



**APEX OPTO
CORP**

HIGH POWER LIGHT AOL-EL165XXX 5W MR16 Series



5W LED MR16 series can provide different power-operation and different colors. They serve as optical engine appropriately and applied to lighting and projector in the form of MR16 or others.

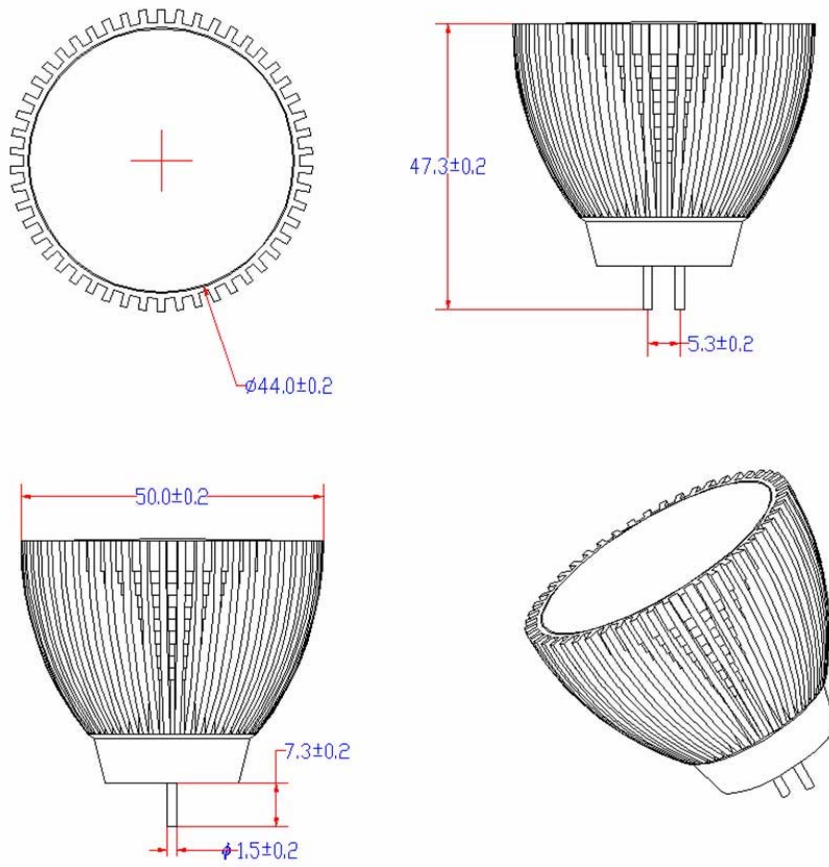
Features

- Compatible with traditional halogen MR16
- High power factor 95%
- Excellent thermal performance
- NO UV

Typical Applications

- Entertainment lighting
- Architectural lighting
- Landscape lighting
- Bollards/Security/Garden lighting
- Interior Commercial lighting

Package Outlines:



Unit:mm

Material:

Heat sink: Al

Bottom base: PC, flammability V2 level

Pin type:GU 5.3

Absolute Maximum Ratings

Parameter	Symbol	Rating	Units
Operating voltage (AC/DC)	V	15	V
LED junction Temperature	T _j	125	°C
Operating Temperature	T _{opr}	-30 ~ +40	°C
Storage Temperature	T _{stg}	-40 ~ +60	°C
Input Voltage root-mean-square	V _{rms}	9~13	V

Specification

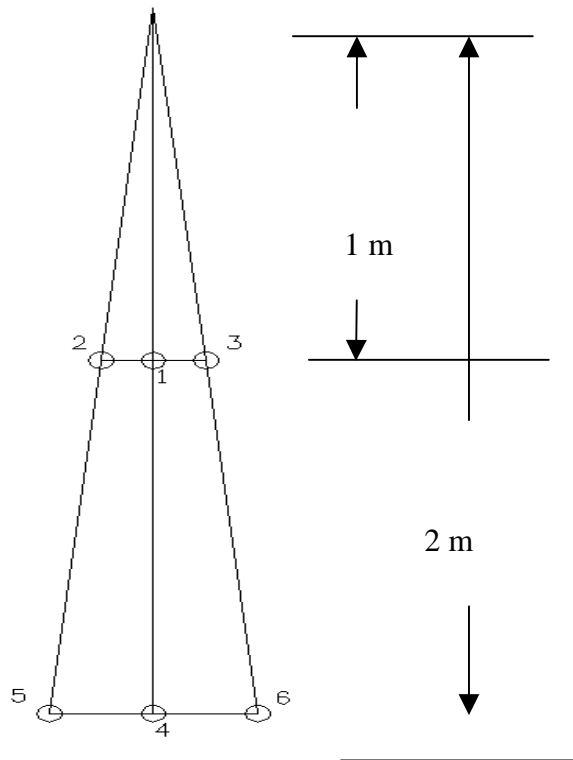
Power consumption	Part Name	Color	Beam Angle	Lux@ 1m
5W	AOL-EL1651W1	White	10°	1800
	AOL-EL1651X1	Warm White	10°	900
	AOL-EL1651R1	Red	10°	1100
	AOL-EL1651A1	Amber	10°	600
	AOL-EL1651T1	True Green	10°	1100
	AOL-EL1651B1	Blue	10°	1100
	Power consumption	Part Name	Color	Beam Angle
5W	AOL-EL1653W1	White	60°	80
	AOL-EL1653X1	Warm White	60°	50
	AOL-EL1653R1	Red	60°	50
	AOL-EL1653A1	Amber	60°	25
	AOL-EL1653T1	True Green	60°	50
	AOL-EL1653A1	Blue	60°	50

