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Nata

LumCAT: 1702-A
Luminaire: 92.70.150.00+92.70.152.00
Report No: NT2017072110
Test No: GC2017072110
LampCAT:CITIZEN LCN-C02B
Lamp flux(lm): 1991.8
Number of Lamps: 1
Length(mm): 46
Phm Type: C

Voltage(V): 23.4000
Current(A): 0.7000
Power (W): 16.3800
PF: 0.0000
Ballast type: DC
Width(mm): 46
Height(mm): 0

Photometric Results

Lumens(lm): 1700.08
Efficiency(%): 85.35%
Lumens(lm)/Power(W): 103.79
Central intensity(cd): 3007.830
Maximum intensity(cd): 3007.830
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=34.9
 [C90/270]Total=34.9
Field angle(10%Imax): [C0/180]Total=82.5
 [C90/270]Total=82.5
Maximum s/h(1/2): C0_180=0.56 C90_270=0.56
Maximum s/h(1/4): C0_180=0.63 C90_270=0.63
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 86.18%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.551%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2017/7/18
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.46

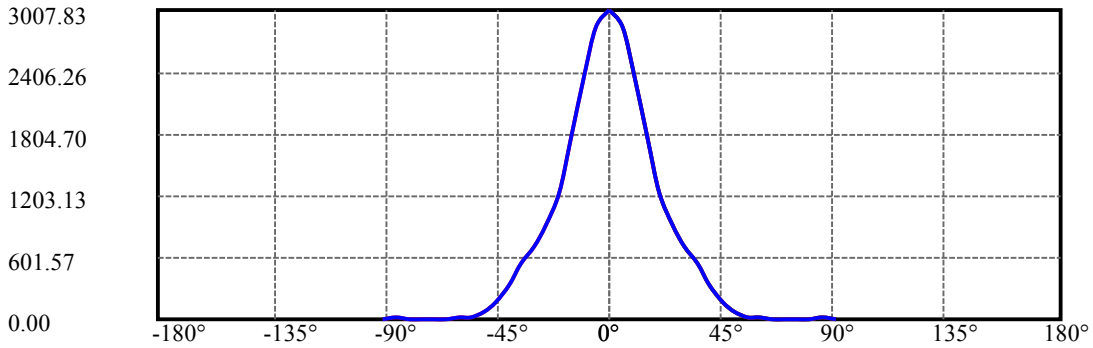
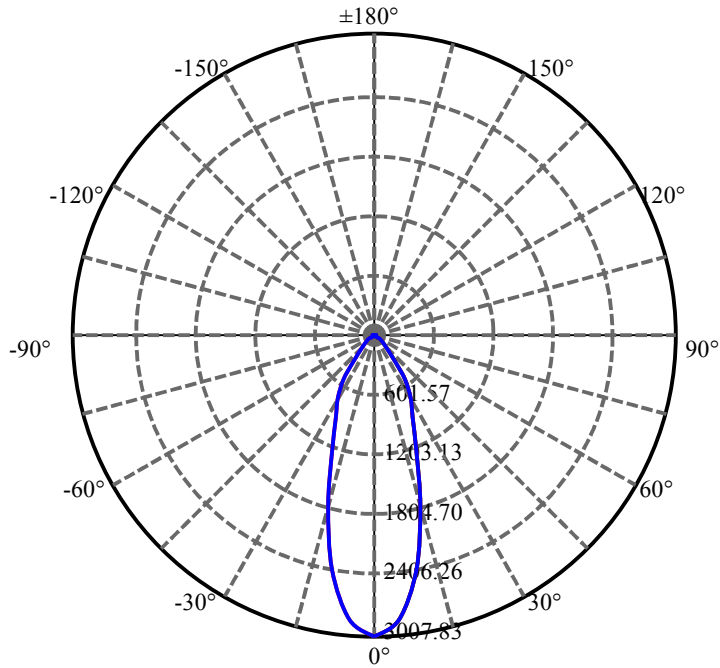
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3007.830	17.987	17.987	.903%	1.058%
5.0	2839.206	135.638	153.626	6.810%	9.036%
10.0	2373.262	225.894	379.52	11.341%	22.324%
15.0	1755.947	249.113	628.633	12.507%	36.977%
20.0	1237.274	231.957	860.59	11.646%	50.620%
25.0	916.304	212.264	1072.855	10.657%	63.106%
30.0	719.046	197.068	1269.923	9.894%	74.698%
35.0	535.814	168.459	1438.382	8.458%	84.607%
40.0	342.104	120.536	1558.917	6.052%	91.697%
45.0	176.026	68.226	1627.144	3.425%	95.710%
50.0	70.608	29.648	1656.792	1.489%	97.454%
55.0	27.075	12.157	1668.948	.610%	98.169%
60.0	11.534	5.475	1674.424	.275%	98.491%
65.0	9.029	4.486	1678.909	.225%	98.754%
70.0	8.709	4.486	1683.395	.225%	99.018%
75.0	9.057	4.795	1688.191	.241%	99.300%
80.0	9.029	4.874	1693.065	.245%	99.587%
85.0	9.669	5.280	1698.345	.265%	99.898%
90.0	6.344	1.739	1700.084	.087%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1269.92	63.76%	74.70%
0-40	1558.92	78.27%	91.70%
0-60	1674.42	84.07%	98.49%
0-90	1698.35	85.27%	99.90%
0-120	1698.35	85.27%	99.90%
0-180	1700.08	85.35%	100.00%
60-90	29.40	1.48%	1.73%
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%
0-32.68	1360.07	68.28%	80.00%

