
AFX

Client:

LumCAT: VRNV2207LAJUDSN

Luminaire: LED lamp

Report No:

Ballast type:

Test No:

Voltage(V): 120.010

LampCAT:

Current(A): 0.245

Lamp flux(lm): 2555.0

Power (W): 29.080

Number of Lamps: 1

PF: 0.991

Length(mm): 540

Width(mm): 120

Phm Type: C

Height(mm): 120

Photometric Results

Lumens(lm): 2554.99, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 87.86

Central intensity(cd): 314.990, Maximum intensity(cd): 314.990

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=1.30 C90_270=1.34

Maximum s/h(1/4): C0_180=1.47 C90_270=1.52

Up flux rate of lamp(%): 49.21%

Down flux rate of lamp(%): 50.79%

Up flux rate of LUM(%): 49.21%

Down flux rate of LUM(%): 50.79%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 30.128%

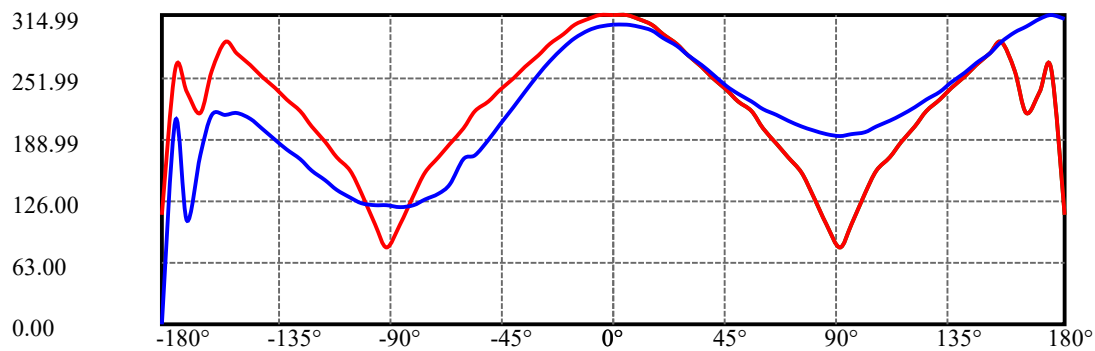
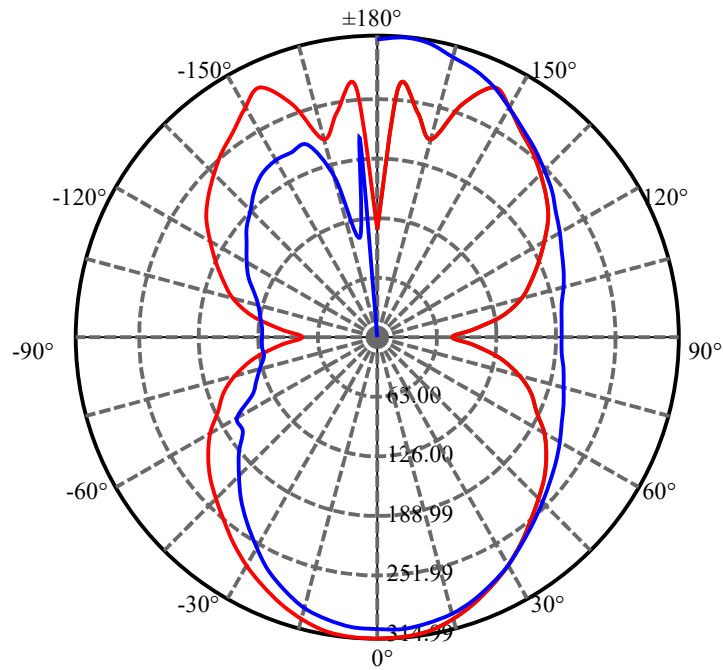
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	309.267	0.000	0	0.00%	0.00%
5.0	308.237	7.382	7.382	0.29%	0.29%
10.0	304.688	21.926	29.308	0.86%	1.15%
15.0	298.622	35.788	65.096	1.40%	2.55%
20.0	290.534	48.555	113.651	1.90%	4.45%
25.0	280.271	59.867	173.518	2.34%	6.79%
30.0	268.558	69.455	242.973	2.72%	9.51%
35.0	255.471	77.167	320.139	3.02%	12.53%
40.0	243.529	83.254	403.394	3.26%	15.79%
45.0	231.244	87.908	491.302	3.44%	19.23%
50.0	219.875	91.155	582.457	3.57%	22.80%
55.0	208.734	93.194	675.651	3.65%	26.44%
60.0	198.433	94.115	769.767	3.68%	30.13%
65.0	187.521	93.826	863.593	3.67%	33.80%
70.0	177.258	92.364	955.957	3.62%	37.42%
75.0	166.613	89.882	1045.84	3.52%	40.93%
80.0	157.228	86.651	1132.49	3.39%	44.32%
85.0	150.627	83.652	1216.142	3.27%	47.60%
90.0	146.774	81.431	1297.573	3.19%	50.79%
95.0	150.818	81.483	1379.056	3.19%	53.97%
100.0	158.601	84.077	1463.133	3.29%	57.27%
105.0	167.796	87.335	1550.467	3.42%	60.68%
110.0	176.762	90.062	1640.529	3.52%	64.21%
115.0	186.071	91.872	1732.401	3.60%	67.80%
120.0	195.533	92.769	1825.17	3.63%	71.44%
125.0	205.834	92.775	1917.945	3.63%	75.07%
130.0	216.021	91.725	2009.67	3.59%	78.66%
135.0	226.513	89.421	2099.091	3.50%	82.16%
140.0	236.013	85.641	2184.731	3.35%	85.51%
145.0	245.742	80.377	2265.109	3.15%	88.65%
150.0	257.188	74.060	2339.169	2.90%	91.55%
155.0	265.315	66.123	2405.292	2.59%	94.14%
160.0	259.668	55.061	2460.353	2.16%	96.30%
165.0	248.337	41.867	2502.22	1.64%	97.93%
170.0	250.244	29.575	2531.795	1.16%	99.09%
175.0	263.293	18.371	2550.166	0.72%	99.81%
180.0	140.250	4.824	2554.99	0.19%	100.00%

