
PQL 91314 LED SMD 4'13WT8/40K/SC/V5

LumCAT: /

Luminaire: /

Report No: SL/BG6-172568-03

Test No:

LampCAT: 13WT8/40K/SC/V5

Lamp flux(lm): -1.0

Number of Lamps: 6

Length(mm): 1200

Phm Type: C

Voltage(V):

Current(A):

Power (W): 96.2000

PF:

Ballast type:

Width(mm): 475

Height(mm): 100

Photometric Results

Lumens(lm): 10979.72

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 114.13

Central intensity(cd): 3903.665

Maximum intensity(cd): 3903.665

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50% I_{max}): [C0/180]Total=111.2

[C90/270]Total=93.8

Field angle(10% I_{max}): [C0/180]Total=169.0

[C90/270]Total=152.6

Maximum s/h(1/2): C0_180=1.24 C90_270=1.17

Maximum s/h(1/4): C0_180=1.36 C90_270=1.27

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 7.78%

Down flux rate of LUM(%): 92.22%

CIE Type : Direct lighting

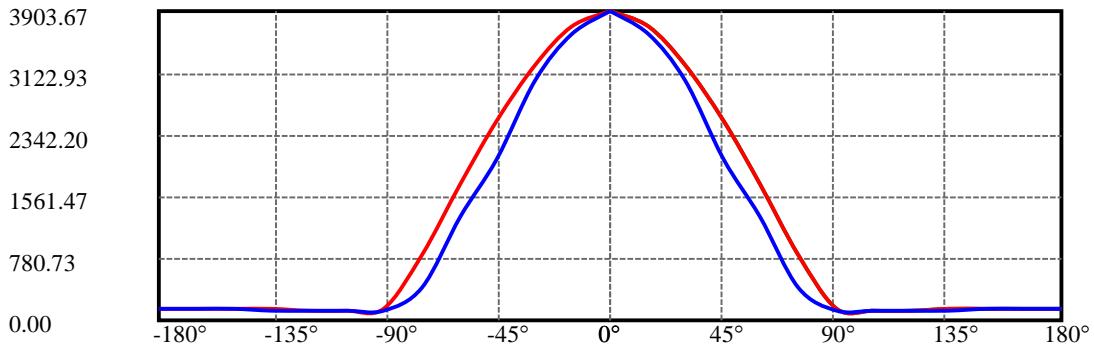
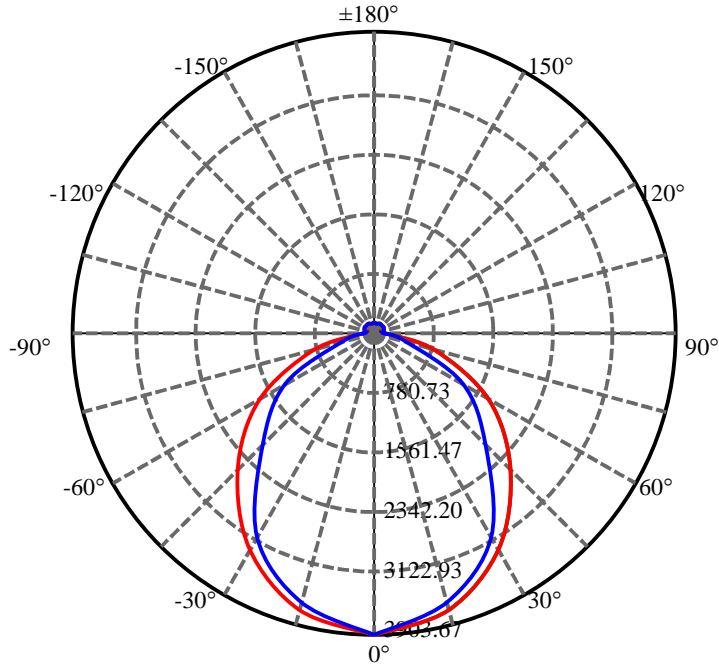
Output flux ratio in π solid angle : 72.680%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3899.352	0.000	0	.000%	.000%
15.0	3633.020	806.319	806.319	.000%	7.344%
30.0	3094.191	2111.311	2917.63	.000%	26.573%
45.0	2244.157	2665.210	5582.841	.000%	50.847%
60.0	1440.289	2397.267	7980.108	.000%	72.680%
75.0	600.421	1546.231	9526.338	.000%	86.763%
90.0	136.854	599.482	10125.82	.000%	92.223%
105.0	131.758	218.410	10344.23	.000%	94.212%
120.0	133.853	201.251	10545.481	.000%	96.045%
135.0	136.352	175.807	10721.288	.000%	97.646%
150.0	141.867	138.903	10860.191	.000%	98.911%
165.0	142.225	89.161	10949.352	.000%	99.723%
180.0	141.437	30.365	10979.717	.000%	100.000%

ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	2917.63	N.A.	26.57%
0-40	2917.63	N.A.	26.57%
0-60	7980.11	N.A.	72.68%
0-90	10125.82	N.A.	92.22%
0-120	10545.48	N.A.	96.05%
0-180	10979.72	N.A.	100.00%
60-90	4542.98	N.A.	41.38%
90-120	1019.14	N.A.	9.28%
90-130	1019.14	N.A.	9.28%
90-150	1333.85	N.A.	12.15%
90-180	1423.01	N.A.	12.96%
0-67.80	8783.77	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	0.00
10-20	806.32
20-30	2111.31
30-40	0.00
40-50	2665.21
50-60	2397.27
60-70	0.00
70-80	1546.23
80-90	599.48
90-100	0.00
100-110	218.41
110-120	201.25
120-130	0.00
130-140	175.81
140-150	138.90
150-160	0.00
160-170	89.16
170-180	0.00



C0(Max): ——

C0/C180: ——

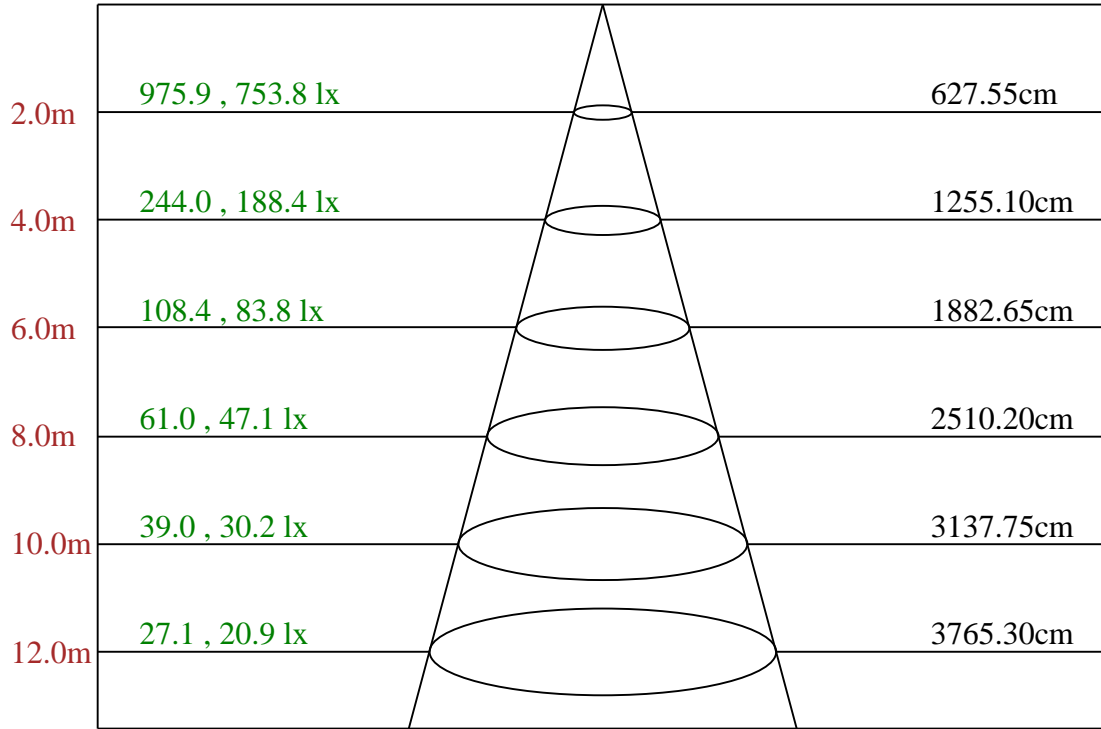
C90/C270: ——

Field angle(10% I_{max}):C0/180Left:84.5 Right:84.5

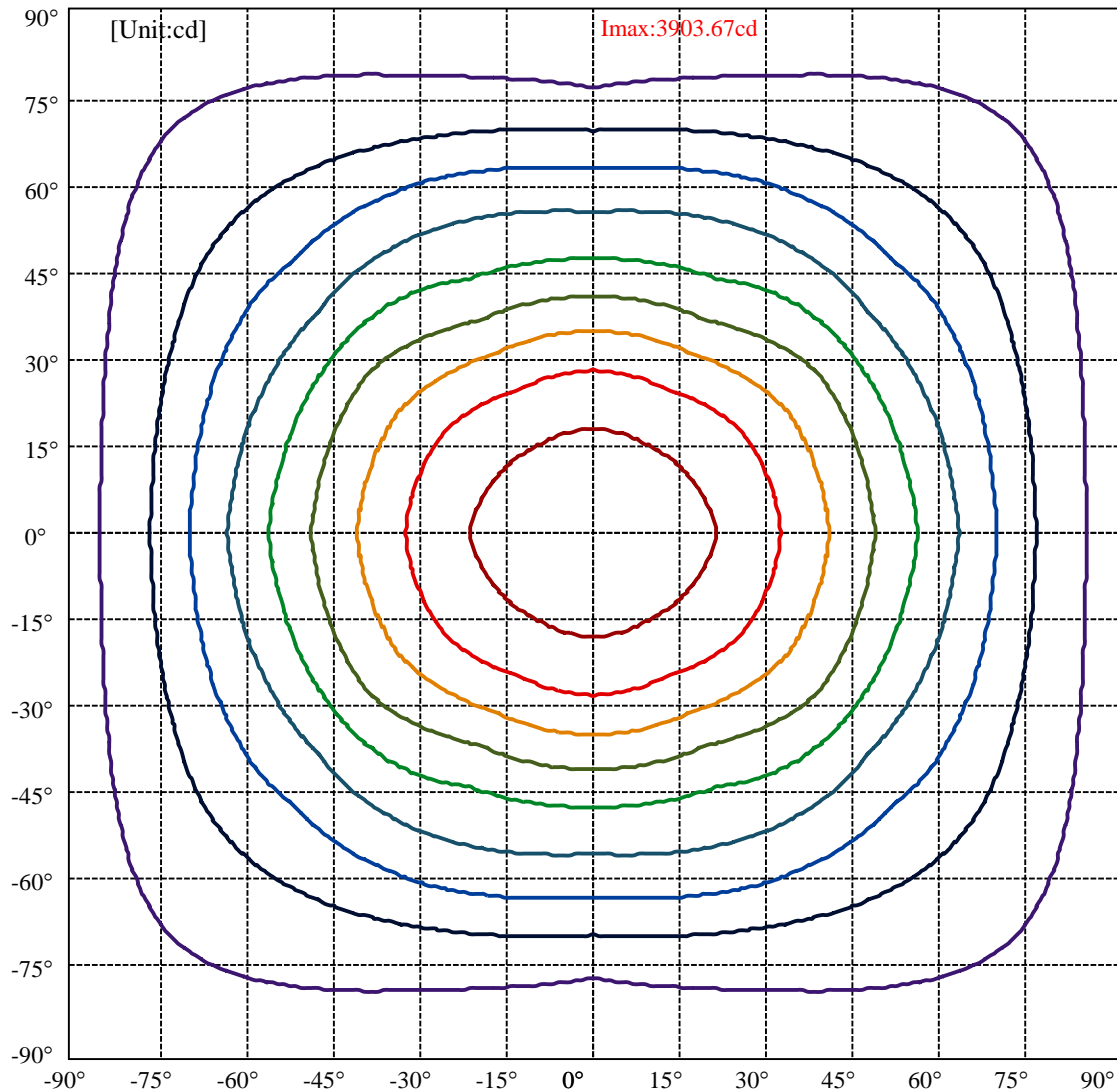
:C90/270Left:76.3 Right:76.3

Beam Angle(50% I_{max}):C0/180Left:55.6 Right:55.6

:C90/270Left:46.9 Right:46.9



