

3M Display Materials & Systems Division

Technical Data 2021

3M[™] Enhanced Specular Reflector Films (3M[™] ESR)

- 3M[™] ESR 65
- 3M[™] ESR 80v2

Product Description

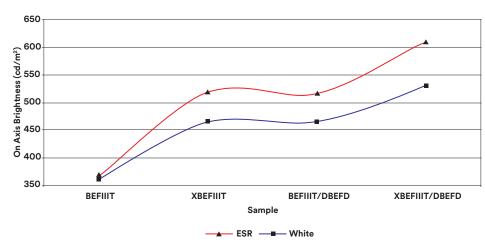
3M[™] Enhanced Specular Reflector Films (ESR) maximize the recycling efficiency of liquid crystal display backlights. 3M[™] ESR is >98% reflective across the visible spectrum and contains no metal.

Construction/Performance

Product	3M™ ESR 65	3M™ ESR 80v2
Reflectivity (minimum)	98%	98%
Caliper (microns)	65 +/- 4	82 +/- 4
Halogen Free	No	Yes

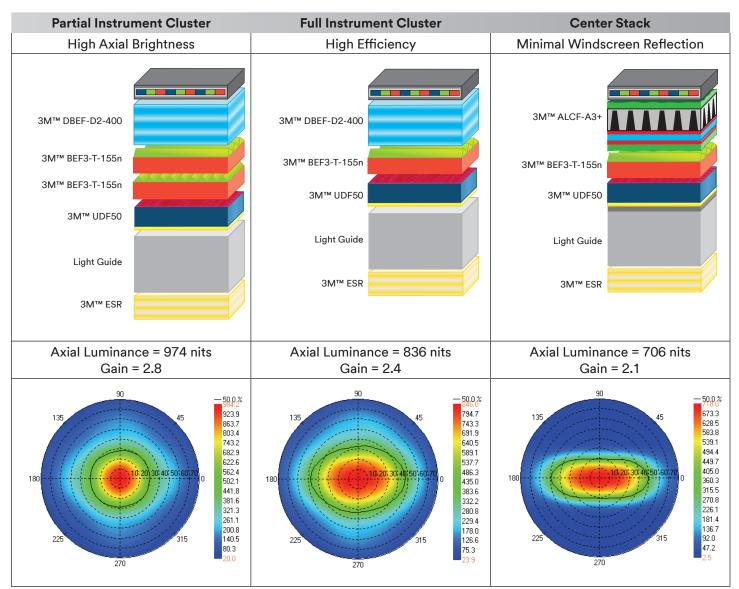


Backlight Efficiency



Reflector Impact Comparison

Display – Recommended Solutions



	Condition	Time
High Temperature	85°C	1000 hours
Low temperature	-40°C	1000 hours
Temperature/ Humidity	65°C/95%RH	1000 hours
Thermal Shock	-40°C to 85°C	1 hour dwell/ 100 cycles

Environmental Testing

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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