
乐达凯

Client:

LumCAT: ALDF16LAJUDGY

Luminaire: LED Lamp

Report No:

Ballast type:

Test No:

Voltage(V): 120.040

LampCAT:

Current(A): 0.254

Lamp flux(lm): 2346.9

Power (W): 30.240

Number of Lamps: 1

PF: 0.991

Length(mm): -400

Width(mm): -400

Phm Type: C

Height(mm): 80

Photometric Results

Lumens(lm): 2346.85, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 77.61

Central intensity(cd): 771.259, Maximum intensity(cd): 771.259

Angle of maximum intensity: C=45.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=112.0

[C90/270]Total=112.6

Field angle(10%Imax): [C0/180]Total=164.8

[C90/270]Total=165.4

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

Maximum s/h(1/4): C0_180=1.37 C90_270=1.37

Up flux rate of lamp(%): 5.10%

Down flux rate of lamp(%): 94.90%

Up flux rate of LUM(%): 5.10%

Down flux rate of LUM(%): 94.90%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 73.294%

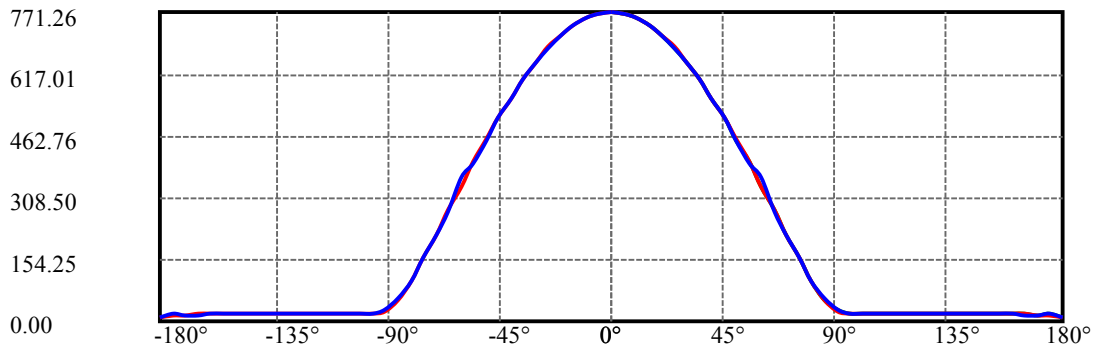
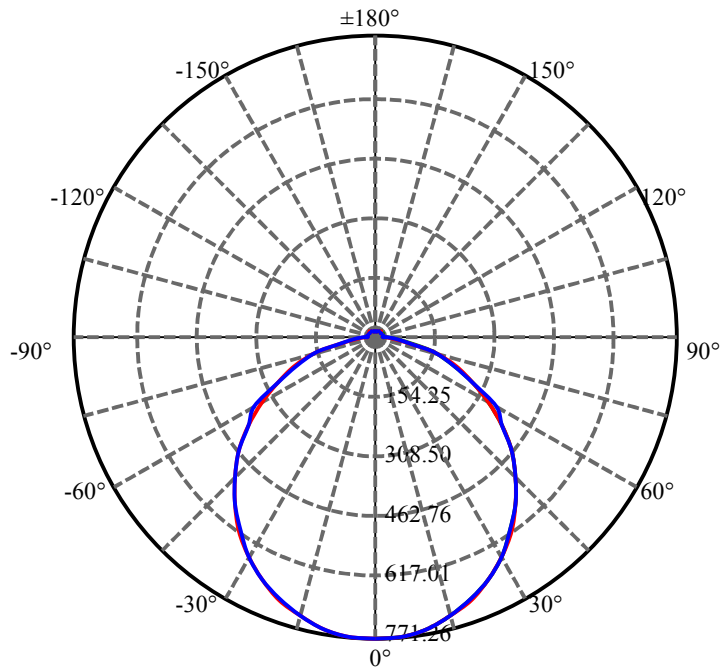
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	771.259	0.000	0	0.00%	0.00%
5.0	767.594	18.397	18.397	0.78%	0.78%
10.0	756.570	54.524	72.921	2.32%	3.11%
15.0	738.496	88.686	161.607	3.78%	6.89%
20.0	713.720	119.683	281.29	5.10%	11.99%
25.0	682.532	146.441	427.731	6.24%	18.23%
30.0	645.986	168.125	595.856	7.16%	25.39%
35.0	603.899	184.054	779.91	7.84%	33.23%
40.0	559.072	194.033	973.943	8.27%	41.50%
45.0	507.022	197.396	1171.339	8.41%	49.91%
50.0	452.834	193.953	1365.292	8.26%	58.18%
55.0	396.735	184.725	1550.017	7.87%	66.05%
60.0	339.102	170.087	1720.103	7.25%	73.29%
65.0	276.726	149.709	1869.812	6.38%	79.67%
