DATASHEET

effiLux Efficient Led Lighting

ZEBRA

Flexible light

Up to 3 meters

High Speed

MegaStrobe™

Easy-to-mount

Adjustable angle

MEGASTROBE

IP5X

CE

effiLux Efficient Led Lighting **LGHT-T**

Ultra high-power logistic bar light

STANDARD VERSION

LGHT - T		LLL	CC	- XX	YY	ZZ
	Type	Optical Length (mm)	Color	Detail	Rev	Custom
	T=Transportation	400	● RD (Red 625 nm)	00 = NA	0	0

Exemple: LGHT-T400RD-0000 is a 400mm red logistic light.

Note: The standard LGHT-T Series is delivered as a package including light, lens plate and three windows:
- Lightly-diffusive window
- Semi-diffusive window
- Opaline window

The light is delivered assembled in the default configuration with the lens plate positioned at Position 2 (45°) and the Lightly-diffusive window.

ACCESSORIES

OPTICS	
Polarizer	LGHT-A400BP-000
MECHANICS	
Pivot joint	BRKT-LBMT-U000 Variable angle, Bolt kit included

LGHT-T series

Illumination Mode		Ultra High-power strobe *(Strobe only)*
Wavelengths		625nm (+/- 5%) *(Other wavelength upon request)*
Power Supply		24V DC +/- 10%
Connector(s)	INPUT (male)	M12 - 5pins
Power Consumption	Average	40W max.
	Peak (Max.)	80W max. *(Exact value indicated on the product label)*
Built-in driver version		MegaStrobe™ feature
Response Time		< 1µs
Frequency		Internal Frequency protection: 150Hz max.
Strobe duration		Internal Strobe length protection: 400µs max.
Input signal		PNP trigger input: Light ON: from 4V to 24V / Max. signal consumption: 2mA
Weight		1.2 kg
Dimensions		60mm x 47mm x 435mm
Material		Device body: Aluminium alloy & ABS / Window and caps: PMMA
Fastener		One T-slot on the back for M6 T-nuts 8mm slot (2x M6 T-nuts included)
Caps color		Color Name: ZEBRA Green 1 / Color ID: 4R7D001
IP rating		IP5X (dust protected)
Operation environment		Temperature: 0°C to 40°C - Humidity: 20 to 85%RH (with no condensation) - Altitude: Up to 2000m
Storage environment		Temperature: -20° to 60°C - Humidity: 20 to 85%RH (with no condensation)
Informations		Overvoltage category I - Protective class III - Pollution degree 3
Regulations & Marking		CE - UKCA - FCC - ICES-3/NMB-3
Environmental Standards		RoHS Directives (2011/65/EU, 2015/863/EU and China RoHS) - REACH Regulation - WEEE Regulation
Country of Origin		France

MANY POSSIBLE CONFIGURATIONS IN JUST ONE LIGHT

Diffusers

LD : Ligthly-diffuse   SD : Semi-diffuse   OP : Opaline

The LGHT-T Series is shipped with three different diffusers. Depending on the uniformity needed for the application, the user can easily change the diffuser to one that fulfills the application requirements.

Lens position

The LGHT-T offers flexible lens positioning to control the beam angle. The user can adjust it by himself: the angle can be widened by moving the lens closer to the LEDs or narrowed by moving the lens further away from the LEDs.

90°	45°	25°	10°

P0
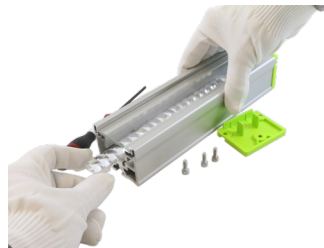(without lens)   P1   P2   P3
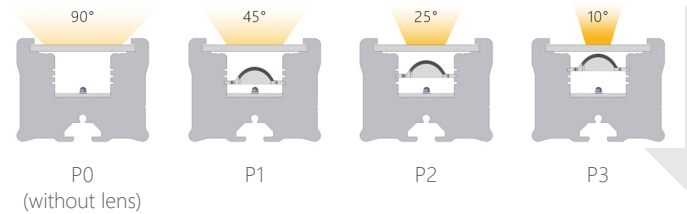
How to change the optical configuration of your LGHT-T?

The LGHT-T offers flexible lens positioning to control the beam angle and different type of diffusers to adapt the uniformity. The user can easily change the diffuser and the lens position.

