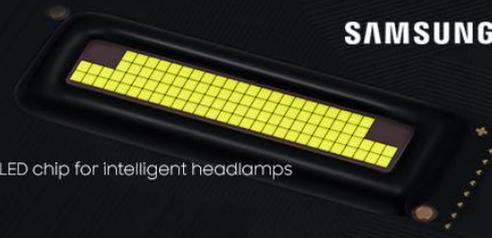


PixCell LED

Ultimate precision in perfect alignment

100+ individual cells with just 25 μm spacing, perfectly matrixed onto a single LED chip for intelligent headlamps



社论

汽车行业面临不断变化

在上个月ISAL 研讨会上，前奥迪照明总监 Wolfgang Huhn博士发表了一场精彩的主题演讲，介绍市场和技术各个方面发生的变化：

- 佛吉亚收购了海拉，KKR收购了康奈可（Calsonic Kansei），Motherson 收购了马瑞利（Marelli），LG-E 收购了 ZKW，麦格纳收购了Olsa，彼欧集团收购了AMSL，紧接着又收购了伟瑞柯，预计类似并购未来还会继续。
- 光源供应商引领创新，电子、半导体和软件供应商越来越活跃，所有二级供应商包括透镜、微光学、DMD、传感器、致动器、测量设备、塑料材料、工程/模拟/计算，都在全力开发创新技术。
如我们最近采访的舜宇车载，可以看出，随着新照明功能的发展，相关企业是如何变革以顺应发展需求。

At the ISAL symposium last month, Wolfgang Huhn, former Audi lighting chief, made a best in Class keynote concerning his vision on lighting, explaining how the market and the technologies are changing:

- Faurecia bought Hella, KKR's Calsonic Kansei then Motherson bought Marelli, LG-E bought ZKW, Magna bought Olsa, Plastic Omnium bought AMSL before buying Varroc Lighting, and it will continue.
- Light Sources suppliers are leading the innovations, Electronics, semiconductor and software suppliers are more and more active and all Tier 2 Lenses, Micro-Optics, DMD, sensors, actuators, Measuring Equipment, Plastic Material, Engineering/Simulation/Calculation, make innovations possible.

舜宇从2006年开始量产车用传感镜头，2015年起先后进入HUD、激光雷达、智能车灯等新兴领域，与全球一级供应商合作，为宝马、奔驰、奥迪、福特等车企配备相关产品。

An example is Sunny Automotive of which we made an interview. It shows how companies are evolving following the new lighting innovations arriving. The company began mass production of automotive sensing lens in 2006, and since 2015, the company has successively entered emerging fields such as HUD, Lidar, and Smart Automotive Lamp, cooperating with worldwide Tier1 to equip cars such as BMW, Mercedes-Benz, Audi, Ford.

“既然涉及投影功能，就不是传统的照明光学范畴，而是成像光学”。车灯从照明光学向成像光学发展，既然需要成像，就会对像素有要求，比如百级像素、千级像素、万级像素，甚至百万级像素。

“Since the projection function is involved, it is not the traditional lighting optics category, but the imaging optics”. Automotive lamps are developing from lighting optics to imaging optics, but because of imaging, they have pixel requirements, such as 100-level pixels, 1,000-level pixels, 10,000-level pixels, and mega-pixels.

A handwritten signature in black ink, appearing to read 'W. Frally'.

DVN 首席执行官

深度新闻

Tani Gu: 舜宇车载深耕成像光学



舜宇光学科技（集团）有限公司，成立于1984年，距今已专注光学行业三十多年，是全球领先的综合光学零件及产品制造商。

舜宇车载是舜宇光学集团下面的核心子公司，2004年开始进入车载领域，之后一直专注车载光学产品的研发、生产、制造。2006年，舜宇第一款车载感应镜头开始量产。2012年至今，舜宇车载镜头的市占率已经连续10年全球第一（数据来源于TSR），全球知名汽车品牌如奔驰、宝马、奥迪、大众等均搭载了舜宇车载的镜头。自2015年开始，公司相继进入HUD、激光雷达、车灯等新兴领域。

Sunny Optical Technology Group, established in 1984, has been focusing on the optical industry for over 30 years and is a global leader and comprehensive manufacturer of optical components and products.

