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Nata

LumCAT: 3-1546-A3
Luminaire: TE 2213407-1+92.76.365.00
Report No: GC2015051411
Test No: NT-0010
LampCAT: CREE CXA2530
Lamp flux(lm): 4258.0
Number of Lamps: 1
Length(mm): 84
Phm Type: C

Voltage(V): 38.4000
Current(A): 1.2100
Power (W): 46.4640
PF: 0.0000
Ballast type: DC
Width(mm): 84
Height(mm): 0

Photometric Results

Lumens(lm): 3672.34
Efficiency(%): 86.25%
Lumens(lm)/Power(W): 79.04
Central intensity(cd): 10834.800
Maximum intensity(cd): 10834.800
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=29.0
 [C90/270]Total=29.0
Field angle(10%Imax): [C0/180]Total=62.8
 [C90/270]Total=62.8
Maximum s/h(1/2): C0_180=0.49 C90_270=0.49
Maximum s/h(1/4): C0_180=0.48 C90_270=0.48
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 86.25%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.044%

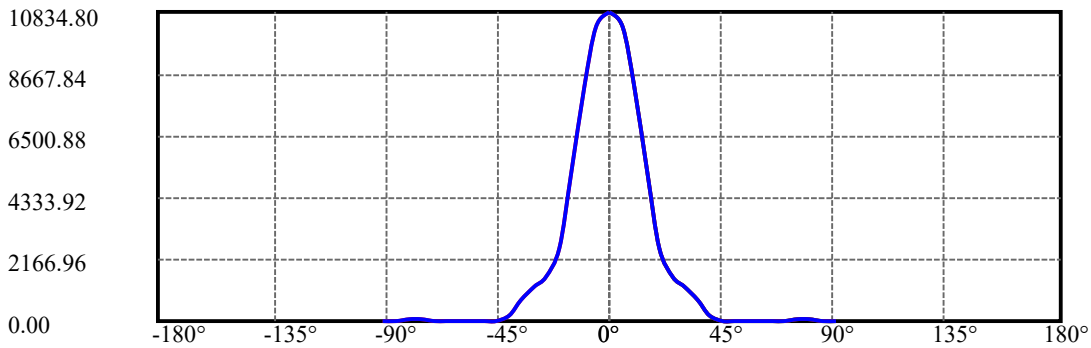
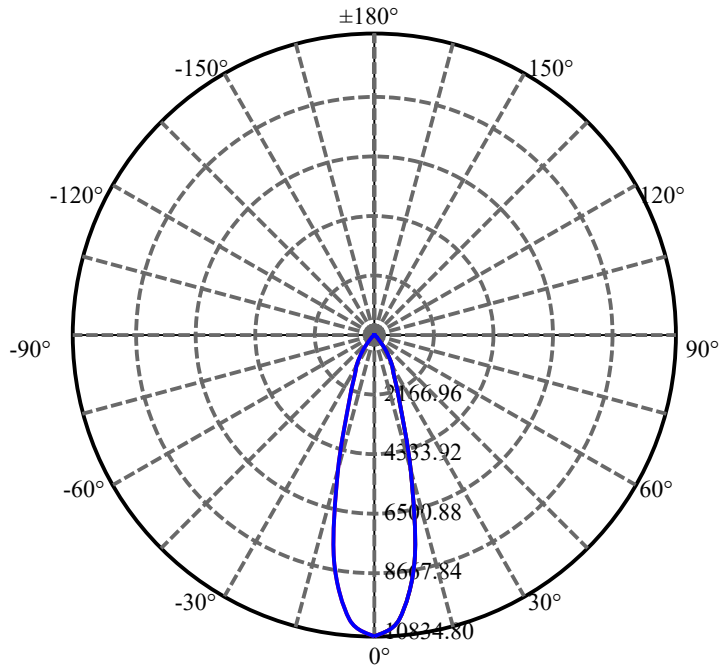
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	10834.795	0.000	0	.000%	.000%
5.0	10275.221	252.364	252.364	5.927%	6.872%
10.0	8233.101	662.101	914.465	15.550%	24.901%
15.0	5090.367	790.339	1704.804	18.561%	46.423%
20.0	2528.958	627.939	2332.744	14.747%	63.522%
25.0	1557.309	428.574	2761.318	10.065%	75.192%
30.0	1229.426	352.664	3113.982	8.282%	84.796%
35.0	707.815	285.272	3399.254	6.700%	92.564%
40.0	169.614	146.392	3545.646	3.438%	96.550%
45.0	18.534	34.837	3580.483	.818%	97.499%
50.0	15.624	6.902	3587.385	.162%	97.687%
55.0	14.575	6.566	3593.952	.154%	97.865%
60.0	13.855	6.571	3600.523	.154%	98.044%
65.0	13.512	6.653	3607.176	.156%	98.226%
70.0	22.254	9.056	3616.232	.213%	98.472%
75.0	36.892	15.460	3631.692	.363%	98.893%
80.0	34.207	19.024	3650.716	.447%	99.411%
85.0	16.002	13.643	3664.359	.320%	99.783%
90.0	13.148	7.982	3672.341	.187%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	3113.98	73.13%	84.80%
0-40	3545.65	83.27%	96.55%
0-60	3600.52	84.56%	98.04%
0-90	3664.36	86.06%	99.78%
0-120	3664.36	86.06%	99.78%
0-180	3672.34	86.25%	100.00%
60-90	70.41	1.65%	1.92%
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%
0-27.50	2937.87	69.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	914.47
10-20	1418.28
20-30	781.24
30-40	431.66
40-50	41.74
50-60	13.14
60-70	15.71
70-80	34.48
80-90	13.64
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: —————

