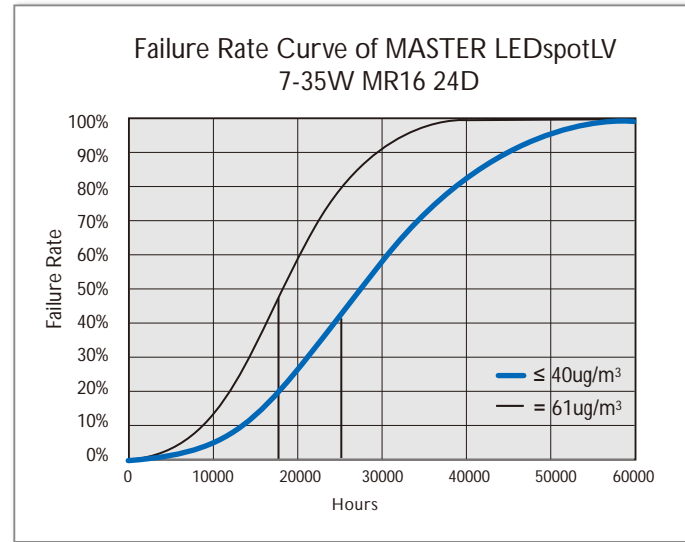


## Lifetime + Sustainability

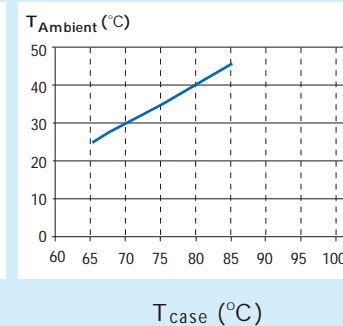
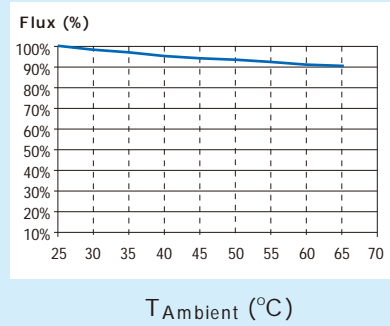
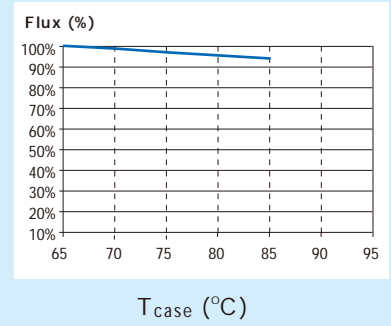


Dust density in real application	Lifetime	Indoor application coverage
≤ 40 (µg/m <sup>3</sup> )	25,000 hrs	80%
= 61 (µg/m <sup>3</sup> )	18,000 hrs	95%

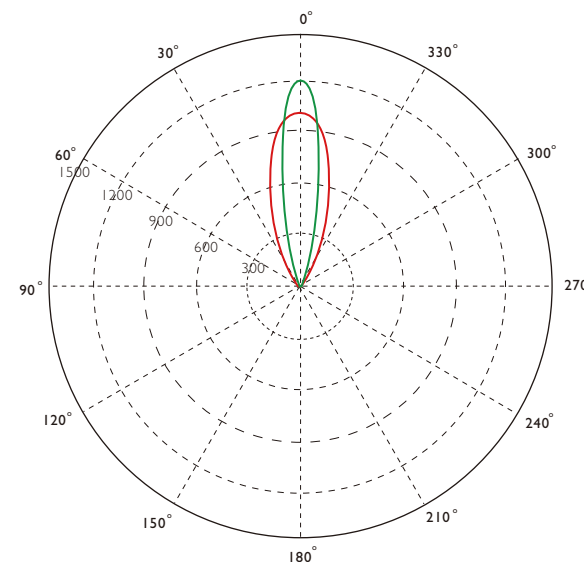
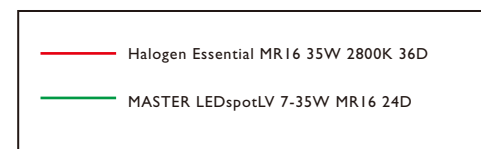
- PHILIPS MASTER LEDspotLV 7-35W MR16 24D lamp has a lifetime of 25,000 hours, defined as the number of hours when 50% of a large group of identical lamps below 70% of its initial lumens.
- Lifetime estimation based on the application environment condition: at room temperature (25°C), free air burning, base down burning position, and at rated voltage.
- Lamp lifetime is within spec (25,000hrs) in dust density of 40 µg/m<sup>3</sup>-cover 80% of indoor application.

