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## SOTEN

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LumCAT: T1008	
Luminaire: 3-1824-A	
Report No:	Voltage(V): 220.4000
Test No:	Current(A): 0.1650
LampCAT: Lumileds1208 3000K Ra80	Power (W): 35.6400
Lamp flux(lm): 4000.0	PF: 0.9760
Number of Lamps: 1	Ballast type: Tridonic 40W 900mA
Length(mm): 98	Width(mm): 98
Phm Type: C	Height(mm): 68

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## Photometric Results

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Lumens(lm): 3477.68  
Efficiency(%): 86.94%  
Lumens(lm)/Power(W): 97.58  
Central intensity(cd): 7367.412  
Maximum intensity(cd): 7367.412  
Angle of maximum intensity: C=0.0  $\gamma$ =0.0  
Beam Angle(50%Imax): [C0/180]Total=38.0  
                                  [C90/270]Total=38.0  
Field angle(10%Imax): [C0/180]Total=67.1  
                                  [C90/270]Total=67.1  
Maximum s/h(1/2): C0\_180=0.62 C90\_270=0.62  
Maximum s/h(1/4): C0\_180=0.89 C90\_270=0.64  
Up flux rate of lamp(%): 0.00%  
Down flux rate of lamp(%): 86.94%  
Up flux rate of LUM(%): - -  
Down flux rate of LUM(%): 100.00%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 99.309%

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Equipment: GMS 1800  
Temperature(°C): 25.0

Date: 2017/9/13  
Humidity(%): 60.0%

Operator: 01  
Distance(m): 6.81

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2979.79	74.49%	85.68%
0-40	3359.91	84.00%	96.61%
0-60	3453.65	86.34%	99.31%
0-90	3475.50	86.89%	99.94%
0-120	3475.50	86.89%	99.94%
0-180	3477.68	86.94%	100.00%
60-90	34.40	0.86%	0.99%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-27.70	2782.14	69.55%	80.00%

## ZONAL LUMEN SUMMARY

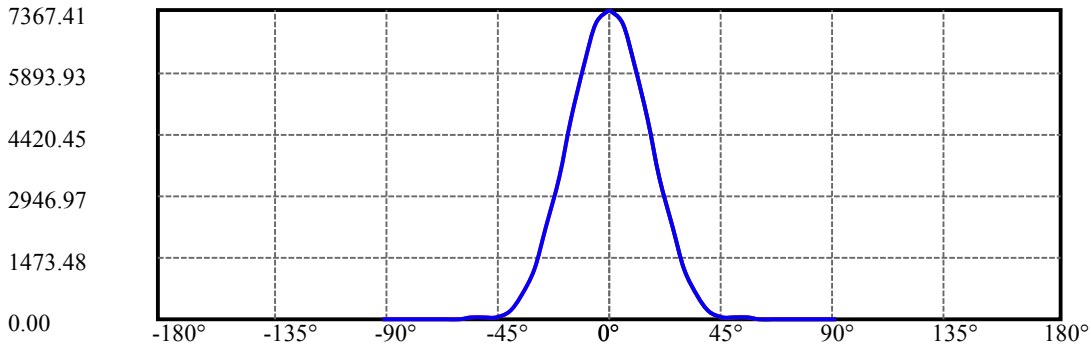
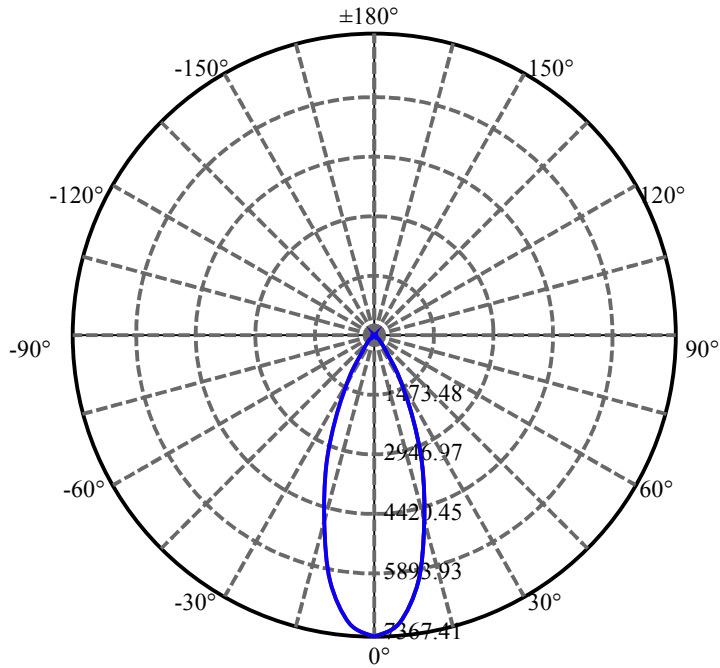
0-10	643.59
10-20	1318.04
20-30	1018.16
30-40	380.12
40-50	64.62
50-60	29.12
60-70	12.09
70-80	7.15
80-90	2.62
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2979.79	74.49%	85.68%
0-40	3359.91	84.00%	96.61%
0-60	3453.65	86.34%	99.31%
0-90	3475.50	86.89%	99.94%
0-120	3475.50	86.89%	99.94%
0-180	3477.68	86.94%	100.00%
60-90	34.40	0.86%	0.99%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-27.70	2782.14	69.55%	80.00%

