

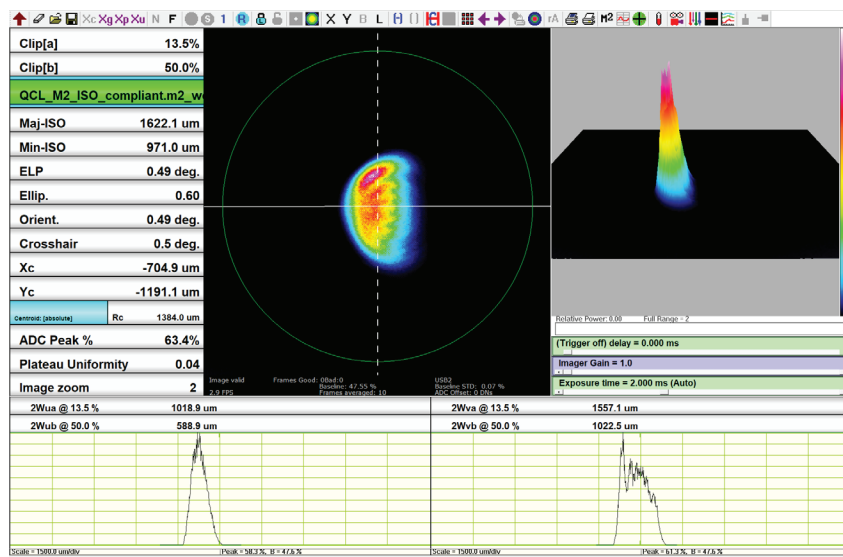


# DATA RAY

## WinCamD-IR-BB

High resolution beam profiling in the MWIR and FIR spectrum (2 - 16  $\mu\text{m}$ )

The WinCamD-IR-BB is an imaging solution for lasers in the MWIR and FIR range. With 17  $\mu\text{m}$  pixels, a wavelength range of 2 - 16  $\mu\text{m}$ , and an integrated shutter, the WinCamD-IR-BB offers unparalleled beam profiling capabilities. With a signal-to-noise ratio that exceeds 1000:1, the WinCamD-IR-BB is capable of ISO 11146 compliant beam measurements. The microbolometer-based camera features very high sensitivity, and the integrated shutter allows for fully automated non-uniformity correction.



The WinCamD-IR-BB is supported by DataRay's full-featured, highly customizable, user-centric software which has no license fees, unlimited installations, and free software updates. The software supports M<sup>2</sup> measurements using our M2DU stages.

For higher power lasers, DataRay offers a range of sampling, absorbing, and reflecting attenuators for use with beam powers exceeding the camera's maximum power limits.

### System Features

- 2 - 16  $\mu\text{m}$  wavelength range microbolometer
- 640 x 480, 17  $\mu\text{m}$  pixels
- 10.8 x 8.2 mm active area
- Low irradiance capability:  $\sim 75 \mu\text{W}/\text{cm}^2$  at 5 x peak-to-peak noise
- 30 fps (7.5 fps for export)
- Port-powered USB 3.0; no power brick required
- No chopper/TEC
- Integrated shutter allowing for
  - HyperCal™ - Dynamic Noise and Baseline Correction software
  - Automated non-uniformity correction (NUC)
- $\geq 1000:1$  Signal to RMS Noise
- 14-bit ADC
- 14 ms thermal time constant
  - Measure pulsed lasers with PRR  $\geq 1 \text{ kHz}$
- Parallel capture on multiple cameras
- ISO 11146 M<sup>2</sup> option - beam propagation analysis, divergence, focus finding



**WinCamD-IR-BB**  
2.8 x 2.8 x 2.0 in  
73 x 73 x 52 mm