

# TX-H1936SW17A-2760V39-03H90

## PRODUCT SPECIFICATION

### Features:

- ◆Excellent transiting heat from LED chip operating under 1200mA.
- ◆Provide uniform cross distribution of positive white and warm white dual color scheme, mixed pure.
- ◆High luminous output.
- ◆No UV.
- ◆Encapsulated materials are environmentally certified and meet environmental requirements.

### Chip Material:

- ◆GaInN

### Emitting Color:

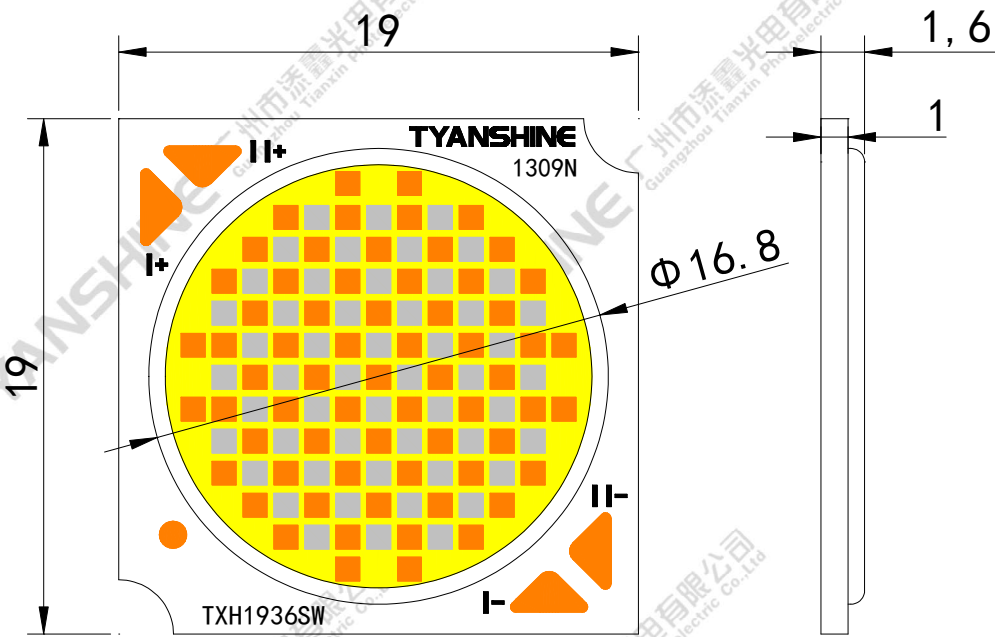
- ◆White
- ◆Warm white

### Applications:

- ◆Commercial lighting
- ◆General Lighting

|          |                             |          |            |      |        |
|----------|-----------------------------|----------|------------|------|--------|
| Part No. | TX-H1936SW17A-2760V39-03H90 | Spec No. | WKF-DA0144 | Page | 1 of 9 |
|----------|-----------------------------|----------|------------|------|--------|

Package Dimensions:



I: Warm White    II: White

Notes:

- 1.All dimensions are in millimeters .SS
- 2.Tolerances unless otherwise mentioned are ±0.25mm .

Code Formats:

TX-H1936SW17A-2760V39-03H90

| TX        | — | H            | 19     | 36        | SW          | 17  | A       | — | 2760 | V39    | — | 03  | H90 |
|-----------|---|--------------|--------|-----------|-------------|-----|---------|---|------|--------|---|-----|-----|
| TYANSHINE | — | high density | series | watt type | performance | LES | texture | — | CCT  | VOL TS | — | BOM | Ra  |

|          |                             |          |            |      |        |
|----------|-----------------------------|----------|------------|------|--------|
| Part No. | TX-H1936SW17A-2760V39-03H90 | Spec No. | WKF-DA0144 | Page | 2 of 9 |
|----------|-----------------------------|----------|------------|------|--------|