## ZONAL LUMEN SUMMARY

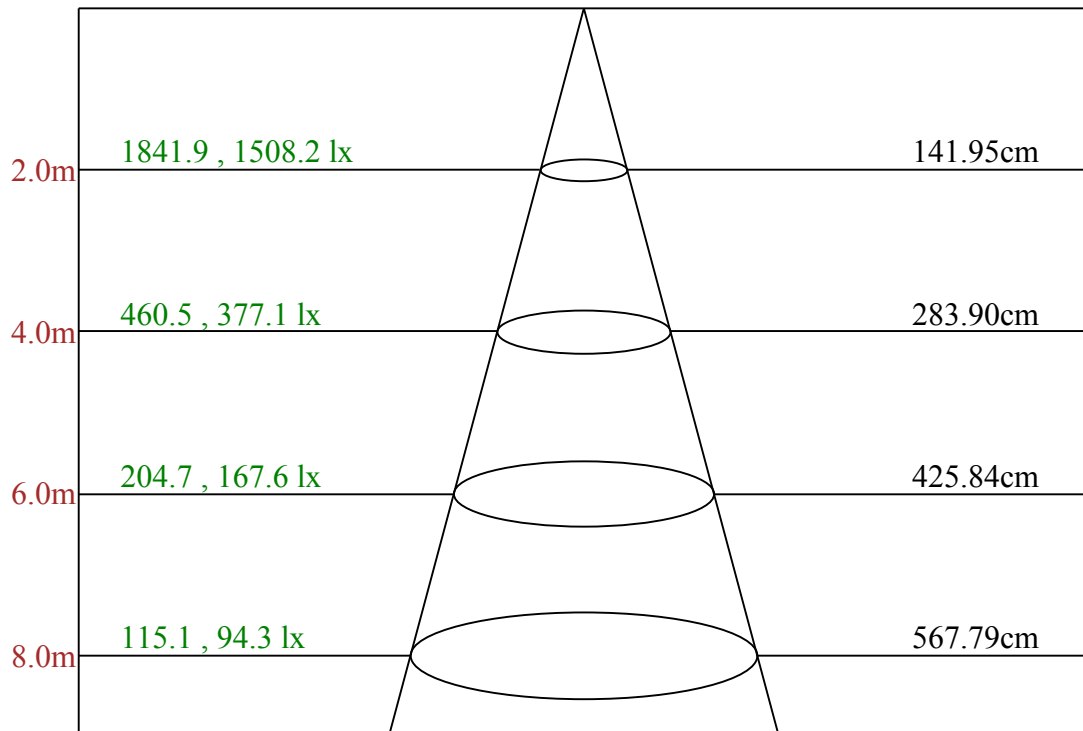
0-10	643.59
10-20	1318.04
20-30	1018.16
30-40	380.12
40-50	64.62
50-60	29.12
60-70	12.09
70-80	7.15
80-90	2.62
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



