



Product Model Number

CKO-CS17-045021-1307

✓ Model Number Definitions

CKO-XXXX-XXXXXX-XXXX

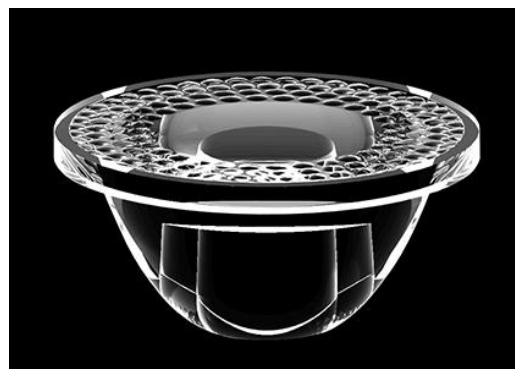
(A)

(B)

(C)

(D)

(E)

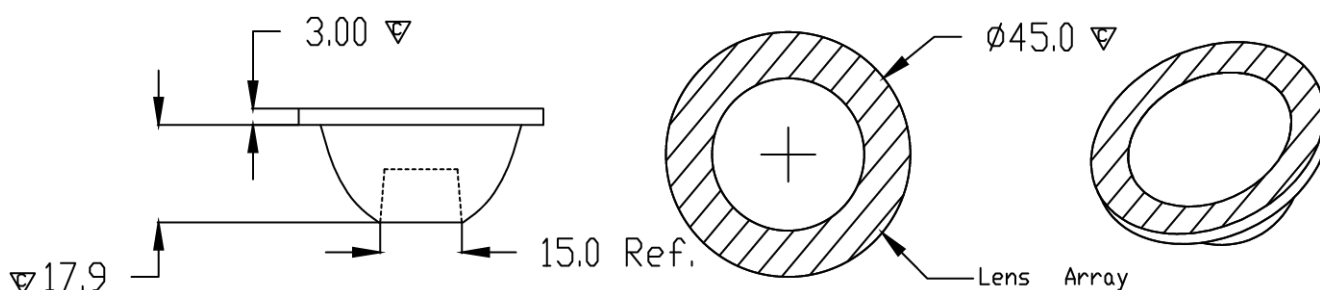


- A. Chun Kuang Optics Corp. Product
- B. Product Type: product abbreviation
Ex:
CH→CoB High Intensity
CC→CoB Compact
CS→Soft Shading for CoB LED
HC→Holder for CoB LED

- 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) : Φ45 x 20.9



▽:Critical Dimension



✓ **Optical Characteristics – Angle Performances**

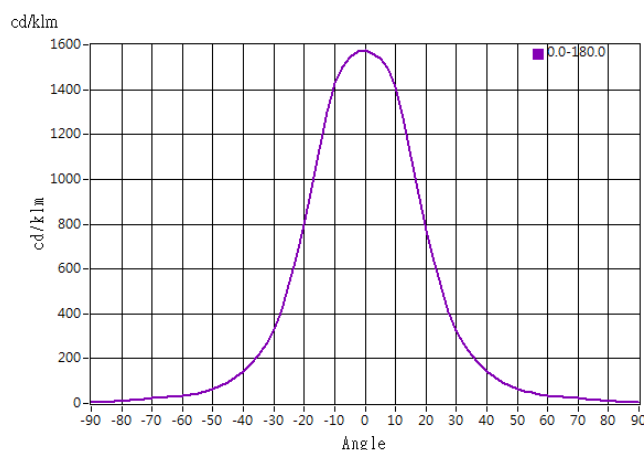
CREE	LED LES (mm)	FWHM (degrees)	Field Angle (degrees)
CMA1303	Φ4.5	40°	78°
CXA1304	Φ6	40°	78°
CXB1304	Φ6	40°	80°
CMA1306	Φ6	40°	78°
CXB1310	Φ6	39°	77°
CXA1507	Φ9	42°	82°
CXB1507	Φ9	42°	82°
CXA1510	Φ9	43°	82°
CXA1512	Φ9	41°	80°
CXB1512	Φ9	43°	82°
CMA1516	Φ9	44°	83°
CXB1520	Φ9	43°	83°
CMT1407	Φ9.8	43°	83°
CMT1412	Φ9.8	43°	84°
CMT1420	Φ9.8	44°	84°
CXA1816	Φ12	48°	89°
CXB1816	Φ12	48°	87°
CXA1820	Φ12	49°	88°
CXB1820	Φ12	49°	90°
CMA1825	Φ12	49°	90°



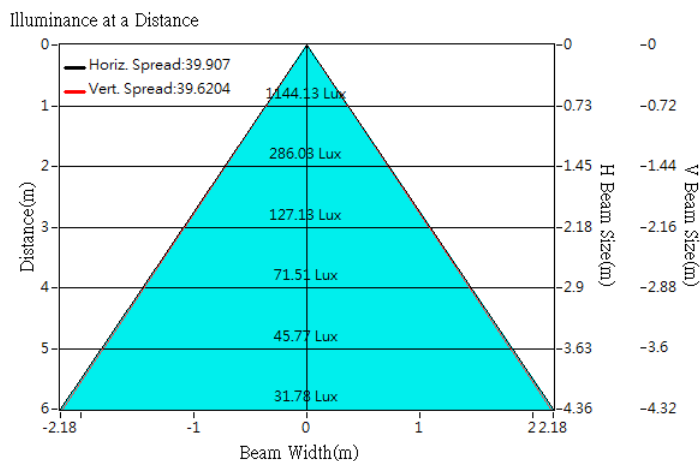
Optical Characteristics

Model Number		CKO-CS17-045021-1307		"H" definition
LED	CMA1303			
LES / LED Size	Φ 4.5 mm			
FWHM (D50)	40°			
Field Angle (D10)	78°			
H (distance)	2.5mm			
Dimension	Φ =45 mm, Thickness=20.9 mm			
Luminous Flux	725 lm	Measured @ 6.7 W		
Material	PC / UL94V2			

