

A modern bedroom interior featuring a large bed with a yellow headboard and brown bedding. A large window in the background shows a city skyline at night. A Philips LEDspot MV ExpertColor light fixture is visible on the wall. The Philips logo and product name are overlaid on the left side of the image.

PHILIPS

MASTER
LEDspot MV
ExpertColor



Technical Application Guide

MASTER LEDspot MV ExpertColor

MASTER LEDspot MV ExpertColor creates a warm and comfortable ambience for hospitality venues, homes and restaurants. It creates such an ambience with superior lighting that has a customized spectrum, high CRI, and deep dimming feature. The result? A beautiful lighting experience. The innovative, trimless lens design will also suit almost any interior decor with its clean and neat look.



www.philips.com

Expert
Color

ExpertColor features



Customized color spectrum replicates halogen



Best-in-class color realization, CRI97



Deep and smooth dimming, below 5%



Energy savings up to 89%



Furnishings and fabrics look great



Retrofit

Warm, comfortable light color

ExpertColor replicates **a true halogen light color** to create the most comfortable light for guests. It emphasizes the texture and colors of furnishings, floors and fabrics. So you can **make rooms and spaces even more luxurious and attractive.**

Dim to the right light level

ExpertColor offers a wide range of light levels from 100% to below 5%, enabling you to **set precisely the right light levels.**

Efficient and sustainable

MASTER LED MR16 ExpertColor is a hassle-free, **retrofit solution.** It fits most of luminaires to make re-lamping and renovation projects as easy as possible. And with a long lifetime and high lumen maintenance, it improves **operational efficiency and sustainability.**

Innovative, Trimless design with V-groove lens

The V-groove lens design creates an integrated look, combining high quality light with minimal design to suit every application

Design highlights

- Up to 89% energy saving compared to standard halogen GU10
- Long lifetime of 40,000 hours (F50, L70)
- 24, 36 degree beam angle for a clearly defined beam spread
- CCT: 2700K, 3000K
- No UV and IR – Cool beam
- Environmental friendly, without mercury
- ROHS compliant
- 3 SDCM

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

Application notes

- Operating temperature range is between -20°C and 45°C ambient
- Only to apply in dry indoor environments and most of open fixtures with GU10 lamp-holders that offer sufficient space
- Not intended for use with emergency light fixtures or exit lights

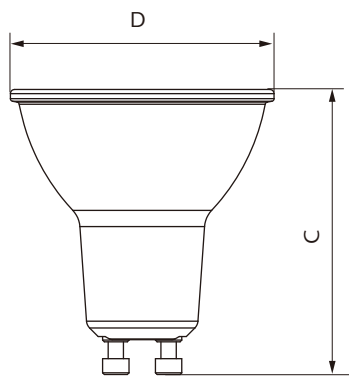
Product features

Technical Specifications

Product type	Voltage	Lamp Wattage Claim	Replaced Wattage	Lumen output	Lumen output 90D cone (lm)	Beam Angle	CCT	Intensity	Lifetime	CRI	Dim
	(VAC)	(W)	(W)			(lm)	(°)	(K)	(Cd)	(Hrs)	
MAS LED ExpertColor 5.5-50W GU10 927 24D	220-240	5.5	50	385	355	24	2700	1000	40,000	97	Yes
MAS LED ExpertColor 5.5-50W GU10 930 24D	220-240	5.5	50	405	375	24	3000	1000	40,000	97	Yes
MAS LED ExpertColor 5.5-50W GU10 927 36D	220-240	5.5	50	385	355	36	2700	800	40,000	97	Yes
MAS LED ExpertColor 5.5-50W GU10 930 36D	220-240	5.5	50	405	375	36	3000	800	40,000	97	Yes

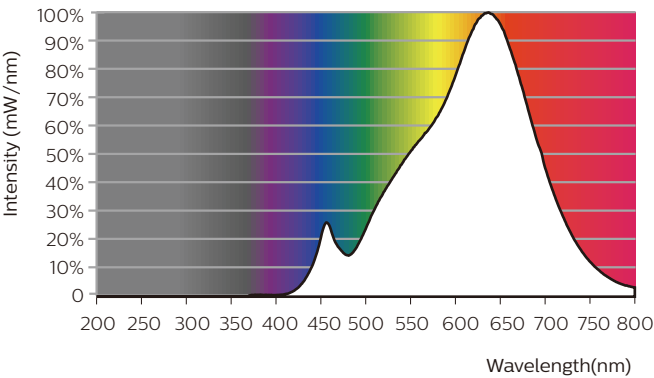
Dimensions

Type	C typical Overall Length (mm)	D typical Diameter (mm)
MASTER LEDspot MV ExpertColor	54	50

