

# 1000W LED FLOOD LIGHT

VOL-FL-1000-CW



## SECTION 1: SPECIFICATIONS

POWER	1000W
VOLTAGE	AC100-305V
ALTERNATING CURRENT	1.0A/277 VAC
FREQUENCY	47~63 Hz
POWER FACTOR	PF>0.92/277VAC
TOTAL HARMONICAL DISTORTION	THD<20% (>@electrical load>50%/115VC, 230VAC; @electrical load>75%/277VAC)
COMPRESSION RESISTANCE	O/P-FG:1.5KVAC
SURGE IMMUNITY	LINE TO GROUNDING: 6KV, LINE TO LINE: 4KV I/P-O/P,I/P-FG,O/P-FG
LEAKAGE CURRENT	Under AC 277V normal condition lighting <2.5mA/277VAC
INSULATION RESISTANCE	ACline L+N, with earthwire G > 100mΩ / 500V, I/P-FG,O/P-FG: >100M Ohms/500VDC/25°C/70%RH
GROUND RESISTANCE	THE GROUND RESISTANCE IS LESS THAN 75mΩ
LUMINOUS FLUX	170 lm/W
BEAM ANGLE	120°
CCT	5500-6500K (CW)
WAVELENGTH	RED 620-625nm, GREEN 515-525nm, BLUE 460-470nm

## CERTIFICATIONS

RoHS  
Compliant



## SECTION 2: PRODUCT SAFETY AND PERFORMANCE

### 1. CABLE

**Rubber cable : DC copper core is 0.75mm<sup>2</sup>, AC copper core is 1 .0mm<sup>2</sup>. The insulation resistance of core can be as high as 50MΩKM with the cable working at temperature of 20°C with good flexibility, fire-resistant, cold-resistant,heat-resistant and UV-resistant.able to bear large external mechanical forces.**

### WIRING REGULATIONS

Brown wire	Blue wire	Green and Yellow wire
Connect with AC170-250V Live Line(L)	Connect with AC170-250V Neutral Line (N)	Connect with Grounding Line(G)

### 2. PCB BOARD

**PCB thickness is 1.5MM, thermal conductivity: 2.0 W/(mK) clearance of creepage distance is 5mm insulation voltage; 3000V**

### 3. THERMAL SILICONE GREASE

**Thermal conductivity: 3.4 W/(mK). It has good resistance to weather and chemical ,also high insulation , without solidification,no corrosion to substates, it can be used in temperature between -40°C ~150°C for long term.**

Test Item:	Test Condition:	Qualification Evaluation:
Cable tension		
Heating test	The light is applied to be pressured one hour with 20N by a 5mm steel ball and soak in cold water 10s when It is horizontal	Diameter of indentation ≤2mm
Hanging Strength	Putting permanent load of fourfold light's weight on the loading direction of lamp for 1hour.	No deformation
Endurance Test	Ambient temperature: (35 ± 2) °C, Test time: 240h, continuous cycle 10 times, each cycle is 24h.	light cannot be deformed ,cracked and scorched.It must be safe ,the marking should be clear
Temperature Test	Ambient temperature:25°C±1°C It should be measured when the ratio of temperature changing less than or equal to 1°C/h. Testing voltage is 1.06U (U=rate voltage)	The temperature of each test point meets the relevant requirements.
Vibration Test	10~500HZ, 5G12 Minute/Cycle,Each axis 72minutes, X,Y,Z	No parts are loose or deformed

