

DATE: 10 June 2020
DESIGNER: Steve Higham
PROJECT No: LL1171-001
PROJECT NAME: M606 Bradford



Development layout reference: P402A-Proposed Site Plan
Lighting classification: (As taken from BS 5489-1:2020 (Table A.4),
ILP PLG 02 & BS EN 12464-2:2014 (Table 5.9)

HGV loading area
Table 5.7 BS EN 12464-2:2014
Short-term handling of large units and raw materials, loading and
unloading of solid bulk goods
Minimum maintained average illuminance (Eav): >20.0 lux
Emin/Eav (Uniformity) => 0.25 (25%)

Access Road
Table 2 BS EN 12464-2:2014
Lighting Classification: C3
Minimum maintained average illuminance (Eav): >15.0 lux
Emin/Eav (Uniformity) => 0.40 (40%)

Access Road and Rear HGV.

PREPARED BY: Loveday Lighting Limited
Email: aimie@lovedaylighting.com
Website: www.lovedaylighting.com



Layout Report

General Data

Dimensions in Metres Angles in Degrees
Local Origin at 418064208.86m x 427573517.61m

Calculation Grids

ID	Grid Name	X	Y	X' Length	Y' Length	X' Spacing	Y' Spacing
1	Grid 1	-184.77	-64.96	144.00	24.00	1.50	1.50
2	Grid 2	-92.00	0.00	87.00	223.59	1.50	1.50
3	CONTOUR EXTRACT ONLY	-276.04	-76.40	275.04	332.40	1.50	1.50

Luminaires

Luminaire A Data

Supplier	Philips
Type	BGP703 DW10 BL1
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	10.00
File Name	Luma Gen2 Mini_BGP703_DW10 BL1_1000_40LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.74
Lum. Int. Class	G4
Lamp S/P Ratio	1.30
No. in Project	6

Luminaire B Data

Supplier	Philips
Type	BGP703 DX10 BL1
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	7.50
File Name	Luma Gen2 Mini_BGP703_DX10 BL1_7500_40LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.74
Lum. Int. Class	G3
Lamp S/P Ratio	1.30
No. in Project	2



Luminaire D Data

Supplier	Philips
Type	BVP650 DX10 BL1
Lamp(s)	LED-HB 5.1S
Lamp Flux (klm)	36.00
File Name	Clearflood Small_BVP650_DX10 BL1_36000_5.1S_L90_CLO_WW.ies
Maintenance Factor	0.74
Lum. Int. Class	G1
Lamp S/P Ratio	0.00
No. in Project	17

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	B	-166.26	-32.03	6.00	206.00	0.00	0.00	0.40			
2	B	-180.38	-39.71	6.00	114.00	0.00	0.00	0.40			
3	A	-176.66	-42.80	8.00	296.00	0.00	0.00	0.40			
4	A	-148.80	-29.64	8.00	295.00	0.00	0.00	0.40			
5	A	-125.33	-18.38	8.00	297.00	0.00	0.00	0.40			
6	A	-101.90	-7.13	8.00	295.00	0.00	0.00	0.40			
7	A	-78.50	4.08	8.00	296.00	0.00	0.00	0.40			
8	D	-41.27	11.65	8.00	115.00	5.00	0.00	0.40			



