

MAY 2013



Philips MASTER LEDlamps

See what light can do
2nd quarter 2013



PHILIPS

www.philips.com/masterledlamps
www.philips.com/led-product-info



WHY CHOOSE PHILIPS FOR LED LAMPS

How do professional end users appreciate Philips LED lamps?

Together with TNS Infratest Philips investigated customer experiences in various countries in Europe. Here is a summary of the results including customer quotes:



Best Product

- **Superior light and product quality:**
"Philips LED lamps were closest to what we had before... according to our experience a big difference compared to the other brands."
- **High energy saving results with a short ROI period:**
"We reached amortization much earlier than expected. The energy savings are amazing."

Best Partner

- **Close cooperation with Philips before, during, and after projects:**
"They really tried hard to satisfy our needs well. They really have cared a lot and showed a lot of commitment..."
- **Technical consulting and intense customer support:**
"Quick and competent responses to questions"
- **Close cooperation with local wholesalers was a key element of assuring on-time product availability:**
"Philips is flexible to offer different delivery options"

Best Portfolio

- **Philips LED expertise and portfolio:**
"Philips already has an image of being the LED specialist in the market"
- **A wide range of LED Lamps ensures various applications are possible:**
"Philips offers the best portfolio of LED Light compared to competitors"

MASTER LEDlamps RANGE



MASTER LEDspot

P 4



MASTER LEDcapsule

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MASTER LEDbulb

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MASTER LEDbulb Designer



MASTER LEDcandle

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MASTER LEDluster

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MASTER LEDtube

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Features explained

LEDcontrol 36

TransforMax 37

High Performance Dimming 37

Pay-back comparison LED

Halogen/Incandescent 38

Photometric diagrams

39

MASTER LEDspot

FEATURES AND BENEFITS

LONGEST LIFETIME
SUPERIOR LIGHT QUALITY
FOR ACCENT AND GENERAL LIGHTING
VARIETY OF BEAM ANGLES AND COLORS
MAXIMUM ENERGY SAVINGS



MV GU10 - 8W
Dimmable
Page 6



MV GU10 - 6W
Dimmable
Page 7



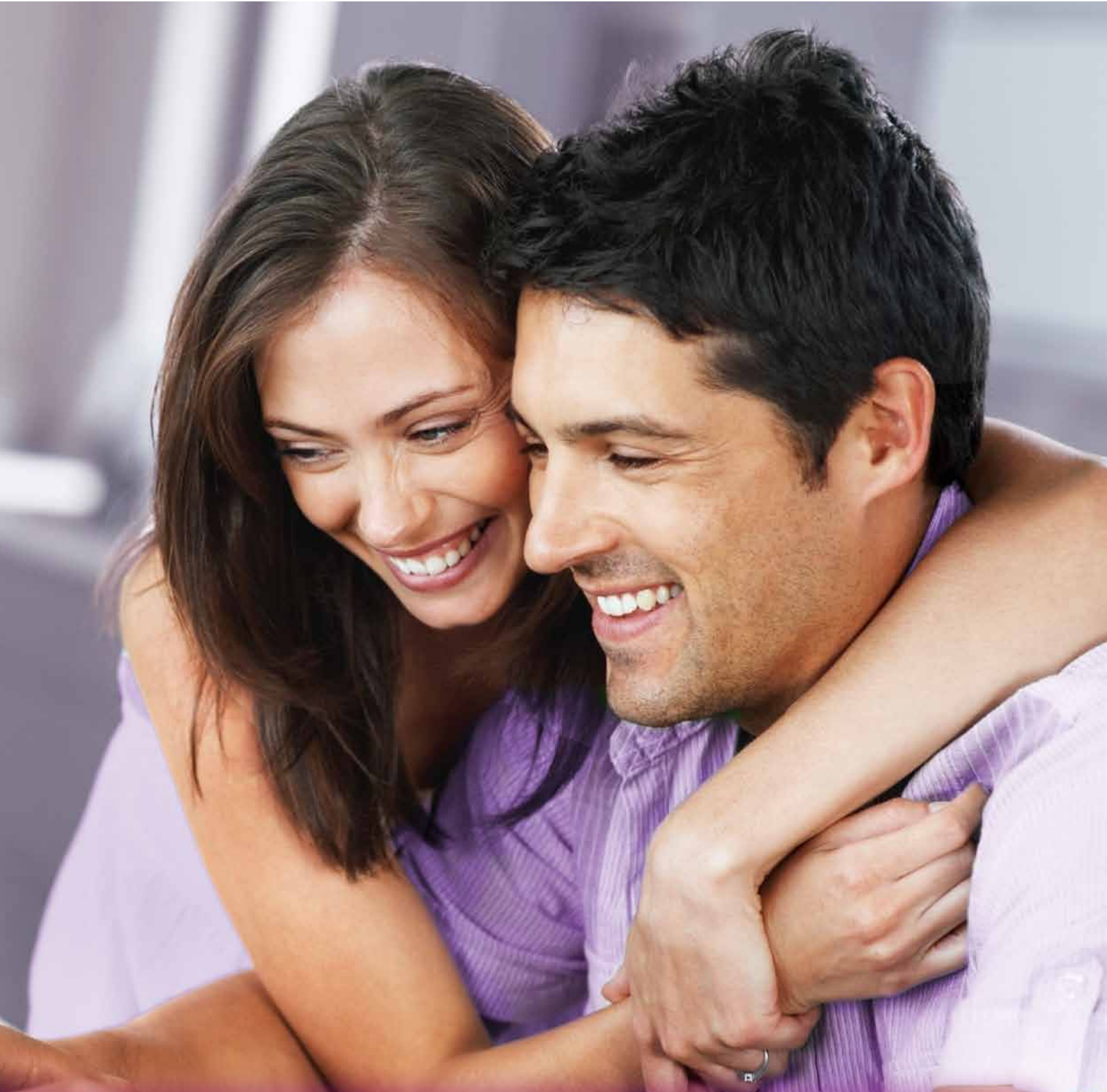
MV GU10 - 4W
Dimmable
Page 7



LV MR16 GU5.3 - 7W
Dimmable
Page 8



LV MR16 GU5.3 - 10W
Dimmable
Page 8



LV MR16 GU5.3 - 4 W
Non-Dimmable
Page 9



LV MR11 GU4 - 4 W
Non-Dimmable
Page 10



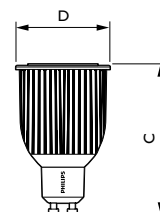
LV AR111 G53 - 10 W / 15 W
Dimmable
Page 11



