

**Product number** CN13517_MIRELLA-50-S-CL

Family	Mirella	FWHM	19 degrees
Type	RefPack	Efficiency	84 %
LED	CLL02x	cd/Im	3.600
Color	Metal	Gerber File	Available
Diameter	49.9 mm	Not compatible if PCB board fixed down by using screws.	
Height	23.9 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Glue		
Status	On production		

**Product number** C12476_MIRELLA-50-S

Family	Mirella	FWHM	20 degrees
Type	Reflector	Efficiency	93 %
LED	CLL02x	cd/Im	(simulated) 0.000
Color	Metal	Gerber File	Available
Diameter	49.9 mm	Not compatible if PCB board fixed down by using screws.	
Height	23.9 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Glue		
Status	On production		

**Product number** CN12483_MIRELLA-50-S-DL

Family	Mirella	FWHM	24 degrees
Type	RefPack	Efficiency	85 %
LED	CLL02x	cd/Im	(simulated) 0.000
Color	Metal	Gerber File	Available
Diameter	49.9 mm	Not compatible if PCB board fixed down by using screws.	
Height	23.9 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Glue		
Status	On production		

**Product number** CN13905_MIRELLA-50-S-PF-RZL

Family	Mirella	FWHM	25 degrees
Type	RefPack	Efficiency	-
LED	CLL02x	cd/Im	1.500
Color	Metal	Gerber File	Available
Diameter	49.9 mm		
Height	25.6 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Socket, screw		
Status	On production		

**Product number C12477_MIRELLA-50-M**

Family	Mirella	FWHM	29 degrees
Type	Reflector	Efficiency	91 %
LED	CLL02x	cd/Im	3.400
Color	Metal	Gerber File	Available
Diameter	49.9 mm	Not compatible if PCB board fixed down by using screws.	
Height	23.9 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Glue		
Status	On production		

**Product number CN13518_MIRELLA-50-M-CL**

Family	Mirella	FWHM	30 degrees
Type	RefPack	Efficiency	84 %
LED	CLL02x	cd/Im	2.200
Color	Metal	Gerber File	Available
Diameter	49.9 mm	Not compatible if PCB board fixed down by using screws.	
Height	24 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Glue		
Status	On production		

**Product number CN12484_MIRELLA-50-M-DL**

Family	Mirella	FWHM	36 degrees
Type	RefPack	Efficiency	83 %
LED	CLL02x	cd/Im	(simulated) 0.000
Color	Metal	Gerber File	Available
Diameter	49.9 mm	Not compatible if PCB board fixed down by using screws.	
Height	24 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Glue		
Status	On production		

**Product number CN13906_MIRELLA-50-M-PF-RZL**

Family	Mirella	FWHM	36 degrees
Type	RefPack	Efficiency	-
LED	CLL02x	cd/Im	1.000
Color	Metal	Gerber File	Available
Diameter	49.9 mm		
Height	25.6 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Socket, screw		
Status	On production		

**Product number C12478_MIRELLA-50-W**

Family	Mirella	FWHM	42 degrees
Type	Reflector	Efficiency	90 %
LED	CLL02x	cd/Im	(simulated) 0.000
Color	Metal	Gerber File	Available
Diameter	49.9 mm	Not compatible if PCB board fixed down by using screws.	
Height	23.9 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Glue		
Status	On production		

**Product number CN13520_MIRELLA-50-W-CL**

Family	Mirella	FWHM	46 degrees
Type	RefPack	Efficiency	84 %
LED	CLL02x	cd/Im	1.200
Color	Metal	Gerber File	Available
Diameter	49.9 mm		
Height	23.9 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Glue		
Status	On production		

**Product number CN13907_MIRELLA-50-W-PF-RZL**

Family	Mirella	FWHM	46 degrees
Type	RefPack	Efficiency	-
LED	CLL02x	cd/Im	0.700
Color	Metal	Gerber File	Available
Diameter	49.9 mm		
Height	25.6 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Socket, screw		
Status	On production		

**Product number CN12485_MIRELLA-50-W-DL**

Family	Mirella	FWHM	48 degrees
Type	RefPack	Efficiency	82 %
LED	CLL02x	cd/Im	(simulated) 0.000
Color	Metal	Gerber File	Available
Diameter	49.9 mm		
Height	23.9 mm		
Style	Round		
Optic Material	PC		
Holder Material	-		
Fastening	Glue		
Status	On production		



PRODUCT DATASHEET
Mirella series
last update 3/10/2012



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

Mirella series

last update 3/10/2012



GENERAL INFORMATION

- Product series especially designed & optimized for CLL02x series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- 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 (short term 100 degrees of Celcius / 212 degrees of Fahrenheit).

