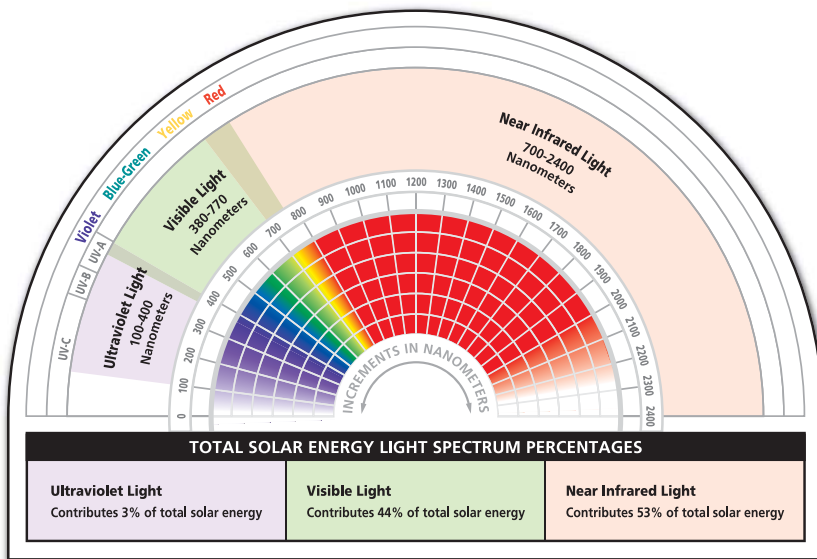## Understanding Solar Energy

The radiation from the sun, commonly referred to as Solar Energy is measured in nanometers and is classified in three categories: Ultra Violet, Visible Light and Infrared. Ultraviolet light accounts for 3%, visible light accounts for 44% and infrared accounts for 53% of the total solar energy that is generated by the sun.

TOTAL SOLAR ENERGY LIGHT SPECTRUM PERCENTAGES

Ultraviolet Light	Visible Light	Near Infrared Light
Contributes 3% of total solar energy	Contributes 44% of total solar energy	Contributes 53% of total solar energy

Not all solar energy is visible to the eye. You see only a portion of this energy as visible sunlight.

The majority of solar heat is generated in the infrared area of the solar energy spectrum. When looking for a solar control window film to reduce solar heat, it is important to choose a film that has a high infrared reduction rate.

It is important to pay close attention to exactly which type of solar energy is being reduced by a window film. Some films claim good solar energy reduction, however, the majority of the energy controlled is actually from the visible light spectrum; not the infrared spectrum. Visible light is what our eyes can see. Any window film that reduces visible light will darken a room, but it may not actually reduce much solar heat, which comes from the infrared spectrum; thus not offering the best energy saving benefits.

The third element of the solar energy spectrum is ultraviolet light. While it does not create heat, it is the leading cause of fading of materials and fabrics, as well as aging of the skin and skin cancer, therefore it is important to reduce ultraviolet light as much as possible.

With the technology in today's Sunscape® advanced solar control window films, you can achieve excellent heat reduction by blocking out a good percentage of infrared, while still allowing a great amount of visible light to pass through the glass. Therefore you can continue to enjoy the beauty of sunlight, while reducing unwanted solar heat. This benefit is attainable without generating a reflective appearance as some conventional films do; thus, you will notice a clearer, cleaner view.

Talk with your Sunscape authorized window film dealer to discuss which film is best for your needs.