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## Nata

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LumCAT: 2-1569-M	
Luminaire: BJB47.319.2021	
Report No: NT2017050301	Voltage(V): 35.3000
Test No: GC2015050301	Current(A): 0.5000
LampCAT: bridgelux V13B	Power (W): 17.6500
Lamp flux(lm): 2274.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 70	Width(mm): 70
Phm Type: C	Height(mm): 0

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## Photometric Results

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Lumens(lm): 2084.80  
Efficiency(%): 91.68%  
Lumens(lm)/Power(W): 118.12  
Central intensity(cd): 2332.189  
Maximum intensity(cd): 2350.495  
Angle of maximum intensity: C=0.0  $\gamma$ =5.0  
Beam Angle(50%Imax): [C0/180]Total=60.2  
                                  [C90/270]Total=60.2  
Field angle(10%Imax): [C0/180]Total=78.9  
                                  [C90/270]Total=78.9  
Maximum s/h(1/2): C0\_180=0.98 C90\_270=0.98  
Maximum s/h(1/4): C0\_180=0.89 C90\_270=0.89  
Up flux rate of lamp(%): 0.00%  
Down flux rate of lamp(%): 92.21%  
Up flux rate of LUM(%): - -  
Down flux rate of LUM(%): 100.00%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 98.245%

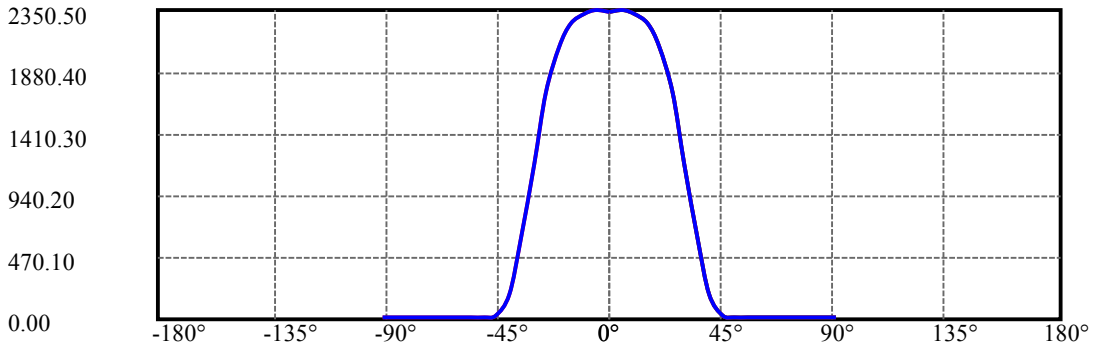
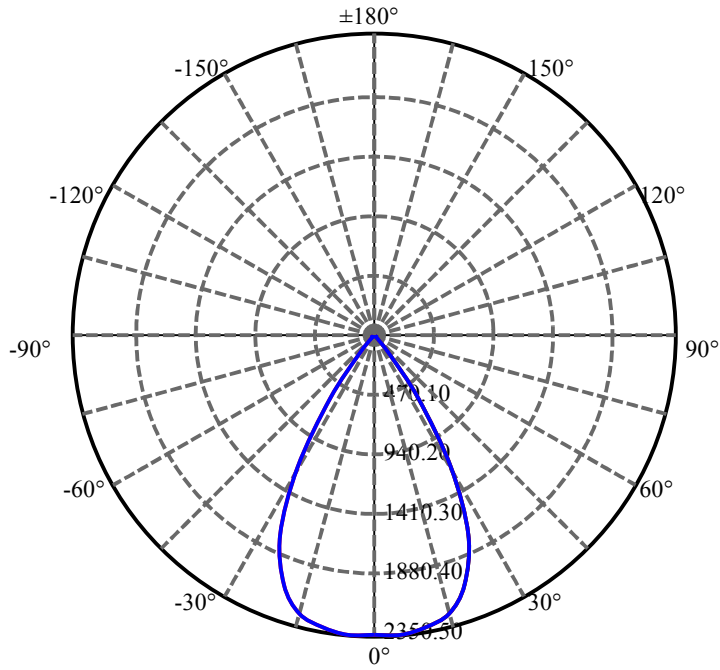
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2332.189	13.947	13.947	.613%	.669%
5.0	2350.495	112.291	126.238	4.938%	6.055%
10.0	2317.668	220.603	346.841	9.701%	16.637%
15.0	2249.949	319.197	666.037	14.037%	31.947%
20.0	2074.594	388.932	1054.97	17.103%	50.603%
25.0	1720.788	398.625	1453.595	17.530%	69.723%
30.0	1185.612	324.939	1778.534	14.289%	85.309%
35.0	611.635	192.297	1970.832	8.456%	94.533%
40.0	186.627	65.756	2036.587	2.892%	97.687%
45.0	22.552	8.741	2045.328	.384%	98.106%
50.0	12.635	5.306	2050.634	.233%	98.361%
55.0	10.488	4.709	2055.343	.207%	98.587%
60.0	9.738	4.623	2059.966	.203%	98.809%
65.0	9.201	4.571	2064.537	.201%	99.028%
70.0	8.809	4.537	2069.074	.200%	99.245%
75.0	8.506	4.504	2073.578	.198%	99.461%
80.0	8.300	4.480	2078.058	.197%	99.676%
85.0	8.224	4.491	2082.549	.197%	99.892%
90.0	8.231	2.256	2084.805	.099%	100.000%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1778.53	78.21%	85.31%
0-40	2036.59	89.56%	97.69%
0-60	2059.97	90.59%	98.81%
0-90	2082.55	91.58%	99.89%
0-120	2082.55	91.58%	99.89%
0-180	2084.80	91.68%	100.00%
60-90	27.21	1.20%	1.30%
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%
0-28.30	1667.84	73.34%	80.00%

