



ProLight Opto
Technology Corporation



**Collimators for Phenix Series
Technical Datasheet
Version: 1.5**

Features

- High Efficiency
- Works with ProLight Phenix Series

Typical Applications

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

Collimators List

Collimator Size	Collimator P/N	View angle ($2\theta_{0.3}$)	Beam angle ($2\theta_{0.5}$)	On axis efficiency (cd/lm)	X*
20mm	PR2N-NX25-AW	25	19	6.15	19.2
	PR2N-NX35-AW	35	25	3.05	9.3
	PR2N-NX45-AW	45	35	2.60	8.0
	PR2N-NX55-AW	55	45	1.55	4.8
23mm	PR2N-3A30	30	22	4.30	13.6
	PR2N-3A45	45	32	1.50	4.7
25.4mm	PR2N-4A30	30	22	3.80	11.7
	PR2N-4A45	45	32	1.65	5.1
35mm	PR2N-3B30	35	25	3.50	10.8
	PR2N-3B60	60	45	0.90	2.8
	PR2N-3B70	70	55	0.75	2.3
35mm	PR2N-4B30	30	22	3.80	11.7
	PR2N-4B45	45	32	1.65	5.1
39mm	PR2N-7A30	30	22	3.00	9.7
	PR2N-7A45	45	32	1.60	5.2
50mm	PR2N-7B30	30	22	3.00	9.7
	PR2N-7B45	45	32	1.60	5.2

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

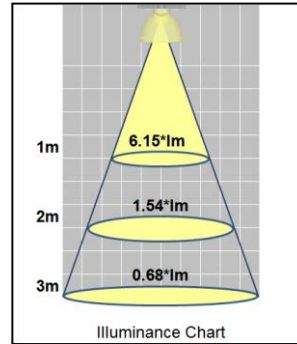
General Characteristics:

Lens Material	Optical Grade PC
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

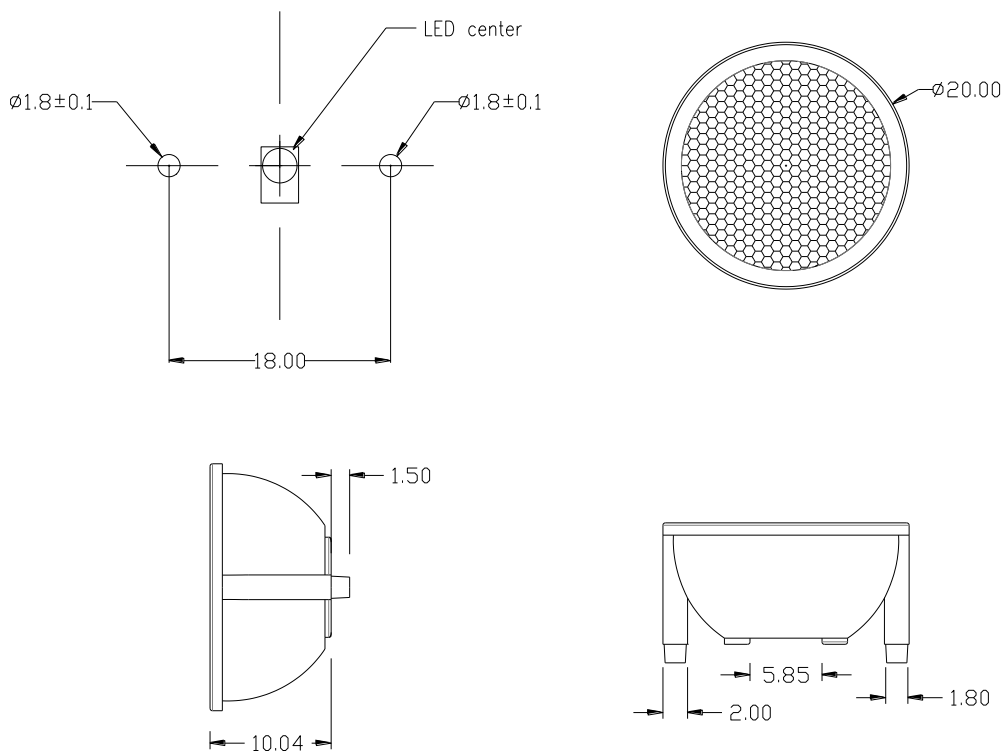


Collimator P/N : PR2N-NX25-AW

View angle ($2\theta_{0.3}$) : 25°

Beam angle ($2\theta_{0.5}$) : 19°

Layout

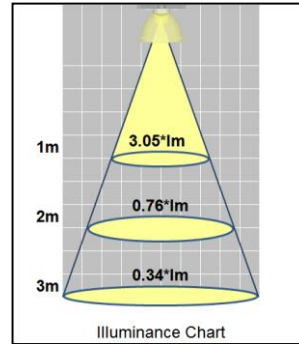


Notes:

