Company presentation

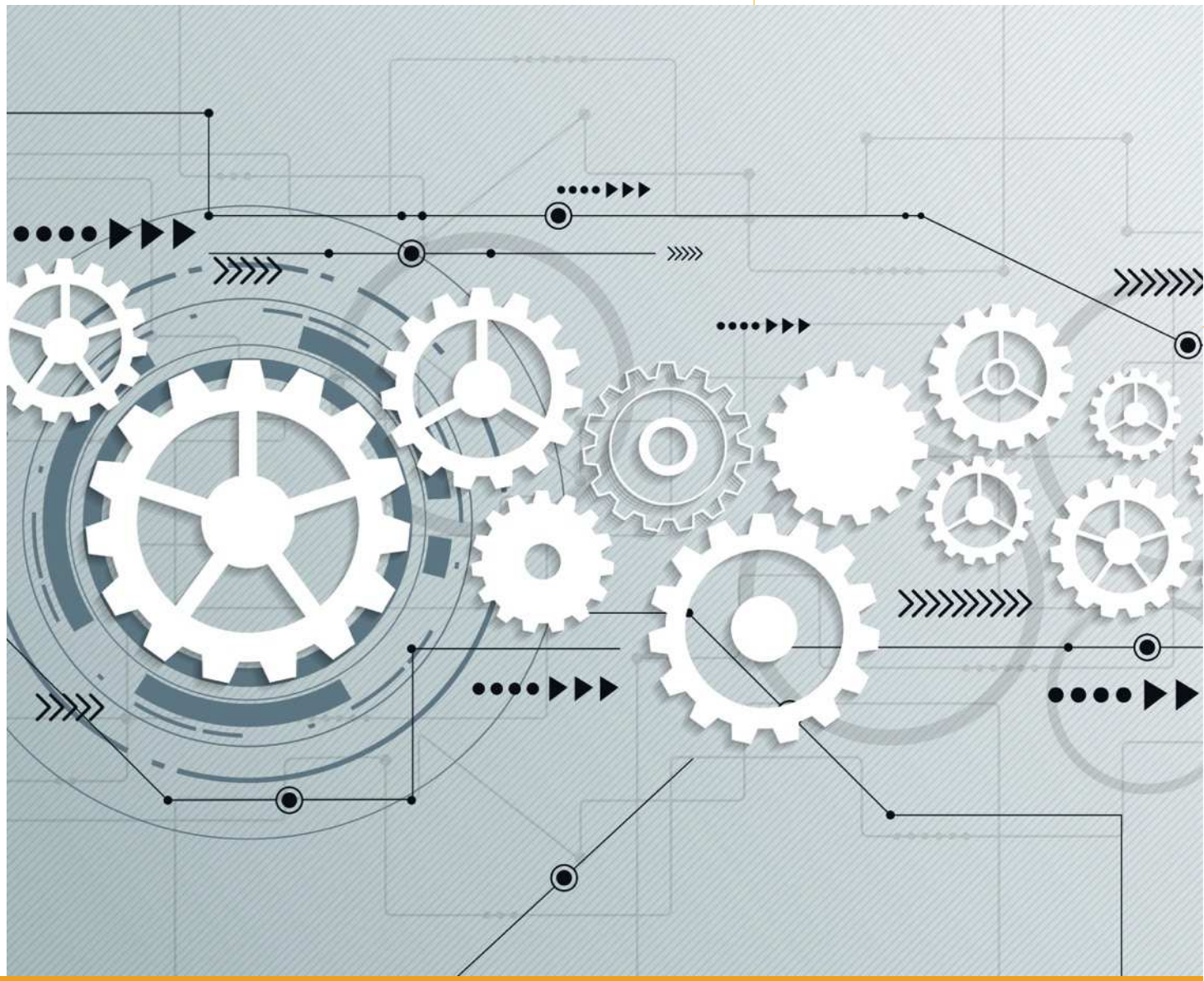
iLumTech™
Innovation ahead

WHO WE ARE

WE OFFER ENGINEERING SERVICES.
WE OFFER LABORATORY SERVICES.
WE HAVE A UNIQUE PORTFOLIO OF DEVICES.

iLumTech is:

- A globally visible company specialising in the development of luminaires, electronic devices, and optical components.
- Comprised of an experienced team of designers and engineers with access to the most advanced technical and development equipment, and who cooperate at the highest levels to ensure the best outputs.
- Home to enthusiastic, driven, and creative thinkers with a sustainable approach and a focus on “innovation ahead”.



WE ARE CREATING A NEW WORLD OF

OUR OFFER

EXPERIENCED ENGINEERS

Our engineers have experience in every field related to the development of lighting devices and their parts.

PROFESSIONAL OUTPUTS

Technical documentation and measurement reports are professionally completed and compiled ready for CE certification and entrance of products into serial production.

CONFIDENTIAL ATTITUDE

We have a strict NDA approach to all of our work. The confidentiality of information about our cooperation and the projects we work on together is an essential part of our service.

FUTURE ORIENTED THINKING

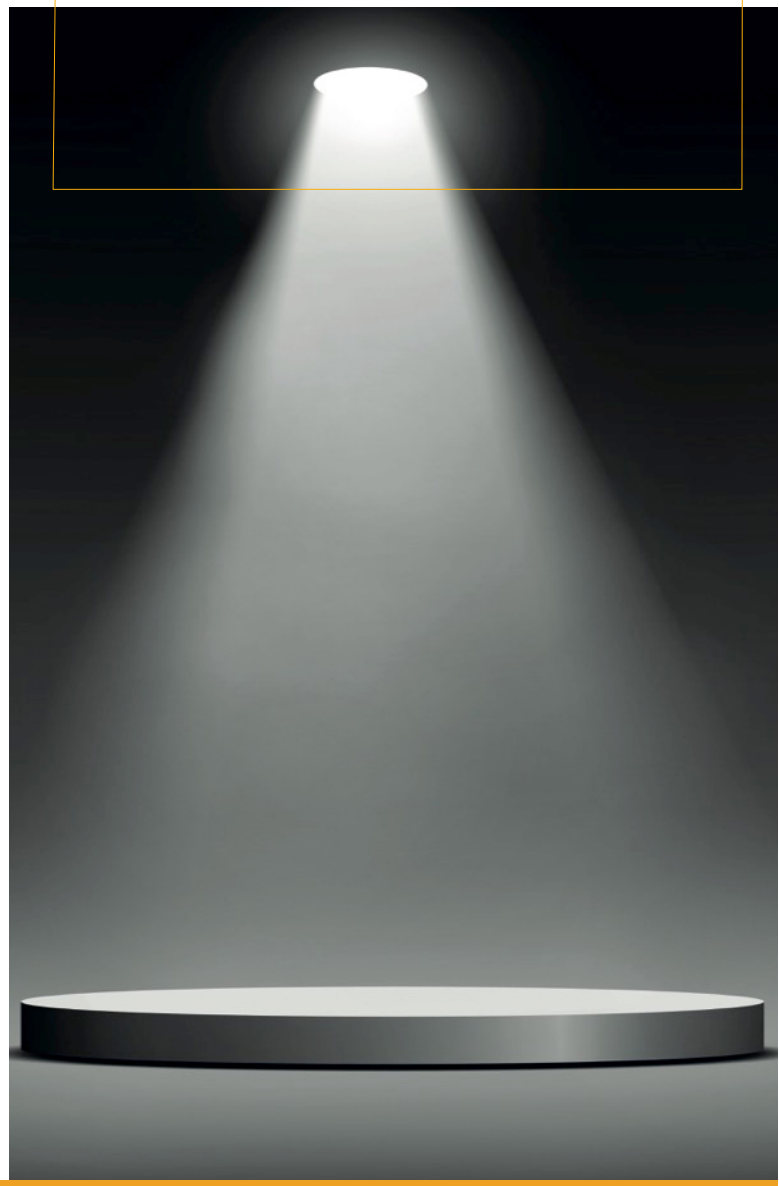
Thanks to our experience in the LED industry, all our development and engineering are done with the future in mind.

