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Nata

LumCAT: 1-0937-N	
Luminaire: 92.361.000	
Report No: 220519-B006	Voltage(V): 38.1900
Test No: 220519-C006	Current(A): 0.3610
LampCAT: CREE CXA1507	Power (W): 13.7860
Lamp flux(lm): 1272.8	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 43	Width(mm): 43
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1020.04
Efficiency(%): 80.14%
Lumens(lm)/Power(W): 73.99
Central intensity(cd): 2686.938
Maximum intensity(cd): 2686.938
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=34.5
 [C90/270]Total=34.5
Field angle(10%Imax): [C0/180]Total=57.3
 [C90/270]Total=57.3
Maximum s/h(1/2): C0_180=0.57 C90_270=0.57
Maximum s/h(1/4): C0_180=0.57 C90_270=0.57
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 80.14%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.036%

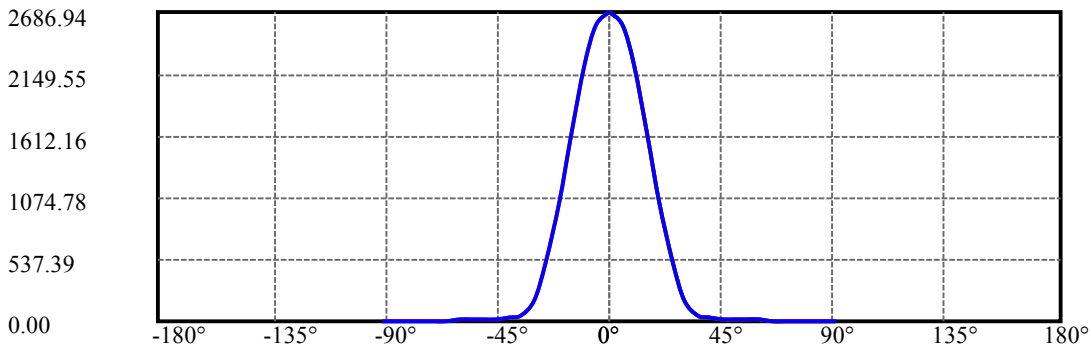
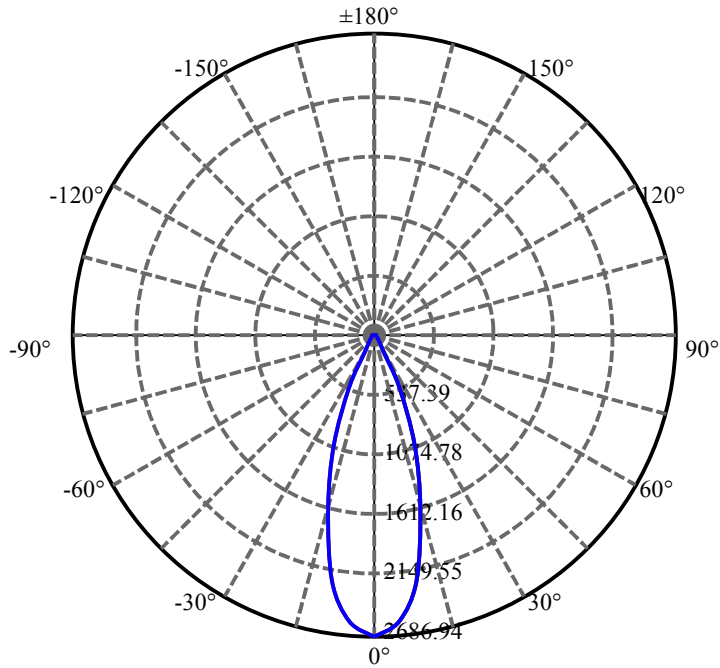
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2686.939	0.000	0	.000%	.000%
5.0	2562.503	62.756	62.756	4.931%	6.152%
10.0	2215.862	170.937	233.693	13.430%	22.910%
15.0	1595.649	226.096	459.789	17.764%	45.076%
20.0	1036.205	216.902	676.691	17.042%	66.340%
25.0	509.924	162.160	838.851	12.741%	82.237%
30.0	178.676	87.143	925.994	6.847%	90.780%
35.0	46.129	33.104	959.098	2.601%	94.026%
40.0	30.541	12.792	971.89	1.005%	95.280%
45.0	21.429	9.623	981.513	.756%	96.223%
50.0	15.790	7.521	989.033	.591%	96.960%
55.0	11.883	6.017	995.05	.473%	97.550%
60.0	9.546	4.953	1000.004	.389%	98.036%
65.0	7.999	4.265	1004.269	.335%	98.454%
70.0	6.999	3.798	1008.066	.298%	98.826%
75.0	6.199	3.450	1011.516	.271%	99.164%
80.0	5.520	3.136	1014.652	.246%	99.472%
85.0	4.930	2.839	1017.491	.223%	99.750%
90.0	4.377	2.548	1020.039	.200%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	925.99	72.75%	90.78%
0-40	971.89	76.36%	95.28%
0-60	1000.00	78.57%	98.04%
0-90	1017.49	79.94%	99.75%
0-120	1017.49	79.94%	99.75%
0-180	1020.04	80.14%	100.00%
60-90	22.44	1.76%	2.20%
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%
0-24.30	816.03	64.11%	80.00%

