

DATE: 22 May 2020
DESIGNER: PETER WILLIAMS
PROJECT No: WLC322
PROJECT NAME: NANT SILYN, WREXHAM



REVISION A: LC3 RELOCATED

The proposals have been designed to meet the requirements of the following target lighting class: P5 with an SP ratio of 1.3 applied.

Levels Achieved:

Eav: 2.90 lux

Emin: 0.48 lux

Vertical Grids are from ground level to 8m in height to demonstrate impact on surrounding properties and key habitat areas.

WLC322-LC-AC-001-A

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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	ROADWAY	334274.27	349805.25	164.73	143.20	1.50	1.49
2	VERTICAL GRID 1	334373.90	349907.16	22.15	8.00	1.48	2.00
3	VERTICAL GRID 2	334389.95	349924.77	112.76	8.00	1.48	1.33
4	VERTICAL GRID 3	334390.31	349924.69	27.42	8.00	1.44	1.33
5	VERTICAL GRID 4	334385.50	349869.06	15.17	8.00	1.38	1.33
6	VERTICAL GRID 5	334409.82	349887.40	15.15	8.00	1.38	1.33
7	VERTICAL GRID 6	334348.44	349836.22	12.93	8.00	1.44	1.33
8	VERTICAL GRID 7	334356.81	349846.25	10.31	8.00	1.47	1.33

Luminaires

Luminaire A Data

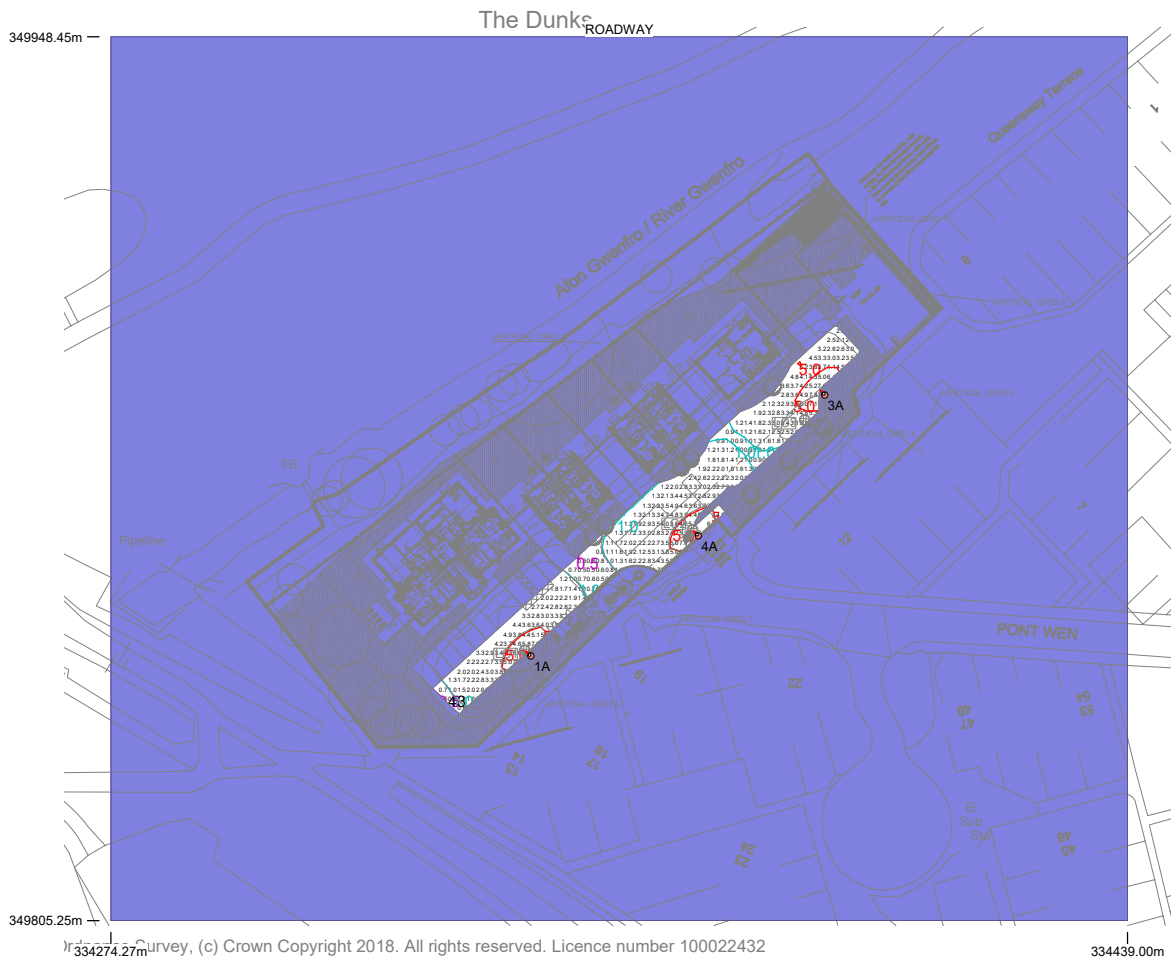
Supplier	
Type	AXIA 2.1 5241 Back louvers 8 NVSL219CT 690mA WW 230V [see d]
Lamp(s)	8 NVSL219CT690mA 230V
LampFlux(klm)/Colour	1.47 WW 3000K/CRI 80
File Name	AXIA 2.1 5241 8 NVSL219CT 690mA WW 19W 402442 [isd] PC B [Integrated lenses]...
Maintenance Factor	0.76
Lum. Int. Class	G3
Lamp S/P Ratio	0.00
No. in Project	3

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	334342.28	349848.16	5.00	134.00	0.00	0.00	0.25			
3	A	334389.92	349890.44	5.00	133.00	0.00	0.00	0.25			
4	A	334369.39	349867.62	5.00	132.00	0.00	0.00	0.25			

Horizontal Illuminance (lux)

ROADWAY



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Results

Eav	2.90
Emin	0.48
Emax	8.08
Emin/Emax	0.06
Emin/Eav	0.17

Illuminance (lux)

VERTICAL GRID 1

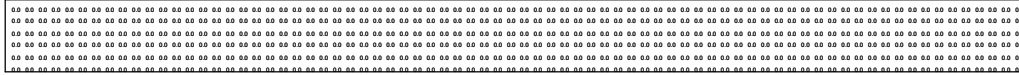
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2

Results

Eav	0.03
Emin	0.00
Emax	0.28
Emin/Emax	0.00
Emin/Eav	0.00

Illuminance (lux)

VERTICAL GRID 2



Results

Eav	0.00
Emin	0.00
Emax	0.01
Emin/Emax	0.00
Emin/Eav	0.00

Illuminance (lux)

VERTICAL GRID 3

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1

Results

Eav	0.02
Emin	0.00
Emax	0.17
Emin/Emax	0.00
Emin/Eav	0.00

Illuminance (lux)

VERTICAL GRID 4

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Results

Eav	0.01
Emin	0.00
Emax	0.02
Emin/Emax	0.00
Emin/Eav	0.00

Illuminance (lux)

VERTICAL GRID 5

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Results

Eav	0.00
Emin	0.00
E _{max}	0.01
Emin/E _{max}	0.00
Emin/Eav	0.00

Illuminance (lux)

VERTICAL GRID 6

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Results

Eav	0.01
Emin	0.00
Emax	0.02
Emin/Emax	0.00
Emin/Eav	0.00

Illuminance (lux)

VERTICAL GRID 7

0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0

Results

Eav	0.00
Emin	0.00
Emax	0.00
Emin/Emax	0.00
Emin/Eav	0.00