
AFX

Client:

LumCAT: ARNP17LAJD4BKLB

Luminaire: LED LAMP

Report No:

Ballast type:

Test No:

Voltage(V): 120.000

LampCAT:

Current(A): 0.241

Lamp flux(lm): 2549.0

Power (W): 28.300

Number of Lamps: 1

PF: 0.979

Length(mm): 390

Width(mm): 390

Phm Type: C

Height(mm): 480

Photometric Results

Lumens(lm): 2549.02, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 90.07

Central intensity(cd): 246.725, Maximum intensity(cd): 248.520

Angle of maximum intensity: C=180.0 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=1.53 C90_270=1.48

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

Up flux rate of lamp(%): 47.87%

Down flux rate of lamp(%): 52.13%

Up flux rate of LUM(%): 47.87%

Down flux rate of LUM(%): 52.13%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 26.926%

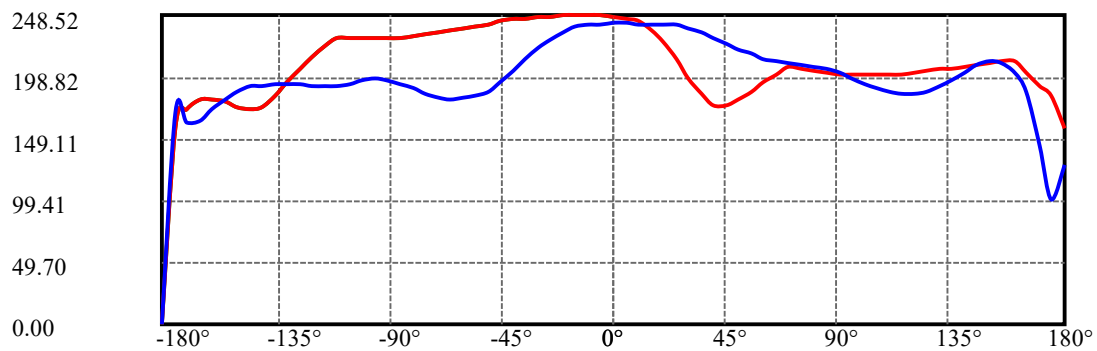
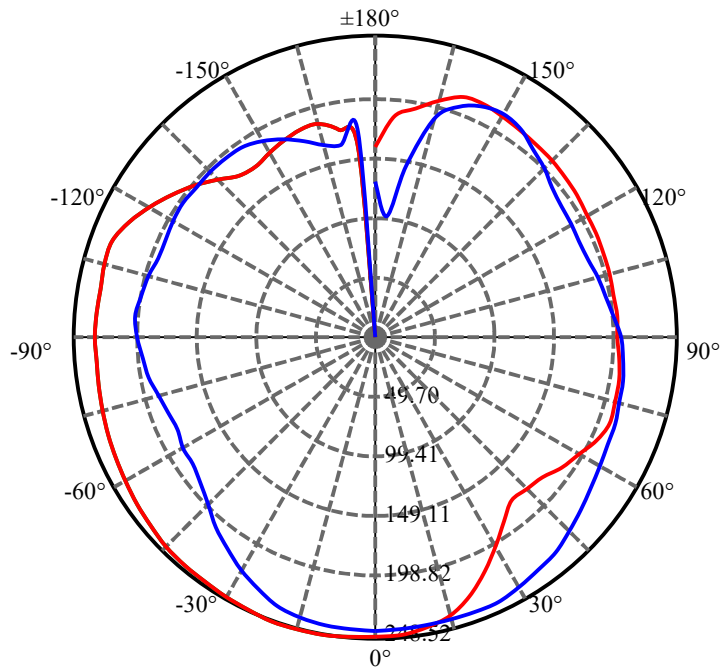
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	243.062	0.000	0	0.00%	0.00%
5.0	242.837	5.809	5.809	0.23%	0.23%
10.0	241.678	17.333	23.141	0.68%	0.91%
15.0	239.548	28.546	51.687	1.12%	2.03%
20.0	236.071	39.198	90.885	1.54%	3.57%
25.0	231.473	49.037	139.922	1.92%	5.49%
30.0	225.940	57.886	197.808	2.27%	7.76%
35.0	220.669	65.766	263.574	2.58%	10.34%
40.0	216.557	72.948	336.522	2.86%	13.20%
45.0	212.071	79.364	415.886	3.11%	16.32%
50.0	208.782	85.040	500.926	3.34%	19.65%
55.0	206.427	90.280	591.206	3.54%	23.19%
60.0	205.230	95.153	686.359	3.73%	26.93%
65.0	204.782	99.675	786.034	3.91%	30.84%
70.0	204.670	103.676	889.71	4.07%	34.90%
75.0	204.670	106.995	996.705	4.20%	39.10%
