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## Nata

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LumCAT: 1676-A  
Luminaire: 92.70.051.00+92.70.147.00  
Report No: NT2017092603  
Test No: GC2017092603  
LampCAT: LUMINUS CXM-6-AA30  
Lamp flux(lm): 936.0  
Number of Lamps: 1  
Length(mm): 46  
Phm Type: C

Voltage(V): 39.0000  
Current(A): 0.3000  
Power (W): 11.7000  
PF: 0.0000  
Ballast type: DC  
Width(mm): 46  
Height(mm): 0

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## Photometric Results

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Lumens(lm): 811.42  
Efficiency(%): 86.69%  
Lumens(lm)/Power(W): 69.35  
Central intensity(cd): 5071.383  
Maximum intensity(cd): 5071.383  
Angle of maximum intensity: C=0.0  $\gamma$ =0.0  
Beam Angle(50%Imax): [C0/180]Total=16.7  
                                  [C90/270]Total=16.7  
Field angle(10%Imax): [C0/180]Total=36.6  
                                  [C90/270]Total=36.6  
Maximum s/h(1/2): C0\_180=0.29 C90\_270=0.29  
Maximum s/h(1/4): C0\_180=0.30 C90\_270=0.30  
Up flux rate of lamp(%): 0.00%  
Down flux rate of lamp(%): 86.69%  
Up flux rate of LUM(%): - -  
Down flux rate of LUM(%): 100.00%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 97.602%

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Equipment: GMS1980  
Temperature(°C): 25.0

Date: 2017/9/26  
Humidity(%): 60.0%

Operator: NT07  
Distance(m): 7.42

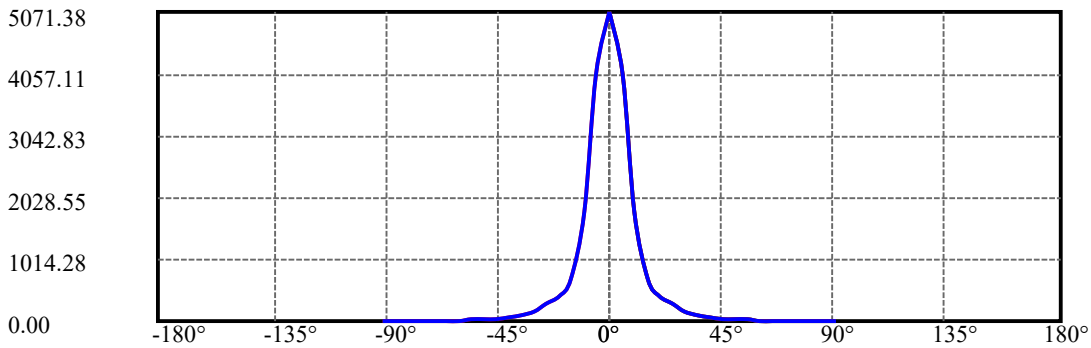
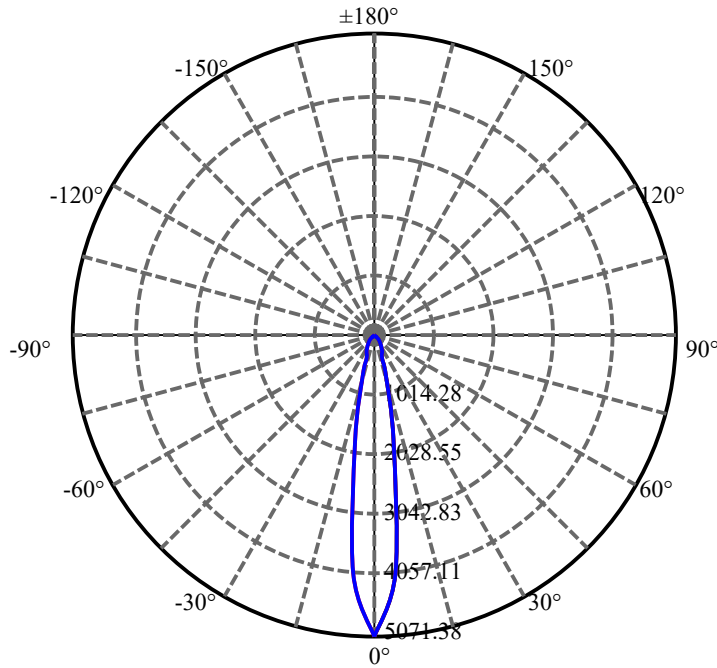
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5071.383	0.000	0	.000%	.000%
5.0	4028.270	108.784	108.784	11.622%	13.407%
10.0	1787.929	208.064	316.848	22.229%	39.048%
15.0	693.890	147.220	464.067	15.729%	57.192%
20.0	409.482	90.933	555.001	9.715%	68.398%
25.0	274.208	71.707	626.707	7.661%	77.236%
30.0	162.719	55.294	682.001	5.907%	84.050%
35.0	94.759	37.915	719.916	4.051%	88.723%
40.0	60.005	25.821	745.737	2.759%	91.905%
45.0	38.244	18.191	763.929	1.944%	94.147%
50.0	25.257	12.831	776.76	1.371%	95.728%
55.0	17.804	9.363	786.123	1.000%	96.882%
60.0	7.453	5.838	791.961	.624%	97.602%
65.0	6.022	3.276	795.237	.350%	98.005%
70.0	6.070	3.062	798.299	.327%	98.383%
75.0	6.751	3.351	801.65	.358%	98.796%
80.0	6.882	3.648	805.298	.390%	99.245%
85.0	6.228	3.562	808.86	.381%	99.684%
90.0	3.131	2.563	811.423	.274%	100.000%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	682.00	72.86%	84.05%
0-40	745.74	79.67%	91.90%
0-60	791.96	84.61%	97.60%
0-90	808.86	86.42%	99.68%
0-120	808.86	86.42%	99.68%
0-180	811.42	86.69%	100.00%
60-90	22.74	2.43%	2.80%
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%
0-27.03	649.14	69.35%	80.00%