Sunny Automotive is a core subsidiary of Sunny Optical Technology Group. It entered the automotive field in 2004 and has been focusing on R&D, production and manufacturing of automotive optical products since then. In 2006, Sunny's first automotive sensing lens began mass production. From 2012 to the present, the market share of Sunny Automotive lens has been the first in the world for 10 consecutive years. Sunny Automotive has cooperated with world-renowned Tier1 enterprises and Sunny lens covers the global mainstream cars such as BMW, Mercedes-Benz, Audi, Ford, and so on. Since 2015, the company has successively entered emerging fields such as HUD, Lidar, and Smart Automotive Lamp.



我们对舜宇副总Tani提出了以下几个问题

Questions to Tani GU

Tani个人简介：谷春燕，现任宁波舜宇车载光学技术有限公司副总经理，深耕汽车领域十多年，拥有深厚的汽车光学及行业背景，在战略规划，市场开拓，客户关系，产品管理等方面具有丰富的实战经验，曾多次接受业内知名媒体专访并在国际性展会论坛上发表精彩演说。

Tani Gu is the deputy general manager of Ningbo Sunny Automotive Optech. She has been deeply involved in the automotive field for more than ten years, has a profound automotive optics and industry background, and has rich practical experience in strategic planning, market development, customer relations, product management. She has ever received interviews with industry well-known media and delivered wonderful speeches at the international exhibition forum.

DVN：舜宇车载最早是做车载镜头起家的，之后为何选择进入车灯市场？

Tani Gu:对于车灯，大家传统的认知只用于照明，只要把黑暗的地方照亮就可以了。但随着智能驾驶市场的发展，让汽车去进行信息交互是发展趋势，市场和行业也对此提出了更多的需求：车灯是一个很好的信息交互媒介，要求照明功能之外，还包括信息交互，换句话说，就是车灯要具备投影功能，由于涉及到投影功能，就不是传统的照明光学范畴，而是成像光学。舜宇车载成立以来一直专注成像光学领域，这个是我们擅长的，所以我们2017年开始进入车灯市场。

DVN: Sunny original business was Automotive Lens, why would you enter the automotive lamps market?

Tani: As for automotive lamps, the traditional cognition is only for lighting, to illuminating the dark. However, with the development of intelligent driving, it is a trend to realize information interaction via car itself, and the market and industry have also put forward much more demands for this function. Lamps are good medium for information interaction, except the original lighting function, it need to realize information interaction, in other words, the automotive lamps must equip with projection function. Since the projection function is involved, it is not the traditional lighting optics category, but the imaging optics. Since its establishment, Sunny Automotive has been focusing on the field of imaging optics, which is our biggest strength, so we began to enter the automotive lamps market in 2017.

DVN: 从光学的角度，舜宇车载如何看待车灯的未来发展？

Tani Gu:上面有提到，车灯是从照明光学向成像光学发展，但因为要成像，它有像素要求，如百级像素、千级像素、万级像素、百万级像素。随着车灯像素越来越高，它能承载的信息交互内容也会更加丰富。简单的应用比如ADB (Adaptive Driving Beam) 功能，通过对灯光进行分区管控，实现远近光灯的自适应切换，以避免对其他道路使用者造成眩目。现在陆续也有一些高端车开始投一些比较复杂的内容，如人行横道、光轨导航、欢迎图案等。总的来说，车灯未来会逐渐从照明光学到成像光学发展，且有不断向高像素化发展的趋势，成像的内容也会越来越丰富。

DVN: From an optical point of view, how does Sunny Automotive see the future development of automotive lamps?

