

## Q-LUX DC LED BOARDS

### QLUXL57524LED Series



| Information Overview |            |
|----------------------|------------|
| Wattage              | 8.1W       |
| Available CRI        | 80/90+ *   |
| Available CCT        | 2200-5000K |
| Dimensions           | 575x25mm   |
| Number of LEDs       | 24         |
| Beam Angle           | 120        |
| 1250 lumens at 4000K |            |

RoHS



### FEATURES

- High Color Renedering Index (CRI) Ra max. 98
- High efficacy lumen output
- LM-80 compliant LEDs
- Tight Binning 3 Step Mac Adam Ellipses
- Uniform & Crisp Light Source Intensity
- Hot Spot Free Design
- Exceed ENERGY STAR lumen maintenance requirements
- Extra thin low profile
- Low heat generation, easy thermal management
- Easy to fit in new design or retrofit applications

### APPLICATIONS

For Architectural New Designs and Retrofits lighting fixtures:

- |                      |                    |
|----------------------|--------------------|
| Indoor Lightings:    | Outdoor Lightings: |
| • Recessed can light | • Street light     |
| • Ceiling light      | • Marker lights    |
| • Wall sconces       | • Wall sconces     |
| • Table lamps        | • Signage lights   |
| • Fixtures           |                    |
| • Signage            |                    |

### ELECTRICAL SPECS.

| 16.5W Linear  | Wattage | Forward Voltage | Forward Current |
|---------------|---------|-----------------|-----------------|
| Model Number  | Max.    | Typ.            | Typ. Max.       |
| QLUXL57548LED | 10.7W   | 23.2V           | 350mA 450mA     |

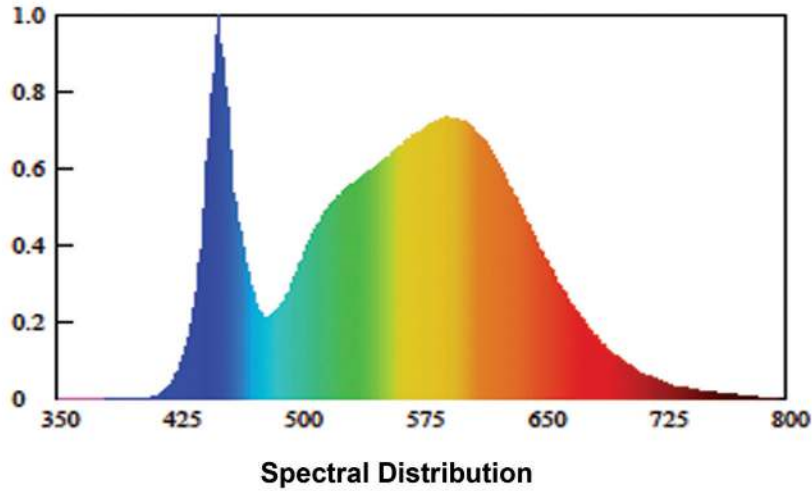
| Order Number      | CRI | CCT   |
|-------------------|-----|-------|
| QLUXL57524LED822K | 80+ | 2200K |
| QLUXL57524LED825K | 80+ | 2500K |
| QLUXL57524LED827K | 80+ | 2700K |
| QLUXL57524LED830K | 80+ | 3000K |
| QLUXL57524LED832K | 80+ | 3200K |
| QLUXL57524LED835K | 80+ | 3500K |
| QLUXL57524LED840K | 80+ | 4000K |
| QLUXL57524LED850K | 80+ | 5000K |

| Order Number      | CRI | CCT   |
|-------------------|-----|-------|
| QLUXL57524LED822K | 90+ | 2200K |
| QLUXL57524LED925K | 90+ | 2500K |
| QLUXL57524LED927K | 90+ | 2700K |
| QLUXL57524LED930K | 90+ | 3000K |
| QLUXL57524LED932K | 90+ | 3200K |
| QLUXL57524LED935K | 90+ | 3500K |
| QLUXL57524LED940K | 90+ | 4000K |
| QLUXL57524LED950K | 90+ | 5000K |