## Temperature

MASTER LEDspotLV 7-35W MR16 24D is designed for operation in all MR16 lighting installations in open fixtures, 10mm free air space is needed around the lamp housing to ensure long-life.

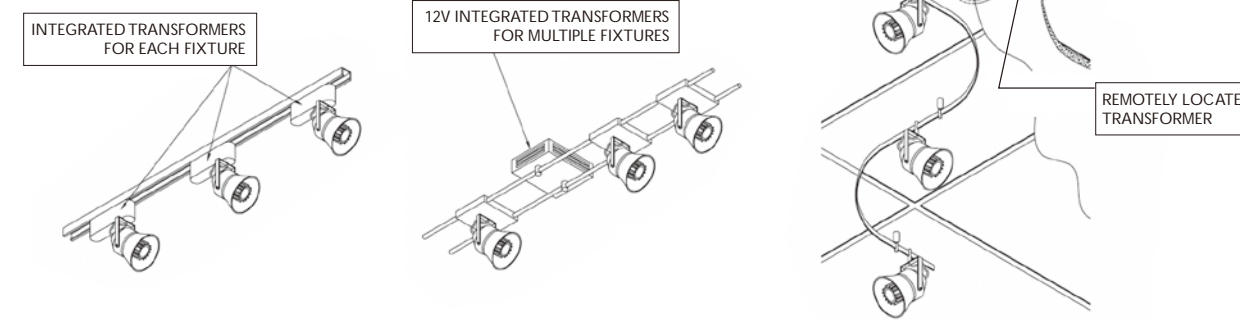


## Polar Diagram Comparison



## Transformer Integrated Drawing

Transformers can be integral to fixtures or remotely located, and can be used to power a group of fixtures, tracks, cables, or rails.



## Transformer Compatibility

- MASTER LEDspotLV 7-35W MR16 24D with patent pending, is compatible with all the Halogen EM transformers and vast majority of the Halogen Electronic transformers in the market of Europe.
- As a system, the maximum number of lamps is limited by the maximum power of the transformer; and the load power is calculated based on the lamps replacement wattage (X\*35W), not the consuming wattage (X\*7W), such as 150W transformer will only hold INT(150/35)=4 lamps.

## Recommended Transformer List

No	Brand	Mode	Load range (W)	Operation Voltage (Vac)	Frequency (Hz)	Country
1	Philips	ET-E50	20...60	220...230	50...60	China
2	Philips	ET-E60 (<2007)	20...60	220...240	50 / 60	China
3	Philips	ET-S60	20...60	220...240	50 / 60	China
4	OSRAM	ET-Z60	20-60	220-240	50 - 60	China
5	OSRAM	ECO-ET 60	20-60	220-230	50	China
6	OSRAM	HTM 105/230-240	35-105	230-240	50 / 60	Australia
7	TCL	ET60H	20...60	220	50	China
8	TCL	ET60A	20-60	220	50	China
9	TCL	ET50S	10-50	220	50	China
10	TCL	ET60B	20-60	220	50	China
11	nVc	ET60E	20-60	220	50	China
12	LONON	LND-ET-50	20-50	220	50 / 60	China
13	CDN	CS50N	20-50	220	50-60	China
14	JINGTAI	NB-3	20-50	220	50	China
15	SHLY	LYZ80701-2	50 (max)	220 ± 10%	50 / 60	China
16	Philips	ET-S105	35-105	230	50 / 60	China
17	Philips	PRIMALINE 105	35-105	230	50 / 60	China
18	ATCO	POSSUM 99	60	230-240	50 / 60	Australia
19	ATCO	VIPER 60	60	230-240	50 / 60	Australia
20	OSRAM	REDBACK 60	60	230-240	50	Australia
21	DAIKO	DP-53178	49 (max)	100	50 / 60	Japan
22	DAIKO	DP-36283M		100	50 / 60	Japan
23	KAO'S	-	50 (max)	220-240	50 / 60	Taiwan
24	A-LIM	AL-2250HA (H)	50	220	60	Korea
25	A-LIM	AL-2250HA (L)	50	220	60	Korea
26	Dooyong	SKE-H5001N	50	220	60	Korea



