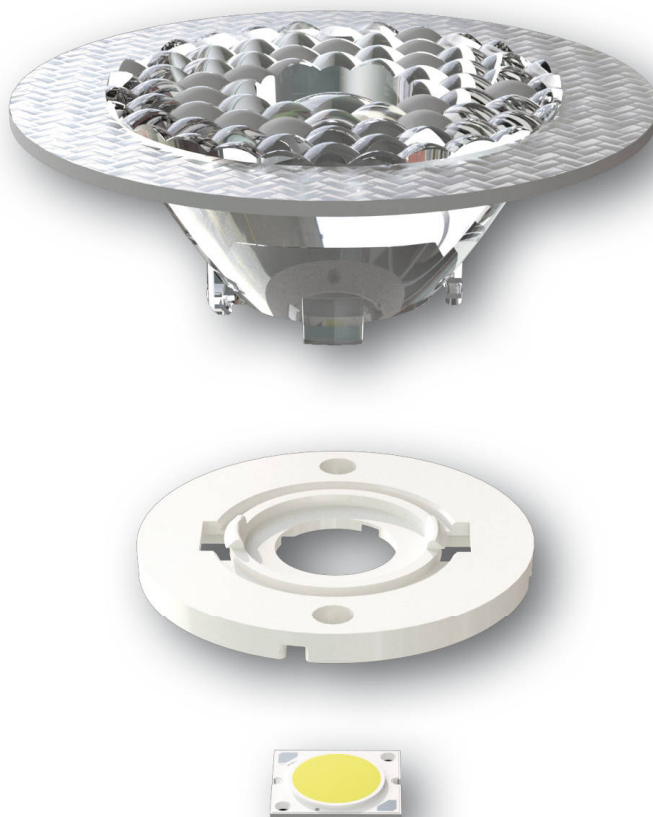




KRISTALL Lenses For CoB LEDs

- TIR Lenses available in 80 mm in diameter, made of PC
- Available in 3 Beams: Narrow - Medium - Wide
- Optical Grade PC.
- Excellent Uniformity, > 85%.
- Efficiency > 85%;
- Clean Spot.
- Provided with special adaptors, customized for the individual models of the major HB COB LEDs. The adaptors allow for easy fixing of onto the COB LEDs:
 - fix the adaptor onto the PCB with two screws;
 - twist & lock KRISTALL onto the adaptor.
- The adaptors allow for interchangeability of KRISTALL models on the same LED source.
- Excellent performance for a wide range of COB LEDs.

Typical Applications

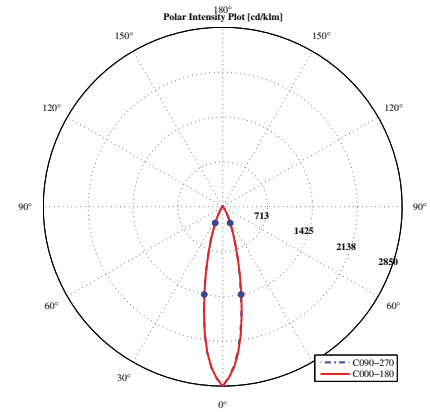
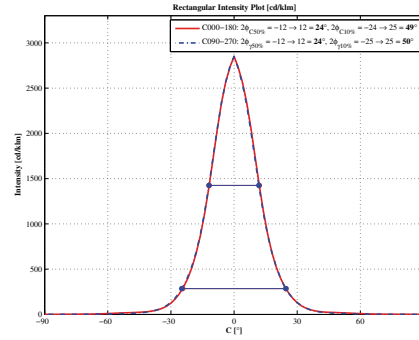
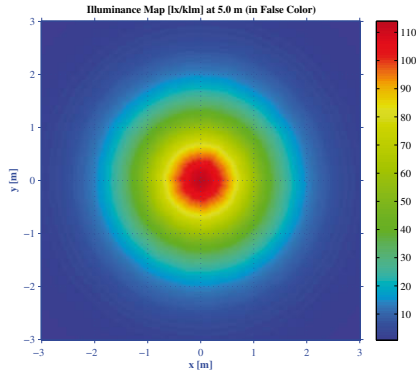
Any applications in General Lighting and Wide Area Lighting Indoor/Outdoor:

- Industrial
- Commercial
- Retailers, Shops
- Halls & Entrances
- Architectural
- Entertainment
- Stage, etc. on the same LED source.
- Excellent performance for a wide range of COB LEDs.