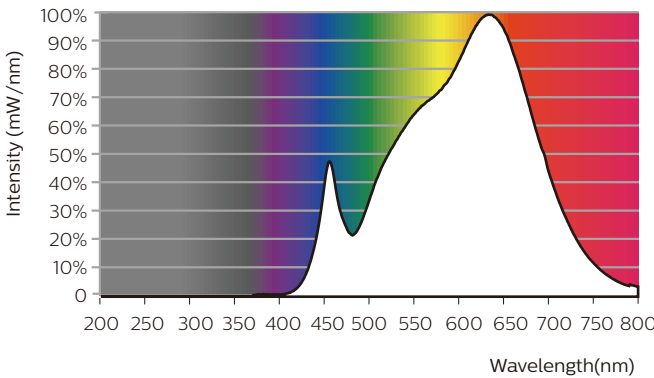


Spectral Power Distribution

MAS LED ExpertColor 5.5-50W GU10 2700K



MAS LED ExpertColor 5.5-50W GU10 3000K



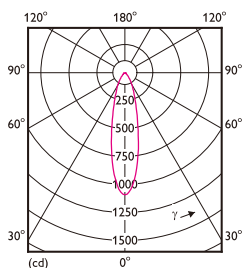
Photometric Diagrams

MAS LED ExpertColor 5.5-50W GU10 927 24D

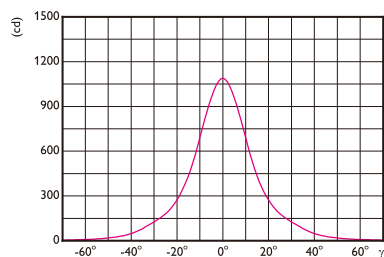
1 x 385 lm

Light output ratio	1.00	I _{max}	1090 cd
Service upward	0.00	BS ($\frac{1}{2}$ I _{max})	$2 \times 13^\circ$
Service downward	1.00	VBA ($\frac{1}{2}$ E ₀)	$2 \times 12^\circ$

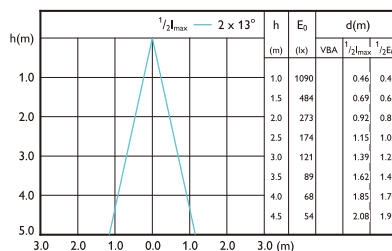
Polar intensity diagram



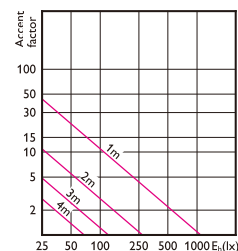
Cartesian intensity diagram



Beam diagram



Visual impact diagram

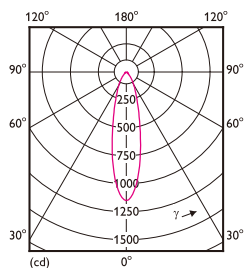


MAS LED ExpertColor 5.5-50W GU10 930 24D

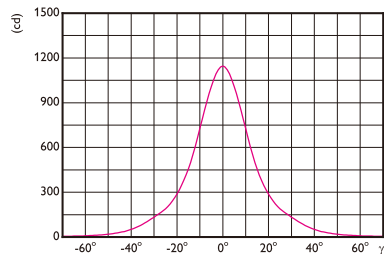
1 x 405 lm

Light output ratio	1.00	I _{max}	1147 cd
Service upward	0.00	BS ($\frac{1}{2}$ I _{max})	$2 \times 13^\circ$
Service downward	1.00	VBA ($\frac{1}{2}$ E ₀)	$2 \times 12^\circ$

