

Dome Lights

HPD2 series

Refer to our website for product details.

CCS HPD2

Search



You can also use your smartphone or cell phone.

Use a search engine.

Provides diffused light evenly through the dome-shaped reflective panel



Applications Visual/text/color determination inspections on glossy surfaces, curved surfaces, or uneven surfaces, inspection for engraving/damage/stains on stain finishing, visual inspection for metal with hairline finishing, and inspection for parts on circuit boards, etc.

Supports applications for a wide variety of industries

It is bright and even if the distance from the workpiece to the Light Unit is changed, there is little change in the uniform region. Therefore, it can be used in a wide range of industries.

Semiconductor industry (Circuit board)



HPD2-100SW (White)

Electronic parts industry (Condenser)



HPD2-150SW (White)

Food industry (Chocolate)



HPD2-250SW (White)

Packaging industry (Top of a drink container)



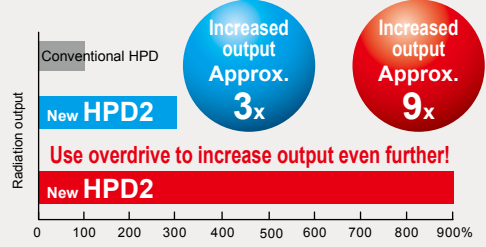
HPD2-150SW (White)

Illuminates diffused light at high output

Light from the surface-mounted LEDs is diffused inside the dome-shaped reflective panel. The diffused light from the wide uniform region is illuminated evenly.

Achieved higher output than the conventional product

Output comparison with the conventional product



* This is a comparison between the HPD-100 and HPD2-100, using red and white colors.
 * It can be combined with a Strobe Control Unit for even brighter emission than continuous emission.
 * The data included is for reference only and does not guarantee the quality of this product.

Added two sizes and an infrared and full color (RGB) type

We added the HPD2-75 and HPD2-200 models. Also, we added infrared (860 nm) and full color (RGB) types to the lineup as variation for wavelengths, increasing the applications of our products.

Custom orders

Please contact your CCS sales representative.

E.g.: Different shape

Format/material

Changed the camera aperture to a rectangle

Customizable items

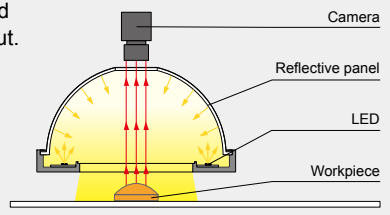
- External/internal diameter
- Increase output
- Illuminating angle
- Connector format
- Wavelength/color
- Cable length
- Format/material
- Installation/mounting



Example configuration

Uses a unique illuminating mechanism to illuminate diffused light at high output.

HPD2-150



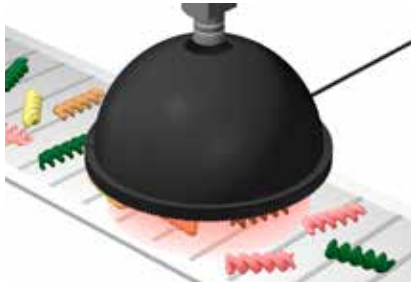
LDR2	Direct Lighting
LDR2-LA	Direct Lighting
LDR-LA1	Direct Lighting
SQR	Direct Lighting
SQR-TP	Direct Lighting
HLDR-IP	Convergent Lighting
HPR2	Diffused Lighting
HPR	Diffused Lighting
LFR	Diffused Lighting
LKR	Diffused Lighting
FPR	Diffused Lighting
FPQ2	Direct Lighting
LDL2	Direct Lighting
LDLB	Direct Lighting
HLDL2	Direct Lighting
TH	Diffused Lighting
LFL	Diffused Lighting
HPD2	Diffused Lighting
HPD	Diffused Lighting
LDM2	Diffused Lighting
LAV	Diffused Lighting
PDM	Diffused Lighting
LFX2	Diffused Lighting
LFV3	Diffused Lighting
LFV2	Diffused Lighting
MSU	Collimated Lighting
MFU	Collimated Lighting
UV2	Ultraviolet Lighting
UV	Ultraviolet Lighting
LNSP-UV-FN	Ultraviolet Lighting
IR2	Infrared Lighting
HLV2	Spot Lighting, Etc.
LV	Spot Lighting, Etc.
LSP	Spot Lighting, Etc.
HFS/HFR	Spot Lighting, Etc.
HLV2-NR	Spot Lighting, Etc.
HLV2-3M-RGB-3W	Spot Lighting, Etc.
PFB2	Convergent Lighting
PFBR	Convergent Lighting
LNSP	Convergent Lighting
CU-LNSP	Convergent Lighting
LNSP-FN	Convergent Lighting
LN/LN-HK	Convergent Lighting
LNSD	Diffused Lighting
LND2	Diffused Lighting
HLND	Diffused Lighting
LT	Diffused Lighting
LNW/HLDN	Diffused Lighting
LNIS	Oblique Angled Lighting
LNIS-FN	Oblique Angled Lighting
Telecentric Lens	Lenses
Macro Lens	Lenses

