



PHILIPS

LEDbulb



Technical Application Guide

Philips LEDbulb

Gentle on your eyes.
Brighter for your home.



Philips My Care LEDbulb deliver high quality light to provide comfortable brightness in indoor application.

Philips LEDbulb offers over 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/lighting

Over
85%
Energy cost
saving



Design highlights

With form factor designed as a direct retrofit into A60 fixtures, Philips optimized LED bulb technology delivers:

- Interlaced optics provide an optimal light & comfort
- reduce glare with soft light
- 40% more even light distribution compare to Philips LED Essential bulb
- Last up to 15 years
- Environmental friendly, no Mercury
- Low Carbon Footprint



Application areas

The eye comfort light makes it ideal for general lighting applications in the home, retail and hospitality industry by offering 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 45 °C ambient
- Only to apply in dry or damp locations and most of open fixtures with E27/E26/B22 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

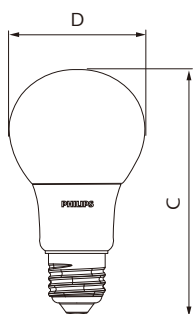
Product features

Technical Specifications

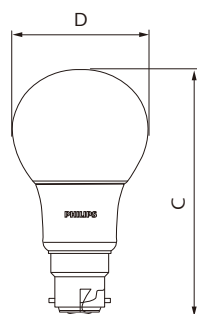
Product type	Wattage (W)	Cap	CCT (K)	Voltage (V)	Frequency (Hz)	Bulb shape	Lumen (Lm)	Luminous efficacy (Lm/W)	Lifetime (hours)	CRI	Dim	Sub Region
LEDBulb 4W 3000K 230V APR	4	E27/B22	3000	220-240	50/60	A60S	420	105	15000	80	No	APR, AU, RCA
LEDBulb 4W 4000K 230V APR	4	E27/B22	4000	220-240	50/60	A60S	420	105	15000	80	No	APR, AU, RCA
LEDBulb 4W 6500K 230V APR	4	E27/B22	6500	220-240	50/60	A60S	420	105	15000	80	No	APR, AU, RCA
LEDBulb 6W 3000K 230V APR	6	E27/B22	3000	220-240	50/60	A60S	560	93	15000	80	No	APR, AU, RCA
LEDBulb 6W 4000K 230V APR	6	E27/B22	4000	220-240	50/60	A60S	580	96	15000	80	No	APR, AU, RCA
LEDBulb 6W 6500K 230V APR	6	E27/B22	6500	220-240	50/60	A60S	580	96	15000	80	No	APR, AU, RCA
LEDBulb 8W 3000K 230V APR	8	E27/B22	3000	220-240	50/60	A60S	770	96	15000	80	No	APR, AU, RCA
LEDBulb 8W 4000K 230V APR	8	E27/B22	4000	220-240	50/60	A60S	770	96	15000	80	No	APR, AU, RCA
LEDBulb 8W 6500K 230V APR	8	E27/B22	6500	220-240	50/60	A60S	770	96	15000	80	No	APR, AU, RCA
LEDBulb 10W 3000K 230V APR	10	E27/B22	3000	220-240	50/60	A60M	1020	102	15000	80	No	APR, AU, RCA
LEDBulb 10W 4000K 230V APR	10	E27/B22	4000	220-240	50/60	A60M	1020	102	15000	80	No	APR, AU, RCA
LEDBulb 10W 6500K 230V APR	10	E27/B22	6500	220-240	50/60	A60M	1020	102	15000	80	No	APR, AU, RCA
LEDBulb 12W 3000K 230V APR	12	E27/B22	3000	220-240	50/60	A60M	1360	113	15000	80	No	APR, AU, RCA
LEDBulb 12W 4000K 230V APR	12	E27/B22	4000	220-240	50/60	A60M	1360	113	15000	80	No	APR, AU, RCA
LEDBulb 12W 6500K 230V APR	12	E27/B22	6500	220-240	50/60	A60M	1360	113	15000	80	No	APR, AU, RCA
LEDBulb 4W 3000K 230V CN	4	E27	3000	220-240	50/60	A60S	400	100	15000	80	No	China
LEDBulb 4W 6500K 230V CN	4	E27	6500	220-240	50/60	A60S	400	100	15000	80	No	China
LEDBulb 6W 3000K 230V CN	6	E27	3000	220-240	50/60	A60S	550	91.6	15000	80	No	China
LEDBulb 6W 6500K 230V CN	6	E27	6500	220-240	50/60	A60S	550	91.6	15000	80	No	China
LEDBulb 8W 3000K 230V CN	8	E27	3000	220-240	50/60	A60S	750	93.75	15000	80	No	China
LEDBulb 8W 6500K 230V CN	8	E27	6500	220-240	50/60	A60S	750	93.75	15000	80	No	China
LEDBulb 10W 3000K 230V CN	10	E27	3000	220-240	50/60	A60M	1000	100	15000	80	No	China
LEDBulb 10W 6500K 230V CN	10	E27	6500	220-240	50/60	A60M	1000	100	15000	80	No	China
LEDBulb 12W 3000K 230V CN	12	E27	3000	220-240	50/60	A60M	1300	108	15000	80	No	China
LEDBulb 12W 6500K 230V CN	12	E27	6500	220-240	50/60	A60M	1300	108	15000	80	No	China

