

effiWide

High Brightness LED Lights by EFFILUX



EFFI-Wide is a range of illuminator for robotic and defect detection applications designed by EFFILUX. This uniform LED lighting is ideal for large area illumination in high speed application with matrix cameras. Its directive light avoids every problems of reflect and offers a high level of control for your applications.

EFFI-Wide is an extremely durable LED light source that offers a service life of up to 60,000 hours. It is available in different colors from UV to near infrared.

BENEFITS

High intensity lighting

Highly uniform illumination

High performance

- Less heat dissipation needed
- Less energy consumption

Flexible

- Full range of color from UV to near IR
- White color
- Wide dimming range of 0-100%
- More in specific

Easy installation

- No ocular hazards
- Few maintenance : very long lifetime

Useable in extreme conditions

- IP 68 Available

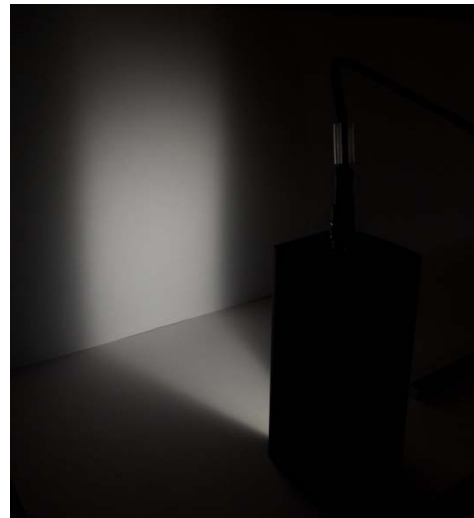
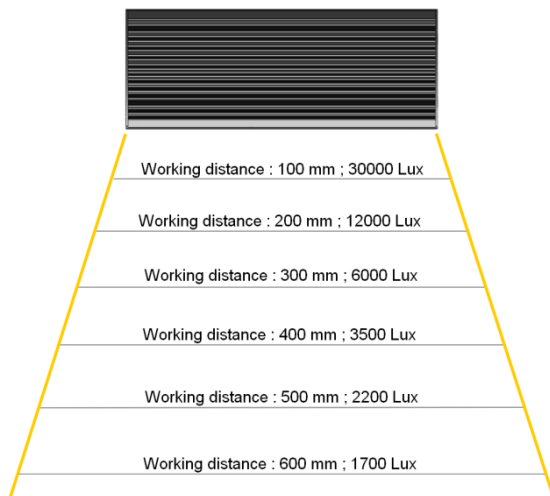
Applications:

- Large area illumination
- Palletisation
- Robot guidance
- Package sorting
- General packaging illumination

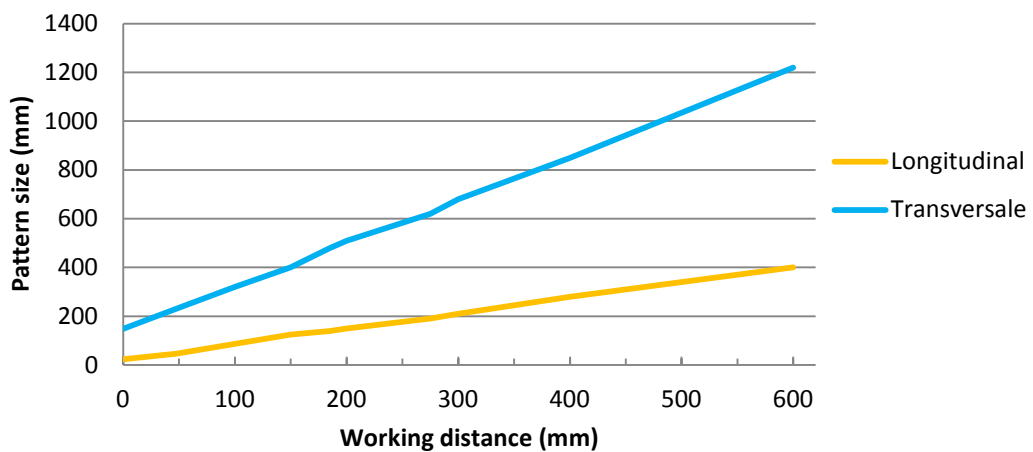


Efficient
Led Lighting
effilux

EFFI-Wide range :



