

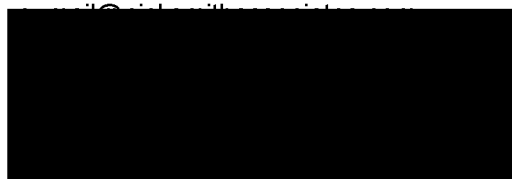
DATE: 7 May 2020
DESIGNER: Nick Smith
PROJECT No: 2624
PROJECT NAME: Herons Farm, Dappers Lane, Angmering



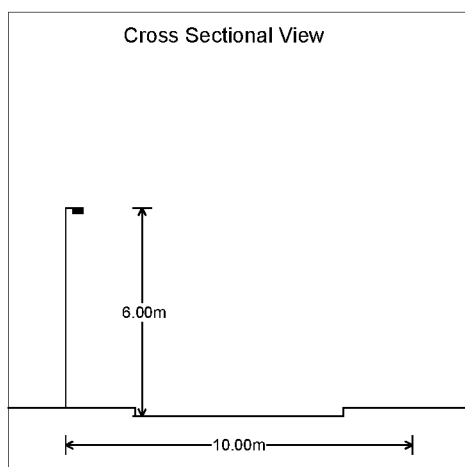
Nick Smith Associates
01243 810000

Roadway Lighting Report

PREPARED BY: Nick Smith Associates Ltd
36 Foxbrook Drive, Chesterfield, S40 3JR



Layout



Calculation Grid	2015:EN13201 Illuminance
Width (m)	10.00
No. of Lanes	2
Road Surface	C2
Q0	0.07
Left Footpath(m)	2.00
Right Footpath(m)	2.00

Column Data

Configuration	Single Sided Left
Spacing (m)	40.00
Height (m)	6.00
Tilt (deg)	0.00
Setback (m)	2.00
Outreach (m)	0.35
Overhang (m)	-1.65

Luminaire Data

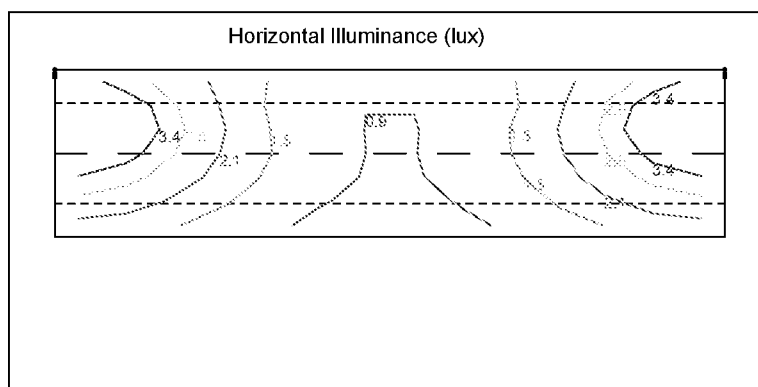
Supplier	
Type	BGP615 DW50
Lamp(s)	LED-HB 5S/830
Lamp Flux (klm)	1.80
File Name	Luma_Micro_BGP615_DW50_1800_12LED_304mA_5S_CLO_L90_VWV.ies
Maintenance Factor	0.83
Lum. Int. Class	G3

Results

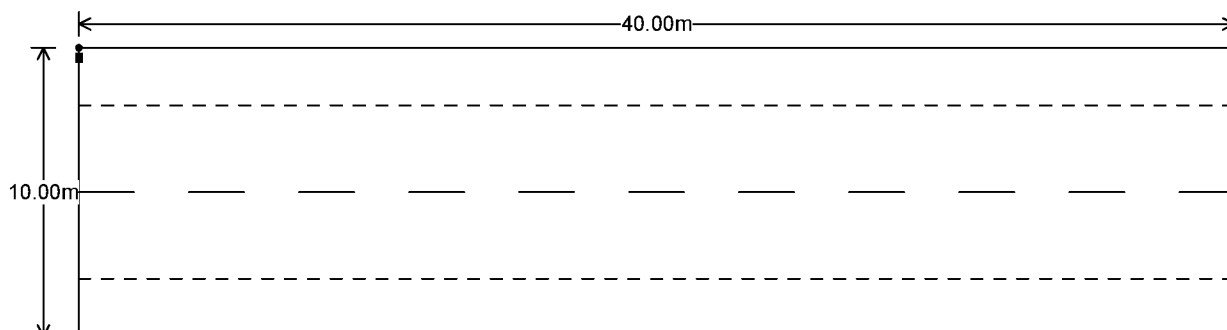
Main

Complies with P6

Eav	2.00
Emin	0.61
Emax	4.30
Emin/Emax	0.14
Emin/Eav	0.31
TI(%)	32.99



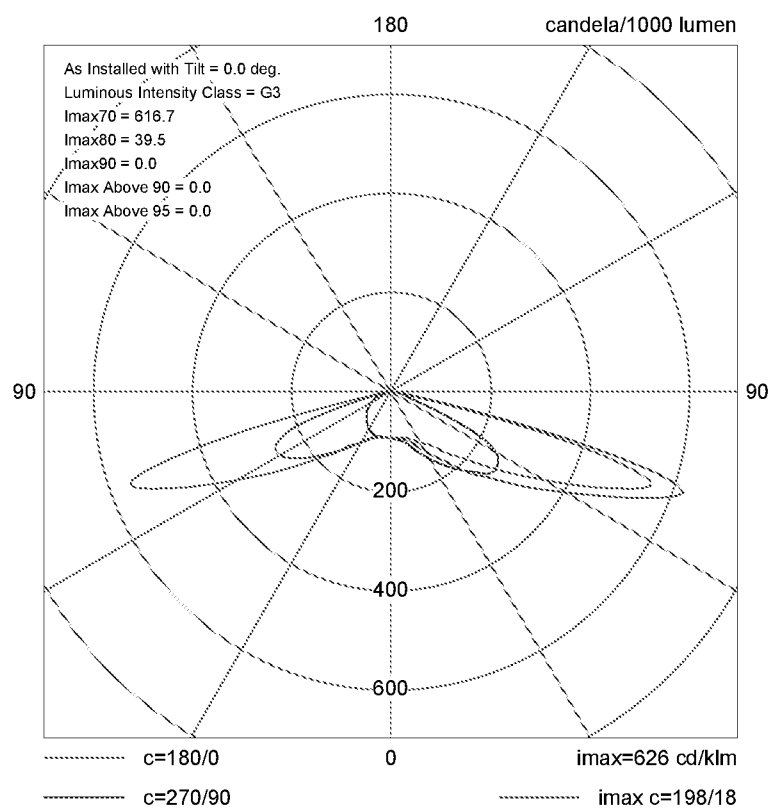
Energy performance indicators



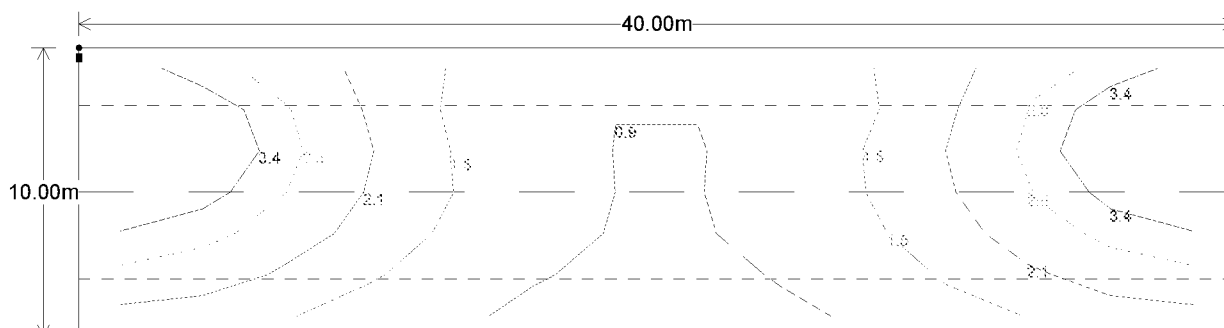
Power Main Luminaire(W)	13.00
Parasitic Power(W)	0.00
Area(m ²)	400
Hours per Year	4100
Power Density(mW/lx/m ²)	16.25
AECI(kWh/m ²)	0.13

Polar Diagram

Main Luminaire BGP615 DW50



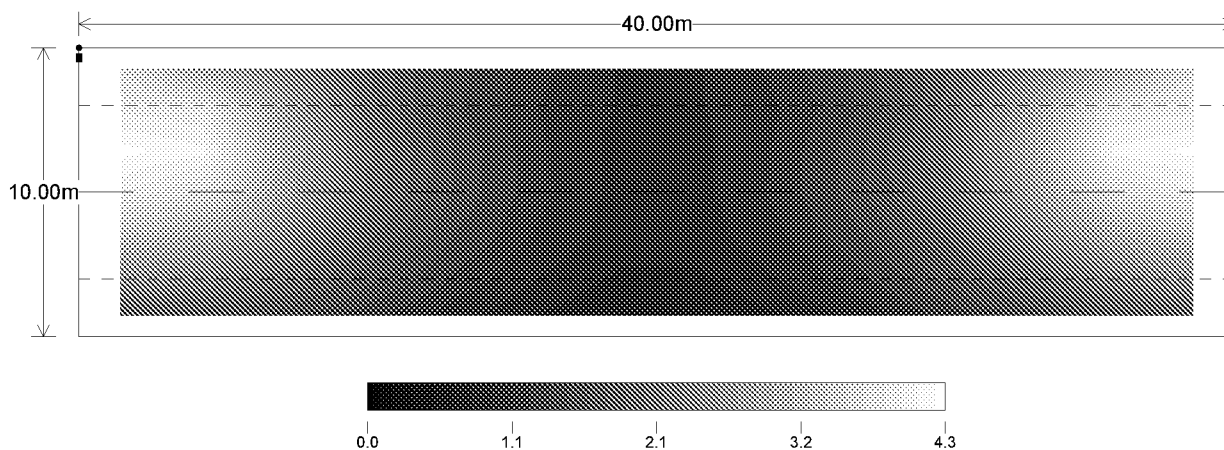
Horizontal Illuminance (lux)



