

LED Lighting for Cabinetry

Direct Ring / Backlight

■ **Features:** By illuminating from 360 deg. direction, even lighting without a shadow is obtained.

Image Sample P.1060.

■ **Direct Ring Type**

LPDRR (Red) D=20
LPDRW (White)

End of the cable has a connector for the power controller.

Material : Aluminum (Main Body)
Surface Treatment : Black Anodize (Main Body)

Part Number Type	D	* Illumination Angle (degree)	Illumination Area	WD	d	H	A	B	M	Mass (g)	Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5 ~ 20 pcs.	
LPDRR LPDRW	20	90	Ø10~30	30~70	16.1	18	-	-	-	70			
	30	90	Ø40~60	50~100	16.1	18	-	-	-	75			
	50	80	Ø60~80	50~100	20	14	20	18	3	60	80		
		25		10~20	20								
	70	80	50~100	34	51	30	25	4	100	140			
		*25	10~20	15									
	90	80	50~100	40	62	16	40	32	4	120			
		*25	10~20	16									

* For LPDRR and LPDRW, use LEDCNR0.5 (P.1060) controller. (Third-party controllers cannot be used.) * LPDRR 70-25 and 90-25 in the Specification Table are not available. * For orders larger than indicated quantity, please check with WOS.
* When selecting an illumination angle, refer to the "Features and Usage of LED Lighting" below.

Image Sample P.1060.

■ **Backlight Type (Embedded Light)**

LPDRR (Red)
LPDRW (White)

Material : Aluminum (Main Body), Polyacetal (Emission Side)
Surface Treatment : Black Anodize (Main Body)
Accessory : Flat Head Screw for Attachment, 2 pcs.

Part Number Type	No.	Emission Side	A	B	C	X	Y	H		d1	d2	h	Mass (g)		LPBLR Unit Price		LPBLW Unit Price	
								LPBLR	LPBLW				LPBLR	LPBLW	Volume Discount Rate	Volume Discount Rate		
LPBLR LPBLW	25	25x25	40	35	20	18	4.5	8	25	3.4	6	2	55	100				
	50	50x50	70	60	40	33	7	100					200					
	75	75x75	95	85	50	46	6.5	10					150	320				

* Use the controller LEDCNR1/LEDCNRF2 (P.1060). (Do not use the controllers of other manufacturers.) * For orders larger than indicated quantity, please check with WOS.

Ordering Example

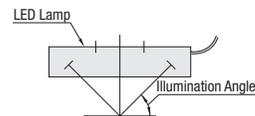
Part Number - Illumination Angle

LPDRR50 - 80
LPBLW50

Features and Usage of LED Lighting

① Direct Ring Type

- By illuminating from 360 deg. direction, even lighting without a shadow is obtained.
- Units with large illumination angle (80°) provide large amounts of illumination on workpieces and are suitable when ample lighting is desired (a). However, the reflection of LED Lighting may occur in the case of the glossy products. In such cases, reflection can be reduced by using a diffuser board.
- Units with small illumination angle (25°) do not cause the LED light source reflections on gloss workpieces and are suitable for detection of shallow bumps and scratches (b).

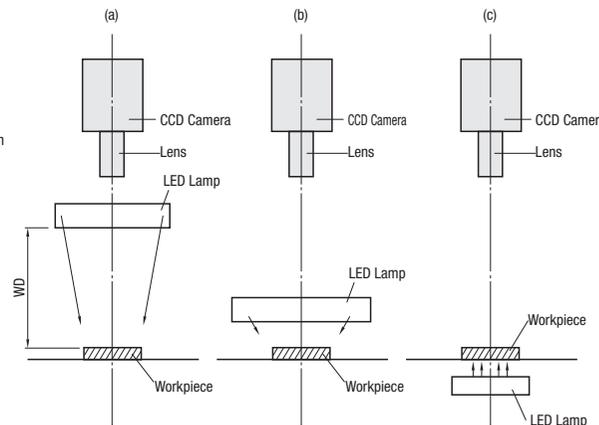


② Backlight Type

- A lighting unit providing a large amount of illumination with LEDs facing directly upwards.
- Does not occupy much space as it is designed to be compact (c).

