



## Product Model Number

CKO-CH15-060027-4305

### ✓ Model Number Definitions

**CKO-XXXX-XXXXXX-XXXX**

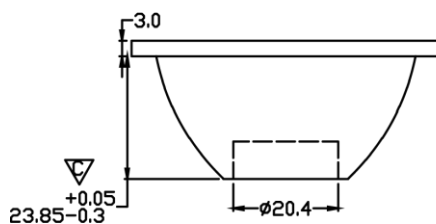
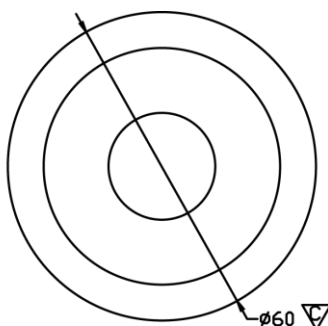


- A. Chun Kuang Optics Corp. Product
- B. Product Type: product abbreviation  
Ex:  
CH→CoB High Intensity  
CC→CoB Compact  
CS→Soft Shading for CoB LED  
HC→Holder for CoB LED

- C. Identity Code
- D. Lens / Fixture Size  
Ex: 075026=Φ75mm / Thickness=26mm (round up)
- C. Serial Numbers

The lens datasheet is applicable for **CREE LED**, that manufactured by Chun Kuang Optics Corp.

### ✓ Dimensions (mm) : Φ60 x 26.85



▽:Critical Dimension



✓ Optical Characteristics – Angle Performances

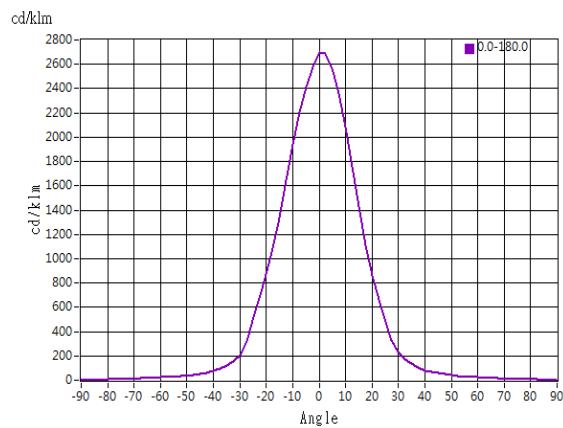
CREE	LED LES (mm)	FWHM (degrees)	Field Angle (degrees)
CXA1304	Φ6	31°	58°
CXA1310	Φ6	31°	62°
CXB1310	Φ6	31°	60°
CXA1507	Φ9	33°	59°
CXB1507	Φ9	34°	63°
CXA1510	Φ9	34°	60°
CXA1512	Φ9	33°	60°
CXB1512	Φ9	34°	60°
CMA1516	Φ9	34°	64°
CXA1520	Φ9	33°	59°
CXB1520	Φ9	34°	63°
CMT1407	Φ9.8	34°	63°
CXA1816	Φ12	36°	63°
CXB1816	Φ12	37°	64°
CXA1820	Φ12	38°	65°
CXB1820	Φ12	38°	64°
CMA1825	Φ12	38°	68°
CXA1850	Φ12	38°	65°
CXA1830	Φ14	38°	67°
CXB1830	Φ14	39°	68°
CMA1840	Φ14	39°	70°
CMT1922	Φ14.5	39°	71°
CMT1925	Φ14.5	40°	71°
CMT1930	Φ14.5	40°	71°
CMT1945	Φ14.5	40°	72°
CXA2520	Φ19	44°	77°
CXA2530	Φ19	43°	75°
CXB2530	Φ19	46°	83°
CXA2540	Φ19	45°	79°
CXB2540	Φ19	47°	82°
CMA2550	Φ19	49°	83°



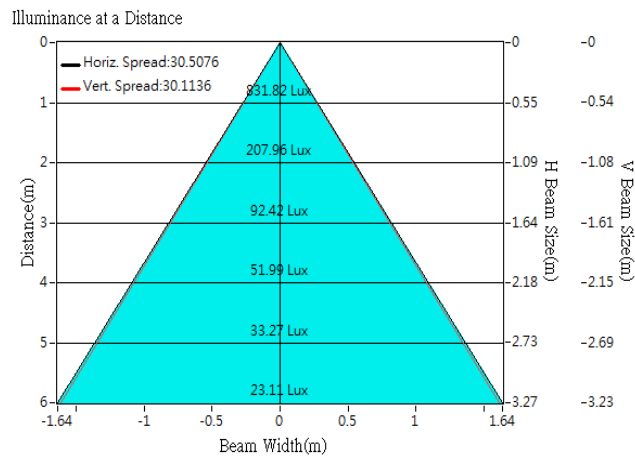
## Optical Characteristics

Model Number	CKO-CH15-060027-4305		<p>"H" definition</p>
LED	<b>CREE CXA1304</b>		
LES / LED Size	Φ 6 mm		
FWHM (D50)	31°		
Field Angle (D10)	58°		
H (distance)	3.65mm		
Dimension	Φ =60 mm, Thickness=26.85 mm		
Luminous Flux	308 lm	Measured @ 3.1 W	
Material	PC / UL94V2		

## cd/klm



## Illuminance At Distances

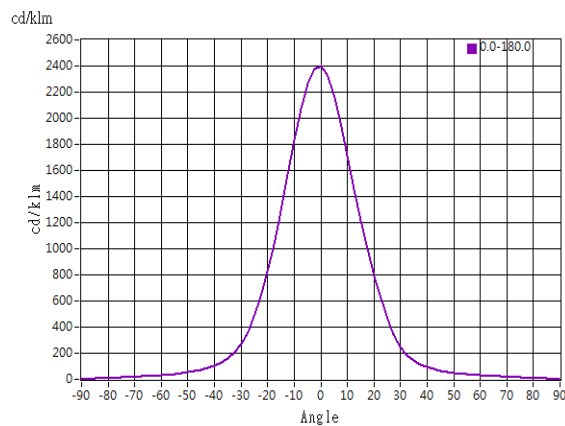




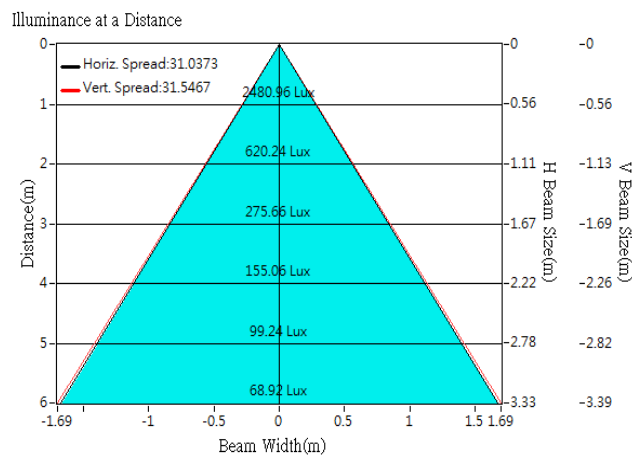
## Optical Characteristics

Model Number	CKO-CH15-060027-4305		<p>"H" definition</p>
LED	<b>CREE CXA1310</b>		
LES / LED Size	Φ 6 mm		
FWHM (D50)	31°		
Field Angle (D10)	62°		
H (distance)	3.65mm		
Dimension	Φ =60 mm, Thickness=26.85 mm		
Luminous Flux	1033 lm	Measured @ 12.7 W	
Material	PC / UL94V2		

## cd/klm



## Illuminance At Distances

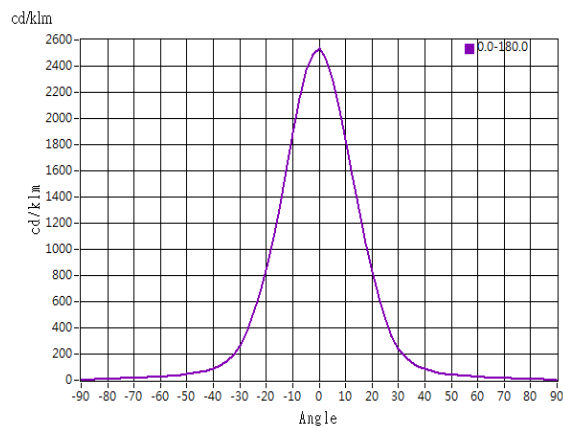




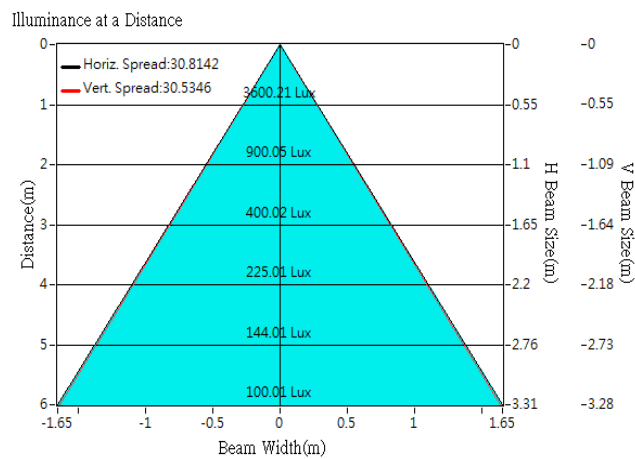
## Optical Characteristics

Model Number	CKO-CH15-060027-4305		<p>"H" definition</p>
LED	<b>CREE CXB1310</b>		
LES / LED Size	Φ 6 mm		
FWHM (D50)	31°		
Field Angle (D10)	60°		
H (distance)	3.65mm		
Dimension	Φ =60 mm, Thickness=26.85 mm		
Luminous Flux	1422 lm	Measured @ 11.9 W	
Material	PC / UL94V2		

