



# INDUSTRIAL

HIGH EFFICIENCY  
LED INDUSTRIAL LUMINAIRES  
MADE IN THE EU

# I-Line

# TECHNICAL DATA

# I-Line

i-LINE industrial luminaires are technical luminaires that are designed to fulfil the most demanding lighting conditions to illuminate industrial areas like warehouses and production halls.

## Mechanical characteristics

- Housing made of casted and extruded aluminium
- As a standard equipped with 3 m connecting electrical cable, other lengths are available upon request
- Finish made of anodisation and dust painted with epoxy paint thermal treatment to ensure long term protection against all weather conditions. RAL 9006 or other upon request
- All screws are made of stainless steel
- All gaskets are made of ozone and UV resistant silicone for IP66 protections (Flexible ceiling connector is IP61). IK10 impact resistance
- There are 3 types of fixation

Low ceiling connector



Flexible ceiling connector



Hooks for chain fixation



## Electrical characteristics

- 220 - 240 V (50-60 Hz) input
- 110 - 277 V input voltage range upon request
- Power factor at full load more than 0,95
- Total harmonic distortion (THD) 8 %
- Up to 99% driver efficiency at full load with the Philips Xitanium LED driver
- Dimming options: Lumistep, Line switch, DALI, 1 - 10 V and Dynadimmer (autonomous dimming) upon request
- 6 kV differential mode and 8 kV common mode standard surge protection. 10kV surge protection upon request
- Protection class I or protection class II
- Upon request we can program our lamps for DALI smart lighting and supply additional switches, sensors, etc.



## LEDs



We use highly efficient & reliable Cree LEDs which ensure long term operation for the lifetime of the luminaire and highest lm/w efficiency in the industry. In the spreadsheet below the total – system W is stated. Below power (W) of lamp is a result in the working mode of lamp (app. 1.5 h after a lamp is turned on). Below lumen is LED lumen. System lumen is available for each optic in IES files and is lower than the LED lumen by app. 5 % (depending on the type of lens). Different colour temperatures are available upon request. The below results in the table are written for 4000 K and 3000 K (average results).



### XPL LED

			4000 – 6500 K	3000 K
12 LED	500 mA	20 W (sys)	2.900 lm (LED)	2.500 lm (LED)
	600 mA	24 W (sys)	3.400 lm (LED)	2.950 lm (LED)
	700 mA	27 W (sys)	3.900 lm (LED)	3.350 lm (LED)
	800 mA	31 W (sys)	4.350 lm (LED)	3.750 lm (LED)
	900 mA	35 W (sys)	4.750 lm (LED)	4.100 lm (LED)
	1000 mA	40 W (sys)	5.150 lm (LED)	4.450 lm (LED)
24 LED	600 mA	45 W (sys)	6.700 lm (LED)	5.800 lm (LED)
	700 mA	53 W (sys)	7.600 lm (LED)	6.600 lm (LED)
	800 mA	60 W (sys)	8.500 lm (LED)	7.350 lm (LED)
	900 mA	68 W (sys)	9.300 lm (LED)	8.050 lm (LED)
	1000 mA	76 W (sys)	10.100 lm (LED)	8.700 lm (LED)
36 LED	700 mA	78 W (sys)	11.450 lm (LED)	9.850 lm (LED)
	800 mA	89 W (sys)	12.750 lm (LED)	11.000 lm (LED)
	900 mA	101 W (sys)	13.950 lm (LED)	12.050 lm (LED)
	1000 mA	113 W (sys)	15.150 lm (LED)	13.050 lm (LED)
48 LED	800 mA	117 W (sys)	16.600 lm (LED)	14.350 lm (LED)
	900 mA	132 W (sys)	18.200 lm (LED)	15.750 lm (LED)
	1000 mA	148 W (sys)	19.700 lm (LED)	17.050 lm (LED)
60 LED	800 mA	146 W (sys)	20.300 lm (LED)	17.750 lm (LED)
	900 mA	165 W (sys)	22.250 lm (LED)	19.200 lm (LED)
	950 mA	175 W (sys)	23.050 lm (LED)	19.900 lm (LED)

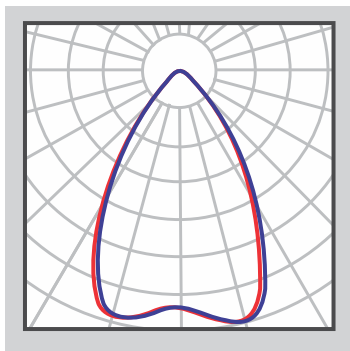
# OPTICAL DATA

# I-Line

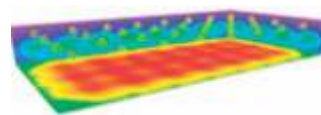
## Optical characteristics

- As a standard we are using PMMA that is 100 % UV resistant which prevents yellowing over the entire life time of the lenses
- Polycarbonate lenses ensure high impact resistance
- Photometric IES files are available upon request