ZONAL LUMEN SUMMARY

0-10	233.69
10-20	443.00
20-30	249.30
30-40	45.90
40-50	17.14
50-60	10.97
60-70	8.06
70-80	6.59
80-90	2.84
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: ———

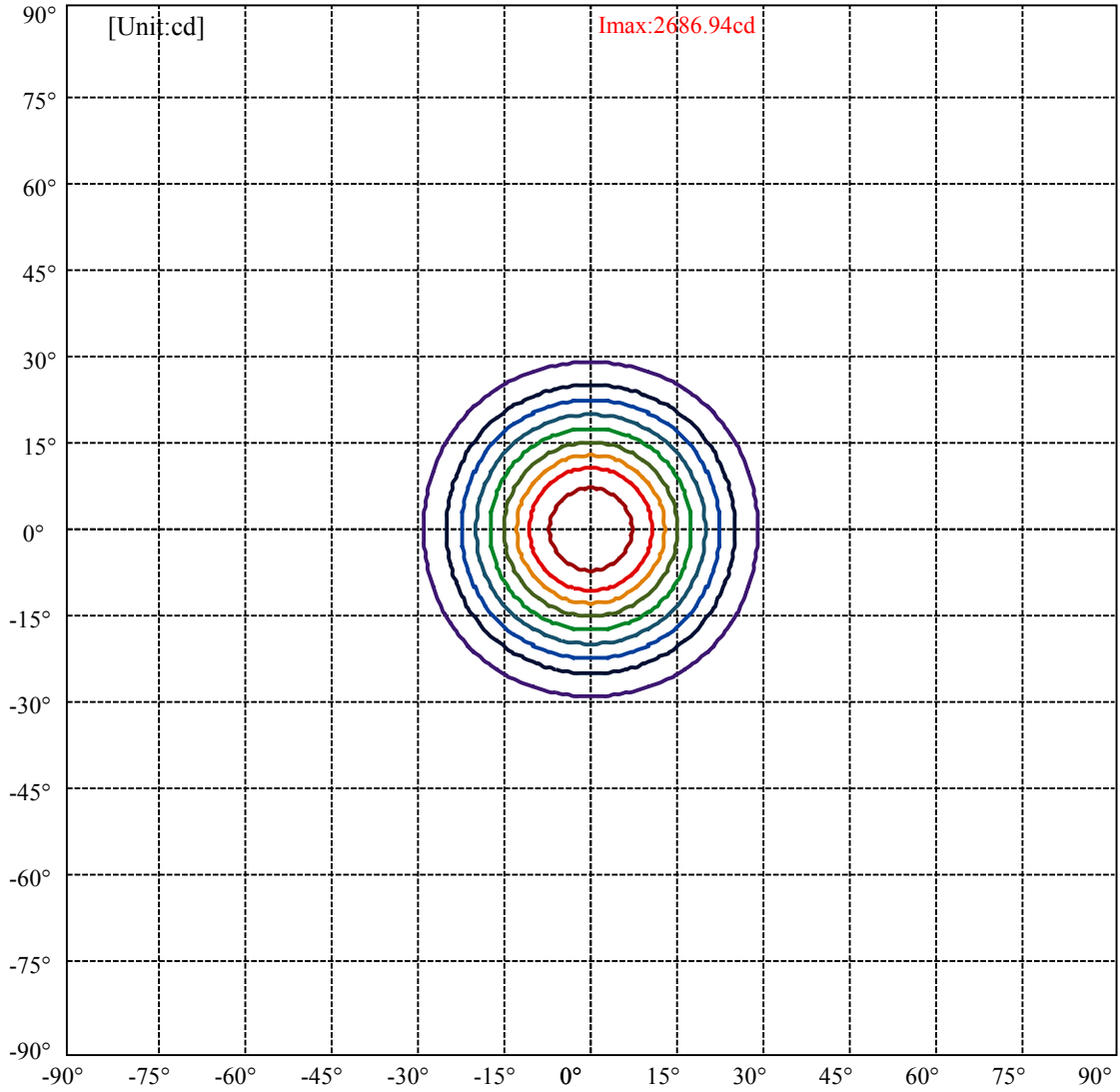
C90/C270: ———

Field angle(10%Imax):C0/180Left:28.6 Right:28.6

