
AFX

Client:

LumCAT: ARNP17LAJD4LB

Luminaire: LED LAMP

Report No:

Ballast type:

Test No:

Voltage(V): 120.000

LampCAT:

Current(A): 0.237

Lamp flux(lm): 2596.9

Power (W): 27.890

Number of Lamps: 1

PF: 0.981

Length(mm): 390

Width(mm): 390

Phm Type: C

Height(mm): 480

Photometric Results

Lumens(lm): 2596.92, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 93.11

Central intensity(cd): 243.136, Maximum intensity(cd): 243.136

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=1.51 C90_270=1.48

Maximum s/h(1/4): C0_180=1.72 C90_270=1.66

Up flux rate of lamp(%): 48.54%

Down flux rate of lamp(%): 51.46%

Up flux rate of LUM(%): 48.54%

Down flux rate of LUM(%): 51.46%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 26.442%

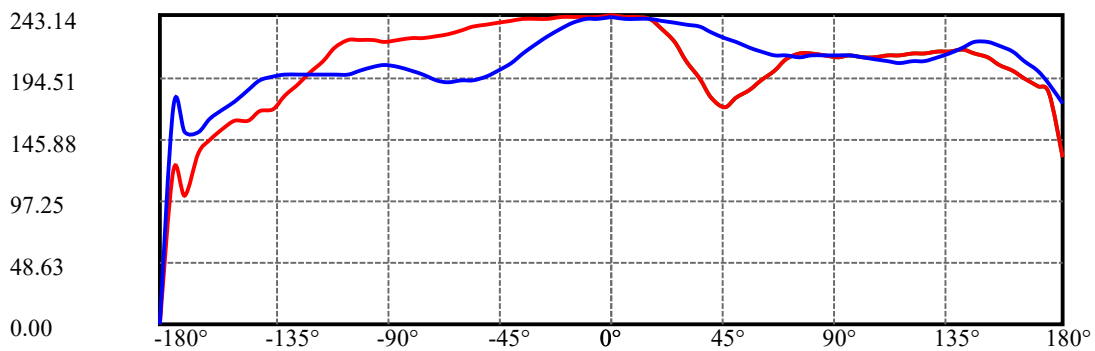
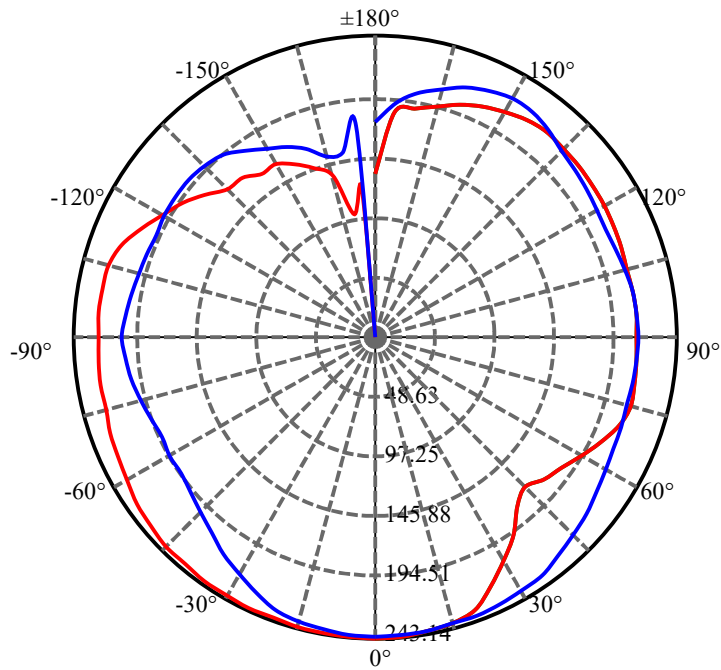
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	240.669	0.000	0	0.00%	0.00%
5.0	240.557	5.753	5.753	0.22%	0.22%
10.0	239.959	17.190	22.942	0.66%	0.88%
15.0	238.464	28.380	51.322	1.09%	1.98%
20.0	235.884	39.093	90.415	1.51%	3.48%
25.0	231.585	49.029	139.444	1.89%	5.37%
30.0	226.688	57.995	197.439	2.23%	7.60%
35.0	221.492	65.998	263.436	2.54%	10.14%
40.0	216.483	73.073	336.509	2.81%	12.96%
45.0	212.071	79.350	415.859	3.06%	16.01%
50.0	209.118	85.108	500.967	3.28%	19.29%
55.0	206.576	90.386	591.353	3.48%	22.77%
60.0	205.791	95.318	686.67	3.67%	26.44%
65.0	205.679	100.029	786.699	3.85%	30.29%
70.0	206.352	104.329	891.028	4.02%	34.31%
75.0	206.987	108.040	999.069	4.16%	38.47%
80.0	207.436	110.888	1109.957	4.27%	42.74%
85.0	207.623	112.781	1222.738	4.34%	47.08%
90.0	207.735	113.728	1336.466	4.38%	51.46%
95.0	207.361	113.657	1450.123	4.38%	55.84%
100.0	206.987	112.588	1562.712	4.34%	60.18%
105.0	205.866	110.468	1673.18	4.25%	64.43%
110.0	204.408	107.239	1780.419	4.13%	68.56%
115.0	202.987	103.155	1883.574	3.97%	72.53%
120.0	201.941	98.439	1982.013	3.79%	76.32%
125.0	201.642	93.287	2075.299	3.59%	79.91%
130.0	201.455	87.647	2162.946	3.38%	83.29%
135.0	201.305	81.384	2244.33	3.13%	86.42%
140.0	201.305	74.547	2318.876	2.87%	89.29%
145.0	199.586	66.886	2385.762	2.58%	91.87%
150.0	196.745	58.362	2444.124	2.25%	94.12%
155.0	192.109	49.210	2493.334	1.89%	96.01%
160.0	184.857	39.537	2532.871	1.52%	97.53%
165.0	172.259	29.431	2562.302	1.13%	98.67%
170.0	161.979	19.827	2582.129	0.76%	99.43%
175.0	167.437	11.784	2593.913	0.45%	99.88%
180.0	83.999	3.006	2596.919	0.12%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	197.44	7.60%	7.60%
0-40	336.51	12.96%	12.96%
0-60	686.67	26.44%	26.44%
0-90	1336.47	51.46%	51.46%
0-120	1982.01	76.32%	76.32%
0-180	2596.92	100.00%	100.00%
60-90	649.80	25.02%	25.02%
90-120	645.55	24.86%	24.86%
90-130	826.48	31.83%	31.83%
90-150	1107.66	42.65%	42.65%
90-180	1257.45	48.42%	48.42%
0-125.13	2077.54	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	22.94
10-20	67.47
20-30	107.02
30-40	139.07
40-50	164.46
50-60	185.70
60-70	204.36
70-80	218.93
80-90	226.51
90-100	226.25
100-110	217.71
110-120	201.59
120-130	180.93
130-140	155.93
140-150	125.25
150-160	88.75
160-170	49.26
170-180	11.78