Tani: Automotive lamps are developing from lighting optics to imaging optics, but because of imaging, they have pixel requirements, such as 100-level pixels, 1,000-level pixels, 10,000-level pixels, and mega-pixels. As the pixels of the lights become higher and higher, the information interaction content it can carry will also be richer. Simple applications, such as the ADB (Adaptive Driving Beam) function, can realize adaptive switching of high and low beams by partitioning and controlling lights to avoid dazzling other road users. Now, some premium cars begin to cast more complicated content, such as crosswalks, light track navigation, welcome patterns, etc. In general, automotive lamps will gradually develop from lighting optics to imaging optics in the future, and there will be a trend of continuous development to high pixelation, and the content of imaging will become more and more diverse.

DVN: 舜宇车载在成像车灯上的优势及挑战？

Tani Gu: 刚刚有讲到，因为舜宇车载一直专注做成像光学，所以在成像光学上有深厚的经验积累和沉淀。在镜头设计上，良好的热补偿特性能确保车灯产品在高低温下的成像稳定，特殊的镜头加工工艺可以有效解决太阳光倒灌及蓝边问题。舜宇车载多年扎根汽车行业，对车规的认知比较深入，能够很好地将原来车载镜头上的成像光学和车规经验运用在车灯上。

但是车灯和车载镜头又有很大不同，车灯既要实现照明，又要实现投影，核心参数（如亮度、照度、对比度、投影距离、照明范围等）与车载镜头不同，在法规上的要求也更严苛，所以我们在进行成像镜头设计的时候，难度也更大，这是第一个挑战。

另外，车灯与车载镜头是完全不同的两个行业，客户群基本没有重叠，想要进入车灯行业，舜宇车载要从零开始进行客户积累，这是第二个挑战。

DVN: What are the advantages and challenges of Sunny Automotive mounted Imaging lamps?

Tani: As I mentioned, Sunny has been focusing on imaging optics, it has accumulated profound experience and precipitation in imaging optics. In terms of lens design, good thermal compensation characteristics can ensure stable imaging under high and low temperature, and the special lens processing technology can effectively solve the problem of sunlight flooding and color edge. Sunny has been rooted in the automotive industry for many years and has a relatively deep understanding of car regulations. It can well apply the imaging optics and automotive grade regulations experience on the automotive lens to the automotive lamps.

However, automotive lamps and automotive lens are also very different. Automotive lamps must realize both lighting and projection. The core parameters (such as brightness, illuminance, contrast, projection distance, lighting range, etc.) are different from automotive lens. The requirements are also more stringent, so it is more complicated situation when we design the imaging lens for automotive lamp.

DVN: 当前疫情、缺芯大环境下，站在汽车行业角度，您对未来发展有什么看法和见解？

Tani Gu:我觉得从大的层面看是一个机遇。目前来看，未来智能化发展是一个必然的发展趋势，现在因为疫情、缺芯等大环境不好，所以市场发展较前期有所放缓。

但从另一个角度看，正是因为大环境造成的资源短缺问题，让大家更为聚焦，集中精力解决主要矛盾，也更慎重地布局和谋划公司未来发展。所以我们可以看到，中国很多造车新势力近几年发力明显，他们不断突破创新，对他们而言是一个绝佳的机会，因为一旦抓住，将会更快地实现弯道超车，在市场站稳脚跟，甚至可以让中国OEM的整体的自主品牌的能力在全球实现领先，完成品牌升级。

DVN: Under the current situation of epidemic and lack of chip, from the perspective of automotive industry, what are your views and insights on future development?

Tani: I think it is an opportunity from a general perspective. We can see intelligent development in the future is an inevitable trend. Now due to the epidemic and lack of chips, the market development has slowed down compared with the previous years.

But from another point of view, because of the current shortage of resources, everyone is more focused, concentrated on solving the main contradiction, and more prudent in the layout and planning of the company's future development. Therefore, we can see that many new car manufacturers in China have made great efforts in recent years. They continue to break through and innovate, which is an excellent opportunity for them. If they seize it, it can even allow Chinese OEMs to succeed in overtaking in automotive field and enhance their brand awareness in the global market.



