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SOTEN

LumCAT: T1160	
Luminaire: GM6314 A38	
Report No:	Voltage(V): 220.3000
Test No:	Current(A): 0.1320
LampCAT: Lumileds1205 3000K Ra80	Power (W): 27.8900
Lamp flux(lm): 3154.0	PF: 0.9580
Number of Lamps: 1	Ballast type: Tridonic 28W 700mA
Length(mm): 74	Width(mm): 74
Phm Type: C	Height(mm): 72

Photometric Results

Lumens(lm): 2398.60
Efficiency(%): 76.05%
Lumens(lm)/Power(W): 86.00
Central intensity(cd): 5460.002
Maximum intensity(cd): 5460.002
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=40.1
 [C90/270]Total=40.1
Field angle(10%Imax): [C0/180]Total=59.2
 [C90/270]Total=59.2
Maximum s/h(1/2): C0_180=0.66 C90_270=0.66
Maximum s/h(1/4): C0_180=0.95 C90_270=0.62
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 76.05%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.573%

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2019/12/25
Humidity(%): 60.0%

Operator: 01
Distance(m): 6.81

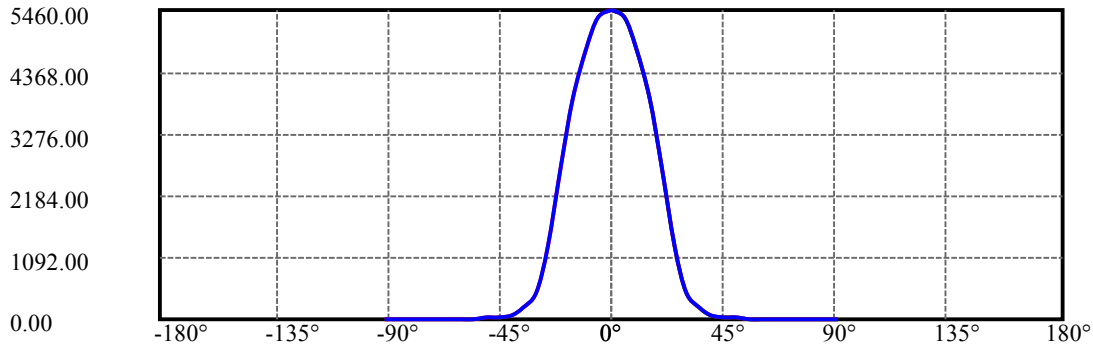
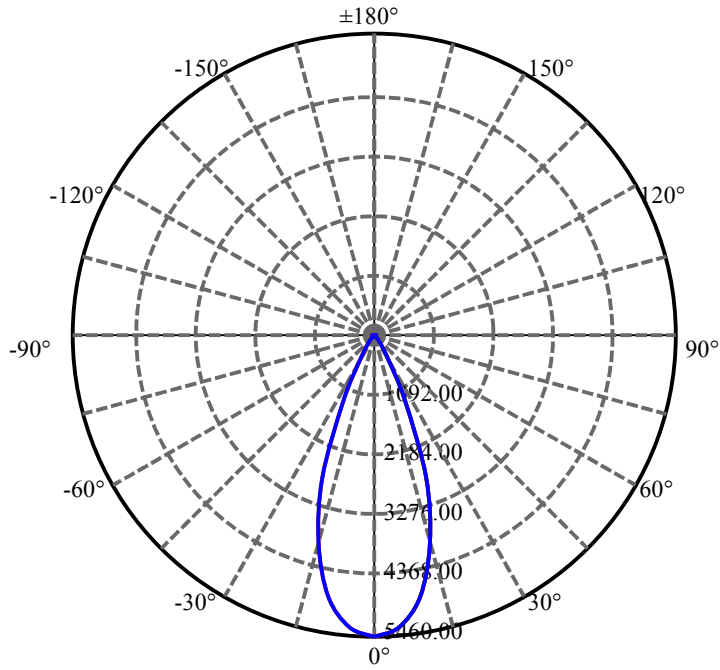
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5460.002	.000	.000	.000%	.000%
5.0	5307.428	128.722	128.722	4.081%	4.081%
10.0	4794.161	361.366	490.087	11.457%	15.539%
15.0	3906.187	516.099	1006.186	16.363%	31.902%
20.0	2741.556	547.867	1554.053	17.371%	49.272%
25.0	1305.419	424.453	1978.506	13.458%	62.730%
30.0	476.284	225.476	2203.982	7.149%	69.879%
35.0	190.254	98.152	2302.134	3.112%	72.991%
40.0	59.396	41.652	2343.786	1.321%	74.312%
45.0	35.916	17.648	2361.434	.560%	74.871%
50.0	23.573	12.021	2373.455	.381%	75.252%
55.0	16.148	8.637	2382.092	.274%	75.526%
60.0	10.905	6.253	2388.345	.198%	75.724%
65.0	6.682	4.275	2392.620	.136%	75.860%
70.0	3.295	2.526	2395.146	.080%	75.940%
75.0	1.485	1.249	2396.396	.040%	75.980%
80.0	1.299	.745	2397.141	.024%	76.003%
85.0	1.346	.719	2397.859	.023%	76.026%
90.0	1.346	.737	2398.596	.023%	76.049%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2203.98	69.88%	91.89%
0-40	2343.79	74.31%	97.71%
0-60	2388.35	75.72%	99.57%
0-90	2397.86	76.03%	99.97%
0-120	2397.86	76.03%	99.97%
0-180	2398.60	76.05%	100.00%
60-90	15.77	0.50%	0.66%
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%
0-24.30	1918.88	60.84%	80.00%

