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Nata

LumCAT: 3-2044-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): 84	Width(mm): 84
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2634.84
Efficiency(%): 89.71%
Lumens(lm)/Power(W): 126.34
Central intensity(cd): 9434.407
Maximum intensity(cd): 9434.407
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=25.6
 [C90/270]Total=25.6
Field angle(10%Imax): [C0/180]Total=56.7
 [C90/270]Total=56.7
Maximum s/h(1/2): C0_180=0.44 C90_270=0.44
Maximum s/h(1/4): C0_180=0.43 C90_270=0.43
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 89.71%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.706%

Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.46

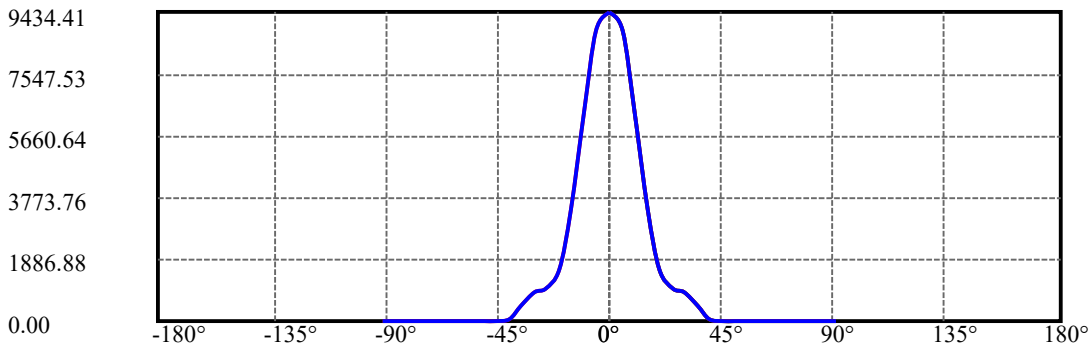
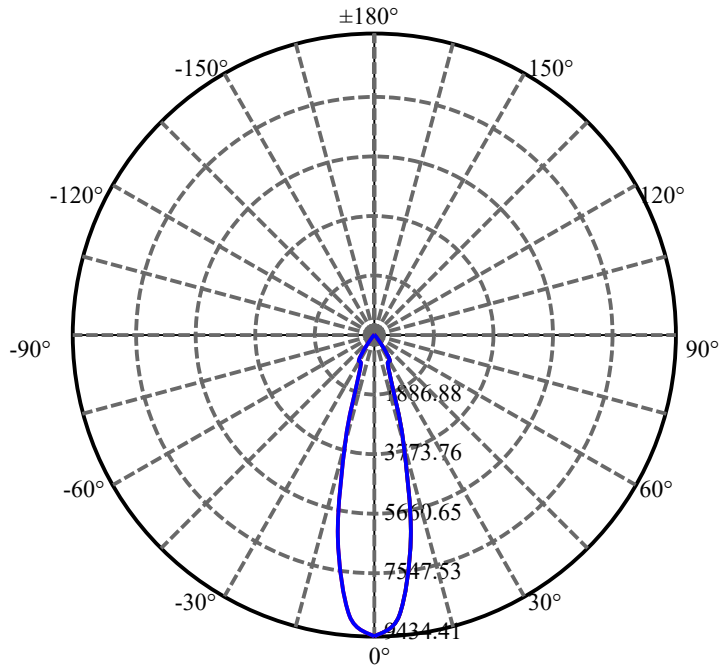
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9434.407	0.000	0	.000%	.000%
5.0	8831.005	218.358	218.358	7.435%	8.287%
10.0	6418.856	545.536	763.893	18.575%	28.992%
15.0	3394.887	582.145	1346.038	19.821%	51.086%
20.0	1585.792	410.478	1756.516	13.976%	66.665%
25.0	1022.654	273.578	2030.094	9.315%	77.048%
30.0	905.034	243.951	2274.044	8.306%	86.307%
35.0	490.151	205.451	2479.495	6.995%	94.104%
40.0	57.836	91.428	2570.923	3.113%	97.574%
45.0	14.553	13.403	2584.326	.456%	98.083%
50.0	12.883	5.544	2589.87	.189%	98.293%
55.0	12.035	5.418	2595.288	.184%	98.499%
60.0	11.548	5.451	2600.739	.186%	98.706%
65.0	11.186	5.527	2606.265	.188%	98.915%
70.0	10.949	5.605	2611.87	.191%	99.128%
75.0	10.789	5.682	2617.553	.193%	99.344%
80.0	10.657	5.739	2623.291	.195%	99.562%
85.0	10.581	5.771	2629.062	.196%	99.781%
90.0	10.532	5.781	2634.843	.197%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2274.04	77.43%	86.31%
0-40	2570.92	87.54%	97.57%
0-60	2600.74	88.55%	98.71%
0-90	2629.06	89.52%	99.78%
0-120	2629.06	89.52%	99.78%
0-180	2634.84	89.71%	100.00%
60-90	33.77	1.15%	1.28%
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%
0-26.59	2107.87	71.77%	80.00%

