## **Sputtered Dark Neutral**

N 1020 SR CDF

## **Performance Data**



Technical data according To EN 410 and EN 673*	4 mm single	4/16/4 mm double	
Solar Energy Transmission, τ <sub>e</sub>	20%	18%	
Solar Energy Reflection, $\rho_{e}$	26%	28%	
Solar Energy Absorbtion, $\alpha_{\text{e}}$	54	54%	
Visible Light Transmission, τ <sub>ν</sub>	23%	21%	
Visible Light Reflection (External), $\rho_{ve}$	29%	33%	
Visible Light Reflection (Internal), $\rho_{vi}$	26%	27%	
Ultraviolet Transmission, τ <sub>uv</sub>	<1	<1%	
Ultraviolet Rejection	>99	>99 %	
g value	0.33	0.49	
Shading Coefficient	0.41	0.61	
Total Solar Energy Rejected	67%	51%	
Glare Reduction	75%	74%	
U value, single glazing (W/m².K)	5.7		
U value, double glazing, Air filled (W/m².K)		2.69	
Emissivity, $\epsilon_n$	0.	0.82	
Colour Rendering Index, R <sub>a</sub>	99	98	
Film Colour / Appearance	Neu	Neutral	
Installation position	Inte	Internal	
Warranty**: 10 Years			

Installation Notes: X-100 may be used for installation.

Datasheet created on 10/06/16. For a more recent version please contact your LLumar representative.

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Please check the complete Film to Glass Thermal Stress Compatibility Guidelines before film installation; Contact Eastman Performance Films for full details.

"The solar performance data reported for LLumar architectural window films was measured and/or calculated using EN410 methodology for glazing solar performance measurement as measured on single pane, 4mm 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.

"Warranty validity: UK only