
Nata

LumCAT: 2-1122-A4
Luminaire: TE 2133401-1+92.76.365.00
Report No: NT2017071206
Test No: NT2017071206
LampCAT: CXA1830
Lamp flux(lm): 1976.0
Number of Lamps: 1
Length(mm): 70
Phm Type: C

Voltage(V): 35.2500
Current(A): 0.5000
Power (W): 17.6250
PF: 0.0000
Ballast type: DC
Width(mm): 70
Height(mm): 0

Photometric Results

Lumens(lm): 1841.61
Efficiency(%): 93.20%
Lumens(lm)/Power(W): 104.49
Central intensity(cd): 3926.637
Maximum intensity(cd): 3926.637
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=35.8
 [C90/270]Total=35.8
Field angle(10%Imax): [C0/180]Total=72.1
 [C90/270]Total=72.1
Maximum s/h(1/2): C0_180=0.59 C90_270=0.59
Maximum s/h(1/4): C0_180=0.60 C90_270=0.60
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 93.20%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.703%

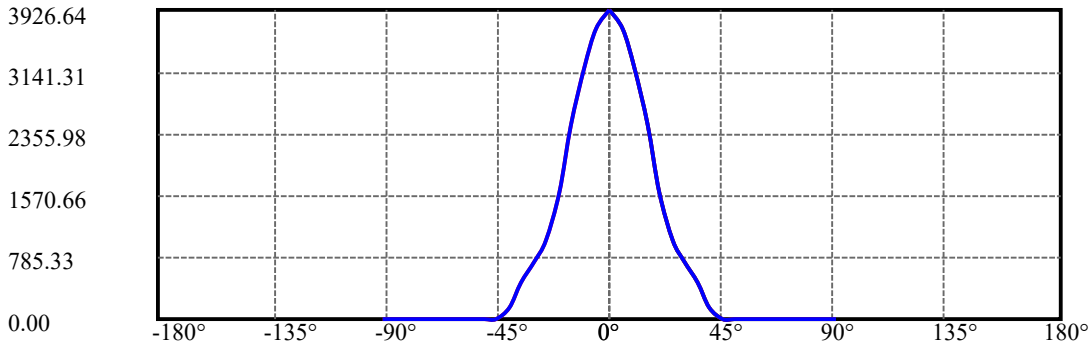
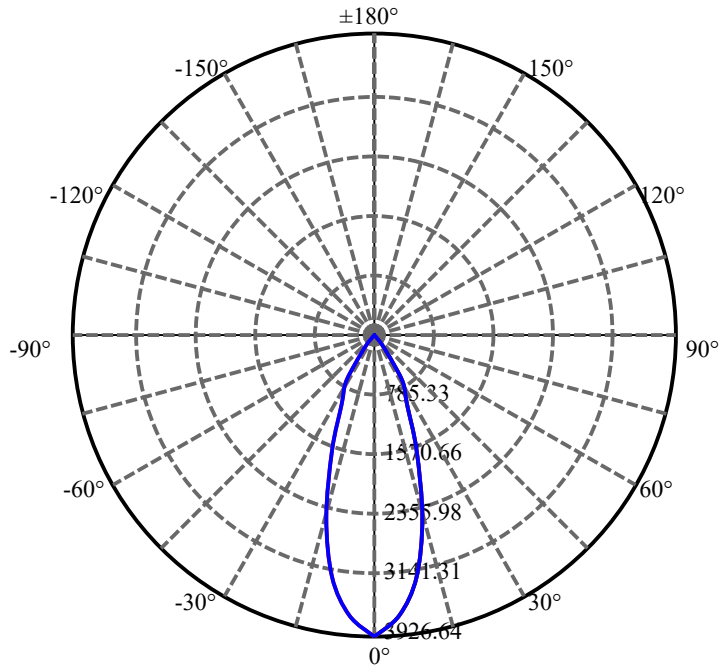
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3926.638	0.000	0	.000%	.000%
5.0	3673.284	90.855	90.855	4.598%	4.933%
10.0	3188.767	245.477	336.332	12.423%	18.263%
15.0	2459.314	335.040	671.372	16.955%	36.456%
20.0	1609.236	335.306	1006.678	16.969%	54.663%
25.0	1000.442	273.707	1280.385	13.852%	69.525%
30.0	732.799	219.343	1499.728	11.100%	81.436%
35.0	456.239	175.094	1674.822	8.861%	90.943%
40.0	150.885	101.294	1776.116	5.126%	96.444%
45.0	11.276	30.026	1806.142	1.520%	98.074%
50.0	8.883	4.074	1810.216	.206%	98.295%
55.0	8.306	3.738	1813.953	.189%	98.498%
60.0	7.993	3.767	1817.721	.191%	98.703%
65.0	7.791	3.837	1821.558	.194%	98.911%
70.0	7.666	3.914	1825.472	.198%	99.124%
75.0	7.534	3.973	1829.445	.201%	99.339%
80.0	7.478	4.017	1833.461	.203%	99.557%
85.0	7.520	4.075	1837.537	.206%	99.779%
90.0	7.367	4.076	1841.613	.206%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1499.73	75.90%	81.44%
0-40	1776.12	89.88%	96.44%
0-60	1817.72	91.99%	98.70%
0-90	1837.54	92.99%	99.78%
0-120	1837.54	92.99%	99.78%
0-180	1841.61	93.20%	100.00%
60-90	23.58	1.19%	1.28%
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%
0-29.40	1473.29	74.56%	80.00%

