



PHILIPS

**MASTER
LEDbulb**



Technical Application Guide

Philips MASTER LEDbulb DIM 13-75 W & 18-100 W E27/B22 2700 K 230 V

Dimmable LED replacement for a 75 W/100 W GLS bulb with warm white light all around.

Philips MASTER LEDbulb integrates leading high power LED light source and compact high efficiency driver into a traditional incandescent A-shape form-factor. Not only does it employ hi-tech IC solution to ensure the dimming system control, it also delivers high quality light, all-around the lamp, to ensure direct replacement of GLS bulbs in every application. Unlike the traditional incandescent lamps, the MASTER LEDbulb offers 80% energy saving and a longer lifetime of 25,000 hours. This is especially ideal for 24/7 applications to ensure minimum maintenance cost and maximum energy saving.



www.philips.com/masterledlamps





Design highlights



- Form factor is designed as a direct retrofit into A67 fixtures
- 75 W 1055 lm, 100 W 1521 lm
- Long lifetime of 25,000 hours
- Warm light all around; beam angle >300 D
- CCT: 2700 K
- Consumes only 13 W/18 W (230 V) and replaces traditional 75 W/100 W GLS bulbs at 80% energy savings. Ideal for general lighting applications
- No UV and no heat in the beam
- Environmental friendly, no mercury and RoHS compliance

“ Dimmable **warm light** for a warm atmosphere”



Application areas

The warm light and dimming effect makes it ideal for general lighting applications in the retail and hospitality industry by offering their guests a differentiating ambiance and unique experience in public areas like:

- Luxury restaurants
- Elite shops
- Corridors / Stairways / Washrooms
- Lobby / Reception areas
- Hotel rooms / Bars

Application notes

- Operating temperature range is between -20 °C and 45 °C ambient
- Only to apply in dry or damp locations and open fixtures with E27/B22 lamp-holders that offer sufficient space (10 mm free air space)
- Not intended for use with emergency light fixtures or exit lights
- For use in fixtures that can structurally support a lamp weighing one quarter kilogram

Product features

Technical Specifications

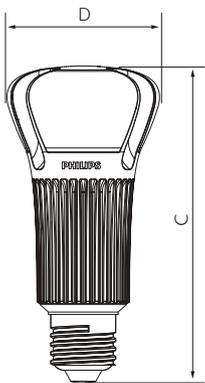
Product type	Voltage (V)	Wattage (W)	Base	Power Factor	Color temp. (K)	Light Output (Lm)	Lifetime (hours)	CRI	Dimmable*
MASTER LEDbulb 13-75W 2700K E27	220-240	13	E27	0.9	2700	1055	25,000	80	Yes
MASTER LEDbulb 13-75W 2700K B22	220-240	13	B22	0.9	2700	1055	25,000	80	Yes
MASTER LEDbulb 18-100W 2700K E27	220-240	18	E27	0.9	2700	1521	25,000	80	Yes
MASTER LEDbulb 18-100W 2700K B22	220-240	18	B22	0.9	2700	1521	25,000	80	Yes

* For information about dimming compatibility we would like to refer to the recommended dimmerlist on the Philips LED Lamps website: www.philips.com/masterledlamps

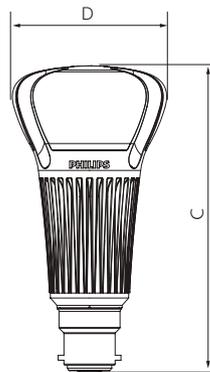
Dimensions

Type	C max. Overall Length (mm)	D max. Diameter (mm)	Weight (kg)
MASTER LEDbulb 13-75W/18-100W 2700K E27/B22	127	39	0.24

