

Solmetric Module Lift Electroluminescence (EL) Testing

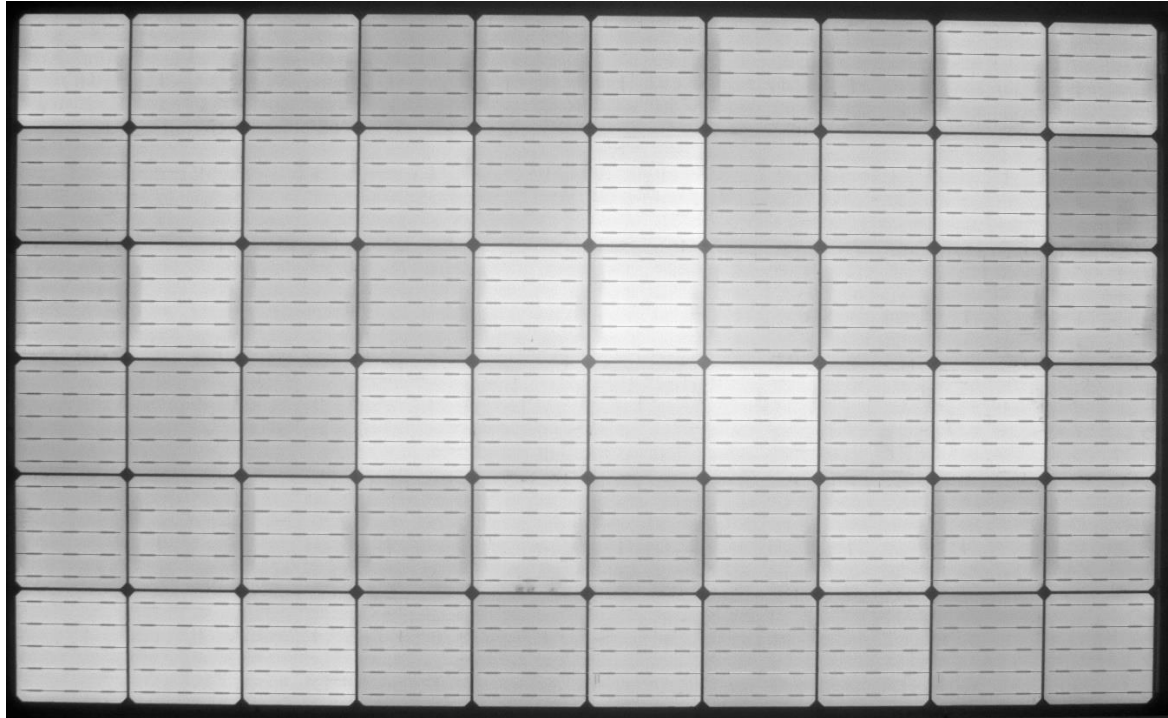
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The Solmetric Module Lift was tested to assess whether its use causes micro-cracking of module cells. The module slides up the outer rails of the ladder and over plastic “ramps” that guide the module over steps between ladders sections and ladder brackets. Modules are raised up the ladder with the glass facing the ladder. Tests were performed with a two section fiberglass ladder extended 19 feet and leaned at an angle of approximately 75° relative to the ground. The ladder had two ramps that the module would pass over on the way up the ladder and again on the way down the ladder. Electroluminescence (EL) images were captured of module before being used with the Module Lift and again after multiple passes up and down the ladder.



Test 1 -- New Jinko JKM290M-60B module

The top image below was taken before any uses with the Module Lift. This is a new module. It shows a few small pre-existing micro-cracks. The bottom image was taken after 10 passes up and down the ladder (40 ramp passes). No new micro-cracks were detected. No existing micro-cracks deteriorated.



Test 2 – Used Sunpower SPR-X22-360-COM module

The top image below was taken before any uses with the Module Lift. This module is used and was taken of a pole array. It shows multiple large pre-existing micro-cracks. The bottom image was taken after 5 passes up and down the ladder (20 ramp passes). No new micro-cracks were detected. No existing micro-cracks deteriorated.

