

# Abacus®

Leaders in lighting

ABACUS REF : HK10/08 e  
 HOCKEY FIH CLASS I  
 COMPETITION STANDARD

**FLOODLIGHTING EQUIPMENT**  
 8x15m MASTS(M1-M8)  
 EACH CARRYING THE FOLLOWING FLOODLIGHTS:-  
 M1,M4,M5,M8.....3 x AL5760/2KW - NARROW BEAM  
 .....2 x AL5760/2KW - MEDIUM BEAM  
 M2,M3,M6,M7.....6 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=968 LUX.

B) MAINTAINED(4000 HRS)  
 E.m.ave=774 LUX.

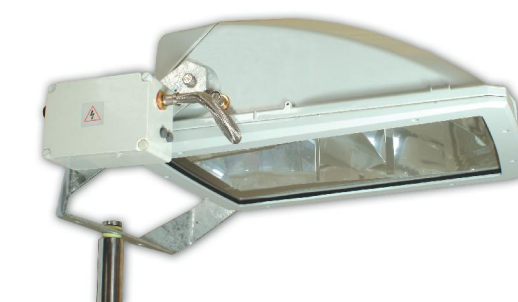
**UNIFORMITY**  
 Emin/Eave=0.74  
 Emin/Emax=0.54

MAXIMUM GLARE RATING(GR)=46

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.

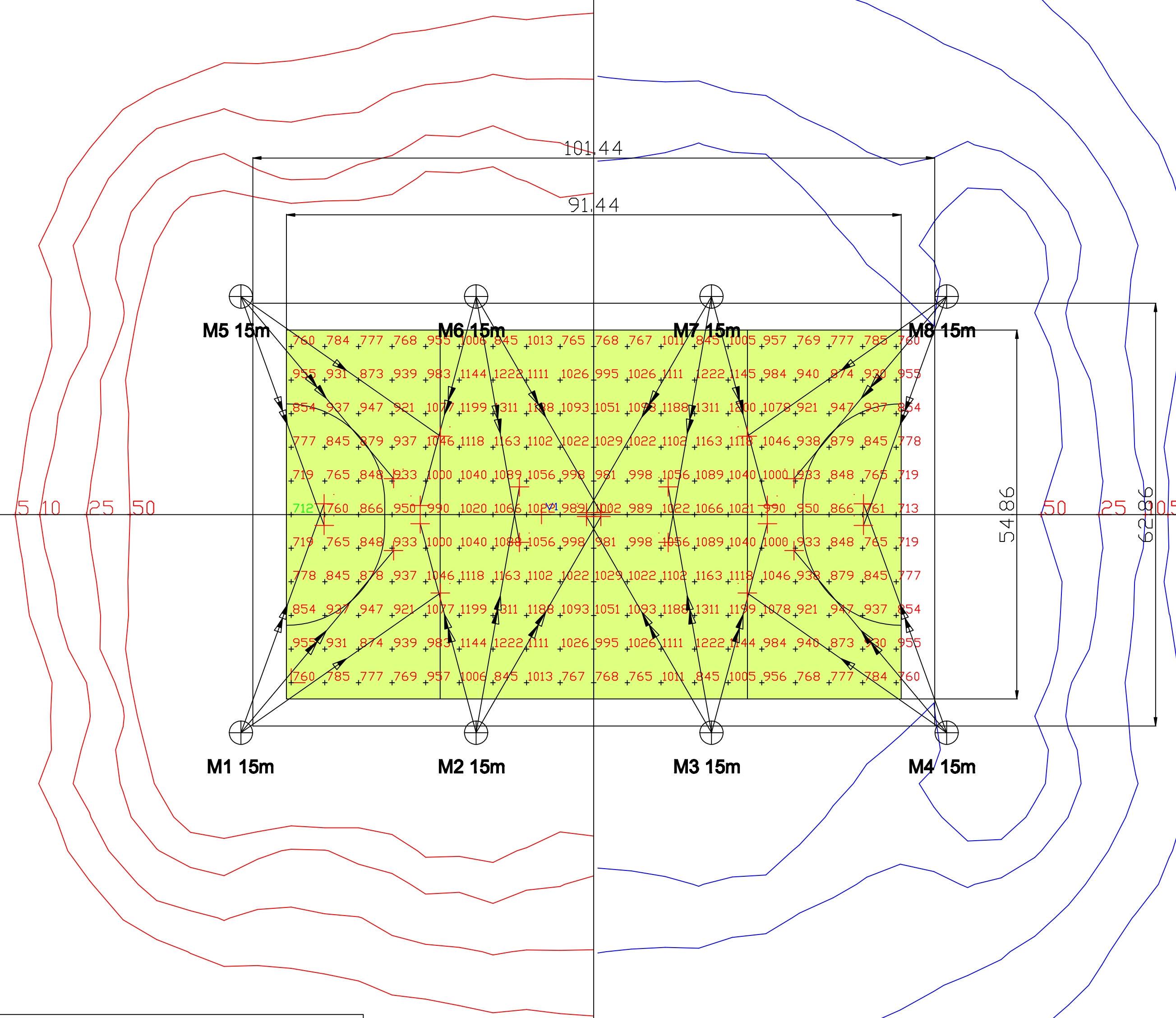
MAINTENANCE FACTOR=0.80  
 BASED UPON:-  
 DIRT DEPRECIATION FACTOR=7%  
 CLEANING INTERVAL=12 MONTHS.  
 LOCATION=MEDIUM POLLUTION.  
 LAMP LUMEN DEPRECIATION=14%

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



ISO9001 • ISO14001  
 OHSAS 18001

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.