

## Description



The Eco<sup>2</sup> LED Bars, just like our 3s Led Bars or ECO, aims to create a new lighting concept and considerably reduce even more energy consumptions than previous versions.

Color temperature tolerance of 3 SDCM MacAdam ellipses, defined by ANSI C78.377:2011 LEDs are classified as Risk Group 1 according standard EN62471.

Photobiological Safety of Lamps and Lamp Systems. Our polycarbonate lens meets the standard for Food contact FDA 21CFR 177.1580 and (EU) No. 10/2011 for European Union.

By using these ECO2 Bars, you can keep the lighting area with high savings regarding electric energy consumption (Kwh) with a low investment.

Huge flexibility size(90-2250mm) allows size and lighting composition for each project.

Easy to install, allows the use of single bars for each sizes, or join several continuous bars so that the lighting space is suitable.

An higher lifetime is achieved comparing with traditional fluorescent lamps.

## Product Benefits

Lumen depreciation / useful lifetime - Have an average useful lifetime of 60.000 hours on L70;

Energy savings - Above 90% of predicted savings. High efficiency;

High efficiency, low energy consumption and low working voltage;

New lamp design possibilities;

High lighting efficiency;

Less environmental impact throughout it's life cycle.

The LED efficiency increase, more lumen per watt, allows us to re-manufacture the LED Bars in the future, if it is profitable luminotechnical and financially;

Repair possibility of LED Bar lamps during it's useful lifetime;

The re-manufacture and repair of LED Bar lamps, grants us an higher balance in investments and a better commitment with the environment.

## Technical Features:

Power source	Class II constant voltage external LED drive power supply
Voltage	24 ± 3 V DC
Current	96 mA
Power	2.3 ± 0.2W
Useful Lifetime	60.000 hours (L70 - 55°C @ 65%H) *
Beam angle	120 ± 5° **
Field angle	Clear: 135 ± 5° Frost: 195 ± 5° ***
Nr of LEDs	20 - SMD
Working Temp.	-20 to 40 °C
Isolation	Class III
Protection degree	IP42
Lumen maintenance	LM80 (Report available: <a href="#">LM-80 9000hrs</a> )
Certificate	CE / RoHs

\*Luminosity depreciation based on L70.

\*\*Beam angle: 50% of maximum lum.

\*\*\*Field angle: 10% of maximum lum.

## Light Technical Data:

Reference	Description	Luminous flux (Lm)*	Efficiency (Lm/W)	Color Temp. (K)**	Color	CRI >	Lens Type
11030032161	LLED Barra 24V 30 WW303 HE ECO <sup>2</sup> DL Clear	193	84	3045 ± 84	Warm	80	Clear
11030032162	LLED Barra 24V 30 WW303 HE ECO <sup>2</sup> DL Frost	159	69	3045 ± 84	Warm	80	Frost
11030034161	LLED Barra 24V 30 NW403 HE ECO <sup>2</sup> DL Clear	202	88	3986 ± 144	Neutral	80	Clear
11030034162	LLED Barra 24V 30 NW403 HE ECO <sup>2</sup> DL Frost	167	72	3986 ± 144	Neutral	80	Frost
11030025161	LLED Barra 24V 30 CW503 ECO <sup>2</sup> DL Clear	183	79	5029 ± 186	Cool	80	Clear
11030025162	LLED Barra 24V 30 CW503 ECO <sup>2</sup> DL Frost	151	66	5029 ± 186	Cool	80	Frost
11030036161	LLED Barra 24V 30 CW573 HE ECO <sup>2</sup> DL Clear	202	88	5668 ± 207	Cool	80	Clear
11030036162	LLED Barra 24V 30 CW573 HE ECO <sup>2</sup> DL Frost	167	72	5668 ± 207	Cool	80	Frost
11030027161	LLED Barra 24V 30 CW653 ECO <sup>2</sup> DL Clear	183	79	6536 ± 279	Cool	80	Clear
11030027162	LLED Barra 24V 30 CW653 ECO <sup>2</sup> DL Frost	151	66	6536 ± 279	Cool	80	Frost

\* Luminous flux ± 7.5%

\*\* Other color temperatures available upon request



## References Code:

The last six numbers are used to choose the options you desire.

