

## PHYSICAL PROPERTIES

|               | FILM THICKNESS<br>(MICRONS) | APPEARANCE         | SINGLE OR MULTI-PLY | TENSILE STRENGTH | BREAK STRENGTH | ELONGATION AT BREAK | PEEL STRENGTH<br>g/inch<br>(lb/inch) | PUNCTURE STRENGTH |
|---------------|-----------------------------|--------------------|---------------------|------------------|----------------|---------------------|--------------------------------------|-------------------|
| SCL PS4       | .004" (100)                 | Clear              | Single              | 33,100           | 132            | 167%                | >3200 (>7)                           | 74                |
| SCL SR PS4    | .004" (100)                 | Clear              | Single              | 33,100           | 132            | 167%                | >3200 (>7)                           | 74                |
| SCL SR PS6    | .006" (150)                 | Clear              | Multi               | 28,000           | 168            | 170%                | >3200 (>7)                           | 111               |
| SCL SR PS7    | .007" (175)                 | Clear              | Single              | 27,614           | 193            | 211%                | >3200 (>7)                           | 121               |
| SCL SR PS8    | .008" (200)                 | Clear              | Multi               | 29,505           | 235            | 140%                | >2850 (>6.3)                         | 146               |
| SCL SR PS11   | .011" (275)                 | Clear              | Multi               | 27,318           | 301            | 159%                | >1550 (>3.4)                         | 184               |
| SCL SR PS15   | .015" (375)                 | Clear              | Multi               | 23,345           | 373            | 149%                | >1550 (>3.4)                         | 226               |
| R-30B SR PS4  | .004" (100)                 | Bronze             | Multi               | 25,714           | 101            | 137%                | >3200 (>7)                           | 77                |
| R-20 SR PS4   | .004" (100)                 | Silver Reflective  | Multi               | 25,714           | 101            | 137%                | >3200 (>7)                           | 77                |
| N-1020 SR PS4 | .004" (100)                 | Dark Neutral       | Multi               | 25,714           | 101            | 137%                | >3200 (>7)                           | 77                |
| N-1035 SR PS4 | .004" (100)                 | Medium Neutral     | Multi               | 25,714           | 101            | 137%                | >3200 (>7)                           | 77                |
| N-1050 SR PS4 | .004" (100)                 | Light Neutral      | Multi               | 25,714           | 101            | 137%                | >3200 (>7)                           | 77                |
| NUV-65 SR PS4 | .004" (100)                 | Very Light Neutral | Multi               | 25,714           | 101            | 137%                | >3200 (>7)                           | 77                |
| N-1020 SR PS8 | .008" (200)                 | Dark Neutral       | Multi               | 29,505           | 235            | 140%                | >2850 (>6.3)                         | 146               |
| N-1035 SR PS8 | .008" (200)                 | Medium Neutral     | Multi               | 29,505           | 235            | 140%                | >2850 (>6.3)                         | 146               |
| N-1050 SR PS8 | .008" (200)                 | Light Neutral      | Multi               | 29,505           | 235            | 140%                | >2850 (>6.3)                         | 146               |
| R-20 SR PS8   | .008" (200)                 | Silver Reflective  | Multi               | 29,505           | 235            | 140%                | >2850 (>6.3)                         | 146               |

| Property            | Test Method | Units  |
|---------------------|-------------|--|
| Film Thickness      |             | Inches (microns)                             |
| Tensile Strength    | ASTM D882   | Pounds per square inch, psi                  |
| Break Strength      | ASTM D882   | Pounds force per inch width                  |
| Elongation At Break | ASTM D882   | Percent                                      |
| Peel Strength       | ASTM D3330  | Grams per inch width (pounds per inch width) |
| Puncture Strength   | ASTM D4830  | Pounds force                                 |

All LLumar Magnum films comply with ANSI Z97.1 impact test requirements on 1/8" and 1/4" glass.  
SCL SR PS11 and SCL SR PS15 also comply with CPSC 16CFR1201 Cat II impact requirements on 1/4" glass.

LLumar Magnum films with a Scratch Resistant coating (SR in film name) tested using ASTM D-1044 using 500g weights and CS-10F wheel have shown less than 5% increase in haze after abrasion.

All LLumar Magnum films utilize an acrylic pressure sensitive adhesive system.

Data values are typical and provided for comparison purposes only.

Rev: 9/2004 L1048



P.O. Box 5068  
Martinsville, Virginia 24115  
(276) 627-3000  
www.cpfilms.com