



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 2-2166-M	
Luminaire: BJB47.360.5080	
Report No: NATA0100	Voltage(V): 37.0600
Test No: GC2020022007	Current(A): 0.7000
LampCAT: LUMILEDS 1205	Power (W): 25.9350
Lamp flux(lm): 2786.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2306.01
Efficiency(%): 82.77%
Lumens(lm)/Power(W): 88.92
Central intensity(cd): 6586.734
Maximum intensity(cd): 6586.734
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=35.2
[C90/270]Total=35.2
Field angle(10%Imax): [C0/180]Total=54.3
[C90/270]Total=54.3
Maximum s/h(1/2): C0_180=0.58 C90_270=0.58
Maximum s/h(1/4): C0_180=0.56 C90_270=0.56
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 82.77%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.163%

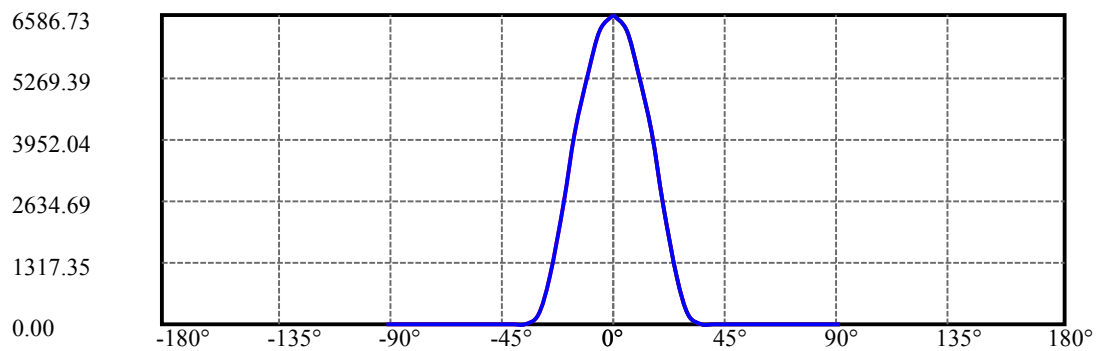
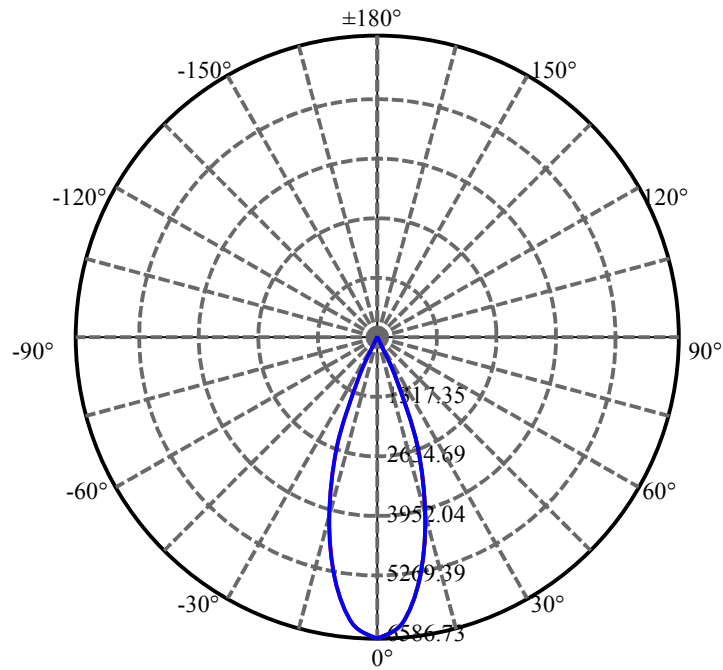
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6586.734	0.000	0	.000%	.000%
5.0	6259.992	153.579	153.579	5.513%	6.660%
10.0	5359.500	415.666	569.245	14.920%	24.685%
15.0	4095.773	560.880	1130.125	20.132%	49.008%
20.0	2552.906	547.945	1678.07	19.668%	72.769%
25.0	1015.671	374.278	2052.348	13.434%	89.000%
30.0	188.627	152.405	2204.753	5.470%	95.609%
35.0	19.491	30.647	2235.4	1.100%	96.938%
40.0	15.595	5.854	2241.253	.210%	97.192%
45.0	13.936	5.468	2246.721	.196%	97.429%
50.0	13.191	5.481	2252.203	.197%	97.667%
55.0	12.698	5.629	2257.832	.202%	97.911%
60.0	12.438	5.810	2263.642	.209%	98.163%
65.0	12.776	6.130	2269.772	.220%	98.428%
70.0	15.553	7.173	2276.945	.257%	98.739%
75.0	20.299	9.371	2286.316	.336%	99.146%
80.0	11.496	8.508	2294.824	.305%	99.515%
85.0	10.041	5.852	2300.676	.210%	99.769%
90.0	9.450	5.337	2306.012	.192%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2204.75	79.14%	95.61%
0-40	2241.25	80.45%	97.19%
0-60	2263.64	81.25%	98.16%
0-90	2300.68	82.58%	99.77%
0-120	2300.68	82.58%	99.77%
0-180	2306.01	82.77%	100.00%
60-90	42.84	1.54%	1.86%
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%
0-22.23	1844.81	66.22%	80.00%

