

TLBt & TMBt



DATA SHEET



Product information

Bring great light from GE into your tunnels with the TLBt and TMBt, GE's new single and double module tunnel lighting fixtures. The TLBt & TMBt are available in a range of optical combinations for flexibility across a wide range of applications such as low and high speed tunnels, underpasses and industrial areas. Maintenance in a tunnel environment can cause a headache not only for the operators but for the users as well. GE Lightings' engineers therefore put major focus on developing a highly durable and reliable product with a long lifetime, providing an easy and rapid tool-less maintenance solution to speed up installation and reduce disruptive maintenance, as well as its costs. Safety is another important aspect regarding tunnels in which lighting has a key role. Our tunnel lighting solution can increase light quality and therefore safety through better visibility for drivers, who can react more rapidly to emergencies and other situations in tunnels, where every second matters.

Application areas

- Underpasses
- Industrial areas
- Floodlight

Installation and maintenance

Mounting options:

- Two types of fixing bracket are available: short arm for ceiling mounting, and long arm for wall mounting. Additional mounting solutions are available on request.
- Weight: 9 Kg
- Recommended mounting height: 4-8 m
- The LED light engine and driver are replaceable without the need of tools, enabling a quick and easy maintenance solution
- Recommended maintenance factor for lighting design: 0.8
- Ambient temperature from -40°C to +50°C
- Storage temperature up to 85°C

Structures and materials

- Housing material: die-cast aluminium
- Optical material: aluminised plastic
- Optical cover: tempered glass
- Colour: RAL9005
- All materials used in this product are WEEE and ROHS compatible.

Electrical

Input voltage and frequency: 220-240V, 50-60Hz
 Class I: standard
 Surge protection: minimum 4kV/3kA, 6kV available on request
 Rated input power: 32W to 151W

Driver features

- Drivers available from 50 up to 150 Watts with astrodimm and DALI control.

Optics

Available photometric distributions:

- Extra narrow Asymmetric – medium (A)
- Narrow Asymmetric – medium (B, AQ)
- Asymmetric – short (C)
- Asymmetric forward – very short (D)
- Asymmetric – medium (E)
- Extra narrow Symmetric – medium (SA)
- Narrow Symmetric – medium (SB)
- Symmetric – short (SC)
- Symmetric forward – very short (SD)
- Symmetric – medium (SE)

Rated colour rendering index: >70

Rated correlated colour temperatures*: 4000K

S/P rating for 4000K: 1.56

ULOR: 0

Rated initial chromaticity co-ordinate values for 4000K:

- CIE(x= 0.38, y= 0.38) 5SDC

Performance

- Rated luminous flux: from 3700 to 17100 lm
 - Rated luminaire efficacy: up to 120 lm/W
 - Rated median useful life and the associated rated LM factor L80B50: > 193.000 hours
 - Rated abrupt failure value: 3.12 %*
 - Lumen maintenance code: 8
 - Rated ambient temperature (tq) related to performance for a luminaire: 25°C
- *Definitions and tolerances according to IEC62722-2-1:2014

Standards and regulation

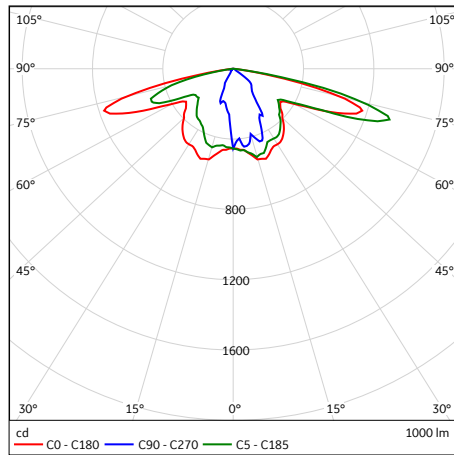
CE, ENEC, Directive 2004/108/EC, 2006/95/EC, 2009/125/EC, 1194/2012/EU, 2011/65/EC, EN 60598, EN 62471, EN 55015, EN 61000, EN 62493, EN 61547, IEC 62031

Other options available

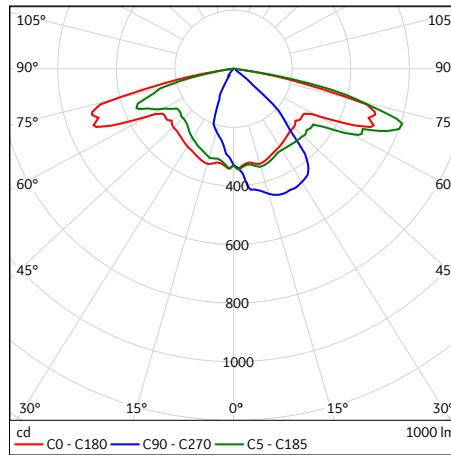
Precabing, extra surge protection up to 10kV/5kA, NEMA socket with shorting cap or lightgrid node

