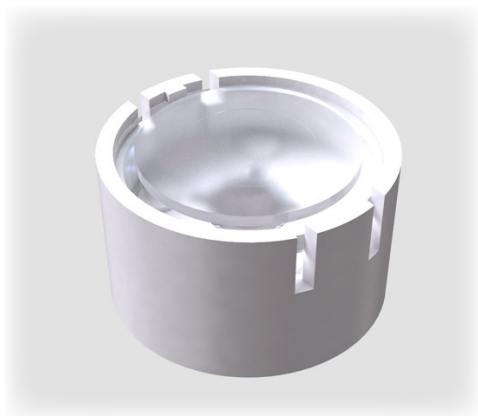


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CODE NUMBER: 120000001084

SUBJECT: KEPL154140 Mini Lens - Ø 13mm - Output Luminous Intensity Measurement



- Innovative mini lenses: Ø 13mm
- High lighting efficiency
- Excellent luminous flux
- Uniform light distribution
- Easy fixing system to the PCB
- No vibration problems

Typical Applications:

- Architectural lighting
- Decorative Lighting
- Stage Lighting
- Downlight
- Flashlight
- Lamps
- Bike Lights
- Most applications where a compact light source is required
- Any applications in narrow or recessed spaces

Khatod Optics are a basic element to make your optical design real.

The right optical solution is fundamental for type and number of LEDs used in your design.

Advanced research, scientific rigour, great attention to the continuous evolution in LED Technology, have led Khatod to develop optical solutions performing an excellent homogeneous luminous flux, and high lighting efficiency.

Khatod delivers the widest range of Single, Triple, Quad and Multiple Lenses, compliant with MR16, MR11, AR111 Standards, for the major LEDs manufacturers

The KEPL1541xx Lenses series offers low-profile lenses specifically designed for major Power LEDs. The lens holder is available in white color, provides the proper alignment onto the PCB, can be glued onto the PCB to provide a secure assembly.

Khatod Lenses meet the most demanding lighting specifications and applications, while delivering real cost-effective and competitive products.

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1 Light Source Model

Parameter	Symbol	Value	Unit
Lens / Reflector Model	-	KEPL154140	-
Material (More info on page 9)	-	ABS, PMMA	-
Dimensions	-	See page 8	-
Source Model	-	SAMSUNG 3535 CERAMIC	-
Number of Sources	N	1	-
Power Supply Type	-	ISO TECH ISP3303	-
Driver Type	-	-	-
Driving Voltage	V_F	-	V
Driving Current	I_F	350	mA
Nominal Flux	Φ	115×1	lm

2 Measurement Setup

Parameter	Symbol	Value	Unit
Operator	-	Simone Bassi	-
Goniophotometer Type	-	KLX12M	-
Measurement Distance	z	5	m
Room Temperature	T	25	°C
Date	-	12-Jun-2012	-

