



ProLight Opto
Technology Corporation



**Collimators for PG1C type
Technical Datasheet
Version: 1.6**

Features

- High Efficiency
- Works with ProLight PG1C type

Typical Applications

- Lamp
- Reading lights
- Architectural lighting
- Street lights
- Decoration lights
- Down lights

Collimators List

Collimator Size	Collimator P/N	Matched Holder P/N	White / Warm White LED			
			View angle ($2\theta_{0.3}$)	Beam angle ($2\theta_{0.5}$)	On axis efficiency (cd/lm)	X*
20mm	PG1C-NX12	PG1C-SX12	10°	8°	14.87	51.75
	PG1N-NX15	PG1N-SE02/PG1N-SO02	15°	10°	10.50	36.54
	PG1N-NX23	PG1N-SE02/PG1N-SO02	25°	20°	4.66	16.22
	PG1C-NX36	PG1N-SO01	35°	25°	4.14	14.42
	PG1C-NX40	PG1C-SX40	35°	25°	2.37	8.25
	PG1C-NX42	PG1C-SX40	40°	25°	2.18	7.60
	PG1N-NX43	PG1N-SO02	45°	35°	1.85	6.45
	PG1N-NX45	PG1N-SE02/PG1N-SO02	55°	40°	1.04	3.61
22mm	PG1C-NY16	PG1C-SY16	10°	8°	16.02	55.76
	PG1C-NY23	PG1C-SY23	15°	10°	14.09	49.03
	PG1C-NY18	PG1C-SY18	20°	15°	9.13	31.80
	PG1C-NY25	PG1C-SY18	20°	15°	6.65	23.13
	PG1C-NY42	PG1C-SY16	35°	20°	2.63	9.17
	PG1C-NY35	PG1C-SY18	40°	25°	1.76	6.13
	PG1C-NY44	PG1C-SY44	50°	30°	1.62	5.62
27mm	PG1N-NX06		10°	6°	23.83	82.95
	PG1C-NZ16		15°	10°	21.18	73.73
	PG1C-NZ35		35°	25°	3.31	11.52
76mm	PG1C-6A20-AW		20°	15°	10.36	37.40
	PG1C-6A30-AW		30°	23°	5.90	21.30
95mm	PG1C-9B30-AW		30°	23°	6.02	20.79

Notes:

1. The typical angle varies with LED due to different color chip and chip position tolerance.
2. The view angle ($2\theta_{0.3}$ is similar to the image by eye view) is the full angle measured where the luminous intensity is 30% of the peak value.
3. The beam angle ($2\theta_{0.5}$) is the full angle measured where the luminous intensity is 50% of the peak value.

* X is the value that measurement of the on-axis lux of LED with lens divided by lux of LED

General Characteristics:

Lens Material Optical Grade PMMA
 Holder Material PC or ABS
 Operating Temperature Range: -40 °C to +70 °C
 Storage Temperature Range -40 °C to +70 °C

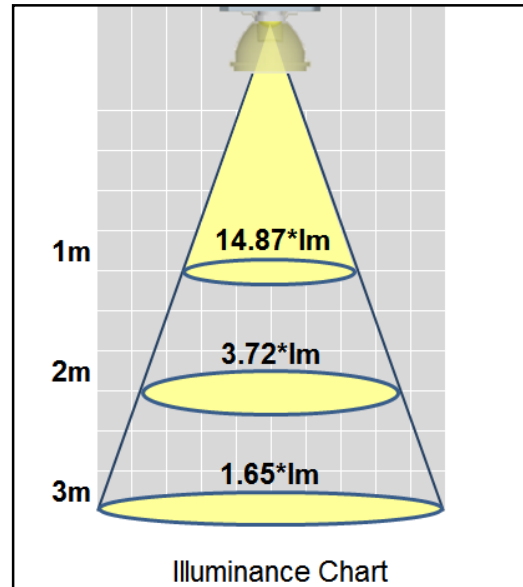
Usage and Maintenance:

1. Clean collimators with mild soap and water and a soft cloth.
2. Do not use any commercial cleaning solvents on collimators, like alcohol.
3. Please handle or install collimators with wearing gloves, skin oils may damage collimators or optical characteristic.

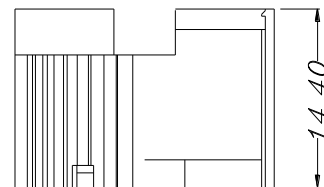
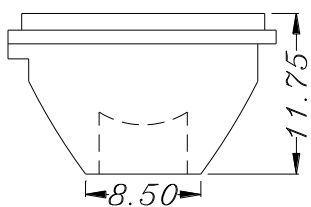
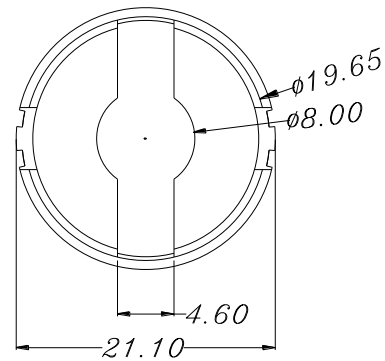
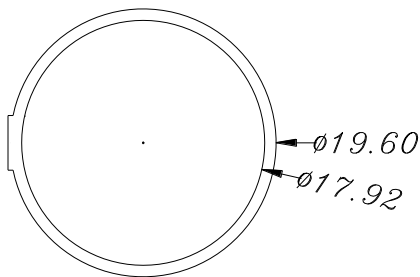
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PG1C-NX12
 View angle ($2\theta_{0.3}$) : 10°
 Beam angle ($2\theta_{0.5}$) : 8°



Matched Holder P/N : PG1C-SX12

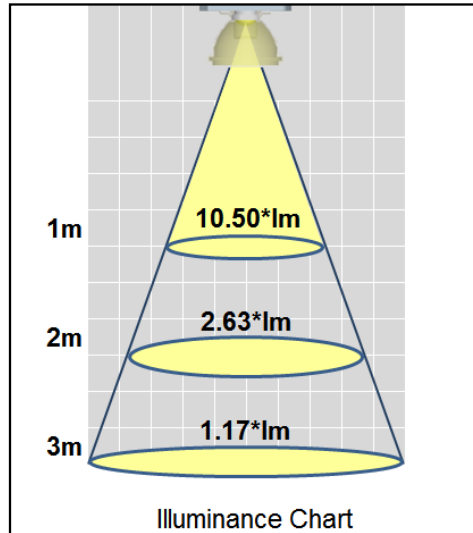


Notes:

1. Tolerance is ± 0.20 mm.
2. Do not subject to temperatures greater than 70°C as plastic deformation may occur.
 Protect collimator against exposure to solvents and adhesives that are not compatible with it.
 Use care in handling the optic to avoid scratches or other damage that will effect the optical performance.
3. All dimensions in millimeters.
4. Drawing not to scale.

