6	Table of Contents
	Laser Safety Eyewear Overview
	How to Choose Your Laser Safety Eyew
	How to Read
	Filter – Eye Protection
	Filter – Visible Alignment

ATE GROUP, INC.



Loser Sofer

티있

Copyright © 2017 by Lasermate Group, Inc.. All rights reserved.

The Friend of Lasers



<u>Oľ</u>

Laser Safety Eyewear...3

2

Filter – Flashlamp/IPL......22 Frames – Fitout Style.....23

Laser Safety Eyewear Overview





Lasermate Group, Inc. offers a vast range of laser safety eyewear and goggles for a wide selection of wavelength ranges. We also provide an extensive collection of frame styles – fitout and wraparound – as well as filters for various applications, in particularly eye protection, visible alignment, and broadband intense pulsed light (IPL). Following the European and American standards, our LaserShield products are manufactured in the United States, and provide EN207 and ANSI Z136 compliant and CE certified laser radiation protection.

FILTERS

- Wavelength Range: 180nm to 10600nm
- Applications:
 - > Eye Protection
 - > Visible Alignment
 - Flashlamp/Intense Pulsed Light (IPL)
- EN207 (European Standard) Compliant
- ANSI Z136 (American Standard) Compliant

FRAMES

- Style Types
 - > Fitout
 - > Wraparound
- Sizes:
 - > Extra-Small
 - > Small
 - > Medium
 - > Large
 - > Extra-Large
 - > Universal
- CE Certified

HOW TO CHOOSE YOUR LASER SAFETY EYEWEAR



• Determine the Optical Density (OD) for wavelength and power of the laser

- Consult the laser manufacturer or refer to laser manual for eyewear requirements.
- Consider the conditions and needs of the use (i.e. eye protection, visible alignment, flashlamp/IPL).
- Confirm that the filter will reduce possible energy exposure to below the Maximum Permissible Exposure (MPE).

• Consider the Visible Light Transmittance (VLT) of the Filter

- Consider the working environment
 - VLT is the percentage of visible light transmitted through a filter, calculated against the spectral sensitivity of the eye to daylight. Typically, the higher the VLT, the lighter the color of the filter. High VLT is most suitable for low-light environments. VLT values below 20% is suggested to be used in well-lit working environments.

Select Frame style

- Consider whether users require a frame option that fits over prescription glasses or an adjustable frame to accommodate a variety of faces.
- Ensure that the selected frame meets individual needs, and is face-forming and well-fitting with no gaps.

• Part Number = [Filter Code] – [Frame Style No.]

- i.e. Filter Code EC2 with Frame Style No. 42 Large Fitover
- Part Number = <u>EC2-42</u>

STEP



FILTERS

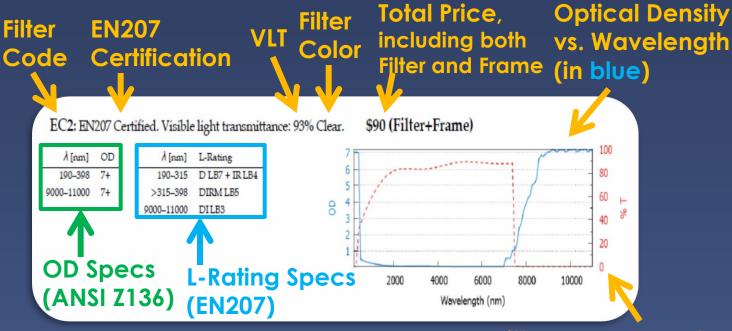
FRAMES

Frame

Style No

Size: LARGE

Dimensions: 138mm×130mm×52mm



Transmittance vs. Wavelength (in red)

OD to % Transmittance Conversions

OD	Transmittance	OD	Transmittance
0.0	100%	5.0	0.001%
1.0	10%	6.0	0.0001%
2.0	1%	7.0	0.00001%
3.0	0.1%	8.0	0.000001%
4.0	0.01%	9.0	0.000001%



T = Transmittance (decimal)

```
CE Certification
```

C E certified

Features:

alone

angle)

