



PAR Z100 5K



UPC: PAR830 SKU: 818651020939

The Par Z100 5K is a modern LED twist to the traditional halogen Par Can. It is powered by a potent 100W cool white C.O.B. (Chip On Board) LED with a color temperature of 5700K. Its output is comparable to a 1000W halogen sealed beam Par. It is equipped with 5 different beam angle options that may be changed by hand. powerCON In/Out allows for the fixture to be daisy chained, while 5-pin DMX control offers a variable strobe rate and 5 different dimming curve options.

The Par Z100 5K allows lighting and stage designers the look of the traditional stage par with the technological conveniences of modern day lighting. The advantages include low power draw, fixture and performers won't get hot on stage, DMX control of dimming and strobe. There are no dimmer controllers need. The fixture comes with a gel frame in which diffusion filters may be inserted to further change the beam angle.

Technical Information:

Optical:

- 100 Watt COB Cool White LED (5700K)
- Life expectancy: rated at 50,000 hrs.
- LUX: 7874 (9°); 4900 (15°); 2467 (20°); 1397 (25°); 896 (30°)
- CRI: 90
- Beam angle: 9, 15, 20, 25 Or 30-degree (manual adjustment)
- PWM frequency: 1200Hz

Connection:

- DMX: 5-pin DMX In/Out
- powerCON In/Out to power battery or daisy chain fixture

Control:

- Control protocol: DMX-512
- 2 DMX Channels

Features:

- 4-button DMX menu display on rear panel
- Adjustable latch to manually change beam angle
- Includes gel frame for diffusion filters (Diffusion filter sold separately)
- Strobe effect (25Hz max)
- Flicker Free Operation
- Electronic Dimming: 0 - 100% with 5 dimming curves
- Run all night - No duty cycle

Electrical:

- Power Draw Total (All LED's @ Full On): 115W, 0.964A @ 120V/60Hz, 112W, 0.5A @ 220V/50Hz
- Multi-voltage operation: AC 100-240V, 50/60Hz
- Daisy chain: 15 fixtures (120V); 25 fixtures (230V)

Dimensions / Weight:

- Dimensions (LxWxH): 19.5" x 10.75" x 10.75" / 491 x 272 x 273mm
- Weight: 7.5 lbs. / 3.4kg.

Specifications subject to change



Beam Angle Manual Adjustment



Beam Angle





PHOTOMETRICS

Light efficiency:

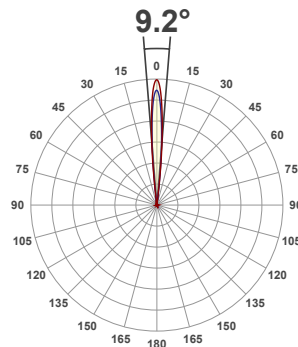
44 Lumen/Watt

Light quality:

CRI: 88.5

Color temperature:

5788 K



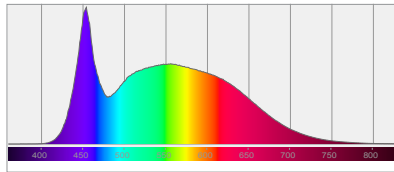
Product name:
Par Z100 5K

Test:
9deg

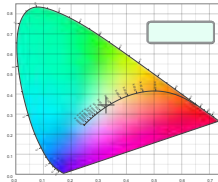
Date:
10/2/2017

Output: 4696 lm Power consumption: 106 W Peak: 207533 cd

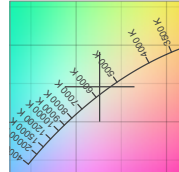
Spectral distribution



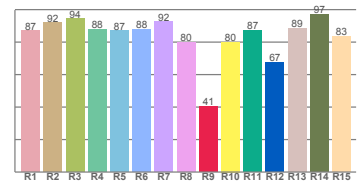
Color coordinates



Zoom color point

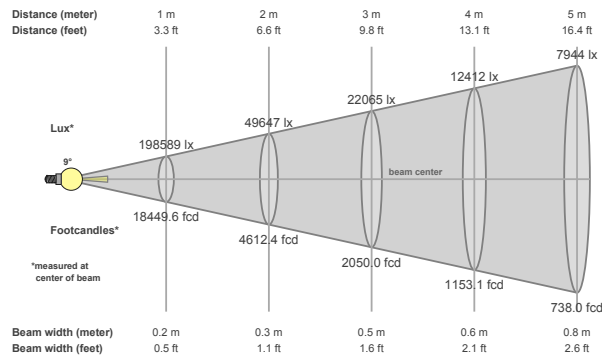


CRI R values



Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
5788 K	88.5	40.6	86.9	96.4	87.5	0.326	0.346	0.201	0.319	0.0020

