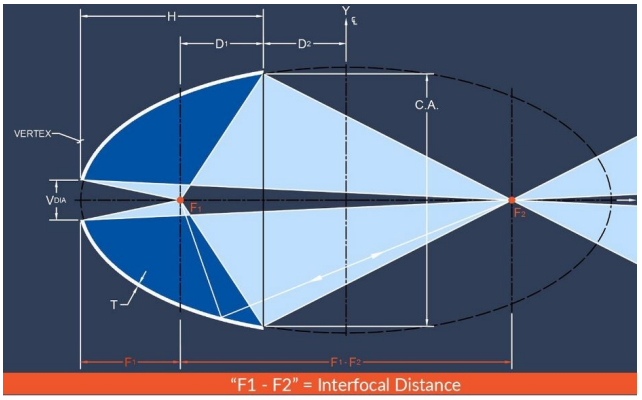
Ellipsoidal and Paraboloidal Reflectors

Overview

These accurately replicated reflectors are designed for many light collection and illumination applications. Their broad spectral range (200 nm to more than 10 um) make them usable for applications where lenses are either too costly or are limited by their transmissive properties. We offer parabolas, off-axis parabolas, and ellipses, which all provide very efficient radiation control since focus or collection is over very large solid angles. This makes them particularly useful for lower incoherent light sources.

Elliptical Reflectors

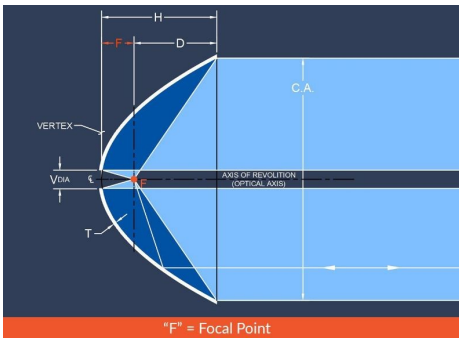
An elliptical reflector is a light control device that collects light rays generated from a primary focal point and directs it to a secondary focal point.



Sciencetech Elliptical Reflectors

SKU	C.A. (Diameter) mm	F1, mm	V, mm	(F1-F2), mm	f/#
620-0087	169	20.1	60.5	389.8	1.6
620-0219	401	60.9	76.2	710	1.28
620-0212	162.6	21.6	25.4	295.9	1.1
620-0208	76.3	19.1	30.5	377.1	4.0

Parabolic Reflectors



An electroformed parabolic reflector is a parabola-shaped reflective surface used to collect and direct wave energy such as light.

Electroformed parabolic reflectors are commonly used in collecting energy from a source at its focal point and directing the energy outward in a parallel beam. Since the principles of reflection are reversible, they can also be used to collect parallel energy from a distant source and bring it to a common focal point. Reflectors are coated with electro-deposited aluminum and then by magnesium fluoride.

Sciencetech Parabolic Reflectors

SKU	C.A. (Diameter) mm	F, mm	V (Vertex), mm	H, mm
620-0224	76.2	8.9	27.9	40.5
165-0253	254	1524	-	10.6

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