Max , Ave Beam angle of C0 plane 114.97

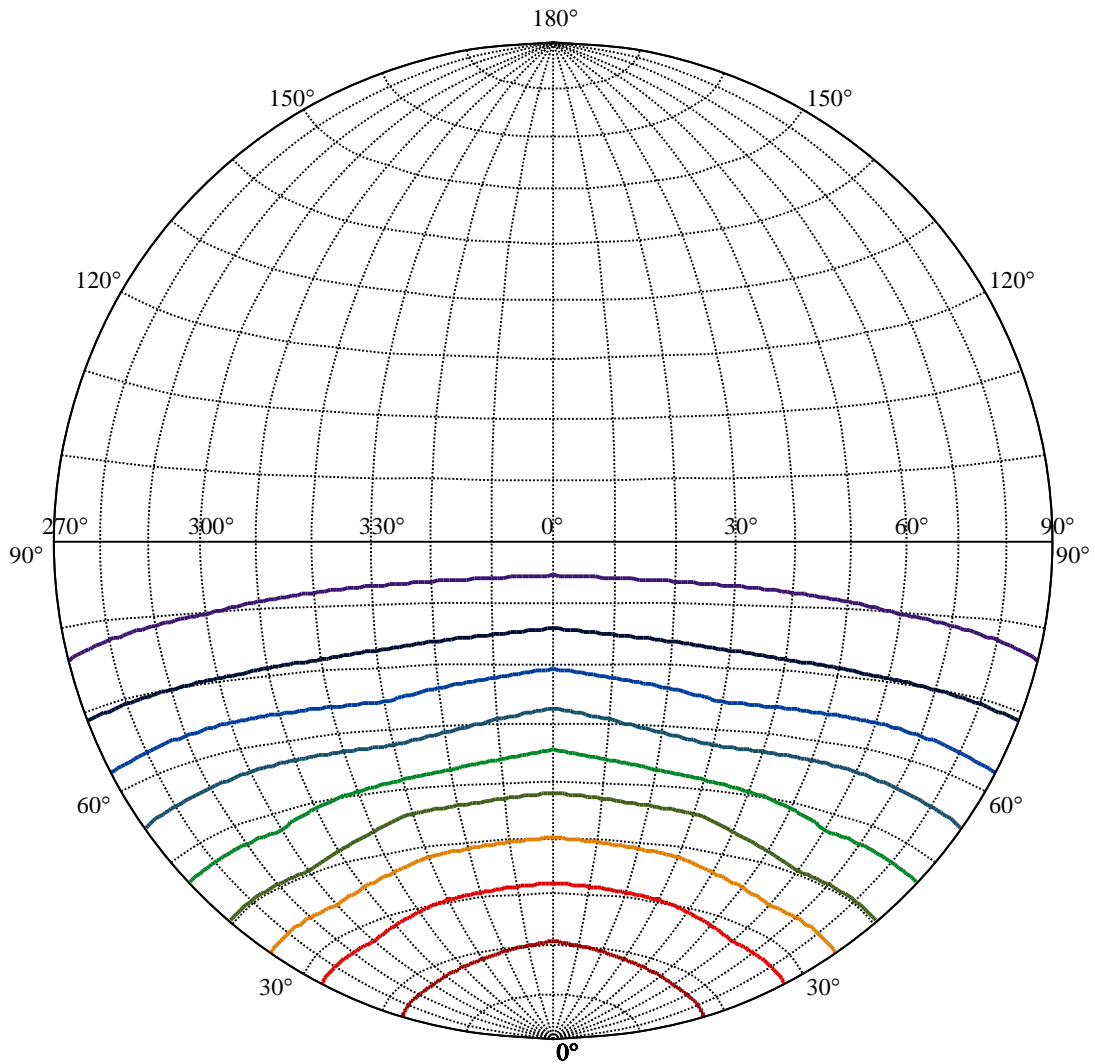


(10% I _{max}) 389.424	—
(20% I _{max}) 778.847	—
(30% I _{max}) 1168.27	—
(40% I _{max}) 1557.69	—
(50% I _{max}) 1947.12	—
(60% I _{max}) 2336.54	—
(70% I _{max}) 2725.97	—
(80% I _{max}) 3115.39	—
(90% I _{max}) 3504.81	—

Equipment: 123
Temperature(°C): 345

Date:
Humidity(%): 456%

Operator: 234












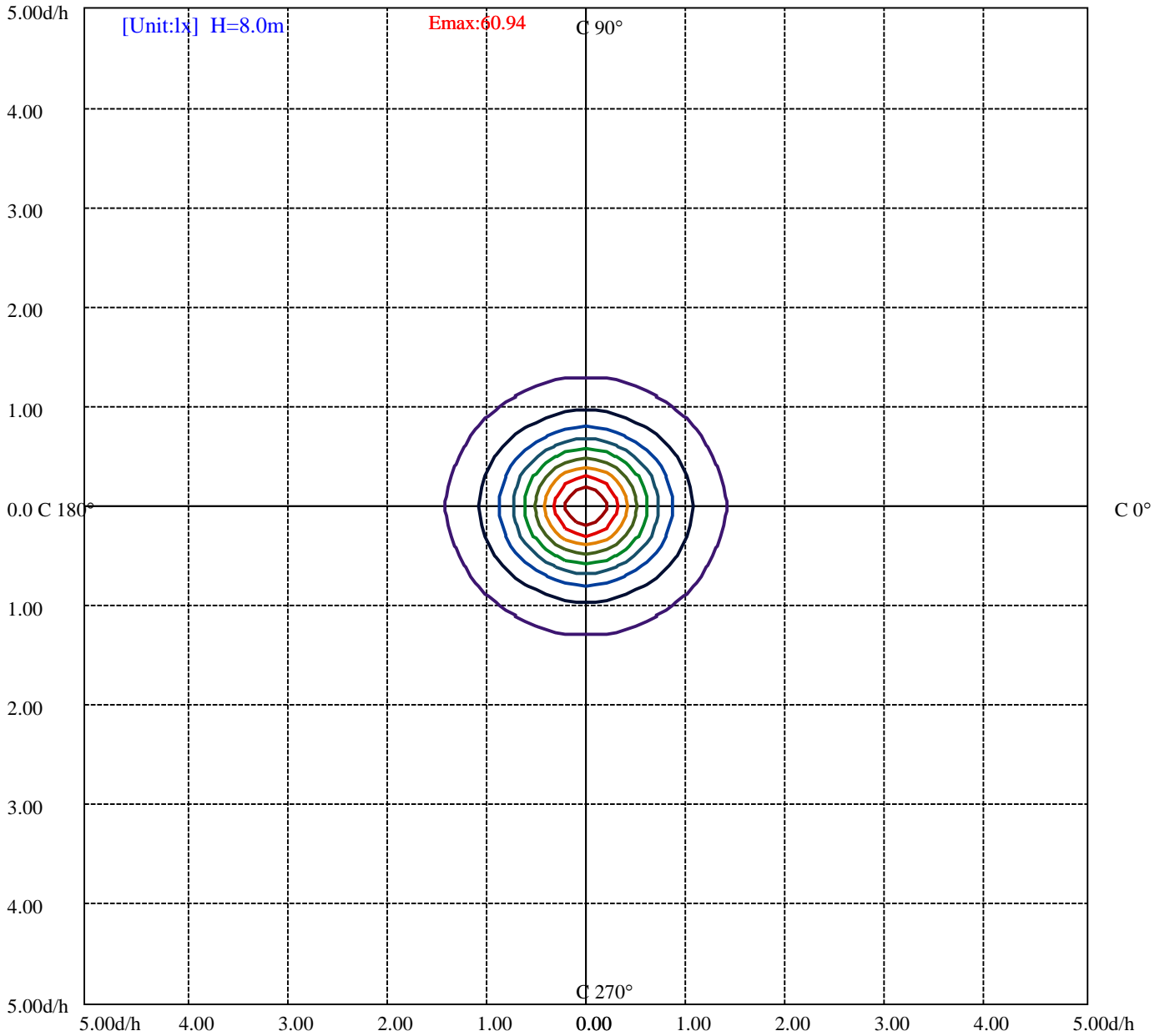
House

[Unit:cd]

