



## CASE STUDY: Media giant beats heat and glare

### Building

Work Point Entertainment

### Location

Bangkok, Thailand

### Window Film

R-20 SR CDF (Silver)

N-1035B SR CDF (Bronze)

### Type

Solar Control Film



## SITUATION

WPE Plc. is the largest media/entertainment company in Thailand, producing movies, television programs, news media, and animation graphics. The WPE building occupies an impressive 753,500 square feet (70,000 square meters). With 80% of the building's façade covered in glass, plus skylights in the atrium, workers inside were plagued with terribly uncomfortable heat and glare. The glass exterior also produced high energy bills, as air conditioning units ran constantly to cool the building.

## SOLUTION

Frustrated with the unwanted heat and glare entering the building, the owners contacted the exclusive distributor of LLumar window film in Thailand to specify a film product that could alleviate the problems. After thorough consultation and analysis, the highest heat-rejection film, R-20 SR CDF, was installed on the external façade and another film, N-1035B SR CDF, was installed in the front lobby and the atrium.

## RESULT

Building management reported that the project was conducted safely and professionally with little interruption to employees, who were able to continue their day-to-day operations during the installation. The owners loved the building's new exterior appearance, while employees were relieved to have a more comfortable work environment. "Everybody gave their 'thumbs up' to the project," said LLumar representative Jane Kannikar. "This was a winning solution for everyone."

## Performance Data

|  | % Total Solar Transmittance | % Total Solar Reflectance | % Total Solar Absorbance | % Visible Light Transmittance | % Visible Reflectance (exterior) | % Visible Reflectance (interior) | Winter U-value | Shading Coefficient | % Ultraviolet Ray Protection (wavelengths 280-380nm) | Emissivity | Solar Heat Gain Coefficient | % Total Solar Energy Rejected | Light-to-Solar Heat Gain Ratio (LSG) | % Summer Solar Heat Gain Reduction | % Winter Heat Loss Reduction | % Glare Reduction |
|--|-----------------------------|---------------------------|--------------------------|-------------------------------|----------------------------------|----------------------------------|----------------|---------------------|--|------------|-----------------------------|-------------------------------|--------------------------------------|------------------------------------|------------------------------|-------------------|
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### Reflective Series

Reflective films feature reflectance on both interiors and exteriors for superior reduction in summer cooling costs and heat retention in winter. Providing a high level of glare and heat control, they are scratch-resistant, shield >99% of ultraviolet rays, and provide excellent heat rejection.

#### R-20 SR CDF (Silver)

11 57 32 15 62 63 0.90 0.22 >99 0.58 0.20 80 0.75 77 13 83

### Neutral Series

Neutral films reduce glare, provide good heat rejection and are specified where a soft, neutral appearance is desired. These films are made with sputtered technology. Neutral films are scratch-resistant and shield 99% of UV rays.

#### N-1035B SR CDF (Bronze)

26 37 37 37 26 23 0.92 0.41 99 0.61 0.36 64 1.03 58 12 59

## EASTMAN

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The solar performance data reported for LLumar architectural window films was captured using the National Fenestration Rating Council's (NFRC) standard guidelines for window film solar performance measurement as measured on single pane, 1/8 inch (3 mm), clear glass. Reported values are taken from representative product samples and are subject to normal manufacturing variances. Actual performance will vary based on a number of factors, including glass type and properties. Films do not eliminate fading - they reduce it. UV rays and heat are contributing factors to fading, but other factors exist. For further information, see [LLumar.com/download-library](http://LLumar.com/download-library). © 2016 Eastman Chemical Company. LLumar® and the LLumar® logo are trademarks of Eastman Chemical Company or one of its wholly owned subsidiaries. As used herein, ® denotes registered trademark status in the U.S. only. (06/16) L1863