
乐达凯

Client:

LumCAT: AVRW0727LAJUDBK-3000K

Luminaire: LED LAMP

Report No:

Ballast type:

Test No: LCZP25090317

Voltage(V): 120.020

LampCAT:

Current(A): 0.199

Lamp flux(lm): 1385.3

Power (W): 23.720

Number of Lamps: 1

PF: 0.993

Length(mm): 60

Width(mm): 60

Phm Type: C

Height(mm): 390

Photometric Results

Lumens(lm): 1385.30, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 58.40

Central intensity(cd): 25.955, Maximum intensity(cd): 219.299

Angle of maximum intensity: C=90.0 γ =90.0

Beam Angle(50%Imax): [C0/180]Total=290.0

[C90/270]Total=114.7

Field angle(10%Imax): [C0/180]Total=335.2

[C90/270]Total=283.0

Maximum s/h(1/2): C0_180=4.53 C90_270=5.13

Maximum s/h(1/4): C0_180=4.27 C90_270=4.79

Up flux rate of lamp(%): 47.23%

Down flux rate of lamp(%): 52.77%

Up flux rate of LUM(%): 47.23%

Down flux rate of LUM(%): 52.77%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 21.176%

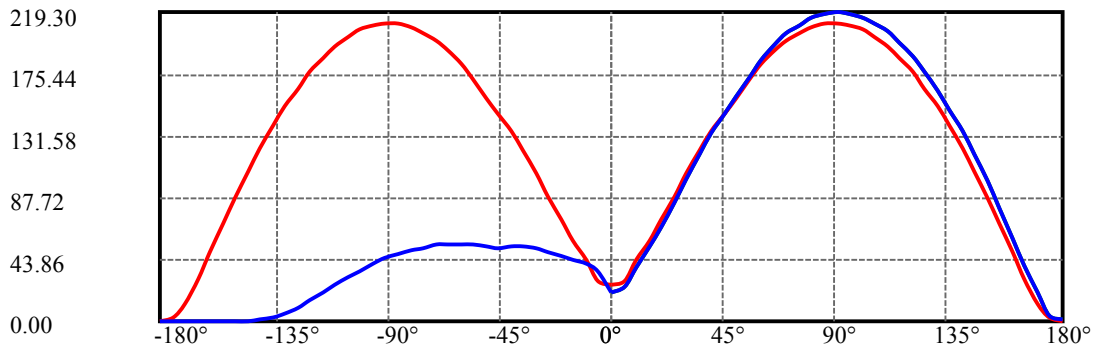
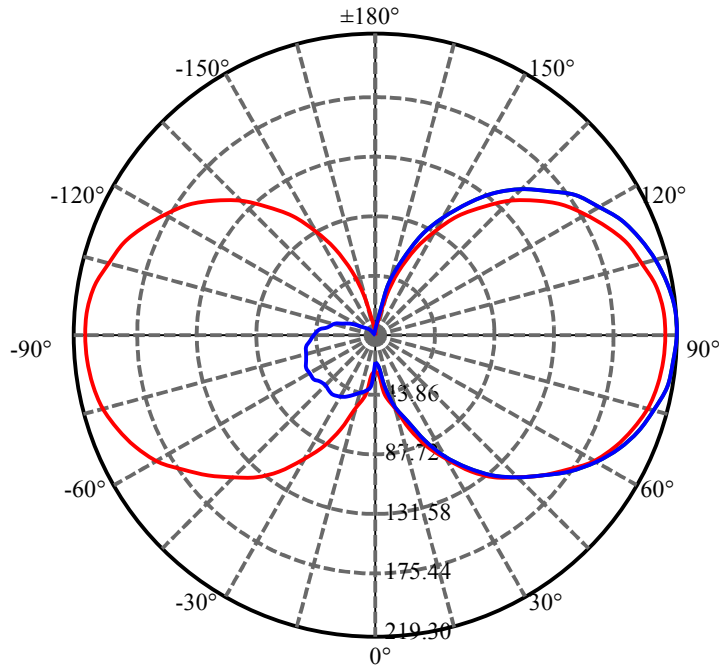
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	21.326	0.000	0	0.00%	0.00%
5.0	30.023	0.614	0.614	0.04%	0.04%
10.0	41.088	2.544	3.158	0.18%	0.23%
15.0	48.898	5.338	8.496	0.39%	0.61%
20.0	57.868	8.799	17.295	0.64%	1.25%
25.0	67.696	13.169	30.464	0.95%	2.20%
30.0	78.078	18.448	48.912	1.33%	3.53%
35.0	88.225	24.489	73.401	1.77%	5.30%
40.0	97.310	30.955	104.356	2.23%	7.53%
45.0	105.039	37.467	141.823	2.70%	10.24%
50.0	112.272	43.911	185.734	3.17%	13.41%
55.0	119.910	50.484	236.218	3.64%	17.05%
60.0	127.283	57.138	293.356	4.12%	21.18%
65.0	133.283	63.344	356.7	4.57%	25.75%
70.0	137.794	68.638	425.339	4.95%	30.70%
75.0	141.039	72.883	498.221	5.26%	35.96%
80.0	143.202	76.055	574.276	5.49%	41.46%
85.0	143.976	78.033	652.309	5.63%	47.09%
90.0	143.725	78.775	731.084	5.69%	52.77%
95.0	141.764	78.169	809.253	5.64%	58.42%
100.0	138.944	76.275	885.528	5.51%	63.92%
105.0	134.607	73.195	958.723	5.28%	69.21%
110.0	129.230	68.963	1027.686	4.98%	74.19%
115.0	122.798	63.815	1091.501	4.61%	78.79%
120.0	115.748	57.991	1149.492	4.19%	82.98%
125.0	107.506	51.604	1201.096	3.73%	86.70%
130.0	98.729	44.842	1245.938	3.24%	89.94%
135.0	89.307	37.995	1283.934	2.74%	92.68%
140.0	79.566	31.268	1315.202	2.26%	94.94%
145.0	68.190	24.652	1339.854	1.78%	96.72%
150.0	56.328	18.336	1358.19	1.32%	98.04%
155.0	44.166	12.718	1370.907	0.92%	98.96%
160.0	32.330	8.023	1378.93	0.58%	99.54%
165.0	19.675	4.286	1383.216	0.31%	99.85%
170.0	8.743	1.686	1384.902	0.12%	99.97%
175.0	1.594	0.370	1385.272	0.03%	100.00%
180.0	0.402	0.024	1385.295	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	48.91	3.53%	3.53%
0-40	104.36	7.53%	7.53%
0-60	293.36	21.18%	21.18%
0-90	731.08	52.77%	52.77%
0-120	1149.49	82.98%	82.98%
0-180	1385.30	100.00%	100.00%
60-90	437.73	31.60%	31.60%
90-120	418.41	30.20%	30.20%
90-130	514.85	37.17%	37.17%
90-150	627.11	45.27%	45.27%
90-180	654.19	47.22%	47.22%
0-116.44	1108.24	80.00%	80.00%

