
AFX

Client:

LumCAT: VRNF05LAJUDSN

Luminaire: LED 灯具

Report No:

Ballast type:

Test No: LCZP24070157

Voltage(V): 120.000

LampCAT:

Current(A): 0.077

Lamp flux(lm): 703.1

Power (W): 8.930

Number of Lamps: 1

PF: 0.965

Length(mm): -140

Width(mm): -140

Phm Type: C

Height(mm): 140

Photometric Results

Lumens(lm): 703.06, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 78.73

Central intensity(cd): 87.724, Maximum intensity(cd): 87.770

Angle of maximum intensity: C=15.0 γ =5.0

Beam Angle(50%Imax): [C0/180]Total=N.A.

[C90/270]Total=N.A.

Field angle(10%Imax): [C0/180]Total=N.A.

[C90/270]Total=N.A.

Maximum s/h(1/2): C0_180=1.31 C90_270=1.35

Maximum s/h(1/4): C0_180=1.49 C90_270=1.54

Up flux rate of lamp(%): 47.19%

Down flux rate of lamp(%): 52.81%

Up flux rate of LUM(%): 47.19%

Down flux rate of LUM(%): 52.81%

CIE Type : General diffuse lighting

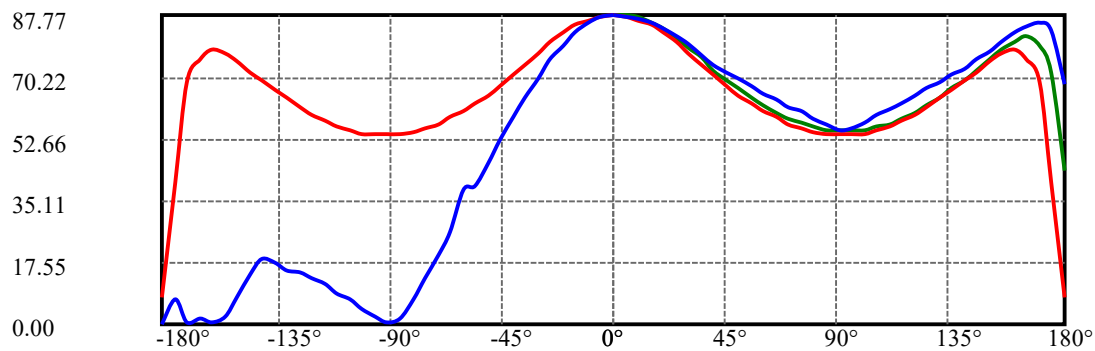
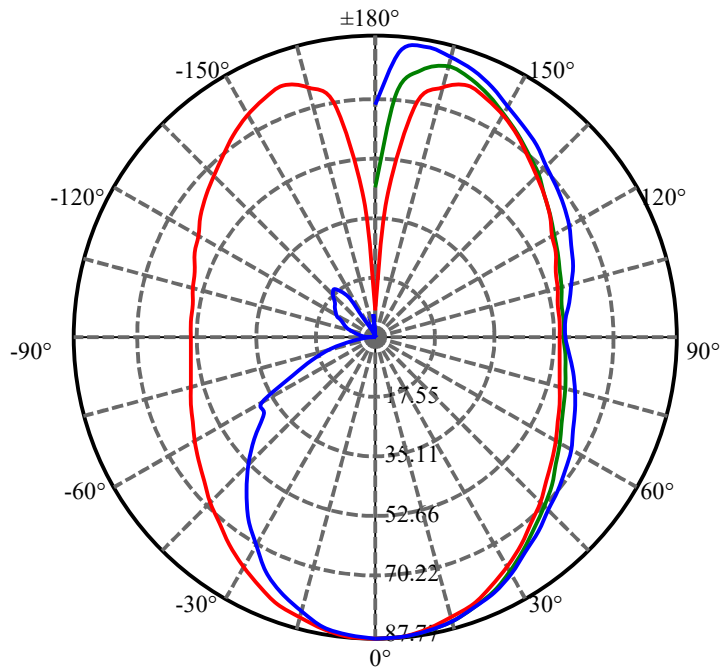
Output flux ratio in π solid angle : 30.937%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	87.724	0.000	0	0.00%	0.00%
5.0	87.343	2.093	2.093	0.30%	0.30%
10.0	86.359	6.214	8.307	0.88%	1.18%
15.0	84.651	10.144	18.451	1.44%	2.62%
20.0	82.368	13.765	32.216	1.96%	4.58%
25.0	79.393	16.966	49.181	2.41%	7.00%
30.0	76.052	19.672	68.853	2.80%	9.79%
35.0	72.400	21.861	90.714	3.11%	12.90%
40.0	68.858	23.568	114.282	3.35%	16.25%
45.0	65.217	24.825	139.107	3.53%	19.79%
50.0	61.892	25.684	164.791	3.65%	23.44%
55.0	58.713	26.223	191.014	3.73%	27.17%
60.0	55.890	26.490	217.504	3.77%	30.94%
65.0	52.926	26.453	243.958	3.76%	34.70%
70.0	50.445	26.174	270.132	3.72%	38.42%
75.0	48.358	25.826	295.957	3.67%	42.10%
80.0	46.788	25.458	321.416	3.62%	45.72%
85.0	45.502	25.077	346.493	3.57%	49.28%
90.0	45.104	24.809	371.302	3.53%	52.81%
95.0	45.344	24.765	396.068	3.52%	56.33%
100.0	46.095	24.846	420.914	3.53%	59.87%
105.0	47.332	24.999	445.912	3.56%	63.42%
110.0	48.752	25.115	471.027	3.57%	67.00%
115.0	50.539	25.141	496.169	3.58%	70.57%
120.0	52.367	25.017	521.185	3.56%	74.13%
125.0	54.401	24.679	545.865	3.51%	77.64%
130.0	56.291	24.068	569.933	3.42%	81.06%
135.0	58.317	23.158	593.091	3.29%	84.36%
140.0	60.384	21.979	615.069	3.13%	87.48%
145.0	61.573	20.348	635.417	2.89%	90.38%
150.0	61.735	18.158	653.575	2.58%	92.96%
155.0	61.060	15.540	669.115	2.21%	95.17%
160.0	60.172	12.715	681.83	1.81%	96.98%
165.0	59.626	9.873	691.703	1.40%	98.38%
170.0	55.092	6.805	698.508	0.97%	99.35%
175.0	47.223	3.660	702.168	0.52%	99.87%
180.0	27.561	0.894	703.062	0.13%	100.00%

ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	68.85	9.79%	9.79%
0-40	114.28	16.25%	16.25%
0-60	217.50	30.94%	30.94%
0-90	371.30	52.81%	52.81%
0-120	521.19	74.13%	74.13%
0-180	703.06	100.00%	100.00%
60-90	153.80	21.88%	21.88%
90-120	149.88	21.32%	21.32%
90-130	198.63	28.25%	28.25%
90-150	282.27	40.15%	40.15%
90-180	330.87	47.06%	47.06%
0-128.45	562.45	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	8.31
10-20	23.91
20-30	36.64
30-40	45.43
40-50	50.51
50-60	52.71
60-70	52.63
70-80	51.28
80-90	49.89
90-100	49.61
100-110	50.11
110-120	50.16
120-130	48.75
130-140	45.14
140-150	38.51
150-160	28.25
160-170	16.68
170-180	3.66



C15(Max): —————

C0/C180: —————

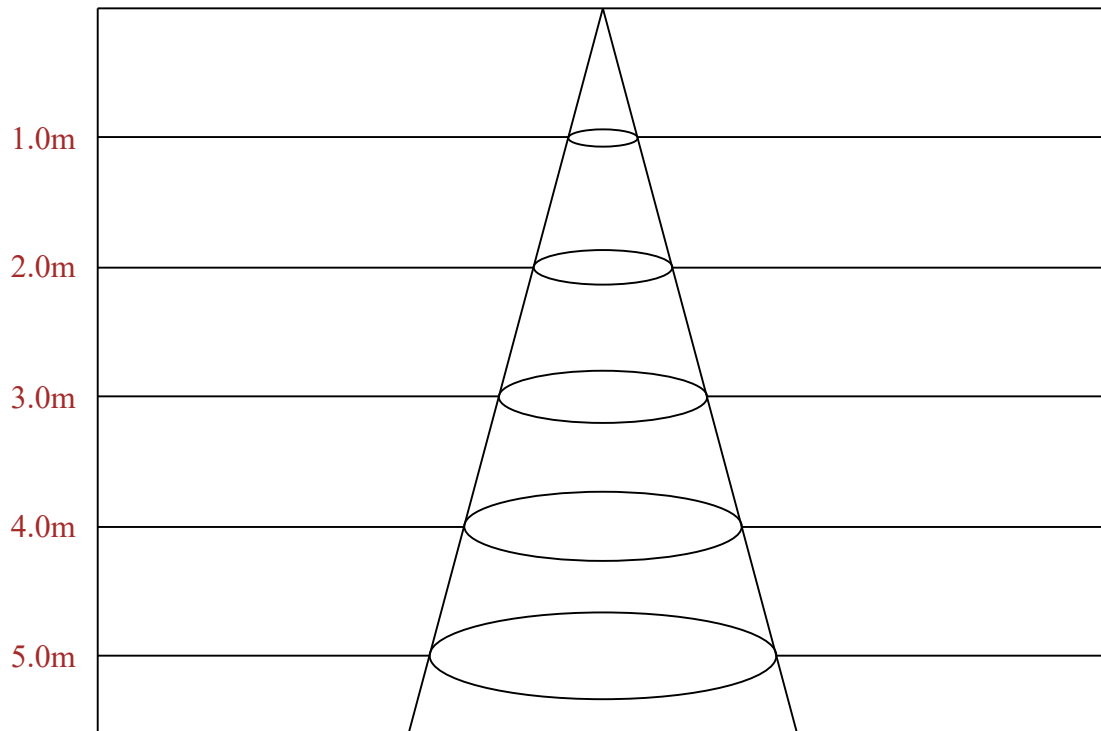
C90/C270: —————

Field angle(10%Imax):C0/180Left:179.8 Right:179.8

:C90/270Left:41.1 Right:41.1

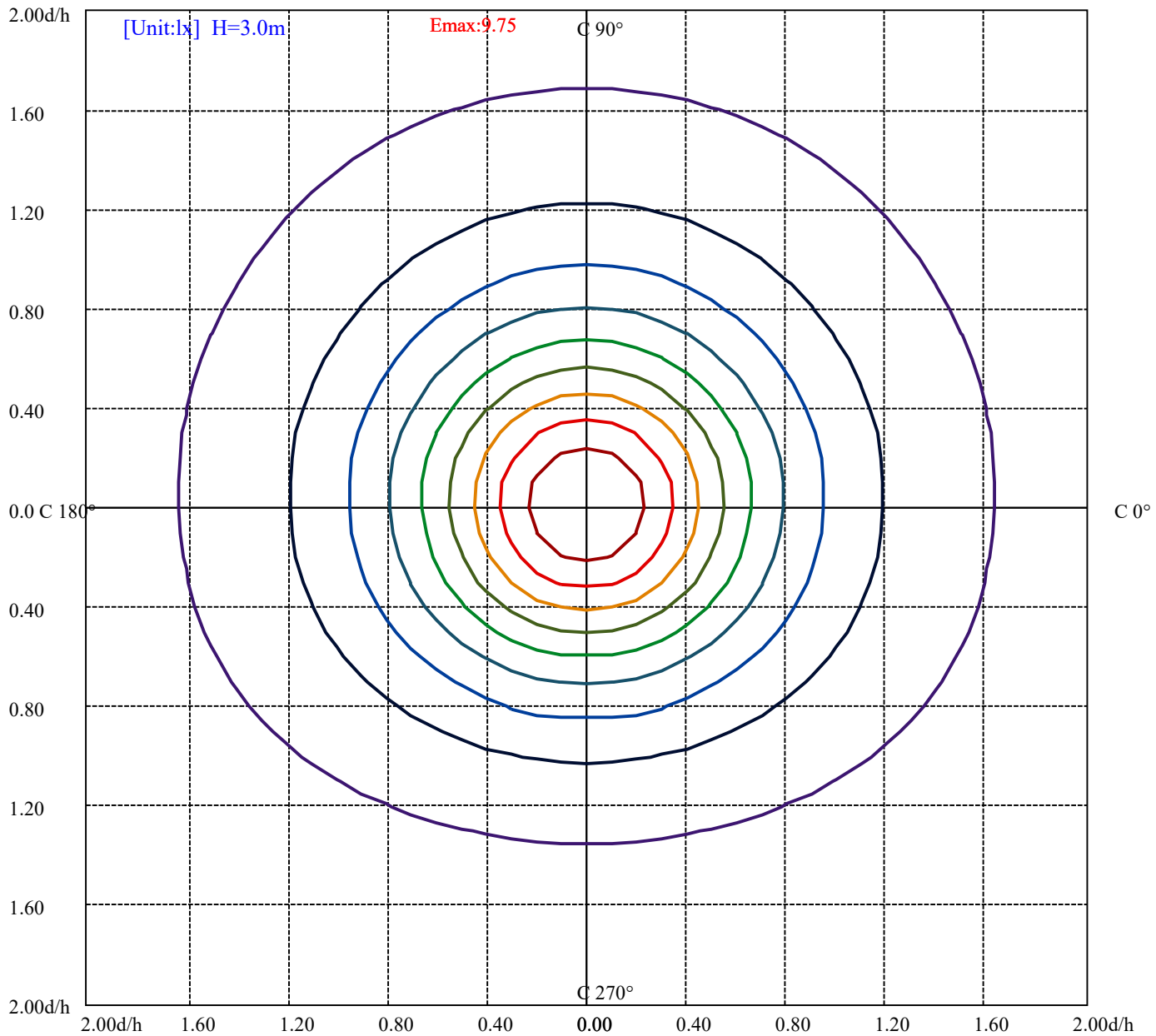
Beam Angle(50%Imax):C0/180Left:174.4 Right:174.4

