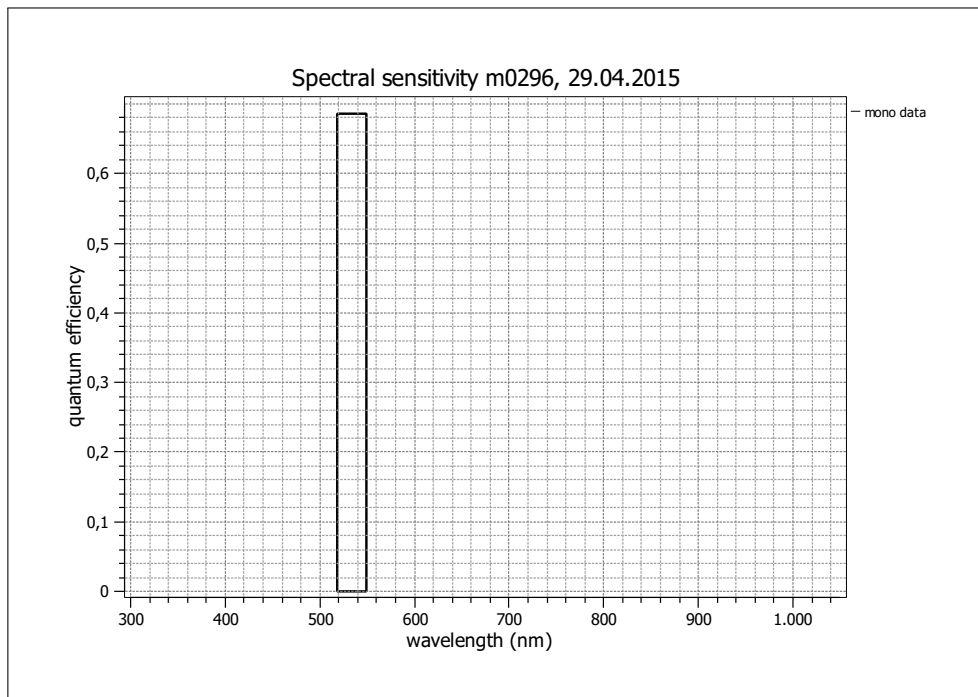


## EMVA 1288 Summary Sheet

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.

