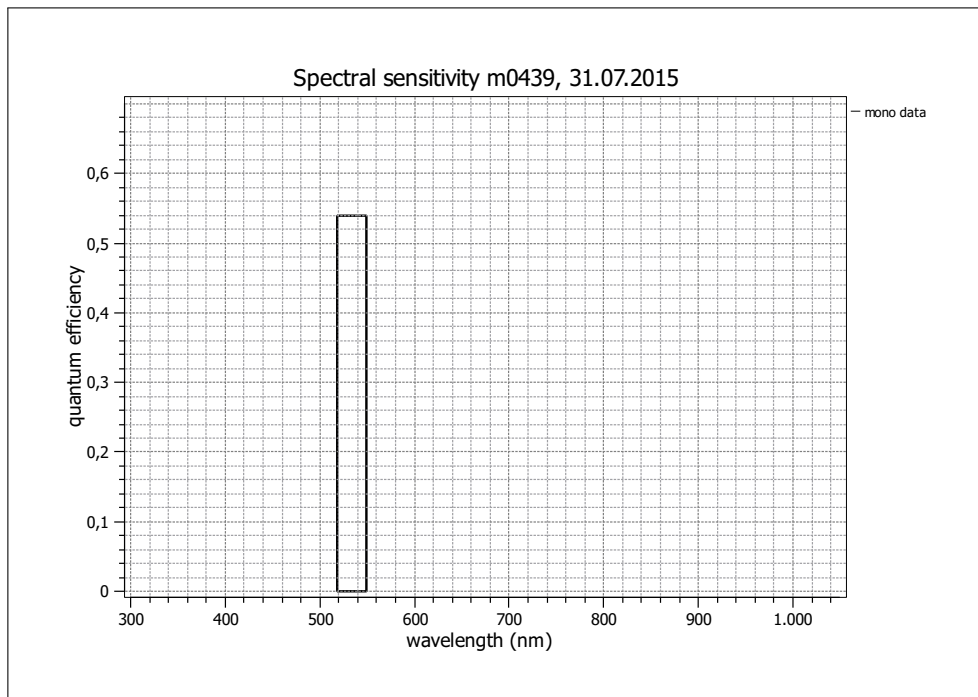


## EMVA 1288 Summary Sheet

This datasheet describes the specification according to the standard 1288 for Characterization and Presentation of Specification Data for Image Sensors and Cameras of the European Machine Vision Association (EMVA)(see [www.standard1288.org](http://www.standard1288.org)). The measurements were performed with an AEON ACC3 RGB Release 3, 20.01.2104, SN 0005() . The performance parameters and estimated accuracy of the measurements are described in the technical report for the instrument, its calibration in the corresponding calibration report.

