
Nata

LumCAT: 3-1550-A3
Luminaire: TE 2133401-1+92.76.365.00
Report No: GC2017071203
Test No: NT-0010
LampCAT: CREE CXA1830
Lamp flux(lm): 1976.0
Number of Lamps: 1
Length(mm): 78
Phm Type: C

Voltage(V): 35.2000
Current(A): 0.5000
Power (W): 17.6000
PF: 0.0000
Ballast type: DC
Width(mm): 78
Height(mm): 0

Photometric Results

Lumens(lm): 1787.22
Efficiency(%): 90.45%
Lumens(lm)/Power(W): 101.55
Central intensity(cd): 3011.726
Maximum intensity(cd): 3011.726
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=44.5
 [C90/270]Total=44.5
Field angle(10%Imax): [C0/180]Total=73.2
 [C90/270]Total=73.2
Maximum s/h(1/2): C0_180=0.71 C90_270=0.71
Maximum s/h(1/4): C0_180=0.74 C90_270=0.74
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.45%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.634%

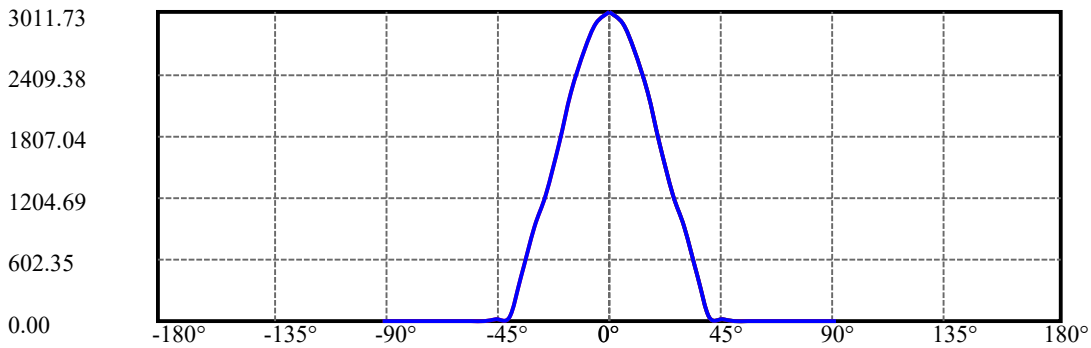
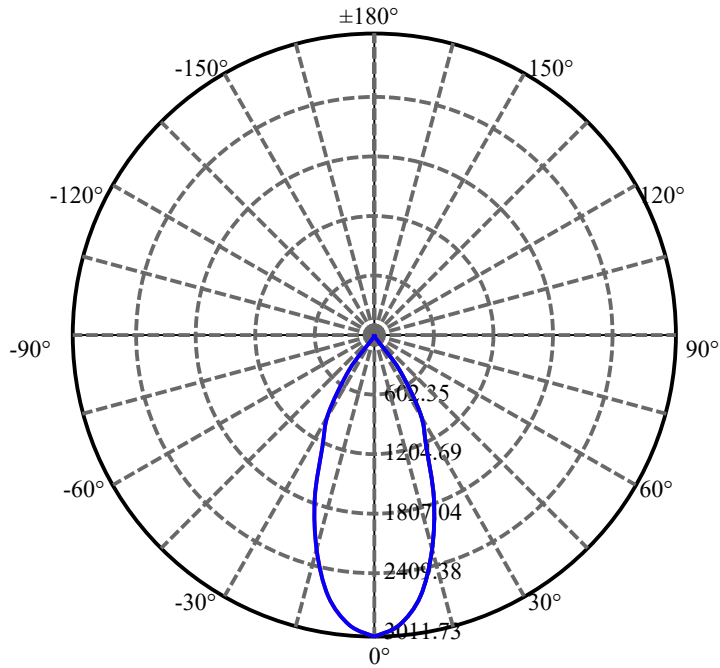
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3011.725	0.000	0	.000%	.000%
5.0	2908.492	70.775	70.775	3.582%	3.960%
10.0	2646.512	198.720	269.494	10.057%	15.079%
15.0	2227.247	289.108	558.603	14.631%	31.255%
20.0	1735.704	326.603	885.205	16.528%	49.530%
25.0	1228.467	310.887	1196.092	15.733%	66.925%
30.0	915.636	271.338	1467.43	13.732%	82.107%
35.0	421.519	196.905	1664.336	9.965%	93.124%
40.0	41.342	77.225	1741.561	3.908%	97.445%
45.0	10.553	9.609	1751.169	.486%	97.983%
50.0	9.057	3.963	1755.132	.201%	98.204%
55.0	8.487	3.815	1758.947	.193%	98.418%
60.0	8.195	3.856	1762.803	.195%	98.634%
65.0	7.965	3.928	1766.731	.199%	98.853%
70.0	7.798	3.991	1770.722	.202%	99.077%
75.0	7.694	4.049	1774.772	.205%	99.303%
80.0	7.631	4.101	1778.872	.208%	99.533%
85.0	7.722	4.172	1783.044	.211%	99.766%
90.0	7.548	4.181	1787.225	.212%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1467.43	74.26%	82.11%
0-40	1741.56	88.14%	97.44%
0-60	1762.80	89.21%	98.63%
0-90	1783.04	90.24%	99.77%
0-120	1783.04	90.24%	99.77%
0-180	1787.22	90.45%	100.00%
60-90	24.10	1.22%	1.35%
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%
0-29.31	1429.78	72.36%	80.00%

