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Nata

LumCAT: 2-1566-M	
Luminaire:BJB 47.319.2011	
Report No: 2017060606-1	Voltage(V): 217.5000
Test No: 2017060606	Current(A): 0.1370
LampCAT: Luxeon 1208	Power (W): 28.1000
Lamp flux(lm): 3235.0	PF: 0.9430
Number of Lamps: 1	Ballast type:
Length(mm): 70	Width(mm): 70
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2961.38
Efficiency(%): 91.54%
Lumens(lm)/Power(W): 105.39
Central intensity(cd): 8920.788
Maximum intensity(cd): 8920.788
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=19.7
 [C90/270]Total=19.7
Field angle(10%Imax): [C0/180]Total=69.9
 [C90/270]Total=69.9
Maximum s/h(1/2): C0_180=0.34 C90_270=0.34
Maximum s/h(1/4): C0_180=0.47 C90_270=0.47
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 93.10%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.168%

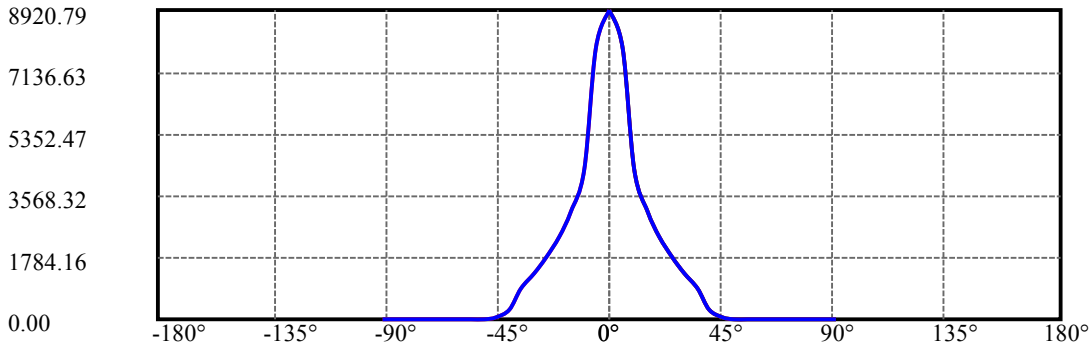
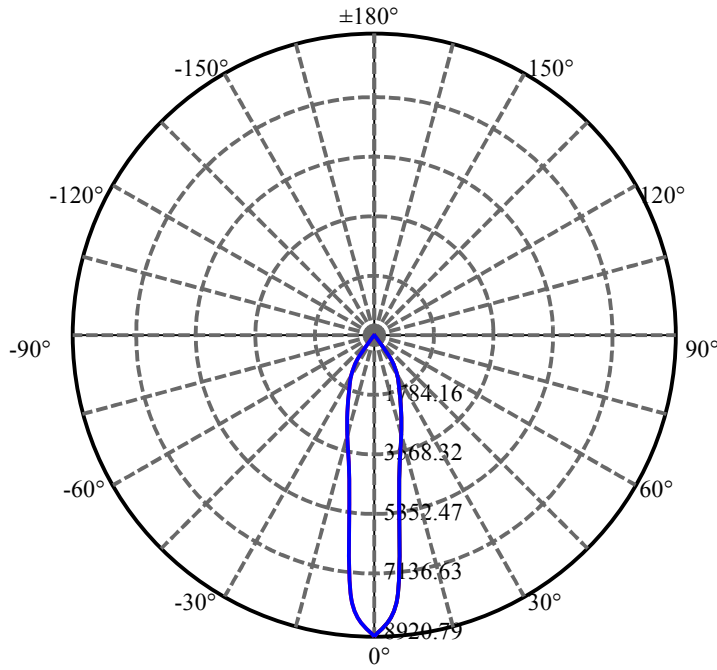
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	8920.788	53.348	53.348	1.649%	1.801%
5.0	7813.742	373.288	426.637	11.539%	14.407%
10.0	4346.496	413.713	840.349	12.789%	28.377%
15.0	3103.805	440.332	1280.681	13.611%	43.246%
20.0	2405.208	450.914	1731.595	13.939%	58.473%
25.0	1769.306	409.865	2141.46	12.670%	72.313%
30.0	1355.420	371.478	2512.938	11.483%	84.857%
35.0	889.099	279.532	2792.47	8.641%	94.296%
40.0	290.588	102.384	2894.854	3.165%	97.753%
45.0	32.587	12.630	2907.484	.390%	98.180%
50.0	17.535	7.363	2914.847	.228%	98.429%
55.0	13.076	5.871	2920.719	.181%	98.627%
60.0	12.443	5.907	2926.625	.183%	98.826%
65.0	12.154	6.038	2932.663	.187%	99.030%
70.0	12.044	6.203	2938.866	.192%	99.240%
75.0	11.968	6.337	2945.203	.196%	99.454%
80.0	11.933	6.442	2951.645	.199%	99.671%
85.0	11.885	6.490	2958.135	.201%	99.890%
90.0	11.851	3.248	2961.383	.100%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2512.94	77.68%	84.86%
0-40	2894.85	89.49%	97.75%
0-60	2926.63	90.47%	98.83%
0-90	2958.13	91.44%	99.89%
0-120	2958.13	91.44%	99.89%
0-180	2961.38	91.54%	100.00%
60-90	37.42	1.16%	1.26%
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%
0-28.06	2369.11	73.23%	80.00%