ZONAL LUMEN SUMMARY

0-10	336.33
10-20	670.35
20-30	493.05
30-40	276.39
40-50	34.10
50-60	7.51
60-70	7.75
70-80	7.99
80-90	4.08
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: —————

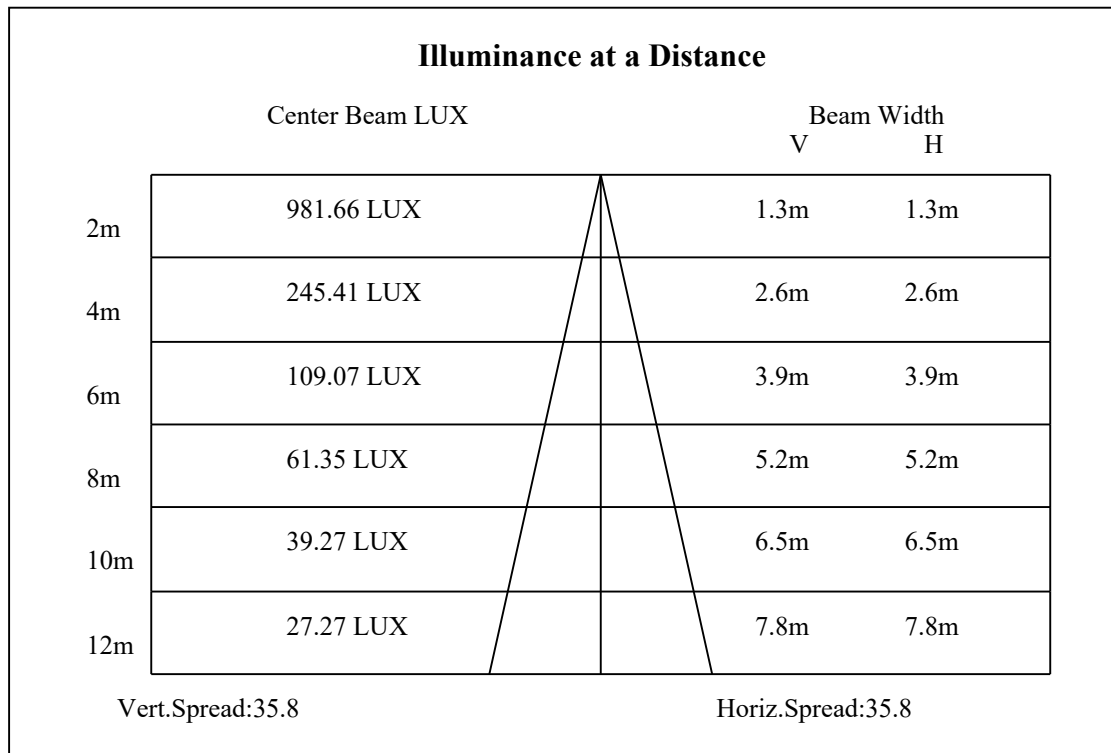
C90/C270: —————

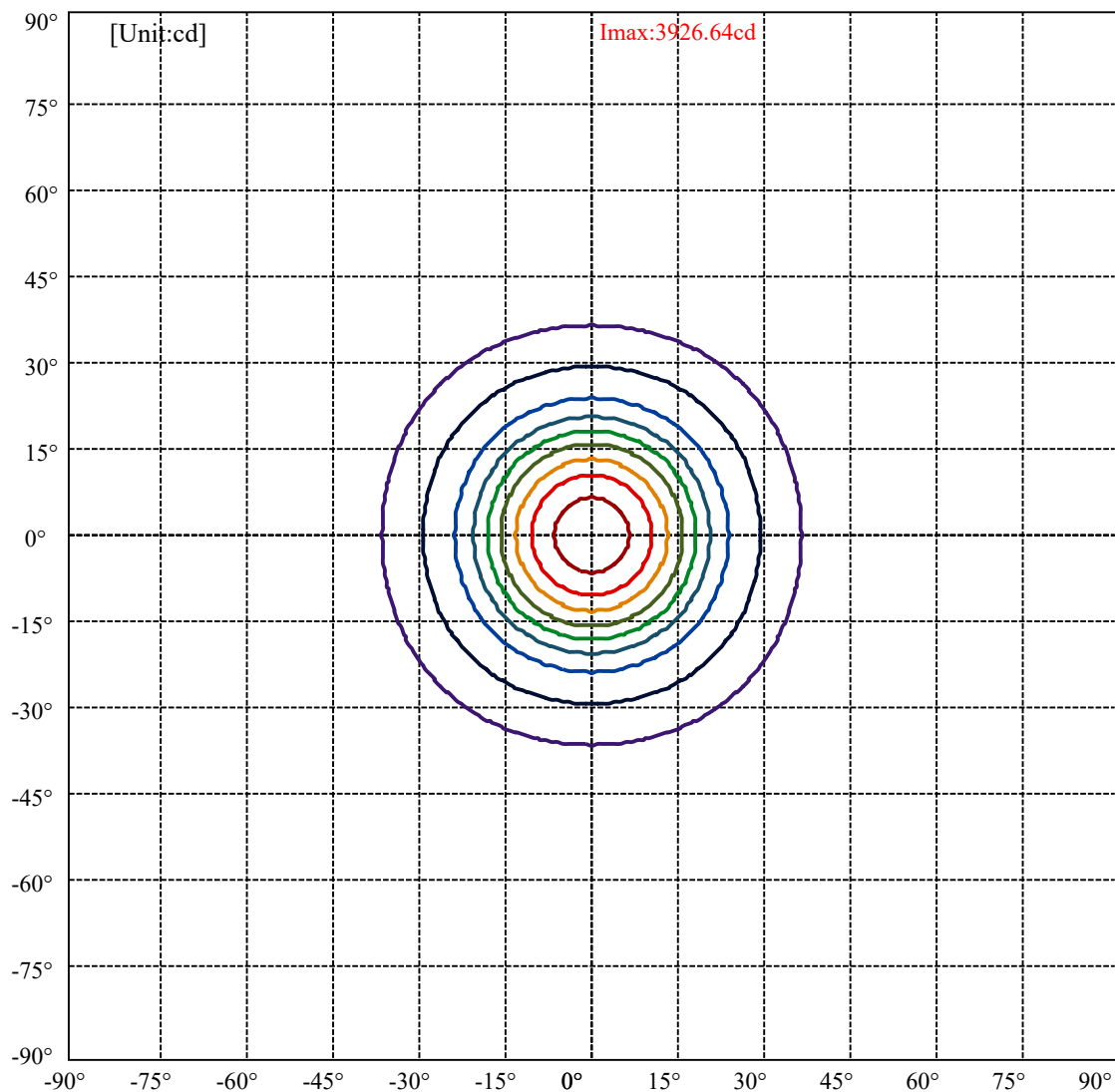
Field angle(10%Imax):C0/180Left:36.0 Right:36.0

