



**PHILIPS**

LEDbulb



## Technical Application Guide

# Philips LED Bulb

3000K/6500K 100-240V

Philips LEDbulb deliver high quality light to ensure direct replacement of GLS bulbs in indoor application. The beam of light is free of infra-red meaning no heat is radiated, and no ultra-violet light means that fabric and items under this light won't fade.

Philips LEDbulb offers up to 85% energy saving and a longer lifetime of 15,000 hours (equivalent to 15 years if lit 2.7 hours per day across 365 days).



[www.philips.com](http://www.philips.com)

**85%**  
Energy cost  
saving



## Design highlights

- Form factor is designed as a direct retrofit into A60/A67 fixtures
- Long lifetime of 15,000 hours
- Warm white CCT 3000K and cool daylight CCT 6500K available
- No UV and No IR
- Environmental friendly, no Mercury or any other hazardous substances
- Low Carbon Footprint



## Application areas

The warm light 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:

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

## Application notes

- Operating temperature range is between -20 °C and 40 °C ambient
- Only to apply in dry or damp locations and most of open fixtures with E27 lamp-holders that offer sufficient space (10 mm free air space)
- Not intended for use with emergency light fixtures or exit lights
- Not intended for enclosed luminaires

# Product features

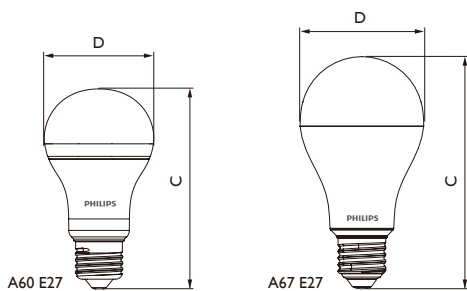
## Technical Specifications

Product type	Voltage (V)	Wattage (W)	Cap	Bulb shape	CCT (K)	Lumen (Lm)	Luminous efficacy (=lm/W)	Lifetime (hours)	CRI	Power Factor	Dimmable	KSA EEI Label
LEDBulb 6W-48W E27 3000K W A60 PF	100-240V	6	E27	A60	3000	600	86	15000	80	>0.7	No	B
LEDBulb 6W-48W E27 6500K W A60 PF	100-240V	6	E27	A60	6500	600	86	15000	80	>0.7	No	B
LEDBulb 7.5W-60W E27 3000K W A60 PF	100-240V	7.5	E27	A60	3000	806	90	15000	80	>0.7	No	B
LEDBulb 7.5W-60W E27 6500K W A60 PF	100-240V	7.5	E27	A60	6500	806	90	15000	80	>0.7	No	B
LEDBulb 9.5W-75W E27 3000K W A60 PF	100-240V	9.5	E27	A60	3000	1055	106	15000	80	>0.7	No	B
LEDBulb 9.5W-75W E27 6500K W A60 PF	100-240V	9.5	E27	A60	6500	1055	106	15000	80	>0.7	No	B
LEDBulb 14W-100W E27 3000K W A67 PF	100-240V	14	E27	A67	3000	1521	108	15000	80	>0.7	No	B
LEDBulb 14W-100W E27 6500K W A67 PF	100-240V	14	E27	A67	6500	1521	108	15000	80	>0.7	No	B

## Dimensions

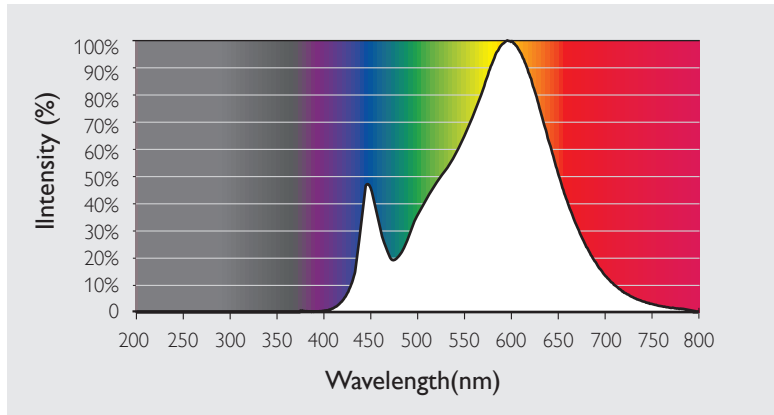
Type	C typical Overall Length (mm)	D typical Diameter (mm)
LEDBulb 6W-48W E27 3000K W A60 PF	110	60
LEDBulb 6W-48W E27 6500K W A60 PF	110	60
LEDBulb 7.5W-60W E27 3000K W A60 PF	110	60
LEDBulb 7.5W-60W E27 6500K W A60 PF	110	60
LEDBulb 9.5W-75W E27 3000K W A60 PF	110	60
LEDBulb 9.5W-75W E27 6500K W A60 PF	110	60
LEDBulb 14W-100W E27 3000K W A67 PF	127	67
LEDBulb 14W-100W E27 6500K W A67 PF	127	67