ZONAL LUMEN SUMMARY

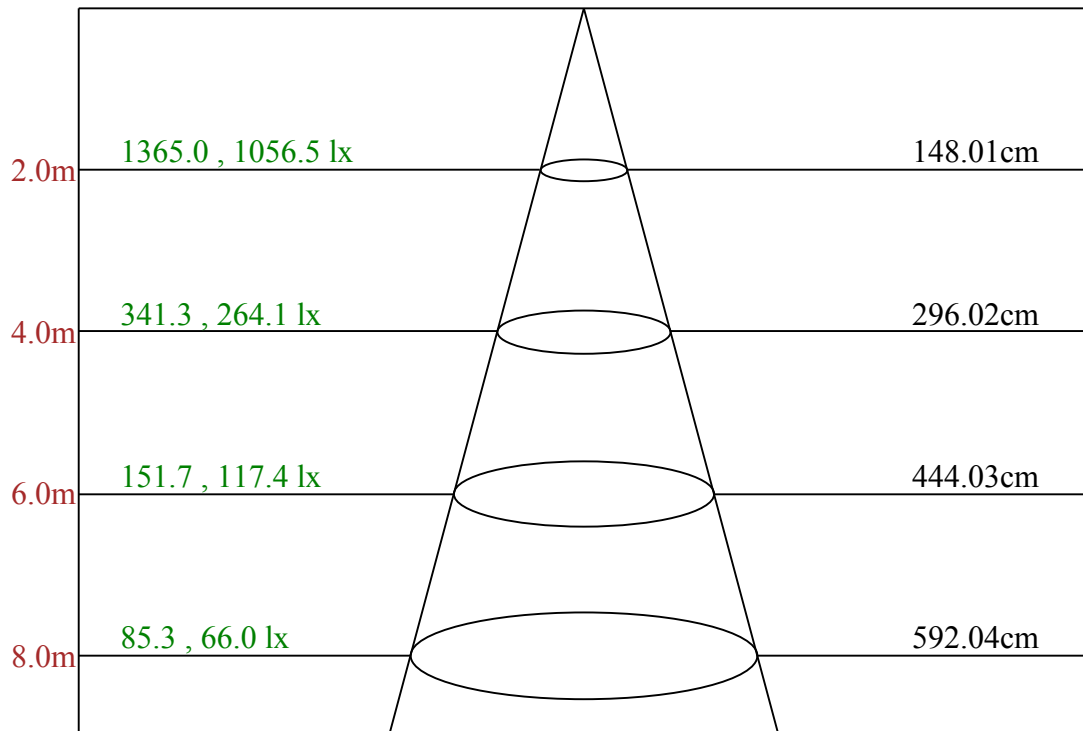
0-10	490.09
10-20	1063.97
20-30	649.93
30-40	139.80
40-50	29.67
50-60	14.89
60-70	6.80
70-80	1.99
80-90	0.72
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



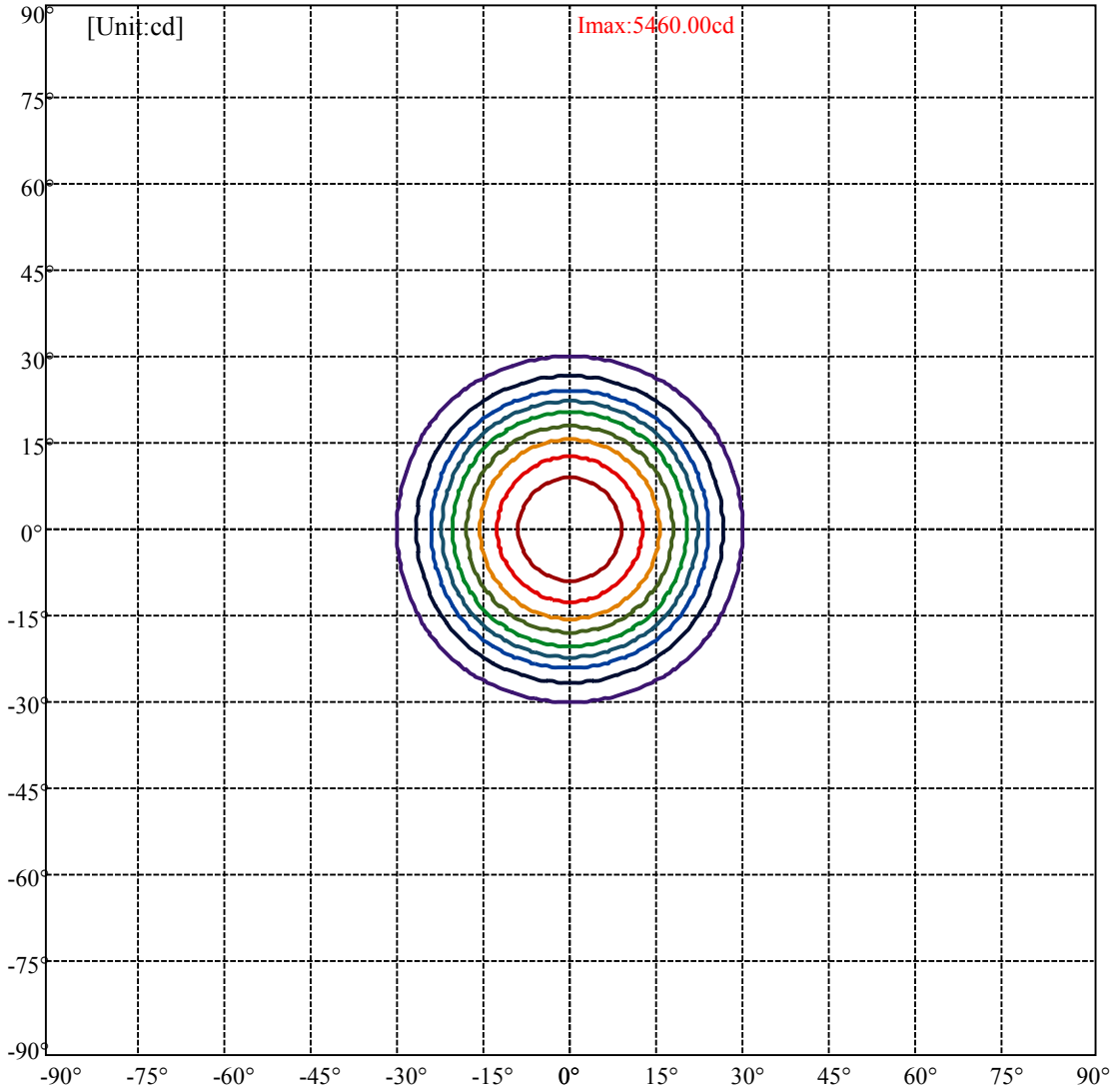
C0(Max): —————
C0/C180: —————
C90/C270: —————

