

VERTICAL LIGHTING | Sense Line GenX+



**Cooler & Freezer
Cabinets**



Door Center



Door End



Plug & Play
Cinch-Connection-System



Dimmable



High efficiency



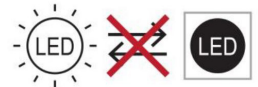
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PRODUCT DESCRIPTION

- High efficient, extra slim door lighting up to 140lm/W
- Ready-to-connect solution available, thanks to Cinch Connection System
- High operational performance due to directional lighting & integrated heat removal
- Excellent product illumination thanks to the combination of SMD LEDs and innovative optics
- Avoids glare and reflections by using a door blind (optional)
- Safe-use operation due safety extra-low voltage (SELV)
- Simple installation with application of fixing plates, or blind
- 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 polycarbonate (GWT up to 850°C)
- Dimming capability

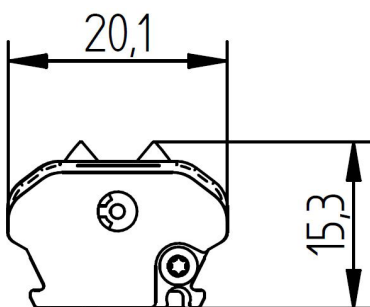
TECHNICAL DATA

Supply voltage	24 VDC
Ambient temperature t_a	-30 ... +30 °C
Max. surface temperature on profile t_c	60 °C
Type of protection	IP54 (only with „PROTECTION KIT“)
Protection class	III
Risk group (EN 62471:2008)	0

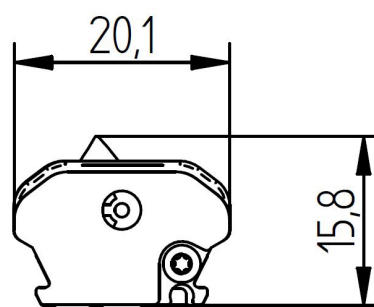


DIMENSIONS

DOOR - CENTER



DOOR - END



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TECHNICAL DATA | ORDER DATA

Art. No.	Type	Length	Light colour	No. of LED modules	Efficiency	Luminous flux	Power	CRI	EEC light source
Door Lighting									
91451034	LED LE1450 CW 10L14-XHD2 24V/70mA SES8DY C	1450mm	5000K	10	2210lm	16,0W	138lm/W	92	C
91451035	LED LE1450 CW 10L14-XHD2 24V/40mA SES8DY E	1450mm	5000K	10	1280lm	10,0W	128lm/W	92	C
91451036	LED LE1450 NW 10L14-XHD2 24V/70mA SES8DY C	1450mm	4000K	10	2210lm	16,0W	138lm/W	92	C
91451037	LED LE1450 NW 10L14-XHD2 24V/40mA SES8DY E	1450mm	4000K	10	1280lm	10,0W	128lm/W	92	C
91451038	LED LE1450 WW 10L14-XHD2 24V/70mA SES8DY C	1450mm	3000K	10	2140lm	16,0W	134lm/W	92	D
91451039	LED LE1450 WW 10L14-XHD2 24V/40mA SES8DY E	1450mm	3000K	10	1250lm	10,0W	125lm/W	92	D
91451040	LED LE1450 PM 10L14-XHD1 24V/70mA SES8DY C	1450mm	Meat	10	1790lm	16,0W	112lm/W	92	E
91451041	LED LE1450 PM 10L14-XHD1 24V/40mA SES8DY E	1450mm	Meat	10	1040lm	10,0W	104lm/W	92	E
91451042	LED LE1591 CW 11L14-XHD2 24V/70mA SES8DY C	1591mm	5000K	11	2430lm	17,6W	138lm/W	92	C
91451043	LED LE1591 CW 11L14-XHD2 24V/40mA SES8DY E	1591mm	5000K	11	1410lm	11,0W	128lm/W	92	C
91451044	LED LE1591 NW 11L14-XHD2 24V/70mA SES8DY C	1591mm	4000K	11	2430lm	17,6W	138lm/W	92	C
91451045	LED LE1591 NW 11L14-XHD2 24V/40mA SES8DY E	1591mm	4000K	11	1410lm	11,0W	128lm/W	92	C
91451046	LED LE1591 WW 11L14-XHD2 24V/70mA SES8DY C	1591mm	3000K	11	2360lm	17,6W	134lm/W	92	D
91451047	LED LE1591 WW 11L14-XHD2 24V/40mA SES8DY E	1591mm	3000K	11	1370lm	11,0W	125lm/W	92	D
91451048	LED LE1591 PM 11L14-XHD1 24V/70mA SES8DY C	1591mm	Meat	11	1970lm	17,6W	112lm/W	92	E
91451049	LED LE1591 PM 11L14-XHD1 24V/40mA SES8DY E	1591mm	Meat	11	1150lm	11,0W	105lm/W	92	E
91451050	LED LE1731 CW 12L14-XHD2 24V/70mA SES8DY C	1731mm	5000K	12	2650lm	19,2W	138lm/W	92	C
91451051	LED LE1731 CW 12L14-XHD2 24V/40mA SES8DY E	1731mm	5000K	12	1540lm	12,0W	128lm/W	92	C
91451052	LED LE1731 NW 12L14-XHD2 24V/70mA SES8DY C	1731mm	4000K	12	2650lm	19,2W	138lm/W	92	C
91451053	LED LE1731 NW 12L14-XHD2 24V/40mA SES8DY E	1731mm	4000K	12	1540lm	12,0W	128lm/W	92	C
91451054	LED LE1731 WW 12L14-XHD2 24V/70mA SES8DY C	1731mm	3000K	12	2570lm	19,2W	134lm/W	92	D
91451055	LED LE1731 WW 12L14-XHD2 24V/40mA SES8DY E	1731mm	3000K	12	1490lm	12,0W	124lm/W	92	D
91451056	LED LE1731 PM 12L14-XHD1 24V/70mA SES8DY C	1731mm	Meat	12	2150lm	19,2W	112lm/W	92	E
91451057	LED LE1731 PM 12L14-XHD1 24V/40mA SES8DY E	1731mm	Meat	12	1250lm	12,0W	104lm/W	92	E

