

# Specification

Eco series-DS8144



## General description

- ※50m long strip driven by one end power supply with the same brightness from end to end
- ※Self-encapsulated design offers 8 optional 1900-6000K white lights
- ※With life span over 36000H
- ※Ta:-25~60° C; Tc: 75° C (max)



## Dimensions

**Max.length:** 50,000mm  
**Cutting unit:** 166.67mm/10leds  
**LED pitch:** 8.33mm  
**Min. bend diameter:**  $\Phi$  60mm  
**Mounting:** 3M tape  
**IP:** IP33/IP65/IP67

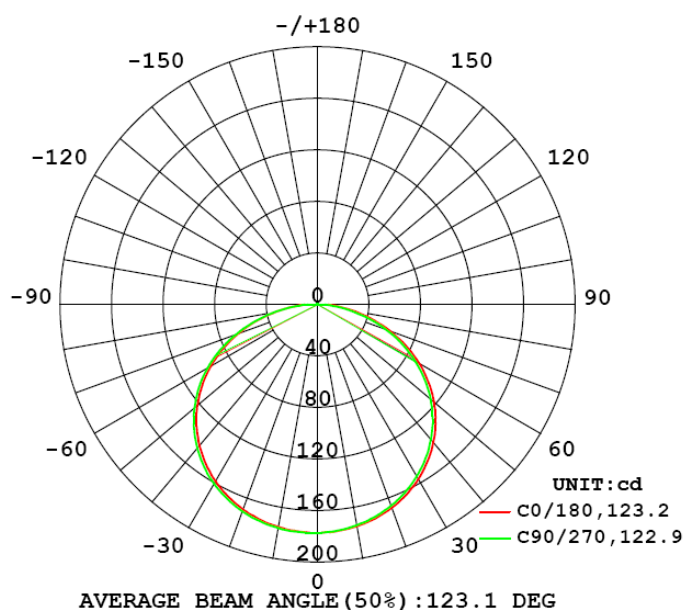


## Electronic & output data

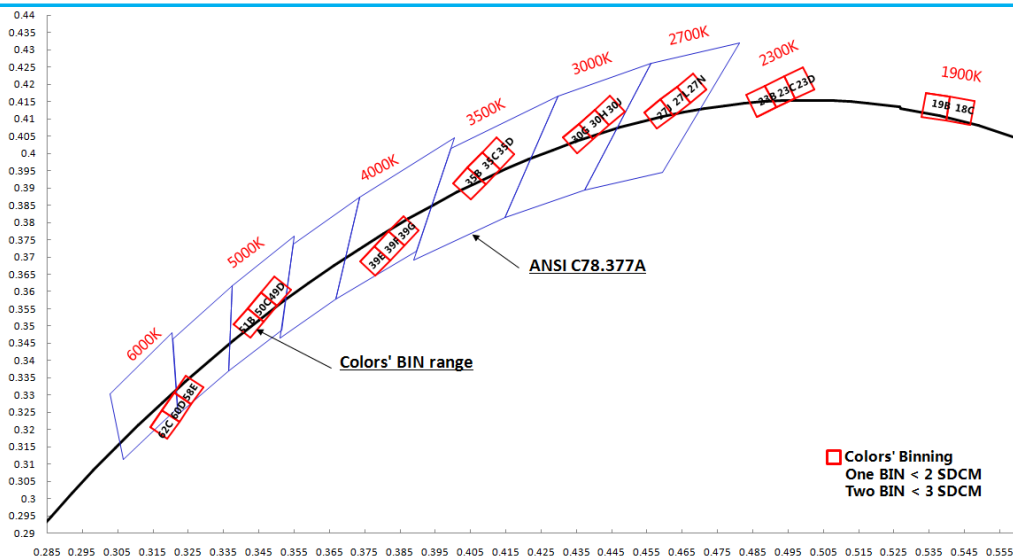
**Input voltage:** 48VDC  
**Rated current:** 0.112A(1meter) /5.7A(50meter)  
**Typical Power:** 5.4W(1meter) /274W(40meter)  
**Power range:** 5.1~5.8W  
**Max.power:** 5.8W (If=10mA)  
**CRI:** 80/90  
**On-off times:** 10000 (test times)

| Color                   | GW    | LW    | SW    | WW    | PW    | NW    | DW    | W     |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| CCT                     | 2000K | 2300K | 2700K | 3000K | 3500K | 4000K | 5000K | 6000K |
| Lumen                   | 454   | 499   | 531   | 558   | 568   | 580   | 580   | 558   |
| Lm/W                    | 84    | 92    | 98    | 103   | 105   | 107   | 107   | 103   |
| Energy efficiency class | A+    | A+    | A+    | A+    | A+    | A+    | A+    | A+    |

