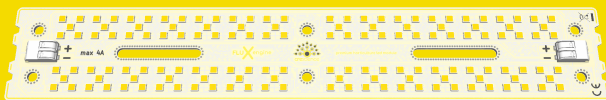


# FLUXengine

## 3500K

### Datasheet and Application Notes



- high-efficiency led module
- high flexibility due to modular concept
- optimized for easy and economic thermal management

**Note:** Only qualified personnel may carry out work such as the installation and maintenance of live components. Qualified personnel are persons who are familiar with the installation, commissioning and operation of the product and have the required qualifications. Relevant standards as well as the user instructions must be observed.

# 1 Specification

## 1.1 Absolute Maximum Ratings

Property	Max.
Current <sup>1</sup>	<b>4000</b> mA
Voltage <sup>2</sup>	<b>20</b> V
Power Consumption	<b>80</b> W
Humidity	<b>95</b> %RH <sup>3</sup>
Board-Temperature	<b>75</b> °C

## 1.2 Typical Performance

Property	Typ.	Max.
Current	<b>1300</b> mA	<b>4000</b> mA
Power Consumption	<b>25</b> W	<b>80</b> W
Luminous Flux	<b>5450</b> lm	<b>15600</b> lm
PPF	<b>76</b> μmol/s	<b>215</b> μmol/s
PPE	<b>3.1</b> μmol/J	<b>2.7</b> μmol/J
Color Temperature	<b>3500</b> K	
Color Rendering Index	<b>CRI 80</b>	
Beam Angle	<b>120</b> °	
Operational Range CC <sup>1</sup>	<b>17.5 - 21.0</b> V	
Operational Range CV <sup>2</sup>	<b>0.0 - 4.0</b> A	

Test Conditions:  $T_j=25\text{ °C}$

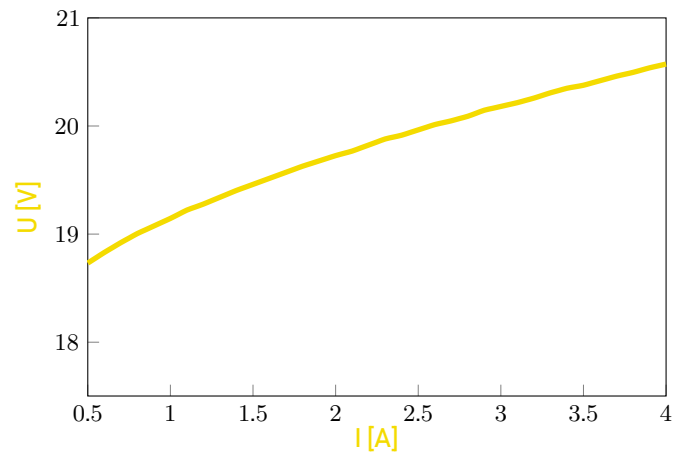
Tolerances: Voltage  $\pm 0,5\%$ , Photon Flux  $\pm 7\%$ , CRI  $\pm 3$

<sup>1</sup> Applies for constant current operation (CC)

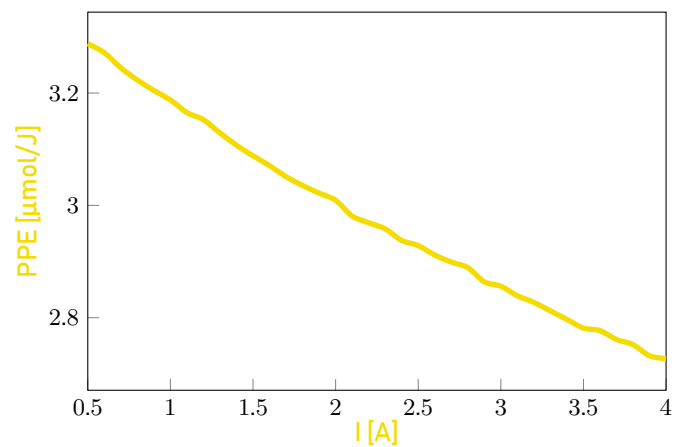
<sup>2</sup> Applies for constant voltage operation (CV)

