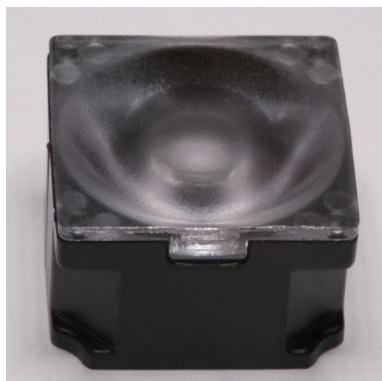


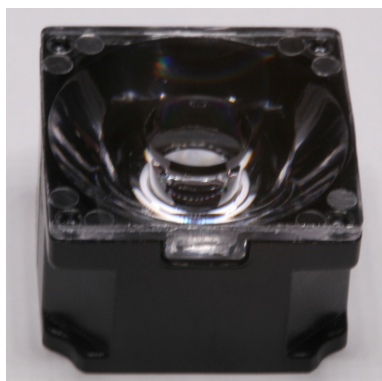
Ordering number	CA11357		
Description	CA11357-Laura-M-NVS19-tape		
Family	Laura	FWHM	0 degrees
Type	Lens	Efficiency	-
LED	NVS19	cd/Im	-
Color	White	Gerber File	Available
Diameter	21.6 mm		
Height	13.1 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	Ready		



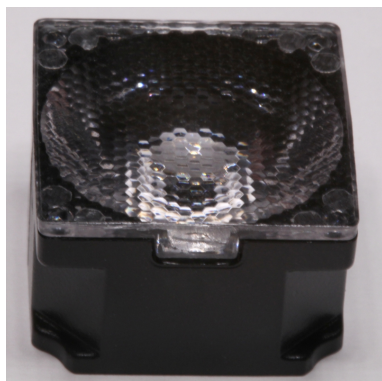
Ordering number	CA11427		
Description	CA11427_Laura-Refl-W-NVS19-tape		
Family	Laura	FWHM	0 degrees
Type	Reflector	Efficiency	-
LED	NVS19	cd/Im	-
Color	Black	Gerber File	Available
Diameter	21.6 mm		
Height	13.1 mm		
Style	Square		
Optic Material	PC		
Holder Material	PC		
Fastening	Tape		
Status	Ready		



Ordering number	CA11756		
Description	CA11756-Laura-D-NVS19-tape		
Family	Laura	FWHM	degrees
Type	Lens	Efficiency	-
LED	NVS19	cd/Im	-
Color	White	Gerber File	Available
Diameter	21.6 mm		
Height	13.1 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	Ready		



Ordering number	CA11697		
Description	CA11697-Laura-RS-NVS19-tape		
Family	Laura	FWHM	8 degrees
Type	Lens	Efficiency	-
LED	NVS19	cd/Im	-
Color	White	Gerber File	Available
Diameter	21.6 mm		
Height	13.1 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	PC		
Fastening	-		
Status	Ready		



Ordering number	CA11646		
Description	CA11646_Laura-SS-NVS19-tape		
Family	Laura	FWHM	12 degrees
Type	Lens	Efficiency	-
LED	NVS19	cd/Im	-
Color	White	Gerber File	Available
Diameter	21.6 mm		
Height	13.1 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	PC		
Fastening	-		
Status	Ready		



Ordering number	CA11367		
Description	CA11367-Laura-O-NVS19-tape		
Family	Laura	FWHM	42+14 degrees
Type	Lens	Efficiency	-
LED	NVS19	cd/Im	-
Color	White	Gerber File	Available
Diameter	21.6 mm		
Height	13.1 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	Ready		

Ordering number	CA11769		
Description	CA11769_Laura-WW-NVS19-tape		
Family	Laura	FWHM	0 degrees
Type	Lens	Efficiency	-
LED	NVS19	cd/Im	-
Color	White	Gerber File	Available
Diameter	21.6 mm		
Height	13.1 mm		
Style	Square		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
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.

GENERAL INFORMATION

- Product series especially designed & optimized for NVS19 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>

- 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).

- 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

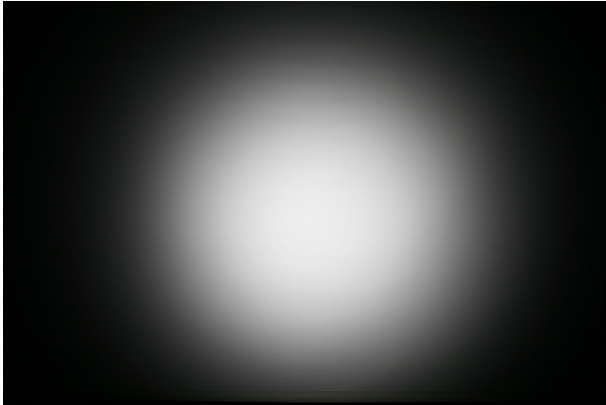
NOTE 1: We advise customer to ensure the suitability and sufficiency of the bond in the end product. For example, mechanical stress, vibration and holes on the surface of the circuit board weaken the strength of the tape.