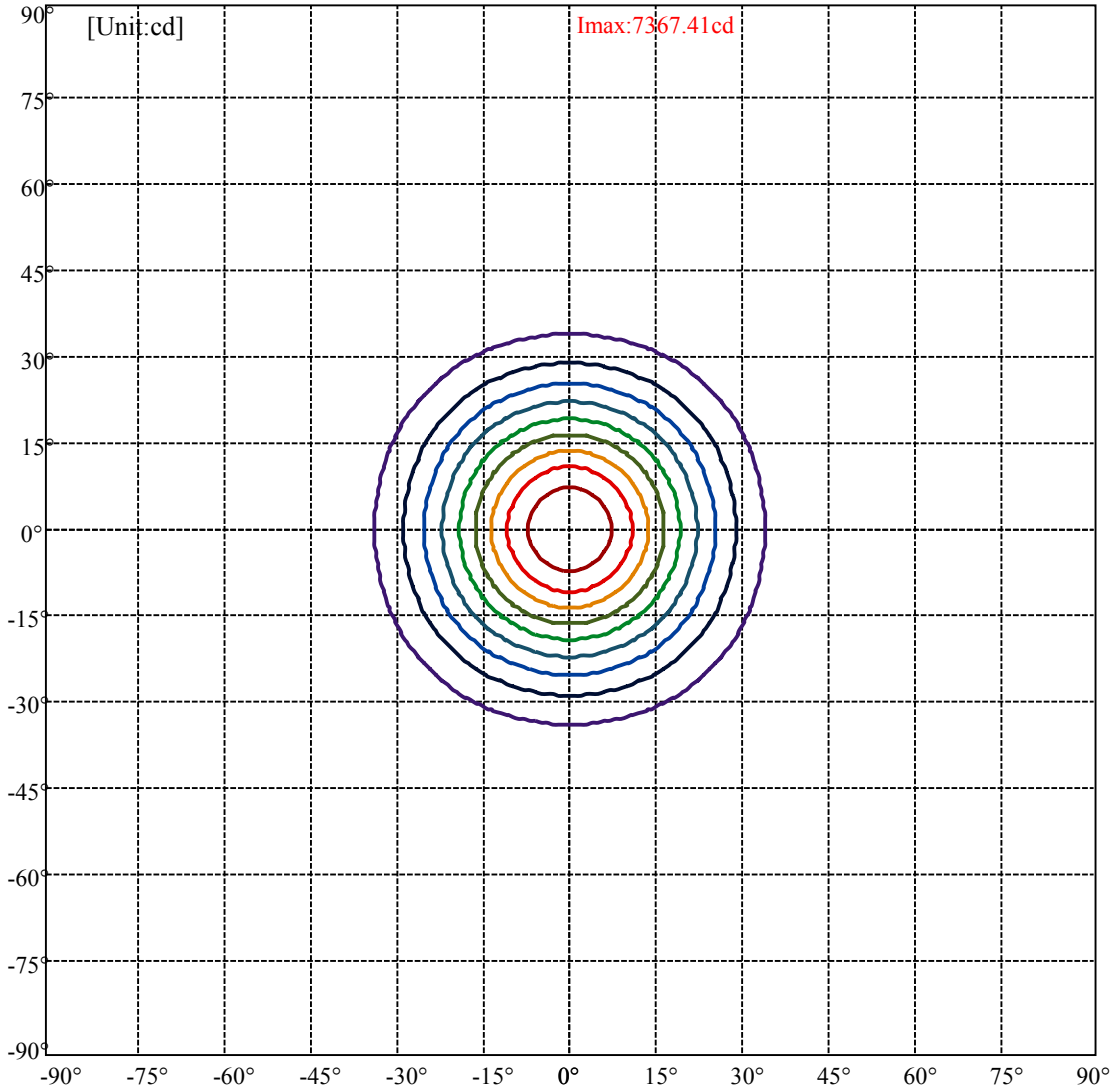
C0(Max): ———  
C0/C180: ———  
C90/C270: ———