illuminated area VS working distance



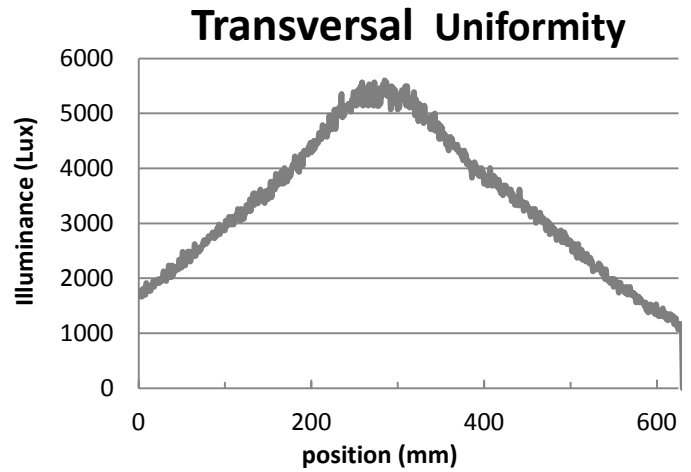
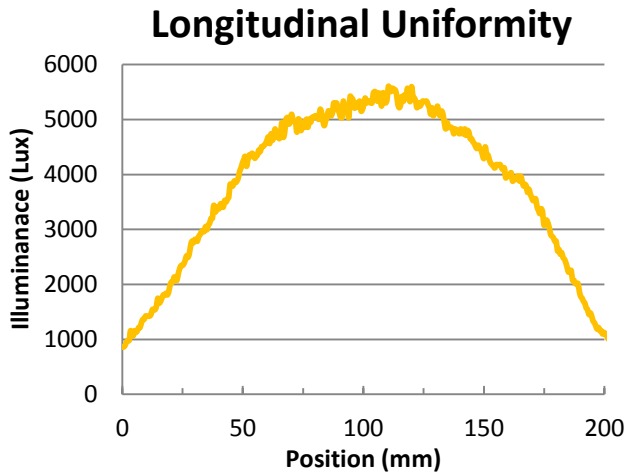
Product nomenclature



XXX	XXX
Mechanical dimension (mm)	Wavelength (nm)
	Cool White : 000
	Neutral White : 001
	Warm White : 002