ZONAL LUMEN SUMMARY

0-10	269.49
10-20	615.71
20-30	582.22
30-40	274.13
40-50	13.57
50-60	7.67
60-70	7.92
70-80	8.15
80-90	4.17
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: —————

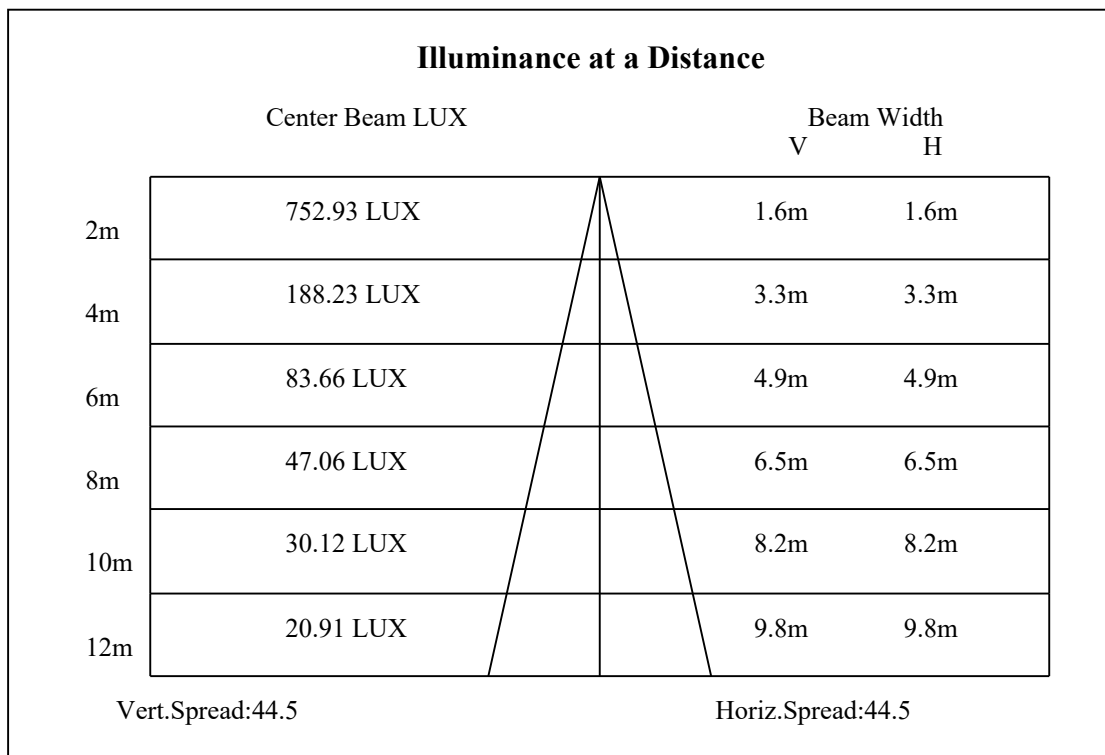
