
AFX

Client:

LumCAT: VRNF05LAJUDSN

Luminaire: LED 灯具

Report No:

Ballast type:

Test No:

Voltage(V): 120.000

LampCAT:

Current(A): 0.080

Lamp flux(lm): 746.2

Power (W): 9.350

Number of Lamps: 1

PF: 0.970

Length(mm): -140

Width(mm): -140

Phm Type: C

Height(mm): 140

Photometric Results

Lumens(lm): 746.24, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 79.81

Central intensity(cd): 93.039, Maximum intensity(cd): 93.039

Angle of maximum intensity: C=0.0 γ =0.0

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=1.50 C90_270=1.54

Up flux rate of lamp(%): 47.20%

Down flux rate of lamp(%): 52.80%

Up flux rate of LUM(%): 47.20%

Down flux rate of LUM(%): 52.80%

CIE Type : General diffuse lighting

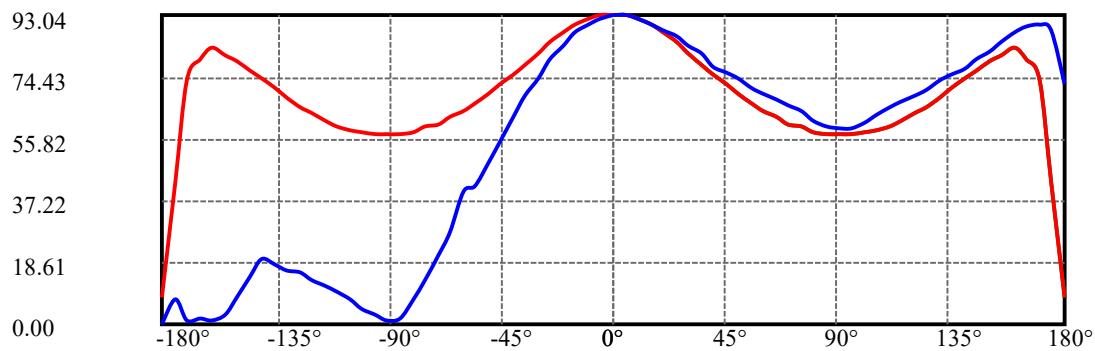
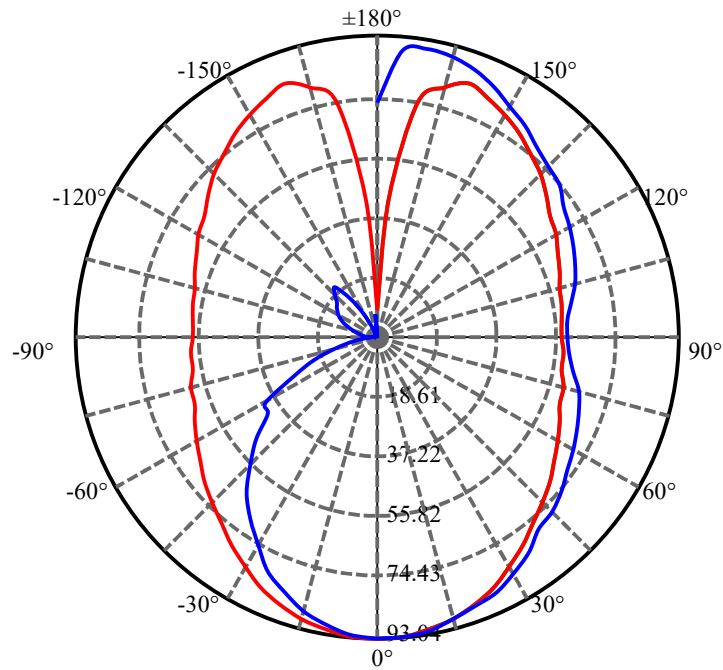
Output flux ratio in π solid angle : 30.934%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	93.039	0.000	0	0.00%	0.00%
5.0	92.702	2.220	2.22	0.30%	0.30%
10.0	91.729	6.598	8.818	0.88%	1.18%
15.0	89.819	10.769	19.587	1.44%	2.62%
20.0	87.424	14.607	34.195	1.96%	4.58%
25.0	84.277	18.008	52.203	2.41%	7.00%
30.0	80.682	20.876	73.079	2.80%	9.79%
35.0	76.899	23.205	96.284	3.11%	12.90%