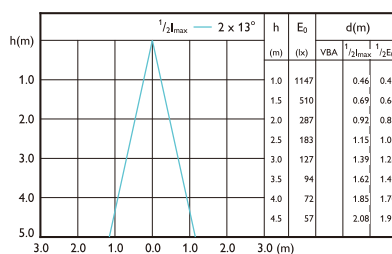
Polar intensity diagram



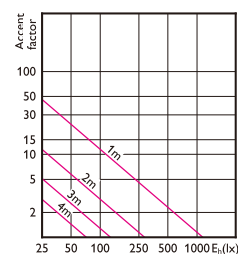
Cartesian intensity diagram



Beam diagram



Visual impact diagram

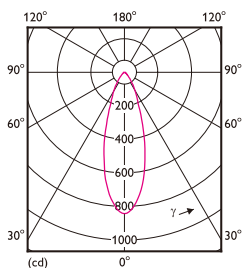


MAS LED ExpertColor 5.5-50W GU10 927 36D

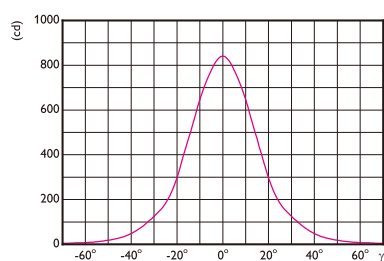
1 x 385 lm

Light output ratio	0.99	I _{max}	842 cd
Service upward	0.00	BS ($\frac{1}{2}$ I _{max})	$2 \times 17^\circ$
Service downward	0.99	VBA ($\frac{1}{2}$ E ₀)	$2 \times 16^\circ$

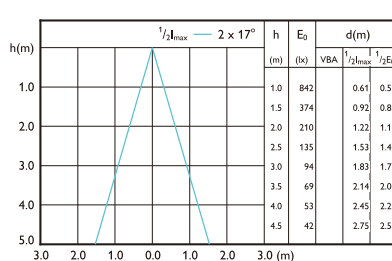
Polar intensity diagram



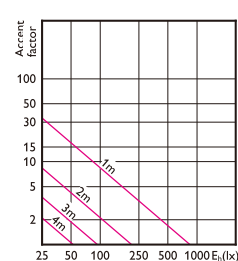
Cartesian intensity diagram



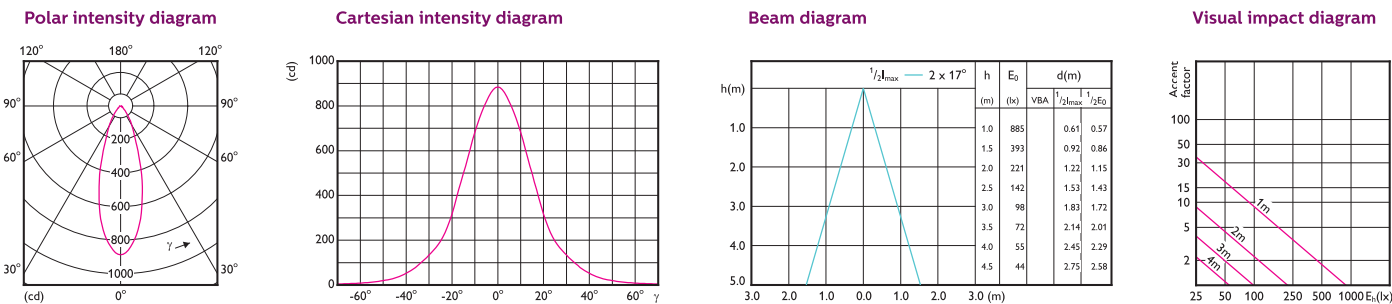
Beam diagram



Visual impact diagram



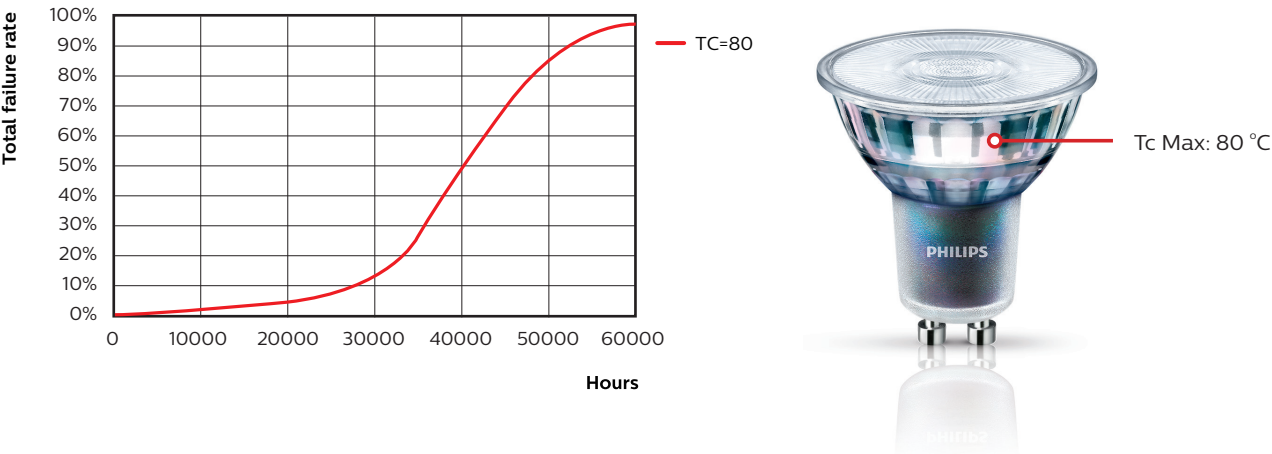
Light output ratio	1.00	I_{max}	885 cd
Service upward	0.00	$BS (\frac{1}{2} I_{max})$	$2 \times 17^{\circ}$
Service downward	1.00	$VBA (\frac{1}{2} E_0)$	$2 \times 16^{\circ}$



