



Automotive Window Film Selector Guide

LX Series



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1/4" Clear Glass

% Visible light transmittance	89
% Visible light transmittance @ 550nm	89
% Visible light reflectance out	9
% Ultraviolet (UVA/UVB) rejected	34
Sun protection factor (SPF) (All Solar Gard® films offer 285+ SPF)	14
% Total solar energy rejected	18
% Infrared energy rejected (IRER) (1 - SHGC 780 to 2500 nm)	23
% Selective Infrared rejected (SIRR) (1 - average transmittance 780 to 2500 nm)	28



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LX 80

Featuring all the benefits of a spectrally selective film, the Solar Gard® LX Series provides unsurpassed solar control and interior comfort. Offered in shades from virtually undetectable – maintaining the natural appearance of factory-tinted side windows and panoramic sunroofs – to darker options for added privacy, the LX Series also boasts industry-leading optical clarity and protection against damaging UV rays.

% Visible light transmittance	79
% Visible light transmittance @ 550nm	80
% Visible light reflectance out	9
% Ultraviolet (UVA/UVB) rejected	>99
Sun protection factor (SPF) (All Solar Gard® films offer 285+ SPF)	285+
% Total solar energy rejected	41
% Infrared energy rejected (IRER) (1 - SHGC 780 to 2500 nm)	58
% Selective Infrared rejected (SIRR) (1 - average transmittance 780 to 2500 nm)	82



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LX 70

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% Visible light transmittance	71
% Visible light transmittance @ 550nm	74
% Visible light reflectance out	9
% Ultraviolet (UVA/UVB) rejected	>99
Sun protection factor (SPF) (All Solar Gard® films offer 285+ SPF)	285+
% Total solar energy rejected	54
% Infrared energy rejected (IRER) (1 - SHGC 780 to 2500 nm)	78
% Selective Infrared rejected (SIRR) (1 - average transmittance 780 to 2500 nm)	96





LX 55

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% Visible light transmittance	58
% Visible light transmittance @ 550nm	57
% Visible light reflectance out	8
% Ultraviolet (UVA/UVB) rejected	>99
Sun protection factor (SPF) (All Solar Gard® films offer 285+ SPF)	285+
% Total solar energy rejected	54
% Infrared energy rejected (IRER) (1 - SHGC 780 to 2500 nm)	74
% Selective Infrared rejected (SIRR) (1 - average transmittance 780 to 2500 nm)	95





LX 40

Featuring all the benefits of a spectrally selective film, the Solar Gard® LX Series provides unsurpassed solar control and interior comfort. Offered in shades from virtually undetectable – maintaining the natural appearance of factory-tinted side windows and panoramic sunroofs – to darker options for added privacy, the LX Series also boasts industry-leading optical clarity and protection against damaging UV rays.

% Visible light transmittance	41
% Visible light transmittance @ 550nm	39
% Visible light reflectance out	6
% Ultraviolet (UVA/UVB) rejected	>99
Sun protection factor (SPF) (All Solar Gard® films offer 285+ SPF)	285+
% Total solar energy rejected	59
% Infrared energy rejected (IRER) (1 - SHGC 780 to 2500 nm)	75
% Selective Infrared rejected (SIRR) (1 - average transmittance 780 to 2500 nm)	95





LX 25

Featuring all the benefits of a spectrally selective film, the Solar Gard® LX Series provides unsurpassed solar control and interior comfort. Offered in shades from virtually undetectable – maintaining the natural appearance of factory-tinted side windows and panoramic sunroofs – to darker options for added privacy, the LX Series also boasts industry-leading optical clarity and protection against damaging UV rays.

% Visible light transmittance	23
% Visible light transmittance @ 550nm	20
% Visible light reflectance out	6
% Ultraviolet (UVA/UVB) rejected	>99
Sun protection factor (SPF) (All Solar Gard® films offer 285+ SPF)	285+
% Total solar energy rejected	64
% Infrared energy rejected (IRER) (1 - SHGC 780 to 2500 nm)	74
% Selective Infrared rejected (SIRR) (1 - average transmittance 780 to 2500 nm)	96





SOLAR GARD® AUTOMOTIVE WINDOW FILMS

SOLAR ENERGY TECHNICAL DEFINITIONS

VISIBLE LIGHT TRANSMITTANCE (VLT)

The percent of total visible light that is transmitted through the window film/glass system. The lower the number, the less visible light transmitted.

VISIBLE LIGHT TRANSMITTANCE @ 550 nm

The percent of visible light at 550 nanometers that is transmitted through the window film/glass system. The lower the number, the less visible light transmitted. This is provided because portable light meters have a peak response at 550 nanometers which can be different than the entire spectrum.

VISIBLE LIGHT REFLECTANCE

The percent of total visible light that is reflected by the window film/glass system. The lower the number, the less visible light reflected.

ULTRAVIOLET LIGHT BLOCKED

The percent of invisible light blocked between 300 nm and 380 nm. The higher the number, the more ultraviolet light blocked. This light is a primary cause of skin cancer, fading and discoloration of furnishings, and materials. Solar Gard window films block more than 99% of both UVA and UVB.

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SOLAR GARD® AUTOMOTIVE WINDOW FILMS

SOLAR ENERGY TECHNICAL DEFINITIONS *(continued)*

SUN PROTECTION FACTOR (SPF)

The SPF rating is a measure of the protection from ultraviolet radiation caused by exposure to the sun. It is calculated by comparing the amount of time needed to produce a sunburn on protected skin to the amount of time needed to cause a sunburn on unprotected skin.

TOTAL SOLAR ENERGY REJECTED (TSER)

The percent of total solar energy that is directly reflected and absorbed and radiated outwards. The higher the number, the more total solar energy is rejected. Calculated as $1 - \text{SHGC}$ (Solar Heat Gain Coefficient).

INFRARED ENERGY REJECTION (IRER)

The percent of infrared energy (780 nm to 2500 nm) that is directly reflected and absorbed and radiated outwards. Calculated as $1 - \text{SHGC}$ (780 nm to 2,500 nm) using Lawrence Berkeley National Laboratory (LBNL) Window software and NFRC 200 solar spectrum from 780 nm to 2500 nm. The higher the number the more infrared energy is reflected and absorbed and released outwards.

SELECTIVE INFRARED REJECTION (SIRR)

Calculated as $1 - \text{average unweighted transmittance from 780 nm to 2,500 nm}$ using ASTM E 903. The higher the number the less infrared directly transmitted. This value is often misleading because radiated absorbed heat is not considered a source of heat gain.





SOLAR GARD® AUTOMOTIVE WINDOW FILMS

PERFORMANCE NOTES

Performance results were generated with LBNL Windows 7 using 1/4" (6mm) clear glass and have been measured, calculated and reported in accordance with NFRC, ASTM, ASHRAE and AIMCAL standards. Solar Gard® is a participating member of AIMCAL and the IWFA.

Performance results are subject to variations within industry standards and should be used for comparative purposes only. Important: Solar Gard is not responsible for automotive window film installation compliance with the laws of your state, or the laws of any other state where the vehicle may be utilized. You must therefore determine whether such window film is in compliance with any such laws. Do not install any window film product in violation of any law.





What matters most to you...
We're On It!

Saint-Gobain Solar Gard
4540 Viewridge Avenue
San Diego, CA 92123
Tel: 877-273-4364
E-mail: solargardinfo@saint-gobain.com

SK0306LX 09/17
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