
AFX

Client:

LumCAT: VRNF05LAJUDSN

Luminaire: LED 灯具

Report No:

Ballast type:

Test No:

Voltage(V): 119.980

LampCAT:

Current(A): 0.077

Lamp flux(lm): 743.6

Power (W): 8.960

Number of Lamps: 1

PF: 0.969

Length(mm): -140

Width(mm): -140

Phm Type: C

Height(mm): 140

Photometric Results

Lumens(lm): 743.61, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 82.99

Central intensity(cd): 92.739, Maximum intensity(cd): 92.739

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=1.49 C90_270=1.55

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

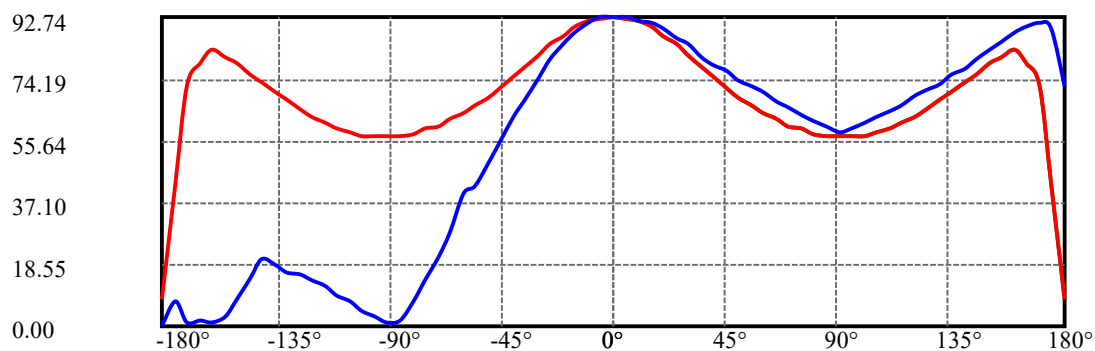
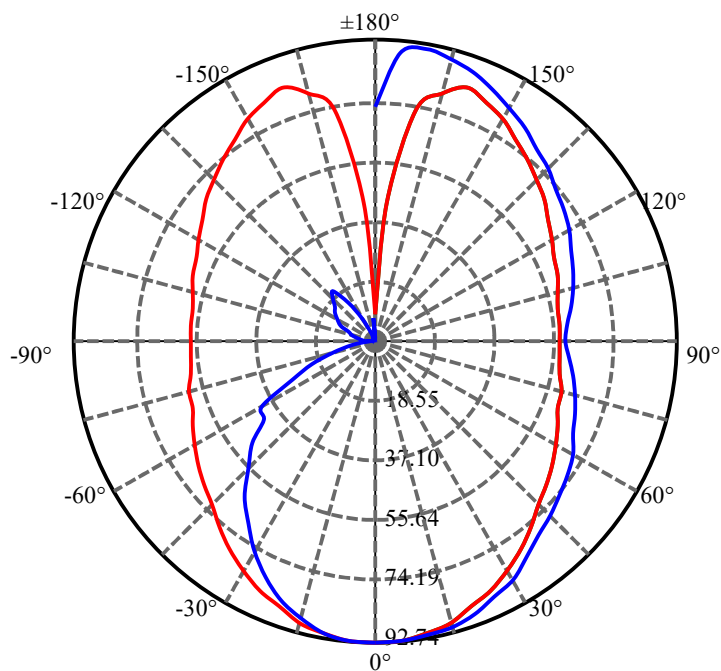
Output flux ratio in π solid angle : 30.938%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	92.739	0.000	0	0.00%	0.00%
5.0	92.366	2.213	2.213	0.30%	0.30%
10.0	91.280	6.570	8.782	0.88%	1.18%
15.0	89.558	10.727	19.51	1.44%	2.62%
20.0	87.162	14.564	34.074	1.96%	4.58%
25.0	83.865	17.938	52.011	2.41%	6.99%
30.0	80.495	20.800	72.811	2.80%	9.79%
35.0	76.486	23.117	95.928	3.11%	12.90%
40.0	72.929	24.929	120.857	3.35%	16.25%
45.0	68.919	26.264	147.121	3.53%	19.78%
