



Technical Application Guide

Introducing MasterConnect LED lamps - smart retrofit LED lamps that give you an easy and seamless way to upgrade to connected lighting. Simply set up with an intuitive app, MasterConnect LED lamps can be programmed to maximize energy savings, while providing wireless and automated light for your comfort and convenience.

What's more, your lighting system is fully scalable and upgradable with MasterConnect. If you want to enjoy further benefits such as remote control or management dashboard, you can simply keep the currently installed lamps and add a gateway to experience all the advantages of a cloud-based system. There's no better way to take lighting solutions to the next level.



interact ready.



Product Features

Product Design

- Familiar look & feel of Glass halogen spots.
- · Hassle free retrofit solution.
- Achieve more natural color realization for cozy ambiance and better merchandise display with high CRI value.
- UV- and IR-free light for less heat and protection for heat-sensitive objects.
- Clearly defined beam spread for accent lighting.

Connectivity

- Reliable and secure wireless mesh technology, nominal range 12m (40ft).
- Easy commissioning and configuration with mobile app.
- Interact ready, seamless integration with Interact.

Control Functionality

- Automatic on/off and dimming based on occupancy detection and daylight variation.
- Personal dimming and scene setting with wireless switch or app.
- High-end trimming to help save energy and extend lamp life.
- · Works with and without gateway.

Energy Saving

- Energy savings of 90% compared to conventional spot lamps [1].
- Additional energy saving when used with advanced control, such as dimming, occupancy sensing and daylight harvesting [2].
- Energy label A+.

User comfort

- Uniform light output and superior optical efficiency with advanced optical design.
- Personal light setting to enhance user comfort and productivity.

Reliability

- Reliable operation between -20°C (-4°F) and +45°C (133°F) ambient temperature.
- Tested to B50 L70 requirement. Lamps are rated for 25,000 hours.
- 200,000 wireless switching cycles.

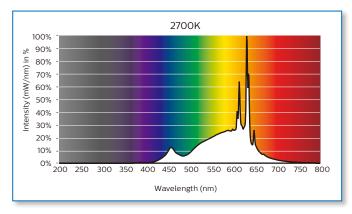
Environment

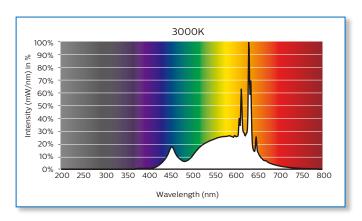
- Environmental friendly, without mercury or any other hazardous substances.
- Low Carbon Footprint.

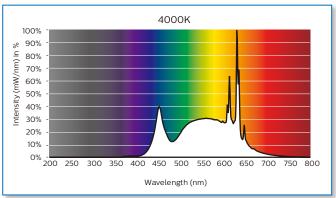
Application areas

- Hospitality: hotel guest room, corridors, lobby, reception area, restaurants, bars, cafes
- · Home: living room, bedrooms, hall way
- Retail: exhibitions, display cabinets, shops, dressing rooms
 - [1] Compared to standard halogen spot lamps. Lamps are set at 100% light level.
 - [2] Savings based on published articles and Signify internal study.