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Mechanical Dimensions and Illuminance Chart



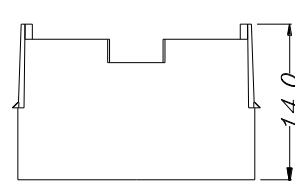
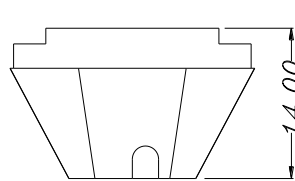
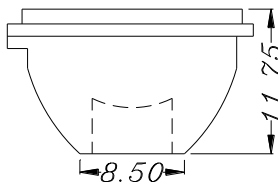
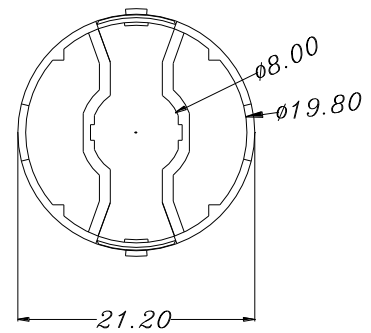
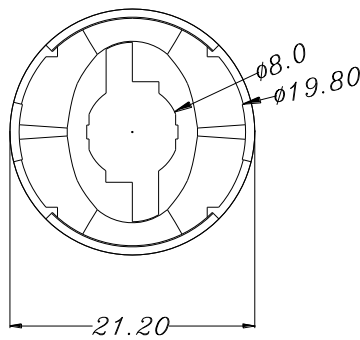
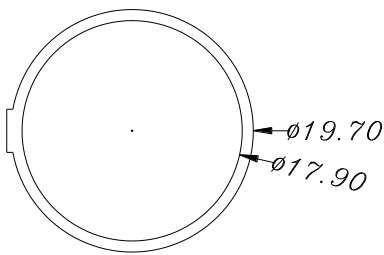
Collimator P/N : PG1N-NX15

Matched Holder P/N : PG1N-SE02

Matched Holder P/N : PG1N-SO02

View angle ($2\theta_{0.3}$) : 15°

Beam angle ($2\theta_{0.5}$) : 10°



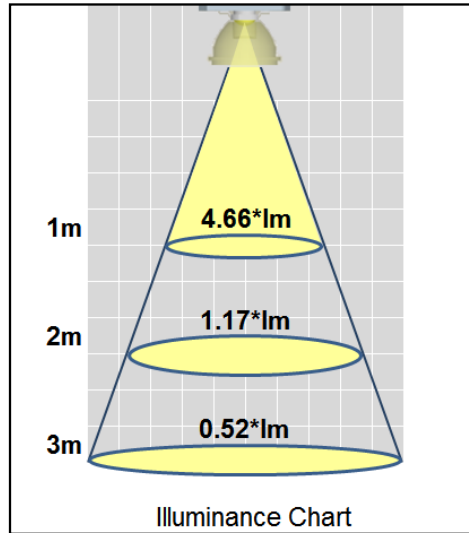
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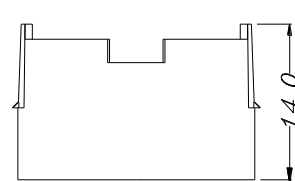
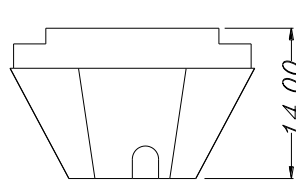
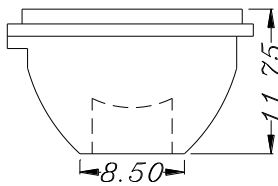
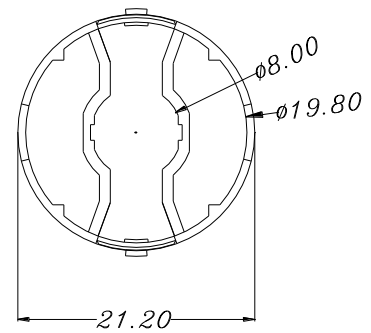
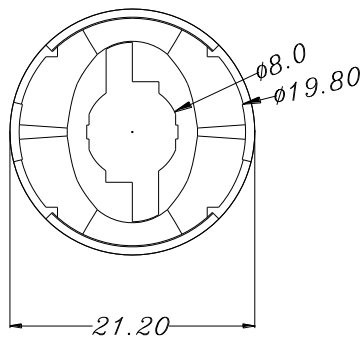
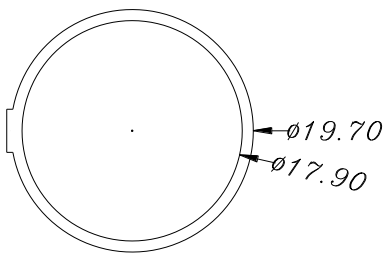
Collimator P/N : PG1N-NX23

Matched Holder P/N : PG1N-SE02

Matched Holder P/N : PG1N-SO02

View angle ($2\theta_{0.3}$) : 25°

Beam angle ($2\theta_{0.5}$) : 20°



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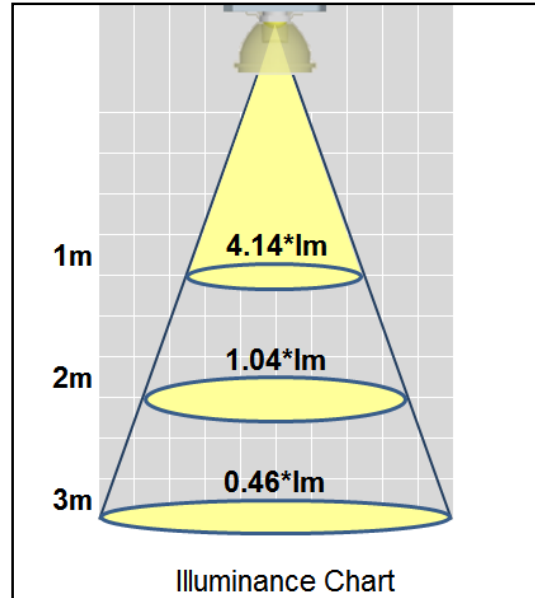
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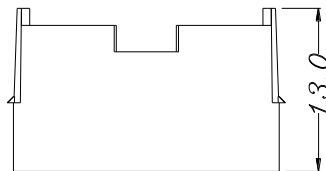
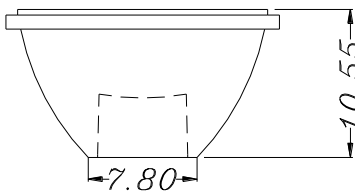
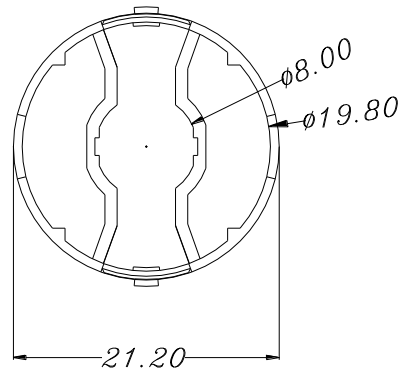
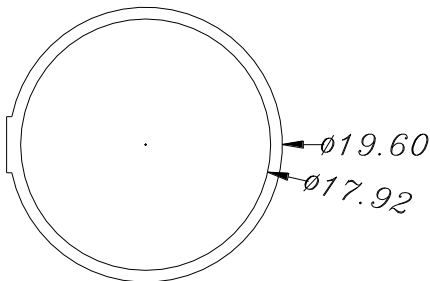
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PG1C-NX36
 View angle ($2\theta_{0.3}$) : 35°
 Beam angle ($2\theta_{0.5}$) : 25°



Matched Holder P/N : PG1N-SO01



Notes:

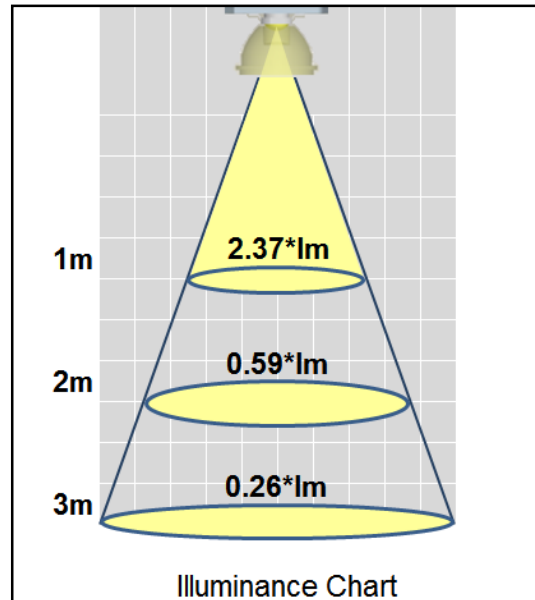
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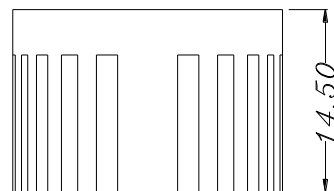
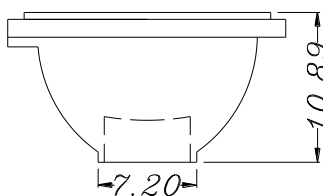
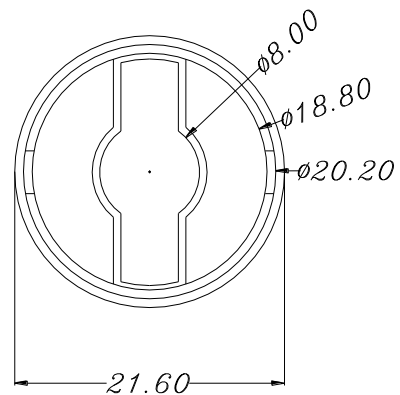
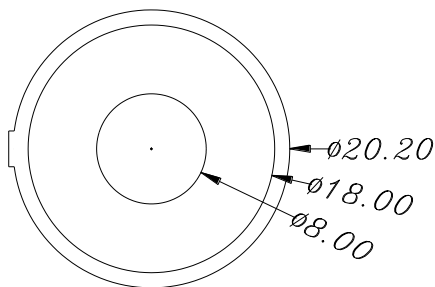
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PG1C-NX40
 View angle ($2\theta_{0.3}$) : 35°
 Beam angle ($2\theta_{0.5}$) : 25°



Matched Holder P/N : PG1C-SX40



Notes:

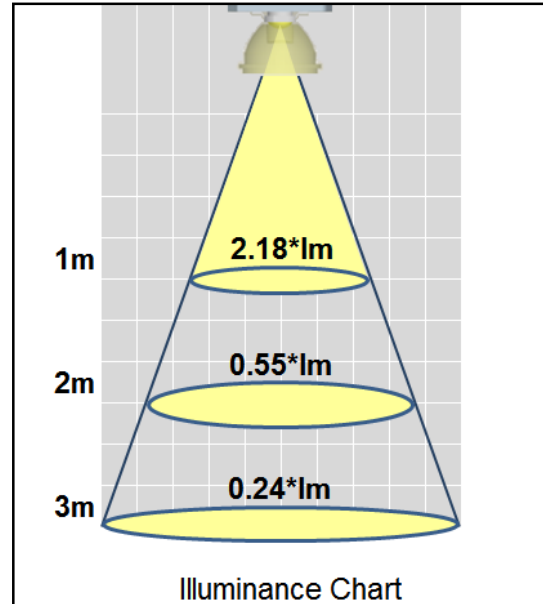
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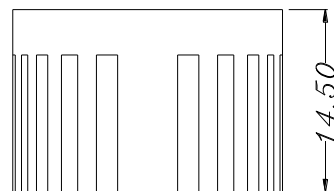
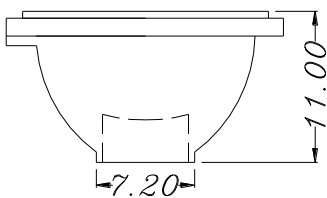
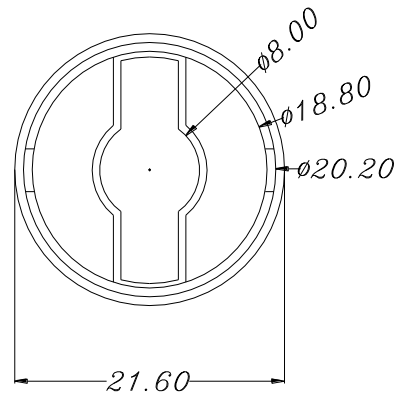
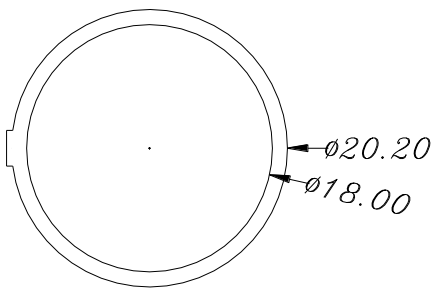
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PG1C-NX42
 View angle ($2\theta_{0.3}$) : 40°
 Beam angle ($2\theta_{0.5}$) : 25°



Matched Holder P/N : PG1C-SX40



Notes:

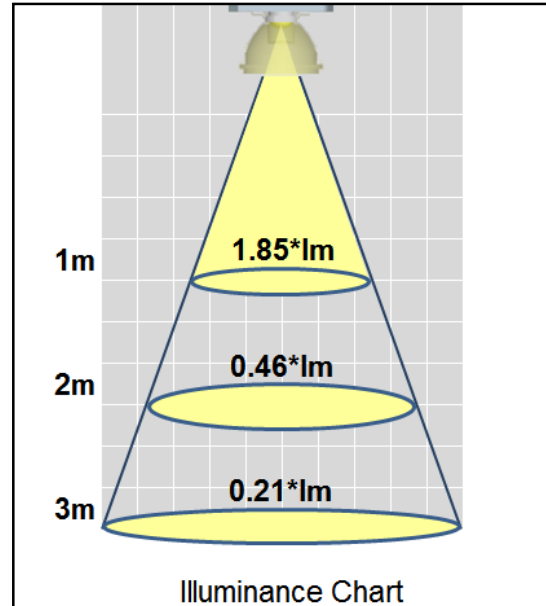
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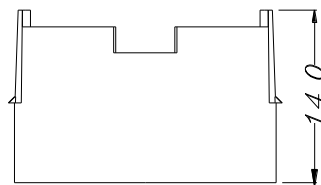
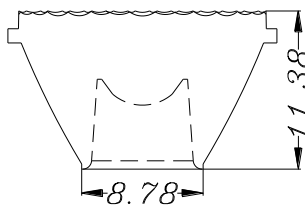
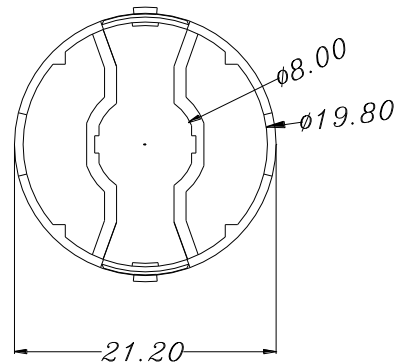
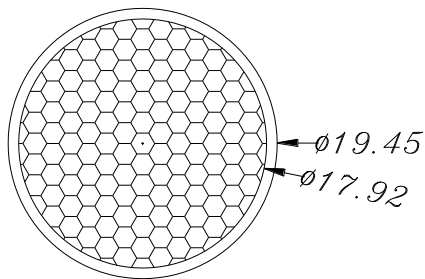
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PG1N-NX43
 View angle ($2\theta_{0.3}$) : 45°
 Beam angle ($2\theta_{0.5}$) : 35°