50.0	65.432	27.148	174.268	3.65%	23.44%
55.0	62.169	27.745	202.013	3.73%	27.17%
60.0	59.174	28.048	230.061	3.77%	30.94%
65.0	56.057	28.013	258.074	3.77%	34.71%
70.0	53.356	27.704	285.778	3.73%	38.43%
75.0	50.989	27.274	313.052	3.67%	42.10%
80.0	49.487	26.885	339.937	3.62%	45.71%
85.0	48.135	26.526	366.463	3.57%	49.28%
90.0	47.720	26.246	392.708	3.53%	52.81%
95.0	47.983	26.204	418.913	3.52%	56.34%
100.0	48.735	26.281	445.193	3.53%	59.87%
105.0	50.010	26.422	471.615	3.55%	63.42%
110.0	51.621	26.565	498.18	3.57%	66.99%
115.0	53.420	26.597	524.777	3.58%	70.57%
120.0	55.480	26.474	551.251	3.56%	74.13%
125.0	57.611	26.141	577.391	3.52%	77.65%
130.0	59.589	25.483	602.874	3.43%	81.07%
135.0	61.646	24.497	627.372	3.29%	84.37%
140.0	63.817	23.230	650.602	3.12%	87.49%
145.0	65.039	21.499	672.101	2.89%	90.38%
150.0	65.283	19.191	691.292	2.58%	92.96%
155.0	64.481	16.422	707.713	2.21%	95.17%
160.0	63.685	13.442	721.156	1.81%	96.98%
165.0	63.068	10.446	731.602	1.40%	98.39%
170.0	58.169	7.192	738.794	0.97%	99.35%
175.0	49.999	3.870	742.663	0.52%	99.87%
180.0	29.191	0.947	743.61	0.13%	100.00%

ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	72.81	9.79%	9.79%
0-40	120.86	16.25%	16.25%
0-60	230.06	30.94%	30.94%
0-90	392.71	52.81%	52.81%
0-120	551.25	74.13%	74.13%
0-180	743.61	100.00%	100.00%
60-90	162.65	21.87%	21.87%
90-120	158.54	21.32%	21.32%
90-130	210.17	28.26%	28.26%
90-150	298.58	40.15%	40.15%
90-180	349.95	47.06%	47.06%
0-128.43	594.89	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	8.78
10-20	25.29
20-30	38.74
30-40	48.05
40-50	53.41
50-60	55.79
60-70	55.72
70-80	54.16
80-90	52.77
90-100	52.49
100-110	52.99
110-120	53.07
120-130	51.62
130-140	47.73
140-150	40.69
150-160	29.86
160-170	17.64
170-180	3.87

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

Field angle(10%Imax):C0/180Left:179.9 Right:179.9

:C90/270Left:0.0 Right:0.0

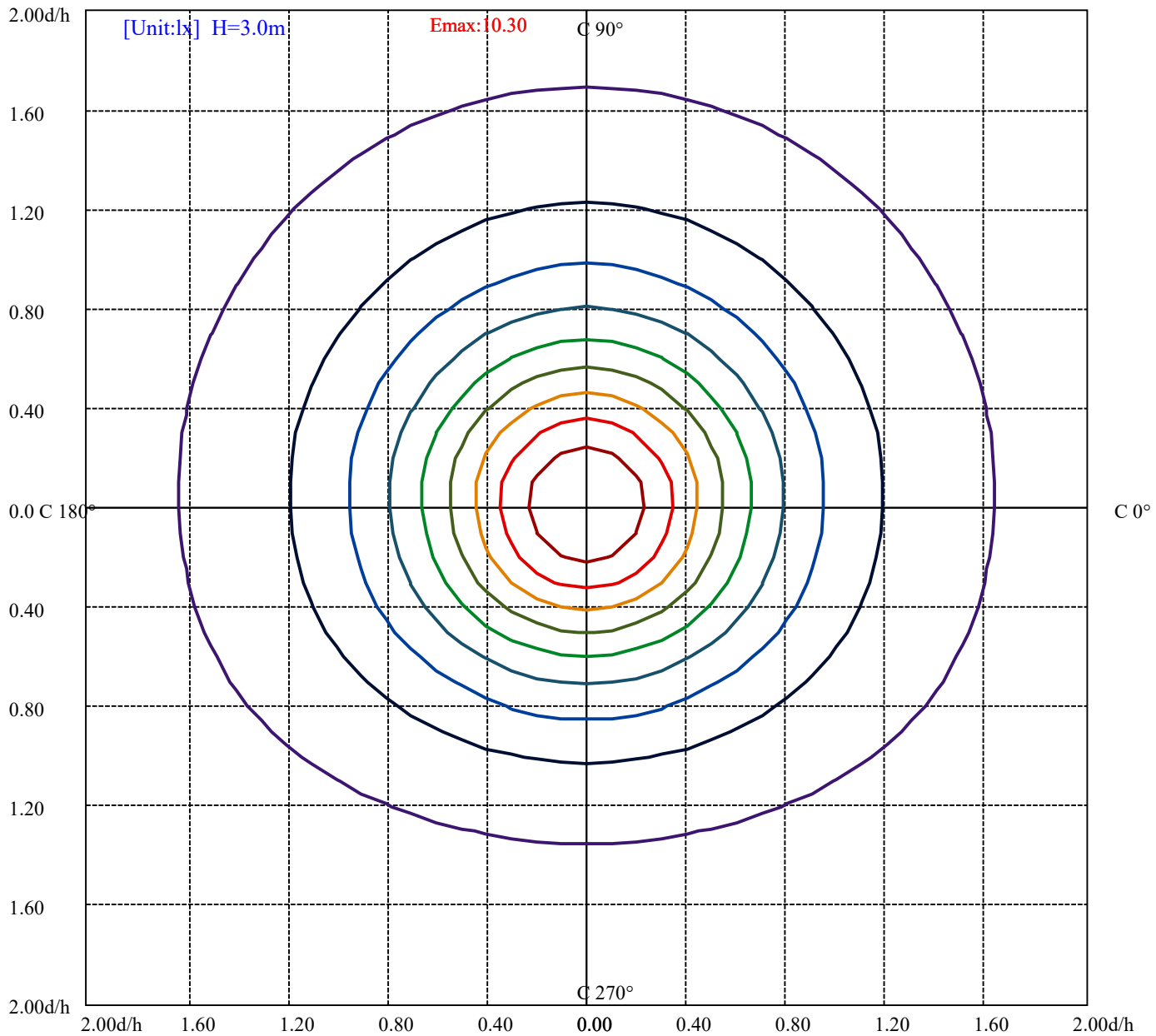
Beam Angle(50%Imax):C0/180Left:174.4 Right:174.4

