

## **AN-TGD05 LED flood light INSTRUCTION MANUAL**

**Model: AN-TGD05 系列**

**Date : 2021**

**Revision : A0**

## 一、 Product Image



### Integrated design

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Easy to install, strong and reliable.



### Streamlined design

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Small cross-sectional area, lower wind resistance.

## 1.Design theme and concept

**Theme:** People-oriented, optimizing life, establishing image, highlighting individuality.

**Concept:** safe and reliable, advanced technology, economical and reasonable, energy saving and environmental protection, convenient maintenance and other principles.

## 2. Design compliance with standards and regulations

### 1) The structure and safety performance of lamps should be based on:

|   |                |
|---|----------------|
| "General safety requirements and tests for lamps"           | GB7000.1-2007  |
| "Safety requirements for road and street lighting fixtures" | GB7000.5-2005  |
| "Lamp Control Device Technology, Part 1"                    | GB19510.1-2004 |

### 2) The optical performance of lamps should be based on:

|  |             |
|--|-------------|
| "Urban Road Lighting Design Standard"        | CJJ45-2006  |
| "Photometric Test of Road Lighting Fixtures" | GB9468-1998 |

## 3. Product features

- ◆ The product adopts AL6063 stretch forming, the surface is anodized, and the anti-corrosion level is higher;
- ◆ The two ends are integrated by ADC12 die-casting, and the surface is electrostatic sprayed, which is strong and anti-corrosion;
- ◆ Adopt air convection active heat dissipation method to ensure the working temperature of the light source, and the power supply is placed below, the temperature is lower;
- ◆ The product has a large built-in space and can be equipped with intelligent PLC, Zigbee, sensor and other modules;
- ◆ Multiple optical angles, including TYPE II, TYPE III, TYPE IV, TYPE V, NEMA4, NEMA6, etc.
- ◆ A variety of installation methods are available, including rotating bracket, wall mounting, pole mounting, etc.

## 4. Applicable occasions:

- 1) It is suitable for the lighting of urban squares and the lighting of ramp high pole areas;
- 2) Project lighting for large buildings, long-distance lighting;
- 3) Airport high pole lighting, highway and park high pole lighting;
- 4) Basketball courts, football fields, tennis, baseball fields and other places.

## 5. Structural features

### 1) The power supply is double waterproof



Built-in waterproof power supply + shell protection, placed under the lamp body, low temperature, IP66 design, with short circuit/overload/overvoltage/overtemperature protection functions, etc.

### 2) Special optical design mask



Japanese Teijin Optics PC, high-precision molding, high light transmittance, yellowing UV resistance, etc.

## 二.Product specifications

### 1. Product Selection Table

| Type  | Product model | LED (PCS) | Number of lamps | Rated power (W) | Luminous flux(LM) |
|-------|---------------|-----------|-----------------|-----------------|-------------------|
| Black | AN-TGD05-300W | 432pcs    | 8S18P * 3       | 300             | 42000LM           |
|       | AN-TGD05-400W | 576pcs    | 8S18P * 4       | 400             | 56000LM           |
|       | AN-TGD05-500W | 720pcs    | 8S18P * 5       | 500             | 70000LM           |

### 2. Electrical parameters

| Parameter                 | Min    | Rated value | Max     |
|---------------------------|--------|-------------|---------|
| Voltage                   | 85V AC | 220V AC     | 285V AC |
| Operating frequency       | 43Hz   | 50Hz        | 63Hz    |
| Total power               |        | ±5%         |         |
| Light source power        |        | -10%        |         |
| Power factor              | 0.92   | 0.95        | 0.99    |
| Power efficiency          | 86%    | 89%         | 92%     |
| Constant current accuracy | 2%     | 3%          | 5%      |

