

LSM800_Illumination (SHORT)

Microscope info:

Image		2026-06-12_Illumination	
image's creation	date	2026-06-12 10:25:23	
	method used	from Metadata	
Actual image depth		8	
Filter combination(s)		Wavelengths	
		Ex. (nm)	Em. (nm)
Alexa 350		-1.0	-1.0
			none

Warnings:

(No saturated pixels detected).

Noise was removed using a gaussian Blur of sigma=2.0. The centering accuracy is computed using the 90.0-100% reference zone.

Uniformity & Centering Accuracy:

Filters combination/set	Uniformity (%)	Field Uniformity (%)	Centering Accuracy (%)	Image	Coef. of Variation	Mean c fit value
Alexa 350	45.2	86.8	94.2	C1-2026-06-12_Illumination	0.0817	0.0

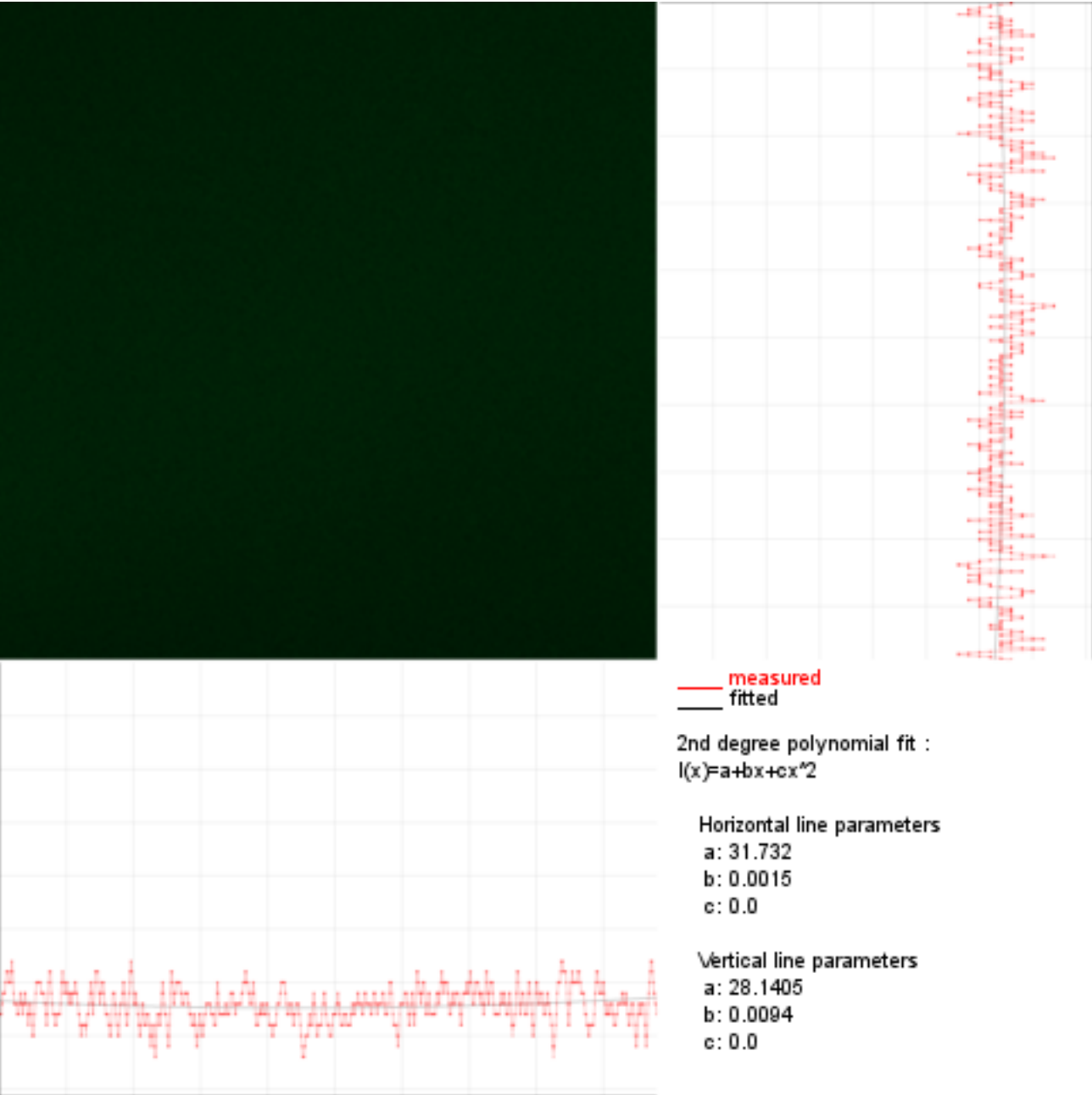
Green: within specifications, red: outside specifications (ie. uniformity below 50.0 or centering accuracy below 50.0). Centering accuracy computed using the 90.0%-100% zone as reference rather than the maximum intensity pixel position.

Alexa 350 normalised intensity profile:



Filters combination /set	Type	Image Centre	Centre of intensity/mass	Last maximum intensity pixel	Centre of the 90.0-100% reference zone
Alexa 350	Coordinates in pixels	(980.0, 980.0)	(981.4, 969.2)	(1356.0, 0.0)	(900.9, 997.6)
	Distance to image centre in	-	3.561	342.155	26.426

Alexa 350 intensity profiles through reference zone centre



Alexa 350 coordinates' statistics:

Filters combination/set	Location	Intensity	relative intensity to max
Alexa 350	Maximum (1356.0,0.0)	42	1.0
	Center of Mass(981.4,969.2)	31	0.738
	Reference zone center(900.9,997.6)	36	0.857
	Minimum(1266,1959)	19	0.452
	Top-left corner	23	0.548
	Top-right corner	40	0.952
	Bottom-left corner	21	0.5
	Bottom-right corner	32	0.762
	Upper bound, middle pixel	26	0.619
	Lower bound, middle pixel	27	0.643
	Left bound, middle pixel	28	0.667
	Right bound, middle pixel	31	0.738

Analysis parameters

Tool & Operator	Tool	Field-Illumination
	Versions	MetroloJ_QC v1.3.1.2, ImageJ v2.16.0/1.54p, Java v1.8.0_452, OS Windows 11
	Operator & date	Hanna, July 23, 2026 12:09 PM
data	result folder	Z:\CTIU\QC\2026-06-12\LSM800\Processed\LSM800_Illumination\
	Type of saved data	.pdf, .jpg, .xls
	Input data bit depth	8
Dimension order		XY-(C)Z
Discard saturated samples		false
Gaussian blur noise removal applied		true
Isointensity image steps width		10.0%
Reference zone		90.0%-100%
Tolerance	Applied in this report	true
	Uniformity valid if above	50.0
	CA valid if above	50.0

Analysis log

image name	creation date	saturation	status
2026-06-12_Illumination	2026-06-12 10:25:23	none	analysed

Formulas used:

$$Uniformity = \frac{\text{minimum intensity}}{\text{maximum intensity}} * 100$$

$$Centering Accuracy = 100 - 100 * \frac{2}{\sqrt{w^2 + h^2}} * \sqrt{(x_{ref} - \frac{w}{2})^2 + (y_{ref} - \frac{h}{2})^2}$$

x_{ref} and y_{ref} are the coordinates of the “reference”, w and h the width and height of the image.