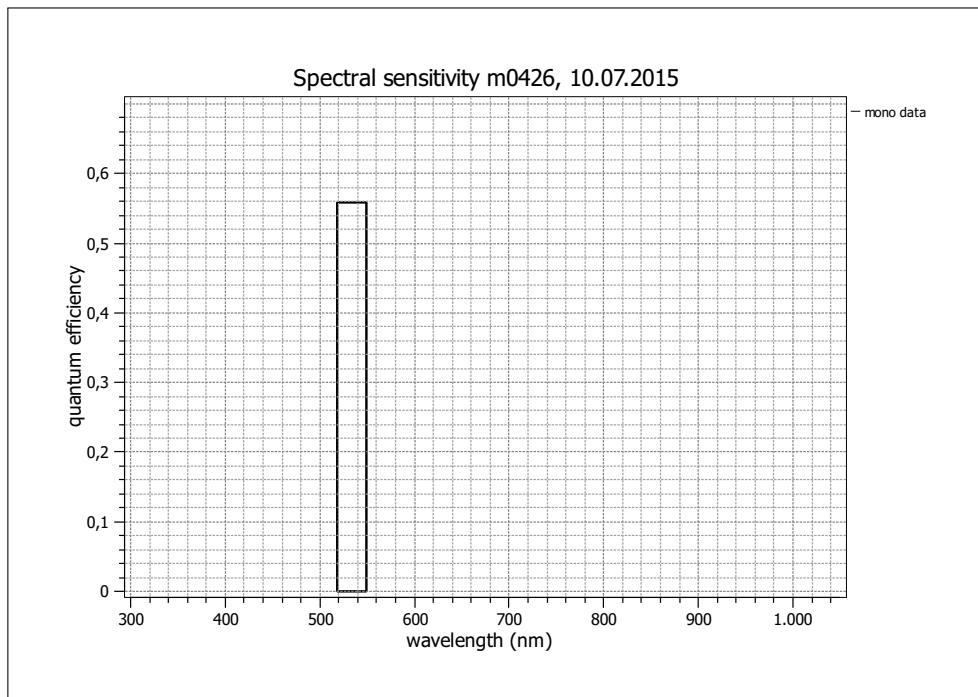


EMVA 1288 Summary Sheet

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.

