
乐达凯

Client:

LumCAT: SYDC13LAJUDLB

Luminaire: LED lamp

Report No:

Ballast type:

Test No: LCZP25010158

Voltage(V): 120.030

LampCAT:

Current(A): 0.208

Lamp flux(lm): 1959.3

Power (W): 24.800

Number of Lamps: 1

PF: 0.993

Length(mm): -320

Width(mm): -320

Phm Type: C

Height(mm): 70

Photometric Results

Lumens(lm): 1959.31, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 79.00

Central intensity(cd): 357.707, Maximum intensity(cd): 359.438

Angle of maximum intensity: C=0.0 γ =10.0

Beam Angle(50%Imax): [C0/180]Total=135.4

[C90/270]Total=134.4

Field angle(10%Imax): [C0/180]Total=N.A.

[C90/270]Total=N.A.

Maximum s/h(1/2): C0_180=1.37 C90_270=1.36

Maximum s/h(1/4): C0_180=1.50 C90_270=1.49

Up flux rate of lamp(%): 30.55%

Down flux rate of lamp(%): 69.45%

Up flux rate of LUM(%): 30.55%

Down flux rate of LUM(%): 69.45%

CIE Type : Semidirect lighting

Output flux ratio in π solid angle : 46.797%

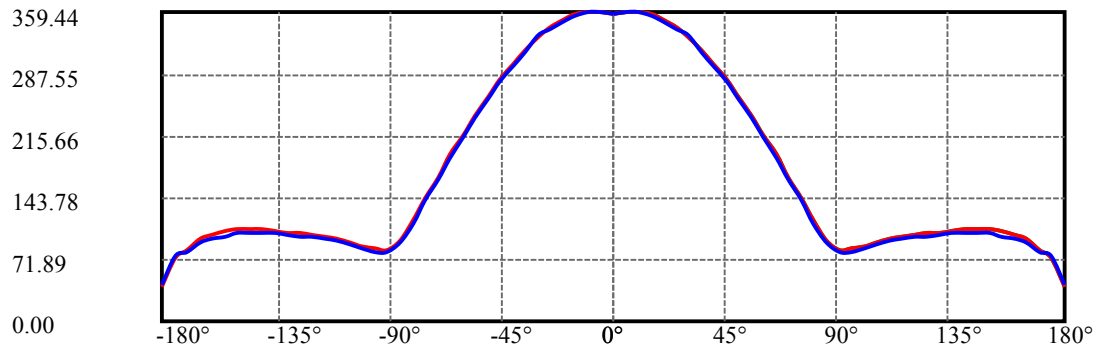
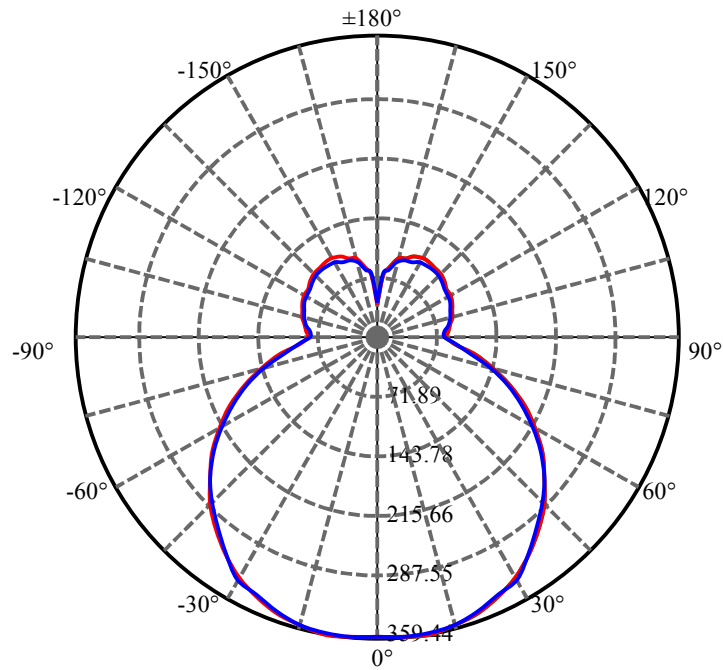
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	357.707	0.000	0	0.00%	0.00%
5.0	358.819	8.566	8.566	0.44%	0.44%
10.0	358.583	25.664	34.23	1.31%	1.75%
15.0	355.267	42.345	76.575	2.16%	3.91%
20.0	349.109	58.050	134.625	2.96%	6.87%
25.0	339.992	72.274	206.899	3.69%	10.56%
30.0	328.390	84.584	291.483	4.32%	14.88%
35.0	314.327	94.645	386.128	4.83%	19.71%
40.0	298.032	102.168	488.296	5.21%	24.92%
45.0	279.759	106.983	595.278	5.46%	30.38%
50.0	258.837	108.831	704.109	5.55%	35.94%
55.0	238.074	108.045	812.154	5.51%	41.45%
60.0	215.103	104.750	916.905	5.35%	46.80%
65.0	191.300	98.797	1015.702	5.04%	51.84%