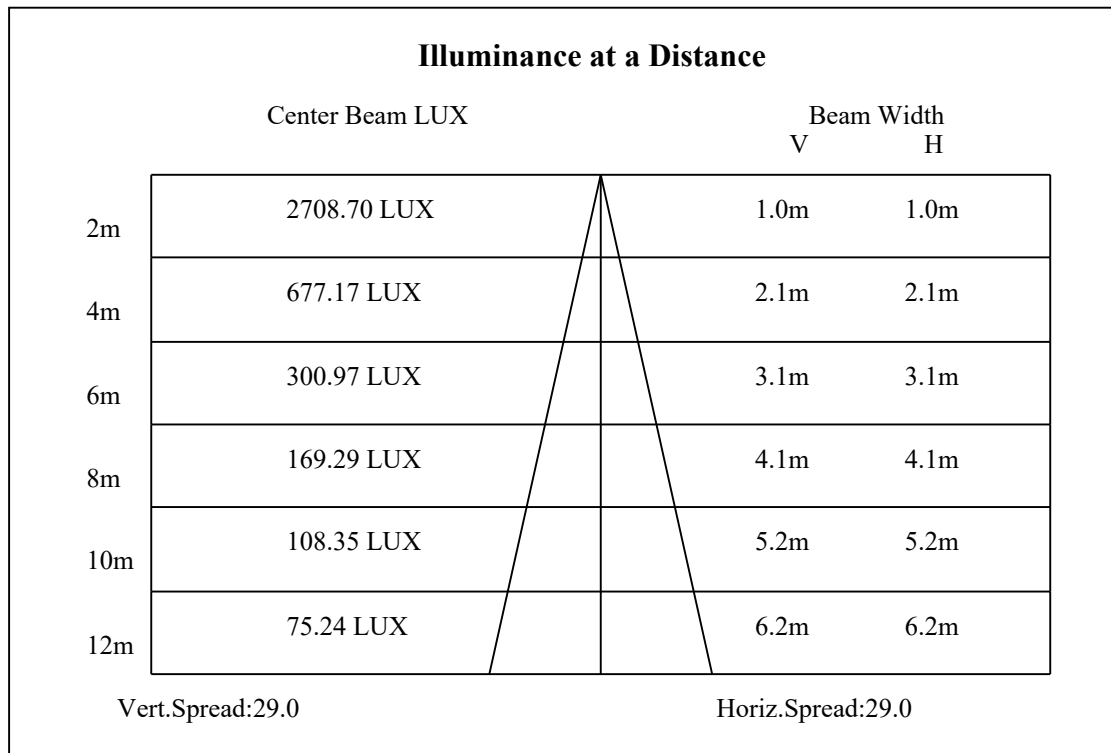
C90/C270: —————

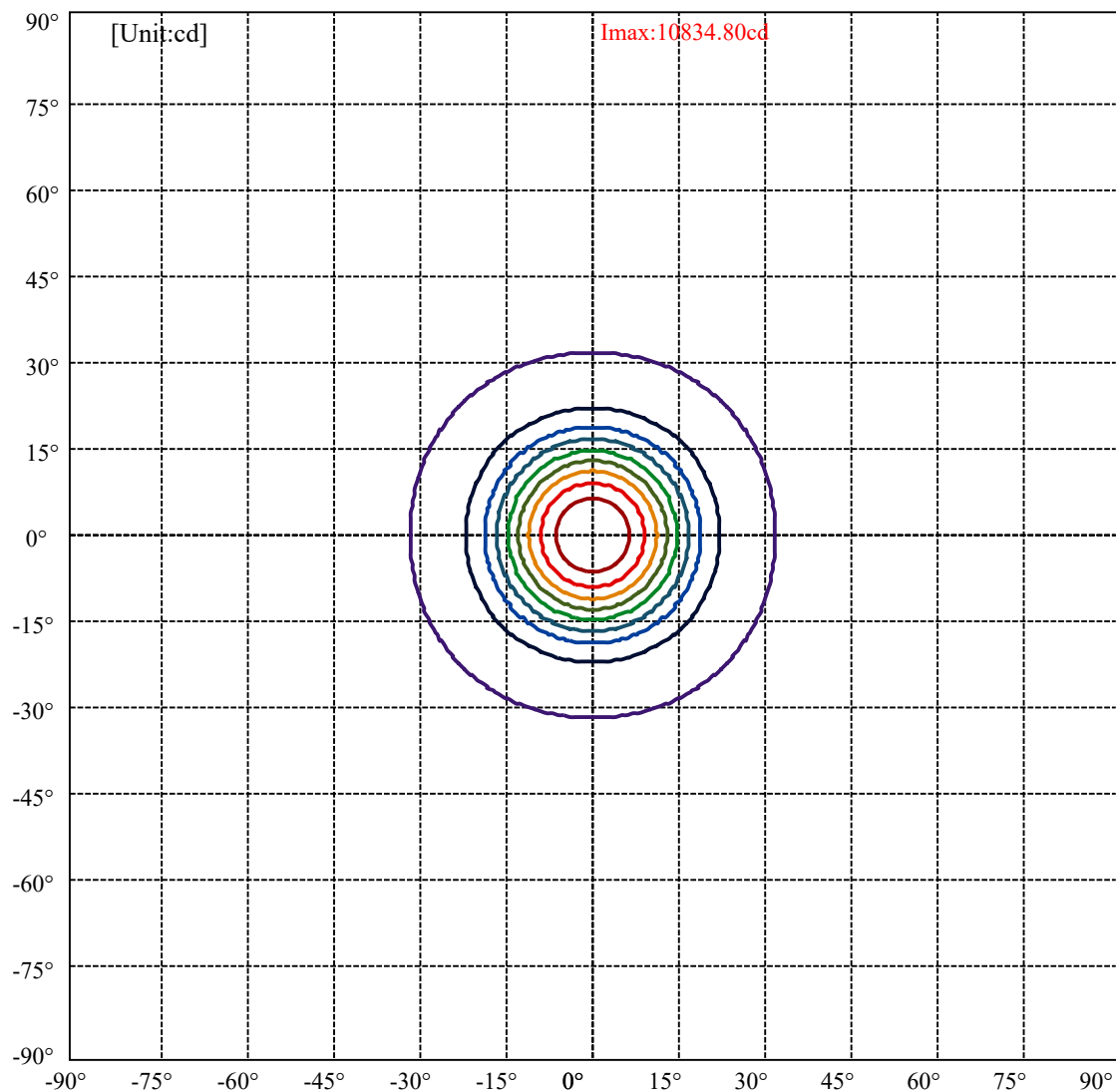
Field angle(10%Imax):C0/180Left:31.4 Right:31.4

