PHILIPS

LEDbulb

LED

Technical Application Guide

Philips MyCare LEDBulb

EyeComfort

Philips MyCare LEDbulb deliver Interlaced Optics to provide comfortable brightness of GLS bulbs in indoor application.

Philips MyCare 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/eyecomfort

Over 85% Energy cost saving

Design highlights

With form factor designed as a direct retrofit into A60 fixtures. Philips Interlaced Optics deliver:

- Reduced glare with soft lighting*
- No visible flickering
- Eye safety of lamps compliance**
- Last up to 15 years
- Environmental friendly, no Mercury
- Low Carbon Footprint

* Comparing the bulb surface brightness between Philips LED bulb and CFLi Tornado

** Compliance with IEC62471 photobiological safety of lamps and lamps systems

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 45 °C ambient
- Only to apply in dry or damp locations and most of 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
- Not intended for enclosed luminaires

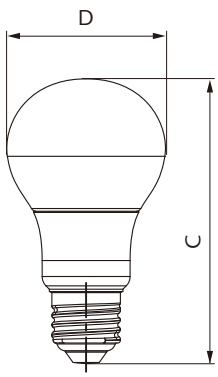
Product features

Technical Specifications

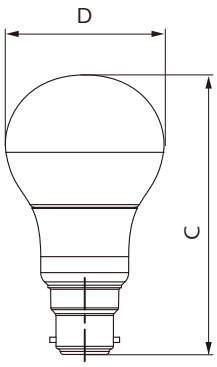
Product type	Voltage (V)	Lamp Wattage (W)	Power Factor	Cap	Bulb shape	CCT (K)	Lumen (Lm)	Luminous efficacy (=lm/W)	Lifetime (hours)	CRI	Dimmable	Interlaced Optics
LEDBulb 4W E27 6500K	220-240	4	0.4	E27	A60S	6500	420	105	15000	80	No	Yes
LEDBulb 4W E27 3000K	220-240	4	0.4	E27	A60S	3000	420	105	15000	80	No	Yes
LEDBulb 4W B22 6500K	220-240	4	0.4	B22	A60S	6500	420	105	15000	80	No	Yes
LEDBulb 4W B22 3000K	220-240	4	0.4	B22	A60S	3000	420	105	15000	80	No	Yes
LEDBulb 6W E27 6500K	220-240	6	0.5	E27	A60S	6500	580	96	15000	80	No	Yes
LEDBulb 6W E27 3000K	220-240	6	0.5	E27	A60S	3000	560	93	15000	80	No	Yes
LEDBulb 6W B22 6500K	220-240	6	0.5	B22	A60S	6500	580	96	15000	80	No	Yes
LEDBulb 6W B22 3000K	220-240	6	0.5	B22	A60S	3000	560	93	15000	80	No	Yes
LEDBulb 8W E27 6500K	220-240	8	0.5	E27	A60S	6500	770	96	15000	80	No	Yes
LEDBulb 8W E27 3000K	220-240	8	0.5	E27	A60S	3000	770	96	15000	80	No	Yes
LEDBulb 8W B22 6500K	220-240	8	0.5	B22	A60S	6500	770	96	15000	80	No	Yes
LEDBulb 8W B22 3000K	220-240	8	0.5	B22	A60S	3000	770	96	15000	80	No	Yes
LEDBulb 10W E27 6500K	220-240	10	0.5	E27	A60M	6500	1020	102	15000	80	No	Yes
LEDBulb 10W E27 3000K	220-240	10	0.5	E27	A60M	3000	1020	102	15000	80	No	Yes
LEDBulb 10W B22 6500K	220-240	10	0.5	B22	A60M	6500	1020	102	15000	80	No	Yes
LEDBulb 10W B22 3000K	220-240	10	0.5	B22	A60M	3000	1020	102	15000	80	No	Yes
LEDBulb 12W E27 6500K	220-240	12	0.5	E27	A60M	6500	1360	113	15000	80	No	Yes
LEDBulb 12W E27 3000K	220-240	12	0.5	E27	A60M	3000	1360	113	15000	80	No	Yes
LEDBulb 12W B22 6500K	220-240	12	0.5	B22	A60M	6500	1360	113	15000	80	No	Yes
LEDBulb 12W B22 3000K	220-240	12	0.5	B22	A60M	3000	1360	113	15000	80	No	Yes

Dimensions

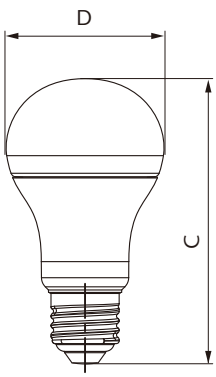
Type	C typical Overall Length (mm)	D typical Diameter (mm)
Entry_bulb G8 A60S E27	109.1	60.5
Entry_bulb G8 A60S B22	107.6	60.5
Entry_bulb G8 A60M E27	109.1	60.5
Entry_bulb G8 A60M B22	107.6	60.5