ZONAL LUMEN SUMMARY

0-10	763.89
10-20	992.62
20-30	517.53
30-40	296.88
40-50	18.95
50-60	10.87
60-70	11.13
70-80	11.42
80-90	5.77
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



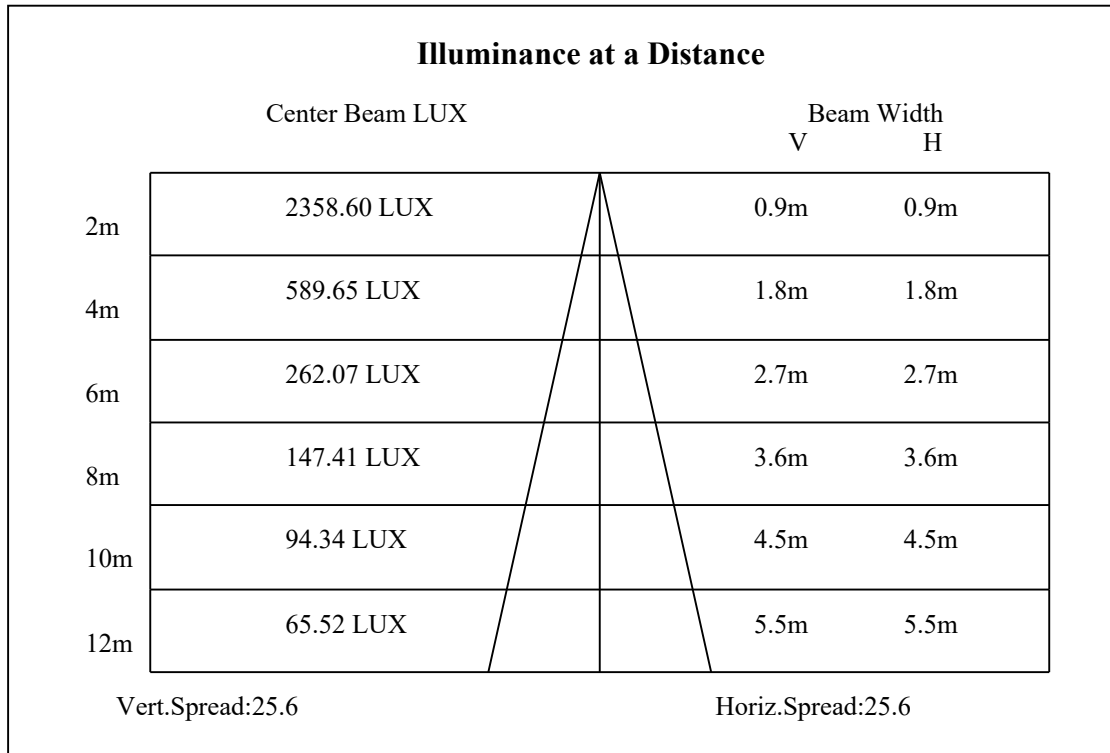