:C90/270Left:36.0 Right:36.0

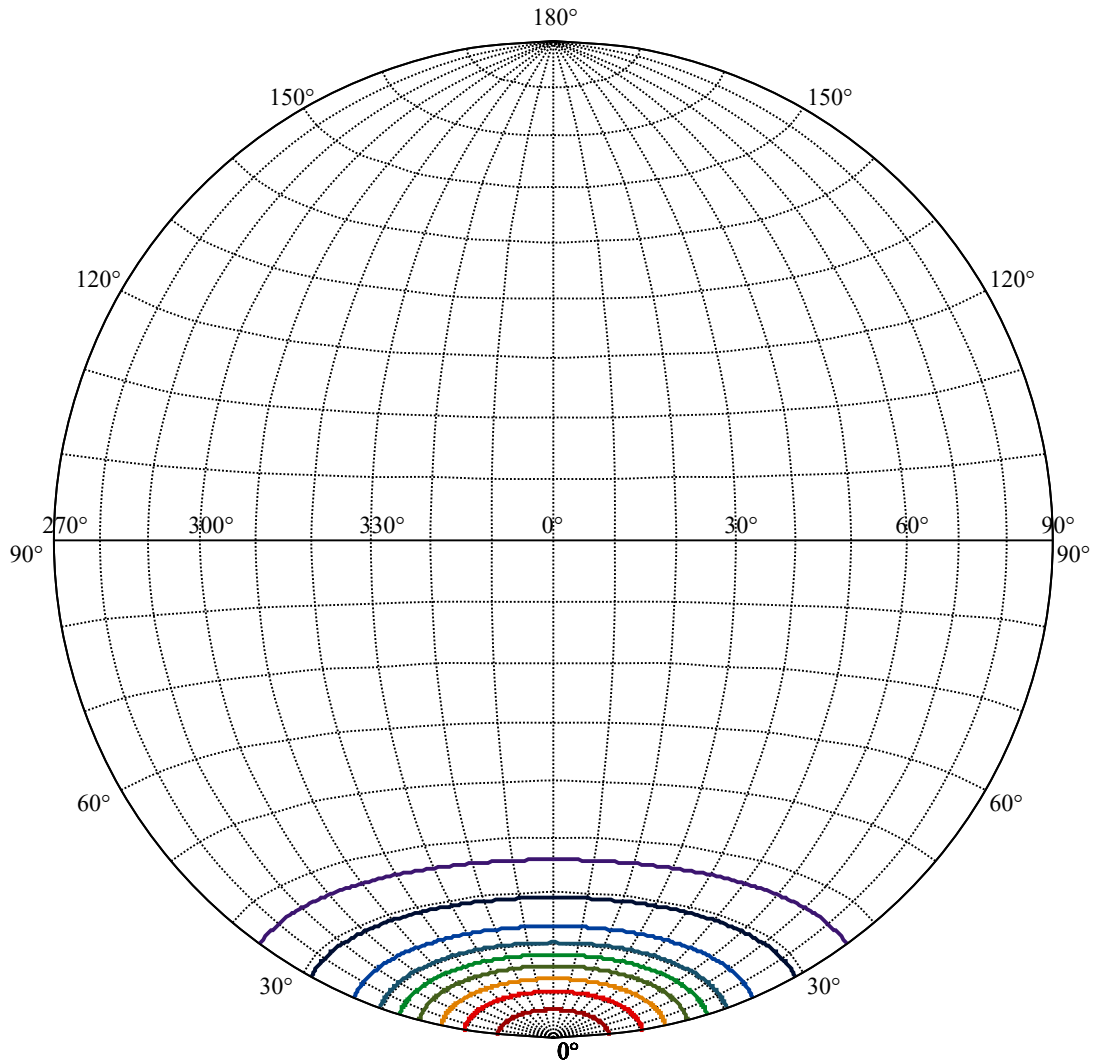
Beam Angle(50%Imax):C0/180Left:17.9 Right:17.9

:C90/270Left:17.9 Right:17.9





(10%Imax) 392.664	—
(20%Imax) 785.328	—
(30%Imax) 1177.99	—
(40%Imax) 1570.66	—
(50%Imax) 1963.32	—
(60%Imax) 2355.98	—
(70%Imax) 2748.65	—
(80%Imax) 3141.31	—
(90%Imax) 3533.97	—