:C90/270Left:31.4 Right:31.4

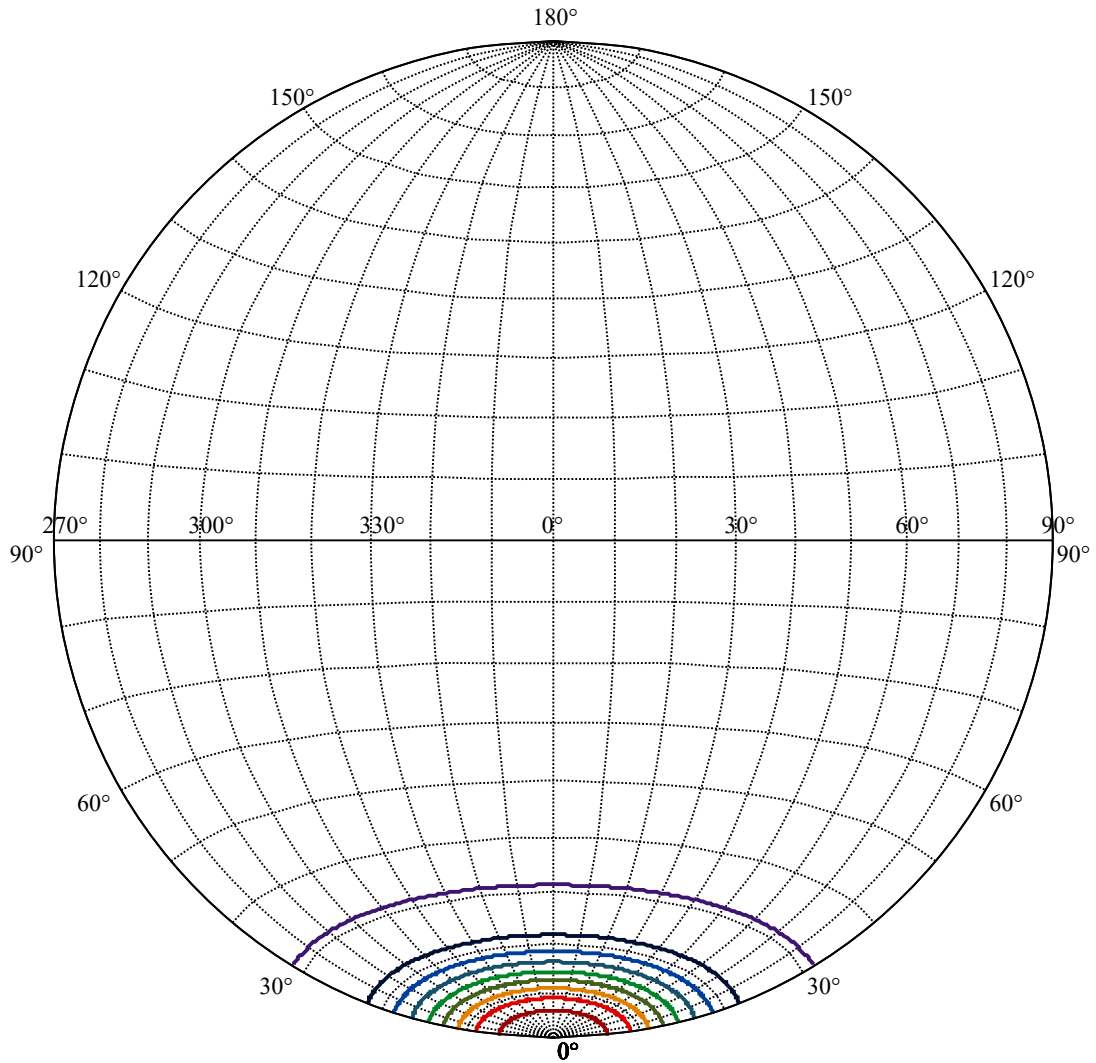
Beam Angle(50%Imax):C0/180Left:14.5 Right:14.5