Zonal flux distribution table

ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	242.97	9.51%	9.51%
0-40	403.39	15.79%	15.79%
0-60	769.77	30.13%	30.13%
0-90	1297.57	50.79%	50.79%
0-120	1825.17	71.44%	71.44%
0-180	2554.99	100.00%	100.00%
60-90	527.81	20.66%	20.66%
90-120	527.60	20.65%	20.65%
90-130	712.10	27.87%	27.87%
90-150	1041.60	40.77%	40.77%
90-180	1252.59	49.03%	49.03%
0-131.92	2043.99	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	29.31
10-20	84.34
20-30	129.32
30-40	160.42
40-50	179.06
50-60	187.31
60-70	186.19
70-80	176.53
80-90	165.08
90-100	165.56
100-110	177.40
110-120	184.64
120-130	184.50
130-140	175.06
140-150	154.44
150-160	121.18
160-170	71.44
170-180	18.37

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

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

:C90/270Left:0.0 Right:0.0

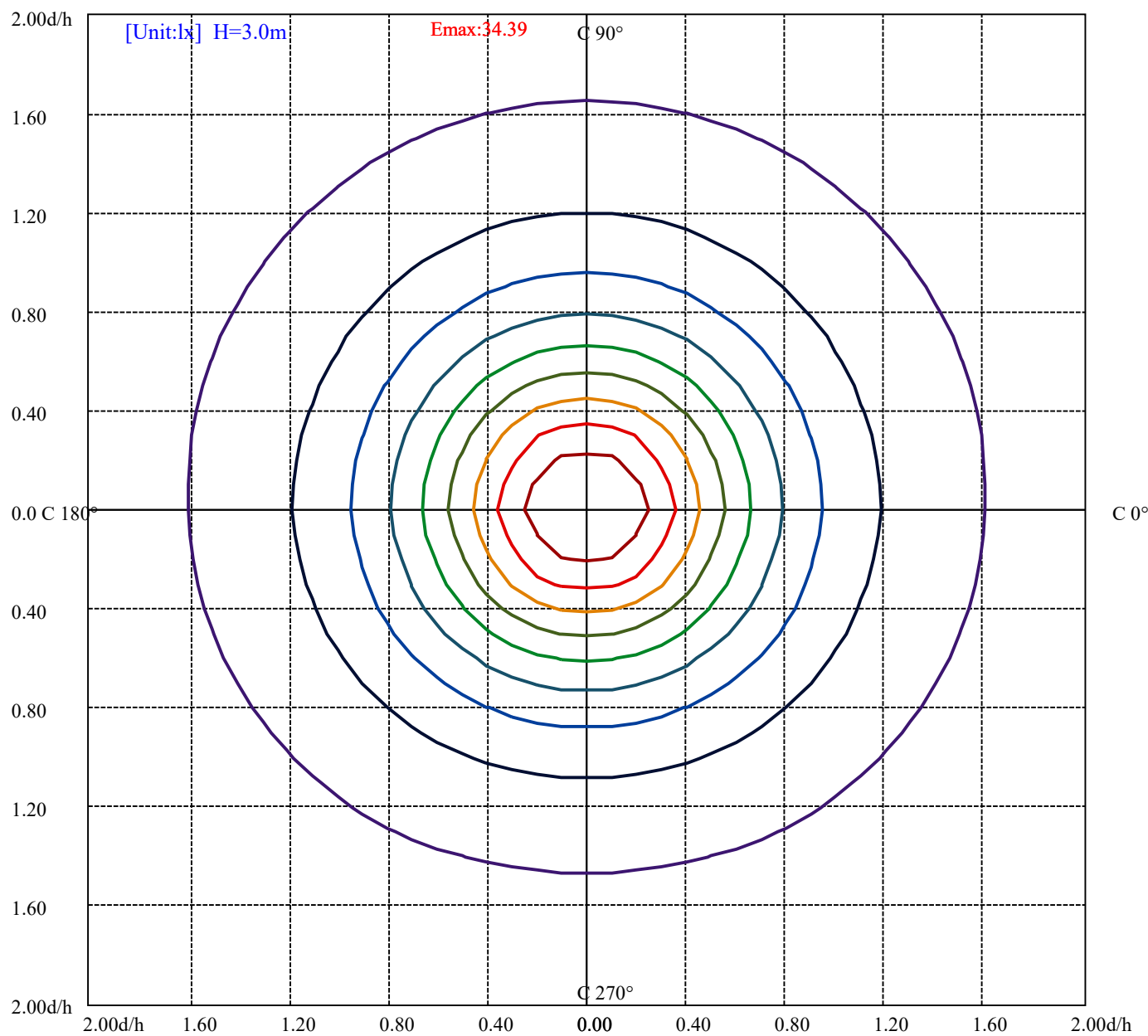
Beam Angle(50%Imax):C0/180Left:178.5 Right:178.5

