

AB-GES-L54108Wxx4N3

Features & Applications

Features:

- 8W Linear AC LED light engine
- SimpleDrive® - 120V AC drive technology
- Max Qty in series: 15
- Driver on Board structure
- Phillips Lumileds LED
- Long life - No Electrolytic capacitors
- Easily to be integrated
- UL Compliance

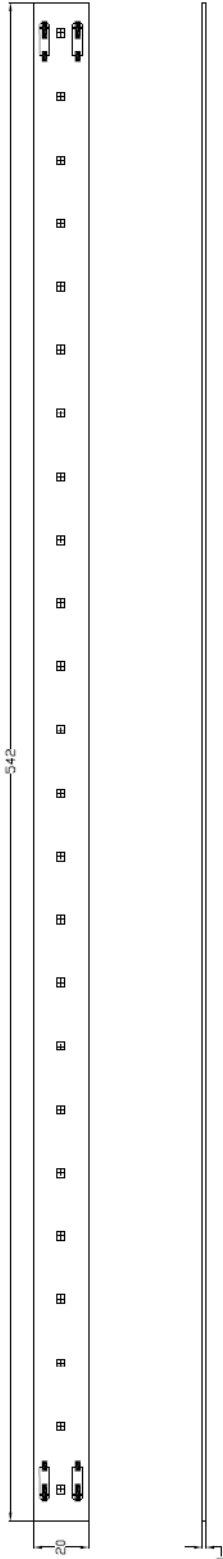


Applications:

- Refrigerator Light
- Under-cabinet



Outline Dimensions



Units: mm

Notes:

1. 4 pcs terminal block is used for the serial connection and No wire connected.
2. Thickness of PCB: 1.2mm
3. Tolerance of dimension: ± 0.1 mm
4. Substrate is MCPCB and no thermal tape in the back of PCB.



Characteristics

Absolute Maximum Ratings

| Parameter | Symbol | Rating | Unit |
|--------------------------|------------------|--------------|------|
| Input Voltage | V _{in} | 140 | Vac |
| LED Junction Temperature | T _J | 115 | °C |
| Storage Temperature | T _{stg} | -40 ~ 100 °C | °C |
| Operation Temperature | T _{opr} | -40 ~ 85 °C | °C |

- Proper current rating must be observed to maintain junction temperature below maximum at all time. For this product, we suggest to keep the Temperature of TC point under 75°C, and the temperature of Top IC surface under 115°C. After passing the maximum temperature of IC, the rating current will be lower automatically for protecting the whole circuit.

Electrical Characteristics, Ta=25°C

| Parameter | Symbol | Min. | Max. | Unit |
|-----------------|-----------------|-------|------|------|
| Input Voltage | V _{in} | 100 | 130 | Vac |
| Input Frequency | Freq. | 50/60 | | Hz |
| Power Factor | PF | 0.9 | 0.95 | - |

* This surge protection is without the protection device circuit.