Field angle(10%I_{max}):C0/180Left:29.6 Right:29.6
:C90/270Left:29.6 Right:29.6

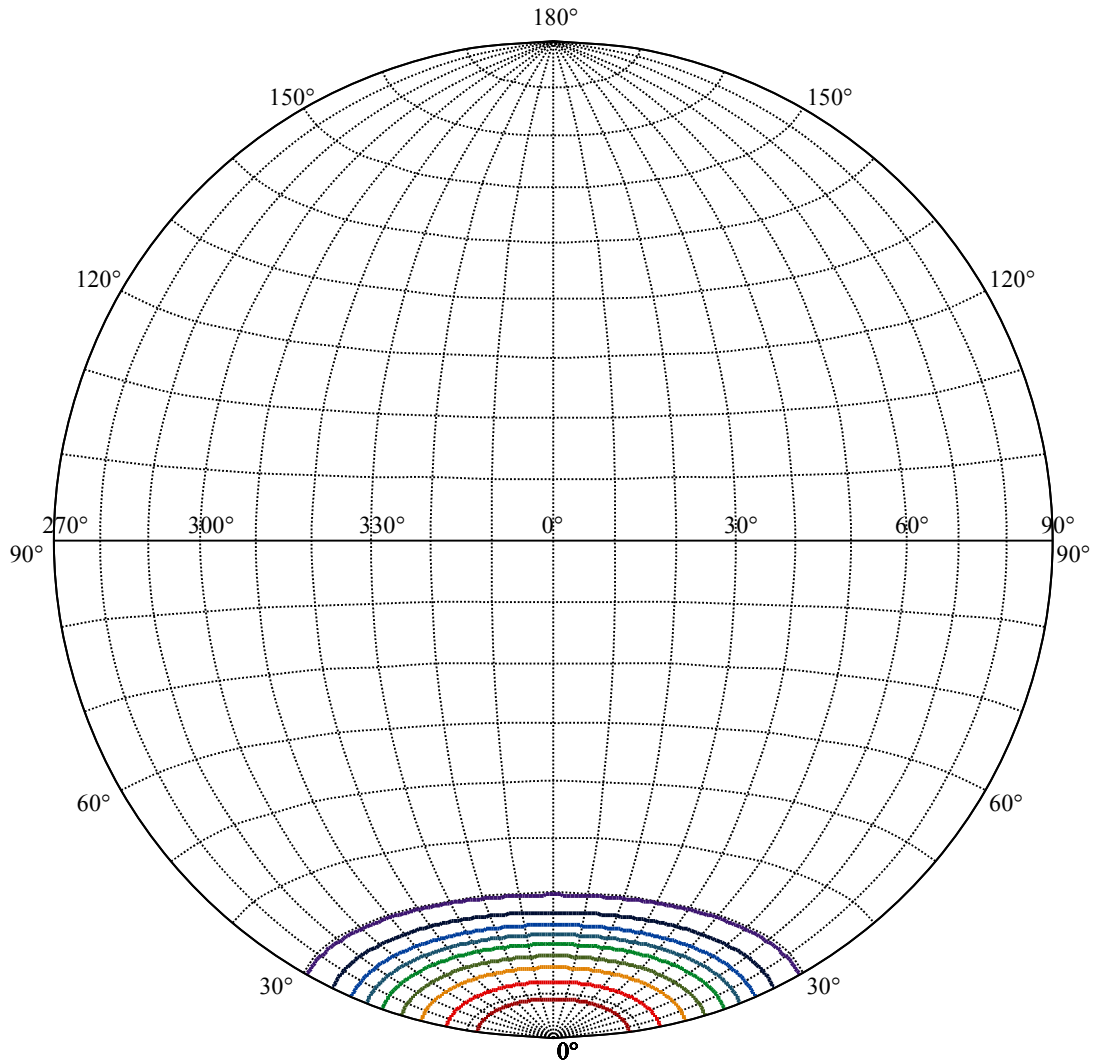
Beam Angle(50%I_{max}):C0/180Left:20.0 Right:20.0
:C90/270Left:20.0 Right:20.0