ZONAL LUMEN SUMMARY

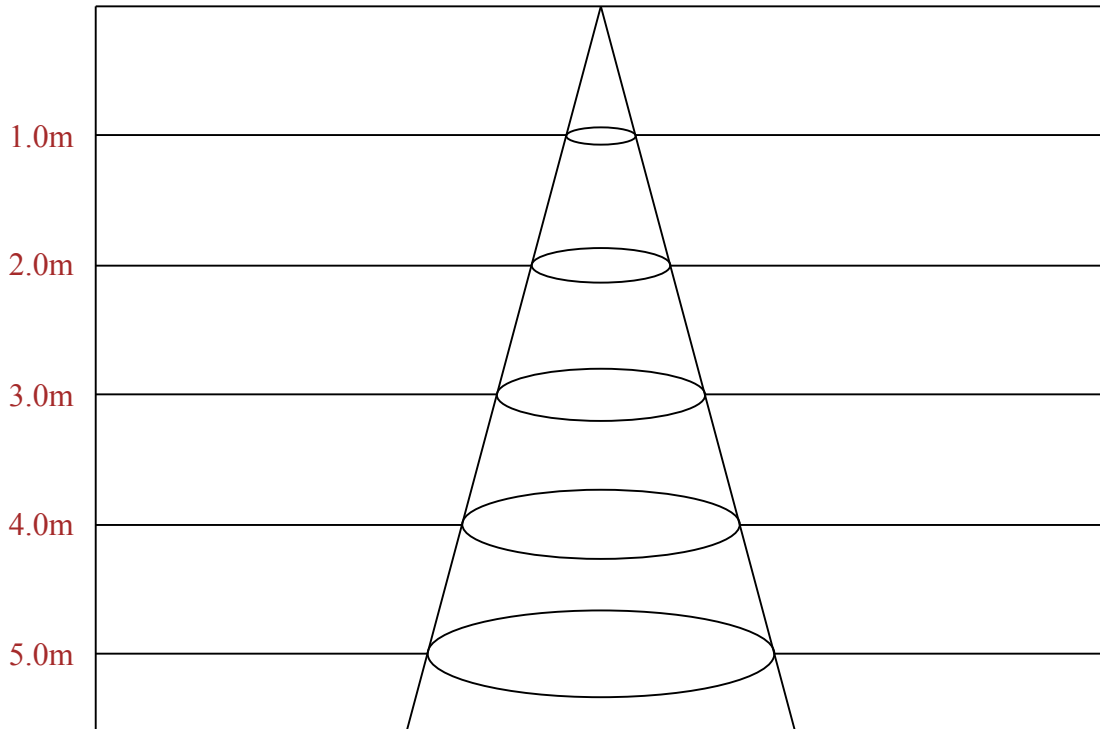
0-10	3.16
10-20	14.14
20-30	31.62
30-40	55.44
40-50	81.38
50-60	107.62
60-70	131.98
70-80	148.94
80-90	156.81
90-100	154.44