## cd/klm



## Illuminance At Distances

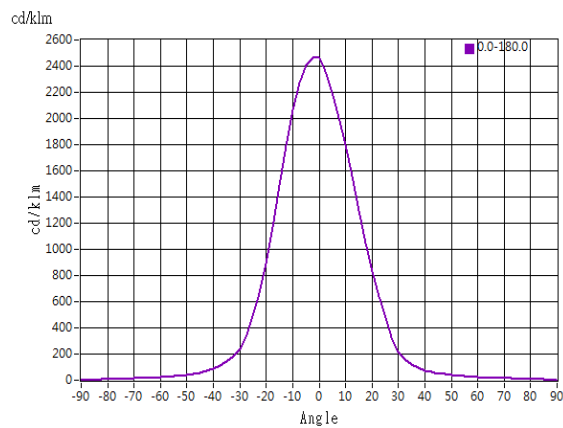




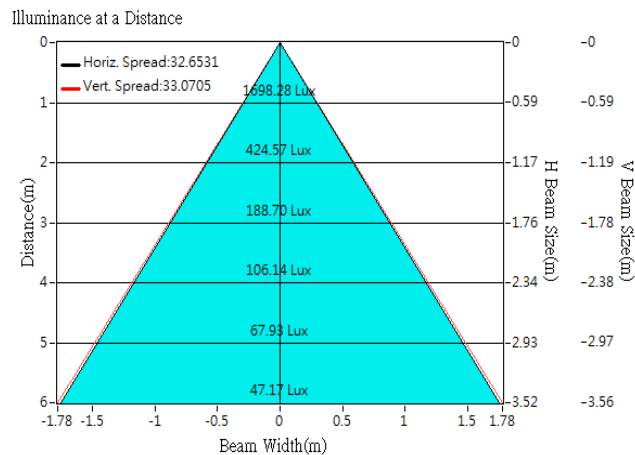
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p>
LED	<b>CREE CXA1507</b>	
LES / LED Size	Φ 9 mm	
FWHM (D50)	33°	
Field Angle (D10)	59°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	689 lm	
Material	PC / UL94V2	

## cd/klm



## Illuminance At Distances

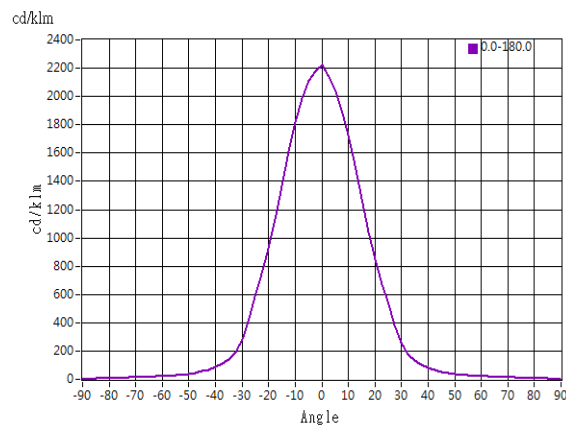




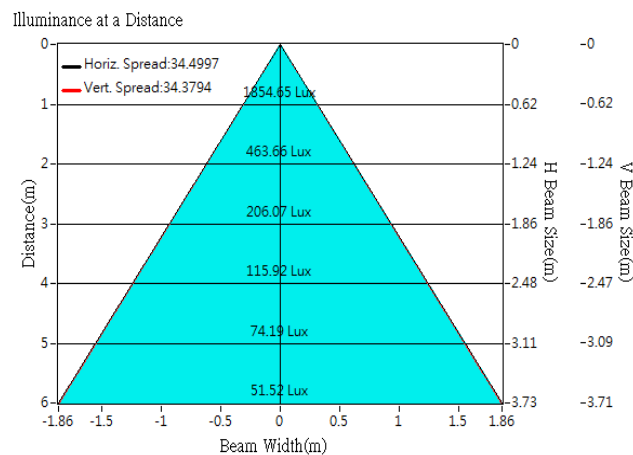
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p>
LED	<b>CREE CXB1507</b>	
LES / LED Size	Φ 9 mm	
FWHM (D50)	34°	
Field Angle (D10)	63°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	835 lm	
Material	PC / UL94V2	

## cd/klm

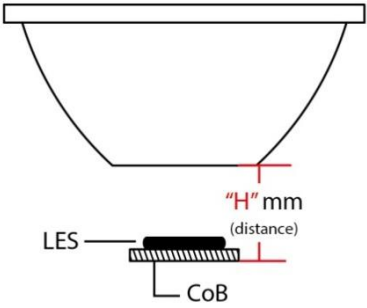


## Illuminance At Distances

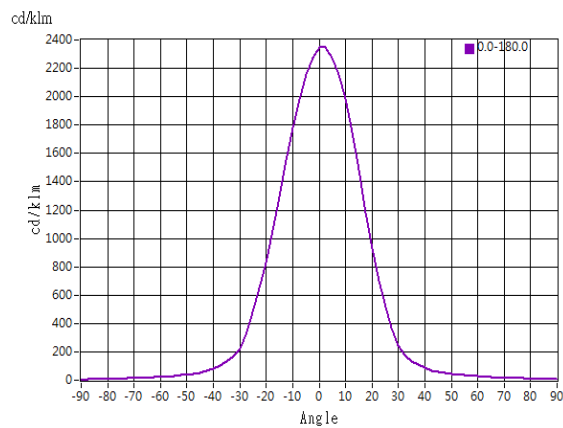




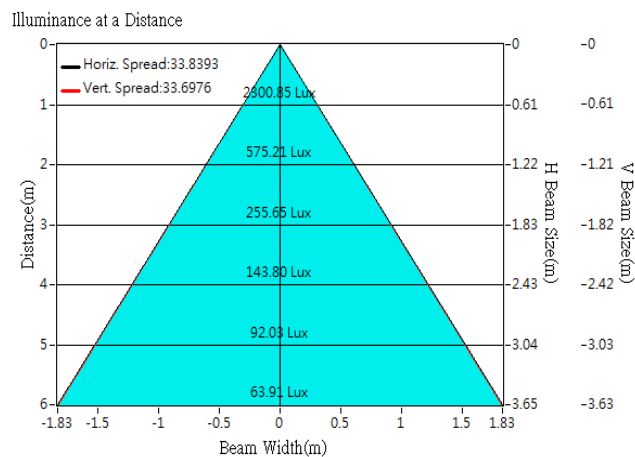
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p> 
LED	<b>CREE CXA1510</b>	
LES / LED Size	Φ 9 mm	
FWHM (D50)	34°	
Field Angle (D10)	60°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	979 lm      Measured @ 9.1 W	
Material	PC / UL94V2	

## cd/klm



## Illuminance At Distances

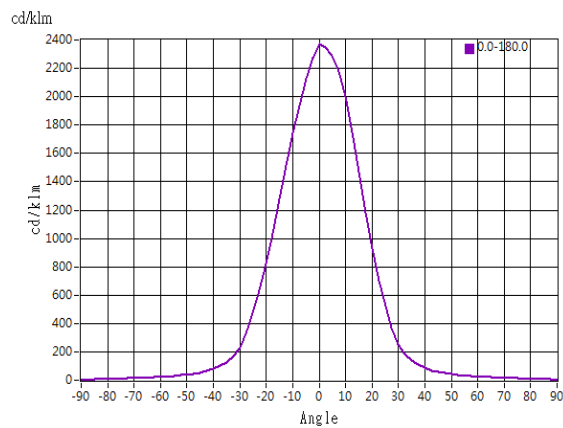




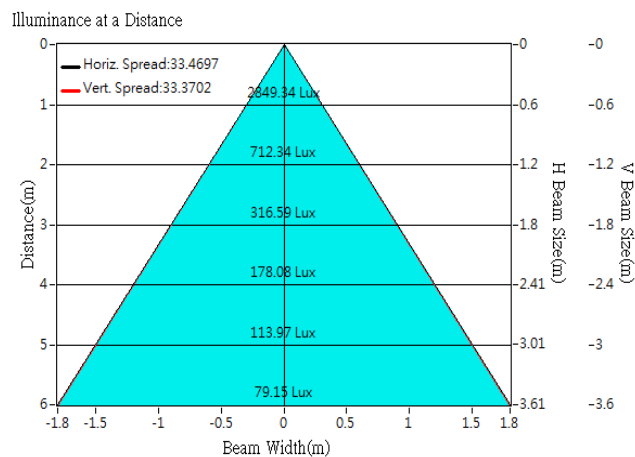
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p> <p>LES CoB</p>
LED	<b>CREE CXA1512</b>	
LES / LED Size	Φ 9 mm	
FWHM (D50)	33°	
Field Angle (D10)	60°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	1204lm	
Material	PC / UL94V2	