:C90/270Left:19.7 Right:19.7

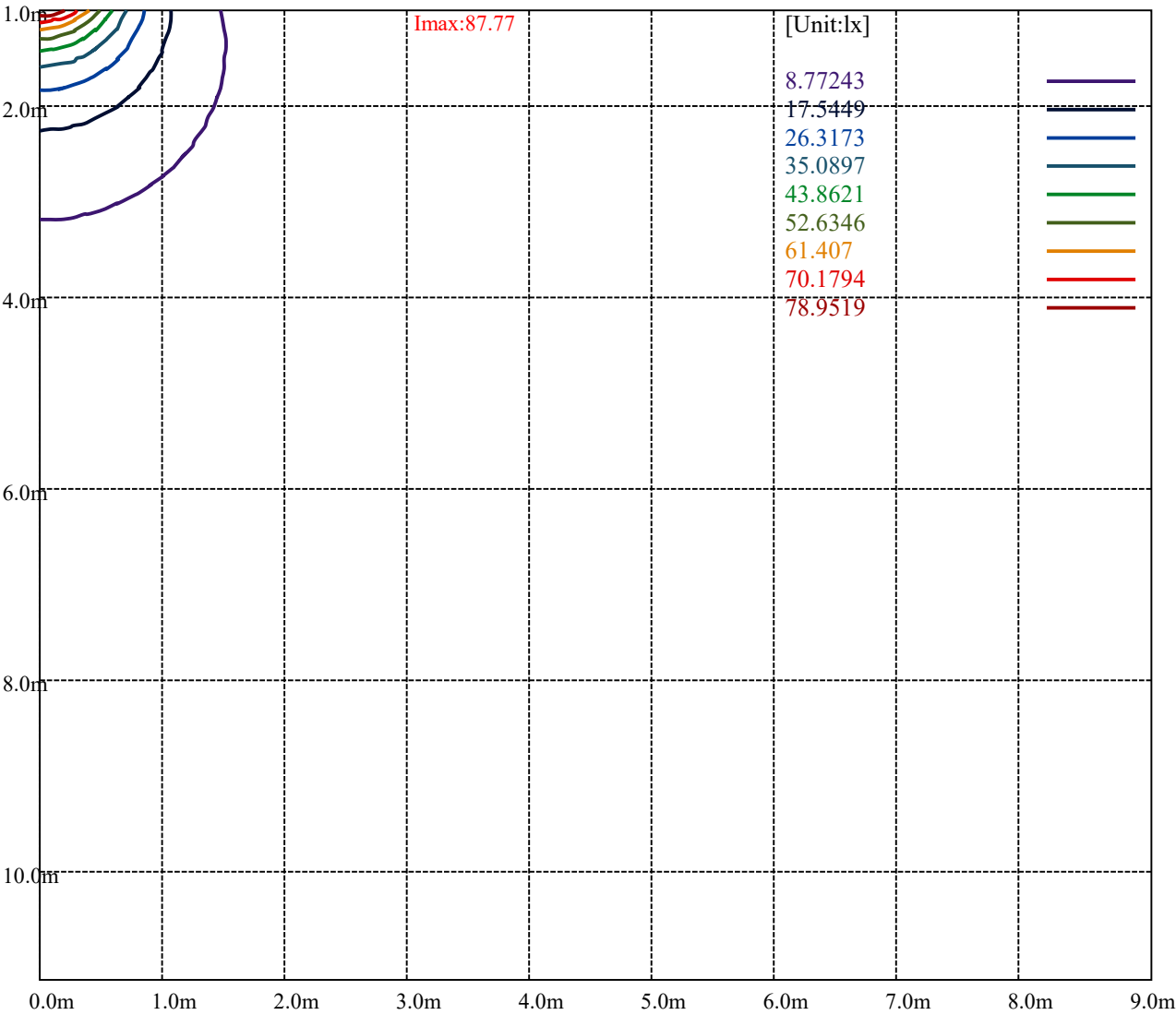


Max , Ave

Beam angle of C15 plane 352.24



(10%Emax) 0.9747145	—
(20%Emax) 1.949433	—
(30%Emax) 2.924145	—
(40%Emax) 3.898855	—
(50%Emax) 4.873567	—
(60%Emax) 5.848289	—
(70%Emax) 6.823	—