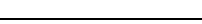
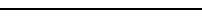
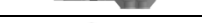
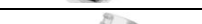
1.The tolerance of output data can be vary up to 10%  
 2.the output data tested according to IES LM-79-08  
 3.the output data is based on IP33/1merter  
 4.IP protection process leads changes to size, CCT and luminous flux



| Height | Eavg, Emax      | Angle: 120.78deg | Diameter  |
|--------|-----------------|------------------|-----------|
| 1m     | 43.10, 180.41x  |                  | 351.89cm  |
| 2m     | 10.78, 45.091x  |                  | 703.78cm  |
| 3m     | 4.789, 20.041x  |                  | 1055.67cm |
| 5m     | 1.724, 7.2151x  |                  | 1759.45cm |
| 6m     | 1.197, 5.0101x  |                  | 2111.34cm |
| 7m     | 0.8797, 3.6811x |                  | 2463.23cm |
| 8m     | 0.6735, 2.8181x |                  | 2815.12cm |
| 9m     | 0.5321, 2.2271x |                  | 3167.01cm |
| 10m    | 0.4310, 1.8041x |                  | 3518.90cm |



## Accessories Information

| Type                      | Name                               | Picture                                                                             | Code                                          | Color              | protection technique | Remark                 |
|---------------------------|------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------|--------------------|----------------------|------------------------|
| wire cable with connector | red and black cable                |  | 94.31.20181201 (head) / 94.31.20181202 (tail) | red/black          | NO/ NA/ET/ /EF\EH    | 18AWG<br>L=120mm       |
|                           | Two core SM-male wire              |  | 94.34.20182101                                | red/black          | NO/ NA               | 18AWG<br>L=210mm       |
|                           | Two core SM-female wire            |  | 94.34.20182102                                | red/black          | NO/ NA               | 18AWG<br>L=210mm       |
|                           | Two core DC-male wire              |  | 94.35.22182101                                | black              | NO/ NA               | 18AWG<br>L=210mm       |
|                           | Two core DC-female wire            |  | 94.35.22182102                                | black              | NO/ NA               | 18AWG<br>L=210mm       |
|                           | Two core Lucid wire                |  | 94.32.20182001                                | transparent        | NO/NA                | 18AWG<br>L=200mm       |
|                           | Two core Lucid-male wire           |  | 94.35.23182401                                | transparent        | NO/NA                | 18AWG<br>L=240mm       |
|                           | Two core Lucid-female wire         |  | 94.35.23182402                                | transparent        | NO/NA                | 18AWG<br>L=240mm       |
|                           | single pin,"-"shape wire connector |  | 94.50.110300001                               | Transparent /black | -                    | Wire Diameterer< 2.1mm |
|                           | single pin,"T"shape wire connector |  | 94.50.110000001                               | Transparent /black | -                    | Wire Diameterer< 2.1mm |
|                           | double pin,"-"shape wire connector |  | 94.50.210300001                               | Transparent /black | -                    | Wire Diameterer< 2.1mm |
|                           | double pin,"T"shape wire connector |  | 94.50.210000001                               | Transparent /black | -                    | Wire Diameterer< 2.1mm |
|                           | double pin,"Y"shape wire connector |  | 94.51.110000001                               | white              | -                    | -                      |
|                           | double pin,"-"shape wire connector |  | 94.51.110000002                               | transparent /black | -                    | Wire Diameterer< 2.1mm |
|                           | Solder free terminal               |  | 94.42.621020003                               | transparent        | NO                   | -                      |
|                           | Solder free terminal               |  | 94.42.621020004                               | transparent        | NO                   | -                      |
|                           | 12mm Tube clamps                   |  | 94.19.01100002                                | transparent        | NO/NA                | -                      |