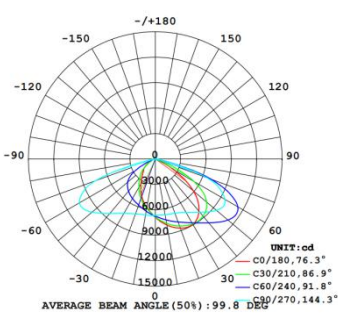
### 3. Optical parameters

| Item                    | Parameter value   |
|-------------------------|---|
| LED single light effect | $\geq 140$ Lm/W   |
| Luminous flux           | 300W $\geq$ 42000Lm,400W $\geq$ 56000Lm,500W $\geq$ 70000Lm     |
| Lamp efficiency         | $\geq 90\%$   |
| Color rendering index   | $\geq 80$   |
| Beam angle              | TYPE II, TYPE III, TYPE IV, TYPE V, NEMA4, NEMA6                |
| Color tolerance         | $\leq 5$ SDCM   |
| Color temperature       | Warm white: 3000K    Positive white: 4000K    Cool white: 5000K |

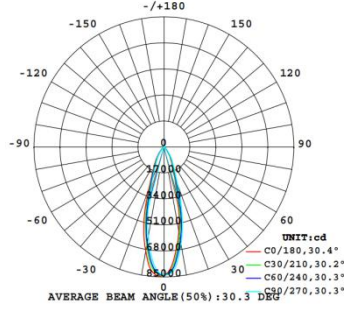
### 4. Use parameters

| Item                       | Parameter value  |
|----------------------------|--|
| Surface temperature        | $< 65^{\circ}\text{C}$   |
| Working temperature        | $-25^{\circ}\text{C}—45^{\circ}\text{C}$   |
| Storage temperature        | $-40^{\circ}\text{C}—85^{\circ}\text{C}$   |
| Adaptation humidity        | $\leq 90\%$  |
| Material composition       | Aluminum alloy, special optical design mask, high and low temperature resistant waterproof silicone sealing ring |
| Mean time between failures | 30000 hrs  |
| Protection grade           | IP66   |
| Installation method        | Rotating bracket installation, $\varnothing 60$ pole installation, wall installation                             |
| Recommended pole height    | 15m-18m  |