ZONAL LUMEN SUMMARY

0-10	840.35
10-20	891.25
20-30	781.34
30-40	381.92
40-50	19.99
50-60	11.78
60-70	12.24
70-80	12.78
80-90	6.49
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



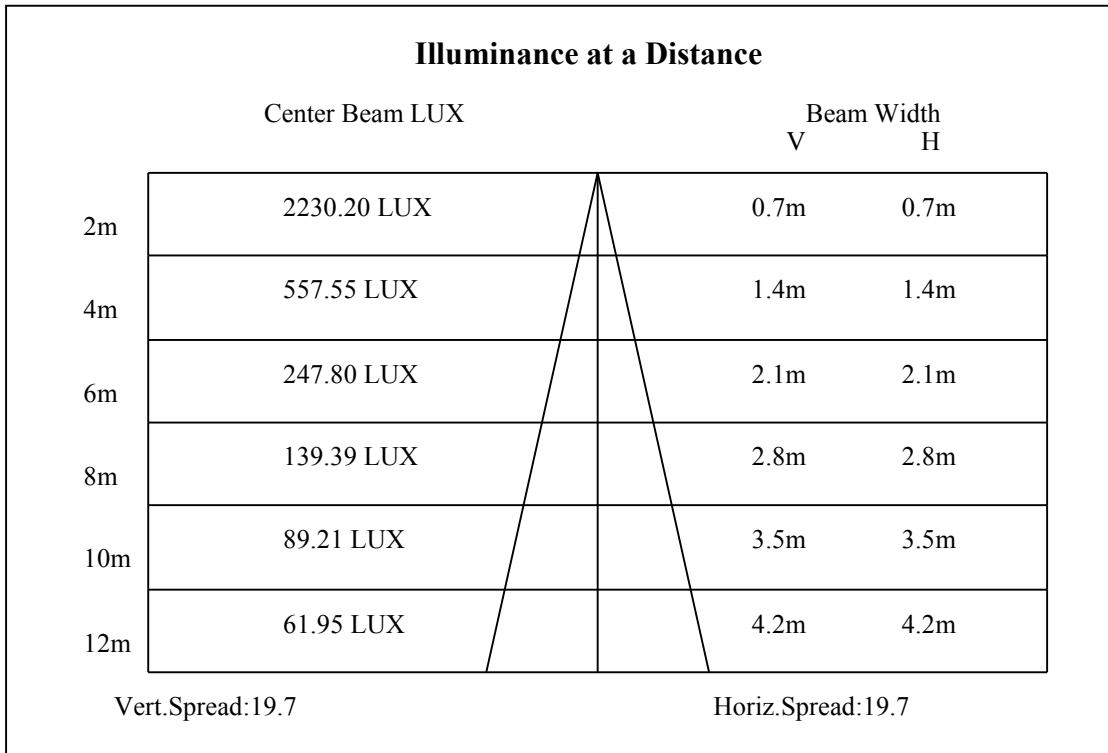
