

## Light Engine

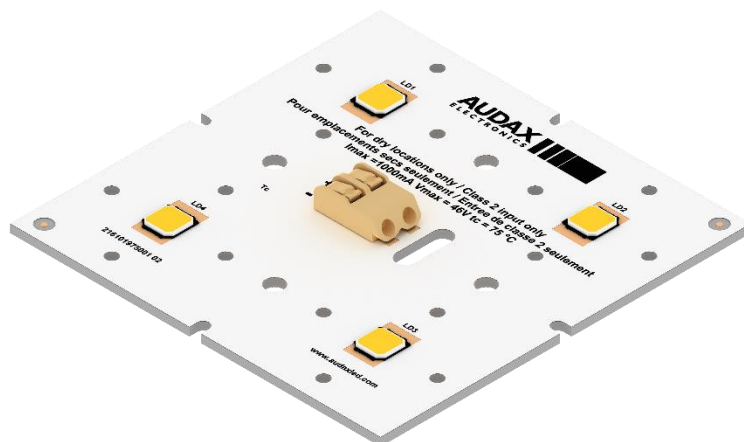
|            |               |
|------------|---------------|
| Issue Date | November/2021 |
| Issued by  | Carmo, K.     |

### Applications

- Highbay
- Street Light
- Gas station
- Projectors
- Decorative Poles

### Characteristics

- Module Efficacy – up to 145 lm/W
- L80 > 50,000 hours
- CRI > 80 (Typ.85)
- 03 SDCM
- CCTs: 2700K; 3000K; 3500K; 4000K
- 05 years warranty.



### DRIVE CURRENTS

| Parameter                   | Nominal | Max    |
|-----------------------------|---------|--------|
| Light Engine 2x2 4 LEDs 488 | 700mA   | 1000mA |

### MODULE TEMPERATURES

| Parameter                    | Nominal | Max   |
|------------------------------|---------|-------|
| Tc (temperature at Tc point) | 75 °C   | 85 °C |

