# OFISLED L I T P A





### OFISLED

OFISLED has been developed to provide office lighting utilising the latest high efficiency LED technology.OFISLED combines the specific requirements of modular office lighting with advantages and efficiency of LED Technology. Product compatibility is possible with all suspended ceiling types. To achieve this objective, OFiSLED production is carried out on the basis of the suspended ceiling brand/model to be used to ensure compatibility. The design of the OFiSLED range takes great care in regards to glare and screen reflections therefore Cat-1 and Cat-2 types of the fixture are available OFiSLED provides substantial savings in comparison to classic fluorescent and T5 fixtures due to the high efficiency, quality and durability of the devices LEDs utilised. With an OFiSLED lighting system and initial investment costs can easily be recouped through the savings achieved with this new system.



Body: Manufactured from 0,6 mm thick 6114, A1 Quality DKP sheet

C90 - C270

3000-4000-5000K

LED: High efficient Mid-Power LED

Diffuser: Micro Prismatic, 3 mm thick lens, 92% transparency

Reflector

Internal: Alanod Miro-Silver 27 AG aluminium reflector

External:

(Cat1): Alanod Miro-Silver 27/4270 AG Aluminium reflector Alanod Miro-Silver 20/2000 Aluminium reflector (Cat2):

Protection Class: IP20

#### Optional:

- Dali-Dim control compatibility
- ZigBee control compatibility

Code	Optical Category	Reflector Quantity	Led Quantity	System Power	System Light Flux	Color Temperature
LGS 30-120/1	(Cat-1), (Cat-2)	1	132	52W	4.100lm	3000-4000-5000K
LGS 60-60/3	ICat-1) ICat-2)	3	66	27\X/	2 340lm	3000-4000-5000K

35W

3.000lm

LGS 60-60/4 Luminous flux values are given on the basis of 5000K light colour.





(Cat-1), (Cat-2)



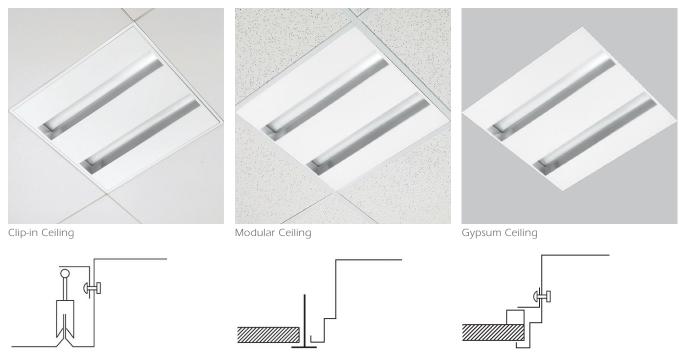


Single Reflector

Double Reflector Triple Reflector

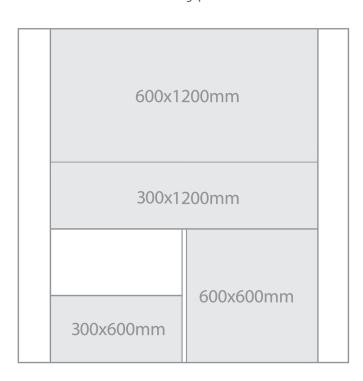
**Quad Reflector** 

## OFiSLED Ceiling Types

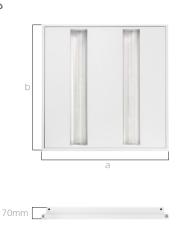


Fixture edge details are shaped according to the ceiling type.