Max , Ave Beam angle of C0plane40.61



(10%Imax) 546	—
(20%Imax) 1092	—
(30%Imax) 1638	—
(40%Imax) 2184	—
(50%Imax) 2730	—
(60%Imax) 3276	—
(70%Imax) 3822	—
(80%Imax) 4368	—
(90%Imax) 4914	—



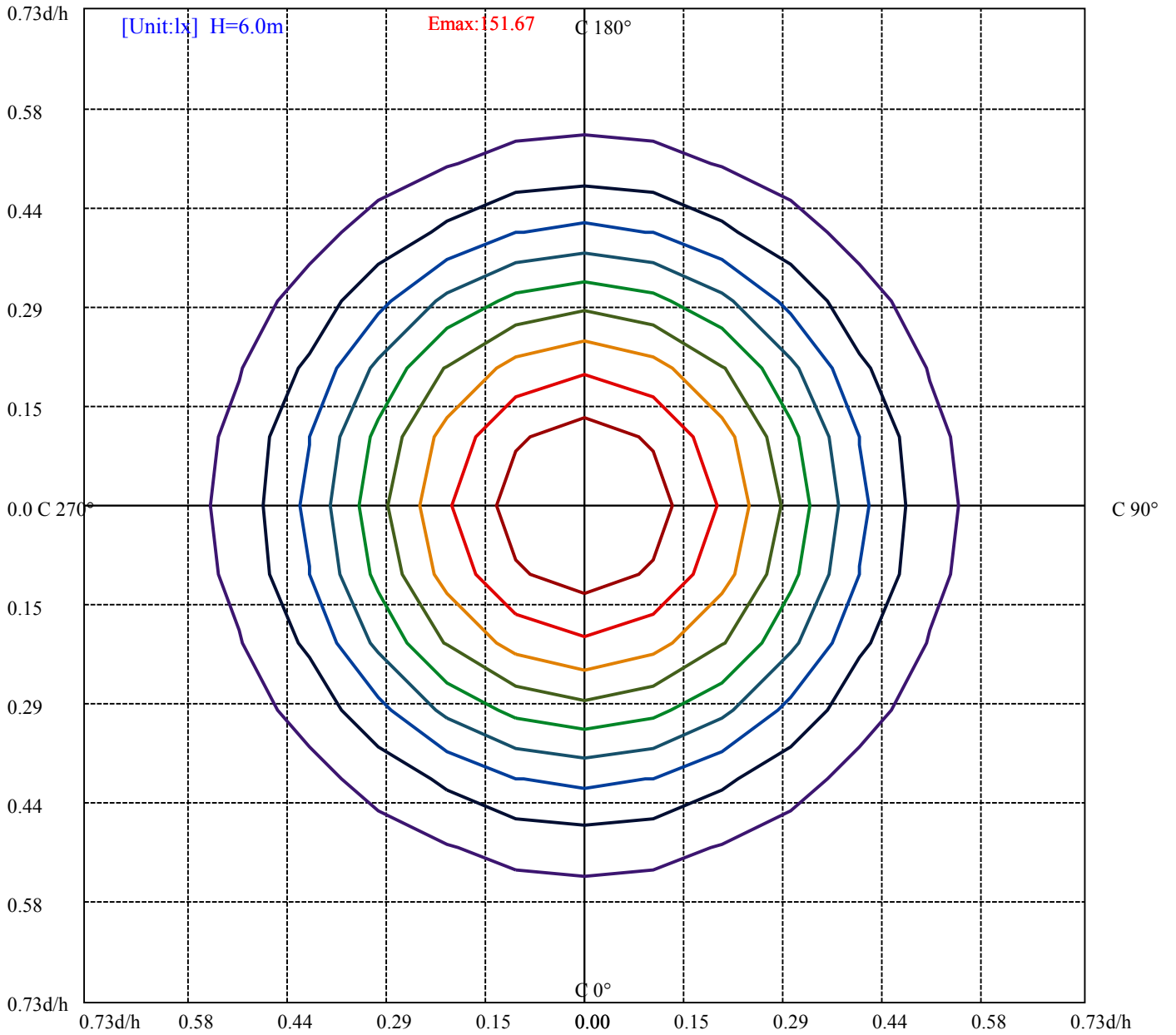
House

[Unit:cd]

