

PERFECTLY CONTROLLED **LED LIGHTING**

EdgeLED™ | **A1**



 **EDGELED**®
FernHoward

THE NEW DAWN IN LED LIGHTING

There has been LED lighting before, but never like this. Highly energy efficient yet with a pleasing and uniform level of light, we deliver the advantages LED has always promised.

It's taken Fern-Howard's extensive commercial lighting experience, combined with ground-breaking new EdgeLED™ technology - and it means you no longer have to choose between energy efficient lighting, effective lighting and good looking luminaires.



Light
there where you need it



LIGHT THERE WHERE YOU NEED IT

More light - precisely where you need it

EdgeLED™ technology places LEDs around the edge of a light guide - a highly engineered optical device containing thousands of micro lenses that precisely control the density of light travelling through the guide.

The EdgeLED™ A1 takes this a step further. Using ray angle control, the light is directed precisely to where it is required - in a walkway only the walkway is lit, no light spills onto opposite walls, none is lost to the sky.

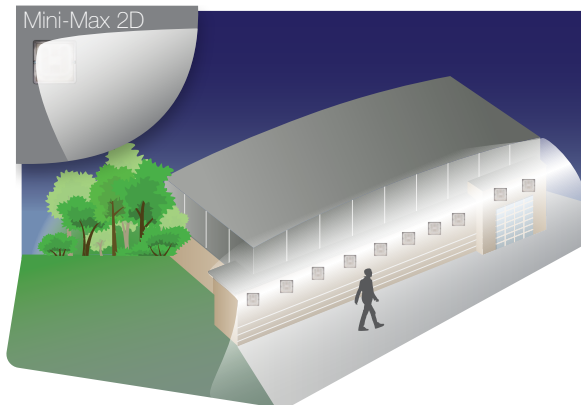
This method guarantees maximum efficiency and - with fewer fixtures required to light the same area - installation and operating costs are reduced.

Zero light loss on unwanted areas guarantees maximum application efficiency

It would take 10 x 2D luminaires to light an average 10 x 2m corridor or walkway, to 100 Lux – yet only 2 EdgeLED™ A1 luminaires can achieve the same result!

Mini-Max 2D

28W 2D HF (Opal Diffuser)
32W System Power Consumption per Luminaire

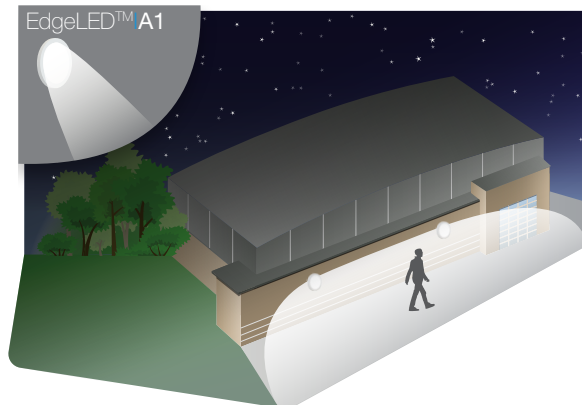


10 Luminaires required

Annual Energy Consumption = 2,803 kWh
Annual CO² Emission = 1,318 kg

NEW EdgeLED™ A1

1900 Lumen EdgeLED™ A1
(with Rambus patented MicroLens® technology)
25W System Power Consumption per Luminaire



2 Luminaires required

Annual Energy Consumption = 420 kWh
Annual CO² Emission = 198 kg



This highly energy efficient exterior wall luminaire **distributes light exactly where it is needed** with a combination of high optical efficiency and precise ray angle controlled output.

Rambus' patented MicroLens® technology creates pleasant and uniform light, whilst ray angle control directs light exactly to where it is required - light spillages and light pollution are avoided and spaces come to life; all with minimal energy consumption.

