

IQ System: advanced optics for sustainable lighting from NANOPTIQS

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Precise Light Distribution with IQ System

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“This innovation represents years of dedicated effort and marks a significant advancement in lighting technology”— Marek Skeren, R&D Director

REZ, CZEC REPUBLIC, March 27, 2024 / EINPresswire.com / -- IQS NANOPTIQS has launched IQ System, the first nanotechnology lighting optics to be delivered as a modular kit. IQ System means lighting manufacturers and designers can now design and produce luminaires that are much slimmer, save material and energy, and provide precisely controlled light distribution for a wide variety of applications. They thus better meet the requirements for sustainable, low-energy lighting projects while creating a more comfortable environment for users.

A luminaire built with IQ System, for instance, weighs less than 135 g per meter yet delivers over 20 lumens per gram of luminaire weight, setting a new industry standard.

IQ System consists of three components, each with a specific function:

* A reflector for primary light shaping and control ,

* an antiglare cover for enhanced visual comfort and a low UGR rating,

* nanofilm at its core enabling it to achieve supreme optical precision and desired light distribution.

Luminaire manufacturers can thus combine their own creativity with fundamentally new technological possibilities to develop their own unique solutions for galleries, showrooms, corridors, warehouses, large halls, building reception areas, and anywhere else where both visual comfort and material and energy efficiency are important.

IQ System differs from existing optical modular systems in that it is based on optical nanotechnology. The component surfaces have a structure created using mathematical algorithms on the same scale as the wavelength of light. IQS Group companies design, develop and produce these sophisticated nano and micro structures with precise architecture, using them in a range of fields from anti-counterfeiting through medicine to material engineering. Lighting technologies can thus benefit from expertise in other fields.

The IQ System solution was presented at the Light + Building 2024 trade fair in Frankfurt am Main (Germany), where it attracted great attention. IQS NANOPTIQS also introduced their innovative optics system at the fair's Architeller presentation format, earning praise for its sustainable nano-optic technology from architects and exhibitors alike. This recognition underscores IQ System's innovative approach to meeting modern design and environmental standards.

Marek Škereň, Research and Development Director at NANOPTIQS, said: "This innovation represents years of dedicated effort and marks a significant advancement in lighting technology. Our journey involved a rigorous process of testing, refinement, and solving complex technical challenges. Through collaboration with our partners, we refined our technology to make it practically applicable and effective. The development process was both challenging and rewarding, leading us to make a notable breakthrough in lighting."

For editors:

IQS NANOPTIQS is a pioneer in nanotechnological light solutions and designs, developing and producing a wide range of optics with innovative characteristics and functions. These products feature enhanced visual comfort, remarkable miniaturization, and precise light control to ensure sustainability and a competitive advantage.

IQS NANOPTIQS is a member of IQS Group.

<https://www.nanoptiqs.com/iq-system/>

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