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Nata

LumCAT: 2-1569-M
Luminaire:BJB47.319.2011
Report No: 2017060609-1
Test No: 2017060609
LampCAT: Luxeon 1208
Lamp flux(lm): 3235.0
Number of Lamps: 1
Length(mm): 78
Phm Type: C

Voltage(V): 217.5000
Current(A): 0.1370
Power (W): 28.1000
PF: 0.9440
Ballast type:
Width(mm): 78
Height(mm):0

Photometric Results

Lumens(lm): 2931.86
Efficiency(%): 90.63%
Lumens(lm)/Power(W): 104.34
Central intensity(cd): 3145.647
Maximum intensity(cd): 3162.990
Angle of maximum intensity: C=0.0 γ =5.0
Beam Angle(50%Imax): [C0/180]Total=62.2
 [C90/270]Total=62.2
Field angle(10%Imax): [C0/180]Total=79.4
 [C90/270]Total=79.4
Maximum s/h(1/2): C0_180=1.01 C90_270=1.01
Maximum s/h(1/4): C0_180=0.91 C90_270=0.91
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 91.12%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.224%

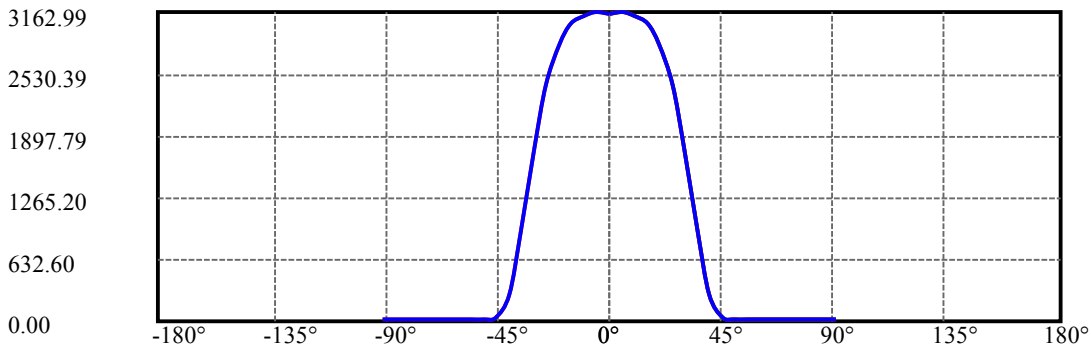
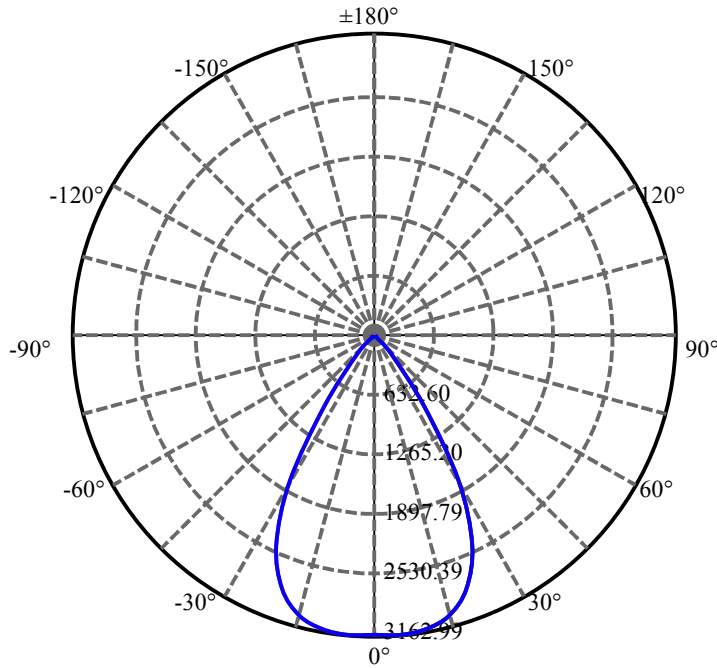
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3145.647	18.812	18.812	.582%	.642%
5.0	3162.990	151.107	169.918	4.671%	5.796%
10.0	3125.442	297.489	467.407	9.196%	15.942%
15.0	3039.829	431.256	898.663	13.331%	30.652%
20.0	2838.763	532.194	1430.857	16.451%	48.804%
25.0	2412.241	558.803	1989.66	17.274%	67.863%
30.0	1774.248	486.266	2475.926	15.031%	84.449%
35.0	914.872	287.635	2763.56	8.891%	94.260%
40.0	275.282	96.992	2860.552	2.998%	97.568%
45.0	35.181	13.636	2874.188	.422%	98.033%
50.0	18.774	7.883	2882.071	.244%	98.302%
55.0	15.141	6.798	2888.869	.210%	98.534%
60.0	14.039	6.665	2895.534	.206%	98.761%
65.0	13.324	6.619	2902.153	.205%	98.987%
70.0	12.883	6.636	2908.789	.205%	99.213%
75.0	12.443	6.588	2915.377	.204%	99.438%
80.0	12.167	6.568	2921.945	.203%	99.662%
85.0	12.112	6.614	2928.559	.204%	99.887%
90.0	12.057	3.305	2931.863	.102%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2475.93	76.54%	84.45%
0-40	2860.55	88.43%	97.57%
0-60	2895.53	89.51%	98.76%
0-90	2928.56	90.53%	99.89%
0-120	2928.56	90.53%	99.89%
0-180	2931.86	90.63%	100.00%
60-90	39.69	1.23%	1.35%
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%
0-28.66	2345.49	72.50%	80.00%

