

3M™ Brightness Enhancement Films

(3M™ BEF)

- BEF2-T-155n Auto
- BEF3-T-155n Auto
- BEF3-T-205 ASn Auto
- AEF-155



Product Description

3M™ Brightness Enhancement Films (BEF) manage the angular output of light from liquid crystal display backlights. 3M BEF films use a prismatic structure to focus light towards on-axis viewers of the display. 3M BEF films can be used alone or two films can be crossed at 90 degrees to each other.

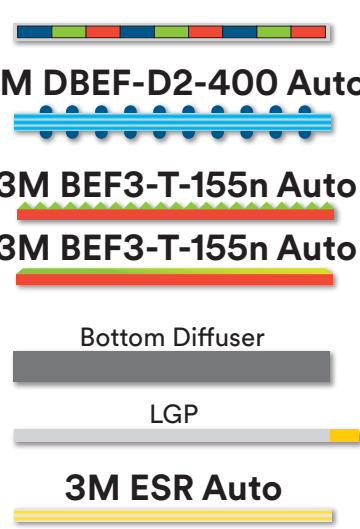
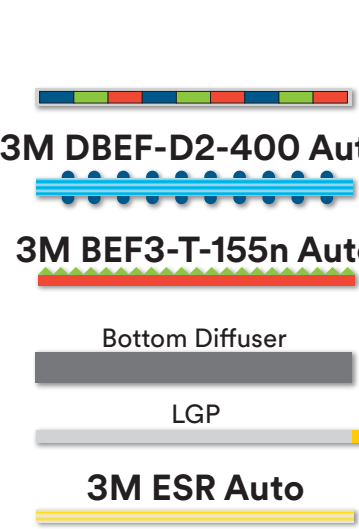
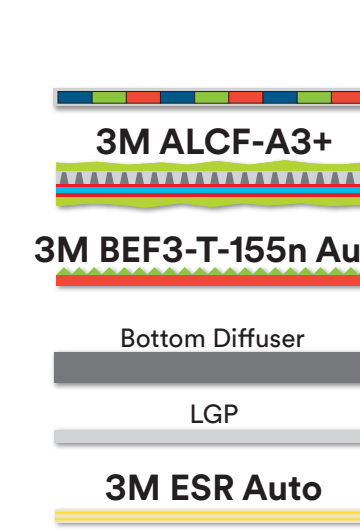
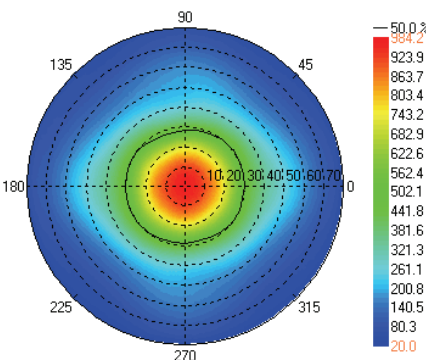
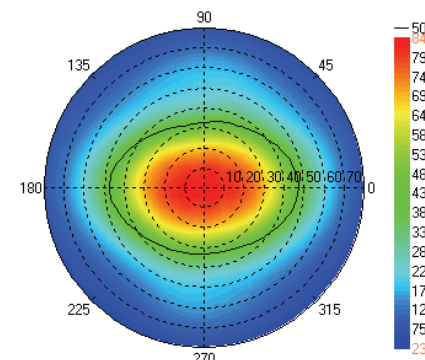
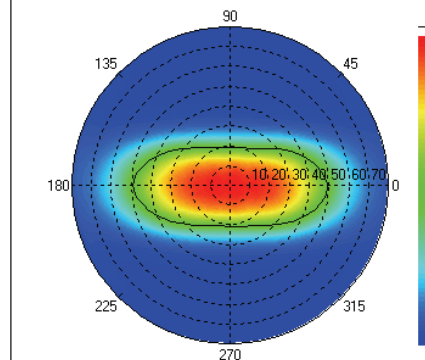
Construction/Performance

Product	3M BEF2-T-155n Auto	3M BEF3-T-155n Auto	3M BEF3-T-205 ASn Auto	3M AEF-155
Effective Transmission	1.56	1.53	1.5	1.6
Caliper (microns)	150 ± 10	155 ± 10	205 ± 15	152 ± 10
Prism Angle (degrees)	90	90	90	90
Prism Pitch (microns)	50	50	50	50
Non-halogenated	Yes	Yes	Yes	Yes

Automotive Environmental Testing

	Condition	Time
High Temperature	95°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

Automotive Display – Recommended Solutions

Partial Instrument Cluster	Full Instrument Cluster	Center Stack
High Axial Brightness	High Efficiency	Minimal Windscreen Reflection
 <p>3M DBEF-D2-400 Auto</p> <p>3M BEF3-T-155n Auto</p> <p>3M BEF3-T-155n Auto</p> <p>Bottom Diffuser</p> <p>LGP</p> <p>3M ESR Auto</p>	 <p>3M DBEF-D2-400 Auto</p> <p>3M BEF3-T-155n Auto</p> <p>Bottom Diffuser</p> <p>LGP</p> <p>3M ESR Auto</p>	 <p>3M ALCF-A3+</p> <p>3M BEF3-T-155n Auto</p> <p>Bottom Diffuser</p> <p>LGP</p> <p>3M ESR Auto</p>
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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