70.0	166.515	90.601	1106.303	4.62%	56.46%
75.0	141.264	80.448	1186.751	4.11%	60.57%
80.0	117.182	69.153	1255.904	3.53%	64.10%
85.0	93.247	57.179	1313.083	2.92%	67.02%
90.0	80.857	47.671	1360.754	2.43%	69.45%
95.0	82.715	44.787	1405.541	2.29%	71.74%
100.0	86.498	45.979	1451.521	2.35%	74.08%
105.0	90.681	47.408	1498.929	2.42%	76.50%
110.0	94.076	48.293	1547.222	2.46%	78.97%
115.0	96.798	48.331	1595.552	2.47%	81.43%
120.0	98.754	47.539	1643.091	2.43%	83.86%
125.0	100.272	46.004	1689.096	2.35%	86.21%
130.0	101.573	43.888	1732.983	2.24%	88.45%
135.0	103.034	41.344	1774.327	2.11%	90.56%
140.0	104.283	38.386	1812.714	1.96%	92.52%
145.0	105.135	34.940	1847.654	1.78%	94.30%
150.0	104.925	30.933	1878.586	1.58%	95.88%
155.0	102.522	26.253	1904.839	1.34%	97.22%
160.0	99.086	21.145	1925.984	1.08%	98.30%
165.0	94.070	15.919	1941.903	0.81%	99.11%
170.0	81.448	10.412	1952.314	0.53%	99.64%
175.0	75.033	5.598	1957.912	0.29%	99.93%
180.0	41.897	1.398	1959.31	0.07%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	291.48	14.88%	14.88%
0-40	488.30	24.92%	24.92%
0-60	916.90	46.80%	46.80%
0-90	1360.75	69.45%	69.45%
0-120	1643.09	83.86%	83.86%
0-180	1959.31	100.00%	100.00%
60-90	443.85	22.65%	22.65%
90-120	282.34	14.41%	14.41%
90-130	372.23	19.00%	19.00%
90-150	517.83	26.43%	26.43%
90-180	597.16	30.48%	30.48%
0-112.09	1567.45	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	34.23
10-20	100.40
20-30	156.86
30-40	196.81
40-50	215.81
50-60	212.80
60-70	189.40
70-80	149.60
80-90	104.85
90-100	90.77
100-110	95.70
110-120	95.87
120-130	89.89
130-140	79.73
140-150	65.87
150-160	47.40
160-170	26.33
170-180	5.60



C0(Max):

C0/C180:

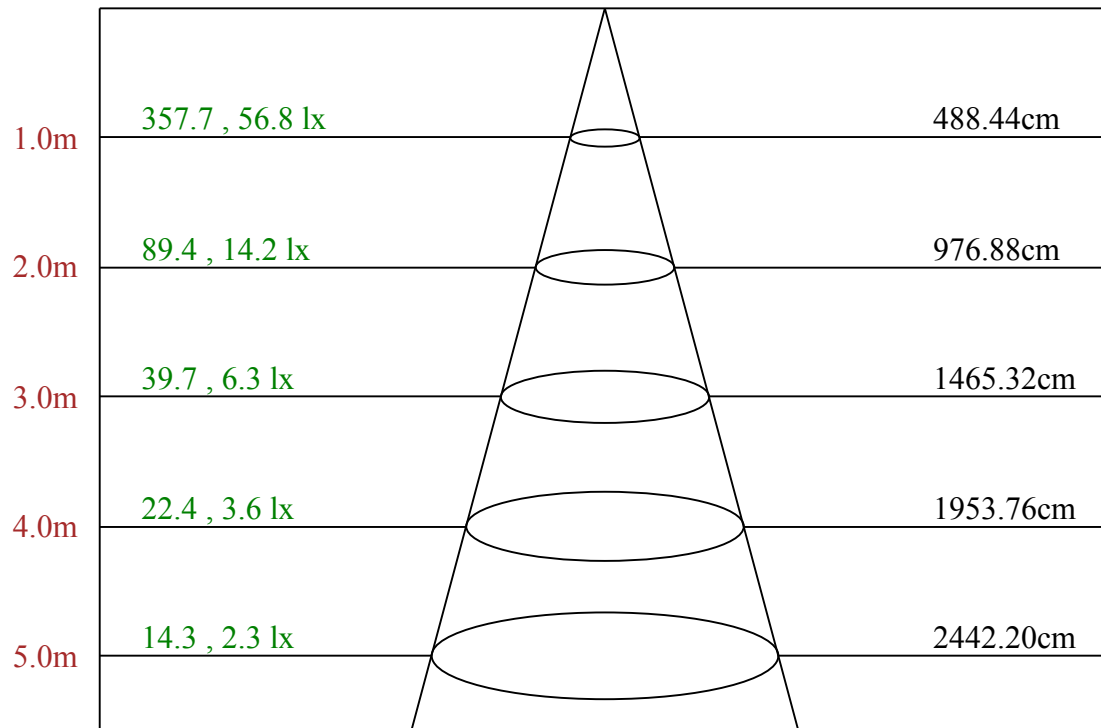
C90/C270:

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

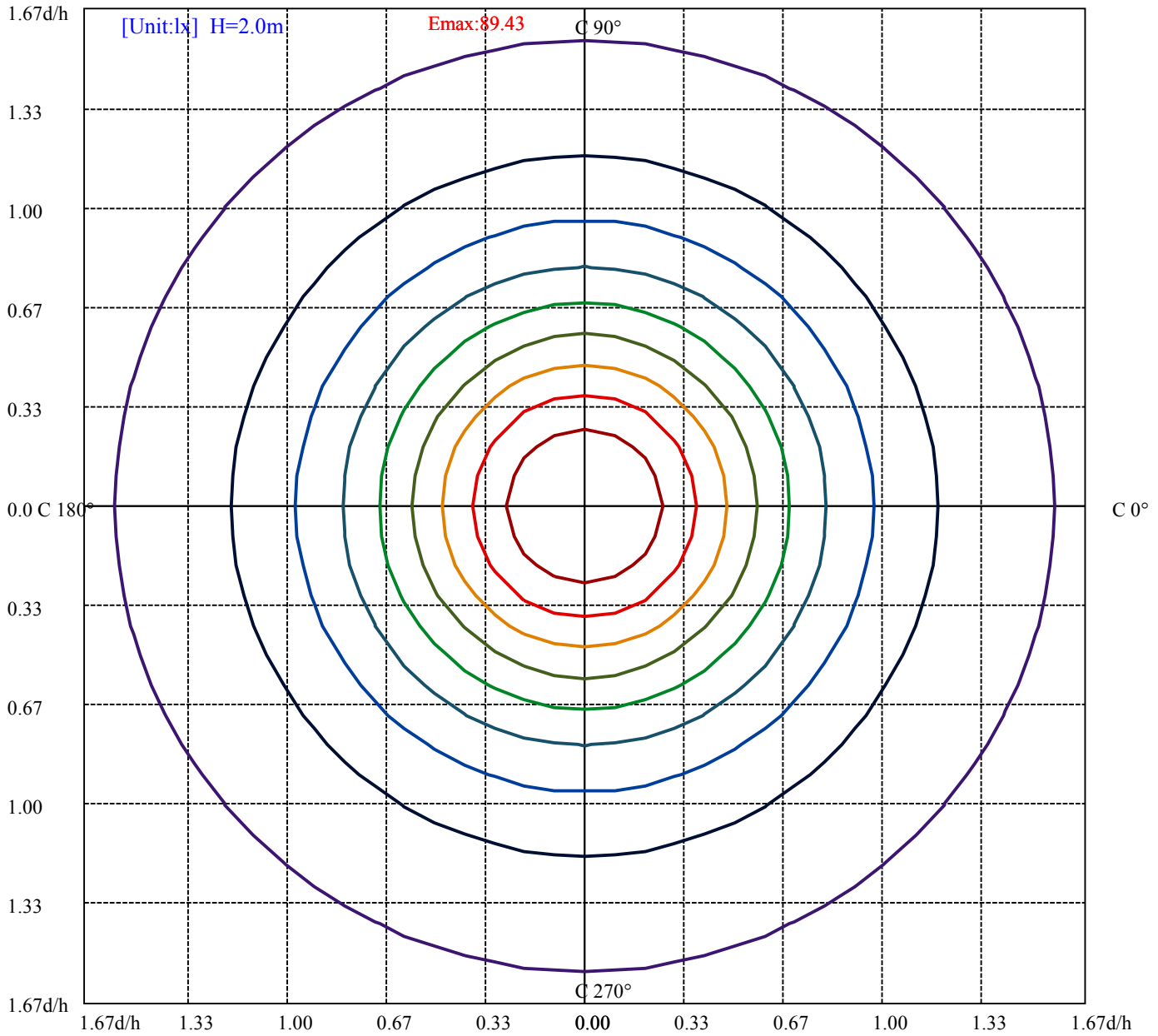
:C90/270Left:0.0 Right:0.0

Beam Angle(50%Imax):C0/180Left:77.7 Right:57.7

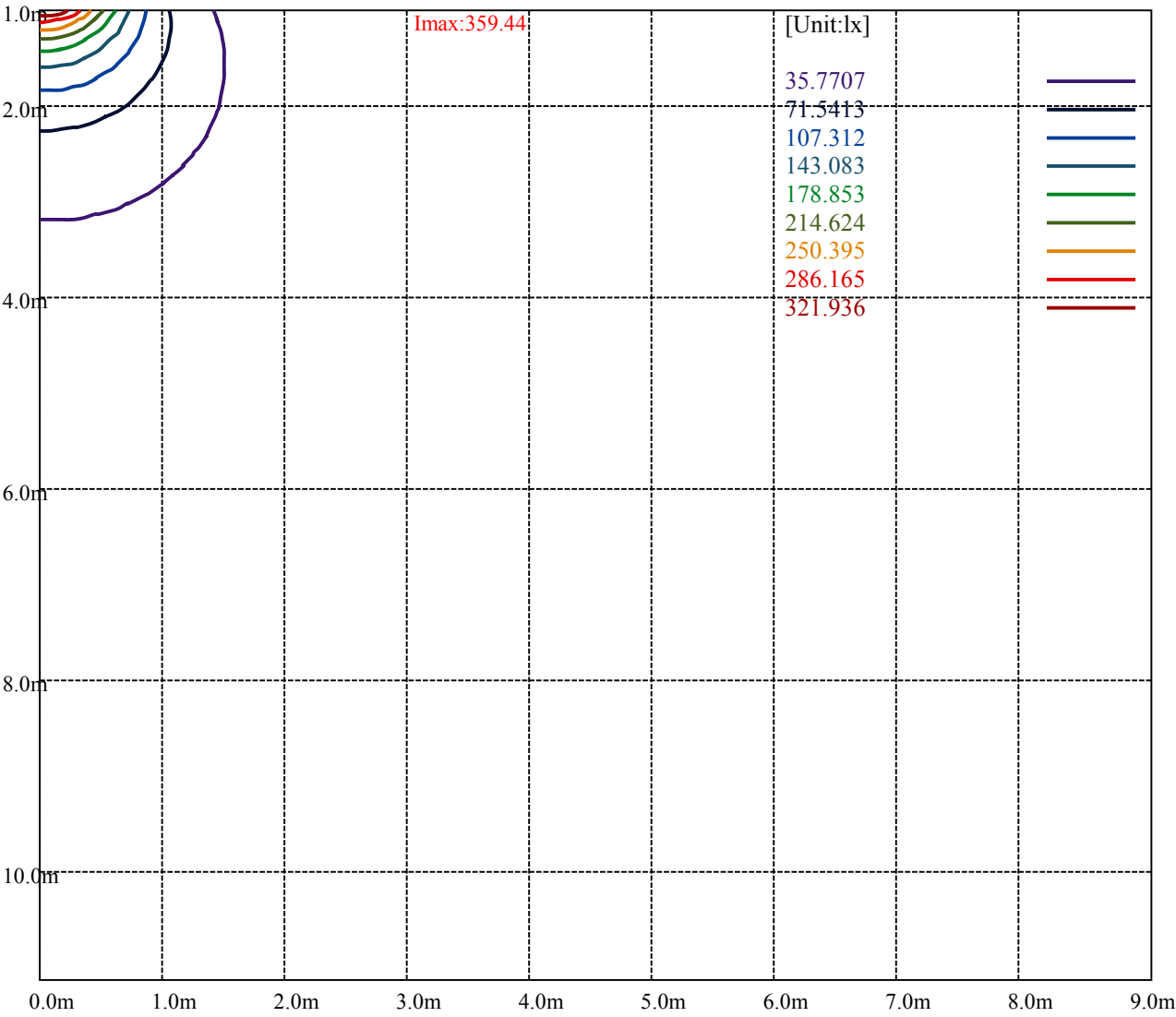
:C90/270Left:72.2 Right:62.2



Max , Ave Beam angle of C0 plane 135.47



(10%Emax) 8.942675	—
(20%Emax) 17.88532	—
(30%Emax) 26.828	—