ZONAL LUMEN SUMMARY

0-10	569.24
10-20	1108.83
20-30	526.68
30-40	36.50
40-50	10.95
50-60	11.44
60-70	13.30
70-80	17.88
80-90	5.85
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:

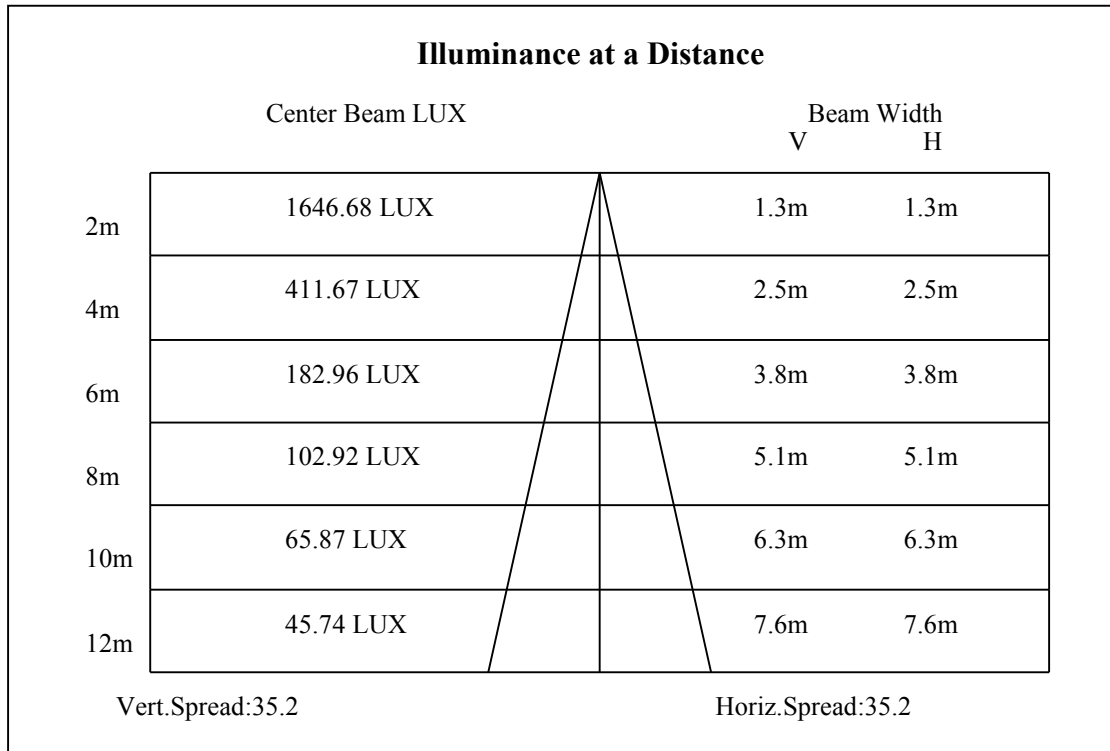
C90/C270:

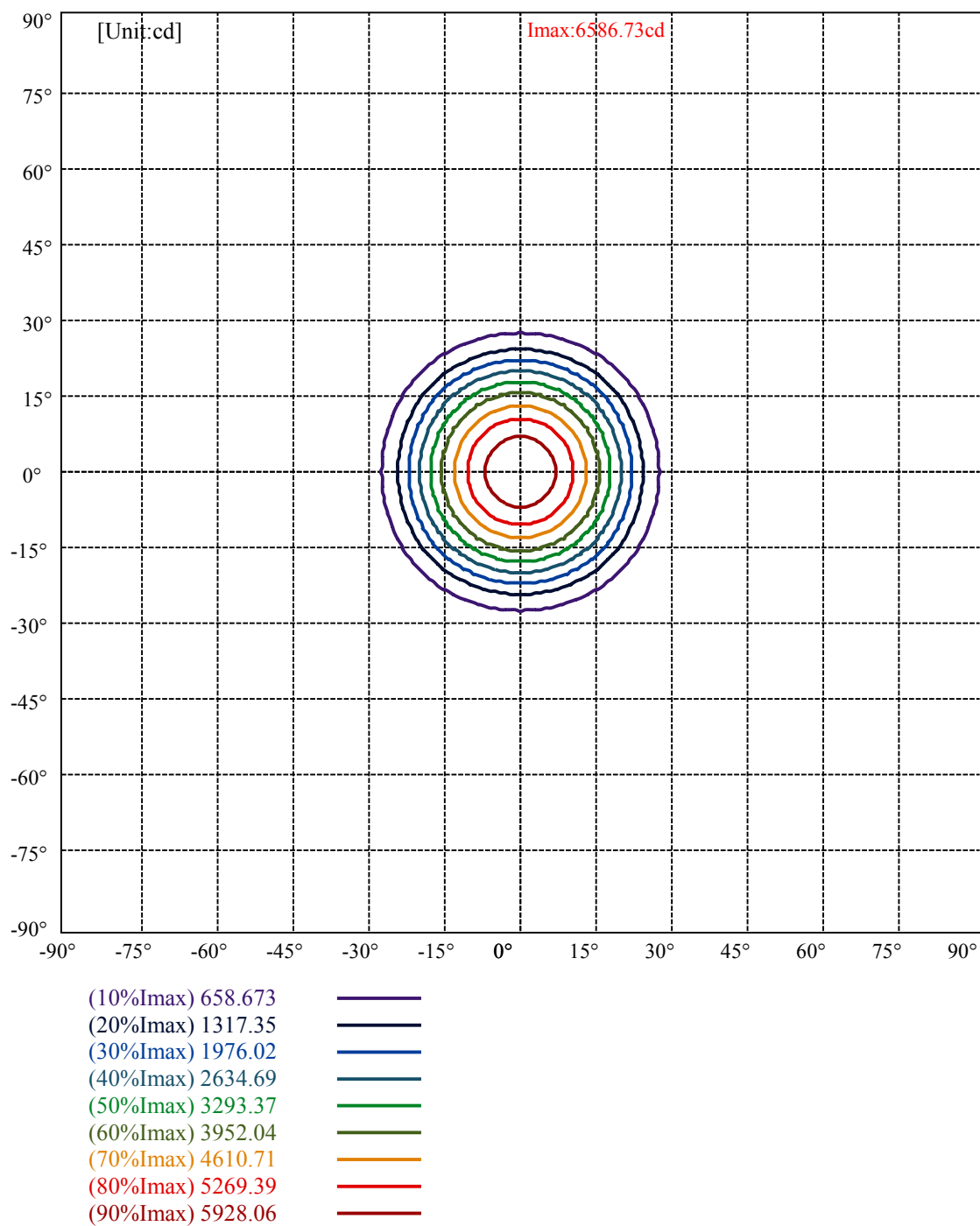
Field angle(10%Imax):C0/180Left:27.2 Right:27.2

