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HQ FLOOD LIGHT 100W

CE RoHS Compliant UL

SECTION 1: SPECIFICATIONS

Voltage	AC100~305V
Alternating Current	1.0A/277VAC
Frequency	47~63Hz
POWER FACTOR	PF 0.92/277VAC
TOTAL HAMORNICAL 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 earth wire G 100mΩ/500V I/P-FG,O/P-FG: 100M Ohms/500VDC/25 /70%RH
GROUND RESISTANCE	The ground resistance is less than 75mΩ
LUMINOUS FLUX	150lm/W
CRI	RA≥80
BEAM ANGLE	120°
COLOR TEMPERATURE	6000K -6500K
WAVE LENGTH	RED 620-625nm GREEN 515-525nm BLUE 460-470nm
DIMENSIONS	180*290*130mm (L*W*H)

SECTION 2: CERTIFICATIONS

1	UL Listing: Underwriters Laboratory testing for dependable reliability and life span of fixture.
2	Rohs Certification: Restriction of Hazardous Substances- Ensuring no toxic chemicals or materials are used in the manufacture.
3	CE Certification: (Conformity European) to ensure that this product can be within the strictest standards of Europe.

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1. CABLE
Rubber cable : DC copper core is 0.75mm^2, AC copper core is 1 .0mm^2
The insulation resistance of core can be as high as 50MΩKM with the cable working at temperature of 20 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 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° to 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 ±1 It should be measured when the ratio of temperature changing less than or equal to 1 /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	
	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	No dust, no sediment as qualified
	Sand&Dust test IP The second characteristic digital is 5	
	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.	

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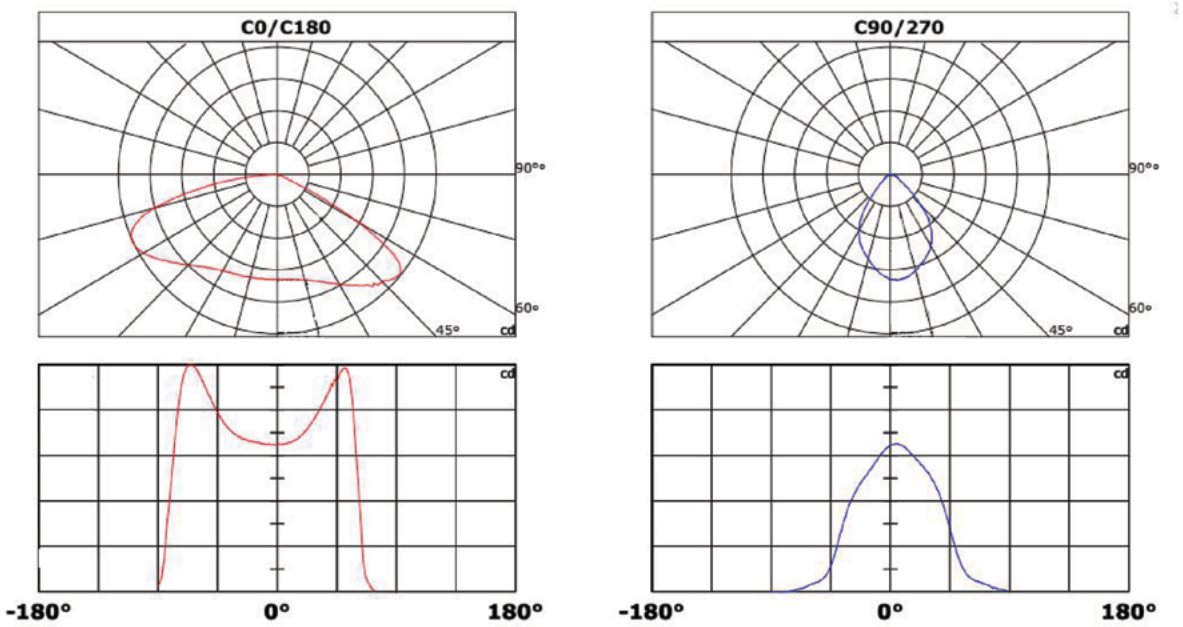
ITEM	TEST CONDITION	QUALIFICATION EVALUATION
GROUND RESISTANCE	10A	The ground resistance is less than 75mΩ
HI-POT TEST	AC wire L+N with earth wire G I/P-O/P,I/P-FG,O/P-FG pass high voltage1500v	No ARC and phenomenon of leakage of electricity
LEAKAGE CURRENT	under AC 277V normal condition lighting	≤2.5mA/277VAC
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 /70%RH
I/P-O/P,I/P-FG,O/P-FG:100M OHMS/500VDC/25 /70%RH		

OPERATING TEMPERATURE RANGE (AMBIENT TEMP 25°C HUMIDITY 30%RH)	Tcase=-40~+90°C
MAX. RATED TEMPERATURE OF HOUSING (AMBIENT TEMP 25°C HUMIDITY30%RH)	Tcase= +70°C
WORKING HUMIDITY	20~95%RH non-condensing
STORAGE TEMPERATURE AND HUMIDITY	-40~+90°C 10~95%RH

