
LumCAT: 2-1779-L	
Luminaire: 92.70.131.00	
Report No: NATA0100	Voltage(V): 34.1000
Test No: GC2019120411	Current(A): 0.4470
LampCAT: TRIDONIC SLE G7 15MM	Power (W): 15.2400
Lamp flux(lm): 2031.0	PF: 1.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1963.87
Efficiency(%): 96.69%
Lumens(lm)/Power(W): 128.86
Central intensity(cd): 3867.891
Maximum intensity(cd): 3867.891
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=39.5
[C90/270]Total=39.5
Field angle(10%Imax): [C0/180]Total=68.6
[C90/270]Total=68.6
Maximum s/h(1/2): C0_180=0.66 C90_270=0.66
Maximum s/h(1/4): C0_180=0.62 C90_270=0.62
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 96.69%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.273%

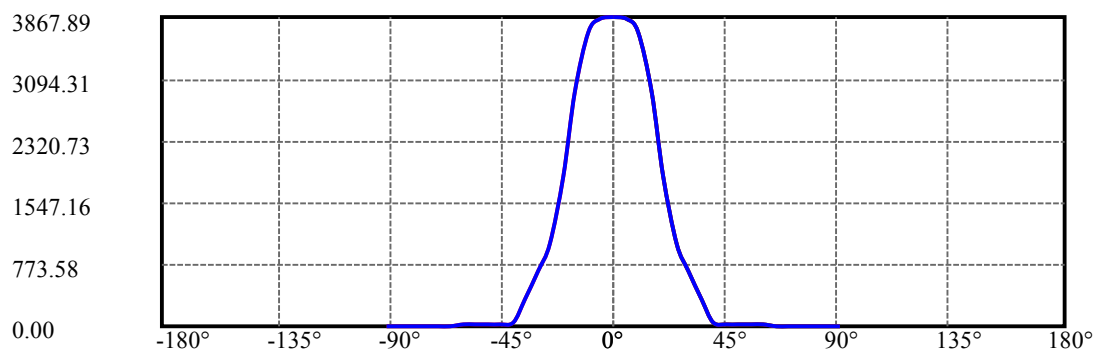
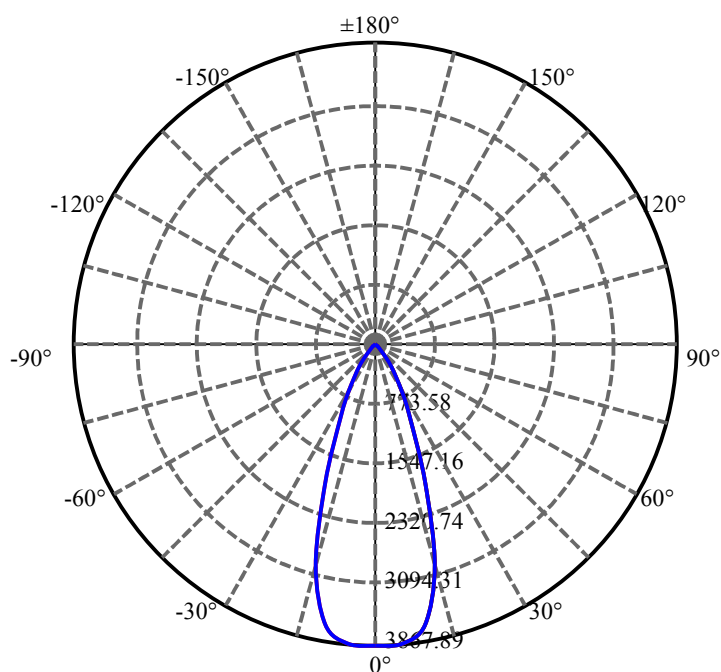
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3867.891	0.000	0	.000%	.000%
5.0	3847.008	92.229	92.229	4.541%	4.696%
10.0	3663.844	268.687	360.916	13.229%	18.378%
15.0	2937.234	391.572	752.488	19.280%	38.317%
20.0	1885.219	397.438	1149.926	19.569%	58.554%
25.0	1036.744	306.460	1456.386	15.089%	74.159%
30.0	703.673	220.251	1676.637	10.844%	85.374%
35.0	336.080	153.111	1829.748	7.539%	93.170%
40.0	59.344	65.973	1895.721	3.248%	96.530%
45.0	20.130	14.715	1910.436	.725%	97.279%
50.0	15.609	7.222	1917.658	.356%	97.647%
55.0	13.437	6.316	1923.974	.311%	97.968%
60.0	12.452	5.984	1929.958	.295%	98.273%
65.0	11.897	5.919	1935.877	.291%	98.575%
70.0	11.454	5.913	1941.79	.291%	98.876%
75.0	10.730	5.798	1947.588	.285%	99.171%
80.0	10.230	5.608	1953.197	.276%	99.456%
85.0	9.788	5.439	1958.636	.268%	99.733%
90.0	9.330	5.235	1963.871	.258%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1676.64	82.55%	85.37%
0-40	1895.72	93.34%	96.53%
0-60	1929.96	95.03%	98.27%
0-90	1958.64	96.44%	99.73%
0-120	1958.64	96.44%	99.73%
0-180	1963.87	96.69%	100.00%
60-90	34.66	1.71%	1.76%
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%
0-27.60	1571.10	77.36%	80.00%

