



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NT

Client:

LumCAT: 12-0071-S2

Luminaire: 92.70.267.00+99.02.73.185

Report No: 2024430-B002

Ballast type: AC

Test No: 2024430-C002

Voltage(V): 32.790

LampCAT: LUMILEDS LUXEON CoB 5050 Current(A): 0.336

Lamp flux(lm): 1678.3 Power (W): 11.017

Number of Lamps: 1 PF: 0.000

Length(mm): 0 Width(mm): 0

Phm Type: C Height(mm): 0

Photometric Results

Lumens(lm): 1031.31, Efficiency(%): 61.45% , Luminous Efficacy(lm/W): 93.61

Central intensity(cd): 1166.295, Maximum intensity(cd): 1209.719

Angle of maximum intensity: C=247.5 γ =1.0

Beam Angle(50%Imax): [C0/180]Total=51.2

[C90/270]Total=63.7

Field angle(10%Imax): [C0/180]Total=70.0

[C90/270]Total=84.3

Maximum s/h(1/2): C0_180=0.86 C90_270=0.99

Maximum s/h(1/4): C0_180=0.76 C90_270=0.93

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 61.56%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.431%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/4/30
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1196.536	0.000	0	0.00%	0.00%
1.0	1195.245	1.144	1.144	0.07%	0.11%
2.0	1193.588	3.429	4.573	0.20%	0.44%
3.0	1190.176	5.701	10.274	0.34%	1.00%
4.0	1183.018	7.944	18.218	0.47%	1.77%
5.0	1176.013	10.148	28.367	0.60%	2.75%
6.0	1165.348	12.304	40.671	0.73%	3.94%
7.0	1154.828	14.401	55.072	0.86%	5.34%
8.0	1142.206	16.439	71.512	0.98%	6.93%
9.0	1130.830	18.422	89.933	1.10%	8.72%
10.0	1115.845	20.332	110.265	1.21%	10.69%
11.0	1099.857	22.139	132.404	1.32%	12.84%
12.0	1083.409	23.866	156.271	1.42%	15.15%
13.0	1065.556	25.503	181.773	1.52%	17.63%
14.0	1046.364	27.032	208.806	1.61%	20.25%
15.0	1026.920	28.463	237.269	1.70%	23.01%
16.0	1005.208	29.776	267.045	1.77%	25.89%
17.0	983.441	30.969	298.014	1.85%	28.90%
18.0	960.512	32.052	330.065	1.91%	32.00%
19.0	937.479	33.021	363.087	1.97%	35.21%
20.0	912.841	33.866	396.953	2.02%	38.49%
21.0	886.305	34.547	431.5	2.06%	41.84%
22.0	860.533	35.103	466.603	2.09%	45.24%
23.0	831.952	35.513	502.116	2.12%	48.69%
24.0	800.826	35.698	537.815	2.13%	52.15%
25.0	768.492	35.683	573.497	2.13%	55.61%
26.0	733.492	35.454	608.952	2.11%	59.05%
27.0	692.175	34.879	643.831	2.08%	62.43%
28.0	651.381	34.016	677.847	2.03%	65.73%
29.0	608.071	32.951	710.798	1.96%	68.92%
30.0	562.021	31.592	742.39	1.88%	71.99%
31.0	518.762	30.077	772.467	1.79%	74.90%
32.0	471.450	28.368	800.835	1.69%	77.65%
33.0	428.626	26.517	827.352	1.58%	80.22%
34.0	389.595	24.762	852.114	1.48%	82.62%
35.0	335.308	22.513	874.626	1.34%	84.81%
36.0	294.017	20.038	894.664	1.19%	86.75%
37.0	258.421	18.017	912.682	1.07%	88.50%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	220.937	16.000	928.682	0.95%	90.05%
39.0	181.442	13.734	942.416	0.82%	91.38%
40.0	155.706	11.759	954.175	0.70%	92.52%
41.0	134.774	10.344	964.519	0.62%	93.52%
42.0	106.496	8.766	973.284	0.52%	94.37%
43.0	86.280	7.141	980.425	0.43%	95.07%
44.0	71.774	5.965	986.391	0.36%	95.64%
45.0	59.975	5.063	991.454	0.30%	96.14%
46.0	50.757	4.330	995.785	0.26%	96.56%
47.0	42.246	3.699	999.484	0.22%	96.91%
48.0	35.333	3.136	1002.62	0.19%	97.22%
49.0	29.393	2.658	1005.278	0.16%	97.48%
50.0	23.947	2.224	1007.502	0.13%	97.69%
51.0	19.473	1.837	1009.339	0.11%	97.87%
52.0	15.896	1.518	1010.856	0.09%	98.02%
53.0	12.542	1.237	1012.093	0.07%	98.14%
54.0	10.124	0.999	1013.093	0.06%	98.23%
55.0	8.511	0.832	1013.924	0.05%	98.31%
56.0	7.356	0.717	1014.641	0.04%	98.38%
57.0	6.697	0.643	1015.284	0.04%	98.45%
58.0	6.295	0.601	1015.885	0.04%	98.50%
59.0	6.028	0.576	1016.461	0.03%	98.56%
60.0	5.805	0.559	1017.02	0.03%	98.61%
61.0	5.604	0.544	1017.564	0.03%	98.67%
62.0	5.443	0.532	1018.096	0.03%	98.72%
63.0	5.304	0.523	1018.619	0.03%	98.77%
64.0	5.161	0.513	1019.133	0.03%	98.82%
65.0	5.051	0.505	1019.638	0.03%	98.87%
66.0	4.974	0.500	1020.138	0.03%	98.92%
67.0	4.872	0.495	1020.633	0.03%	98.96%
68.0	4.792	0.490	1021.123	0.03%	99.01%
69.0	4.733	0.486	1021.609	0.03%	99.06%
70.0	4.667	0.483	1022.092	0.03%	99.11%
71.0	4.609	0.479	1022.571	0.03%	99.15%
72.0	4.565	0.477	1023.048	0.03%	99.20%
73.0	4.514	0.475	1023.523	0.03%	99.25%
74.0	4.477	0.473	1023.995	0.03%	99.29%
75.0	4.437	0.471	1024.466	0.03%	99.34%

