

Single Layer AR Coatings (AR Coatings)

The thickness of these coatings is an odd number of $1/4$ wavelengths in order to achieve the correct phase for cancellation. In order to improve the effect if its use, it is very important to make the suitable index of the glass and wavelength. This kind of the coatings work very well over a wide range of wavelengths and angles of incidence. In fact, the single layer of this kind is most suitable to transmit the steep surfaces, where most rays are incident at large angles.

Magnesium fluoride is probably the most widely used thin film material for optical coatings. Its performance is not outstanding but represents a significant improvement over an uncoated surface. Because its index is too high to provide a good impedance match at the air-glass interface.

Specifications:

- Reflectance: $R < 1.5\%$ @540nm, $R_{avg} < 2\%$ @400~700nm
- Durability: Meets MIL-C-675C
- Angle of Incidence: 0 degree



Specifications:

- Reflectance: $R < 2.0\%$ @540nm, $R_{avg} < 3.0\%$ @400~700nm
- Durability: Meets MIL-C-675C
- Angle of Incidence: 45 degree