Typical photometrical features

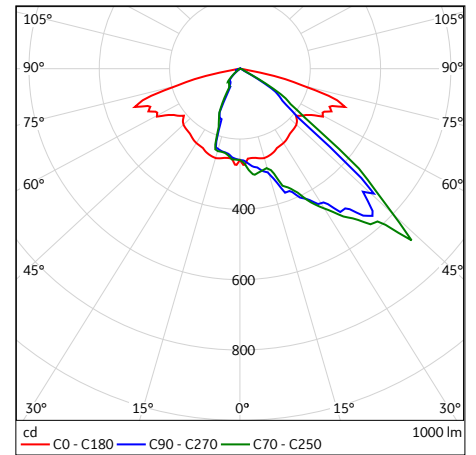
TLBt



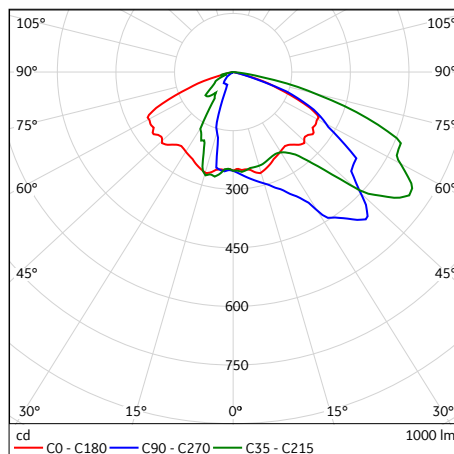
A



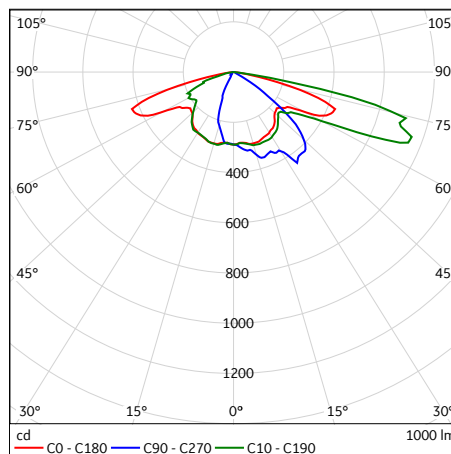
B



C

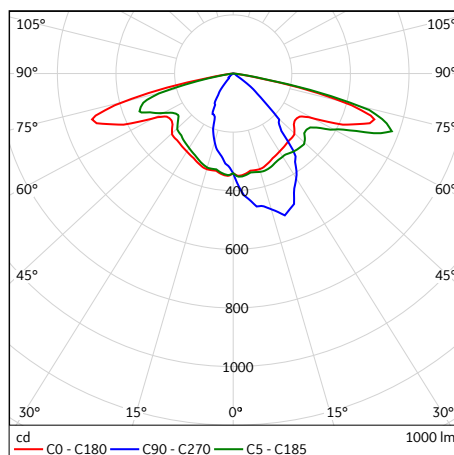


D

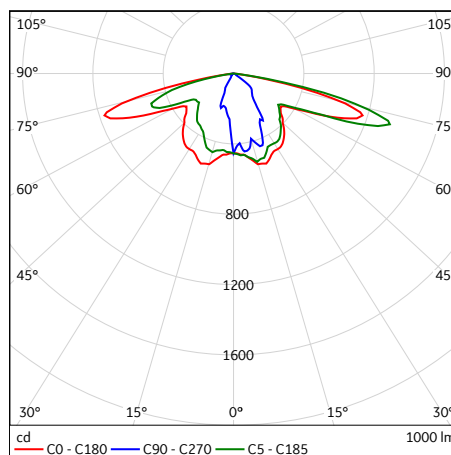


E

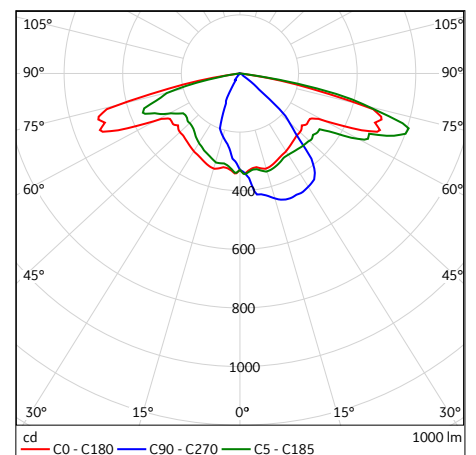
TMBt



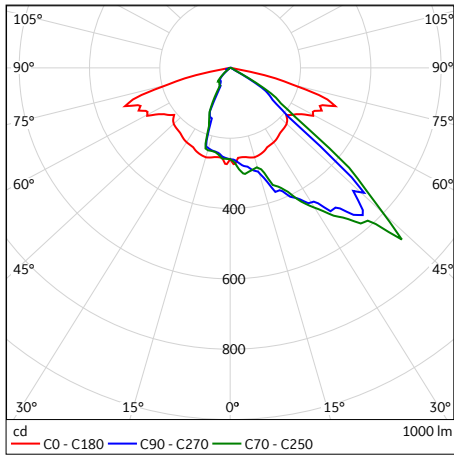
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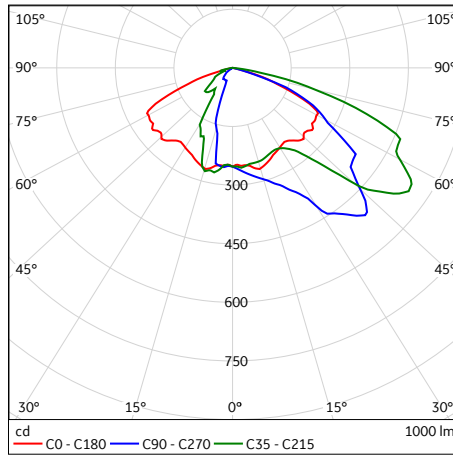