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

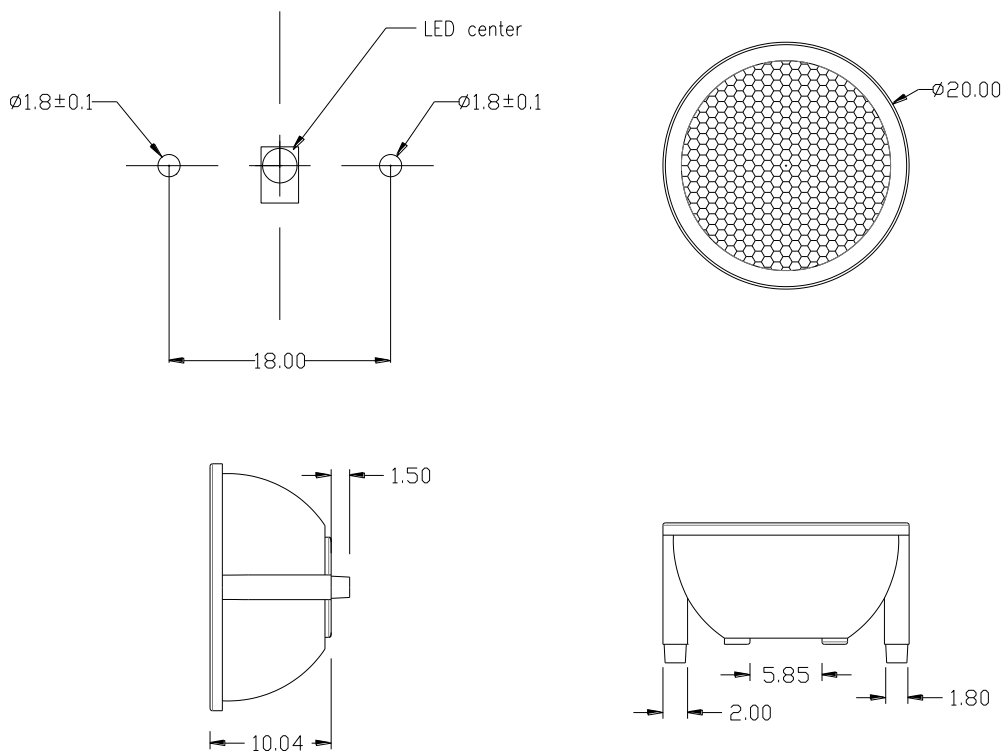


Collimator P/N : PR2N-NX35-AW

View angle ($2\theta_{0.3}$) : 35°

Beam angle ($2\theta_{0.5}$) : 25°

Layout



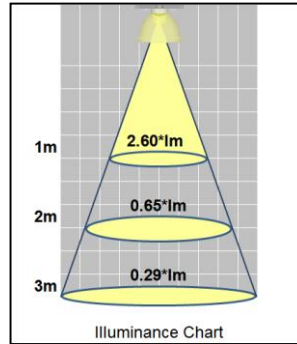
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Mechanical Dimensions and Illuminance Chart

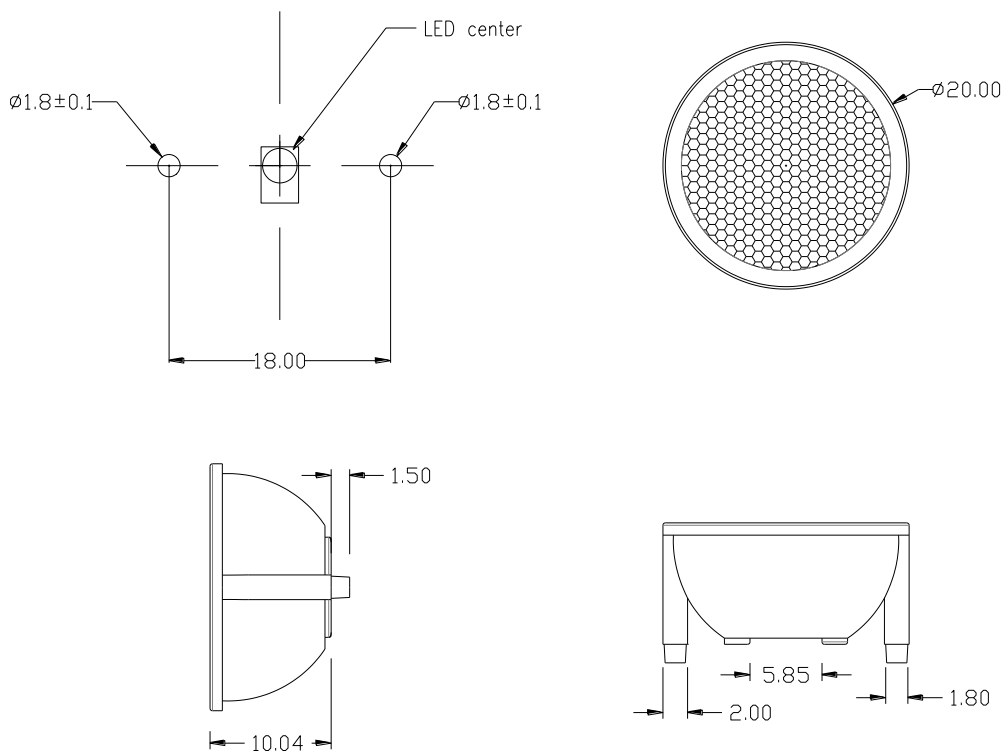


Collimator P/N : PR2N-NX45-AW

View angle ($2\theta_{0.3}$) : 45°

Beam angle ($2\theta_{0.5}$) : 35°

Layout

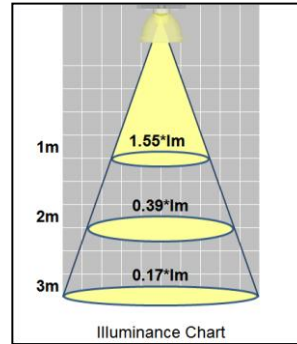


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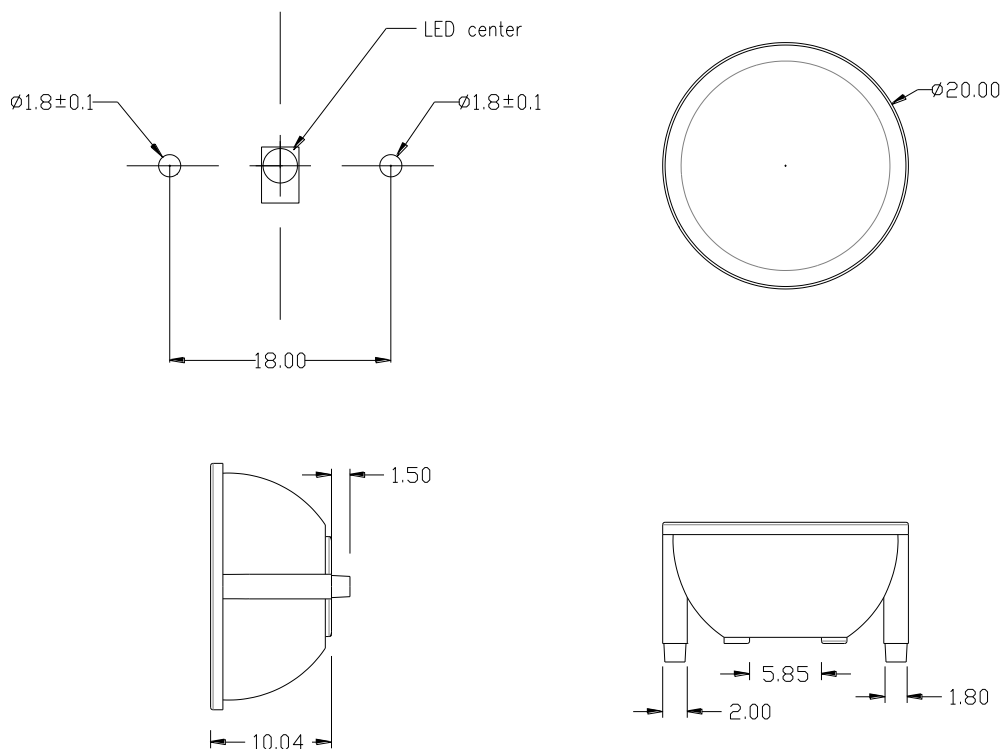


