

# Spot Lighting

## Spot Lights

### HLV2 Series

Provides high output spot lighting using an original optical design



#### Applications

As a light source for a telecentric lens, light source for alignment of LCDs or circuit boards, light source for dimension measuring, light source for spot illumination, etc.

#### Lineup with Selection to Match Your Needs

The HLV2 series provides a selection to match your usage environment and application. The LED color has a lineup of red, white, blue, and green.

##### HLV2-14 series, with a lightweight and compact design

###### Compact model

The HLV2-14 series is perfect for saving space, with its lightweight and compact design.

Example connection with the lens



Weights just  
**18g**



#### Spot Lights That Achieve High Output

The lightweight and compact Spot Light achieved high output through its unique optical design.

##### HLV2-22-3W series, a high output model

###### Standard model

HLV2-22 series

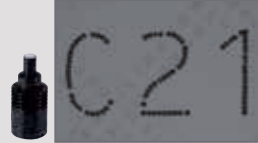


###### High output model

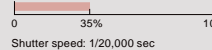
The HLV2-22-3W series is a Spot Light with the highest output of all series.



HLV2-22SW

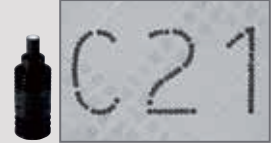


Intensity setting: 35%

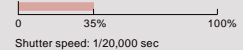


Shutter speed: 1/20,000 sec

HLV2-22SW-3W



Intensity setting: 35%



Shutter speed: 1/20,000 sec

Brightness varies based on the camera's spectral sensitivity. The data included is for reference only and does not guarantee the quality of this product.

#### Custom Orders

Please contact your sales representative.

E.g.: Changed the LED emitted wavelength to infrared

##### Customizable items

- External/internal diameter
- Wavelength/color
- Increase output
- Cable length
- Illuminating angle
- Format/material
- Connector format
- Installation/mounting

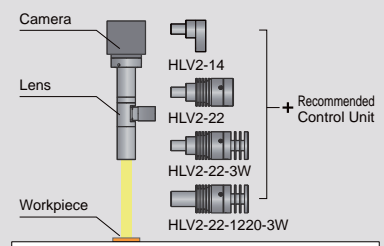


Etc.

#### Example Configuration

Revised the optical system to increase the emitting efficiency for this high output Spot Light.

##### HLV2 series

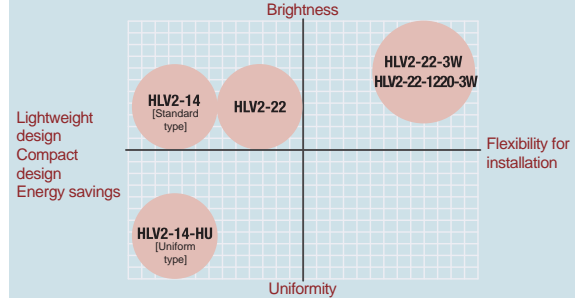


## Lineup Offering a Selection to Match Your Needs

HLV2 series evaluation chart

	Brightness	Uniformity	Lightweight design	Compact design	Flexibility for installation	Energy savings
<b>HLV2-14</b> [Standard type]	Good	Good	Very Good	Very Good	Good	Very Good
<b>HLV2-14-HU</b> [Uniform type]	OK	Very Good	Very Good	Very Good	Good	Very Good
<b>HLV2-22</b> (Comparison criterion)	Good	Good	Good	Good	Good	Good
<b>HLV2-22-3W</b>	Very Good	Good	OK	OK	Very Good	Good
<b>HLV2-22-1220-3W</b>	Very Good	Good	OK	OK	Very Good	Good