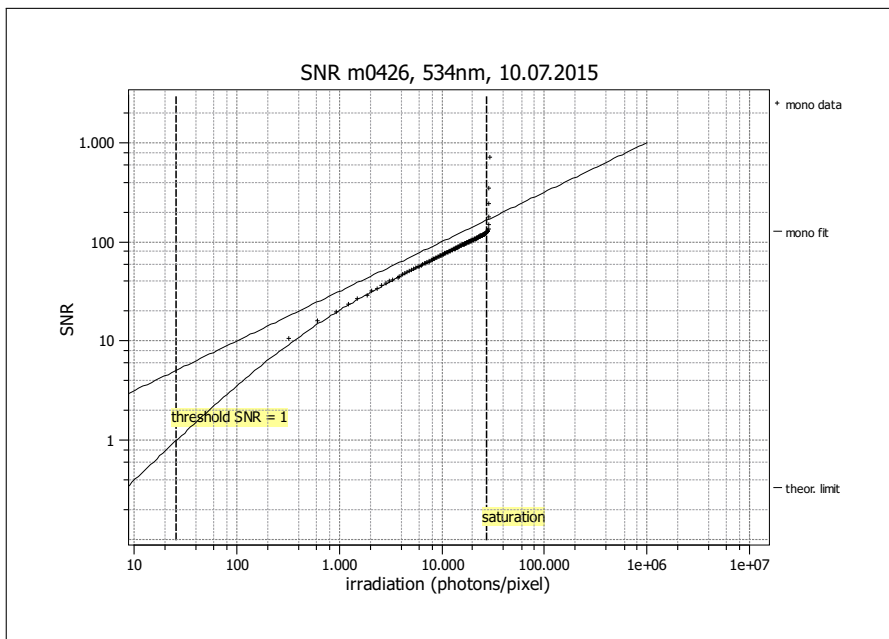
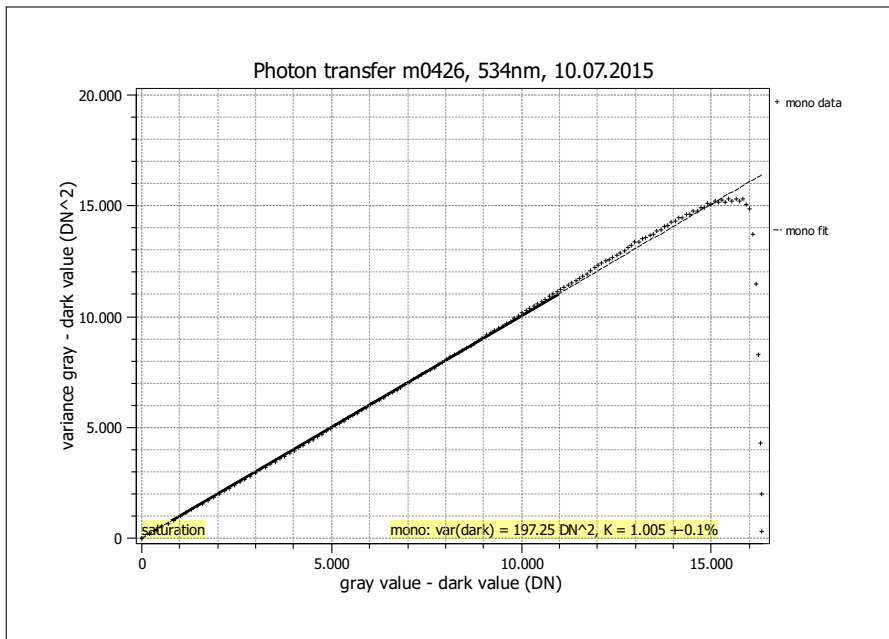
Vendor	MATRIX VISION
Model	mvBlueCOUGAR-XD124aG
Serial number	GX200163
Sensor diagonal	11.01 mm
Lens category	C-Mount
Resolution	1936 × 1460, 14 bit
Pixel size	4.54 μm × 4.54 μm
Sensor type	CCD
Readout type	Progressive
Transfer type	Interline
Maximum frame rate	42.2 Hz
Interface type	GigE Vision

Type of data presented	Single
Operation point 1, (page 3)	
Wavelength centroid	534.2 nm
Wavelength FWHM	30.9 nm
Gain, offset	Gain = -6dB, Offset = 0.25
Optional data measured	
None	



EMVA 1288 Summary Sheet for Operating Point 1

Type of data	Single	Gain, offset	Gain = -6dB, Offset = 0.25
Exposure time	17.0 ms	Environmental temperature	25.5°C
Frame rate	42.2 Hz	Camera temperature	41.5°C
Data transfer mode	Mono14	Wavelength, centr., FWHM	534 nm, 30.9 nm



Quantum efficiency	
η	0.559
Gain	
K (DN/e)	1.005
$1/K$ (e/DN)	0.995
Dark noise & DSNU	
σ_d (DN)	14.04
σ_0 (e)	14.0
DSNU ₁₂₈₈ (DN)	—
DSNU ₁₂₈₈ (e)	—
Signal-to-noise ratio & PRNU	
SNR _{max}	124
SNR _{max} (dB)	41.9
SNR _{max} (bits)	7.0
$1/\text{SNR}_{\text{max}}$ (%)	0.81
PRNU ₁₂₈₈ (%)	—
Nonlinearity	
LE (%)	0.47
Sensitivity & saturation	
$\mu_{p,\text{min}}$ (p)	25.9
$\mu_{e,\text{min}}$ (e)	14.5
$\mu_{p,\text{sat}}$ (p)	27582
$\mu_{e,\text{sat}}$ (e)	15418
Dynamic range	
DR	1065
DR (dB)	60.5
DR (bit)	10.1
Dark current	
$\mu_{c,\text{mean}}$ (DN/s)	—
$\mu_{c,\text{mean}}$ (e/s)	—
$\mu_{c,\text{var}}$ (e/s)	—