

**Ordering number FP11086_LISA2-RS-CLIP**

Family	Lisa2	FWHM	18 degrees
Type	Assembly	Efficiency	89 %
LED	LUXEON Rebel	cd/lm	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.6 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		

Ordering number FP11072_LISA2-M-CLIP

Family	Lisa2	FWHM	25 degrees
Type	Assembly	Efficiency	90 %
LED	LUXEON Rebel	cd/lm	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.6 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		

Ordering number FP11073_LISA2-W-CLIP

Family	Lisa2	FWHM	36 degrees
Type	Assembly	Efficiency	90 %
LED	LUXEON Rebel	cd/lm	1.800
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.6 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		

Ordering number FP11122_LISA2-O-CLIP

Family	Lisa2	FWHM	48+19 degrees
Type	Assembly	Efficiency	83 %
LED	LUXEON Rebel	cd/lm	2.150
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.6 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		

**Ordering number FP11858_LISA2-O-90-CLIP**

Family	Lisa2	FWHM	48+19 degrees
Type	Assembly	Efficiency	83 %
LED	LUXEON Rebel	cd/lm	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.6 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		

**Ordering number FP11952
Description**

Family	Lisa2	FWHM	80 degrees
Type	Assembly	Efficiency	79 %
LED	LUXEON Rebel	cd/lm	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.6 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	-		
Status	Ready		

NOTE: The typical divergence will be changed by different color, chip size and chip position tolerance. The typical total divergence is the full angle measured where the luminous intensity is half of the peak value.



PRODUCT DATASHEET

Lisa2 series

last update 24/9/2013

PHILIPS
LUMILEDS

GENERAL INFORMATION

- Product series especially designed & optimized for LUXEON Rebel series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- Lens material optical grade PMMA with high UV and temperature resistance (105 degrees of Celcius / 220 degrees of Fahrenheit). Allows use of high current and temperature conditions.

Please find more information about used material from below:

http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20UL94_Yellow%20Card.pdf

<http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20PLEXIGLAS-Datasheet.pdf>

- Optic holder molded by high quality PC material (120 dergees of Celcius / 248 degrees of Fahrenheit).

- Fastening to PCB with appropriate adhesive. By clicking link below you can find Ledil recommended glue options.

http://www.ledil.com/datasheets/DataSheet_GLUES.pdf

NOTE 1: We advise customer to ensure the suitability and sufficiency of the bond in the end product. For example, mechanical stress, vibration and holes on the surface of the circuit board weaken the strength of the glue.

NOTE 2: All surfaces where glue is applied must be clean, dry and free from grease and dirt. If cleaning of PCB surfaces is needed, please follow strictly the cleaning instructions of your LED manufacturer -this is important as cleaning shall under no circumstances damage LEDs or other electronics components on the PCB.

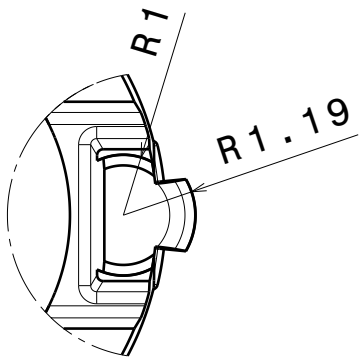
Further note that optical components shall not be cleaned with any chemicals - only micro fiber cloth may be used to remove fingerprints or other traces from handling.