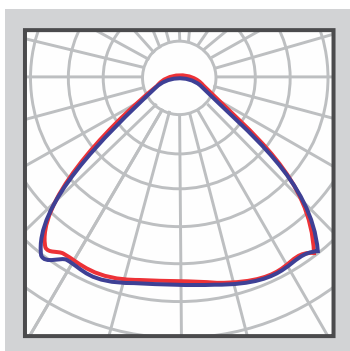
Optic I, 95 % optical efficiency, 67 deg viewing angle  
Narrow symmetrical beam, suitable for very high installations



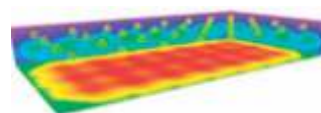
- Luminaire installation height: 10 m
- Number of luminaires: 50 pcs
- Luminaire wattage: 62 W
- Avg. illuminance at floor level: 300 lx
- Illuminance uniformity on the floor level ( $u_0$ ): typical 0,39
- Total power consumption: 3,1 kW (2,36 W/m)



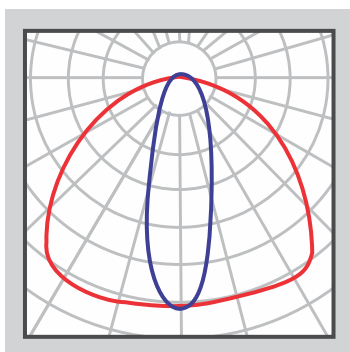
Optic J, 92 % optical efficiency, 103 deg viewing angle  
Wide symmetrical beam, suitable also for lower installations heights



- Luminaire installation height: 6 m
- Number of luminaires: 32 pcs
- Luminaire wattage: 92 W
- Avg. illuminance at floor level: 300 lx
- Illuminance uniformity on the floor level ( $u_0$ ): typical 0,41
- Total power consumption: 2,94 kW (2,24 W/m)



Optic K, 91 % optical efficiency, 63/115 deg viewing angle  
Aisle asymmetrical beam, suitable to illuminate isles between warehouse racks and corridors.



- Luminaire installation height: 8 m
- Luminaire spacing: 8,3 m
- Number of luminaires: 6 pcs
- Shelf height: 6 m
- Distance between shelves: 2 m
- Luminaires are installed in the aisle: Centerline
- Fixture luminous flux: 3000 lm
- Eav: 38 lx, Emin: 32 lx, Emax: 41 lx  $u_0$ : 0.839



Above are just calculation examples, please send us specific data and we will make a lighting study for you!



# MECHANICAL DATA

## 12 LED lamp

PN with letter K	PN with letter T	PN with letter C
Gross weight: 5,7 kg Net weight: 5,1 kg Box dimension: 60 x 30 x 20 cm Full euro pallet dimension: 32 units, 80 x 120 x 150 cm	Gross weight: 5,6 kg Net weight: 5,0 kg Box dimension: 60 x 30 x 20 cm Full euro pallet dimension: 32 units, 80 x 120 x 150 cm	Gross weight: 4,7 kg Net weight: 4,4 kg Box dimension: 54 x 30 x 10 cm Full euro pallet dimension: 64 units, 80 x 120 x 150 cm

## 24, 36, 72 LED lamp

PN with letter K	PN with letter T	PN with letter C
Gross weight: 7,4 kg Net weight: 6,8 kg Box dimension: 60 x 30 x 20 cm Full euro pallet dimension: 32 units, 80 x 120 x 150 cm	Gross weight: 7,3 kg Net weight: 6,7 kg Box dimension: 60 x 30 x 20 cm Full euro pallet dimension: 32 units, 80 x 120 x 150 cm	Gross weight: 7,0 kg Net weight: 6,7 kg Box dimension: 75 x 30 x 20 cm Full euro pallet dimension: 48 units, 80 x 120 x 150 cm

Operating temperature from -40°C up to 55°C.

Our standard warranty (acc. warranty conditions) is 5 years but the warranty may be extended for up to 10 years.

	TYPES OF FIXATION	PROTECTION CLASS	LED TYPE	NUMBER OF MODULES	OPTICS	mA	REGULATION	LENGTH OF CABLE	SURGE PROTECTION
L	C Chain hooks	1 protection class I	D XPL-4500 K	1 1 module (12 led)	I Narrow beam	50 500 mA	R No regulation	NO INDICATION 3 meters	NO INDICATION 8 kV protector (XPL)
	T Flexible ceiling		G XPL-4000 K	2 2 modules (24 led)	J Wide beam	60 600 mA	D DALI	4 4 meters	P 10 kV protector
	K Low ceiling		I XPL-3000 K	3 3 modules (36 led)	K Aisle optics	70 700 mA	X 1-10 V	5 5 meters	
			J XPL-6000 K	6 6 module (72 led)		80 800 mA	M Line switch (negative)	...	
				4 modules (48 led)		90 900 mA		12 12 meters	
				5 modules (60 led)		00 1000 mA			

The manufacturer reserves all rights to make changes in the materials and components used in its products. All data is subject to change without prior notice.



Company certified with

# I-Line