 Large universal fit - Comfortable over prescription glasses or

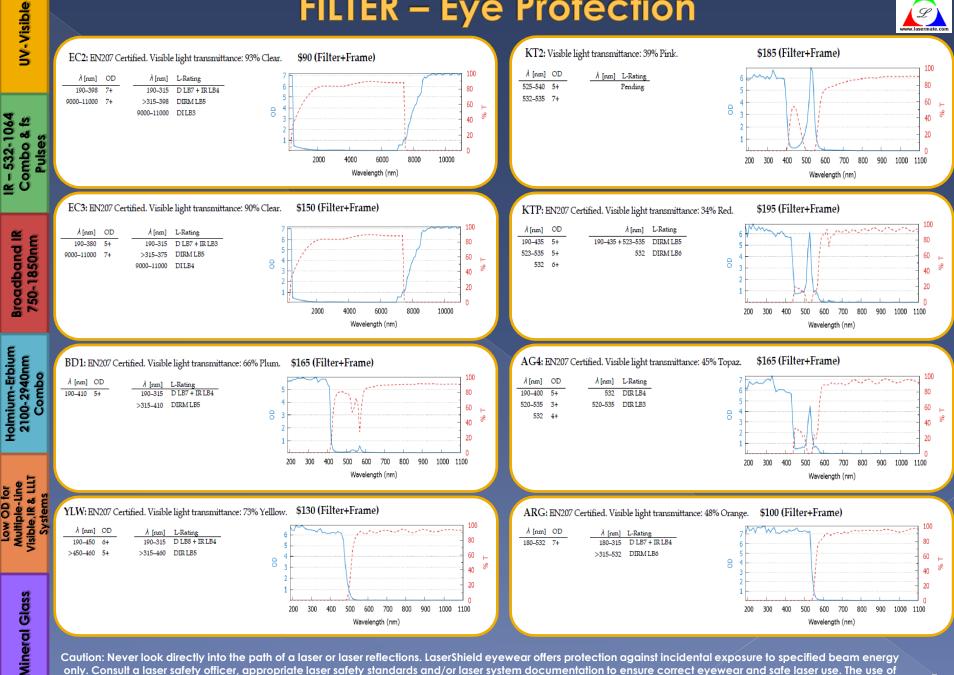
Wider nose bridge

temples (length and

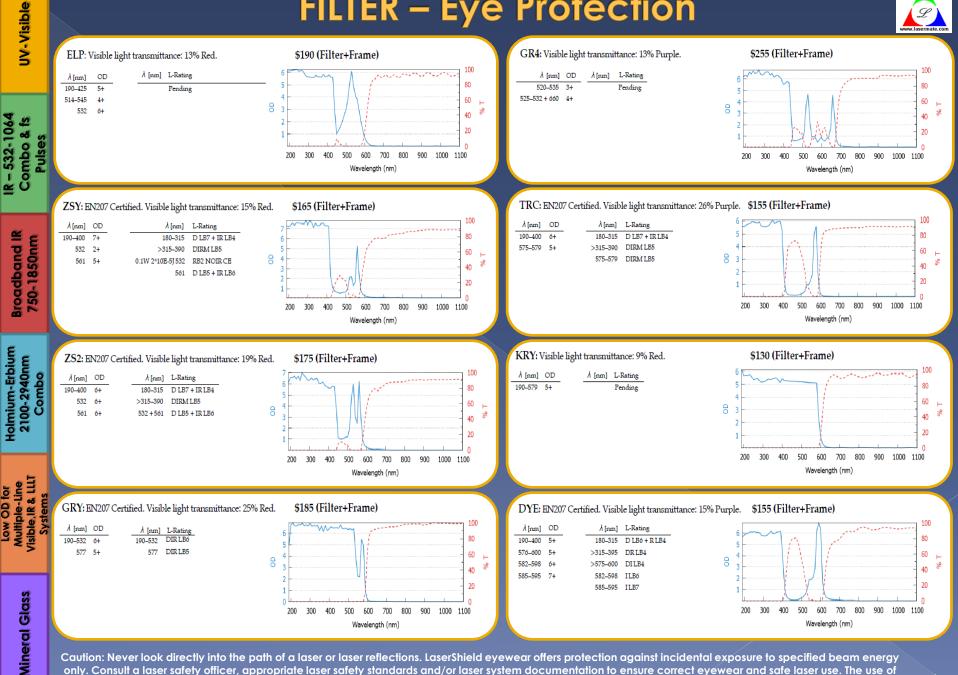
and adjustable

L w.lasermate.o

