



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

NT

Client: NT

LumCAT: 61-0208-1

Luminaire: 92.70.427.00

Report No: 20250519-B005

Ballast type: AC

Test No: 20250519-C005

Voltage(V): 36.790

LampCAT: CITIZEN CLU701

Current(A): 0.352

Lamp flux(lm): 1347.9

Power (W): 12.950

Number of Lamps: 1

PF: 0.000

Length(mm): 45

Width(mm): 45

Phm Type: C

Height(mm): 21

Photometric Results

Lumens(lm): 1212.63, Efficiency(%): 89.96% , Luminous Efficacy(lm/W): 93.64

Central intensity(cd): 10153.900, Maximum intensity(cd): 10153.900

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=18.0

[C90/270]Total=18.0

Field angle(10%Imax): [C0/180]Total=31.0

[C90/270]Total=31.0

Maximum s/h(1/2): C0_180=0.31 C90_270=0.31

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(%): 89.96%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.505%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	10153.903	0.000	0	0.00%	0.00%
1.0	10092.753	9.688	9.688	0.72%	0.80%
2.0	9824.504	28.587	38.275	2.12%	3.16%
3.0	9472.724	46.153	84.427	3.42%	6.96%
4.0	8967.401	61.725	146.152	4.58%	12.05%
5.0	8325.257	74.392	220.545	5.52%	18.19%
6.0	7587.923	83.628	304.173	6.20%	25.08%
7.0	6780.313	89.183	393.356	6.62%	32.44%
8.0	5930.471	90.969	484.325	6.75%	39.94%
9.0	5068.305	89.139	573.464	6.61%	47.29%
10.0	4232.518	84.169	657.633	6.24%	54.23%
11.0	3455.550	76.820	734.452	5.70%	60.57%
12.0	2693.770	67.221	801.673	4.99%	66.11%
13.0	2095.110	56.832	858.505	4.22%	70.80%
14.0	1616.379	47.507	906.012	3.52%	74.71%
15.0	1151.384	37.997	944.009	2.82%	77.85%
16.0	897.637	30.024	974.033	2.23%	80.32%
17.0	661.189	24.275	998.308	1.80%	82.33%
18.0	483.434	18.872	1017.18	1.40%	83.88%
19.0	359.148	14.659	1031.839	1.09%	85.09%
20.0	279.699	11.693	1043.532	0.87%	86.05%
21.0	204.047	9.289	1052.821	0.69%	86.82%
22.0	181.852	7.755	1060.576	0.58%	87.46%
23.0	150.611	6.976	1067.552	0.52%	88.04%
24.0	120.395	5.925	1073.477	0.44%	88.52%
25.0	107.499	5.182	1078.659	0.38%	88.95%
26.0	97.587	4.841	1083.5	0.36%	89.35%
27.0	89.720	4.583	1088.082	0.34%	89.73%
28.0	82.706	4.365	1092.448	0.32%	90.09%
29.0	76.451	4.164	1096.612	0.31%	90.43%
30.0	70.703	3.973	1100.585	0.29%	90.76%
31.0	65.374	3.787	1104.372	0.28%	91.07%
32.0	60.584	3.609	1107.98	0.27%	91.37%
33.0	55.701	3.426	1111.406	0.25%	91.65%
34.0	51.731	3.251	1114.657	0.24%	91.92%
35.0	47.854	3.093	1117.75	0.23%	92.18%
36.0	44.730	2.948	1120.698	0.22%	92.42%
37.0	41.846	2.824	1123.522	0.21%	92.65%