C90/C270: —————

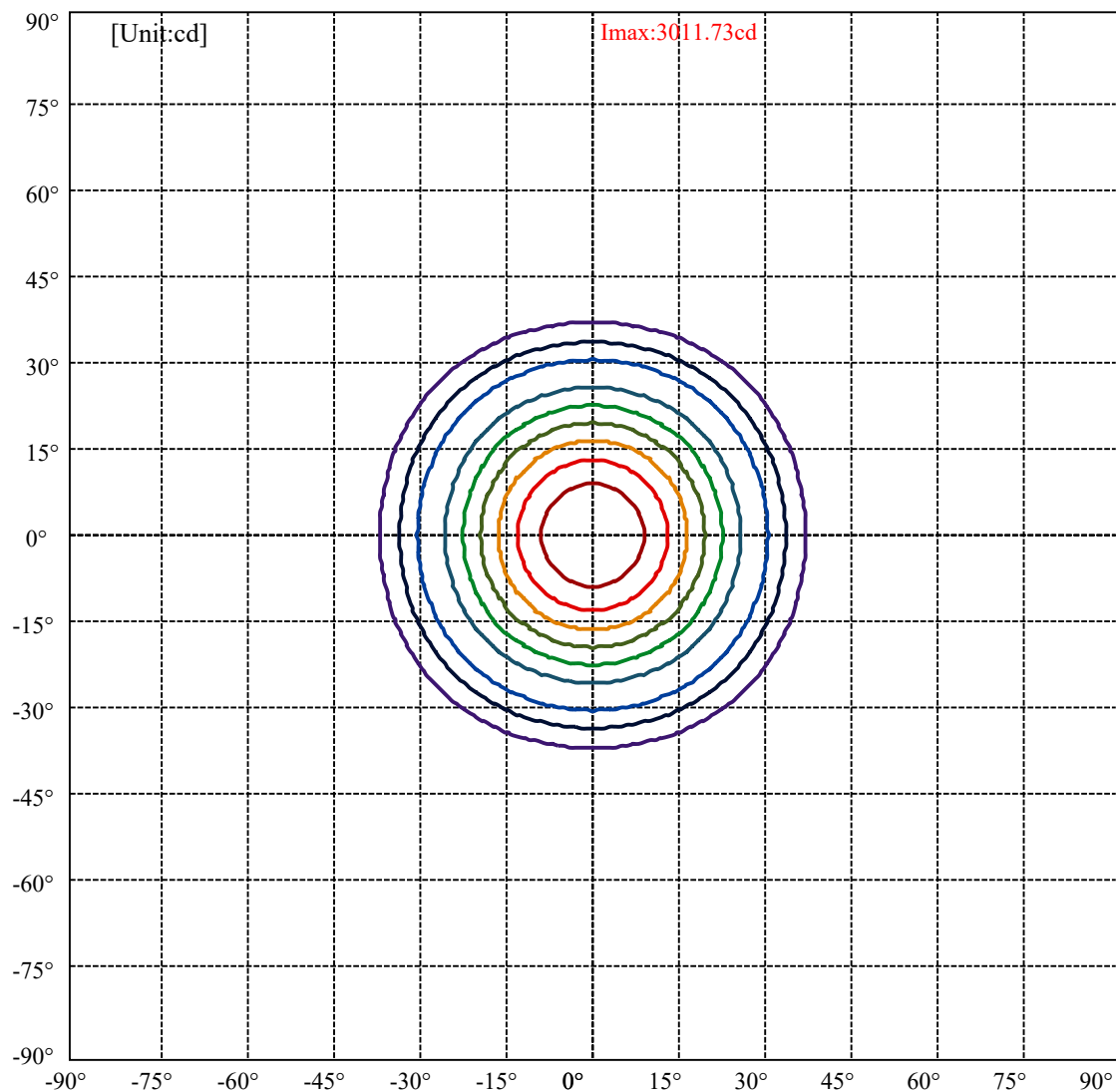
Field angle(10%Imax):C0/180Left:36.6 Right:36.6

:C90/270Left:36.6 Right:36.6

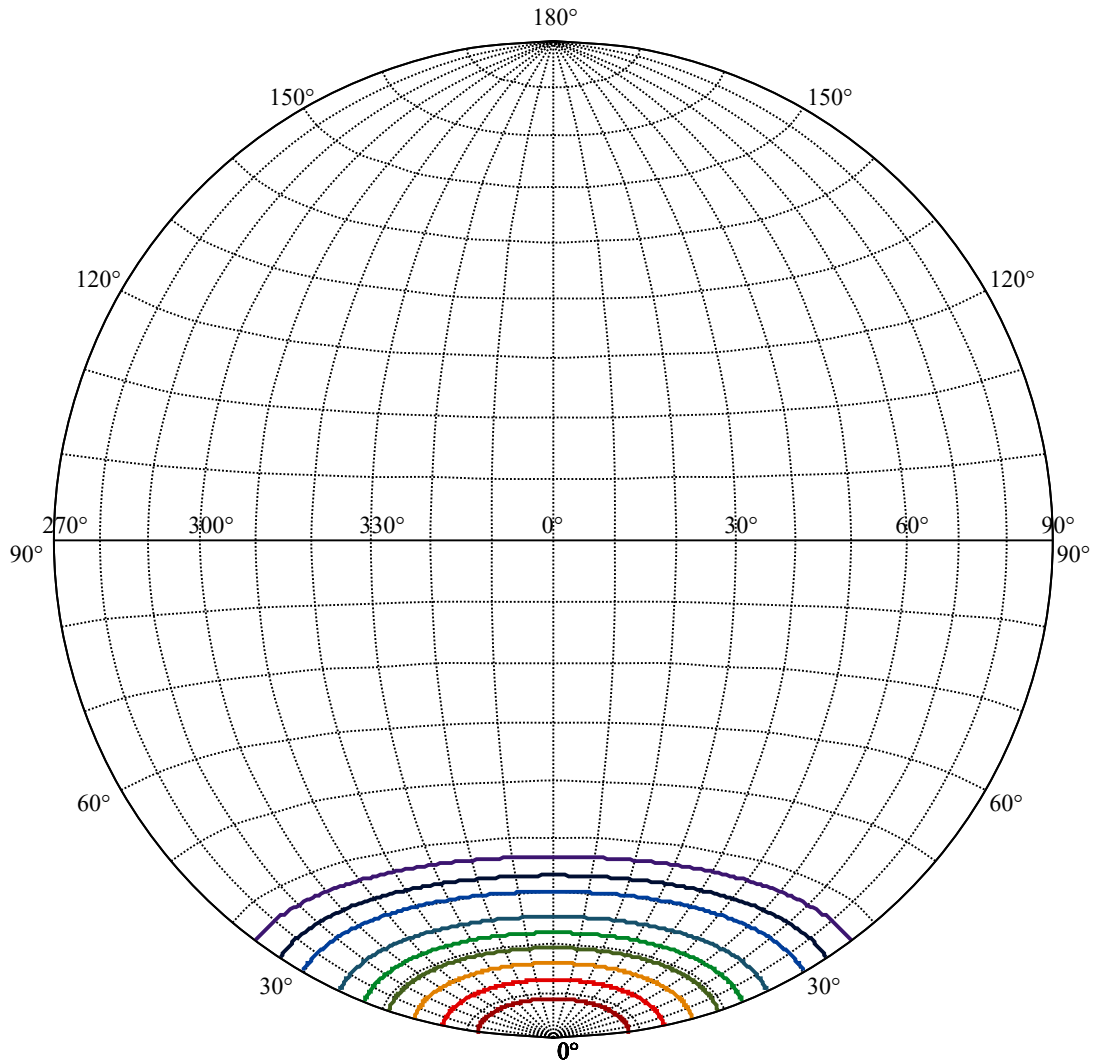
Beam Angle(50%Imax):C0/180Left:22.3 Right:22.3