## Absolute Maximum Ratings

| Parameter                               | Symbol           | Ratings                            | Unit |
|-----------------------------------------|------------------|------------------------------------|------|
| Forward Current                         | IF               | 1200                               | mA   |
| Reverse Voltage                         | V <sub>R</sub>   | Not designed for reverse operation | V    |
| Power Dissipation                       | P <sub>D</sub>   | S                                  | W    |
|                                         |                  | W                                  |      |
|                                         |                  | S+W                                |      |
| Junction Temperature                    | T <sub>j</sub>   | S                                  | ℃    |
|                                         |                  | W                                  |      |
| Case Temperature (C)                    | T <sub>c</sub>   | 85                                 | ℃    |
| Electrostatic Discharge Threshold (ESD) | ESD              | 2000                               | V    |
| Storage Temperature                     | T <sub>stg</sub> | -30~+80                            | ℃    |
| Operation Temperature                   | T <sub>opr</sub> | -30~+80                            |      |

## Notes:

- Specifications are subject to change without notice.
- The data on this specification is for reference only and the actual data is in accordance with the acknowledgment.
- Precautions for ESD:  
STATIC SHIELD Electricity and surge damages the LED. It is recommended to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.

Electrical Optical Characteristics (Tc=25°C)

| Parameter                           | Symbol          | Condition | Emitting color | Min. | Typ. | Max. | Units   |
|-------------------------------------|-----------------|-----------|----------------|------|------|------|---------|
| Luminous Flux                       | $\varphi_v$     | If=1000mA | S              | 3500 | 3950 | 4500 | lm      |
|                                     |                 |           | W              | 4200 | 4700 | 5350 |         |
| Forward Voltage                     | $V_f$           |           | S              | 35   | 37   | 39   | V       |
|                                     |                 |           | W              | 35   | 37   | 39   |         |
| Correlated Colour Temperature       | CCT             |           | S              | 2700 | 2760 | 2830 | K       |
|                                     |                 |           | W              | 5800 | 5950 | 6150 |         |
| Viewing Angle at 50 % IV            | $2\theta_{1/2}$ |           | S              | —    | 115  | —    | Deg     |
|                                     |                 |           | W              | —    | 115  | —    |         |
| Thermal Resistance Junction to Case | $R\theta_{J-C}$ |           |                | —    | —    | 0.61 | —       |
| Reverse Current                     | $I_R$           | —         | —              | —    | —    | —    | $\mu A$ |
| Color Rendering Index               | Ra              | If=1000mA | S              | 90   | —    | —    | —       |
|                                     |                 |           | W              | 90   | —    | —    |         |

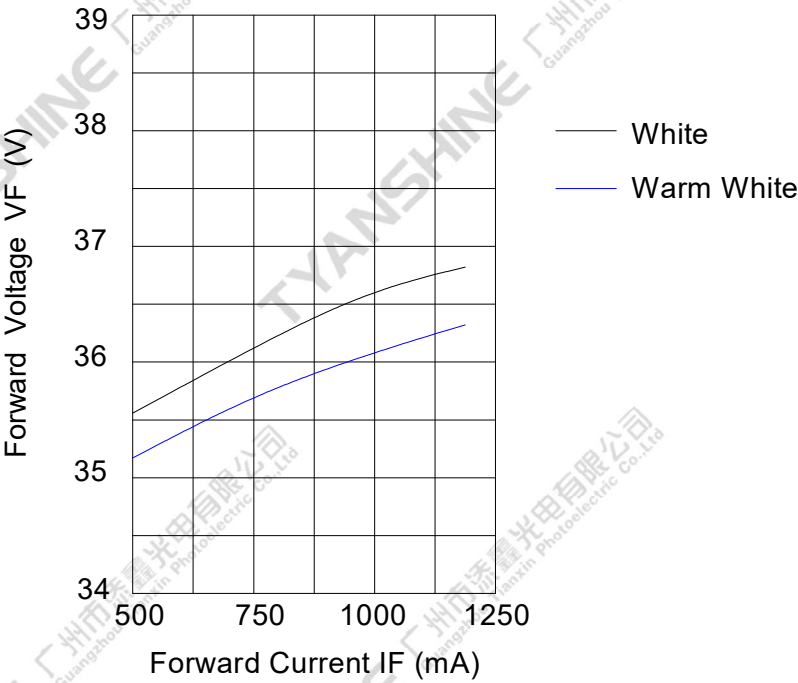
Notes:

- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.Luminous flux measurement tolerance:±15%.
- 4.Forward voltage measurement tolerance:±3%.
- 5.Ra measurement tolerance: ±2.