SMART EYE SAFER DRIVING汽车智慧之眼

DVN: 在这样的背景下，对舜宇车载而言，您觉得有哪些机遇或挑战？

Tani Gu:正如前面所说，智能化汽车、无人驾驶是必然的发展趋势，舜宇车载一直致力于为自动驾驶和智能驾驶提供光学解决方案，公司除了具有交互功能的成像车灯产品，如汽车前大灯、车身投影灯、舱内投影灯，还包括车身感应功能的产品，如感应类镜头，这块市场潜力巨大，我们非常看好感应类产品这块市场。随着汽车自动驾驶等级不断提升和安全冗余的需要，激光雷达的搭载需求与日俱增，公司近几年继续加

大激光雷达领域布局，从今年开始激光雷达多款产品将会陆续实现量产；同时，随着智能座舱的发展，HUD市场正在兴起，未来会有更加丰富的应用，目前我司多款HUD产品已经实现量产。

然而伴随“汽车+光学”市场发展日趋白热化，公司的竞争对手越来越多，对我们来说将面临更大的挑战。但无论市场怎样变化，舜宇车载始终坚持为客户提供满意的产品及服务，不断提高公司竞争力，积极应对挑战。

DVN: Against current background, what opportunities or challenges do you see for Sunny Automotive?

Tani: As mentioned, intelligent vehicles and autonomous driving are inevitable development trends. Sunny has been committed to providing optical solutions for autonomous and intelligent driving. In addition to the imaging lamp products with interactive functions, such as automotive headlamp, ground projection lamps, cabin projection lamps, and products with sensing functions, such as sensing lenses, have huge market potential, and we are very optimistic about the sensing market. As constantly upgrade of autonomous driving levels and the need for safety redundancy, the demand for lidar will keep rise up. In recent years, Sunny has continued to increase the layout of the lidar field. From this year, a variety of products for lidar applications will be put into mass production; at the same time, with the development of smart cockpit, the HUD market is emerging, and there will be more abundant applications in the future. At present, many of our products for HUD applications have achieved mass production.

However, with the rapid development of "automobile + optics" market, we will face more and more competitors and also bigger challenge. But Sunny always insists on providing customers with satisfactory products and services, continuously improving the company's competitiveness, and actively responding to all the challenges.

DVN: 最后一个问题，DVN将于今年9月在上海举办照明创新技术研讨会，届时贵司是否会展示新的技术或产品？可否透露一些相关信息？

Tani Gu:舜宇车载已成功自研出阵列投影灯产品，拥有知识产权，可实现小型化、高清晰度，成像内容也更灵活，不仅可以投信息交互的内容，如迎宾图案，还可以投警示内容，如倒车警示标识，满足个性化投影需求。同时，搭载位置灵活，可以安装在车身任何位置。并根据客户需求，提供整车投影解决方案。

欲了解更多详情，可联系czxcpgy@sunnyoptical.com

DVN: Last question, DVN will hold the 25th Lighting Workshop at Shanghai in September this year. Will Sunny present new technologies or products at workshop? Can you disclose some relevant information?

Tani: Sunny Automotive has successfully developed array projector lamp, with exclusive IP, which can achieve miniaturization, high definition, and more flexible imaging content. It can not only cast information interactive content, such as welcome patterns, but also project warning content, such as reversing warning signs, to meet the needs of personalized projection. At the same time, the mounting position is flexible and can be installed anywhere on the vehicle body. And depends on customer needs, to provide overall vehicle projection solutions, Sunny welcome industry personnel to exchange and discuss at any time.

More information at czxcpgy@sunnyoptical.com

照明新闻

思达科技推出UNICORN-LAIT II 并行Micro-LED 测试系统

照明新闻



STAR UNICORN-LAIT II 先进综合测试系统

随着 MicroLED 从工程转向生产，将对坏像素、超小间距探测、自动电气和光学测量系统等提出更加严苛的要求。思达增强型 Unicorn-LAIT II 以其独特的并行测试架构实现了电气、驱动器功能、RGB、光学测试能力，满足了日益严格的测试要求。

With MicroLED moving from Engineering to Production, a near-zero tolerance for bad pixel, ultra-small pitch probing, automatic electrical and optical measurement systems need to step up. With STAr's enhanced Unicorn-LAIT II addresses these stricter testing requirements and with its unique parallel test architecture for electrical, driver functionality, RGB, optical testing capabilities.

