

[P7] P7-CL SERIES LENS [P7] P7 LENS SERIES-2

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- The 'P7 Lens series-2' and P7-CL series offers low profile lens especially designed for the Seoul Semiconductor LEDs
: P7 'W724C0'

- 'P7-CL' is ideal optical solution for P7 LEDs illumination application.

<http://www.seoulsemicon.co.kr>

※ Korea Patent no. 10-0837573 & 10-0756174, issued June 4, 2008
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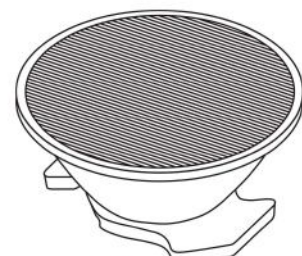
1. Lens Layout



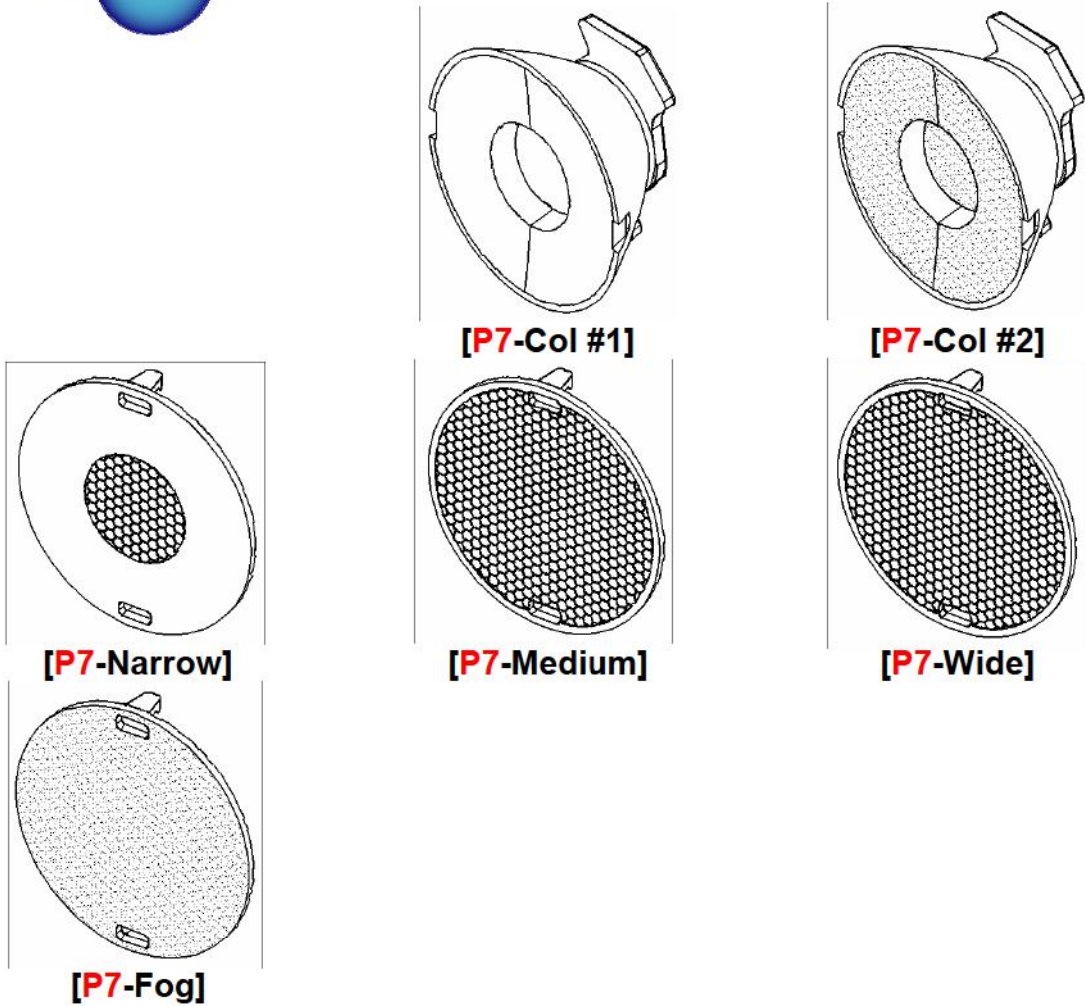
■ Narrow Lens



■ Wide Lens



■ Elliptical Lens



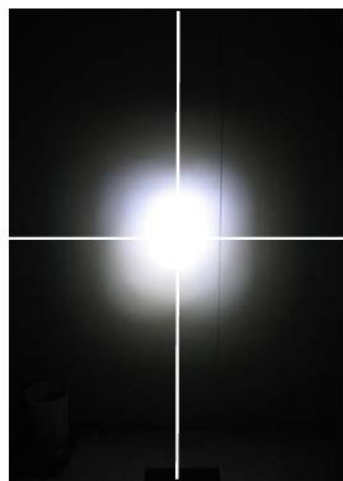
2. Lens Specification

Lens Type	Beam Angle	Beam Pattern	Components
Narrow Lens	10 deg.	Circle	Single Lens