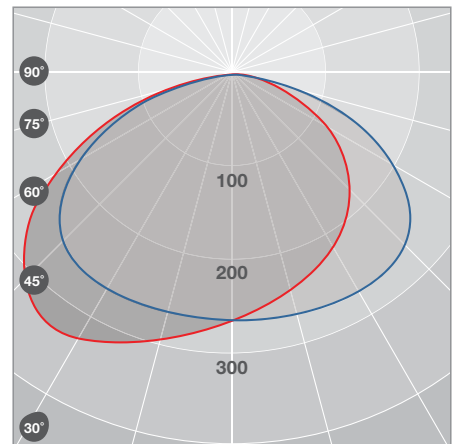
- Highly energy efficient EdgeLED™ optical system with a life span of 50,000 hours (L85)
- Fewer luminaires are required to light the same area, drastically reducing installation and operating costs
- Delivering exceptionally uniform and pleasant light
- IP65 – formed-in-place foam gasket protects against dust and water
- Base with integral high-efficiency driver
- Security screws are available
- Qualifying for ECA support
- Suitable for exterior and interior use



Wall mountable, the EdgeLED™ A1 has been designed specifically for areas where controlling illumination is paramount, such as walkways, external landing areas and corridors; anywhere that demands to be well lit, but where light pollution must be avoided.



EdgeLED™ A1		
Product Code:	EDGE-A1-110	EDGE-A1-190
Lumen Output (lm)	1,100	1,900
System Power Consumption (W)	13	25
Colour Temperature (K)	4,000	
CRI (Ra)	>83	
Life (L85 Hours)	50,000	
Efficacy (Lumens Per Circuit Watt)	85	76
Specification Options:		
3hr Emergency	✓	✓
Auto Test	✓	✓
Microwave Sensor	✓	✓
Photocell	✓	✓
DALI	✓	✓
Corridor Function	✓	✓
Dimming	✓	✓
Weight (kg)	2.0	
Dimensions (mm)	Ø 350 x 45	
Mounting Type	Wall	



cd/klm η = 100%

— C0 - C180

— C90 - C270

Full photometric .LDT files available online



Formed In Place Foam Gasket

Our system uses two chemically safe components which expand when combined to form a 'poured two-part gasket'. This has no joints, blends and fills any uneven surfaces, needs no additional fixing and requires no secondary sponge material to form a perfect seal.

Rambus
Lighting Technology

Clear Polycarbonate lens cover

Clip-on fascia in black, white or chrome

Slim 45mm profile

Robust Polycarbonate body



More luminaires from the EdgeLED™ Range



EdgeLED™ R3

Thinner, brighter and highly energy efficient, the new R3 produces the same exceptionally uniform and pleasant light common to all EdgeLED™ luminaires.

Rambus' patented MicroLens® optics achieve high optical efficiency through controlled light distribution; and because the maximum light is extracted, less energy is required.



Full photometric .LDT files available online

- Highly energy efficient EdgeLED™ optical system with a life span of 50,000 hours (L85)
- Reduced running and maintenance costs
- IP65 – formed-in-place foam gasket protects against dust and water
- Robust Polycarbonate body
- Base with integral high-efficiency driver
- Clip-on fascia in black, white or chrome
- Slim profile
- Wall or ceiling mountable
- Suitable for exterior or interior use
- Qualifying for ECA support

Elegant and stylish, the EdgeLED™ R3 is ideally suited for applications where aesthetics are as important as performance, in reception areas, hallways and staircases as well as commercial spaces.

EdgeLED™ R3					
Product Code:	EDGE-R3 -180HE	EDGE-R3 -180	EDGE-R3 -250HE	EDGE-R3 -250	EDGE-R3 -340
Lumen Output (Lumens)	1,800	1,800	2,500	2,500	3,400
System Power Consumption (W)	18	20	27	30	39
Efficacy (Lumens Per Circuit Watt)	100	90	93	83	88
Colour Temperature (K)	4,000	4,000	4,000	4,000	4,000
CRI (Ra)	>83	>83	>83	>83	>83
Life (L85 Hours)	50,000				
Specification Options:					
3hr Emergency	✓	✓	✓	✓	OUTDOOR USE ONLY
Auto Test	✓	✓	✓	✓	
Microwave Sensor	✓	✓	✓	✓	✓
Photocell	✓	✓	✓	✓	✓
DALI	✓	✓	✓	✓	✓
Corridor Function	✓	✓	✓	✓	✓
Dimming	✓	✓	✓	✓	✓
Weight (kg)	2.0				
Dimensions (mm)	Ø 350 x 45				
Mounting Type	Wall & Ceiling				



COMPLETELY CONTROLLABLE

All too often, LED products are disliked due to the intensity of light created by the very LED source that makes them so efficient – and most attempts at reducing this intensity have compromised their optical efficiency and light distribution by using opal diffusers - so increasing energy consumption.