cd/klm



Illuminance At Distances

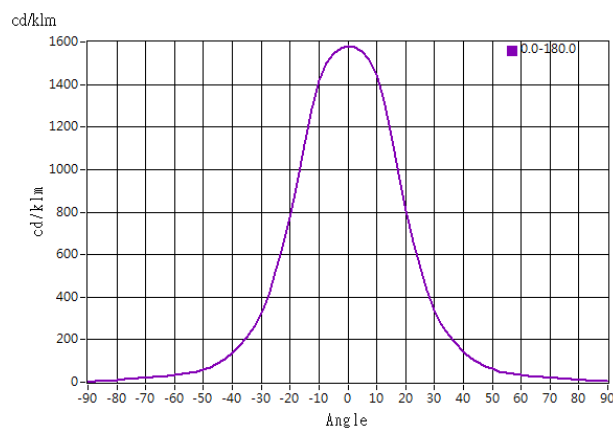




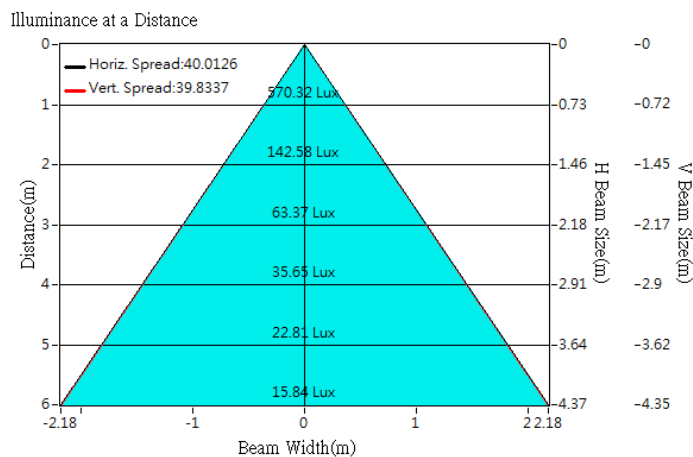
Optical Characteristics

Model Number	CKO-CS17-045021-1307		"H" definition
LED	CXA1304		
LES / LED Size	Φ 6 mm		
FWHM (D50)	40°		
Field Angle (D10)	78°		
H (distance)	2.5mm		
Dimension	Φ =45 mm, Thickness=20.9 mm		
Luminous Flux	361 lm	Measured @ 3.7 W	
Material	PC / UL94V2		

cd/klm



Illuminance At Distances

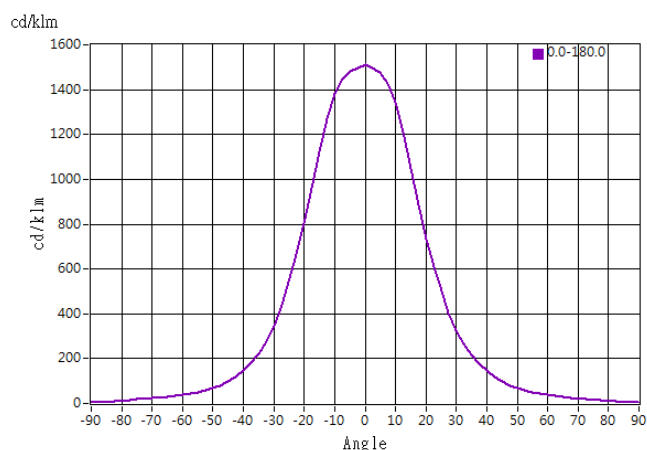




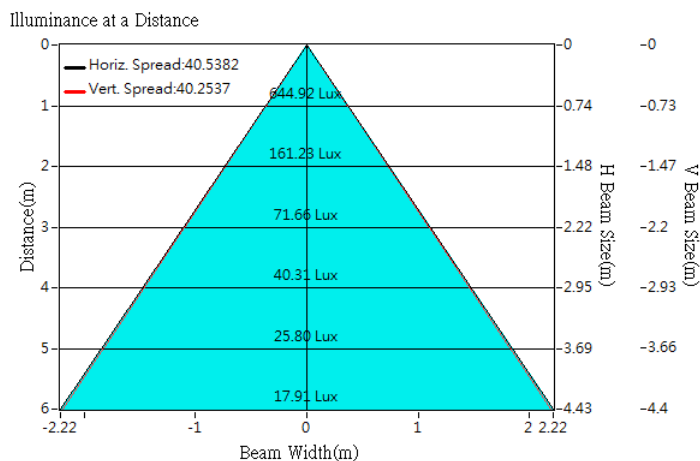
Optical Characteristics

Model Number	CKO-CS17-045021-1307		“H” definition 
LED	CXB1304		
LES / LED Size	Φ 6 mm		
FWHM (D50)	40°		
Field Angle (D10)	80°		
H (distance)	2.5mm		
Dimension	Φ =45 mm, Thickness=20.9 mm		
Luminous Flux	426 lm	Measured @ 3.4 W	
Material	PC / UL94V2		

cd/klm



Illuminance At Distances

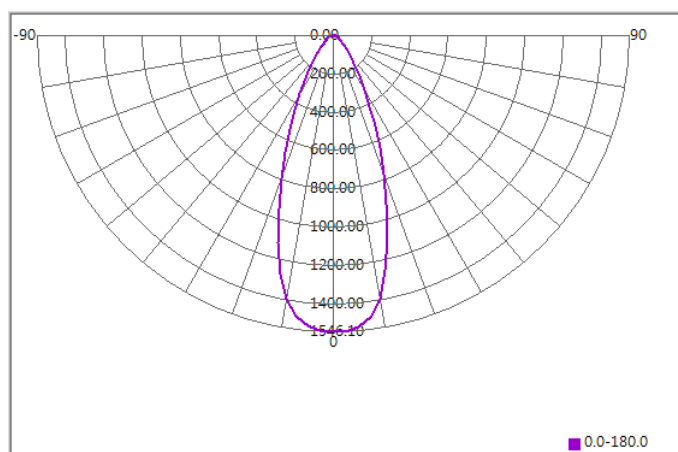




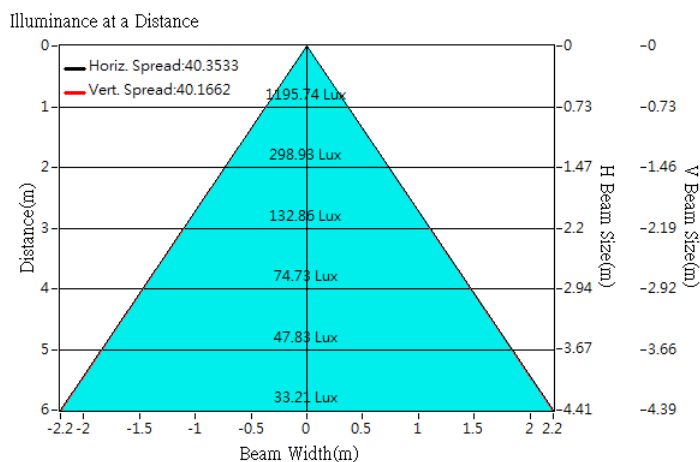
Optical Characteristics

Model Number		CKO-CS17-045021-1307		"H" definition
LED	CMA1306			
LES / LED Size	Φ 6 mm			
FWHM (D50)	40°			
Field Angle (D10)	78°			
H (distance)	2.5mm			
Dimension	Φ =45 mm, Thickness=20.9 mm			
Luminous Flux	773 lm	Measured @ 6.1 W		
Material	PC / UL94V2			

