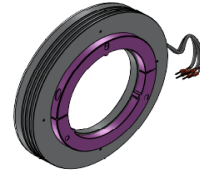
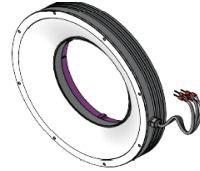
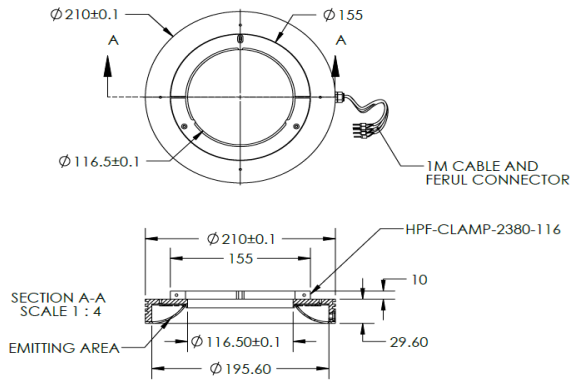


LRTN210RGBW

Lighting Dimension



Mechanical Information

| | |
|---------------------------|-----------|
| Casing Material | Aluminium |
| Storage Temperature Range | 0 - 45°C |
| Storage Humidity Range | 20 - 85% |
| Weight | 650g |
| Length / Outer Diameter | 210mm |
| Width / Inner Diameter | 116mm |
| Thickness / Height | 39.6mm |



OPTO ENGINEERING

ILLUMINATOR DATA

LRTN210RGBW

| Lighting Information | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|-------|-------|--------|------|-------|---------|-------|-------|------------------------|------|------|---|-------|-------|-------|-------|---|-------|-------|------|------|---|-------|-------|-------|-------|---|-------|-------|-------|-------|
| Part Number | LRTN210RGBW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED Color | RED | | | GREEN | | | BLUE | | | WHITE | | | | | | | | | | | | | | | | | | | | | | |
| Wavelength | 630 | | | 525 | | | 470 | | | REFER CHROMACITY TABLE | | | | | | | | | | | | | | | | | | | | | | |
| Working Distance | 45mm | 55mm | 65mm | 45mm | 55mm | 65mm | 45mm | 55mm | 65mm | 45mm | 55mm | 65mm | | | | | | | | | | | | | | | | | | | | |
| Intensity (±15%) | FOR FURTHER INFORMATION PLEASE CONTACT US | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Illumination (number of row) | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Illumination Active Area | Active Length / Outer Dia. | | | | | | 195.6mm | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Active Width / Inner Dia. | | | | | | 119.5mm | | | | | | | | | | | | | | | | | | | | | | | | | |
| Emission angle | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye Safety Class (IEC62471) | EXEMPT | | | EXEMPT | | | II | | | EXEMPT | | | | | | | | | | | | | | | | | | | | | | |
| Chromaticity Table | <table border="1"> <tr> <td>X</td> <td>0.296</td> <td>0.287</td> <td>0.307</td> <td>0.311</td> <td>X</td> <td>0.311</td> <td>0.307</td> <td>0.33</td> <td>0.33</td> </tr> <tr> <td>Y</td> <td>0.276</td> <td>0.295</td> <td>0.315</td> <td>0.294</td> <td>Y</td> <td>0.294</td> <td>0.315</td> <td>0.339</td> <td>0.318</td> </tr> </table> | | | | | | | | | | | | X | 0.296 | 0.287 | 0.307 | 0.311 | X | 0.311 | 0.307 | 0.33 | 0.33 | Y | 0.276 | 0.295 | 0.315 | 0.294 | Y | 0.294 | 0.315 | 0.339 | 0.318 |
| X | 0.296 | 0.287 | 0.307 | 0.311 | X | 0.311 | 0.307 | 0.33 | 0.33 | | | | | | | | | | | | | | | | | | | | | | | |
| Y | 0.276 | 0.295 | 0.315 | 0.294 | Y | 0.294 | 0.315 | 0.339 | 0.318 | | | | | | | | | | | | | | | | | | | | | | | |
| For White colour only | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |


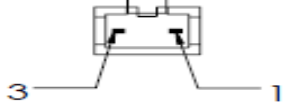
| Electrical Information | | | | |
|---|--|--------|--------|--------|
| Rated Constant Voltage | 24V | | | |
| Rated Constant Current | 600mA | 560mA | 630mA | 840mA |
| Power Consumption | 14.4W | 13.44W | 15.12W | 20.16W |
| Casing temperature, After 60 minutes operation | 59.8 | | | |
| Max. continuous current of RED, GREEN & BLUE LEDs on at the same time | *It is not recommended to turn on Red, Green and Blue colour at the same time. Refer to Maximum Simultaneous Current Output section in the last page for maximum current that can be supplied for each colour. Failure in following this may results in damaging the lighting. | | | |

| Strobe Mode Specification | | | | |
|--|--|------------------------|------------------------|-------------------------|
| *Normal Strobe Voltage | 24V | | | |
| *Normal Strobe Current | 600mA | 560mA | 630mA | 840mA |
| Overdrive Voltage Range | Min: 36V Max: 48V | Min: 36V Max: 48V | Min: 36V Max: 48V | Min: 36V Max: 48V |
| Overdrive Current Range | Min: 900mA Max: 1200mA | Min: 840mA Max: 1120mA | Min: 945mA Max: 1260mA | Min: 1260mA Max: 1680mA |
| Max. pulse current of RED, GREEN & BLUE LEDs on at the same time | *It is not recommended to turn on Red, Green and Blue colour at the same time. Refer to Maximum Simultaneous Current Output section in the last page for maximum current that can be supplied for each colour. Failure in following this may results in damaging the lighting. | | | |
| Recommended Overdrive Voltage | 36V | | | |
| **Max. Trigger Pulse Duration | 10 msec | | | |
| **Max. Duty Cycle | 10% | | | |

*Normal strobe means the lighting is operated using the rated power. Overdrive means the power supplied to the lighting exceeded the rated power.

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

LRTN210RGBW

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

| 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 |






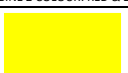





| Application | |
|-------------------|---|
| Illumination Type | Diffused Ring Illumination |
| Application Use | Shining Surface and Food Packaging Inspection |



OPTO ENGINEERING

ILLUMINATOR DATA

LRTN210RGBW

| Maximum Simultaneous Current Output Information | | |
|---|-------------------|--|
| Colour | Current Limit (A) | Remarks |
|  SINGLE COLOUR : RED | | TOTAL CURRENT OUTPUT : 0.5 A RECOMMENDED OVERDRIVE CURRENT : 1 A (36 V) ** OPTIMUM FOR SINGLE COLOUR |
|  SINGLE COLOUR : GREEN | | TOTAL CURRENT OUTPUT : 0.4 A RECOMMENDED OVERDRIVE CURRENT : 1.17 A (36 V) ** OPTIMUM FOR SINGLE COLOUR |
|  SINGLE COLOUR : BLUE | | TOTAL CURRENT OUTPUT : 0.45 A RECOMMENDED OVERDRIVE CURRENT : 1.21 A (36 V) ** OPTIMUM FOR SINGLE COLOUR |
|  COMBINE 2 COLOUR: RED & 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 ENSURE CURRENT MUST NOT EXCEED 0.5 A  |
|  COMBINE 2 COLOUR: RED & GREEN | | 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 ENSURE CURRENT MUST NOT EXCEED 0.5 A  |
|  COMBINE 2 COLOUR: GREEN & BLUE | | TOTAL CURRENT OUTPUT : 0.5 A ****(EXAMPLE : GREEN = 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 ENSURE CURRENT MUST NOT EXCEED 0.5 A  |
|  COMBINE COLOUR: RED, GREEN & BLUE | | 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) FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C ENSURE CURRENT MUST NOT EXCEED 0.5 A  |



ILLUMINATOR DATA

LRTN210RGBW

| Lighting Pattern | | | | | |
|-------------------|--|--|-----------|--|--|
| Working Distance | For further details please contact us. | | | | |
| Display and Image | | | | | |
| Data Results | Horizontal | | Vertical | | |
| | Meas.(mm) | | Meas.(mm) | | |
| | 90% | | 90% | | |
| | 80% | | 80% | | |
| | 70% | | 70% | | |
| | 60% | | 60% | | |
| | 50% | | 50% | | |
| | 40% | | 40% | | |
| | 30% | | 30% | | |
| | 20% | | 20% | | |
| | 10% | | 10% | | |
| | | | | | |