



## SPECIFICATION

<b>Product Name:</b>	<u>PAR30 LED Spotlight</u>
<b>Product Model:</b>	<u>L4D-PAR30-32</u>
<b>Description:</b>	<u>PAR30 Spotlight / 32W</u> .....
<b>Version Date</b>	<u>2018. Jan.</u>

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## 32W LED PAR30 Spotlight



32W-PAR30 spotlight is a compact, anti-glare LED light source, can radiate emphasis light beam like halogen lamp or incandescent lamp dose, it is a ideal lighting solution for Exhibition, Jewelry, Clothing, Furniture, Food and Hotel etc, particularly good at accent lighting and public lighting demands.

Using 32W PAR30 will save considerable energy and have much longer life span than traditional lights, beside, reduce maintenance costs.

As a replace lamp, 32W PAR30 is compatible with most traditional lamps and lantern t.

### 1. Product Features

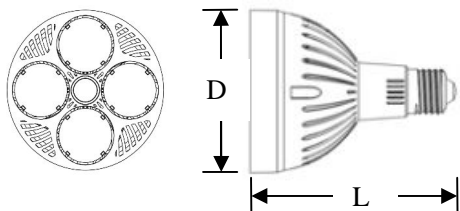
- >> Low maintenance cost
- >> 50%~80% Energy saving 50%~80% compare to Halogen and incandescent lamps
- >> Delicate shape design
- >> Eco-friendly, no UV and IR, no mercury or other deleterious material, environmental!
- >> Adopt active cooling technology, extend lifespan and increase the watt density
- >> Variety of beam angle several beam angle 25/45 degree for option
- >> Use original OSRAM LED, with low light failure, high CRI and high-quality illumination.
- UL Listed



### 2. Applications

- >> Clothing shop, jewelry store, cosmetic store.
- >> Furniture store, hotel, coffee shop, etc.
- >> Other applications with traditional ceiling spotlights.
- >> Other accent and basic lighting applications.

### 3. Product Parameters



Model No.	Diameter	Height
L4D-PAR30-32	3.75"	4.75"

Model	Wattage	Color	Beam angle	Lumen	CRI
L4D-PAR30-32	32W	6000K	25°/45°	4200lm	90
L4D-PAR30-32	32W	4000K	25°/45°	4200lm	90
L4D-PAR30-32	32W	3000K	25°/45°	4200lm	90

#### Data sheet

<b>Model</b>	L4D-PAR30-32
<b>Input Voltage</b>	AC100V-277V 50/60Hz
<b>Input Current</b>	0.16A
<b>Nominal Power</b>	32W
<b>Power Factor</b>	>0.9
<b>Harmonic Wave</b>	<20%
<b>Light Source Qty</b>	OSRAM LED x24pcs
<b>Lumen Maintenance</b>	>L70@60000hrs
<b>LED Life Span</b>	>60000H
<b>Dimmable</b>	No
<b>IP Rate</b>	IP20
<b>Working Condition</b>	-20~+40°C / 0-90% (RH)
<b>Storage Condition</b>	-20~+75°C / 0-90% (RH)
<b>Lamp Base</b>	E27/E26
<b>Net Weight</b>	0.27Kg

