
乐达凯

Client:

LumCAT: LB72201

Luminaire: LED 灯具

Report No:

Ballast type:

Test No:

Voltage(V): 119.980

LampCAT:

Current(A): 0.212

Lamp flux(lm): 2018.3

Power (W): 25.260

Number of Lamps: 1

PF: 0.994

Length(mm): -380

Width(mm): -380

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2018.30, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 79.90

Central intensity(cd): 745.956, Maximum intensity(cd): 745.956

Angle of maximum intensity: C=60.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=107.8

[C90/270]Total=107.6

Field angle(10%Imax): [C0/180]Total=156.6

[C90/270]Total=157.0

Maximum s/h(1/2): C0_180=1.25 C90_270=1.24

Maximum s/h(1/4): C0_180=1.35 C90_270=1.35

Up flux rate of lamp(%): 0.46%

Down flux rate of lamp(%): 99.54%

Up flux rate of LUM(%): 0.46%

Down flux rate of LUM(%): 99.54%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 80.840%

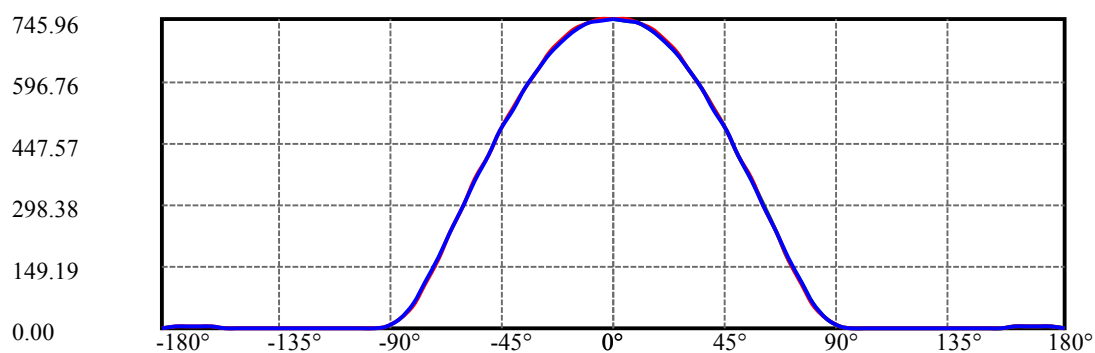
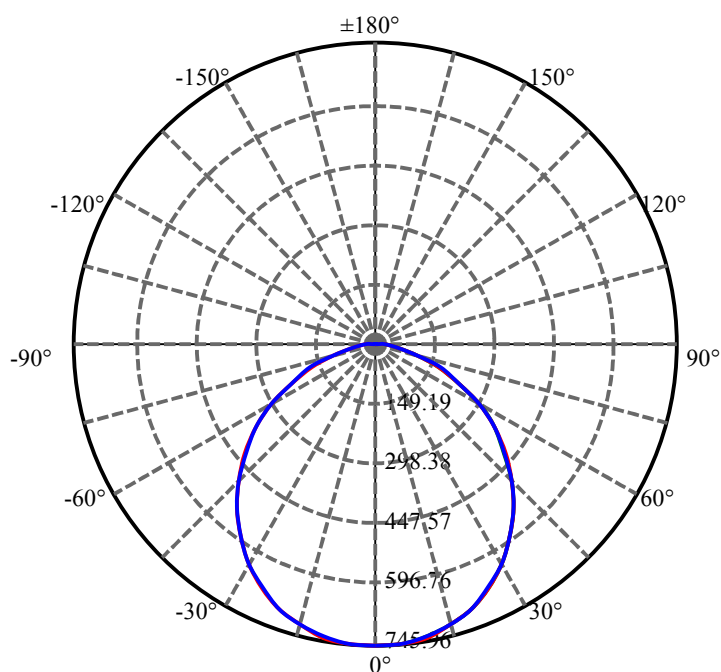
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	745.956	0.000	0	0.00%	0.00%
5.0	743.522	17.806	17.806	0.88%	0.88%
10.0	735.812	52.920	70.727	2.62%	3.50%
15.0	721.032	86.419	157.146	4.28%	7.79%
20.0	697.040	116.869	274.015	5.79%	13.58%
25.0	664.443	142.795	416.809	7.07%	20.65%
30.0	626.610	163.384	580.193	8.10%	28.75%
35.0	580.649	177.777	757.971	8.81%	37.55%
40.0	530.687	185.418	943.389	9.19%	46.74%
45.0	477.621	186.696	1130.085	9.25%	55.99%
50.0	418.523	181.079	1311.164	8.97%	64.96%
55.0	358.643	168.982	1480.146	8.37%	73.34%
60.0	296.559	151.448	1631.594	7.50%	80.84%
65.0	231.510	128.375	1759.968	6.36%	87.20%
