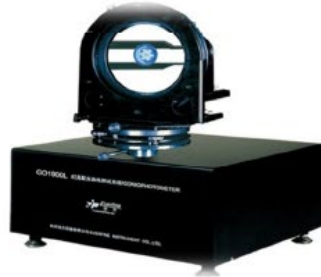




## Shenzhen Trismart Lighting Technology Co., Ltd.

Shenzhen Trismart Lighting Technology Co., Ltd. is a research and development, design, production and sales of private high-tech enterprises. Company's management and technical team has 20 years' experience in the development and design of industrial lightings, professional lightings and lighting engineering systems. The chairman of the company, Dr. Chen, is the member of China Lighting Society, the Deputy Secretary General of the Shenzhen Lighting Appliance Association and a senior expert of Shenzhen Lighting Society. Trismart Lighting is a cooperative supplier of European Union led street lamps, a network supplier of Royal Shell (shell) and a network supplier of large enterprises such as Sinopec, PetroChina, State Grid, Datang Electric Power and Huadian Group.



# SZG200 series of led explosionproof lamp



## Features:

- Composite explosion-proof type with flameproof, increased safety and encapsulation type can be used in various dangerous places.
- Explosionproof mark:  $\text{Ex}$  II 2 G Ex demb IIC T6 Gb
- Adopting Philips ultra-bright led chips, luminous efficacy of luminaire can reach 155-170 lm/W which saves 30% energy compared with similar products.
- Power supply is directly attached to the shell. Its surface temperature rise is less than 30 °C and service lifespan is up to 50000 hours.
- Patented composite heat dissipation mode of surface heat radiation+internal air convection, heat dissipation is excellent.
- IP66

## Technical parameters:

Parameter items	50W	75W	100W	150W	200W
Input voltage (V)	90-305Vac	90-305Vac	90-305Vac	90-305Vac	90-305Vac
Power efficiency	92%	92%	92%	92%	92%
Brand of led chip	Philips	Philips	Philips	Philips	Philips
Luminous efficiency for led (lm/W)	230	220	210	210	210
Total luminous flux (lm)	12000±5%	16500±5%	21000±5%	33000±5%	42000±5%
Light efficacy for luminaire (lm/W)	170	160	155	160	155
Correlated color temperature (K)	3000-6500	3000-6500	3000-6500	3000-6500	3000-6500
Color rendering index (Ra)	≥75	≥75	≥75	≥75	≥75
Beam angle (°)	120°	120°	120°	120°	120°
LED lifespan (h)	100,000	100,000	100,000	100,000	100,000
Working temperature (°C)	-40~+50°C	-40~+50°C	-40~+50°C	-40~+50°C	-40~+50°C
Material of heat dissipation shell	ADC die-casting aluminum	ADC die-casting aluminum	ADC die-casting aluminum	ADC die-casting aluminum	ADC die-casting aluminum
Material of cover	Tempered glass	Tempered glass	Tempered glass	Tempered glass	Tempered glass
IP protection	IP66	IP66	IP66	IP66	IP66
Installation mode of led driver	built-in	built-in	built-in	built-in	built-in
Modular quantity (pcs)	1	1	1	2	2
Dimensions (mm)	Φ240*135	Φ240*135	Φ240*135	480*240*135	480*240*135
Weight (Kg)	2.8	3.0	3.0	5.9	6.2
Mounting mode	G3/4 pipe /U-bracket/ceiling	G3/4 pipe /U-bracket/ceiling	G3/4 pipe /U-bracket/ceiling	G3/4 pipe /U-bracket/ceiling	G3/4 pipe /U-bracket/ceiling

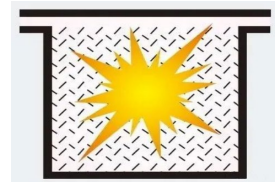
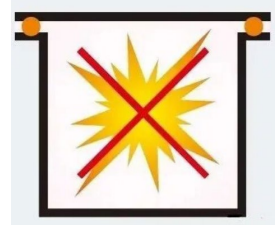
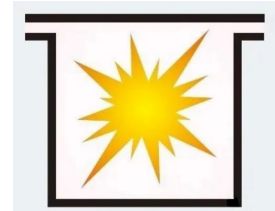
# SZG200 led explosionproof platform lighting

## Explosion-proof type and principle:

**Flameproof enclosure:** All components of the equipment that can ignite explosive gas mixture are closed in an enclosure. The enclosure can withstand the internal explosion of the combustible mixtures penetrated into it through any joint surface or structural gap and isn't damaged, and can ensure that the internal flame gas spread through the gap to reduce energy which is not enough to detonate the gas outside the enclosure.