cd/klm



Illuminance At Distances

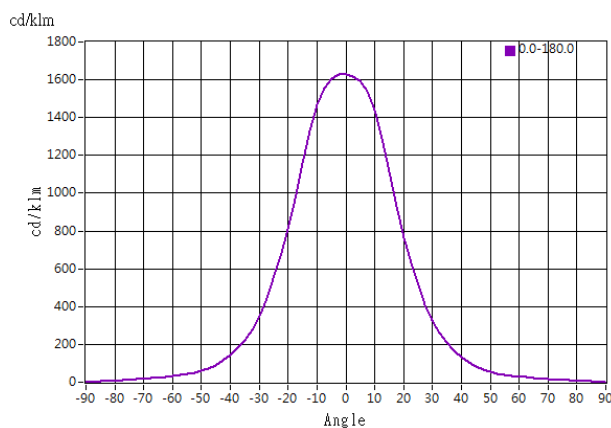




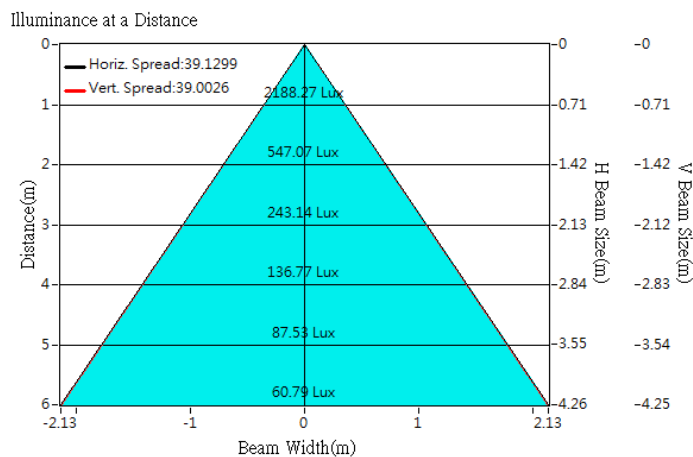
Optical Characteristics

Model Number	CKO-CS17-045021-1307		“H” definition
LED	CXB1310		
LES / LED Size	Φ 6 mm		
FWHM (D50)	39°		
Field Angle (D10)	77°		
H (distance)	2.5mm		
Dimension	Φ =45 mm, Thickness=20.9 mm		
Luminous Flux	1342 lm	Measured @ 11.7 W	
Material	PC / UL94V2		

cd/klm



Illuminance At Distances

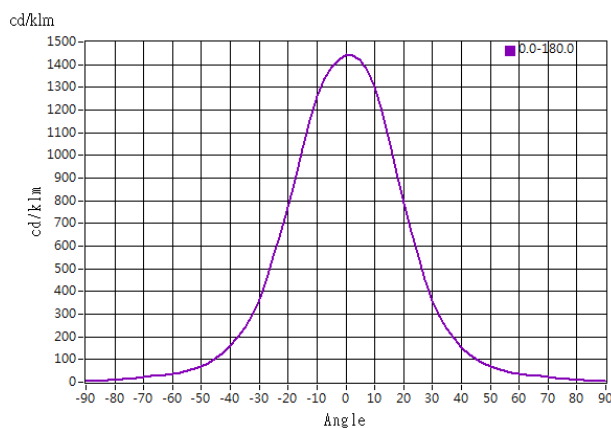




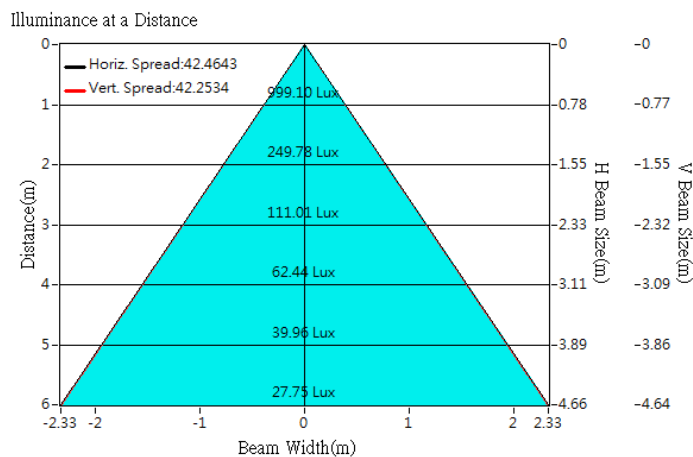
Optical Characteristics

Model Number		CKO-CS17-045021-1307	"H" definition
LED	CXA1507		
LES / LED Size	Φ 9 mm		
FWHM (D50)	42°		
Field Angle (D10)	82°		
H (distance)	2.5mm		
Dimension	Φ =45 mm, Thickness=20.9 mm		
Luminous Flux	693 lm	Measured @ 7.3 W	
Material	PC / UL94V2		

cd/klm



Illuminance At Distances

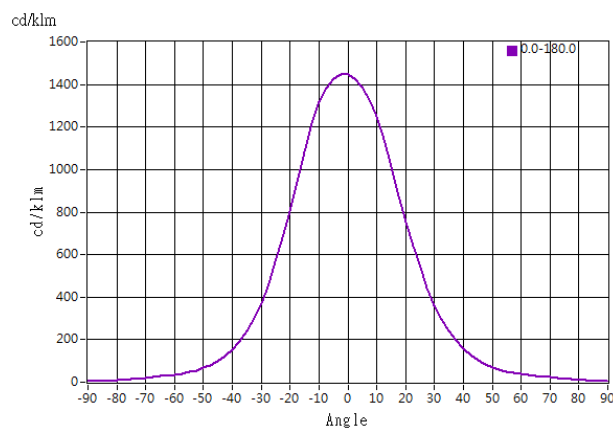




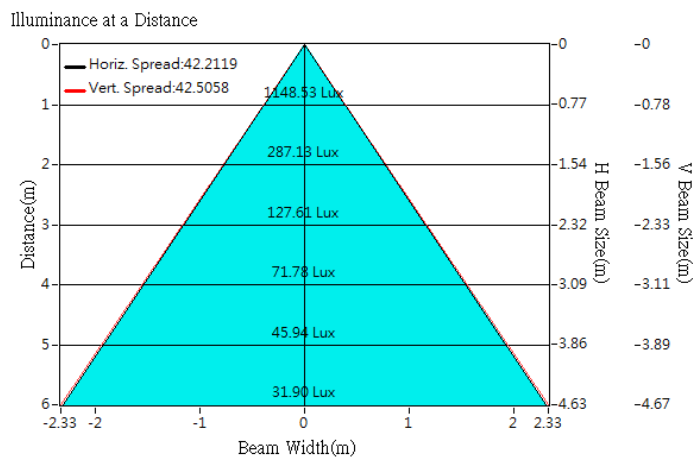
Optical Characteristics

Model Number		CKO-CS17-045021-1307	"H" definition
LED	CXB1507		
LES / LED Size	Φ 9 mm		
FWHM (D50)	42°		
Field Angle (D10)	82°		
H (distance)	2.5mm		
Dimension	Φ =45 mm, Thickness=20.9 mm		
Luminous Flux	793 lm	Measured @ 7.1 W	
Material	PC / UL94V2		