:C90/270Left:0.0 Right:0.0

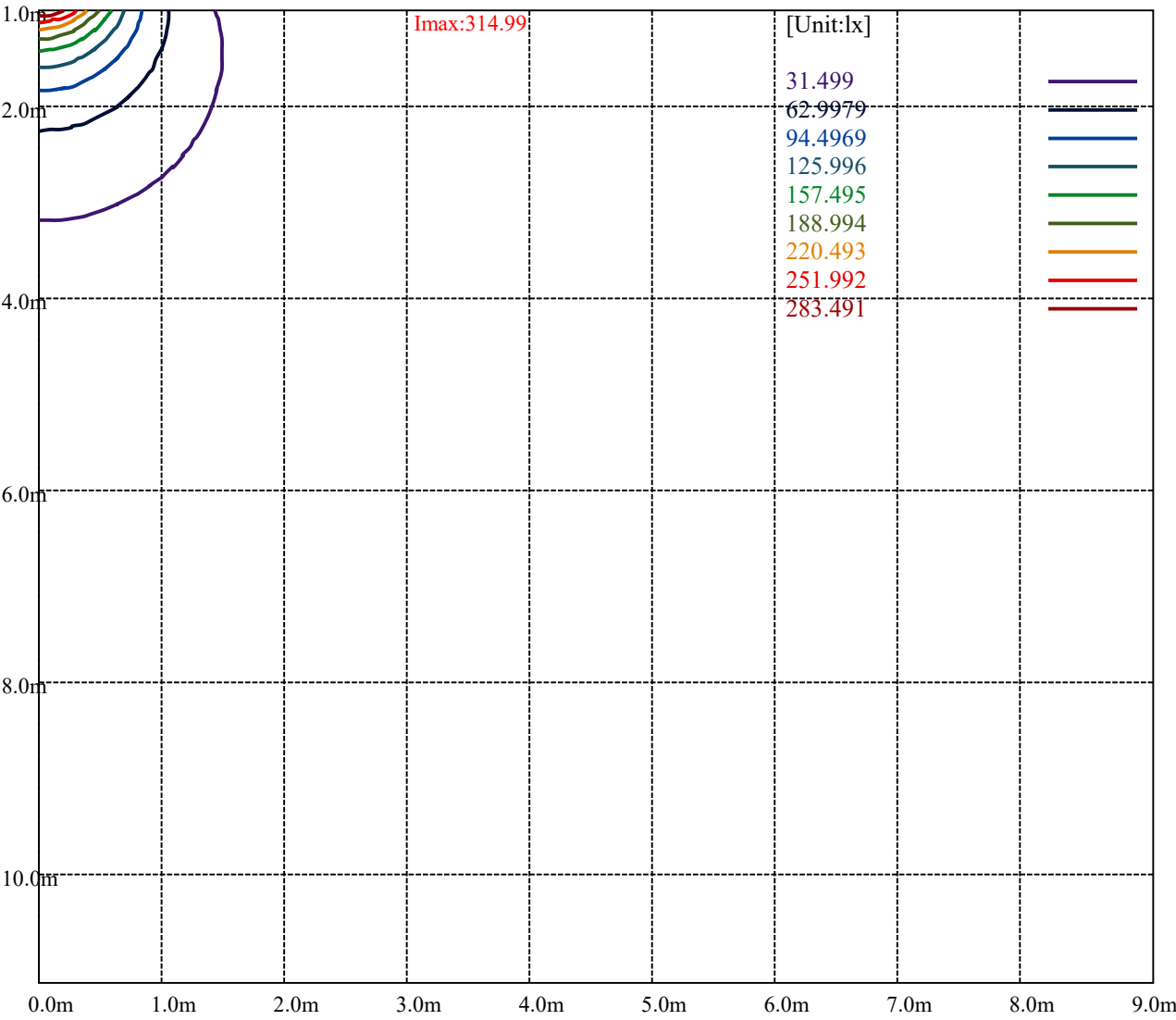


Max , Ave

Beam angle of C0 plane 252.57



(10%Emax) 3.438844	—
(20%Emax) 6.877678	—
(30%Emax) 10.31652	—
(40%Emax) 13.75533	—
(50%Emax) 17.19422	—
(60%Emax) 20.633	—
(70%Emax) 24.07189	—