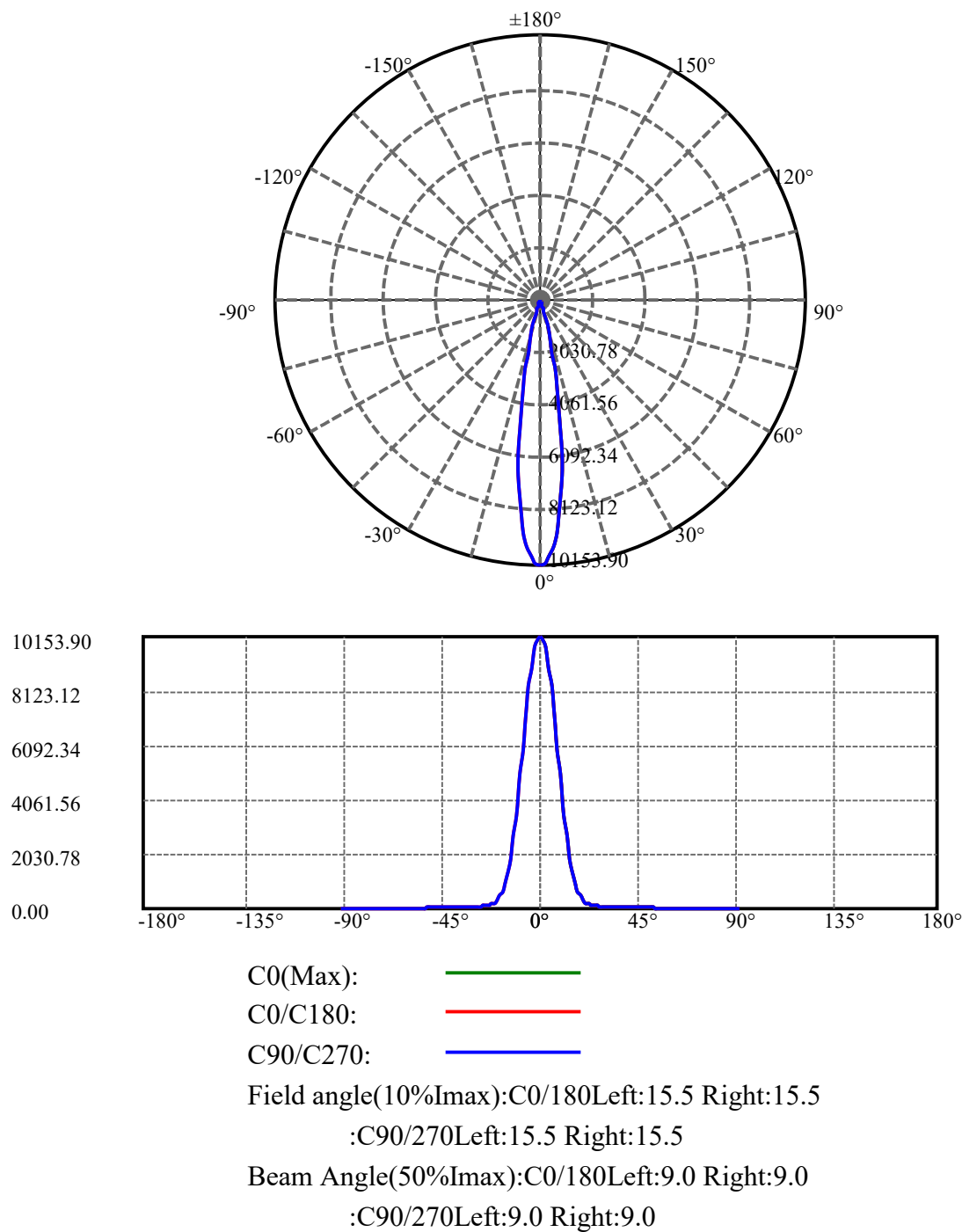
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	39.288	2.708	1126.23	0.20%	92.87%
39.0	37.729	2.629	1128.859	0.20%	93.09%
40.0	36.097	2.575	1131.433	0.19%	93.30%
41.0	35.078	2.535	1133.968	0.19%	93.51%
42.0	34.259	2.519	1136.487	0.19%	93.72%
43.0	33.726	2.518	1139.005	0.19%	93.93%
44.0	33.340	2.531	1141.537	0.19%	94.14%
45.0	33.113	2.554	1144.091	0.19%	94.35%
46.0	32.947	2.583	1146.674	0.19%	94.56%
47.0	32.853	2.617	1149.291	0.19%	94.78%
48.0	32.747	2.652	1151.943	0.20%	95.00%
49.0	32.514	2.680	1154.623	0.20%	95.22%
50.0	32.180	2.697	1157.32	0.20%	95.44%
51.0	31.721	2.704	1160.024	0.20%	95.66%
52.0	31.108	2.696	1162.72	0.20%	95.88%
53.0	30.315	2.672	1165.392	0.20%	96.10%
54.0	29.403	2.632	1168.024	0.20%	96.32%
55.0	28.444	2.582	1170.606	0.19%	96.53%
56.0	27.304	2.519	1173.125	0.19%	96.74%
57.0	26.139	2.444	1175.569	0.18%	96.94%
58.0	24.913	2.361	1177.929	0.18%	97.14%
59.0	23.614	2.269	1180.198	0.17%	97.33%
60.0	22.455	2.176	1182.375	0.16%	97.50%
61.0	21.183	2.082	1184.457	0.15%	97.68%
62.0	19.797	1.975	1186.432	0.15%	97.84%
63.0	18.711	1.873	1188.305	0.14%	97.99%
64.0	17.466	1.775	1190.08	0.13%	98.14%
65.0	16.453	1.679	1191.758	0.12%	98.28%
66.0	15.394	1.589	1193.347	0.12%	98.41%
67.0	14.415	1.499	1194.846	0.11%	98.53%
68.0	13.496	1.414	1196.26	0.10%	98.65%
69.0	12.610	1.332	1197.592	0.10%	98.76%
70.0	11.790	1.253	1198.845	0.09%	98.86%
71.0	11.024	1.179	1200.024	0.09%	98.96%
72.0	10.312	1.109	1201.134	0.08%	99.05%
73.0	9.639	1.043	1202.177	0.08%	99.14%
74.0	9.019	0.981	1203.158	0.07%	99.22%
75.0	8.420	0.921	1204.079	0.07%	99.29%

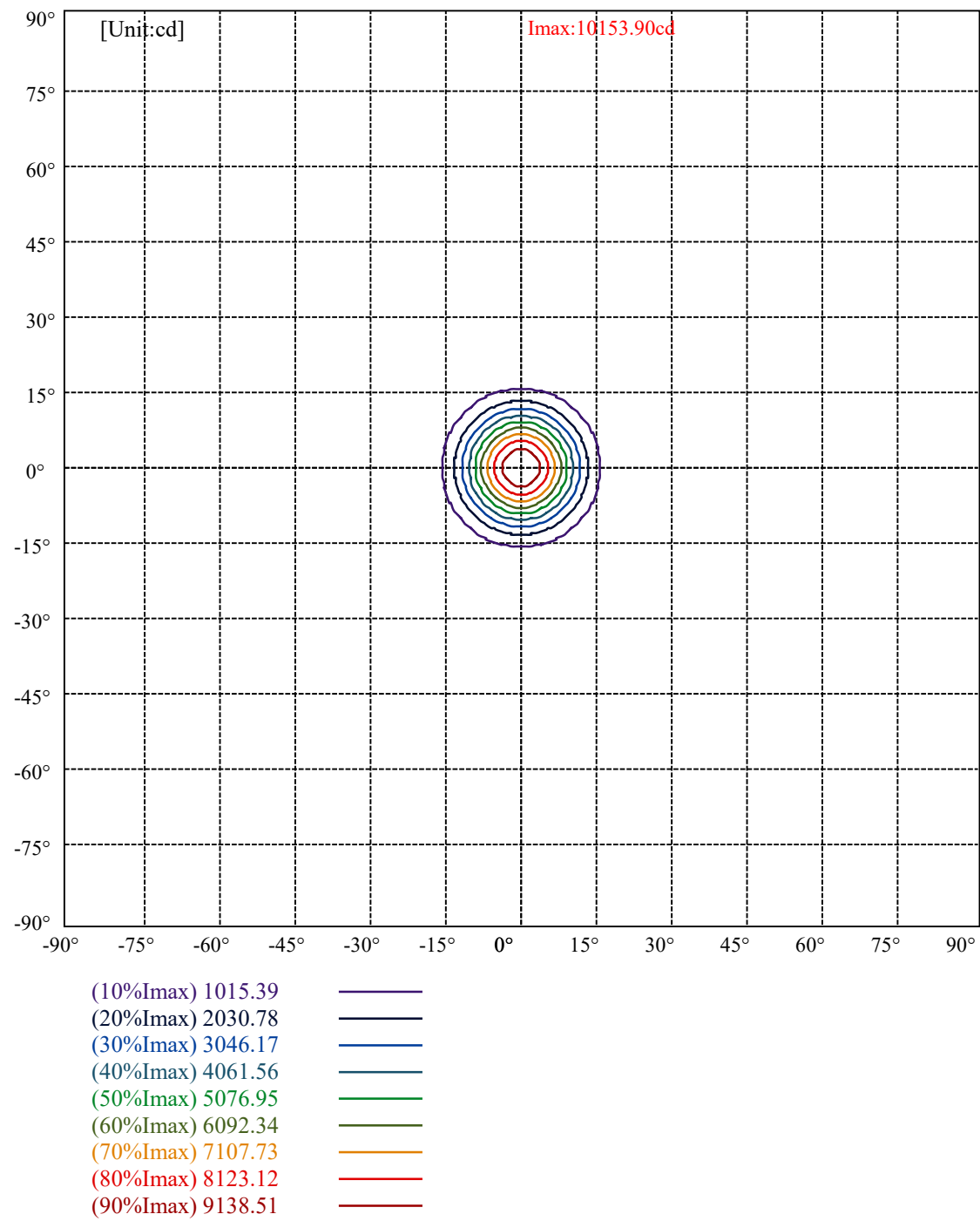
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.854	0.864	1204.943	0.06%	99.37%
77.0	7.341	0.810	1205.753	0.06%	99.43%
78.0	6.808	0.757	1206.511	0.06%	99.50%
79.0	6.308	0.705	1207.215	0.05%	99.55%
80.0	5.855	0.656	1207.871	0.05%	99.61%
81.0	5.449	0.611	1208.482	0.05%	99.66%
82.0	5.076	0.571	1209.053	0.04%	99.70%
83.0	4.710	0.532	1209.585	0.04%	99.75%
84.0	4.470	0.500	1210.085	0.04%	99.79%
85.0	4.237	0.475	1210.56	0.04%	99.83%
86.0	4.003	0.450	1211.011	0.03%	99.87%
87.0	3.850	0.430	1211.441	0.03%	99.90%
88.0	3.690	0.413	1211.854	0.03%	99.94%
89.0	3.550	0.397	1212.251	0.03%	99.97%
90.0	3.451	0.384	1212.634	0.03%	100.00%

