

3M™ Dual Brightness Enhancement Films (DBEF)

- DBEF-D2-280 Auto
- DBEF-D2-400 Auto
- ARP-260
- ARP-320



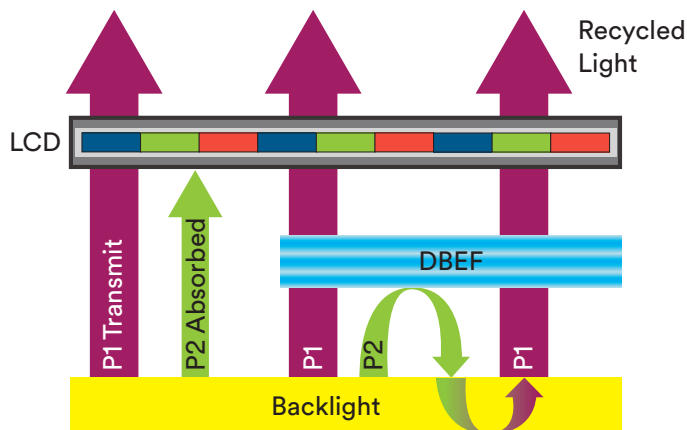
Product Description

3M™ Dual Brightness Enhancement Films (DBEF) manage the polarization output of light from liquid crystal display backlights. 3M DBEF recycles light that would normally be absorbed by the rear polarizer. This increases the amount of light available for viewing the display.

Construction/Performance

Product	3M DBEF-D2-280 Auto	3M DBEF-D2-400 Auto	3M ARP-260	3M ARP-320
Effective Transmission	1.6	1.6	1.6	1.66
Caliper (microns)	280 +/- 40	390 +/- 40	255 +/- 40	320 +/- 40
Haze (%)	75.5 +/- 10	79.5 +/- 10	79.5 +/- 10	41.5 +/- 10
Outer Skins	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate

Polarization Recycling



Automotive Environmental Testing

	Condition	Time
High Temperature	95°C	1000 hours
High Temperature – ARP	105°C	1000 hours
Low Temperature	-40°C	1000 hours
Temperature/ Humidity	65°C/90%RH	1000 hours
Thermal Shock	-40°C to 95°C	1 hour dwell/ 100 cycles
Thermal Shock – ARP	-40°C to 95°C	1 hour dwell/ 300 cycles

Automotive Display – Recommended Solutions

Partial Instrument Cluster	Full Instrument Cluster	Center Stack
High Axial Brightness	High Efficiency	Minimal Windscreen Reflection
Axial Luminance = 974 nits Gain = 2.8	Axial Luminance = 836 nits Gain = 2.4	Axial Luminance = 706 nits Gain = 2.1

Technical Information

The technical information, recommendations and other statements contained in this document are based on tests or experience 3M believes reliable, but the accuracy or completeness of such information is not guaranteed.

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