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Nata

LumCAT: 4-2267-M	
Luminaire: 92.70.131.00	
Report No: GC2017071907	Voltage(V): 34.7600
Test No: NT-0010	Current(A): 0.6000
LampCAT: SEOUL SAWx15	Power (W): 20.8560
Lamp flux(lm): 2937.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 100	Width(mm): 100
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2596.13
Efficiency(%): 88.39%
Lumens(lm)/Power(W): 124.48
Central intensity(cd): 5954.721
Maximum intensity(cd): 5954.721
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=34.2
 [C90/270]Total=34.2
Field angle(10%Imax): [C0/180]Total=68.9
 [C90/270]Total=68.9
Maximum s/h(1/2): C0_180=0.56 C90_270=0.56
Maximum s/h(1/4): C0_180=0.59 C90_270=0.59
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 88.39%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.559%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2017/7/19
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.46

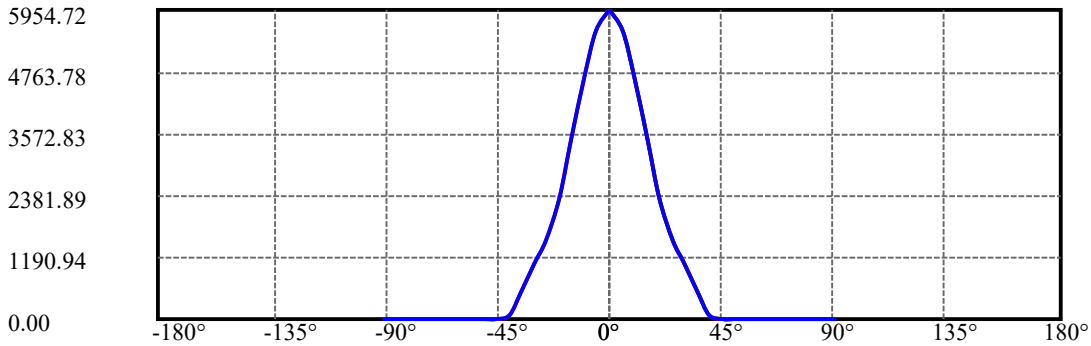
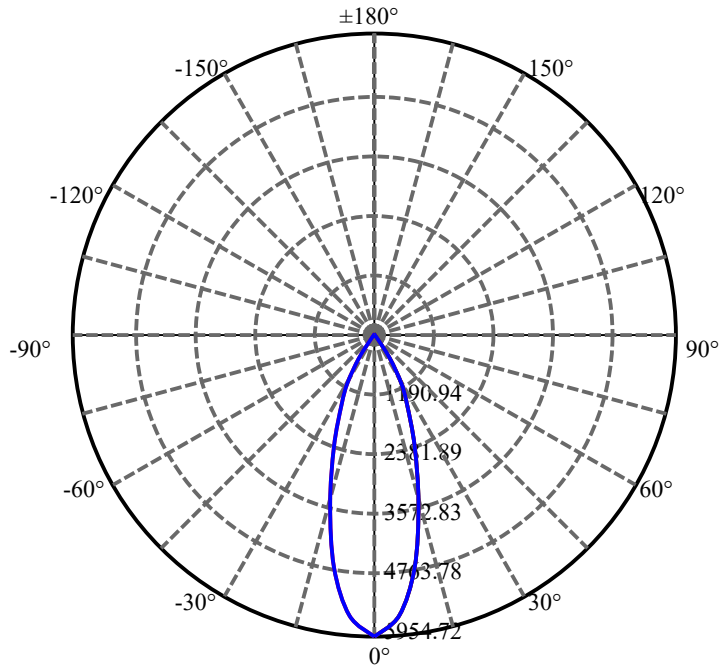
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5954.721	0.000	0	.000%	.000%
5.0	5564.743	137.712	137.712	4.689%	5.305%
10.0	4647.465	365.323	503.035	12.439%	19.376%
15.0	3442.817	479.910	982.945	16.340%	37.862%
20.0	2338.411	476.454	1459.399	16.222%	56.214%
25.0	1498.906	402.464	1861.863	13.703%	71.717%
30.0	1079.161	326.257	2188.119	11.108%	84.284%
35.0	535.417	237.758	2425.877	8.095%	93.442%
40.0	70.817	101.146	2527.023	3.444%	97.338%
45.0	14.511	15.799	2542.822	.538%	97.947%
50.0	12.536	5.465	2548.287	.186%	98.157%
55.0	11.513	5.229	2553.516	.178%	98.359%
60.0	11.047	5.215	2558.731	.178%	98.559%
65.0	10.963	5.351	2564.082	.182%	98.766%
70.0	11.485	5.684	2569.766	.194%	98.985%
75.0	15.283	6.997	2576.762	.238%	99.254%
80.0	11.763	7.237	2583.999	.246%	99.533%
85.0	11.068	6.204	2590.203	.211%	99.772%
90.0	10.574	5.926	2596.129	.202%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2188.12	74.50%	84.28%
0-40	2527.02	86.04%	97.34%
0-60	2558.73	87.12%	98.56%
0-90	2590.20	88.19%	99.77%
0-120	2590.20	88.19%	99.77%
0-180	2596.13	88.39%	100.00%
60-90	36.69	1.25%	1.41%
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	2076.90	70.72%	80.00%