:C90/270Left:14.5 Right:14.5





(10%Imax) 1083.48	—
(20%Imax) 2166.96	—
(30%Imax) 3250.44	—
(40%Imax) 4333.92	—
(50%Imax) 5417.4	—
(60%Imax) 6500.88	—
(70%Imax) 7584.36	—
(80%Imax) 8667.84	—
(90%Imax) 9751.32	—



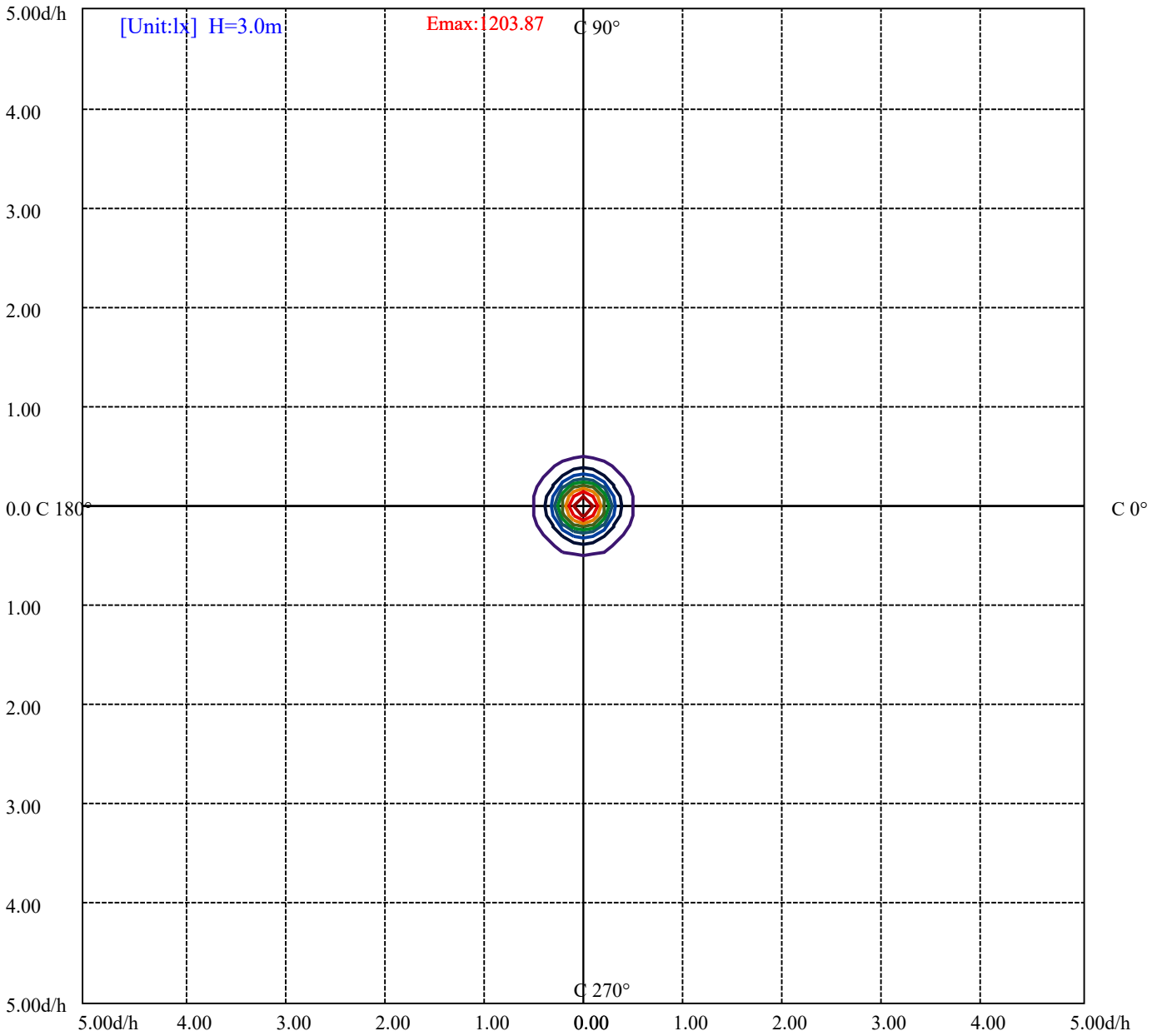
