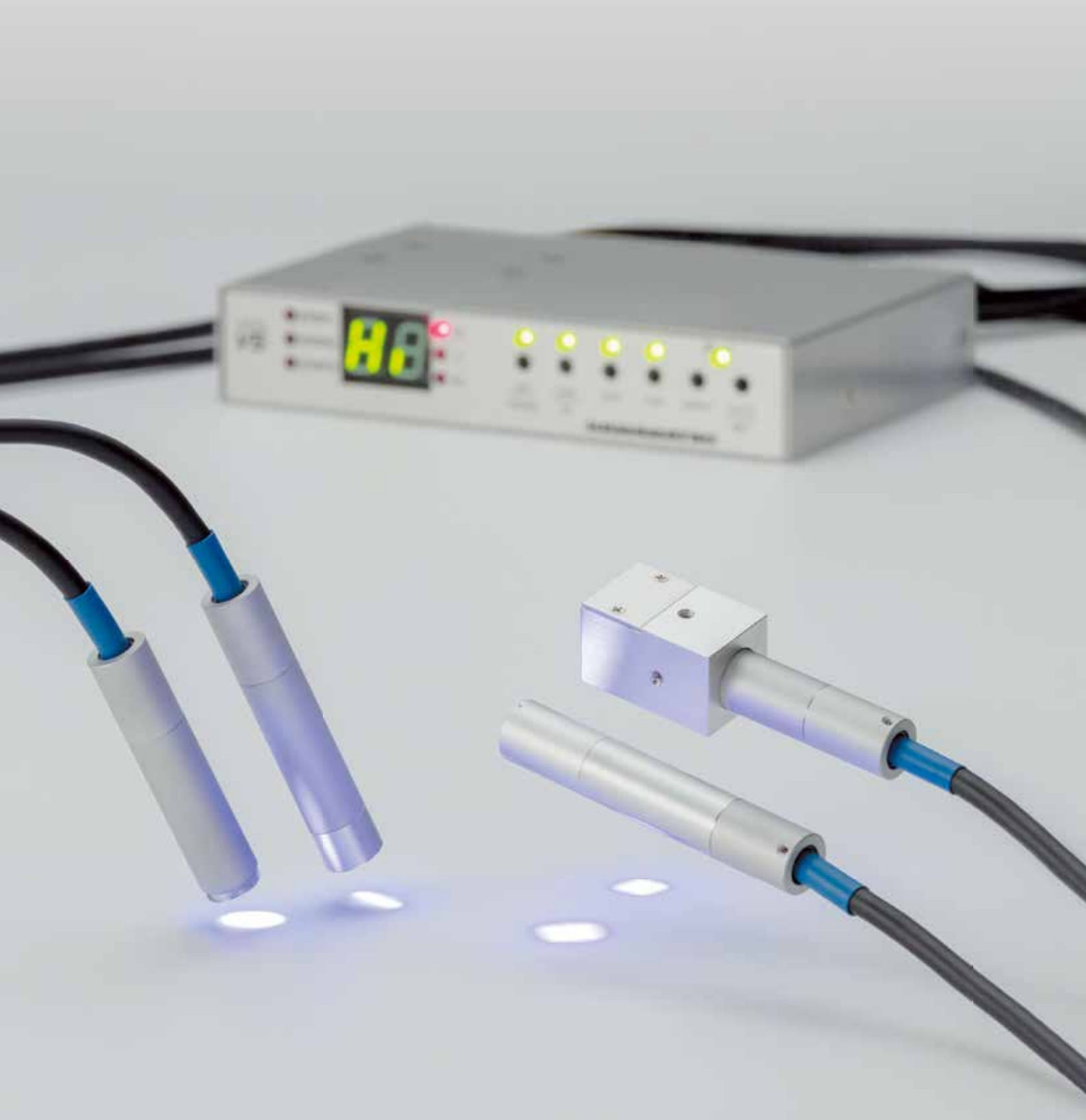


UV Irradiance Distribution Graphs

# LIGHTNINGCURE® LC-L1V5

UV-LED Spot Light Sources



# LIGHTNINGCURE® LC-L1V5

## UV-LED Spot Light Sources

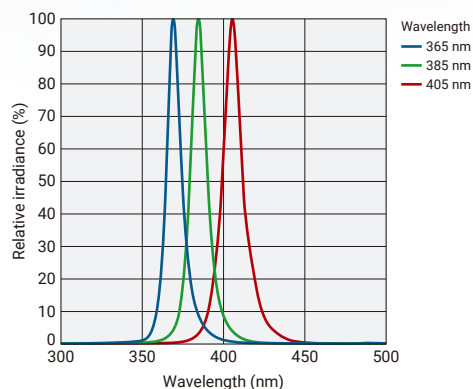


The LIGHTNINGCURE LC-L1V5 is a UV-LED spot light source having 4 independently driven heads.

Its controller is a palm-sized compact unit that easily installs in narrow spaces, allowing flexible equipment layout and design. Our unique feedback function ensures excellent light output stability steadily maintained within  $\pm 5\%$  immediately after lighting.


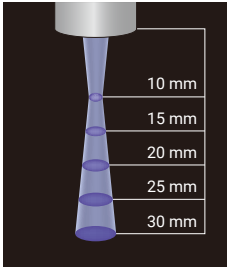
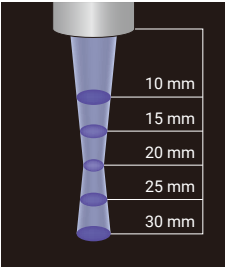
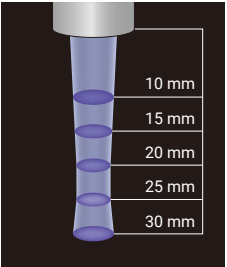
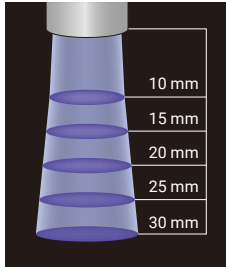


### ■ Spectral distribution (Typ.)



## ■ Product lineup

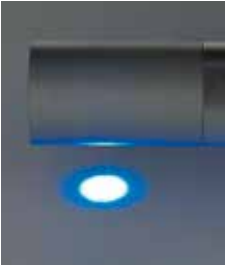
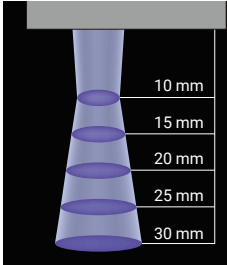