Temperature

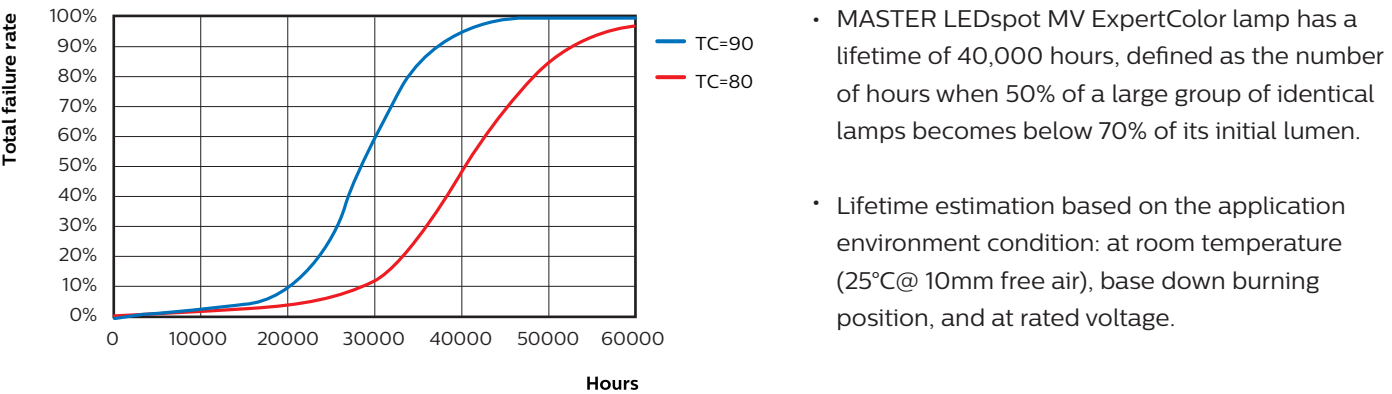
MASTER LEDspot MV ExpertColor is designed for operation in all GU10 lighting installations in open fixtures, 10mm free air space is needed around the lamp housing to ensure long-life.