## cd/klm



## Illuminance At Distances

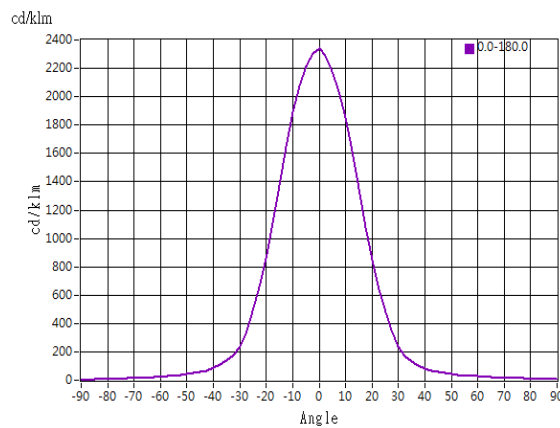




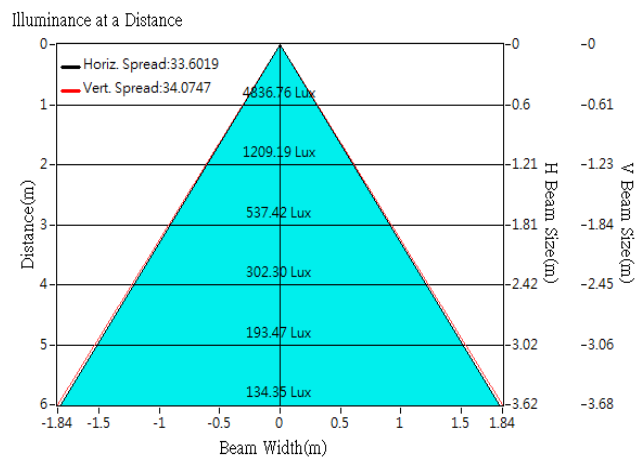
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p>
LED	<b>CREE CXB1512</b>	
LES / LED Size	Φ 9 mm	
FWHM (D50)	34°	
Field Angle (D10)	60°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	2068lm	
Material	PC / UL94V2	

## cd/klm



## Illuminance At Distances

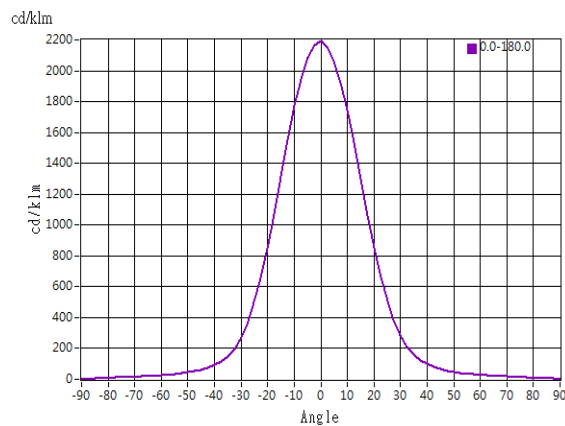




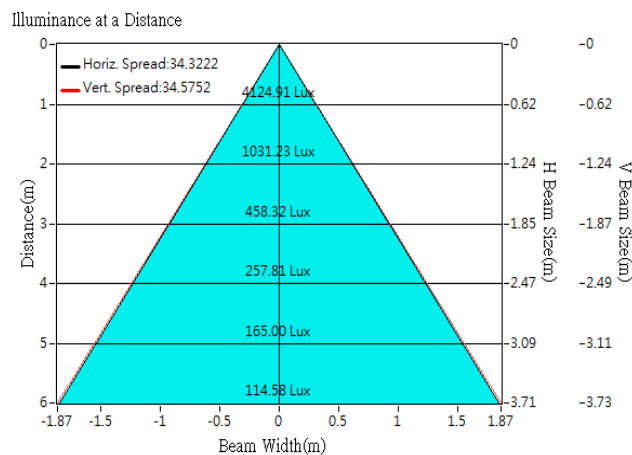
## Optical Characteristics

Model Number	CKO-CH15-060027-4305		<p>"H" definition</p> <p>LES CoB</p>
LED	<b>CREE CMA1516</b>		
LES / LED Size	Φ 9 mm		
FWHM (D50)	34°		
Field Angle (D10)	64°		
H (distance)	3.65mm		
Dimension	Φ =60 mm, Thickness=26.85 mm		
Luminous Flux	1878 lm	Measured @ 15.8 W	
Material	PC / UL94V2		

## cd/klm



## Illuminance At Distances

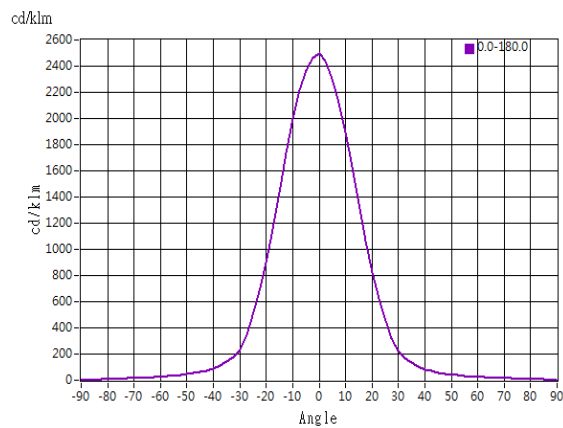




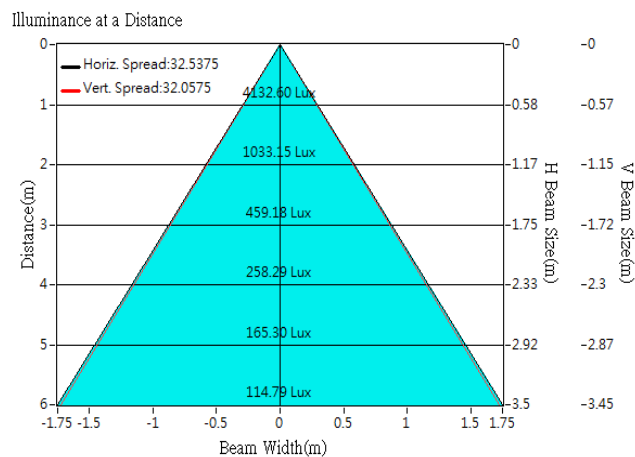
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p>
LED	<b>CREE CXA1520</b>	
LES / LED Size	Φ 9 mm	
FWHM (D50)	33°	
Field Angle (D10)	59°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	1654m	
Material	PC / UL94V2	

## cd/klm



## Illuminance At Distances

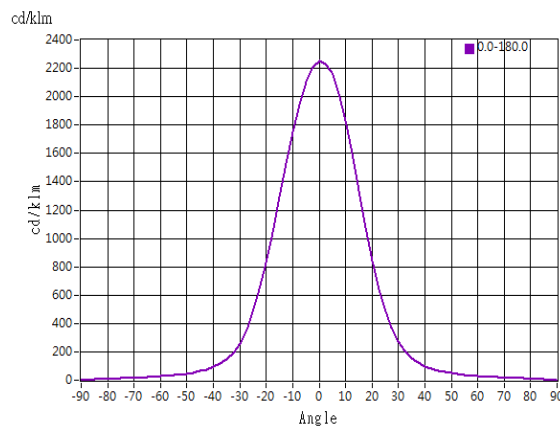




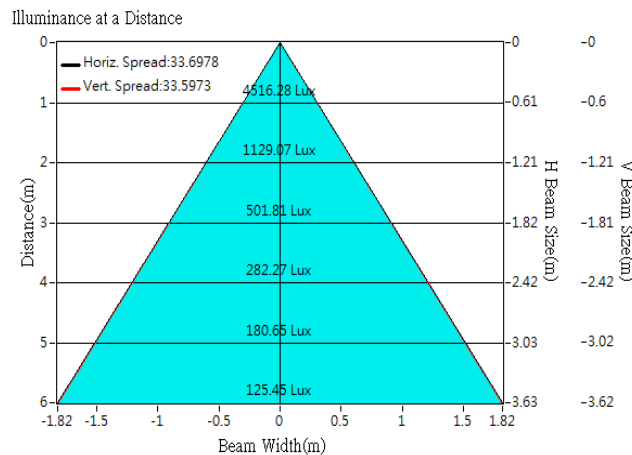
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p> <p>LES CoB</p>
LED	<b>CREE CXB1520</b>	
LES / LED Size	Φ 9 mm	
FWHM (D50)	34°	
Field Angle (D10)	63°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	2007m	
Material	PC / UL94V2	