### XXYYZZ

The XX refers to the body option.

The YY corresponds if the product have connectors.

The ZZ refers to the cable type.

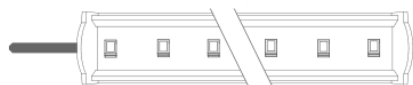
### XX

Natural Aluminum | Ref:...01YYZZ

Chocolate Aluminum | Ref:...03YYZZ

White Aluminum | Ref:...02YYZZ

### YY



**(STOPO) Top Input cable**

Ref:...XX01ZZ



**(1C2P STOPO) Top Input cable output connector**

Ref:...XX08ZZ



**(1C2P) Male connector input**

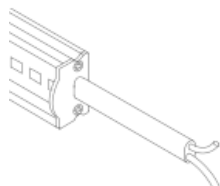
Ref:...XX04ZZ



**(1C2P) Male connector input female connector output**

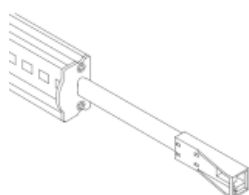
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### ZZ



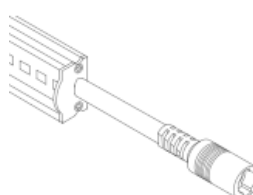
**(-)**

Ref:...XXYY00



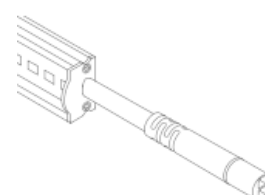
**(ASQC2)**

Ref:...XXYY27



**(DCJ)**

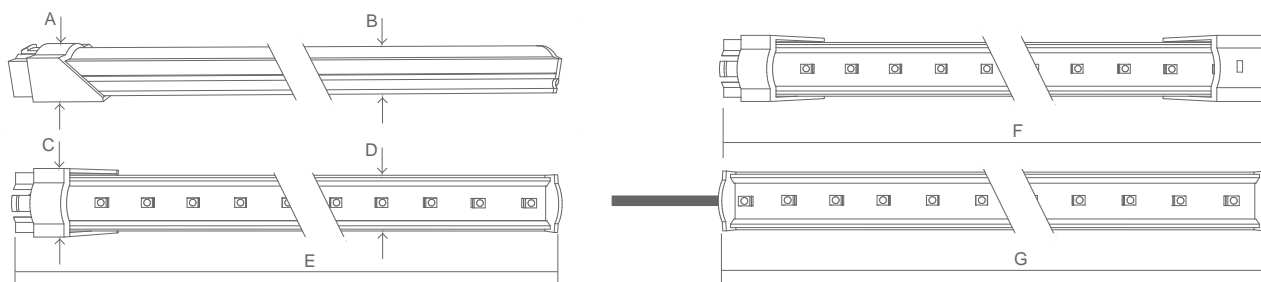
Ref:...XXYY25



**(DC24)**

Ref:...XXYY42

## Dimensions

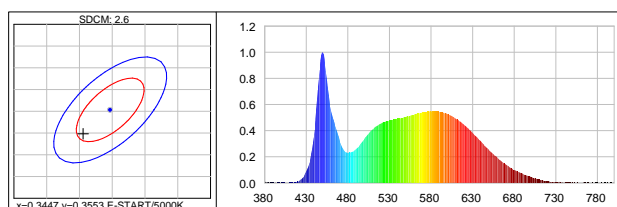


A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
15	12	20	17	319	335	304

## CCT (Color temperature)

Color temperature tolerance of 3 SDCM MacAdam ellipses, defined by ANSI C78.377:2011

### Cool white 5000K 3SDCM



#### Photometric Parameters

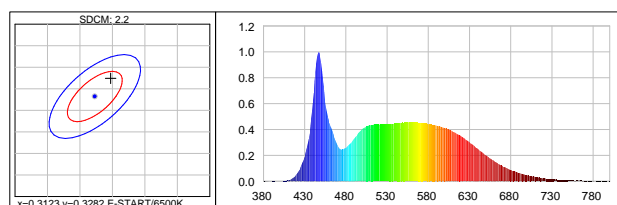
EEL: 0.15 Energy Efficiency Class: A+ (EU 874-2012)

