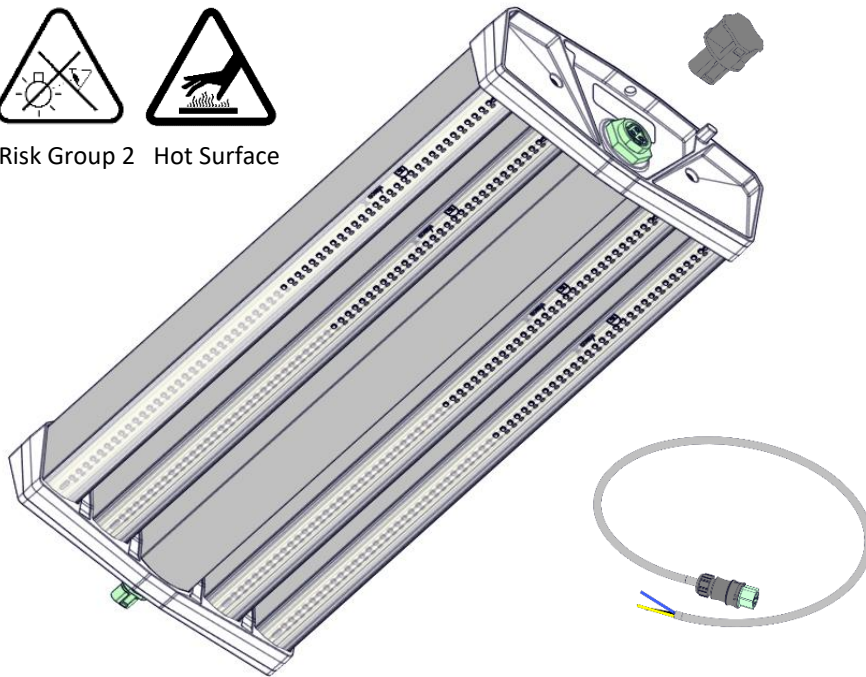




DLI DIODE – SERIES Toplighting Fixture Installation Manual



Risk Group 2 Hot Surface



Package content

- 1x DIODE LED Toplight
- 1x 1.8-meter cable (6 ft) Female Wieland connector (RST2013)
- 1x Male IP65 End Cap

General

This manual describes how to install the DIODE-Series Toplighting fixture, read this manual carefully before installation.

Risk Group 2

This product can possibly emit hazardous optical radiation, never stare at the light source of the Toplight. (EN 62471)

Risk group 2

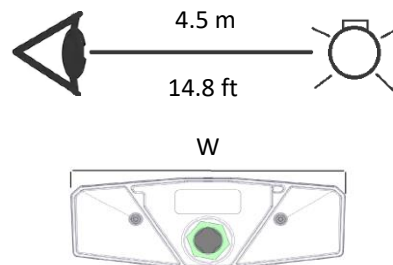
CAUTION Possibly hazardous optical radiation emitted from this product.

Product specifications

Ambient working range	0°C-40°C (32°F – 104° F)
Storage	0°C-40°C (32°F – 104° F)
Rated Voltage range	230V~ -400V~ 50/60 Hz
IP Class	65
Wattage	See product label/ table
Weight	4.4 kg (9.7 lbs)
Relative humidity	5%-85% RH – Not condensing
HxLxW	85x542x232 mm (3.35x21.34x9.13")

Important

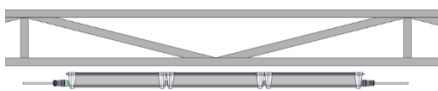
Disconnect the mains before installing or modifying this product. Up to 12 units can be connected as series on a single power cord on a C16 or B16 MCB. NEVER look into an active top lighting fixture from a distance less than 4.5 m (14.8 ft)



Installation

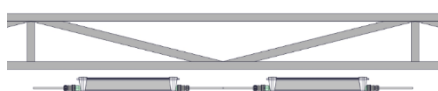
The DIODE-Series Toplighting fixture can be installed in three ways on existing trellis girders, as continuous line, as non-continuous line and as stand alone.

Continuous line installation



As a continuous line the products can be linked directly to each other.

Non-continuous line installation



As non-continuous line the products can be linked with in jumper cables.

