

**Ordering number CA11053_TINA2-O**

Family	Tina2	FWHM	(simulated) 36+14
Type	Assembly	Efficiency	89 %
LED	NCSxx19A	cd/Im	-
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.3 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Pin, tape		
Status	Ready		

**Ordering number CA11020_TINA2-RS**

Family	Tina2	FWHM	13 degrees
Type	Assembly	Efficiency	93 %
LED	NCSxx19A	cd/Im	10.660
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.3 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Pin, tape		
Status	Ready		

**Ordering number CA11942_TINA2-D**

Family	Tina2	FWHM	14 degrees
Type	Assembly	Efficiency	92 %
LED	NCSxx19A	cd/Im	7.250
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.3 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Pin, tape		
Status	Ready		

**Ordering number CA11021_TINA2-M**

Family	Tina2	FWHM	25 degrees
Type	Assembly	Efficiency	89 %
LED	NCSxx19A	cd/Im	2.780
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.3 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Pin, tape		
Status	Ready		

**Ordering number CA11022_TINA2-W**

Family	Tina2	FWHM	46 degrees
Type	Assembly	Efficiency	88 %
LED	NCSxx19A	cd/Im	1.300
Color	Black	Gerber File	Available
Diameter	16.1 mm		
Height	9.3 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Pin, tape		
Status	Ready		

**Ordering number C13253_TINA2-R-CLIP16**

Family	Tina2	FWHM	72 degrees
Type	Reflector	Efficiency	90 %
LED	NCSxx19A	cd/Im	0.600
Color	Clear	Gerber File	Available
Diameter	16.1 mm		
Height	10.1 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Clips		
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

Tina2 series

last update 18/2/2013



GENERAL INFORMATION

- Product series especially designed & optimized for NCSxx19A 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>

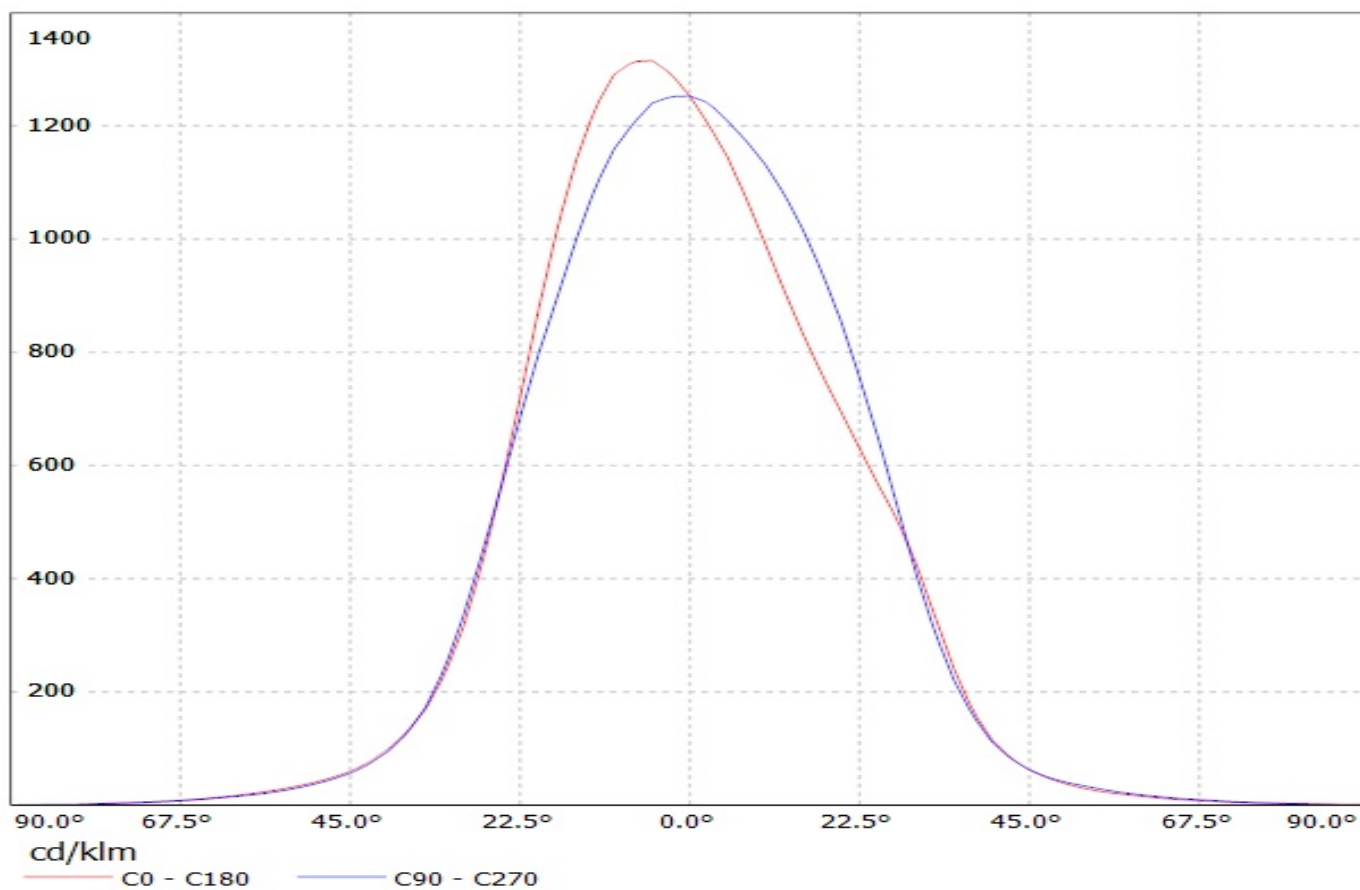
- Lens material optical grade PC with high UV and temperature resistance (120 degrees of Celcius / 248 degrees of Fahrenheit). Allows use of high current and temperature conditions.