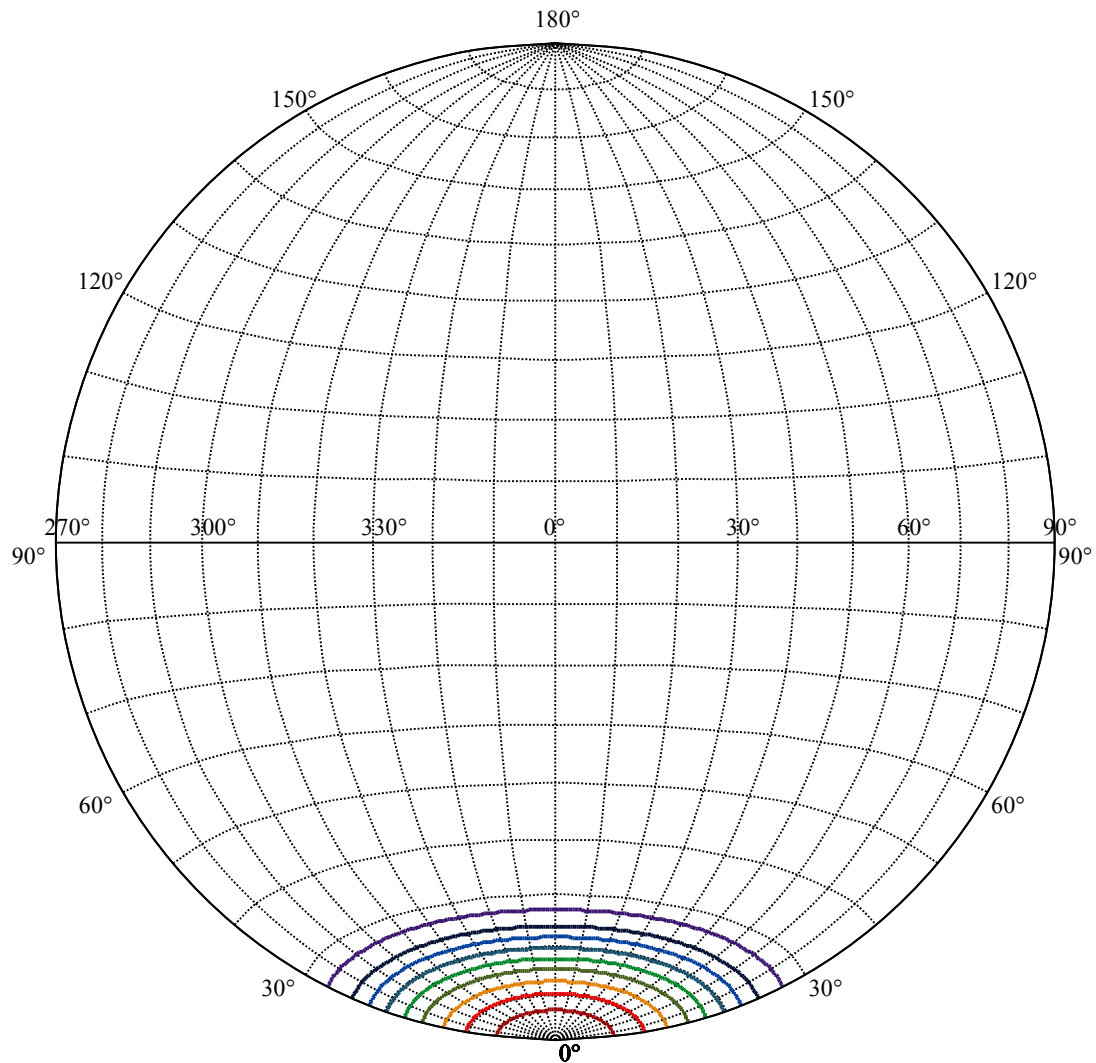
:C90/270Left:27.2 Right:27.2

Beam Angle(50%Imax):C0/180Left:17.6 Right:17.6

:C90/270Left:17.6 Right:17.6







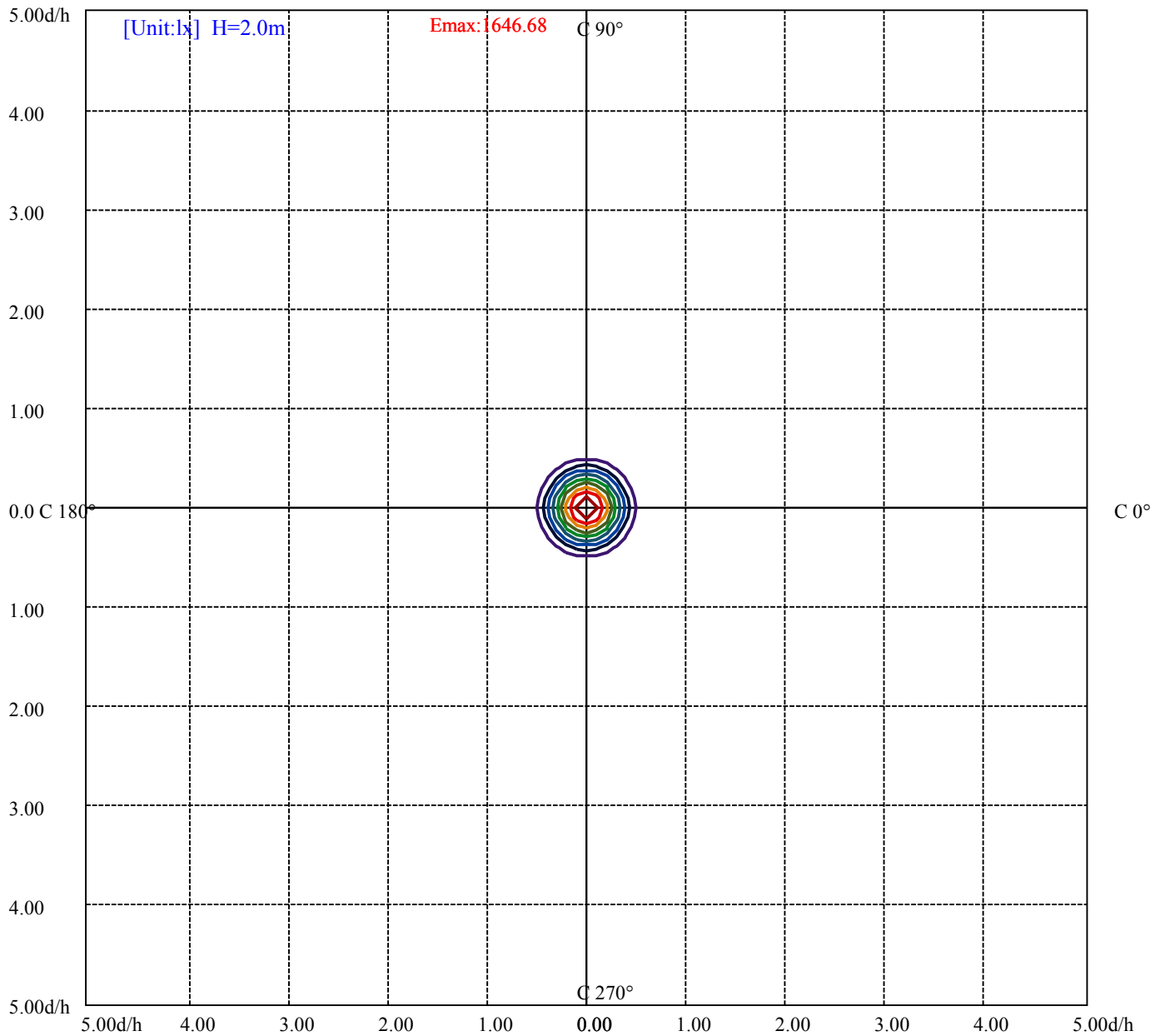
House

[Unit:cd]