D

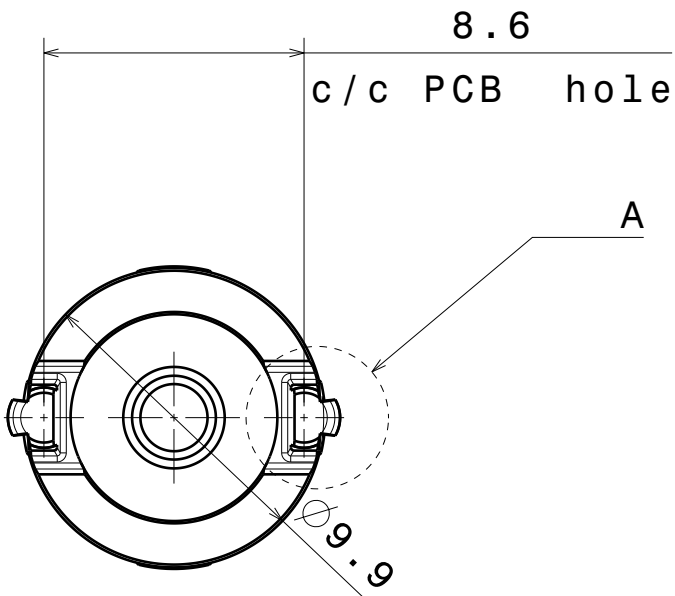
C

B

A



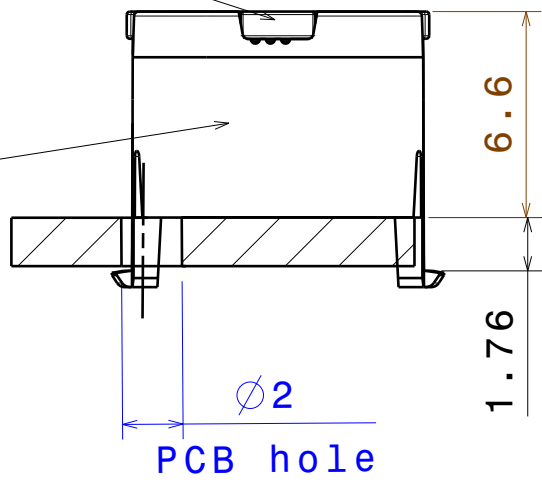
Detail A
Scale: 8:1



Bottom view
Scale: 4:1

Lens

Holder



Front view
Scale: 4:1

Materials:
Lens PMMA
Holder PC

4

4

3

3

2

2

1

1

This drawing is our property.
It can't be reproduced
or communicated without
our written agreement.



L
T
F
F
e
e
i
i
N
n

DRAWING TITLE
Datasheet Lisa2-clip16-Rebel series Assy

DRAWN BY
ca

DATE
20.7.2011

CHECKED BY
s n

DATE
20.7.2011

SIZE A4
DRAWING NUMBER

REV
2

DESIGNED BY
hh

DATE
19.10.2009

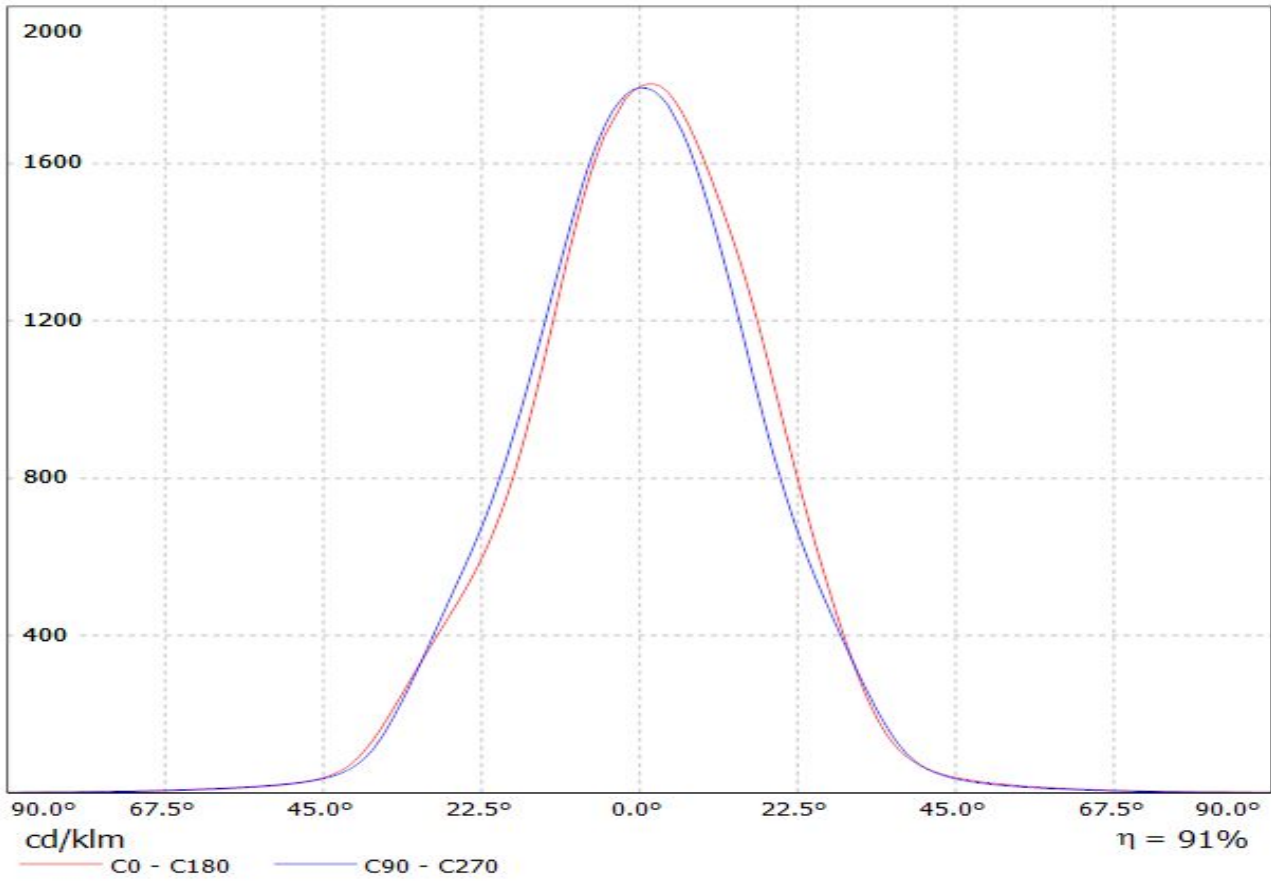
SCALE 4:1
WEIGHT (g)

