



CEA GROUP INTERNATIONAL CO.,LTD  
http://www.ceaworld.com  
Email:anlen@ceaworld.com  
Tel:0558 2623358 2603767 Fax:0558 2623358  
Address:No.55,DingDa Road YingQuan District FuYang City AnHui Province

LumCAT: ASD-SSFL-A3040-B

Luminaire:

Report No: HH201512010

Test No:

LampCAT: LED

Lamp flux(lm): -1.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 120.2000

Current(A): 0.2570

Power (W): 30.7400

PF: 0.9950

Ballast type:

Width(mm): 0

Height(mm): 0

#### Photometric Results

Lumens(lm): 2365.32

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 76.95

Central intensity(cd): 1068.053

Maximum intensity(cd): 1086.944

Angle of maximum intensity: C=225.0  $\gamma$ =3.0

Beam Angle(50% Imax): [C0/180]Left=50.6 Right=49.0

[C90/270]Left=48.5 Right=49.4

Field angle(10% Imax): [C0/180]Left=70.2 Right=67.4

[C90/270]Left=62.9 Right=64.4



Equipment: GMS-1800  
Temperature(°C): 26.0

Date: 2015/12/4  
Humidity(%): 45.0%

Operator: CYF  
Distance(m): 14.41

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1070.146	.000	.000	.000%	.000%
1.0	1069.990	1.024	1.024	.000%	.000%
2.0	1070.657	3.072	4.096	.000%	.000%
3.0	1069.740	5.119	9.216	.000%	.000%
4.0	1067.482	7.154	16.370	.000%	.000%
5.0	1063.719	9.168	25.538	.000%	.000%
6.0	1059.620	11.159	36.697	.000%	.000%
7.0	1055.961	13.131	49.828	.000%	.000%
8.0	1051.809	15.085	64.913	.000%	.000%
9.0	1047.415	17.013	81.926	.000%	.000%
10.0	1041.230	18.901	100.827	.000%	.000%
11.0	1035.029	20.746	121.574	.000%	.000%
12.0	1028.014	22.552	144.126	.000%	.000%
13.0	1020.783	24.314	168.440	.000%	.000%
14.0	1012.791	26.030	194.469	.000%	.000%
15.0	1004.435	27.693	222.163	.000%	.000%
16.0	996.322	29.317	251.479	.000%	.000%
17.0	988.355	30.907	282.386	.000%	.000%
18.0	980.199	32.457	314.843	.000%	.000%
19.0	970.364	33.936	348.779	.000%	.000%
20.0	961.438	35.357	384.136	.000%	.000%
21.0	952.148	36.745	420.881	.000%	.000%
22.0	942.746	38.079	458.960	.000%	.000%
23.0	931.865	39.334	498.294	.000%	.000%
24.0	921.278	40.516	538.811	.000%	.000%
25.0	910.622	41.653	580.464	.000%	.000%
26.0	900.406	42.750	623.213	.000%	.000%
27.0	888.781	43.773	666.986	.000%	.000%
28.0	877.373	44.715	711.702	.000%	.000%
29.0	865.713	45.604	757.306	.000%	.000%
30.0	853.846	46.428	803.733	.000%	.000%
31.0	841.382	47.176	850.909	.000%	.000%
32.0	828.494	47.840	898.749	.000%	.000%
33.0	815.165	48.423	947.172	.000%	.000%
34.0	801.204	48.916	996.088	.000%	.000%
35.0	787.711	49.346	1045.434	.000%	.000%
36.0	773.309	49.703	1095.137	.000%	.000%
37.0	759.253	49.984	1145.120	.000%	.000%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	744.385	50.189	1195.310	.000%	.000%
39.0	730.545	50.343	1245.653	.000%	.000%
40.0	715.461	50.432	1296.085	.000%	.000%
41.0	700.773	50.431	1346.516	.000%	.000%
42.0	686.190	50.391	1396.907	.000%	.000%
43.0	670.682	50.262	1447.169	.000%	.000%
44.0	654.118	50.002	1497.171	.000%	.000%
45.0	635.383	49.557	1546.728	.000%	.000%
46.0	619.139	49.062	1595.790	.000%	.000%
47.0	599.132	48.454	1644.243	.000%	.000%
48.0	579.004	47.626	1691.870	.000%	.000%
49.0	556.775	46.641	1738.511	.000%	.000%
50.0	536.820	45.596	1784.107	.000%	.000%
51.0	515.231	44.511	1828.618	.000%	.000%
52.0	493.789	43.298	1871.916	.000%	.000%
53.0	470.763	41.958	1913.873	.000%	.000%
54.0	446.432	40.426	1954.300	.000%	.000%
55.0	421.487	38.742	1993.042	.000%	.000%
56.0	395.252	36.906	2029.948	.000%	.000%
57.0	372.063	35.083	2065.031	.000%	.000%
58.0	348.683	33.330	2098.361	.000%	.000%
59.0	320.217	31.271	2129.633	.000%	.000%
60.0	291.812	28.914	2158.547	.000%	.000%
61.0	264.816	26.563	2185.111	.000%	.000%
62.0	240.355	24.342	2209.453	.000%	.000%
63.0	218.870	22.334	2231.787	.000%	.000%
64.0	195.187	20.318	2252.105	.000%	.000%
65.0	170.466	18.096	2270.201	.000%	.000%
66.0	149.872	15.983	2286.184	.000%	.000%
67.0	129.640	14.055	2300.238	.000%	.000%
68.0	114.261	12.355	2312.594	.000%	.000%
69.0	93.355	10.592	2323.185	.000%	.000%
70.0	79.533	8.879	2332.064	.000%	.000%
71.0	61.750	7.302	2339.366	.000%	.000%
72.0	47.815	5.697	2345.063	.000%	.000%
73.0	37.565	4.465	2349.528	.000%	.000%
74.0	28.587	3.478	2353.006	.000%	.000%
75.0	22.307	2.689	2355.695	.000%	.000%