ZONAL LUMEN SUMMARY

0-10	360.92
10-20	789.01
20-30	526.71
30-40	219.08
40-50	21.94
50-60	12.30
60-70	11.83
70-80	11.41
80-90	5.44
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:

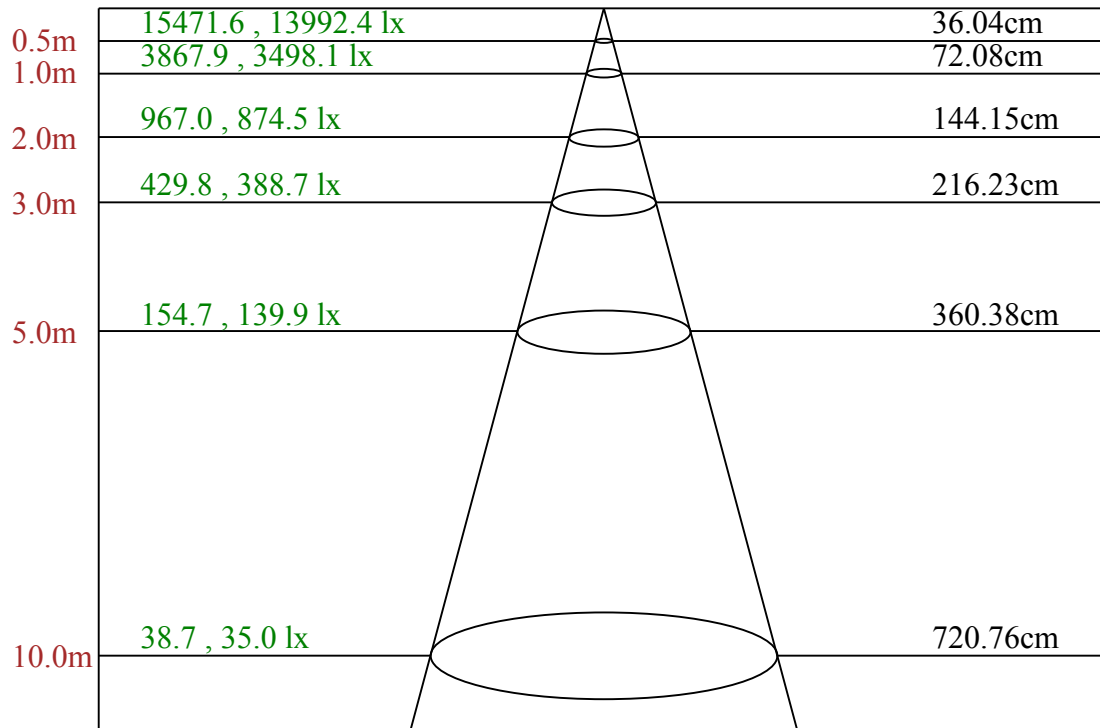
C90/C270:

Field angle(10%Imax):C0/180Left:34.3 Right:34.3

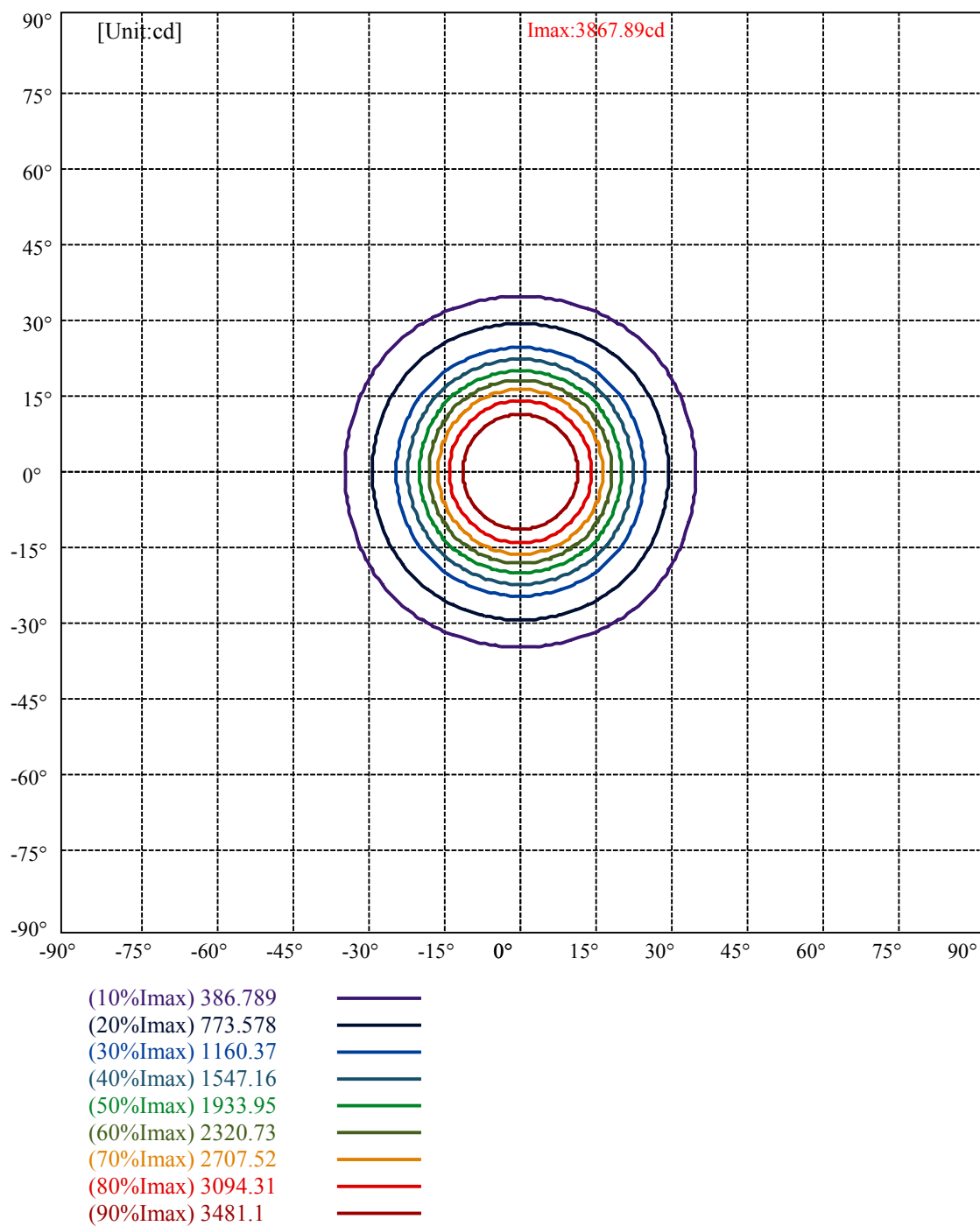
