

**Product number FCA11151_NIS83-MX-O-90**

Family	Rose	FWHM	(simulated) 24+6
Type	Assembly	Efficiency	-
LED	NS6x83	cd/Im	-
Color	White	Gerber File	Available
Diameter	21.6 + 21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PC		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number CA12125_NIS83-2-O**

Family	Rose	FWHM	(simulated) 24 + 6
Type	Assembly	Efficiency	-
LED	NS6x83	cd/Im	-
Color	Black	Gerber File	Available
Diameter	21.6+21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	-		
Holder Material	-		
Fastening	Tape		
Status	On production		

**Product number CA12126_NIS83-2-M**

Family	Rose	FWHM	(simulated) 15
Type	Assembly	Efficiency	-
LED	NS6x83	cd/Im	-
Color	Black	Gerber File	Available
Diameter	21.6 + 21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number FCA13625_G2-NIS83-MX-O-90**

Family	Rose	FWHM	(simulated) 24+6
Type	Assembly	Efficiency	-
LED	NS6x83	cd/Im	(simulated) 0.000
Color	White	Gerber File	Available
Diameter	21.6 + 21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PC		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number FA10336_NIS83-MX-RS**

Family	Rose	FWHM	9 degrees
Type	Assembly	Efficiency	-
LED	NS6x83	cd/Im	17.400
Color	White	Gerber File	Available
Diameter	21.6 + 21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PC		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number CA12124_NIS83-2-RS**

Family	Rose	FWHM	12 degrees
Type	Assembly	Efficiency	92 %
LED	NS6x83	cd/Im	12.290
Color	Black	Gerber File	Available
Diameter	21.6 + 21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number FA10337_NIS83-MX-SS**

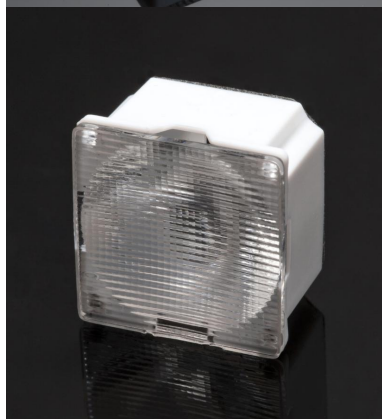
Family	Rose	FWHM	14 degrees
Type	Assembly	Efficiency	-
LED	NS6x83	cd/Im	9.680
Color	White	Gerber File	Available
Diameter	21.6 + 21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PC		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number FA10338_NIS83-MX-D**

Family	Rose	FWHM	14 degrees
Type	Assembly	Efficiency	88 %
LED	NS6x83	cd/Im	7.240
Color	White	Gerber File	Available
Diameter	21.6 + 21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PC		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number CA10611_NIS83-MX-2-O**

Family	Rose	FWHM	14+38 degrees
Type	Assembly	Efficiency	-
LED	NS6x83	cd/Im	3.510
Color	White	Gerber File	Available
Diameter	21.6 + 21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number CA13622_G2-NIS83-MX-2-O**

Family	Rose	FWHM	14+38 degrees
Type	Assembly	Efficiency	-
LED	NS6x83	cd/Im	3.510
Color	White	Gerber File	Available
Diameter	21.6*21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number CA12123_NIS83-2-SS**

Family	Rose	FWHM	16 degrees
Type	Assembly	Efficiency	-
LED	NS6x83	cd/Im	-
Color	Black	Gerber File	Available
Diameter	21.6 + 21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number CA13624_G2-NIS83-MX-2-O-90**

Family	Rose	FWHM	17+38 degrees
Type	Assembly	Efficiency	87 %
LED	NS6x83	cd/Im	3.660
Color	White	Gerber File	Available
Diameter	21.6*21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number CA12122_NIS83-2-D**

Family	Rose	FWHM	20 degrees
Type	Assembly	Efficiency	-
LED	NS6x83	cd/Im	(simulated) 0.000
Color	Black	Gerber File	Available
Diameter	21.6 + 21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number FA11540_NIS83-MX-MD**

Family	Rose	FWHM	24 degrees
Type	Assembly	Efficiency	-
LED	NS6x83	cd/Im	(simulated) 0.000
Color	White	Gerber File	Available
Diameter	21.6 + 21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PC		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number CA11839_NIS83-MX-2-M**

Family	Rose	FWHM	27 degrees
Type	Assembly	Efficiency	93 %
LED	NS6x83	cd/Im	3.300
Color	White	Gerber File	Available
Diameter	21.6 + 21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number CA13623_G2-NIS83-MX-2-M**

Family	Rose	FWHM	27 degrees
Type	Assembly	Efficiency	93 %
LED	NS6x83	cd/Im	3.300
Color	White	Gerber File	Available
Diameter	21.6*21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number FA10339_NIS83-MX-M**

Family	Rose	FWHM	31 degrees
Type	Assembly	Efficiency	86 %
LED	NS6x83	cd/Im	2.540
Color	White	Gerber File	Available
Diameter	21.6 + 21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PC		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number FA10340_NIS83-MX-O**

