
246852

Manufacturer: LED line	Luminaire: 246852
Report No:	Voltage(V): 219.100
Test No:	Current(A): 0.685
LampCAT:	Power (W): 146.200
Lamp flux(lm)	PF: 0.974
Number of Lamps: 1	Ballast type:
Length(mm): 220	Width(mm): 220
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 17718.33
Lumens(lm)/Power(W): 121.19
Central intensity(cd): 6780.672
Maximum intensity(cd): 6822.144
Angle of maximum intensity: C=30.0 γ =0.0
Beam Angle(50%Imax): [H]Left=52.9 Right=52.8
 [V]Left=49.8 Right=57.1
Field angle(10%Imax): [H]Left=74.7 Right=74.8
 [V]Left=71.4 Right=78.8
Beam angle of C30plane: 106.72

246852

Zonal flux distribution table

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6797.952	.000	.000	.000%	.000%
10.0	6647.615	641.728	641.728	3.622%	3.622%
20.0	6340.032	1840.783	2482.511	10.389%	14.011%
30.0	5783.616	2805.804	5288.315	15.836%	29.847%
40.0	4973.184	3378.705	8667.020	19.069%	48.916%
50.0	3789.504	3393.112	12060.130	19.150%	68.066%
60.0	2484.864	2814.559	14874.690	15.885%	83.951%
70.0	1156.032	1807.007	16681.700	10.199%	94.149%
80.0	281.664	760.478	17442.170	4.292%	98.441%
90.0	25.920	167.797	17609.970	.947%	99.388%
100.0	.000	14.140	17624.110	.080%	99.468%
110.0	10.368	5.484	17629.600	.031%	99.499%
120.0	15.552	12.864	17642.460	.073%	99.572%
130.0	19.008	15.503	17657.960	.087%	99.659%
140.0	20.736	15.390	17673.360	.087%	99.746%
150.0	27.648	15.197	17688.550	.086%	99.832%
160.0	36.288	14.797	17703.350	.084%	99.915%
170.0	41.472	11.021	17714.370	.062%	99.978%
180.0	41.472	3.959	17718.330	.022%	100.000%

Equipment: GMS1800B
Temperature($^{\circ}\text{C}$): 25.0

Date: 2016-11-5
Humidity(%): 60.0%

Distance(m): 14.40

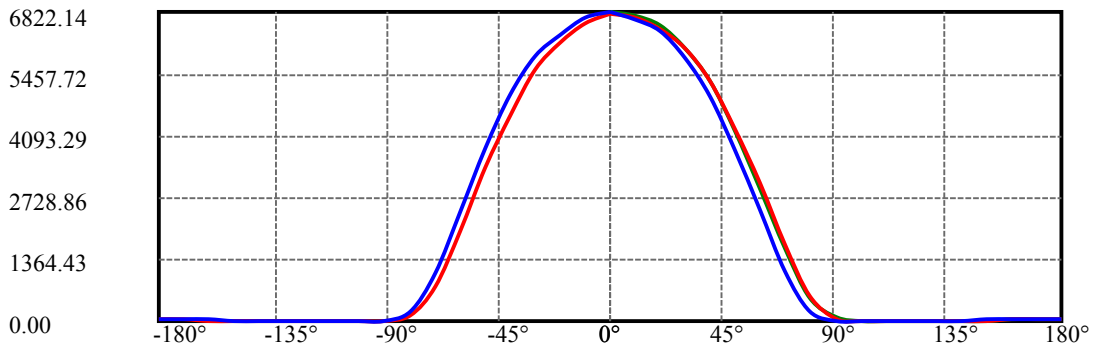
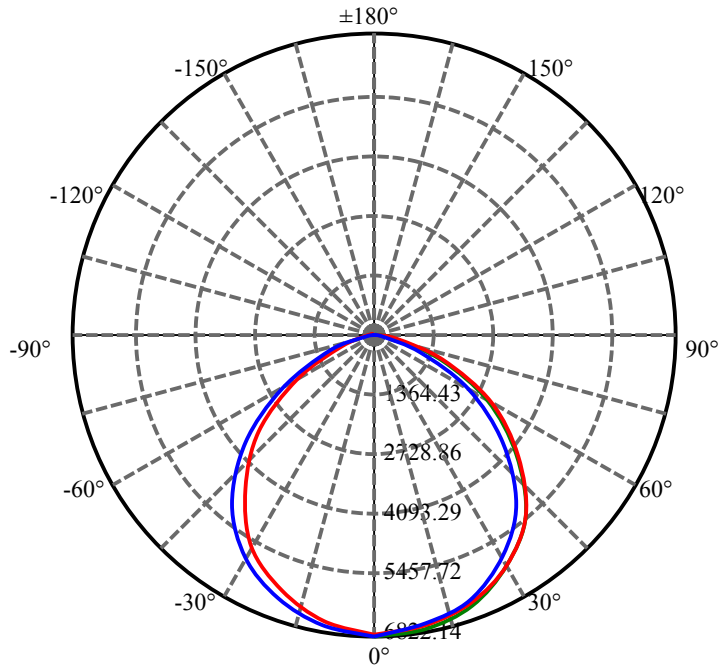
Zonal flux distribution table**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixt
0-30	5288.32	29.85%
0-40	8667.02	48.92%
0-60	14874.69	83.95%
0-90	17609.97	99.39%
90-120	32.49	0.18%
90-130	47.99	0.27%
90-150	78.58	0.44%
90-180	104.40	0.59%
0-180	17718.33	100.00%