We have various materials.

- PDF Drawings
- DXF Drawings
- 3D CAD
- Instruction Guides
- Product Filters
- Imaging Samples
- Data Sheets
- Examples of Custom Ordered Products

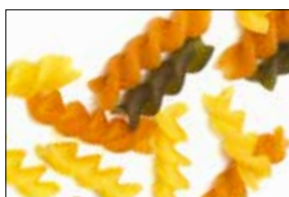
Download here. <http://www.ccs-grp.com/dl/>

Imaging example : Imaging of foreign materials mixed in food



Description	Mixed foreign materials inspection
Workpiece	Macaroni
Before the proposal	HPD2-200SW
After the proposal	HPD2-200IR860: Infrared type
Result	Emphasizes the foreign material

Workpiece image



Macaroni

HPD2-200SW



It is difficult to form an image of the foreign material using white light.

HPD2-200IR860



It is possible to form an image of the foreign material using infrared light.

* This workpiece was processed by CCS for sample imaging.

Direct Lighting	LDR2
	LDR2-LA
	LDR-LA1
	SQR
Convergent Lighting	SQR-TP
	HLDLR-IP
Diffused Lighting	HPR2
	HPR
	LFR
	LKR
	FPR
	FPQ2
Direct Lighting	LDL2
	LDLB
	HLDL2
	TH
Diffused Lighting	LFL
	HPD2
	HPD
	LDM2
	LAV
	PDM
	LFX2
	LFX3
	LFX2
	LFX2
Collimated Lighting	MSU
	MFU
	UV2
	UV
Ultraviolet Lighting	UV
	LNSP-UV-FN
Infrared Lighting	IR2
	HLV2
Spot Lighting, Etc.	LV
	LSP
	HFS/HFR
	HLV2-NR
	HLV2-3M-RGB-3W
	PFB2
	PFBR
	LNSP
Convergent Lighting	CU-LNSP
	LNSP-FN
	LN/LN-HK
Diffused Lighting	LNSD
	LND2
	HLND
	LT
Oblique Angled Lighting	LN/HLDN
	LNIS
Lenses	LNIS-FN
	Telecentric Lens
	Macro Lens

Imaging example : Exterior imaging using color determination of a multi-colored workpiece

Workpiece image

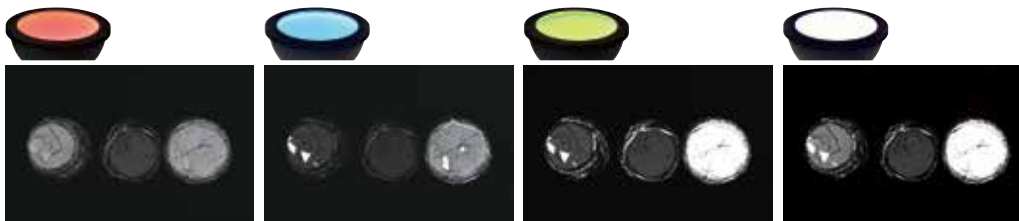


Chocolate



Description	Visual inspection
Workpiece	Chocolate
Before the proposal	-
After the proposal	HPD2-200FC: Full color (RGB) type
Result	Allows for multi-color determination

HPD2-200FC: Full color (RGB) type



Imaging with red illumination Imaging with blue illumination Imaging with green illumination Imaging with white illumination

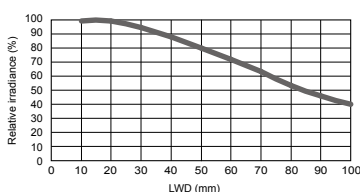
Data: Relative irradiance graph/Uniformity graph (Representative example)

* The graph included is for reference only and does not guarantee the quality of this product.