## cd/klm



## Illuminance At Distances

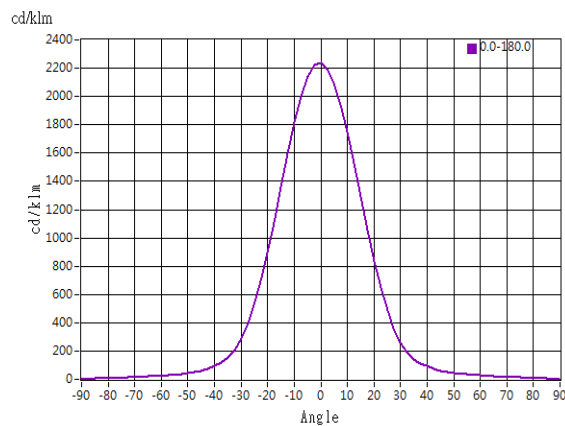




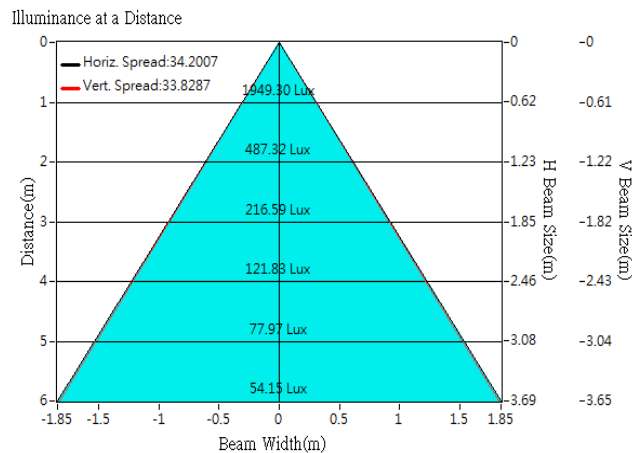
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p>
LED	<b>CREE CMT1407</b>	
LES / LED Size	Φ 9.8 mm	
FWHM (D50)	34°	
Field Angle (D10)	63°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	870 m	
Material	PC / UL94V2	

## cd/klm



## Illuminance At Distances

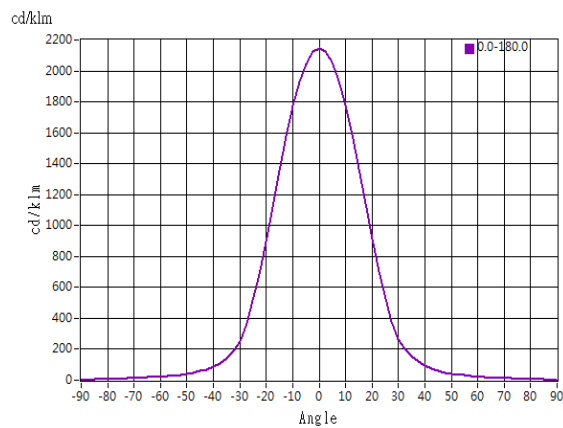




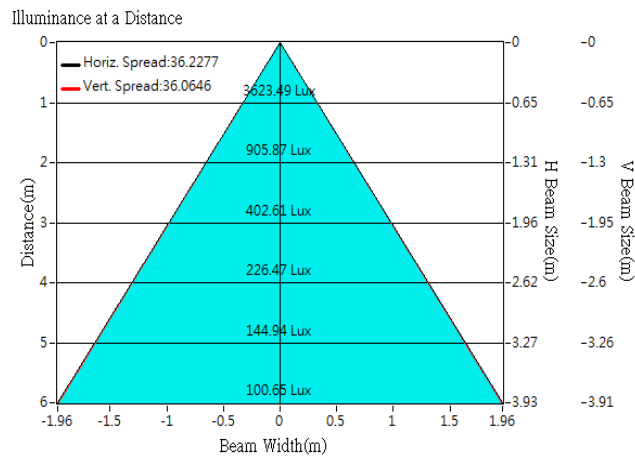
## Optical Characteristics

Model Number	CKO-CH15-060027-4305		<p>"H" definition</p>
LED	<b>CREE CXA1816</b>		
LES / LED Size	Φ 12 mm		
FWHM (D50)	36°		
Field Angle (D10)	63°		
H (distance)	3.65mm		
Dimension	Φ =60 mm, Thickness=26.85 mm		
Luminous Flux	1689 lm	Measured @ 16.8W	
Material	PC / UL94V2		

## cd/klm



## Illuminance At Distances

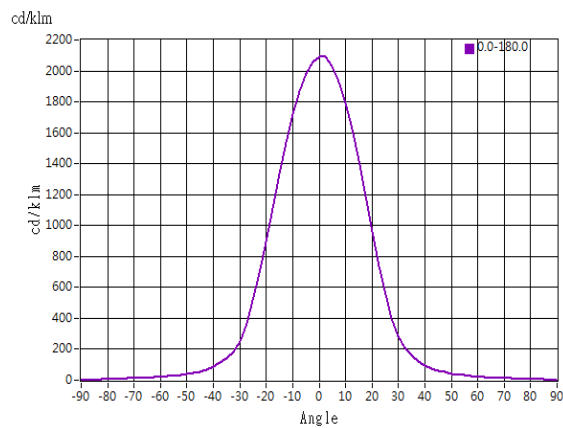




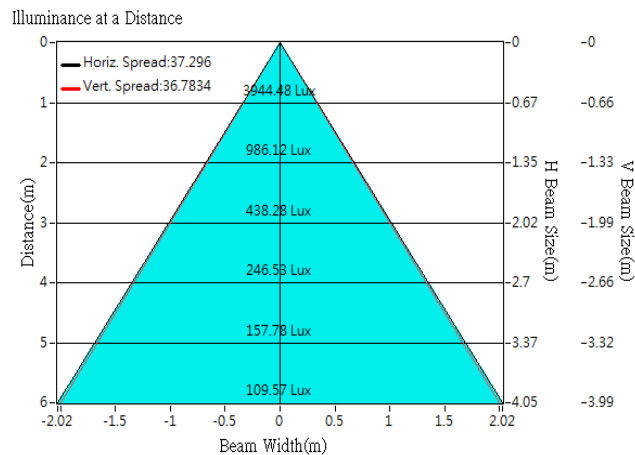
## Optical Characteristics

Model Number	CKO-CH15-060027-4305		<p>"H" definition</p>
LED	<b>CREE CXB1816</b>		
LES / LED Size	Φ 12 mm		
FWHM (D50)	37°		
Field Angle (D10)	64°		
H (distance)	3.65mm		
Dimension	Φ =60 mm, Thickness=26.85 mm		
Luminous Flux	1884 lm	Measured @ 15.6W	
Material	PC / UL94V2		

## cd/klm



## Illuminance At Distances

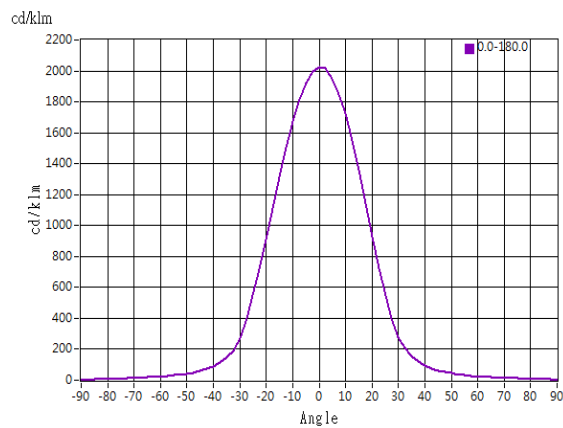




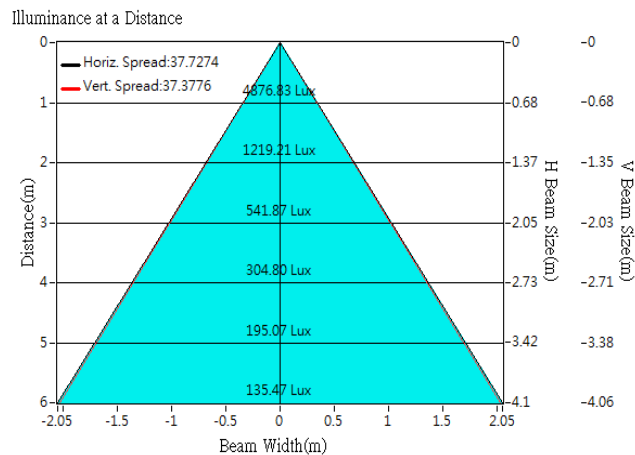
## Optical Characteristics

Model Number	CKO-CH15-060027-4305		<p>"H" definition</p>
LED	<b>CREE CXA1820</b>		
LES / LED Size	Φ 12 mm		
FWHM (D50)	38°		
Field Angle (D10)	65°		
H (distance)	3.65mm		
Dimension	Φ =60 mm, Thickness=26.85 mm		
Luminous Flux	2406 lm	Measured @ 30.9W	
Material	PC / UL94V2		