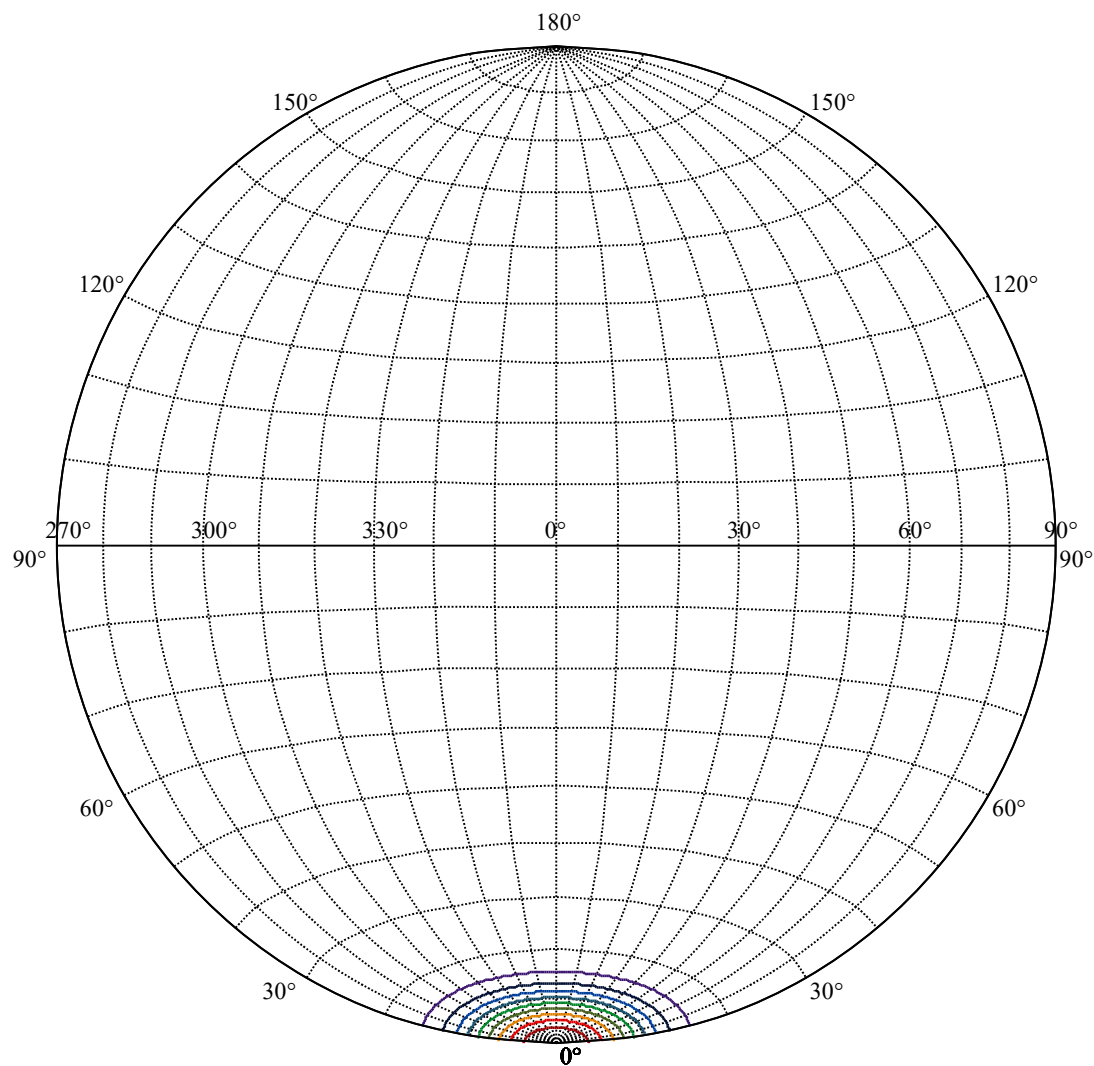
ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	1100.59	81.65%	90.76%
0-40	1131.43	83.94%	93.30%
0-60	1182.37	87.72%	97.50%
0-90	1212.25	89.94%	99.97%
0-120	1212.25	89.94%	99.97%
0-180	1212.63	89.96%	100.00%
60-90	29.88	2.22%	2.46%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-15.87	970.11	71.97%	80.00%

