

# C Series Petrol Filling Station Lights



## Features.:

- High-quality die-casting aluminum #ADC12 housing, with integrated shell, high hardness, not easy to break, good heat dissipation, greatly improving service life.
- The lamp body is completely sealed and suitable work in thunder and rain.
- High-quality high-brightness LED light source, high luminous efficiency, high color rendering, no radiation pollution, long service life.
- No EMI, low harmonic distortion (THD), through the CE, ROSS, FCC, SAA, RCM certification requirements.
- Working under the ambient temperature  $-30^{\circ}$  to  $55^{\circ}$
- Ease of maintenance. Tool-less opening of gear compartment & gear tray replacement

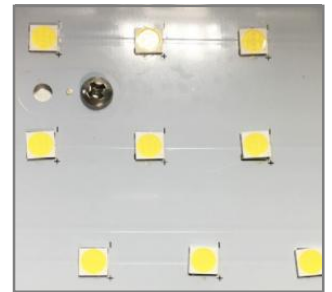
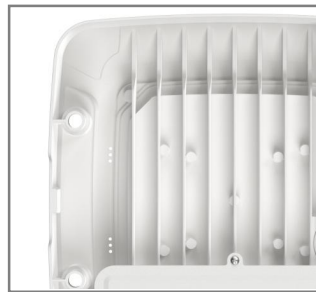
## **New Cup reflector design:**

1. The reflector cup has a better UGR anti-glare effect because the light source is deeper and the cut-off angle is larger.
2. The reflector cup has a higher effective luminous flux and the light utilization rate of the lamp is higher.
3. There is no color deviation caused by lens refraction, so the color temperature of the light spot will be more consistent, the color rendering index will be higher, and the light spot will be clearer.

## Overview



- LED Source: Lumileds 3030/5050 LED
- Input Vol: AC100-277V,50/60hz
- CRI:  $\geq 70/80Ra$
- UGR:  $< 19$
- IP Rate: IP66
- Body: Surface anti-corrosive treatment



### PMMA Lens:

New optical lens, high light efficiency, UGR  $< 19$ .

### lamp body:

Thickened aluminium radiator for good heat dissipation.

### Installation:

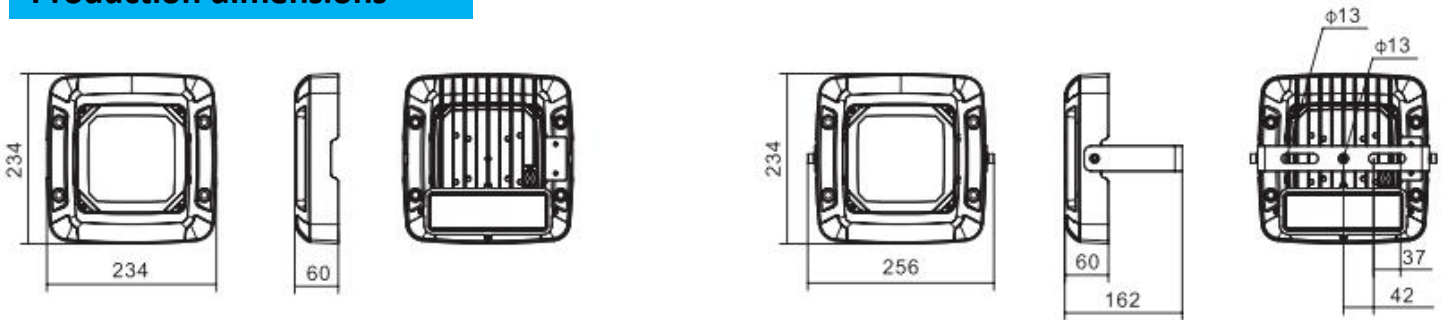
Options for open or concealed installation.

### Lamp Bead Chip:

High quality SMD chips, high luminous efficacy, light decay.