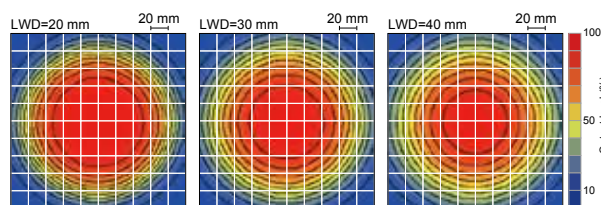
HPD2-200SW

Relative irradiance graph^{*1}
(LWD Characteristics)^{*2}

*1: Irradiance on the optical axis
*2: Illuminating distance from the Light Unit to the workpiece



Uniformity graph (Relative irradiance)



You can inquire using our website.

Requests for Light Unit Selection

Requests for Loan Products

Requests for Estimates

Requests for a Catalog

Product Inquiries

Other Inquiries

Inquire on our website here.
<http://www.ccs-grp.com/contact/>

HPD2 series



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CCS HPD2

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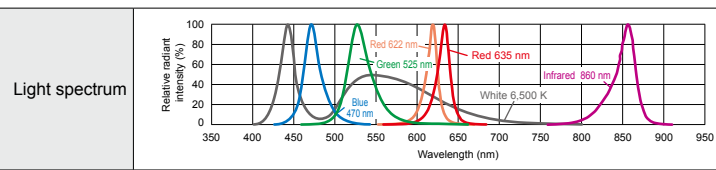
Lineup

Model name	LED color	Power consumption	Peak wavelength/ correlated color temperature	Options	Recommended Control Units	Weight
HPD2-75RD	Red	24 V / 17 W	635 nm	Bracket	<input type="checkbox"/> PD3 <input type="checkbox"/> PSB <input type="checkbox"/> PTU2	140 g
HPD2-75SW	White	24 V / 16 W	6,500 K			
HPD2-75BL	Blue		470 nm			
HPD2-75IR860	Infrared	24 V / 12 W	860 nm			
HPD2-75FC*1	Red/Green/Blue	24 V / 6.0 W	622 nm/525 nm/470 nm			
HPD2-100RD	Red	24 V / 17 W	635 nm	Bracket	<input type="checkbox"/> PD3 <input type="checkbox"/> PSB <input type="checkbox"/> PTU2	160 g
HPD2-100SW	White	24 V / 23 W	6,500 K			
HPD2-100BL	Blue		470 nm			
HPD2-100IR860	Infrared	24 V / 23 W	860 nm			
HPD2-100FC*1	Red/Green/Blue	24 V / 11 W	622 nm/525 nm/470 nm			
HPD2-150RD	Red	24 V / 27 W	635 nm	Bracket	<input type="checkbox"/> PD3 <input type="checkbox"/> PSB <input type="checkbox"/> PTU2* *Cannot use infrared.	285 g
HPD2-150SW	White		6,500 K			
HPD2-150BL	Blue		470 nm			
HPD2-150IR860	Infrared		860 nm			
HPD2-150FC*1	Red/Green/Blue		24 V / 15 W			
HPD2-200RD	Red	24 V / 34 W	635 nm	Bracket	<input type="checkbox"/> PD3	460 g
HPD2-200SW	White	24 V / 41 W	6,500 K			
HPD2-200BL	Blue		470 nm			
HPD2-200IR860	Infrared	24 V / 46 W	860 nm			
HPD2-200FC*1	Red/Green/Blue	24 V / 19 W	622 nm/525 nm/470 nm			
HPD2-250RD	Red	24 V / 45 W	635 nm	Bracket	<input type="checkbox"/> PD3	650 g
HPD2-250SW	White	24 V / 46 W	6,500 K			
HPD2-250BL	Blue		470 nm			
HPD2-250IR860	Infrared	24 V / 46 W	860 nm			
HPD2-250FC*1	Red/Green/Blue	24 V / 24 W	622 nm/525 nm/470 nm			
HPD2-400RD	Red	24 V / 45 W	635 nm	-	<input type="checkbox"/> PD3	1,300 g
HPD2-400SW	White	24 V / 46 W	6,500 K			
HPD2-400BL	Blue		470 nm			
HPD2-400IR860	Infrared	24 V / 46 W	860 nm			
HPD2-400FC*1	Red/Green/Blue	24 V / 30 W	622 nm/525 nm/470 nm			