Matched Holder P/N : PG1N-SO02

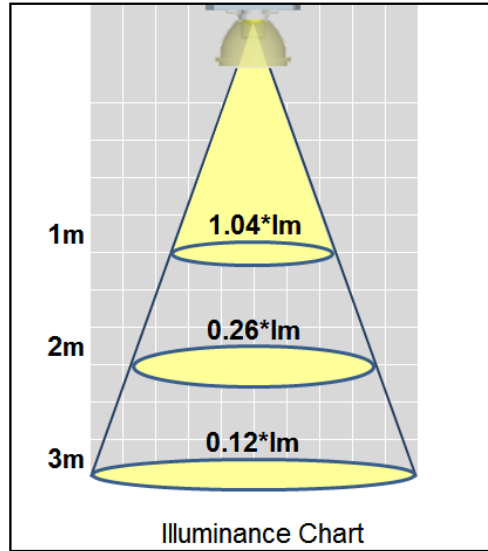


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Mechanical Dimensions and Illuminance Chart



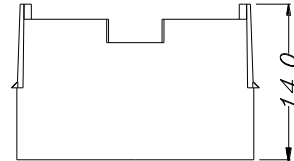
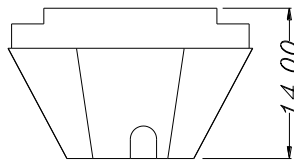
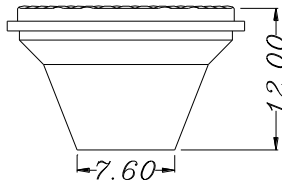
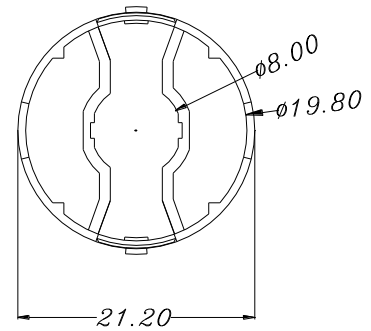
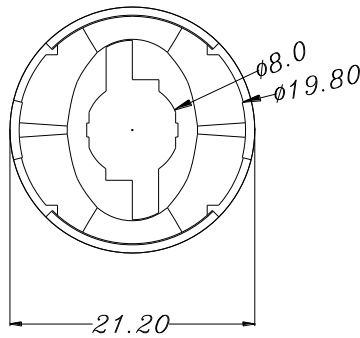
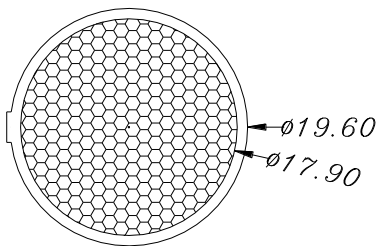
Collimator P/N : PG1N-NX45

Matched Holder P/N : PG1N-SE02

Matched Holder P/N : PG1N-SO02

View angle ($2\theta_{0.3}$) : 55°

Beam angle ($2\theta_{0.5}$) : 40°



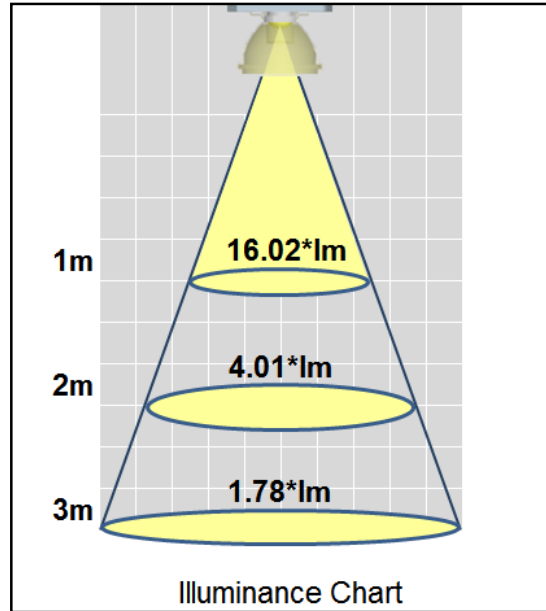
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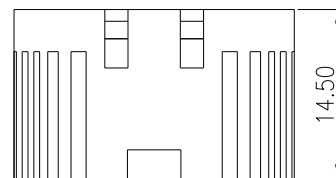
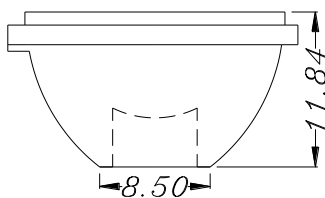
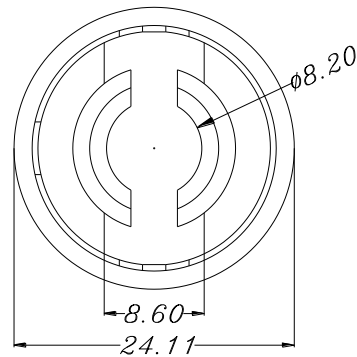
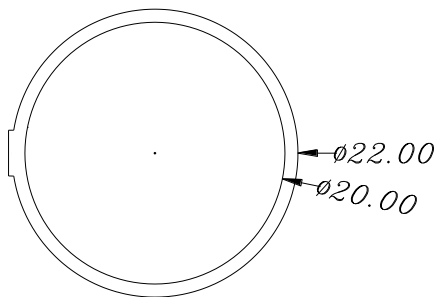


Collimator P/N : PG1C-NY16

View angle ($2\theta_{0.3}$) : 10°

Beam angle ($2\theta_{0.5}$) : 8°

Matched Holder P/N : PG1C-SY16



Notes:

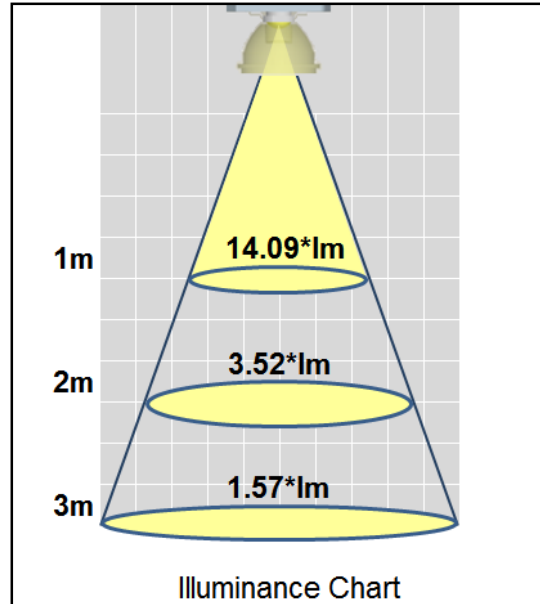
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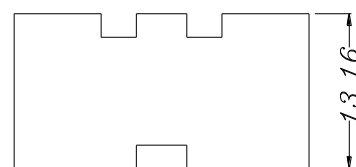
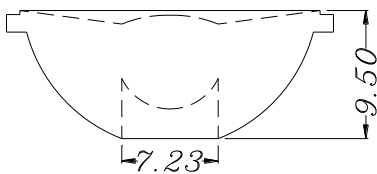
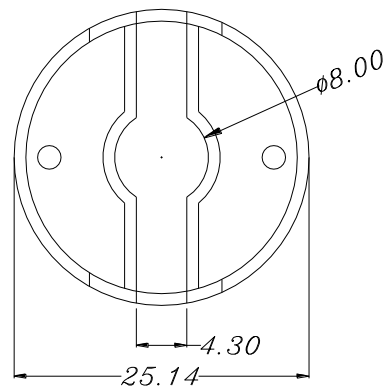
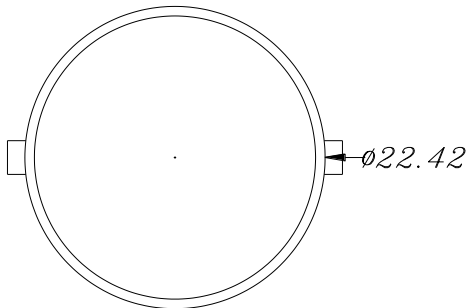
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PG1C-NY23
 View angle ($2\theta_{0.3}$) : 15°
 Beam angle ($2\theta_{0.5}$) : 10°