SHEET 1/1

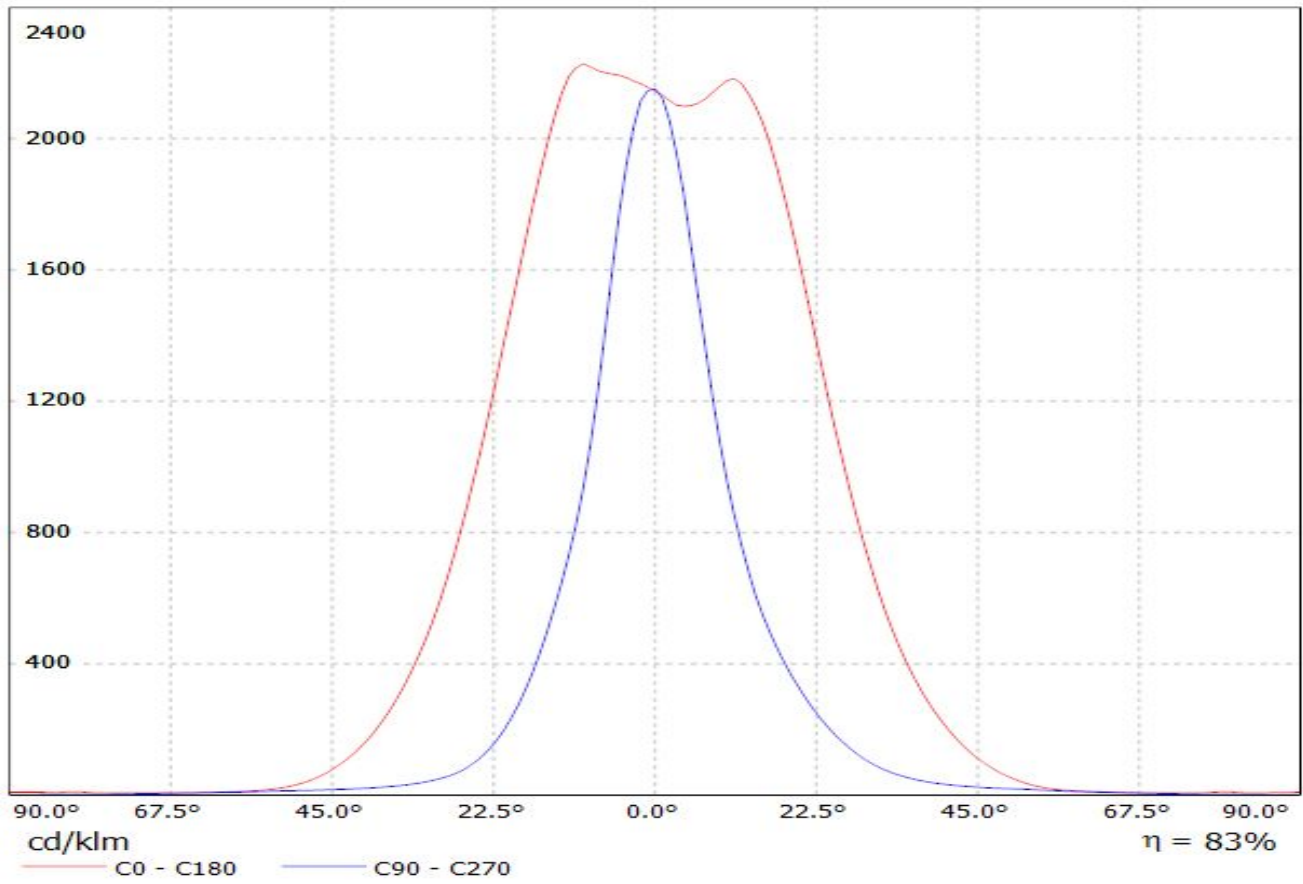
D

A

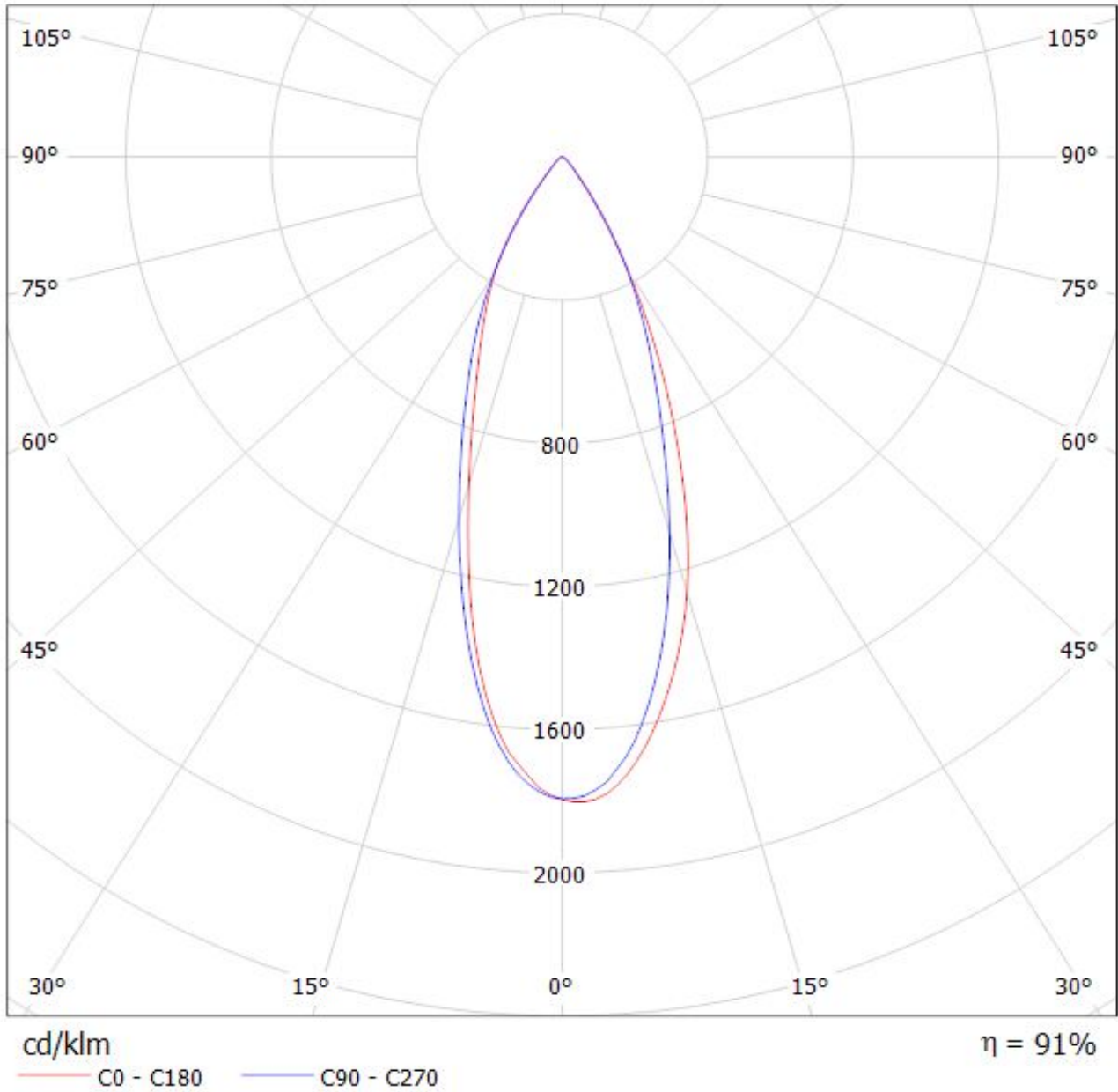
Luminaire: LEDiL Oy FP10993 & FP11073_LISA2-W_(Rebel) Eff.91.3%
Lamps: 1 x REBEL (80.0891lm@250mA)