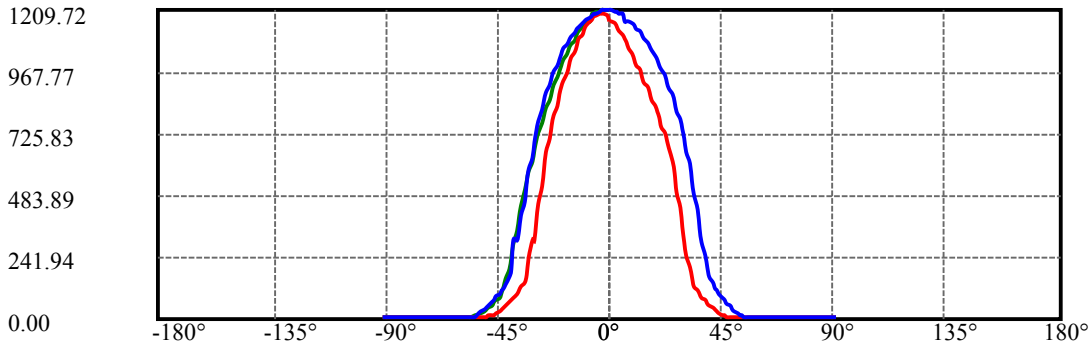
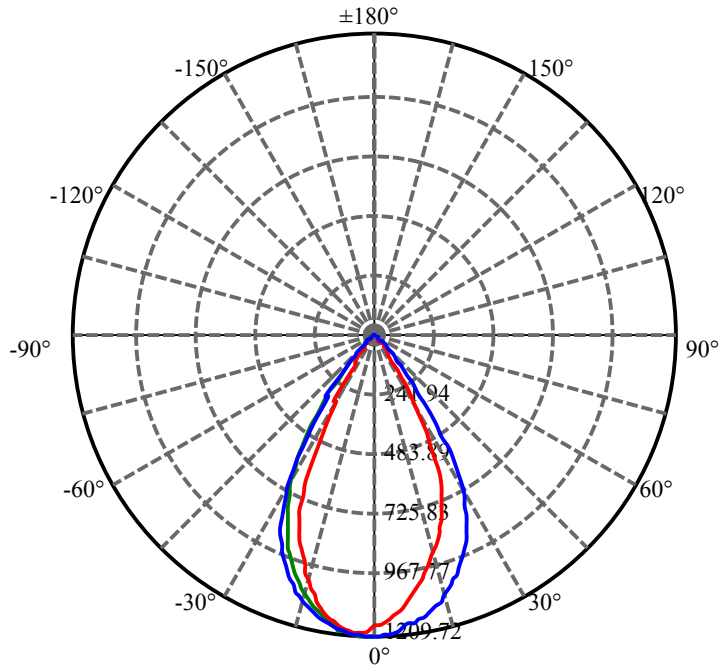
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	4.397	0.469	1024.935	0.03%	99.38%
77.0	4.338	0.466	1025.401	0.03%	99.43%
78.0	4.298	0.462	1025.863	0.03%	99.47%
79.0	4.247	0.459	1026.322	0.03%	99.52%
80.0	4.188	0.455	1026.777	0.03%	99.56%
81.0	4.170	0.452	1027.229	0.03%	99.60%
82.0	4.108	0.449	1027.678	0.03%	99.65%
83.0	4.075	0.445	1028.123	0.03%	99.69%
84.0	4.042	0.442	1028.565	0.03%	99.73%
85.0	4.020	0.440	1029.005	0.03%	99.78%
86.0	4.053	0.441	1029.446	0.03%	99.82%
87.0	4.217	0.453	1029.899	0.03%	99.86%
88.0	4.323	0.468	1030.366	0.03%	99.91%
89.0	4.305	0.473	1030.839	0.03%	99.95%
90.0	4.261	0.470	1031.309	0.03%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	742.39	44.23%	71.99%
0-40	954.17	56.85%	92.52%
0-60	1017.02	60.60%	98.61%
0-90	1030.84	61.42%	99.95%
0-120	1030.84	61.42%	99.95%
0-180	1031.31	61.45%	100.00%
60-90	13.82	0.82%	1.34%
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%
0-32.91	825.05	49.16%	80.00%

ZONAL LUMEN SUMMARY

0-10	110.27
10-20	286.69
20-30	345.44
30-40	211.78
40-50	53.33
50-60	9.52
60-70	5.07
70-80	4.69
80-90	4.06
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