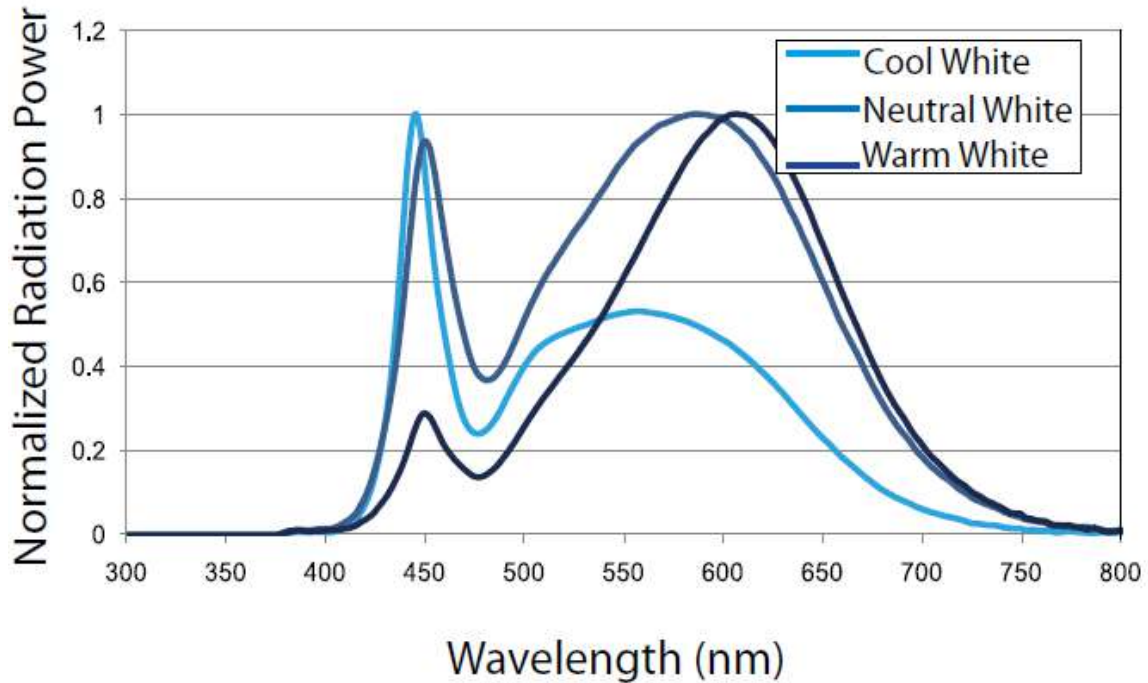
Optical Characteristics (V_{in}=120V), Ta=25°C

| Model name | AC Power | | | Color Temp (K) | Luminous Flux(lm) | | CRI |
|---------------------|----------|------|-----|-------------------|-------------------|-----|-----|
| | Min | Typ. | Max | | Min | Typ | |
| AB-GES-L54108W304N3 | 7.2 | 8.0 | 8.7 | 3000 | 800 | 880 | >80 |
| AB-GES-L54108W404N3 | 7.2 | 8.0 | 8.7 | 4000 | 880 | 960 | >80 |
| AB-GES-L54108W504N3 | 7.2 | 8.0 | 8.7 | 5000 | 880 | 960 | >80 |

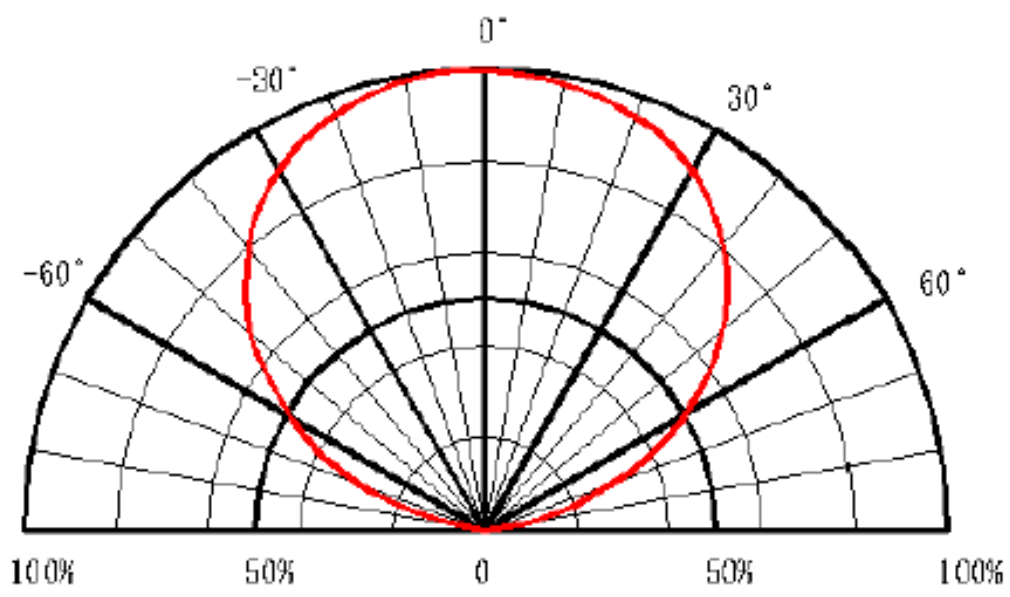
- Correlated color Temperature is derived from the CIE 1931Chromaticity diagram.
- The luminous flux tolerance is ± 10%.
- This CRI value tolerance is ± 2.
- Calibration accuracy of CIE_x and CIE_y : ±0.007 ;
- Calibration error CCT 3000K ±175K ; 4000K ±300K ; 6500K ±400K



