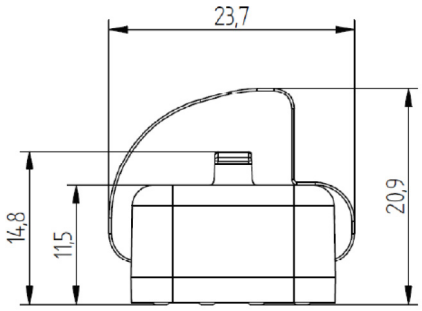
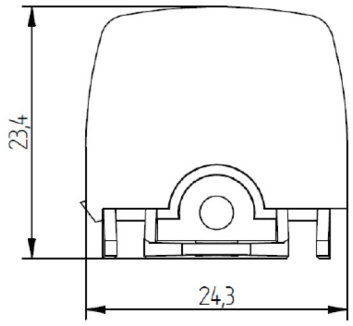
# Door Lighting

## REFRIGERATORS & FREEZERS LUMINAIRES

### FEATURES & BENEFITS

- Efficient lighting for different applications
- Available in a variety of light colours and can be matched to specific food types
- Ready-to-connect solution
- High operational performance due to directional lighting, integrated heat removal and highly efficient LEDs
- Excellent product illumination thanks to the combination of SMD LEDs and innovative optics
- Safe-use operation due safety extra-low voltage (SELV)
- Simple installation with application of fixing plates
- Heat sink profile made of anodised, extruded aluminium
- LED modules protected against moisture & dust by Conformal coating
- End caps made of PBT
- Linear lenses made of PMMA
- Dimming capability




### APPLICATION

Grocery & Supermarkets freezers and refrigerators .
Other specialized uses for narrow enclosures.

## SPECIFICATIONS

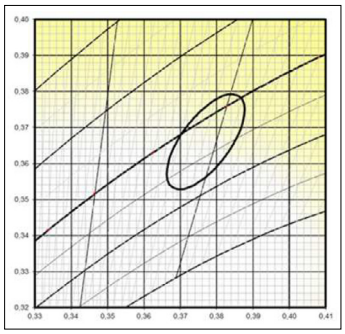
| | |
|---|---|
| Supply voltage | 24V DC |
| Ambient temperature ta | -30 ... +30 ˚C |
| Max. surface temeprature on profile tc | 60 ˚C |
| Type of protection | IP 20 |
| Protection class | III |
| Risk group (EN 62471:2008) | 1 |
| CRI | 90, 95 |

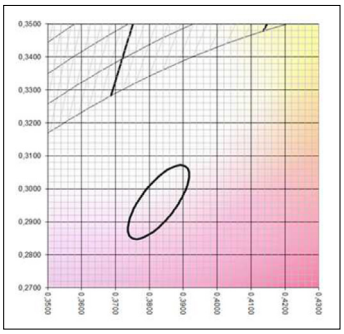
## SKU SPECIFICATIONS

| Article Number | Description | Current (mA) | Length (mm) | Nr. of modules | Luminous flux light engine (lm) | Power (W) | CCT |
|---|---|---|---|---|---|---|---|
| 90102151 | LED LE1080 NW 10L10-1 24V/80mA SED-8Y 1500 C | 80 | 1080 | 10 | 1520 | 19.2 | NW |
| 90102152 | LED LE1080 NW 10L10-1 24V/42mA SED-8Y 1500 L | 42 | 1080 | 10 | 640 | 10.1 | NW |
| 90102153 | LED LE1080 NW 10L10-1 24V/42mA SED-8Y 1500 R | 42 | 1080 | 10 | 640 | 10.1 | NW |
| 90102154 | LED LE1080 PM 10L10-1 24V/80mA SED-8Y 1500 C | 80 | 1080 | 10 | 1320 | 19.2 | PM |
| 90102155 | LED LE1080 PM 10L10-1 24V/42mA SED-8Y 1500 L | 42 | 1080 | 10 | 580 | 10.1 | PM |
| 90102156 | LED LE1080 PM 10L10-1 24V/42mA SED-8Y 1500 R | 42 | 1080 | 10 | 580 | 10.1 | PM |

* All typical values for Ta=25°C +/- 2°C, setting time =200ms
* Luminous flux min. value = typ. value – 20%
* Tolerance mechanical dimensions +/- 1mm
* Tolerance electrical data +/- 15%
* Tolerance optical data +/-10%

## COORDINATES AND TOLERANCES ACCORDING TO CIE 1964





| CIE - Coordinates | | |
|---|---|---|
| Neutral white 4100K | | |
| | x0 | y0 |
| Center point | 0.3770 | 0.3660 |
| MacAdam ellipse | 3SDCM | |

| CIE - Coordinates | | |
|---|---|---|
| Meat & Deli | | |
| | x0 | y0 |
| Center point | 0.3890 | 0.3030 |
| MacAdam ellipse | 3SDCM | |

## OPTICAL PROPERTIES

### Lifetime

| $tc_{LED}$ temperature in ˚C | Luminous flux in % | Lifetime in h |
|---|---|---|
| 0 | 70 | 50000 |
| | 80 | 30000 |
| 25 | 70 | 47000 |
| | 80 | 29000 |
| 45 | 70 | 45000 |
| | 80 | 28000 |

### Standards

*EN 60598-1
*EN 60598-2-1
*EN 62031
*EN 62471

### Thermal Behavior

| | | |
|---|---|---|
| Operating temperature (operation, no defects) | ta | -30 ... +30 ˚C |
| Storage temperature | ts | -30 ... +60 ˚C |
| Temperature cooling profile* | tc | -30 ... +60 ˚C |

*Values apply to operation at 100% output, natural convection.
*If the maximum temperature limits are exceeded, the lifetime of the module will be greatly reduced or the module may be destroyed. The tc point temperature at the profile of the light should be measured in the thermally stable state and under operating conditions by means of a temperature sensor or temperature sensitive sticker in accordance with EN60598 - 1. The entire profile can be used as the tc point.