Collimator P/N : PR2N-NX55-AW

View angle ($2\theta_{0.3}$) : 55°

Beam angle ($2\theta_{0.5}$) : 45°

Layout



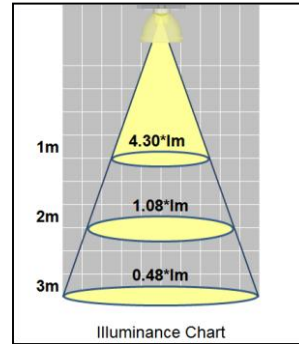
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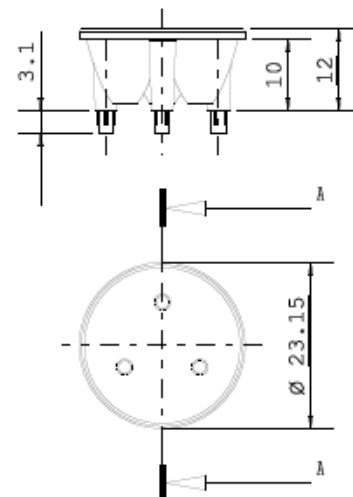
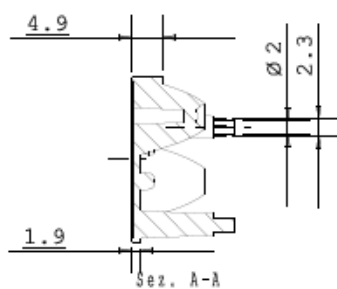
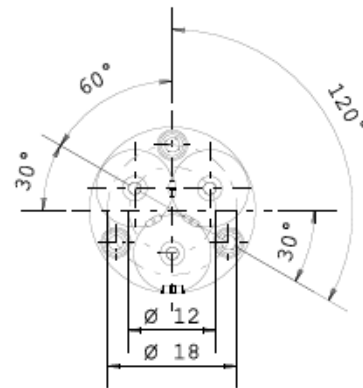
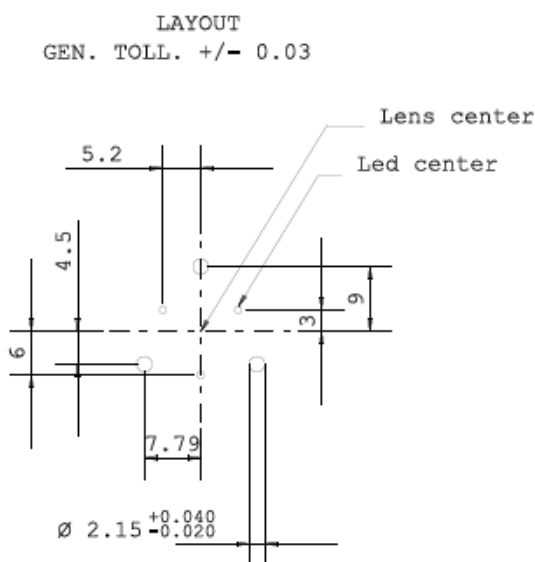
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PR2N-3A30

View angle ($2\theta_{0.3}$) : 30°

Beam angle ($2\theta_{0.5}$) : 22°



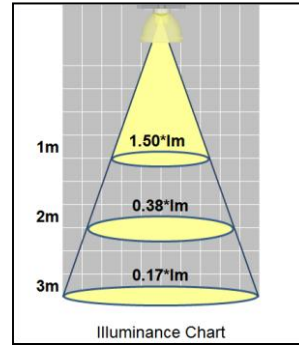
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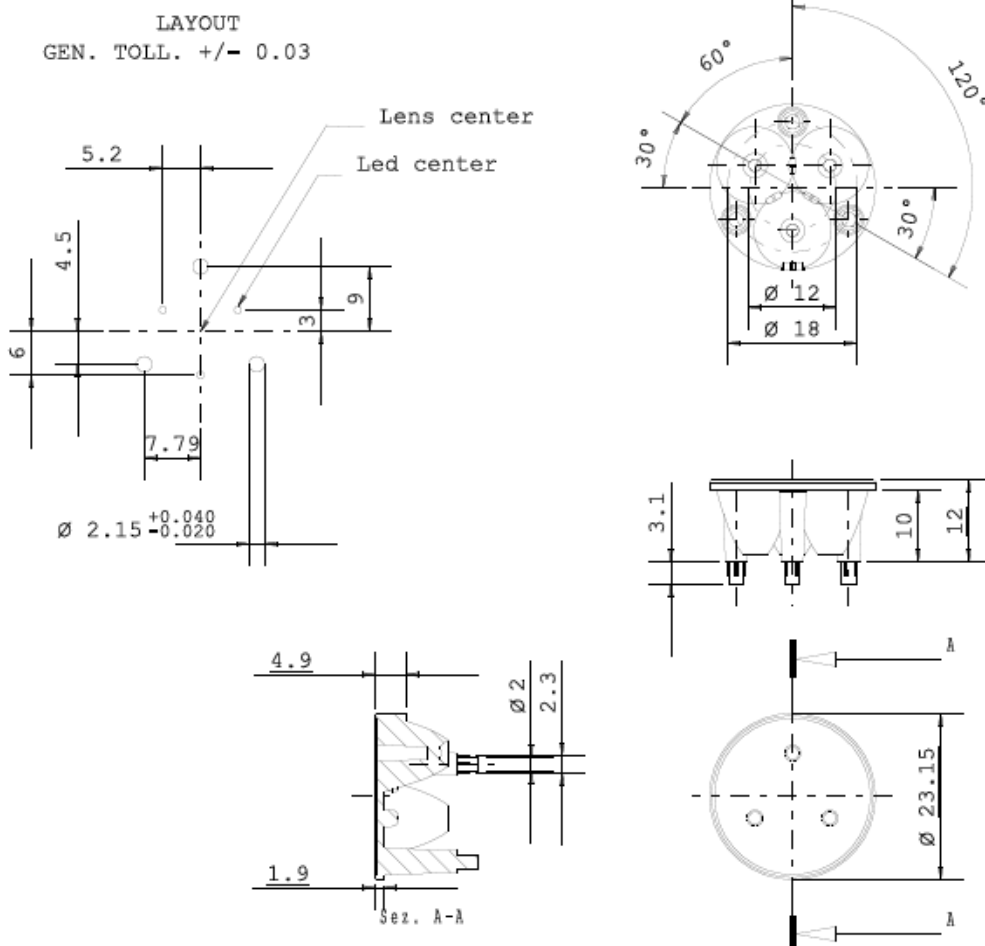
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PR2N-3A45