Matched Holder P/N : PG1C-SY23

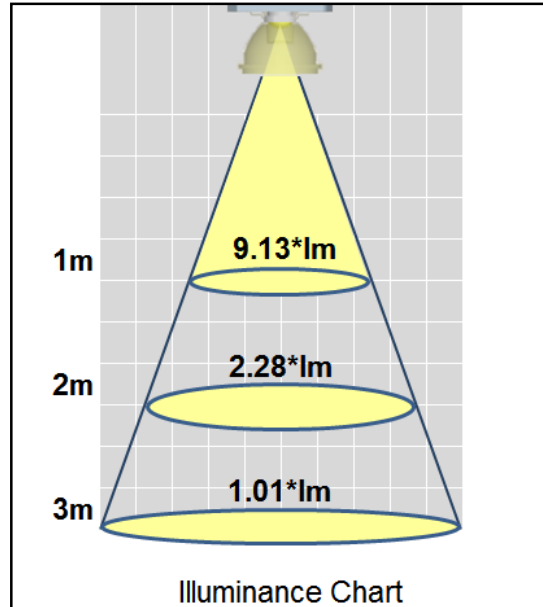


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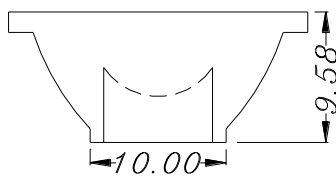
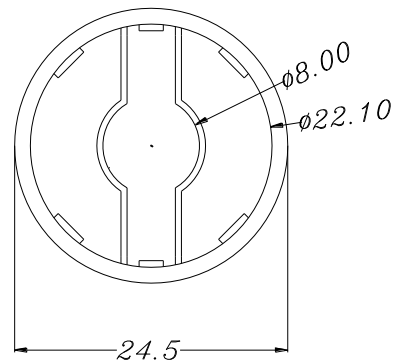
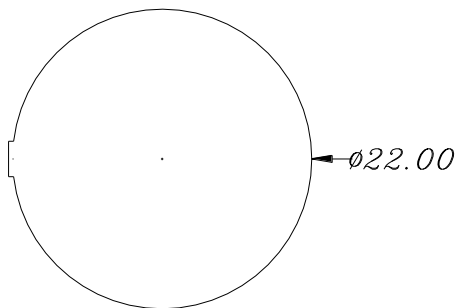


Collimator P/N : PG1C-NY18

View angle ($2\theta_{0.3}$) : 20°

Beam angle ($2\theta_{0.5}$) : 15°

Matched Holder P/N : PG1C-SY18



Notes:

1. Tolerance is ± 0.20 mm.
2. Do not subject to temperatures greater than 70°C as plastic deformation may occur.
Protect collimator against exposure to solvents and adhesives that are not compatible with it.
Use care in handling the optic to avoid scratches or other damage that will effect the optical performance.
3. All dimensions in millimeters.
4. Drawing not to scale.

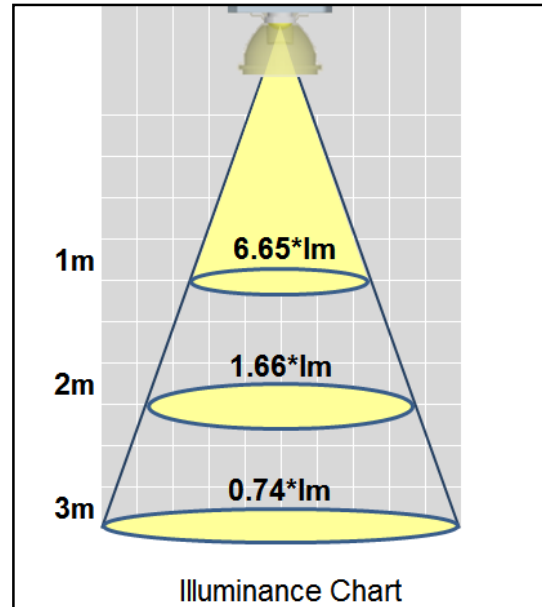
*The appearance and specifications of the product may be modified for improvement without notice.

ProLight

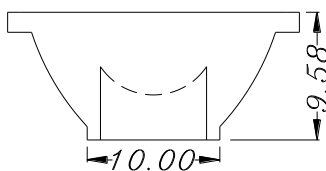
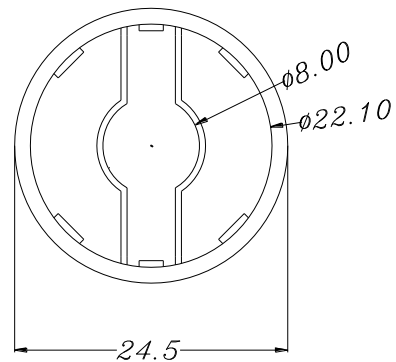
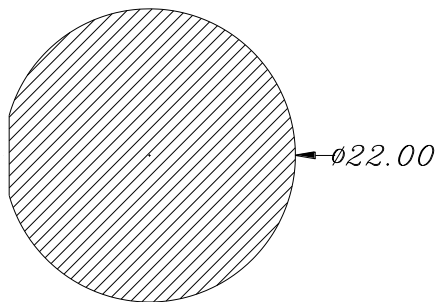
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PG1C-NY25
 View angle ($2\theta_{0.3}$) : 20°
 Beam angle ($2\theta_{0.5}$) : 15°



Matched Holder P/N : PG1C-SY18



Notes:

1. Tolerance is ± 0.20 mm.
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 Use care in handling the optic to avoid scratches or other damage that will effect the optical performance.
3. All dimensions in millimeters.
4. Drawing not to scale.

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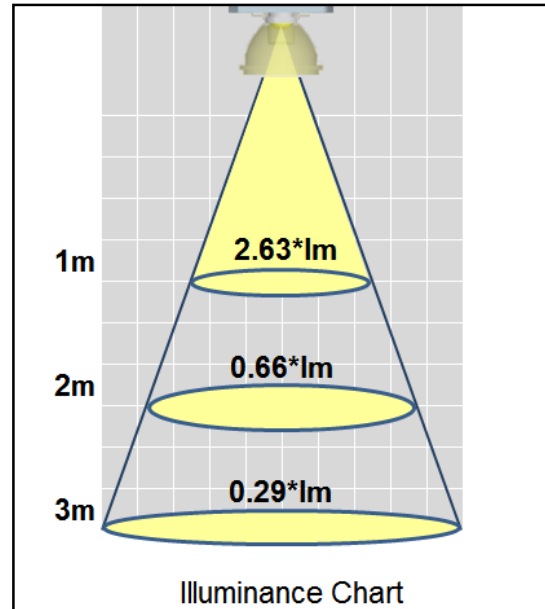
Mechanical Dimensions and Illuminance Chart