House

[Unit:cd]

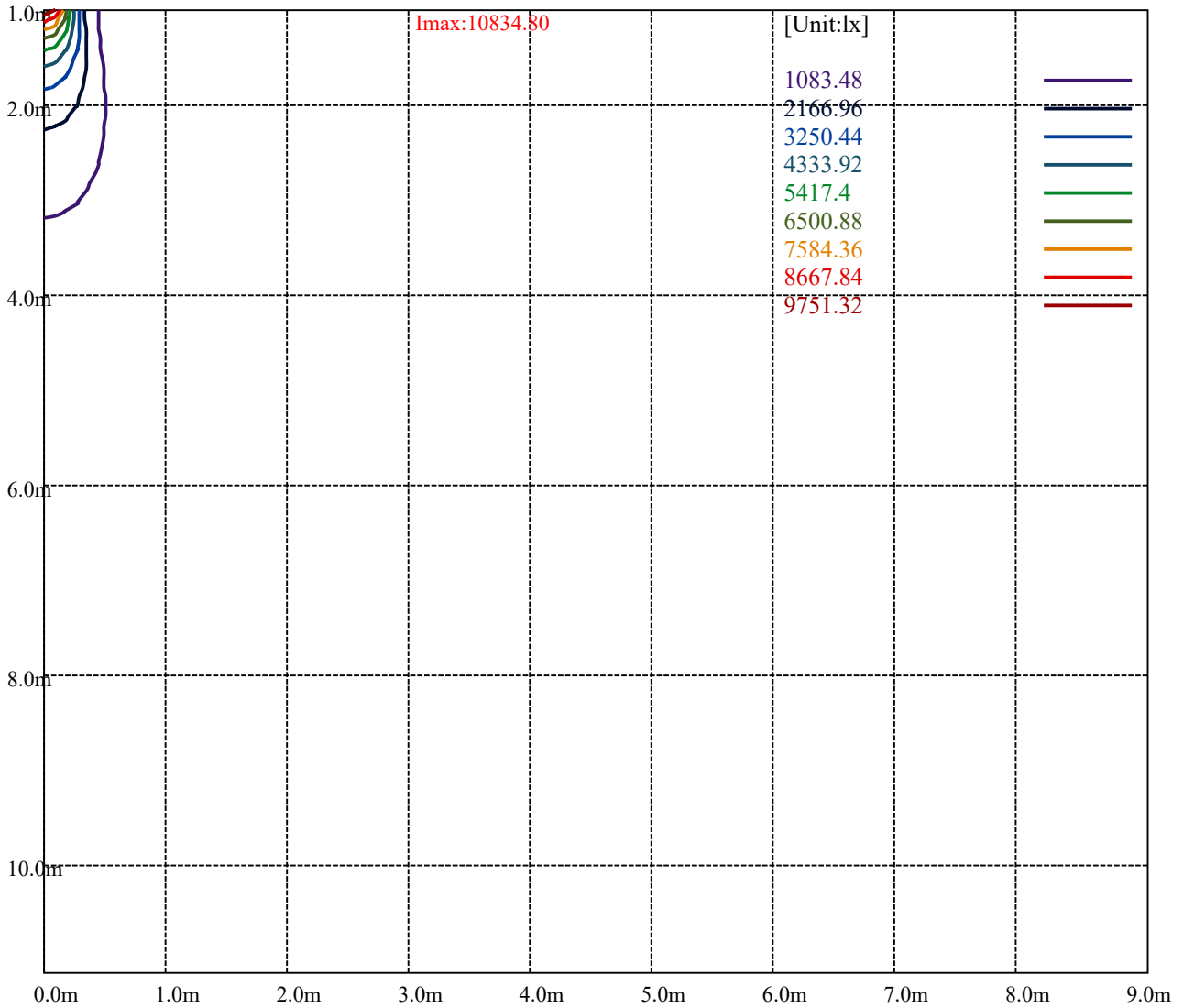
Road

Imax:10834.80

(10%Imax)	1083.48	—
(20%Imax)	2166.96	—
(30%Imax)	3250.44	—
(40%Imax)	4333.92	—
(50%Imax)	5417.4	—
(60%Imax)	6500.88	—
(70%Imax)	7584.36	—
(80%Imax)	8667.84	—
(90%Imax)	9751.32	—



