

PRISM SPECIFICATION SHEET

TITLE, DATE ZnSe Prism (Right Angle, w/Polish+Coating) ver.20090414

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CONTACT PERSON Chihiro Tokoku

GENERAL

Intended Use: Astronomical Spectrograph
Wavelength Range: 2.0 - 2.4 μm
Operating Temperature: ~100 K

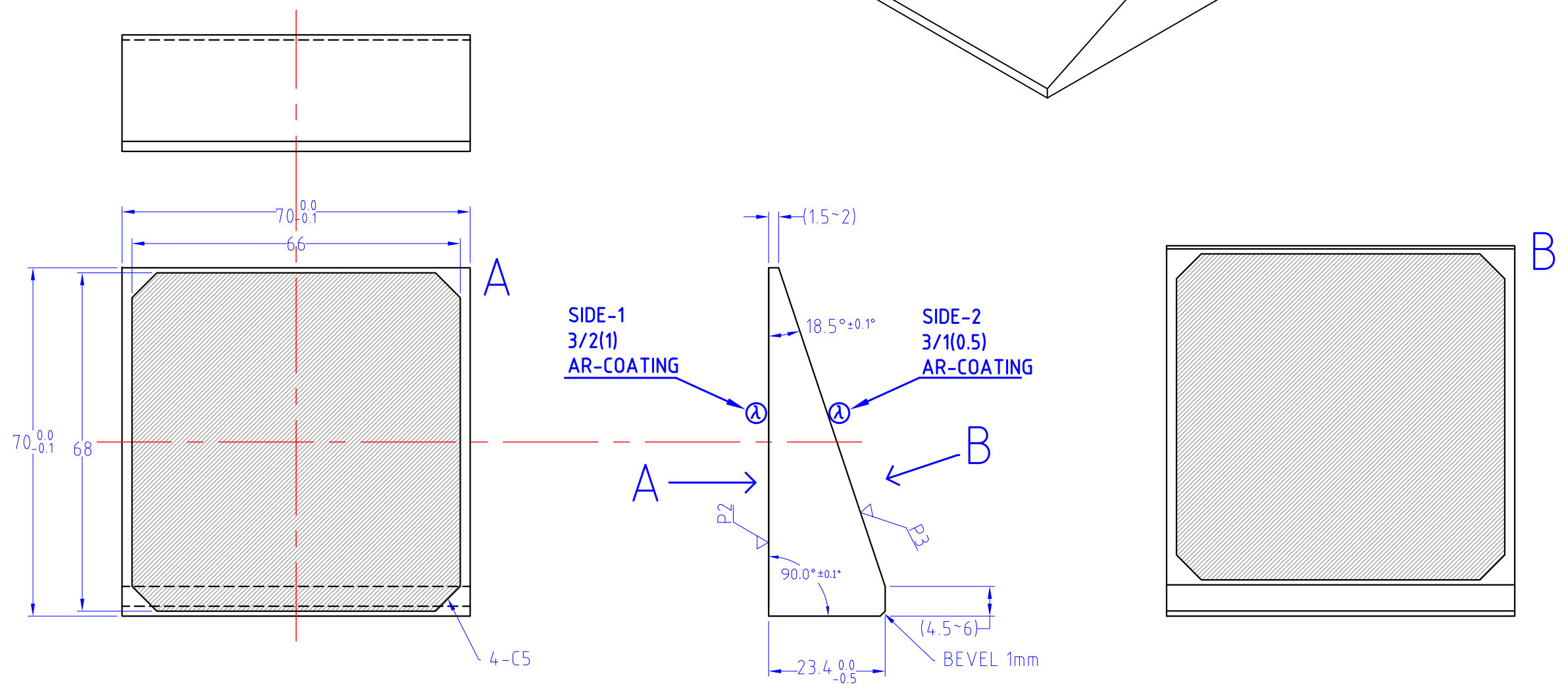
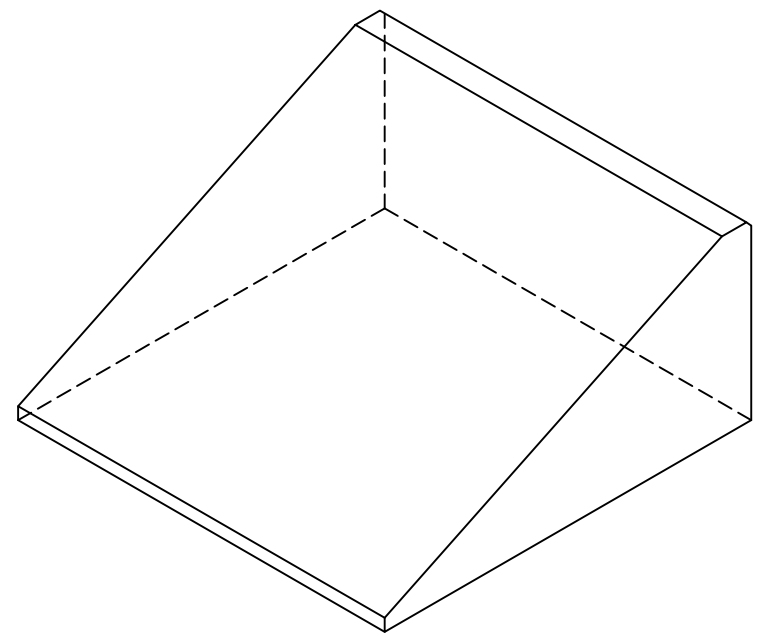
PRISM SPECIFICATION

