



MATERIAL : OPTICAL GRADE SILICON (N-TYPE MONO CRYSTALLINE)  
 REFRACTIVE INDEX SHALL NOT VARY MORE THAN 20 PPM OVER THE ENTIRE BLANK

SURFACE FINISH (Ra) :  $\lambda/2$  AT 632.8 nm  
 SURFACE QUALITY : 80/40  
 CLEAR APPEARANCE : 80/2  
 PARALLELISM : < 3 MINUTES OF AN ARC  
 CHAMFER : NOMINAL CHAMFERING ON EDGES  
 CHAMFER : THE FOLLOWING SPECIFICATIONS APPLY TO SURFACE-B :

THE FOLLOWING SPECIFICATIONS APPLY TO SURFACE-A :

DLC AR COATING FROM 3.6-4.9  $\mu$ m  
 WINDSHIELD WIPER TEST AS PER IS 1888 P 5.4.3  
 SALT SOLUBILITY AS PER MIL-C-48497A 4.5.5.2.3  
 HUMIDITY AS PER MIL-C-48497A 4.5.5.2.3  
 TEMPERATURE AS PER MIL-C-48497A 4.5.4.1(5)  
 SOLUBILITY AND CLEAVABILITY AS PER MIL-C-48497A 4.5.4.2(6)  
 ADHESION AS PER MIL-C-48497A 4.5.3.1

THE FOLLOWING SPECIFICATIONS APPLY TO SURFACE-B :

HIGH DURABILITY AR COATING FROM 3.6-4.9  $\mu$ m  
 SEVERE ABRASION AS PER MIL-C-48497A 4.5.5.1  
 SALT SOLUBILITY AS PER MIL-C-48497A 4.5.5.2.3  
 HUMIDITY AS PER MIL-C-48497A 4.5.5.2(4)  
 TEMPERATURE AS PER MIL-C-48497A 4.5.4.1(5)  
 SOLUBILITY AND CLEAVABILITY AS PER MIL-C-48497A 4.5.4.2(6)  
 ADHESION AS PER MIL-C-48497A 4.5.3.1  
 1mm FROM THE EDGE MAY REMAIN UNCOATED

AVERAGE TRANSMISSION  $\geq 90\%$  AS MEASURED THROUGH 8 mm THICK WITNESS SAMPLE COATED IN THE SAME COATING RUN IN THE 3.6 - 4.9  $\mu$ m SPECTRAL RANGE

VERIFIED  
 (A.K. GUPTA)  
 S.C.E. IRDE

SYMBOL	ZONE	FINISH	APPROX. DATE	APPROVED BY	DATE
①	DIMENSION	1	14/11/14		
②	COATINGS	1	14/11/14		
③	CHAMFER	1	14/11/14		

TITLE: FRONT THERMAL WINDOW (COMMANDER'S CUPOLA)

ORG. NO. 0967 00 00 00 00 0000

SCALE: 1:1

DATE: 14/11/14

APPROVED BY: P. K. SHARMA

DATE: 14/11/14