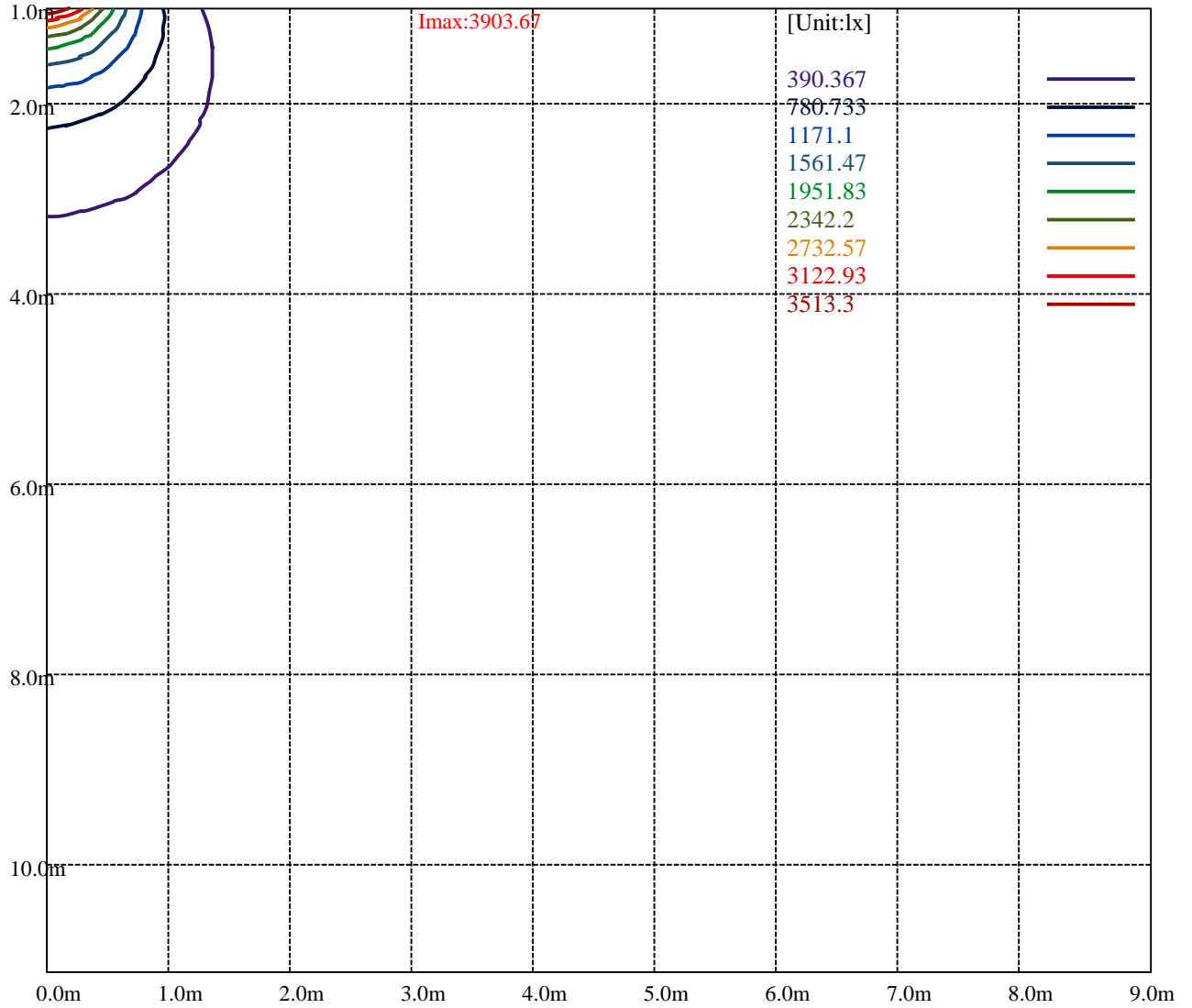
Road

Imax:3903.67

(10% Imax)	390.367	
(20% Imax)	780.733	
(30% Imax)	1171.1	
(40% Imax)	1561.47	
(50% Imax)	1951.83	
(60% Imax)	2342.2	
(70% Imax)	2732.57	
(80% Imax)	3122.93	
(90% Imax)	3513.3	



(10% Emax) 6.093985	—
(20% Emax) 12.18797	—
(30% Emax) 18.28203	—
(40% Emax) 24.37594	—
(50% Emax) 30.47	—
(60% Emax) 36.56391	—
(70% Emax) 42.65797	—
(80% Emax) 48.75188	—
(90% Emax) 54.84594	—