PAR - 18 W
Dimmable/Non-Dimmable
Page 12



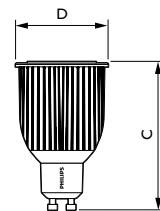
- DimTone dimming: the light gets warmer when dimmed
- High Performance Dimming (see page 37)

MASTER LEDspot GU10 - 8 W DimTone


Product	8 W
C	80
D	50
Weight in kg	0.116
Dimensions in mm	



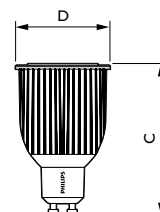
- CRI90: enhances the presentation of fabrics
- High Performance Dimming (see page 37)

MASTER LEDspot GU10 - 8 W CRI90


Product	8 W
C	80
D	50
Weight in kg	0.116
Dimensions in mm	



- High Performance Dimming (see page 37)

MASTER LEDspot GU10 - 8 W


Product	8 W
C	80
D	50
Weight in kg	0.116
Dimensions in mm	

Product description	Socket	Beam intensity	Beam angle	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC
MASTER LEDspot MV		cd	°	lm	lm/W			K	8718291
8-50W+ DimTone GU10 2700 K 25D	GU10	1800	25	430	54	6	>80	2700	68243100
8-50W+ DimTone GU10 2700 K 40D	GU10	900	40	430	54	6	>80	2700	68245500
D 8-50W CRI90 GU10 2700 K 25D	GU10	1400	25	330	41	6	90	2700	68227100
D 8-50W CRI90 GU10 2700 K 40D	GU10	700	40	330	41	6	90	2700	68229500
D 8-50W+ GU10 2700 K 25D	GU10	1800	25	430	54	6	>80	2700	68231800
D 8-50W+ GU10 2700 K 40D	GU10	900	40	430	54	6	>80	2700	68233200
D 8-50W+ GU10 3000 K 25D	GU10	1900	25	450	56	6	>80	3000	68235600
D 8-50W+ GU10 3000 K 40D	GU10	950	40	450	56	6	>80	3000	68237000
D 8-50W+ GU10 4000 K 25D	GU10	1900	25	450	56	6	>80	4000	68239400
D 8-50W+ GU10 4000 K 40D	GU10	950	40	450	56	6	>80	4000	68241700

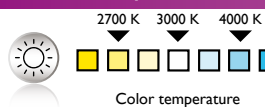
* Please refer to the site www.philips.com/masterledlamps for the latest information about dimming MASTER LEDlamps.



• Perfect Fit

4W → 35 WATT

MASTER LEDspot MV GU10 - 4 W



Color temperature



Dimmable



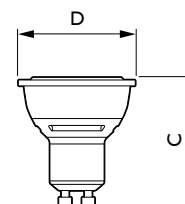
25,000 h



Beam angle



GU10



Product	4 W
C	55
D	50
Weight in kg	0.035
Dimensions in mm	

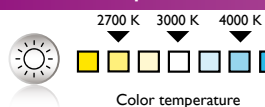


• Perfect Fit

6W → 50 WATT

• High Performance Dimming (see page 37)

MASTER LEDspot MV GU10 - 6 W



Color temperature



Dimmable



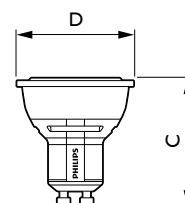
40,000 h



Beam angle



GU10



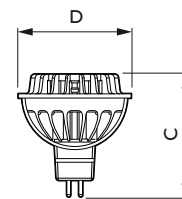
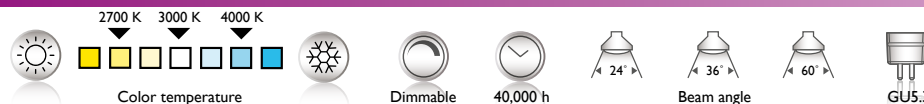
Product	6 W
C	55
D	50
Weight in kg	0.05
Dimensions in mm	

Product description	Socket	Beam intensity	Beam angle	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC
MASTER LEDspot MV		cd	°	lm	lm/W			K	8718291
D 4-35W GU10 2700 K 25D	GU10	700	25	180	45	10	>80	2700	19234300
D 4-35W GU10 2700 K 40D	GU10	350	40	180	45	10	>80	2700	19236700
D 4-35W GU10 3000 K 25D	GU10	700	25	180	45	10	>80	3000	19238100
D 4-35W GU10 3000 K 40D	GU10	350	40	180	45	10	>80	3000	19240400
D 4-35W GU10 4000 K 25D	GU10	760	25	200	50	10	>80	4000	19242800
D 4-35W GU10 4000 K 40D	GU10	380	40	200	50	10	>80	4000	19244200
D 6-50W GU10 2700 K 25D	GU10	1000	25	300	50	10	>80	2700	21067200
D 6-50W GU10 2700 K 40D	GU10	600	40	300	50	10	>80	2700	21073300
D 6-50W GU10 3000 K 25D	GU10	1100	25	320	54	10	>80	3000	21069600
D 6-50W GU10 3000 K 40D	GU10	600	40	320	54	10	>80	3000	21075700
D 6-50W GU10 4000 K 25D	GU10	1100	25	320	54	10	>80	4000	21071900
D 6-50W GU10 4000 K 40D	GU10	600	40	320	54	10	>80	4000	21077100

* Please refer to the site www.philips.com/masterledlamps for the latest information about dimming MASTER LEDlamps.



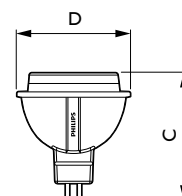
- **TransforMax** (patented) (see page 37)
- Silent operation


MASTER LEDspots LV MR16 GU5.3 - 7 W


Product	7 W
C	54
D	50
Weight in kg	0.042
Dimensions in mm	



- **TransforMax** (patented) (see page 37)
- Active fan cooling to ensure longest lifetime