80.0	204.632	109.518	1106.222	4.30%	43.40%
85.0	204.184	111.085	1217.308	4.36%	47.76%
90.0	203.137	111.528	1328.835	4.38%	52.13%
95.0	201.978	110.924	1439.759	4.35%	56.48%
100.0	200.670	109.409	1549.168	4.29%	60.78%
105.0	198.950	106.927	1656.095	4.19%	64.97%
110.0	197.380	103.594	1759.689	4.06%	69.03%
115.0	196.184	99.653	1859.342	3.91%	72.94%
120.0	195.361	95.185	1954.528	3.73%	76.68%
125.0	195.212	90.280	2044.808	3.54%	80.22%
130.0	195.025	84.850	2129.658	3.33%	83.55%
135.0	194.016	78.611	2208.269	3.08%	86.63%
140.0	192.371	71.543	2279.812	2.81%	89.44%
145.0	190.988	63.960	2343.773	2.51%	91.95%
150.0	190.016	56.105	2399.878	2.20%	94.15%
155.0	188.670	47.923	2447.801	1.88%	96.03%
160.0	184.035	39.090	2486.891	1.53%	97.56%
165.0	171.923	29.336	2516.227	1.15%	98.71%
170.0	154.764	19.379	2535.605	0.76%	99.47%
175.0	146.353	10.772	2546.377	0.42%	99.90%
180.0	74.317	2.638	2549.015	0.10%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	197.81	7.76%	7.76%
0-40	336.52	13.20%	13.20%
0-60	686.36	26.93%	26.93%
0-90	1328.84	52.13%	52.13%
0-120	1954.53	76.68%	76.68%
0-180	2549.02	100.00%	100.00%
60-90	642.48	25.20%	25.20%
90-120	625.69	24.55%	24.55%
90-130	800.82	31.42%	31.42%
90-150	1071.04	42.02%	42.02%
90-180	1217.54	47.77%	47.77%
0-124.69	2039.21	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	23.14
10-20	67.74
20-30	106.92
30-40	138.71
40-50	164.40
50-60	185.43
60-70	203.35
70-80	216.51
80-90	222.61
90-100	220.33
100-110	210.52
110-120	194.84
120-130	175.13
130-140	150.15
140-150	120.07
150-160	87.01
160-170	48.71
170-180	10.77