Spectral Power Distribution



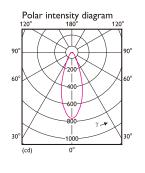


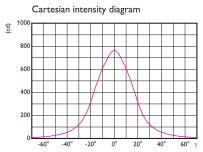


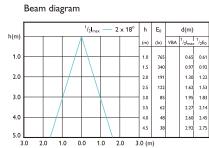
Photometric Diagrams

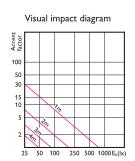
1 x MC LEDspot IA 4.7-50W GU10 927 36D

1 x 345 lm



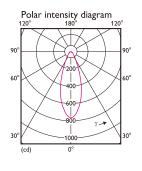


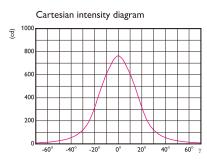


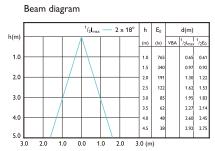


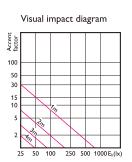
1 x MC LEDspot IA 4.7-50W GU10 930 36D

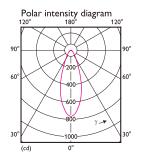
1 x 345 lm

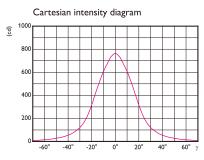


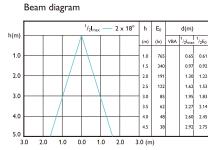


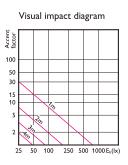




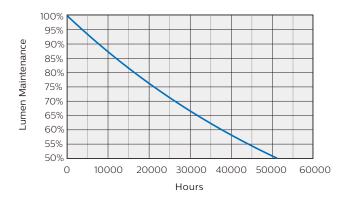






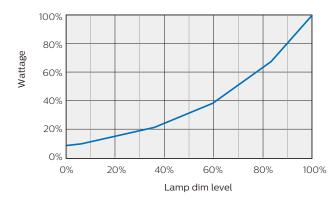


Lifetime and Lumen Maintenance



MasterConnect LEDspot GU10 is designed for operation in all GU10 lighting installations in open fixtures, 10mm free air space is needed around the lamp housing to ensure long-life.

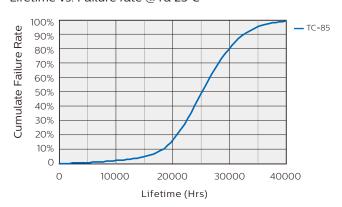
Dimming Curve



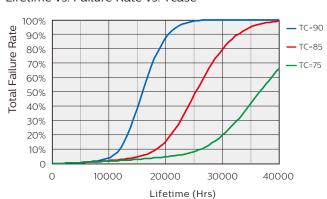
The product can be dimmed via wireless control signal. Please refer to the figure for lamp power consumption at dimmed level.

Lifetime and Failure Rate

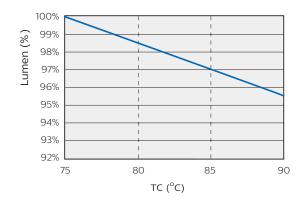
Lifetime vs. Failure rate @Ta 25°C

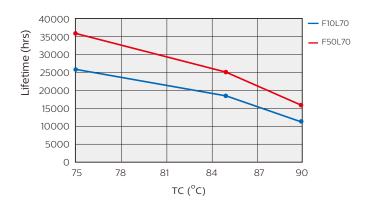


Lifetime vs. Failure Rate vs. Tcase

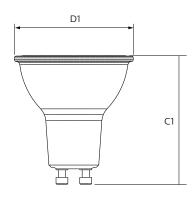


Temperature





Dimensions



Dimensions (mm)

Product	C1	D1	
GU10	54	50	

Technical Specification

Product Number 10NC	Product Description	Lamp Wattage	Replaced Wattage	Voltage	Lumen Output (90D cone)	Lumen Output (total)	МВСР	ССТ	CRI	Lifetime		Stand -by power	RF range
		(W)	(W)	(V)	(lm)	(lm)	(Cd)	(K)		(hrs)	(°)	(W)	(m)
9290022537	MC LEDspot IA 4.7-50W GU10 927 36D	4.7	50	220-240	345	400	500	2700	90	25000	36	<=0.3	12
9290022538	MC LEDspot IA 4.7-50W GU10 930 36D	4.7	50	220-240	345	400	500	3000	90	25000	36	<=0.3	12
9290022539	MC LEDspot IA 4.7-50W GU10 940 36D	4.7	50	220-240	345	400	500	4000	90	25000	36	<=0.3	12

Application Notes

- · Product is dimmable by wireless control
- · Reliable operation between -20°C to + 45°C ambient temperature
- · Not intended for use in emergency luminaires
- Only to apply in dry indoor environments and most of open fixtures with GU10 lamp-holders that offer sufficient space (10 mm free air space)
- For use in fixtures that can structurally support weight of a lamp
- · Modifications to the product void the limited warranty
- For warranty information, please see www.philips.com/lighting
- You are required to read and understand the Quick Installation Guide and all warnings, cautions and other materials related to installation published at: www.philips.com/lighting before commencing installation work.



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