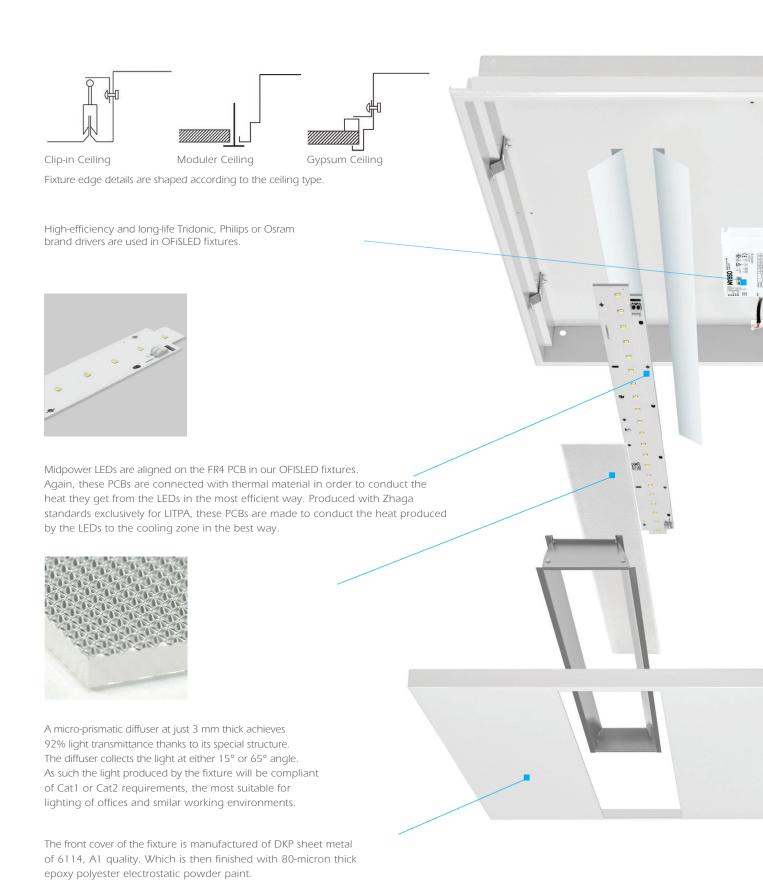
## OFiSLED Module Types

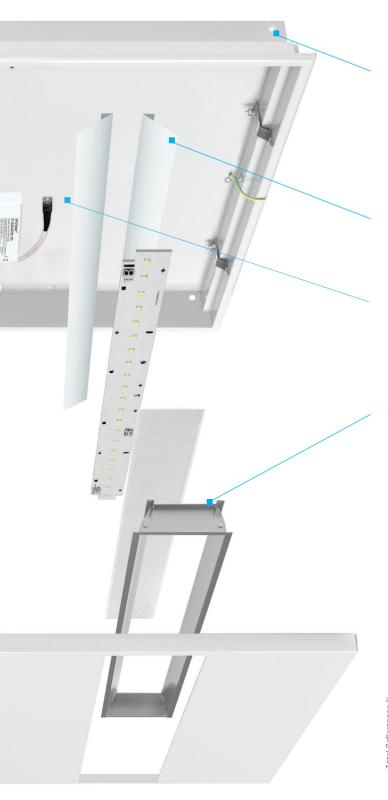


### **Dimensions**



	Code		b	Cut-out
Clip-in	LGS 30-60	299mm	599mm	
	LGS 60-60	599mm	599mm	
	LGS 30-120	299mm	1199mm	
	LGS 60-120	599mm	1199mm	
Modular	LGS 30-60	295mm	595mm	
	LGS 60-60	595mm	595mm	
	LGS 30-120	299mm	1199mm	
	LGS 60-120	595mm	1195mm	
Gypsum	LGS 30-60	295mm	595mm	280x 580mm
	LGS 60-60	595mm	595mm	580x 580mm
	LGS 30-120	299mm	1199mm	280x1180mm
	LGS 60-120	595mm	1195mm	580x1180mm





The OFiSLED main body is manufactured of DKP sheet metal of 6114, A1 quality and then finished with 80-micron thick epoxy polyester electrostatic powder paint.

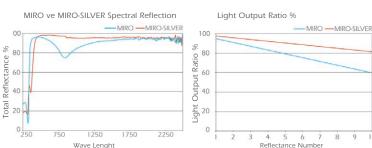
The Miro-Silver 27 AG reflector surface is developed by Alanod to improve efficiency index and has very high optical reflectivity. It focusses the light produced by LEDs into the micro-prismatic lens in a concentrated manner to ensure that the light produced by the LEDs is collected efficiently without diminishing fixture lumen output.

To protect from possible damage arising from high ambient temperatures or electrical supply issues, thermal protection is integrated to OFiSLED luminaires. Exceeding the specified ambient temperature results in temporary shut-down to avoid damage to the LEDs or LED drive unit.



Miro-Silver series reflectors enhanced by Alanod are special reflectors that have high reflectivity. For areas that require Cat-1 light distribution, Miro-Silver 27/4270AG aluminium reflectors are used whilst in the areas that need Cat-2 light distribution the performance is reached by using Miro-Silver 20/2000AG aluminium reflectors.





