

DATE: 10 August 2026
DESIGNER: DFL-UK (AJB)
PROJECT No: Proving Calculations
PROJECT NAME: Land South Of Sacheverell Way



>Indicative light spill diagram.
>Proving Calculation for evidence base only
>Not for construction
>Lighting subject to a detailed design
> Lighting to P5 class BS 5489-2
> light levels from BS EN 13201-2, P5 class defined as, 3-4.5 lux average, 0.6 lux minimum
> Design maintenance factor used 0.85

3544-DFL-HLG-XX-CA-EO-13001

PREPARED BY: DFL-UK
+44 (0)1962 855080
17/18 City Business Centre,
Winchester Hants,
SO23 7TA.
e-mail: info@dfi-uk.com
website: www.dfi-uk.com

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 - P5	452390.19	306196.77	352.06	297.07	1.50	1.49
2	Grid 2	452221.85	306301.18	168.34	179.86	1.49	1.50
3	Grid 3	452742.32	306273.97	109.16	219.87	1.50	1.50
4	Grid 4	452239.89	306481.60	48.22	40.98	24.11	20.49

Luminaire

Luminaire A Data

Supplier	Ligman
Type	JE-30454-N-9027
Lamp(s)	1 LED 2700K
Lamp Flux (klm)	0.34
File Name	JE-30454-N-9030.ies
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	11.9, 3.9, 0.6
No. in Project	1

Luminaire C Data

Supplier	Urbis Schreder
Type	AMPERA EVO 1 5393 Flat glass Back Light 20 LEDs@200mA WW 727
Lamp(s)	20 LEDs@200mA WW 727 230V 03-55-867
LampFlux(klm)/Colour	1.68 WW 3000K/70
File Name	AMPERA EVO 1 5393 20 LEDs 200mA WW 730 13W 504872 Flat glass BL 230V TF .ldt
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	483.3, 59.7, 0.0
No. in Project	44



Layout

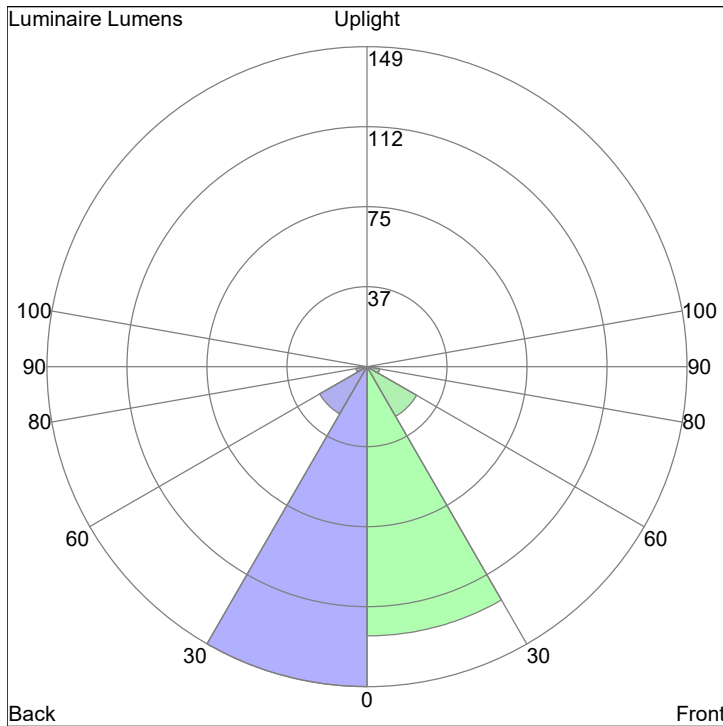
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
200	C	452734.13	306463.28	6.00	198.00	0.00	0.00	0.40			
201	C	452696.26	306397.91	6.00	325.00	0.00	0.00	0.40			
202	C	452680.80	306376.20	6.00	128.00	0.00	0.00	0.40			
203	C	452649.18	306351.40	6.00	143.00	0.00	0.00	0.40			
204	C	452633.41	306325.90	6.00	154.00	0.00	0.00	0.40			
205	C	452617.29	306275.08	6.00	158.00	0.00	0.00	0.40			
206	C	452601.37	306252.76	6.00	345.00	0.00	0.00	0.40			
207	C	452595.66	306208.22	6.00	82.00	0.00	0.00	0.40			
208	C	452639.03	306278.85	6.00	85.00	0.00	0.00	0.40			
209	C	452700.03	306296.38	6.00	279.00	0.00	0.00	0.40			
210	C	452733.63	306299.74	6.00	149.00	0.00	0.00	0.40			
211	C	452726.26	306331.71	6.00	201.00	0.00	0.00	0.40			
212	C	452718.66	306377.43	6.00	146.00	0.00	0.00	0.40			
213	C	452630.73	306387.49	6.00	49.00	0.00	0.00	0.40			
214	C	452615.22	306409.07	6.00	22.00	0.00	0.00	0.40			
215	C	452650.26	306437.48	6.00	293.00	0.00	0.00	0.40			
216	DFL-UK	452610.71	306343.39	6.00	242.00	0.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
217	C	452582.30	306352.20	6.00	59.00	0.00	0.00	0.40			
218	C	452543.95	306374.72	6.00	315.00	0.00	0.00	0.40			
219	C	452550.90	306305.64	6.00	46.00	0.00	0.00	0.40			
220	C	452538.76	306328.30	6.00	228.00	0.00	0.00	0.40			
221	C	452468.44	306357.39	6.00	73.00	0.00	0.00	0.40			
222	C	452458.92	306379.34	6.00	175.00	0.00	0.00	0.40			
223	C	452446.66	306348.10	6.00	322.00	0.00	0.00	0.40			
224	C	452424.40	306336.90	6.00	60.00	0.00	0.00	0.40			
225	C	452392.70	306378.97	6.00	355.00	0.00	0.00	0.40			
226	C	452397.83	306407.93	6.00	272.00	0.00	0.00	0.40			
227	C	452448.78	306402.09	6.00	357.00	0.00	0.00	0.40			
228	C	452536.59	306352.67	6.00	135.00	0.00	0.00	0.40			
229	C	452499.28	306357.55	6.00	243.00	0.00	0.00	0.40			
230	C	452513.90	306337.22	6.00	50.00	0.00	0.00	0.40			
231	C	452575.03	306294.09	6.00	218.00	0.00	0.00	0.40			
232	C	452401.31	306350.89	6.00	53.00	0.00	0.00	0.40			
233	C	452589.51	306274.93	6.00	64.00	0.00	0.00	0.40			
234	C	452595.20	306233.15	6.00	345.00	0.00	0.00	0.40			
235	C	452672.51	306291.78	6.00	274.00	0.00	0.00	0.40			
236	C	452715.66	306360.88	6.00	208.00	0.00	0.00	0.40			
237	C	452715.56	306393.23	6.00	219.00	0.00	0.00	0.40			
238	C	452735.40	306434.64	6.00	140.00	0.00	0.00	0.40			
239	C	452627.14	306306.18	6.00	159.00	0.00	0.00	0.40			
240	C	452566.79	306373.08	6.00	235.00	0.00	0.00	0.40			
241	C	452660.16	306376.97	6.00	220.00	0.00	0.00	0.40			
242	C	452631.97	306429.56	6.00	293.00	0.00	0.00	0.40			
243	C	452721.96	306416.62	6.00	145.00	0.00	0.00	0.40			
77	A	452608.39	306332.24	2.00	51.00	0.00	0.00	0.20			