:C90/270Left:34.3 Right:34.3

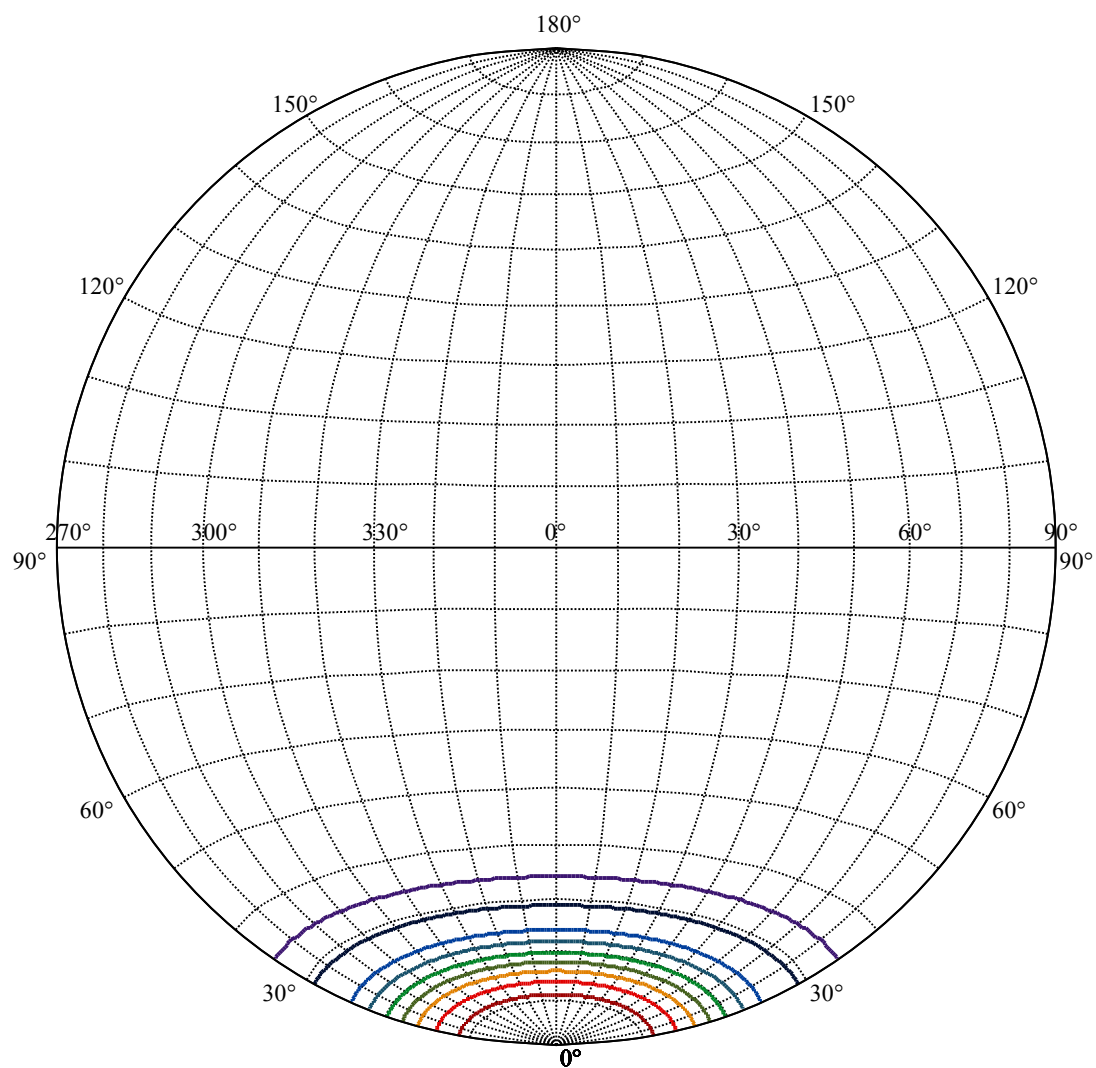
Beam Angle(50%Imax):C0/180Left:19.8 Right:19.8