ZONAL LUMEN SUMMARY

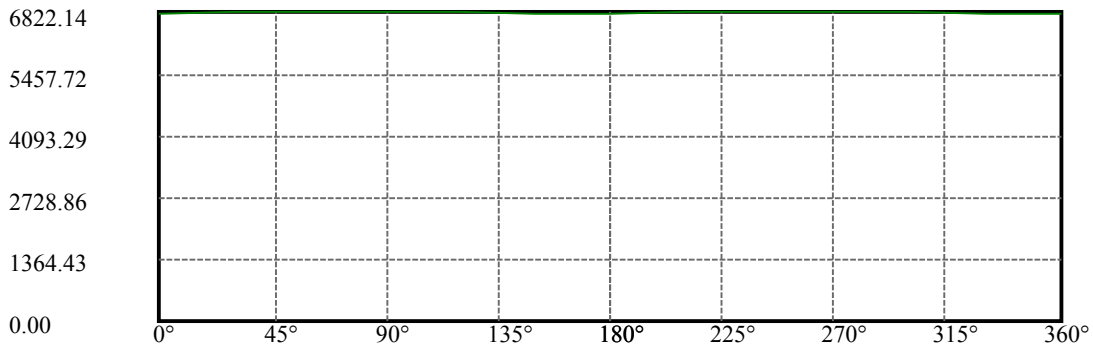
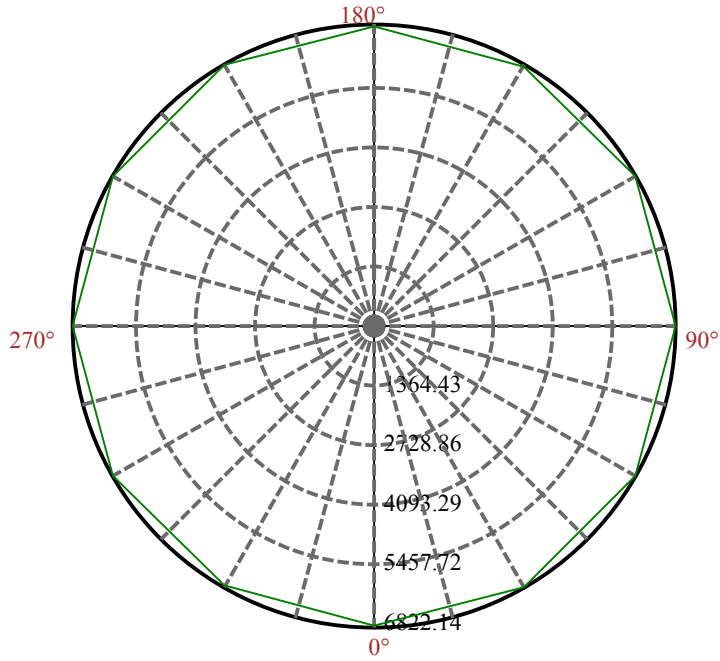
0-10	641.73
10-20	1840.78
20-30	2805.80
30-40	3378.71
40-50	3393.11
50-60	2814.56
60-70	1807.01
70-80	760.48
80-90	167.80
90-100	14.14
100-110	5.48
110-120	12.86
120-130	15.50
130-140	15.39
140-150	15.20
150-160	14.80
160-170	11.02
170-180	0.00

Light Distribution Curve [Unit: cd]