## LEDbulb

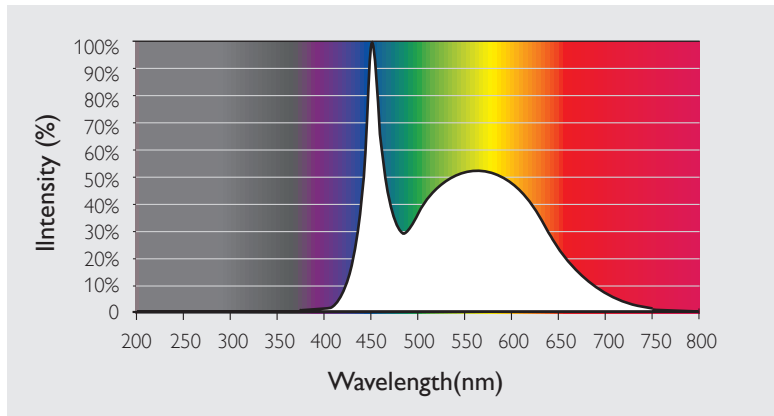


# Spectral Power Distribution

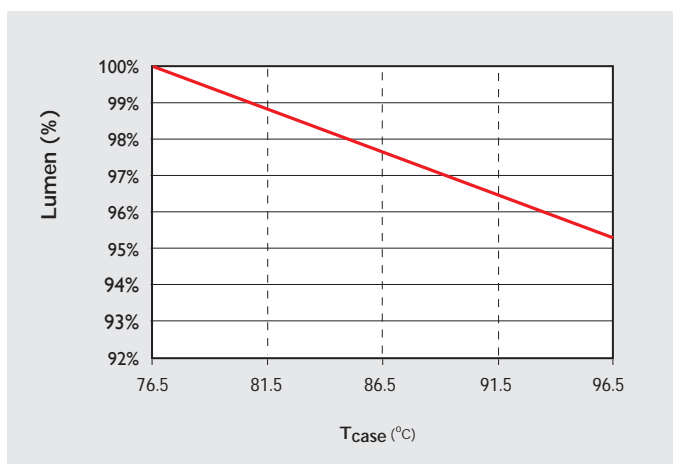
Spectrum LEDbulb 3000K



Spectrum LEDbulb 6500K



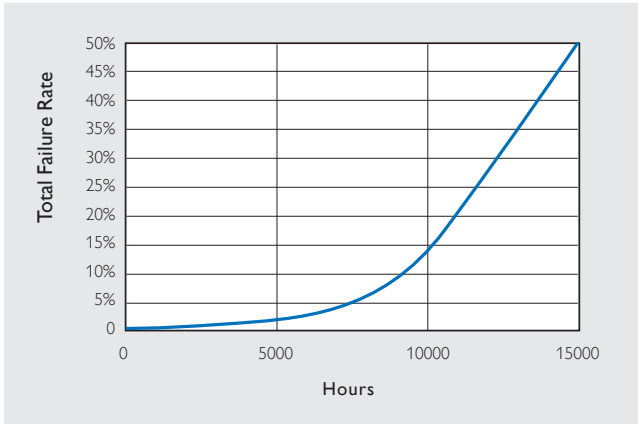
# Temperature



600 lm T<sub>c</sub> Max: 90 °C  
 806 lm T<sub>c</sub> Max: 100 °C  
 1055 lm T<sub>c</sub> Max: 100 °C