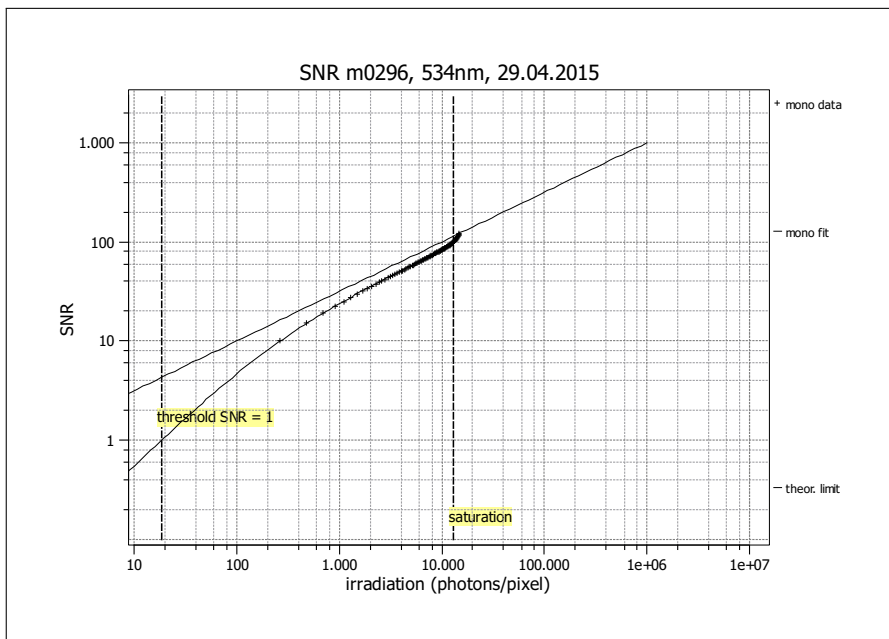
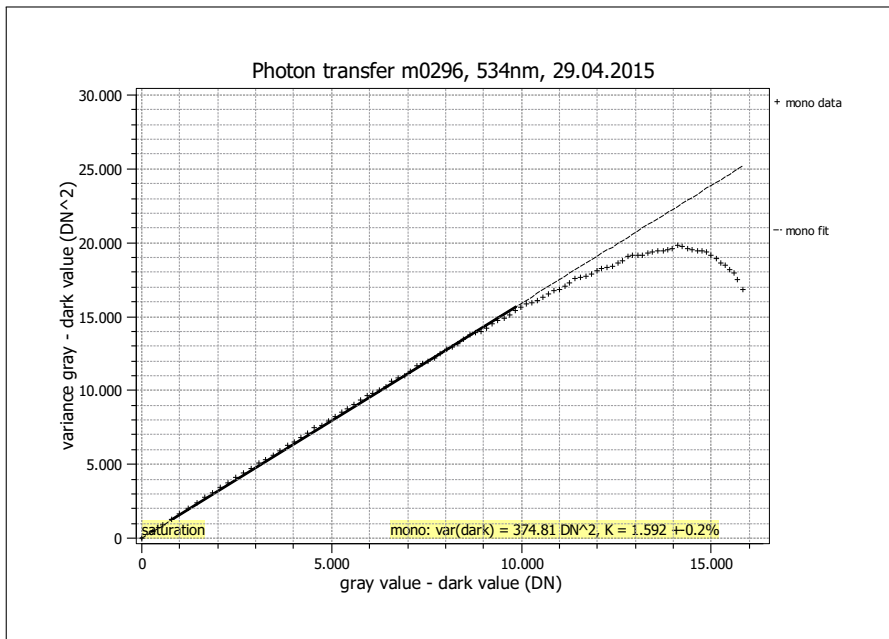
Vendor	MATRIX VISION
Model	mvBlueCOUGAR-XD1212aG
Serial number	GX200544
Sensor diagonal	15.83 mm
Lens category	C-Mount
Resolution	4248 × 2836, 14 bit
Pixel size	3.10 μm × 3.10 μm
Sensor type	CCD
Readout type	Progressive
Transfer type	Interline
Maximum frame rate	7.6 Hz
Interface type	GigE Vision

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 = -5dB, Offset = 0.35
<b>Optional data measured</b>	
None	



## EMVA 1288 Summary Sheet for Operating Point 1

Type of data	Single	Gain, offset	Gain = -5dB, Offset = 0.35
Exposure time	20.0 ms	Environmental temperature	28.2°C
Frame rate	0.0 Hz	Camera temperature	49.2°C
Data transfer mode	Mono14	Wavelength, centr., FWHM	534 nm, 30.9 nm



Quantum efficiency	
$\eta$	0.685
Gain	
$K$ (DN/e)	1.592
$1/K$ (e/DN)	0.628
Dark noise & DSNU	
$\sigma_d$ (DN)	19.36
$\sigma_0$ (e)	12.2
DSNU <sub>1288</sub> (DN)	—
DSNU <sub>1288</sub> (e)	—
Signal-to-noise ratio & PRNU	
SNR <sub>max</sub>	95
SNR <sub>max</sub> (dB)	39.5
SNR <sub>max</sub> (bits)	6.6
$1/\text{SNR}_{\text{max}}$ (%)	1.06
PRNU <sub>1288</sub> (%)	—
Nonlinearity	
LE (%)	0.21
Sensitivity & saturation	
$\mu_{p,\text{min}}$ (p)	18.5
$\mu_{e,\text{min}}$ (e)	12.7
$\mu_{p,\text{sat}}$ (p)	13042
$\mu_{e,\text{sat}}$ (e)	8936
Dynamic range	
DR	705
DR (dB)	57.0
DR (bit)	9.5
Dark current	
$\mu_{c,\text{mean}}$ (DN/s)	—
$\mu_{c,\text{mean}}$ (e/s)	—
$\mu_{c,\text{var}}$ (e/s)	—