<sup>3</sup> Non condensing

Voltage vs. Current

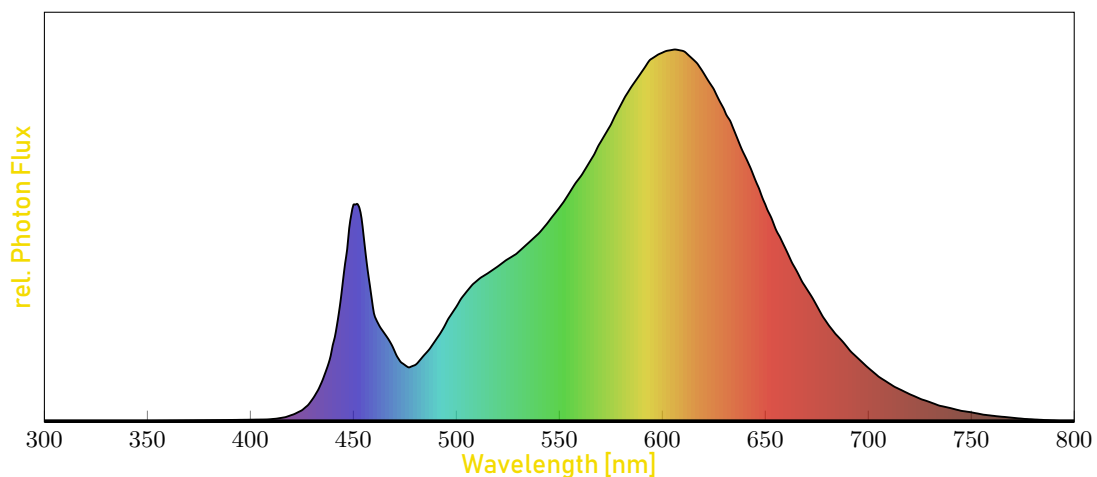


Photon Efficiency vs. Current



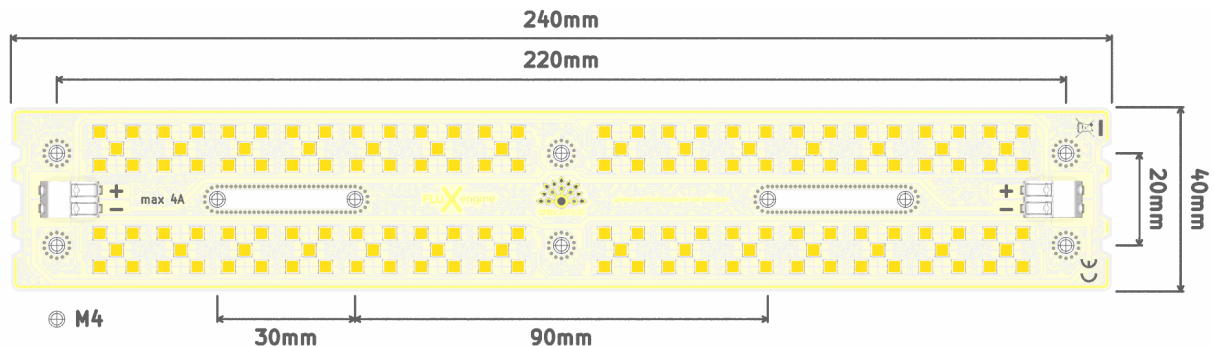
## 1.3 Spektrum 3500K

Photon Spectrum



## 1.4 Dimensions

Outline Dimensions: 240.0 mm x 40.0 mm x 7.5 mm  
 PCB Thickness: 3.0 mm



## 1.5 Connection

Connector: Terminal for solid and fine-stranded wires.  
 Conductor cross-section: 0.2 mm<sup>2</sup> - 0.75 mm<sup>2</sup> (AWG 24-18)  
 - with ferrule: 0.25 mm<sup>2</sup> - 0.34 mm<sup>2</sup>  
 Terminal strip length: 7 - 9 mm  
 Wiring: Direct plugging of *solid conductors*.  
 Opening of actuator for fine-stranded conductors.  
 Releasing of any connection by pressing the actuator.

## 2 Application Notes

### 2.1 General Notes

- Do not exceed the absolute maximum ratings.
- Operating the module well below the maximum specification ensures efficient operation and improves longevity.
- Prefer series connection.
- Prefer constant current operation.
- Ensure sufficient heat dissipation.

### 2.2 Safety

Work on live components must only be carried out when the device is de-energized and by qualified personnel. Observe the risk of burns when touching heat-conducting components. Life-threatening voltage may be present during operation. Contact protection must be ensured.

## Disclaimer

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