ZONAL LUMEN SUMMARY

0-10	657.63
10-20	385.90
20-30	57.05
30-40	30.85
40-50	25.89
50-60	25.05
60-70	16.47
70-80	9.03
80-90	4.38
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





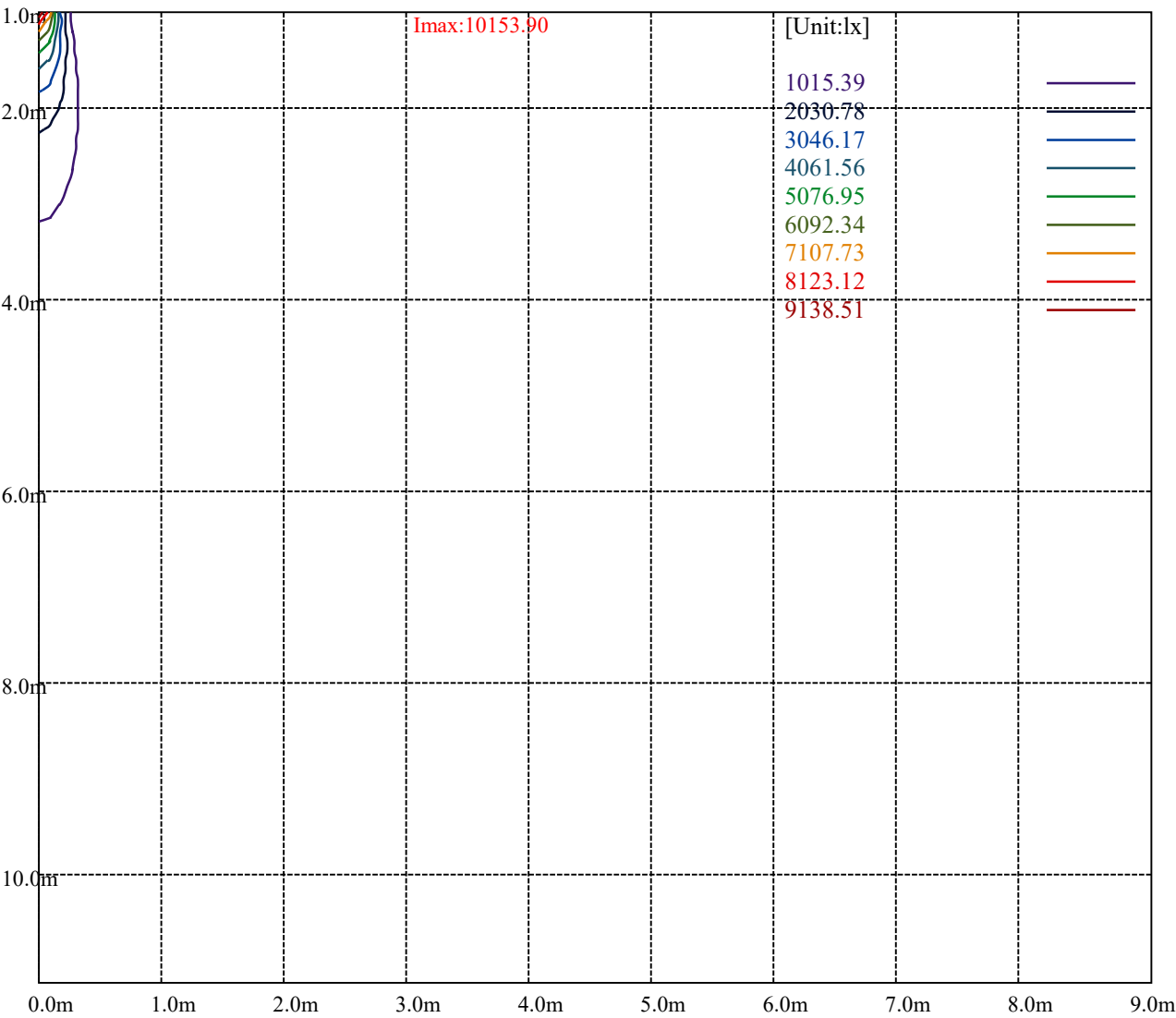


House

[Unit:cd]

Road

Imax:10153.90	
(10%Imax)	1015.39
(20%Imax)	2030.78
(30%Imax)	3046.17
(40%Imax)	4061.56
(50%Imax)	5076.95
(60%Imax)	6092.34
(70%Imax)	7107.73
(80%Imax)	8123.12
(90%Imax)	9138.51



