

SmartStart Library

For LucidShape and LucidShape CAA V5 Based

Features at a Glance

The SmartStart Library is a curated database of routinely updated optical data for glasses, plastics, and surface finishes.

Access a measurement queue for requesting additions of commercially available materials and media at no added cost to users with an active SmartStart Library license.

Glass and plastic data includes:

- Dispersion
- Wavelength-dependent absorption
- Volumetric scattering

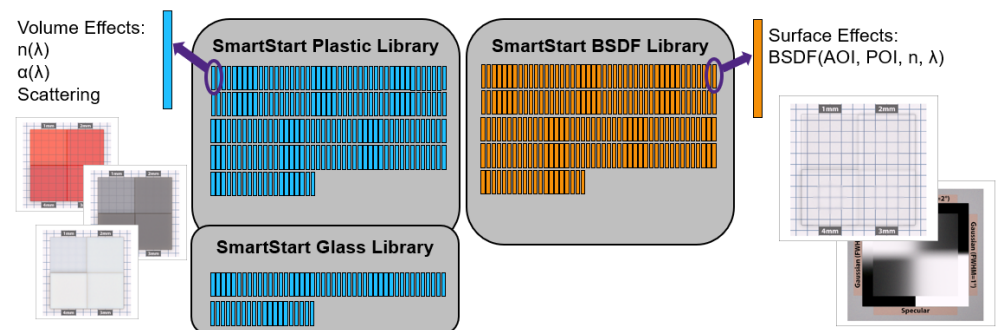
Surface finish data includes:

- High-accuracy BSDF for commercially available reflectors and diffusers
- Reflective BSDF for mold textures that can be applied to any substrate
- Reflective BSDF for mold textures that are metalized using industry-standard methods

Customers with a SmartStart Library license can request to add expedited custom measurements to the library for a fee. Send requests to:
osg-libraries@synopsys.com

Data for Realistic Simulations of Lighting Designs

Lighting designers know that the best designs depend on the best input data. The Synopsys SmartStart Library provides designers with light scatter data for faster, more cost-effective product development. Hundreds of optical measurements are stored as data files for use in LucidShape and LucidShape CAA V5 Based, and provided with licensed modules in each software product. You can be confident that your product simulations will give you a complete picture of your final product's optical performance.



High-Accuracy Datasets

Data in the SmartStart Library is obtained either directly from the vendor or through measurements by the Synopsys Optical Measurements Services team. Examples of optical measurements include:

- 2D BSDF measurements – the slice has a 0.1 degree resolution in the plane of incidence
- 3D BSDF measurements – individual slices have a 0.1 degree resolution and slices occur every 10 degrees of azimuth

SmartStart Library Contents as of March 2021

Dataset Type	Number of Vendors	Vendor Examples	Number of Datasets	Supported In
Glasses	1	Kopp Glass	23	LucidShape 2020.12, LucidShape CAA 2020.09
Plastics	6	Covestro, Dow Chemical, Röhm, SABIC	108	LucidShape 2020.12, LucidShape CAA 2020.09
Diffuse Plastics	6	MOCOM, Covestro, Röhm, SABIC	77	LucidShape 2020.12, LucidShape CAA 2020.09
Reflectors	16	Acktar, Alanod, LabSphere	131	LucidShape 2020.12
Diffusers	18	Bright View, Luminit, KIMOTO	135	LucidShape 2020.12
Refractive Mold Textures	3	Mold-Tech, Tenibac, VDI 3400	75	LucidShape 2020.12, LucidShape CAA 2020.09
Reflective Mold Textures	4	Mold-Tech, Tenibac, VDI 3400	58	LucidShape 2020.12

For More Information

Visit synopsys.com/optical-solutions/scattering-measurements.html to learn more about Synopsys' optical scattering measurement services and equipment.

Contact us at optics@synopsys.com to request software pricing and to start a trial.