

**Technical Application Guide** 

## Philips LEDClassic LEDbulb and LEDcandle

LED Classic with a warm white classic design that saves around 90% energy costs, offering the beautiful decorative light.

LED Classic is ideal for installation in various kinds of fixtures where people can easily enjoy the art of light. The lamps perfectly work with crystal chandeliers, wall sconces where lamps are exposed or modern fixtures with a glass Shield.

www.philips.com/masterledlamps



# Design highlig



- $\cdot$  Classic design meets the need of OEM lumi-makers
- Vintage filament design allows for decorative light
- Low power consumption
- Long-lifetime of 15,000 hours
- No UV and Cool beam (no IR)
- Environmental friendly, no Mercury or any other hazardous substances
- Low Carbon Footprint

# **66** Designed with **LEDClassic**"

# Application Indoor

#### Application areas

LED Classic lamps are ideal for general and decorative lighting in the hospitality industry, as well as in home environments. Mounted in full view in chandeliers, wall sconces or modern luminaires, fit all existing fixtures with an E14 or E27 socket. Drawing upon inputs from chandelier makers and designed to enhance the aesthetic appeal of the chandelier or luminaire, not only when lit but also when not, these lamps come in a classic design with a unique, eye-catching filament design. They produce a beautiful light that delivers huge energy savings and minimizes maintenance cost.

#### Application notes

- Operating temperature range is between -20 °C and 40 °C ambient
- Designed for indoor application
- Not intended for use with emergency light fixtures or exit lights
- For indoor applications in open luminaires

## **Product features**

#### Technical Specifications (ND/D)

Product Description	Voltage	Power	Replaced	Base	сст	Lumen	Version	Lifetime	CRI	Dim	Switch	KSA
			Watt								Cycle	EEI Label
	(V)	(W)	(W)		(K)	(Lm)		(hours)				
LED Classic 4-40W E27 WW A60 CL ND	220-240	4	40	E27	2700	470	Clear	15,000	80	No	20K	А
LED Classic 5-40W E27 WW A60 CL D	220-240	5	40	E27	2700	470	Clear	15,000	80	YES	20K	А
LED Classic 4-40W E27 WW ST64 CL ND	220-240	4	40	E27	2700	470	Clear	15,000	80	No	20K	А
LED Classic 4-40W E14 WW B35 CL ND	220-240	4	40	E14	2700	470	Clear	15,000	80	No	20K	А

#### Dimensions (ND/D)

Туре	C typical	D typical
	Overall Length	Diameter
	(mm)	(mm)
LED Classic 4-40W E27 WW A60 CL ND	104	60
LED Classic 5-40W E27 WW A60 CL D	112	60
LED Classic 4-40W E27 WW ST64 CL ND	140	64
LED Classic 4-40W E14 WW B35 CL ND	97	35

ND/D



4-40W A60 E27



#### 5-40W A60 E27



4-40W ST64 E27



4-40W B35 E14

#### **Spectral Power Distribution**

#### LEDClassic 2700K



### **Photometric Diagrams**



#### LED Classic 4-40W E27 WW A60 CL ND

Light output ratio	1.00		
Service upward	0.50		
Service downward	0.50		

150<sup>°</sup>

120

90'

Polar intensity diagram

180°

150

00

-50

50

00

150

0

150°

(cd/1000lm)

120

90

60

CIE flux code UGRcen (4Hx8H, 0.25H )

of luminaires

240

180

120

60

0

10

Quantity estimation diagram

h<sub>room</sub>: 2.8 m Reflectances: 0.70, 0.50, 0.20 Maintenance factor: 1.0 Ceiling mounted

30

11 37 67 50 100 23

750 lx

500 lx

300 Ix-

70

90 (m<sup>2</sup>) UGR diagram



5

#### LED Classic 5-40W E27 WW A60 CL DIM

Light output ratio	1.00
Service upward	0.50
Service downward	0.50



50

#### Quantity estimation diagram



#### UGR diagram







1 x 470 lm

1 x 470 lm

#### LED Classic 4-40W E27 WW ST64 CL ND

Light output ratio	1.00
Service upward	0.50
Service downward	0.50

150<sup>°</sup>

120<sup>°</sup>

90°

60'

1.1

Polar intensity diagram

180°

-150-

100

.50

X

50

'nο

150

0

150°

(cd/1000lm)

120

90

60

CIE flux code UGRcen (4Hx8H, 0.25H )