:C90/270Left:19.7 Right:19.7

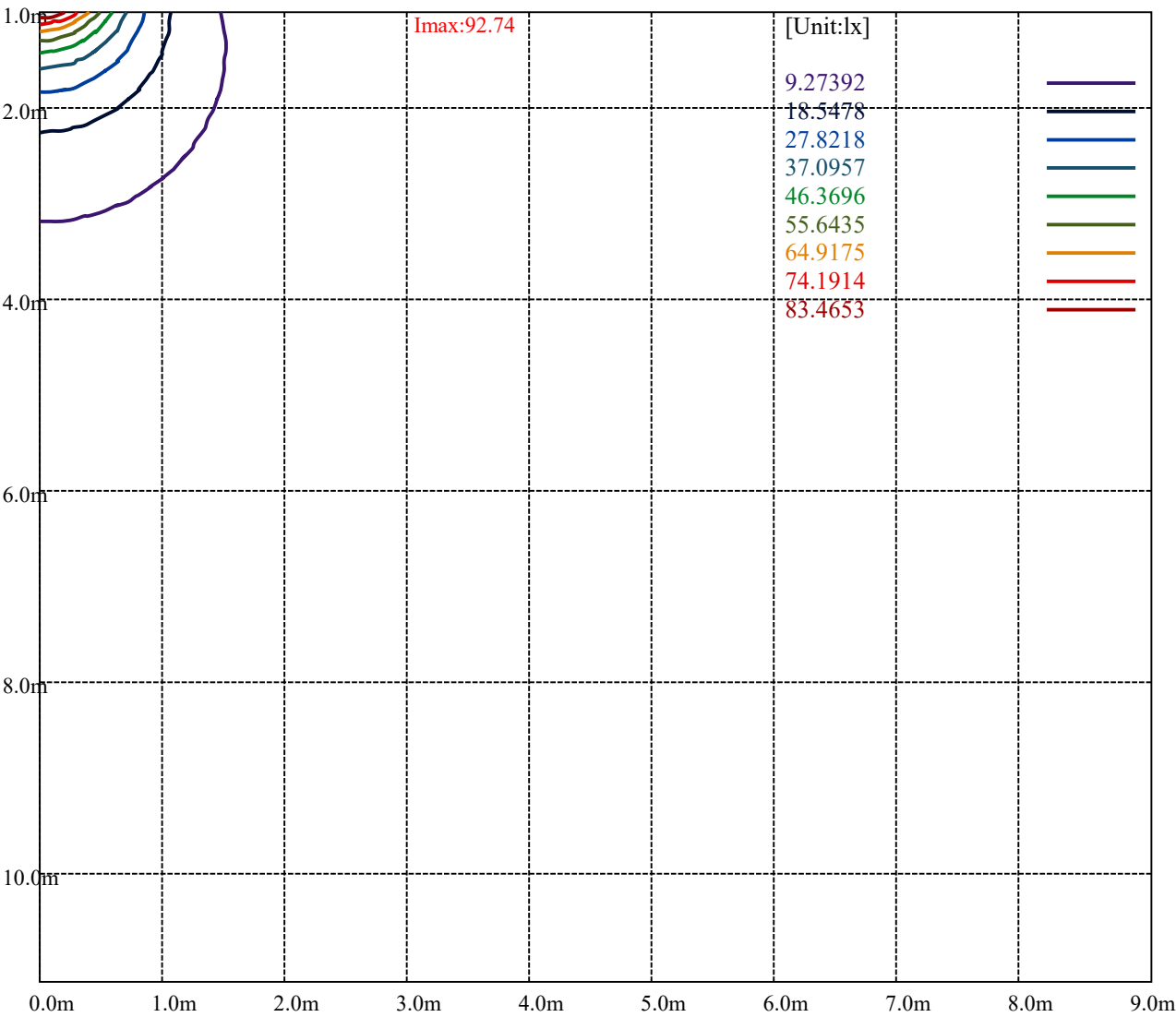


Max , Ave

Beam angle of C0 plane 348.88



(10%Emax) 1.030436	—
(20%Emax) 2.060867	—
(30%Emax) 3.091311	—
(40%Emax) 4.121744	—
(50%Emax) 5.152178	—
(60%Emax) 6.182611	—
(70%Emax) 7.213056	—
(80%Emax) 8.243488	—
(90%Emax) 9.273922	—