(80%Emax) 7.797711	—
(90%Emax) 8.772433	—



Luminance Table

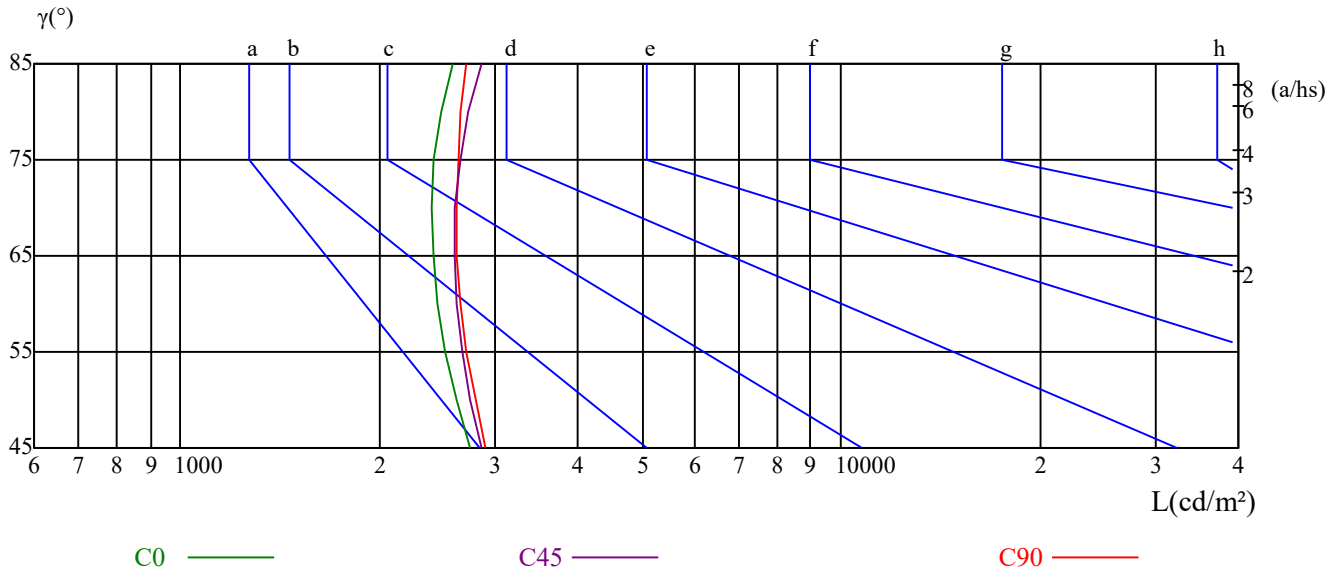
γ	45	50	55	60	65	70	75	80	85
C0	2739	2614	2520	2453	2418	2402	2425	2486	2589
C45	2852	2743	2668	2615	2597	2606	2650	2729	2852
C90	2890	2791	2714	2657	2622	2611	2631	2649	2716