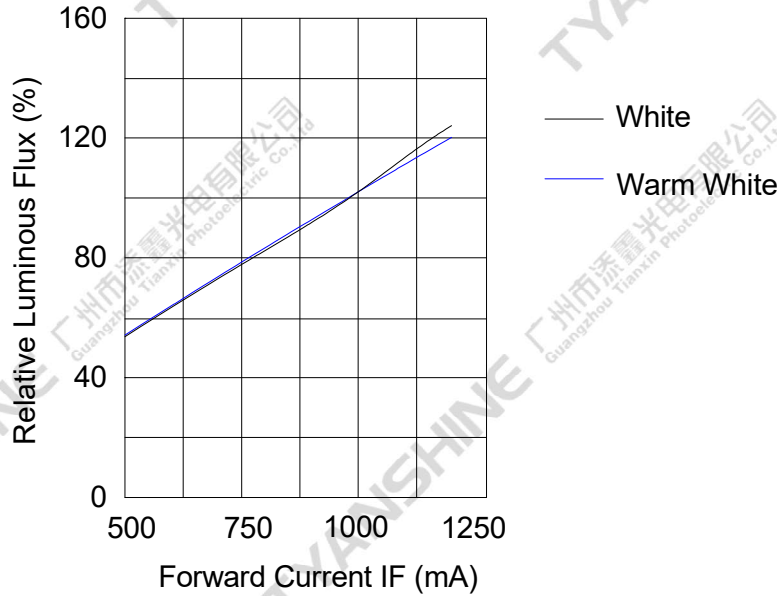
Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

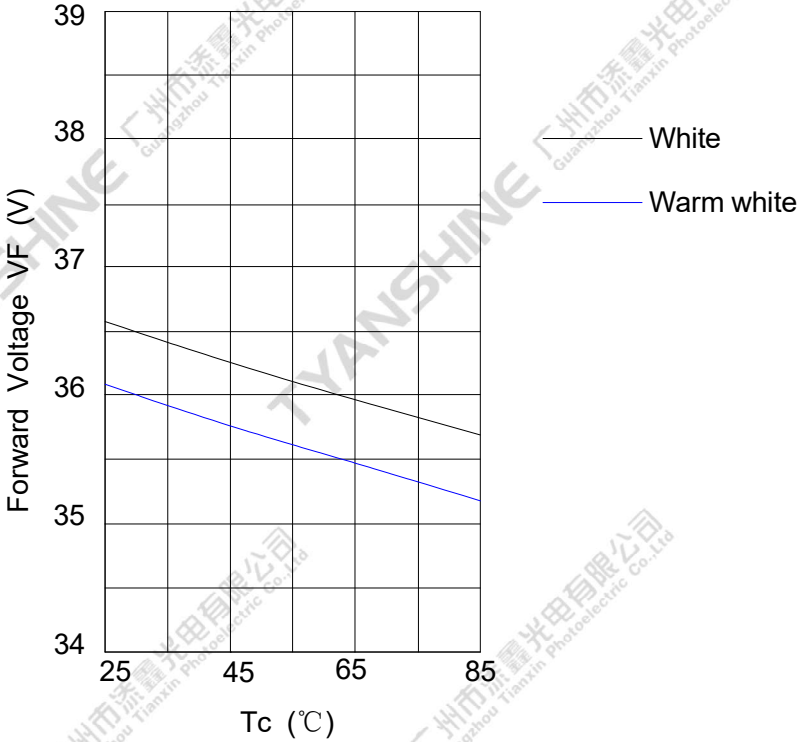
Forward Current VS. Relative Forward Voltage



