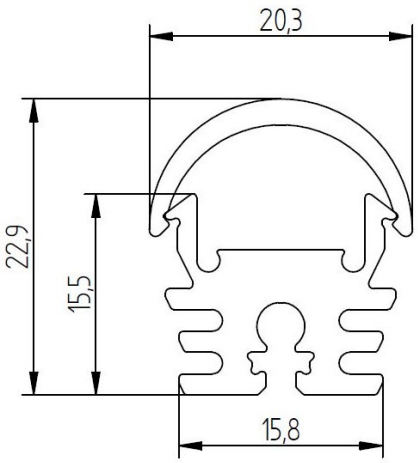


Shop Lighting

REFRIGERATORS & FREEZERS LUMINAIRES

FEATURES & BENEFITS

- Linear lighting for various applications
- Plug & Play solution with the Quick Connection System (QCS)
- Available in cool white (CW) and natural white (NW) temperatures
- High efficiency due directional lighting, integrated heat removal and highly efficient LEDs
- Excellent product lighting thanks to the combination of SMD LED´s and different optics
- Safe use due safety extra-low voltage (SELV)
- Simple installation with fixing plates
- Cooling profile made of anodised, extruded aluminium
- Endcaps made of PBT
- Dimmable

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	95

SKU SPECIFICATIONS

Article Number	Description	CCT (K)	Length (mm)	Nr. of modules	Luminous flux light engine (lm)	Power (W)	Current (mA)
90101848	LED LE1000 WW 9L10-1 24V/100mA COW9QY	3000 / WW	1000	9	980	21.6	100
90101621	LED LE1171 WW 11L10-1 24V/100mA COW9QY	3000 / WW	1171	11	1200	26.4	100
90101649	LED LE1171 NW 11L10-1 24V100mA COW9QY	4200 / NW	1171	11	1570	26.4	100
90101740	LED LE1486 WW 14L10-1 24V/100mA COW9QY	3000 / WW	1486	14	4140	33.6	100
90101741	LED LE1486 NW 14L10-1 24V/100mA COW9QY	4200 / NW	1486	14	1200	33.6	100
90101622	LED LE1670 WW 16L10-1 24V/100mA COW9QY	3000 / WW	1670	16	1740	38.4	100
90101650	LED LE1670 NW 16L10-1 24V/100mA COW9QY	4200 / NW	1670	16	2280	38.4	100
90101623	LED LE1970 WW 19L10-1 24V/100mA COW9QY	3000 / WW	1970	19	2060	45.6	100
90101651	LED LE1970 NW 19L10-1 24V/100mA COW9QY	4200 / NW	1970	19	2710	45.6	100
90101624	LED LE2972 WW 29L10-1 24V/100mA COW9QY	3000 / WW	2972	29	3150	69.6	100
90101652	LED LE2972 NW 29L10-1 24V/100mA COW9QY	4200 / NW	2972	29	4140	69.6	100

**All typical values for Ta=26°C +/- 2°C, setting time =200ms*

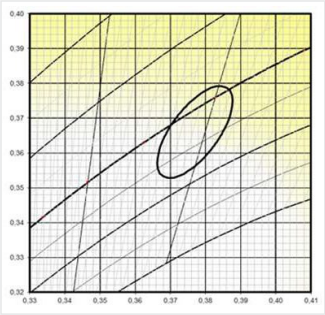
**Luminous flux min. value = typ. value – 20%*

**Tolerance mechanical dimensions +/- 1mm*

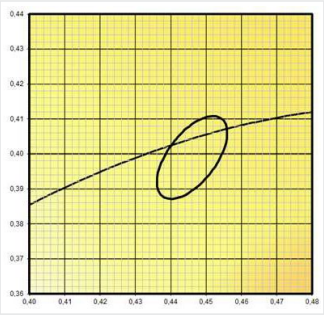
**Tolerance electrical data +/- 16%*

**Tolerance optical data +/-10%*

COORDINATES AND TOLERANCES ACCORDING TO CIE 1964



CIE - Coordinates		
Neutral white 4200K		
	x0	y0
Center point	0.3770	0.3660
MacAdam ellipse	5SDCM	



CIE - Coordinates		
Warm white 3000K		
	x0	y0
Center point	0.4460	0.3990
MacAdam ellipse	5SDCM	

OPTICAL PROPERTIES

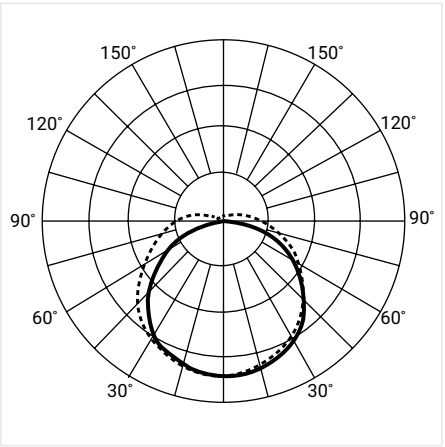
Lifetime tc_{LED} temperature in ˚C	Luminous flux in %	Lifetime in h
0	70	50000
	80	30000
25	70	47000
	80	29000
45	70	45000
	80	28000

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

Standards

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

Light distribution curve COW lens



** 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.*