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
9019	6909	8278	13945	9225	12585	40270	21694	35962

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



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	1.08	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	0.89	0.84	0.80	0.83	0.78	0.74	0.70	0.66	0.63	0.58	0.55	0.53	0.47	0.45	0.43	0.38
2	0.76	0.69	0.63	0.71	0.64	0.58	0.59	0.54	0.50	0.49	0.45	0.42	0.40	0.37	0.34	0.29
3	0.66	0.58	0.51	0.61	0.54	0.48	0.51	0.46	0.41	0.43	0.38	0.34	0.34	0.31	0.28	0.24
4	0.58	0.49	0.42	0.54	0.46	0.40	0.45	0.39	0.34	0.37	0.33	0.29	0.30	0.26	0.23	0.20
5	0.52	0.43	0.36	0.48	0.40	0.34	0.40	0.34	0.29	0.33	0.28	0.24	0.27	0.23	0.20	0.17
6	0.46	0.37	0.31	0.43	0.35	0.29	0.36	0.30	0.25	0.30	0.25	0.21	0.24	0.20	0.17	0.14
7	0.41	0.33	0.27	0.38	0.31	0.25	0.33	0.26	0.22	0.27	0.22	0.18	0.22	0.18	0.15	0.13
8	0.37	0.29	0.24	0.35	0.27	0.22	0.30	0.24	0.19	0.25	0.20	0.16	0.20	0.16	0.13	0.11
9	0.34	0.26	0.21	0.32	0.25	0.20	0.27	0.21	0.17	0.23	0.18	0.15	0.19	0.15	0.12	0.10
10	0.31	0.24	0.19	0.29	0.22	0.17	0.25	0.19	0.15	0.21	0.16	0.13	0.17	0.14	0.11	0.09

