

DATE: 3 March 2023
DESIGNER: MMA Lighting Consultancy Ltd
PROJECT No: MMA17827
PROJECT NAME: Church Lane, Ashington MUGA



MMA17827 - Church Lane, Ashington - LIA - Proposed Lighting Calculation - R0

15m raise and lower steel columns with Urbis Schreder Ecoblast LED sports floodlights

Lighting levels achieved as per Sport England Design Guidance Note Appendix 3 'Hockey' including England Hockey recommendation for minimum lux level for competition.

Results Required
Eav = Min 350 Lux
Emin/Eav = Min 0.70

Base drawing number used in this calculation "062009-BEL-SL-01 "

Outdoor Lighting Report

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Layout Report

General Data

Dimensions in Metres Angles in Degrees
Local Origin at 512421677.52m x 116117791.60m
Grid Origin 30.0m x 358.1m
Area 118.5m x 141.0m
Sample Spacing 9.87m x 7.05m

Luminaires

Luminaire A Data

Supplier	
Type	ECOBlast 5 5356 300 OSLO SQUARE GIANT@1450mA NW 740 230V - A
Lamp(s)	300 OSLO SQUARE GIANT@1450mA N W 740 230V [CJOIO9STDA], valid
Lamp Flux (klm)	184.20
File Name	ECOBlast 5 5356 300 OSLO SQUARE GIANT 1450mA NW 740 1310W 6x6 I-Ver...
Maintenance Factor	0.90
Imax70,80,90(cd/klm)	53.0, 7.7, 3.0
No. in Project	24

