

# Safety/Security Film

---



THE RETROFIT SOLUTION TO  
HIGH PERFORMANCE GLAZING

  
**LLumar**<sup>®</sup>  
[www.llumar.com](http://www.llumar.com)

# Product Specifications

Typical solar properties  
with film mounted to  
3mm clear glass

	SOLAR PROPERTIES													PHYSICAL PROPERTIES				
	% Solar Transmittance	% Solar Reflectance	% Solar Absorbance	% Visible Light Transmittance	% Visible Light Reflected	Winter Median "U" Value	Shading Coefficient	% Ultraviolet Rejected	Emissivity	% Total Solar Energy Rejected	Luminous Efficacy	% Solar Heat Reduction	% Glare Reduction	Tensile Strength (lb/in <sup>2</sup> )	Break Strength (lb/in)	% Elongation at Break	Peel Strength (g/inch)	Puncture Strength (lb)
<b>Safety/Security Clear Films</b>																		
SCLSRPS2 (clear)	83	9	8	89	10	1.11	.97	95	.84	16	.91	1	0	28,000	56	170	>3200	45
SCLSRPS4 (clear)	81	9	10	89	10	1.11	.97	95	.86	16	.90	1	1	33,100	132	167	>3200	74
SCLSRPS7 (clear)	81	9	10	88	10	1.11	.96	95	.87	16	.90	1	1	27,614	193	170	>3200	121
SCLSRPS11 (clear)	78	9	13	85	11	1.11	.93	99	.87	19	.88	1	3	27,318	301	159	>1550	184
SCLSRPS15 (clear)	76	10	14	83	11	1.11	.92	99	.84	20	.92	5	3	23,345	373	149	>1550	226
<b>Solar/Security Tinted Films</b>																		
SA35CSRPS4 (charcoal)	56	7	37	38	6	1.09	.76	99	.84	34	.50	24	58	25,714	101	137	>3200	77
SA50CSRPS4 (charcoal)	62	7	31	52	6	1.09	.81	99	.84	29	.64	19	42	25,714	101	137	>3200	77
<b>Solar/Security Exterior Films</b>																		
SCLERPS4 (clear)	86	7	7	89	9	1.14	.99	95	.86	14	.90	1	1	25,714	101	137	>3200	77
<b>Solar/Security Reflective/Sputtered Films</b>																		
SSISRPS4 (silver)	12	55	33	15	60	.99	.24	99	.71	79	.63	57	79	25,714	101	137	>3200	77
N1020SRPS4 (neutral)	22	26	52	24	29	1.10	.43	99	.85	63	.56	57	73	25,714	101	137	>3200	77
N1035SRPS4 (neutral)	35	17	48	35	19	1.10	.55	99	.88	52	.64	45	61	25,714	101	137	>3200	77
N1035SRPS8 (neutral)	35	17	48	35	19	1.10	.55	99	.88	52	.64	45	61	29,505	235	140	>2850	146
N1050SRPS4 (neutral)	48	12	40	48	13	1.11	.64	99	.89	44	.75	36	47	25,714	101	137	>3200	77

LLumar glass treatment films are manufactured exclusively by **CPFilms Inc., a Unit of Solutia**. CPFilms is a member of the Association of Industrial Metallizers Coaters and Laminators. All data has been measured in accordance with AIMCAL standards. All values averaged from routinely accumulated quality control data. See part number for film thickness in mils.

PRODUCT TESTING: LLumar safety/security films conform to and have been tested to the following internationally recognized standards:

<b>Personal Safety Glazing</b> ANSI Z97.1 CPSC 16 CFR 1201 BS 6206 JIS A5759 GB 9962-88 EN 12600	<b>Blast Hazard Mitigation</b> GSA (Glazing Systems Subject to Airblast Loadings)	<b>Windborne Debris Protection</b> Dade County PA 201-94/PA 202-94 PA 203-94	<b>Burglary Resistance</b> DIN 52290 Part 4/Type A1 UL 972 ULC-S332	<b>Physical Testing</b> ASTM D 1929 (Self-Ignition Temp.) ASTM D 635 (Rate of Burn) ASTM E 84 (Surface Burning Char.) ASTM E 162 (Surface Flammability) ASTM D 1922/1004 (Tear Resistance)	ASTM D 1044/1003 (Surface Abrasion Rst.) ASTM D 882 (Tensile Strength) ASTM D 3330 (Peel Strength) ASTM D 4830 (Puncture Strength) ASTM E 662 (Smoke O.D.)
---	--	---	---	---	--