Luminaire Classification System (LCS) Graphs

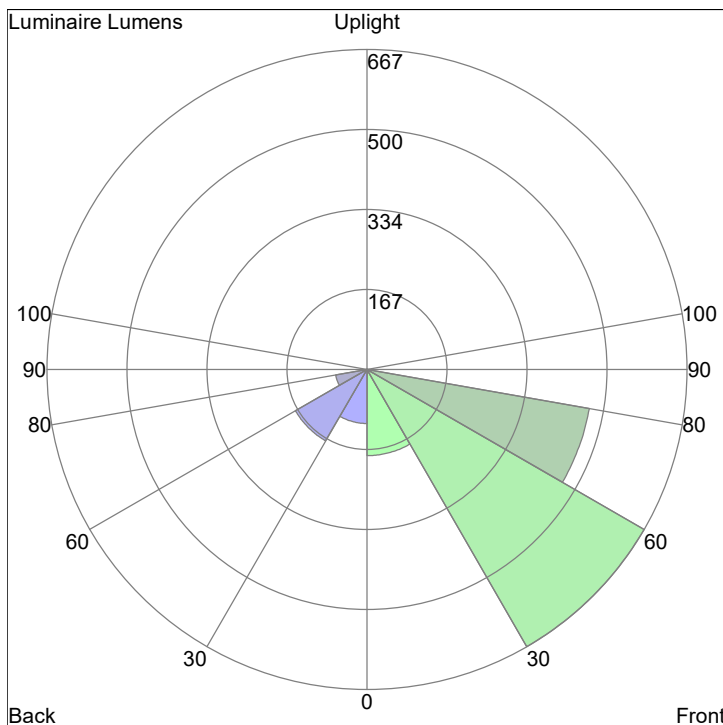
Luminaire A JE-30454-N-9027



LCS	Lumens	%Lamp	%Lum
FL	125.9	37.3	37.3
FM	26.8	8.0	8.0
FH	6.0	1.8	1.8
FVH	0.3	0.1	0.1
BL	149.5	44.3	44.3
BM	25.5	7.6	7.6
BH	5.1	1.5	1.5
BVH	0.3	0.1	0.1
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	337.1	100.0	100.0

