
Nata

LumCAT: 2-1121-A4
Luminaire: TE 2213407-1+92.76.365.00
Report No: NT2015050803
Test No: GC2015050803
LampCAT: SOLERIQ S19
Lamp flux(lm): 3679.0
Number of Lamps: 1
Length(mm): 180
Phm Type: C

Voltage(V): 48.2000
Current(A): 0.7100
Power (W): 34.2200
PF: 0.0000
Ballast type: DC
Width(mm): 180
Height(mm): 0

Photometric Results

Lumens(lm): 3406.94
Efficiency(%): 92.61%
Lumens(lm)/Power(W): 99.56
Central intensity(cd): 9457.995
Maximum intensity(cd): 9457.995
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=29.3
 [C90/270]Total=29.3
Field angle(10%Imax): [C0/180]Total=65.5
 [C90/270]Total=65.5
Maximum s/h(1/2): C0_180=0.50 C90_270=0.50
Maximum s/h(1/4): C0_180=0.47 C90_270=0.47
Up flux rate of lamp(%): 2.33%
Down flux rate of lamp(%): 90.28%
Up flux rate of LUM(%): 2.52%
Down flux rate of LUM(%): 97.48%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 96.211%

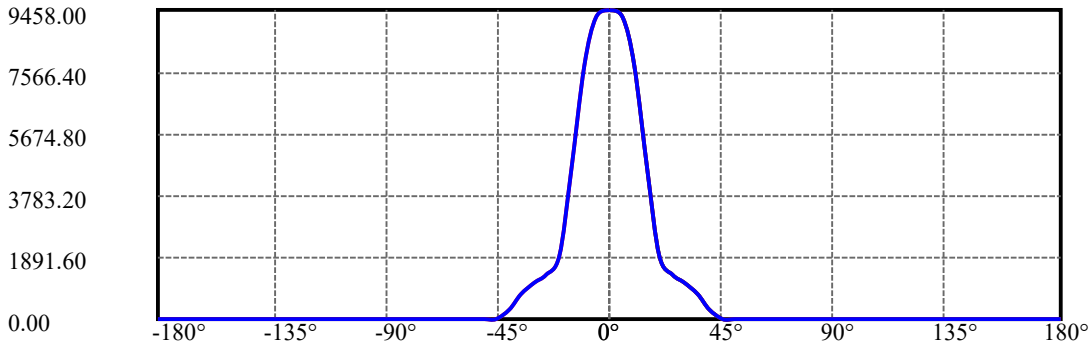
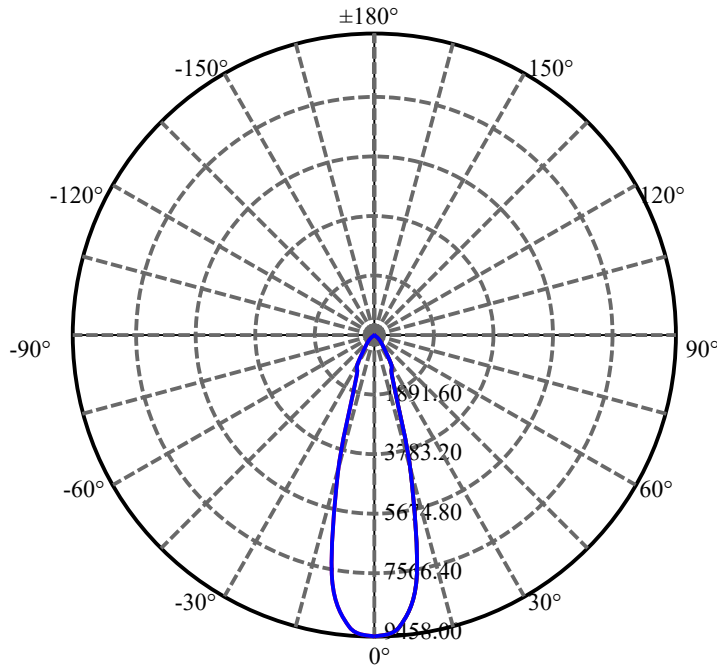
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9457.995	0.000	0	.000%	.000%
5.0	9214.891	223.229	223.229	6.068%	6.552%
10.0	7774.518	607.765	830.994	16.520%	24.391%
15.0	4491.418	727.607	1558.601	19.777%	45.748%
20.0	1913.923	527.890	2086.491	14.349%	61.242%
25.0	1350.363	342.363	2428.854	9.306%	71.291%
30.0	1143.605	315.614	2744.468	8.579%	80.555%
35.0	787.180	284.322	3028.79	7.728%	88.901%
40.0	267.422	175.952	3204.742	4.783%	94.065%
45.0	19.883	53.197	3257.939	1.446%	95.626%
50.0	15.337	7.117	3265.056	.193%	95.835%
55.0	14.134	6.408	3271.464	.174%	96.023%
60.0	13.491	6.386	3277.85	.174%	96.211%
65.0	13.211	6.491	3284.341	.176%	96.401%
70.0	13.715	6.818	3291.159	.185%	96.602%
75.0	15.072	7.524	3298.683	.205%	96.822%
80.0	16.023	8.320	3307.003	.226%	97.067%
85.0	12.183	7.664	3314.667	.208%	97.292%
90.0	11.861	6.584	3321.251	.179%	97.485%
95.0	11.799	6.478	3327.729	.176%	97.675%
100.0	11.847	6.425	3334.155	.175%	97.864%
105.0	11.736	6.310	3340.465	.172%	98.049%
110.0	11.882	6.173	3346.638	.168%	98.230%
115.0	12.099	6.072	3352.71	.165%	98.408%
120.0	12.358	5.946	3358.656	.162%	98.583%
125.0	12.568	5.762	3364.418	.157%	98.752%
130.0	12.736	5.502	3369.919	.150%	98.913%
135.0	12.862	5.172	3375.092	.141%	99.065%
140.0	12.953	4.780	3379.871	.130%	99.205%
145.0	13.645	4.438	3384.309	.121%	99.336%
150.0	16.051	4.373	3388.682	.119%	99.464%
155.0	19.771	4.533	3393.215	.123%	99.597%
160.0	22.989	4.485	3397.7	.122%	99.729%
165.0	24.772	3.936	3401.636	.107%	99.844%
170.0	25.087	2.958	3404.594	.080%	99.931%
175.0	24.429	1.771	3406.365	.048%	99.983%
180.0	23.807	0.577	3406.942	.016%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2744.47	74.60%	80.56%
0-40	3204.74	87.11%	94.07%
0-60	3277.85	89.10%	96.21%
0-90	3321.25	90.28%	97.48%
0-120	3358.66	91.29%	98.58%
0-180	3406.94	92.61%	100.00%
60-90	49.79	1.35%	1.46%
90-120	43.99	1.20%	1.29%
90-130	55.25	1.50%	1.62%
90-150	74.01	2.01%	2.17%
90-180	91.70	2.49%	2.69%
0-29.70	2725.55	74.08%	80.00%