View angle ($2\theta_{0.3}$) : 45°

Beam angle ($2\theta_{0.5}$) : 32°



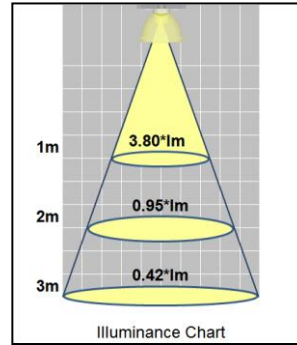
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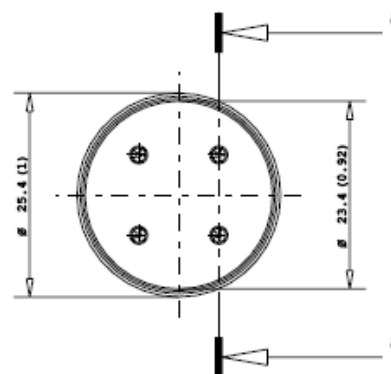
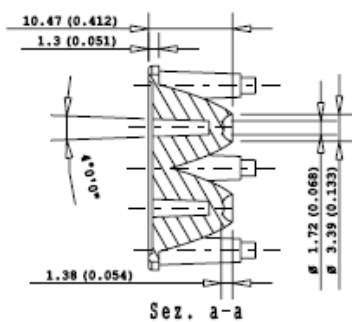
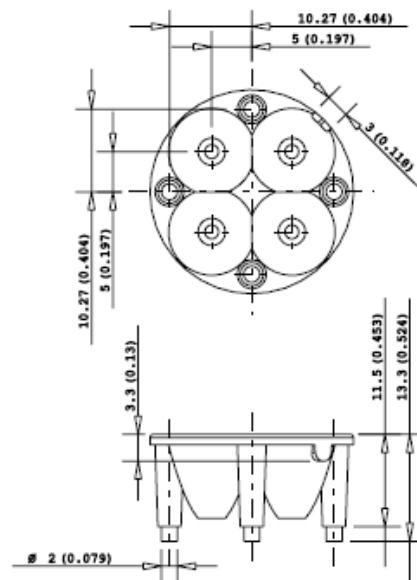
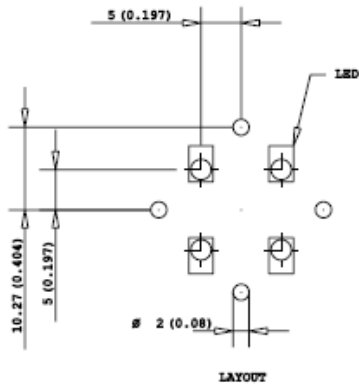
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PR2N-4A30

View angle ($2\theta_{0.3}$) : 30°

Beam angle ($2\theta_{0.5}$) : 22°



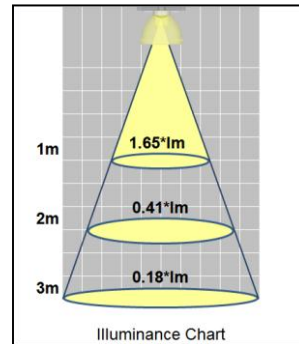
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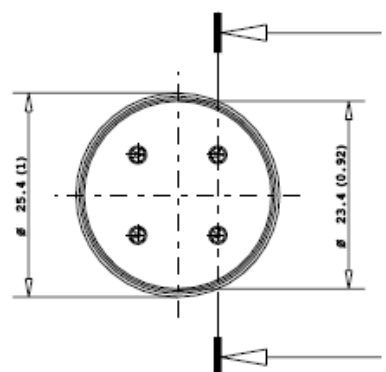
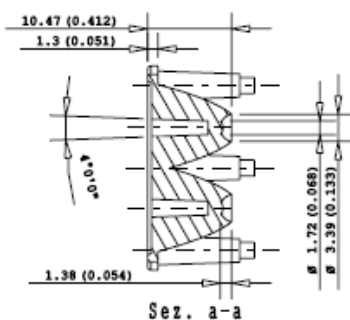
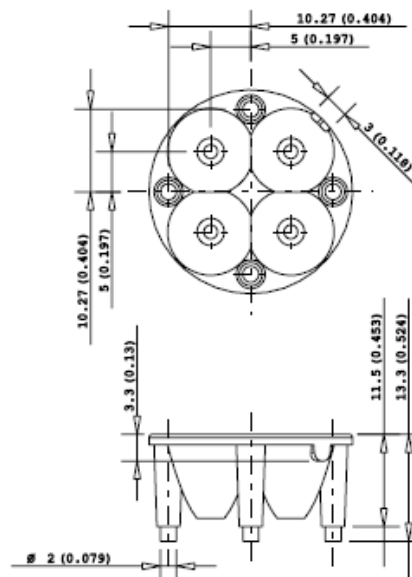
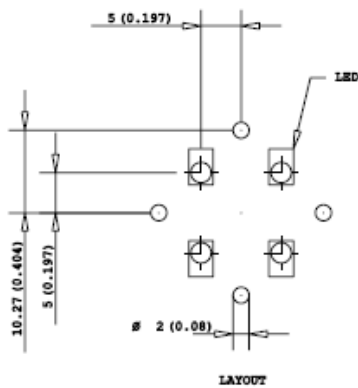
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PR2N-4A45

