Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
www.bellingeel.com

Tel:0755-21038430
Address:Rm. 108, No.1 Building, Meibaohe industrial park, No.14 Shilongzi Road, Dalang street, Longhua district, Shenzhen, China

Client:
LumCAT:
Luminaire:
Report No:
Ballast type:
Test No:
LampCAT:
Lamp flux(lm): -1.0
Number of Lamps: 1
Length(mm): 0
Phm Type: C

Voltage(V): 120.11
Current(A): 0.0940
Power (W): 11.07
PF: 0.9756
Width(mm): 0
Height(mm): 0

Photometric Results

Lumens(lm): 739.13, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 66.77
Central intensity(cd): 263.990, Maximum intensity(cd): 269.894
Angle of maximum intensity: C=112.5 γ=5.0
Beam Angle(50%Imax): [C0/180]Total=109.2
[C90/270]Total=113.7
Field angle(10%Imax): [C0/180]Total=156.7
[C90/270]Total=160.5
Maximum s/h(1/2): C0_180=1.24 C90_270=1.30
Maximum s/h(1/4): C0_180=1.36 C90_270=1.41
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 0.00%
Up flux rate of LUM(%): 0.56%
Down flux rate of LUM(%): 99.44%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 79.626%

Zonal flux distribution table

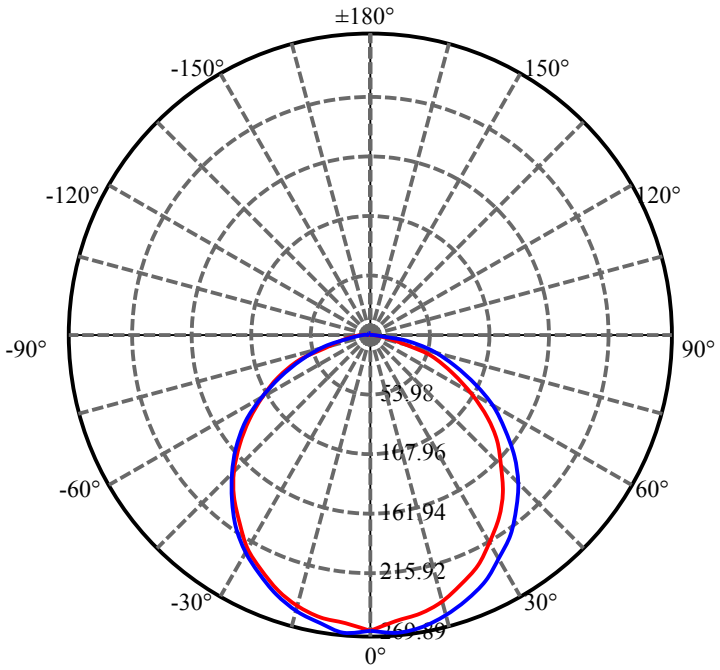
γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	263.990	0.000	0	0.00%	0.00%
5.0	263.068	6.301	6.301	0.00%	0.85%
10.0	259.342	18.688	24.989	0.00%	3.38%
15.0	253.360	30.413	55.402	0.00%	7.50%
20.0	244.977	41.070	96.472	0.00%	13.05%
25.0	234.483	50.286	146.759	0.00%	19.86%
30.0	222.010	57.770	204.528	0.00%	27.67%
35.0	207.718	63.280	267.809	0.00%	36.23%
40.0	191.563	66.617	334.426	0.00%	45.25%
45.0	174.098	67.705	402.131	0.00%	54.41%
50.0	154.886	66.476	468.607	0.00%	63.40%
55.0	134.321	62.883	531.49	0.00%	71.91%
60.0	112.504	57.053	588.543	0.00%	79.63%
65.0	89.727	49.163	637.706	0.00%	86.28%
70.0	66.542	39.568	677.274	0.00%	91.63%
75.0	43.765	28.832	706.106	0.00%	95.53%
80.0	23.301	17.945	724.051	0.00%	97.96%
85.0	7.845	8.463	732.514	0.00%	99.10%
90.0	1.106	2.451	734.965	0.00%	99.44%
95.0	0.495	0.438	735.403	0.00%	99.50%
100.0	0.466	0.261	735.664	0.00%	99.53%
105.0	0.495	0.257	735.922	0.00%	99.57%
110.0	0.510	0.263	736.184	0.00%	99.60%
115.0	0.524	0.262	736.446	0.00%	99.64%
120.0	0.553	0.262	736.708	0.00%	99.67%
125.0	0.655	0.279	736.987	0.00%	99.71%
130.0	0.641	0.282	737.269	0.00%	99.75%
135.0	0.684	0.268	737.536	0.00%	99.78%
140.0	0.801	0.275	737.811	0.00%	99.82%
145.0	0.873	0.279	738.091	0.00%	99.86%
150.0	0.917	0.264	738.354	0.00%	99.89%
155.0	0.931	0.234	738.588	0.00%	99.93%
160.0	0.960	0.198	738.786	0.00%	99.95%
165.0	0.888	0.152	738.939	0.00%	99.97%
170.0	0.888	0.105	739.044	0.00%	99.99%
175.0	0.946	0.066	739.11	0.00%	100.00%
180.0	0.959	0.023	739.132	0.00%	100.00%

