

Technical Assistance Request

Technical assistance requests are as follows:

1. Assistance is requested to determine the bifacial boost response when utilizing the Light Bending Bounce Box (LB cubed) technology with a bifacial solar panel compared to an identical bifacial solar panel without the LB cubed technology in different types of background albedo situations ranging from .1 to .5, covering the most common scenarios. This research and assistance is requested from Sandia National Labs with their experience in bifacial solar research and from National Renewable Energy Labs.
2. Assistance is requested in optimizing the concave shape and reflectivity of the rigid frame elements of the LB cubed assembly to create maximum light redirection to the underside of the assembly into the bounce box. This could tap into expertise at National Labs that have worked on concentrating troughs and heliostats, such as NREL and Sandia.
3. Assistance is requested to 3D print prototypes of the mounting clips for the rigid frame elements to optimize the design for manufacturing (injection molding) and for ease of installation on panels. Power connector Greentown Labs has availability of 3D printing machines.
4. Assistance is requested to complete a failure modes and effects analysis to establish all failure modes and effects of the design on a wide variety of potential solar installations
5. Other technical assistance as the design iterates and matures .