View angle ($2\theta_{0.3}$) : 45°

Beam angle ($2\theta_{0.5}$) : 32°



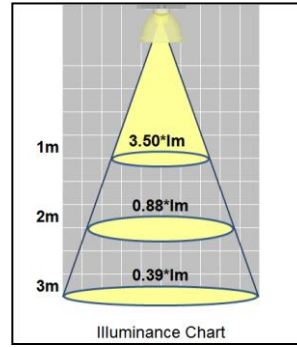
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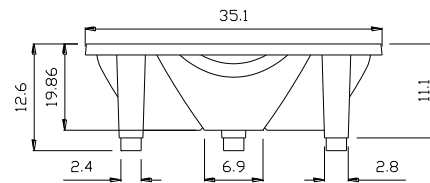
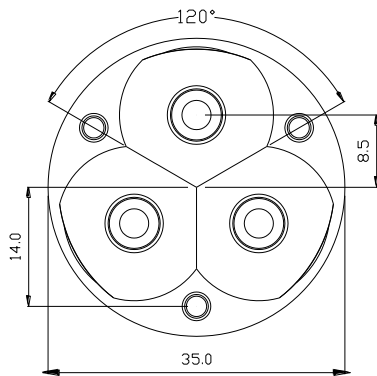
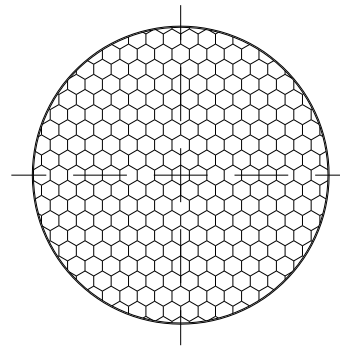
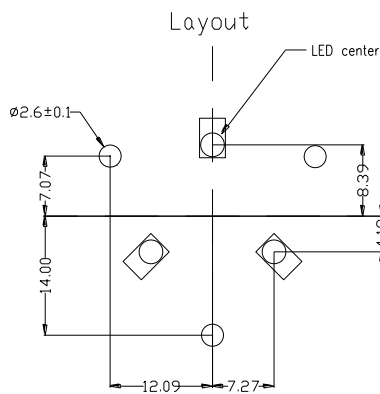
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PR2N-3B30

View angle ($2\theta_{0.3}$) : 35°

Beam angle ($2\theta_{0.5}$) : 25°

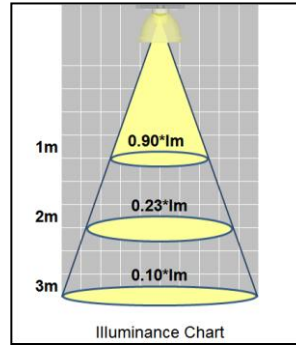


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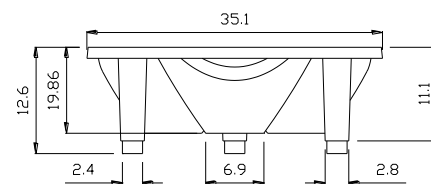
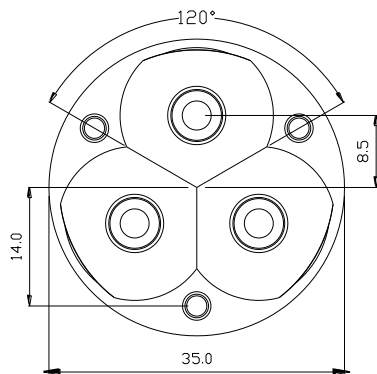
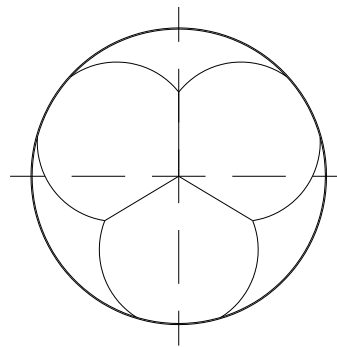
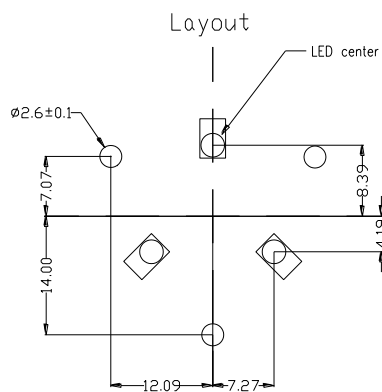
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PR2N-3B60

View angle ($2\theta_{0.3}$) : 60°

Beam angle ($2\theta_{0.5}$) : 45°



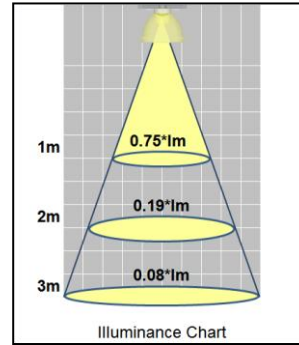
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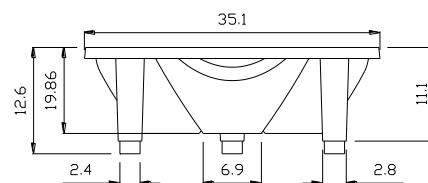
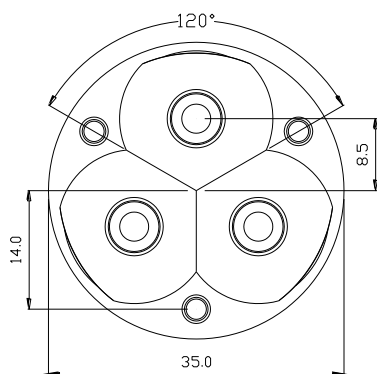
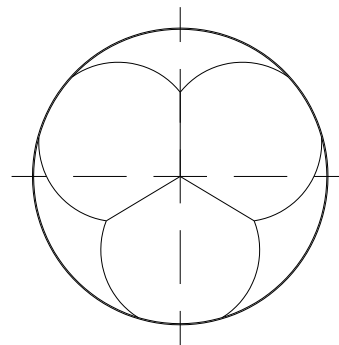
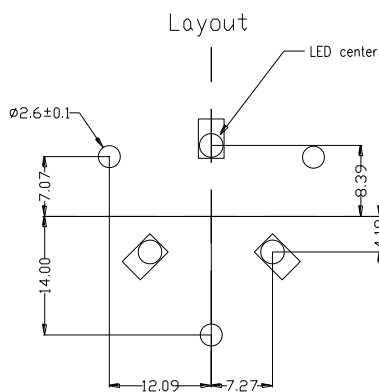
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PR2N-3B70