(80%Emax) 27.51078	—
(90%Emax) 30.94955	—



Luminance Table

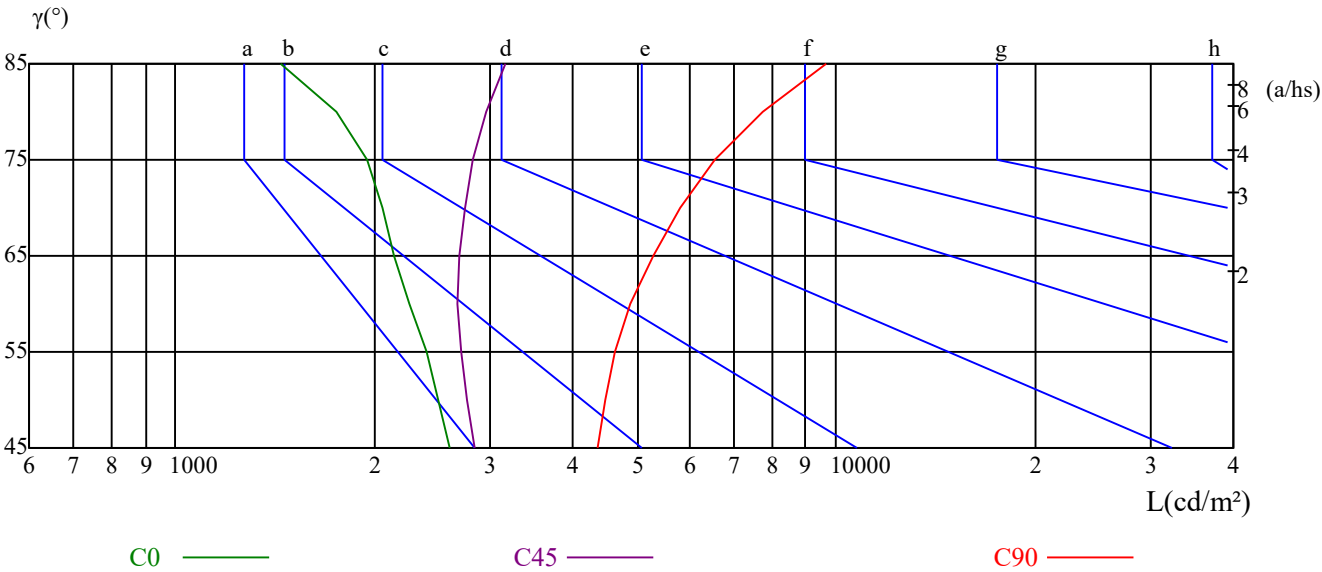
γ	45	50	55	60	65	70	75	80	85
C0	2603	2492	2400	2265	2143	2056	1944	1750	1441
C45	2846	2767	2707	2677	2689	2743	2817	2951	3167
C90	4349	4467	4638	4898	5276	5798	6566	7740	9664