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

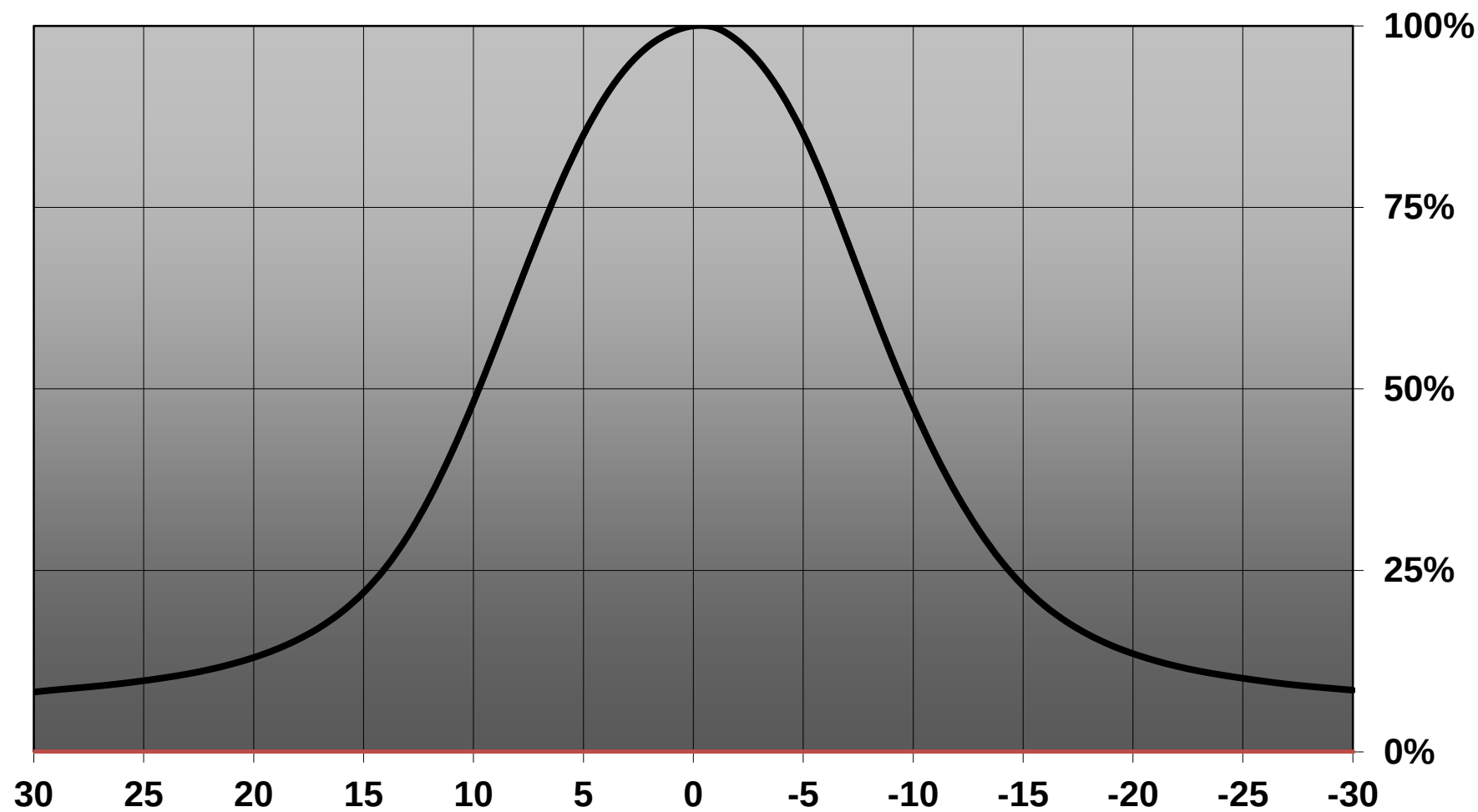
http://www.ledil.com/datasheets/DataSheet_GLUES.pdf

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.

