EMVA 1288 IMAGING PERFORMANCE

BLACKFLY®S

BFS-PGE-50S4

Measurements are taken based on guidelines in the EMVA 1288 standard; the full definition can be found at EMVA.org. Camera settings are: maximum bit depth, 16-bit pixel format, and ISP disabled. The center wavelength is 525 nm unless otherwise noted. Results are captured at room temperature (20°C).

	Blackfly S BFS-PGE-50S4M	Blackfly S BFS-PGE-50S4C
Resolution	2448x2048	2448x2048
Sensor	Sony IMX547, CMOS, 1/1.8	Sony IMX547, CMOS, 1/1.8
Pixel Size (µm)	2.74	2.74
Firmware Version	2106.0.111.0	2106.0.111.0
ADC Bit Depth	12	12
Quantum Efficiency Mono (% at 525 nm)	68.01	N/A
Quantum Efficiency Blue (% at 470 nm)	N/A	46.15
Quantum Efficiency Green (% at 525 nm)	N/A	52.92
Quantum Efficiency Red (% at 630 nm)	N/A	33.10
Temporal Dark Noise (Read Noise) (e-)	2.50	2.55
Temporal Dark Noise (Read Noise) (DN)	16.22	16.44
Signal to Noise Ratio Maximum (dB)	39.89	39.90
Signal to Noise Ratio Maximum (Bits)	6.63	6.63
Absolute Sensitivity Threshold (γ)	4.41	5.77
Absolute Sensitivity Threshold (e-)	3.00	3.05
Saturation Capacity (Well Depth) (e-)	9745	9764
Saturation Capacity (Well Depth) (γ)	14329	18464
Dynamic Range (dB)	70.24	70.10
Dynamic Range (Bits)	11.67	11.64
Gain (e-/ADU)	0.15	0.16

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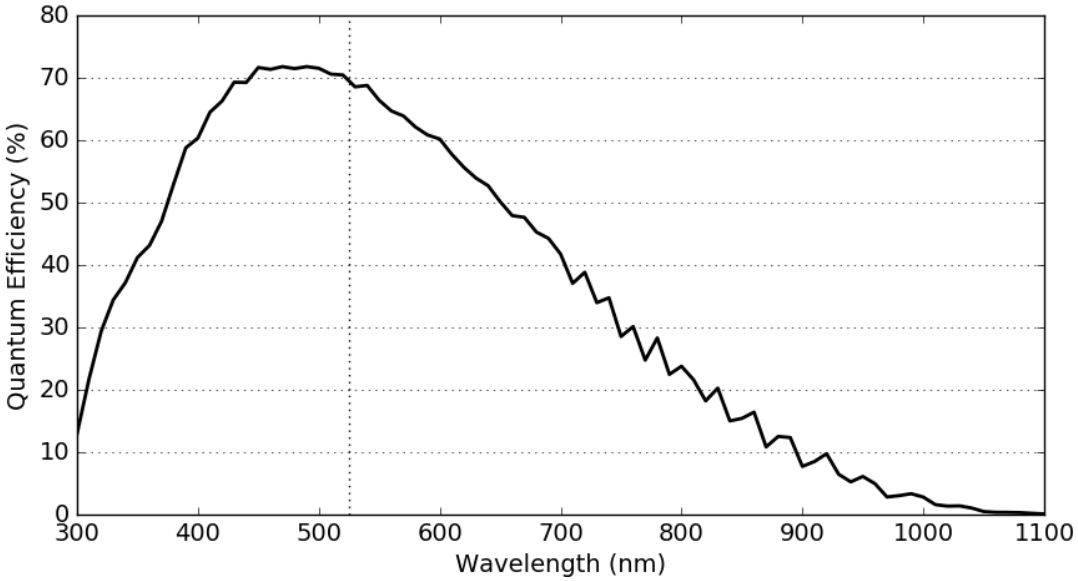
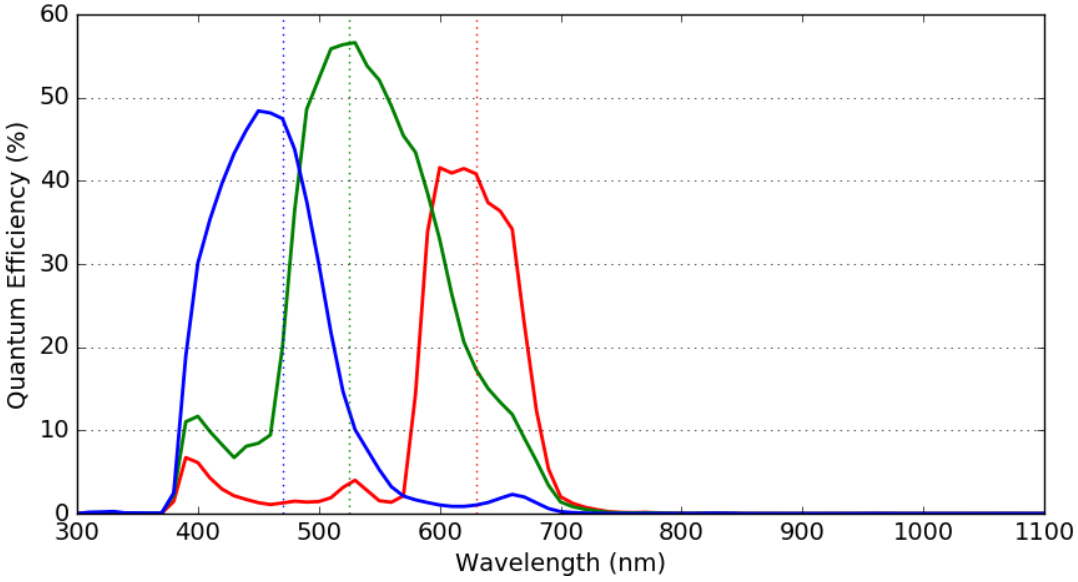
TELEDYNE

Blackfly S BFS-PGE-50S4M Spectral Response Curve



Blackfly S BFS-PGE-50S4C Spectral Response Curve



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