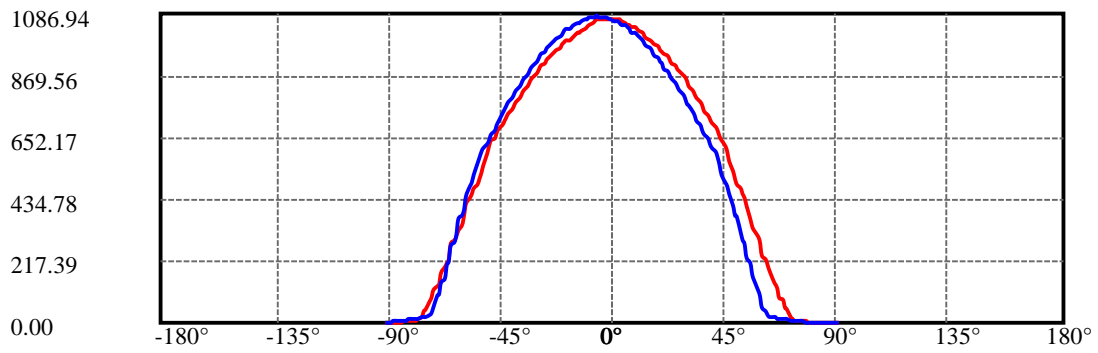
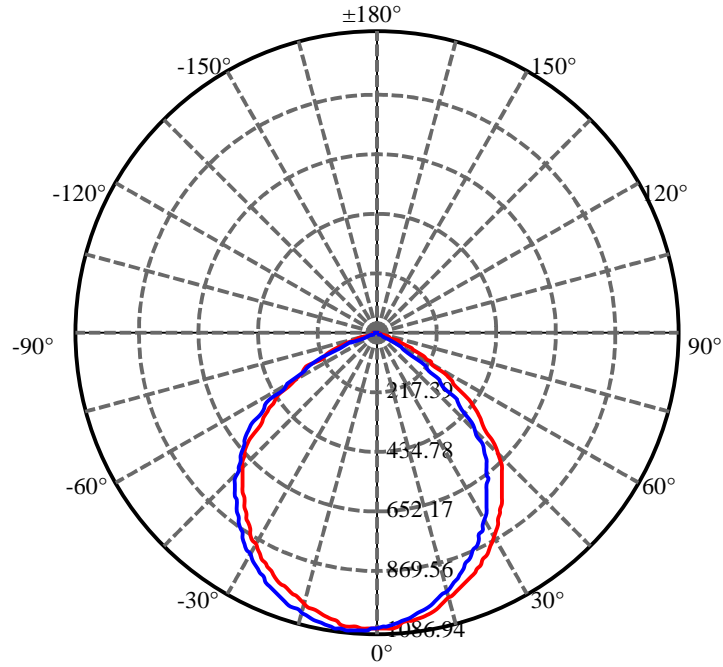
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	16.452	2.057	2357.752	.000%	.000%
77.0	12.395	1.538	2359.290	.000%	.000%
78.0	9.532	1.174	2360.464	.000%	.000%
79.0	7.145	.896	2361.360	.000%	.000%
80.0	5.994	.708	2362.068	.000%	.000%
81.0	4.991	.594	2362.662	.000%	.000%
82.0	4.169	.497	2363.159	.000%	.000%
83.0	3.633	.424	2363.583	.000%	.000%
84.0	3.097	.367	2363.950	.000%	.000%
85.0	2.638	.313	2364.263	.000%	.000%
86.0	2.214	.265	2364.528	.000%	.000%
87.0	1.972	.229	2364.757	.000%	.000%
88.0	1.773	.205	2364.962	.000%	.000%
89.0	1.635	.187	2365.149	.000%	.000%
90.0	1.505	.172	2365.321	.000%	.000%

## ZONAL LUMEN SUMMARY

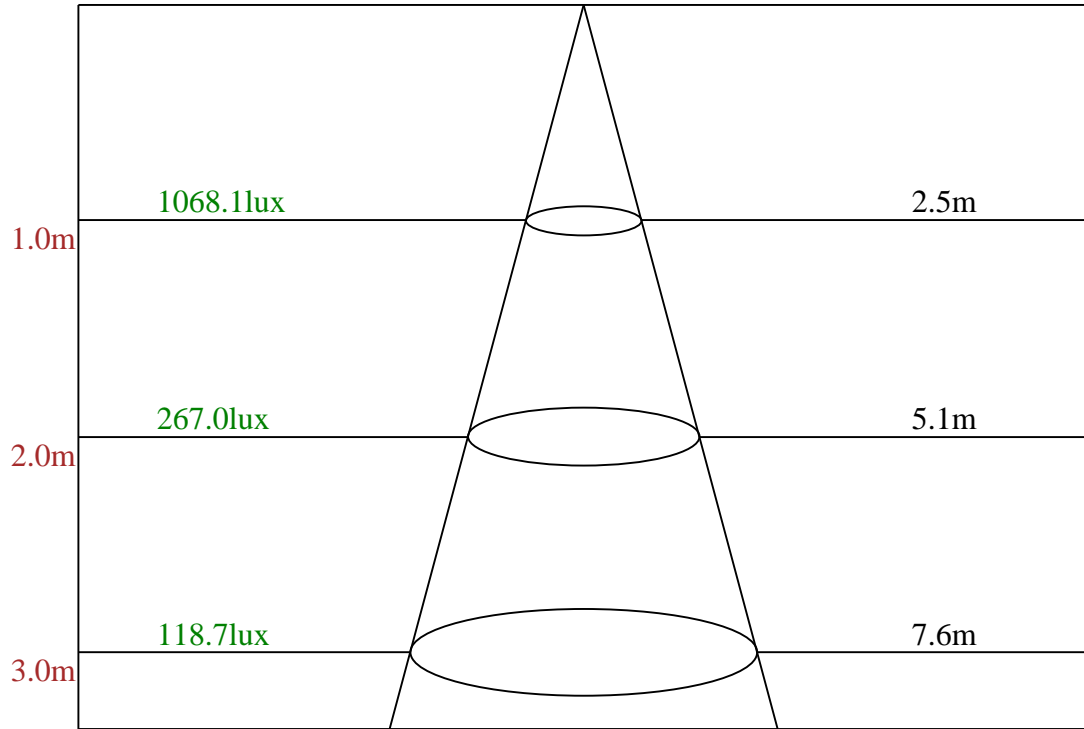
Zone	Lumens	%Lamp	%Fixt
0-30	803.73	N.A.	33.98%
0-40	1296.09	N.A.	54.80%
0-60	2158.55	N.A.	91.26%
0-90	2365.15	N.A.	99.99%
0-120	2365.15	N.A.	99.99%
0-180	2365.32	N.A.	100.00%
60-90	235.52	N.A.	9.96%
90-120	0.00	N.A.	0.00%
90-130	0.00	N.A.	0.00%
90-150	0.00	N.A.	0.00%
90-180	0.00	N.A.	0.00%
0-52.48	1892.26	N.A.	80.00%