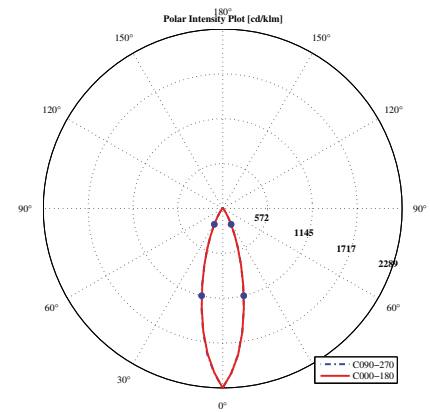
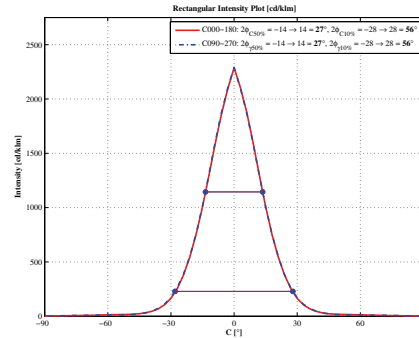
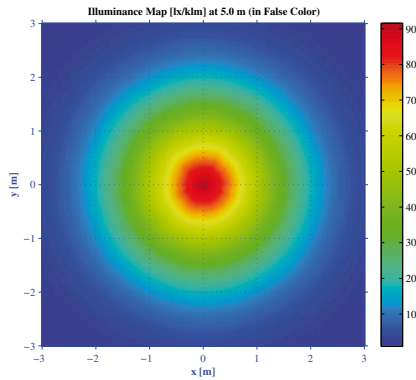
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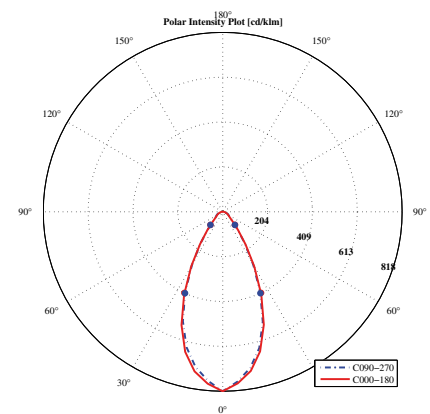
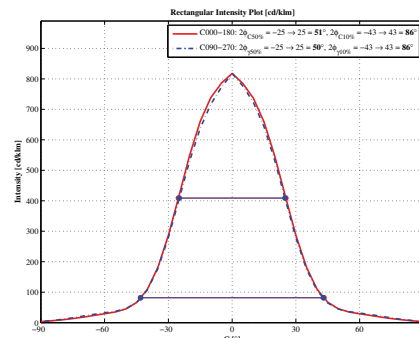
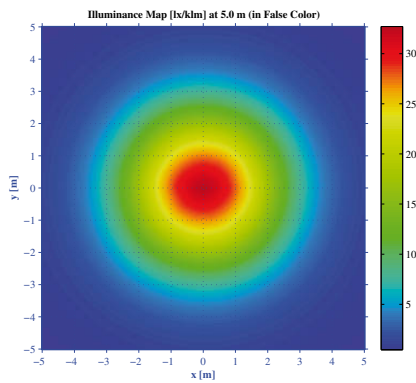
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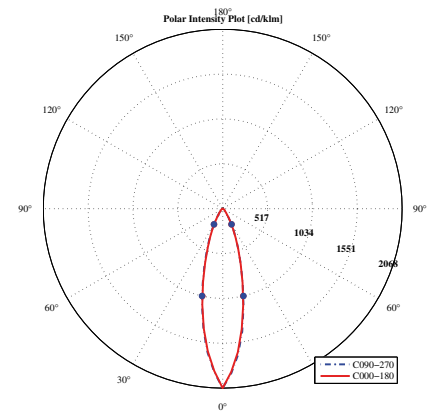
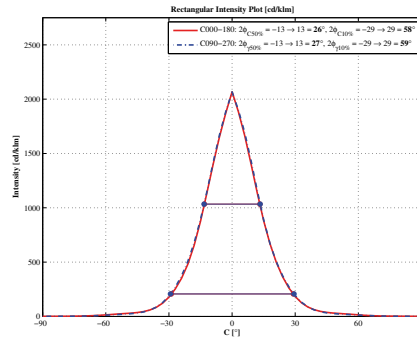
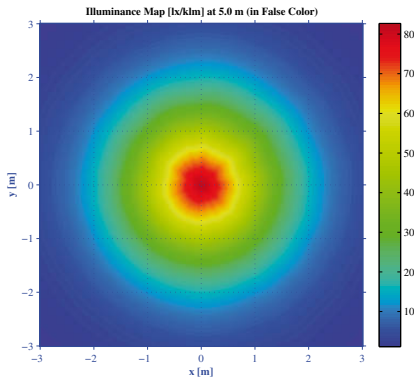
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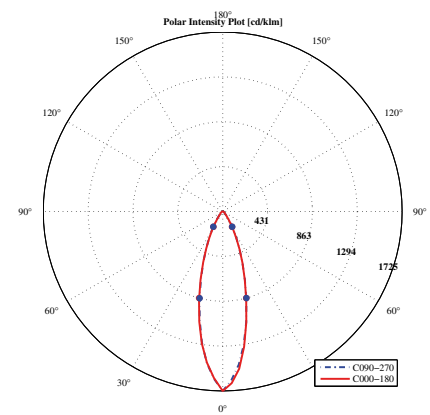
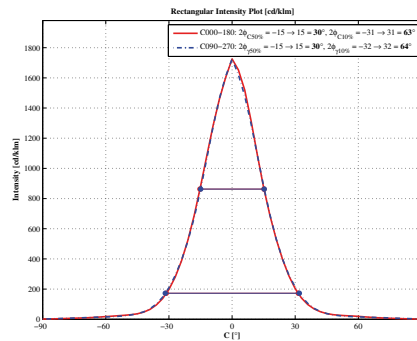
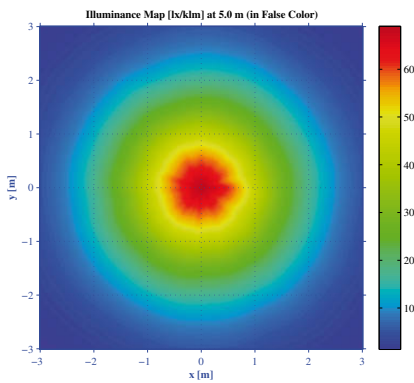
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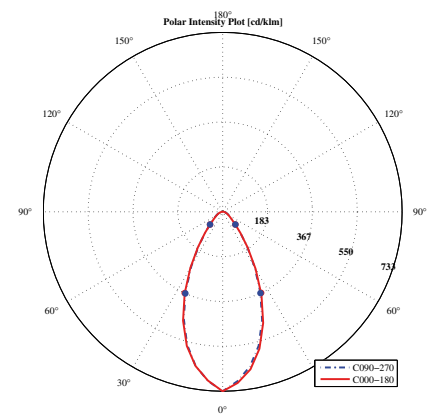
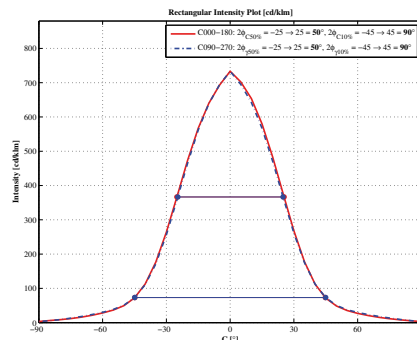
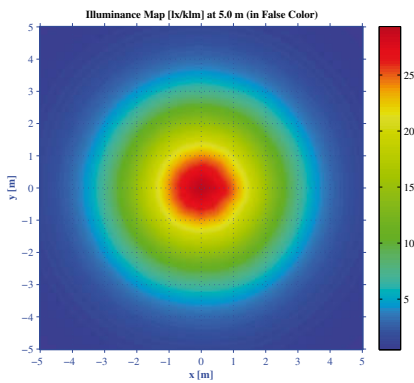
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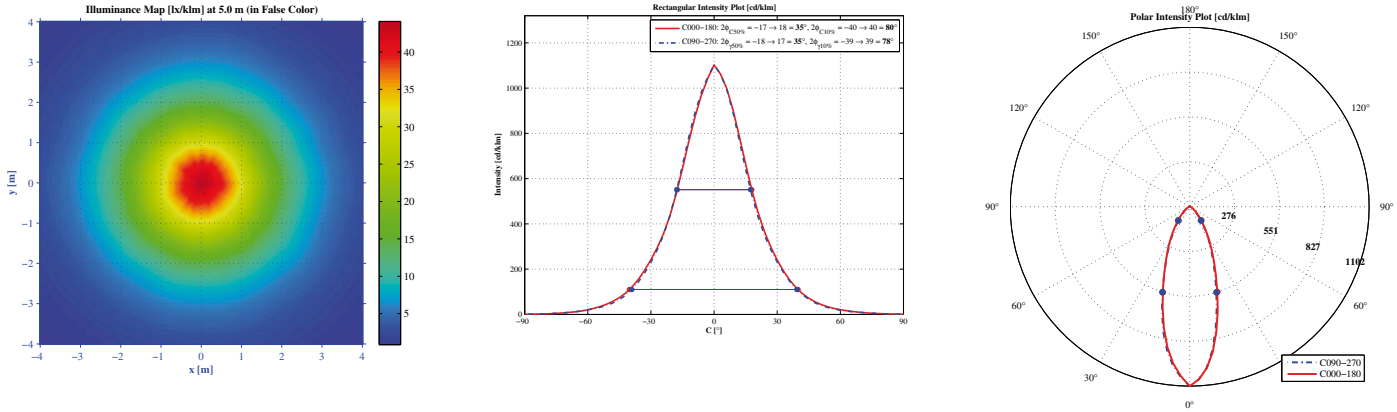
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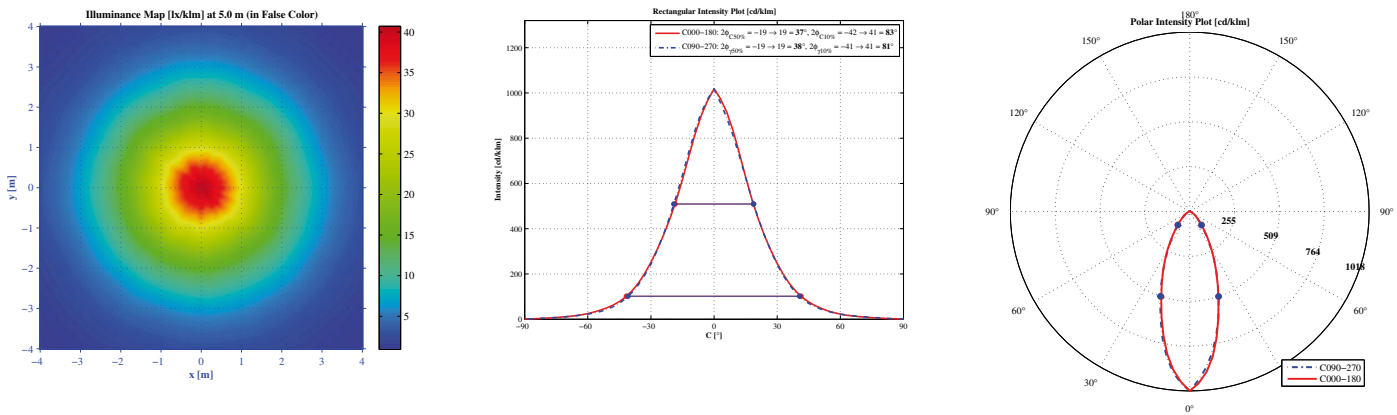
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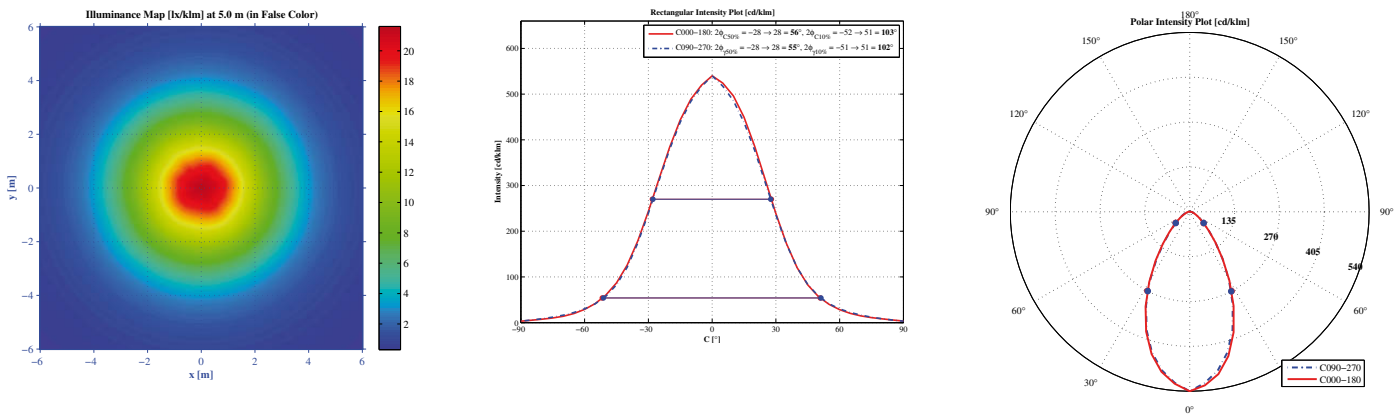
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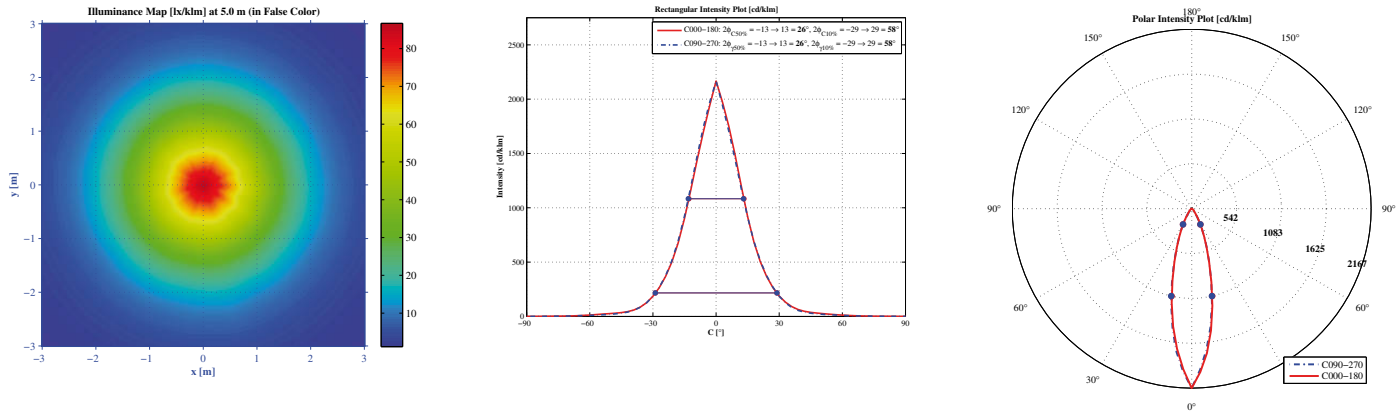
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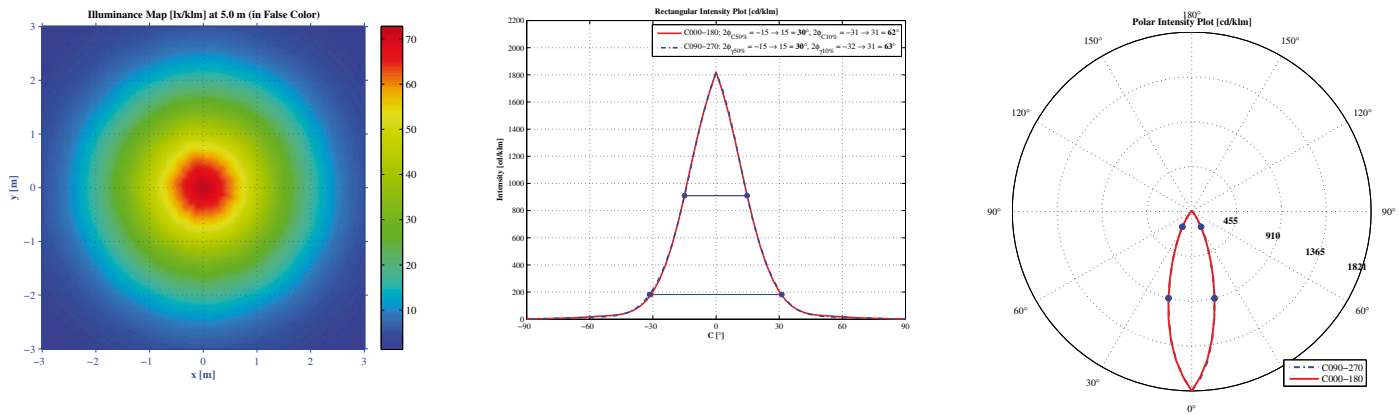
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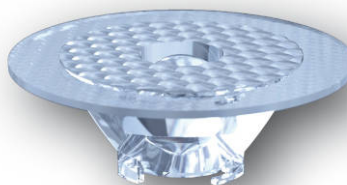
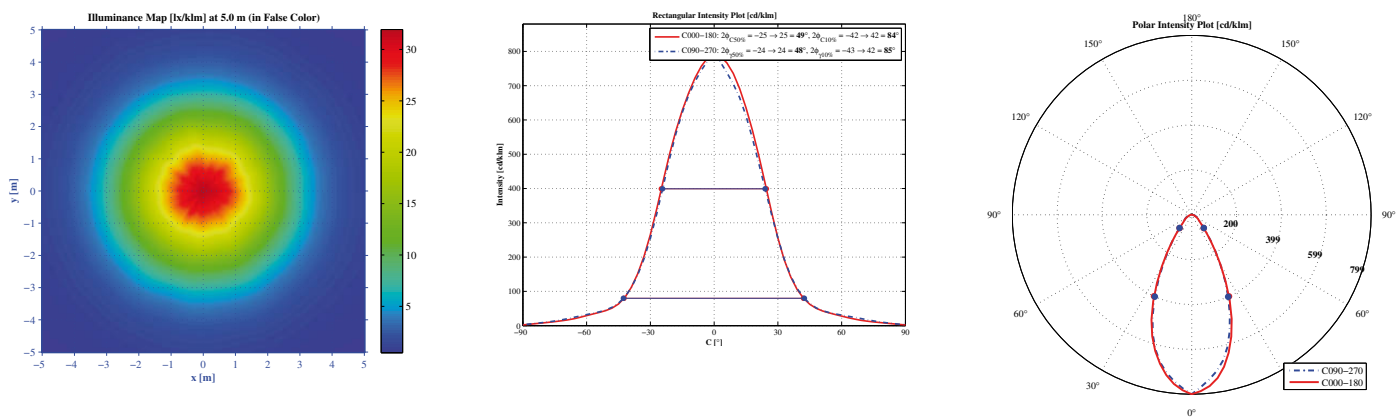
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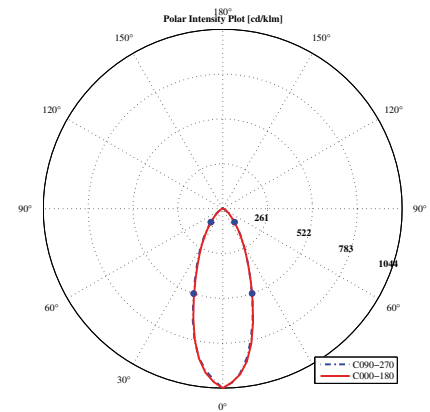
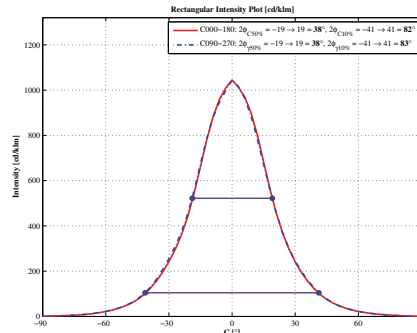
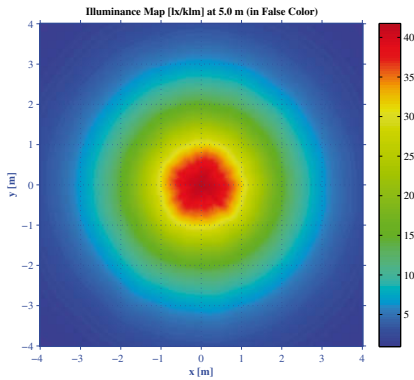
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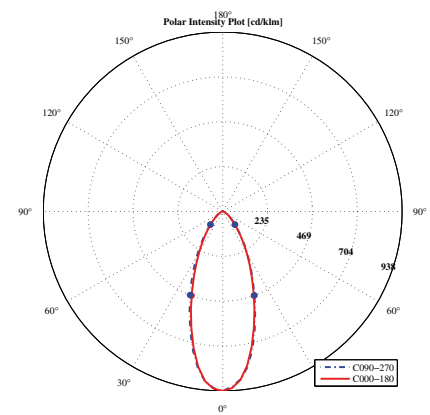
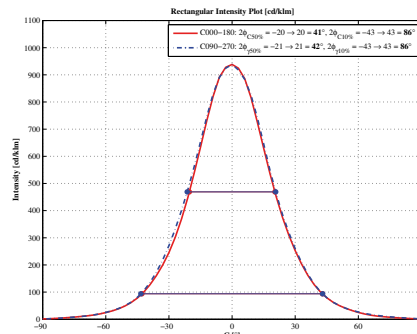
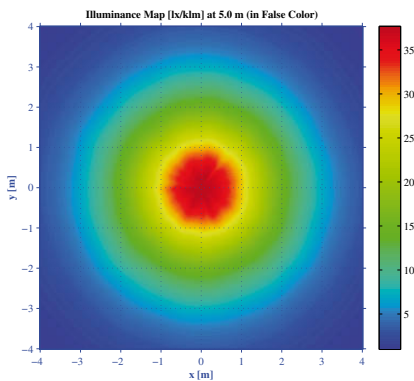
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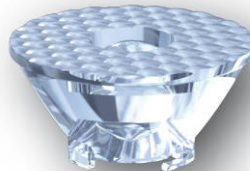
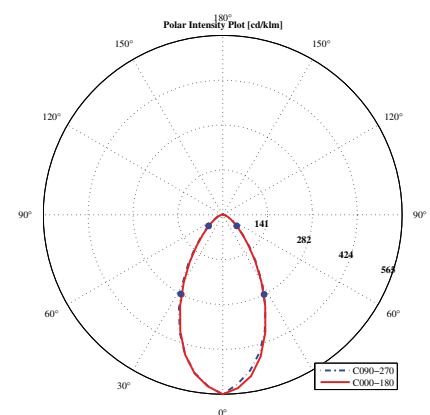
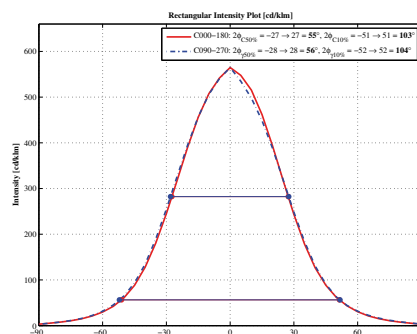
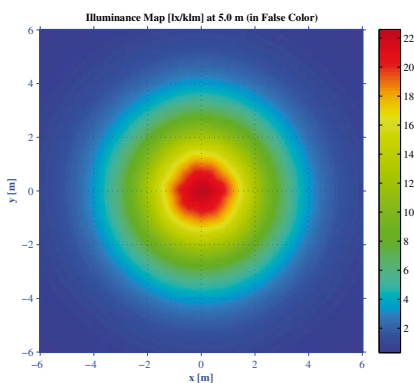
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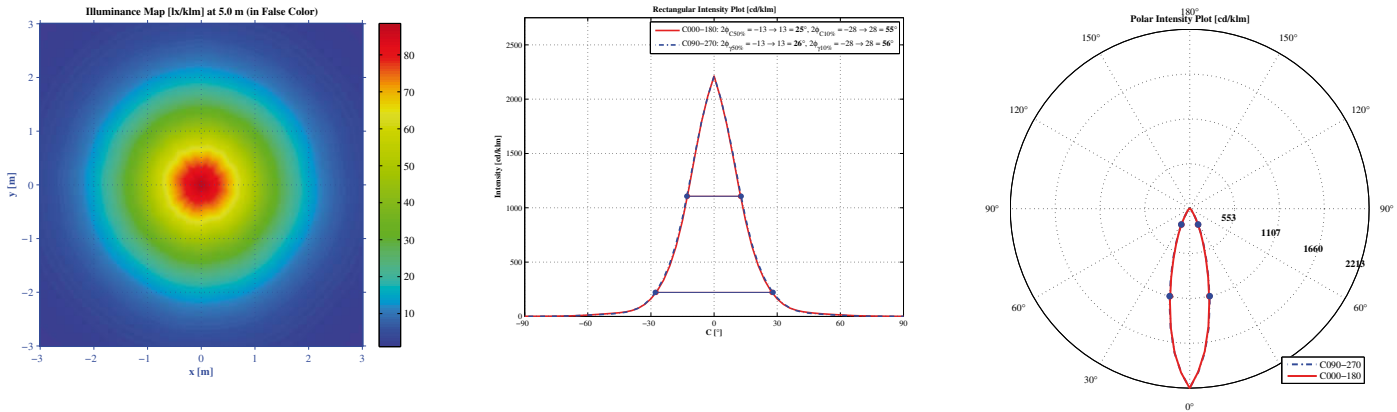
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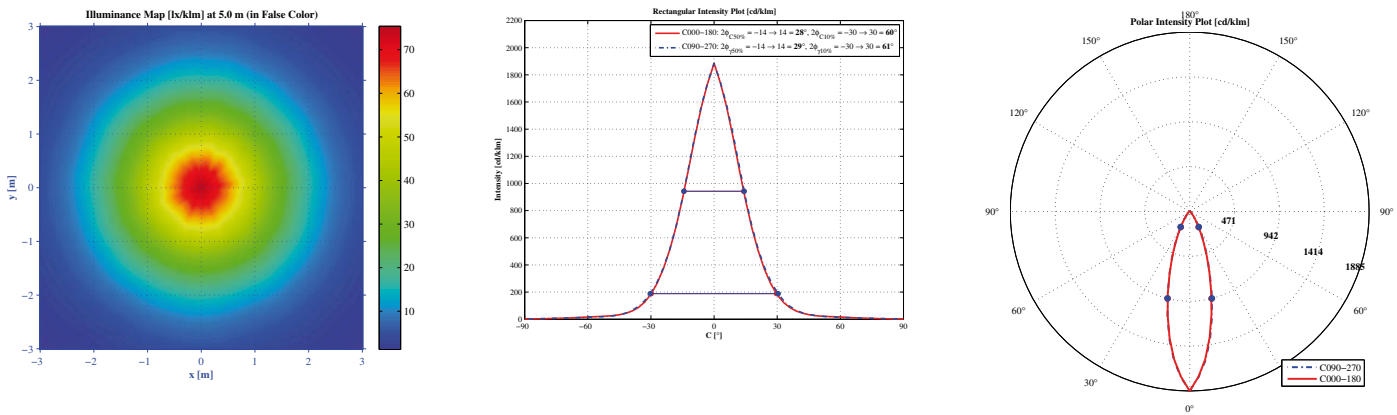
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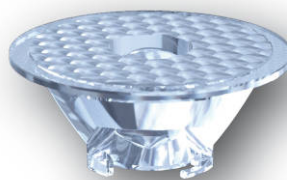
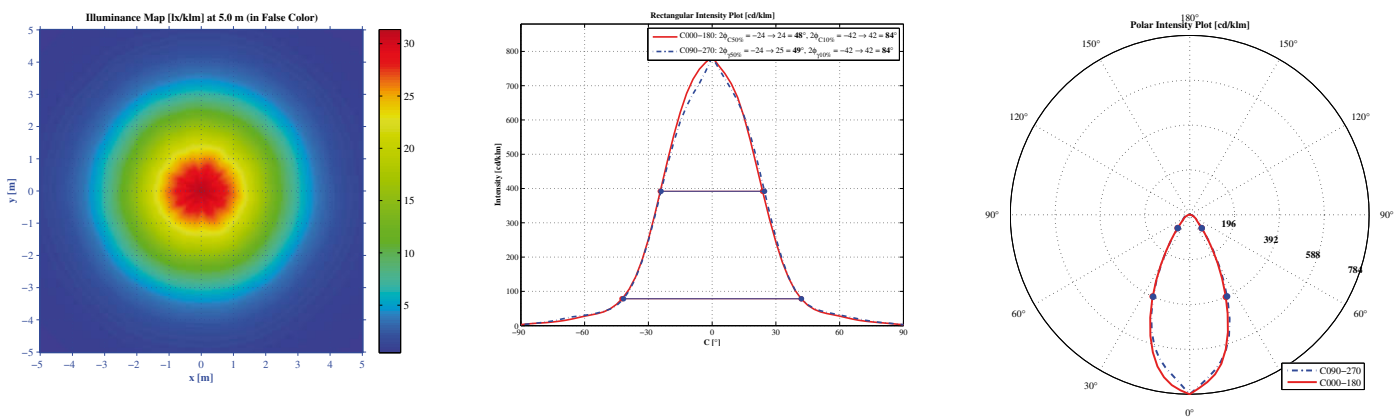
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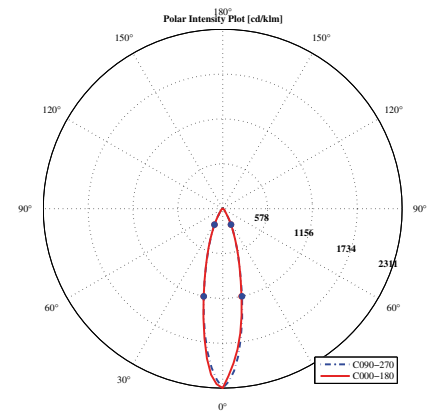
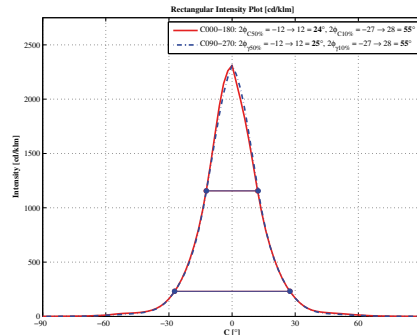
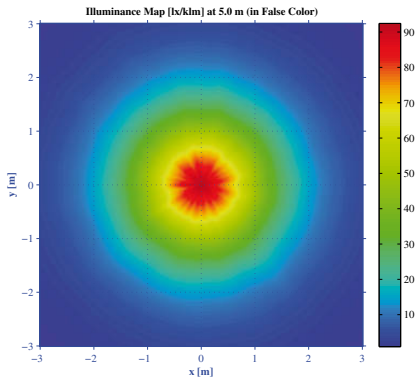
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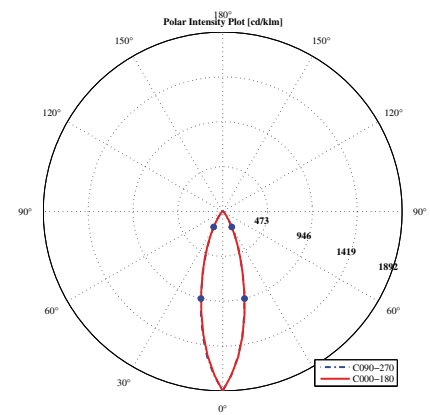
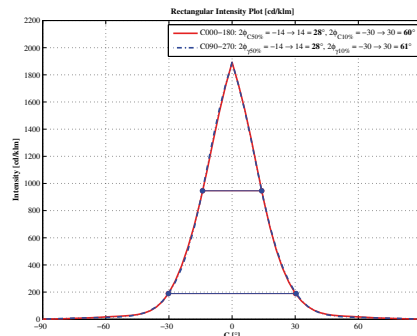
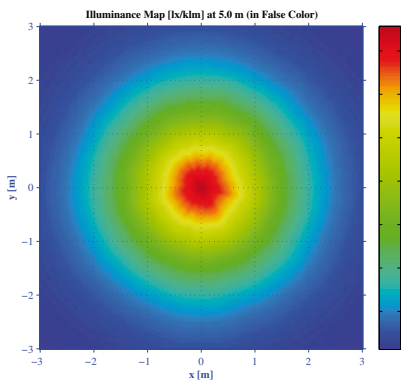
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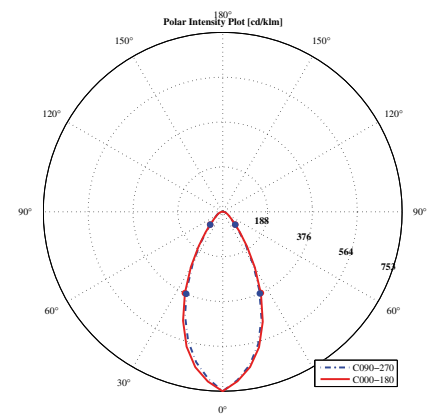
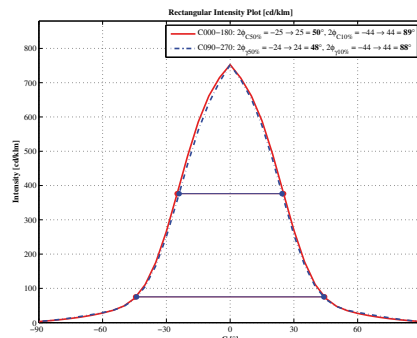
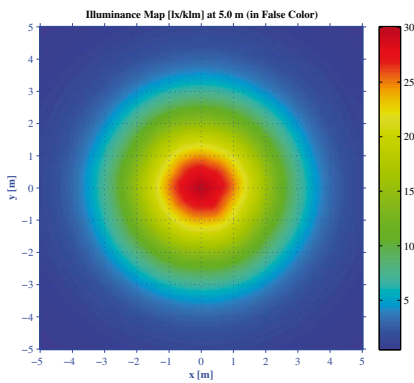
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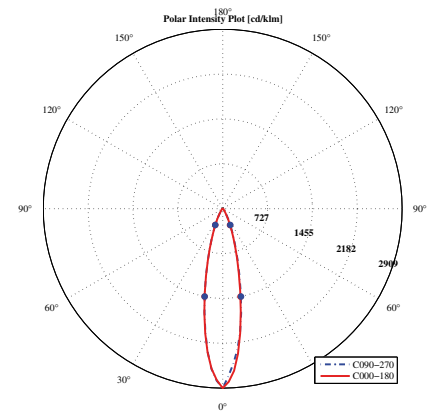
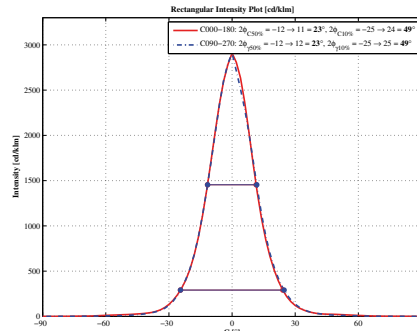
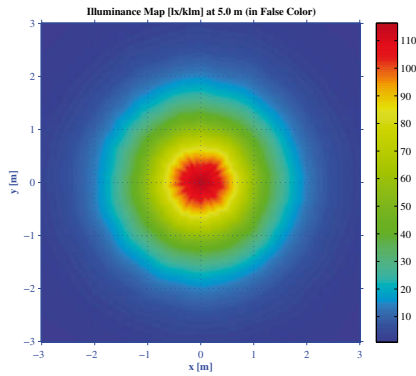
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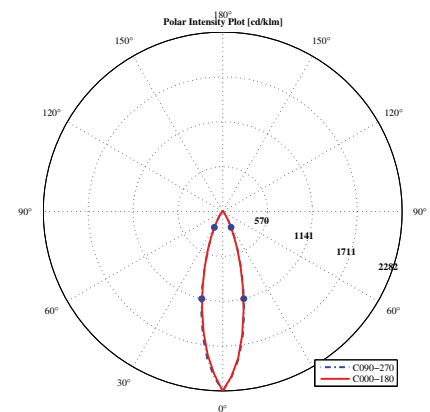
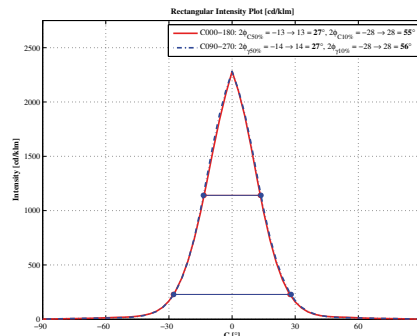
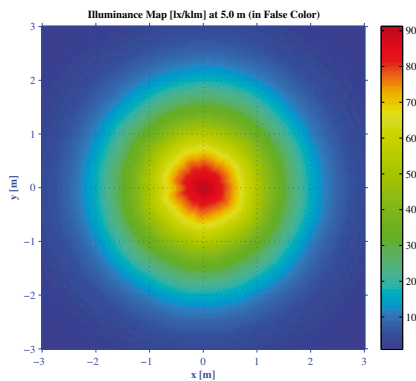
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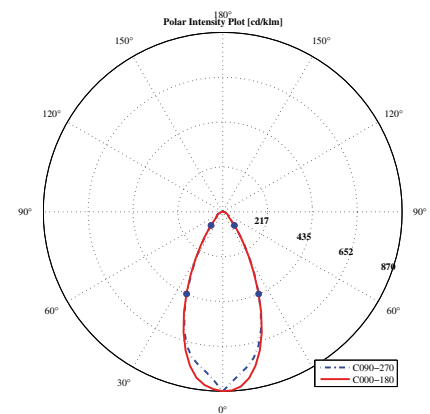
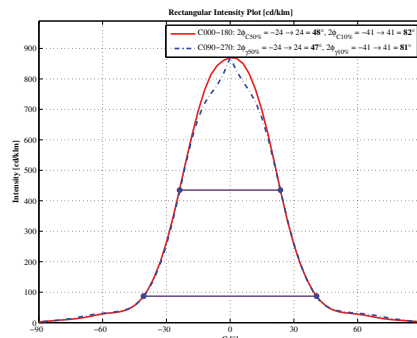
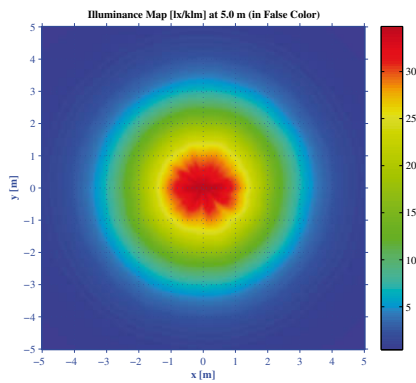
8. PL1724NA / PL1731NA / PL1743NA - CREE CXA-3050