MASTER LEDbulb E27

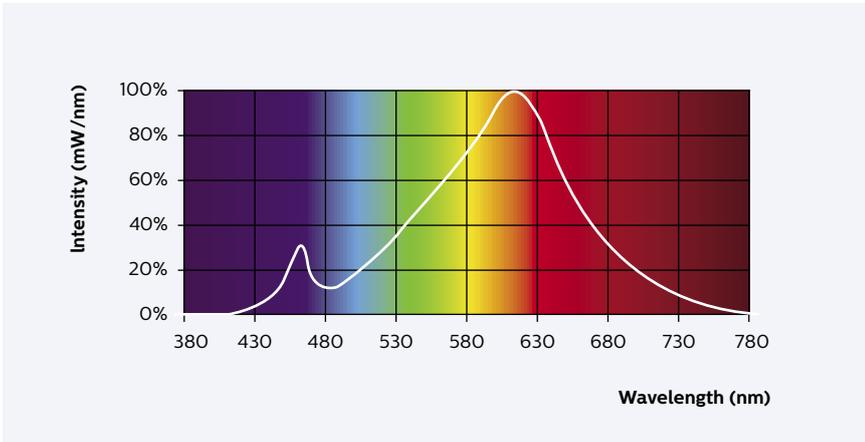


MASTER LEDbulb B22



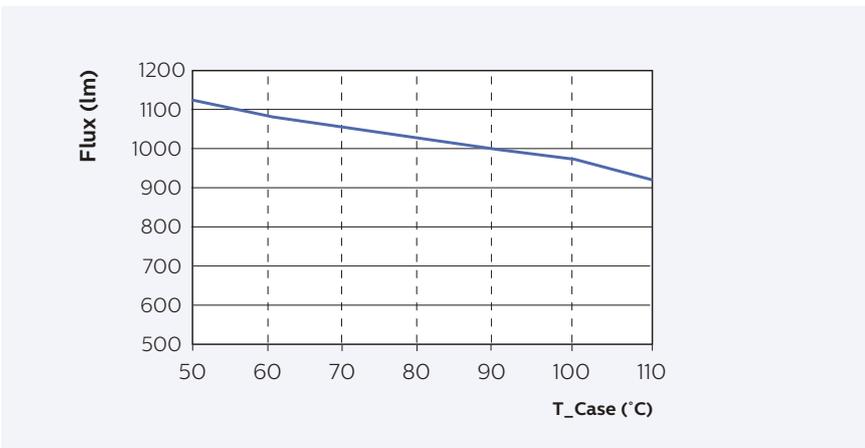
Spectral Power Distribution

Spectrum MASTER LEDbulb

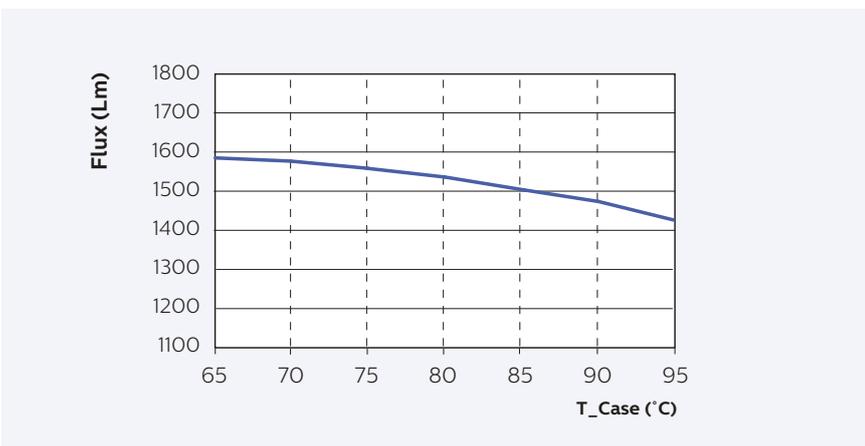


Temperature

MASTER LEDbulb 13-75 W



MASTER LEDbulb 18-100 W

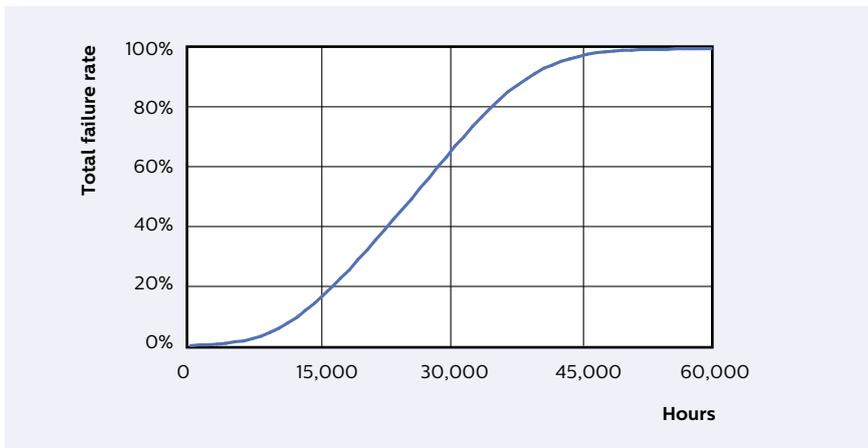


Lumen Maintenance MASTER LEDbulb 13-75 W and 18-100 W



Lifetime + Sustainability

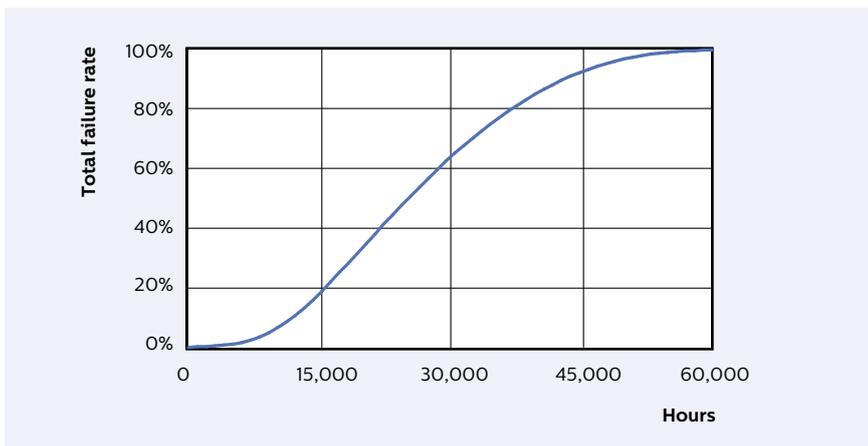
Failure Rate Curve of MASTER LEDbulb 13-75 W



MASTER LEDbulb has a lifetime exceeding 25,000 hours defined as (F50, L70), where:

- Philips MASTER LEDbulb 75 W/100 W 2700 K Dimmable has a lifetime of 25,000 hours, defined as the number of hours when 50% of a large group of identical lamps below 70% of its initial lumens.
- Lifetime estimation based on the application environment condition: please refer to the Tc for lifetime forecast.

