

**Ordering number CA11020_TINA2-RS**

Family	Tina2	FWHM	(simulated)
Type	Assembly	Efficiency	93 %
LED	NVSxx19A	cd/lm	-
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	(simulated)
Type	Assembly	Efficiency	89 %
LED	NVSxx19A	cd/lm	-
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	(simulated)
Type	Assembly	Efficiency	92 %
LED	NVSxx19A	cd/lm	-
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 CA11053_TINA2-O**

Family	Tina2	FWHM	36+15 degrees
Type	Assembly	Efficiency	89 %
LED	NVSxx19A	cd/lm	-
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	58 degrees
Type	Assembly	Efficiency	82 %
LED	NVSxx19A	cd/lm	0.900
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	74 degrees
Type	Reflector	Efficiency	90 %
LED	NVSxx19A	cd/lm	0.556
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 NVSxx19A 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>

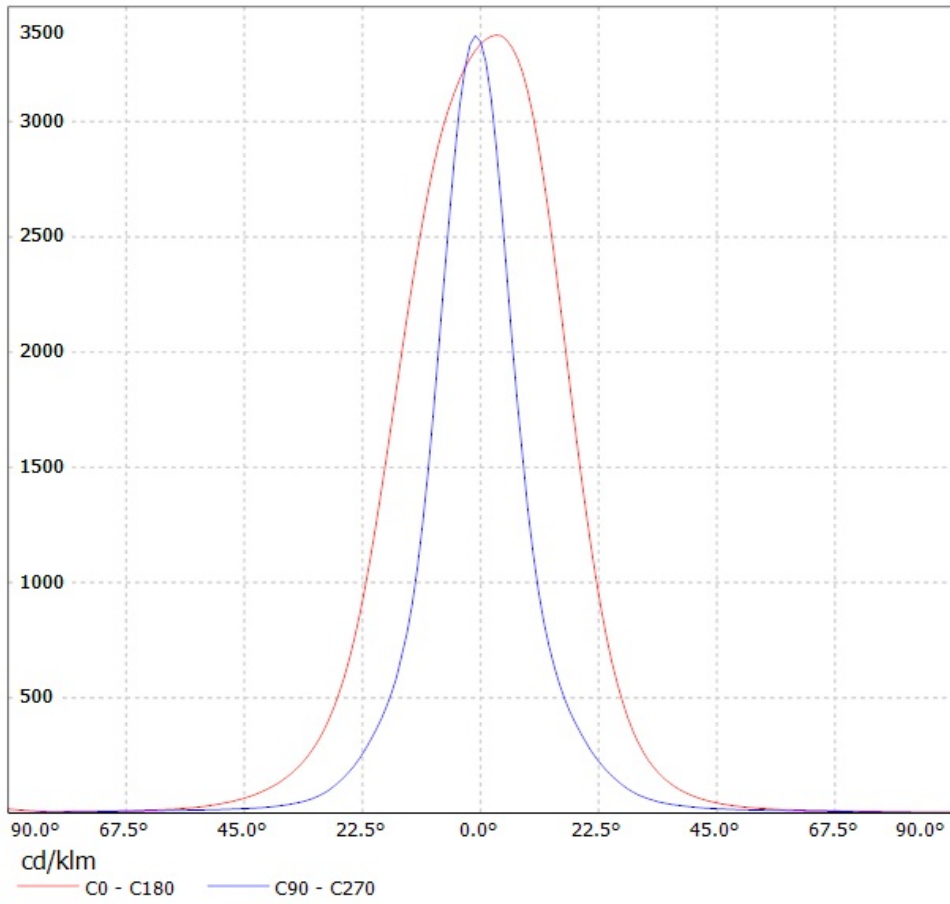
- Lens material optical grade PC with high UV and temperature resistance (120 degrees of Celcius / 248 degrees of Fahrenheit). Allows use of high current and temperature conditions.