**Increased safety:** Eelectrical equipments that do not generate arc and spark under normal operation conditions are taken some additional measures to improve its safety and prevent the possibility of dangerous temperature, arc and spark in its internal and external components. Further protective measures are taken in the structure to improve the reliability and safety performance of the equipment.

**Encapsulation:** The electrical components that may produce the sparks, arcs or dangerous temperature which can ignite explosive gas mixtures are encapsulated in the pouring agent so that it cannot ignite the surrounding explosive gas mixture. The pouring measures can prevent the short circuit of electrical components and solidify the electrical insulation and avoid the generation of sparks, arcs, dangerous temperatures, and prevent the invasion of explosive mixture and control the surface temperature under normal and fault conditions.



## Selection table of Explosive gas atmospheres hazardous location:

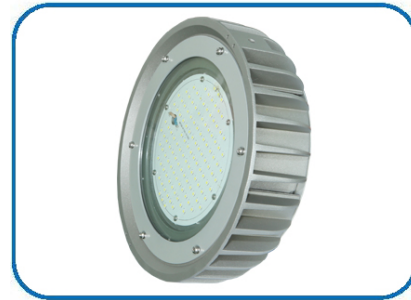
Suitable hazardous areas	Explosionproof type of lamps	Explosionproof mark
Zone 0	intrinsic safety(ia)	Ex ia
	special type designed for Zone 0(s)	Ex s
Zone 1	intrinsic safety(ib)	Ex ib
	flameproof enclosure	Ex d
	increased safety	Ex e
	pressurized enclosure	Ex px、 Ex py
	powder filling	Ex q
	encapsulation	Ex m
Zone 2	type of protection "n"	Ex nA、 Ex nC、 Ex nR
	pressurized enclosure	Ex pz

# SZG200 led explosionproof platform lighting

Led explosionproof  
platform lighting

## Super brightness Philips led chip

- led chip luminous efficiency: 225 lm/W @80mA
- light efficacy of luminaire: ≥160 lm/W
- The thermal resistance is only 3°C and 75% lower
- The illuminance is 20%-30% higher
- average service life: ≥100,000 hours
- no blue light hazard

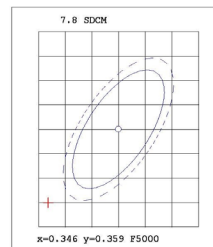
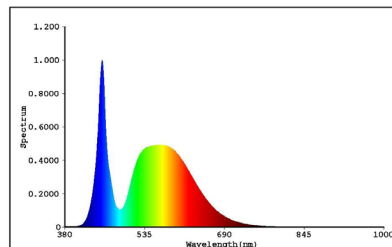


## Test report of luminous efficiency of led chip

**EVERFINE** 远方

Test report  
EVERFINE LEDspec Test Report 3 Of 4

### Spectrum Test Report



#### Color Parameters:

Chromaticity Coordinate(2Deg):x=0.3328 y=0.3439/u'=0.2060 v'=0.4791 duv=1.302e-003  
Tc=5484K Dominant WL:Ld=552.1nm Purity=3.1%  
Ratio:R=14.0% G=82.3% B=3.7% Peak WL:Lp=452.8nm HWL:18.5nm  
Render Index:Ra=75.7  
R1 =74.13 R2 =80.20 R3 =82.28 R4 =76.12 R5 =74.24  
R6 =71.69 R7 =84.13 R8 =62.77 R9 =-13.42 R10=50.62  
R11=72.60 R12=43.24 R13=75.20 R14=89.82 R15=70.27  
TM30 Parameters: Rf = 73.3, Rg:94.2

#### Photo Parameters:

Flux = 99.64 lm Eff. : 225.37 lm/W Fe = 296.6 mW

#### Electrical parameters:

Vf = 5.534 V If = 79.89 mA P = 442.1 mW Ch1  
LEVEL:\*\*[OUT] WHITE:ANSI\_5700K

Status: T=140.00ms Ip=33646 (51%) [ HAAS1200\_V1\_USB ] V2.00.288

Model:80MA  
Tester:D.U.01.0151 24V  
Temperature:25.3Deg  
Manufacture:EVERFINE  
Assessor:damin  
System:WY + HAAS1200\_V1\_USB