C0(Max): —————

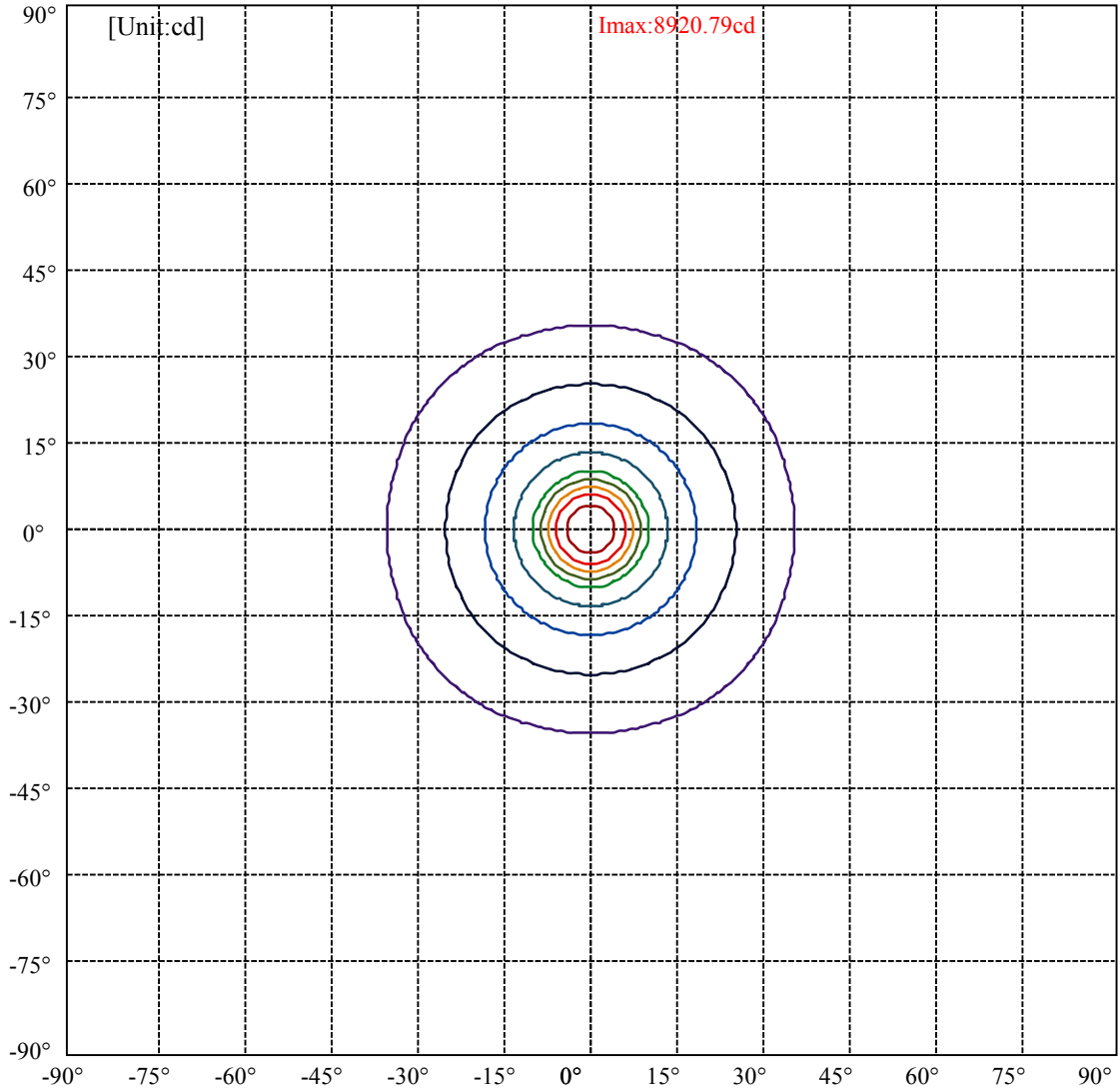
C0/C180: —————

C90/C270: —————

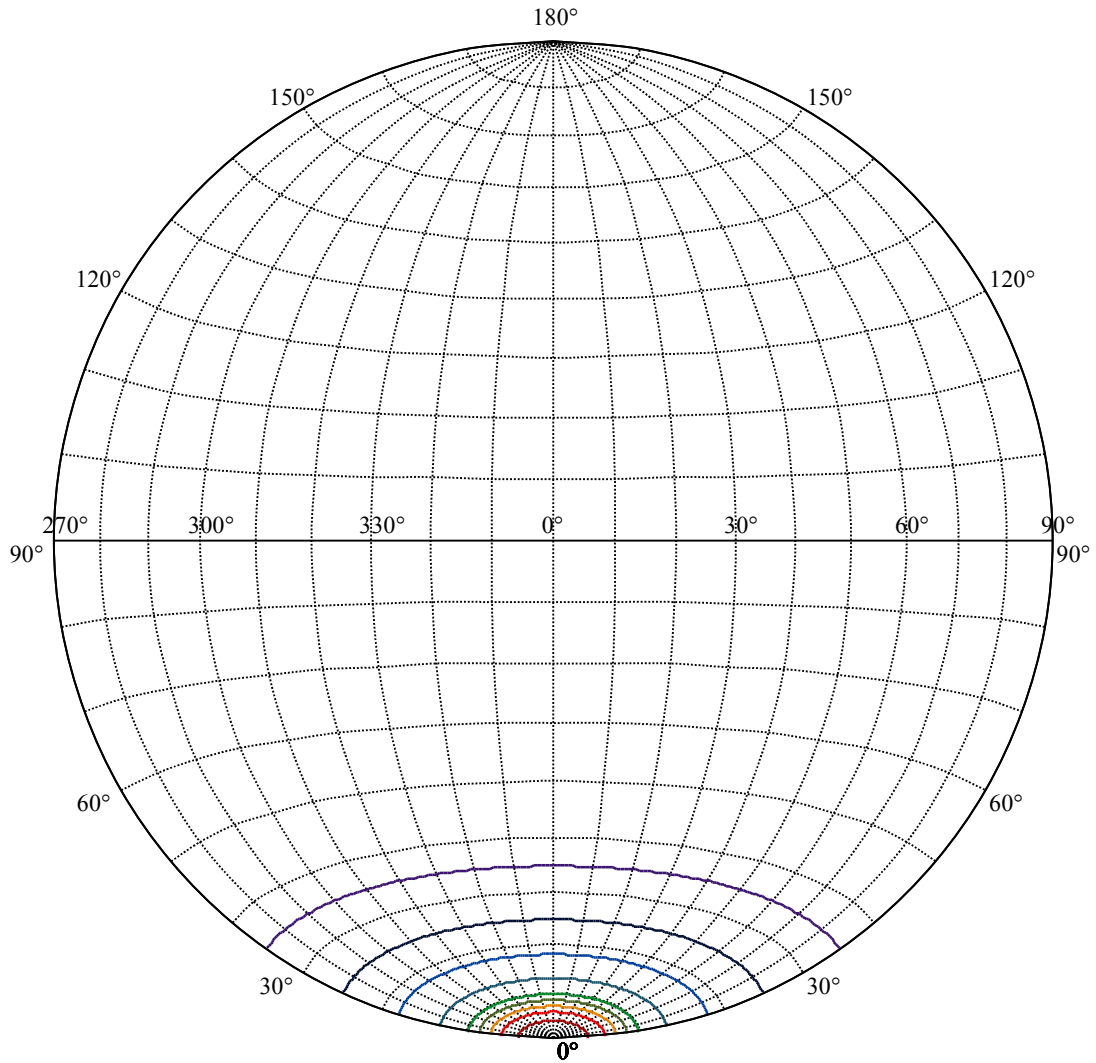
Field angle(10%Imax):C0/180Left:35.0 Right:35.0
:C90/270Left:35.0 Right:35.0

