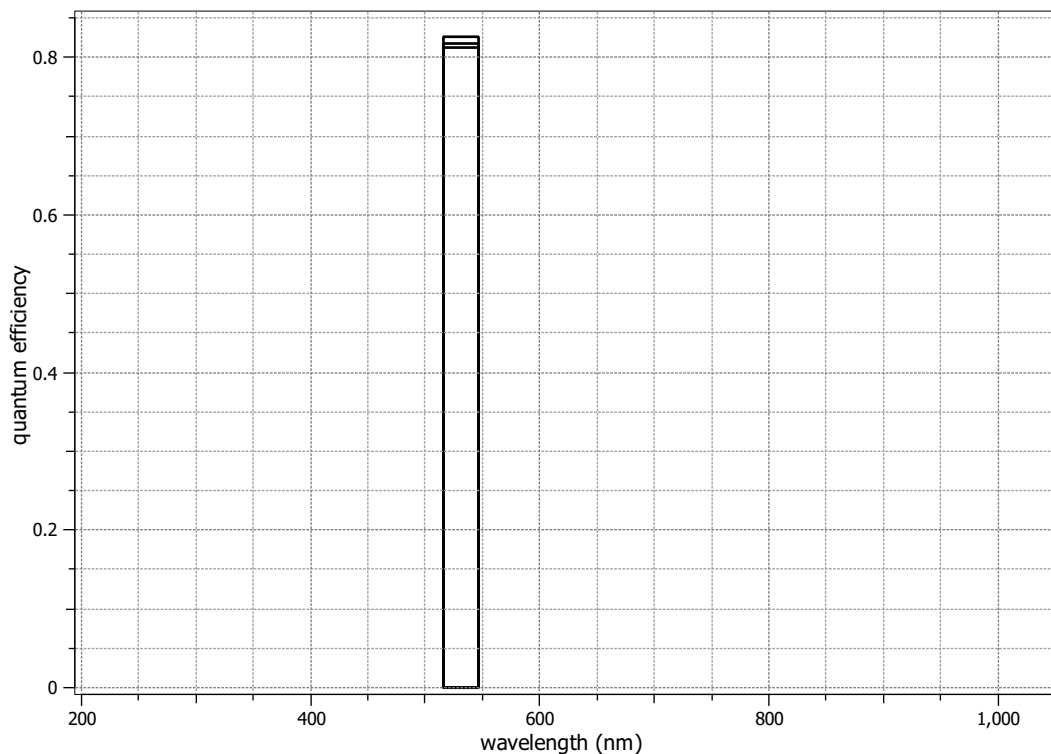


EMVA 1288 Data Sheet m0229

This datasheet describes the specification according to the standard 1288 release 3.1 for "Characterization and Presentation of Specification Data for Image Sensors and Cameras" issued on December 30, 2016 by the European Machine Vision Association (EMVA), published at www.standard1288.org and the *zenodo EMVA 1288 community* with proprietary extensions from AEON. The measurements were performed with the AEON ACC2b RGB-IR, Release 9, 30.07.2018, SN 0032(AMETEK).

Measurements were performed by Vision Research. Measurements are on raw sensor data.

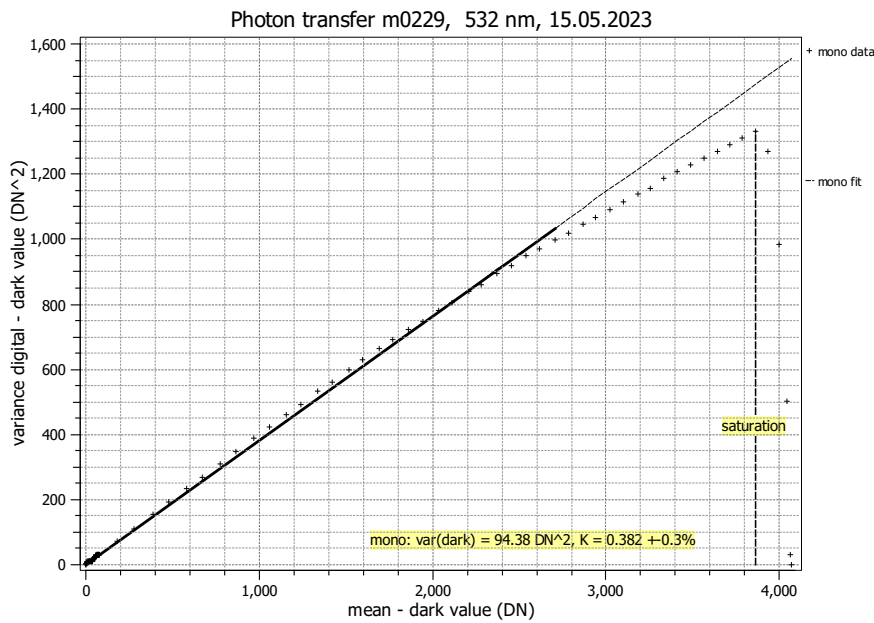
Vendor	Vision Research	Type of data presented	Single
Model	Phantom T-3610	Operation point 1	
Serial number	29357	Wavelength centroid	531.5 nm
Sensor diagonal	27.92 mm	Wavelength FWHM	31.2 nm
Lens category	F-Mount	Gain, black-level	1 / 0
Resolution	1280 × 800, 12 bit	Optional data measured	
Pixel size (h×v)	18.50 μm × 18.50 μm	None	
Sensor	Vision Research Proprietary		
Sensor type	CMOS		
Shutter type	Global		
Overlap cap.	Overlapping		
Max. frame rate	38043.0 Hz		
Interface type	Ethernet		



