NOTES: UNLESS OTHERWISE NOTED
1. MACHINED SURFACE ROUGHNESS 84
2. RING GROOVES AND SURFACES .32
3. REMOVE ALL BURRS/SHARP CORNERS

BILL OF MATERIAL

<table>
<thead>
<tr>
<th>NO.</th>
<th>REQ'D</th>
<th>REF</th>
<th>DRW</th>
<th>DESCRIPTION</th>
<th>MATERIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>1</td>
<td>SK5-019A</td>
<td>SX01 Spacer Front</td>
<td>ALU 6061-T6</td>
<td></td>
</tr>
</tbody>
</table>

SECTION A-A

INSTITUTE FOR ASTRONOMY
2680 WOODLAWN DR, HONOLULU, HI 96822

INSTRUMENT: SPLX - CROSS DISPERSED SPECTROGRAPH
PART NAME: SX01 Spacer Front
TELESCOPE: IRF

TOLERANCES

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>XX</td>
<td>+/- .015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XXX</td>
<td>+/- .005</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XXXX</td>
<td>+/- .002</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANGLE</td>
<td>+/- 30 min</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRACTION</td>
<td>+/- 1/32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REVDATE: N/A
REVISION: N/A
DATE: 07/01/99
DESIGN: STAHLBERGER
DRAWN: STAHLBERGER
APPROD: J. RAEMER

SK5-001B
NEXT ASSY

SIZE: A
LOT NO: 725
 SHEET: 1 OF 3

PLOT: 10/19/99