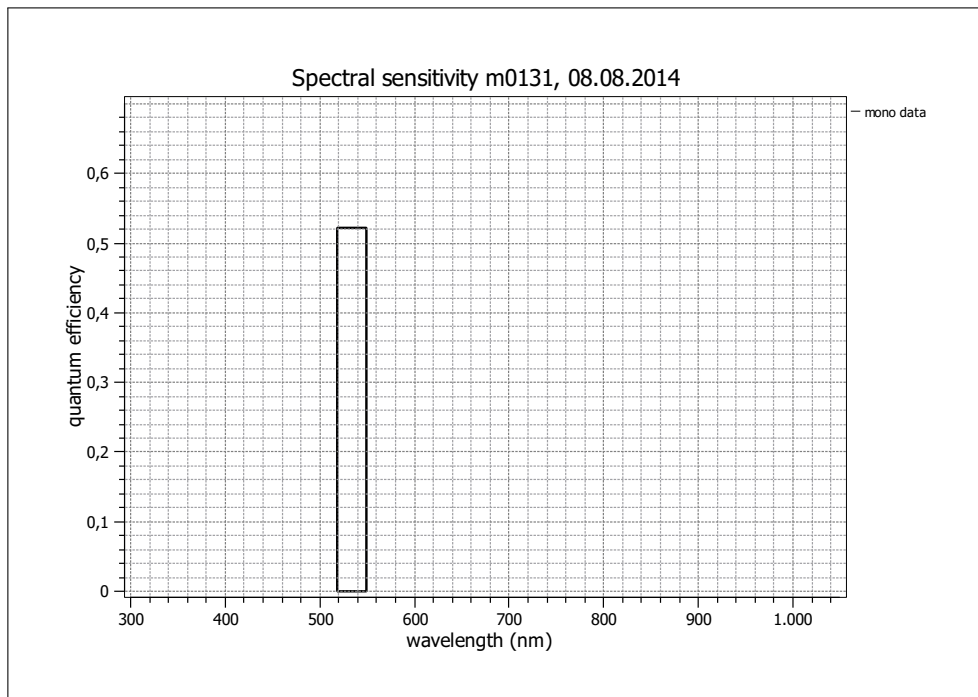


## EMVA 1288 Summary Sheet

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.

