



LumaChrome

Colour-shifting film for product authentication

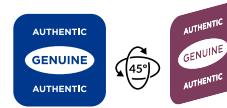


LumaChrome offers easy, intuitive authentication through a crisp colour transition when the viewing angle is changed. It is simple to explain and easy to recognize at considerable distance, multiple angles and variable lighting conditions. Address consumer counterfeit concerns and drive product authentication with LumaChrome.

TILT IN ANY DIRECTION TO AUTHENTICATE



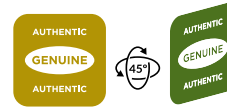
Violet to Amber



Navy to Violet



Emerald to Navy



Amber to Emerald



DURABLE

Virtually no degradation over the lifetime of the substrate with easy conversion into multiple application formats.



PROVEN

LumaChrome security foil has been used in 30 banknote denominations and multiple secure ID applications in over ten countries.



EASY TO USE

Quick, intuitive authentication through a colour shift from one colour to another.



SECURE

Striking colour transitions that are extremely difficult to simulate, requiring sophisticated production equipment and specialized knowledge in thin-film optics.

VISUAL DESIGN FEATURES:

Colour Switch	✓
Ink-free High Saturation	✓
Overprinting of Text and Logos	✓
Laser Etching	✓
Intaglio Printing	✓

SECURITY OPTIONS:

QR Codes	✓
Serialization	✓
Tamper Evident	✓
Microtext	✓
UV Inks	✓

APPLICATION FORMAT:

Shape & Size	Flexible
Plain Foil	15 - 24 microns thick
Cold Foil	15 microns thick
Tamper Evident Foil	36 microns thick
PSA Labels / Stickers	36 - 50 microns thick

USAGE:

Product Authentication - visual and covert product authentication for security labels, tapes, and seals

Consumer Goods Packaging - labeling for rigid product packaging in both retail and grocery settings