cd/klm



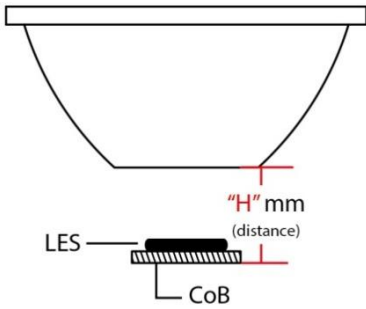
Illuminance At Distances





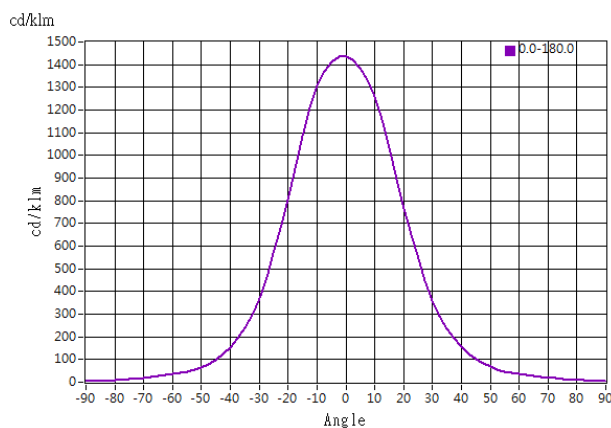
Optical Characteristics

Model Number		CKO-CS17-045021-1307		"H" definition
LED		CXA1510		
LES / LED Size		Φ 9 mm		
FWHM (D50)		43°		
Field Angle (D10)		82°		
H (distance)		2.5mm		
Dimension		Φ =45 mm, Thickness=20.9 mm		
Luminous Flux		944 lm	Measured @ 9.0 W	
Material		PC / UL94V2		

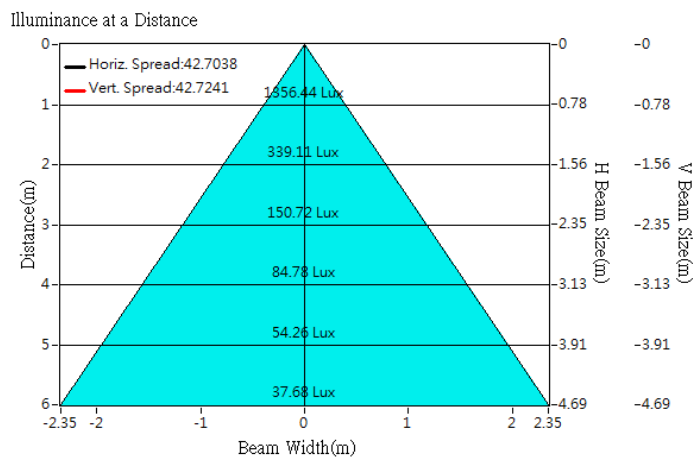


The diagram illustrates the "H" definition, which is the distance from the LED chip (LES) to the center of the beam (CoB). The LED chip is shown as a rectangular component with a hatched pattern, and the beam is shown as a semi-circular profile. The distance "H" is indicated by a red line and labeled "H" mm (distance).

cd/klm

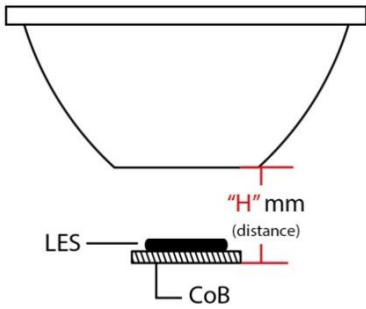


Illuminance At Distances

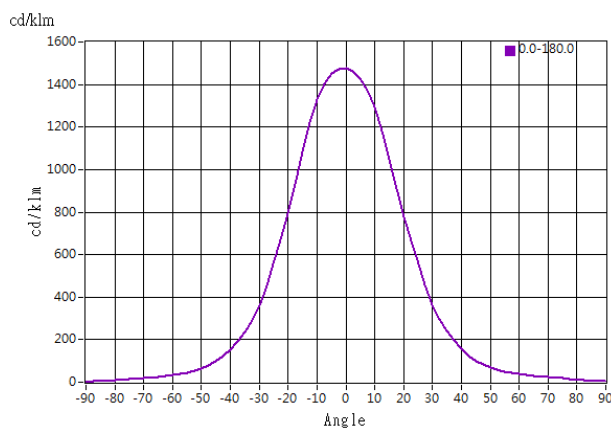




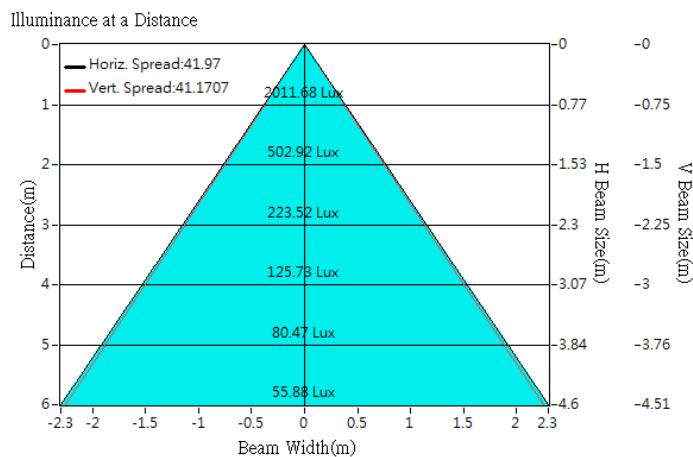
Optical Characteristics

Model Number		CKO-CS17-045021-1307		"H" definition
LED	CXA1512			
LES / LED Size	Φ 9 mm			
FWHM (D50)	41°			
Field Angle (D10)	80°			
H (distance)	2.5mm			
Dimension	Φ =45 mm, Thickness=20.9 mm			
Luminous Flux	1362 lm	Measured @ 13.3 W		
Material	PC / UL94V2			

cd/klm



Illuminance At Distances

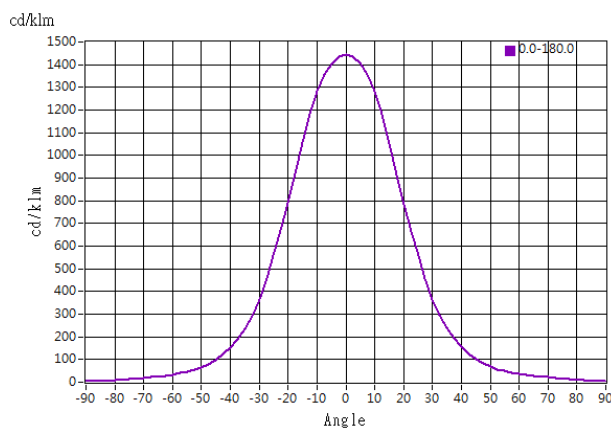




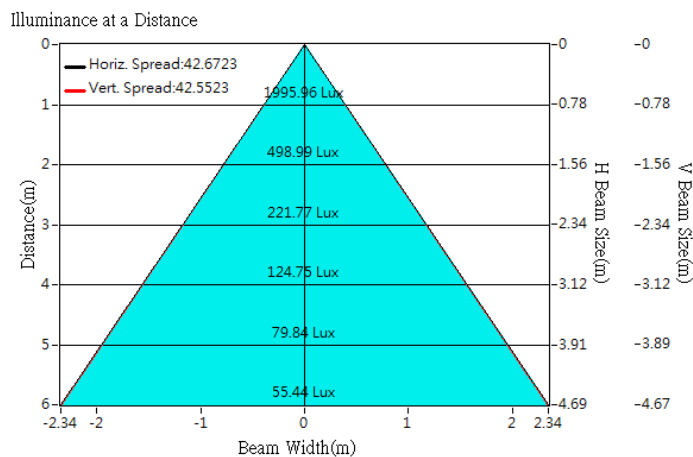
Optical Characteristics

Model Number		CKO-CS17-045021-1307		"H" definition
LED		CXB1512		
LES / LED Size		Φ 9 mm		
FWHM (D50)		43°		
Field Angle (D10)		82°		
H (distance)		2.5mm		
Dimension		Φ =45 mm, Thickness=20.9 mm		
Luminous Flux		1381 lm	Measured @ 12.0 W	
Material		PC / UL94V2		