- (10%Emax) 120.3867
- (20%Emax) 240.7733
- (30%Emax) 361.1589
- (40%Emax) 481.5456
- (50%Emax) 601.9323
- (60%Emax) 722.3189
- (70%Emax) 842.7056
- (80%Emax) 963.0911
- (90%Emax) 1083.478



Luminance Table

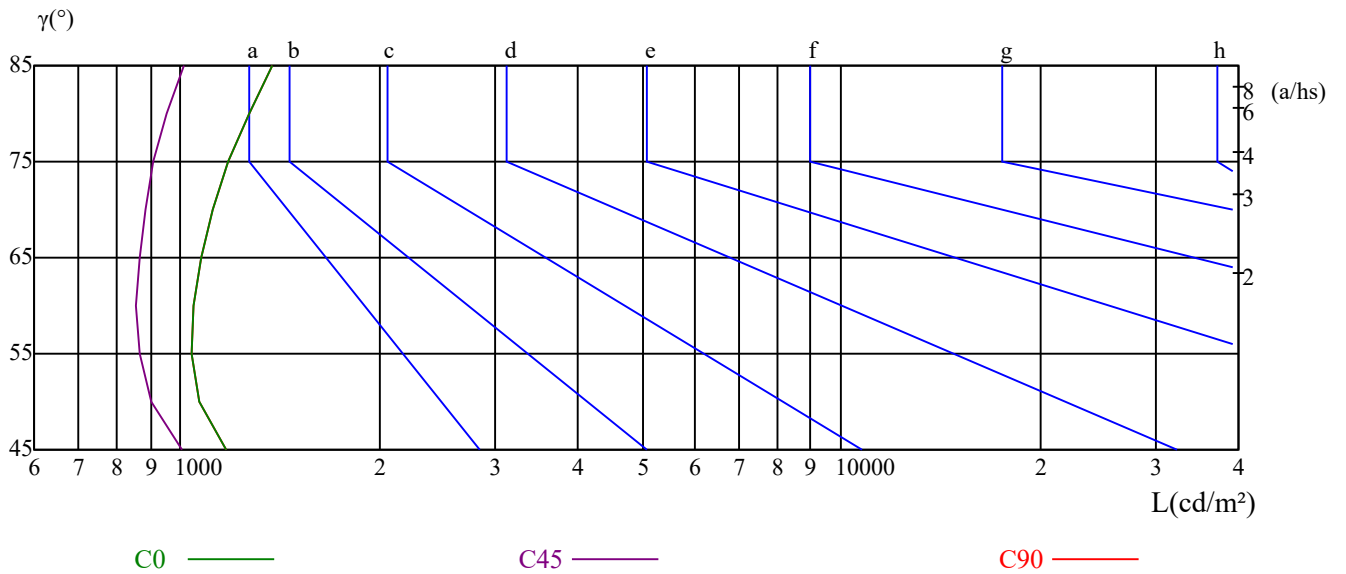
γ	45	50	55	60	65	70	75	80	85
C0	1169	1069	1041	1046	1075	1122	1179	1268	1381
C45	1004	904	867	857	866	886	911	956	1011
C90	1169	1069	1041	1046	1075	1122	1179	1268	1381