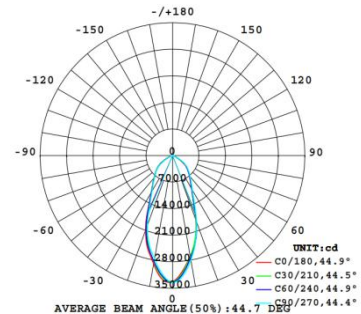
## 5. Light distribution curve



TYPE

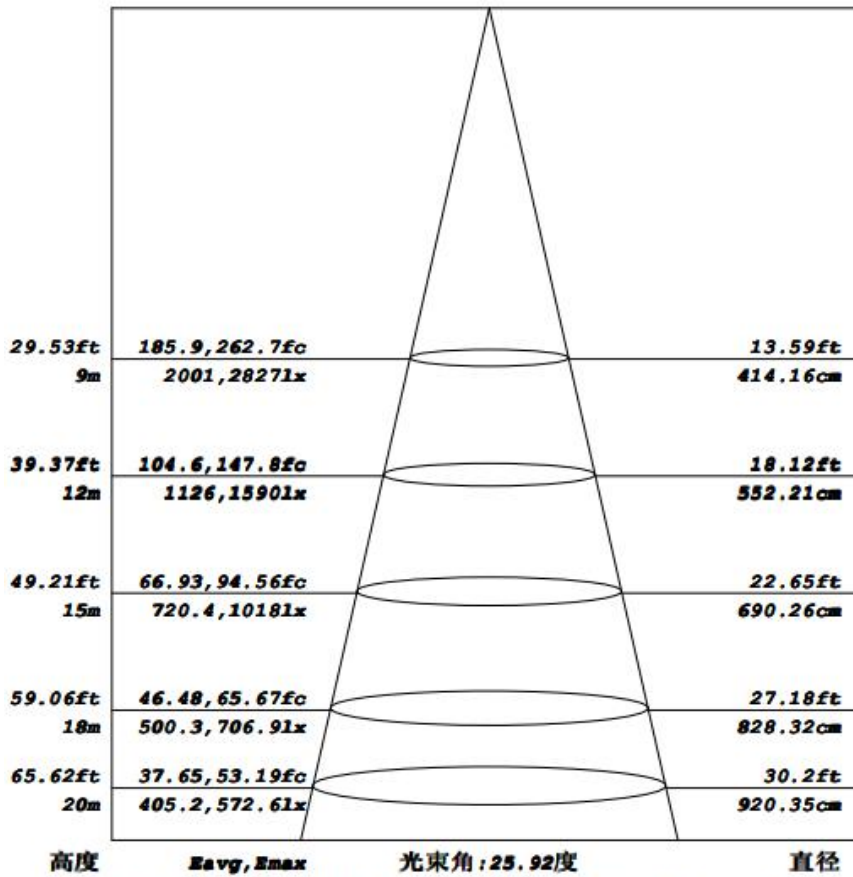


NEMA4-25degree



NEMA6-45degree

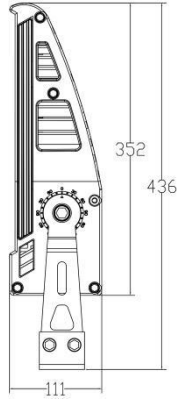
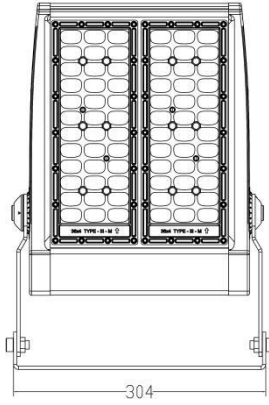
## 6. Isoilluminance diagram



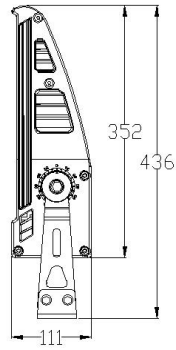
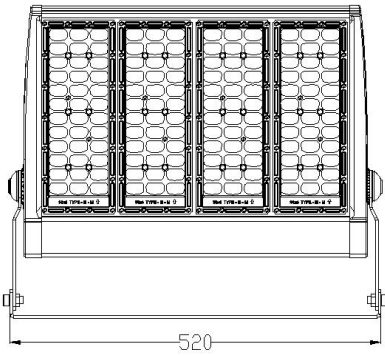
注: 曲线为灯具在不同投射距离下的照射区域及区域内平均照度.

NEMA4-25 degree reference

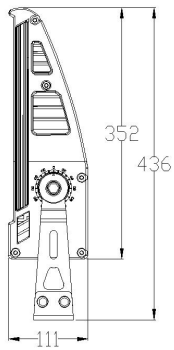
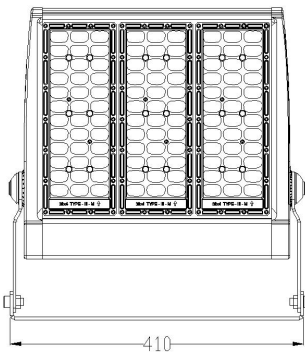
## 7. Dimensions



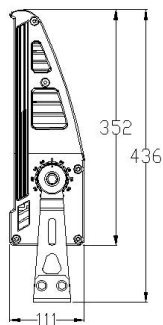
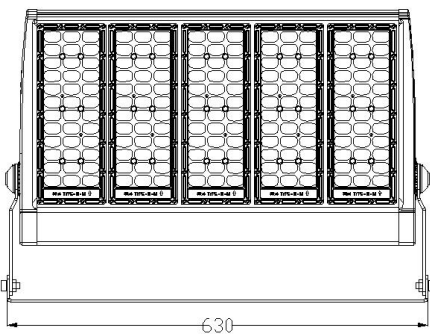
**200W**