## cd/klm



## Illuminance At Distances

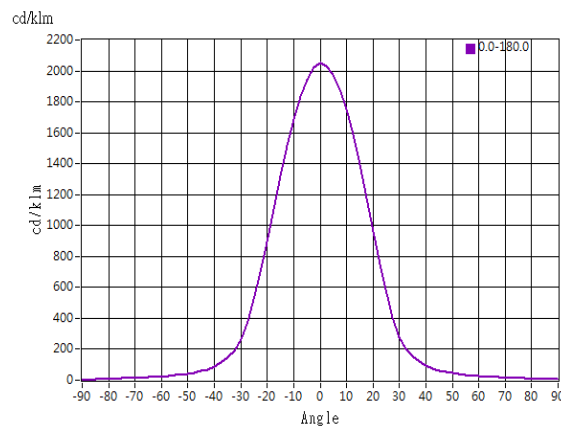




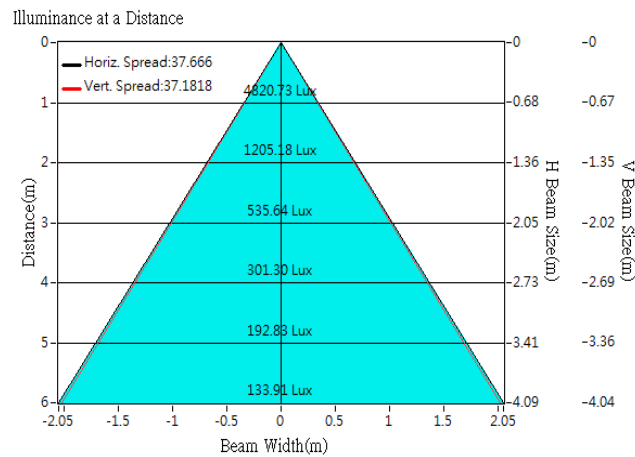
## Optical Characteristics

Model Number	CKO-CH15-060027-4305		<p>"H" definition</p>
LED	<b>CREE CXB1820</b>		
LES / LED Size	Φ 12 mm		
FWHM (D50)	38°		
Field Angle (D10)	64°		
H (distance)	3.65mm		
Dimension	Φ =60 mm, Thickness=26.85 mm		
Luminous Flux	2352 lm	Measured @ 19.6W	
Material	PC / UL94V2		

## cd/klm



## Illuminance At Distances

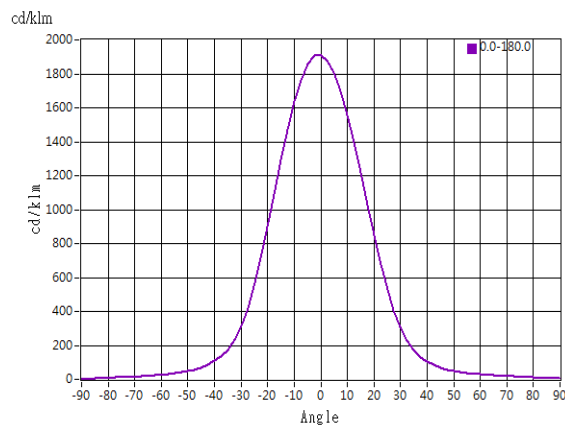




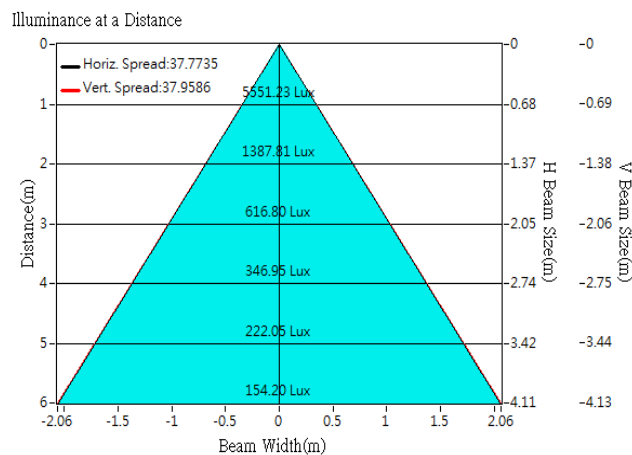
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p>
LED	<b>CREE CMA1825</b>	
LES / LED Size	Φ 12 mm	
FWHM (D50)	38°	
Field Angle (D10)	68°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	2907 lm	
Material	PC / UL94V2	

## cd/klm

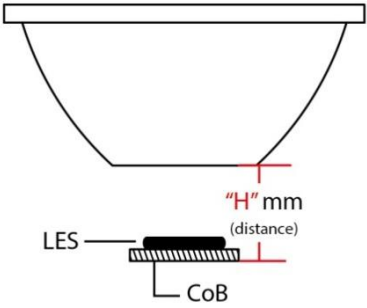


## Illuminance At Distances

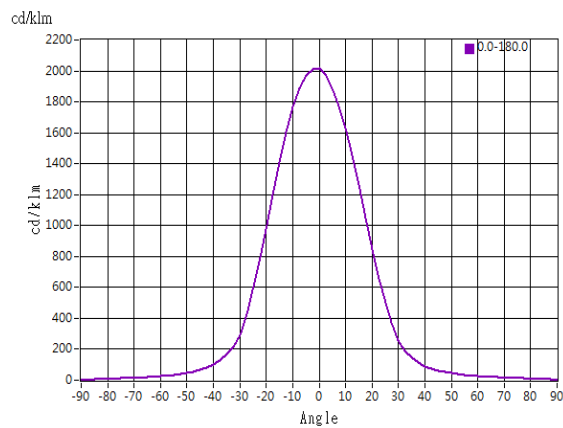




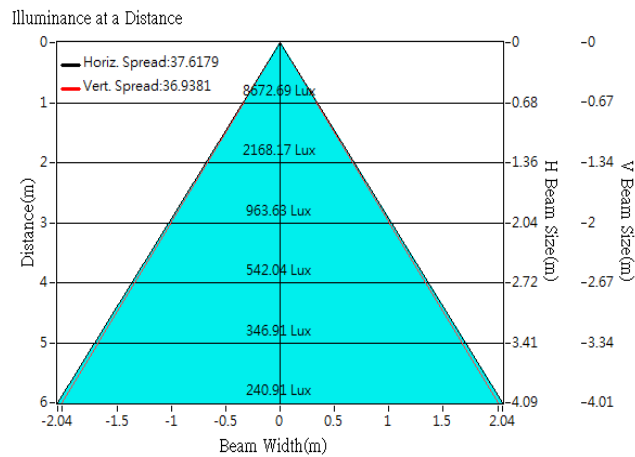
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p> 
LED	<b>CREE CXA1850</b>	
LES / LED Size	Φ 12 mm	
FWHM (D50)	38°	
Field Angle (D10)	65°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	4303 lm Measured @ 48.6W	
Material	PC / UL94V2	

## cd/klm



## Illuminance At Distances

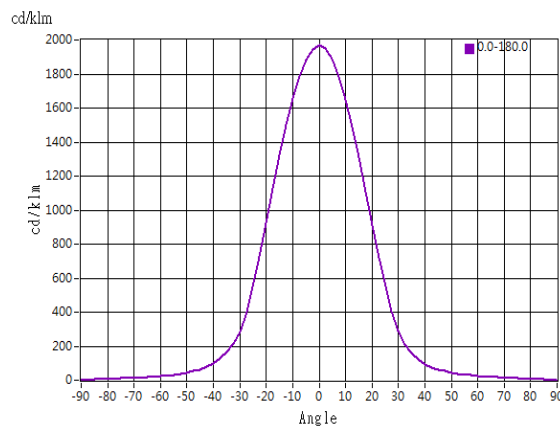




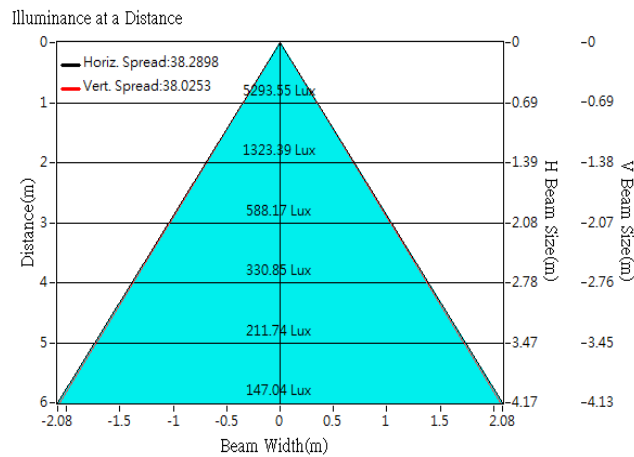
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p> <p>LES CoB</p>	
LED	<b>CREE CXA1830</b>		
LES / LED Size	Φ 14 mm		
FWHM (D50)	38°		
Field Angle (D10)	67°		
H (distance)	3.65mm		
Dimension	Φ =60 mm, Thickness=26.85 mm		
Luminous Flux	2689 lm		Measured @ 28.8 W
Material	PC / UL94V2		