C0(Max): —————

C0/C180: —————

C90/C270: —————

Field angle(10%Imax):C0/180Left:0.0 Right:0.0

:C90/270Left:0.0 Right:0.0

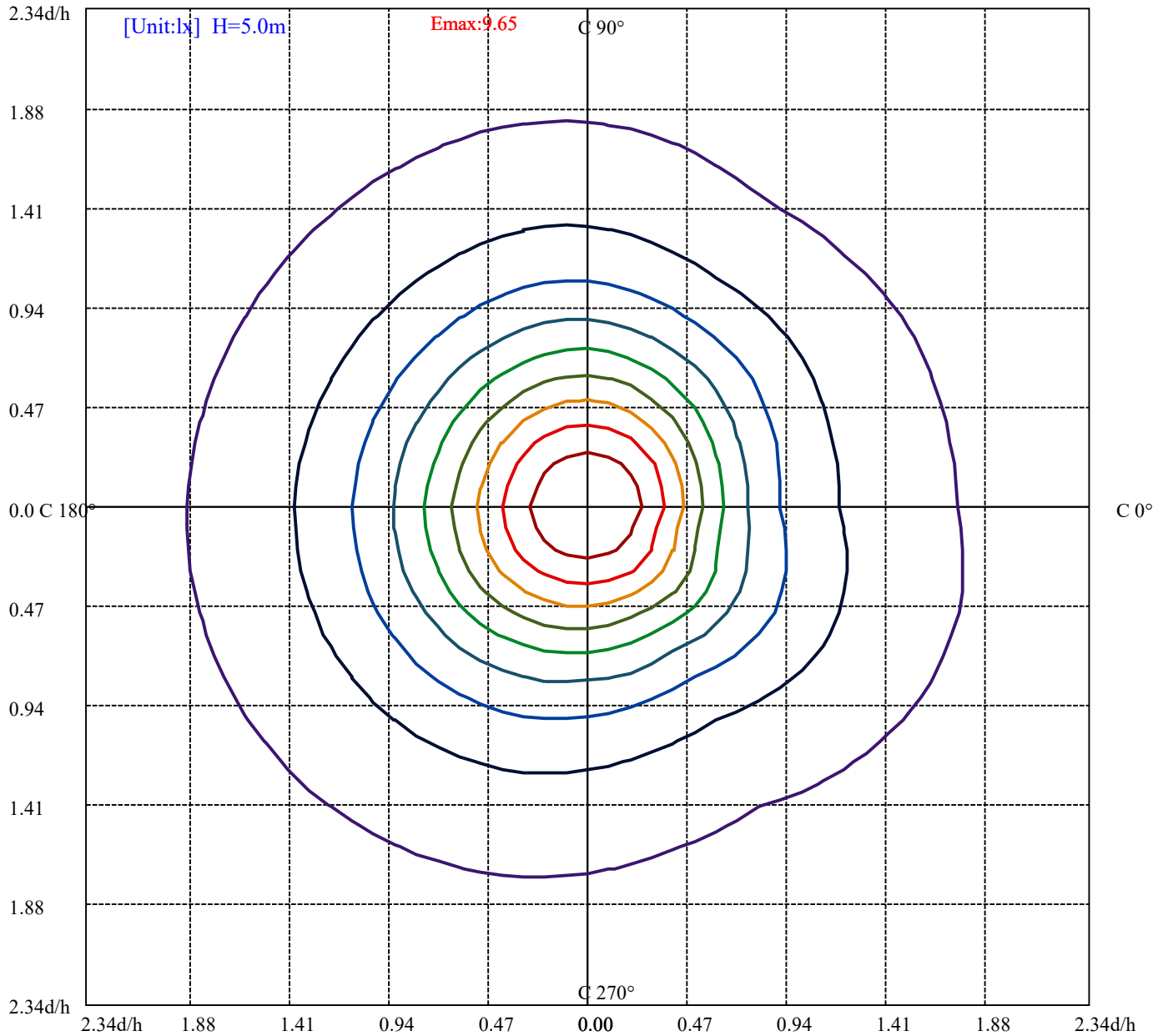
Beam Angle(50%Imax):C0/180Left:0.0 Right:0.0

