

DATE: 12/10/2022
DESIGNER: James Duffin BA (Hons) IEng MILP
PROJECT No: EVO20011211-AC-001-A
PROJECT NAME: Lower Acre Parcel 1.2, OHH

ENERVEO

Parcel 1.2 - Adoptable Roads
One Horton Heath

Road Lighting Class - P4

Lantern - Urbis Schreder Axia 3.1
Colour Temperature - 3000K
Maintenance Factor - 0.85

Outdoor Lighting Report

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Layout Report

General Data

Dimensions in Metres Angles in Degrees

Calculation Grids

ID	Grid Name	X	Y	X' Length	Y' Length	X' Spacing	Y' Spacing
1	Grid 1 - Road 1 - P4	448795.80	116382.92	66.00	33.00	1.50	1.50
2	Grid 2 - Vertical Plot 383	448810.16	116413.29	11.00	5.00	1.38	1.25
3	Grid 3 - Vertical Plot 329	448824.42	116406.33	11.07	5.00	1.38	1.25
4	Grid 4 - Road 2 - P4	448914.13	116349.11	45.00	42.00	1.50	1.50
5	Grid 5 - Vertical Plot 335	448943.90	116369.47	11.49	5.00	1.44	1.25
6	Grid 6 - Vertical Plot 310	448949.54	116353.44	8.43	5.00	1.41	1.25

Luminaire

Luminaire A Data

Supplier	Urbis Schreder
Type	AXIA 3.1 5295 Integrated lenses Rear louvers 8 OSLO SQUARE G
Lamp(s)	8 OSLO SQUARE GIANT@850mA WW 730 230V 00-53-394
LampFlux(klm)/Colour	1.94 WW 3000K/70
File Name	AXIA 3.1 5295 8 OSLO SQUARE GIANT 850mA WW 730 22.8W 457592 Integrated...
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	842.8, 11.9, 0.0
No. in Project	2

Luminaire B Data

Supplier	Urbis Schreder
Type	AXIA 3.1 5295 Integrated lenses Rear louvers 16 OSLO SQUARE
Lamp(s)	16 OSLO SQUARE GIANT@200mA WW 730 230V 01-37-041
LampFlux(klm)/Colour	1.09 WW 3000K/70
File Name	AXIA 3.1 5295 16 OSLO SQUARE GIANT T 200mA WW 730 11.2W 457592 Integrated...
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	842.8, 11.9, 0.0
No. in Project	2

Luminaire Q Data

Supplier	Urbis Schreder
Type	AXIA 3.2 5279 Integrated lenses - 24 OSLO SQUARE GIANT@700m
Lamp(s)	24 OSLO SQUARE GIANT@700mA WW 730 230V 00-49-490
LampFlux(klm)/Colour	6.53 WW 3000K/70
File Name	AXIA 3.2 5279 24 OSLO SQUARE GIANT T 700mA WW 730 52.5W 430122 Integrated...
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	758.9, 149.6, 0.0
No. in Project	1

Luminaire S Data

Supplier	Urbis Schreder
Type	AXIA 3.1 5267 Integrated lenses Rear louvers 16 OSLO SQUARE
Lamp(s)	16 OSLO SQUARE GIANT@700mA WW 730 230V 00-53-397
LampFlux(klm)/Colour	3.14 WW 3000K/70
File Name	AXIA 3.1 5267 16 OSLO SQUARE GIANT T 700mA WW 730 35.6W 457672 Integrated...
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	1281.8, 174.5, 0.0
No. in Project	7

Luminaire T Data

Supplier	Urbis Schreder
Type	AXIA 3.1 5270 Integrated lenses - 16 OSLO SQUARE GIANT@480m
Lamp(s)	16 OSLO SQUARE GIANT@480mA WW 730 230V 00-56-615
LampFlux(klm)/Colour	3.23 WW 3000K/70
File Name	AXIA 3.1 5270 16 OSLO SQUARE GIANT T 480mA WW 730 25.1W 429112 Integrated...
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	1022.0, 99.2, 0.0
No. in Project	4

Luminaire U Data

Supplier	Urbis Schreder
Type	AXIA 3.1 5296 Integrated lenses Rear louvers 8 OSLO SQUARE G
Lamp(s)	8 OSLO SQUARE GIANT@300mA WW 730 230V 01-37-041
LampFlux(klm)/Colour	0.82 WW 3000K/70
File Name	AXIA 3.1 5296 8 OSLO SQUARE GIANT 300mA WW 730 8.4W 457602 Integrated ...
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	1285.9, 28.2, 0.0
No. in Project	5

