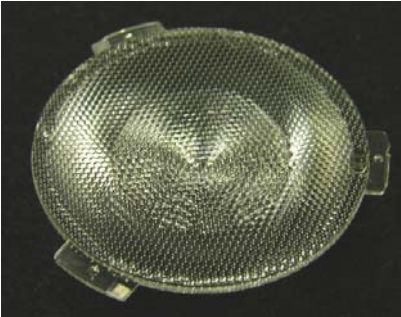


# ILU - 008 series

## Appearance



Material : PMMA

## Application

LED Bulb(MR16,GU10,etc...)  
LED Down-light , Street Light, others ...

### Recommended LED

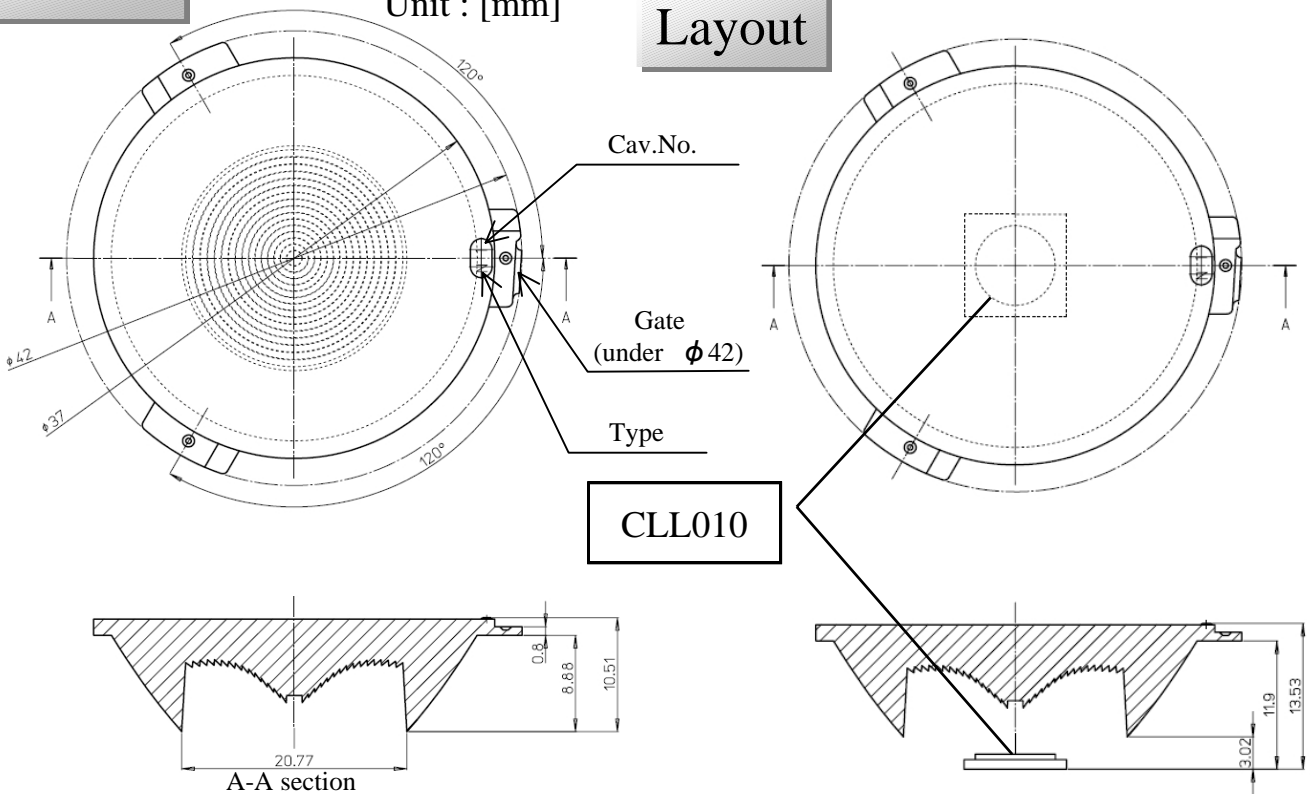
CLL010 series



## Outline

Unit : [mm]

## Layout



### < Attention in the handling >

- To fix the lens, the use of its flange with thickness of 0.8mm is recommended.
- The lens should be placed against the LED “CLL010” as shown in the figure above.
- The specification is subject to change without notice.
- The prism shape is not accurate.
- Do not use this product under the temperature condition exceeding 85°C.