Luminance Table

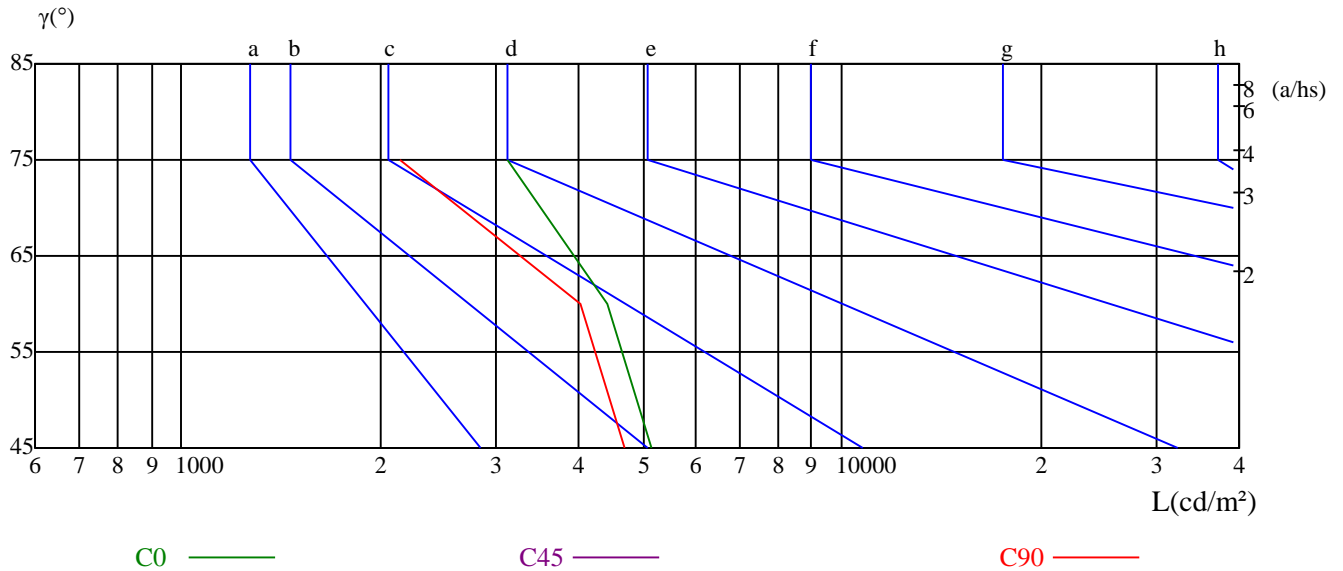
γ	45	50	55	60	65	70	75	80	85
C0	5150	0	0	4422	0	0	3117	0	0
C45	0	0	0	0	0	0	0	0	0
C90	4675	0	0	4031	0	0	2139	0	0