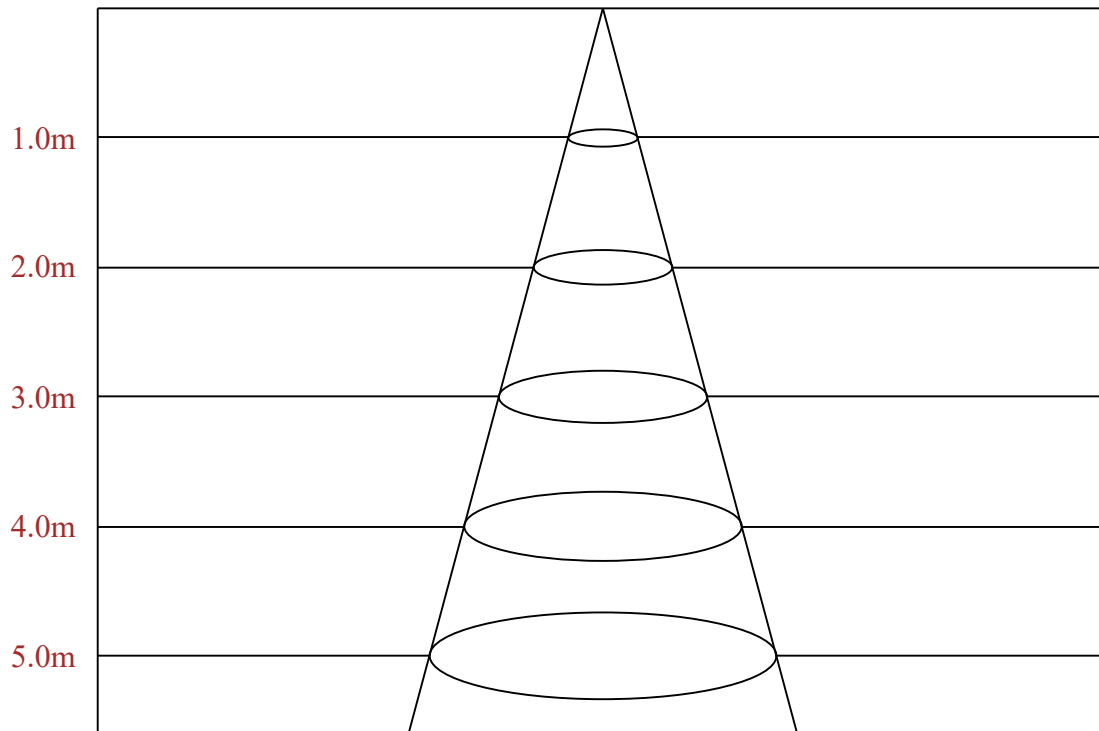
C180(Max): —————C0/C180: —————C90/C270: —————

