

Glossary of Terms

Aperture	The maximum area of the microstructured surfaces
Beamsplitter	A linear Fresnel prismatic structure which bends collimated light into two equal beams
Collector	A Fresnel lens used to collect light and focus it to a point
Collimator	A Fresnel lens used to collect light and collimate it
Condenser Lens	A Fresnel lens used in an illumination system to collect light from a source to evenly illuminate the object to be projected
Corner Cube Retroreflector	Very small and efficient retroreflectors that return light rays toward their source parallel to the incident rays
Cylindrical	A linear Fresnel lens that focuses light in a line
Diffractive Optical Elements (DOEs)	A microstructured pattern using constructive and destructive interference to shape light into spots or lines, modify intensity distribution or create a holographic image.
Diffuse Surfaces	A surface having a nonspecular (rough) texture
Draft Angle	The non optical relief angle of a Fresnel prismatic groove (measured from the y-axis)
Draft Surface	The non optical, or relief, surface of a Fresnel type prism structure
EFL – Effective Focal Length	The distance between the Fresnel Component and the focal point, assuming light is from a finite distance
f/number	Focal length divided by aperture
Facet	One prismatic Fresnel structure
Facet Spacing	The distance between peaks of the prismatic structures
Field Lens	A Fresnel lens used in an illumination system to focus light from an object to a projection lens
Focal Length	The distance between the Fresnel Component and the focal point, assuming light from infinity
Fresnel Conjugate	The object/image distance on the microstructured side of a component
Fresnel Lens	A thin, flat lens having prismatic structures simulating the curve of a conventional positive lens
Fresnel prism	A Fresnel prism has a linear structure with constant slope and draft angles. A pair of lens arrays used to shape light from a lamp/reflector source into a rectangular pattern to evenly illuminate an imaging panel, such as LCD, DLP or LCOS
Integrator Lenses	Lens arrays are comprised of rows and columns of small lenslets. The lenslets can be spherical or aspherical or Fresnel.
Lens Arrays	
Lenticular	A lenticular has linear structures, where the structures have a radius of curvature. Also known as a cylindrical

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	array
Light Guide	Lightguides consist of microprisms that are optically bonded to or molded into a solid polymer substrate
Microstructured Surfaces	Any surface having some type of engineered structure to manage light
Motheye Structure	A moth-eye structure is a submicron surface relief profile that provides a low reflectance interface for light
Pitch	Another term used to define facet spacing
Plano Conjugate	The object/image distance on the plano side of a component
Plano Surfaces	The smooth side of a component
Slope Angle	The angle of a prism facet (measured from the x-axis) of a Fresnel type structure