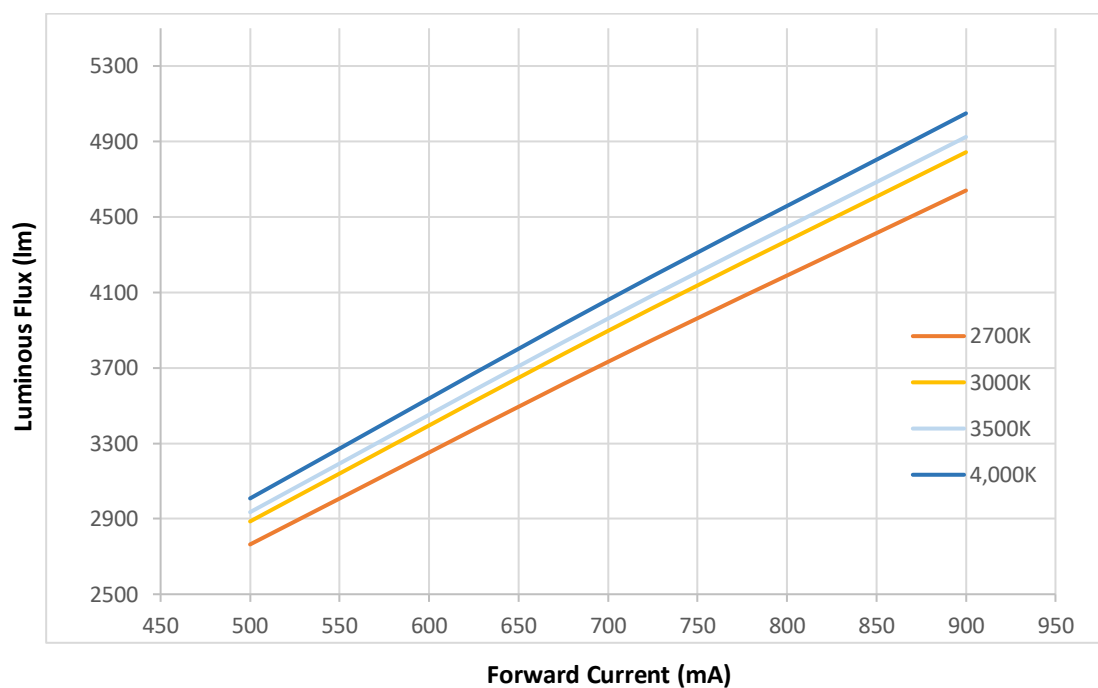
### PRODUCT PART NUMBER

| 80298800100 | 80298900100 | 80299000100 | 80299100100 |
|-------------|-------------|-------------|-------------|
| 2700K       | 3000K       | 3500K       | 4000K       |

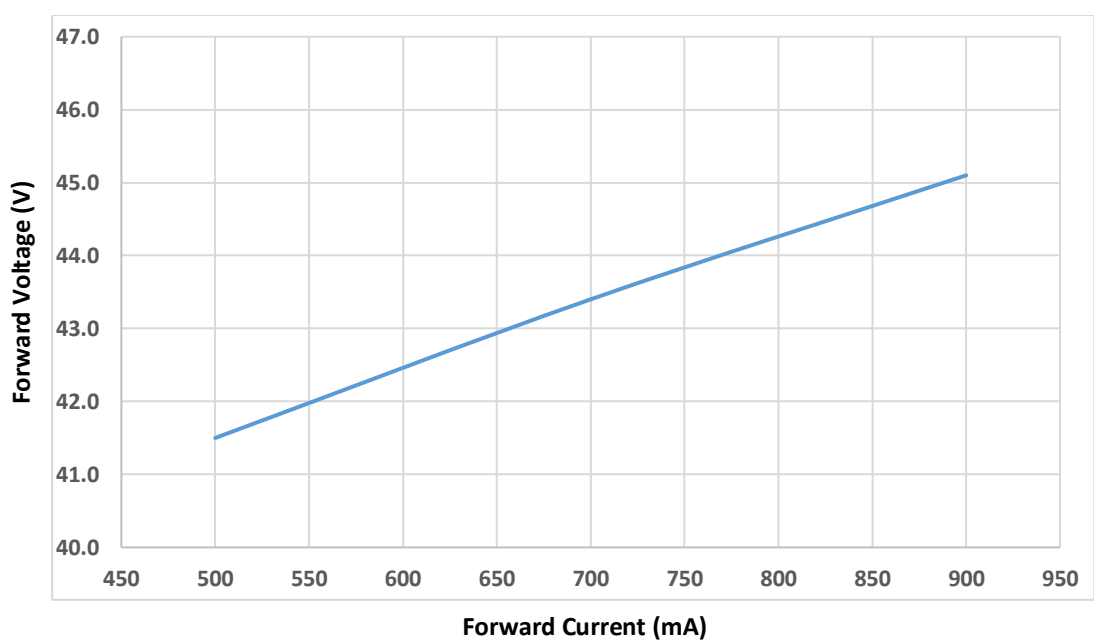
### TECHNICAL INFORMATION

| CCT    | LED Driver Current (mA) | # LEDs | Luminous Flux (lm) | Forward Voltage (V) | LED Current (mA) | TC (°C) | Power (W) | Efficacy (lm/W) |
|--------|-------------------------|--------|--------------------|---------------------|------------------|---------|-----------|-----------------|
| 2700K  | 500                     | 4      | 2,764              | 41.5                | 125              | 75      | 20.7      | 133             |
| 2700K  | 700                     | 4      | 3,732              | 43.4                | 175              | 75      | 30.4      | 122             |
| 2700K  | 900                     | 4      | 4,640              | 45.1                | 240              | 75      | 40.6      | 114             |
| 3000K  | 500                     | 4      | 2,886              | 41.5                | 116              | 75      | 20.7      | 139             |
| 3000K  | 700                     | 4      | 3,896              | 43.4                | 175              | 75      | 30.4      | 128             |
| 3000K  | 900                     | 4      | 4,843              | 45.1                | 240              | 75      | 40.6      | 119             |
| 3500K  | 500                     | 4      | 2,935              | 41.5                | 116              | 75      | 20.7      | 141             |
| 3500K  | 700                     | 4      | 3,961              | 43.4                | 175              | 75      | 30.4      | 130             |
| 3500K  | 900                     | 4      | 4,924              | 45.1                | 240              | 75      | 40.6      | 121             |
| 4,000K | 500                     | 4      | 3,008              | 41.5                | 116              | 75      | 20.7      | 145             |
| 4,000K | 700                     | 4      | 4,060              | 43.4                | 175              | 75      | 30.4      | 133             |
| 4,000K | 900                     | 4      | 5,049              | 45.1                | 240              | 75      | 40.6      | 124             |