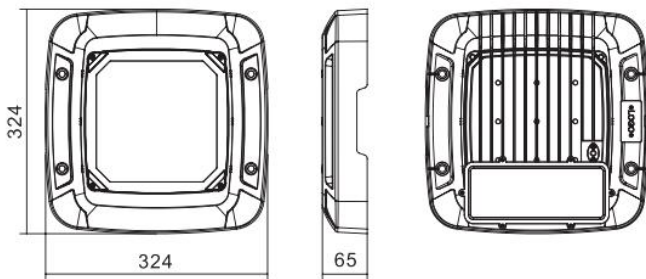
Model	Housing Dimensions(mm)	Housing Net weight	Luminous efficiency
MS-YZD50W-C01	234*234*65	1.6KGS	130lm/150lm
MS-YZD60W-C01	234*234*65	1.6KGS	130lm/150lm
MS-YZD80W-C02	324*324*65	2.5KGS	130lm/150lm
MS-YZD100W-C02	324*324*65	2.5KGS	130lm/150lm

## Production dimensions

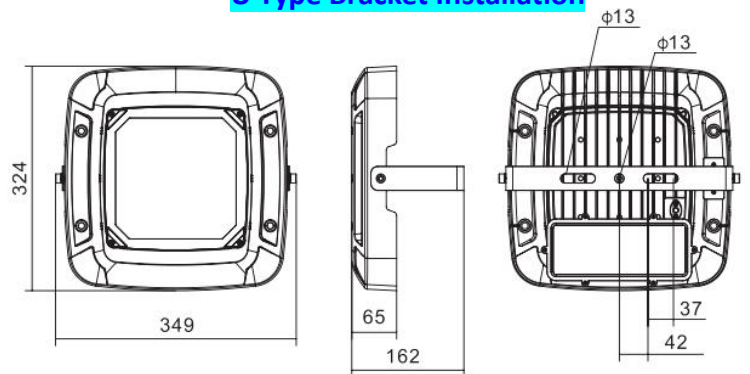


## 50W/60W

### Surface Mounted Installation



### U Type Bracket Installation



## 80W/100W

### Surface Mounted Installation

### U Type Bracket Installation

## Products Characteristics

Model:	MS-YZD50W-C01	MS-YZD60W-C01	MS-YZD80W-C02	MS-YZD100W-C02
Wattage:	50W	60W	80W	100W
Led Source:	Lumileds-3030/5050LED	Lumileds-3030/5050LED	Lumileds-3030/5050LED	Lumileds-3030/5050LED
Led Qty:	3030-88PCS/5050-16PCS	3030-88PCS/5050-16PCS	3030-152PCS/5050-36PCS	3030-152PCS/5050-36PCS
Working voltage:	AC100-277V	AC100-277V	AC100-277V	AC100-277V
Driver brand options	Meanwell/Philips/ Inventronics /Sosen/Mosun	Meanwell/Philips/ Inventronics /Sosen/Mosun	Meanwell/Philips/ Inventronics /Sosen/Mosun	Meanwell/Philips/ Inventronics /Sosen/Mosun
Optical lens options	15/24/36/48/60/120°	15/24/36/48/60/120°	15/24/36/48/60/120°	15/24/36/48/60/120°
Lumen efficiency:	130lm/W/150lm/W	130lm/W/150lm/W	130lm/W/150lm/W	130lm/W/150lm/W
Luminous	6500lm/7500lm	7800lm/9000lm	10400lm/12000lm	13000lm/15000lm
Power Factor:	>0.95	>0.95	>0.95	>0.95
Correlated Color Temperature:	3000K-6500K	3000K-6500K	3000K-6500K	3000K-6500K
Color rendering index:	≥70Ra	≥70Ra	≥70Ra	≥70Ra
SDCM	<5	<5	<5	<5
IP Rating:	IP66	IP66	IP66	IP66
Housing Finish:	Polyester powder coating	Polyester powder coating	Polyester powder coating	Polyester powder coating
Standard colour(s)	white colour	white colour	white colour	white colour
Materials	Aluminum Alloy+Tempered glass+Polycarbonate	Aluminum Alloy+Tempered glass+Polycarbonate	Aluminum Alloy+Tempered glass+Polycarbonate	Aluminum Alloy+Tempered glass+Polycarbonate
Certificates	CE/RoHS	CE/RoHS	CE/RoHS	CE/RoHS
Warranty	5 years	5 years	5 years	5 years

## Products Electrical Parameters

				Nominal flux (lm) (*)	Power consumption (W)	Nominal efficacy (lm/W)	Luminaire output flu(lm)	Luminaire efficacy (lm/W)	Photometry
Lamp	3030 LEDs	Current (mA)	Line Current (A)	(A) Typical	Typical	Typical	Typical	Typical	KingBrite T3
SMALL	88	0.95	0.22	8050	50W	161	6600	132	KingBrite T3
	88	1.14	0.26	9600	60W	160	7860	131	
	152	1.54	0.35	12640	80W	158	10400	130	
	152	1.91	0.45	15900	100W	159	13100	131	