70.0	216.000	124.761	1994.573	5.32%	84.99%
75.0	157.461	97.617	2092.19	4.16%	89.15%
80.0	103.158	69.734	2161.924	2.97%	92.12%
85.0	54.057	42.719	2204.643	1.82%	93.94%
90.0	28.041	22.479	2227.122	0.96%	94.90%
95.0	18.474	12.736	2239.858	0.54%	95.44%
100.0	18.728	10.109	2249.967	0.43%	95.87%
105.0	19.051	10.108	2260.075	0.43%	96.30%
110.0	19.324	10.031	2270.106	0.43%	96.73%
115.0	19.438	9.815	2279.921	0.42%	97.15%
120.0	19.404	9.442	2289.363	0.40%	97.55%
125.0	19.256	8.936	2298.299	0.38%	97.93%
130.0	18.895	8.295	2306.594	0.35%	98.28%
135.0	18.387	7.533	2314.128	0.32%	98.61%
140.0	18.091	6.754	2320.882	0.29%	98.89%
145.0	18.000	6.021	2326.903	0.26%	99.15%
150.0	17.927	5.290	2332.194	0.23%	99.38%
155.0	17.866	4.530	2336.723	0.19%	99.57%
160.0	17.786	3.739	2340.463	0.16%	99.73%
165.0	17.281	2.890	2343.353	0.12%	99.85%
170.0	16.518	2.005	2345.358	0.09%	99.94%
175.0	16.804	1.192	2346.55	0.05%	99.99%
180.0	8.509	0.303	2346.852	0.01%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	595.86	25.39%	25.39%
0-40	973.94	41.50%	41.50%
0-60	1720.10	73.29%	73.29%
0-90	2227.12	94.90%	94.90%
0-120	2289.36	97.55%	97.55%
0-180	2346.85	100.00%	100.00%
60-90	507.02	21.60%	21.60%
90-120	62.24	2.65%	2.65%
90-130	79.47	3.39%	3.39%
90-150	105.07	4.48%	4.48%
90-180	119.43	5.09%	5.09%
0-65.31	1877.48	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	72.92
10-20	208.37
20-30	314.57
30-40	378.09
40-50	391.35
50-60	354.81
60-70	274.47
70-80	167.35
80-90	65.20
90-100	22.84
100-110	20.14
110-120	19.26
120-130	17.23
130-140	14.29
140-150	11.31
150-160	8.27
160-170	4.89
170-180	1.19