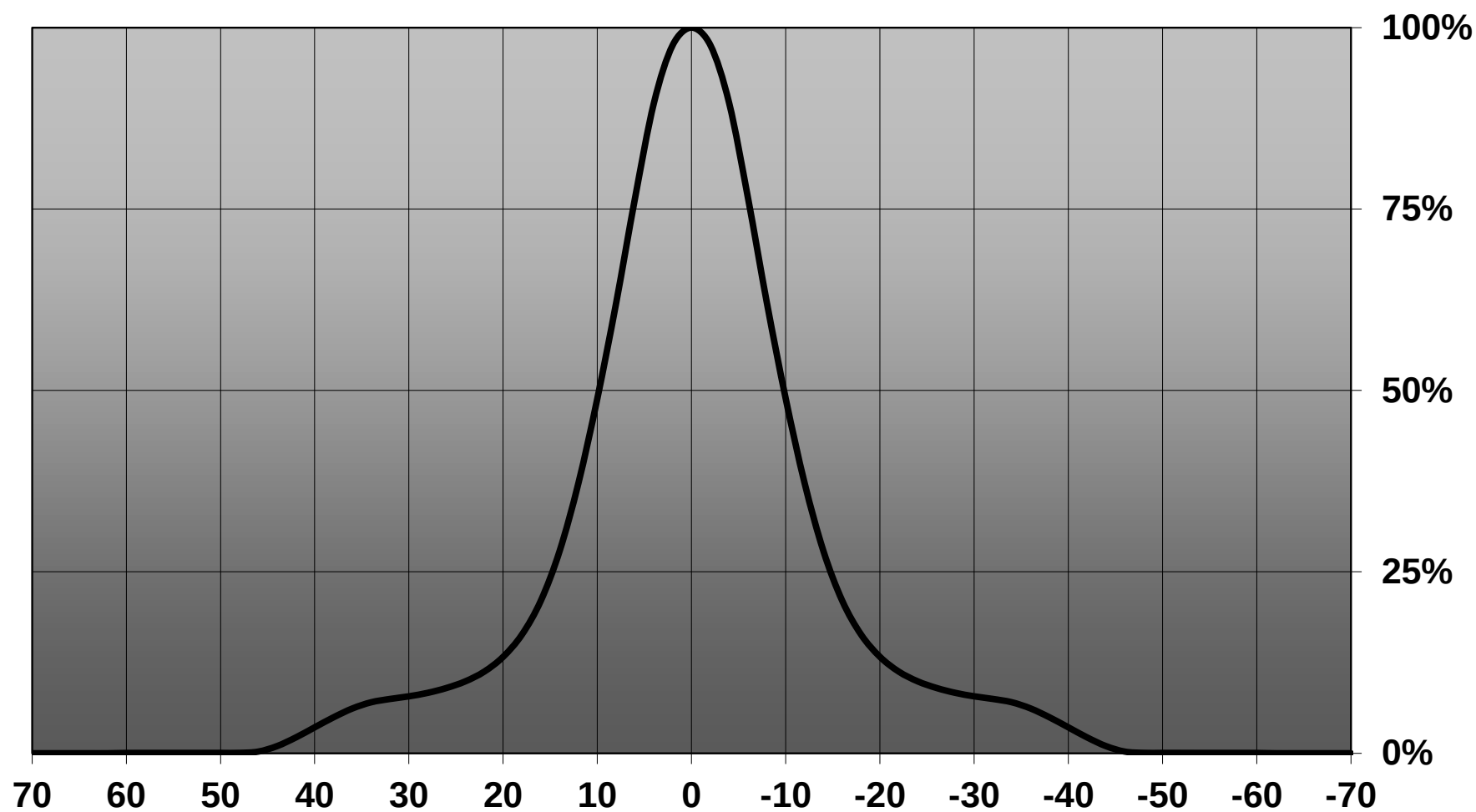
NOTE 2: All surfaces where glue is applied must be clean, dry and free from grease and dirt. If cleaning of PCB surfaces is needed, please follow strictly the cleaning instructions of your LED manufacturer -this is important as cleaning shall under no circumstances damage LEDs or other electronics components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