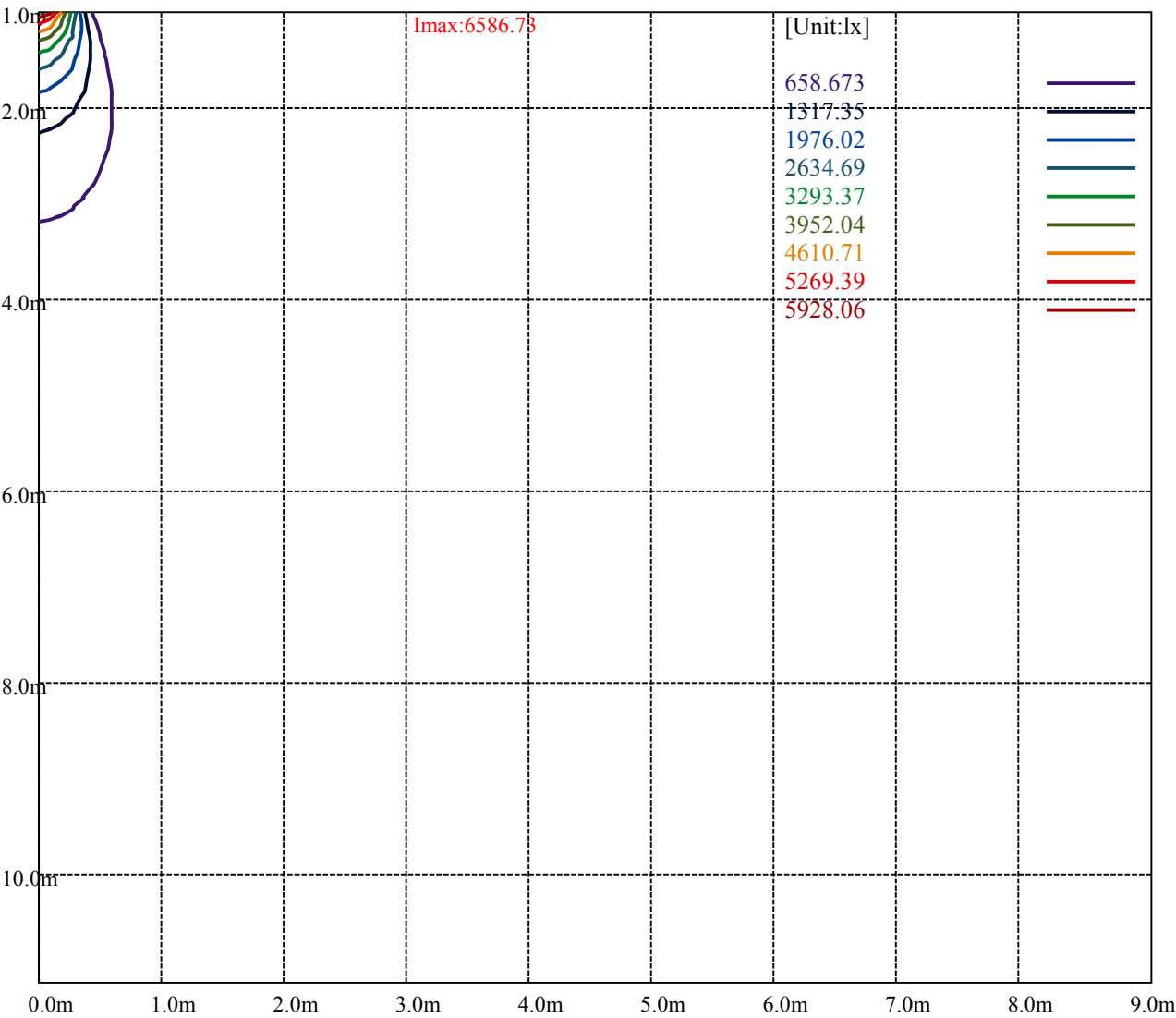
Road

Imax:6586.73

(10%Imax)	658.673	—
(20%Imax)	1317.35	—
(30%Imax)	1976.02	—
(40%Imax)	2634.69	—
(50%Imax)	3293.37	—
(60%Imax)	3952.04	—
(70%Imax)	4610.71	—
(80%Imax)	5269.39	—
(90%Imax)	5928.06	—



(10%Emax) 164.668	—
(20%Emax) 329.335	—