Wide Lens	35 deg.	Circle	
Elliptical Lens	x 45deg. Y 15deg.	Elliptical	

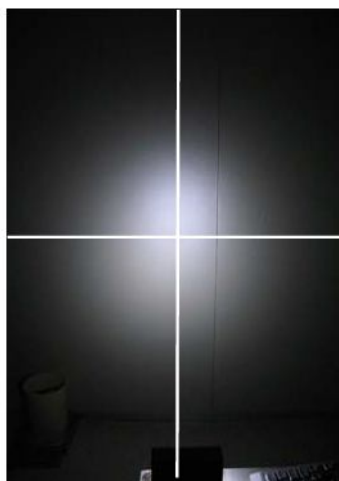
Lens Type	Beam Angle	Beam Pattern	Components
P7-Col #1	15 deg.	Circle	Collimate lens #1
P7-Col #2	25 deg.	Circle(Smooth)	Collimate lens #2(pattern)
P7-Narrow	15 deg.	Circle	Collimate lens + Narrow Beam Filter
P7-Medium	20 deg.	Circle	Collimate lens + Medium Beam Filter
P7-Wide	30 deg.	Circle	Collimate lens + Wide Beam Filter
P7-Fog	25 deg.	Circle(Smooth)	Collimate lens + Fog Beam Filter

3. Beam Pattern (Photo)

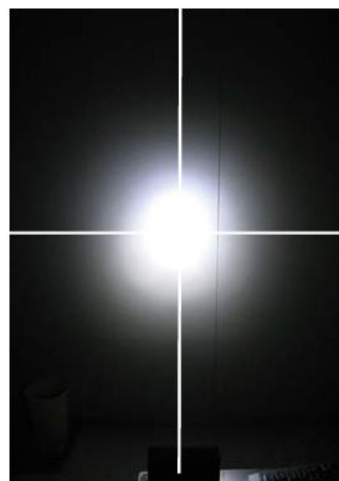
[Measurement Distance 100cm]



[P7-Col #1]



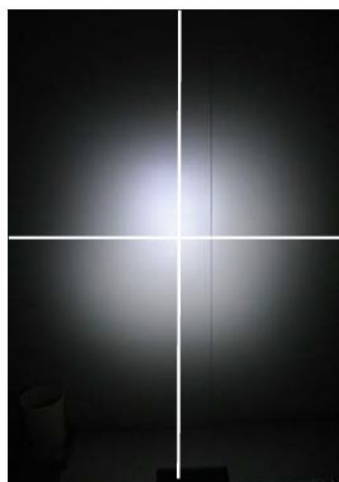
[P7-Col #2]



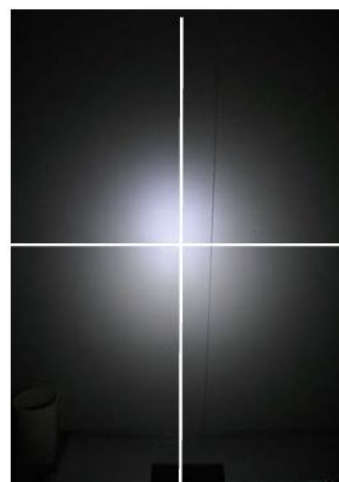
[P7-Narrow]



[P7-Medium]



[P7-Wide]



[P7-Fog]