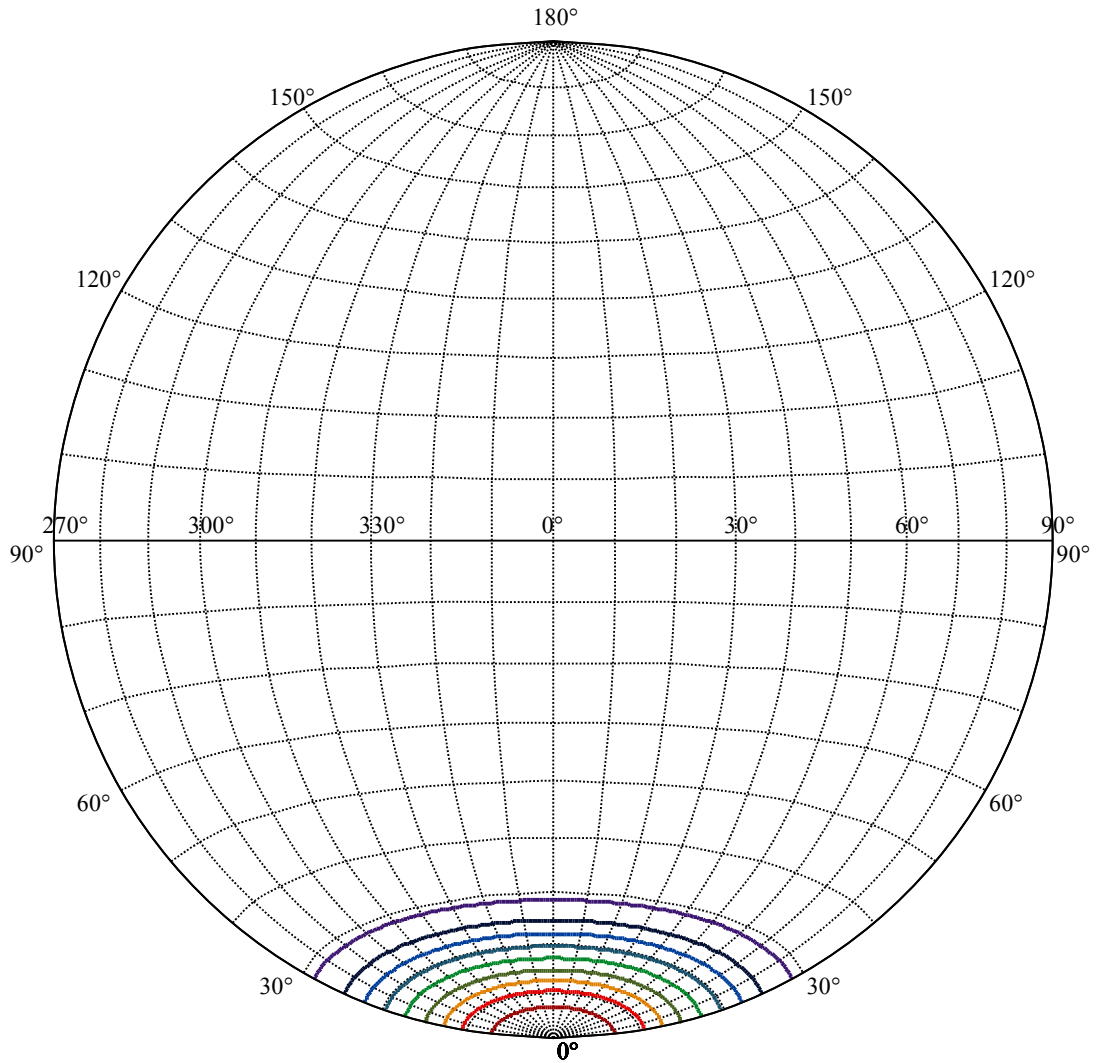
:C90/270Left:28.6 Right:28.6

Beam Angle(50%Imax):C0/180Left:17.3 Right:17.3

:C90/270Left:17.3 Right:17.3



(10%Imax) 268.694	—
(20%Imax) 537.388	—
(30%Imax) 806.082	—
(40%Imax) 1074.78	—
(50%Imax) 1343.47	—
(60%Imax) 1612.16	—
(70%Imax) 1880.86	—
(80%Imax) 2149.55	—
(90%Imax) 2418.24	—