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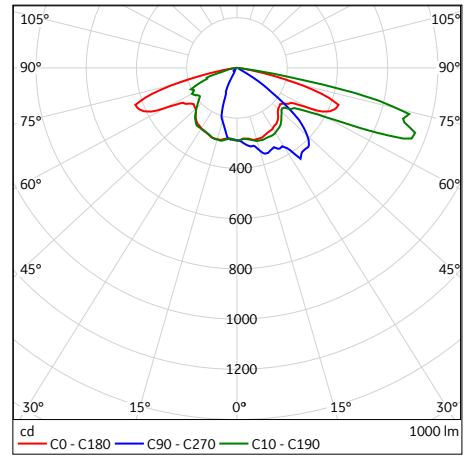
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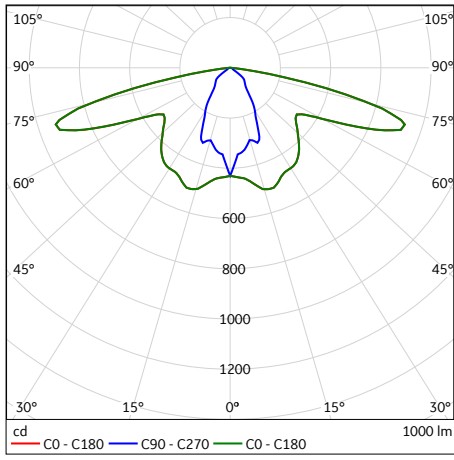
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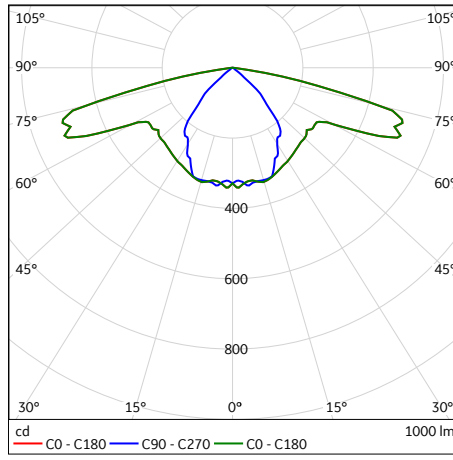
D



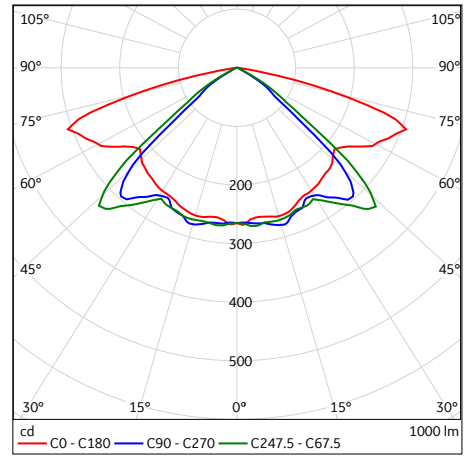
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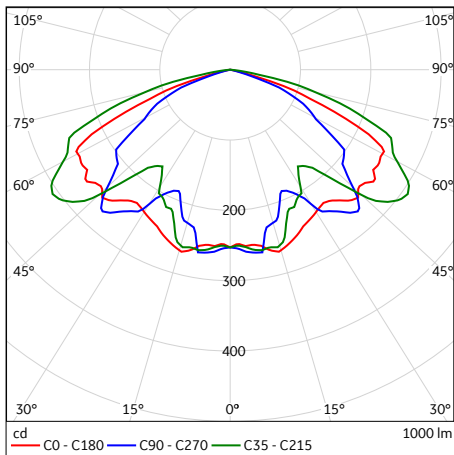
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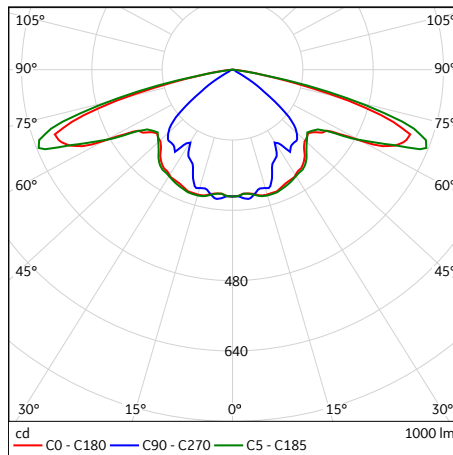
SB