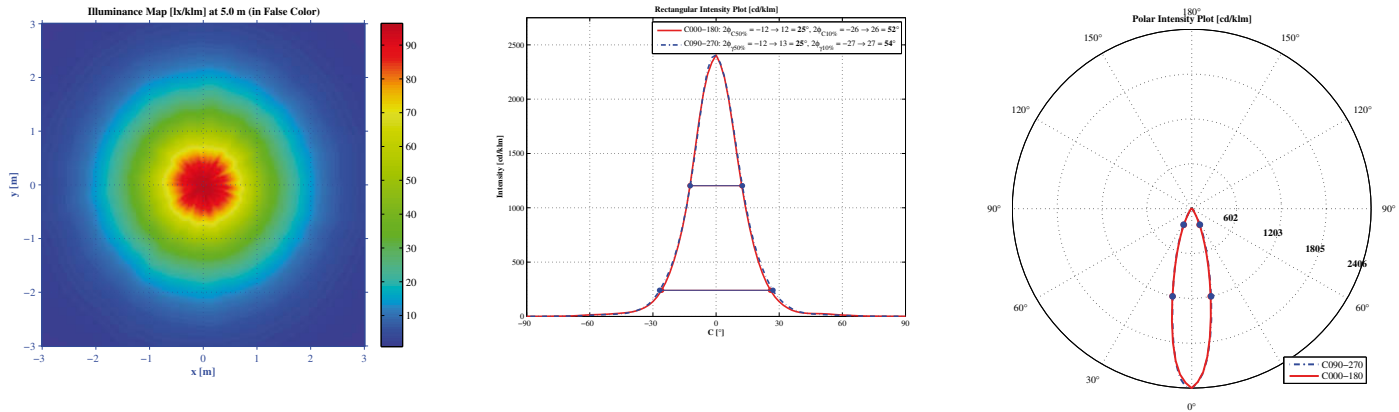
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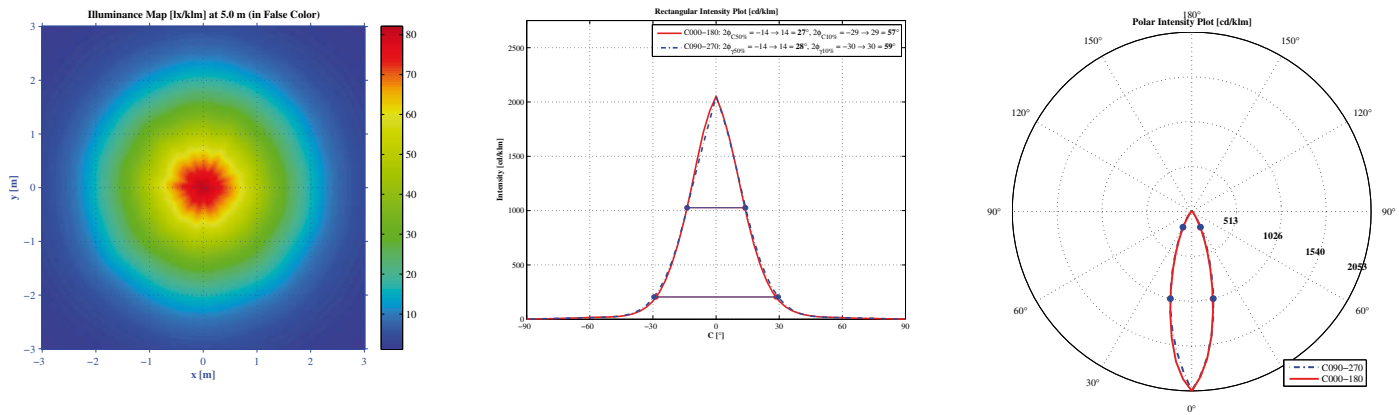
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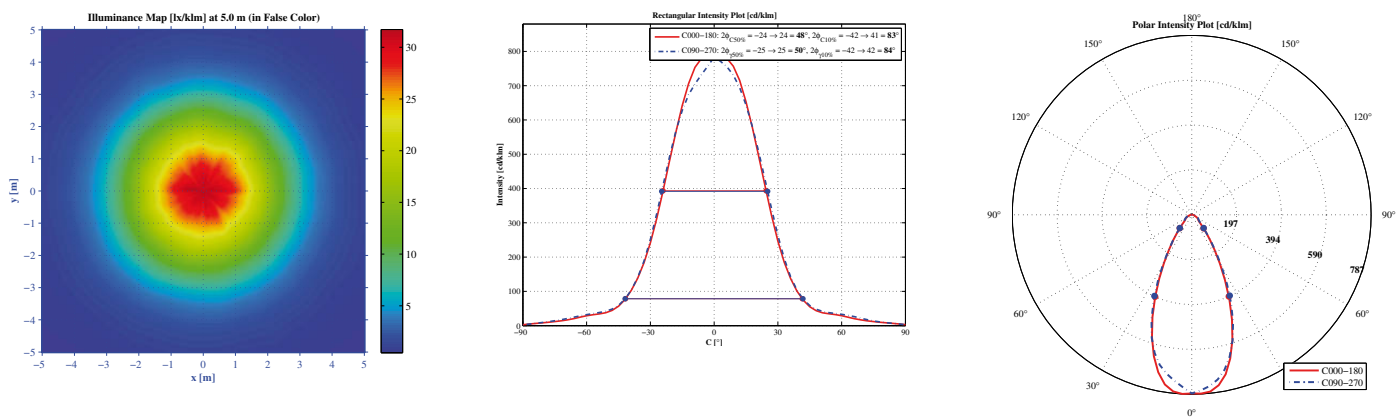
9. PL1724NA / PL1731NA / PL1743NA - OSRAM SOLERIQ E30