View angle ($2\theta_{0.3}$) : 70°

Beam angle ($2\theta_{0.5}$) : 55°



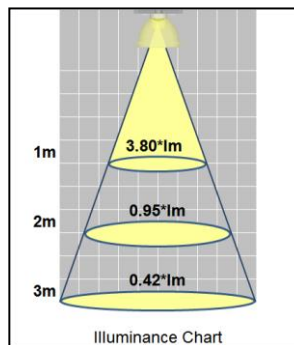
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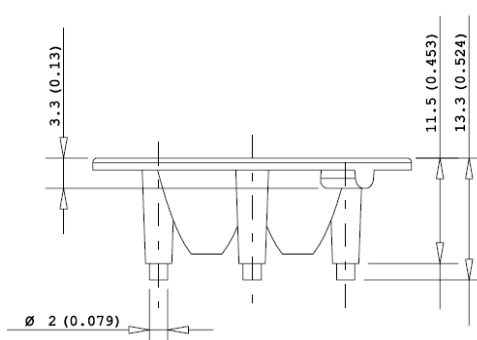
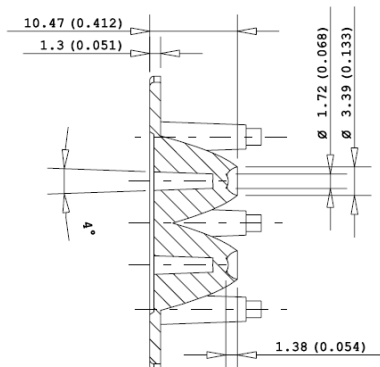
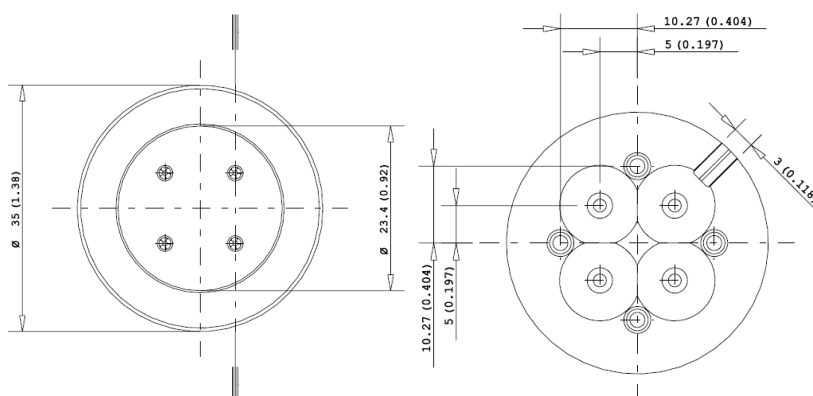
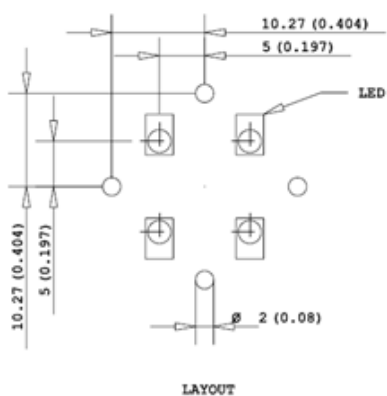
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PR2N-4B30

View angle ($2\theta_{0.3}$) : 30°

Beam angle ($2\theta_{0.5}$) : 22°



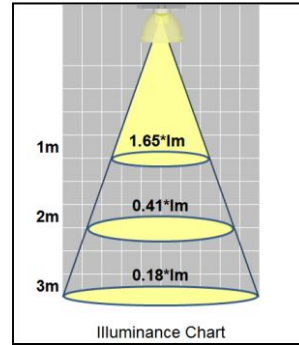
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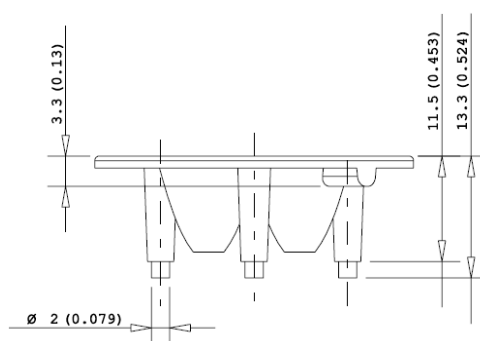
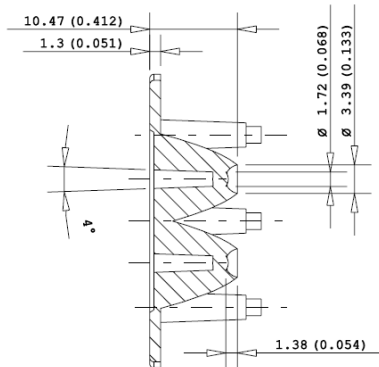
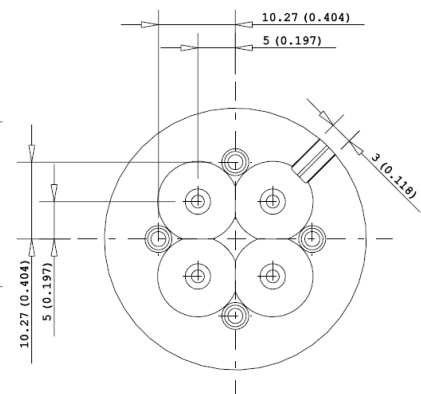
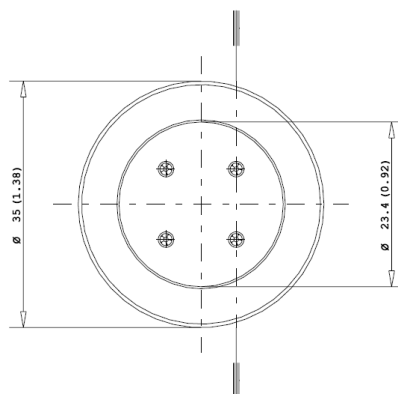
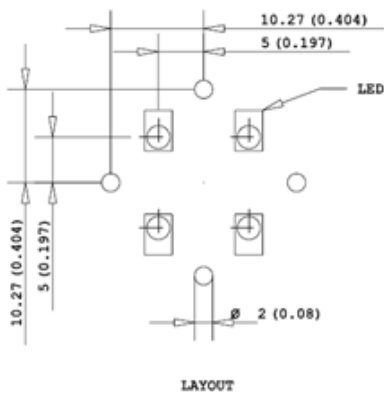
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PR2N-4B45