70.0	168.712	101.339	1861.307	5.02%	92.22%
75.0	110.559	72.997	1934.305	3.62%	95.84%
80.0	58.609	45.265	1979.569	2.24%	98.08%
85.0	22.530	22.047	2001.617	1.09%	99.17%
90.0	4.642	7.440	2009.057	0.37%	99.54%
95.0	1.048	1.558	2010.615	0.08%	99.62%
100.0	1.160	0.600	2011.215	0.03%	99.65%
105.0	1.235	0.641	2011.856	0.03%	99.68%
110.0	1.198	0.636	2012.492	0.03%	99.71%
115.0	1.160	0.597	2013.089	0.03%	99.74%
120.0	1.085	0.546	2013.635	0.03%	99.77%
125.0	1.010	0.484	2014.119	0.02%	99.79%
130.0	0.898	0.415	2014.534	0.02%	99.81%
135.0	0.898	0.363	2014.897	0.02%	99.83%
140.0	0.936	0.340	2015.237	0.02%	99.85%
145.0	1.721	0.443	2015.68	0.02%	99.87%
150.0	1.796	0.518	2016.198	0.03%	99.90%
155.0	2.246	0.512	2016.709	0.03%	99.92%
160.0	2.695	0.518	2017.228	0.03%	99.95%
165.0	2.695	0.444	2017.672	0.02%	99.97%
170.0	2.881	0.331	2018.002	0.02%	99.99%
175.0	3.593	0.232	2018.234	0.01%	100.00%
180.0	1.796	0.064	2018.299	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	580.19	28.75%	28.75%
0-40	943.39	46.74%	46.74%
0-60	1631.59	80.84%	80.84%
0-90	2009.06	99.54%	99.54%
0-120	2013.63	99.77%	99.77%
0-180	2018.30	100.00%	100.00%
60-90	377.46	18.70%	18.70%
90-120	4.58	0.23%	0.23%
90-130	5.48	0.27%	0.27%
90-150	7.14	0.35%	0.35%
90-180	9.18	0.45%	0.45%
0-59.44	1614.64	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	70.73
10-20	203.29
20-30	306.18
30-40	363.20
40-50	367.78
50-60	320.43
60-70	229.71
70-80	118.26
80-90	29.49
90-100	2.16
100-110	1.28
110-120	1.14
120-130	0.90
130-140	0.70
140-150	0.96
150-160	1.03
160-170	0.77
170-180	0.23



C60(Max):

C0/C180:

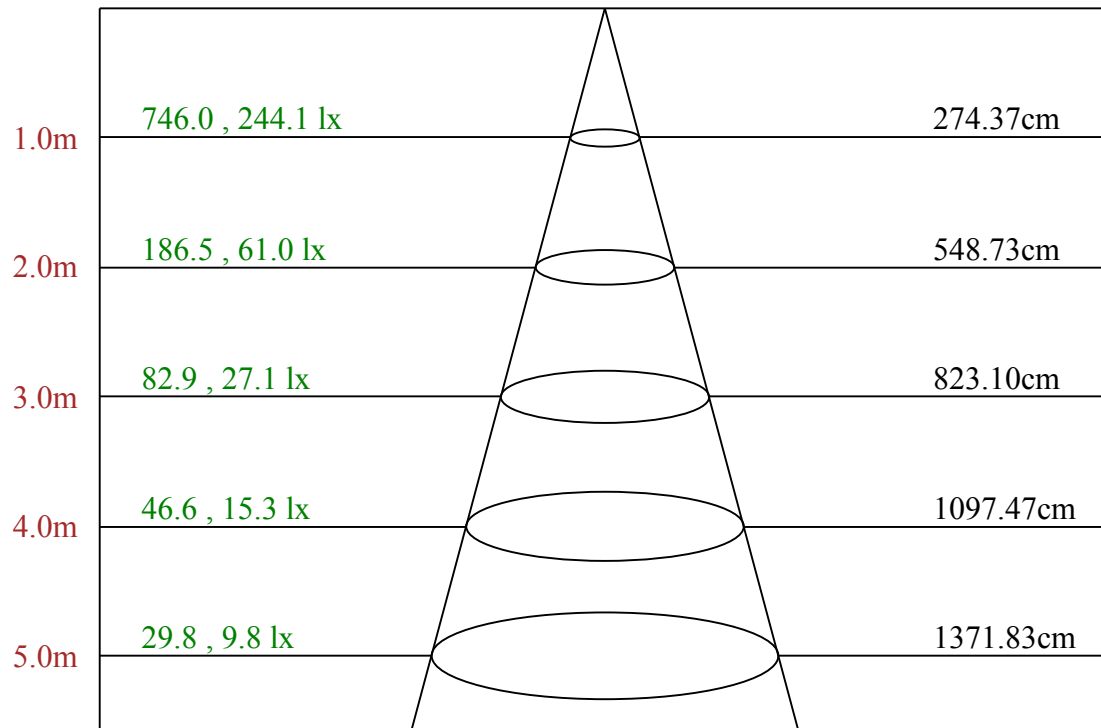
C90/C270:

Field angle(10%Imax):C0/180Left:78.3 Right:78.3

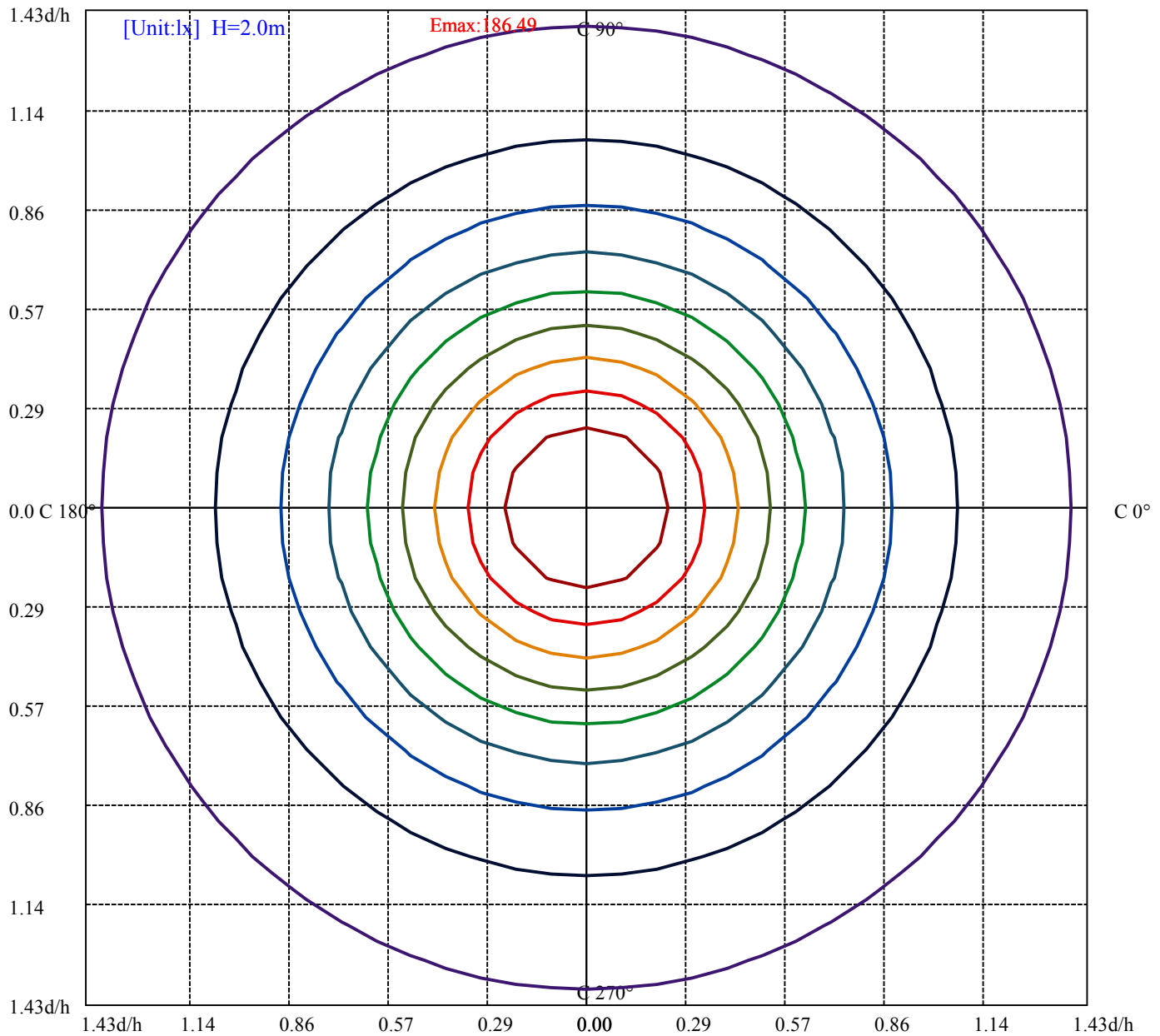
:C90/270Left:78.5 Right:78.5

Beam Angle(50%Imax):C0/180Left:53.9 Right:53.9

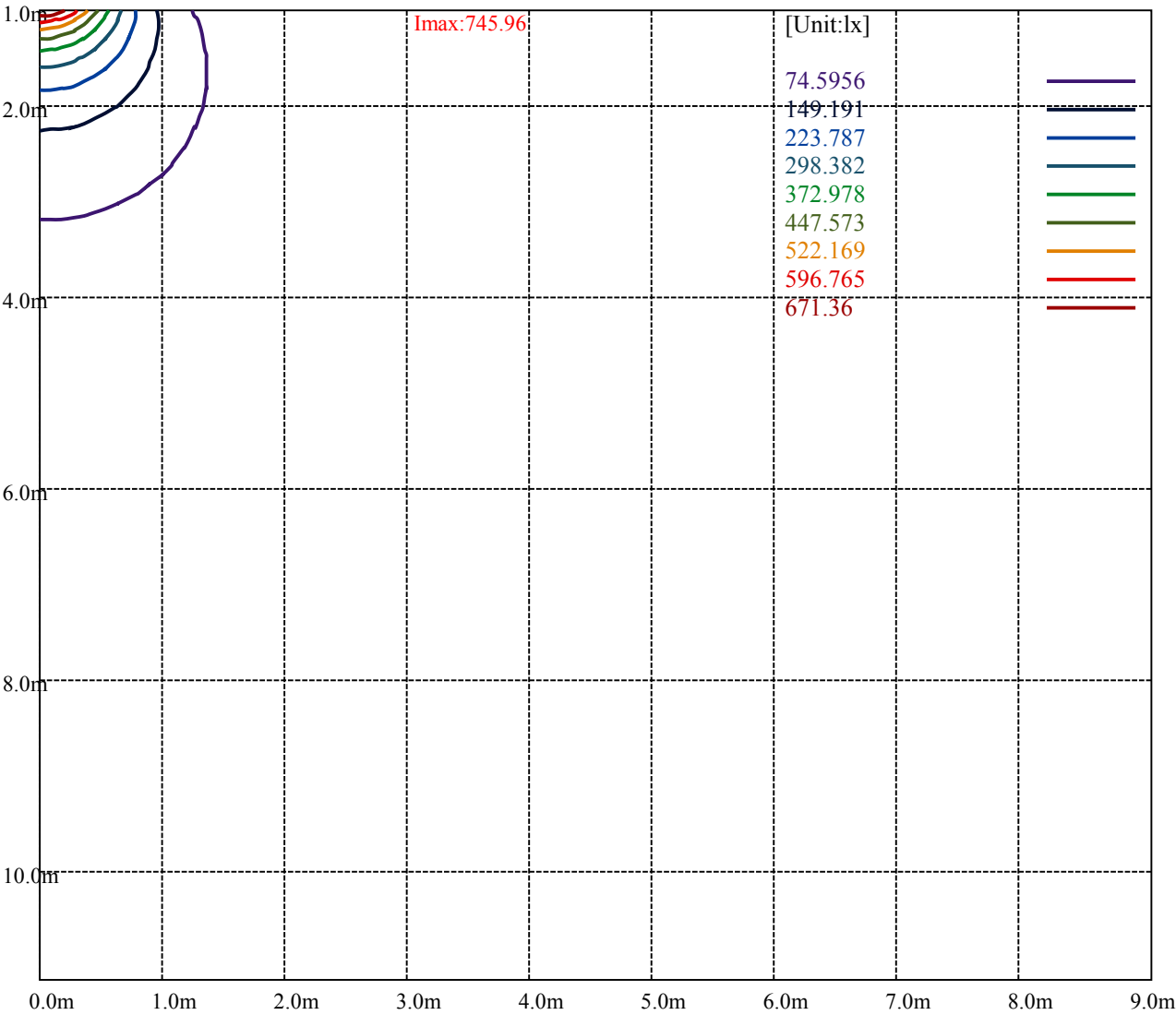
:C90/270Left:53.8 Right:53.8



Max , Ave Beam angle of C60 plane 107.82



(10%Emax) 18.6489	—
(20%Emax) 37.29775	—
(30%Emax) 55.94675	—