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.

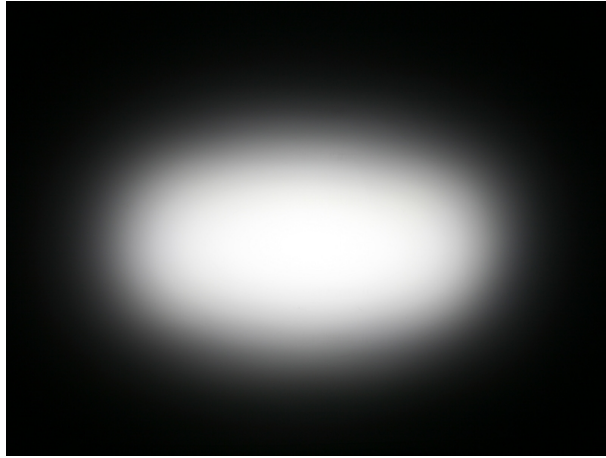
If cleaning of PCB surfaces is needed, please follow strictly the cleaning instructions of your LED manufacturer - this is important as cleaning shall under no circumstances damage LEDs or other electronics components on the PCB.

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.

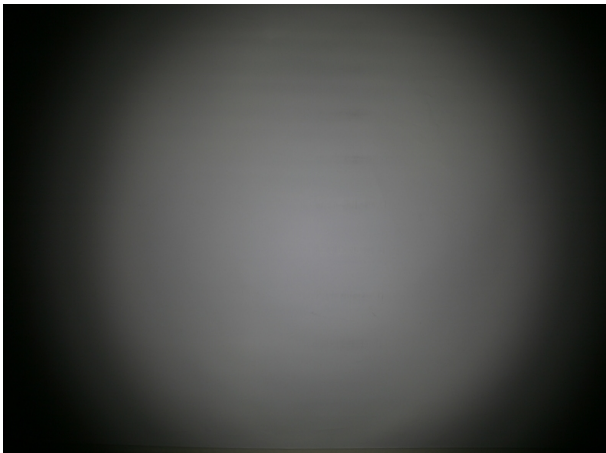
CA11357



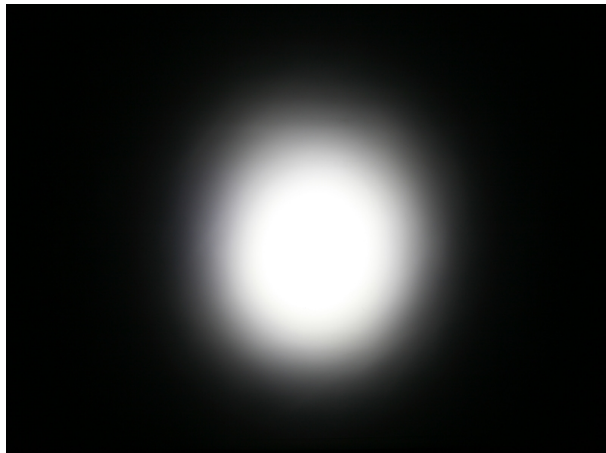
