

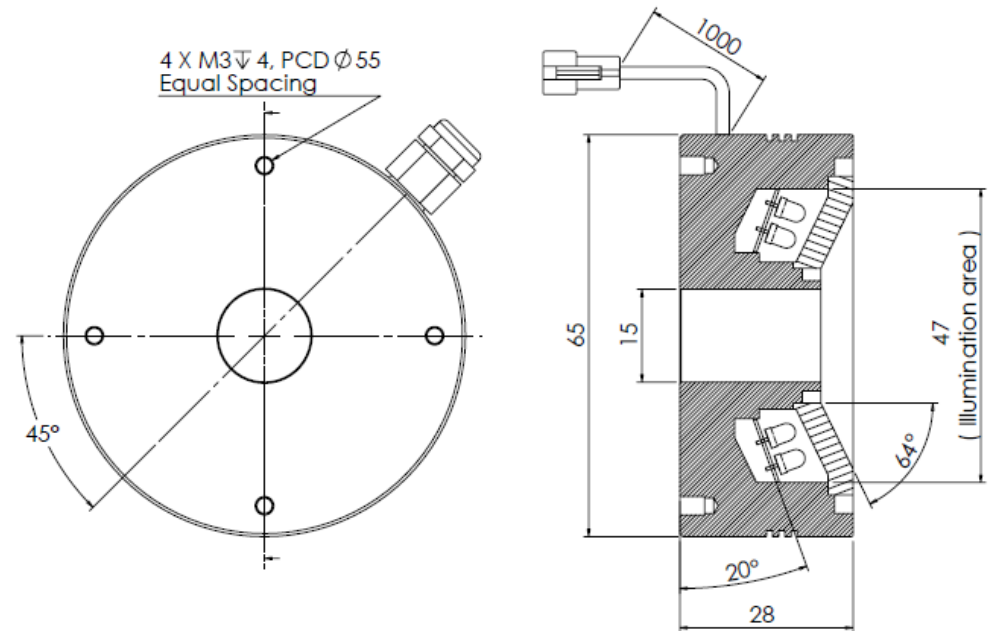
Ring Light Direct Angle

 **FLDR-i50B-IP55**

Lighting Picture



Lighting Dimension



| Mechanical Information       |                              |
|------------------------------|------------------------------|
| Casing Material              | Aluminium + Acrylic          |
| Storage Temperature Range    | Temp 0-35°C, Humidity 20-85% |
| Weight                       | 204 g                        |
| Lighting Dimension $\phi$ xH | $\phi$ 65 x 28.0mm           |
| IP Rating                    | IP55                         |

Unit in mm



| Optical Information          |                  |                    |           |          |                |                     |
|------------------------------|------------------|--------------------|-----------|----------|----------------|---------------------|
| Led Color                    | RED (R/R24/SR24) | InfraRed (IR/IR24) | GREEN (G) | BLUE (B) | WHITE (W)      | Ultra Violet (UV24) |
| Wavelength                   | 640/626nm        | 875nm              | 525nm     | 470nm    | xy=(0.31,0.32) | 400nm               |
| Illumination (number of LED) | 54/55/54         | 56                 | 56        | 56       | 56             | 54                  |
| Illumination Area            | Ø47mm            |                    |           |          |                |                     |
| Led Package                  | T1 3mm           |                    |           |          |                |                     |
| Eye Safety (EN 62471:2008)   | Exempt Group     |                    |           |          |                | RG3                 |