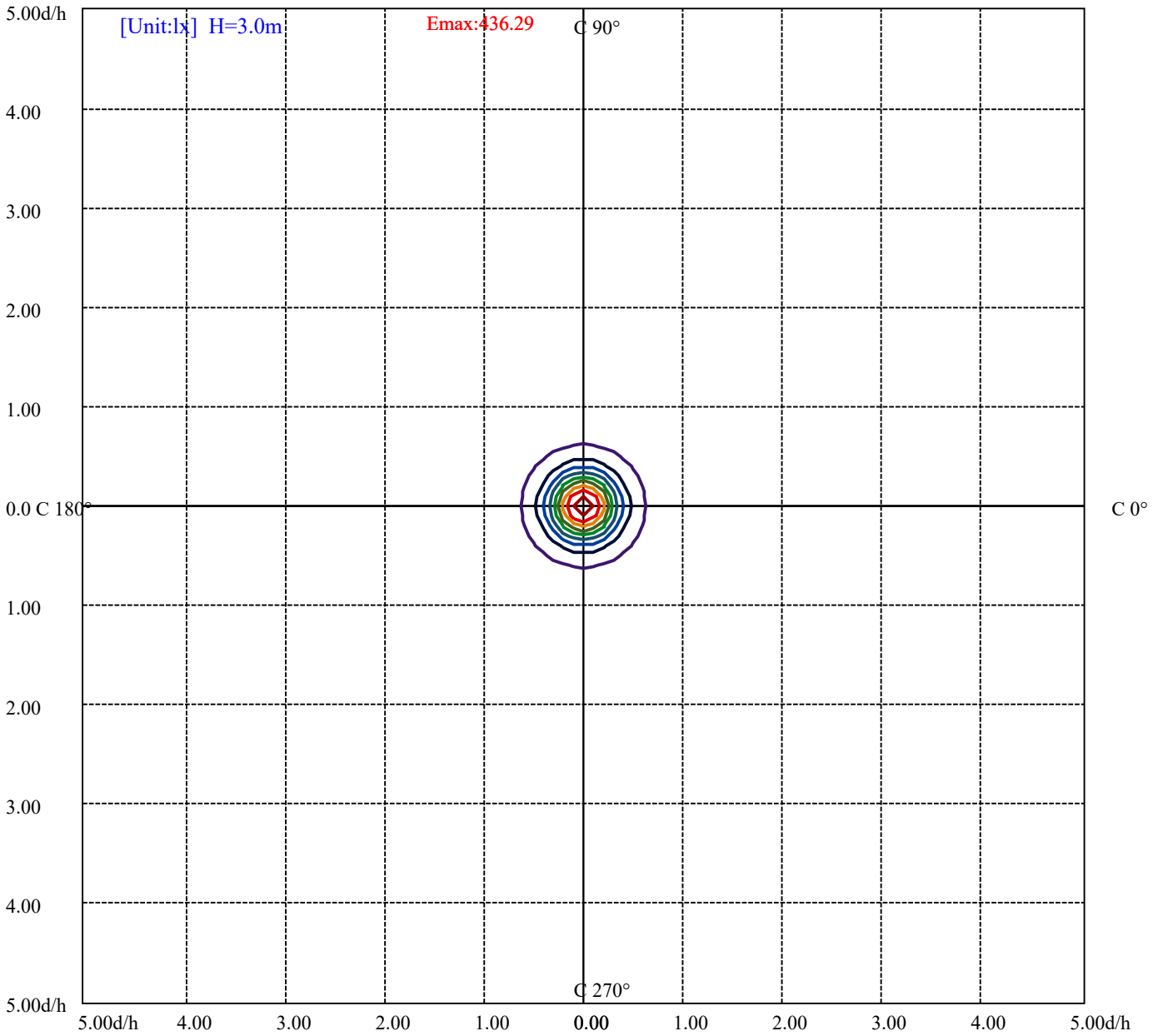
House

[Unit:cd]