(40%Emax) 74.5955	—
(50%Emax) 93.2445	—
(60%Emax) 111.8932	—
(70%Emax) 130.5423	—
(80%Emax) 149.1913	—
(90%Emax) 167.84	—



Luminance Table

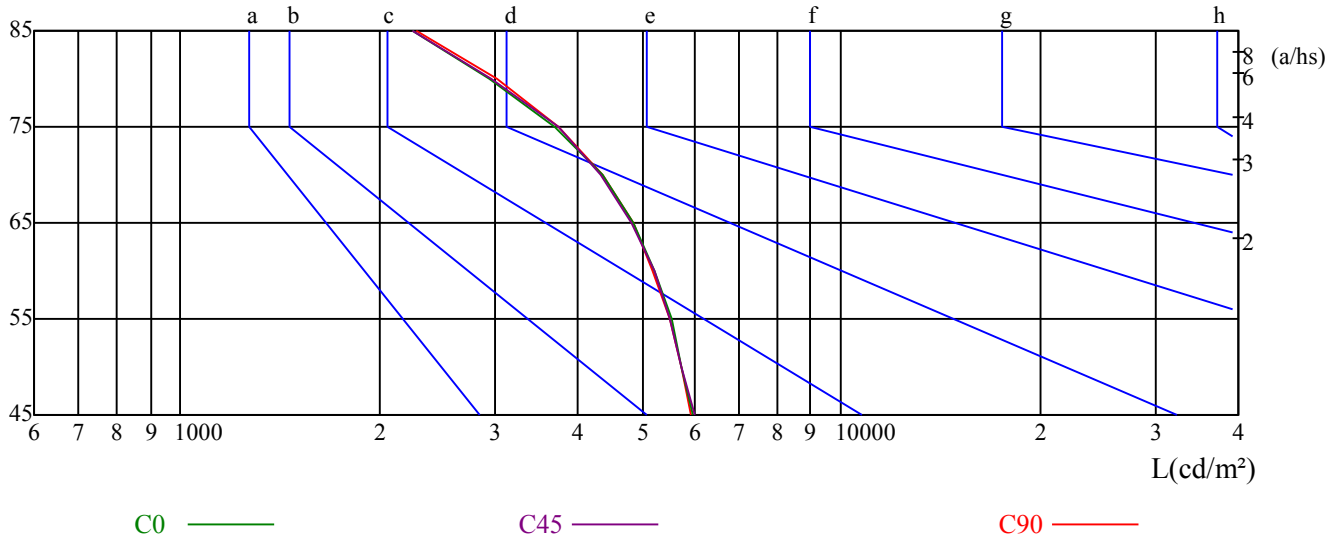
γ	45	50	55	60	65	70	75	80	85
C0	5959	5751	5529	5213	4842	4344	3695	2935	2249
C45	6016	5736	5506	5214	4828	4333	3735	2955	2250
C90	5929	5727	5506	5199	4838	4368	3735	3012	2273

