EMVA 1288 IMAGING PERFORMANCE

BLACKFLY®S

BFS-PGE-51S5

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-51S5P				Blackfly S BFS-PGE-51S5PC			
Resolution	2448x2048				2448x2048			
Sensor	Sony IMX250, CMOS, 2/3				Sony IMX250, CMOS, 2/3			
Pixel Size (µm)	3.45				3.45			
Firmware Version	2303.0.330.0				2303.0.330.0			
ADC Bit Depth	12				12			
Polarization Angle (degrees)	**0**	**45**	**90**	**135**	**0**	**45**	**90**	**135**
Quantum Efficiency Mono (% at 525 nm)	23.81	24.45	23.88	24.68	NA	NA	NA	NA
Quantum Efficiency Blue (% at 470 nm)	NA	NA	NA	NA	17.70	18.36	17.91	18.35
Quantum Efficiency Green (% at 525 nm)	NA	NA	NA	NA	22.41	22.83	22.30	23.01
Quantum Efficiency Red (% at 630 nm)	NA	NA	NA	NA	18.72	19.01	18.53	18.93
Temporal Dark Noise (Read Noise) (e-)	2.48				2.48			
Temporal Dark Noise (Read Noise) (DN)	13.92				14.11			
Signal to Noise Ratio Maximum (dB)	40.48				40.50			
Signal to Noise Ratio Maximum (Bits)	6.72				6.73			
Absolute Sensitivity Threshold (γ)	12.50				13.30			
Absolute Sensitivity Threshold (e-)	2.98				2.98			
Saturation Capacity (Well Depth) (e-)	11174				11208			
Saturation Capacity (Well Depth) (γ)	46927				50067			
Dynamic Range (dB)	71.49				71.51			
Dynamic Range (Bits)	11.87				11.88			
Gain (e-/ADU)	0.18				0.18			

6/2/2023

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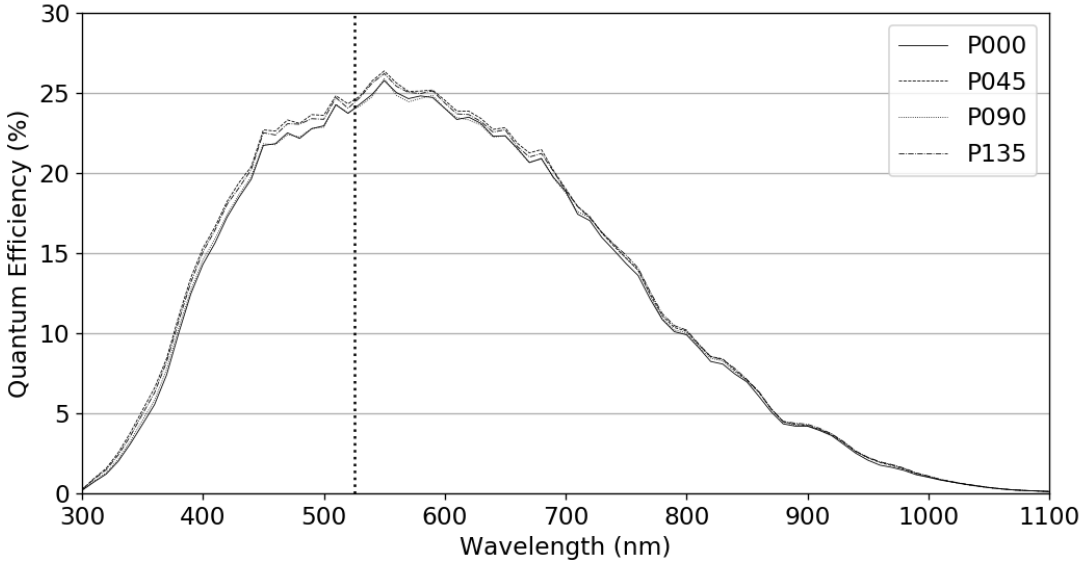
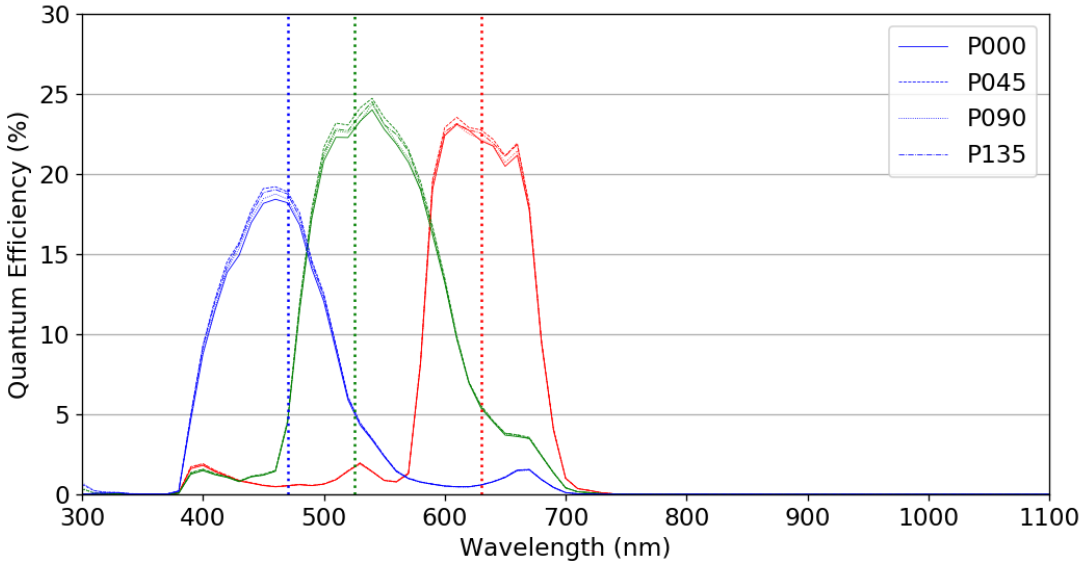
TELEDYNE

Blackfly S BFS-PGE-51S5P Spectral Response Curve



Blackfly S BFS-PGE-51S5PC Spectral Response Curve



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