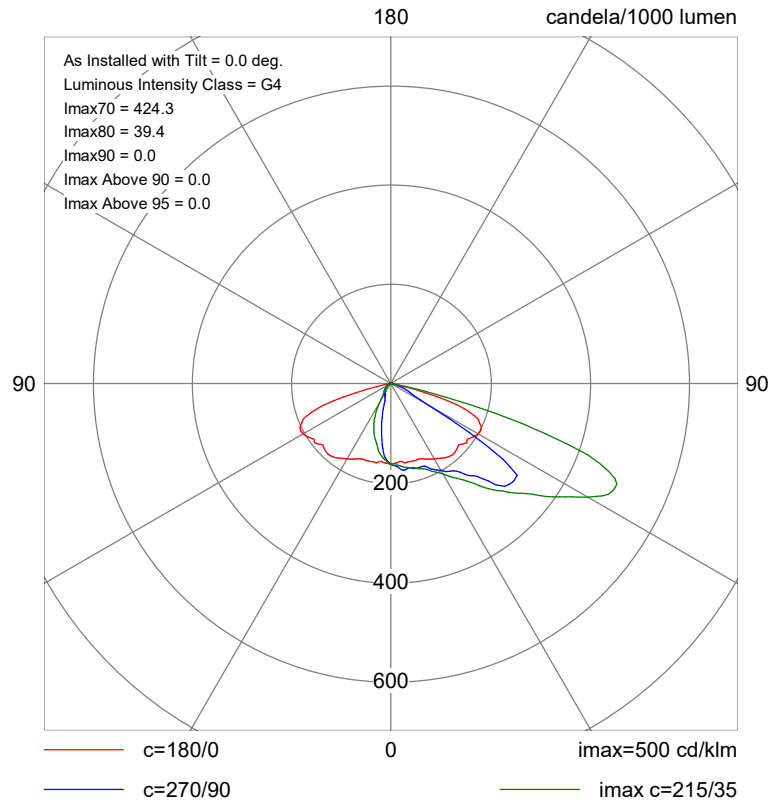
Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
9	D	-38.53	38.43	10.00	202.00	5.00	0.00	0.40			
10	A	-163.98	-50.60	8.00	111.00	0.00	0.00	0.40			
11	D	-70.37	29.24	10.00	25.00	5.00	0.00	0.40			
12	D	-89.47	43.33	8.00	25.00	5.00	0.00	0.40			
13	D	-49.50	61.47	10.00	205.00	5.00	0.00	0.40			
14	D	-99.56	64.66	8.00	27.00	5.00	0.00	0.40			
15	D	-59.10	83.10	10.00	200.00	5.00	0.00	0.40			
16	D	-113.54	92.95	8.00	27.00	5.00	0.00	0.40			
17	D	-63.71	113.07	10.00	183.00	5.00	0.00	0.40			
18	D	-71.23	143.30	10.00	208.00	5.00	0.00	0.40			
19	D	-126.86	121.64	8.00	25.00	5.00	0.00	0.40			
20	D	-140.38	150.04	8.00	26.00	5.00	0.00	0.40			
21	D	-82.45	166.87	10.00	208.00	5.00	0.00	0.40			
22	D	-149.12	210.19	8.00	298.00	5.00	0.00	0.40			
23	D	-154.03	178.56	8.00	24.00	5.00	0.00	0.40			
24	D	-106.31	217.25	10.00	205.00	5.00	0.00	0.40			
25	D	-94.38	191.82	10.00	205.00	5.00	0.00	0.40			

