

DATE: 11 October 2018
DESIGNER: KM
PROJECT No: C85850
PROJECT NAME: Bartons Road, Havant



Phase 2 Private Street Lighting to BS EN 13201:2015

Lanterns - Philips Micro Luma DM70 LED

Lighting Class - P6 with 1.61 S/P Ratio applied

Eav = 1.20 - 1.80 lux

Emin = 0.40 lux

This report is to be read in conjunction with drawing no. C85850-D141

Luminaire Type A shown for information only. For Phase 1 street lighting, refer to C85850-C111 S38 Street Lighting Design.

C85850-C112 - Phase 2 Street Lighting

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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	473059.21	107726.03	120.00	67.50	1.50	1.50
2	Grid 2	473153.11	107649.00	72.00	157.50	1.50	1.50
3	Grid 3	473219.00	107649.00	100.50	150.00	1.50	1.50
4	Grid 4	473066.93	107644.00	100.50	90.00	1.50	1.50
5	Grid 5	473122.75	107557.44	105.00	99.00	1.50	1.50

Luminares



Luminaire A Data

Supplier	Philips
Type	BGP615 DM70
Lamp(s)	LED-HB 5S/657
Lamp Flux (klm)	1.40
File Name	Luma_Micro_BGP615_DM70_1400_12LED_2_05mA_5S_CLO_L90_CW.ies
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	405.6, 354.6, 0.0
Lamp S/P Ratio	1.96
No. in Project	2



Luminaire B Data

Supplier	Philips
Type	BGP615 DM70
Lamp(s)	LED-HB 5S/740
Lamp Flux (klm)	1.40
File Name	Luma_Micro_BGP615_DM70_1400_12LED_2_05mA_5S_CLO_L90_NW.ies
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	405.6, 354.6, 0.0
Lamp S/P Ratio	1.61
No. in Project	26

Layout

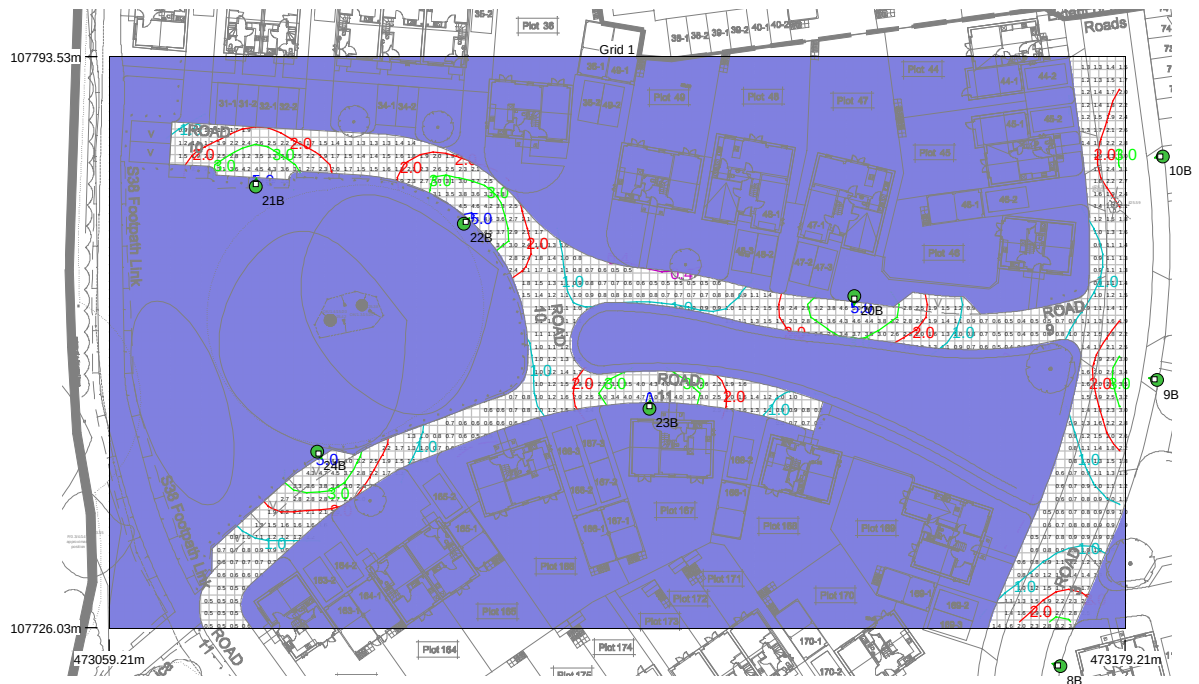
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	473271.33	107788.16	6.00	342.00	0.00	0.00	0.30			
2	A	473169.02	107806.45	6.00	8.00	0.00	0.00	0.30			
3	B	473260.49	107754.06	6.00	342.00	0.00	0.00	0.30			
4	B	473251.21	107697.08	6.00	152.00	0.00	0.00	0.30			
5	B	473231.14	107664.43	6.00	148.00	0.00	0.00	0.30			
6	B	473203.17	107655.79	6.00	45.00	0.00	0.00	0.30			
7	B	473183.57	107691.08	6.00	219.00	0.00	0.00	0.30			
8	B	473171.49	107721.55	6.00	160.00	0.00	0.00	0.30			
9	B	473182.90	107755.39	6.00	167.00	0.00	0.00	0.30			
10	B	473183.56	107781.77	6.00	189.00	0.00	0.00	0.30			
11	B	473295.66	107712.44	6.00	66.00	0.00	0.00	0.30			
12	B	473265.44	107722.65	6.00	71.00	0.00	0.00	0.30			
13	B	473226.46	107720.94	6.00	73.00	0.00	0.00	0.30			
14	B	473267.04	107684.97	6.00	237.00	0.00	0.00	0.30			
15	B	473198.42	107630.69	6.00	311.00	0.00	0.00	0.30			
16	B	473174.57	107603.25	6.00	158.00	0.00	0.00	0.30			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
17	B	473139.85	107703.01	6.00	125.00	0.00	0.00	0.30			
18	B	473110.07	107690.78	6.00	220.00	0.00	0.00	0.30			
19	B	473211.44	107744.92	6.00	258.00	0.00	0.00	0.30			
20	B	473147.20	107765.25	6.00	269.00	0.00	0.00	0.30			
21	B	473076.52	107778.17	6.00	87.00	0.00	0.00	0.30			
22	B	473101.08	107773.80	6.00	45.00	0.00	0.00	0.30			
23	B	473122.99	107751.97	6.00	86.00	0.00	0.00	0.30			
24	B	473083.77	107746.92	6.00	302.00	0.00	0.00	0.30			
25	B	473080.70	107710.41	6.00	35.00	0.00	0.00	0.30			
26	B	473129.29	107661.40	6.00	216.00	0.00	0.00	0.30			
27	B	473152.72	107631.00	6.00	213.00	0.00	0.00	0.30			
28	B	473190.72	107577.28	6.00	210.00	0.00	0.00	0.30			

Horizontal Illuminance (lux)

Grid 1

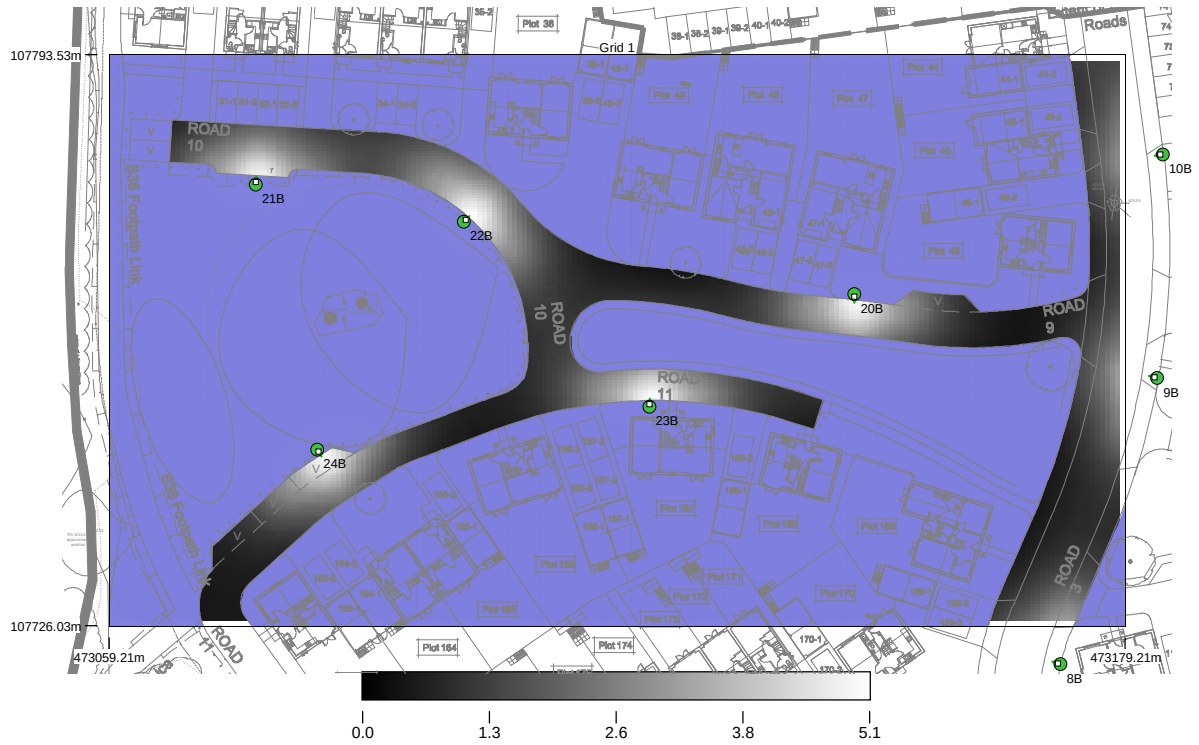


Results

Eav	1.72
Emin	0.42
Emax	5.11
Emin/Emax	0.08
Emin/Eav	0.24

Horizontal Illuminance (lux)

Grid 1



Results

Eav	1.72
Emin	0.42
Emax	5.11
Emin/Emax	0.08
Emin/Eav	0.24

Horizontal Illuminance (lux)

Grid 2

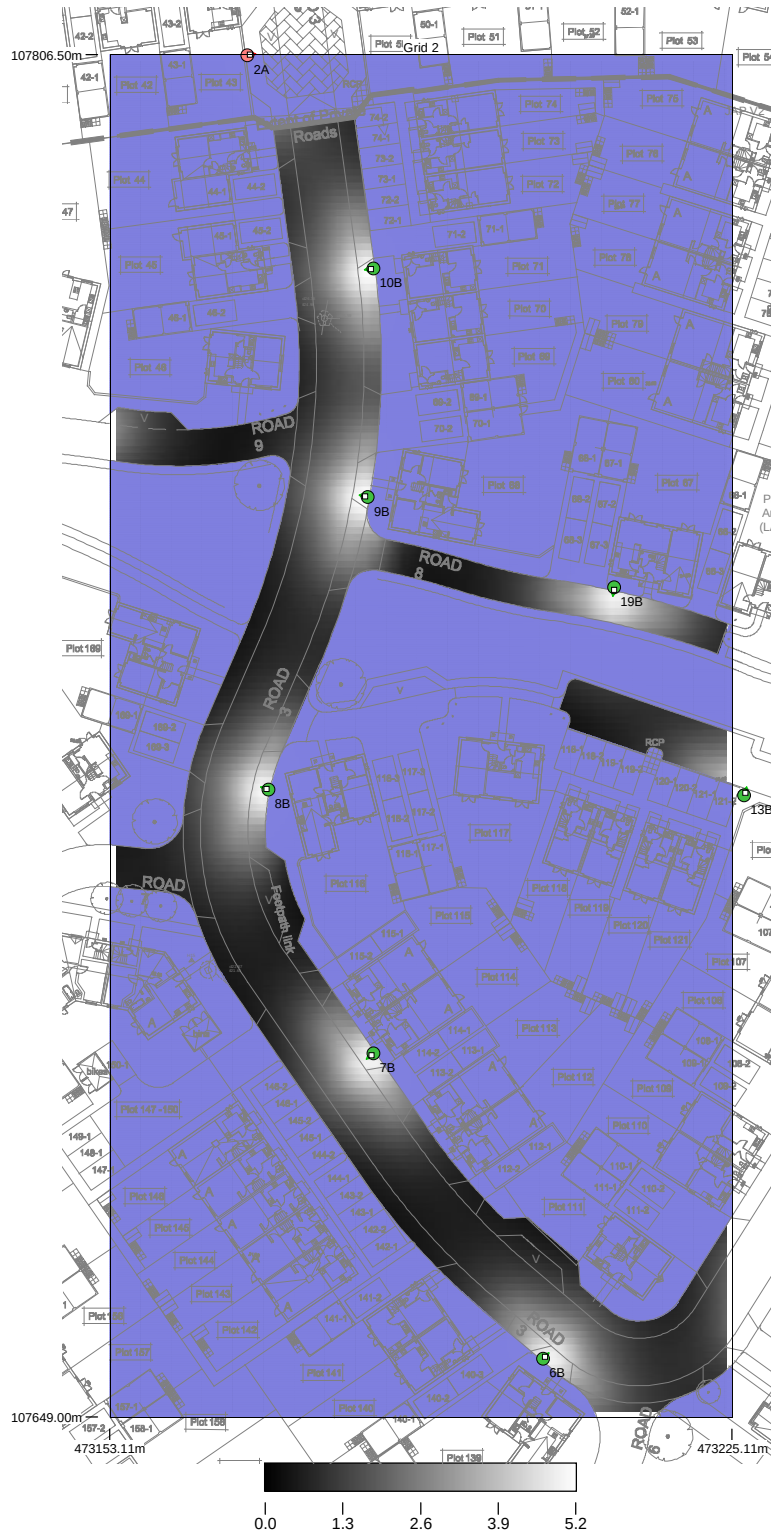


Results

Eav	1.70
Emin	0.40
Emax	5.21
Emin/Emax	0.08
Emin/Eav	0.23

Horizontal Illuminance (lux)

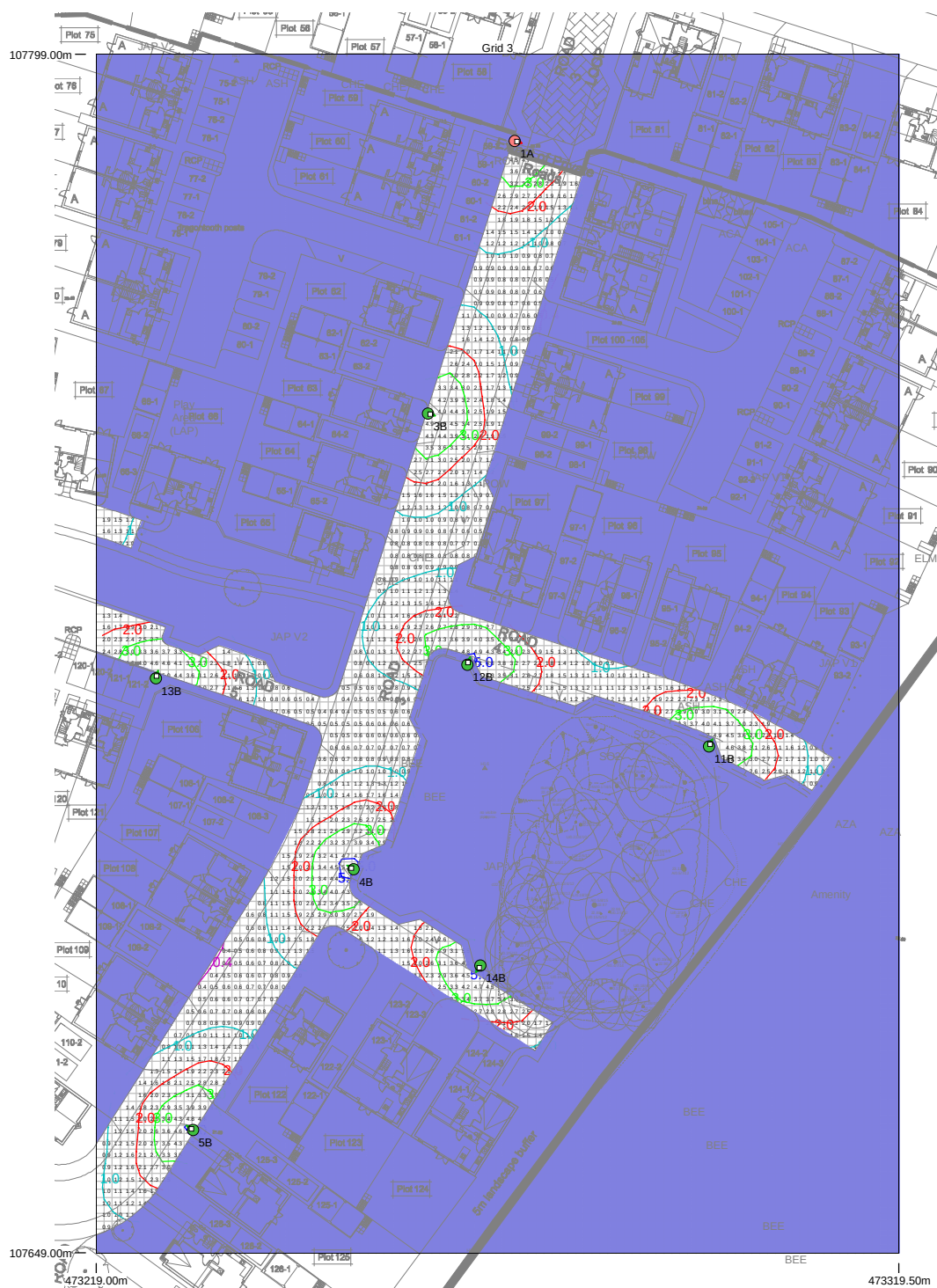
Grid 2



Results

Eav	1.70
Emin	0.40
Emax	5.21
Emin/Emax	0.08
Emin/Eav	0.23

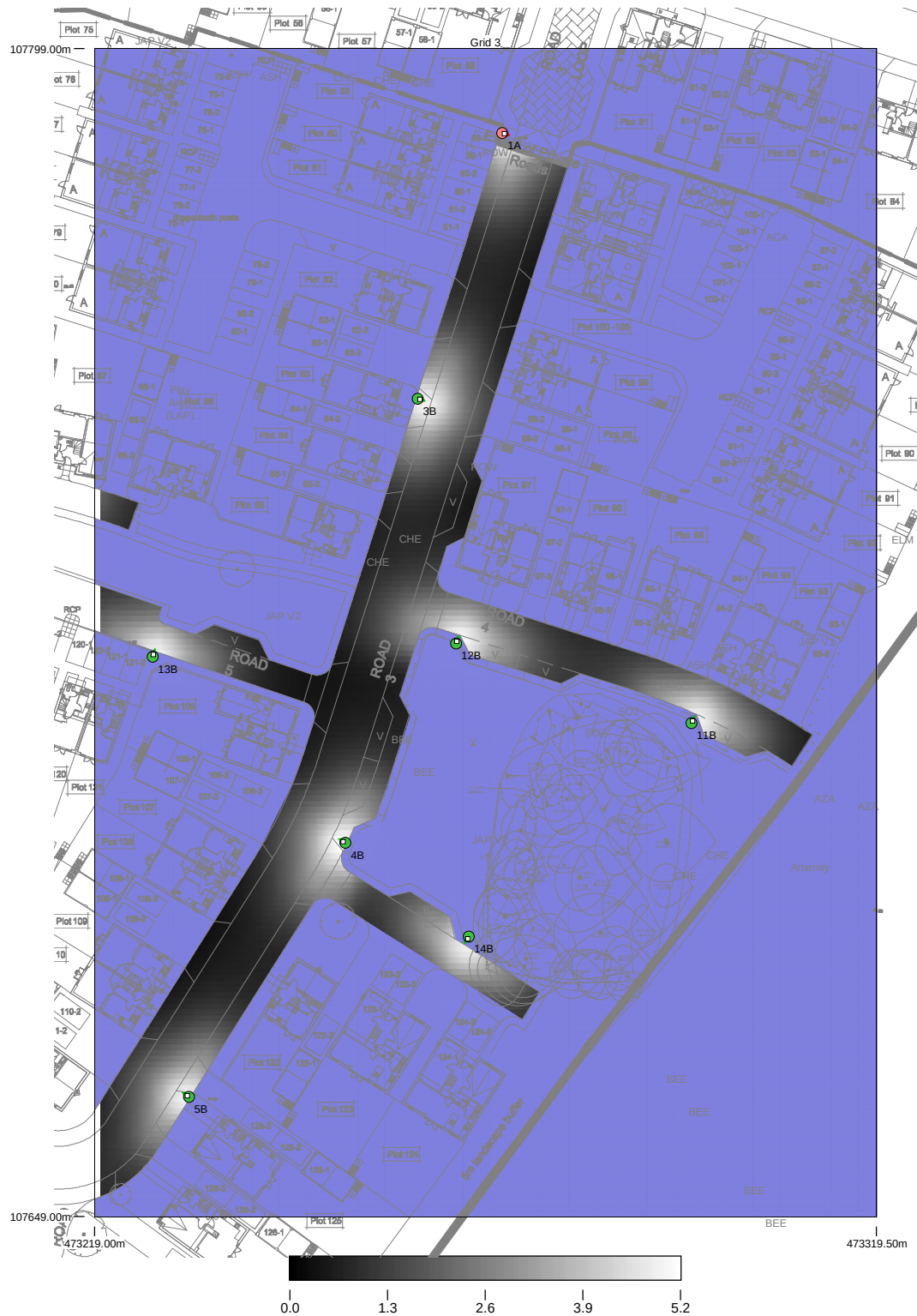
Grid 3



Eav	1.80
Emin	0.40
E _{max}	5.24
Emin/E _{max}	0.08
Emin/Eav	0.22

Horizontal Illuminance (lux)

Grid 3

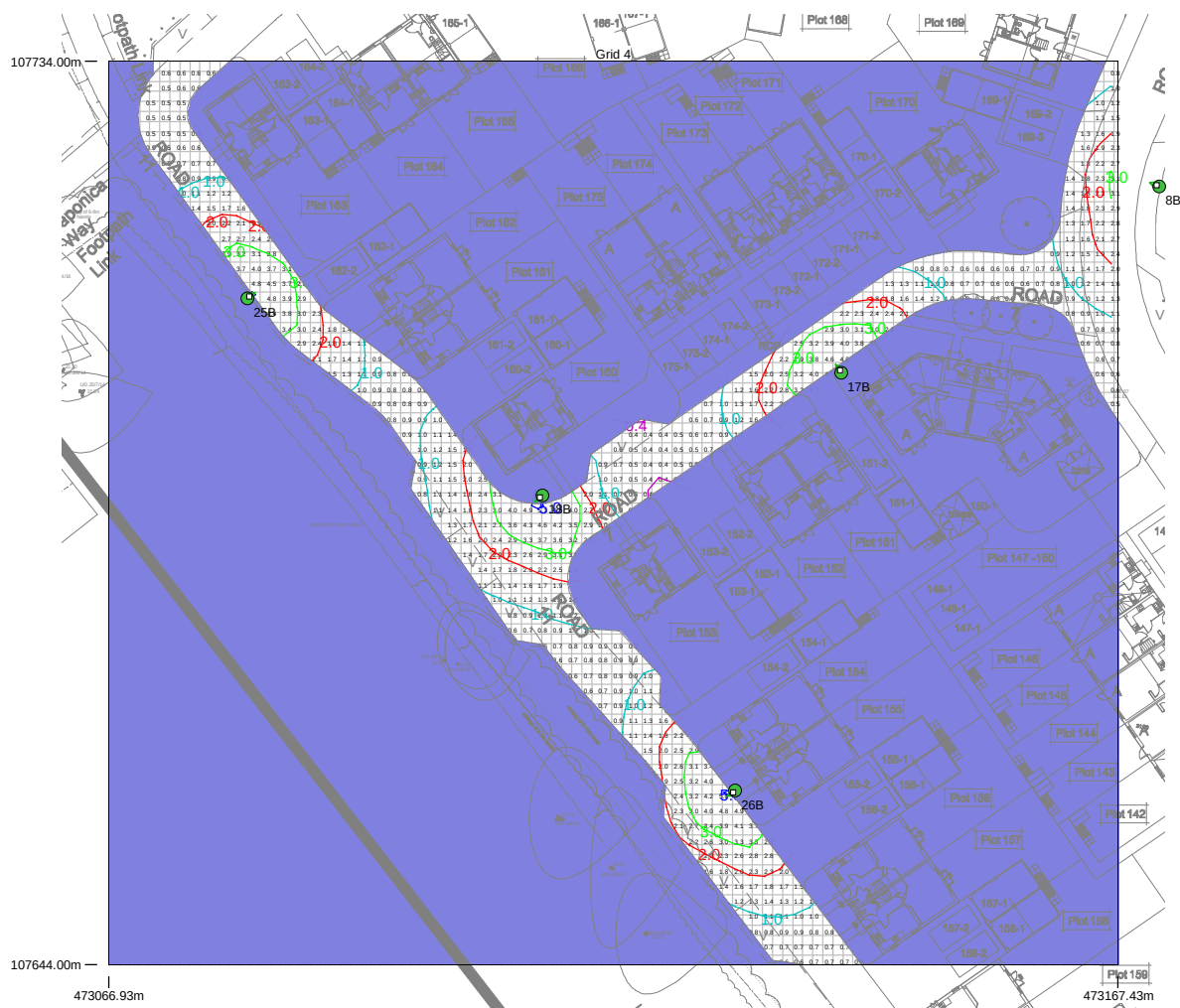


Results

Eav	1.80
Emin	0.40
E _{max}	5.24
E _{min} /E _{max}	0.08
E _{min} /E _{av}	0.22

Horizontal Illuminance (lux)

Grid 4

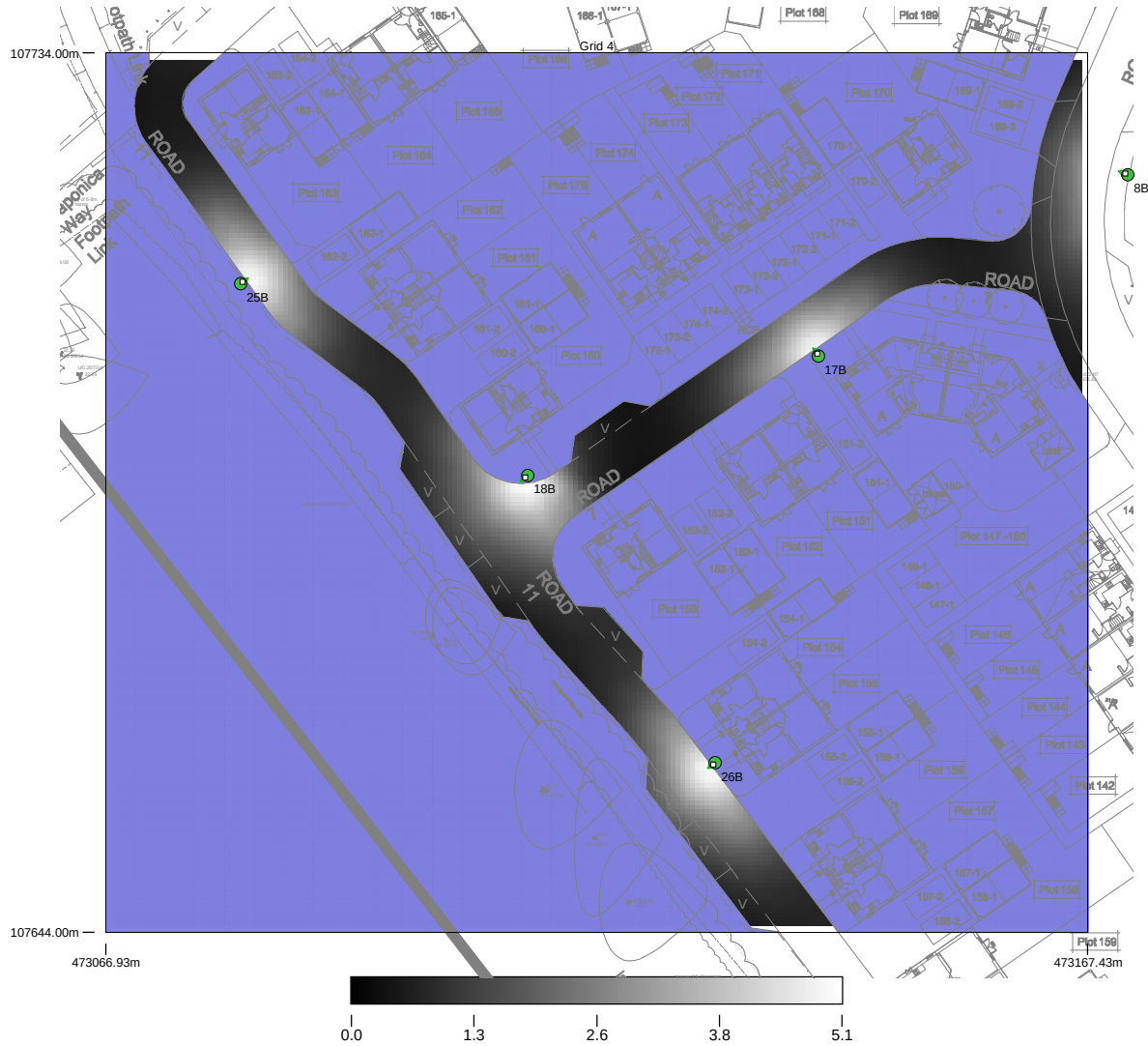


Results

Eav	1.66
Emin	0.40
Emax	5.11
Emin/Emax	0.08
Emin/Eav	0.24

Horizontal Illuminance (lux)

Grid 4

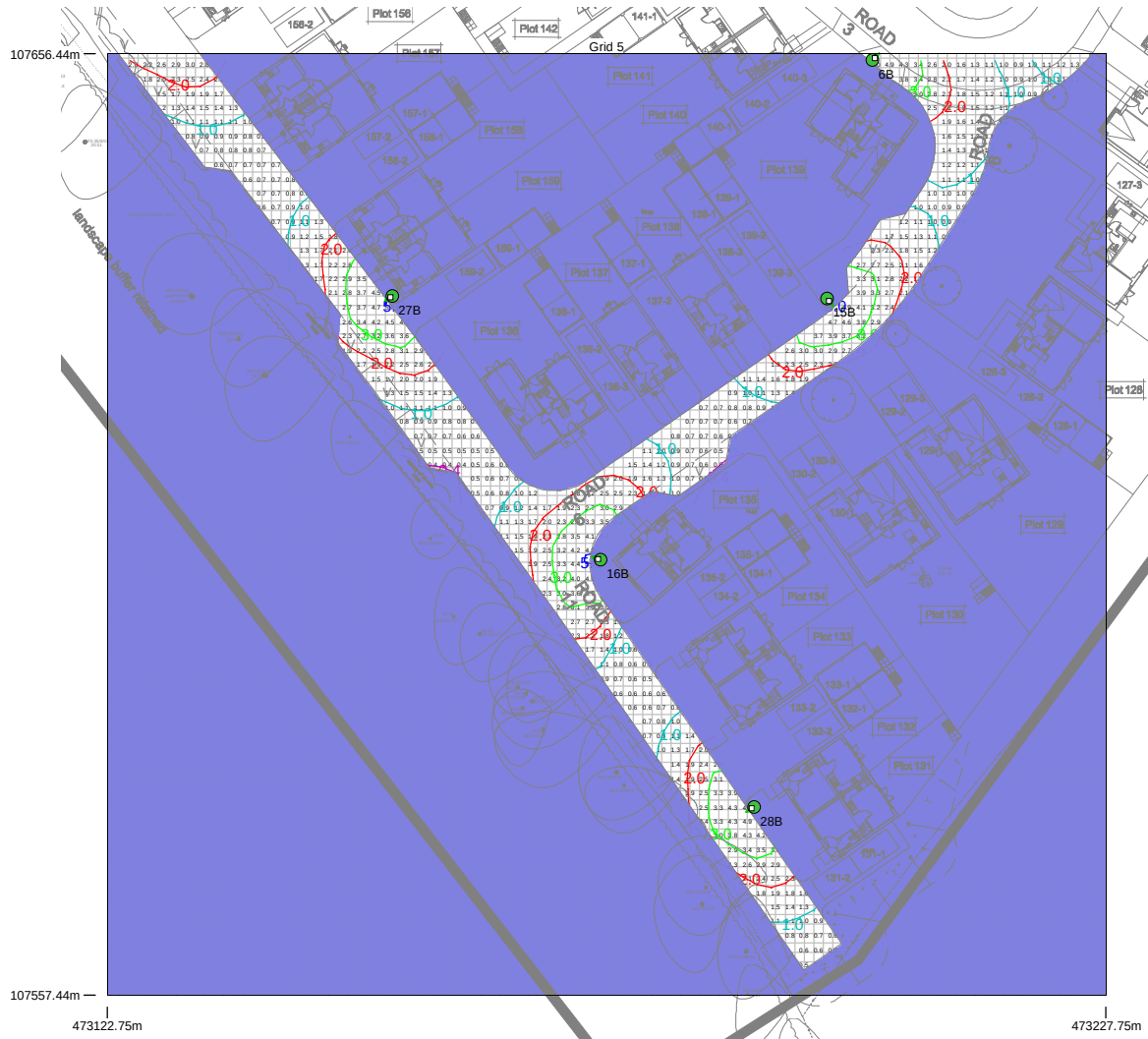


Results

Eav	1.66
Emin	0.40
Emax	5.11
Emin/Emax	0.08
Emin/Eav	0.24

Horizontal Illuminance (lux)

