

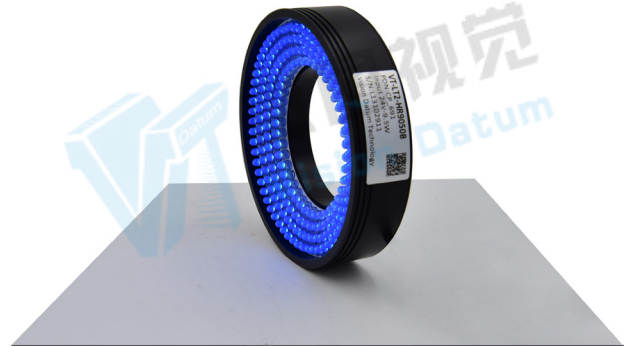
# High Angle Ring Illumination - HR Series

## Features

- Multi angles available for right light to get vivid image
- High density LED arrays for the intensity illumination
- Diffuser is available to increase the uniformity of illumination
- Breakthrough wave-soldering technology to improve production quality and efficiency.

## Applications

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



## Sample Images



Imaging for characters printed on water bottle cap



Imaging for characters SD card contact



Imaging for characters Bearing scratch



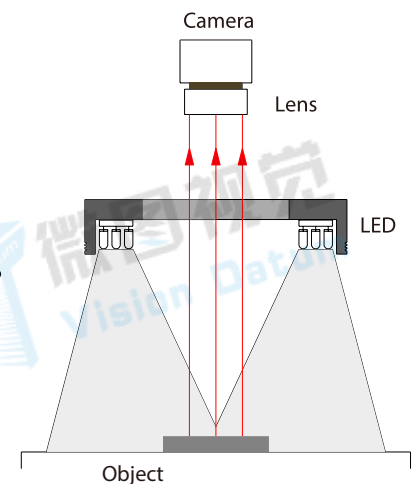
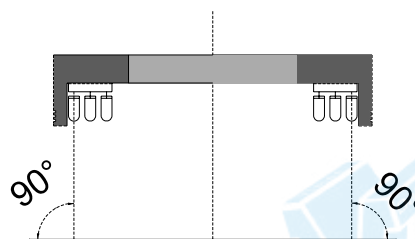
Imaging for characters Battery surface

## Explanation of Model Code

|           |           |         |           |
|-----------|-----------|---------|-----------|
| VT-LT2-HR | 7035      | 90      | (W/B/G/R) |
| Series    | O.D./I.D. | Angle * | Color     |

\*The emission angle refers to the angle between light and horizontal plane.