Luminous Flux (lm) x Forward Current (mA) (Tc 75°C)



Forward Voltage (V) x Forward Current (mA) (Tc 75°C)

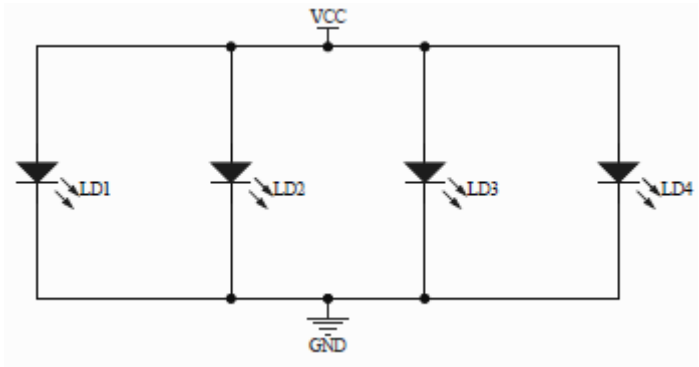


## LED TYPE

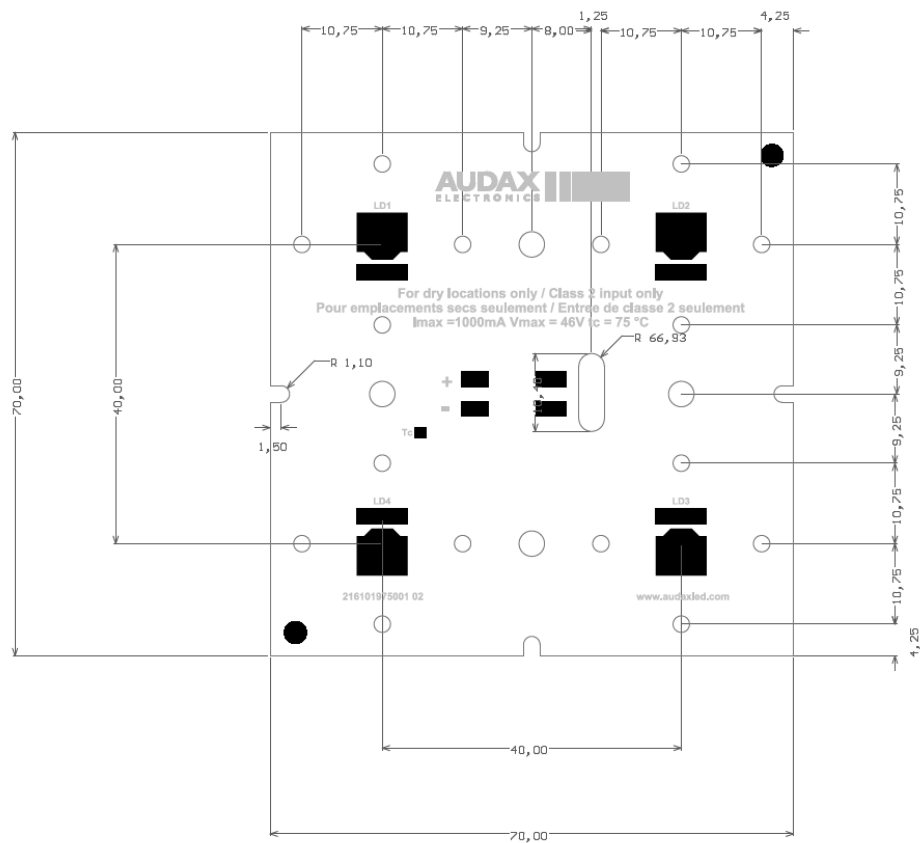
Manufacturer: Nichia

LED Series: NFMW488ART R9050 42V

SCHEMATICS



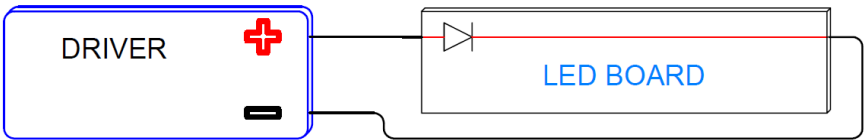
MECHANICAL DRAWINGS



Unit: mm

WIRING

| Specification item        | Value                  | Unit                   | Condition     |
|---------------------------|------------------------|------------------------|---------------|
| Input wire cross- section | 0.13...0.50<br>26...20 | mm <sup>2</sup><br>AWG | Solid wire    |
| Input wire strip length   | 5...7                  | mm                     | Solid wire    |
| Input wire cross-section  | 0.13...0.50<br>26...20 | mm <sup>2</sup><br>AWG | Stranded wire |
| Input wire strip length   | 5...7                  | mm                     | Stranded wire |



## COMPATIBLE OPTICS

| Manufacturer | Part Number                 | Color | Material | Beam                     |
|--------------|-----------------------------|-------|----------|--------------------------|
| LEDiL        | CS15759_HB-2X2MX-8-W        | Clear | PMMA     | ~50°                     |
| LEDiL        | CS15765_HB-2X2MX-8-WWW      | Clear | PMMA     | ~65°                     |
| LEDiL        | CS15767_HB-2X2MX-8-M        | Clear | PMMA     | ~30°                     |
