

## Matteo Botner, Botlighting, Italy (LabSpion)

<p><b>1. Please, tell us about your company. What does it do, what are its main products and services?</b></p>	<p>BOT Lighting is a manufacturer, importer and distributor of lighting products. The main market is the professional channel of lighting products/electrical goods (wholesalers, lighting shops and projects). BOT has a long-term partnership with Finnish company AIRAM, for whose products it is the exclusive distributor in Italy. It owns also the brand SHOT-Botlighting, launched in 2001 with a wide portfolio of LED bulbs and fixtures and the newly-launched brand KAI (2017) for retail shops-DIY market.</p>
<p><b>2. How old is your company? Are you operating nationally/internationally?</b></p>	<p>The company was founded in the late seventies, and originally was the distributor in Italy of Finnish brand AIRAM with its Neodymium and longlife incandescent bulbs, later the company established some cooperation with famous lighting brands like NARVA, BLV, USHIO, LAES and was able to offer a complete portfolio of high quality lighting bulbs, including products for special applications. The main Company's business is Italian Market, however the export sales are growing constantly and are being pushed strongly.</p>
<p><b>3. Are you a manufacturer of luminaires?</b></p>	<p>Botlighting always had a small range of luminaires from the beginning of its history, but this market started to be developed greatly in the last 5 years. Today, together with AIRAM, Botlighting can offer a wide range of fixtures both for indoor and outdoor applications. The fixtures catalogue is expected to be enlarged in 2018 with some new product lines.</p>
<p><b>4. Which professional websites and publications do you visit/read regularly?</b></p>	<p>None</p>
<p><b>5. Which exhibitions and fairs do you attend and exhibit at?</b></p>	<p>We attend to the main international lighting fairs including Frankfurt, Hong Kong, Guangzhou. In the past we had a booth in Euroluce, but recently we focused mainly to local Italian exhibitions. Nowadays we exhibit at around 10 fairs in Italy.</p>
<p><b>6. Which Viso product are you using?</b></p>	<p>LabSpion + LabFlicker</p>

<p><b>7. How did you measure the light quality before the Viso products?</b></p>	<p>We started building a small lab about 10 years ago. The first instrument was a 1m integrating sphere, then we ordered the LabSpion goniometer to complete the information with angle data.</p>
<p><b>8. What were the main challenges in light measurement or the technical characteristics of your lamps?</b></p>	<p>Nowadays most of measured bulbs and fixtures are standard ones so we do not have any special challenge. We need complete set of data for both lighting and electrical part, provided by a flexible and fast measuring instrument. We also need a complete reporting system to show and forward the data collected, measurement data are often presented to customers.</p>
<p><b>9. How did you determine the light quality prior Viso? Can you, please, list organizations (research labs, etc.), if you used any?</b></p>	<p>Test reports were provided by suppliers, using their internal lab or third party ones (TUV, SGS etc.). Some data were cross-checked with our sphere measurement.</p>
<p><b>10. How long did it take to measure a single lamp, on average (incl. shipping and waiting time, if you involved third party organizations)?</b></p>	<p>N/A</p>
<p><b>11. What was the cost of a single lamp measurement, on average?</b></p>	<p>N/A</p>
<p><b>12. What was your measurement error and uncertainty interval, on average?</b></p>	<p>Difficult to say, around 5% hopefully.</p>
<p><b>13. How did you change the light metrology with the Viso product?</b></p>	<p>For bulbs there is not a big difference than before. Most of bulbs are not directional so they can be measured faster using the integrating sphere. The advantage of VISO LabSpion is mainly the opportunity of having a second testing method for data comparison, and the complete output including electrical data. Different story for fixtures, now we have a complete set of .ldt files, including special products customized for customers, during product development we can measure the effect of different solutions (e.g a different mirror, or LED chip or glass finishing), and finally we can provide to customers a complete and easy to read test report.</p>
<p><b>14. How long do you measure a single lamp with the Viso products now?</b></p>	<p>?</p>

<p><b>15. How many lamps do you measure per week, on average?</b></p>	<p>15-20 on Viso LabSpion, around 50-60 including the sphere (bulbs only)</p>
<p><b>16. 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>We test bulbs for mainly three purposes:</p> <ul style="list-style-type: none"> <li>• R/D: we test the effectiveness of different technical solutions during product development</li> <li>• Quality control: we randomly test the production batches, we perform life-testing of selected products after 100-1000-2000hrs aging, after a claim raised from customer/user we try to replicate it in our laboratory to provide better feedback to production and R/D</li> <li>• Market control and Benchmark: we test competitors' products taken from the market and compare them to ours.</li> </ul>
<p><b>17. 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>We are increasing the number of LED lighting products, but this is not connected to the Viso measuring products.</p>
<p><b>18. How did the quality of your lighting items change after the implementation of the Viso products?</b></p>	<p>The quality of products is increasing day by day. The measurement system let us select the best product for each application.</p>
<p><b>19. How did the implementation of the Viso technology influence the dynamic of your company's growth?</b></p>	<p>After the LED bulbs were introduced massively in the market, we had the goal to select the best partners to supply components, to develop and produce our bulbs/fixtures.</p> <p>The quantity of samples was (and is still today) too big and expensive to test in an external lab.</p> <p>After developing an internal testing facility we have been much quicker and effective in selecting materials and also our partners.</p> <p>In this way the internal lab shaped our current product portfolio and production structure.</p>
<p><b>20. How did the new Viso technology influence the company's revenue (percentage-wise)?</b></p>	<p>Difficult to say.</p>
<p><b>21. Are you able to increase the retail price of your lighting items after the new Viso technology?</b></p>	<p>Not directly, but customers appreciate the company has the right instruments for the R/D.</p> <p>The reputation on the market has been increased.</p>

<b>22. How long did it take for you to return the investment in the Viso products?</b>	We do not have a prior history to compare, but If we needed to test the same amount of bulbs using a third part laboratory we paid the same amount in 1-1,5 years.
<b>23. Can we use your company's name as a reference point in our sales cases?</b>	YES
<b>24. Would you like the Viso marketing team to contact you on the phone to confirm the correctness of submitted data?</b>	
<b>25. Other comments and suggestions.</b>	-
<b>26. Contact person, responsible for the Viso products.</b>	Matteo Botner