

### ➤ Product description

- Ideal for linear and magnetic lights
- 4 terminals for series wiring
- High color rendering index CRI > 80
- Simple installation via clips or screws
- Long life-time up to 50,000 hours
- 5-year guarantee

### ➤ Optical properties

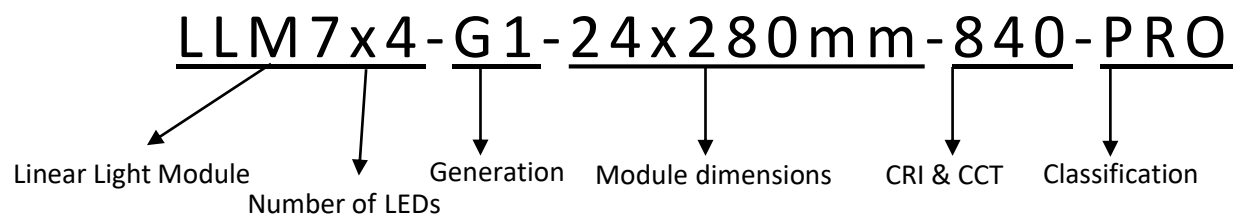
- Colour temperatures 3,000K and 4,000 K
- Typ. luminous flux 2300 lumen (28 cm)
- Efficacy of the module up to 150 lm/W
- High colour rendering index CRI > 80
- Small color tolerance (MacAdam 3)

### ➤ Mechanical properties

- Module dimension 24x280 mm, 24x140 mm
- Push terminals for quick and simple wiring of LED module to LED module



Product Code information:

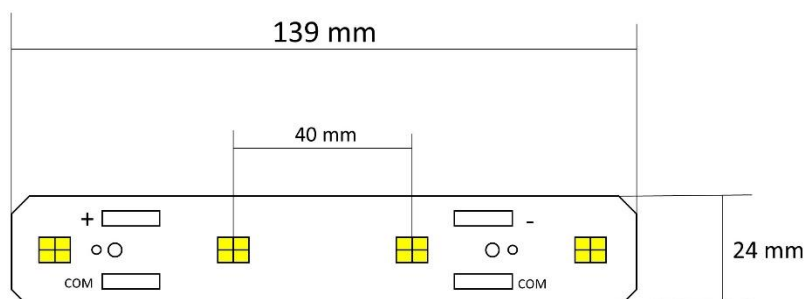
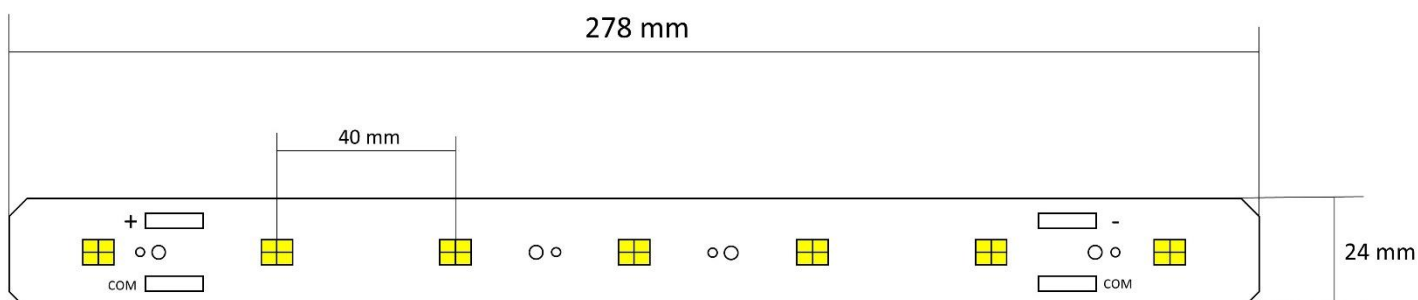


Electro-Optical characteristics : (  $I_f = 350\text{mA}$  ,  $T_a = 25^\circ\text{C}$  )