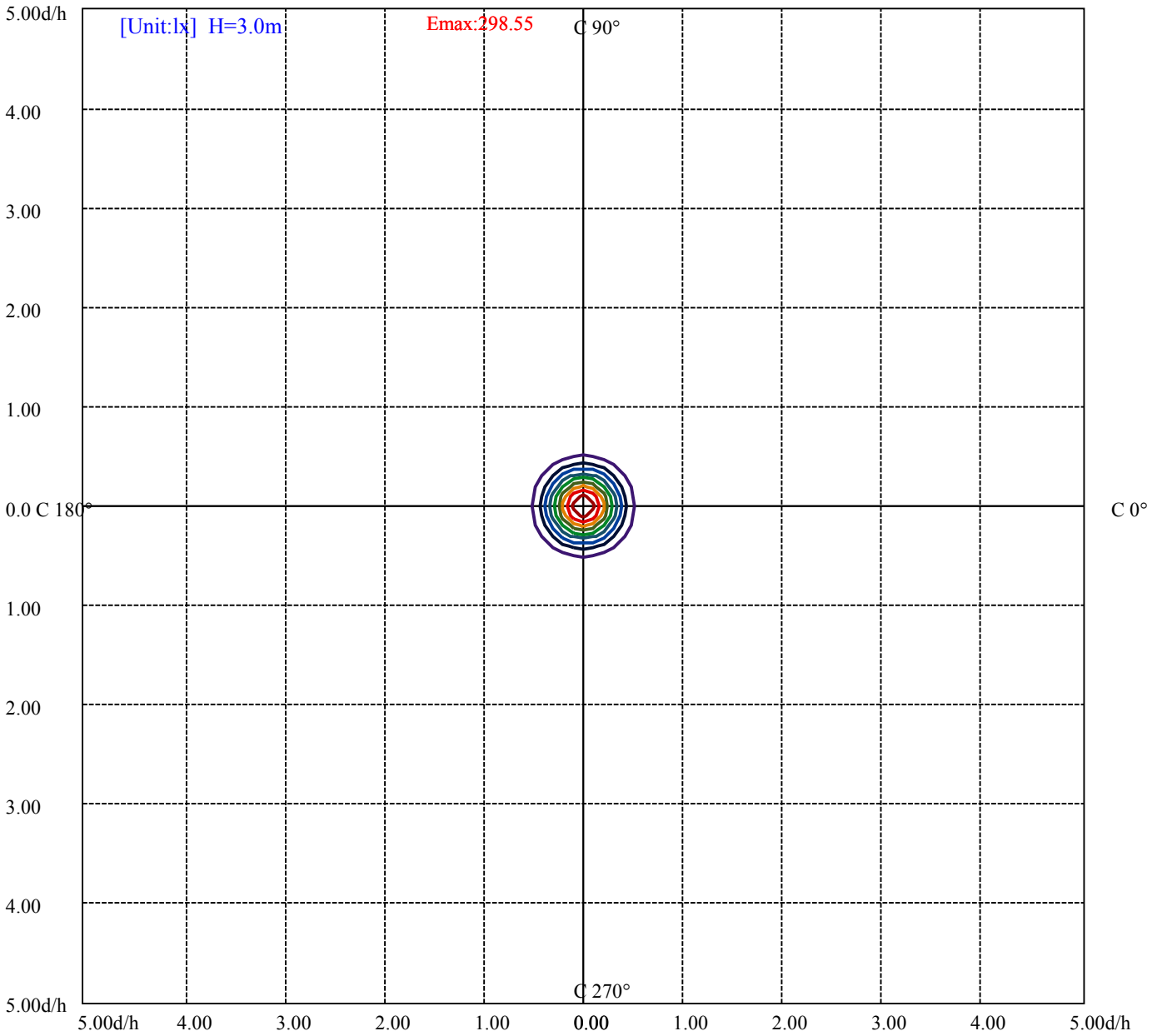
House

[Unit:cd]