:C90/270Left:19.8 Right:19.8



Max , Ave Beam angle of C0 plane 39.64





House

[Unit:cd]

Road

Imax:3867.89

(10%Imax) 386.789

(20%Imax) 773.578

(30%Imax) 1160.37

(40%Imax) 1547.16

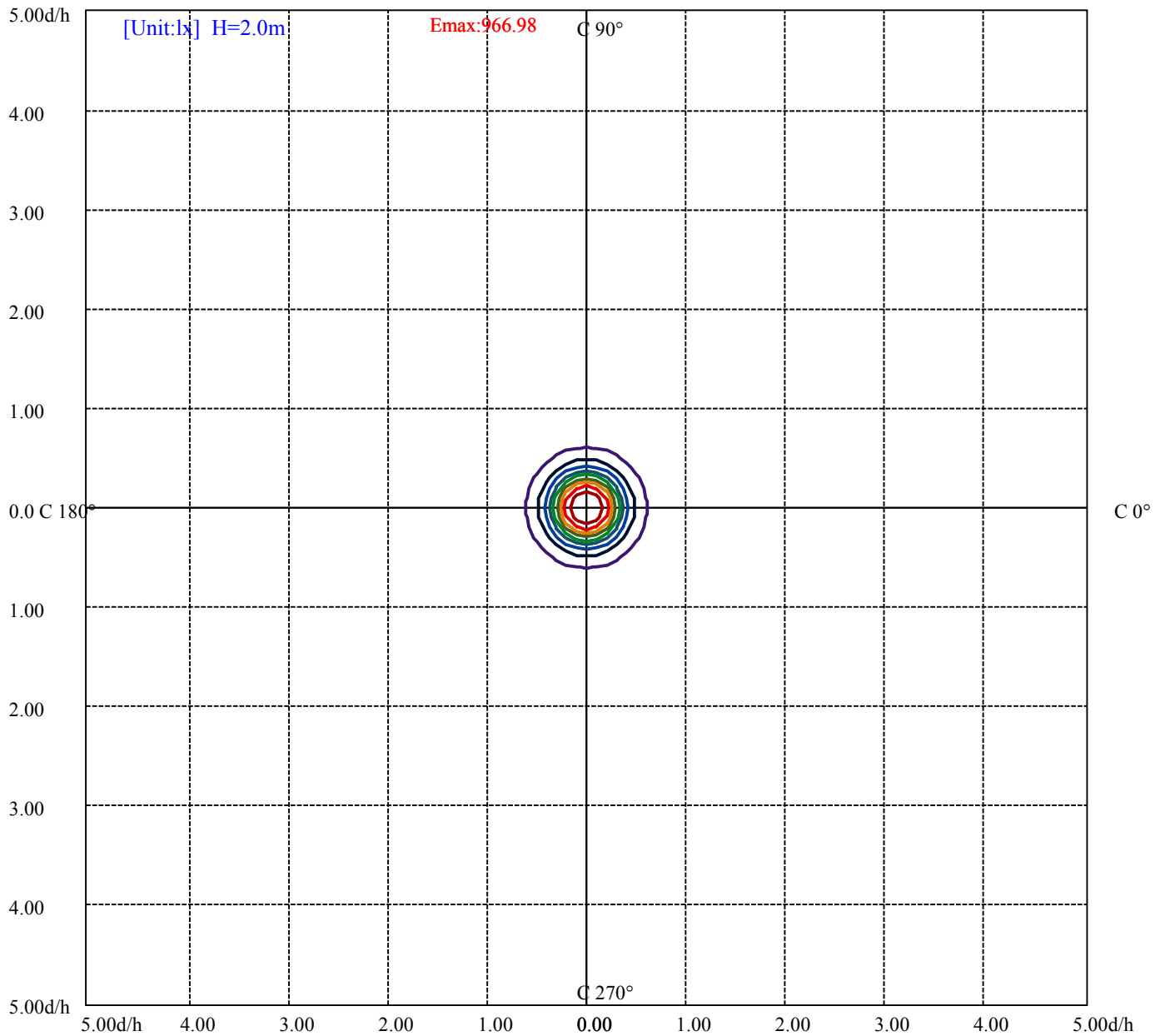
(50%Imax) 1933.95

(60%Imax) 2320.73

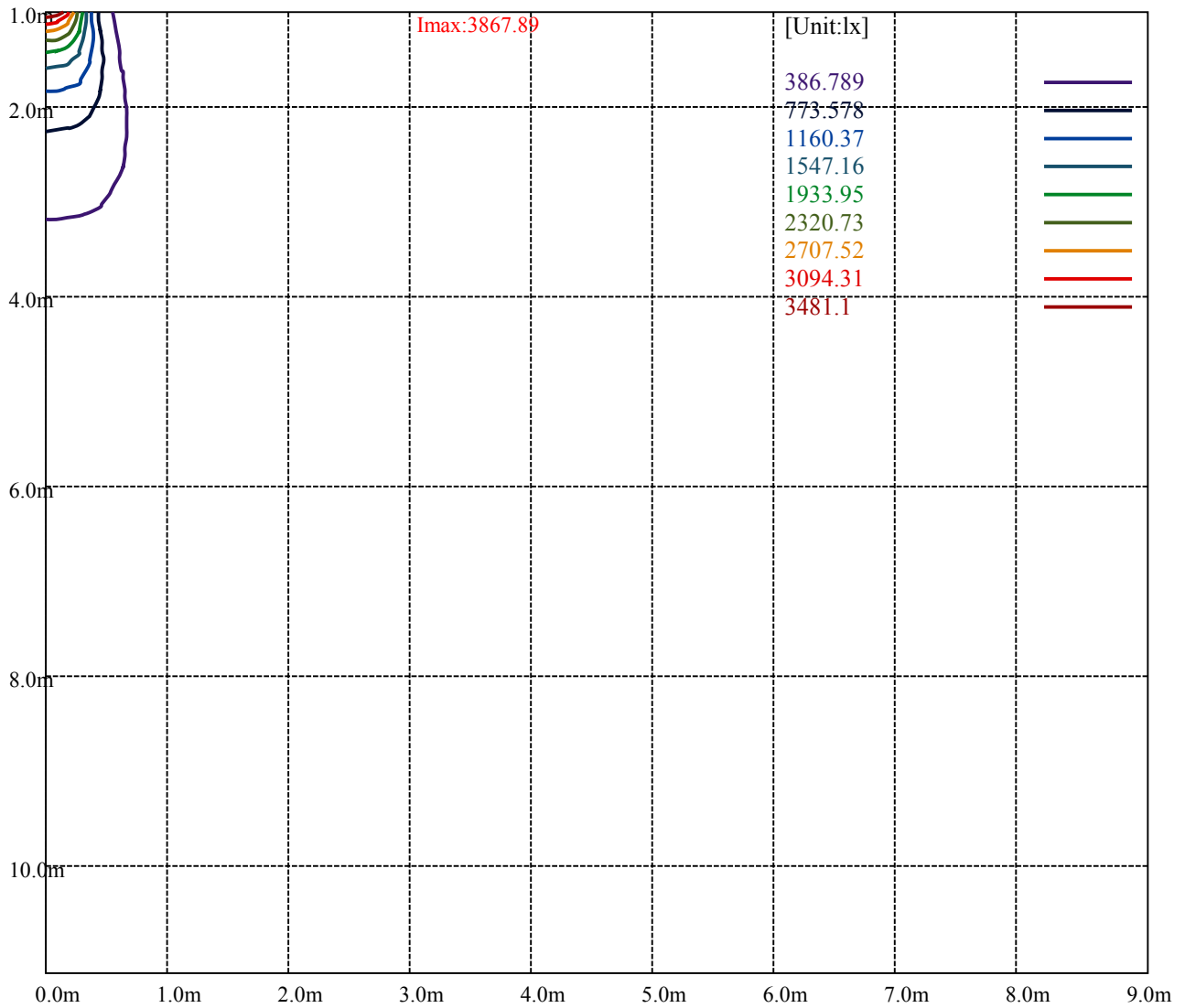
(70%Imax) 2707.52

(80%Imax) 3094.31

(90%Imax) 3481.1



(10%E _{max}) 96.69725	
(20%E _{max}) 193.3945	