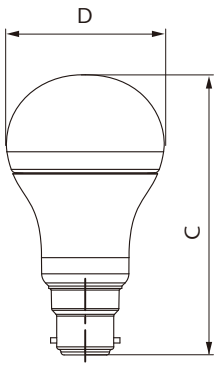
A60S E27



A60S B22



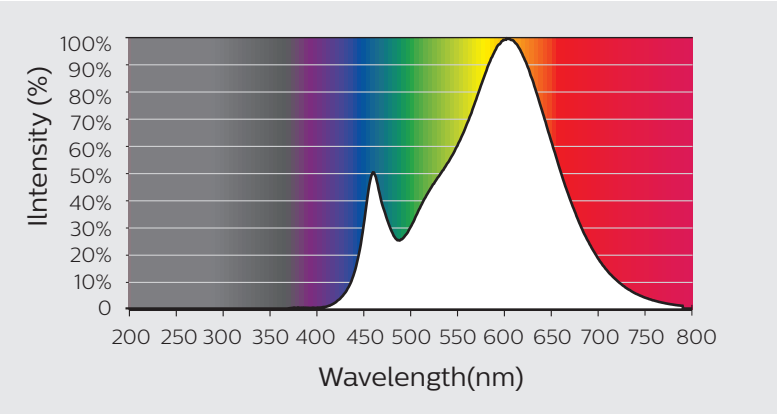
A60M E27



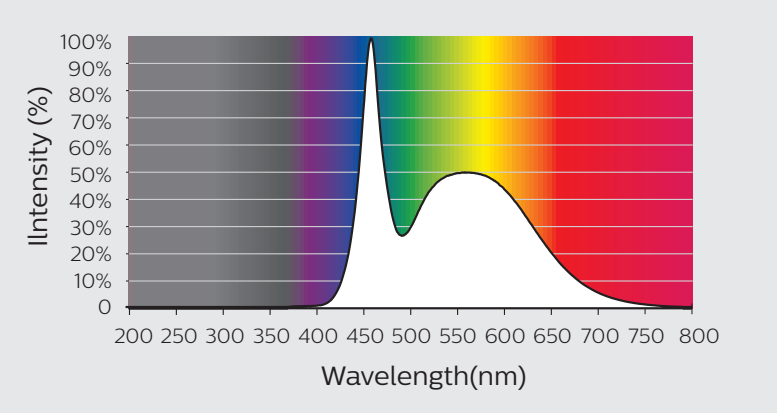
A60M B22

Spectral Power Distribution

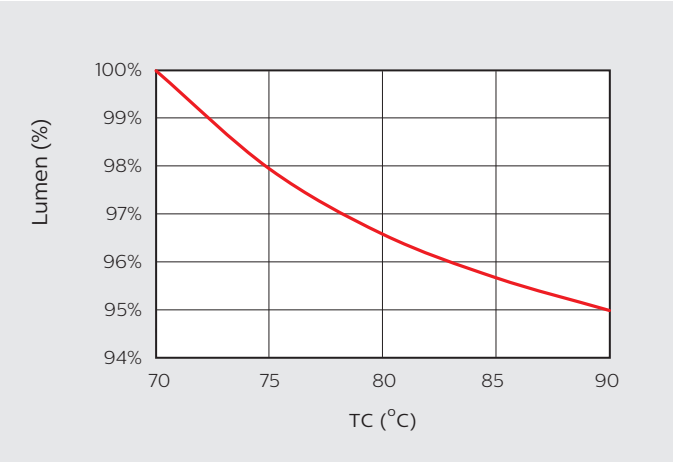
Spectrum LEDbulb 3000K



Spectrum LEDbulb 6500K

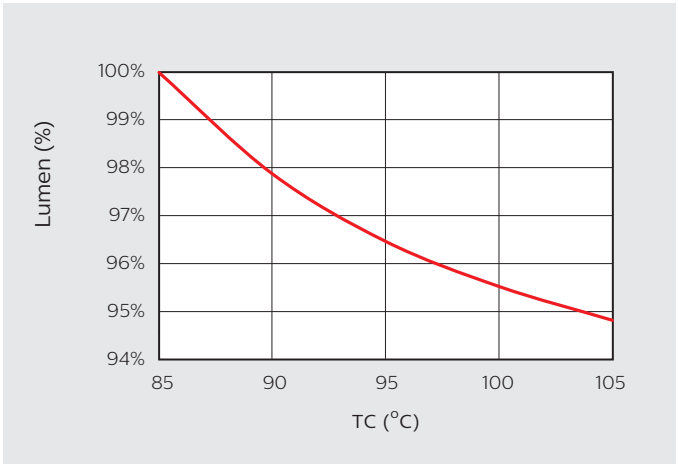


Temperature



Tc.