C0(Max): ———

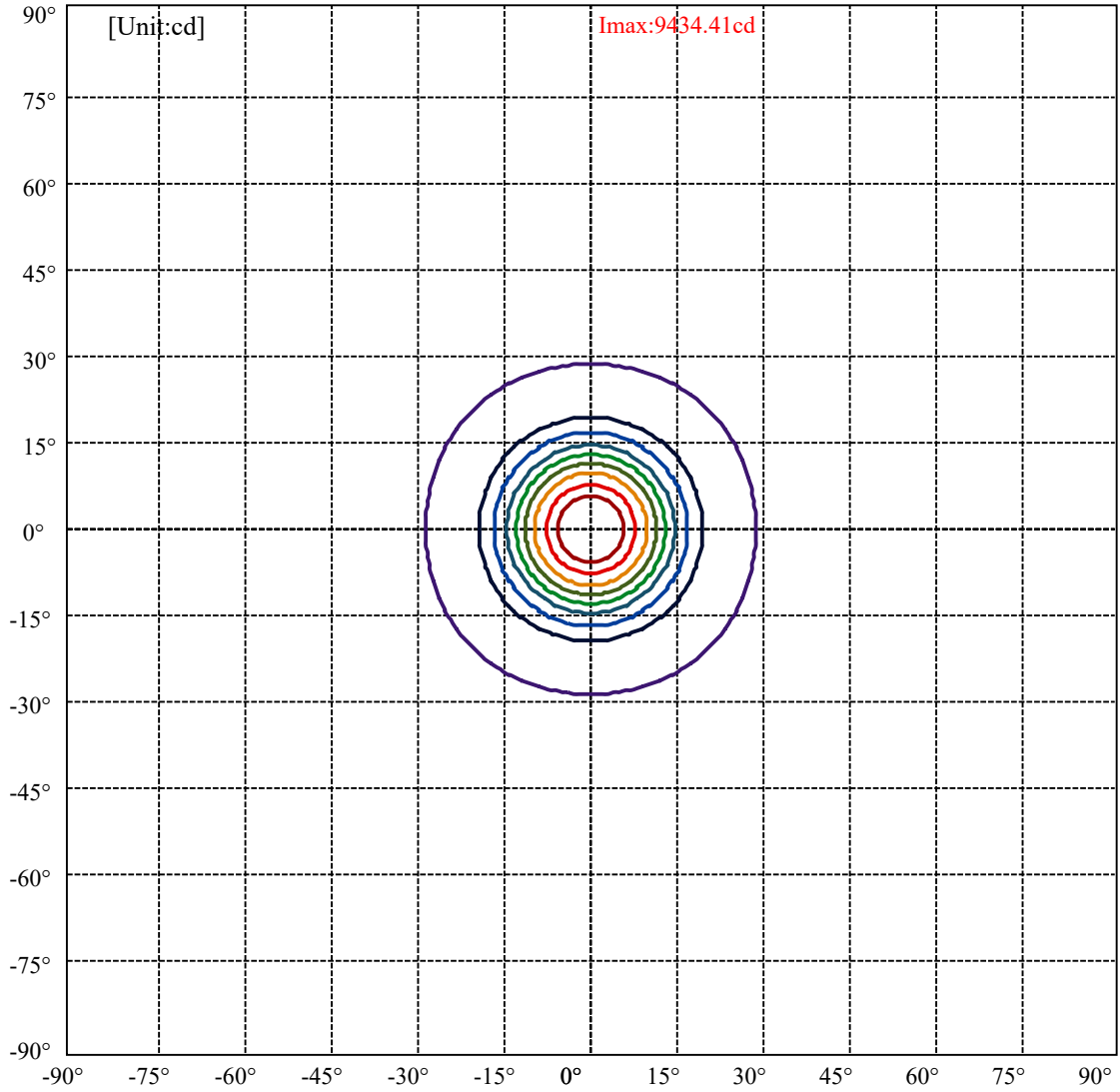
C0/C180: ———

C90/C270: ———

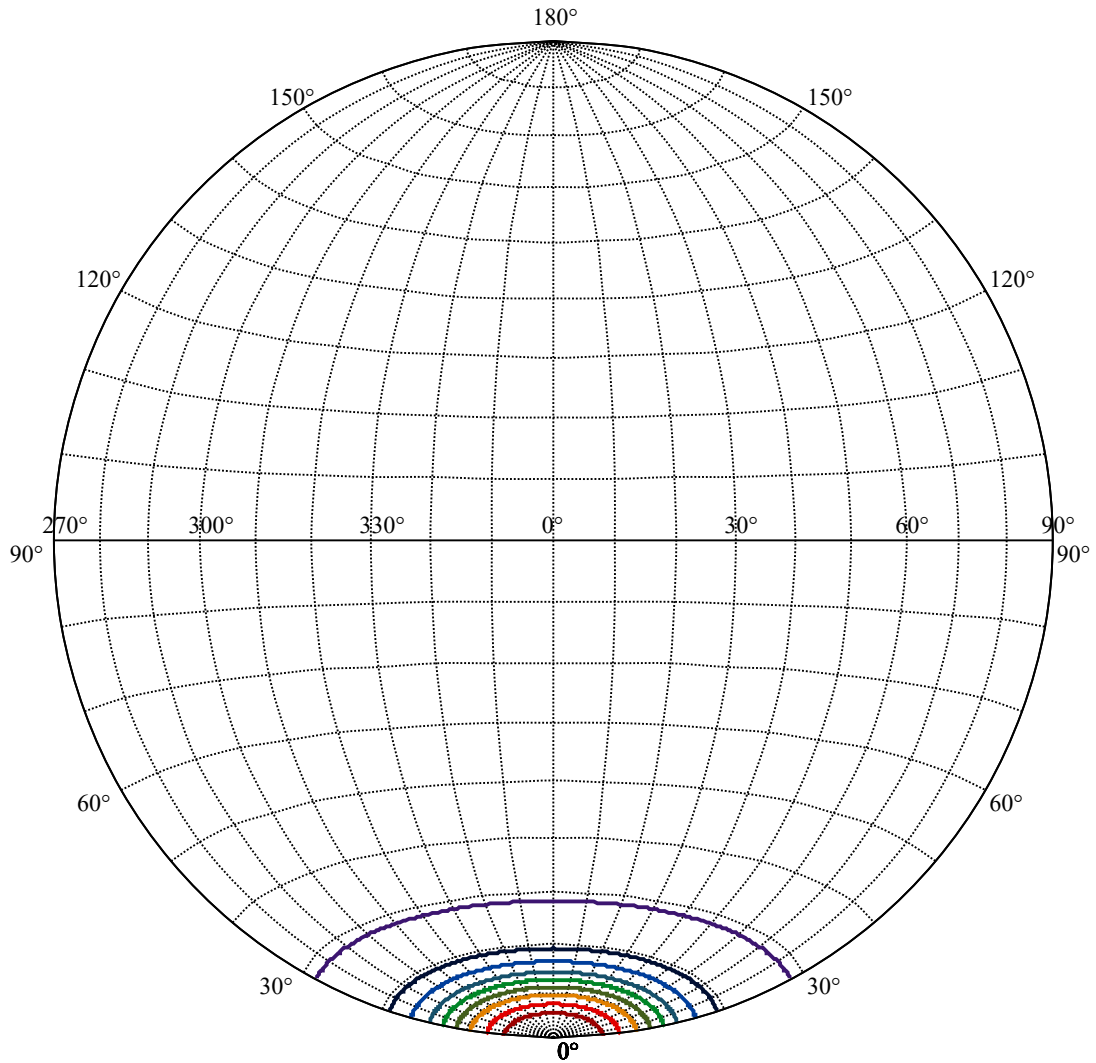
Field angle(10%Imax):C0/180Left:28.4 Right:28.4
:C90/270Left:28.4 Right:28.4