(30%E _{max}) 290.0925	
(40%E _{max}) 386.79	
(50%E _{max}) 483.4875	
(60%E _{max}) 580.1825	
(70%E _{max}) 676.88	
(80%E _{max}) 773.5775	
(90%E _{max}) 870.275	



Luminance Table

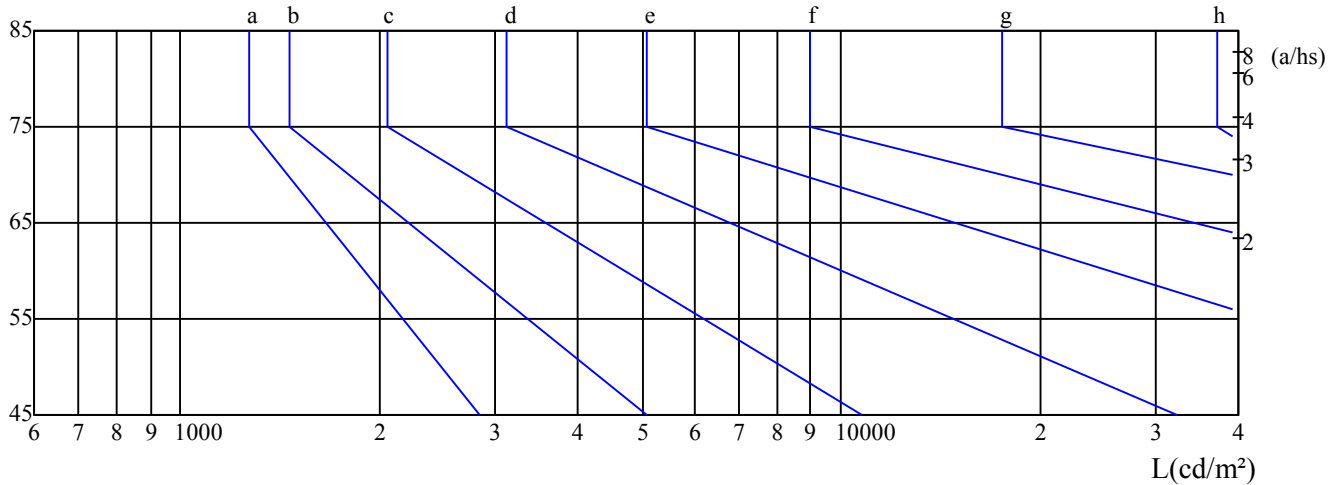
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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	0	0	0	0	0	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