### •Standard type

Type		Irradiation area Φ3 mm type	Irradiation area Φ6 mm type	Irradiation area Φ8 mm type	Irradiation area Φ12 mm type
Type No.	Wavelength 365 nm	L14310-110 (L14310-100 + E11923-010)	L14310-115 (L14310-100 + E11923-015)	L14310-120 (L14310-100 + E11923-020)	L14310-100
	Wavelength 385 nm	L14310-210 (L14310-200 + E11923-010)	L14310-215 (L14310-200 + E11923-015)	L14310-220 (L14310-200 + E11923-020)	L14310-200
	Wavelength 405 nm	L14310-410 (L14310-400 + E11923-010)	L14310-415 (L14310-400 + E11923-015)	L14310-420 (L14310-400 + E11923-020)	L14310-400
					

### •Right-angle type


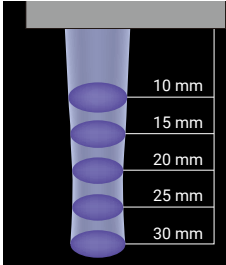
#### Mid focal length type

This LED head unit can be mounted in tight spaces, increasing installation flexibility.

Type No.	Wavelength 365 nm	L14311-103
	Wavelength 385 nm	L14311-203
	Wavelength 405 nm	L14311-403
		

#### Long focal length type


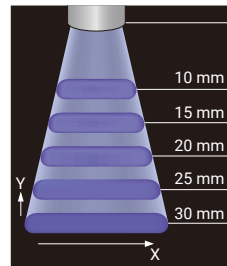
This type provides a longer focal length than the mid focal length type.

