Beam Profiler Software RayCi
- Version Overview -

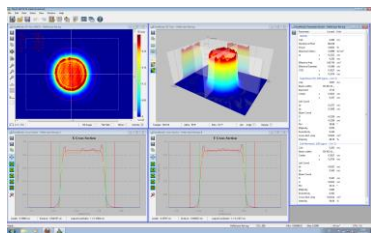|	Lite	Standard	Professional
System			
Vista, Windows 7, 8, 10	32Bit / 64Bit	32Bit / 64Bit	32Bit / 64Bit
Beam Profiler			
Multi-Use (Several Beam Profilers simultaneously)	○	○	●
Support for USB / FireWire / GigE / CameraLink Beam Profiler	● / ● / ● / ○	● / ● / ● / ●	● / ● / ● / ●
CW Mode / Pulse Mode (Software Trigger)	● / ●	● / ●	● / ●
Live Mode (live data) and Save Mode (stored data) can be used simultaneously	●	●	●
Automatic Update Support / Email Support	○ / ●	● / ●	● / ●
Visualization Windows			
2D-View (2D Profile, AOI Features, Beam Width, Cuts, Coordinate System)	●	●	●
3D-View (3D Profile, Coordinate System, Rotation, Cuts, Fit)	○	●	●
Cross Section (X/Y-Cut, Radial-Cut, Circular-Cut, Arbitrary-Cut, Beam Width, Cursor)	● (X, Y)	● (All)	● (All)
Number of Cross-Section Windows	1	2	2
Cross Section Analysis (1D Beam Width, Sinc² Fit, Edge Steepness)	○	●	●
Power Profile (Power Content Virtually Aperture)	○	●	●
Histogram (Probability Density Distribution, Cursor)	○	●	●
Beam Results (Highlighting, Separating, Pass / Fail Criteria)	● / ● / ○	● / ● / ●	● / ● / ●
AOI Parameter (Center xy, Diameter, Area, Intensity)	●	●	●
Centroid Position	●	●	●
Power Profile Position	○	●	●
Statistics (Number of Pixel, Power, Peak)	●	●	●
Beam Parameter (Beam Width, Centroid, Uniformity, etc.)	●	●	●
Beam Profiler Dynamic (Saturation, Intensity, Power)	●	●	●
Measurement Windows (ISO 11146, ISO 13694, ISO 11670)			
Single Measurement (2D / 3D-View, Histogram, Cross Section, Beam Results)	●	●	●
Time Series (2D / 3D-View, Histogram, Cross Section, Beam Results)	○	●	●
Divergence Measurement (2D / 3D-View, Fit, Divergence Parameter)	○	●	●
Beam Quality M^2 Tool (2D / 3D-View, Caustic Fit, 3D Caustic Fit, Caustic Parameter)	○	○	●
Beam Stability (Peak, Power, Centroid X/Y, Beam Width: d, D, Phi)	○	●	●
Pointing Stability (Centroid Fluctuation X/Y, Centroid Position Analysis, Spectrum)	○	●	●
Standard Features			
LUT / Adjustable LUT Dynamic / Auto Contrast	● / ● / ●	● / ● / ●	● / ● / ●
AOI Adjustment (Centroid, Peak, Beam Width)	●	●	●
Centroid Calculation (Data, Threshold Level, Highest Pixel)	○	●	●
Spatial Units (px, µm, mm, cm, in, m)	●	●	●
Power Units (1, nW, µW, mW, W, kW)	●	●	●
Coordinate System (Default, Standard, User-Defined)	●	●	●
Adjustable Cursors (Peak, Beam Width, Edge Steepness)	○	●	●
Zoom Function (All Visualization and Measurement Windows)	●	●	●
Camera Settings (Exposure Time, Gain, Floating Average, Frame Summing)	●	●	●
Trigger Settings (Polarity, Delay Time, Auto Pulse Finder)	●	●	●

