

# Technical data

**CODE:** 541421 / 541422 / 541423 / 541424

**PRODUCT:** LED MODULE D170-1 / D170-2 / D170-3 / D170-4

**NOTE:** TECHNICAL DATA

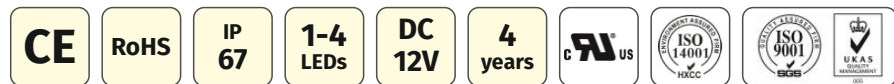
**IMAGE:**



**LAST UPDATE:**

9/2023

# LED MODULE D170



## Model D170

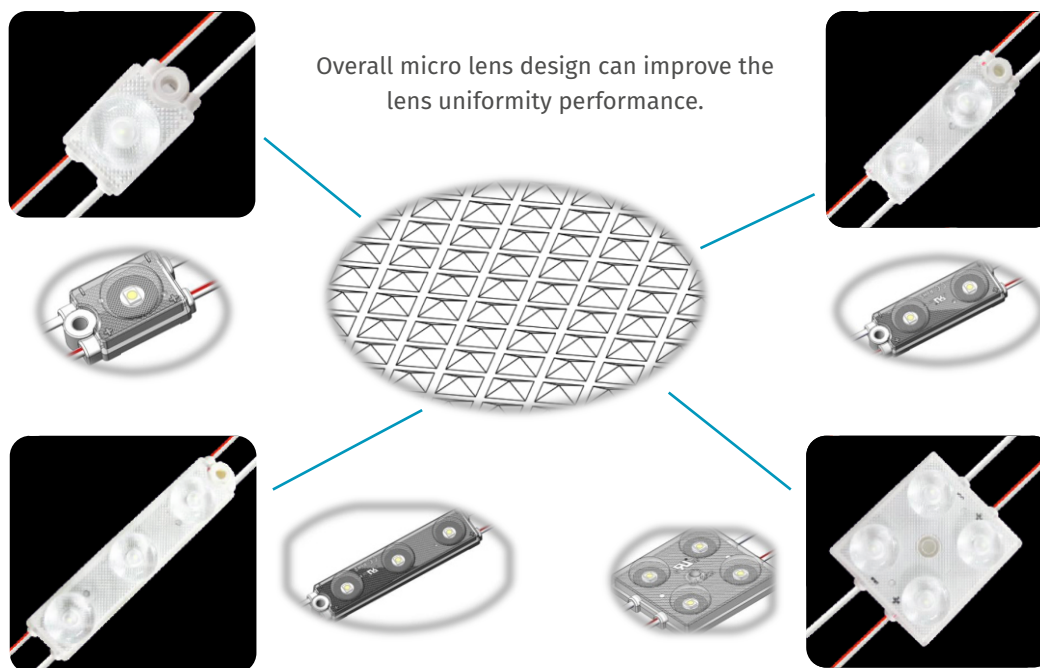
### Areas of application

- Signage and illuminated advertising
- Backlighting of channel letters and light box
- Best for 50 mm to 200 mm depth

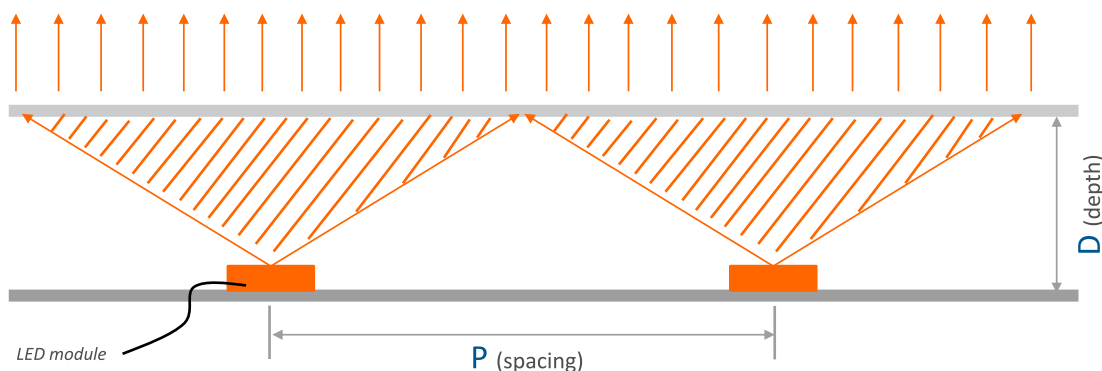
### Product main benefits:

- Uniform and efficient illumination at high LED module distance thanks to new excellent lens design
- New technology to get high efficiency
- 4 years warranty
- 170 lm/W (7000 K)