## ZONAL LUMEN SUMMARY

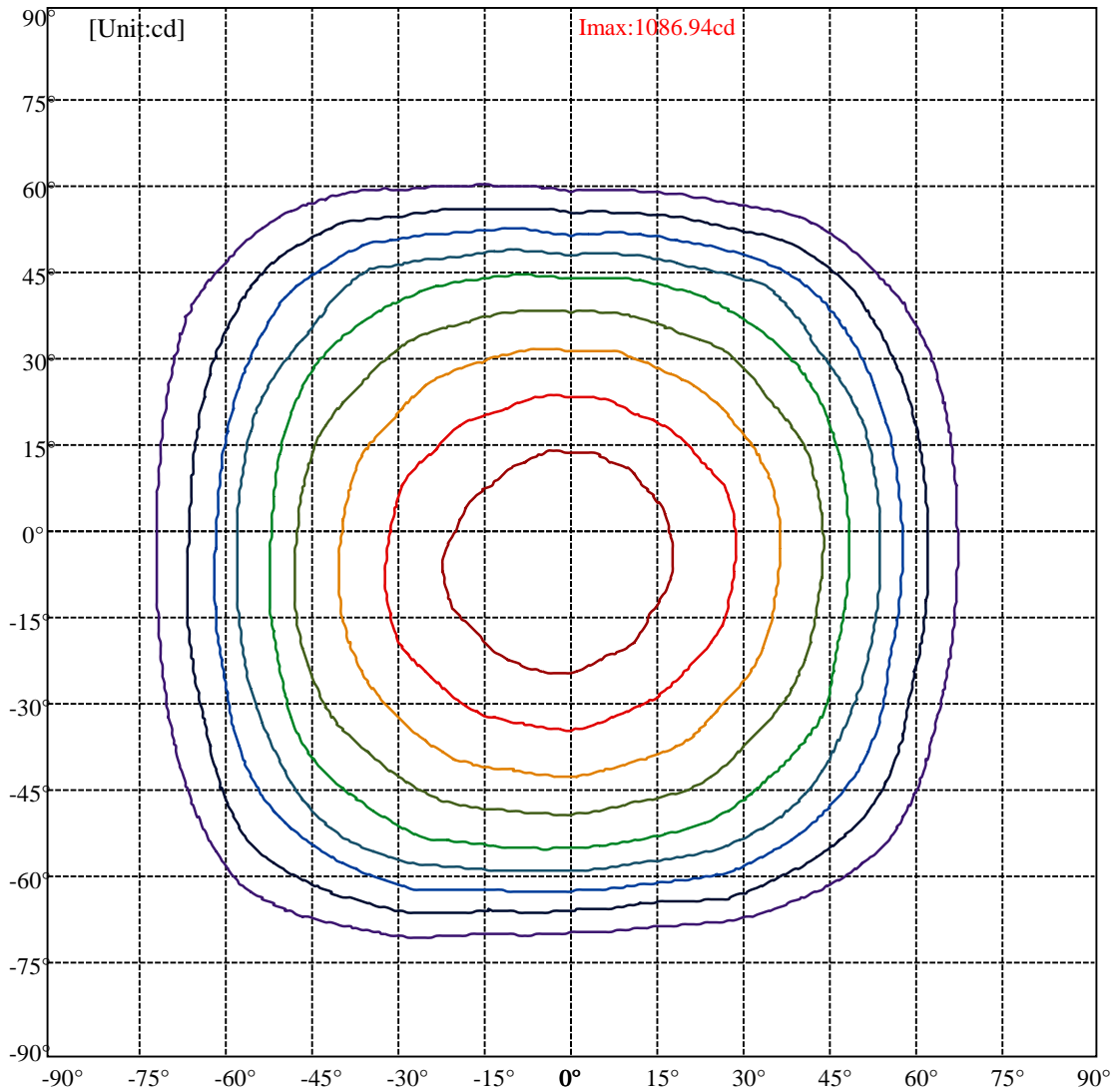
0-10	100.83
10-20	283.31
20-30	419.60
30-40	492.35
40-50	488.02
50-60	374.44
60-70	173.52
70-80	30.00
80-90	3.08
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



C0/C180: ————  
C90/C270: ————

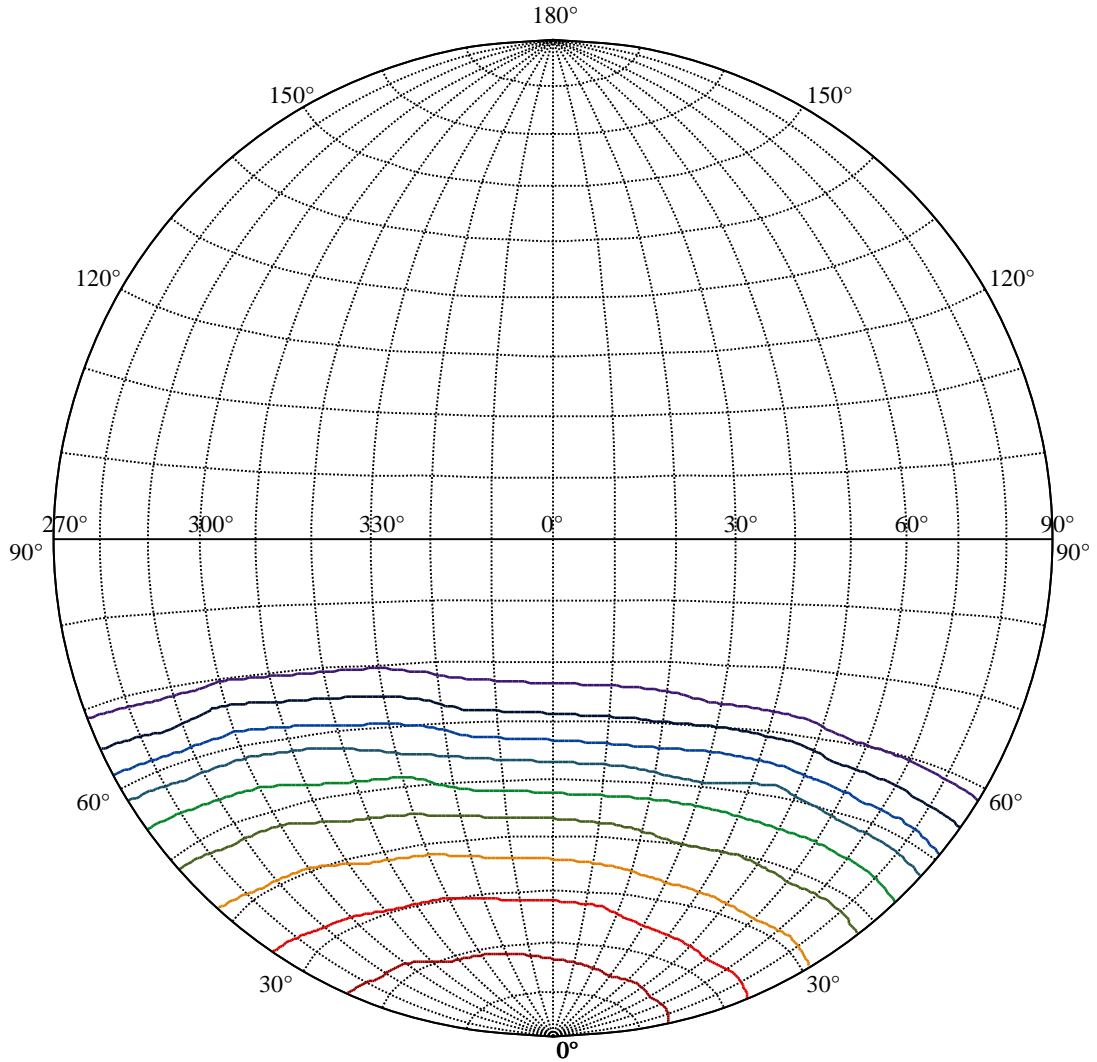


Beam angle of C225plane102.52



(10% I <sub>max</sub> )	108.653	—
(20% I <sub>max</sub> )	217.306	—
(30% I <sub>max</sub> )	325.96	—
(40% I <sub>max</sub> )	434.613	—
(50% I <sub>max</sub> )	543.266	—
(60% I <sub>max</sub> )	651.919	—
(70% I <sub>max</sub> )	760.573	—
(80% I <sub>max</sub> )	869.226	—
(90% I <sub>max</sub> )	977.879	—