*1: Use a 3-channel Control Unit for a full color (RGB) type.
 *1: The full color (RGB) type cannot be used in combination with Strobe Control Units (PTU2-3024, BB-V24S30-M, BB-V24S30-S).
 ON/OFF control is possible via the strobe mode or ON/OFF mode of the PD3 series, and continuous lighting Control Units (PD2 series, BB series, etc.).

Extension Cables ▶ P.222 Control Unit Selection Guide ▶ P.181 Control Unit Page ▶ P.185

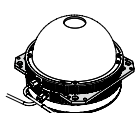
LED properties



If using a sharp-cut filter, please use the R60 (option). For details about the sharp-cut filter, refer to P.215.

Be sure to read the "Instruction Guide" included with the product before use and observe cautionary information. The data included is for reference only and does not guarantee the quality of this product.

Options

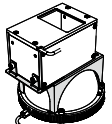


Combine with a Ring Light to achieve imaging by light switching and simultaneous lighting.

Light joint bracket

Model name	Applicable Light Unit (Common for all colors)
BK-75-JO	HPD2-75 series
BK-100-JO	HPD2-100 series
BK-150-JO	HPD2-150 series
BK-200-JO	HPD2-200 series
BK-250-JO	HPD2-250 series

▶ P.219



Combine with a Coaxial Light to solve uneven illumination and achieve uniform illumination from all directions.

Coaxial Light joint bracket

Model name	Applicable Light Unit (Common for all colors)
BK-HPD2-75-LFV	HPD2-75 series
BK-HPD2-100-LFV	HPD2-100 series
BK-HPD2-150-LFV	HPD2-150 series
BK-HPD2-200-LFV	HPD2-200 series
BK-HPD2-250-LFV	HPD2-250 series

▶ P.220



Achieves installation using installation holes with a larger gap than the Light Unit body installation holes, or installation on a vertical surface.

Expansion mounting bracket

Model name	Applicable Light Unit (Common for all colors)
BK-75-CI	HPD2-75 series
BK-100-CI	HPD2-100 series
BK-150-CI	HPD2-150 series
BK-200-CI	HPD2-200 series
BK-250-CI	HPD2-250 series

▶ P.220

• Example of the expansion mounting bracket in use



Dome Light: Image of usage with the HPD2-250SW

We have various materials.

- PDF Drawings
- DXF Drawings
- 3D CAD
- Instruction Guides
- Product Filers
- Imaging Samples
- Data Sheets
- Examples of Custom Ordered Products

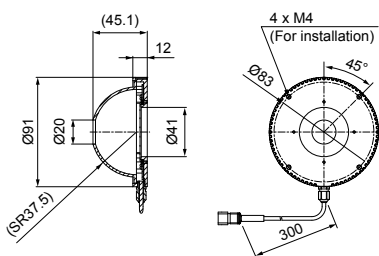
Download here. <http://www.ccs-grp.com/dl/>

Direct Lighting	LDR2
	LDR2-LA
	LDR-LA1
	SQR
	SQR-TP
Convergent Lighting	HLDR-IP
Diffused Lighting	HPR2
	HPR
	LFR
	LKR
	FPR
	FPQ2
Direct Lighting	LDL2
	LDLB
	HLDL2
Diffused Lighting	TH
	LFL
	HPD2
	HPD
	LDM2
	LAV
	PDM
	LFX2
	LFX3
	LFX2
Calculated Lighting	MSU
	MFU
Ultraviolet Lighting	UV2
	UV
	LNSP-UV-FN
Infrared Lighting	IR2
Spot Lighting, Etc.	HLV2
	LV
	LSP
	HFS/HFR
	HLV2-NR
	HLV2-3M-RGB-3W
	PFB2
	PFBR
Convergent Lighting	LNSP
	CU-LNSP
	LNSP-FN
	LN/LN-HK
Diffused Lighting	LNSD
	LND2
	HLND
	LT
	LNV/HLDN
Oblique Angled Lighting	LNIS
	LNIS-FN
Lenses	Telecentric Lens
	Macro Lens

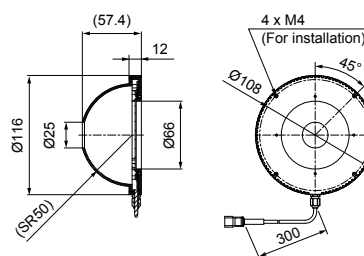
Dimensions (mm)

* M4 and M6 installation holes are tapped and perforated holes.