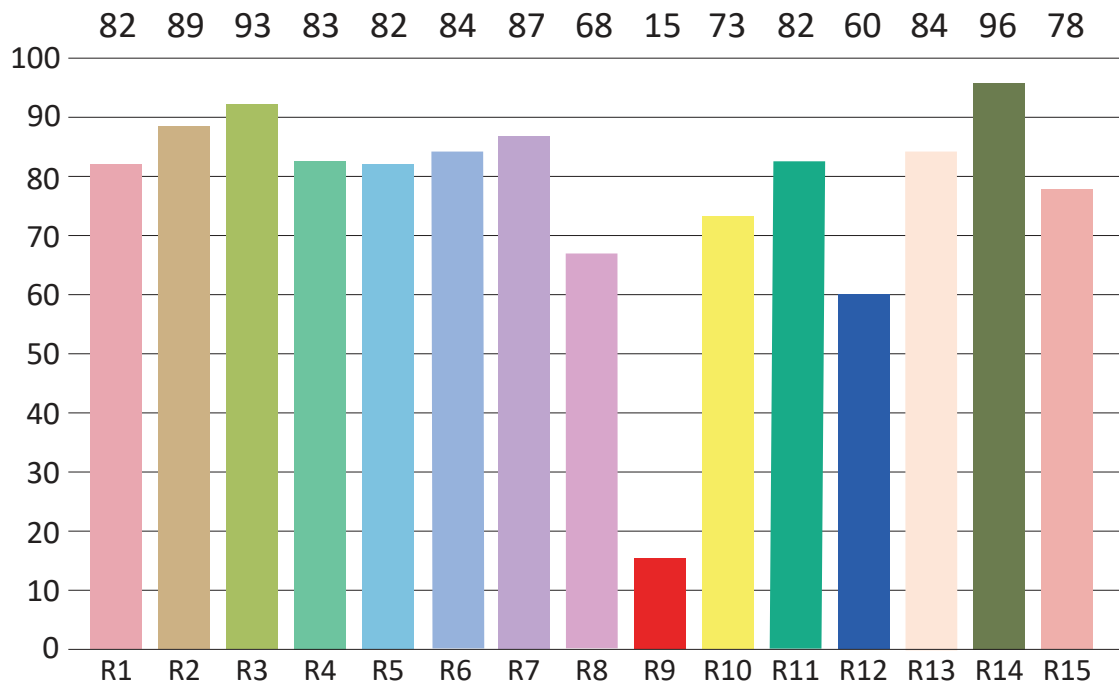
\* Up to 98 CRI

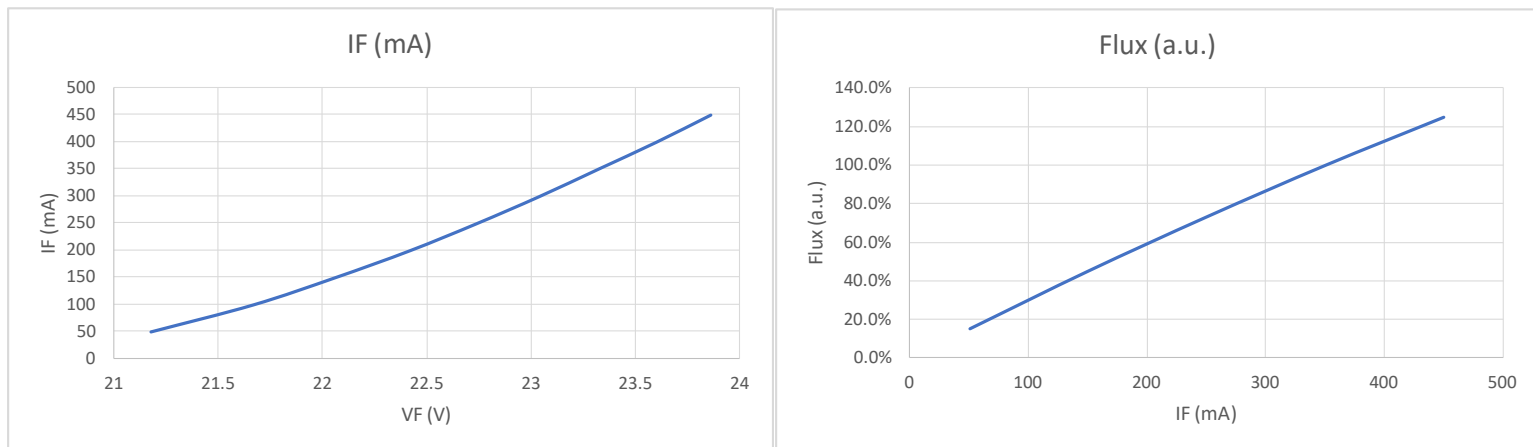
## SPECTRORADIOMETRIC CHART

SPECTRORADIOMETRIC PARAMETERS



## CRI CHART



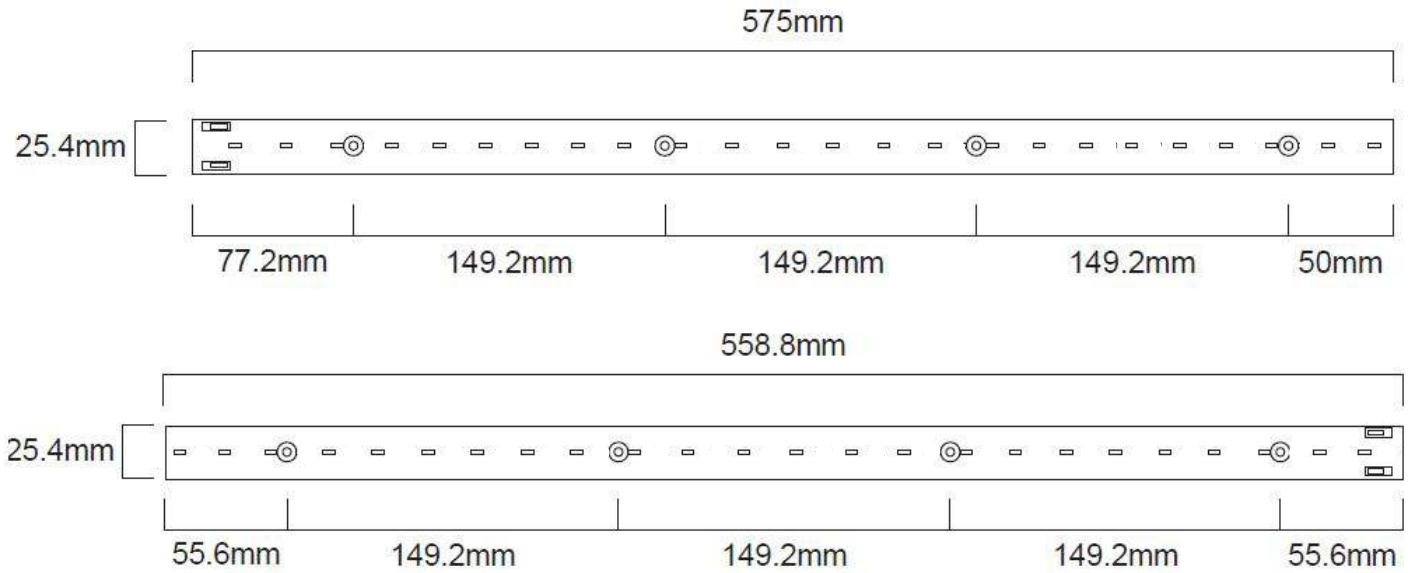


## ELECTRICAL SPECIFICATIONS

| Item              | Specifications |       |      |      |      | Unit | Remark          |
|-------------------|----------------|-------|------|------|------|------|-----------------|
|                   | Sym.           | Model | Min. | Nom. | Max. |      |                 |
| Luminous Flux     | lm             | 2700K | 900  | 1000 | 1050 | lm   | @350mA, Tp=50°C |
|                   |                | 3000K | 1000 | 1100 | 1150 |      |                 |
|                   |                | 3500K | 1100 | 1200 | 1300 |      |                 |
|                   |                | 4000K | 1200 | 1250 | 1350 |      |                 |
|                   |                | 5000K | 1250 | 1300 | 1400 |      |                 |
| Efficiency        | LPW            | 2700K | -    | 120  | -    | lm/W | @350mA, Tp=50°C |
|                   |                | 3000K | -    | 130  | -    |      |                 |
|                   |                | 3500K | -    | 147  | -    |      |                 |
|                   |                | 4000K | -    | 152  | -    |      |                 |
|                   |                | 5000K | -    | 155  | -    |      |                 |
| Operating Current | Iop            | -     | -    | 350  | 450  | mA   | -               |