## ZONAL LUMEN SUMMARY

0-10	346.84
10-20	708.13
20-30	723.56
30-40	258.05
40-50	14.05
50-60	9.33
60-70	9.11
70-80	8.98
80-90	4.49
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



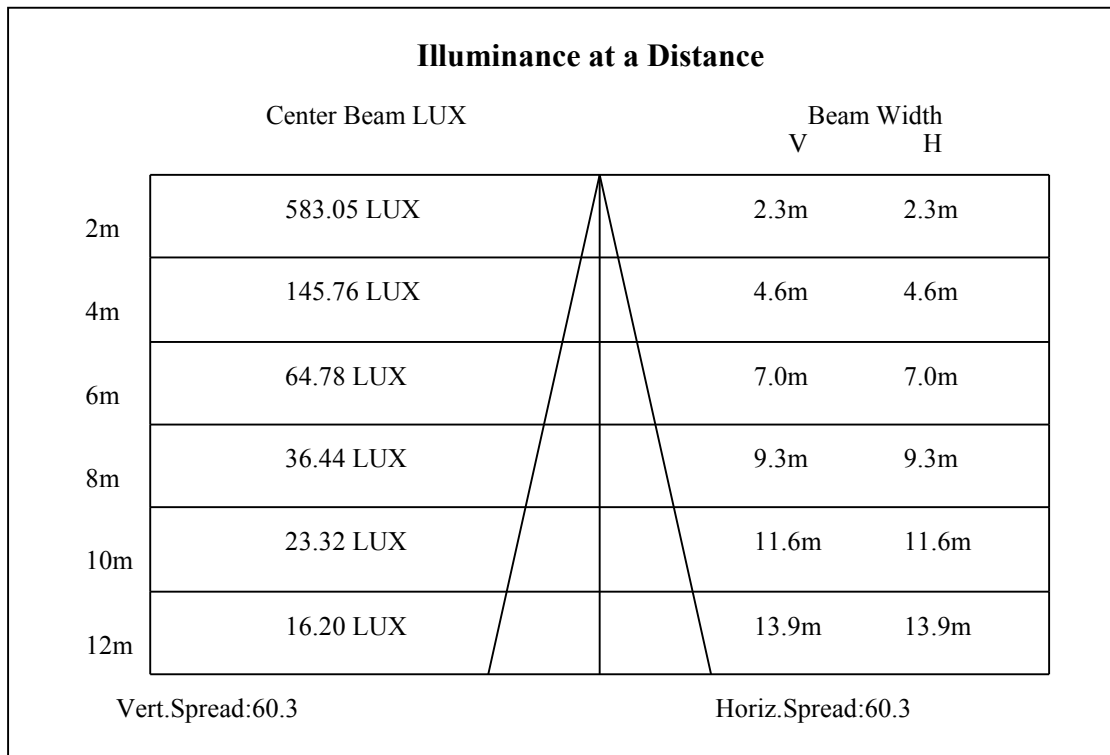