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	5567	2804	0	0	0	0

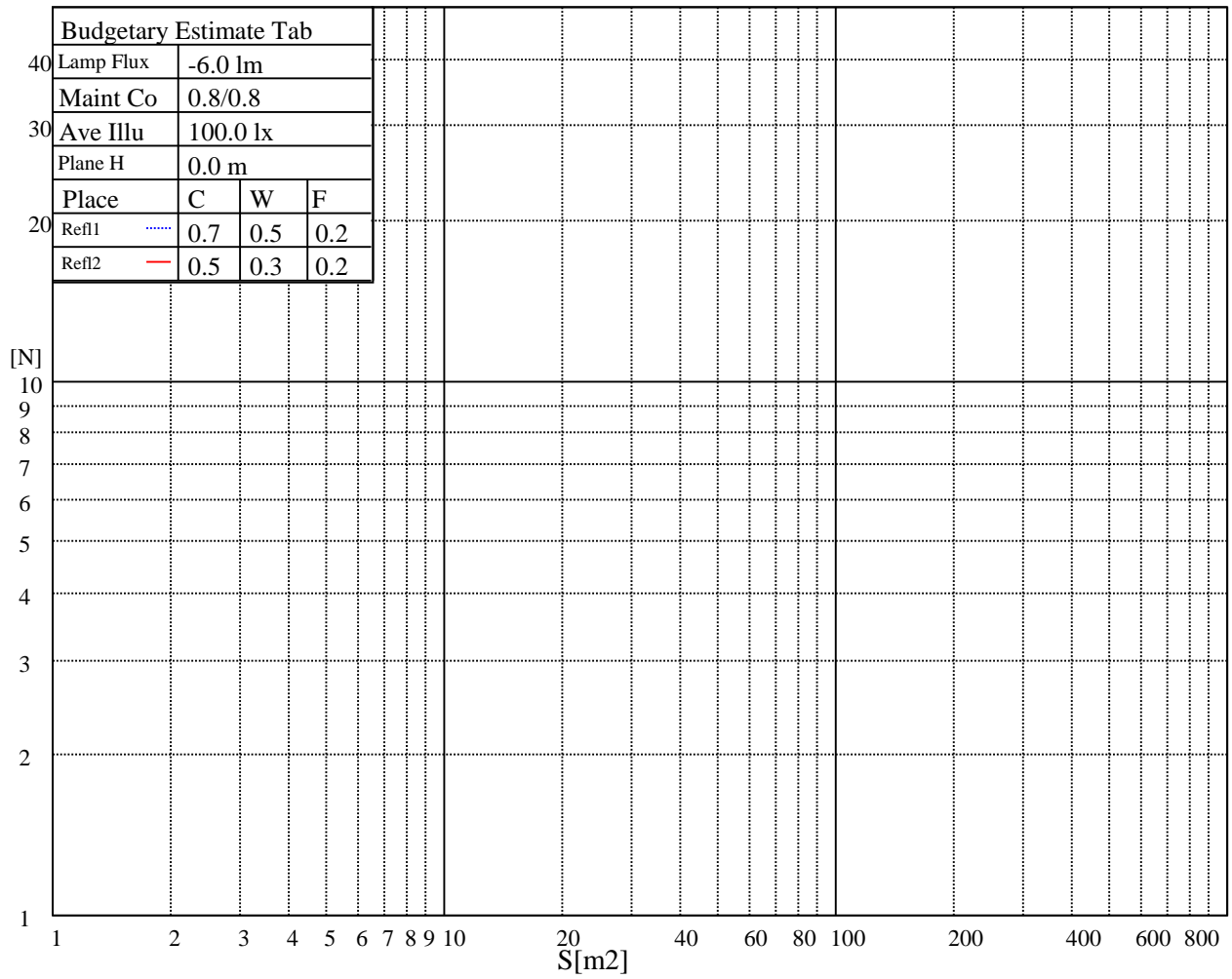
Glare Table

Glare	Quality	Service Values Illuminance(lx)							
		a	b	c	d	e	f	g	h
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