| Operating Voltage | Vdc            | -     | -    | 23.2 | -    | V    | @350mA, Tp=50°C |
| Power Consumption | -              | -     | -    | 8.1  | -    | W    | @350mA, Tp=50°C |

| Recommended Driver |           |           |           |
|--------------------|-----------|-----------|-----------|
| 120V               | 277V      | 220-240V  | 100-305V  |
| DA10W350C          | DE10W350C | DU10W350C | DS10W350C |

## MECHANICAL SPECIFICATIONS



## Precaution for use:

(1) Storage

To avoid the moisture penetration, we recommend store in a dry box with a desiccant . The recommended storage temperature range is 5C to 30C and a maximum humidity of RH50%.

(2) Use Precaution after Opening the Packaging as separation of the lens may affect the light output efficiency. Pay attention to the following:

a. Recommend conditions after opening the package

- Sealing

- Temperature : 5 ~ 40°C Humidity : less than RH30%

b. If the package has been opened more than 4 week(MSL 2a) or the color of the desiccant changes, components should be dried for 10-12hr at 60±5°C

(3) Do not apply mechanical force or excess vibration during the cooling process to normal temperature after soldering.

(4) Do not rapidly cool device after soldering.

(5) Components should not be mounted on warped (non coplanar) portion of PCB.

(6) Radioactive exposure is not considered for the products listed here in.

(7) Gallium arsenide is used in some of the products listed in this publication. These products are dangerous if they are burned or shredded in the process of disposal. It is also dangerous to drink the liquid or inhale the gas generated by such products when chemically disposed of.