100-110	142.16
110-120	121.81
120-130	96.45
130-140	69.26
140-150	42.99
150-160	20.74
160-170	5.97
170-180	0.37



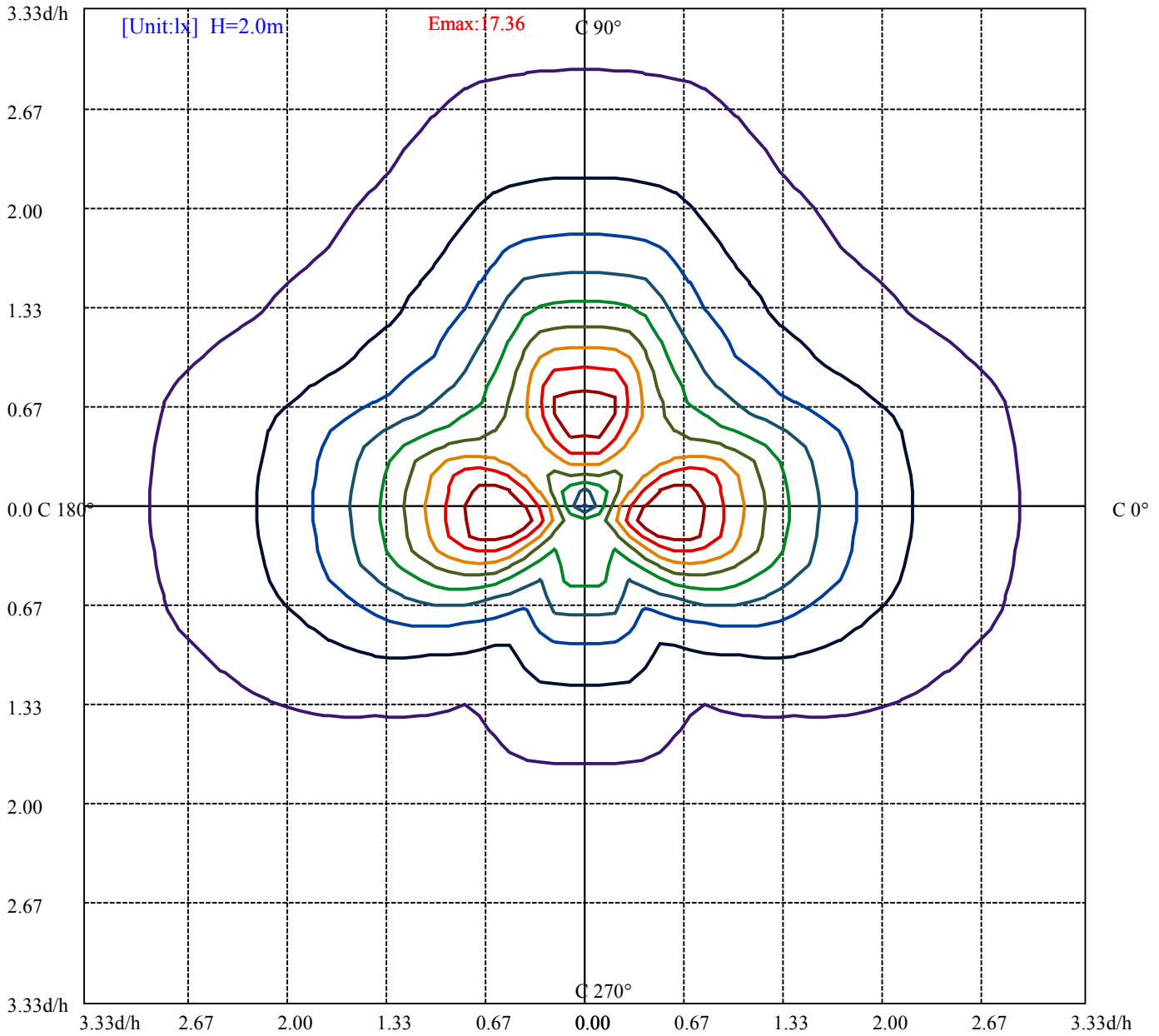
C90(Max): ———
 C0/C180: ———
 C90/C270: ———