ZONAL LUMEN SUMMARY

0-10	830.99
10-20	1255.50
20-30	657.98
30-40	460.27
40-50	60.31
50-60	12.79
60-70	13.31
70-80	15.84
80-90	14.25
90-100	12.90
100-110	12.48
110-120	12.02
120-130	11.26
130-140	9.95
140-150	8.81
150-160	9.02
160-170	6.89
170-180	1.77



C0(Max): —————

C0/C180: —————

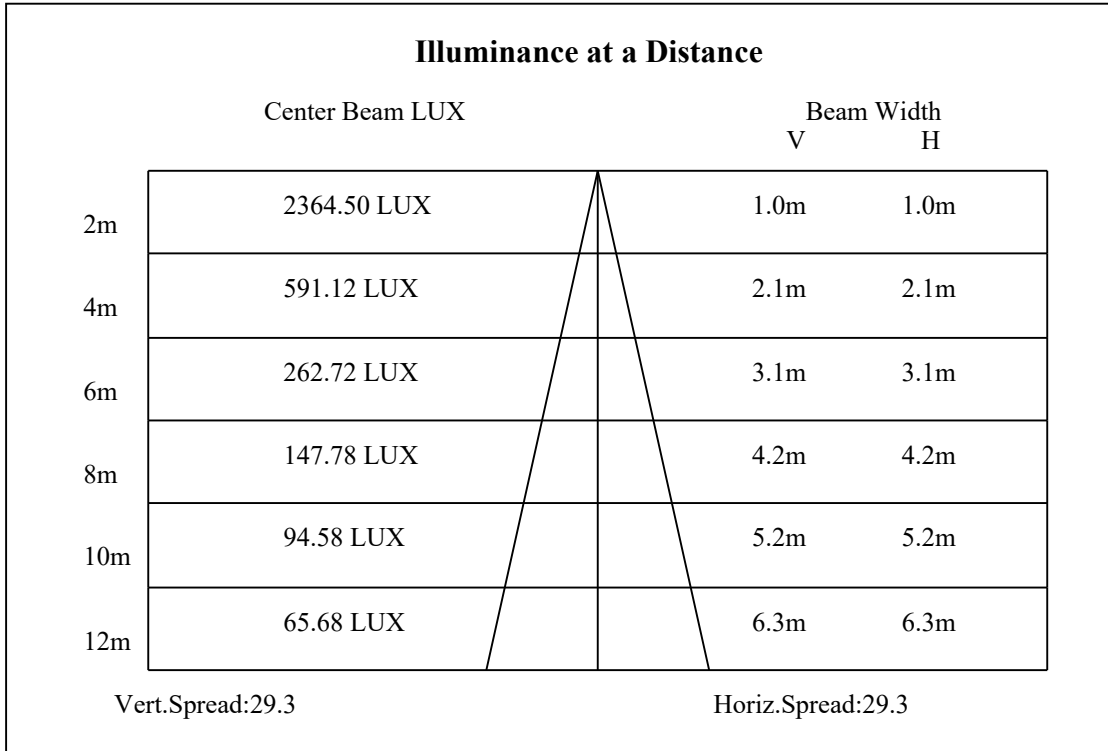
C90/C270: —————

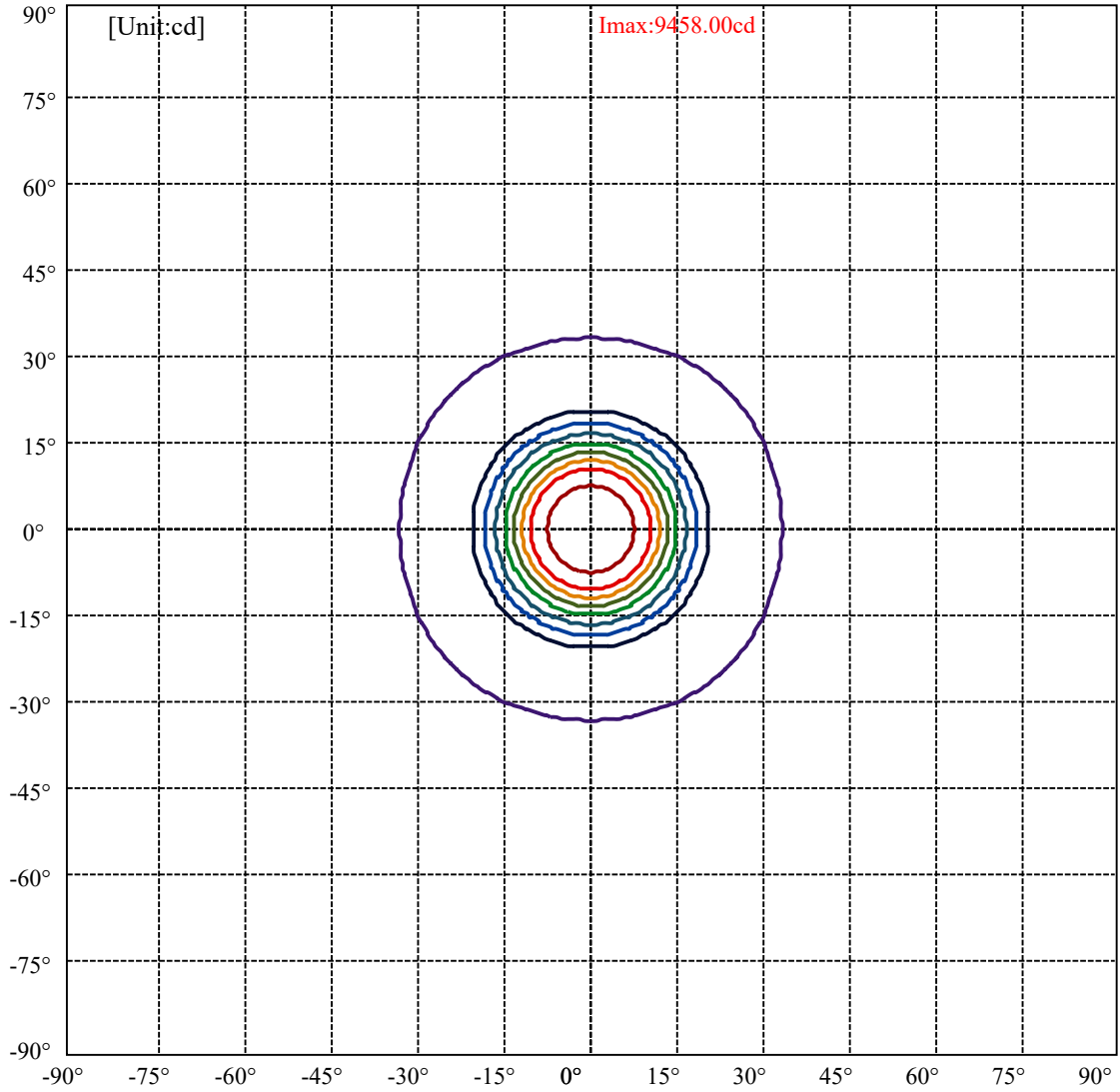
Field angle(10%Imax):C0/180Left:32.8 Right:32.8