Please find more information about used materials from below:

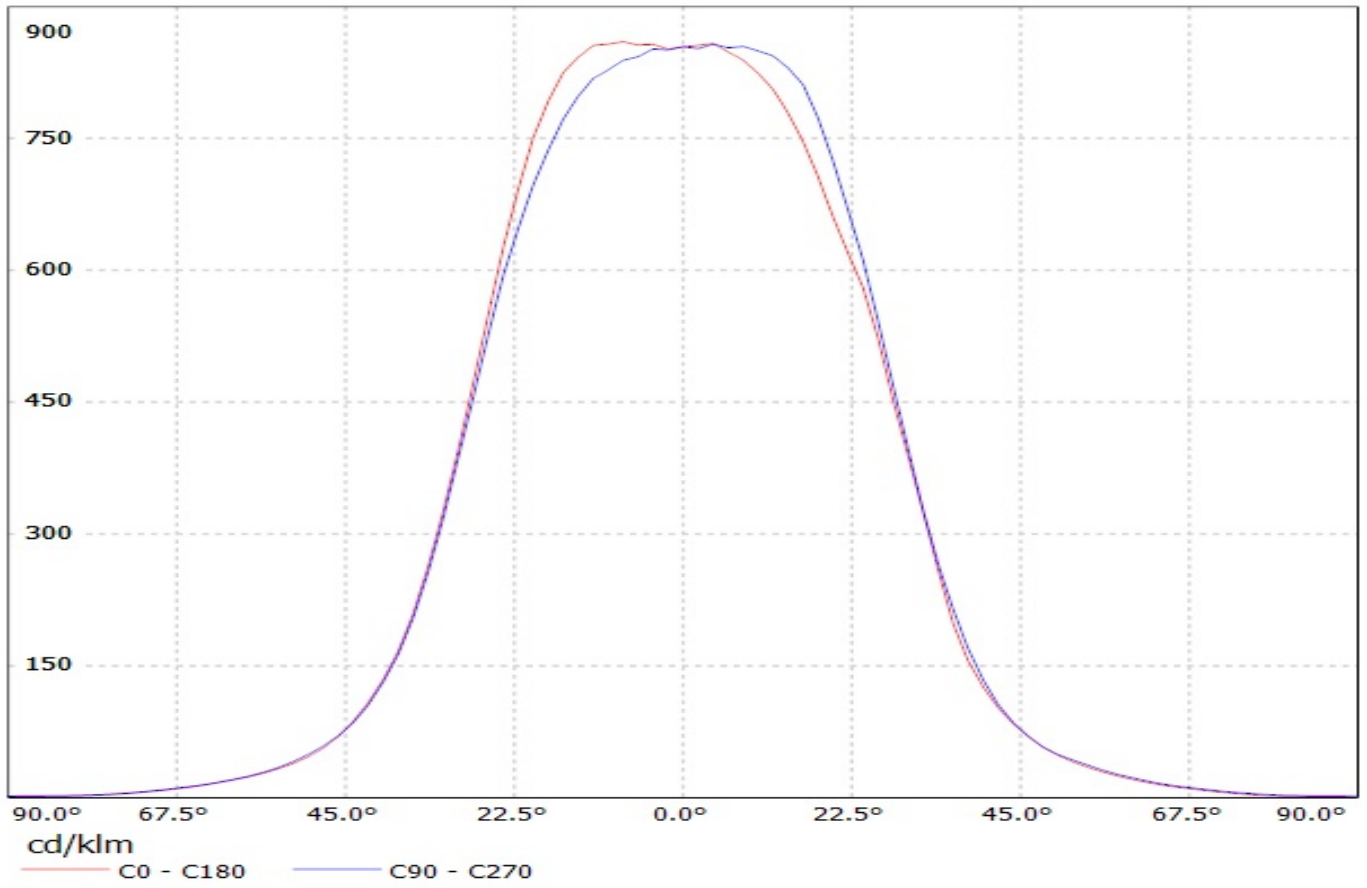
http://ledil.fi/sites/default/files/Documents/Technical/Material/PC%20Makrolon%202400_2407_2456_2458-UL.pdf

- 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).

