

# OSRAM LED PERFORMANCE PAR 16 80



## Highlights

- Easy replacement of halogen lamps due to compact full glass design and single optic
- TruWave Technology is defined as LEDVANCE unique technology which can offer more natural and comfortable light.
- Premium light quality thanks to high color rendering index and narrow binning
- Dimming towards your ideal ambience
- Very high color rendering : Ra 90
- Long lifetime, up to 25,000hrs

## Application Areas:

- Hospitality
- Restaurant
- Residential
- Art galleries and museum
- Homes

## Advancing Light

LEDVANCE is one of the World's leaders in general lighting for lighting professionals as well as end users, offering



A broad variety of LED luminaires



Advanced LED lamps



Intelligent, networked Smart Home & Smart Building solutions



Traditional light sources

LEDVANCE is licensee of product trademark OSRAM for lamps products in general lighting.



## LED PERFORMANCE PAR 16 80



*We bring nature light!*

### Life need natural light

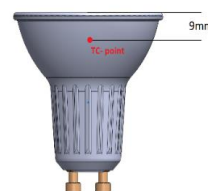
- It makes us feel warm, safe, relaxed, content, happy & energized. Natural Light gives us life.
- Life needs Natural Light after the sun goes down.
- Life needs Natural Light to combat feelings of sadness during dark winter months.
- Life needs Natural Light to help nighttime workers do their best.

### Benefits of natural light product

- LEDVANCE SPOT lamp mimics the natural light spectrum and wavelength intensity to support an improved sleep/wake cycle.
- With its balanced blue light spectrum, it is beneficial for boosting attention, reaction times and mood
- Truwave technology is defined as LEDVANCE unique technology which can offer more natural & comfortable light

### Application Note

- Suitable for indoor application.
- Switch off the light during installation
- Input voltage: 220-240V
- Frequency: 50-60HZ
- Storage temperature & humidity conditions (-20°C up to +80°C, at max. 95% relative humidity)
- Operating temperature & humidity conditions (-20°C up to +30°C, at max. 95% relative humidity)



### Disposal Information

- Lamps with WEEE sign can be returned at specific collection points.
- LED lamps have to be disposed as special waste.



# Product Information

## LED PERFORMANCE PAR 16 80



### Product Overview<sup>1</sup>

Product Name	Model Name	Wattage	Input Voltage	CCT	Lm
PAR16 80 P 7.5W 927 36° GU10	AC32241	7.5W	220V-240V	2700K	630lm
PAR16 80 P 7.5W 930 36° GU10	AC32242	7.5W	220V-240V	3000K	630lm
PAR16 80 P 7.5W 940 36° GU10	AC32243	7.5W	220V-240V	4000K	650lm
PAR16 80 P 7.5W 965 36° GU10	AC32244	7.5W	220V-240V	6500K	650lm
PAR16 80 P 7.5W 930 60° GU10	AC32245	7.5W	220V-240V	3000K	630lm
PAR16 80 P 7.5W 930 60° GU10	AC32246	7.5W	220V-240V	3000K	630lm
PAR16 80 P 7.5W 965 60° GU10	AC32247	7.5W	220V-240V	6500K	650lm
PAR16 80 P 7.5W 965 60° GU10	AC32248	7.5W	220V-240V	6500K	650lm
PAR16 80 P 7.5W 927 10° GU10	AC33036	7.5W	220V-240V	2700K	500lm
PAR16 80 P 7.5W 930 10° GU10	AC33037	7.5W	220V-240V	3000K	500lm
PAR16 80 P 7.5W 940 10° GU10	AC33038	7.5W	220V-240V	4000K	500lm



### Benefits

- Easy replacement of halogen lamps due to compact full glass design and single optic
- Premium light quality thanks to high color rendering index and narrow binning
- Free of multiple shadows for an excellent accent lighting
- Dimming towards your ideal ambience
- Up to 91% Energy Saving, spend little and save a lot
- Install and forget: assured by Germany quality standard

### Key Features

- Full glass design, elegant appearance
- Very high color rendering: Ra 90
- Color consistency: ≤6 Standard Deviation Color Matching
- Uniform and clean beam thanks to the innovative single optics
- Perfect Fit, 1:1 halogen outline ensures easy installation
- Excellent dimmer compatibility
- 220-240V AC input voltage
- UV and NIR radiation free
- Mercury free
- 25,000 hours lifetime<sup>2</sup>

<sup>1</sup> Typical values. All the technical parameters apply to the entire lamp. In view of the complex manufacturing process for light emitting diodes, the typical values given above for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technical parameters of an individual product; individual products may vary from the typical values.