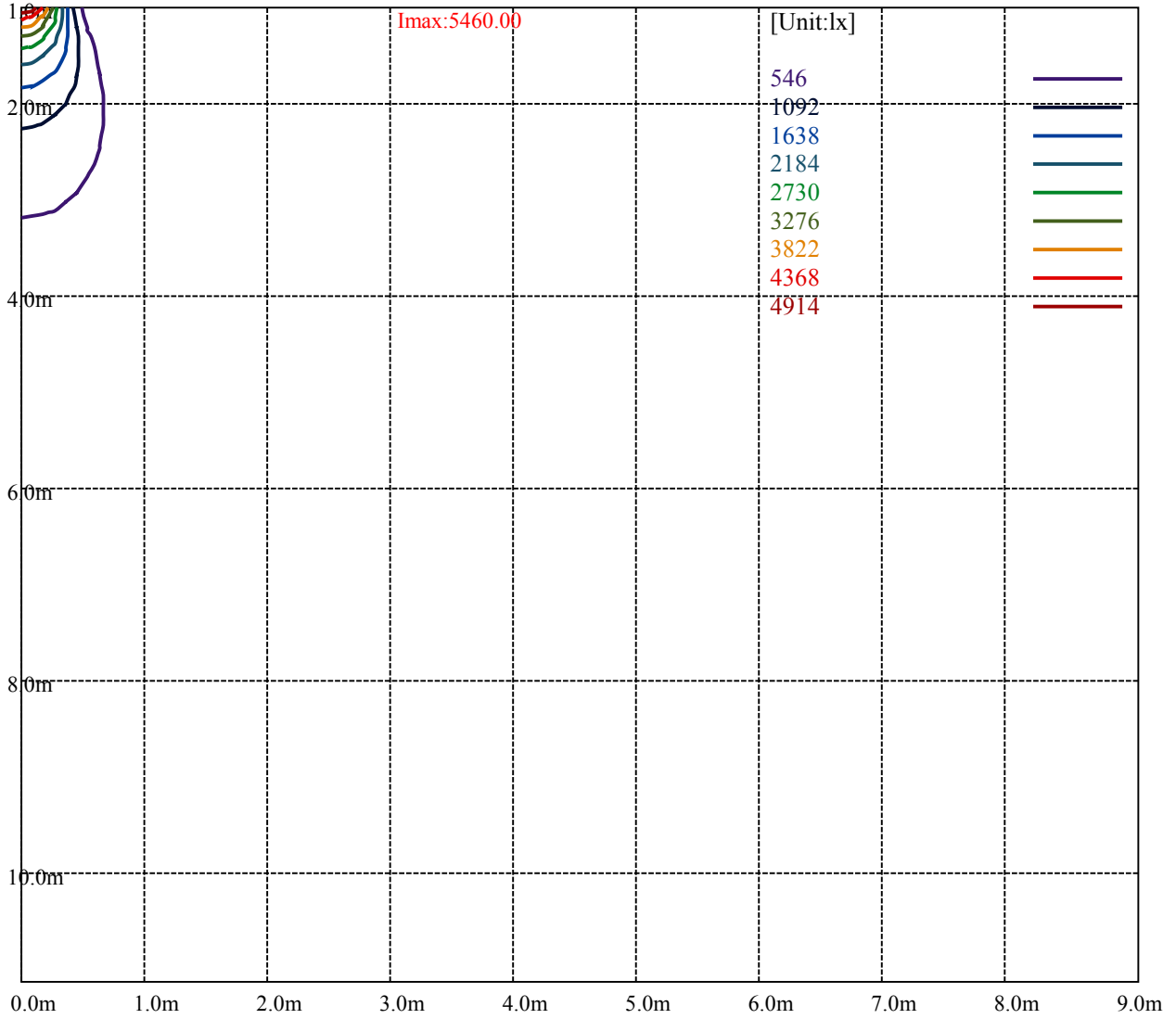
Road

Imax:5460.00

(10%Imax) 546	—
(20%Imax) 1092	—
(30%Imax) 1638	—
(40%Imax) 2184	—
(50%Imax) 2730	—
(60%Imax) 3276	—
(70%Imax) 3822	—
(80%Imax) 4368	—
(90%Imax) 4914	—



(10%Emax) 15.16667	—
(20%Emax) 30.33333	—
(30%Emax) 45.5	—
(40%Emax) 60.66667	—
(50%Emax) 75.83334	—
(60%Emax) 91	—
(70%Emax) 106.1667	—
(80%Emax) 121.3333	—
(90%Emax) 136.5	—



