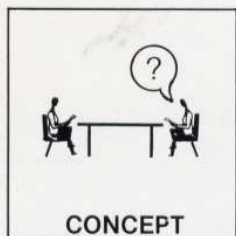


Sports Lighting



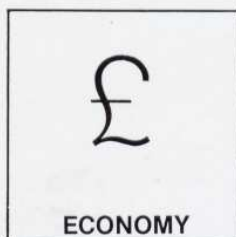
C.U. + Phosco



A golden rule in planning a lighting scheme for a new sports facility or in upgrading existing lighting is to seek professional advice. Lighting will extend the time facilities are available and will encourage increased utilisation. Sports lighting should aim to provide conditions that will allow players to perform to the levels of their daylight skills and if appropriate provide optimum viewing for spectators and television broadcasting. Advice on these aspects together with equipment options is vital if the result is to be viable in fiscal and planning terms.

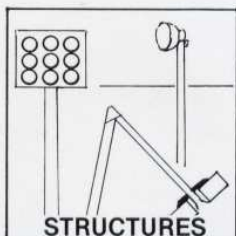


Once a decision has been made on the target lighting level required, the most appropriate light source and the best technique to use for the particular sport, Phosco engineers, using the latest computer and graphic display equipment linked to sophisticated in-house programmes will produce high accuracy horizontal and vertical illuminance predictions.

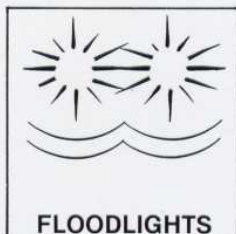


With the concept and the lighting plans established it is prudent to consider the long term implications of the project. Are elaborate arrangements for maintenance appropriate given the long life of most lamps used today? Is there likely to be a future increase in the lighting load to cater for an enhanced status of the club? Is T.V. coverage likely? Is an adjacent facility likely to require lighting from the structures now proposed? Electrical equipment and the installation of structures are part of initial capital and require a firm commitment from the start. Floodlights, lamps and accessories can later be added as required. Get the priorities right — consult the experts.

Over 50 years of experience are behind every C.U. structure, but which pole, mast or hinged column? Consult the table and then consult the manufacturers — C.U.



Type	Standard Height Range Metres	Standard Accommodation	Maintenance/ Access	Advantages/Disadvantages
Floodpole	5/18	Usually up to four floodlights at head with control gear in base compartment or at head	Tower Platform or ladders	Low Cost, tidy profile. Difficult for vandals. Access required for Tower Platform
Floodpole with Ladder rungs	5/18	Usually up to four floodlights at head with control gear in expanded base or at head	Ladder steps and/or climbing rungs	Tempting to vandals — Electrician with good head for heights required!
Hinged Column	5/20	Subject to weight limitations at column head	Hinges to ground	Mid-Point hinge (See-saw type): Tidy profile. Easy maintenance.
High Mast Raising and Lowering Head	16/50	Electrical loading limited. Head load limitation to order of 2 Tonnes	Lantern head-frame winds down	Good profile — Easy ground level maintenance. Relatively small foundations and base area. Difficult for vandals
High Mast Fixed Head	16/50	Heavier head loads possible	Detachable maintenance cage	Good profile — allows angled headframes. Relatively easy maintenance. Small foundations and base area. Difficult for vandals



From Tungsten halogen to high pressure discharge, from 50 watt to 2000 watt, from wide beam to narrow beam, Phosco have a luminaire to suit. Phosco products are backed by the No. 1 B.S.I. registered lighting laboratory. The choice of control gear and lamps is amongst the most comprehensive available. Protected luminaires for sports halls complements the Phosco range for sport and leisure.



C.U. will advise on installation; erection of the larger structures can be carried out by C.U.'s own experience erection team. If required, the checking of predicted lighting levels is part of the Phosco service.

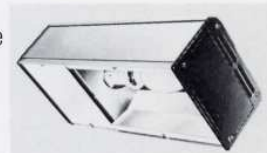
For individual sports please ask for appropriate Sports Data Sheet

The Products

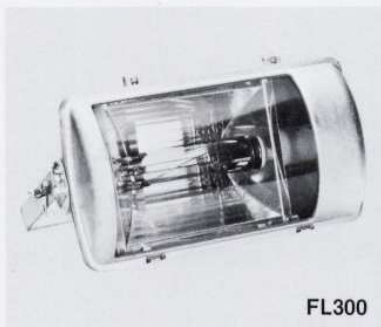
From the wide selection of lanterns and floodlights available from Phosco Ltd, the following are typical of the range most often used for Sportslighting:

- FL300 and FL310 accommodate Tubular discharge lamps from 100 watt to 1000 watt SON/T or MBI. In addition to narrow and medium beam reflector options the distribution can be modified by baffles and louvres.
- FL360 and FL370 are primarily for 2000 watt MBI lamps. The various light distributions available from these two floodlights provides the versatility required for most stadia systems.

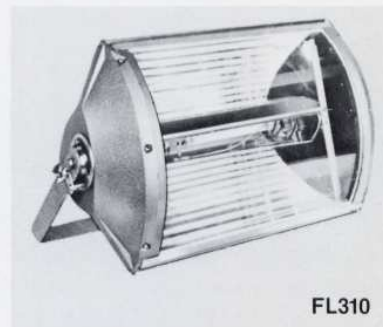
- The Phosbay range of robust interior fittings is available in single or twin versions for tubular or elliptical discharge lamps from 70 watt to twin 400 watt. Wireguards, skirts and diffusers complete this versatile range.