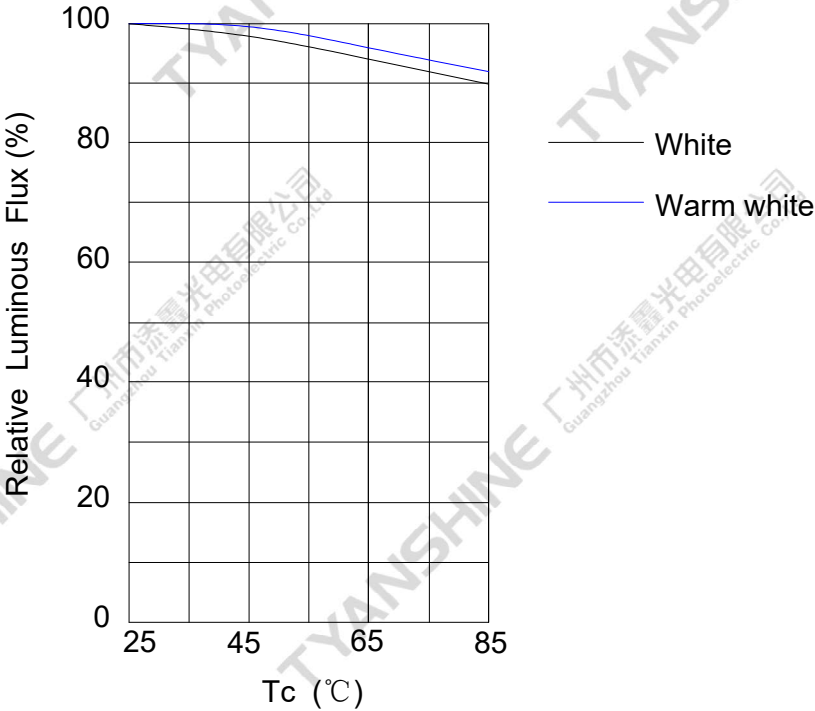
Forward Current VS. Relative Luminous Flux