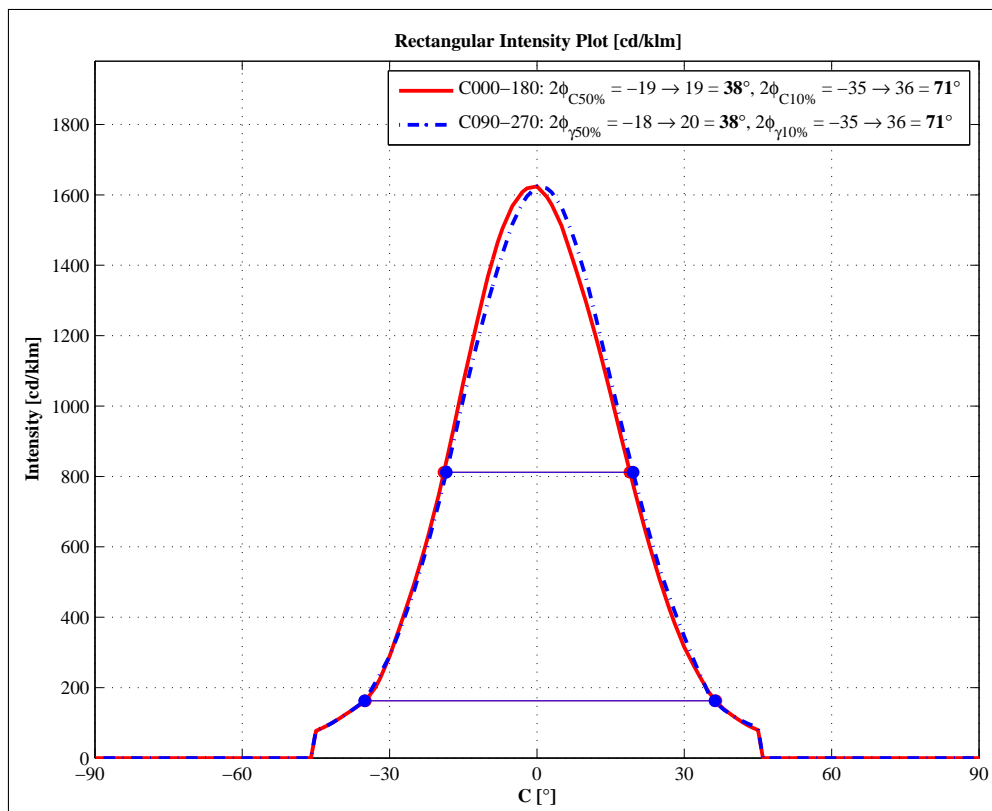