C247.5(Max): ———

C0/C180: ———

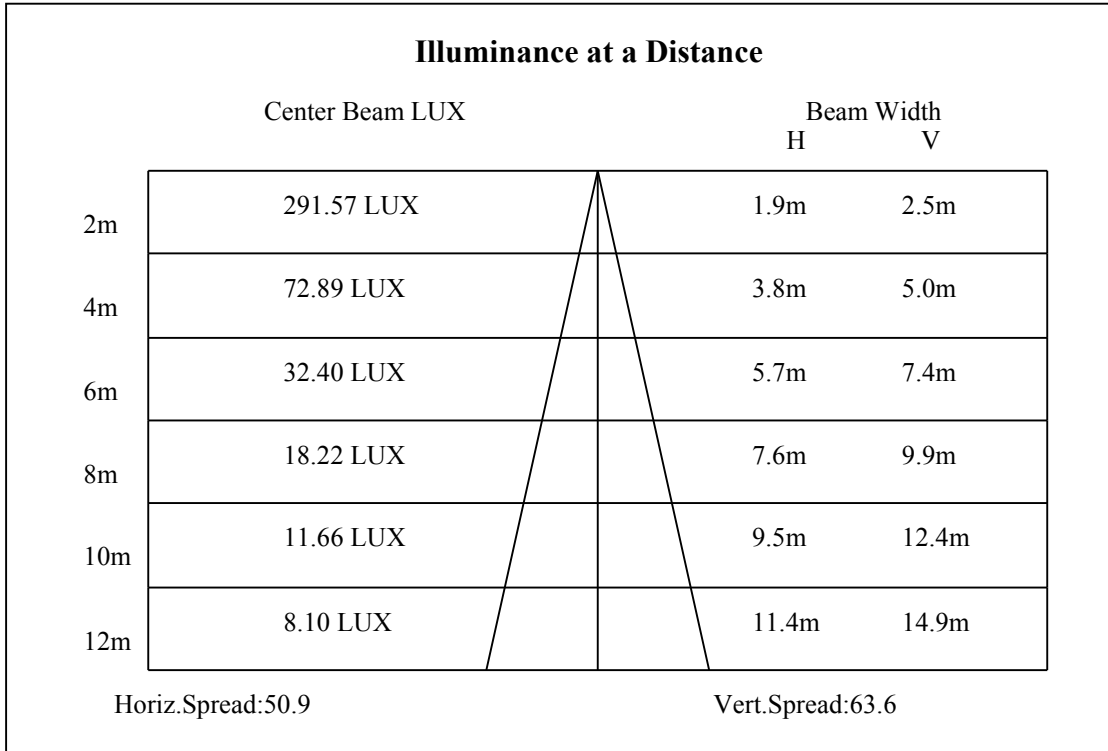
C90/C270: ———

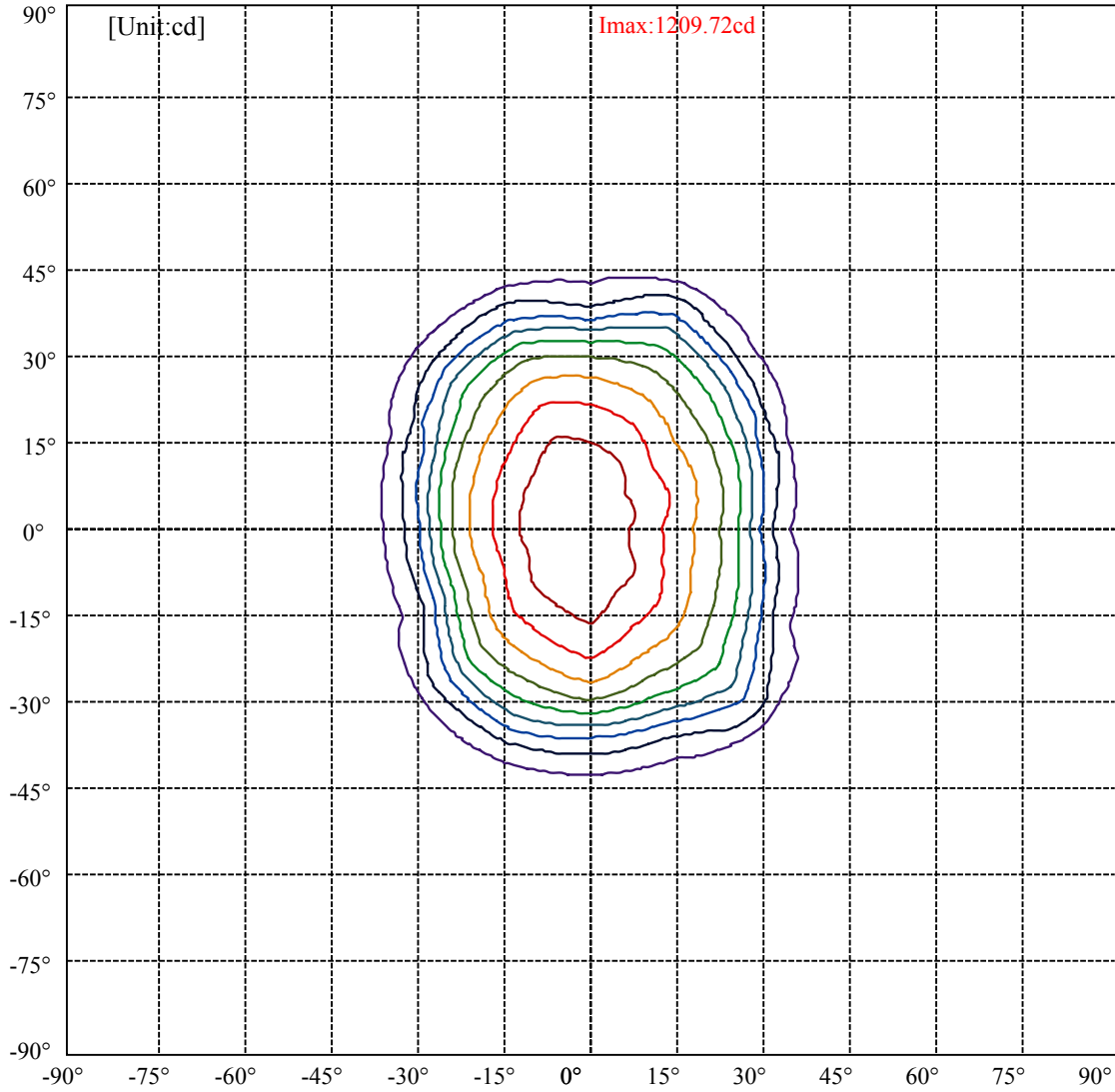
Field angle(10%Imax):C0/180Left:33.5 Right:36.5

:C90/270Left:43.2 Right:41.2

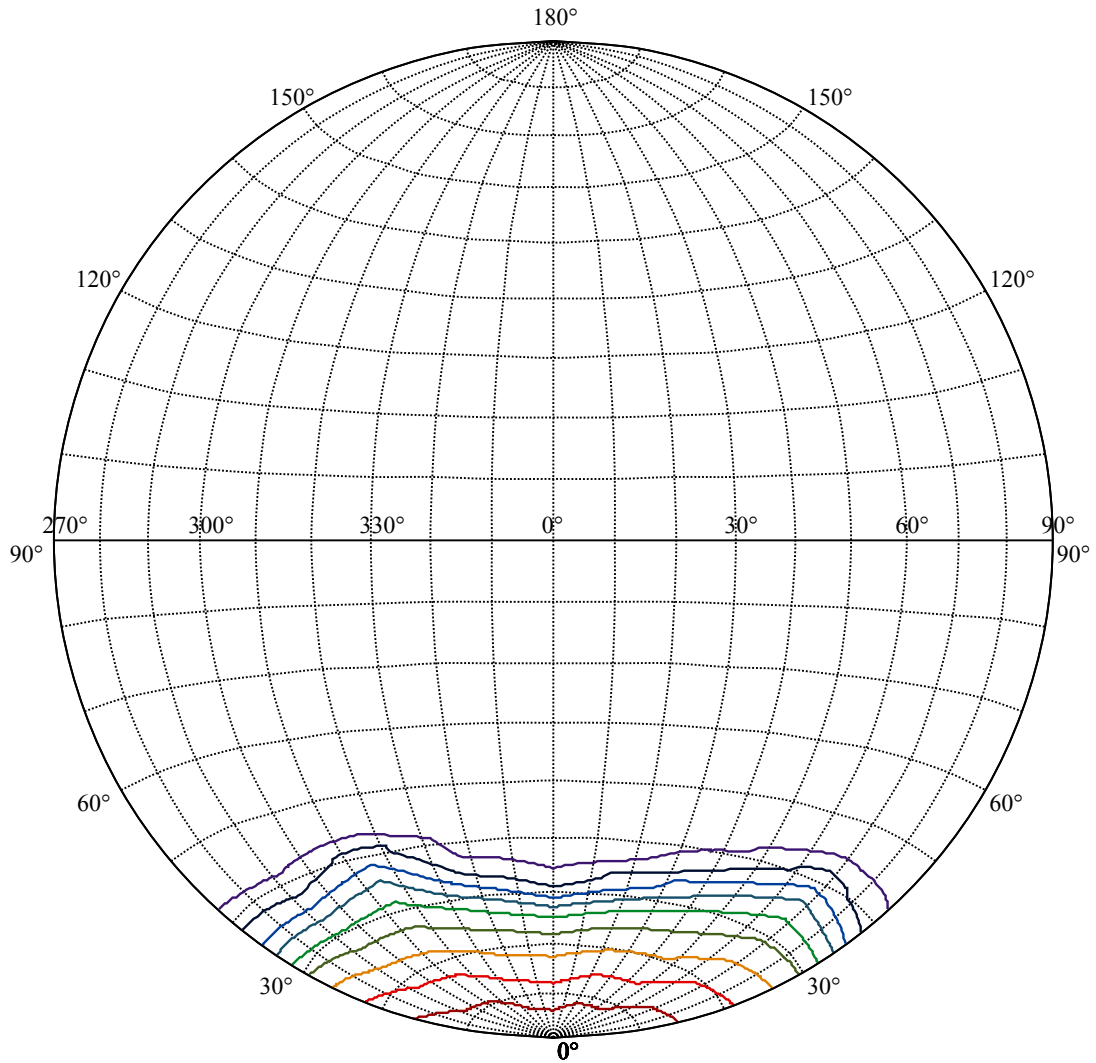
Beam Angle(50%Imax):C0/180Left:23.8 Right:27.4

:C90/270Left:32.6 Right:31.0





(10%Imax) 120.972	—
(20%Imax) 241.944	—
(30%Imax) 362.916	—
(40%Imax) 483.887	—
(50%Imax) 604.859	—
(60%Imax) 725.831	—
(70%Imax) 846.803	—
(80%Imax) 967.775	—
(90%Imax) 1088.75	—