## Order Code Formats

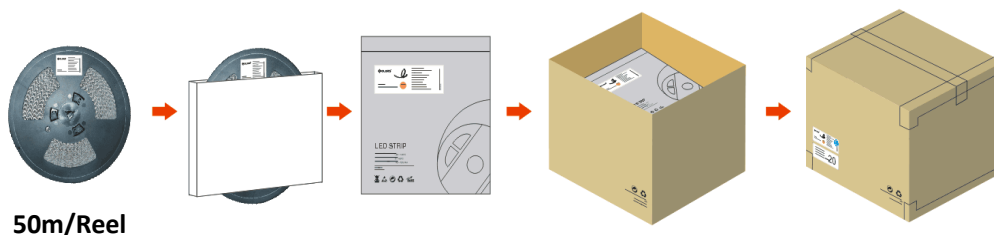
| 1:Category |   | 2:LED |      | 3:LED/m |         | 4:Voltage |     | 5:FPC Width |      | 6:IP Process |                           | 7:CRI |     | 8:CCT |       |
|------------|---|-------|------|---------|---------|-----------|-----|-------------|------|--------------|---------------------------|-------|-----|-------|-------|
| DS         | - | 8     | 2835 | 144     | 144 LED | 48        | 48V | 12          | 12mm | NO           | NO                        | 8     | >80 | GW    | 2000K |
|            |   |       |      |         |         |           |     |             |      | NA           | NANO                      | 9     | >90 | LW    | 2300K |
|            |   |       |      |         |         |           |     |             |      | ET           | Extrusion Tube            | F     | FS  | SW    | 2700K |
|            |   |       |      |         |         |           |     |             |      | EH           | Dual-color Extrusion Tube |       |     | WW    | 3000K |
|            |   |       |      |         |         |           |     |             |      | EF           | Extrusion Full            |       |     | PW    | 3500K |
|            |   |       |      |         |         |           |     |             |      |              |                           |       |     | NW    | 4000K |
|            |   |       |      |         |         |           |     |             |      |              |                           |       |     | DW    | 5000K |
|            |   |       |      |         |         |           |     |             |      |              |                           |       |     | W     | 6500K |

| 9:Silk Printing |            | 10: Entry cable |         | 11:Wire type |                     | 12:Wire length |         | 13:Tape type |           | 14:Label Type |            | 15: Strip Length |      |
|-----------------|------------|-----------------|---------|--------------|---------------------|----------------|---------|--------------|-----------|---------------|------------|------------------|------|
| C               | COLORS     | S               | Single  | A            | red and black cable | 012            | 12cm    | W            | White 3M  | C             | COLORS     | 0050             | 0.5m |
| S               | customized | D               | doubel  | B            | SM-male wire        | 015            | 15cm    | Y            | Yellow 3M | S             | customized | 0100             | 1m   |
| N               | Neutral    | X               | Nothing | C            | SM-female wire      | 020            | 20cm    | R            | Red 3M    |               |            | 0200             | 2m   |
|                 |            |                 |         | X            | Nothing             | 050            | 50cm    | X            | Nothing   |               |            | 0500             | 5m   |
|                 |            |                 |         |              |                     | 000            | Nothing |              |           |               |            | 5000             | 50m  |

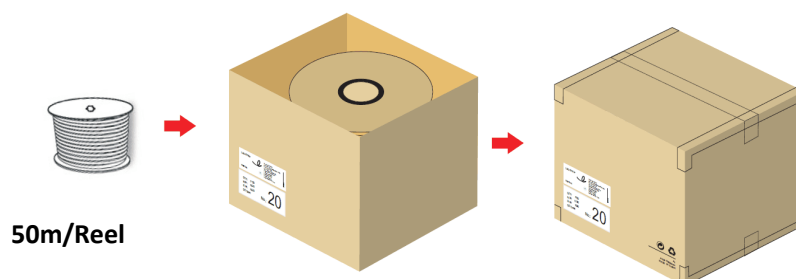
DS81444812NO-8NWDA012WC5000

## Packing

### 1. Conventional packaging of NO(IP33)/NA(IP65).



### 2. Conventional packaging of ET/EH/EF(IP67)



## Disclaimer

- ※Please drive the led strip with 48VDC isolated power, and the ripple of the constant voltage source should be less than 5%.
- ※ Please do not bend the strip into an arc with a diameter less than 60mm to ensure the longevity and reliability.
- ※Do not fold it in case any damage of LED beads.
- ※Do not pull the power wire hard to ensure the longevity. Any Crash may damage the LED light is prohibited.
- ※Please make sure the wire is connected to the anode and cathode correctly. The power output should be consistent with the voltage of the strip to avoid damage.
- ※LED lights should be stored in dry, sealed environment. Please only unpack it before usage. Ambient temperature: -20 °C ~ + 40 °C.Storage temperature: -0 °C ~ + 60 °C.Please use the strips without waterproof within indoor environment with humidity less than 70%.
- ※Please be careful during operation. Do not touch the AC power supply in case of electric shock.
- ※Please leave at least 20% power for the power supply during using to ensure there is enough power supply to drive the product.
- ※Do not use any acid or alkaline adhesives to fix the product (e.g.: glass cement).