Luminance Table

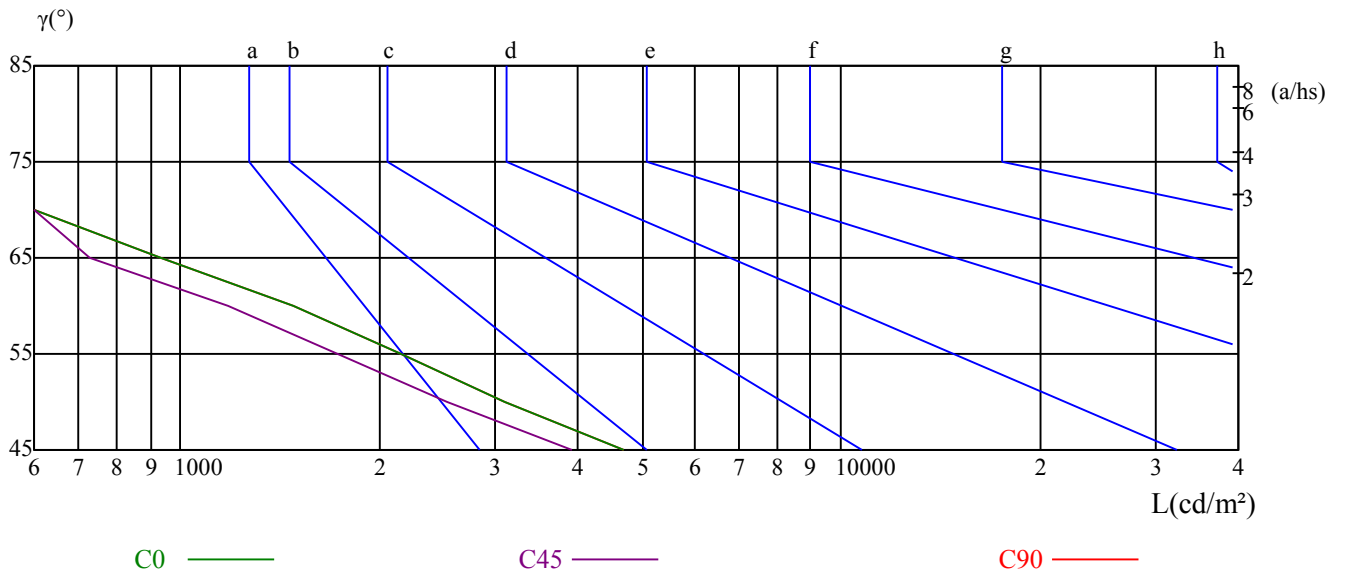
γ	45	50	55	60	65	70	75	80	85
C0	4701	3101	2152	1483	935	479	226	210	233
C45	3904	2537	1734	1177	731	368	171	155	169
C90	4701	3101	2152	1483	935	479	226	210	233

L横(65)	L纵(65)	L45(65)	L横(75)	L纵(75)	L45(75)	L横(85)	L纵(85)	L45(85)
2887	2887	2887	1048	1048	1048	2820	2820	2820

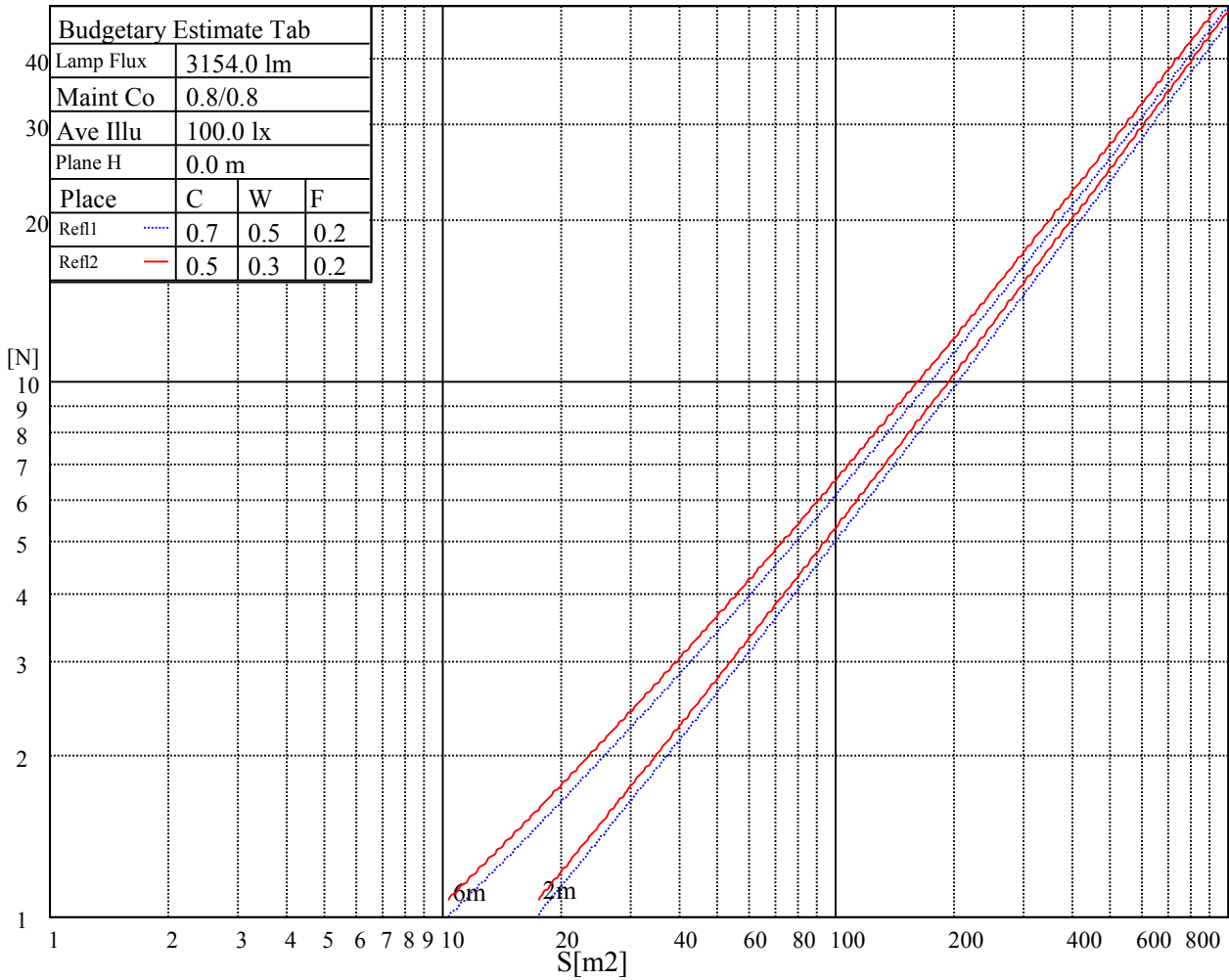
Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