:C90/270Left:32.8 Right:32.8

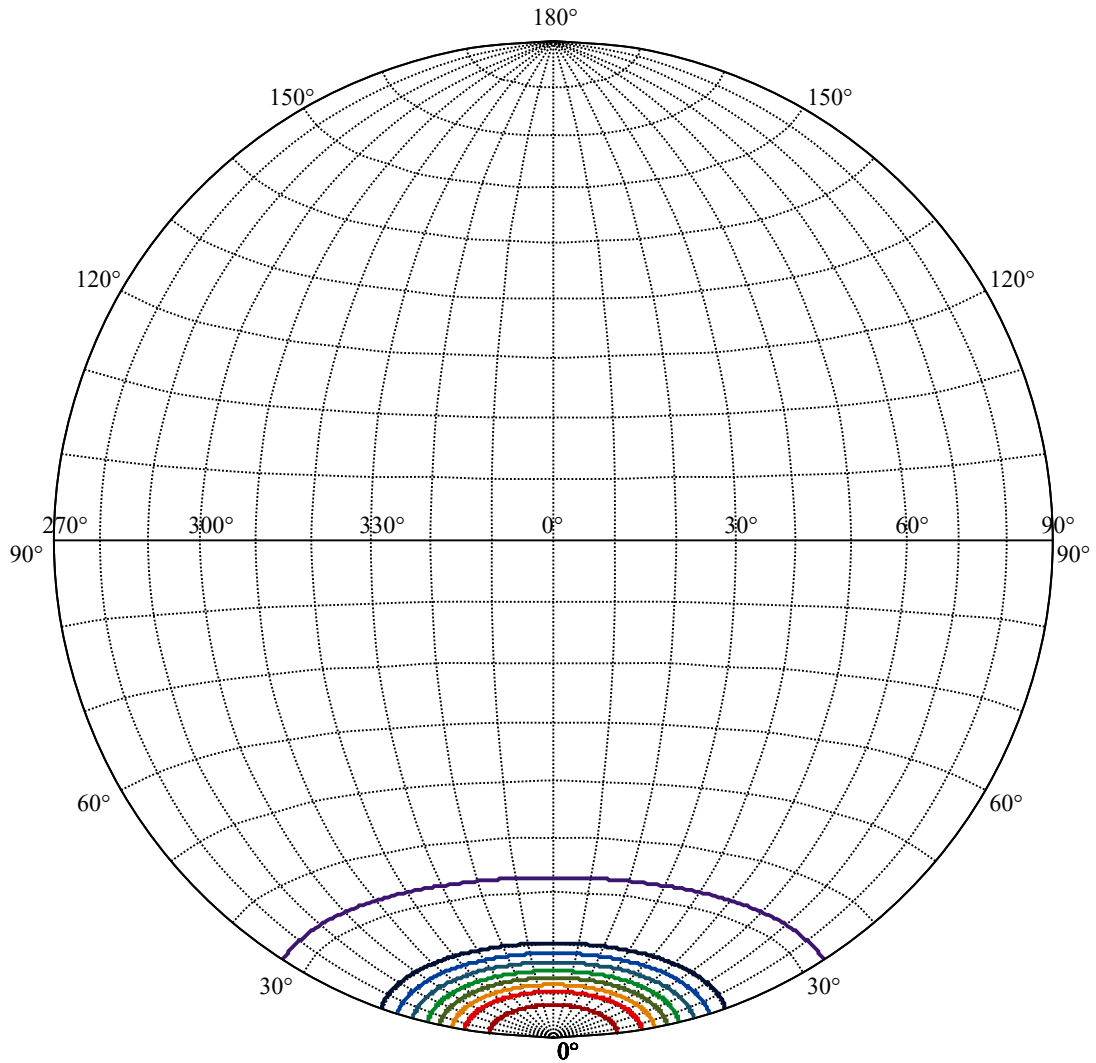
Beam Angle(50%Imax):C0/180Left:14.6 Right:14.6