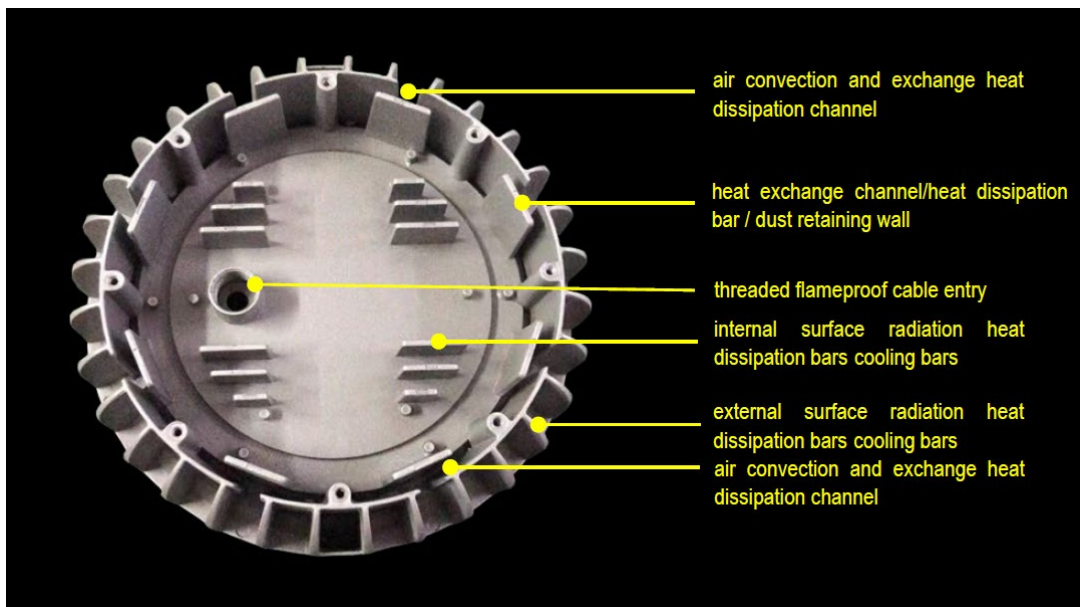
Number:4  
Date:2021-06-05 16-41  
Humidity:65.0%  
Remarks:---

# SZG200 led explosionproof platform lighting

## Surface radiation + internal convection heat dissipation:

**Radiation heat dissipation:** Radiation heat dissipation is a heat dissipation method in which infrared rays are emitted from the surface of the object with higher temperature and received by the object with lower temperature. Radiation heat dissipation is related to the environmental temperature difference and radiation area. The lower the environmental temperature, the larger the radiation area, the more radiation heat dissipation.

**Convective heat dissipation:** Convective heat dissipation refers to that the air close to the heat source rises in temperature and volume due to radiation. The cold air is then supplemented, and the surface of the heat source exchanges heat with the newly moved cold air, thus continuously taking away heat. The larger and faster the air flow channel is, the faster the convection heat dissipation speed is, and the better the heat dissipation effect is.



## Product details:



50W/75W/100W



150W/200W



G3/4 pipe mounting



U-bracket mounting

# SZG200 led explosionproof platform lighting

## Applications:



petrochemical device and other hazardous places



offshore drilling platform and oilfield derrick



oil depot and chemical tank area



workshop and equipment area of pharmaceutical and chemical enterprises



# Trismart Lighting

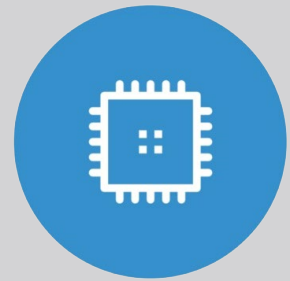
speciality builds higher quality



energy-saving



quality



intelligent

**Address:** No.3, behind the substation, Yulu Community, Yutang Street, Guangming District, Shenzhen

Mobile phone: +86-13823331749

Website: [www.sztrismart.com](http://www.sztrismart.com)

Email: [dr.chen@sztrismart.com](mailto:dr.chen@sztrismart.com)