| LEDiL        | FP15897_HB-2X2MXS-WWW       | Black | Silicone | ~85°                     |
| LEDiL        | FP15898_HB-2X2MXS-WW        | Black | Silicone | ~55°                     |
| LEDiL        | FP16310_HB-2X2MXS-M         | Black | Silicone | ~30°                     |
| LEDiL        | CS15750_STRADA-2X2MX-8-T4-B | Clear | PMMA     | Asy-Angle <sup>(1)</sup> |
| LEDiL        | CS15751_STRADA-2X2MX-8-DWC  | Clear | PMMA     | Asy-Angle <sup>(1)</sup> |
| LEDiL        | CS15761_STRADA-2X2MX-8-SCL  | Clear | PMMA     | Asy-Angle <sup>(1)</sup> |
| LEDiL        | CS15763_STRADA-2X2MX-8-VSM  | Clear | PMMA     | Asy-Angle <sup>(1)</sup> |
| LEDiL        | CS15769_STRADA-2X2MX-8-T2-S | Clear | PMMA     | Asy-Angle <sup>(1)</sup> |
| LEDiL        | CS15771_STRADA-2X2MX-8-T2   | Clear | PMMA     | Asy-Angle <sup>(1)</sup> |
| LEDiL        | FP14825_STRADA-2X2MXS-DWC2  | Black | Silicone | Asy-Angle <sup>(1)</sup> |
| LEDiL        | FP15589_STRADA-2X2MXS-T2    | Black | Silicone | Asy-Angle <sup>(1)</sup> |
| LEDiL        | FP15672_STRADA-2X2MXS-T4-B  | Black | Silicone | Asy-Angle <sup>(1)</sup> |
| LEDiL        | FP15752_STRADA-2X2MXS-T3    | Black | Silicone | Asy-Angle <sup>(1)</sup> |
| LEDiL        | FP15812_STRADA-2X2MXS-VSM   | Black | Silicone | Asy-Angle <sup>(1)</sup> |

(1) Photometric data for asymmetrical angles can be evaluated on [www.ledil.com](http://www.ledil.com)