Kellwood - Lighting Design - Sunderland Peacock - Higher Boyce Farm

Kellwood aims to meet relevant CIBSE guidelines or industry/client-specific recommendations when generating lighting designs. Where applicable, Kellwood will attempt to ensure that emergency lighting solutions achieve suggested guidelines. However, ultimate responsibility for ensuring product suitability lies with the purchasing authority.

Lighting designs cannot fully represent a project area and therefore should be considered indicative only. Predicted lux levels are based on sample unit photometric data and will vary in accordance with product lifetime and the additional dynamic site variables. Claims cannot be made against Kellwood based on the values from this or any lighting design.

Data forecasts within this design - light levels, uniformity, and fitting quantities, are applicable to this design only. LED product capabilities are not interchangeable. Alternative products may be similar in performance but the resulting output may not yield the same results.

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Customer No.: SUND01 Project Ref.: PL0003838

Rev. No.: 0

Date: 18.07.2019

Operator: Michael Boyom

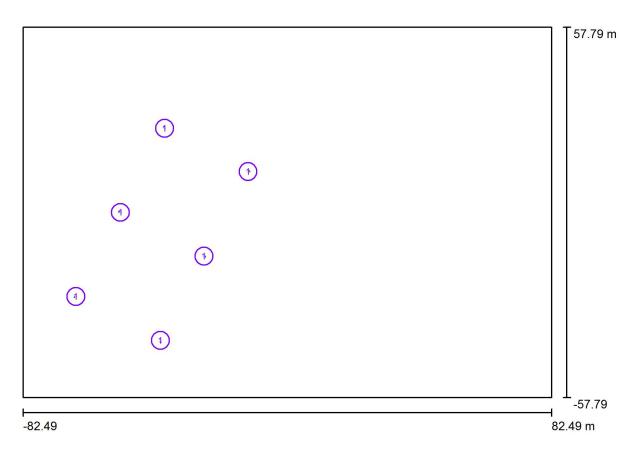
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Horse Menage / Planning data



Maintenance factor: 0.80, ULR (Upward Light Ratio): 0.0%

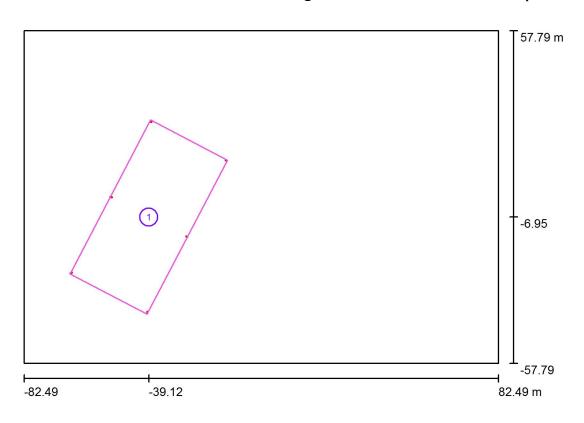
Scale 1:1180

Luminaire Parts List

No.	Pieces	Designation (Correction Factor)	Φ (Lumin	aire) [lm]	Φ (Lar	mps) [lm]	P [W]
		Kellwood Lighting AR4B-310-750-4S Kellwood Lighting - Arrol 4B Series - LED					
1	6	Street Light - 310W - 5000K - IESNA Type IV Light Distribution - Short Lateral Throw (1.000)		39114		39114	307.5
			Total:	234684	Total:	234684	1845.0

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Horse Menage / Calculation surfaces (results overview)



Scale 1: 1316

Calculation Surface List

No.	Designation	Type	Grid	E _{av} [lx]	E _{min} [lx]	E _{max} [lx]	u0	E_{min}/E_{max}
1	Arena Floor	perpendicular	128 x 128	54	35	75	0.647	0.461

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Horse Menage / Ground Element 1 / Surface 1 / Value Chart (E)

115.59 m 0.07 0.12 0.27 0.40 0.72 0.79 0.24 0.12 0.09 0.06 0.04 0.03 0.03 0.02 0.01 0.01 0.01 0.00 0.08 0.17 0.52 1.00 1.50 2.10 0.52 0.19 0.13 0.09 0.06 0.04 0.03 0.02 0.01 0.01 0.01 0.00 0.11 0.20 0.86 2.36 2.08 5.35 1.42 0.35 0.24 0.15 0.09 0.05 0.04 0.03 0.02 0.01 0.01 0.00 0.12 0.26 1.37 5.70 3.11 14 4.68 0.83 0.64 0.34 0.17 0.08 0.05 0.03 0.01 0.01 0.01 0.00 0.15 0.32 1.78 15 29 5.19 3.15 1.22 0.39 0.14 0.06 0.03 0.01 0.01 0.01 0.00 9.93 2.68 0.81 0.20 0.06 0.02 0.01 0.01 0.01 0.01 0.21 0.53 2.12 21 36 46 49 26 0.31 1.05 2.94 26 42 55 71 38 14 3.39 0.77 0.16 0.06 0.03 0.01 0.01 0.01 0.01 0.43 1.57 5.53 29 45 50 60 42 7.38 3.02 0.63 0.18 0.06 0.03 0.02 0.01 0.01 0.01 0.70 1.96 7.20 38 63 47 49 40 18 4.02 1.05 0.27 0.10 0.03 0.02 0.01 0.01 0.01 38 52 1.17 3.38 6.44 66 61 46 19 4.56 1.04 0.25 0.10 0.04 0.03 0.02 0.01 0.01 1.35 5.39 19 48 57 65 60 34 10 2.43 0.54 0.16 0.09 0.05 0.03 0.02 0.01 0.01 59 16 3.56 0.78 0.28 0.13 0.08 0.05 0.03 0.02 0.01 0.01 1.31 8.19 38 48 54 42 3.81 28 54 62 65 53 38 9.89 2.85 0.64 0.23 0.10 0.07 0.04 0.03 0.02 0.01 0.01 51 64 30 2.97 1.53 0.54 0.20 0.09 0.07 0.04 0.03 0.02 0.01 0.01 11 43 44 52 11 33 44 51 51 61 26 5.00 0.96 0.36 0.15 0.07 0.05 0.03 0.02 0.02 0.01 0.01 4.82 13 42 70 46 48 3.90 1.20 0.29 0.12 0.06 0.05 0.03 0.02 0.02 0.01 0.01 16 2.09 0.90 0.30 0.08 0.04 0.04 0.03 0.02 0.01 0.01 0.01 2.02 17 41 64 48 43 3.53 11 20 40 40 34 0.90 0.47 0.21 0.09 0.03 0.03 0.02 0.01 0.01 0.01 0.01 2.11 4.29 4.75 20 23 20 7.71 0.60 0.26 0.14 0.07 0.03 0.03 0.02 0.01 0.01 0.01 0.00 0.85 1.10 1.45 8.47 7.51 9.36 3.67 0.43 0.19 0.11 0.06 0.03 0.03 0.02 0.01 0.01 0.01 0.00 <u>0.27</u> 0.33 0.60 3.80 3.33 3.99 1.81 0.29 0.14 0.08 0.05 0.03 0.02 0.02 0.01 0.01 0.01 0.00 0.00

0.00 164.99 m

Not all calculated values could be displayed.

Position of surface in external scene: Marked point: (-82.495 m, -57.793 m, 0.000 m)

external scene: n, 0.000 m)

Grid: 128 x 128 Points

 $E_{av}[Ix]$ $E_{min}[Ix]$ $E_{max}[Ix]$ u_0 E_{min}/E_{max} 9.38 0.00 76 0.000 0.000

Values in Lux, Scale 1: 1180