Beam Angle(50%Imax):C0/180Left:9.8 Right:9.8
:C90/270Left:9.8 Right:9.8





(10%Imax) 892.079	—
(20%Imax) 1784.16	—
(30%Imax) 2676.24	—
(40%Imax) 3568.32	—
(50%Imax) 4460.39	—
(60%Imax) 5352.47	—
(70%Imax) 6244.55	—
(80%Imax) 7136.63	—
(90%Imax) 8028.71	—



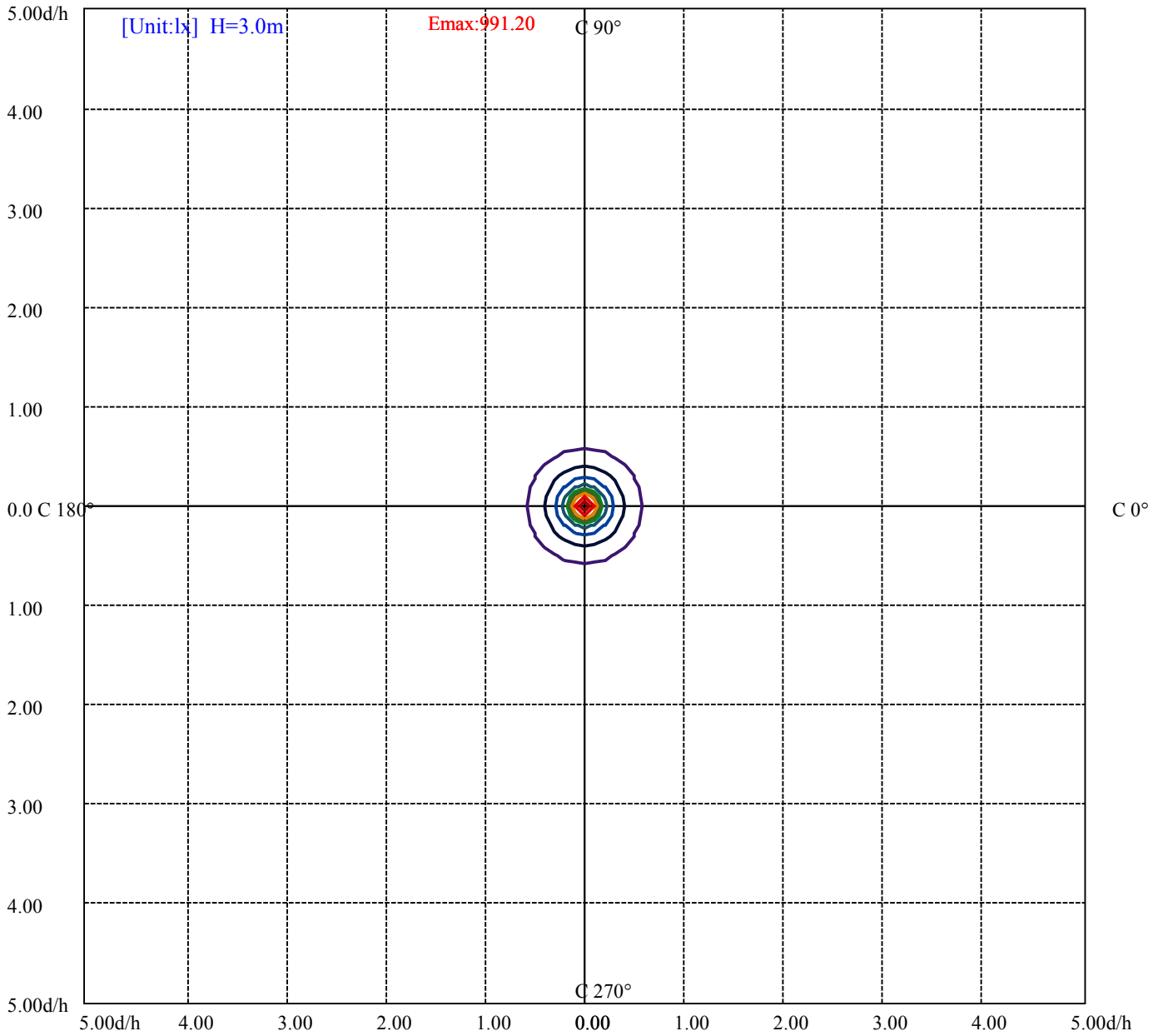