CONTINUOUS SERVICES

Product development is a never-ending process. We will continue with you on this journey through product optimisation, updates, and customisations.

FULLY EQUIPPED R&D

We have some of the best-equipped optical, thermal, electronic, and mechanical laboratories in Europe, and can provide customers with an array of tests side-by-side with many other services.



OUR SERVICES

INDUSTRIAL DESIGN

Our market research, product design, 2D/3D visualisation, packaging design, and mock-up creation will give you a competitive advantage, save time, and reduce costs.

OPTICAL DESIGN / PRODUCTION

Comprehensive design of all types of optical system, and the development and manufacture of tailored lenses and reflectors.

THERMAL DESIGN

Thermal simulation and the evaluation and optimisation of thermal solutions to ensure long-term performance of all developed devices.

ELECTRONIC DESIGN

Hardware and software development, PCB design, and the production of electronic components.

MECHANICAL ENGINEERING

The design of all mechanical parts in CATIA alongside full technical support and creation of complete technical documentation.

RAPID PROTOTYPING

3D printing and milling, electronic prototyping, and creation of fully functional prototypes for evaluation and presentation.

FULL LUMINAIRE DEVELOPMENT

Full development of luminaires from concept to release of the product to production, including arranging of certification and optional OEM support.

LABORATORY SERVICES & PRE-CERTIFICATION TESTS & MEASUREMENTS

Optical, thermal, electrical, electronic, and mechanical pre-certification tests and measurements for CE declaration, and as a wide range of independent tests.

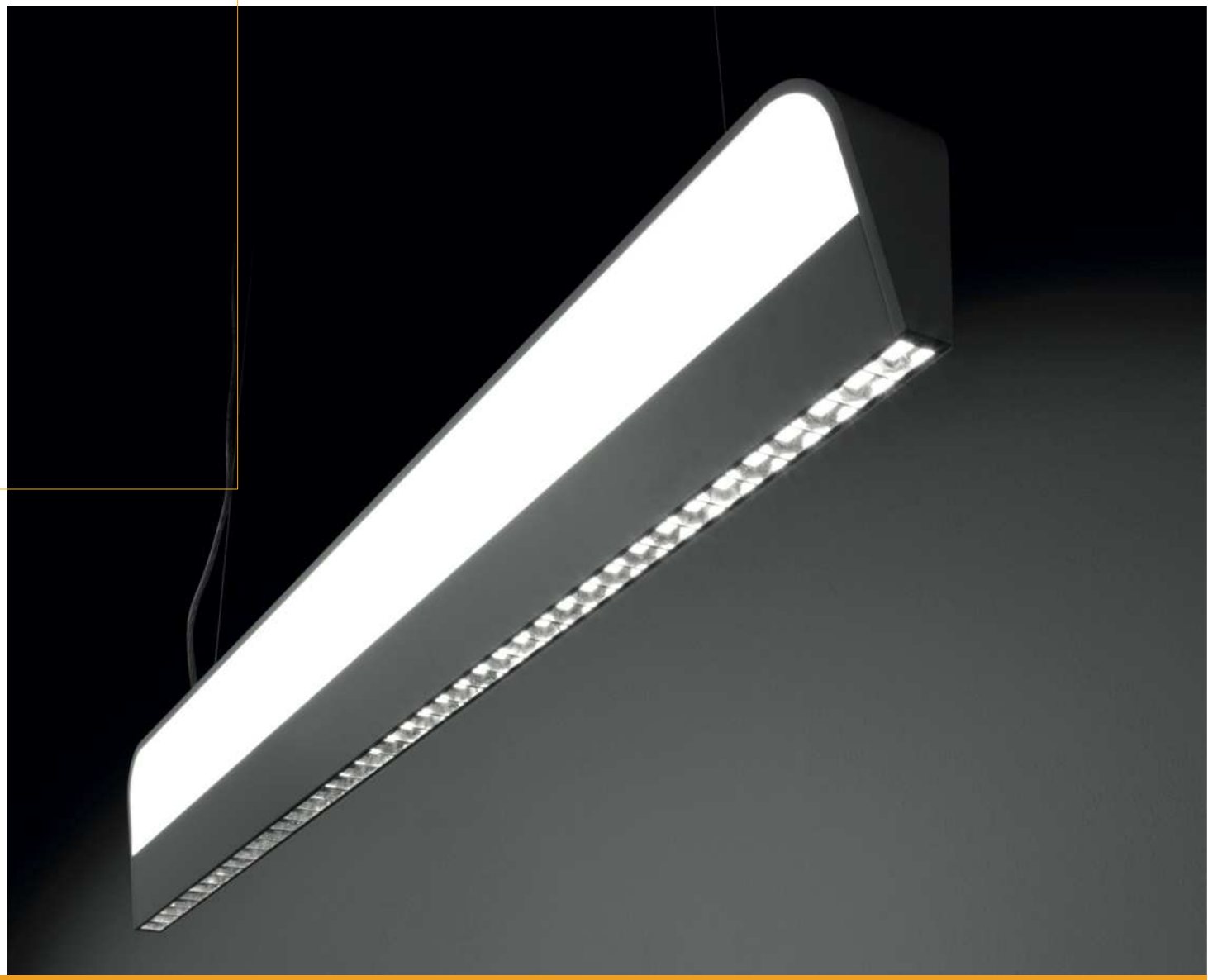
Full luminaire development

From the beginning until the end – we support lighting manufacturers through the whole process:

- Concept development.
- Engineering.
- Prototyping.
- Tooling.
- Certification.
- Product launch.

