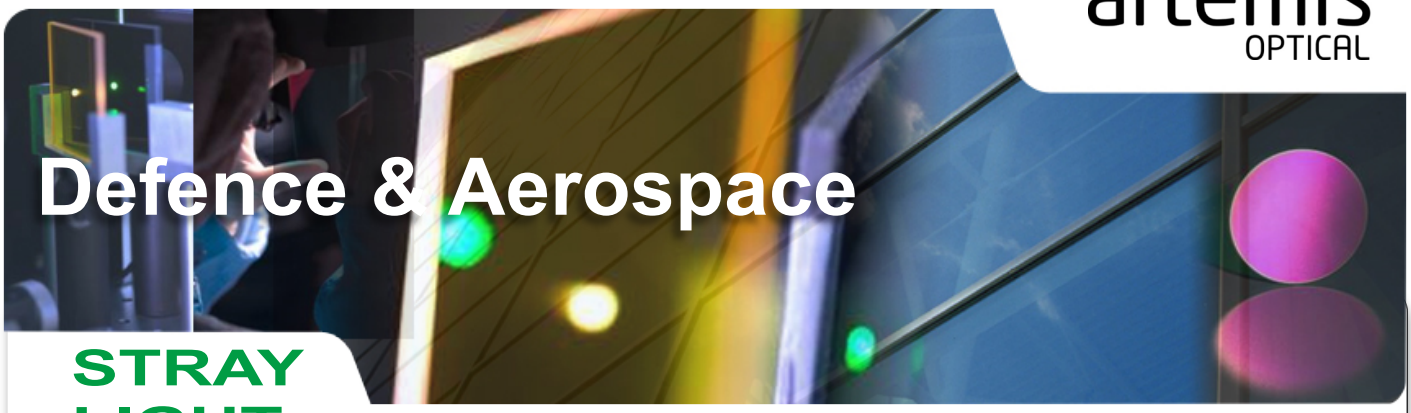
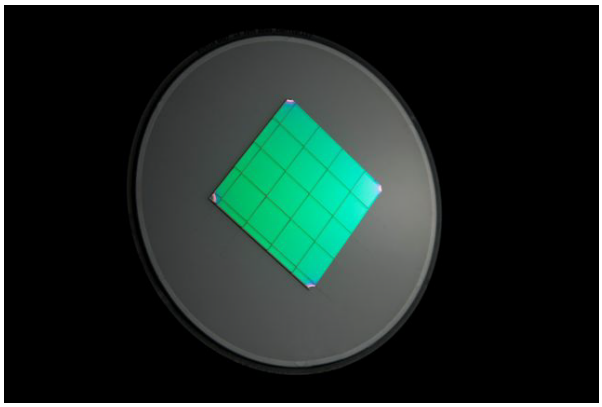


Defence & Aerospace

STRAY LIGHT Filters

Artemis Optical Ltd manufacture Stray Light Filters for use in cockpit lighting.



We have the capability to design bespoke filters to ensure that the indicator lights on the cockpit display never reach the canopy. This removes any possibility of reflections, consequently reducing disorientating distractions.

We are able to design, using a range of technologies to provide the best solution for your application. Our filters are tried, tested and qualified for cockpit compatibility and offer a permanent and highly effective solution.

Application

The indicator lamps and Multi- Function Display's (MFD) utilised in a modern aircraft cockpit can reflect off the canopy into the pilot's line of sight. Distracting at the best of times but, imagine being the pilot of a fast fighter jet, flying in pitch black, less than 100 feet from the ground at 600 miles per hour. The less distractions you have, the higher your chances of survival. Artemis' customers are designers and manufacturers of cockpit lighting and design systems.

Special features of Artemis Stray Light Filters

- A number of technologies, including polarisers and dichroic filters, from which to choose the right solution for each application.
- Bespoke viewing angles for each light source to suit your particular application.
- Highly consistent cone of incident angle which means that each light will be viewable across exactly the right angle.
- Impressive resistance to moisture, solvents and physical abrasion, ensuring a tough and long lasting solution.
- A range of tried, tested and qualified cockpit compatible materials.

Defence & Aerospace

STRAY LIGHT Filters

Durability Spec

Environmental/Durability Test	MIL SPEC	ISO SPEC
Adhesion	**MIL-C-48497 - 4.5.3.1** Quick tape pull	**ISO 9211-4-02-03** 'Snap' tape pull
Humidity	**MIL-C-48497 - 4.5.3.2** 24hrs @ 49°C/95% RH	**ISO 10109-6-6-Tab.2/5** 5 day cyclic @40°C/92% RH & 23°/83%
Abrasion (Moderate)	**MIL-C-48497 - 4.5.3.3** 50 strokes with cheesecloth	**ISO 9211-4-01-01** 50 strokes with cheesecloth
Temperature	**MIL-C-48497 - 4.5.4.1** 2hrs @ -62.2°C & 2hrs @ 71.1°C	**ISO 10109-12-8-Tab.2/1** 16hr @ -40°C **ISO 10109-12-8-Tab.2/2** 6hr @ 70°C
Solubility and Cleanability	**MIL-C-48497 - 4.5.4.2** 10 min in acetone & 10 min in ethyl alcohol.	
Abrasion (Severe)	**MIL-C-48497 - 4.5.5.1** 20 strokes with eraser	**ISO 9211-4-01-03** 20 strokes with eraser
Salt Solubility	**MIL-C-48497 - 4.5.5.2** 24hrs in salt water solution	**ISO 9211-4-04-05** 24hrs in salt water solution
Water Solubility	**MIL-C-48497-4.5.5.3** 24hrs in distilled water.	**ISO 9211-4-04-08** 15 min in boiling deionized water

Artemis' filters are designed to be resistant to the effects of a wide range of corrosive and volatile substances which are in common use in an aerospace and military environment. For specific details please contact us.

Where contamination is likely to cause corrosion, a suitable anti-corrosion treatment will be applied to the material.

Artemis Optical & Our Facilities

Headed by the team of five Directors, Artemis, a world renowned company employs in excess of 50 talented staff, with an unbeatable history of more than 50 years in the design and application of its high precision, technically differentiated optical coatings.

Our customer portfolio includes blue chip original equipment manufacturers in the defence, aerospace, security, photonic surgery and medical and analytical instrumentation markets.

Our state of the art facilities are located at Langage Science Park in Plymouth the South West of England. Our factory includes a 22,000 square foot bespoke, environmentally controlled coating room, housing a range of modern coating chambers, to include APS, APS Pro, Sputtering and thermal evaporation coating technologies.

Ryan Gillard
Sales Executive - Defence

Ryan.gillard@artemis-optical.co.uk
+44 (0)1752 294931

a 1 Western Wood Way, Langage Science Park, Plympton, Plymouth, Devon, PL7 5BG
t + 44 (0)1752 341 943
f + 44 (0)1752 342 467
w www.artemis-optical.co.uk