Beam Angle(50%Imax):C0/180Left:12.8 Right:12.8
:C90/270Left:12.8 Right:12.8





(10%Imax) 943.441	—
(20%Imax) 1886.88	—
(30%Imax) 2830.32	—
(40%Imax) 3773.76	—
(50%Imax) 4717.2	—
(60%Imax) 5660.64	—
(70%Imax) 6604.08	—
(80%Imax) 7547.53	—
(90%Imax) 8490.97	—



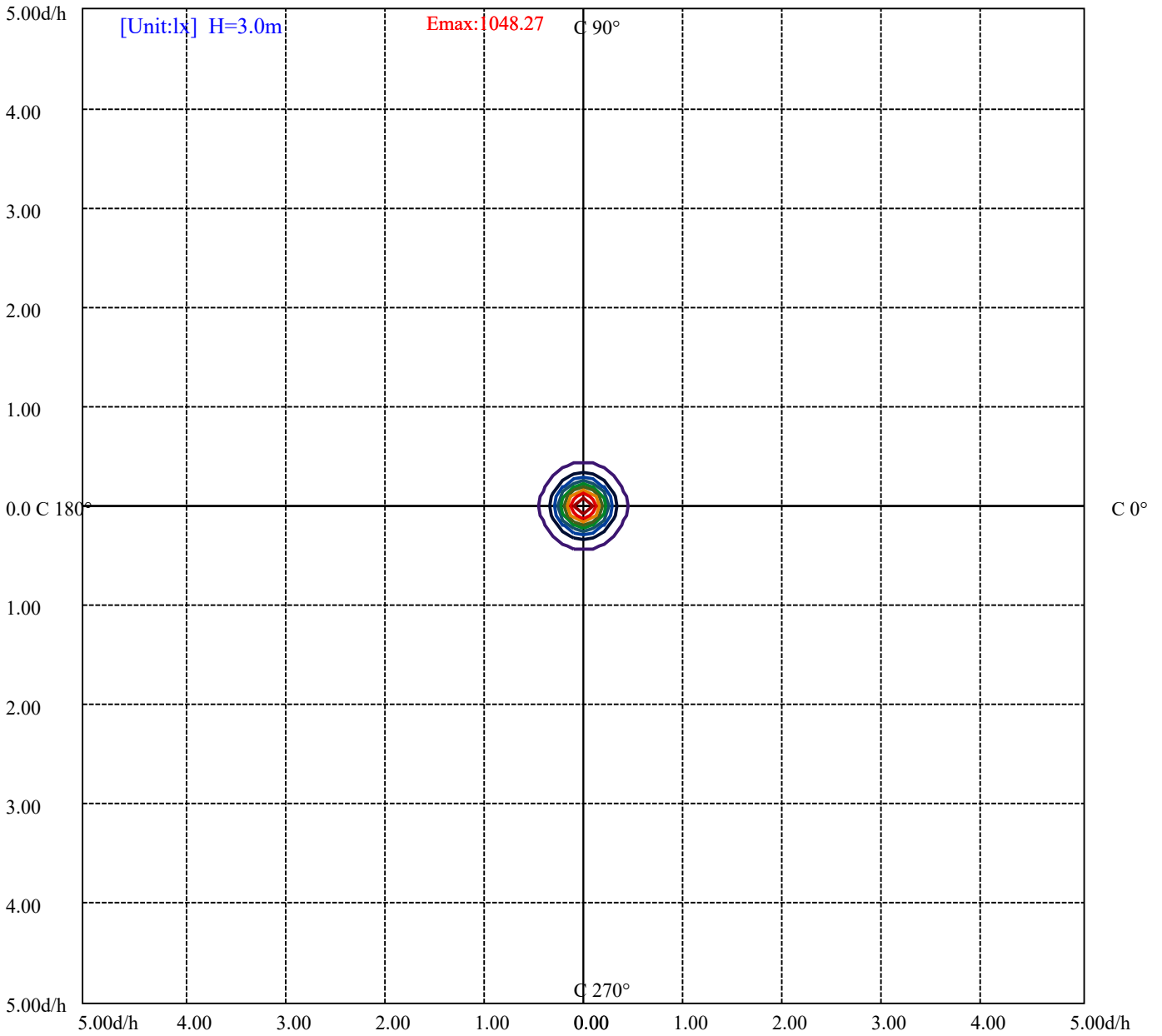
House

[Unit:cd]

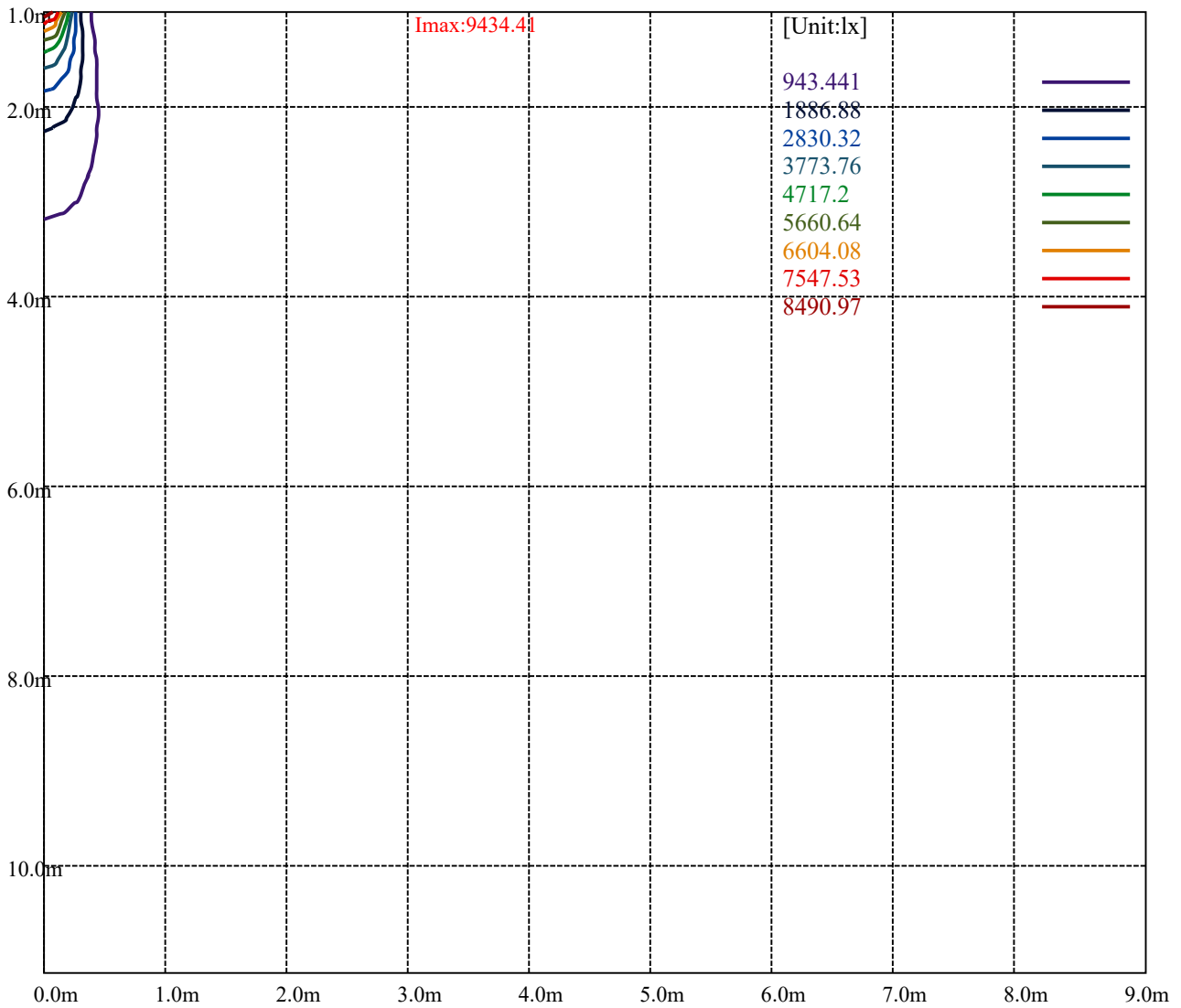
Road

Imax:9434.41

(10%Imax)	943.441	—
(20%Imax)	1886.88	—
(30%Imax)	2830.32	—
(40%Imax)	3773.76	—
(50%Imax)	4717.2	—
(60%Imax)	5660.64	—
(70%Imax)	6604.08	—
(80%Imax)	7547.53	—
(90%Imax)	8490.97	—



