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MODEL NO: KEPL113320D

SUBJECT: CREE® XLAMP® LEDs 1W MC-E , Lens Coupling - Output Luminous Intensity Measurement

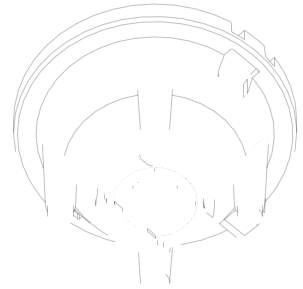


KEPL113320D single colour MCE

- High efficiency
- No vibration problems
- Easy fitting onto the PCB

Typical applications are

- Wall Washing
- Architectural lighting
- Lamps
- Most applications where a compact light source is required



DESCRIPTION:

Verification of Luminous Intensity with coupling conditions between Khatod lenses and CREE® XLAMP® LEDs 1W Worm White mod. MCE4WT-A2-7A0-H0-0-00001

REPORT:

From 1 m ± 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 lens Khatod cod. KEPL113320D.

MEASURED DATA:

Column 1 shows the Lens P/N - Column 2 shows the Luminous Intensity detected by measuring the LEDs without the Lens - Column 3 shows the Luminous Intensity detected by measuring the LEDs coupled with the Lens. - Column 4 shows the difference (X*) between col. 2 and col. 3

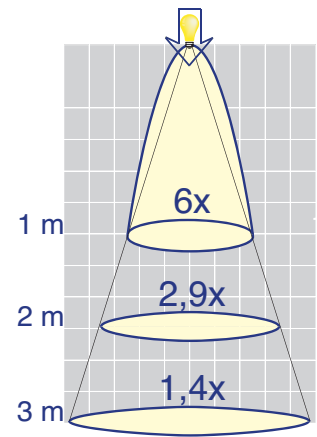
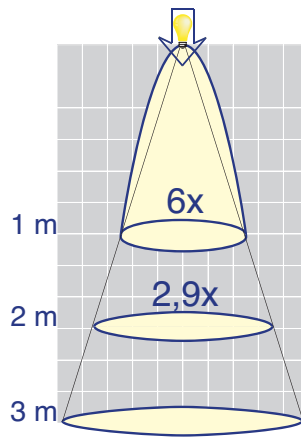
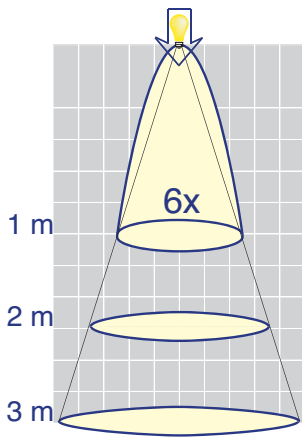
Lens Type	LED Lux from 1 Mt (ftc From 1 Mt)	LED + lens Lux from 1Mt (ftc From 1 Mt)	X*
KEPL113320D (20°)	97 (8,95 ftc)	582 (53,71 ftc)	6

Test carried out after 5 min. of operation of the LED to: 350mA ~ ,
local power source **GOSSEN KONSTANTER** mod 3226-K118

Measurements carried out by using Luxometer mod LUX-1337 of **ISO-TEC** and **MINOLTA** mod LS – 150

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

White LED Illuminance Chart



KEPL113320D (20°) - 1 METER

KEPL113320D (20°) - 2 METER

KEPL113320D (20°) - 3 METER

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

Test conditions:

Test current: 350mA

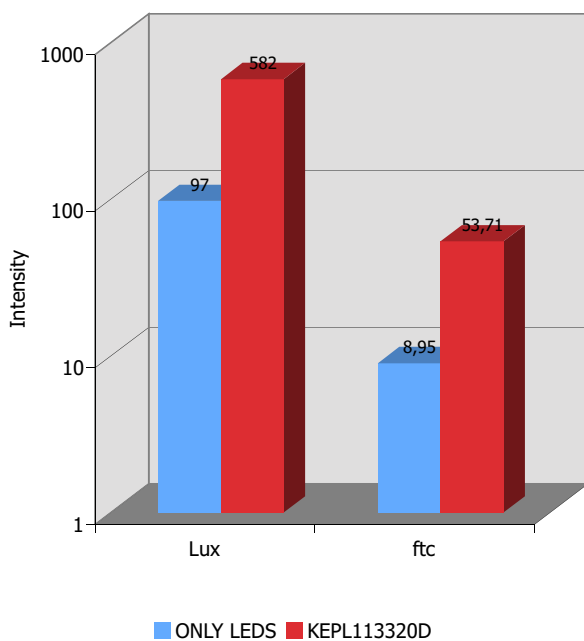
Room Luminous Intensity : 0 Lumen

Room Temperature: 22° C

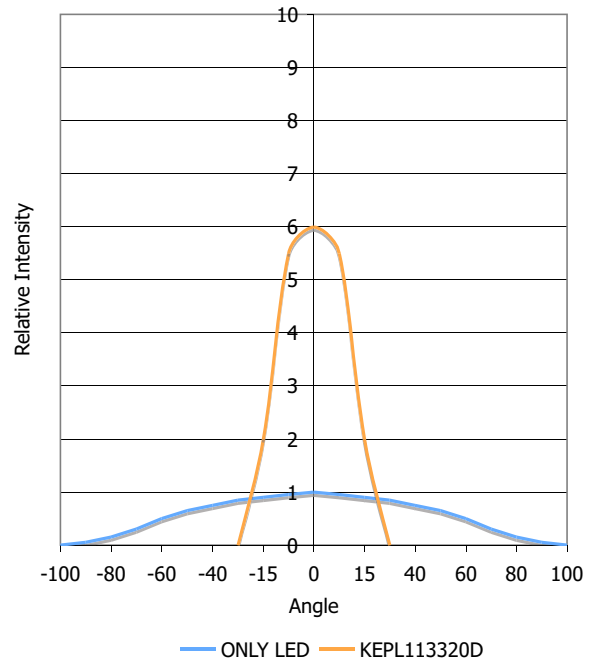
LED temperature after 15 min. : ~ 42 °C

The diagram shows the performance of Khatod lenses

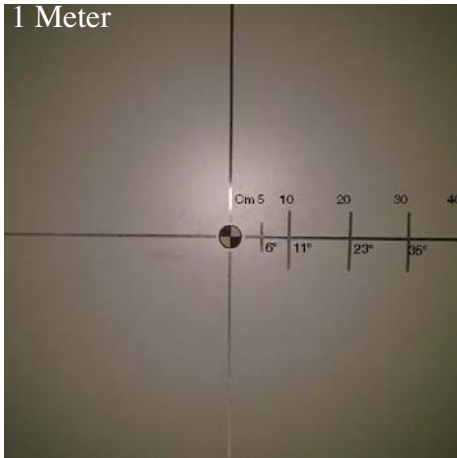
Intensity to 1 Meter



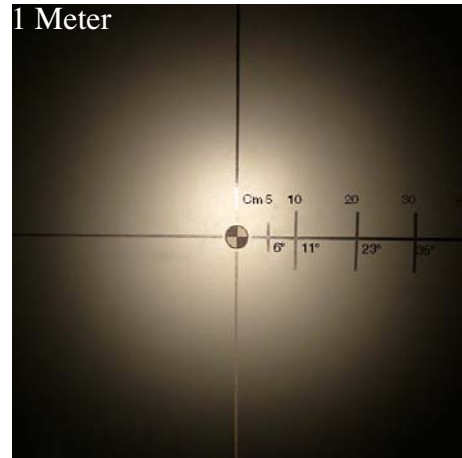
Spectrum Distribution



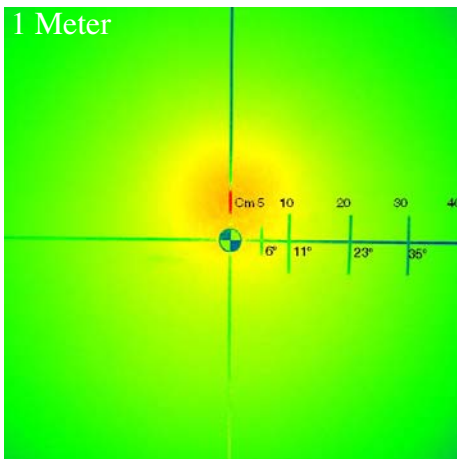
Photos:



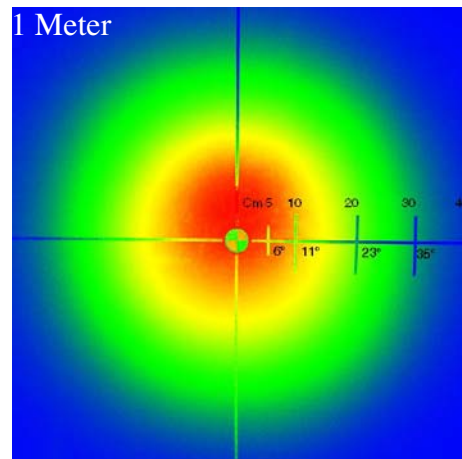
CREE® XLAMP® LEDs



KEPL113320D (20°)