PHOSBAY



FL300



FL310



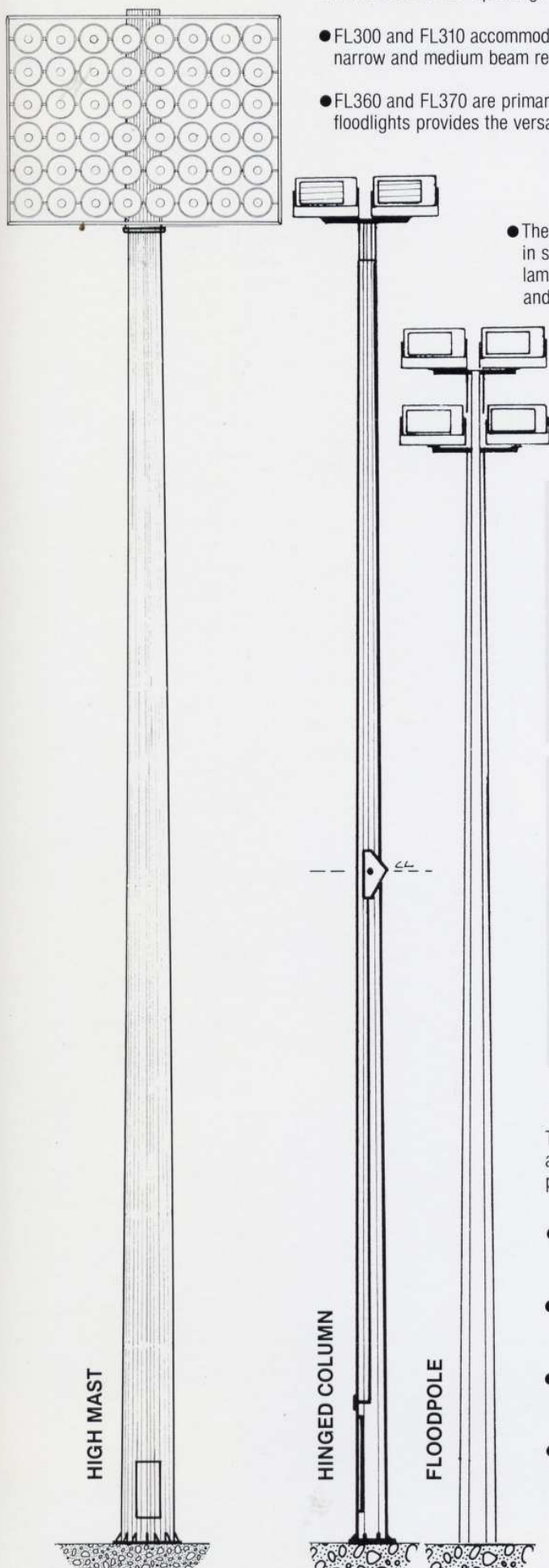
FL360



FL370

The range of columns and masts available from C.U. Ltd includes concrete, aluminium and various types of steel. Sizes range from 5 to 50 metres and structures particularly suited to sports lighting include:

- Steel high masts from 18 to 50 metres with single, double or treble drum winch for lowering the head frame which can accommodate loads of up to 2 tonnes.
- Steel high masts for heavier loads up to 50 metres available with horizontal, angled or vertical fixed head frames. Maintenance by winched detachable cages.
- Steel centre hinged columns from 5 to 18 metres for root or baseplate mounting. For lowering the head a concealed pull down rope with safety lock is provided.
- Steel floodpoles from 8 to 20 metres for root or baseplate mounting. Option: ladder steps and safety hoop.



Some of the Venues



CU PHOSCO

Gateshead A.C.
Cambridge University
R.U.F.C.
Stanstead F.C. — Essex
Harlequins H.C. — Eire
Sanaa — Yemen
Droylesden S.C.
Navan R.F.C. — Eire
Sawston Village T.C.
Bromley Sports Centre
Trojans H.C. — Hants
Caesareum C and LTC — Jersey
Queens Park S.C. — Wrexham
Basingstoke (Down Grange) — Athletic Track
Llandudno — Welsh R.U.F.C.
Hackney Sports Centre
Mecca Stadium
Crystal Palace Stadium
Malaysian Banking Stadium
Sun Yet Sen Gymnasium
South Shields S.C.
Waltham Forest T.C.
Tattersalls — Newmarket

HELP LINE: (0920) 2272

CU

Montreal Olympic Stadium
Q.P.R.F.C.
Tun Razak — Malaysia
NASR Stadium — U.A.E.
Sabah S.C. — Malaysia
Jurong C.C. — Singapore
Lagos Stadium — Nigeria
Hussein Sports City — Jordan
Berakas Stadium
Maritime Stadium — Tripoli
Clementi Park Swimming Pool — Singapore
Brunei Police Stadium
Keningau Stadium — Sabah
Muar Stadium — Malaysia



PHOSCO

Reading B.C.
London Welsh R.F.C.
IPOH Stadium — Malaysia
Hertford L.T.C.
Bermuda Stadium
Bank of England S.C.

CU + Phosco

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