(40%Emax) 35.77075	—
(50%Emax) 44.71325	—
(60%Emax) 53.656	—
(70%Emax) 62.59875	—
(80%Emax) 71.54125	—
(90%Emax) 80.484	—



Luminance Table

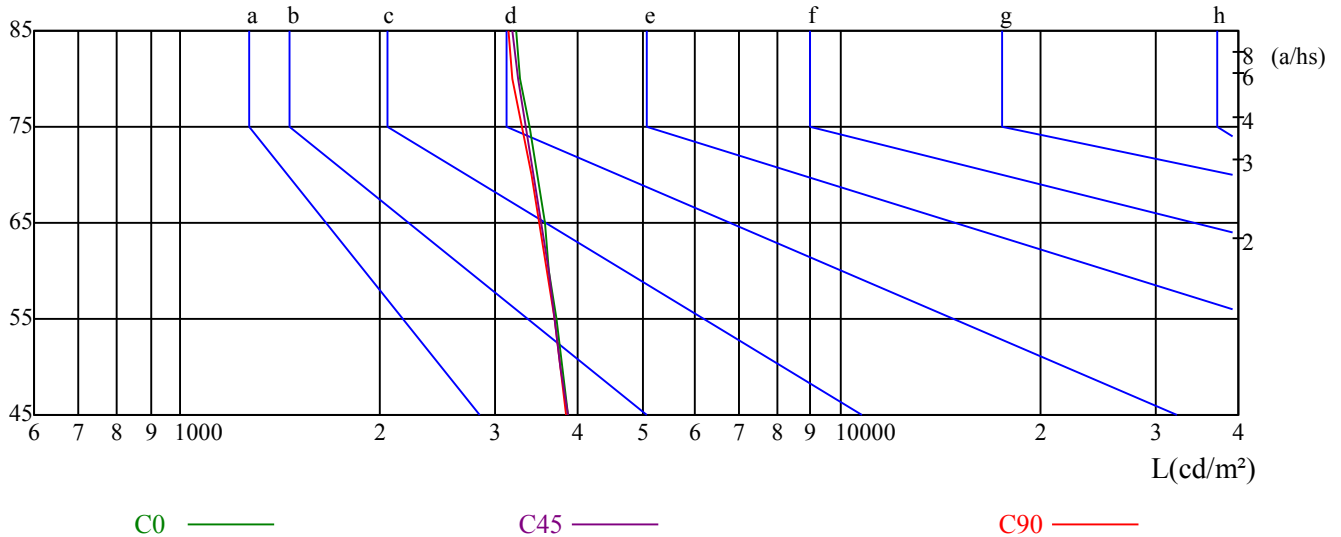
γ	45	50	55	60	65	70	75	80	85
C0	3868	3791	3716	3624	3560	3469	3373	3276	3222
C45	3853	3766	3694	3609	3523	3428	3330	3235	3179
C90	3830	3758	3675	3598	3503	3406	3297	3182	3129