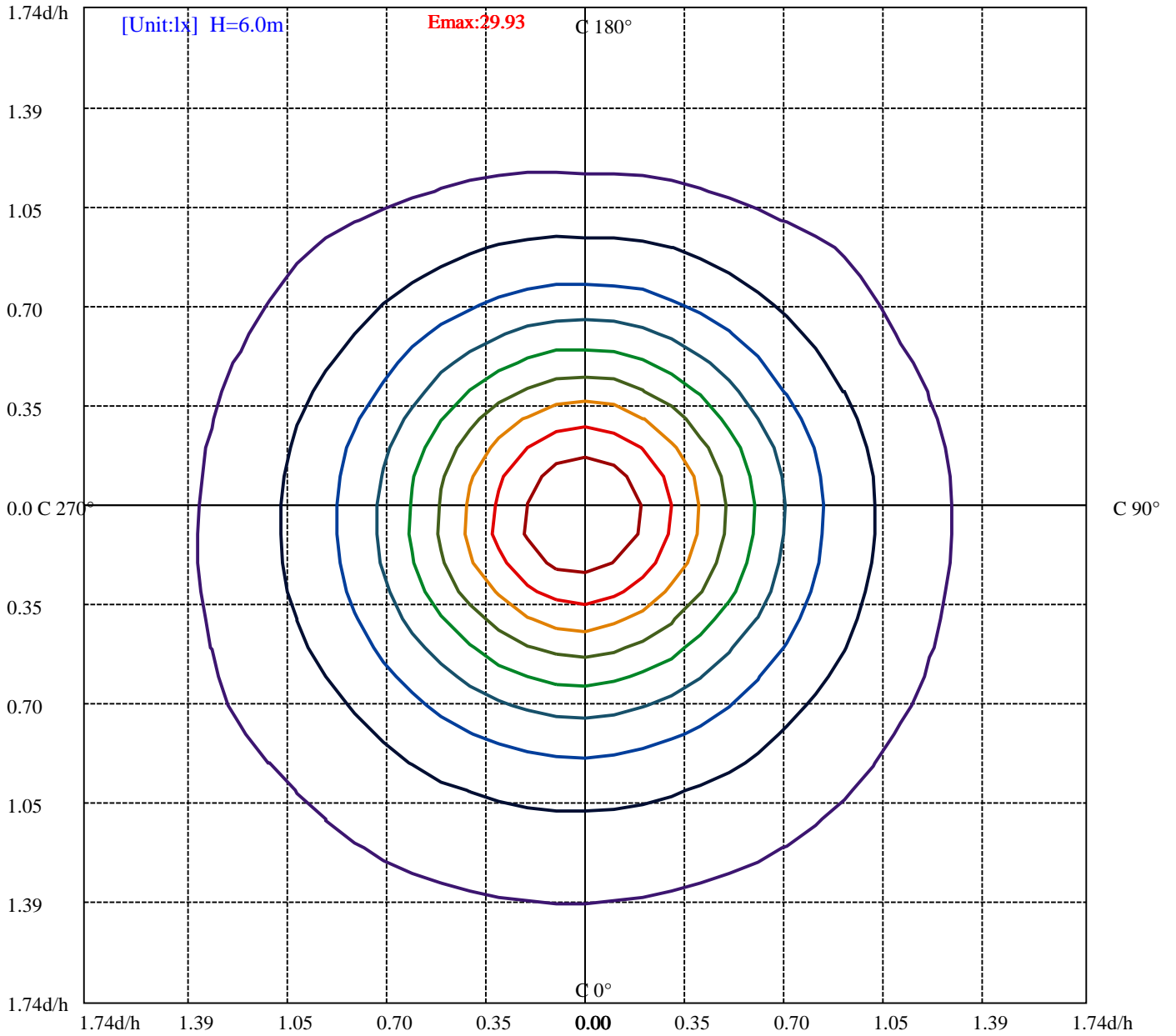


House

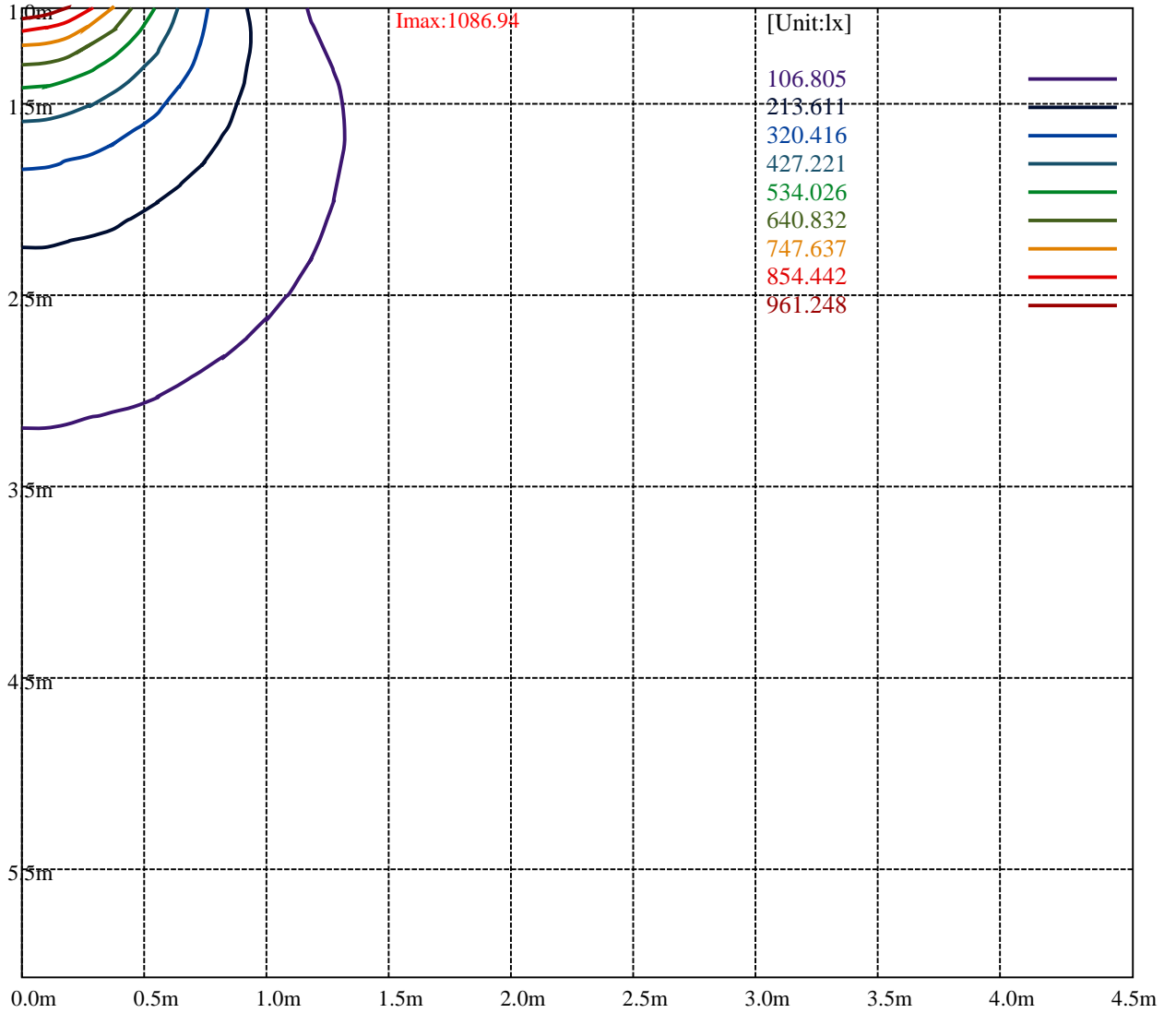
[Unit:cd]