C45(Max):

C0/C180:

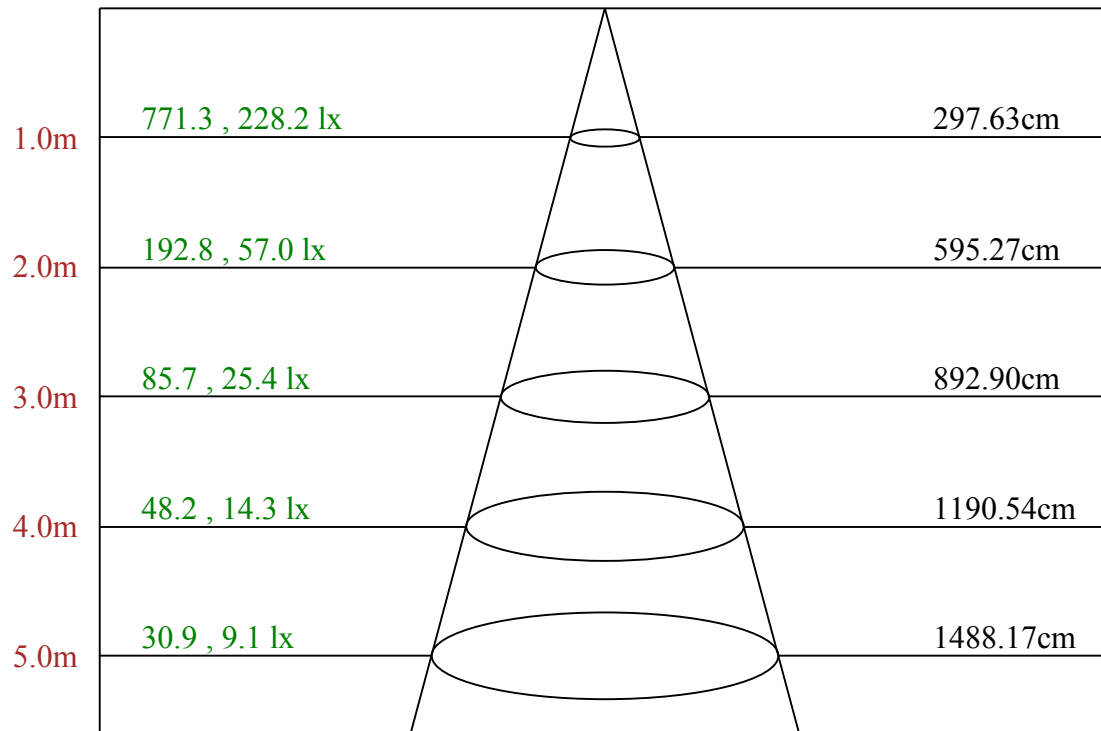
C90/C270:

Field angle(10%Imax):C0/180Left:82.4 Right:82.4

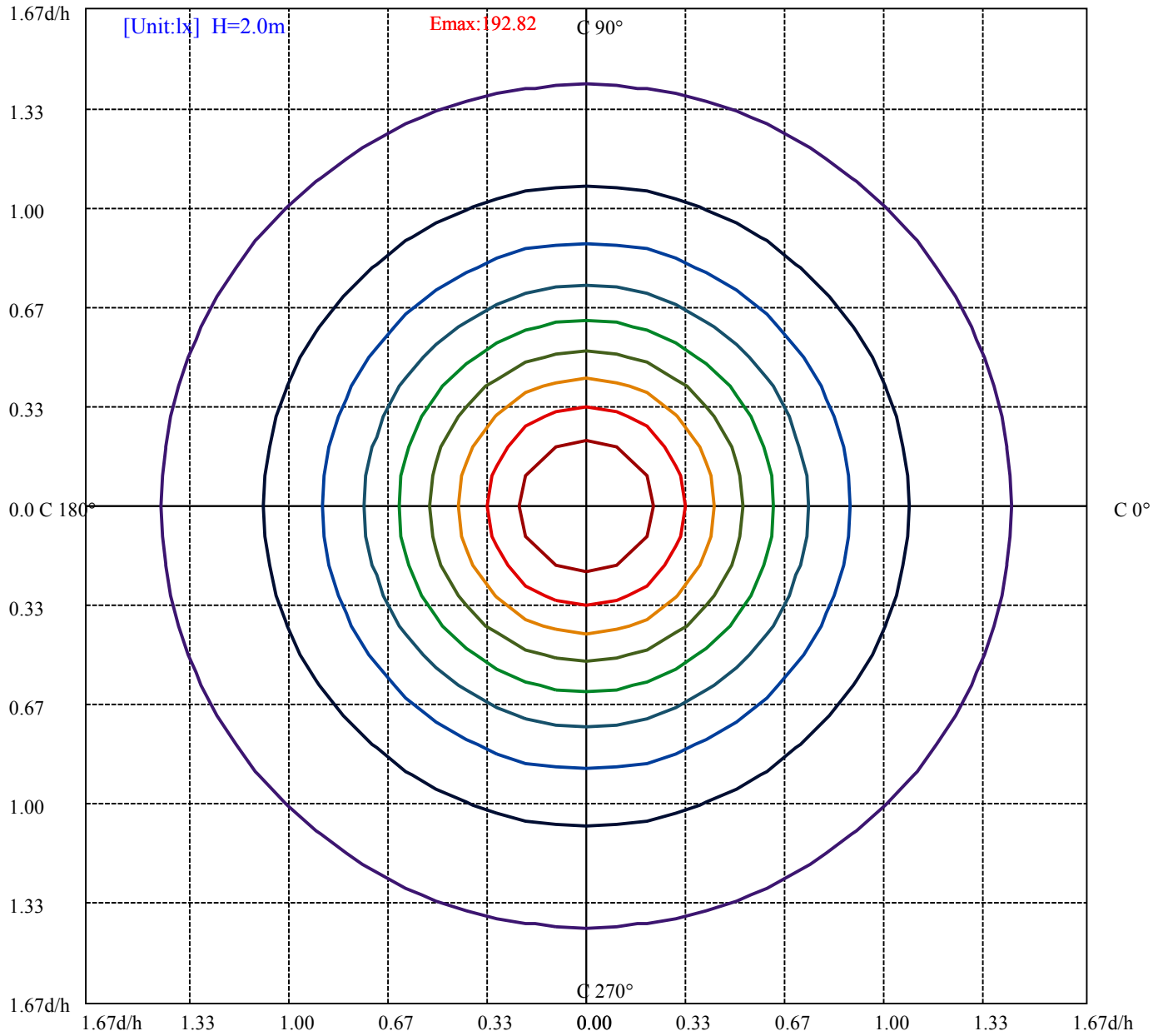
:C90/270Left:82.7 Right:82.7

Beam Angle(50%Imax):C0/180Left:56.0 Right:56.0

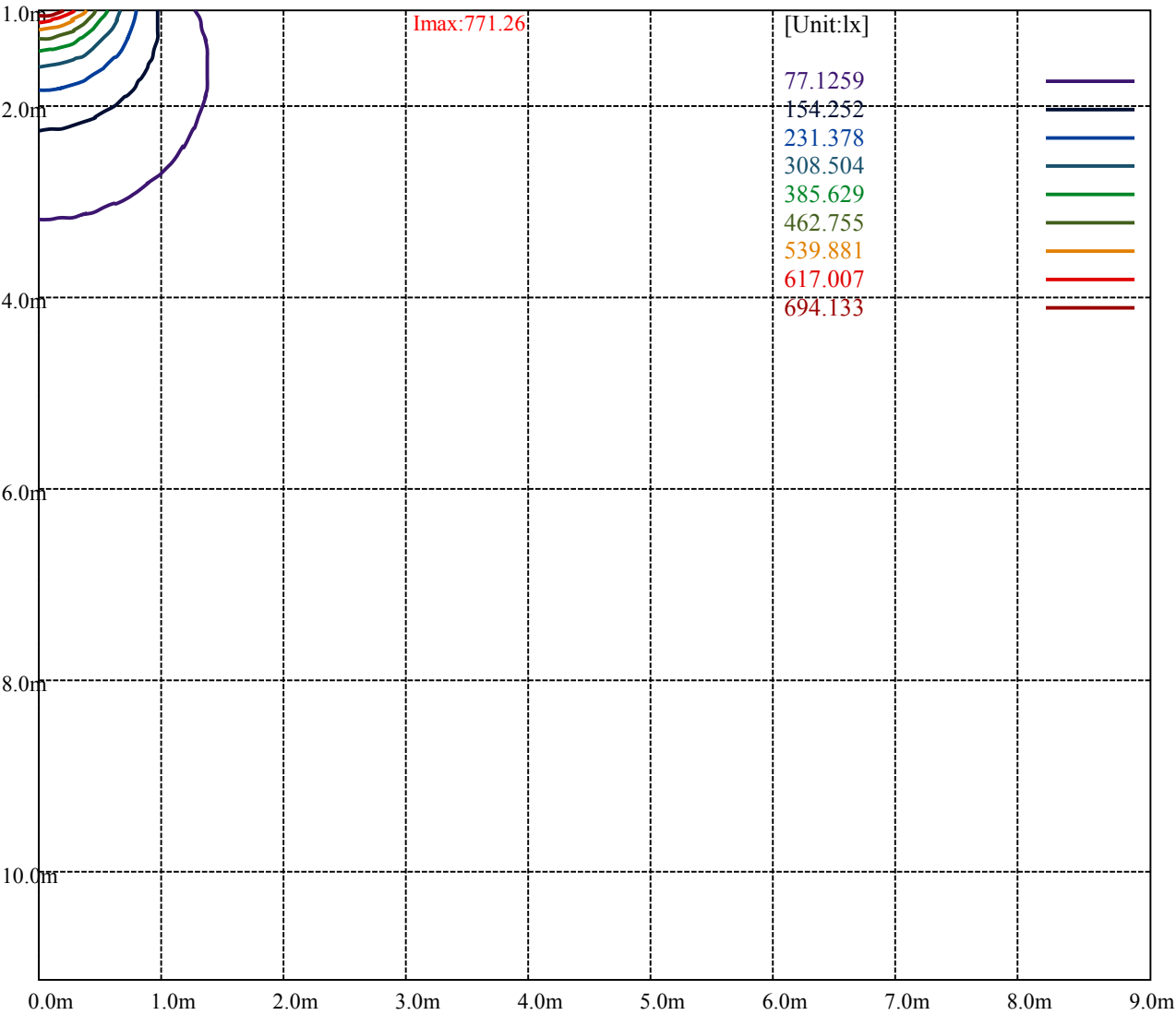
:C90/270Left:56.3 Right:56.3



Max , Ave Beam angle of C45 plane 112.20



(10%E _{max}) 19.28148	—
(20%E _{max}) 38.563	—
(30%E _{max}) 57.8445	—
(40%E _{max}) 77.126	—