420 lm	Tc Max: 90 °C
560 lm	Tc Max: 90 °C
580 lm	Tc Max: 90 °C



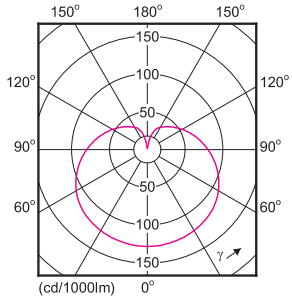
770 lm	Tc Max: 105 °C
1020 lm	Tc Max: 105 °C
1360 lm	Tc Max: 105 °C

Photometric Diagrams

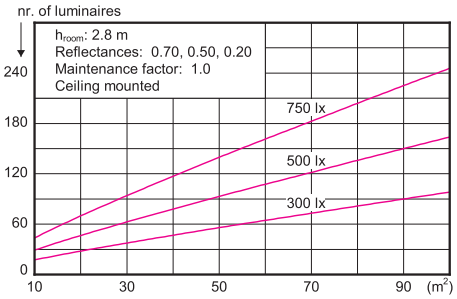
LEDBulb 4W E27 6500K — 1 x 420 lm

Light output ratio	1.00	CIE flux code	29 56 80 67 100
Service upward	0.33		
Service downward	0.67	UGRcen (4Hx8H, 0.25H)	23

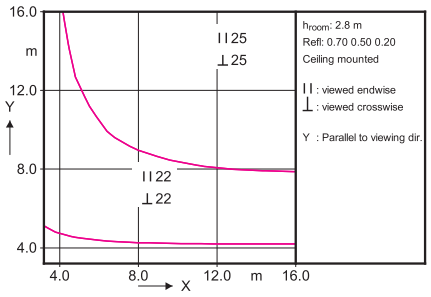
Polar intensity diagram



Quantity estimation diagram



UGR diagram



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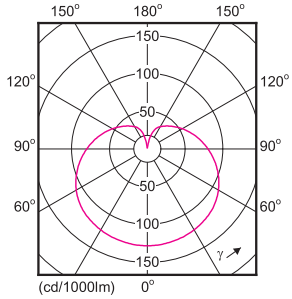

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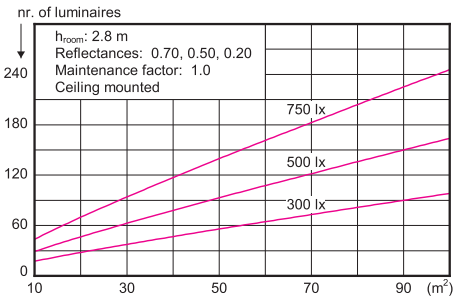

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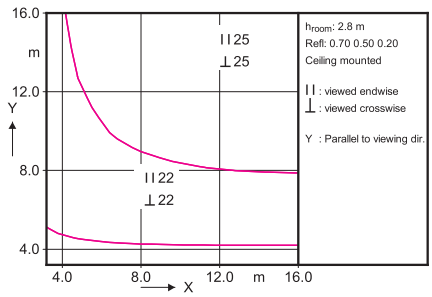
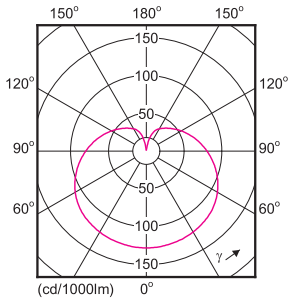


LEDBulb 4W B22 6500K

1 x 420 lm

Light output ratio	1.00	CIE flux code	29 56 80 67 100
Service upward	0.33		
Service downward	0.67	UGRcen (4Hx8H, 0.25H)	23

Polar intensity diagram



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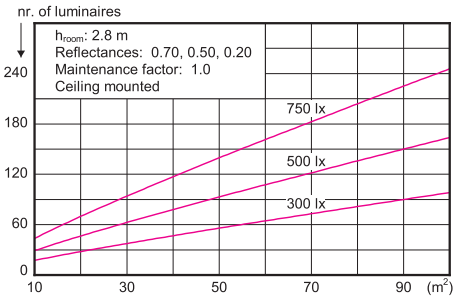
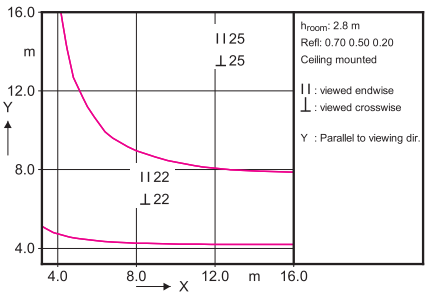


UGR diagram



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1 x 420 lm

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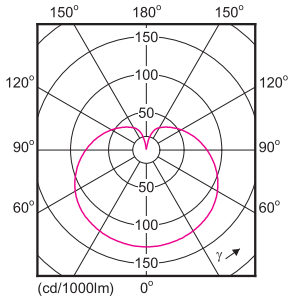