				Nominal flux (lm) (*)	Power consumption (W)	Nominal efficacy (lm/W)	Luminaire output flu(lm)	Luminaire efficacy (lm/W)	Photometry
Lamp	5050 LEDs	Current (mA)	Line Current (A)	(A) Typical	Typical	Typical	Typical	Typical	KingBrite T3
SMALL	16	0.95	0.22	9250	50W	185	7600	152	KingBrite T3
	16	1.14	0.26	11040	60W	184	9060	151	
	36	1.54	0.35	14640	80W	183	12000	150	
	36	1.91	0.45	18100	100W	181	14900	149	

Tolerance on LED flux is  $\pm 7\%$  and on total luminaire power  $\pm 5\%$

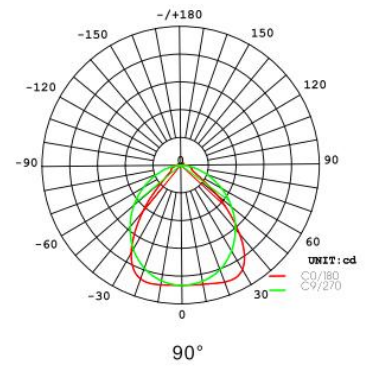
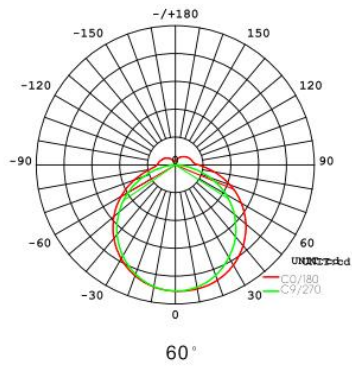
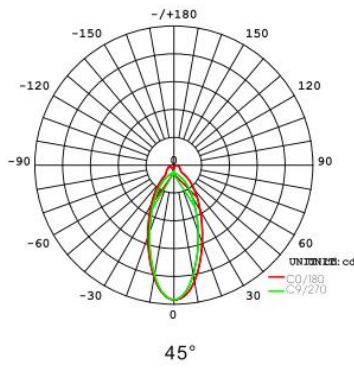
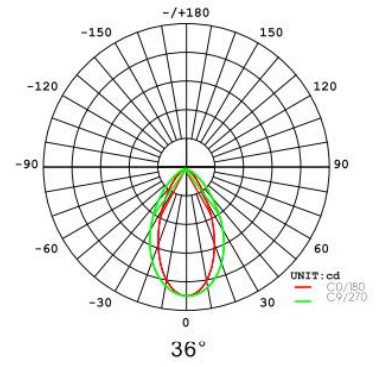
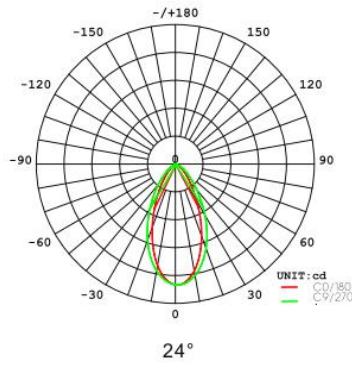
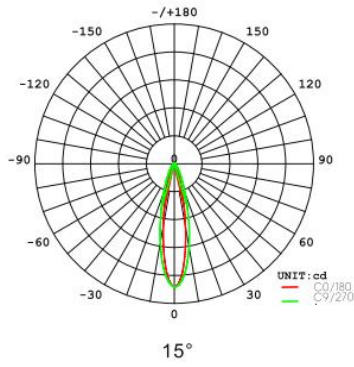
(\*) The nominal flux is an indicative LED flux @ Ts 85° C based on LED manufacturer's data. The real flux output of the luminaire depends on environmental conditions (e.g. temperature and pollution) and the optical efficiency of luminaire. The type of LED used is subject to change due to the ongoing rapid progress taking place in LED technology