:C90/270Left:0.0 Right:0.0

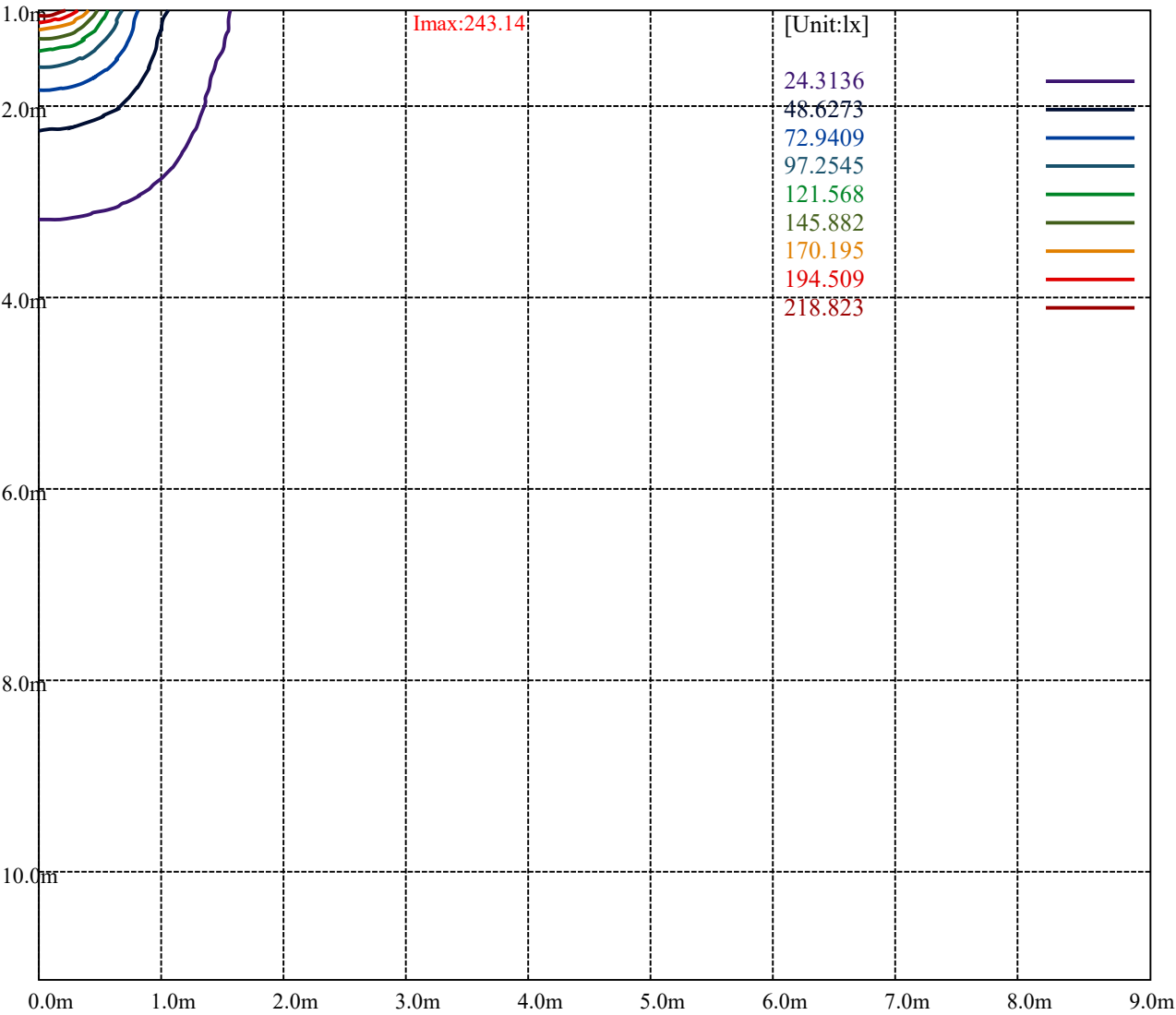


Max , Ave

Beam angle of C0 plane 347.03



(10%Emax) 0.965368	—
(20%Emax) 1.930736	—
(30%Emax) 2.8961	—
(40%Emax) 3.861468	—
(50%Emax) 4.82684	—
(60%Emax) 5.7922	—
(70%Emax) 6.75756	—
