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**New Folder Name** Coating Thickness

Data T950067

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UGO-T950067-00-D



Research Electro-Optics Inc.

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FROM:

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30 Aug 95

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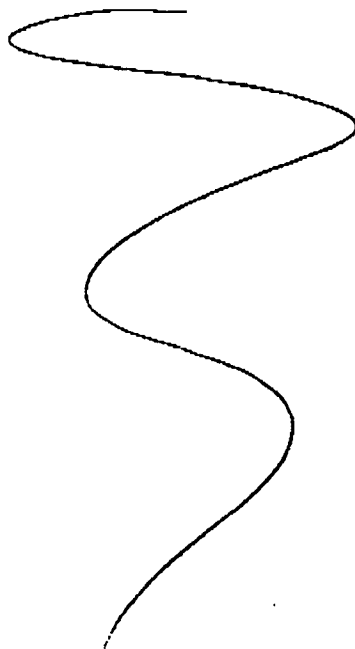
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Here's the latest data, gathered using a micrometer translation stage equipped with a 1mm dia. aperture. The %RMS error of 0.013% was not corrected for power. I repeated my measurements at 1.8, 2.2, 2.6, 3.0, and 3.5 cm. The repeatability of this method, for a given slide, is excellent. I'm now working on the issue of slide to slide repeatability.

Regards,

Dale C Nest

Thin Films Coating Dept. REO.



22-141 50 SHEETS  
22-142 100 SHEETS  
22-144 200 SHEETS



Double rotation data using mask32

ox65a.mcd  
30 Aug 95

j := 0, 1..14

$R_j :=$	$A_j :=$	$Err_j :=$
1.4	428.020	0.005
1.6	428.00	0.01
1.8	427.99	0.01
1.8	427.995	0.005
2.0	427.98	0.01
2.2	427.970	0.005
2.2	427.97	0.01
2.4	427.965	0.005
2.6	427.935	0.005
2.6	427.930	0.005
2.8	427.910	0.005
3.0	427.89	0.01
3.0	427.895	0.005
3.2	427.86	0.01
3.5	427.82	0.01
3.5	427.81	0.01

$$A_v := \frac{1}{\text{length}(A)} \sum_j A_j \quad A_v = 427.942$$

$$a_j := \frac{A_j}{A_v} \quad err_j := \frac{Err_j}{A_v}$$

$$RMSError := \left[ \frac{1}{\text{length}(A)} \sum_j [(a_j - 1)^2] \right]^{\frac{1}{2}}$$

RMSError = 0.013 %

**Relative coating thickness as a function of radius, Zr coating on glass slide**