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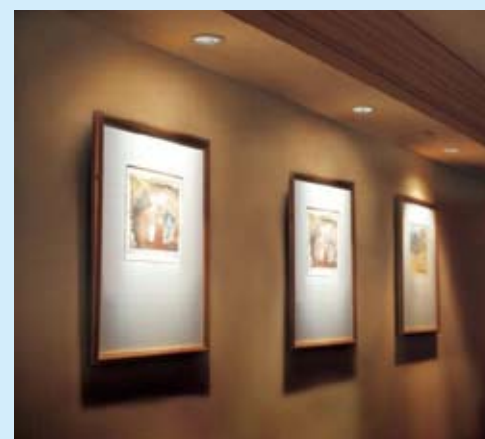


# New Generation of Energy Saving Light

PHILIPS MASTER LEDspotLV 7-35W MR16 24D

**PHILIPS**  
sense and simplicity

# Introduction



PHILIPS MASTER LEDspotLV 7-35W MR16 24D is the latest in Philips' series of Low Voltage (12VAC) Halogen spot replacements. Not only does it employ PHILIPS' patent pending solution to guarantee the broadest possible compatibility with standard 12V Halogen electronic transformers, it also delivers a beam intensity which reaches that of a 35W PHILIPS Essential and Accentline Halogen MR16 lamp. The form-factor of the PHILIPS MASTER LEDspotLV 7-35W MR16 24D guarantees a 100% form-fit on the back-side of the lamp (exact form fit with Halogen lamps).

MASTER LEDspotLV 7-35W MR16 24D is ideal for a myriad of applications including track lighting, general architectural and landscape lighting, display case fixtures and cabinet lighting, plus industrial OEM equipment lighting.

## Design Highlights

- 80% energy saving compared to a 35W 12VAC Halogen lamp.
- Broadest 12VAC Halogen electronic transformer compatibility
- Retrofits into vast majority of MR16 fixtures
- 24 degrees beam angle for a clearly defined beam spread
- CCT: 2700K, 3000K, 4000K
- no UV and Cool Beam (no IR)
- Environmental friendly, without Mercury or any other hazardous substances
- RoHS compliant

## Application Areas

PHILIPS MASTER LEDspotLV 7-35W MR16 24D lamp is suitably designed for spot and general lighting applications in hospitality and retail industries.

Unlike the conventional low wattage halogen reflector lamp, PHILIPS MASTER LEDspotLV 7-35W MR16 24D lamp, 7W power consumption per lamp, has a long lifetime of 25,000 hours (or equivalent to 3 years if lit continuously for 24hrs a day) ensuring minimum maintenance cost in hotels, restaurants, cafes and shops, especially suitable for various applications in the public areas such as:

- Corridors / Stairway / Washroom
- Lobby / Reception areas
- Display racks / Windows

## Application Notes

- Operating temperature range is between -20°C and 45°C ambient
- Only to apply in indoor environments and most of open fixtures with MR16 lamp-holders that offer sufficient space (10mm free air space)
- Not intended for use with emergency light fixtures or exit lights
- For use in fixtures that can structurally support a lamp weighing one quarter kilogram