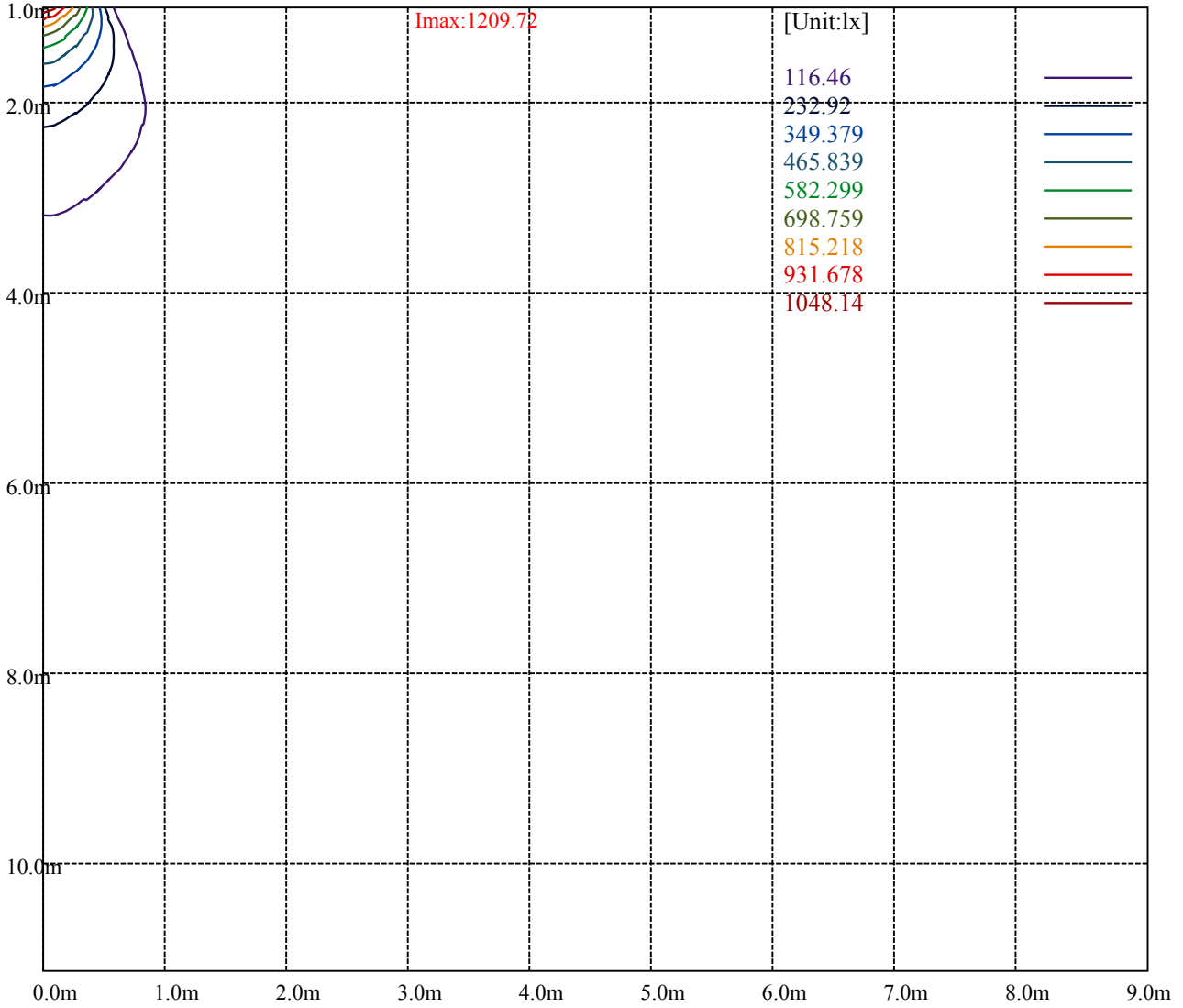
House

[Unit:cd]

Road

Imax:1209.72

(10%Imax) 121.142	—
(20%Imax) 242.283	—
(30%Imax) 363.425	—
(40%Imax) 484.566	—
(50%Imax) 605.708	—
(60%Imax) 726.85	—
(70%Imax) 847.991	—
(80%Imax) 969.133	—
(90%Imax) 1090.27	—



Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

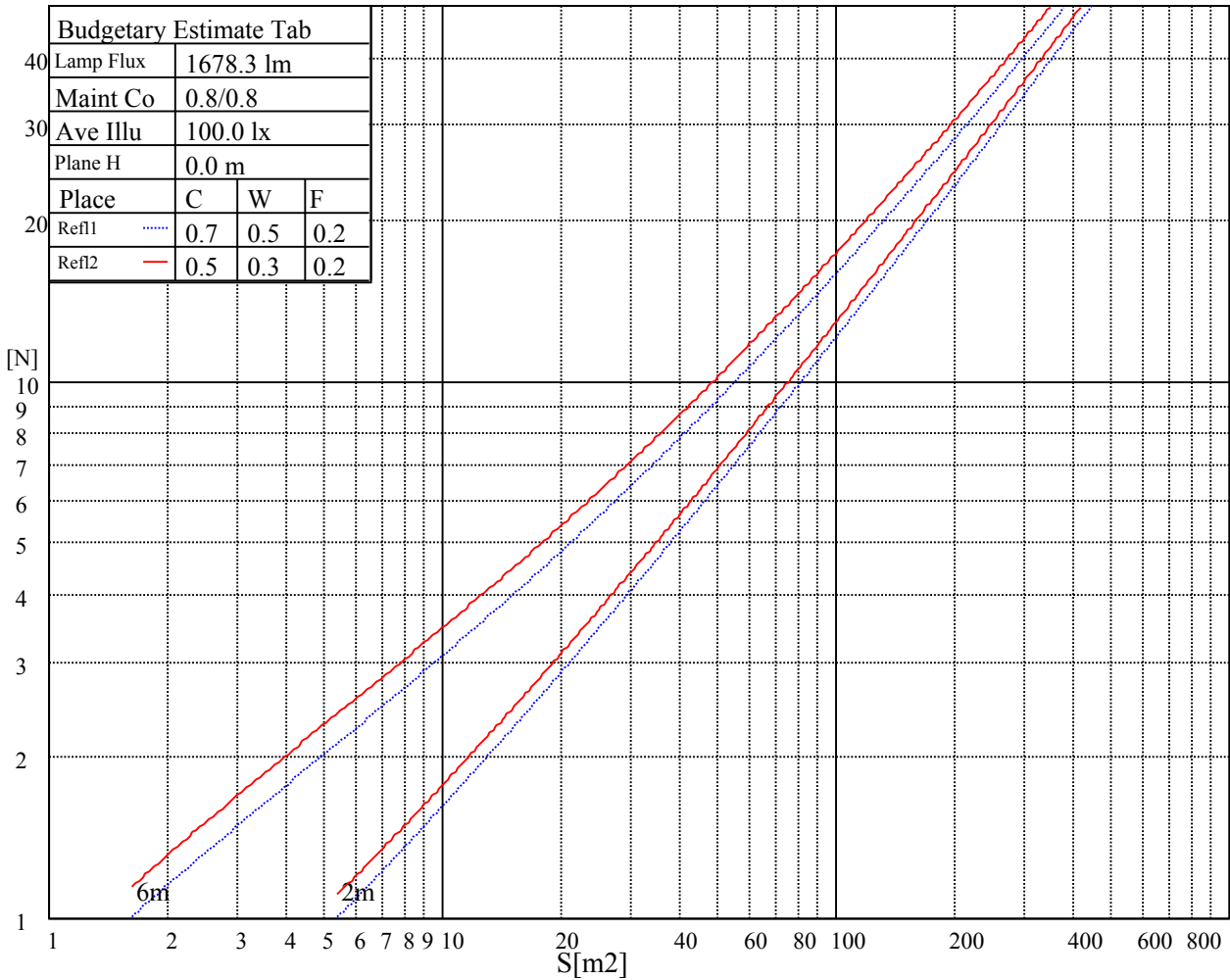
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

