# MASTER – LED HID SON–T

## MAS LED SON–T EM 8.1Klm 50W 727 E40

Philips MASTER - LED HID SON–T lamps are an easy LED solution with a short payback period to replace High–Intensity Discharge (HID) and High–Pressure Sodium (SON) lamps. MASTER – LED HID SON–T solutions bring the energy efficiency and long lifetime benefits of LED to HID replacement, providing instant savings for a low initial investment. With the right lamp size and light distribution, you can easily retrofit MASTER – LED HID SON–T lamps into existing SON and SON–T systems, enhancing the lighting quality with LED without changing the luminaire's ballast (for IF replacements) or reflector.

**Warnings and Safety**

• Please refer to the installation guide or consult a Philips Lighting representative for the wiring diagram and instructions.

## Product data

### General Information

| | |
|---|---|
| Cap–Base | E40 |
| Nominal lifetime | 70,000 hour(s) |
| Switching Cycle | 50,000 |
| Lighting Technology | LED |
| Flux measurement reference | Sphere |

### Light Technical

| | |
|---|---|
| Color Code | 727 [CCT of 2700K] |
| Luminous Flux | 8,100 lm |
| Color Designation | Warm White (WW) |
| Correlated Color Temperature (Nom) | 2700 K |
| Luminous Efficacy (rated) (Nom) | 162 lm/W |
| Color Consistency | <6 |

| | |
|---|---|
| Color rendering index (CRI) | 70 |
| LLMF At End Of Nominal Lifetime (Nom) | 70 % |
| Photobiological safety according to EN 62471 | RG1 |

### Operating and Electrical

| | |
|---|---|
| Line Frequency | 50 to 60 Hz |
| Input Frequency | 50 to 60 Hz |
| Power Consumption | 50 W |
| Lamp Current (Max) | 465 mA |
| Lamp Current (Min) | 245 mA |
| Starting Time (Nom) | 0.5 s |
| Warm–up time to 60% light | 0.5 s |
| Power Factor (Fraction) | 0.9 |
| Voltage (Nom) | 120–240 V |

# MASTER – LED HID SON–T

| | |
|---|---|
| **Ballast Compatibility** | EM/Mains |
| **Inrush current at mains** | 7.4 |
| **Max. lamp no. on MCB B type 10A – Mains** | 26 |
| **Max. lamp no. on MCB B type 10A – EM ballast without Compensation Capacitor.** | 26 |
| **Max. lamp no. on MCB B type 10A – EM ballast with Compensation Capacitor.** | 5 |
| **Max. lamp no. on MCB B type 16A – Mains** | 41 |
| **Max. lamp no. on MCB B type 16A – EM ballast without Compensation Capacitor.** | 41 |
| **Max. lamp no. on MCB B type 16A – EM ballast with Compensation Capacitor.** | 9 |

## Temperature

| | |
|---|---|
| **T–Case Maximum (Nom)** | 52 ℃ |

## Controls and Dimming

| | |
|---|---|
| **Dimmable** | No |

## Mechanical and Housing

| | |
|---|---|
| **Bulb Finish** | Clear |
| **Bulb Material** | Glass |
| **Bulb Shape** | T70 |
| **Net Weight (Piece)** | 0.505 kg |

## Approval and Application

| | |
|---|---|
| **Energy Efficiency Class** | C |
| **Energy Consumption kWh/1000 h** | 50 kWh |
| **EPREL Registration Number** | 1077793 |
| **CE mark** | Yes |
| **EU RoHS compliant** | Yes |
| **Flickering value (PstLM) – Flickering value as per EN 61000-3-3** | 1 |
| **Stroboscopic effect visibility measure (SVM)** | 2.5 |
| **Ambient temperature range** | –30 to +45 ℃ |