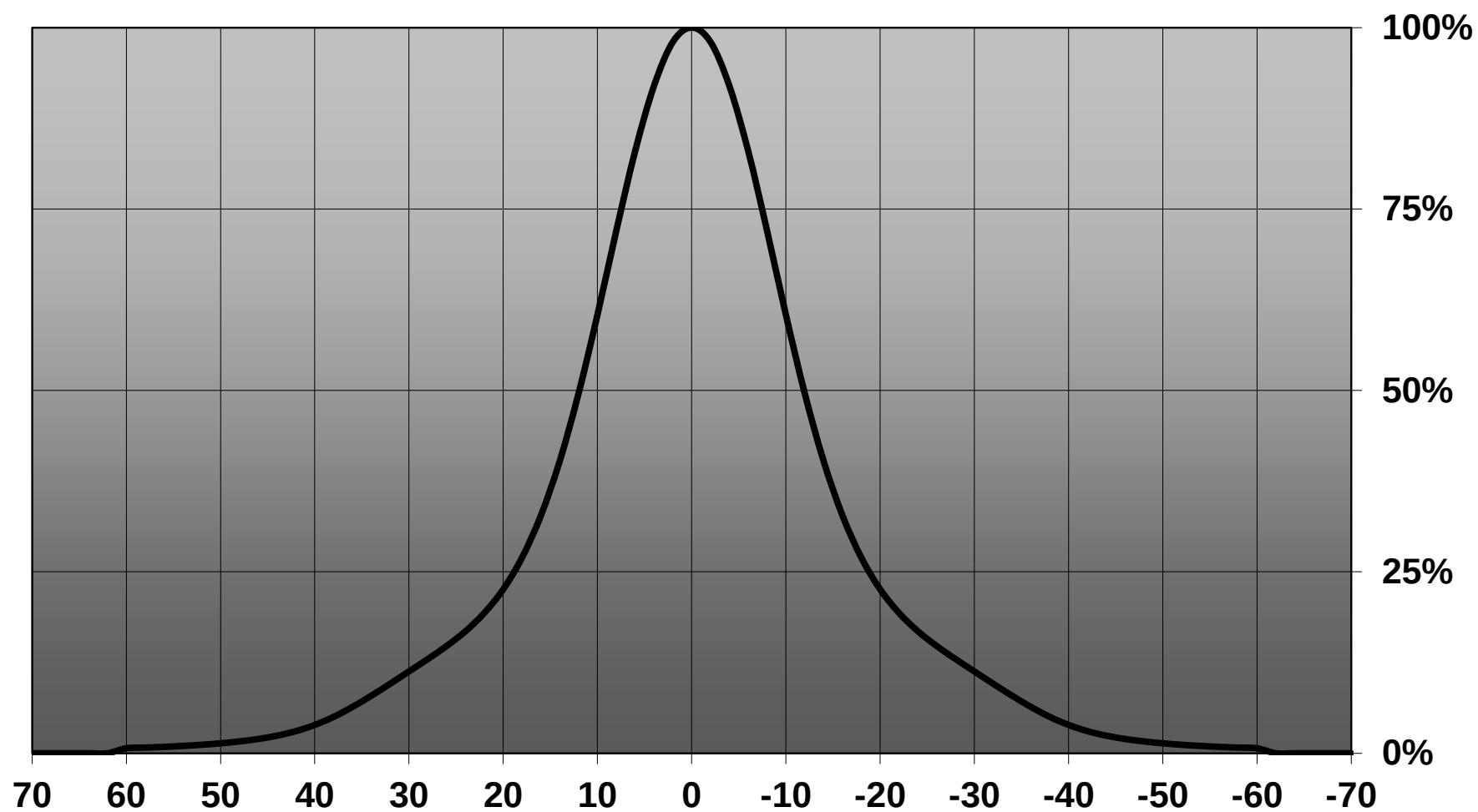
Relative intensity of CN13517_MIRELLA-50-S-CL-(CLL020)