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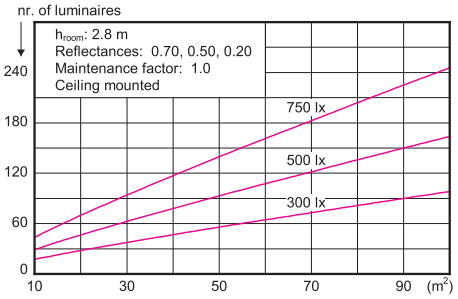
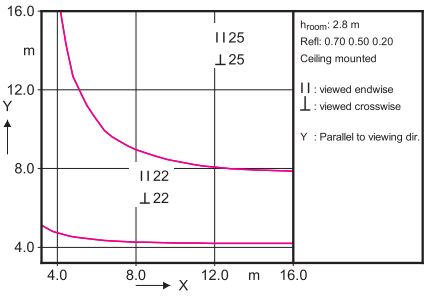


UGR diagram

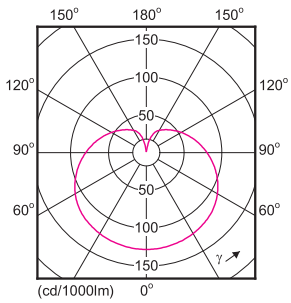


LEDBulb 6W E27 6500K

1 x 580 lm

Light output ratio	1.00	CIE flux code	29 56 80 67 100
Service upward	0.33		
Service downward	0.67	UGRcen (4Hx8H, 0.25H)	24

Polar intensity diagram



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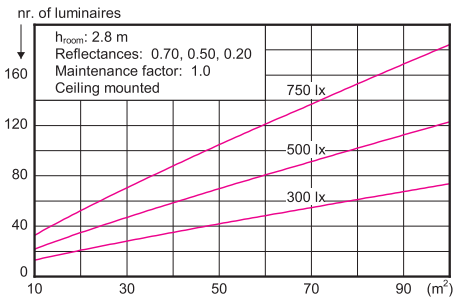
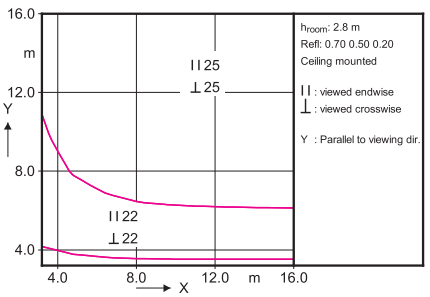


UGR diagram

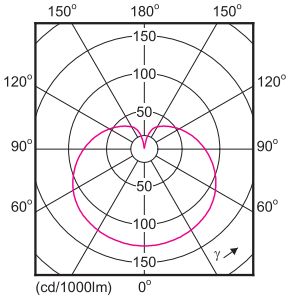


LEDBulb 6W E27 3000K

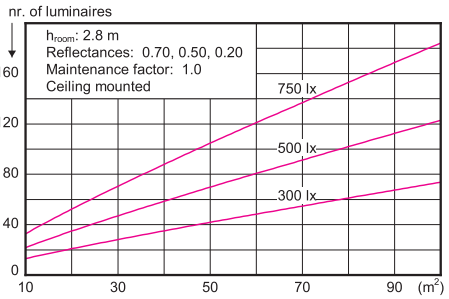
1 x 560 lm

Light output ratio	1.00	CIE flux code	29 56 80 67 100
Service upward	0.33		
Service downward	0.67	UGRcen (4Hx8H, 0.25H)	24

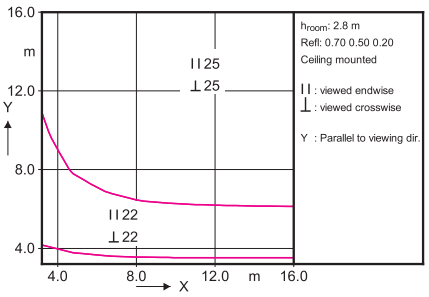
Polar intensity diagram



Quantity estimation diagram



UGR diagram

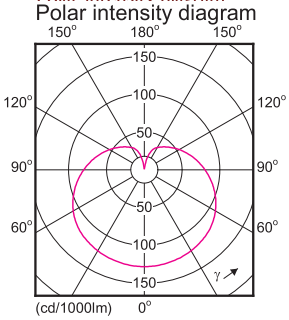


LEDBulb 6W B22 6500K

1 x 580 lm

Light output ratio	1.00	CIE flux code	29 56 80 67 100
Service upward	0.33		
Service downward	0.67	UGRcen (4Hx8H, 0.25H)	24

Polar intensity diagram



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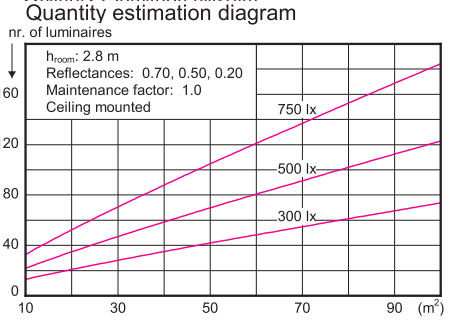
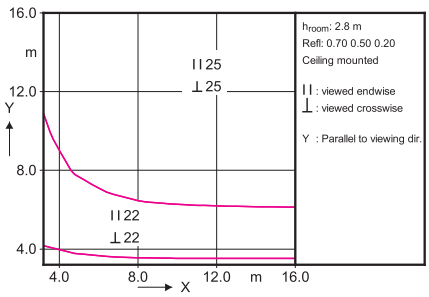


