

# Abacus®

Leaders in lighting

**ABACUS REF : FB10/04**  
**FOOTBALL CLASS II**  
**COMPETITION STANDARD**

**FLOODLIGHTING EQUIPMENT**

8x15m MASTS(M1-M8)  
 EACH CARRYING THE FOLLOWING FLOODLIGHTS:-  
 M1,M4,M5,M8.....1 x AL5760/2KW - NARROW BEAM  
 .....1 x AL5760/2KW - MEDIUM BEAM  
 M2,M3,M6,M7.....2 x AL5760/2KW - MEDIUM BEAM

**LAMPS (CHOICE OF)**

PHILIPS - MHN-LA 2KW 400V/842(220000 INITIAL Lm.).  
 OSRAM - HQI-TS2000WDL(225000 INITIAL Lm.).  
 VENTURE - MH-TS2000W/L/K12/4K(240000 INITIAL Lm.).

**ILLUMINANCE LEVELS**

**A) INITIAL(100 HRS)**  
 E.i.ave=293 LUX.

**B) MAINTAINED(4000 HRS)**  
 E.m.ave=234 LUX.

**UNIFORMITY**

E<sub>min</sub>/E<sub>ave</sub>=0.78  
 E<sub>min</sub>/E<sub>max</sub>=0.56

**MAXIMUM GLARE RATING(GR)=47**

**GRID VALUES IN LUX(INITIAL).**

GRID INTERVAL=5m.

**CONTOUR VALUES IN LUX(INITIAL).**

CONTOURS:5,10,25,50 LUX.

VERTICAL ILLUMINANCE CALCULATED AT +3.0m A.G.L.

**MAINTENANCE FACTOR=0.80**

BASED UPON:-

DIRT DEPRECIATION FACTOR=7%

CLEANING INTERVAL=12 MONTHS.

LOCATION=MEDIUM POLLUTION.

LAMP LUMEN DEPRECIATION=14%

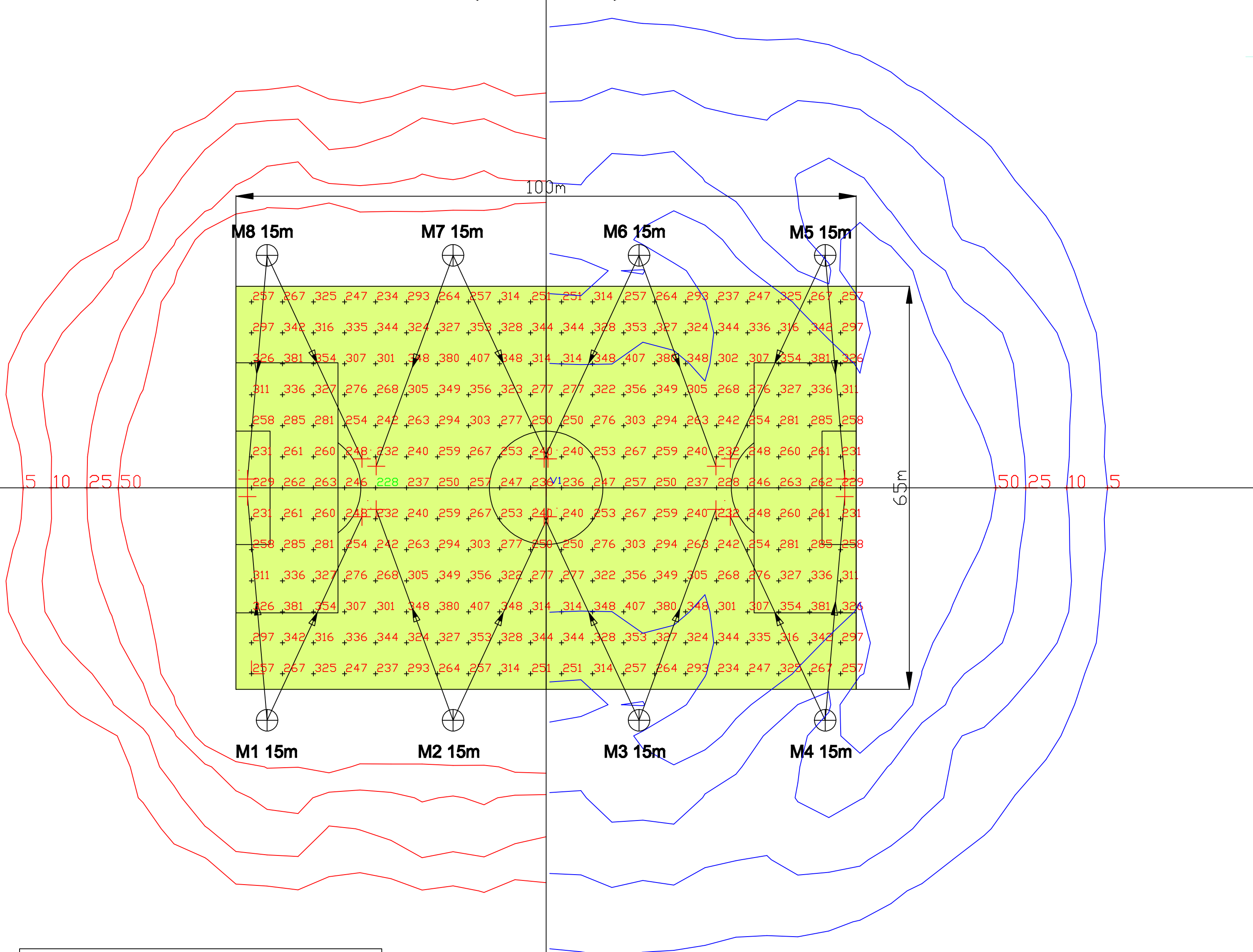
**NOTE**

THE DESIGN CALCULATIONS ARE BASED UPON PHILIPS LAMPS, THE MAINTAINED ILLUMINANCE LEVEL WILL VARY DEPENDING ON FINAL LAMP CHOICE.



HORIZONTAL OVERSPILL

VERTICAL OVERSPILL



**Flexible Solutions**  
 Abacus base hinged masts offer the facility to upgrade this system in the future.

[www.abacuslighting.com](http://www.abacuslighting.com)

All illuminance values are the result of computer calculations, based upon precisely positioned luminaires in a fixed relationship to each other and to the area under examination. In practice the values may vary due to tolerances on luminaires, luminaire positioning, reflection properties and electrical supply.