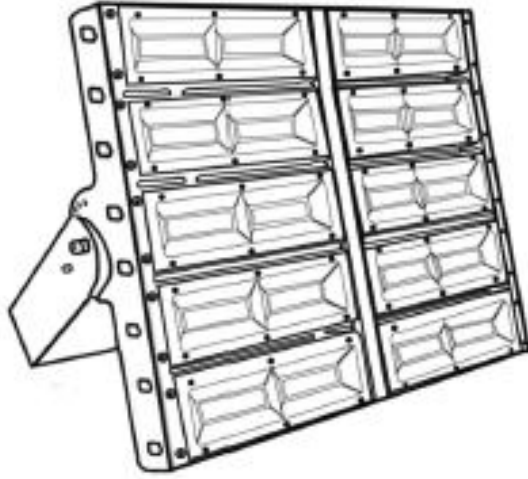
IP65	Sand&Dust test (IP initial characteristic digital is 6)	No dust no sediment as qualified
	1.50-75µm talc powder dosage:2.1kg turn on the light for 30minutes before test . then put it into testing box for 3hours under floating dust state after finished blowing dust for 3 minutes	
	Sand&Dust test (IP The second characteristic digital is 5)	No water no hydrops as qualified
	Light is subjected to a water jet of 6.3m from all practicable directions by means of a hose having a nozzle, the nozzle shall be held 2.5-3m away the sample, the water pressure at the nozzle shall be adjusted to achieve a water delivery rate of 12.5L/min, spraying time 1minute per square at least for 10minutes, all parts should be tested which requests to be sprayed.	

Test Item:	Test Condition:	Qualification Evaluation:
Ground Resistance	10A	The ground resistance is less than 75mΩ
Hi-pot Test	AC wire L+N, with earth wire G, I/P-O/P,I/P-FG,O/P-FG, pass high voltage1500v,	No ARC and phenomenon of leakage of electricity
Leakage Current	under AC 277V normal condition lighting	≤2.5mA/277VAC
Insulation Resistance	AC wire L+N, with earth wire G, pass voltage 500V, I/P-O/P,I/P-FG,O/P-FG:	100M Ohms/500VDC/25°C/70%RH

I/P-O/P,I/P-FG,O/P-FG:100M Ohms/500VDC/25°C/70%RH

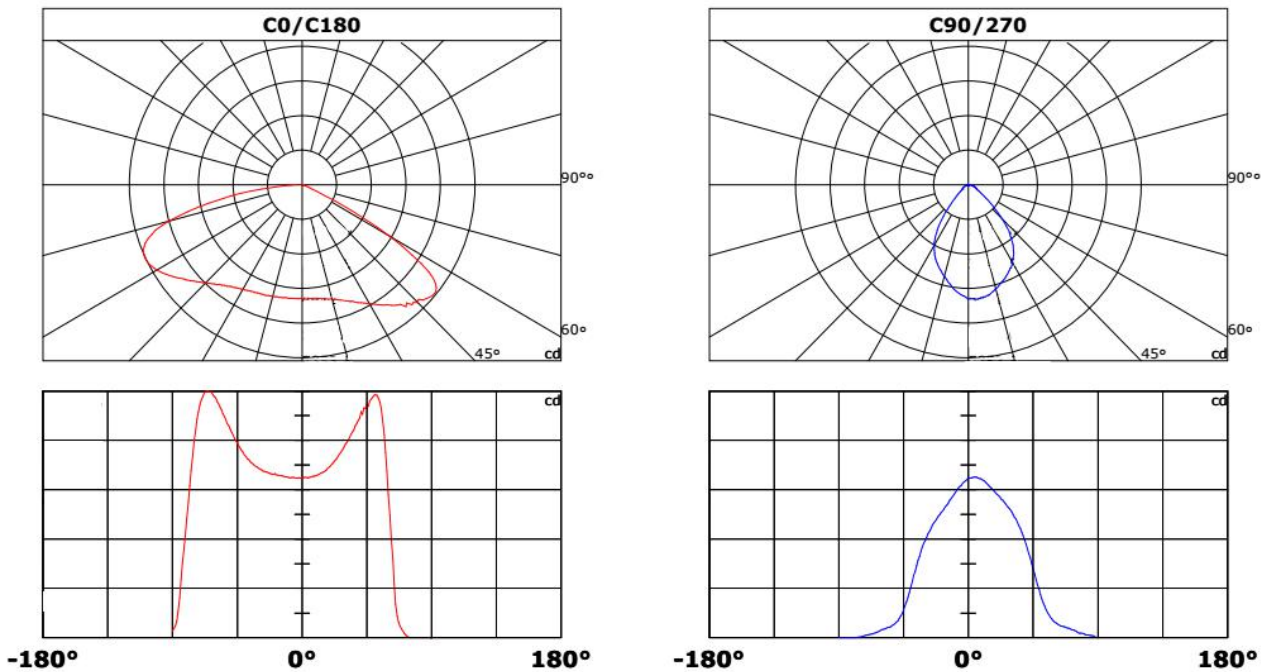
Operating Temperature Range (Ambient temp25°C, Humidity30%RH)	Tcase=-40~+90°C
Max. rated temperature of housing (Ambient temp25°C, Humidity30%RH)	Tcase=+70°C
Working Humidity	20~95%RH, non-condensing
Storage Temperature and Humidity	-40~+90°C, 10~95%RH