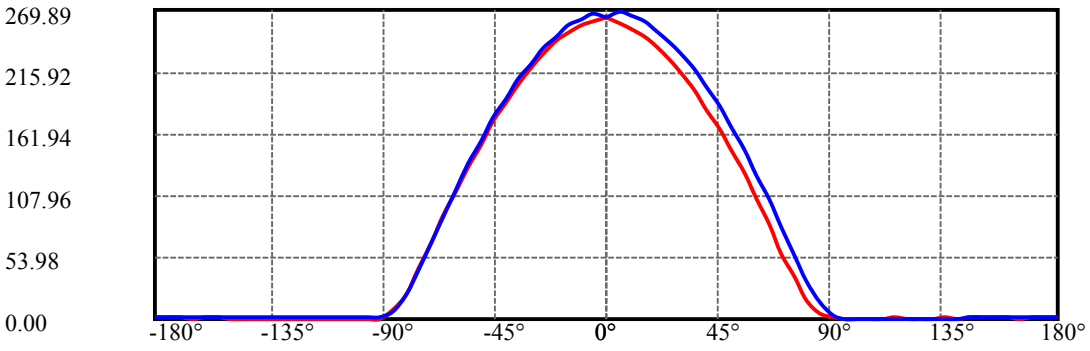
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	204.53	N.A.	27.67%
0-40	334.43	N.A.	45.25%
0-60	588.54	N.A.	79.63%
0-90	734.96	N.A.	99.44%
0-120	736.71	N.A.	99.67%
0-180	739.13	N.A.	100.00%
60-90	146.42	N.A.	19.81%
90-120	1.74	N.A.	0.24%
90-130	2.30	N.A.	0.31%
90-150	3.39	N.A.	0.46%
90-180	4.14	N.A.	0.56%
0-60.28	591.31	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	24.99
10-20	71.48
20-30	108.06
30-40	129.90
40-50	134.18
50-60	119.94
60-70	88.73
70-80	46.78
80-90	10.91
90-100	0.70
100-110	0.52
110-120	0.52
120-130	0.56
130-140	0.54
140-150	0.54
150-160	0.43
160-170	0.26
170-180	0.07