C0(Max): ———

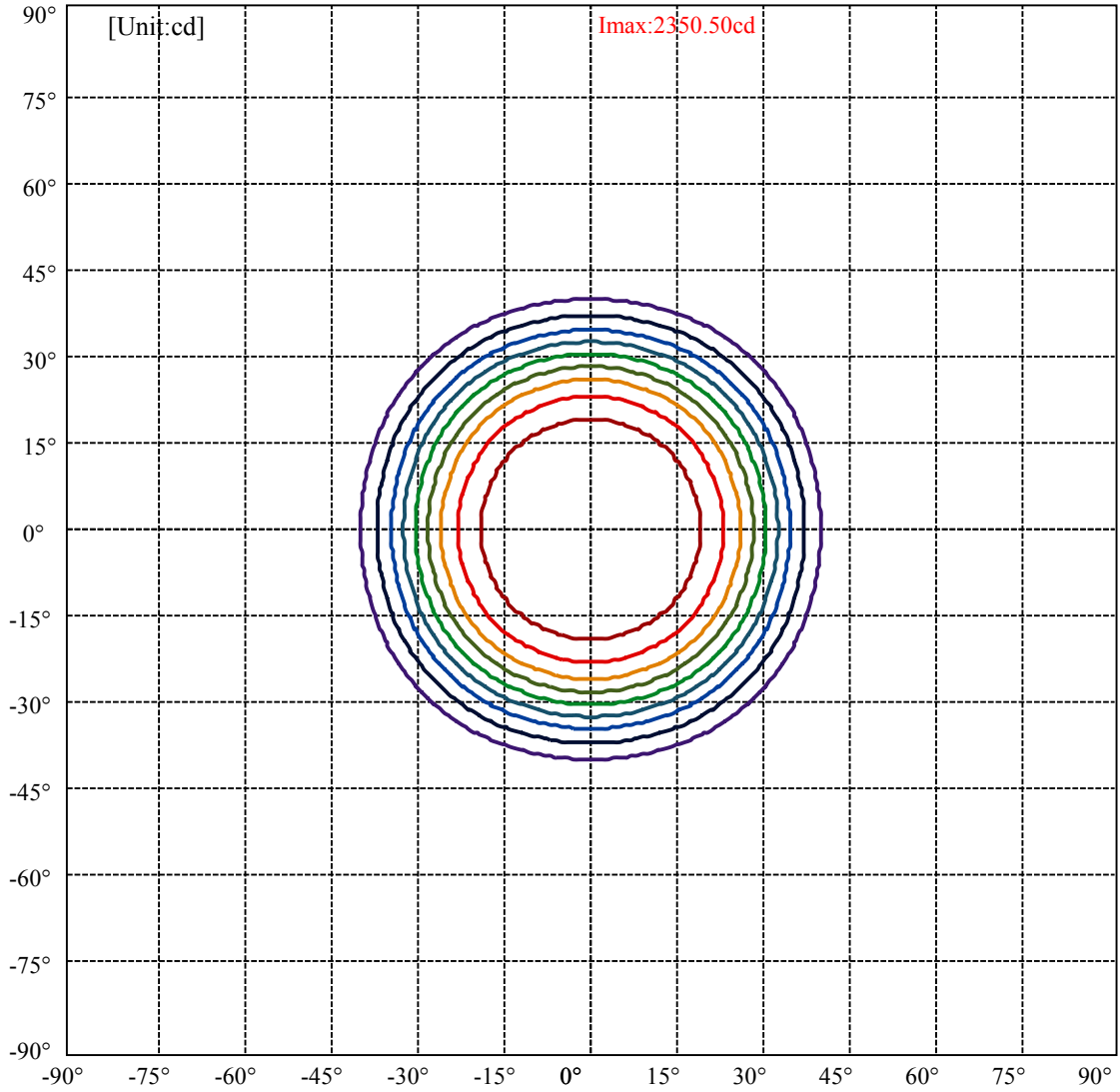
C0/C180: ———

C90/C270: ———

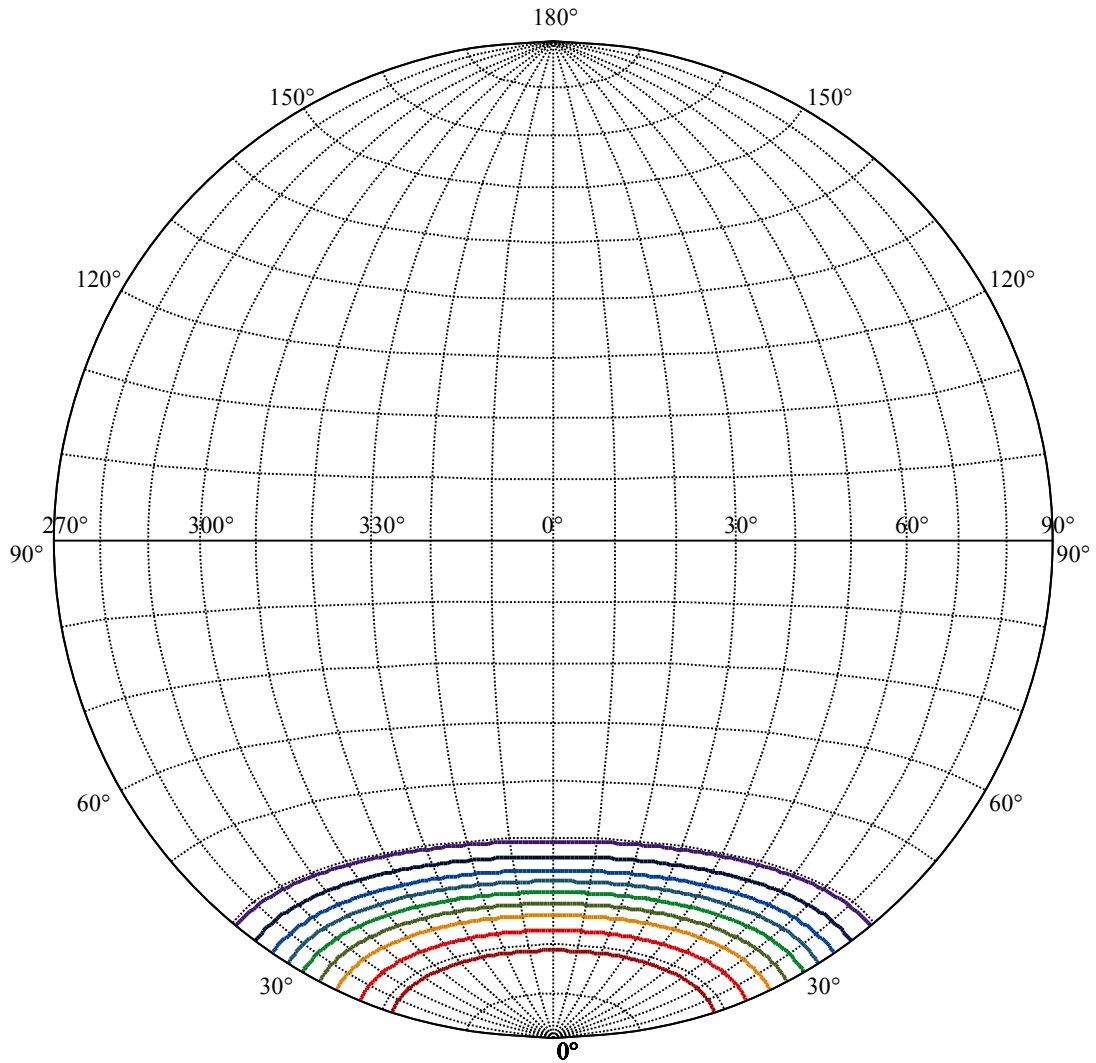
Field angle(10%Imax):C0/180Left:44.4 Right:34.4  
:C90/270Left:44.4 Right:34.4

