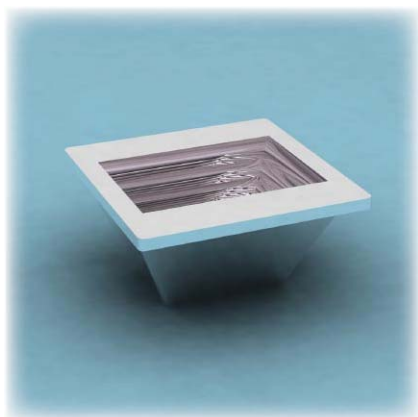


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## MODEL NO: KCLP1270CR Series

SUBJECT: **CREE<sup>®</sup> XLAMP<sup>®</sup> LEDs 1W MC-E , Reflector Coupling - Output Luminous Intensity Measurement**

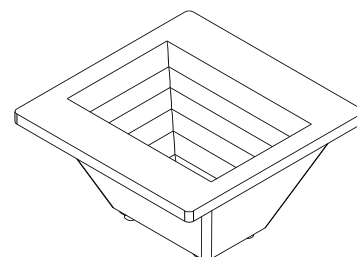


### KCLP1270CR Series for MC-E

- High efficiency
- Rectangular spot
- High Uniformity
- Net Cut-Off

### Typical applications are

- Linear lights
- Lamps
- Street lights
- Tunnel Lighting



### DESCRIPTION:

Verification of Luminous Intensity with coupling conditions between Khatod reflector and CREE<sup>®</sup> XLAMP<sup>®</sup> LEDs White with 380 lumen.

### REPORT:

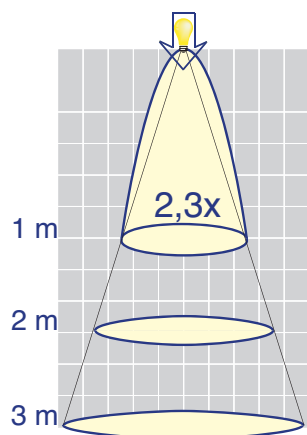
From 1 m  $\pm$  0,02 distance, we have measured Luminous Intensity emitted by LED.  
Such measurements have been repeated with the same test conditions but coupling LEDs to the reflector Khatod cod. KCLP1270CR.

### MEASURED DATA:

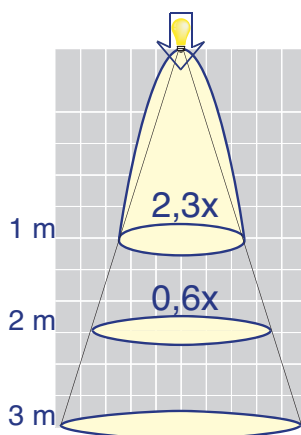
Column 1 shows p/n of the Reflector, column 2 shows Luminous Intensity detected measuring LEDs without reflector, column 3 shows Luminous Intensity detected on LEDs coupled with reflector, column 4 shows the difference (X\*) between col. 2 and col. 3

Reflector Type	LED Lux from 1 Mt (ftc From 1 Mt)	LED + reflector Lux from 1Mt (ftc From 1 Mt)	X*
KCLP1270CR (50°x70°)	109 (10,06 ftc)	251 (23,16 ftc)	2,3
Test carried out after 5 min. of operation of the LED to 350 mA ~ , local power source <b>GOSSEN KONSTANTER</b> mod 3226-K118 Measurements carried out with Luxometer mod LUX-1337 of <b>ISO-TEC</b> and <b>MINOLTA</b> mod LS – 150 * X is the value of the measurement of the LED brightness at 1 meter distance, without optic devices applied to the LED.			

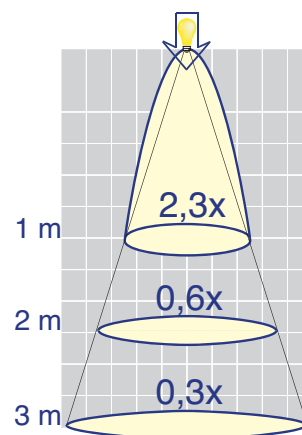
## White LED Illuminance chart



KCLP1270CR (50°X70°)



KCLP1270CR (50°X70°)



KCLP1270CR (50°X70°)

\* X is the value of the measurement of the LED brightness at 1 meter distance, without optic devices applied to the LED.