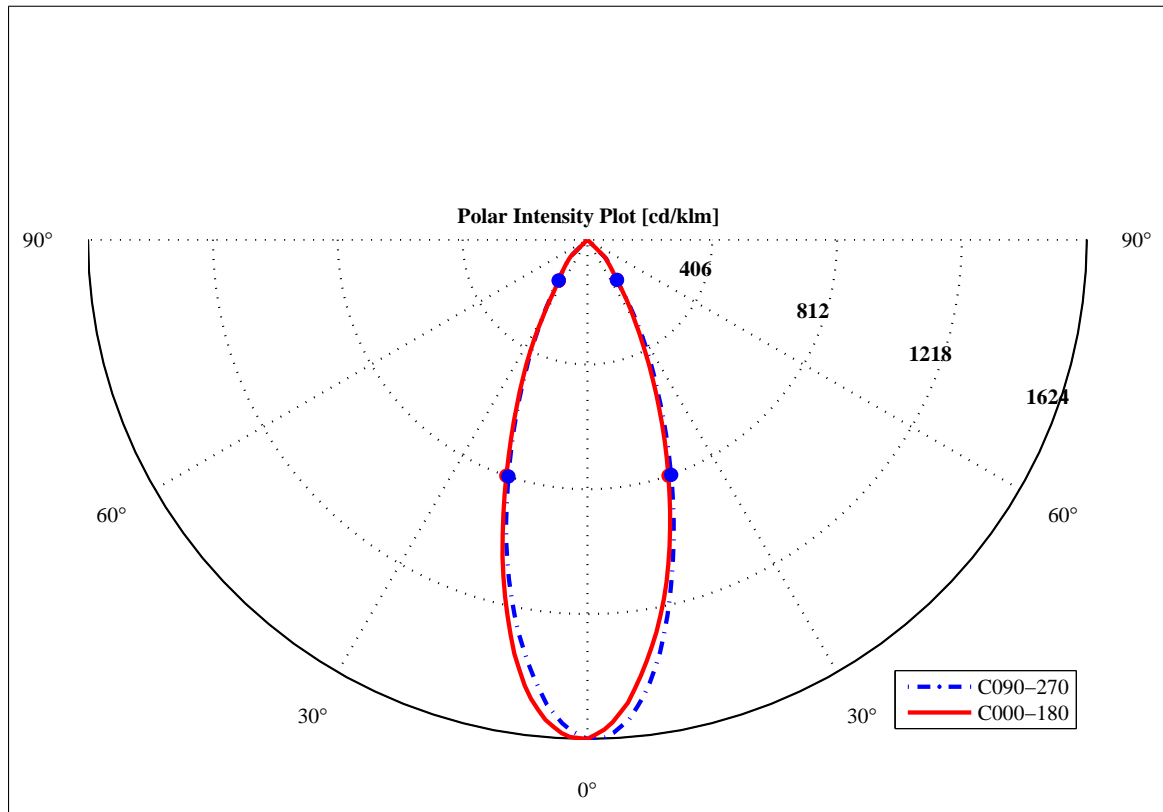
3 Results