BUG rating=B1-U0-G0

Luminaire C AMPERA EVO 1 5393 Flat glass Back Light 20 LEDs@200mA WW 727



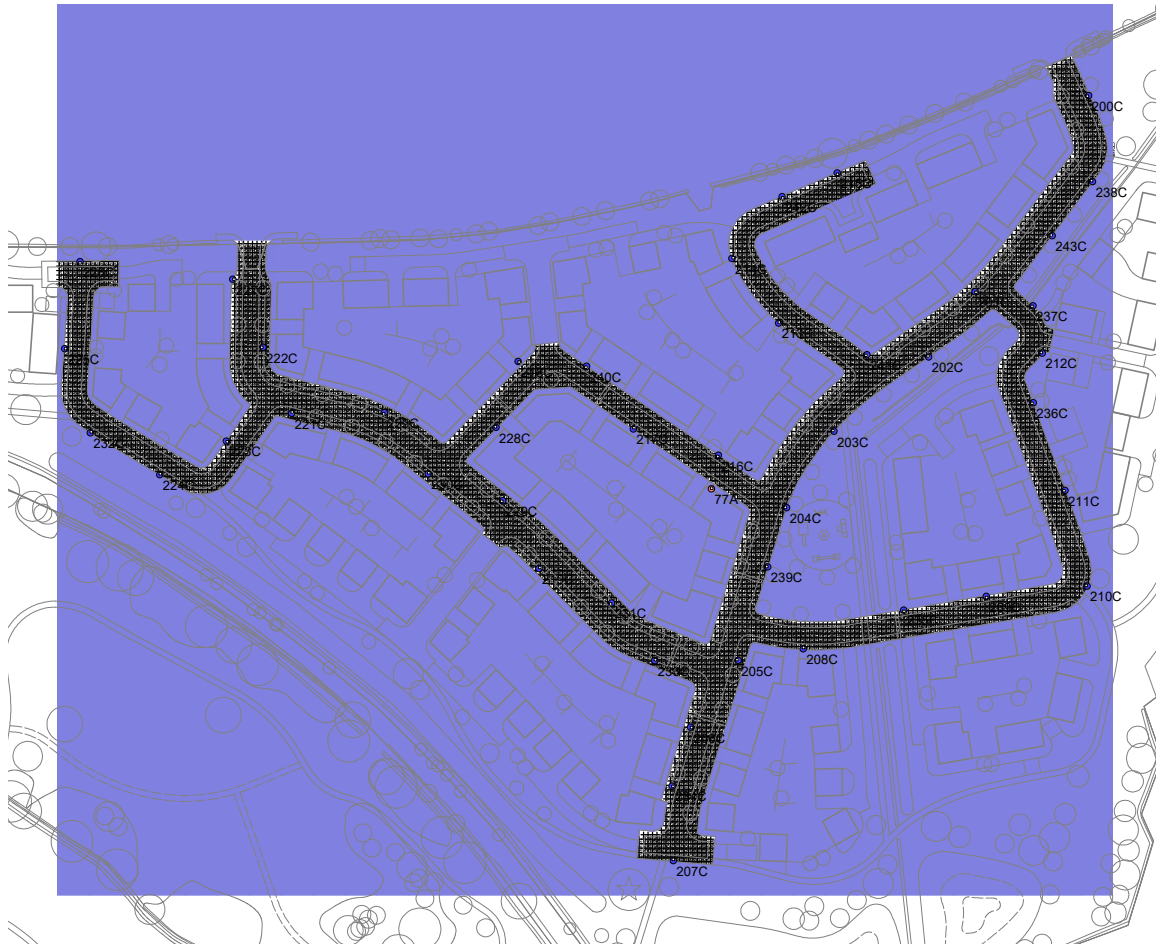
LCS	Lumens	%Lamp	%Lum
FL	179.9	10.7	10.7
FM	667.0	39.8	39.8
FH	470.8	28.1	28.1
FVH	5.8	0.3	0.3
BL	112.9	6.7	6.7
BM	172.1	10.3	10.3
BH	66.1	3.9	3.9
BVH	2.3	0.1	0.1
UL	0.0	0.0	0.0
UH	0.0	0.0	0.0
Total	1677.0	100.0	100.0

BUG rating=B1-U0-G0

Horizontal Illuminance (lux)

Grid 1 - P5

Grid 1 - P5



Results

Eav	3.54
Emin	0.61
E _{max}	10.39
E _{min} /E _{max}	0.06
E _{min} /E _{av}	0.17