ZONAL LUMEN SUMMARY

0-10	503.03
10-20	956.36
20-30	728.72
30-40	338.90
40-50	21.26
50-60	10.44
60-70	11.03
70-80	14.23
80-90	6.20
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: ———

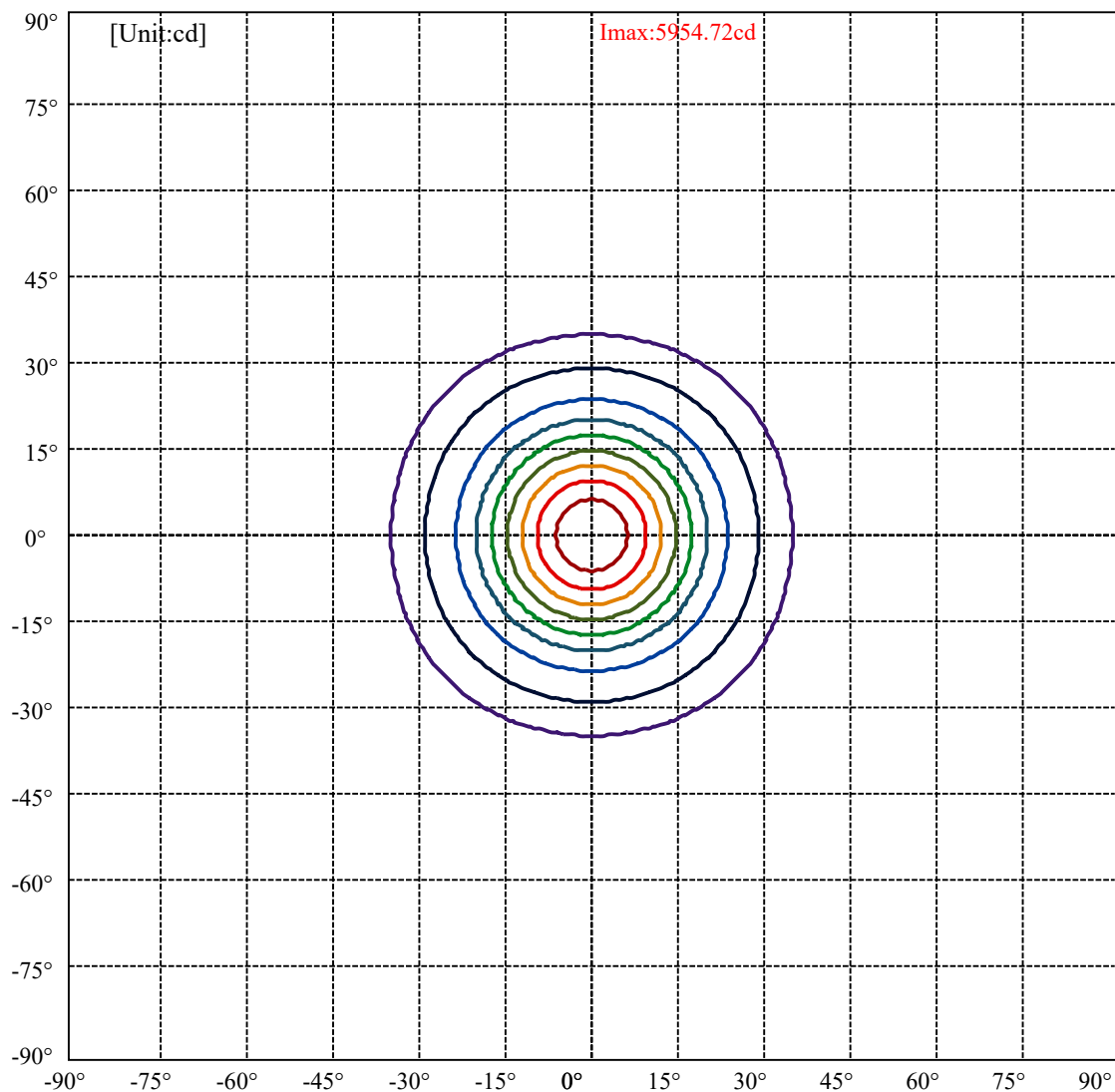
C90/C270: ———

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