(30%Emax) 494.005	—
(40%Emax) 658.6725	—
(50%Emax) 823.34	—
(60%Emax) 988.0075	—
(70%Emax) 1152.677	—
(80%Emax) 1317.345	—
(90%Emax) 1482.012	—



Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

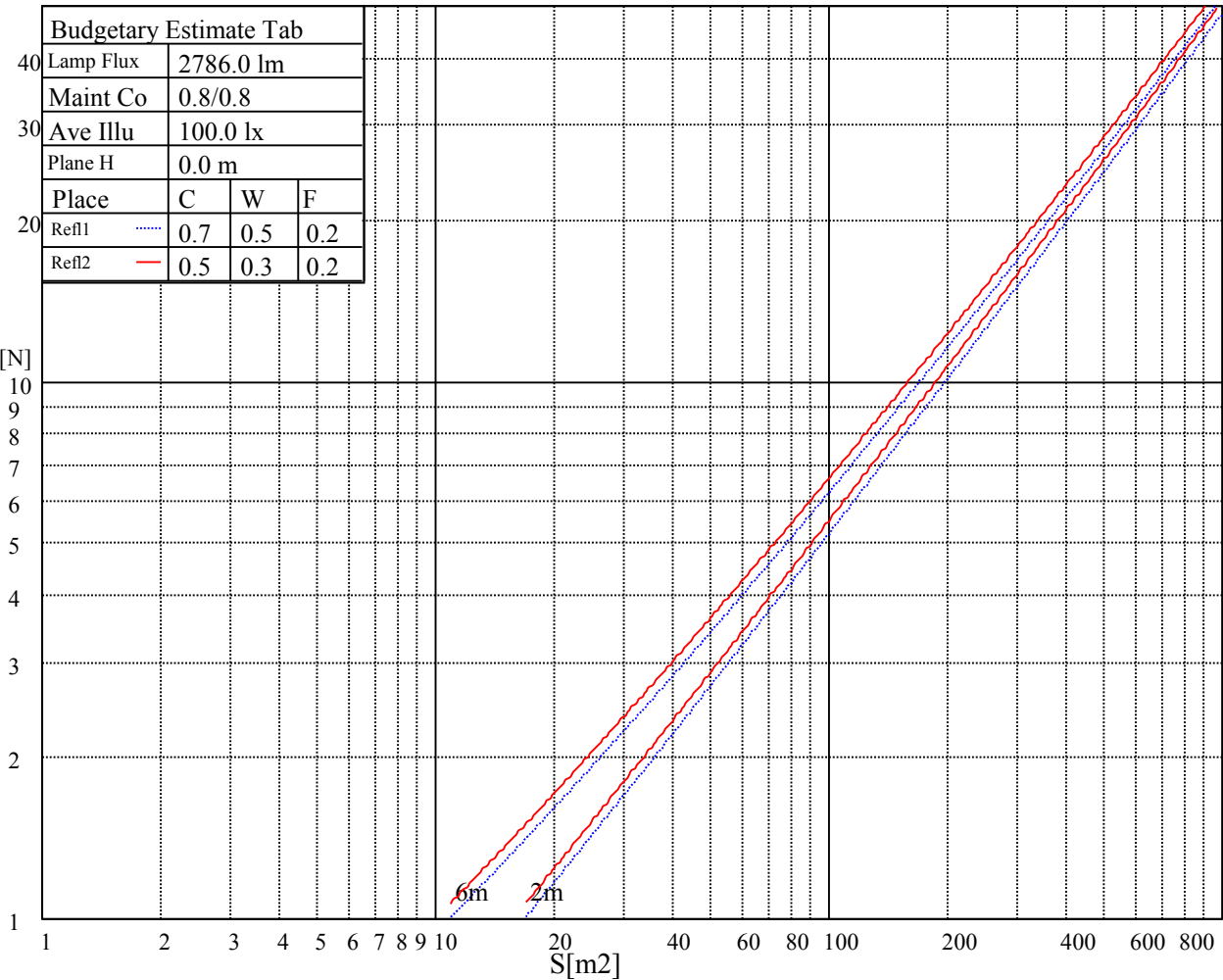
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