## Photometric Distribution

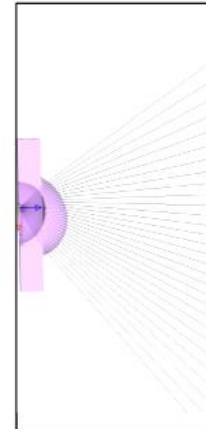
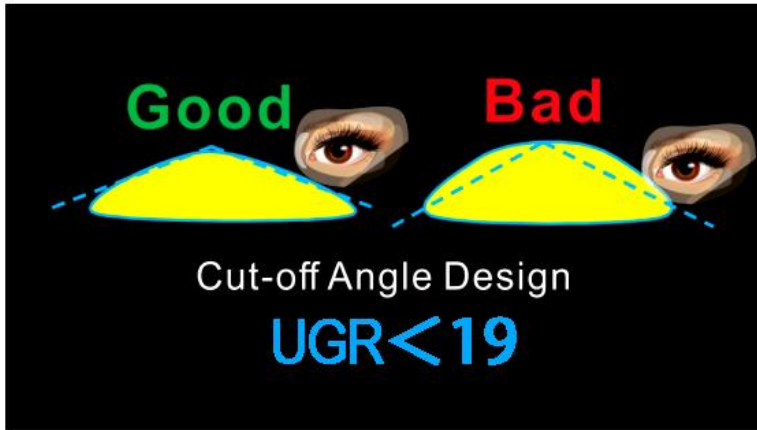
### Optics

Tech.Support: Tell us the room length, width, height and the usage.

We have an engineer team to respond the DIALUX simulations for lights quantity calculation and effects. ies files are available upon request.



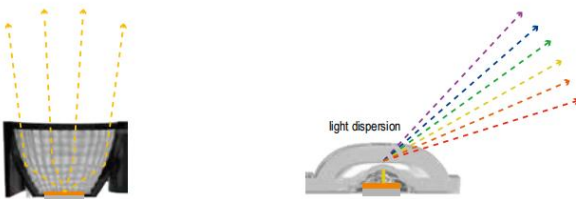
Photometric



A

### 3. Good light color consistency

New Lens: There will be no degradation of light color quality due to material problems;  
 Traditional lens: Due to the characteristics of the material, when light is refracted, dispersion is very likely to occur, i.e., the refractive index changes with the wavelength of the light, which leads to light color deviation;



### 4. High color rendering index

New Lens: There will be no degradation of light color quality due to material problems;  
 Traditional lens: Due to the characteristics of the material, the color of the light may deviate, resulting in a slight reduction in the ability to reproduce the true color of the object;



Colour rendering of new lenses

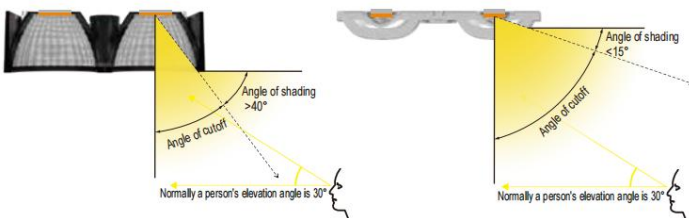


Colour rendering of conventional lenses

### 1. Low glare, GR<19

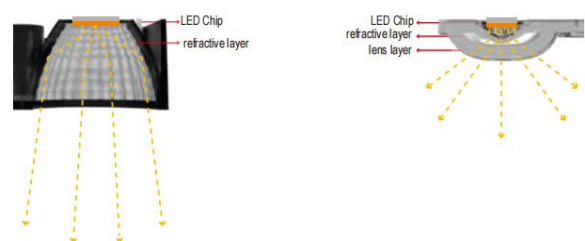
Note: The larger the shadow angle, the less the effect on the human eye.

New Lens: Deep mounted light control design with added large shading angle technology to reduce the possibility of glare when customers see the luminaire lit in the application;  
 Traditional lens: the light source and the lens are basically on the same level, although the light is refracted, the shading angle is still too small, so the flare will be larger.



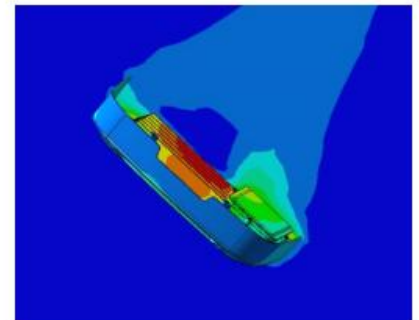
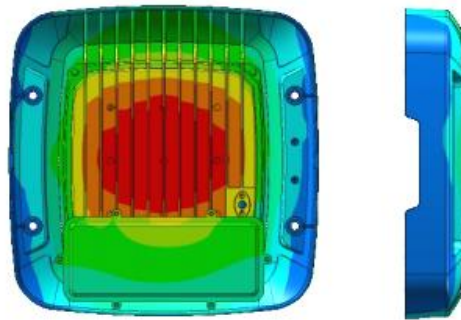
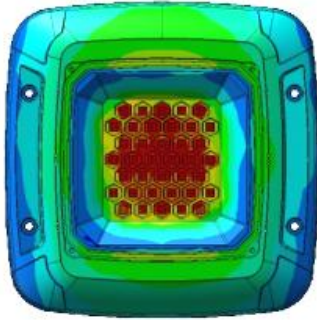
### 2. High light utilization rate