Luminance Table

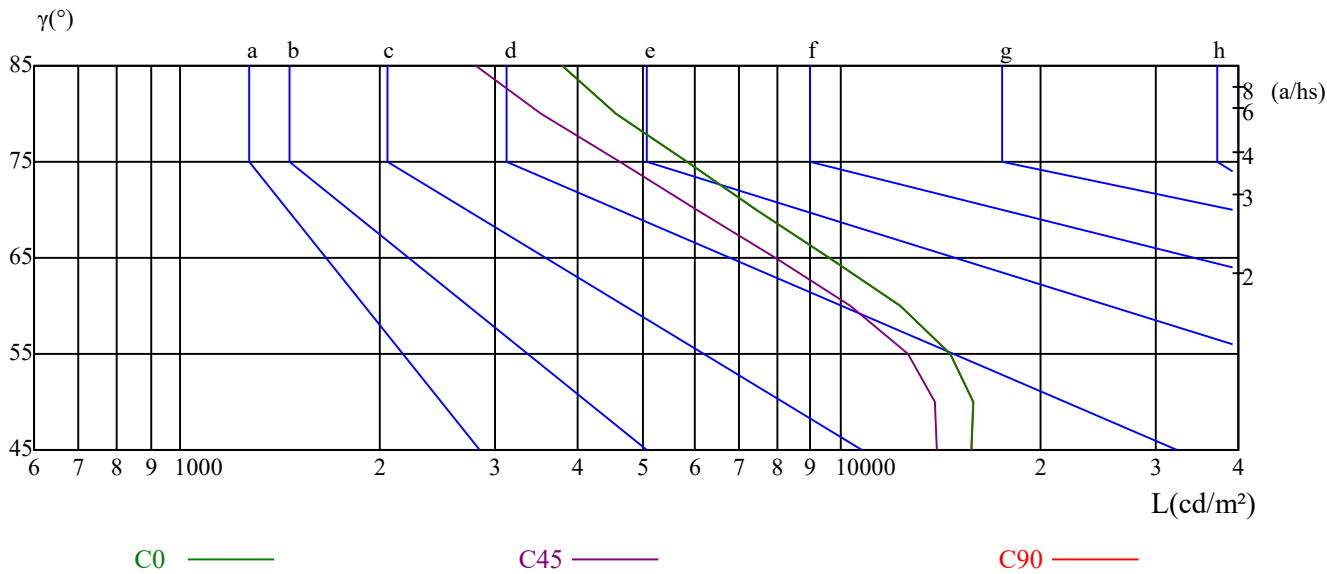
γ	45	50	55	60	65	70	75	80	85
C0	15767	15887	14695	12265	9609	7459	5860	4566	3790
C45	13931	13839	12607	10349	7960	6051	4639	3511	2810
C90	15767	15887	14695	12265	9609	7459	5860	4566	3790

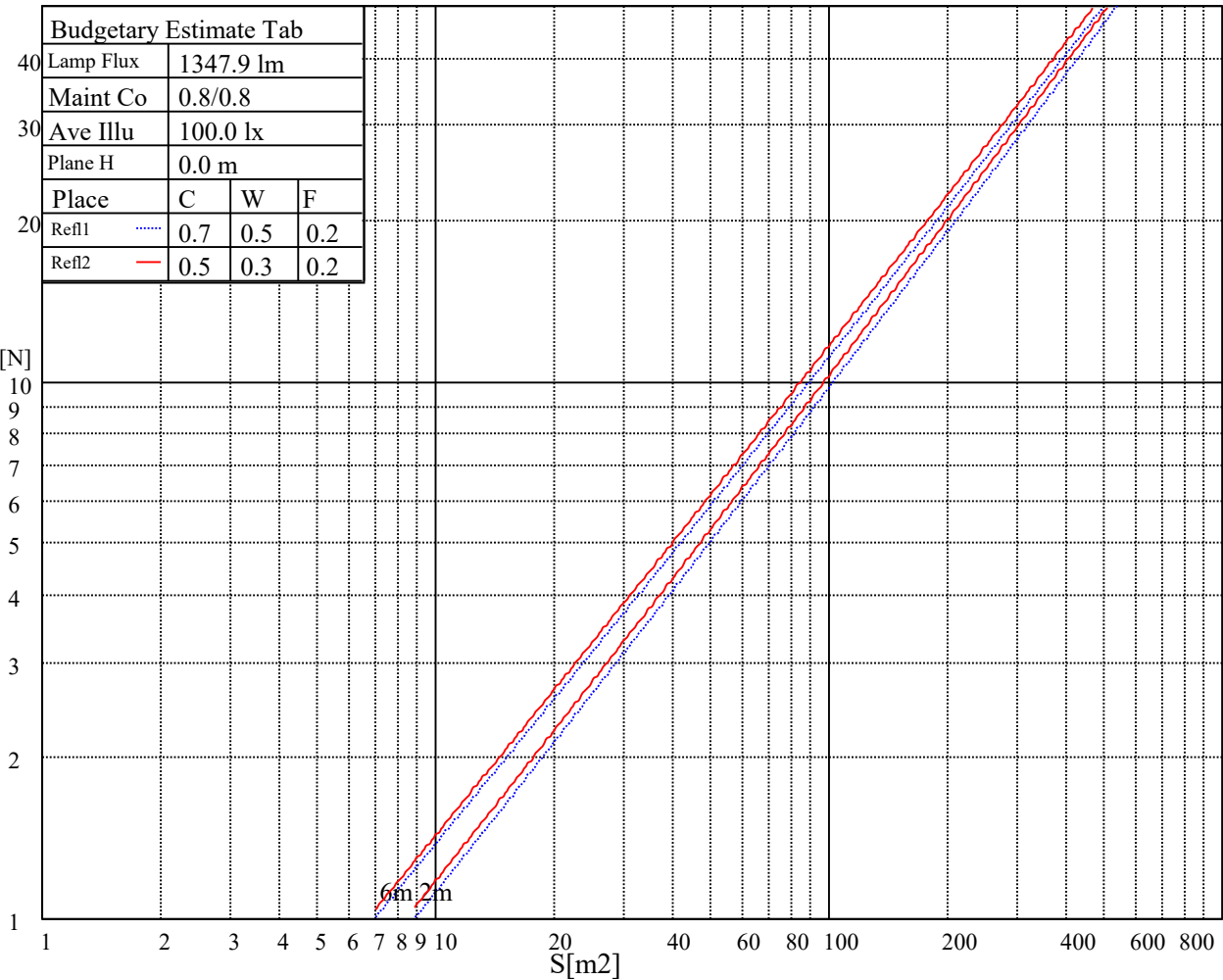
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
19226	19226	19226	16065	16065	16065	24004	24004	24004