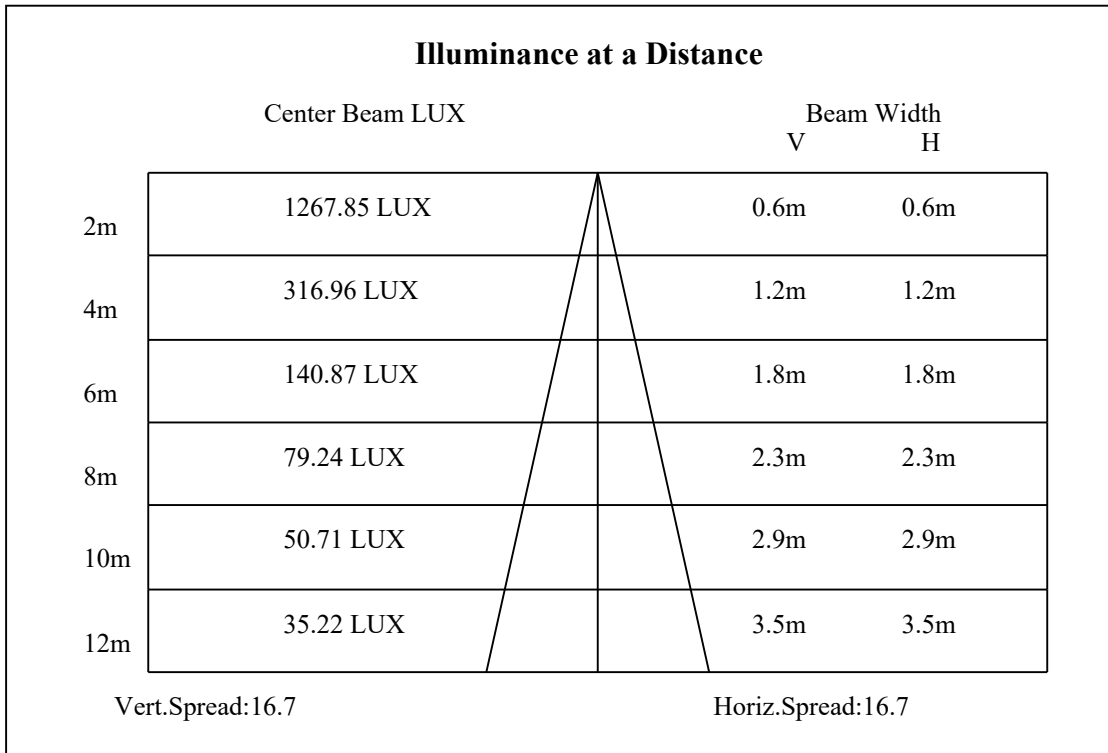
## ZONAL LUMEN SUMMARY

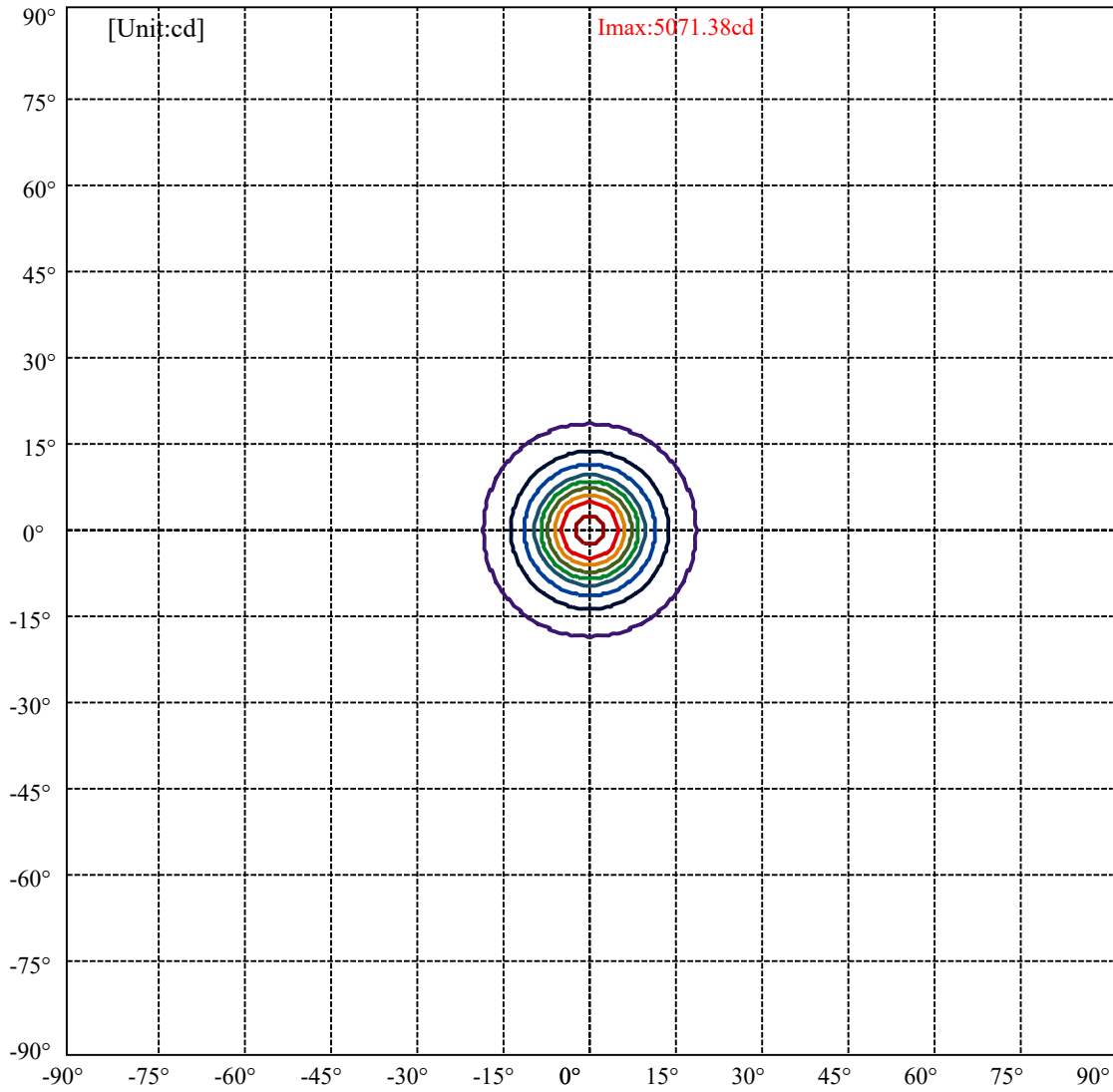
0-10	316.85
10-20	238.15
20-30	127.00
30-40	63.74
40-50	31.02
50-60	15.20
60-70	6.34
70-80	7.00
80-90	3.56
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