(50%E _{max}) 96.40725	—
(60%E _{max}) 115.6888	—
(70%E _{max}) 134.9702	—
(80%E _{max}) 154.2518	—
(90%E _{max}) 173.5332	—



Luminance Table

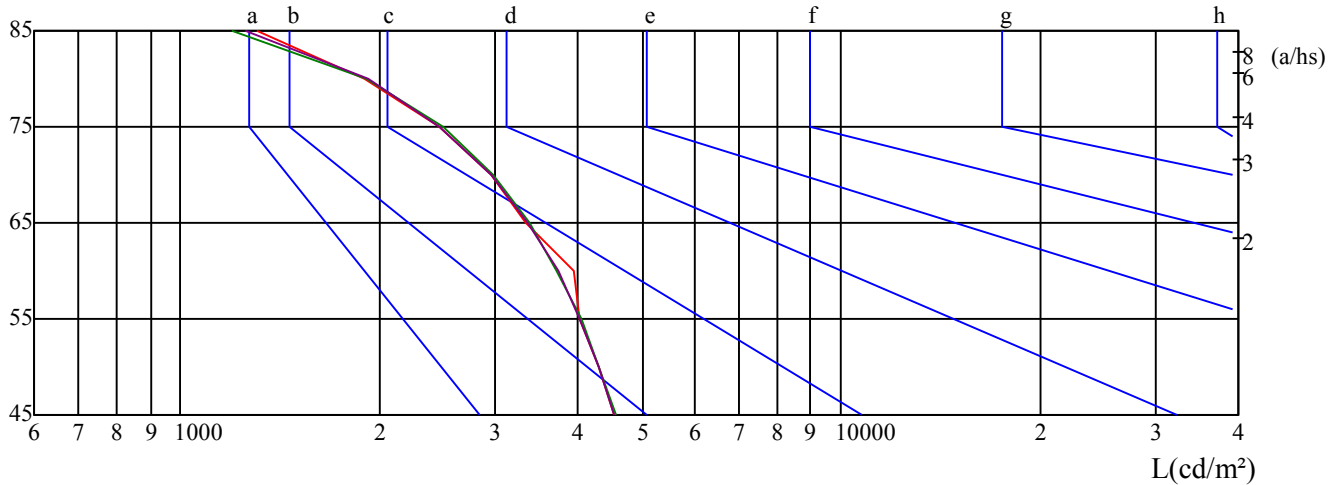
γ	45	50	55	60	65	70	75	80	85
C0	4554	4307	4045	3722	3378	2981	2494	1907	1198
C45	4548	4296	4033	3727	3365	2951	2473	1921	1257
C90	4534	4297	4019	3952	3337	2945	2461	1895	1307

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5223	5159	5203	4864	4799	4823	4686	5112	4915

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

 $\gamma(^{\circ})$ 

C0 ———

C45 ———

C90 ———

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	1.18	1.18	1.18	1.14	1.14	1.14	1.08	1.08	1.08	1.03	1.03	1.03	0.97	0.97	0.97	0.95
1	1.02	0.98	0.94	0.99	0.95	0.92	0.94	0.91	0.88	0.89	0.87	0.84	0.85	0.83	0.81	0.78
2	0.89	0.82	0.76	0.86	0.80	0.75	0.82	0.77	0.72	0.78	0.74	0.70	0.74	0.71	0.67	0.65
3	0.78	0.70	0.63	0.76	0.68	0.62	0.72	0.66	0.60	0.69	0.63	0.59	0.65	0.61	0.57	0.55
4	0.69	0.60	0.53	0.67	0.59	0.53	0.64	0.57	0.51	0.61	0.55	0.50	0.58	0.53	0.49	0.46
5	0.61	0.52	0.46	0.60	0.52	0.45	0.57	0.50	0.44	0.55	0.48	0.43	0.52	0.47	0.42	0.40
6	0.55	0.46	0.40	0.54	0.46	0.39	0.52	0.44	0.39	0.50	0.43	0.38	0.47	0.42	0.37	0.35
7	0.50	0.41	0.35	0.49	0.41	0.35	0.47	0.40	0.34	0.45	0.39	0.34	0.43	0.37	0.33	0.31
8	0.46	0.37	0.31	0.45	0.37	0.31	0.43	0.36	0.31	0.41	0.35	0.30	0.40	0.34	0.30	0.28
9	0.42	0.34	0.28	0.41	0.33	0.28	0.40	0.32	0.27	0.38	0.32	0.27	0.37	0.31	0.27	0.25
10	0.39	0.31	0.25	0.38	0.30	0.25	0.37	0.30	0.25	0.35	0.29	0.25	0.34	0.28	0.24	0.22