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5687	5595	5628	6879	6724	6791	13480	13088	13298

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

 $\gamma(^{\circ})$ 

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	1.12	1.12	1.12	1.06	1.06	1.06	0.94	0.94	0.94	0.84	0.84	0.84	0.74	0.74	0.74	0.69
1	0.94	0.89	0.85	0.89	0.85	0.81	0.79	0.76	0.73	0.70	0.67	0.65	0.62	0.60	0.58	0.54
2	0.81	0.74	0.67	0.76	0.70	0.64	0.68	0.63	0.58	0.60	0.56	0.52	0.53	0.50	0.47	0.43
3	0.70	0.62	0.55	0.66	0.59	0.53	0.59	0.53	0.48	0.52	0.47	0.43	0.46	0.42	0.39	0.35
4	0.62	0.53	0.46	0.58	0.50	0.44	0.52	0.45	0.40	0.46	0.41	0.36	0.41	0.36	0.33	0.29
5	0.55	0.46	0.39	0.52	0.44	0.37	0.46	0.39	0.34	0.41	0.35	0.31	0.36	0.32	0.28	0.25
6	0.49	0.40	0.34	0.46	0.38	0.32	0.42	0.35	0.30	0.37	0.31	0.27	0.33	0.28	0.24	0.22
7	0.44	0.35	0.29	0.42	0.34	0.28	0.38	0.31	0.26	0.34	0.28	0.24	0.30	0.25	0.21	0.19
8	0.40	0.32	0.26	0.38	0.30	0.25	0.34	0.28	0.23	0.31	0.25	0.21	0.27	0.23	0.19	0.17
9	0.37	0.28	0.23	0.35	0.27	0.22	0.31	0.25	0.20	0.28	0.23	0.19	0.25	0.20	0.17	0.15
10	0.34	0.26	0.21	0.32	0.25	0.20	0.29	0.23	0.18	0.26	0.21	0.17	0.23	0.19	0.15	0.13

