

Indoor Lighting by ELS Group

CASE STUDY

“At Telenor Arena we strive to provide the best total experience for our audience and customers in terms of visual and technical perception. ELS Group managed to succeed in providing a unique illumination both indoor and outdoor that we could not find elsewhere.

The light quality inside our Arena is second to none, and the visual impression of the Arena building is astonishing, thanks to the technological expertise provided from ELS Group.

Build quality and service from ELS Group has been impeccable, and we are proud to have achieved the highest ranking Arena light quality measurements.”

– Marius J Hansen - COO, Telenor Arena

Background

With more than 35 years of lighting experience, ELS Group creates high-quality lighting solutions for special industries and applications in extreme environments throughout Europe. ELS Group works closely with clients from the initial concept phase through implementation.

Project

Opened in 2009, Telenor Arena is Norway's leading multipurpose arena for concerts, sports events and family shows with a capacity up to 23,000 seats. Telenor Arena wanted to improve its indoor light quality to enhance the experience for spectators.

Participating Company



Final Installation



Bridgelux Array and Final Fixtures



Fast Facts

Client:
Telenor Arena

Location:
Norway

Manufacturer:
[ELS Group](#)

LED technology: [Bridgelux](#)

Challenges

- Complete lighting of 10,000 m² arena floor
- Flicker-free light with high color rendering (CRI) for HDTV/4K recordings
- Extreme requirements for rapid temperature changes under arena ceiling
- Floor luminance > 1300 Lux in 23m distance
- Individual lighting solution for the grandstand
- Illumination of outdoor space including entrances and parking lots
- Existing solutions on the market were of inadequate performance

Solutions

- Vero® Series 18 Décor Typical 97 CRI version (BXRC-30H4000-F-23)
- ITL 48, a custom developed LED Arena luminaire with 100,000 lm output (48 arrays)
- ITL 24, a custom developed LED Grand Stand luminaire with 60,000 lm output (24 arrays)

Benefits

- Overall energy savings of 45% compared to previous metal halide installation
- Integrated DMX dimmer control for individual programming of each luminaire
- 100% flicker-free and Ra/CRI > 98 according to EBU/TLCI-2012 standards
- Active cooling to withstand rapid temperature spikes