:C90/270Left:22.3 Right:22.3





(10%Imax) 301.173	—
(20%Imax) 602.345	—
(30%Imax) 903.518	—
(40%Imax) 1204.69	—
(50%Imax) 1505.86	—
(60%Imax) 1807.04	—
(70%Imax) 2108.21	—
(80%Imax) 2409.38	—
(90%Imax) 2710.55	—



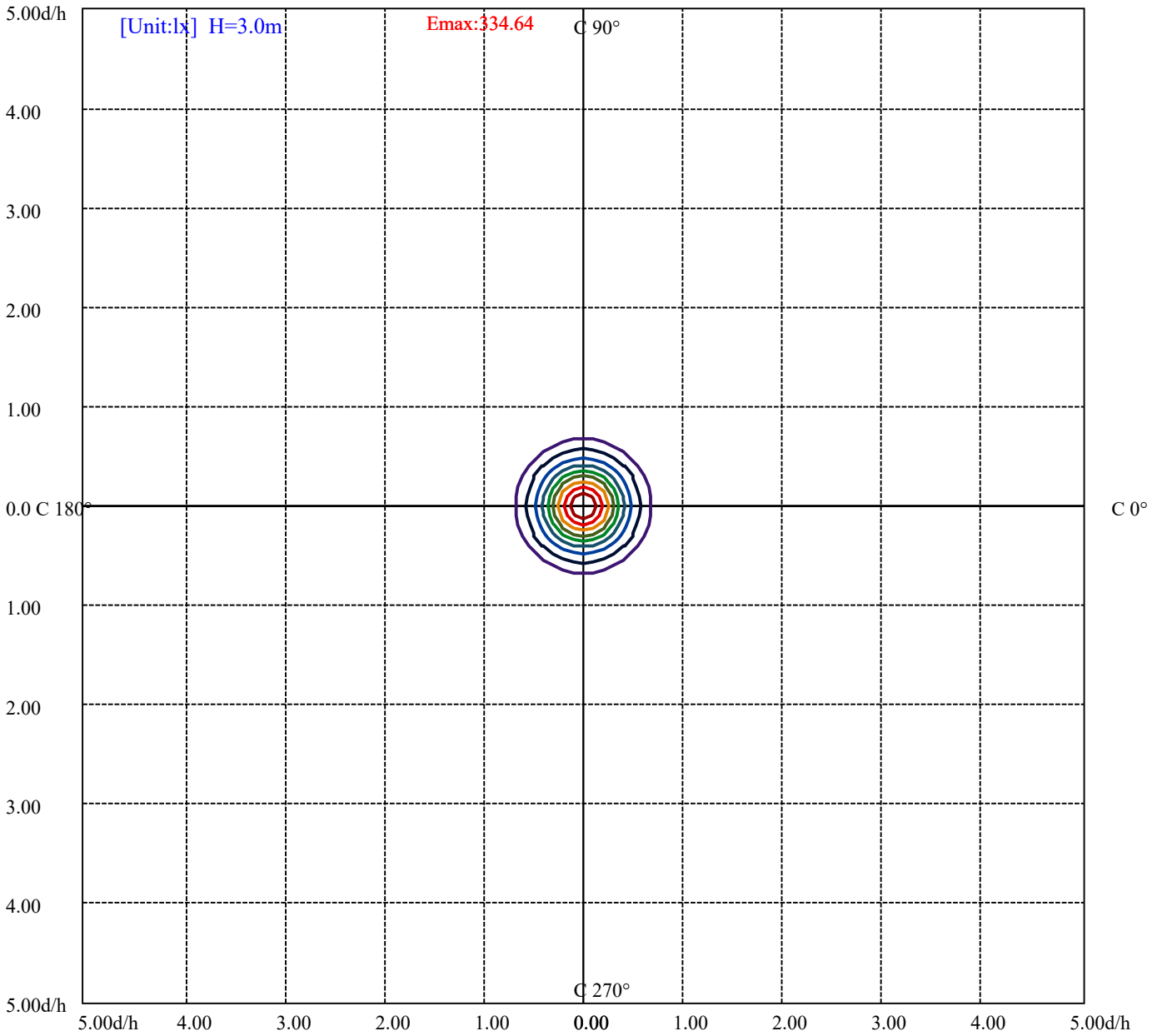
House

[Unit:cd]