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4842	4838	4828	3695	3735	3735	2249	2273	2250

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

 $\gamma(^{\circ})$ 

RHOC	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	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.04	1.00	0.97	1.02	0.98	0.95	0.98	0.95	0.92	0.94	0.91	0.89	0.90	0.88	0.86	0.84
2	0.91	0.85	0.79	0.89	0.83	0.78	0.86	0.81	0.76	0.83	0.78	0.75	0.79	0.76	0.73	0.71
3	0.80	0.73	0.66	0.79	0.71	0.66	0.76	0.70	0.64	0.73	0.68	0.63	0.70	0.66	0.62	0.60
4	0.71	0.63	0.56	0.70	0.62	0.56	0.68	0.61	0.55	0.65	0.59	0.54	0.63	0.58	0.53	0.51
5	0.64	0.55	0.49	0.63	0.54	0.48	0.61	0.53	0.48	0.59	0.52	0.47	0.57	0.51	0.47	0.44
6	0.58	0.49	0.42	0.57	0.48	0.42	0.55	0.47	0.42	0.53	0.46	0.41	0.51	0.46	0.41	0.39
7	0.52	0.44	0.38	0.51	0.43	0.37	0.50	0.42	0.37	0.48	0.42	0.37	0.47	0.41	0.37	0.35
8	0.48	0.39	0.34	0.47	0.39	0.33	0.46	0.38	0.33	0.44	0.38	0.33	0.43	0.37	0.33	0.31
9	0.44	0.36	0.30	0.43	0.35	0.30	0.42	0.35	0.30	0.41	0.34	0.30	0.40	0.34	0.30	0.28
10	0.40	0.33	0.27	0.40	0.32	0.27	0.39	0.32	0.27	0.38	0.32	0.27	0.37	0.31	0.27	0.25