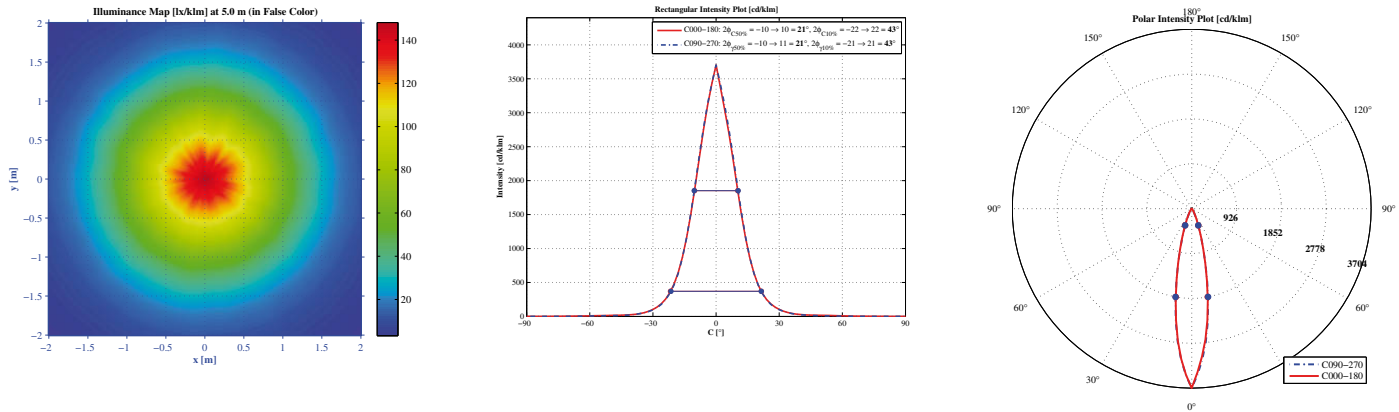
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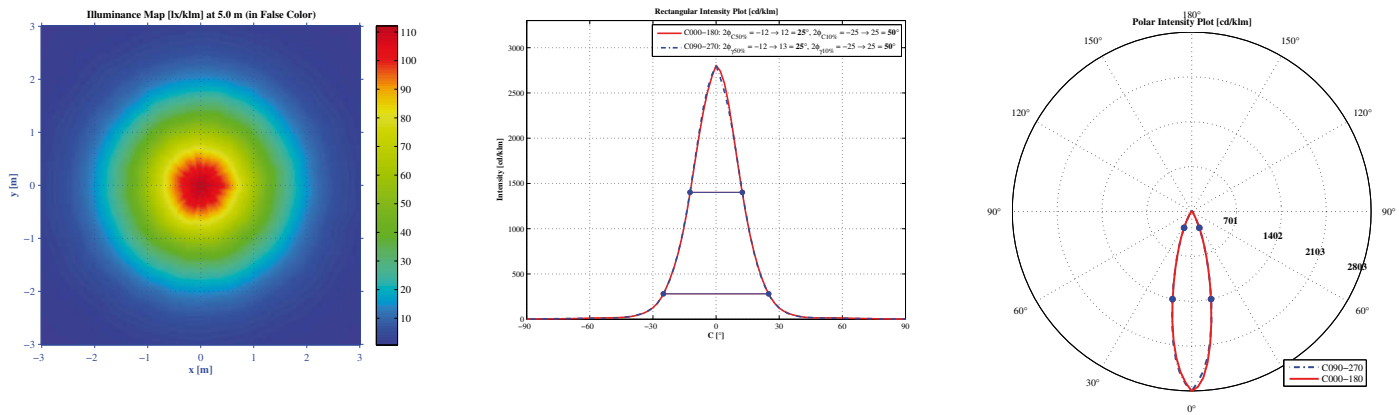
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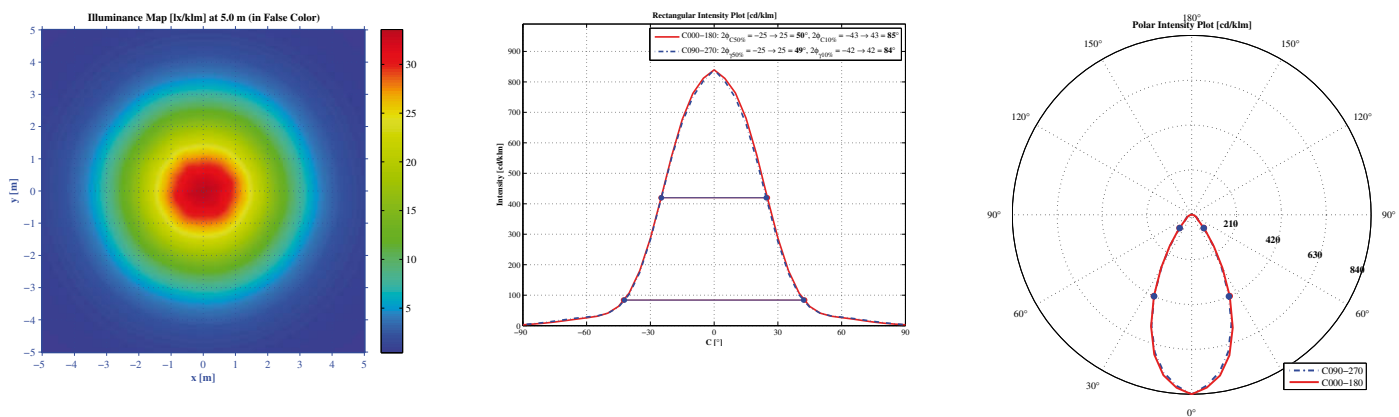
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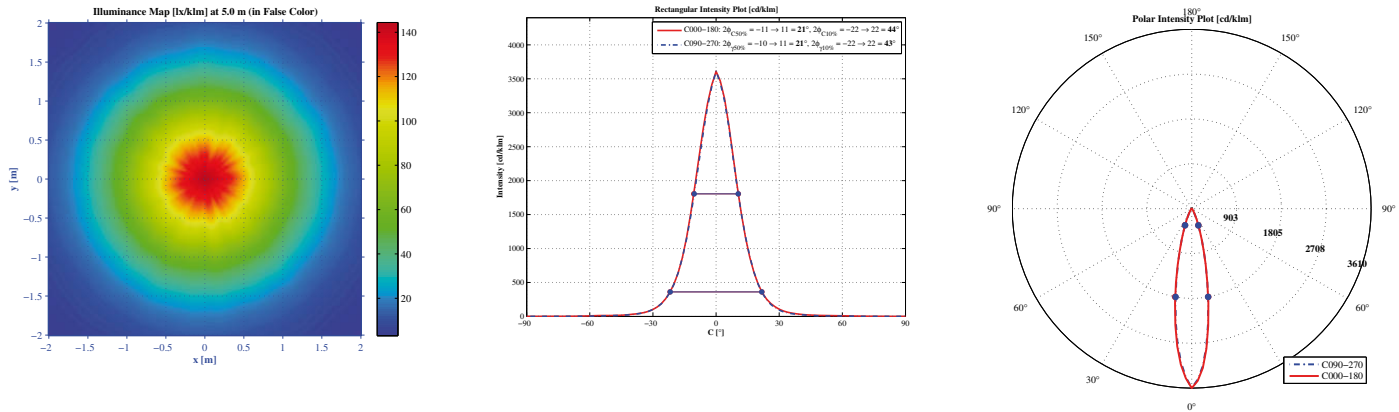
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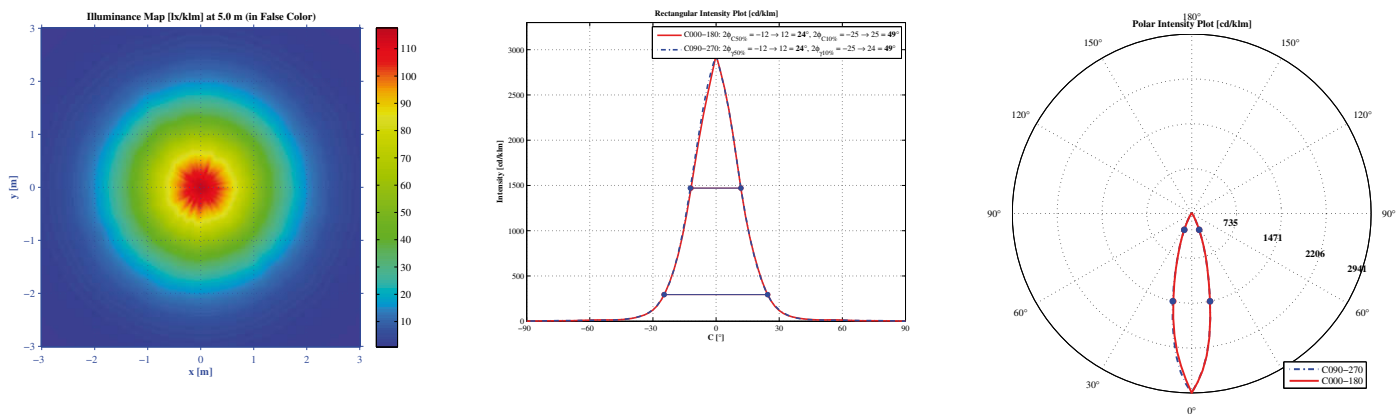
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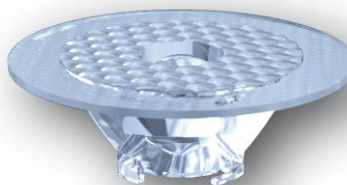
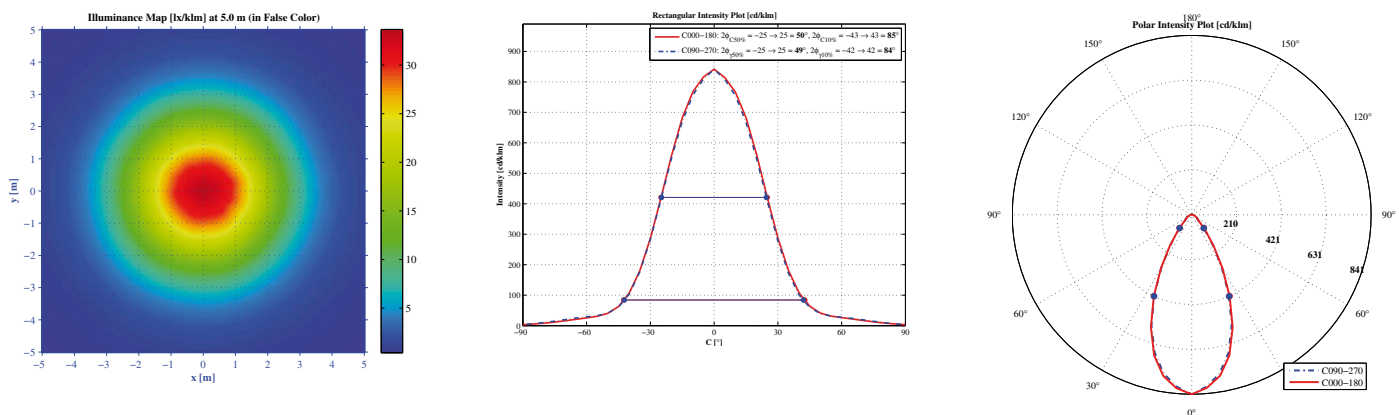
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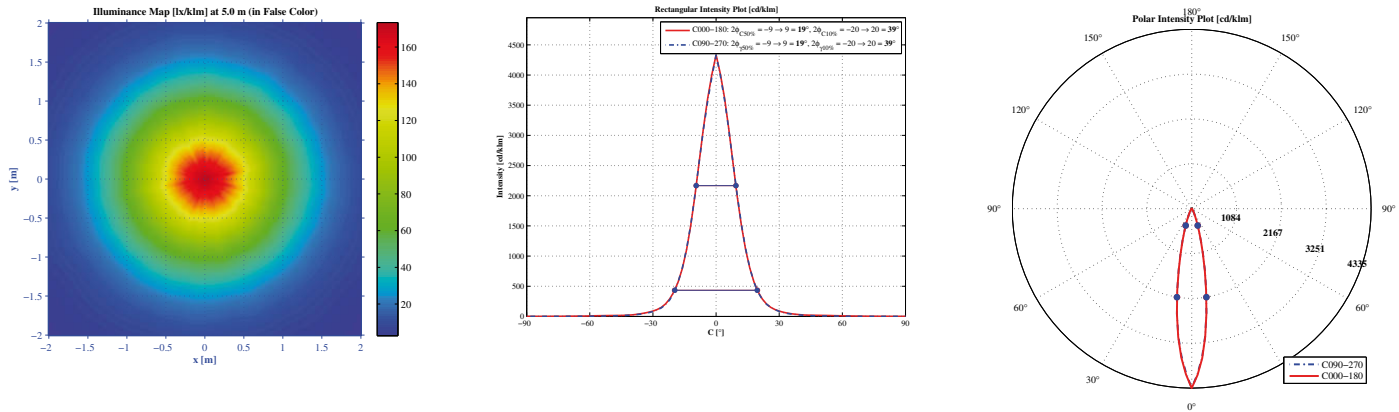
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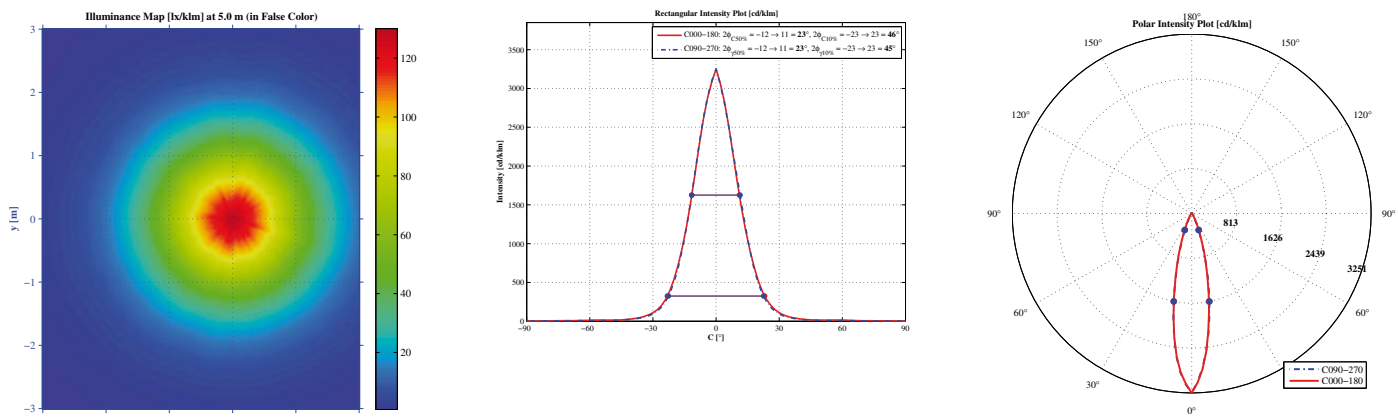
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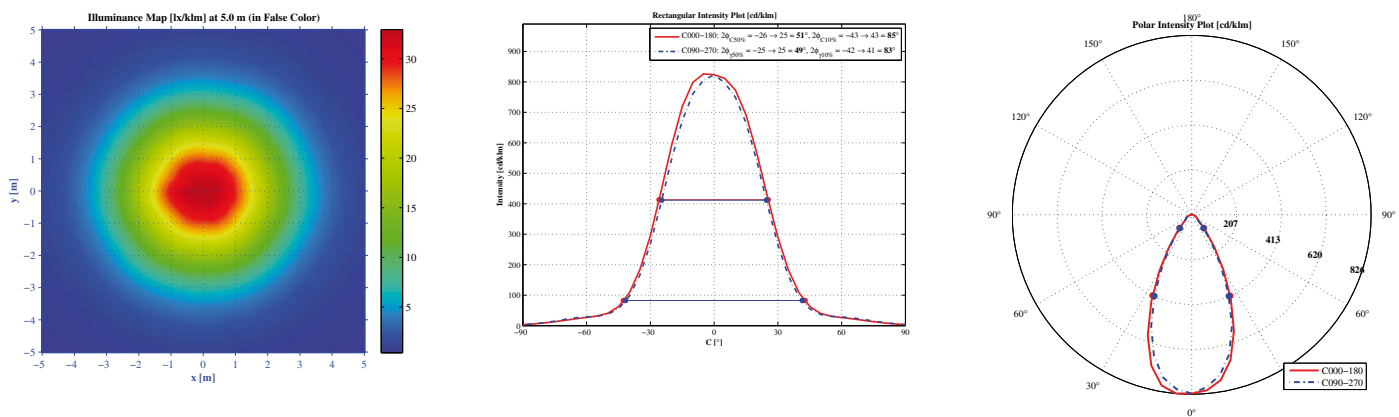
12. PL1724NA / PL1731NA / PL1743NA - BRIDGELUX ES - DS24



12.1 PL1724ME / PL1731ME / PL1743ME - BRIDGELUX ES - DS24



12.2 PL1724WI / PL1731WI / PL1743WI - BRIDGELUX ES - DS24



13. Product Series

LED Manufacturer	COB LED	P/N	Holder*
LUMILEDS	LUXEON K24	PL1724xx / PL1731xx / PL1743xx	ZOC1494
CITIZEN	CLL-040	PL1724xx / PL1731xx / PL1743xx	ZOC1443
CITIZEN	CLL-050	PL1724xx / PL1731xx / PL1743xx	ZOC1441
CITIZEN	CLL-042	PL1724xx / PL1731xx / PL1743xx	ZOC1443
CITIZEN	CLL-052	PL1724xx / PL1731xx / PL1743xx	ZOC1441
CITIZEN	CLL-040	PL1724xx / PL1731xx / PL1743xx	ZOC1443EC*
CITIZEN	CLL-050	PL1724xx / PL1731xx / PL1743xx	ZOC1441EC*
CITIZEN	CLL-042	PL1724xx / PL1731xx / PL1743xx	ZOC1443EC*
CITIZEN	CLL-052	PL1724xx / PL1731xx / PL1743xx	ZOC1441EC*
SEOUL S.C.	ZC-25	PL1724xx / PL1731xx / PL1743xx	ZOC1443
SEOUL S.C.	ZC-40	PL1724xx / PL1731xx / PL1743xx	ZOC1443
CREE	CXA-3050	PL1724xx / PL1731xx / PL1743xx	ZOC1702
OSRAM	SOLERIQ E-30	PL1724xx / PL1731xx / PL1743xx	ZOC1637
TRIDONIC	STARK-G3-LES-19	PL1724xx / PL1731xx / PL1743xx	ZOC1633
TRIDONIC	STARK-G3-LES-23	PL1724xx / PL1731xx / PL1743xx	ZOC1633
BRIDGELUX	ES ARRAY - DS24	PL1724xx / PL1731xx / PL1743xx	ZOC1440
BRIDGELUX	ES ARRAY - DS24	PL1724xx / PL1731xx / PL1743xx	ZOC1440EC*

NOTES:

- PL1724xx model is recommended for your testing and simulations.
- The mounting flange of PL1731xx and PL1743xx models has different mechanical dimensions. 100 pcs MOQ is requested for volume production.