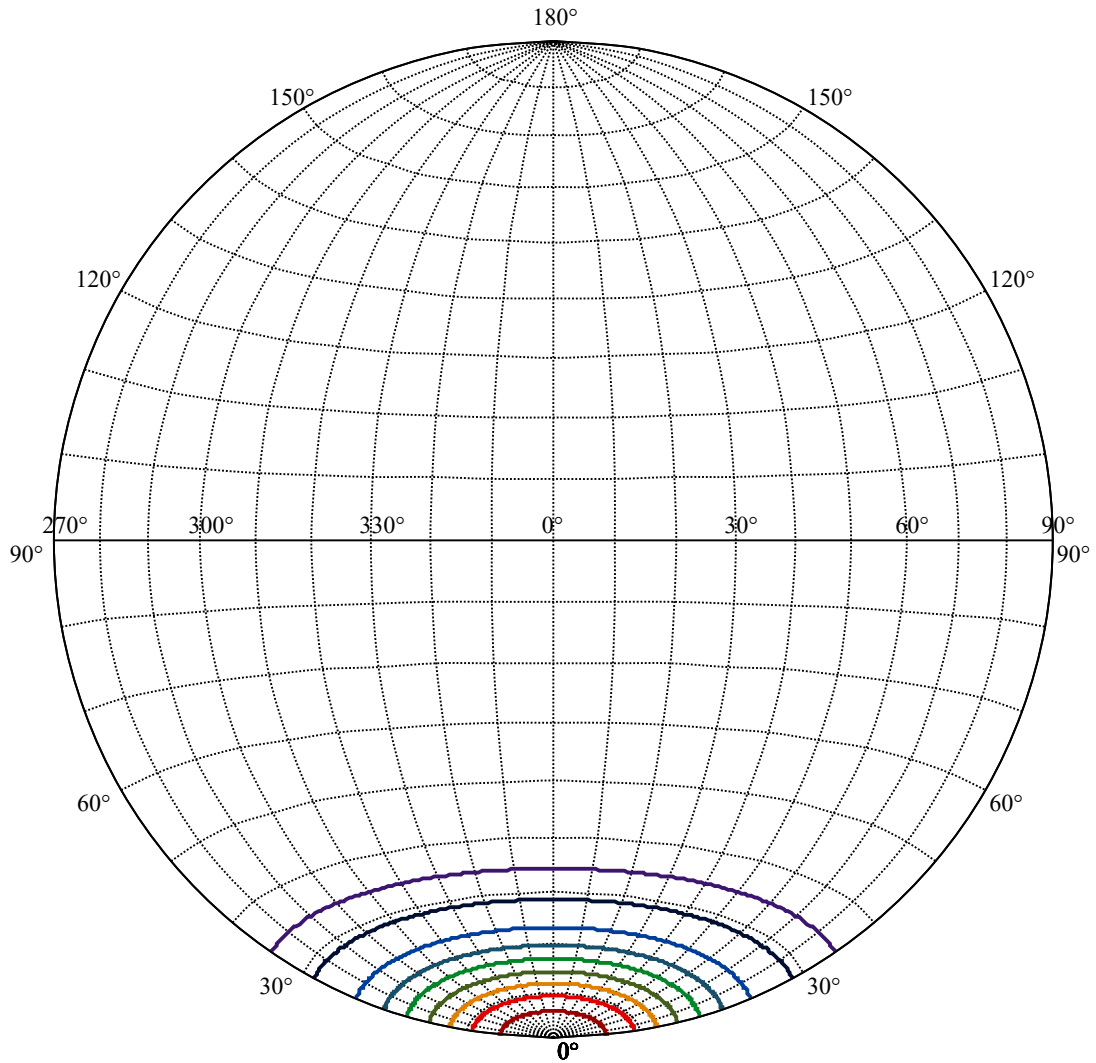
:C90/270Left:34.4 Right:34.4

Beam Angle(50%Imax):C0/180Left:17.1 Right:17.1

:C90/270Left:17.1 Right:17.1



(10%Imax) 595.472	—
(20%Imax) 1190.94	—
(30%Imax) 1786.42	—
(40%Imax) 2381.89	—
(50%Imax) 2977.36	—
(60%Imax) 3572.83	—
(70%Imax) 4168.3	—
(80%Imax) 4763.78	—
(90%Imax) 5359.25	—



