

# Direct Ring Illumination CV-R/SQ Series

## Direct Ring Illumination: CV-R Series

- High intensity, uniform direct, bright-field 360-degree lighting
- Standard LED illumination for a wide range of applications

## Square Ring Illumination: CV-SQ Series

- Standard LED illumination for a wide range of application



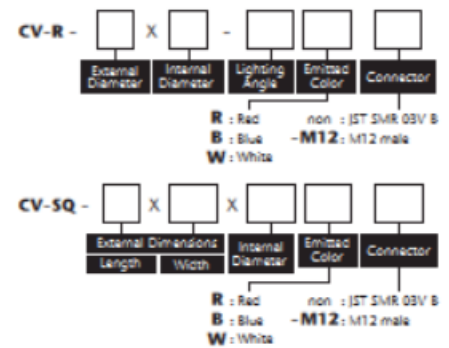
Model	Emitted Color	Power (W)	External Dimensions (mm)				Lighting Angle (Deg.)	Weight (g)*	Accessories
			External Diameter	Internal Diameter	Height				
CV-R-32X10-70R	Red	0.9	32	10	16	70	35	CV-AD-R-32X10-70 CV-DF-R-32X10-70 CV-PL-R-32X10-70	
CV-R-32X10-70B	Blue	1.7	32	10	16	70	35		
CV-R-32X10-70W	White	1.7	32	10	16	70	35		
CV-R-42X18-65R	Red	1.5	42	18	18	65	55	CV-AD-R-42X18-65 CV-DF-R-42X18-65 CV-PL-R-42X18-65	
CV-R-42X18-65B	Blue	2.7	42	18	18	65	55		
CV-R-42X18-65W	White	2.7	42	18	18	65	55		
CV-R-50X28-75R	Red	0.7	50	28	16	75	55	CV-AD-R-50X28-75 CV-DF-R-50X28-75 CV-PL-R-50X28-75	
CV-R-50X28-75B	Blue	2.6	50	28	16	75	55		
CV-R-50X28-75W	White	2.8	50	28	16	75	55		
CV-R-70X35-90R	Red	1.5	70	35	22	90	140	CV-AD-R-70X35-90 CV-DF-R-70X35-90 CV-PL-R-70X35-90	
CV-R-70X35-90B	Blue	5.5	70	35	22	90	140		
CV-R-70X35-90W	White	5.5	70	35	22	90	140		
CV-R-90X30-80R	Red	5.3	90	30	20	83	260	CV-AD-R-90X30-80 CV-DF-R-90X30-80 CV-PL-R-90X30-80	
CV-R-90X30-80B	Blue	9.3	90	30	20	83	260		
CV-R-90X30-80W	White	10.3	90	30	20	83	260		
CV-R-90X50-70R	Red	3.5	90	50	20	71	180	CV-AD-R-90X50-70 CV-DF-R-90X50-70 CV-PL-R-90X50-70	
CV-R-90X50-70B	Blue	6.2	90	50	20	71	180		
CV-R-90X50-70W	White	6.4	90	50	20	71	180		
CV-R-120X58-50R	Red	3.1	120	58	31.5	52	560	CV-AD-R-120X58-50 CV-DF-R-120X58-50 CV-PL-R-120X58-50	
CV-R-120X58-50B	Blue	13.1	120	58	31.5	52	560		
CV-R-120X58-50W	White	13.5	120	58	31.5	52	560		

Model	Emitted Color	Power (W)	External Dimensions (mm)				Weight (g)*	Accessories
			Length	Width	Height	Internal Diameter		
CV-SQ-56X56X30R	Red	1.0	56	56	18	30	85	CV-DF-SQ-56X56X30 CV-PL-SQ-56X56X30
CV-SQ-56X56X30B	Blue	2.5	56	56	18	30	85	
CV-SQ-56X56X30W	White	2.6	56	56	18	30	85	

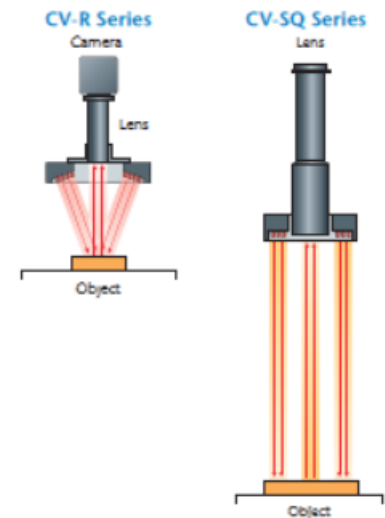
\* LED Controller on P.1B5

\* It is weighted 15g more in case 'M12'.

## Explanation of Model Code



## Illumination Structure



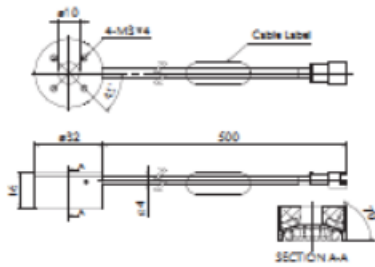
945 East 11<sup>th</sup> Avenue Tampa, FL 33605

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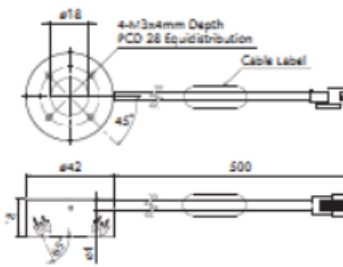
Contact: Sales@pyramidimaging.com