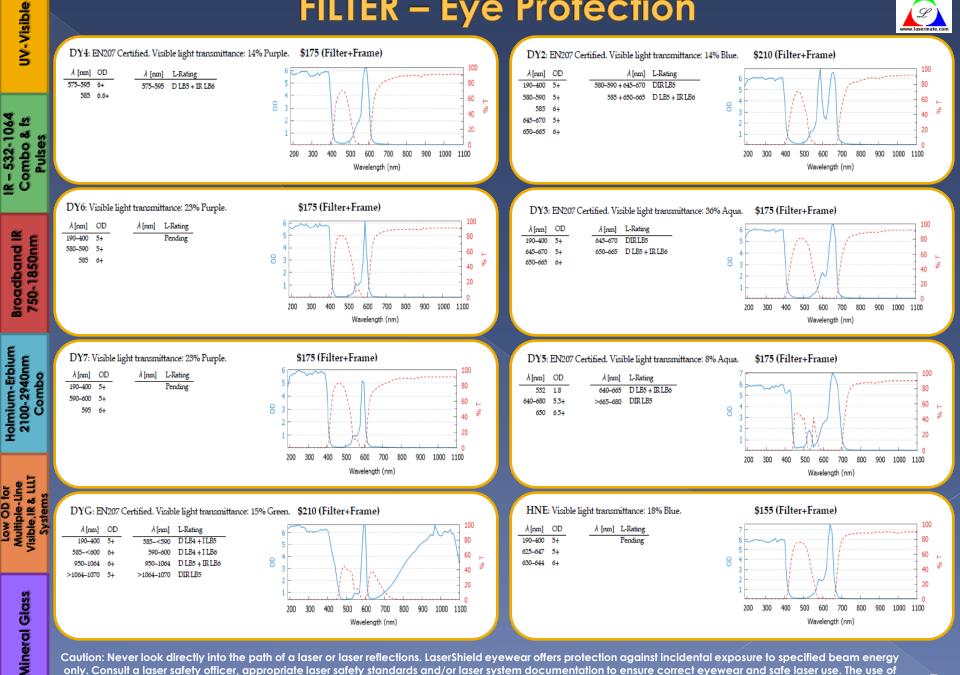




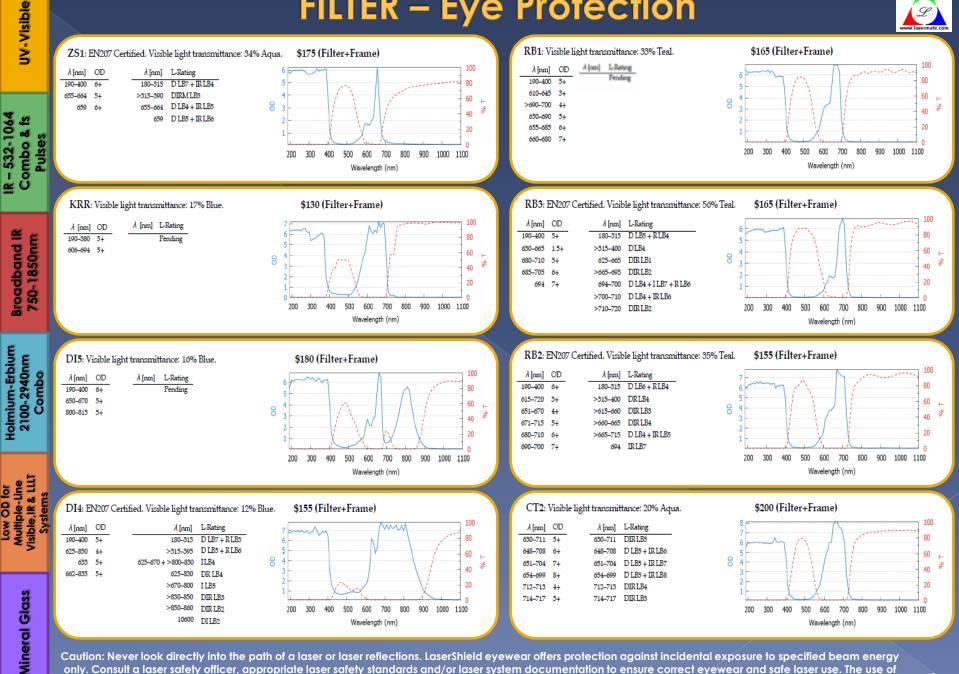




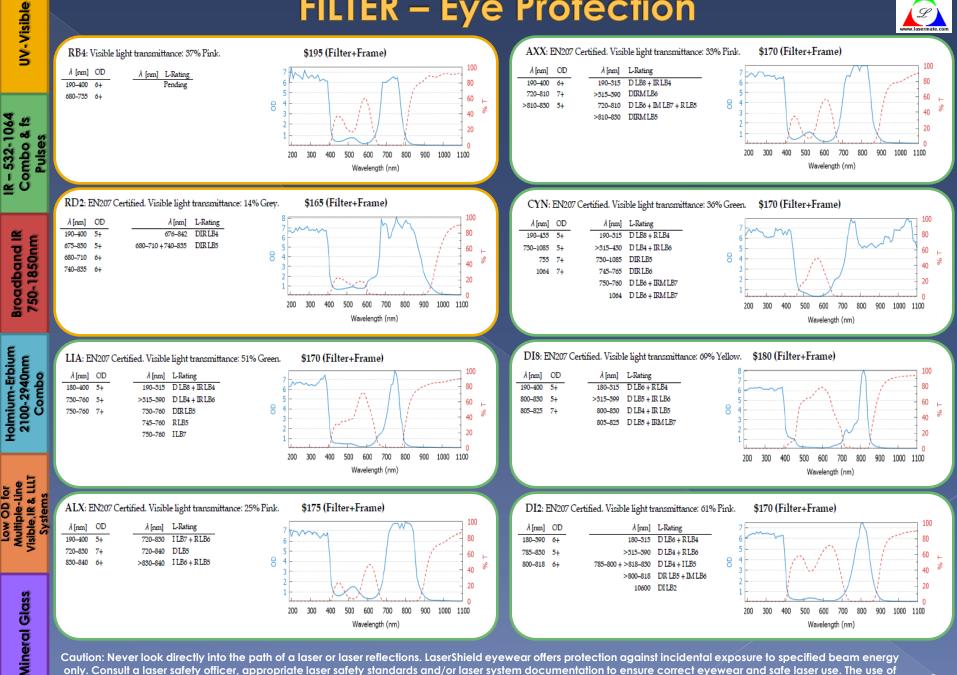




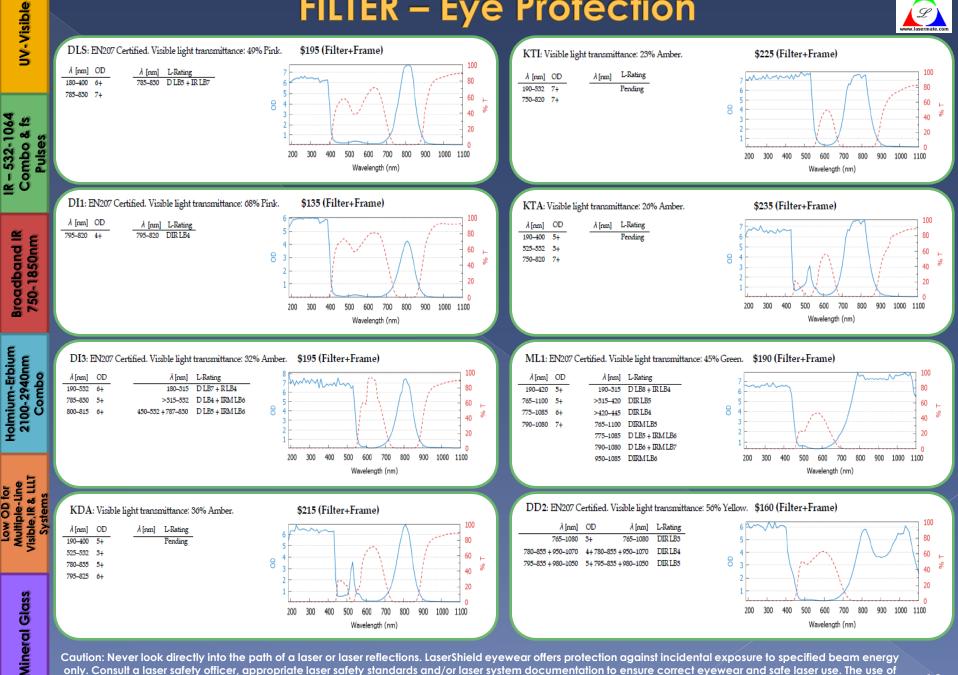




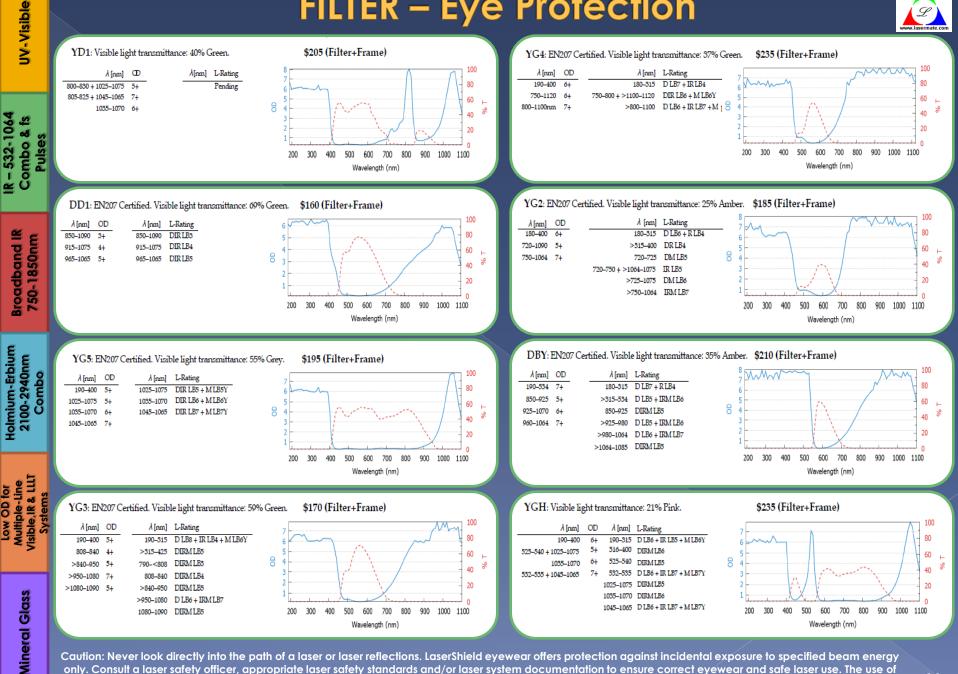