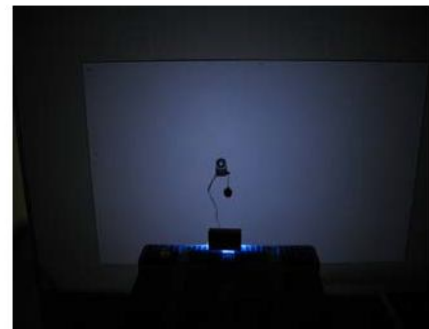
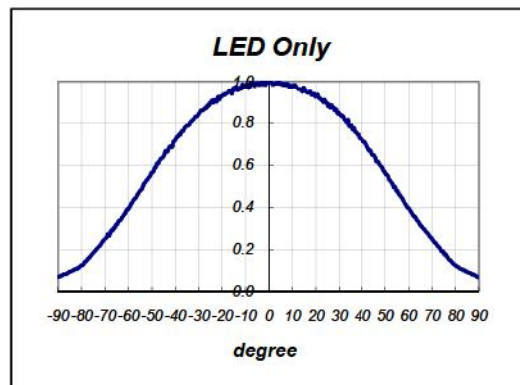
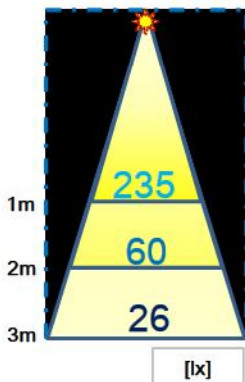
4. Feature of Beam Lens Filter

Item	Feature
P7-Col #2	Smooth Light (no filter)
P7-Narrow	Spot Light
P7-Medium	Medium Light (Center of light is narrow)
P7-Wide	Wide Light (Center of light is wide)
P7-Fog	Smooth Light

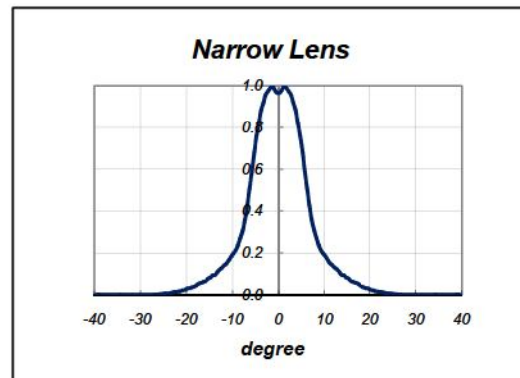
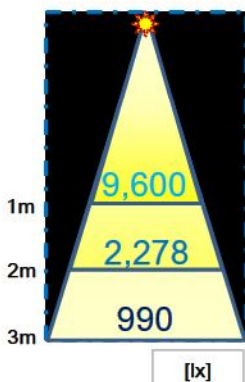
5. Measurements data (Illuminance, Distribution Graph, Photo)

Test Conditions :	LED : Seoul Semiconductor 'W724C0' (Luminous Flux = 700 Lumen)
	Room Luminous Intensity : 0 Lumen
	Room Temperature : 20°C ± 1°C
	LED temperature after 10 min : ~ 36°C

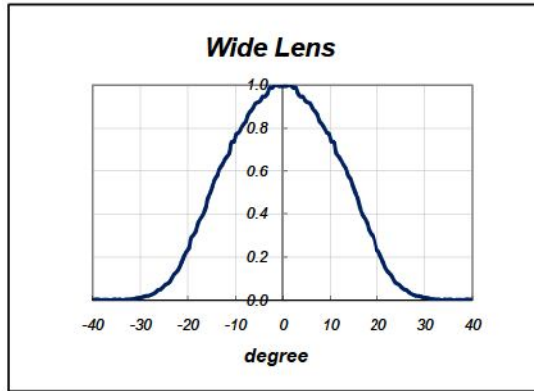
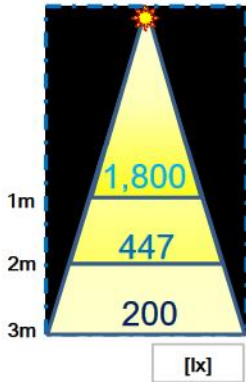
■ LED Only