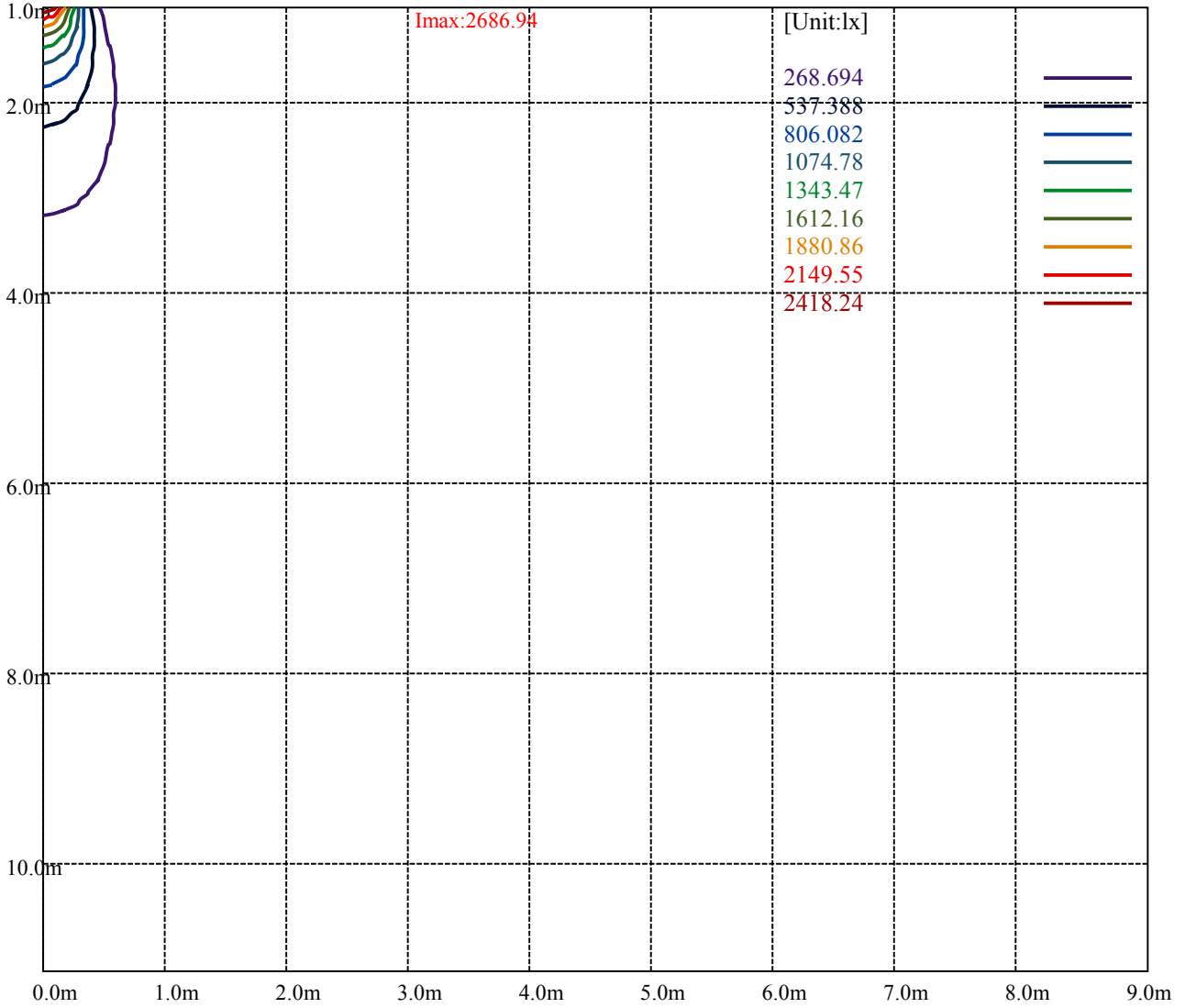
Road

Imax:2686.94

(10%Imax) 268.694	—
(20%Imax) 537.388	—
(30%Imax) 806.082	—
(40%Imax) 1074.78	—
(50%Imax) 1343.47	—
(60%Imax) 1612.16	—
(70%Imax) 1880.86	—
(80%Imax) 2149.55	—
(90%Imax) 2418.24	—



- (10%Emax) 29.85478
- (20%Emax) 59.70967
- (30%Emax) 89.56445
- (40%Emax) 119.4189
- (50%Emax) 149.2744
- (60%Emax) 179.1289
- (70%Emax) 208.9833
- (80%Emax) 238.8389
- (90%Emax) 268.6933