Packaging: 12 pieces/carton, 360 pieces/pallet

- All typical values for Ta=25°C +/- 2°C
- Luminous flux min. value = typ. value - 20%
- Tolerance mechanical dimensions +/- 1mm
- Tolerance electrical data +/- 15%
- Tolerance optical data +/- 15%
- Tolerance min. value CRI +/- 1

CONVERTER

Output voltage	24 VDC +10 %
Power driver	= sum of the typical individual power of the light engines + 10 %
Chaining length (in series)	@70mA: max 44 LED modules @40mA: max 50 LED modules

Selection of the operating device/protective functions

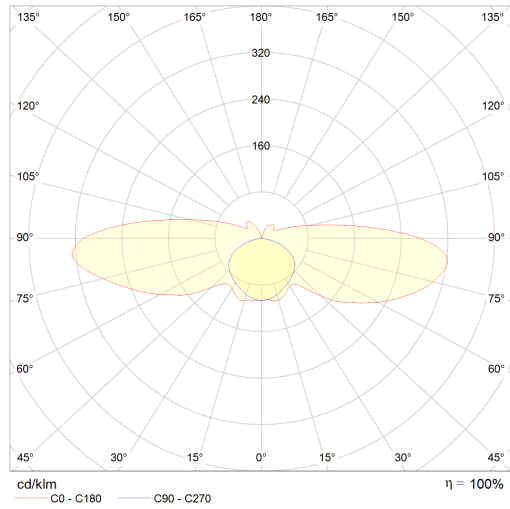
The operating device protects the modules against overvoltage, overcurrent, overload and short circuits. The device must comply with the relevant standards for safe operation in freezer and refrigeration equipment and must be also technically approved by LUMITECH Lighting Solution GmbH. Power supply units must ensure the following protective measures:

- SELV
- Short-circuit protection
- Overload protection
- Overtemperature protection
- Protection against environmental influences

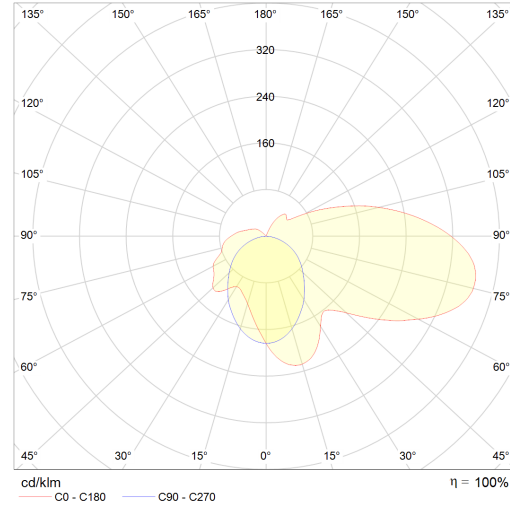
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OPTICAL PROPERTIES - LUMINAIRE