cd/klm

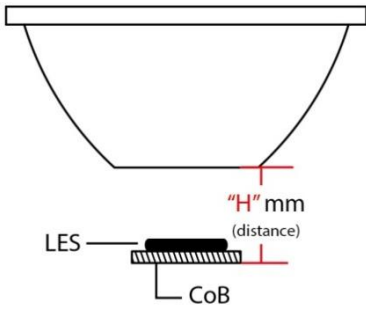


Illuminance At Distances

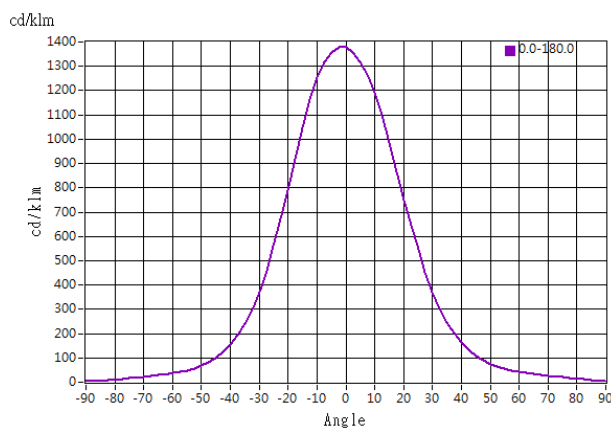




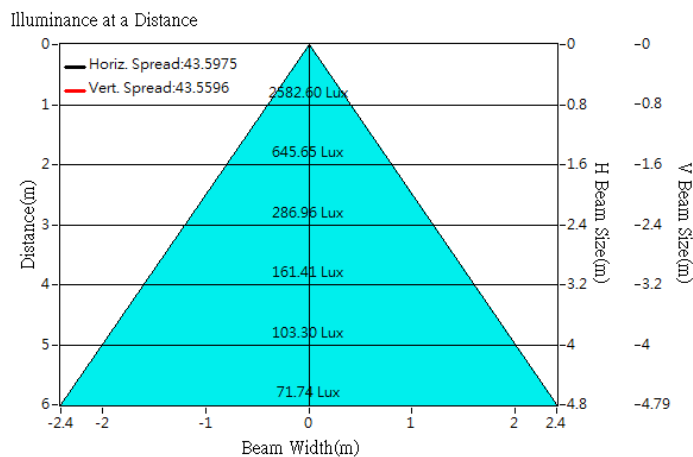
Optical Characteristics

Model Number	CKO-CS17-045021-1307		"H" definition
LED	CMA1516		
LES / LED Size	Φ 9 mm		
FWHM (D50)	44°		
Field Angle (D10)	83°		
H (distance)	2.5mm		
Dimension	Φ =45 mm, Thickness=20.9 mm		
Luminous Flux	1874 lm	Measured @ 15.9 W	
Material	PC / UL94V2		

cd/klm

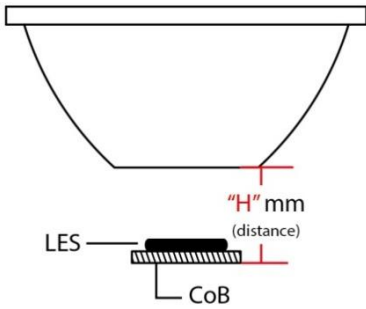


Illuminance At Distances

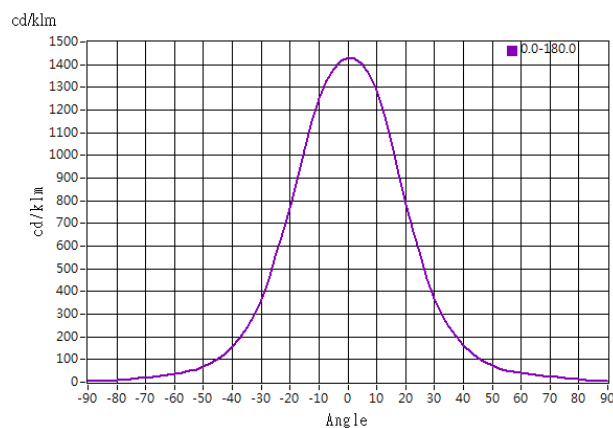




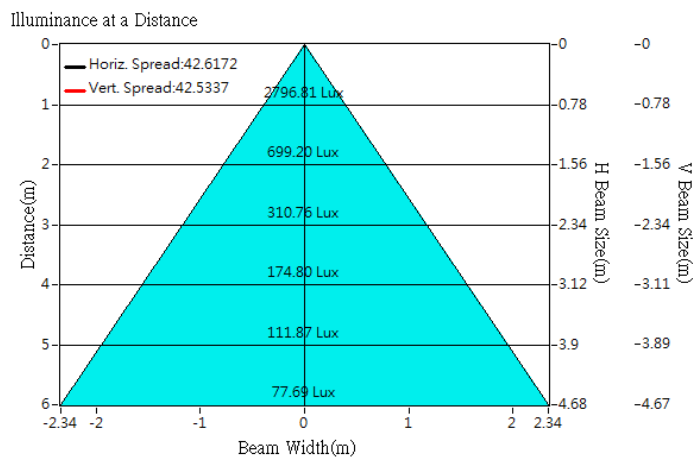
Optical Characteristics

Model Number		CKO-CS17-045021-1307		"H" definition
LED	CXB1520			
LES / LED Size	Φ 9 mm			
FWHM (D50)	43°			
Field Angle (D10)	83°			
H (distance)	2.5mm			
Dimension	Φ =45 mm, Thickness=20.9 mm			
Luminous Flux	1954 lm	Measured @ 16.8 W		
Material	PC / UL94V2			