CA11367



CA11427



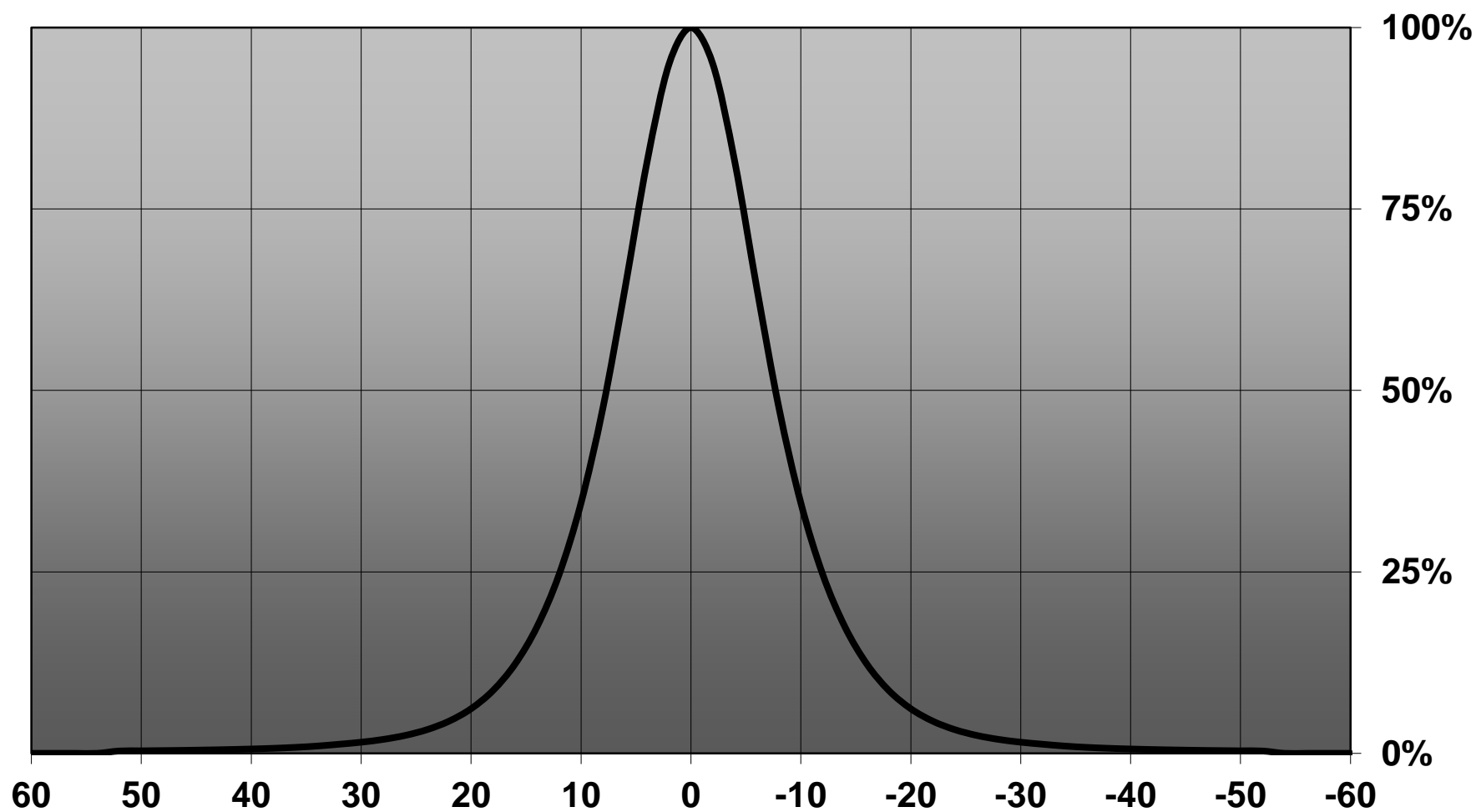
CA11646



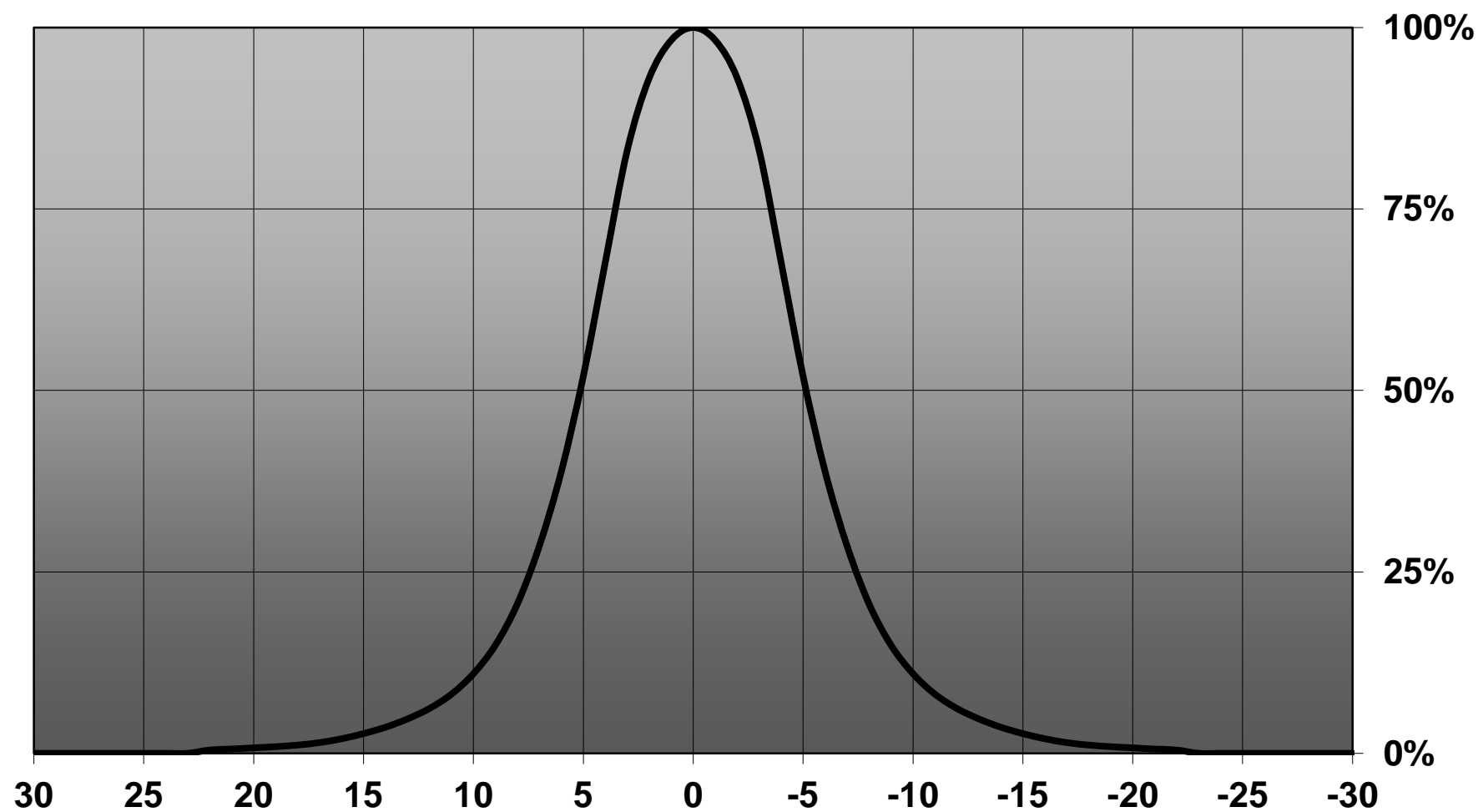
CA11697



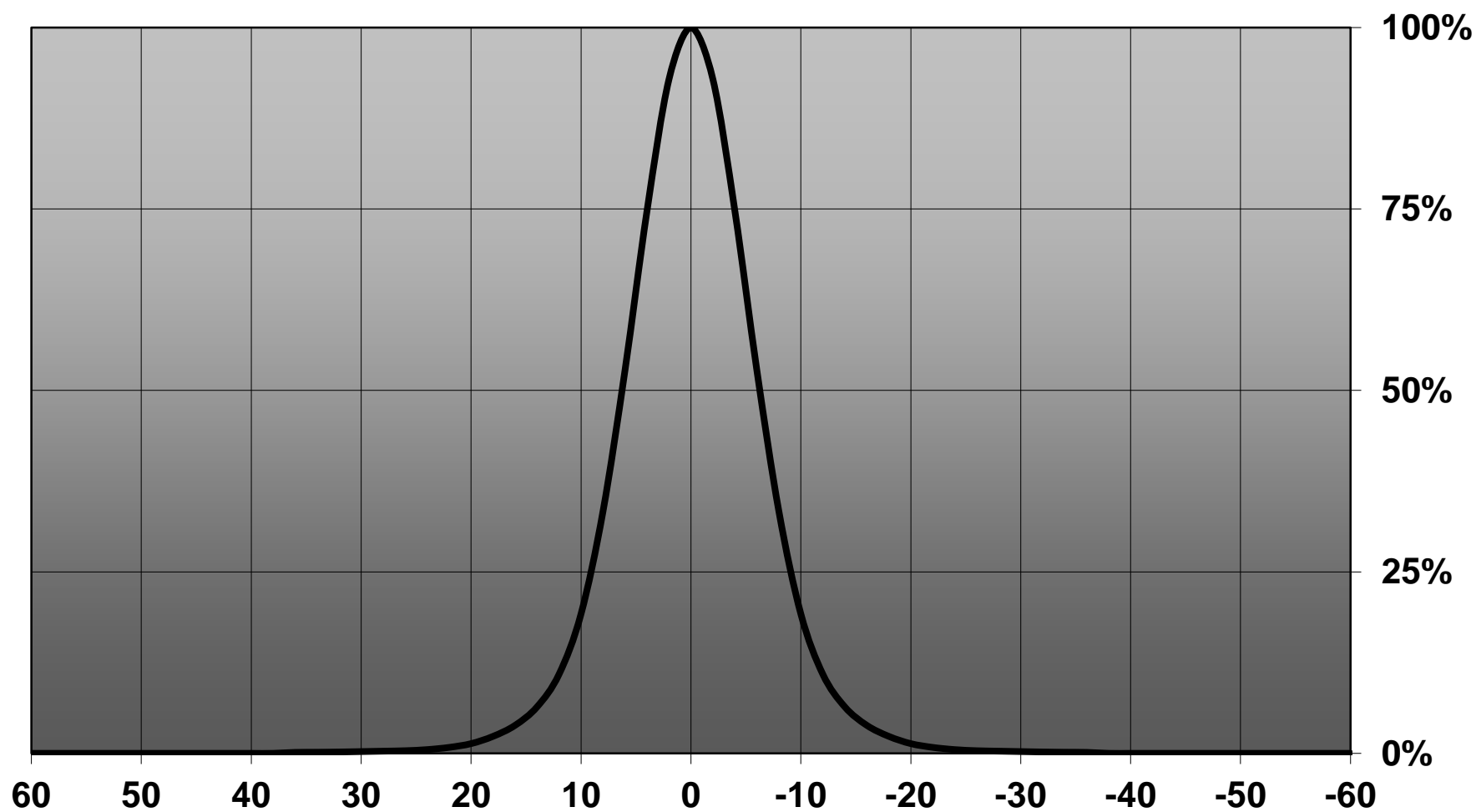
Relative intensity of CA11756_Laura-D-NVS19-tape