Luminaires**Luminaire W Data**

Supplier	Urbis Schreder
Type	AXIA 3.2 5279 Integrated lenses - 24 OSLO N SQUARE GIANT@1000
Lamp(s)	24 OSLO N SQUARE GIANT@1000mA W W 730 230V 00-49-490
LampFlux(klm)/Colour	8.49 WW 3000K/70
File Name	AXIA 3.2 5279 24 OSLO N SQUARE GIAN T 1000mA WW 730 76W 430122 Integrat...
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	758.9, 149.6, 0.0
No. in Project	1

Luminaire X Data

Supplier	Urbis Schreder
Type	AXIA 3.1 5266 Integrated lenses Rear louv ers 8 OSLO N SQUARE G
Lamp(s)	8 OSLO N SQUARE GIANT@700mA WW 730 230V 01-37-041
LampFlux(klm)/Colour	1.74 WW 3000K/70
File Name	AXIA 3.1 5266 8 OSLO N SQUARE GIANT 700mA WW 730 19.4W 457662 Integrated...
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	1216.3, 169.4, 0.0
No. in Project	4

Luminaire Y Data

Supplier	Urbis Schreder
Type	AXIA 3.2 5267 Integrated lenses - 32 OSLO N SQUARE GIANT@800m
Lamp(s)	32 OSLO N SQUARE GIANT@800mA WW 730 230V 00-49-490
LampFlux(klm)/Colour	9.61 WW 3000K/70
File Name	AXIA 3.2 5267 32 OSLO N SQUARE GIAN T 800mA WW 730 78W 430092 Integrat...
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	1001.2, 151.3, 0.0
No. in Project	1

Luminaire Z Data

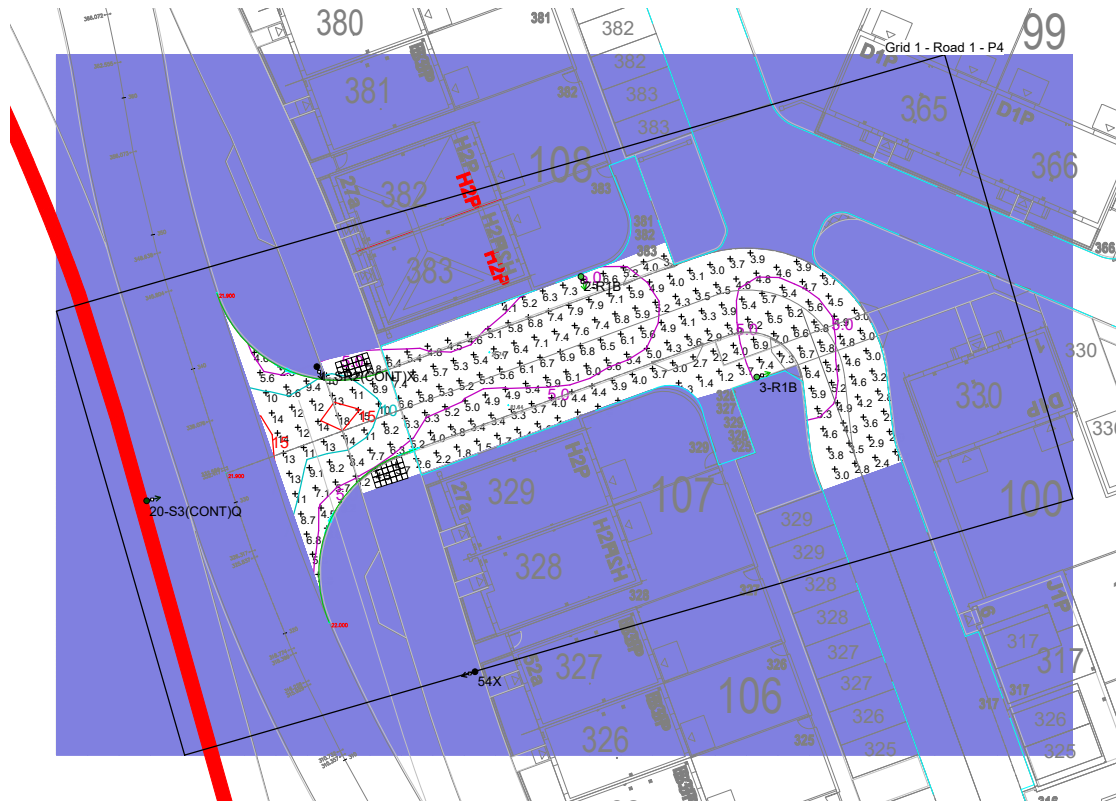
Supplier	Urbis Schreder
Type	AXIA 3.2 5295 Integrated lenses Rear louv ers 32 OSLO N SQUARE
Lamp(s)	32 OSLO N SQUARE GIANT@800mA WW 730 230V 01-50-748
LampFlux(klm)/Colour	7.96 WW 3000K/70
File Name	AXIA 3.2 5295 32 OSLO N SQUARE GIAN T 800mA WW 730 78W 479062 Integrat...
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	723.7, 21.7, 0.0
No. in Project	2