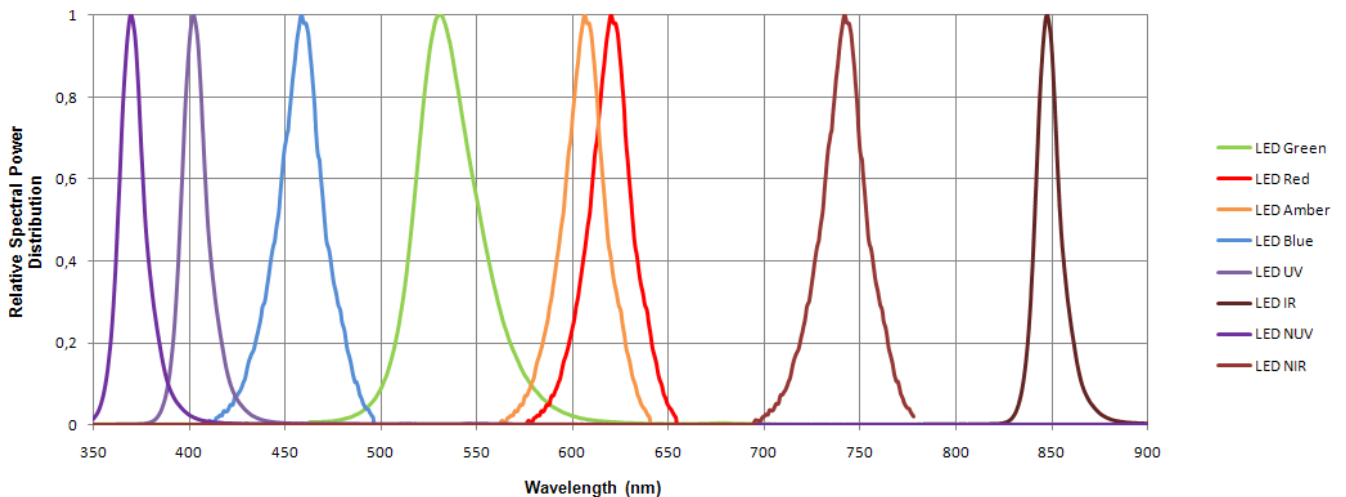
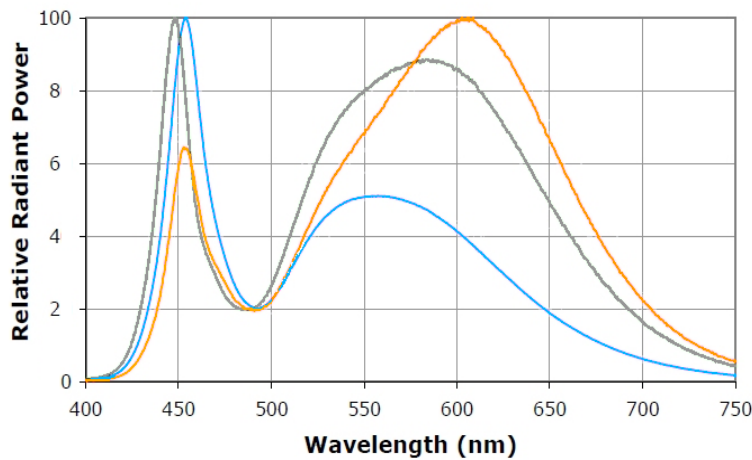
Optical Characteristics