After sales services:

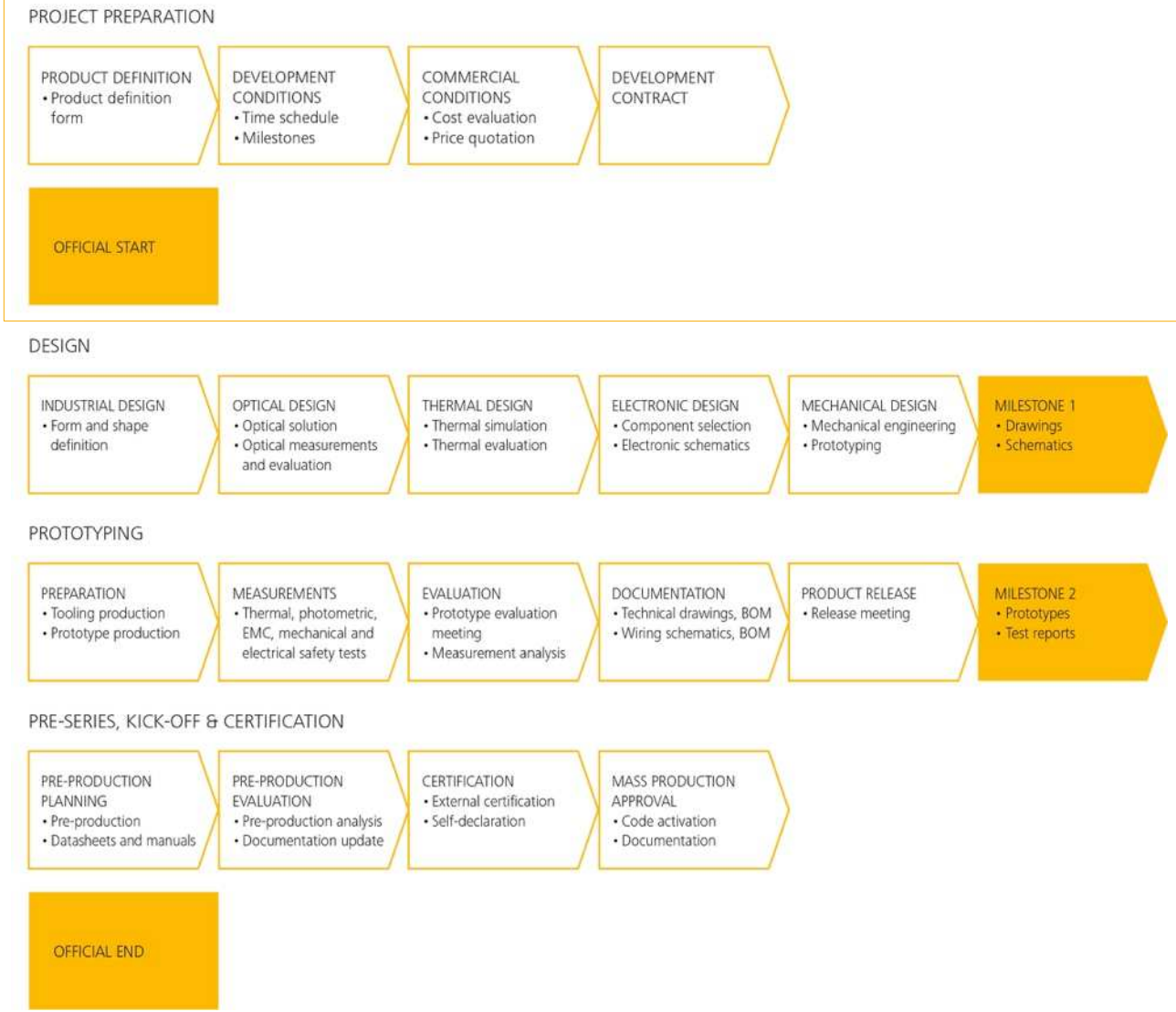
- Generation updates.
- Customisations.
- OEM support.



Development stages

Our comprehensive product development covers:

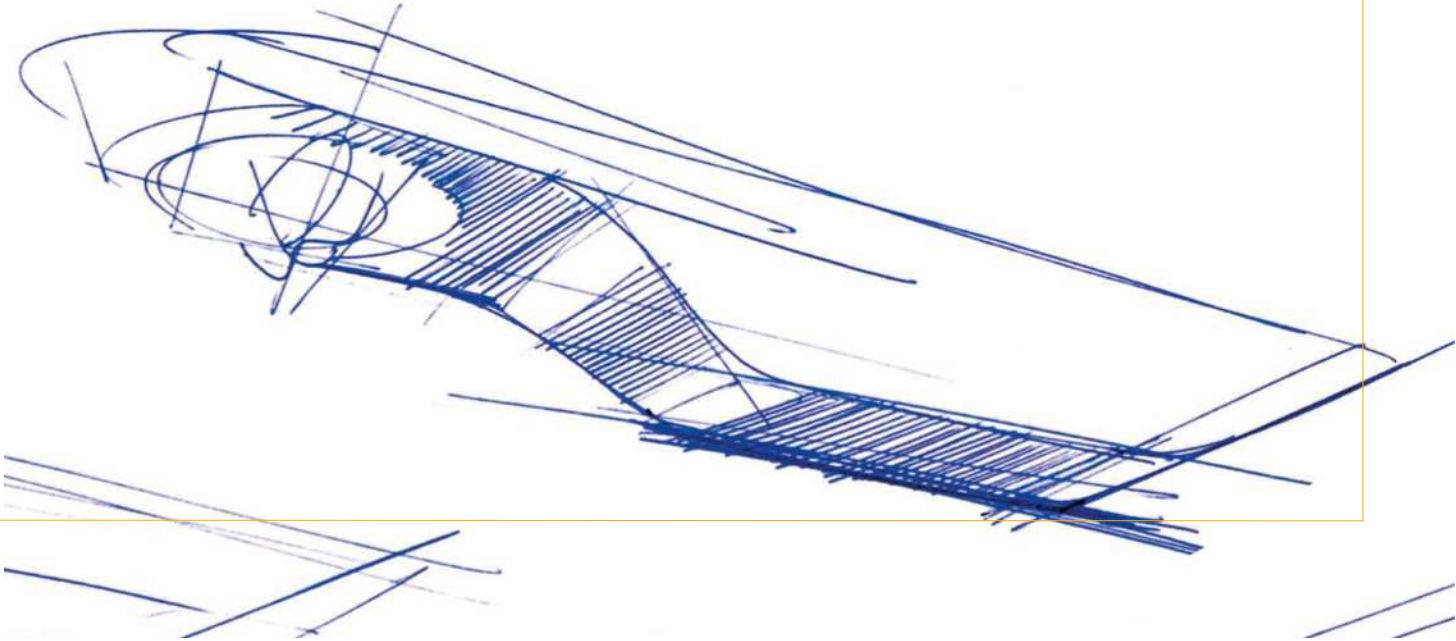
- Deep evaluation of customer requirements.
- Regular meetings and updates about progress and the development process.
- A flexible response to requested changes.
- Professionally compiled engineering and technical documentation.
- Full test and measurement reports.
- Experienced tooling production.
- Arrangement of certification and release to mass production.