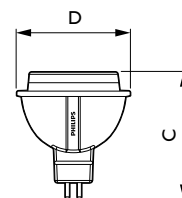

MASTER LEDspots LV MR16 GU5.3 - 10 W


Product	10 W
C	54
D	50
Weight in kg	0.042
Dimensions in mm	

Product description	Socket	Beam intensity	Beam angle	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC
MASTER LEDspot LV		cd	°	lm	lm/W			K	8718291
NEW D 7-35W 2700 K MR16 24D	GU5.3	2140	24	350	50	10	>80	2700	65447600
NEW D 7-35W 2700 K MR16 36D	GU5.3	1180	36	350	50	10	>80	2700	65538100
NEW D 7-35W 2700 K MR16 60D	GU5.3	320	60	350	50	10	>80	2700	65544200
NEW D 7-35W 3000 K MR16 24D	GU5.3	2200	24	350	50	10	>80	3000	65449000
NEW D 7-35W 3000 K MR16 36D	GU5.3	1210	36	350	50	10	>80	3000	65540400
NEW D 7-35W 3000 K MR16 60D	GU5.3	340	60	350	50	10	>80	3000	65546600
NEW D 7-35W 4000 K MR16 24D	GU5.3	2340	24	380	54	10	>80	4000	65536700
NEW D 7-35W 4000 K MR16 36D	GU5.3	1230	36	380	54	10	>80	4000	65542800
NEW D 7-35W 4000 K MR16 60D	GU5.3	1230	60	380	54	10	>80	4000	65548000
D 10-50W 2700 K MR16 24D	GU5.3	2720	24	470	47	10	>80	2700	21051100
D 10-50W 2700 K MR16 36D	GU5.3	1500	36	470	47	10	>80	2700	21057300
D 10-50W 3000 K MR16 24D	GU5.3	2840	24	490	49	10	>80	3000	21053500
D 10-50W 3000 K MR16 36D	GU5.3	1560	36	490	49	10	>80	3000	21059700
D 10-50W 4000 K MR16 24D	GU5.3	3010	24	495	50	10	>80	4000	21055900
D 10-50W 4000 K MR16 36D	GU5.3	1580	36	495	50	10	>80	4000	21061000



- Ultra low power consumption for areas with low light level requirements



MASTER LEDspots LV MR16 GU5.3 - 4 W

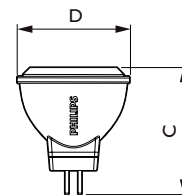


Product	4 W
C	47.8
D	50
Weight in kg	0.046
Dimensions in mm	

Product description	Socket	Beam intensity	Beam angle	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC
MASTER LEDspot LV		cd	°	lm	lm/W			K	8718291
4-20W 2700 K MR16 24D	GU5.3	1000	24	210	53	10	>80	2700	19378400
4-20W 2700 K MR16 36D	GU5.3	600	36	210	53	10	>80	2700	19222000
4-20W 3000 K MR16 24D	GU5.3	1100	24	220	55	10	>80	3000	19380700
4-20W 3000 K MR16 36D	GU5.3	660	36	220	55	10	>80	3000	19226800
4-20W 4000 K MR16 24D	GU5.3	1150	24	240	60	10	>80	4000	19228200
4-20W 4000 K MR16 36D	GU5.3	700	36	240	60	10	>80	4000	19230500



- CRI80: 3000 K truly enhances the presentation of silver jewelry, adding sparkle to the items on display
- TransforMax (patented) (see page 37)
- LEDspot with a clearly defined beam spread
- Innovative design



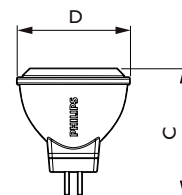
MASTER LEDspots LV MR11 GU4 - 4 W



Product	4 W
C	40
D	35
Weight in kg	0.026
Dimensions in mm	



- CRI90: truly enhances the presentation of gold jewelry, bringing colors to life
- TransforMax (patented) (see page 37)
- LEDspot with a clearly defined beam spread
- Innovative design



MASTER LEDspots LV MR11 GU4 - 4 W CRI90

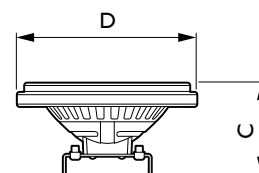


Product	4 W
C	40
D	35
Weight in kg	0.026
Dimensions in mm	

Product description	Socket	Beam intensity	Beam angle	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC
MASTER LEDspot LV		cd	°	lm	lm/W			K	8718291
4-20W GU4 2700 K 24D	GU4	580	24	140	35	12	>80	2700	11923400
4-20W GU4 3000 K 24D	GU4	650	24	150	38	12	>80	3000	19224400
4-20W GU4 4000 K 24D	GU4	700	24	150	38	12	>80	4000	11925800
4-20W CRI90 MR11 2700 K 24D GU4	GU4	720	24	125	31	12	>90	2700	19220600



- **TransforMax** (patented) (see page 37)
- For accent and general lighting
- Dimmable



MASTER LEDspots LV AR111 G53 - 10 W



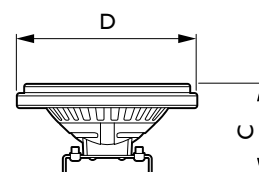
Product 10 W

C	56
D	111
Weight in kg	0.114

Dimensions in mm



- **TransforMax** (patented) (see page 37)
- For accent and general lighting
- Dimmable



MASTER LEDspots LV AR111 G53 - 15 W



Product 15 W

C	56
D	111
Weight in kg	0.114

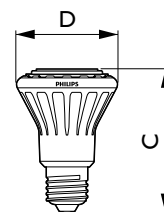
Dimensions in mm

Product description	Socket	Beam intensity	Beam angle	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC
MASTER LEDspot LV		cd	°	lm	lm/W			K	8718291
AR111 2700 K 24D 10 W	G53	3360	24	600	60	6	>80	2700	19204600
AR111 2700 K 40D 10 W	G53	1220	40	600	60	6	>80	2700	19206000
AR111 3000 K 24D 10 W	G53	3470	24	620	62	6	>80	3000	19208400
AR111 3000 K 40D 10 W	G53	1270	40	620	62	6	>80	3000	19210700
AR111 2700 K 24D 15 W	G53	4560	24	830	55	6	>80	2700	19212100
AR111 2700 K 40D 15 W	G53	1660	40	830	55	6	>80	2700	19214500
AR111 3000 K 24D 15 W	G53	4700	24	860	57	6	>80	3000	19216900
AR111 3000 K 40D 15 W	G53	1700	40	860	57	6	>80	3000	19218300



7 W ▶ 50 WATT

- For accent and general lighting (e.g. hotels, shops and offices)

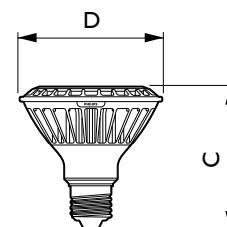

MASTER LEDspots PAR - 7 W


Product	7 W
C	90.2
D	63.7
Weight in kg	0.156
Dimensions in mm	



12 W ▶ 75 WATT

- For accent and general lighting (e.g. hotels, shops and offices)