■ Relative Spectrum of Emission (Ta=25°C)

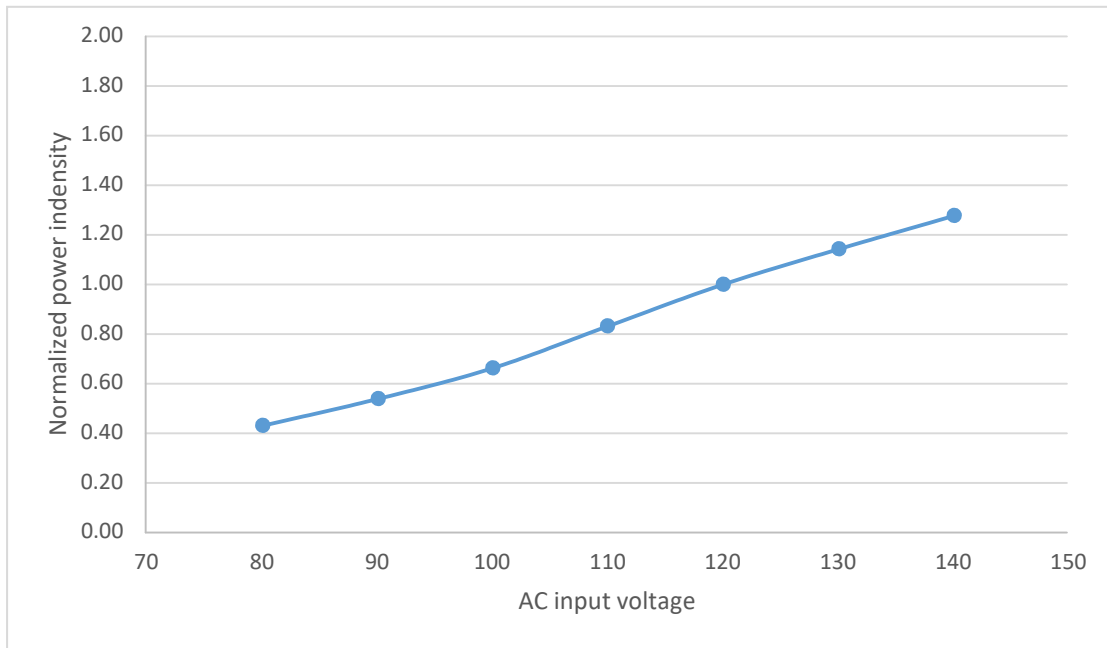


■ Radiation Pattern

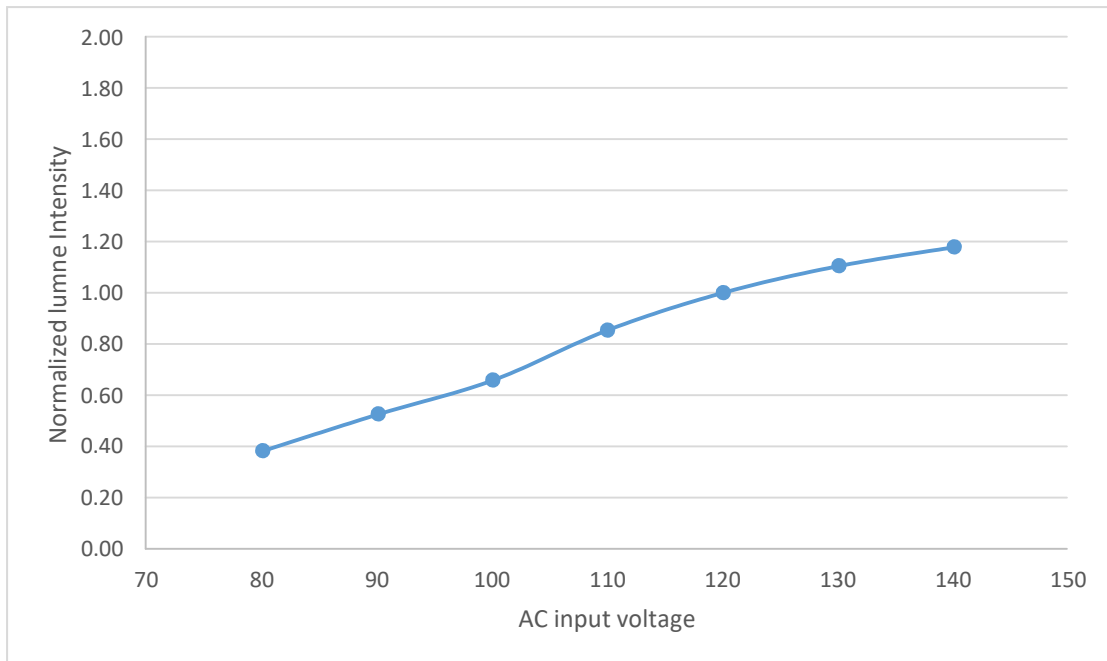




■ Relative luminous vs. Input voltage (Ta=25°C)

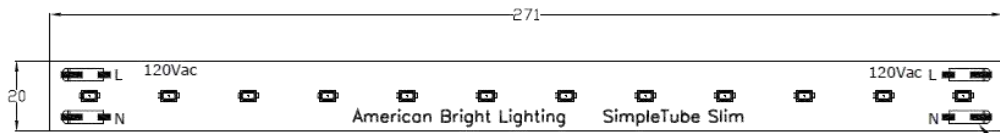


■ Relative power distribution vs. Input voltage (Ta=25°C)



