



Automotive Window Film Selector Guide

# XENITH IR™

CERAMIC FILM SERIES







# 1/4" Clear Glass

% Visible light transmittance	89
% Total solar energy rejected	18
% Ultraviolet blocked (300 to 380 nanometers)	34
% Infrared energy rejected (IRER)	23
% Selective infrared rejection (SIRR)	22
% Glare reduction	N/A
% Visible light reflectance	9



# XenithIR™ 15

Through a proprietary technology that leverages the most advanced ceramic materials available today, the new XenithIR™ line introduces Solar Gard's coolest interior temperature yet, clear transmission of cellular and other data signals, and a true black hue that enhances the look of every vehicle exterior. Additionally, XenithIR blocks more than 99% of harmful UV rays to shield passengers from skin damage and high-end interior furnishings from premature fading.

% Visible light transmittance	15
% Visible light transmittance applied to auto glass	13
% Total solar energy rejected	63
% Total solar energy rejected applied to auto glass	65
% Ultraviolet blocked (300 to 380 nanometers)	>99
% Infrared energy rejected (IRER)	65
% Selective infrared rejection (SIRR)	93
% Glare reduction	83
% Visible light reflectance	5
Sun Protection Factor	285+

# XenithIR™ 30

Through a proprietary technology that leverages the most advanced ceramic materials available today, the new XenithIR™ line introduces Solar Gard's coolest interior temperature yet, clear transmission of cellular and other data signals, and a true black hue that enhances the look of every vehicle exterior. Additionally, XenithIR blocks more than 99% of harmful UV rays to shield passengers from skin damage and high-end interior furnishings from premature fading.

% Visible light transmittance	30
% Visible light transmittance applied to auto glass	25
% Total solar energy rejected	60
% Total solar energy rejected applied to auto glass	63
% Ultraviolet blocked (300 to 380 nanometers)	>99
% Infrared energy rejected (IRER)	66
% Selective infrared rejection (SIRR)	93
% Glare reduction	66
% Visible light reflectance	6
Sun Protection Factor	285+

# XenithIR™ 35

Through a proprietary technology that leverages the most advanced ceramic materials available today, the new XenithIR™ line introduces Solar Gard's coolest interior temperature yet, clear transmission of cellular and other data signals, and a true black hue that enhances the look of every vehicle exterior. Additionally, XenithIR blocks more than 99% of harmful UV rays to shield passengers from skin damage and high-end interior furnishings from premature fading.

% Visible light transmittance	38
% Visible light transmittance applied to auto glass	32
% Total solar energy rejected	59
% Total solar energy rejected applied to auto glass	62
% Ultraviolet blocked (300 to 380 nanometers)	>99
% Infrared energy rejected (IRER)	65
% Selective infrared rejection (SIRR)	93
% Glare reduction	58
% Visible light reflectance	6
Sun Protection Factor	285+

# XenithIR™ 45

Through a proprietary technology that leverages the most advanced ceramic materials available today, the new XenithIR™ line introduces Solar Gard's coolest interior temperature yet, clear transmission of cellular and other data signals, and a true black hue that enhances the look of every vehicle exterior. Additionally, XenithIR blocks more than 99% of harmful UV rays to shield passengers from skin damage and high-end interior furnishings from premature fading.

% Visible light transmittance	45
% Visible light transmittance applied to auto glass	38
% Total solar energy rejected	56
% Total solar energy rejected applied to auto glass	60
% Ultraviolet blocked (300 to 380 nanometers)	>99
% Infrared energy rejected (IRER)	65
% Selective infrared rejection (SIRR)	91
% Glare reduction	49
% Visible light reflectance	6
Sun Protection Factor	285+

# XenithIR™ 70

Through a proprietary technology that leverages the most advanced ceramic materials available today, the new XenithIR™ line introduces Solar Gard's coolest interior temperature yet, clear transmission of cellular and other data signals, and a true black hue that enhances the look of every vehicle exterior. Additionally, XenithIR blocks more than 99% of harmful UV rays to shield passengers from skin damage and high-end interior furnishings from premature fading.

% Visible light transmittance	67
% Visible light transmittance applied to auto glass	57
% Total solar energy rejected	50
% Total solar energy rejected applied to auto glass	55
% Ultraviolet blocked (300 to 380 nanometers)	>99
% Infrared energy rejected (IRER)	64
% Selective infrared rejection (SIRR)	91
% Glare reduction	24
% Visible light reflectance	8
Sun Protection Factor	285+

# XenithIR™ 80

Through a proprietary technology that leverages the most advanced ceramic materials available today, the new XenithIR™ line introduces Solar Gard's coolest interior temperature yet, clear transmission of cellular and other data signals, and a true black hue that enhances the look of every vehicle exterior. Additionally, XenithIR blocks more than 99% of harmful UV rays to shield passengers from skin damage and high-end interior furnishings from premature fading.

% Visible light transmittance	76
% Visible light transmittance applied to auto glass	64
% Total solar energy rejected	45
% Total solar energy rejected applied to auto glass	52
% Ultraviolet blocked (300 to 380 nanometers)	>99
% Infrared energy rejected (IRER)	61
% Selective infrared rejection (SIRR)	82
% Glare reduction	15
% Visible light reflectance	8
Sun Protection Factor	285+

# SOLAR ENERGY TECHNICAL DEFINITIONS

## VISIBLE LIGHT TRANSMITTANCE (VLT)

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

## TOTAL SOLAR ENERGY REJECTED (TSER)

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

## ULTRAVIOLET LIGHT BLOCKED

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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.

## INFRARED ENERGY REJECTION (IRER)

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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 2500 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 reflected and absorbed and released outwards. IRER is the endorsed calculation method of IWFA.

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SOLAR GARD® AUTOMOTIVE WINDOW FILMS

# SOLAR ENERGY TECHNICAL DEFINITIONS (continued)

## SELECTIVE INFRARED REJECTION (SIRR)

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The percent of “film only” transmitted infrared energy (780 nm to 1700 nm) measured using the Solar Spectrum Transmission Meter (model # SS2450). The higher the number, the less infrared directly transmitted.

## GLARE REDUCTION

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The percent of glare that is reduced by window film/glass system compared to untreated glass. The higher the number, the more glare reduced.

## VISIBLE LIGHT REFLECTANCE

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



SOLAR GARD® AUTOMOTIVE WINDOW FILMS

# PERFORMANCE NOTES

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Performance results are calculated using NFRC methodology and LBNL Window software, and subject to variations within industry standards and only intended for estimating purposes. This data is provided for informational purposes only and subject to normal manufacturing variances.

Performance results for glare reduction are calculated by comparing filmed glass to that of untreated glazing.





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

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