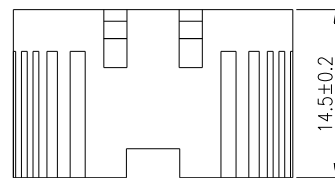
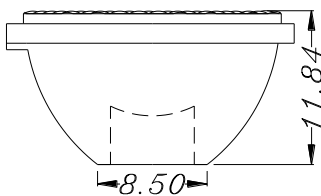
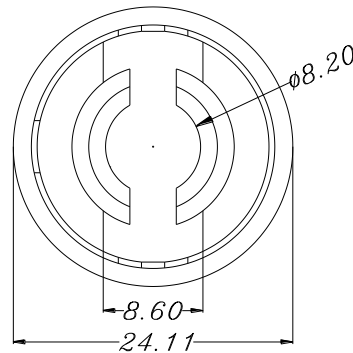
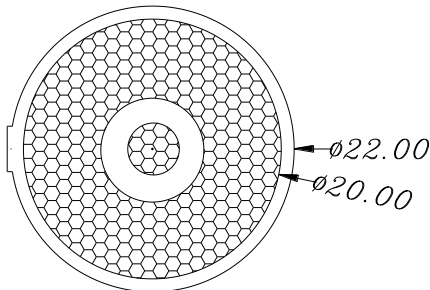
Collimator P/N : PG1C-NY42

View angle ($2\theta_{0.3}$) : 35°

Beam angle ($2\theta_{0.5}$) : 20°



Matched Holder P/N : PG1C-SY16



Notes:

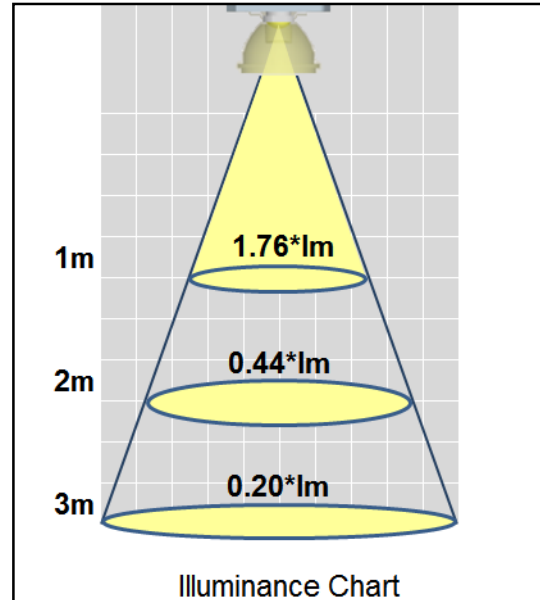
1. Tolerance is ± 0.20 mm.
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Use care in handling the optic to avoid scratches or other damage that will effect the optical performance.
3. All dimensions in millimeters.
4. Drawing not to scale.

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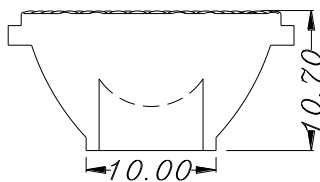
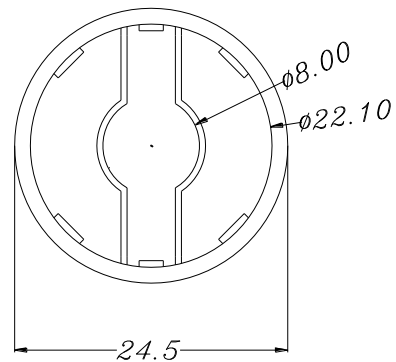
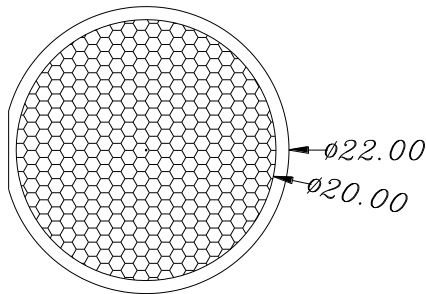
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PG1C-NY35
 View angle ($2\theta_{0.3}$) : 40°
 Beam angle ($2\theta_{0.5}$) : 25°



Matched Holder P/N : PG1C-SY18



Notes:

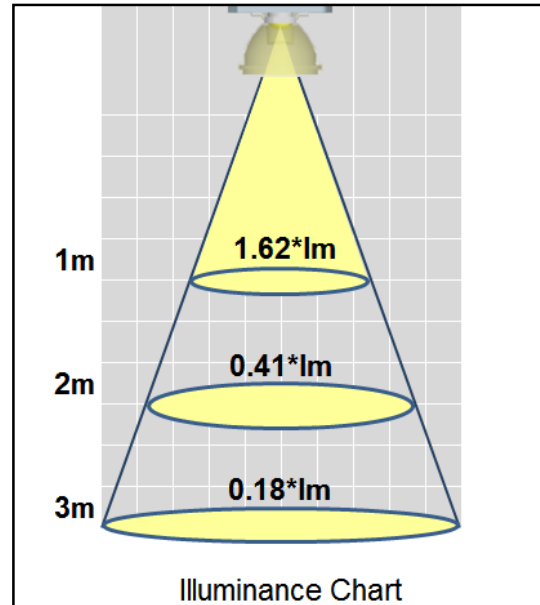
1. Tolerance is ± 0.20 mm.
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 Use care in handling the optic to avoid scratches or other damage that will effect the optical performance.
3. All dimensions in millimeters.
4. Drawing not to scale.

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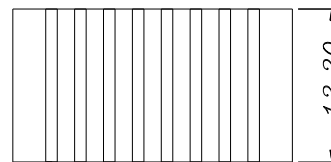
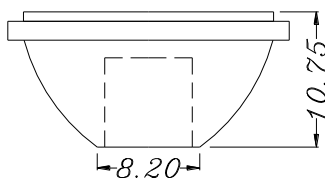
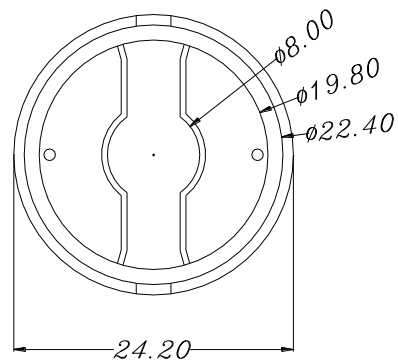
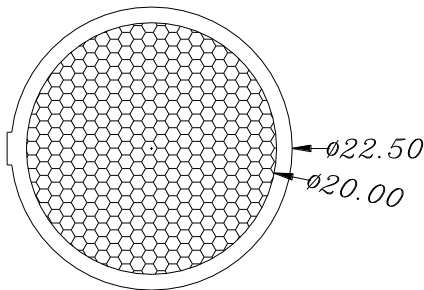
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PG1C-NY44
 View angle ($2\theta_{0.3}$) : 50°
 Beam angle ($2\theta_{0.5}$) : 30°



Matched Holder P/N : PG1C-SY44

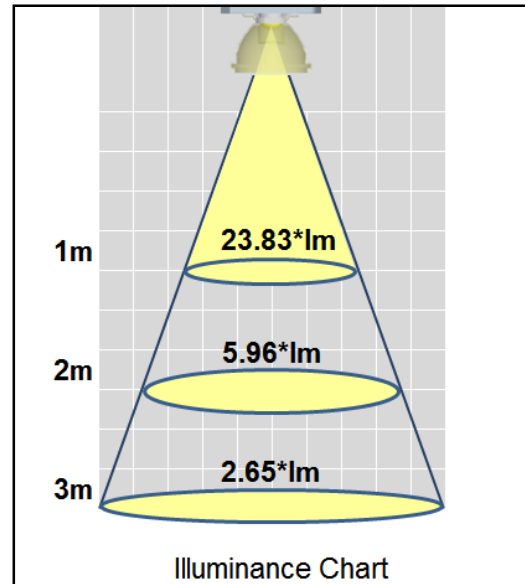


Notes:

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3. All dimensions in millimeters.
4. Drawing not to scale.

