

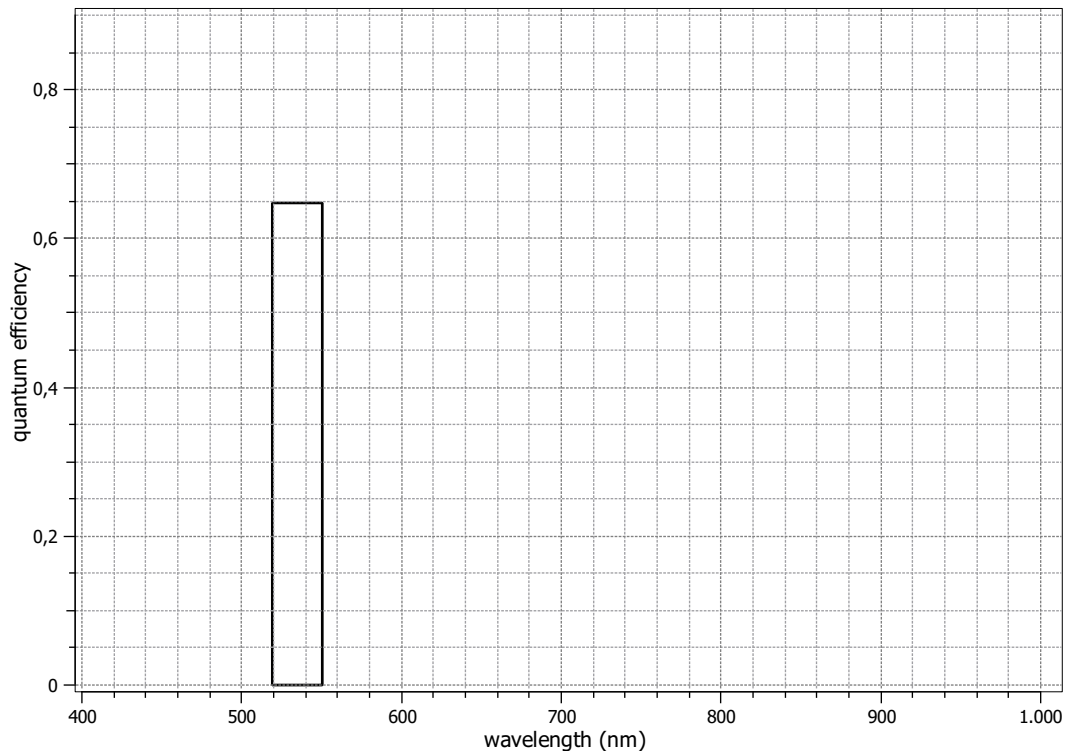
EMVA 1288 Summary Sheet

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 ACC3 RGB Release 7, 21.08.2018, SN 0001(Baumer).

Measurements performed by Technical and Application Support Center, Baumer Optronic GmbH.

Vendor	Baumer
Model	VAX-32M.I.NVN
Serial number	700006710690
Sensor diagonal	8.83 mm
Lens category	C-Mount
Resolution	2048 × 1536, 12 bit
Pixel size (h×v)	3.45 μm × 3.45 μm
Sensor	Sony IMX265
Sensor type	CMOS
Shutter type	Global shutter
Overlap cap.	Overlapped
Max. frame rate	0.0 Hz
Interface type	GEV

Type of data presented	Single
Operation point 1	
Wavelength centroid	534.9 nm
Wavelength FWHM	31.8 nm
Gain, black-level	1.0 / 39.0
Optional data measured	
None	