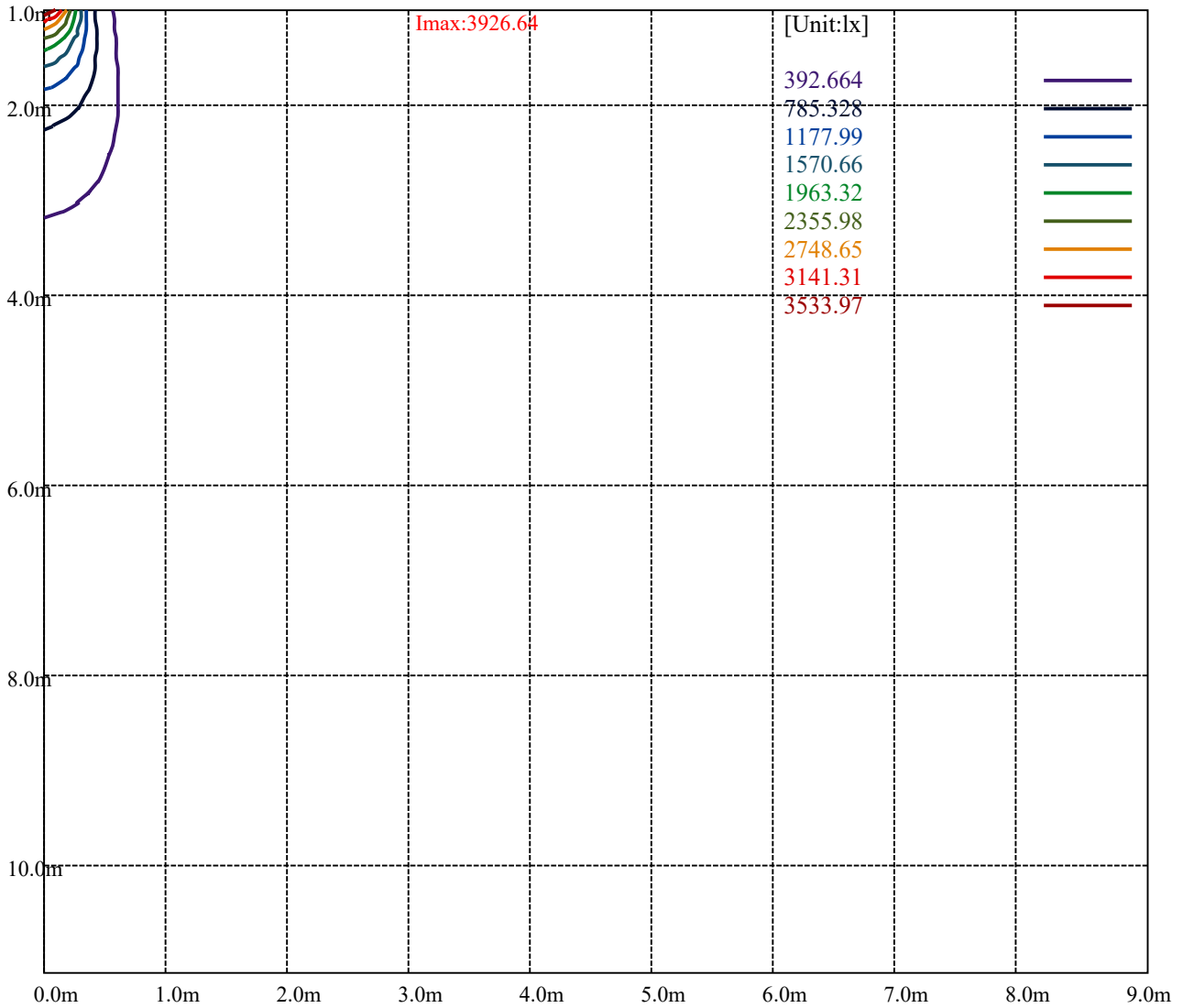
Road

Imax:3926.64

(10%Imax)	392.664	—
(20%Imax)	785.328	—
(30%Imax)	1177.99	—
(40%Imax)	1570.66	—
(50%Imax)	1963.32	—
(60%Imax)	2355.98	—
(70%Imax)	2748.65	—
(80%Imax)	3141.31	—
(90%Imax)	3533.97	—



- (10%Emax) 43.62922
- (20%Emax) 87.25845
- (30%Emax) 130.8878
- (40%Emax) 174.5167
- (50%Emax) 218.1456
- (60%Emax) 261.7755
- (70%Emax) 305.4044
- (80%Emax) 349.0333
- (90%Emax) 392.6633