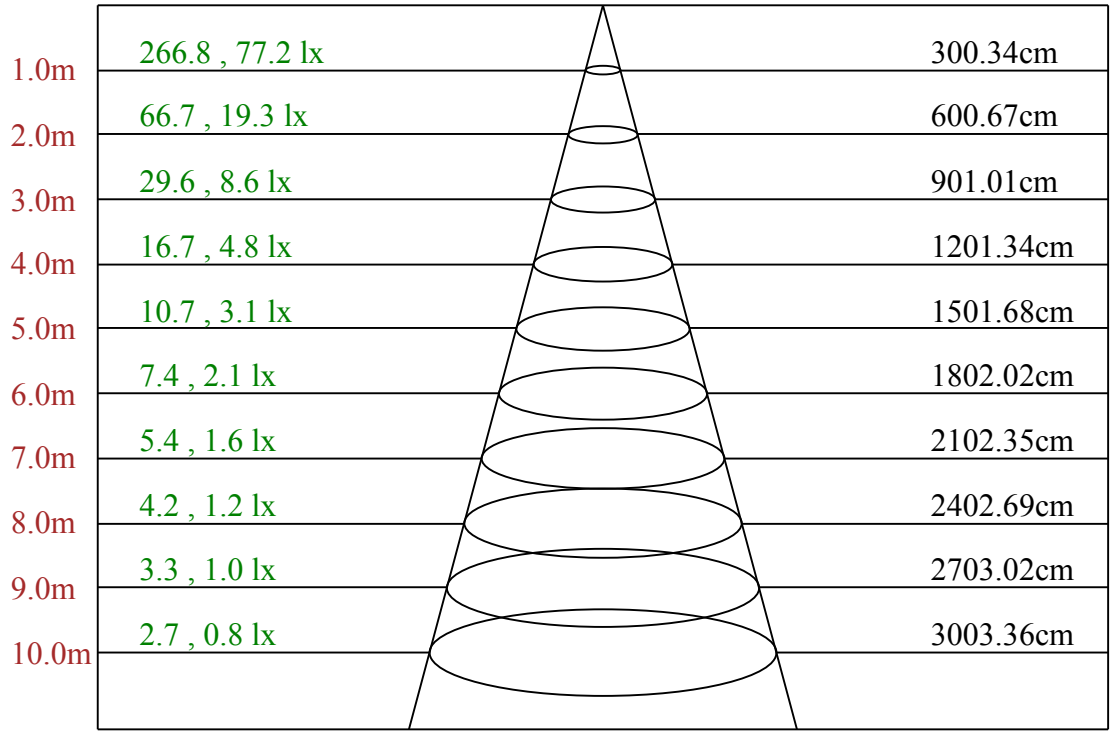


C0/C180:

C90/C270:

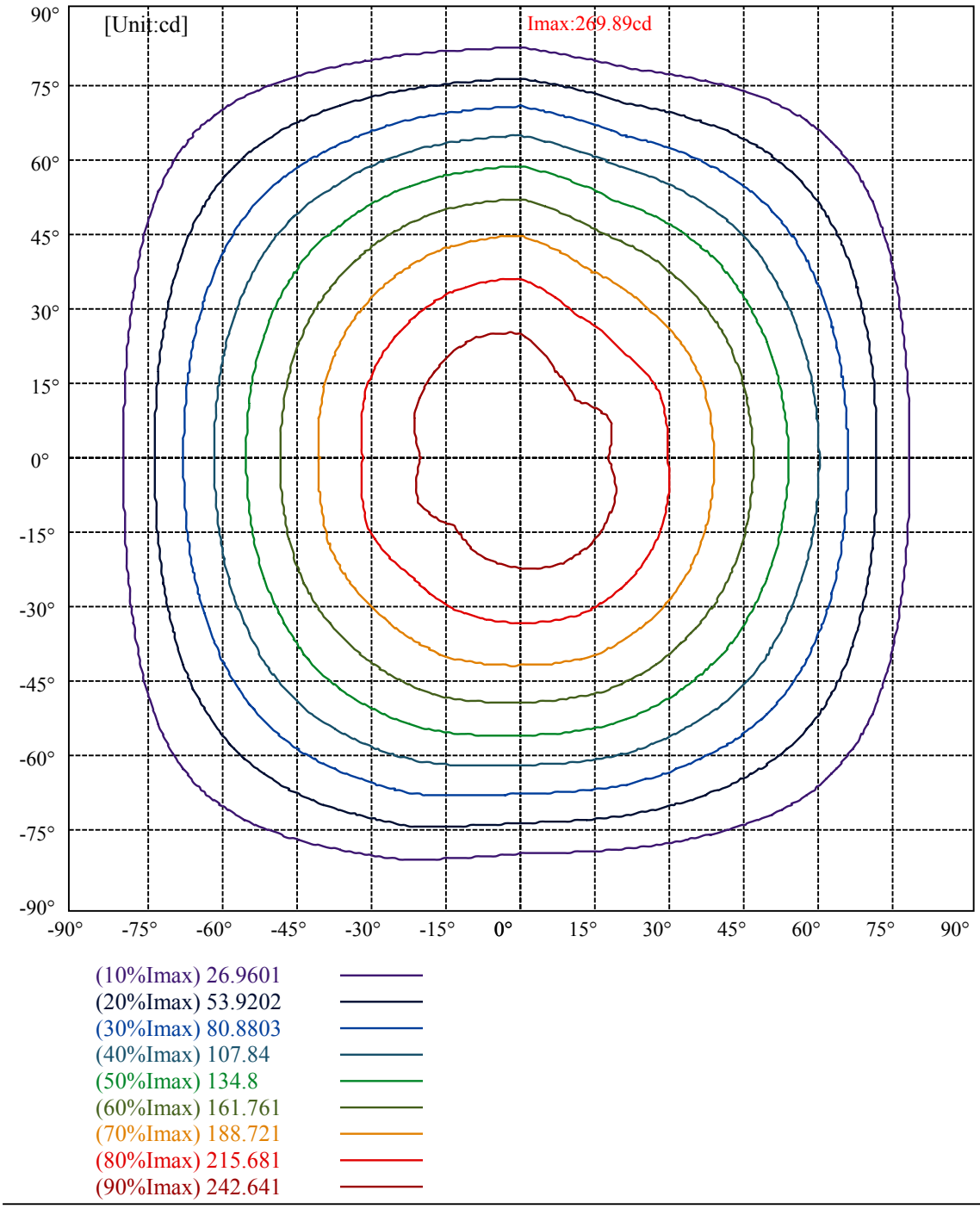
Field angle(10%Imax):C0/180Left:79.1 Right:77.6
:C90/270Left:78.8 Right:81.7