Type No.	Wavelength 365 nm	L14311-105
	Wavelength 385 nm	L14311-205
	Wavelength 405 nm	L14311-405
		

### •Linear beam type


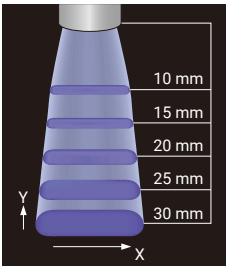
#### Wide range type

Emits an elliptical light beam that irradiates a wide area, making it ideal for irradiating odd-shaped workpieces and multiple locations.

Type No.	Wavelength 365 nm	L14311-102
	Wavelength 385 nm	L14311-202
	Wavelength 405 nm	L14311-402
		

#### Narrow range type

This type emits a narrower light beam with higher intensity than the wide range type.

Type No.	Wavelength 365 nm	L14311-104
	Wavelength 385 nm	L14311-204
	Wavelength 405 nm	L14311-404
		

NOTE: The center of the external dimensions of the LED head unit may not coincide with the center of the irradiated light. Adjust the installation position as needed.

The shape of the irradiated light varies depending on the irradiation distance, for example, becomes close to a square.

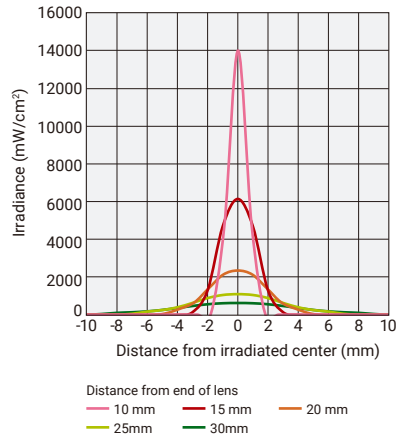
The irradiance distribution is a typical value. There are individual differences in the irradiance distribution between LED head units due to variations in the emission intensity of LED elements.

## ■ Irradiance distribution (Typ.)

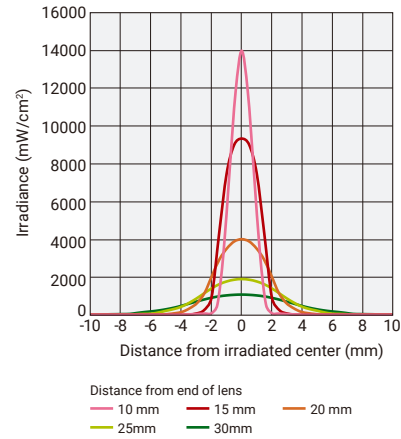
### • Standard type

#### Irradiation area $\Phi 3$ mm type

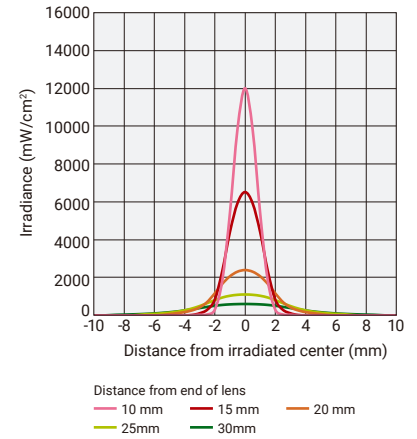
Wavelength 365 nm (L14310-110)



Wavelength 385 nm (L14310-210)

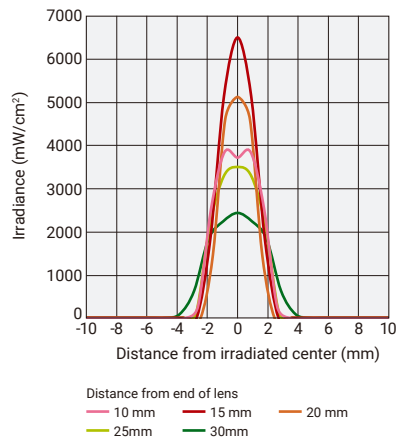


Wavelength 405 nm (L14310-410)

