

PHILIPS

MASTER
LEDbulb



Technical Application Guide

Philips MASTER LEDbulb ClearClassic MV DimTone

Best of the world... a DimTone Master LEDbulb ClearClassic with a warm white sparkle that saves over 85% energy costs.

The DimTone MASTER LEDbulb ClearClassic are ideal for installation in various kinds of fixtures where people can easily enjoy the art of light. The clear elegance aesthetic design with brilliant sunset-like light effect bringing LED close to users.



www.philips.com/masterledlamps



reddot award 2016
winner



Design highlights



- Classical clear outlook meets the need of OEM lumi-makers
- Unique optical design allows for sparkling light
- Low power consumption
- Long-lifetime of 25,000 hours (F50, L70)
- Dimmable with recommended dimmers
- Deluxe and dimming system provide smooth dimming from CCT 2200 K to 2700 K
- No UV and Cool beam (no IR)
- Environmental friendly, no Mercury or any other hazardous substances
- Low Carbon Footprint

“ Designed with **classical slender shape** and a unique eye-catching lens”



Application areas

MASTER LEDbulb ClearClassic lamps are ideal for general and decorative lighting in the hospitality industry, as well as in home environments, fit all existing fixtures with an E27 or B22 socket. Drawing upon inputs from luminaire makers and designed to enhance the aesthetic appeal of the luminaire, not only when lit but also when not, these lamps come in a classical slender shape with a unique, eye-catching lens design. They produce a beautiful sparkling warm light that delivers huge energy savings and minimizes maintenance cost. The DimTone LEDbulb provide smooth dimming from CCT 2200 K to 2700 K.

Application notes

- Operating temperature range is between -20 °C and 40 °C ambient
- Designed for indoor application
- Dimmable with most of leading edge and trailing edge dimmers and dimming system in the market (refer to the recommended dimmer list online)
- Not intended for use with emergency light fixtures or exit lights
- For indoor applications in open luminaires (open/free air gap of min. 10 mm)

Product features

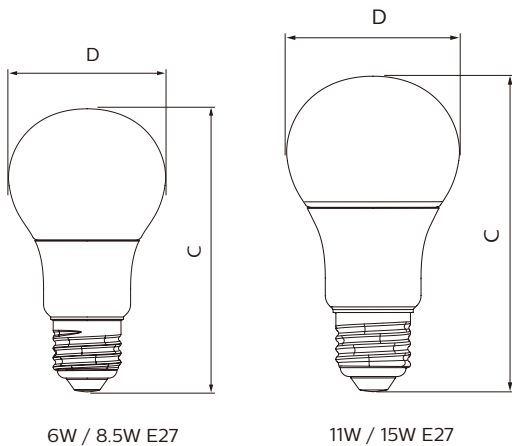
Technical Specifications

| Product type | Voltage (V) | Lamp Wattage (W) | Replaced Wattage (W) | Base | Lamp/shape finish | Color temp. (K) | Light Output (Lm) | Lifetime (hours) | CRI | Dimmable |
|-----------------------------------|-------------|------------------|----------------------|------|-------------------|-----------------|-------------------|------------------|-----|----------|
| MAS LEDbulb DT 6-40W E27 A60 CL | 220-240 | 6.0 | 40 | E27 | Clear | 2200-2700 | 470 | 25,000 | 80 | Yes |
| MAS LEDbulb DT 8.5-60W E27 A60 CL | 220-240 | 8.5 | 60 | E27 | Clear | 2200-2700 | 806 | 25,000 | 80 | Yes |
| MAS LEDbulb DT 11-75W E27 A60 FR | 220-240 | 11.0 | 75 | E27 | Clear | 2200-2700 | 1055 | 25,000 | 80 | Yes |
| MAS LEDbulb DT 15-100W E27 A60 FR | 220-240 | 15 | 100 | E27 | Clear | 2200-2700 | 1521 | 25,000 | 80 | Yes |