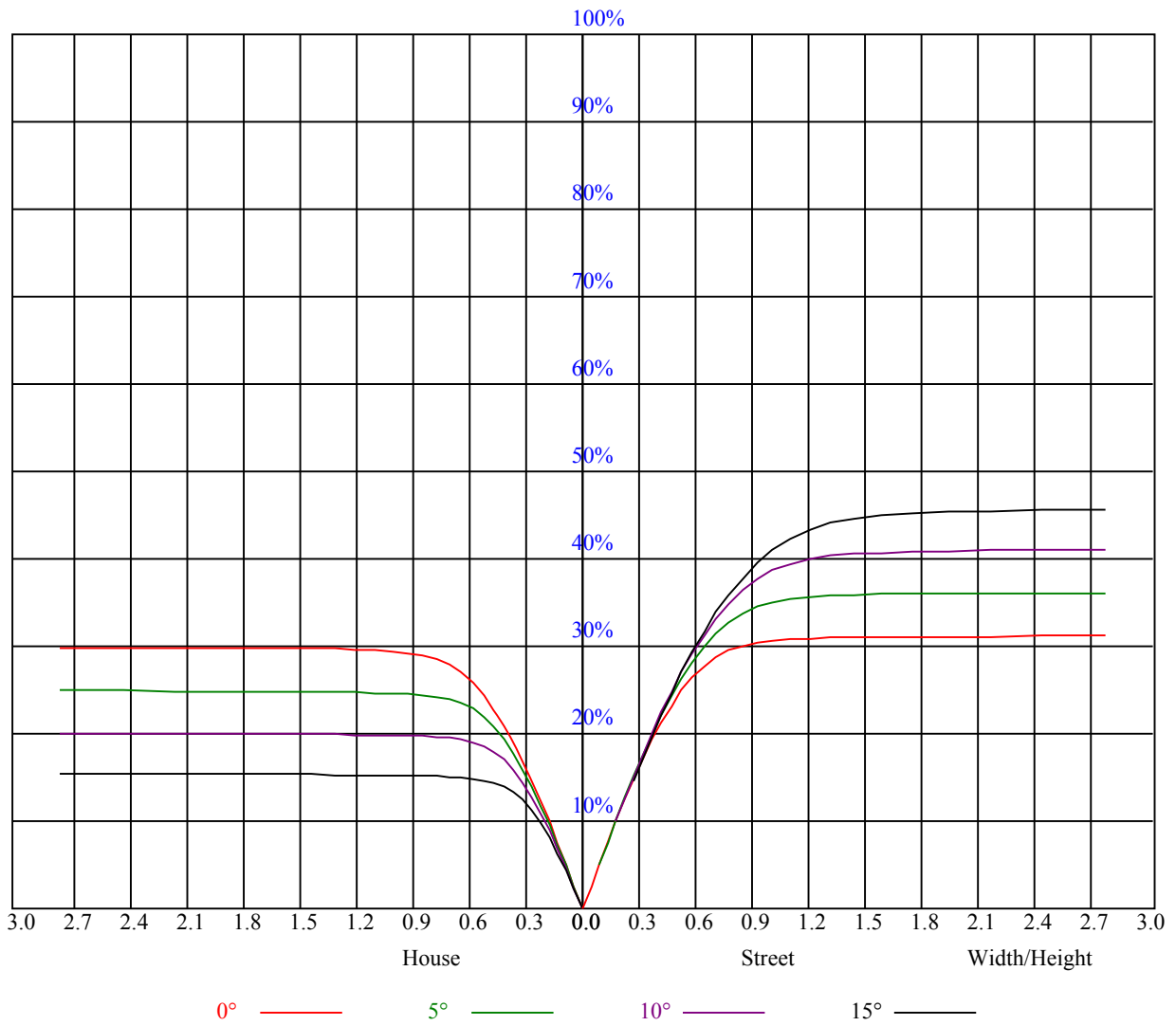
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