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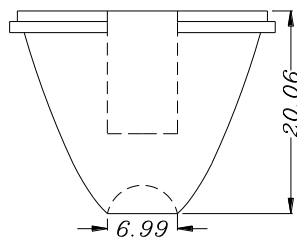
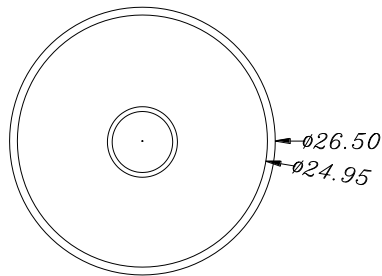
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PG1N-NX06

View angle ($2\theta_{0.3}$) : 10°

Beam angle ($2\theta_{0.5}$) : 6°

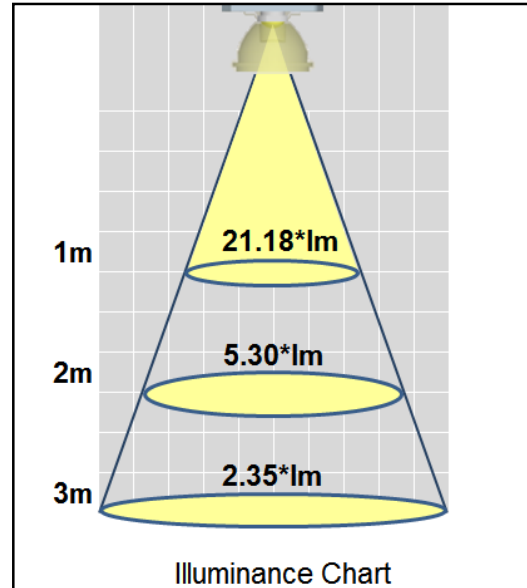


Notes:

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3. All dimensions in millimeters.
4. Drawing not to scale.

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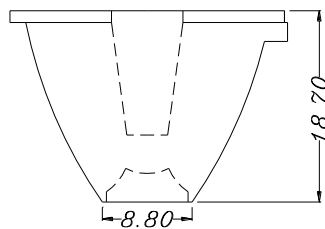
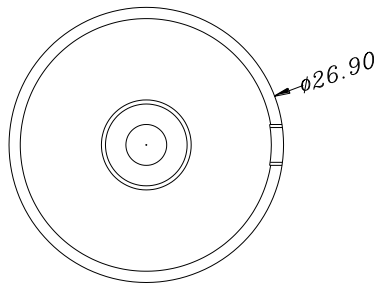
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PG1C-NZ16

View angle ($2\theta_{0.3}$) : 15°

Beam angle ($2\theta_{0.5}$) : 10°



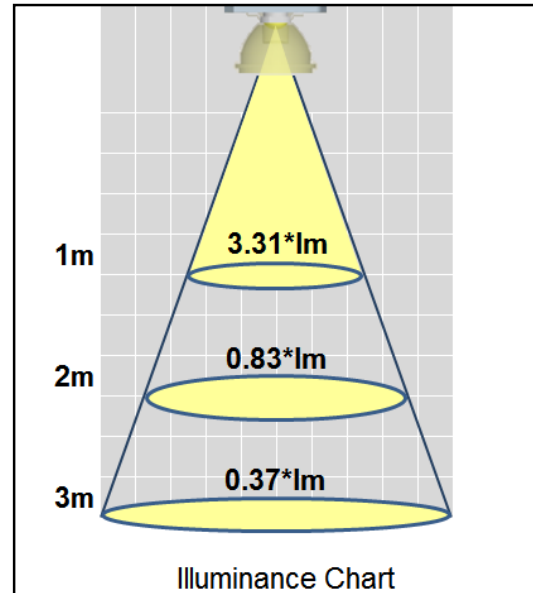
Notes:

1. Tolerance is ± 0.20 mm.
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Use care in handling the optic to avoid scratches or other damage that will effect the optical performance.
3. All dimensions in millimeters.
4. Drawing not to scale.

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ProLight

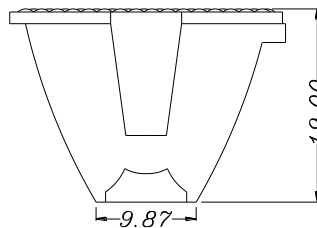
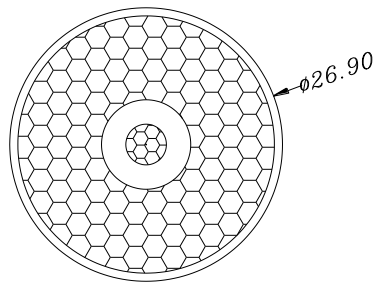
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PG1C-NZ35

View angle ($2\theta_{0.3}$) : 35°

Beam angle ($2\theta_{0.5}$) : 25°



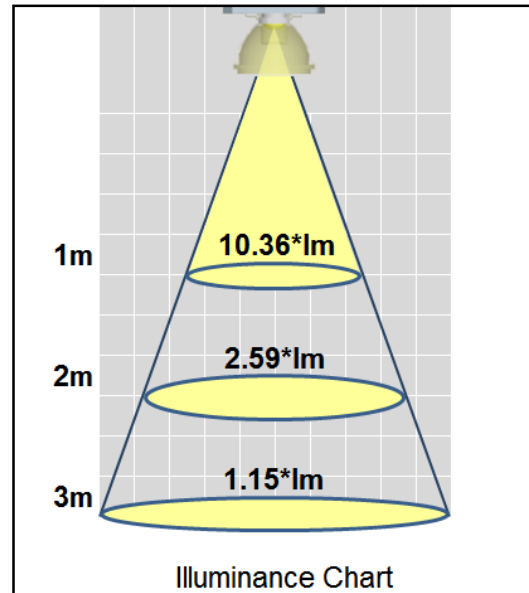
Notes:

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ProLight

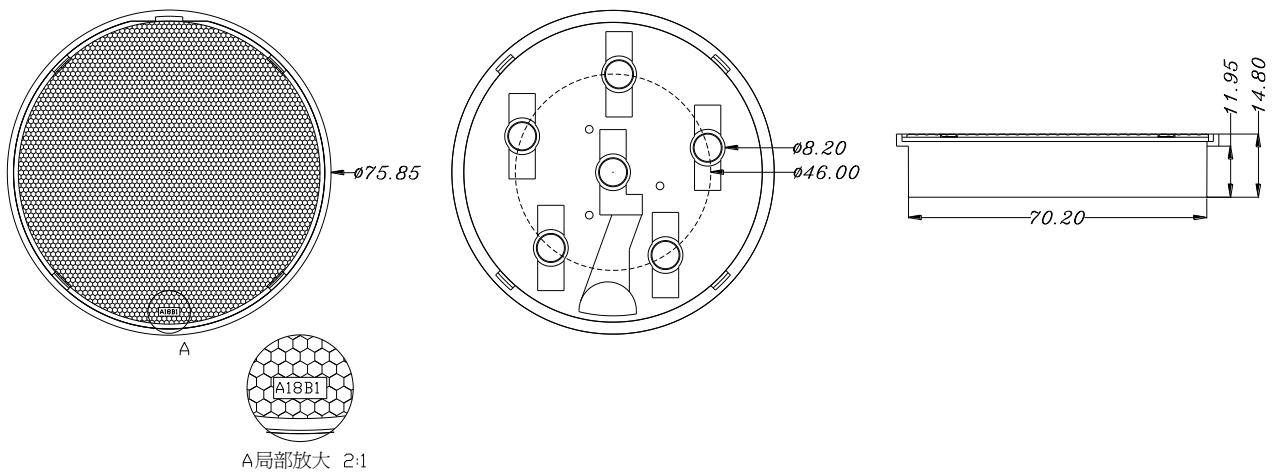
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PG1C-6A20-AW