ZONAL LUMEN SUMMARY

0-10	467.41
10-20	963.45
20-30	1045.07
30-40	384.63
40-50	21.52
50-60	13.46
60-70	13.25
70-80	13.16
80-90	6.61
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



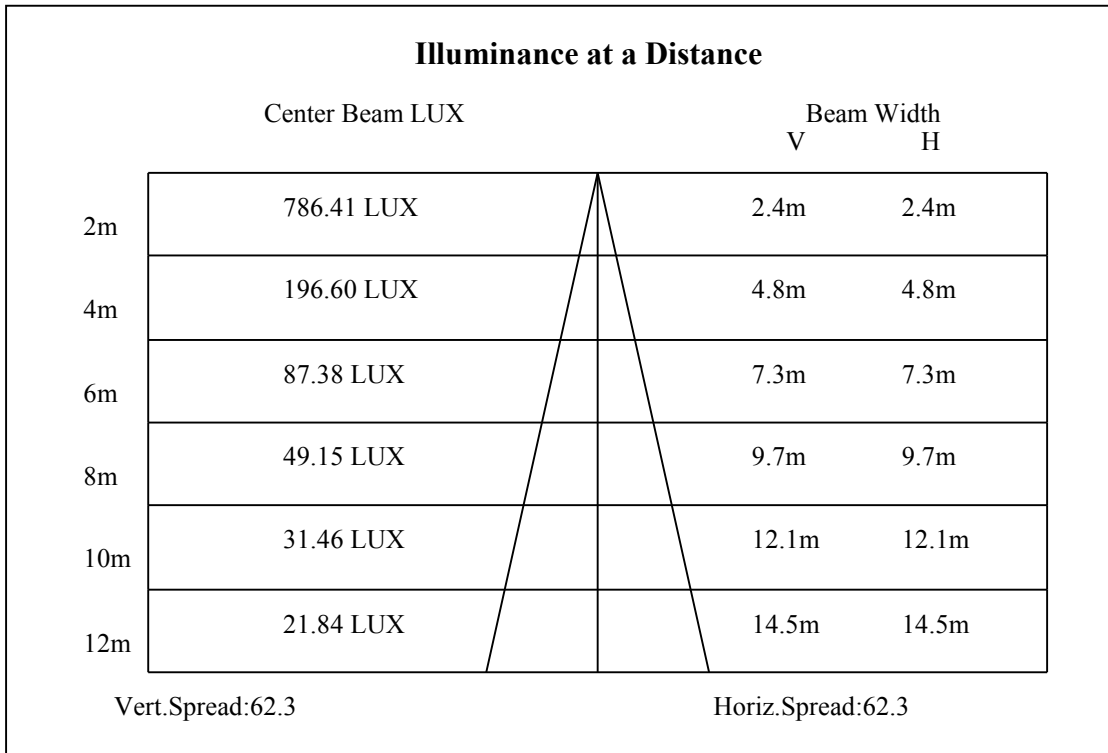