Unicorn-LAIT II 是一款先进的高通量 LED 测试系统，可满足每片晶圆上数十万到数百万颗LED的测试要求。高并行化的特点能显著降低测试成本和测试时间。该系统为 Mini/Micro-LED 提供关键测量，将并行测试与探针台和探针卡的电气、光学测量集成在同一个系统，为行业用户提供全面的分析结果。

Unicorn-LAIT II is an advanced high throughput LED test system, that caters for dies in hundreds of thousands to millions of LED per wafer. High Parallelization allows the customer to significantly reduce the Cost of Test and Test Time. The

system provides critical measurements for Mini/Micro-LEDs and integrates parallel testing with the electrical, optical measurement with probe station and probe cards in one system, offering a comprehensive analysis result to industry users.

思达 Unicorn-LAIT II 是一款高级系统，它在半自动和全自动探针台中将并行测试仪器集成到一个全新水平。它基于 STAR Unicorn-LPX 精密 SMU，具有 48 个和多达 480 个通道，可为每个 Micro-LED 提供高速和准确的光学特性 DC。此外，该系统具备高精度闭环 XYZ 平台和 0.1um 激光编码器反馈的探针台，确保了多 LED 步进 <5um 焊盘尺寸的最佳可重复性。

Unicorn-LAIT II series is an advanced system that integrates parallel test instruments to a whole new level in both semiautomatic and fully automatic probe station options. Based on STAR Unicorn-LPX precision SMUs with 48 and up to 480 channels, this new model provides a high-speed and accurate DC of optical characterization of each Micro-LED. The probe station with high-precision closed-loop XYZ stages with 0.1um Laser encoder feedback ensures the best repeatability in multi-LED stepping <5um pad size.

通过思达 MicroLED-MD 测试探针卡，思达 Unicorn-LAIT II 可实现多种探针布局配置，实现精确的多 DUT 探测，并通过“多边缘感应”功能确保电流接触高度。此外，用户可以通过升级软件轻松高效地设置和控制整个测量过程，获得最佳测试性能。

With STAR's MicroLED-MD test probe card, STAR Unicorn-LAIT II enables wide varying probe layout configuration for accurate multi-DUT probing and ensures current contact height with "Multi-Edge Sensing" capabilities. Moreover, users can easily and efficiently set up and control the whole measurement process with upgrade software and achieve the best test performance.

佛吉亚将评估 10 亿欧元以下的业务

照明新闻



海拉新任首席执行官 MICHEL FAVRE

佛吉亚财务总监兼海拉新任首席执行官Michel Favre表示，佛吉亚将评审其10亿欧元以下的所有业务，因为该供应商在收购海拉后加大了撤资计划。

“我们正在建立一个非常强大的集团，因此我们需要专注关键业务，”Favre 在佛吉亚与分析师的第一季度营收电话会议上表示，他排除了出售该集团清洁移动业务的计划。

Faurecia will review all its business activities under €1b, Michel Favre, finance chief Faurecia, and new CEO HELLA said, as the supplier ramps up its divestment plan following its acquisition of Hella.

"We are building a very powerful group, so we need to focus on the key business," Favre said in Faurecia's first-quarter revenue call with analysts, where he ruled out plans to sell the group's clean mobility business.

佛吉亚表示已以54亿欧元的总价收购了海拉81.5%的股份，并在2月底停止了收购。根据佛吉亚和海拉 2020 年的销售额，合并后的公司将在汽车供应商名单中排名第八，总销售额约为 220 亿欧元，仅随销售额为 230 亿欧元的现代摩比斯。

Faurecia said it has bought 81.5% of Hella for a total price of 5.4 billion euros, but stopped buying shares at the end of February. Based on 2020 sales at Faurecia and Hella, the combined company would have ranked eighth on the list of the automotive suppliers., with combined sales of about €22 billion, just behind Hyundai Mobis, with sales of €23 billion.