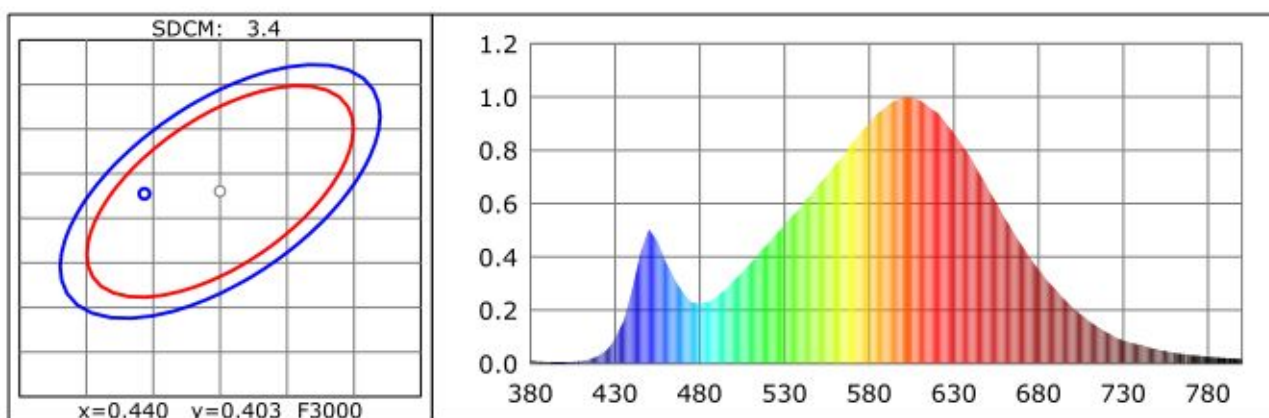
## 4. Light Characteristics

### 1. Spectral Analysis system Test Report

#### CIE Colorimetric Parameters

Chromaticity coordinates:  $x=0.4343$   $y=0.4027$   $u(u')=0.2495$   $v=0.3470$   $v'=0.5205$   
 CCT:  $T_c=3033K$  ( $duv=-0.00018$ ) Color Ratio:  $R=0.242$   $G=0.734$   $B=0.024$   
 Peak Wavelength: 605nm Half Bandwidth: 137.6nm  
 Dominant Wavelength: 583.7nm Color Purity: 0.513  
 Rendering Index:  $R_a=82.3$   

R1 =80	R2 =90	R3 =97	R4 =79	R5 =80	R6 =86	R7 =84	R8 =62
R9 =13	R10=76	R11=76	R12=68	R13=82	R14=98	R15=75	



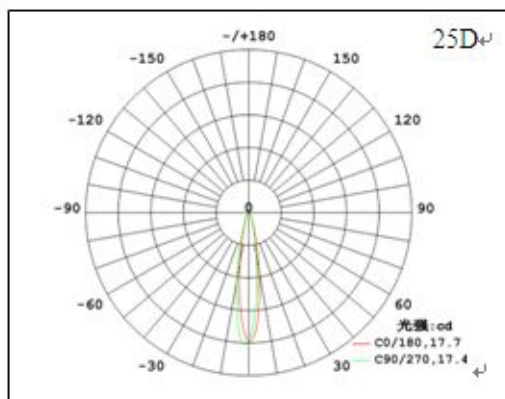
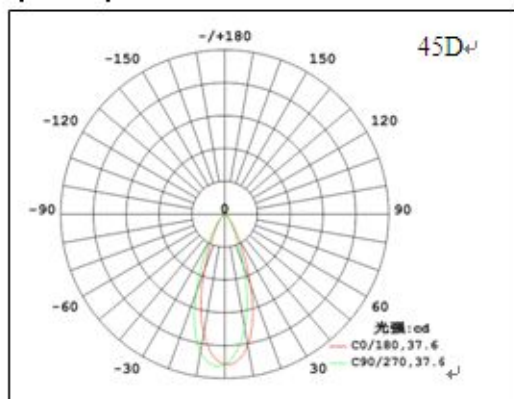
#### Photometric Parameters

Luminous Flux: 2411.1 lm Efficiency: 66.98 lm/W  
 Radiant Power: 7.580 W

#### Electric Parameters

Voltage:  $U=199.1V$  Current:  $I=0.184A$  Power:  $P=36.00W$  Power Factor:  $PF=0.975$

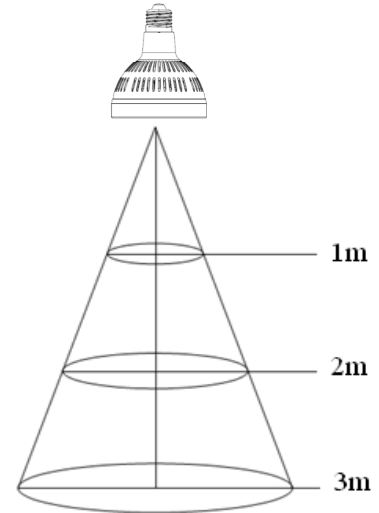
### 2. Light Distribution



**3. Illuminance Diagram**

Beam Distance	25°	
	Central Lux	Spot Size
1m	15000 lx	60cm
2m	3700 lx	100cm
3m	1700 lx	150cm

Beam Distance	45°	
	Central Lux	Spot Size
1m	10000 lx	90cm
2m	2900 lx	130cm
3m	1300 lx	180cm



**5. Life span test for LED and micro fan**

**1. OSRAM LED life span test**

After 10,000 hrs long-term working under 85°C (Al PCB), lumen dropt 8%.

