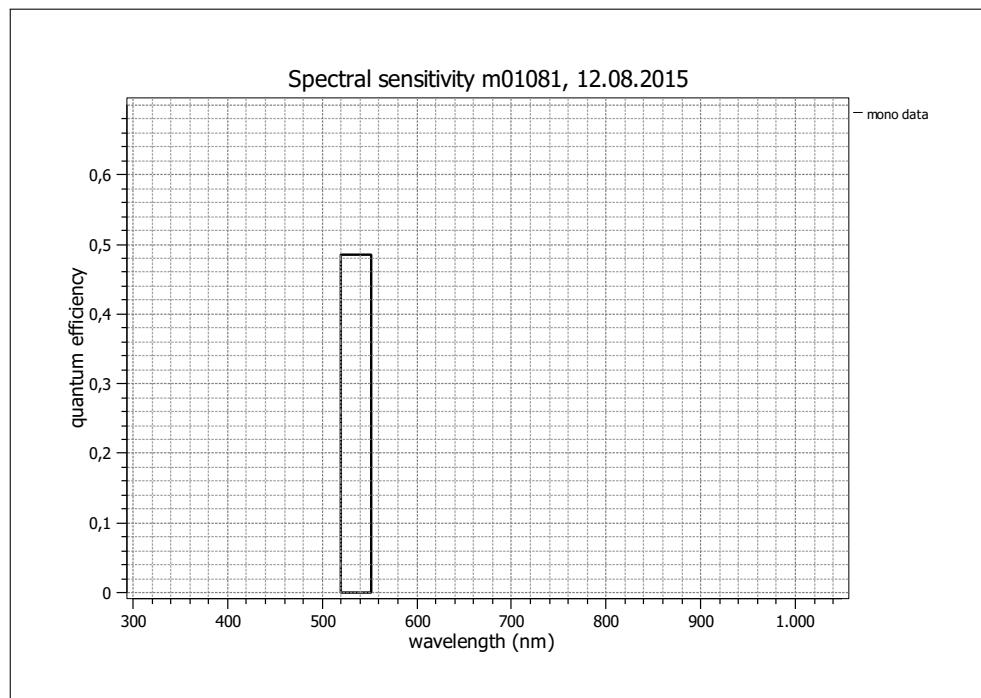


## EMVA 1288 Summary Sheet

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, 27.08.2013, SN 0001(Baumer) . 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.

