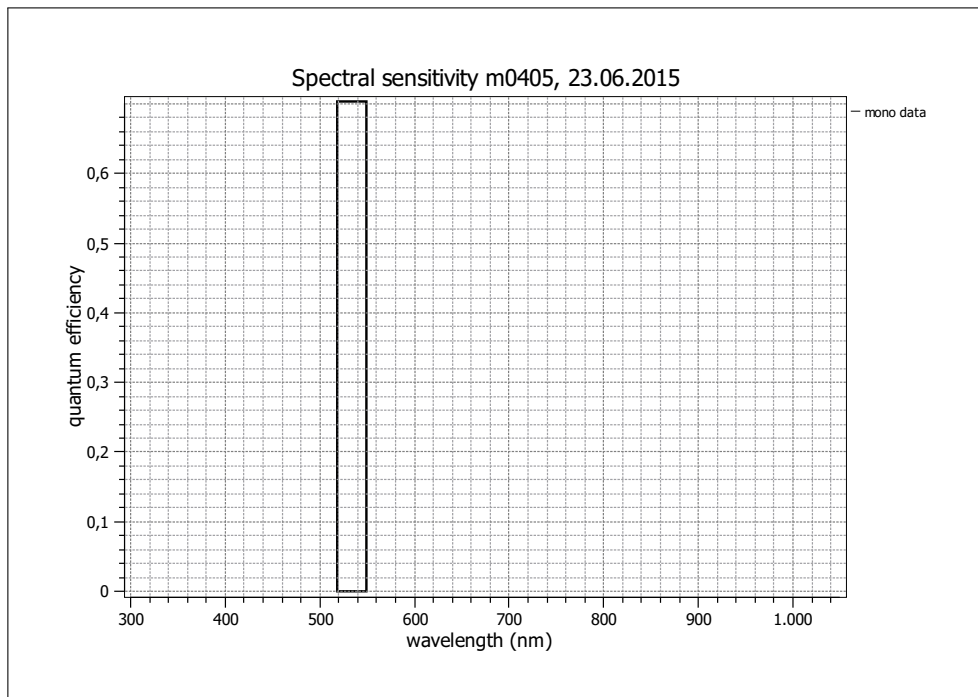


EMVA 1288 Summary Sheet

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). 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.