Family	Rose	FWHM	46+17 degrees
Type	Assembly	Efficiency	86 %
LED	NS6x83	cd/Im	2.810
Color	White	Gerber File	Available
Diameter	21.6 + 21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PC		
Holder Material	PC		
Fastening	Tape		
Status	On production		

**Product number FA10903_NIS83-MX-WW**

Family	Rose	FWHM	61 degrees
Type	Assembly	Efficiency	-
LED	NS6x83	cd/Im	0.730
Color	White	Gerber File	Available
Diameter	21.6 + 21.6 mm		
Height	13.5 mm		
Style	Square		
Optic Material	PC		
Holder Material	PC		
Fastening	Tape		
Status	On production		

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

Rose series

last update 27/2/2013



GENERAL INFORMATION

- Product series especially designed & optimized for NS6x83 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. 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>

- Lens material optical grade PC with high UV and temperature resistance (120 degrees of Celcius / 248 degrees of Fahrenheit). Allows use of high current and temperature conditions.

Please find more information about used materials from below:

http://ledil.fi/sites/default/files/Documents/Technical/Material/PC%20Makrolon%202400_2407_2456_2458-UL.pdf

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

- Fastening to heat sink with a PU foam adhesive tape of automotive grade. Please find fastening details by clicking link: http://www.ledil.com/datasheets/DataSheet_TAPE.pdf

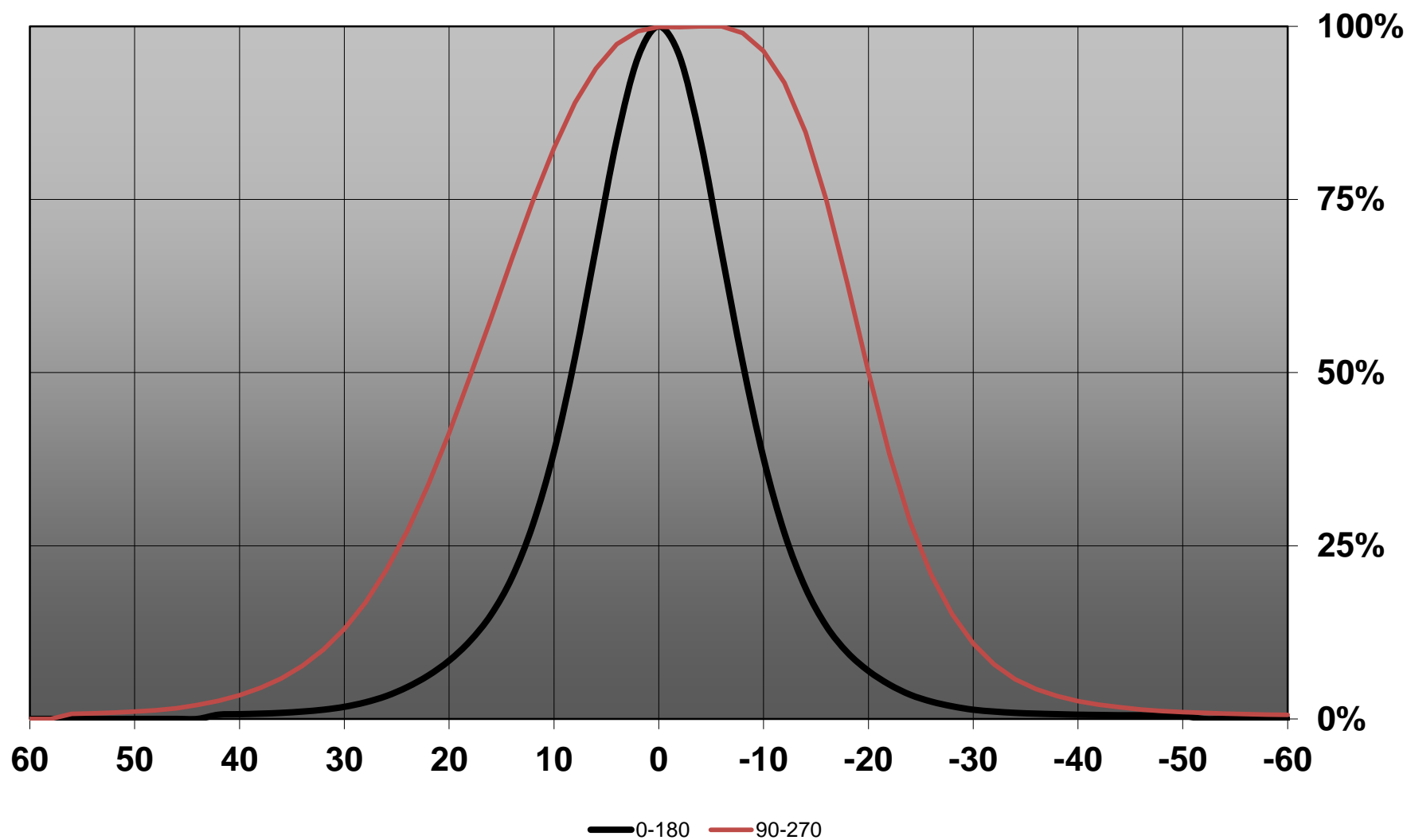
NOTE 1: We advise customer to ensure the suitability and sufficiency of the bond in the end product. For example, mechanical stress, vibration and holes on the surface of the circuit board weaken the strength of the tape.