Beam details



Beam angels

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%
9.2°	13.3°	14.8°

Beam intensities

Peak intensity	Int. ratio in 120° cone	Int. ratio in 90° cone
207533 cd	97.3%	96.2%

Power

Power	Power factor	Power frequency
106 W	0.99	60.1 Hz

Nominal voltage	Voltage	Current
230 V	117 V	0.910 A

Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
198589lx	49647lx	22065lx	12412lx	7944lx	5516lx	4053lx	3103lx	2452lx	1986lx	1641lx	1379lx	1175lx	1013lx	883lx	776lx	687lx	613lx	550lx	496lx
18449.6 fcd	4612.4 fcd	2050.0 fcd	1153.1 fcd	738.0 fcd	512.5 fcd	376.5 fcd	288.3 fcd	227.8 fcd	184.5 fcd	152.5 fcd	128.1 fcd	109.2 fcd	94.1 fcd	82 fcd	72.1 fcd	63.8 fcd	56.9 fcd	51.1 fcd	46.1 fcd



PHOTOMETRICS

Light efficiency:

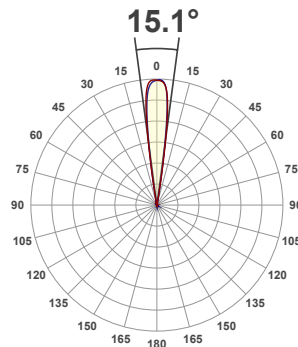
51 Lumen/Watt

Light quality:

CRI: 88.5

Color temperature:

5737 K



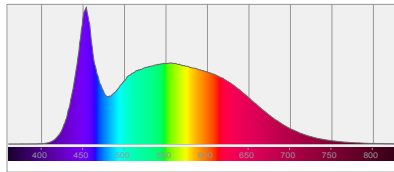
Product name:
Par Z100 5K

Test:
15deg

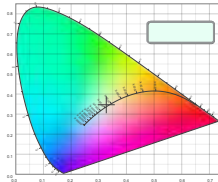
Date:
10/2/2017

Output: 5425 lm Power consumption: 106 W Peak: 91347 cd

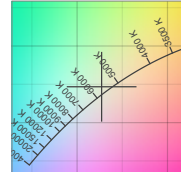
Spectral distribution



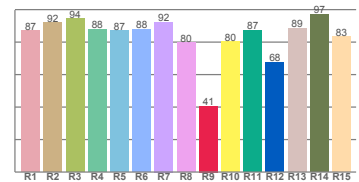
Color coordinates



Zoom color point

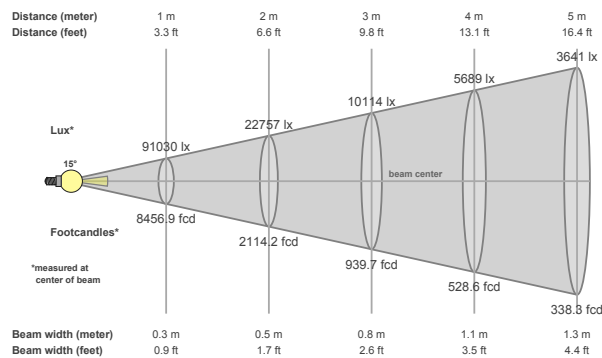


CRI R values



Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
5737 K	88.5	40.7	87.0	96.4	87.5	0.327	0.347	0.201	0.320	0.0020

Beam details



Beam angles

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%
15.1°	19.5°	21.9°

Beam intensities

Peak intensity	Int. ratio in 120° cone	Int. ratio in 90° cone
91347 cd	98.2%	97.4%

Power

Power	Power factor	Power frequency
106 W	0.99	60 Hz

Nominal voltage	Voltage	Current
230 V	117 V	0.907 A

Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
91030lx	22757lx	10114lx	5689lx	3641lx	2529lx	1858lx	1422lx	1124lx	910lx	752lx	632lx	539lx	464lx	405lx	356lx	315lx	281lx	252lx	228lx
8456.9fcd	2114.2fcd	939.7fcd	528.6fcd	338.3fcd	234.9fcd	172.6fcd	132.1fcd	104.4fcd	84.6fcd	69.9fcd	58.7fcd	50fcd	43.1fcd	37.6fcd	33fcd	29.3fcd	26.1fcd	23.4fcd	21.1fcd



PHOTOMETRICS

Light efficiency:

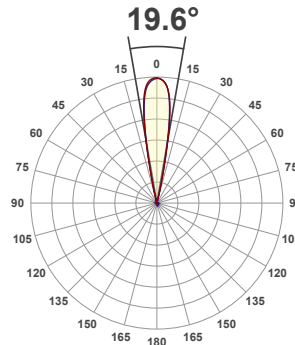
53 Lumen/Watt

Light quality:

CRI: 88.5

Color temperature:

5731 K



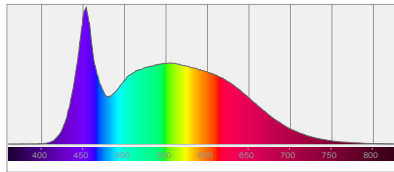
Product name:
Par Z100 5K

Test:
20deg

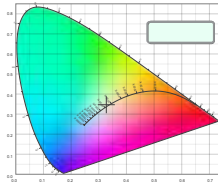
Date:
10/2/2017

Output: 5593 lm Power consumption: 106 W Peak: 56775 cd

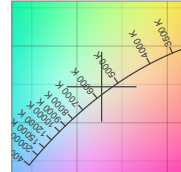
Spectral distribution



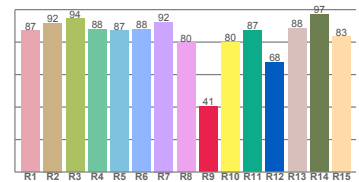
Color coordinates



Zoom color point

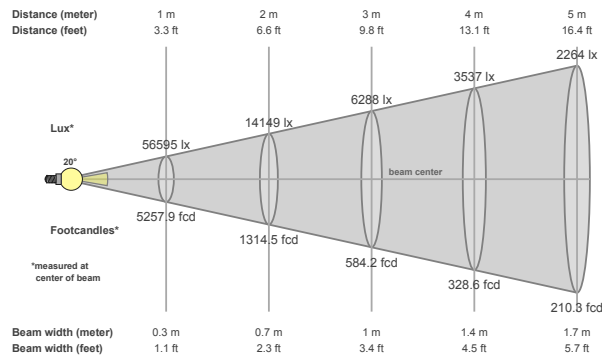


CRI R values



Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
5731 K	88.5	40.5	87.0	96.4	87.5	0.327	0.347	0.201	0.320	0.0020

Beam details



Beam angels

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%
19.6°	25.8°	28.8°

Beam intensities

Peak intensity	Int. ratio in 120° cone	Int. ratio in 90° cone
56775 cd	98.1%	97.5%

Power

Power	Power factor	Power frequency
106 W	0.99	60 Hz

Nominal voltage	Voltage	Current
230 V	117 V	0.905 A

Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
56595lx	14149lx	6288lx	3537lx	2264lx	1572lx	1155lx	884lx	699lx	566lx	468lx	393lx	335lx	289lx	252lx	221lx	196lx	175lx	157lx	141lx
5257.9fcd	1314.5fcd	584.2fcd	328.6fcd	210.3fcd	146.1fcd	107.3fcd	82.2fcd	64.9fcd	52.6fcd	43.5fcd	36.5fcd	31.1fcd	26.8fcd	23.4fcd	20.5fcd	18.2fcd	16.2fcd	14.6fcd	13.1fcd



PHOTOMETRICS

Light efficiency:

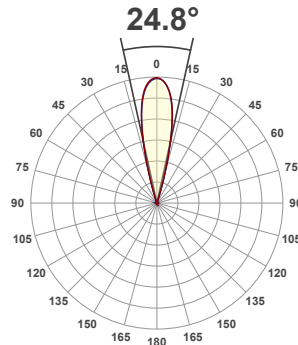
53 Lumen/Watt

Light quality:

CRI: 88.6

Color temperature:

5731 K



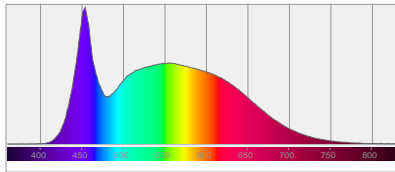
Product name:
Par Z100 5K

Test:
25deg

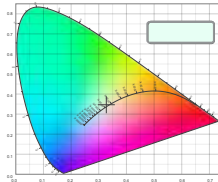
Date:
10/2/2017

Output: 5597 lm Power consumption: 106 W Peak: 35142 cd

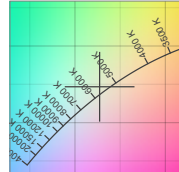
Spectral distribution



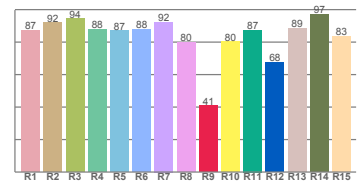
Color coordinates



Zoom color point

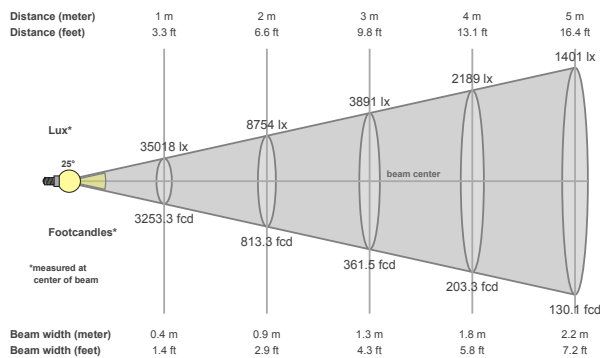


CRI R values



Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
5731 K	88.6	40.7	87.0	96.4	87.5	0.327	0.347	0.201	0.320	0.0020