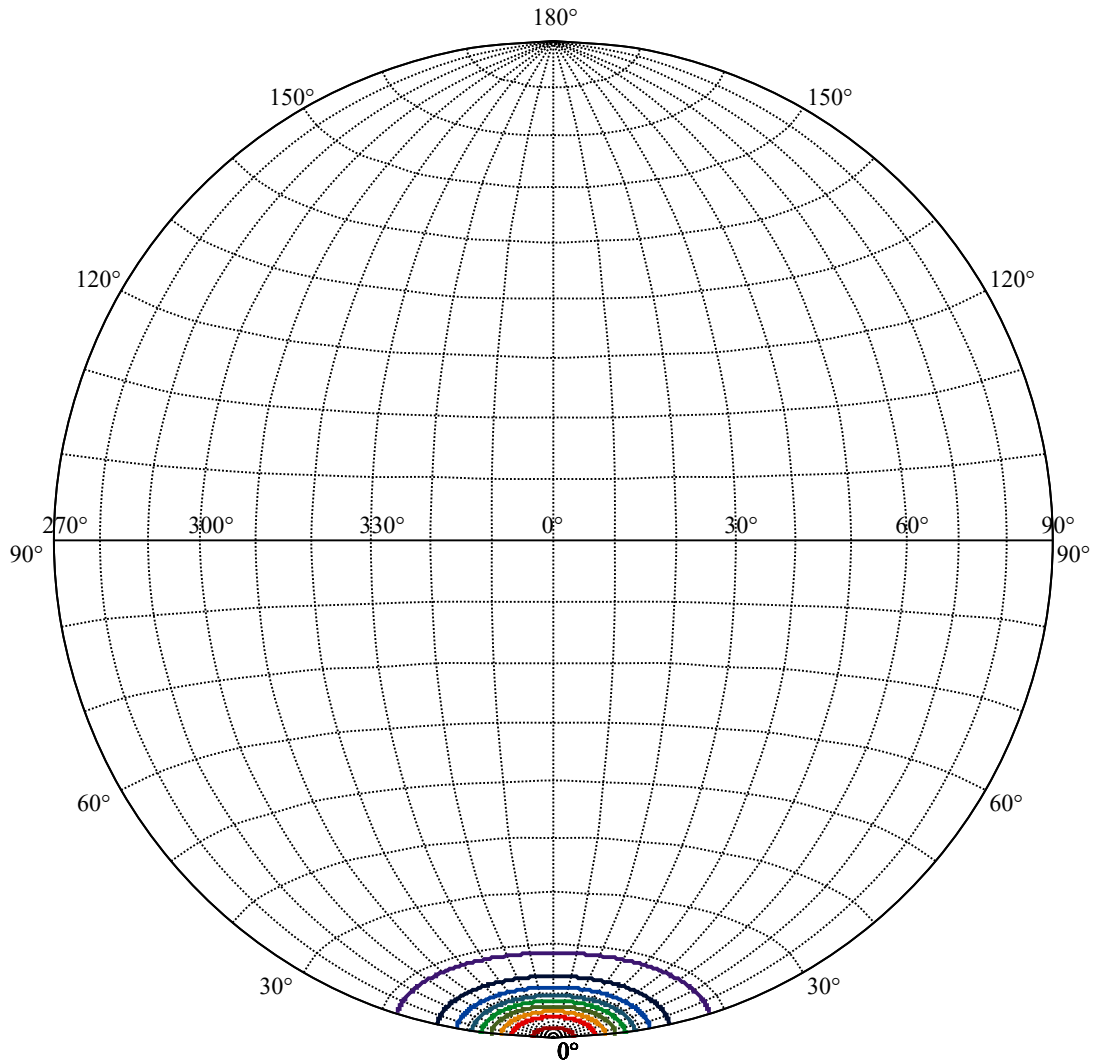
C0(Max): —————  
C0/C180: —————  
C90/C270: —————

Field angle(10%Imax):C0/180Left:18.3 Right:18.3  
:C90/270Left:18.3 Right:18.3  
Beam Angle(50%Imax):C0/180Left:8.3 Right:8.3  
:C90/270Left:8.3 Right:8.3





(10%Imax)	507.138	—
(20%Imax)	1014.28	—
(30%Imax)	1521.41	—
(40%Imax)	2028.55	—
(50%Imax)	2535.69	—
(60%Imax)	3042.83	—
(70%Imax)	3549.97	—
(80%Imax)	4057.11	—
(90%Imax)	4564.24	—



