

Installation : Royle Barn Road

Project number :
Customer : Midlands Power Networks
Processed by : Claire Sutton
Date : 14.07.2025

Project description:
70w asymmetric floods with a 25 degree tilt. All at 3m as instructed.

Lighting Design:

These plots represent specific manufacturers products under given conditions. Changes to environment, calculation software accuracy and on site measurement mean real installations may differ from these predictions. This design information constitutes guidance only.

Edmundson Electrical Ltd takes no design responsibility where the company has not been provided with information pertinent to this design. Substitutions for anything detailed here in invalidates these plots.

Common design parameters have been used in order to carry out all calculations. If any part of the scheme or subsequent luminaires used within the scheme is deemed to be inappropriate, please contact us in order for re-calculations to be carried out, prior to an order being placed.

Please ensure that this lighting scheme complies with all requirements, and if further details/ calculations are required please contact us on the above number.

Final quantities are to be confirmed prior to an order/installation.

The following values are based on precise calculations performed on calibrated lamps and luminaires, and their configurations, whereby gradual, unavoidable deviations can occur in practice. All guarantee claims are excluded for the specified data.

This exclusion of liability applies irrespective of the legal grounds for both damages and consequential damages suffered by users and third parties.

1 ASYMMETRIC all 70w

1.1 Description, ASYMMETRIC all 70w

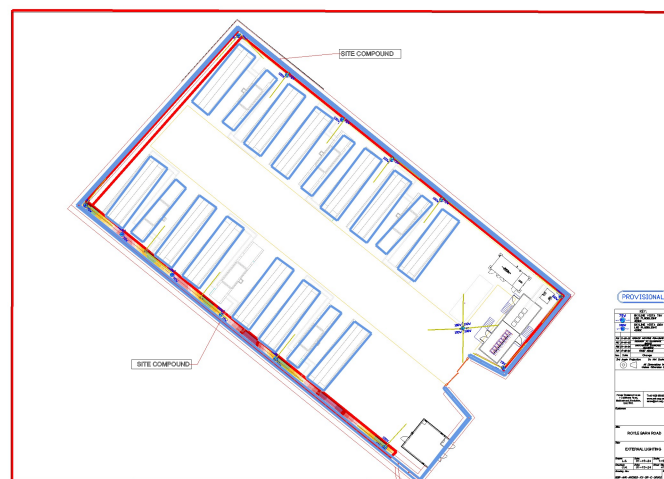
1.1.1 Floor plan



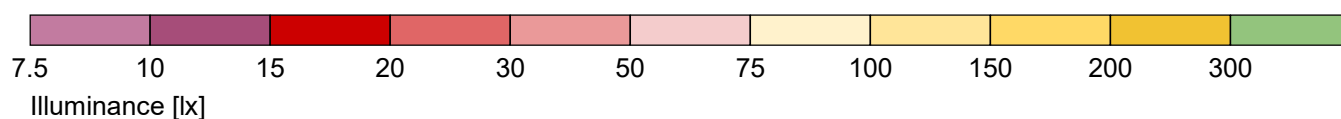
1 ASYMMETRIC all 70w

1.2 Summary, ASYMMETRIC all 70w

1.2.1 Result overview, Measuring area 1



-0 10 20 30 40 50 60 70 80 90 100 110 x [m]



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Height (phot centre) [m]:	2.98 m
Maintenance factor	0.85
Total luminous flux	251804 lm
Total power	1960 W
Total power per area (9985.80 m²)	0.20 W/m²
Upward light ratio (RUL)	1 %

Illuminance

Average illuminance	$\bar{E}_m$	145 lx
Minimum illuminance	E_{min}	9 lx
Maximum illuminance	E_{max}	465 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:16.3 (0.06)
Diversity U_d	E_{min}/E_{max}	1:52.4 (0.02)