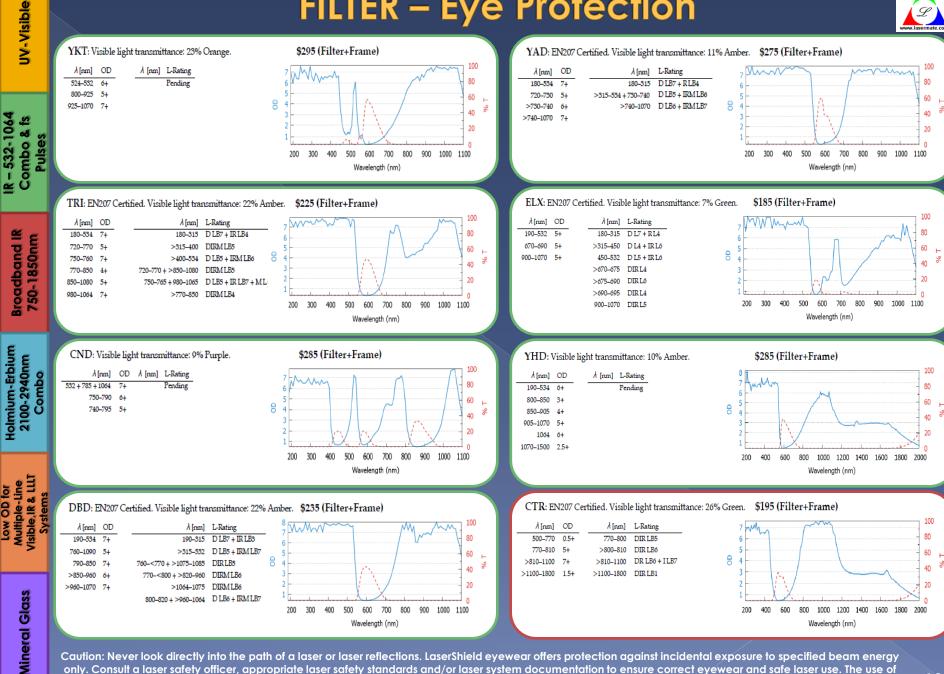




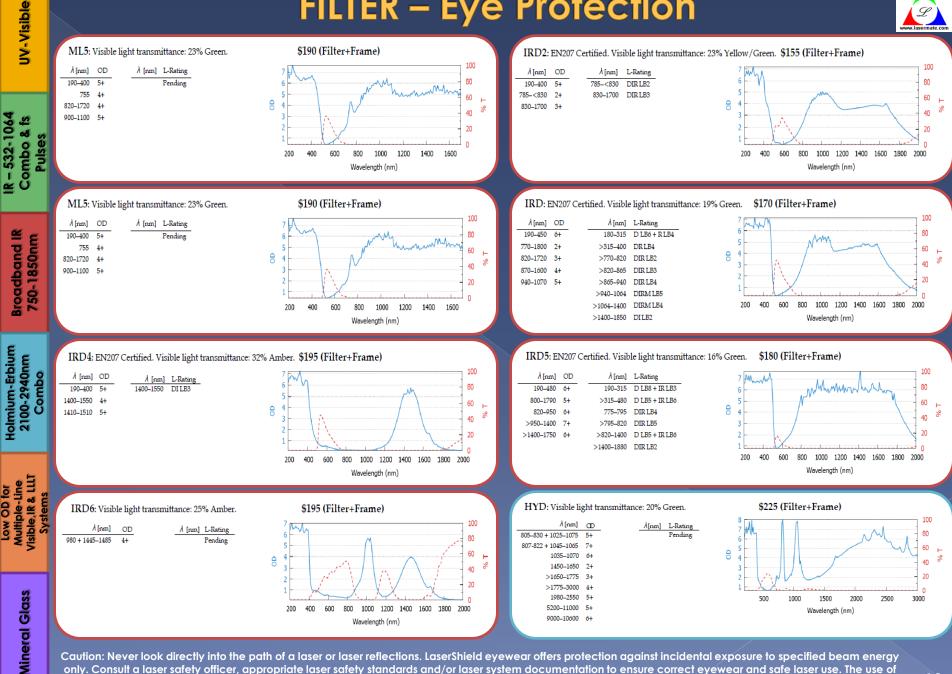




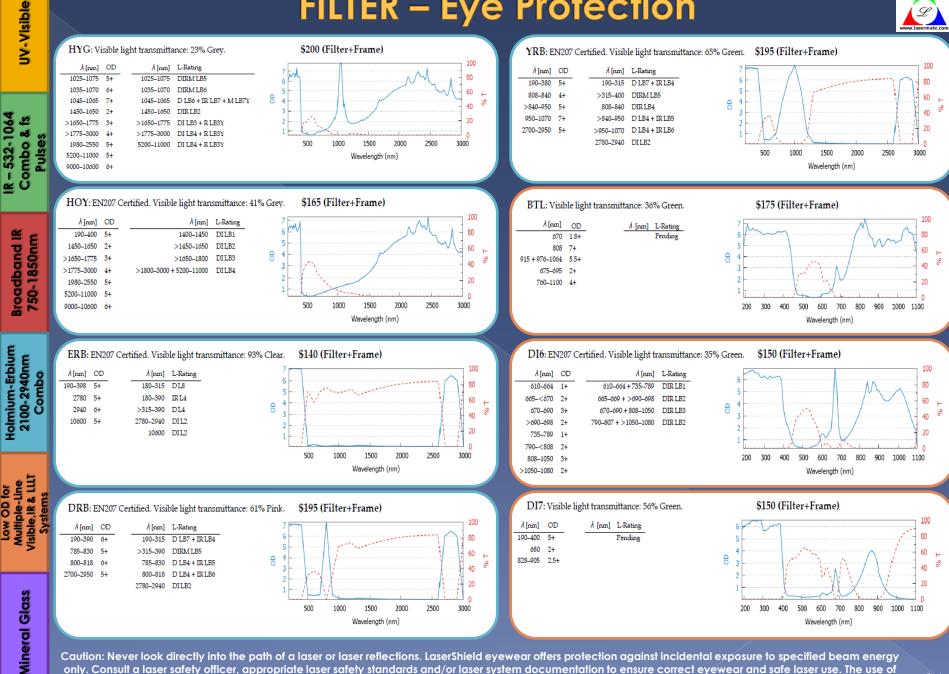




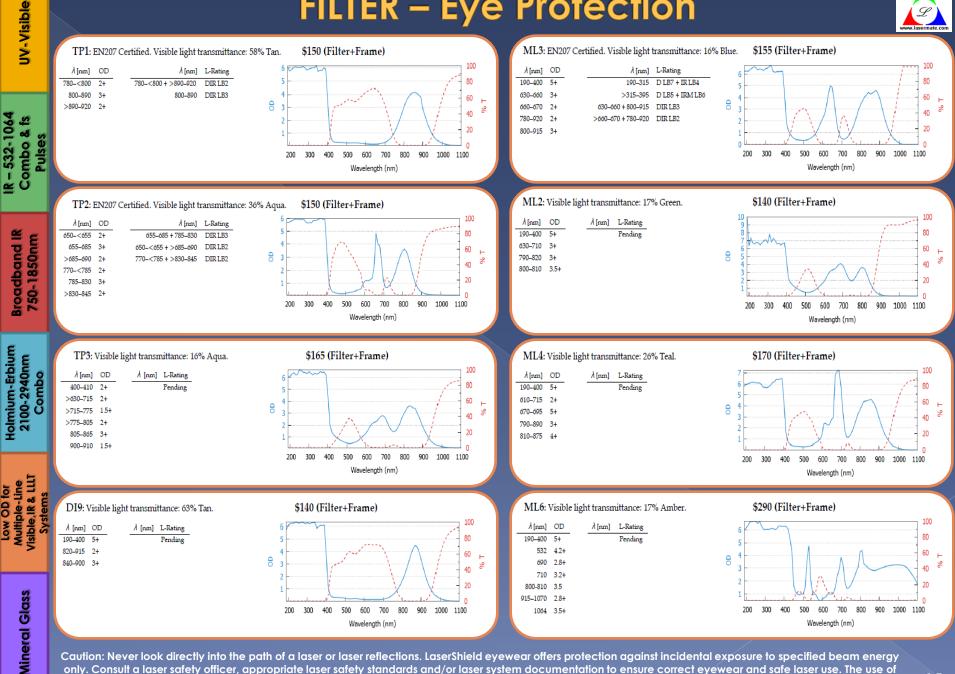




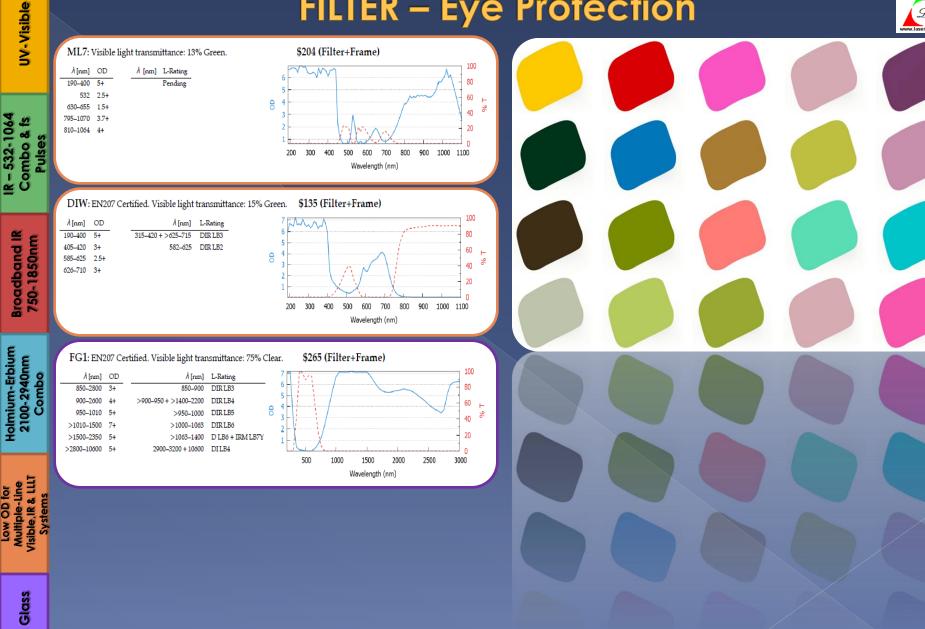