Industrial design

Industrial design includes:

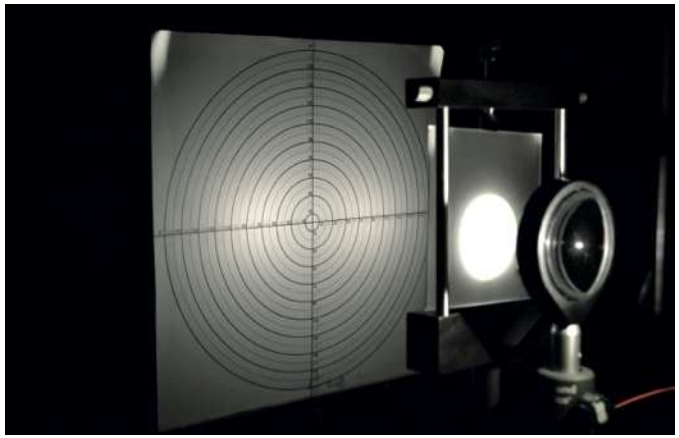
- Design research.
- Concept and product design.
- Mock-up creation.
- Product and corporate promotion.

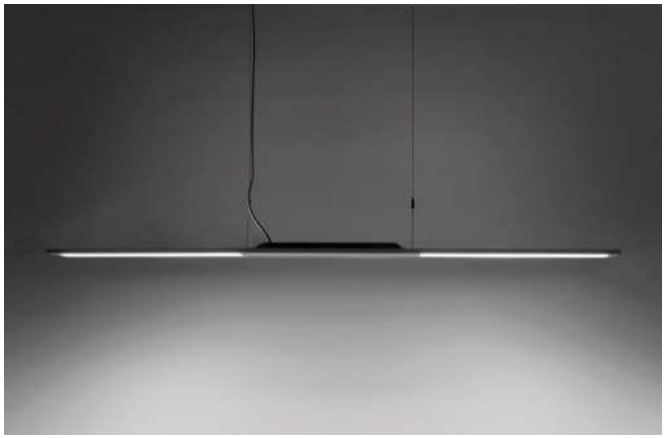


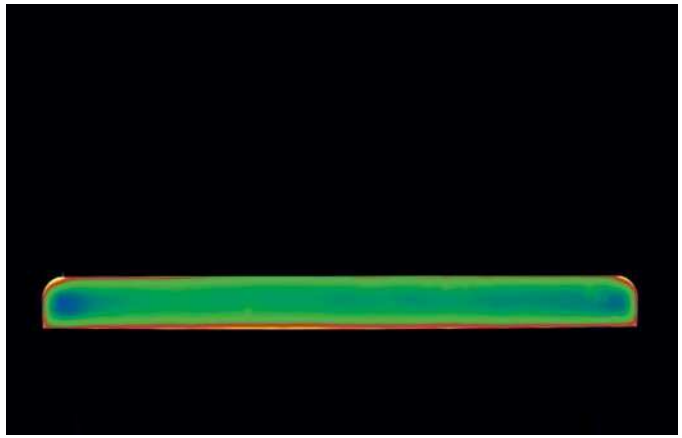
Optical design

Optical design includes:

- Optical system development.
- Reflector and parabolic louvre design.
- Refractor and diffuser design.
- Lighting design.
- Lens development, tooling, and optional OEM support.



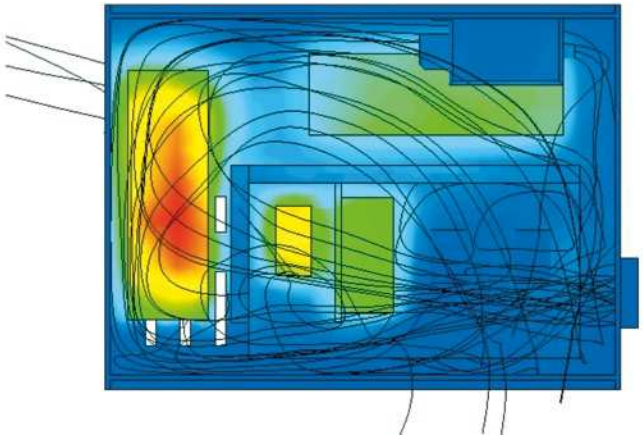


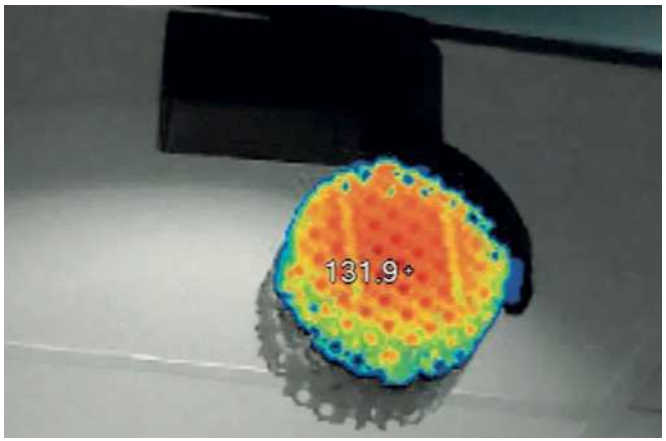


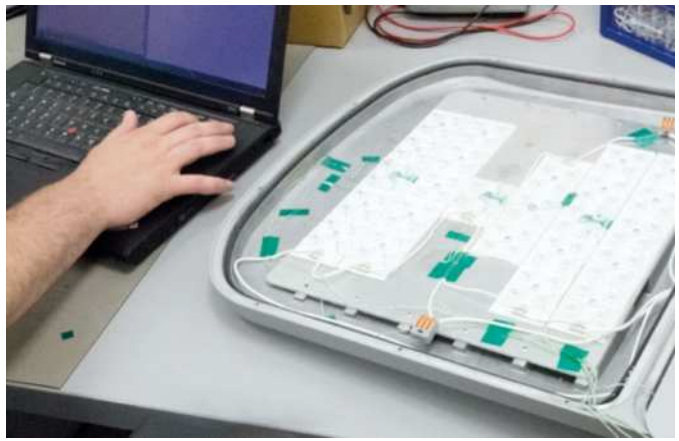
Thermal design

Thermal design includes:

- Thermomechanical simulation.
- CFD analysis.
- Thermography.