:C90/270Left:14.6 Right:14.6



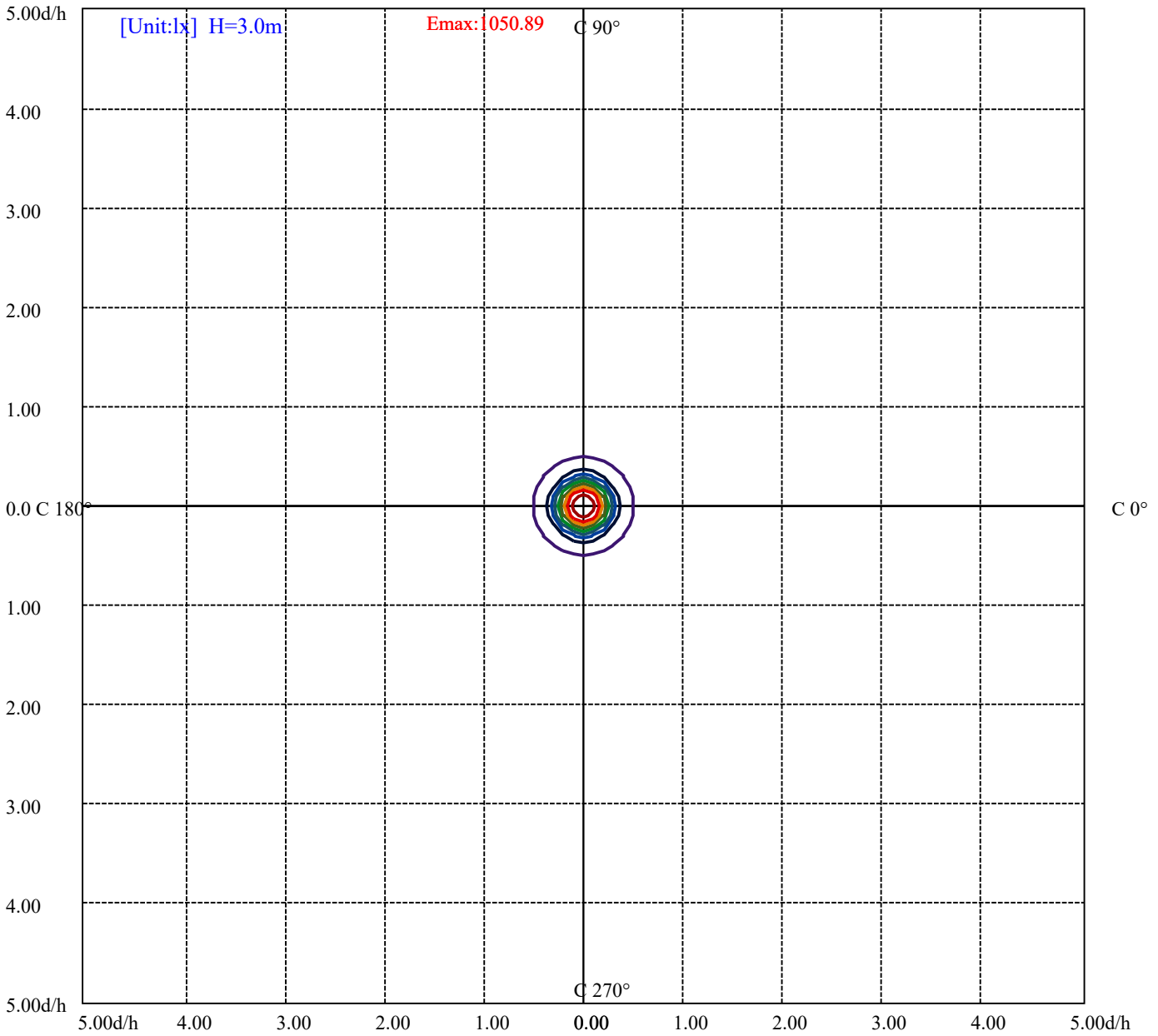


(10%Imax)	945.799	—
(20%Imax)	1891.6	—
(30%Imax)	2837.4	—
(40%Imax)	3783.2	—
(50%Imax)	4729	—
(60%Imax)	5674.8	—
(70%Imax)	6620.6	—
(80%Imax)	7566.4	—
(90%Imax)	8512.2	—