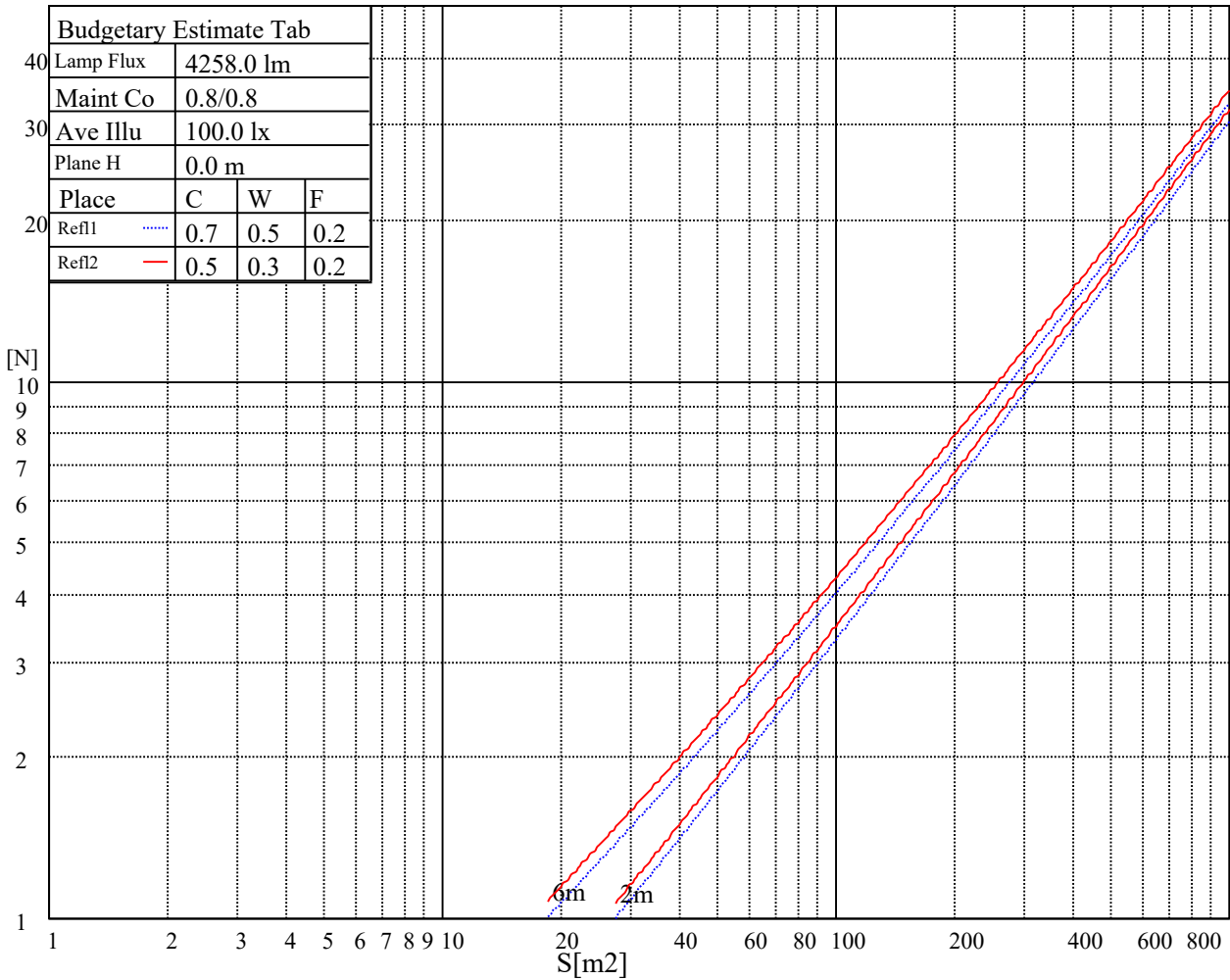
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2595	2595	2595	4077	4077	4077	11776	11776	11776