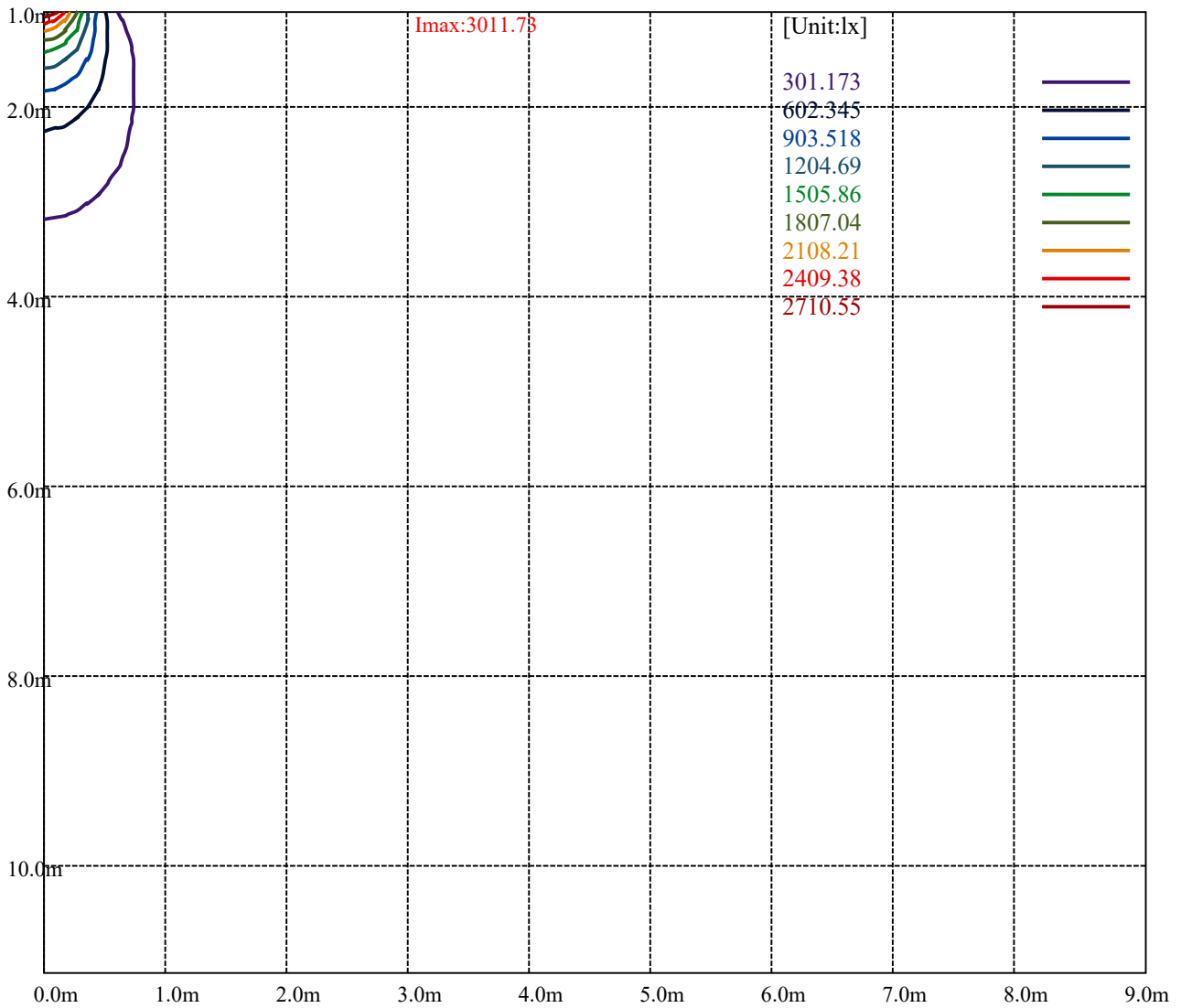
Road

I_{max}:3011.73

(10%I _{max})	301.173	—
(20%I _{max})	602.345	—
(30%I _{max})	903.518	—
(40%I _{max})	1204.69	—
(50%I _{max})	1505.86	—
(60%I _{max})	1807.04	—
(70%I _{max})	2108.21	—
(80%I _{max})	2409.38	—
(90%I _{max})	2710.55	—