Luminance Table

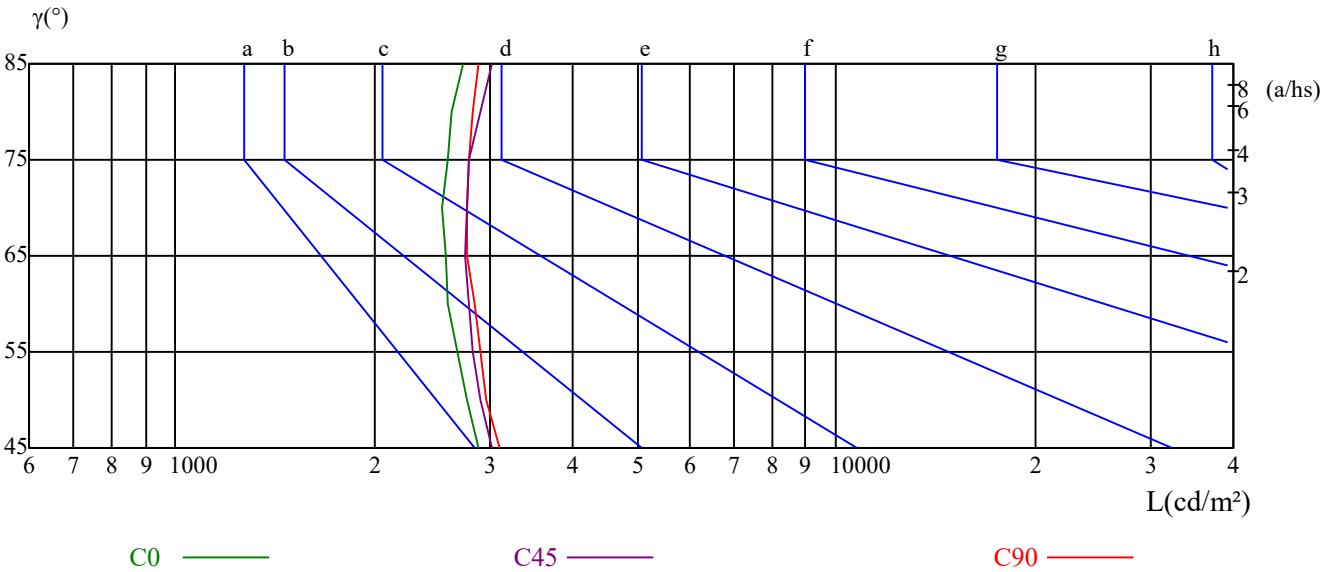
γ	45	50	55	60	65	70	75	80	85
C0	2882	2757	2672	2589	2560	2531	2577	2628	2725
C45	3020	2892	2822	2774	2746	2757	2790	2889	3021
C90	3087	2957	2886	2838	2772	2764	2777	2813	2876

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
9548	7337	8754	14822	9699	13276	42387	23041	38083