Luminance Table

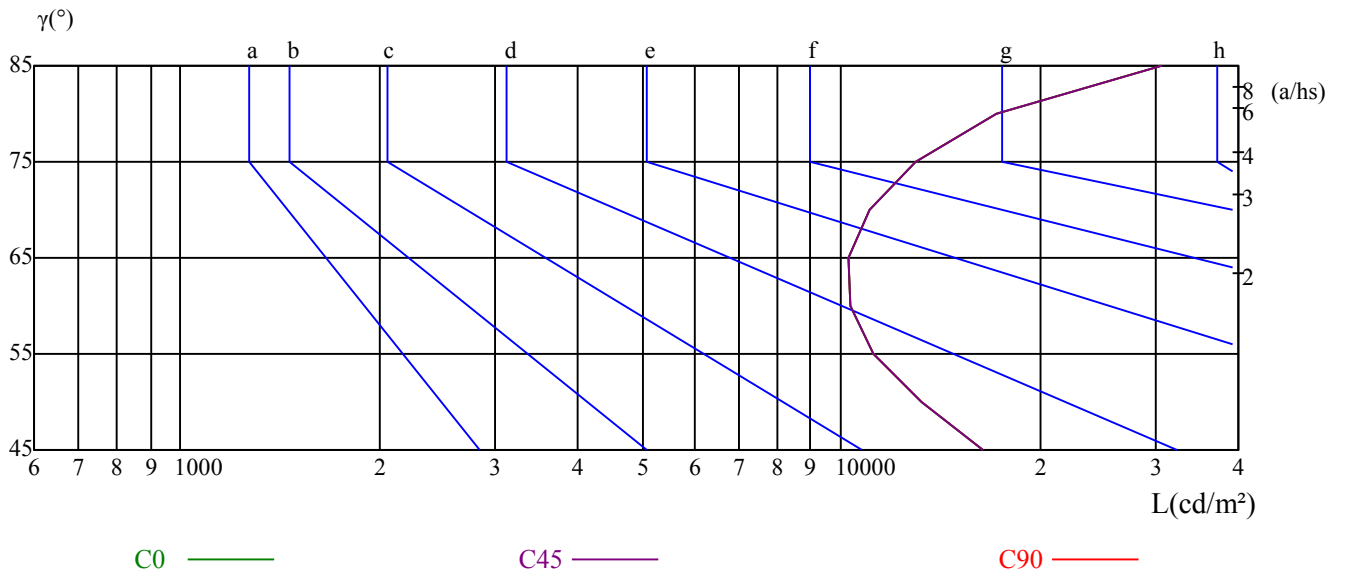
γ	45	50	55	60	65	70	75	80	85
C0	16390	13285	11205	10325	10237	11067	12954	17191	30590
C45	16390	13285	11205	10325	10237	11067	12954	17191	30590
C90	16390	13285	11205	10325	10237	11067	12954	17191	30590

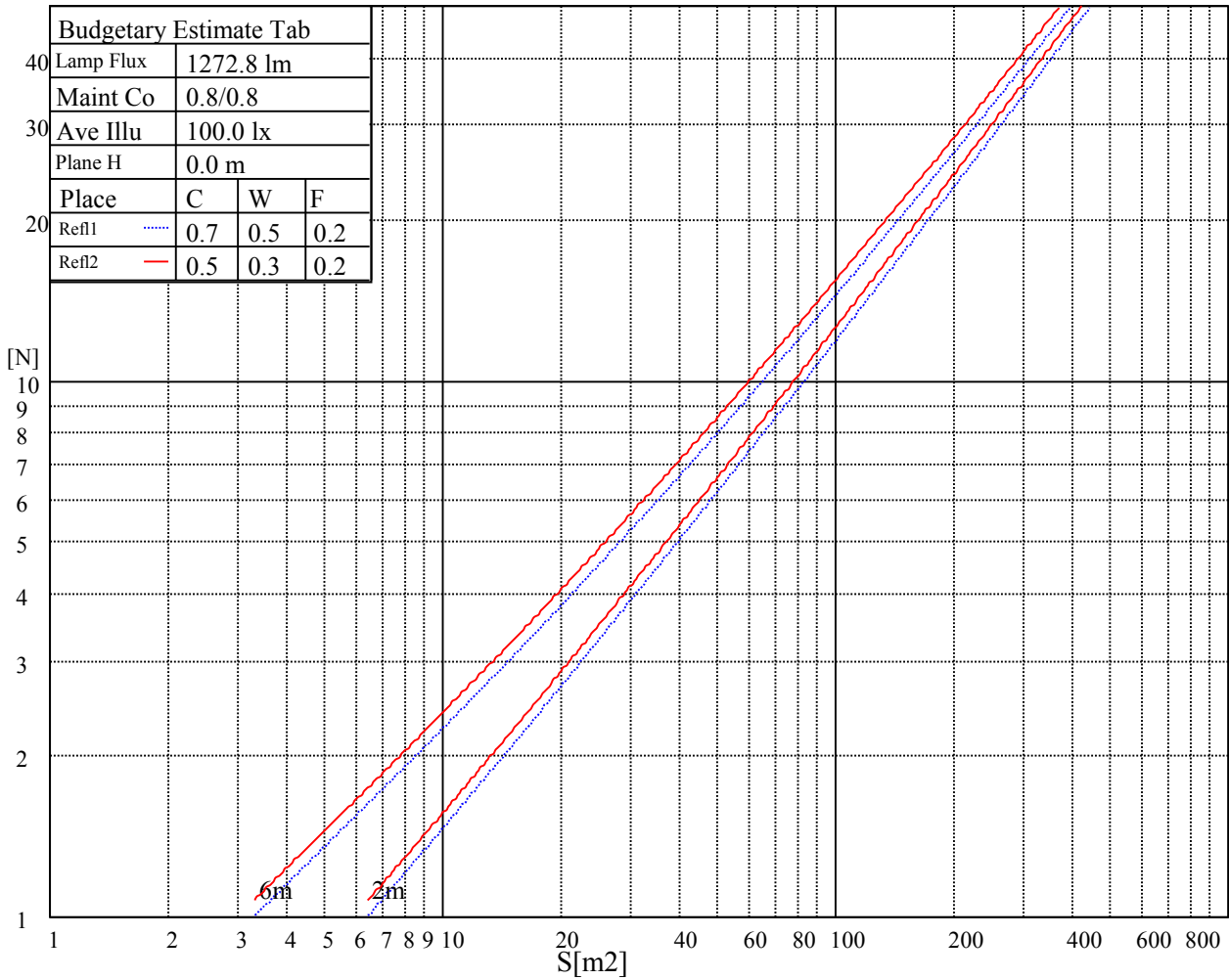
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
10237	10237	10237	12954	12954	12954	30590	30590	30590