1521 lm T<sub>c</sub> Max: 100 °C



# Photometric Diagrams

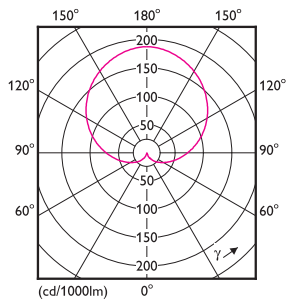


## LED Bulb 6.5W-48W 3000K W A60 PF

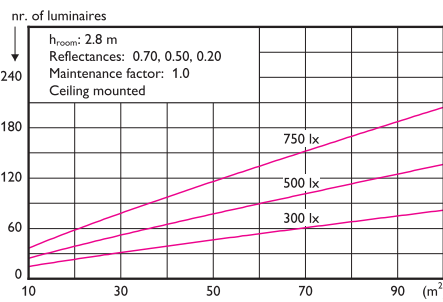
1 x 600 lm

Light output ratio	1.00	CIE flux code	7 26 56 22 100
Service upward	0.78		
Service downward	0.22	UGR <sub>cen</sub> (4Hx8H, 0.25H)	19

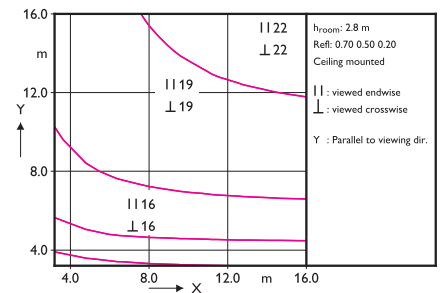
Polar intensity diagram



Quantity estimation diagram



UGR diagram

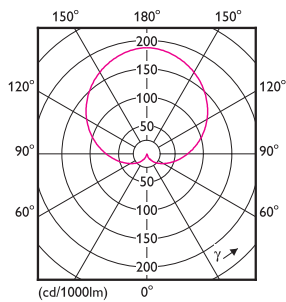


## LED Bulb 6.5W-48W 6500K W A60 PF

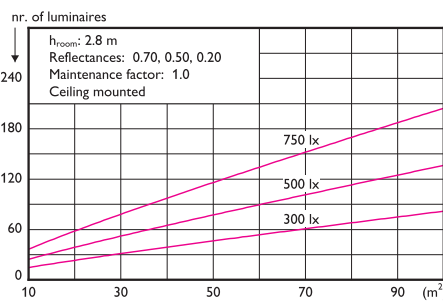
1 x 600 lm

Light output ratio	1.00	CIE flux code	7 26 56 22 100
Service upward	0.78		
Service downward	0.22	UGR <sub>cen</sub> (4Hx8H, 0.25H)	19

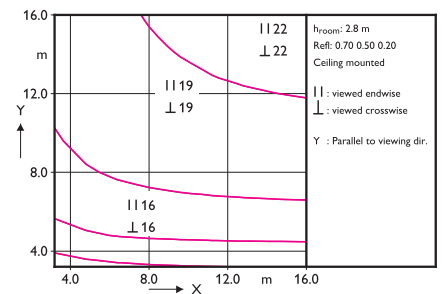
Polar intensity diagram



Quantity estimation diagram



UGR diagram





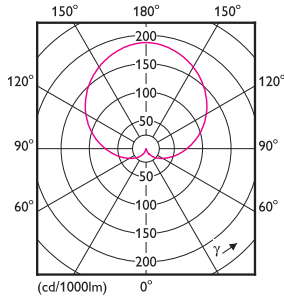
### LED Bulb 7.5W-60W 3000K WA60 PF

1 x 806 lm

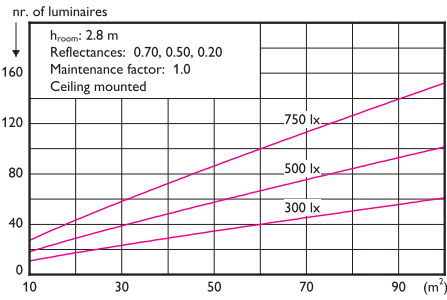
Light output ratio 1.00  
Service upward 0.78  
Service downward 0.22