ZONAL LUMEN SUMMARY

0-10	379.52
10-20	481.07
20-30	409.33
30-40	288.99
40-50	97.87
50-60	17.63
60-70	8.97
70-80	9.67
80-90	5.28
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: —————

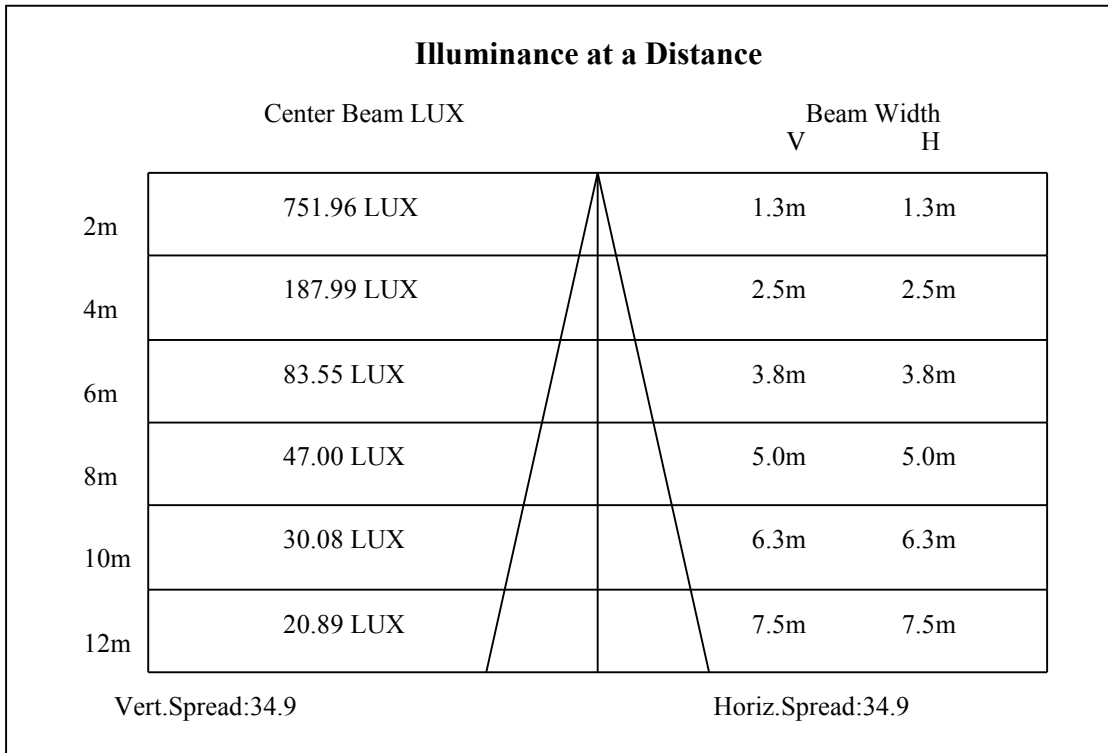
C90/C270: —————

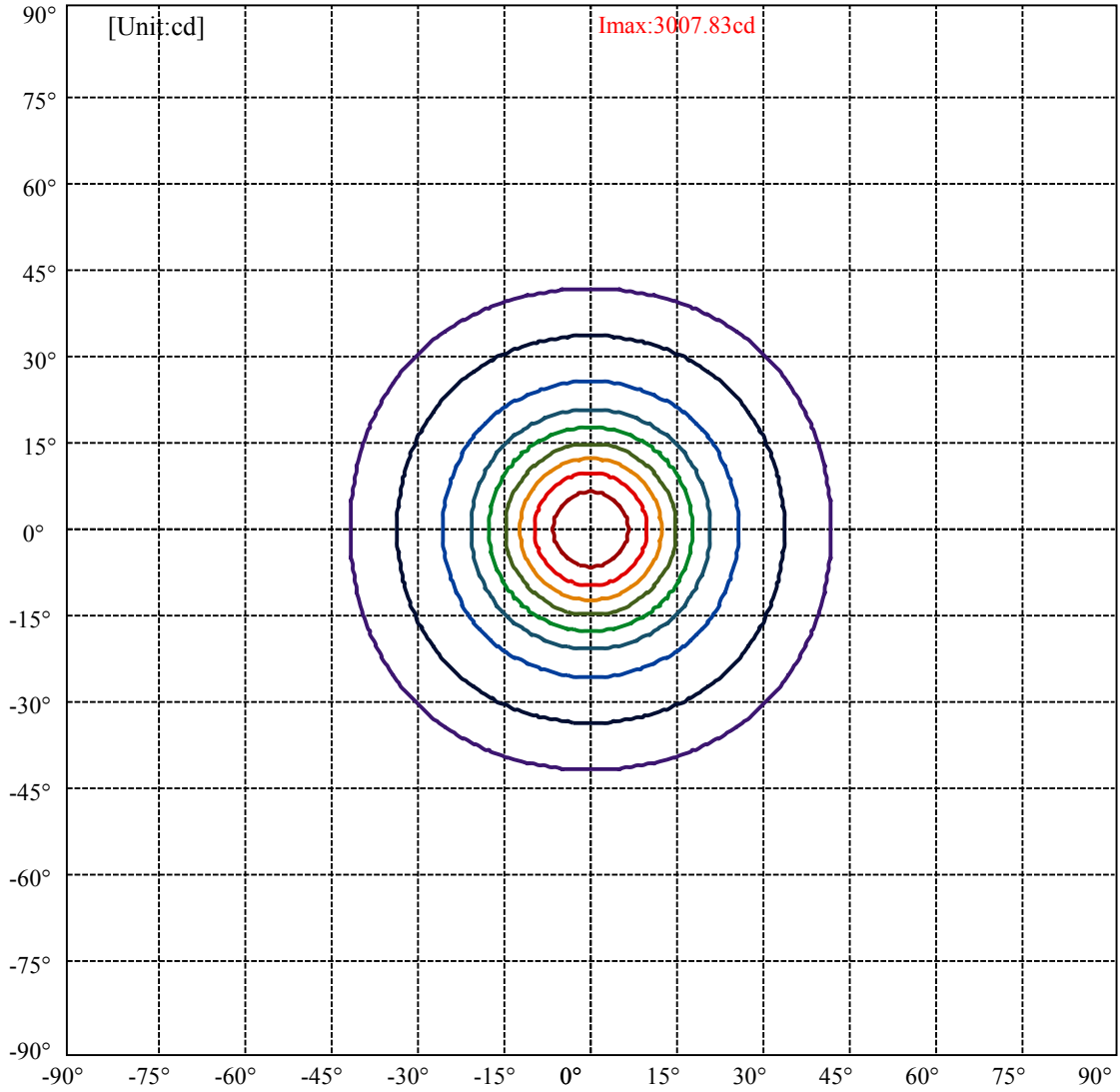
Field angle(10%Imax):C0/180Left:41.2 Right:41.2

:C90/270Left:41.2 Right:41.2

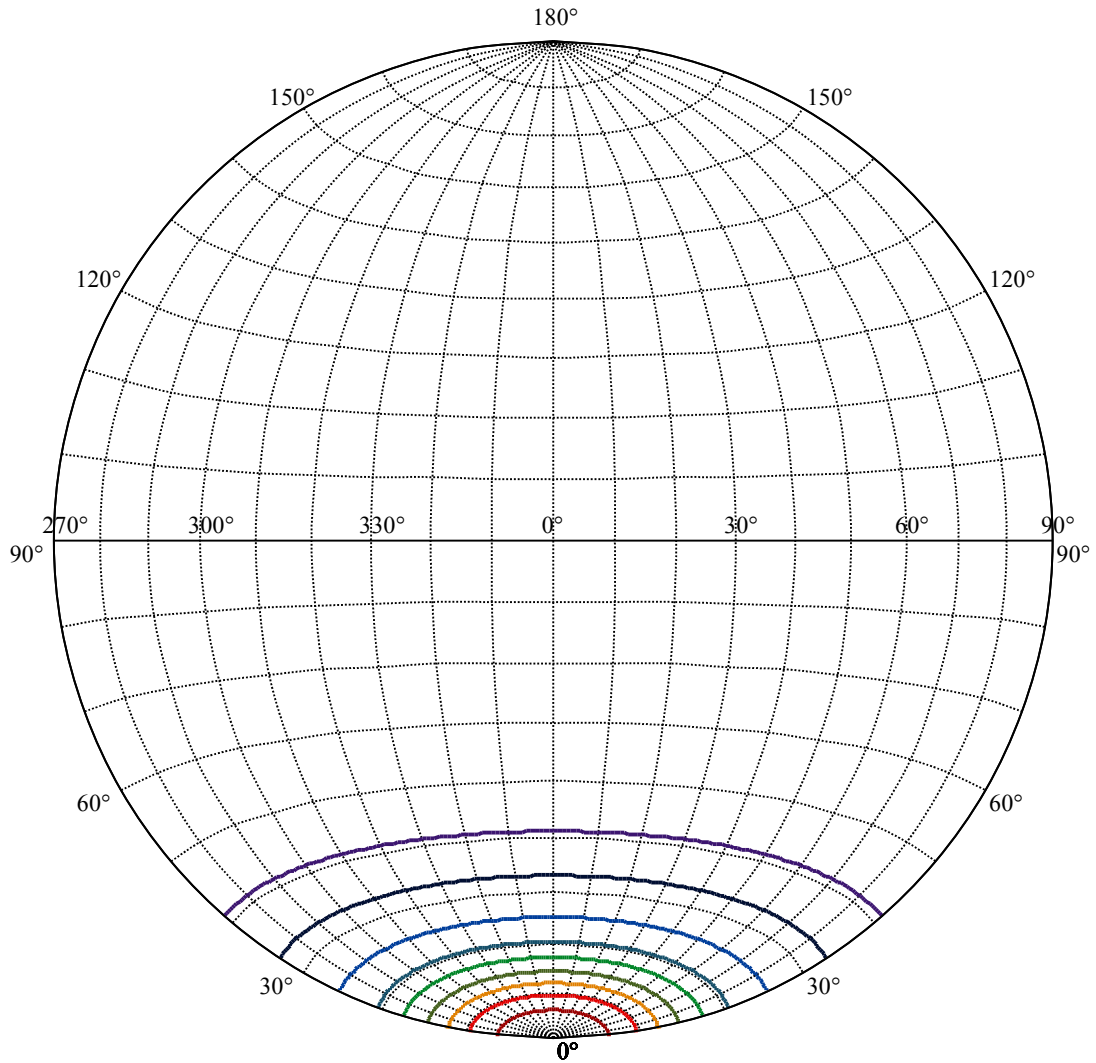
Beam Angle(50%Imax):C0/180Left:17.4 Right:17.4

:C90/270Left:17.4 Right:17.4





(10%Imax) 300.783	—
(20%Imax) 601.566	—
(30%Imax) 902.349	—
(40%Imax) 1203.13	—
(50%Imax) 1503.91	—
(60%Imax) 1804.7	—
(70%Imax) 2105.48	—
(80%Imax) 2406.26	—
(90%Imax) 2707.05	—



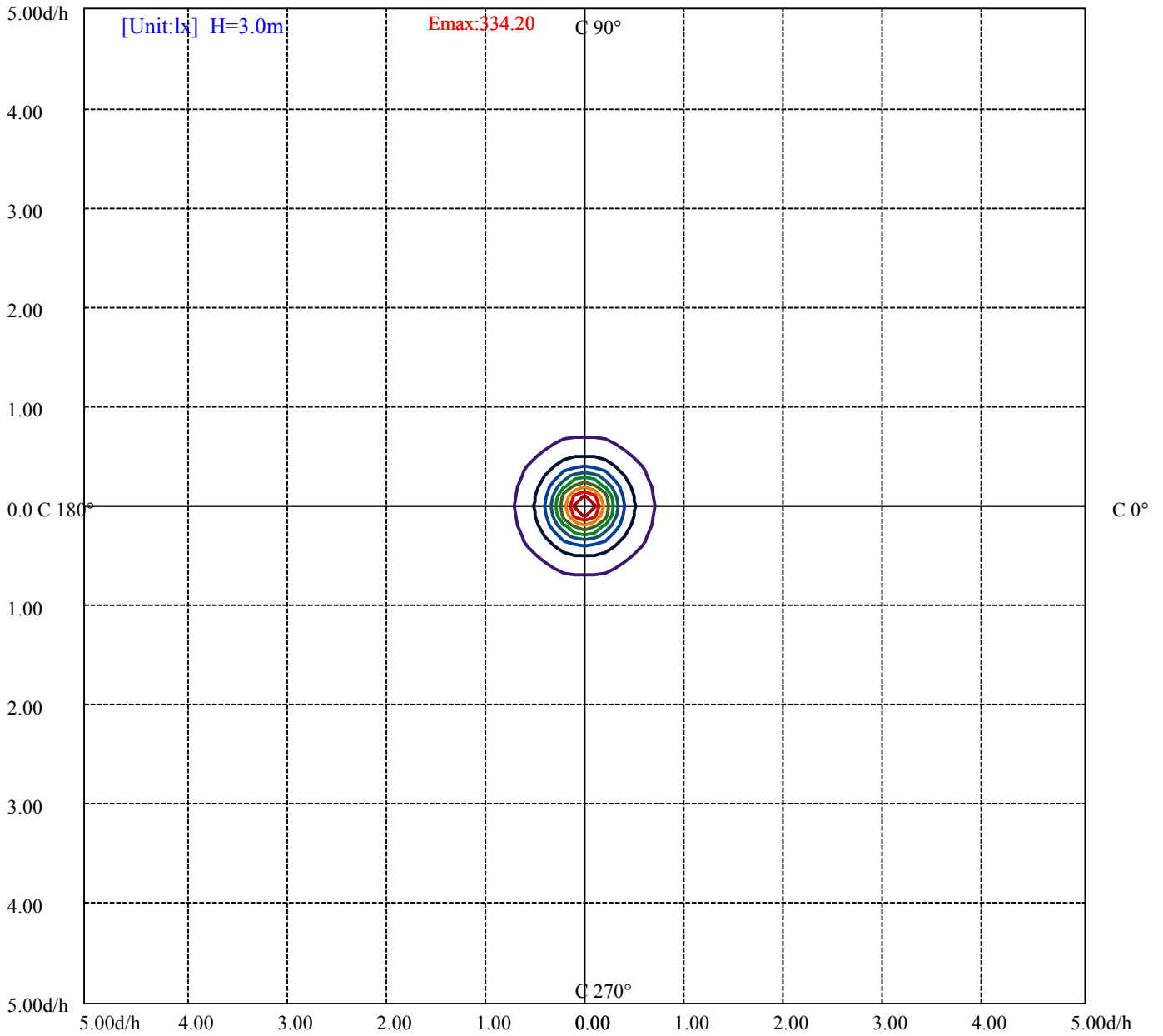
House

[Unit:cd]

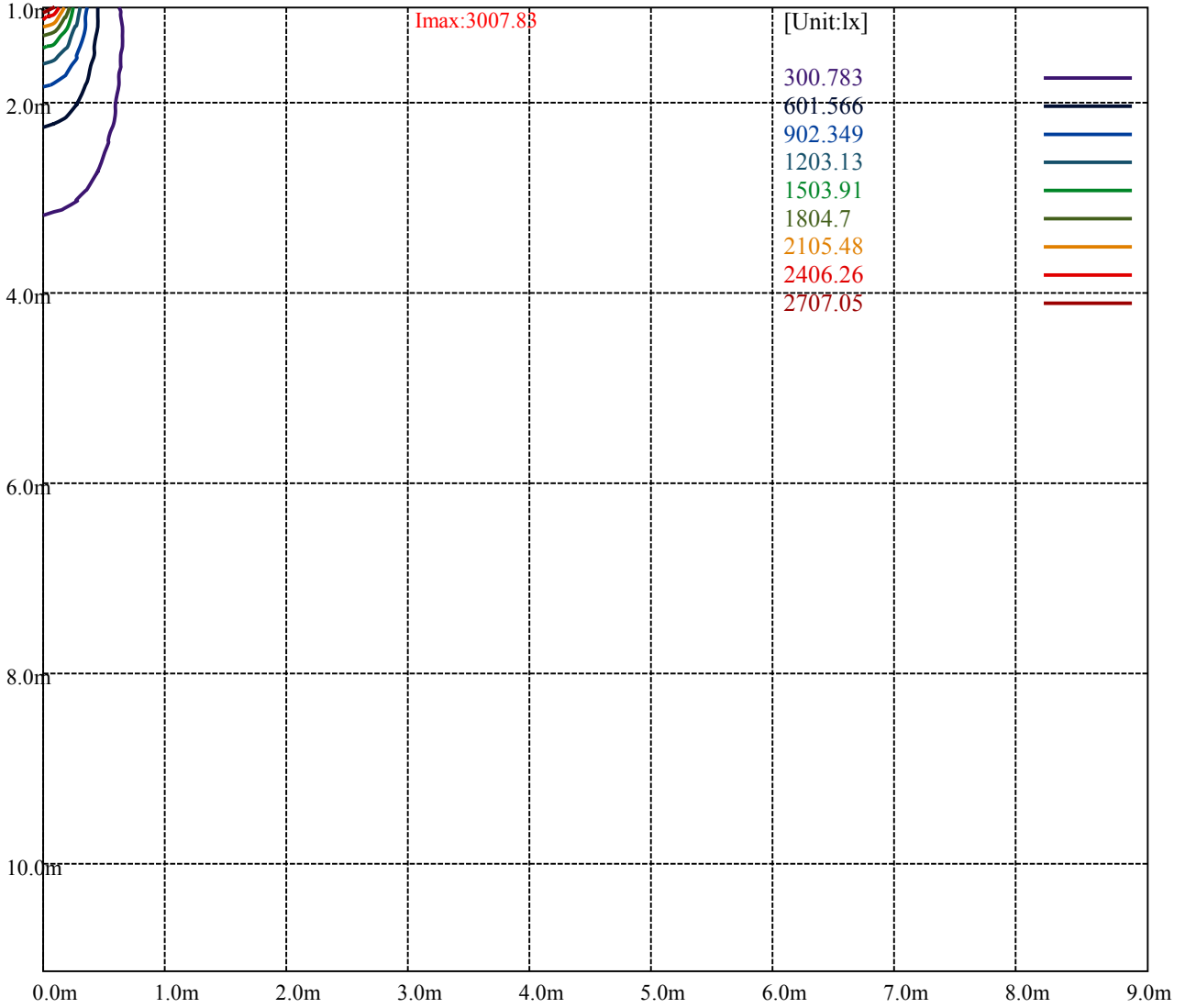
Road

Imax:3007.83

(10%Imax) 300.783	—
(20%Imax) 601.566	—
(30%Imax) 902.349	—
(40%Imax) 1203.13	—
(50%Imax) 1503.91	—
(60%Imax) 1804.7	—
(70%Imax) 2105.48	—
(80%Imax) 2406.26	—
(90%Imax) 2707.05	—