Field angle(10%Imax):C0/180Left:257.6 Right:77.6
 :C90/270Left:203.4 Right:79.6

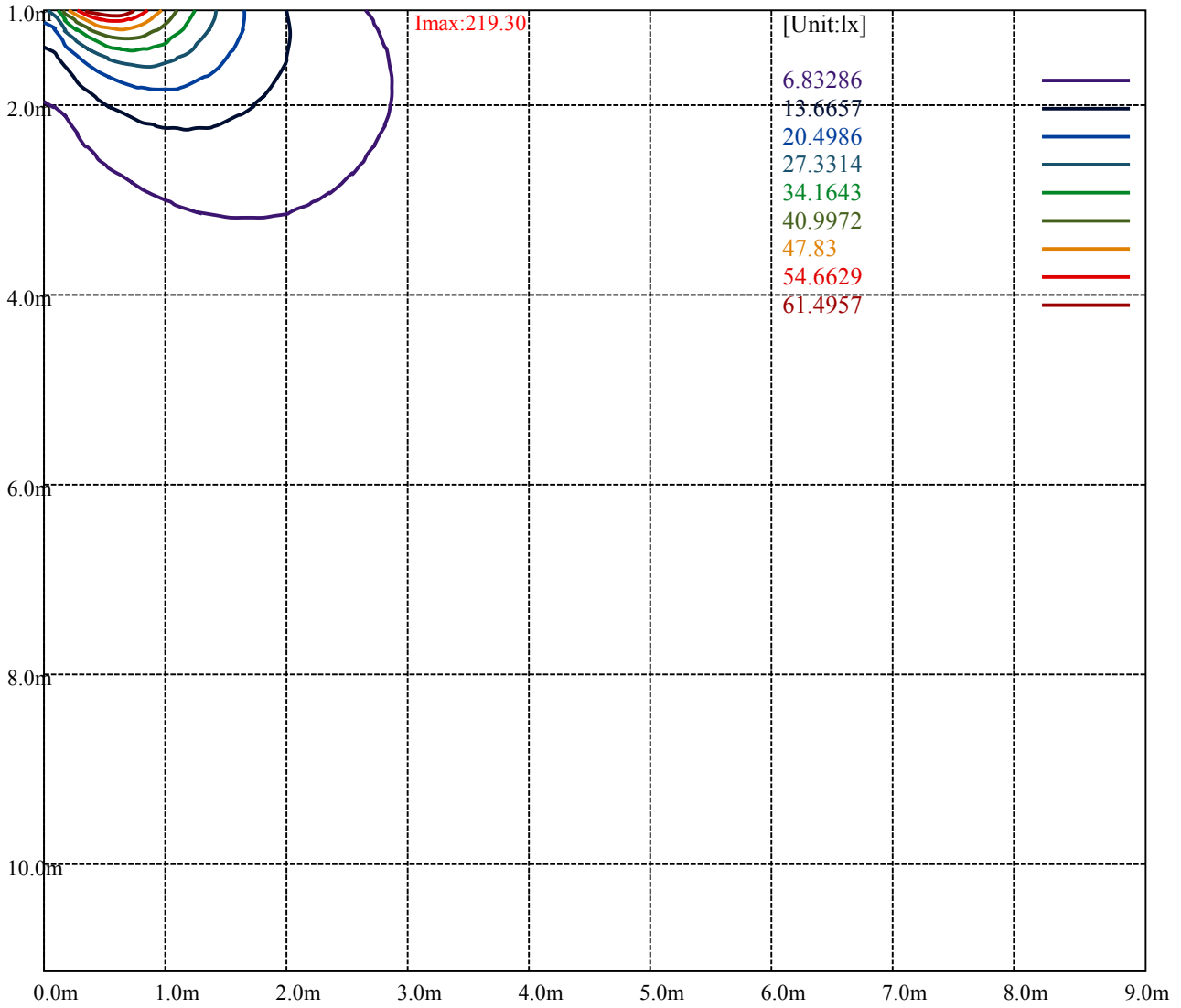
Beam Angle(50%Imax):C0/180Left:235.0 Right:55.0
 :C90/270Left:57.5 Right:57.2