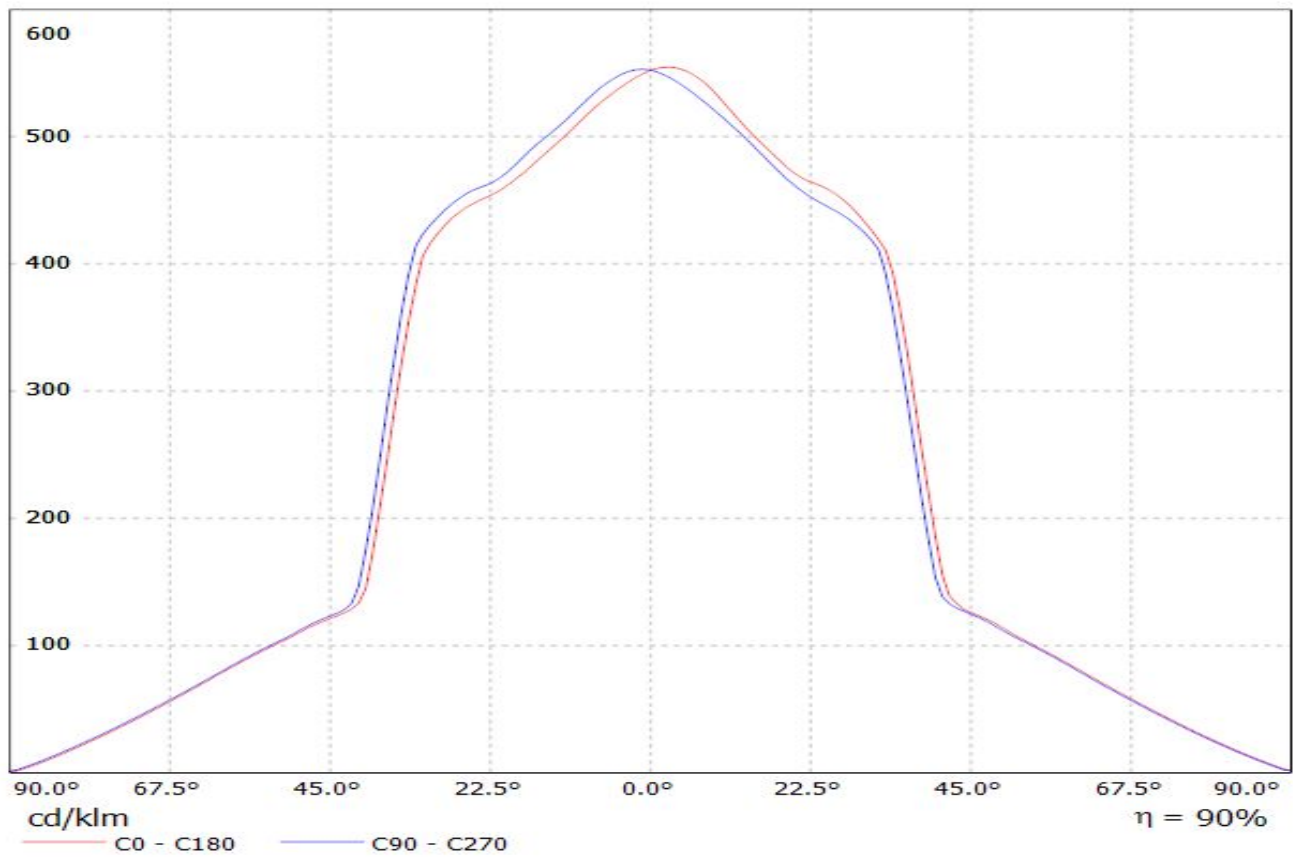
Luminaire: LEDIL OY CA11053-TINA2-O (NVS19) Efficiency=85%
Lamps: 1 x Nichia NVS19 (98.3lm @ 250mA)