同样在上周，Favre和首席执行官Patrick Koller发布了一个比较保守的年度目标，理由是考虑到中国的疫情封锁以及乌克兰战争可能带来的影响。

佛吉亚在自 1 月份海拉交易达成以来的第一份财务指导中表示，合并后的集团今年预计将产生约230亿至 240亿欧元的销售额，利润率为 4% 至 5%。

Also last week, Favre and CEO Patrick Koller issued annual targets at the low end of forecasts, citing caution linked to Chinese lockdowns and the war in Ukraine. The combined group should generate sales of about €23b to €24b this year with a profit margin of 4% to 5%, Faurecia said in its first financial guidance since the Hella deal was sealed in January.

该供应商表示，该指导基于对全球汽车生产的谨慎估计，由于乌克兰战争和中国新一轮疫情带来的封锁导致的全球供应链中断，该预估已被下调。“组件不是问题，”即将担任海拉首席执行官的Favre在电话中告诉记者，“问题是要知道最终的需求，以及中国的情况，这既关乎生产，也关乎需求，” Favre 说。

The supplier said its guidance was based on cautious estimates on worldwide automotive production, which have been revised down due to global supply disruptions linked to the war in Ukraine and new COVID lockdowns in China.

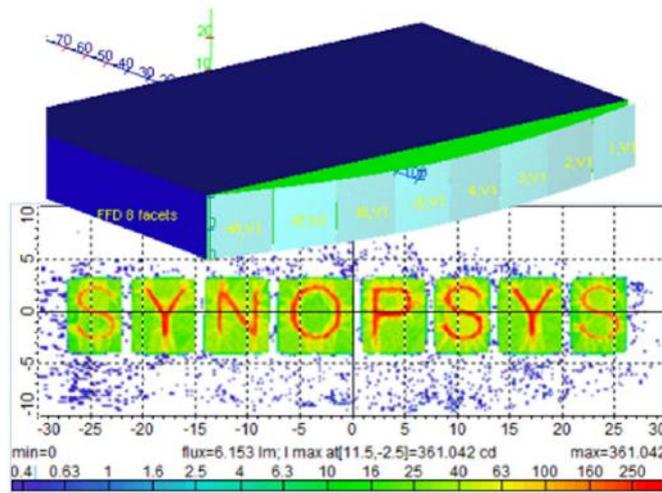
"Components are not the problem," Favre, who will be chief executive at the Hella division, told journalists in a call. "The problem is knowing what the final demand will be, and the situation in China, which is both a production and a demand problem," Favre said.

中国作为全球最大的汽车市场，为应对日益严重的新冠疫情而采取的封锁措施导致工厂停工和港口堵塞，进一步冲击了两年来新冠疫情和最近乌克兰战争而导致的供应链困局。

Lockdowns to manage growing COVID-19 flare-ups in the world's largest auto market are stranding workers, shutting factories and clogging up ports, disrupting supply chains already shaken by two years of pandemic and Russia's war on Ukraine.

LucidShape发布全新高级分析工具

照明新闻



最新版本 LucidShape 2022.03 提供诸多新功能和增强功能，帮助设计人员加快进入汽车照明的未来。使用该款全新高级分析工具，设计人员可以实现更智能化、更高效的工作，并通过针对自由曲面透镜和反射器的 MacroFocal 增强功能开发尖端照明产品。此外，该版本中包含的其他更新有助于简化产品开发流程，缩短上市时间。

The latest release of LucidShape, version 2022.03, provides many new features and enhancements to help designers speed into the future of automotive lighting. Designers can work smarter and faster with the new Advanced Analysis Tool, and develop cutting-edge lighting with MacroFocal enhancements for freeform lenses and reflectors. Additional updates included in this release help simplify product development workflows to accelerate time to market.

LucidShape 高级分析工具简化了分析步骤，提供对各种新分析工具的访问，并简化了交互式设计分析和故障排除。使用此款高级分析工具，您可以：

- 通过对点、样条线和多边形执行测量，交互式地分析光分布以查看您的系统是否满足要求。
- 通过组合多个 UV 数据文件并对结果进行测量，一次分析多个灯具。

The LucidShape Advanced Analysis tool streamlines analysis steps, provides access to a wide range of new analysis tools, and simplifies interactive design analysis and troubleshooting. With Advanced Analysis, you can:

- Interactively analyze a light distribution to see if your system meets requirements by performing measurements on points, splines, and polygons.
- Analyze multiple lamps at one time by combining multiple UV Data files and taking measurements on the results.

