BLACK PEARL SERIES
SAMPLE BOOK

SUN-GARD®

Nothing Better Under the Sun.

AUTOMOTIVE WINDOW FILMS

Black Pearl HP 38

Scratch Resistant

Shading Coefficient	0.67
Total Solar Energy Rejection %	41.7
Solar Reflection %	8.9
Solar Absorption %	47.0
Solar Transmission %	44.1
Visible Light Reflection %	7.7
Visible Light Transmission %	40.1
Emissivity	0.84

Performance data is based on film applied to ¼" clear, monolithic, annealed glass. For specifications on other types of glass visit our website at www.sun-gard.com.

Tests, equipment and methods are in accordance with ASTM and NFRC standards. Results are calculated using Lawrence Berkeley Lab's "Window 5.2" software program. Data expressed herein is typical and provided for comparative purposes only.

Black Pearl HP 32

Scratch Resistant

Shading Coefficient	0.65
Total Solar Energy Rejection %	43.5
Solar Reflection %	8.3
Solar Absorption %	51.1
Solar Transmission %	40.6
Visible Light Reflection %	6.3
Visible Light Transmission %	33.2
Emissivity	0.84

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Black Pearl HP 22

Scratch Resistant

Shading Coefficient	0.59
Total Solar Energy Rejection %	48.7
Solar Reflection %	8.0
Solar Absorption %	58.9
Solar Transmission %	33.1
Visible Light Reflection %	5.6
Visible Light Transmission %	22.5
Emissivity	0.81

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Black Pearl HP 15

Scratch Resistant

Shading Coefficient	0.57
Total Solar Energy Rejection %	50.4
Solar Reflection %	8.4
Solar Absorption %	60.8
Solar Transmission %	30.8
Visible Light Reflection %	5.2
Visible Light Transmission %	14.6
Emissivity	0.82

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Black Pearl HP 4

Scratch Resistant

Shading Coefficient	0.54
Total Solar Energy Rejection %	53.0
Solar Reflection %	8.7
Solar Absorption %	64.1
Solar Transmission %	27.2
Visible Light Reflection %	4.7
Visible Light Transmission %	3.90
Emissivity	0.81

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Black Pearl NR 70

Scratch Resistant

Shading Coefficient	0.88
Total Solar Energy Rejection %	23.4
Solar Reflection %	6.6
Solar Absorption %	24.6
Solar Transmission %	68.8
Visible Light Reflection %	7.2
Visible Light Transmission %	68.6
Emissivity	0.86

Performance data is based on film applied to ¼" clear, monolithic, annealed glass. For specifications on other types of glass visit our website at www.sun-gard.com.

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Black Pearl NR 55

Scratch Resistant

Shading Coefficient	0.84
Total Solar Energy Rejection %	26.9
Solar Reflection %	6.3
Solar Absorption %	29.2
Solar Transmission %	64.5
Visible Light Reflection %	6.3
Visible Light Transmission %	56.4
Emissivity	0.86

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Black Pearl NR 35

Scratch Resistant

Shading Coefficient	0.79
Total Solar Energy Rejection %	31.3
Solar Reflection %	5.9
Solar Absorption %	36.6
Solar Transmission %	57.5
Visible Light Reflection %	5.4
Visible Light Transmission %	36.6
Emissivity	0.86

Performance data is based on film applied to ¼" clear, monolithic, annealed glass. For specifications on other types of glass visit our website at www.sun-gard.com.

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Black Pearl NR 20

Scratch Resistant

Shading Coefficient	0.71
Total Solar Energy Rejection %	38.2
Solar Reflection %	5.5
Solar Absorption %	47.0
Solar Transmission %	47.5
Visible Light Reflection %	.4.7
Visible Light Transmission %	19.1
Emissivity	0.86

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Black Pearl NR 5

Scratch Resistant

Shading Coefficient	0.68
Total Solar Energy Rejection %	40.8
Solar Reflection %	5.5
Solar Absorption %	50.8
Solar Transmission %	43.7
Visible Light Reflection %	4.5
Visible Light Transmission %	4.4
Emissivity	0.86

Performance data is based on film applied to ¼" clear, monolithic, annealed glass. For specifications on other types of glass visit our website at www.sun-gard.com.

Tests, equipment and methods are in accordance with ASTM and NFRC standards. Results are calculated using Lawrence Berkeley Lab's "Window 5.2" software program. Data expressed herein is typical and provided for comparative purposes only.

Definitions

SHADING COEFFICIENT is the ratio of solar heat gain through a given glazing system to that of a standard glass pane under the same test conditions. It is a measure of the sun control capability. The lower the shading coefficient, the more efficient the glazing system.

SOLAR ENERGY is solar radiant energy that contacts the exterior surface of a window and is reflected, absorbed and transmitted. The total of these three parameters equals 100%.

TOTAL SOLAR ENERGY REJECTION is the ratio of the amount of total solar energy in the full solar wavelength range (300-2,500 nm) that is prevented from passing through a glazing system to the amount of total solar energy falling on that glazing system.

SOLAR REFLECTION is the ratio of the amount of solar energy in the full solar wavelength range (300-2,500 nm) that is directly reflected by the glazing system to the amount of solar energy falling on that glazing system.

SOLAR ABSORPTION is the ratio of the amount of solar energy in the full solar wavelength range (300-2,500 nm) that is directly absorbed by the glazing system to the amount of solar energy falling on that glazing system.

SOLAR TRANSMISSION is the ratio of the amount of solar energy in the full solar wavelength range (300-2,500 nm) that passes directly through a glazing system to the amount of solar energy falling on that glazing system.

VISIBLE LIGHT REFLECTION is the ratio of visible solar energy in the range (380-780 nm) that is reflected by a given glazing system to the total visible solar energy falling on the system.

VISIBLE LIGHT TRANSMISSION (VLT) is the ratio of visible solar energy in the range (380-780 nm) that passes through a given glazing system to the total visible solar energy falling on the system.

EMISSIVITY is a measure of the ability of a product to reflect long wave room radiant energy. The lower the emissivity, the higher the ability of the material in question to retain the room's heat.

Black Pearl Series Film

- Great look that matches most factory tint
- 1.5 mil premium grade film in a wide range of shades
- Contour engineered for cleaner, faster installations
- High-performance version with superior heat rejection
- Non-reflective version that ensures no signal disruption
- Provides 99% UV protection

SUN-GARD®
Solar Control Film

U.S. (888) 887-2022
International (727) 327-2544
Email sales@sun-gard.com
Visit us at www.sun-gard.com