(80%Emax) 7.72292	—
(90%Emax) 8.68832	—



Luminance Table

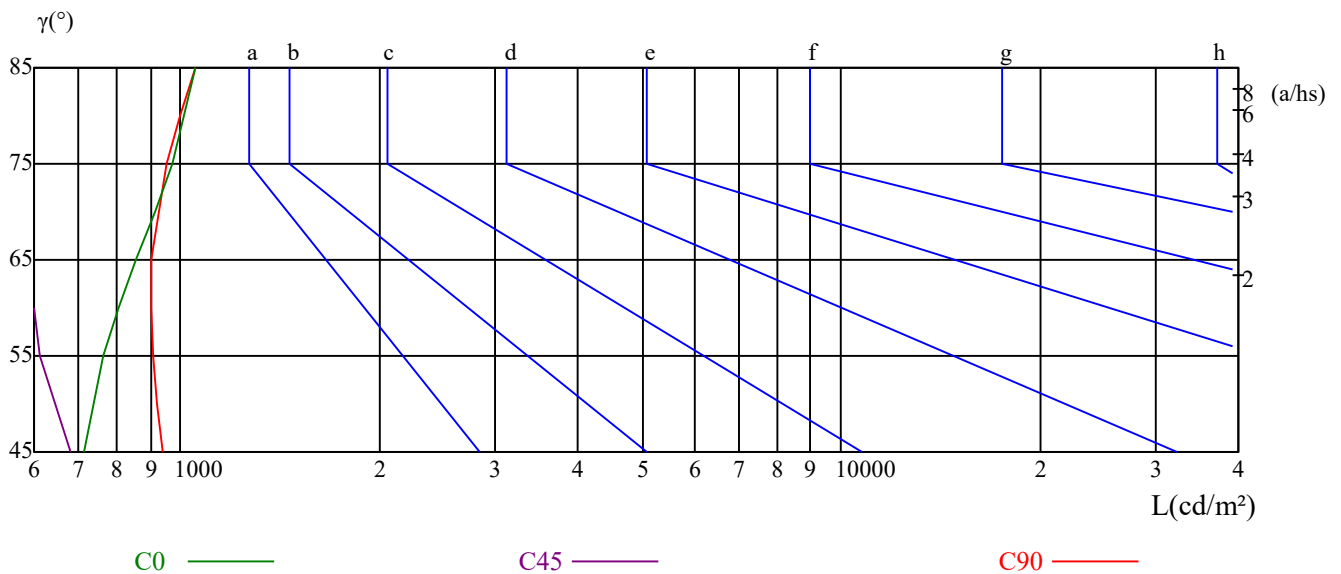
γ	45	50	55	60	65	70	75	80	85
C0	714	737	764	806	855	917	970	1009	1056
C45	682	648	614	594	581	591	611	641	680
C90	939	919	906	900	905	925	953	1000	1056