## cd/klm

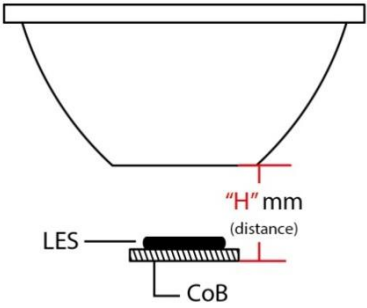


## Illuminance At Distances

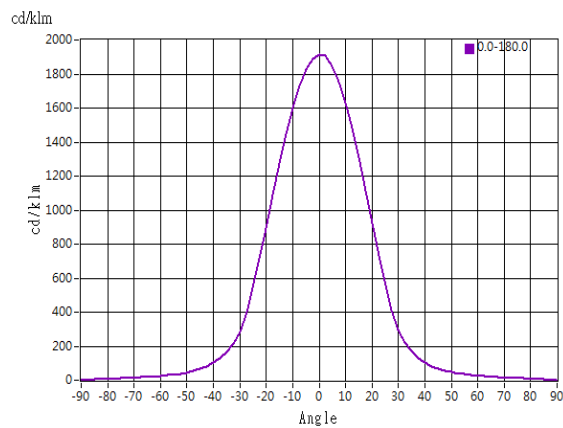




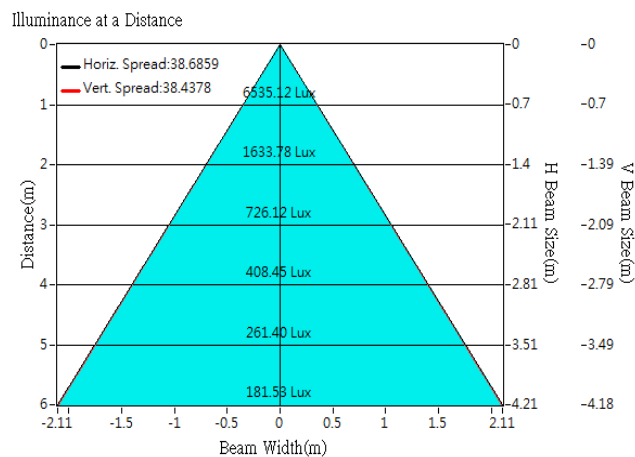
## Optical Characteristics

Model Number	CKO-CH15-060027-4305		<p>"H" definition</p> 
LED	<b>CREE CXB1830</b>		
LES / LED Size	Φ 14 mm		
FWHM (D50)	39°		
Field Angle (D10)	68°		
H (distance)	3.65mm		
Dimension	Φ =60 mm, Thickness=26.85 mm		
Luminous Flux	3410 lm	Measured @ 28.3 W	
Material	PC / UL94V2		

## cd/klm



## Illuminance At Distances

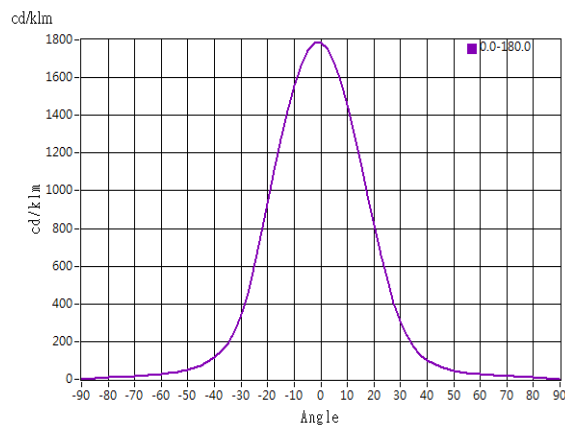




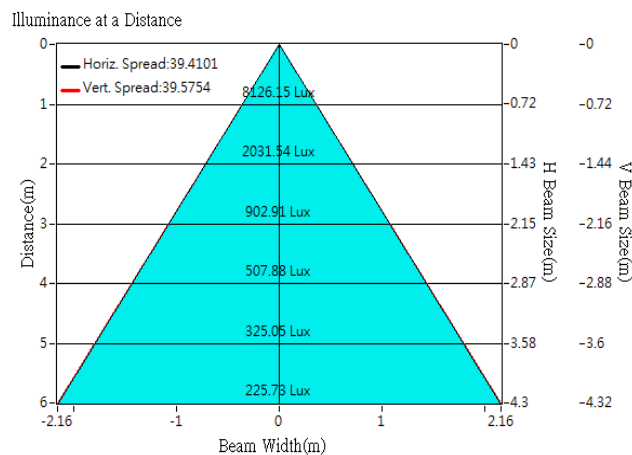
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p> <p>LES CoB</p>
LED	<b>CREE CMA1840</b>	
LES / LED Size	Φ 14 mm	
FWHM (D50)	39°	
Field Angle (D10)	70°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	4557 lm	
Material	PC / UL94V2	

## cd/klm

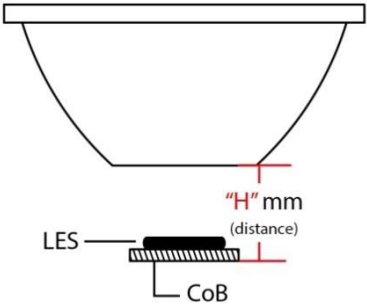


## Illuminance At Distances

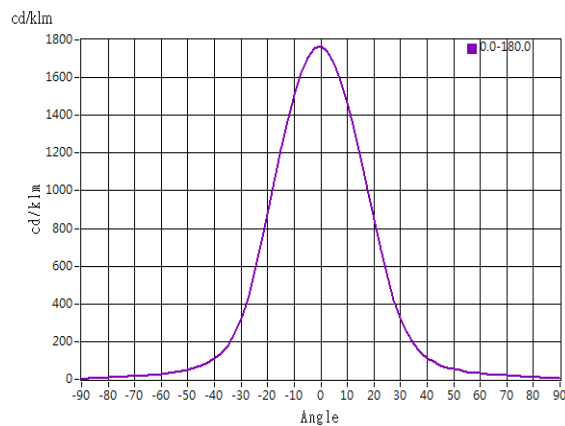




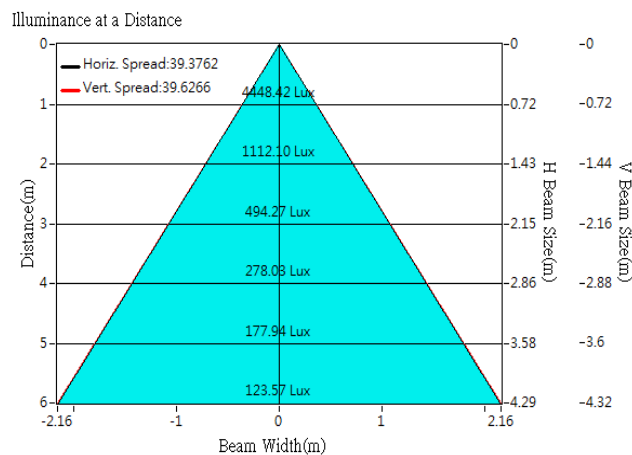
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p> 
LED	<b>CREE CMT1922</b>	
LES / LED Size	Φ 14.5 mm	
FWHM (D50)	39°	
Field Angle (D10)	71°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	2522 lm      Measured @ 22 W	
Material	PC / UL94V2	

## cd/klm



## Illuminance At Distances

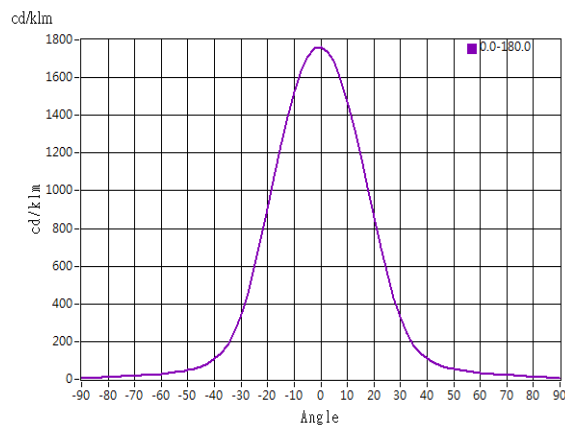




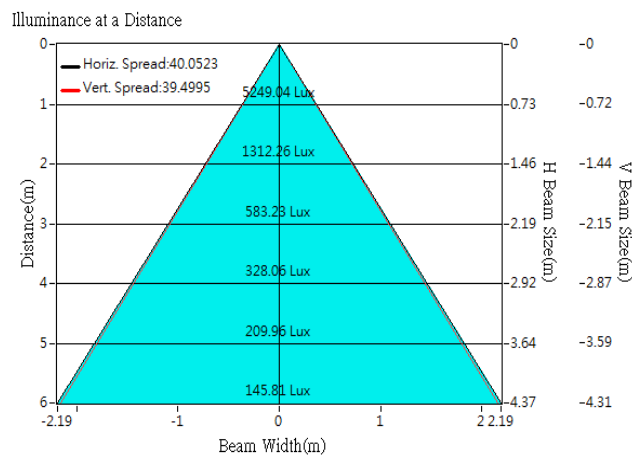
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p>
LED	<b>CREE CMT1925</b>	
LES / LED Size	Φ 14.5 mm	
FWHM (D50)	40°	
Field Angle (D10)	71°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	2982 lm	
Material	PC / UL94V2	