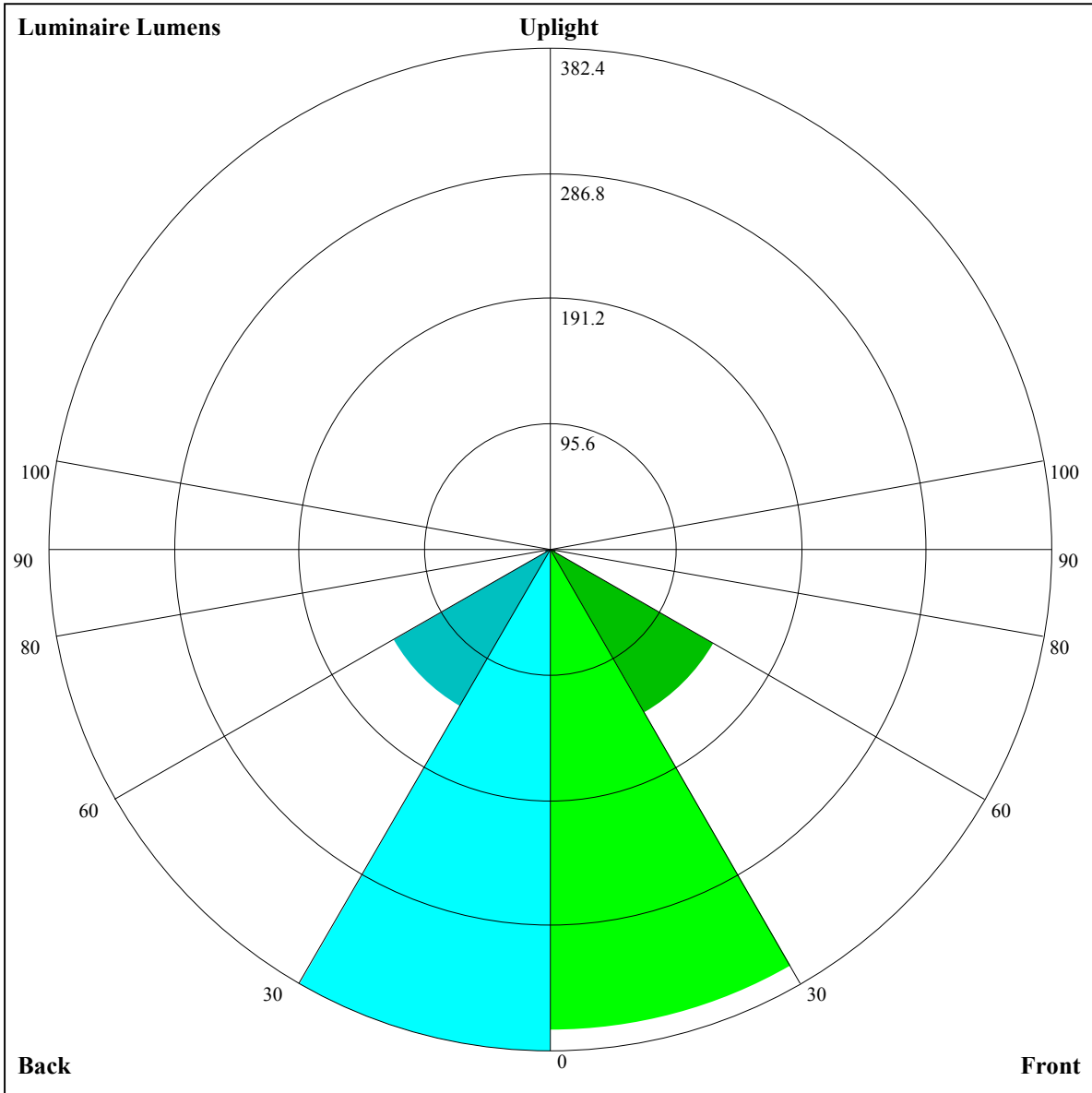
Luminance Limiting Curve





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	0.73	0.73	0.73	0.72	0.72	0.72	0.68	0.68	0.68	0.65	0.65	0.65	0.63	0.63	0.63	0.62
1	0.68	0.66	0.65	0.67	0.65	0.64	0.64	0.63	0.62	0.62	0.61	0.60	0.60	0.59	0.58	0.57
2	0.63	0.61	0.59	0.62	0.60	0.58	0.60	0.58	0.57	0.58	0.57	0.55	0.57	0.55	0.54	0.53
3	0.59	0.56	0.53	0.58	0.55	0.53	0.56	0.54	0.52	0.55	0.53	0.51	0.54	0.52	0.50	0.49
4	0.55	0.52	0.49	0.54	0.51	0.49	0.53	0.50	0.48	0.52	0.49	0.48	0.51	0.49	0.47	0.46
5	0.52	0.48	0.45	0.51	0.48	0.45	0.50	0.47	0.45	0.49	0.46	0.44	0.48	0.46	0.44	0.43
6	0.48	0.45	0.42	0.48	0.44	0.42	0.47	0.44	0.42	0.46	0.43	0.41	0.45	0.43	0.41	0.40
7	0.46	0.42	0.39	0.45	0.42	0.39	0.44	0.41	0.39	0.44	0.41	0.39	0.43	0.40	0.39	0.38
8	0.43	0.39	0.37	0.43	0.39	0.37	0.42	0.39	0.37	0.41	0.38	0.36	0.41	0.38	0.36	0.35
9	0.41	0.37	0.34	0.40	0.37	0.34	0.40	0.37	0.34	0.39	0.36	0.34	0.39	0.36	0.34	0.33
10	0.38	0.35	0.32	0.38	0.35	0.32	0.38	0.34	0.32	0.37	0.34	0.32	0.37	0.34	0.32	0.31





Luminaire Lumens:

FL=367.33,FM=143.57,FH=4.84,FVH=2.26

BL=382.4,BM=138.85,BH=4.89,BVH=2.26

UL=0,UH=0

BUG Rating:B1-U0-G0

Intensity data(cd)

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	1166.29	1166.29	1156.17	1144.76	1128.20	1112.81	1097.00	1079.39	1057.38
22.5	1198.01	1193.33	1186.31	1174.61	1163.49	1146.51	1131.88	1116.08	1095.01
45.0	1193.92	1166.59	1166.59	1162.02	1148.91	1137.79	1126.44	1109.94	1096.13
67.5	1208.55	1206.21	1202.11	1198.01	1191.58	1184.55	1174.02	1164.66	1155.29
90.0	1209.13	1208.55	1204.45	1200.35	1196.26	1190.99	1166.29	1166.29	1164.01
112.5	1202.70	1205.62	1206.21	1206.79	1206.21	1203.28	1201.53	1195.09	1190.99
135.0	1205.04	1207.38	1207.96	1206.79	1203.28	1199.18	1192.16	1166.12	1166.12
157.5	1188.65	1193.33	1195.67	1196.84	1196.26	1193.92	1188.65	1181.63	1168.75
180.0	1166.29	1188.07	1192.75	1195.09	1193.92	1190.41	1185.14	1174.61	1162.90
202.5	1198.01	1201.53	1202.70	1201.53	1199.77	1193.33	1166.41	1166.41	1152.95
225.0	1193.92	1198.01	1200.94	1203.28	1202.11	1200.94	1194.50	1187.48	1178.70
247.5	1208.55	1209.72	1209.13	1207.96	1205.04	1201.53	1195.09	1196.84	1166.82
270.0	1209.13	1209.72	1208.55	1206.21	1202.70	1198.01	1195.09	1187.48	1179.87
292.5	1202.70	1199.18	1195.09	1190.99	1166.47	1166.47	1162.14	1149.85	1138.79
315.0	1205.04	1202.70	1195.09	1189.24	1178.12	1167.58	1156.46	1144.17	1127.79
337.5	1188.65	1167.70	1167.70	1158.34	1145.99	1128.90	1112.75	1091.21	1073.77
360.0	1166.29	1166.29	1156.17	1144.76	1128.20	1112.81	1097.00	1079.39	1057.38
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	1039.01	1015.25	994.71	973.52	947.71	926.65	905.99	885.33	858.17
22.5	1078.04	1060.49	1038.83	1020.11	1001.38	980.31	959.83	932.32	910.67
45.0	1082.26	1063.41	1046.09	1028.06	1009.98	991.31	967.49	946.48	926.47
67.5	1141.25	1128.96	1116.67	1100.28	1085.07	1070.44	1053.46	1031.81	1013.67
90.0	1156.70	1147.45	1135.98	1124.63	1112.81	1100.52	1083.25	1068.80	1049.19
112.5	1184.55	1175.78	1166.41	1154.71	1144.76	1133.05	1120.76	1102.62	1087.99
135.0	1162.02	1147.51	1133.87	1120.24	1103.32	1083.60	1064.99	1039.94	1019.70
157.5	1156.46	1143.00	1121.93	1103.21	1080.38	1060.49	1038.83	1015.42	984.99
180.0	1151.78	1132.47	1114.91	1096.18	1070.44	1045.86	1021.28	994.94	960.41
202.5	1138.03	1120.65	1096.95	1076.81	1049.54	1026.89	1002.37	969.78	943.03
225.0	1168.75	1157.63	1141.83	1126.03	1109.06	1084.48	1065.17	1038.83	1016.59
247.5	1163.72	1152.89	1141.07	1125.86	1111.58	1092.67	1076.05	1057.91	1039.07
270.0	1172.26	1164.07	1153.54	1143.59	1133.05	1120.76	1106.13	1091.50	1076.29
292.5	1127.79	1111.52	1097.59	1083.25	1068.45	1049.66	1033.16	1016.89	998.63
315.0	1115.50	1100.28	1084.48	1064.00	1047.03	1027.13	1004.89	984.41	963.92
337.5	1055.16	1032.16	1012.85	994.06	974.34	948.01	927.05	906.34	886.26
360.0	1039.01	1015.25	994.71	973.52	947.71	926.65	905.99	885.33	858.17
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	835.64	811.06	786.07	755.00	728.25	698.70	665.23	615.89	567.96
22.5	889.02	862.09	840.44	816.45	787.19	762.61	729.25	699.99	667.22
45.0	901.36	880.47	859.75	833.07	812.35	785.90	764.30	742.36	719.36
67.5	995.53	976.80	952.80	932.91	911.84	884.33	862.68	834.00	810.60
90.0	1032.34	1014.90	992.66	973.70	953.16	925.77	901.95	876.43	849.22
112.5	1071.61	1054.63	1031.81	1011.91	992.01	964.51	941.10	916.52	889.60
135.0	999.21	971.59	948.77	924.25	893.17	867.07	841.20	814.98	781.86
157.5	959.24	931.74	903.65	868.53	841.03	811.77	771.39	734.52	694.72
180.0	932.91	905.99	875.56	834.59	800.06	762.02	708.18	656.68	582.36
202.5	915.70	878.89	849.34	817.50	783.56	736.92	694.43	645.09	589.50
225.0	993.77	970.95	936.42	908.91	882.58	856.83	823.47	796.55	767.29
247.5	1013.08	991.20	968.02	943.85	918.98	886.21	859.64	824.52	795.85
270.0	1056.39	1038.83	1014.84	993.77	972.12	948.12	917.11	887.84	856.24
292.5	974.11	953.57	931.39	908.91	878.83	854.02	820.72	793.16	765.01
315.0	938.76	917.69	896.04	867.36	846.88	824.64	802.40	774.31	751.49
337.5	859.52	839.27	817.91	790.17	766.53	741.83	710.17	683.02	647.61
360.0	835.64	811.06	786.07	755.00	728.25	698.70	665.23	615.89	567.96