CIE flux code 7 26 56 22 100  
UGR<sub>rcn</sub> (4Hx8H, 0.25H) 20

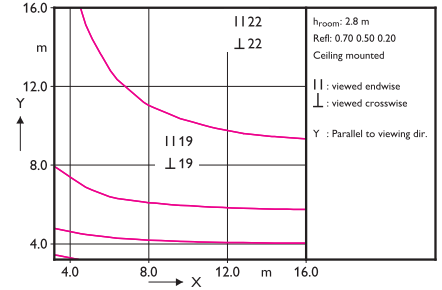
Polar intensity diagram



Quantity estimation diagram



UGR diagram



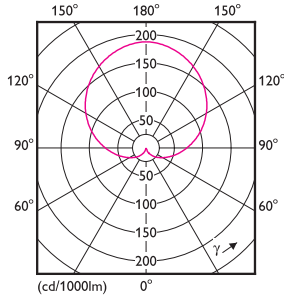
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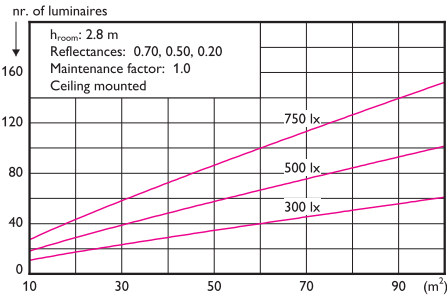
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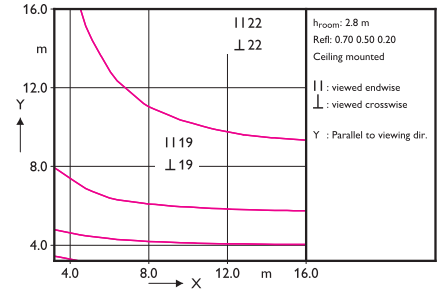
Polar intensity diagram



Quantity estimation diagram



UGR diagram



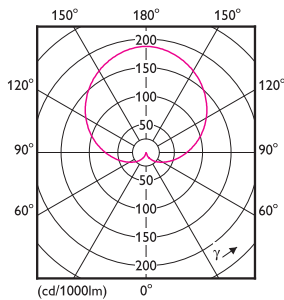
### LED Bulb 9.5W-75W 3000K WA60 PF

1 x 1055 lm

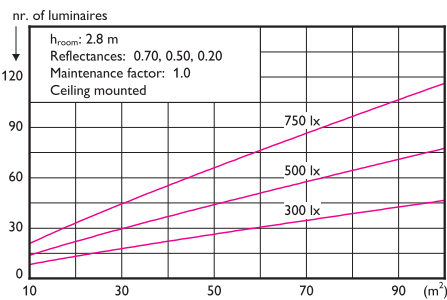
Light output ratio 1.00  
Service upward 0.78  
Service downward 0.22

CIE flux code 7 26 56 22 100  
UGR<sub>rcn</sub> (4Hx8H, 0.25H) 21

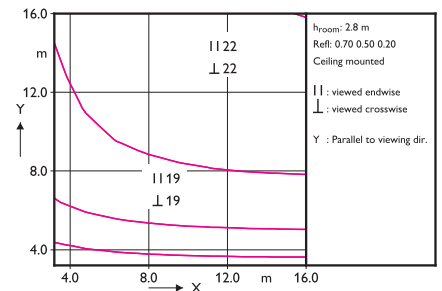
Polar intensity diagram



Quantity estimation diagram



UGR diagram





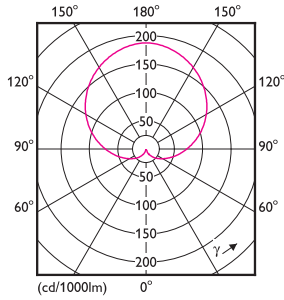
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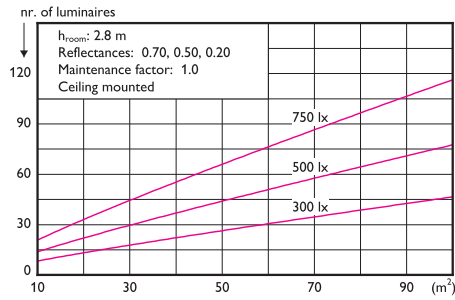
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Service downward 0.22