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	87.72	87.46	86.76	85.27	83.08	80.71	77.73	74.40	71.07
15.0	87.72	87.64	86.93	85.26	83.32	80.76	77.85	74.76	71.59
30.0	87.72	87.28	86.40	84.99	83.13	80.75	78.01	75.00	71.82
45.0	87.72	87.37	86.74	85.23	83.71	81.13	78.36	75.42	72.48
60.0	87.72	87.54	86.74	85.57	83.59	81.53	78.84	75.96	73.09
75.0	87.72	87.54	87.00	85.56	83.84	81.67	79.05	76.25	73.63
90.0	87.72	87.45	86.91	85.46	83.83	81.75	79.40	76.41	73.69
105.0	87.72	87.63	87.00	85.72	84.08	81.89	79.43	76.79	73.88
120.0	87.72	87.91	86.99	85.99	84.16	82.06	79.78	76.77	73.85
135.0	87.72	87.63	87.18	86.00	84.18	82.09	79.36	76.72	73.82
150.0	87.72	87.63	87.09	85.82	82.65	82.02	79.40	76.50	73.42
165.0	87.72	87.90	87.27	86.01	84.29	82.04	79.42	76.26	72.74
180.0	87.72	87.11	85.97	84.31	82.12	79.22	76.24	72.91	70.20
195.0	87.72	87.28	86.05	84.55	82.17	79.52	76.44	72.91	69.91
210.0	87.72	86.93	85.78	83.93	81.54	78.45	75.27	71.47	68.11
225.0	87.72	87.10	85.85	84.16	81.48	77.92	74.00	69.72	65.44
240.0	87.72	87.10	85.93	83.68	80.45	76.68	72.01	67.43	62.13
255.0	87.72	87.18	85.65	83.48	80.05	75.71	70.92	65.50	59.63
270.0	87.72	87.00	85.64	82.93	79.30	75.23	69.80	64.55	58.66
285.0	87.72	87.00	85.81	83.26	79.71	75.34	70.23	64.77	63.49
300.0	87.72	87.27	85.90	83.43	82.79	76.13	71.48	66.36	60.89
315.0	87.72	87.09	85.72	83.45	80.63	76.91	73.09	68.45	63.82
330.0	87.72	87.00	85.73	83.83	81.21	77.86	74.14	70.52	66.63
345.0	87.72	87.18	85.56	83.75	81.50	78.07	75.00	71.75	68.59
360.0	87.72	87.46	86.76	85.27	83.08	80.71	77.73	74.40	71.07
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	68.18	65.29	62.75	60.47	58.63	56.53	55.12	54.07	53.37
15.0	68.59	66.04	63.57	61.10	59.07	57.48	56.16	55.19	54.57
30.0	69.26	66.61	64.31	62.19	60.34	58.75	57.60	56.72	56.10
45.0	69.98	67.84	65.70	63.74	62.32	60.89	60.00	59.29	58.93
60.0	70.84	68.69	66.71	65.19	63.75	62.49	61.33	60.88	60.16
75.0	71.19	69.20	67.49	65.68	63.96	62.34	60.80	59.63	58.54
90.0	71.52	69.53	67.54	65.54	63.64	61.83	60.29	58.21	56.67
105.0	71.60	69.51	67.87	65.95	64.40	62.67	61.22	59.58	58.48
120.0	71.48	69.38	67.55	66.18	64.72	63.53	62.44	61.62	60.98
135.0	71.18	68.82	67.09	65.27	63.73	62.54	61.45	60.63	60.09
150.0	70.70	68.26	65.91	63.91	62.29	60.75	59.39	58.48	57.76
165.0	70.13	67.69	65.34	63.09	61.10	59.48	58.12	56.86	56.05
180.0	67.39	64.94	62.66	60.56	58.72	57.23	56.00	55.21	54.69
195.0	67.09	64.54	62.24	60.04	58.10	56.69	55.37	54.66	54.22
210.0	64.84	61.75	58.92	56.01	53.71	51.68	49.91	48.85	48.15
225.0	61.07	56.97	52.96	49.03	45.73	42.88	40.56	38.96	37.98
240.0	56.93	51.54	46.24	41.21	36.45	32.14	29.00	26.31	24.87
255.0	53.57	47.88	41.20	35.14	28.91	23.04	18.16	16.80	11.20
270.0	52.33	45.90	39.38	37.93	26.25	19.65	13.22	7.06	1.54
285.0	52.93	46.55	40.26	33.71	27.42	21.59	16.58	12.02	9.29
300.0	55.77	50.12	44.73	39.43	34.60	30.40	26.84	24.28	22.64
315.0	59.45	55.18	50.82	47.09	43.63	40.82	38.54	36.91	36.00
330.0	63.46	60.11	57.22	54.50	51.96	49.97	48.34	47.26	46.71
345.0	65.70	63.09	60.65	58.39	56.77	55.32	54.15	53.43	53.07
360.0	68.18	65.29	62.75	60.47	58.63	56.53	55.12	54.07	53.37