NOTE 2: Assembly to the surface must be made straight, so the tape bonds constant and balanced with fastening surface. Slanted assembly might cause unbalanced bond to the surface. All surfaces where tape 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.

Relative intensity of CA13624_G2-NIS83-MX-2-O-90_(NS6x83)



D

C

B

A

4

4

3

3

2

2

Lens

Holder

Adhesive tape 0.4mm

13.5

21.6

21.6

MATERIALS

LENS: PC

HOLDER: PC

TAPE: PU foam

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DRAWING TITLE

Datasheet NIS083-series Assy

DRAWN BY

p

DATE

15.04.2009

CHECKED BY

H

DATE

31.1.2007

SIZE

A4

DRAWING NUMBER

REV

1

DESIGNED BY

HH

DATE

31.1.2007

SCALE

2:1

WEIGHT (g)

SHEET

1 / 1

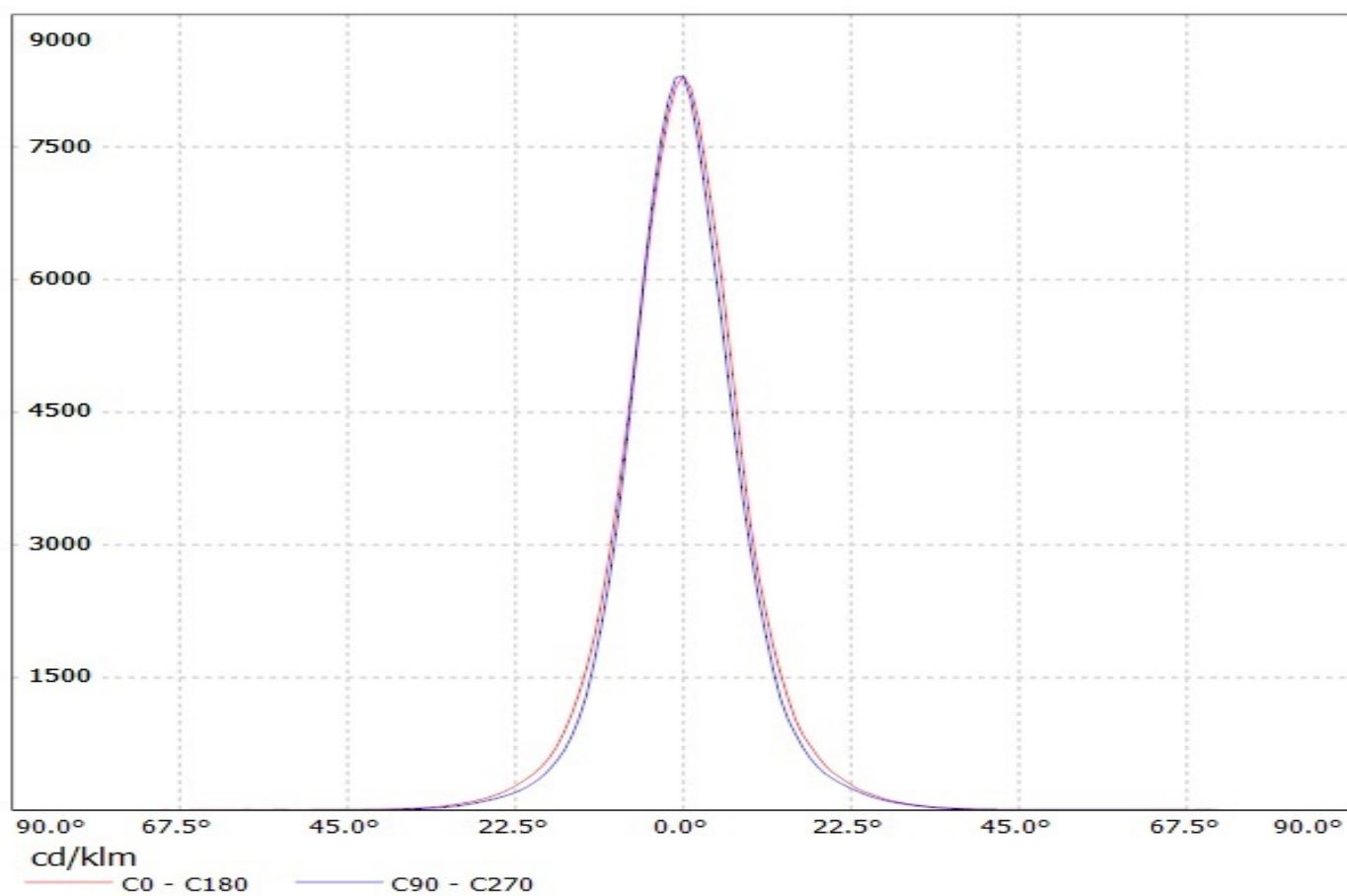
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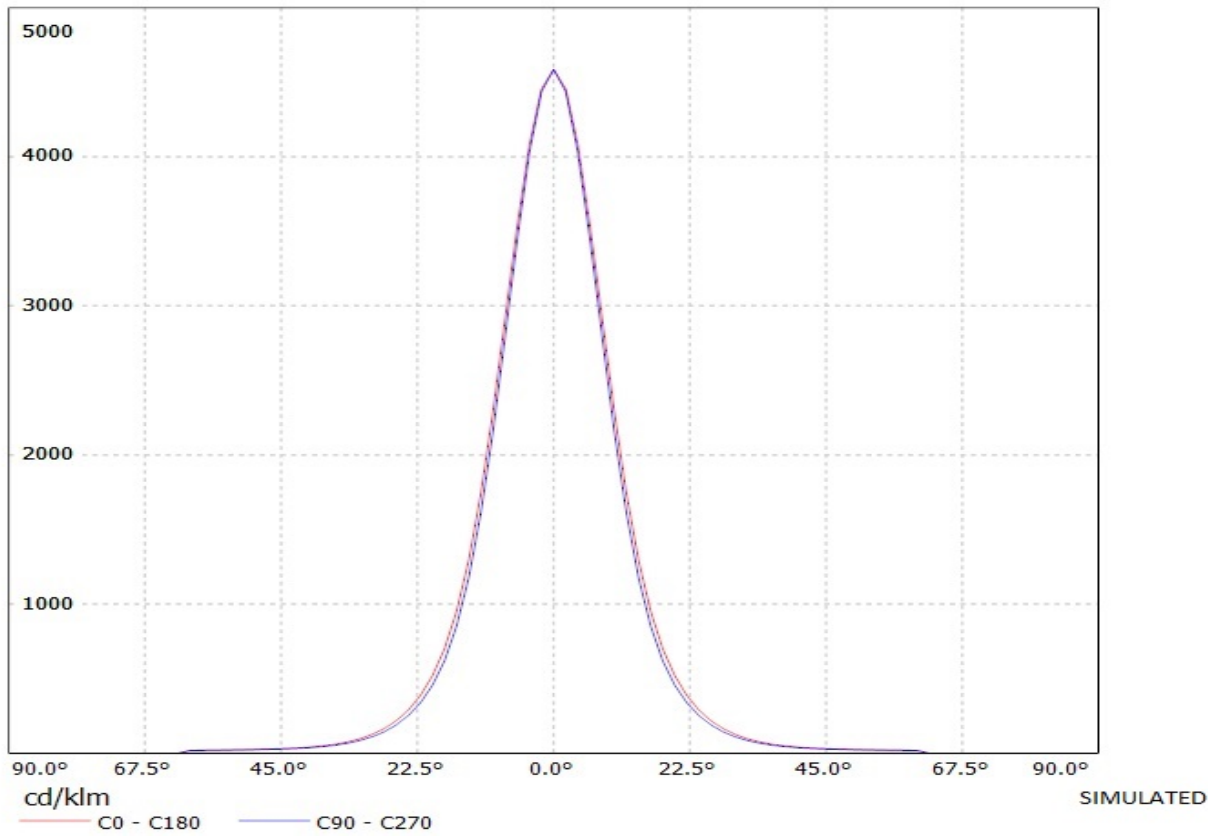
1