### SECTION 3: PRODUCT STRUCTURE DRAWING & SPECIFICATION

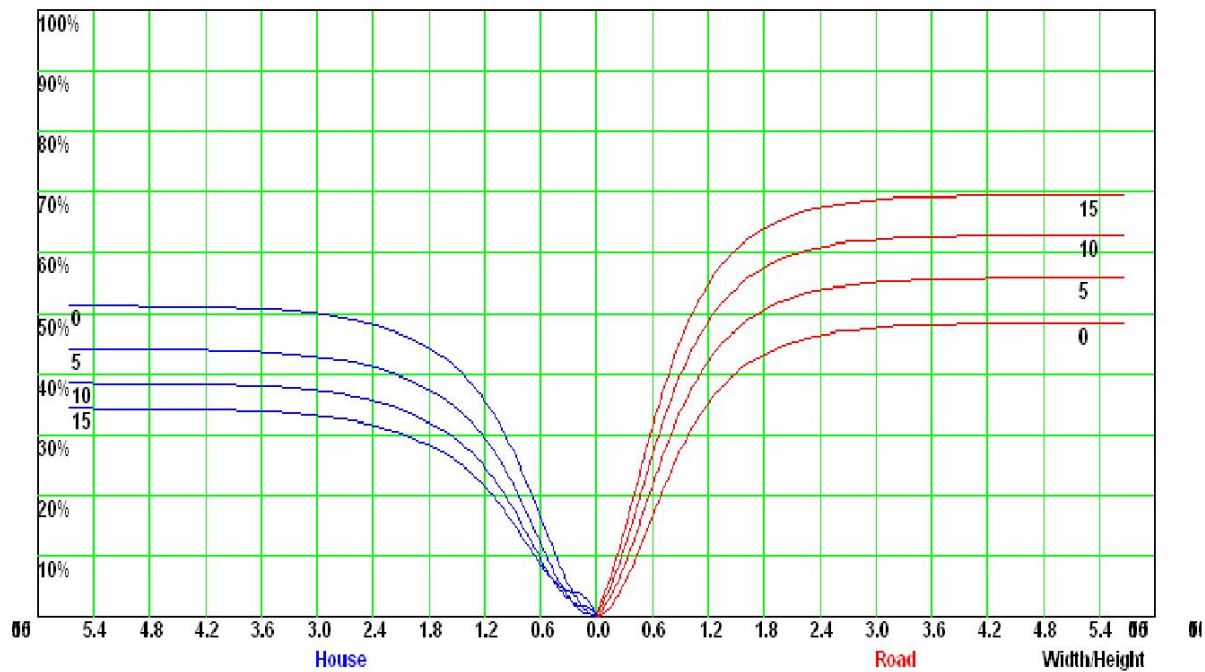


**DIMENSIONS: 570x1140x130mm**

### SECTION 4: LIGHT DISTRIBUTION CURVE & ILLUMINATION DIAGRAM



SECTION 5: COEFFICIENT UTILIZATION CURVE



SECTION 6: PACKING INFORMATION





## SECTION 7: INSTALLATION INSTRUCTIONS

1. THE CAPACITY OF THE INSTALLATION FIXTURE SHOULD MATCH THE WEIGHT OF THE LIGHTS.
2. WORKING TEMPERATURE -30°C ~ +70°C
3. ENSURE THESE CONNECTIONS OF WIRE ARE SEALED TO PREVENT LEAKAGE WHEN YOU INSTALL.
4. TAKE MEASURES WHEN WIRING THE LIGHT.
5. DO NOT USE THE LAMP AGAINST THE FIRE REGULATIONS.