MASTER LEDspots PAR - 12 W

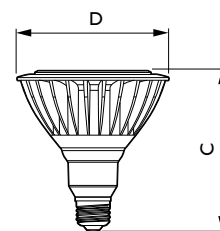

Product	12 W
C	91
D	92
Weight in kg	0.290
Dimensions in mm	

Product description	Socket	Beam intensity	Beam angle	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC	EOC
MASTER LEDspot MV		cd	°	lm	lm/W			K	8727900	8718291
D 7-50W 2700 K PAR20 25D	E27	1000	25	250	36	6	>80	2700	93398700	
D 7-50W 2700 K PAR20 40D	E27	450	40	250	36	6	>80	2700	93406900	
D 7-50W 3000 K PAR20 25D	E27	1050	25	260	37	6	>80	3000	93400700	
D 7-50W 3000 K PAR20 40D	E27	500	40	260	37	6	>80	3000	93408300	
D 7-50W 4000 K PAR20 25D	E27	1200	25	280	40	6	>80	4000	93402100	
D 7-50W 4000 K PAR20 40D	E27	550	40	280	40	6	>80	4000	93410600	
D 12-75W 2700 K PAR30S 25D	E27	2250	25	630	53	6	>80	2700		11927200

* Please refer to the site www.philips.com/masterledlamps for the latest information about dimming MASTER LEDlamps.



- For outdoor use - IP66 (please check the packaging guidelines for outdoor installation requirements)
- For accent and general lighting



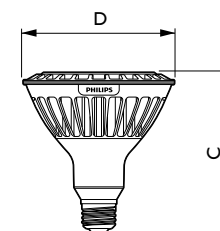
MASTER LEDspots PAR - 17 W OD



Product	17W OD
C	133
D	121.5
Weight in kg	0.525
Dimensions in mm	



- For accent and general lighting (e.g. hotels, shops and offices)



MASTER LEDspots PAR - 18 W



Product	18 W
C	132.5
D	121.6
Weight in kg	0.530
Dimensions in mm	

Product description

Socket

Beam intensity

Beam angle

Lumen output

Efficacy

Units per pack

CRI

Color temperature

EOC

MASTER LEDspot MV		cd	°	lm	lm/W			K	8718291
D 17-100W 2700 K PAR38 OD	E27	3500	25	810	48	6	>80	2700	11931900
D 18-100W 2700 K PAR38 25D	E27	3400	25	810	45	6	>80	2700	11929600

* Please refer to the site www.philips.com/masterledlamps for the latest information about dimming MASTER LEDlamps.

MASTER LEDcapsule

FEATURES AND BENEFITS

FOR TASK LIGHTING AND DECORATIVE APPLICATIONS

LONG LIFETIME

UV- AND IR-FREE LIGHT FOR LESS HEAT AND PROTECTION

FOR HEAT-SENSITIVE OBJECTS

NICE SPARKLING EFFECT



LV G4 - 1 W
Non-Dimmable
Page 16



LV G4 - 2.5 W
Non-Dimmable - With lens
Page 17



LV G4 - 2.5 W
Non-Dimmable - Without lens
Page 17



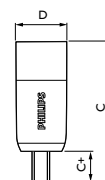
LV G4 - 3 W
Non-Dimmable
Page 17





1 W $\rightarrow$ 5 WATT

- Unique sparkling effect
- Compatible with a broad range of transformers



MASTER LEDcapsule LV G4 - 1 W



Color temperature

Non-Dimmable

25,000 h

Beam angle

G4

Product	1 W
C	36.8
C+	8
D	13.2
Weight in kg	0.005
Dimensions in mm	

Note: not a perfect fit retrofit size

Application note for the MASTER LEDcapsule 1-5 W:

- excludes patented intelligent driver to achieve smaller size and weight
- works with Magnetic Transformers
- works with a restricted set of Electronic Transformers (see below information for compatible Philips transformers)

The suggested maximum number of 1 W capsules of:

Certaline 60
12 pieces



Primaline 70
6 pieces



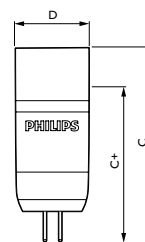
Product description	Socket	Beam angle	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC
MASTER LEDcapsule LV G4		°	lm	lm/W			K	8718291
G4 2700 K G4 2700K 1W	G4	360	50	50	12	>80	2700	19202200

With lens Without lens



- Customizable thanks to the removable lens
- Compatible with a broad range of transformers
- Unique sparkling effect

MASTER LEDcapsule LV G4 - 2.5 W



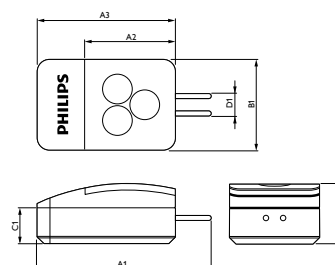
Product	2.5 W
C	49.8
C+	40.2
D	18.7
Weight in kg	0.018
Dimensions in mm	

Note: not a perfect fit retrofit size



- Unique sparkling effect
- Compatible with magnetic transformers

MASTER LEDcapsule LV G4 - 3 W



Product	3 W
A1	39.9
A3	32
B1	20
C2	14.5
Weight in kg	0.018
Dimensions in mm	

Product description	Socket	Beam angle	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC
MASTER LEDcapsule LV G4		°	lm	lm/W			K	8718291
G4 2700K 2.5W	G4	360	100	40	12	>80	2700	15535500
G4 2700K 3W	G4	80	170	57	12	>80	2700	24283300

MASTER LEDbulb

MASTER LEDbulb Designer

FEATURES AND BENEFITS

WARM WHITE LIGHT

COMPATIBLE WITH AN EXTENSIVE RANGE OF DIMMERS



7W
Dimmable
Page 20



8W DimTone
Dimmable
Page 20



12W
Dimmable
Page 21



13W
Dimmable
Page 21



20 W
Dimmable
Page 21



Designer - 7 W
Dimmable
Page 22-23



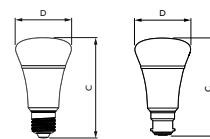
With convex
Page 22-23



With concave
Page 22-23



- Warm white light
- High Performance Dimming
- Light all around



MASTER LEDbulb - 7 W

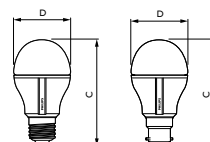


Product	7 W/E27	7 W/B22
C	109.6	108.9
D	61.5	61.5
Weight in kg	0.134	0.134

Dimensions in mm



- DimTone dimming: the light gets warmer when dimmed (from 2700 K to 2200 K)
- Classic incandescent shape