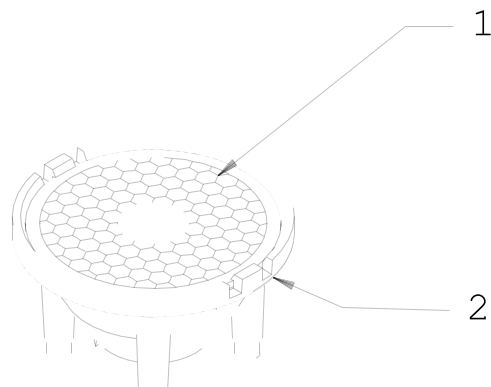


CREE® XLAMP® LEDs
Spectro Metric Analysis

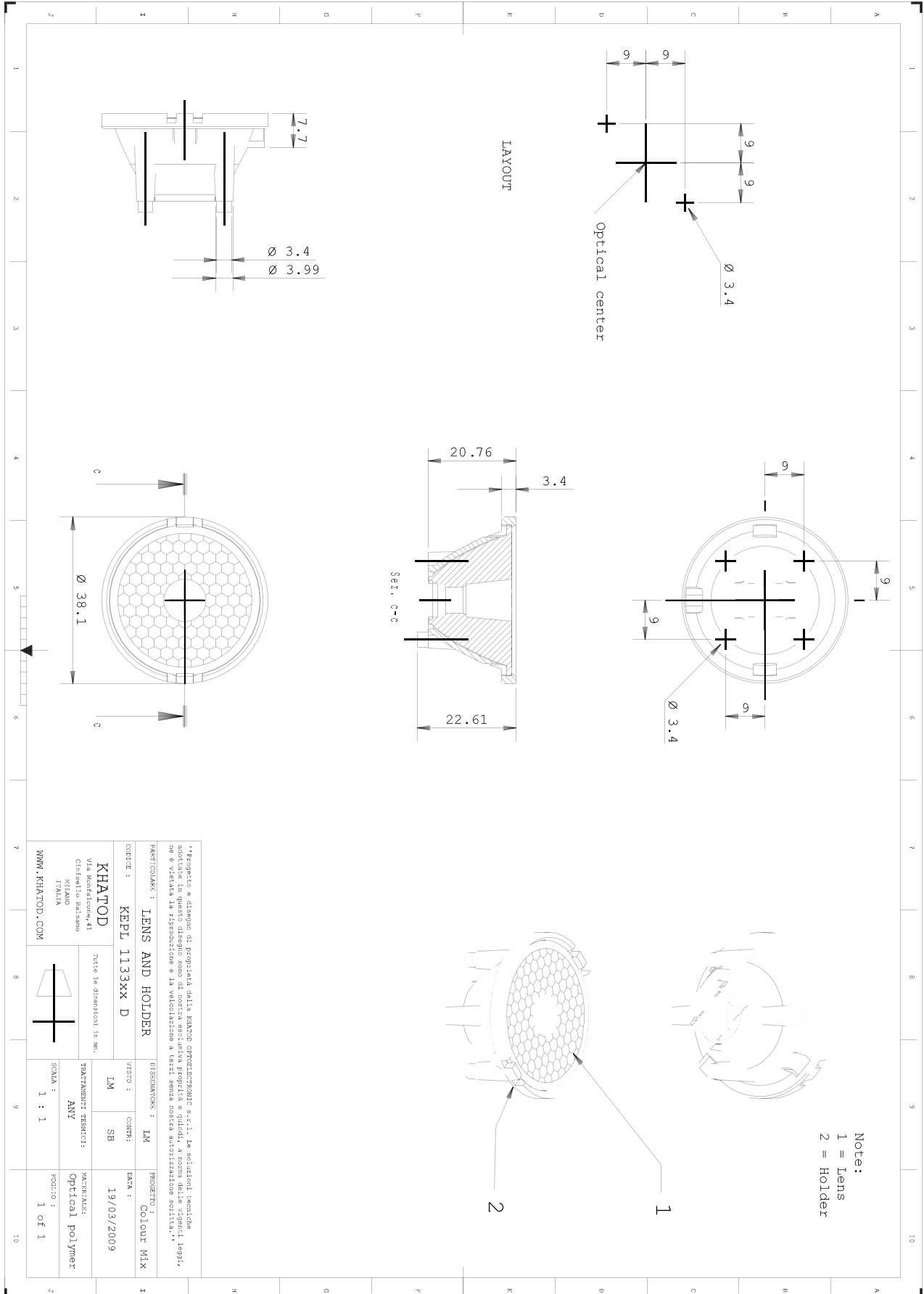


KEPL113320D (20°)
Spectro Metric Analysis

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



Drawing.



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PARTICOLARI : LENS AND HOLDER	
CODICE : KEPL 1133xx D	DESCRIZIONE : LM
KHATOD Via Montefalcone,41 Chivasso (TO) - Italia WWW.KHATOD.COM	PRODOTTO : COLOUR MIX
Titolo in dimensioni in mm.	VISO : LM
TRATTAMENTI ELETTRICI : ANI	CONTRA : SB
SCALA : 1 : 1	DATA : 19/03/2009
MATERIALI : Optical polymer	Foglio : 1 of 1

Lens characteristics

Parameter	Symbol	Rating	Unit
Lens Material	PMMA Optics	--	--
Holder Material	PC	--	--
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +85	°C
Average transmittance in visible spectrum (400 – 700nm) >90% as measured using 3mm thick Optical Grade PMMA			

LED characteristics

For technical specification on LEDs please refer to CREE® XLAMP® LEDs datasheet or visit www.cree.com

Notes:

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

- Should you require further information, please contact Khatod for advice.
- All lens testing must be subject to identical conditions as Khatod test condition.
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KHATOD LENS Use And Maintenance

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

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