<sup>2</sup> L70B50 is the average operating life of the LED Lamp during which the luminous flux is greater than or equal to 70% of the initial luminous flux, for 50% of the population. The lifetime is estimated at room temperature (25° C), free air burning, base up burning position and at rated voltage.

For lamps with a weight significantly higher than that of the lamps for which they are a replacement, attention should be drawn to the fact that the increased weight may reduce the mechanical stability of certain luminaires and lampholders and may impair contact making and lamp retention.

# Product Information

## LED PERFORMANCE PAR 16 80

### Ordering Guide

Product	Wattage	CCT	Lm	Candela	Diameter	Length	Weight	Beam Angle	EAN10	EAN40	Ship.
										(ship unit)	unit
LPPAR168036 7.5W/927230V GU1010X1AR7OSRAM	7.5W	2700K	630lm	850cd	50mm	52mm	57.5g	36°	4058075588059	4058075588066	10
LPPAR168036 7.5W/930230V GU1010X1AR7OSRAM	7.5W	3000K	630lm	850cd	50mm	52mm	57.5g	36°	4058075588073	4058075588080	10
LPPAR168036 7.5W/940230V GU1010X1AR7OSRAM	7.5W	4000K	650lm	950cd	50mm	52mm	57.5g	36°	4058075588097	4058075588103	10
LPPAR168036 7.5W/965230V GU1010X1AR7OSRAM	7.5W	6500K	650lm	950cd	50mm	52mm	57.5g	36°	4058075588110	4058075588127	10
LPPAR1680607,5W/930230VG U1010X1AR7AUOSRAM	7.5W	3000K	630lm	620cd	50mm	52mm	57.5g	60°	4058075588134	4058075588141	10
LPPAR1680607,5W/930230V GU108X3AR7AUOSRAM	7.5W	3000K	630lm	620cd	50mm	52mm	57.5g	60°	4058075588172	4058075588189	24
LPPAR1680607,5W/965230V GU1010X1AR7AUOSRAM	7.5W	6500K	650lm	620cd	50mm	52mm	57.5g	60°	4058075588233	4058075588240	10
LPPAR1680607,5W/965230V GU108X3AR7AUOSRAM	7.5W	6500K	650lm	620cd	50mm	52mm	57.5g	60°	4058075588271	4058075588288	24
LPPAR1680107,5W/927230V GU108X3AR7OSRAM	7.5W	2700K	500lm	4000cd	50mm	52mm	57.5g	10°	4058075601697	4058075601703	10
LPPAR1680107,5W/930230V GU1010X1AR7OSRAM	7.5W	3000K	500lm	4000cd	50mm	52mm	57.5g	10°	4058075601710	4058075601727	10
LPPAR1680107,5W/940230V GU108X3AR7OSRAM	7.5W	4000K	500lm	4000cd	50mm	52mm	57.5g	10°	4058075601734	4058075601741	10

### Common Characteristics<sup>3</sup>

Type	Average lifetime <sup>4</sup>	Switching cycles (30s on, 30s off)	Casing material	Starting time	Warm up time for 95% light	Power factor
LED PERFORMANCE PAR16 50	25,000 hrs	100,000	Glass	<0.5 s	<0.5 s	0.7
Type	Nominal current	Tc temperature max. <sup>5</sup>	CRI	Mercury max.	Standard deviation of color matching	Ambient temperature range
LED PERFORMANCE PAR16 50	49 mA	≤85°C @ Ta 40°C	90	0.0 mg	<6 SDCM	-20..+40 °C

<sup>3</sup> Typical values. All the technical parameters apply to the entire lamp. In view of the complex manufacturing process for light emitting diodes, the typical values given above for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technical parameters of an individual product; individual products may vary from the typical values.