Dimensions

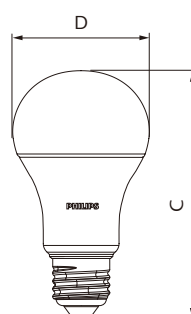
Type	C typical Overall Length (mm)	D typical Diameter (mm)
4W, 6W, 8W	108	60
10W, 12W	110	60



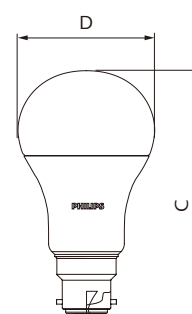
4W, 6W, 8W
E27



4W, 6W, 8W
B22



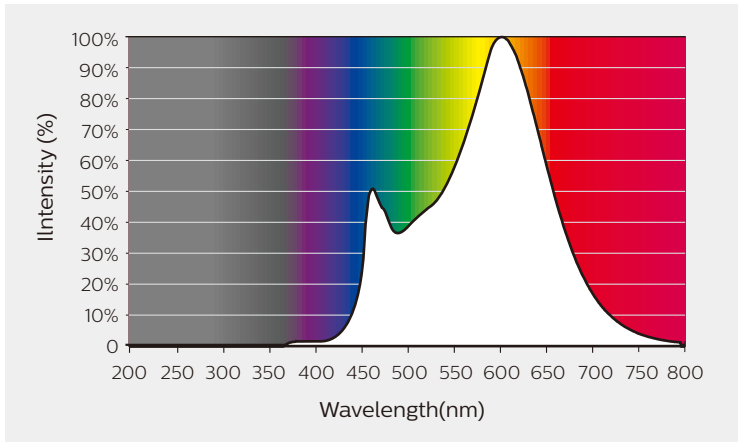
10W, 12W
E27



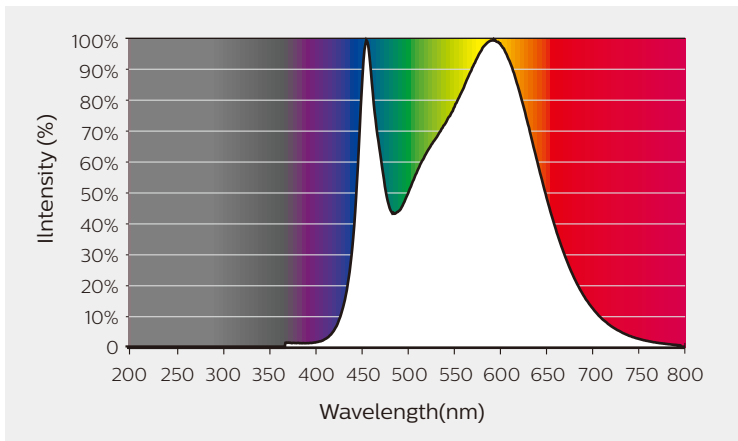
10W, 12W
B22

Spectral Power Distribution

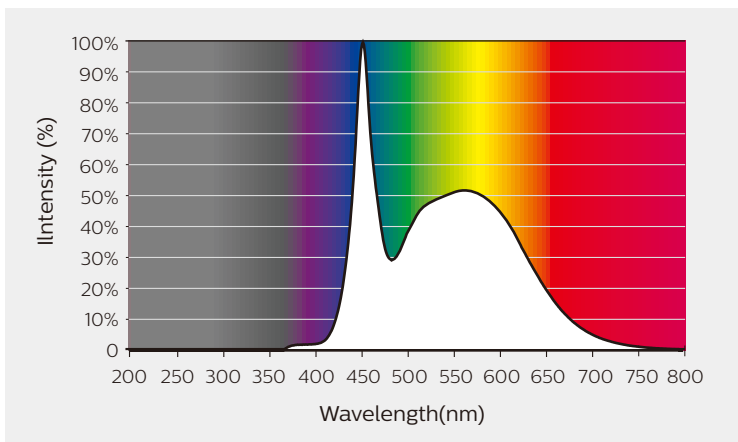
Spectrum 3000K



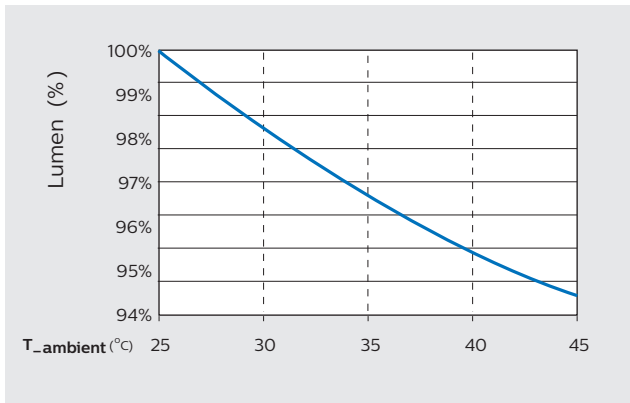
Spectrum 4000K