House

[Unit:cd]

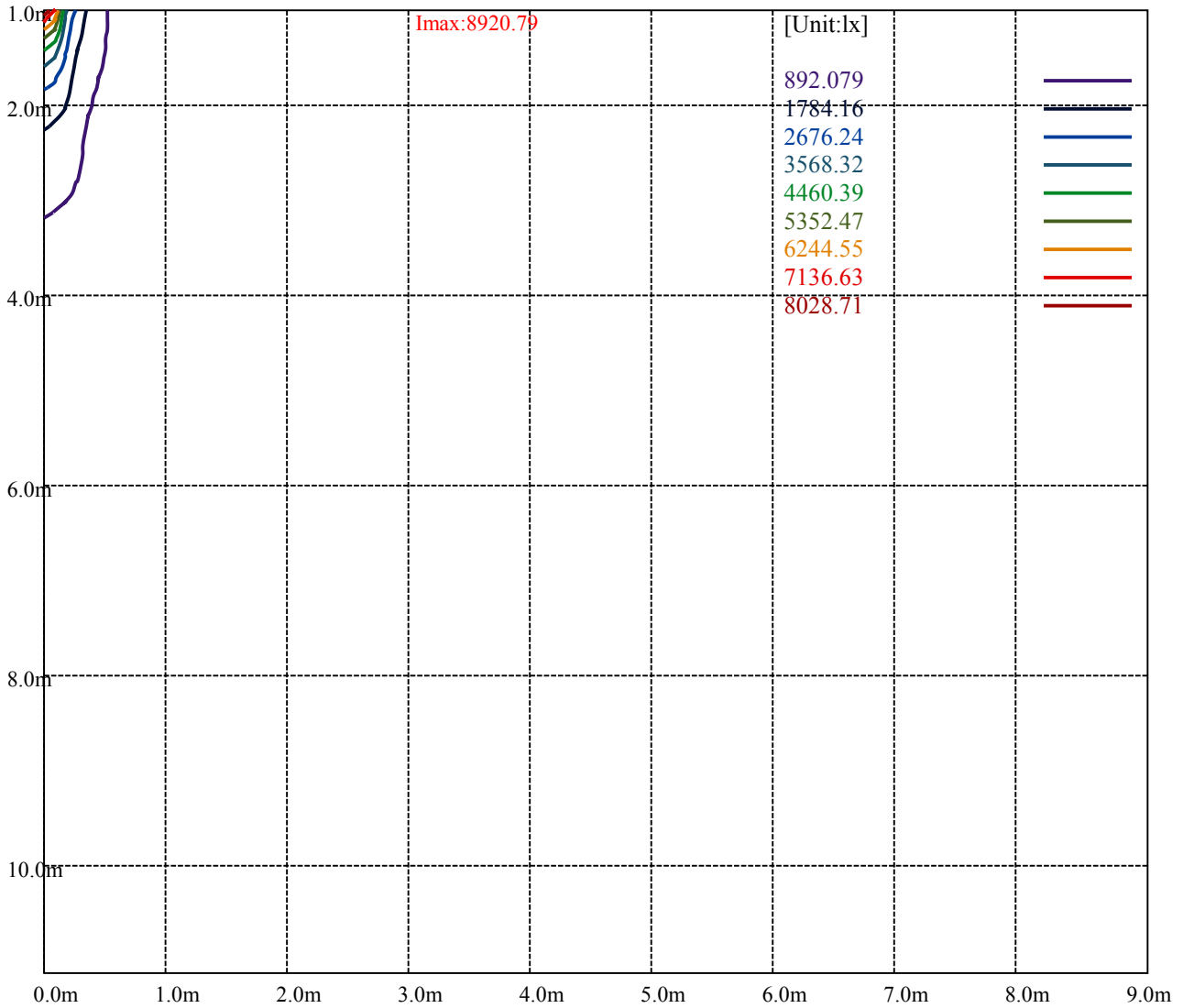
Road

Imax:8920.79

(10%Imax) 892.079	—
(20%Imax) 1784.16	—
(30%Imax) 2676.24	—
(40%Imax) 3568.32	—
(50%Imax) 4460.39	—
(60%Imax) 5352.47	—
(70%Imax) 6244.55	—
(80%Imax) 7136.63	—
(90%Imax) 8028.71	—



