

3M Display Materials & Systems Division

Technical Data 2016

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

- ESR 65 Auto
- ESR 80v2 Auto

Product Description

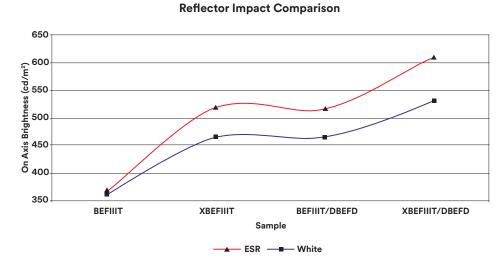
3M[™] Enhanced Specular Reflector Films (ESR) maximize the recycling efficiency of liquid crystal display backlights. ESR is >98% reflective across the visible spectrum and contains no metal.

Construction/Performance

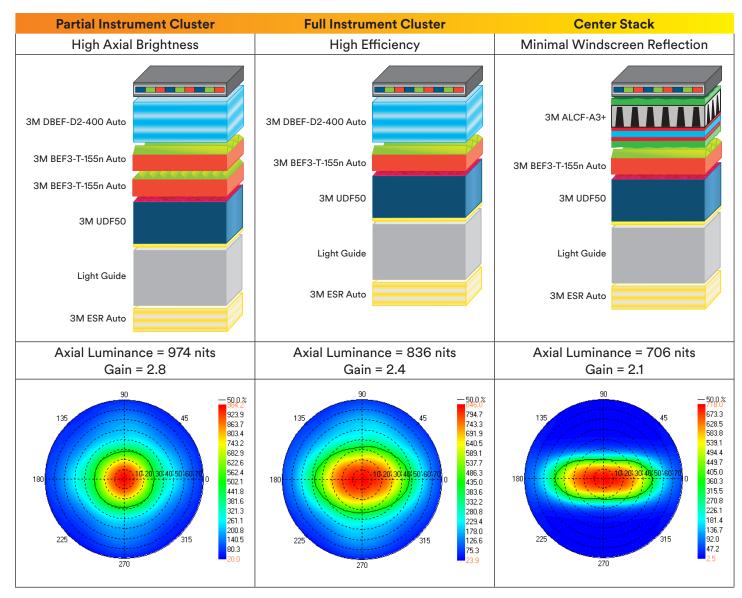
| Product | ESR 65 Auto | ESR 80v2 Auto |
|---------------------------|-------------|---------------|
| Reflectivity (minimum) | 98% | 98% |
| Caliper (microns) | 65 +/- 4 | 82 +/- 4 |
| Halogen Free | No | Yes |



Backlight Efficiency



Automotive Display – Recommended Solutions



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 |

Technical Information

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| | dZ | Printed Colors – Front: |
|------------------------|----------------------------------|--|
| Requester: Creator: | Kristin Wincek deZinnia 19957 | Printed Colors – Back: |
| File Name: | dz19957_TechDataSheet_ESR.indd | |
| Structure #: | N/A | Match Colors: |
| Date: | 03/14/16 | |
| Scale: - | +++++++ 1 Inch | This artwork has been created as requested by 3M. 3M is responsible for the artwork AS APPROVED and assumes full responsibility for its correctness. |