
AFX

Client:

LumCAT: VRNV3007LAJUDSN

Luminaire: LED 灯具

Report No:

Ballast type:

Test No:

Voltage(V): 120.000

LampCAT:

Current(A): 0.324

Lamp flux(lm): 3315.3

Power (W): 38.520

Number of Lamps: 1

PF: 0.990

Length(mm): 750

Width(mm): 140

Phm Type: C

Height(mm): 140

Photometric Results

Lumens(lm): 3315.25, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 86.07

Central intensity(cd): 391.017, Maximum intensity(cd): 391.466

Angle of maximum intensity: C=45.0 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=1.31 C90_270=1.34

Maximum s/h(1/4): C0_180=1.49 C90_270=1.51

Up flux rate of lamp(%): 48.20%

Down flux rate of lamp(%): 51.80%

Up flux rate of LUM(%): 48.20%

Down flux rate of LUM(%): 51.80%

CIE Type : General diffuse lighting

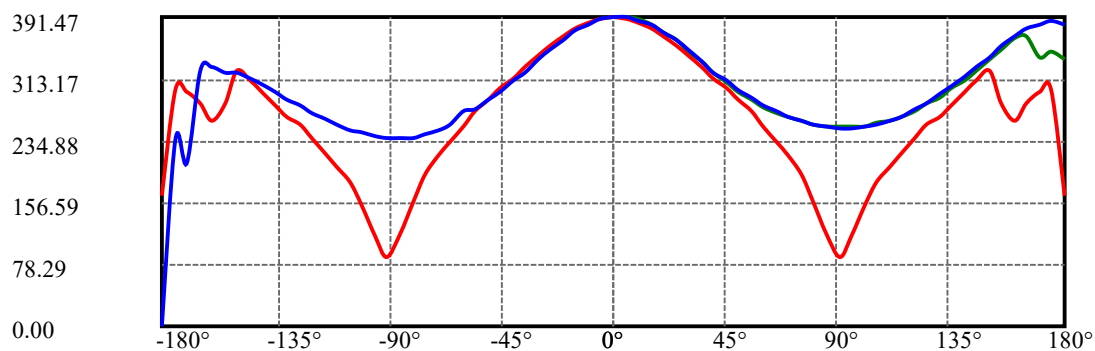
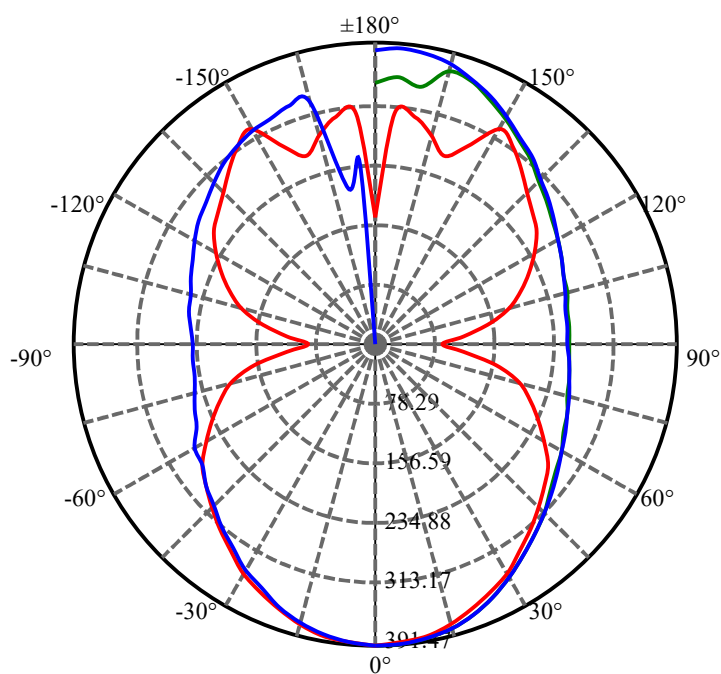
Output flux ratio in π solid angle : 30.033%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	391.017	0.000	0	0.00%	0.00%
5.0	389.521	9.331	9.331	0.28%	0.28%
10.0	385.067	27.709	37.041	0.84%	1.12%
15.0	377.807	45.253	82.294	1.37%	2.48%
20.0	368.372	61.496	143.789	1.85%	4.34%
25.0	356.437	76.019	219.808	2.29%	6.63%
30.0	343.000	88.514	308.323	2.67%	9.30%
35.0	328.592	98.897	407.219	2.98%	12.28%
40.0	314.931	107.367	514.586	3.24%	15.52%
45.0	301.271	114.095	628.681	3.44%	18.96%
50.0	288.510	119.174	747.855	3.59%	22.56%
55.0	276.497	122.851	870.706	3.71%	26.26%
60.0	264.079	124.953	995.659	3.77%	30.03%
65.0	251.434	125.322	1120.981	3.78%	33.81%
70.0	240.282	124.506	1245.487	3.76%	37.57%
75.0	229.664	122.836	1368.323	3.71%	41.27%
80.0	218.264	119.853	1488.176	3.62%	44.89%
85.0	208.448	115.948	1604.124	3.50%	48.39%
90.0	204.465	113.059	1717.183	3.41%	51.80%
95.0	209.009	113.212	1830.395	3.41%	55.21%
100.0	216.879	115.724	1946.119	3.49%	58.70%
105.0	225.394	118.340	2064.459	3.57%	62.27%
110.0	233.504	119.949	2184.407	3.62%	65.89%
115.0	242.181	120.447	2304.854	3.63%	69.52%
120.0	250.592	119.794	2424.648	3.61%	73.14%
125.0	258.664	117.713	2542.361	3.55%	76.69%
130.0	267.532	114.413	2656.774	3.45%	80.14%
135.0	278.579	110.350	2767.123	3.33%	83.47%
140.0	287.748	104.860	2871.983	3.16%	86.63%
145.0	296.008	97.395	2969.379	2.94%	89.57%
150.0	303.967	88.351	3057.729	2.66%	92.23%
155.0	303.721	76.903	3134.633	2.32%	94.55%
160.0	304.790	63.822	3198.454	1.93%	96.48%
165.0	309.681	50.641	3249.095	1.53%	98.00%
170.0	315.368	37.078	3286.173	1.12%	99.12%
175.0	330.048	23.089	3309.262	0.70%	99.82%
180.0	171.239	5.993	3315.254	0.18%	100.00%

ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	308.32	9.30%	9.30%
0-40	514.59	15.52%	15.52%
0-60	995.66	30.03%	30.03%
0-90	1717.18	51.80%	51.80%
0-120	2424.65	73.14%	73.14%
0-180	3315.25	100.00%	100.00%
60-90	721.52	21.76%	21.76%
90-120	707.47	21.34%	21.34%
90-130	939.59	28.34%	28.34%
90-150	1340.55	40.44%	40.44%
90-180	1592.08	48.02%	48.02%
0-129.80	2652.20	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	37.04
10-20	106.75
20-30	164.53
30-40	206.26
40-50	233.27
50-60	247.80
60-70	249.83
70-80	242.69
80-90	229.01
90-100	228.94
100-110	238.29
110-120	240.24
120-130	232.13
130-140	215.21
140-150	185.75
150-160	140.73
160-170	87.72
170-180	23.09

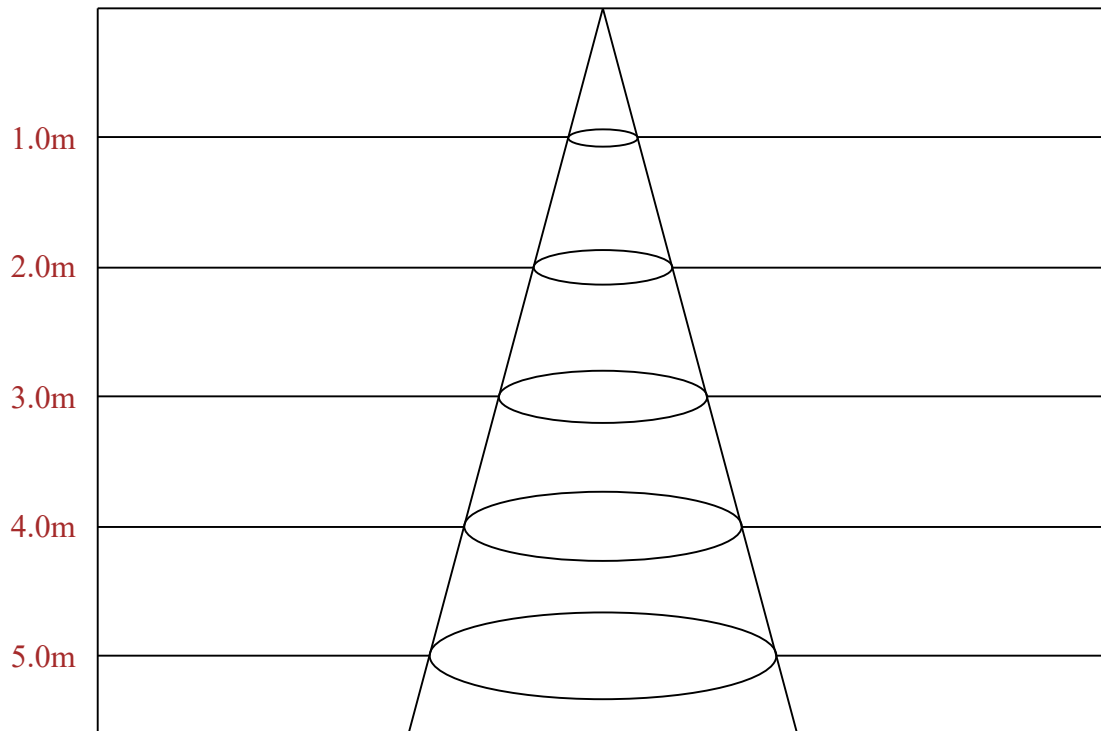
C45(Max): ———C0/C180: ———C90/C270: ———

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

:C90/270Left:0.0 Right:0.0

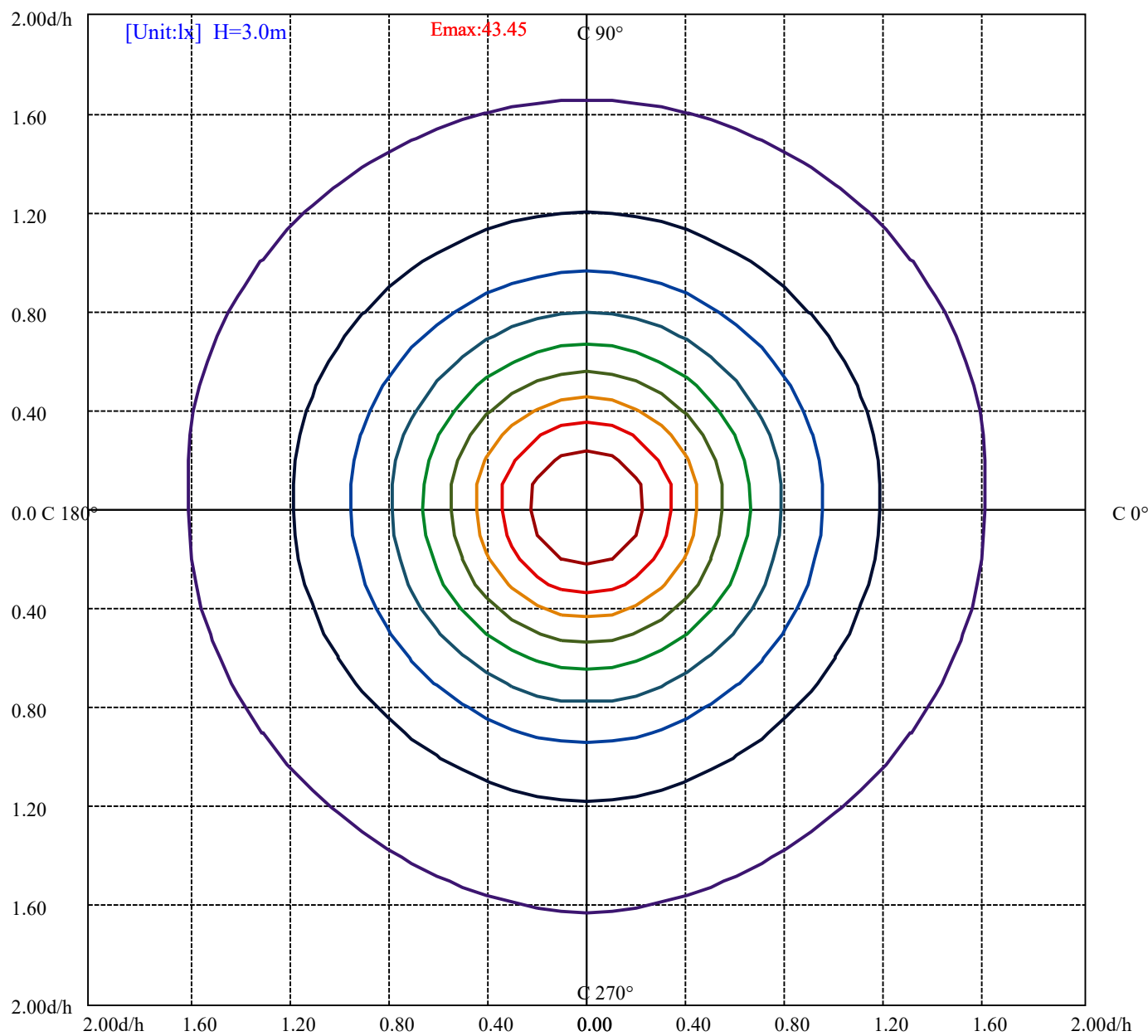
Beam Angle(50%Imax):C0/180Left:178.9 Right:178.9