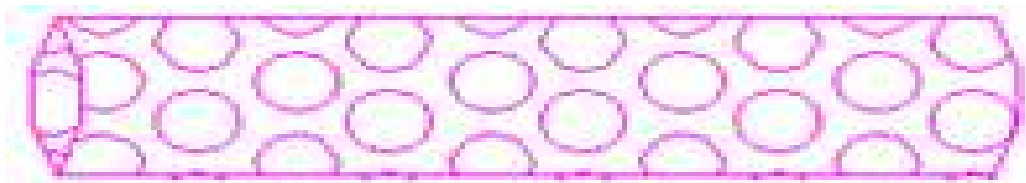
Packing & Labeling

Packing



1.0mm MCPCB

Wire connector
AWG#22-18



1 Box = xxx PCS (about Kgs)

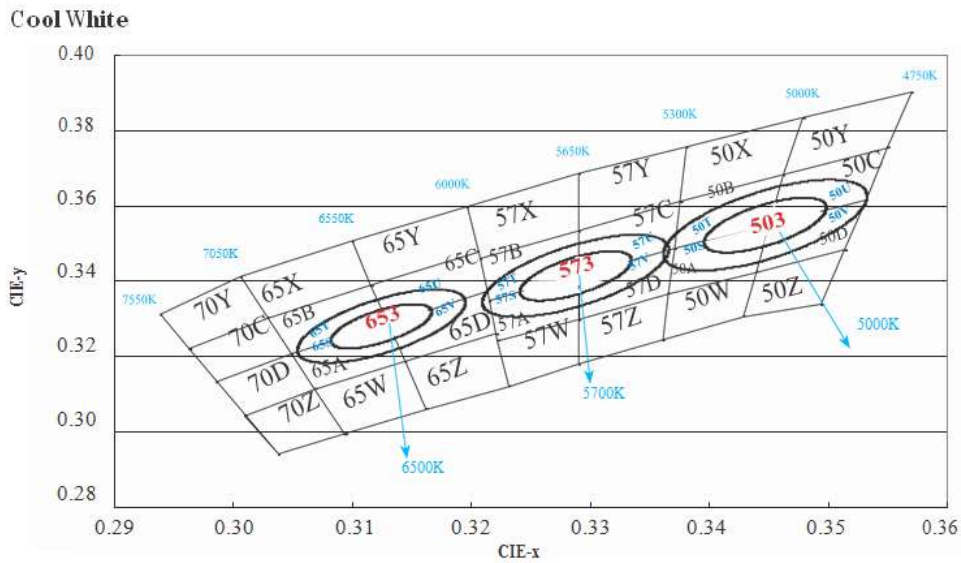
Box size (L x W x H) = TBD

Color Bin Code

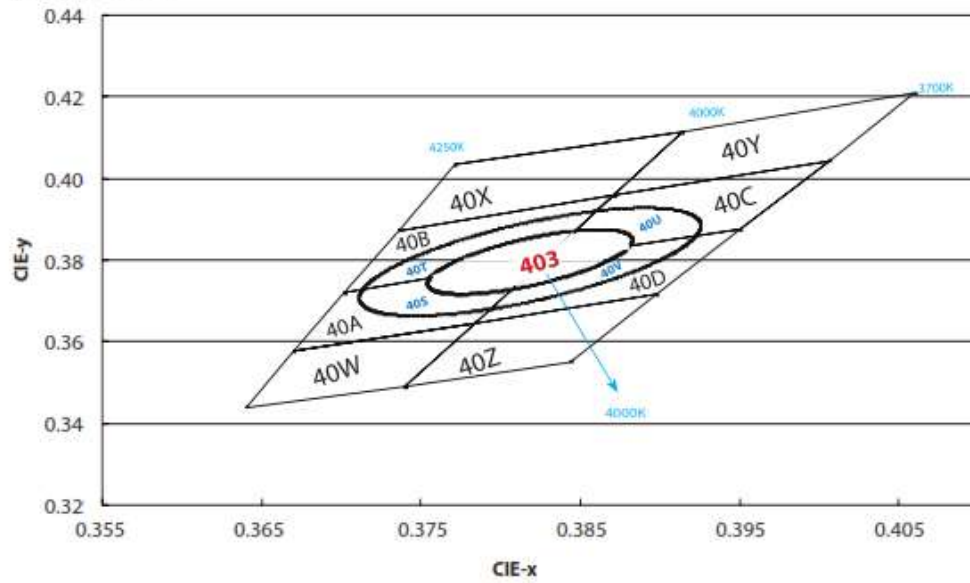
Color region stays within Macadam "3-Step" ellipse from the chromaticity center. The chromaticity center refers to ANSI C78.377:2008.

Please refer to ANSI C78.377 for the chromaticity center.

| CCT | Steps | Cx | Cy | a | b | theta |
|-------|-------|--------|--------|---------|---------|-------|
| 2700K | 3 | 0.4578 | 0.4101 | 0.00810 | 0.00420 | 53.70 |
| 3000K | 3 | 0.4338 | 0.4030 | 0.00834 | 0.00408 | 53.22 |
| 3500K | 3 | 0.4073 | 0.3917 | 0.00927 | 0.00414 | 54.00 |
| 4000K | 3 | 0.3818 | 0.3797 | 0.00939 | 0.00402 | 53.72 |
| 5000K | 3 | 0.3447 | 0.3553 | 0.00822 | 0.00354 | 59.62 |
| 5700K | 3 | 0.3287 | 0.3417 | 0.00746 | 0.00320 | 59.09 |
| 6500K | 3 | 0.3123 | 0.3282 | 0.00669 | 0.00285 | 58.57 |



Neutral White



Warm White