UGR diagram

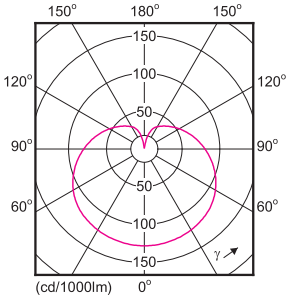


LEDBulb 6W B22 3000K

1 x 560 lm

Light output ratio	1.00	CIE flux code	29 56 80 67 100
Service upward	0.33		
Service downward	0.67	UGRcen (4Hx8H, 0.25H)	24

Polar intensity diagram



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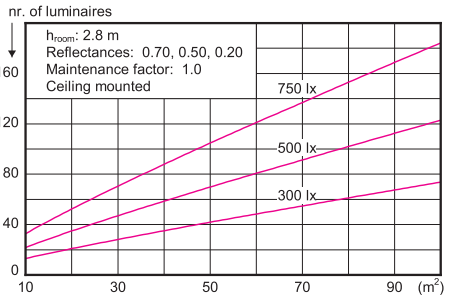

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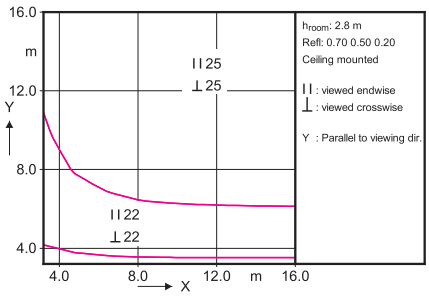
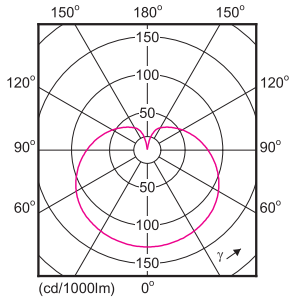


LEDBulb 8W E27 6500K

1 x 770 lm

Light output ratio	1.00	CIE flux code	29 56 80 67 100
Service upward	0.33		
Service downward	0.67	UGRcen (4Hx8H, 0.25H)	25

Polar intensity diagram



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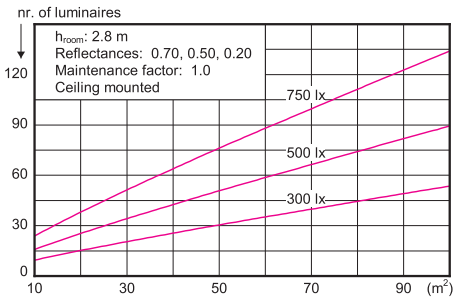

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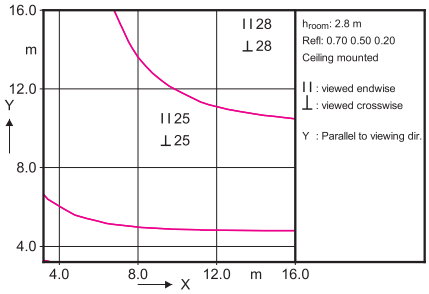

LEDBulb 8W E27 3000K

1 x 770 lm

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Service upward	0.33		
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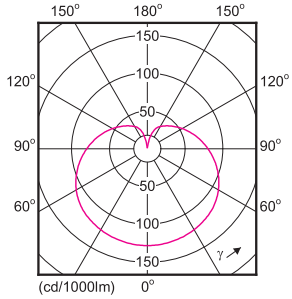

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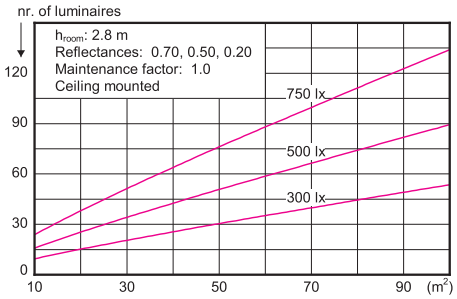

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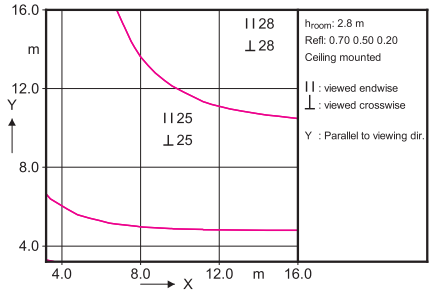
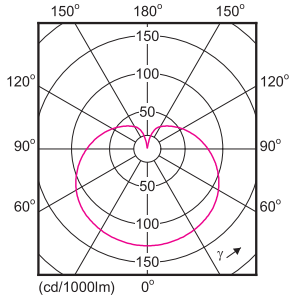


LEDBulb 8W B22 6500K

1 x 770 lm

Light output ratio	1.00	CIE flux code	29 56 80 67 100
Service upward	0.33		
Service downward	0.67	UGRcen (4Hx8H, 0.25H)	25