Max , Ave Beam angle of C90 plane 287.85



- (10%Emax) 1.735713
- (20%Emax) 3.471425
- (30%Emax) 5.20715
- (40%Emax) 6.94285
- (50%Emax) 8.678575
- (60%Emax) 10.41428
- (70%Emax) 12.15
- (80%Emax) 13.8857
- (90%Emax) 15.62142



Luminance Table

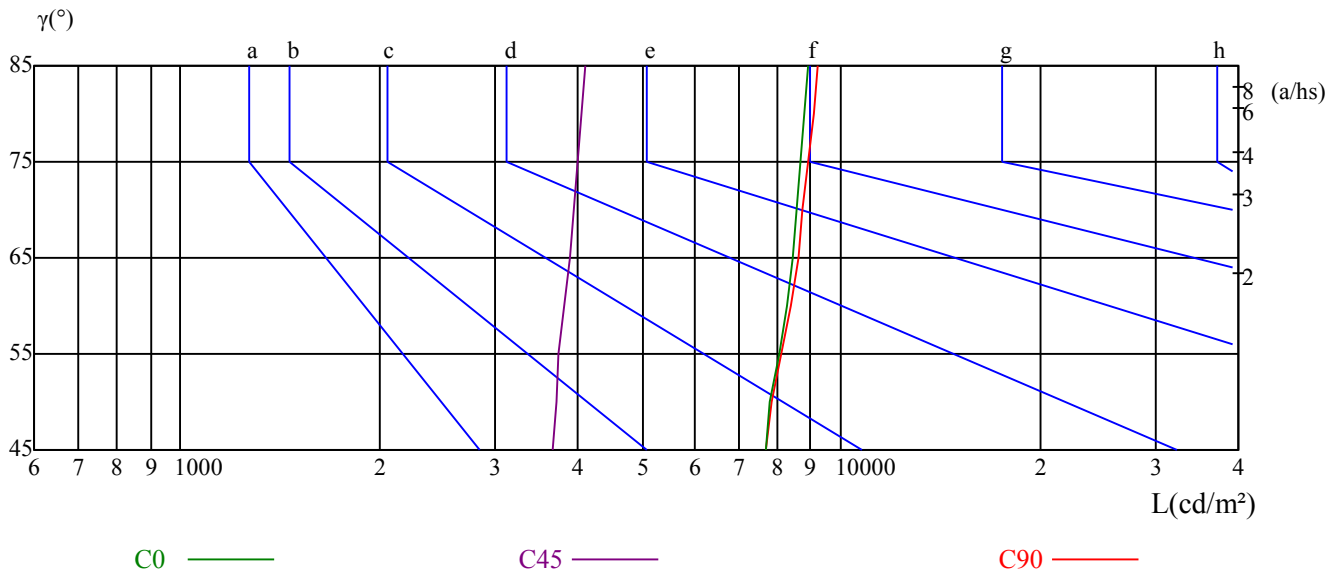
γ	45	50	55	60	65	70	75	80	85
C0	7689	7827	8068	8294	8464	8591	8707	8824	8924
C45	3666	3707	3740	3806	3881	3947	4002	4048	4097
C90	7699	7861	8128	8379	8603	8774	8931	9080	9217