## Product Data

| | |
|---|---|
| **Order product name** | MAS LED SON–T EM 8.1Klm 50W 727 E40 |
| **Full product name** | MAS LED SON–T EM 8.1Klm 50W 727 E40 |
| **Full product code** | 871951444915200 |
| **Order code** | 929003468418 |
| **Material Nr. (12NC)** | 929003468418 |
| **Numerator – Quantity Per Pack** | 1 |
| **EAN/UPC – Product/Case** | 8719514449152 |
| **Numerator – Packs per outer box** | 6 |
| **EAN/UPC – Case** | 8719514449169 |

## Dimensional drawing
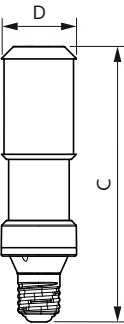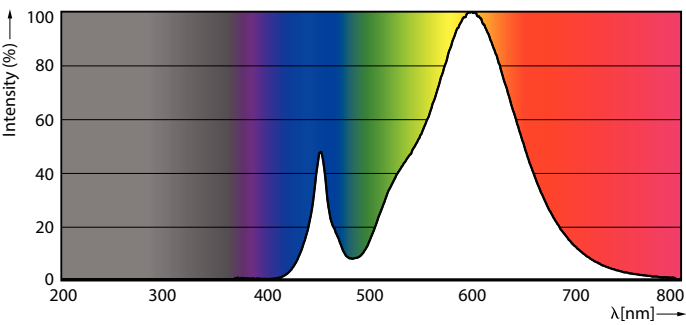


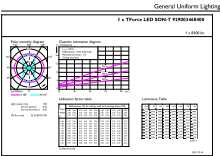| Product | D | C |
|---|---|---|
| MAS LED SON–T EM 8.1Klm 50W 727 E40 | 71 mm | 262 mm |

# MASTER – LED HID SON–T

## Photometric data
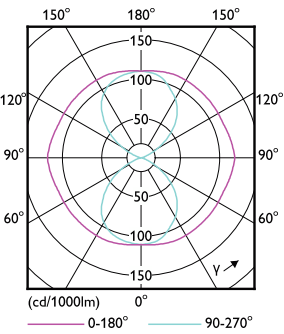


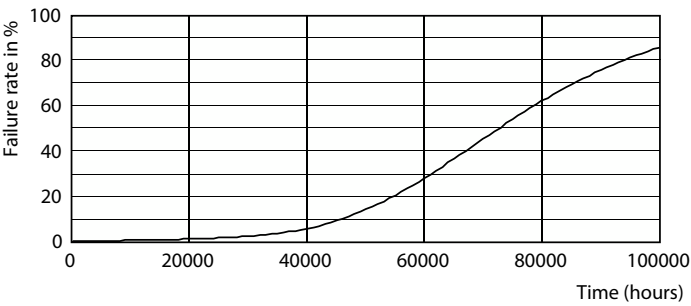**Light Distribution Diagram – MAS LED SON–T EM 8.1Klm 50W 727 E40**



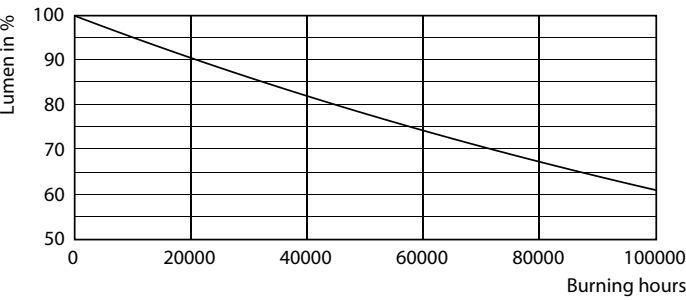**Spectral Power Distribution Colour – MAS LED SON–T EM 8.1Klm 50W 727 E40**



**General uniform lighting – MAS LED SON–T EM 8.1Klm 50W 727 E40**

## Lifetime



**Life Expectancy Diagram**



**Lumen Maintenance Diagram – MAS LED SON–T EM 8.1Klm 50W 727 E40**