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3336	3126	3154	5572	5151	5173	16378	15600	15448

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	1.07	1.07	1.07	0.99	0.99	0.99	0.84	0.84	0.84	0.70	0.70	0.70	0.57	0.57	0.57	0.51
1	0.88	0.82	0.77	0.81	0.76	0.72	0.68	0.64	0.60	0.55	0.53	0.50	0.44	0.42	0.40	0.35
2	0.75	0.67	0.60	0.68	0.62	0.56	0.57	0.52	0.47	0.46	0.42	0.39	0.37	0.34	0.31	0.26
3	0.64	0.56	0.48	0.59	0.51	0.45	0.49	0.43	0.38	0.40	0.35	0.31	0.31	0.28	0.25	0.21
4	0.56	0.47	0.40	0.52	0.43	0.37	0.43	0.37	0.31	0.35	0.30	0.26	0.28	0.24	0.21	0.17
5	0.50	0.41	0.34	0.46	0.37	0.31	0.38	0.32	0.27	0.31	0.26	0.22	0.24	0.21	0.17	0.14
6	0.44	0.35	0.29	0.41	0.33	0.27	0.34	0.28	0.23	0.28	0.23	0.19	0.22	0.18	0.15	0.12
7	0.40	0.31	0.25	0.37	0.29	0.23	0.31	0.24	0.20	0.25	0.20	0.16	0.20	0.16	0.13	0.10
8	0.36	0.28	0.22	0.33	0.26	0.20	0.28	0.22	0.17	0.23	0.18	0.14	0.18	0.14	0.11	0.09
9	0.33	0.25	0.19	0.30	0.23	0.18	0.25	0.19	0.15	0.21	0.16	0.13	0.17	0.13	0.10	0.08
10	0.30	0.22	0.17	0.28	0.21	0.16	0.23	0.18	0.14	0.19	0.15	0.11	0.16	0.12	0.09	0.07

Intensity data(cd)