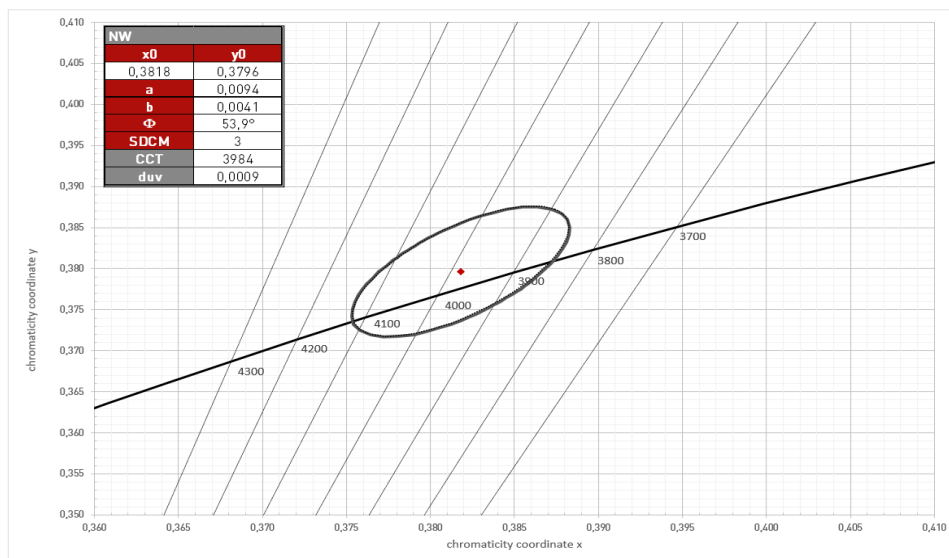
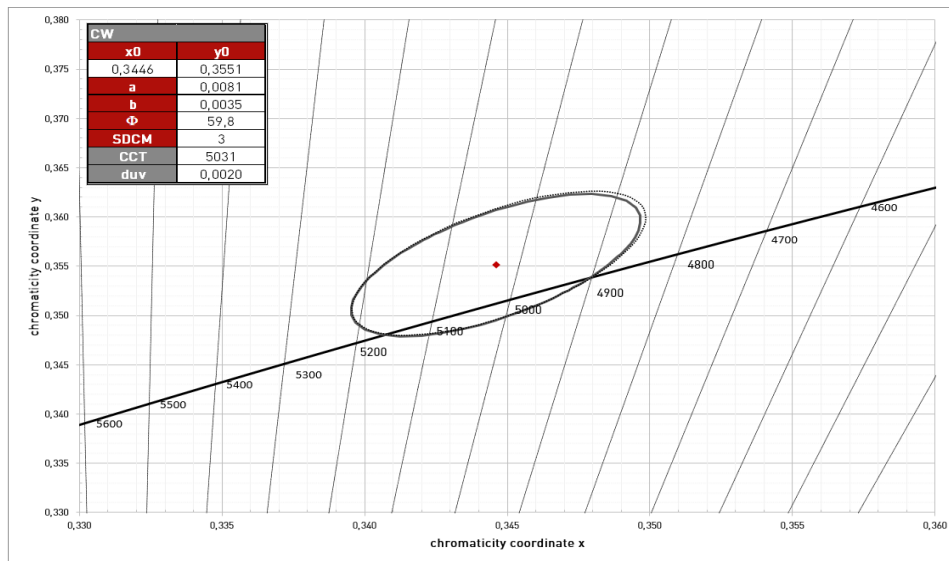
CENTER