- (10%Emax) 33.42022
- (20%Emax) 66.84055
- (30%Emax) 100.2608
- (40%Emax) 133.6811
- (50%Emax) 167.1011
- (60%Emax) 200.5211
- (70%Emax) 233.9422
- (80%Emax) 267.3622
- (90%Emax) 300.7822



Luminance Table

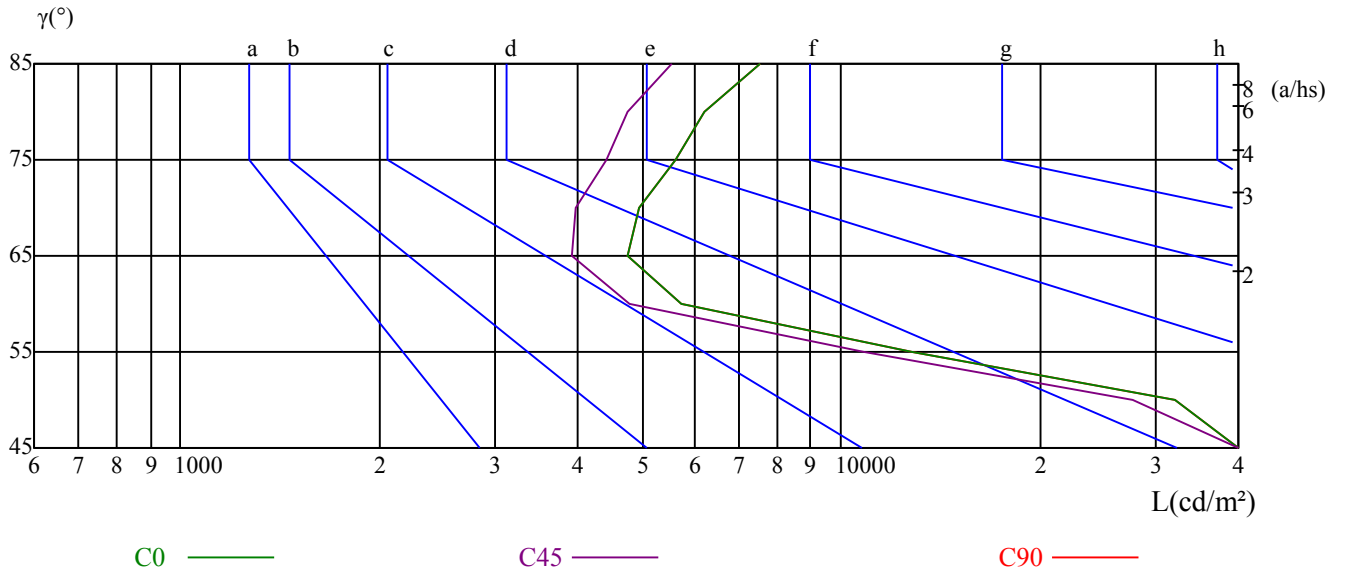
γ	45	50	55	60	65	70	75	80	85
C0	77310	32009	12783	5727	4765	4945	5612	6207	7529
C45	67696	27623	10862	4786	3910	3975	4406	4740	5558
C90	77310	32009	12783	5727	4765	4945	5612	6207	7529

