



PHILIPS

LEDspot



Technical Application Guide

Philips LEDspot AR111

In shops, showrooms and galleries, but also in restaurants and hotels, people need to see colors as they are. Which makes Philips LEDspot AR111 lighting the perfect choice. With its high Color Rendering Index of 80, colors stay vibrant and natural.

Around 20 times longer than standard halogen, and stay cooler too. Natural looking colors, huge energy savings and fewer lamp changes make them more than just an alternative.



<http://www.philips.com>

70%
Energy cost
saving



Design highlights

- Up to 70% energy saving compared to standard halogen spots
- Long lifetime of 25,000 hours (F50,L70)
- Switching cycles at the rate of 30s ON/30s OFF = 50,000 cycles
- Available in beam angles of 24°
- CCT: 2700 K
- No UV and Cool Beam (no IR)
- Environmental friendly, without Mercury or any other hazardous substances
- RoHS compliant

Application areas

Delivering a warm, halogen-like accent beam, LEDspot AR111 is an ideal retrofit solution for spot, track and general lighting applications in the hospitality and retail industry. It is particularly suitable for general lighting where the light is on all the time, such as creative accent lighting applications in shops, restaurants, hotels, and especially for galleries, exhibitions and museums. The robustly designed LEDspot AR111 offers clearly defined beam spreads at different beam angles to suit various applications. There is no UV or IR in the beam, making it suitable for illuminating heat-sensitive objects (food, organic materials, paintings, etc.). LEDspot AR111 delivers huge energy savings and minimizes maintenance cost without any reduction in brightness.

Application notes

- Operating temperature range is between -20 °C and 45 °C ambient
- Not intended for use with emergency light fixtures or exit lights
- For use in fixtures that can structurally support the weight of a lamp.



Product features

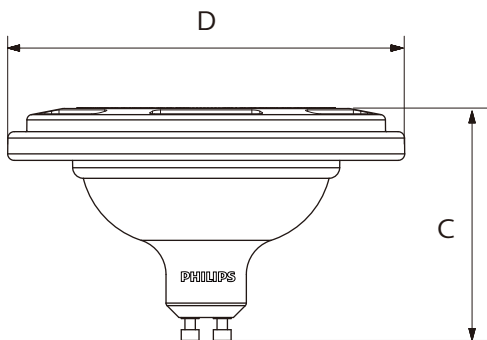
Technical Specifications

12NC	Product type	Voltage (V AC)	Power Wattage (W)	Replaced Wattage (W)	Cap	Lumen (lm)	Beam Angle ($^{\circ}$)	CCT (K)	MBCP (Cd)	Lifetime (Hrs)	CRI	Dimmable
929001235212	LEDspot 9-70W AR111 827 100-240V 24D ND	100-240	9.0	70	GU10	910	24	2700	3500	25,000	80	No

Fixture Compatibility

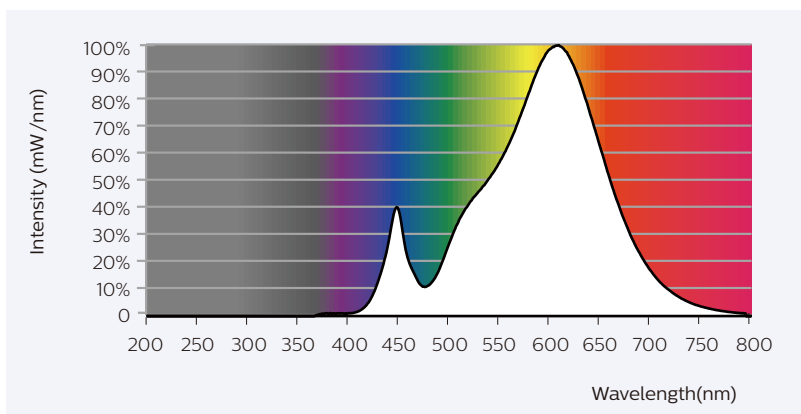
Type	C max. Overall Length (mm)	D max. Diameter (mm)	max. Weight (gram)
LEDspot 9-70W AR111 827 100-240V 24D ND	65	110	170