Uniformity of the light



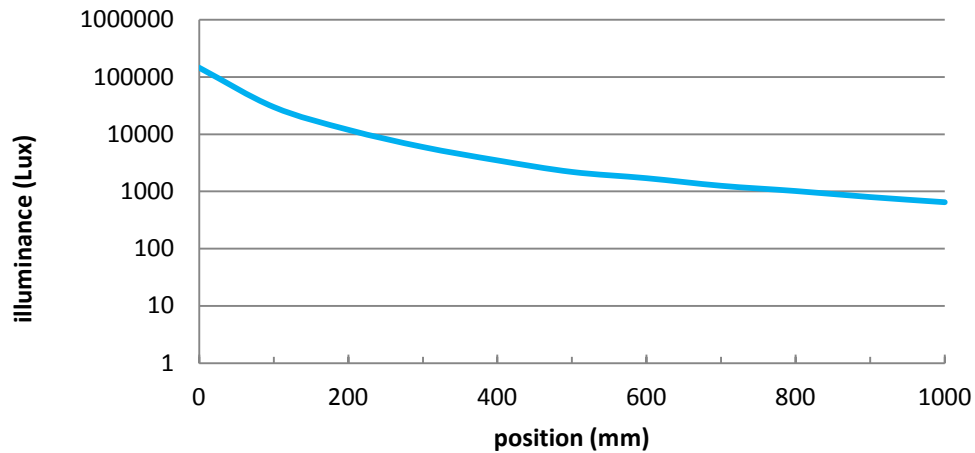
Working Distance: 300 mm

LED Typical Spectrum



Illuminance for working distance

Illuminance vs Working Distance



Electric characteristics

Device Power Ratings

General technical specifications

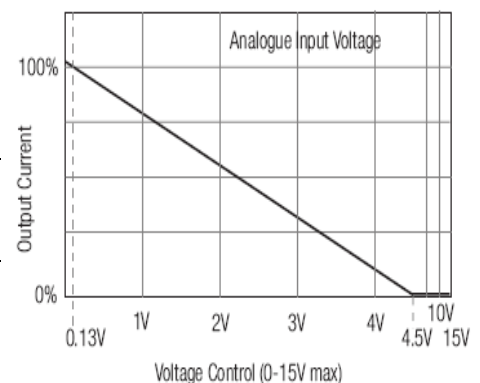
Products	Input range Volt DC	Dimming control	Power consumption
EFFI-Wide	24V - 36V : Typ. 24V	Digital + Analogue	15 watt

Dimming control

The device has two means of LED dimming: PWM/digital control and analogue voltage. Both dimming controls are independent and can be combined.

Analogue Dimming Control (leave open if not used)

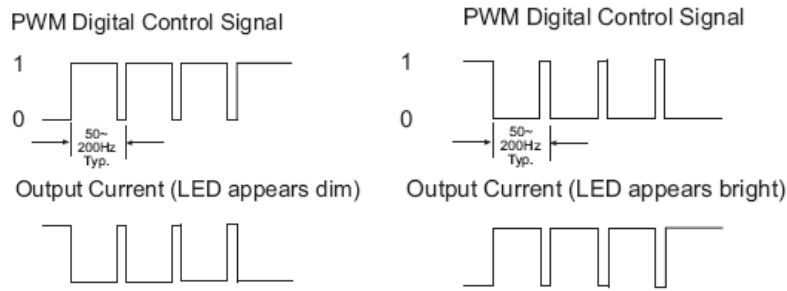
Input Voltage Range:	0.3V to 15V		
Control Voltage Range Limits:	Full On	0.13V ± 50mV	
(see Graph)	Full Off	4.5V ± 50mV	
Analogue Current :	Vc=5V 0.2mA max.		



Digital Dimming (Leave open if not used)

Remote ON/OFF	DC/DC ON	700mA	Open or 0V < Vr < 0.6V
Threshold Voltages	DC/DC OFF (Standby)	700mA	0.6 < Vr < 2.9V
	DC/DC OFF (Shutdown)	700mA	2.9V < Vr < 6V
Remote Pin Drive Current		Vr=5V	1mA max
Quiescent Input Current in Shutdown Mode		Vin=36V	200µA max

Maximum PWM Frequency For Linear Operation 20 -200Hz
(measured 10%~90% Dimming) Maximum Frequency 2000Hz



Electrical diagram

General Electrical diagram



Wire

Colour of wire:	Brown	Black	Blue
Identification:	24V	Dimming	Ground

M12 connector



Pin	1	2	3	4
Identification:	24 VDC	DIM	GND	n.c.

LED Power Ratings

Products	Wavelength peak	Forward voltage (Volt)	Forward current (mA)
EFFI-Sharp RED	630 nm	2.6V	700 mA
EFFI-Sharp GREEN	520 nm	3.8V	700 mA
EFFI-Sharp BLUE	460 nm	3.8V	700 mA
EFFI-Sharp WHITE	n.a.	3.8V	700 mA
EFFI-Sharp NUV	365 nm	3.7V	700 mA
EFFI-Sharp UV	385 nm	3.7V	700 mA
EFFI-Sharp IR	850 nm	1.6V	700 mA
EFFI-Sharp NIR	750 nm	1.6V	700 mA

Conditions of use

Sealing: IP 54

Working temperature: [-30 / 50 °C]

Mechanical Characteristics (all dimensions are in millimeters)

The EFFI-Wide range has been mechanically conceived and optimized to improve:

- Heat dissipation :
 - Aluminium fins are disposed all over the profil:

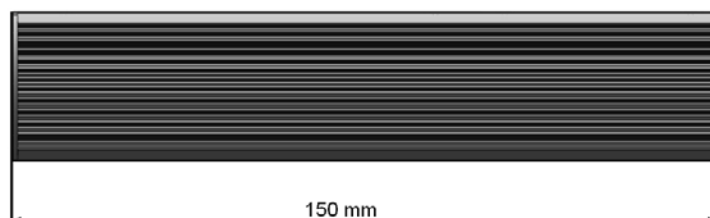
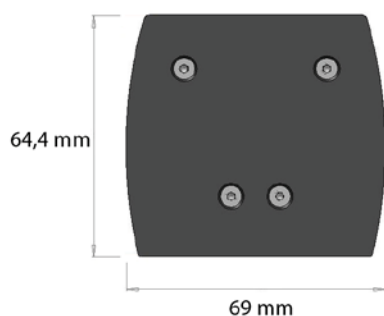
Heat dissipation is insensitive to orientation.

- Life time is improved.
- Easy fixing
- Weight : 1 Kg



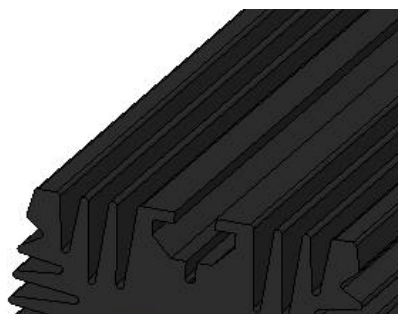
Dimension

Effi-Wide dimension



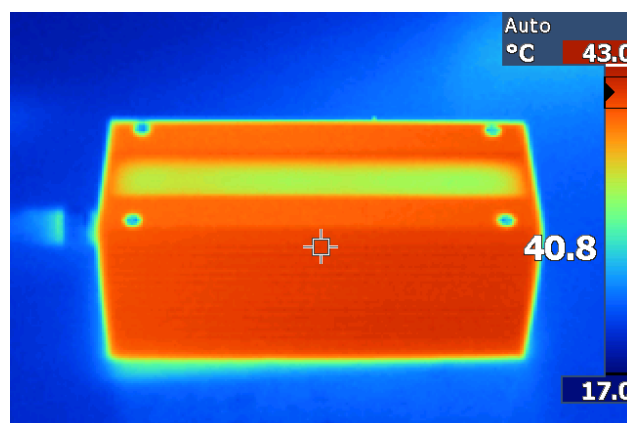
Fixing

A slide rail is made in the profil to make the fixing easier



Thermal Characteristics

The design of EFFI-Sharp permits the transfer of LED heat. Each custom LED lighting design involves the concept of efficiently transferring as much heat as possible away from LED PN junction.



Bill of material

- **EFFI-Wire_M12/Strip_3_5000**
 - ordering number : 78 3430 37 04
 - Wire gauge (mm) 0,34 mm²
 - Wire gauge (AWG) 22 Cable
 - lenth 5 m



Accessories

Accessories are not included with lighting

Other Wire

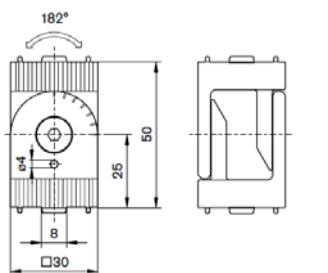
- **EFFI-Wire_M12/Strip_3_5000_angled**
 - ordering number : 78 3434 37 04
 - Wire gauge (mm) 0,34 mm²
 - Wire gauge (AWG) 22 Cable
 - lenth 5 m



Fixing

➤ Bosch fixation

Réf : 3842502683



- + 2x DIN 7984
M6x12
- + 4x ISO 4032
M6



Thank to Bosh fixation is easy to install EFFI-Wide.