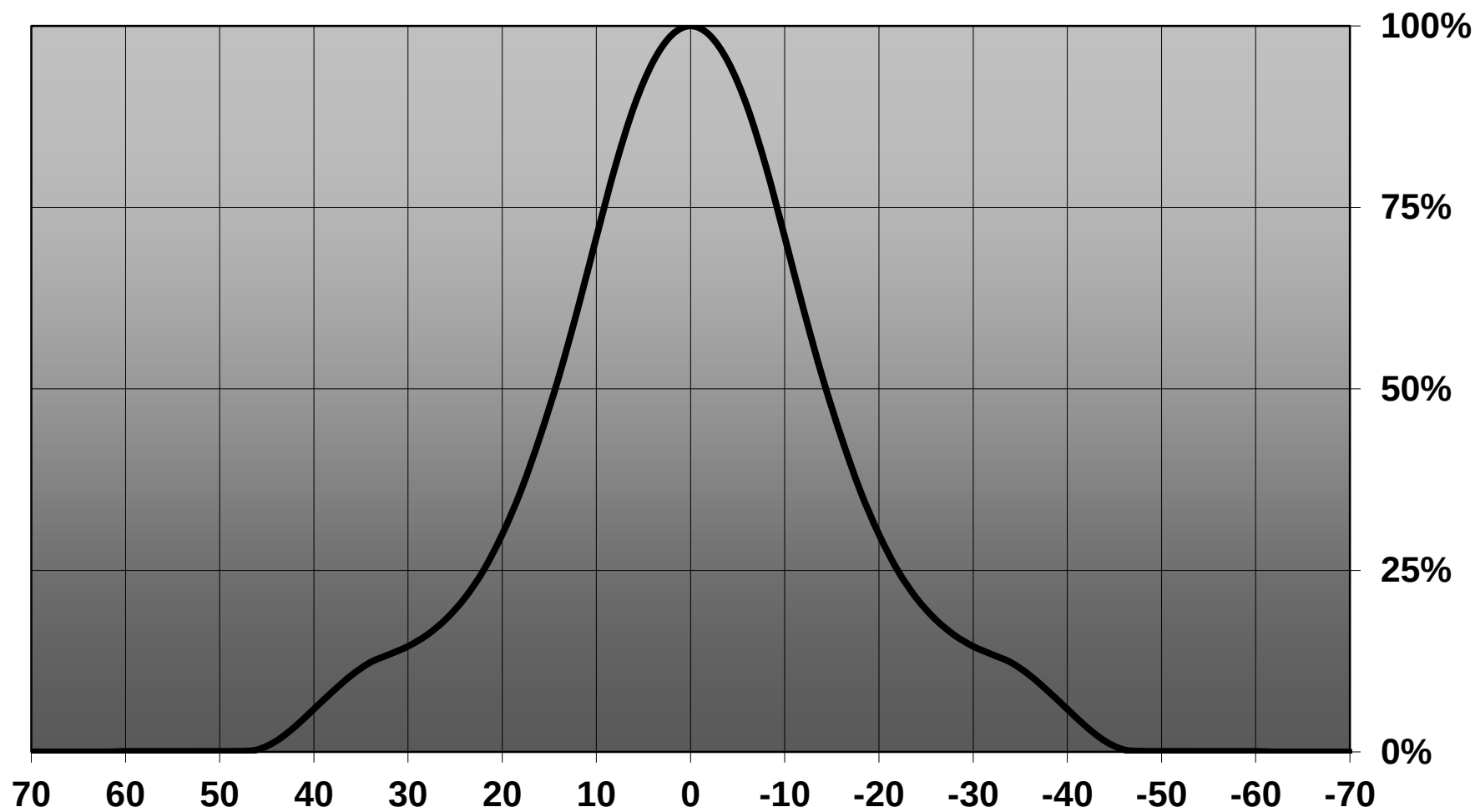
Relative intensity of C12476_Mirella_50-S_(CLL020)



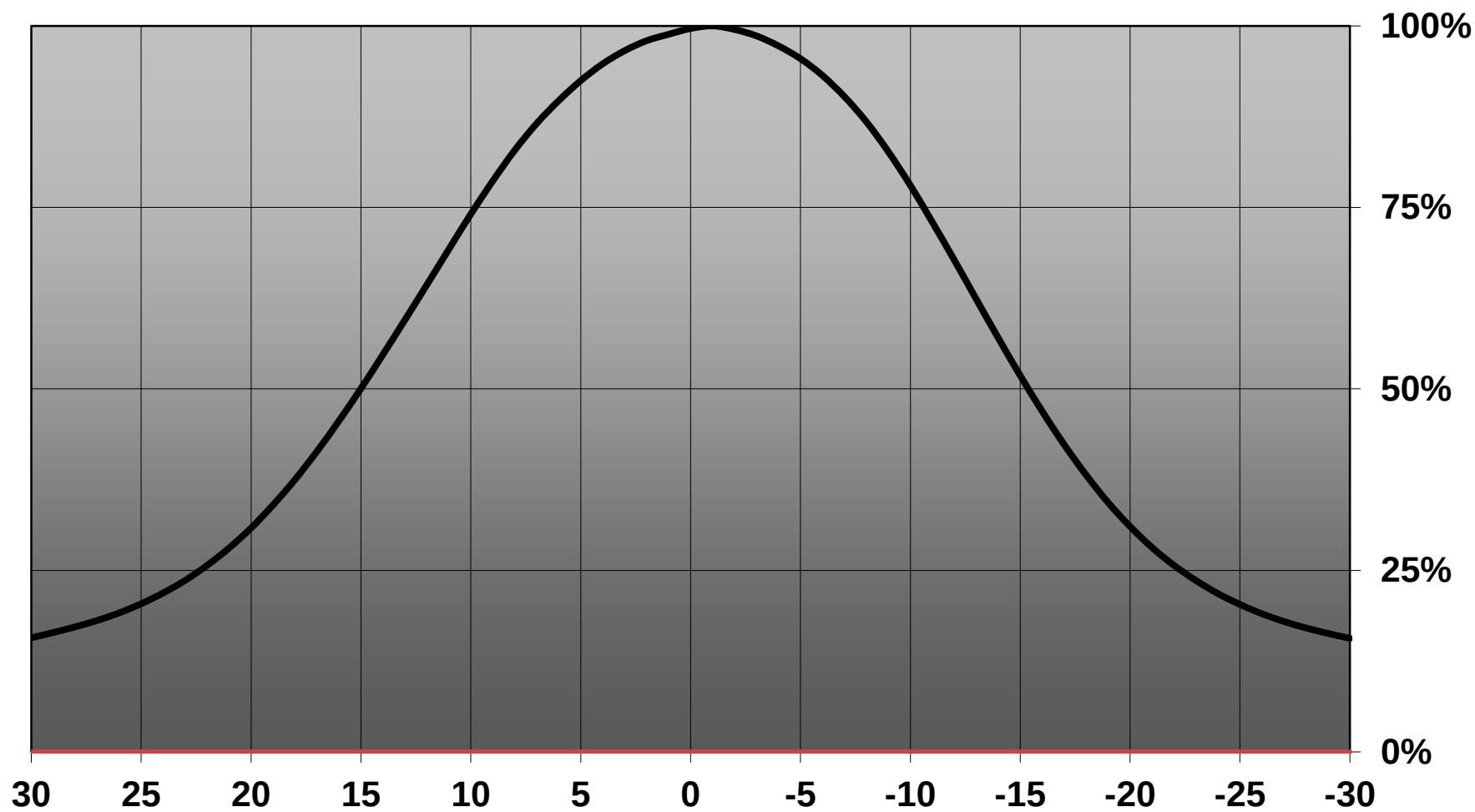
Relative intensity of CN12483_MIRELLA-50-S-DL_(CLL020)