## Illumination Structure

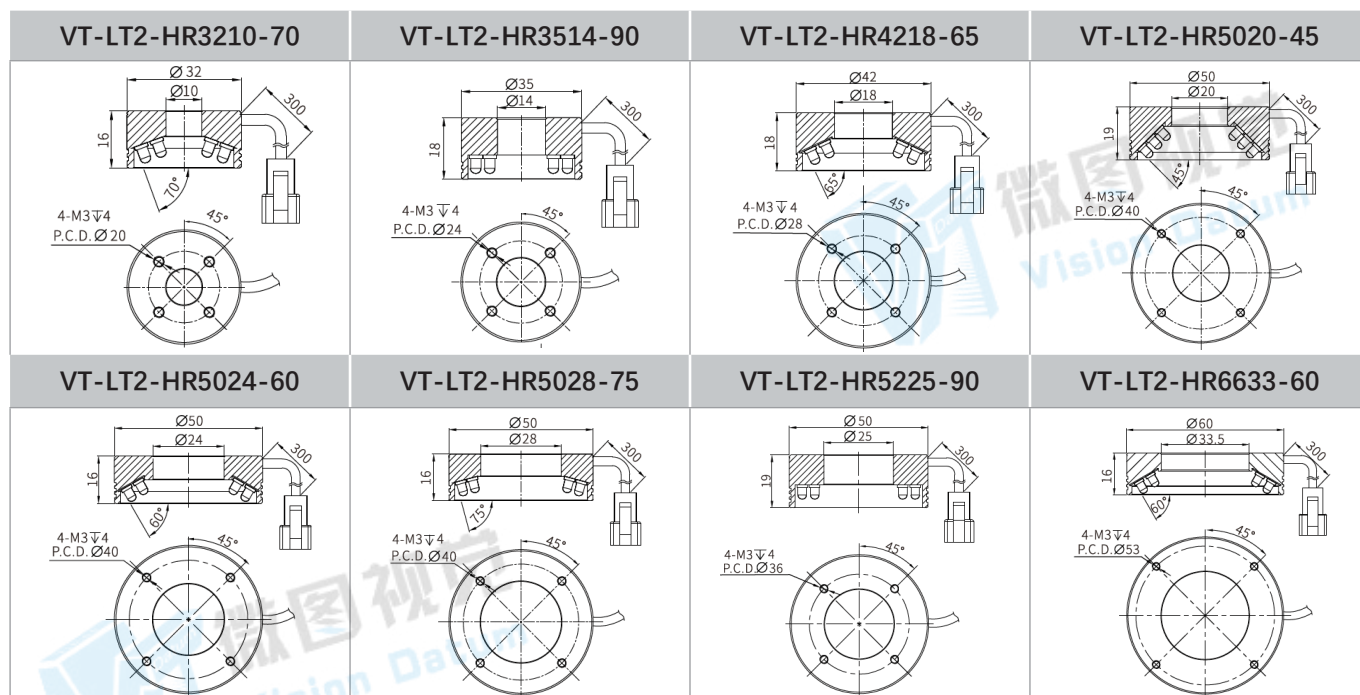


## Common Specifications

|                                |  |
|--------------------------------|--|
| Input voltage                  | 24 VDC   |
| Wavelength range               | Red: 620-630nm; Blue: 460-475nm; Green: 520-530nm;   |
| Color temperature (white)      | 6500-8500K   |
| Operating environment (indoor) | Temperature: 0~40°C<br>Humidity: 20% to 85% RH (with no condensation)                      |
| Life time                      | White:30,000hrs, Red: 60,000hrs<br>(Depends on the operating environment, not a guarantee) |
| Case material                  | Aluminum alloy, Resin  |