:C90/270Left:0.0 Right:0.0

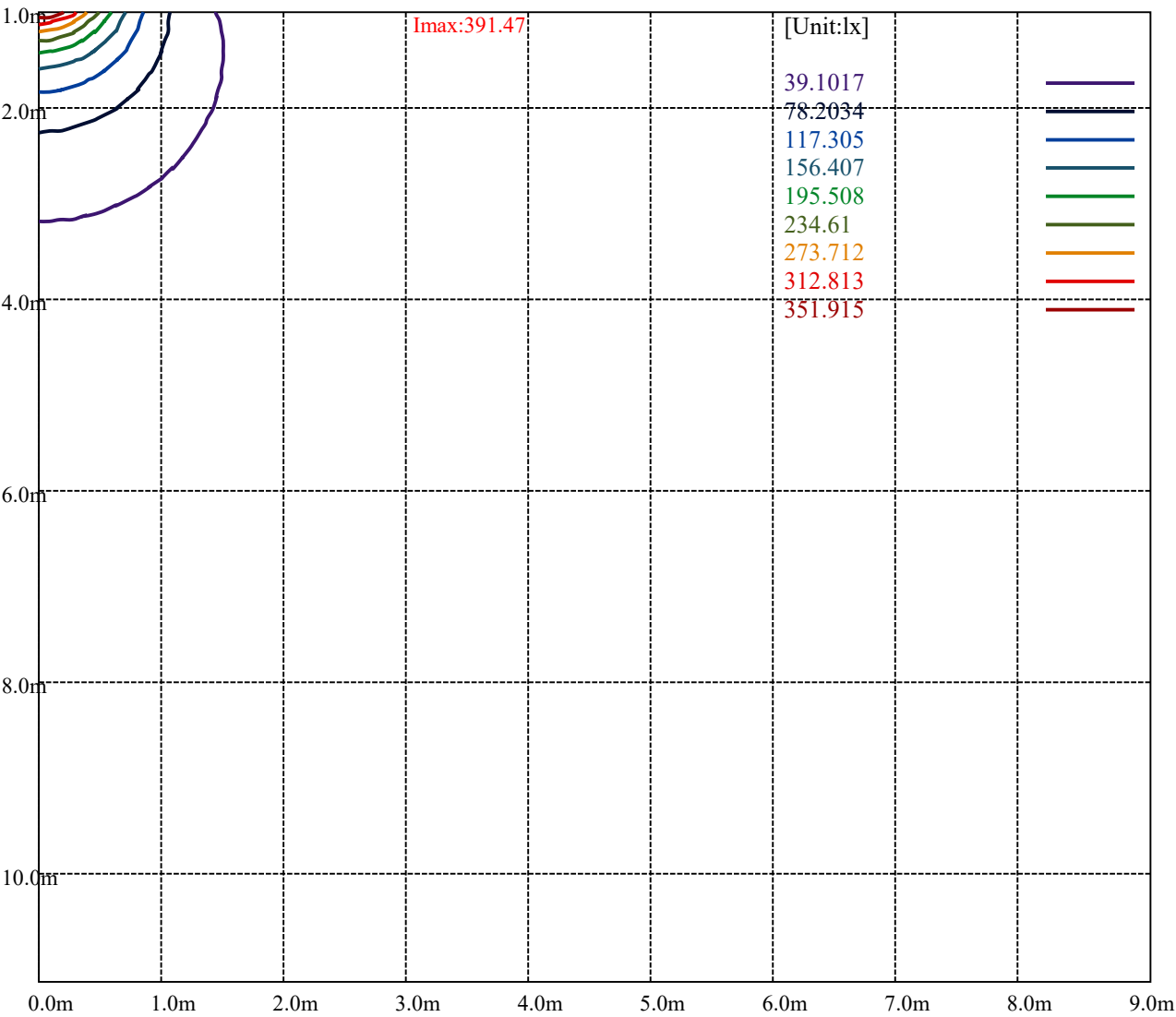


Max , Ave

Beam angle of C45 plane 258.10



(10%Emax) 4.344633	
(20%Emax) 8.689266	
(30%Emax) 13.03389	
(40%Emax) 17.37856	
(50%Emax) 21.72311	
(60%Emax) 26.06778	
(70%Emax) 30.41245	
(80%Emax) 34.757	
(90%Emax) 39.10167	