Beam Angle(50%Imax):C0/180Left:35.1 Right:25.1  
:C90/270Left:35.1 Right:25.1





(10%Imax) 235.05	—
(20%Imax) 470.099	—
(30%Imax) 705.149	—
(40%Imax) 940.198	—
(50%Imax) 1175.25	—
(60%Imax) 1410.3	—
(70%Imax) 1645.35	—
(80%Imax) 1880.4	—
(90%Imax) 2115.45	—



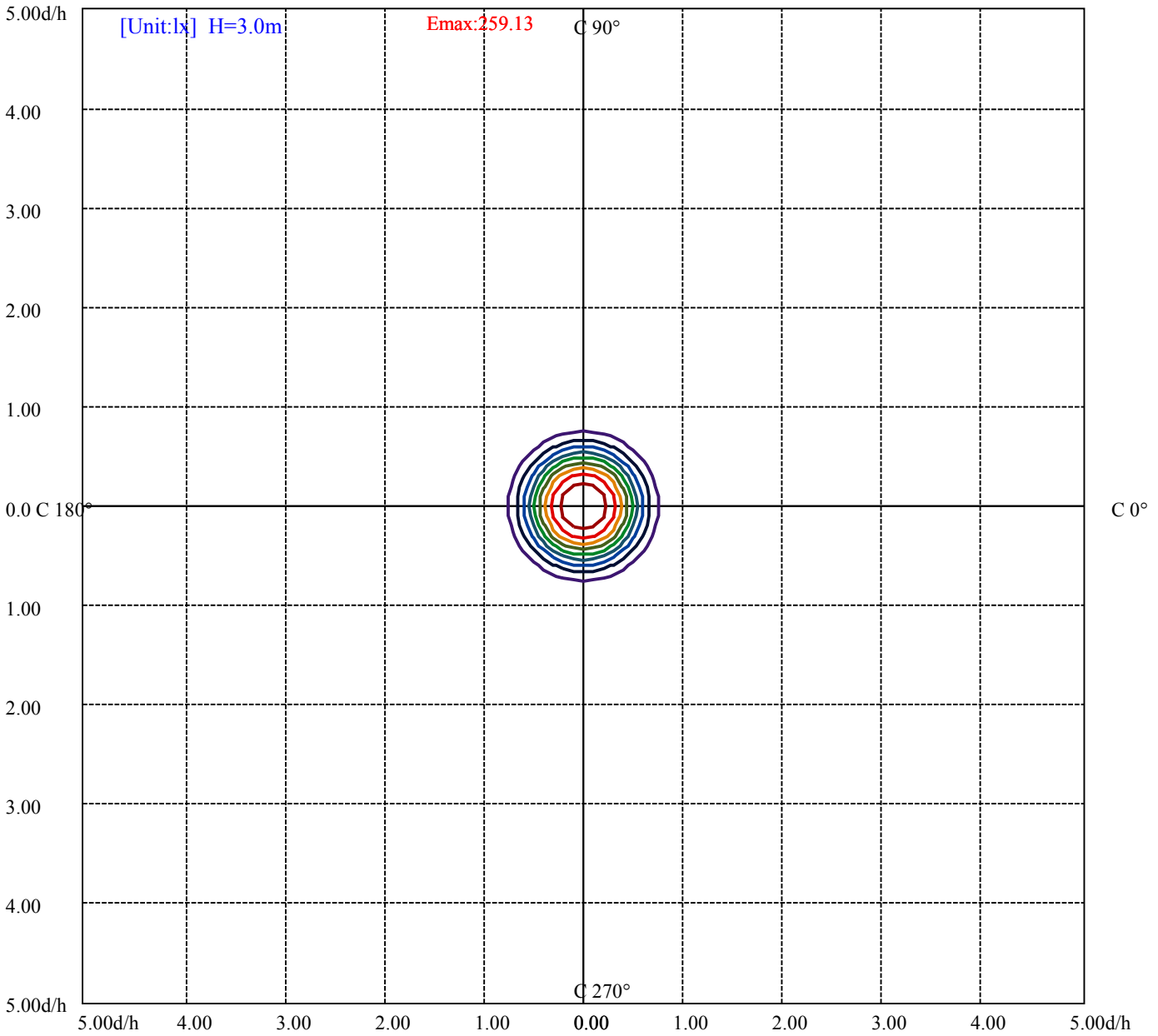
House

[Unit:cd]

Road

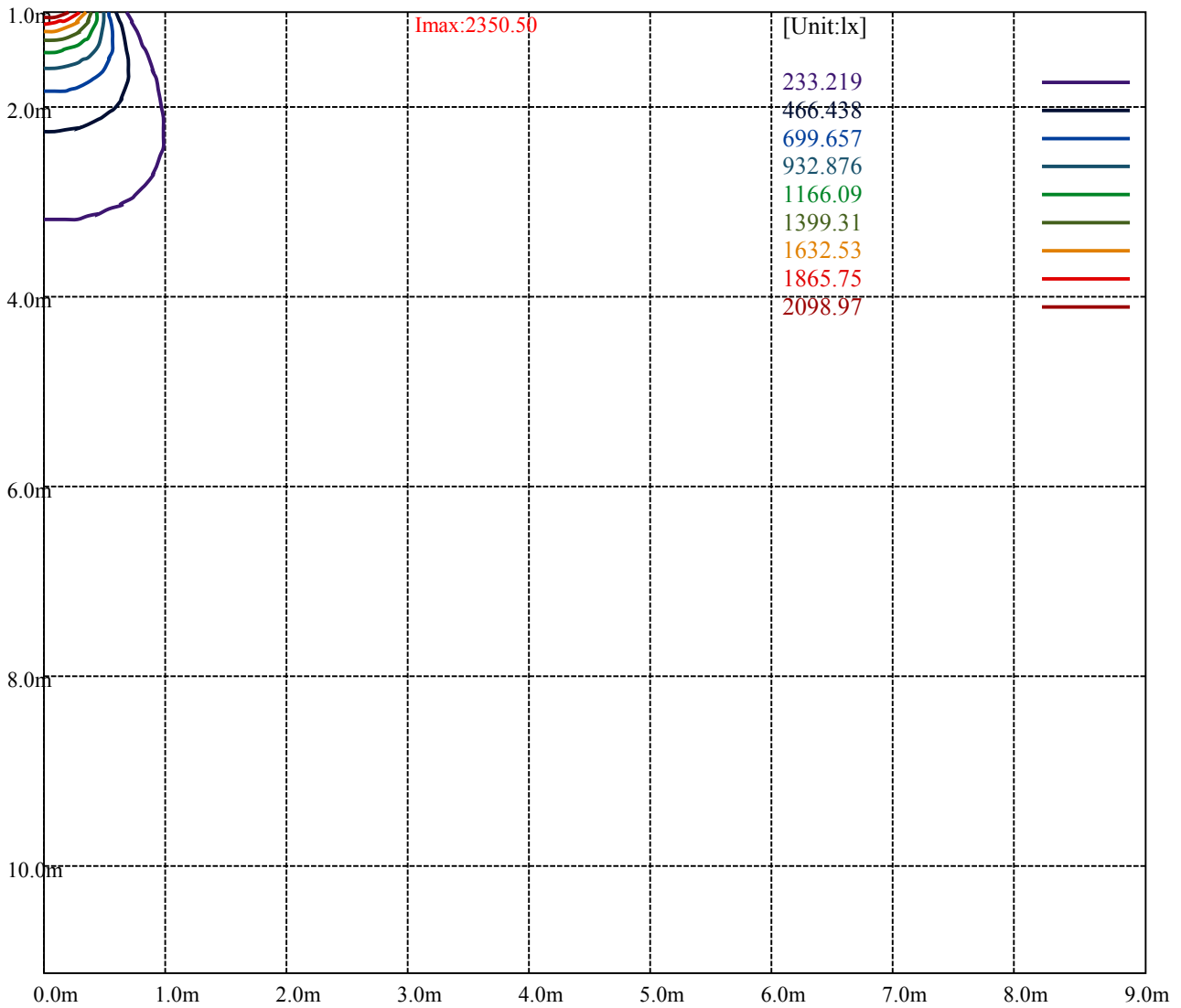
Imax:2350.50

(10%Imax)	235.05	—
(20%Imax)	470.099	—
(30%Imax)	705.149	—
(40%Imax)	940.198	—
(50%Imax)	1175.25	—
(60%Imax)	1410.3	—
(70%Imax)	1645.35	—
(80%Imax)	1880.4	—
(90%Imax)	2115.45	—



