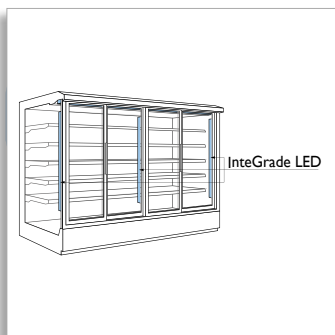




The perfect fit

InteGrade LED fixtures NB (narrow beam)



InteGrade LED fixtures NB enable easy creation of narrow-beam lighting solutions in chillers with doors. The narrow beam in combination with the extremely small dimensions makes this system suitable for integration in doors and mullions where there is no room to place a sizable lighting solution. The unique optical system directs the light precisely where you want it, thus making optimum use of the light and energy. Our LEDs have minimal output degradation and color shift, so the light remains consistent throughout their long lifetime. InteGrade LED is an ideal solution for high-quality lighting without flicker or color differences.

The fixture consists of a profile with LED engines and inline locks. Mounting accessories, cables and LED power driver are available separately.

*NB = narrow beam

Operating temperature
-30 to +30 °C

Benefits

- Smooth and uniform linear floodlighting in display cases
- Aesthetic integration of LED lighting; possible to mount on very small mullions
- Excellent Total Cost of Ownership with attractive payback times

Product features

- Energy savings of up to 55% (102 W compared to 224 W for a TL5 28/35 W system in a 3.75 m cabinet)
- Dedicated Xitanium LED Outdoor drivers for reliable operation
- The fixtures have standard dimensions and so fit commonly used mullions and cabinets
- The InteGrade LED fixture Ctr (Center) distributes the light in two directions, ideal for center mullions. The InteGrade LED fixture SD (Side) distributes the light in one direction (from the side of the cabinet).

Applications

- Chillers with doors
- Vertical and horizontal linear floodlighting, mounted on very small chiller door mullions, and island freezers
- The narrow-beam light distribution is also suitable for applications such as display lighting in supermarkets, retail environments, libraries and museums. Because the dimensions of these applications are often very diverse, you might consider using the InteGrade LED engine NB system – with which you can create different lengths – for these applications.

System

InteGrade LED fixtures NB and accessories are designed and marketed together, as we believe good system design is crucial to effective functioning of the system, and it also facilitates an easy design-in.

www.philips.com/ledrefrigeration



PHILIPS

Specifications

- The rated average life of the fixture, in combination with a Philips LED power driver, is B50L70 at 50,000 hours (70% lumen maintenance). This rated average life is based on engineering data testing and probability analysis and three switchings a day.
- Operating temperature (performance)
min -30 °C / max +30 °C
- Storage temperature min -30 °C / max +60 °C
- Housing color: aluminum
- Safety Extra Low Voltage (SELV); safety is ensured even if wiring or units become damaged (only when a SELV-rated power supply is used).
- Compliance and approval:
ENEC, UL, CE, Product safety class III, RoHS, WEEE, EU directive 2002/95/EC and IEC 60335-2/89
- The fixtures are suitable for the described applications on condition of typical use in dry and damp locations.

InteGrade LED fixture NB

Installation advice

We advise you to consult our website for the latest up-to-date information and important detailed installation instructions. See www.philips.com/ledrefrigeration.

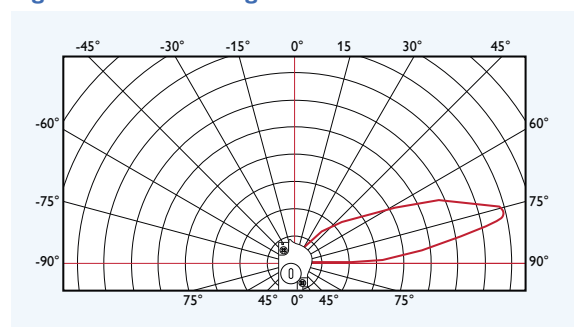


Energy savings

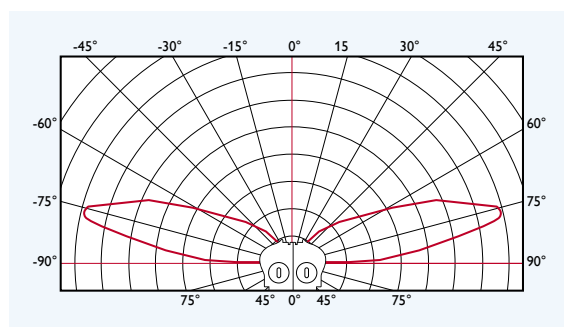
Energy savings are a major benefit of the InteGrade LED system compared to TL5 and TL-D systems. Based on a 3.75 m chiller cabinet energy savings of 55% can be achieved.