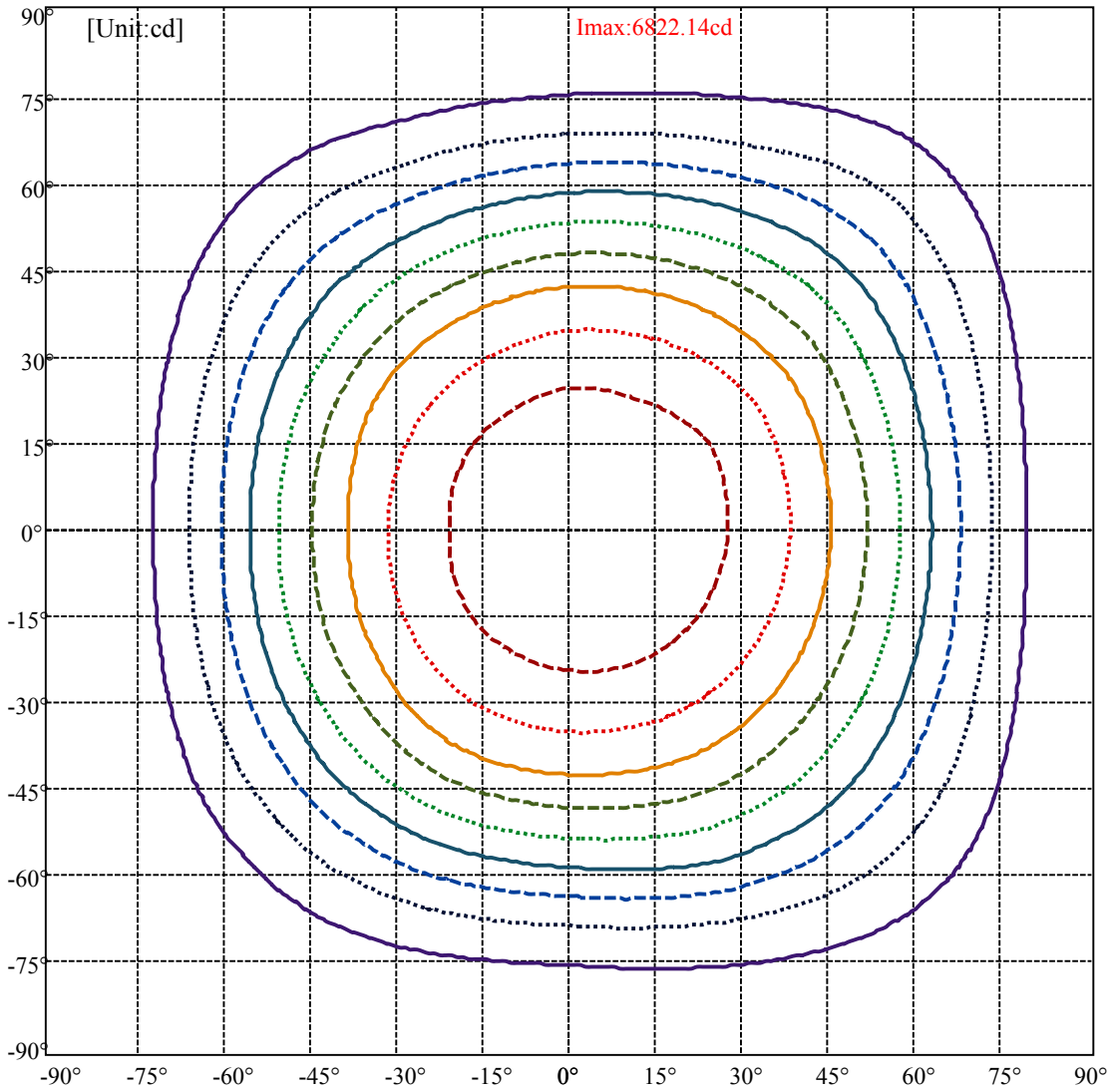
C30(Max): —
 C0/C180: —
 C90/C270: —

Light Distribution Curve [Unit: cd]



MaxG=0

ISO-Intensity(V-H)



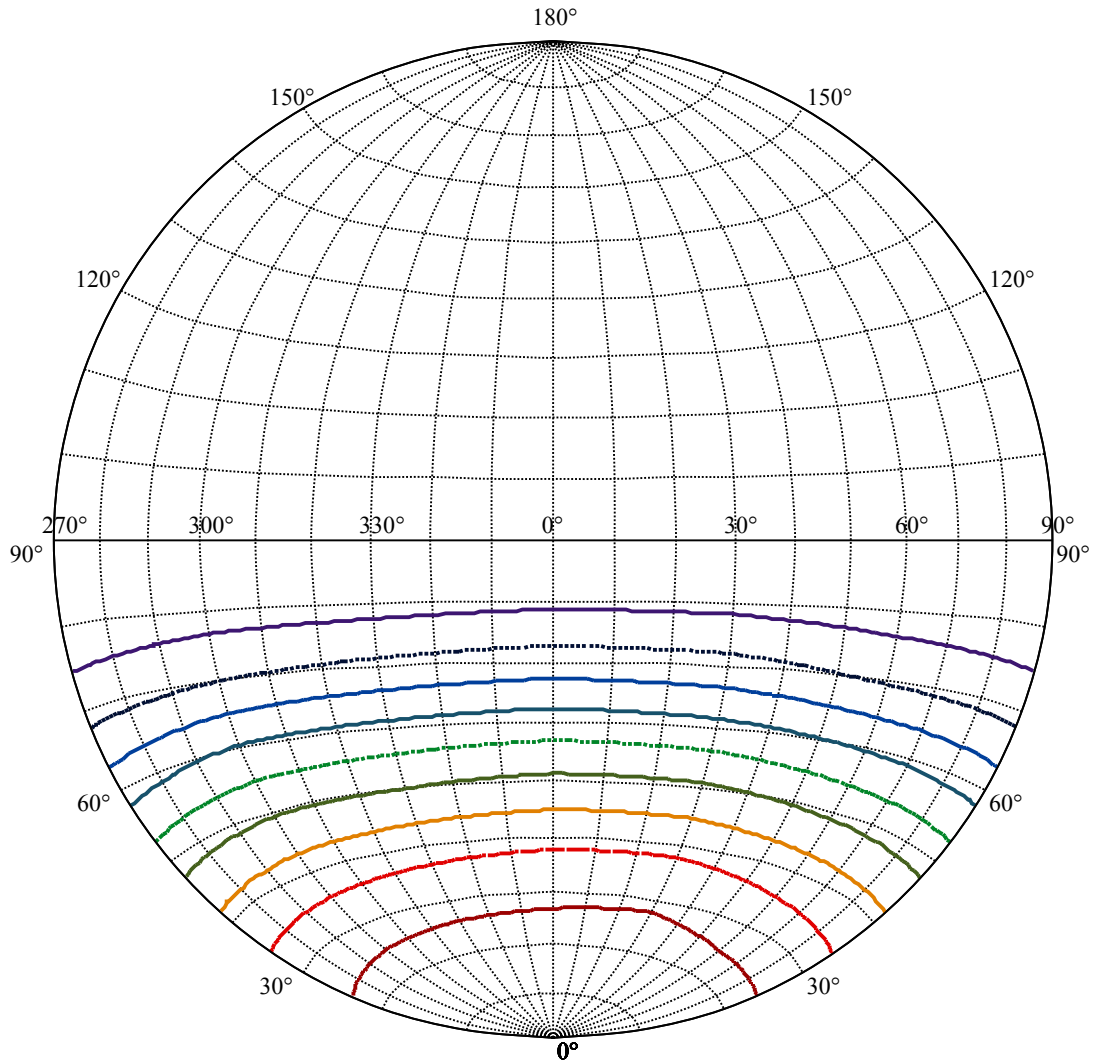
(10%Imax) 680.141	———
(20%Imax) 1360.28
(30%Imax) 2040.42	- - - - -
(40%Imax) 2720.56	—————
(50%Imax) 3400.7
(60%Imax) 4080.84	- - - - -
(70%Imax) 4760.98	—————
(80%Imax) 5441.13
(90%Imax) 6121.27	- - - - -