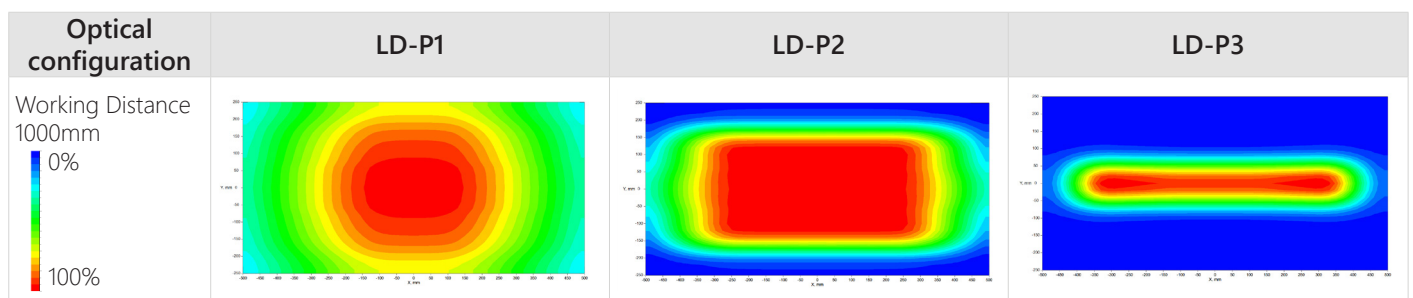Unscrew the M4 screws and remove the cap (without connector)

Slide out the window and all lenses

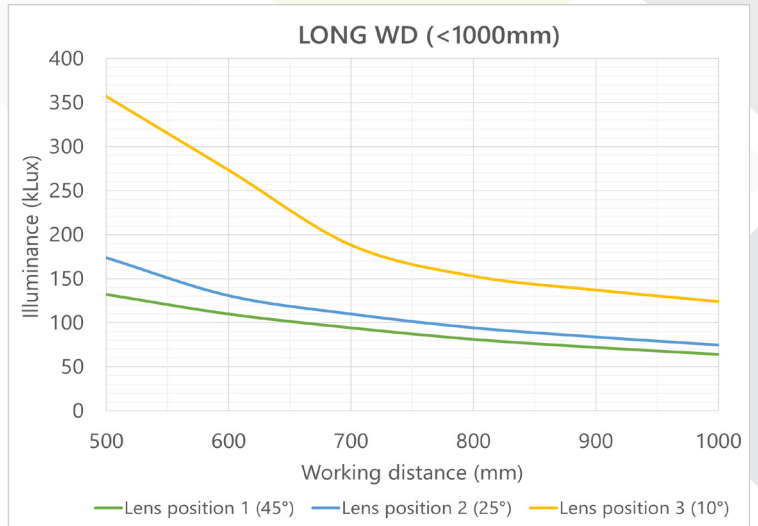Place the lenses & window in desired configuration

OPTICAL IMPACT

Lens position VS Illuminated area

Optical configuration	LD-P1	LD-P2	LD-P3
Working Distance 1000mm 0% 100%			

Optical impact

Lens position VS Irradiance

SHORT WD (<500mm)

LONG WD (<1000mm)