Material: Optically homogeneous ZnSe
Dimension: Please see attached figure
Apex Angle: 18.5 degree($\pm 0.1^\circ$)
Effective Area: Center of polishing area 64X64mm
Surface Quality: at SIDE-1 Newton Ring ≤ 2 , astigmatism ≤ 1
at SIDE-2 Newton Ring ≤ 1 , astigmatism ≤ 0.5
Surface Accuracy: $< 1 \lambda$ rms
Transmittance: $> 70\%$ at 2.0-2.4 μm
Cosmetic Statement: No bubbles and striae
AR Coating: at Edge-1 Multi-AR for index of refraction=1.51 (2.0-2.4 μm)
Angle for air 23.7~32.1 $^\circ$
Angle for resin 15.6~20.9 $^\circ$
at Edge-2 Multi-AR for air (2.0-2.4 μm)
Angle 14.5~22.5 $^\circ$
Coating Area: Center of polishing area 68X66mm excepting bevel
Surface Finish: Sand-floated #500-1000 unless otherwise stated
Chamfer: C0.1~0.5 unless otherwise stated

OTHERS

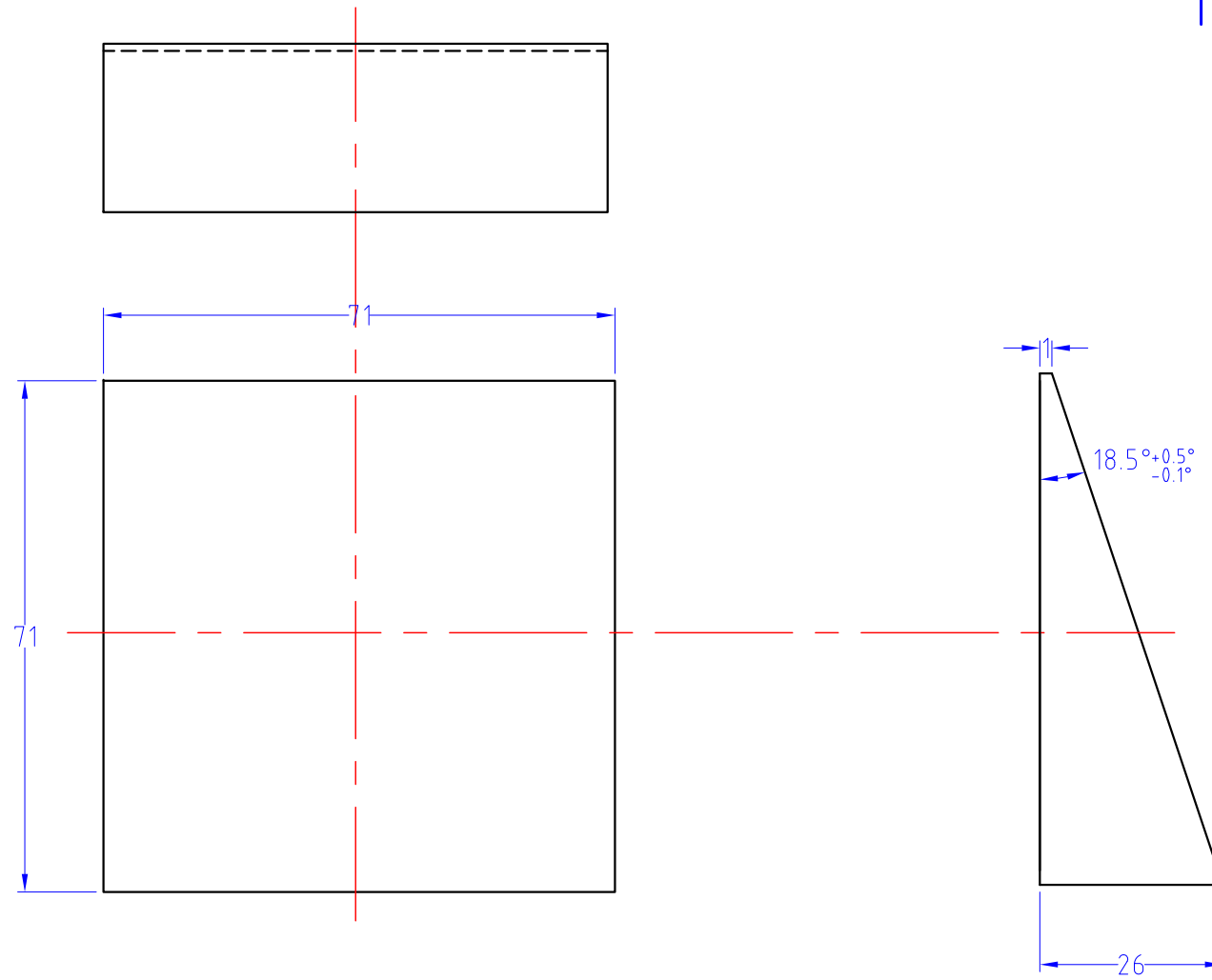
Quantity: 2
Required literature upon delivery: Measured dimensions at 20 $^\circ\text{C}$ (0.1mm,0.1 $^\circ$ accuracy)

COATING (SHADED AREA)