Type No. Make

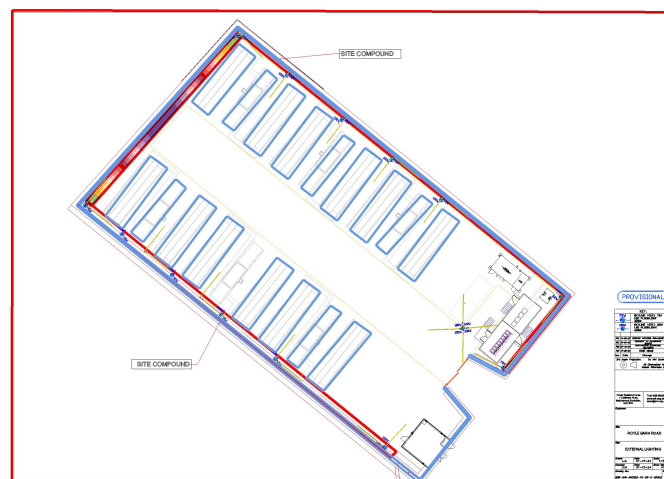
3	28 x	BELL Lighting Limited
	Order No.	: 10996
	Luminaire name	: Skyline Slim+ 70W 4000K Asymmetric Floodlight IP65
	Equipment	: 1 x LED 740 70 W / 8993 lm

The ULR value has been calculated without obstruction by other objects.

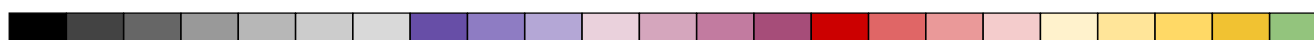
Claire.Sutton@ukld.co.uk

1.2 Summary, ASYMMETRIC all 70w

1.2.2 Result overview, Measuring area 2



-0 10 20 30 40 50 60 70 80 90 100 110 x [m]



0 0.1 0.15 0.2 0.3 0.5 0.75 1 1.5 2 3 5 7.5 10 15 20 30 50 75 100 150 200 300
 Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Height (phot centre) [m]:	2.98 m
Maintenance factor	0.85

Total luminous flux	251804 lm
Total power	1960 W
Total power per area (9985.80 m²)	0.20 W/m²
Upward light ratio (RUL)	1 %

Illuminance

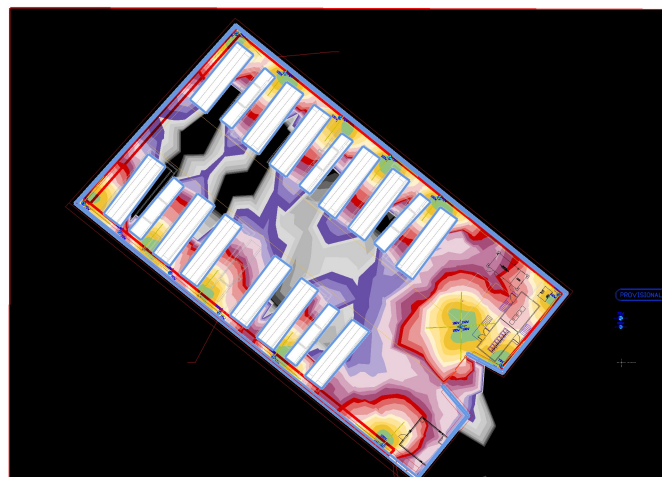
Average illuminance	$\bar{E}_m$	112 lx
Minimum illuminance	E_{min}	0 lx
Maximum illuminance	E_{max}	426 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:--- (---)
Diversity U_d	E_{min}/E_{max}	1:--- (---)

Type No. Make

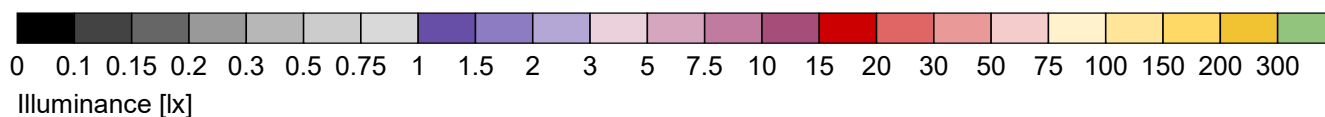
3	28 x	BELL Lighting Limited
	Order No.	: 10996
	Luminaire name	: Skyline Slim+ 70W 4000K Asymmetric Floodlight IP65
	Equipment	: 1 x LED 740 70 W / 8993 lm

1.2 Summary, ASYMMETRIC all 70w

1.2.3 Result overview, Evaluation area 1



-0 10 20 30 40 50 60 70 80 90 100 110 x [m]