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6737	6520	6988	9200	9773	10319	17916	27724	29508

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



RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFCIENTS 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	0.89	0.84	0.80	0.82	0.78	0.74	0.69	0.66	0.63	0.57	0.54	0.52	0.46	0.44	0.42	0.37
2	0.77	0.69	0.63	0.70	0.64	0.59	0.59	0.54	0.50	0.48	0.45	0.41	0.39	0.36	0.33	0.29
3	0.66	0.58	0.51	0.61	0.54	0.48	0.51	0.45	0.41	0.42	0.38	0.34	0.33	0.30	0.27	0.23
4	0.58	0.49	0.43	0.54	0.46	0.40	0.45	0.39	0.34	0.37	0.32	0.28	0.29	0.26	0.23	0.19
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	0.26	0.23	0.20	0.16
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	0.32	0.26	0.22	0.27	0.22	0.18	0.21	0.18	0.15	0.12
8	0.38	0.29	0.24	0.35	0.27	0.22	0.29	0.23	0.19	0.24	0.20	0.16	0.20	0.16	0.13	0.11
9	0.34	0.26	0.21	0.32	0.24	0.20	0.27	0.21	0.17	0.22	0.18	0.14	0.18	0.14	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	0.13	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	314.99	314.99	312.24	306.75	298.51	289.35	277.45	264.63	251.81
15.0	314.07	312.24	309.50	304.92	296.68	287.52	277.45	263.71	251.81
30.0	312.24	312.24	309.50	304.92	296.68	288.44	277.45	265.54	253.64
45.0	312.24	313.16	310.41	304.92	298.51	289.35	278.36	267.37	255.47
60.0	311.33	311.33	308.58	304.00	297.59	289.35	278.36	267.37	256.39
75.0	308.58	307.66	305.83	301.25	294.84	286.60	276.53	264.63	254.56
90.0	305.83	305.83	303.09	298.51	292.10	283.86	274.70	263.71	253.64
105.0	306.75	305.83	304.00	298.51	293.01	283.86	274.70	262.80	252.72
120.0	307.66	307.66	305.83	300.34	293.93	284.77	275.62	263.71	252.72
135.0	306.75	306.75	304.00	298.51	293.01	283.86	273.78	263.71	250.89
150.0	304.92	304.92	302.17	297.59	284.77	281.11	271.95	260.05	249.06
165.0	305.83	305.83	303.09	297.59	290.27	282.03	271.04	259.13	245.40
180.0	314.99	314.07	309.50	302.17	293.93	282.94	271.95	259.13	247.23
195.0	314.07	311.33	307.66	301.25	293.01	282.03	270.12	257.30	245.40
210.0	312.24	310.41	305.83	299.42	290.27	279.28	267.37	254.56	242.65
225.0	312.24	311.33	305.83	299.42	289.35	278.36	264.63	249.98	236.24
240.0	311.33	309.50	304.92	297.59	287.52	274.70	260.05	244.48	228.92
255.0	308.58	306.75	302.17	293.93	283.86	271.04	255.47	238.99	223.42