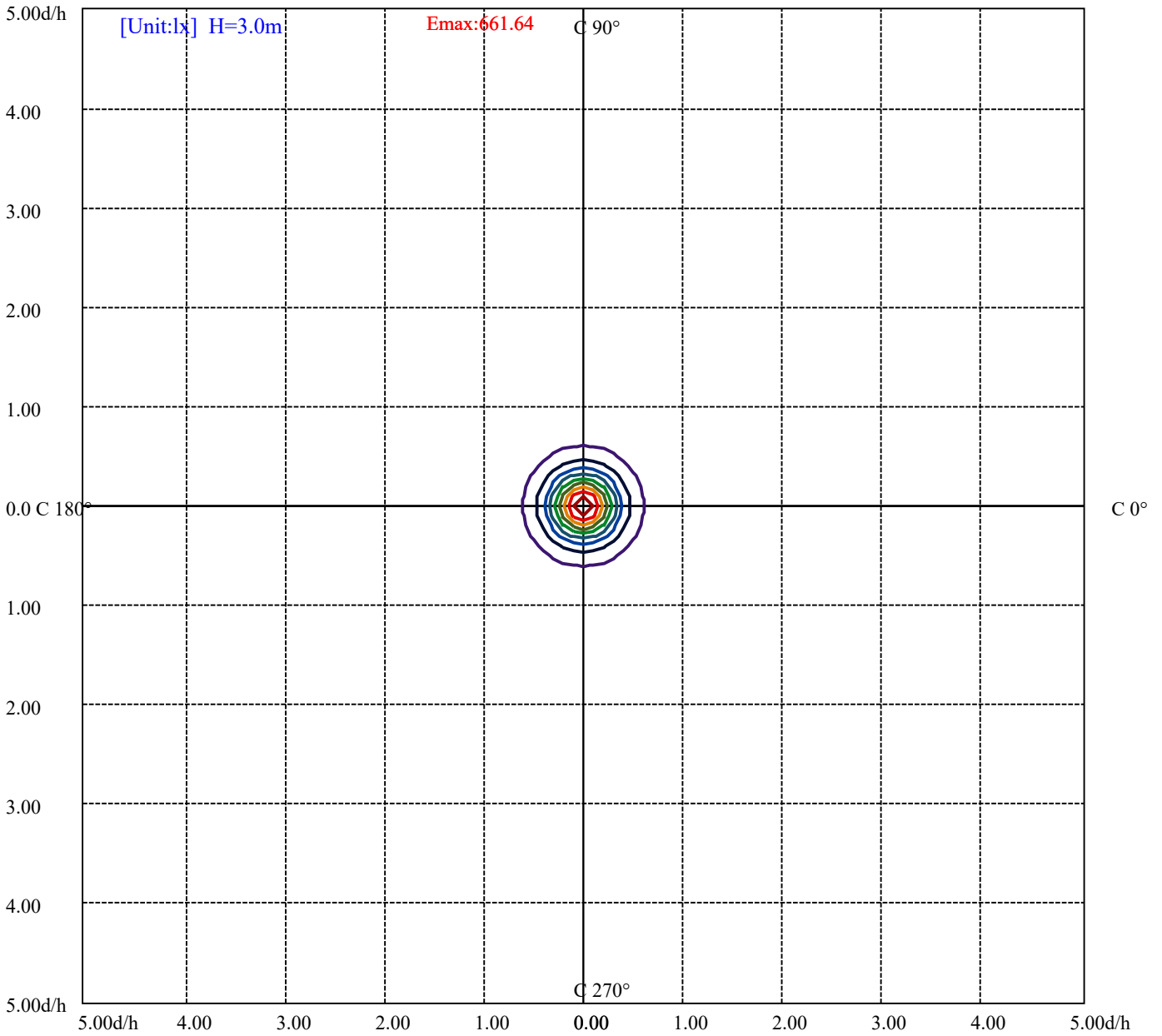
House

[Unit:cd]