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
126452	82366	65351	219920	140895	112624	671944	423339	340181

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	1.08	1.08	1.08	1.00	1.00	1.00	0.85	0.85	0.85	0.71	0.71	0.71	0.59	0.59	0.59	0.53
1	0.86	0.80	0.74	0.79	0.73	0.68	0.66	0.62	0.58	0.54	0.51	0.48	0.43	0.40	0.38	0.33
2	0.72	0.63	0.56	0.66	0.58	0.52	0.54	0.48	0.43	0.44	0.39	0.35	0.34	0.31	0.28	0.23
3	0.61	0.52	0.44	0.56	0.47	0.41	0.46	0.39	0.34	0.37	0.32	0.27	0.29	0.25	0.21	0.17
4	0.53	0.43	0.36	0.48	0.40	0.33	0.40	0.33	0.27	0.32	0.26	0.22	0.25	0.20	0.17	0.13
5	0.46	0.37	0.29	0.42	0.34	0.27	0.35	0.28	0.23	0.28	0.22	0.18	0.21	0.17	0.14	0.10
6	0.41	0.32	0.25	0.38	0.29	0.23	0.31	0.24	0.19	0.25	0.19	0.15	0.19	0.15	0.11	0.08
7	0.37	0.28	0.21	0.34	0.25	0.19	0.28	0.21	0.16	0.22	0.17	0.13	0.17	0.13	0.10	0.07
8	0.33	0.24	0.18	0.30	0.22	0.17	0.25	0.19	0.14	0.20	0.15	0.11	0.16	0.11	0.08	0.06
9	0.30	0.22	0.16	0.27	0.20	0.15	0.23	0.17	0.12	0.18	0.13	0.10	0.14	0.10	0.07	0.05
10	0.27	0.19	0.14	0.25	0.18	0.13	0.21	0.15	0.11	0.17	0.12	0.08	0.13	0.09	0.06	0.04

