

SALT-3120AS0008 version 1.1 (2 Jan 2003)

Calcium Fluoride optical blanks

Scope of Project

These optical blanks will be used for the collimator and camera optics =  
on the visible/ near-infrared spectrograph for the Southern African =  
Large Telescope.

Cylindrical Calcium Fluoride optical blanks.

One each of the following. Dimensions in mm.

Contractors may bid for any grade individually

Grade Name Diam Thickness=09

1 O-L1 130 62

=09

2 O-L5 190 60=09

2 O-L7 210 64=09

2 O-L9 208 58

=09

3 A-L2 244 75=09

3 A-L4 250 55=09

3 A-L5 256 59=09

Grade 1: single crystal (random orientation), stress birefringence < 1 =  
nm/cm. Supply birefringence data as map and data file. Mark =  
birefringence reference axis on edge of blank.

Grade 2: single crystal (random orientation), stress birefringence < 2 =  
nm/cm. Supply birefringence data as map and data file. Mark =  
birefringence reference axis on edge of blank.

Grade 3: polycrystalline, stress birefringence < 10 nm/cm. The CaF2 =  
boules used to generate the final blanks shall have more than 90% of the =  
volume consisting of less than three crystals

All grades:

Physical dimensions +/- 0.2 mm.

Absorption: minimum internal absorption from 300 nm to 1.7 micrometers.

Refractive index homogeneity <  $5 \times 10^{-5}$ .

Desired delivery: < 8-12 weeks