Examples of LED Lamp Placements

• Direct Ring Type Illumination Angle 80° • Direct Ring Type Illumination Angle 25° • Backlight Type



Power Controller for Image Processing LED Light

■ **Features:** The worldwide voltage specifications (F1, F2) can be used with AC100~240V.

■ **LED Lighting for Cabinetry Dedicated Power Controller**

LEDCNR Japanese Specifications (No. 0.5, 1)

Worldwide Specifications (No. F1 and F2)

Specifications

Input Power Supply	No.0.5, 1 AC100V±10% 50/60Hz
Operating Temperature	No.F1, F2 AC100V-240V 50/60Hz
Operating Temperature	0~45°C
Light Control	75%RH or Less (No Condensation)
Lighting Method	External Input ON/OFF Signal
Light Control	Constant Voltage Power (Voltage Variable)
Light Control	Continuously Variable (Knob on the Panel)

* Light control differs according to the model of LED lamp. For details, refer to instruction manual for individual LED lamp.

* No. 0.5 and 1 come with a 2m electrical cable and an external input connector.
* No. F1 or F2 does not come with an electrical cable.
Receptacle spec. IEC60320/C14

Part Number Type	No.	Number of Circuits	Output Current	Capacity	Input Power Supply	Specifications		Unit Price 1 ~ 4 pc(s).	Volume Discount Rate 5 ~ 10 pcs.
						Applicable Lighting (MISUMI Type)			
LEDCNR	0.5	1	1.1A or less	25W	AC100V±10% 50/60Hz	LPDRR 20, LPDRR 50-25			
	1					MMD, LPDRR 30, LPDRR 50-80, LPDRR 70, LPDRR 90, LPBLR			
	F1					LPDRR 20, LPDRR 50-25			
	F2					MMD, LPDRR 30, LPDRR 50-80, LPDRR 70, LPDRR 90, LPBLR			

* For orders larger than indicated quantity, please check with WOS.

Ordering Example

Part Number LEDCNR1

Operation Method

- Confirm that cables, connectors, etc. are all connected.
 - Turn ON the power switch.
 - The ON/OFF of the LED lamp is operated with LAMP ON/OFF switch.
 - When LED lamp is ON, brightness is adjusted with the light control knob.
 - Turn-off/on of the LED lamp device is facilitated by the external ON/OFF signal inputs. Input Signal Range : Voltage (VDD) = DC12V (Min.) ~ DC24V (Max.). LEDs are turned off when Input Current (IF) = 10mA (Max.) is applied.
 - Turn OFF the power switch.
- * Be sure to turn off the power switch before removing or mounting the lamps. Never remove or install lamps while the power is ON, or it may result in malfunctioning of the lighting device.

Image Sample

Image Sample	Workpiece	Lens	LED Lamp	CCD Camera, WD
	Wire-Bonds on Circuit Boards	LFSHB-6-198	LPDRR30-90	2/3 inch, 37
	Package of Tea Bag	LCV6/LCVR1	LPDRW90-80*	2/3 inch, 75
	IC (Laser Mark)	LCV25/LCVR5	LPDRR90-25	2/3 inch, 130
	Lead Frame	LCV50/LCVR5	LPBLR75	2/3 inch, 370
	Printing on Cardboard	LCV12/LCVR1x3	LPDRR90-80	2/3 inch, 130
	Semiconductor Lead Bending	LTAB5/LTAB5	LPDRR70-25	2/3 inch, 65
	Fuse	LFSL29-0.5-50.5	LPBLR50	2/3 inch, 95
	Engraving on Cutter Edge	LFSHA-2-72.8	LPDRR30-90	2/3 inch, 75
	Chip Capacitor	LFSHA-4-103.8	LPDRR30-90	2/3 inch, 75
	Chip Components on Tape (Presence Check)	LFSL16-0.7-48	LPBLR50	2/3 inch, 95
	Flat Washer (Scratch Detection)	LFSL16-1-50	LPDRR50-25	2/3 inch, 68
	Circuit Board Patterns	LFSHB-4-158	LPDRR30-90	2/3 inch, 45