Beam Angle(50%Imax):C0/180Left:55.2 Right:54.0
:C90/270Left:55.4 Right:58.3

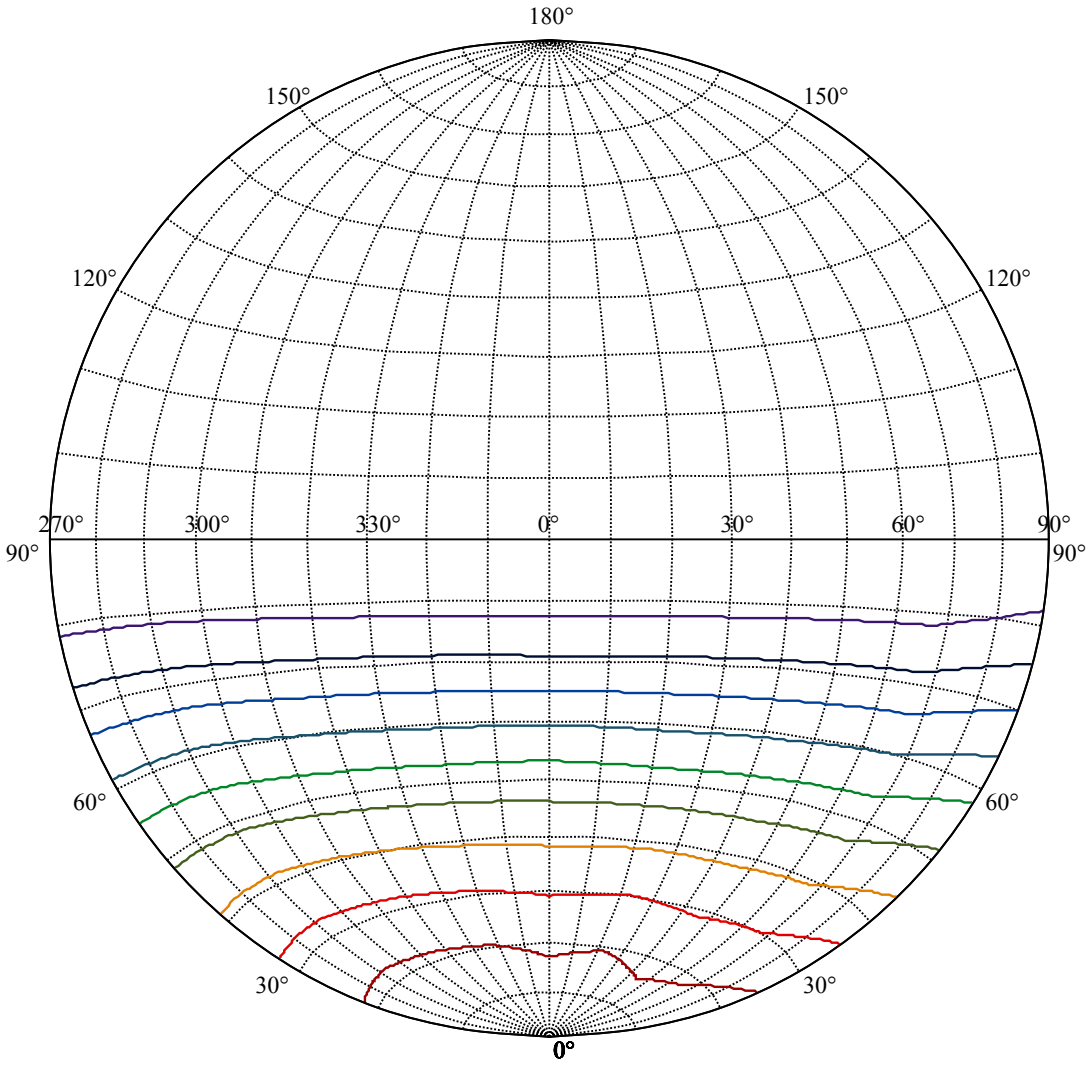


Max , Ave

Beam angle of C112.5 plane 112.68


[Unit:cd]
Imax:269.89cd
90°
75°
60°
45°
30°
15°
0°
-15°
-30°
-45°
-60°
-75°
-90°
-90° -75° -60° -45° -30° -15° 0° 15° 30° 45° 60° 75° 90°
(10%Imax) 26.9601
(20%Imax) 53.9202
(30%Imax) 80.8803
(40%Imax) 107.84
(50%Imax) 134.8
(60%Imax) 161.761
(70%Imax) 188.721
(80%Imax) 215.681
(90%Imax) 242.641

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:269.89

(10%Imax) 26.9847
(20%Imax) 53.9695
(30%Imax) 80.9542
(40%Imax) 107.939
(50%Imax) 134.924
(60%Imax) 161.908
(70%Imax) 188.893
(80%Imax) 215.878
(90%Imax) 242.863

Equipment: GMS-3000 Date: Operator: Tester
Temperature(°C): 25 Humidity(%): 58%

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	263.99	257.78	253.13	246.84	238.22	227.05	213.77	199.80	183.50
22.5	263.99	262.68	258.02	251.03	241.48	230.07	216.57	201.66	184.43
45.0	263.99	254.52	250.33	244.05	235.20	224.95	212.84	198.87	183.27
67.5	263.99	258.95	254.52	248.47	240.09	229.14	216.80	202.60	186.53
90.0	263.99	267.80	265.47	260.11	252.20	242.18	231.01	217.73	202.60
112.5	263.99	269.89	266.87	261.05	253.36	243.81	231.47	217.27	201.20
135.0	263.99	267.57	263.84	258.72	250.80	240.55	228.44	213.31	197.71
157.5	263.99	265.47	261.98	256.39	248.47	237.76	224.95	210.98	194.21
180.0	263.99	259.18	256.15	250.57	242.42	231.94	219.83	205.16	188.62
202.5	263.99	263.84	260.81	255.22	247.07	237.06	224.48	210.28	193.28
225.0	263.99	255.69	252.89	247.77	240.55	230.77	219.59	206.79	191.65