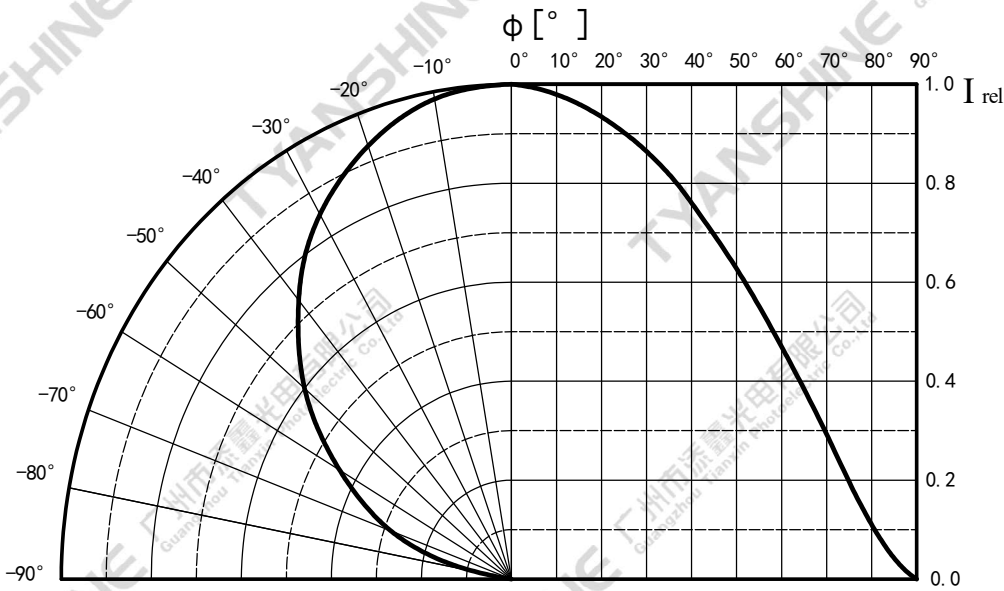
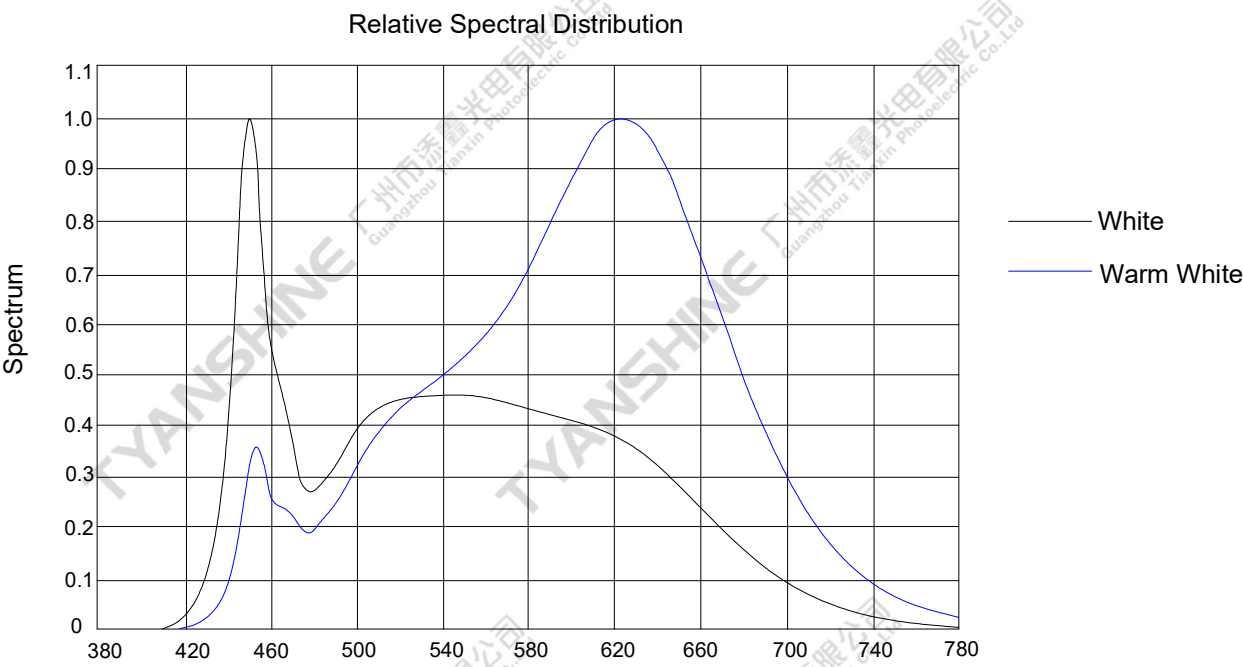


Temperature VS. Forward Voltage (IF=1000mA)



Temperature VS. Relative Luminous Flux (IF=1000mA)