40.0	73.081	25.023	121.307	3.35%	16.26%
45.0	69.216	26.347	147.654	3.53%	19.79%
50.0	65.692	27.260	174.914	3.65%	23.44%
55.0	62.282	27.826	202.74	3.73%	27.17%
60.0	59.284	28.100	230.84	3.77%	30.93%
65.0	56.169	28.067	258.907	3.76%	34.69%
70.0	53.545	27.780	286.687	3.72%	38.42%
75.0	51.328	27.412	314.099	3.67%	42.09%
80.0	49.640	27.016	341.115	3.62%	45.71%
85.0	48.249	26.599	367.714	3.56%	49.28%
90.0	47.874	26.319	394.033	3.53%	52.80%
95.0	48.137	26.289	420.322	3.52%	56.33%
100.0	48.923	26.374	446.696	3.53%	59.86%
105.0	50.311	26.552	473.248	3.56%	63.42%
110.0	51.885	26.712	499.961	3.58%	67.00%
115.0	53.533	26.692	526.653	3.58%	70.57%
120.0	55.592	26.528	553.182	3.55%	74.13%
125.0	57.651	26.176	579.357	3.51%	77.64%
130.0	59.742	25.525	604.882	3.42%	81.06%
135.0	61.910	24.582	629.464	3.29%	84.35%
140.0	64.117	23.335	652.799	3.13%	87.48%
145.0	65.454	21.618	674.417	2.90%	90.38%
150.0	65.586	19.297	693.713	2.59%	92.96%
155.0	64.744	16.493	710.207	2.21%	95.17%
160.0	63.836	13.486	723.692	1.81%	96.98%
165.0	63.369	10.483	734.176	1.40%	98.38%
170.0	58.545	7.232	741.408	0.97%	99.35%
175.0	50.076	3.886	745.294	0.52%	99.87%
180.0	29.266	0.949	746.242	0.13%	100.00%

ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	73.08	9.79%	9.79%
0-40	121.31	16.26%	16.26%
0-60	230.84	30.93%	30.93%
0-90	394.03	52.80%	52.80%
0-120	553.18	74.13%	74.13%
0-180	746.24	100.00%	100.00%
60-90	163.19	21.87%	21.87%
90-120	159.15	21.33%	21.33%
90-130	210.85	28.25%	28.25%
90-150	299.68	40.16%	40.16%
90-180	351.26	47.07%	47.07%
0-128.45	596.99	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	8.82
10-20	25.38
20-30	38.88
30-40	48.23
40-50	53.61
50-60	55.93
60-70	55.85
70-80	54.43
80-90	52.92
90-100	52.66
100-110	53.26
110-120	53.22
120-130	51.70
130-140	47.92
140-150	40.91
150-160	29.98
160-170	17.72
170-180	3.89



C0(Max):

C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:184.9 Right:174.9

:C90/270Left:0.0 Right:0.0

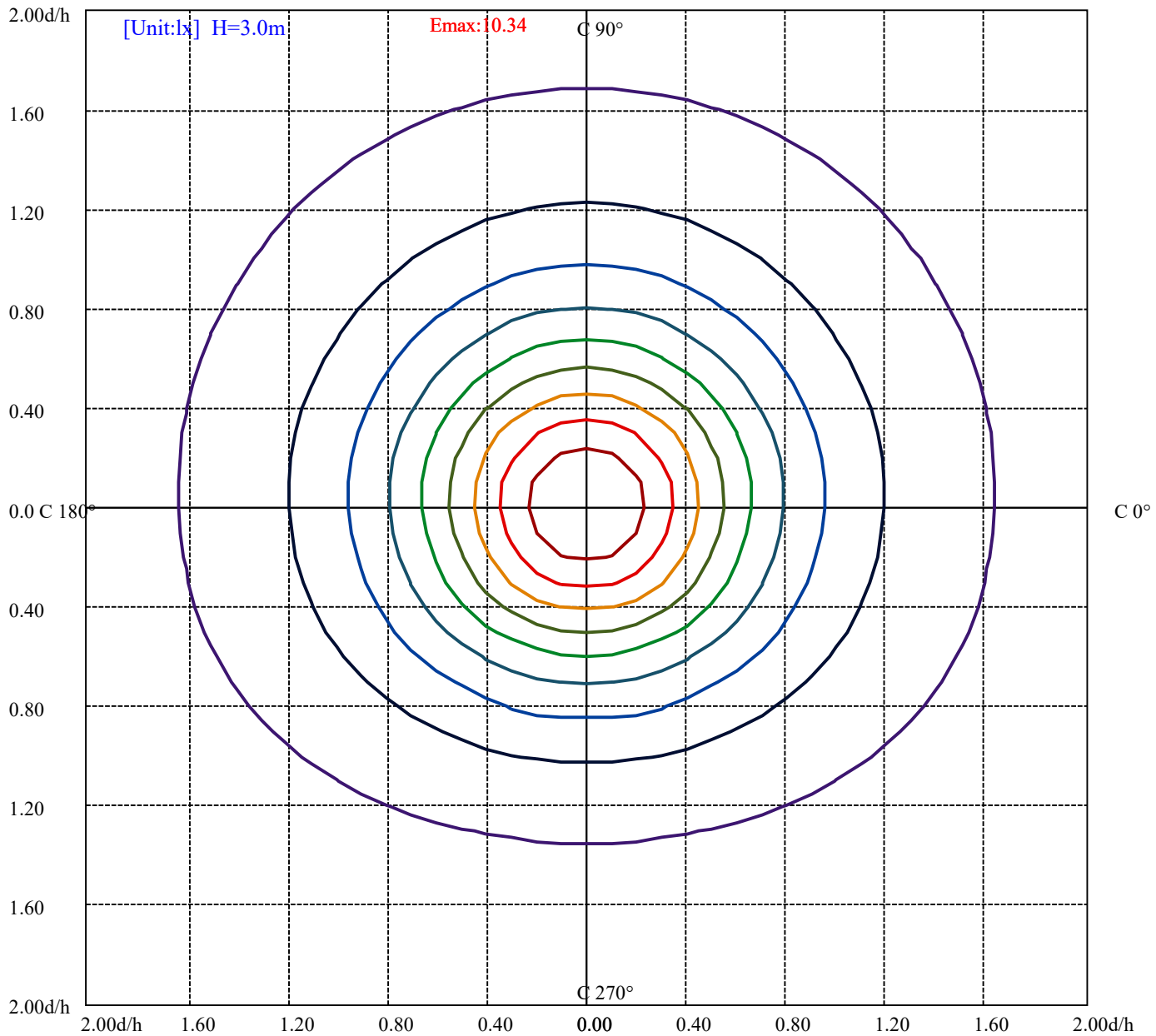
Beam Angle(50%Imax):C0/180Left:179.4 Right:169.4

