

## CUSTOMER CASE STUDY : VISO SYSTEMS



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**Christian Krause**  
Founder, Viso Systems

### Customer Summary

Founded in 2005, Viso Systems is a supplier of test and measurement equipment for the global lighting market. The company has vast experience in hardware and software development of solutions for dynamic control systems. Viso Systems products are used in horticultural lighting, marine lighting, lighting atmosphere systems for medical procedures, entertainment lighting and many more applications. Based in Copenhagen Denmark, the company's current main product category is test light measurement systems, covering both portable and large systems.

### Quick Facts

Customer Name: Viso Systems

Headquarters: Copenhagen, Denmark

Industry: Light Measurement

Founded: 2005

Website: [www.visosystems.com](http://www.visosystems.com)

### Ibsen Product Used

- FREEDOM VIS Spectrometer



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### Challenge

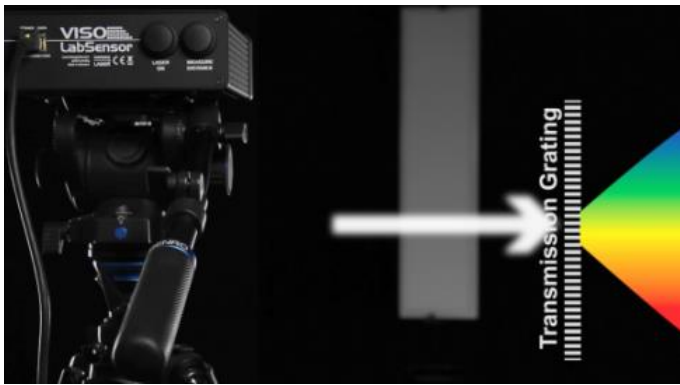
Viso Systems wanted to scale up its light testing equipment into a specialized segment. Hence it was essential for the company to develop a professional measurement tool that could rapidly analyze collected data and could easily be taken for on-site inspection.

### Solution

To provide the customers with speed and simplicity in their light measurement solution, Viso systems implemented spectrometer technology in their product. The company chose Ibsen's FREEDOM spectrometer due to its compact size and unique transmission grating technology. Viso closely collaborated with Ibsen for the successful integration of the customized features into the FREEDOM spectrometer to be perfectly suitable to the Viso Systems Solution.

### Benefits

- High speed and full photometric data collection in one system achieved through the transmission grating based FREEDOM spectrometer
- First in the market portable light measurement system
- Faster customer response rate due to direct access to skilled engineers handling the technical support needed in spectrometer technology
- Opportunity to focus on light measurement as core competence to further identify areas to differentiate



## Lightweight, Quick and Easy Measurement Solution

Viso Systems makes a spectro photo goniometer, an instrument that rotates a lamp while measuring the complete radiation of that lamp in any direction. From the collected data, the complete output in luminous flux in lumen, intensity in candela, efficiency in lumen per watt, CRI, colour temperature, beam angle are calculated. A 3D file known as IES and LDT files are then created and imported into a 3D rendering software, that are essential for lighting professionals.

In the case of, for example, planning a warehouse lighting installation, there are certain requirements in different parts of the world for how many lux there has to be on every floor level. For that reason the architects need to do the light rendering to ensure that the amount of light is according to the requirements. This process requires a professional measurement tool that can measure quickly and can be easily taken for on-site inspection.

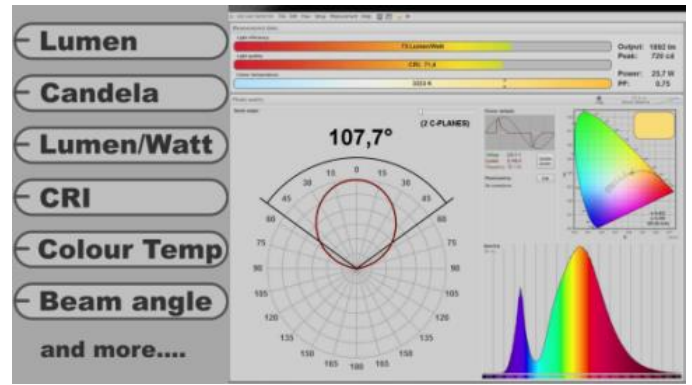
To provide the customers with speed and simplicity in their light measurement solution, Viso uses spectrometer sensor technology into their products. By using the spectrometer sensor technology, Viso is able to produce not only the 3D files but also the full photometric data in one system at extremely high speed. To achieve this, Viso uses Ibsen's FREEDOM spectrometer with a customized feature implemented on it. As a result the company is able to develop a unique technology in a portable system that can rapidly analyze all the data collected.

"We chose Ibsen Photonics because of the unique transmission grating technology used in their spectrometers. This technology adds significantly more value to our product", Christian Krause says.

## The Perfect Partnership from Beginning to the End

Being able to work with Ibsen Photonics has shown to be a great benefit for Viso. The company draws on Ibsen Photonics' expertise, particularly in the area of spectrometer technology. With an average employee tenure of more than 10 years, Ibsen is an effective partner that builds on more than 25 years of experience as a company. Ultimately, the long fruitful collaboration gave rise to products such as the LabSpion and the LightSpion which are considered one of the fastest portable measurement systems on the market.

The first contact with Ibsen took place in 2012 during a visit program initiated by the Lighting Industry Association, where Ibsen was one of the companies to be visited. "Later on that year, we were actually going to scale up our light testing equipment into a specialized segment. We said why not try and have a talk with Ibsen", Christian recalls. When the FREEDOM spectrometer became known to Viso the company was amazed by the high efficiency and the unique transmission grating technology it offers.



After a few meetings and discussions, it quickly became clear that the FREEDOM spectrometer was well suited for Viso's spectrometer project. To integrate the FREEDOM spectrometer into Viso Systems solution, customized features had to be implemented exactly as Viso wanted them to be. Thus the solution was designed, developed and piloted with a strong collaboration between Ibsen and Viso. To this end, the R&D departments of both companies worked closely together.

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## Access to the Right People with the Right Skill

The capability to directly access the key people from Ibsen whenever needed gives Viso Systems the necessary resources to meet all its technical demands in the field of spectrometer sensor technology. This enables Viso to be responsive in a challenging industry by drawing on the experience and skills of Ibsen in the field of spectrometers. "When we have a problem it is easy to get in contact with the right people. We can even talk to the engineer who has tested that specific unit or email with him. Ibsen also has good long term knowledge, they have employees like Thomas Rasmussen who has been there for many years who can answer all questions about spectrometers upfront", Christian stresses.

With the benefit of experience provided by Ibsen, Viso was able to concentrate their skills on strengthening and improving their core processes to differentiate their products in the market.

"It's not just buying a product but it's also being able to get access to the experience within that. When our client in the field asks something that is spectrometer specific, we can answer that question because we are able to talk with an experienced person within Ibsen. Thus we can remove the knowledge of spectrometer technology, not to be a part of our core business and concentrate on what we are really good at", Christian concludes.