MASTER LEDbulb - 8 W DimTone



Product	8 W/E27	8 W/B22
C	105.4	104.2
D	56.7	56.7
Weight in kg	0.138	0.138

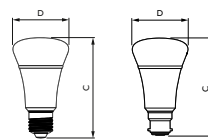
Dimensions in mm

	Product description	Socket	Bulb shape	Beam angle	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC
	MASTER LEDbulb				lm	lm/W			K	8718291
NEW	D 7-40W E27 2700 K	E27	A60	>340	470	67	6	>80	2700	67196100
NEW	D 7-40W B22 2700 K	B22	A60	>340	470	67	6	>80	2700	67198500
	D 8-40W DimTone E27 2700 K	E27	A60	>250	470	59	6	>80	2700	19200800
	D 8-40W DimTone B22 2700 K	B22	A60	>250	470	59	6	>80	2700	19198800



12 W 60 WATT

- High Performance Dimming
- Light all around
- Innovative design



MASTER LEDbulb - 12 W

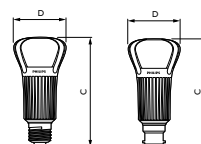


Product	12 W/E27	12 W/B22
C	109.6	108.9
D	61.5	61.5
Weight in kg	0.134	0.134
Dimensions in mm		



13 W 75 WATT

- Light all around
- Innovative design



MASTER LEDbulb - 13 W

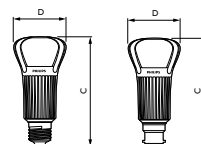


Product	13 W/E27	13 W/B22
C	127.2	126.5
D	61	61
Weight in kg	0.224	0.224
Dimensions in mm		



20 W 100 WATT

- High Performance Dimming
- Light all around
- Innovative design



MASTER LEDbulb - 20 W



Product	13 W/E27	13 W/B22
C	127.2	126.5
D	61	61
Weight in kg	0.224	0.224
Dimensions in mm		

	Product description	Socket	Bulb shape	Beam angle	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC
	MASTER LEDbulb				lm	lm/W			K	8718291
NEW	D 12-60W E27 2700 K	E27	A60	>340	806	67	6	>80	2700	67200500
NEW	D 12-60W B22 2700 K	B22	A60	>340	806	67	6	>80	2700	67202900
	D 13-75W E27 2700 K	E27	A67	>300	1055	62	6	>80	2700	66350800
	D 13-75W B22 2700 K	B22	A67	>300	1055	62	6	>80	2700	66352200
NEW	D 20-100W E27 2700 K	E27	A67	>340	1520	76	6	>80	2700	67192300
NEW	D 20-100W B22 2700 K	B22	A67	>340	1520	76	6	>80	2700	67194700

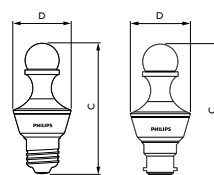
MASTER LEDbulb



Customize your bulb



- Add one of the covers to design your own bulb



MASTER LEDbulb Designer - 7 W



Product	7 W/E27	7 W/B22
C	102	102
D	45	45
Weight in kg	0.088	0.088
Dimensions in mm		

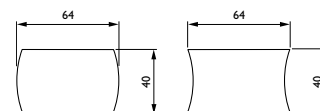


Convex



Concave

- Convex cover for light all around and warm cover light
- Concave cover for a focused beam of light



MASTER LEDbulb Designer - Cover Convex + Concave

Convex

Concave

Designer bulb (A) + Convex shape (B)

Designer bulb (A) + Concave shape (C)



Product description	Socket	Beam angle	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC
MASTER LEDspot MV			lm	lm/W			K	8718291
A) 7-40W E27 2700 K Designer	E27	240	470	67	6	>80	2700	15501000
A) 7-40W B22 2700 K Designer	B22	240	470	67	6	>80	2700	15503400
B) Designer bulb lamp cover Convex shape	n.a.	n.a.	n.a.	n.a.	6	n.a.	n.a.	17176800
C) Designer bulb lamp cover Concave shape	n.a.	n.a.	n.a.	n.a.	6	n.a.	n.a.	17180500

* Please refer to the site www.philips.com/masterledlamps for the latest information about dimming MASTER LEDlamps.

MASTER LEDcandle

FEATURES AND BENEFITS

UPDATE YOUR EYE CATCHING CHANDELIER WITH
LONG LASTING AND SPARKLE ENHANCING LED CANDLES



4W - E14 / B35

Dimmable

Page 26



4W - E14 / B35

Dimmable

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4W - B15 / B35

Dimmable

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4W - E14 / BA35

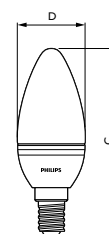
Dimmable

Page 27





- Sparkling light effect
- Available in clear and frosted version



MASTER LEDcandle - 4 W E14 / B35



Product 4 W E14 / B35

C 102.5

D 35.5

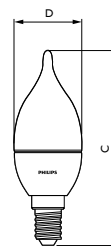
Weight in kg 0.04

Dimensions in mm

Product description	Socket	Bulb shape	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC
MASTER LEDcandle B15 / B35			lm	lm/W			K	8718291
D 4W E14 2700K 230V B35 CL	E14	B35	250	63	10	>80	2700	19370800
D 4W E14 2700K 230V B35 FR	E14	B35	250	63	10	>80	2700	19252700



- Flame shaped clear LEDcandle
- Sparkling light effect



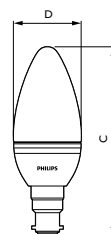
MASTER LEDcandle - 4 W E14 / BA35



Product	4 W
C	106.5
D	35.5
Weight in kg	0.04
Dimensions in mm	



- Sparkling light effect
- Clear LEDcandle with B15 cap



MASTER LEDcandle - 4 W B15 / B35



Product	4 W B15 / B35
C	100.5
D	35.5
Weight in kg	0.04
Dimensions in mm	

Product description	Socket	Bulb shape	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC
MASTER LEDcandle			lm	lm/W			K	8718291
D 4W E14 2700K 230V BA35 CL	E14	BA35	250	63	10	>80	2700	21063400
D 4W B15 2700K 230V B35 CL	B15	B35	250	63	10	>80	2700	19250300

MASTER LEDcluster

FEATURES AND BENEFITS

UPDATE YOUR EYE CATCHING CHANDELIER WITH
LONG LASTING AND SPARKLE ENHANCING LED LUSTERS



4W - E14 / P45 CL

Dimmable

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4W - E14 / P45 FR

Dimmable

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4W - E27 / P45 CL

Dimmable

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4W - E27 / P45 FR

Dimmable

Page 31



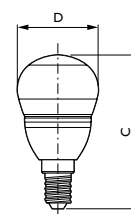
4W - B22 / P45 CL

Dimmable

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- Sparkling light effect
- Available in clear and frosted version



MASTER LEDluster - 4W E14 / P45



Product 4W E14 / P45

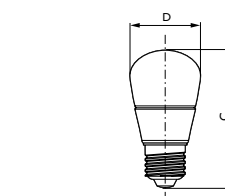
C	86
D	43.5
Weight in kg	0.038
Dimensions in mm	