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	357.71	359.13	359.48	356.11	350.60	340.83	330.18	316.23	300.07
15.0	357.71	358.78	358.42	355.48	349.51	340.43	328.85	315.23	298.58
30.0	357.71	358.42	358.24	355.12	348.68	340.11	327.96	314.38	298.12
45.0	357.71	358.60	358.78	355.47	349.19	340.14	328.40	314.24	298.73
60.0	357.71	358.33	357.89	354.66	348.29	339.51	328.03	313.96	297.55
75.0	357.71	357.89	357.71	354.48	348.46	339.48	327.91	313.72	297.39
90.0	357.71	357.89	357.80	354.56	348.54	339.82	328.31	314.47	298.19
105.0	357.71	357.35	357.62	354.56	349.52	339.99	328.56	314.80	299.69
120.0	357.71	357.62	356.53	355.27	350.40	341.12	330.84	317.14	301.00
135.0	357.71	357.35	357.80	355.45	349.96	342.66	322.03	317.79	301.93
150.0	357.71	357.08	358.16	356.08	351.13	343.20	332.66	319.41	304.28
165.0	357.71	357.35	358.52	356.71	351.93	345.17	333.89	321.80	306.28
180.0	357.71	359.75	359.39	356.11	350.42	340.57	329.64	315.44	299.10
195.0	357.71	359.49	359.58	356.64	350.32	341.50	329.12	316.03	300.27
210.0	357.71	359.94	359.85	356.72	351.10	342.25	330.82	316.79	300.62
225.0	357.71	360.57	360.22	356.99	350.89	341.93	330.37	316.21	299.99
240.0	357.71	360.22	360.22	356.63	350.36	340.22	329.74	315.66	298.54
255.0	357.71	359.68	359.59	355.73	349.09	340.65	328.80	314.44	297.83
270.0	357.71	359.86	359.23	355.37	348.72	339.10	336.13	312.40	295.59
285.0	357.71	359.60	359.42	354.38	347.81	338.10	325.96	311.03	294.30
300.0	357.71	359.60	358.52	354.28	347.16	337.33	324.89	309.84	292.98
315.0	357.71	359.24	358.07	353.47	346.17	336.08	323.56	308.60	291.48
330.0	357.71	359.06	357.62	353.02	345.54	335.36	322.39	307.16	290.58
345.0	357.71	358.88	357.35	353.11	344.81	334.25	322.34	307.10	289.68
360.0	357.71	359.13	359.48	356.11	350.60	340.83	330.18	316.23	300.07
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	281.69	261.53	240.57	216.51	193.77	169.00	143.78	118.29	94.67
15.0	281.84	260.55	238.74	215.85	191.90	168.48	142.03	117.90	94.48
30.0	279.63	259.35	237.55	216.02	190.56	167.24	141.96	116.76	94.52
45.0	280.27	259.92	238.14	215.20	191.09	166.26	142.24	116.88	93.75
60.0	279.17	258.91	238.02	214.09	192.39	166.48	139.86	115.65	92.61
75.0	279.52	259.42	237.78	214.80	190.75	166.96	140.48	116.33	93.26
90.0	279.94	259.72	237.96	216.12	193.19	167.12	141.86	116.33	93.13
105.0	280.26	261.11	239.43	216.40	192.39	167.57	143.82	118.28	94.80
120.0	282.61	262.60	242.41	218.07	195.44	170.65	145.41	119.90	97.45
135.0	285.17	264.00	244.00	221.11	197.14	173.63	148.49	122.99	99.29
150.0	286.08	250.66	245.71	224.08	199.22	175.88	150.74	125.33	101.55
165.0	288.87	269.39	248.18	226.98	201.81	176.19	152.92	127.48	104.74
180.0	280.71	260.47	238.62	215.53	192.80	167.93	142.62	117.76	94.31
195.0	281.39	261.80	240.43	217.37	193.32	168.66	143.28	118.43	94.93
210.0	283.11	262.38	240.67	217.71	194.67	168.67	144.64	119.62	95.77
225.0	282.87	261.54	241.01	217.98	193.96	169.22	142.51	118.67	94.74
240.0	281.06	260.88	240.17	216.24	193.20	167.38	142.90	117.80	93.86
255.0	279.16	259.86	238.23	215.16	191.02	166.24	140.66	134.64	91.92
270.0	276.98	257.83	235.98	212.79	187.17	163.62	138.08	112.91	90.35
285.0	275.59	254.99	232.95	209.66	186.72	161.81	136.17	111.17	87.70
300.0	273.96	253.14	231.86	208.51	184.17	159.11	133.42	109.89	85.73
315.0	272.38	251.84	229.49	206.15	182.91	156.69	132.18	107.58	85.06
330.0	271.48	250.75	228.59	205.16	180.93	155.88	130.20	105.87	84.79
345.0	270.47	249.45	227.25	204.97	180.70	155.71	130.09	105.91	84.53
360.0	281.69	261.53	240.57	216.51	193.77	169.00	143.78	118.29	94.67