	T5 28 W in canopy and 35 W vertical	New Chiller door InteGrade LED system
Technology	Fluorescent	LED
Wattage of lamp	224 W	102 W
Wattage ballast / driver	22.4 W	12.2 W
System energy consumption	246 W	112 W
Energy savings		Saving 55%

Light distribution diagram



InterGrade LED fixture SD (for edges)

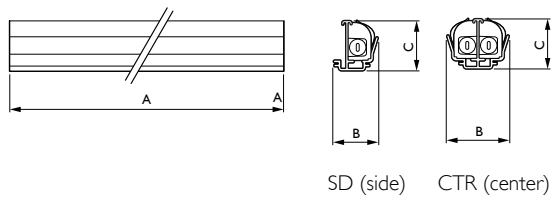


InterGrade LED fixture CTR (for center)

Wattage and lighting characteristics InteGrade LED fixture NB

	Typical power consumption	Lumen	Color Rendering Index (typ)	Correlated Color Temperature*
	W \pm 20%	Typical \pm 20%	CRI typical	K
InteGrade fixture vision 1500mm (59") 830 NB CTR	34	2200	85	3000
InteGrade fixture vision 1500mm (59") 830 NB SD	17	1100	86	3000
InteGrade fixture vision 1500mm (59") 840 NB CTR	34	2300	85	4100
InteGrade fixture vision 1500mm (59") 840 NB SD	17	1150	85	4100
InteGrade fixture vision 1500mm (59") WWVR NB CTR	38	2000	n.a.	n.a.
InteGrade fixture vision 1500mm (59") WWVR NB SD	19	1000	n.a.	n.a.

* Correlated color temperature within 6 SDCM range



Dimensions InteGrade LED fixture NB

InteGrade LED fixtures NB	Dimensions (mm)		
	A	B	C
InteGrade fixture 1500mm (59") NB SD	1500	22	24.8
InteGrade fixture 1500mm (59") NB CTR	1500	31	24.8

Xitanium LED power driver

We have developed Xitanium Constant Voltage LED power drivers of 20 and 80 W 24 V which are ideal for powering the InteGrade LED fixtures NB, see ordering table on the last pages.

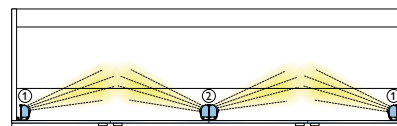
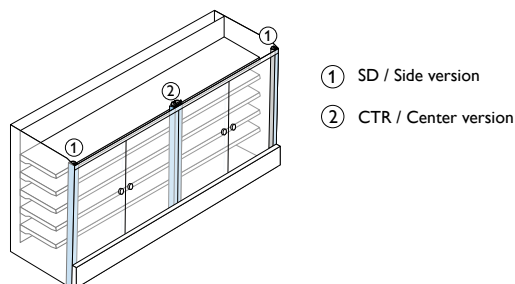


Xitanium Constant Voltage
Outdoor driver 80 W



Xitanium Constant Voltage
Outdoor driver 20 W

Installation examples



Accessories

Power cables

The power cables are available in different lengths and colors (black and white). They are easy to connect to the fixture and the driver. Specific details can be found in the design-in guide available on our website.