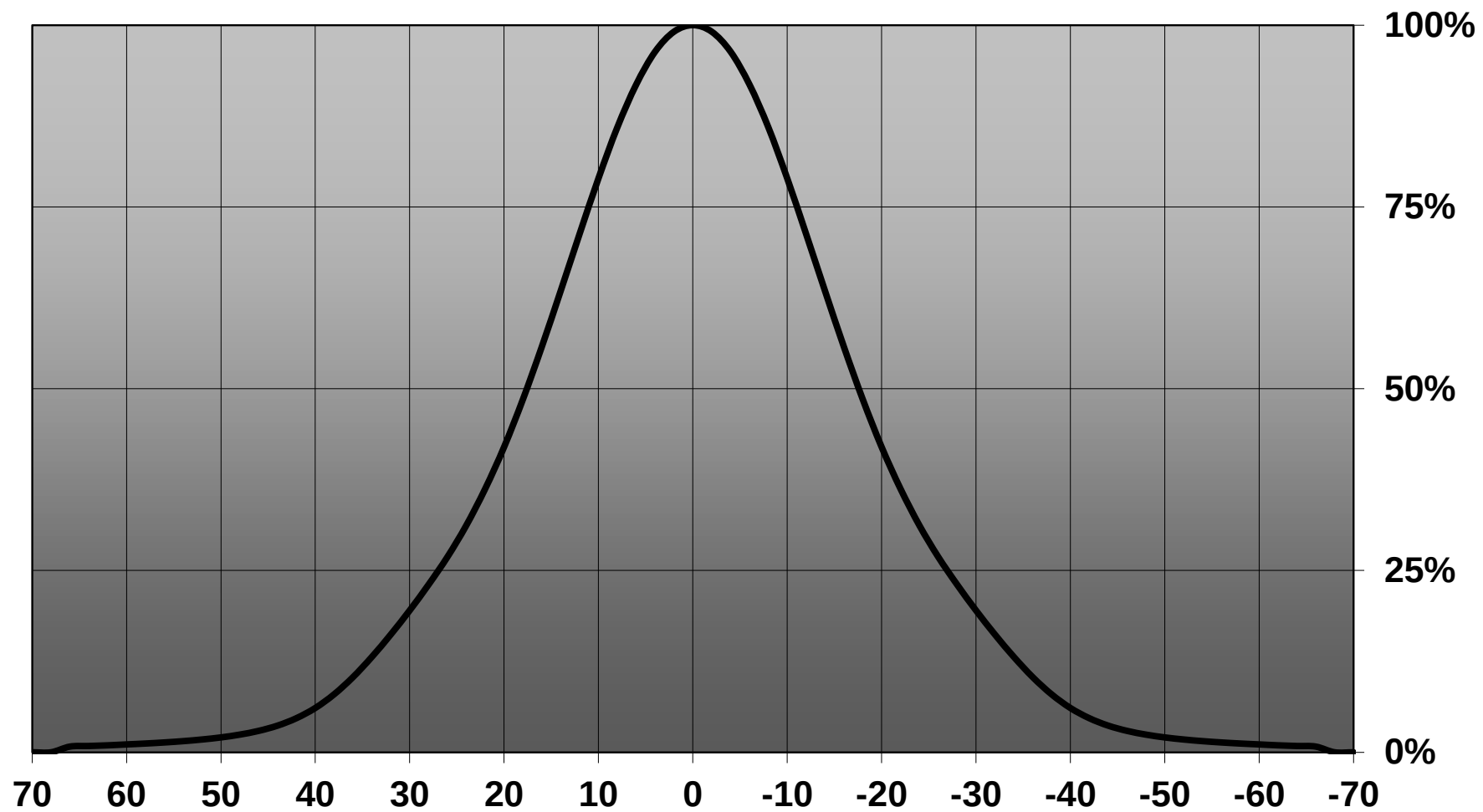
Relative intensity of C12477_Mirella_50-M _(CLL020)