### Lens technology (micro lens design)



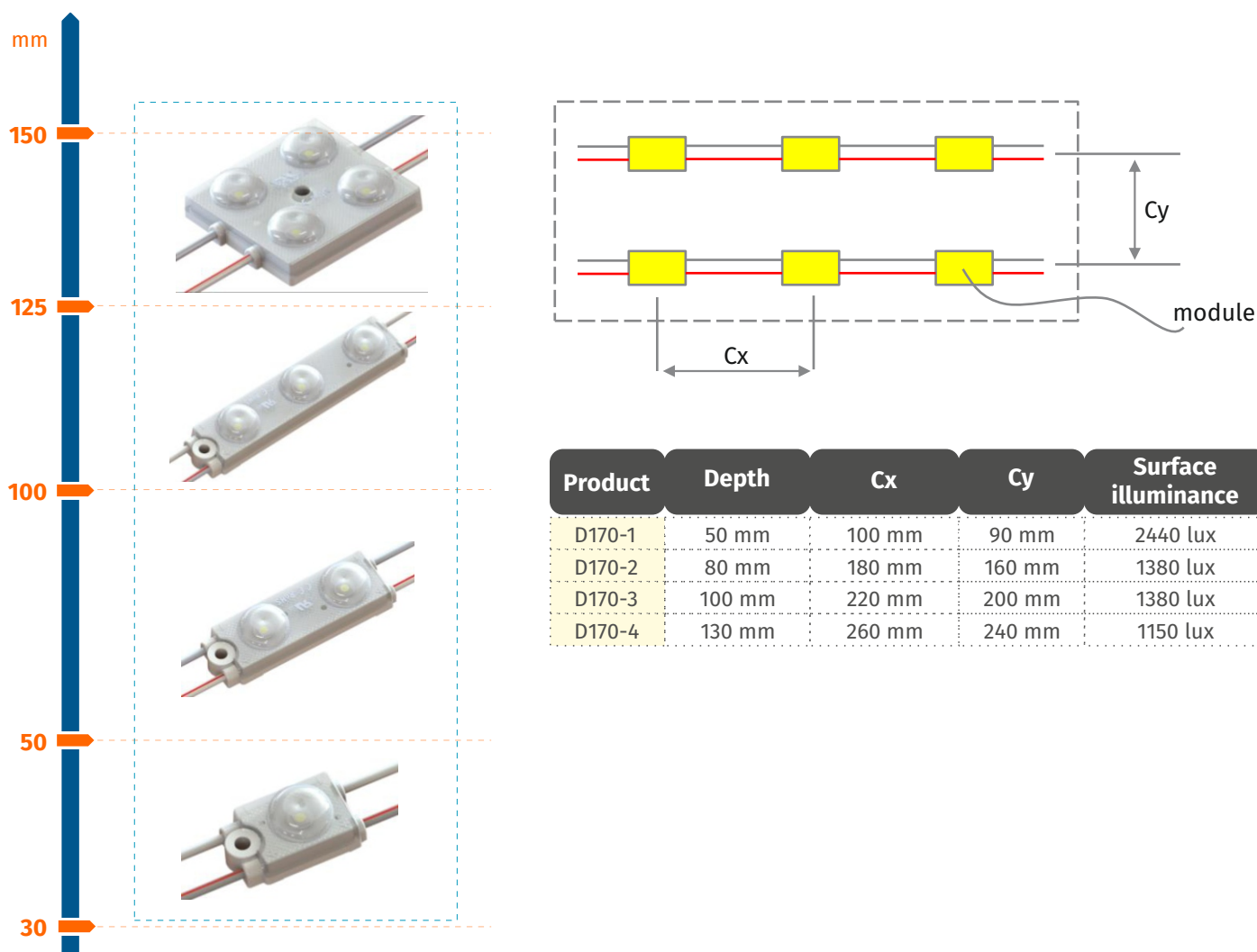
### Optics technology (wide light spot)



$$\text{optical performance proportion} = \frac{D \text{ (depth)}}{P \text{ (spacing)}} = 1:3$$

- The proportion of "P" and "D" can show the performance of lens optics design
- The bigger proportion, the wider light spot
- The proportion is for reference from lab, actual layout need based on real application

## Application



## Electrical data (constant current)

Product	Typical Voltage	Energy Consumption (W/module)	Energy Consumption (W/chain)	Energy Consumption (W/ft.)	Additional Information (modules/chain)
D170-1	12 VDC	0,36	18	0,9	50
D170-2	12 VDC	0,72	21,6	0,9	30
D170-3	12 VDC	1,08	21,6	1,2	20
D170-4	12 VDC	1,44	28,8	1,3	20