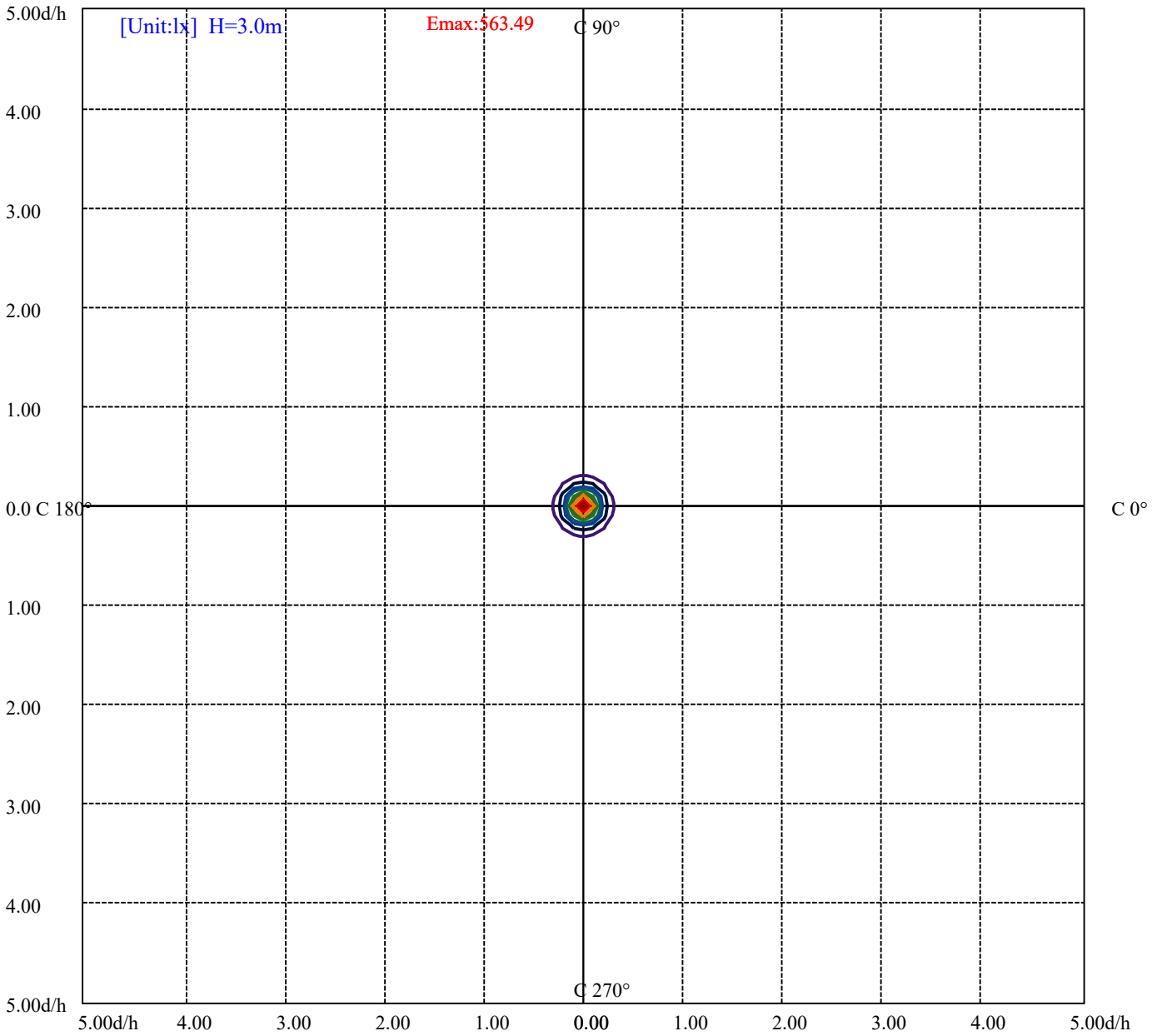
House

[Unit:cd]

Road

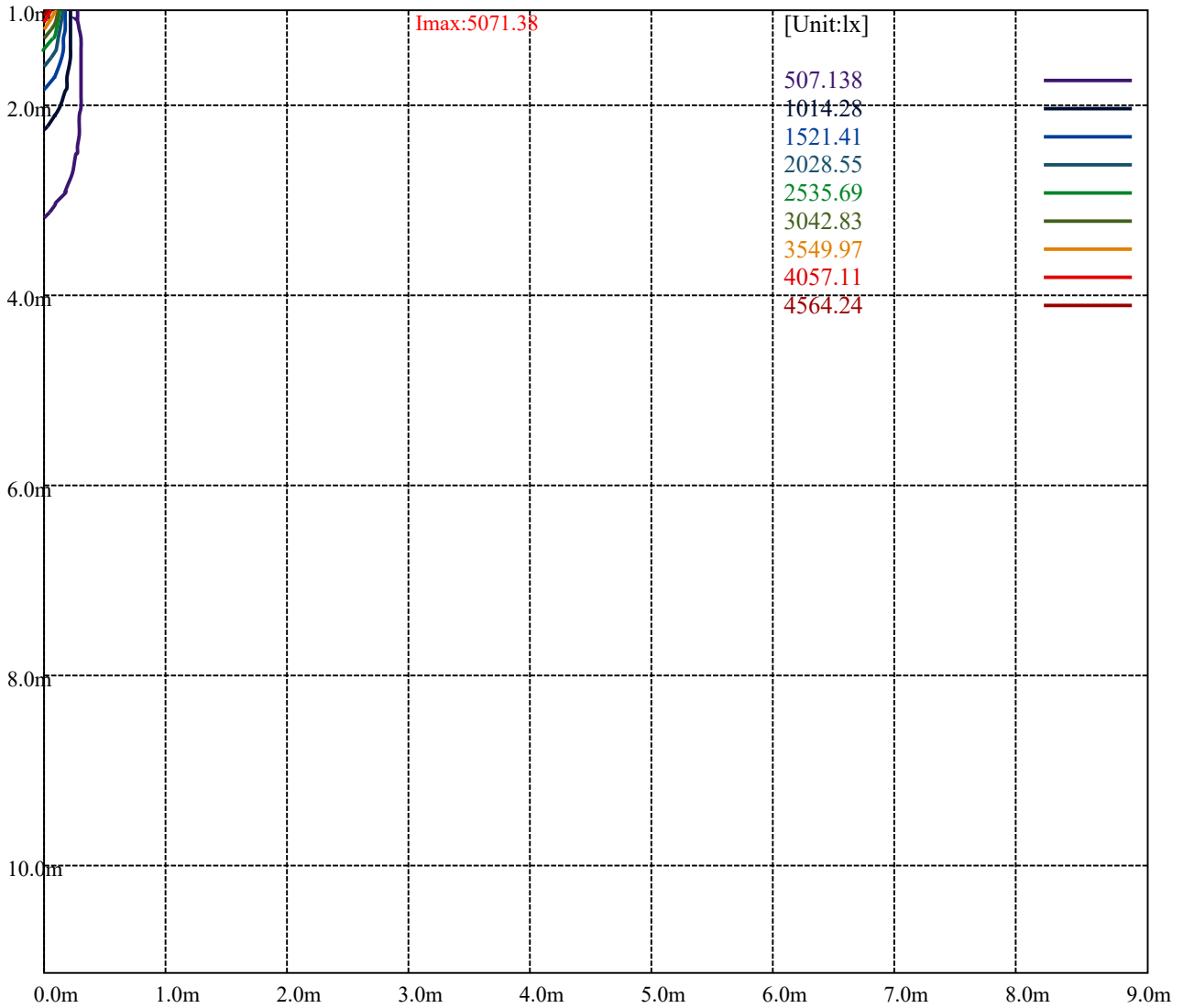
Imax:5071.38

(10%Imax)	507.138	—
(20%Imax)	1014.28	—
(30%Imax)	1521.41	—
(40%Imax)	2028.55	—
(50%Imax)	2535.69	—
(60%Imax)	3042.83	—
(70%Imax)	3549.97	—
(80%Imax)	4057.11	—
(90%Imax)	4564.24	—



(10%Emax) 56.34834	—
(20%Emax) 112.6967	—
(30%Emax) 169.0456	—
(40%Emax) 225.3933	—
(50%Emax) 281.7422	—
(60%Emax) 338.09	—
(70%Emax) 394.4389	—
(80%Emax) 450.7867	—
(90%Emax) 507.1356	—