Luminaire: LEDil Oy FA10338_NIS83-MX-D_(NS6x83)
Lamps: 1 x Nichia NS6x83 (70.4lm @ 250mA) P=0.7W I=250mA

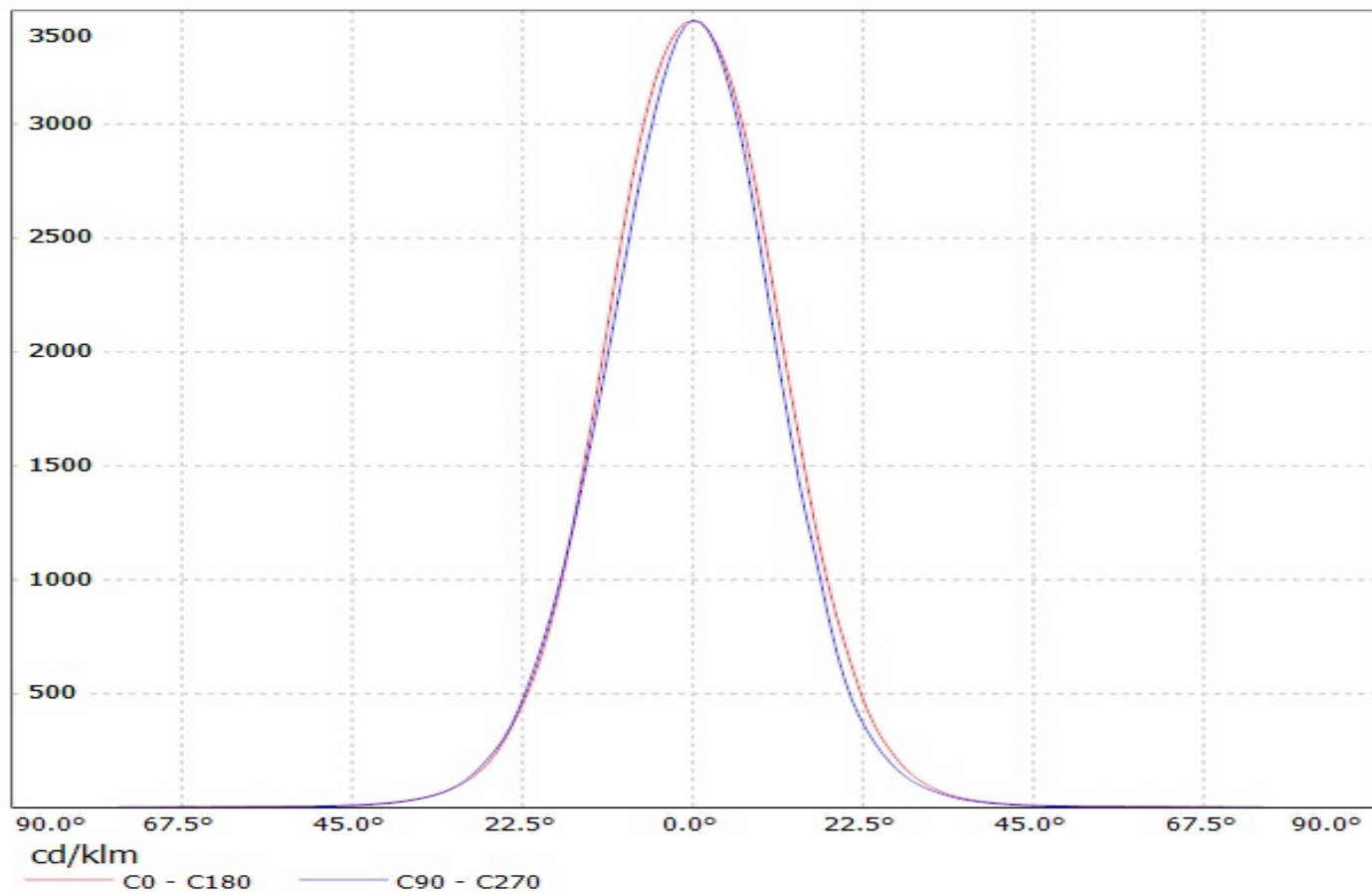


Ledil Oy CA12122_NIS83-2-D CA12122_NIS83-2-D Nichia NS6x083 (white) 76lm @ 250mA / LDC
(Linear)