Field angle(10%Imax):C0/180Left:33.5 Right:33.5  
:C90/270Left:33.5 Right:33.5

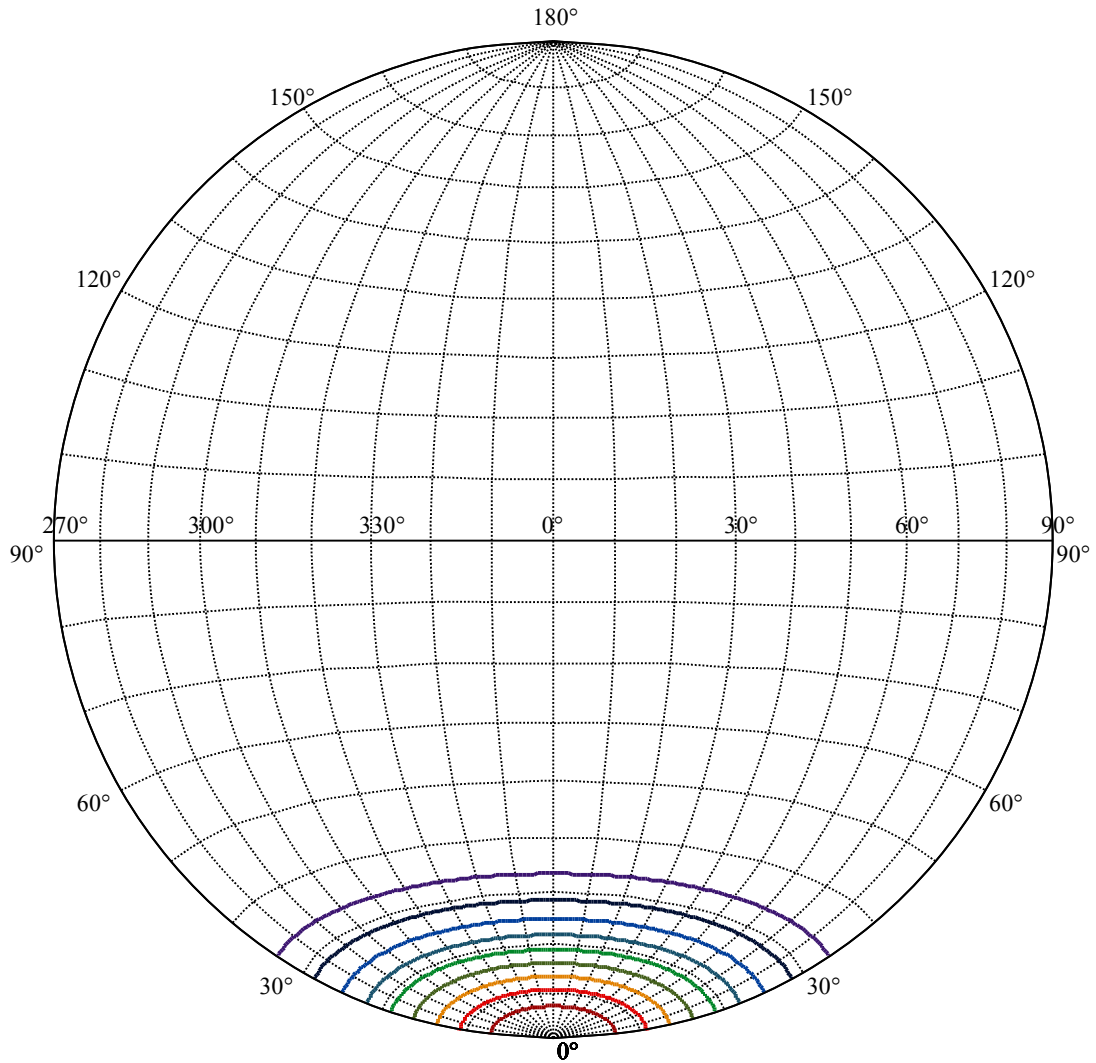
Beam Angle(50%Imax):C0/180Left:19.0 Right:19.0  
:C90/270Left:19.0 Right:19.0



Max , Ave      Beam angle of C0plane39.08



(10%Imax) 736.741	—
(20%Imax) 1473.48	—
(30%Imax) 2210.22	—
(40%Imax) 2946.96	—
(50%Imax) 3683.71	—
(60%Imax) 4420.45	—
(70%Imax) 5157.19	—
(80%Imax) 5893.93	—
(90%Imax) 6630.67	—