Product description	Socket	Bulb shape	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC
MASTER LEDluster			lm	lm/W			K	8718291
D 4W E14 2700K 230V P45 CL	E14	P45	250	63	10	>80	2700	19372200
D 4W E14 2700K 230V P45 FR	E14	P45	250	63	10	>80	2700	19254100



- Sparkling light effect
- Available in clear and frosted version

MASTER LEDluster - 4 W E27 / P45



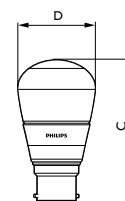
Product 4 W E27

C	91.5
D	46.5
Weight in kg	0.052
Dimensions in mm	



- Sparkling light effect
- Clear LEDluster with B22 cap

MASTER LEDluster - 4 W B22 / P45



Product 4 W B22

C	90
D	46.5
Weight in kg	0.052
Dimensions in mm	

Product description	Socket	Bulb shape	Lumen output	Efficacy	Units per pack	CRI	Color temperature	EOC
MASTER LEDluster			lm	lm/W			K	8718291
D 4W E27 2700K 230V P45 CL	E27	P45	250	63	10	>80	2700	19256500
D 4W E27 2700K 230V P45 FR	E27	P45	250	63	10	>80	2700	19258900
D 4W B22 2700K 230V P45 CL	B22	P45	250	63	10	>80	2700	21065800

MASTER LEDtube

FEATURES AND BENEFITS

RETROFIT TO EXISTING T8 LAMPS ON EM BALLAST INSTALLATIONS

EXTRA LONG LIFETIME

ONLY 50% ENERGY CONSUMPTION COMPARED TO FLUORESCENT TUBES

LEDCONTROL

SWITCHES LEDTUBES AUTOMATICALLY ON/OFF



PERFORMANCE / rotatable

Page 34-35



GA110 / rotatable

Page 34-35



EMP050

Accessory

Page 34-35



LEDcontrol

Accessory

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PERFORMANCE / GA300

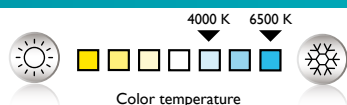
- High lux requirements
- High bay applications
- Warehouses
- Transport and distribution areas

NEW

LEDtube PERFORMANCE

- High Lm/W in an integrated product 95 Lm/W surpassed T5
- To cover high light requirements

MASTER LEDtube GA300 / GA300 rotatable



Color temperature



Non-Dimmable



50,000 h



Beam angle



G13



Rotatable (ROT)

Product description	System wattage	Comparable wattage	Cap base	Beam angle	Lumen output	Operation	CRI	Color temperature	EOC	EOC
MASTER LEDtube PERFORMANCE							lm	K	8718291	8718291
									1 pcs (C) excl. EMP050	10 pcs (I) excl. EMP050
NEW PERF 1500 mm	31	58	G13	140	3100	EM & Mains	85	4000	69369700	
NEW PERF 1500 mm	31	58	G13	140	3100	EM & Mains	85	6500	69006100	
NEW PERF 1500 mm ROT	31	58	G13	140	3100	EM & Mains	85	3000K	Make To Order	
GA300 600 mm	11	18	G13	140	1050	EM & Mains	85	4000	23864500	23872000
GA300 600 mm	11	18	G13	140	1050	EM & Mains	85	6500	23866900	23874400
GA300 600 mm ROT	11	18	G13	140	1050	EM & Mans	85	4000	n.a.	66229700
GA300 1200 mm	22	36	G13	140	2100	EM & Mains	85	4000	23852200	23840900
GA300 1200 mm	22	36	G13	140	2100	EM & Mains	85	6500	23854600	23842300
GA300 1200 mm ROT	22	36	G13	140	2100	EM & Mans	85	4000	n.a.	66231000
Accessory										
EMP050										15720500



MASTER LEDtubes come with all necessary industry certifications like KEMA,VDE.



GA110



EMP050



LEDcontrol

Value over lifetime

- Supermarket (food/retail)
- Parking lots / covered car parks
- Cold rooms
- Back office
- Warehouses
- Back of house areas

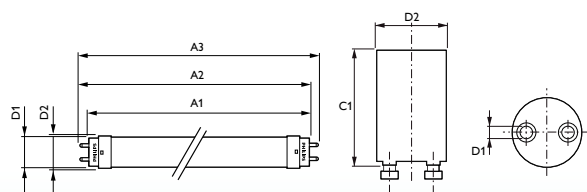
MASTER LEDtube GA110 rotatable / GA110



Product description	System wattage	Comparable lamp wattage	Cap base	Beam angle	Lumen output	Operation	CRI	Color temperature	EOC	EOC
MASTER LEDtube GA110					lm			K	8718291	8718291
									1 pcs (C) incl. EMP050	10 pcs (I) excl. EMP050
GA110 600 mm	10	18	G13	140	825	EM & Mains	85	4000	23868300	23876800
GA110 600 mm	10	18	G13	140	825	EM & Mains	85	6500	23870600	23878200
GA110 600 mm ROT	10	18	G13	140	825	EM & Mans	85	4000	n.a.	66233400
GA110 900 mm	15	30	G13	140	1250	EM & Mains	85	4000	23880500	23884300
GA110 900 mm	15	30	G13	140	1250	EM & Mains	85	6500	23882900	23886700
GA110 1200 mm	19	36	G13	140	1650	EM & Mains	85	4000	23856000	23844700
GA110 1200 mm	19	36	G13	140	1650	EM & Mains	85	6500	23858400	23846100
GA110 1200 mm ROT	19	36	G13	140	1650	EM & Mans	85	4000	n.a.	66235800
GA110 1500 mm	24	58	G13	140	2000	EM & Mains	85	4000	23860700	23848500
GA110 1500 mm	24	58	G13	140	2000	EM & Mains	85	6500	23862100	23850800
GA110 1500 mm ROT	24	58	G13	140	2000	EM & Mans	85	4000	n.a.	66237200