Device: OSOLON SSL (LUW CQ7P)

Test Condition II: T<sub>s</sub> = 85°C, I<sub>F</sub> = 700mA

Lumen Maintenance (I<sub>F</sub> = 350mA) – Normalized to 24 h

	0	24	48	168	500	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000
1	100,00	100,00	99,36	98,35	98,35	97,44	95,61	94,79	94,24	92,69	92,32	91,38	91,07	90,54	90,50
2	100,09	100,00	99,18	98,27	98,27	97,26	95,89	95,16	94,43	92,69	92,51	91,57	91,26	90,73	90,69
3	100,00	100,00	99,55	98,47	98,12	97,38	96,02	95,20	94,48	92,76	92,75	91,81	91,50	90,96	90,92
4	99,91	100,00	99,72	98,26	98,26	98,34	97,14	96,41	95,85	94,38	94,47	93,51	93,20	92,65	92,61
5	98,97	100,00	99,44	98,12	98,11	97,29	95,98	95,23	94,39	93,14	93,18	92,23	91,92	91,39	91,34
6	100,00	100,00	99,73	98,78	98,22	97,90	96,44	95,06	94,88	93,69	93,61	92,66	92,35	91,81	91,77
7	99,82	100,00	99,54	98,70	98,50	97,63	96,45	95,72	94,90	93,44	93,45	92,50	92,19	91,65	91,61
8	99,91	100,00	99,63	98,77	98,92	97,80	96,61	95,79	95,06	93,60	93,70	92,75	92,44	91,90	91,85
9	99,81	100,00	99,81	99,05	99,39	99,07	97,95	97,39	96,64	95,43	95,45	94,48	94,16	93,61	93,57
10	100,09	100,00	99,64	98,53	98,33	97,46	96,20	95,38	94,47	93,12	93,03	92,09	91,78	91,24	91,20
11	99,82	100,00	99,72	98,26	98,44	97,51	96,31	95,30	95,02	93,91	94,10	93,14	92,83	92,29	92,25
12	100,00	100,00	99,72	99,17	99,54	98,24	96,94	95,92	95,45	94,34	94,53	93,57	93,25	92,71	92,67
13	99,63	100,00	99,82	99,17	100,10	98,62	97,61	96,78	96,32	95,13	95,22	94,25	93,94	93,39	93,34
14	99,73	100,00	99,73	99,08	99,26	98,08	96,62	95,89	95,16	94,06	94,25	93,29	92,98	92,43	92,39
15	100,00	100,00	99,72	99,15	99,42	98,42	97,12	96,47	95,72	94,60	94,52	93,56	93,25	92,70	92,66
16	99,91	100,00	99,73	98,27	97,82	97,26	95,97	95,15	94,33	93,14	92,86	91,92	91,61	91,07	91,03
17	99,81	100,00	99,81	99,26	99,35	98,41	97,20	96,36	95,71	94,50	94,49	93,53	93,22	92,67	92,63
18	99,73	100,00	99,73	98,82	99,11	98,26	96,88	96,24	95,51	94,32	94,31	93,35	93,04	92,49	92,45
19	99,81	100,00	99,44	98,79	98,61	97,86	96,74	95,90	95,07	93,95	93,76	92,81	92,50	91,95	91,91
20	99,72	100,00	99,81	98,88	99,07	98,50	97,38	96,64	95,98	94,86	94,86	93,90	93,58	93,03	92,99
21	99,72	100,00	99,82	98,06	98,60	97,88	96,78	96,04	95,40	94,39	94,39	93,43	93,12	92,57	92,53
22	99,91	100,00	99,64	98,47	98,30	97,55	96,10	95,29	94,47	93,20	92,74	91,80	91,49	90,95	90,91
23	100,09	100,00	99,72	98,80	98,62	97,51	96,22	95,40	94,66	93,37	93,28	92,33	92,02	91,48	91,44
24	99,72	100,00	99,91	99,51	99,85	99,08	97,97	97,33	96,69	95,67	95,68	94,71	94,39	93,84	93,80
25	99,91	100,00	99,72	98,84	98,71	97,50	96,21	95,47	94,55	93,44	93,45	92,50	92,19	91,65	91,61
median	99,91	100,00	99,72	98,80	98,92	97,86	96,61	95,79	95,06	93,91	93,76	92,81	92,50	91,95	91,91
average	99,84	100,00	99,67	98,79	98,89	97,93	96,65	95,85	95,18	93,91	93,88	92,92	92,61	92,07	92,03
std. dev.	0,22	0,00	0,17	0,40	0,59	0,55	0,64	0,71	0,73	0,84	0,93	0,92	0,91	0,91	0,91
min.	98,97	100,00	99,18	98,06	97,82	97,26	95,61	94,79	94,24	92,69	92,32	91,38	91,07	90,54	90,50
max.	100,09	100,00	99,91	99,51	100,10	99,08	97,97	97,39	96,69	95,67	95,68	94,71	94,39	93,84	93,80