# VISION DATUM Illumination

| Model No.          | Optical spec.        | Working Distance    | Electrical specifications (NIR / UV Accept custom) |                      |                          | Dimensions       |                  |             |
|--------------------|----------------------|---------------------|--|----------------------|--------------------------|------------------|------------------|-------------|
|                    | Emission angle (deg) | Recommended WD (mm) | Supply Voltage (v)                                 | Power cons. (w)<br>● | Power cons. (w)<br>● ○ ● | Outer diam. (mm) | Inner diam. (mm) | Height (mm) |
| VT-LT2-HR3210-70   | 70°                  | 15-25               | 24   | 1.4                  | 1.4                      | 32               | 10               | 16          |
| VT-LT2-HR3514-90   | 90°                  | 15                  | 24   | 1.5                  | 1.5                      | 35               | 14               | 18          |
| VT-LT2-HR4218-65   | 65°                  | 19-29               | 24   | 1.7                  | 2.2                      | 42               | 18               | 18          |
| VT-LT2-HR5020-45   | 45°                  | 4-16                | 24   | 2.5                  | 3.8                      | 50               | 20               | 19          |
| VT-LT2-HR5024-60   | 60°                  | 22-31               | 24   | 2.1                  | 2.6                      | 50               | 24               | 16          |
| VT-LT2-HR5028-75   | 75°                  | 56                  | 24   | 1.8                  | 2.5                      | 50               | 28               | 16          |
| VT-LT2-HR5225-90   | 90°                  | 26                  | 24   | 1.9                  | 2.6                      | 50               | 25               | 19          |
| VT-LT2-HR6633-60   | 60°                  | 30-38               | 24   | 3.1                  | 3.2                      | 60               | 33.5             | 16          |
| VT-LT2-HR6630-60   | 60°                  | 27-43               | 24   | 3.8                  | 5.2                      | 66               | 30               | 17          |
| VT-LT2-HR7038-45   | 45°                  | 12-35               | 24   | 4.1                  | 5.8                      | 70               | 38               | 21          |
| VT-LT2-HR7030-60   | 60°                  | 28-46               | 24   | 4.1                  | 5.2                      | 70               | 30               | 20          |
| VT-LT2-HR7035-90   | 90°                  | 36                  | 24   | 4.1                  | 4.8                      | 70               | 35               | 22          |
| VT-LT2-HR7435-60   | 60°                  | 28-45               | 24   | 4.0                  | 5.4                      | 74               | 35               | 20          |
| VT-LT2-HR9056-45   | 45°                  | 50-90               | 24   | 6.6                  | 6.4                      | 90               | 56               | 20          |
| VT-LT2-HR9050-70   | 70°                  | 68-103              | 24   | 7.6                  | 9.0                      | 90               | 50               | 20          |
| VT-LT2-HR10040-90  | 90°                  | 100-150             | 24   | 9.9                  | 10.0                     | 100              | 40               | 20          |
| VT-LT2-HR12080-50  | 50°                  | 30-48               | 24   | 12.1                 | 12.9                     | 120              | 80               | 21          |
| VT-LT2-HR12065-75  | 75°                  | 130-180             | 24   | 13.1                 | 15.5                     | 120              | 65               | 17          |
| VT-LT2-HR12050-90  | 90°                  | 120-200             | 24   | 9.8                  | 20.5                     | 120              | 50               | 18          |
| VT-LT2-HR15025-90  | 90°                  | 150-240             | 24   | 18.5                 | 24.9                     | 150              | 25               | 22.5        |
| VT-LT2-HR180126-60 | 60°                  | 106-240             | 24   | 20.1                 | 29.4                     | 180              | 126              | 23          |
| VT-LT2-HR210145-60 | 60°                  | 116-166             | 24   | 23.5                 | 30.0                     | 210              | 145              | 25          |



Dimension (mm)

|   |   |  |  |
|---|---|--|--|
| <p><b>VT-LT2-HR6630-60</b></p> <p>4-M3x4<br/>P.C.D. 49.5</p>  | <p><b>VT-LT2-HR7038-45</b></p> <p>4-M3x4<br/>P.C.D. 54</p>    | <p><b>VT-LT2-HR7030-60</b></p> <p>4-M3x4<br/>P.C.D. 54</p>   | <p><b>VT-LT2-HR7035-90</b></p> <p>4-M3x4<br/>P.C.D. 50</p>   |
| <p><b>VT-LT2-HR7435-60</b></p> <p>4-M3x4<br/>P.C.D. 60</p>    | <p><b>VT-LT2-HR9056-45</b></p> <p>4-M3x4<br/>P.C.D. 75</p>    | <p><b>VT-LT2-HR9050-70</b></p> <p>4-M3x4<br/>P.C.D. 70</p>   | <p><b>VT-LT2-HR10040-90</b></p> <p>4-M3x4<br/>P.C.D. 75</p>  |
| <p><b>VT-LT2-HR12080-50</b></p> <p>4-M3x4<br/>P.C.D. 100</p>  | <p><b>VT-LT2-HR12065-75</b></p> <p>4-M3x4<br/>P.C.D. 110</p>  | <p><b>VT-LT2-HR12050-90</b></p> <p>4-M3x4<br/>P.C.D. 100</p> | <p><b>VT-LT2-HR15025-90</b></p> <p>4-M3x4<br/>P.C.D. 100</p> |
| <p><b>VT-LT2-HR180126-60</b></p> <p>4-M3x4<br/>P.C.D. 161</p> | <p><b>VT-LT2-HR210145-60</b></p> <p>4-M3x4<br/>P.C.D. 180</p> |  |  |