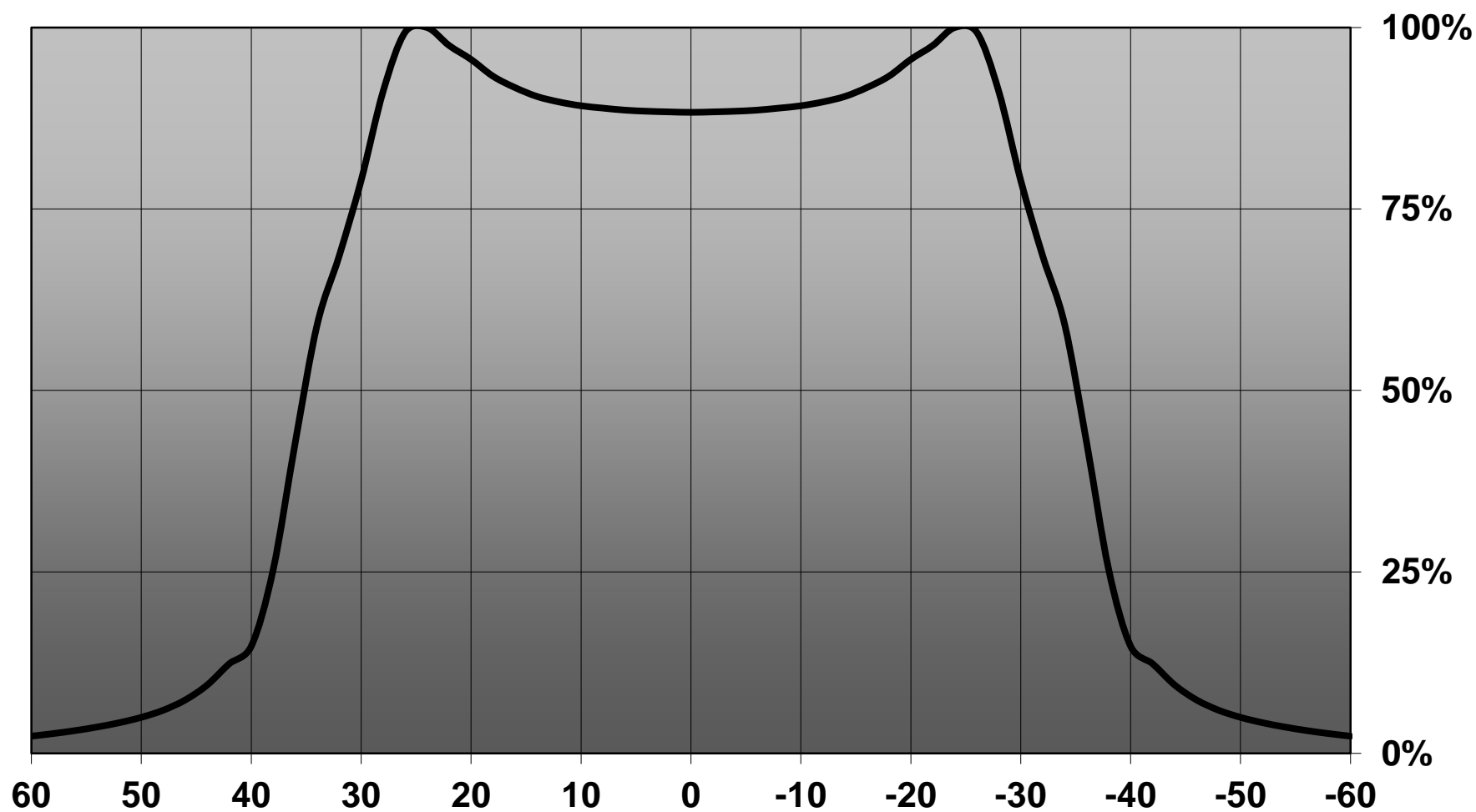
Relative intensity of CA11697_Laura-RS-NVS19-tape