Standalone installation



As standalone the Top light is connected as a single Top light to the electrical grid.



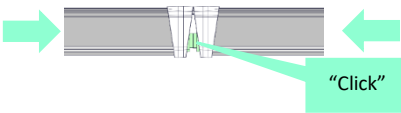
Continuous line installation

- 1 The first unit can be connected to the grid.



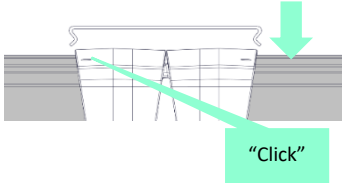
Use 2.5 mm² cable H07RN-F or similar

- 2 Up to 12 units can be connected to each other.



Check indicational circuit breaker table

- 3 Add locking clip for extra stability (not included)



Non-continuous line installation

- 1 The first unit can be connected to the grid.



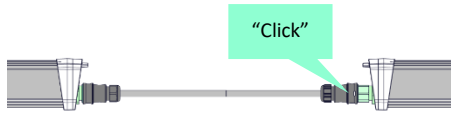
Use 2.5 mm² cable H07RN-F or similar

- 2 A cable can be added to the other side -



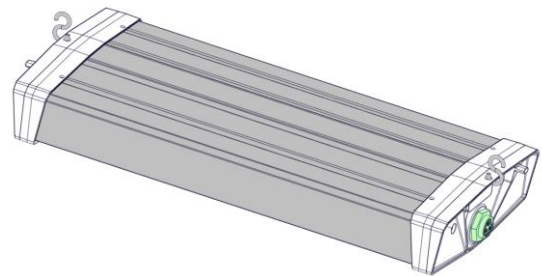
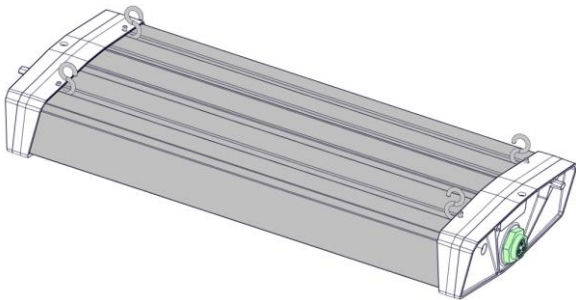
Check indicational circuit breaker table

- 3 Up to 12 units can be connected with jumper cables -

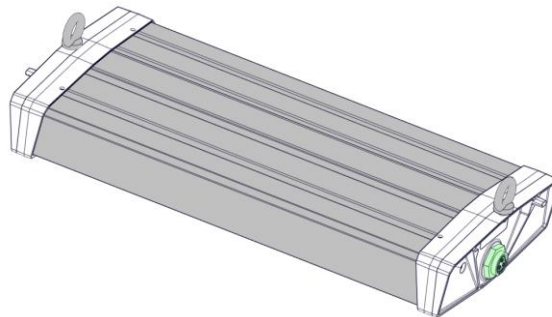


Max length of Top lights with jumper cable ≤ 50 m (164 feet)

- 4 Product can be mounted by means of S hooks (not included)

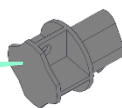


- 5 Product can be mounted with M8 O Hooks and suspension cables. (not included)



- 6 Finally add the IP65 End Cap to seal the last Top Light – Required for IP65 Sealing