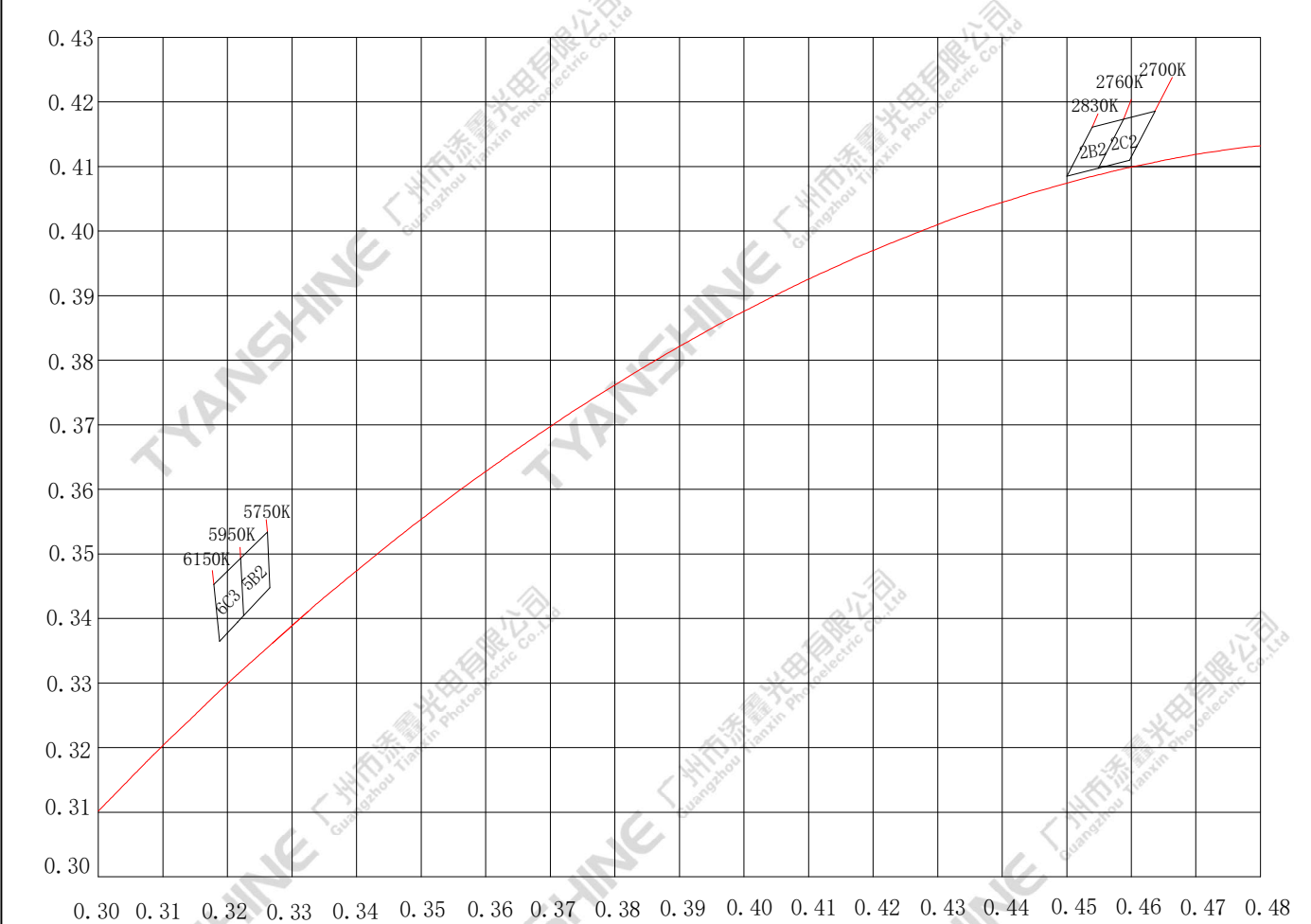




Notes:

- 1.  $2\theta_{1/2}$  is the off axis angle from lamp centerline where the luminous intensity is 1/2 of the peak value.
- 2. View angle tolerance is  $\pm 5^\circ$ .

Chromaticity Coordinates （Condition:IF=1000mA,Tc=25℃）



Notes:

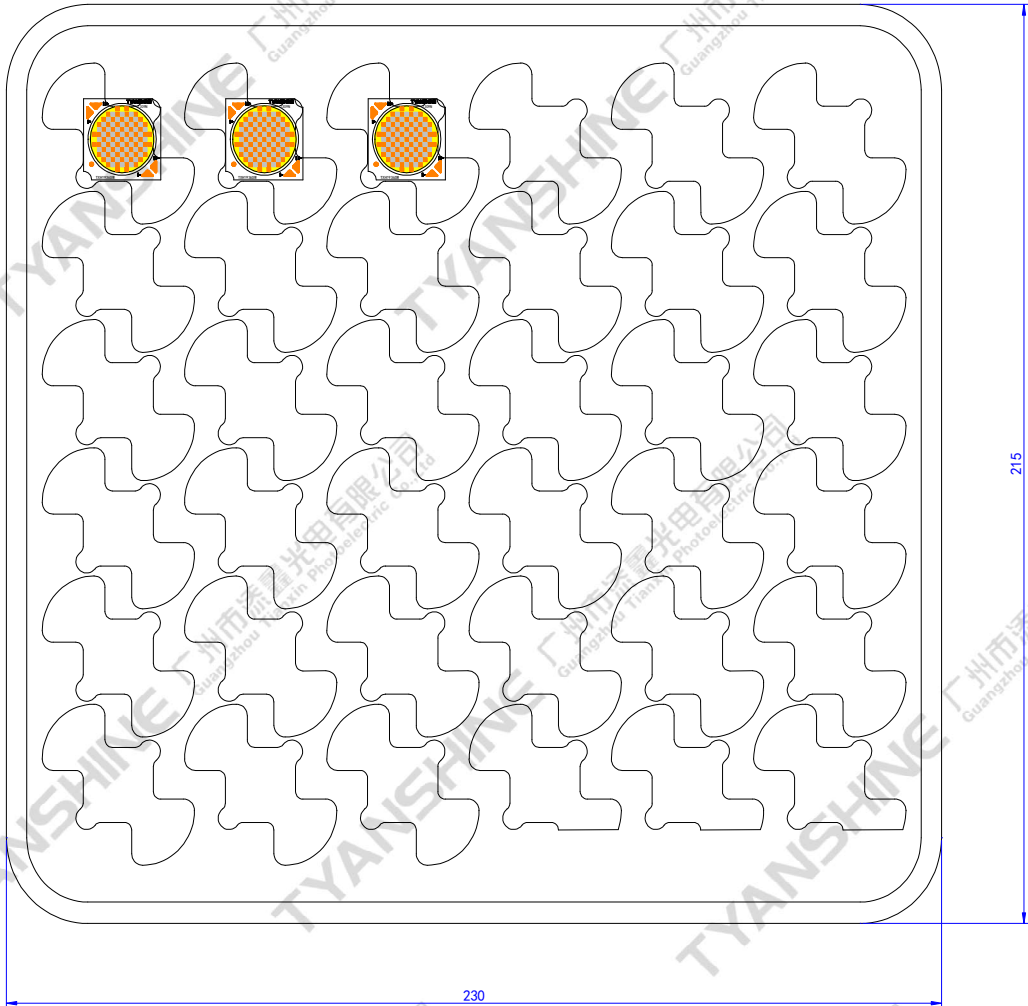
1. Chromaticity (x,y) measurements tolerance:±0.005.

Reliability Test

| Test Item                     | Test Condition                           |
|-------------------------------|------------------------------------------|
| Continuous Operation Test     | IF=1000mA Ta=25℃×1000hrs                 |
| Low Temperature Storage Test  | -30℃×1000hrs                             |
| High Temperature Storage Test | 100℃×1000hrs                             |
| Moisture-proof Test           | 85℃，85%RH for 500 hours                  |
| Thermal Shock Test            | - 40℃×15minutes-125℃×15minutes,100 cycle |

Dimensions For Cannulation And Packaging

Quantity: 36PCS



Notes:

1. All dimensions are in millimeters.
2. Tolerances are  $\pm 2.0$  mm unless otherwise noted.
3. The products are packaged together with silica gel, Transport, not to the weight of welding LED light-emitting area, As a result of the weight of LED light-emitting zone in the quality of, Irresponsible of the Company.

|          |                             |          |            |      |        |
|----------|-----------------------------|----------|------------|------|--------|
| Part No. | TX-H1936SW17A-2760V39-03H90 | Spec No. | WKF-DA0144 | Page | 9 of 9 |
|----------|-----------------------------|----------|------------|------|--------|