Luminaire: Ledil Oy CA12122_NIS83-2-D CA12122_NIS83-2-D Nichia NS6x083 (white) 76lm @ 250mA
Lamps: 1 x Nichia NS6x083 (white) 76lm @ 250mA



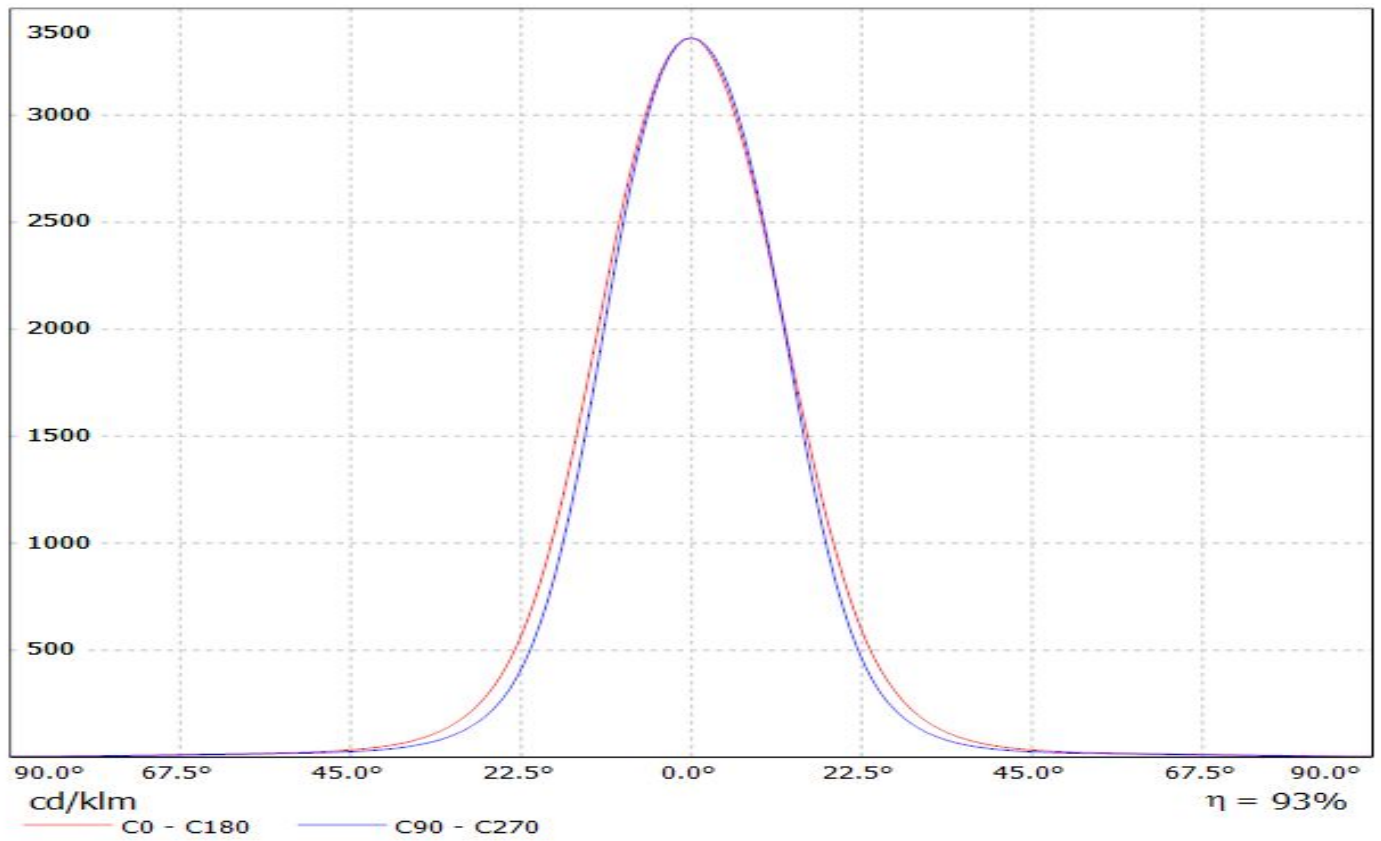
Luminaire: LEDil Oy FA11540_NIS83-MX-MD_(NS6x83) Efficiency=82%
Lamps: 1 x Nichia NS6x83 (70.4lm @ 250mA) P=0.7W I=250mA