CIE flux code 7 26 56 22 100  
UGR<sub>rcn</sub> (4Hx8H, 0.25H) 21

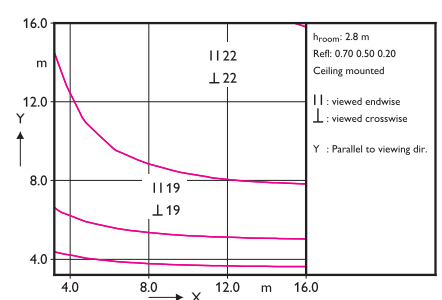
Polar intensity diagram



Quantity estimation diagram



UGR diagram



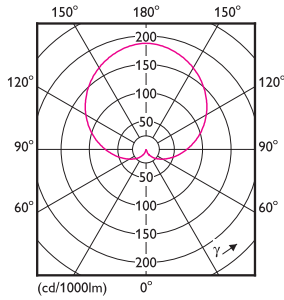
### LED Bulb 14W-100W 3000K W A67 PF

1 x 1521 lm

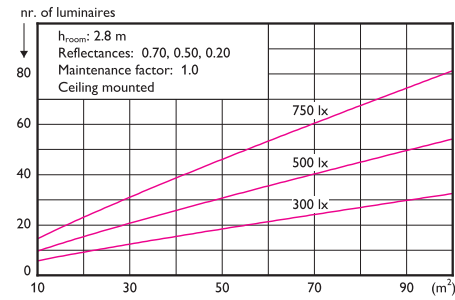
Light output ratio 1.00  
Service upward 0.78  
Service downward 0.22

CIE flux code 7 26 56 22 100  
UGR<sub>rcn</sub> (4Hx8H, 0.25H) 21

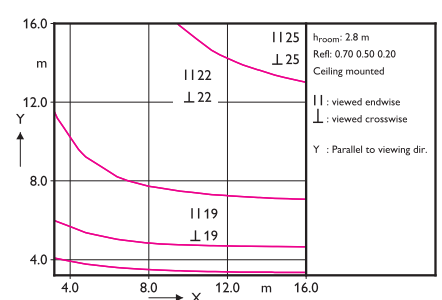
Polar intensity diagram



Quantity estimation diagram



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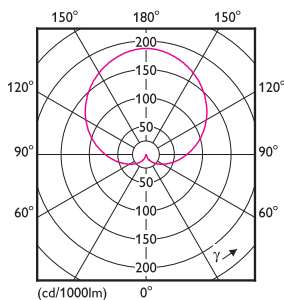
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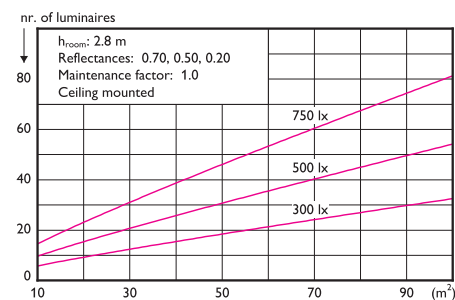
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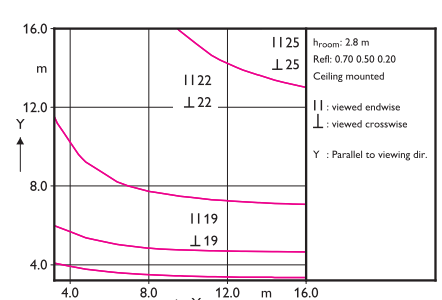
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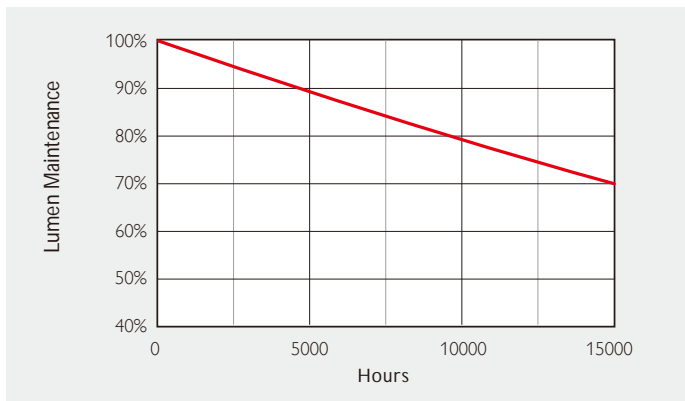




# Lifetime + Sustainability

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Lumen Maintenance Curve of LEDbulb 3000K/6500K 100-240V



**Philips LEDbulb has a lifetime exceeding 15,000 hours defined as (F50L70), where:**

- F50L70, meaning 50% in total of whole population of lamps either fail without light output or lumen maintenance lower than 70% of initial value
- Lifetime estimation based on the application environment condition: at room temperature (25°C), free air burning, baseup burning position, and at rated voltage.



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