

## Alflex™ - Aluminum Mirror

### High Reflective Aluminum Mirror

Our Alflex™ product line incorporates a broadband and color optimized narrow band, highreflectivity aluminum-coated mirror offering unprecedented performance and durability. Increased lifetime requirements of RPTV were a key feature for the newly developed Alflex™. Aluminum coating is a confident choice for LCD and LCOS projectors where the high reflectivity over the whole visible spectrum is not required.



#### Benefits

- Best cost performance
- Reasonable light output for optical systems
- Excellent environmental stability
- Temp resistance up to 200°C
- Increased lifetime for RPTV applications
- Can be customized for AOI, color bands, polarization
- Neutral color
- ROHS

#### Applications

Ocean Thin Films Alflex™ are designed to optimize the cost performance of optical systems.

#### Technical Data

##### Reflectivity

Alflex™ 45B	Ravg. ≥ 96%	420-500nm (q.pol)
Alflex™ 45B	Ravg. ≥ 98%	420-500nm (s.pol)
Alflex™ 45B	Ravg. ≥ 96%	420-500nm (p.pol)
Alflex™ 45G	Ravg. ≥ 96%	480-600nm (q.pol)
Alflex™ 45G	Ravg. ≥ 98%	480-600nm (s.pol)
Alflex™ 45G	Ravg. ≥ 95%	480-600nm (p.pol)
Alflex™ 45R	Ravg. ≥ 96%	560-670nm (q.pol)
Alflex™ 45R	Ravg. ≥ 98%	560-670nm (s.pol)
Alflex™ 45R	Ravg. ≥ 95%	560-670nm (p.pol)
Alflex™ 45RGB	Ravg. ≥ 92%	430-670nm (q.pol)
Alflex™ 45RGB	Ravg. ≥ 96%	430-670nm (s.pol)
Alflex™ 45RGB	Ravg. ≥ 90%	430-670nm (p.pol)

Typical cosmetic specification based on ISO-norm  
[size 30.0 x 30.0 nm]: 5/3 x 0.25; R1.0

##### Dimensions

Customized size & shape available

##### Substrate type

Borosilicate, other substrates on request

##### Operating temperature

200°C max

##### Environmental reliability testing Temperature

(MIL-M-13508 C, para. 4.4.4)  
5 h each at - 62°C and +71°C.

##### Hardness

(MIL-M-13508 C, para. 4.4.5)  
50 strokes with cheesecloth

##### Adherence

(MIL-M-13508 C, para. 4.4.6)  
Scotch tape test

##### Humidity

(MIL-M-13508 C, para. 4.4.7)  
24 h at 49°C at r.h. 95%

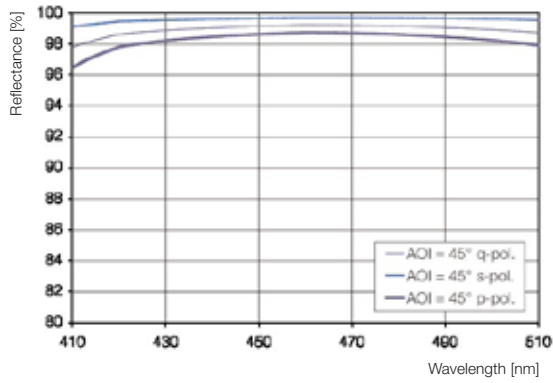
##### Salt fog

(MIL-M-13508 C, para. 4.4.8)  
24 h salt spray 4.5% NaCl

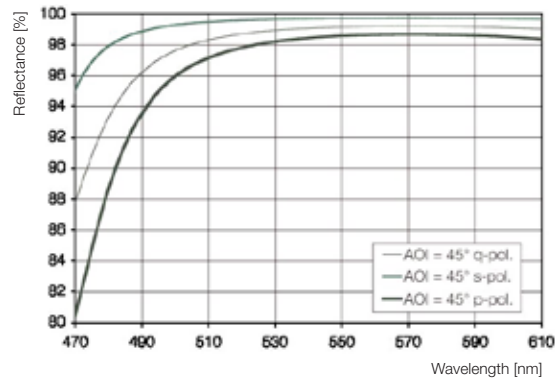
##### ROHS compliant

Typical spectral characteristics of Alflex™

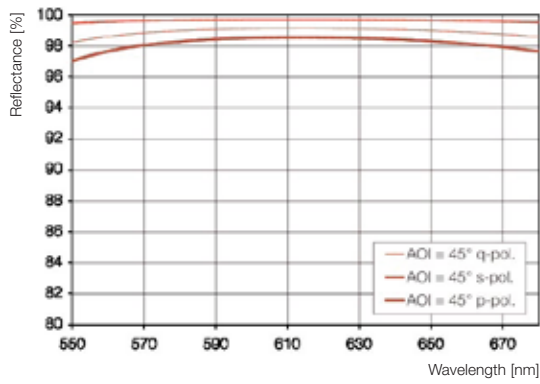
**Alflex™ mirror narrowband blue** AOI = 45°, q-, s-, p-pol



**Alflex™ mirror narrowband green** AOI = 45°, q-, s-, p-pol



**Alflex™ mirror narrowband red** AOI = 45°, q-, s-, p-pol



**Alflex™ mirror broadband** AOI = 45°, q-, s-, p-pol