**300W**

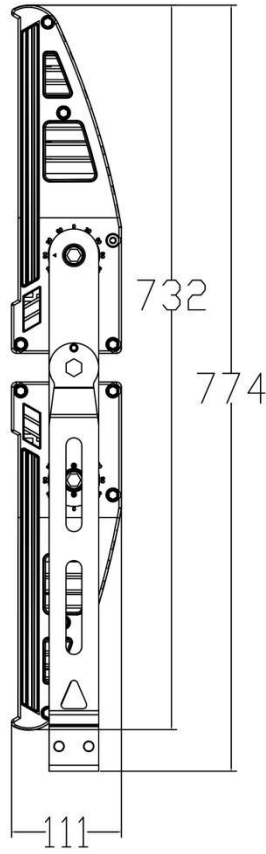
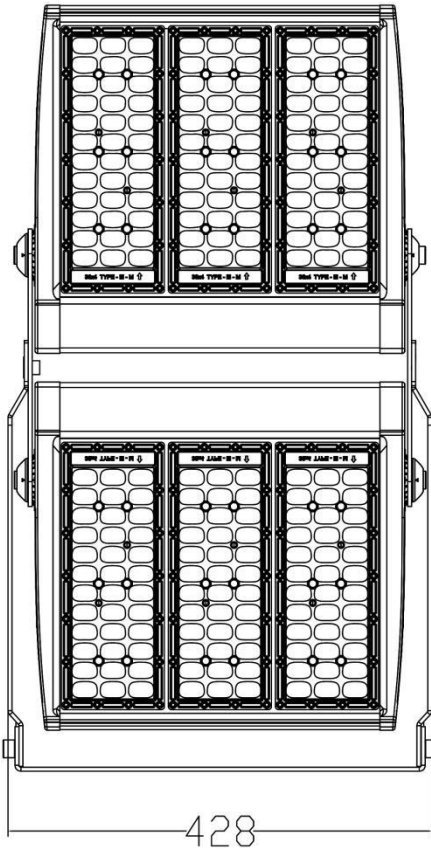


**400W**

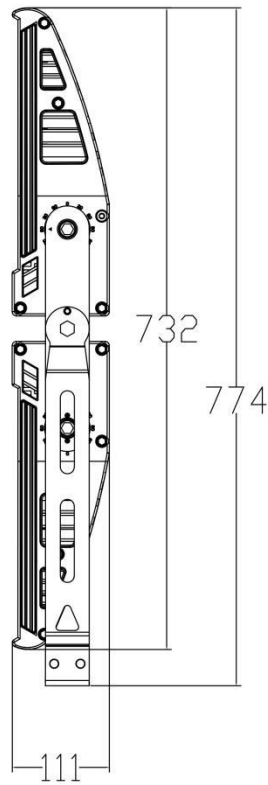
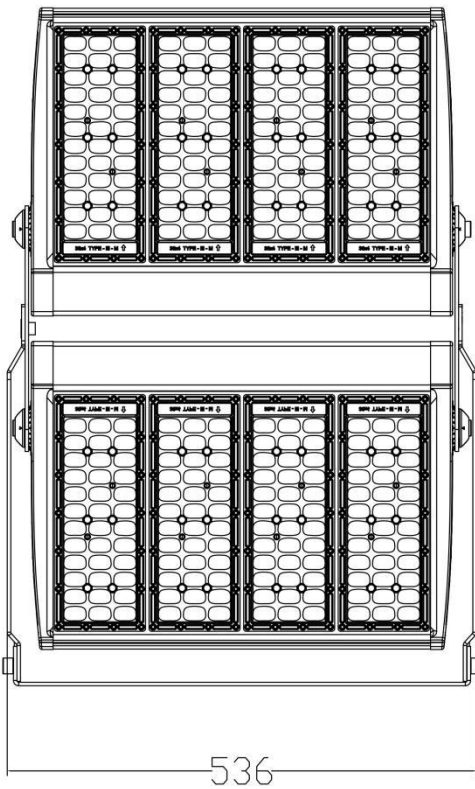