LEDiL Oy CA11839_NIS83-MX-2-M_(NS6x83)_1 Eff.92.9% / LDC (Linear)

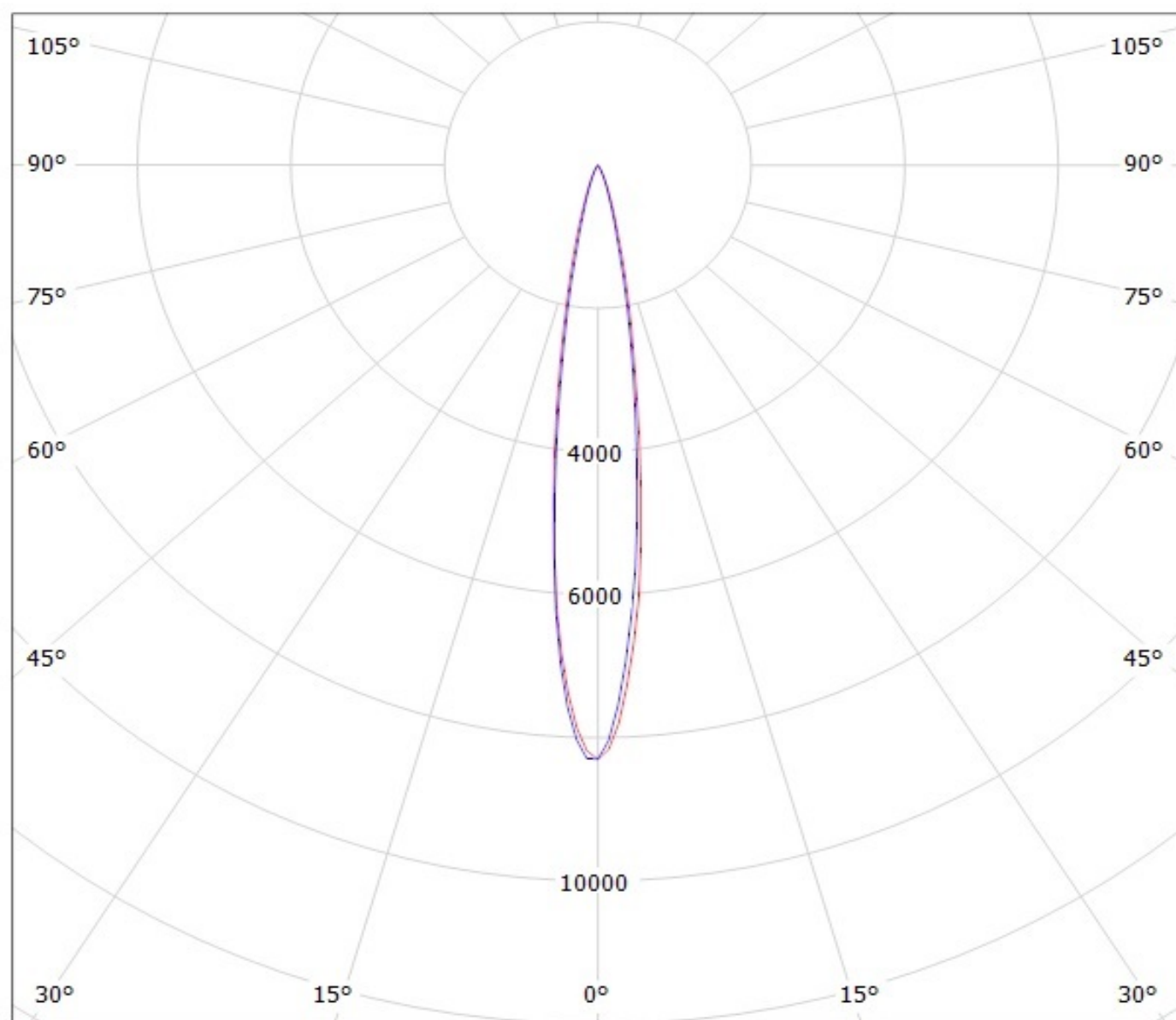
Luminaire: LEDiL Oy CA11839_NIS83-MX-2-M_(NS6x83)_1 Eff.92.9%