(10%Emax) 104.8266	—
(20%Emax) 209.6533	—
(30%Emax) 314.48	—
(40%Emax) 419.3067	—
(50%Emax) 524.1322	—
(60%Emax) 628.9589	—
(70%Emax) 733.7855	—
(80%Emax) 838.6122	—
(90%Emax) 943.4389	—



Luminance Table

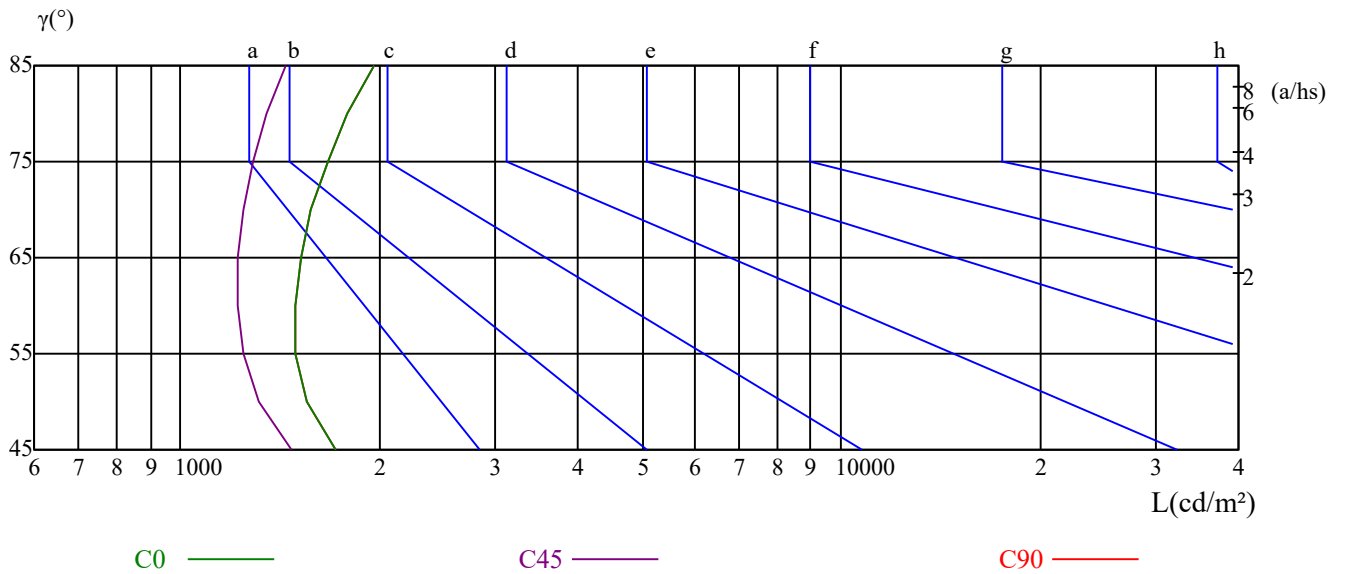
γ	45	50	55	60	65	70	75	80	85
C0	1717	1554	1496	1493	1518	1577	1668	1793	1970
C45	1475	1315	1246	1223	1222	1245	1289	1352	1442
C90	1717	1554	1496	1493	1518	1577	1668	1793	1970