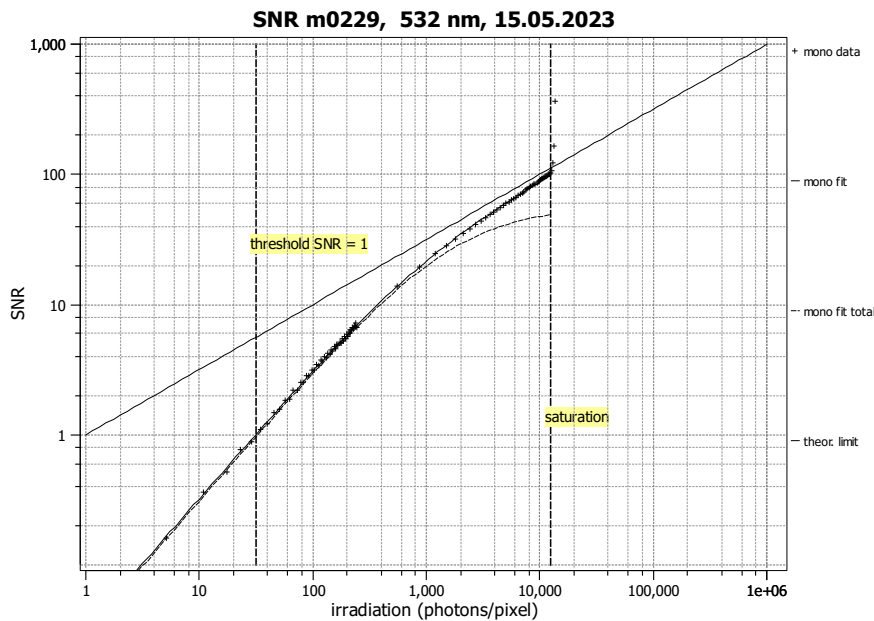
Summary Sheet for Operation Point 1 at a Wavelength of 532 nm

Type of data	Single	Gain, black-level	1 / 0
Exposure control	By irradiance	Environmental temperature	26.2°C
Exposure time	50.00 μs	Camera body temperature	37.1°C
Frame rate	1000.0 Hz	Internal temperature(s)	—
Data transfer mode	Mono 12	Wavelength, centr., FWHM	532 nm, 31.2 nm

Photon Transfer



Signal-to-Noise Ratio



Quantum efficiency

η 82.6%

Overall system gain

K 0.382 DN/e⁻

$1/K$ 2.617 e⁻/DN

Temporal dark noise

σ_d 25.42 e⁻

$\sigma_{y,\text{dark}}$ 9.72 DN

Signal-to-noise ratio

SNR_{max} 102

40.1 dB

6.7 bit

$1/\text{SNR}_{\text{max}}$ 0.98 %

Absolute sensitivity threshold

$\mu_{p,\text{min}}$ 31.4 p

$\mu_{p,\text{min,area}}$ 0.09 p/μm²

$\mu_{e,\text{min}}$ 25.9 e⁻

$\mu_{e,\text{min,area}}$ 0.08 e⁻/μm²

Saturation capacity

$\mu_{p,\text{sat}}$ 12491 p

$\mu_{p,\text{sat,area}}$ 36 p/μm²

$\mu_{e,\text{sat}}$ 10322 e⁻

$\mu_{e,\text{sat,area}}$ 30 e⁻/μm²

Dynamic range

DR 398

52.0 dB

8.6 bit

Spatial nonuniformities

DSNU₁₂₈₈ 7.64 e⁻

2.92 DN

PRNU₁₂₈₈ 1.77 %

Linearity error

LE_{min} -1.38%

LE_{max} 1.20%

Dark current

$\mu_{c,\text{mean}}$ 26955 ± 286 e⁻/s

10298.2 DN/s

$\mu_{c,\text{var}}$ 24587 ± 1669 e⁻/s

T_d — °C