The Telescope

Optics

LENS MATERIALS

Two different materials are under investigation: CYTOP and PMMA-000. CYTOP is an amorphous, soluble perfluoropolymer (AGC Co., Ltd. product). PMMA-000 is a special Grade UV transmittance polymethylmetacrylate (Mitsubishi Rayon Co., Ltd. product).

FIELD OF VIEW

Baseline: > 60° (±30° in X and ±24° in Y if with side-cut)

Advanced: > 60° (±30° in X and ±24° in Y if with side-cut)

Optics Performance

Encircled Energy (EE): ratio between the number of photons in the spot area and the photons reaching the focal surface. Throughput: ratio between the number of photons in the spot area and those passing through the Aperture Stop (i.e., the iris).

Encircled Energy

Baseline vs. Advanced: 5mm and 2.5mm spot sizes

Throughput

Baseline vs. Advanced:


1.5m BBM Lens (Central area of 2.5m lens) Manufacturing

June, 2009: Rear lens

Dec 2009: Middle lens

Dec 2010: Front lens