Main Results

Eav	2.00
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E _{max}	4.30
Emin/E _{max}	0.14
Emin/Eav	0.31
Tl(%)	32.99

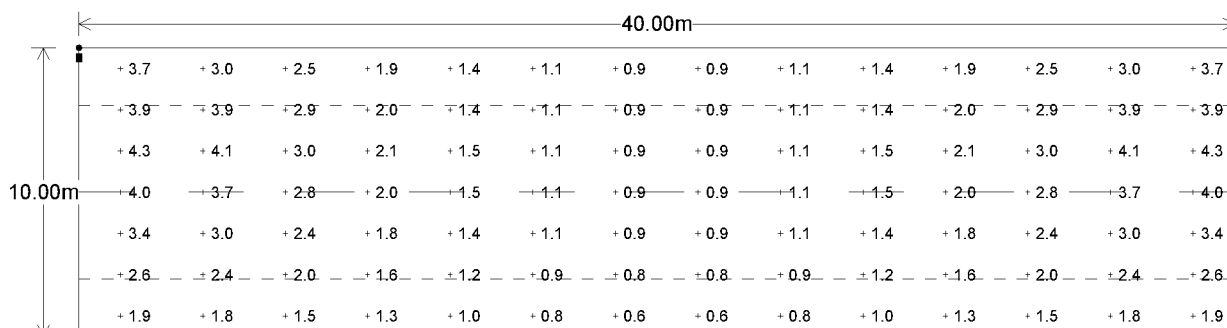
Horizontal Illuminance (lux)



Main Results

Eav	2.00
Emin	0.61
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Emin/Emax	0.14
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Horizontal Illuminance (lux)



Main Results

Eav	2.00
Emin	0.61
Emax	4.30
Emin/Emax	0.14
Emin/Eav	0.31
Tl(%)	32.99

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Comparison Table

EN13201 Class: P6 Calculation Grid: 2015:EN13201 Illuminance Road Surface: C2 Q0: 0.07 No. of Lanes: 2 Total Width: 10.00
Configuration: Single Sided Left

No.	Luminaire	Lamp	Flux	MF	Spacing	Overhang	Height	Tilt	Eav	Emin	Emax	Emin/Emax	Emin/Eav	TI	Power Density	AECI
1	BGP615 DW50	LED-HB 5S	1.80	0.83	27.00	-1.65	6.00	0.00	2.96	1.80	4.38	0.41	0.61	24.17	16.25	0.20
2	BGP615 DW50	LED-HB 5S	1.80	0.83	28.00	-1.65	6.00	0.00	2.86	1.71	4.36	0.39	0.60	24.86	16.25	0.19
3	BGP615 DW50	LED-HB 5S	1.80	0.83	29.00	-1.65	6.00	0.00	2.76	1.62	4.33	0.37	0.59	25.58	16.25	0.18
4	BGP615 DW50	LED-HB 5S	1.80	0.83	30.00	-1.65	6.00	0.00	2.67	1.52	4.32	0.35	0.57	26.27	16.25	0.18
5	BGP615 DW50	LED-HB 5S	1.80	0.83	31.00	-1.65	6.00	0.00	2.58	1.41	4.32	0.33	0.56	26.95	16.25	0.17
6	BGP615 DW50	LED-HB 5S	1.80	0.83	32.00	-1.65	6.00	0.00	2.50	1.32	4.31	0.31	0.53	27.64	16.25	0.17
7	BGP615 DW50	LED-HB 5S	1.80	0.83	33.00	-1.65	6.00	0.00	2.42	1.23	4.30	0.29	0.51	28.32	16.25	0.16
8	BGP615 DW50	LED-HB 5S	1.80	0.83	34.00	-1.65	6.00	0.00	2.35	1.13	4.30	0.26	0.48	29.00	16.25	0.16
9	BGP615 DW50	LED-HB 5S	1.80	0.83	35.00	-1.65	6.00	0.00	2.29	1.04	4.30	0.24	0.46	29.68	16.25	0.15
10	BGP615 DW50	LED-HB 5S	1.80	0.83	36.00	-1.65	6.00	0.00	2.22	0.95	4.30	0.22	0.43	30.35	16.25	0.15
11	BGP615 DW50	LED-HB 5S	1.80	0.83	37.00	-1.65	6.00	0.00	2.16	0.83	4.30	0.19	0.39	31.01	16.25	0.14
12	BGP615 DW50	LED-HB 5S	1.80	0.83	38.00	-1.65	6.00	0.00	2.10	0.74	4.30	0.17	0.35	31.68	16.25	0.14
13	BGP615 DW50	LED-HB 5S	1.80	0.83	39.00	-1.65	6.00	0.00	2.05	0.66	4.30	0.15	0.32	32.34	16.25	0.14
14	BGP615 DW50	LED-HB 5S	1.80	0.83	40.00	-1.65	6.00	0.00	2.00	0.61	4.30	0.14	0.31	32.99	16.25	0.13