## LED & Driver



- Wide angle Mid-Power LEDs for homogeneous light distribution
- Balanced light throughout the life of the product



- ■In Zhaga standarts
- CE and ROHS compliance
- High thermal conductivity

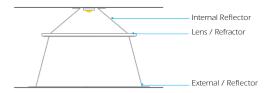
PCB cards are manufactured by LITPA in accordance with CE & ROHS directives. They produces in Zhaga standarts



- ■CE and ROHS compliant
- ENEC Marked
- High efficiency >92%
- High power factor Cos  $\phi$  >0,92
- ■Long service life

OFISLED utilises drivers manufactured by Osram and Tridonic according to CE and ROHS requirements. They are designed to provide 120 mA drive, which is the most efficient current for LED devices fitted.

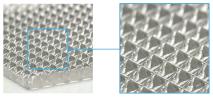
## **Optical System**



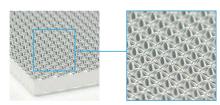
Two different reflectors have been used in OFiSLED fixtures; one internal and one external. On the inside, the bright aluminium reflector direct the light in a concentrated manner on the prismatic lens /refractor to prevent light from escaping. In Category-1 fixtures, 15-degree light refracting diffuser is used. In Category-2 fixtures, 65-degree light refracting diffuser is used. Following the light refractor, a second external aluminium reflector is used in order to better control the light and minimize the glare. This ensures that less than 200 candela of optical dispersion above 50 degrees is allowed to achieve Category-1 classified. In Category-2 fixtures the reflector is made of matter aluminium and the subject matter angle is increased to 65 degrees by means of a gradient on the reflector. The resultant fixture therefore achieves Category-2 standards.



#### Diffuser



Cat-1



Cat-2

Micro Prismatic Diffuser:

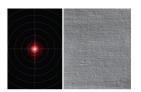
It is 3 mm thick with 92% light transmittance. Diffuser ensures uniform optical diffusion and at channels the light is at either 15° or 65° angle, based on the preference of the user.

#### Reflectors

Inner Reflector



Alanod Miro-Silver 27 aluminium reflector

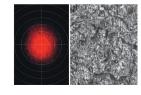


MIRO-SILVER 27/4270 AG

- Highgloss surface with low diffuseness < 6%, very low preferential direction
- Optical mirror effect
- High brightness



Miro-Silver 27/4270AG Aluminum Reflectors are used at places where CAT-1 optical diffusion is required while Alanod Miro-Silver 20/2000 AG aluminum reflectors are used where CAT-2 optical diffusion is necessary.

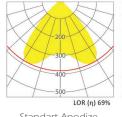


#### MIRO-SILVER 20/2000AG

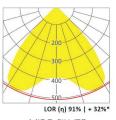
- Scattergloss surface with complete diffuse reflection value, without preferential direction
- Increasing brightness value at lower incident angles



#### Anodized Reflector Comparison



LOR (η) 83% | + 20%\* Standart Anodize MIRO



MIRO-SILVER

The left diagram shows the comparison of reflectors with the same shape and beam spread and shows the variation in aluminium types. Although the optical diffusion differences between the standard anodized aluminium (3506), Miro-Aluminium and Miro-Silver aluminium that are manufactured by Alanod show similar characteristics, there are major light efficiency differences. The improved efficiency of Miro-Silver is 32% higher than of standard anodising. For purposes of maximizing the efficiency of LITPA LED fixtures we use Miro-Silver aluminium.

Product	Quality	Total Reflection %	Diffuse Reflection%	Brightness along ISO 7668	Brightness across ISO 7668	Reflector material efficiency class
MIRO 27	4270 AG	≤98	≤6	93	93	A+
MIRO 20	2000 AG	≤97	≤97	18 - 20	23 - 33	A+

## LITPA

## LITPA LIGHTING COMPANY Office HQ:

Koza Plaza B Blok No:6/20 Teskstilkent - Esenler Istanbul / TURKEY

Tel: +90 212 438 09 58 Fax: +90 212 438 09 57

#### Manufacturing Facility:

Haraççı - Hadımköy Yolu Cad. NO:15 Haraççı Mah. Arnavutköy - Istanbul / TURKEY

Tel: +90 212 683 09 87 Fax: +90 212 683 09 92