Intensity data(cd)

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	497.15	436.52	359.91	300.81	246.96	200.85	163.04	128.22	109.09
22.5	628.00	571.82	518.57	462.39	403.86	330.13	302.62	302.62	180.48
45.0	688.75	663.41	636.84	608.46	567.55	530.56	488.60	442.61	380.45
67.5	786.02	756.17	731.00	706.43	680.09	653.75	618.64	588.79	556.02
90.0	811.30	778.17	743.70	706.19	654.28	608.28	544.73	488.90	429.38
112.5	853.90	824.64	793.62	762.61	720.47	684.19	645.56	593.48	546.66
135.0	755.53	727.79	699.46	661.30	628.12	592.25	542.91	498.96	439.91
157.5	632.69	577.68	503.94	443.66	383.97	326.03	298.52	298.52	179.37
180.0	516.23	451.27	386.31	309.06	309.06	241.17	176.15	144.26	127.81
202.5	513.13	448.57	383.91	308.94	256.56	203.48	171.35	146.95	123.89
225.0	730.42	699.40	664.29	614.54	571.24	512.13	461.80	407.96	354.70
247.5	766.70	727.90	695.72	662.36	619.34	581.83	542.04	500.19	443.78
270.0	822.30	776.65	736.27	692.38	632.69	582.94	530.27	459.46	403.86
292.5	728.25	696.89	663.06	627.83	579.08	536.01	490.54	442.72	380.45
315.0	728.08	705.84	677.16	652.58	628.59	596.99	572.99	544.32	507.45
337.5	616.36	579.37	535.36	472.80	418.32	362.61	308.24	245.56	201.61
360.0	497.15	436.52	359.91	300.81	246.96	200.85	163.04	128.22	109.09
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	95.04	83.92	71.75	62.79	54.72	44.65	36.93	27.74	21.01
22.5	140.51	117.86	97.62	85.38	72.92	64.08	55.89	47.99	40.44
45.0	331.12	271.43	226.01	185.52	144.49	118.16	97.26	81.00	65.60
67.5	519.15	468.82	423.18	362.31	311.98	299.69	242.63	167.78	136.36
90.0	355.23	299.58	247.96	204.48	163.92	140.63	123.42	110.08	95.98
112.5	481.70	426.10	368.17	298.52	298.52	238.01	166.44	133.31	114.41
135.0	391.81	343.47	295.42	238.25	197.05	160.94	129.57	98.73	79.94
157.5	152.10	126.82	111.31	98.38	87.14	74.56	65.25	56.42	46.17
180.0	112.66	99.66	85.85	75.38	65.49	53.37	44.48	33.94	26.69
202.5	109.73	97.85	86.79	76.49	64.20	55.01	46.35	35.93	28.44
225.0	304.38	304.38	200.50	166.38	132.38	111.31	94.69	81.46	68.00
247.5	395.61	346.28	296.77	238.01	195.47	159.12	124.59	104.35	86.03
270.0	347.10	306.72	306.72	193.07	163.63	137.47	122.60	110.90	97.79
292.5	330.07	281.03	225.19	186.92	155.96	128.05	112.48	97.67	87.73
315.0	473.51	426.10	383.97	338.90	303.21	303.21	181.89	143.56	111.54
337.5	164.57	134.72	107.80	92.29	80.23	68.12	59.46	49.63	42.25
360.0	95.04	83.92	71.75	62.79	54.72	44.65	36.93	27.74	21.01
C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	15.33	11.88	10.77	9.95	9.31	8.60	8.13	7.72	7.37
22.5	31.72	24.93	18.67	13.69	11.00	10.01	9.25	8.54	8.08
45.0	55.95	47.58	40.20	32.19	26.39	21.19	15.63	12.17	9.60
67.5	107.33	90.42	77.66	67.24	58.11	47.29	39.09	31.60	23.88
90.0	85.15	74.38	61.16	50.97	41.08	30.43	24.40	18.26	12.35
112.5	100.19	88.60	75.73	65.95	56.36	44.54	35.64	28.09	21.54
135.0	65.66	52.32	43.89	36.99	29.67	24.81	20.66	16.15	13.05
157.5	38.33	30.96	22.94	17.91	14.57	11.82	10.48	9.54	8.90
180.0	21.07	17.26	14.10	12.41	11.24	10.36	9.54	8.90	8.37
202.5	22.18	16.80	14.22	11.82	10.65	9.83	9.19	8.43	8.02
225.0	58.82	50.39	40.73	33.71	27.45	20.60	16.15	12.87	10.07
247.5	74.79	65.43	54.89	46.94	39.44	32.42	26.04	19.25	15.10
270.0	87.78	77.89	67.94	55.48	45.71	36.87	28.03	22.88	14.10
292.5	78.48	69.93	59.46	51.15	42.96	35.17	26.86	22.12	16.56
315.0	81.52	64.49	52.38	43.25	34.82	29.44	23.76	19.66	16.04
337.5	35.29	28.85	21.19	15.68	11.53	9.77	8.72	8.13	7.67
360.0	15.33	11.88	10.77	9.95	9.31	8.60	8.13	7.72	7.37

