For our Lucentile's large-area, single-crystal perovskite solar cells, the National Renewable Energy Laboratory (NREL) offers a range of valuable resources and expertise that can significantly contribute to our project. NREL's distinguished track record in solar cell development and characterization positions them as an ideal partner for our endeavors.

NREL boasts extensive experience and leadership in solar cell research and development. Their optical characterization capabilities, complemented by their proficient staff, hold promise for conducting comprehensive assessments of Lucentile's perovskite solar cell materials. This includes evaluating the uniformity of optical properties across Lucentile's expansive single-crystal perovskite layers (e.g., 30 cm x 30 cm) and scrutinizing thin film electron or hole transport layers. Moreover, NREL can assist us in benchmarking solar cell efficiency and various performance parameters, as well as providing essential certifications for our perovskite solar cell performance.

One of the standout advantages of collaborating with NREL is their real-world field evaluation capabilities. They can subject our solar panels to changing environmental conditions, encompassing variations in weather, sunlight angles, wind exposure, dirt accumulation on the solar cell surface, and more. This allows for the rigorous, long-term assessment of Lucentile's solar panels under diverse scenarios, furnishing us with invaluable insights.

NREL's expertise extends to a variety of Lucentile's single-crystal perovskite solar cells, including those measuring 30 cm x 30 cm, and see-through/semi-transparent perovskite solar cells designed for window applications. Their thorough evaluations will undoubtedly yield constructive feedback that can guide us toward refining our solar cell technologies.

In pursuit of a deeper understanding of scientific principles and the accelerated development of practical and widely accepted perovskite solar cells, we wholeheartedly welcome potential collaborations with NREL scientists. Our startup, stemming from an academic laboratory background, is primed for innovation in new materials development and prototyping. To expedite the product development phase and streamline time-to-market, we aspire to leverage the American Made Network's expertise. We are actively seeking partnerships within the American Made Network to aid in device prototype development in the short term. Additionally, we envision long-term collaborations for large-scale production, aiming for cost-effective, high-volume manufacturing with swift turnaround times in the solar energy industry.