270.0	305.83	304.00	299.42	292.10	281.11	268.29	253.64	236.24	220.68
285.0	306.75	304.00	299.42	292.10	282.03	269.21	254.56	238.07	234.41
300.0	307.66	305.83	301.25	293.01	290.27	270.12	257.30	241.74	228.00
315.0	306.75	304.92	300.34	293.01	283.86	272.87	260.05	246.31	233.50
330.0	304.92	303.09	298.51	292.10	283.86	272.87	260.97	248.15	237.16
345.0	305.83	304.00	299.42	293.01	283.86	274.70	261.88	249.98	238.99
360.0	314.99	314.99	312.24	306.75	298.51	289.35	277.45	264.63	251.81
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	240.82	228.92	218.84	204.19	187.71	173.06	158.41	137.35	110.80
15.0	240.82	229.83	219.76	211.52	199.62	187.71	176.72	164.82	153.83
30.0	242.65	232.58	223.42	215.18	208.77	202.36	196.87	192.29	188.63
45.0	245.40	236.24	227.09	218.84	212.43	206.94	201.45	197.78	196.87
60.0	245.40	237.16	228.00	221.59	214.27	208.77	204.19	200.53	198.70
75.0	245.40	236.24	228.00	220.68	214.27	207.86	203.28	198.70	195.95
90.0	243.57	235.33	227.09	219.76	213.35	206.94	201.45	196.87	193.21
105.0	242.65	234.41	226.17	218.84	212.43	206.94	202.36	198.70	195.95
120.0	242.65	232.58	226.17	217.93	211.52	205.11	201.45	197.78	195.95
135.0	240.82	231.66	222.51	214.27	207.86	203.28	197.78	194.12	192.29
150.0	238.07	228.00	218.84	211.52	205.11	197.78	191.37	186.80	183.13
165.0	236.24	225.25	216.10	206.03	193.21	181.30	168.48	152.92	139.18
180.0	236.24	226.17	214.27	196.87	181.30	168.48	150.17	125.45	91.57
195.0	234.41	225.25	211.52	200.53	184.96	166.65	148.34	127.28	112.63
210.0	230.75	217.01	204.19	192.29	177.64	162.07	140.10	125.45	124.53
225.0	223.42	210.60	195.04	183.13	173.06	160.24	146.51	136.43	137.35
240.0	214.27	199.62	186.80	173.98	162.99	152.92	142.84	136.43	129.11
255.0	206.94	191.37	176.72	162.99	150.17	139.18	124.53	123.62	116.29
270.0	204.19	187.71	172.15	168.48	143.76	133.69	126.36	120.87	119.95
285.0	206.94	191.37	176.72	162.99	152.00	141.93	133.69	130.02	128.19
300.0	213.35	199.62	187.71	175.81	165.74	156.58	149.25	142.84	141.93
315.0	220.68	207.86	194.12	182.22	172.15	161.16	146.51	136.43	140.10
330.0	226.17	214.27	201.45	189.54	177.64	160.24	141.01	124.53	119.04
345.0	228.00	217.93	206.94	193.21	178.56	162.99	145.59	125.45	109.88
360.0	240.82	228.92	218.84	204.19	187.71	173.06	158.41	137.35	110.80