View angle ($2\theta_{0.3}$) : 45°

Beam angle ($2\theta_{0.5}$) : 32°

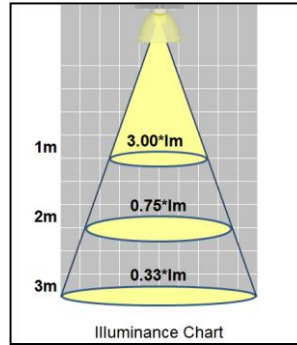


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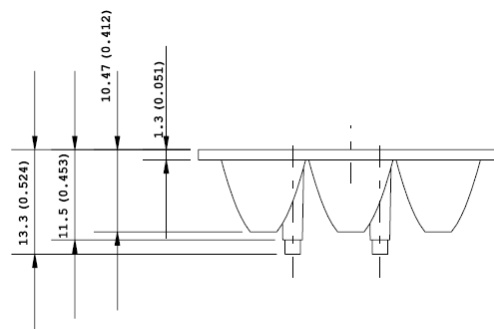
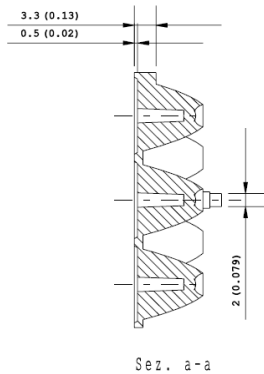
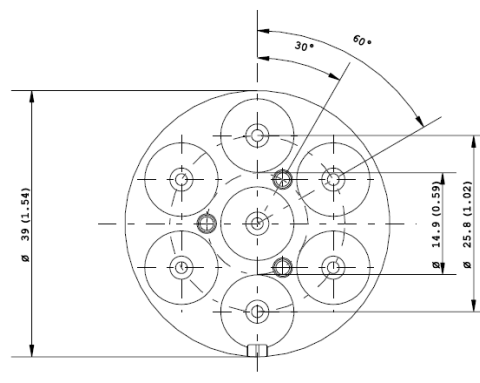
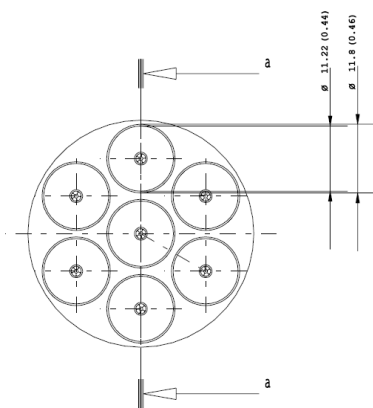
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PR2N-7A30

View angle ($2\theta_{0.3}$) : 30°

Beam angle ($2\theta_{0.5}$) : 22°



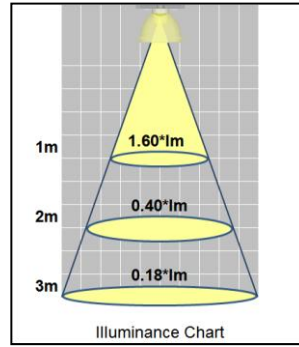
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Use care in handling the optic to avoid scratches or other damage that will effect the optical performance.
4. All dimensions in millimeters. Dimensions in inches into brackets.
5. Drawing not to scale.

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

ProLight

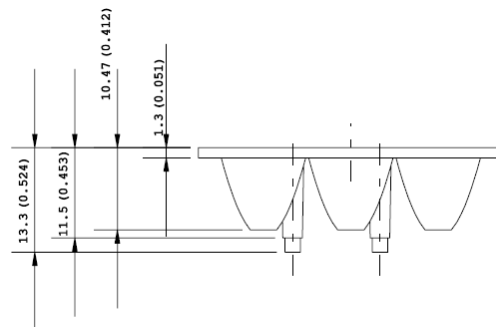
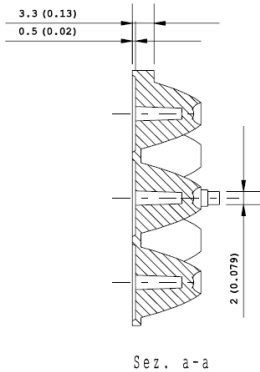
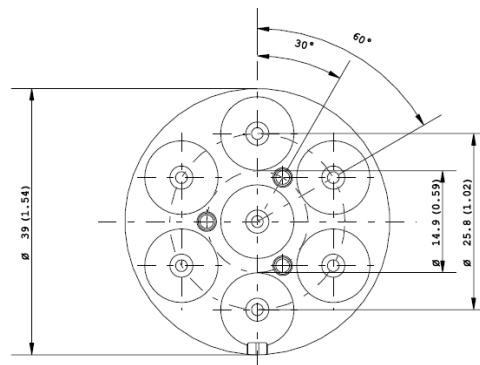
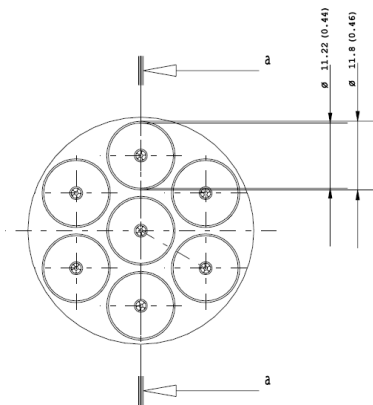
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PR2N-7A45

View angle ($2\theta_{0.3}$) : 45°

Beam angle ($2\theta_{0.5}$) : 32°



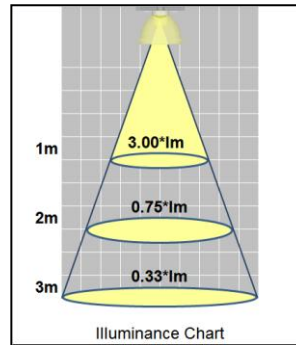
Notes:

1. From Khatod lens datasheet.
2. Tolerance is ± 0.20 mm.
3. 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.
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4. All dimensions in millimeters. Dimensions in inches into brackets.
5. Drawing not to scale.