C0(Max): —————

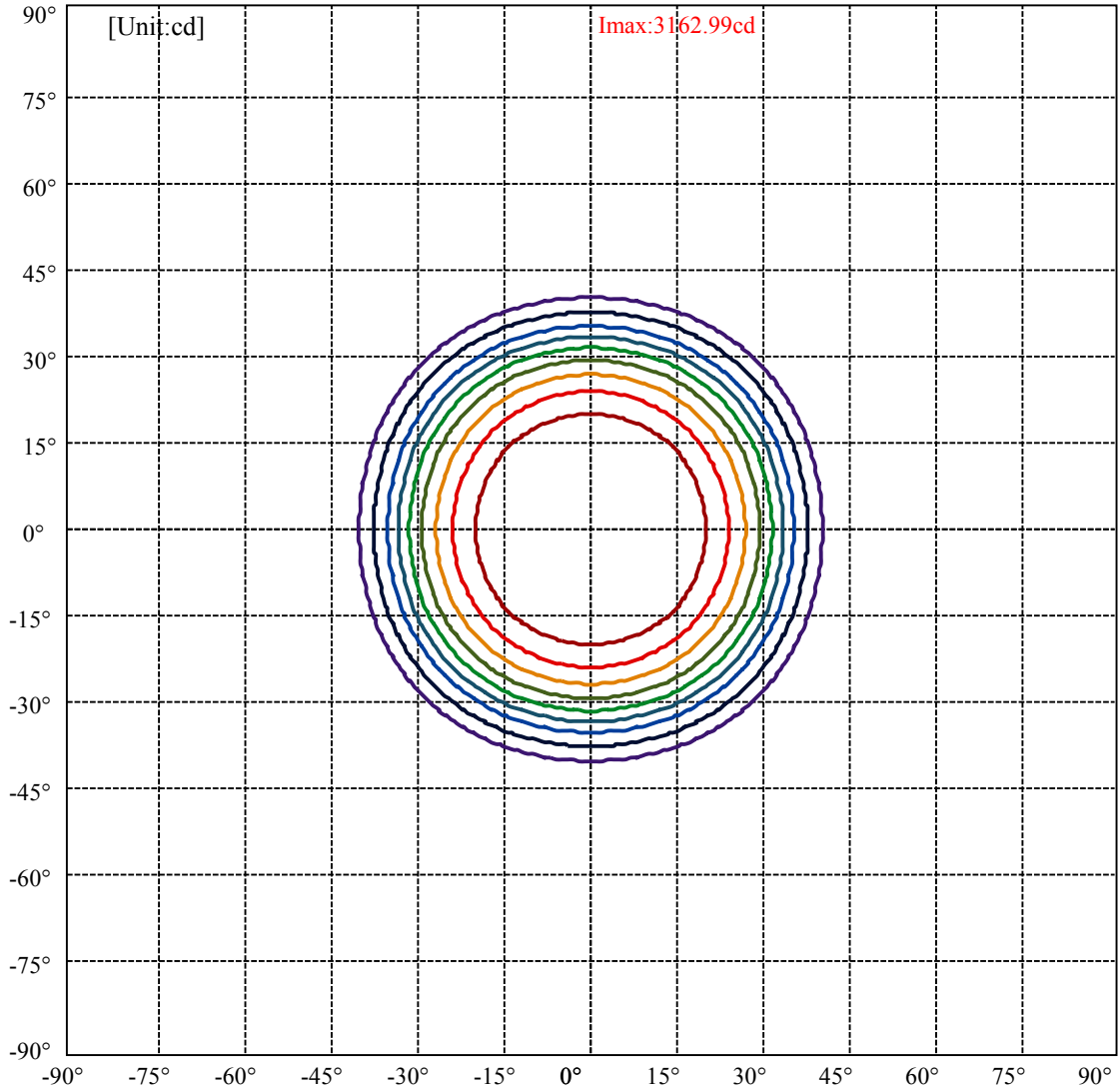
C0/C180: —————

C90/C270: —————

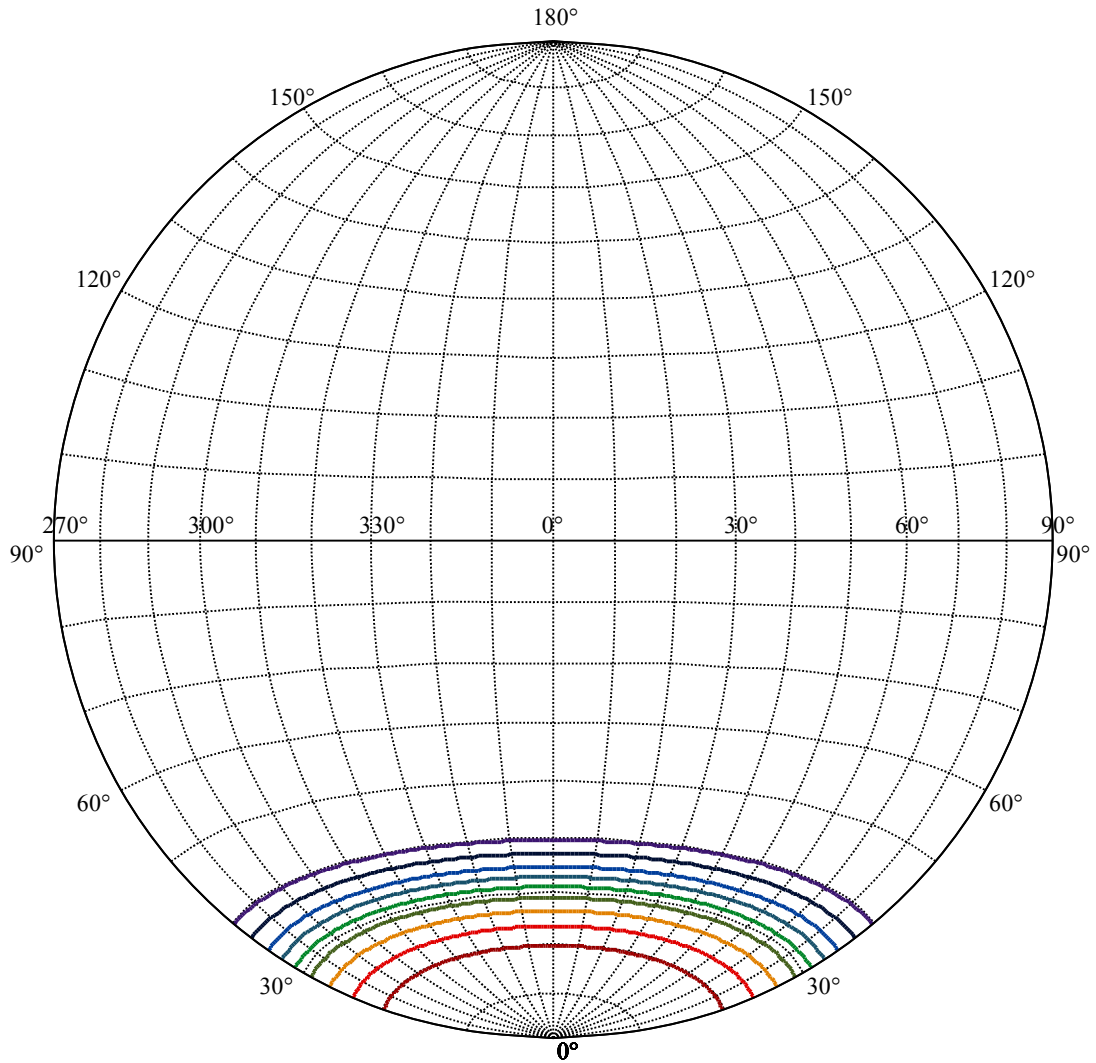
Field angle(10%Imax):C0/180Left:44.7 Right:34.7
:C90/270Left:44.7 Right:34.7

