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Exhibitor Introduction (Within 200 words)	This research institute, which is located in Cheorwon-gun, Gangwon-do was established in December 2005 with the aim of development regional economies through moving in companies and sales contribution of enterprises based on the support of the local government. The LED/OLED ICT Convergence Center is planning and performing national projects related to lighting, display, and sensor industries. Especially, we are preparing for the transfer of commercialization technology through not only researching quantum dots, which are optically excited nanomaterials but also production and evaluation analysis related to OLED light extraction films.In addition, 200mm X 200mm class In-Line type OLED Deposition System and patterning process facilities, lighting evaluation apparatus about optical/electrical properties are built in our institution. And developing in various field, not only transparent electrode fabrication via solution process but also external optical excitation / light extraction film optimization experiments, which can improve the properties of the OLED lighting.
Exhibit Description (Within 200 words)	In the case of OLED lighting products, many vacuum deposition steps were required to achieve color coordinate(CIE) control and high color rendering index(CRI). However, in order for OLED lighting products to have price competitiveness, it's necessary to study the cost of simplifying the organic vapor deposition process. Therefore, we are developing optical excitation and optical extraction film technology to enhance CRI and achieve high optical efficiency by combining quantum dot technology with existing External Out-Coupling(EOC) optical extraction film technology. This technology is also a core technology that can minimize complaints caused by the deviation of color coordinates of existing OLED lighting products. As a result, it can be a technology to enhance the competitiveness of OLED lighting products by lowering product prices and improving quality. The film is made by screen printing, spin coating and bar coating technology. It has a color rendering index of 90 or more and light extraction efficiency of 114%.

Exhibit Product	OLED Lightings & External Out-coupling Film Quantum Dot Powders and Films, Quantum Dot molding Caps