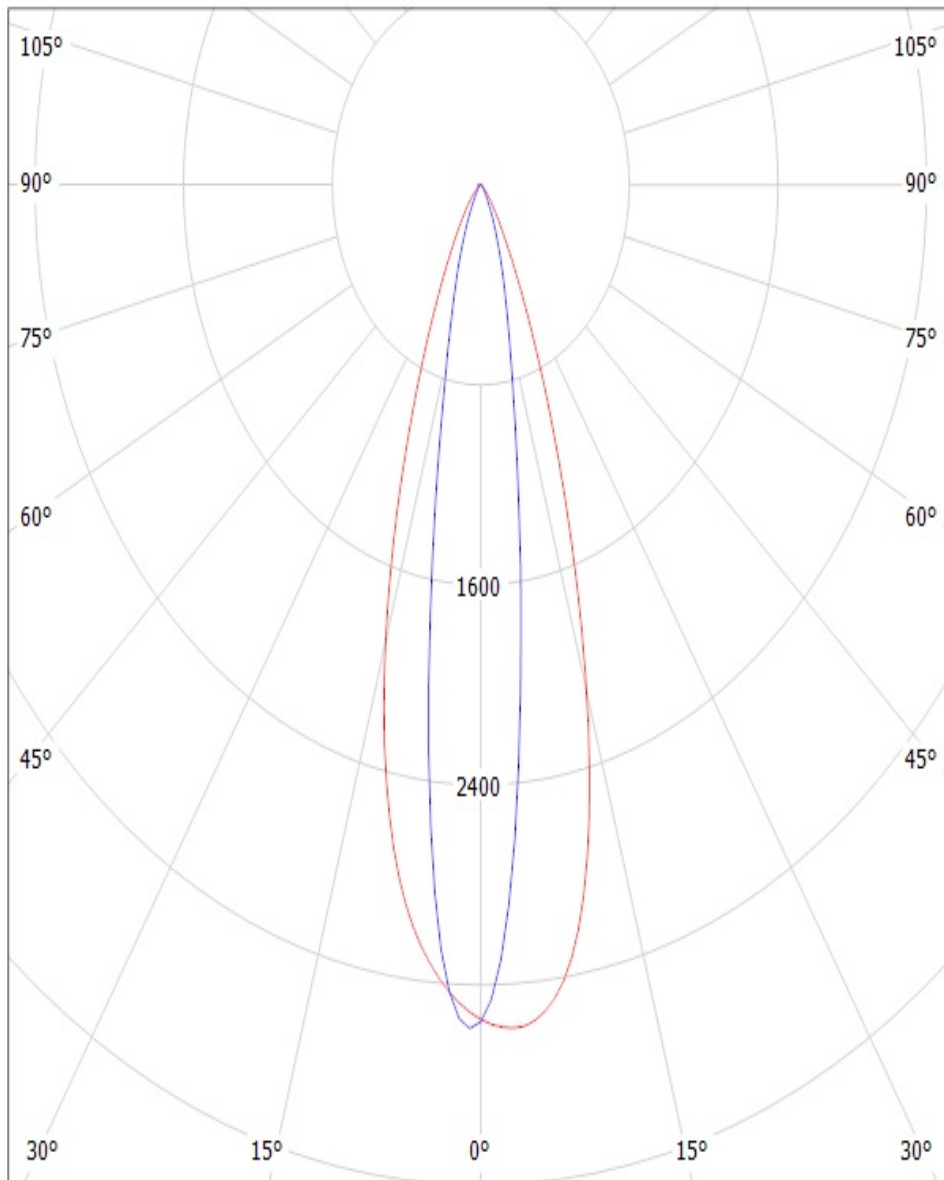
Luminaire: Ledil Oy CA11022_TINA2-W (Nichia NVS19 98lm @ 250mA) Efficiency=82%
Lamps: 1 x Nichia NVS19 98lm @ 250mA



Luminaire: LEDiL Oy C13253_TINA2-R-CLIP16_(NVS19) Eff. 89,8%
Lamps: 1 x Nichia NVS19 (97,5lm@250mA)