Lamps: 1 x Nichia 6N83 (74lm@250mA)



Luminaire: LEDil Oy FA10338_NIS83-MX-D_(NS6x83)

Lamps: 1 x Nichia NS6x83 (70.4lm @ 250mA) P=0.7W I=250mA



cd/klm

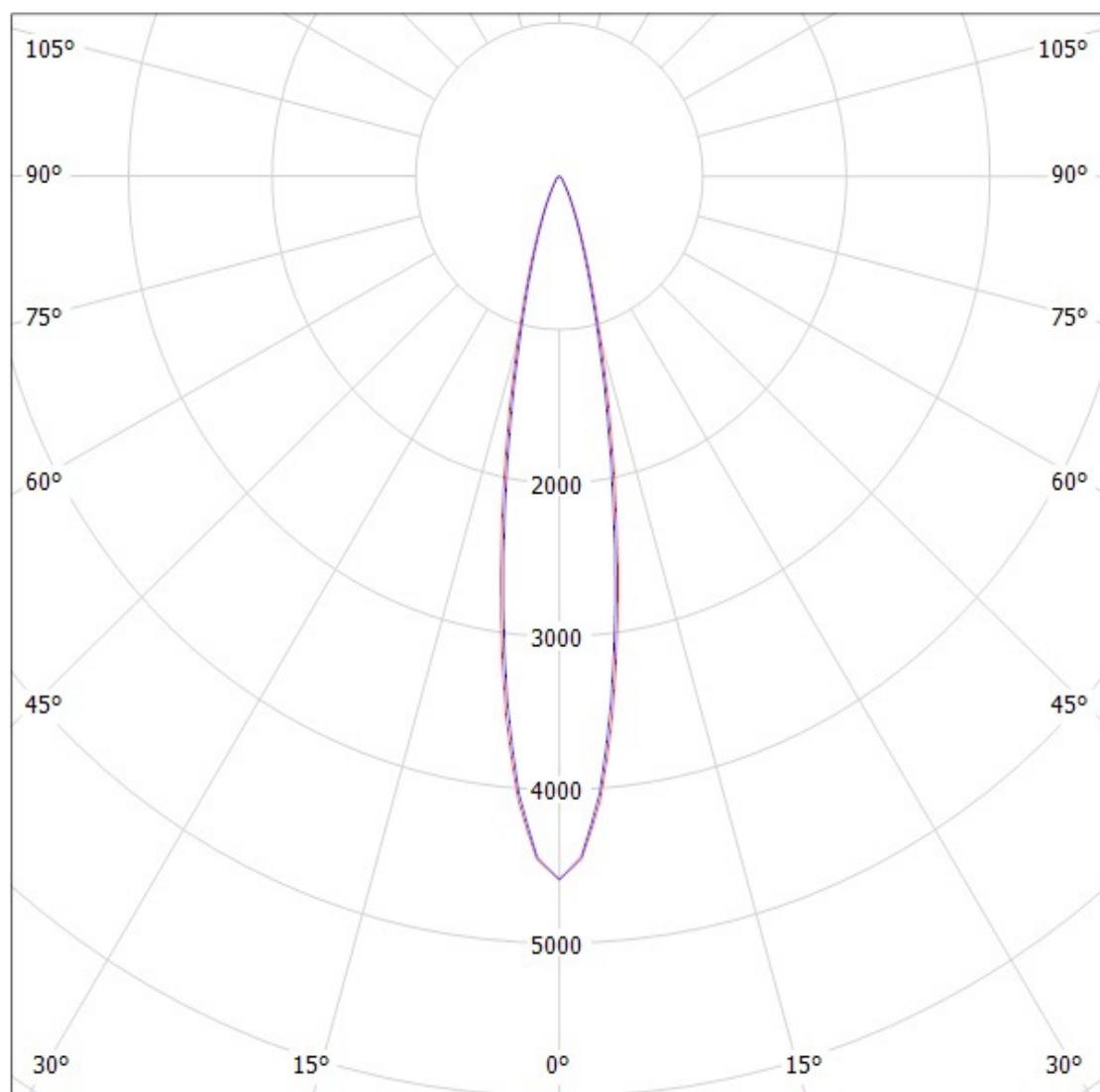
C0 - C180

C90 - C270

**Ledil Oy CA12122_NIS83-2-D CA12122_NIS83-2-D Nichia NS6x083 (white) 76lm @ 250mA / LDC
(Polar)**

Luminaire: Ledil Oy CA12122_NIS83-2-D CA12122_NIS83-2-D Nichia NS6x083 (white) 76lm @ 250mA