Photometrics

Color	Dominant Wavelength (λ_d)nm/CCT	Half Width (nm)
White	6400~7200 K	
Warm White	2700~3100 K	
Red	620~630	25
Amber	585~595	25
True Green	520~530	35
Blue	460~470	25

Performance

(5W white)



distance \ NO.	1	2	3
	1 m	1900 lux	760 lux
2 m	490 lux	190 lux	190 lux

Bin Group

White: W1: 7200K ~6800K

W2: 6400K~6800K

Warm White: X1: 3100K~2900K

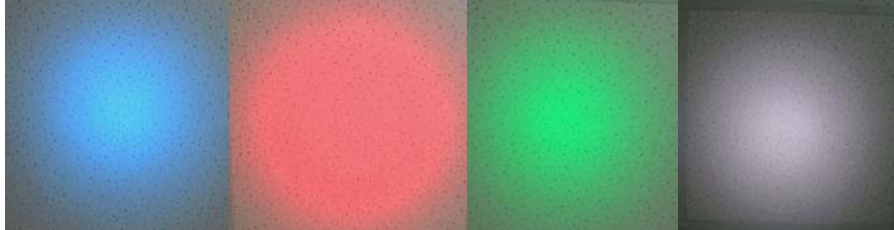
X2: 2700K~2900K

Light Pattern

The ambient light is around 200 lux

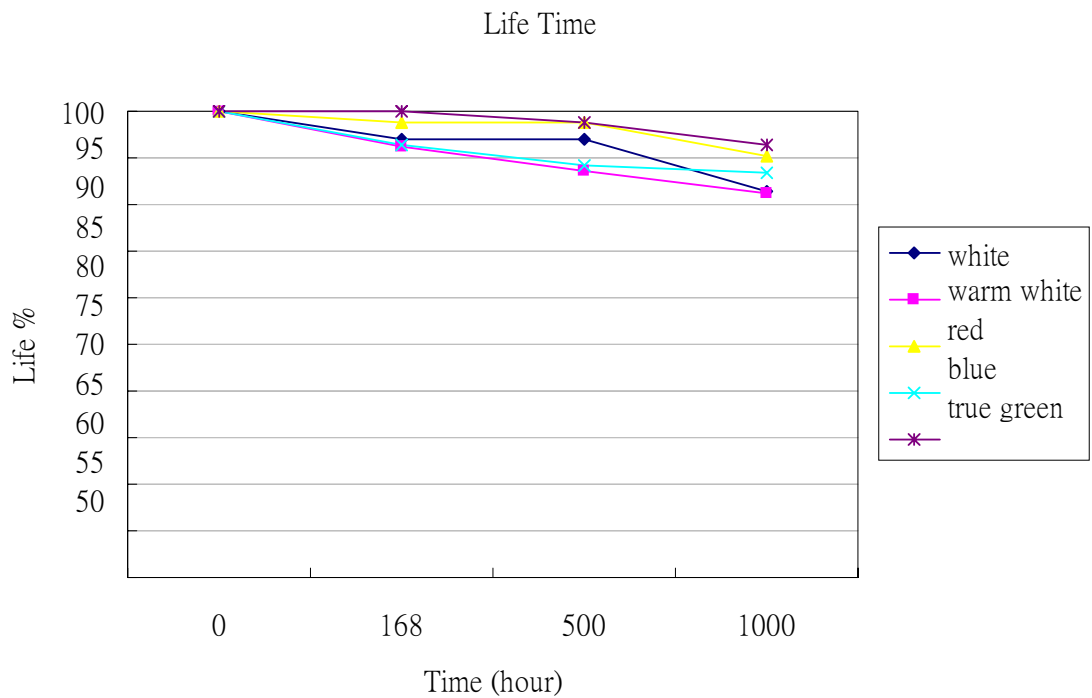
The photo distance from MR16 is around 2 meters

The light area is around 60x60 cm²



Reliability

Color	Initial lux	168 hr. lux	500 hr. lux	1000 hr. lux	Decay %
White	1750	1700	1700	1600	-8.57%
Warm White	800	770	750	730	-8.75%
Red	840	830	830	800	-4.76%
Blue	700	675	660	655	-6.43%
True Green	860	860	850	830	-3.49%



Electronic Transformer Recommendation

Company: ANCHORN ENTERPRISE. , LTD

Website: <http://www.globalmarket.com/hsinchang>

Model No.

1. AET-H050-B

Input: AC 120V 50/60Hz

Output: AC 12V 50W/MAX



2. AET-3202R1

Input: AC 230V 50Hz

Output: AC 11.5V 60W/MAX



3. AET-D0501

Input: AC 120V 50/60Hz

Output: AC 11.5V 50W/MAX

