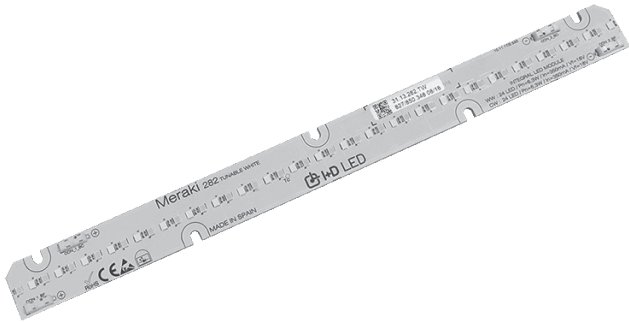
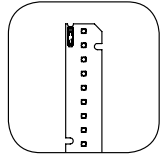


MERAKI LED MODULES

TUNABLE WHITE 282- LINEAL CC

(280X24 MM)



MERAKI family introduces new LED dynamic modules in white. Ideal for small size fixtures that seek dynamic colour changes solutions and require high performance and excellent lm/\$ relation. MERAKI TUNABLE WHITE design is based on Circadian rhythm, searching for an appropriate influence over biological cycles. These modules are very simple to connect and to assembly to any surface. They are specially indicated for the production of linear lighting, both direct and indirect with changes in CCT. The modules have two different functioning: high flux and high efficiency. Regarding input current, heatsinks could be avoided. Modules are available on diverse CCT and SELV voltage.



In compliance with:

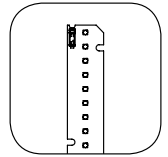
IEC 62031 / IEC 62471 / IEC 62717

APPLICATION



PRODUCT DESCRIPTION

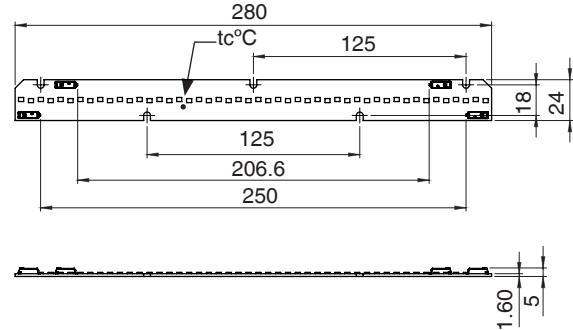
- Efficiency > 150lm/W
- Available in the range of 2700K - 5000K
- CRI>80 (CRI90 available under request)
- Easy installation
- With Push-In connectors
- CCT Tolerance -3 SDCM
- Ideal for homes and offices
- SELV voltage
- 5 years guarantee



TECHNICAL DATA

- SELV voltage
- Available from 2700K to 5000K
- Typical CRI80
- Operating temperature between -20°C and +45°C
- EN 61471:2008 group 1
- Standard Tc 65°C
- LED viewing angle 120°
- Weight 20 g
- MOQ 88 units
- Packaging box weight (approx.) 900 g
- PWM dimmable

DIMENSIONS



(*) Measured in mm

SPECIFIC TECHNICAL DATA

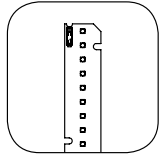
SPECIFIC TECHNICAL DATA

CODE	CCT	RATED CURRENT mA	VOLTAGE Min (V)	VOLTAGE Typ(V)	VOLTAGE Max(V)	NOMINAL POWER (W)	LUMINOUS EFFICACY (lm/W)	TOTAL FLUX (lm)	PHOTO METRIC CODE
31.13.282.TW	2700K	200	16,2	18,1	19,2	3,66	141,78	518,4	827/850.348
31.13.282.TW	5000K	200	16,2	18,1	19,2	4,66	129,79	604,8	827/850.348
31.13.282.TW	2700K	350	16,2	18,1	19,2	6,34	132,98	842,4	827/850.348
31.13.282.TW	5000K	350	16,2	18,1	19,2	6,34	155,14	982,8	827/850.348