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ProLight

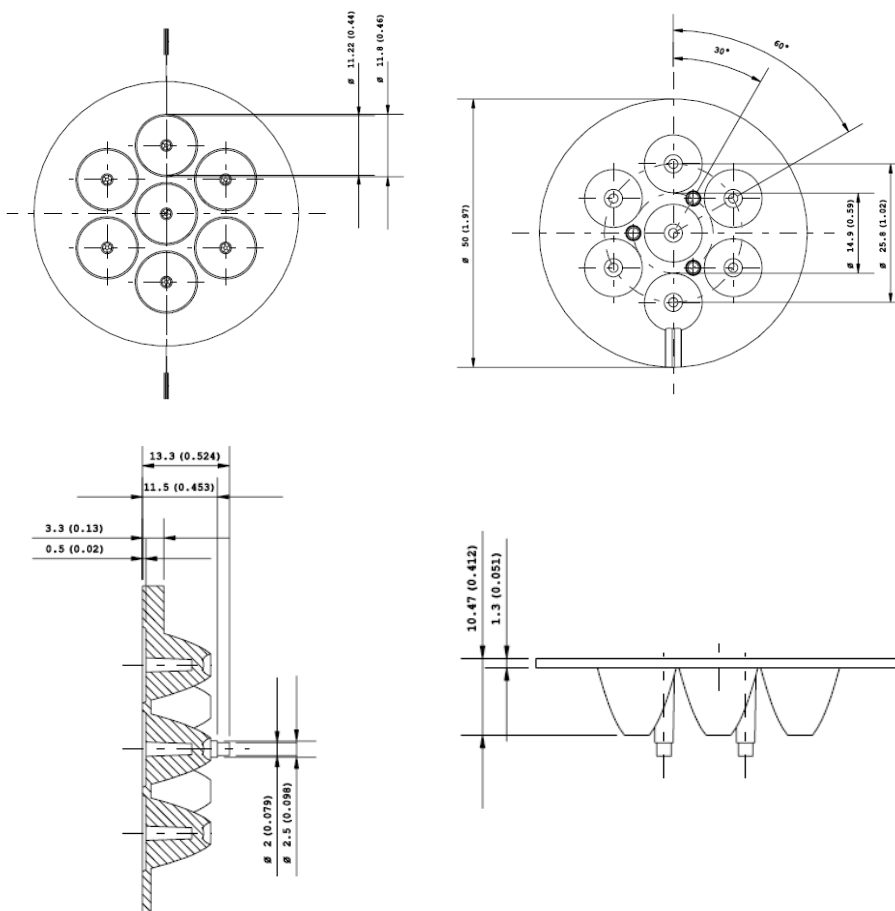
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PR2N-7B30

View angle ($2\theta_{0.3}$) : 30°

Beam angle ($2\theta_{0.5}$) : 22°



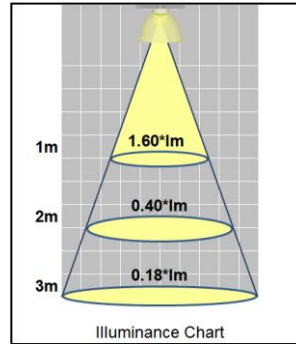
Notes:

1. From Khatod lens datasheet.
2. Tolerance is ± 0.20 mm.
3. 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.
4. All dimensions in millimeters. Dimensions in inches into brackets.
5. Drawing not to scale.

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ProLight

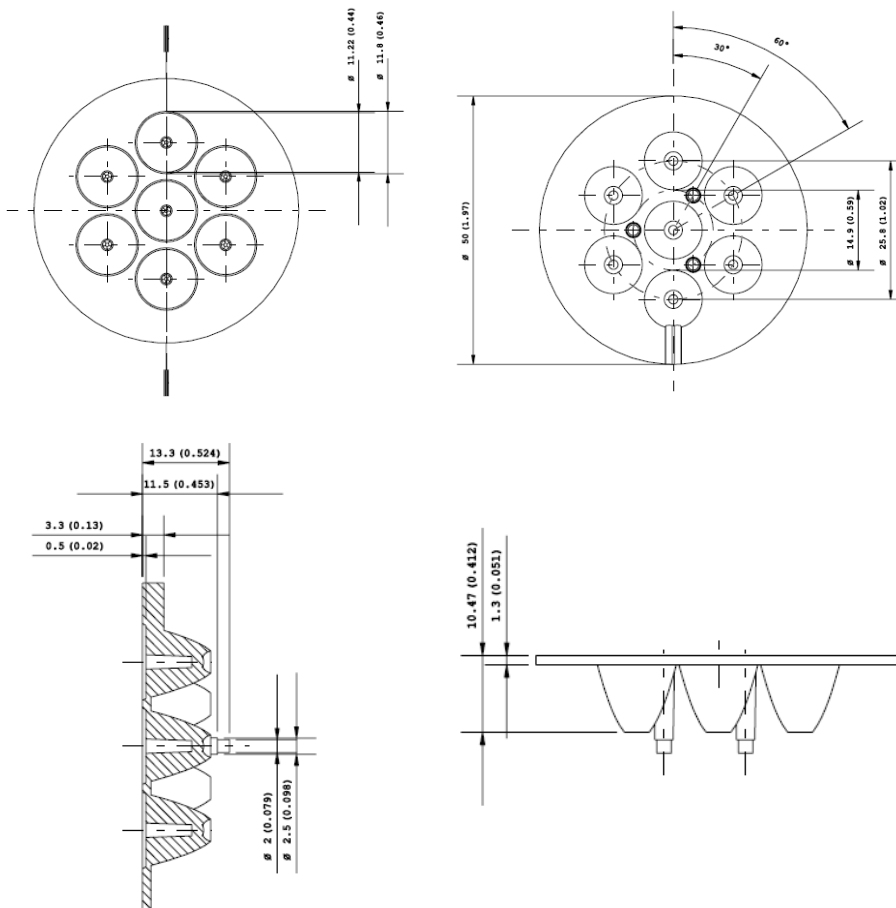
Mechanical Dimensions and Illuminance Chart



Collimator P/N : PR2N-7B45

View angle ($2\theta_{0.3}$) : 45°

Beam angle ($2\theta_{0.5}$) : 32°



Notes:

1. From Khatod lens datasheet.
2. Tolerance is ± 0.20 mm.
3. 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.
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4. All dimensions in millimeters. Dimensions in inches into brackets.
5. Drawing not to scale.

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ProLight