HLV2 series evaluation graph

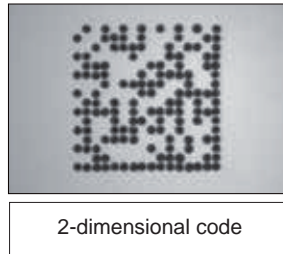


## Imaging Example: Imaging of 2-dimensional Codes



Description	Code reading
Workpiece	2-dimensional codes
New lighting	HLV2-22RD-3W

HLV2-22RD-3W

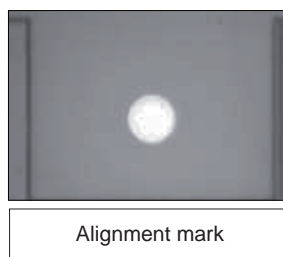


## Imaging Example: Imaging of Alignment Marks



Description	Positioning
Workpiece	Alignment marks
Light Unit in use	HLV2-22SW-3W

HLV2-22SW-3W



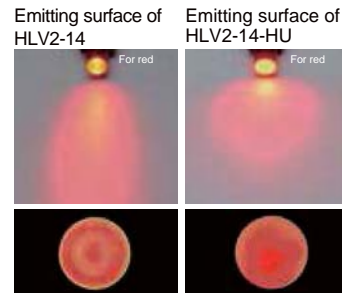
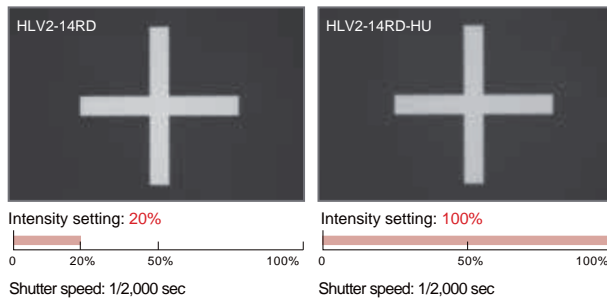
Direct Lighting	LDR2 LDR2-LA LDR-LA1 SQR SQR-TP
Diffused Lighting	HPR2 LFR LKR FPR FPQ2
Direct Lighting	LDL2 LDLB HLDL2 HL TH2 (5 types) TH LFL HPD2 LDM2 LAV PDM LFX3 LFX3-PT LFV3
Diffused Lighting	MSU MFU
Strobe Lighting	PF
Water-proof Lighting	HLDR-IP/ HSL-PCL
Ultraviolet Lighting	UV2 UV LNSP-UV-FN
Infrared Lighting	IR2
Intensity Control Lighting	IU
Spot Lighting, Etc.	HLV3 HLV2 LV LSP HFS/HFR HLV3-NR HLV3-3M-RGB-4 HLV2-NR HLV2-3M-RGB-3W PFBR PFB3 PFB2
Convergent Lighting	LNLP LNSP2 LNSP Coaxial Units LNSP-FN LN/LN-HK
Diffused Lighting	LNSD LND2 HLND LT LNV
Oblique/Angled Lighting	LNDG LNS2 LNIS LNIS-FN
Lenses	Telecentric Lens Macro Lens

## HLV2 Series



## Comparison of Data for HLV2-14 Series

Brightness comparison between HLV2-14 and HLV2-14-HU



HLV2-14-HU is a Spot Light with a highly uniform emitting surface.

## Lineup

Model name	LED color	Power consumption	Peak wavelength/ correlated color temperature	Options	Extension cables	Recommended Control Units	Weight
HLV2-14RD	Red	0.9 W	645 nm	-			18 g
HLV2-14SW	White		5,300 K				
HLV2-14BL	Blue		465 nm				
HLV2-14GR	Green		520 nm				
HLV2-14RD-HU	Red	0.9 W	645 nm	-			18 g
HLV2-14SW-HU	White		4,700 K				
HLV2-14BL-HU	Blue		465 nm				
HLV2-14GR-HU	Green		520 nm				
HLV2-22RD	Red	1.4 W	645 nm	Convergent lens	FCB* <sup>2</sup> Straight Cable	PD3* <sup>1</sup> CC-PJ-0707 PJ PJ2	37 g
HLV2-22SW	White		5,300 K				
HLV2-22BL	Blue		465 nm				
HLV2-22GR	Green		520 nm				
HLV2-22RD-3W	Red	2.8 W	645 nm	-			41 g
HLV2-22SW-3W	White		5,300 K				
HLV2-22BL-3W	Blue		465 nm				
HLV2-22GR-3W	Green		520 nm				
HLV2-22RD-1220-3W	Red	2.8 W	645 nm	-			42 g
HLV2-22SW-1220-3W	White		5,300 K				
HLV2-22BL-1220-3W	Blue		465 nm				
HLV2-22GR-1220-3W	Green		520 nm				