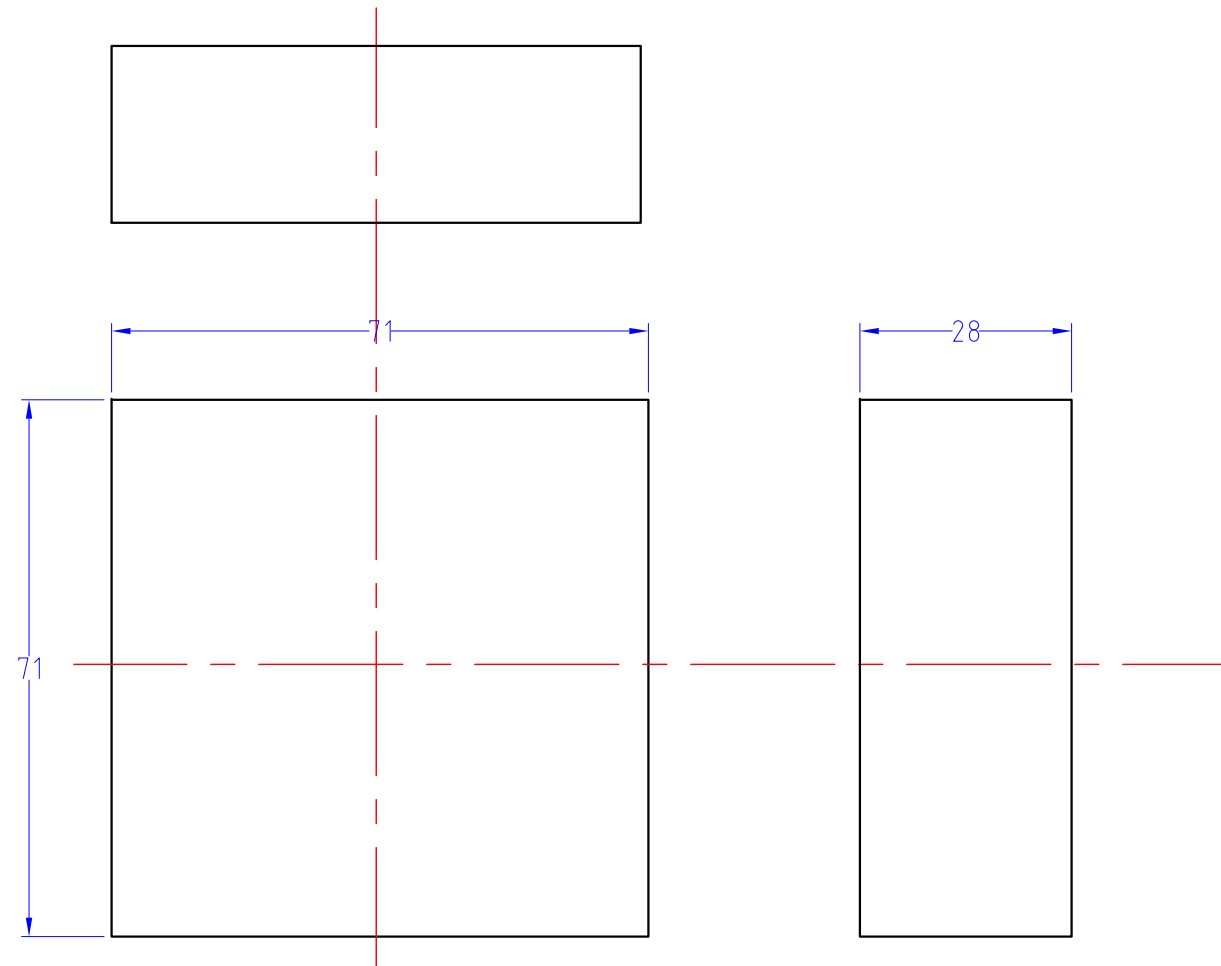
 TOLERANCE UNLESS OTHERWISE NOTED .X +/- .1 .XX +/- .01 L +/- .5	TITLE ZnSe PRISM (w/COATING)	ORGANIZATION ASTRONOMICAL INSTITUTE, TOHOKU UNIVERSITY
	MATERIAL ZnSe	DESIGN CHIHIRO TOKOKU
	DIMENSIONS mm	REVISED DATE 4/14/2009
	QUANTITY 2	DRAWING SIZE A3


NO POLISH,
NO COATING



 TOLERANCE UNLESS OTHERWISE NOTED .X +/- .1 .XX +/- .01 ∠ +/- .5	TITLE ZnSe PRISM (wo/POLISH,COATING)	ORGANIZATION ASTRONOMICAL INSTITUTE, TOHOKU UNIVERSITY
	MATERIAL ZnSe	DESIGN CHIHIRO TOKOKU
	DIMENSIONS mm	REVISED DATE 4/14/2009
	QUANTITY 2	DRAWING SIZE A3

ZnSe BLANK
NO POLISH,
NO COATING



 TOLERANCE UNLESS OTHERWISE NOTED .X +/- .1 .XX +/- .01 ∠ +/- .5	TITLE	ZnSe BLANK	ORGANIZATION	ASTRONOMICAL INSTITUTE, TOHOKU UNIVERSITY	
	MATERIAL	ZnSe	DESIGN	CHIIRO TOKOKU	
	DIMENSIONS	mm	REVISED DATE	4/14/2009	
	QUANTITY	1	DRAWING SIZE	A3	SCALE