Since the relatively new development of polycapillary optics (~10 years), a standardized approach of characterization has not been established. Many different performance measures are used, sometimes resulting in radically different rankings. This makes it difficult, even for practitioners intimately involved, to compare results from different optics and for different applications.

To enable the understanding of polycapillary optics’ advances, different methods of optic comparison will be evaluated and their relevance explained. These methods include transmission efficiency, intensity, equivalent distance, normalized gain, insertion gain, and effective capture angle. Polycapillary focusing optics with varying input and output parameters will be compared using the different standards of performance.