

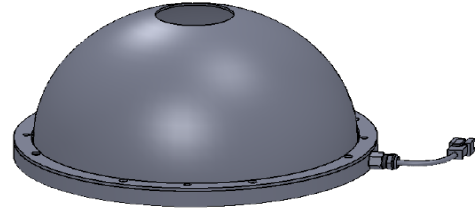
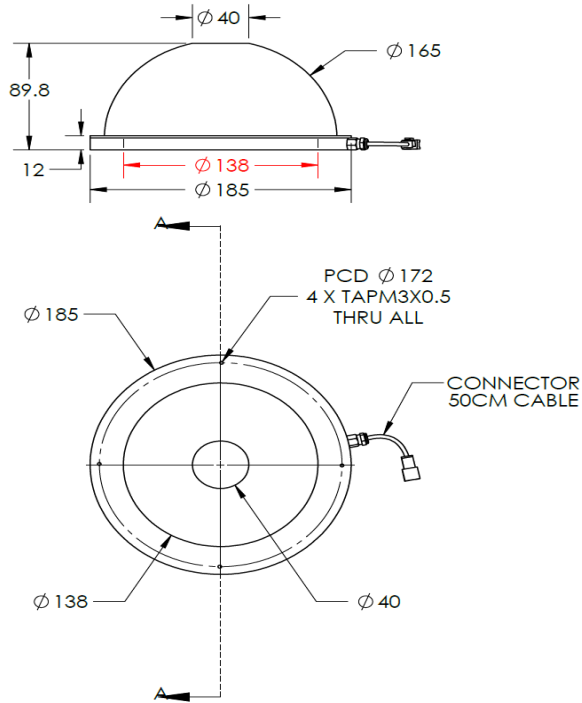


OPTO ENGINEERING

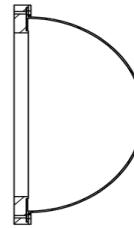
# ILLUMINATOR DATA

## LT5WRG150-00-1-RGBW-24V

### Lighting Dimension



SECTION A-A  
SCALE 1 : 3.5



Mechanical Information	
Casing Material	Aluminium
Storage Temperature Range	0 - 45°C
Storage Humidity Range	20 - 85%
Weight	483 g
Length / Outer Diameter	185 mm
Width / Inner Diameter	40 mm
Thickness / Height	89.8mm

# ILLUMINATOR DATA

## LT5WRG150-00-1-RGBW-24V

Lighting Information																																
Part Number	LT5WRG150-00-1-RGBW-24V																															
LED Color	RED			GREEN			BLUE			WHITE																						
Wavelength	630 nm			525 nm			470 nm			refer to chromaticity table																						
Working Distance	50 mm	60 mm	80 mm	50 mm	60 mm	80 mm	50 mm	60 mm	80 mm	50 mm	60 mm	80 mm																				
Intensity (±15%)	2310 lx	1960 lx	1480 lx	5620 lx	4830 lx	3650 lx	6640 lx	5700 lx	4250 lx	4750 lx	4050 lx	3020 lx																				
Illumination (number of row)	1																															
Illumination Active Area	Active Length / Outer Dia.						138 mm																									
	Active Width / Inner Dia.						40 mm																									
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±2%			
Rated Constant Current	135 mA	135 mA	135 mA	135 mA
Power Consumption	3.24 W	3.24 W	3.24 W	3.24 W
Casing temperature, After 60 minutes operation	41 °C			
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.			


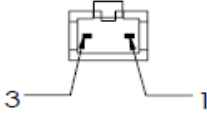
Strobe Mode Specification				
**Normal Strobe Voltage	24 V			
**Normal Strobe Current	135 mA	135 mA	135 mA	135 mA
Overdrive Voltage Range	Min: 36 V Max: 48 V	Min: 36 V Max: 48 V	Min: 36 V Max: 48 V	Min: 36 V Max: 48 V
Overdrive Current Range	Min: 0.42 A Max: 0.69 A	Min: 0.24 A Max: 0.40 A	Min: 0.29 A Max: 0.48 A	Min: 0.34 A Max: 0.57 A
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	36 V			
***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.