Parameter	Symbol	Value	Unit
Total Flux	Φ	115	lm
Max Intensity	I_{\max}	187	cd
Max Illuminance at 5 m	E_{\max}	7	lx
C-Viewing Angle at $50\%I_{\max}$	$2\varphi_C$	38	°
γ -Viewing Angle at $50\%I_{\max}$	$2\varphi_\gamma$	38	°
C-Viewing Angle at $10\%I_{\max}$	$2\varphi_{C10\%}$	71	°
γ -Viewing Angle at $10\%I_{\max}$	$2\varphi_{\gamma10\%}$	71	°
General Optical Measurement Tolerance	-	$\pm 10\%$	-

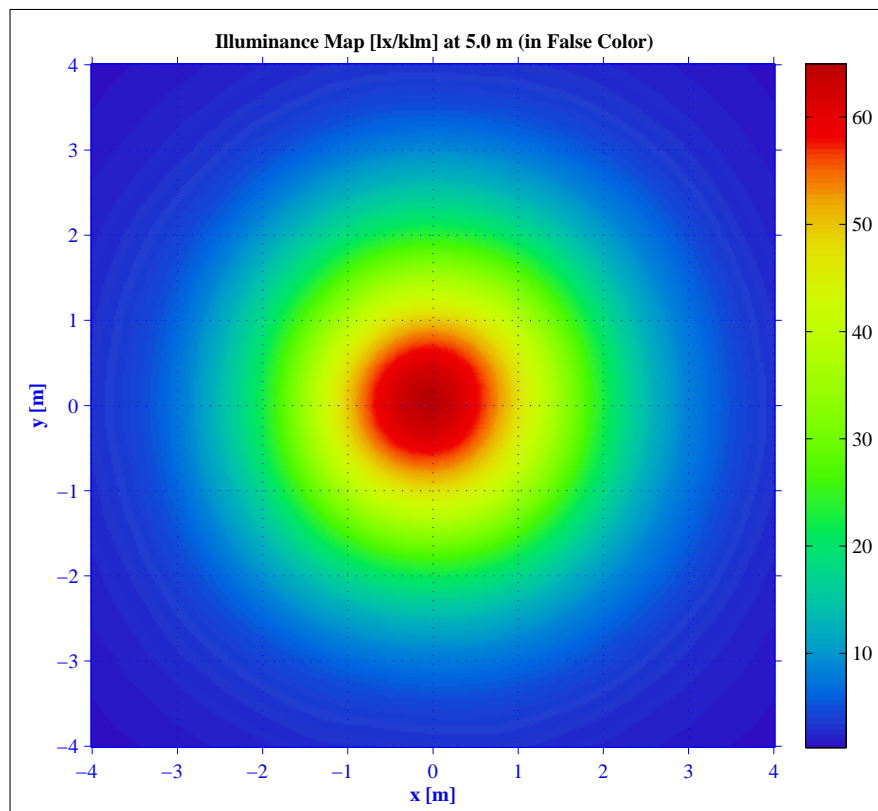
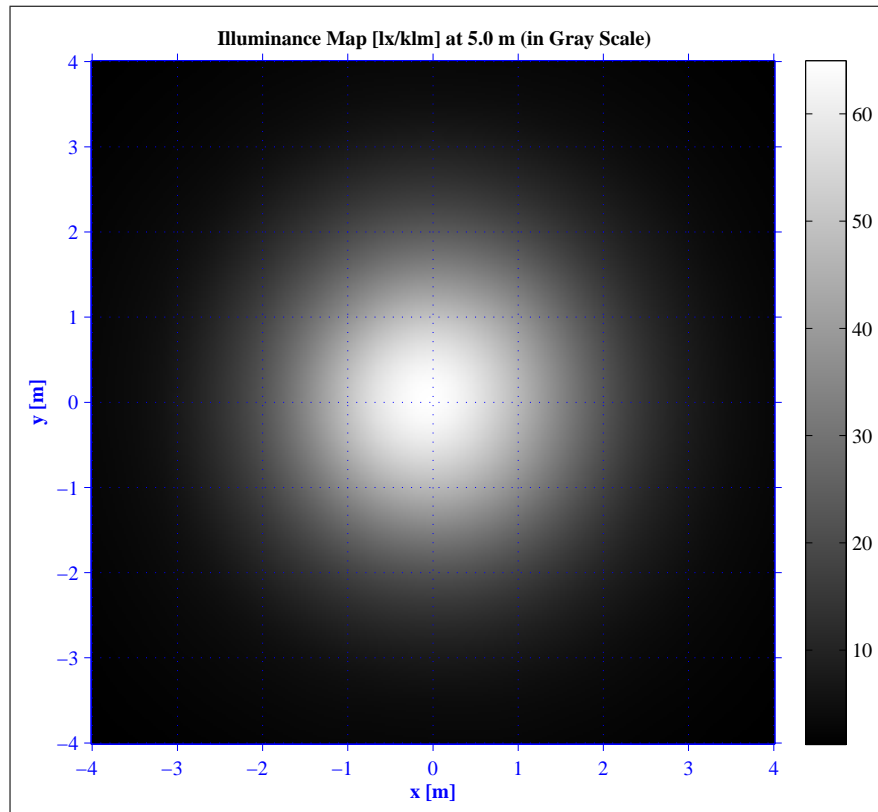
NOTES:

- Intensity (I) and illuminance (E) data are normalized by 1000 lm

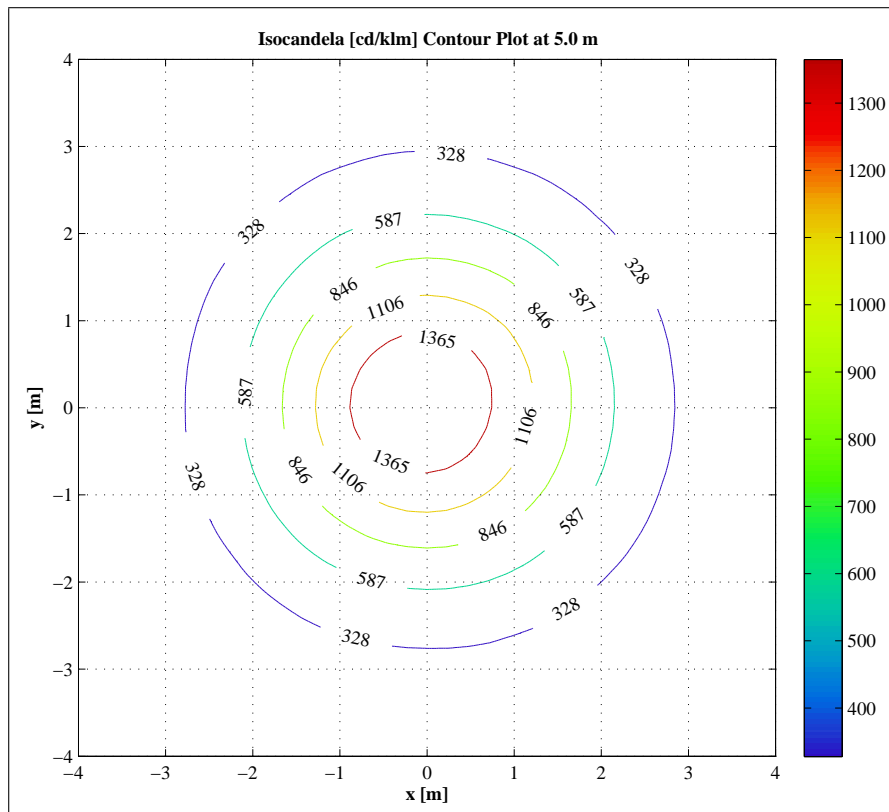
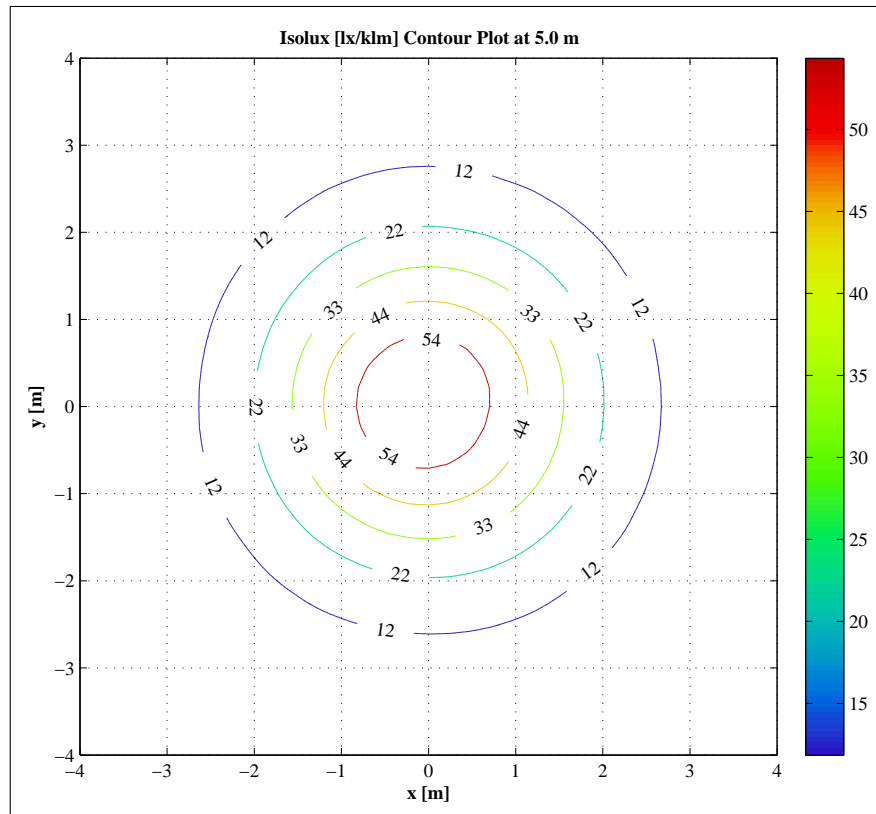
4 Intensity Plot