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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	771.26	770.27	764.40	750.14	729.10	701.12	667.45	629.36	583.95
15.0	771.26	771.62	764.83	752.78	730.04	704.85	671.78	633.10	589.34
30.0	771.26	772.08	766.08	752.46	732.39	705.69	675.00	634.13	593.54
45.0	771.26	772.80	766.35	753.81	733.63	707.27	674.54	636.46	593.65
60.0	771.26	772.90	767.25	754.42	734.67	708.19	676.24	638.65	595.78
75.0	771.26	773.36	767.25	755.40	735.44	709.09	676.55	638.54	595.60
90.0	771.26	773.45	768.34	756.11	736.13	708.84	677.54	640.13	597.24
105.0	771.26	774.28	768.88	756.36	736.25	709.74	677.10	638.71	598.30
120.0	771.26	772.81	767.70	754.81	735.35	708.58	676.14	638.04	594.64
135.0	771.26	771.08	765.33	754.01	734.12	707.47	674.34	636.10	592.20
150.0	771.26	773.64	767.05	753.87	713.61	706.11	675.18	636.30	591.92
165.0	771.26	772.08	765.78	751.90	731.35	704.22	670.34	631.53	582.39
180.0	771.26	763.95	749.50	727.12	699.68	665.55	625.47	580.79	531.59
195.0	771.26	763.56	748.52	725.69	697.06	662.18	621.68	579.19	529.54
210.0	771.26	762.90	747.74	723.58	696.16	660.65	619.97	574.20	523.80
225.0	771.26	762.53	746.35	723.08	693.09	657.09	617.64	569.38	521.11
240.0	771.26	761.98	744.96	721.29	690.35	655.03	613.35	567.20	516.51
255.0	771.26	761.69	744.64	720.94	690.31	653.85	614.11	565.07	517.21
270.0	771.26	761.40	744.07	721.89	689.68	654.37	612.30	565.85	515.21
285.0	771.26	763.21	746.12	721.71	691.00	654.34	612.66	568.23	554.52
300.0	771.26	762.12	745.31	720.82	713.88	654.76	613.19	567.05	520.26
315.0	771.26	761.31	744.98	720.61	693.41	657.91	617.39	571.67	521.38
330.0	771.26	764.03	748.48	725.78	696.41	661.09	620.65	575.26	528.05
345.0	771.26	763.22	747.79	725.32	696.19	662.76	623.03	578.65	529.97
360.0	771.26	770.27	764.40	750.14	729.10	701.12	667.45	629.36	583.95
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	537.37	485.47	430.49	372.72	312.69	254.83	193.99	134.59	78.71
15.0	541.41	491.76	435.32	379.97	319.99	259.02	198.05	138.61	85.25
30.0	545.87	494.56	440.16	382.95	325.56	262.53	204.14	144.57	88.36
45.0	549.47	495.21	444.03	386.95	327.41	266.69	205.88	149.53	90.35
60.0	548.91	498.12	443.88	387.09	327.84	269.95	209.33	149.81	93.84
75.0	551.49	497.52	446.48	391.87	330.16	269.54	208.65	152.05	96.08
90.0	550.06	498.96	444.30	387.00	327.59	270.56	209.42	150.02	94.26
105.0	548.03	499.58	444.91	387.41	327.63	266.47	208.88	146.35	93.88
120.0	547.22	495.87	444.06	383.12	326.19	264.88	203.94	144.64	89.63
135.0	544.02	493.91	438.70	380.75	320.51	259.28	198.31	142.00	87.16
150.0	543.51	491.18	435.36	376.53	318.51	256.84	195.63	136.43	84.18
165.0	540.47	484.40	431.43	372.43	311.52	249.78	191.79	132.52	77.90
180.0	478.07	421.56	364.69	301.23	242.10	180.72	122.40	68.88	23.92
195.0	475.73	418.47	359.58	298.97	235.37	173.95	118.68	62.87	21.74
210.0	469.40	411.65	358.79	293.23	230.84	169.91	112.06	59.48	18.89
225.0	466.85	409.22	351.04	287.51	227.61	164.07	109.08	57.17	18.00
240.0	461.90	407.47	344.58	286.97	223.26	162.55	105.03	53.79	17.75
255.0	462.61	404.73	344.47	284.13	222.23	159.89	105.19	90.24	17.59
270.0	460.82	405.98	345.75	328.60	220.37	159.69	102.75	52.10	17.70
285.0	462.10	404.60	348.38	283.29	224.70	163.72	106.41	54.94	18.28
300.0	462.79	409.16	349.77	288.46	226.60	165.84	111.11	56.28	19.64
315.0	467.99	411.05	352.00	294.69	229.71	172.21	114.17	61.15	19.80
330.0	475.07	416.05	360.15	299.48	237.99	177.05	118.68	67.07	21.50
345.0	477.37	421.57	363.30	303.12	245.03	184.02	125.48	70.69	22.92
360.0	537.37	485.47	430.49	372.72	312.69	254.83	193.99	134.59	78.71