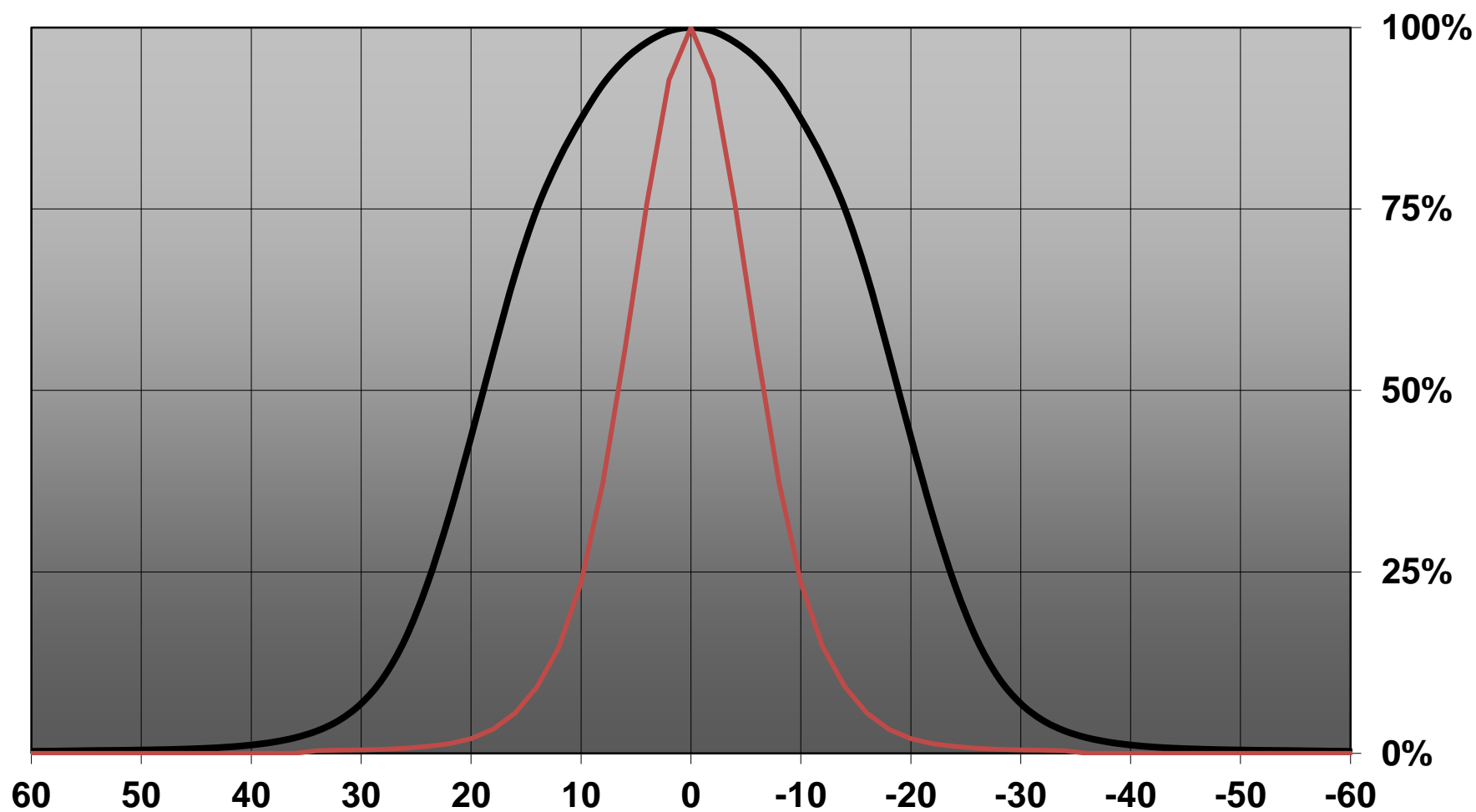
Relative intensity of CA11646_Laura-SS-NVS19



