Channel 4 DOB

Product Sheet

<u>L()()</u><u>XLuminaires</u>

Easy to use and simple to operate.

Channel 4 DOB is the ideal linear LED fixture designed for the indoor use.

Channel 4 DOB comes with a built-in driver inside. All you need is one power supply, just plug it in and it works!

When you wish to obtain a mono chromatic color, and no dimming needed*; one **Channel 4** DOB will do the trick.

Channel 4 DOB is a versatile liner: Available in lengths of up to 2000mm, offering a choice of 20mm optics and a wide range of LED configurations.





Installation

With 2 sets of attachments supplied, **Channel 4** DOB can be set to 3 different positions (0, -15, +15 deg.).

Units can be daisy chained using a jumper cable.

Optic Range

Different optics can be specified for each unit. The oval lens is designed for wall grazing.

Thermal Protection

The fixture is thermally managed to maintain consistency in color and output.

High Power

The liner can be operated at 700mA, with a max. power consumption of 90.1W.



*dimming is available upon request



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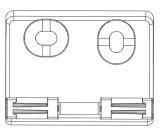
<u>L()()</u><u>X</u>Luminaires

Table1_Electrical Specifications

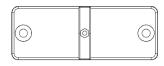
| Output | |
|------------------------|---|
| LED Source | High power Luxeon Rebel |
| Channel Range | 1 channel |
| Color Choice | Monochrome color only |
| Optical System | 6°, 15°, 25°, 36°, Oval |
| Electrical | |
| Control | Driver on board |
| Input Voltage | 24VDC |
| LED Driving Current | 350mA/ 500mA/ 700mA |
| Max. LEDs Per Chain* | 32 LEDs @ 700mA 44 LEDs @ 500mA 64 LEDs @ 350mA |
| Efficiency | Up to 90% |
| Electrical Protection | Reverse polarity, over voltage |
| Thermal Protection | Triggered @ 60°C, slowly decreases driving current/ @80-85°C driving current approx. 50% of nominal |
| Dimming Options | 0-10VDC, PWM** |
| Physical | |
| Length | Dependent |
| Width | 42mm |
| Height | 44.8mm |
| Housing | Powder coated aluminum, UV protected polycarbonate |
| Color | Aluminium anodize |
| Accessories | |
| Attachments | Visible, blind 180° Adjustable |
| Environmental | |
| Operating temp. | 0°C ~ + 40°C |
| Storage temp. | 0°C ~ + 60°C |
| IP Rating | Indoor – IP40 |

- * See power consumption table
- ** Dimming is available upon request.

Attachments

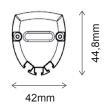








Dimensions



Daisy Chain Connection







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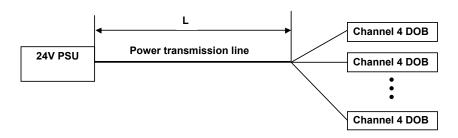
Power Consumption Table

| | Power Consumption [W] using LUXEON Rebel (Vf=3.5V) | | | Power Consumption [W] using LUXEON Rebel ES (Vf=3.0V) | | |
|----------------|--|--------|--------|---|--------|--------|
| No. of LEDs | @350mA | @500mA | @700mA | @350mA | @500mA | @700mA |
| 4 | 5.9 | 8.2 | 11.3 | 5.0 | 7.0 | 9.6 |
| 8 | 11.9 | 16.5 | 22.5 | 10.1 | 14.0 | 19.1 |
| 12 | 17.8 | 24.7 | 33.8 | 15.1 | 21.0 | 28.7 |
| 16 | 23.8 | 32.9 | 45.1 | 20.2 | 28.0 | 38.3 |
| 20 | 29.7 | 41.2 | 56.3 | 25.2 | 35.0 | 47.9 |
| 24 | 35.6 | 49.4 | 67.6 | 30.3 | 42.0 | 57.4 |
| 28 | 41.6 | 57.6 | 78.9 | 35.3 | 49.0 | 67.0 |
| 32 | 47.5 | 65.9 | 90.1 | 40.4 | 56.0 | 76.6 |
| 36 | 53.5 | 74.1 | N/A | 45.4 | 63.0 | 86.2 |
| 40 | 59.4 | 82.4 | N/A | 50.5 | 70.0 | N/A |
| 44 | 65.3 | 90.6 | N/A | 55.5 | 77.0 | N/A |
| 48 | 71.3 | N/A | N/A | 60.6 | 84.0 | N/A |
| 52 | 77.2 | N/A | N/A | 65.6 | N/A | N/A |
| 56 | 83.2 | N/A | N/A | 70.7 | N/A | N/A |
| 60 | 89.1 | N/A | N/A | 75.7 | N/A | N/A |
| 64 | 95.0 | N/A | N/A | 80.8 | N/A | N/A |
| 68 | N/A | N/A | N/A | 85.85 | N/A | N/A |
| 72 | N/A | N/A | N/A | 90.9 | N/A | N/A |

Cable Limitations

| Cable Type | Wire Cross Section | LED Type | LED Forward Voltage (typ.) | Max. Cable Length (L)* |
|------------|--------------------|----------|----------------------------|------------------------|
| CAT5 | 8x24 AWG | Rebel ES | 3.0 V | 20m |
| CAT5 | 8x24 AWG | Rebel | 3.5 V | 15m |

^{*} The calculations were made for the following connection structure:





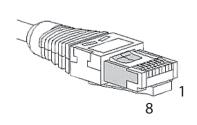


Cable Length

| Length | No. of LEDs | BIN Options | Optics | | |
|--------|-------------|---|-------------------------------------|--|--|
| 171mm | 4 | | | | |
| 337mm | 8 | | 6° 15° 25° 45° 6° x 25° | | |
| 503mm | 12 | WW- 2700K WW- 3000K NW- 4000K CW- 6500K Red Green Blue Amber | | | |
| 669mm | 16 | | | | |
| 835mm | 20 | | | | |
| 1001mm | 24 | | | | |
| 1067mm | 28 | | | | |
| 1332mm | 32 | | | | |
| 1499mm | 36 | | | | |
| 1665mm | 40 | | | | |
| 1800mm | 44 | | | | |
| 2000mm | 48 | | | | |

Table 2_Power Input Pin-Out

| Pin | Polarity | |
|-----|----------|--|
| 1 | | |
| 2 | GND | |
| 3 | | |
| 4 | +Vdim* | |
| 5 | N.C. | |
| 6 | | |
| 7 | +24V | |
| 8 | | |



Note:

In case the connection structure is different and longer cable is needed, please consult with R&D department.



^{*}On dimming supporting fixtures only, otherwise N.C.