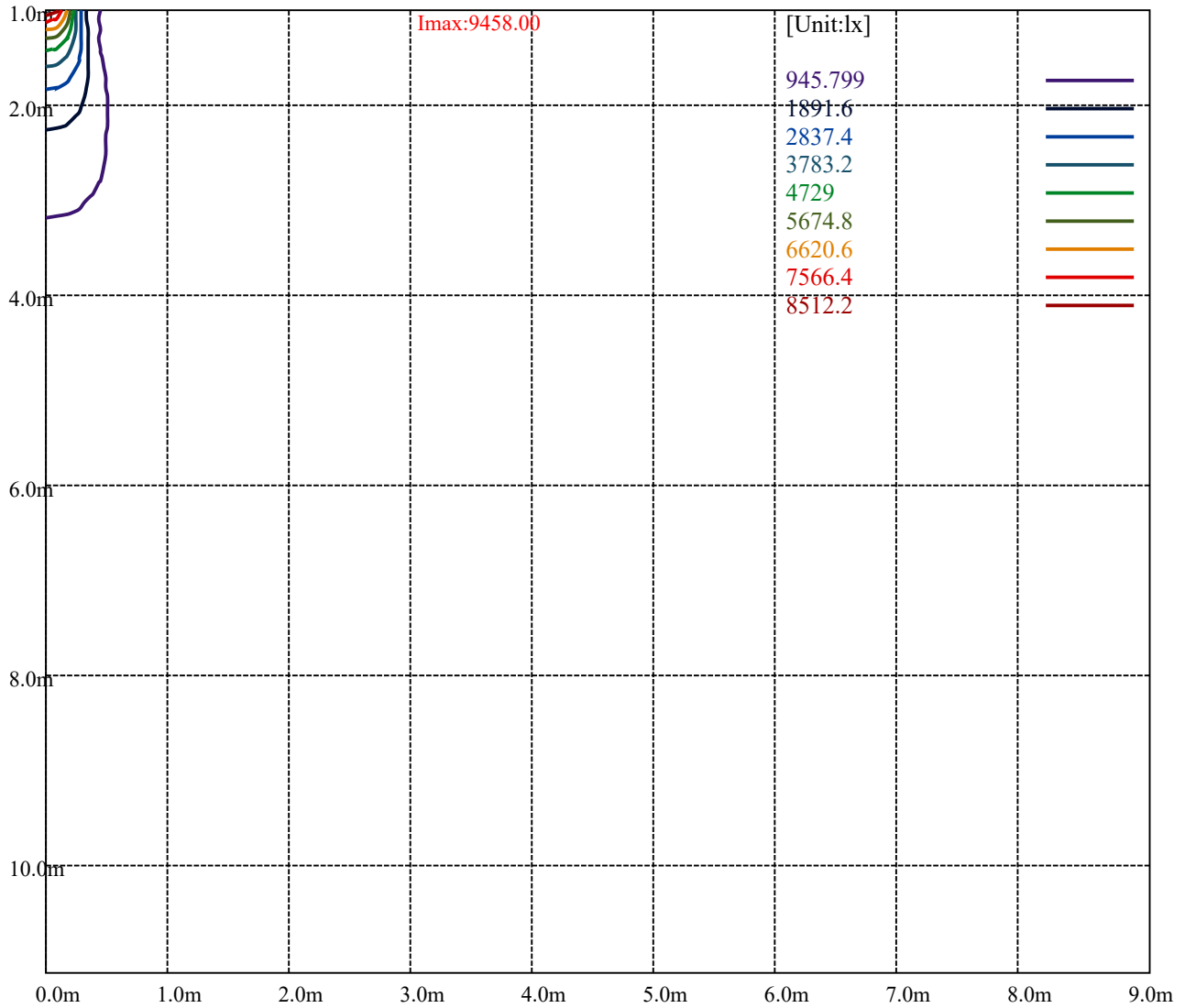


I_{max}:9458.00

(10%I _{max}) 945.799	—
(20%I _{max}) 1891.6	—
(30%I _{max}) 2837.4	—
(40%I _{max}) 3783.2	—
(50%I _{max}) 4729	—
(60%I _{max}) 5674.8	—
(70%I _{max}) 6620.6	—
(80%I _{max}) 7566.4	—
(90%I _{max}) 8512.2	—



(10%Emax) 105.0888	—
(20%Emax) 210.1778	—
(30%Emax) 315.2667	—