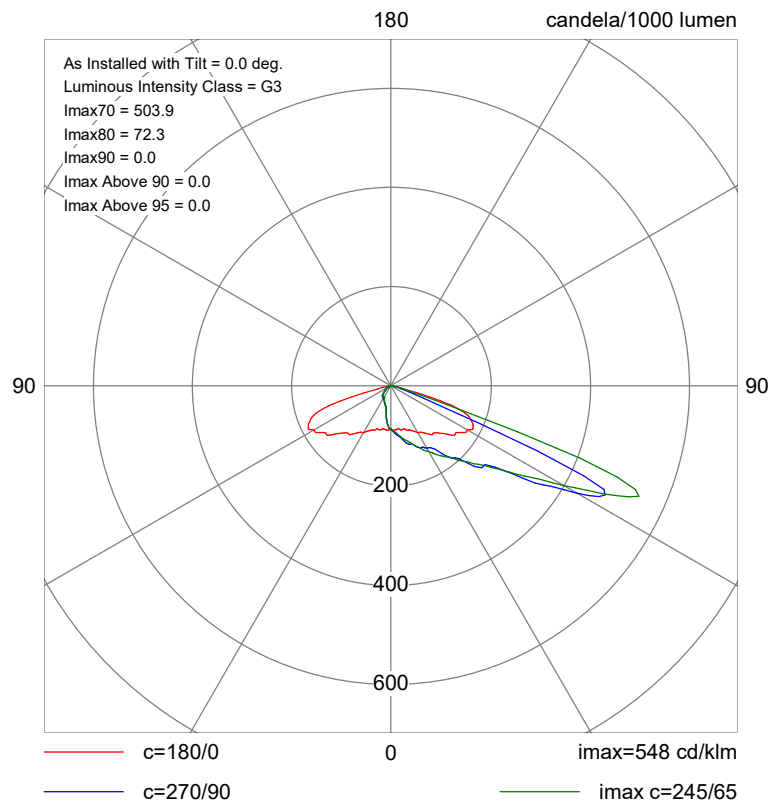


Polar Diagrams

Luminaire A BGP703 DW10 BL1



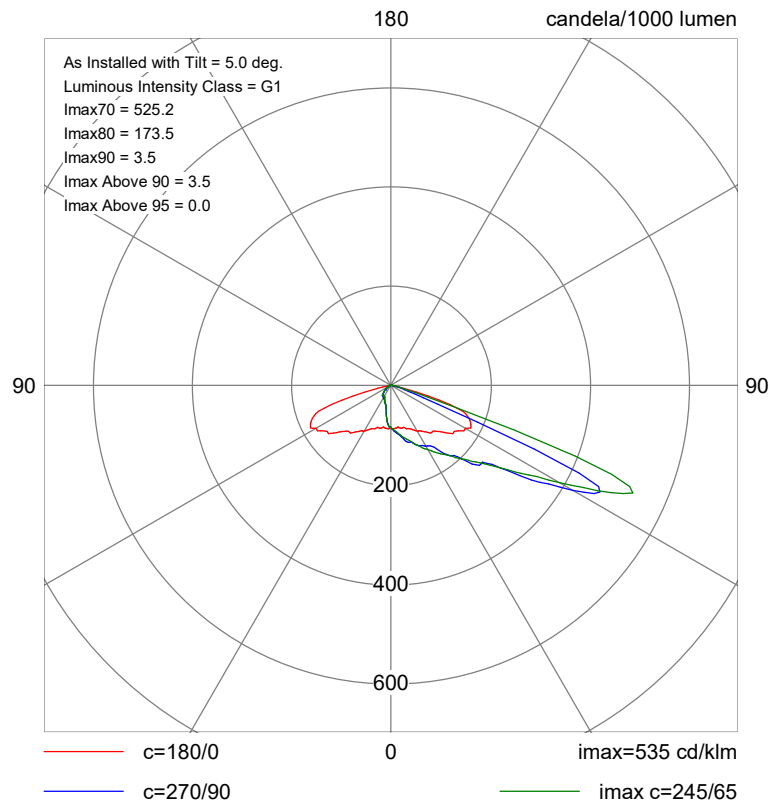
Luminaire B BGP703 DX10 BL1





Polar Diagrams Continued

Luminaire D BVP650 DX10 BL1





Horizontal Illuminance (lux)