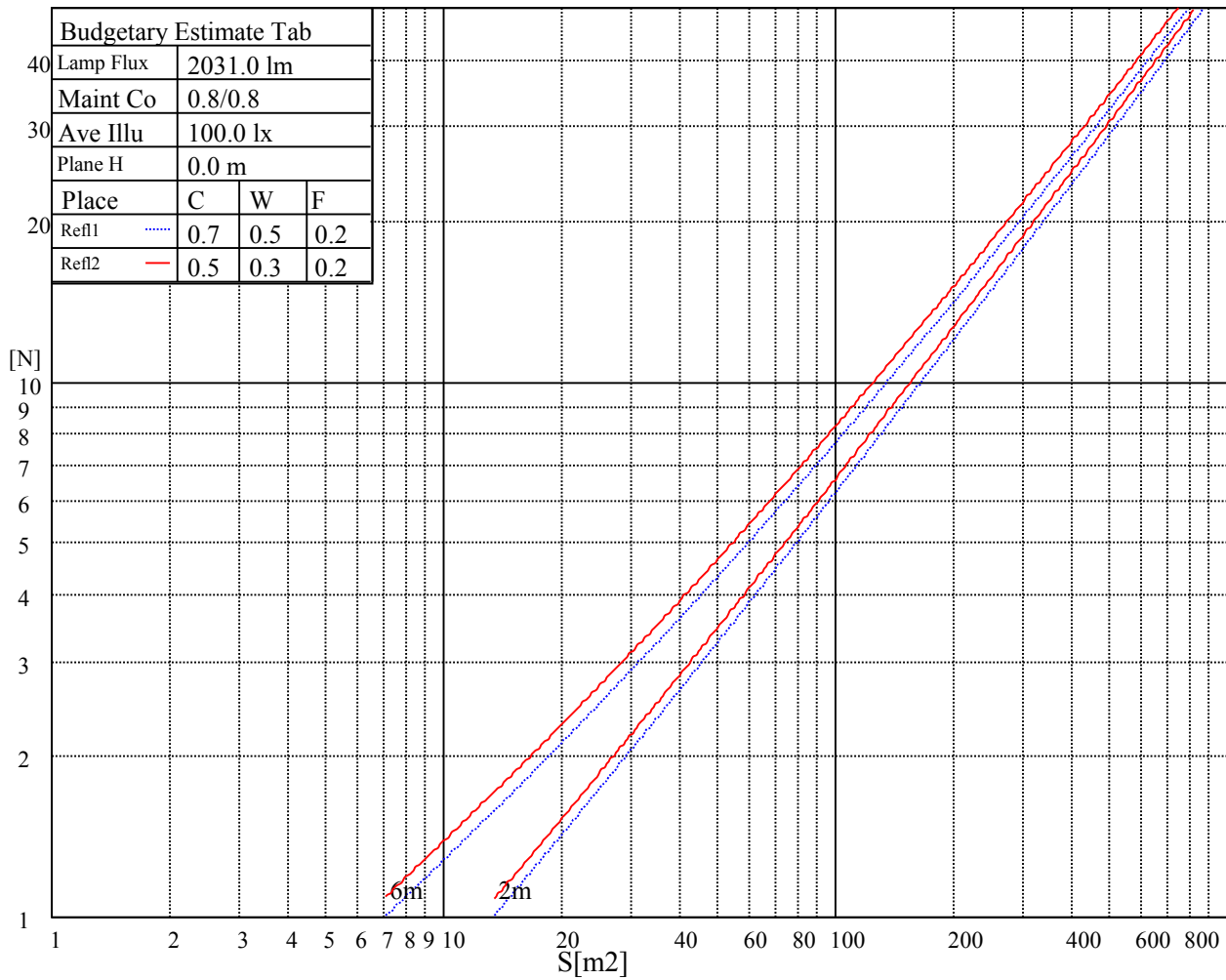
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