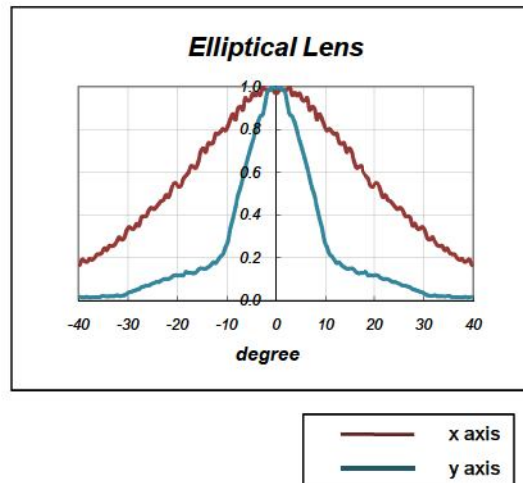
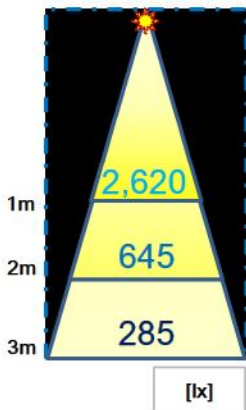
■ Narrow Lens



■ Wide Lens



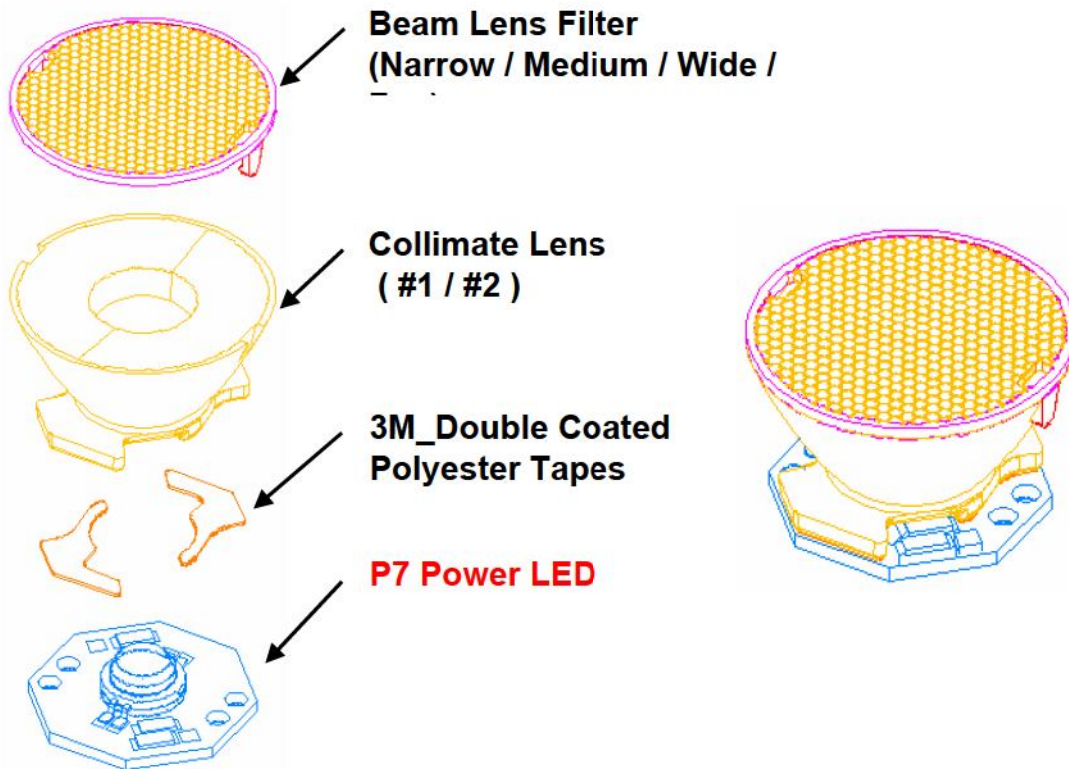
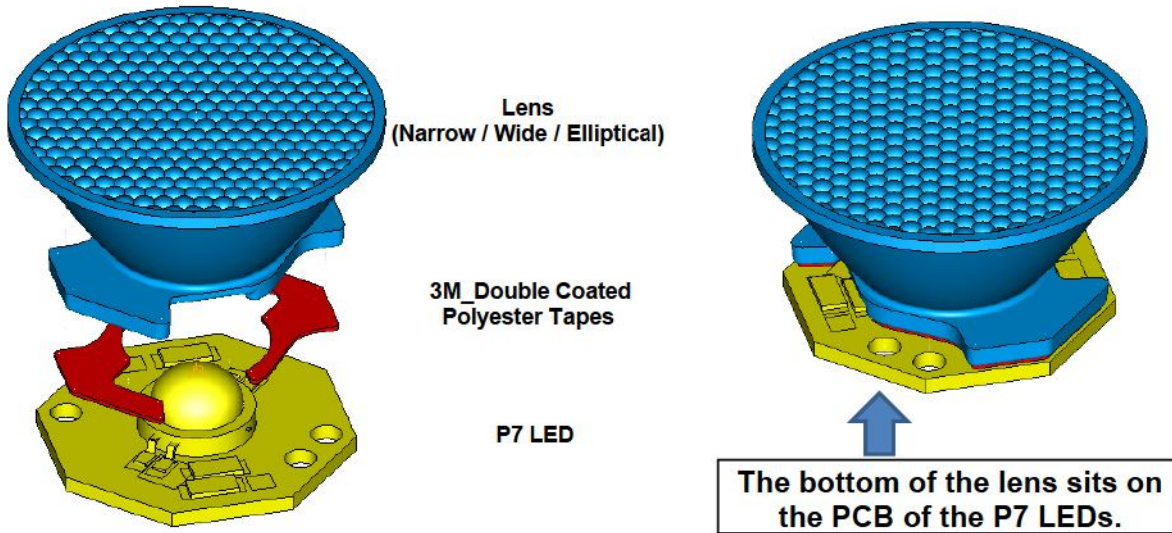
■ Elliptical Lens