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

:C90/270Left:0.0 Right:0.0

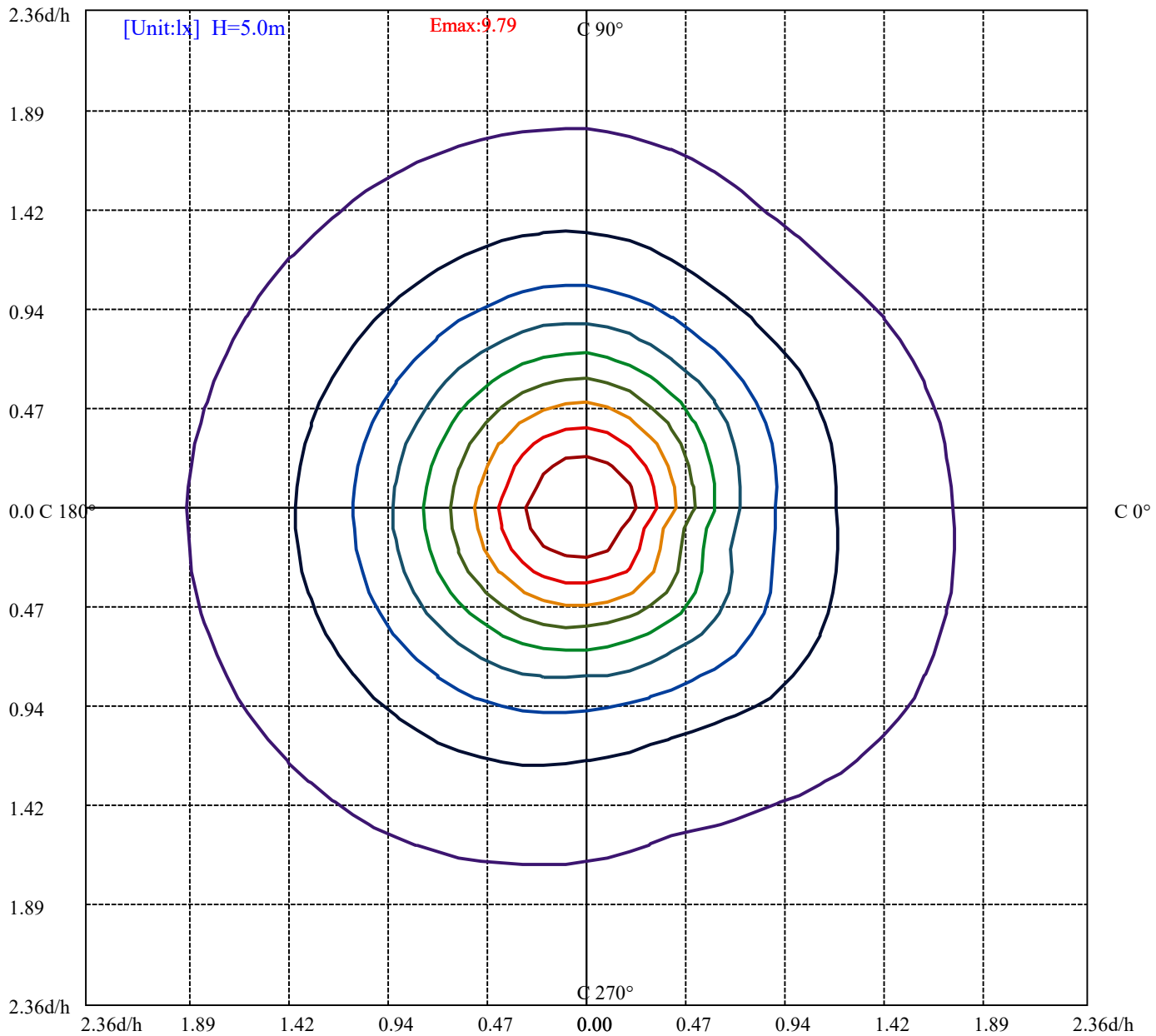
Beam Angle(50%Imax):C0/180Left:0.0 Right:0.0