Spectrum 6500K



Temperature

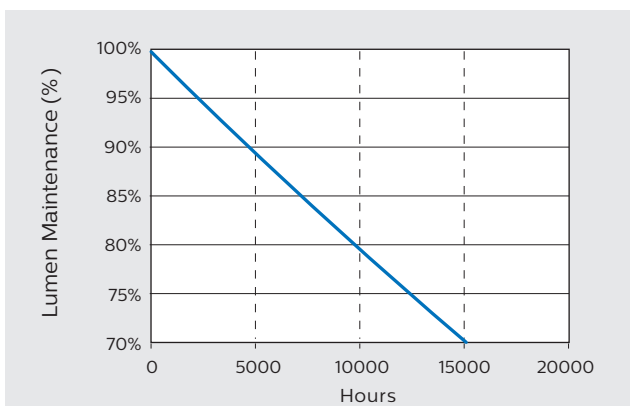


4W, 6W

T_c Max: 70 °C

8W, 10W, 12W

T_c Max: 85 °C



Photometric Diagrams



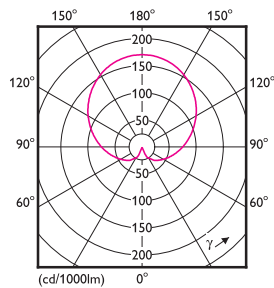
LEDBulb 4W

Light output ratio 1.01
Service upward 0.74
Service downward 0.27

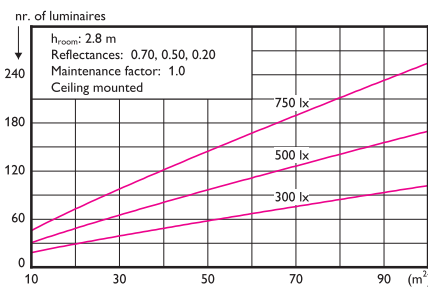
CIE flux code 10 32 62 27 101

UGR_{cen} (4Hx8H, 0.25H) 19

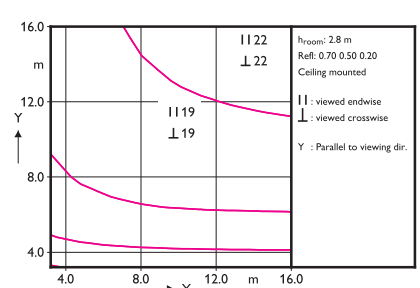
Polar intensity diagram



Quantity estimation diagram



UGR diagram