Layout

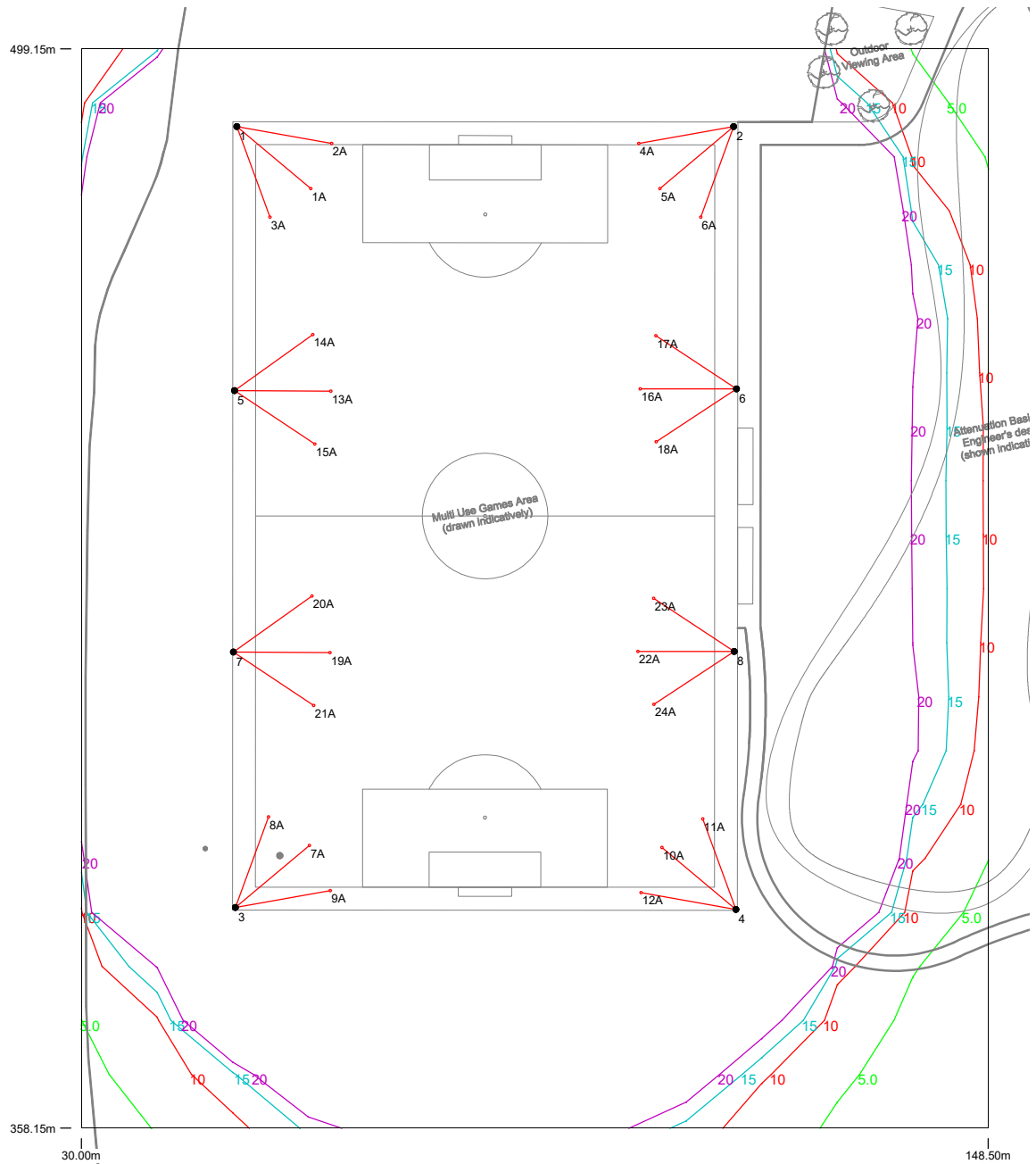
ID /Mast	Type	X	Y	Height	Angle	Tilt	Cant	Out- reach	Target X	Target Y	Target Z
1/1	A	50.31	489.00	15.00	320.00	40.00	0.00	0.00	59.95	480.91	0.00
2/1	A	50.31	489.00	15.00	350.00	40.00	0.00	0.00	62.71	486.81	0.00
3/1	A	50.31	489.00	15.00	290.00	40.00	0.00	0.00	54.61	477.17	0.00
4/2	A	115.22	489.00	15.00	190.00	40.00	0.00	0.00	102.82	486.81	0.00
5/2	A	115.22	489.00	15.00	220.00	40.00	0.00	0.00	105.58	480.91	0.00
6/2	A	115.22	489.00	15.00	250.00	40.00	0.00	0.00	110.92	477.17	0.00
7/3	A	50.13	387.00	15.00	40.00	40.00	0.00	0.00	59.77	395.09	0.00
8/3	A	50.13	387.00	15.00	70.00	40.00	0.00	0.00	54.43	398.83	0.00
9/3	A	50.13	387.00	15.00	10.00	40.00	0.00	0.00	62.53	389.19	0.00
10/4	A	115.50	386.75	15.00	140.00	40.00	0.00	0.00	105.86	394.84	0.00
11/4	A	115.50	386.75	15.00	110.00	40.00	0.00	0.00	111.20	398.58	0.00
12/4	A	115.50	386.75	15.00	170.00	40.00	0.00	0.00	103.10	388.94	0.00
13/5	A	50.00	454.50	15.00	359.75	40.00	0.00	0.00	62.59	454.45	0.00
14/5	A	50.00	454.50	15.00	35.52	40.00	0.00	0.00	60.24	461.81	0.00
15/5	A	50.00	454.50	15.00	326.39	40.00	0.00	0.00	60.48	447.53	0.00
16/6	A	115.59	454.75	15.00	180.00	40.00	0.00	0.00	103.00	454.75	0.00
17/6	A	115.59	454.75	15.00	146.69	40.00	0.00	0.00	105.07	461.66	0.00
18/6	A	115.59	454.75	15.00	213.39	40.00	0.00	0.00	105.08	447.82	0.00
19/7	A	49.87	420.35	15.00	359.75	40.00	0.00	0.00	62.46	420.30	0.00
20/7	A	49.87	420.35	15.00	35.52	40.00	0.00	0.00	60.11	427.67	0.00

Layout Continued

ID /Mast	Type	X	Y	Height	Angle	Tilt	Cant	Out- reach	Target X	Target Y	Target Z
21/7	A	49.87	420.35	15.00	326.39	40.00	0.00	0.00	60.35	413.39	0.00
22/8	A	115.29	420.45	15.00	180.00	40.00	0.00	0.00	102.70	420.45	0.00
23/8	A	115.29	420.45	15.00	146.69	40.00	0.00	0.00	104.77	427.36	0.00
24/8	A	115.29	420.45	15.00	213.39	40.00	0.00	0.00	104.78	413.52	0.00

Horizontal Illuminance (lux)

Grid 1



Results

Eav	353.48
Emin	265.25
Emax	409.57
Emin/Emax	0.65
Emin/Eav	0.75