- (10%Emax) 33.46355
- (20%Emax) 66.92711
- (30%Emax) 100.3908
- (40%Emax) 133.8544
- (50%Emax) 167.3178
- (60%Emax) 200.7811
- (70%Emax) 234.2455
- (80%Emax) 267.7089
- (90%Emax) 301.1722



Luminance Table

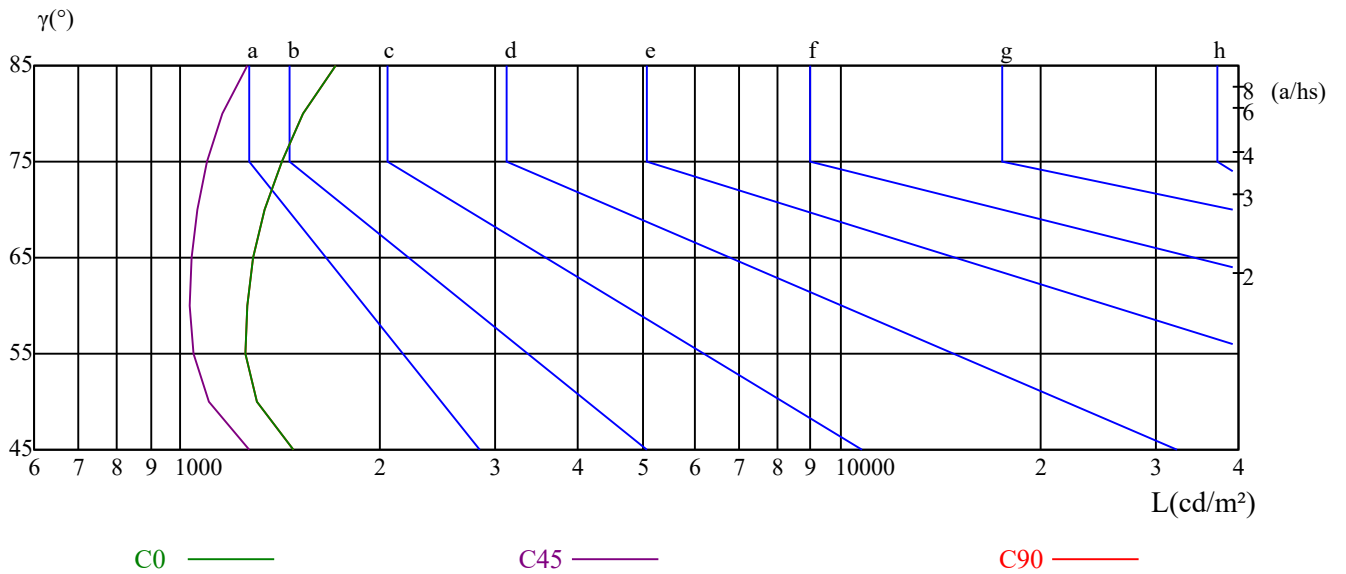
γ	45	50	55	60	65	70	75	80	85
C0	1483	1302	1258	1263	1290	1340	1420	1534	1719
C45	1275	1102	1048	1035	1038	1058	1098	1157	1259
C90	1483	1302	1258	1263	1290	1340	1420	1534	1719