Equipment: GMS1800B
Temperature(°C): 25.0

Date: 2016-11-5
Humidity(%): 60.0%

Distance(m): 14.40

ISO candela diagram on circular web



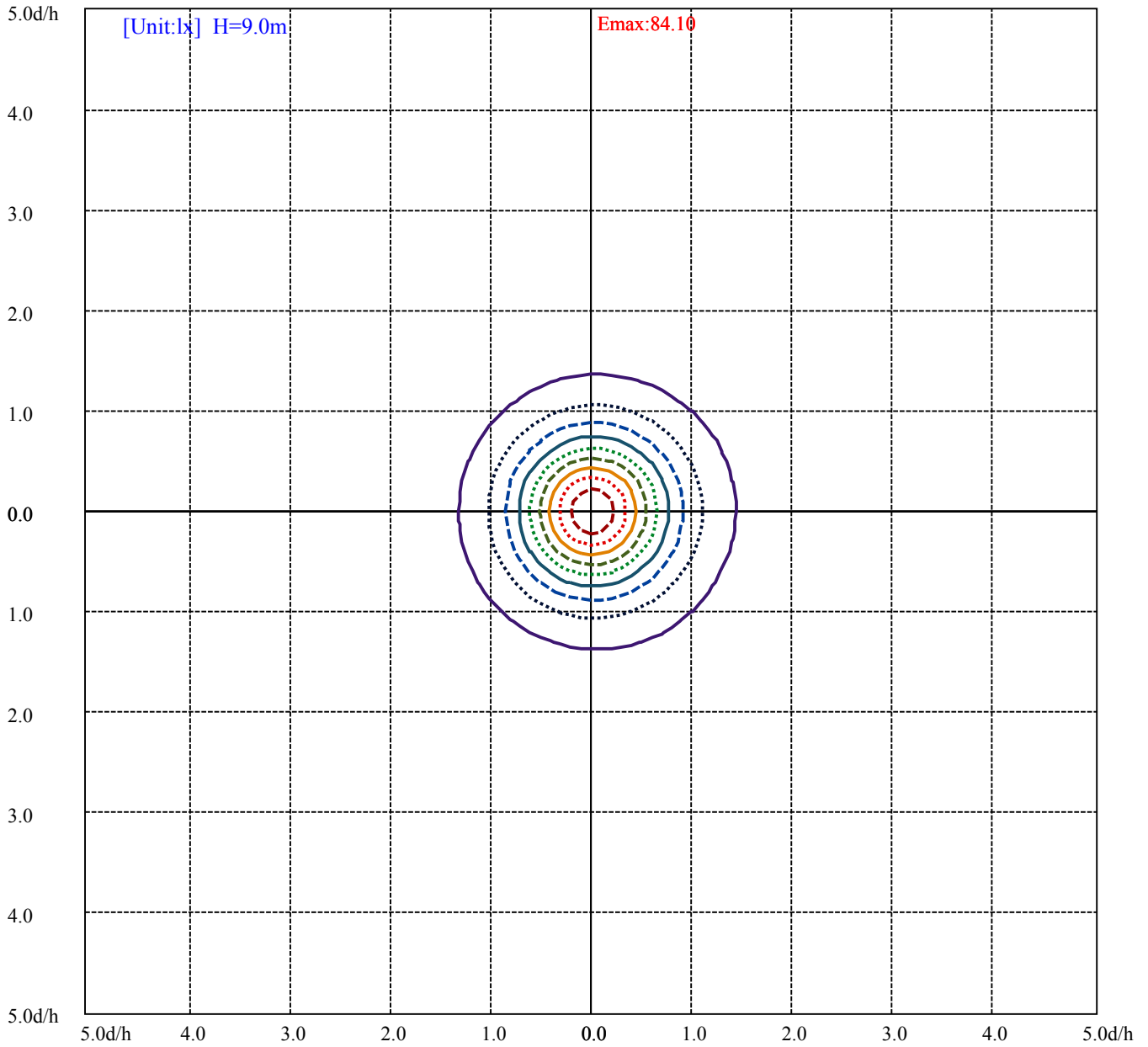
House

Road

Imax:6822.14cd

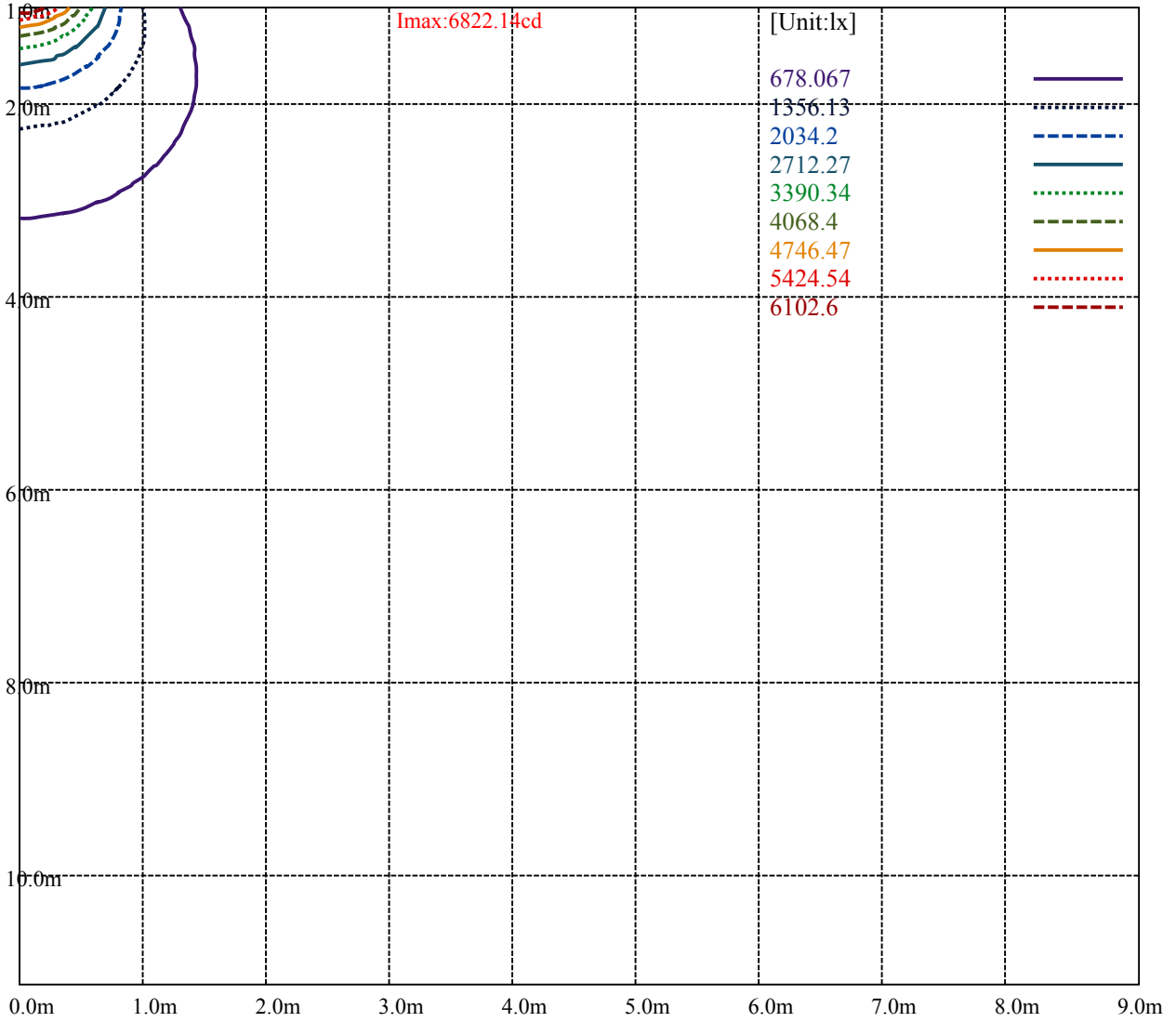
(10%Imax) 682.214	—
(20%Imax) 1364.43	⋯
(30%Imax) 2046.64	- - -
(40%Imax) 2728.86	—
(50%Imax) 3411.07	⋯
(60%Imax) 4093.29	- - -
