AB DELTALUX

PLAN EXAMINER
BUILDING CONTROL
03 JUL 2013

Wythenshawe L.T.C

Installation : 3 Court Spillage

Project number : 130108.1
Customer : Floodlighting
Processed by : Åke Forslin
Date : 11.01.2013

Project description:
3 court tennis 48.26 x 36,48m
Columns 10m
Floodlight BS 2000B 2kW MH lamp

The following values are based on exact calculations on calibrated lamps, luminaires and their arrangement. In practice, gradual divergences can occur.

Guarantee claims for luminaire data are excluded.

Relux and the luminaire manufacturers accept no liability for consequential damage and damage which is occasioned to the user or to third parties.

1 Luminaire data

1.1 AB Deltalux, BS2000B (BS2000B)

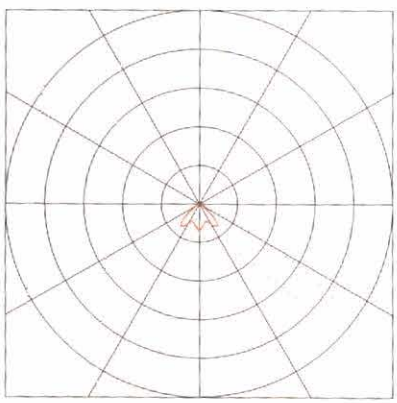
1.1.1 Data sheet

Manufacturer: AB Deltalux

BS2000B **BS2000B**

Luminaire data		
Luminaire efficiency	:	77.8%
Luminaire efficacy	:	75.17 lm/W
Classification	:	A50 ↓100.0% ↑0.0%
CIE Flux Codes	:	48 95 100 100 78
Control gear	:	
System power	:	2070 W
Length	:	620 mm
Width	:	700 mm
Height	:	400 mm

Equipped with		
Quantity	:	1
Designation	:	Metallhalogen 2000 W
Colour	:	
Luminous flux	:	200000 lm



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2 Exteriör 1

2.1 Description, Exteriör 1

2.1.1 Luminaire data/Room elements

Luminaire data:

Type No.\Make

		AB Deltalux
1	12	Order No. : BS2000B
		Luminaire name : BS2000B
		Equipment : 1 x Metallhalogen 2000 W / 200000 lm

	Centre point			Rotation angle			Target coordinates		
No.	X [m]	Y [m]	Z [m]	Z [°]	C0 [°]	C90 [°]	Xa [m]	Ya [m]	Za [m]
AB Deltalux BS2000B BS2000B									
1	0.01	0.04	10.01	349.90	13.00	0.00	3.45	19.38	0.00
2	16.04	0.04	10.01	12.79	12.97	0.00	11.70	19.17	0.00
3	16.06	0.04	10.00	345.57	12.71	0.00	20.89	18.82	0.00
4	32.09	0.04	10.01	11.64	13.11	0.00	28.11	19.37	0.00
5	32.11	0.04	10.01	345.32	13.00	0.00	37.09	19.04	0.00
6	48.14	0.04	10.01	9.44	12.94	0.00	44.93	19.36	0.00
7	48.14	36.16	10.01	170.65	12.92	0.00	44.97	16.85	0.00
8	32.11	36.16	10.01	194.45	13.00	0.00	37.01	17.14	0.00
9	32.09	36.16	10.01	168.22	13.11	0.00	28.06	16.84	0.00
10	16.06	36.16	10.01	194.71	12.91	0.00	21.03	17.24	0.00
11	16.04	36.16	10.01	167.34	13.11	0.00	11.72	16.91	0.00
12	0.01	36.16	10.01	189.72	13.00	0.00	3.32	16.80	0.00

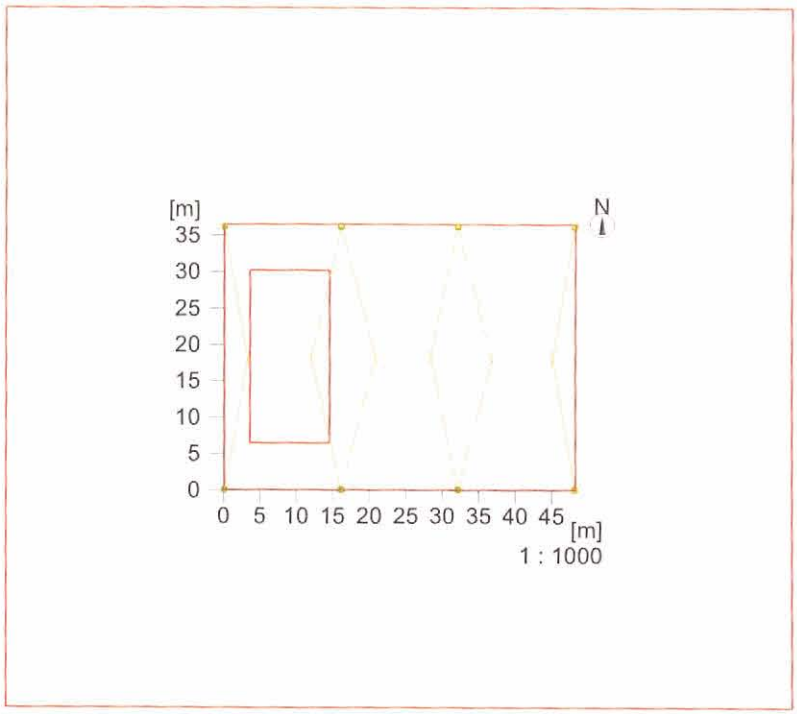
Structural elements

Virtual measuring surface

							Rotation angle	
No.	xm[m]	ym[m]	zm[m]	Length	Width	z axis	L axis	Q axis
Ref. plane 1								
	24.13	18.24	0.00	48.26	36.48	0.00	0.00	0.00
Spillage								
m 1	-30.00	-30.00	0.00	108.00	96.20	0.00	0.00	0.00
PPA								
m 2	3.50	6.45	0.00	10.97	23.71	0.00	0.00	0.00

2.1 Description, Exteriör 1

2.1.2 Floor plan

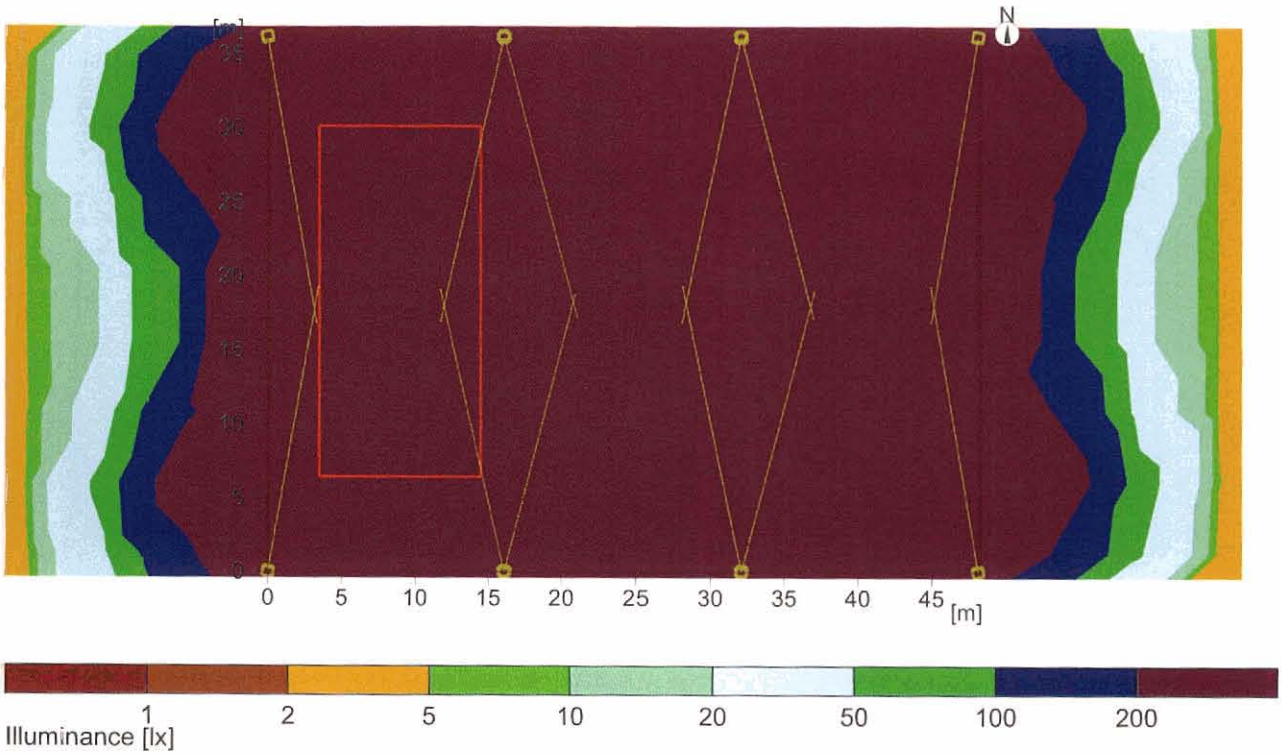


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2 Exteriör 1

2.2 Summary, Exteriör 1

2.2.1 Result overview, Spillage



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
photometric centre height. [m]:	10.01 m
Maintenance factor	0.80
Total luminous flux of all lamps	2400000 lm
Total power	24840 W
Total power per area (1760.52 m²)	14.11 W/m²

Illuminance

Average illuminance	Eav	142 lx
Minimum illuminance	Emin	0 lx
Maximum illuminance	Emax	898 lx
Uniformity g1	Emin/Em	1:760 (0)
Uniformity g2	Emin/Emax	1:4800 (0)

Type No.\Make

		AB Deltalux	
1	12	Order No.	: BS2000B
		Luminaire name	: BS2000B
		Equipment	: 1 x Metallhalogen 2000 W / 200000 lm

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2 Exteriör 1

2.3 Calculation results, Exteriör 1

2.3.1 Table, PPA (E)

[m]	1	2	3	4	5	6	7	8	9	10
22	412	426	446	483	524	562	601	624	647	675	686	680	655	639	635	638	655	660	673	703
20	(391)	409	434	468	492	518	542	561	570	581	591	603	607	591	586	589	595	614	619	628
18	459	463	480	498	515	529	543	552	560	565	575	575	581	598	606	615	633	638	630	633
16	594	595	608	621	630	639	632	649	637	650	655	660	667	673	695	692	699	706	713	719
14	740	751	733	737	732	736	740	746	752	757	785	770	805	805	803	811	816	822	821	781
12	743	765	772	762	743	746	751	756	763	770	777	792	819	807	817	827	835	839	[843]	799
10	623	624	636	646	655	647	667	675	680	681	681	686	693	701	725	721	716	722	729	739
8	470	484	500	518	536	551	545	553	566	582	586	591	594	603	623	643	649	652	645	649
6	395	413	437	467	490	510	536	558	564	578	583	588	592	590	585	588	596	617	624	625
4	408	416	443	486	522	556	592	616	634	659	678	668	657	635	624	630	650	656	667	679
2																				

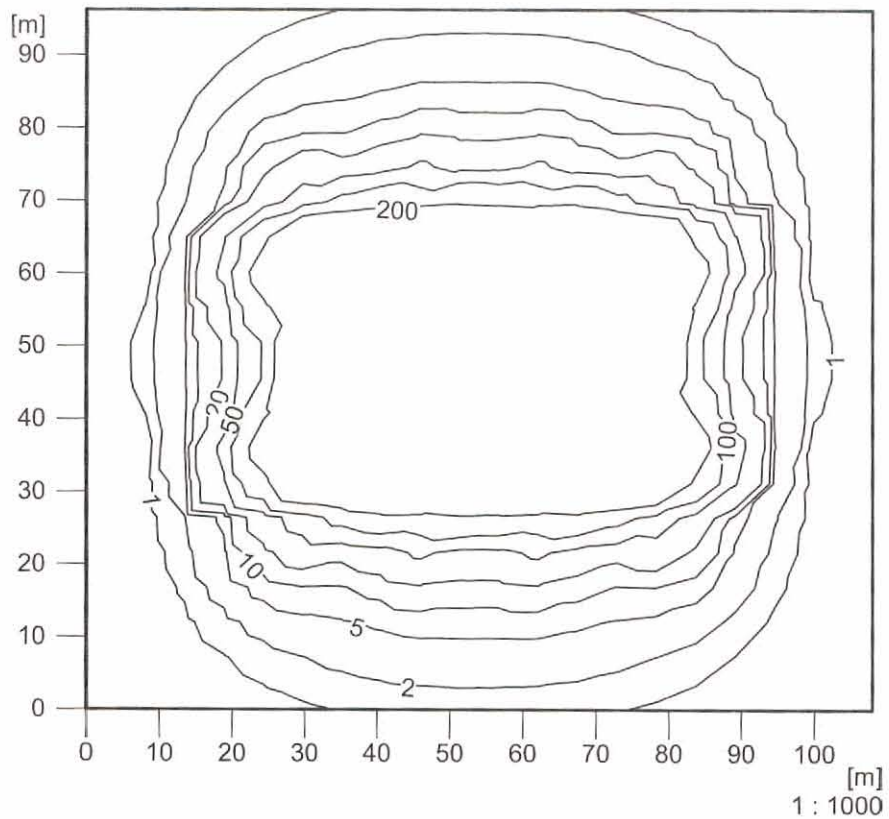
[m]

Illuminance [lx]

Height of the reference plane		: 0.00 m
Average illuminance	Eav	: 633 lx
Minimum illuminance	Emin	: 391 lx
Maximum illuminance	Emax	: 843 lx
Uniformity g1	Emin/Eav	: 1 : 1.62 (0.62)
Uniformity g2	Emin/Emax	: 1 : 2.16 (0.46)

2.3 Calculation results, Exteriör 1

2.3.2 Isolines representation, Spillage (E)



Illuminance [lx]

Height of the reference plane		: 0.00 m
Average illuminance	Eav	: 142 lx
Minimum illuminance	Emin	: 0 lx
Maximum illuminance	Emax	: 898 lx
Uniformity g1	Emin/Eav	: 1 : 759.54 (0.00)
Uniformity g2	Emin/Emax	: 1 : 4799.72 (0.00)