Note: Measurement done with a Red, 800 mm light, LD window

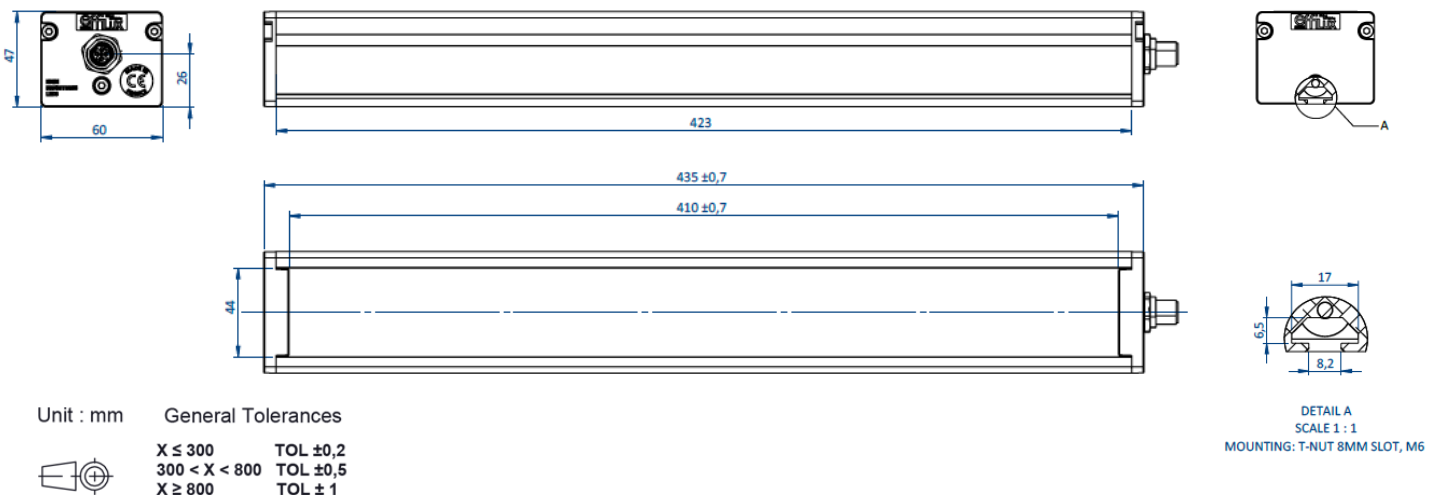## Option: Polarizer accessory

Without polarizer

With polarizer

Important note: The polarization is optimal with an LD window, the use of diffuser (SD or OP) can depolarize the light.

MECHANICAL SPECIFICATIONS

Dimensions (in mm)

Unit : mm

General Tolerances

X ≤ 300   TOL ±0,2
300 < X < 800   TOL ±0,5
X ≥ 800   TOL ± 1

DETAIL A
SCALE 1 : 1
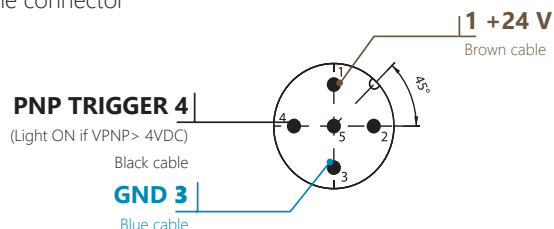MOUNTING: T-NUT 8MM SLOT, M6

ELECTRONICAL SPECIFICATIONS

Wiring layout - Standard connector version

The LGHT-T requires 24V DC input power. Note the trigger pin needs to be connected to a PNP trigger signal.

M12 - 5 pins
male connector

1 +24 V
Brown cable

PNP TRIGGER 4
(Light ON if VPNP> 4VDC)
Black cable

GND 3
Blue cable

45°

Power consumption

The LGHT-T integrates **boosters technology** to limit the power consumption.

MAX POWER CONSUMPTION (+/- 5%) at 150Hz - 400µs (Red version - Standard software - 2 meters cable)	
Optical Length (mm)	400mm
Average power consumption (W)	40W
Peak power consumption (W)	80W

Initialization phase

When LGHT-T is supplied, the product first enters in a few seconds initialization phase. This initialization is a sequence of very short strobes of increasing intensity. Please wait until the end of this initialization to use the product (max 5 seconds).

MegaStrobe feature

The integrated driver with MegaStrobe feature allows Ultra high-power strobes.

Output Intensity

100%

Strobe length
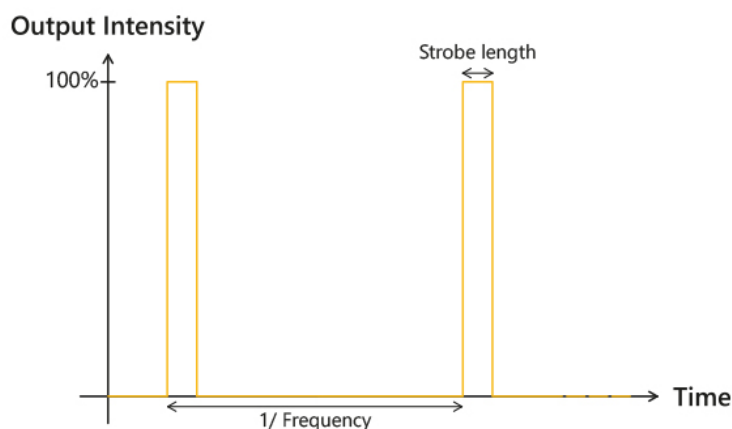
1/ Frequency

Time

MegaStrobe	
Strobing time (internal protection)	400µs max
Frequency (internal protection)	150Hz max
Rising time	<1µs
Falling time	<2µs

ACCESSORIES

Please refer to the specific documentation for additional information on the accessories of the LGHT-T.

Diffusers
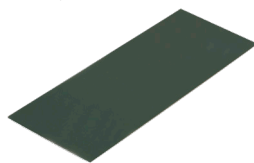
Polarizer

Extension Cables

Fasteners

Power supplies

Camera Filters

CUSTOMIZATION

Please ask your sales contact for a custom device.

Connector options

Extra power

Other wavelengths

CONTACT INFORMATION

Please refer to the specific documentation (datasheet, user manual and drawing) for complementary information. Contents of this document are based on information available as of Jan-2022 and may be changed without prior notice.