Luminance Limiting Curve(no luminous side)

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Luminance Table

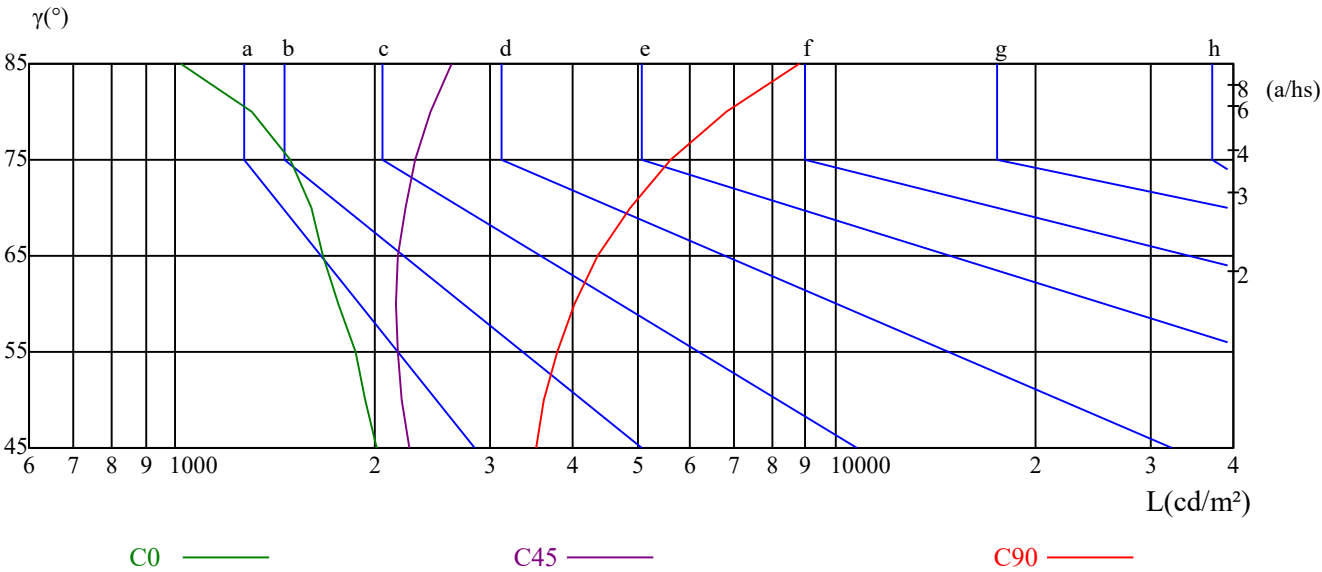
γ	45	50	55	60	65	70	75	80	85
C0	2023	1940	1869	1766	1672	1605	1496	1308	1016
C45	2261	2203	2168	2159	2177	2225	2308	2438	2614
C90	3520	3617	3783	4011	4369	4881	5634	6825	8777