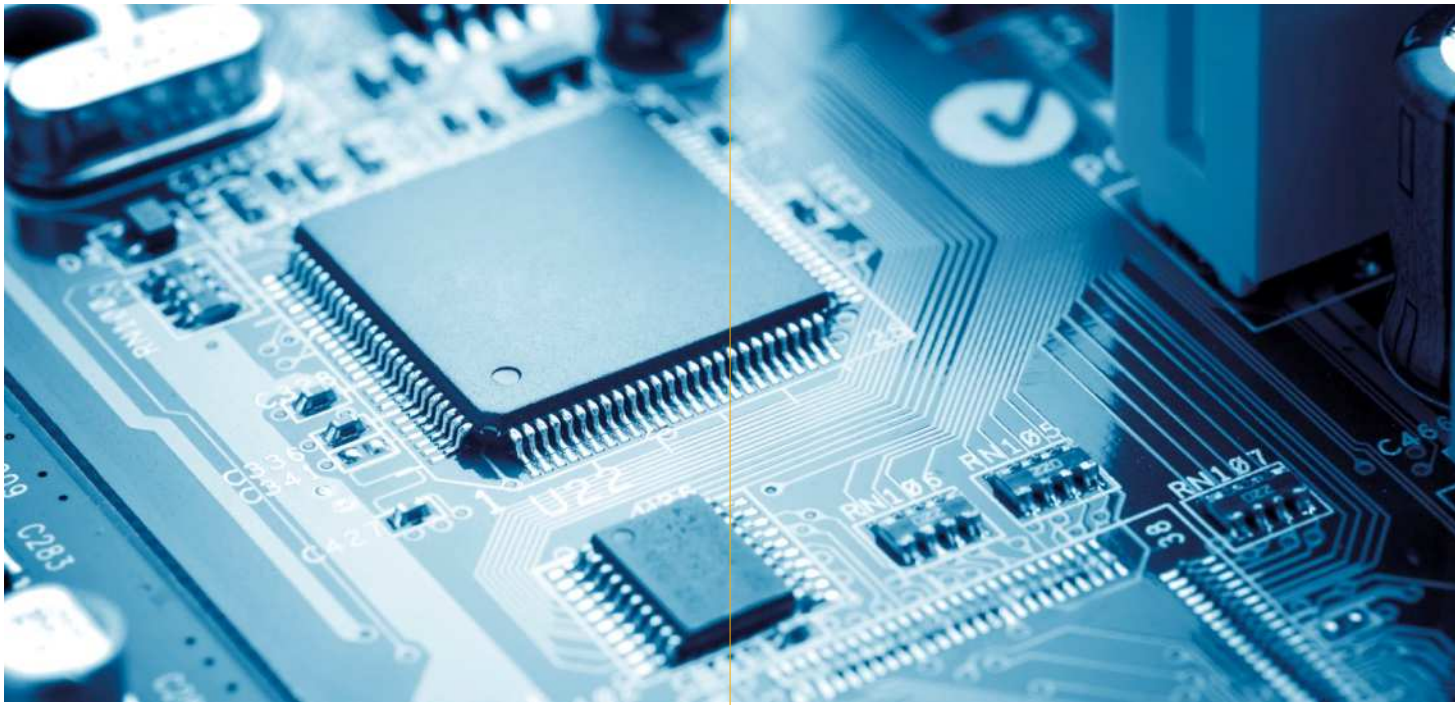


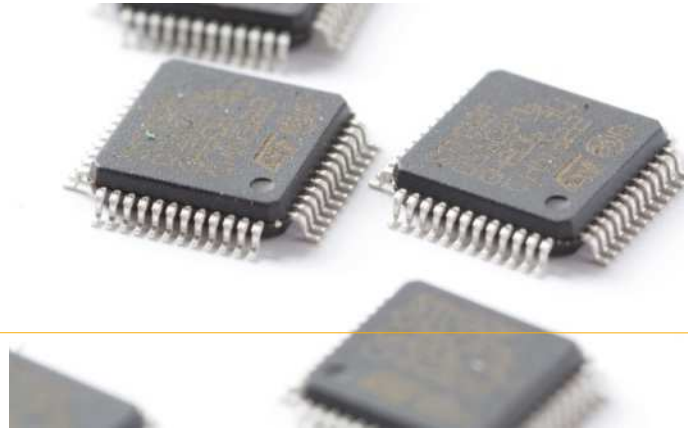


Electronic design

Electronic design includes:

- Hardware design.
- Firmware design.
- Software design.
- Labware design.
- Electronic design consultancy.

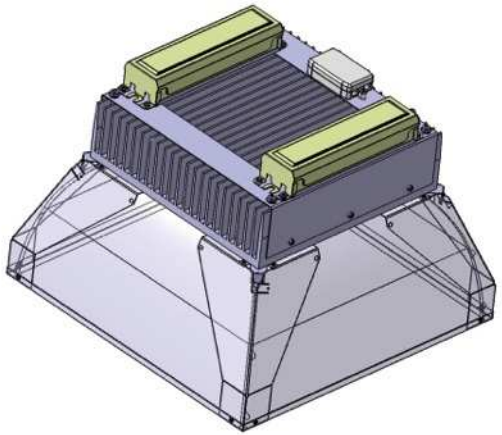


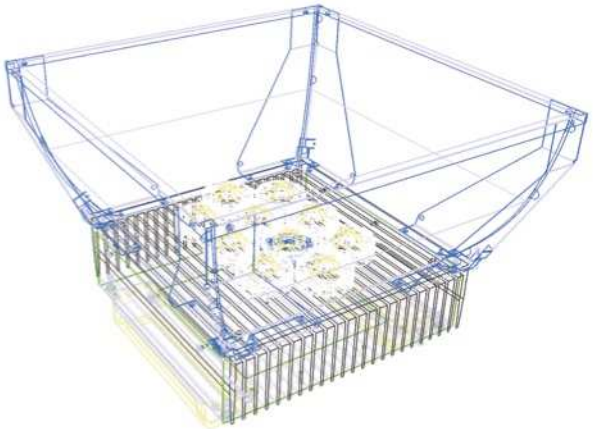


Mechanical engineering

Mechanical engineering includes:

- Sheet metal design.
- Aluminium die cast and extrusion design.
- Aluminium forging design.
- Mechanical analysis.