(40%Emax) 420.3544	—
(50%Emax) 525.4434	—
(60%Emax) 630.5322	—
(70%Emax) 735.6211	—
(80%Emax) 840.71	—
(90%Emax) 945.799	—



Luminance Table

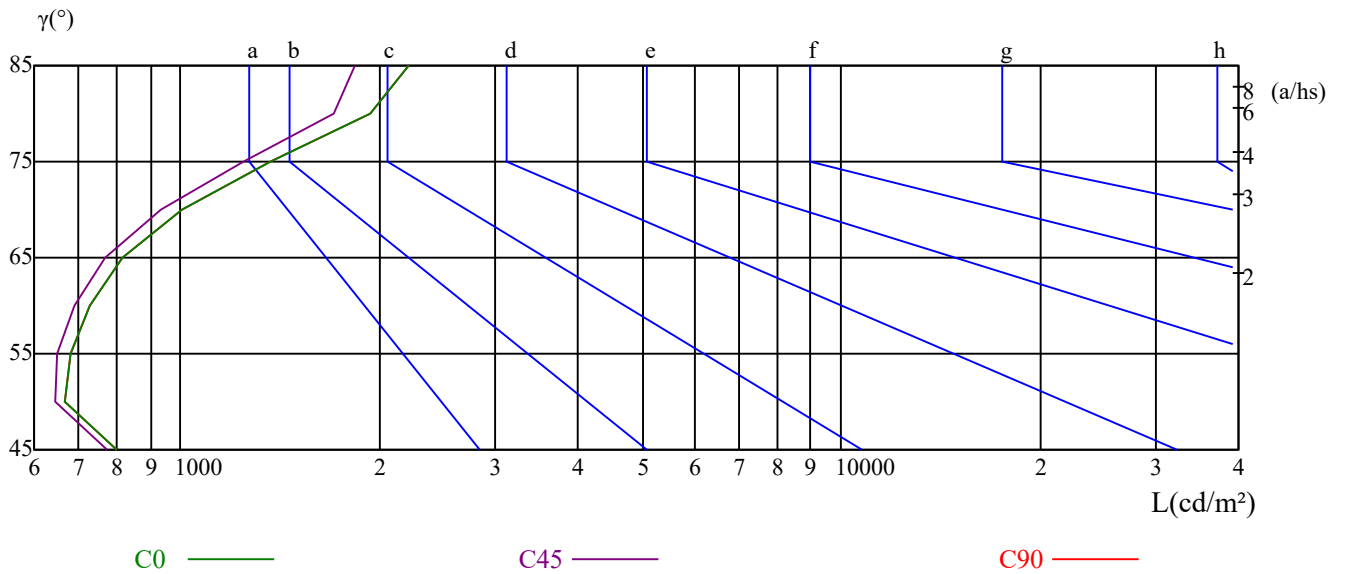
γ	45	50	55	60	65	70	75	80	85
C0	801	670	680	728	819	1007	1371	1934	2210
C45	776	646	651	692	770	935	1248	1707	1838
C90	801	670	680	728	819	1007	1371	1934	2210