# ILLUMINATOR DATA

## LT5WRG150-00-1-RGBW-24V












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	Indirect Dome Illumination
Application Use	Cracks, Chips, Stains & Marks on Circular or Cylindrical Object Inspection, Solder and Substrate Inspection

# ILLUMINATOR DATA

## LT5WRG150-00-1-RGBW-24V

Maximum Simultaneous Current Output Information		
Colour	Current Limit (A)	Remarks
 SINGLE COLOUR : RED	0.135 A	TOTAL CURRENT OUTPUT : 0.135 A RECOMMENDED OVERDRIVE CURRENT : 0.42 A (36 V) ** OPTIMUM FOR SINGLE COLOUR
 SINGLE COLOUR : GREEN	0.135 A	TOTAL CURRENT OUTPUT : 0.135 A RECOMMENDED OVERDRIVE CURRENT : 0.42 A (36 V) ** OPTIMUM FOR SINGLE COLOUR
 SINGLE COLOUR : BLUE	0.135 A	TOTAL CURRENT OUTPUT : 0.135 A RECOMMENDED OVERDRIVE CURRENT : 0.42 A (36 V) ** OPTIMUM FOR SINGLE COLOUR
 COMBINE 2 COLOUR: RED & BLUE	0.135 A	TOTAL CURRENT OUTPUT : 0.135 A ****(EXAMPLE : RED = 0.07 A , BLUE = 0.07 A) ****(OVERDRIVE STROBE MODE EXAMPLE : RED = 0.21 A , BLUE = 0.21 A) FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C ENSURE CURRENT MUST NOT EXCEED 0.5 A 
 COMBINE 2 COLOUR: RED & GREEN	0.135 A	TOTAL CURRENT OUTPUT : 0.135 A ****(EXAMPLE : RED = 0.07 A , GREEN = 0.07 A) ****(OVERDRIVE STROBE MODE EXAMPLE : RED = 0.21 A , GREEN = 0.21 A) FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C ENSURE CURRENT MUST NOT EXCEED 0.5 A 
 COMBINE 2 COLOUR: GREEN & BLUE	0.135 A	TOTAL CURRENT OUTPUT : 0.135 A ****(EXAMPLE : GREEN = 0.07 A , BLUE = 0.07 A) ****(OVERDRIVE STROBE MODE EXAMPLE : GREEN = 0.21 A , BLUE = 0.21 A) FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C ENSURE CURRENT MUST NOT EXCEED 0.5 A 
 COMBINE COLOUR: RED, GREEN & BLUE	0.135 A	TOTAL CURRENT OUTPUT : 0.135 A ****(EXAMPLE : RED = 0.045 A , GREEN = 0.045 A , BLUE = 0.045 A) ****(OVERDRIVE STROBE MODE EXAMPLE : RED = 0.14 A , GREEN = 0.14 A , BLUE = 0.14 A) FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C ENSURE CURRENT MUST NOT EXCEED 0.5 A 



# ILLUMINATOR DATA

**LT5WRG150-00-1-RGBW-24V**

Lighting Pattern																																											
Working Distance	For further details please contact us.																																										
Display and Image																																											
Data Results	<table border="1"> <thead> <tr> <th>Horizontal</th> <th>Meas.(mm)</th> </tr> </thead> <tbody> <tr><td>90%</td><td></td></tr> <tr><td>80%</td><td></td></tr> <tr><td>70%</td><td></td></tr> <tr><td>60%</td><td></td></tr> <tr><td>50%</td><td></td></tr> <tr><td>40%</td><td></td></tr> <tr><td>30%</td><td></td></tr> <tr><td>20%</td><td></td></tr> <tr><td>10%</td><td></td></tr> </tbody> </table>	Horizontal	Meas.(mm)	90%		80%		70%		60%		50%		40%		30%		20%		10%		<table border="1"> <thead> <tr> <th>Vertical</th> <th>Meas.(mm)</th> </tr> </thead> <tbody> <tr><td>90%</td><td></td></tr> <tr><td>80%</td><td></td></tr> <tr><td>70%</td><td></td></tr> <tr><td>60%</td><td></td></tr> <tr><td>50%</td><td></td></tr> <tr><td>40%</td><td></td></tr> <tr><td>30%</td><td></td></tr> <tr><td>20%</td><td></td></tr> <tr><td>10%</td><td></td></tr> </tbody> </table>	Vertical	Meas.(mm)	90%		80%		70%		60%		50%		40%		30%		20%		10%		
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