Glare Table

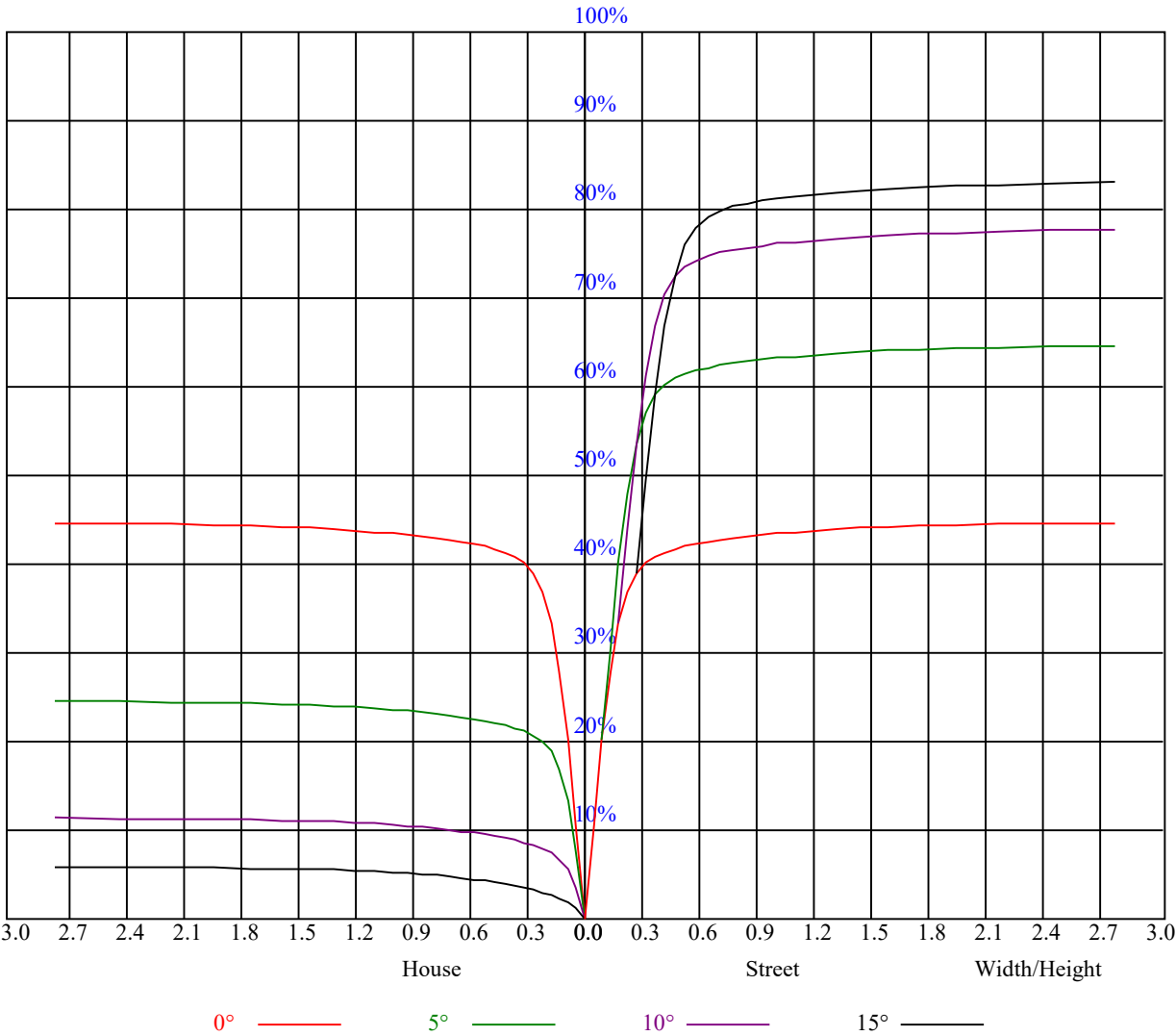
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