Beam Angle(50%Imax):C0/180Left:36.1 Right:26.1
:C90/270Left:36.1 Right:26.1





(10%Imax) 316.299	—
(20%Imax) 632.598	—
(30%Imax) 948.897	—
(40%Imax) 1265.2	—
(50%Imax) 1581.5	—
(60%Imax) 1897.79	—
(70%Imax) 2214.09	—
(80%Imax) 2530.39	—
(90%Imax) 2846.69	—



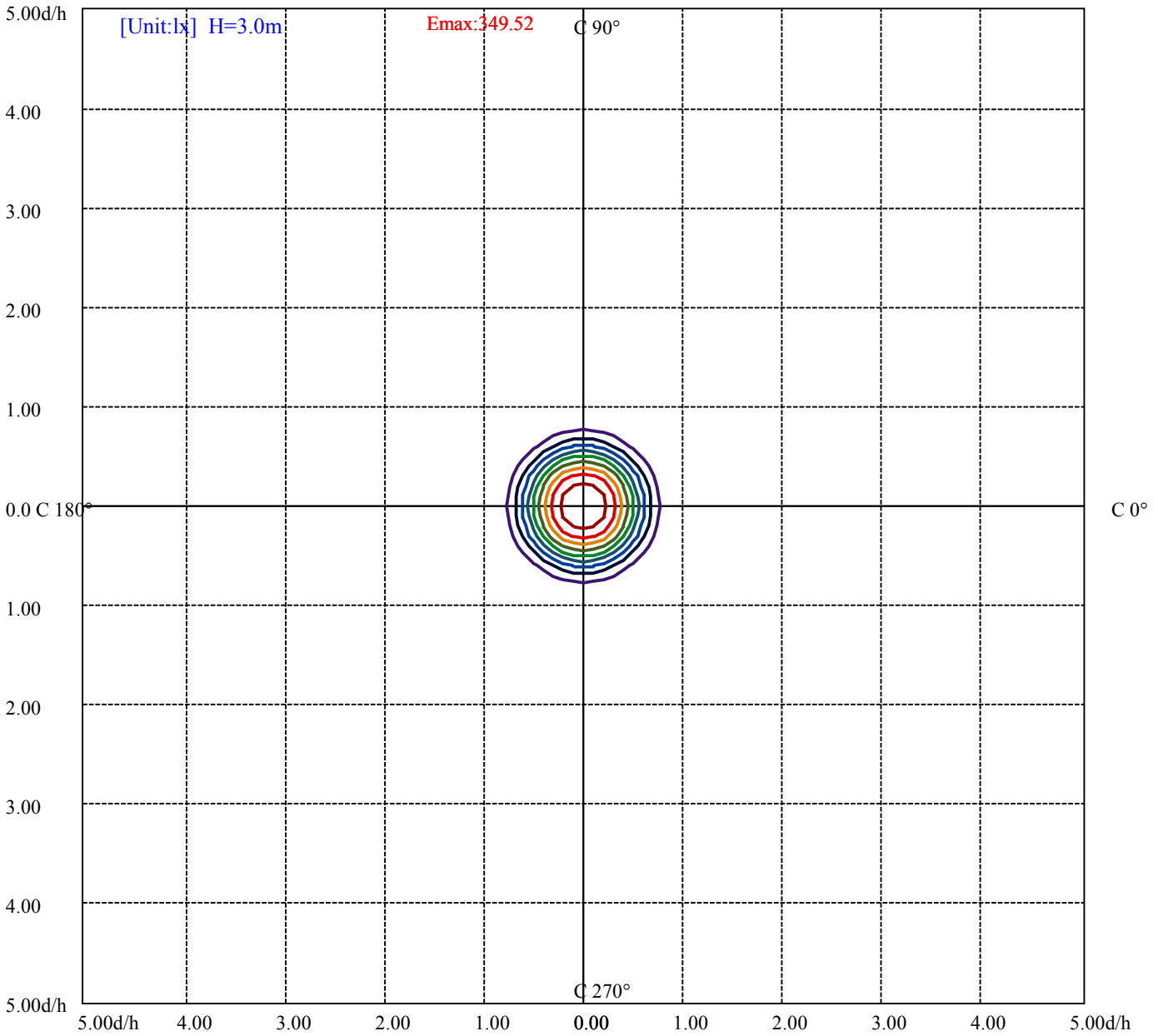