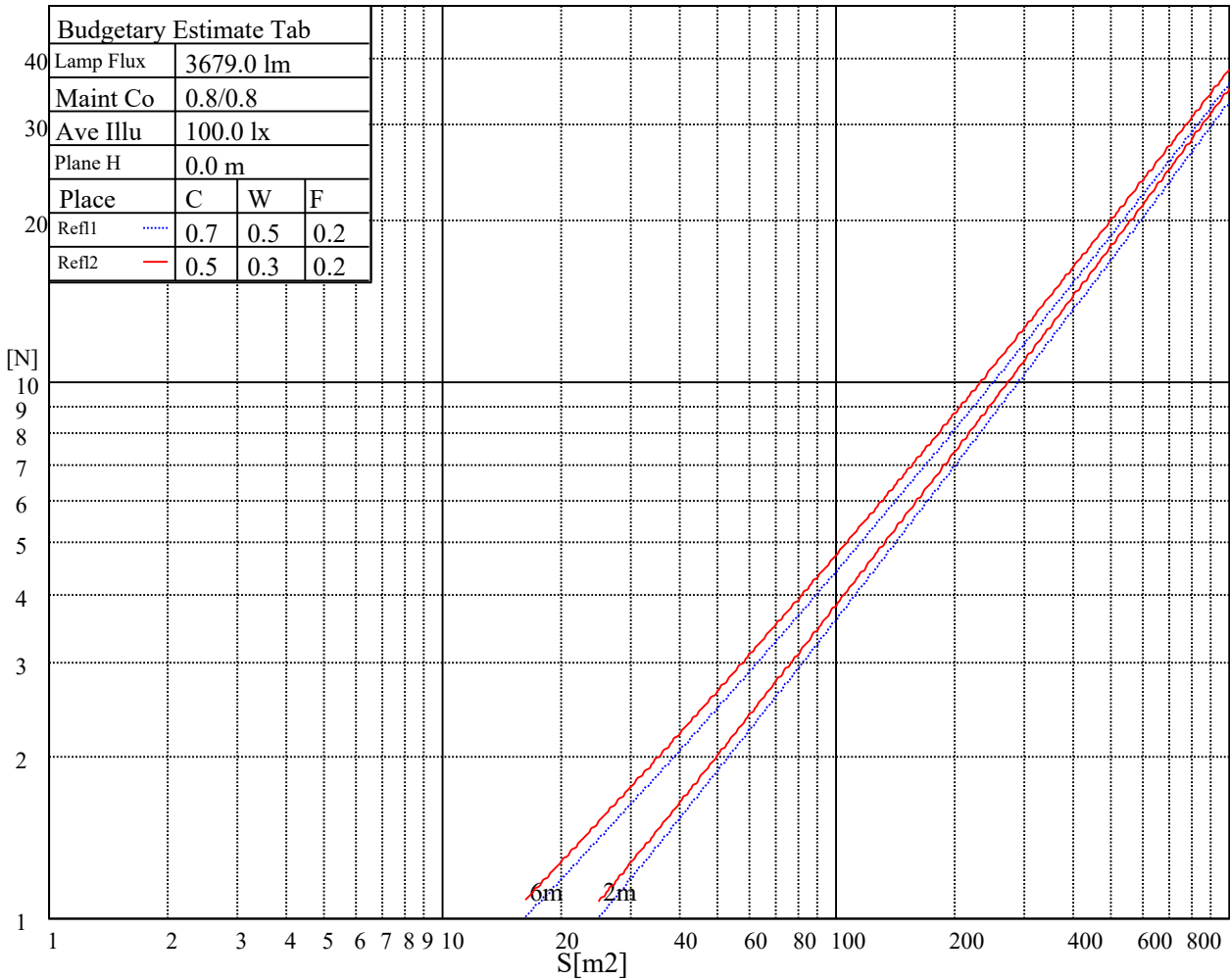
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
965	965	965	1797	1797	1797	4314	4314	4314