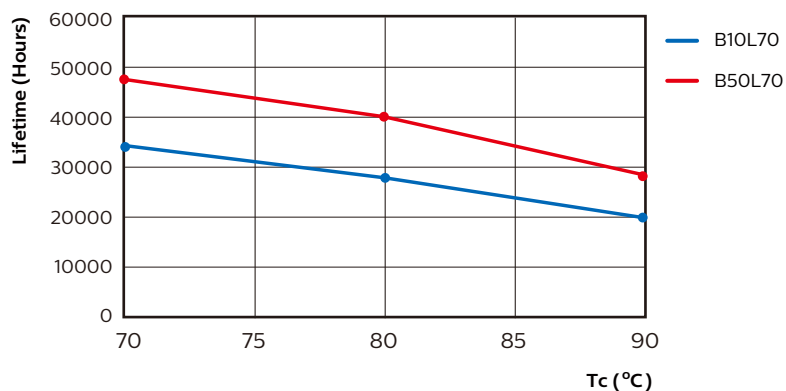
MASTER LEDspot MV ExpertColor



Lifetime + Sustainability

Failure Rate Curve of MASTER LEDspot MV ExpertColor





Dimmer Compatibility list

3.5-35W

Dimmer info					Overall Result
No	Brand	Type #	Load Type	Load	
1	Schneider (Merten)	SBD420RCRL (MEG5138-0000)	RLC	20~420 VA	2-5
2	Schneider	SBD315RC (ATD 315) (CCT011533)	RC	315 W	2-5
3	Schneider (Elko)	SBD200LED (CCTEL10501) (S520512: 4-400VA)	LED (RC) (RL)	4~200 W 4~40 W	2-5
4	Busch-Jaeger	2250U	R	600 W	2-5
5	Busch-Jaeger	6513 U-102	RC	420 W	2-5
6	Busch-Jaeger	6523U	LED	2~100 VA	2-5
7	Busch-Jaeger	2200 U-503	R	60~400 W	Start from 17% Brightness
8	Busch-Jaeger	2247 U - 500	RL	500 W	2-5
9	Legrand	67081	RL	40~300 W	3-5
10	Legrand	0774161	RL	40~400 W	5
11	Legrand	067082	RL	40~600 W	5
12	Legrand	067084	RLC	40~400 W	2-5
13	Legrand	067085	RLC	40~300 W	2-5
14	Jung	225TDE	RC	20~525 W	2-5
15	Varilight	HQ3W	R	60~400 W	2-5
16	Insta (Berker)	2867 10	RC	20~360 W	2-5
17	Insta (Berker)	2830 10	R	60~400 W	2-5
18	Gira	2390 00 / 100	LED	7~100 W	Start from 24% Brightness
19	Jung	1271LEDDE	LED	3~100 W	2-5
20	MK	K1535	R	65~450 W	Max 71% brightness
21	MK	K1501 WHILV	R	60~500 W	Max 77% brightness
22	Vimar	20148	RL	500 W	2-5
23	Vimar	20162	RC	40~300 W	2-5
Professional Specific: 2 Dynalite dimmers					
24	Dynalite	DDLE801	R	100W per channel	2-5
25	Dynalite	DDMC-GRMSPLUS	RC	6*2 A	2-5
Consumer Specific: 5 Cord dimmers					
26	Ikea	WDE300F-1	R	300 W	2-5
27	Ikea	E0902-Dim	R	25~150 W	2-5
28	Ikea	WDE200L-1	R	200 W	2-5
29	Ikea	EED200LRS	R	200 W	2-5
30	Ikea	SD804	TE	150 W	2-5

5.5-50W

Dimmer info					Overall Result
No	Brand	Type #	Load Type	Load	
1	Schneider (Merten)	SBD420RCRL (MEG5138-0000)	RLC	20~420 VA	2-5
2	Schneider	SBD315RC (ATD 315) (CCT011533)	RC	315 W	2-5
3	Schneider (Elko)	SBD200LED (CCTEL10501) (S520512: 4~400VA)	LED (RC) (RL)	4~200 W 4~40 W	2-5
4	Busch-Jaeger	2250U	R	600 W	2-5
5	Busch-Jaeger	6513 U-102	RC	420 W	2-5
6	Busch-Jaeger	6523U	LED	2~100 VA	2-5
7	Busch-Jaeger	2200 U-503	R	60~400 W	Start from 17% Brightness
8	Busch-Jaeger	2247 U - 500	RL	500 W	2-5
9	Legrand	67081	RL	40~300 W	2-5
10	Legrand	0774161	RL	40~400 W	not compatible
11	Legrand	067082	RL	40~600 W	3-5
12	Legrand	067084	RLC	40~400 W	2-5
13	Legrand	067085	RLC	40~300 W	2-5
14	Jung	225TDE	RC	20~525 W	2-5
15	Varilight	HQ3W	R	60~400 W	2-5
16	Insta (Berker)	2867 10	RC	20~360 W	2-5
17	Insta (Berker)	2830 10	R	60~400 W	2-3
18	Gira	2390 00 / 100	LED	7~100 W	Start from 25% Brightness
19	Jung	1271LEDDE	LED	3~100 W	2-5
20	MK	K1535	R	65~450 W	2-5
21	MK	K1501 WHILV	R	60~500 W	2-5
22	Vimar	20148	RL	500 W	2-5
23	Vimar	20162	RC	40~300 W	2-5
Professional Specific: 2 Dynalite dimmers					
24	Dynalite	DDLE801	R	100W per channel	2-5
25	Dynalite	DDMC-GRMSPLUS	RC	6*2 A	2-5
Consumer Specific: 5 Cord dimmers					
26	Ikea	WDE300F-1	R	300 W	2-3
27	Ikea	E0902-Dim	R	25~150 W	2
28	Ikea	WDE200L-1	R	200 W	2-5
29	Ikea	EED200LRS	R	200 W	2-5
30	Ikea	SD804	TE	150 W	2-5