Road

<b>Imax:1086.94</b>	—
(10% Imax) 108.694	—
(20% Imax) 217.389	—
(30% Imax) 326.083	—
(40% Imax) 434.777	—
(50% Imax) 543.472	—
(60% Imax) 652.166	—
(70% Imax) 760.861	—
(80% Imax) 869.555	—
(90% Imax) 978.249	—



- (10% Emax) 2.993333
- (20% Emax) 5.986667
- (30% Emax) 8.98
- (40% Emax) 11.97333
- (50% Emax) 14.96669
- (60% Emax) 17.96003
- (70% Emax) 20.95336
- (80% Emax) 23.94669
- (90% Emax) 26.94003



## Intensity data(cd)

C/ $\gamma$ (°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	1068.05	1068.26	1069.09	1068.68	1062.24	1052.07	1045.63	1043.35	1041.27
15.0	1080.09	1079.47	1080.51	1074.90	1070.54	1061.83	1055.18	1047.09	1043.77
30.0	1078.43	1075.32	1075.53	1071.79	1063.90	1053.52	1044.60	1039.41	1033.59
45.0	1077.60	1075.73	1072.21	1069.51	1064.94	1059.33	1047.09	1038.99	1032.97
60.0	1073.66	1068.47	1066.60	1062.66	1060.58	1054.14	1043.77	1037.33	1029.65
75.0	1069.92	1067.22	1065.98	1059.54	1054.98	1051.03	1047.92	1042.10	1033.18
90.0	1064.32	1060.37	1058.71	1054.14	1046.67	1043.14	1038.78	1033.59	1022.38
105.0	1066.60	1060.17	1057.05	1056.01	1051.45	1045.22	1039.41	1035.67	1030.06
120.0	1064.52	1061.20	1058.71	1054.98	1050.62	1045.22	1040.03	1034.42	1028.20
135.0	1065.56	1064.32	1060.79	1058.92	1055.60	1052.48	1046.88	1040.65	1036.29
150.0	1066.60	1063.90	1063.07	1059.75	1058.09	1053.73	1047.71	1045.43	1042.10
165.0	1066.39	1066.39	1066.81	1065.77	1062.66	1058.50	1057.67	1056.01	1050.20
180.0	1068.05	1069.51	1068.88	1065.56	1065.15	1065.15	1064.32	1059.13	1051.45
195.0	1080.09	1080.51	1080.92	1082.38	1081.34	1079.89	1080.30	1078.85	1074.28
210.0	1078.43	1079.89	1082.79	1082.79	1082.38	1084.04	1085.49	1084.45	1082.38
225.0	1077.60	1080.51	1081.96	1086.94	1086.94	1085.28	1082.58	1083.00	1084.66
240.0	1073.66	1074.07	1077.81	1081.13	1085.91	1083.42	1082.79	1080.92	1082.17
255.0	1069.92	1073.04	1079.06	1079.26	1080.09	1080.09	1082.58	1081.75	1078.02
270.0	1064.32	1069.30	1073.24	1073.87	1075.53	1075.73	1077.40	1074.90	1073.24
285.0	1066.60	1069.92	1072.00	1074.07	1076.56	1079.89	1076.36	1075.32	1073.24
300.0	1064.52	1066.81	1070.34	1075.94	1078.02	1078.02	1074.90	1070.75	1066.81
315.0	1065.56	1068.68	1072.83	1075.94	1074.28	1067.43	1061.20	1059.54	1054.35
330.0	1066.60	1066.81	1070.75	1071.79	1071.17	1065.35	1058.30	1053.52	1052.48
345.0	1066.39	1069.92	1070.13	1067.43	1059.96	1054.77	1049.99	1046.88	1046.67
360.0	1068.05	1068.26	1069.09	1068.68	1062.24	1052.07	1045.63	1043.35	1041.27

C/ $\gamma$ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	1040.24	1034.63	1027.78	1017.19	1009.10	998.51	990.21	984.19	976.71
15.0	1043.56	1038.78	1028.82	1017.61	1009.51	998.72	990.83	977.54	972.35
30.0	1027.57	1022.38	1016.78	1009.10	994.98	983.98	973.39	964.88	954.92
45.0	1026.33	1020.31	1009.72	1005.15	996.43	988.96	974.64	962.80	954.50
60.0	1020.10	1007.85	999.96	990.62	984.39	974.84	961.77	951.39	944.54
75.0	1025.29	1018.65	1009.10	998.10	987.09	978.37	968.20	957.82	946.82
90.0	1016.78	1009.51	1003.91	994.36	981.28	971.73	965.09	954.71	941.42
105.0	1025.08	1014.08	1007.44	1000.38	991.24	979.83	970.28	961.97	952.01
120.0	1022.59	1014.29	1008.06	997.68	990.00	979.20	969.03	958.24	945.57
135.0	1032.76	1025.91	1016.16	1007.02	998.93	989.17	978.17	967.79	959.90
150.0	1034.01	1022.59	1015.95	1007.85	1002.87	990.41	983.56	975.26	969.45
165.0	1042.10	1034.42	1028.61	1021.35	1014.08	1007.64	1001.62	994.15	986.89
180.0	1045.63	1039.82	1033.39	1028.40	1022.80	1017.61	1009.10	1001.62	995.19
195.0	1067.85	1059.75	1056.64	1052.69	1047.92	1040.86	1034.63	1028.82	1022.38
210.0	1080.30	1073.87	1069.30	1060.17	1054.98	1051.86	1047.50	1038.37	1030.69
225.0	1082.79	1077.40	1070.75	1063.28	1057.67	1050.82	1042.10	1035.67	1030.89
240.0	1079.47	1074.90	1073.04	1070.96	1067.43	1060.79	1055.18	1049.58	1041.48
255.0	1075.11	1073.24	1069.71	1063.07	1059.96	1054.56	1051.65	1046.46	1037.33
270.0	1070.75	1067.85	1064.11	1058.92	1055.81	1051.86	1046.88	1040.65	1035.67
285.0	1071.79	1066.81	1058.50	1053.52	1050.82	1044.60	1034.42	1028.61	1021.14
300.0	1061.00	1053.52	1047.29	1042.31	1036.71	1032.76	1026.12	1021.97	1016.36
315.0	1048.33	1047.09	1045.01	1044.39	1034.84	1028.20	1018.65	1011.59	1001.62
330.0	1051.45	1048.54	1047.09	1043.14	1034.01	1022.18	1012.21	1005.15	997.89
345.0	1047.09	1043.35	1033.59	1025.08	1015.95	1009.51	1001.21	992.49	984.81
360.0	1040.24	1034.63	1027.78	1017.19	1009.10	998.51	990.21	984.19	976.71