House

[Unit:cd]

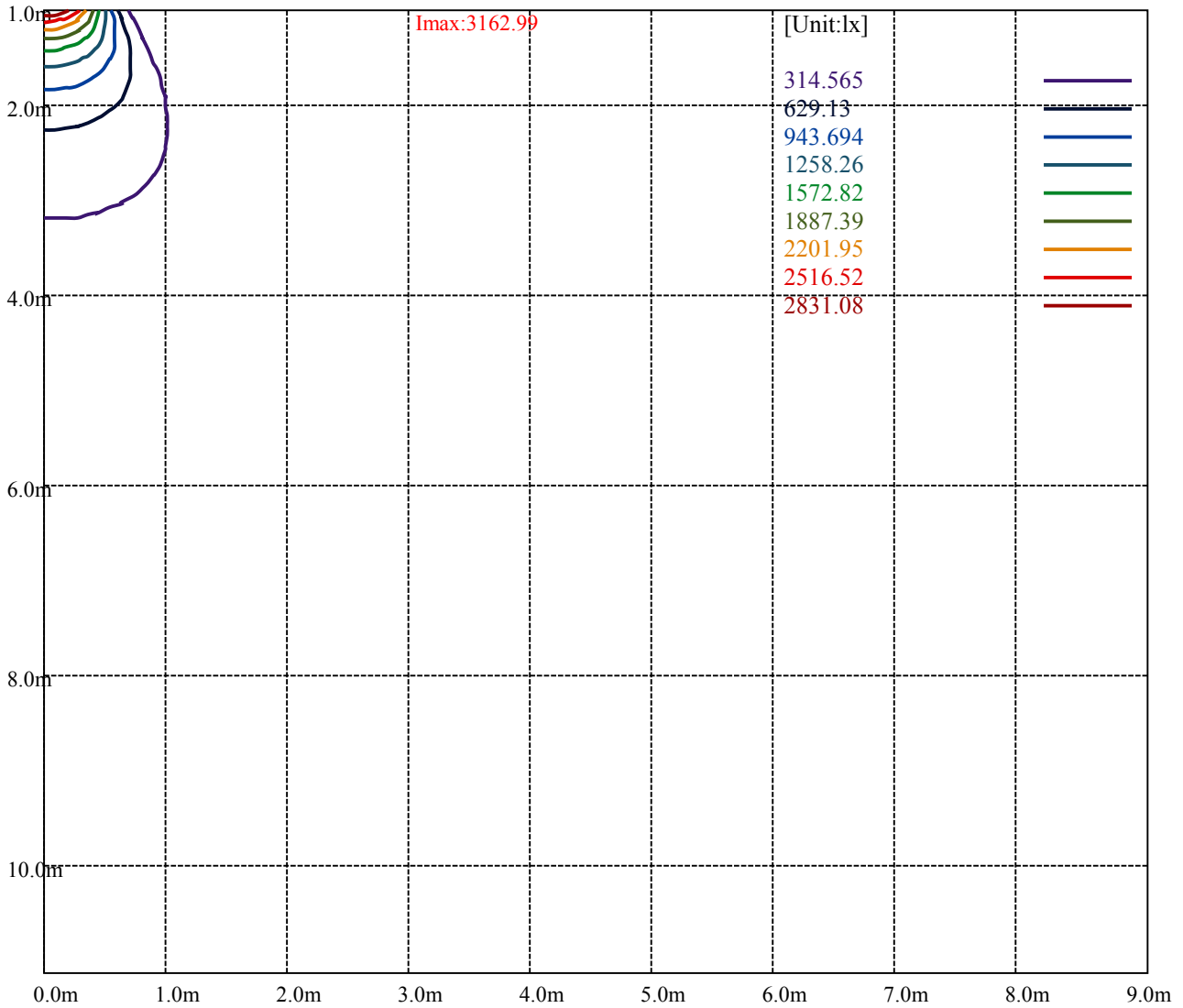
Road

I_{max}:3162.99

(10%I _{max}) 316.299	—
(20%I _{max}) 632.598	—
(30%I _{max}) 948.897	—
(40%I _{max}) 1265.2	—
(50%I _{max}) 1581.5	—
(60%I _{max}) 1897.79	—
(70%I _{max}) 2214.09	—
(80%I _{max}) 2530.39	—
(90%I _{max}) 2846.69	—