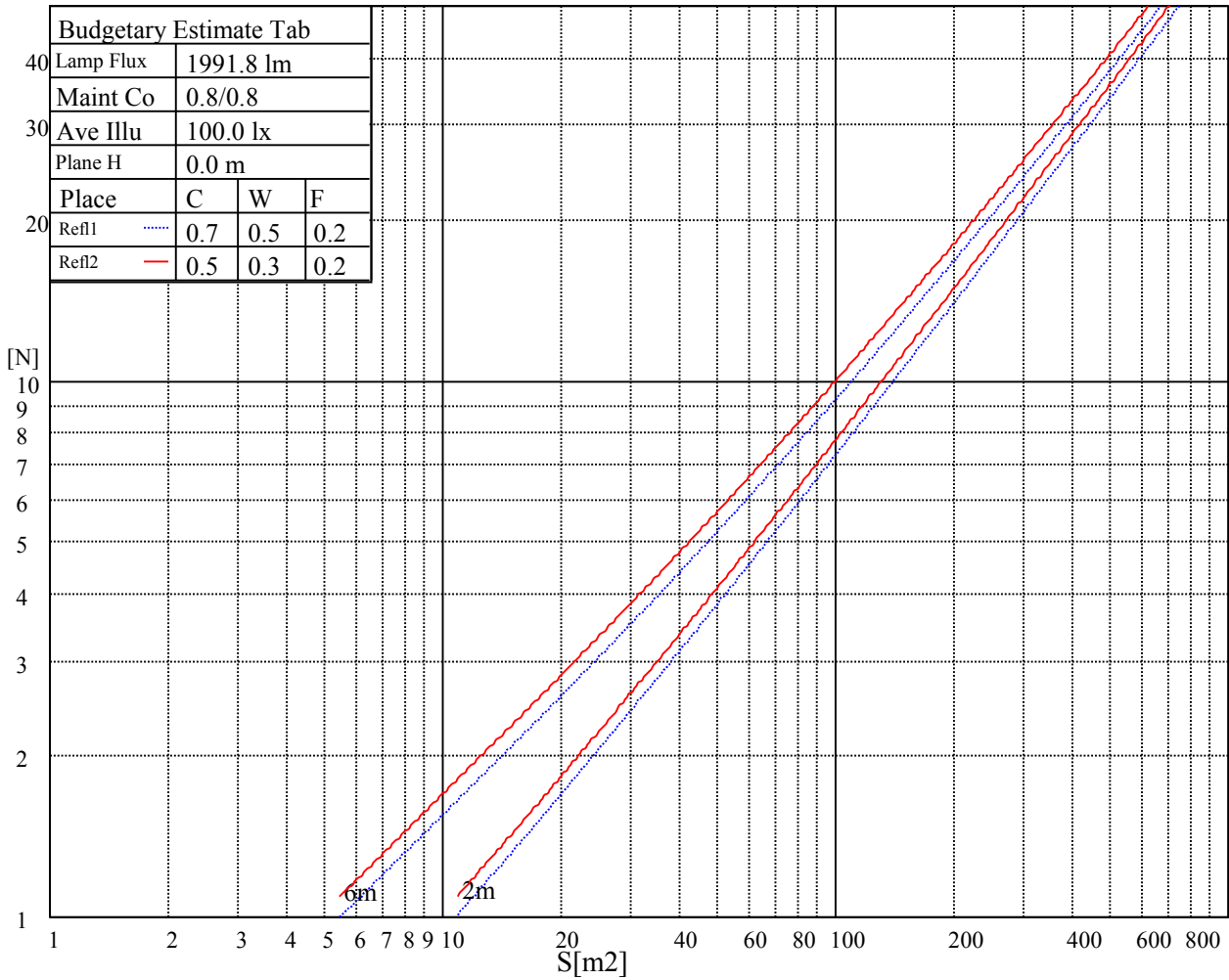
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
10097	10097	10097	16538	16538	16538	52431	52431	52431