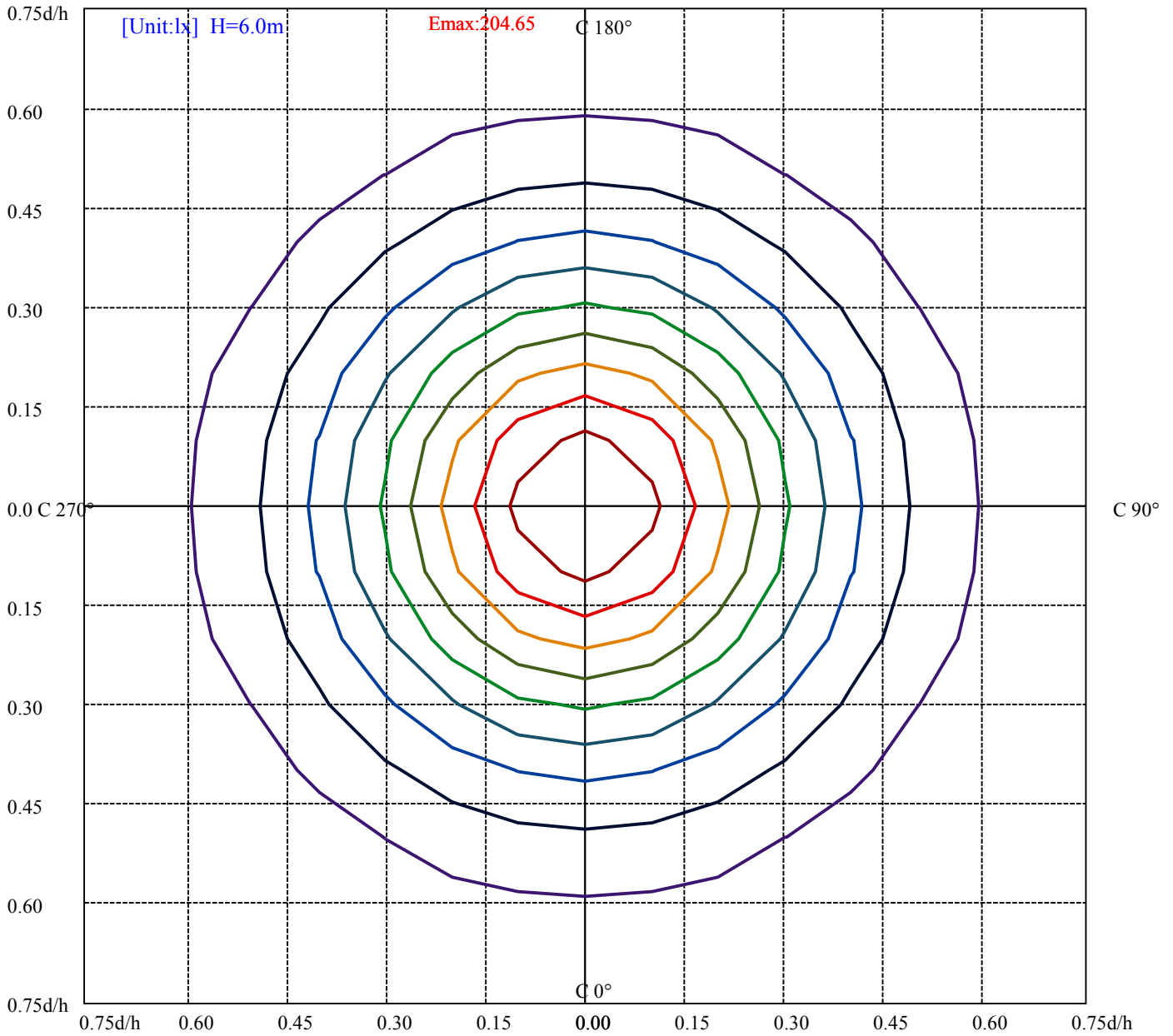
House










[Unit:cd]