PL1724ME



PL1724NA



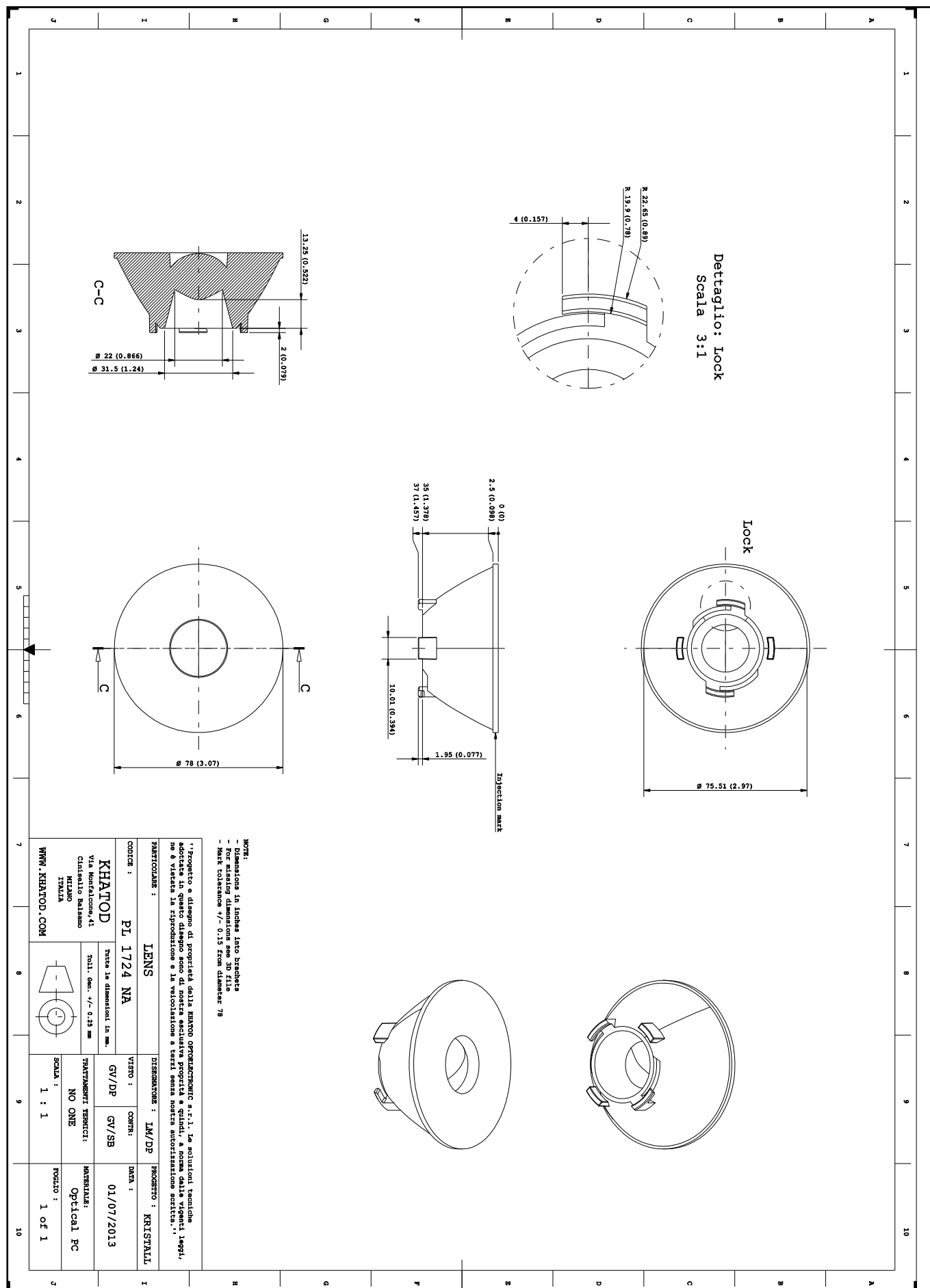
PL1724WI



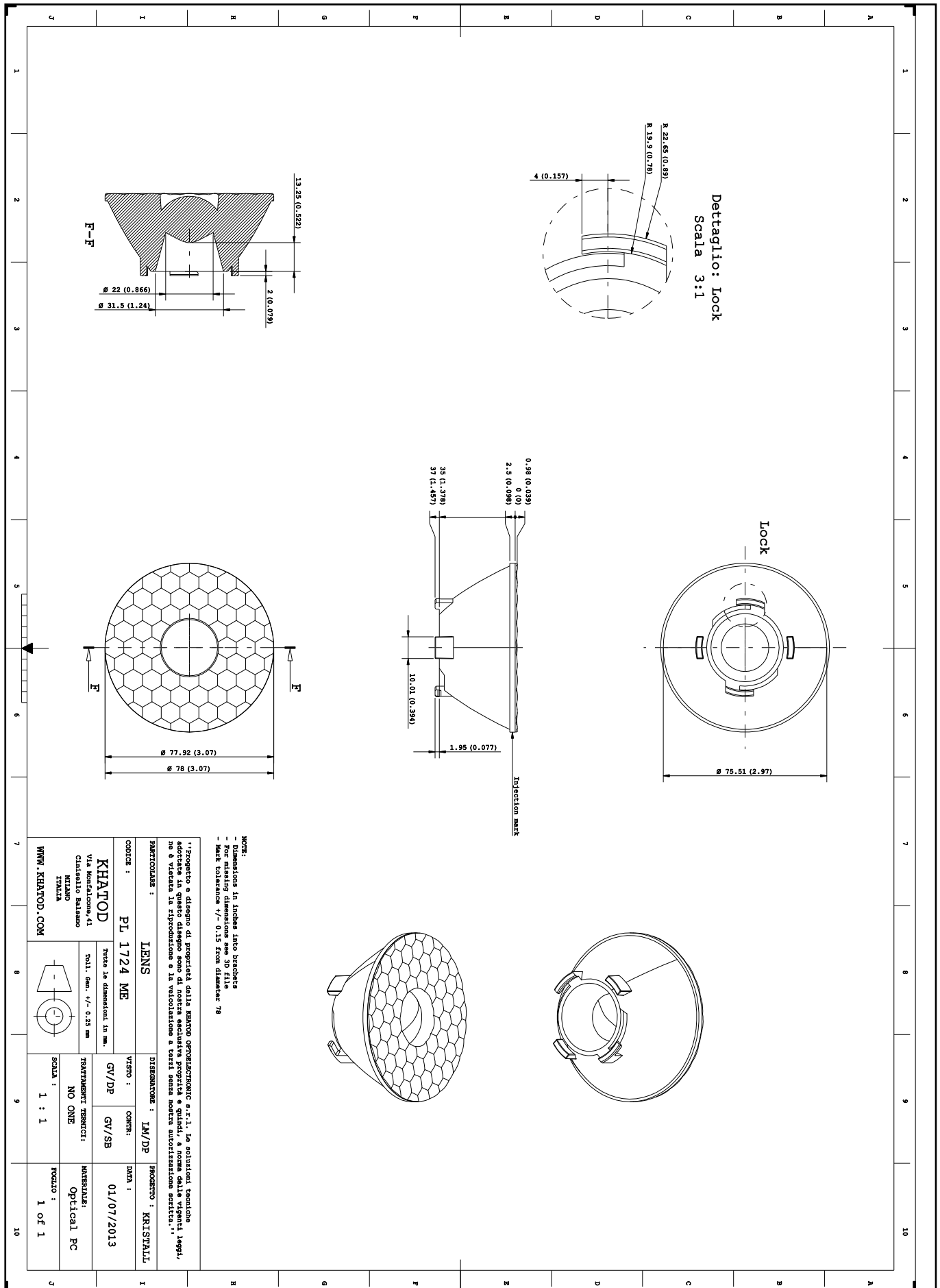
ZOCxxxx

*Available with Connector

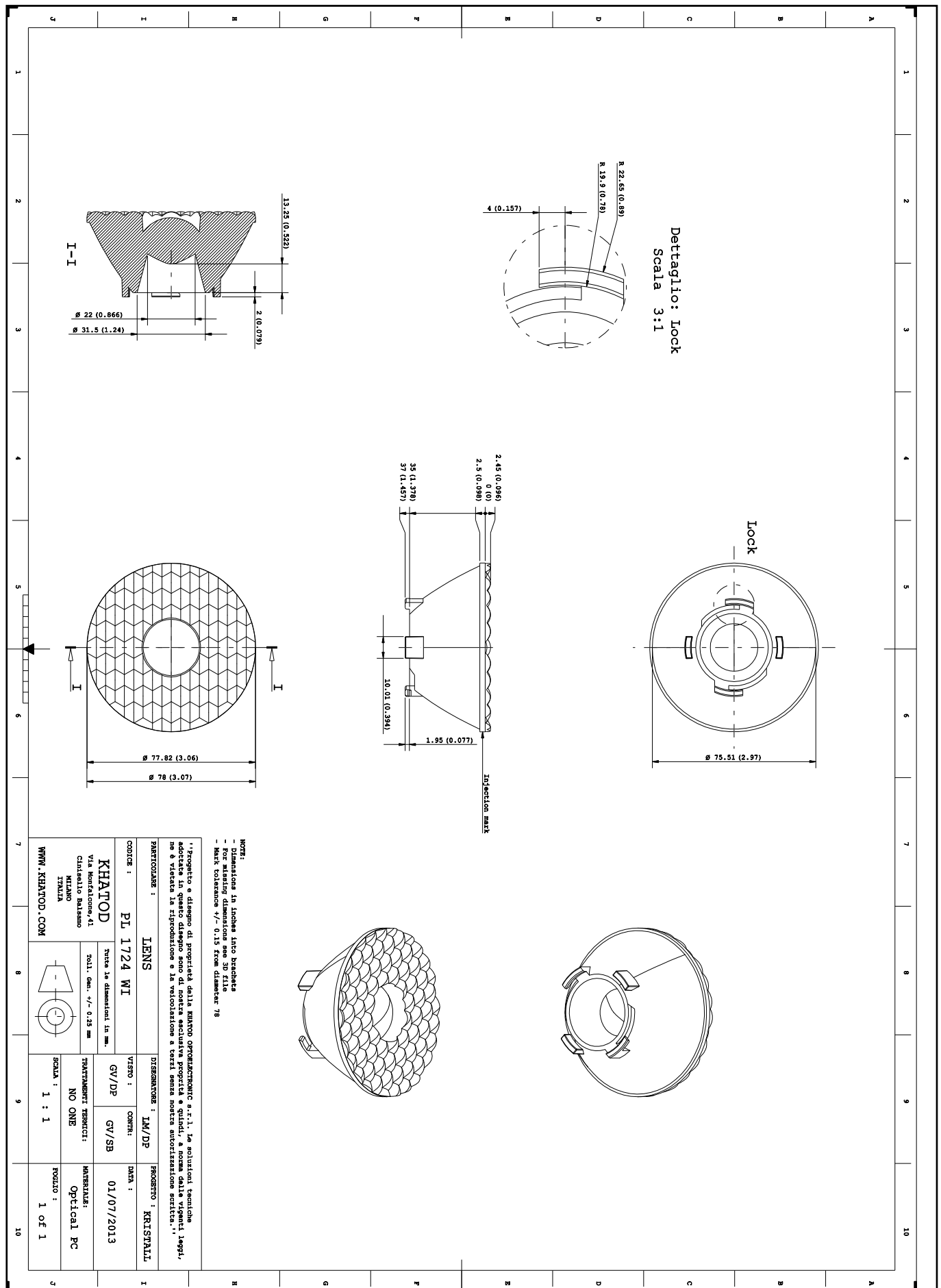
14. PL1724NA Drawing



15. PL1724ME Drawing

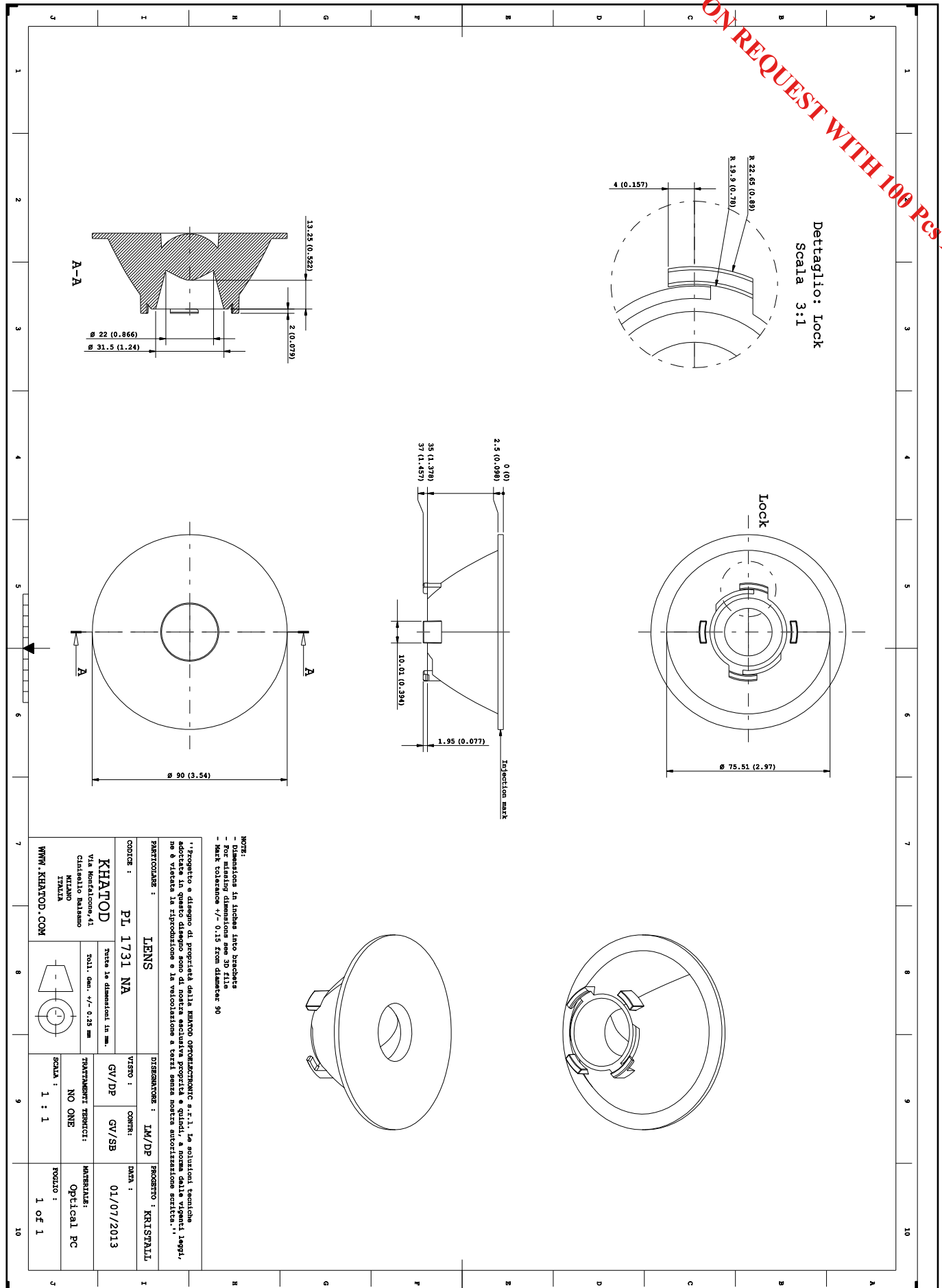


16. PL1724WI Drawing



17. PL1731NA Drawing

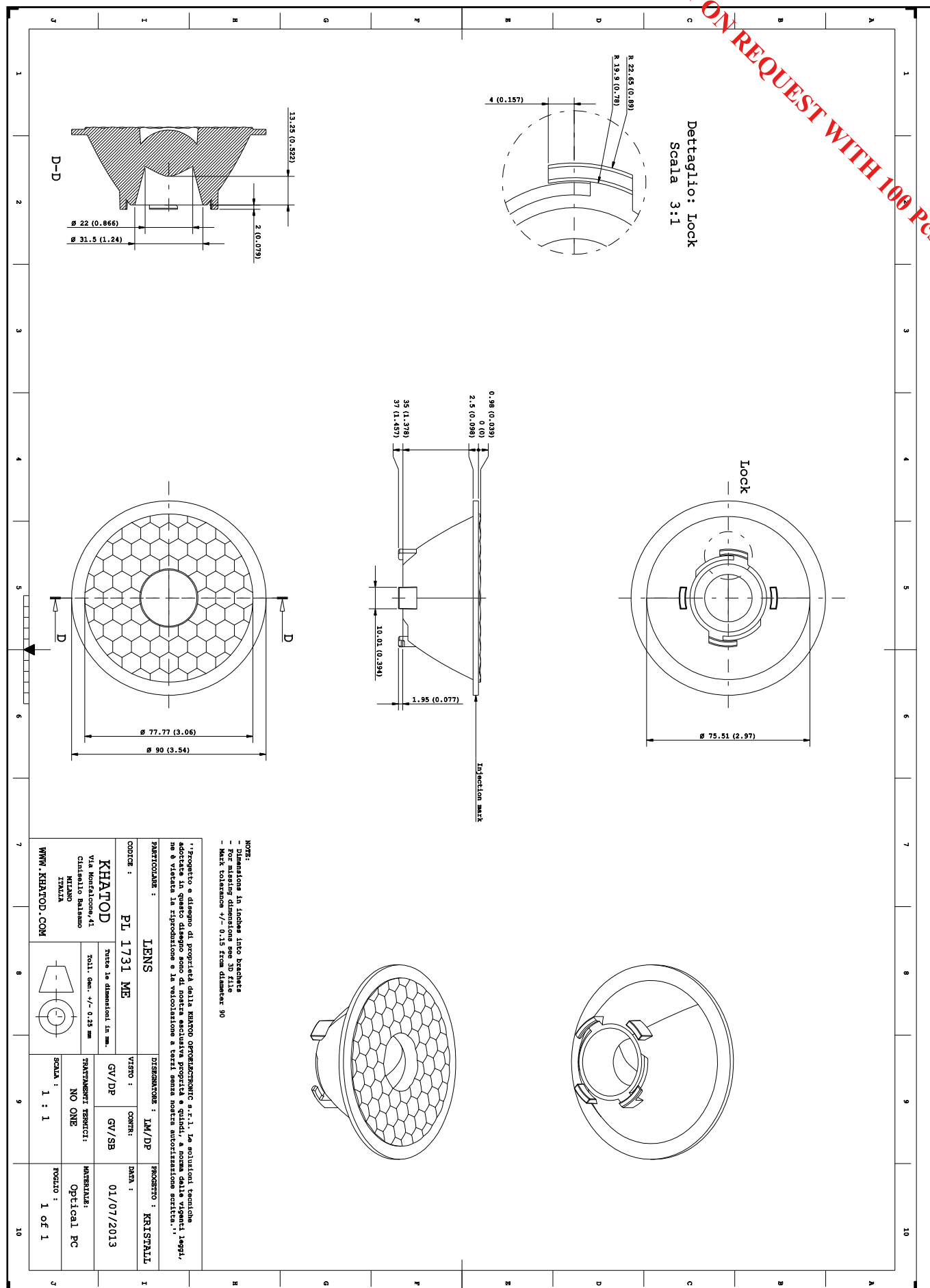
ONLY ON REQUEST WITH 100 Pcs M.O.Q.



18. PL1731ME Drawing

ONLY ON REQUEST WITH 100 Pcs M.O.Q.