(70%Imax) 4775.5	—
(80%Imax) 5457.72	⋯
(90%Imax) 6139.93	- - -

ISO illuminance diagram



- (10%Emax) 8.409593
- (20%Emax) 16.81914
- (30%Emax) 25.22877
- (40%Emax) 33.63839
- (50%Emax) 42.04802
- (60%Emax) 50.45753
- (70%Emax) 58.86716
- (80%Emax) 67.27679
- (90%Emax) 75.68629

Space ISO Lux diagram



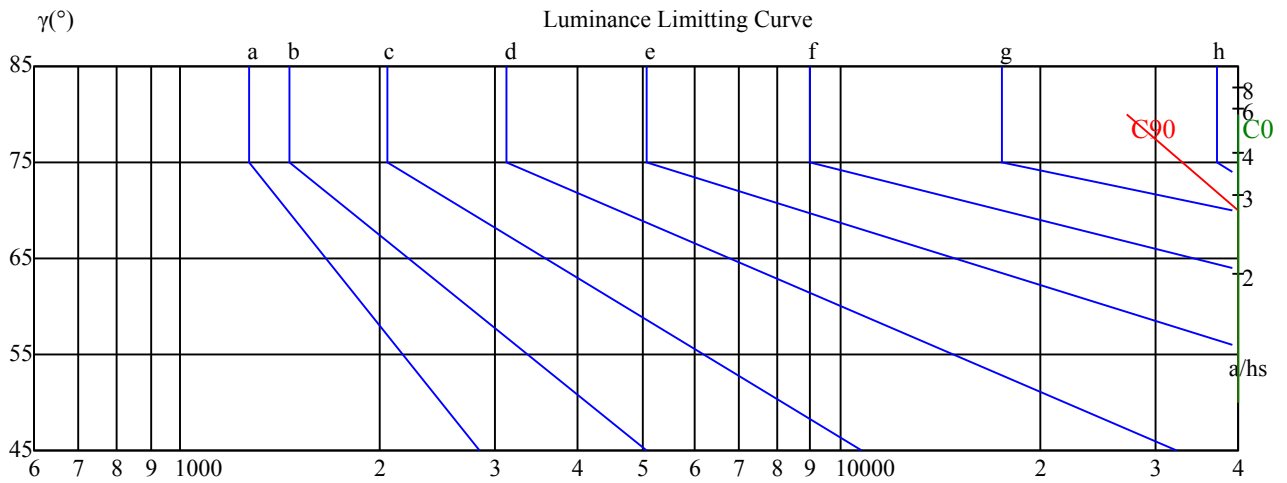
Luminance Limiting Curve(no luminous side)

Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	0	136636	0	125958	0	101464	0	64148	0
C45	0	0	0	0	0	0	0	0	0
C90	0	121306	0	101109	0	66390	0	27140	0

Glare Table

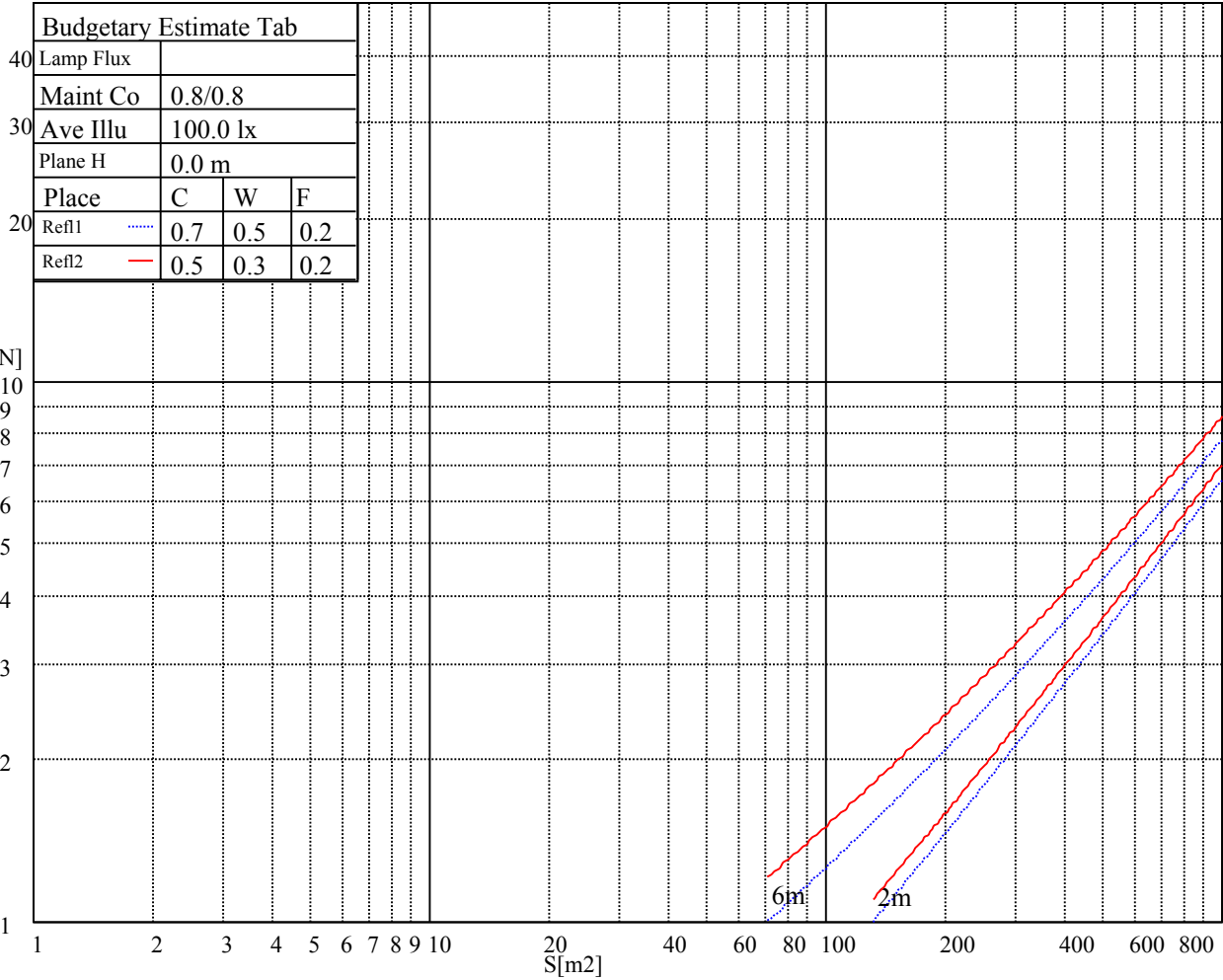
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