Extension Cables ▶ P.308

Control Unit Selection Guide ▶ P.251

List of Control Unit Specifications ▶ P.253

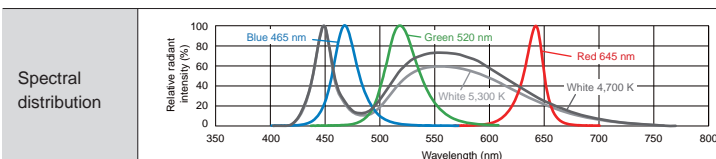
\*1 The PD3-3024-3 and PD3-5024-3 series are not applicable to these products.

\*2 The cables with a model name that ends with "-ME7", "-EL2", "-PF", or "-PF-EL9" are not included.

### Caution

- The length of the extension cable must be 5 m or less. If you want to use longer than 5 m, please contact your sales representative.
- Branch cables cannot be used. Use the FCB series (straight cable) or the FRCB series (robot cable).

## LED Properties



Offers you the most suitable lens filter for each wavelength. For details about the lens filter, refer to P.299.

Be sure to read the "Instruction Guide" included with the product before use and follow the safety precautions upon use.  
The data included is for reference only. Actual values may vary.

Various technical documents available.

PDF Drawings

DXF Drawings

Product Brochures

Instruction Guides

3D CAD

Data Sheets

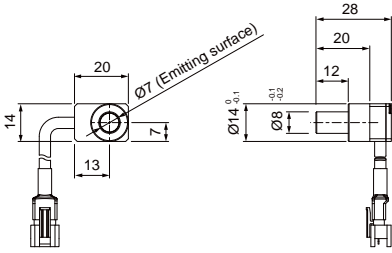
Imaging Examples

Digital Catalogs

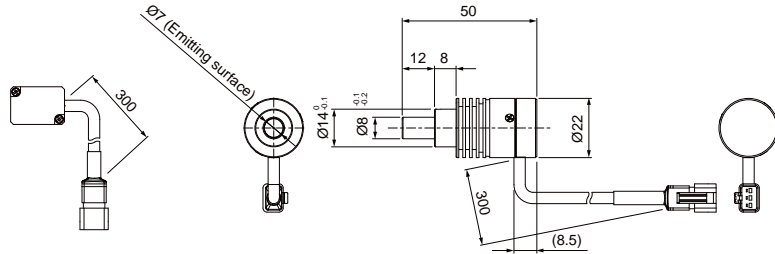
**HOURS**  
www.hours-web.com

## Dimensions (mm)

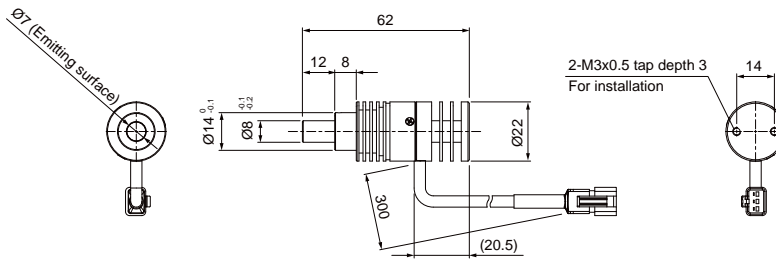
HLV2-14RD/SW/BL/GR/RD-HU/SW-HU/BL-HU/GR-HU