Beam details



Beam angles

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%
24.8°	34°	37.9°

Beam intensities

Peak intensity	Int. ratio in 120° cone	Int. ratio in 90° cone
35142 cd	97.8%	97.3%

Power

Power	Power factor	Power frequency
106 W	0.99	59.9 Hz

Nominal voltage	Voltage	Current
230 V	116 V	0.916 A

Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
35018lx	8754lx	3891lx	2189lx	1401lx	973lx	715lx	547lx	432lx	350lx	289lx	243lx	207lx	179lx	156lx	137lx	121lx	108lx	97lx	88lx
3253.3fcd	813.3fcd	361.5fcd	203.3fcd	130.1fcd	90.4fcd	66.4fcd	50.8fcd	40.2fcd	32.5fcd	26.9fcd	22.6fcd	19.3fcd	16.6fcd	14.5fcd	12.7fcd	11.3fcd	10fcd	9fcd	8.1fcd



PHOTOMETRICS

Light efficiency:

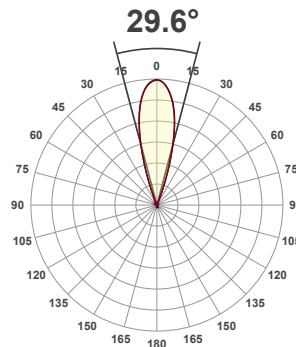
52 Lumen/Watt

Light quality:

CRI: 88.5

Color temperature:

5730 K



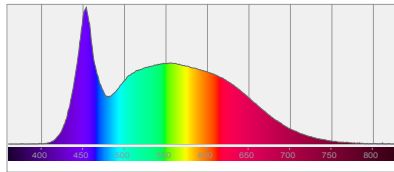
Product name:
Par Z100 5K

Test:
30deg

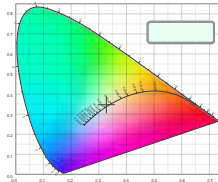
Date:
10/2/2017

Output: 5513 lm Power consumption: 106 W Peak: 24186 cd

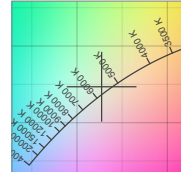
Spectral distribution



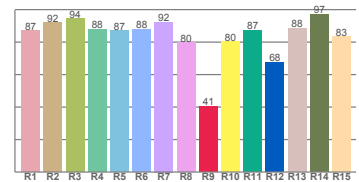
Color coordinates



Zoom color point

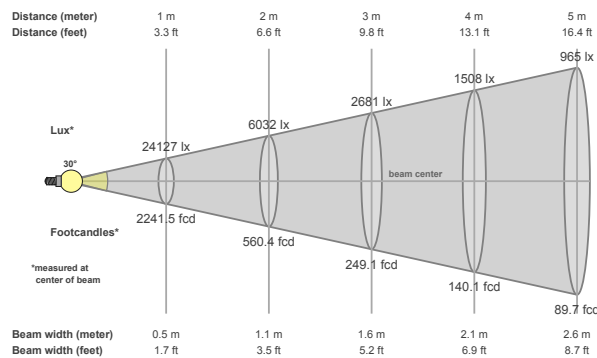


CRI R values



Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
5730 K	88.5	40.5	87.0	96.4	87.5	0.327	0.347	0.201	0.320	0.0020

Beam details



Beam angles

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%
29.6°	41.7°	46.1°

Beam intensities

Peak intensity	Int. ratio in 120° cone	Int. ratio in 90° cone
24186 cd	97.8%	97.3%

Power

Power	Power factor	Power frequency
106 W	0.99	59.9 Hz

Nominal voltage	Voltage	Current
230 V	116 V	0.914 A

Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
24127lx	6032lx	2681lx	1508lx	965lx	670lx	492lx	377lx	298lx	241lx	199lx	168lx	143lx	123lx	107lx	94lx	83lx	74lx	67lx	60lx
2241.5fcd	560.4fcd	249.1fcd	140.1fcd	89.7fcd	62.3fcd	45.7fcd	35fcd	27.7fcd	22.4fcd	18.5fcd	15.6fcd	13.3fcd	11.4fcd	10fcd	8.8fcd	7.8fcd	6.9fcd	6.2fcd	5.6fcd