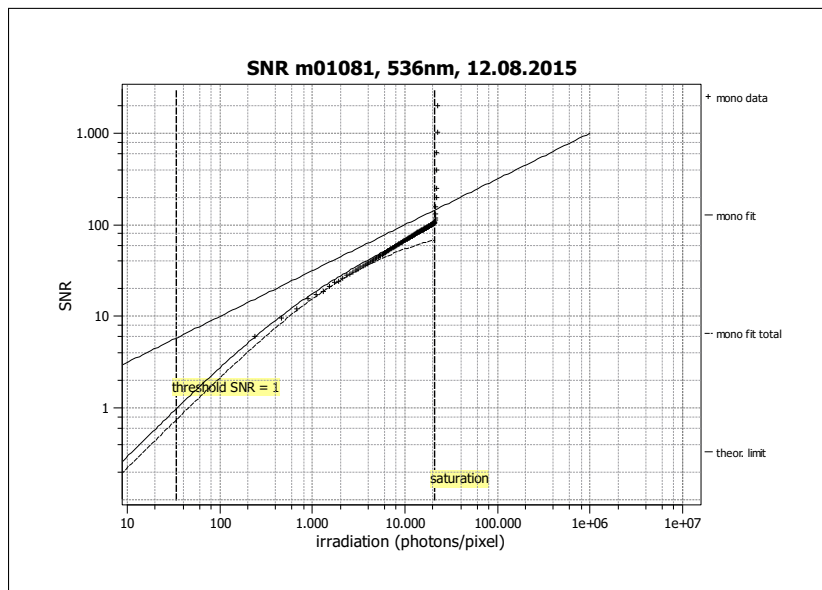
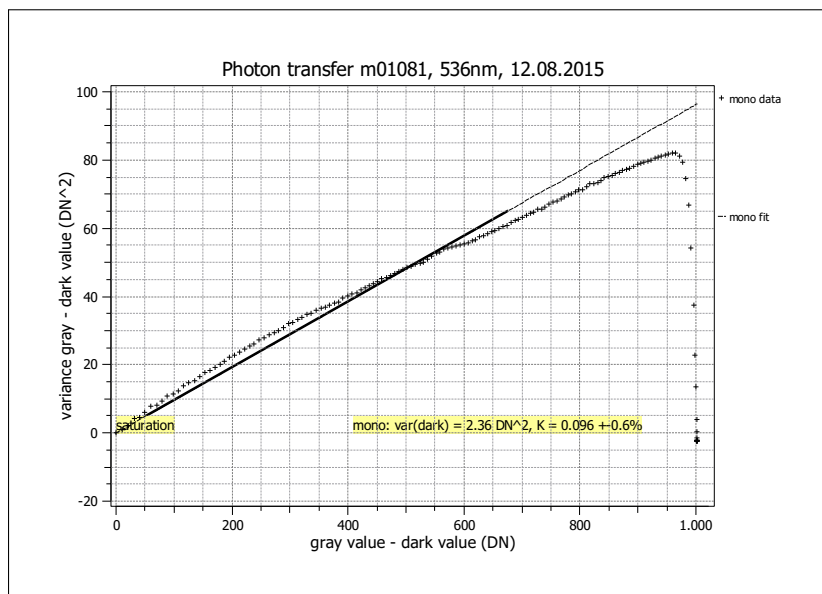
Vendor	Baumer
Model	LXG-20M
Serial number	0686933315
Sensor diagonal	12.75 mm
Lens category	C-Mount
Resolution	2048 × 1088, 10 bit
Pixel size	5.50 $\mu\text{m}$ × 5.50 $\mu\text{m}$
Sensor type	CMOS
Shutter type	Global shutter
Overlap capabilities	Overlapped
Maximum frame rate	0.0 Hz
Interface type	GEV

Type of data presented	Single
<b>Operation point 1</b>	
Wavelength centroid	535.5 nm
Wavelength FWHM	32.0 nm
Gain, offset	BlackLevel = 0
<b>Optional data measured</b>	
None	



## EMVA 1288 Summary Sheet for Operating Point 1

Type of data	Single	Gain, offset	BlackLevel = 0
Exposure time	500.0 $\mu$ s	Environmental temperature	25.1°C
Frame rate	0.0 Hz	Camera temperature	33.4°C
Data transfer mode	Mono10	Wavelength, cent., FWHM	536 nm, 32.0 nm



### Quantum efficiency

$\eta$  0.486

### Gain

$K$  (DN/e) 0.096  
 $1/K$  (e/DN) 10.392

### Dark noise & DSNU

$\sigma_d$  (DN) 1.54  
 $\sigma_0$  (e) 15.7  
 DSNU<sub>1288</sub> (DN) 1.38  
 DSNU<sub>1288</sub> (e) 14.36

### Signal-to-noise ratio & PRNU

SNR<sub>max</sub> 100  
 SNR<sub>max</sub> (dB) 40.0  
 SNR<sub>max</sub> (bits) 6.6  
 $1/\text{SNR}_{\text{max}}$  (%) 1.00  
 PRNU<sub>1288</sub> (%) 1.060

### Nonlinearity

LE (%) 0.37

### Sensitivity & saturation

$\mu_{p,\text{min}}$  (p) 33.9  
 $\mu_{e,\text{min}}$  (e) 16.5  
 $\mu_{p,\text{sat}}$  (p) 20735  
 $\mu_{e,\text{sat}}$  (e) 10074

### Dynamic range

DR 612  
 DR (dB) 55.7  
 DR (bit) 9.3

### Dark current

$\mu_{c,\text{mean}}$  (DN/s) 34.50  
 $\mu_{c,\text{mean}}$  (e/s) 358.48  
 $\mu_{c,\text{var}}$  (e/s) 498.11