### Remark

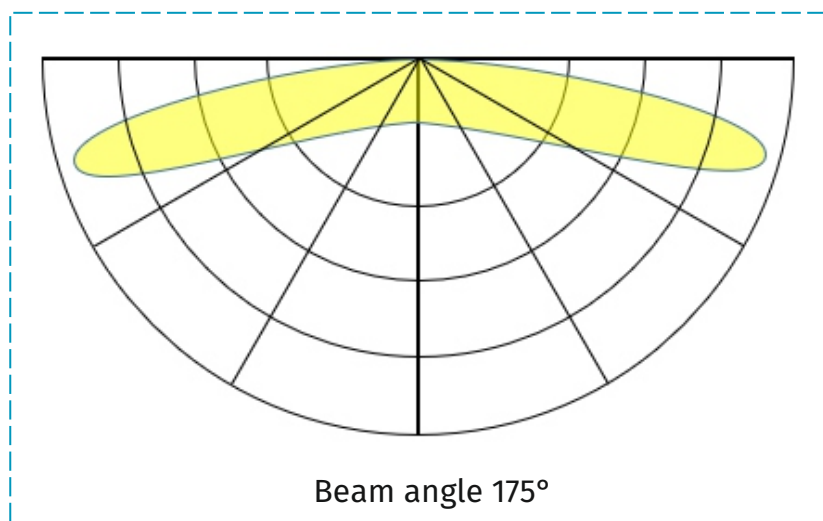
1. Ranking at  $t_a = 25^\circ\text{C}$
2. Constant current design

## Photometrical data

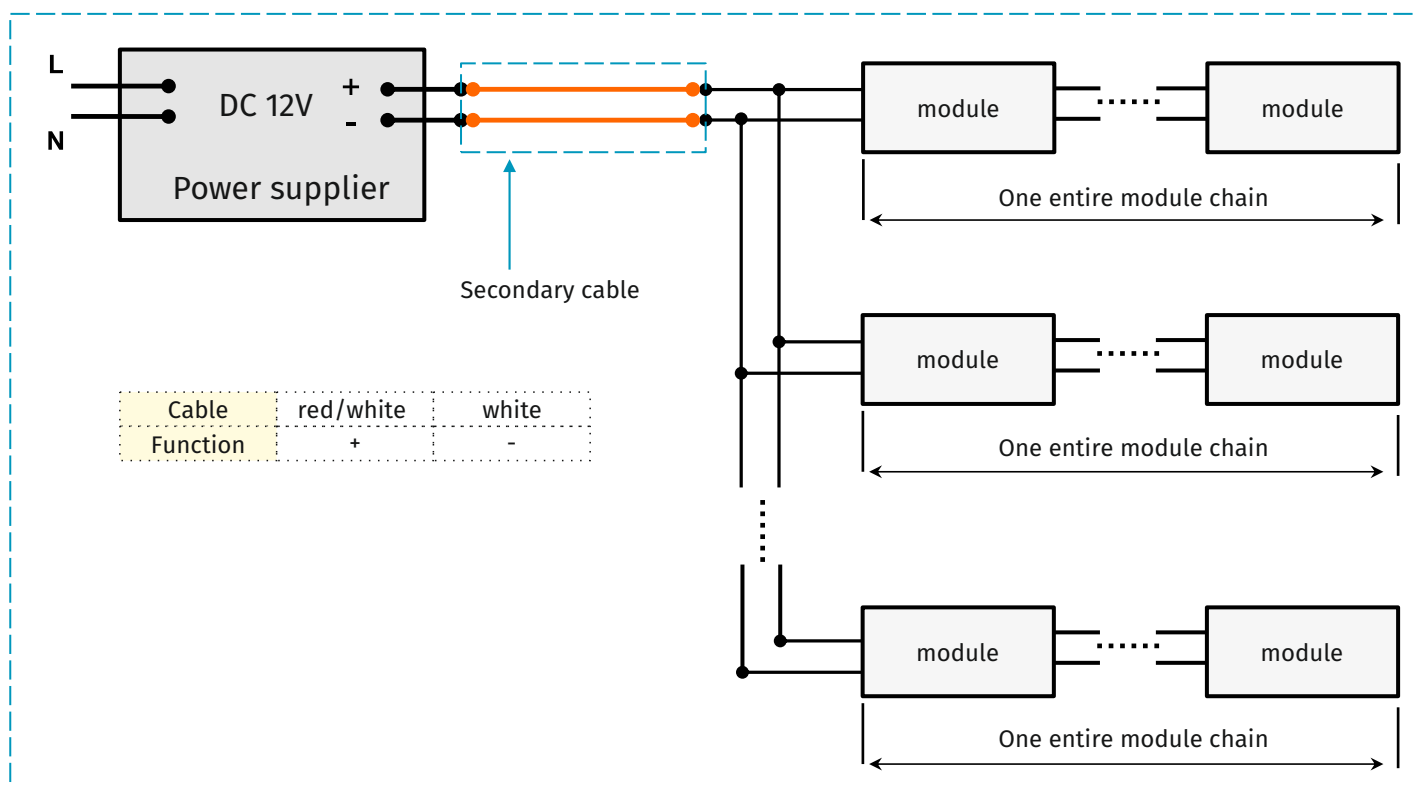
Product	Light color (designation)	Color (CCT, wavelength)	Typical Brightness (lumen/module)	Typical Brightness (lumen/ft.)
D170-1	white	7000 K	61	148
D170-2	white	7000 K	122	149
D170-3	white	7000 K	184	204
D170-4	white	7000 K	245	217