Intensity data(cd)

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	971.32	960.52	954.09	944.12	936.65	924.40	913.40	902.60	894.09
15.0	963.64	957.41	945.57	936.44	929.17	918.59	904.06	892.43	884.34
30.0	943.50	933.12	925.02	915.06	902.40	890.36	878.94	869.18	853.82
45.0	941.63	926.48	914.64	906.55	895.34	886.20	868.97	859.01	846.97
60.0	933.74	919.42	906.76	896.17	883.09	866.69	856.10	842.82	832.23
75.0	937.89	920.04	911.11	898.87	889.11	873.75	862.33	851.95	839.50
90.0	931.87	920.04	908.62	892.02	882.26	869.60	859.42	846.14	829.32
105.0	939.97	928.14	918.80	907.38	890.77	877.69	867.73	855.48	842.19
120.0	935.40	925.02	913.19	900.32	888.90	878.52	865.24	851.12	841.16
135.0	950.56	939.76	926.48	918.59	908.83	898.66	887.66	875.62	867.73
150.0	960.31	948.07	938.93	932.29	922.53	909.04	899.90	888.90	881.01
165.0	979.20	971.11	963.43	955.54	947.03	937.69	930.01	918.59	908.21
180.0	990.21	983.36	976.09	968.62	960.52	950.97	941.84	932.29	923.36
195.0	1014.29	1007.85	1001.83	995.60	986.89	977.13	967.16	959.28	950.56
210.0	1025.08	1017.19	1009.72	998.10	992.70	985.64	978.58	967.58	959.90
225.0	1024.46	1016.16	1007.64	1000.17	991.87	982.11	972.98	964.47	951.41
240.0	1035.05	1024.04	1017.19	1010.76	1002.25	991.24	981.49	972.15	962.18
255.0	1031.10	1028.20	1021.35	1009.93	1003.08	993.32	986.68	970.07	961.77
270.0	1031.10	1024.25	1015.74	1007.85	1001.00	992.07	982.53	972.35	962.39
285.0	1015.33	1004.53	997.06	988.55	981.70	971.73	958.65	948.48	941.84
300.0	1012.00	1003.08	995.19	987.92	977.75	964.67	953.26	943.29	931.67
315.0	988.75	981.07	972.56	963.01	951.18	944.12	935.61	929.59	919.42
330.0	989.38	977.75	970.90	964.47	956.16	945.57	936.23	928.34	916.51
345.0	979.00	972.15	962.60	953.26	944.74	934.99	921.91	913.19	902.19
360.0	971.32	960.52	954.09	944.12	936.65	924.40	913.40	902.60	894.09

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	883.09	871.67	860.88	847.80	833.48	818.94	804.00	787.81	775.14
15.0	873.54	864.82	849.05	836.38	823.10	811.26	792.79	776.39	760.20
30.0	841.99	829.74	820.19	807.11	793.00	779.09	763.73	747.53	731.96
45.0	836.17	819.15	806.07	796.11	782.82	766.01	752.52	742.34	727.60
60.0	814.38	803.79	790.71	779.29	766.01	749.19	737.98	721.79	705.18
75.0	823.72	810.64	800.26	786.56	769.33	757.08	740.68	722.41	705.18
90.0	815.83	805.04	790.71	772.65	759.99	743.80	726.77	706.43	692.94
105.0	828.70	815.42	801.30	787.39	773.48	759.57	746.70	729.47	710.37
120.0	828.70	818.32	800.47	790.50	777.84	767.05	754.18	737.98	726.98
135.0	854.23	841.99	829.32	819.36	805.87	793.00	780.54	767.67	753.35
150.0	865.03	855.90	845.31	835.76	823.10	807.73	793.62	782.20	768.08
165.0	898.45	890.36	879.35	867.31	851.74	841.57	828.91	815.62	801.92
180.0	914.02	903.43	891.60	879.15	868.97	856.31	843.65	827.46	816.87
195.0	940.38	931.25	921.49	908.42	894.92	882.26	869.60	859.01	845.31
210.0	952.63	942.25	929.38	919.63	912.78	902.40	888.28	876.03	866.07
225.0	947.86	937.06	924.40	915.47	904.68	892.43	880.18	869.39	860.05
240.0	950.56	939.35	931.04	920.87	907.38	896.58	887.45	876.86	864.82
255.0	950.97	942.67	931.46	915.89	904.47	895.55	883.51	867.52	856.93
270.0	953.05	942.67	931.04	919.63	910.49	898.87	884.13	871.05	860.67
285.0	932.08	917.97	909.66	899.07	890.15	873.33	864.41	852.37	843.02
300.0	922.12	908.21	896.38	885.37	877.49	864.41	853.20	843.44	832.02
315.0	905.30	894.51	886.41	874.58	858.80	846.55	836.80	824.34	808.77
330.0	904.06	892.02	882.88	873.33	859.42	850.50	837.63	824.76	810.85
345.0	893.88	878.73	867.73	854.65	843.86	830.36	812.72	799.02	780.75
360.0	883.09	871.67	860.88	847.80	833.48	818.94	804.00	787.81	775.14

## Intensity data(cd)

C/ $\gamma$ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	760.20	744.42	729.89	718.06	700.83	685.67	672.18	656.19	638.55
15.0	749.19	734.25	719.09	701.45	688.99	673.42	657.85	641.45	624.64
30.0	715.15	697.92	682.77	670.10	651.83	635.64	623.19	607.62	592.05
45.0	715.15	697.30	681.52	665.33	651.21	629.83	611.56	591.84	577.31
60.0	685.46	671.56	653.91	640.00	617.58	603.88	588.10	575.44	560.49
75.0	688.58	672.39	655.57	638.96	623.39	609.07	598.48	583.95	554.27
90.0	676.33	662.84	645.81	627.96	614.88	603.47	583.33	553.44	516.90
105.0	693.97	680.90	663.46	647.47	632.32	617.17	602.84	588.93	574.40
120.0	710.79	694.81	675.71	662.42	646.02	631.70	615.30	596.20	581.05
135.0	738.81	725.94	711.62	699.58	680.69	666.37	650.38	636.89	618.20
150.0	750.85	739.85	724.91	712.87	692.52	680.69	665.12	652.66	638.13
165.0	788.64	778.26	763.52	748.78	733.83	722.21	707.88	693.97	679.24
180.0	804.83	793.00	779.29	763.52	751.89	735.08	721.79	707.68	695.84
195.0	830.78	815.21	805.45	792.58	777.43	763.93	750.02	738.40	722.21
210.0	853.61	843.02	822.47	810.85	796.52	784.48	766.42	751.89	740.48
225.0	846.35	834.10	821.02	809.81	796.52	783.03	769.54	754.38	739.64
240.0	852.16	839.70	827.66	815.00	800.47	786.98	776.39	763.52	746.70
255.0	843.65	830.57	814.38	804.00	790.50	779.71	759.37	746.91	731.76
270.0	846.14	832.02	816.87	805.66	790.30	775.97	762.48	746.50	732.79
285.0	829.12	811.06	797.77	787.81	773.69	756.67	744.63	728.64	715.36
300.0	817.49	804.83	794.45	780.96	769.95	753.35	739.44	724.49	712.66
315.0	798.39	784.28	773.07	754.38	742.97	728.02	714.32	698.33	679.65
330.0	796.32	780.33	763.52	748.16	733.21	718.89	706.64	691.28	675.91
345.0	767.46	753.55	741.51	727.40	713.49	693.35	681.31	665.74	650.59
360.0	760.20	744.42	729.89	718.06	700.83	685.67	672.18	656.19	638.55