Polar intensity diagram



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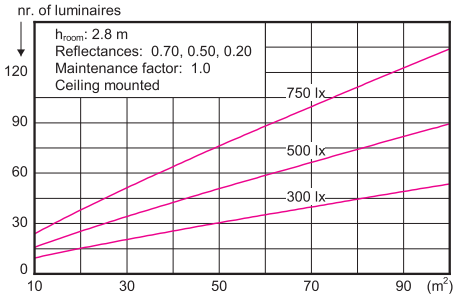

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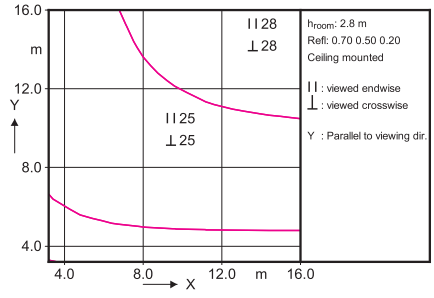

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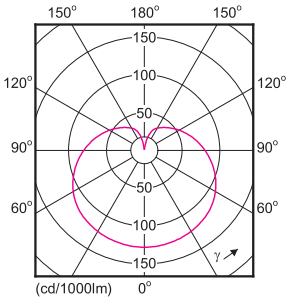
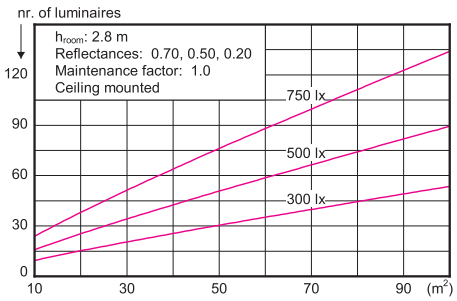
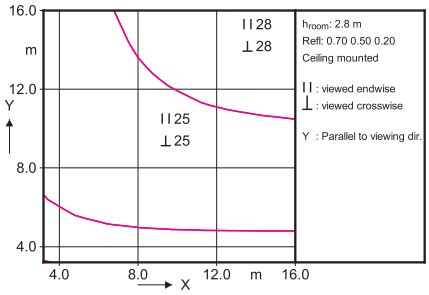


Quantity estimation diagram



UGR diagram

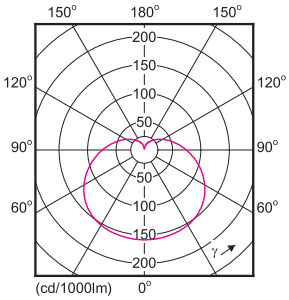


LEDBulb 10W E27 6500K

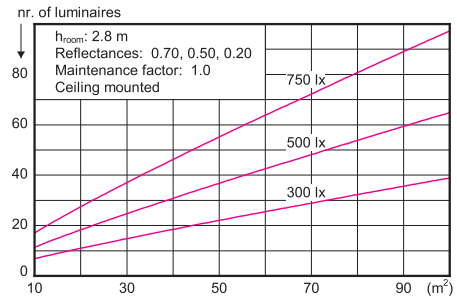
1 x 1020 lm

Light output ratio	1.00	CIE flux code	32 59 82 76 100
Service upward	0.24		
Service downward	0.76	UGRcen (4Hx8H, 0.25H)	27

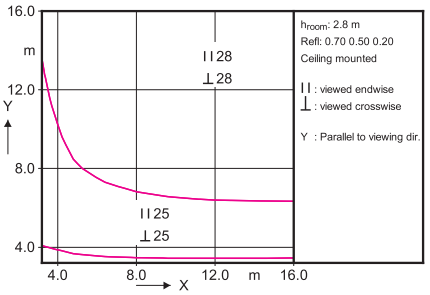
Polar intensity diagram



Quantity estimation diagram



UGR diagram



LEDBulb 10W E27 3000K

1 x 1020 lm

Light output ratio	1.00	CIE flux code	32 59 82 76 100
Service upward	0.24		
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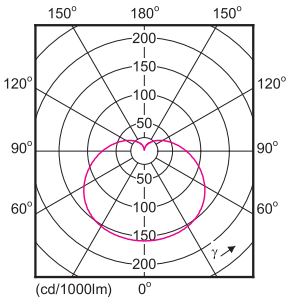
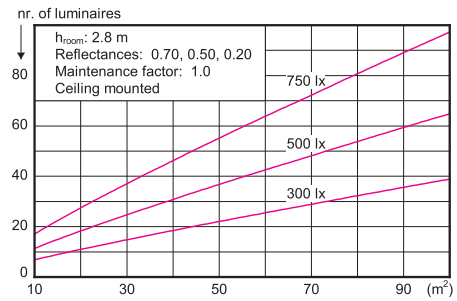
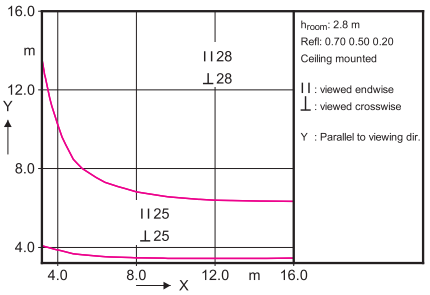
Polar intensity diagram