● included   ○ not included
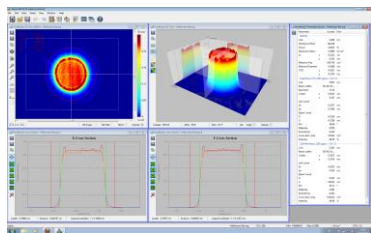
Beam Profiler Software RayCi
- Version Overview -

	Lite	Standard	Professional
Correction and Calibration Tool			
Background Correction (incl. Cold and Hot Pixel)	●	●	●
Baseline Correction	●	●	●
Flat Field Calibration	●	●	●
Linearity Calibration	○	●	●
Power Calibration	●	●	●
2D Beam Width Techniques			
Threshold	●	●	●
2nd Moment	●	●	●
Gauss-Fit	●	●	●
Super-Gauss-Fit	○	●	●
Plateau	○	●	●
Geometry Simple	○	●	●
Geometry Area	○	○	●
Knife-Edge 90/10	●	●	●
Moving Slit 86/14	○	●	●
2D Beam Parameters			
Exponent	○	●	●
Centroid at x, y	●	●	●
Beam width at x, y / Divergence at x, y (Lab Coordinates)	●	●	●
Beam width major, minor / Divergence major, minor (Beam Coordinates)	●	●	●
Azimuth Angle	●	●	●
Ellipticity / Eccentricity	●	●	●
Correlation	●	●	●
Uniformity	●	●	●
Roughness	○	●	●
Slope	○	●	●
Cross-Sectional Area	●	●	●
Intensity	●	●	●
Goodness of Fit Index (GFI)	●	●	●
Top Hat Factor (F)	○	●	●
Effective Power	●	●	●
Power Ratio	●	●	●
Effective Area	●	●	●
Mean Intensity	●	●	●
Flatness	●	●	●
Edge Steepness	●	●	●
Beam Statistics			
Number of Pixel	●	●	●
Power	●	●	●
Peak at x, y	●	●	●

● included   ○ not included

Beam Profiler Software RayCi
- Version Overview -

	Lite	Standard	Professional
Video			
Video capturing	○	●	●
Video playback	○	●	●
Almost all measurements / visualizations can be performed on video files	○	●	●
Work with Live Data / Save Data			
Camera Options (Binning 1x1, 2x2, 4x4, 8x8)	●	●	●
Arithmetic Operations (Add, Subtract, Multiply, Divide, Raise)	●	●	●
Image Transformation (Flip vertical / horizontal, Rotate Left / Right)	●	●	●
Filter (Median, Smoothing, Lowpass, Highpass)	●	●	●
Optimization (Baseline Correction)	○	●	●
Data (Save / Open)			
Single Measurement (TIF / Printable Report)	● / ○	● / ●	● / ●
Time Series (TS / Printable Report)	○ / ○	● / ●	● / ●
Divergence Measurement (DVG / Printable Report)	○ / ○	● / ●	● / ●
Beam Quality (M2 / Printable Report)	○ / ○	○ / ○	● / ●
Beam Stability (BST / Printable Report)	○ / ○	● / ●	● / ●
Pointing Stability (PST / Printable Report)	○ / ○	● / ●	● / ●
Export			
Data (TXT / CSV)	●	●	●
Image (BMP / JPEG / GIF / TIFF / PNG)	●	●	●
Grayscale Image 8Bit (BMP / GIF / TIFF / PNG); 16Bit (PGM)	○	●	●
Video (AVI / TS)	○	●	●
Workspaces / Settings	●	●	●
Import			
Data (CSV)	○	○	●
Grayscale Image (BMP / JPEG / GIF / TIFF / PNG / EMF / WMF / ICO)	○	○	●
Workspaces / Settings	●	●	●
XML-RPC interface that allows full remote control of all RayCi functions			
Control of all camera settings	○	●	●
Capture of data and results	○	●	●
Control of measurement settings	○	●	●
SDK			
Wrapper-Dll for C (LabView)	○	●	●
Wrapper-Dll for .NET	○	●	●
Control of External Devices			
Translation Stage for Beam Quality M^2 - CinSquare	○	○	●
Trigger Device for Advanced Pulse Measurements	○	○	●
Dongle Network Server	○	●	●

● included   ○ not included