Glare Table

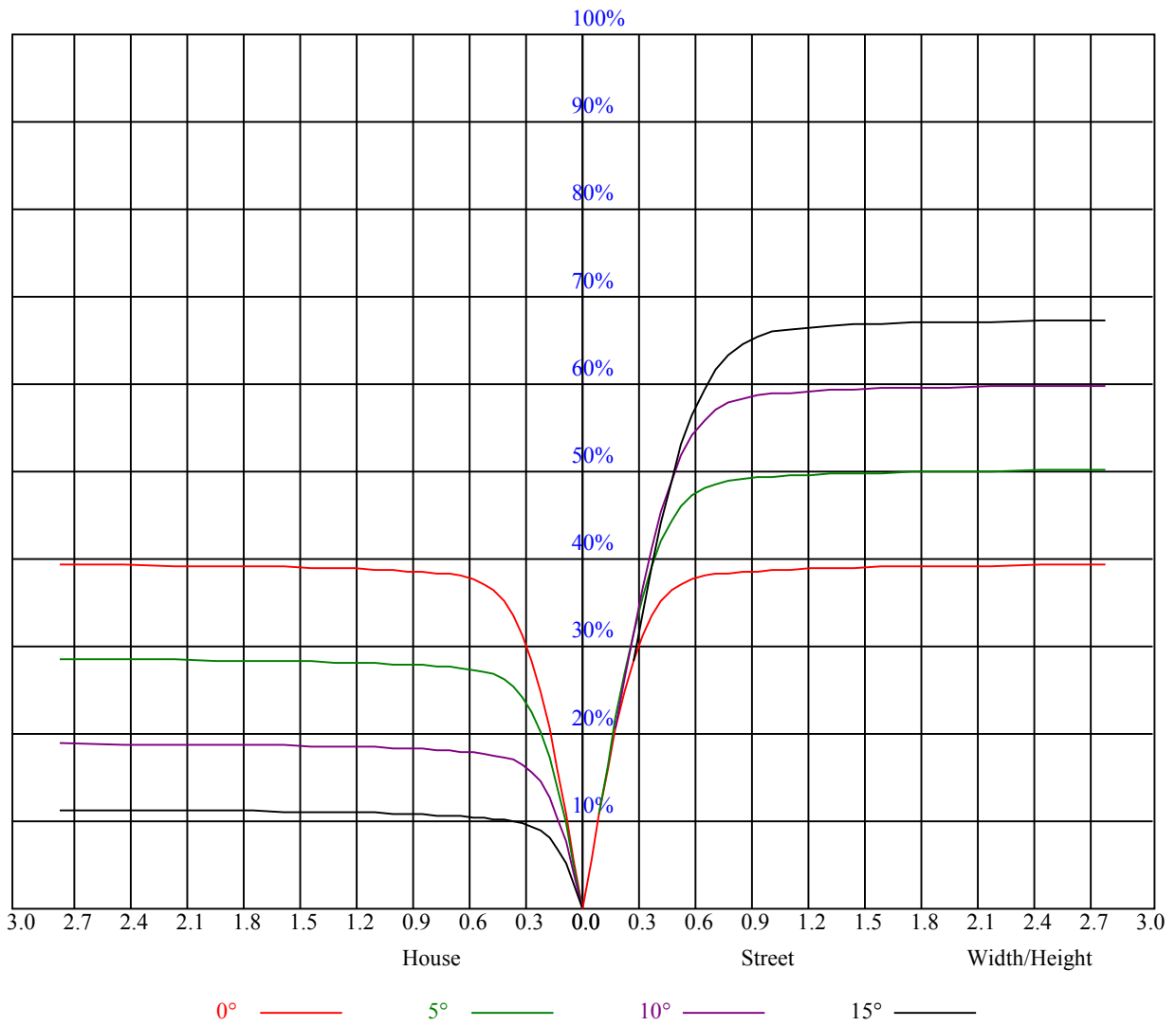
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.95	0.95	0.95	0.93	0.93	0.93	0.89	0.89	0.89	0.85	0.85	0.85	0.82	0.82	0.82	0.80
1	0.89	0.88	0.86	0.88	0.86	0.85	0.85	0.83	0.82	0.82	0.81	0.80	0.79	0.78	0.77	0.76
2	0.84	0.82	0.79	0.83	0.81	0.78	0.81	0.78	0.77	0.78	0.77	0.75	0.76	0.75	0.74	0.72
3	0.80	0.77	0.74	0.79	0.76	0.73	0.77	0.74	0.72	0.75	0.73	0.71	0.73	0.72	0.70	0.69
4	0.76	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.68	0.72	0.70	0.68	0.71	0.69	0.67	0.66
5	0.73	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.65	0.69	0.67	0.65	0.68	0.66	0.64	0.63
6	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.67	0.64	0.62	0.66	0.63	0.62	0.61
7	0.67	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.60	0.64	0.62	0.59	0.64	0.61	0.59	0.58
8	0.64	0.60	0.58	0.64	0.60	0.58	0.63	0.60	0.57	0.62	0.59	0.57	0.62	0.59	0.57	0.56
9	0.62	0.58	0.55	0.61	0.58	0.55	0.61	0.57	0.55	0.60	0.57	0.55	0.59	0.57	0.55	0.54
10	0.60	0.56	0.53	0.59	0.56	0.53	0.59	0.55	0.53	0.58	0.55	0.53	0.58	0.55	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	2687.09	2627.93	2351.87	1845.17	1253.02	669.23	320.87	56.53	35.07
45.0	2694.26	2529.34	2143.93	1614.52	954.25	437.39	137.19	44.75	30.59