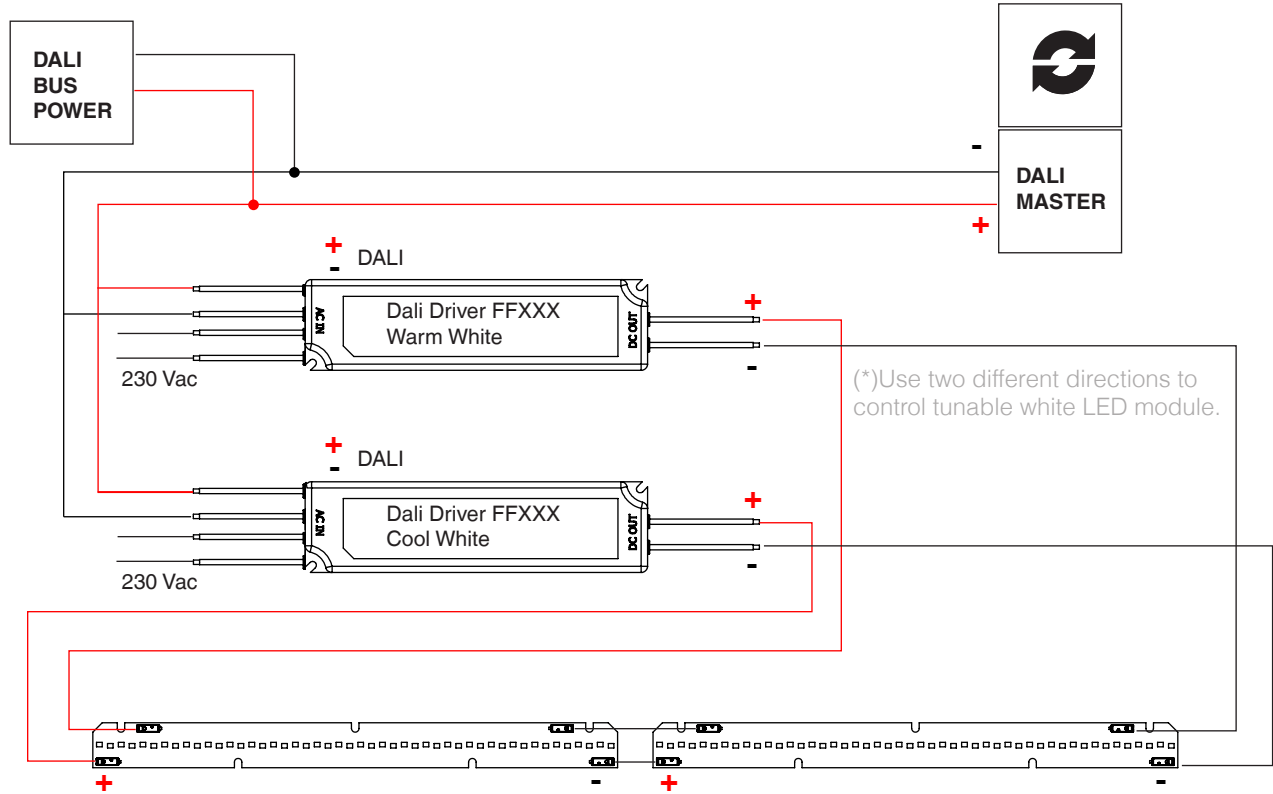
Note: It is required to keep Tc < 65°C.

Tolerance range for flux measurements of 8%.

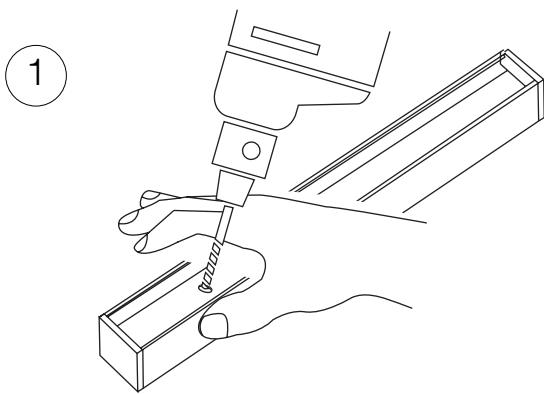
For PCB supply including high adhesion thermal tape, please add the letter "C" behind the product code. Example: 31.13.282.TWC
QTY LED 24 CRI>90



