

## Matt Samuel, LEDRABrands, USA (LabSpion)

<p><b>1. Please, tell us a little about your company. What does your company do? What are the main products/services/functions of your company?</b></p>	<p>Ledra Brand's extensive line of fixtures has and continues to use reliable, energy efficient LED's that have led the way in the commercial, residential and lighting design communities. Continuing to make breakthroughs in technology for performance, decorative and architectural lighting, Ledra Brands provides the latest in solid state technology, while changing age old standards of how LED is viewed. Ledra Brands is specified in some of the highest profile projects, by some of the most revered lighting designers in the world, and has become a leader in solid state lighting design.</p> <p><b>BRUCK</b></p> <p>Bruck Lighting is an American lighting manufacturer located in Tustin, CA. It was the first brand of Ledra Brands, Inc and has been in operation in the U.S. since 1993. Bruck was the first American lighting manufacturer to integrate LED technology into its decorative and accent products.</p> <p><b>ALPHABET</b></p> <p>ALPHABET Lighting is a brand of parent LEDRABrands offering commercial, specification grade light fixtures and solutions. ALPHABET is an American manufacturer, founded in 1993, specializing in cutting edge technology for general lighting solutions. Offerings include recessed downlights, cylinders, highbays, track systems and linear solutions.</p> <p><b>MOLTO LUCE</b></p> <p>Our latest brand of Austrian designed pendants, display lights, wall &amp; ceiling, and linear lights.</p>
<p><b>2. How old is your company? Are you operating primarily on a national or also on an international market?</b></p>	<p>1993 international</p>
<p><b>3. Are you manufacturing lighting products, such as lamps and illumination?</b></p>	<p>yes</p>
<p><b>4. Which professional websites and publications do you visit/read regularly?</b></p>	

<p><b>5. Which exhibitions and fairs do you usually attend and exhibit at?</b></p>	<p>ALR, Light Space, Sustainable Action, Regency Lighting Show, IES, Global Shop, LEDucation, BD West, Lightfair, Elan Lighting Road Show, Light Affair, Clarus Lighting Open House, Senior Living Design, SDLA, Work Design Show, Lighting for Health and Wellbeing, Spectrum Light showcase, RDI, CTA, Rocky mountain lights, Light Show West, Clarus Octoberfest, HDC, BDNY</p>
<p><b>6. Which Viso product are you using?</b></p>	<p>The big one</p>
<p><b>7. What were the quality control methods/tools you used for your lamps prior to utilising Viso equipment?</b></p>	<p>Outsourcing testing</p>
<p><b>8. What were your primary challenges when measuring the quality of your lamps, or the technical characteristics of your lamps?</b></p>	<p>Outsourcing ALL of our photometric testing was a costly and time consuming process. Our product development schedules were impacted by this. We consistently had to re-submit multiple iterations of testing when initial results were not favorable or when additional experimentation was needed. Working with an outside testing lab restricted our ability to make quick modifications and prevented us from being hands on during the testing process.</p>
<p><b>9. How did you solve the light metrology prior to using the Viso products?</b></p>	
<p><b>10. How long did it take to measure a single lamp, on average?</b></p>	<p>2-4 days depending on the outside lab</p>
<p><b>11. What was the cost (approximately) of a single lamp measurement, on average?</b></p>	<p>\$400 for full photometry and color</p>
<p><b>12. What was your measurement errors and uncertainty interval, on average?</b></p>	<p>Tests were accurate, but we were sometimes uncertain of results due to being excluding from the actual testing</p>
<p><b>13. Did you have to engage other companies or research institutions to solve your light measurement tasks?</b></p>	

<p><b>14. What was the cost of a single lamp measurement (approximately) through another company, on average?</b></p>	
<p><b>15. How did the situation with light metrology change after implementing the Viso products?</b></p>	
<p><b>16. How long does it take to measure a single lamp with the Viso products, on average?</b></p>	<p>Once our sample is built, we stabilize the light for 5-30 minutes depending on what the test is being used for. It takes about 1 minute to mount our sample using our custom mounting system. Overall time for testing is typically 10 minutes, but we normally test multiple optical variations after a sample has been mounted and with the LED stabilized, so our test duration can be reduced to 1-2 minutes.</p>
<p><b>17. How many lamps do you measure per week, on average?</b></p>	<p>50-200</p>
<p><b>18. What are the additional tasks you are solving with the data provided by the Viso technology, aside from supplying your lamps with exact light characteristics? (For example, you use the data to improve on existing lamp designs, engineer and supply new lamps, other services and/or products.)</b></p>	<p>Viso allows us to create our own ies files, which we publish on our website. In addition to generating ies files for our released products, the engineering department uses Viso daily to assist with product development. Our Engineers are continually verifying optical designs and improving performance based on the results of the gonio. Having the ability to make small modifications on the fly, and being able to instantaneously see photometric results of those changes, allows extreme flexibility during product development.</p>
<p><b>19. What was the impact of the Viso measuring products on the range of your company products? Did you increase the total number of your lighting items?</b></p>	<p>Without using an inhouse gonio photometer that was easy to use (like Viso), our company's recent growth would not have been possible. With the help of Viso, we have launched our largest product families in our companies history. The need for in-house testing was critical in the decision making of these product launches, and our Engineering department has successfully supported those launches with all the required photometric and color data.</p>
<p><b>20. How did the quality of your lighting items change after the implementation of the Viso products?</b></p>	<p>We can now maximize the efficacy of our products, and provide a more comprehensive offering</p>

<p><b>21. How did the implementation of the Viso technology influence the dynamic of your company's growth?</b></p>	<p>It was instrumental in our company's growth, and has significantly helped in establishing Ledra Brands as an innovative technology company.</p>
<p><b>22. How did the new Viso technology influence the company's revenue (percentage-wise)?</b></p>	
<p><b>23. Are you able to increase the retail price of your lighting items after the new Viso technology?</b></p>	
<p><b>24. How long did it take for you to return the investment in the Viso products?</b></p>	<p>The investment was recouped within 6 months.</p>
<p><b>25. Can we use your company's name as a reference point in our sales cases?</b></p>	<p>yes</p>
<p><b>26. Would you like the Viso marketing team to contact you on the phone to confirm the correctness of submitted data?</b></p>	<p>Call anytime you want</p>
<p><b>27. Other comments and suggestions.</b></p>	<p>Because of our success with Viso, we expanded our engineering lab, and have made a dedicated dark room for the viso gonio.</p>
<p><b>28. Contact person.</b></p>	<p>Matt Samuel</p>