

Illumination

Microscope info:

Image		Evident_Illumination	
image's creation	date	2026-06-15 14:53:51	
	method used	from file creation date	
Actual image depth		8	
Filter combination(s)		Wavelengths	
		Ex. (nm)	Em. (nm)
Alexa 350		647.0	410.0
DAPI		564.0	450.0
GFP		488.0	525.0

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.

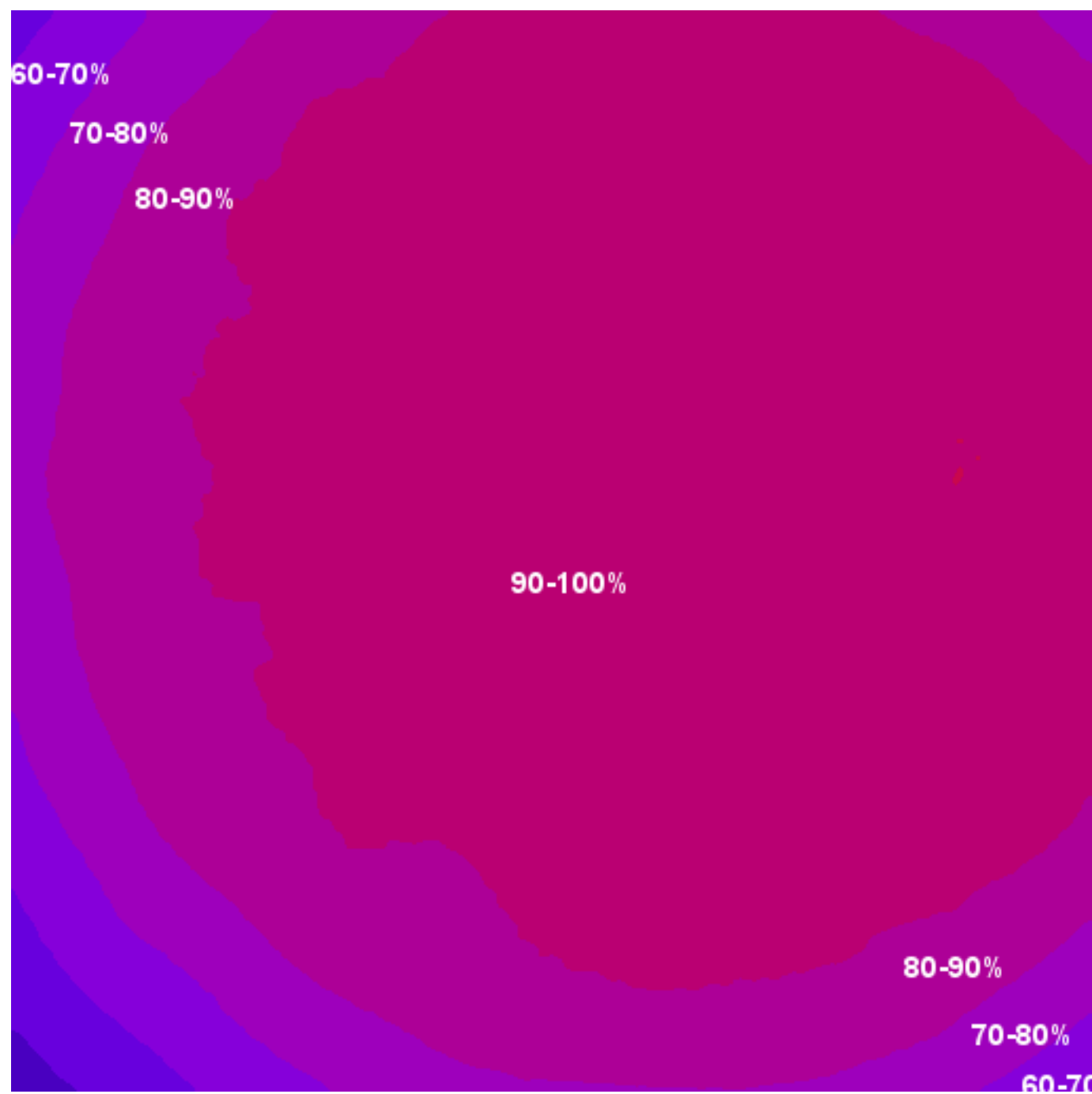
Uniformity & Centering Accuracy:

Filters combination/set	Uniformity (%)	Field Uniformity (%)	Centering Accuracy (%)	Image	Coef. of Variation	Mean c fit value
Alexa 350	43.9	83.1	81.5	C1-Evident_Illumination	0.1065	3.0E-4
DAPI	0.0	0.0	0.0	C2-Evident_Illumination	0.0	0.0
GFP	0.0	0.0	0.0	C3-Evident_Illumination	0.0	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 (ex. 647.0 nm, em. 410.0nm)

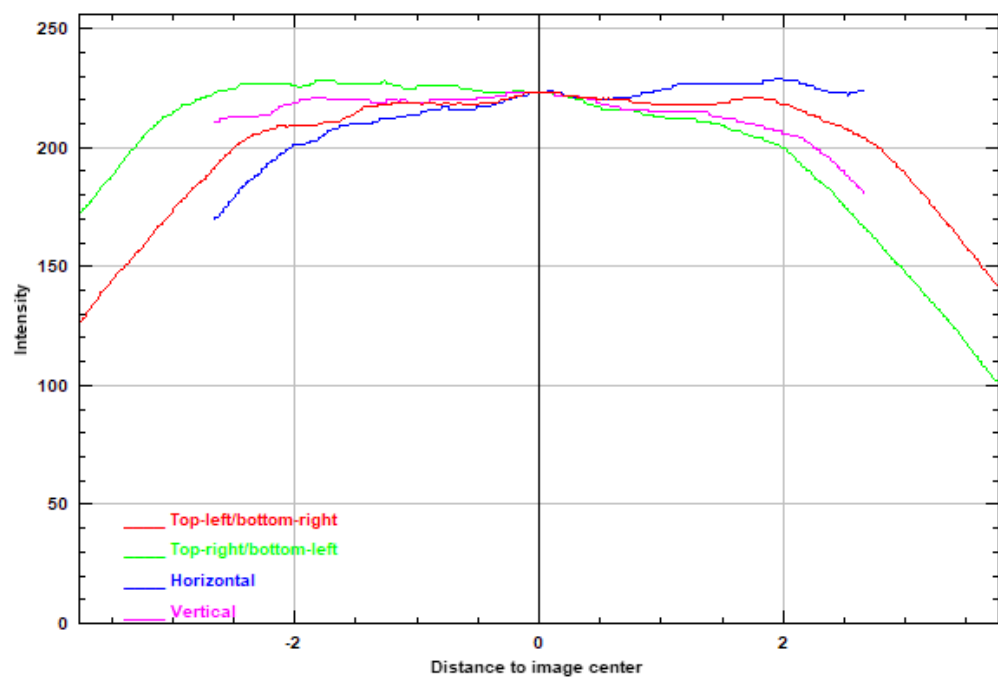
Alexa 350 normalised intensity profile:



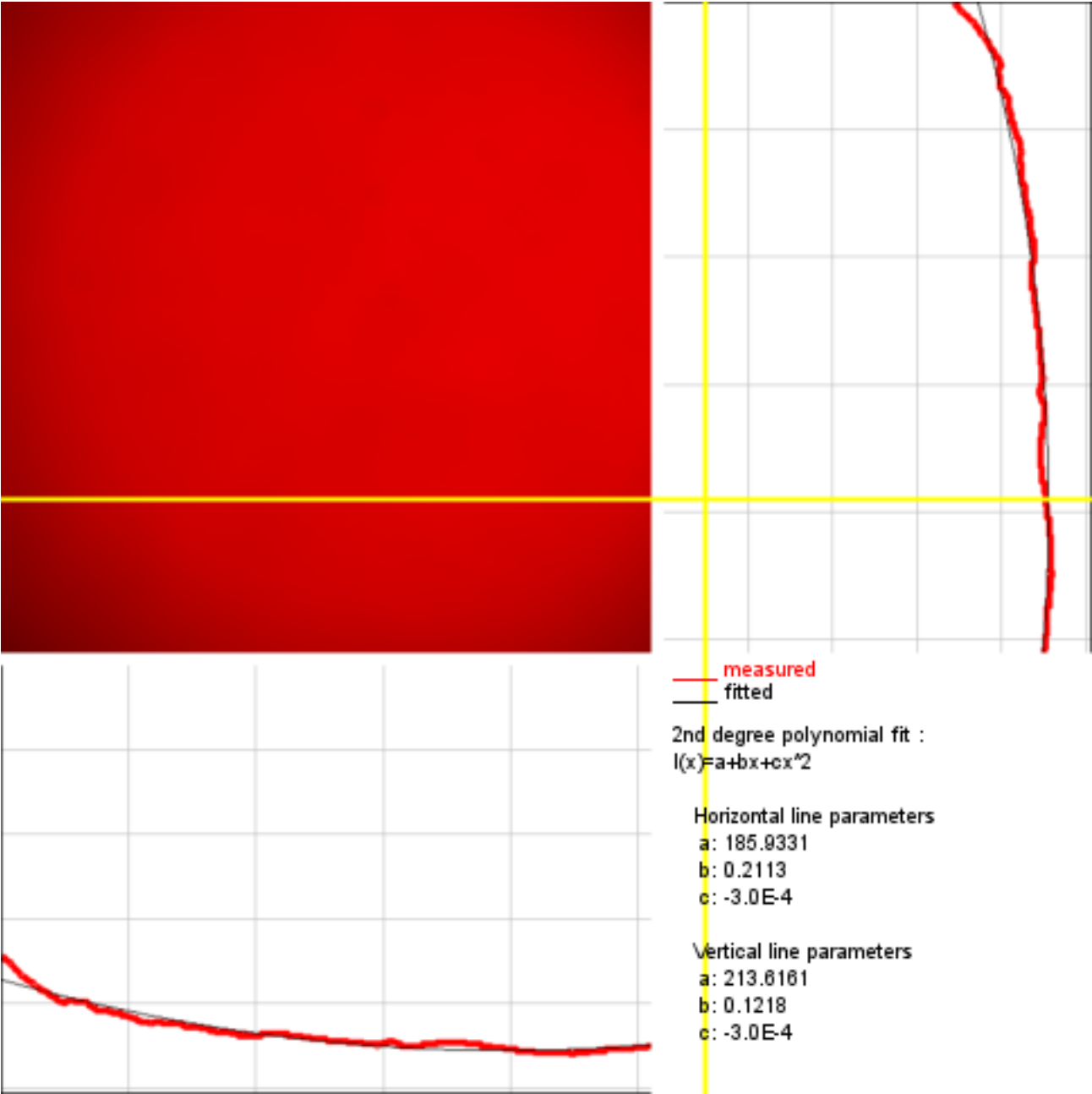
Alexa 350 centres' locations:

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	(256.0, 256.0)	(265.2, 250.7)	(447.0, 224.0)	(312.7, 220.2)
	Distance to image centre in	-	0.111	2.017	0.698

Alexa 350 diagonal & geometrical centre intensity profiles:



Alexa 350 intensity profiles through reference zone centre



Alexa 350 coordinates' statistics:

Filters combination/set	Location	Intensity	relative intensity to max
Alexa 350	Maximum (447.0,224.0)	230	1.0
	Center of Mass(265.2,250.7)	223	0.97
	Reference zone center(312.7,220.2)	224	0.974
	Minimum(0,511)	101	0.439
	Top-left corner	126	0.548
	Top-right corner	173	0.752
	Bottom-left corner	101	0.439
	Bottom-right corner	141	0.613
	Upper bound, middle pixel	211	0.917
	Lower bound, middle pixel	181	0.787
	Left bound, middle pixel	170	0.739
	Right bound, middle pixel	224	0.974

DAPI (ex. 564.0 nm, em. 450.0nm)

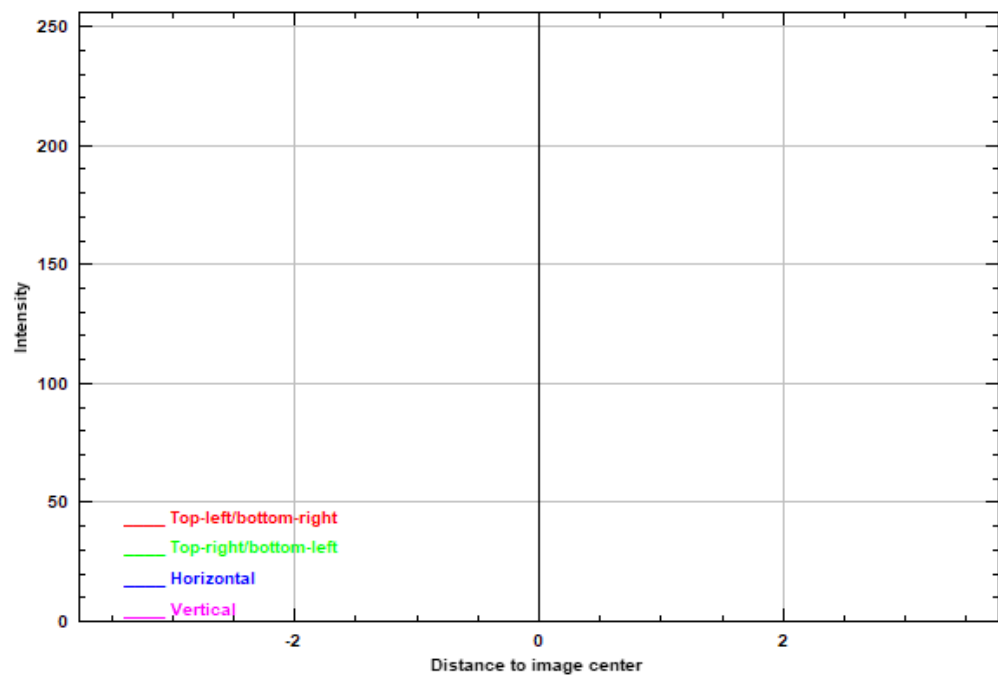
DAPI normalised intensity profile:



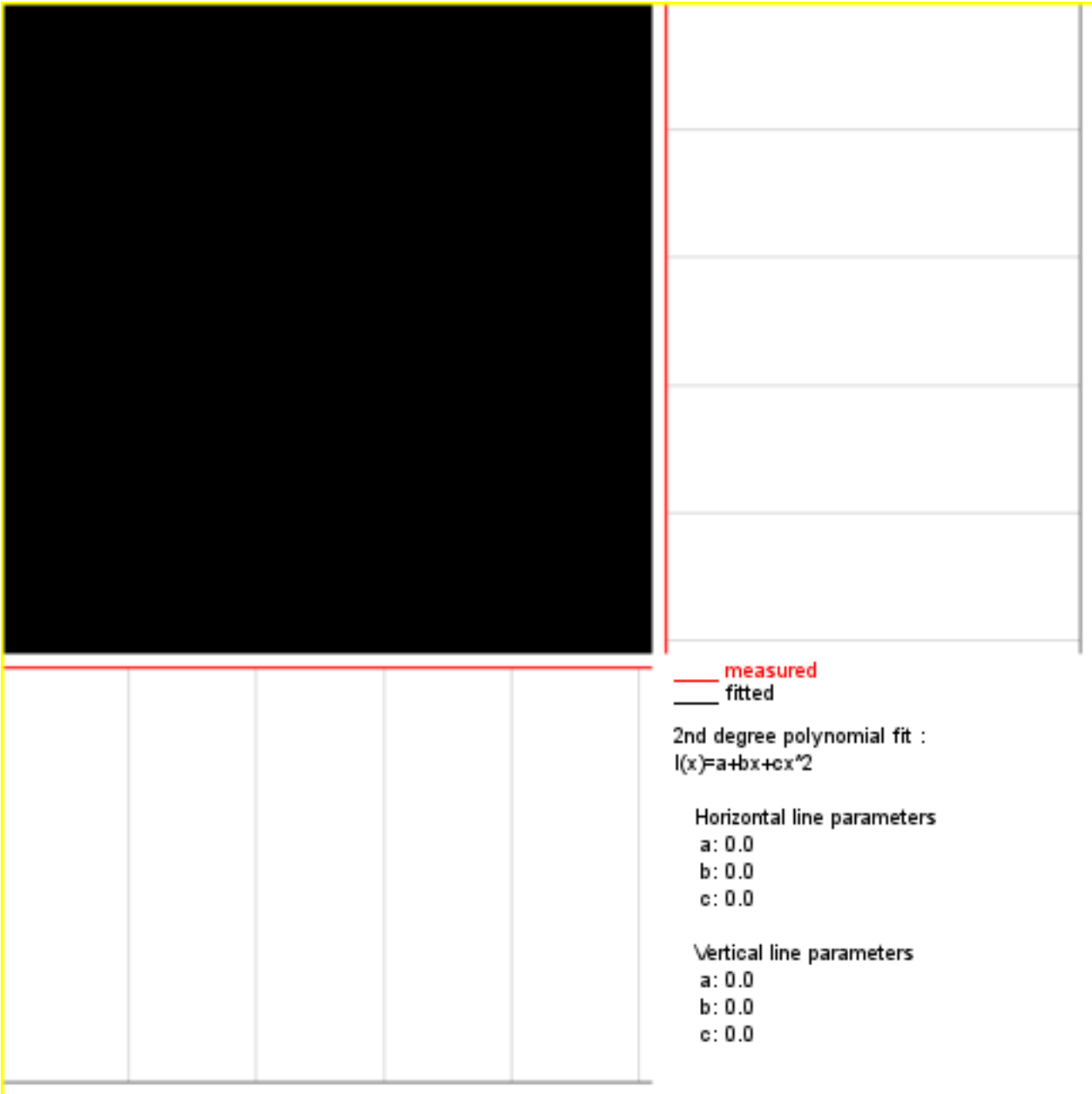
DAPI centres' locations:

Filters combination /set	Type	Image Centre	Centre of intensity/mass	Last maximum intensity pixel	Centre of the 90.0-100% reference zone
DAPI	Coordinates in pixels	(256.0, 256.0)	(256.0, 256.0)	(511.0, 511.0)	(0.0, 0.0)
	Distance to image centre in	-	0.0	3.757	0.0

DAPI diagonal & geometrical centre intensity profiles:



DAPI intensity profiles through reference zone centre



DAPI coordinates' statistics:

Filters combination/set	Location	Intensity	relative intensity to max
DAPI	Maximum (511.0,511.0)	0	0.0
	Center of Mass(256.0,256.0)	0	0.0
	Reference zone center(0.0,0.0)	0	0.0
	Minimum(511,511)	0	0.0
	Top-left corner	0	0.0
	Top-right corner	0	0.0
	Bottom-left corner	0	0.0
	Bottom-right corner	0	0.0
	Upper bound, middle pixel	0	0.0
	Lower bound, middle pixel	0	0.0
	Left bound, middle pixel	0	0.0
	Right bound, middle pixel	0	0.0