The true advantages of LED are lost.

However, our new range of EdgeLED™ luminaires employs Rambus' patented MicroLens® technology combined with TruEdge™ technology. Here, the LEDs are arranged around the edge of a light guide, a highly engineered optical device containing thousands of micro lenses. It is these that precisely control the light from the light guide and channel it to exactly where it is needed.

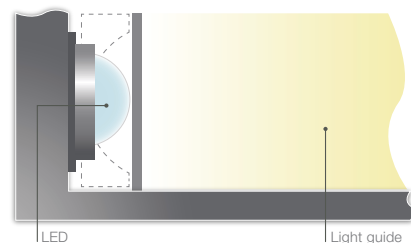
Although new to the lighting market, the technology itself is well proven and reliable and can already be found in TVs, tablets, and mobile phones.

TruEdge™ LED Coupling

TruEdge™ optimises the interface between LED and light guide

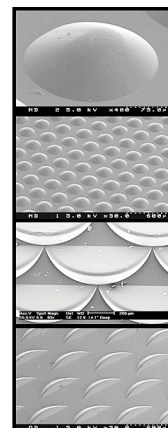
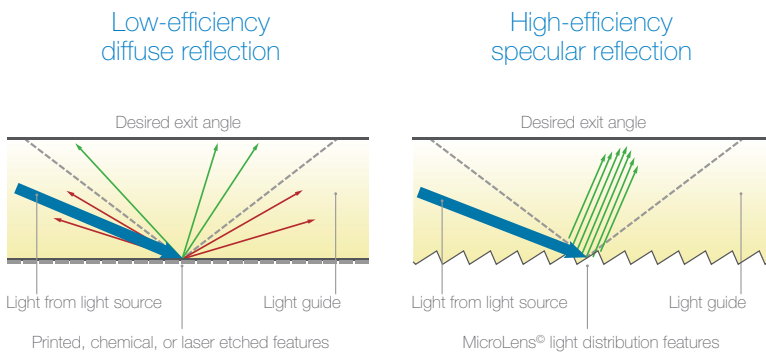
- Highly efficient
- Fewer LEDs means lower costs
- Thinner LEDs means lower costs
- Thinner form factors for more elegant designs

TruEdge™ LED-to-light guide interface



MicroLens® Optics

- MicroLens® optics give precise control of the uniformity, exit angle and spread of light
- Optimised delivery means fewer LEDs
- Optics can vary by depth, shape, density and location
- Perfect for a wide range of displays and lighting fixtures



Fern-Howard - market-leading manufacturers of energy efficient, high quality and reliable luminaires since 1987 - are known for their functional and stylish designs. A reputation among users, specifiers and installers that's enhanced by their new and ground breaking range of slim and elegant EdgeLED™ luminaires.

EdgeLED™ allows Fern-Howard to create luminaires that are both highly energy efficient and deliver a pleasing, uniform light, and underlines their ability to meet the needs of a rapidly changing market through innovation.

Over 500,000 fittings are manufactured annually at Fern-Howard's state-of-the-art UK factory - from vandal proof designs and self-testing and DALI control units to precise injection moulded light guides.



All products are Designed & Manufactured in the UK



Rambus Lighting Technology

Our EdgeLED™ products are the result of a unique collaboration with Rambus Inc. a US based technology leader in the field of LED Edge lighting application. All EdgeLED™ products are manufactured at our state-of-the-art injection moulding and assembly facility in the UK and are based on Rambus' impressive portfolio of LED Edge lighting patents covering lens design, LED coupling and Lens replication. This unique partnership brings our customers innovative products with market leading performance and appearance - designed and manufactured using world class, patented, technology.

Warranty

All Fern-Howard products are designed and manufactured to exacting standards for excellent performance, reliable operation and long life. This also enables Fern-Howard to offer market-leading warranty periods and give unrivalled support on the rare occasions when help is needed. Exact warranty terms vary by product; but can last up to seven years and may be managed by a simple, on-line, registration process. Full details can be found on our website.



FernHoward
Lighting

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