6. THIS PRODUCT SHOULD BE INSTALLED BY A QUALIFIED ELECTRICIAN, THE CORRECT CONNECTION WAY OF THREE-CORE CABLE: BROWN WIRE - LIVE WIRE, BLUE WIRE - NEUTRAL WIRE, YELLOW WIRE - GROUNDING WIRE.
7. THE OPERATING VOLTAGE IS AC 100-265 V 50/60Hz. DO NOT EXCEED THIS RANGE OF VOLTAGE & FREQUENCY.

FIGURE 1

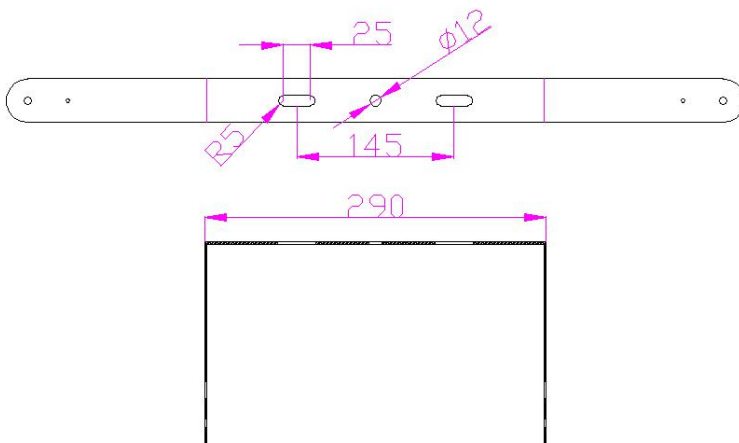


FIGURE 2

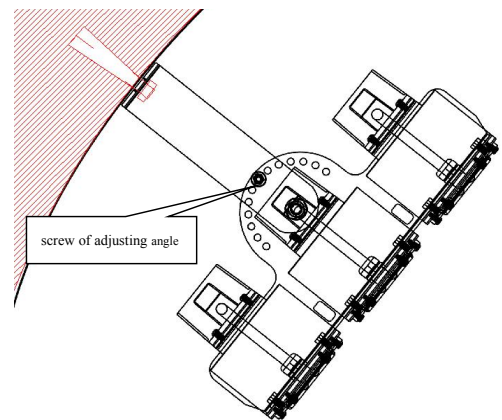


FIGURE 1: HOLE PUNCHING FIGURE

AS FIGURE BELOW SHOWS, TWO HOLES (DIAL 12mm/DEPTH 60-80mm) HAD BEEN PUNCHED ON THE SYMMETRICAL POSITION OF TUNNEL WALL ACCORDING TO THE CUT-OUT SIZE.

FIGURE 2: INSTALLATION FIGURE

TUNNEL WALL

**ABOVE INSTALLATION FIGURE'S DIRECTION TO INSTALL BRACKET INTO TUNNEL WALL WITH M10\*100 EXPANSION BOLT, THE TORQUE APPLIED TO THE BOLT IS 7N-M.**

