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Sommario/riassunto	Conventional ellipsometry is limited to flat surfaces because precise alignment is required, making measurements on curved samples difficult and time-consuming. This work proposes retroreflex ellipsometry, which overcomes these geometric limitations by using a retroreflector to return light along the same path. The method enables accurate, nondestructive ellipsometric measurements on nonplanar surfaces, allowing the determination of angles of incidence, tilt, refractive index, and film thickness. Experimental results confirm high accuracy and show strong potential for inline and in-situ industrial quality control, including the characterization of freeform optics and complex-shaped surfaces.