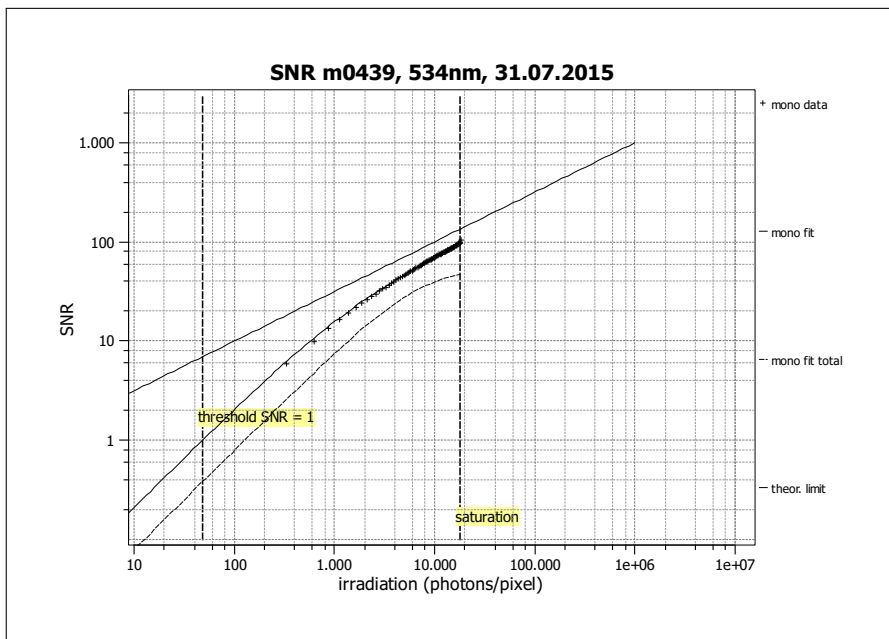
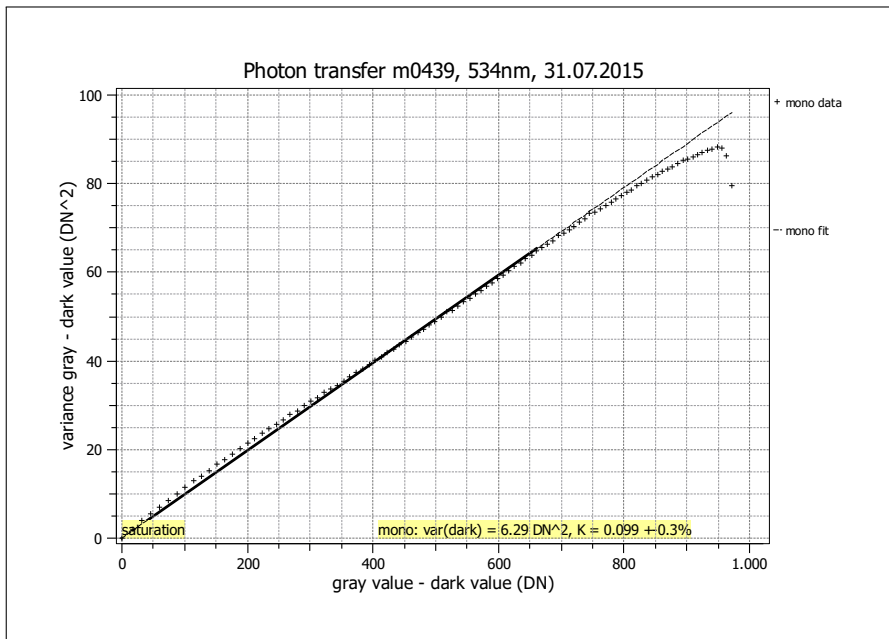
Vendor	MATRIX VISION
Model	mvBlueFOX3-1013G
Serial number	F0900049
Sensor diagonal	8.69 mm
Lens category	C-Mount
Resolution	1280 × 1024, 10 bit
Pixel size	5.30 μm × 5.30 μm
Sensor type	CMOS
Shutter type	global
Overlap capabilities	pipelined
Maximum frame rate	60.6 Hz
Interface type	USB3 Vision

Type of data presented	Single
<b>Operation point 1, (page 3)</b>	
Wavelength centroid	534.2 nm
Wavelength FWHM	30.9 nm
Gain, offset	Gain = 0dB, Offset = 21.0
<b>Optional data measured</b>	
None	



## EMVA 1288 Summary Sheet for Operating Point 1

Type of data	Single	Gain, offset	Gain = 0dB, Offset = 21.0
Exposure time	8.0 ms	Environmental temperature	24.4°C
Frame rate	0.0 Hz	Camera temperature	24.4°C
Data transfer mode	Mono10	Wavelength, centr., FWHM	534 nm, 30.9 nm



Quantum efficiency	
$\eta$	0.540
Gain	
$K$ (DN/e)	0.099
$1/K$ (e/DN)	10.113
Dark noise & DSNU	
$\sigma_d$ (DN)	2.51
$\sigma_0$ (e)	25.2
DSNU <sub>1288</sub> (DN)	6.24
DSNU <sub>1288</sub> (e)	63.15
Signal-to-noise ratio & PRNU	
SNR <sub>max</sub>	98
SNR <sub>max</sub> (dB)	39.9
SNR <sub>max</sub> (bits)	6.6
$1/\text{SNR}_{\text{max}}$ (%)	1.02
PRNU <sub>1288</sub> (%)	1.740
Nonlinearity	
LE (%)	0.32
Sensitivity & saturation	
$\mu_{p,\text{min}}$ (p)	47.9
$\mu_{e,\text{min}}$ (e)	25.9
$\mu_{p,\text{sat}}$ (p)	17913
$\mu_{e,\text{sat}}$ (e)	9676
Dynamic range	
DR	374
DR (dB)	51.5
DR (bit)	8.5
Dark current	
$\mu_{c,\text{mean}}$ (DN/s)	294.89
$\mu_{c,\text{mean}}$ (e/s)	2982.28
$\mu_{c,\text{var}}$ (e/s)	913.47