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5257	5945	5653	7080	9261	8469	12624	26717	24068

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	0.99	0.99	0.99	0.84	0.84	0.84	0.70	0.70	0.70	0.58	0.58	0.58	0.52
1	0.89	0.84	0.80	0.82	0.78	0.74	0.69	0.66	0.63	0.57	0.55	0.52	0.46	0.44	0.42	0.37
2	0.76	0.69	0.63	0.70	0.64	0.58	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	0.53	0.47	0.51	0.45	0.40	0.42	0.37	0.34	0.33	0.30	0.27	0.23
4	0.58	0.49	0.42	0.53	0.45	0.39	0.45	0.39	0.34	0.37	0.32	0.28	0.29	0.26	0.23	0.19
5	0.51	0.42	0.36	0.47	0.39	0.33	0.40	0.33	0.29	0.33	0.28	0.24	0.26	0.22	0.19	0.16
6	0.46	0.37	0.31	0.42	0.34	0.29	0.36	0.29	0.25	0.29	0.24	0.21	0.24	0.20	0.17	0.14
7	0.41	0.33	0.27	0.38	0.30	0.25	0.32	0.26	0.21	0.27	0.22	0.18	0.22	0.18	0.15	0.12
8	0.37	0.29	0.23	0.35	0.27	0.22	0.29	0.23	0.19	0.24	0.19	0.16	0.20	0.16	0.13	0.11
9	0.34	0.26	0.21	0.31	0.24	0.19	0.27	0.21	0.17	0.22	0.18	0.14	0.18	0.14	0.12	0.09
10	0.31	0.23	0.18	0.29	0.22	0.17	0.25	0.19	0.15	0.21	0.16	0.13	0.17	0.13	0.11	0.08

