

# EMVA 1288 IMAGING PERFORMANCE

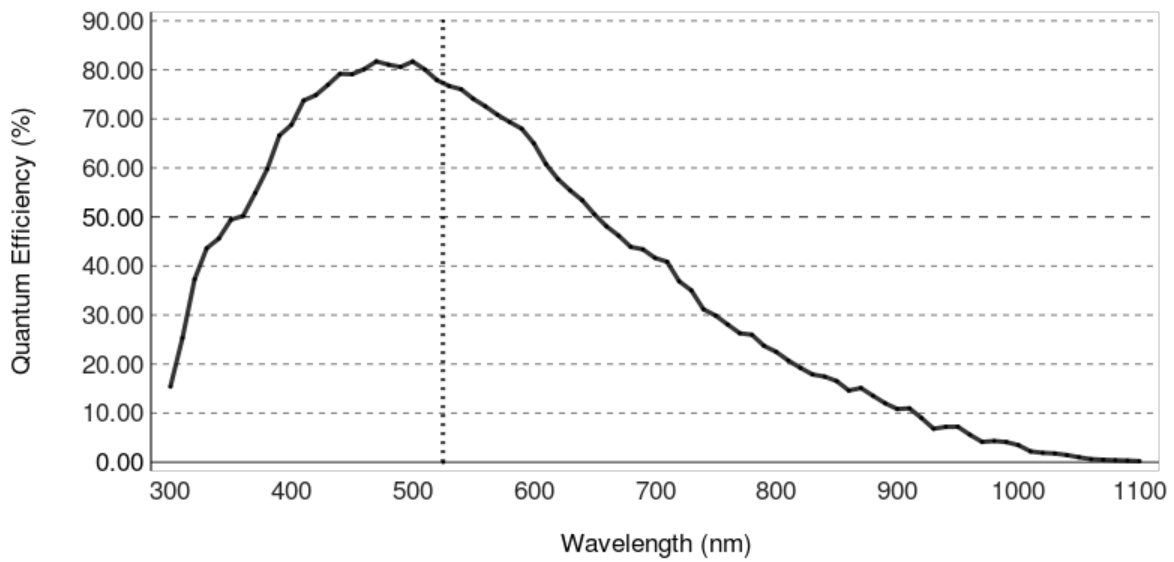
# FLIR BLACKFLY<sup>®</sup>S

## BFS-U3-63S4-BD

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-U3-63S4M-BD	Blackfly S BFS-U3-63S4C-BD
<b>Resolution</b>	3072x2048	3072x2048
<b>Sensor</b>	IMX178 (1/1.8", CMOS, Rolling Shutter)	IMX178 (1/1.8", CMOS, Rolling Shutter)
<b>Pixel Size</b>	2.4	2.4
<b>Firmware Version</b>	1908.0.165.0	1908.0.165.0
<b>ADC Bit Depth</b>	14	14
<b>Quantum Efficiency Mono (% at 525 nm)</b>	74.38	N/A
<b>Quantum Efficiency Blue (% at 470 nm)</b>	N/A	61.09
<b>Quantum Efficiency Green (% at 525 nm)</b>	N/A	65.56
<b>Quantum Efficiency Red (% at 630 nm)</b>	N/A	40.77
<b>Temporal Dark Noise (Read Noise) (e-)</b>	2.49	2.44
<b>Temporal Dark Noise (Read Noise) (DN)</b>	10.65	10.50
<b>Signal to Noise Ratio Maximum (dB)</b>	41.61	41.47
<b>Signal to Noise Ratio Maximum (Bits)</b>	6.91	6.89
<b>Absolute Sensitivity Threshold (<math>\gamma</math>)</b>	4.02	4.48
<b>Absolute Sensitivity Threshold (e-)</b>	2.99	2.94
<b>Saturation Capacity (Well Depth) (e-)</b>	14474.70	14038.60
<b>Saturation Capacity (Well Depth) (<math>\gamma</math>)</b>	19459.10	21394.90
<b>Dynamic Range (dB)</b>	73.71	73.59
<b>Dynamic Range (Bits)</b>	12.24	12.22
<b>Gain (e-/ADU)</b>	0.23	0.23

## Blackfly S BFS-U3-63S4M-BD Spectral Response Curve



## Blackfly S BFS-U3-63S4C-BD Spectral Response Curve

