

**Site**

Sheraton Waikiki Beach Resort

**Location**

Honolulu, Hawaii

**Window Film**

Luminance V28

**Product Series**

Dual-Reflective Series



**SITUATION**

Commanding a city block of the world's most famous beach, the Sheraton Waikiki Beach Resort, one of Hawaii's most popular hotels, reigns over Honolulu's glittering lights. With the gleaming Pacific and regal Diamond Head as a backdrop, the location is incomparable. Each of the 1,852 rooms comes with either an unparalleled view of white crested waves, the Ko'olau Mountains with their majestic silhouettes or downtown Honolulu's whirling constellation of lights. More than two-thirds of the rooms directly face the Pacific.

All of the guest rooms on the south and east side of the hotel are bathed in sunlight for most of the day. Adding to the damaging effects of the direct sunlight was the harsh glare that came with the reflected light off the ocean. Beyond guest discomfort, the solar problems faced by management also included fast fading draperies and furnishings and exorbitant air conditioning costs to cope with the heat generated by the sunlight.

**SOLUTION**

The solution advocated by the local Vista™ by LLumar® dealer whose counsel on solar control was sought, was the installation of Vista™ by LLumar® V28 Luminance film. This film would tame the damaging effects of sunlight and reduce heat buildup without in any way impairing the magnificent views that are a signature asset of the hotel. Vista Luminance, a complex thin laminate of polyester and metal particles finished with an easy-clean scratch resistant coating, cuts glare by 67 percent and solar heat by 58 percent and blocks more than 99 percent of ultraviolet rays, helping protect against premature fading.\*The film rejects 64 percent of total solar energy at the glass surface. Sixty thousand square feet of Luminance was installed without interference to the normal hotel activities at a cost to be recovered by energy savings.

**RESULT**

Furnishings and wood floors are now safeguarded against fading for years to come, and already hotel patrons are basking in glare-free tropical views.

**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 Reflected	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	-	-	-
Neutral Series																
Luminance V28 SR CDF	23	33	44	30	33	21	1.01	0.41	>99	0.77	0.36	64	0.83	58	3	67

**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. © 2008, revised 2016 Eastman Chemical Company. VISTA™, the VISTA® logo, LLumar®, the LLumar® logo and Enerlogic® 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) SP1101