## cd/klm

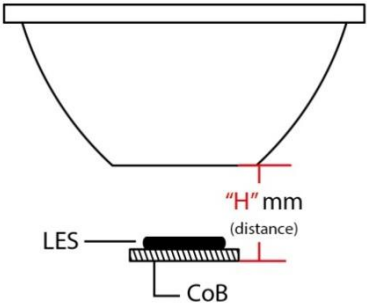


## Illuminance At Distances

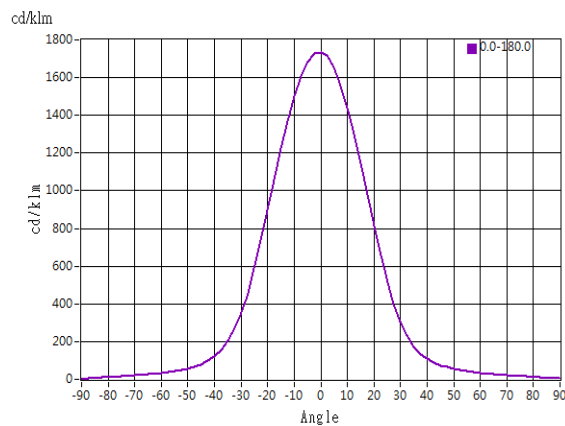




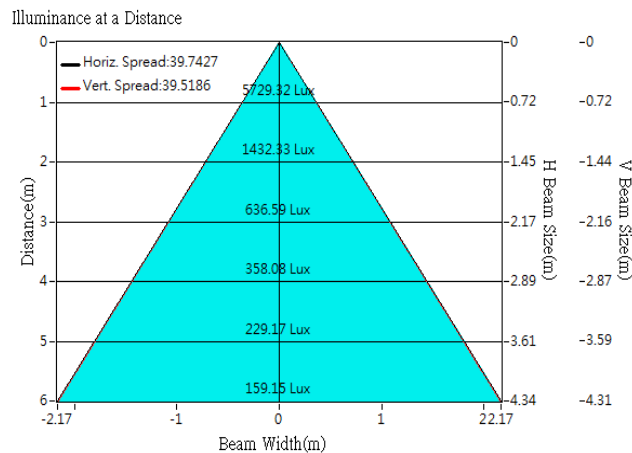
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p> 
LED	<b>CREE CMT1930</b>	
LES / LED Size	Φ 14.5 mm	
FWHM (D50)	40°	
Field Angle (D10)	71°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	3309 lm      Measured @ 29.1 W	
Material	PC / UL94V2	

## cd/klm

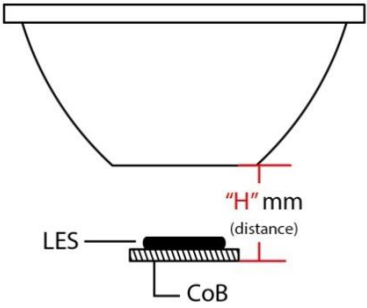


## Illuminance At Distances

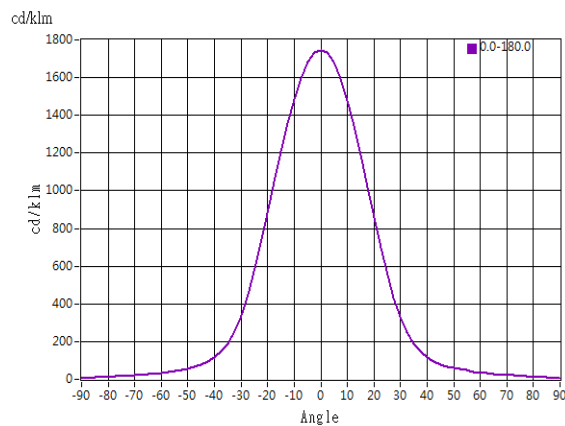




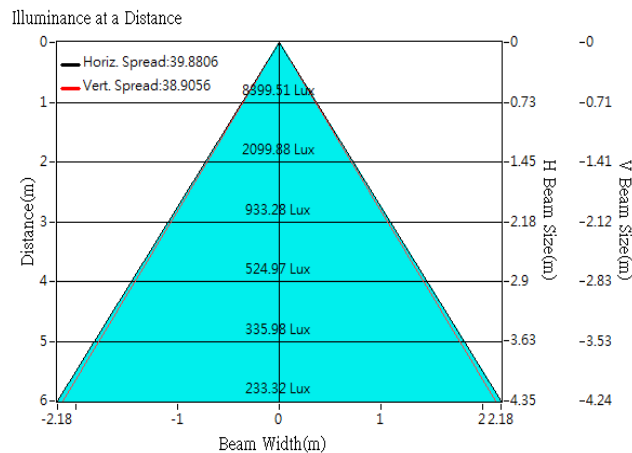
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p> 
LED	<b>CREE CMT1945</b>	
LES / LED Size	Φ 14.5 mm	
FWHM (D50)	40°	
Field Angle (D10)	72°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	4815 lm      Measured @ 44.1 W	
Material	PC / UL94V2	

## cd/klm



## Illuminance At Distances

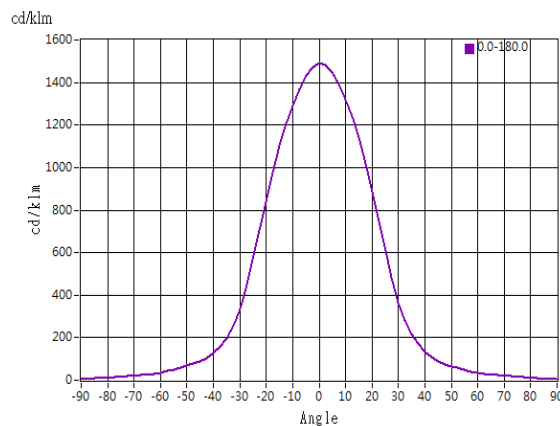




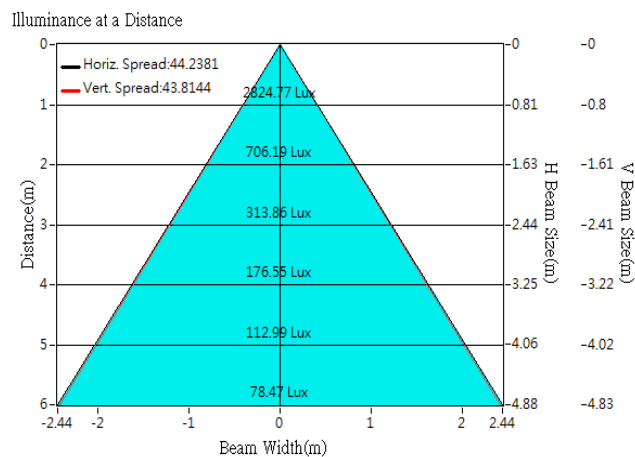
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p> <p>LES CoB</p>
LED	<b>CREE CXA2520</b>	
LES / LED Size	Φ 19 mm	
FWHM (D50)	44°	
Field Angle (D10)	77°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	1894 lm	
Material	PC / UL94V2	

## cd/klm



## Illuminance At Distances

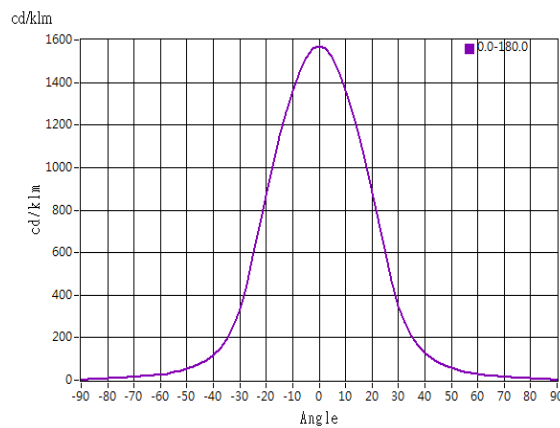




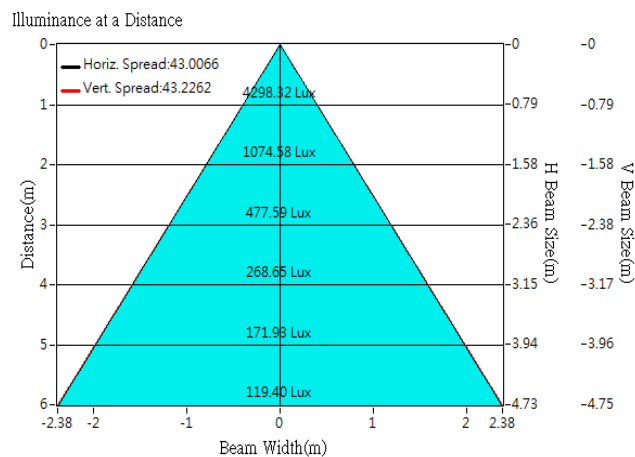
## Optical Characteristics

Model Number	CKO-CH15-060027-4305		<p>"H" definition</p>
LED	<b>CREE CXA2530</b>		
LES / LED Size	Φ 19 mm		
FWHM (D50)	43°		
Field Angle (D10)	75°		
H (distance)	3.65mm		
Dimension	Φ =60 mm, Thickness=26.85 mm		
Luminous Flux	2733 lm	Measured @ 29.7 W	
Material	PC / UL94V2		