Dimensions

| Type | C typical Overall Length (mm) | D typical Diameter (mm) |
|-----------------------------------|-------------------------------|-------------------------|
| MAS LEDbulb DT 6-40W E27 A60 CL | 110 | 60 |
| MAS LEDbulb DT 8.5-60W E27 A60 CL | 110 | 60 |
| MAS LEDbulb DT 11-75W E27 A60 FR | 137 | 71 |
| MAS LEDbulb DT 15-100W E27 A60 FR | 137 | 71 |

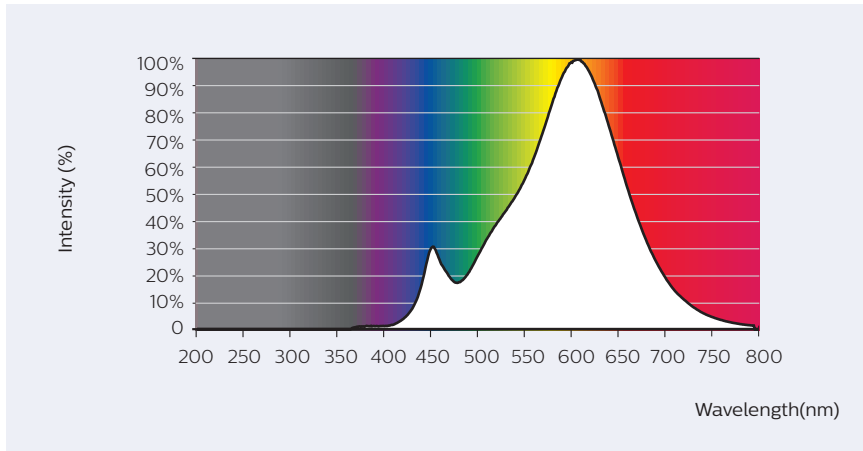
MASTER LEDbulb



Spectral Power Distribution

Spectrum Philips MASTER LEDbulb ClearClassic MV DimTone

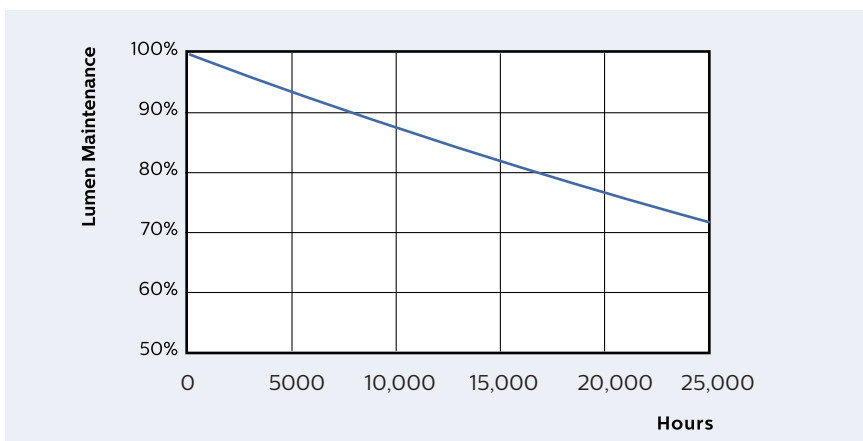
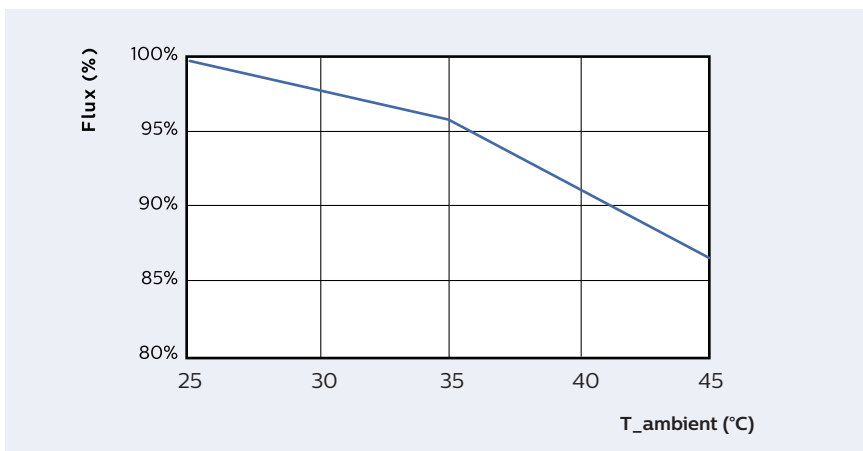
LEDbulb ClearClassic MV DimTone