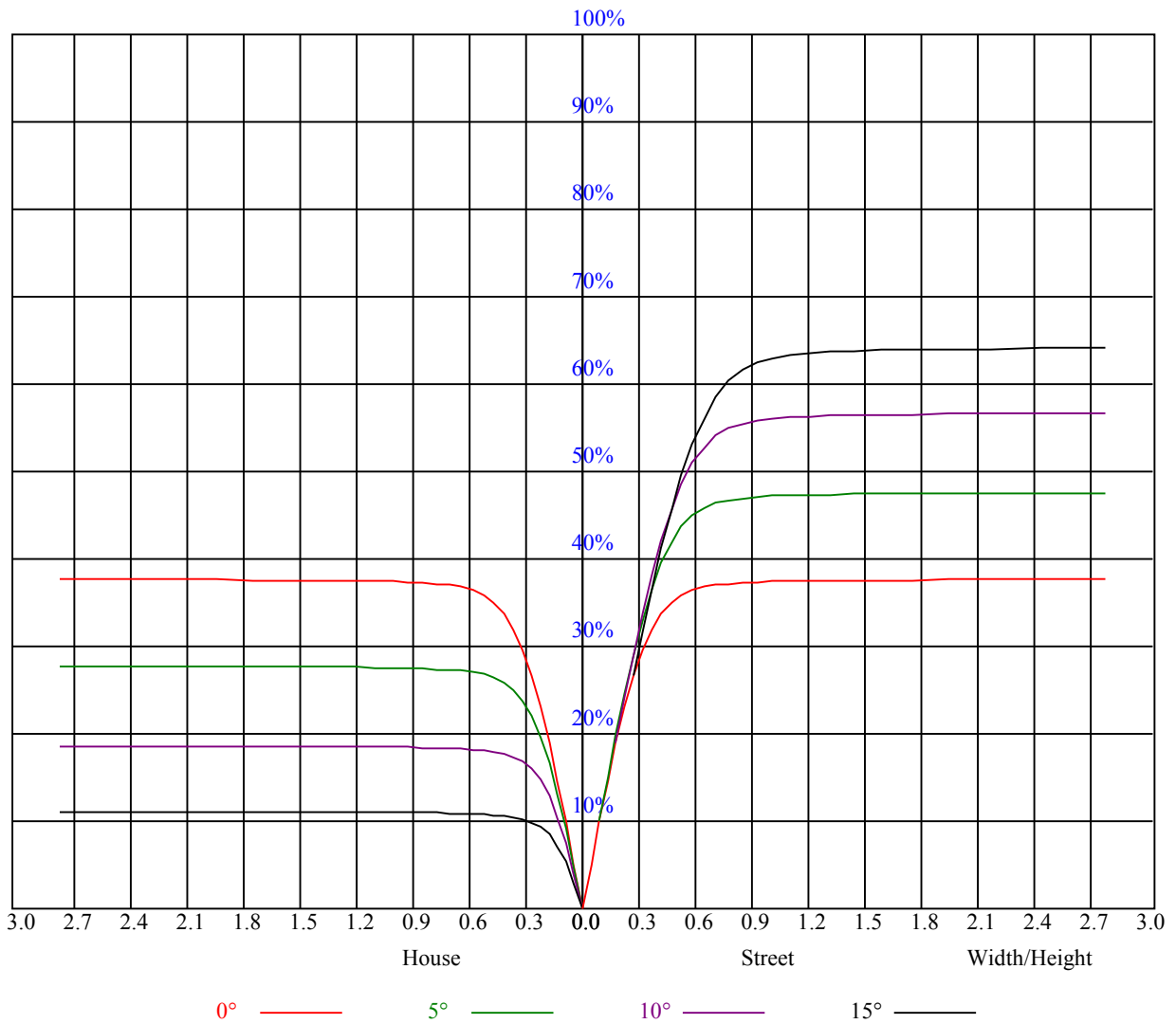
Luminance Limiting Curve



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	4.7	5.4	5.0	5.6	5.8	4.7	5.4	5.0	5.6	5.8
	3H	4.6	5.3	4.9	5.5	5.7	4.6	5.3	4.9	5.5	5.7
	4H	4.5	5.0	4.8	5.3	5.6	4.5	5.0	4.8	5.3	5.6
	6H	4.5	5.0	4.8	5.3	5.6	4.5	5.0	4.8	5.3	5.6
	8H	4.5	5.0	4.8	5.3	5.6	4.5	5.0	4.8	5.3	5.6
	12H	4.3	4.7	4.7	5.1	5.4	4.3	4.7	4.7	5.1	5.4
4H	2H	4.5	5.0	4.8	5.3	5.6	4.5	5.0	4.8	5.3	5.6
	3H	4.3	4.7	4.8	5.1	5.5	4.3	4.7	4.8	5.1	5.5
	4H	4.4	4.8	4.8	5.1	5.5	4.4	4.8	4.8	5.1	5.5
	6H	4.4	4.8	4.8	5.2	5.5	4.4	4.8	4.8	5.2	5.5
	8H	4.2	4.4	4.7	4.9	5.4	4.2	4.4	4.7	4.9	5.4
	12H	4.2	4.4	4.7	4.9	5.4	4.2	4.4	4.7	4.9	5.4
8H	4H	4.1	4.4	4.6	4.8	5.3	4.1	4.4	4.6	4.8	5.3
	6H	4.2	4.4	4.7	4.9	5.4	4.2	4.4	4.7	4.9	5.4
	8H	4.2	4.4	4.7	4.9	5.4	4.2	4.4	4.7	4.9	5.4
	12H	4.2	4.4	4.7	4.9	5.4	4.2	4.4	4.7	4.9	5.4
12H	4H	4.1	4.4	4.6	4.8	5.3	4.1	4.4	4.6	4.8	5.3
	6H	4.2	4.4	4.7	4.9	5.4	4.2	4.4	4.7	4.9	5.4
	8H	4.2	4.4	4.7	4.9	5.4	4.2	4.4	4.7	4.9	5.4
Variation with the observer position at spacings:											
S = 1.0H		5.5/-6.2					5.5/-6.2				
S = 1.5H		8.2/-7.7					8.2/-7.7				
S = 2.0H		10.2/-9.3					10.2/-9.3				
Standard tables:		BK0					BK0				
Uncorrected UGR		-9.2					-9.2				



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	0.91	0.91	0.91	0.88	0.88	0.88	0.84	0.84	0.84	0.81	0.81	0.81	0.78	0.78	0.78	0.76
1	0.85	0.84	0.82	0.84	0.82	0.81	0.81	0.79	0.78	0.78	0.77	0.76	0.75	0.74	0.74	0.73
2	0.81	0.78	0.76	0.79	0.77	0.75	0.77	0.75	0.73	0.75	0.73	0.72	0.73	0.71	0.70	0.69
3	0.76	0.73	0.71	0.75	0.73	0.70	0.73	0.71	0.69	0.72	0.70	0.68	0.70	0.68	0.67	0.66
4	0.73	0.69	0.67	0.72	0.69	0.66	0.70	0.68	0.65	0.69	0.67	0.65	0.68	0.66	0.64	0.63
5	0.69	0.66	0.63	0.69	0.65	0.63	0.67	0.64	0.62	0.66	0.64	0.62	0.65	0.63	0.61	0.60