UGR Glare

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	19.9	21.2	20.2	21.5	21.7	19.2	20.5	19.5	20.7	21.0
	3H	21.3	22.5	21.6	22.7	23.0	20.1	21.3	20.5	21.6	21.9
	4H	21.6	22.6	22.0	22.9	23.3	20.3	21.2	20.6	21.6	21.9
	6H	22.0	23.0	22.4	23.3	23.6	20.4	21.4	20.8	21.7	22.1
	8H	22.1	23.1	22.5	23.4	23.8	20.5	21.4	20.8	21.8	22.1
	12H	22.0	22.8	22.5	23.2	23.6	20.3	21.1	20.8	21.4	21.9
4H	2H	20.3	21.3	20.7	21.6	21.9	19.7	20.6	20.0	21.0	21.3
	3H	21.8	22.5	22.2	22.9	23.4	20.8	21.5	21.2	21.9	22.3
	4H	22.5	23.2	22.9	23.6	24.0	21.2	21.9	21.6	22.3	22.8
	6H	22.9	23.6	23.3	24.0	24.4	21.4	22.1	21.8	22.5	23.0
	8H	22.9	23.3	23.4	23.8	24.3	21.3	21.7	21.8	22.2	22.7
	12H	23.0	23.4	23.5	23.9	24.5	21.4	21.8	21.9	22.3	22.8
8H	4H	22.5	22.9	23.0	23.4	24.0	21.4	21.8	21.9	22.3	22.8
	6H	23.1	23.5	23.6	23.9	24.5	21.7	22.1	22.2	22.6	23.1
	8H	23.3	23.7	23.8	24.2	24.7	21.8	22.2	22.3	22.6	23.2
	12H	23.5	23.9	24.0	24.4	24.9	21.8	22.2	22.3	22.7	23.3
12H	4H	22.6	23.0	23.1	23.4	24.0	21.4	21.8	21.9	22.3	22.8
	6H	23.1	23.5	23.6	24.0	24.5	21.7	22.1	22.2	22.6	23.1
	8H	23.3	23.8	23.8	24.2	24.8	21.8	22.3	22.4	22.7	23.3
Variation with the observer position at spacings:											
S = 1.0H	0.4/-0.5					0.4/-0.4					
S = 1.5H	0.7/-0.7					0.6/-1.0					
S = 2.0H	1.0/-1.0					1.5/-1.6					
Standard tables:	BK3					BK3					
Uncorrected UGR	5.0					3.8					
According 1000lm											

Budgetary Estimate Table



Utilization factor table for indoor luminaire

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	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.01	1.01	1.01	0.99
1	1.05	1.01	0.98	1.03	0.99	0.96	0.99	0.96	0.93	0.95	0.92	0.90	0.91	0.89	0.87	0.85
2	0.93	0.86	0.81	0.91	0.85	0.80	0.87	0.82	0.78	0.84	0.80	0.76	0.81	0.77	0.74	0.72
3	0.82	0.74	0.68	0.80	0.73	0.67	0.77	0.71	0.66	0.74	0.69	0.65	0.72	0.67	0.64	0.62
4	0.73	0.64	0.58	0.72	0.64	0.58	0.69	0.62	0.57	0.67	0.61	0.56	0.64	0.59	0.55	0.53
5	0.65	0.57	0.50	0.64	0.56	0.50	0.62	0.55	0.49	0.60	0.54	0.49	0.58	0.53	0.48	0.46
6	0.59	0.50	0.44	0.58	0.50	0.44	0.56	0.49	0.43	0.54	0.48	0.43	0.53	0.47	0.43	0.41
7	0.53	0.45	0.39	0.53	0.45	0.39	0.51	0.44	0.39	0.50	0.43	0.38	0.48	0.42	0.38	0.36
8	0.49	0.41	0.35	0.48	0.40	0.35	0.47	0.40	0.34	0.45	0.39	0.34	0.44	0.38	0.34	0.32
9	0.45	0.37	0.31	0.44	0.37	0.31	0.43	0.36	0.31	0.42	0.36	0.31	0.41	0.35	0.31	0.29
10	0.41	0.34	0.28	0.41	0.33	0.28	0.40	0.33	0.28	0.39	0.33	0.28	0.38	0.32	0.28	0.26
RCR	COEFFICIENTS OF UTILIZATION RHOFc=20 WLC															
1	0.28	0.16	0.05	0.27	0.16	0.05	0.26	0.15	0.05	0.25	0.14	0.05	0.24	0.14	0.04	
2	0.27	0.15	0.05	0.26	0.14	0.04	0.25	0.14	0.04	0.24	0.13	0.04	0.23	0.13	0.04	
3	0.25	0.13	0.04	0.25	0.13	0.04	0.24	0.13	0.04	0.23	0.12	0.04	0.22	0.12	0.04	
4	0.24	0.12	0.04	0.23	0.12	0.04	0.22	0.12	0.04	0.21	0.11	0.03	0.21	0.11	0.03	
5	0.22	0.11	0.03	0.22	0.11	0.03	0.21	0.11	0.03	0.20	0.11	0.03	0.19	0.10	0.03	
6	0.21	0.10	0.03	0.20	0.10	0.03	0.19	0.10	0.03	0.19	0.10	0.03	0.18	0.10	0.03	
7	0.19	0.09	0.03	0.19	0.09	0.03	0.18	0.09	0.03	0.18	0.09	0.03	0.17	0.09	0.03	
8	0.18	0.09	0.02	0.18	0.09	0.02	0.17	0.09	0.02	0.17	0.08	0.02	0.16	0.08	0.02	
9	0.17	0.08	0.02	0.17	0.08	0.02	0.16	0.08	0.02	0.16	0.08	0.02	0.15	0.08	0.02	
10	0.16	0.08	0.02	0.16	0.08	0.02	0.15	0.07	0.02	0.15	0.07	0.02	0.14	0.07	0.02	
RCR	COEFFICIENTS OF UTILIZATION RHOFc=20 CCLU															
0	0.20	0.20	0.20	0.17	0.17	0.17	0.11	0.11	0.11	0.07	0.07	0.07	0.02	0.02	0.02	
1	0.16	0.15	0.14	0.14	0.13	0.12	0.10	0.09	0.08	0.06	0.05	0.05	0.02	0.02	0.02	
2	0.13	0.11	0.10	0.11	0.10	0.09	0.09	0.07	0.06	0.06	0.05	0.04	0.02	0.02	0.01	
3	0.10	0.09	0.07	0.10	0.08	0.06	0.08	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0.01	
4	0.09	0.07	0.05	0.09	0.06	0.05	0.07	0.05	0.04	0.05	0.04	0.02	0.02	0.01	0.01	
5	0.08	0.06	0.04	0.08	0.05	0.04	0.07	0.05	0.03	0.05	0.03	0.02	0.02	0.01	0.01	
6	0.07	0.05	0.03	0.07	0.05	0.03	0.06	0.04	0.02	0.05	0.03	0.02	0.02	0.01	0.01	
7	0.06	0.04	0.03	0.06	0.04	0.03	0.06	0.04	0.02	0.04	0.03	0.01	0.02	0.01	0.00	
8	0.05	0.04	0.02	0.06	0.04	0.02	0.06	0.03	0.02	0.04	0.02	0.01	0.02	0.01	0.00	
9	0.05	0.03	0.02	0.05	0.03	0.02	0.05	0.03	0.02	0.04	0.02	0.01	0.02	0.01	0.00	
10	0.05	0.03	0.02	0.05	0.03	0.02	0.05	0.03	0.01	0.04	0.02	0.01	0.01	0.01	0.00	