LIGHT DISTRIBUTION CURVE



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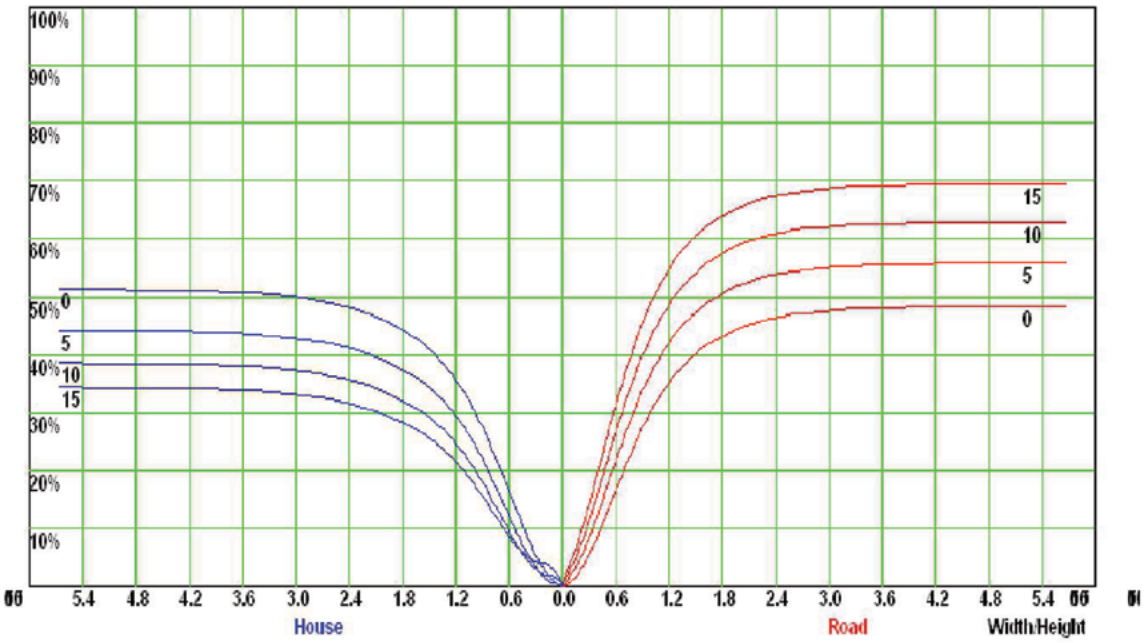
COEFFICIENT UTILIZATION CURVE



PACKING INFORMATION






INSTALLATION INSTRUCTIONS

1. The capacity of the installation fixture should match the weight of 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 of fire regulation.
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 100-265V 50/60Hz do not exceed this range of voltage & frequency.

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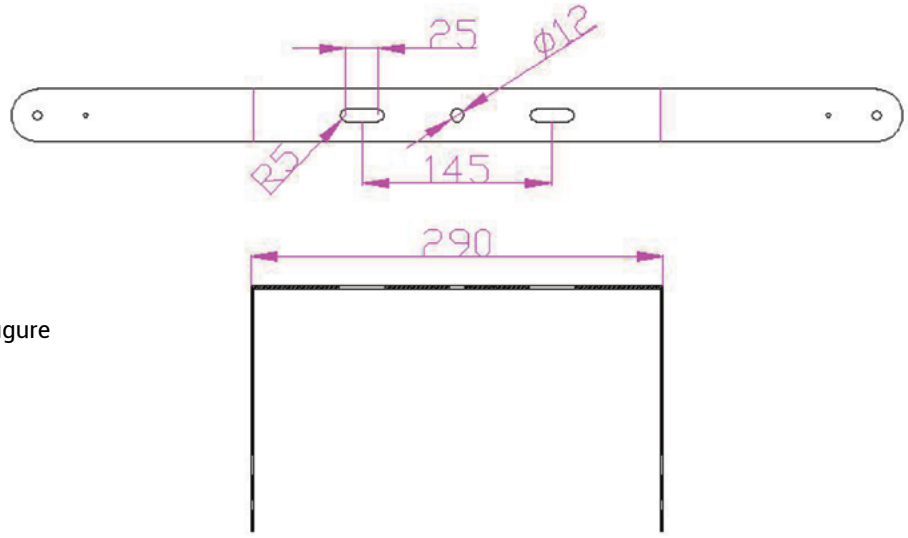
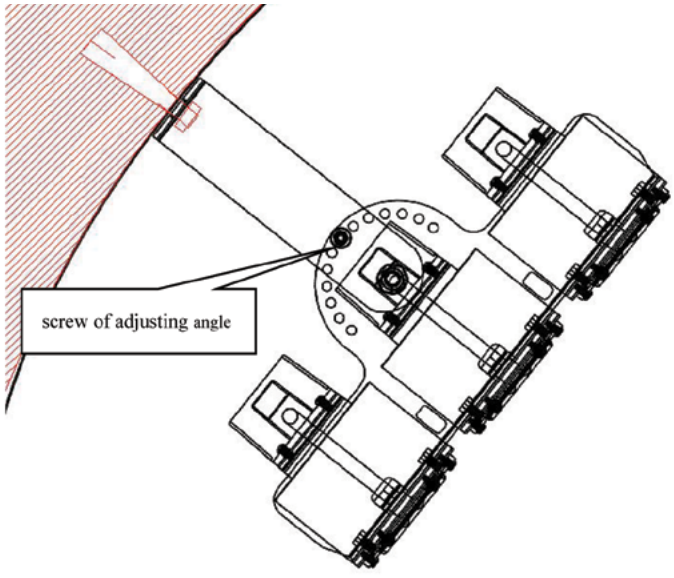
INSTALLATION INSTRUCTIONS (Continued)

1. As figure below showing two holes (ø12mm/depth 60-80mm) had been punched on the symmetrical pos tion of tunnel wall according to the cut-out size.



Picture 1
Hole punching figure

2. Tunnel Wall



Picture 2
Installation figure

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INSTALLATION INSTRUCTIONS (Continued)

3. 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.

4. The lamp wiring should be followed below wiring diagrams of power input to connect with AC220V

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)

5. You can remove the bracket (M4*16) screws for adjusting the angle and reinstall it back using tools to tightening bolt after selected angles according to actual demand on site.