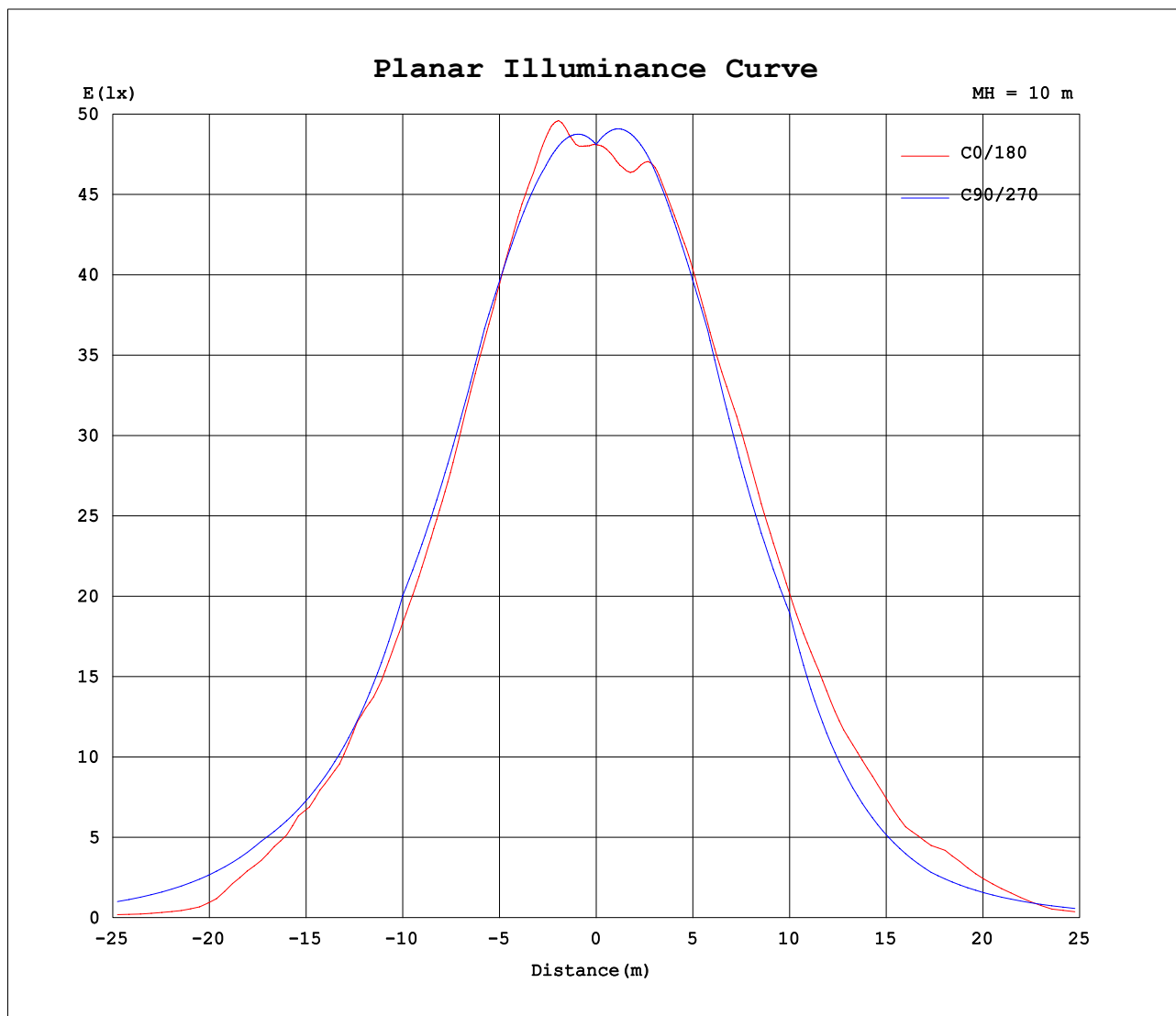
**THE LAMP WIRING SHOULD BE FOLLOWED BELOW WIRING DIAGRAM OF POWER INPUT TO CONNECT WITH AC 220V**

**YOU CAN REMOVE THE BRACKET (M4\*16) SCREWS FOR ADJUSTING THE ANGLE AND REINSTALL IT BACK USING TOOLS TO TIGHTEN BOLT AFTER SELECTED ANGLES ACCORDING TO ACTUAL DEMAND ON SITE.**

#### **WIRING DIAGRAMS OF POWER INPUT**

Brown wire	Blue wire	Green and Yellow wire
Connect with AC170-250V Live Line (L)	Connect with AC170-250V Neutral Line (N)	Connect with Grounding Line(G)

# PLANAR ILLUMINANCE CURVE



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.0DEG  
Operators:  
Test Date:2017-08-07

V(B) Range:-90 - 90DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V1.0.260  
Humidity:65.0%  
Test Distance:6.800m [K=1.0000]  
Remarks: