

DATE: 23 March 2020
DESIGNER: MMA Lighting Consultancy Ltd
PROJECT No: MMA15553
PROJECT NAME: North End Road, Yapton



North End Road, Yapton S38 - Road Calc 8.8m
6m WSCC Specification Column with Philips Luma Micro CW LED
Standard: BS 5489:2013
Class - P5 with SP Ratio of 1.96
Eave = 1.82 - 2.73 Lux
Emin = 0.40
Single Sided Spacing Max - 35m
Single Sided Spacing Min - 24.4m

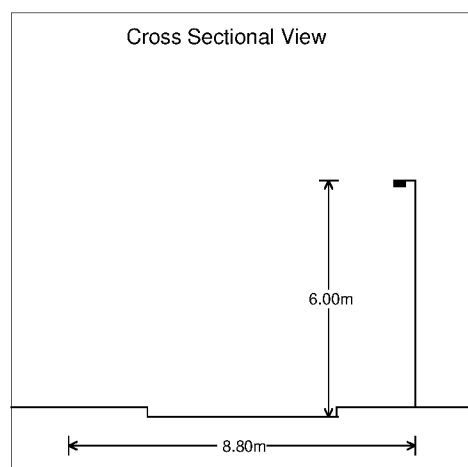
Roadway Lighting Report

PREPARED BY: MMA Lighting Consultancy Ltd
99 Old Bath Road
Summer Field House
Charvil
Reading
Berkshire
RG10 9QN



Roadway Report Summary

Layout



Road Data

Calculation Grid	BS5489 2013 Illuminance
Width (m)	8.80
No. of Lanes	2
Road Surface	C2
Q0	0.07
Left Footpath(m)	2.00
Right Footpath(m)	2.00

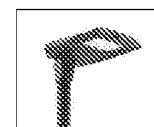
Main Lighting

Column Data

Configuration	Single Sided Right
Spacing (m)	24.50
Height (m)	6.00
Tilt (deg)	0.00
Setback (m)	2.00
Outreach (m)	0.40
Overhang (m)	-1.60

Luminaire Data

Supplier	Philips
Type	BGP615_DW10_1200_6LED_5.1S_CLO_L90_CW
Lamp(s)	LED-HB 5.1S CW
Lamp Flux (klm)	1.20
File Name	Luma Micro_BGP615_DW10_1200_6LED_5.1S_CLO_L90_CW.ies
Maintenance Factor	0.83
Lum. Int. Class	G4
Lamp S/P Ratio	1.96

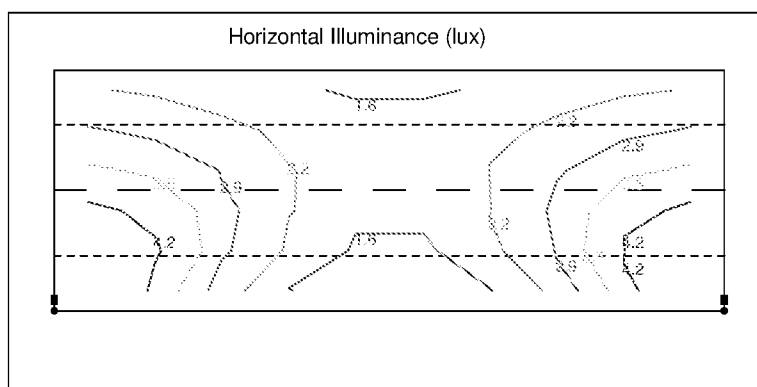


Results

Main

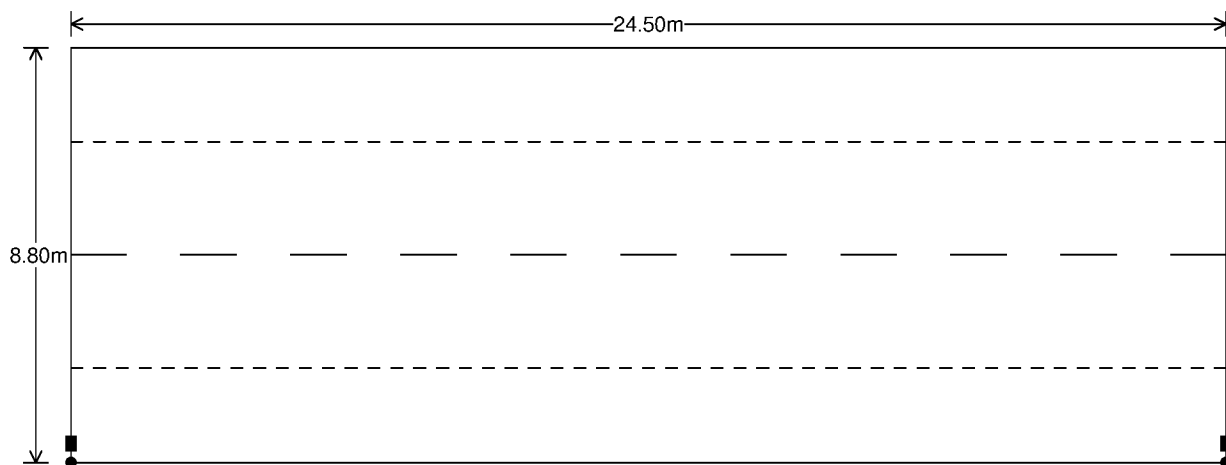
Complies with P5*
With S/P ratio = 1.96

Eav	2.70
Emin	1.24
Emax	5.17
Emin/Emax	0.24
Emin/Eav	0.46



*The lighting class has been modified using the lamp S/P ratio in accordance with PLG03 With Eav from 1.82 to 2.73 and Emin 0.40