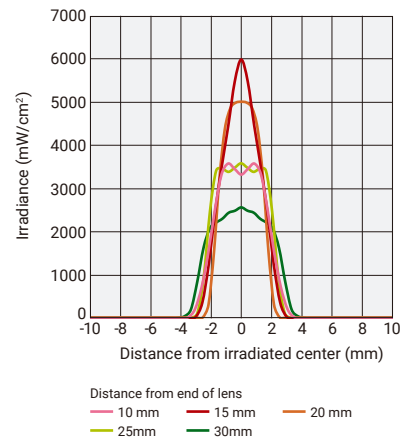


#### Irradiation area $\Phi 6$ mm type

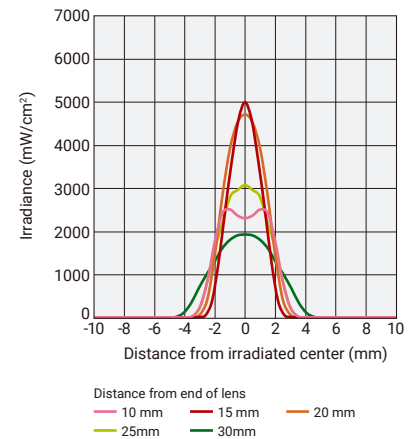
Wavelength 365 nm (L14310-115)



Wavelength 385 nm (L14310-215)

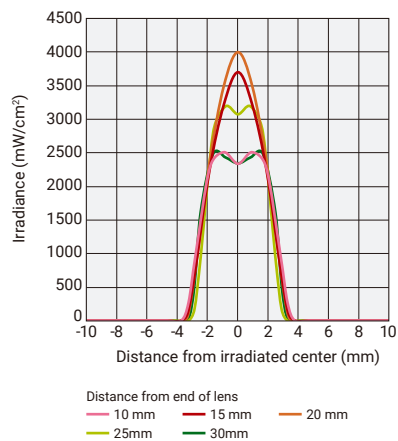


Wavelength 405 nm (L14310-415)

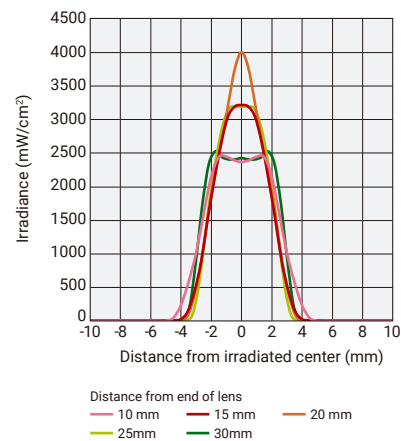


#### Irradiation area $\Phi 8$ mm type

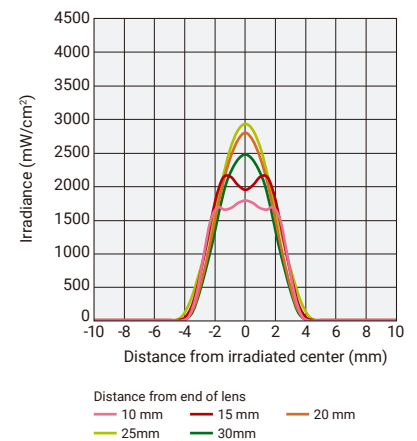
Wavelength 365 nm (L14310-120)



Wavelength 385 nm (L14310-220)

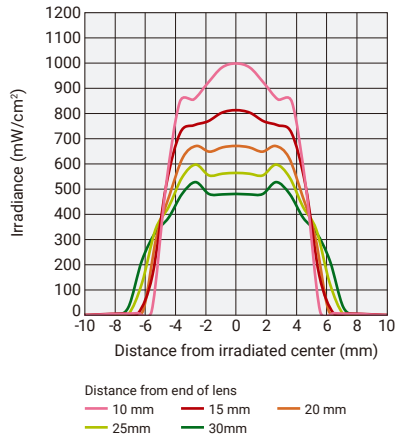


Wavelength 405 nm (L14310-420)

