

observation table

S.No	$h_1$ (mm)	$h_2$ (mm)	$(h_2 - h_1)$	Angle (°)
1.	0	29.75	29.75	5° 69"
2.	3	33.25	30.25	5° 48"
3.	4	30	26	4° 47"
4.	5	29.25	24.25	4° 63"
Average				5° 26"

calculation:

$$l = 300 \text{ mm}$$

$$\theta = \sin^{-1} \left[ \frac{h_2 - h_1}{l} \right]$$

$$= \sin^{-1} \left[ \frac{29.75}{300} \right]$$

$$= 5^\circ 69''$$