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	0.12
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	92.74	92.74	91.86	90.11	87.49	84.87	82.24	78.74	75.24
15.0	92.74	92.74	91.86	90.09	88.32	85.67	82.14	79.49	75.96
30.0	92.74	91.86	90.97	90.09	87.44	85.67	82.14	79.49	75.96
45.0	92.74	92.74	91.85	90.06	88.28	85.61	82.93	79.36	76.69
60.0	92.74	92.74	91.84	90.94	88.24	86.44	83.74	80.13	77.43
75.0	92.74	91.84	91.84	90.04	88.24	86.44	83.74	80.13	77.43
90.0	92.74	92.74	91.83	90.92	89.10	86.37	84.56	80.92	78.19
105.0	92.74	92.74	91.83	90.01	89.10	86.37	83.65	80.92	78.19
120.0	92.74	92.74	91.83	90.92	88.19	86.37	83.65	80.92	78.19
135.0	92.74	92.74	91.83	90.92	89.10	86.37	83.65	80.92	78.19
150.0	92.74	92.74	92.74	90.92	88.19	87.28	84.56	80.92	78.19
165.0	92.74	92.74	91.84	90.94	89.14	86.44	83.74	80.13	76.53
180.0	92.74	91.86	90.99	89.24	86.61	83.99	80.49	76.99	74.37
195.0	92.74	92.74	90.97	89.21	87.44	83.91	81.26	76.84	74.19
210.0	92.74	91.86	90.97	88.32	86.56	83.02	79.49	75.96	72.42
225.0	92.74	91.85	90.96	89.17	86.50	82.04	78.47	74.01	69.55
240.0	92.74	92.74	90.94	89.14	85.54	81.03	76.53	71.13	65.73
255.0	92.74	91.84	90.04	88.24	84.64	80.13	74.73	69.33	63.03
270.0	92.74	92.74	90.92	88.19	84.56	80.01	74.56	68.19	62.74
285.0	92.74	91.83	90.92	88.19	84.56	79.10	74.56	68.19	67.28
300.0	92.74	91.83	90.01	88.19	87.28	80.01	75.46	70.01	64.55
315.0	92.74	91.83	90.92	88.19	85.47	80.92	77.28	72.74	67.28
330.0	92.74	92.74	90.92	89.10	86.37	82.74	79.10	74.56	70.92
345.0	92.74	91.84	90.04	88.24	85.54	81.93	79.23	75.63	72.03
360.0	92.74	92.74	91.86	90.11	87.49	84.87	82.24	78.74	75.24
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	71.74	69.12	66.49	63.87	62.12	59.49	58.62	56.87	55.99
15.0	72.42	69.78	67.13	64.48	62.71	60.94	59.18	58.29	57.41
30.0	73.31	70.66	68.01	65.36	63.59	61.83	60.94	60.06	59.18
45.0	74.01	71.34	69.55	67.77	65.99	64.20	63.31	62.42	62.42
60.0	74.73	72.93	71.13	69.33	67.53	66.63	64.83	64.83	63.93
75.0	74.73	72.93	71.13	69.33	67.53	65.73	63.93	63.03	62.13
90.0	76.37	73.65	71.83	70.01	67.28	65.46	63.64	61.83	60.01
105.0	75.46	73.65	71.83	70.01	68.19	66.37	64.55	62.74	61.83
120.0	75.46	72.74	70.92	70.01	68.19	67.28	65.46	64.55	64.55
135.0	75.46	72.74	70.92	69.10	67.28	66.37	64.55	64.55	63.64
150.0	75.46	72.74	70.01	68.19	66.37	64.55	62.74	61.83	60.92
165.0	73.83	71.13	69.33	66.63	64.83	63.03	61.23	60.33	59.43
180.0	70.87	68.24	66.49	63.87	62.12	60.37	59.49	58.62	57.74
195.0	70.66	68.01	66.24	63.59	61.83	60.06	58.29	58.29	57.41
210.0	68.89	65.36	62.71	59.18	56.53	54.76	52.99	51.23	51.23
225.0	64.20	60.64	56.18	51.72	48.15	45.48	42.80	41.02	40.13
240.0	60.33	54.92	48.62	44.12	38.72	34.21	30.61	27.91	26.11
255.0	56.72	50.42	43.22	36.92	30.61	24.31	18.91	18.01	11.70
270.0	55.46	49.10	41.82	40.01	28.19	20.91	13.64	7.27	1.82
285.0	55.46	49.10	42.73	35.46	29.09	22.73	17.27	12.73	10.00
300.0	59.10	52.73	47.28	41.82	36.37	31.82	28.19	25.46	23.64
315.0	62.74	58.19	53.64	50.01	46.37	42.73	40.91	39.10	38.19
330.0	67.28	63.64	60.92	58.19	55.46	52.73	50.92	50.01	50.01
345.0	69.33	66.63	63.93	61.23	60.33	58.52	56.72	56.72	55.82
360.0	71.74	69.12	66.49	63.87	62.12	59.49	58.62	56.87	55.99