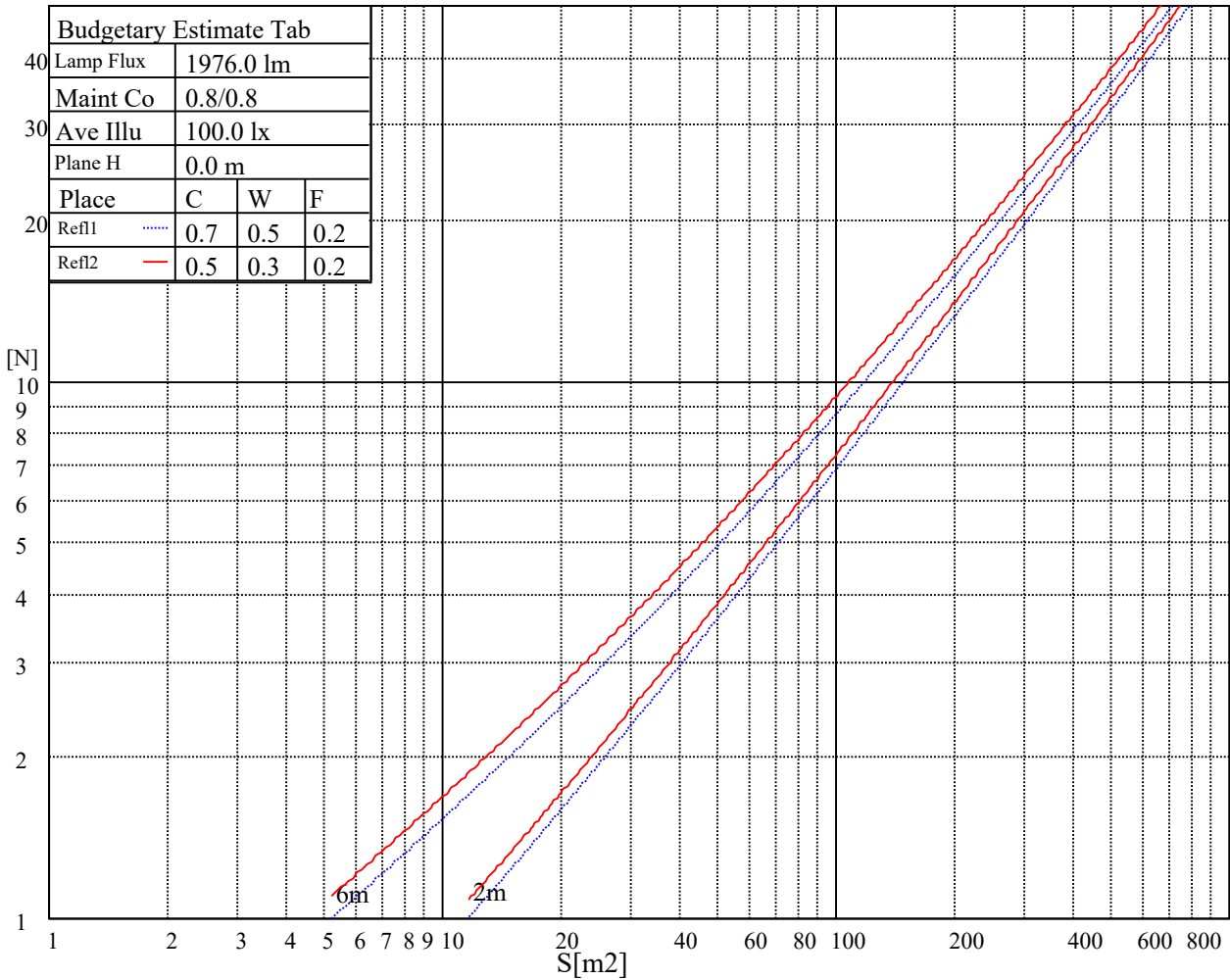
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3098	3098	3098	4886	4886	4886	14562	14562	14562