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	391.02	390.13	386.57	380.35	372.35	360.80	348.36	334.14	319.92
15.0	391.02	391.02	387.45	381.22	373.20	362.51	349.15	335.79	320.65
30.0	391.02	391.91	388.34	382.09	374.05	363.34	350.84	335.67	323.17
45.0	391.02	391.92	389.22	382.93	373.94	364.05	350.57	336.18	322.70
60.0	391.02	391.02	388.32	382.03	373.94	363.15	350.57	336.18	322.70
75.0	391.02	391.02	387.42	382.03	373.94	362.25	350.57	336.18	322.70
90.0	391.02	391.02	387.42	381.13	373.04	362.25	349.67	336.18	321.80
105.0	391.02	391.02	387.43	381.15	372.18	361.42	348.87	335.41	321.06
120.0	391.02	390.12	386.54	379.38	371.33	359.70	347.17	333.75	319.43
135.0	391.02	391.02	387.41	381.11	372.10	360.38	346.87	333.36	318.94
150.0	391.02	390.11	386.48	380.13	363.80	360.17	346.56	332.05	318.44
165.0	391.02	390.11	385.55	379.17	370.96	359.12	345.44	331.77	316.28
180.0	391.02	387.46	381.24	373.24	362.58	350.14	336.81	321.70	307.48
195.0	391.02	387.45	382.11	374.09	363.41	350.94	336.68	321.54	308.18
210.0	391.02	388.34	382.98	374.05	363.34	351.74	336.56	323.17	307.99
225.0	391.02	388.32	382.93	373.04	364.05	351.47	337.08	321.80	306.52
240.0	391.02	388.32	382.03	373.04	362.25	349.67	336.18	320.00	304.72
255.0	391.02	388.32	382.93	374.84	364.05	350.57	336.18	321.80	308.32
270.0	391.02	388.32	382.03	373.94	363.15	349.67	337.08	321.80	310.12
285.0	391.02	388.33	382.95	375.77	364.11	351.56	338.10	323.75	321.06
300.0	391.02	387.44	382.96	374.91	372.23	350.75	336.44	321.22	306.91
315.0	391.02	388.31	383.81	375.70	364.89	352.28	337.86	322.54	307.23
330.0	391.02	388.30	383.76	375.59	365.61	352.91	338.40	324.79	310.27
345.0	391.02	389.19	383.73	376.43	366.41	353.65	339.97	325.39	311.72
360.0	391.02	390.13	386.57	380.35	372.35	360.80	348.36	334.14	319.92
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	306.59	292.37	280.82	262.16	240.83	222.17	203.51	173.29	135.08
15.0	306.40	293.04	281.46	270.77	252.07	236.93	223.57	204.86	185.27
30.0	309.78	298.17	287.46	276.75	268.71	261.57	255.32	249.97	245.50
45.0	311.02	299.33	289.44	279.55	272.36	266.07	260.68	257.08	254.39
60.0	311.02	299.33	288.54	279.55	272.36	266.07	261.58	257.98	257.08
75.0	310.12	298.43	289.44	280.45	272.36	266.07	260.68	256.18	254.39
90.0	310.12	298.43	288.54	278.66	271.46	265.17	259.78	256.18	251.69
105.0	309.41	297.75	287.88	278.91	270.84	264.56	259.18	255.60	252.91
120.0	306.91	295.28	285.43	276.49	269.33	263.06	258.59	255.01	254.12
135.0	306.33	295.52	284.70	276.59	268.49	262.18	257.67	254.97	252.27
150.0	305.74	294.85	283.96	273.98	265.82	259.47	254.93	250.40	246.77
165.0	304.43	290.76	279.82	267.06	251.56	236.98	223.31	205.08	189.58
180.0	294.15	281.71	265.71	244.39	225.72	209.73	181.29	144.85	95.98
195.0	293.93	280.57	269.88	249.40	230.69	213.77	193.28	161.22	134.50
210.0	292.82	278.53	264.25	249.97	234.79	220.50	207.11	195.51	190.15
225.0	291.24	276.86	261.58	246.30	230.12	215.73	200.45	189.67	187.87
240.0	292.14	277.76	263.37	248.99	235.51	223.82	213.94	206.74	203.15
255.0	295.73	283.15	270.57	258.88	249.89	240.90	232.81	231.01	225.62
270.0	297.53	286.75	275.06	271.46	256.18	248.99	243.60	239.10	237.31
285.0	297.75	285.19	272.64	261.87	252.01	243.04	235.87	230.48	227.79
300.0	292.59	278.28	264.85	251.43	238.91	227.27	217.43	209.38	205.80
315.0	293.71	278.40	263.08	247.76	232.45	216.23	201.82	190.10	186.50
330.0	294.85	280.33	265.82	251.30	236.79	221.36	207.76	195.96	188.70
345.0	296.22	283.46	271.62	255.21	235.16	215.10	197.79	167.71	140.36
360.0	306.59	292.37	280.82	262.16	240.83	222.17	203.51	173.29	135.08