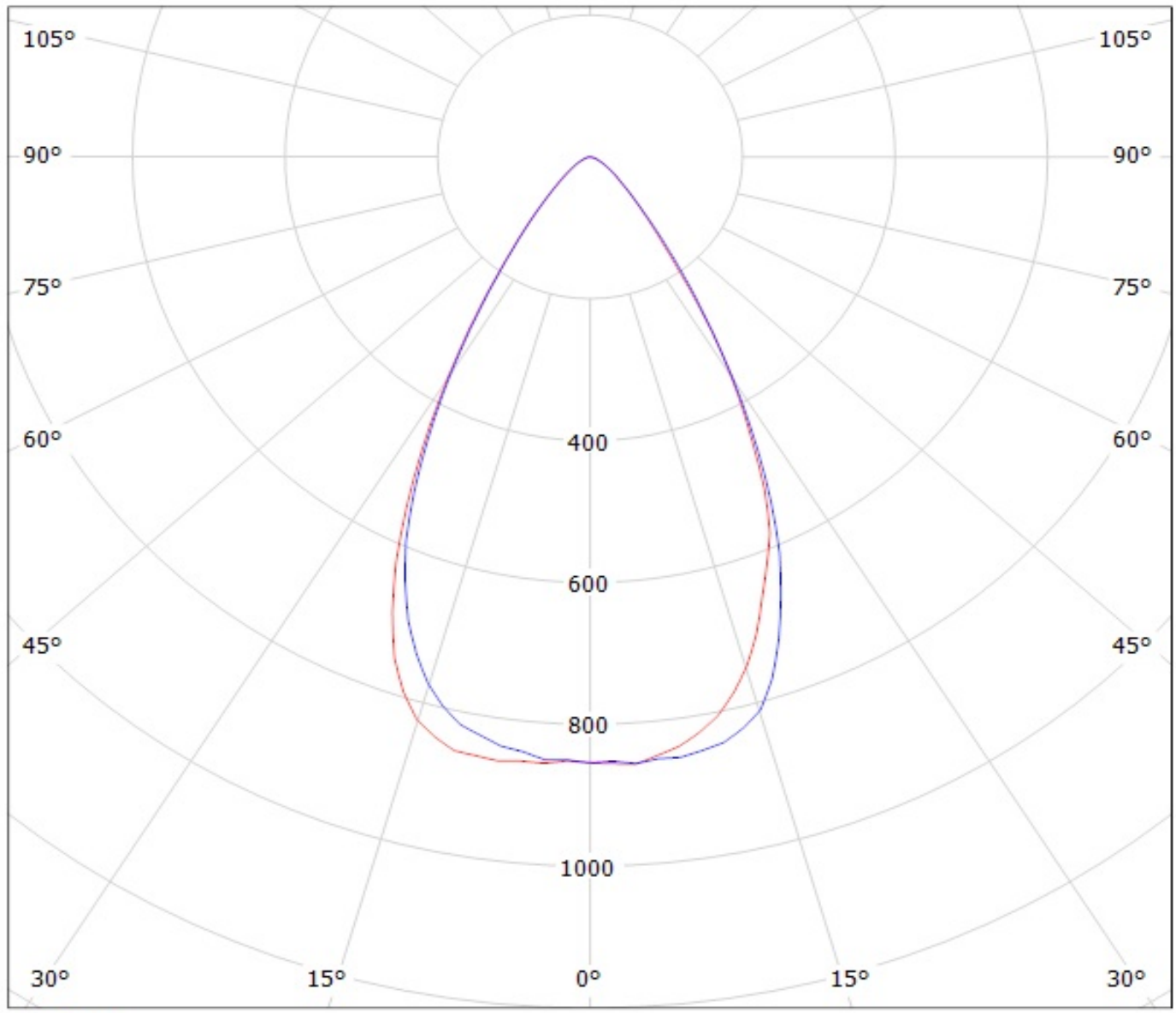
Luminaire: LEDIL OY CA11053-TINA2-O (NVS19) Efficiency=85%
Lamps: 1 x Nichia NVS19 (98.3lm @ 250mA)



cd/klm

— C0 - C180 — C90 - C270

Luminaire: Ledil Oy CA11022_TINA2-W (Nichia NVS19 98lm @ 250mA) Efficiency=82%
Lamps: 1 x Nichia NVS19 98lm @ 250mA



cd/klm
— C0 - C180 — C90 - C270

Luminaire: LEDiL Oy C13253_TINA2-R-CLIP16_(NVS19) Eff. 89,8%
Lamps: 1 x Nichia NVS19 (97,5lm@250mA)