Please find more information about used materials from below:

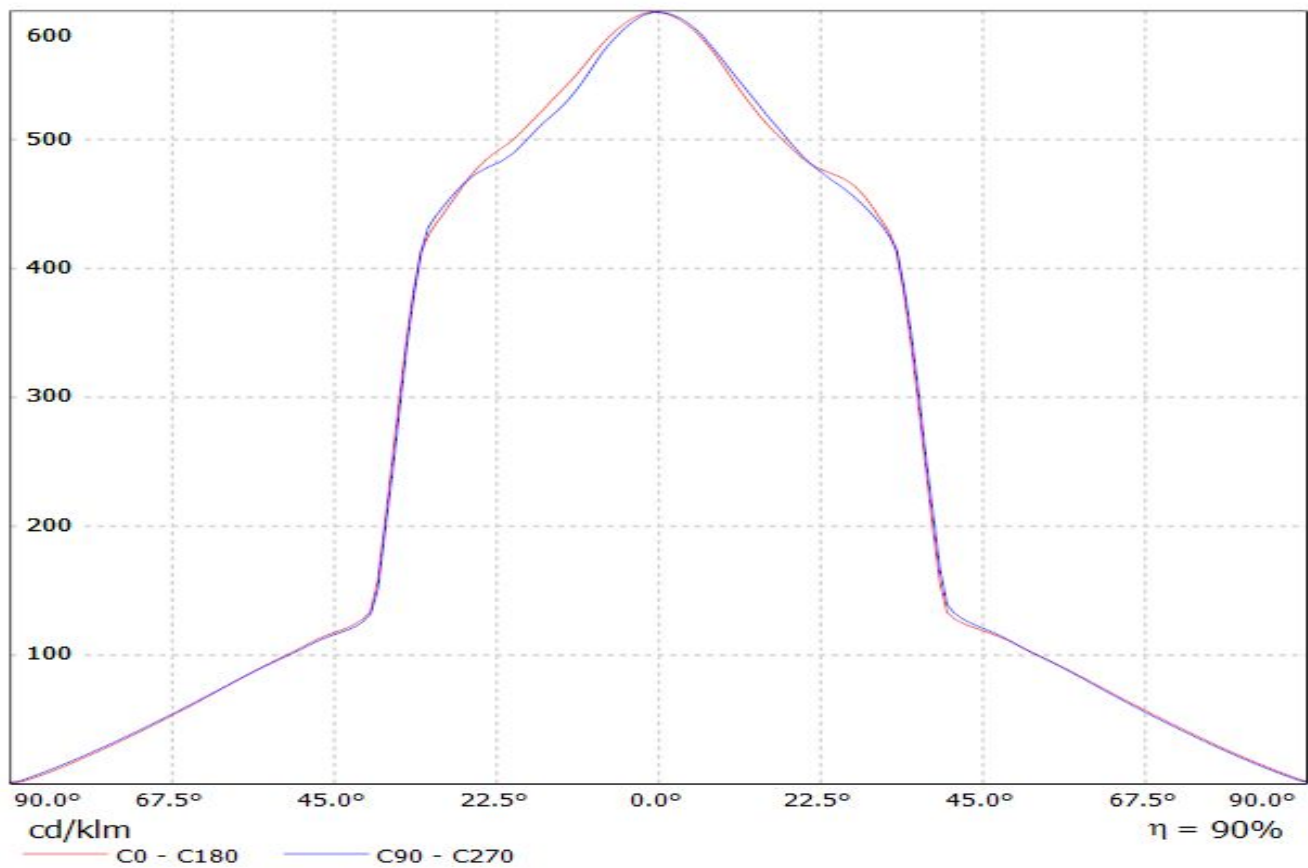
http://ledil.fi/sites/default/files/Documents/Technical/Material/PC%20Makrolon%202400_2407_2456_2458-UL.pdf

- Reflector is made of aluminium coated PC (120 degrees of Celcius / 248 degrees of Fahrenheit) with protective lacquer (110 degrees of Celcius / 230 degrees of Fahrenheit).
- Optic holder molded by high quality PC material (120 dergees of Celcius / 248 degrees of Fahrenheit).