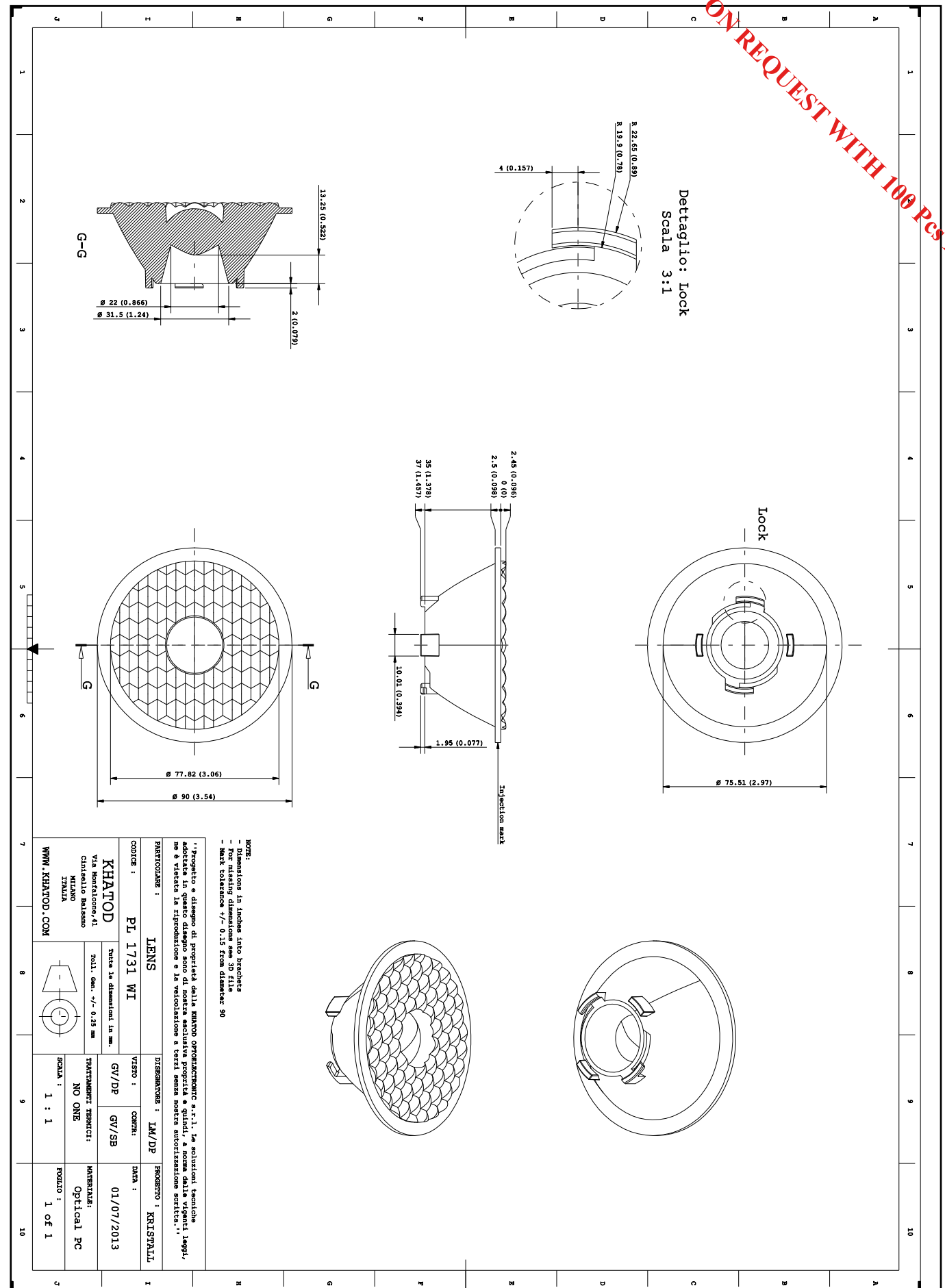
Dettaglio: Lock
Scala 3:1



19. PL1731WI Drawing

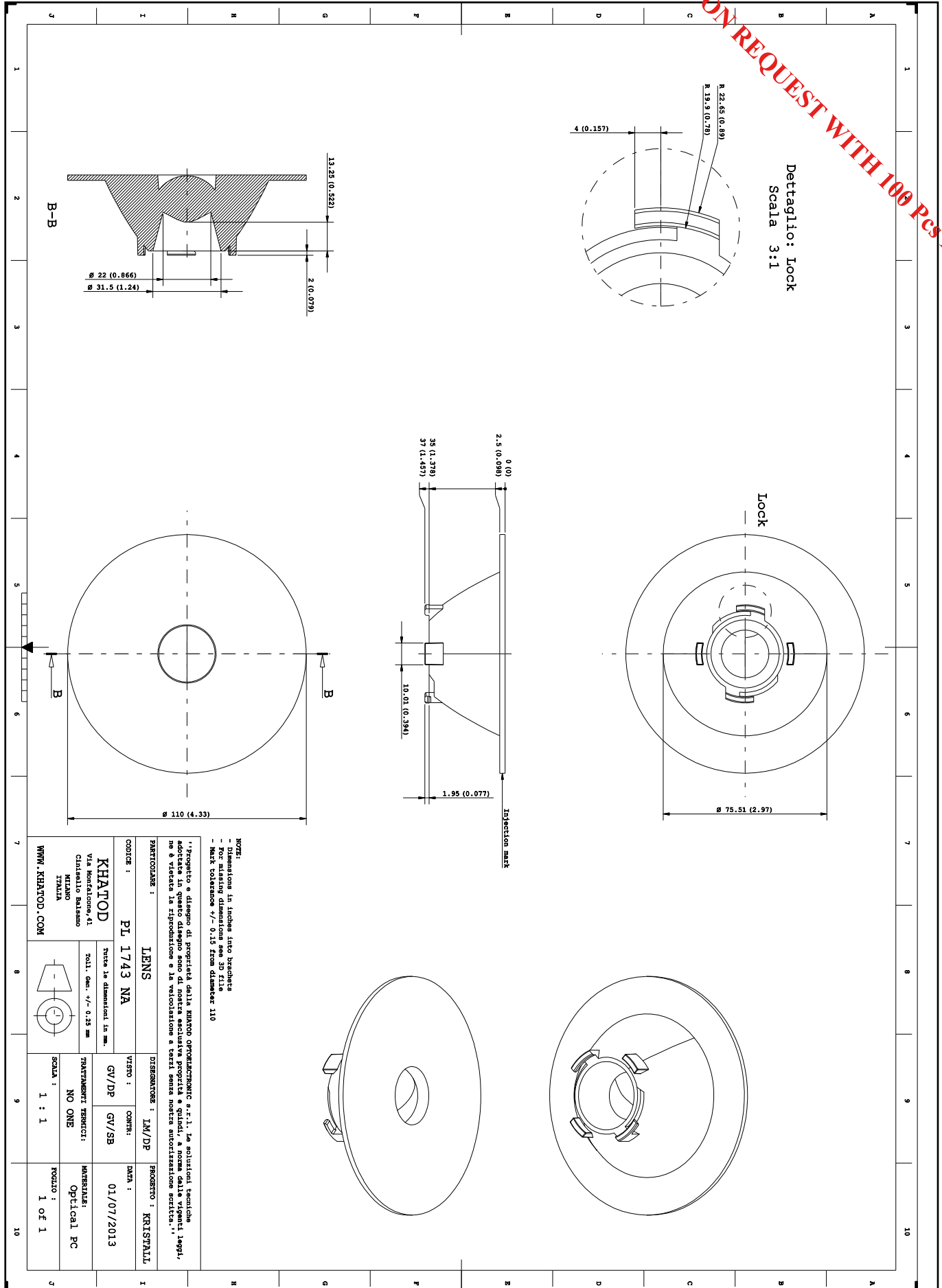
ONLY ON REQUEST WITH 100 Pcs M.O.Q.

Dettaglio: Loo
Scala 3:1



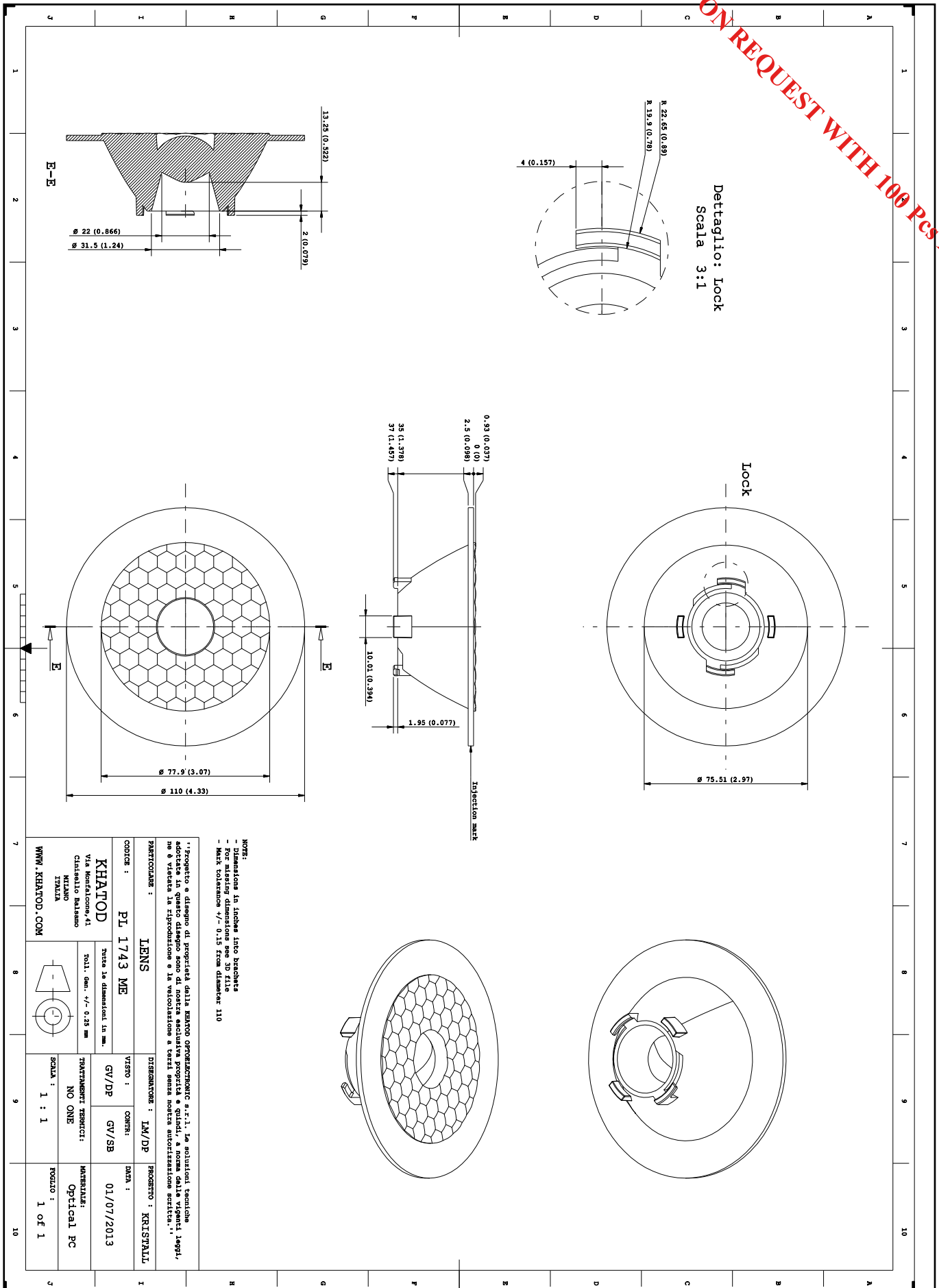
20. PL1743NA Drawing

ONLY ON REQUEST WITH 100 Pcs M.O.Q.



21. PL1743ME Drawing

ONLY ON REQUEST WITH 100 Pcs M.O.Q.



22. PL1743WI Drawing

ONLY ON REQUEST WITH 100 Pcs M.O.Q.

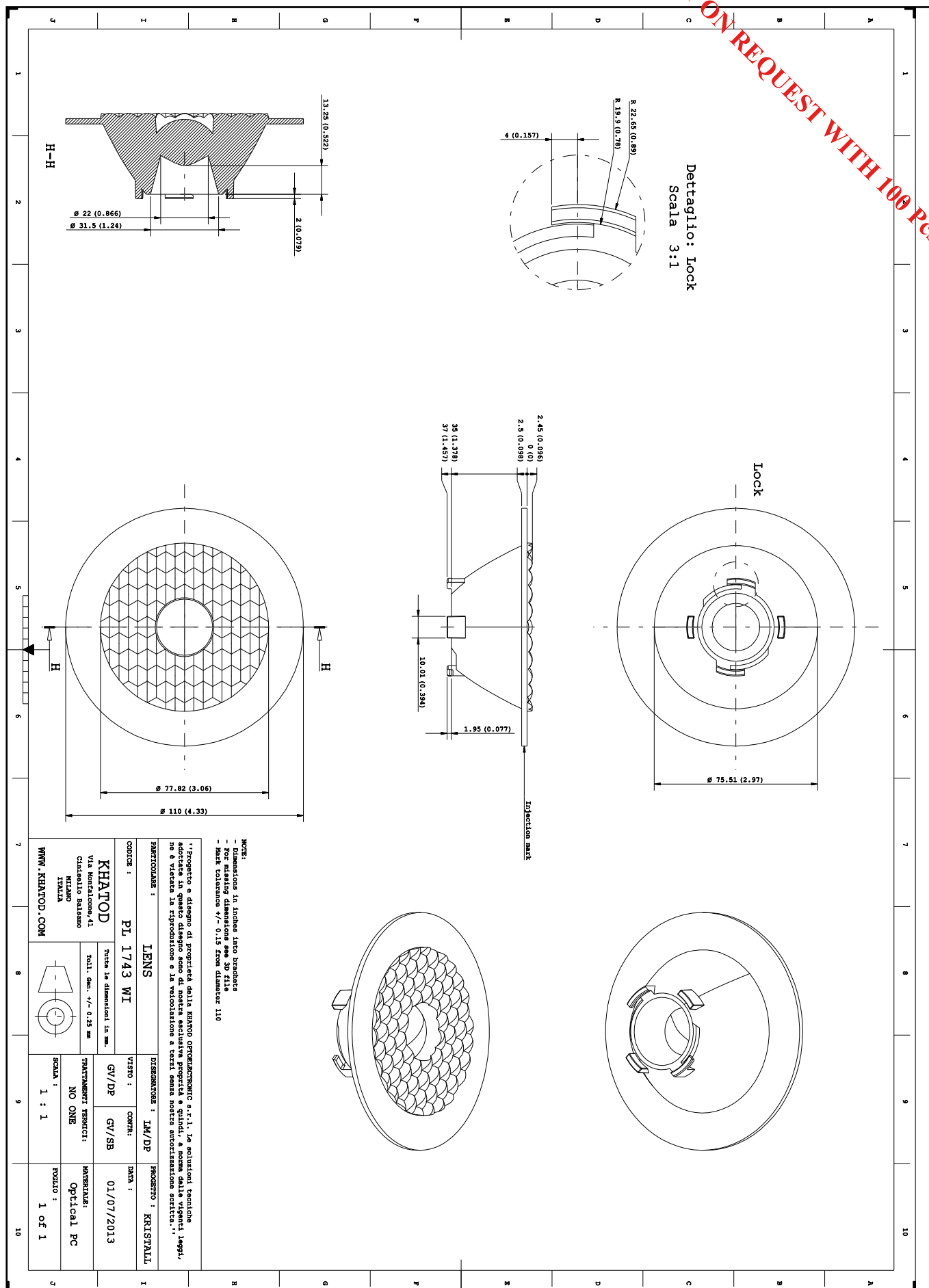
1

A

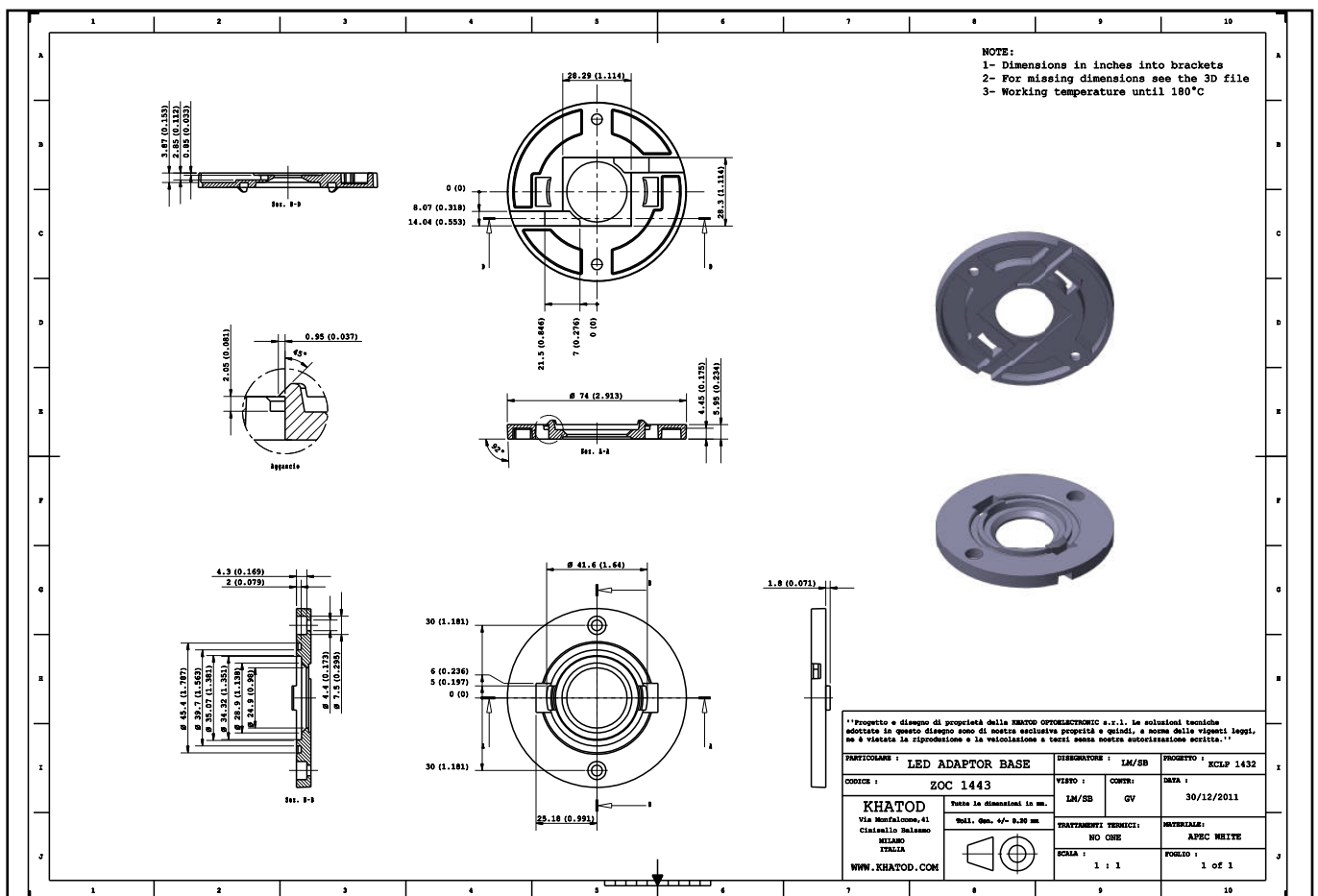
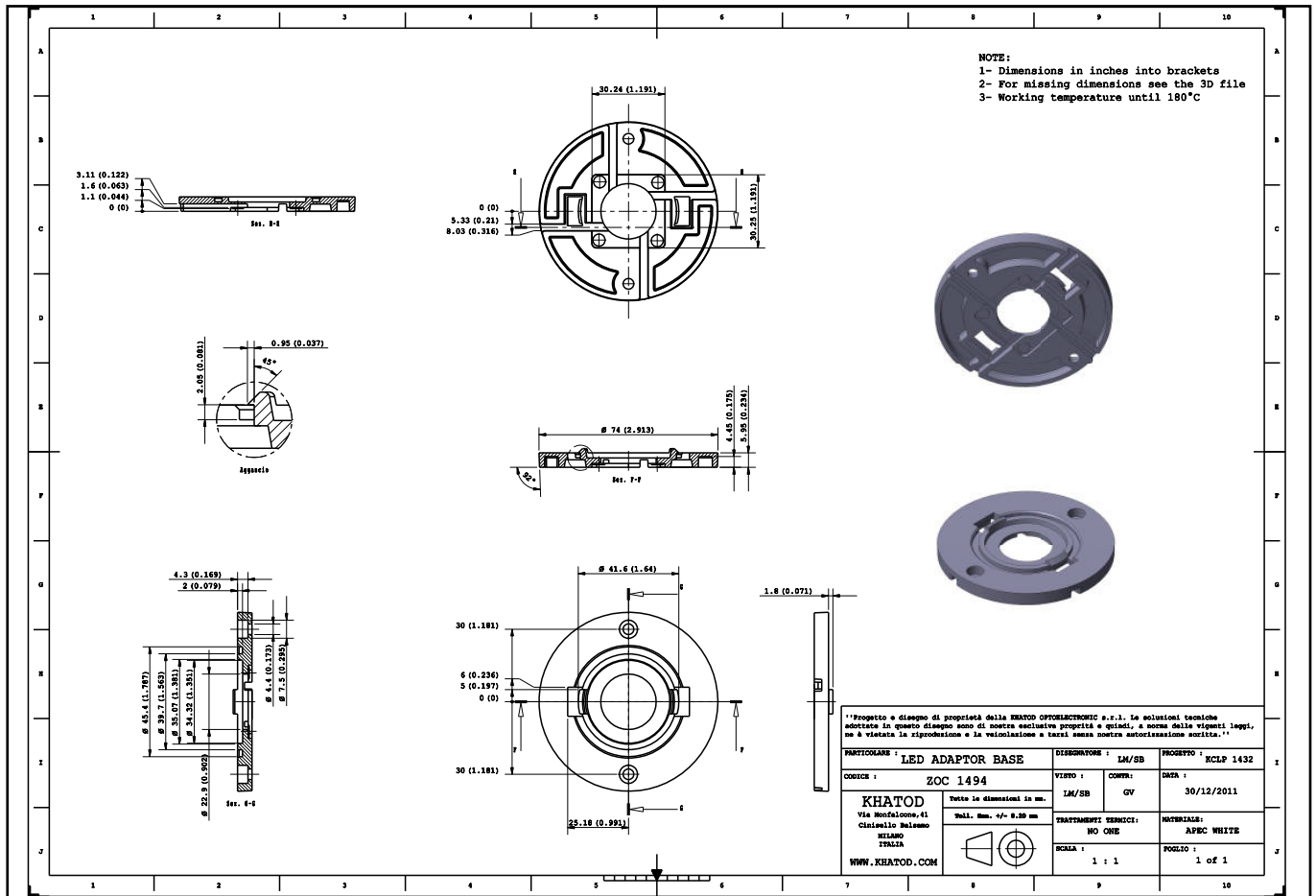
B