- (10%Emax) 25.91322
- (20%Emax) 51.82644
- (30%Emax) 77.73966
- (40%Emax) 103.6529
- (50%Emax) 129.5656
- (60%Emax) 155.4789
- (70%Emax) 181.3922
- (80%Emax) 207.3056
- (90%Emax) 233.2189





Luminance Table

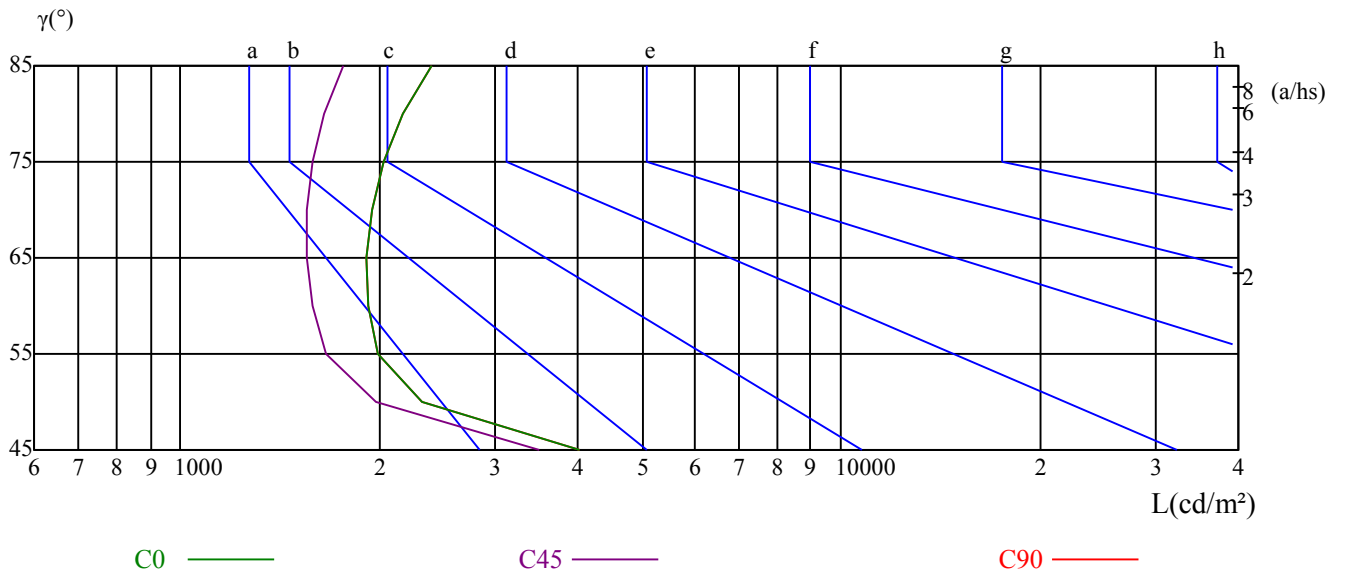
$\gamma$	45	50	55	60	65	70	75	80	85
C0	4032	2316	1988	1926	1917	1956	2037	2175	2401
C45	3483	1971	1665	1587	1552	1552	1581	1646	1762
C90	4032	2316	1988	1926	1917	1956	2037	2175	2401