Lamps: 1 x Nichia NS6x083 (white) 76lm @ 250mA



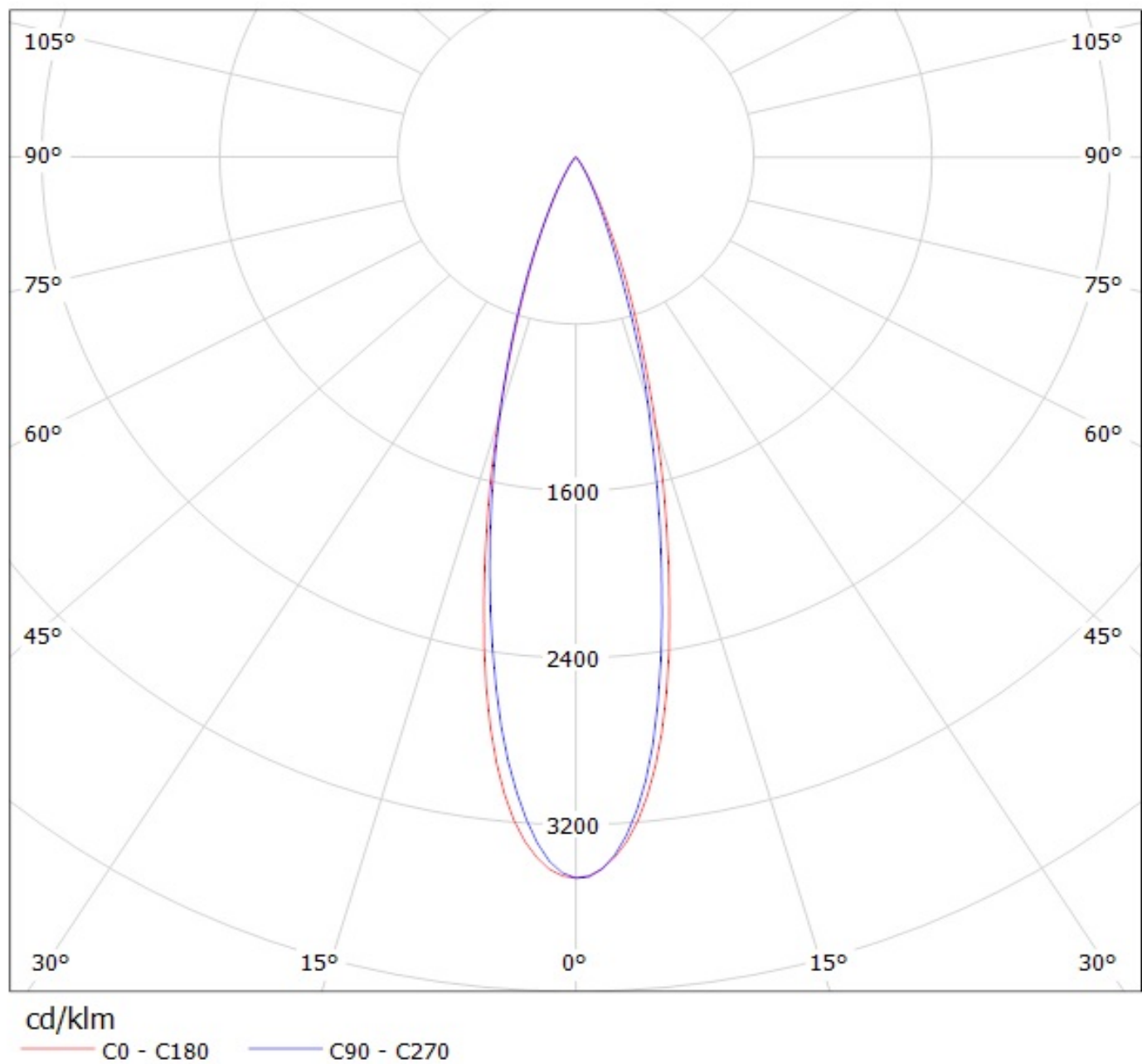
cd/klm

— C0 - C180

— C90 - C270

SIMULATED

Luminaire: LEDil Oy FA11540_NIS83-MX-MD_(NS6x83) Efficiency=82%
Lamps: 1 x Nichia NS6x83 (70.4lm @ 250mA) P=0.7W I=250mA



LEDiL Oy CA11839_NIS83-MX-2-M_(NS6x83)_1 Eff.96.0% / LDC (Polar)

Luminaire: LEDiL Oy CA11839_NIS83-MX-2-M_(NS6x83)_1 Eff.96.0%

Lamps: 1 x Nichia 6N83 (71.6lm@250mA)