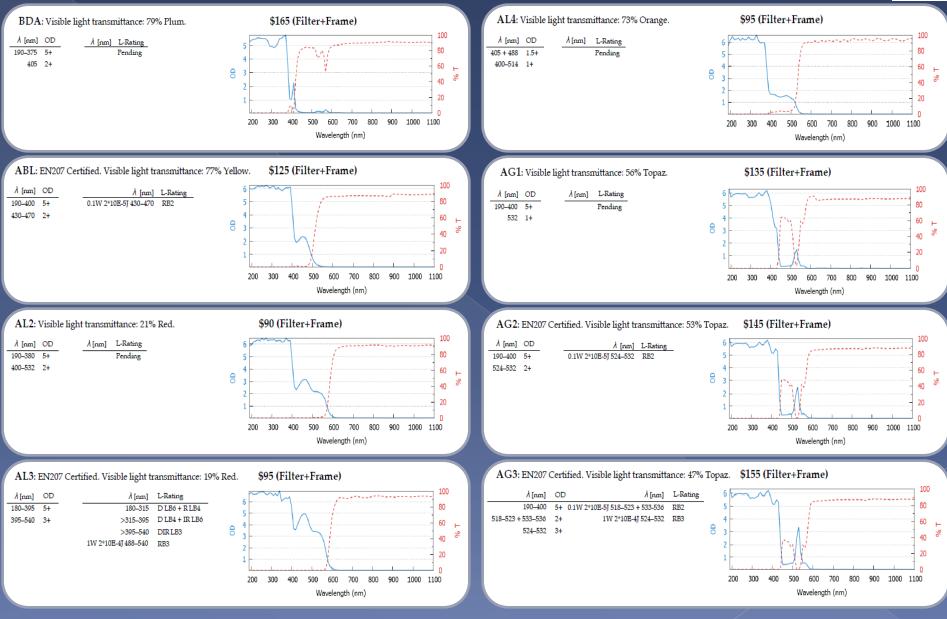




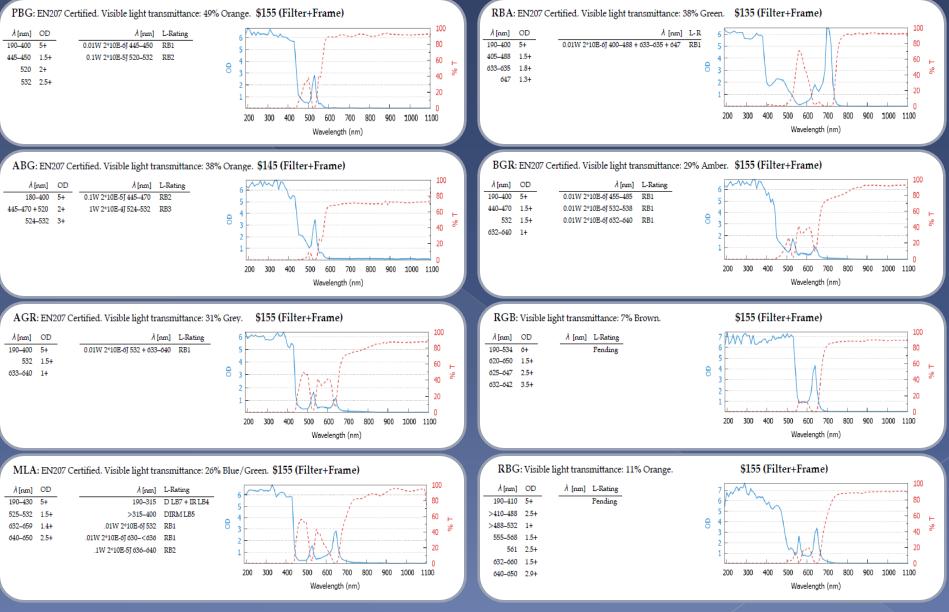




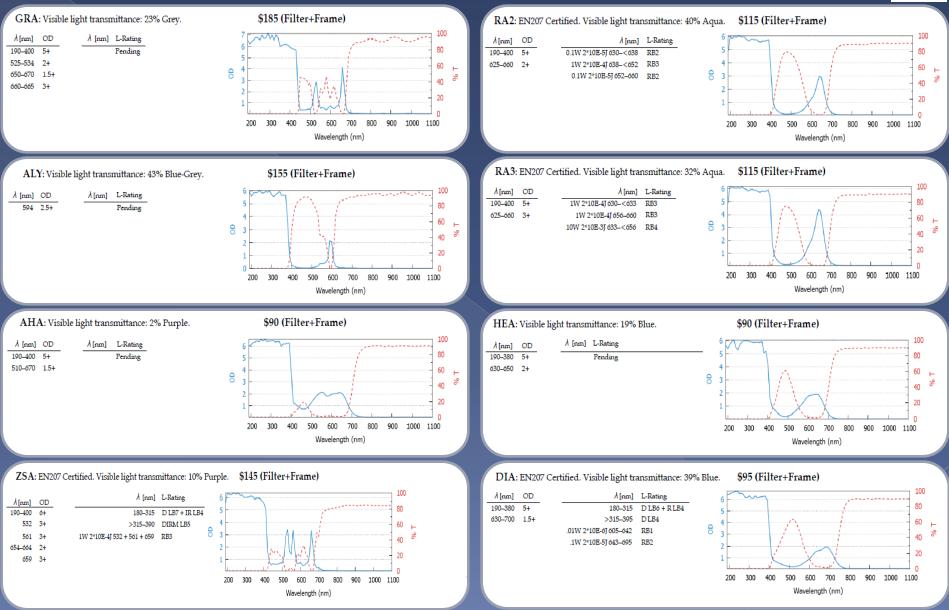
Mineral Glass







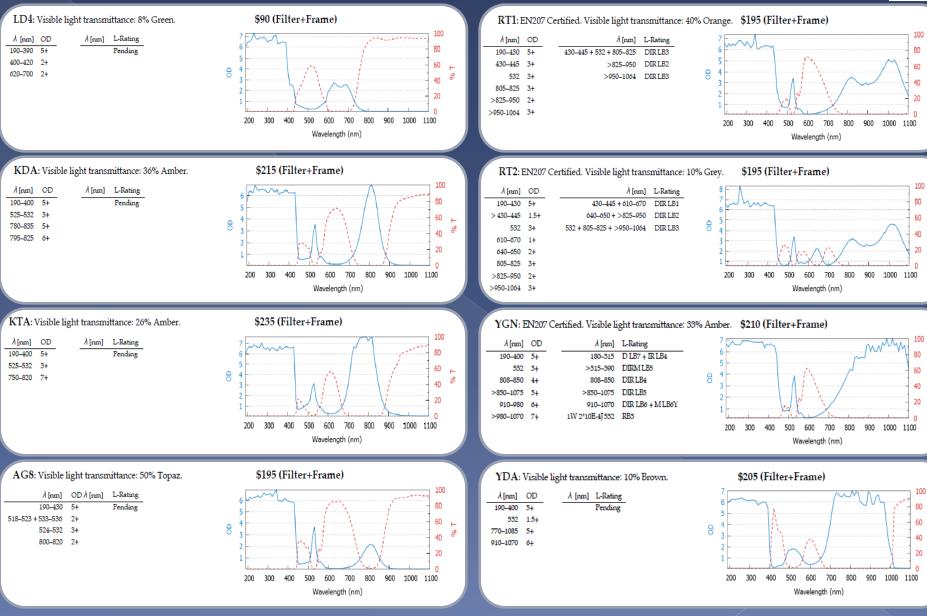