Glare Table

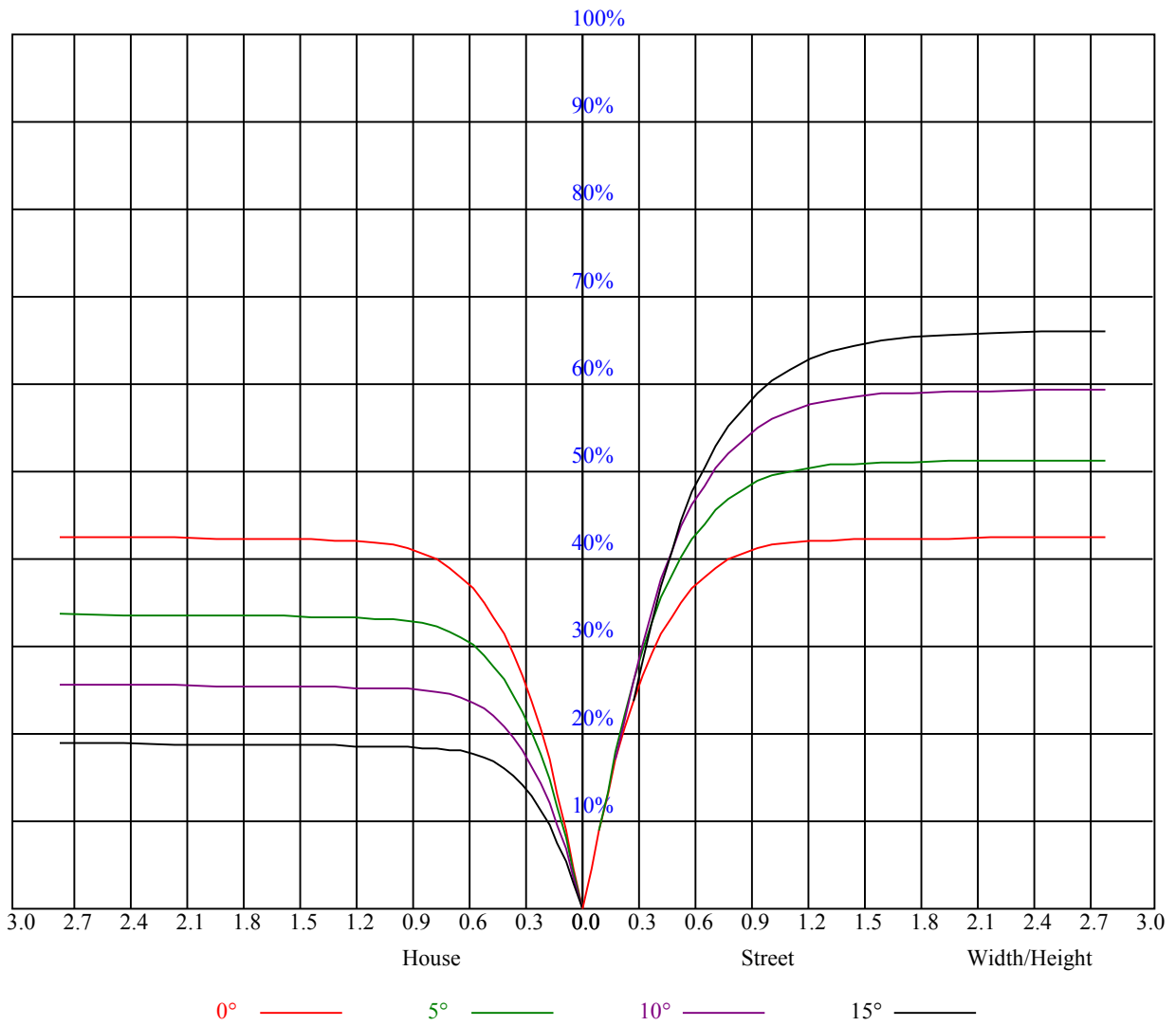
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.95	0.92	0.90	0.93	0.91	0.89	0.89	0.87	0.86	0.86	0.85	0.83	0.83	0.82	0.81	0.79
2	0.88	0.85	0.82	0.87	0.84	0.81	0.84	0.81	0.79	0.82	0.79	0.77	0.79	0.77	0.76	0.74
3	0.83	0.79	0.75	0.82	0.78	0.75	0.80	0.76	0.74	0.77	0.75	0.72	0.76	0.73	0.71	0.70
4	0.78	0.74	0.70	0.77	0.73	0.70	0.75	0.72	0.69	0.74	0.70	0.68	0.72	0.69	0.67	0.66
5	0.74	0.69	0.65	0.73	0.69	0.65	0.71	0.68	0.65	0.70	0.67	0.64	0.69	0.66	0.63	0.62
6	0.70	0.65	0.62	0.69	0.65	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.59
7	0.66	0.62	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.63	0.60	0.57	0.56
8	0.63	0.58	0.55	0.63	0.58	0.55	0.62	0.58	0.55	0.61	0.57	0.55	0.60	0.57	0.54	0.53
9	0.60	0.56	0.52	0.60	0.55	0.52	0.59	0.55	0.52	0.58	0.55	0.52	0.58	0.54	0.52	0.51
10	0.58	0.53	0.50	0.57	0.53	0.50	0.57	0.53	0.50	0.56	0.52	0.50	0.55	0.52	0.49	0.48



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	2991.27	2816.25	2383.56	1740.23	1188.38	915.02	724.70	534.26	336.30
45.0	3012.98	2838.51	2364.91	1768.89	1251.21	920.20	720.24	532.31	342.03
90.0	3031.34	2863.55	2379.66	1745.79	1258.28	909.79	711.00	544.38	348.05
135.0	2995.73	2838.51	2364.91	1768.89	1251.21	920.20	720.24	532.31	342.03
180.0	2991.27	2816.25	2383.56	1740.23	1188.38	915.02	724.70	534.26	336.30
225.0	3012.98	2838.51	2364.91	1768.89	1251.21	920.20	720.24	532.31	342.03
270.0	3031.34	2863.55	2379.66	1745.79	1258.28	909.79	711.00	544.38	348.05
315.0	2995.73	2838.51	2364.91	1768.89	1251.21	920.20	720.24	532.31	342.03
360.0	2991.27	2816.25	2383.56	1740.23	1188.38	915.02	724.70	534.26	336.30

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	158.50	64.44	23.82	10.02	8.63	8.24	8.07	8.07	8.24
45.0	188.88	70.23	27.49	11.80	9.07	8.74	8.79	8.74	9.85
90.0	167.85	77.52	29.50	12.52	9.35	9.13	10.57	10.57	10.74
135.0	188.88	70.23	27.49	11.80	9.07	8.74	8.79	8.74	9.85
180.0	158.50	64.44	23.82	10.02	8.63	8.24	8.07	8.07	8.24
225.0	188.88	70.23	27.49	11.80	9.07	8.74	8.79	8.74	9.85
270.0	167.85	77.52	29.50	12.52	9.35	9.13	10.57	10.57	10.74
315.0	188.88	70.23	27.49	11.80	9.07	8.74	8.79	8.74	9.85
360.0	158.50	64.44	23.82	10.02	8.63	8.24	8.07	8.07	8.24

C/γ(°)	90.0
0.0	6.29
45.0	6.34
90.0	6.40
135.0	6.34
180.0	6.29
225.0	6.34
270.0	6.40
315.0	6.34
360.0	6.29