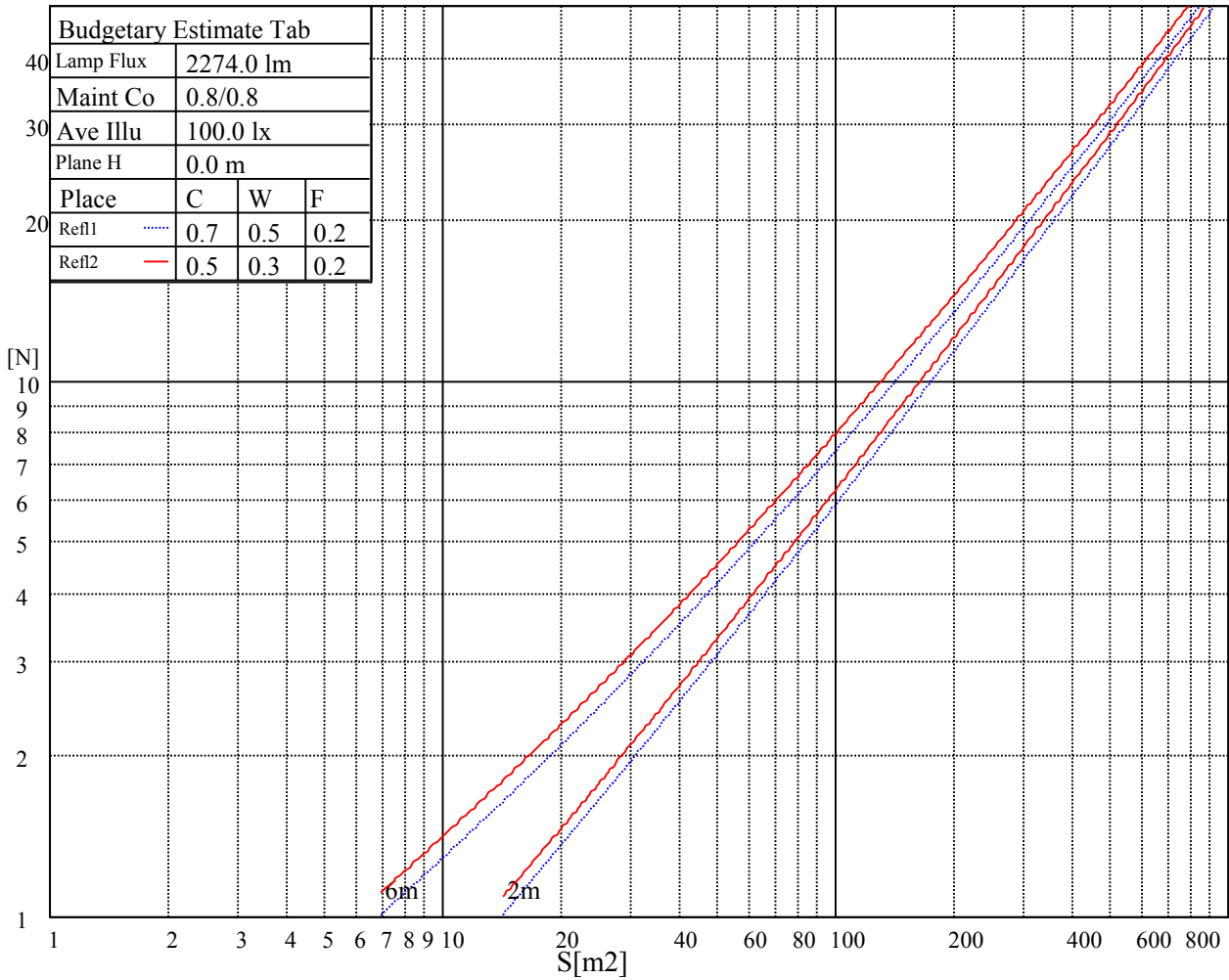
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4443	4443	4443	6707	6707	6707	19257	19257	19257