<https://pyramidimaging.com>

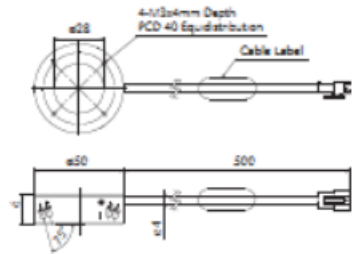
CV-R-32X10-70R (B,W)



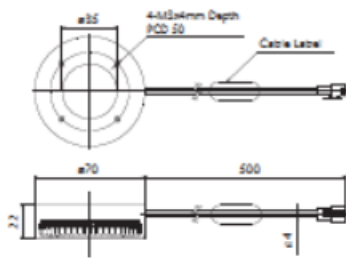
CV-R-42X18-65R (B,W)



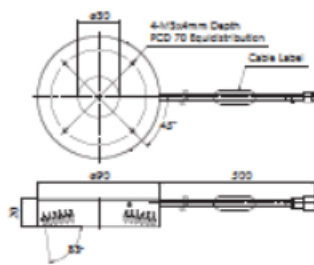
CV-R-50X28-75R (B,W)



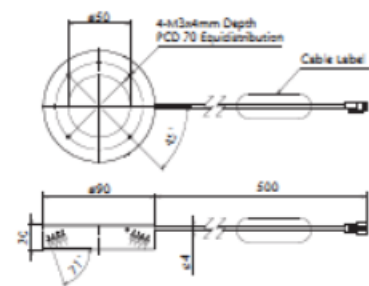
CV-R-70X35-90R (B,W)



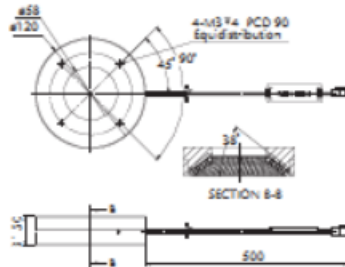
CV-R-90X30-80R (B,W)



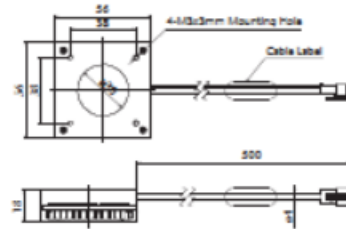
CV-R-90X50-70R (B,W)



CV-R-120X58-50R (B,W)

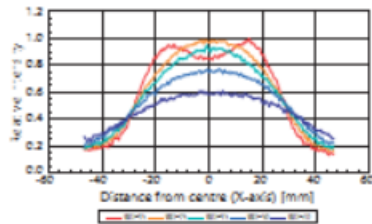


CV-SQ-56X56X30R (B,W)

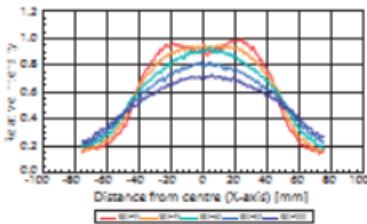


### Light Distribution Characteristics

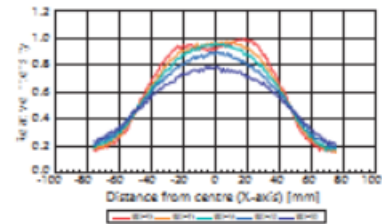
CV-R-50X28-75W



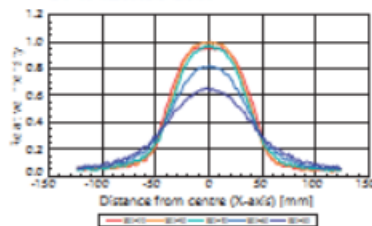
CV-R-70X35-90W



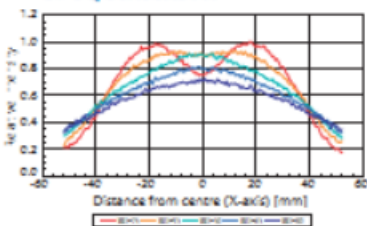
CV-R-90X30-80W



CV-R-120X58-50W



CV-SQ-56X56X30W



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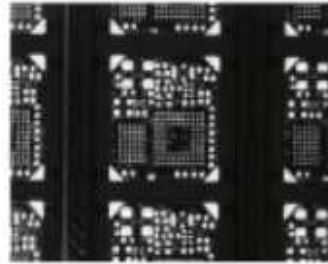
<https://pyramidimaging.com>

## Sample Images

### CV-R Series

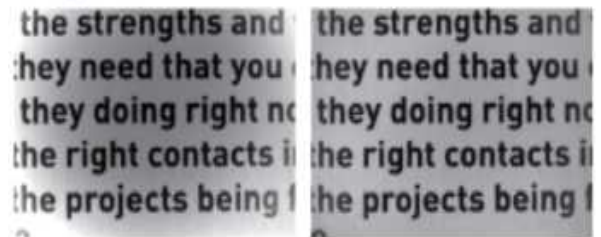


Foreign Object in Paper Cup



PCB Fabrication Inspection

### CV-SQ Series



Not Much Light at Short WD

Full Light at Longer WD

## Applications

- Lead frame inspection
- Electronic component appearance inspection
- QFP/SOP lead curve inspection
- Transparency film dirt inspection
- Various types of silhouette observation

## Accessories

### Adapter



**CV-AD-Rxx**  
Used to mount the diffuser or polarizer onto the LED lighting.

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### Diffusion Plate



**CV-DF-Rxx**  
To be mounted in front of the LED lighting using the adapter. Used to soften the lighting output, so as to reduce the glares on specular surface.

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### Polarizer Plate



**CV-PL-Rxx**  
To be mounted in front of the LED lighting using the adapter. Used together with a Polarizer filter lens in front of the camera as a set. It helps to reduce glare.

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