Grid 1



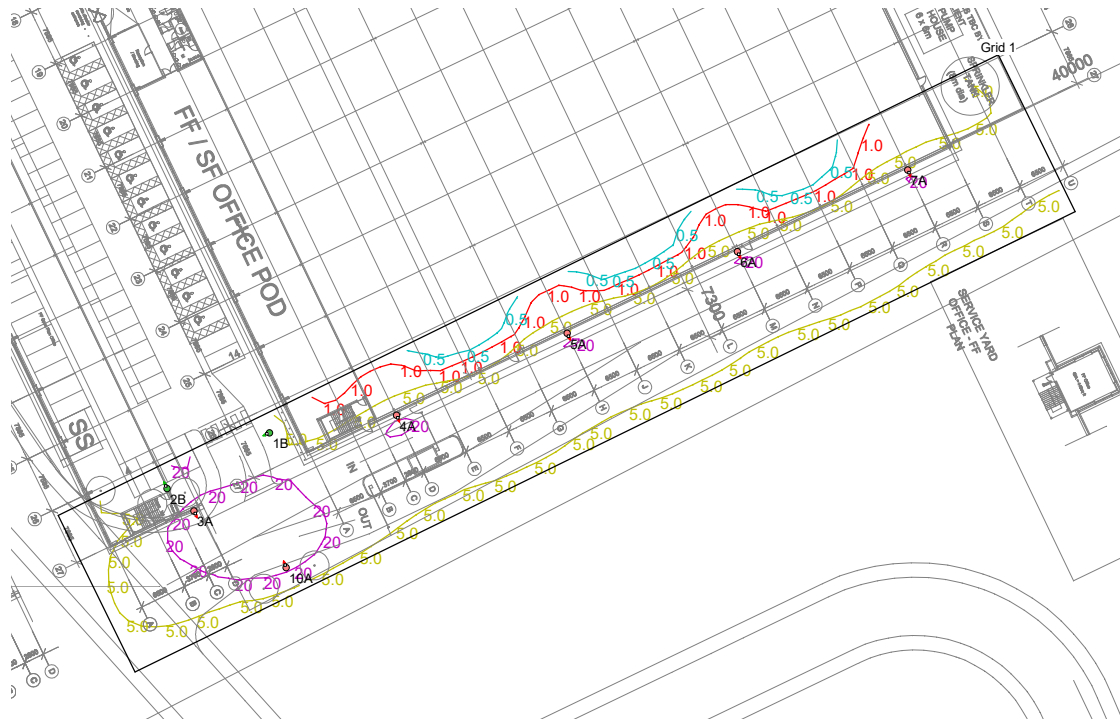
Results

Eav	15.00
Emin	5.93
E _{max}	32.33
E _{min} /E _{max}	0.18
E _{min} /E _{av}	0.40



Horizontal Illuminance (lux)

Grid 1



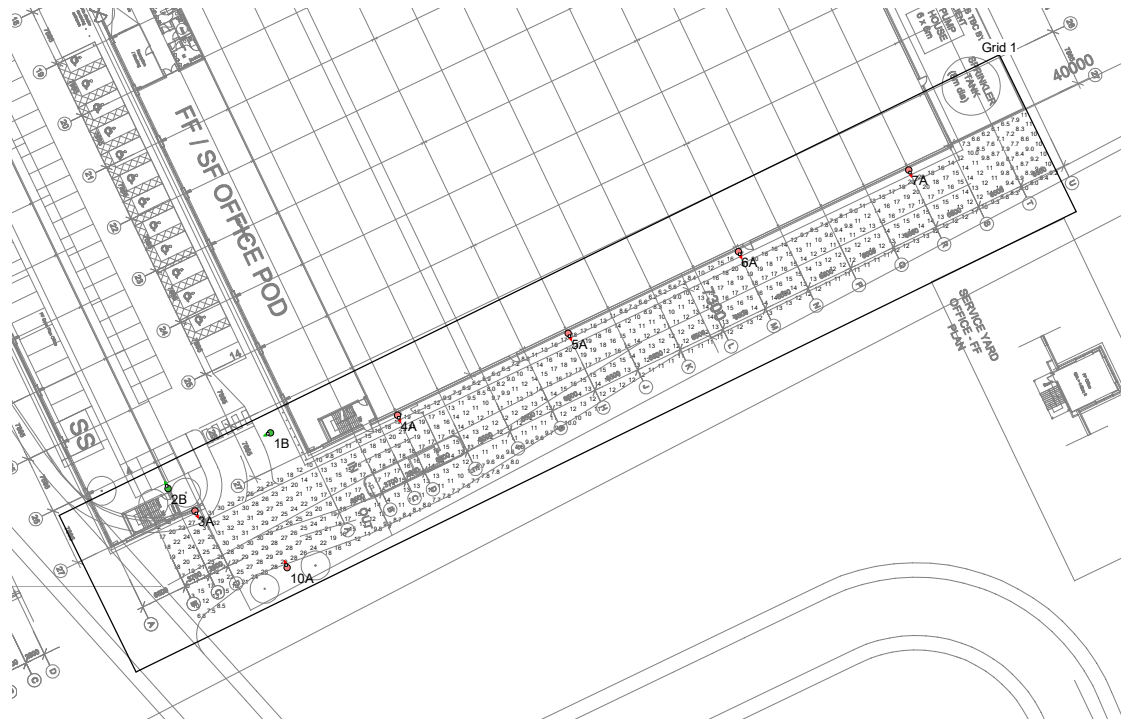
Results

Eav	15.00
Emin	5.93
E _{max}	32.33
E _{min} /E _{max}	0.18
E _{min} /E _{av}	0.40



Horizontal Illuminance (lux)

Grid 1



Results

Eav	15.00
Emin	5.93
Emax	32.33
Emin/Emax	0.18
Emin/Eav	0.40



Horizontal Illuminance (lux)