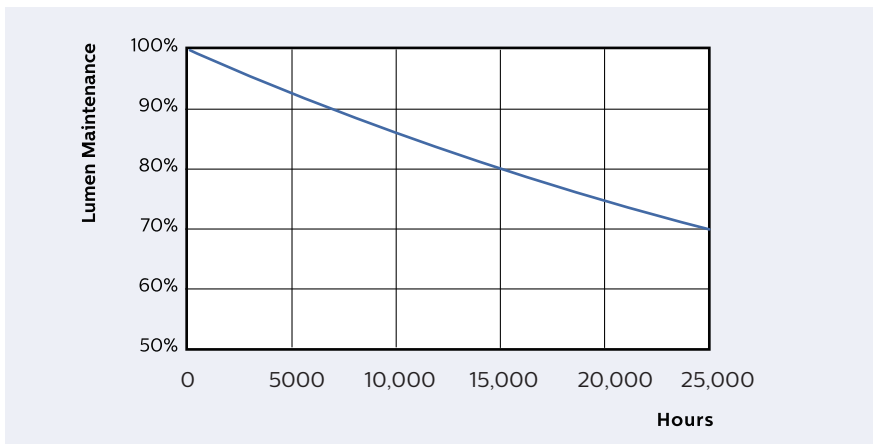
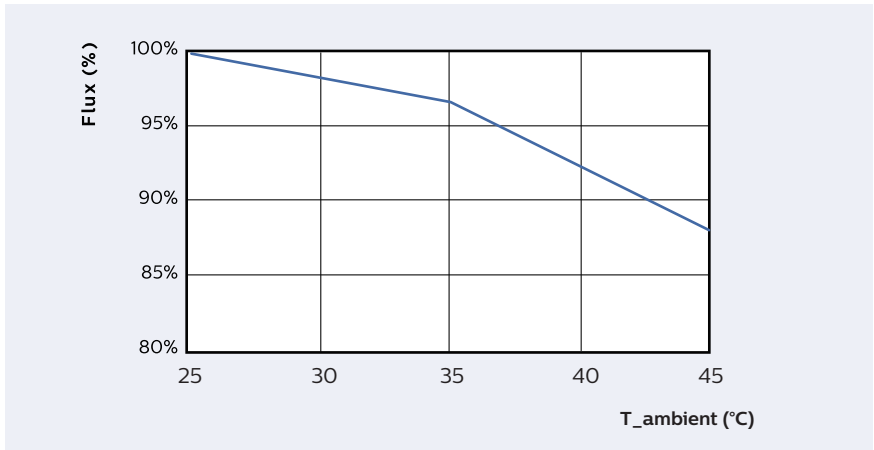


Temperature

MASTER LEDbulb

LEDbulb ClearClassic MV DimTone 40W

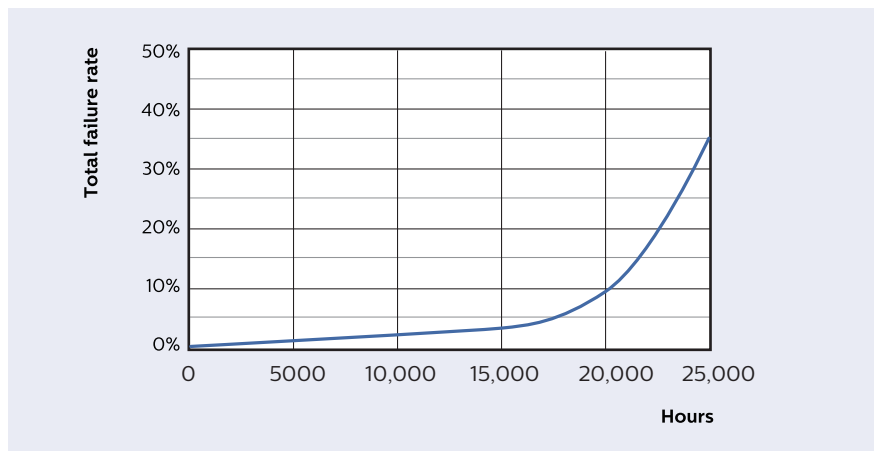




Lifetime + Sustainability

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LEDbulb ClearClassic MV DimTone



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

- F50, L70, 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 operation, base down burning position and at rated voltage.