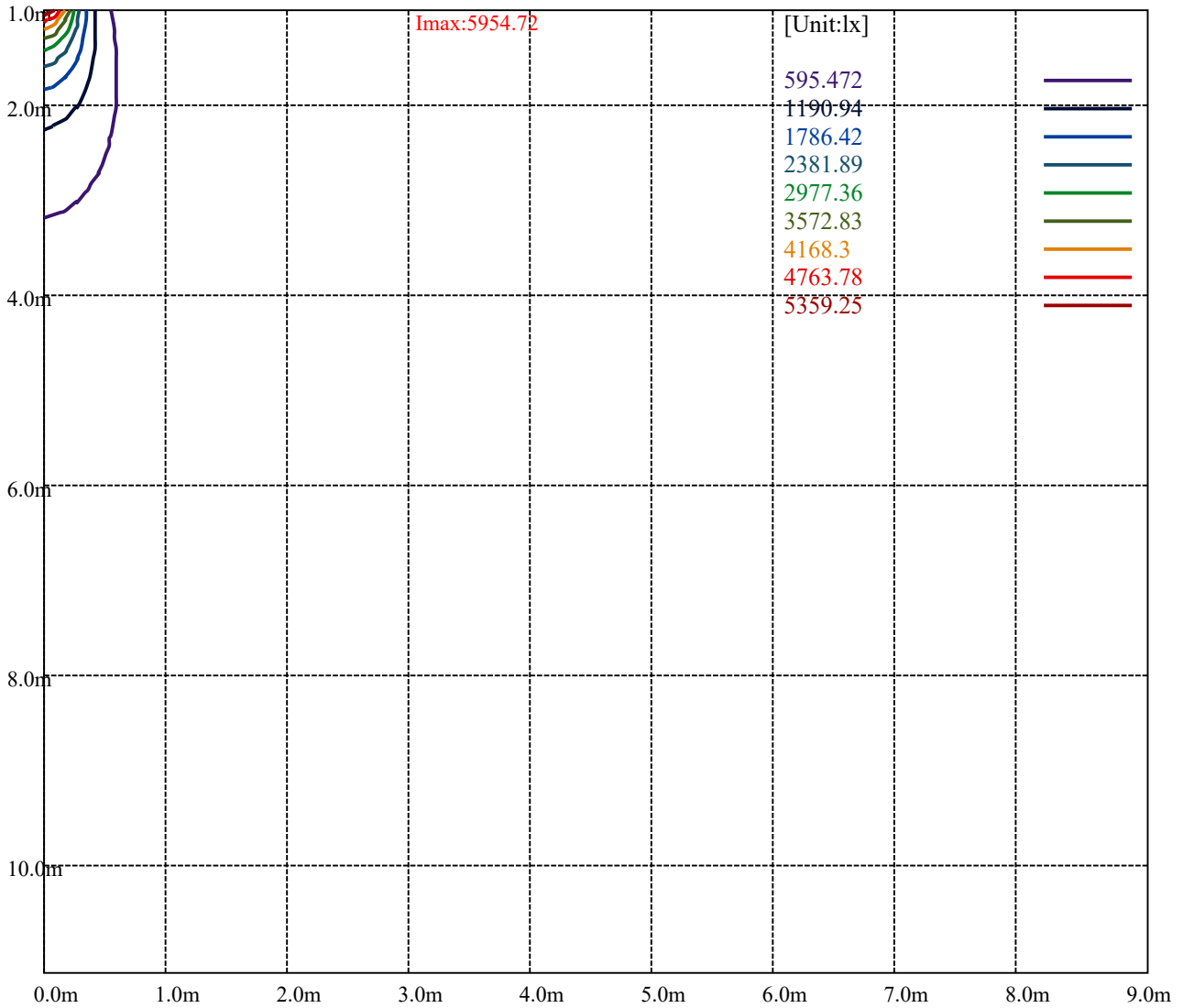
Road

Imax:5954.72

(10%Imax)	595.472	—
(20%Imax)	1190.94	—
(30%Imax)	1786.42	—
(40%Imax)	2381.89	—
(50%Imax)	2977.36	—
(60%Imax)	3572.83	—
(70%Imax)	4168.3	—
(80%Imax)	4763.78	—
(90%Imax)	5359.25	—



(10%Emax) 66.16344	—
(20%Emax) 132.3267	—
(30%Emax) 198.49	—
(40%Emax) 264.6533	—
(50%Emax) 330.8167	—
(60%Emax) 396.9811	—
(70%Emax) 463.1444	—
(80%Emax) 529.3078	—
(90%Emax) 595.4711	—