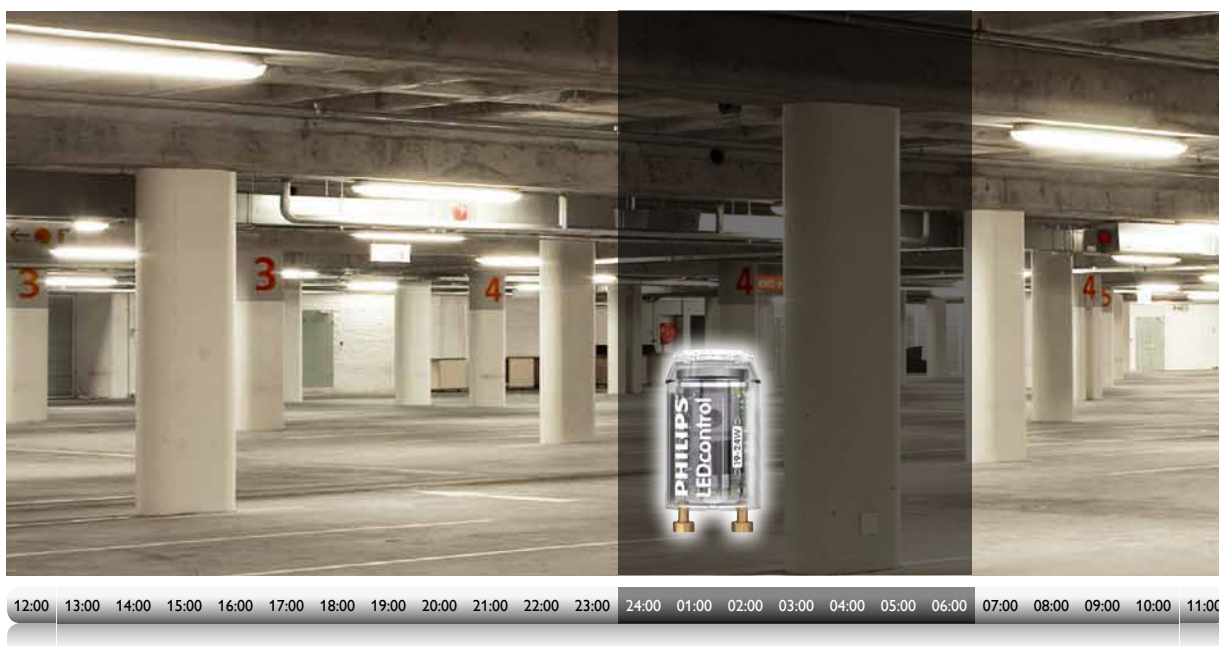
Accessory

EMP050	15720500
LEDcontrol - for 1200 mm and 1500 mm only (please check page 36 for more information)	will be available in June 2013



Product	A1	A2	A3	C1	D1	D2
MASTER LEDtube 600mm 840/865 G13	589	596	603		25.6	27.3
MASTER LEDtube 900mm 840/865 G13	894	901	908		25.6	27.3
MASTER LEDtube 1200mm 840/865 G13	1198	1205	1212		25.6	27.3
MASTER LEDtube 1500mm 840/865 G13	1498	1507	1514		25.6	27.3
EMP050 Protection starter				34.5	3	21.5
LEDcontrol				34.4	4.8	21.3

Dimensions in mm



TIME YOUR SAVING WITH CONTROLLED LIGHTING

The brand-new Philips LEDcontrol automatically switches MASTER LEDtubes ON and OFF to give you light only when you need it.

Combining the Philips MASTER LEDtube GA110 with the Philips LEDcontrol offers you a complete solution, resulting in significantly more energy savings and optimizing your energy management.

A solution which...:

- controls your LED lighting, auto-switch **ON/OFF** on preset time, delivering **additional** energy saving of +20%
- is the most simple way to **add intelligence**, no ceiling refurbishment needed
- builds up your sustainable image with **LED and Controls**

Product features:

- Real time clock operating on battery
- Time adjustable depending customer's preference
- Override possible, by simple switch toggle
- Completely retrofit to existing luminaires with magnetic ballast
- Overcurrent protection and thermal protection

**For more information
please contact:**

Ms. Elly Goeman
elly.goeman@philips.com

System
type

EM system
only

LEDcontrol	
Lamps	MASTER LEDtube GA110
Wattage	19-24 W (1200 & 1500 mm)
Lamp brands	Philips only
Voltage range	220-240 V~, 50 Hz
Battery	Integrated, 3V Lithium coin cell
Ambient operating temperature range	-30 °C to +45 °C at max. 90% relative humidity
Recommended storage temperature	0 °C to 30 °C (device temperature) - Max. 1 year at 25 °C at max. 90% relative humidity
Packaging	10 pieces in one box
Order quantity	Per 200 pieces

TransforMax (patented)

First class halogen transformer compatibility thanks to intelligent electronics within low voltage LED Lamps

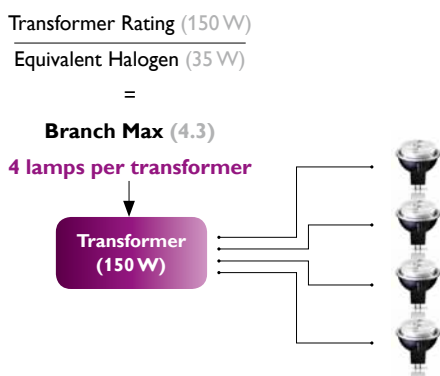
Philips designed a unique (patent protected) intelligent driver concept for low voltage (12 V) LED lamps, which enables broad compatibility with existing electronic and electromagnetic Halogen transformers. Therefore, Philips low voltage (12 V) LED lamps universally replace 12 V Halogen spot lamps with unique first class transformer compatible electronics.

This technology is called TransforMax which enables the lamp to work on most sockets – a simple 'plug & play' retrofit solution.

Without dimmer

To estimate how many LED lamps can be connected to an existing halogen transformer, the rated power of the transformer needs to be divided by the LED lamp replacement Wattage.

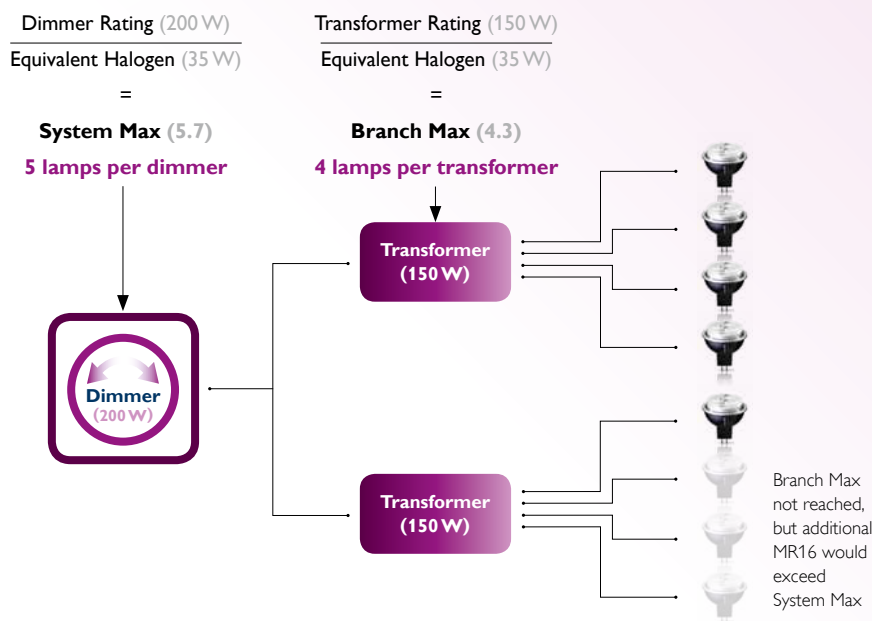
For example there is a 150 W transformer available, and the MR16 7 W (replacing a 35 W halogen lamp) is going to be installed. The calculation in this case is as shown