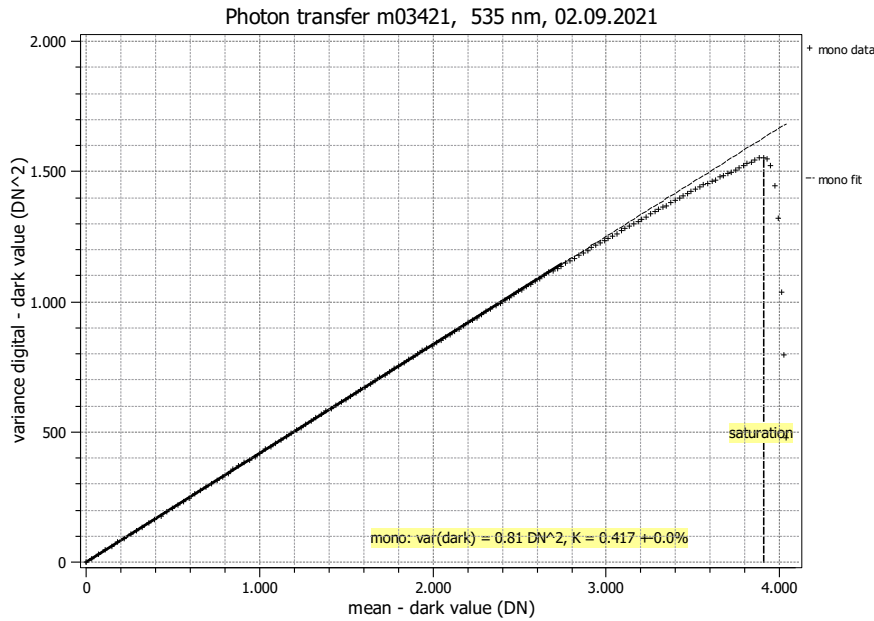




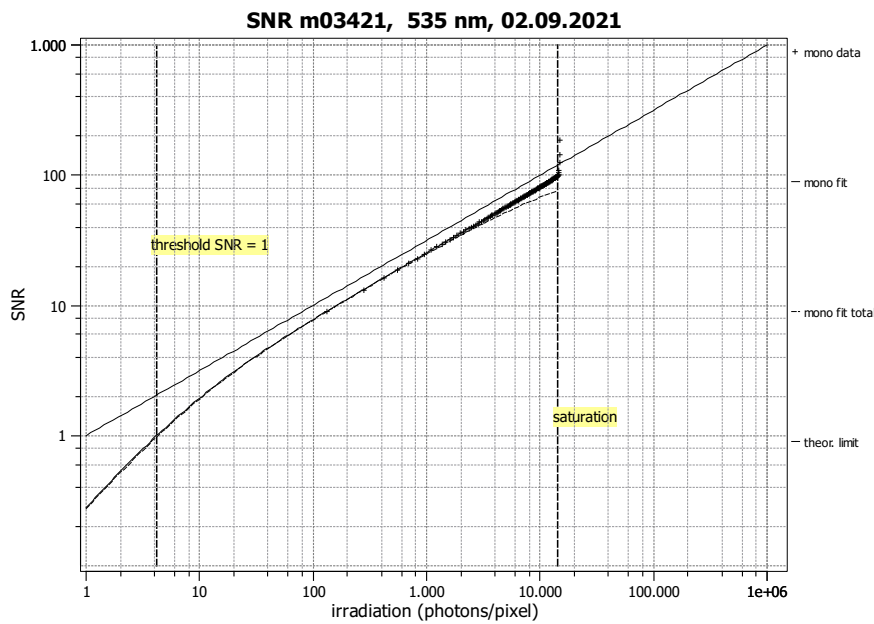
Summary Sheet for Operation Point 1 at a Wavelength of 535 nm

Type of data	Single	Gain, black-level	1.0 / 39.0
Exposure control	By irradiance	Environmental temperature	27.0°C
Exposure time	796.00 μs	Camera body temperature	32.8°C
Frame rate	10.0 Hz	Internal temperature(s)	—
Data transfer mode	Mono12	Wavelength, centr., FWHM	535 nm, 31.8 nm

Photon Transfer



Signal-to-Noise Ratio



Quantum efficiency	η	64.8%
Overall system gain	K	0.417 DN/e ⁻
	$1/K$	2.398 e ⁻ /DN
Temporal dark noise	σ_d	2.04 e ⁻
	$\sigma_{y,\text{dark}}$	0.90 DN
Signal-to-noise ratio	SNR _{max}	97
		39.7 dB
		6.6 bit
	$1/\text{SNR}_{\text{max}}$	1.03 %
Absolute sensitivity threshold	$\mu_{p,\text{min}}$	4.18 p
	$\mu_{p,\text{min,area}}$	0.351 p/μm ²
	$\mu_{e,\text{min}}$	2.71 e ⁻
	$\mu_{e,\text{min,area}}$	0.228 e ⁻ /μm ²
Saturation capacity	$\mu_{p,\text{sat}}$	14405 p
	$\mu_{p,\text{sat,area}}$	1210 p/μm ²
	$\mu_{e,\text{sat}}$	9341 e ⁻
	$\mu_{e,\text{sat,area}}$	785 e ⁻ /μm ²
Dynamic range	DR	3444
		70.7 dB
		11.7 bit
Spatial nonuniformities	DSNU ₁₂₈₈	0.59 e ⁻
		0.25 DN
	PRNU ₁₂₈₈	0.81 %
Linearity error	LE _{min}	-0.50%
	LE _{max}	1.21%
Dark current	$\mu_{c,\text{mean}}$	-0.8 ± 0.1 e ⁻ /s
		-0.34 DN/s
	$\mu_{c,\text{var}}$	2.7 ± 0.2 e ⁻ /s
	T_d	— °C