:C90/270Left:19.7 Right:19.7

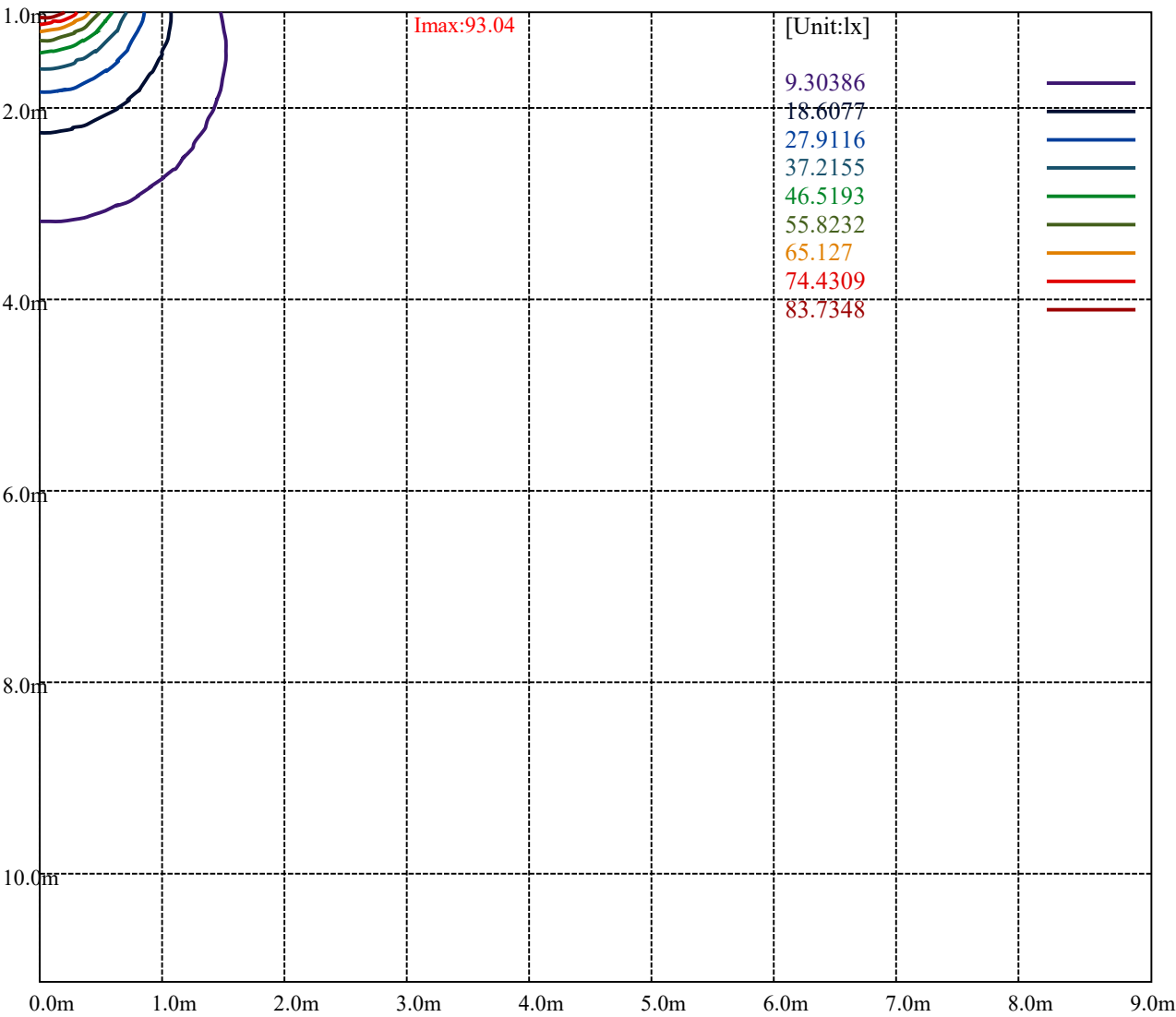


Max , Ave

Beam angle of C0 plane 348.84



(10%Emax) 1.033762	—
(20%Emax) 2.067522	—
(30%Emax) 3.101289	—
(40%Emax) 4.135056	—
(50%Emax) 5.168811	—
(60%Emax) 6.202578	—
(70%Emax) 7.236333	—
(80%Emax) 8.2701	—
(90%Emax) 9.303867	—