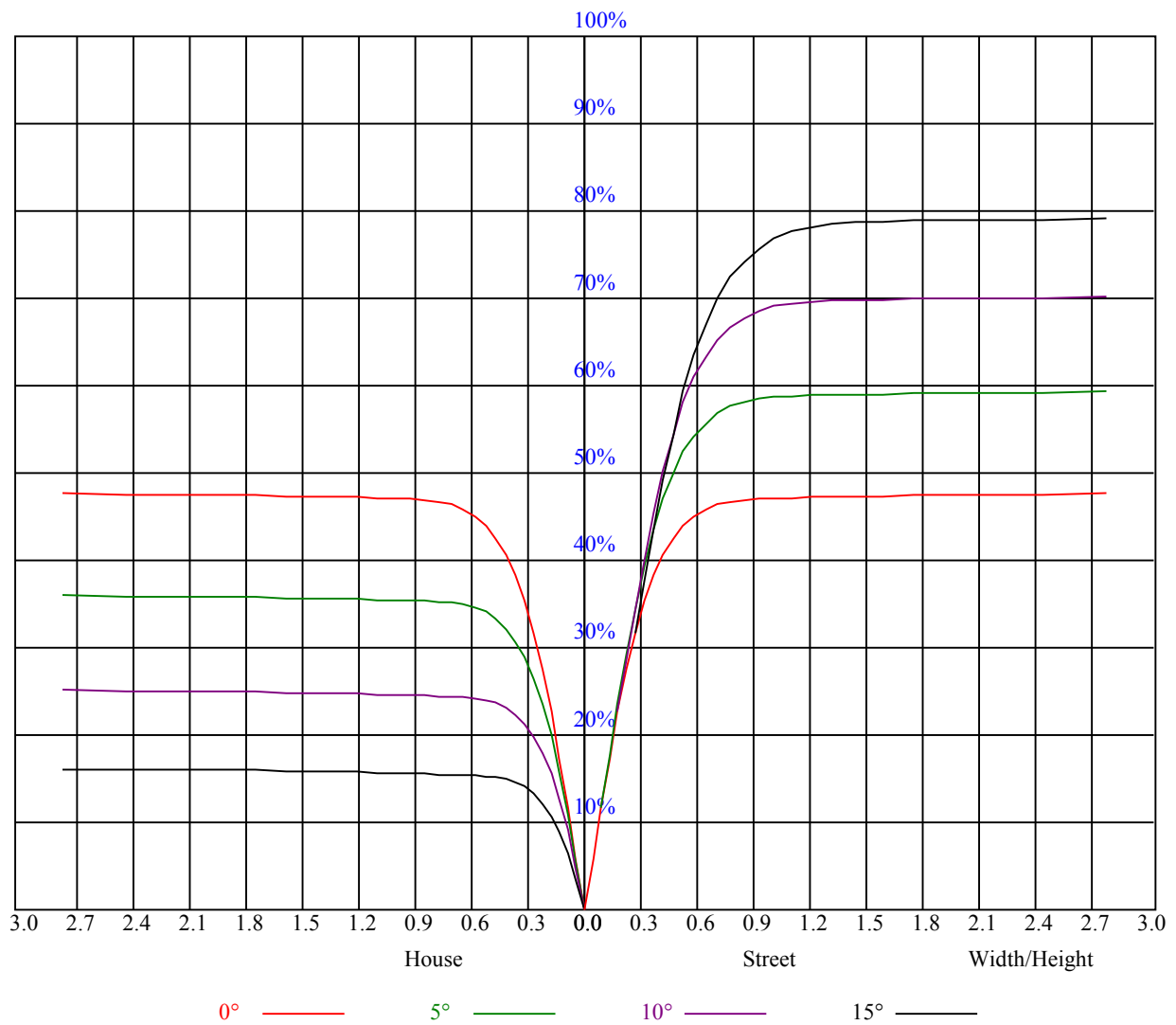
C0 ———

C45 ———

C90 ———



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	1.15	1.15	1.15	1.12	1.12	1.12	1.07	1.07	1.07	1.03	1.03	1.03	0.99	0.99	0.99	0.97
1	1.08	1.05	1.03	1.06	1.04	1.02	1.02	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.91
2	1.01	0.98	0.95	1.00	0.96	0.94	0.97	0.94	0.92	0.94	0.92	0.90	0.91	0.89	0.88	0.86
3	0.96	0.91	0.88	0.94	0.90	0.87	0.92	0.89	0.86	0.90	0.87	0.85	0.87	0.85	0.83	0.82
4	0.91	0.86	0.82	0.89	0.85	0.82	0.87	0.84	0.81	0.86	0.82	0.80	0.84	0.81	0.79	0.78
5	0.86	0.81	0.77	0.85	0.81	0.77	0.83	0.80	0.76	0.82	0.79	0.76	0.81	0.78	0.75	0.74
6	0.82	0.77	0.73	0.81	0.76	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.77	0.74	0.72	0.70
7	0.78	0.73	0.70	0.78	0.73	0.69	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.68	0.67
8	0.75	0.70	0.66	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.65	0.64
9	0.72	0.67	0.63	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.66	0.63	0.69	0.65	0.63	0.61
10	0.69	0.64	0.61	0.68	0.64	0.60	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.63	0.60	0.59



Intensity data(cd)										Appendix Page: 14 Total:14	
C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0		
0.0	3868.31	3809.25	3639.38	2959.88	1924.88	1059.75	704.25	338.63	59.12		
45.0	3867.75	3794.63	3540.38	2804.06	1926.00	1059.19	704.81	314.44	53.89		
90.0	3866.06	3801.38	3540.94	2738.25	1757.81	1014.47	674.27	303.24	45.96		
135.0	3869.44	3880.13	3787.88	3112.88	1942.88	999.56	699.75	351.56	68.96		
180.0	3868.31	3905.44	3735.00	2991.38	1800.56	947.14	665.38	311.91	47.36		
225.0	3867.75	3897.56	3718.13	3002.63	1945.13	1106.04	775.46	378.17	69.98		
270.0	3866.06	3876.19	3734.44	3069.00	2049.75	1133.44	752.06	400.50	87.92		
315.0	3869.44	3811.50	3614.63	2819.81	1734.75	974.36	653.40	290.19	41.57		
360.0	3868.31	3809.25	3639.38	2959.88	1924.88	1059.75	704.25	338.63	59.12		
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	18.39	14.85	13.05	12.21	11.76	11.42	10.97	10.35	9.79		
45.0	20.31	15.75	13.67	12.71	12.21	11.70	10.63	10.13	9.68		
90.0	20.64	15.36	13.44	12.66	12.21	11.64	10.69	10.18	9.73		
135.0	18.39	14.79	12.94	12.15	11.59	11.31	10.69	10.24	9.79		
180.0	18.06	14.74	12.99	12.15	11.59	11.25	10.63	10.24	9.84		
225.0	22.39	16.59	13.78	12.60	12.04	11.53	10.69	10.24	9.84		
270.0	24.53	17.83	14.57	12.99	12.15	11.59	10.86	10.29	9.84		
315.0	18.34	14.96	13.05	12.15	11.64	11.19	10.69	10.18	9.79		
360.0	18.39	14.85	13.05	12.21	11.76	11.42	10.97	10.35	9.79		
C/γ(°)	90.0										
0.0	9.28										
45.0	9.34										
90.0	9.34										
135.0	9.34										
180.0	9.34										
225.0	9.34										
270.0	9.34										
315.0	9.34										
360.0	9.28										