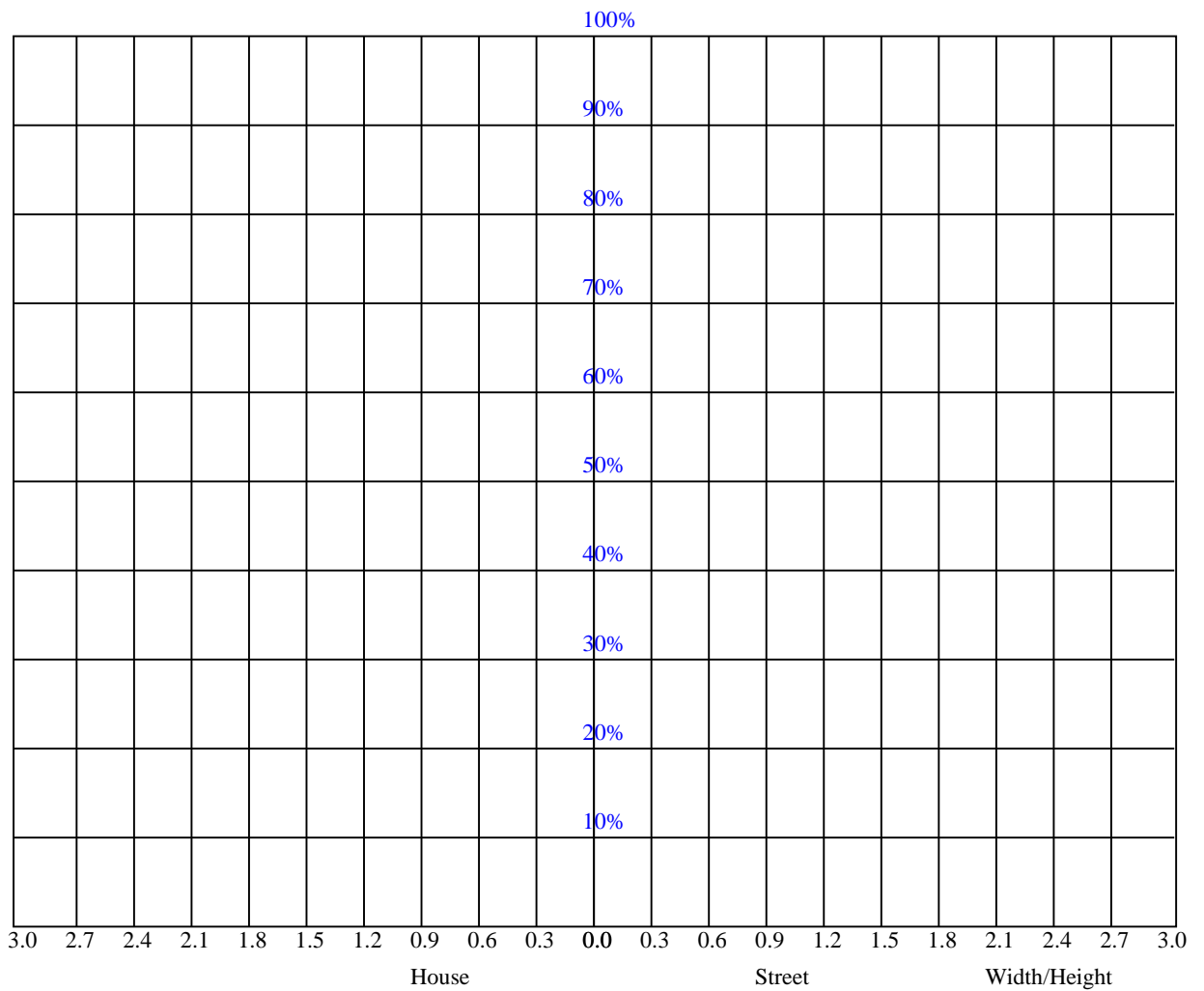
Luminance Limiting Curve



Illumination 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	7.87	9.31	8.36	9.79	10.30	8.56	10.00	9.05	10.48	10.99
	3H	9.24	10.54	9.74	11.03	11.58	10.20	11.51	10.70	11.99	12.54
	4H	9.59	10.83	10.12	11.33	11.89	10.84	12.07	11.36	12.57	13.14
	6H	9.91	11.06	10.45	11.57	12.15	11.37	12.51	11.91	13.03	13.61
	8H	10.06	11.15	10.61	11.69	12.26	11.57	12.66	12.12	13.20	13.77
	12H	10.32	11.36	10.87	11.89	12.51	11.86	12.90	12.41	13.43	14.05
4H	2H	8.37	9.60	8.89	10.10	10.67	8.94	10.17	9.46	10.67	11.24
	3H	9.93	10.97	10.47	11.51	12.10	10.77	11.80	11.30	12.35	12.93
	4H	10.38	11.32	10.94	11.88	12.50	11.52	12.47	12.08	13.02	13.64
	6H	10.70	11.54	11.30	12.13	12.76	12.06	12.91	12.66	13.49	14.13
	8H	10.94	11.71	11.52	12.29	12.93	12.37	13.14	12.95	13.72	14.37
	12H	11.23	11.92	11.83	12.53	13.18	12.69	13.39	13.30	14.00	14.65
8H	4H	10.65	11.42	11.23	12.00	12.65	11.69	12.46	12.27	13.04	13.68
	6H	11.13	12.40	11.74	12.40	13.05	12.39	13.66	13.01	13.66	14.31
	8H	11.43	12.01	12.06	12.65	13.31	12.77	13.34	13.40	13.98	14.64
	12H	12.07	12.59	12.70	13.71	13.94	13.35	13.86	13.98	14.99	15.22
12H	4H	10.69	11.38	11.29	11.99	12.64	11.69	12.39	12.30	13.00	13.65
	6H	12.11	11.80	11.86	12.40	13.11	13.32	13.01	13.07	13.61	14.32
	8H	11.58	12.09	12.21	12.71	13.44	12.86	13.37	13.48	13.99	14.72
Variation with the observer position at spacings:											
S = 1.0H		0.3/-0.4					0.3/-0.6				
S = 1.5H		0.7/-0.8					0.6/-0.6				
S = 2.0H		0.8/-1.0					0.8/-0.7				
Standard tables:		BK4					BK3				
Uncorrected UGR		2.4					2.9				



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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Intensity data(cd)

C/γ(°)	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0
0.0	3903.67	3724.39	3255.38	2564.75	1730.80	836.65	141.01	132.55	132.28
30.0	3903.67	3639.96	3180.33	2329.02	1380.85	714.44	141.01	132.55	132.28
60.0	3896.64	3639.96	2973.94	2074.43	1484.89	554.64	141.01	132.55	132.28
90.0	3894.24	3621.20	3001.41	2017.86	1305.19	404.23	131.61	132.55	132.28
120.0	3894.24	3602.43	2851.98	1999.00	1399.77	479.43	131.61	123.08	132.28
150.0	3903.67	3630.58	3152.19	2329.02	1371.40	695.64	141.01	132.55	132.28
180.0	3903.67	3686.86	3180.33	2461.03	1709.10	805.85	138.17	132.55	132.28
210.0	3903.67	3630.58	3114.66	2470.46	1380.85	639.24	131.61	132.55	132.28
240.0	3896.64	3567.25	3047.93	2027.28	1396.99	495.63	131.61	132.55	132.28
270.0	3894.24	3610.64	3058.37	2065.00	1324.11	423.03	131.61	132.55	132.28
300.0	3894.24	3611.81	3189.71	2102.72	1390.31	498.23	141.01	132.55	141.73
330.0	3903.67	3630.58	3124.04	2489.32	1409.23	658.04	141.01	132.55	141.73
360.0	3903.67	3724.39	3255.38	2564.75	1730.80	836.65	141.01	132.55	132.28

C/γ(°)	135.0	150.0	165.0	180.0
0.0	141.87	141.87	141.44	141.44
30.0	132.41	141.87	150.87	141.44
60.0	141.87	141.87	141.44	141.44
90.0	132.41	141.87	141.44	141.44
120.0	132.41	141.87	141.44	141.44
150.0	132.41	141.87	141.44	141.44
180.0	132.41	141.87	141.44	141.44
210.0	132.41	141.87	141.44	141.44
240.0	141.87	141.87	141.44	141.44
270.0	132.41	141.87	141.44	141.44
300.0	141.87	141.87	141.44	141.44
330.0	141.87	141.87	141.44	141.44
360.0	141.87	141.87	141.44	141.44