247.5	263.99	259.88	257.55	251.96	244.51	235.20	223.09	209.58	194.44
270.0	263.99	266.63	262.21	255.69	246.84	235.90	223.79	209.35	193.28
292.5	263.99	268.50	263.61	257.32	248.24	237.53	224.48	210.51	194.21
315.0	263.99	266.17	262.21	255.46	246.37	235.43	222.39	206.55	190.02
337.5	263.99	264.54	259.88	253.13	243.81	232.40	218.66	203.06	186.06
360.0	263.99	257.78	253.13	246.84	238.22	227.05	213.77	199.80	183.50

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	166.50	148.34	128.08	105.26	81.50	57.75	36.56	17.00	4.19
22.5	166.50	146.47	125.05	102.93	81.04	58.92	36.79	17.70	3.96
45.0	165.57	147.64	126.45	104.56	82.20	60.08	38.42	18.86	4.89
67.5	168.83	149.50	129.47	108.05	85.00	61.71	39.82	20.03	5.36
90.0	186.06	167.67	147.87	126.45	104.09	80.57	56.12	33.30	14.44
112.5	184.66	165.34	144.61	122.95	100.37	76.15	51.93	30.51	12.11
135.0	180.01	159.28	139.02	116.90	93.61	69.86	47.74	26.55	10.25
157.5	175.58	155.79	135.53	114.11	90.82	68.00	45.41	24.68	8.85
180.0	172.09	152.76	132.74	111.54	90.59	66.83	43.31	22.59	8.15
202.5	175.12	155.56	134.60	113.17	90.59	67.30	44.71	24.92	8.85
225.0	175.35	157.19	138.09	116.67	94.08	70.56	47.97	27.01	10.25
247.5	178.38	159.51	139.72	118.53	96.17	74.29	51.70	29.81	12.34
270.0	175.58	156.72	135.76	113.17	88.96	66.37	42.62	21.66	6.52
292.5	175.82	156.49	135.53	113.17	89.42	65.44	41.45	21.42	5.82
315.0	171.16	151.60	129.71	107.82	84.76	61.01	38.89	19.10	5.12
337.5	168.36	148.34	126.91	104.79	82.44	59.85	36.79	17.70	4.42
360.0	166.50	148.34	128.08	105.26	81.50	57.75	36.56	17.00	4.19