用于设计多面反射器的 LucidShape MacroFocal 功能包括最先进的自由形式设计功能，可对光散布提供更精细的控制，从而最大限度地收集光通量。这使设计师可以自由地专注于造型和外观，而不是复杂光学组件的实现细节。

LucidShape's MacroFocal feature for the design of multifaceted reflectors includes state-of-the-art freeform design capabilities to provide more granular control over light spread to maximize flux collection. This gives designers the freedom to focus on styling and appearance, rather than the implementation details of complex optical components.

外饰照明主要功能通常含截止线，避免给其他驾驶者造成眩光。在对此类灯具进行合规物理测试时，在进行光度测试之前必须执行照准核实。在大多数情况下，需要进行垂直照准调整以满足法规规定的照准要求。

Important light distributions commonly used for exterior automotive lighting applications exhibit a cutline shape to avoid glaring other motorists. When physically testing such lamps for regulation compliance, an aiming procedure must be carried out prior to conducting the photometry test. In most cases a vertical aim adjustment is required to satisfy aiming requirements as stated by the regulations.

在对使用 LucidShape 生成的模拟结果进行光度测试时，您可以选择自动垂直照准选项。指定水平位置和所需的垂直截止线位置后，照准自动调整。在虚拟原型设计和测试阶段可节省大量时间。

When photometrically testing simulation results generated with LucidShape, you can now select an automatic vertical aiming option. You specify the horizontal position and desired vertical cutline position and the aim adjustment is carried out for you, automatically. This can save a lot of time during virtual prototyping and testing.

小糸人事变动

照明新闻



4月27日，小糸宣布了董事会决定的董事和公司高管人事变动。

Koito announces changes of Directors and Corporate Officers decided at the Board of Directors held on April 27.

9名董事包括：

- Masahiro Otake 董事长兼首席执行官
- Michiaki Kato 总裁兼首席运营官
- Kenji Arima 工程本部/销售本部移动战略部门/研发部执行副总裁

9 directors included:

- Masahiro Otake Chairman and CEO
- Michiaki Kato President and COO
- Kenji Arima Executive VP Engineering Headquarters, Sales Headquarters In charge of Mobility Strategy Department, R&D Department.

22 名公司高管包括：

- Takayuki Katsuda 工程总部常务董事，负责项目管理部，系统产品开发部
- Atsushi Inoue 公司常务董事，负责公司企划部、CN推广、总务部和公关部
- Toshiyuki Katsumata 工程本部常务董事，负责第一产品开发部、第二产品开发部、静岡第二设计部、产品性能确认部和中国技术中心规划办公室
- Koji Shimakura 工程本部公司董事，负责工程本部、先进电子开发部、电子设计与开发和丰田设计部
- Kirk Gadberry 公司总裁，北美照明公司 (NAL)
- Manabu Kobayashi 公司董事主席，北美照明公司 (NAL)

22 Corporate Officers included:

- Takayuki Katsuda Managing Corporate Officer Engineering Headquarters, in charge of Project Management Department, System Product Development Department,

- Atsushi Inoue Managing Corporate Officer In charge of Corporate Planning Department, CN Promotion, General Affairs Department and Public Relations Department
- Toshiyuki Katsumata Managing Corporate Officer Engineering, In charge of 1st Product Development Department, 2nd Product Development Department, Shizuoka 2nd Design Department, Product Performance Confirmation Department and China Tech Center Planning Office
- Koji Shimakura Corporate Officer Engineering Headquarters, In charge of Engineering Department, Advanced Electronics Development Department, Electronics Design & Development and Toyota Design Department
- Kirk Gadberry Corporate Officer President, North American Lighting, Inc. (NAL)
- Manabu Kobayashi Corporate Officer Chairman, North American Lighting Inc. (NAL)