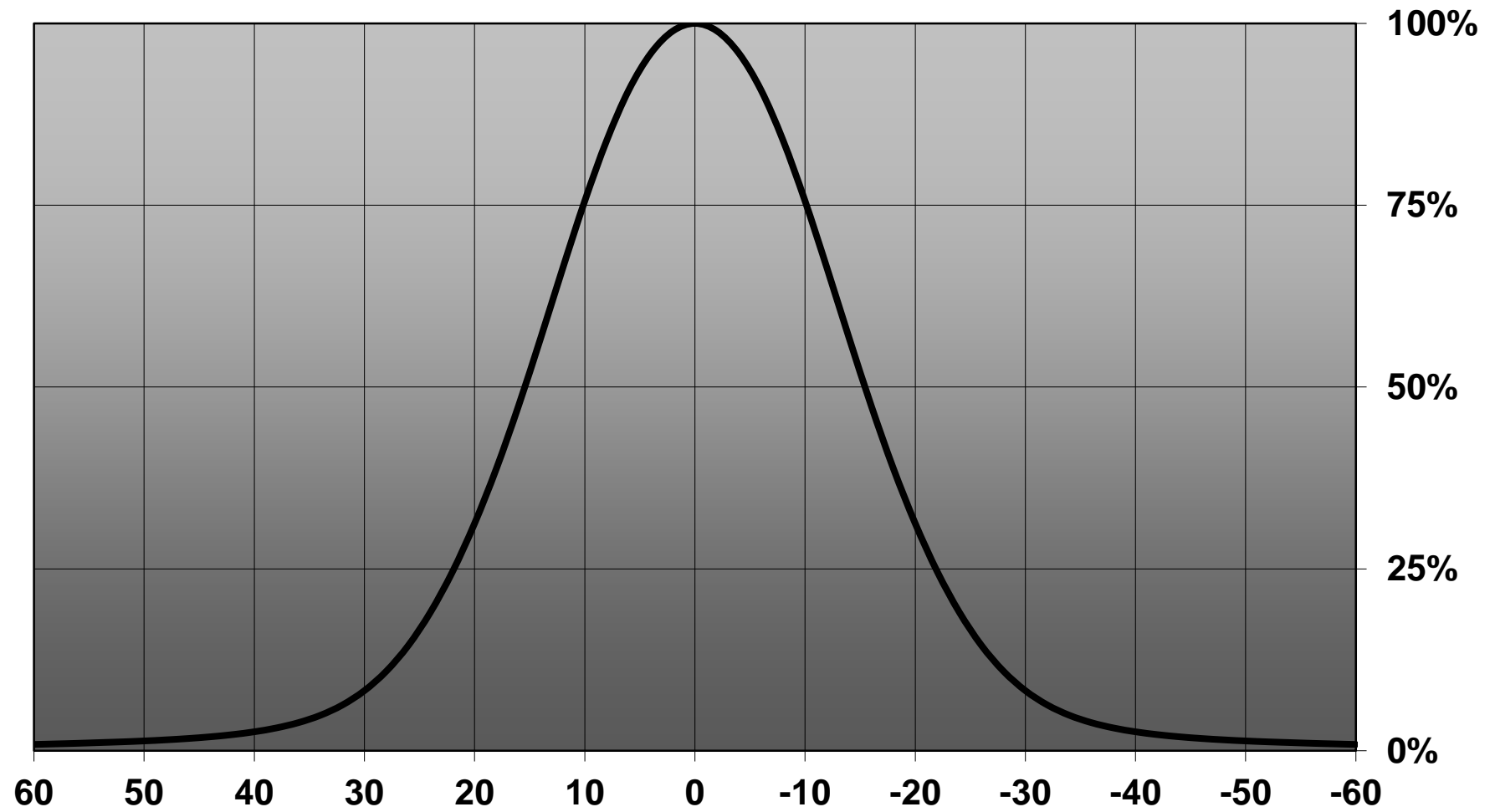
Relative intensity of CA11427_Laura-Refl-W-NVS19-tape