6	0.66	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.64	0.61	0.59	0.63	0.60	0.59	0.58
7	0.63	0.60	0.57	0.63	0.59	0.57	0.62	0.59	0.57	0.61	0.59	0.56	0.60	0.58	0.56	0.55
8	0.61	0.57	0.55	0.60	0.57	0.55	0.60	0.57	0.54	0.59	0.56	0.54	0.58	0.56	0.54	0.53
9	0.58	0.55	0.52	0.58	0.55	0.52	0.57	0.54	0.52	0.57	0.54	0.52	0.56	0.54	0.52	0.51
10	0.56	0.53	0.50	0.56	0.53	0.50	0.55	0.52	0.50	0.55	0.52	0.50	0.54	0.52	0.50	0.49



SOTEN T1160

Intensity data(cd)

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	5460.00	5307.43	4794.16	3906.19	2741.56	1305.42	476.28	190.25	59.40
45.0	5460.00	5307.43	4794.16	3906.19	2741.56	1305.42	476.28	190.25	59.40
90.0	5460.00	5307.43	4794.16	3906.19	2741.56	1305.42	476.28	190.25	59.40
135.0	5460.00	5307.43	4794.16	3906.19	2741.56	1305.42	476.28	190.25	59.40
180.0	5460.00	5307.43	4794.16	3906.19	2741.56	1305.42	476.28	190.25	59.40
225.0	5460.00	5307.43	4794.16	3906.19	2741.56	1305.42	476.28	190.25	59.40
270.0	5460.00	5307.43	4794.16	3906.19	2741.56	1305.42	476.28	190.25	59.40
315.0	5460.00	5307.43	4794.16	3906.19	2741.56	1305.42	476.28	190.25	59.40
360.0	5460.00	5307.43	4794.16	3906.19	2741.56	1305.42	476.28	190.25	59.40

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	35.92	23.57	16.15	10.90	6.68	3.29	1.48	1.30	1.35
45.0	35.92	23.57	16.15	10.90	6.68	3.29	1.48	1.30	1.35
90.0	35.92	23.57	16.15	10.90	6.68	3.29	1.48	1.30	1.35
135.0	35.92	23.57	16.15	10.90	6.68	3.29	1.48	1.30	1.35
180.0	35.92	23.57	16.15	10.90	6.68	3.29	1.48	1.30	1.35
225.0	35.92	23.57	16.15	10.90	6.68	3.29	1.48	1.30	1.35
270.0	35.92	23.57	16.15	10.90	6.68	3.29	1.48	1.30	1.35
315.0	35.92	23.57	16.15	10.90	6.68	3.29	1.48	1.30	1.35
360.0	35.92	23.57	16.15	10.90	6.68	3.29	1.48	1.30	1.35

C/γ(°)	90.0
0.0	1.35
45.0	1.35
90.0	1.35
135.0	1.35
180.0	1.35
225.0	1.35
270.0	1.35
315.0	1.35
360.0	1.35