## cd/klm



## Illuminance At Distances

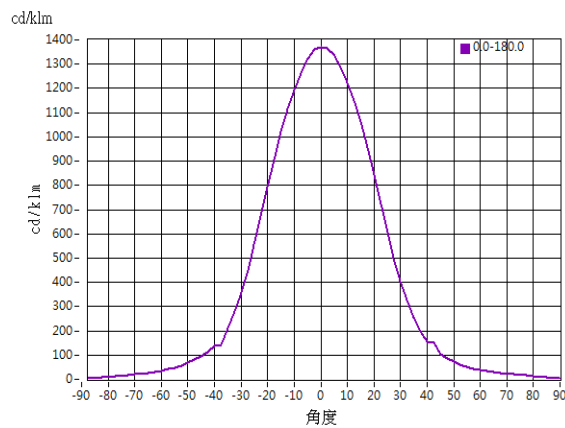




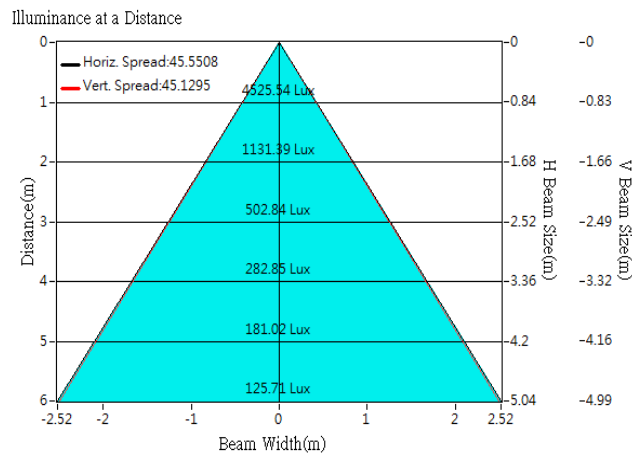
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p>
LED	<b>CREE CXB2530</b>	
LES / LED Size	Φ 19 mm	
FWHM (D50)	46°	
Field Angle (D10)	83°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	3303 lm      Measured @ 27.9 W	
Material	PC / UL94V2	

## cd/klm



## Illuminance At Distances

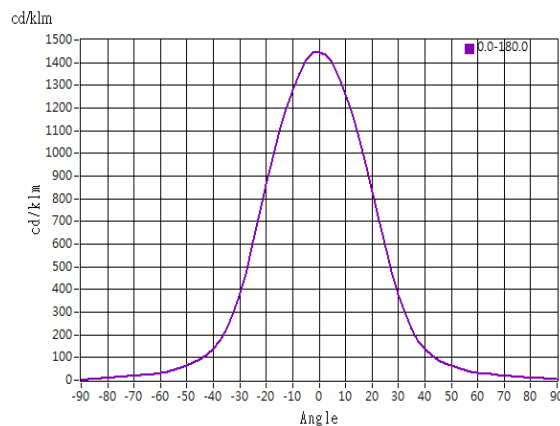




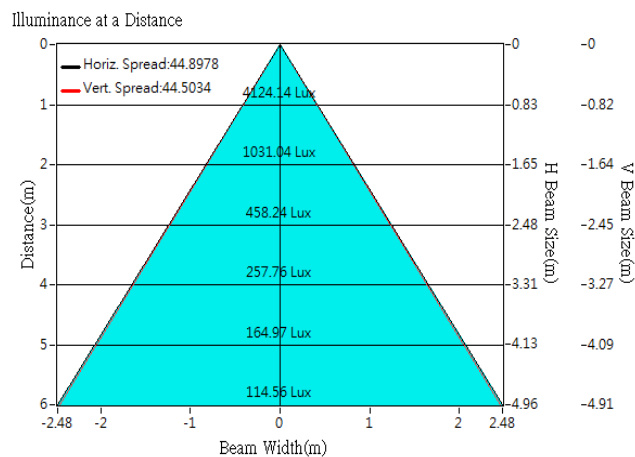
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p> <p>LES CoB</p>
LED	<b>CREE CXA2540</b>	
LES / LED Size	Φ 19 mm	
FWHM (D50)	45°	
Field Angle (D10)	79°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	2858 lm	
Material	PC / UL94V2	

## cd/klm



## Illuminance At Distances

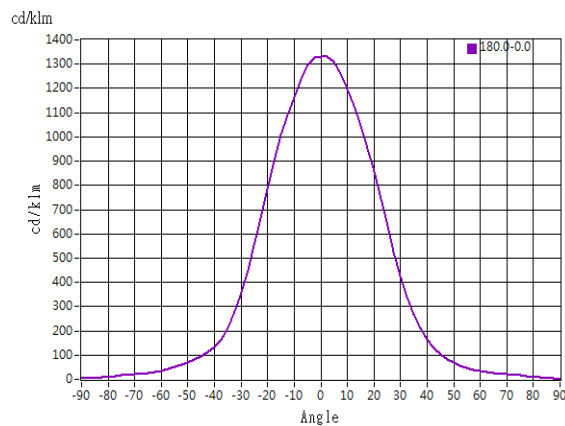




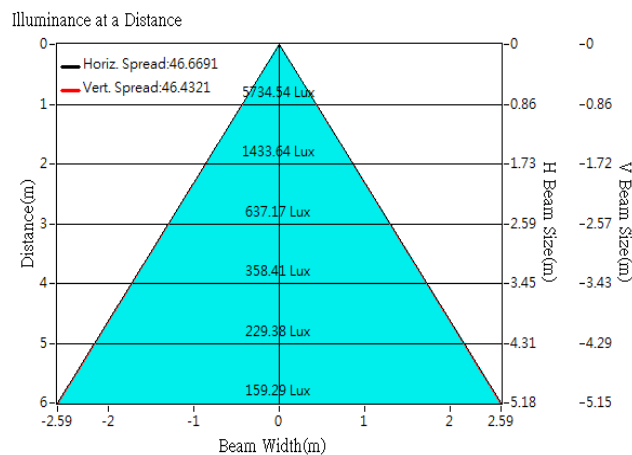
## Optical Characteristics

Model Number	CKO-CH15-060027-4305		<p>"H" definition</p>
LED	<b>CREE CXB2540</b>		
LES / LED Size	Φ 19 mm		
FWHM (D50)	47°		
Field Angle (D10)	82°		
H (distance)	3.65mm		
Dimension	Φ =60 mm, Thickness=26.85 mm		
Luminous Flux	4310 lm	Measured @ 38 W	
Material	PC / UL94V2		

## cd/klm



## Illuminance At Distances

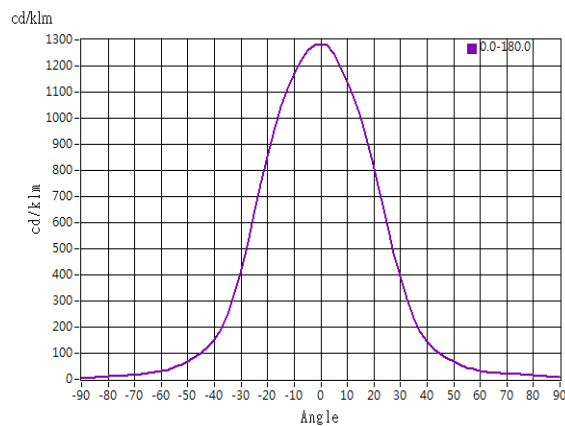




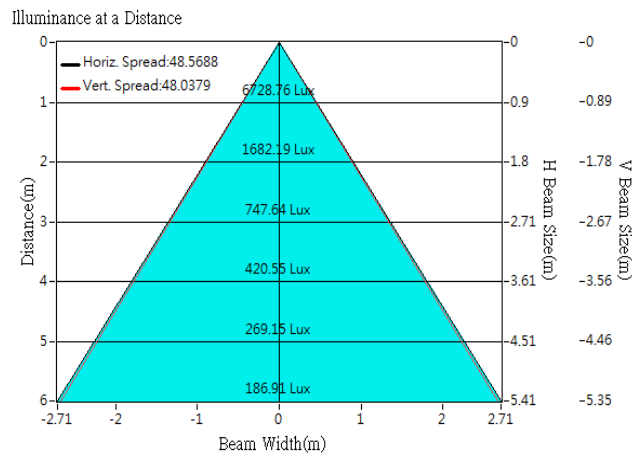
## Optical Characteristics

Model Number	CKO-CH15-060027-4305	<p>"H" definition</p>
LED	<b>CREE CMA2550</b>	
LES / LED Size	Φ 19 mm	
FWHM (D50)	49°	
Field Angle (D10)	83°	
H (distance)	3.65mm	
Dimension	Φ =60 mm, Thickness=26.85 mm	
Luminous Flux	5250 lm	
Material	PC / UL94V2	

## cd/klm

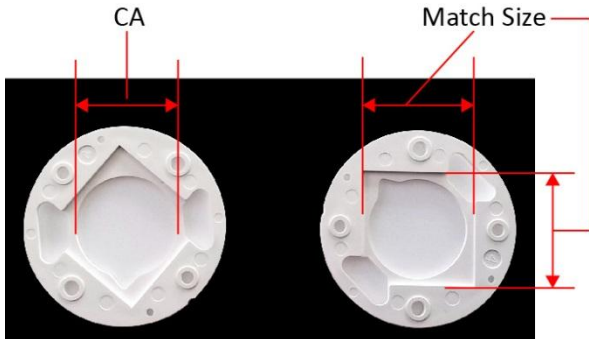


## Illuminance At Distances





## Lens Accessories - CoB Holder



Example of LES Area & LED Size Dimension Locations

Product Model	Match Size (mm)	CA (mm)	Material	Applicability
CKO-HC13-131307-6411	13.6 x 13.6	Φ 7.8	PBT	CREE CXA 13XX
CKO-HC13-161610-6412	16.1 x 16.1	Φ 10.8	PBT	CREE CXA 15XX
CKO-HC13-181816-6413	18.1 x 18.1	Φ 16.4	PBT	CREE CXA 18XX
CKO-HC13-242421-6414	24.1 x 24.1	Φ 21.3	PBT	CREE CXA 25XX
CKO-HC13-272725-6415	27.6 x 27.6	Φ 25.3	PBT	CREE CXA 30XX