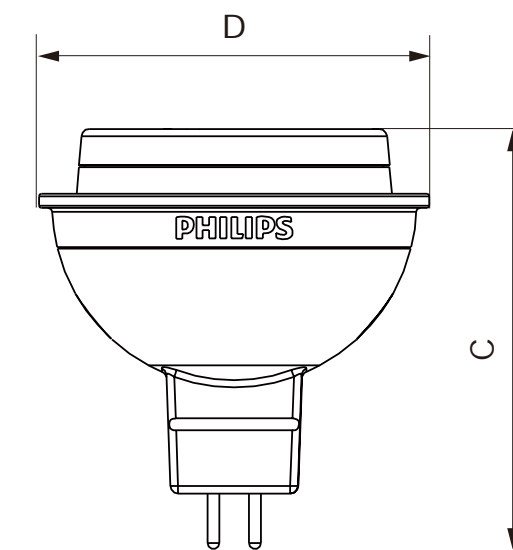
# Product Design

## Technical Specifications

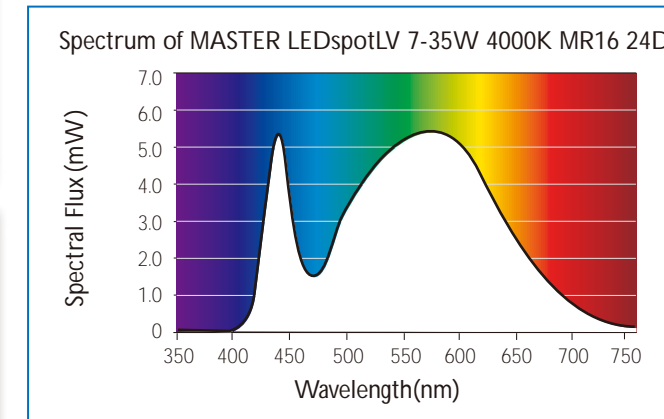
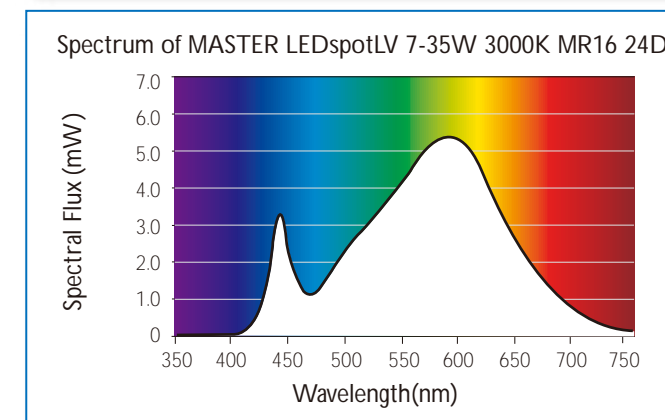
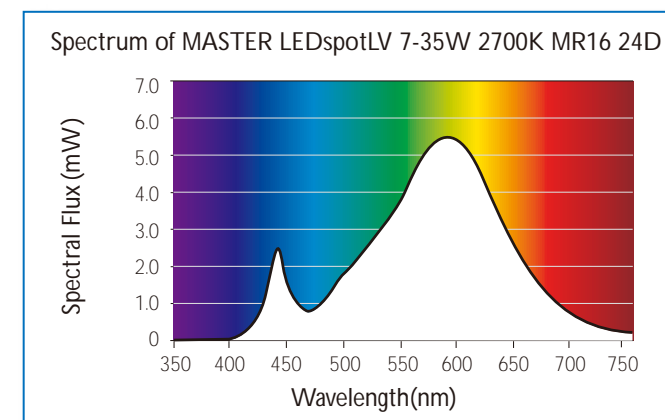
Product name	Wattage (W)	Power Factor (System)	Power Factor (Lamp)	Cap Base	CRI	Luminous Flux (lm)	Lifetime (hrs)	Voltage (V)	Beam Angle (°)	CCT	Beam Intensity (Cd)	Dimmable
MASTER LEDspotLV 7-35W 2700K MR16 24D	7	0.72	0.65	GU5.3	80	260	25000	12	24	2700K	1200	no
MASTER LEDspotLV 7-35W 3000K MR16 24D	7	0.72	0.65	GU5.3	80	275	25000	12	24	3000K	1270	no
MASTER LEDspotLV 7-35W 4000K MR16 24D	7	0.72	0.65	GU5.3	80	305	25000	12	24	4000K	1400	no

## Fixture Compatibility

Type	C max. Overall length (mm)	D max. Diameter (mm)	Weight (kg)
MASTER LEDspotLV 7-35W MR16 24D	54.2	50.5	0.045



## Spectral Power Distribution



## Photometric Diagrams