Grid 2



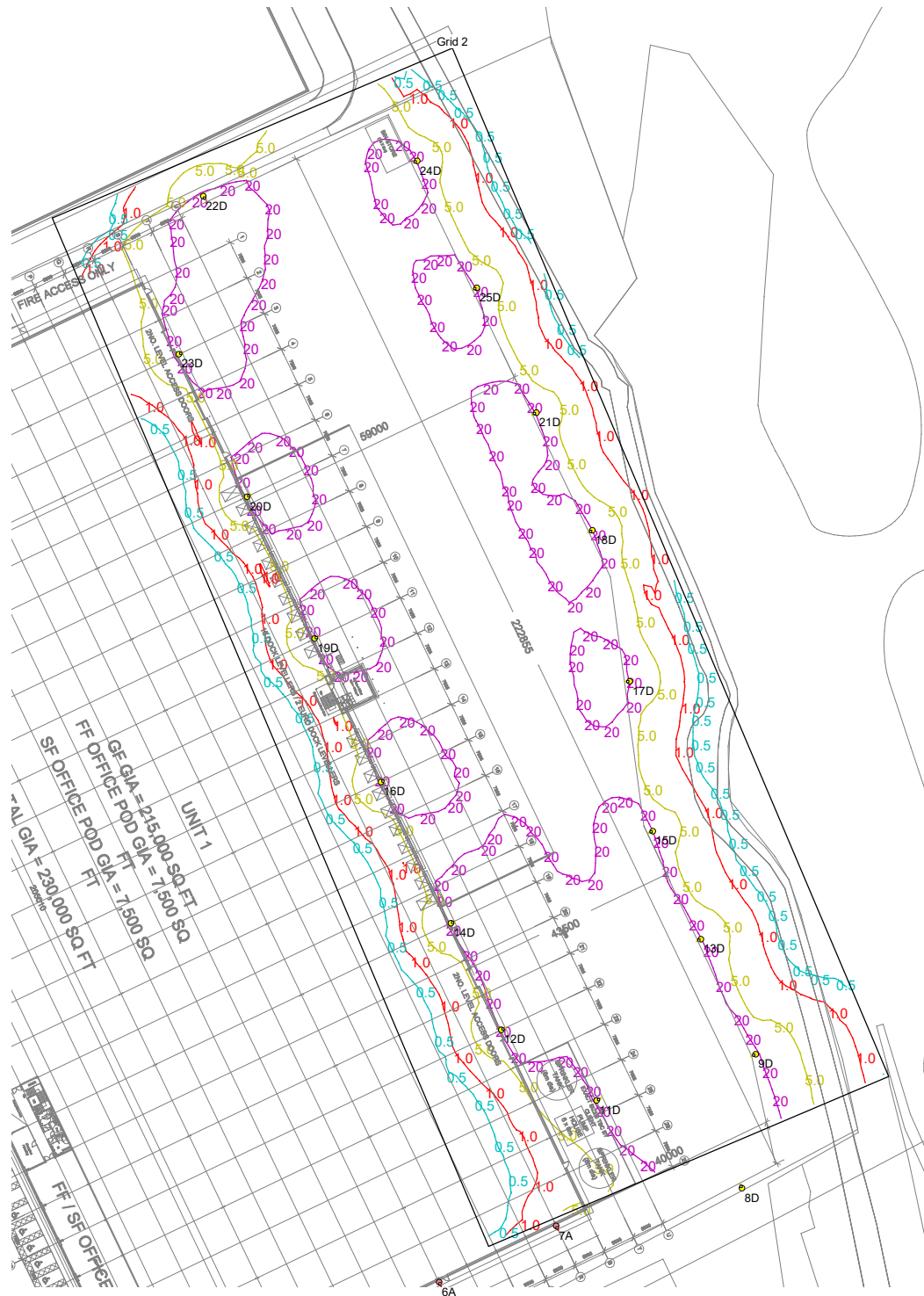
Results

Eav	20.44
Emin	5.30
Emax	42.78
Emin/Emax	0.12
Emin/Eav	0.26



Horizontal Illuminance (lux)

Grid 2



Results

Eav	20.44
Emin	5.30
Emax	42.78
Emin/Emax	0.12
Emin/Eav	0.26



Horizontal Illuminance (lux)

Grid 2



Results

Eav	20.44
Emin	5.30
Emax	42.78
Emin/Emax	0.12
Emin/Eav	0.26



Horizontal Illuminance (lux)

CONTOUR EXTRACT ONLY