SC

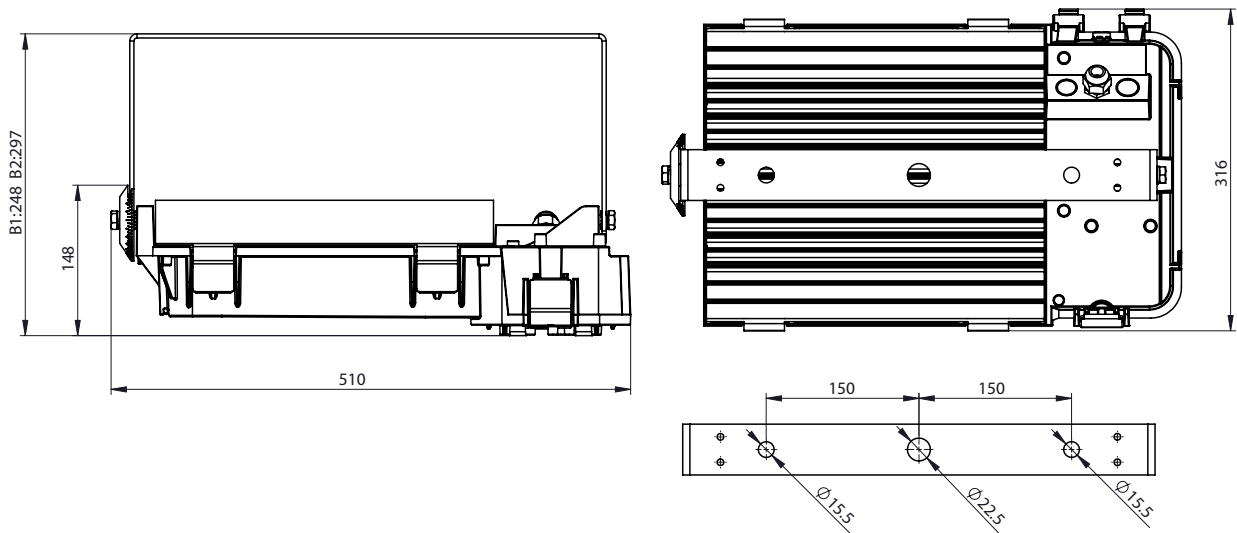


SD



SE

Dimensions (mm)



Order logic

TLBt

Name	Generation	Module	Optics	Drive Current (mA)	CCT (K)	Control	Surge Protection	Precabling	Mounting
TLBt	2	40-40 chip	A	255*	4-4000	N - No control	4 - 4kV	N- No precabling	B1- Short bracket for ceiling mounting
			B	340					
			C	440					
			D	530					
			E	700					
					D - DALI	6 - 6kV	PXX- Precabling with XX meters	B2- Long bracket for wall mounting	
					S - StepDIM				

Example: TLBt/2/40/240/B/255/4/N/4/N/N/B1

* 255mA is not available with Stepdim
Dali is not available with 6kV surge protection above 440mA

TMBt

Name	Generation	Module	Optics	Drive Current (mA)	CCT (K)	Control	Surge Protection	Precabling	Mounting
TMBt	2	80-80 chip	AA	615	4-4000	N - No control	4 - 4kV	N- No precabling	B1- Short bracket for ceiling mounting
			AB						
			AC						
			AD						
			AE						
			AQ						
			SA						
			SB						
			SC						
			SD						
			SE						
					D - DALI	6 - 6kV	PXX- Precabling with XX meters	B2- Long bracket for wall mounting	
					S - StepDIM				

Example: TMBt/2/80/615/B/255/4/N/4/N/N/B1