General

Calculation algorithm used	Average indirect fraction
Height (phot centre)	2.98 m
Maintenance factor	0.85
Luminaire luminous flux	251804.00 lm
Total power	1960.0 W
Total power per area (9985.80 m²)	0.20 W/m² (1.60 W/m²/100lx)
Upward light ratio (RUL)	1 %

Evaluation area 1

Reference plane 1.1

$\bar{E}_m$	Horizontal
E_{min}	12.3 lx
$E_{min}/\bar{E}_m (U_o)$	0 lx
$E_{min}/E_{max} (U_d)$	---
Position	---
	0.00 m

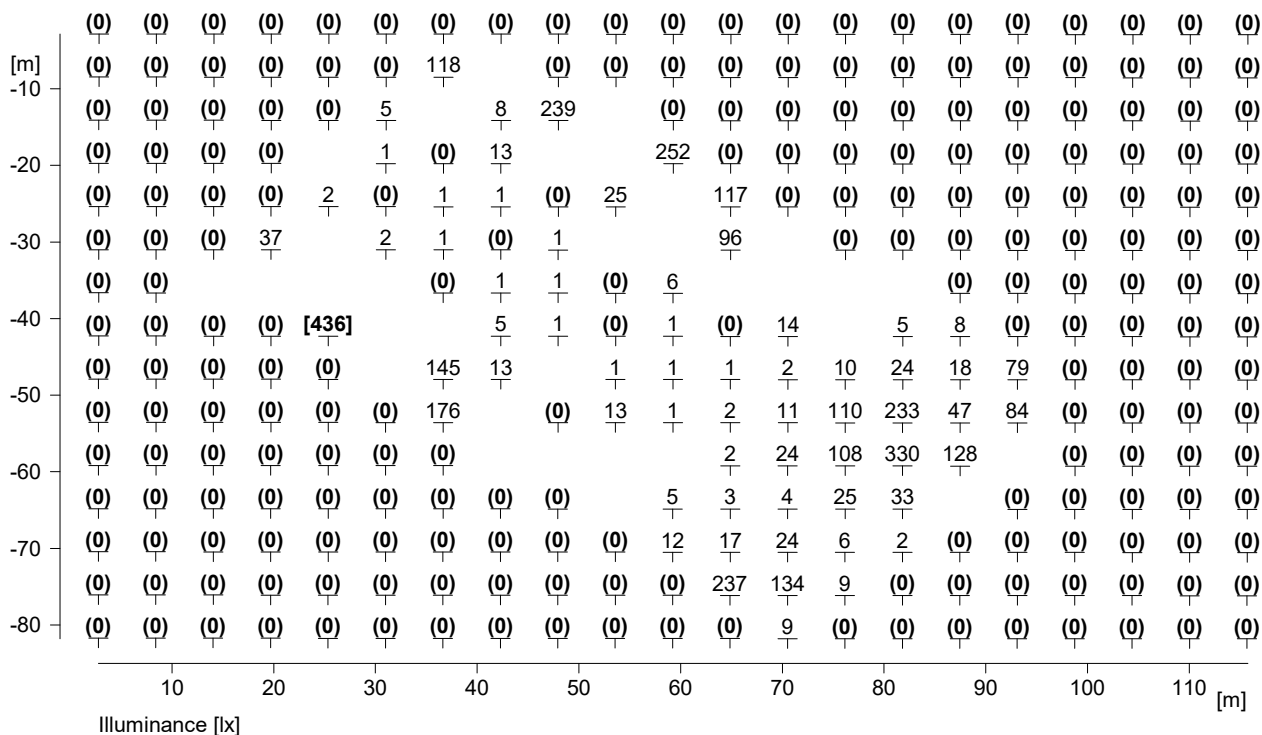
Type No. Make

BELL Lighting Limited	
3	Order No. : 10996
28 x	Luminaire name : Skyline Slim+ 70W 4000K Asymmetric Floodlight IP65
	Equipment : 1 x LED 740 70 W / 8993 lm