Photometric Diagrams

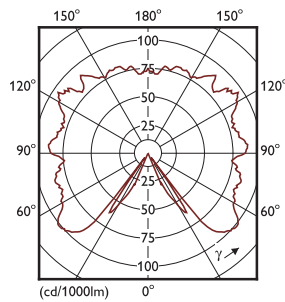


MAS LEDbulb DT 6-40W E27 A60 CL

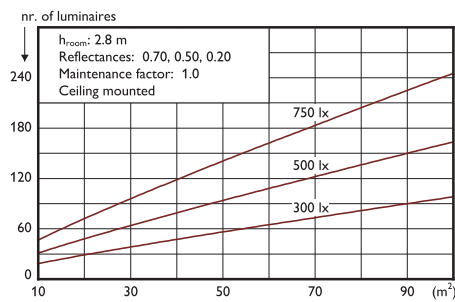
1 x 470 lm

| | | | |
|--------------------|------|-----------------------|----------------|
| Light output ratio | 1.00 | CIE flux code | 13 45 73 47 99 |
| Service upward | 0.52 | UGRcen (4Hx8H, 0.25H) | 22 |
| Service downward | 0.48 | | |

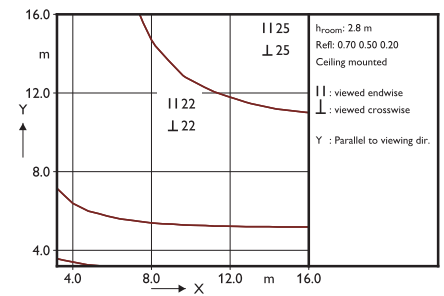
Polar intensity diagram



Quantity estimation diagram



UGR diagram

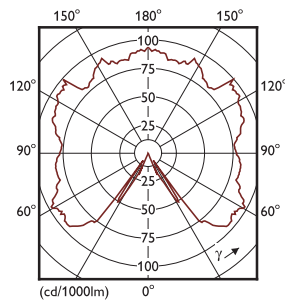


MAS LEDbulb DT 8.5-60W E27 A60 CL

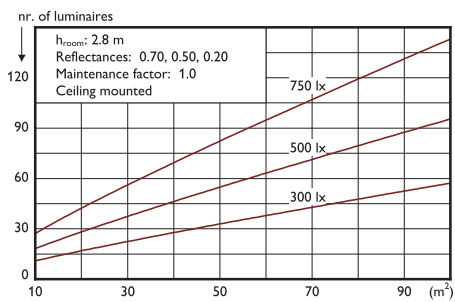
1 x 806 lm

| | | | |
|--------------------|------|-----------------------|-----------------|
| Light output ratio | 1.00 | CIE flux code | 11 42 72 46 100 |
| Service upward | 0.54 | UGRcen (4Hx8H, 0.25H) | 24 |
| Service downward | 0.46 | | |