LEDspot AR111



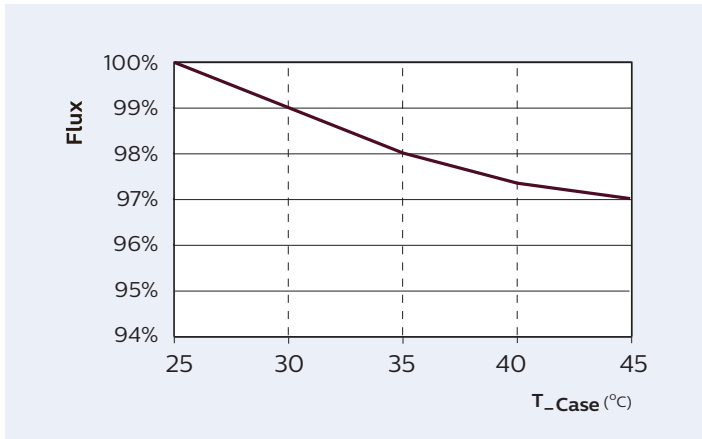
Spectral Power Distribution

Spectrum LEDspot 70W AR111 2700K

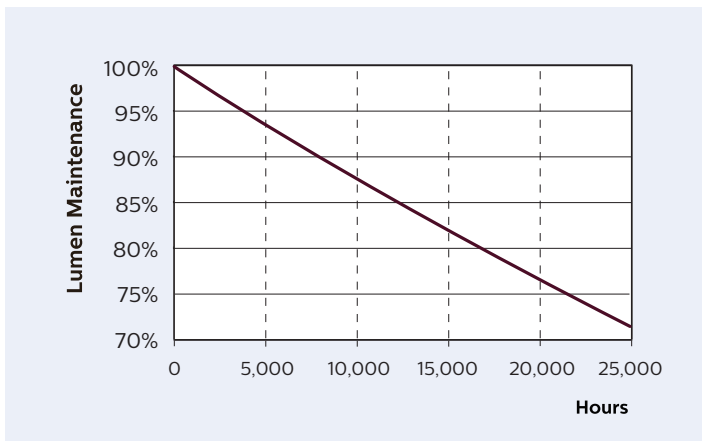


Temperature

LEDspot AR111



T_c Max: 70 °C



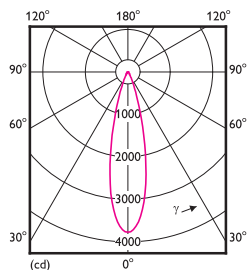
Photometric Diagrams

LEDspot 9-70W AR111 827 100-240V 24D ND

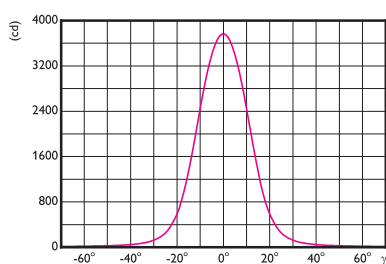
910 lm

Light output ratio	1.00	I _{max}	3769 cd
Service upward	0.00	BS (1/2 I _{max})	2 x 13°
Service downward	1.00	VBA (1/2 E ₀)	2 x 12°

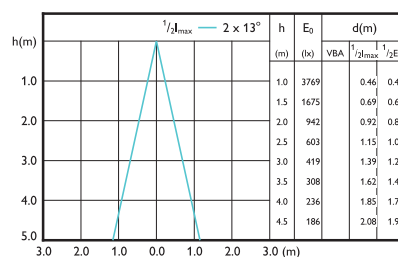
Polar intensity diagram



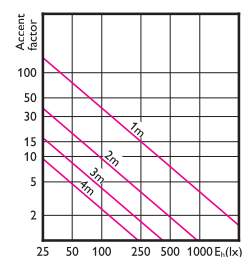
Cartesian intensity diagram



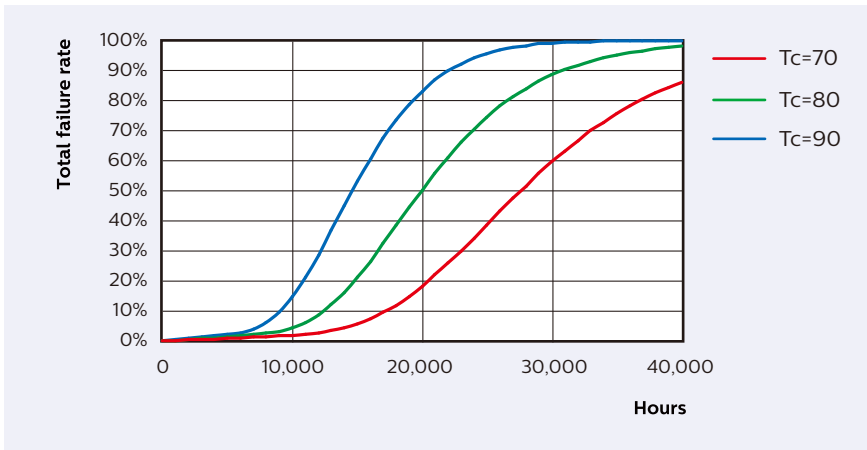
Beam diagram



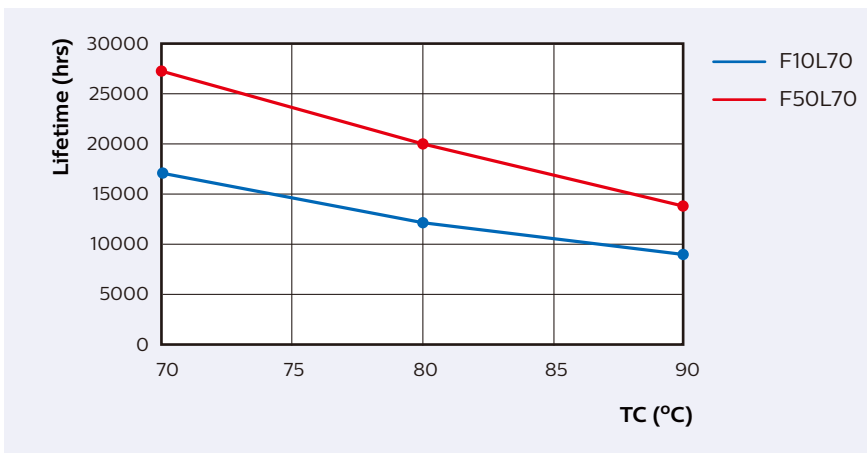
Visual impact diagram



Failure Rate Curve of LEDspot AR111



- Philips LEDspot AR111 family 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 @ 10mm free air), base down burning position, and at rated voltage.



© 2016 Philips Lighting

All rights reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent or other industrial or intellectual property rights.

08/2016
www.philips.com