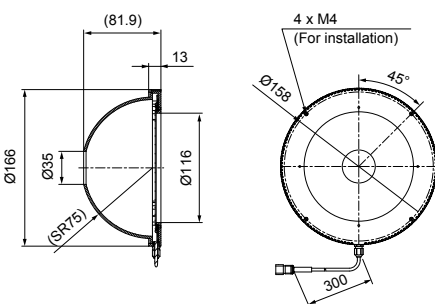
HPD2-75RD/SW/BL/FC/IR860



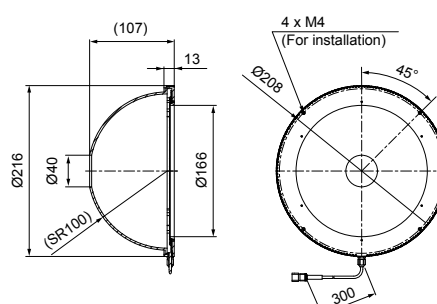
HPD2-100RD/SW/BL/FC/IR860



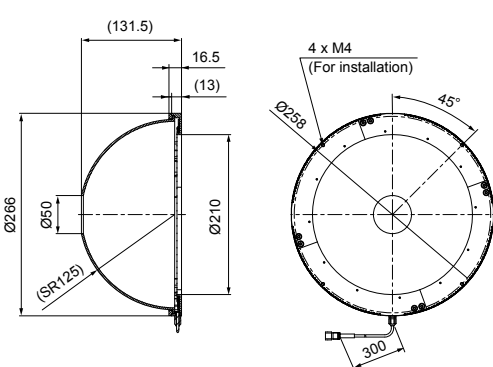
HPD2-150RD/SW/BL/FC/IR860



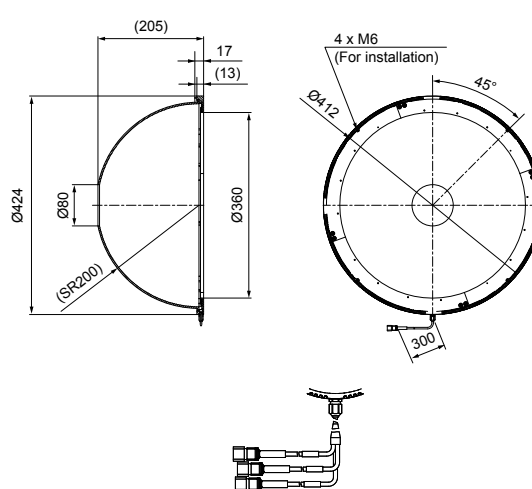
HPD2-200RD/SW/BL/FC/IR860



HPD2-250RD/SW/BL/FC/IR860

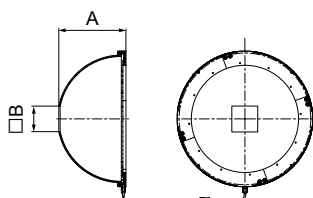


HPD2-400RD/SW/BL/FC/IR860



• The camera aperture can be changed to a square.

• Special order



Model	Dimension A	Dimension B
HPD2-75□-SQ20	45.1	20
HPD2-100□-SQ30	56.7	30
HPD2-150□-SQ40	81.3	40
HPD2-200□-SQ50	105.8	50
HPD2-250□-SQ60	130.3	60
HPD2-400□-SQ80	205	80

□ is a placeholder for letters that indicate the color of the emitted light.
* Dimensions are subject to change.

* The full color type (HPD2-□□FC, HPD2-400FC-FT) has three connectors. Use a 3-channel Control Unit if controlling intensity separately for each color.

You can change the connectors of the Light Unit cable. Choose between M12 connectors and flying leads. Refer to P.125 for details.