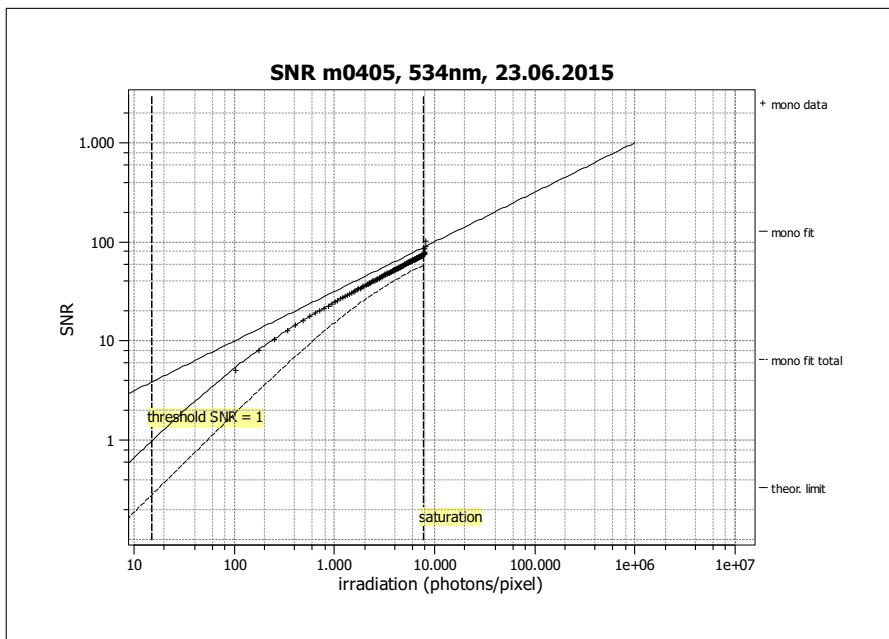
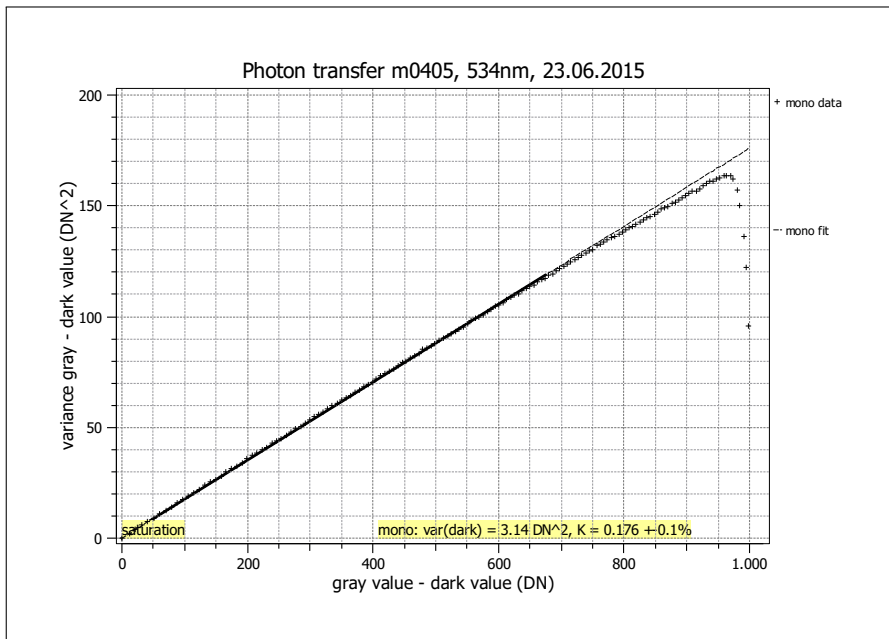
Vendor	MATRIX VISION
Model	mvBlueFOX3-1012bG
Serial number	F0400098
Sensor diagonal	6.00 mm
Lens category	C-Mount
Resolution	1280 × 960, 10 bit
Pixel size	3.75 μm × 3.75 μm
Sensor type	CMOS
Shutter type	Global
Overlap capabilities	Overlapping
Maximum frame rate	40.6 Hz
Interface type	USB3 Vision

Type of data presented	Single
Operation point 1, (page 3)	
Wavelength centroid	534.2 nm
Wavelength FWHM	30.9 nm
Gain, offset	Gain = 0dB, Offset = 1.1
Optional data measured	
None	



EMVA 1288 Summary Sheet for Operating Point 1

Type of data	Single	Gain, offset	Gain = 0dB, Offset = 1.1
Exposure time	7.0 ms	Environmental temperature	25.4°C
Frame rate	0.0 Hz	Camera temperature	34.0°C
Data transfer mode	Mono10	Wavelength, centr., FWHM	534 nm, 30.9 nm



Quantum efficiency	
η	0.704
Gain	
K (DN/e)	0.176
$1/K$ (e/DN)	5.682
Dark noise & DSNU	
σ_d (DN)	1.77
σ_0 (e)	9.9
DSNU ₁₂₈₈ (DN)	6.30
DSNU ₁₂₈₈ (e)	35.80
Signal-to-noise ratio & PRNU	
SNR _{max}	74
SNR _{max} (dB)	37.4
SNR _{max} (bits)	6.2
$1/\text{SNR}_{\text{max}}$ (%)	1.35
PRNU ₁₂₈₈ (%)	0.817
Nonlinearity	
LE (%)	0.33
Sensitivity & saturation	
$\mu_{p,\text{min}}$ (p)	15.0
$\mu_{e,\text{min}}$ (e)	10.6
$\mu_{p,\text{sat}}$ (p)	7811
$\mu_{e,\text{sat}}$ (e)	5498
Dynamic range	
DR	519
DR (dB)	54.3
DR (bit)	9.0
Dark current	
$\mu_{c,\text{mean}}$ (DN/s)	59.87
$\mu_{c,\text{mean}}$ (e/s)	340.15
$\mu_{c,\text{var}}$ (e/s)	315.02