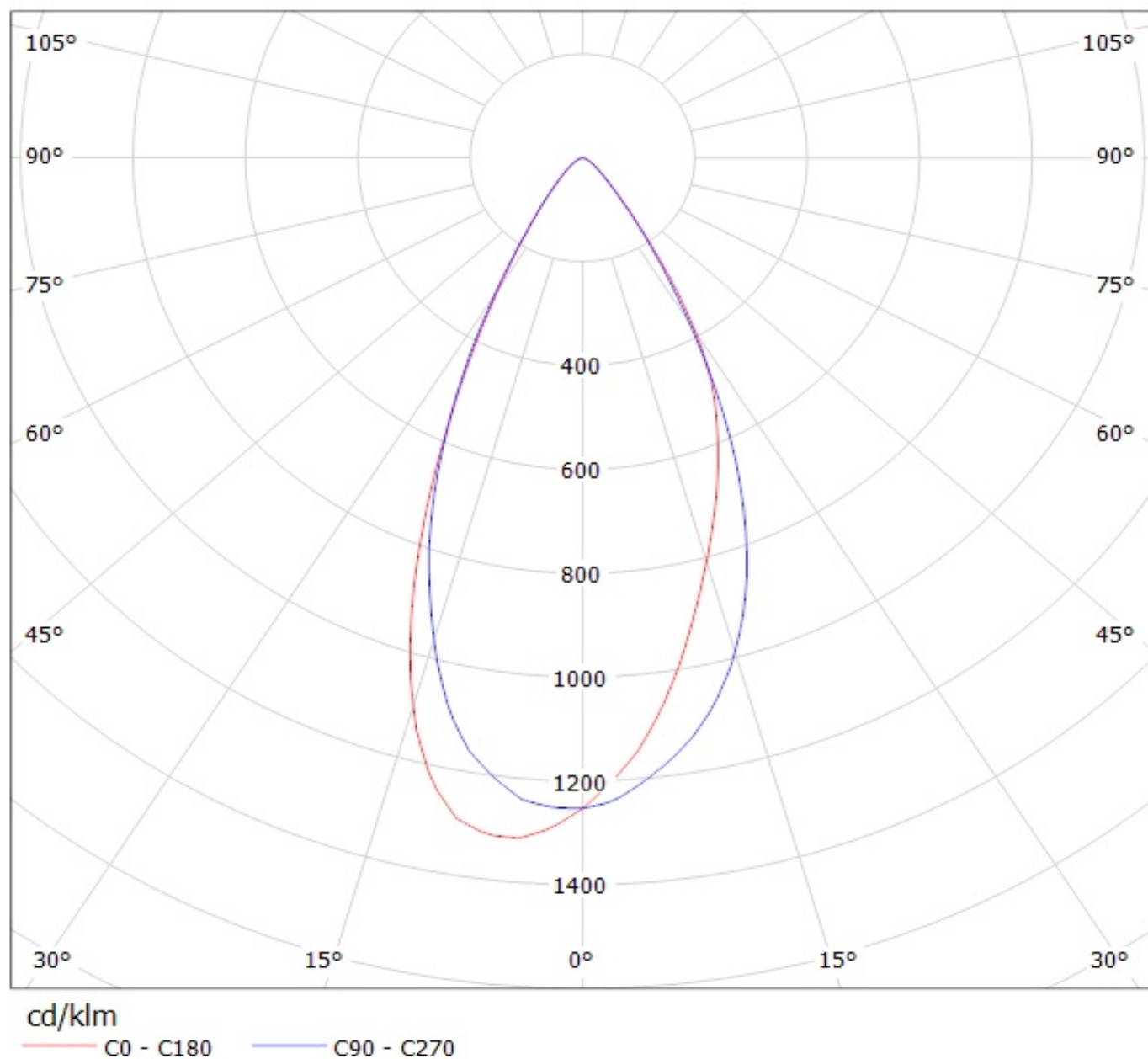
Luminaire: Ledil Oy CA11022_TINA2-W (Nichia NCS19 95lm @ 250mA) Efficiency=88%
Lamps: 1 x Nichia NCS19 95lm @ 250mA



Luminaire: LEDiL Oy C13253_TINA2-R-CLIP16_(NCS19) Eff. 89,7%
Lamps: 1 x Nichia NCS19 (88lm@250mA)



Luminaire: Ledil Oy CA11022_TINA2-W (Nichia NCS19 95lm @ 250mA) Efficiency=88%
Lamps: 1 x Nichia NCS19 95lm @ 250mA



Luminaire: LEDiL Oy C13253_TINA2-R-CLIP16_(NCS19) Eff. 89,7%
Lamps: 1 x Nichia NCS19 (88lm@250mA)