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





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	1.10	1.10	1.10	1.07	1.07	1.07	1.02	1.02	1.02	0.97	0.97	0.97	0.92	0.92	0.92	0.90
1	1.03	1.01	0.99	1.01	0.99	0.97	0.96	0.95	0.94	0.93	0.91	0.90	0.89	0.88	0.87	0.86
2	0.97	0.93	0.91	0.95	0.92	0.89	0.92	0.89	0.87	0.89	0.87	0.85	0.86	0.84	0.83	0.81
3	0.91	0.87	0.84	0.90	0.86	0.83	0.87	0.84	0.82	0.85	0.82	0.80	0.83	0.81	0.79	0.77
4	0.87	0.82	0.79	0.86	0.82	0.78	0.83	0.80	0.77	0.81	0.78	0.76	0.79	0.77	0.75	0.74
5	0.83	0.78	0.75	0.82	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.73	0.76	0.74	0.72	0.70
6	0.79	0.74	0.71	0.78	0.74	0.70	0.76	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.67
7	0.75	0.71	0.67	0.75	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.71	0.68	0.66	0.65
8	0.72	0.68	0.64	0.72	0.67	0.64	0.71	0.67	0.64	0.69	0.66	0.63	0.68	0.65	0.63	0.62
9	0.69	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.60
10	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.58	0.57

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	9419.25	9072.36	7495.12	3896.39	1774.75	1301.97	1127.96	656.30	290.94
45.0	9486.95	9410.30	8316.47	5030.50	2111.57	1383.65	1195.66	845.41	334.58
90.0	9479.68	9265.39	7652.90	4407.77	1801.04	1333.30	1100.60	792.71	238.91
135.0	9446.11	9335.88	8353.39	5284.52	2191.02	1400.44	1212.45	909.75	363.68
180.0	9419.25	9276.58	8181.63	5248.71	2180.39	1389.81	1108.77	888.94	310.13
225.0	9486.95	9142.30	7419.58	3940.59	1740.06	1323.23	1108.88	721.48	174.68
270.0	9479.68	9212.79	7878.38	4379.80	1865.95	1366.87	1186.71	810.16	299.33
315.0	9446.11	9003.54	6898.68	3743.08	1646.62	1303.64	1107.82	672.69	127.12
360.0	9419.25	9072.36	7495.12	3896.39	1774.75	1301.97	1127.96	656.30	290.94

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	17.68	14.49	13.88	13.43	13.32	13.65	15.33	15.27	12.37
45.0	20.81	16.06	14.32	13.65	13.37	16.23	20.53	21.76	12.20
90.0	19.08	15.27	14.27	13.48	13.15	14.32	17.79	18.41	12.14
135.0	22.32	15.39	14.38	13.65	13.20	13.43	15.11	17.29	12.25
180.0	21.60	16.11	14.21	13.37	12.98	13.20	13.15	14.60	12.09
225.0	18.74	14.66	14.04	13.43	13.20	12.98	12.81	13.32	12.09
270.0	20.98	15.61	14.16	13.65	13.26	12.98	12.87	13.54	12.25
315.0	17.85	15.11	13.82	13.26	13.20	12.92	12.98	13.99	12.09
360.0	17.68	14.49	13.88	13.43	13.32	13.65	15.33	15.27	12.37

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	12.09	12.09	12.14	12.03	12.14	12.42	12.59	12.64	12.87
45.0	11.75	11.64	11.58	11.41	11.58	11.69	12.09	12.48	12.64
90.0	11.69	11.58	11.64	11.41	11.58	11.75	12.20	12.48	12.64
135.0	11.81	11.58	11.64	11.47	11.58	11.75	12.09	12.48	12.64
180.0	11.69	11.53	11.58	11.47	11.58	11.81	12.14	12.48	12.59
225.0	11.92	11.97	12.03	11.97	12.20	12.48	12.59	12.70	12.87
270.0	11.97	12.03	12.09	12.09	12.20	12.48	12.59	12.64	12.81
315.0	11.97	11.97	12.09	12.03	12.20	12.42	12.59	12.64	12.81
360.0	12.09	12.09	12.14	12.03	12.14	12.42	12.59	12.64	12.87

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	13.09	13.20	14.21	16.73	21.15	24.17	25.74	25.63	24.23
45.0	12.70	12.70	13.48	15.78	19.47	22.88	24.73	25.23	25.18
90.0	12.64	12.76	13.48	15.95	19.36	22.32	23.89	24.06	23.78
135.0	12.70	12.70	13.04	14.77	17.79	20.87	22.83	23.39	23.33
180.0	12.64	12.64	13.04	14.71	17.90	20.87	22.83	23.56	23.56
225.0	13.09	13.26	14.04	17.23	21.48	25.12	26.80	27.14	26.13
270.0	13.04	13.15	13.82	16.06	19.97	23.61	25.79	26.18	25.07
315.0	12.98	13.20	14.04	17.18	21.04	24.06	25.57	25.51	24.17
360.0	13.09	13.20	14.21	16.73	21.15	24.17	25.74	25.63	24.23

C/γ(°)	180.0
0.0	23.33
45.0	25.07
90.0	23.78
135.0	23.05
180.0	23.33
225.0	25.07
270.0	23.78
315.0	23.05
360.0	23.33