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C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	243.14	242.24	241.34	239.55	233.27	221.60	207.25	193.79	178.54
15.0	241.34	241.34	241.34	238.65	231.47	221.60	209.04	194.69	183.92
30.0	241.34	241.34	240.44	238.65	234.16	226.09	215.32	203.66	195.59
45.0	241.34	241.34	241.34	238.65	236.86	229.68	223.40	214.43	207.25
60.0	240.44	240.44	240.44	239.55	236.86	232.37	226.99	221.60	213.53
75.0	240.44	240.44	240.44	239.55	238.65	236.86	234.16	228.78	222.50
90.0	241.34	240.44	240.44	239.55	238.65	237.75	235.96	234.16	229.68
105.0	240.44	240.44	239.55	239.55	238.65	237.75	236.86	235.06	232.37
120.0	239.55	239.55	239.55	239.55	238.65	237.75	235.96	234.16	231.47
135.0	239.55	239.55	239.55	239.55	238.65	237.75	235.96	234.16	231.47
150.0	239.55	240.44	239.55	239.55	237.75	236.86	235.96	235.06	232.37
165.0	239.55	239.55	239.55	238.65	238.65	237.75	235.96	235.96	234.16
180.0	243.14	242.24	242.24	242.24	241.34	240.44	240.44	239.55	238.65
195.0	241.34	241.34	240.44	240.44	240.44	239.55	239.55	239.55	238.65
210.0	241.34	241.34	241.34	240.44	240.44	240.44	240.44	239.55	237.75
225.0	241.34	241.34	240.44	239.55	237.75	237.75	236.86	235.96	234.16
240.0	240.44	240.44	239.55	237.75	235.96	233.27	230.58	226.99	225.19
255.0	240.44	240.44	239.55	237.75	235.06	230.58	226.09	220.71	216.22
270.0	241.34	240.44	239.55	236.86	233.27	226.99	220.71	213.53	205.45
285.0	240.44	240.44	239.55	236.86	232.37	225.19	217.12	207.25	204.56
300.0	239.55	239.55	238.65	236.86	235.96	226.09	216.22	205.45	194.69
315.0	239.55	239.55	238.65	236.86	232.37	226.99	221.60	213.53	206.35
330.0	239.55	239.55	238.65	235.06	230.58	224.30	217.12	212.63	208.15
345.0	239.55	239.55	236.86	231.47	223.40	212.63	200.97	195.59	192.89
360.0	243.14	242.24	241.34	239.55	233.27	221.60	207.25	193.79	178.54
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	171.36	177.64	183.92	192.00	200.07	209.04	213.53	212.63	210.84
15.0	179.44	179.44	183.03	190.20	197.38	203.66	206.35	206.35	206.35
30.0	190.20	188.41	188.41	191.10	192.89	192.00	192.89	194.69	197.38
45.0	200.97	194.69	186.61	181.23	176.74	177.64	180.33	183.92	188.41
60.0	204.56	194.69	183.03	174.05	170.46	174.95	180.33	185.72	190.20
75.0	215.32	208.15	200.97	197.38	194.69	194.69	195.59	198.28	201.87
90.0	225.19	221.60	218.02	214.43	211.74	210.84	209.94	210.84	210.84
105.0	229.68	226.09	223.40	219.81	217.12	215.32	213.53	212.63	209.94
120.0	228.78	225.19	221.60	218.02	215.32	212.63	209.94	208.15	203.66
135.0	227.88	225.19	221.60	218.02	214.43	211.74	209.04	207.25	204.56
150.0	230.58	226.99	223.40	219.81	216.22	213.53	210.84	209.04	208.15
165.0	232.37	230.58	227.88	225.19	221.60	218.02	215.32	212.63	210.84
180.0	237.75	235.96	234.16	231.47	228.78	226.99	225.19	224.30	223.40
195.0	237.75	235.96	235.06	233.27	232.37	230.58	229.68	227.88	227.88
210.0	236.86	236.86	235.06	233.27	231.47	230.58	230.58	229.68	228.78
225.0	233.27	231.47	229.68	227.88	226.99	226.09	225.19	222.50	218.91
240.0	223.40	221.60	220.71	218.91	218.02	217.12	215.32	210.84	207.25
255.0	212.63	209.94	207.25	206.35	207.25	208.15	209.04	209.04	203.66
270.0	199.17	194.69	191.10	191.10	190.20	192.00	195.59	200.07	202.76
285.0	188.41	181.23	175.85	174.95	176.74	180.33	184.82	189.31	194.69
300.0	183.03	172.26	163.29	167.77	174.95	181.23	186.61	192.00	197.38
315.0	199.17	193.79	190.20	191.10	192.89	196.48	200.07	203.66	207.25
330.0	207.25	208.15	209.04	210.84	211.74	212.63	213.53	213.53	214.43
345.0	194.69	198.28	204.56	210.84	216.22	216.22	214.43	213.53	213.53
360.0	171.36	177.64	183.92	192.00	200.07	209.04	213.53	212.63	210.84

Intensity data(cd)