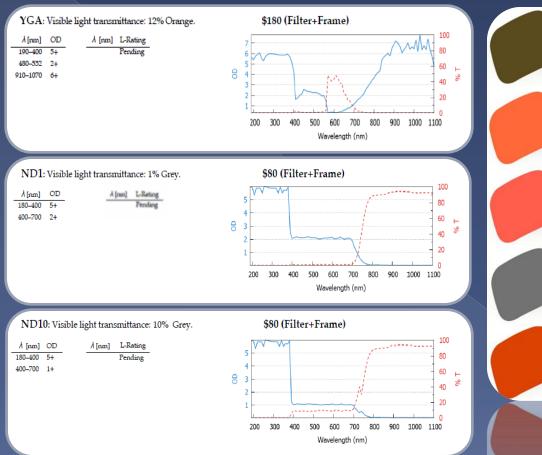
H

%



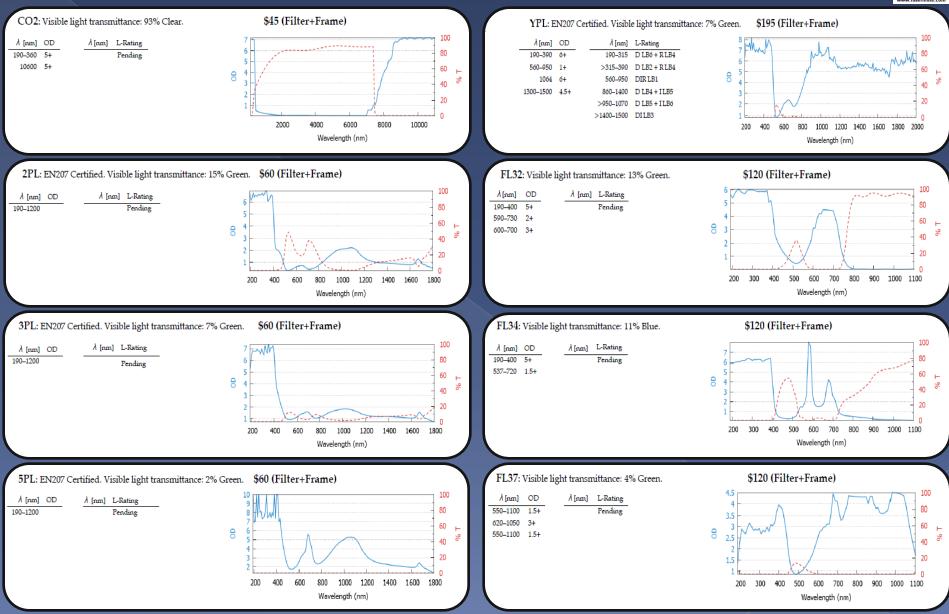
Caution: Never look directly into the path of a laser or laser reflections. LaserShield eyewear offers protection against