View angle ($2\theta_{0.3}$) : 20°

Beam angle ($2\theta_{0.5}$) : 15°



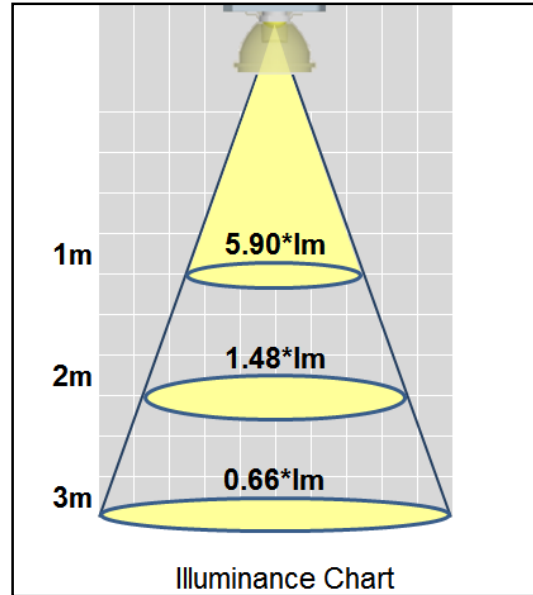
Notes:

1. Tolerance is ± 0.20 mm.
2. Do not subject to temperatures greater than 70°C as plastic deformation may occur.
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3. All dimensions in millimeters.
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ProLight

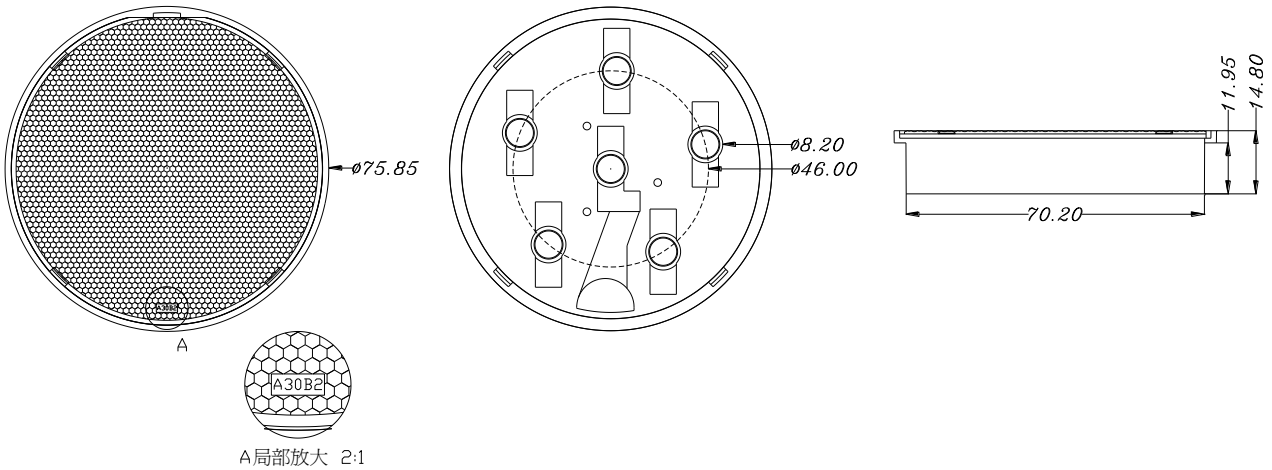
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PG1C-6A30-AW

View angle ($2\theta_{0.3}$) : 30°

Beam angle ($2\theta_{0.5}$) : 23°

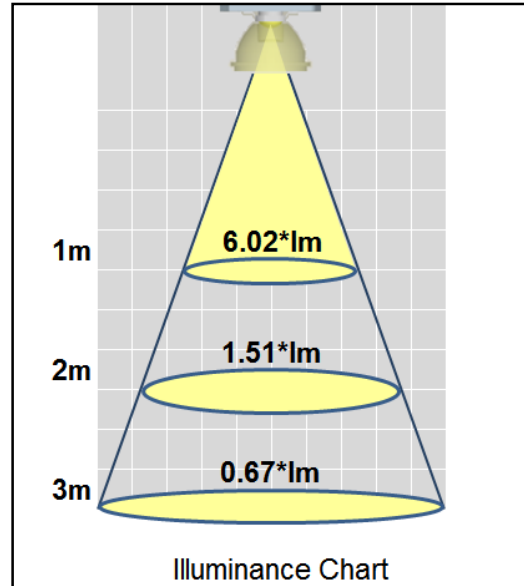


Notes:

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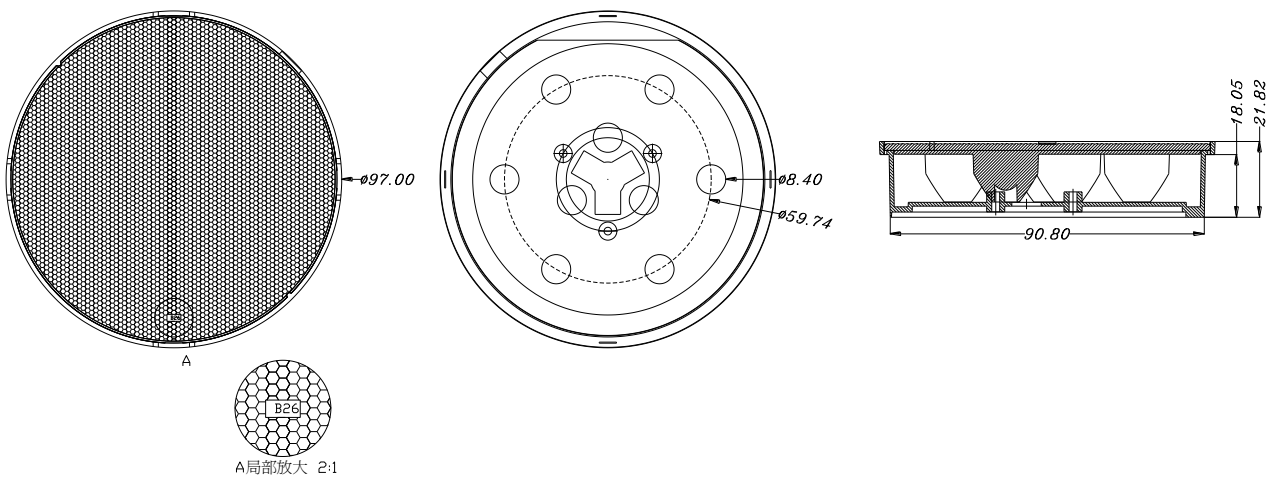
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PG1C-9B30-AW

View angle ($2\theta_{0.3}$) : 30°

Beam angle ($2\theta_{0.5}$) : 23°



Notes:

1. Tolerance is ± 0.20 mm.
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3. All dimensions in millimeters.
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ProLight