



NOTES (FROM DX.REF SPIRE-RAL-NOT 621, 622 AND 734)

1. A FIDUCIAL MARK SHOULD LOCATE THE CENTRE OF THE OPTICAL SURFACE.
2. EXTRA POLISHING OF THE CENTRE REIGON (>10cm²) IS REQUIRED.
3. THE OPTICAL SURFACE (BICONIC) MUST ACCURATELY FOLLOW THE EQUATION SPECIFIED BELOW, BUT THE MACHINED SURFACE IS ONLY REQUIRED TO BE IN THE ORDER OF 5 TO 10 MICRONS R.M.S.

$$K_x=0 \quad K_y=1 \quad C_x=1/R_x \quad C_y=1/R_y \quad R_x=1400.6436 \quad R_y=2801.2871$$

$$Z = \frac{C_x X^2 + C_y Y^2}{1 + \sqrt{1 - (1+K_x)C_x^2 X^2 - (1+K_y)C_y^2 Y^2}}$$

SPIRE MASTER DRAWING	
PROJECT MEMBER	APPROVED
PROJECT MANAGER	
SYSTEM ENG	
ELECTRONICS ENG	
PA GROUP	
STRESS ENG	
OPTICAL ENG	
THERMAL ENG	
MECHANICAL ENG	

A	23-Jul-01		D.SIMMONS			
ISSUE	DATE	MOD. NO.	DRN. BY	CHKD.	APPD.	STATUS
TOLERANCES UNLESS STATED			FINISH		ORIGINAL SCALE	
±0.2 mm			SEE NOTES		0.500	
±0.3			REMOVE ALL BURRS		DO NOT SCALE	
MATERIAL & SPEC			SURFACE TEXTURE µm		0 _____ 50 mm	
ALUM ALLOY			SEE NOTES			
BS 1470 6082 (T6)			✓ UNLESS STATED			
USED ON						©CLRC 1996
CENTRAL LABORATORY OF THE RESEARCH COUNCILS						
TITLE MIRROR M2, TELESCOPE SIMULATOR						
A 1-KG-0720-500-A					1 OF 1	