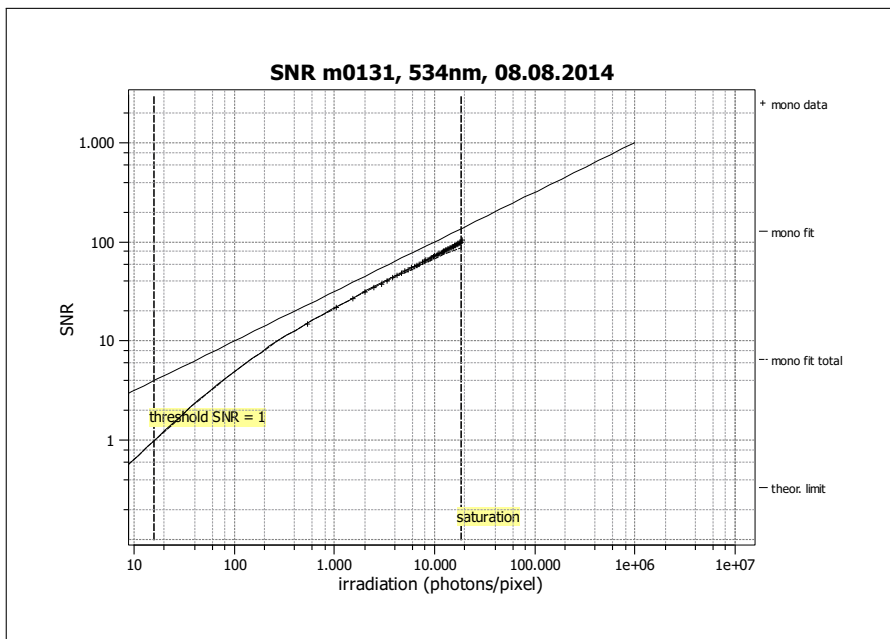
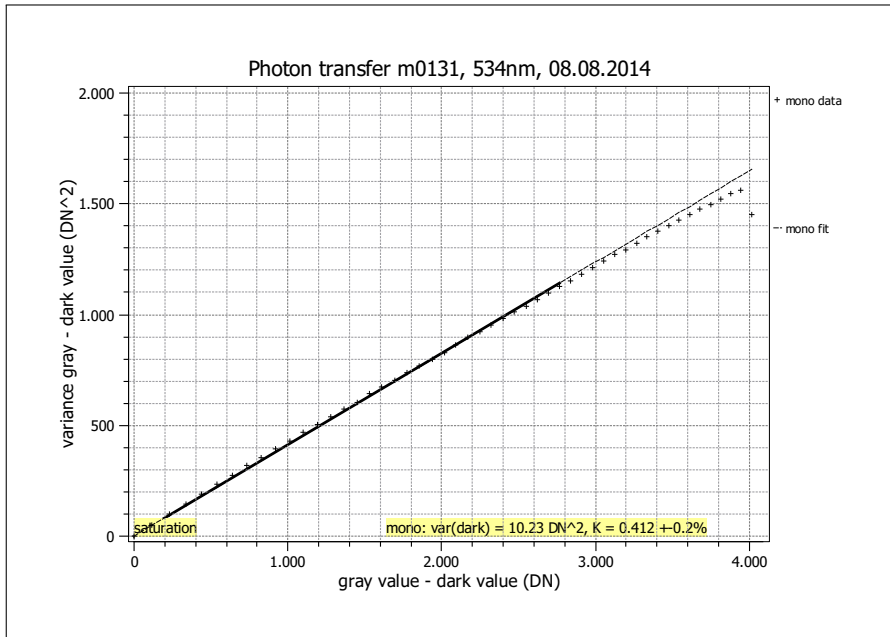
Vendor	MATRIX VISION
Model	mvBlueCOUGAR-X122G
Serial number	GX007718
Sensor diagonal	6.00 mm
Lens category	C-Mount
Resolution	1280 × 960, 12 bit
Pixel size	3.75 μm × 3.75 μm
Sensor type	CCD
Readout type	Progressive
Transfer type	Interline
Maximum frame rate	22.0 Hz
Interface type	GigE Vision

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 = -6dB, Offset = 0.186
<b>Optional data measured</b>	
None	



## EMVA 1288 Summary Sheet for Operating Point 1

Type of data	Single	Gain, offset	Gain = -6dB, Offset = 0.186
Exposure time	1.0 ms	Environmental temperature	26.1°C
Frame rate	0.0 Hz	Camera temperature	40.2°C
Data transfer mode	Mono12	Wavelength, centr., FWHM	534 nm, 30.9 nm



Quantum efficiency	
$\eta$	0.522
Gain	
$K$ (DN/e)	0.412
$1/K$ (e/DN)	2.426
Dark noise & DSNU	
$\sigma_d$ (DN)	3.20
$\sigma_0$ (e)	7.7
DSNU <sub>1288</sub> (DN)	0.37
DSNU <sub>1288</sub> (e)	0.89
Signal-to-noise ratio & PRNU	
SNR <sub>max</sub>	98
SNR <sub>max</sub> (dB)	39.8
SNR <sub>max</sub> (bits)	6.6
$1/\text{SNR}_{\text{max}}$ (%)	1.02
PRNU <sub>1288</sub> (%)	0.522
Nonlinearity	
LE (%)	0.22
Sensitivity & saturation	
$\mu_{p,\text{min}}$ (p)	15.9
$\mu_{e,\text{min}}$ (e)	8.3
$\mu_{p,\text{sat}}$ (p)	18470
$\mu_{e,\text{sat}}$ (e)	9637
Dynamic range	
DR	1164
DR (dB)	61.3
DR (bit)	10.2
Dark current	
$\mu_{c,\text{mean}}$ (DN/s)	6.04
$\mu_{c,\text{mean}}$ (e/s)	14.66
$\mu_{c,\text{var}}$ (e/s)	-1051.23