Quantity estimation diagram



UGR diagram

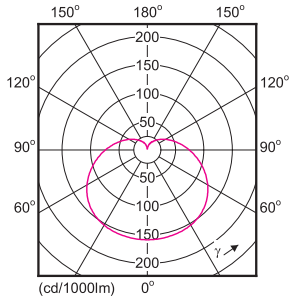


LEDBulb 10W B22 6500K

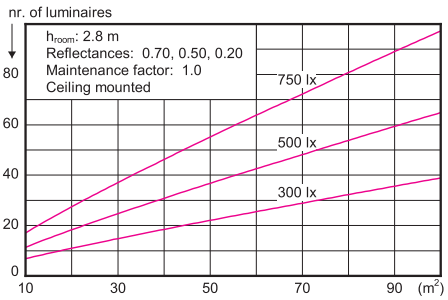
1 x 1020 lm

Light output ratio	1.00	CIE flux code	32 59 82 76 100
Service upward	0.24		
Service downward	0.76	UGRcen (4Hx8H, 0.25H)	27

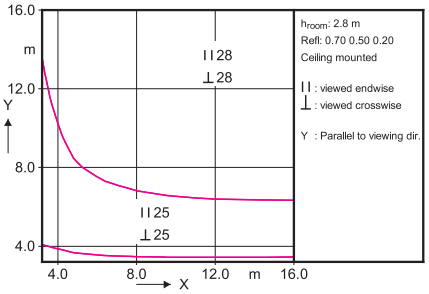
Polar intensity diagram



Quantity estimation diagram



UGR diagram



LEDBulb 10W B22 3000K

1 x 1020 lm

Light output ratio	1.00	CIE flux code	32 59 82 76 100
Service upward	0.24		
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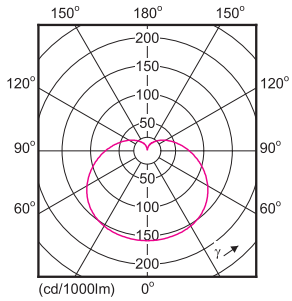
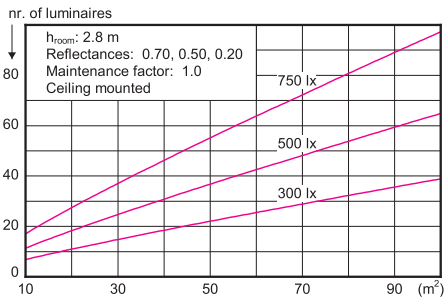
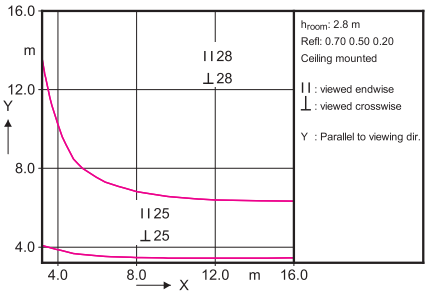
Polar intensity diagram



Quantity estimation diagram



UGR diagram

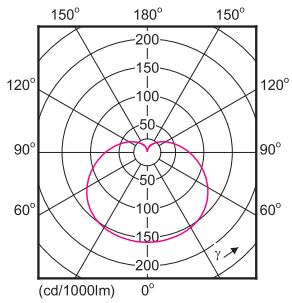


LEDBulb 12W E27 6500K

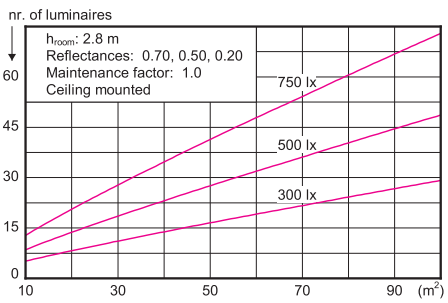
1 x 1360 lm

Light output ratio	1.00	CIE flux code	32 59 82 76 100
Service upward	0.24		
Service downward	0.76	UGRcen (4Hx8H, 0.25H)	28

Polar intensity diagram



Quantity estimation diagram



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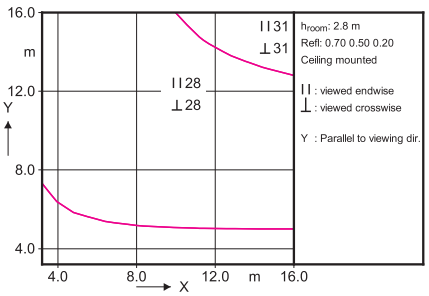