Glare Table

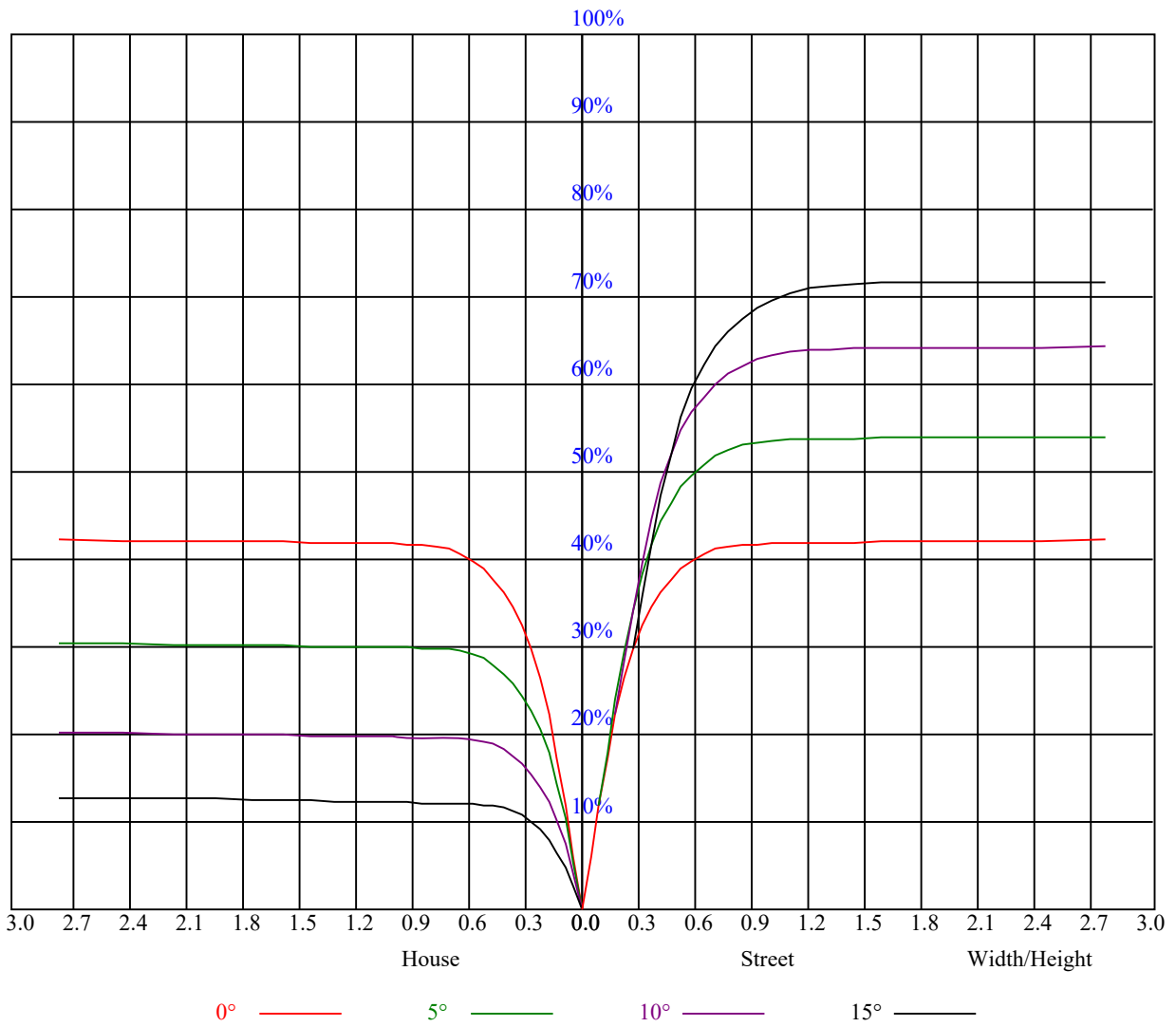
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.03	1.03	1.03	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.86
1	0.96	0.94	0.92	0.94	0.93	0.91	0.91	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.83	0.82
2	0.91	0.88	0.85	0.89	0.86	0.84	0.86	0.84	0.82	0.84	0.82	0.81	0.82	0.80	0.79	0.78
3	0.86	0.82	0.79	0.85	0.81	0.79	0.83	0.80	0.77	0.81	0.78	0.76	0.79	0.77	0.75	0.74
4	0.82	0.78	0.75	0.81	0.77	0.74	0.79	0.76	0.73	0.77	0.75	0.72	0.76	0.74	0.72	0.70
5	0.78	0.74	0.71	0.77	0.73	0.70	0.76	0.72	0.70	0.74	0.71	0.69	0.73	0.71	0.68	0.67
6	0.74	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.71	0.68	0.66	0.70	0.68	0.66	0.65
7	0.71	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.63	0.68	0.65	0.63	0.62
8	0.68	0.64	0.61	0.68	0.64	0.61	0.67	0.64	0.61	0.66	0.63	0.61	0.66	0.63	0.61	0.60
9	0.66	0.62	0.59	0.65	0.61	0.59	0.65	0.61	0.59	0.64	0.61	0.58	0.63	0.60	0.58	0.57
10	0.63	0.59	0.57	0.63	0.59	0.57	0.62	0.59	0.56	0.62	0.59	0.56	0.61	0.58	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	10832.00	10468.32	8642.66	5178.77	2533.43	1543.67	1305.88	754.21	291.50
45.0	10829.20	10844.87	9785.17	7111.30	3597.05	1773.07	1378.62	1073.13	375.43
90.0	10877.88	10747.51	9533.39	6564.10	3183.02	1656.69	1365.75	995.08	274.77
135.0	10800.11	10652.96	9444.99	6292.18	3178.54	1668.44	1394.84	981.37	294.30
180.0	10832.00	10240.04	7848.72	4694.24	2200.53	1504.51	1106.31	651.99	52.76
225.0	10829.20	9596.05	6681.60	3432.00	1764.12	1444.08	1052.59	348.18	21.60
270.0	10877.88	9839.44	7233.27	3702.24	1906.23	1441.84	1144.75	426.90	23.22
315.0	10800.11	9812.58	6695.02	3748.12	1868.74	1426.18	1086.67	431.66	23.33
360.0	10832.00	10468.32	8642.66	5178.77	2533.43	1543.67	1305.88	754.21	291.50

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	18.18	14.99	13.82	13.09	12.48	12.09	13.60	13.15	11.69
45.0	21.09	16.17	14.99	14.16	13.54	13.15	17.62	22.16	14.04
90.0	20.81	15.78	14.83	13.99	13.37	13.26	28.20	33.40	18.35
135.0	20.98	17.06	15.16	14.44	13.82	13.99	46.66	51.47	26.97
180.0	17.01	15.78	14.99	14.21	13.99	26.74	54.05	52.03	14.60
225.0	17.06	15.33	14.60	14.04	14.10	38.77	48.56	38.72	14.94
270.0	17.34	15.11	14.27	13.71	13.88	38.55	52.54	41.57	14.38
315.0	15.78	14.77	13.93	13.20	12.92	21.48	33.91	21.15	13.04
360.0	18.18	14.99	13.82	13.09	12.48	12.09	13.60	13.15	11.69

C/γ(°)	90.0
0.0	11.41
45.0	12.53
90.0	12.87
135.0	13.88
180.0	13.88
225.0	14.38
270.0	13.54
315.0	12.70
360.0	11.41