META®
Go Beyond.

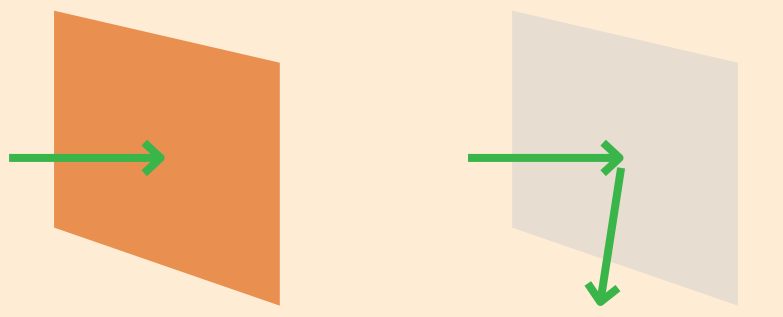
7 Things You Should Know When Buying Laser Glare Protection

A Buyer's Guide for Police Chiefs

METAAIR®

1

TYPE



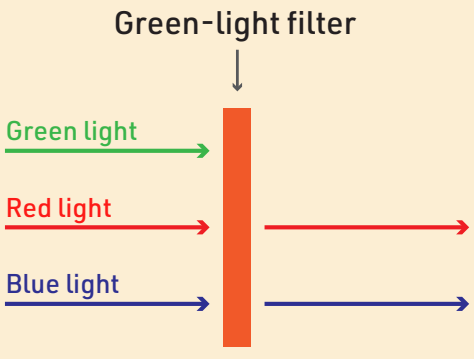
2

FORM

CHARACTERISTICS

3

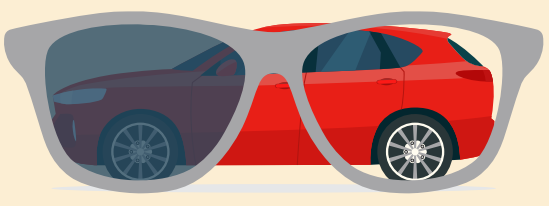
SELECTIVITY



4

TRANSPARENCY

Measured in visible light transmission (VLT)



5

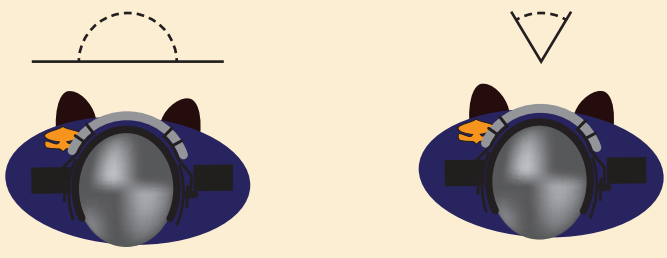
STRENGTH

Measured in optical density (OD)

COMPARISON

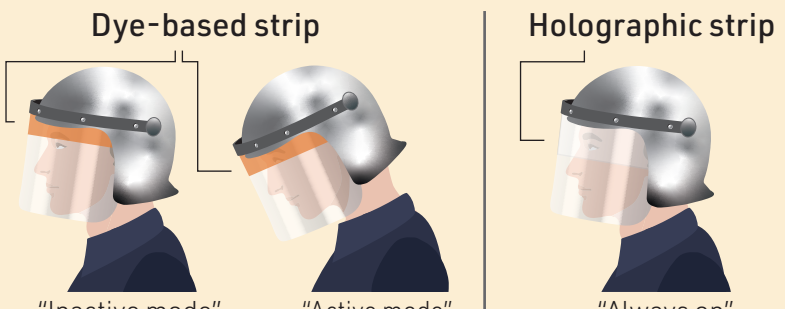
6

COVERAGE



7

INSTALLATION



EXPLANATORY NOTES

Selectivity: Green laser pointers produce the most dramatic startling effect as the human eye is most sensitive to green light.

Transparency: Low transparency is an inherent limitation of most dye-based filters. This may compromise the operational capacities of law enforcement officers, particularly at night. In comparison, a holographic filter like metaAIR® offers high transparency that enables a clear view of the wearer's surroundings under most lighting conditions.

Strength: With an OD greater than 3.0, metaAIR® is capable of blocking at least 99.9% of 532-nm green laser light.

Coverage: Most dye-based filters are effective at blocking laser beams incident from any angle. While holographic filters can block only laser beams coming from certain angles (generally within the central field of view), this limitation may be mitigated by movement in practice.

Installation: Due to its low transparency, a dye-based strip is recommended to be installed onto a face shield slightly above the wearer's line of sight to ensure high visibility in normal conditions. Under a laser attack, the wearer dips their head down to position their eyes directly behind the strip for protection. This approach requires physical action from the wearer to "activate" protection and may not provide adequate visibility in active mode. In contrast, thanks to its high transparency, a holographic strip, such as metaAIR®, can be fitted onto a face shield at the same level as the wearer's eyes without substantially reducing their visibility, thus offering constant protection.