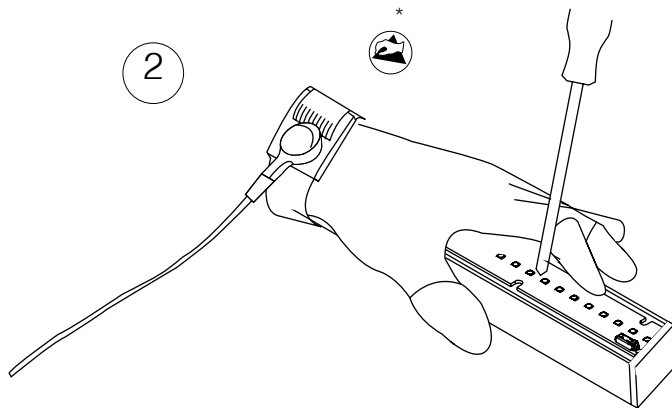
DRIVER + MODULE CONNECTION EXAMPLE
DALI PROTOCOL CONTROL



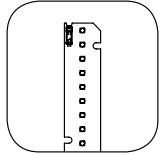
INSTALLATION AND CONNECTION EXAMPLE



For eventual attachment of the fixture (with no use of double sided adhesive tape) drill a hole in the profile.

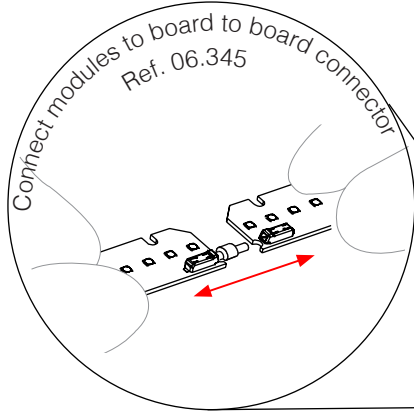


Place the PCB and apply pressure. Fix the screws to the fixture base. Note: Accessory M3 screws.