- (10%Emax) 99.11955
- (20%Emax) 198.2389
- (30%Emax) 297.3589
- (40%Emax) 396.4778
- (50%Emax) 495.5978
- (60%Emax) 594.7167
- (70%Emax) 693.8367
- (80%Emax) 792.9556
- (90%Emax) 892.0756



Luminance Table

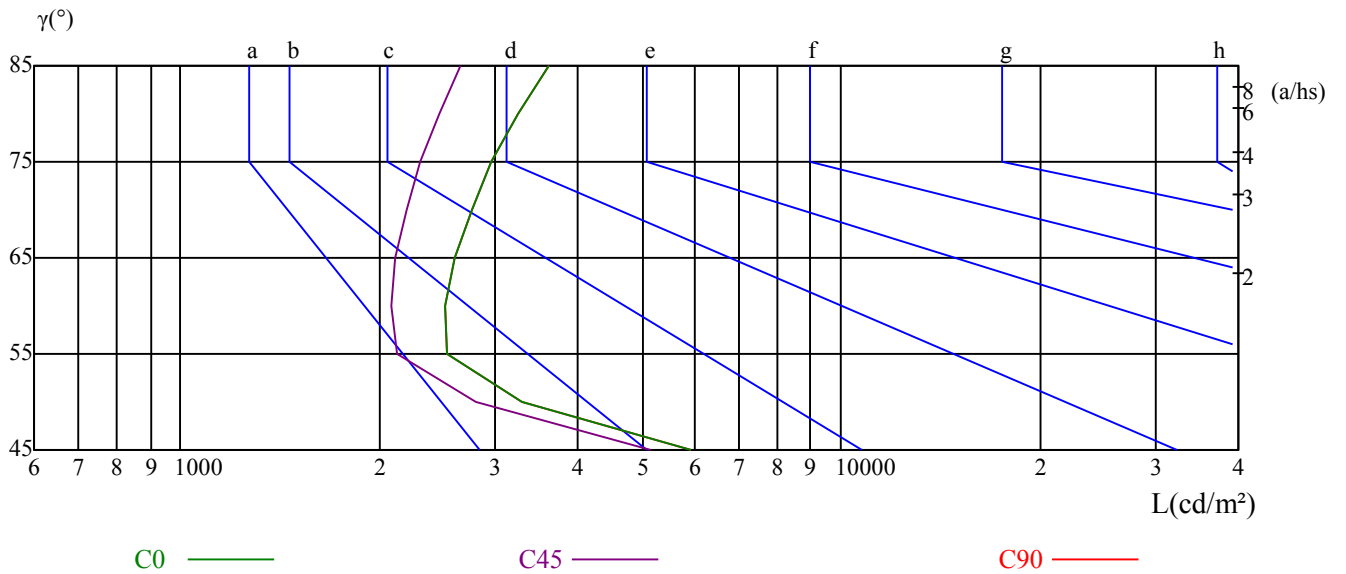
γ	45	50	55	60	65	70	75	80	85
C0	5931	3279	2533	2521	2601	2754	2962	3245	3617
C45	5144	2802	2131	2086	2114	2194	2307	2462	2659
C90	5931	3279	2533	2521	2601	2754	2962	3245	3617