Luminance Table

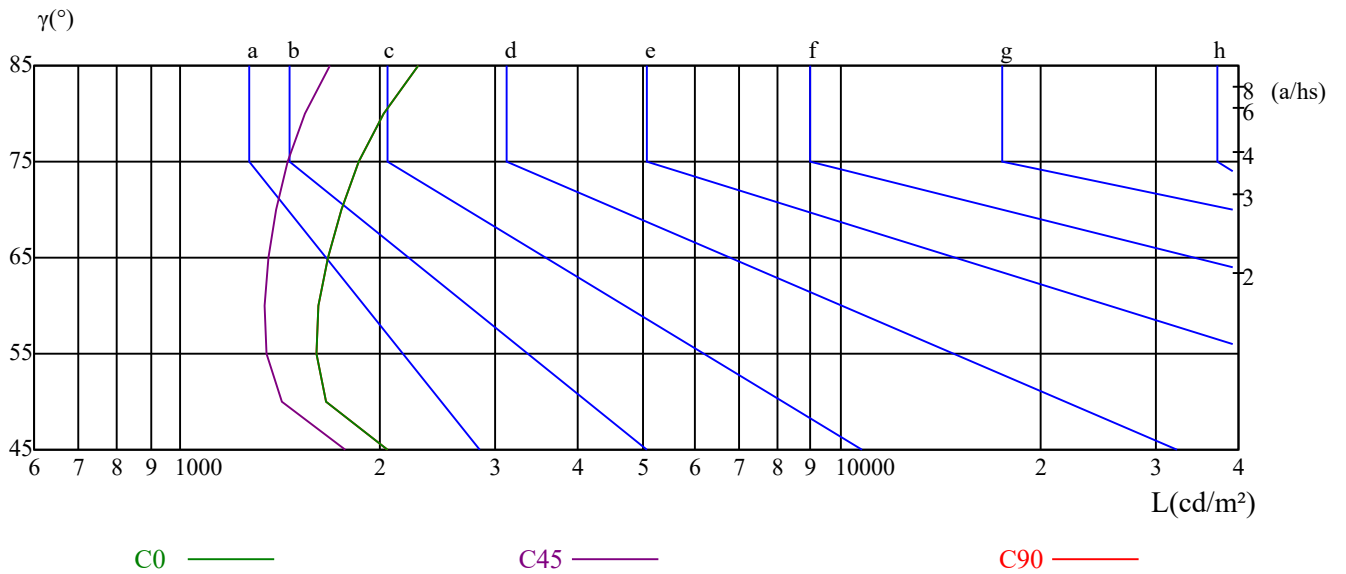
γ	45	50	55	60	65	70	75	80	85
C0	2052	1661	1609	1619	1668	1753	1865	2034	2288
C45	1780	1419	1354	1340	1355	1396	1452	1543	1682
C90	2052	1661	1609	1619	1668	1753	1865	2034	2288

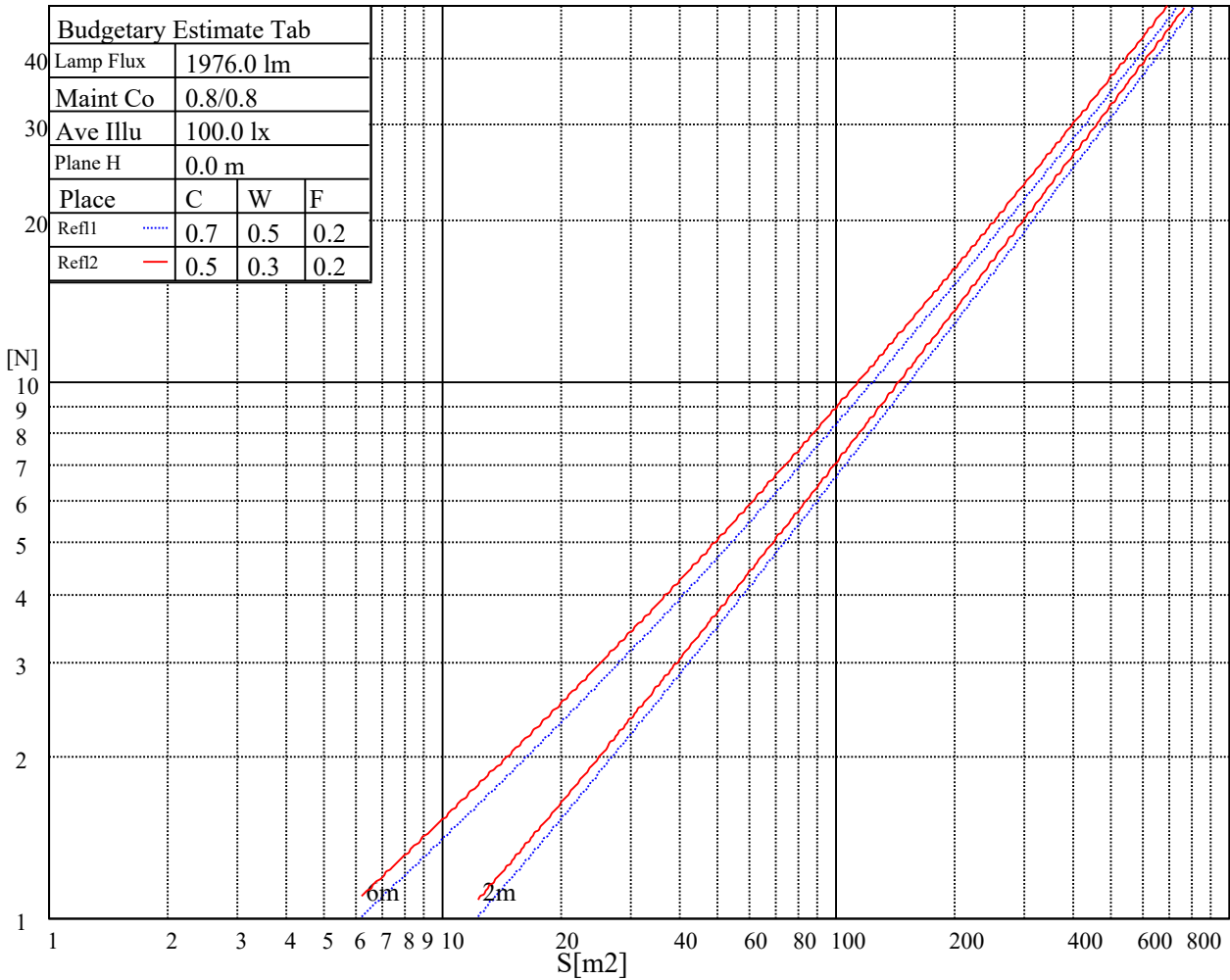
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3762	3762	3762	5941	5941	5941	17608	17608	17608