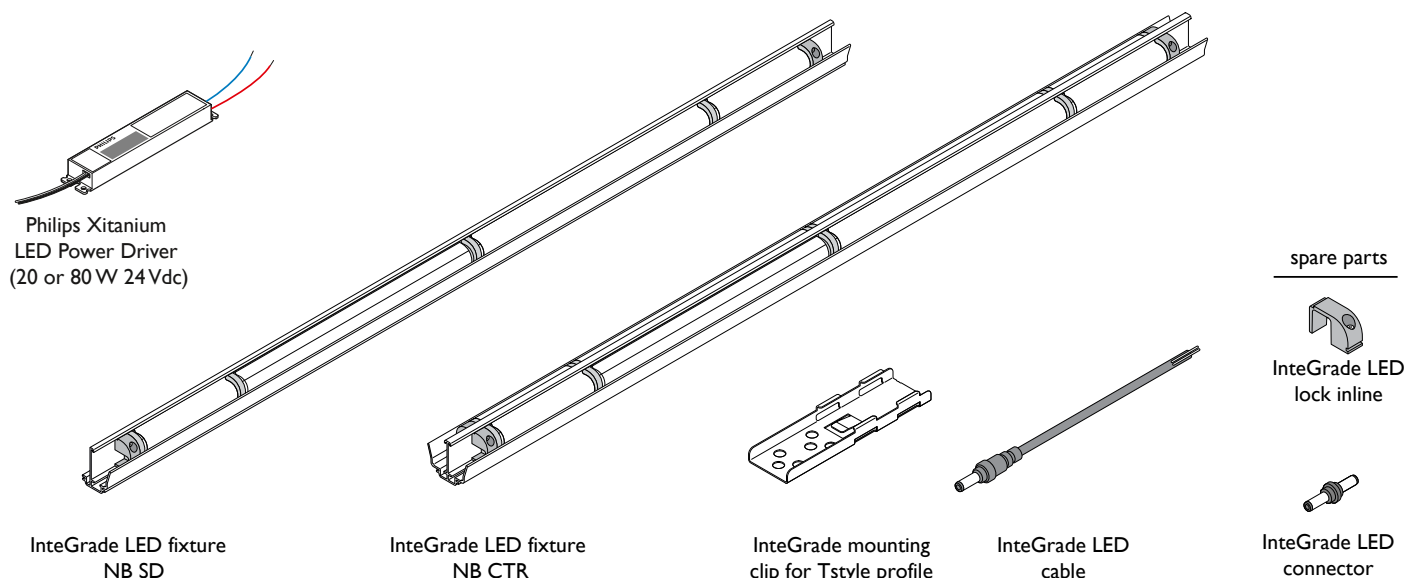
Connector and lock

The connector is used to electrically connect two LED engines (engines are the separate LED lighting parts in the fixture). The lock fixes the engine in its profile.

Mounting clips

The InteGrade LED mounting clip can be easily clicked onto the InteGrade LED fixture.

Ordering details for InteGrade LED fixture NB systems



InteGrade LED fixture system

	Logistic code 12 NC	European ordering code EOC	Minimum order quantity pcs
Fixtures			
InteGrade fixture vision 1500mm(59") 830 NB CTR	9290 006 54613	871829167083400	6
InteGrade fixture vision 1500mm(59") 830 NB SD	9290 008 52713	871829167087200	6
InteGrade fixture vision 1500mm(59") 840 NB CTR	9290 006 54713	871829167085800	6
InteGrade fixture vision 1500mm(59") 840 NB SD	9290 008 52813	871829167089600	6
InteGrade fixture vision 1500mm(59") WWR NB CTR*	9290 008 49613	871829166198600	6
InteGrade fixture vision 1500mm(59") WWR NB SD*	9290 008 52913	871829167091900	6
InteGrade power cables - to connect fixture to driver			
InteGrade power cable 1m (39") black	9290 006 41014	871829121812800	24
InteGrade power cable 2.5m (98") black	9290 006 41114	871829122144900	24
InteGrade power cable 1m (39") white	9290 006 45614	871829122140100	24
InteGrade power cable 2.5m (98") white	9290 006 44514	871829122148700	24
InteGrade clip			
InteGrade mounting clip for T style profile	9290 008 53213	871829167650800	100
Power driver			
Xitanium Constant Voltage Outdoor LED Power Driver 20W - 24V	9290 006 54006	871829121524000	10
Xitanium Constant Voltage Outdoor LED Power Driver 80W - 24V	9290 006 53906	871829121526400	10

*WWR = LED rose

Spare parts

Lock-inline - to fix engine in profile			
InteGrade inline lock	9290 006 43713	871829121951400	100
Connector - connects engine to engine			
InteGrade connector	9290 006 40913	871829122115900	500



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01/2014

Data subject to change.

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