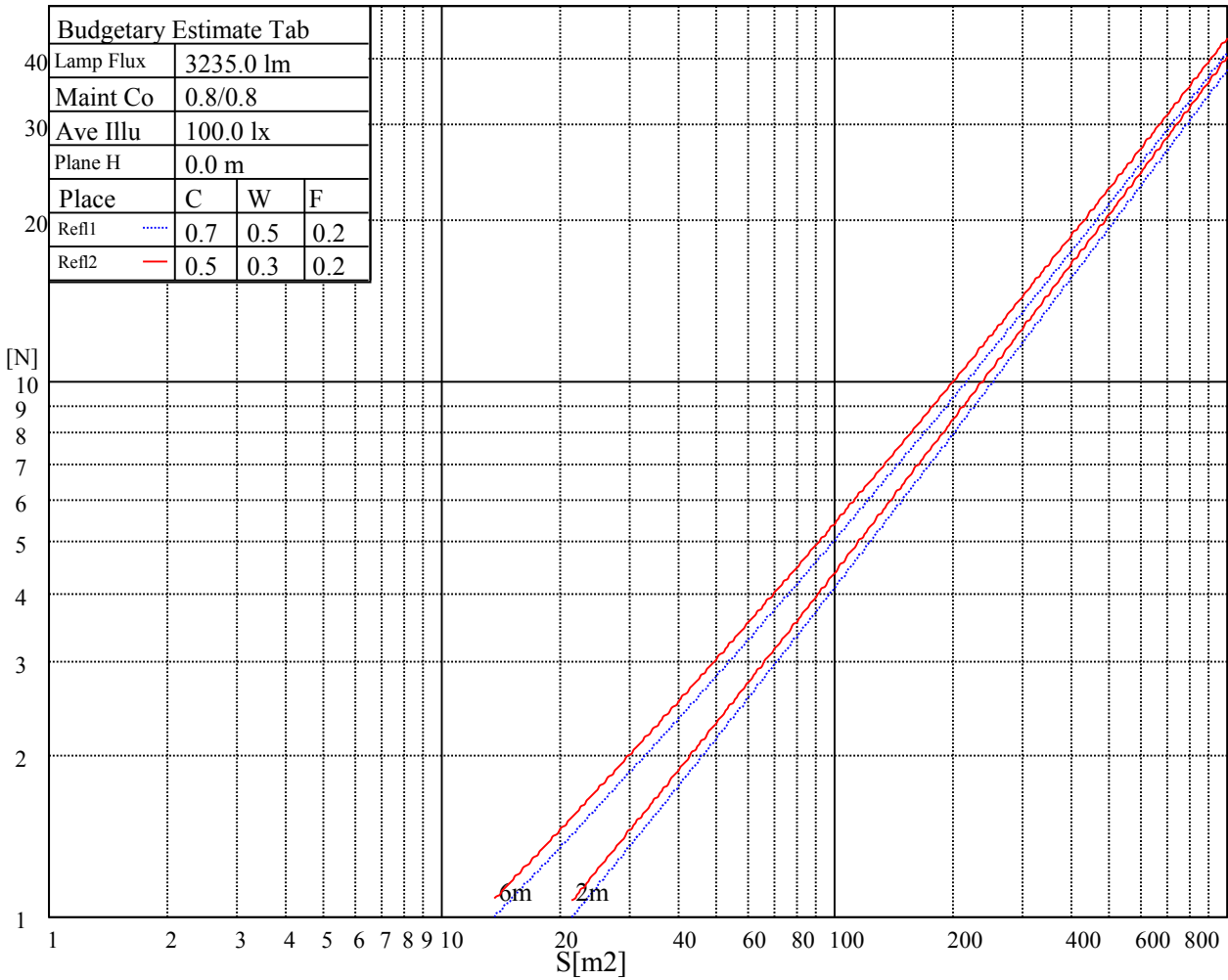
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5869	5869	5869	9437	9437	9437	27830	27830	27830