LEDBulb 12W E27 3000K

1 x 1360 lm

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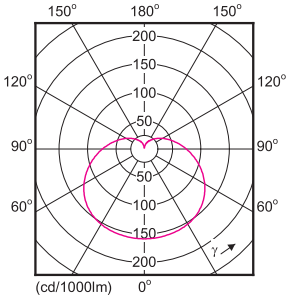
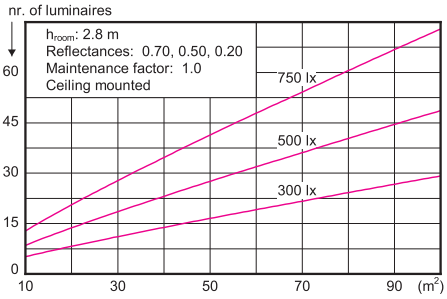
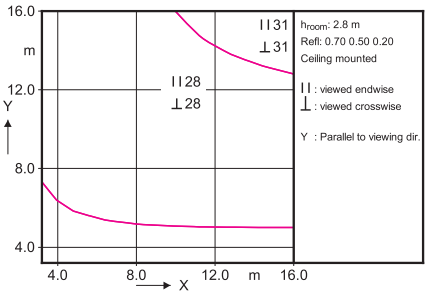
Polar intensity diagram



Quantity estimation diagram



UGR diagram

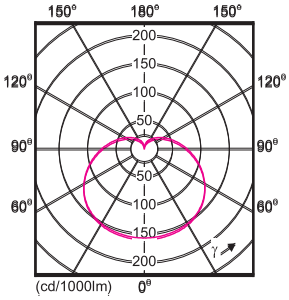


LEDBulb 12W B22 6500K

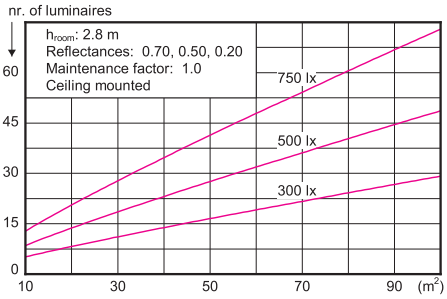
1 x 1360 lm

Light output ratio	1.00	CIE flux code	32 59 82 76 100
Service upward	0.24		
Service downward	0.76	UGRcen (4Hx8H, 0.25H)	28

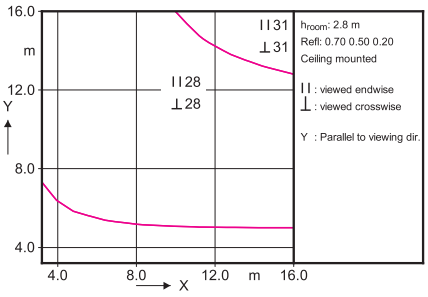
Polar intensity diagram



Quantity estimation diagram



UGR diagram



LEDBulb 12W B22 3000K

1 x 1360 lm

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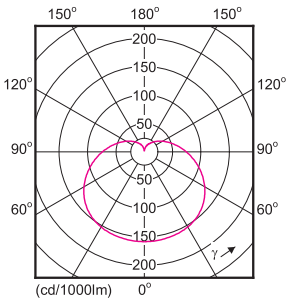
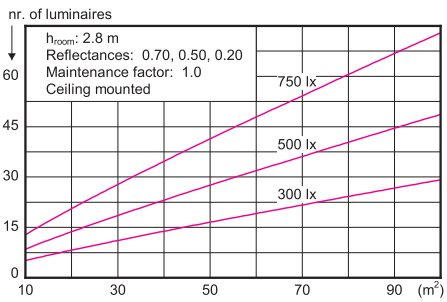
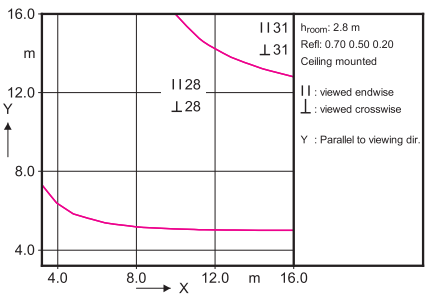


Quantity estimation diagram

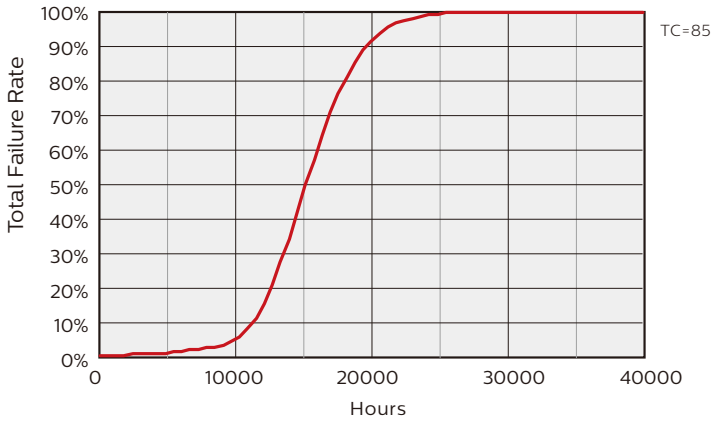


UGR diagram



Lifetime + Sustainability

Failure Rate Curve of Entry Gen 8 3000K/6500K



Philips MyCare Bulb 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.

07/2018
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