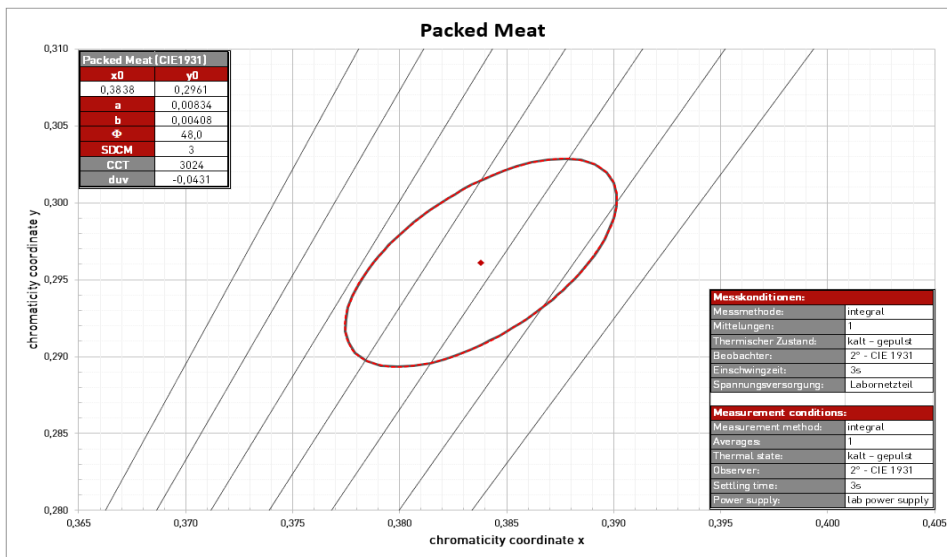
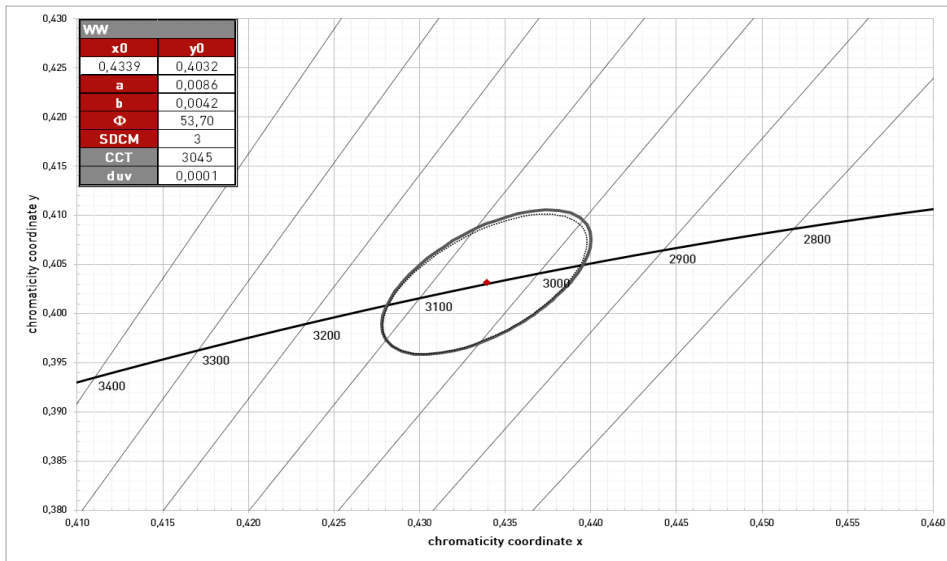
END



COORDINATES AND TOLERANCES (DATA REFERS ONLY TO LED MODULES WITHOUT LENS)



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COLOUR KEY

Code	CW	NW	WW	PC	BP	PM
Colour	Cool White	Neutral White	Warm White	Pasta & Cheese	Bread & Pastries	Meat & Deli
CCT	5000K	4000K	3000K	2700K	2400K	special colour

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■ LIFETIME

70.000h (L80 B10)

■ THERMAL BEHAVIOUR

Operating temperature (operation, no defects)	ta	-30 ... +30 °C
Storage temperature	ts	-30 ... +60 °C
Temperature cooling profile ¹²	tc	-30 ... +60 °C

¹ Values apply to operation at 100% output, natural convection.

² 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 engine 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.

■ STANDARDS

- EN 60598-1
- EN 60598-2-1
- EN 62031
- EN 62471
- EN 60335-2-89
- Eco Design 2019/2020 (SLR)
- Energy Labelling 2019/2015 (ELR)
- PRP/HACCP (Food Safety)
- RoHS/Reach
- ENEC, UL



Note

- Installation should only be conducted by a licensed electrician.
- Reversing the polarity can damage the product!
- Make sure the converter has been switched off prior to connecting the light engine. If this is not observed, the light engine may be damaged!
- Connection or operation is only permitted when using the specified converters. Higher voltages result in damage to or failure of the light engine.
- The user is responsible for correct selection of illumination intensity. Excessive illumination intensity may lead to greying or colour changes of displayed products.