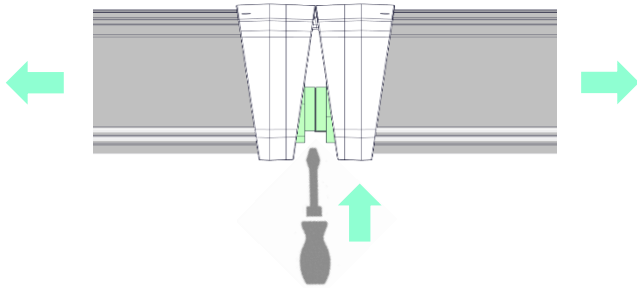
Critical



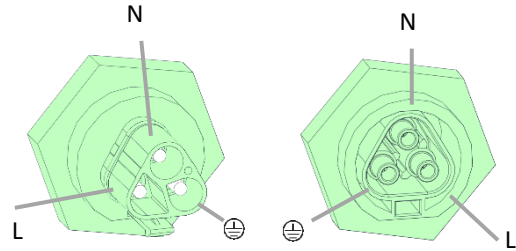
Disconnect Toplighting fixture

Connector pole types

Push in the black pin in the connector with a screwdriver and



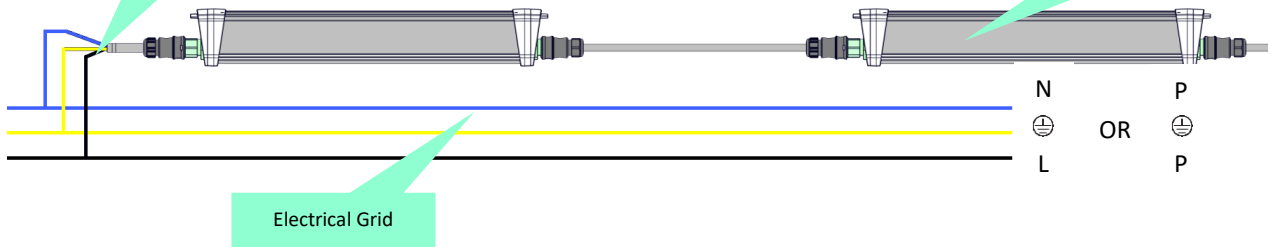
move the Top Light outwards



Minimum 2.5mm²

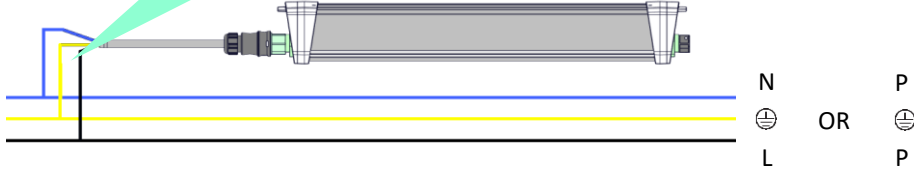
Wire thickness to electrical grid multiple Toplighting fixtures

Up to 10 Toplighting fixtures



Minimum 1mm²

Wire thickness to electrical grid single Toplighting fixture



Toplighting fixture specifications indication table

Spectrum	System power	PF	I @ 220V~	I @ 400V~	Retinal Blue*	Minimum viewing distance
RB-LB	330 W	>0.96	1.45	0.83	Risk group 2	4.5 m (14.8 ft)
RW-LB	345 W	>0.96	1.50	0.87	Risk group 2	4.5 m (14.8 ft)
Indoor White	357W	>0.96	1.55	0.89	Risk group 2	4.5 m (14.8 ft)
Greenhouse White	361 W	>0.96	1.57	0.90	Risk group 2	4.5 m (14.8 ft)

All typical values at ambient temperature of 25°C / 77F

*All other radiation hazards: Exempt Group



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Europe – ROW - Indications table

Maximum number of fixtures per phase pair

Mains Voltage (V~)	System	Power (W)	B10*	B16*	C10*	C16*
220	P-N	290	7	11	7	11
220	P-N	310	6	10	6	10
220	P-N	330	6	10	6	10
220	P-N	350	5	9	5	9
220	P-N	370	5	9	5	9
220	P-N	390	5	8	5	8
230	P-N	290	7	12	7	12
230	P-N	310	7	11	7	11
230	P-N	330	6	10	6	10
230	P-N	350	6	10	6	10
230	P-N	370	5	9	5	9
230	P-N	390	5	8	5	8
240	P-N	290	7	12	7	12
240	P-N	310	7	11	7	11
240	P-N	330	6	11	6	11
240	P-N	350	6	10	6	10
240	P-N	370	6	9	6	9
240	P-N	390	5	9	5	9
380	P-P	290	5	7	8	12
380	P-P	310	5	7	8	12
380	P-P	330	5	7	8	12
380	P-P	350	5	7	8	12
380	P-P	370	5	7	8	12
380	P-P	390	5	7	8	12
400	P-P	290	5	7	8	12
400	P-P	310	5	7	8	12
400	P-P	330	5	7	8	12
400	P-P	350	5	7	8	12
400	P-P	370	5	7	8	12
400	P-P	390	5	7	8	12