#### CIE Colorimetric Parameters

Chromaticity coordinates:  $x=0.3406$   $y=0.3498$   $u(u')=0.2090$   $v=0.3221$   $v'=0.4831$

CCT:  $T_c=5172K$  ( $duv=0.00096$ ) CRI:  $R_a=85.4$  Color Ratio:  $R=0.156$   $G=0.797$   $B=0.047$

### Cool white 6500K 3SDCM



#### Photometric Parameters

EEL: 0.15

Energy Efficiency Class: A+ (EU 874-2012)

#### CIE Colorimetric Parameters

Chromaticity coordinates:  $x=0.3147$   $y=0.3324$

$u(u')=0.1980$   $v=0.3136$   $v'=0.4704$

CCT:  $T_c=6374K$  ( $duv=0.00392$ )

CRI:  $R_a=87.8$

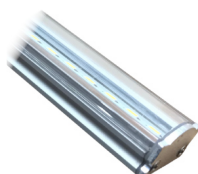
Color Ratio:  $R=0.140$   $G=0.802$   $B=0.058$

## Options

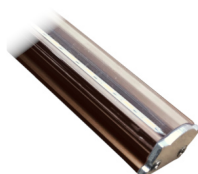
We provide all professionals and non professionals with a huge installation flexibility of our LED Bars.  
 Give your lighting area a new look and design with 3 available finishing colours for the body lamp and 2 types of lens polycarbonate.  
 Fixed or rotating docking.  
 Huge connection flexibility.

### Options: Body

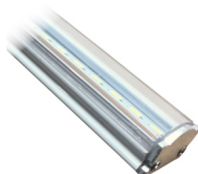
We provide 3 finishing jobs for the bar body, that allows for a new look and design when using our LED bars.



Natural Aluminum



Chocolate Aluminum



White Aluminum



Polycarbonate

### Options: Cover

We provide 2 types of polycarbonate, clear and frost.



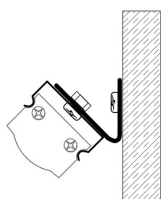
Clear cover



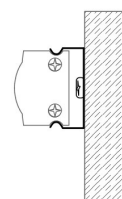
Frost cover

### Options: Metallic Fixture

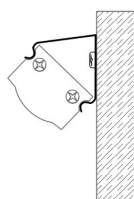
We provide 4 types of docking, rotating so the bar can be oriented, fixed @ 45°, fixed @ 180° and fixed @ 180° with extra 45°. Available in PVC, fixing at 180°, 45° and on corners.



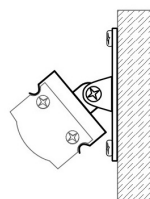
Clip 180° (45° extra)



180° Fix clip



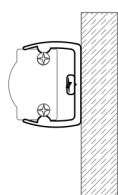
45° Fix clip



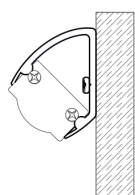
Rotating clip

### Options: Pvc Fixture

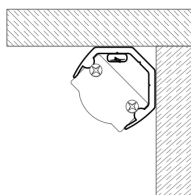
We provide 4 types of docking, rotating so the bar can be oriented, fixed @ 45°, fixed @ 180° and fixed @ 180° with extra 45°. Available in PVC, fixing at 180°, 45° and on corners.



180° PVC clip



45° PVC clip



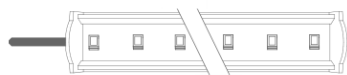
Corner PVC clip

## Options: Connection

For greater installation flexibility of our LED bars, we provide bars with the following characteristics:

Cable input, connector input.

Cable input and connector output and connector input and connector output, so other LED bars can be interconnected.



Top Input cable  
(STopo)



Top Input cable output connector  
(1C2P STopo)



Male connector input  
(1C2P)



Male connector input female connector output  
(2C2P)



Top Input cable with ASQC2 connector  
(ASQC2)