C/ $\gamma$ (°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	621.53	600.97	564.44	533.30	503.41	489.08	470.19	455.66	437.19
15.0	611.98	587.90	558.83	518.56	498.63	478.29	457.32	443.41	426.60
30.0	571.29	557.38	539.74	519.60	486.38	447.15	429.30	409.58	391.31
45.0	555.72	538.70	524.79	508.39	495.52	474.14	460.85	429.92	398.99
60.0	543.68	523.34	479.53	453.59	437.19	419.33	369.93	342.11	328.82
75.0	510.05	491.16	476.21	451.51	404.59	374.29	363.28	325.92	281.08
90.0	496.14	482.44	452.96	412.27	380.93	368.06	315.54	290.00	278.38
105.0	540.36	510.47	483.69	473.10	442.79	402.52	372.42	359.34	318.44
120.0	568.80	554.89	535.58	508.80	469.57	449.23	432.83	411.44	364.53
135.0	601.18	585.20	567.76	548.87	531.22	515.65	499.26	487.21	468.95
150.0	620.70	608.66	592.67	576.69	559.46	547.00	530.19	511.30	472.89
165.0	664.29	649.76	635.23	620.90	604.50	590.18	550.53	515.24	492.20
180.0	682.35	669.06	650.80	638.34	619.87	593.29	551.57	523.34	507.56
195.0	708.09	693.56	682.97	669.27	653.29	633.77	617.17	585.41	548.45
210.0	724.91	713.49	693.14	682.14	667.40	655.36	637.93	622.77	606.58
225.0	724.49	708.92	692.73	679.86	664.08	646.23	629.62	615.30	598.90
240.0	732.59	720.96	705.81	689.82	673.01	655.16	637.72	619.45	602.43
255.0	717.85	701.24	681.10	667.20	649.14	635.85	615.30	603.88	588.73
270.0	709.75	693.97	676.12	662.42	643.32	625.68	614.05	599.11	583.12
285.0	691.90	677.78	659.31	644.98	628.58	609.90	597.65	582.29	566.93
300.0	694.60	679.65	665.74	647.27	626.30	608.03	591.63	573.16	559.25
315.0	666.16	649.34	633.57	615.51	602.01	584.57	569.42	545.13	529.98
330.0	656.61	643.95	626.92	611.15	595.58	579.38	565.06	531.64	494.48
345.0	634.19	616.54	599.52	562.57	525.83	501.54	486.80	468.32	452.55
360.0	621.53	600.97	564.44	533.30	503.41	489.08	470.19	455.66	437.19

Intensity data(cd)

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	412.48	363.70	337.54	323.84	301.63	284.19	235.82	221.08	204.89
15.0	404.59	352.70	327.99	312.22	293.74	272.57	228.14	211.95	199.91
30.0	371.79	358.30	324.05	285.44	269.04	252.01	222.54	176.04	160.26
45.0	358.30	326.75	300.38	261.56	242.26	216.93	182.47	155.07	130.16
60.0	287.10	252.22	242.88	194.10	176.66	133.27	119.78	78.88	58.33
75.0	269.66	226.69	202.82	167.53	143.03	112.72	89.89	52.11	42.35
90.0	230.84	209.46	171.47	147.39	117.50	94.25	55.63	43.18	23.67
105.0	282.12	272.36	216.93	202.19	166.90	144.07	114.80	89.68	54.18
120.0	341.07	327.79	283.98	250.35	238.94	194.10	175.83	137.01	122.69
135.0	452.96	418.71	392.97	365.57	330.07	286.27	257.20	240.18	221.08
150.0	436.36	415.60	400.86	385.50	366.60	349.58	323.63	279.42	258.66
165.0	477.46	459.61	443.41	428.05	411.86	375.95	332.35	312.84	297.89
180.0	487.42	471.02	453.79	440.71	419.54	375.12	341.69	321.77	306.61
195.0	523.34	503.41	486.18	470.40	453.17	435.52	416.01	366.60	339.20
210.0	592.67	572.53	549.08	516.28	483.06	458.57	441.55	427.64	410.20
225.0	579.38	561.32	546.38	527.70	507.97	493.24	475.38	460.44	429.50
240.0	584.57	571.91	553.23	540.15	520.01	494.48	453.59	432.62	417.67
255.0	575.86	547.00	502.78	480.78	467.91	438.85	383.21	368.06	349.37
270.0	557.17	518.35	492.20	476.42	448.40	399.20	377.81	366.81	308.48
285.0	537.04	503.20	476.84	460.85	421.82	381.14	361.83	343.35	289.38
300.0	537.24	523.75	506.31	488.67	443.41	418.29	404.80	376.15	334.22
315.0	511.92	495.10	476.21	453.79	433.45	396.08	375.95	342.32	311.39
330.0	467.29	450.26	430.54	413.52	393.80	380.10	350.00	304.12	282.12
345.0	435.73	413.94	367.23	336.50	317.61	298.72	283.57	248.28	216.31
360.0	412.48	363.70	337.54	323.84	301.63	284.19	235.82	221.08	204.89