Glare Table

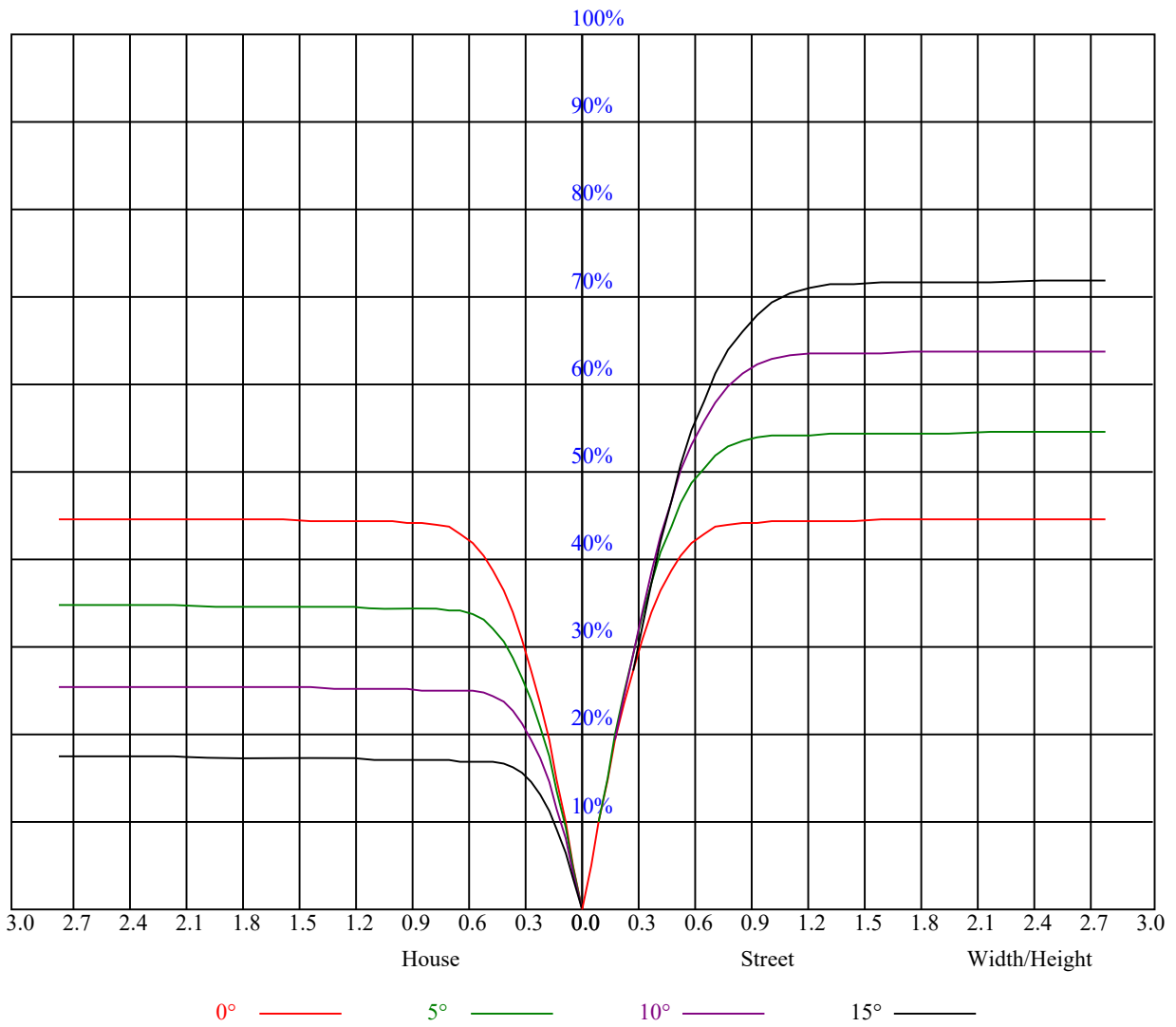
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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 RHOF=20 CU															
0	1.08	1.08	1.08	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.00	0.98	0.96	0.99	0.97	0.95	0.95	0.93	0.92	0.92	0.90	0.89	0.88	0.88	0.87	0.85
2	0.94	0.91	0.88	0.93	0.90	0.87	0.90	0.87	0.85	0.87	0.85	0.83	0.85	0.83	0.82	0.80
3	0.89	0.84	0.81	0.87	0.84	0.81	0.85	0.82	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.75
4	0.84	0.79	0.76	0.83	0.78	0.75	0.81	0.77	0.74	0.79	0.76	0.73	0.77	0.75	0.73	0.71
5	0.79	0.74	0.71	0.78	0.74	0.70	0.77	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.67
6	0.75	0.70	0.66	0.74	0.70	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.67	0.65	0.64
7	0.71	0.66	0.63	0.71	0.66	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.67	0.64	0.62	0.60
8	0.68	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.64	0.61	0.58	0.57
9	0.64	0.60	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.59	0.56	0.62	0.58	0.56	0.55
10	0.61	0.57	0.54	0.61	0.57	0.53	0.60	0.56	0.53	0.60	0.56	0.53	0.59	0.56	0.53	0.52



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	3008.53	2955.10	2719.14	2341.82	1866.55	1376.82	1017.87	554.85	76.30
45.0	3013.53	2938.40	2701.33	2291.73	1815.36	1321.73	957.21	486.95	54.65
90.0	3012.42	2889.99	2600.60	2194.34	1695.70	1109.58	896.77	395.91	30.11
135.0	3012.42	2911.69	2657.36	2253.33	1773.06	1313.38	943.85	464.13	43.91
180.0	3008.53	2861.05	2568.88	2127.56	1597.76	1099.95	838.89	262.84	19.48
225.0	3013.53	2883.31	2608.95	2170.41	1653.97	1089.71	873.56	350.27	24.93
270.0	3012.42	2932.84	2685.19	2263.91	1765.83	1310.04	927.16	458.57	52.81
315.0	3012.42	2895.55	2630.65	2174.86	1717.41	1206.53	869.78	398.63	28.55
360.0	3008.53	2955.10	2719.14	2341.82	1866.55	1376.82	1017.87	554.85	76.30
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	11.85	9.41	8.68	8.29	8.07	7.85	7.74	7.62	7.85
45.0	11.02	9.18	8.57	8.24	8.01	7.85	7.74	7.62	7.68
90.0	10.35	8.96	8.40	8.18	7.90	7.79	7.62	7.62	7.57
135.0	10.57	9.13	8.51	8.24	8.01	7.79	7.74	7.57	7.57
180.0	9.74	8.90	8.46	8.13	7.90	7.74	7.68	7.62	7.57
225.0	10.07	8.90	8.35	8.13	7.90	7.79	7.68	7.62	7.68
270.0	10.57	9.02	8.46	8.18	7.96	7.79	7.68	7.68	7.90
315.0	10.24	8.96	8.46	8.18	7.96	7.79	7.68	7.68	7.96
360.0	11.85	9.41	8.68	8.29	8.07	7.85	7.74	7.62	7.85
C/ γ (°)	90.0								
0.0	7.57								
45.0	7.57								
90.0	7.57								
135.0	7.57								
180.0	7.57								
225.0	7.51								
270.0	7.46								
315.0	7.57								
360.0	7.57								