C

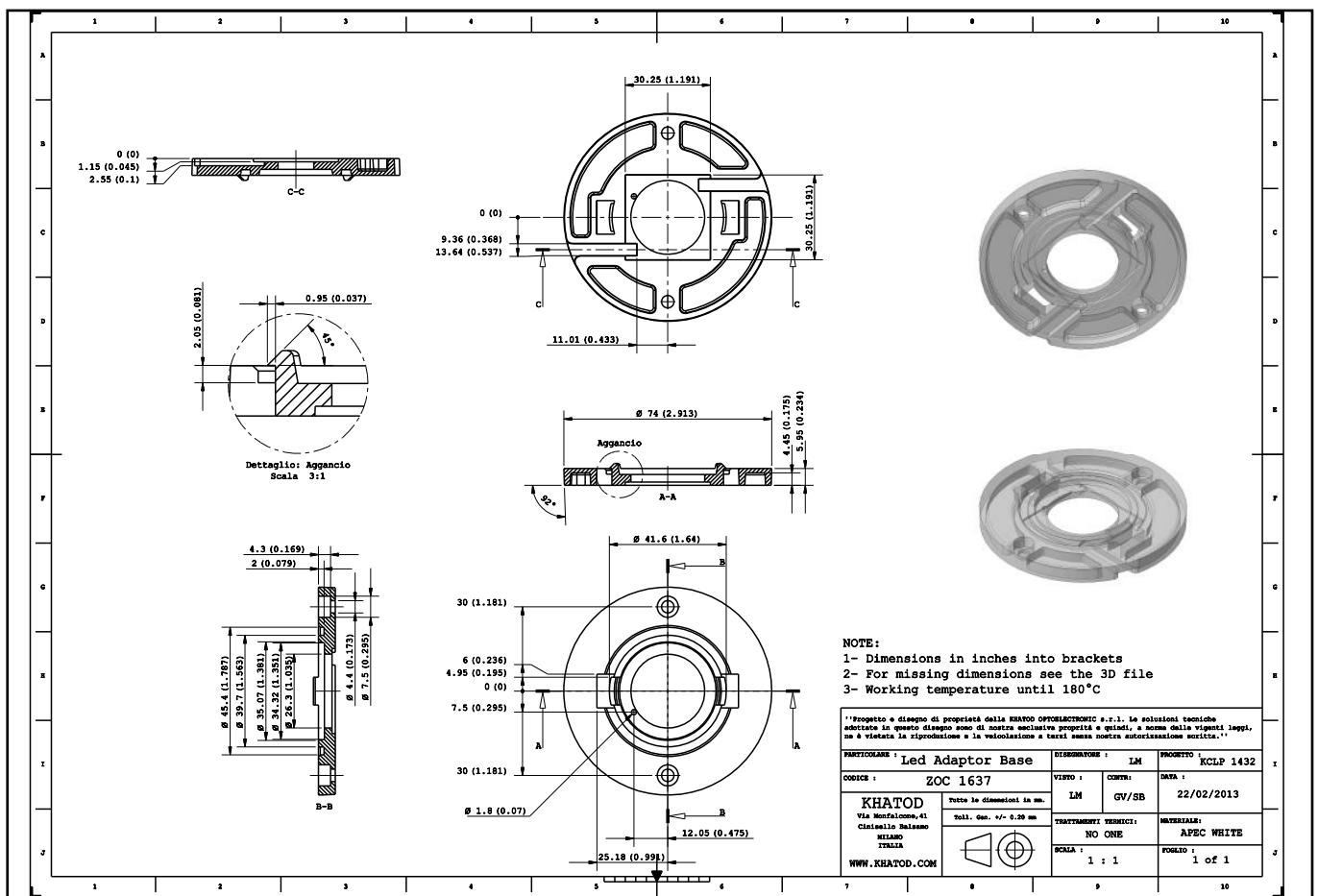
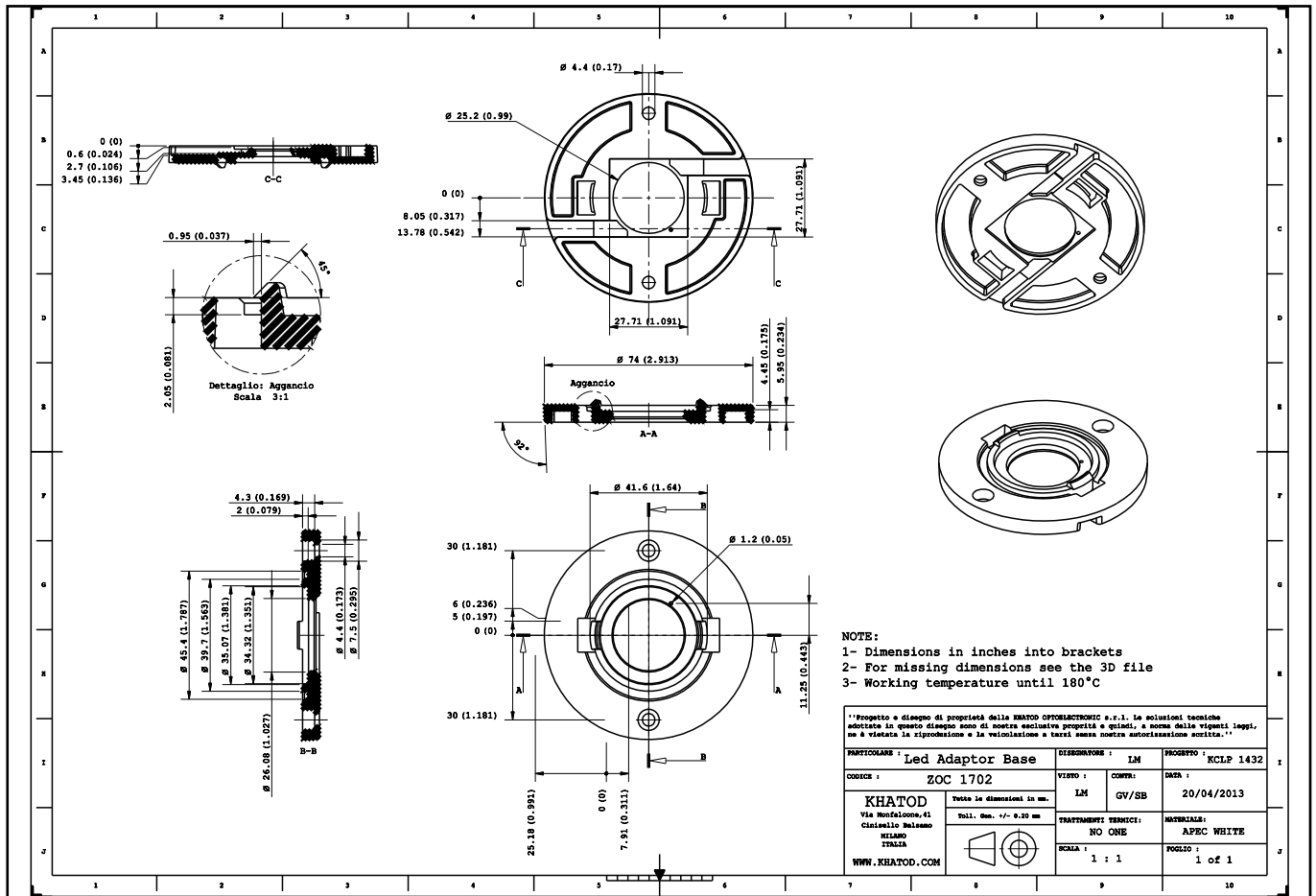
Dettaglio: Lock
Scala 3:1



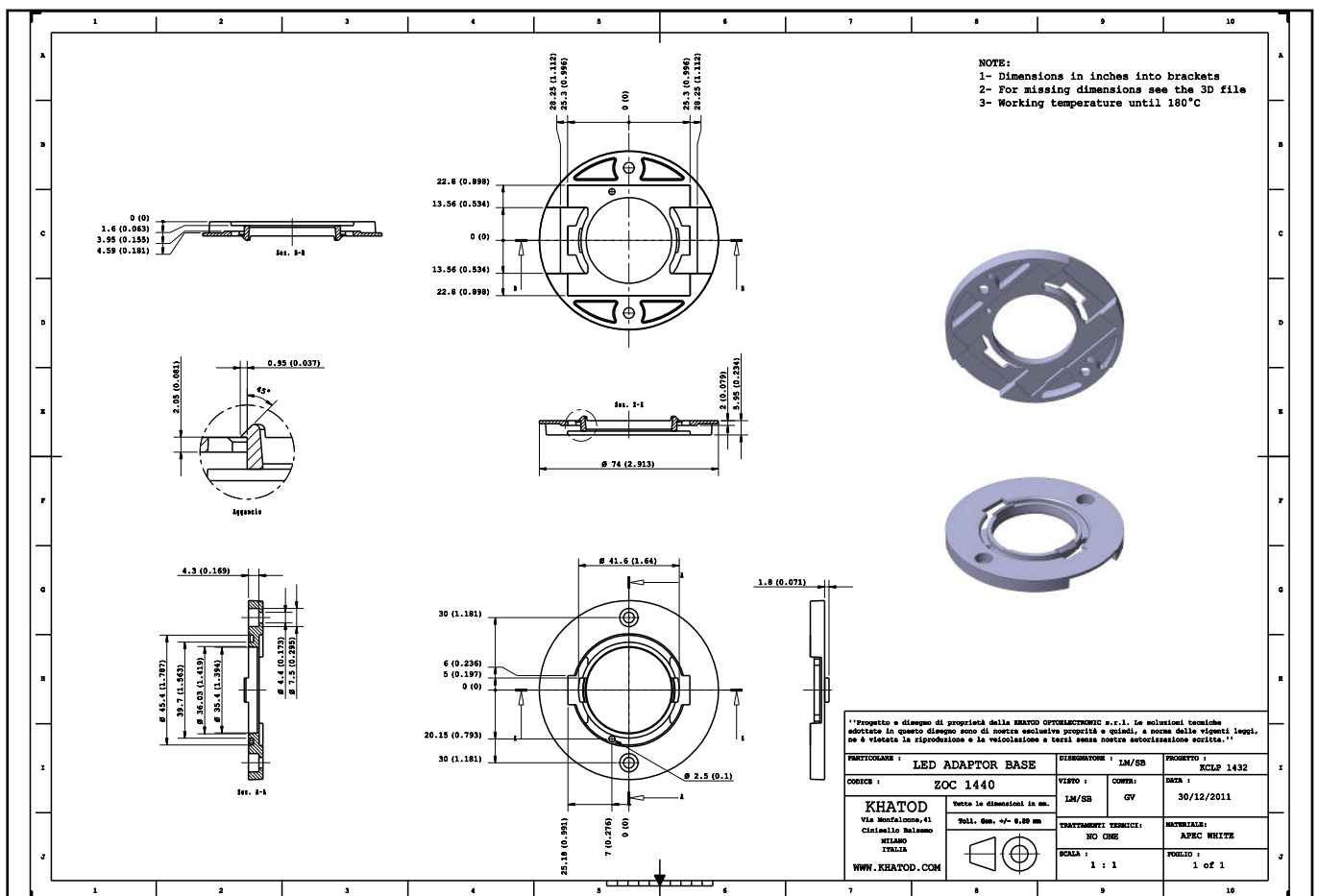
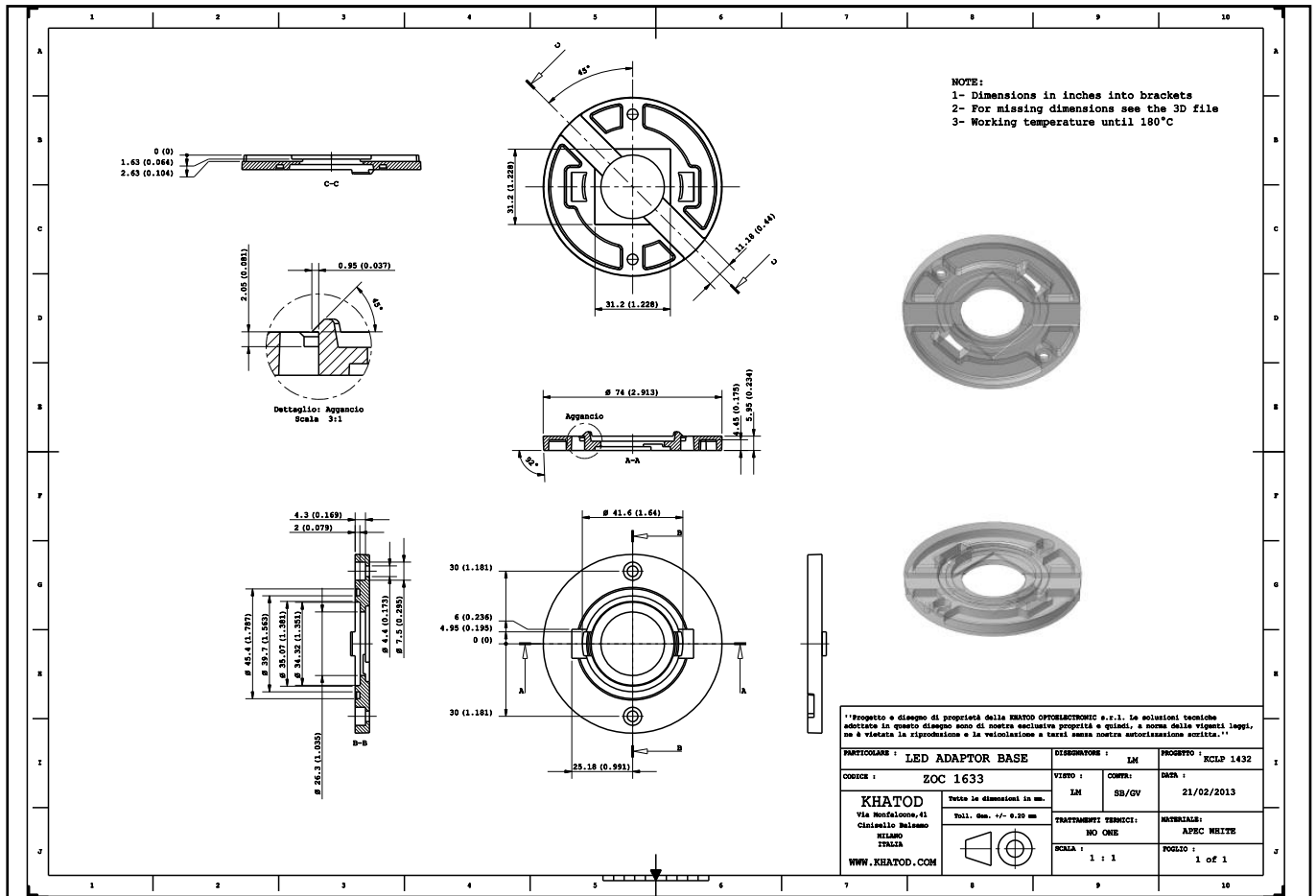
23. ZOCxxxx Drawing