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Intensity data(cd)										Appendix Page: 10 Total:12	
C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0		
0.0	745.96	746.84	741.51	728.17	708.61	680.16	641.93	597.48	551.24		
15.0	745.96	746.85	738.79	728.94	709.24	678.79	643.87	599.09	551.63		
30.0	745.96	745.96	738.78	728.92	710.09	680.51	642.85	599.81	550.50		
45.0	745.96	745.06	738.78	729.82	707.40	677.82	641.06	599.81	550.50		
60.0	745.96	743.26	739.67	728.90	708.25	679.53	644.52	598.74	550.27		
75.0	745.96	744.16	741.46	731.58	710.01	681.25	644.40	601.26	554.52		
90.0	745.96	745.06	741.46	730.68	710.90	681.25	646.20	602.16	553.62		
105.0	745.96	748.66	743.25	734.23	715.29	686.42	648.54	605.24	557.44		
120.0	745.96	745.96	743.25	733.34	714.42	686.50	649.56	606.31	559.47		
135.0	745.96	746.86	743.25	734.24	716.23	687.40	652.26	609.92	561.27		
150.0	745.96	749.56	744.15	736.03	718.90	688.23	653.05	611.56	564.65		
165.0	745.96	745.96	742.36	735.16	716.26	689.27	654.17	613.68	565.09		
180.0	745.96	744.18	734.40	713.06	688.16	651.71	609.92	565.47	511.23		
195.0	745.96	742.37	731.63	711.93	686.85	651.03	610.73	565.06	511.33		
210.0	745.96	742.37	732.51	713.68	686.78	650.92	611.47	563.05	511.05		
225.0	745.96	739.68	731.61	711.89	684.09	647.33	609.68	560.36	510.15		
240.0	745.96	739.67	730.70	710.95	683.12	648.11	605.92	560.14	509.87		
255.0	745.96	740.56	729.78	711.80	681.25	646.20	604.85	557.22	505.09		
270.0	745.96	739.66	729.78	709.11	680.35	643.50	602.16	554.52	504.19		
285.0	745.96	742.35	729.72	709.88	680.11	645.83	602.54	556.54	504.22		
300.0	745.96	740.55	728.84	707.22	680.19	643.25	602.71	554.06	502.71		
315.0	745.96	740.55	727.94	707.22	679.29	641.45	600.91	552.26	500.01		
330.0	745.96	740.54	727.92	708.97	677.40	642.23	618.77	552.93	500.61		
345.0	745.96	737.86	727.96	709.06	675.77	637.98	596.58	548.89	495.80		
360.0	745.96	746.84	741.51	728.17	708.61	680.16	641.93	597.48	551.24		
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	500.56	441.88	384.98	321.85	259.62	194.71	134.25	78.24	33.79		
15.0	498.80	442.38	385.07	321.49	256.11	193.43	132.53	76.12	33.13		
30.0	497.60	443.81	382.84	319.18	256.42	191.87	130.90	76.21	33.17		
45.0	496.71	440.22	381.94	318.29	256.42	190.08	130.00	75.31	32.28		
60.0	499.10	439.85	382.40	318.67	255.83	192.10	131.06	76.30	33.21		
75.0	501.50	439.48	382.86	320.85	258.84	191.43	130.32	75.49	32.35		
90.0	502.40	443.98	386.46	320.85	258.84	194.13	133.01	77.29	33.25		
105.0	503.32	447.39	386.06	324.72	259.78	195.73	133.50	77.57	34.28		
120.0	506.31	448.65	389.19	326.13	263.07	197.30	136.04	78.38	34.23		
135.0	507.21	449.56	391.00	329.73	264.87	199.10	137.84	79.28	34.23		
150.0	512.34	456.41	395.98	331.94	266.99	203.85	141.61	82.08	36.08		
165.0	513.80	456.21	397.72	333.84	271.75	206.06	143.07	85.48	36.89		
180.0	455.22	396.54	334.30	269.40	204.49	142.26	82.69	37.34	10.67		
195.0	454.92	397.60	334.92	271.34	206.86	143.28	85.07	39.40	11.64		
210.0	456.36	396.29	336.22	272.56	205.32	146.14	86.97	40.35	11.66		
225.0	454.57	396.29	334.42	272.56	207.11	146.14	88.76	40.35	12.55		
240.0	451.52	394.97	333.03	270.20	207.36	147.22	89.77	41.29	12.57		
255.0	450.27	392.75	332.53	269.62	205.81	145.60	88.98	42.24	12.58		
270.0	448.47	390.95	329.84	268.72	204.91	144.70	86.28	41.34	11.68		
285.0	449.20	388.76	330.13	266.09	202.05	141.61	110.04	39.69	11.73		
300.0	448.65	388.29	327.93	292.80	199.10	138.74	83.78	39.64	10.81		
315.0	471.18	386.49	325.23	262.17	197.30	136.94	81.98	37.84	9.91		
330.0	442.88	385.15	322.92	258.87	195.73	135.30	78.47	35.18	9.02		
345.0	440.01	380.63	319.44	255.55	191.66	131.37	76.49	34.19	9.00		
360.0	500.56	441.88	384.98	321.85	259.62	194.71	134.25	78.24	33.79		

Intensity data(cd)