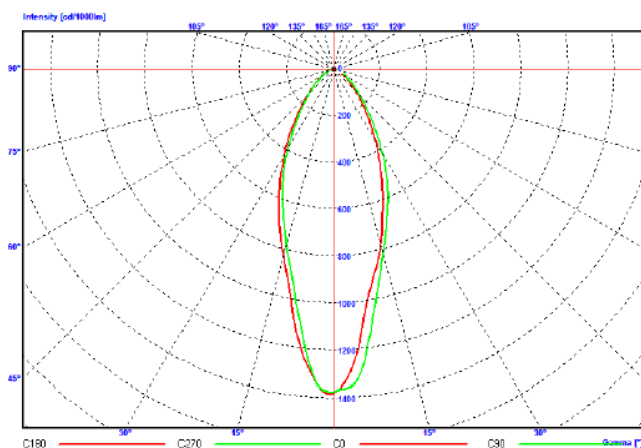
<sup>4</sup> L70B50 is the average operating life of the LED Lamp during which the luminous flux is greater than or equal to 70% of the initial luminous flux, for 50% of the population. The lifetime is estimated at room temperature (25° C), free air burning, base up burning position and at rated voltage.

<sup>5</sup> The Tc is defined as the highest permissible temperature which may occur on the outer surface of the LED lamp (in the indicated position) under normal operating conditions and at the rated voltage/current/power or the maximum of the rated voltage/current/power range (DIN EN 62031: 2009-01)

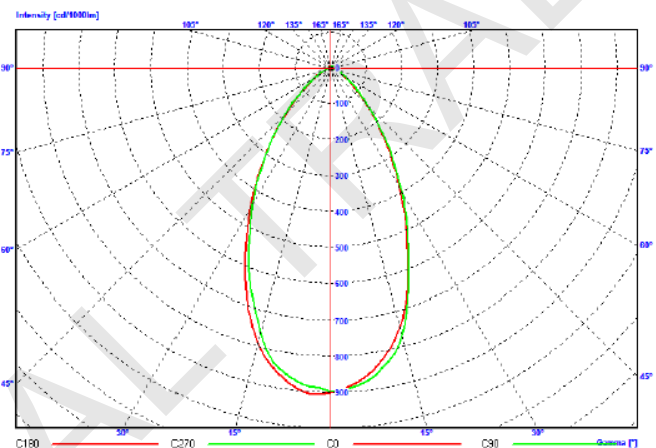
# Product Information

## LED PERFORMANCE PAR 16 80

### Light Distribution

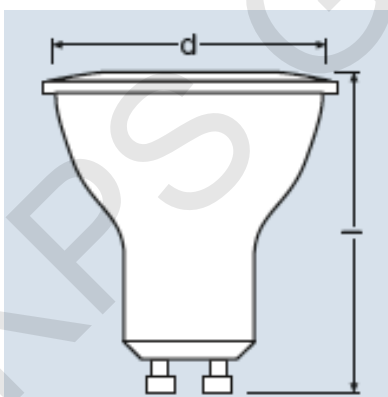


PAR16 80 P 7.5W 36° GU10



PAR16 80 P 7.5W 60° GU10

### Lamp Dimension



	PAR16
D (mm)	50
l (mm)	52

# Product Information

## LED PERFORMANCE PAR 16 80

### Application information

- Hospitality
- Restaurant
- Residential
- Art galleries and museum
- Homes

### Lamp conformity

- CISPR 15: 2013 + A1: 2015 (Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment)
- IEC 60038 (IEC standard voltages)
- IEC 60061 (Lamp caps and holders)
- IEC 60357 (Tungsten halogen lamps (non vehicle) - Performance specifications)
- IEC 60432 (Incandescent lamps - Safety specifications)
- IEC 60630 (Maximum lamp outlines for incandescent lamps)
- IEC 62560 (Self-ballasted LED-lamps for general lighting services by voltage > 50 V -Safety specifications - Safety requirements)
- IEC 60969 (Self-ballasted lamps for general lighting services - Performance requirements)
- IEC 61341 (Method of measurement of centre beam intensity and beam angle(s) of reflector lamps)
- IEC 61547 (Equipment for general lighting purposes - EMC immunity requirements)
- IEC 62612 (Self-ballasted LED-lamps for general lighting services > 50 V – Performance requirements)
- Commission Regulation No 244/2009 (1194/2012) implementing Directive 2005/32/EC (2009/125/EC) of the European Parliament and of the Council with regard to ecodesign requirements for non-directional household lamps (directional household lamps)