- (10%Emax) 34.95167
- (20%Emax) 69.90334
- (30%Emax) 104.8549
- (40%Emax) 139.8067
- (50%Emax) 174.7578
- (60%Emax) 209.71
- (70%Emax) 244.6611
- (80%Emax) 279.6133
- (90%Emax) 314.5645



Luminance Table

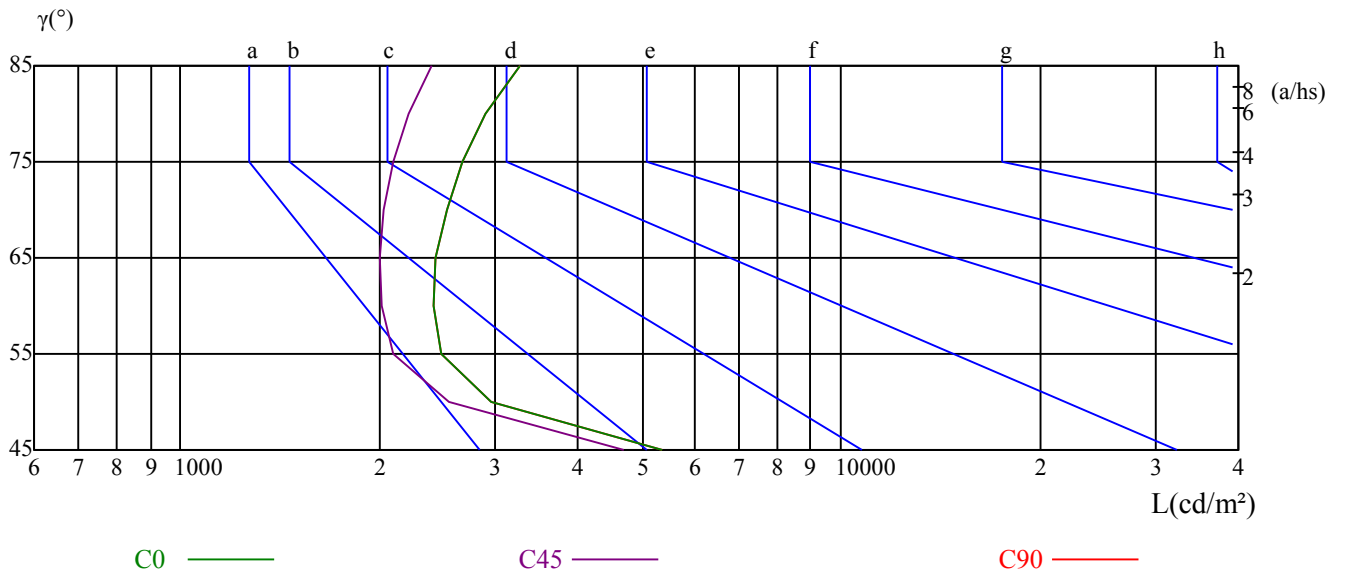
γ	45	50	55	60	65	70	75	80	85
C0	5360	2952	2478	2416	2436	2533	2668	2893	3259
C45	4691	2546	2104	2018	1998	2035	2094	2208	2405
C90	5360	2952	2478	2416	2436	2533	2668	2893	3259

