



SPECIFICATION FOR APPROVAL



Customer : _____
Products Name : LED T8 Tube
Our Model : LUM-T8H16-18W
Customer model : _____

Approved by : _____

ECR history

| version | issue date | Description of amendment/additional |
|---------|------------|-------------------------------------|
| A | | |
| | | |
| | | |

1. Specification

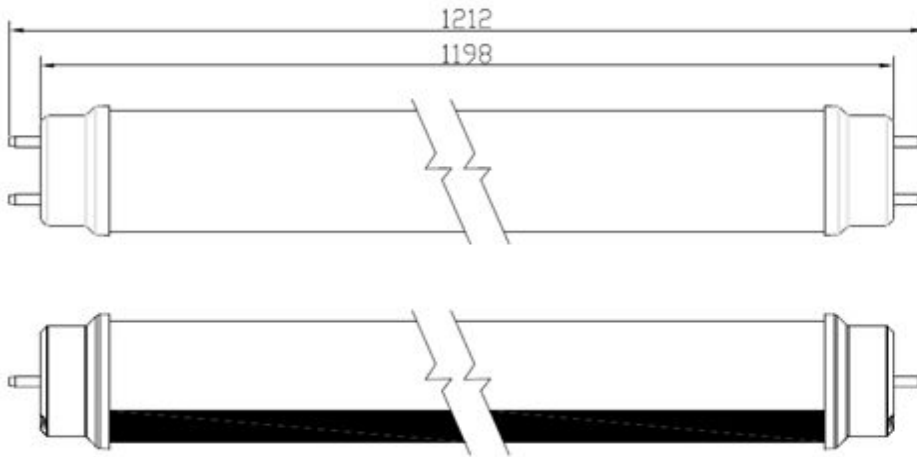
1-1. Environment

| | Spec. | | | |
|--------------------|--------|---------|-----|-----|
| | unit | Typical | min | max |
| Storage temp. | (degC) | 25 | -20 | 60 |
| Operating temp. | (degC) | 25 | -20 | 40 |
| Storage humidity | (%RH) | 65% | 10% | 90% |
| Operating humidity | (%RH) | 65% | 10% | 90% |

1-2. Geometry Property

Dimension & Drawing of products

| | Spec. | | | |
|----------|-------|---------|------|------|
| | unit | Typical | min | max |
| Diameter | (mm) | 26.9 | 26.8 | 27 |
| Cut-Out | (mm) | | | |
| MOL | (mm) | 1198 | 1197 | 1199 |
| Weight | (g) | 200 | 180 | 220 |
| Base | | | G13 | |



1-3. Electrical Performance

| | spec | | | |
|------------------------|-------|---------|------|------|
| | unit | Typical | min | max |
| Consumption Power | (w) | 18 | 16.2 | 19.8 |
| Input Voltage | (v) | 230 | 220 | 240 |
| Input Current | (mA) | 76 | 68 | 84 |
| Power Factor | | 0.9 | | |
| Frequency | (Hz) | 50/60 | | |
| Starting time * for EU | (sec) | 0.5 | | |
| THD | % | 15% | | |

1-4. LED Chip/Package information LED

| | |
|-------------------------|-----------------------|
| LED Vender | REFOND/CEC/NATIONSTAR |
| model no. | 2835 |
| Number of LED per board | 90 |

1-5. Photometric Performance

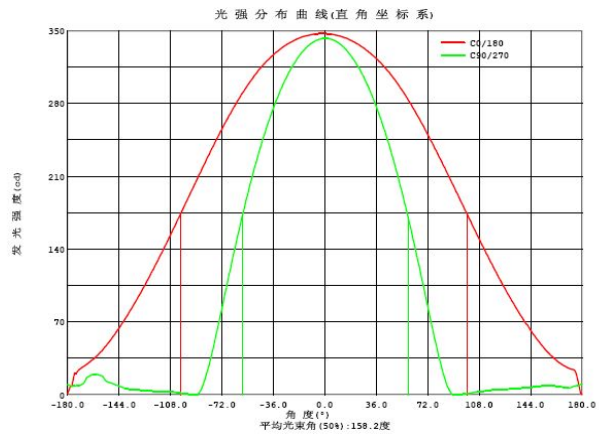
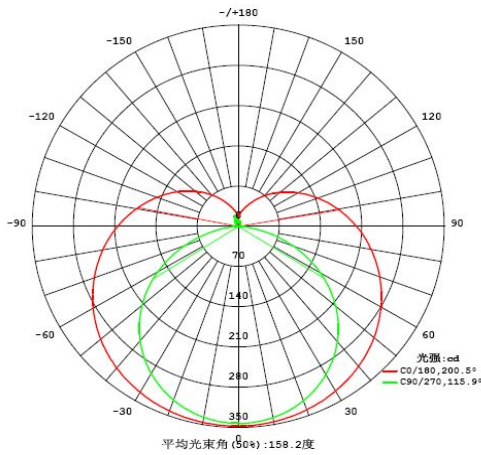
| | unit | Spec. | | | |
|--|--------|---------|------|------|------|
| | | Typical | | | |
| Color Temp. | (k) | 3000 | 4000 | 5000 | 6500 |
| luminous flux (90deg cone) * for EU directional lamp | (lm) | | | | |
| total Luminus flux | (lm) | 1760 | 1800 | 1800 | 1800 |
| CBCP | (cd) | 530 | 550 | 550 | 550 |
| CRI(Ra) | 700 | ≥80 | | | |
| Beam Angle | (deg) | 180 | | | |
| Efficiency | (lm/w) | 98 | 100 | 100 | 100 |
| Dimming | | NO | | | |

Tolerance ± 6%

1-6. Lifespan

| | | | |
|------------------------|---------|-------|------------------|
| Lifetime(L70) at 25deg | (hours) | 40000 | @25°C |
| Switching Cycle | (times) | 20000 | 30s on / 60s off |

1-7. Light Distribution data / LED's Spectrum wave form



1-8. work in special fixture

| | | |
|-----------------------------|-------------|-----|
| enclosed (sealed) fixtures | (OK or N/A) | N/A |
| thermal-insulation fixtures | (OK or N/A) | N/A |

1-9. compatibility for switch with indicator (Firefly switch)

| | | |
|------------|-------------|----|
| compatible | (OK or N/A) | OK |
|------------|-------------|----|

(330kΩ) for ~120V, (750kΩ) for ~230V, Pana_FireFlySW x 2-parallel, work properly ~ for JPN. * N/A~ lamp w/transformer

2. Regulation Certification

On the way.

3.Pallatizing (drawing)

| | Length (mm) | Width (mm) | Height (mm) | Weight (g) |
|--------------------------------------|----------------|---------------|----------------|---------------|
| giftbox | | | | |
| Outer carton | 1320 | 200 | 160 | |
| Unit weight with lamp | | | | |
| Carton weight with full lamps inside | | | | |

For example) Package configuration