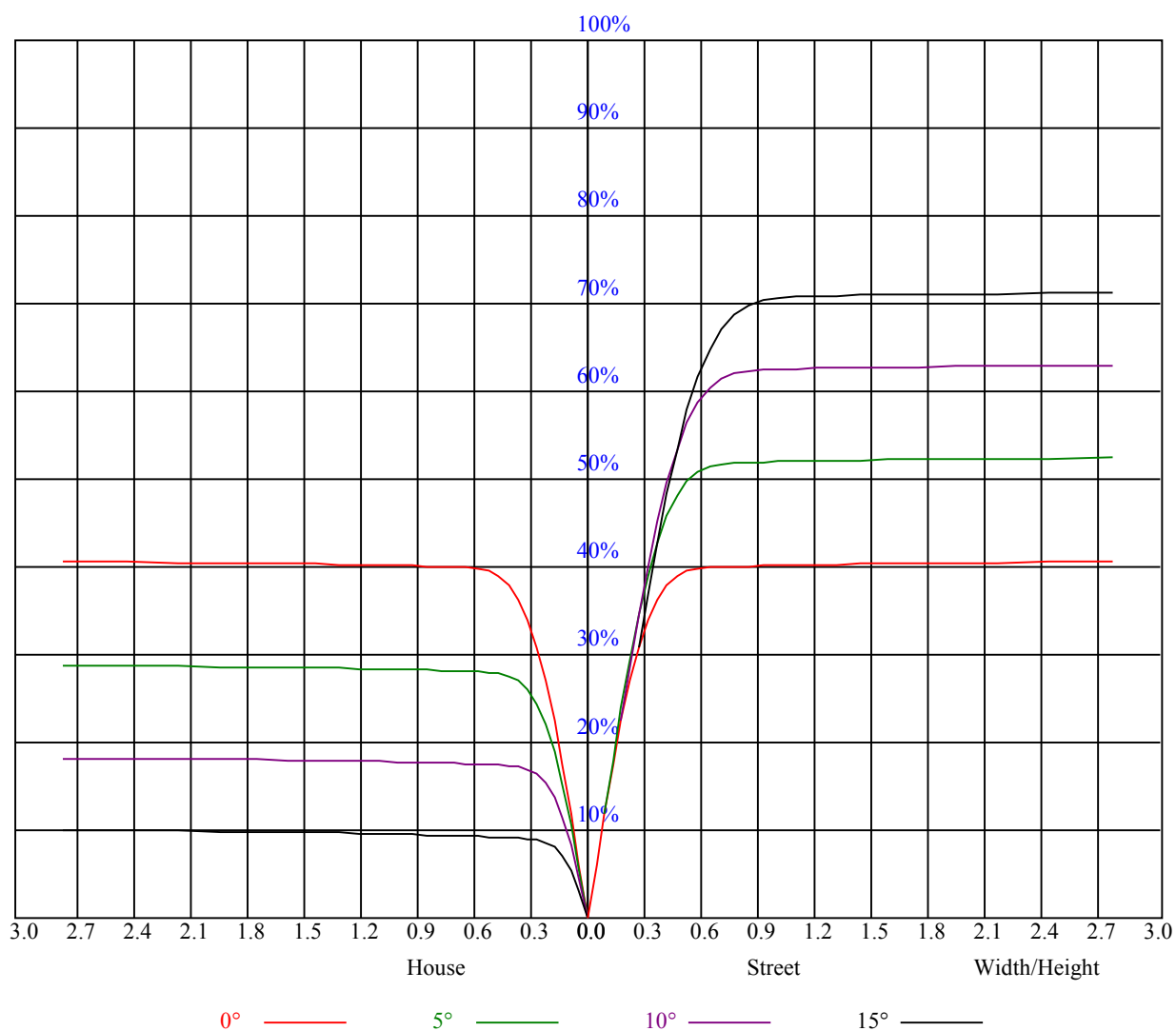
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