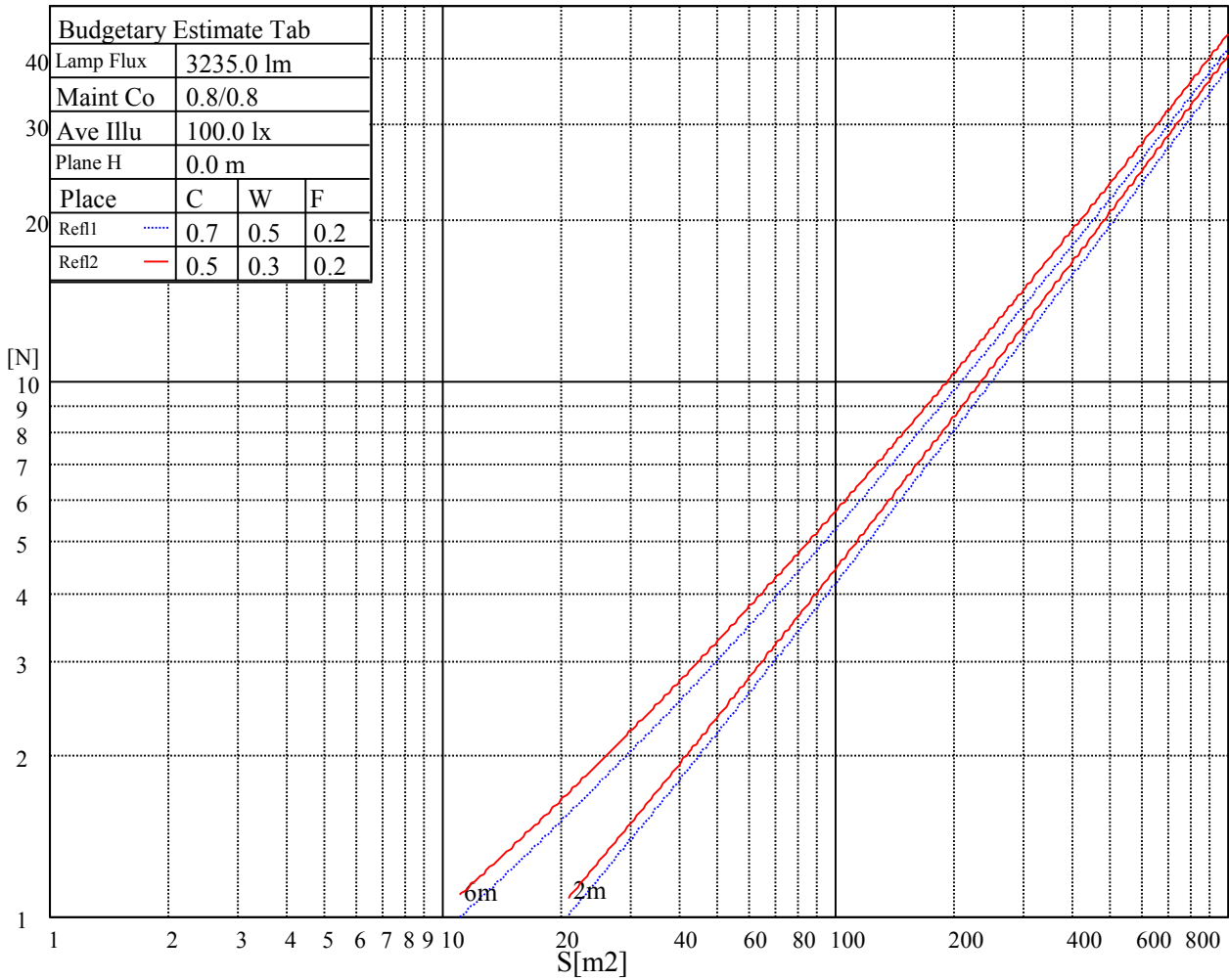
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5182	5182	5182	7902	7902	7902	22843	22843	22843