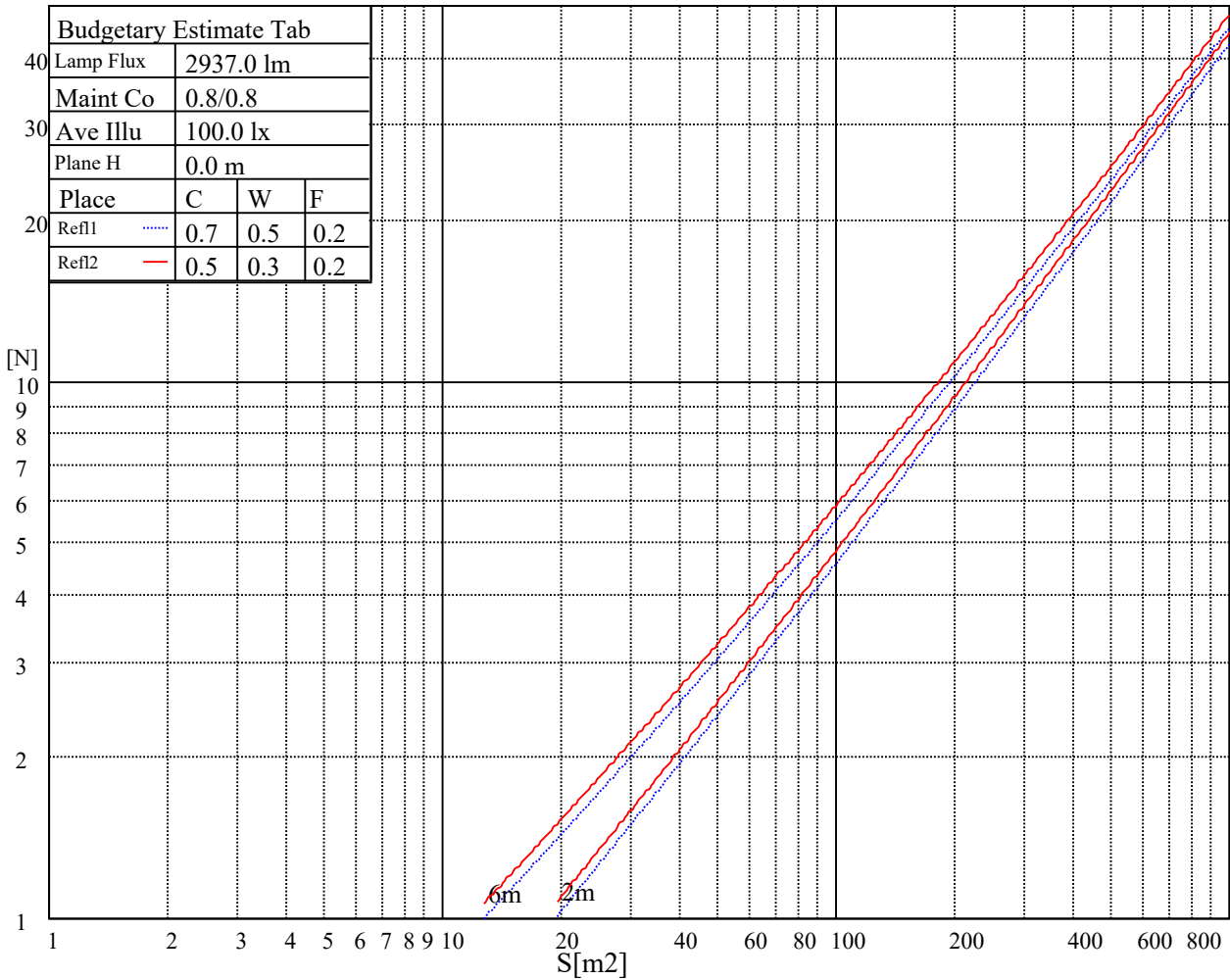
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3663	3663	3663	5770	5770	5770	16803	16803	16803