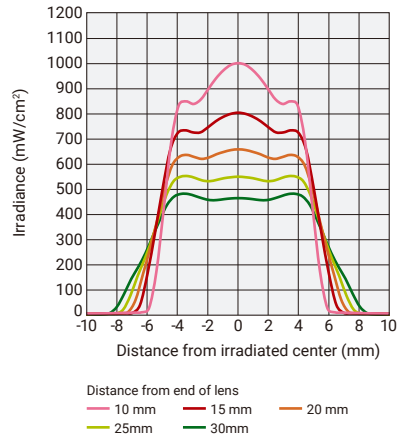


## Irradiation area $\Phi 12$ mm type

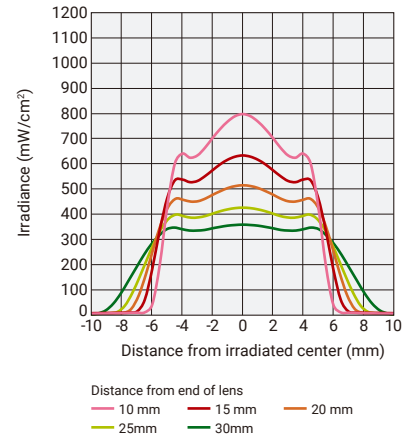
Wavelength 365 nm (L14310-100)



Wavelength 385 nm (L14310-200)



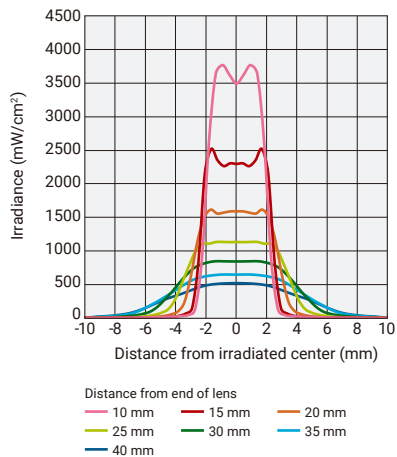
Wavelength 405 nm (L14310-400)



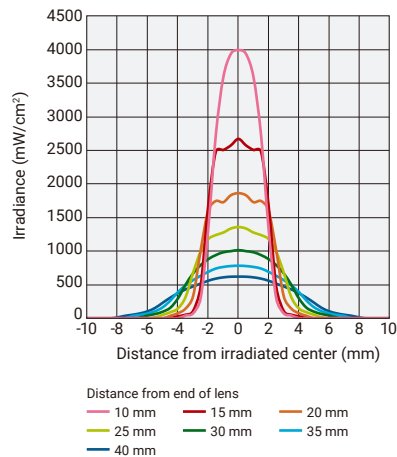
## •Right-angle type

### Mid focal length type

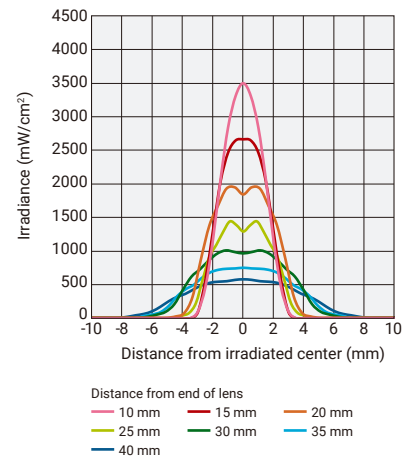
Wavelength 365 nm (L14311-103)



Wavelength 385 nm (L14311-203)

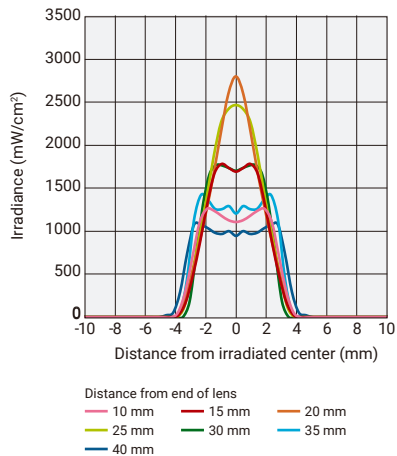


Wavelength 405 nm (L14311-403)