# Product Information

## LED PERFORMANCE PAR 16 80 927/ 930/ 940/ 965


Compatibility performance with dimmer <sup>6</sup> (Single lamp & Four Lamps)

Legend APM dimmer

L/Leading edge dimmer

T/Trailing edge dimmer

U/Universal Dimmer

Legend						PERFORMANCE PAR16	
	Very good dimmability with indicated number of lamps (dimming range greater than 75%)						
	Limited dimmability with indicated number of lamps (dimming range smaller than 75%)						
	Undesired dimmability						
Not tested							
						EAN / Basic Code	
						4058075588059 / AC32241 4058075588073 / AC32242 4058075588097 / AC32243 4058075588110 / AC32244 4058075588134 / AC32245 4058075588172 / AC32246 4058075588233 / AC32247 4058075588271 / AC32248 4058075601697 / AC33036 4058075601710 / AC33037 4058075601710 / AC33038	
Dimmer						Number of Lamps	Dimming range
Brand	Model	Voltage range	Power	Type			
Clipsal	E30 (32V500M) L500VA	230V / 50Hz	500W	L	100-0%	100-0%	
TCL-Legrand	V8051-M	230V / 50Hz	40-630W	L	100-0%	100-0%	
Panasonic	WEG57813	230V / 50Hz	40-300W	L	100-0%	100-0%	
LUMEX	LOADSMART LT1D450LS	230V / 50Hz	500VA	T		100-0%	
Schneider-Clipsal	KB31RD400	230V / 50Hz	400W	L	100-0%	100-0%	
Clipsal	32E450UDM	230V / 50Hz	450W	T	3-0%	100-11%	
HPM	CAT400T HPM	230V / 50Hz	400W	T	25-10%	100-0%	
Anam / Legrand	ASW3000H	230V / 50Hz	1000W	T	80-0%	100-0%	
Trader	Dimpala	230V / 50Hz	400W	U	9-0%	100-0%	
Clipsal	32ELEDM	230V / 50Hz	400W	T	100-0%	100-0%	
Siemens	5UH8622-3NC01	230V / 50Hz	25-400W	L	100-0%	100-15%	
Schneider-Electric	C460	230V / 50Hz	400W	L	100-0%	100-0%	
Schneider-Electric	U201DST600	230V / 50Hz	40-600VA	L	100-43%	76-0%	
Clipsal	32E450LM	230V / 50Hz	450W	L	100-0%	100-0%	
Honyar	KT250	230V / 50Hz	15-250W	L	100-0%	100-0%	
Schneider-Electric	40600 RL	230V / 50Hz	40-600W	L	100-0%	100-0%	
Step	E033	230V / 50Hz	45-300W	L			
Bticino	SAM5350	230V / 50Hz	40-300W	L	100-0%	100-0%	
Lutron	GXI-3104-T-CE-WH	230V / 50Hz	2300W	T	100-0%	100-0%	
HPM	CAT400L	230V / 50Hz	400W	L	14-0%	90-0%	
Panasonic	WMS549	230V / 50Hz	40-400W	L	100-0%	90-0%	



# Product Information

## LED PERFORMANCE PAR 16 80 927/ 930/ 940/ 965


Compatibility performance with dimmer <sup>6</sup> (Single lamp & Four Lamps)

