

LED LAMP FOR FRESNEL LENSES

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DESIGN OF A LED LAMP

- MECHANICAL CONFIGURATION
- FOCUSING THE LIGHT SOURCE
- ELECTRICAL CONNECTION OF DIODES
- THERMAL MANAGEMENT

COMPLEXITY INCREASES WITH POWER



ACRYLIC FRESNEL LENSES

WE CAN CHANGE THE LENS CONFIGURATION TO
FOCUS THE LAMP

GLASS FRESNEL LENSES

IT IS NOT POSSIBLE TO MODIFY ANY LENS TO DO
IT



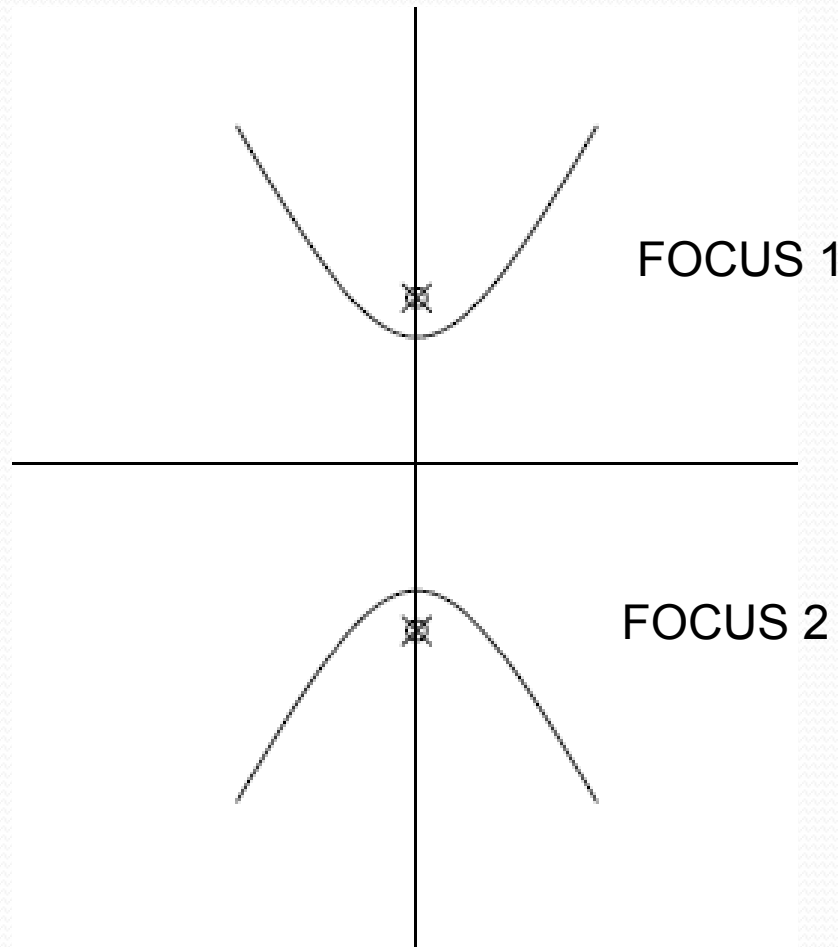
GOAL

GET A HIGH-POWER LIGHT SOURCE, UNIFORM AND
