





| Lighting Information          |   |                                  |      |     |        |       |       |       |   |      |                        |       |       |       |        |      |  |
|-------------------------------|---|----------------------------------|------|-----|--------|-------|-------|-------|---|------|------------------------|-------|-------|-------|--------|------|--|
| Part Number                   |   | LRTN075RGBW                      |      |     |        |       |       |       |   |      |                        |       |       |       |        |      |  |
| LED Color                     | RED                                       |                                  |      |     |        | GREEN |       | BLUE  |   |      |                        | WHITE |       |       |        |      |  |
| Wavelength                    | 630                                       |                                  |      |     | 525    |       | 470   |       |   |      | REFER CHROMACITY TABLE |       |       |       |        |      |  |
| Working Distance              | 5mm 20mm 35mm 5mm                         |                                  |      | . 2 | 0mm    | 35mr  | n     | 5mm   | ı | 20mm | 35n                    | nm    | 5mr   | n     | 20mm   | 35mm |  |
| Intensity (±15%)              | FOR FURTHER INFORMATION PLEASE CONTACT US |                                  |      |     |        |       |       |       |   |      |                        |       |       |       |        |      |  |
| Illumination (number of row)  |   | 1                                |      |     |        |       |       |       |   |      |                        |       |       |       |        |      |  |
| Illumination Active Area      | Active Ler                                | ngth / Outer                     | Dia. |     |        |       |       |       |   |      |                        | 65.4r | nm    |       |        |      |  |
| mummation Active Area         | Active Wi                                 | Active Width / Inner Dia. 46.8mm |      |     |        |       |       |       |   |      |                        |       |       |       |        |      |  |
| Emission angle                | 0   |                                  |      |     |        |       |       |       |   |      |                        |       |       |       |        |      |  |
| Eye Safety Class ( IEC62471 ) | EXEMPT                                    |                                  |      |     | EXEMPT |       |       |       |   | II   |                        |       |       |       | EXEMPT |      |  |
| Chromaticity Table            |   |                                  |      | х   | 0.296  | 0.287 | 0.307 | 0.311 |   | X    | 0.311                  | 0.307 | 0.33  | 0.33  |        | •    |  |
| For White colour only         |   |                                  |      | Y   | 0.276  | 0.295 | 0.315 | 0.294 |   | Y    | 0.294                  | 0.315 | 0.339 | 0.318 |        |      |  |

| Electrical Information         |  |       |       |       |  |  |
|--------------------------------|--|-------|-------|-------|--|--|
| Rated Constant Voltage         | 24V  |       |       |       |  |  |
| Rated Constant Current         | 75mA   | 90mA  | 90mA  | 90mA  |  |  |
| Power Consumption              | 1.8W   | 2.16W | 2.16W | 2.16W |  |  |
| Casing temperature,            |  | 59.6  |       |       |  |  |
| After 60 minutes operation     | 35.0   |       |       |       |  |  |
| Max. continous current of RED, | It is not recommended to turn on Red, Green and Blue colour at the same time. Refer to Maximum Simultaneous Current Output section in  |       |       |       |  |  |
| GREEN & BLUE LEDs on at the    | he last page for maximum current that can be supplied for each colour. Failure in following this may results in damaging the lighting. |       |       |       |  |  |
| same time                      |  | •     | -     |       |  |  |

| Strobe Mode Specification     |  |                       |                       |                       |  |  |  |
|-------------------------------|--|-----------------------|-----------------------|-----------------------|--|--|--|
| *Normal Strobe Voltage        |  | 24V                   |                       |                       |  |  |  |
| *Normal Strobe Current        | 75mA 90mA 90mA 90mA  |                       |                       |                       |  |  |  |
| Overdrive Voltage Range       | Min: 36V Max: 48V  | Min: 36V Max: 48V     | Min: 36V Max: 48V     | Min: 36V Max: 48V     |  |  |  |
| Overdrive Current Range       | Min: 219mA Max: 373mA  | Min: 260mA Max: 478mA | Min: 260mA Max: 478mA | Min: 428mA Max: 755mA |  |  |  |
| Max. pulse current of RED,    | It is not recommended to turn on Red, Green and Blue colour at the same time. Refer to Maximum Simultaneous Current Output section in  |                       |                       |                       |  |  |  |
| GREEN & BLUE LEDs on at the   | he last page for maximum current that can be supplied for each colour. Failure in following this may results in damaging the lighting. |                       |                       |                       |  |  |  |
| same time                     |  |                       |                       |                       |  |  |  |
| Recommended Overdrive         | 36V  |                       |                       |                       |  |  |  |
| Voltage                       | 30V  |                       |                       |                       |  |  |  |
| **Max. Trigger Pulse Duration | 10 msec  |                       |                       |                       |  |  |  |
| **Max. Duty Cycle             | 10%  |                       |                       |                       |  |  |  |

<sup>\*</sup>Normal strobe means the lighting is operated using the rated power. Overdrive means the power supplied to the lighting exceeded the rated power.