incidental exposure to specified beam energy only. Consult a laser safety officer, appropriate laser safety standards and/or laser system documentation to ensure correct eyewear and safe laser use. The use of incorrect eyewear may lead to serious personal injury or blindness. \$





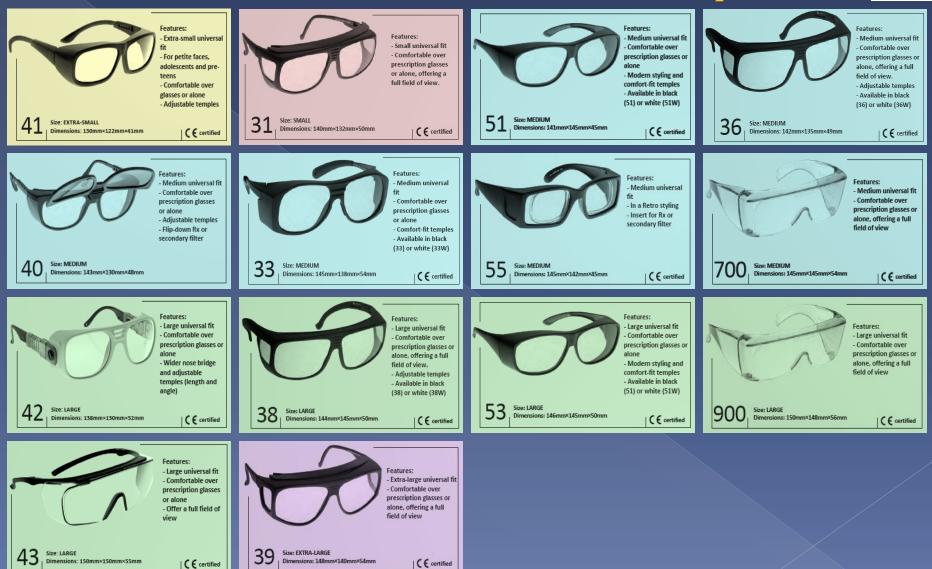
FILTER – Flashlamp/Intense Pulsed Light (IPL)





FRAMES – Fitover Style





FRAMES – Wraparound Style



