



## Low Outgassing Test Report

Testing Site: Pacific Testing Laboratories, Inc. 24950 Avenue Tibbitts, Valencia California 91355-3426, (Tel) 661.257.1437

Date: September 13, 2013

Specification: ASTM E595

Testing: Outgas test

Test Sample: XF-528, 1 mil white coated polyimide film, 1 mil solvent acrylic adhesive

Requirement: ASTM E 595-07, Paragraph 1.5:

The criteria used for the acceptance and rejection of materials shall be determined by the user and based upon specific component and system requirements. Historically, a total mass loss (TML) of 1.00% and collected volatile condensable material (CVCM) of 0.10% have been used as screening levels for rejection of spacecraft materials.

Test Method: The outgas test was performed in a vacuum environment of less than  $5 \times 10^{-5}$  torr according to ASTM E 595-07, for a duration of 24 hours at 125°C. The TML, CVCM and the amount of water vapor recovered (WVR) were measured after the test.

Results: The following are the results for the XF-528, 1 mil white polyimide label material.

<b>Sample</b>	<b>TML %</b>	<b>CVCM %</b>	<b>WVR %</b>
<b>XF-528</b>	<b>0.81</b>	<b>0.02</b>	<b>0.71</b>

Remarks: The XF-528 has passed the requirements of ASTM E 595-07 for outgas testing.