:C90/270Left:0.0 Right:0.0

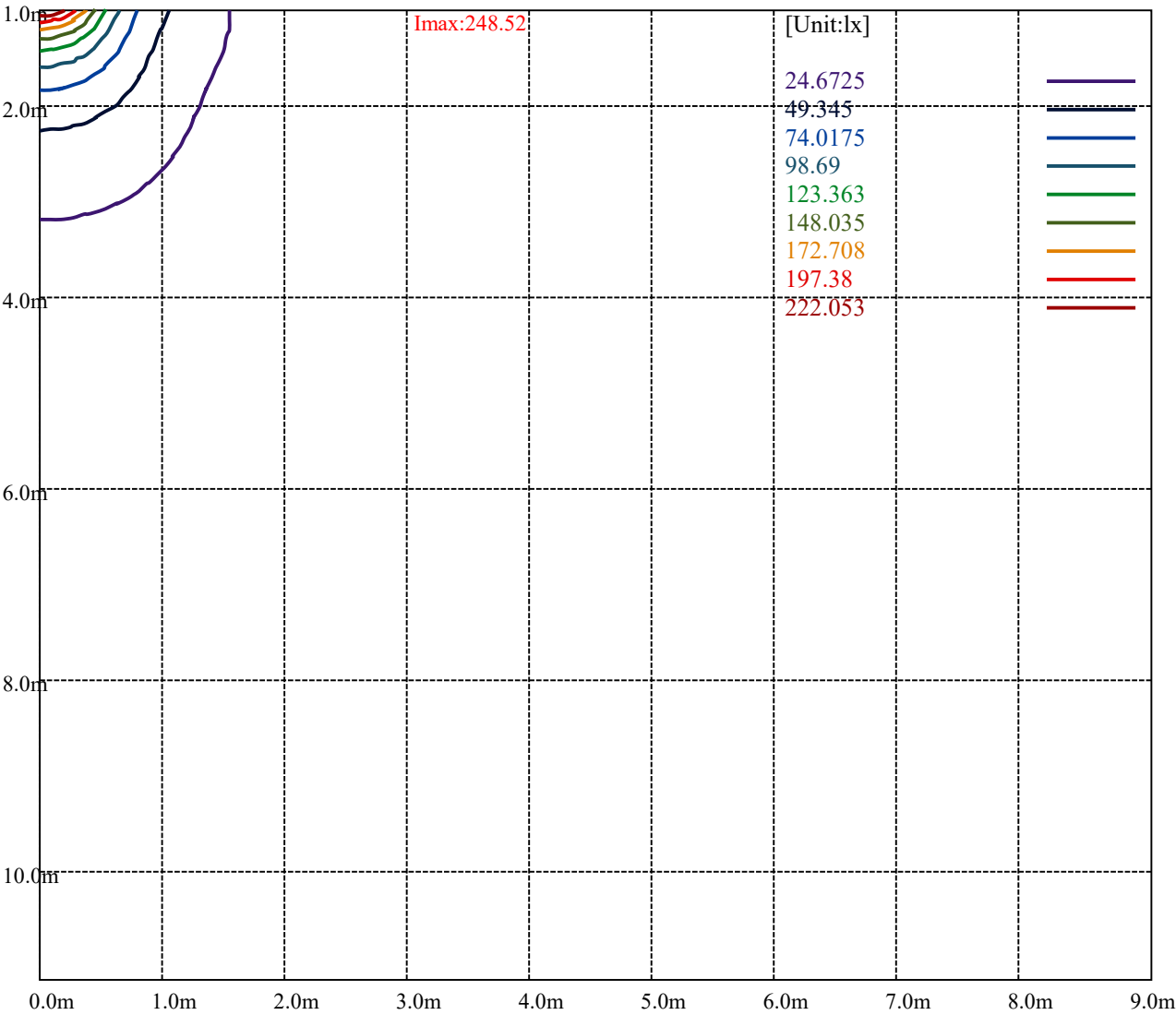


Max , Ave

Beam angle of C180 plane 333.11



(10%Emax) 0.979348	—
(20%Emax) 1.958696	—
(30%Emax) 2.938044	—
(40%Emax) 3.917392	—
(50%Emax) 4.89672	—
(60%Emax) 5.87608	—
(70%Emax) 6.85544	—
