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