Road

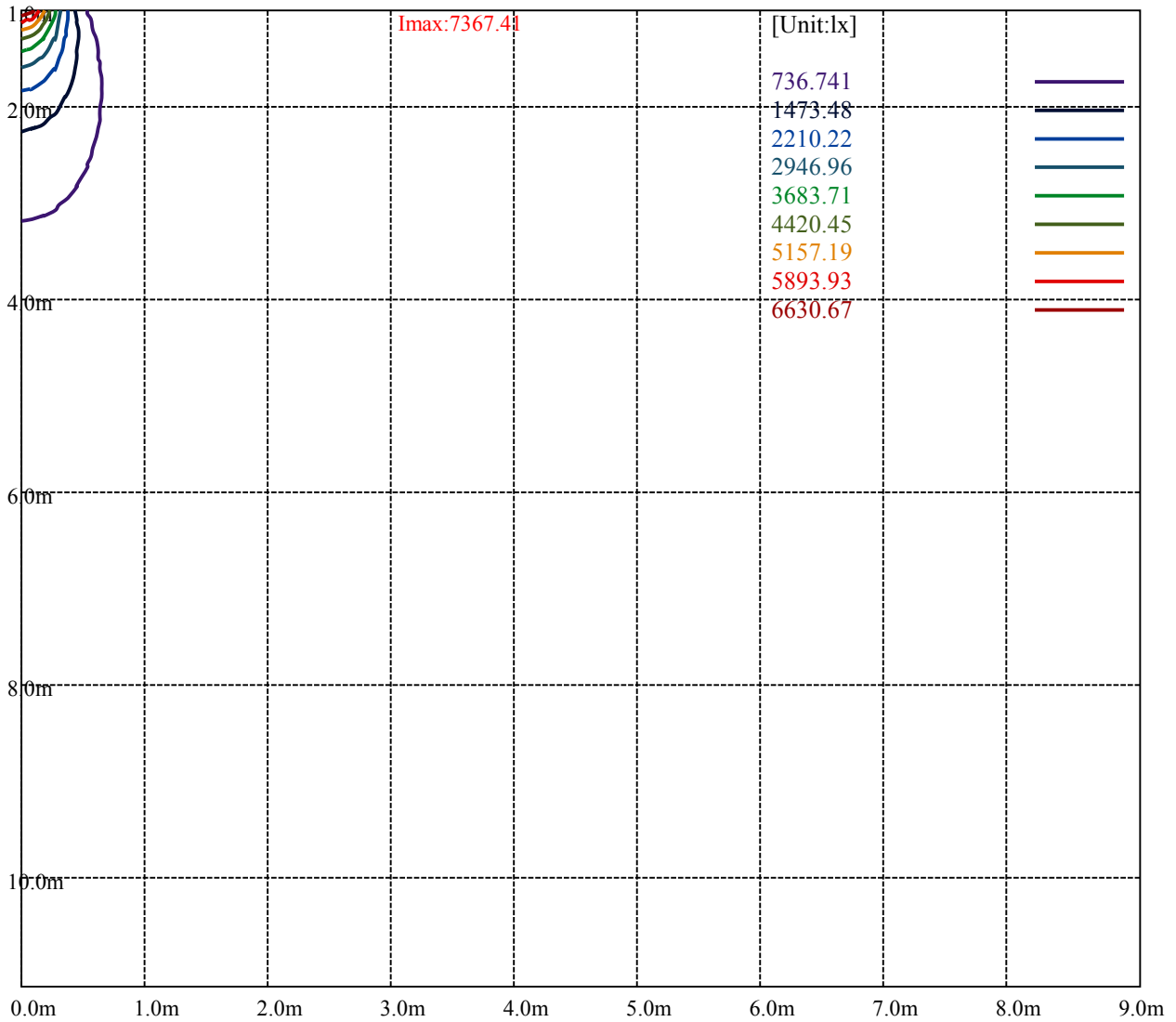
**Imax:7367.41**

(10%Imax) 736.741	—
(20%Imax) 1473.48	—
(30%Imax) 2210.22	—
(40%Imax) 2946.96	—
(50%Imax) 3683.71	—
(60%Imax) 4420.45	—
(70%Imax) 5157.19	—
(80%Imax) 5893.93	—
(90%Imax) 6630.67	—



