## **EMVA 1288 IMAGING PERFORMANCE**

## BLACKFLY®S BFS-U3-1652

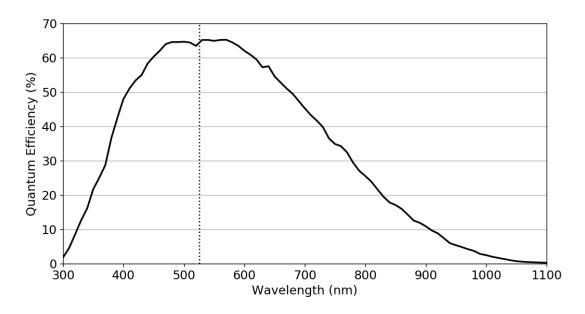
Measurements are taken based on guidelines in the EMVA 1288 standard; the full definition can be found at EMVA.org. Camera settings are: maximum bit depth, 16-bit pixel format, and ISP disabled. The center wavelength is 525 nm unless otherwise noted. Results are captured at room temperature (20°C).

|  | Blackfly S BFS-U3-16S2M  | Blackfly S BFS-U3-16S2C  |
|--|--------------------------|--------------------------|
| Resolution                             | 1440x1080                | 1440x1080                |
| Sensor                                 | Sony IMX273, CMOS, 1/2.9 | Sony IMX273, CMOS, 1/2.9 |
| Pixel Size (μm)                        | 3.45                     | 3.45                     |
| Firmware Version                       | 1707.0.98.0              | 1707.0.98.0              |
| ADC Bit Depth                          | 10                       | 10                       |
| Quantum Efficiency Mono (% at 525 nm)  | 63.86                    | N/A                      |
| Quantum Efficiency Blue (% at 470 nm)  | N/A                      | 47.72                    |
| Quantum Efficiency Green (% at 525 nm) | N/A                      | 58.84                    |
| Quantum Efficiency Red (% at 630 nm)   | N/A                      | 46.76                    |
| Temporal Dark Noise (Read Noise) (e-)  | 4.98                     | 4.90                     |
| Temporal Dark Noise (Read Noise) (DN)  | 28.96                    | 29.13                    |
| Signal to Noise Ratio Maximum (dB)     | 40.28                    | 40.18                    |
| Signal to Noise Ratio Maximum (Bits)   | 6.69                     | 6.67                     |
| Absolute Sensitivity Threshold (y)     | 8.59                     | 9.18                     |
| Absolute Sensitivity Threshold (e-)    | 5.48                     | 5.40                     |
| Saturation Capacity (Well Depth) (e-)  | 10662                    | 10419                    |
| Saturation Capacity (Well Depth) (y)   | 16695                    | 17728                    |
| Dynamic Range (dB)                     | 65.78                    | 65.71                    |
| Dynamic Range (Bits)                   | 10.93                    | 10.91                    |
| Gain (e-/ADU)                          | 0.17                     | 0.17                     |





## Blackfly S BFS-U3-16S2M Spectral Response Curve



Blackfly S BFS-U3-16S2C Spectral Response Curve