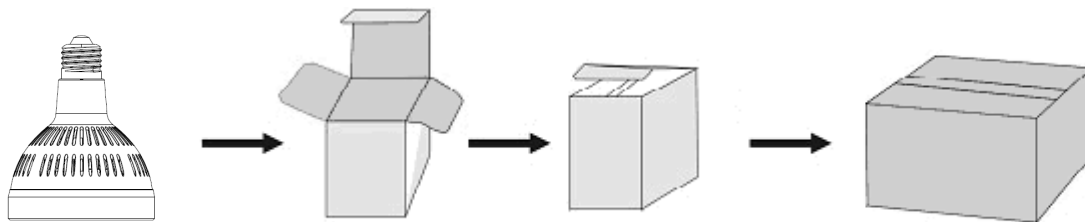
## 2. Micro fan life span test

The life span for Fan is 27943 hours under condition of working temperature 80°.

Model NO.	HA60151V4-000C-999		Test Condition			Test Result		
Spec.	Speed	2,500 RPM	Input voltage	12 VDC		Failed Q'ty		5
	Current	0.052 AMP	Temperature	70°C		Life Expectancy	L10 (hours)	15,223
Sample tested	50 Pcs		Orientation	Vertical		MTTF (hours)	27,943	
Test hours/Each	15,120 Hours		Running	In Free Air				
Failure Definition			Test Result , (Including Time To Failure , Datum , Statistics ..... etc)					
1. No function.			Accu.F/Q	TTF(Hrs)	UUT	Accu.F/R	Finding	
2. RPM under 15% of original			1	8,064	49	2.00%	Speed under 15%	
3. Current over 15% of original			2	10,416	48	4.00%	Speed under 15%	
4. Noise over 3dB(A) of original			3	12,264	47	6.00%	Speed under 15%	
			4	13,608	46	8.00%	Speed under 15%	
			5	15,120	45	10.00%	Speed under 15%	
<small>※ The Life Expectancy of this fan has not been evaluated for use in combination with any end application. Therefore, the Life Expectancy Test Report( L10/ MTTF Report) that relates to this fan is only for reference.</small>								
Life calculation according to the equation for Weibull distribution to obtain relevant data			Accelerate Factor ; AF = 1.5 (Testing Temp. - Operating Temp. x10)					
Shape parameter;β	3.1318		Temp. Range	30°C	40°C	50°C	60°C	70°C
Characteristic parameter; θ	31,231 hrs		AF (Multiple)	5.06	3.38	2.25	1.50	1.00
MTTF = $\theta x \Gamma(1 + \frac{1}{\beta})$	27,943 hrs		MTTF (hours)	141,461	94,308	62,872	41,915	27,943
L10 = $\theta x (0.10536)^{\frac{1}{\beta}}$	15,223 hrs		L10 (hours)	77,066	51,378	34,252	22,835	15,223
Approved by:	<i>Angela</i>		Checked by:	<i>Jony-chen</i>		Tested by: <i>Dobbin</i>		

## 6. Packaging:

### 1. Package Drawing

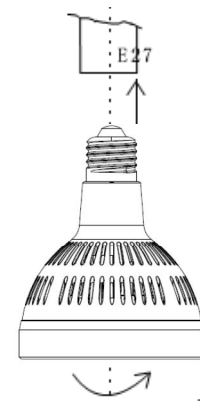


### 2. Packing Specification

Net weight	Unit package size	Gross weight	CTN size	Qty/CTN	Weight/CTN
0.306Kg	100*100*135mm	0.375Kg	525*420*290mm	40pcs	15.5Kg

## 7. Installation:

1. Install this lamp into lanterns which is fit for E26/E27
2. Once replacing CDM-R /MHL, please remove the ballast.



## 8. Attention

1. Non-waterproof, only for indoor use.
2. Do not disassemble this lamp personally, in case of any damage.
3. LED lamp can not work under dead air environment, make sure air is flowing.
4. Build-in cooling fan, do not use in dusty application to ensure long lifetime.
5. Power off before replace lamps.
6. Do not use LED lamp under inflammable, explosive or corrosive environment, avoiding high temperature.
7. Make the shell of lamp cool before replacing it to avoid scalding.
8. Make sure input voltage is suitable for LED lamp, or irreparable damage can be made.
9. Problematic lamp needs professional maintenance.