(80%Emax) 7.8348	—
(90%Emax) 8.81412	—



Luminance Table

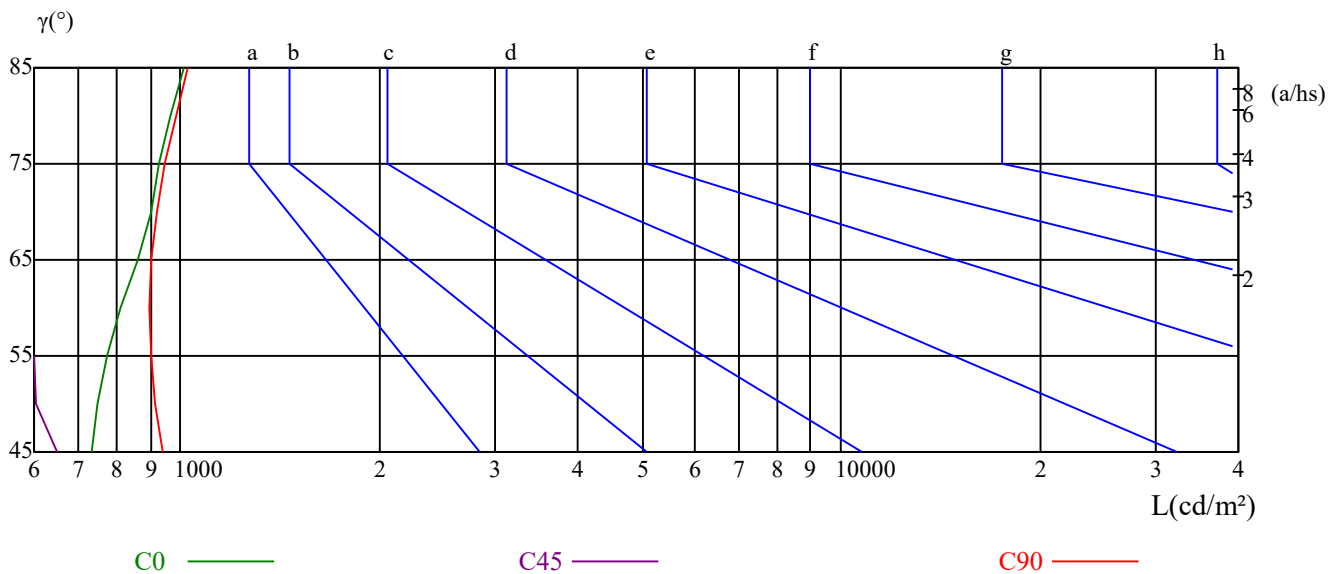
γ	45	50	55	60	65	70	75	80	85
C0	733	748	776	814	859	905	929	966	1011
C45	651	603	566	547	549	564	587	612	645
C90	939	915	902	897	901	921	945	983	1029