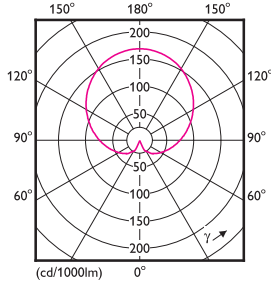


LEDBulb 6W

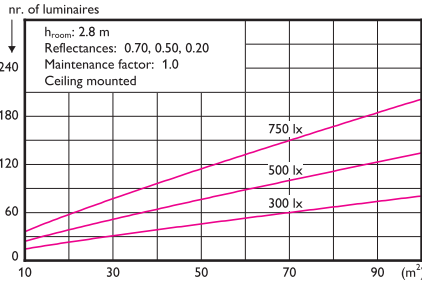
Light output ratio 1.00
Service upward 0.73
Service downward 0.27

CIE flux code 10 32 62 27 100
UGRc_{en} (4Hx8H, 0.25H) 20

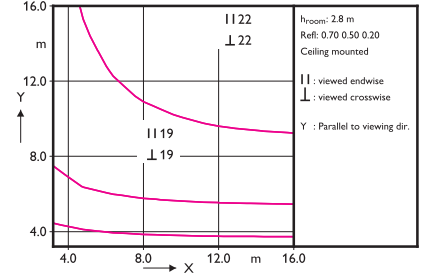
Polar intensity diagram



Quantity estimation diagram



UGR diagram

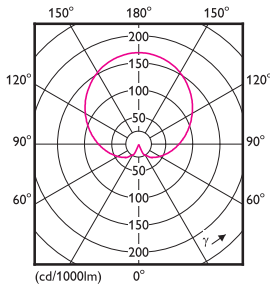


LEDBulb 8W

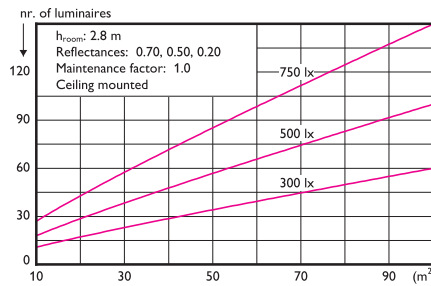
Light output ratio 1.00
Service upward 0.73
Service downward 0.27