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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	25.96	18.49	37.61	51.18	67.30	84.24	101.64	118.48	133.24
15.0	25.77	19.49	37.07	50.73	66.30	84.51	101.18	118.67	134.60
30.0	23.68	21.04	36.70	44.26	52.46	62.84	73.77	85.33	96.35
45.0	23.41	21.04	36.52	42.53	49.54	58.38	68.39	79.05	88.79
60.0	21.40	22.77	38.80	47.45	56.28	66.39	77.87	89.98	100.72
75.0	21.40	22.77	39.07	52.55	67.67	83.24	101.73	118.39	134.24
90.0	19.76	24.22	38.80	53.00	67.39	84.51	101.18	118.03	132.96
105.0	20.04	23.77	39.52	52.55	67.21	83.60	101.09	117.21	132.96
120.0	18.94	25.04	40.25	48.54	57.28	67.03	79.14	90.89	101.91
135.0	16.76	24.32	39.07	43.35	49.09	56.10	65.02	75.95	84.88
150.0	19.94	26.14	39.62	45.08	57.47	60.20	69.94	80.69	90.89
165.0	18.85	24.86	38.52	49.18	61.47	75.22	91.25	107.19	123.13
180.0	25.96	39.52	50.27	62.75	77.41	93.71	109.10	123.40	135.42
195.0	25.77	38.52	48.72	60.84	74.04	89.61	104.64	118.21	134.24
210.0	23.68	37.89	43.53	49.91	57.28	66.39	75.86	84.61	91.98
225.0	23.41	36.79	39.71	42.53	44.90	49.09	53.73	57.83	60.93
240.0	21.40	37.16	40.34	40.25	40.89	42.53	43.53	43.90	44.35
255.0	21.40	36.16	41.80	44.17	46.90	50.09	52.00	53.37	53.91
270.0	19.76	35.97	41.35	43.62	46.26	49.45	51.36	52.46	52.55
285.0	20.04	36.97	42.71	44.99	47.45	50.64	53.19	54.92	54.92
300.0	18.94	37.07	39.43	38.16	37.89	38.61	39.52	40.16	39.98
315.0	16.76	36.61	40.44	43.71	47.54	52.91	57.74	62.47	66.76
330.0	19.94	37.43	46.63	57.37	68.03	78.87	89.89	100.91	110.83
345.0	18.85	36.52	49.63	64.84	80.78	96.54	111.11	125.31	138.43
360.0	25.96	18.49	37.61	51.18	67.30	84.24	101.64	118.48	133.24
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	147.63	160.92	174.77	188.34	199.08	207.64	214.11	219.39	222.58
15.0	148.72	162.29	175.04	189.06	199.45	208.55	215.47	220.39	223.31
30.0	106.19	115.21	123.95	132.96	141.43	147.63	152.64	156.64	158.83
45.0	97.45	105.55	112.84	120.21	126.95	132.42	136.61	139.61	141.62
60.0	110.11	118.57	127.14	135.60	143.25	148.99	153.82	156.92	159.01
75.0	148.35	160.83	173.76	186.33	197.08	205.55	211.92	217.02	219.75
90.0	146.99	159.10	172.58	184.87	195.53	203.73	210.19	214.93	217.75
105.0	146.72	158.83	171.67	184.15	194.35	202.45	208.64	213.47	216.02
120.0	111.84	120.21	128.14	136.79	144.62	150.63	155.09	158.46	160.56
135.0	92.80	99.54	105.37	111.65	117.66	122.76	126.68	129.32	131.05
150.0	99.63	106.92	113.02	120.40	127.77	133.33	137.70	140.80	142.98
165.0	134.15	144.26	154.91	166.11	175.77	183.60	189.34	193.62	196.53
180.0	145.99	155.91	167.84	177.68	185.69	191.34	195.71	198.35	199.08
195.0	140.52	150.81	161.83	170.94	178.41	184.05	188.24	190.61	191.43
210.0	99.18	103.82	109.74	116.12	121.31	125.22	127.86	129.41	129.69
225.0	62.66	63.84	65.57	67.94	69.40	70.12	70.12	69.40	68.30
240.0	43.53	42.53	43.08	43.99	43.62	42.80	41.44	39.71	37.52
255.0	53.00	53.28	54.92	55.83	55.19	54.01	52.27	51.55	47.54
270.0	51.82	52.73	54.82	54.92	55.10	54.01	52.37	50.36	47.90
285.0	54.19	54.64	56.37	57.47	57.10	55.92	54.19	52.18	49.63
300.0	39.25	38.71	38.98	39.89	39.52	38.71	37.52	35.88	34.06
315.0	70.31	73.68	77.59	81.05	83.69	85.33	86.34	86.52	85.97
330.0	119.12	128.87	137.79	145.99	152.09	156.92	160.38	162.74	163.38
345.0	150.81	163.47	176.13	186.51	194.71	201.36	206.28	209.55	210.92
360.0	147.63	160.92	174.77	188.34	199.08	207.64	214.11	219.39	222.58