### Application conditions and light distribution

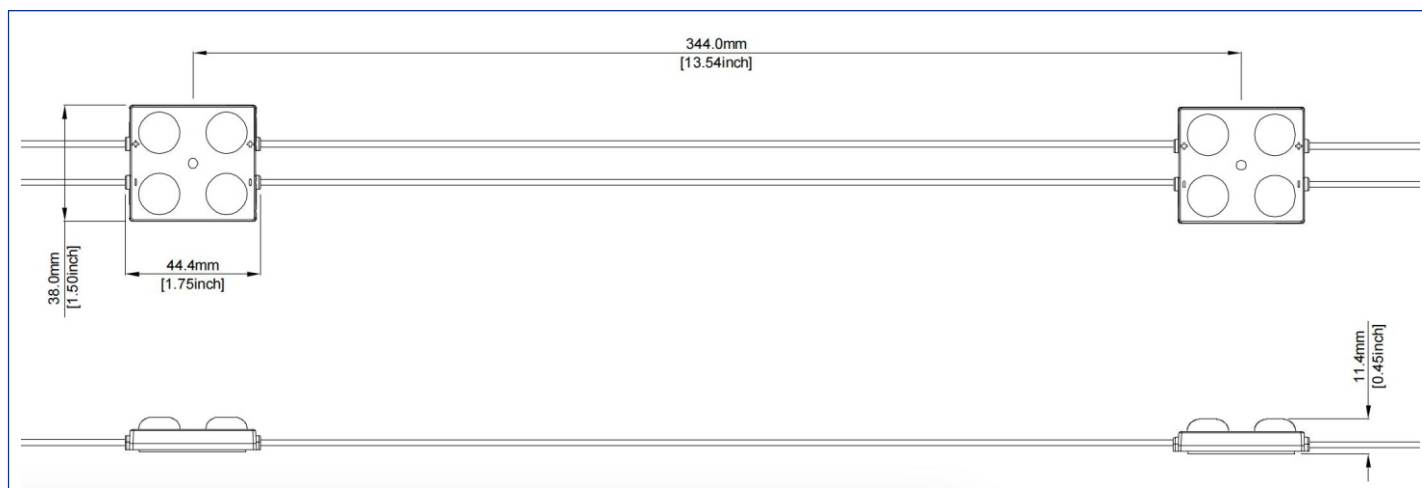
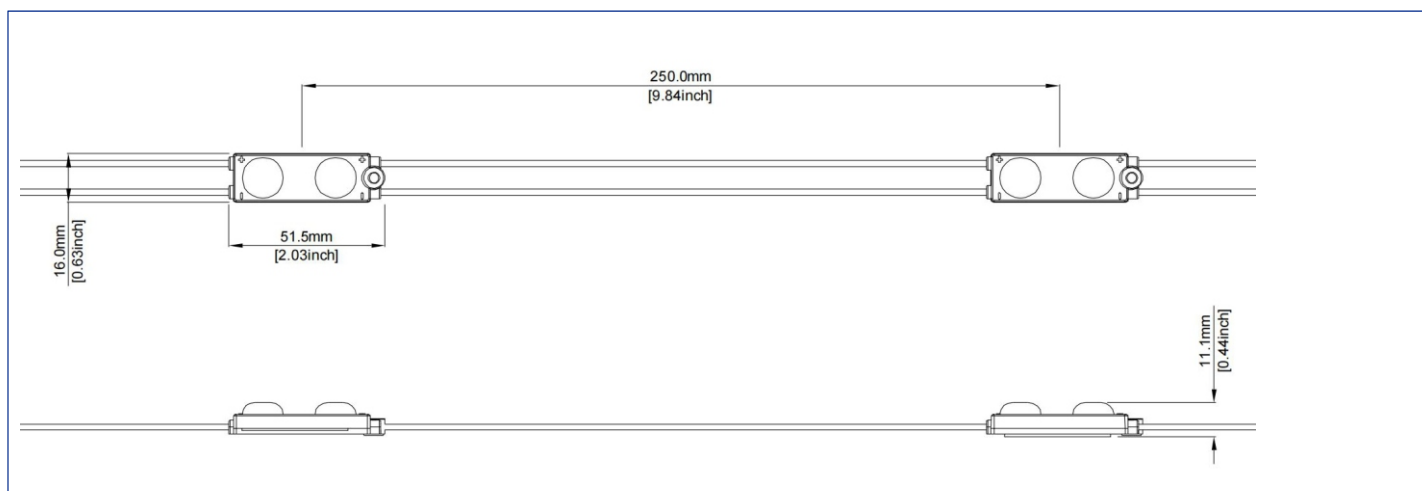
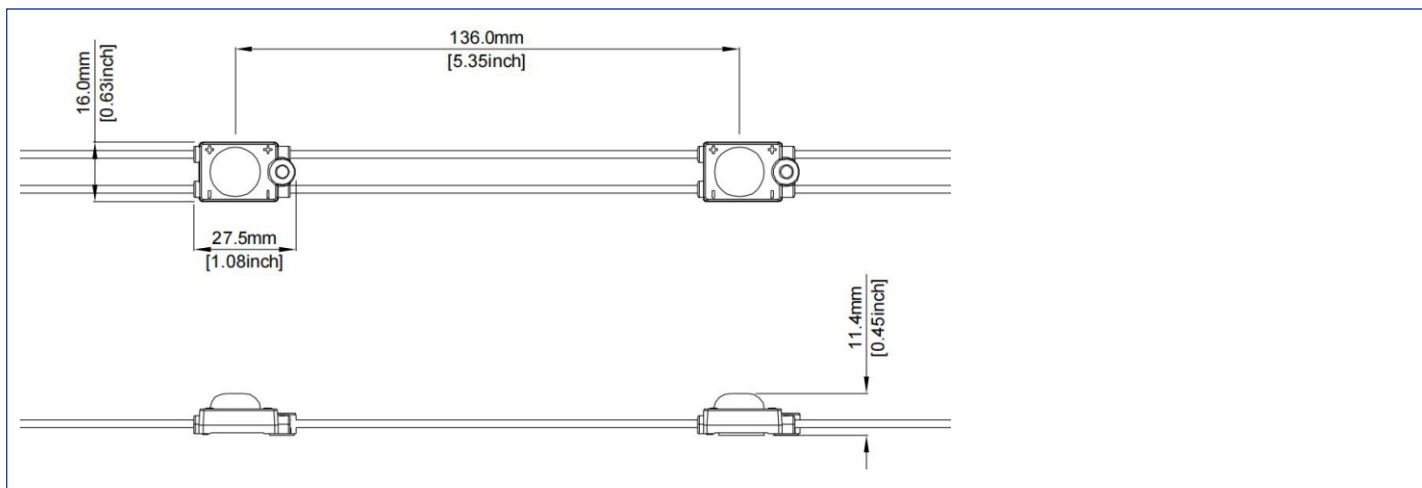
Operating Environment ( $t_a$ )	-25°C to + 60°C
Storage temperature range ( $t_s$ )	-40°C to +85°C
IP Rating	IP67
Lifetime (L70B50)	4 years
tc temperature	80°C
Dimming mode	Dimmable
Cutting resolution	Cut on wire between every module



### Wiring method



**Drawing**



## Additional information

- Installation of LED modules (with power supplies) needs to be made under consideration of all valid regulations and norms.
- Installation by qualified electrician only.
- Parallel connection is mandatory for safe electrical operation. Serial connection of LED modules is discouraged. Unbalanced voltage drop in serial connection can cause hazardous overload.
- Electrical contact is achieved with the contact cables or the terminals of the module. Please refer to the technical data for maximum number of LED modules that can be operated on one control gear.
- To avoid mechanical damage, the LED modules have to be attached securely to the intended mounting surface. It is recommended to avoid heavy vibration.
- LED modules are dimmable by means of PWM (pulse width modulation).