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.93	0.70	0.70	0.70	0.70	0.93	0.70	0.70	0.70
22.5	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
45.0	0.93	0.70	0.93	0.70	0.70	0.47	0.70	0.93	0.93
67.5	0.70	0.47	0.70	0.47	0.70	0.70	0.93	0.93	0.47
90.0	2.79	0.47	0.23	0.47	0.23	0.70	0.47	0.70	0.70
112.5	1.86	0.23	0.23	0.00	0.23	0.47	0.23	0.47	0.47
135.0	1.16	0.47	0.23	0.47	0.00	0.23	0.47	0.47	0.47
157.5	0.93	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
180.0	0.70	0.00	0.23	0.23	0.00	0.23	0.47	0.23	0.47
202.5	0.93	0.47	0.23	0.23	0.23	0.00	0.23	0.23	0.47
225.0	1.16	0.23	0.23	0.23	0.47	0.23	0.23	0.47	0.47
247.5	1.86	0.47	0.23	0.00	0.23	0.00	0.23	0.47	0.70
270.0	1.16	1.16	1.16	1.16	1.40	1.40	1.16	1.16	1.16
292.5	0.47	0.70	0.70	0.93	0.93	0.70	0.70	1.16	0.70
315.0	0.70	0.47	0.47	0.70	0.70	0.70	0.70	0.93	0.93
337.5	0.70	0.47	0.23	0.70	0.70	0.70	0.70	0.70	0.70
360.0	0.93	0.70	0.70	0.70	0.70	0.93	0.70	0.70	0.70

Intensity data(cd)

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.93	0.70	1.16	1.16	0.93	1.16	0.70	0.93	0.93
22.5	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.70
45.0	0.70	1.16	0.93	1.16	0.93	0.93	0.93	0.70	0.70
67.5	0.70	0.93	0.93	1.16	0.93	0.70	0.93	0.93	0.93
90.0	0.70	0.70	0.93	0.93	0.93	0.93	1.16	0.93	1.16
112.5	0.23	0.70	0.70	0.70	0.93	0.93	0.93	0.70	0.93
135.0	0.47	0.47	0.70	0.47	0.70	0.93	0.70	0.93	0.93
157.5	0.23	0.70	0.93	0.70	0.93	0.93	0.93	0.70	0.93
180.0	0.47	0.47	0.47	0.70	0.93	0.93	0.70	0.93	0.93
202.5	0.47	0.47	0.47	0.70	0.93	0.70	0.70	0.70	0.70
225.0	0.47	0.47	0.93	0.70	0.70	0.70	0.70	0.93	0.93
247.5	0.70	0.70	0.70	0.93	0.70	1.16	0.70	0.70	0.93
270.0	1.40	1.63	1.63	1.40	1.40	1.63	1.40	1.40	1.40
292.5	0.93	0.93	0.93	0.93	1.16	0.93	0.93	0.93	0.93
315.0	0.93	0.93	0.70	1.16	0.93	0.93	0.93	0.93	0.93
337.5	0.70	0.93	0.93	0.93	0.93	0.93	0.93	0.93	1.16
360.0	0.93	0.70	1.16	1.16	0.93	1.16	0.70	0.93	0.93

C/γ(°)	180.0
0.0	0.96
22.5	0.96
45.0	0.96
67.5	0.96
90.0	0.96
112.5	0.96
135.0	0.96
157.5	0.96
180.0	0.96
202.5	0.96
225.0	0.96
247.5	0.96
270.0	0.96
292.5	0.96
315.0	0.96
337.5	0.96
360.0	0.96