1 ASYMMETRIC all 70w

1.3 Calculation results, ASYMMETRIC all 70w

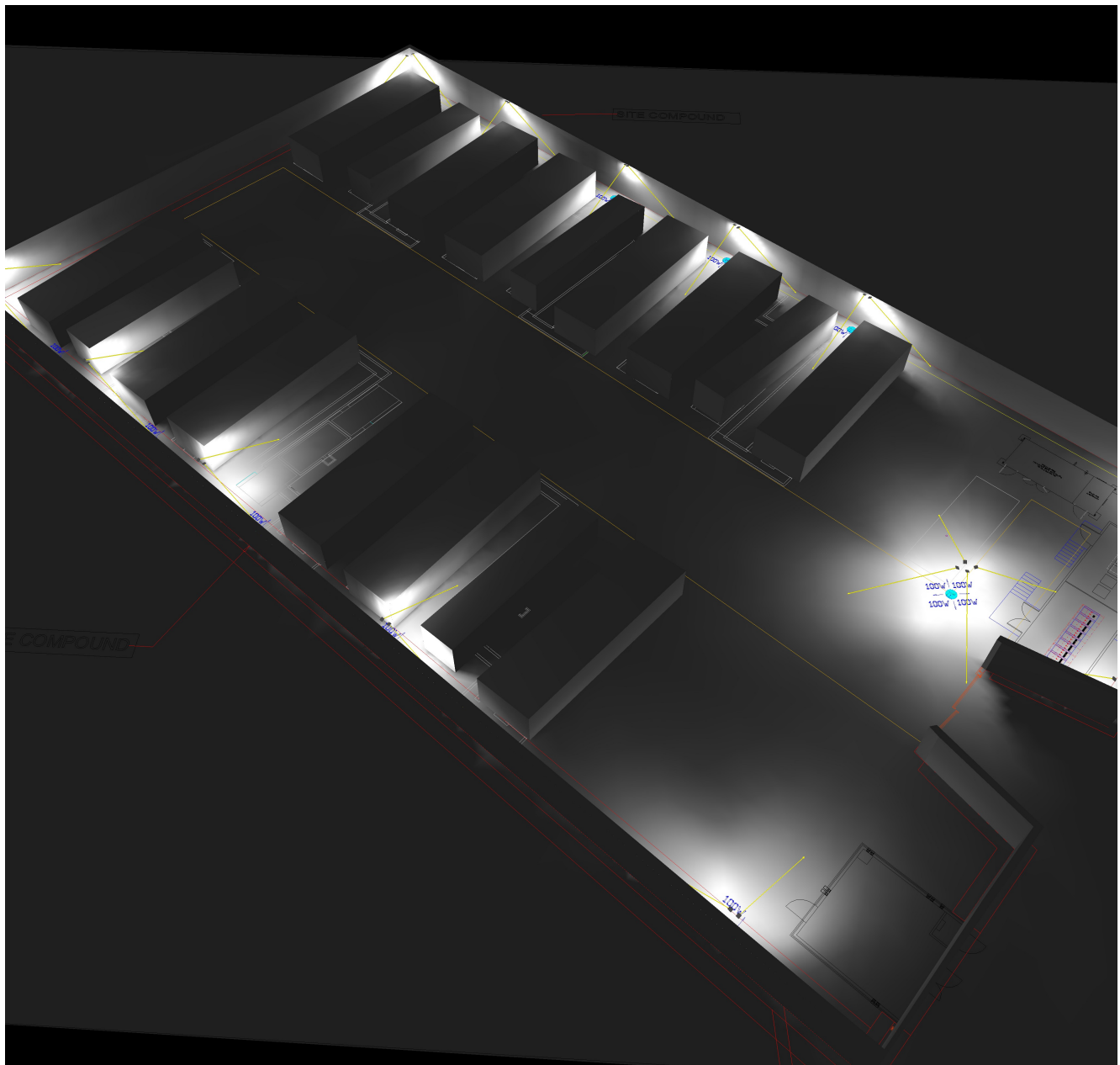
1.3.1 Table, Reference plane 1.1 (E)



Height reference plane	: 0.00 m
Average illuminance	$\bar{E}_m$: 12 lx
Minimum illuminance	E_{min} : 0 lx
Maximum illuminance	E_{max} : 436 lx
Uniformity U_o	$E_{min}/\bar{E}_m$: ---
Diversity U_d	E_{min}/E_{max} : ---