Luminance Table

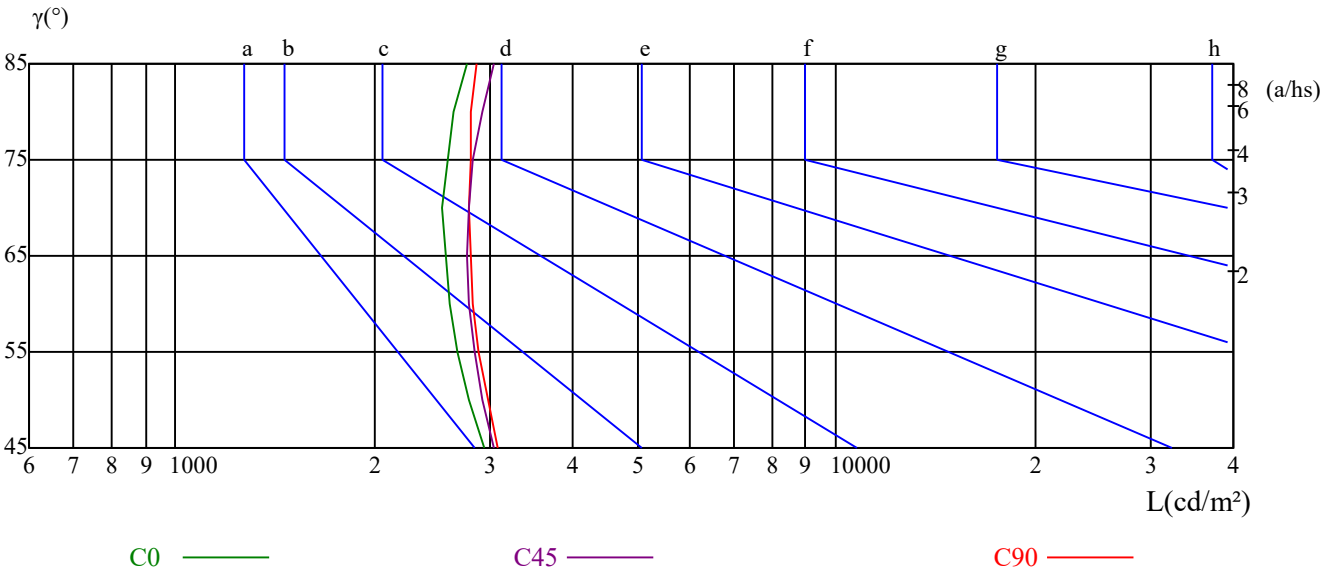
γ	45	50	55	60	65	70	75	80	85
C0	2926	2784	2681	2597	2568	2539	2585	2636	2755
C45	3030	2919	2832	2783	2754	2785	2819	2919	3030
C90	3066	2974	2868	2819	2791	2784	2799	2795	2857

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
9579	7359	8782	14870	9749	13376	42851	22891	38206