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	183.51	145.73	136.39	118.95	86.77	79.51	50.86	44.63	22.42
15.0	175.83	140.75	127.88	104.83	82.41	68.92	47.12	32.59	22.21
30.0	141.16	102.55	90.09	72.03	48.99	39.86	24.70	16.81	7.89
45.0	104.83	80.34	60.82	41.93	23.67	14.74	11.42	9.96	8.51
60.0	41.93	19.72	18.06	15.57	14.53	13.08	11.63	10.38	8.51
75.0	22.83	21.38	19.10	17.65	15.78	14.53	12.87	11.42	9.96
90.0	22.00	19.72	18.27	16.81	15.36	13.29	11.83	10.79	9.34
105.0	47.12	23.25	21.59	19.93	18.06	16.40	14.53	13.29	11.63
120.0	85.53	67.05	43.39	26.99	19.51	17.23	15.78	14.12	12.87
135.0	185.59	165.86	134.10	106.08	83.24	68.92	45.88	32.59	20.76
150.0	247.66	222.74	198.87	154.86	143.45	118.53	93.62	77.43	58.54
165.0	285.44	270.08	222.74	200.74	191.19	175.83	134.31	123.52	110.23
180.0	292.70	273.81	224.61	207.38	197.21	175.21	137.63	128.71	112.93
195.0	320.73	304.12	289.17	258.66	223.37	206.34	193.89	171.88	135.35
210.0	395.88	368.89	328.20	294.57	279.00	260.53	244.75	226.90	186.42
225.0	399.20	356.64	325.29	307.03	288.55	255.54	226.48	196.38	150.30
240.0	385.70	346.26	321.35	295.61	248.90	237.69	195.34	171.68	134.31
255.0	299.14	272.77	244.96	206.55	196.59	148.43	134.73	96.53	80.55
270.0	285.44	268.41	217.97	205.10	156.94	144.69	104.21	93.00	54.18
285.0	269.24	228.97	203.23	183.93	141.99	130.37	91.55	72.03	45.88
300.0	307.86	273.60	237.69	226.90	178.53	158.60	116.04	106.49	71.83
315.0	289.80	272.57	237.90	194.93	168.98	139.29	123.93	93.00	75.98
330.0	264.68	250.98	220.67	186.42	172.09	158.81	121.65	99.64	88.64
345.0	199.08	188.28	148.84	133.48	116.25	85.94	75.77	55.01	42.76
360.0	183.51	145.73	136.39	118.95	86.77	79.51	50.86	44.63	22.42

Intensity data(cd)

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	14.12	7.68	6.64	5.60	4.57	3.94	3.32	2.70	2.28
15.0	8.93	7.47	6.64	5.81	4.98	4.36	3.74	3.53	3.11
30.0	6.85	5.81	5.40	4.36	3.53	3.32	2.91	2.49	2.28
45.0	7.47	6.23	5.60	4.77	3.53	3.32	2.70	2.49	1.87
60.0	7.68	6.44	5.19	4.36	3.53	3.11	2.49	1.87	1.87
75.0	8.72	7.06	6.02	4.77	3.74	3.53	2.49	1.87	1.87
90.0	7.68	6.85	5.60	4.57	3.74	2.91	2.28	2.08	1.87
105.0	10.59	8.93	7.47	6.44	5.19	4.15	3.32	2.91	2.28
120.0	11.21	9.55	8.51	7.06	5.81	4.57	3.74	3.11	2.49
135.0	12.46	11.00	9.13	7.89	6.64	5.40	4.77	3.53	3.11
150.0	44.42	31.14	18.27	10.17	7.27	6.23	4.77	3.94	3.32
165.0	78.47	70.79	45.25	38.82	21.38	8.72	7.47	6.23	5.19
180.0	84.49	72.66	48.16	42.14	22.00	11.21	7.68	6.44	5.40
195.0	123.52	100.27	80.96	67.05	46.09	38.20	21.80	8.93	8.10
210.0	167.11	143.03	118.74	97.15	78.26	57.29	43.59	27.61	19.10
225.0	139.50	111.27	95.91	61.24	51.27	33.21	20.14	12.04	10.79
240.0	116.46	80.96	68.09	41.10	23.87	18.06	16.40	14.53	13.08
255.0	48.99	25.33	22.42	20.76	18.68	16.61	15.15	13.49	12.04
270.0	35.91	23.67	22.21	19.93	18.48	16.81	15.15	13.29	11.83
285.0	24.70	22.63	20.97	19.10	16.81	15.36	13.91	11.83	10.38
300.0	47.95	37.57	19.51	17.44	15.78	13.91	12.25	11.00	8.93
315.0	57.71	37.16	20.97	14.95	11.00	9.96	7.89	6.64	5.81
330.0	59.58	48.16	29.69	22.42	12.66	7.89	6.64	5.40	4.15
345.0	23.04	19.93	8.72	7.47	6.02	5.40	4.15	3.53	2.70
360.0	14.12	7.68	6.64	5.60	4.57	3.94	3.32	2.70	2.28

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	1.87	1.66	1.04	0.83	0.21	0.62	0.42	0.42	0.42
15.0	2.49	2.28	1.87	1.66	1.66	1.45	1.45	1.66	1.87
30.0	2.08	1.66	1.87	1.87	1.66	1.66	1.87	1.87	1.87
45.0	1.66	1.66	1.66	1.66	1.87	1.66	1.66	1.87	1.87
60.0	1.66	1.45	1.45	1.66	1.66	1.66	1.87	1.66	1.66
75.0	1.66	1.45	1.66	1.45	1.45	1.45	1.66	1.66	1.66
90.0	1.45	1.25	1.45	1.45	1.45	1.25	1.45	1.45	1.45
105.0	1.66	1.66	1.66	1.66	1.66	1.66	1.66	2.08	1.87
120.0	1.87	2.08	1.87	1.66	1.66	1.25	1.45	1.45	1.87
135.0	2.49	1.87	1.45	1.25	0.62	0.83	0.83	0.62	0.62
150.0	3.11	2.49	2.28	1.87	1.25	1.04	0.83	0.62	0.83
165.0	4.36	3.53	3.32	2.49	2.08	1.66	1.45	0.83	1.04
180.0	4.57	3.74	3.53	3.11	2.49	2.28	1.87	1.45	1.04
195.0	6.85	5.81	4.98	4.15	3.74	3.53	2.91	2.70	2.28
210.0	11.21	7.89	6.64	5.60	4.57	3.74	3.53	3.11	2.91
225.0	9.76	8.10	7.06	6.02	4.98	3.94	3.53	3.32	2.70
240.0	11.63	10.17	8.93	7.47	6.23	5.19	3.94	3.53	2.70
255.0	10.59	9.13	7.89	6.44	5.40	4.15	3.53	2.70	2.28
270.0	10.79	9.34	7.89	6.64	5.81	4.57	3.53	3.11	2.49
285.0	9.55	8.10	6.64	5.60	4.77	3.53	3.11	2.49	2.08
300.0	7.68	6.44	5.19	4.57	3.53	2.49	2.08	1.66	1.45
315.0	4.77	3.74	3.11	2.49	2.28	1.66	1.25	1.45	1.04
330.0	3.74	2.70	2.28	1.66	1.25	1.04	0.83	0.42	0.62
345.0	2.28	1.87	1.45	1.04	1.04	0.83	0.62	0.42	0.62
360.0	1.87	1.66	1.04	0.83	0.21	0.62	0.42	0.42	0.42



Intensity data(cd)

C/ $\gamma$ ( $^{\circ}$ )	90.0
0.0	0.62
15.0	1.66
30.0	1.66
45.0	2.08
60.0	1.87
75.0	1.66
90.0	1.66
105.0	1.66
120.0	1.87
135.0	0.83
150.0	0.62
165.0	0.62
180.0	0.83
195.0	1.87
210.0	2.28
225.0	2.28
240.0	2.08
255.0	1.87
270.0	2.08
285.0	2.08
300.0	1.45
315.0	1.25
330.0	0.62
345.0	0.62
360.0	0.62