*For the EU circuit breaker type Siemens 5SL4 or 5SY4 or similar shall be used

For P-N Installations 3x 1 pole, 1x 3 pole or 1x 4 pole circuit breakers may be used

For P-P Installations 3x 2 pole breakers shall be used

Do not use >16A circuit breakers in order to increase the number of Toplighting fixtures per phase, due to the internal wiring

No liability can be given for installations due the dependencies on application related circumstances such as the impendence of the total installation and/or the exact type of circuit breaker



DLI DIODE – SERIES Toplighting Fixture Installation Manual



USA - Canada - Indications table

Maximum number of fixtures per phase pair

Mains Voltage (V~)	System	Power (W)	**15A 1 Pole CB	**15A 2 Pole CB
240	P-P	290	5	9
240	P-P	310	5	8
240	P-P	330	4	8
240	P-P	350	4	7
240	P-P	370	4	7
240	P-P	390	4	7
277	P-N	290	10	10
277	P-N	310	10	10
277	P-N	330	9	9
277	P-N	350	9	9
277	P-N	370	8	8
277	P-N	390	8	8
347	P-P	290	N/A	10
347	P-P	310	N/A	10
347	P-P	330	N/A	10
317	P-P	350	N/A	10
317	P-P	370	N/A	10
317	P-P	390	N/A	10

**For the USA/Canada a 15A circuit breaker acc. UL489 type Siemens 5SJ118-7HG42 (1 pole) or similar shall be used for P-N mains supplies

For the USA/Canada a 15A circuit breaker acc. UL489 type Siemens 5SJ218-7HG42 (2 poles) or similar shall be used for P-P mains supplies

Do not use >16A circuit breakers in order to increase the number of Toplighting fixtures per phase, due to the internal wiring

No liability can be given for installations due to dependencies on application related circumstances such as the impedance of the total installation and/or the exact type of circuit breaker



Important

- Installation must be performed by a qualified electrician in accordance with all national and/or local regulations
- Use IP65 or higher-class connectors and/or junction boxes with this product
- Install all Toplighting fixtures before connecting to the grid
- NEVER install this product without reading this installation guide
- NEVER stare into this product when switched on
- NEVER modify or alter this product, this will result in warranty loss
- NEVER connect more than 12 products in series
- This product is not suitable as emergency light and/or signal functions
- This product is not suitable for outdoor use
- On this product no condensation allowed during storage, operation and application

Note

- The light source of this product is custom made and non-replaceable
- At end of life the whole product needs to be replaced
- This product is not intended for household usage
- Take care with the usage of power cables and prevent damage to the cables when installing them
- Wear protective glasses if working inside the minimum view distance of active Toplighting fixtures
- Read the product labels carefully for all product details
- Avoid touching the product if active, might cause harm due to heat
- This product has a build in thermal protection, incase in overheating this device will dim and/or shutdown
- When the product is removed from the box take care of placement, do not let the product rest on top of the optics, damage to optics will result in light output loss

Cleaning

- ALWAYS switch off the power to the product before cleaning
- This product can be cleaned with a wet towel
- Do not use coarse or rough cleaning tools on this product
- Do not use bleach or solvents on this product
- Do not use high pressure equipment to clean this product, this product is designed for IP65
- Do not submerge this product

Chemicals, Crop Protectors and Cleaning Agents

- Please note the list of agents that have been tested and are safe to come in contact with the DIODE-series Toplighting fixtures, to find this list please visit www.dutchlightinginnovations.com


Cable


- Wieland female RST2013 green connector should apply with H07RN-F 3x2.5 mm² power cable with a diameter of >10 mm, follow Wielands instructions, if not the product warranty will be lost
- If jumper cables are used, the total length of the conductors will be limiting
- The needed circuit breaker type and maximum number of Top Lights depends on the cable diameter and the total protected length
- The wires inside the Toplighting fixture are 2.5 mm² (for through wiring)


Contact

For more information please contact us in one of the following ways:

 info@dutchlightinginnovations.com

 The Netherlands
De Vlonder 217A, 5427 DG Boekel

 +31 (0) 492264309

 www.dutchlightinginnovations.com