Luminance Table

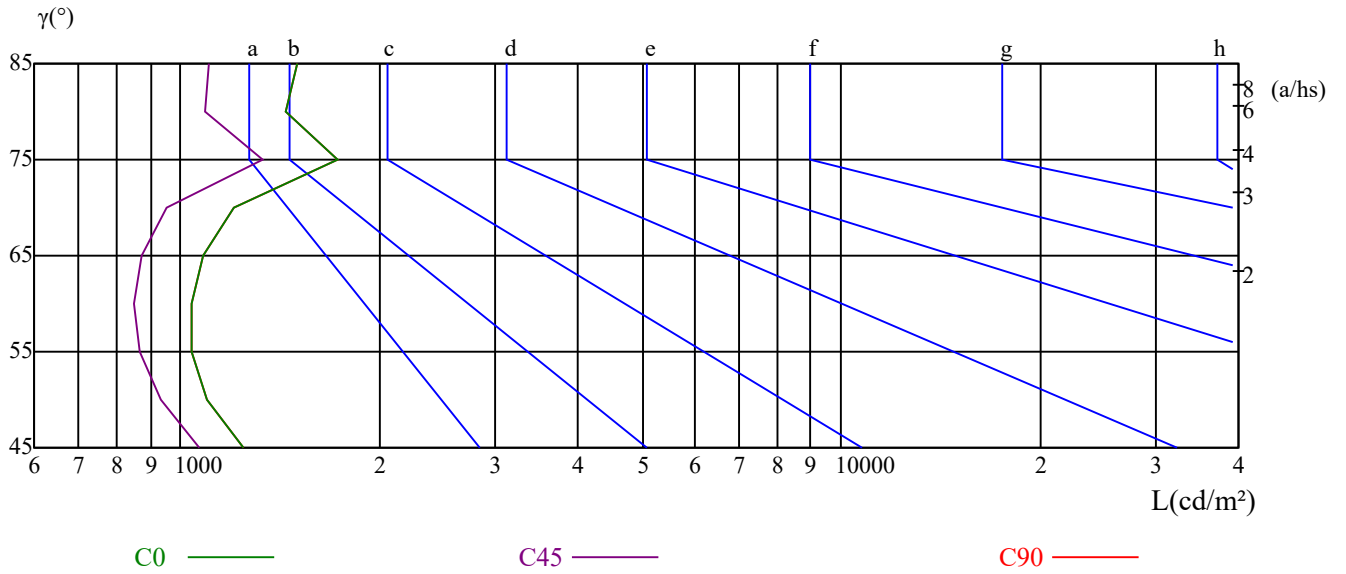
γ	45	50	55	60	65	70	75	80	85
C0	1244	1099	1041	1039	1084	1205	1724	1446	1506
C45	1069	931	868	852	873	952	1333	1090	1104
C90	1244	1099	1041	1039	1084	1205	1724	1446	1506

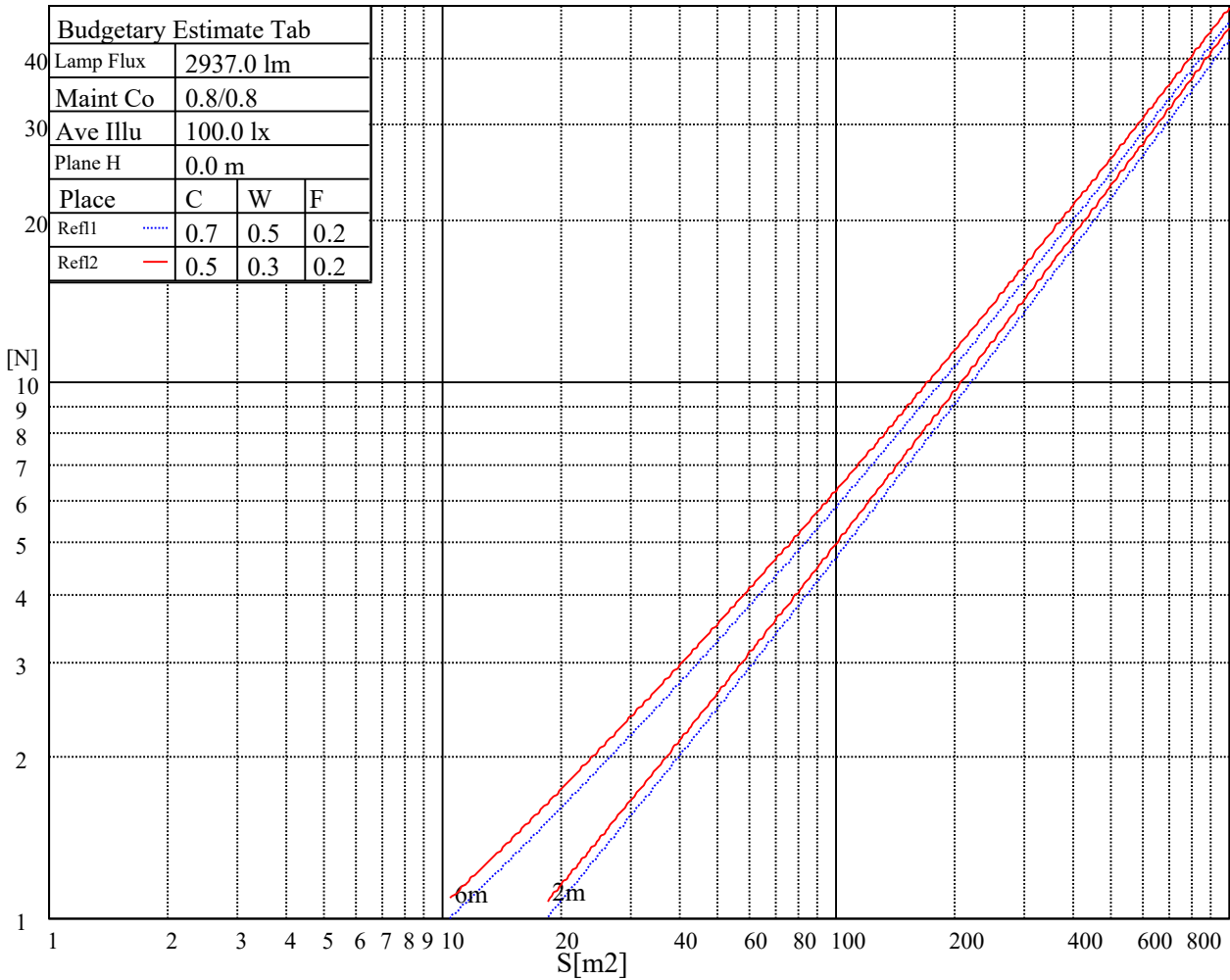
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2594	2594	2594	5905	5905	5905	12699	12699	12699