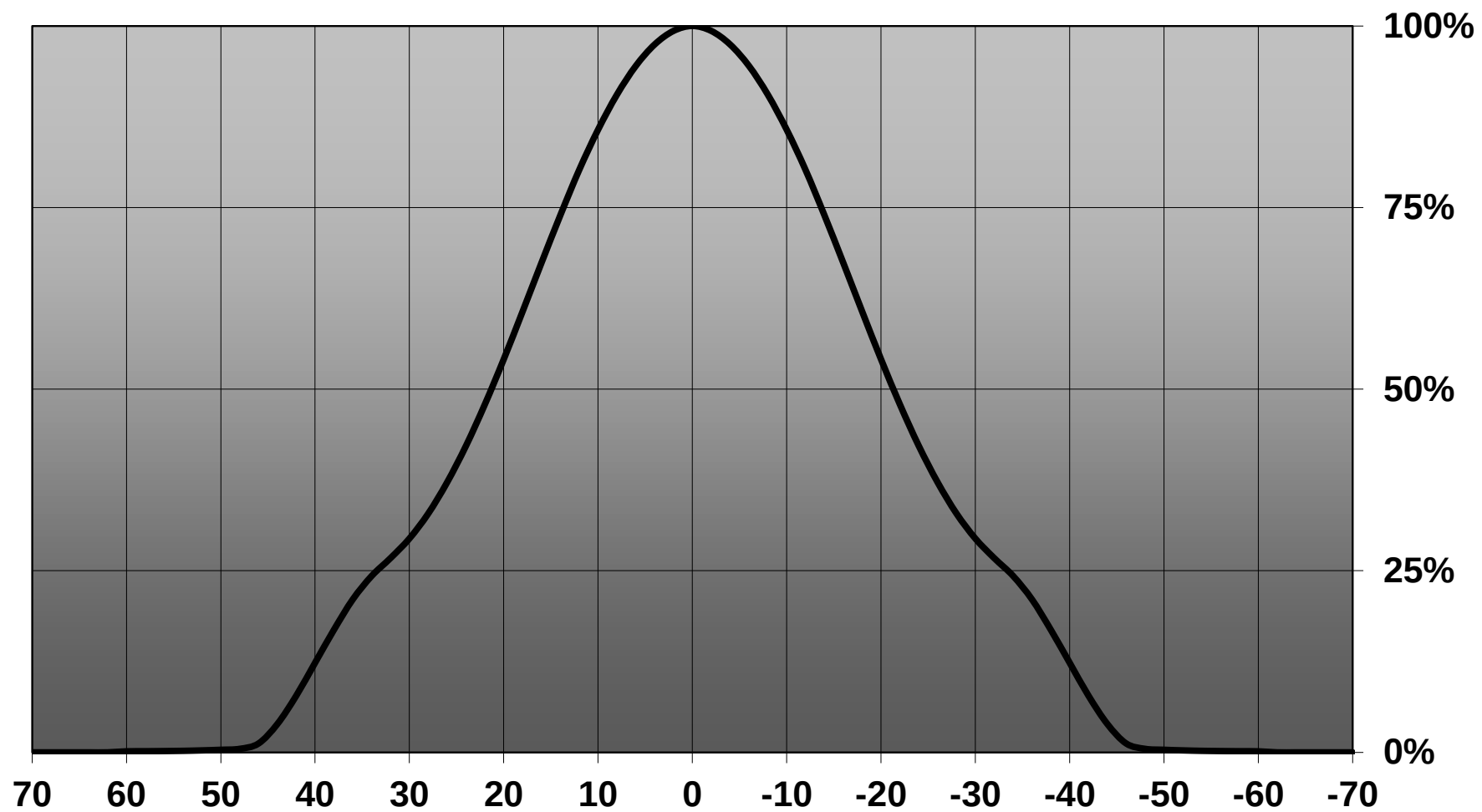
Relative intensity of CN13518_MIRELLA-50-M-CL-(CLL020)