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
10_S3(CONT)	Z	448847.56	116261.65	8.00	164.00	0.00	0.00	0.40			
11_S3(CONT)	X	448825.24	116268.39	6.00	339.00	0.00	0.00	0.40			
12_S3(CONT)	Z	448836.56	116288.36	8.00	13.00	0.00	0.00	0.40			
13_S3(CONT)	X	448848.62	116317.82	6.00	204.00	0.00	0.00	0.40			
14_S3(CONT)	W	448829.79	116309.23	8.00	14.00	0.00	0.00	0.40			
1-SR(CONT)	Y	448855.80	116295.81	8.00	279.00	0.00	0.00	0.40			
3-SR(CONT)	S	448878.64	116292.06	6.00	106.00	0.00	0.00	0.40			
4-SR(CONT)	T	448903.59	116309.03	6.00	287.00	0.00	0.00	0.40			
5-SR(CONT)	T	448924.82	116314.98	6.00	284.00	0.00	0.00	0.40			
6-SR(CONT)	T	448942.55	116321.25	6.00	310.00	0.00	0.00	0.40			
8-SR	S	448961.35	116331.62	6.00	150.00	0.00	0.00	0.40			
10-SR(CONT)	S	448971.99	116354.64	6.00	159.00	0.00	0.00	0.40			
12-SR(CONT)	T	448973.73	116383.68	6.00	344.00	0.00	0.00	0.40			
13-SR(CONT)	S	448988.00	116402.32	6.00	168.00	0.00	0.00	0.40			
15-SR(CONT)	S	448997.71	116428.32	6.00	158.00	0.00	0.00	0.40			
16-SR(CONT)	S	448996.17	116452.69	6.00	337.00	0.00	0.00	0.40			
17-SR(CONT)	S	449016.83	116471.05	6.00	156.00	0.00	0.00	0.40			
7-SR	U	448944.90	116337.59	6.00	341.00	0.00	0.00	0.40			
9-SR(CONT)	U	448951.34	116352.87	6.00	339.00	0.00	0.00	0.40			
11-SR(CONT)	U	448964.16	116382.96	6.00	336.00	0.00	0.00	0.40			
14-SR(CONT)	U	448978.53	116416.85	6.00	344.00	0.00	0.00	0.40			
2-SR(CONT)	U	448862.36	116308.51	6.00	246.00	0.00	0.00	0.40			
1-R2	A	448940.00	116359.50	6.00	66.00	0.00	0.00	0.40			
2-R2	A	448928.01	116356.22	6.00	158.00	0.00	0.00	0.40			
1_SR2(CONT)	X	448805.24	116410.66	6.00	293.00	0.00	0.00	0.40			
54	X	448816.53	116388.88	6.00	199.00	0.00	0.00	0.40			
2-R1	B	448824.09	116417.09	6.00	287.00	0.00	0.00	0.40			
3-R1	B	448836.64	116409.91	6.00	19.00	0.00	0.00	0.40			
20-S3(CONT)	Q	448793.09	116401.08	8.00	14.00	0.00	0.00	0.40			

Horizontal Illuminance (lux)

Grid 1 - Road 1 - P4



Results

Eav	5.68
Emin	1.13
Emax	18.31
Emin/Emax	0.06
Emin/Eav	0.20

Illuminance (lux)

Grid 2 - Vertical Plot 383

0.5	0.2	0.1	0.1	0.1	0.1	0.2	0.6
0.6	0.9	0.7	0.5	0.4	0.3	0.2	0.3
0.4	0.5	0.6	0.7	0.7	0.4	0.4	0.4
0.5	0.5	0.5	0.4	0.4	0.5	0.6	0.6

Results

Eav	0.43
Emin	0.06
Emax	0.94
Emin/Emax	0.06
Emin/Eav	0.13

Illuminance (lux)