1.3 Calculation results, ASYMMETRIC all 70w

1.3.2 3D luminance, View 1

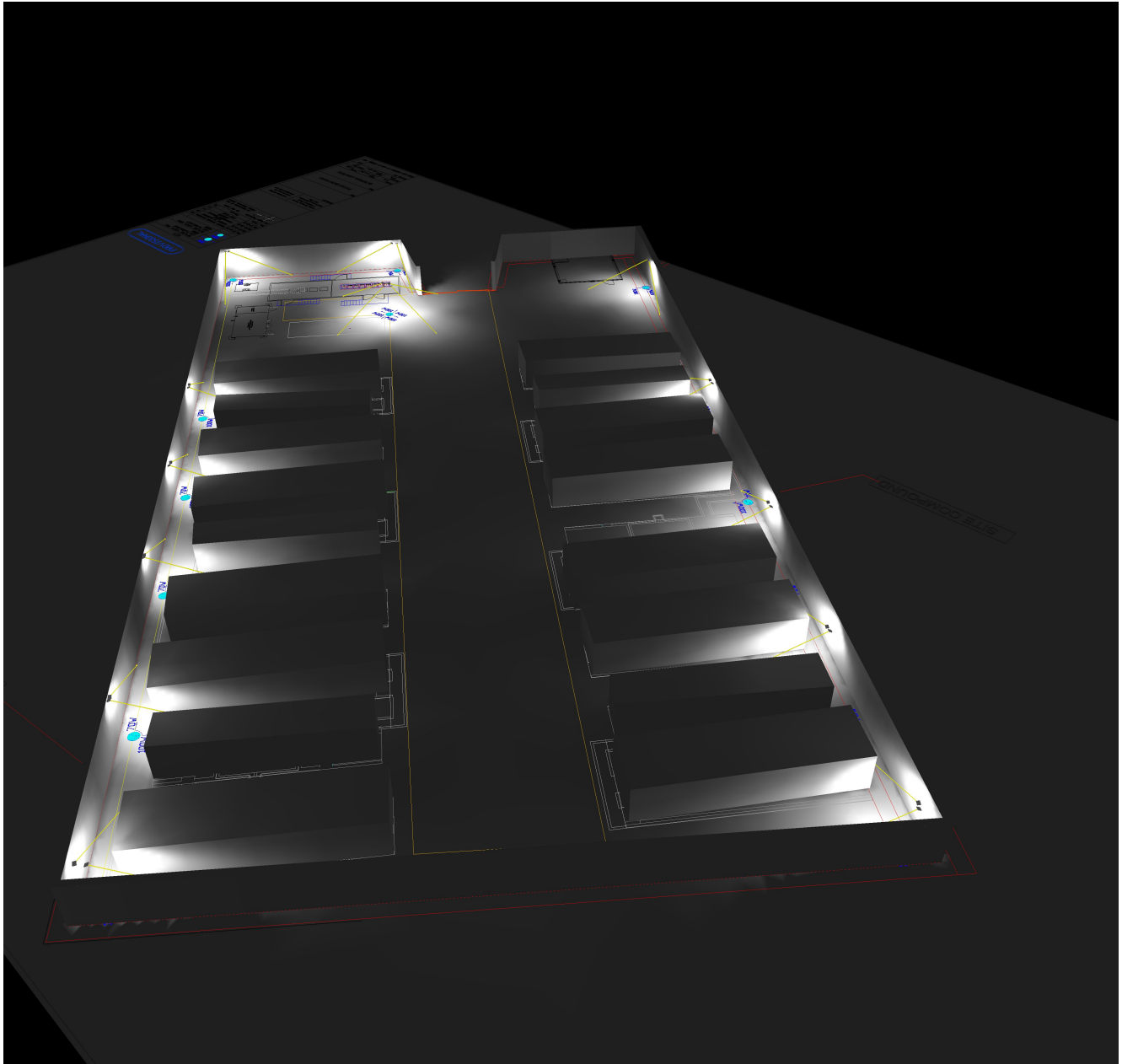


Luminance in the scene

Minimum: : 0 cd/m²
Maximum: : 4640 cd/m²

1.3 Calculation results, ASYMMETRIC all 70w

1.3.3 3D luminance, View 2



Luminance in the scene

Minimum: : 0 cd/m²

Maximum: : 4640 cd/m²