### Test conditions:

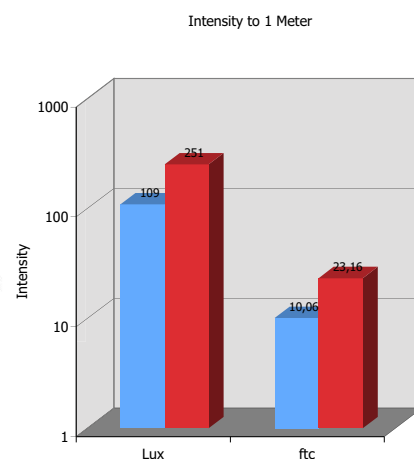
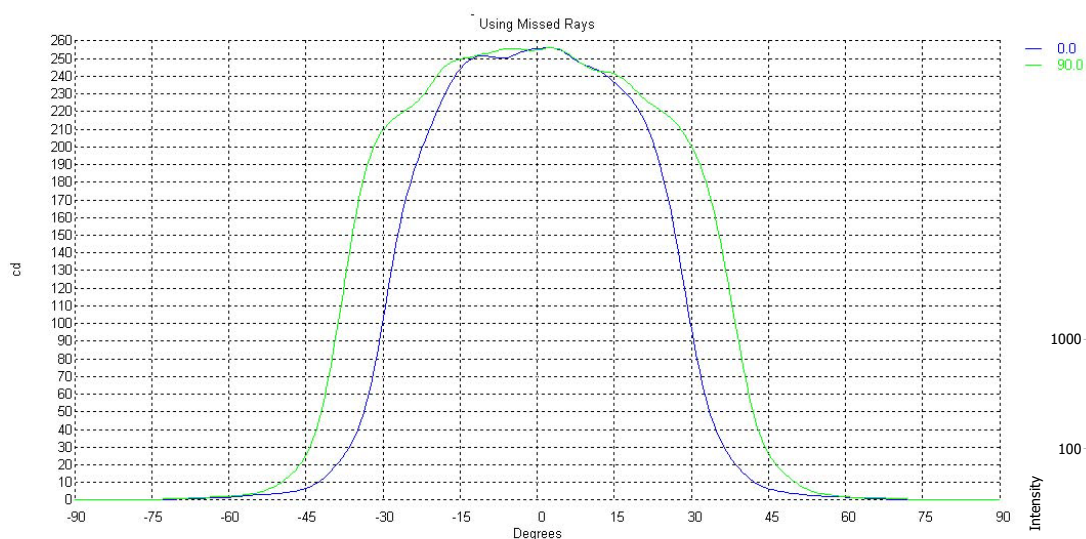
Test current: 350 mA / LED

Room Luminous Intensity :0 Lumen

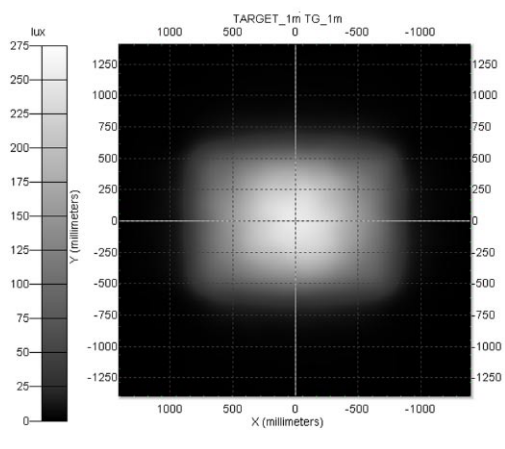
Room Temperature: 24° C

LED temperature after 10 min. : ~ 41 °C

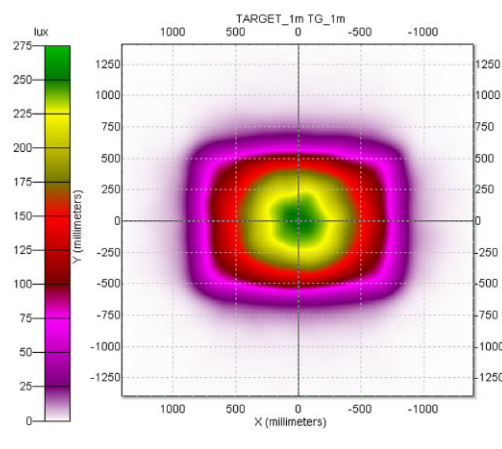
The diagram demonstrates the performance of the Khatod optoelectronic reflector