Luminance Table

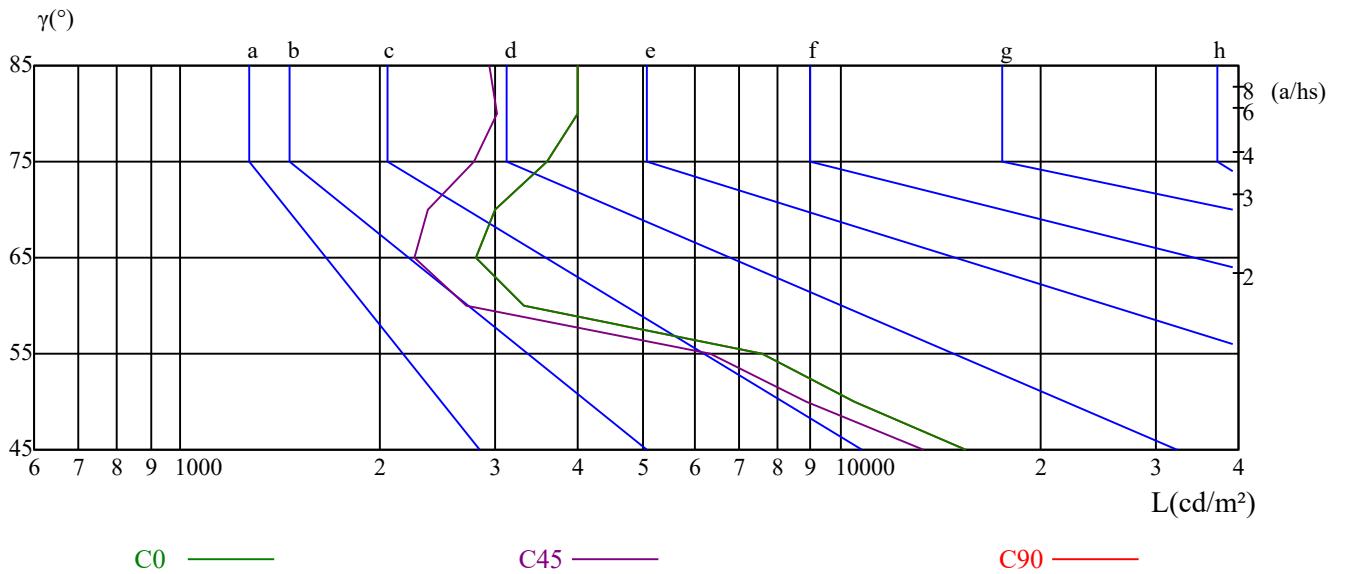
$\gamma$	45	50	55	60	65	70	75	80	85
C0	15470	10449	7595	3308	2807	3004	3590	3986	3995
C45	13296	8846	6331	2712	2261	2373	2775	3006	2926
C90	15470	10449	7595	3308	2807	3004	3590	3986	3995

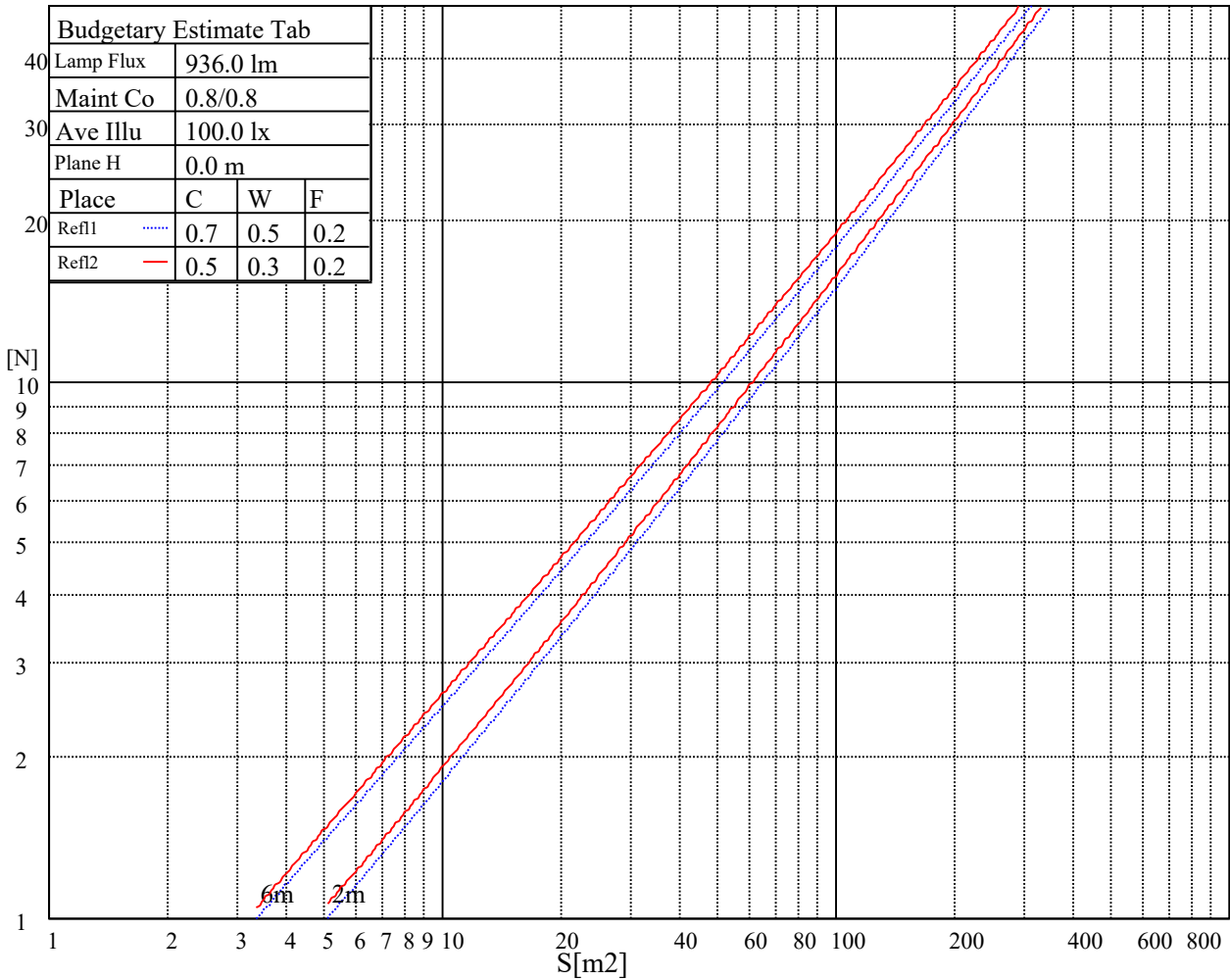
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6734	6734	6734	12328	12328	12328	33772	33772	33772