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3399	3043	3151	5550	4991	5151	16311	15025	15262

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	0.58	0.58	0.58	0.52
1	0.88	0.82	0.78	0.81	0.76	0.72	0.68	0.64	0.61	0.56	0.53	0.50	0.45	0.43	0.41	0.35
2	0.75	0.67	0.60	0.69	0.62	0.56	0.57	0.52	0.47	0.47	0.43	0.39	0.37	0.34	0.31	0.27
3	0.64	0.56	0.49	0.59	0.51	0.45	0.49	0.43	0.38	0.40	0.36	0.32	0.32	0.28	0.25	0.21
4	0.56	0.47	0.40	0.52	0.44	0.37	0.43	0.37	0.32	0.35	0.30	0.26	0.28	0.24	0.21	0.17
5	0.50	0.41	0.34	0.46	0.38	0.31	0.38	0.32	0.27	0.31	0.26	0.22	0.25	0.21	0.18	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	0.15	0.12	0.09
9	0.33	0.25	0.19	0.30	0.23	0.18	0.26	0.20	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	0.24	0.18	0.14	0.20	0.15	0.12	0.16	0.12	0.09	0.07

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	246.73	245.83	243.14	236.86	226.99	213.53	198.28	184.82	175.85
15.0	245.83	244.93	242.24	236.86	226.99	215.32	200.97	191.10	183.92
30.0	244.93	244.03	241.34	236.86	228.78	218.91	208.15	199.17	193.79
45.0	244.03	243.14	240.44	237.75	231.47	225.19	217.12	209.04	200.97
60.0	243.14	242.24	240.44	237.75	233.27	228.78	223.40	216.22	207.25
75.0	242.24	241.34	240.44	239.55	237.75	235.96	233.27	226.09	219.81
90.0	242.24	242.24	241.34	241.34	240.44	240.44	237.75	234.16	230.58
105.0	242.24	242.24	242.24	242.24	242.24	242.24	240.44	237.75	234.16
120.0	242.24	243.14	243.14	243.14	243.14	243.14	240.44	238.65	235.96
135.0	242.24	242.24	243.14	243.14	243.14	243.14	240.44	238.65	236.86
150.0	240.44	241.34	242.24	243.14	243.14	243.14	241.34	239.55	237.75
165.0	240.44	241.34	242.24	243.14	243.14	243.14	243.14	241.34	239.55
180.0	246.73	248.52	248.52	248.52	248.52	247.62	246.73	245.83	244.93
195.0	245.83	247.62	247.62	247.62	247.62	246.73	245.83	244.93	244.03
210.0	244.93	246.73	246.73	247.62	246.73	245.83	244.93	243.14	241.34
225.0	244.03	244.93	244.93	244.93	244.03	241.34	237.75	235.96	234.16
240.0	243.14	243.14	244.03	243.14	241.34	238.65	235.06	230.58	226.09
255.0	242.24	242.24	242.24	240.44	237.75	233.27	227.88	220.71	214.43
270.0	242.24	241.34	240.44	238.65	235.06	228.78	221.60	212.63	203.66
285.0	242.24	241.34	240.44	237.75	233.27	226.99	217.12	207.25	205.45
300.0	242.24	241.34	239.55	236.86	235.96	226.99	218.91	210.84	200.97
315.0	242.24	240.44	237.75	233.27	227.88	221.60	217.12	211.74	208.15
330.0	240.44	238.65	234.16	227.88	218.91	209.94	202.76	200.07	199.17
345.0	240.44	237.75	231.47	220.71	208.15	194.69	182.13	175.85	178.54
360.0	246.73	245.83	243.14	236.86	226.99	213.53	198.28	184.82	175.85
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	175.85	180.33	186.61	193.79	200.97	206.35	204.56	203.66	201.87
15.0	181.23	183.03	187.51	191.10	193.79	193.79	193.79	195.59	195.59
30.0	189.31	185.72	183.92	181.23	180.33	180.33	181.23	183.03	184.82
45.0	192.00	181.23	172.26	166.88	166.88	169.57	173.16	175.85	178.54
60.0	197.38	186.61	177.64	172.26	172.26	175.85	179.44	182.13	183.03
75.0	212.63	205.45	200.07	197.38	195.59	194.69	195.59	194.69	194.69
90.0	225.19	220.71	217.12	213.53	210.84	209.94	208.15	207.25	205.45
105.0	230.58	226.99	222.50	218.91	216.22	213.53	211.74	209.04	205.45
120.0	231.47	227.88	224.30	220.71	217.12	213.53	210.84	209.04	204.56
135.0	232.37	229.68	226.09	222.50	218.91	216.22	213.53	211.74	209.94
150.0	235.06	232.37	229.68	226.09	223.40	219.81	218.02	216.22	214.43
165.0	238.65	235.96	234.16	231.47	228.78	226.09	223.40	220.71	218.91
180.0	243.14	241.34	239.55	237.75	235.96	234.16	232.37	231.47	230.58
195.0	242.24	240.44	239.55	237.75	236.86	235.06	233.27	233.27	232.37
210.0	240.44	238.65	235.96	235.06	233.27	231.47	230.58	229.68	227.88
225.0	232.37	230.58	228.78	226.99	225.19	223.40	222.50	219.81	216.22
240.0	222.50	220.71	218.02	216.22	214.43	213.53	211.74	209.04	204.56
255.0	208.15	204.56	200.97	198.28	197.38	198.28	200.07	200.07	200.97
270.0	194.69	187.51	183.03	182.13	180.33	182.13	184.82	189.31	192.89
285.0	184.82	174.05	165.98	165.08	168.67	173.16	178.54	183.03	187.51
300.0	191.10	181.23	175.85	175.85	178.54	183.03	187.51	191.10	194.69
315.0	204.56	202.76	200.97	199.17	199.17	200.97	201.87	202.76	204.56
330.0	200.07	202.76	206.35	210.84	210.84	209.94	209.04	208.15	207.25
345.0	183.92	190.20	197.38	204.56	209.04	207.25	206.35	204.56	203.66
360.0	175.85	180.33	186.61	193.79	200.97	206.35	204.56	203.66	201.87