cd/klm

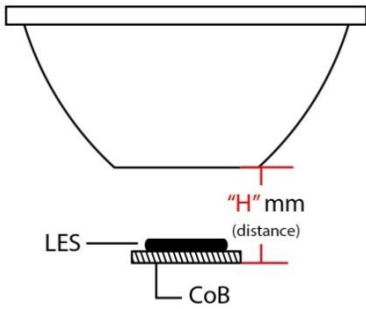


Illuminance At Distances

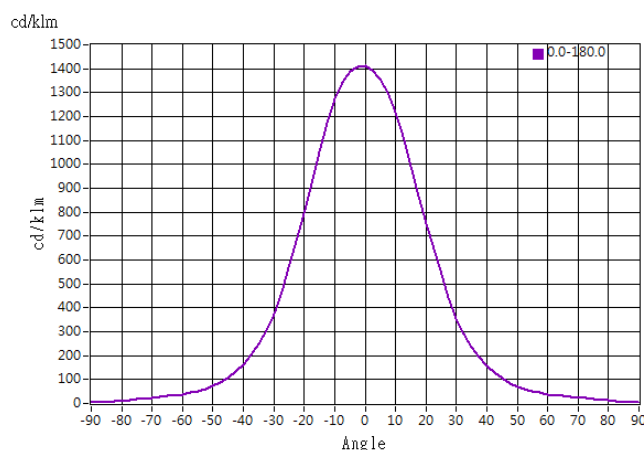




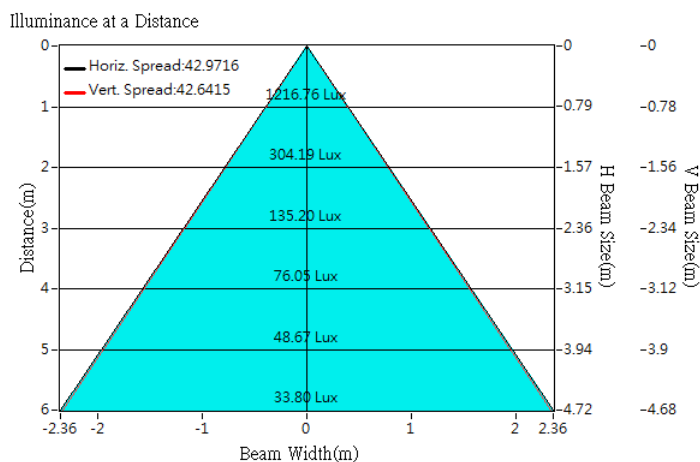
Optical Characteristics

Model Number	CKO-CS17-045021-1307		
LED	CMT1407		
LES / LED Size	Φ 9.8 mm		
FWHM (D50)	43°		
Field Angle (D10)	83°		
H (distance)	2.5mm		
Dimension	Φ =45 mm, Thickness=20.9 mm		
Luminous Flux	862 lm	Measured @ 7.0 W	
Material	PC / UL94V2		

cd/klm

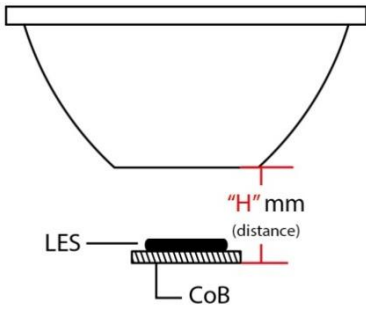


Illuminance At Distances

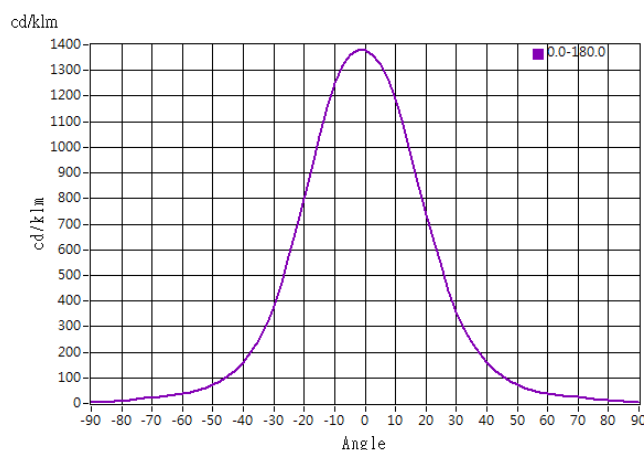




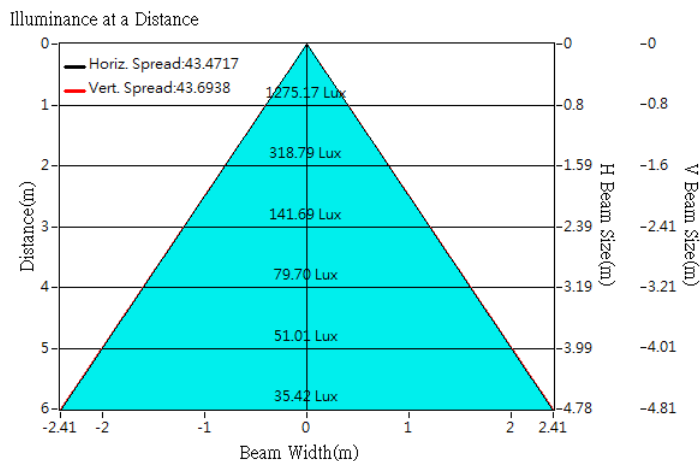
Optical Characteristics

Model Number	CKO-CS17-045021-1307		"H" definition
LED	CMT1412		
LES / LED Size	Φ 9.8 mm		
FWHM (D50)	43°		
Field Angle (D10)	84°		
H (distance)	2.5mm		
Dimension	Φ =45 mm, Thickness=20.9 mm		
Luminous Flux	924 lm	Measured @ 6.6 W	
Material	PC / UL94V2		

cd/klm

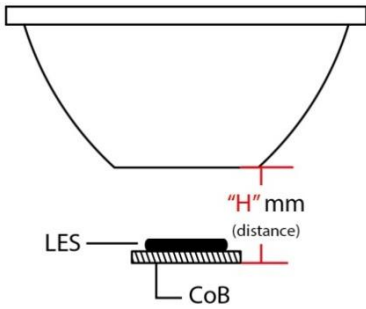


Illuminance At Distances

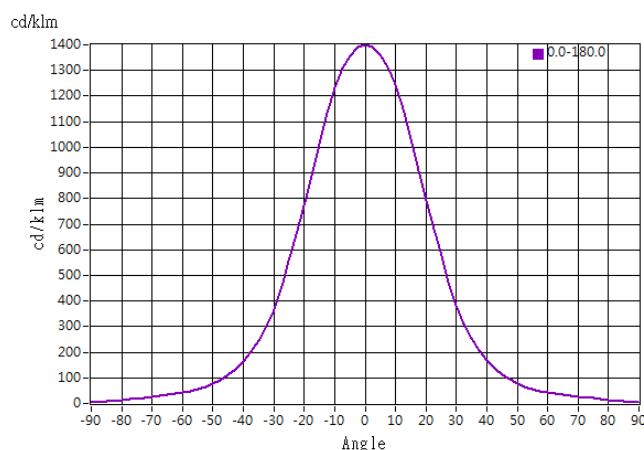




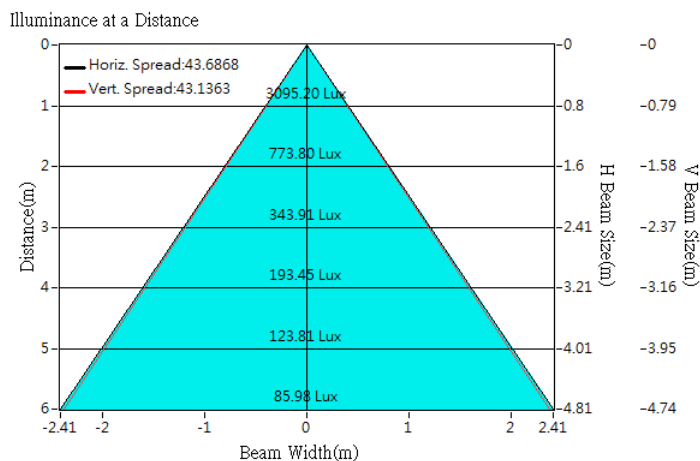
Optical Characteristics

Model Number	CKO-CS17-045021-1307		"H" definition 
LED	CMT1420		
LES / LED Size	Φ 9.8 mm		
FWHM (D50)	44°		
Field Angle (D10)	84°		
H (distance)	2.5mm		
Dimension	Φ =45 mm, Thickness=20.9 mm		
Luminous Flux	2212 lm	Measured @ 19 W	
Material	PC / UL94V2		