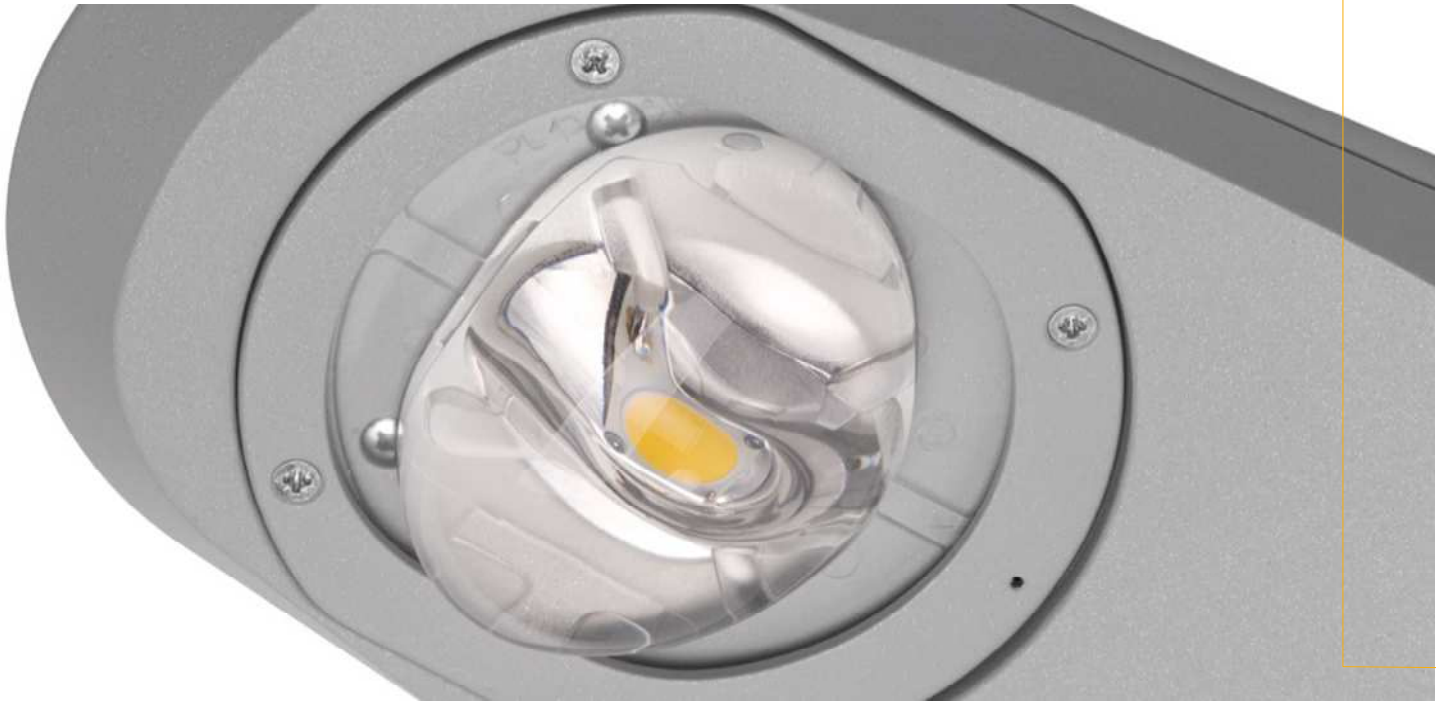


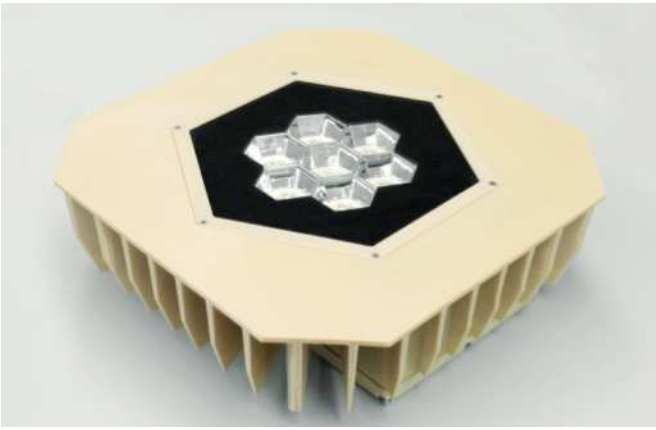


Rapid prototyping

Rapid prototyping includes:

- Functional prototyping.
- 3D printing and CNC milling.
- Electronic prototyping.





Laboratory services & pre-certification tests & measurements

We can perform:

- Optical tests and measurements.
- Thermal tests and measurements.
- Electrical and electronic tests and measurements.
- Mechanical tests and measurements.

Optical laboratory

Our optical laboratory can provide:

- Luminous intensity distribution curves.
- Ray data.
- Processing and archiving of LVK data.
- Luminance data of CRTs, LEDs and ELs.
- Road and tunnel brightness measurements.
- Rail system, road, and airport signal measurements.
- Illumination equipment and signage measurements.
- Research and measurement testing.
- Device brightness and uniformity evaluation.
- RGB colour values according to the CMOS matrix.
- Luminous flux data.
- Spectral measurements.
- CCT and CRI qualification.
- X, Y, Z coordinates.
- Scattering measurements.
- 3D scanning of objects.