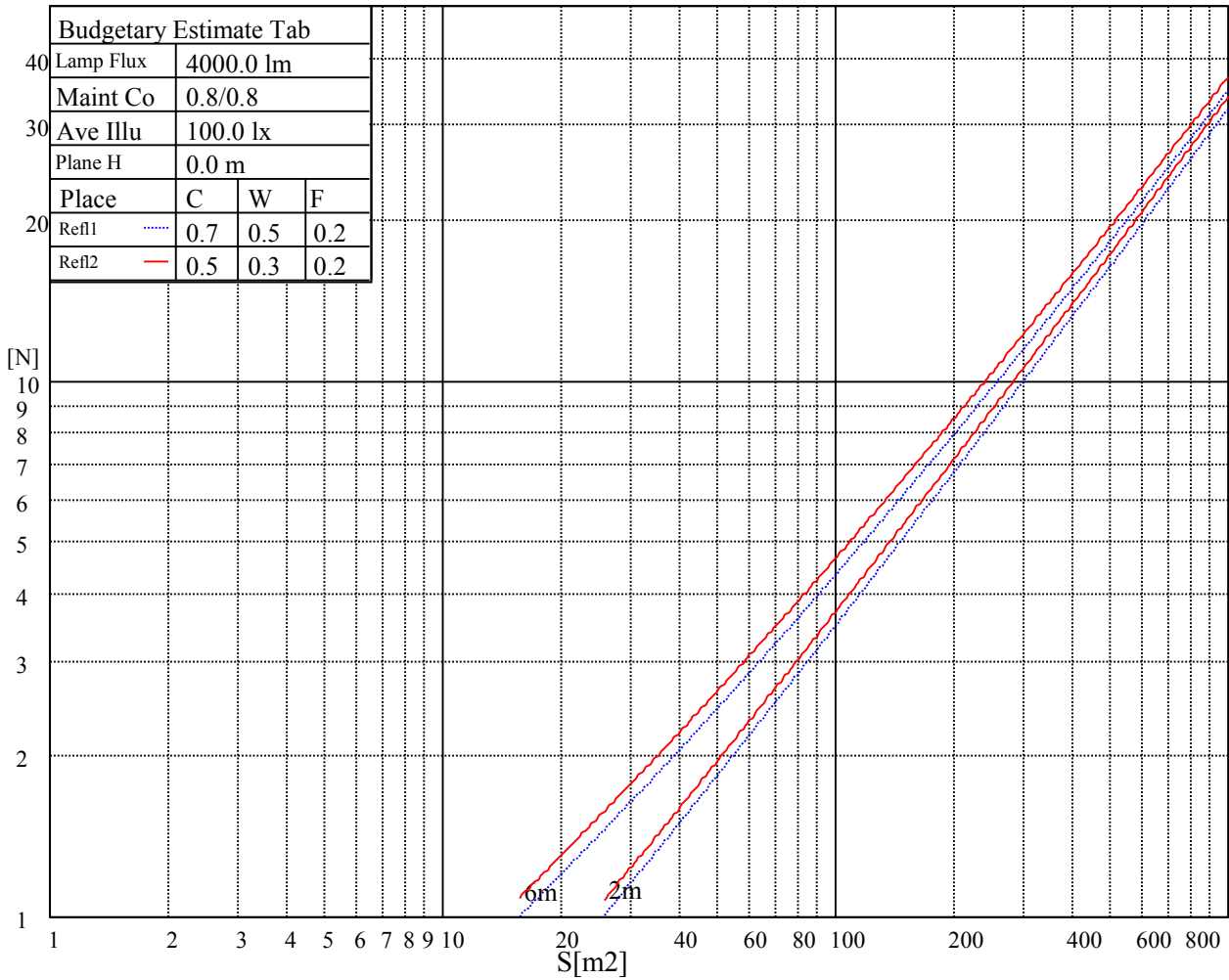
(10%Emax) 20.465	
(20%Emax) 40.93	
(30%Emax) 61.395	
(40%Emax) 81.86	
(50%Emax) 102.325	
(60%Emax) 122.79	
(70%Emax) 143.255	
(80%Emax) 163.72	
(90%Emax) 184.185	





Illuminatin assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	8.3	9.0	8.5	9.2	9.4	8.3	9.0	8.5	9.2	9.4
	3H	8.1	8.8	8.4	9.0	9.3	8.1	8.8	8.4	9.0	9.3
	4H	8.0	8.5	8.3	8.8	9.2	8.0	8.5	8.3	8.8	9.2
	6H	8.0	8.6	8.4	8.9	9.2	8.0	8.6	8.4	8.9	9.2
	8H	8.0	8.6	8.4	8.9	9.2	8.0	8.6	8.4	8.9	9.2
	12H	7.9	8.3	8.3	8.6	9.0	7.9	8.3	8.3	8.6	9.0
4H	2H	8.0	8.5	8.3	8.8	9.1	8.0	8.5	8.3	8.8	9.1
	3H	7.8	8.2	8.2	8.6	9.0	7.8	8.2	8.2	8.6	9.0
	4H	7.9	8.3	8.3	8.7	9.0	7.9	8.3	8.3	8.7	9.0
	6H	7.9	8.3	8.3	8.7	9.1	7.9	8.3	8.3	8.7	9.1
	8H	7.7	8.0	8.2	8.4	8.9	7.7	8.0	8.2	8.4	8.9
	12H	7.7	8.0	8.2	8.5	9.0	7.7	8.0	8.2	8.5	9.0
8H	4H	7.7	7.9	8.1	8.4	8.9	7.7	7.9	8.1	8.4	8.9
	6H	7.7	8.0	8.2	8.4	8.9	7.7	8.0	8.2	8.4	8.9
	8H	7.8	8.0	8.3	8.5	9.0	7.8	8.0	8.3	8.5	9.0
	12H	7.8	8.1	8.3	8.5	9.0	7.8	8.1	8.3	8.5	9.0
12H	4H	7.7	7.9	8.2	8.4	8.9	7.7	7.9	8.2	8.4	8.9
	6H	7.7	8.0	8.2	8.5	9.0	7.7	8.0	8.2	8.5	9.0
	8H	7.8	8.0	8.3	8.5	9.0	7.8	8.0	8.3	8.5	9.0
Variation with the observer position at spacings:											
S = 1.0H	5.6/-7.5					5.6/-7.5					
S = 1.5H	8.3/-8.7					8.3/-8.7					
S = 2.0H	10.2/-9.0					10.2/-9.0					
Standard tables:	BK0					BK0					
Uncorrected UGR	-5.1					-5.1					