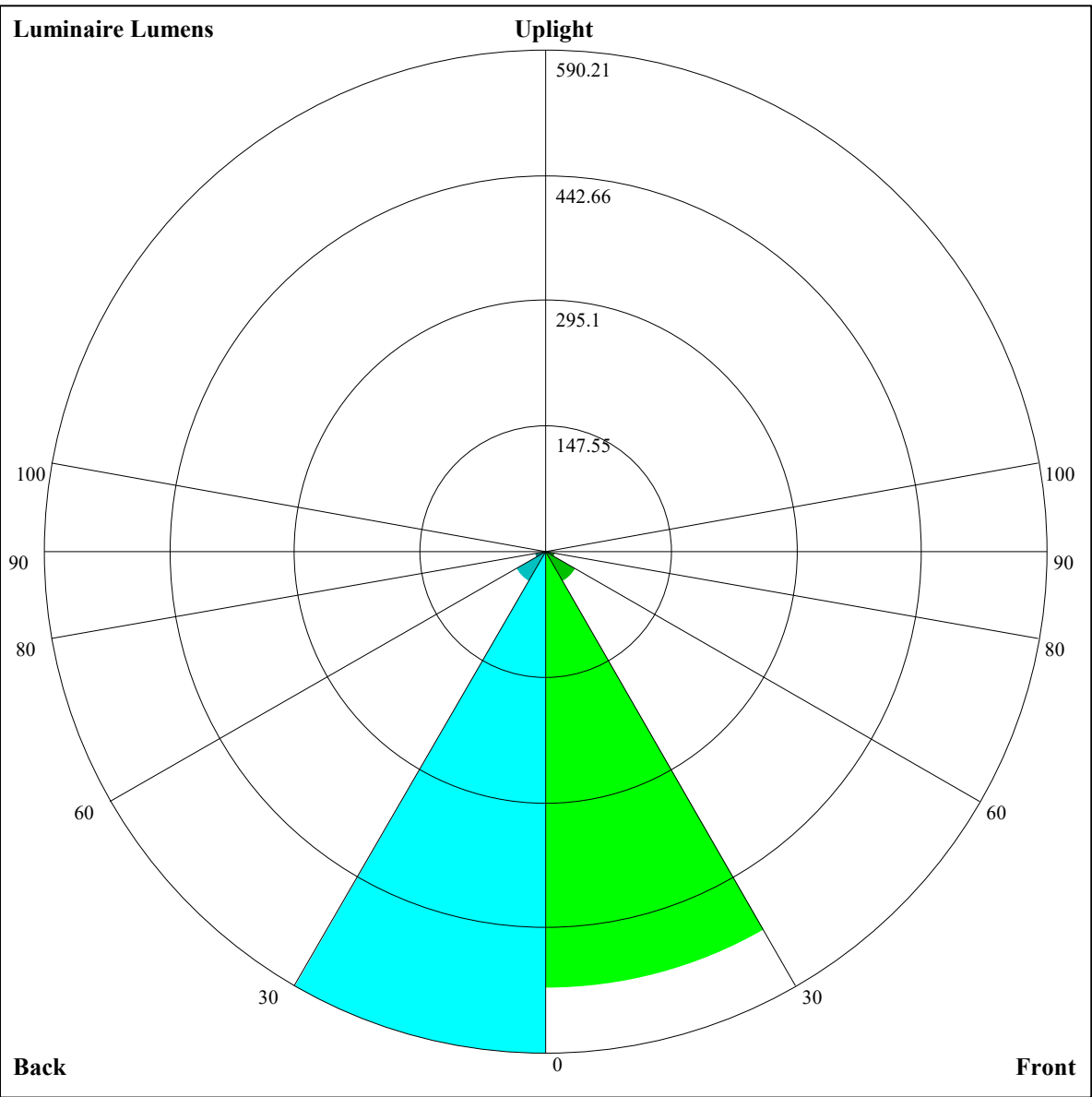
Luminance Limiting Curve





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	COEFFCIENTS OF UTILIZATION RHOFC=20 CU															
0	1.07	1.07	1.07	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.01	1.00	0.98	1.00	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87
2	0.97	0.94	0.92	0.95	0.93	0.91	0.93	0.91	0.89	0.90	0.88	0.87	0.88	0.86	0.85	0.84
3	0.93	0.90	0.87	0.92	0.89	0.87	0.90	0.87	0.85	0.88	0.86	0.84	0.86	0.84	0.83	0.82
4	0.90	0.86	0.84	0.89	0.86	0.83	0.87	0.85	0.82	0.86	0.83	0.82	0.84	0.82	0.81	0.80
5	0.87	0.84	0.81	0.86	0.83	0.81	0.85	0.82	0.80	0.84	0.81	0.79	0.82	0.80	0.79	0.78
6	0.85	0.81	0.79	0.84	0.81	0.78	0.83	0.80	0.78	0.82	0.79	0.78	0.81	0.79	0.77	0.76
7	0.83	0.79	0.77	0.82	0.79	0.77	0.81	0.78	0.76	0.80	0.78	0.76	0.79	0.77	0.76	0.75
8	0.81	0.77	0.75	0.80	0.77	0.75	0.80	0.77	0.75	0.79	0.76	0.74	0.78	0.76	0.74	0.73
9	0.79	0.76	0.74	0.79	0.76	0.74	0.78	0.75	0.73	0.77	0.75	0.73	0.77	0.75	0.73	0.72
10	0.78	0.74	0.72	0.77	0.74	0.72	0.77	0.74	0.72	0.76	0.74	0.72	0.76	0.73	0.72	0.71





Luminaire Lumens:

FL=514.29,FM=40.31,FH=12.46,FVH=2.33

BL=590.21,BM=41.46,BH=13.01,BVH=2.44

UL=0,UH=0

BUG Rating:B2-U0-G0

Intensity data(cd)

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C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	10086.89	9789.00	9139.39	8779.69	8093.31	7311.01	6456.78	5565.77	4668.36
45.0	10237.17	10089.02	9719.72	9209.20	8583.58	7843.38	7024.85	6138.63	5218.85
90.0	9962.73	9619.00	8942.75	8422.11	7640.88	6799.43	5889.77	4975.31	4083.77
135.0	10328.83	10203.06	10037.86	9423.96	9077.05	8414.12	7643.54	6806.89	5919.61
180.0	10086.89	10200.40	10231.31	10076.77	9731.45	9244.91	8634.74	7923.85	7130.89
225.0	10237.17	10303.25	10106.61	9909.44	9446.35	8892.66	8235.06	7483.14	6667.27
270.0	9962.73	10249.43	10348.54	10254.22	9974.45	9540.14	8987.52	8342.71	7612.64
315.0	10328.83	10288.86	10069.84	9706.40	9192.15	8556.40	7831.13	7006.20	6142.37
360.0	10086.89	9789.00	9139.39	8779.69	8093.31	7311.01	6456.78	5565.77	4668.36
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3811.99	3038.22	2377.96	1818.95	1002.97	1002.97	764.60	500.39	376.33
45.0	4315.58	3490.12	2758.98	2132.83	1606.32	1177.34	843.21	594.34	419.02
90.0	3273.23	2567.14	1972.42	952.99	952.99	775.64	627.17	379.11	308.39
135.0	5000.89	4142.39	3346.77	2642.81	2037.44	1527.98	1116.59	800.04	562.37
180.0	6283.05	5396.84	4518.09	3696.35	2951.89	2309.22	1764.06	1316.42	958.85
225.0	5797.05	4907.10	4061.39	3282.82	2602.31	2019.85	1007.82	1007.82	774.46
270.0	6811.15	5928.67	5037.66	4183.42	3393.67	2695.57	2100.32	1595.66	1186.40
315.0	5253.49	4389.66	3571.12	2839.98	2213.29	1422.47	987.30	987.30	703.69
360.0	3811.99	3038.22	2377.96	1818.95	1002.97	1002.97	764.60	500.39	376.33
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	267.41	188.59	157.42	132.11	115.16	103.49	94.54	87.40	81.37
45.0	300.18	265.01	265.01	150.49	129.44	115.53	105.57	97.41	90.65
90.0	228.99	179.91	149.32	129.17	115.69	105.19	96.99	90.33	83.93
135.0	392.37	298.05	298.05	161.79	146.71	127.90	114.09	104.40	95.76
180.0	683.34	482.43	340.15	298.05	298.05	162.53	138.66	122.46	109.56
225.0	634.26	401.33	333.49	251.32	197.01	160.56	136.26	119.48	107.70
270.0	865.06	707.85	440.87	317.24	297.52	297.52	160.51	133.60	116.39
315.0	495.86	350.01	253.29	192.22	155.23	132.16	116.55	104.93	95.34
360.0	267.41	188.59	157.42	132.11	115.16	103.49	94.54	87.40	81.37
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	75.94	70.82	66.24	61.82	57.50	53.34	49.77	46.36	43.70
45.0	84.84	78.34	72.90	67.94	62.67	58.14	53.72	51.37	46.15
90.0	77.86	72.37	67.25	62.19	57.61	53.34	49.35	45.62	42.58
135.0	88.67	82.12	75.99	70.08	64.80	59.79	54.84	50.52	46.52
180.0	100.13	92.14	85.00	78.50	72.69	67.04	61.82	57.07	52.38
225.0	98.27	90.01	82.76	76.04	70.08	64.53	59.21	54.62	50.20
270.0	104.02	94.11	86.17	79.40	72.90	66.93	61.87	57.39	52.92
315.0	88.04	81.75	75.30	69.65	64.75	61.55	55.05	50.89	48.39
360.0	75.94	70.82	66.24	61.82	57.50	53.34	49.77	46.36	43.70
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	41.09	38.95	37.25	36.50	35.12	34.69	34.11	33.79	33.52
45.0	43.16	41.41	38.48	37.46	36.18	35.33	34.64	34.21	33.84
90.0	40.23	38.42	36.93	35.97	34.96	34.37	33.95	33.63	33.36
135.0	43.16	40.50	39.06	36.40	35.12	34.59	33.57	33.25	32.88
180.0	48.12	45.88	41.51	39.91	37.89	35.81	35.06	34.16	33.63
225.0	47.85	43.01	40.23	38.90	36.29	35.60	34.64	34.00	33.63
270.0	49.45	44.87	41.73	39.54	37.52	35.76	34.43	33.57	32.99
315.0	44.76	41.73	39.11	37.14	35.70	34.48	33.68	33.20	32.88
360.0	41.09	38.95	37.25	36.50	35.12	34.69	34.11	33.79	33.52