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	93.04	93.04	92.16	90.41	88.65	86.02	82.51	79.00	75.48
15.0	93.04	93.04	92.16	90.41	87.77	85.14	82.51	79.00	75.48
30.0	93.04	93.04	92.15	90.38	88.61	85.95	83.29	79.75	76.20
45.0	93.04	93.04	92.14	90.35	89.46	86.78	83.20	80.51	76.94
60.0	93.04	92.14	92.14	90.35	88.57	85.88	83.20	80.51	76.94
75.0	93.04	93.04	92.14	91.23	89.43	86.72	84.01	81.30	78.59
90.0	93.04	93.04	92.14	90.33	88.52	86.72	84.01	81.30	77.68
105.0	93.04	93.04	92.13	91.21	89.39	86.65	84.83	81.18	78.44
120.0	93.04	93.04	92.13	91.21	89.39	86.65	84.83	81.18	78.44
135.0	93.04	93.04	93.04	91.21	89.39	87.57	84.83	82.09	78.44
150.0	93.04	93.04	92.14	91.23	87.62	86.72	84.01	81.30	77.68
165.0	93.04	93.04	93.04	91.23	89.43	86.72	84.01	81.30	77.68
180.0	93.04	93.04	91.28	89.53	86.89	84.26	80.75	77.24	74.61
195.0	93.04	92.16	91.28	89.53	86.89	84.26	80.75	77.24	73.73
210.0	93.04	92.15	91.27	89.49	86.84	83.29	79.75	76.20	72.66
225.0	93.04	93.04	91.25	89.46	86.78	83.20	78.72	74.25	69.78
240.0	93.04	92.14	91.25	88.57	84.99	81.41	76.04	71.57	65.31
255.0	93.04	92.14	91.23	88.52	84.91	80.39	74.97	69.55	63.23
270.0	93.04	92.14	90.33	87.62	84.01	79.49	74.07	68.65	62.33
285.0	93.04	92.13	91.21	88.48	84.83	80.27	74.80	68.41	67.50
300.0	93.04	92.13	91.21	88.48	87.57	81.18	75.71	70.24	64.76
315.0	93.04	93.04	91.21	88.48	85.74	82.09	77.53	72.97	68.41
330.0	93.04	92.14	91.23	88.52	85.81	82.20	78.59	74.97	70.46
345.0	93.04	93.04	91.23	89.43	86.72	83.10	79.49	75.88	73.17
360.0	93.04	93.04	92.16	90.41	88.65	86.02	82.51	79.00	75.48
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	72.85	69.34	66.71	64.07	62.32	59.69	58.81	57.05	57.05
15.0	72.85	70.22	67.58	64.95	62.32	60.56	59.69	57.93	57.93
30.0	73.54	70.89	68.23	66.46	64.68	62.91	61.14	60.25	59.37
45.0	74.25	72.46	69.78	67.99	66.20	65.31	63.52	63.52	62.62
60.0	75.15	72.46	70.67	68.88	67.10	66.20	65.31	64.41	63.52
75.0	75.88	73.17	71.36	69.55	67.75	65.94	64.13	63.23	62.33
90.0	75.88	74.07	71.36	69.55	67.75	65.94	64.13	61.42	59.62
105.0	75.71	73.88	72.06	70.24	68.41	66.59	64.76	62.94	62.03
120.0	75.71	73.88	72.06	70.24	68.41	67.50	66.59	65.67	64.76
135.0	75.71	72.97	71.15	69.32	67.50	66.59	65.67	64.76	63.85
150.0	74.97	72.26	69.55	67.75	65.94	64.13	63.23	62.33	61.42
165.0	74.07	72.26	69.55	66.84	65.04	63.23	61.42	60.52	59.62
180.0	71.97	69.34	66.71	64.07	62.32	60.56	59.69	58.81	57.93
195.0	71.10	68.46	65.83	63.20	61.44	59.69	58.81	57.93	57.05
210.0	69.11	65.57	62.91	59.37	57.60	54.94	53.16	52.28	51.39
225.0	65.31	60.83	56.36	51.89	48.31	45.62	42.94	41.15	40.26
240.0	59.94	54.57	49.20	43.84	38.47	33.99	30.42	27.73	25.94
255.0	56.91	50.58	43.36	37.03	30.71	24.39	18.97	18.07	11.74
270.0	55.10	48.78	41.55	39.74	28.00	20.78	13.55	7.23	1.81
285.0	56.55	49.26	42.87	35.57	29.19	22.80	17.33	12.77	10.03
300.0	59.29	52.90	47.43	41.96	36.49	31.93	28.28	25.54	23.72
315.0	62.94	58.38	53.82	50.17	46.52	43.78	41.05	39.22	38.31
330.0	66.84	63.23	60.52	57.81	55.10	53.29	51.49	49.68	49.68
345.0	69.55	66.84	64.13	62.33	60.52	58.71	57.81	56.91	56.00
360.0	72.85	69.34	66.71	64.07	62.32	59.69	58.81	57.05	57.05

