

# EmiClare Sigma

**EmiClare** is a range of EMI shielded windows designed by Optical filters for optimum optical performance without sacrificing EMI shielding performance.

**Sigma** is the standard EmiClare polycarbonate window which offers a cost effective solution with short delivery times.

## Product format

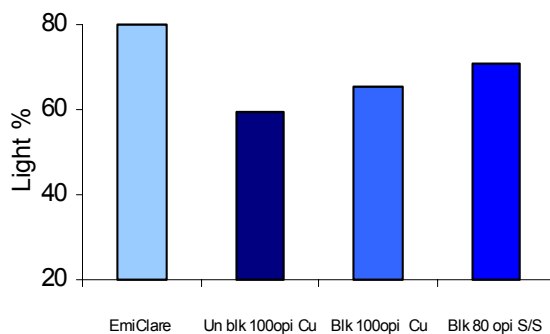
EmiClare Sigma is a fully laminated polycarbonate window with EmiClare EMI shielding. Manufactured in large sheets, EmiClare Sigma is available in a range of standard thicknesses. The front surface is either a non-glare or clear hard coating and the rear surface is clear hard coated. It is available in sheets or as finished parts terminated with a silver busbar

## Substrate Properties

- Optical grade polycarbonate.
- High impact resistance.
- UL94 HB flammability rating.
- High clarity non-glare or hard coated clear gloss front surface finish.
- Hard coated clear gloss rear surface.
- Chemical resistance to DIN 42 115.
- 3H pencil hardness scratch resistance.

## Optical properties

EmiClare mesh provides higher brightness of image.



Actual light transmissions of the fully laminated window at 500-550nm are:

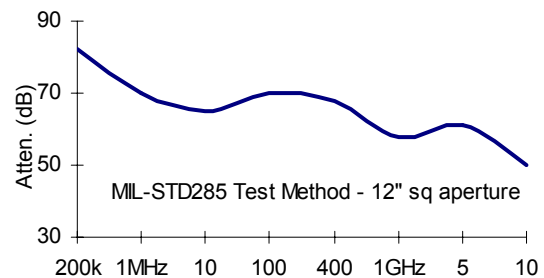
- 65-68% Non glare front surface finish.
- 66-70% Clear gloss finish both sides.

## Quality

EmiClare Sigma windows are manufactured in Optical filters ISO9001 approved facility and inspected to the Optical Inspection Standard OIS/4.

## Shielding effectiveness

This graph is a guide to the typical shielding effectiveness of EmiClare mesh.



## Termination

EmiClare Sigma windows are CNC machined to size with either a stepped or square edge profile. A silver painted busbar is used to terminate the mesh in a 'L' or 'C' shape cross-section, this has 5-10db reduction in shielding compared with direct contact to the mesh. Windows can be supplied with additional conductive gaskets, environmental seals and tapes.

*# Please refer to EmiClare Sigma Technical Guide for details on steps and busbar widths.*

## Product Range

Sheet Size:

- 500 x 660mm (nominal usable area).

Standard Thickness :

- 1.5, 2.0, 2.5, 3.0 and 4mm (+/-0.2mm)

*# Please refer to EmiClare Sigma XL for large panel products .*

Finish:

- Non-glare or clear gloss hard coating.

*# EmiClare Ultra are custom built windows using EmiClare mesh, available in glass or polycarbonate with options including extended mesh and sunlight readability filter.*

## Service

- Sheets ex-stock
- Finished window lead times from 5-10 working days.

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