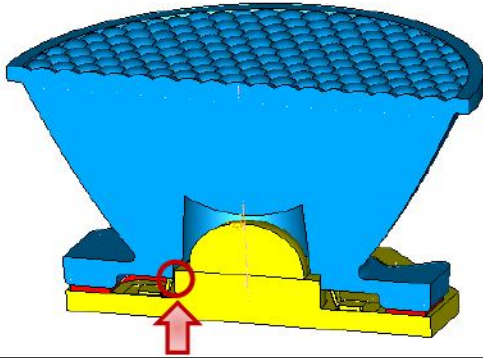
6. Lens Characteristics

Parameter	Symbol	Value	Unit
Collimate Lens	PMMA (Optics)	-	-
Beam Lens Filter	PMMA (Optics)	-	-
Operating Temp.	T _{opr}	-40 ~ +80	°C
Storage Temp.	T _{stg}	-40 ~ +80	°C

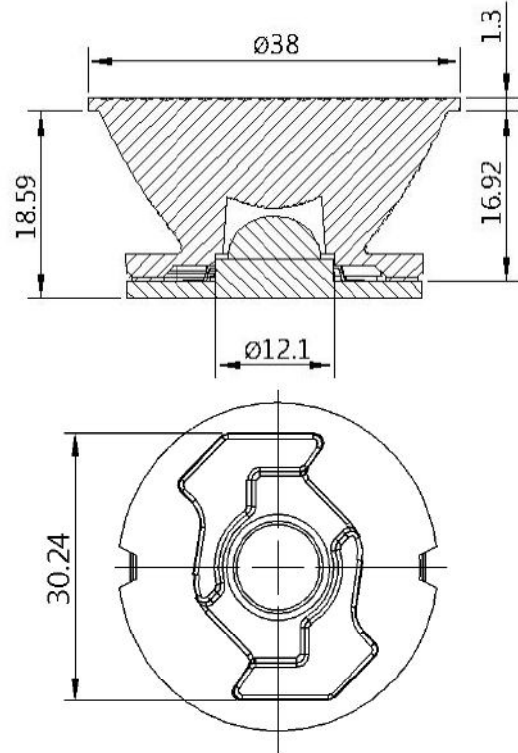
7. View of the Assmby with the Collimate Lens & Beam Lens Filter