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	0.99	0.99	0.99	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.84	0.84	0.84	0.83
1	0.93	0.91	0.89	0.91	0.89	0.88	0.88	0.86	0.85	0.85	0.84	0.83	0.82	0.81	0.80	0.79
2	0.88	0.85	0.83	0.86	0.84	0.82	0.84	0.82	0.80	0.81	0.80	0.78	0.79	0.78	0.77	0.75
3	0.84	0.80	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.79	0.76	0.75	0.77	0.75	0.74	0.72
4	0.80	0.76	0.74	0.79	0.76	0.73	0.77	0.75	0.72	0.76	0.73	0.71	0.74	0.72	0.71	0.70
5	0.77	0.73	0.70	0.76	0.72	0.70	0.74	0.71	0.69	0.73	0.71	0.69	0.72	0.70	0.68	0.67
6	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.71	0.68	0.66	0.70	0.67	0.66	0.65
7	0.71	0.67	0.64	0.70	0.67	0.64	0.69	0.66	0.64	0.69	0.66	0.64	0.68	0.65	0.63	0.62
8	0.68	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.62	0.66	0.63	0.61	0.66	0.63	0.61	0.60
9	0.66	0.62	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.64	0.61	0.59	0.64	0.61	0.59	0.58
10	0.64	0.60	0.58	0.63	0.60	0.58	0.63	0.60	0.57	0.62	0.59	0.57	0.62	0.59	0.57	0.56



Intensity data(cd)										Appendix Page: 14 Total:14	
C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0		
0.0	6588.56	6356.25	5474.81	4326.19	2747.25	1149.75	299.81	19.86	15.69		
45.0	6546.94	6408.56	5611.50	4483.69	2918.25	1321.31	311.63	20.03	15.58		
90.0	6592.50	6151.50	5232.38	3888.00	2300.63	785.03	58.78	18.90	15.75		
135.0	6618.94	6282.00	5373.56	4044.94	2628.00	963.56	298.69	20.08	16.20		
180.0	6588.56	6186.38	5217.75	3871.69	2369.25	863.55	73.24	19.13	15.47		
225.0	6546.94	6018.19	5048.44	3679.88	2106.56	709.48	56.42	17.44	14.29		
270.0	6592.50	6360.19	5547.94	4340.81	2760.75	1323.00	311.63	20.87	15.92		
315.0	6618.94	6316.88	5369.63	4131.00	2592.56	1009.69	98.83	19.63	15.86		
360.0	6588.56	6356.25	5474.81	4326.19	2747.25	1149.75	299.81	19.86	15.69		
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	14.06	13.39	13.11	12.94	13.33	16.20	19.24	12.66	10.07		
45.0	13.78	12.77	11.98	11.59	11.19	10.97	10.74	10.46	10.13		
90.0	14.34	13.44	12.83	12.88	13.78	17.89	29.08	10.52	10.35		
135.0	14.57	13.89	13.56	13.11	13.39	18.34	23.18	12.38	10.24		
180.0	14.06	13.67	13.28	12.83	13.11	16.65	20.48	11.31	10.07		
225.0	12.83	12.04	11.48	11.08	10.74	10.52	10.35	10.01	9.51		
270.0	13.78	12.83	12.26	12.15	13.11	14.91	26.66	11.98	9.96		
315.0	14.06	13.50	13.11	12.94	13.56	18.96	22.67	12.66	10.01		
360.0	14.06	13.39	13.11	12.94	13.33	16.20	19.24	12.66	10.07		
C/γ(°)	90.0										
0.0	9.62										
45.0	9.28										
90.0	9.45										
135.0	9.51										
180.0	9.62										
225.0	9.23										
270.0	9.39										
315.0	9.51										
360.0	9.62										