Glare Table

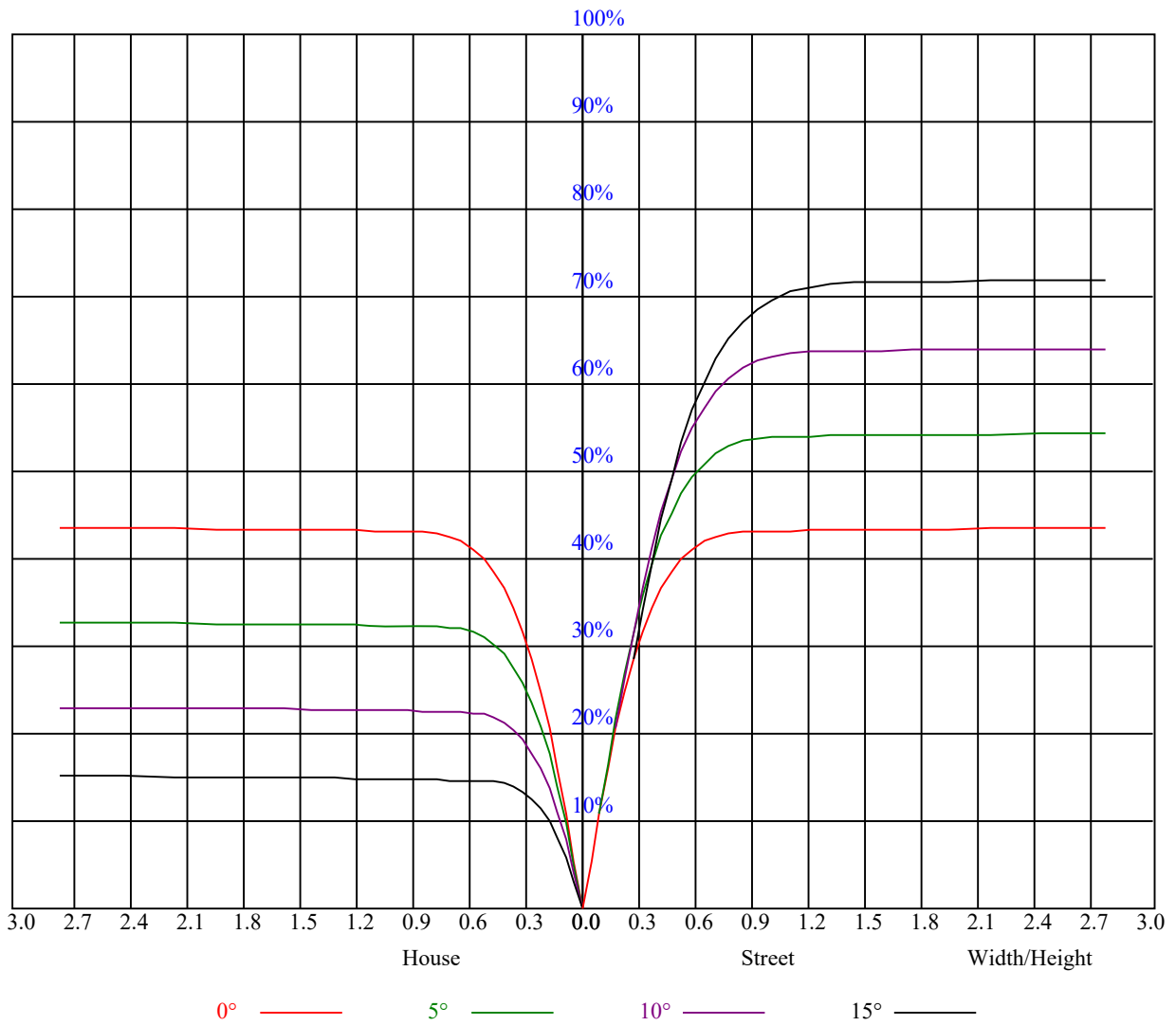
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.05	1.05	1.05	1.03	1.03	1.03	0.98	0.98	0.98	0.94	0.94	0.94	0.90	0.90	0.90	0.88
1	0.98	0.96	0.95	0.97	0.95	0.93	0.93	0.92	0.90	0.90	0.89	0.88	0.87	0.86	0.85	0.83
2	0.93	0.89	0.87	0.91	0.88	0.86	0.88	0.86	0.84	0.86	0.84	0.82	0.83	0.82	0.80	0.79
3	0.87	0.84	0.80	0.86	0.83	0.80	0.84	0.81	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.75
4	0.83	0.78	0.75	0.82	0.78	0.75	0.80	0.77	0.74	0.78	0.75	0.73	0.77	0.74	0.72	0.71
5	0.79	0.74	0.71	0.78	0.74	0.70	0.76	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.68
6	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.65	0.64
7	0.71	0.67	0.64	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.61
8	0.68	0.64	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.59
9	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.63	0.60	0.57	0.63	0.59	0.57	0.56
10	0.63	0.58	0.55	0.62	0.58	0.55	0.61	0.58	0.55	0.61	0.57	0.55	0.60	0.57	0.55	0.54