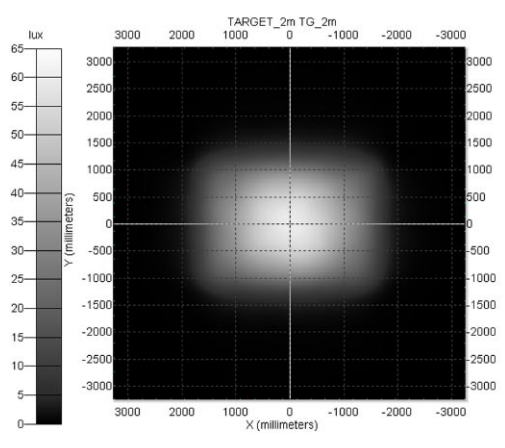
Photos:



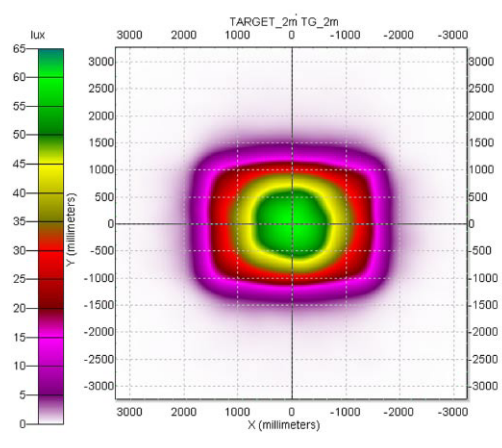
KCLP1270CR  
Target at 1 Meter (spot 2m x 1,5m)



Spectro Metric Analysis  
Target at 1 Meter (spot 2m x 1,5m)

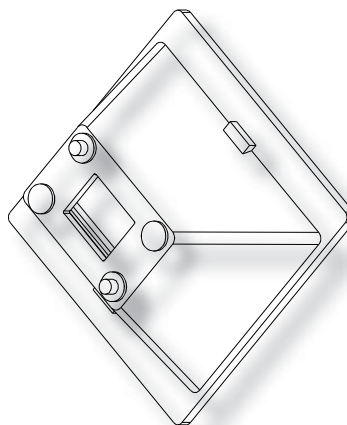
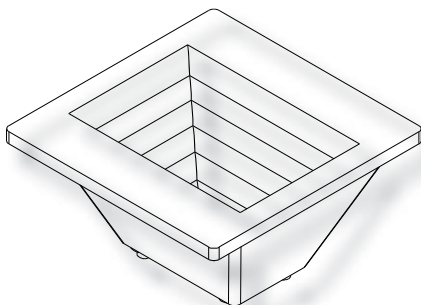


KCLP1270CR  
Target at 2 Meters (spot 4m x 3m)