Thermal laboratory

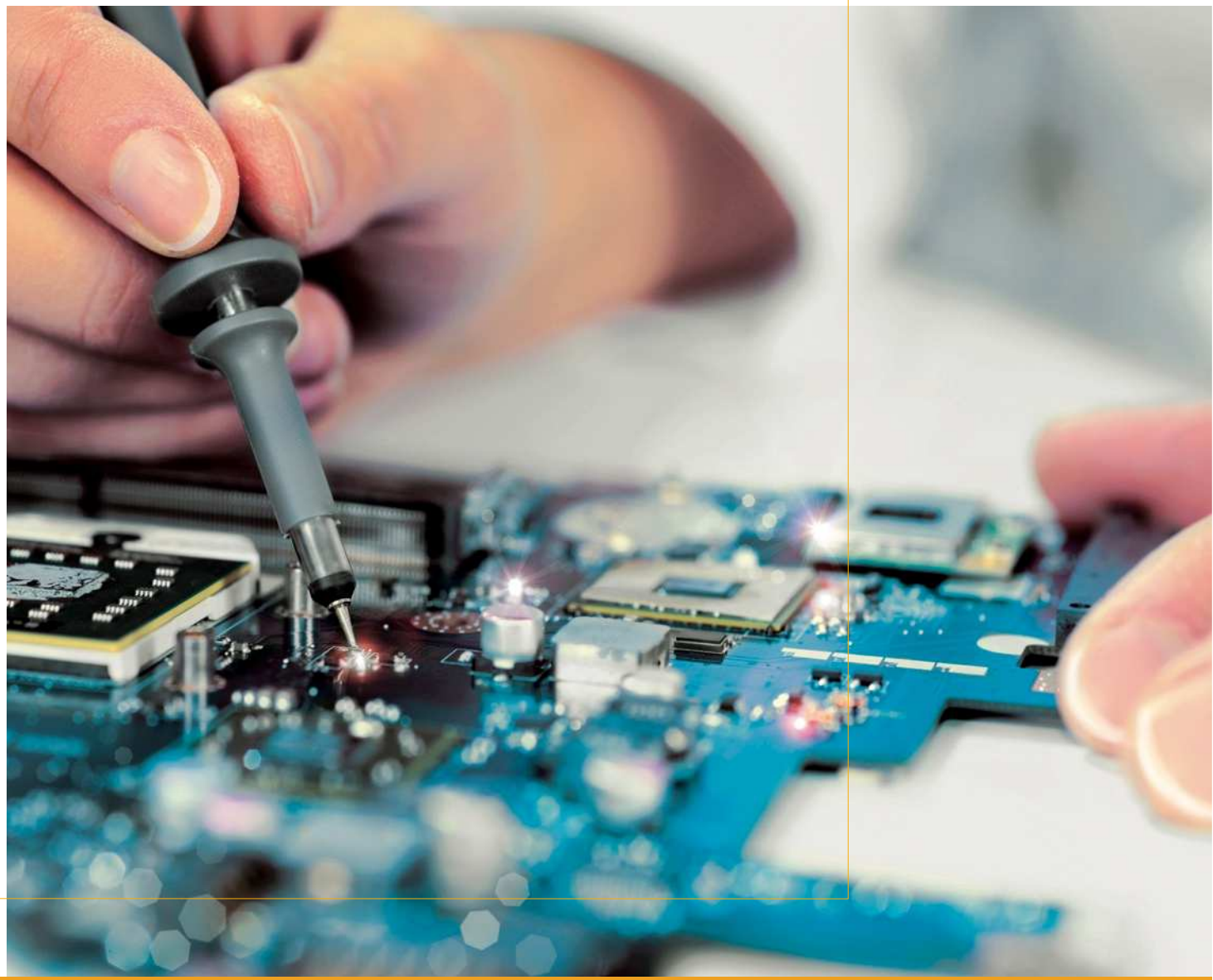
Our thermal laboratory can provide:

- High- and low-temperature operating lifetime tests.
- High- and low-temperature storage lifetime tests.
- Glow wire texts in ºC.
- Temperature cycling.
- Power cycling.

Electrical & electronic laboratory

Our electrical and electronic laboratory can provide:

- Long-term tests according to IEC 60598-1-12.
- Electrical safety tests according to IEC 60335/61010.
- EMC tests.
- DALI compatibility tests.



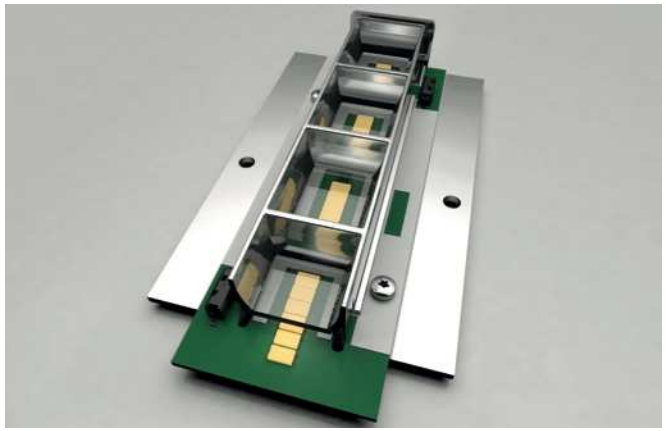
Mechanical laboratory

Our mechanical laboratory can provide:

- IP tests.
- IK tests..