**500W**

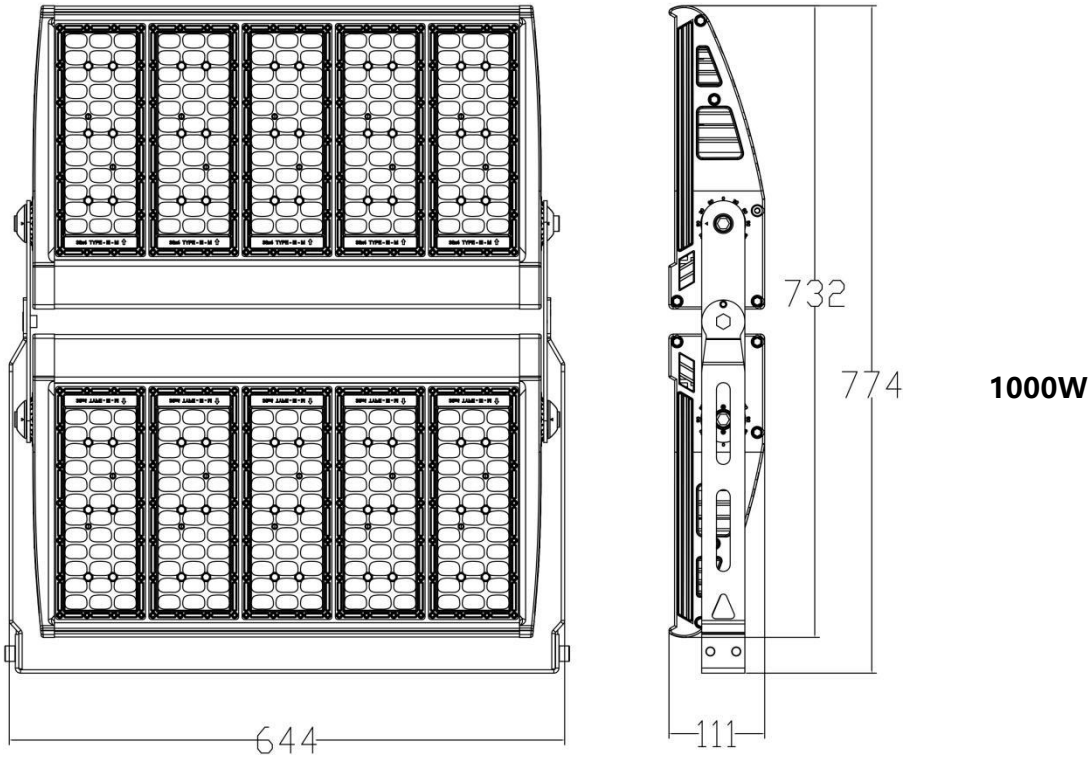




**600W**



**800W**



### 3. Product description

#### 1. Instructions

- The LED high pole light input is a 3-core sheathed wire, in which the brown wire is connected to the live wire, the blue wire is connected to the neutral wire, and the yellow-green flower wire is grounded.
- Fix the LED high pole light on the installation platform, tighten the hexagonal screws, and keep the LED high pole light balanced during installation.
- Apply the rated voltage to the LED high pole lamp to work normally. During the working process, ensure that the voltage is within the rated range. If the rated voltage is exceeded, it will cause irreparable damage.

## 2. Matters needing attention

- Please cut off the power before installation and make sure that the installation part can bear the weight of the lamp.
- In order to prevent the lamp from falling off, please make sure that the installation is correct. .
- Please do not cover any material on the lamp.
- For safety, please connect the ground wire securely.
- The breakdown, modification, or improper construction of this product is not within the scope of this warranty.

## 3.Package instruction



| Specification                    | L   | W   | H   | KG   | Remarks |
|----------------------------------|-----|-----|-----|------|---------|
| TG03 stadium lights-2groups      | 360 | 475 | 160 | 6.8  | 200W    |
| TG03stadium lights-3groups       | 470 | 475 | 160 | 9.5  | 300W    |
| TG03stadium lights-4groups       | 580 | 475 | 160 | 11.8 | 400W    |
| TG03stadium lights-5groups       | 690 | 475 | 160 | 14.5 | 500W    |
| TG03 stadium lights-6groups (拼)  | 470 | 830 | 160 | 19.3 | 600W    |
| TG03 stadium lights-8groups (拼)  | 580 | 830 | 160 | 23.8 | 800W    |
| TG03 stadium lights-10groups (拼) | 690 | 830 | 160 | 28   | 1000W   |

Weight includes power supply (refer to Inventronics power supply weight)