Illuminatin assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	8.3	9.0	8.5	9.2	9.4	8.3	9.0	8.5	9.2	9.4
	3H	8.1	8.8	8.4	9.0	9.3	8.1	8.8	8.4	9.0	9.3
	4H	8.0	8.5	8.3	8.8	9.2	8.0	8.5	8.3	8.8	9.2
	6H	8.0	8.6	8.4	8.9	9.2	8.0	8.6	8.4	8.9	9.2
	8H	8.0	8.6	8.4	8.9	9.2	8.0	8.6	8.4	8.9	9.2
	12H	7.9	8.3	8.3	8.6	9.0	7.9	8.3	8.3	8.6	9.0
4H	2H	8.0	8.5	8.3	8.8	9.1	8.0	8.5	8.3	8.8	9.1
	3H	7.8	8.2	8.2	8.6	9.0	7.8	8.2	8.2	8.6	9.0
	4H	7.9	8.3	8.3	8.7	9.0	7.9	8.3	8.3	8.7	9.0
	6H	7.9	8.3	8.3	8.7	9.1	7.9	8.3	8.3	8.7	9.1
	8H	7.7	8.0	8.2	8.4	8.9	7.7	8.0	8.2	8.4	8.9
	12H	7.7	8.0	8.2	8.5	9.0	7.7	8.0	8.2	8.5	9.0
8H	4H	7.7	7.9	8.1	8.4	8.9	7.7	7.9	8.1	8.4	8.9
	6H	7.7	8.0	8.2	8.4	8.9	7.7	8.0	8.2	8.4	8.9
	8H	7.8	8.0	8.3	8.5	9.0	7.8	8.0	8.3	8.5	9.0
	12H	7.8	8.1	8.3	8.5	9.0	7.8	8.1	8.3	8.5	9.0
12H	4H	7.7	7.9	8.2	8.4	8.9	7.7	7.9	8.2	8.4	8.9
	6H	7.7	8.0	8.2	8.5	9.0	7.7	8.0	8.2	8.5	9.0
	8H	7.8	8.0	8.3	8.5	9.0	7.8	8.0	8.3	8.5	9.0
Variation with the observer position at spacings:											
S = 1.0H	5.6/-7.5					5.6/-7.5					
S = 1.5H	8.3/-8.7					8.3/-8.7					
S = 2.0H	10.2/-9.0					10.2/-9.0					
Standard tables:	BK0					BK0					
Uncorrected UGR	-5.1					-5.1					



RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION RHOFC=20 CU															
0	1.04	1.04	1.04	1.01	1.01	1.01	0.97	0.97	0.97	0.92	0.92	0.92	0.89	0.89	0.89	0.87
1	0.97	0.95	0.93	0.95	0.93	0.92	0.92	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.82
2	0.91	0.88	0.86	0.90	0.87	0.85	0.87	0.85	0.83	0.85	0.83	0.81	0.82	0.81	0.79	0.78
3	0.86	0.82	0.79	0.85	0.82	0.79	0.83	0.80	0.77	0.81	0.78	0.76	0.79	0.77	0.75	0.74
4	0.82	0.77	0.74	0.81	0.77	0.74	0.79	0.76	0.73	0.77	0.74	0.72	0.76	0.73	0.71	0.70
5	0.77	0.73	0.70	0.77	0.73	0.69	0.75	0.72	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.67
6	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.63
7	0.70	0.66	0.63	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.61	0.60
8	0.67	0.63	0.60	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.59	0.58
9	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.56	0.62	0.59	0.56	0.62	0.58	0.56	0.55
10	0.61	0.57	0.54	0.61	0.57	0.54	0.60	0.57	0.54	0.60	0.56	0.54	0.59	0.56	0.54	0.53