90.0	2671.55	2433.14	2022.64	1173.97	800.15	339.93	76.66	39.38	27.90
135.0	2694.86	2498.87	2130.79	1511.75	895.10	418.87	102.72	40.69	28.74
180.0	2687.09	2494.68	2051.32	1160.16	845.80	363.90	75.89	37.41	26.17
225.0	2694.26	2620.76	2292.12	1725.07	1112.90	568.49	187.15	44.93	30.29
270.0	2671.55	2670.36	2431.94	1942.57	1272.74	688.95	314.90	55.81	33.34
315.0	2694.86	2624.94	2302.28	1791.99	1155.68	592.63	214.03	49.54	32.21
360.0	2687.09	2627.93	2351.87	1845.17	1253.02	669.23	320.87	56.53	35.07
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	24.26	18.11	13.03	10.28	8.43	7.35	6.45	5.74	5.14
45.0	21.21	15.66	11.65	9.32	7.89	6.81	6.04	5.38	4.72
90.0	19.66	14.46	10.93	8.90	7.47	6.57	5.86	5.20	4.66
135.0	20.02	14.64	11.41	9.14	7.77	6.87	6.21	5.68	4.78
180.0	18.52	14.04	10.88	8.90	7.65	6.75	5.98	5.26	4.78
225.0	21.21	15.60	12.01	9.68	8.07	7.11	6.27	5.56	5.02
270.0	23.66	17.21	12.79	10.28	8.43	7.29	6.45	5.68	5.08
315.0	22.89	16.61	12.37	9.86	8.31	7.23	6.33	5.68	5.26
360.0	24.26	18.11	13.03	10.28	8.43	7.35	6.45	5.74	5.14
C/ γ (°)	90.0								
0.0	4.48								
45.0	4.24								
90.0	4.30								
135.0	4.36								
180.0	4.36								
225.0	4.30								
270.0	4.48								
315.0	4.48								
360.0	4.48								