Glare Table

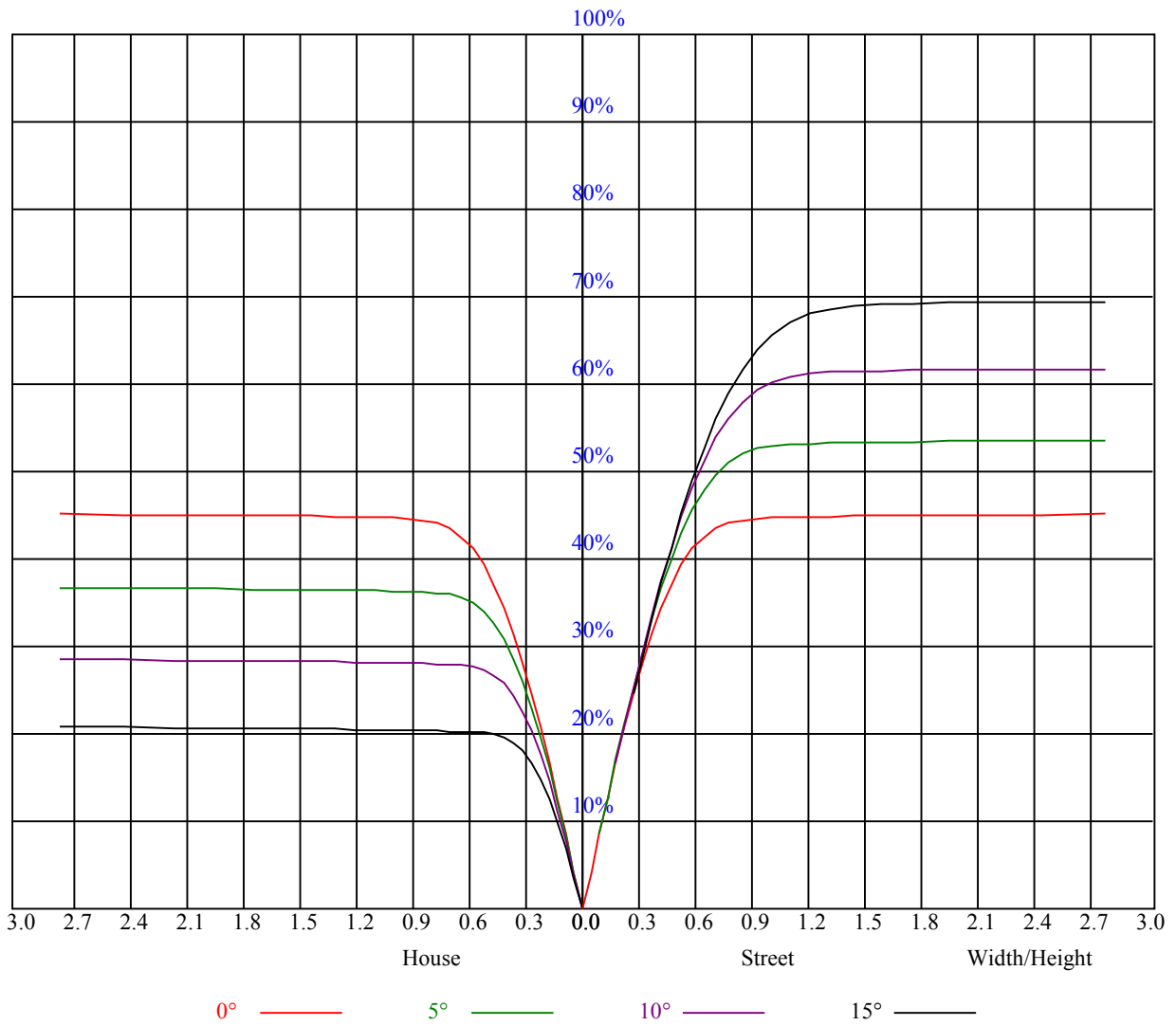
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.08	1.08	1.08	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.01	0.98	0.96	0.99	0.97	0.95	0.95	0.93	0.92	0.92	0.90	0.89	0.88	0.87	0.86	0.85
2	0.94	0.91	0.88	0.93	0.90	0.87	0.90	0.87	0.85	0.87	0.85	0.83	0.85	0.83	0.81	0.80
3	0.89	0.84	0.81	0.88	0.84	0.80	0.85	0.82	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.75
4	0.84	0.79	0.75	0.83	0.78	0.75	0.81	0.77	0.74	0.79	0.76	0.73	0.77	0.75	0.72	0.71
5	0.79	0.74	0.71	0.78	0.74	0.70	0.77	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.67
6	0.75	0.70	0.66	0.74	0.70	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.67	0.65	0.64
7	0.71	0.66	0.63	0.71	0.66	0.63	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.60
8	0.68	0.63	0.59	0.67	0.63	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.65	0.61	0.59	0.57
9	0.65	0.60	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.55
10	0.62	0.57	0.54	0.61	0.57	0.54	0.61	0.56	0.53	0.60	0.56	0.53	0.59	0.56	0.53	0.52



Intensity data(cd)

C/\u03b3(\u00b0)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	3145.65	3162.99	3125.44	3039.83	2838.76	2412.24	1774.25	914.87	275.28
45.0	3145.65	3162.99	3125.44	3039.83	2838.76	2412.24	1774.25	914.87	275.28
90.0	3145.65	3162.99	3125.44	3039.83	2838.76	2412.24	1774.25	914.87	275.28
135.0	3145.65	3162.99	3125.44	3039.83	2838.76	2412.24	1774.25	914.87	275.28
180.0	3145.65	3162.99	3125.44	3039.83	2838.76	2412.24	1774.25	914.87	275.28
225.0	3145.65	3162.99	3125.44	3039.83	2838.76	2412.24	1774.25	914.87	275.28
270.0	3145.65	3162.99	3125.44	3039.83	2838.76	2412.24	1774.25	914.87	275.28
315.0	3145.65	3162.99	3125.44	3039.83	2838.76	2412.24	1774.25	914.87	275.28
360.0	3145.65	3162.99	3125.44	3039.83	2838.76	2412.24	1774.25	914.87	275.28

C/\u03b3(\u00b0)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	35.18	18.77	15.14	14.04	13.32	12.88	12.44	12.17	12.11
45.0	35.18	18.77	15.14	14.04	13.32	12.88	12.44	12.17	12.11
90.0	35.18	18.77	15.14	14.04	13.32	12.88	12.44	12.17	12.11
135.0	35.18	18.77	15.14	14.04	13.32	12.88	12.44	12.17	12.11
180.0	35.18	18.77	15.14	14.04	13.32	12.88	12.44	12.17	12.11
225.0	35.18	18.77	15.14	14.04	13.32	12.88	12.44	12.17	12.11
270.0	35.18	18.77	15.14	14.04	13.32	12.88	12.44	12.17	12.11
315.0	35.18	18.77	15.14	14.04	13.32	12.88	12.44	12.17	12.11
360.0	35.18	18.77	15.14	14.04	13.32	12.88	12.44	12.17	12.11

C/\u03b3(\u00b0)	90.0
0.0	12.06
45.0	12.06
90.0	12.06
135.0	12.06
180.0	12.06
225.0	12.06
270.0	12.06
315.0	12.06
360.0	12.06