Legend APM dimmer

L/Leading edge dimmer

T/Trailing edge dimmer

U/Universal Dimmer

Legend					PERFORMANCE PAR16 80 10° 36° 60°	
	Very good dimmability with indicated number of lamps (dimming range greater than 75%)					
	Limited dimmability with indicated number of lamps (dimming range smaler than 75%)					
	Undesired dimmability					
Not tested					EAN / Basic Code	
					4058075588059 / AC32241 4058075588073 / AC32242 4058075588097 / AC32243 4058075588110 / AC32244 4058075588134 / AC32245 4058075588172 / AC32246 4058075588233 / AC32247 4058075588271 / AC32248 4058075601697 / AC33036 4058075601710 / AC33037 4058075601710 / AC33038	
Dimmer					Number of Lamps	Dimming range
Brand	M odel	Voltage range	Power	Type		
SAL	SDA450	230V / 50Hz	450W	T	100-0%	100-0%
Siemens	5UH8122-3NC01	230V / 50Hz	25-400W	L	100-0%	100-0%
Schneider-Clipsal	E8431EPD4	230V / 50Hz	25-350W	T	100-0%	100-0%
MK branded	K1541 WHI	230V / 50Hz	75-500W	L	9-0%	95-0%
Veto	VT-500	230V / 50Hz	60-500W	L	100-0%	100-0%
DIGINET(GERARD)	MMDM/PB	230V / 50Hz	400W	ush Butto	9-0%	100-0%
Legrand	617030	230V / 50Hz	600W	L	100-0%	100-0%
Panasonic	WEG 57912	230V / 50Hz	40-200W	T	100-0%	100-0%
SR SANJOON	SRD-1000	230V / 50Hz	1000W	L	100-0%	100-0%
JIN HEUNG ELECTRIC	JH-922473	230V / 50Hz	1000W	L	100-0%	100-0%
Dynalite	DMC810GL	230V / 50Hz	4*2200W	L	100-96%	100-958%
OSRAM	Hti DALI 315/230-240 DIM	230V / 50Hz	35-105W	Hti	95-0%	95-0%



# Product Information

## LED PERFORMANCE PAR 16 80 927/ 930/ 940/ 965


Compatibility performance with dimmer <sup>6</sup> (Single lamp & Four Lamps)

Legend APM dimmer

L/Leading edge dimmer

T/Trailing edge dimmer

U/Universal Dimmer

Legend					PERFORMANCE PAR16 80 10° 36° 60°	
	Very good dimmability with indicated number of lamps (dimming range greater than 75%)					
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	Undesired dimmability					
Not tested					EAN / Basic Code	
					4058075588059 / AC32241 4058075588073 / AC32242 4058075588097 / AC32243 4058075588110 / AC32244 4058075588134 / AC32245 4058075588172 / AC32246 4058075588233 / AC32247 4058075588271/ AC32248 4058075601697 / AC33036 4058075601710 / AC33037 4058075601710 / AC33038	
Dimmer					Number of Lamps	Dimming range
Brand	Model	Voltage range	Power	Type		
Shuttle	SDIM-T-LED 500W	230V / 50Hz	500W	T	100-0%	100-0%
Shuttle	SDIMR-T-LED 500W	230V / 50Hz	500W	T	100-0%	100-0%
Shuttle	SDIM-T-LED 125W	230V / 50Hz	125W	T	100-0%	100-0%
Shuttle	SDIM-T-LED 250W	230V / 50Hz	250W	T	100-0%	100-0%
Shuttle	SDIMR-T-LED 250W	230V / 50Hz	250W	T	100-0%	100-0%
Shuttle	MINI-LED-ROTARY 225W	230V / 50Hz	225W	T	100-0%	100-0%
Schneider	E8331RD250_WG_G11	230V / 50Hz	50-250W		100-0%	100-0%
Shuttle	SDIM-T-LED 800W	230V / 50Hz	800W	T	100-0%	100-0%
Shuttle	SDIMR-T-LED 800W	230V / 50Hz	800W	T	100-0%	100-0%

<sup>6</sup> Typical values.

The compatibility test is based upon testing conducted by the manufacturer in a lab simulated environment, and the results can vary in certain field applications due to a number of factors. The test results were achieved by using the above mentioned LED-lamp types. The transformer with any of undesired compatibility shown in above report is not recommended. LEDVANCE does not take over any responsibility, warranty or liability that this results can also be achieved by using the devices under other conditions or when using successor models of the tested devices or different models of the same manufacturer, or when using other LED lamp types.

LED lamps contain several electronic components. Under unfavorable conditions these can lead to acoustic noise. In case of resonance even low noise can cause audible effect. Possible factors influencing this are the installation, the design of the lamp holder and the luminaries (acoustic resonance effect) as well as the dimmer or the transformer (harmonics or electronic resonance).

Lamp will work but LEDVANCE can not guarantee electromagnetic compatibility will be according norms

Subject to change without notice.

Always make sure to use the most recent release.