CIE flux code 10 32 62 27 100
UGRc_{en} (4Hx8H, 0.25H) 21

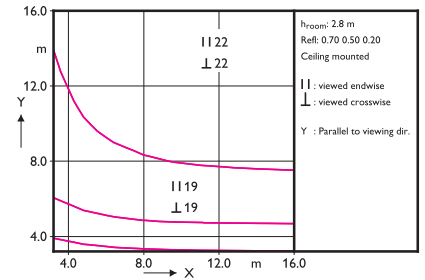
Polar intensity diagram



Quantity estimation diagram



UGR diagram

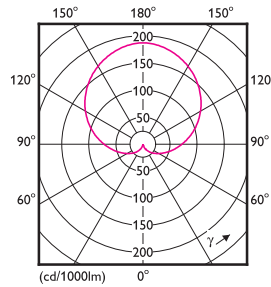


LEDBulb 10W

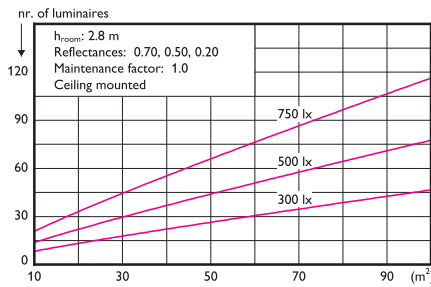
Light output ratio 1.00
Service upward 0.78
Service downward 0.22

CIE flux code 7 26 56 22 100
UGRc_{en} (4Hx8H, 0.25H) 21

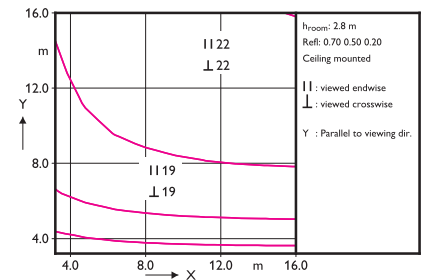
Polar intensity diagram



Quantity estimation diagram



UGR diagram



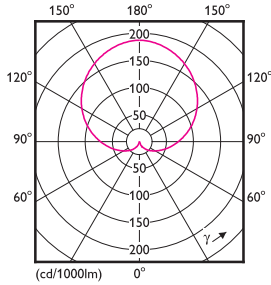


LEDBulb 12W

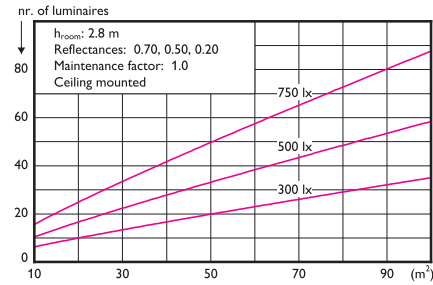
Light output ratio 1.00
 Service upward 0.78
 Service downward 0.22

CIE flux code 7 26 56 22 100
 UGRcen (4Hx8H, 0.25H) 22

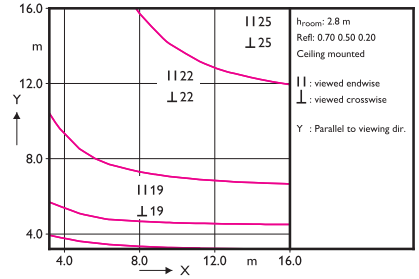
Polar intensity diagram



Quantity estimation diagram

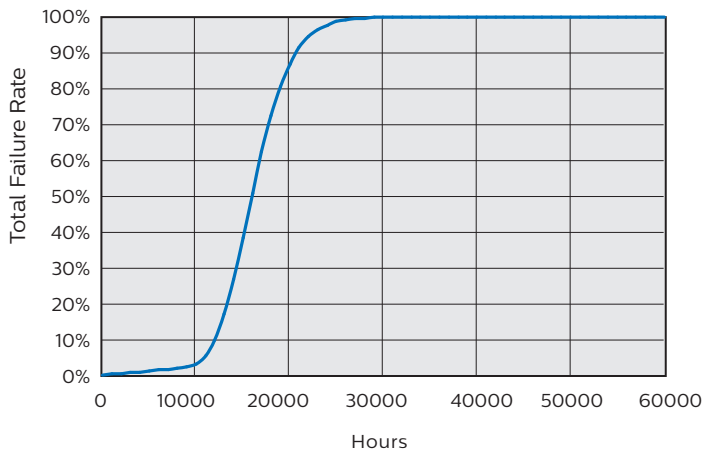


UGR diagram



Lifetime + Sustainability

Failure Rate Curve of Philips LEDbulb



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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