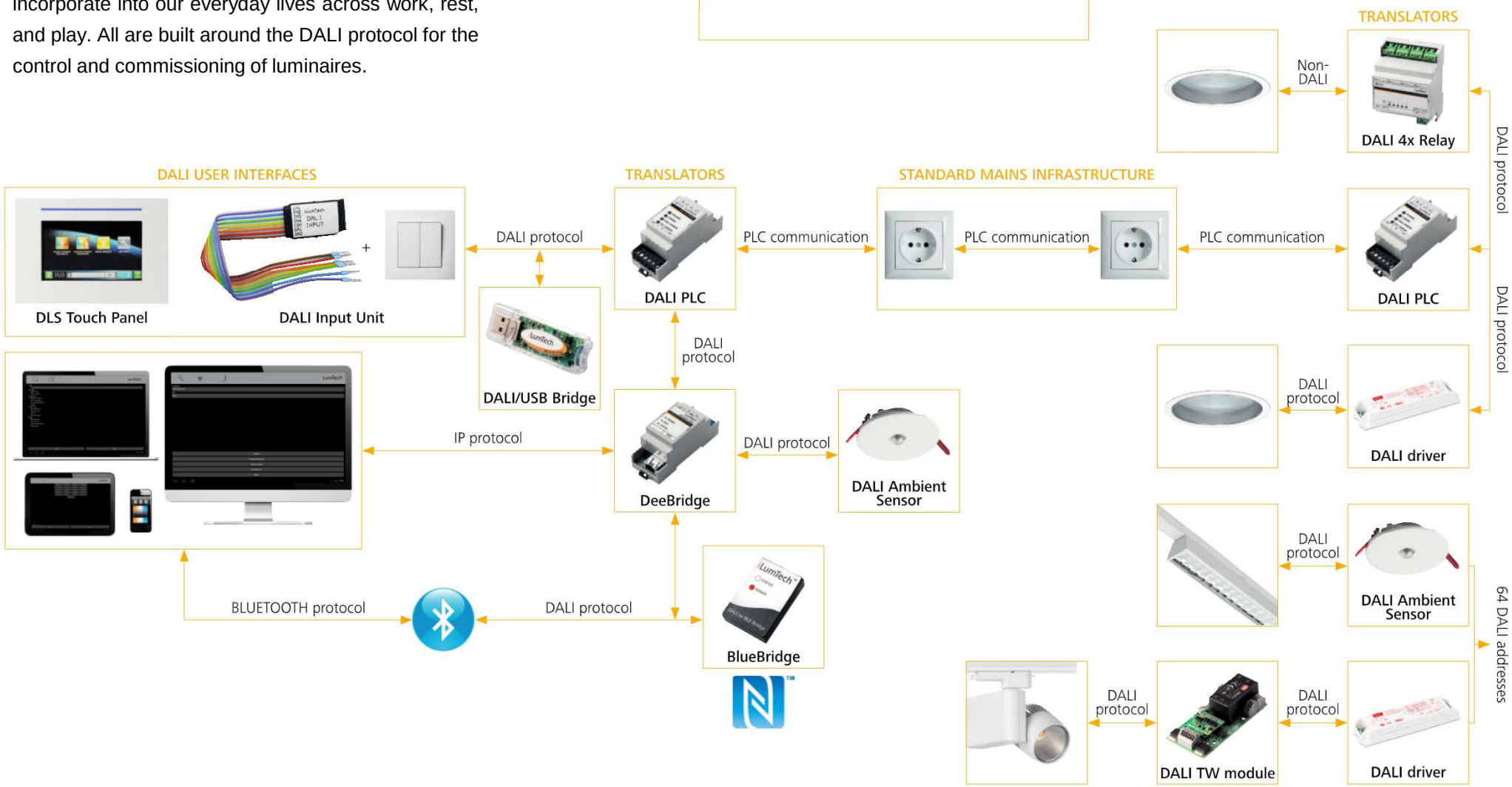
OUR PRODUCTS

We have developed a range of devices for the professional lighting market with the aim of being inimitable and simple to install for lighting manufacturers, installers, electrical engineers, and even end users. All of the devices were created by our own optical, thermal, and electronic engineers, and produced locally. We are sure you will be satisfied with their user-friendly and intelligent functionality, offered at an appealing price level.



Connected Lighting

Practical and simple to use devices that are easy to incorporate into our everyday lives across work, rest, and play. All are built around the DALI protocol for the control and commissioning of luminaires.



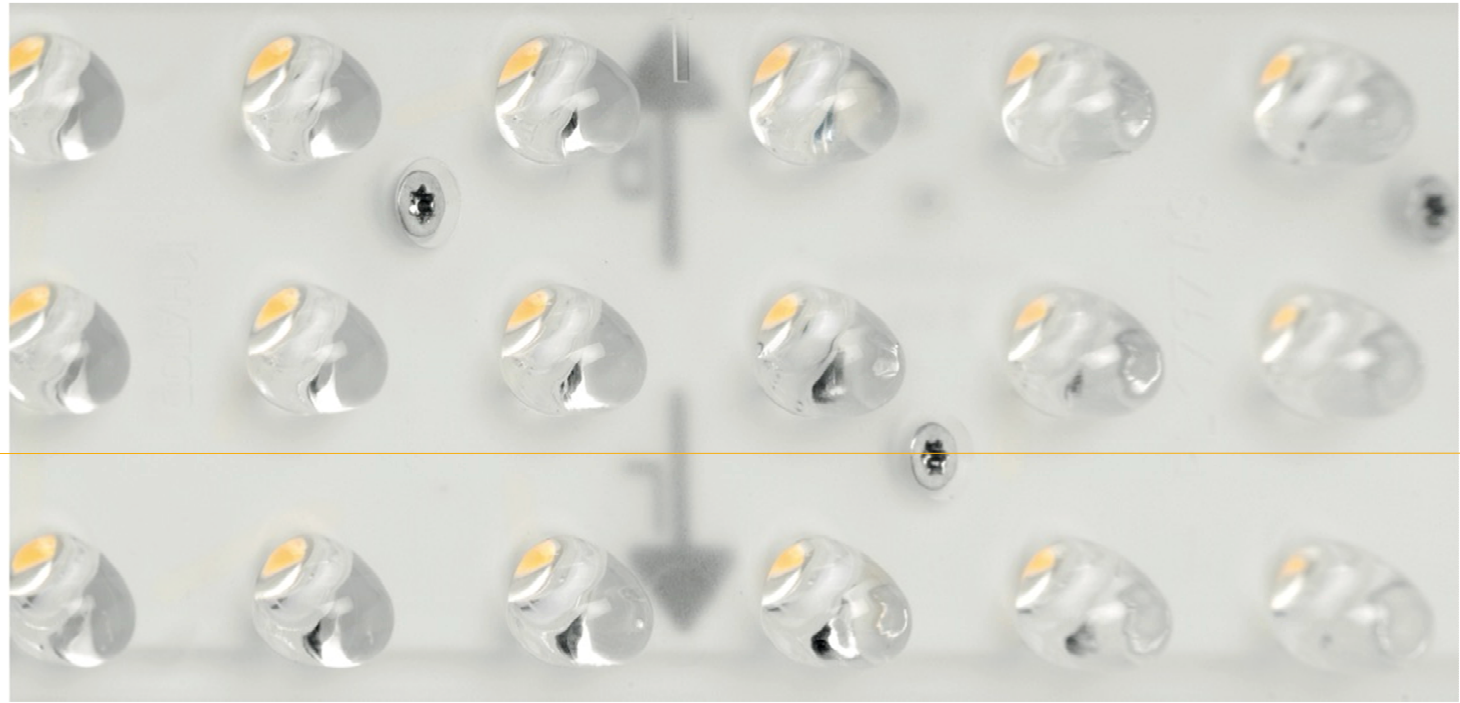
Connected LED Units

LED Units that offer the attractive feature of requiring no further development as everything is included in one module. This makes them an ideal choice for luminaire manufacturers and those seeking devices for bespoke solutions.

Optical Solutions

Our range of optical solutions includes complete lens systems, reflectors, and customisable diffusers in addition to tailored optical parts.

We also offer full lens development services that cover design, professional tooling, and optional OEM support.



THE APPROACH YOU TRULY DESERVE

Our services and products are built around your needs and wishes. Everything else is just general guidance. Let us know what you need, how we can support you, and where you can utilise our capacities. Feel free to contact us with any question and benefit from our fast responses, flexibility, and customer-oriented principles.

PROVIDING THE PERFECT SOLUTION IS NOT JUST OUR JOB.

Thanks for your attention

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