



Radiant Light Film

CM500

Technical Data

June, 2006

Product Description 3M™ Radiant Light Film CM500 is a premium grade multi-layer polymeric film. The polyester (PET) surface can be embossed, die cut, sheer slit, precision cut, surface treated, dyed, coated to be heat sealed, coated with adhesive, printed and extruded into plastics.

Performance Properties/ Characteristics **Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.**

Property	Units	ASTM Test	Typical Value
Optical			
Transmissive Color (varies with viewing angle)			Blue / Magenta / Gold
Reflective Color (varies with viewing angle)			Gold / Blue
Transmission, normal angle		E1164-94 / E387-95	
L* (L-star)			35 to 75
a* (a-star)			-50 to 70
b* (b-star)			-80 to -10
Bandwidth (absorbs below 400 nm)		3M	
Left Band Edge	nm		500
Right Band Edge	nm		700
Usage Angle (color varies with angle)	degrees	3M	0 to 90

Typical Physical Properties **Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.**

Property	Units	ASTM Test	Typical Value
Thickness	mils (µm)	3M	1.15 (29)
Tensile Strength	lb/in	D-882	> 20
Elongation at Break	%	D-882	> 60
Heat Shrinkage, 150°C, 15 min	%	3M	< 1.5
Density (Yield)	yd ² /lb (m ² /kg)		13.9 (25.6)
Maximum Use Temperature	°C		125
Roll Configuration			
Maximum Width	in		56 or 28
Length	yd		3,000
Core	in		6 (paper)
Splices	# per roll		2

Protection from sunlight radiation wavelengths less than 380 nm is required.

Features

- Reflective color film, depending on angle.
- Metal-free, non-corroding, non-conductive.
- Thermally stable, low shrinkage, maximum continuous use temperature up to 125°C.
- Suitable for applications requiring coverage of large surface areas, high clarity and brilliant visual appearance.

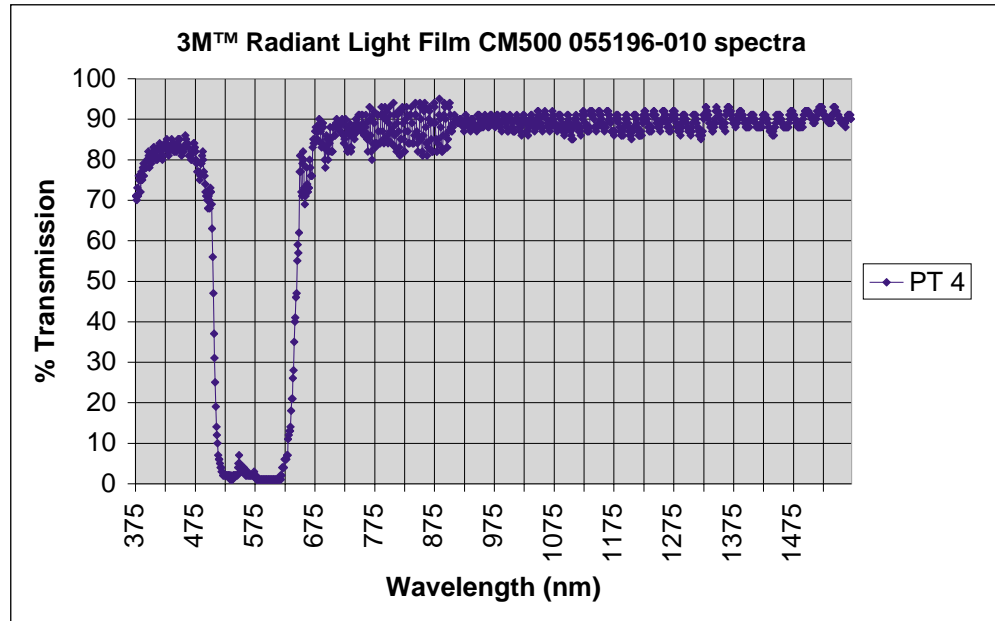
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Application Ideas

- Typical decorative applications include packaging, display, gift wrap, ornaments, custom thread, yarn, glitter, etc.

Typical Spectral Response



Product Use

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