C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	8.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
15.0	7.16	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
30.0	7.17	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
45.0	7.17	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
60.0	7.18	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
75.0	8.09	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
90.0	8.09	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
105.0	9.02	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
120.0	9.01	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
135.0	9.01	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
150.0	9.92	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
165.0	10.80	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
180.0	0.89	0.89	1.78	1.78	0.89	0.89	0.89	0.89	0.89
195.0	0.90	0.90	0.90	0.90	1.79	0.90	0.90	0.90	0.90
210.0	0.90	0.90	0.90	1.79	1.79	1.79	0.90	0.90	0.90
225.0	0.90	0.90	0.90	1.79	1.79	1.79	1.79	1.79	0.90
240.0	0.90	0.90	1.80	1.80	1.80	1.80	1.80	1.80	0.90
255.0	0.90	1.80	1.80	1.80	1.80	1.80	1.80	0.90	0.90
270.0	0.90	1.80	1.80	1.80	1.80	1.80	1.80	1.80	0.90
285.0	0.90	1.80	1.80	1.80	1.80	1.80	1.80	0.90	0.90
300.0	0.90	1.80	1.80	1.80	1.80	1.80	0.90	0.90	0.90
315.0	0.90	0.90	1.80	1.80	0.90	0.90	0.90	0.90	0.90
330.0	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
345.0	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
360.0	8.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.89	0.89	1.78	1.78	2.67	2.67	2.67	3.56	3.56
15.0	0.90	1.79	1.79	1.79	2.69	2.69	2.69	3.58	3.58
30.0	0.90	0.90	1.79	1.79	2.69	2.69	2.69	3.59	3.59
45.0	0.90	0.90	1.79	1.79	2.69	2.69	2.69	3.59	3.59
60.0	0.90	0.90	1.80	1.80	2.69	2.69	2.69	2.69	3.59
75.0	0.90	0.90	1.80	1.80	2.70	2.70	2.70	2.70	3.59
90.0	0.90	0.90	1.80	1.80	2.70	2.70	2.70	2.70	3.59
105.0	0.90	0.90	1.80	1.80	2.71	2.71	2.71	2.71	3.61
120.0	0.90	0.90	1.80	1.80	2.70	2.70	2.70	2.70	3.60
135.0	0.90	0.90	1.80	1.80	2.70	2.70	2.70	3.60	3.60
150.0	0.90	0.90	1.80	1.80	2.71	2.71	2.71	2.71	3.61
165.0	0.90	0.90	1.80	1.80	2.70	2.70	2.70	2.70	3.60
180.0	0.89	0.89	1.78	1.78	1.78	2.67	2.67	2.67	3.56
195.0	0.90	0.90	1.79	1.79	1.79	2.69	2.69	2.69	3.58
210.0	0.90	0.90	1.79	1.79	1.79	2.69	2.69	2.69	3.59
225.0	0.90	0.90	1.79	1.79	1.79	2.69	2.69	2.69	3.59
240.0	0.90	0.90	1.80	1.80	1.80	2.69	2.69	2.69	3.59
255.0	0.90	0.90	1.80	1.80	1.80	2.70	2.70	2.70	3.59
270.0	0.90	0.90	1.80	1.80	1.80	2.70	2.70	2.70	3.59
285.0	0.90	0.90	1.80	1.80	1.80	2.71	2.71	2.71	3.61
300.0	0.90	0.90	0.90	1.80	1.80	2.70	2.70	2.70	3.60
315.0	0.90	0.90	1.80	1.80	1.80	2.70	2.70	2.70	3.60
330.0	0.90	0.90	0.90	1.80	1.80	2.71	2.71	2.71	3.61
345.0	0.90	0.90	1.80	1.80	1.80	2.70	2.70	2.70	3.60
360.0	0.89	0.89	1.78	1.78	2.67	2.67	2.67	3.56	3.56

Intensity data(cd)

C/ $\gamma(^{\circ})$	180.0
0.0	3.56
15.0	3.58
30.0	3.59
45.0	3.59
60.0	3.59
75.0	3.59
90.0	3.59
105.0	3.61
120.0	3.60
135.0	3.60
150.0	3.61
165.0	3.60
180.0	0.00
195.0	0.00
210.0	0.00
225.0	0.00
240.0	0.00
255.0	0.00
270.0	0.00
285.0	0.00
300.0	0.00
315.0	0.00
330.0	0.00
345.0	0.00
360.0	3.56