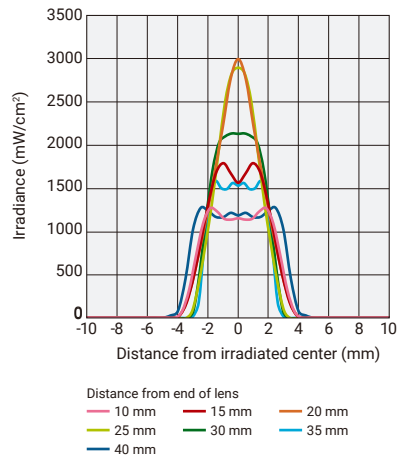


### Long focal length type

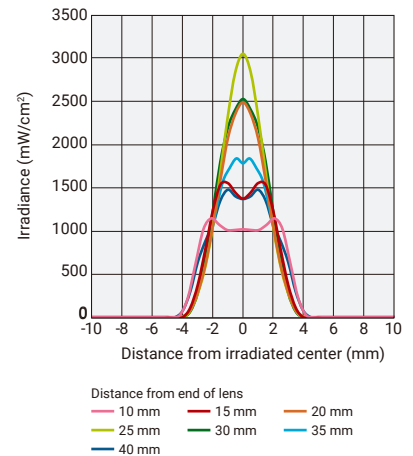
Wavelength 365 nm (L14311-105)



Wavelength 385 nm (L14311-205)



Wavelength 405 nm (L14311-405)



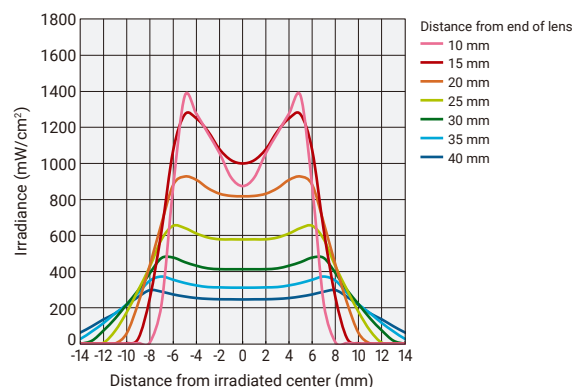
## ■ Irradiance distribution (Typ.)