(8) This device should not be used in any type of fluid such as water, oil, organic solvent and etc. When washing is required, IPA (Isopropyl Alcohol) should be used.

(9) When the LEDs are in operation the maximum current should be decided after measuring the package temperature.

(10) LEDs must be stored properly to maintain the device. If the LEDs are stored for 3 months or more after being shipped from SSC, a sealed container with a nitrogen atmosphere should be used for storage.

(11) The appearance and specifications of the product may be modified for improvement without notice.

(12) Long time exposure of sunlight or occasional UV exposure will cause lens discoloration.

(13) VOCs (Volatile organic compounds) emitted from materials used in the construction of fixtures can penetrate silicone encapsulants of LEDs and discolor when exposed to heat and photonic energy. The result can be a significant loss of light output from the fixture.

Knowledge of the properties of the materials selected to be used in the construction of fixtures can help prevent these issues.

(14)Attaching LEDs, do not use adhesives that outgas organic vapor.

(15)The driving circuit must be designed to allow forward voltage only when it is ON or OFF.

If the reverse voltage is applied to LED, migration can be generated resulting in LED damage.

### CAUTION!

- Turn the power off before installing LED to the proper constant current LED driver.
- Avoid short circuit, or drilling / cutting the LED board! It will damage its electrical circuit!