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	85.31	95.09	138.63	171.51	192.84	209.73	229.28	251.49	258.60
15.0	172.80	172.80	187.94	205.75	222.67	237.82	254.74	268.99	279.68
30.0	242.82	241.93	244.61	249.97	255.32	261.57	268.71	278.53	288.35
45.0	252.59	252.59	254.39	257.98	261.58	266.97	274.16	282.25	291.24
60.0	257.08	257.98	258.88	260.68	263.37	267.87	275.06	284.05	293.04
75.0	253.49	253.49	255.28	257.98	261.58	267.87	275.06	284.05	293.94
90.0	249.89	249.89	251.69	255.28	260.68	266.07	274.16	283.15	293.04
105.0	251.11	252.01	252.91	255.60	260.08	266.36	273.53	282.50	292.37
120.0	253.22	254.12	255.01	256.80	260.38	264.85	272.01	280.96	290.80
135.0	251.37	251.37	252.27	255.87	259.48	264.88	272.09	280.20	289.21
150.0	244.05	243.14	246.77	252.21	256.75	262.19	270.35	279.43	289.41
165.0	181.38	185.03	197.79	215.10	228.78	244.27	259.77	273.44	284.38
180.0	89.76	134.19	167.07	191.95	209.73	228.39	249.72	261.27	272.82
195.0	134.50	146.07	161.22	175.47	188.83	203.08	207.53	201.30	208.42
210.0	189.26	193.72	197.29	203.54	211.58	217.83	216.04	212.47	215.15
225.0	187.87	191.46	197.76	204.95	211.24	219.33	220.23	235.51	244.50
240.0	204.05	207.64	208.54	217.53	224.72	231.91	240.90	249.89	259.78
255.0	225.62	229.22	234.61	240.00	246.30	253.49	261.58	271.46	280.45
270.0	237.31	240.00	244.50	248.99	255.28	262.48	269.67	278.66	286.75
285.0	227.79	230.48	235.87	241.25	248.42	255.60	265.46	274.43	284.29
300.0	205.80	209.38	214.75	221.01	227.27	235.33	243.38	254.12	265.75
315.0	186.50	190.10	195.51	202.72	209.92	215.33	222.54	231.55	239.66
330.0	188.70	192.33	195.96	200.50	208.66	216.83	221.36	215.92	220.46
345.0	134.90	142.19	155.86	166.80	178.65	192.32	196.88	192.32	198.70
360.0	85.31	95.09	138.63	171.51	192.84	209.73	229.28	251.49	258.60
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	271.05	289.71	303.93	319.03	297.71	253.27	263.05	303.93	287.04
15.0	289.48	301.95	315.31	329.56	343.81	292.15	277.90	325.11	292.15
30.0	298.17	307.99	320.49	333.88	348.17	355.31	289.25	302.64	321.38
45.0	302.03	313.71	325.40	337.98	351.47	364.05	360.45	297.53	311.02
60.0	302.93	314.61	326.30	339.78	353.26	364.95	374.84	373.04	302.03
75.0	303.82	316.41	328.09	341.58	355.06	366.75	376.63	382.03	383.83
90.0	303.82	316.41	328.09	341.58	355.06	366.75	376.63	382.03	385.62
105.0	302.23	313.89	327.34	339.90	353.35	366.80	377.56	383.84	388.33
120.0	300.64	312.28	323.91	338.23	352.54	365.07	374.91	382.96	386.54
135.0	299.12	310.83	322.54	336.96	350.47	363.09	373.90	381.11	384.71
150.0	300.29	310.27	322.07	334.77	349.28	361.99	371.96	380.13	382.85
165.0	296.22	307.16	319.92	334.51	348.18	360.03	370.96	378.26	381.90
180.0	287.04	302.15	319.03	327.03	268.38	266.60	300.37	291.49	312.81
195.0	222.67	229.80	242.27	246.72	228.91	229.80	274.34	284.13	330.45
210.0	227.65	228.54	236.57	242.82	236.57	257.11	270.50	287.46	331.20
225.0	251.69	253.49	251.69	257.08	268.77	278.66	282.25	287.64	299.33
240.0	266.07	264.27	264.27	266.97	273.26	284.05	290.34	280.45	266.07
255.0	286.75	292.14	294.84	296.63	300.23	311.02	320.90	275.06	212.14
270.0	296.63	305.62	314.61	320.00	321.80	328.09	324.50	205.85	235.51
285.0	294.16	303.13	304.02	304.92	311.20	321.06	232.28	208.06	324.65
300.0	276.49	277.38	273.80	274.70	285.43	236.22	193.27	272.01	343.59
315.0	248.67	248.67	246.86	251.37	218.03	185.60	218.93	281.10	347.77
330.0	237.69	251.30	253.12	242.23	195.96	202.31	245.86	293.04	352.01
345.0	220.57	234.25	239.71	236.98	222.40	234.25	290.76	329.95	358.20
360.0	271.05	289.71	303.93	319.03	297.71	253.27	263.05	303.93	287.04

Intensity data(cd)

C/ γ (°)	180.0
0.0	331.48
15.0	318.87
30.0	294.60
45.0	294.84
60.0	281.35
75.0	300.23
90.0	381.13
105.0	382.95
120.0	381.17
135.0	381.11
150.0	381.04
165.0	380.99
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	331.48