

Multi-direction shadowless light (DML)

LS-DML series · Shadowless lights · 2 models



Multi-direction shadowless light: LEDs face vertically toward the light side, a special diffuser reflects ring illumination, giving highly uniform emission onto multiple slopes.

Features

- LEDs mounted vertically, fastened to the light side
- Special diffuser, reflected ring illumination
- Highly uniform emission onto multiple slopes
- Customizable: Shape, Outer & inner diameter, Combined light, Colour & colour temperature, Multi-area control, Cable length, Installation method
- UV & IR versions can be customized as required

Applications

- Surface character and pattern recognition
- Metal object edge location and measurement inspection
- Imaging example: metal shrapnel location (LS-DML90-W), high-uniformity diffuse light gives high contrast

Colours

R	620-630 nm
G	525-530 nm
B	465-470 nm
W	6600 K

Common specifications

Voltage	24 V
Min. diameter	dia. 90
Max. diameter	dia. 120
Recommended working distance	10~100 mm
FOV	1~100 mm

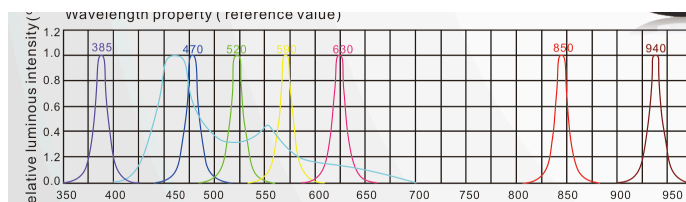
Ordering code: LS-DML##-R/G/B/W/IR/UV (## = outer diameter; last field = colour)

Model	Power (R)	Power (G/B/ W)	Weight	Common model	Dimension drawing no.	Emitting surface dia. (mm)
LS-DML90 colours: R, G, B, W	1.4W	2.4W	215 g	Y	1	64
LS-DML120 colours: R, G, B, W	1.9W	3.1W	340 g	N	2	94

1.LS-DML90

2.LS-DML120

Figure 1 consists of a line graph and three heatmaps. The line graph, titled 'WD-Illumination property', plots Illumination [LX] on the y-axis (0 to 24,000) against WD [MM] on the x-axis (0 to 200). The curve shows a sharp decrease in illumination as WD increases, starting at 20,000 LX at 0 mm and dropping to approximately 1,000 LX at 200 mm. To the right of the graph are three heatmaps for a 40x30mm FOV, labeled 'Dark', 'Medium luminance', and 'High luminance'. A color scale on the far right indicates luminance values from 10 to 100. The 'Dark' heatmap shows a yellow-to-orange gradient, 'Medium luminance' shows a red-to-orange gradient, and 'High luminance' shows a solid red color. A note below the heatmaps states: '*Above diagram only for reference'.



Product views