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	55.99	55.99	55.99	56.87	58.62	59.49	62.12	63.87	66.49
15.0	57.41	57.41	58.29	58.29	59.18	60.94	63.59	65.36	68.01
30.0	59.18	59.18	59.18	60.06	61.83	62.71	64.48	66.24	68.89
45.0	62.42	62.42	62.42	63.31	64.20	65.10	66.88	68.66	70.45
60.0	63.93	63.93	63.93	64.83	65.73	66.63	68.43	70.23	72.03
75.0	61.23	61.23	62.13	63.03	64.83	66.63	68.43	70.23	72.03
90.0	58.19	59.10	60.92	62.74	64.55	66.37	69.10	70.92	72.74
105.0	60.92	60.92	62.74	63.64	65.46	67.28	69.10	70.92	72.74
120.0	63.64	63.64	64.55	64.55	66.37	67.28	69.10	70.92	72.74
135.0	62.74	62.74	63.64	64.55	65.46	66.37	68.19	70.01	71.83
150.0	60.92	60.92	60.92	61.83	62.74	64.55	66.37	68.19	70.92
165.0	58.52	58.52	58.52	59.43	60.33	62.13	63.93	65.73	68.43
180.0	57.74	57.74	57.74	59.49	60.37	62.12	63.87	66.49	69.12
195.0	57.41	57.41	58.29	59.18	60.06	61.83	63.59	66.24	68.01
210.0	50.34	51.23	52.11	52.99	54.76	57.41	59.18	61.83	64.48
225.0	40.13	40.13	41.91	43.69	45.48	48.15	48.15	53.50	56.18
240.0	26.11	27.01	27.01	29.71	32.41	35.11	37.82	39.62	42.32
255.0	10.80	11.70	12.61	14.41	18.01	19.81	22.51	23.41	25.21
270.0	0.91	2.73	4.55	7.27	9.09	11.82	13.64	15.46	16.37
285.0	9.09	9.09	10.00	11.82	13.64	15.46	18.18	19.09	20.00
300.0	23.64	23.64	24.55	26.37	28.19	30.91	33.64	36.37	38.19
315.0	38.19	39.10	40.01	41.82	43.64	46.37	49.10	51.82	52.73
330.0	50.01	50.01	50.92	52.73	54.55	56.37	59.10	61.83	62.74
345.0	55.82	55.82	56.72	57.62	59.43	61.23	63.03	65.73	67.53
360.0	55.99	55.99	55.99	56.87	58.62	59.49	62.12	63.87	66.49
C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	69.12	71.74	74.37	76.99	79.62	82.24	80.49	73.49	59.49
15.0	70.66	72.42	75.96	78.61	81.26	83.91	85.67	81.26	73.31
30.0	70.66	73.31	76.84	79.49	83.02	84.79	87.44	86.56	78.61
45.0	72.23	74.90	77.58	81.15	83.82	86.50	88.28	89.17	82.93
60.0	73.83	75.63	78.33	81.93	84.64	87.34	89.14	90.04	86.44
75.0	73.83	76.53	78.33	81.93	84.64	87.34	89.14	90.04	87.34
90.0	75.46	77.28	80.01	82.74	85.47	88.19	90.01	90.92	89.10
105.0	74.56	77.28	79.10	82.74	84.56	87.28	90.01	90.01	89.10
120.0	74.56	76.37	79.10	81.83	84.56	87.28	89.10	90.01	87.28
135.0	73.65	76.37	79.10	81.83	84.56	87.28	89.10	90.01	86.37
150.0	72.74	75.46	78.19	80.92	84.56	87.28	89.10	89.10	82.74
165.0	71.13	73.83	76.53	80.13	82.84	85.54	87.34	84.64	78.33
180.0	71.74	74.37	76.99	80.49	82.24	83.12	77.87	70.87	26.25
195.0	70.66	73.31	75.07	77.72	78.61	78.61	68.89	56.53	9.72
210.0	66.24	66.24	69.78	70.66	67.13	61.83	55.64	35.33	1.77
225.0	57.96	58.85	59.75	56.18	50.83	45.48	41.91	18.73	0.89
240.0	44.12	45.92	44.12	37.82	31.51	26.11	26.11	6.30	4.50
255.0	27.91	30.61	26.11	19.81	12.61	8.10	9.90	0.90	6.30
270.0	18.18	20.00	14.55	8.18	2.73	0.91	1.82	0.91	7.27
285.0	21.82	23.64	20.91	14.55	7.27	2.73	4.55	4.55	10.91
300.0	40.01	42.73	40.01	32.73	25.46	19.09	19.09	17.27	20.00
315.0	54.55	56.37	57.28	52.73	45.46	39.10	36.37	31.82	33.64
330.0	64.55	67.28	69.10	69.10	63.64	57.28	51.82	47.28	44.55
345.0	69.33	71.13	73.83	76.53	76.53	71.13	64.83	60.33	53.12
360.0	69.12	71.74	74.37	76.99	79.62	82.24	80.49	73.49	59.49

Intensity data(cd)

C/ γ (°)	180.0
0.0	16.62
15.0	27.38
30.0	43.28
45.0	59.75
60.0	65.73
75.0	71.13
90.0	71.83
105.0	72.74
120.0	70.92
135.0	69.10
150.0	67.28
165.0	64.83
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	16.62