Glare Table

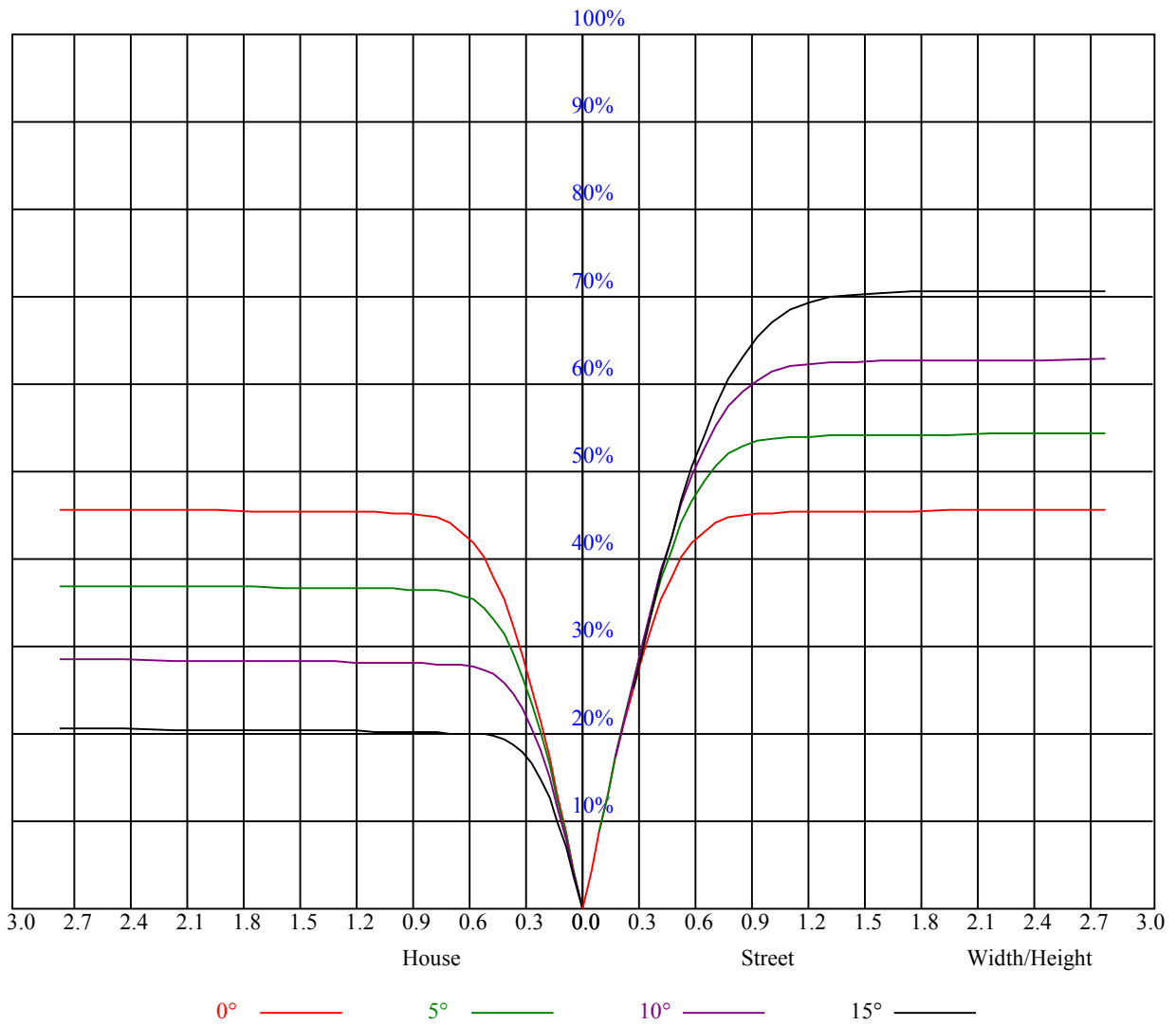
Glare	Quality	Service Values Illuminance(lx)							
		a	b	c	d	e	f	g	h
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.10	1.10	1.10	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.94	0.94	0.94	0.92
1	1.02	1.00	0.97	1.00	0.98	0.96	0.96	0.94	0.93	0.93	0.91	0.90	0.90	0.89	0.88	0.86
2	0.96	0.92	0.89	0.94	0.91	0.88	0.91	0.88	0.86	0.88	0.86	0.84	0.86	0.84	0.83	0.81
3	0.90	0.86	0.82	0.89	0.85	0.82	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.77
4	0.85	0.80	0.77	0.84	0.80	0.76	0.82	0.78	0.75	0.80	0.77	0.75	0.79	0.76	0.74	0.72
5	0.80	0.76	0.72	0.80	0.75	0.72	0.78	0.74	0.71	0.77	0.73	0.70	0.75	0.72	0.70	0.69
6	0.76	0.71	0.68	0.76	0.71	0.68	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.65
7	0.73	0.68	0.64	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.69	0.65	0.63	0.62
8	0.69	0.64	0.61	0.69	0.64	0.61	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.59
9	0.66	0.61	0.58	0.65	0.61	0.58	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.60	0.57	0.56
10	0.63	0.58	0.55	0.63	0.58	0.55	0.62	0.58	0.55	0.61	0.57	0.55	0.61	0.57	0.54	0.53



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	2325.03	2352.01	2317.87	2263.37	2125.18	1792.09	1277.86	664.53	278.03
45.0	2333.29	2350.91	2316.77	2245.20	2067.92	1704.55	1240.42	583.05	168.80
90.0	2331.64	2330.54	2298.05	2209.96	1988.64	1566.35	1084.94	433.46	50.93
135.0	2338.25	2333.84	2292.55	2227.03	2040.39	1684.18	1218.95	579.19	285.74
180.0	2326.13	2334.94	2300.26	2227.58	2040.94	1663.80	1095.18	595.43	120.79
225.0	2333.29	2359.17	2328.89	2263.37	2071.22	1737.03	1093.92	601.99	157.85
270.0	2331.64	2375.13	2355.86	2300.81	2154.36	1856.50	1414.95	807.68	286.84
315.0	2338.25	2367.43	2331.09	2262.27	2108.11	1761.80	1058.68	627.75	144.03
360.0	2325.03	2352.01	2317.87	2263.37	2125.18	1792.09	1277.86	664.53	278.03

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	22.24	12.66	10.41	9.69	9.14	8.81	8.48	8.31	8.26
45.0	20.26	11.62	10.19	9.52	9.08	8.75	8.42	8.31	8.15
90.0	17.78	11.89	10.13	9.58	9.03	8.70	8.48	8.26	8.20
135.0	22.08	12.50	10.68	9.91	9.30	8.92	8.59	8.31	8.26
180.0	23.23	12.99	10.68	9.80	9.25	8.81	8.48	8.26	8.26
225.0	24.22	13.16	10.63	9.80	9.19	8.81	8.48	8.26	8.20
270.0	28.13	13.60	10.74	9.97	9.36	8.86	8.64	8.37	8.20
315.0	22.46	12.66	10.46	9.63	9.25	8.81	8.48	8.31	8.26
360.0	22.24	12.66	10.41	9.69	9.14	8.81	8.48	8.31	8.26

C/γ(°)	90.0
0.0	8.20
45.0	8.20
90.0	8.26
135.0	8.26
180.0	8.20
225.0	8.20
270.0	8.31
315.0	8.20
360.0	8.20