





An Roinn Turasóireachta, Cultúir, Ealaíon, Gaeltachta, Spóirt agus Meán Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media

SPORTS CAPITAL & EQUIPMENT PROGRAMME (SCEP) 2023

LED FLOODLIGHTING INSTALLATIONS & UPGRADES

Electric Skyline Ltd.



Standard LED Floodlighting Designs

FAI Floodlighting Level Guidelines:

- CAT 3: UEFA (preliminary rounds) at a) 1200 Ev(lx) towards fixed cameras, b) 800 Ev(lx) towards mobile cameras
- CAT 2: Premier Division in the SSE Airtricity a) 800 Ev(lx) towards fixed cameras,
 b) 500 Ev(lx) towards mobile cameras
- Cat 1: First Division in the SSE Airtricity, Senior, Intermediate, Junior & Schoolboy Football levels = 350lux.
- ➤ Training Level = 150lux.

Standard Floodlighting Column Arrangements:

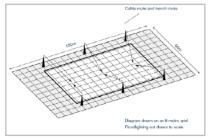


Diagram 2.0 6 column pitch lighting layout

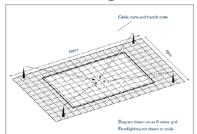


Diagram 1.0 4 column pitch lighting layout















Typical 800lux Design requirements(CAT 2: LOI Premier Division at 800lux towards fixed cameras)

- > 4No. 25m Columns
- **→** 48No. 1.5kW LED Floodlights

Typical 500lux Design requirements (CAT 2: LOI Premier Division at 500lux towards mobile cameras)

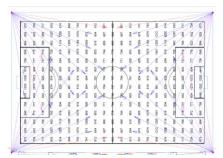
- > 4No. 18m Columns
- > 32No. 1.5kW LED Floodlights

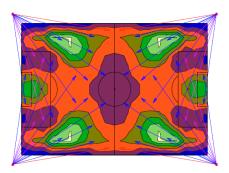
Typical 350lux Design requirements (CAT 1: LOI First Div, Senior, Intermediate, Junior & Schoolboy):

- > 6No. 15m Columns
- > 20No. 1.5kW LED Floodlights

Typical 150lux Design requirements (Training Level):

- 6No. 15m Columns
- > 12No. 1.5kW LED Floodlights





Some important considerations

- Power Distribution Board Location (usually located in Pitch side Pillar or in Control Room)
- Switching Controls (usually located within Clubhouse, Control room etc.)
 - Switching High (Match) / Low (Training)
 - Switching Pitch in sections (e.g. Pitch may be divided in 3rds for 6 Column system)
 - **➢** GSM/Mobile Switching Options Available (On/Off)
 - Bluetooth Dali Dimming System Options (incl link to booking system add-ons)
 - Full Specialist Dali Dimming System Options (incl light shows, events etc.)







- Quality of System: Very important for clubs to consider quality of products being proposed, including certifications (CE), Warranties offered, reputable reputation of both materials & installation contractor etc.
- Cabling: In-ground, Flex (Within column) and Switching/Dali Cabling
- Civil Engineering Works: Column Bases, Trenching/Ducting, Generator Base (if applicable) and Pillar Base (ESL can provide priced
 options if required)

Some important considerations Cont'd





- Power Supply Requirements: Single phase typically suitable for up to 12kW (small Astro), with Three phase supply required thereafter. Cost obtained from the ESB for upgrading supply (if required) would need to be considered vrs a Generator Option. In addition if there is a substantial distance between main Power Supply and the Pillar, a Generator Option may be more feasible when considering Civil & Cabling costs (ESL can provide priced option for suitable Generator if required)
- Pitch Floodlighting Layout (e.g. 6 Column system may not suit due to location of stand etc. Columns usually 4m-6m back from touch lines)
- Planning requirements and neighbouring properties (e.g. Column Heights may be subject to planning, Louvres may be required to Floodlights to limit light spill into neighbouring properties etc.)
- Likelihood for future upgrades: For example, should club initially require Training level lighting but plan to upgrade to Full Match level at a later stage; its more cost effective to install the complete infrastructure (e.g. cabling, columns, PDB etc.) for the full system during Phase 1, enabling only additional floodlights being required in Phase 2.

Sample Pricing for New Builds & LED Upgrades





Typical 800lux Design requirements (CAT 2: LOI Premier Division at 800lux towards fixed cameras):

New Build Price: €250,000.00 (Excl VAT) / €283,750.00 (Incl VAT)

> Upgrade MHL to LED: €129,600.00 (Excl VAT) / €147,096.00 (Incl VAT)

Typical 500lux Design requirements (CAT 2: LOI Premier Division at 500lux towards mobile cameras):

New Build Price: €140,000.00 (Excl VAT) / €158,900.00 (Incl VAT)

Upgrade MHL to LED: €86,400.00 (Excl VAT) / €98,064.00 (Incl VAT)

Typical 350lux Design requirements (CAT 1: LOI First Div, Senior, Intermediate, Junior & Schoolboy):

New Build Price: €98,000.00 (Excl VAT) / 111,230.00 (Incl VAT)

> Upgrade MHL to LED: €61,000.00 (Excl VAT) / €69,235.00 (Incl VAT)

Typical 150lux Design requirements (Training Level):

New Build Price: €73,000.00 (Excl VAT) / €82,855.00 (Incl VAT)

> Upgrade MHL to LED: €33,600.00 (Excl VAT) / €38,136.00 (Incl VAT)

Above prices are for guidance purposes only and are subject to site survey & site-specific designs.

Prices for LED Floodlighting Systems only. Prices exclude Civil Engineering Works and/or Generator (if required). These price options available upon request.

For Upgrade Projects: The condition of existing Columns & Brackets would need to be assessed for structural integrity and in-ground cabling assessed for any power enhancements (e.g upgrade of lighting levels from Training to Match may require enhanced in-ground cabling for increased load)

Benefits of LED vrs Metal Halide Systems





- LED system offers circa 45% savings on energy as opposed to metal halide (achieved by both reduction in Energy & Qty of Floodlights required)
- Smaller power supply required with LED (i.e. reduced energy costs, reduced carbon footprint, smaller Generator, reduced ESB upgrade costs etc.)
- ❖ LED is instant on 100% (no warm up period required). Should power outage occur during an event/match LED is instant back on
- ❖ LED offers much longer life, manufacturers claim up to 80,000 burn hours, metal halide normal lamp life is 8,000 burn hours.
- Little to no maintenance on LED saving clubs in the long term (NB: However important for club to ensure that quality products are selected as per previous)
- ❖ 10 Year Warranty available on LED where only 1 Year Warranty available on Metal Halide
- ❖ LED provides enhanced lighting control, dimming and more limited light spill vrs MHL
- Sports Grant Applications only apply to LED Systems





Some Useful Links





2023 Sports Capital Applications: https://www.sportscapitalprogramme.ie/

The 2023 round of the Programme will be open for applications from 9am on Monday 17th July 2023 until 5pm on Friday 8th September 2023. The deadline for registration is 5pm on Friday 25th August 2023.

Electric Skyline Website: https://electricskyline.ie/sectors/sports-lighting/

For Quotations, please e-mail: estimating@electricskyline.ie

FAI Stadium Infrastructure Criteria Guidelines:

https://www.fai.ie/sites/default/files/atoms/files/FAI Stadium infrastructure Criteria 2011.pdf





THANK YOU

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