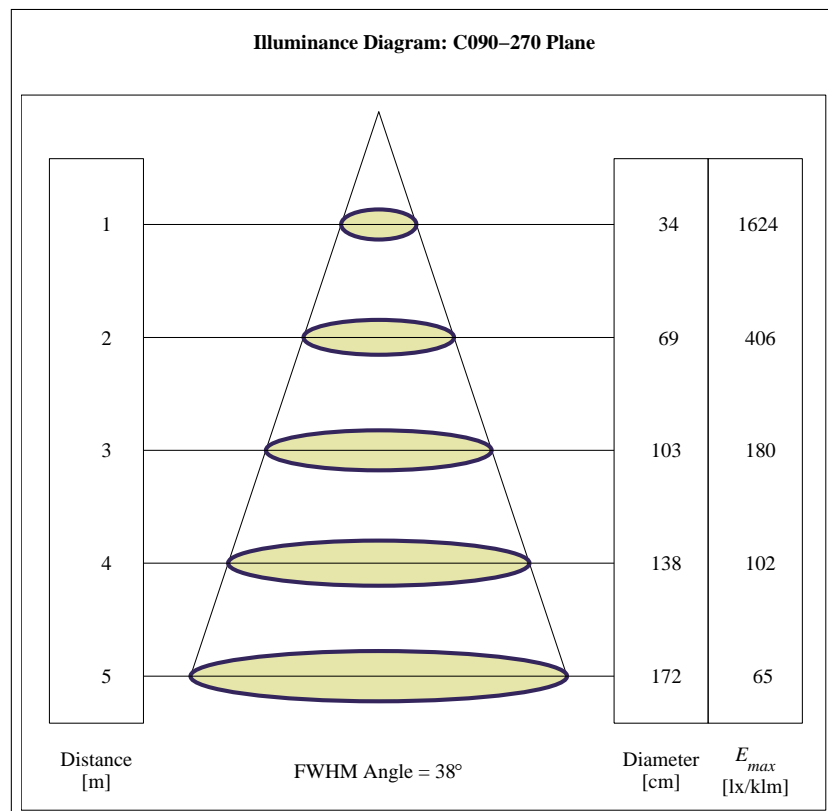
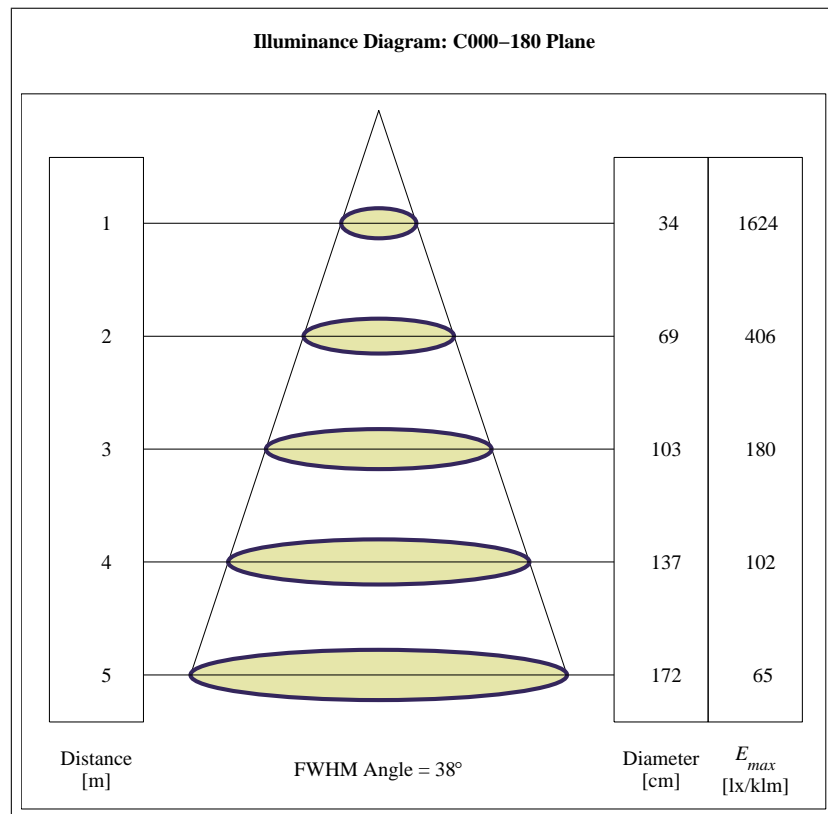
5 Illuminance Map