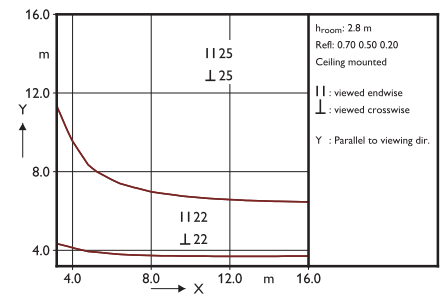
Polar intensity diagram



Quantity estimation diagram



UGR diagram



Recommended Dimmers

MASTER LEDbulb ClearClassic MV DimTone

| Dimmer info | | | 40W Overall Result | 60W Overall Result |
|--|--------------------|--|--------------------|--------------------|
| No | Brand | Type# | | |
| 1 | Schneider (Merten) | SBD420RCRL (MEG5138-0000) | 1-3 | 1-3 |
| 2 | Schneider | SBD315RC (SBD 315) | 1-3 | 1-3 |
| 3 | Schneider (Elko) | SBD200LED (CCTEL10501)(S520512: 4-400VA) | 1-3 | 1-3 |
| 4 | Busch-Jaeger | 2250U | 1-3 | 1-3 |
| 5 | Busch-Jaeger | 6513 U-102 | 1-3 | 1-3 |
| 6 | Busch-Jaeger | 6523U | 1-3 | 1-3 |
| 7 | Busch-Jaeger | 2200 U-503 | 1-3 | 1-3 |
| 8 | Busch-Jaeger | 2247U - 500 | 1-3 | 1-3 |
| 9 | Legrand | 67081 | | |
| 10 | Legrand | 774161 | | |
| 11 | Legrand | 67082 | | |
| 12 | Legrand | 67084 | 1-3 | 1-3 |
| 13 | Legrand | 67085 | 1-3 | 1-3 |
| 14 | Jung | 225TDE | 1-3 | 1-3 |
| 15 | Varilight | HQ3W | 2-3 | 1-3 |
| 16 | Insta (Berker) | 2867 10 | 1-3 | 1-3 |
| 17 | Insta (Berker) | 2830 10 | 1-3 | 1-3 |
| 18 | Gira | 2390 00 / 100 | 1-3 | 1-3 |
| 19 | Jung | 1271LEDDE | 1-3 | 1-3 |
| 20 | MK | K1535 | HEL<80% | 1-3 |
| 21 | MK | K1501 WHILV | 1-3 | 1-3 |
| 22 | Vimar | 20148 | | |
| 23 | Vimar | 20162 | | |
| Professional Specific: 2 Dynalite dimmers | | | | |
| 24 | Dynalite | DDLE801 | 1-3 | 1-3 |
| 25 | Dynalite | DDMC-GRMSPLUS | 1-3 | 1-3 |
| Consumer Specific: 5 Cord dimmers | | | | |
| 26 | Ikea | WDE300F-1 | 3 | |
| 27 | Ikea | E0902-Dim | 1-3 | 1-3 |
| 28 | Ikea | WDE200L-1 | 1-3 | 1-3 |
| 29 | Ikea | EED200LRS | 1-3 | 1-3 |



| Dimmer info | | | 40W Overall Result | 60W Overall Result |
|-------------|-----------|----------------|--------------------|--------------------|
| No | Brand | Type# | | |
| 30 | Anam | D700 (ASW3701) | 2-3 | 1-3 |
| 31 | ARLEC | 9121B/9021 | 2-3 | 1-3 |
| 32 | Clipsal | 31E800T | 2-3 | 1-3 |
| 33 | Clipsal | 32E2CFLDM | 1-3 | 1-3 |
| 34 | Clipsal | 32E450LM | 1-3 | 1-3 |
| 35 | Clipsal | 3031H500MK | 2-3 | 1-3 |
| 36 | Clipsal | 32E450TM | 1-3 | 1-3 |
| 37 | Clipsal | 32E450UDM | 1-3 | 1-3 |
| 38 | Clipsal | 32V500 | 2-3 | 1-3 |
| 39 | Clipsal | E3031HD | | |
| 40 | Clipsal | KB31RD400 | 2-3 | 1-3 |
| 41 | KIWI | K004U | 1-3 | 1-3 |
| 42 | KIWI | K005L | 2-3 | 1-3 |
| 43 | KIWI | K005T | 1-3 | 1-3 |
| 44 | LONON | NB 50.0TG | 1-3 | 1-3 |
| 45 | NVC | E51D14A-02 | | 2-3 |
| 46 | Panasonic | WMS549 | 3 | 1-3 |
| 47 | PDL | 654MWH | 1-3 | 1-3 |
| 48 | PDL | 624TMWH | | |
| 49 | SHIN SUNG | SSD-500 | 3 | 2-3 |
| 50 | TCL | LM2 | | 2-3 |
| 51 | TNC | Z62-M12 | 2-3 | |



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