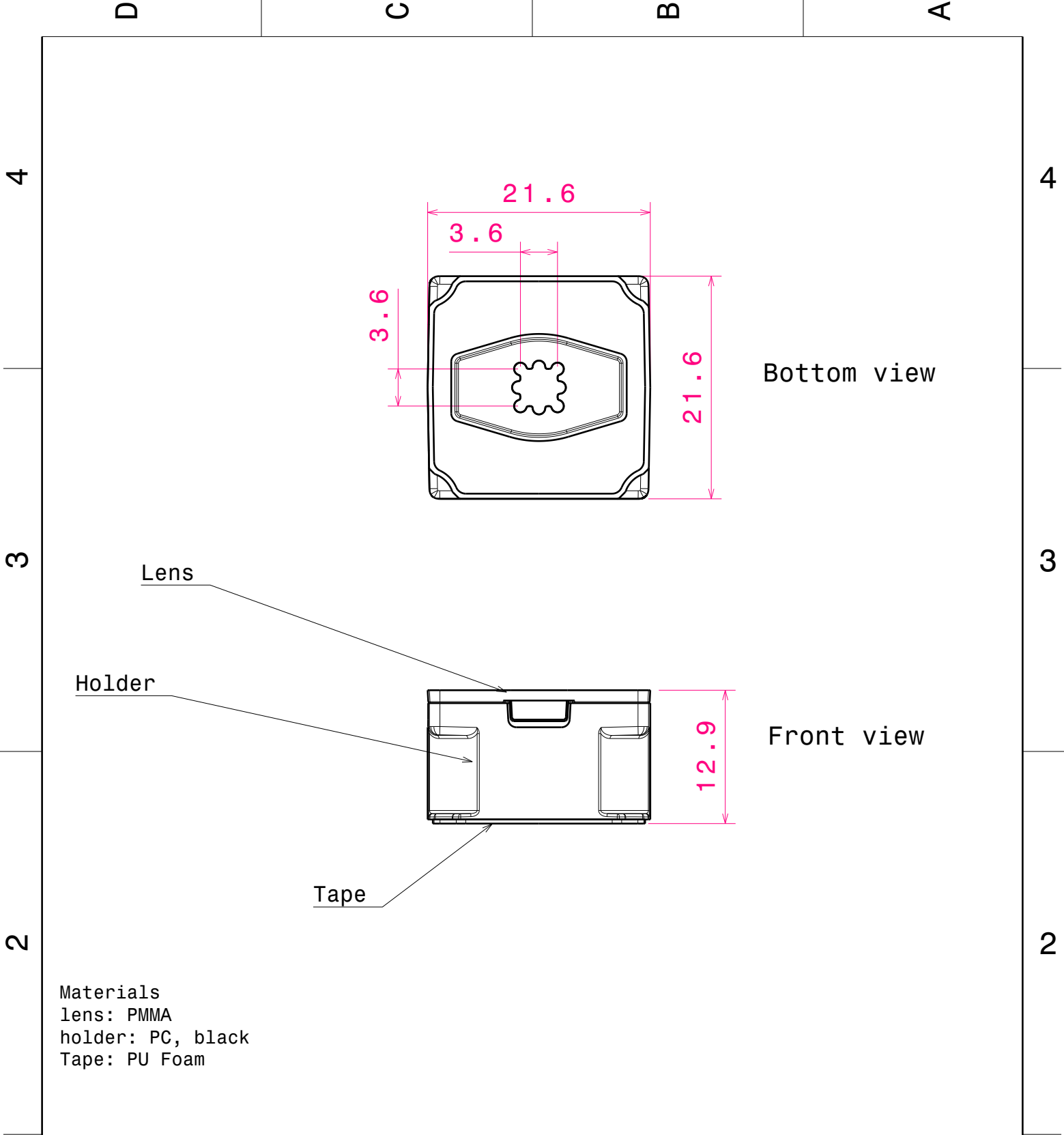


Relative intensity of CA11367_Laura-O-NVS19-tape



Relative intensity of CA11357_Laura-M-NVS19-tape





Materials
lens: PMMA
holder: PC, black
Tape: PU Foam

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or communicated without
our written agreement.



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DRAWING TITLE

Datasheet Assy Laura-N19-tape

DRAWN BY

p

DATE

12.08.2010

CHECKED BY

t k

DATE

04.06.2010

DESIGNED BY

hh

DATE

15.04.2010

SIZE

A4

DRAWING NUMBER

-

REV

1

SCALE

2:1

WEIGHT (g)

SHEET

1 / 1

D

A