乐达凯 SYDC13LAJUDLB

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	80.46	83.21	87.12	91.47	95.11	98.13	100.17	102.04	104.08		
15.0	79.97	82.73	87.00	91.19	95.01	98.13	100.36	101.87	103.65		
30.0	79.51	82.19	86.48	90.86	94.61	97.56	100.15	101.76	103.01		
45.0	79.05	81.11	85.15	89.90	93.48	96.71	99.22	101.01	102.09		
60.0	77.64	79.70	84.00	88.40	92.25	95.39	97.63	99.24	99.33		
75.0	76.93	78.36	82.67	87.07	90.84	93.53	95.15	96.41	97.93		
90.0	76.86	77.31	81.45	85.85	89.45	91.88	94.03	96.28	98.17		
105.0	76.72	76.72	80.68	84.91	88.32	91.47	94.71	97.14	98.94		
120.0	77.44	76.90	80.77	84.74	88.98	92.49	95.02	97.18	98.98		
135.0	79.38	77.94	81.27	85.87	89.38	92.72	95.24	97.31	99.11		
150.0	81.81	79.47	82.71	86.77	90.55	93.53	95.51	97.31	98.48		
165.0	83.63	80.92	84.26	88.32	92.02	95.09	97.34	98.79	99.60		
180.0	82.59	85.43	89.25	92.98	96.00	98.57	100.08	101.15	102.48		
195.0	83.44	86.55	89.94	93.32	96.44	98.84	100.27	101.78	103.12		
210.0	84.25	86.93	90.32	94.25	96.39	98.18	99.70	101.49	102.20		
225.0	84.16	86.85	90.70	94.38	97.16	98.86	98.86	100.11	101.19		
240.0	83.64	86.60	87.23	93.86	96.82	98.88	100.59	100.50	100.95		
255.0	83.03	85.90	89.49	93.53	96.59	98.92	100.62	101.61	101.97		
270.0	82.17	85.13	89.18	93.05	96.28	98.89	100.51	101.77	102.84		
285.0	81.40	84.55	88.68	92.55	95.88	98.67	100.47	101.55	102.90		
300.0	81.13	84.56	88.71	92.67	96.10	98.71	100.70	102.14	103.04		
315.0	81.36	84.79	88.93	92.99	96.23	99.02	100.91	102.27	103.80		
330.0	81.72	85.24	89.47	93.44	96.68	99.29	101.28	102.72	104.34		
345.0	82.28	86.07	90.49	94.01	97.25	99.69	101.58	103.12	105.55		
360.0	80.46	83.21	87.12	91.47	95.11	98.13	100.17	102.04	104.08		
C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0		
0.0	106.30	107.99	108.61	107.63	105.32	101.77	97.86	87.21	75.57		
15.0	105.25	106.86	107.57	106.50	104.10	100.98	97.42	86.47	75.33		
30.0	104.35	105.06	105.78	105.33	103.10	99.79	96.48	85.94	75.31		
45.0	102.36	102.53	103.43	104.42	102.36	98.86	95.81	85.86	74.93		
60.0	100.50	102.02	102.20	102.47	100.86	97.63	94.31	85.26	73.96		
75.0	99.91	101.70	103.23	102.51	99.73	96.94	93.98	83.48	73.61		
90.0	100.24	102.30	103.56	102.48	100.06	96.82	93.76	82.80	73.36		
105.0	100.20	102.09	102.45	102.36	100.56	97.95	94.08	83.83	72.13		
120.0	100.70	102.14	102.59	103.58	102.77	98.89	94.75	84.65	72.12		
135.0	100.82	102.09	103.98	105.06	103.62	99.47	95.69	84.70	72.26		
150.0	99.74	102.81	104.97	105.96	104.88	100.73	97.40	84.88	73.70		
165.0	101.31	103.21	106.00	107.45	105.91	102.12	98.34	86.34	72.62		
180.0	104.26	105.68	107.45	107.72	104.61	100.44	94.31	78.24	73.44		
195.0	104.63	105.88	107.30	108.02	104.72	103.30	94.21	77.47	73.64		
210.0	103.54	103.72	105.95	106.40	104.35	99.70	92.20	76.74	73.44		
225.0	102.45	103.52	105.04	105.22	103.79	98.59	92.59	76.99	75.83		
240.0	102.56	103.10	103.91	104.17	102.29	97.72	91.98	76.29	74.50		
255.0	103.14	104.04	103.23	102.78	100.36	96.76	91.47	76.93	75.67		
270.0	103.92	104.91	103.47	101.95	98.62	96.37	91.34	77.67	76.23		
285.0	104.15	104.96	103.44	102.36	98.04	96.60	91.74	77.62	77.98		
300.0	105.11	104.66	105.38	104.93	100.70	97.99	92.13	78.07	78.43		
315.0	104.07	106.14	107.40	105.51	102.09	99.38	91.63	79.20	78.75		
330.0	105.96	107.31	107.94	106.77	103.89	99.65	91.72	79.29	78.39		
345.0	107.36	108.08	108.35	106.64	103.84	99.60	92.47	78.85	79.57		
360.0	106.30	107.99	108.61	107.63	105.32	101.77	97.86	87.21	75.57		

Intensity data(cd)

C/ γ (°)	180.0
0.0	78.24
15.0	83.62
30.0	84.78
45.0	84.97
60.0	85.17
75.0	85.45
90.0	84.15
105.0	84.19
120.0	84.38
135.0	84.16
150.0	83.62
165.0	82.82
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	78.24