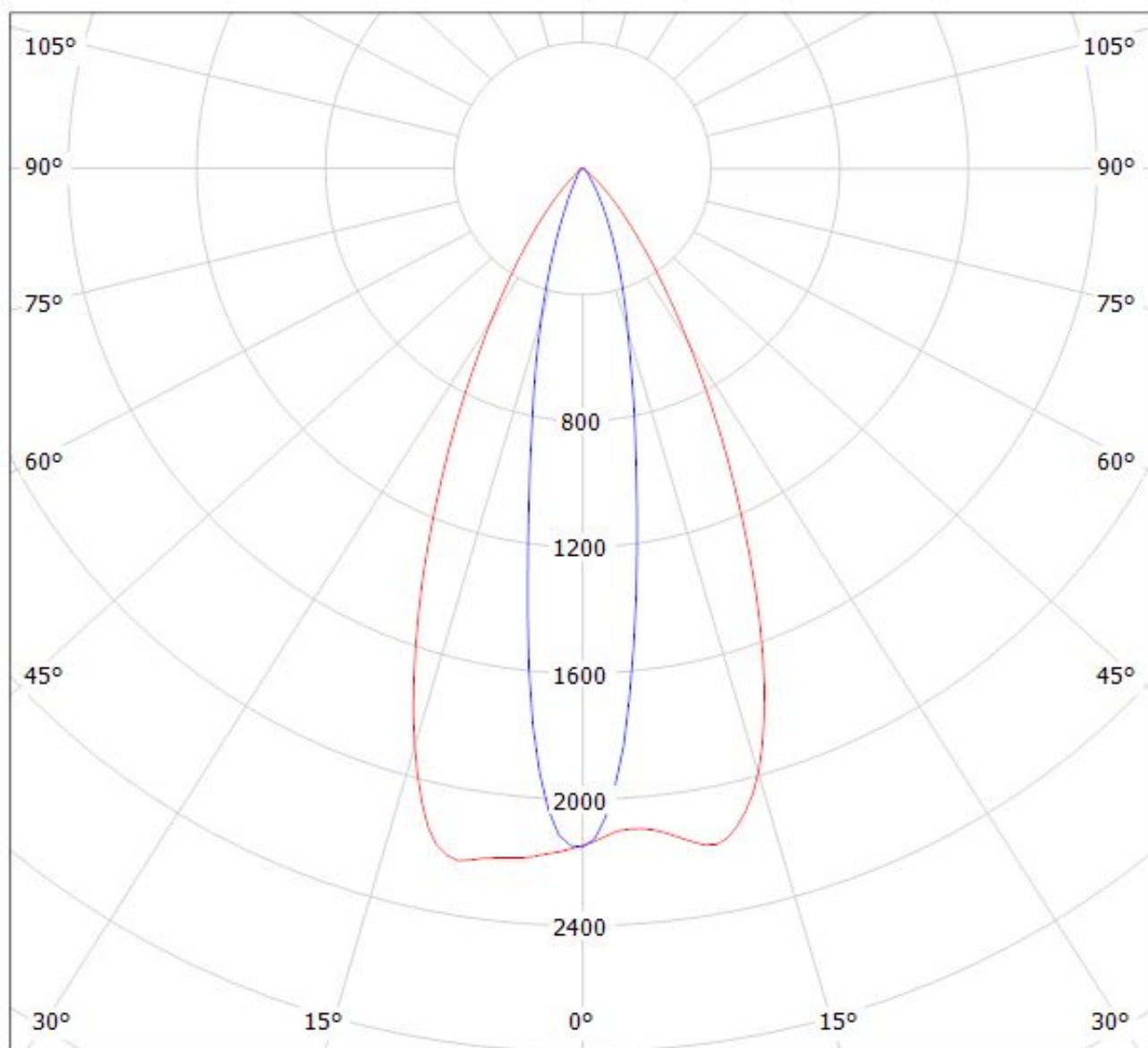
Luminaire: LEDiL Oy FP11126 & FP11122_LISA2-O (Luxeon Rebel) Eff.82.6%
Lamps: 1 x Luxeon Rebel (80.0891lm@250mA)



Luminaire: LEDiL Oy FP10993 & FP11073_LISA2-W_(Rebel) Eff.91.3%
Lamps: 1 x REBEL (80.0891lm@250mA)



Luminaire: LEDiL Oy FP11126 & FP11122_LISA2-O (Luxeon Rebel) Eff.82.6%
Lamps: 1 x Luxeon Rebel (80.0891lm@250mA)



cd/klm

$\eta = 83\%$

— C0 - C180 — C90 - C270