Glare Table

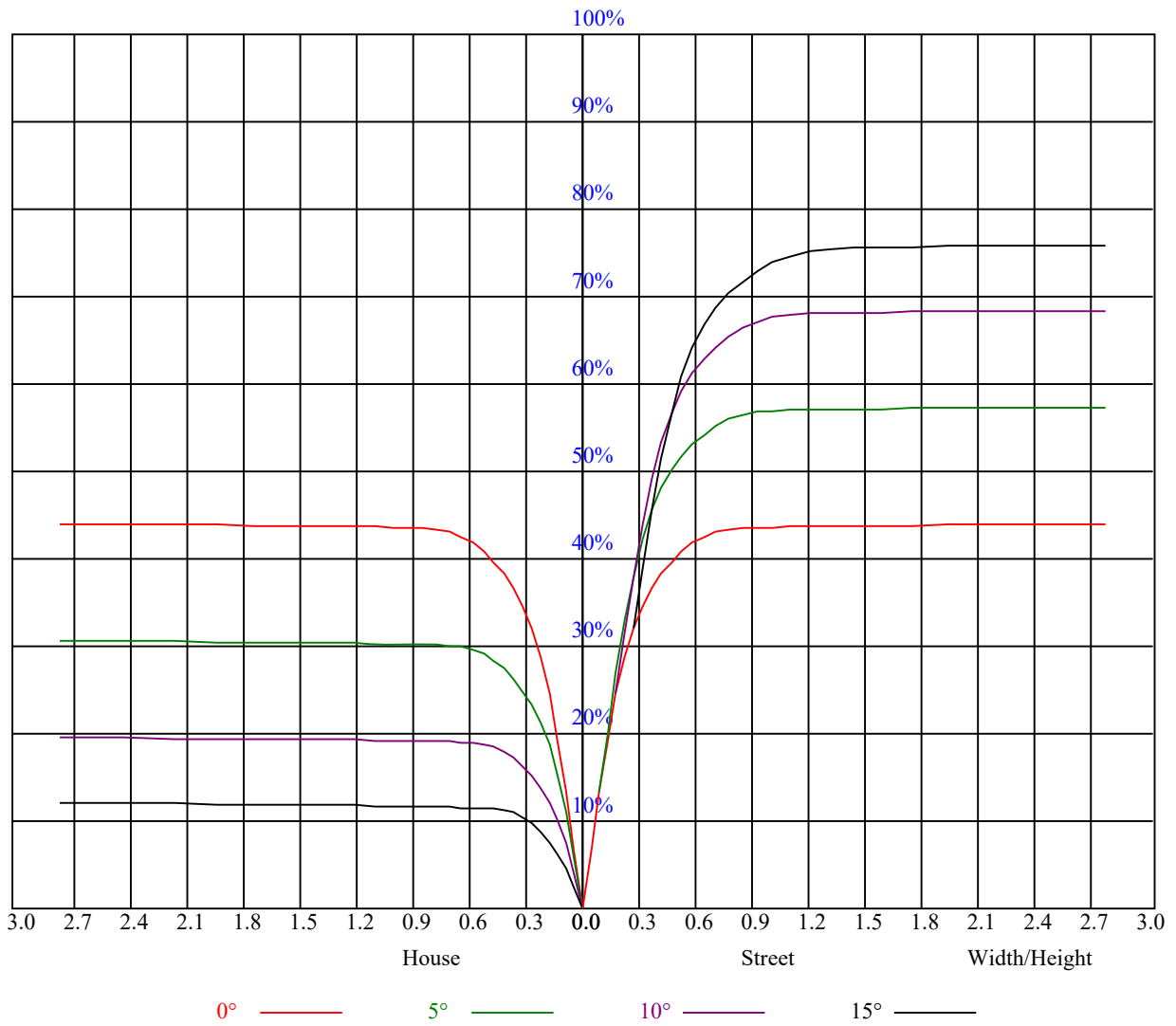
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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 RHOF=20 CU															
0	1.07	1.07	1.07	1.04	1.04	1.04	1.00	1.00	1.00	0.95	0.95	0.95	0.92	0.92	0.92	0.90
1	1.00	0.98	0.97	0.98	0.97	0.95	0.95	0.94	0.92	0.92	0.91	0.90	0.89	0.88	0.87	0.85
2	0.95	0.92	0.89	0.93	0.91	0.88	0.91	0.88	0.86	0.88	0.86	0.85	0.86	0.84	0.83	0.82
3	0.90	0.87	0.84	0.89	0.86	0.83	0.87	0.84	0.82	0.85	0.82	0.80	0.83	0.81	0.79	0.78
4	0.86	0.82	0.79	0.85	0.81	0.78	0.83	0.80	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.75
5	0.82	0.78	0.75	0.81	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.73	0.77	0.75	0.73	0.72
6	0.79	0.75	0.72	0.78	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.69
7	0.76	0.71	0.69	0.75	0.71	0.68	0.74	0.71	0.68	0.73	0.70	0.68	0.72	0.69	0.67	0.66
8	0.73	0.69	0.66	0.72	0.68	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.65	0.64
9	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.63	0.68	0.65	0.63	0.62
10	0.68	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.66	0.63	0.61	0.60



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	9447.42	8667.74	6280.84	3325.74	1549.34	1035.12	908.79	446.33	39.68
45.0	9428.49	8630.45	6135.03	2982.93	1423.57	995.05	892.65	391.23	30.94
90.0	9449.09	8706.14	6096.63	2947.87	1443.60	992.66	890.98	434.53	31.11
135.0	9412.91	9231.49	7220.80	4040.86	1832.05	1059.61	929.38	643.33	166.01
180.0	9447.42	9014.45	6618.64	3557.25	1613.90	1019.09	911.41	530.75	37.79
225.0	9428.49	9048.95	6620.31	3754.81	1759.70	1046.08	918.31	573.66	70.07
270.0	9448.53	8951.00	6718.82	3758.71	1813.13	1055.71	916.03	572.65	59.16
315.0	9412.91	8397.83	5659.77	2790.93	1251.05	977.91	872.73	328.73	27.94
360.0	9447.42	8667.74	6280.84	3325.74	1549.34	1035.12	908.79	446.33	39.68

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	14.08	12.63	11.80	11.30	11.02	10.80	10.63	10.46	10.41
45.0	14.02	12.97	12.19	11.74	11.35	11.13	10.96	10.80	10.63
90.0	14.02	12.97	12.13	11.58	11.24	10.96	10.85	10.74	10.57
135.0	16.19	12.97	12.08	11.63	11.19	10.96	10.80	10.63	10.57
180.0	13.97	12.74	11.85	11.46	11.07	10.80	10.69	10.52	10.52
225.0	15.81	13.19	12.24	11.69	11.35	11.07	10.91	10.80	10.80
270.0	14.58	13.13	12.19	11.63	11.24	11.02	10.85	10.69	10.63
315.0	13.75	12.47	11.80	11.35	11.02	10.85	10.63	10.63	10.52
360.0	14.08	12.63	11.80	11.30	11.02	10.80	10.63	10.46	10.41

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