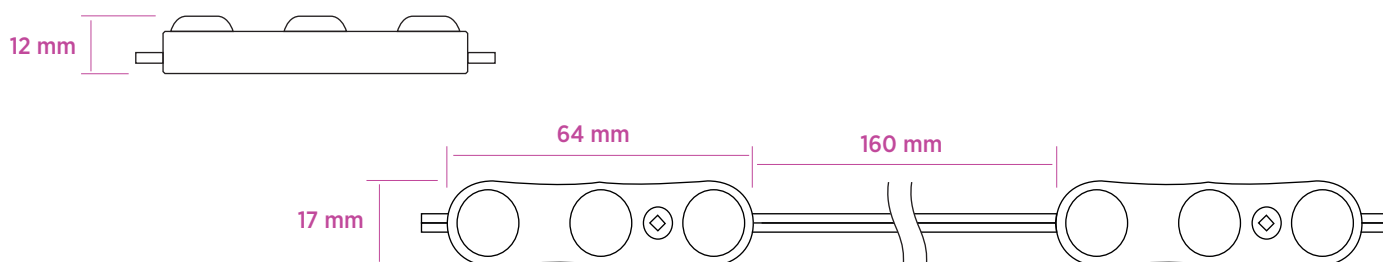




## Dimension:



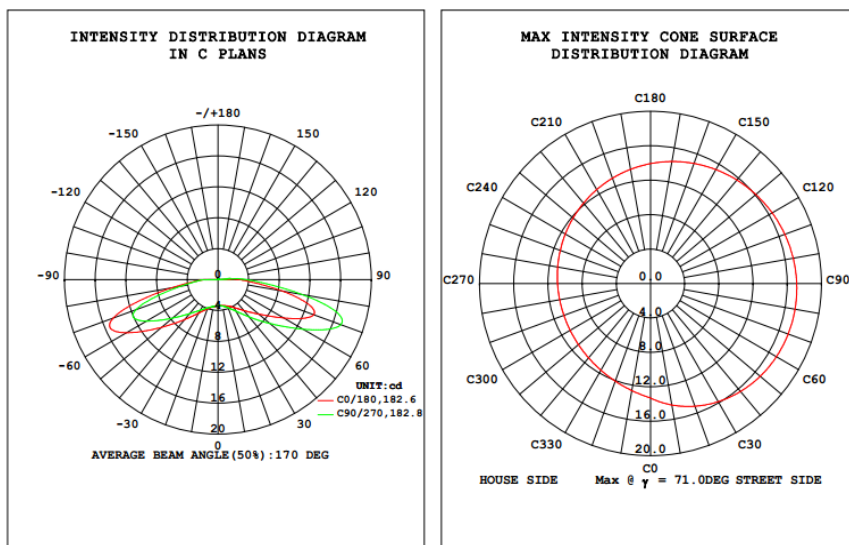
## Feature:

- 90% transmittance lens, Wide view angle 170°
- High efficiency module, up to 150lm/w
- Constant Voltage Technology. 20 pcs per series
- 170 degree view angle, with less qty in square meter
- Injection molding process. Waterproof: IP 67
- Energy saving. Environment friendly
- Long life span
- Suitable for 6-12 cm height channel letters and light boxes backlighting etc.

## Parameter of Product:

| Code      | Color           | "Operation Voltage" | "Rated Current" | "Rated Power" | "Beam Angle" | Luminous Flux | Efficiency | CCT         | IP Rank |
|-----------|-----------------|---------------------|-----------------|---------------|--------------|---------------|------------|-------------|---------|
| 3SMD170HW | White 6000-6500 | DC12V               | 90mA            | 1,08W         | 170°         | 162Lm         | 150LM/W    | 2800-11000K | IP 67   |

## Distribution curve:



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2017-03-21

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 1.100m [K=0.9954]  
Remarks:

## Typical optical characteristics curves :

### Color Parameter

Chroma Coordinate:  $x=0.302$   $y=0.3197$   $u=0.1939$   $v=0.3078$   $Duv=0.0041$

Chroma Coordinate:  $u'=0.1939$   $v'=0.4617$

CCT.: CCT=7231K Dominant:  $d=485.9nm$  Barycenter:  $b=538nm$  Peak Wavelength:  $p=452nm$

FWHM: 16.43nm Purity:  $Pe=11.64\%$  Red Ratio:  $R=0.117$  Green Ratio:  $G=0.836$  Blue Ratio:  $B=0.047$

Color CRI.:  $Ra=75.44$

|         |        |         |         |         |         |         |
|---------|--------|---------|---------|---------|---------|---------|
| R 1=73  | R 2=80 | R 3=81  | R 4=75  | R 5=74  | R 6=70  | R 7=85  |
| R 8=65  | R 9=18 | R 10=48 | R 11=72 | R 12=39 | R 13=75 | R 14=90 |
| R 15=70 |        |         |         |         |         |         |

### Luminosity Parameter

Luminous Flux(380-780nm): 163.879lm Optical Power(380-780nm): 0.521W Efficient(380-780nm): 153.4lm/W

### Electric Parameter

Voltage:  $U=12V$  Current:  $I=89mA$  Power:  $P=1.068W$  PF: PF=1

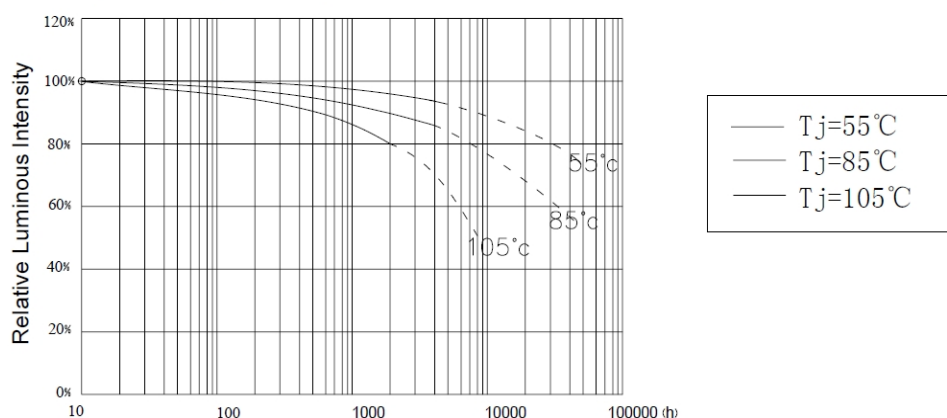
### Device State

Wavelength Range: 380nm-780nm Wavelength Interval: 1nm

## Affect of Tj on Luminous Maintenance:

life test:

Affect of Tj on Luminous Maintenance  
(If=40mA)  
(Dot line: Expected Life)



## Absolute maximum ratings:

| Parameter                   | Symbol | Value     | Unit |
|-----------------------------|--------|-----------|------|
| Power dissipation           | Pd     | 1.08      | W    |
| Forward current             | If     | 90        | mA   |
| Reverse voltage             | Vr     | 15        | v    |
| Operating temperature range | Top    | -40 ~+100 | °C   |
| Storage temperature range   | Tstg   | -40 ~+100 | °C   |
| Pulse forward current       | Ifp    | 120       | mA   |
| Electrostatic discharge     | ESD    | 2000(HBM) | V    |
| Junction temperature        | Tj     | 85        | °C   |