





## **DEFINITIONS OF SOLAR PARAMETERS**

#### **VLT (Visible Light Transmission)**

VLT is the light that enters the structure through the glass. Visible light wavelength ranges from 380 to 700 nm in the sun spectrum.

Higher VLT means more natural light can pass through glass and film combination.

#### IRR (Infra Red Rejected)

IRR is the amount of Infra Red (IR) energy that is blocked by the film, either by reflecting or absorbing. Wavelength for IR in the solar spectrum is in the range of 780 to 2500 nm.

Relevance to the consumer: This is another important factor in the purchase of window films. Too much of incoming IR rays will make the space very hot and uncomfortable to stay inside. Both Capex and Opex for air-conditioning will go up to maintain a comfortable temperature inside if IR rays are not screened.

If purpose of fenestration is heat rejection, IRR should be considered over TSER.

#### **GR (Glare Reduction)**

Glare Reduction refers to the process or ability of reducing or minimizing the intensity and discomfort caused by excessive brightness or glare of light.

#### **UVR (Ultra Violet Rejected)**

UV radiation is a type of electromagnetic radiation emitted by the sun and is invisible to the human eye. UVR is the amount of UV rays stopped from entering interior space. Wavelength for UV in the solar spectrum is in the range 100 to 380 nm.

Relevance to the consumer: This is a very important factor in the purchase of window films. Excessive UV rays is the most dangerous part of the solar spectrum for human health. It is one of the causes of cataract and skin cancer. UV ray is also the biggest factor in damage to drapes, carpets & furniture. UV rays are also the biggest factor in damaging drapes, carpets and furniture through fading or discoloration.

#### TSER (Total Solar Energy Rejected)

The total solar energy rejected refers to the amount of solar energy that is prevented from entering a space or building by a specific material designed to reduce solar heat gain.

This is not the actual measurement of heat ingress into the building



# Cosmo Sunshield: Redefining Excellence in Window Films

Welcome to Cosmo Sunshield, a business of Cosmo First, where we revolutionize window films with a blend of innovation, style, and sustainability. With over four decades of industry leadership, our premium window films have become integral to architecture and automotive design.





Up to 10% Saving on electricity bill



Over 99% UV Protection



Glare Reduction



Safety & Security

#### Enjoy Comfort and Savings:

Our window films reduce solar heat and glare while blocking over 99% of UV rays, enhancing comfort and energy efficiency in homes, cars and commercial spaces.

#### **Unrivaled Expertise:**

In speciality films, our top-notch expertise defines our commitment to perfection and continuous innovation in every product.

#### **Environmental Responsibility:**

We prioritize sustainability by using energy-saving window films that provide protection from the sun, contributing to a greener and safer future.

Setting a new benchmark in window films. Embrace the fusion of quality and innovation.

## **ULTRA COOL SERIES**

## Nano Ceramic Films

Explore the Ultra Cool Series from Cosmo Sunshield Window Films—a revolutionary range blending style and functionality for superior performance in any environment. Designed to be WiFi-friendly, these films ensure uninterrupted connectivity while enhancing energy efficiency, reducing heat buildup, and lowering cooling costs.



#### **BENEFITS:**



High IRR



Sun UV Protection



Higher Energy Efficiency



Glare Reduction



High Longevity



Low Reflectivity

#### **APPLICATIONS:**



Residential Buildings



Commercial Spaces



Office Buildings



Railways, and Marine



## CS-650-AC-7090 2Ply 1.5Mil

#### **SOLAR PROPERTIES**

#### **ULTRA COOL SERIES**

Visible Light Transmission	70%
Ultraviolet Rejected	>99%
Infra Red Heat Rejected	90%
Total Solar Energy Rejected	49%
Glare Reduction	19%
Shading Coefficient	0.62
SHGC(G-Value)	0.55

## CS-650-CT-8065 1Ply 1.5Mil

## **SOLAR PROPERTIES**

## **ULTRA COOL SERIES**

Visible Light Transmission	83%
Ultraviolet Rejected	>99%
Infra Red Heat Rejected	65%
Total Solar Energy Rejected	32%
Glare Reduction	8%
Shading Coefficient	0.77
SHGC(G-Value)	0.68

## CS-650-AC-7465 1Ply 1.5Mil

## **SOLAR PROPERTIES**

## **ULTRA COOL SERIES**

Visible Light Transmission	74%
Ultraviolet Rejected	>99%
Infra Red Heat Rejected	65%
Total Solar Energy Rejected	<b>37</b> %
Glare Reduction	27%
Shading Coefficient	0.71
SHGC(G-Value)	0.63

## CS-501-PAGP-5045 2Ply 1.5Mil

## **SOLAR PROPERTIES**

## **ULTRA COOL SERIES**

Visible Light Transmission 50%
Ultraviolet Rejected >99%
Infra Red Heat Rejected 45%
Total Solar Energy Rejected 41%
Glare Reduction 50%
Shading Coefficient 0.66
SHGC(G-Value) 0.59



## CS-601-PACGP-5095 2Ply 1.5Mil

## SOLAR PROPERTIES ULTRA COOL SERIES

isible Light Transmission 57%
Itraviolet Rejected >99%
fra Red Heat Rejected 92%
otal Solar Energy Rejected 52%
lare Reduction 37%
nading Coefficient 0.54
HGC(G-Value) 0.48

## CS-650-PAC-5075 2Ply 1.5Mil

## SOLAR PROPERTIES ULTRA COOL SERIES

Visible Light Transmission	54%
Ultraviolet Rejected	>99%
Infra Red Heat Rejected	<b>75</b> %
Total Solar Energy Rejected	46%
Glare Reduction	44%
Shading Coefficient	0.61
SHGC(G-Value)	0.55

## **RAINBOW LUSTER SERIES**

# Reflective Films



#### **BENEFITS:**



Enhanced daytime privacy



Enhances aesthetic appeal



Resistant to fading



Blocks more than 99% of harmful UV radiation



Up to 10% savings on energy bills



Reduces daytime glare indoors



#### heat to boost comfort

#### **APPLICATIONS:**



Residential Buildings



Commercial Spaces



Office Buildings



Railways, and Marine



# CS-422-SR-SL-3070 2Ply 2Mil

SOLAR PROPERTIES	Rainbow Luste	Rainbow Luster Series	
Visible Light Transmission	28%	6	
Ultraviolet Rejected	>99%		
Infra Red Heat Rejected	<b>72</b> %		
Total Solar Energy Rejected	<b>57</b> %	6	
Glare Reduction	<b>67</b> %		
Shading Coefficient	0.48		
SHGC(G-Value)	0.43		
CS-422-SR-SL-1085 2Ply 2Mil			
SOLAR PROPERTIES	Rainbow Luste	r Series	
Visible Light Transmission	9%		
Ultraviolet Rejected	>99%		
Infra Red Heat Rejected	85%		
Total Solar Energy Rejected	71%		
Glare Reduction	89%		
Shading Coefficient	0.32		
SHGC(G-Value)			

## CS-401-PR-SL-3595 2Ply 2Mil

## **SOLAR PROPERTIES**

## Rainbow Luster Series

Visible Light Transmission	35%
Ultraviolet Rejected	>99%
Infra Red Heat Rejected	91%
Total Solar Energy Rejected	60%
Glare Reduction	61%
Shading Coefficient	0.45
SHGC(G-Value)	0.40





# Our Premium Product Range

Sun Protection Films <

Safety Films <

Privacy Films <



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