### • Linear beam type

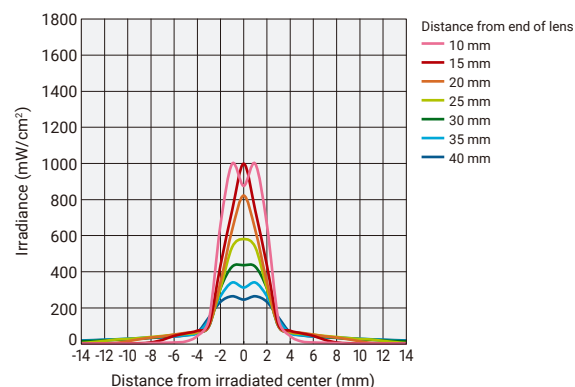
#### Wide range type

##### Wavelength 365 nm (L14311-102)

###### X direction

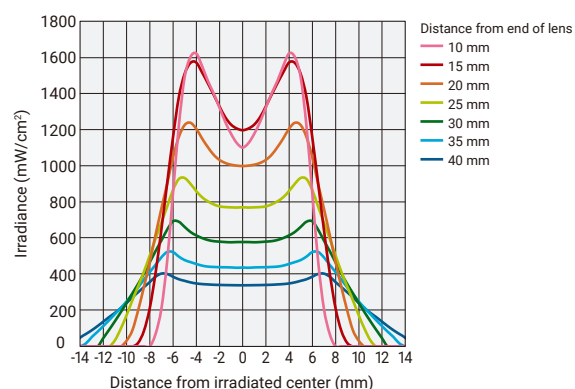


###### Y direction

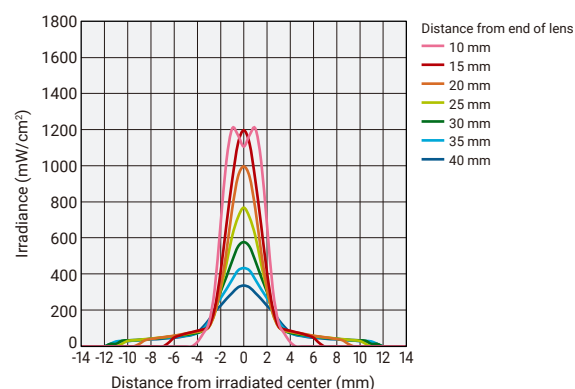


##### Wavelength 385 nm (L14311-202)

###### X direction

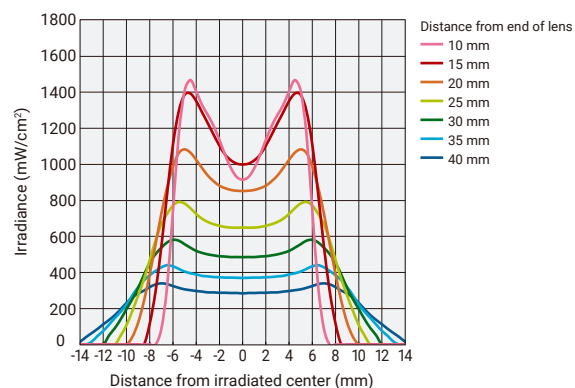


###### Y direction

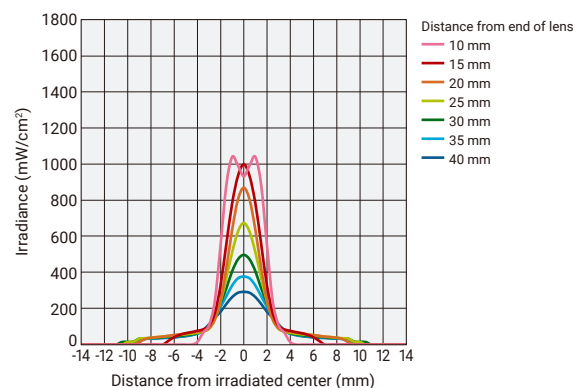


##### Wavelength 405 nm (L14311-402)

###### X direction



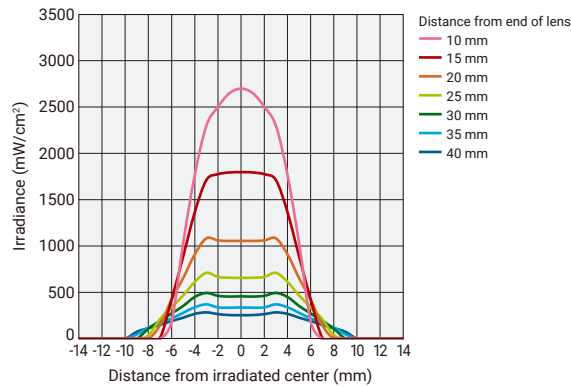
###### Y direction



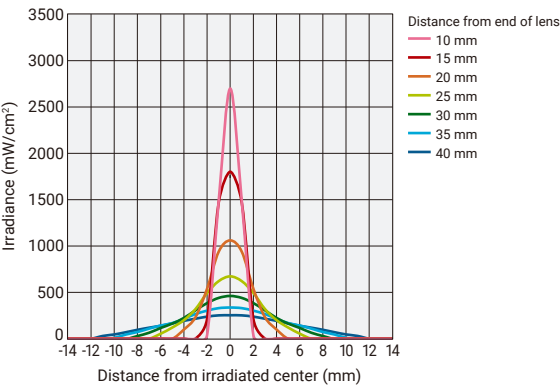
Narrow range type

Wavelength 365 nm (L14311-104)