cd/klm



Illuminance At Distances

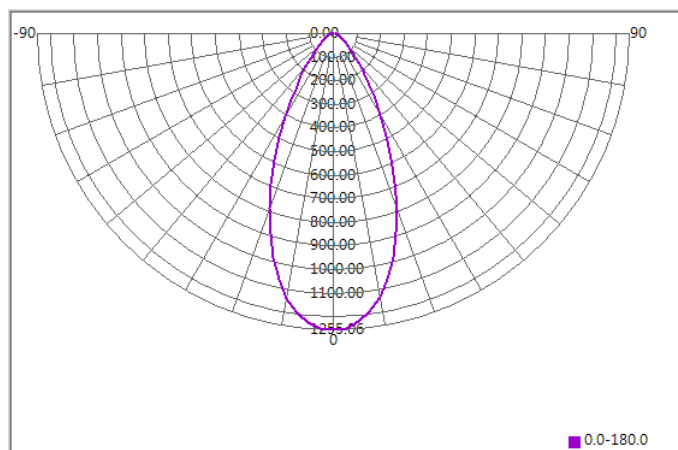




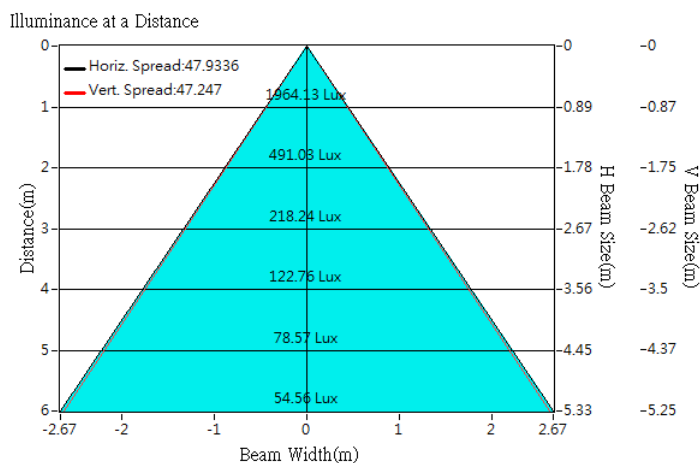
Optical Characteristics

Model Number	CKO-CS17-045021-1307		
LED	CXA1816		
LES / LED Size	Φ 12 mm		
FWHM (D50)	48°		
Field Angle (D10)	89°		
H (distance)	2.5mm		
Dimension	Φ =45 mm, Thickness=20.9 mm		
Luminous Flux	1564 lm	Measured @ 16.7 W	
Material	PC / UL94V2		

cd/klm

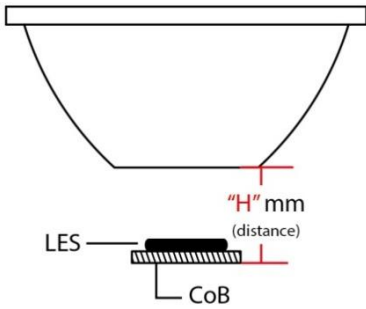


Illuminance At Distances

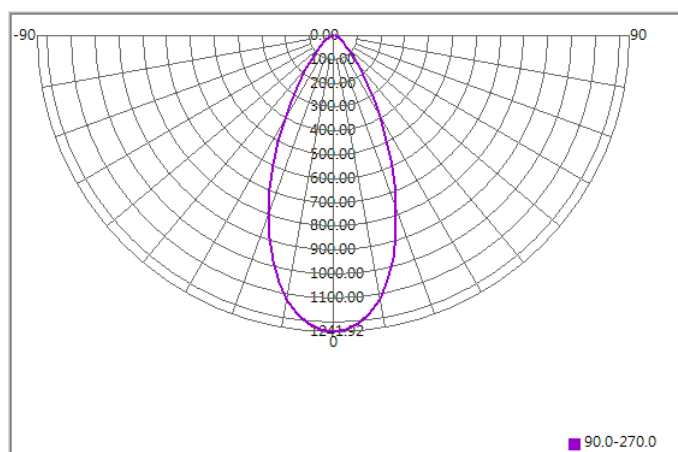




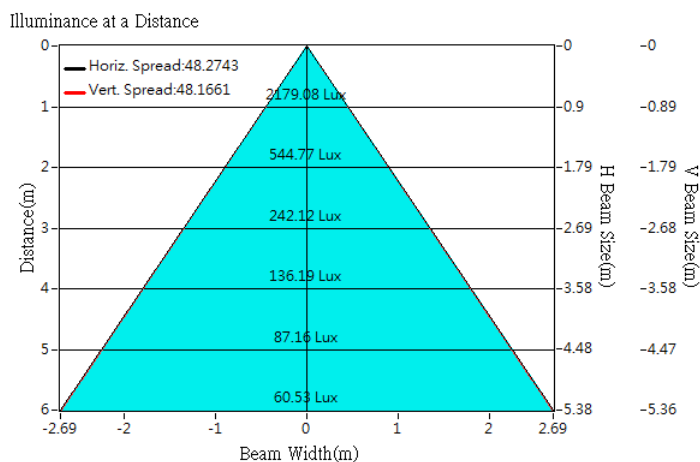
Optical Characteristics

Model Number	CKO-CS17-045021-1307		
LED	CXB1816		
LES / LED Size	Φ 12 mm		
FWHM (D50)	48°		
Field Angle (D10)	87°		
H (distance)	2.5mm		
Dimension	Φ =45 mm, Thickness=20.9 mm		
Luminous Flux	1754 lm	Measured @ 15.7 W	
Material	PC / UL94V2		