Failure Rate Curve of MASTER LEDbulb 18-100 W



Photometric Diagrams

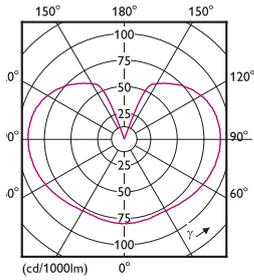


MASTER LEDbulb 13-75 W E27/B22

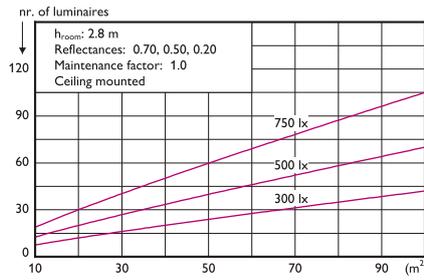
1 x 1055 lm

Light output ratio	1.00	CIE flux code	23 48 73 53 100
Service upward	0.47	UGRcen (4Hx8H, 0.25H)	25
Service downward	0.53		

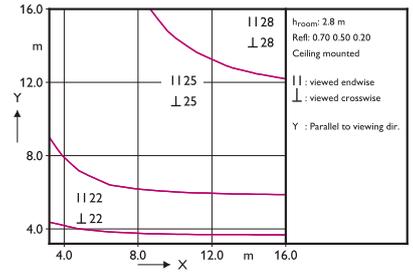
Polar intensity diagram



Quantity estimation diagram



UGR diagram

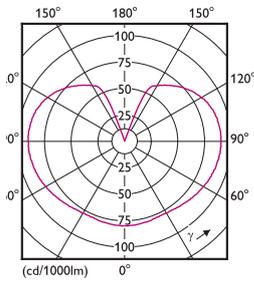


MASTER LEDbulb 18-100 W E27/B22

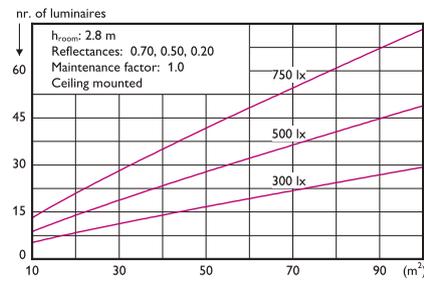
1 x 1521 lm

Light output ratio	1.00	CIE flux code	23 48 73 53 100
Service upward	0.47	UGRcen (4Hx8H, 0.25H)	26
Service downward	0.53		

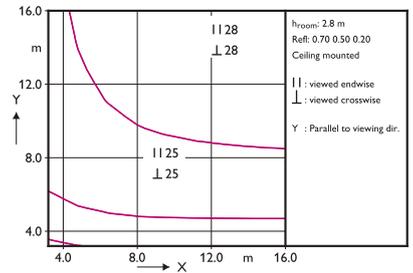
Polar intensity diagram



Quantity estimation diagram



UGR diagram





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www.philips.com/masterledlamps

Product launch: Q2 2014
11/2014