X direction

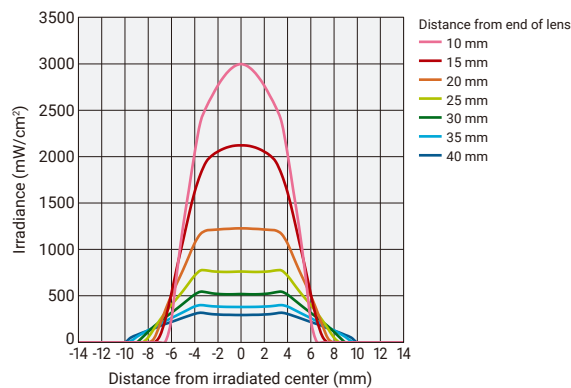


Y direction

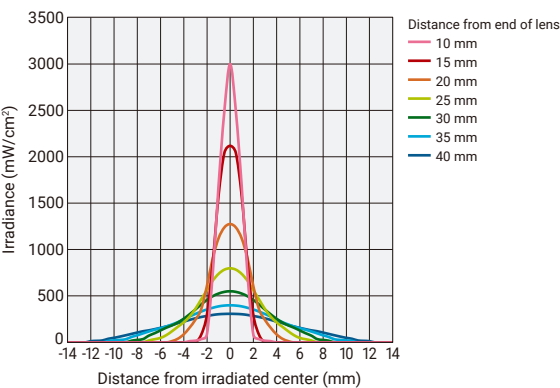


Wavelength 385 nm (L14311-204)

X direction

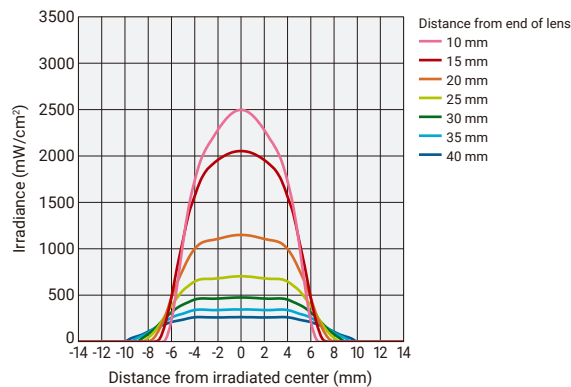


Y direction

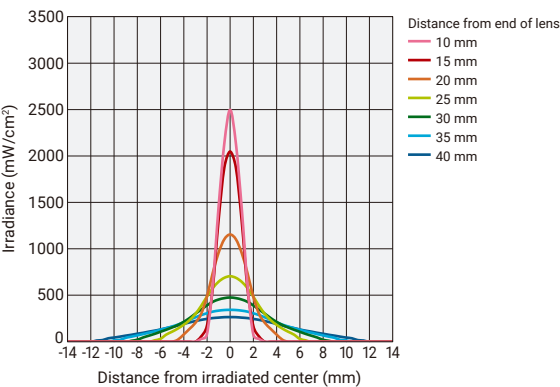


Wavelength 405 nm (L14311-404)

X direction



Y direction



## ■ Related products



### **LIGHTNINGCURE® LC-L5G** **Linear irradiation type UV-LED units**

The LIGHTNINGCURE LC-L5G is a linear irradiation type UV-LED light source featuring a unique air-cooling method to help deliver the industry's highest output in its class.

Other outstanding features include a compact size, light weight, high output, and large area irradiation, making the LC-L5G ideal for broad-ranging applications including UV printing, UV coating, and UV adhesive curing.



### **DUV-LED spot light sources** **L16665-110, C16659 series**

Hamamatsu also provides a DUV-LED spot light source (deep UV: 280 nm).

This DUV-LED light source drives 4 independent heads but is compact enough to fit in the palm of your hand. Promising applications include sterilization by deep UV light with a strong sterilization effect and a wide range of analysis tasks, as well as UV adhesive curing and UV ink curing (tack removal) in combination with 365 nm UV light.



### **UV power meters** **H12684 series, C12144**

The H12684/C12144 is a UV power meter capable of measuring irradiance and accumulated intensity of light emitted from UV-LED light sources.

This UV power meter exhibits minimal decrease in sensitivity even when exposed to high-power UV light, allowing reliable measurements with high reproducibility. It also has RS-232C and USB2.0 ports for external control by PC.

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