

Display Protection Films Cross Reference

Data Summary Sheet

APRIL 2015

Description: 3M™ Display Protection Films use 3M's advanced coating technology to provide increased screen readability and durable protection with a residue-free, self-wetting adhesive for application on electronic displays.

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.

	Attribute	Glossy Protection Film	ARMR220	Glossy LR	AGF6200
Features	Removable/replaceable	✓✓✓✓	✓✓✓	✓✓✓	✓✓✓
	LCD Protection	✓✓✓✓	✓✓✓	✓✓✓	✓✓✓✓
	Reflection Reduction		✓✓✓✓	✓✓✓	✓✓
	Anti-glare		✓✓✓✓		✓✓✓✓
	High Clarity	✓✓✓✓	✓✓	✓✓✓✓	✓✓
	Easy to clean	✓✓✓✓	✓✓✓✓	✓✓✓✓	
	Non-conductive	✓✓✓✓	✓✓✓✓	✓✓✓✓	✓✓✓✓
Physical Specs	Thickness (mm)	0.155	0.155	0.130	0.155
	Abrasion (Steel wool, 3M TM-095)	250 g/cm ² , 20 rubs, Light scratching	25 g/cm ² , 10 rubs, Light scratching	50 g/cm ² , 10 rubs, Light scratching	125 g/cm ² , 20 rubs, Light scratching
	Pencil Hardness ASTM D3363-05	4H (500 g)	3H (500 g)	3H (200 g)	3H (500 g)
	Disinfectant Cleaning	3M™ Neutral Quat Disinfectant Cleaner 23H and 23L, 3M™ Quat Disinfectant Cleaner 5H and 5L, 3M™ Phenolic Disinfectant cleaner 18H and 18L, Clorox™ Germicidal Wipes, Ecolab® Virasept™ Ready-to-Use, Diversey™ Oxiver® Tb Wipes, Metrex CaviWipes™, PDI Super Sani-Cloth(R) Germicidal Disposable			
	Chemical Resistance	Bleach, MEK, IPA, Acetone, Window Cleaner, Motor Oil, Cola, Coffee, water insoluble marker, water			
Optical Specs	Reflection	Not Applicable	1.50%	1.90%	Not Applicable
	Transmission	92%	96%	96%	94%
	Haze	2.00%	2.50%	0.60%	20%
	Clarity	≥ 99.0%	80%	≥ 99.9%	40%

Applications: 3M Display Protection Films are typically used to provide display protection and viewing enhancement for electronic displays, especially in environments where bright light conditions can disrupt display readability.

Protection film options include a combination anti-reflection/anti-glare protection film to enhance the viewing experience by reducing ambient light reflection on a display as well as diffusing mirror-like reflections, a low reflection gloss protection film to reduce screen reflections while retaining the high clarity of a gloss display, and higher durability gloss protection film for maximum protection while retaining the high clarity of a gloss display. By providing a durable hardcoat barrier between the display surface and the user or environment, all DSP films help to protect against scratches and damage to the display. The residue-free adhesive technology gives an easy-to-apply and easy-to-remove application experience for the user.

ARMR220

ARMR220 is the lowest reflection option and includes an anti-glare (AG) matte surface to diffuse specular reflections of bright light sources

- Applications using a mounted display where the user cannot easily move the display to avoid direct reflection from bright sources
- Applications where the display is used in bright ambient conditions

Glossy Low Reflection

Glossy Low Reflection reduces display reflection by about half while retaining the clarity of a high gloss display

- Applications where the user can easily move the display to avoid direct reflection from bright sources
- Applications where the display is used in bright ambient conditions
- Applications where a high gloss front surface is needed to retain the maximum sharpness of the display

Glossy Protection Film

Glossy Protection Film trades off reflection performance for increased pencil hardness and abrasion resistance

- Applications where the user can easily move the display to avoid direct reflection from bright sources
- Applications where a high gloss front surface is needed to retain the maximum sharpness of the display
- Applications where the front display surface is expected to see a lot of wear and tear and contact with the outside world

AGF6200

Anti-Glare Film 6200 eliminates distracting mirror-like images in high ambient light conditions

- Applications where the user cannot easily move the display to avoid direct reflection from bright sources
- Applications where the front display surface is expected to see a lot of wear and tear and contact with the outside world

Shelf Life & Storage (prior to application):

Material should be stored in its original packaging, lying 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 30 – 60% relative humidity.

Availability:

For availability, please contact our customer service group at 1-800-553-9215 or visit our website at www.3m.com/displayenhancement

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The following is made in lieu of all warranties, express or implied, including any implied warranties of merchantability or fitness for a particular purpose. 3M warrants that, at the time of shipment, product will meet 3M's published specification or that specification agreed in writing between 3M and purchaser. Should product not meet specifications at time of shipment, 3M will replace or refund the purchase price of such quantity of the product found not to meet specifications. Purchaser shall determine the suitability of the 3M Product for purchaser's application. **3M shall not be liable under any legal theory, including in contract or in tort, for any injury, loss, or damage, whether direct, indirect, incidental, special or consequential, arising out of the use of or the inability to use the product.**

The warranties and remedies set forth herein are purchaser's sole and exclusive warranties and remedies.



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Revised 04-02-15
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