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	76.92	91.57	124.53	150.17	166.65	181.30	195.95	213.35	226.17
15.0	146.51	149.25	159.33	171.23	182.22	194.12	206.94	217.01	226.17
30.0	185.88	187.71	190.46	195.04	199.62	206.03	212.43	219.76	228.92
45.0	195.95	196.87	196.87	199.62	205.11	210.60	217.01	224.34	232.58
60.0	198.70	198.70	200.53	202.36	207.86	213.35	219.76	226.17	233.50
75.0	195.04	195.95	198.70	203.28	207.86	213.35	220.68	228.92	237.16
90.0	192.29	193.21	195.95	201.45	206.94	213.35	220.68	228.92	237.16
105.0	195.04	195.95	197.78	201.45	206.03	212.43	219.76	227.09	235.33
120.0	195.95	195.95	197.78	200.53	204.19	210.60	217.01	224.34	231.66
135.0	191.37	191.37	193.21	195.04	200.53	206.03	212.43	219.76	228.00
150.0	181.30	181.30	184.05	188.63	194.12	201.45	207.86	215.18	224.34
165.0	129.11	132.77	145.59	160.24	173.06	185.88	199.62	211.52	221.59
180.0	79.66	111.71	141.01	162.07	174.89	190.46	206.94	222.51	232.58
195.0	108.96	120.87	143.76	162.99	176.72	190.46	205.11	216.10	225.25
210.0	124.53	127.28	134.60	145.59	154.75	162.07	172.15	181.30	192.29
225.0	137.35	141.93	144.68	152.92	162.07	172.15	173.06	188.63	201.45
240.0	124.53	125.45	125.45	132.77	148.34	161.16	173.06	185.88	201.45
255.0	118.12	119.04	119.04	126.36	140.10	152.00	163.90	175.81	186.80
270.0	120.87	121.78	123.62	129.11	136.43	147.42	157.49	167.57	177.64
285.0	126.36	128.19	132.77	140.10	146.51	152.92	161.16	170.31	184.96
300.0	135.52	133.69	137.35	148.34	158.41	169.40	180.39	193.21	207.86
315.0	136.43	141.01	147.42	154.75	163.90	173.06	181.30	193.21	205.11
330.0	119.04	120.87	130.94	142.84	152.00	158.41	164.82	174.89	182.22
345.0	107.13	117.21	141.01	160.24	173.98	187.71	203.28	214.27	224.34
360.0	76.92	91.57	124.53	150.17	166.65	181.30	195.95	213.35	226.17
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	237.16	248.15	260.05	273.78	286.60	284.77	217.01	212.43	282.03
15.0	237.16	248.15	260.97	272.87	285.69	296.68	262.80	213.35	259.13
30.0	239.90	250.89	261.88	274.70	286.60	296.68	304.92	249.98	216.10
45.0	241.74	251.81	263.71	275.62	286.60	296.68	304.00	308.58	238.07
60.0	242.65	252.72	263.71	276.53	287.52	296.68	304.00	309.50	309.50
75.0	245.40	254.56	265.54	277.45	287.52	296.68	304.00	310.41	314.99
90.0	246.31	255.47	265.54	276.53	287.52	296.68	303.09	311.33	314.99
105.0	243.57	253.64	264.63	275.62	286.60	294.84	303.09	309.50	312.24
120.0	241.74	249.98	261.88	272.87	283.86	293.93	303.09	307.66	310.41
135.0	237.16	247.23	259.13	271.04	282.94	293.01	301.25	307.66	310.41
150.0	233.50	244.48	256.39	269.21	281.11	291.18	299.42	305.83	308.58
165.0	231.66	242.65	254.56	267.37	279.28	289.35	297.59	303.09	306.75
180.0	242.65	255.47	266.46	279.28	289.35	230.75	211.52	262.80	239.90
195.0	235.33	237.16	238.99	249.06	247.23	235.33	206.94	249.98	211.52
210.0	200.53	200.53	195.04	206.94	216.10	203.28	207.86	222.51	211.52
225.0	214.27	220.68	228.92	245.40	264.63	257.30	241.74	206.03	221.59
240.0	217.01	231.66	246.31	261.88	267.37	269.21	248.15	206.94	180.39
255.0	200.53	211.52	224.34	233.50	235.33	238.07	217.93	156.58	152.00
270.0	187.71	198.70	208.77	214.27	212.43	213.35	172.15	105.30	207.86
285.0	195.95	207.86	219.76	228.00	228.00	216.10	141.01	137.35	255.47
300.0	222.51	236.24	249.06	261.88	264.63	205.11	169.40	202.36	267.37
315.0	217.93	225.25	237.16	250.89	249.98	200.53	195.04	249.06	285.69
330.0	190.46	195.04	195.95	205.11	211.52	194.12	198.70	271.95	298.51
345.0	233.50	244.48	249.06	252.72	259.13	241.74	245.40	285.69	304.00
360.0	237.16	248.15	260.05	273.78	286.60	284.77	217.01	212.43	282.03

Intensity data(cd)

C/ γ (°)	180.0
0.0	223.42
15.0	257.30
30.0	280.19
45.0	235.33
60.0	231.66
75.0	299.42
90.0	310.41
105.0	309.50
120.0	306.75
135.0	304.92
150.0	304.00
165.0	303.09
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	223.42