With dimmer

In case dimmable low voltage LED lamps have to be connected to a dimmer, the following approach has to be followed:

- 1) Determine the max loading of both your transformer(s) and your dimmer:
either in Watts (W) or Volt-Amps (VA).
- 2) Use the ratios below to determine a 'System Max' and 'Branch Max'
- 3) Limit total lamps you can install by 'System Max'...
- 4) ...and ensure transformer load is sufficient to allow for each individual 'Branch'



High Performance Dimming

Thanks to High Performance Dimming you will enjoy smooth, flicker-free dimming. MASTER LEDlamps have been tested with all the major dimmer brands in the market.

- broad dimmer compatibility supporting a wide range of normal phase-cut dimmers: wall box dimmers, panels, plug-in unit phase-cut dimming
- high dimming performance: smooth dimming curve, deeper dimming level, one to multiple lamps

Note: To ensure high dimming performance with the MASTER LEDspot MV GU10 8 W these lamps should not be connected with other lamp types on the same dimmer ('mixed load').

Pay-back comparison LED

Halogen/Incandescent

Traditional



LED



Page 7

Traditional



LED



Page 8

	Twistline Alu GU10 50W	MASTER LEDspot MV GU10 6-50W	Accentline MR16 GU5.3 50W	MASTER LEDspot LV MR16 7-35W
Lifetime of the lamp	3,000 h	40,000 h	3,000 h	40,000 h
Yearly energy costs	€ 27.38	€ 3.29	€ 19.16	€ 3.83
Yearly replacement cost	€ 7.30	€ 0.55	€ 7.30	€ 0.55
Initial price per piece	€ 2.15	€ 36.00	€ 2.50	€ 37.50
Total costs per year	€ 37.81	€ 7.77	€ 30.11	€ 8.49
Saving per year		€ 30.04		€ 21.63
Pay-back time		13.2 months		19.2 months

Traditional



LED



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Traditional



LED

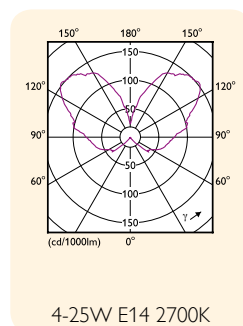
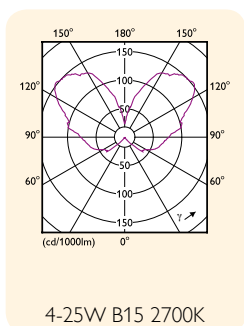
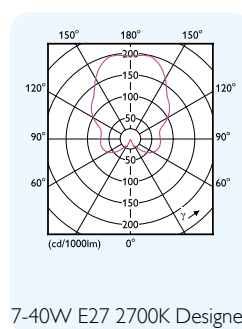
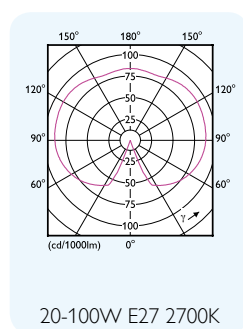
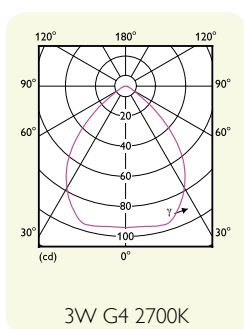
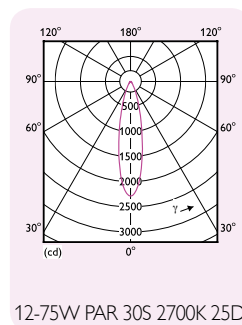
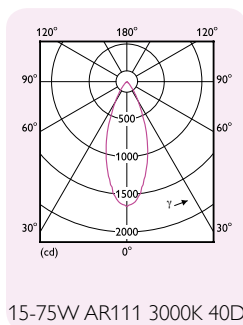
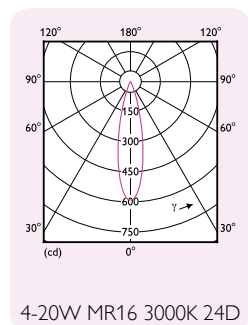
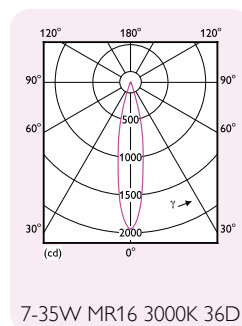
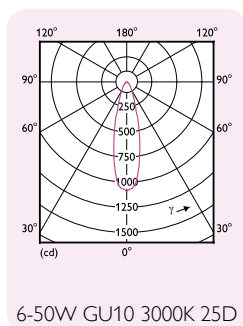
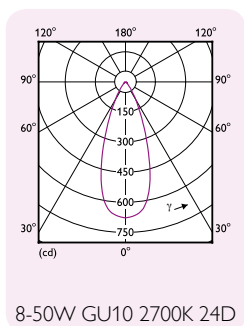


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	Standard 100 W E27 240V A60	MASTER LEDbulb E27 D 20-100 W	Standard 25 W E14 230V B35	MASTER LEDcandle E14 4-25 W
Lifetime of the lamp	1,000 h	25,000	1,000 h	20,000 h
Yearly energy costs	€ 54.75	€ 10.95	€ 13.69	€ 2.19
Yearly replacement cost	€ 21.90	€ 0.88	€ 21.90	€ 1.10
Initial price per piece	€ 15.00	€ 75.00	€ 3.90	€ 24.00
Total costs per year	€ 142.35	€ 24.97	€ 52.67	€ 8.54
Saving per year		€ 117.38		€ 44.13
Pay-back time		6 months		6 months

Photometric diagrams

Selection per product family





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Data are subject to change.
05/2013

www.philips.com/masterledlamps
www.philips.com/led-product-info