Quantity estimation diagram

h<sub>room</sub>: 2.8 m Reflectances: 0.70, 0.50, 0.20 Maintenance factor: 1.0 Ceiling mounted

30

nr. of luminaires

240

180

120

60

0

10

 11 37 67 50 100

 5H )
 23

750 Ix

500 lx

-300 Ix

70

90

(m<sup>2</sup>)

50

#### UGR diagram



#### LED Classic 4-40W E14 WW B35 CL ND

Light output ratio	1.00		
Service upward	0.53		
Service downward	0.47		

 CIE flux code
 8 33 65 47 100

 UGRcen (4Hx8H, 0.25H )
 25

#### Polar intensity diagram



#### Quantity estimation diagram



#### UGR diagram



1 x 470 lm



4-40W E27 A60 CL



4-40W E27 ST64 CL

#### **Failure Rate**



#### Philips LED Classic LEDbulb and LEDcandle has a lifetime exceeding 15,000 hours defined as (F50, L70), where:

- F50, L70, meaning 50% in total of whole population of lamps either fail without light output or lumen maintenance lower than 70% of initial value.
- Lifetime estimation based on the application environment condition: at room temperature (25 °C), free air operation, base down burning position and at rated voltage.

#### EMEA DIM 5W A60 bulb

	Dimmer info				230V Dimmable filament 5W A60			
#	Brand	Type #	Туре	Load	<b>Overall Result</b>	Glowing		
1	Schneider (Elko)	SBD420RCRL (CCTEL13011)						
same as above	Schneider (Merten)	SBD420RCRL (MEG5138-0000)	RLC	$20^{\sim}420$ VA	2-3			
2	Schneider	SBD315RC (ATD 315)CCT11533	RC	315W	2-3			
same as above	Schneider (Elko)	SBD315RC (315 GLE)						
same as above	Schneider	SBD315RC (SBD 315)	RC	315W				
same as above	Schneider	SBD315RC (SDD 315)						
same as above	Schneider (Merten)	SBD315RC (MEG5136-0000)						
3	Schneider (Elko)	SBD200LED (CCTEL10501) (S520512: 4-400VA)	LED (RC) (RL)	4~200 ₩ (4~40 ₩ )	1-3			
same as above	Schneider (Merten)	SBD200LED (MEG5134-0000)						
same as above	Feller	SBD200LED (CCTCH10601)						
4	Busch-Jaeger	2250U	R	600 W	1-3			
5	Busch-Jaeger	6513 U-102	RC	420 W	1-3			
6	Busch-Jaeger	6523U	LED	$2^{\sim}100$ VA	1-3			
same as above	Busch-Jaeger	6524U	LED	$2^{\sim}100$ VA				
same as above	Philips	UID8670						
7	Busch-Jaeger	2200 U-503	R	$60^{\sim}400$ W	1-3			
8	Busch-Jaeger	2247U - 500	RL	500 W	1-3			
9	Legrand	67081	RL	40~300 W	3			
10	Legrand	774161	RL	40~400 W	3			
11	Legrand	67082	RL	40~600 W	3			
12	Legrand	67084	RLC	40~400 W	1-3			
13	Legrand	67085	RLC	40 <sup>~</sup> 300 ₩	1-3			
same as above	Legrand	78406	RLC	40~300 W				
14	Jung	225TDE	RC	$20^{\sim}525W$	1-3			
15	Varilight	HQ3W	R	$60^{400W}$	2-3			
16	Insta (Berker)	2867 10	RC	20~360 W	1-3			
17	Insta (Berker)	2830 10	R	60~400 W	1-3			
18	Gira	2390 00 / IOO	LED	7~100 W	1-3			
19	Jung	1271LEDDE	LED	3~100 ₩	1-3			
20	MK	K1535	R	65~450W	HEL<80%			
21	MK	K1501 WHILV	R	60~500 ₩	2-3			
22	Vimar	20148	RL	500 W	1-3			
23	Vimar	20162	RC	$40^{\sim}300$ W	LEL>20%			
Professional Sp	ecific: 2 Dynalite di	mmers	1					
24	Dynalite	DDLE801			1-3			
25	Dynalite	DDMC-GRMSPLUS			1-3			
Consumer Specif	ic: 5 Cord dimmers		1					
26	Ikea	WDE300F-1	R	300 W	2-3			
27	Ikea	E0902-Dim	R	25~150 W	1-3			
28	Ikea	WDE200L-1	R	200 W	1-3			
29	Ikea	EED200LRS	R	200 W	1-3			
30	Ikea	SD804	TE	150 W	1-3			



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