Intensity data(cd)

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C/ γ (°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	33.25	33.09	32.88	32.67	32.24	31.60	30.91	30.11	29.20
45.0	33.73	33.57	33.31	33.15	32.83	32.35	31.76	31.01	30.06
90.0	33.09	32.72	32.40	32.03	31.60	30.96	30.16	29.31	28.30
135.0	32.72	32.83	32.77	32.77	32.56	32.29	31.87	31.23	30.43
180.0	33.25	32.99	32.93	32.88	32.88	32.77	32.61	32.19	31.55
225.0	33.41	33.31	33.31	33.20	33.04	32.83	32.51	31.92	31.12
270.0	32.72	32.51	32.61	32.67	32.56	32.61	32.45	32.19	31.71
315.0	32.72	32.56	32.61	32.61	32.40	32.03	31.49	30.91	30.16
360.0	33.25	33.09	32.88	32.67	32.24	31.60	30.91	30.11	29.20
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	28.03	26.91	25.69	24.41	23.13	21.85	21.10	19.40	18.23
45.0	29.04	28.35	26.54	25.26	24.41	23.13	21.74	20.41	19.13
90.0	27.18	25.95	24.73	23.39	22.06	20.78	19.50	18.70	17.05
135.0	29.58	28.56	27.50	26.27	24.94	23.71	22.38	21.05	19.98
180.0	30.85	30.00	28.99	27.87	26.91	25.53	24.19	23.13	21.53
225.0	30.27	29.26	28.14	26.91	25.69	24.35	23.29	21.90	20.41
270.0	31.01	30.22	29.26	28.56	26.96	25.69	24.83	23.55	22.12
315.0	29.26	28.30	27.60	26.43	25.21	23.87	22.59	21.32	19.93
360.0	28.03	26.91	25.69	24.41	23.13	21.85	21.10	19.40	18.23
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	17.59	16.15	15.61	14.71	13.86	13.00	12.26	11.56	10.87
45.0	17.91	16.73	15.61	14.71	13.75	12.79	11.94	11.19	10.44
90.0	16.36	15.29	14.34	13.43	12.47	11.72	10.92	10.18	9.49
135.0	18.44	17.16	16.31	15.13	14.12	13.27	12.36	11.51	10.76
180.0	20.52	19.24	18.01	16.84	15.77	14.71	13.75	12.79	11.94
225.0	19.40	18.17	17.05	15.99	15.03	14.07	13.22	12.42	11.67
270.0	20.84	19.56	18.33	17.11	16.04	15.03	13.96	13.06	12.20
315.0	18.65	17.43	16.36	15.24	14.28	13.38	12.47	11.62	10.82
360.0	17.59	16.15	15.61	14.71	13.86	13.00	12.26	11.56	10.87
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	10.34	9.81	9.17	8.53	7.89	7.30	6.71	6.23	5.81
45.0	9.70	9.06	8.47	7.89	7.30	6.82	6.34	5.92	5.44
90.0	8.90	8.31	7.73	7.19	6.77	6.29	5.76	5.38	4.96
135.0	10.07	9.38	8.74	8.10	7.62	7.14	6.61	6.13	5.70
180.0	11.14	10.39	9.70	9.06	8.42	7.89	7.35	6.87	6.39
225.0	10.92	10.23	9.70	9.17	8.63	8.10	7.46	6.87	6.34
270.0	11.30	10.50	9.86	9.17	8.53	7.94	7.46	6.93	6.39
315.0	10.13	9.43	8.79	8.26	7.67	7.25	6.77	6.13	5.81
360.0	10.34	9.81	9.17	8.53	7.89	7.30	6.71	6.23	5.81
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	5.33	5.01	4.69	4.42	4.21	4.00	3.84	3.73	3.62
45.0	4.96	4.64	4.37	4.10	3.89	3.73	3.62	3.36	3.30
90.0	4.64	4.42	4.16	4.00	3.89	3.62	3.57	3.41	3.36
135.0	5.33	4.96	4.69	4.53	4.21	4.00	3.84	3.68	3.52
180.0	5.92	5.54	5.06	4.80	4.48	4.26	4.00	3.89	3.62
225.0	5.92	5.54	5.06	4.85	4.64	4.32	4.16	4.00	3.84
270.0	6.18	5.54	5.01	4.69	4.42	4.16	3.94	3.78	3.62
315.0	5.33	4.96	4.64	4.37	4.16	3.94	3.84	3.68	3.52
360.0	5.33	5.01	4.69	4.42	4.21	4.00	3.84	3.73	3.62

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	3.57
45.0	3.25
90.0	3.36
135.0	3.41
180.0	3.52
225.0	3.68
270.0	3.41
315.0	3.41
360.0	3.57