Grid 5

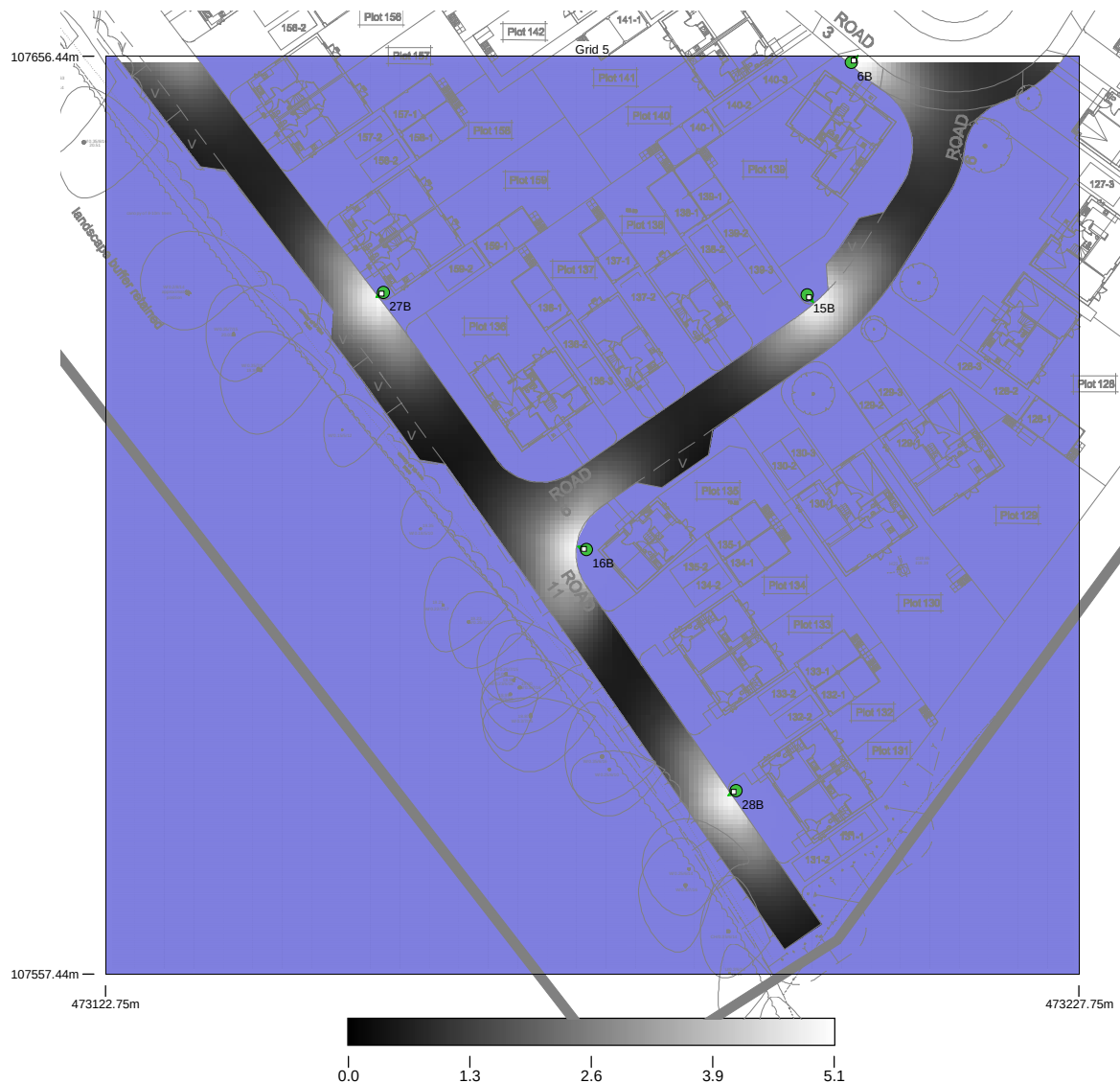


Results

Eav	1.79
Emin	0.43
Emax	5.07
Emin/Emax	0.08
Emin/Eav	0.24

Horizontal Illuminance (lux)

Grid 5



Results

Eav	1.79
Emin	0.43
Emax	5.07
Emin/Emax	0.08
Emin/Eav	0.24