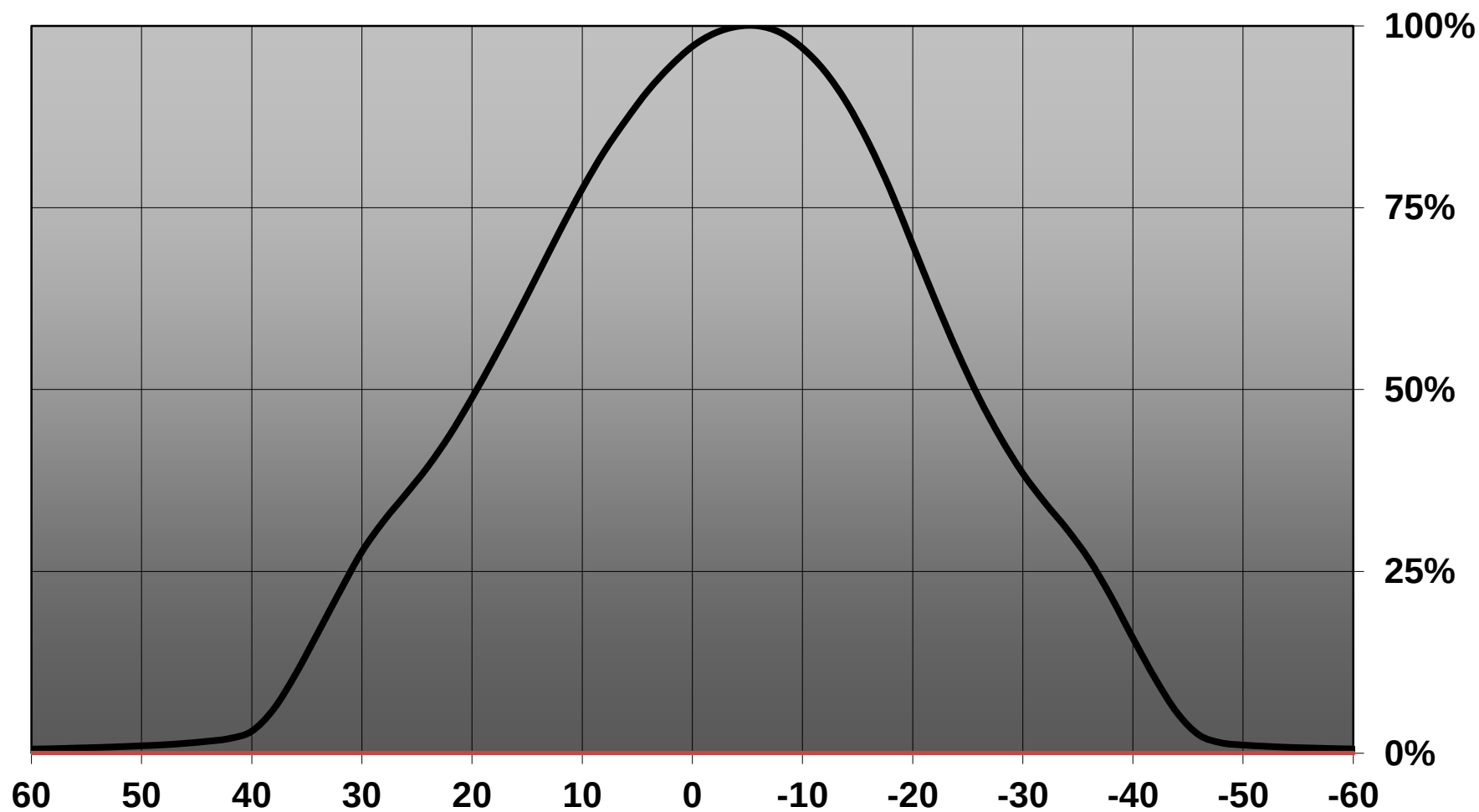
Relative intensity of CN12484_MIRELLA-50-M-DL_(CLL020)



Relative intensity of C12478_Mirella_50-W_(CLL020)



Relative intensity of CN13520_MIRELLA-50-W-CL-(CLL020)



Relative intensity of CN12485_MIRELLA-50-W-DL_(CLL020)