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	1.01	1.01	1.01	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.87
1	0.97	0.95	0.93	0.95	0.93	0.92	0.92	0.90	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.82
2	0.92	0.89	0.86	0.90	0.87	0.85	0.87	0.85	0.83	0.85	0.83	0.82	0.83	0.81	0.80	0.79
3	0.87	0.83	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.79	0.78	0.80	0.78	0.76	0.75
4	0.83	0.79	0.76	0.82	0.79	0.76	0.80	0.77	0.75	0.79	0.76	0.74	0.77	0.75	0.73	0.72
5	0.80	0.76	0.73	0.79	0.75	0.72	0.77	0.74	0.72	0.76	0.73	0.71	0.75	0.73	0.71	0.70
6	0.77	0.73	0.70	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.69	0.73	0.70	0.68	0.67
7	0.74	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.67	0.71	0.68	0.66	0.71	0.68	0.66	0.65
8	0.71	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.69	0.66	0.64	0.69	0.66	0.64	0.63
9	0.69	0.65	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.67	0.64	0.62	0.67	0.64	0.62	0.61
10	0.67	0.63	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.66	0.63	0.61	0.65	0.62	0.60	0.60

Intensity data(cd)

C/ $\gamma$ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	5053.63	4501.41	2601.41	891.36	462.47	314.92	190.94	110.33	69.87
45.0	5095.47	4230.53	1994.69	668.94	407.97	281.89	159.11	91.56	58.97
90.0	5010.13	3544.53	1089.57	571.98	367.17	241.97	140.89	84.51	50.38
135.0	5126.30	3927.72	1619.76	622.14	380.44	284.09	149.97	86.77	55.22
180.0	5053.63	3378.81	1072.61	569.34	349.11	221.49	134.67	82.53	54.45
225.0	5095.47	3831.93	1091.44	651.81	388.15	248.30	151.79	90.46	59.08
270.0	5010.13	4589.50	2485.80	819.79	478.44	304.46	187.80	107.08	65.35
315.0	5126.30	4221.72	2348.16	755.76	442.10	296.53	186.59	104.83	66.73
360.0	5053.63	4501.41	2601.41	891.36	462.47	314.92	190.94	110.33	69.87
C/ $\gamma$ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	44.87	27.86	19.49	10.46	6.55	6.61	6.99	7.32	6.66
45.0	36.83	24.50	18.22	7.43	6.28	6.33	7.05	7.32	6.50
90.0	30.72	22.30	16.30	5.84	5.78	5.73	6.55	5.89	5.29
135.0	35.95	24.56	17.01	6.28	6.11	6.33	7.54	7.21	6.39
180.0	35.79	24.89	16.02	6.44	6.39	6.50	7.10	7.21	6.39
225.0	38.32	25.22	18.00	6.55	5.84	5.84	6.44	6.83	5.95
270.0	40.58	25.77	18.55	8.75	5.67	5.73	6.17	7.16	6.66
315.0	42.89	26.98	18.83	7.87	5.56	5.51	6.17	6.11	6.00
360.0	44.87	27.86	19.49	10.46	6.55	6.61	6.99	7.32	6.66
C/ $\gamma$ (°)	90.0								
0.0	3.14								
45.0	3.08								
90.0	3.14								
135.0	3.14								
180.0	3.19								
225.0	3.14								
270.0	3.08								
315.0	3.14								
360.0	3.14								