EASILY FOCUSABLE

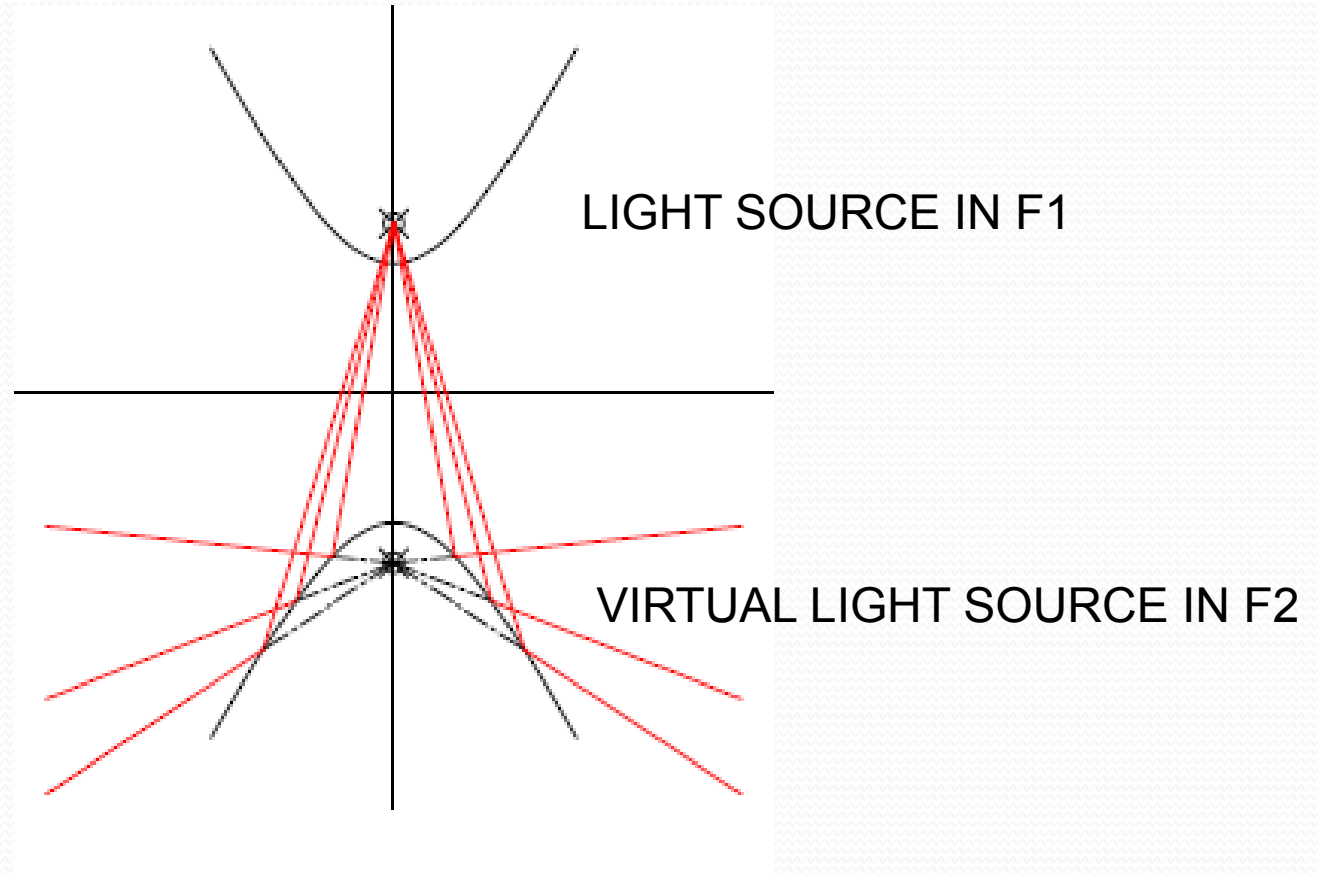
WAY

VIRTUAL LIGHT SOURCE

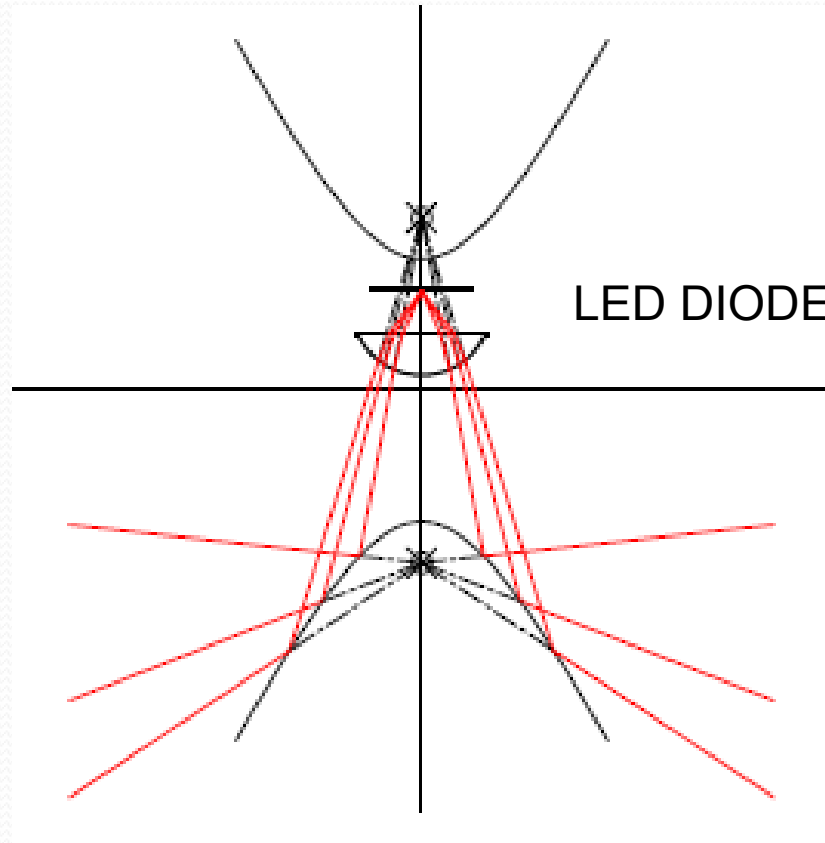
HYPERBOLIC CURVE



TRACING RAYS

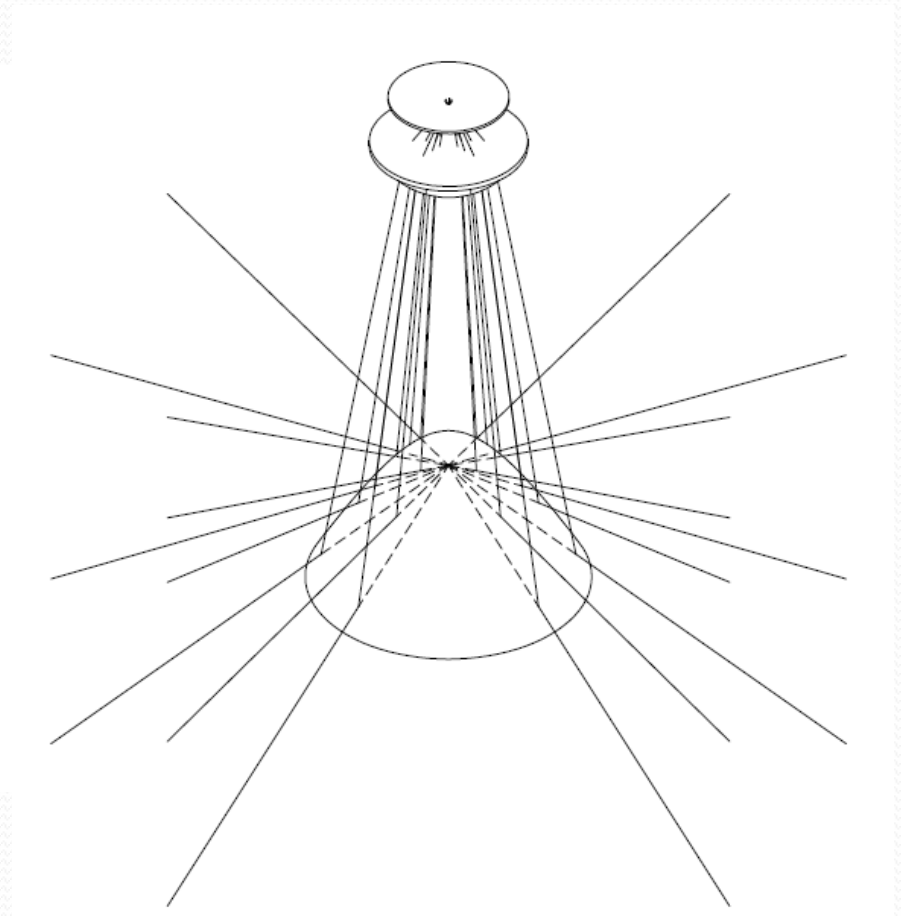
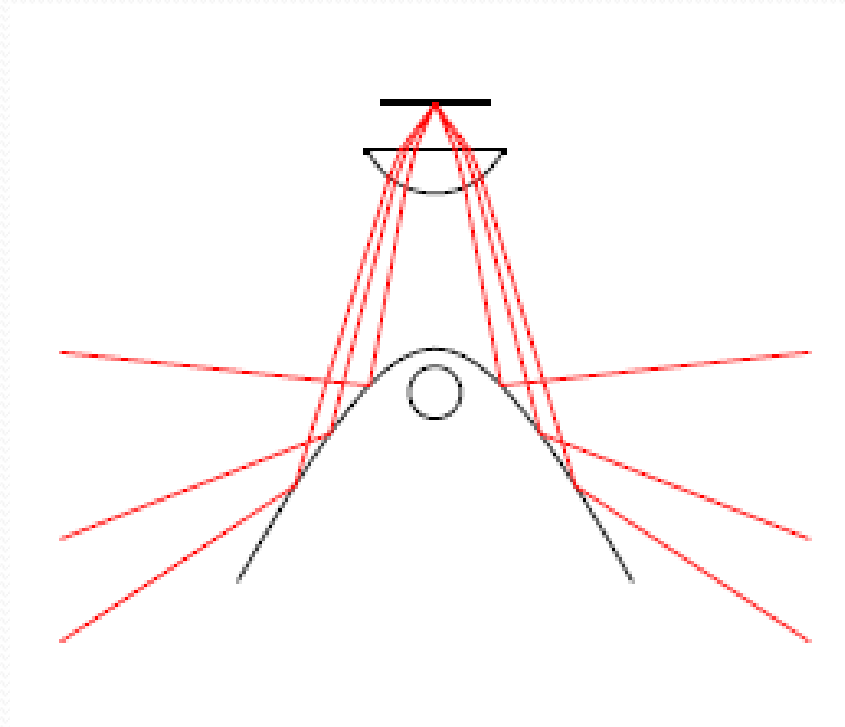