<sup>\*\*\*</sup>Overdrive condition must not exceed the max. trigger pulse duration and max. duty cycle. Failure in following this may results in damaging the lighting.



|                          |                       | Connection Information |       |  |  |
|--------------------------|-----------------------|------------------------|-------|--|--|
| Connector Type (Default) | JST SMR-03V           |                        |       |  |  |
| Cable Length             | 50 cm                 |                        |       |  |  |
| Pin Configuration        | Pin Signal Cable Colo |                        |       |  |  |
|                          | 1                     | LED +                  | Red   |  |  |
|                          | 2                     | N.C                    | -     |  |  |
|                          | 3                     | LED -                  | White |  |  |
|                          | 3                     |                        |       |  |  |

| Additional Information         |  |  |  |  |  |
|--------------------------------|--|--|--|--|--|
| Additional Cooling Method      | Attached to machine part for better heat dissipation |  |  |  |  |
| Intensity Controller Selection | SD, ST, ANG, LC, SDA, SDP series                     |  |  |  |  |
| CE Conformity                  | YES  |  |  |  |  |
| RoHS Compliance                | YES  |  |  |  |  |

| Application Application |   |  |  |  |  |
|-------------------------|---|--|--|--|--|
| Illumination Type       | Diffused Ring Illumination                    |  |  |  |  |
| Application Use         | Shining Surface and Food Packaging Inspection |  |  |  |  |



|                                   | Maxim             | num Simulteneous Current Output Information  |                    |
|-----------------------------------|-------------------|--|--------------------|
| Colour                            | Current Limit (A) | Remarks  |                    |
|                                   |                   | TOTAL CURRENT OUTPUT : 0.5 A   |                    |
|                                   |                   | RECOMMENDED OVERDRIVE CURRENT : 1 A (36 V)   |                    |
|                                   |                   | ** OPTIMUM FOR SINGLE COLOUR   |                    |
|                                   |                   |  |                    |
| SINGLE COLOUR : RED               |                   | TOTAL CURRENT OUTPUT : 0.4 A   |                    |
|                                   |                   | RECOMMENDED OVERDRIVE CURRENT : 1.17 A (36 V)  |                    |
|                                   |                   | ** OPTIMUM FOR SINGLE COLOUR   |                    |
|                                   |                   |  |                    |
| SINGLE COLOUR : GREEN             |                   |  |                    |
|                                   |                   | TOTAL CURRENT OUTPUT : 0.45 A  |                    |
|                                   |                   | RECOMMENDED OVERDRIVE CURRENT : 1.21 A (36 V)  |                    |
|                                   |                   | ** OPTIMUM FOR SINGLE COLOUR   |                    |
|                                   |                   |  |                    |
| SINGLE COLOUR : BLUE              |                   |  |                    |
|                                   |                   | TOTAL CURRENT OUTPUT : 0.5 A   |                    |
|                                   |                   | ****(EXAMPLE : RED = 0.25 A , BLUE = 0.25 A)  ****(OVERDRIVE STROBE MODE EXAMPLE : RED = 0.5 A , BLUE = 0.5 A)                                   | ^                  |
|                                   |                   | FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C  |                    |
| COMBINE 2 COLOUR: RED & BLUE      |                   | ENSURE CURRENT MUST NOT EXCEED 0.5 A   |                    |
| COMBINE 2 COLOGIC: NED & BEGE     |                   | TOTAL CURRENT OUTPUT : 0.5 A   |                    |
|                                   |                   | ****(EXAMPLE : RED = 0.25 A , GREEN = 0.25 A)  |                    |
|                                   |                   | FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C  | $\wedge$           |
|                                   |                   | ENSURE CURRENT MUST NOT EXCEED 0.5 A   | /!\                |
| COMBINE 2 COLOUR: RED & GREEN     |                   |  |                    |
|                                   |                   | TOTAL CURRENT OUTPUT : 0.5 A   |                    |
|                                   |                   | ****(EXAMPLE : GREEN = 0.25 A , BLUE = 0.25 A)   | <b>A</b>           |
|                                   |                   | ****(OVERDRIVE STROBE MODE EXAMPLE : RED = 0.5 A , BLUE = 0.5 A)   | $\mathcal{M}$      |
|                                   |                   | FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C  | $\angle ! \lambda$ |
| COMBINE 2 COLOUR: GREEN & BLUE    |                   | ENSURE CURRENT MUST NOT EXCEED 0.5 A   |                    |
|                                   |                   | TOTAL CURRENT OUTPUT : 0.5 A   |                    |
|                                   |                   | ****(EXAMPLE : RED = 0.16 A , GREEN = 0.16 A, BLUE = 0.16 A)  ****(OVERDRIVE STROBE MODE EXAMPLE : RED = 0.33 A , GREEN = 0.33 A, BLUE = 0.33 A) | Λ                  |
|                                   |                   | FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C  | //\                |
| COMMINE COLOUR DED CREEK & STATE  |                   | ENSURE CURRENT MUST NOT EXCEED MORE THAN 60 C  | $\longrightarrow$  |
| COMBINE COLOUR: RED, GREEN & BLUE |                   |  |                    |



|                   |  | Lighting Pattern |  |           |
|-------------------|--|------------------|--|-----------|
| Working Distance  |  | For further      | details please contact us.               |           |
| Display and Image |  |                  |  |           |
| Data Results      | Horizontal 90% 80% 70% 60% 50% 40% 30% 20% | Meas.(mm)        | Vertical 90% 80% 70% 60% 50% 40% 30% 20% | Meas.(mm) |