

3M™ Advanced Light Control Film (ALCF-P ABRO)

Description

3M™ Advanced Light Control Film (ALCF-P ABRO) uses 3M microlouver technology to provide light transmission blockage at specific viewing angles.

Applications

3M Advanced Light Control Film (ALCF-P ABRO) is a product which restricts visibility of a display at wide angles by limiting the angle at which light may pass through the filter, enabling privacy to the user.

3M Advanced Light Control Film (ALCF-P ABRO) is not hard coated and is best suited to internal display application or applications where there is another surface protecting this film from scratches and damage.

Privacy Effectiveness

3M Advanced Light Control Film (ALCF-P ABRO) uses 3M's microlouver technology to provide light transmission blockage at angles greater than 30° for observers to the sides of the user.

Materials

Made in the USA with Globally Sourced Materials
Outer Substrates: Polycarbonate (non-hardcoated)
Louver Layer: Acrylic Resin and Carbon Black



Typical Properties

Technical information provided consists of typical product data and should not be used for specification purposes. Unless otherwise noted, all tests are performed at room temperature.

Property	Typical Value
Viewing Angle	60 degrees
Thickness	0.530 mm
Transmission	68.9%
Haze	4.2%
Clarity	92.3%

Environmental Testing	Condition
Heat Resistance	85°C for 500 hours
Cold Resistance	-40°C for 500 hours
Humidity Resistance	65°C, 95% RH for 500 hours
Thermal Shock	-40°C for 1 hour to 85°C for 1 hour, 100 cycles

Metric After Environmental	Typical Value
Appearance	No significant change between previous and post environmental testing

Shelf Life and Storage (prior to application)

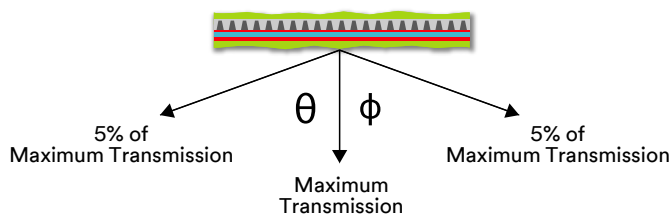
Material should be stored in its original packaging, laying in a horizontal orientation, away from direct sunlight. Heavy objects should not be placed on top of it to avoid damaging the product. Ambient temperature and humidity should be controlled to 10-30°C at 35-65% relative humidity.

Availability

For availability, please contact our customer service group at 1.800.553.9215, DMSDcustomerservice@mmm.com, or visit our web site at 3mscreens.com.

Viewing Angle Definition

- Viewing Angle – The sum of the angles (θ and ϕ), measured from the angle of maximum transmission, at which only 5% of the maximum transmission is transmitted through the film.



Product Features

- Microlouver technology delivers world-class effective “black out” privacy from side views outside the 60-degree viewing angle
- Reduces 35% of blue light transmission from the display
- Provides touch compatibility on some devices
- Designed with advanced microlouver technology, creating an excellent high-resolution viewing experience

Protective Liners

3M Advanced Light Control Film (ALCF-P ABRO) sheets have protective liners on both sides of the privacy film to protect during shipping, handling, or laminating.



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