Appendix Page: 11 Total:12

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	209.94	210.84	209.94	209.94	210.84	211.74	212.63	213.53	214.43
15.0	207.25	206.35	206.35	206.35	206.35	207.25	208.15	209.04	209.94
30.0	200.97	203.66	205.45	205.45	204.56	204.56	204.56	205.45	206.35
45.0	193.79	197.38	202.76	205.45	205.45	205.45	205.45	207.25	208.15
60.0	195.59	200.07	204.56	208.15	208.15	209.04	209.94	210.84	212.63
75.0	205.45	208.15	210.84	211.74	212.63	212.63	213.53	214.43	216.22
90.0	211.74	210.84	209.94	208.15	206.35	205.45	206.35	207.25	209.94
105.0	206.35	201.87	198.28	193.79	190.20	186.61	184.82	186.61	190.20
120.0	198.28	192.89	187.51	181.23	174.95	169.57	164.18	163.29	172.26
135.0	199.17	193.79	188.41	183.92	179.44	176.74	174.95	176.74	182.13
150.0	206.35	203.66	199.17	196.48	193.79	192.00	192.00	190.20	185.72
165.0	209.94	209.94	209.94	209.94	209.94	208.15	200.97	192.00	183.92
180.0	222.50	223.40	223.40	223.40	217.12	207.25	197.38	188.41	179.44
195.0	226.99	226.99	228.78	229.68	226.99	219.81	212.63	206.35	200.97
210.0	226.99	226.09	224.30	223.40	221.60	220.71	218.91	216.22	213.53
225.0	215.32	210.84	207.25	202.76	199.17	196.48	195.59	198.28	195.59
240.0	201.87	196.48	195.59	184.82	179.44	174.05	174.05	175.85	175.85
255.0	199.17	194.69	190.20	187.51	184.82	183.92	183.92	184.82	183.03
270.0	203.66	201.87	199.17	196.48	195.59	195.59	196.48	196.48	196.48
285.0	200.97	205.45	207.25	208.15	208.15	209.04	209.94	211.74	212.63
300.0	203.66	208.15	211.74	213.53	215.32	216.22	218.02	219.81	220.71
315.0	210.84	213.53	215.32	217.12	218.91	220.71	222.50	224.30	225.19
330.0	215.32	216.22	217.12	218.02	219.81	221.60	221.60	222.50	222.50
345.0	213.53	213.53	214.43	215.32	216.22	217.12	218.02	218.02	217.12
360.0	209.94	210.84	209.94	209.94	210.84	211.74	212.63	213.53	214.43
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	214.43	215.32	213.53	209.94	204.56	199.17	192.89	187.51	181.23
15.0	210.84	211.74	209.94	205.45	200.07	192.89	185.72	181.23	176.74
30.0	207.25	209.04	207.25	203.66	198.28	192.89	187.51	181.23	173.16
45.0	209.04	209.94	209.94	207.25	202.76	197.38	191.10	184.82	174.05
60.0	213.53	215.32	215.32	213.53	209.94	203.66	197.38	192.00	180.33
75.0	218.02	220.71	221.60	218.91	215.32	209.94	202.76	196.48	186.61
90.0	213.53	218.02	221.60	221.60	218.91	214.43	207.25	199.17	189.31
105.0	198.28	207.25	214.43	218.91	218.91	214.43	209.04	199.17	188.41
120.0	184.82	196.48	205.45	209.94	211.74	209.04	200.97	191.10	180.33
135.0	189.31	194.69	199.17	201.87	200.07	193.79	185.72	174.95	165.08
150.0	183.92	184.82	186.61	185.72	183.03	174.95	165.08	153.42	144.45
165.0	177.64	175.85	174.95	171.36	165.98	156.11	144.45	131.89	123.81
180.0	169.57	166.88	160.60	160.60	153.42	144.45	134.58	101.38	120.22
195.0	195.59	188.41	183.03	182.13	173.16	171.36	136.37	96.90	139.06
210.0	208.15	205.45	200.97	198.28	188.41	174.05	134.58	102.28	154.32
225.0	192.00	189.31	187.51	182.13	179.44	165.08	130.99	120.22	165.08
240.0	170.46	166.88	162.39	159.70	158.80	148.04	122.91	128.30	172.26
255.0	180.33	174.05	164.18	156.11	152.52	145.34	130.09	139.06	174.05
270.0	194.69	191.10	183.92	175.85	169.57	161.49	150.73	150.73	171.36
285.0	211.74	209.04	203.66	195.59	188.41	181.23	170.46	163.29	170.46
300.0	221.60	219.81	216.22	210.84	202.76	194.69	184.82	174.95	170.46
315.0	225.19	223.40	219.81	214.43	209.04	200.07	191.10	181.23	173.16
330.0	223.40	222.50	217.12	211.74	205.45	198.28	191.10	180.33	172.26
345.0	218.02	215.32	210.84	206.35	200.07	193.79	186.61	175.85	172.26
360.0	214.43	215.32	213.53	209.94	204.56	199.17	192.89	187.51	181.23

Intensity data(cd)

C/ γ (°)	180.0
0.0	131.89
15.0	171.36
30.0	172.26
45.0	170.46
60.0	170.46
75.0	170.46
90.0	174.05
105.0	177.64
120.0	174.05
135.0	171.36
150.0	167.77
165.0	164.18
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	131.89