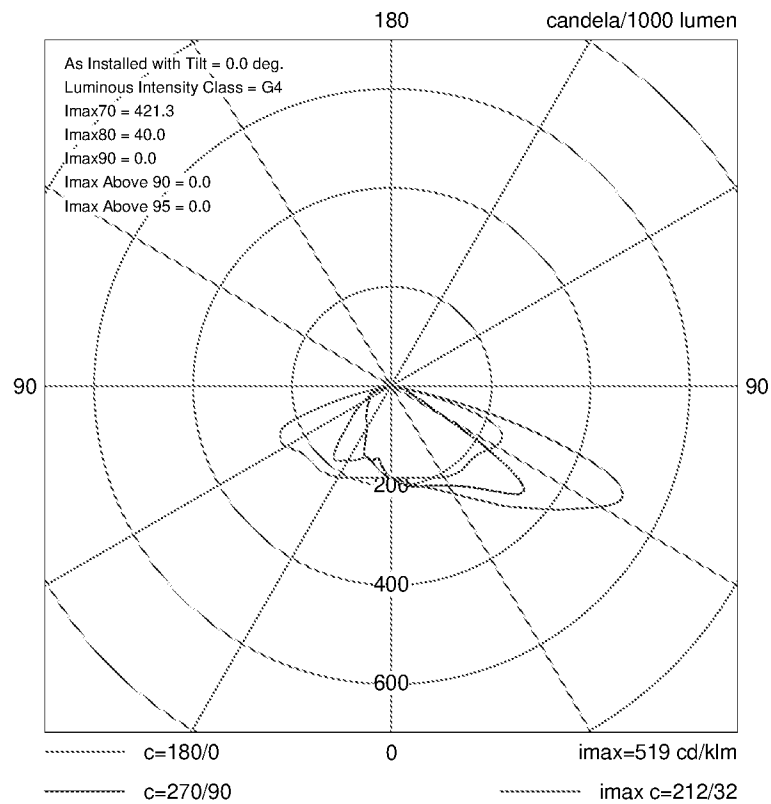
Energy performance indicators



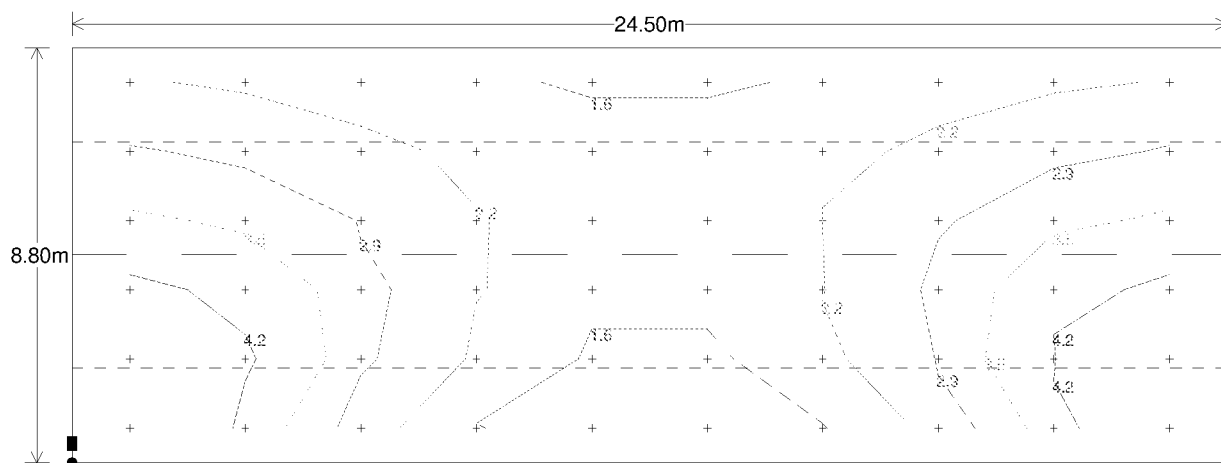
Power Main Luminaire(W)	8.00
Parasitic Power(W)	0.00
Area(m ²)	216
Hours per Year	4100
Power Density(mW/lx/m ²)	13.73
AECI(kWh/m ²)	0.15

Polar Diagram

Main Luminaire BGP615 DW10 1200 6LED 5.1S CLO L90 CW



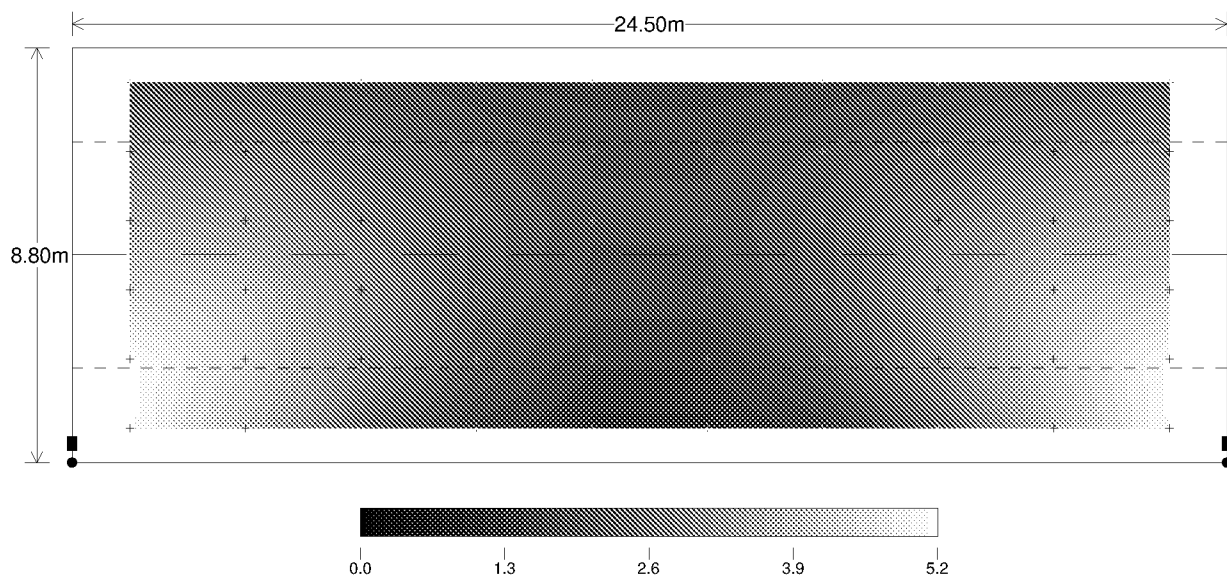
Horizontal Illuminance (lux)



Main Results

Eav	2.70
Emin	1.24
E _{max}	5.17
E _{min} /E _{max}	0.24
E _{min} /E _{av}	0.46

Horizontal Illuminance (lux)



Horizontal Illuminance (lux)