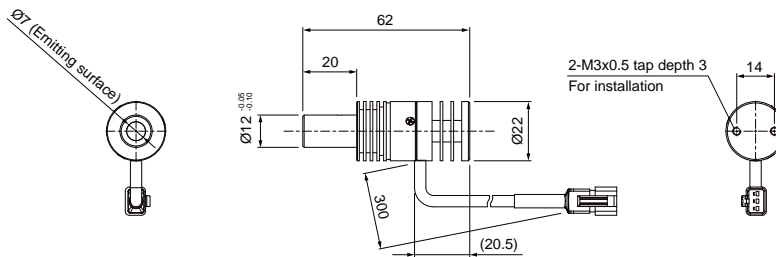
HLV2-22RD/SW/BL/GR



HLV2-22RD-3W/SW-3W/BL-3W/GR-3W



HLV2-22RD-1220-3W/SW-1220-3W/BL-1220-3W/GR-1220-3W



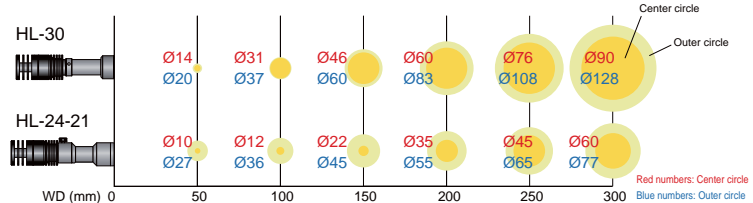
## Options

### HLV2-22 series dedicated condenser lens HL-30 / HL-24-21



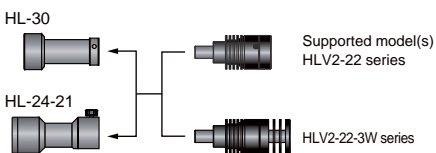
Cannot be used with the HLV2-14 / HLV2-22-1220-3W / HLV2-22-NR-3W series.

### ■Illuminated range of the HL-30 / HL-24-21

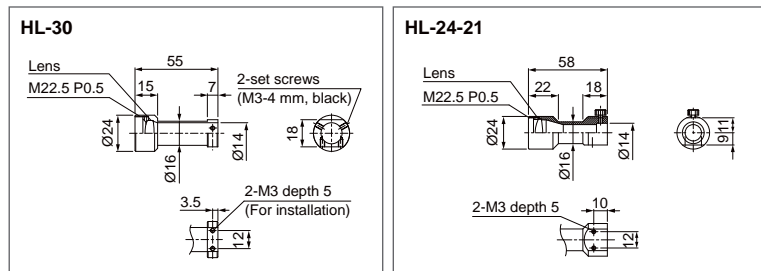


This data is actual measurement values. Results for individual products may vary.

### ■Installation with the HLV2-22 series



### Dimensions (mm)



Direct Lighting	LDR2
	LDR2-LA
	LDR-LA1
	SQR
	SQR-TP
Diffused Lighting	HPR2
	LFR
	LKR
	FPR
	FPQ2
Direct Lighting	LDL2
	LDLB
	HLDL2
	HL
	TH2 (5 types)
	TH
	LFL
	HPD2
	LDM2
	LAV
	PDM
	LFX3
	LFX3-PT
	LFV3
Coaxial Lighting	MSU
	MFU
Strobe Lighting	PF
Water-proof	HLDR-IP/
	HSL-PCL
UV Light	UV2
	UV
	LNSP-UV-FN
Infrared	IR2
Control Lighting	IU
Spot Lighting, Etc.	HLV3
	HLV2
	LV
	LSP
	HFS/HFR
	HLV3-NR
	HLV3-3M-RGB-4
	HLV2-NR
	HLV2-3M-RGB-3W
	PFBR
	PFB3
	PFB2
Convergent Lighting	LNLP
	LNSP2
	LNSP
	Coaxial Units
	LNSP-FN
	LN/LN-HK
Diffused Lighting	LNSD
	LND2
	HLND
	LT
	LVN
Oblique-Angled Lighting	LNDG
	LNIS2
	LNIS
	LNIS-FN
Lenses	Telecentric Lens
	Macro Lens