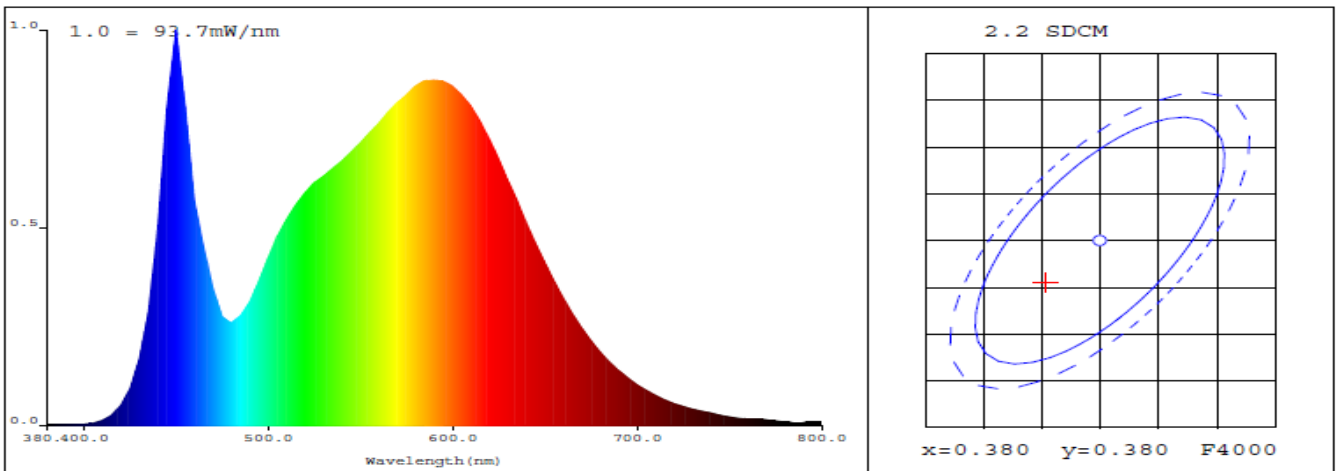
TYPE	Length	Color temp.	Forward current	Luminous flux	forward voltage	Power cons.	Luminous efficacy	CRI
LLM4x4-G1-24x140mm-840-PRO	14 cm	3000 K 4000 K	350 mA	1300 Lm	22V .. 24V	8.5 W	158 lm/W	>80
LLM7x4-G1-24x280mm-840-PRO	28 cm	3000 K 4000 K	350 mA	2300 Lm	40V .. 42V	14.5 W	158 lm/W	>80

- 1-Tolerance of useful light flux - 0 % / + 15 %. Measurement uncertainty  $\pm 10\%$ .
- 2-Tolerance of expected light flux - 0 % / + 15 %. Measurement uncertainty  $\pm 10\%$ . Based on calculation.
- 3- Tolerance of power consumption  $P_{on} \pm 10\%$ . Measurement uncertainty  $\pm 5\%$ .

Technical data	
Beam characteristic	120 ° C
Ambient temperature rang	-25 .. +50° C
$t_c$	95° C
I min	200 mA
I rate	350 mA
I max	450 mA
Type of protection	IP 00
Classification acc. to IEC 62031	Built-in
ESD classification	Severity level 2
Life-time	50,000 h
Guarantee	5 years



### Light Source Test Report (4000K)



### Storage and humidity Storage

temperature -30...+80°C

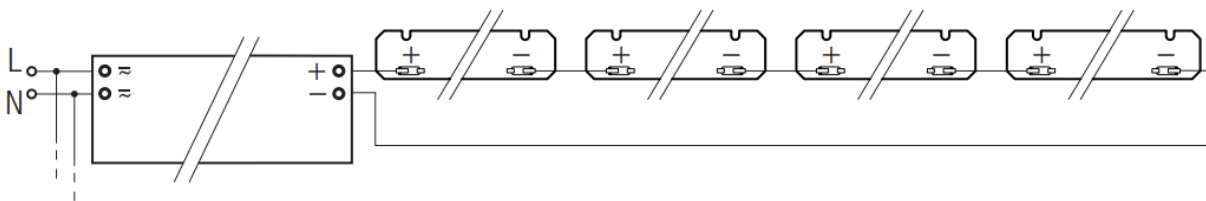
Operation only in non condensing environment. Humidity during processing of the module should be between 0 to 70 %.

### Thermal design and heat sink

The rated life of LED products depends to a large extent on the temperature.

If the permissible temperature limits are exceeded, the life of the LLM will be greatly reduced or the LLM may be destroyed.

### Wiring example:



### Wire preparation:

The wiring can be in stranded wires or solid with a cross section of 0.2 to 0.75mm. For the push-wire connection you have to strip the insulation (8–9mm). To remove the wires use a suitable tool or through twist and pull .

wire preparation:  
0.2 – 0.75 mm<sup>2</sup>