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# ILU - 008 series

Luminous intensity

With CLL010 Series

LED		Lens		ILU-008-N	ILU-008-M	ILU-008-W
LED part code	CCT	Ra	Lumen	FWHM [19deg]	FWHM [30deg]	FWHM [42deg]
CLL010-0305A1-273M1A2	2700[K]	80 Min	90[lm]	486[cd]	229[cd]	140[cd]
			250[lm]	1351[cd]	637[cd]	389[cd]
			445[lm]	2405[cd]	1134[cd]	692[cd]
CLL010-0305A1-303M1A2	3000[K]	80 Min	95[lm]	513[cd]	242[cd]	148[cd]
			265[lm]	1432[cd]	675[cd]	412[cd]
			475[lm]	2567[cd]	1210[cd]	739[cd]
CLL010-0305A1-353M1A2	3500[K]	80 Min	95[lm]	513[cd]	242[cd]	148[cd]
			270[lm]	1459[cd]	688[cd]	420[cd]
			480[lm]	2594[cd]	1223[cd]	747[cd]
CLL010-0305A1-403M1A2	4000[K]	80 Min	100[lm]	540[cd]	255[cd]	156[cd]
			270[lm]	1459[cd]	688[cd]	420[cd]
			485[lm]	2621[cd]	1236[cd]	754[cd]
CLL010-0305A1-503M1A2	5000[K]	80 Min	100[lm]	540[cd]	255[cd]	156[cd]
			280[lm]	1513[cd]	713[cd]	435[cd]
			505[lm]	2729[cd]	1287[cd]	785[cd]
CLL010-0305A1-50KL1A1	5000[K]	65 Typ	120[lm]	648[cd]	306[cd]	187[cd]
			330[lm]	1783[cd]	841[cd]	513[cd]
			590[lm]	3188[cd]	1503[cd]	918[cd]

## < Attention in the handling >

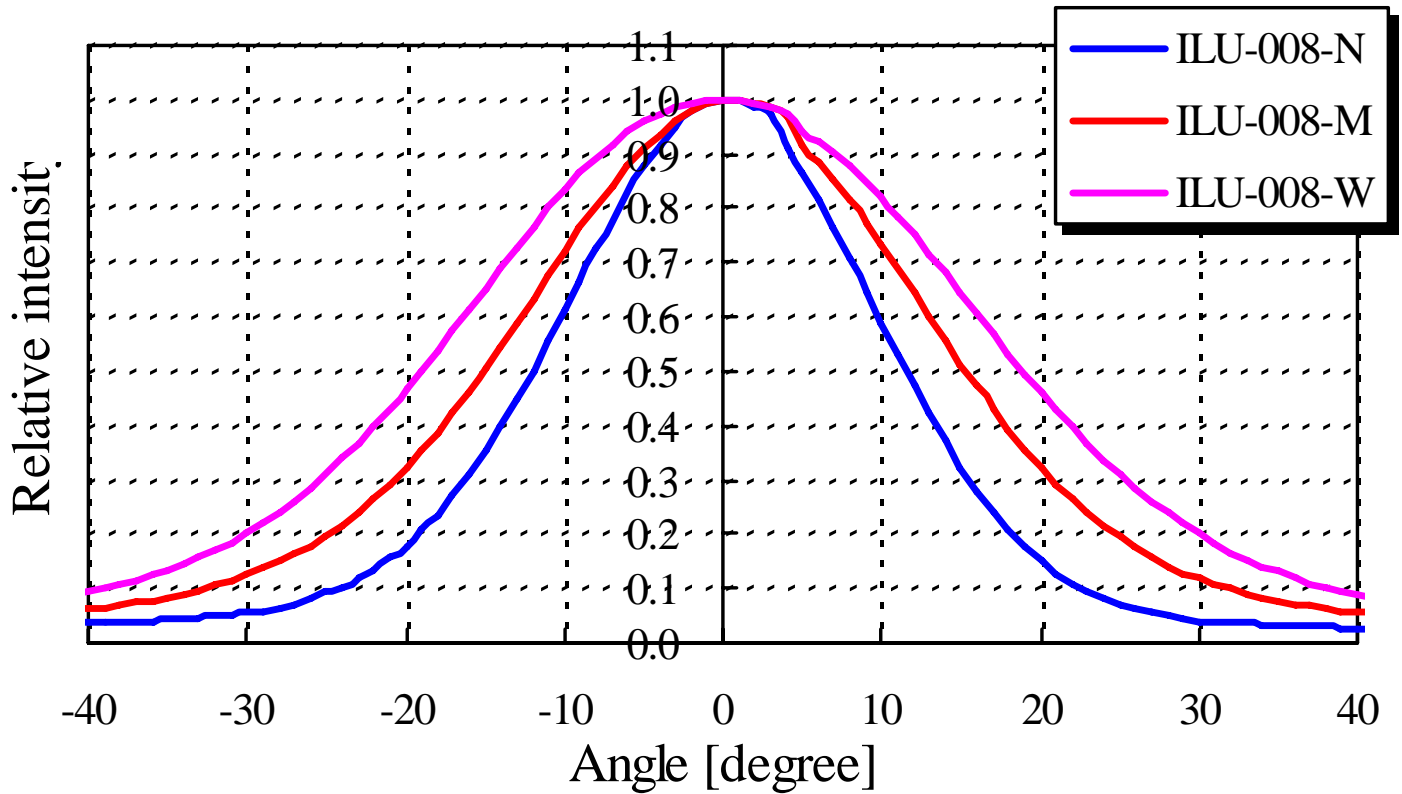
- To fix the lens, the use of its flange with thickness of 0.8mm is recommended.
- The lens should be placed against the LED “CLL010” as shown in the figure above.
- The specification is subject to change without notice.
- Do not use this product under the temperature condition exceeding 85°C.