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	200.07	200.07	200.07	200.07	200.07	200.97	201.87	203.66	205.45
15.0	194.69	192.89	192.00	191.10	189.31	188.41	187.51	188.41	189.31
30.0	186.61	187.51	185.72	183.92	182.13	181.23	181.23	181.23	180.33
45.0	179.44	181.23	183.03	183.03	180.33	179.44	180.33	181.23	181.23
60.0	183.03	182.13	182.13	183.03	183.92	185.72	187.51	190.20	192.00
75.0	193.79	192.89	191.10	190.20	190.20	190.20	192.00	194.69	198.28
90.0	201.87	197.38	192.89	190.20	186.61	185.72	185.72	187.51	191.10
105.0	200.07	194.69	189.31	183.92	178.54	173.16	169.57	169.57	175.85
120.0	198.28	192.00	186.61	182.13	175.85	172.26	169.57	169.57	174.95
135.0	205.45	200.97	196.48	192.00	189.31	186.61	185.72	186.61	185.72
150.0	212.63	211.74	209.94	208.15	205.45	203.66	202.76	196.48	188.41
165.0	217.12	217.12	217.12	218.02	218.02	218.02	212.63	202.76	191.10
180.0	230.58	229.68	230.58	230.58	230.58	223.40	214.43	205.45	194.69
195.0	231.47	231.47	231.47	231.47	231.47	229.68	223.40	218.02	210.84
210.0	226.09	223.40	221.60	218.91	216.22	214.43	214.43	214.43	211.74
225.0	211.74	208.15	202.76	197.38	192.89	187.51	186.61	187.51	192.89
240.0	199.17	194.69	192.89	183.03	177.64	173.16	172.26	177.64	183.92
255.0	197.38	192.89	188.41	184.82	182.13	181.23	181.23	184.82	188.41
270.0	196.48	198.28	195.59	192.89	191.10	191.10	192.00	192.89	192.89
285.0	192.89	197.38	200.97	201.87	201.87	202.76	203.66	202.76	200.07
300.0	199.17	201.87	204.56	204.56	206.35	208.15	209.04	209.04	207.25
315.0	205.45	207.25	207.25	208.15	209.04	210.84	212.63	214.43	214.43
330.0	207.25	207.25	208.15	209.04	209.94	211.74	212.63	214.43	216.22
345.0	204.56	204.56	205.45	206.35	208.15	209.04	209.94	211.74	213.53
360.0	200.07	200.07	200.07	200.07	200.07	200.97	201.87	203.66	205.45
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	205.45	206.35	208.15	209.94	211.74	210.84	201.87	192.00	183.03
15.0	188.41	188.41	190.20	192.89	195.59	192.89	183.92	172.26	175.85
30.0	177.64	174.05	173.16	174.95	180.33	178.54	164.18	152.52	164.18
45.0	179.44	178.54	179.44	183.03	186.61	183.92	162.39	144.45	154.32
60.0	192.00	193.79	196.48	200.07	204.56	202.76	174.95	142.65	138.17
75.0	201.87	205.45	209.04	213.53	214.43	211.74	183.03	142.65	113.04
90.0	196.48	202.76	209.04	211.74	209.94	201.87	186.61	143.55	100.48
105.0	184.82	188.41	191.10	192.89	190.20	182.13	168.67	143.55	103.18
120.0	178.54	174.95	174.05	173.16	171.36	165.98	154.32	140.86	112.15
135.0	181.23	173.16	165.98	162.39	161.49	159.70	155.21	144.45	124.71
150.0	181.23	174.05	166.88	163.29	163.29	163.29	162.39	155.21	127.40
165.0	180.33	169.57	160.60	160.60	165.98	170.46	171.36	168.67	137.27
180.0	183.03	174.05	172.26	174.95	178.54	181.23	181.23	173.16	157.90
195.0	201.87	194.69	190.20	185.72	184.82	183.92	183.92	169.57	156.11
210.0	208.15	206.35	198.28	192.89	187.51	183.92	182.13	165.98	159.70
225.0	195.59	195.59	194.69	191.10	186.61	180.33	175.85	164.18	165.98
240.0	187.51	189.31	188.41	186.61	182.13	176.74	169.57	162.39	174.95
255.0	190.20	190.20	188.41	184.82	179.44	173.16	166.88	161.49	176.74
270.0	192.89	192.00	191.10	186.61	180.33	172.26	164.18	161.49	169.57
285.0	199.17	197.38	194.69	190.20	183.92	176.74	168.67	162.39	153.42
300.0	205.45	202.76	200.97	195.59	190.20	183.92	176.74	154.32	130.09
315.0	213.53	212.63	210.84	206.35	200.07	193.79	177.64	139.96	126.50
330.0	217.12	217.12	215.32	213.53	208.15	199.17	163.29	126.50	144.45
345.0	214.43	215.32	214.43	213.53	210.84	187.51	147.14	130.09	163.29
360.0	205.45	206.35	208.15	209.94	211.74	210.84	201.87	192.00	183.03

Intensity data(cd)

C/ γ (°)	180.0
0.0	157.01
15.0	178.54
30.0	185.72
45.0	183.92
60.0	172.26
75.0	154.32
90.0	128.30
105.0	108.56
120.0	113.94
135.0	130.99
150.0	138.17
165.0	131.89
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	157.01