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	56.17	56.17	57.05	57.05	58.81	59.69	62.32	64.07	66.71
15.0	57.05	57.05	57.93	58.81	59.69	61.44	63.20	64.95	67.58
30.0	59.37	59.37	60.25	61.14	62.03	62.91	64.68	66.46	69.11
45.0	62.62	62.62	62.62	63.52	64.41	65.31	67.10	68.88	70.67
60.0	63.52	63.52	63.52	64.41	65.31	66.20	67.99	69.78	71.57
75.0	61.42	61.42	62.33	64.13	65.04	66.84	68.65	70.46	73.17
90.0	58.71	58.71	60.52	63.23	65.04	66.84	68.65	70.46	73.17
105.0	62.03	62.03	62.94	63.85	65.67	67.50	69.32	71.15	72.97
120.0	63.85	63.85	64.76	65.67	66.59	67.50	69.32	71.15	72.97
135.0	63.85	63.85	63.85	64.76	65.67	66.59	68.41	70.24	72.06
150.0	60.52	60.52	61.42	61.42	63.23	64.13	65.94	67.75	70.46
165.0	58.71	58.71	59.62	59.62	61.42	62.33	64.13	66.84	68.65
180.0	57.93	57.93	58.81	59.69	60.56	63.20	64.95	66.71	69.34
195.0	57.05	57.05	57.93	58.81	60.56	61.44	64.07	65.83	68.46
210.0	51.39	51.39	52.28	54.05	55.82	57.60	59.37	62.03	64.68
225.0	40.26	41.15	42.05	43.84	45.62	48.31	48.31	53.68	56.36
240.0	25.94	26.84	26.84	29.52	32.21	34.89	37.57	39.36	42.05
255.0	10.84	11.74	12.65	15.36	18.07	19.87	22.58	23.49	25.29
270.0	0.90	2.71	4.52	7.23	9.94	11.74	13.55	15.36	16.26
285.0	9.12	9.12	10.03	11.86	13.68	15.51	18.24	19.16	20.98
300.0	23.72	23.72	24.63	26.45	28.28	31.01	33.75	36.49	38.31
315.0	38.31	39.22	40.13	41.96	43.78	46.52	49.26	51.99	52.90
330.0	49.68	49.68	50.58	52.39	54.20	56.00	58.71	61.42	62.33
345.0	56.00	56.91	56.91	58.71	59.62	61.42	64.13	65.94	67.75
360.0	56.17	56.17	57.05	57.05	58.81	59.69	62.32	64.07	66.71
C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	69.34	71.97	74.61	77.24	79.87	82.51	80.75	74.61	59.69
15.0	70.22	72.85	75.48	78.12	81.63	84.26	86.02	81.63	72.85
30.0	71.77	74.43	77.09	80.63	83.29	85.95	87.72	86.84	78.86
45.0	72.46	75.15	77.83	81.41	84.09	86.78	88.57	89.46	84.09
60.0	73.36	76.04	78.72	81.41	84.09	86.78	88.57	89.46	85.88
75.0	74.97	76.78	79.49	82.20	84.91	87.62	90.33	91.23	87.62
90.0	74.97	76.78	79.49	82.20	84.91	87.62	89.43	90.33	88.52
105.0	75.71	77.53	80.27	83.01	85.74	87.57	90.30	91.21	89.39
120.0	74.80	77.53	79.36	83.01	85.74	88.48	90.30	91.21	88.48
135.0	74.80	76.62	79.36	82.09	84.83	87.57	90.30	91.21	86.65
150.0	72.26	74.97	77.68	80.39	84.01	86.72	88.52	89.43	82.20
165.0	71.36	74.97	77.68	80.39	83.10	85.81	87.62	85.81	78.59
180.0	72.85	75.48	78.12	80.75	82.51	83.38	79.00	71.97	26.33
195.0	70.22	72.85	75.48	77.24	79.00	78.12	68.46	56.17	9.65
210.0	66.46	67.34	70.89	71.77	68.23	62.03	56.71	35.44	1.77
225.0	58.15	59.04	60.83	57.25	50.99	45.62	42.05	18.79	0.89
240.0	43.84	45.62	43.84	38.47	31.31	25.94	25.94	6.26	4.47
255.0	28.91	30.71	26.20	19.87	12.65	8.13	9.94	0.90	6.32
270.0	18.07	19.87	14.45	8.13	2.71	0.90	1.81	0.90	7.23
285.0	21.89	23.72	21.89	14.59	7.30	2.74	4.56	4.56	10.95
300.0	40.13	42.87	40.13	33.75	25.54	19.16	19.16	17.33	20.07
315.0	54.73	56.55	58.38	52.90	45.61	39.22	36.49	31.93	33.75
330.0	65.04	66.84	68.65	69.55	64.13	56.91	52.39	47.87	44.26
345.0	69.55	72.26	74.97	77.68	77.68	72.26	65.94	60.52	53.29
360.0	69.34	71.97	74.61	77.24	79.87	82.51	80.75	74.61	59.69

Intensity data(cd)

C/ γ (°)	180.0
0.0	16.68
15.0	27.21
30.0	44.30
45.0	59.94
60.0	65.31
75.0	71.36
90.0	72.26
105.0	72.97
120.0	71.15
135.0	69.32
150.0	66.84
165.0	65.04
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	16.68