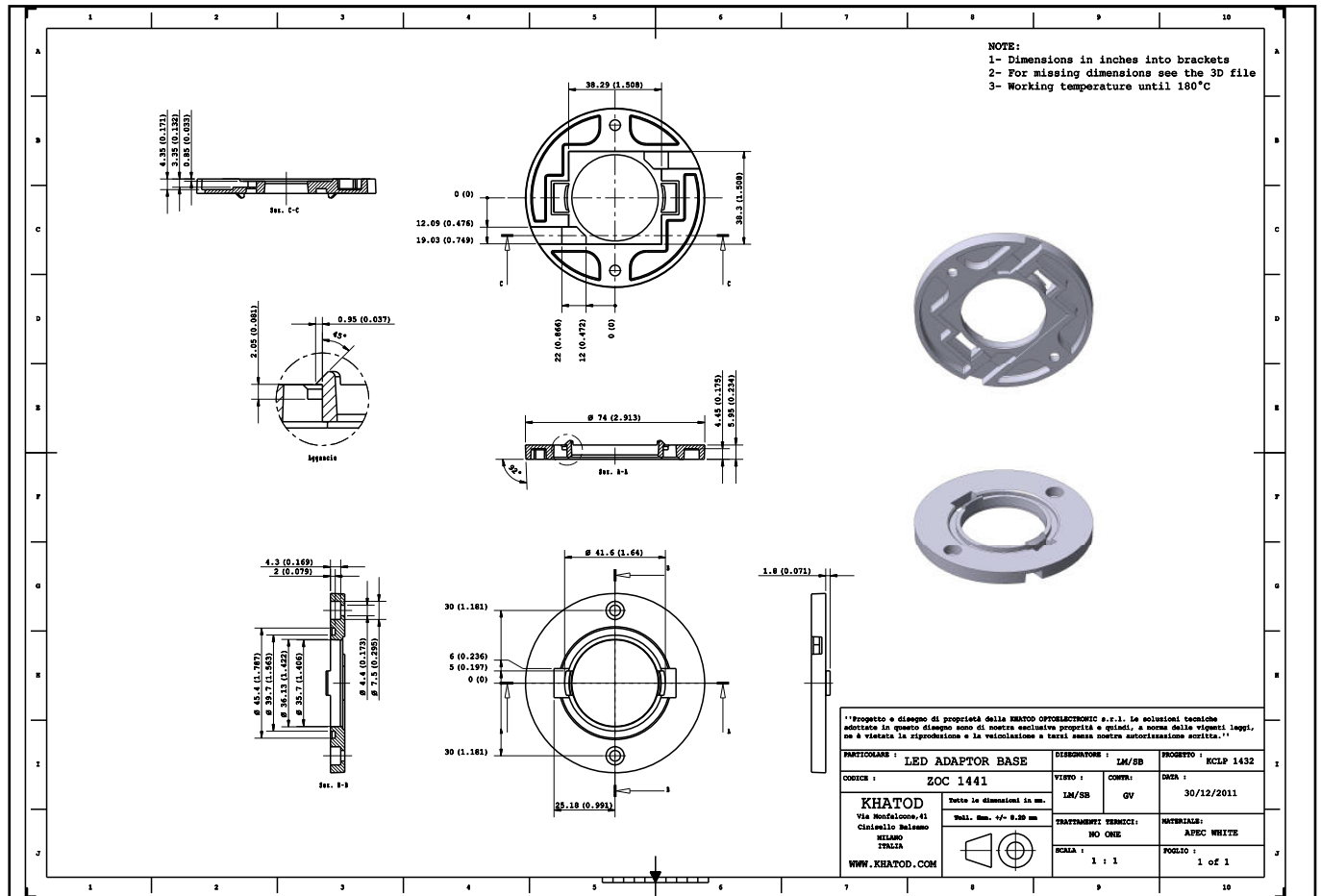
23. ZOCxxxx Drawing



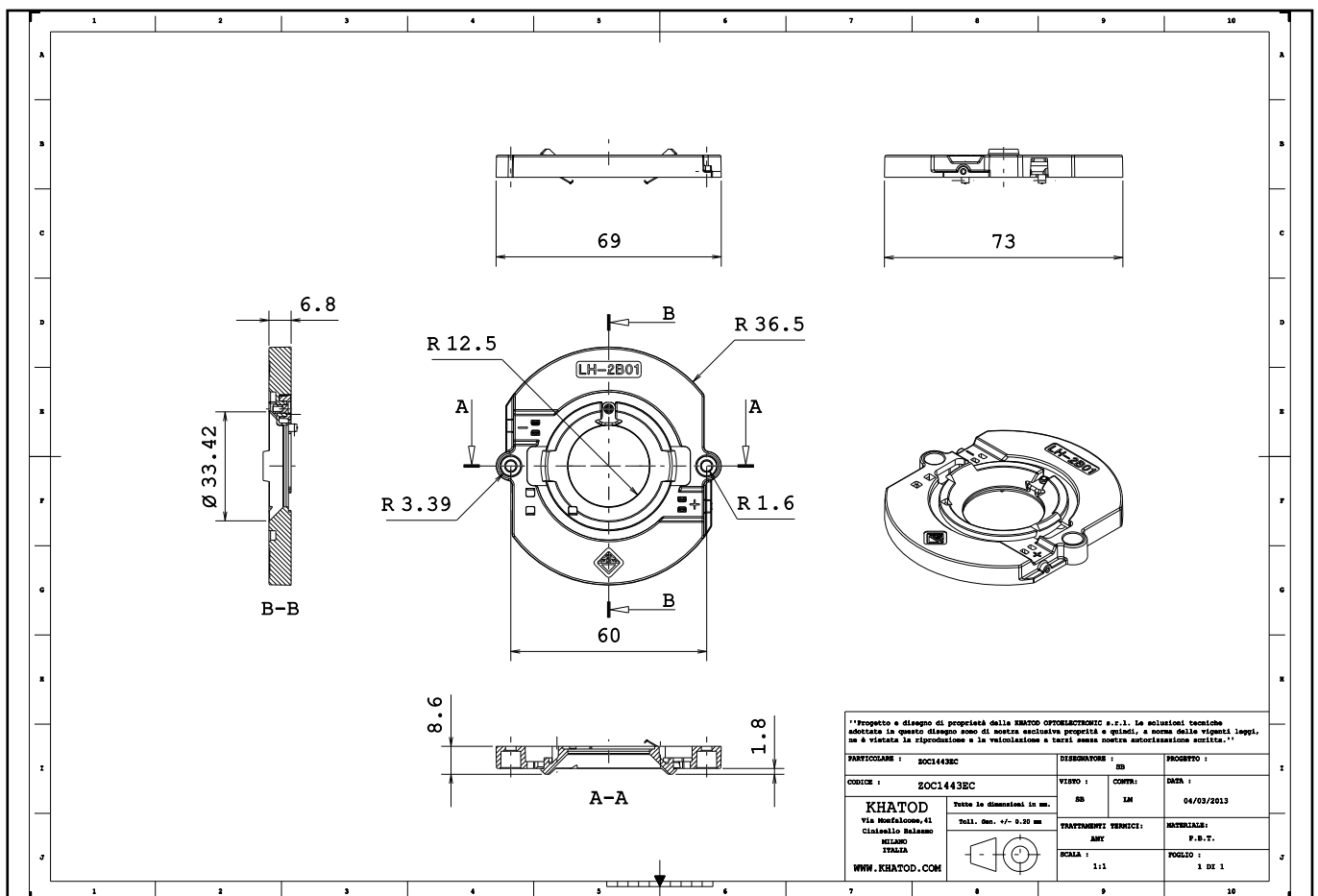
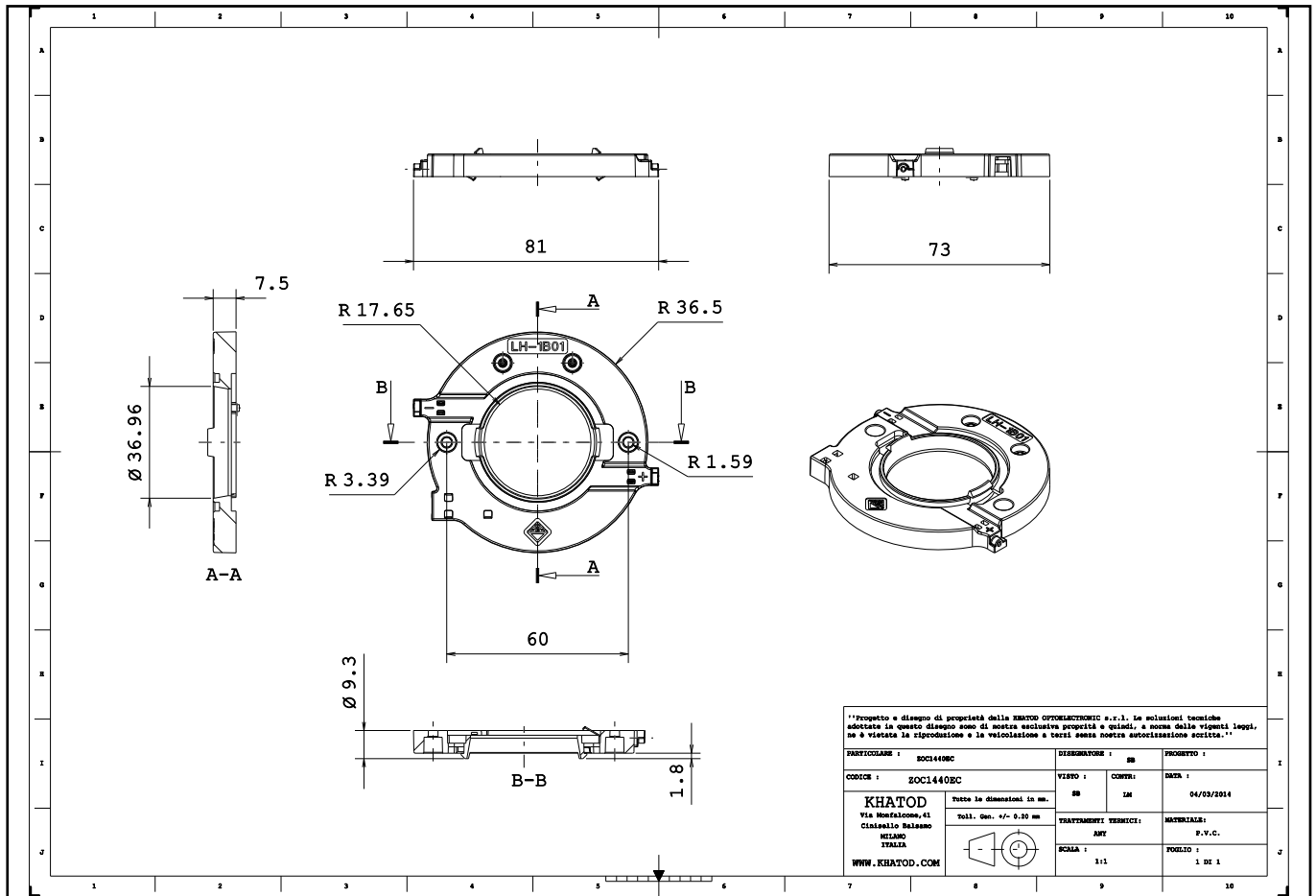
23. ZOCxxxx Drawing



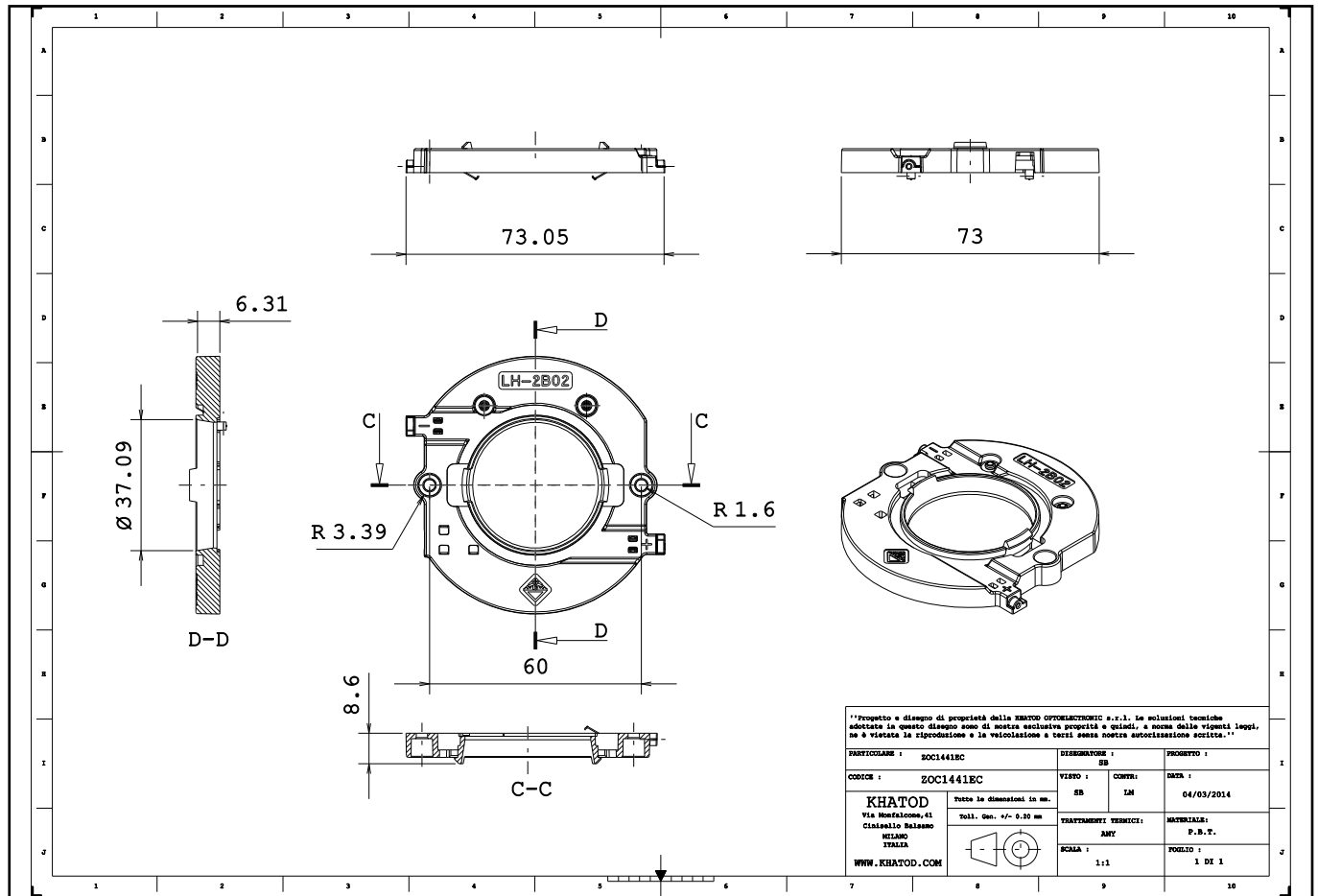
23. ZOCxxxx Drawing



24. ZOCxxxxEC Drawing (with Connector)



24. ZOCxxxxEC Drawing (with Connector)



25. Materials

Material	Top	Tstg
PC	-40°...120°C	-40°...120°C
P.B.T.	-40°...105°C	-40°...105°C

26. 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.

27. Disclaimer

The optical values shown are the result of optical simulations carried out with ASAP and ZEMAX software systems. The optical simulations are carried out on the basis of the typical values provided in the LED manufacturers' official datasheets. The photometric analysis has been carried out on physical samples. On request, by supplying your PCB, we can provide the measurement photometric file.

General Optical Measurement Tolerance : $\pm 10\%$

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 specifications.

Should you require further information, please contact Khatod for advice. All lens testing must be subject to identical conditions as Khatod test condition. Khatod Optoelectronic, Milan, Italy, manufactures lenses for LEDs. Any other use of the lens shall void our liability and warranty. The lenses are an inert component to be used in the manufacture of various products. Our warranty and liability are limited only to the manufacture of the lens. You may not modify, copy, distribute reproduce, license or alter the lens and related materials of Khatod. Khatod does not warrant against damages or defects arising out of the use or misuse of the products; against defects or damage arising from improper installation, or against defects in the product or in its components. No warranty of any kind, expressed or implied, is made regarding the safety of the products. The entire risk as to the quality or performance of the product is with the buyer. In no event shall Khatod be liable for any direct, indirect, punitive, incidental, special, consequential damages, or any damages whatsoever arising out of or connected with the use or misuse of the product. Khatod shall not have any obligation with respect to the product or any part thereof, whether based on contract, tort, strict liability or otherwise. Buyer assumes all risks and liability from use of the product. The laws of Milan, Italy govern this product warranty and liability and you hereby consent to the exclusive jurisdiction and venue of courts in Milan, Italy in all disputes arising out of or relating to the use of this product. Production, marketing, distribution, sale of these products as well as their possible modifications and variations are only exclusive right of Khatod Optoelectronic. No company can perform any of these actions without written permission released by Khatod Optoelectronic. The information contained in this document is proprietary of Khatod Optoelectronic and may change without notice.

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