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# ILU - 008 series

## Directivity



### < Attention in the handling >

- To fix the lens, the use of its flange with thickness of 0.8mm is recommended.
- The lens should be placed against the LED “CLL010” as shown in the figure above.
- The specification is subject to change without notice.
- Do not use this product under the temperature condition exceeding 85°C.

# ILU - 008 series

## Physical properties

Property	Test Method	Condition	Unit	Value
<b>Optical</b>				
Light transmission	ASTM D 1003	3.2mm	%	92
Reflectiv Index	ASTM D 542	ND@23°C	---	1.49
<b>Mechanical</b>				
Tensile modulus	ASTM D 638		MPa	3100
Tensile strength at yield	ASTM D 790	Max.	MPa	70
Nominal tensile strain at break	ASTM D 638	---	%	6
Flexual modulus	ASTM D 790	---	MPa	3200
Flexual strength	ASTM D 790	---	MPa	103
Charpy impact strength	ASTM D 256			7.5
Izod impact strength	ASTM D 256	Noched (23°C)	kJ/m <sup>2</sup>	1.2
Rockwell hardness	ASTM D 785	M scale	---	93
<b>Thermal</b>				
Heat deflection temperature	ASTM D 648	1820kPa	°C	102
Vicat softening point	ASTM D 1525	(Rate A;1kg)	°C	111
		(Rate A;5kg)	°C	104
Melt volume flow rate	ASTM D 1238	---	g/10min	3.7
Coeffient of linear expansion	ASTM D 696	---	× 10 <sup>-5</sup>	5.8
<b>Electrical</b>				
Surface resistivity	ASTM D 257	---	Ω /sq	1.00E+18
Volume resistivity	ASTM D 257	---	Ω cm	1.00E+18
Specific Inductive capacity	ASTM D 150	60cycles	---	3.7
		1,000,000cycles	---	2.2
Dielectric strength	ASTM D 149	volts/mil		500
Dielectric loss Factor	ASTM D 150	60cycles		0.19
		1,000,000cycles		0.007
Tracking resistance	ASTM D 405	---	seconds	no track
<b>Other</b>				
Density	ASTM D 792	---	g/cm <sup>3</sup>	1.19
Water absorption	ASTM D 570	---	%	0.3
Flammability	UL94	---	class	HB

\* Values reported are typical and should not be used for specification purpose.

### < Attention in the handling >

- The data on this document is the characteristics combining ILU-008 and CLL010 series.
- ILU-008 is the lens for CLL010 series.
- Discussion will be needed separately if you combine it with LEDs other than these.
- The specification is subject to change without notice.
- Do not use this product under the temperature condition exceeding 85°C.

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