Intensity data(cd)

C/γ(°)	0.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0	80.0	
0.0	6780.67	6676.99	6428.16	6013.44	5308.42	4250.88	3048.19	1679.62	539.14	
30.0	6822.14	6739.20	6511.10	6034.18	5308.42	4209.41	2944.51	1596.67	497.66	
60.0	6801.41	6697.73	6407.42	5868.29	5142.53	3960.58	2674.94	1285.63	331.78	
90.0	6801.41	6635.52	6386.69	5785.34	4976.64	3773.95	2446.85	1099.01	228.10	
120.0	6801.41	6594.05	6283.01	5619.46	4790.02	3525.12	2177.28	891.65	145.15	
150.0	6780.67	6573.31	6220.80	5557.25	4707.07	3379.97	2073.60	829.44	165.89	
180.0	6780.67	6552.58	6137.86	5536.51	4541.18	3379.97	1990.66	767.23	124.42	
210.0	6822.14	6635.52	6220.80	5619.46	4644.86	3442.18	2032.13	787.97	145.15	
240.0	6801.41	6635.52	6283.01	5723.14	4914.43	3649.54	2301.70	995.33	207.36	
270.0	6801.41	6676.99	6324.48	5826.82	4997.38	3794.69	2426.11	1078.27	228.10	
300.0	6801.41	6697.73	6407.42	5889.02	5121.79	4022.78	2799.36	1347.84	352.51	
330.0	6780.67	6656.26	6469.63	5930.50	5225.47	4084.99	2903.04	1513.73	414.72	
360.0	6780.67	6676.99	6428.16	6013.44	5308.42	4250.88	3048.19	1679.62	539.14	
C/γ(°)	90.0	100.0	110.0	120.0	130.0	140.0	150.0	160.0	170.0	
0.0	62.21	0.00	0.00	20.74	20.74	20.74	20.74	41.47	41.47	
30.0	82.94	0.00	0.00	0.00	20.74	20.74	20.74	41.47	41.47	
60.0	41.47	0.00	0.00	20.74	20.74	20.74	41.47	41.47	41.47	
90.0	20.74	0.00	20.74	0.00	20.74	20.74	41.47	41.47	41.47	
120.0	0.00	0.00	0.00	20.74	20.74	20.74	20.74	41.47	41.47	
150.0	0.00	0.00	20.74	0.00	20.74	20.74	41.47	20.74	41.47	
180.0	0.00	0.00	20.74	20.74	20.74	20.74	20.74	20.74	41.47	
210.0	0.00	0.00	20.74	20.74	20.74	20.74	41.47	41.47	41.47	
240.0	0.00	0.00	20.74	20.74	20.74	20.74	20.74	41.47	41.47	
270.0	0.00	0.00	0.00	20.74	20.74	20.74	20.74	41.47	41.47	
300.0	41.47	0.00	0.00	20.74	0.00	20.74	20.74	20.74	41.47	
330.0	62.21	0.00	20.74	20.74	20.74	20.74	20.74	41.47	41.47	
360.0	62.21	0.00	0.00	20.74	20.74	20.74	20.74	41.47	41.47	
C/γ(°)	180.0									
0.0	41.47									
30.0	41.47									
60.0	41.47									
90.0	41.47									
120.0	41.47									
150.0	41.47									
180.0	41.47									
210.0	41.47									
240.0	41.47									
270.0	41.47									
300.0	41.47									
330.0	41.47									
360.0	41.47									