GFP (ex. 488.0 nm, em. 525.0nm)

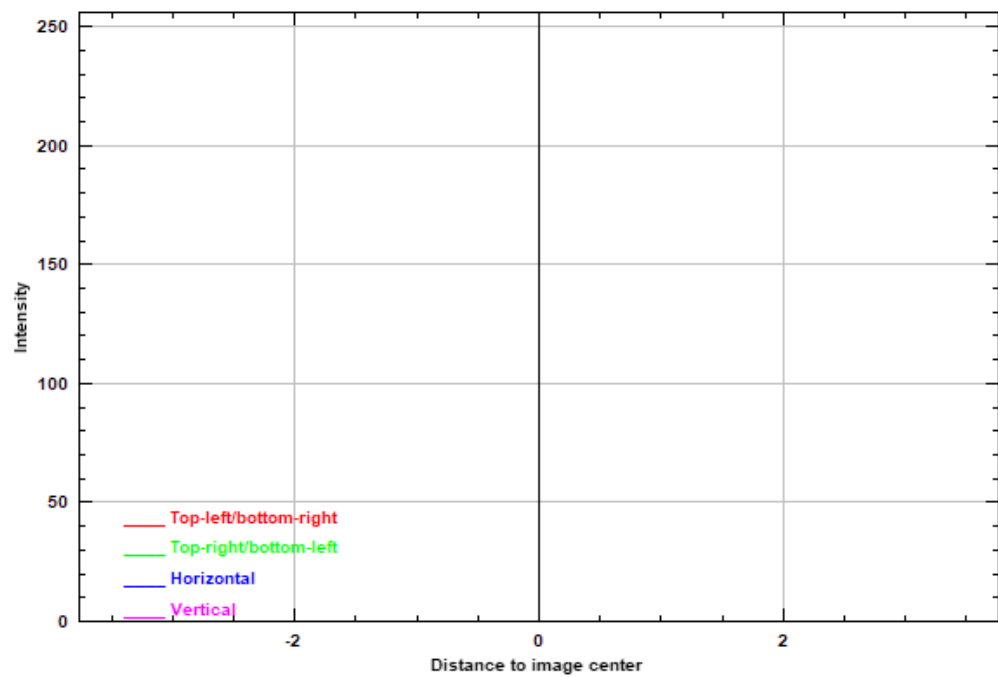
GFP normalised intensity profile:



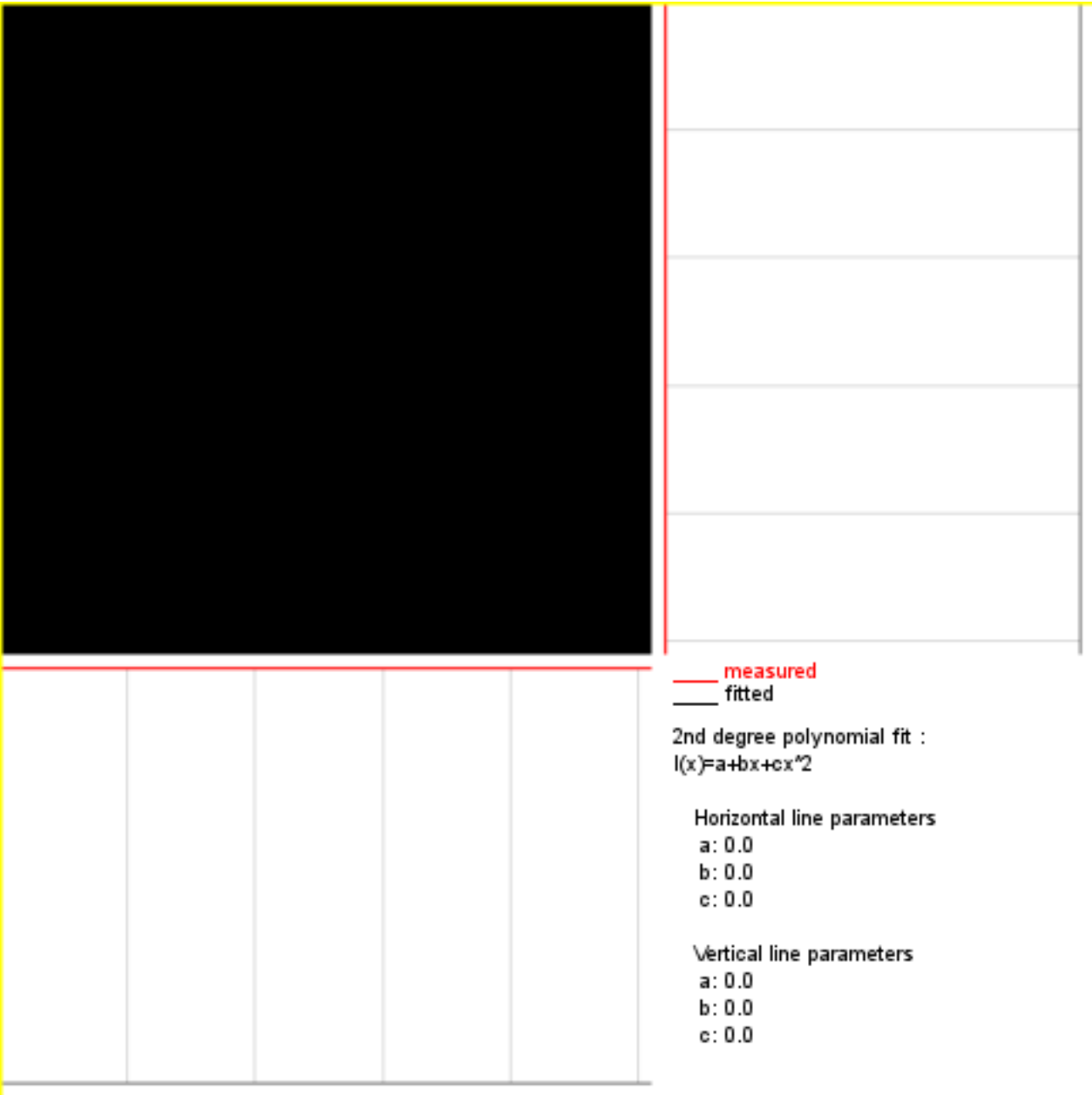
GFP centres' locations:

Filters combination /set	Type	Image Centre	Centre of intensity/mass	Last maximum intensity pixel	Centre of the 90.0-100% reference zone
GFP	Coordinates in pixels	(256.0, 256.0)	(256.0, 256.0)	(511.0, 511.0)	(0.0, 0.0)
	Distance to image centre in	-	0.0	3.757	0.0

GFP diagonal & geometrical centre intensity profiles:



GFP intensity profiles through reference zone centre



GFP coordinates' statistics:

Filters combination/set	Location	Intensity	relative intensity to max
GFP	Maximum (511.0,511.0)	0	0.0
	Center of Mass(256.0,256.0)	0	0.0
	Reference zone center(0.0,0.0)	0	0.0
	Minimum(511,511)	0	0.0
	Top-left corner	0	0.0
	Top-right corner	0	0.0
	Bottom-left corner	0	0.0
	Bottom-right corner	0	0.0
	Upper bound, middle pixel	0	0.0
	Lower bound, middle pixel	0	0.0
	Left bound, middle pixel	0	0.0
	Right bound, middle pixel	0	0.0

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, June 17, 2026 1:12 PM
data	result folder	Z:\CTIU\QC\2026-06-16\Evident\Processed\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
Evident_Illumination	2026-06-15 14:53:51	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.