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	1.11	1.11	1.11	1.08	1.08	1.08	1.04	1.04	1.04	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.04	1.02	1.00	1.02	1.00	0.98	0.98	0.96	0.95	0.95	0.93	0.92	0.91	0.90	0.90	0.88
2	0.97	0.94	0.91	0.96	0.93	0.90	0.93	0.90	0.88	0.90	0.88	0.86	0.88	0.86	0.84	0.83
3	0.92	0.88	0.84	0.91	0.87	0.84	0.88	0.85	0.82	0.86	0.83	0.81	0.84	0.82	0.80	0.78
4	0.87	0.82	0.79	0.86	0.81	0.78	0.84	0.80	0.77	0.82	0.79	0.76	0.80	0.78	0.76	0.74
5	0.82	0.77	0.74	0.81	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.70
6	0.78	0.73	0.70	0.77	0.73	0.69	0.76	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.68	0.67
7	0.74	0.69	0.66	0.74	0.69	0.66	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.64
8	0.71	0.66	0.63	0.70	0.66	0.62	0.69	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.61
9	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.58
10	0.65	0.60	0.57	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.62	0.59	0.56	0.55

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	3923.99	3733.11	3275.10	2556.08	1687.91	1040.68	748.51	495.30	293.84
45.0	3926.22	3725.87	3231.13	2512.67	1635.04	995.05	722.91	466.36	117.76
90.0	3926.78	3684.14	3152.11	2364.08	1505.38	963.50	706.16	413.71	93.61
135.0	3929.56	3712.52	3303.48	2556.08	1699.60	1033.45	756.86	500.31	205.24
180.0	3923.99	3618.47	3083.10	2365.19	1516.51	956.21	716.18	410.82	87.93
225.0	3926.22	3617.91	3137.08	2370.20	1626.70	1012.08	741.84	460.91	117.87
270.0	3926.78	3676.90	3207.76	2603.38	1709.62	1049.03	766.32	498.08	201.57
315.0	3929.56	3617.35	3120.39	2346.83	1493.13	953.53	703.60	404.42	89.27
360.0	3923.99	3733.11	3275.10	2556.08	1687.91	1040.68	748.51	495.30	293.84

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	11.52	8.85	8.29	7.96	7.74	7.68	7.51	7.46	7.62
45.0	10.69	9.02	8.35	8.13	7.90	7.74	7.68	7.51	7.68
90.0	10.52	8.79	8.29	8.07	7.85	7.74	7.57	7.51	7.62
135.0	12.41	8.96	8.29	8.01	7.79	7.68	7.51	7.51	7.46
180.0	10.57	8.74	8.24	7.85	7.74	7.57	7.46	7.40	7.35
225.0	11.80	8.96	8.40	7.96	7.79	7.68	7.51	7.51	7.46
270.0	12.52	9.07	8.35	8.07	7.79	7.68	7.51	7.51	7.51
315.0	10.18	8.68	8.24	7.90	7.74	7.57	7.51	7.40	7.46
360.0	11.52	8.85	8.29	7.96	7.74	7.68	7.51	7.46	7.62

C/γ(°)	90.0
0.0	7.35
45.0	7.40
90.0	7.35
135.0	7.35
180.0	7.35
225.0	7.40
270.0	7.40
315.0	7.35
360.0	7.35