Glare Table

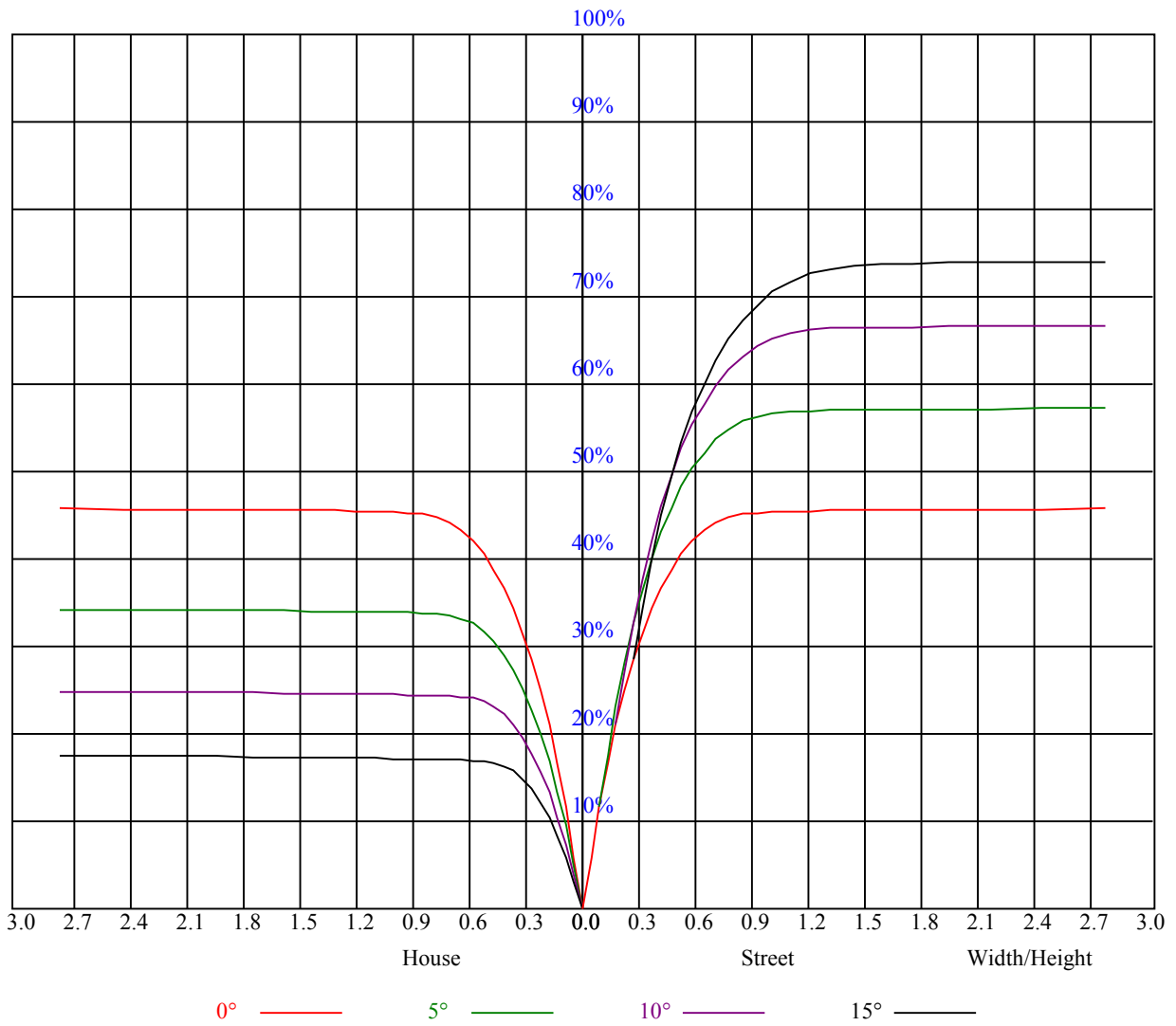
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.11	1.11	1.11	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.02	0.99	0.97	1.00	0.98	0.95	0.96	0.94	0.92	0.93	0.91	0.90	0.89	0.88	0.87	0.85
2	0.96	0.92	0.89	0.94	0.91	0.88	0.91	0.89	0.86	0.89	0.86	0.84	0.86	0.84	0.83	0.81
3	0.91	0.86	0.83	0.90	0.86	0.82	0.87	0.84	0.81	0.85	0.82	0.80	0.83	0.81	0.79	0.77
4	0.86	0.82	0.78	0.85	0.81	0.78	0.83	0.80	0.77	0.81	0.78	0.76	0.80	0.77	0.75	0.74
5	0.82	0.77	0.74	0.81	0.77	0.73	0.80	0.76	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.70
6	0.78	0.74	0.70	0.78	0.73	0.70	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.68	0.67
7	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.64
8	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.62
9	0.69	0.64	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.60	0.59
10	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.65	0.61	0.58	0.64	0.61	0.58	0.57



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	8938.41	7881.87	4378.64	3062.24	2432.39	1771.16	1360.99	933.76	330.89
45.0	8903.72	8152.75	4777.79	3215.84	2523.79	1863.11	1398.98	983.86	369.98
90.0	8927.40	7506.94	4214.57	3080.96	2380.09	1752.45	1329.61	786.98	226.72
135.0	8913.63	7982.08	4711.18	3229.61	2477.54	1864.21	1390.17	911.73	308.32
180.0	8938.41	7786.08	4184.84	3100.23	2387.80	1744.74	1326.86	840.00	259.65
225.0	8903.72	7471.15	3938.73	2932.30	2265.57	1665.46	1302.63	836.80	227.71
270.0	8927.40	8175.32	4502.51	3215.84	2481.39	1809.15	1415.50	983.86	367.78
315.0	8913.63	7553.74	4063.71	2993.42	2293.10	1684.18	1318.60	835.81	233.66
360.0	8938.41	7881.87	4378.64	3062.24	2432.39	1771.16	1360.99	933.76	330.89

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	34.13	18.17	13.16	12.44	12.17	12.06	11.95	11.95	11.89
45.0	33.91	18.94	13.21	12.55	12.22	12.11	12.00	11.95	11.89
90.0	28.68	15.14	12.88	12.39	12.06	12.00	11.89	11.89	11.89
135.0	33.03	16.63	12.99	12.44	12.17	12.06	11.95	11.95	11.89
180.0	30.89	17.01	12.88	12.33	12.06	11.95	11.89	11.84	11.78
225.0	30.28	16.90	13.05	12.44	12.17	12.00	11.95	11.95	11.89
270.0	37.82	19.88	13.43	12.55	12.28	12.11	12.00	11.95	11.89
315.0	31.93	17.62	12.99	12.39	12.11	12.06	12.11	12.00	11.95
360.0	34.13	18.17	13.16	12.44	12.17	12.06	11.95	11.95	11.89

C/γ(°)	90.0
0.0	11.84
45.0	11.89
90.0	11.84
135.0	11.84
180.0	11.78
225.0	11.89
270.0	11.89
315.0	11.84
360.0	11.84