cd/klm

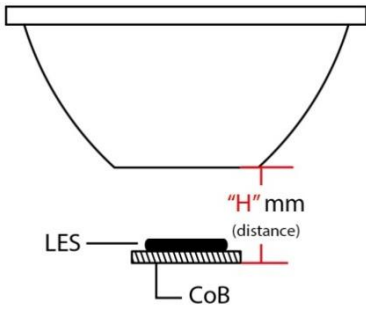


Illuminance At Distances

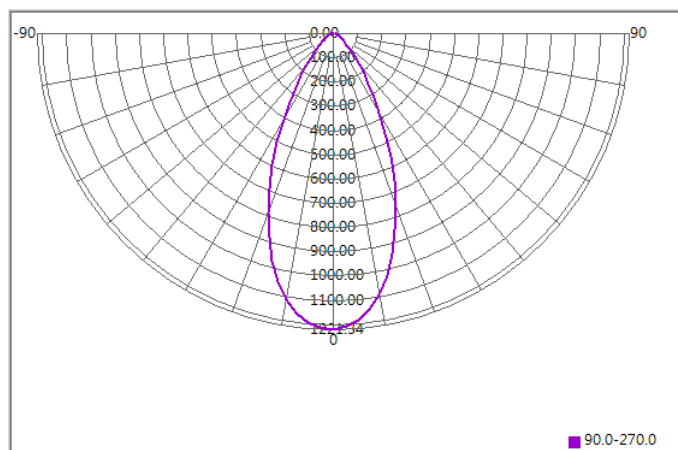




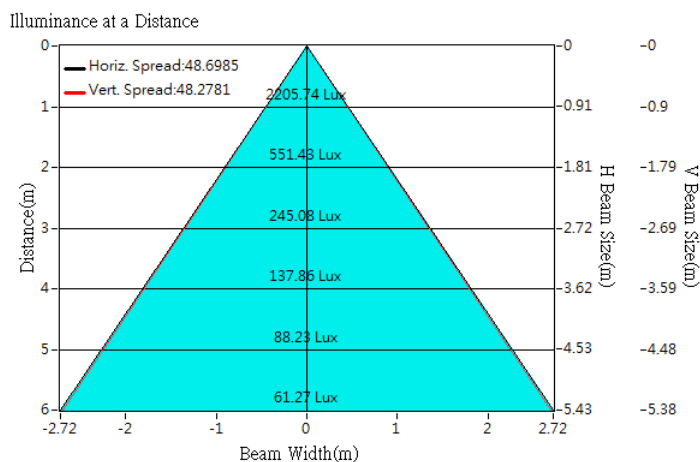
Optical Characteristics

Model Number	CKO-CS17-045021-1307		"H" definition 
LED	CXA1820		
LES / LED Size	Φ 12 mm		
FWHM (D50)	49°		
Field Angle (D10)	88°		
H (distance)	2.5mm		
Dimension	Φ =45 mm, Thickness=20.9 mm		
Luminous Flux	1805 lm	Measured @ 19.7 W	
Material	PC / UL94V2		

cd/klm

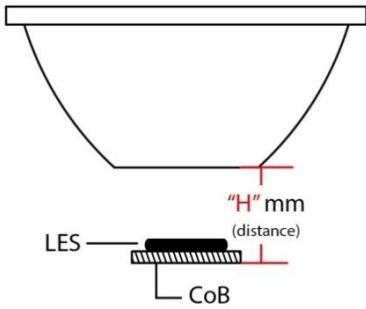


Illuminance At Distances

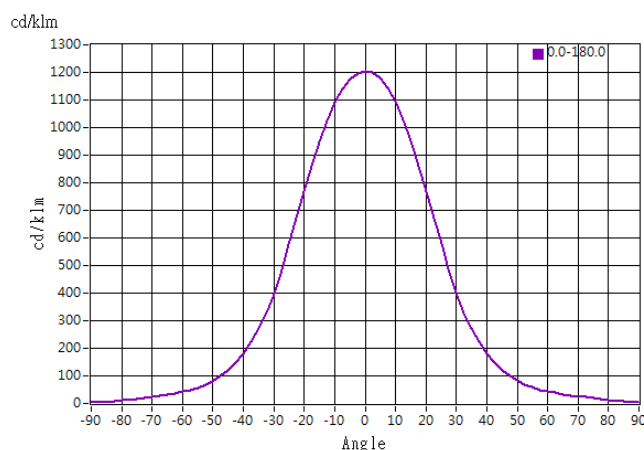




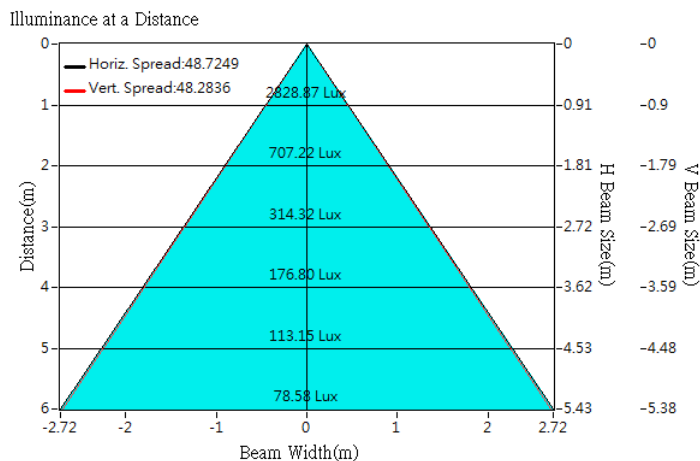
Optical Characteristics

Model Number	CKO-CS17-045021-1307		"H" definition
LED	CXB1820		
LES / LED Size	Φ 12 mm		
FWHM (D50)	49°		
Field Angle (D10)	90°		
H (distance)	2.5mm		
Dimension	Φ =45 mm, Thickness=20.9 mm		
Luminous Flux	2349 lm	Measured @ 19.4 W	
Material	PC / UL94V2		

cd/klm

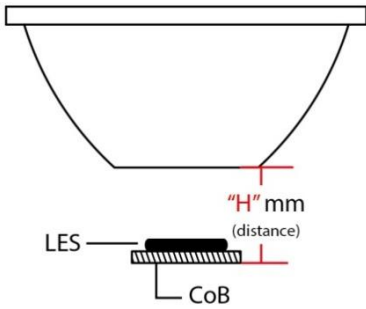


Illuminance At Distances

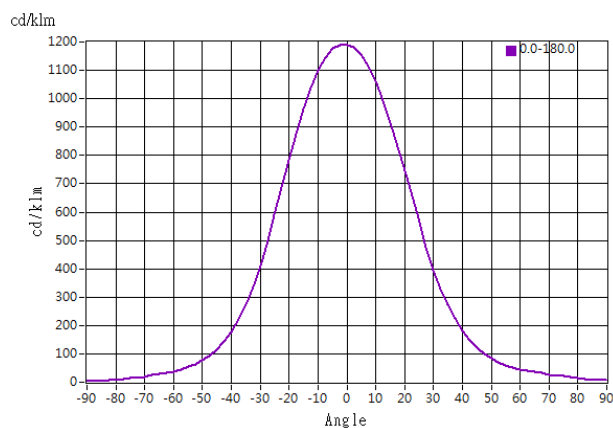




Optical Characteristics

Model Number	CKO-CS17-045021-1307		"H" definition
LED	CMA1825		
LES / LED Size	Φ 12 mm		
FWHM (D50)	49°		
Field Angle (D10)	90°		
H (distance)	2.5mm		
Dimension	Φ =45 mm, Thickness=20.9 mm		
Luminous Flux	2872 lm	Measured @ 25.2 W	
Material	PC / UL94V2		

cd/klm



Illuminance At Distances