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	6.96	6.67	6.44	6.20	6.03	5.85	5.68	5.50	5.33
22.5	7.49	7.20	6.91	6.55	6.32	6.09	5.91	5.74	5.56
45.0	7.90	7.32	6.96	6.50	6.20	5.97	5.79	5.56	5.38
67.5	18.38	14.16	10.48	8.25	6.73	6.20	5.91	5.68	5.44
90.0	8.95	7.55	6.85	6.38	6.09	5.79	5.56	5.33	5.27
112.5	17.67	12.99	8.78	7.37	6.73	6.32	5.97	5.74	5.56
135.0	10.42	8.43	7.08	6.55	6.20	5.97	5.74	5.50	5.38
157.5	8.19	7.67	7.26	6.91	6.61	6.38	6.09	5.85	5.68
180.0	7.84	7.49	7.14	6.73	6.50	6.26	6.09	5.85	5.74
202.5	7.55	7.20	6.79	6.55	6.32	6.03	5.85	5.74	5.56
225.0	8.72	7.90	7.37	6.85	6.50	6.26	6.03	5.79	5.62
247.5	11.88	9.36	7.26	6.55	6.09	5.85	5.62	5.38	5.27
270.0	9.71	7.90	7.08	6.50	6.20	5.91	5.68	5.50	5.33
292.5	10.83	7.67	6.79	6.26	5.97	5.79	5.56	5.44	5.27
315.0	12.35	9.89	7.96	6.73	6.20	5.91	5.74	5.56	5.38
337.5	7.14	6.79	6.55	6.26	6.03	5.85	5.68	5.50	5.33
360.0	6.96	6.67	6.44	6.20	6.03	5.85	5.68	5.50	5.33
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	5.27	5.15	5.03	4.97	4.86	4.80	4.74	4.68	4.62
22.5	5.38	5.27	5.15	5.09	5.03	4.92	4.86	4.80	4.68
45.0	5.27	5.09	4.97	4.92	4.80	4.68	4.68	4.62	4.56
67.5	5.33	5.15	5.03	4.92	4.80	4.74	4.68	4.62	4.56
90.0	5.09	4.97	4.92	4.86	4.80	4.74	4.68	4.62	4.56
112.5	5.33	5.21	5.09	5.03	4.92	4.86	4.80	4.68	4.62
135.0	5.21	5.09	4.97	4.92	4.80	4.74	4.68	4.62	4.56
157.5	5.50	5.33	5.21	5.09	4.92	4.86	4.80	4.68	4.62
180.0	5.56	5.38	5.27	5.15	5.03	4.92	4.92	4.86	4.74
202.5	5.38	5.27	5.15	5.09	5.03	4.92	4.80	4.74	4.74
225.0	5.44	5.27	5.15	5.03	4.92	4.86	4.74	4.68	4.62
247.5	5.15	4.97	4.92	4.86	4.74	4.74	4.68	4.62	4.56
270.0	5.21	5.09	4.92	4.86	4.74	4.68	4.62	4.56	4.56
292.5	5.21	5.09	5.03	4.97	4.92	4.80	4.74	4.68	4.56
315.0	5.27	5.15	5.03	4.92	4.86	4.74	4.68	4.62	4.56
337.5	5.27	5.09	4.97	4.92	4.80	4.68	4.62	4.56	4.56
360.0	5.27	5.15	5.03	4.97	4.86	4.80	4.74	4.68	4.62
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	4.56	4.51	4.51	4.45	4.45	4.39	4.39	4.33	4.33
22.5	4.62	4.56	4.51	4.51	4.45	4.45	4.39	4.39	4.33
45.0	4.51	4.45	4.45	4.39	4.39	4.33	4.27	4.27	4.21
67.5	4.51	4.45	4.45	4.39	4.39	4.33	4.27	4.21	4.16
90.0	4.56	4.45	4.39	4.33	4.27	4.10	3.98	3.92	3.86
112.5	4.62	4.56	4.51	4.45	4.39	4.39	4.33	4.27	4.16
135.0	4.56	4.51	4.51	4.45	4.45	4.33	4.39	4.21	4.16
157.5	4.62	4.56	4.51	4.45	4.39	4.39	4.33	4.33	4.27
180.0	4.68	4.62	4.56	4.56	4.51	4.45	4.45	4.45	4.39
202.5	4.62	4.56	4.56	4.51	4.45	4.45	4.39	4.39	4.33
225.0	4.56	4.56	4.56	4.51	4.51	4.39	4.39	4.33	4.27
247.5	4.56	4.51	4.45	4.39	4.33	4.27	4.21	4.16	4.04
270.0	4.51	4.51	4.45	4.39	4.33	4.21	4.16	4.04	3.98
292.5	4.45	4.39	4.33	4.33	4.27	4.16	4.16	4.10	4.04
315.0	4.56	4.56	4.51	4.51	4.45	4.45	4.39	4.33	4.27
337.5	4.51	4.45	4.39	4.39	4.33	4.33	4.27	4.21	4.21
360.0	4.56	4.51	4.51	4.45	4.45	4.39	4.39	4.33	4.33

Intensity data(cd)

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	4.33	4.27	4.27	4.27	4.21	4.16	4.10	4.10	4.10
22.5	4.33	4.27	4.27	4.21	4.21	4.16	4.04	4.04	4.16
45.0	4.16	4.16	4.10	4.10	4.04	3.98	4.21	4.27	4.27
67.5	4.16	4.04	4.04	3.98	3.86	3.92	3.98	4.16	4.16
90.0	3.86	3.80	3.80	3.80	3.92	4.16	4.27	4.33	4.21
112.5	4.16	4.10	3.98	3.86	3.86	3.98	4.16	4.27	4.33
135.0	4.16	4.10	4.04	4.04	3.98	3.98	4.16	4.27	4.21
157.5	4.27	4.16	4.16	4.16	4.10	4.10	4.04	4.10	4.16
180.0	4.39	4.33	4.33	4.27	4.21	4.21	4.21	4.10	4.04
202.5	4.33	4.27	4.21	4.21	4.16	4.16	4.04	4.21	4.33
225.0	4.21	4.16	4.16	4.10	4.04	4.04	4.16	4.51	4.68
247.5	4.04	3.98	3.98	3.86	3.92	4.04	4.56	4.51	4.33
270.0	3.92	3.80	3.80	3.80	3.80	3.86	4.45	4.56	4.45
292.5	4.04	3.98	3.86	3.86	3.92	4.10	4.68	4.62	4.33
315.0	4.16	4.16	4.10	4.04	3.98	3.98	4.27	4.68	4.62
337.5	4.21	4.16	4.10	4.10	4.10	4.04	4.16	4.45	4.51
360.0	4.33	4.27	4.27	4.27	4.21	4.16	4.10	4.10	4.10

C/γ(°)	90.0
0.0	4.04
22.5	4.16
45.0	4.27
67.5	4.10
90.0	4.16
112.5	4.21
135.0	4.16
157.5	4.21
180.0	4.04
202.5	4.33
225.0	4.56
247.5	4.39
270.0	4.27
292.5	4.45
315.0	4.51
337.5	4.33
360.0	4.04