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	223.94	223.49	221.30	217.11	210.65	202.82	193.34	182.60	169.48
15.0	225.13	224.04	222.12	217.84	211.65	203.73	194.16	182.87	170.39
30.0	160.19	159.92	158.83	155.91	151.63	145.99	139.52	131.78	123.31
45.0	142.53	141.89	140.34	137.52	133.78	128.77	122.58	115.84	107.92
60.0	159.92	159.19	157.19	154.00	149.45	143.89	136.88	128.77	120.12
75.0	220.67	219.94	217.57	213.38	207.00	198.90	189.15	178.32	165.75
90.0	219.30	218.12	215.57	211.10	205.00	197.35	187.61	176.68	163.75
105.0	217.48	215.93	214.02	209.65	203.45	195.44	186.06	175.04	162.84
120.0	161.10	160.74	158.74	155.28	150.72	144.17	138.06	129.87	120.85
135.0	131.96	131.05	129.41	126.95	123.31	118.76	113.20	106.55	99.27
150.0	143.80	143.44	141.89	138.88	134.60	129.69	123.49	116.30	108.19
165.0	197.08	196.44	194.25	190.25	184.60	177.22	168.75	158.28	147.35
180.0	198.54	196.08	192.16	185.97	178.59	169.30	159.65	147.99	135.42
195.0	190.98	188.79	184.60	179.05	171.67	163.02	153.00	141.80	129.23
210.0	129.50	127.68	124.59	120.40	115.21	109.19	102.64	94.90	86.70
225.0	66.30	63.02	59.29	55.10	50.45	45.63	44.26	35.52	30.96
240.0	35.15	31.60	30.51	23.50	19.40	15.03	11.11	7.19	4.19
255.0	44.26	39.89	34.97	30.05	24.68	19.67	14.48	9.47	5.01
270.0	44.81	40.71	35.70	30.87	25.68	20.22	14.94	10.11	5.56
285.0	46.17	41.53	36.52	31.60	25.77	20.40	15.03	9.84	5.46
300.0	31.60	28.32	24.95	21.40	17.49	13.66	9.93	6.65	3.92
315.0	84.79	82.06	78.78	74.86	70.49	65.66	60.29	54.73	49.00
330.0	163.56	160.56	157.28	152.36	145.99	138.34	129.69	120.94	110.47
345.0	210.65	207.92	204.09	197.53	190.25	180.32	170.12	158.10	144.35
360.0	223.94	223.49	221.30	217.11	210.65	202.82	193.34	182.60	169.48
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	156.10	140.52	123.13	104.00	84.97	64.21	43.35	23.13	5.56
15.0	155.82	140.89	122.13	103.73	83.24	62.38	41.44	22.40	3.92
30.0	113.47	102.18	89.52	75.41	60.84	46.54	31.87	16.48	2.37
45.0	98.72	87.88	76.50	63.11	50.36	36.61	23.59	10.66	1.55
60.0	109.47	98.36	85.15	71.13	56.19	41.89	26.87	13.11	1.73
75.0	151.63	135.88	119.30	100.09	79.69	58.92	38.43	19.03	2.82
90.0	150.45	134.60	118.21	98.99	80.23	58.65	39.62	20.49	3.55
105.0	148.81	133.60	117.12	97.26	78.14	57.74	37.70	18.94	3.46
120.0	110.47	99.63	85.79	72.31	57.47	43.26	27.96	14.02	1.46
135.0	90.80	80.78	70.12	58.10	45.72	32.97	20.22	9.29	1.27
150.0	99.09	89.07	77.05	64.02	50.64	37.61	23.22	11.47	1.64
165.0	134.42	120.31	104.19	87.34	68.12	50.36	32.06	16.21	2.64
180.0	121.03	105.55	88.34	71.22	52.91	34.61	16.94	2.64	0.73
195.0	116.39	101.00	84.42	66.94	49.27	44.90	15.03	1.46	0.55
210.0	77.59	74.95	55.55	43.44	31.97	19.85	9.38	1.00	0.64
225.0	26.68	22.59	18.31	14.02	9.74	5.65	2.37	0.73	0.64
240.0	2.37	1.64	1.37	1.27	1.09	0.82	0.55	0.55	0.46
255.0	2.19	0.91	0.64	0.55	0.64	0.46	0.55	0.55	0.55
270.0	2.28	0.73	0.18	0.18	0.18	0.36	0.36	0.36	0.46
285.0	2.46	1.18	0.82	0.82	0.64	0.64	0.46	0.36	0.46
300.0	2.37	1.91	1.64	1.55	1.27	1.00	0.73	0.55	0.36
315.0	42.99	37.07	30.69	23.77	17.21	10.66	5.19	0.64	0.46
330.0	98.45	85.06	71.04	56.28	42.35	27.78	14.21	2.00	0.46
345.0	129.32	113.29	95.35	76.32	57.10	38.07	20.13	3.73	0.55
360.0	156.10	140.52	123.13	104.00	84.97	64.21	43.35	23.13	5.56

Intensity data(cd)

C/γ(°)	180.0
0.0	0.73
15.0	0.73
30.0	0.82
45.0	0.82
60.0	0.91
75.0	0.91
90.0	0.91
105.0	0.91
120.0	0.73
135.0	0.73
150.0	0.73
165.0	0.73
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	0.73