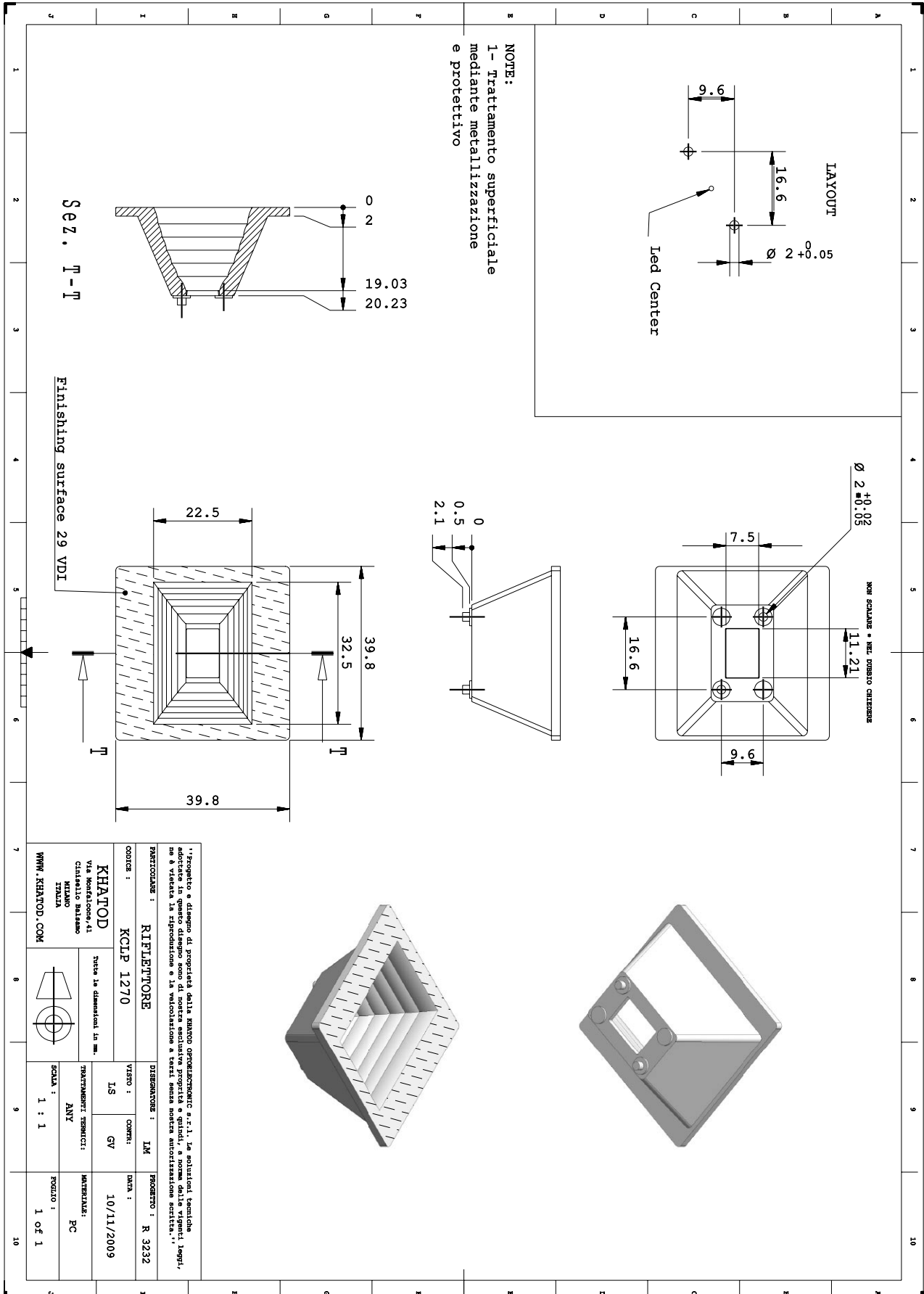


Spectro Metric Analysis  
Target at 2 Meters (spot 4m x 3m)

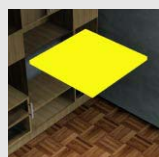
Measurements carried out with Luxometer mod LUX-1337. Room Luminous Intensity: 0 Lumen. Camera mod. Fujifilm S7000



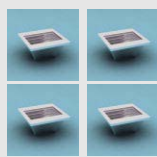
Drawing.