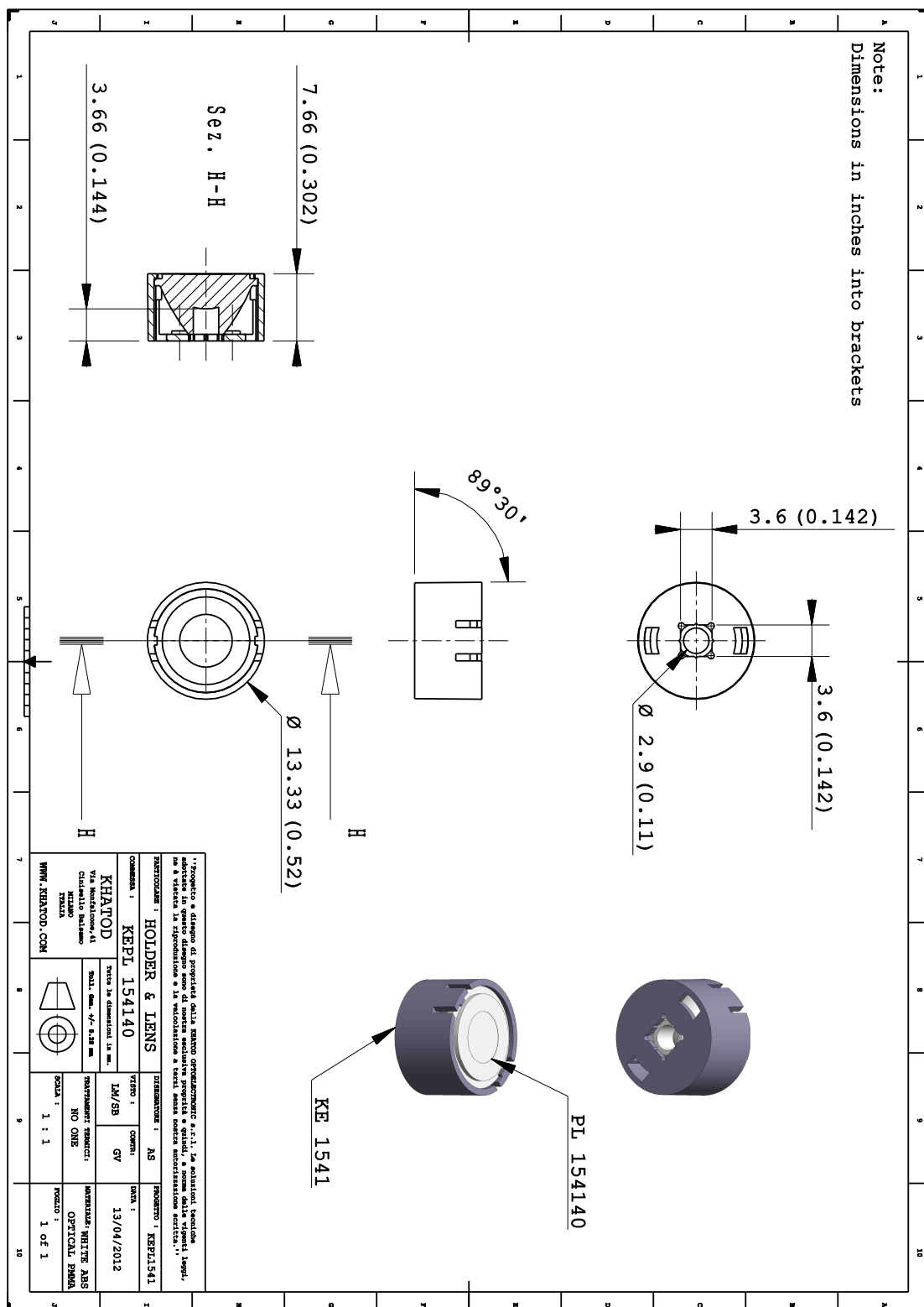
6 Isolux / Isocandela Plots



7 Illuminance Diagram



8 Drawing



9 Use and Maintenance

Lens characteristics

Parameter	Symbol	Rating	Unit
Lens Material	PMMA Optics	--	--
Holder Material	ABS	--	--
Operating Temperature	Topr	-35 to +70	°C
Storage Temperature	Tstg	-35 to +70	°C

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.
- 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 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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