| Electrical Information                                       | R           | IR          | R24         | SR24        | IR24        | G/B/W        | UV24        |
|--|-------------|-------------|-------------|-------------|-------------|--------------|-------------|
| Lighting Supply Voltage (constant voltage mode)              | 12V ± 2%    |             | 24V ± 2%    |             |             |              |             |
| Supply Ripple Voltage  | ≤ Vs ± 5%   |             |             |             |             |              |             |
| Reverse Battery Protection                                   | YES         |             |             |             |             |              |             |
| Lighting Forward voltage, (for zero internal resistor value) | 10.8V       | 9.8V        | 19.8V       | 19.8V       | 19.6 V      | 21.0 V       | 21.6V       |
| Continuous Current   | 0.18A (MAX) | 0.20A (MAX) | 0.10A (MAX) | 0.18A (MAX) | 0.10A (MAX) | 0.16 A (MAX) | 0.18A (MAX) |
| Power Consumption  | 2.16 W      | 2.40 W      | 2.40 W      | 4.32 W      | 2.40 W      | 3.84 W       | 4.32 W      |
| Lighting casing temperature, Operating after 60 minutes      | 46°C        | 50°C        | 46°C        | 46°C        | 50°C        | 56°C         | 39°C        |

| Strobe Mode Specification                                    | R   | IR          | R24   | SR24        | IR24        | G/B/W       | UV24        |
|--|---|-------------|---|-------------|-------------|-------------|-------------|
| Max. Lighting Supply Voltage (Constant voltage power supply) | Pulsing at 12VDC to 24VDC, 0-10% Duty Cycle<br>Recommended at 15VDC |             | Pulsing at 24VDC to 48VDC, 0-10% Duty Cycle<br>Recommended at 36VDC |             |             |             |             |
| Pulse Current, (Max. 10msec) (Constant current power supply) | 0.45A (MAX)   | 0.50A (MAX) | 0.25A (MAX)   | 0.45A (MAX) | 0.25A (MAX) | 0.40A (MAX) | 0.45A (MAX) |
| Max. Trigger Pulse Duration, msec                            | 10 msec   |             |   |             |             |             |             |
| Duty Cycle   | 0 - 10%   |             |   |             |             |             |             |

| Ordering Option                                |  |
|--|--|
| FLDR-i50B-R/R24/SR24/IR/IR24/G/B/W/UV24-IP55   | With resistor to limit the current<br>(Use in both constant voltage/ current power supply) |
| FLDR-i50B-R/R24/SR24/IR/IR24/G/B/W/UV24-IP55-0 | Internal resistor value= zero ohms<br>(only use in constant current power supply)          |



| Connection                      |     | R/IR        |             |   | R24/SR24/IR24/G/B/W/UV24 |             |   |
|---------------------------------|-----|-------------|-------------|---|--------------------------|-------------|---|
| Connector Type (Default):       |     | JST SMR-02V |             |  | JST SMR-03V              |             |  |
|                                 | Pin | Signal      | Cable Color | Pin   | Signal                   | Cable Color |   |
|                                 | 1   | LED +       | Black/White | 1   | LED +                    | Black/White |   |
|                                 | 2   | LED -       | ---         | 2   | N.C.                     | ---         |   |
|                                 |     |             | Black       | 3   | LED -                    | Black       |   |
| Cable Length out from lighting: |     | 1000 mm     |             |   |                          |             |   |

| Additional Information  |  | R/R24/SR24/G/B/W/IR/IR24                             |  | UV24         |  |
|---|--|--|--|--------------|--|
| Additional Cooling Method   |  | Attached to machine part for better heat dissipation |  |              |  |
| Life span in continuous mode  |  | 20,000 hours   |  | 5,000 hours  |  |
| Life span in strobe light mode<br>Lighting drop to 50% intensity<br>(at 25°C ambient temperature) |  | 50,000 hours   |  | 10,000 hours |  |
| Intensity Controller Selection  |  | PSA-Series, PSD-Series, LIC-Series                   |  |              |  |
| CE Conformity   |  | YES  |  |              |  |
| RoHS Compliance   |  | YES  |  |              |  |
| ISO 9001:2008   |  | SG11/03751   |  |              |  |

| Application              |         |
|--------------------------|---------|
| Optimal Working Distance | 5-70 mm |



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