CONDENSING LIGHT

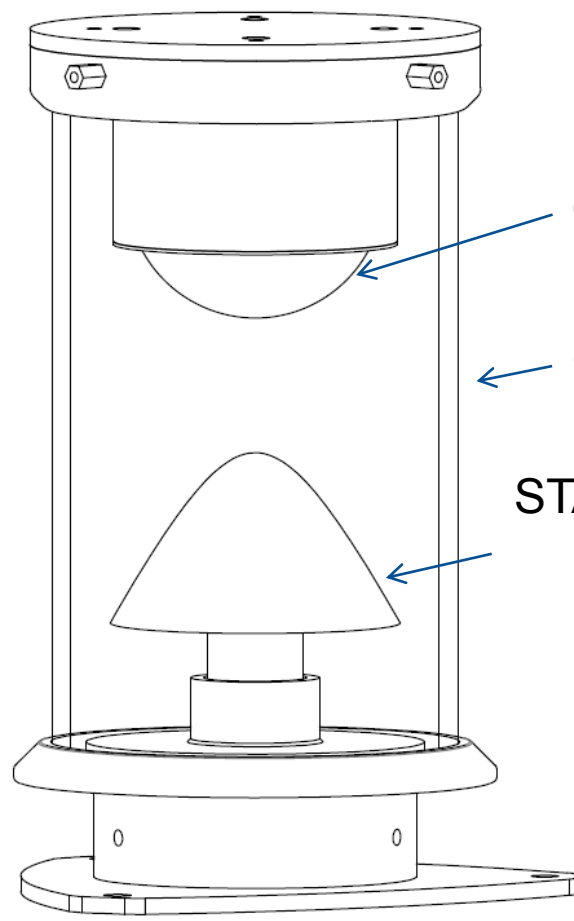


LED DIODE AND CONDENSER LENS

ROTATIONAL SYMMETRY



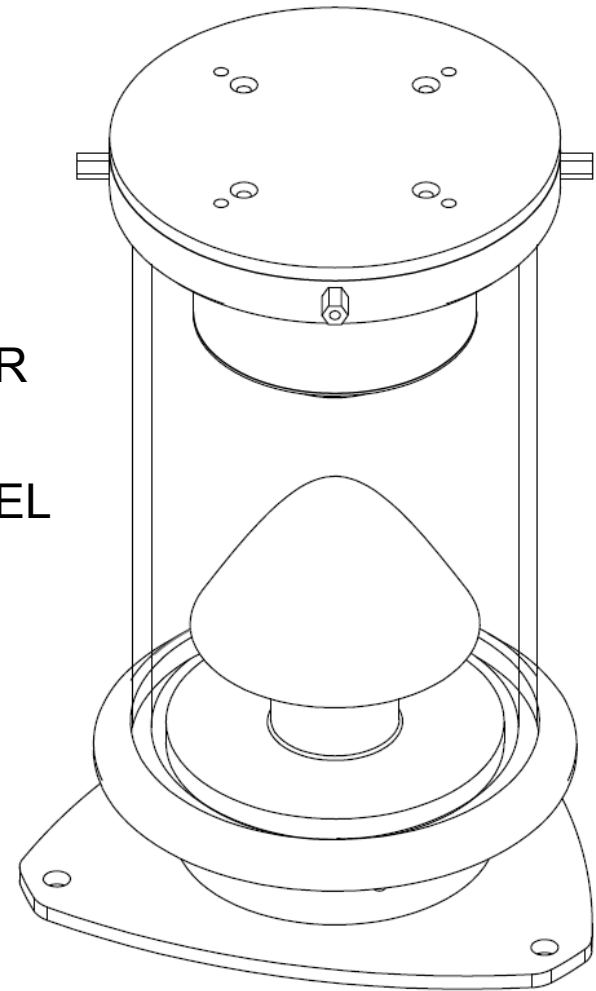
MECHANICAL DESIGN



CONDENSER

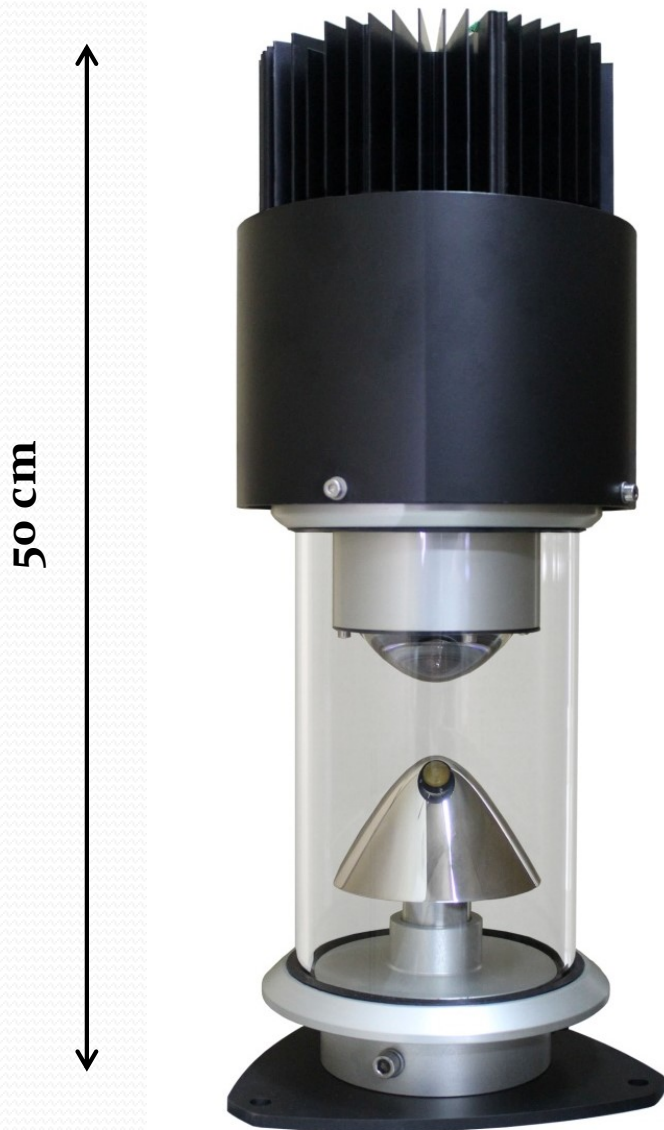
GLASS COVER

STAINLESS STEEL
HYPERBOLIC
MIRROR



LAMP

- SINGLE POINT SOURCE
- POWER: 150W (ADJUSTABLE)
- ACTIVE COOLER
- EASILY FOCUSABLE
- PATENTED
- ADDITIONAL TECHNICAL DATA AVAILABLE SOON



THANK YOU