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	53.02	52.93	53.28	53.90	55.21	56.44	58.45	60.64	62.84
15.0	54.22	54.31	54.75	55.37	56.25	57.92	59.69	61.80	64.10
30.0	55.92	55.83	56.36	57.16	58.22	59.45	60.96	62.81	65.11
45.0	58.84	58.75	59.11	59.64	60.44	61.60	62.85	64.55	66.33
60.0	59.89	59.89	60.25	60.79	61.78	62.94	64.38	65.91	67.70
75.0	57.91	58.09	58.90	60.08	61.34	63.15	64.87	66.67	68.57
90.0	55.22	55.59	57.40	59.30	61.02	62.92	64.91	66.90	68.71
105.0	58.03	58.12	59.03	60.30	61.67	63.58	65.41	67.05	69.05
120.0	60.61	60.52	60.98	61.62	62.71	63.99	65.54	67.19	68.65
135.0	59.73	59.63	60.00	60.82	61.54	62.82	64.18	65.82	67.63
150.0	57.49	57.40	57.76	58.39	59.30	60.84	62.38	64.19	66.45
165.0	55.59	55.50	55.87	56.50	57.58	58.93	60.65	62.54	64.98
180.0	54.51	54.69	55.04	56.18	57.23	59.07	60.73	63.10	65.55
195.0	53.96	54.22	54.93	55.81	56.95	58.54	60.39	62.51	64.63
210.0	47.97	48.41	49.21	50.44	52.12	53.98	56.01	58.22	60.78
225.0	37.71	38.33	39.32	40.92	42.88	45.20	45.65	50.28	52.78
240.0	24.60	25.14	25.23	28.01	30.26	32.95	35.56	37.26	39.51
255.0	10.48	11.02	12.11	14.09	16.71	18.97	21.23	22.41	24.21
270.0	0.72	2.26	4.35	6.97	8.96	11.32	12.86	14.48	15.30
285.0	8.38	8.20	9.47	11.20	12.66	14.76	16.85	18.22	19.31
300.0	22.09	22.36	23.19	24.65	26.56	29.12	31.77	34.41	36.15
315.0	35.91	36.64	37.73	39.27	41.09	43.54	46.09	48.91	49.91
330.0	46.71	47.17	48.07	49.52	51.24	52.96	55.31	57.85	59.03
345.0	52.98	53.25	53.97	55.05	56.32	57.94	60.11	61.91	63.72
360.0	53.02	52.93	53.28	53.90	55.21	56.44	58.45	60.64	62.84
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	65.11	67.57	70.11	73.00	75.46	77.73	75.98	69.85	56.26
15.0	66.48	68.77	71.33	74.15	77.06	79.44	81.11	77.06	69.03
30.0	67.23	69.70	72.53	75.53	78.27	80.48	82.34	81.81	74.47
45.0	68.38	70.70	73.19	76.40	79.17	81.75	83.53	84.34	78.72
60.0	69.59	71.74	74.08	76.95	79.64	82.34	84.13	84.94	81.35
75.0	70.47	72.55	74.71	77.61	80.41	82.48	84.74	85.56	82.94
90.0	70.70	72.70	74.96	77.58	80.30	82.65	84.56	85.46	83.65
105.0	70.87	73.06	75.34	78.07	80.44	82.81	84.99	85.72	84.08
120.0	70.65	72.84	75.04	77.87	80.60	83.16	84.80	85.81	83.16
135.0	69.82	72.09	74.45	77.27	79.72	82.27	84.45	85.27	81.36
150.0	68.62	71.16	73.60	76.23	79.40	82.11	83.92	84.28	77.95
165.0	67.42	70.22	72.92	75.81	78.52	80.77	82.40	80.59	73.92
180.0	68.18	70.64	73.26	75.98	78.00	78.70	73.97	67.30	24.54
195.0	66.56	68.86	71.06	73.18	74.59	74.06	65.07	53.25	8.82
210.0	62.81	62.99	66.35	67.14	63.87	58.13	52.92	33.57	1.59
225.0	54.92	55.63	56.70	53.40	48.14	42.61	39.32	17.65	1.07
240.0	41.39	42.92	41.30	36.01	29.72	24.78	24.24	5.66	4.22
255.0	26.83	29.09	25.03	18.79	12.29	7.50	9.12	1.17	6.32
270.0	17.29	18.56	14.03	7.42	2.35	0.54	1.72	0.81	6.88
285.0	20.68	22.59	20.22	14.03	7.11	2.82	4.46	3.92	10.66
300.0	37.79	40.71	37.61	31.40	24.19	18.35	18.07	15.97	18.90
315.0	51.36	53.36	54.54	49.54	43.09	37.00	34.27	30.09	31.64
330.0	61.11	63.01	65.09	65.36	60.20	54.05	49.07	44.81	41.64
345.0	65.34	67.78	70.31	72.92	72.92	67.60	61.82	57.31	50.18
360.0	65.11	67.57	70.11	73.00	75.46	77.73	75.98	69.85	56.26

Intensity data(cd)

C/ γ (°)	180.0
0.0	15.34
15.0	25.74
30.0	41.34
45.0	56.25
60.0	61.78
75.0	67.13
90.0	67.90
105.0	68.78
120.0	67.46
135.0	65.09
150.0	63.37
165.0	61.28
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	15.34