Grid 3 - Vertical Plot 329

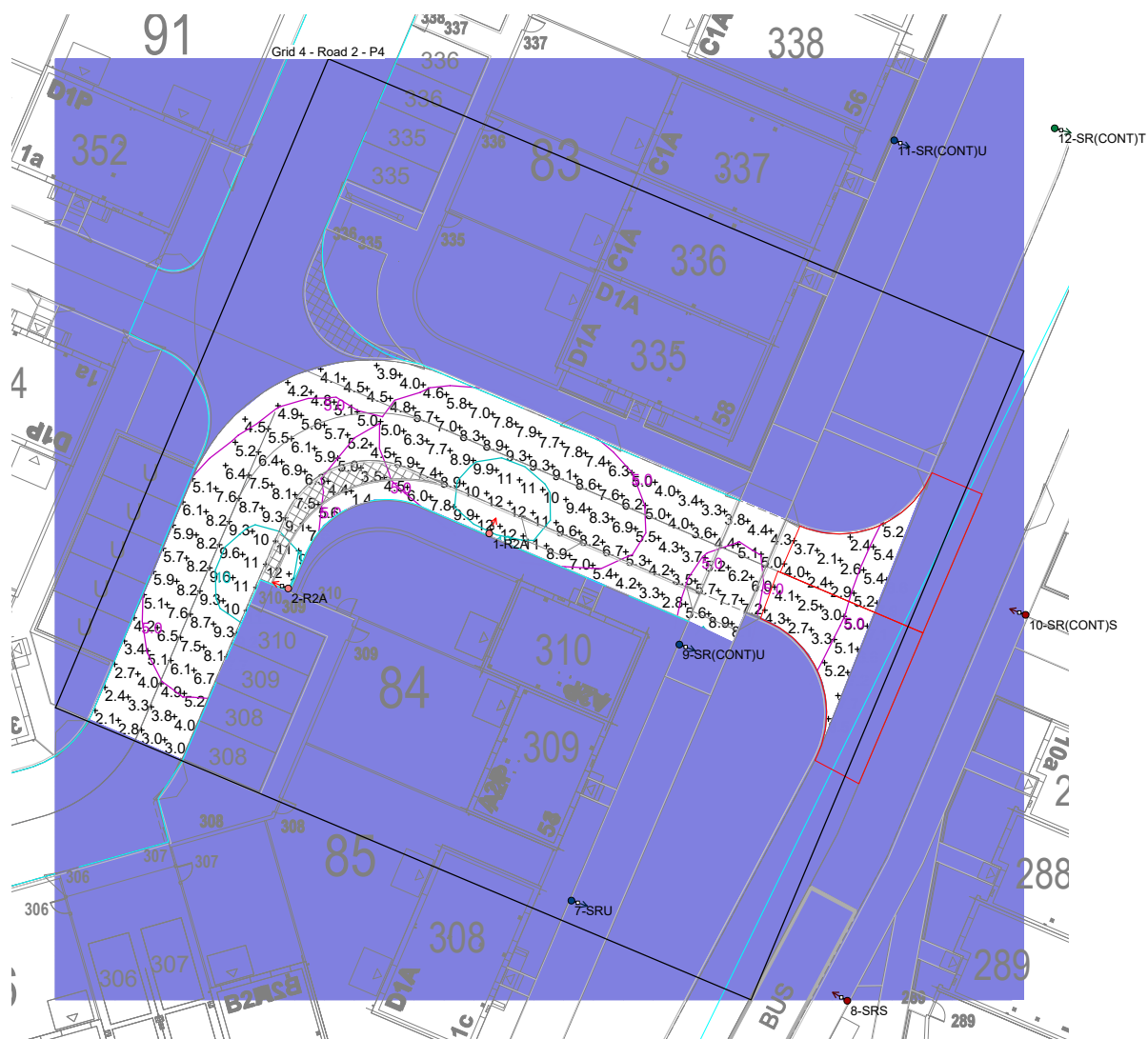
0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4

Results

Eav	0.16
Emin	0.04
E _{max}	0.39
Emin/E _{max}	0.09
Emin/Eav	0.22

Horizontal Illuminance (lux)

Grid 4 - Road 2 - P4



Results

Eav	6.46
Emin	1.35
E _{max}	12.41
Emin/E _{max}	0.11
Emin/Eav	0.21

Illuminance (lux)

Grid 5 - Vertical Plot 335

0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.6
0.3	0.4	0.4	0.5	0.5	0.4	0.5	1.0

Results

Eav	0.22
Emin	0.05
E _{max}	1.03
Emin/E _{max}	0.05
Emin/Eav	0.22

Illuminance (lux)

Grid 6 - Vertical Plot 310

0.1	0.0	0.1	0.1	0.3	0.3
0.1	0.2	0.3	0.4	0.3	0.5
0.2	0.3	0.2	0.2	0.3	0.5
0.2	0.1	0.2	0.2	0.2	0.3

Results

Eav	0.23
Emin	0.04
E _{max}	0.51
Emin/E _{max}	0.08
Emin/Eav	0.17