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	5910.76	5629.16	4678.07	3469.88	2412.50	1539.88	1111.92	616.06	52.70
45.0	5961.96	5685.37	4745.97	3572.28	2416.95	1526.52	1130.84	591.02	50.53
90.0	5996.46	5636.39	4762.11	3538.89	2371.31	1495.92	1090.49	564.64	43.74
135.0	5949.71	5769.40	4945.76	3730.33	2620.08	1645.06	1159.78	666.71	284.38
180.0	5910.76	5463.32	4538.94	3321.84	2267.80	1453.62	1031.34	487.56	31.61
225.0	5961.96	5474.45	4575.67	3360.24	2243.87	1463.08	1042.13	444.66	35.17
270.0	5996.46	5524.53	4617.97	3409.77	2291.73	1498.14	1071.85	517.56	38.57
315.0	5949.71	5335.32	4315.23	3139.31	2083.04	1369.03	994.94	395.13	29.83
360.0	5910.76	5629.16	4678.07	3469.88	2412.50	1539.88	1111.92	616.06	52.70

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	14.97	12.52	11.35	10.80	10.52	10.57	10.46	10.57	10.57
45.0	15.03	12.63	11.52	11.07	10.85	10.85	10.80	10.80	10.74
90.0	14.47	12.41	11.41	10.91	10.69	10.74	10.63	10.69	10.63
135.0	15.19	12.74	11.69	11.07	10.85	10.85	11.02	11.02	10.85
180.0	13.97	12.47	11.46	11.07	11.02	12.13	16.81	12.24	11.74
225.0	14.41	12.69	11.80	11.58	12.02	14.80	32.28	14.36	11.46
270.0	14.36	12.58	11.63	11.13	11.07	11.30	19.53	13.75	11.74
315.0	13.69	12.24	11.24	10.74	10.69	10.63	10.74	10.69	10.80
360.0	14.97	12.52	11.35	10.80	10.52	10.57	10.46	10.57	10.57

C/γ(°)	90.0
0.0	10.41
45.0	10.74
90.0	10.63
135.0	10.52
180.0	10.46
225.0	10.74
270.0	10.57
315.0	10.52
360.0	10.41