New lens: the light emitted from the light source only needs to be refracted once to get the corresponding angle, low light energy loss;  
 Traditional Lens: The light emitted from the light source must pass through more than 2 layers of material to reach the corresponding angle, the more layers of material the light penetrates, the more serious the loss of light energy;



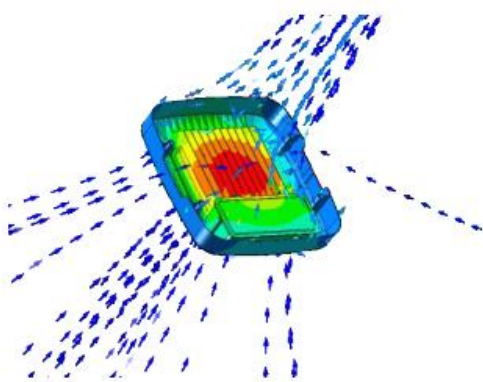
# Thermal management

Structure is optimized by advanced FEA technology. Achieving longer lifespan at best cost-efficiency.

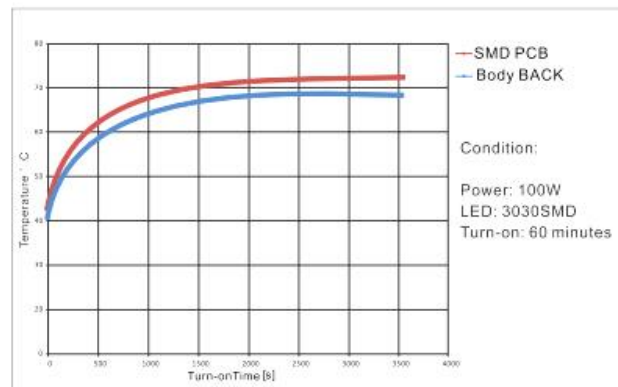


Thermal Conductivity

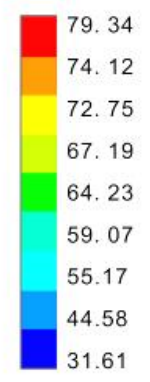
Thermal Air Flow



Thermal Air Convection



Temperature Rise Curve



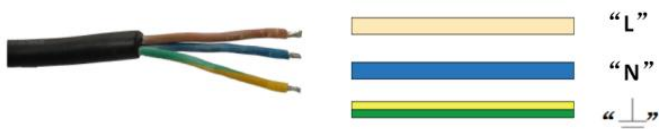
Unit: °C



## Installation Instructions

### Attention:

- 1) Be sure disconnect power before installing, don't construction with electricity.
- 2) Product working voltage is AC100~277V,50/60Hz, Please do not exceed the working voltage range.
- 3) Input product line, brown is **L**, blue is **N**, yellow-green is **GND**.
- 4) Be sure wiring is closed and prevent leakage, when installing.
- 5) The lamp can not be used in violation of any fire regulations.



### Surface Mounted Installation



### U Type Bracket Installation





## Mosun Warranty Policy

All products are under 5-year warranty since the date of luminaires were delivered to you.

1. Under warranty terms, if products are broken down under normal usage within warranty period, Mosun company will provide new lamp for instead of or provide FREE Maintenance service based on the proof-documents and invoice (copy) of the failed products.
2. Mosun company will not provide paid maintenance service under following conditions even within warranty period.
  - a) Failure or damage caused by force majeure.
  - b) Failure or damage caused by transportation or unloading
  - c) Failure or damage caused by incorrect usage or fail to comply with the manual and caution
  - d) Failure or damage caused by demolition, repair or alternation without our authorization.
3. Mosun company always reserves the right for final explanation of aforesaid terms

## Package

Item	MS-YZD50W-C01	MS-YZD60W-C01	MS-YZD80W-C02	MS-YZD100W-C02
Package Qty	10 PCS	10 PCS	5 PCS	5 PCS
GW	17.5 KG	17.7 kg	14.6 KG	14.6 KG
Cartons(mm )	490*335*250MM	490*335*250MM	370*345*345MM	370*345*345MM



Application scenario