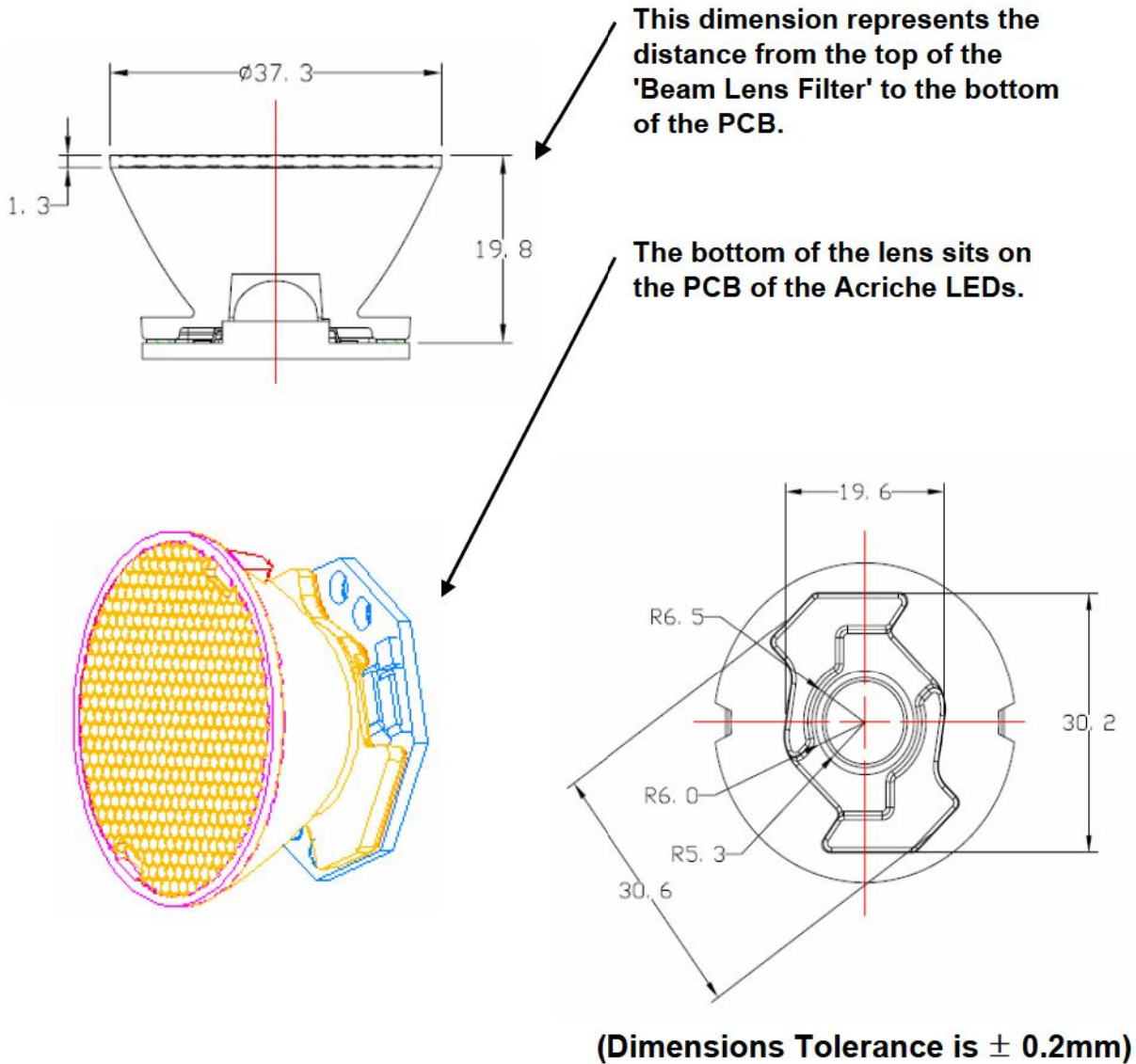
8. Sectional view & Dimensions



The function of this part is to align the Lens with LED chip



9. LED+Collimate Lens+Beam Lens Filter Assembly View & Dimensions



10. Handling of the Collimate Lens

- Do not store in dusty place.
- Do not expose under corrosive environment.
- Do not touch the lens surface with bare-hand.
- Do not dip in or apply to aggressive chemicals, and also.
- DO not wipe with cloth or paper soaked with aggressive chemicals.