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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	31.86	20.13	20.85	20.76	21.12	21.12	21.03	21.03	20.85
15.0	34.97	20.48	21.02	21.29	22.02	22.11	22.02	22.02	21.38
30.0	37.78	20.80	20.98	21.16	22.07	22.43	22.52	22.34	21.79
45.0	42.09	20.82	20.82	20.91	21.91	22.09	22.36	22.36	22.00
60.0	43.05	20.66	20.75	21.12	21.75	21.84	22.30	22.39	22.12
75.0	45.39	20.42	20.42	21.15	21.60	21.88	22.15	22.24	21.88
90.0	44.17	20.17	20.26	20.81	21.17	21.72	21.99	22.17	21.99
105.0	44.06	19.65	19.93	20.11	20.39	20.66	21.03	21.30	21.30
120.0	42.67	18.73	19.01	19.28	19.37	19.46	19.74	20.01	20.28
135.0	38.24	17.70	17.89	18.34	18.71	18.89	19.26	19.44	19.53
150.0	33.31	16.74	17.02	17.29	17.84	18.21	18.48	18.67	18.39
165.0	30.14	15.71	15.98	16.35	16.53	16.62	16.80	17.08	17.08
180.0	15.62	15.98	16.34	16.25	16.25	16.16	16.07	15.80	15.26
195.0	14.95	15.40	15.49	15.76	15.67	15.58	15.40	15.13	14.77
210.0	14.80	14.98	15.26	15.44	15.44	15.35	15.07	14.71	14.53
225.0	14.82	15.00	15.27	15.36	15.27	15.54	15.45	15.18	15.00
240.0	15.38	15.56	15.56	16.11	16.11	16.29	16.29	16.20	15.84
255.0	16.13	16.50	16.95	17.41	17.68	17.87	17.68	17.41	16.77
270.0	16.88	17.43	17.98	18.71	18.89	18.71	18.34	17.79	17.16
285.0	17.83	18.56	19.11	19.56	19.47	19.38	18.92	18.28	17.64
300.0	18.73	19.64	19.92	20.38	20.47	20.47	19.92	19.28	18.64
315.0	19.44	20.26	20.44	20.90	21.08	21.17	20.72	20.08	19.17
330.0	20.22	20.86	21.05	21.32	21.50	21.59	21.14	20.68	20.04
345.0	20.46	21.19	21.19	21.46	21.46	21.37	21.01	20.55	20.09
360.0	31.86	20.13	20.85	20.76	21.12	21.12	21.03	21.03	20.85
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	20.31	20.22	20.49	20.40	20.40	20.58	20.58	20.04	17.33
15.0	20.57	20.20	20.20	20.29	20.75	20.93	20.75	20.20	18.57
30.0	20.98	20.52	20.43	20.61	20.89	20.80	20.70	19.89	18.62
45.0	21.27	20.72	20.45	20.36	20.54	20.09	20.09	19.27	18.18
60.0	21.30	20.93	20.57	20.39	20.30	20.02	19.48	18.93	18.11
75.0	21.24	20.87	20.69	20.69	20.87	20.51	20.05	18.78	18.23
90.0	21.26	20.81	20.90	20.90	21.08	20.90	20.17	18.89	17.98
105.0	21.03	21.03	21.03	21.03	20.93	20.84	20.39	19.20	17.83
120.0	20.28	20.65	20.83	20.65	20.56	20.56	20.19	19.28	17.73
135.0	19.44	19.62	19.80	19.90	20.17	20.17	19.53	18.89	17.98
150.0	18.12	18.30	18.57	18.76	19.12	19.22	18.67	17.84	17.02
165.0	16.62	16.62	16.99	17.35	17.72	16.80	16.71	15.98	15.43
180.0	15.07	14.98	14.44	14.26	14.17	14.53	14.17	13.27	15.53
195.0	14.68	14.50	14.41	14.31	14.68	14.68	14.22	13.68	14.95
210.0	14.35	14.26	14.35	14.62	14.53	14.53	14.44	13.80	13.89
225.0	14.82	14.73	14.63	14.54	14.27	14.27	14.09	12.82	14.18
240.0	15.56	14.93	14.93	14.56	14.29	14.11	13.74	12.38	14.47
255.0	15.77	15.13	15.41	14.86	14.40	14.22	13.22	12.58	15.95
270.0	16.06	15.42	15.33	15.42	14.69	14.60	13.05	12.96	16.33
285.0	16.82	16.09	15.45	15.63	14.90	14.81	13.80	13.71	16.82
300.0	17.73	17.18	16.72	16.17	15.72	15.62	14.71	14.35	17.18
315.0	18.71	18.07	17.80	17.70	17.25	17.34	15.88	15.42	17.25
330.0	19.58	19.03	18.67	18.30	18.12	18.12	17.66	16.65	16.84
345.0	19.73	19.36	18.90	18.54	18.45	18.63	18.45	17.63	16.90
360.0	20.31	20.22	20.49	20.40	20.40	20.58	20.58	20.04	17.33

Intensity data(cd)

C/ $\gamma(^{\circ})$	180.0
0.0	15.62
15.0	15.49
30.0	16.07
45.0	17.36
60.0	17.66
75.0	17.96
90.0	17.98
105.0	17.83
120.0	17.09
135.0	16.97
150.0	16.93
165.0	17.26
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	15.62