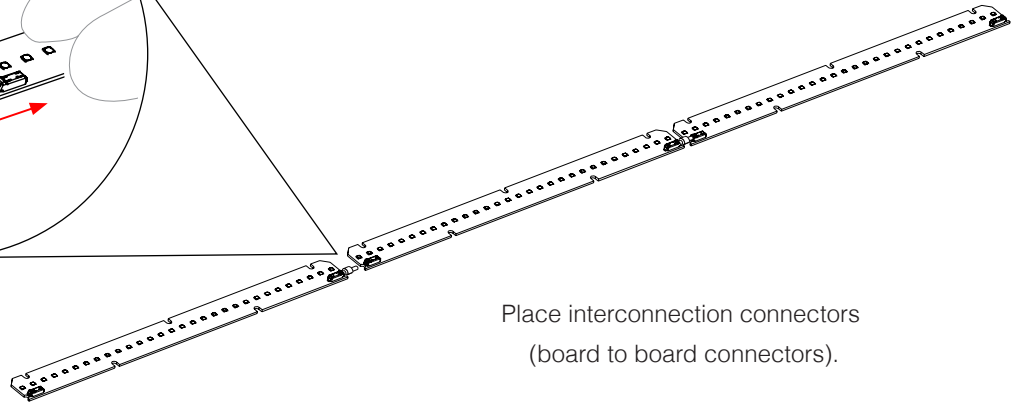


INSTALLATION AND CONNECTION EXAMPLE

3

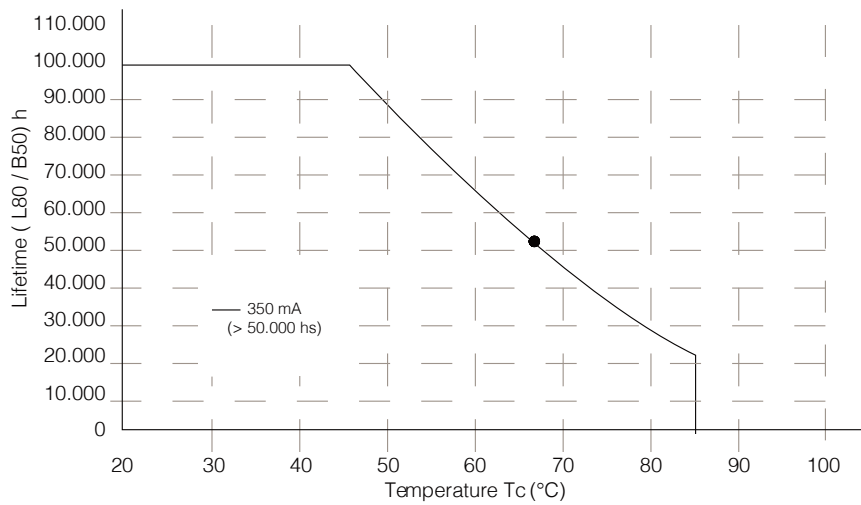


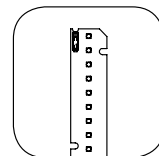
Max. no. of PCBs:
Depends on driver type
 $V_f \text{ total PCBs} \leq V_{out} \text{ Driver}$



Place interconnection connectors
(board to board connectors).

Lifetime Derating for MERAKI LINEAL MERAKI 282 ECO





SECURITY AND INSTALLATION INFORMATION



ELECTRICAL POWER

MERAKI TUNABLE WHITE 282 must be feed at constant current; the energy source power must be in accordance with the quantity of connected modules for proper functioning of the module (or group of modules). Family MERAKI have polarity, for this reason rated current, nominal power and polarity must be taken into account. If that is not the case, the module might be irreversibly damaged.

MERAKI TUNABLE WHITE 282 has integrated protection against reverse polarity errors. MERAKI LED MODULES require specific driver protection against short-circuit currents, temperature raise and overloads. Please, verify driver's min. and max. Vn values specified in this data sheet.



ISOLATION

MERAKI TUNABLE WHITE 282 functions with SELV voltage, does not require active isolation of the component as long as maximum reference SELV voltage is not exceeded. In other case, it will be mandatory earth connection on all conductive components of the fixture or light engine when the number of modules in the series exceeds SELV voltage. The driver must be in compliance with CE, UL or valid analogous regulation.



ESD – STATIC ELECTRICITY INFORMATION

MERAKI TUNABLE WHITE 282 contains electronic components which are very sensible to static electricity. In this respect is it highly recommendable to always manipulate the items with appropriate ESD protection, and take adequate measures for safety matters. If you need further information please refer to our webpage www.idled.eu.



MOUNTING AND INSTALLATION

I+D LED S.L. is not responsible for the installation of the product. MERAKI TUNABLE WHITE 282 must be perfectly placed (and/or stick) on the lighting device, profile or base for a proper connection between modules and power source, respecting its nominal values. MERAKI TUNABLE WHITE 282 modules are designed to be incorporated inside small size light fixtures. The module will be delivered with 4 pre-made holes of D=4 mm according to dimensions drawing (ZHAGA L2W2). Maximum torque for fixing recommended 0,4-0,5 Nm to avoid mechanical stress.

If any type of chemical substance is used during the assembly of the luminaire or light engine, it must not have any type of curing by means of gas condensation; as these chemical substances may damage the LEDs and electronic components. Ideal wire for this connection type is multipolar flexible wire of 0,2-0,75mm².



TEMPERATURE

MERAKI TUNABLE WHITE 282 life-time depends to a great extent on operating temperature. Under no circumstance temperature should exceed the maximum permissible (Tc=80°C) limit here indicated. Exposure to higher temperatures might affect its long term proper functioning. Room temperature must be measured under worst-case conditions to ensure life-time and keep product's guarantee. Store modules between -20 °C and +80 °C, and at a maximum humidity level of 65%.