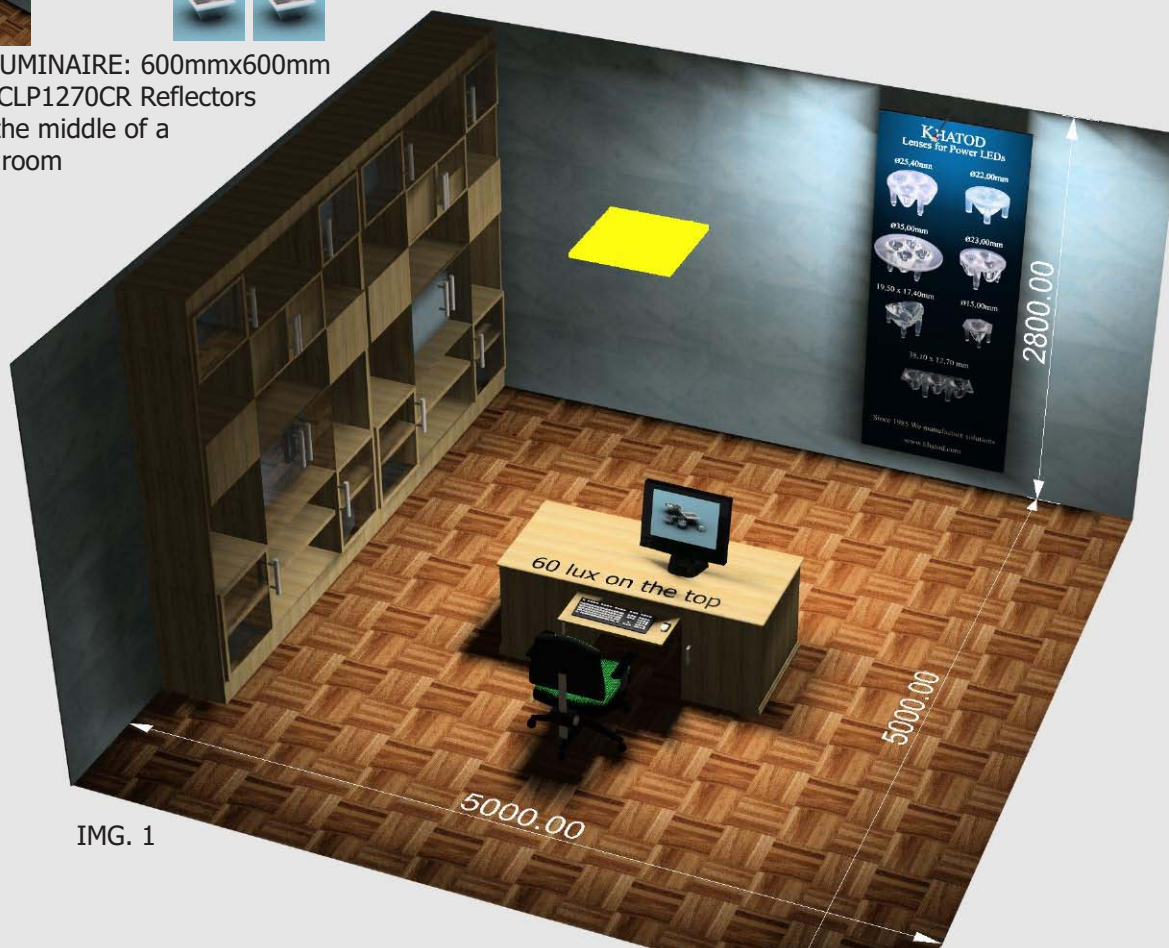




=



CEILING LUMINAIRE: 600mmx600mm  
Made of KCLP1270CR Reflectors  
Placed in the middle of a  
5x5x2,8m room



IMG. 1



IMG. 2



IMG. 3



IMG. 4

IMG.1: Office room - 2,8m height - lighted by a 4 KCLP1270CR.

IMG.2: Desk detail: 60 Lux are measured on the desk top.

IMG.3: Picture lighted by KCLP1270CR Reflector.

IMG.4: Frontal sight of the lighted picture.

## Reflector characteristics

Parameter	Symbol	Rating	Unit
Reflector Material	PC Polycarbonate, Aluminium reflective coating with protective clear-coat	--	--
Operating Temperature	Topr	-40 to +100	°C
Storage Temperature	Tstg	-40 to +100	°C

## LED characteristics

*For technical specification on LEDs please refer to CREE® XLAMP® LEDs datasheet or visit [www.cree.com](http://www.cree.com)*

## Notes:

Please note that flow lines and weld lines on the external surfaces of the reflector are acceptable if the optical performance of the reflector is within the specification described in the section "OPTICAL CHARACTERISTICS"

- Should you require further information, please contact Khatod for advice.
- All reflector testing must be subject to identical conditions as Khatod test condition.
- Published by Khatod optoelectronic srl - All the data contained in this document are the property of Khatod optoelectronic srl and may change without notice.

## **KHATOD Reflector Use And Maintenance**

- DO NOT HANDLE OR INSTALL Reflector WITHOUT WEARING GLOVES, SKIN OILS MAY DAMAGE Reflector OR LIGHT TRANSMISSION
- CLEAN Reflector WITH MILD SOAP AND WATER AND A SOFT CLOTH
- DO NOT USE ANY COMMERCIAL CLEANING SOLVENTS ON Reflector

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