



## CASE STUDY: Not all window films are created equal

### Building

Sheraton Brookhollow Hotel

### Location

Houston, Texas, USA

### Window Film

R-35 SR CDF (Silver)

### Type

Solar Control Film



## SITUATION

When the management at the Sheraton Brookhollow found their window film discoloring rapidly for the second time—to the point that the film's purple hue ruined the hotel's beautiful façade—they went in search of a better product. For the safety and comfort of their guests, they needed reliable film for their ten-story, glass-encased lobby—and for all the windows on the hotel's more than 380 rooms and suites.

## SOLUTION

Brookhollow management searched for a new window film that would provide the heat and glare reduction they desired for their guests; a film that would protect the guests from broken glass in the event of disaster; and most importantly, a film that would not discolor, fade or otherwise fail to perform. The film they discovered? LLumar® R-35 SR CDF solar control window film.

## RESULT

The LLumar film reduced solar heat gain by 49% and reduced visible light transmission by 73%, providing significantly reduced glare, a comfortable environment throughout Brookhollow's lobby and guest rooms. The film provides guests with added safety in the event of broken glass, and the hotel enjoys energy savings resulting from lower air conditioning demand. Best of all, management knows it has a reliable product that can take the heat and will not discolor over time.

## 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
Clear Glass	83	8	9	90	8	8	1.03	1.00	29	0.84	0.86	14	1.05	-	-	-
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-35 SR CDF (Silver)	21	45	34	28	47	46	0.91	0.35	99	0.61	0.30	70	0.93	65	13	69

## 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) L1442