
AFX

Client:

LumCAT: SYDP10LAJUDSN-2700K

Luminaire: LED lamp

Report No:

Ballast type:

Test No: LCZP25010159

Voltage(V): 120.060

LampCAT:

Current(A): 0.172

Lamp flux(lm): 1227.1

Power (W): 20.480

Number of Lamps: 1

PF: 0.991

Length(mm): -250

Width(mm): -250

Phm Type: C

Height(mm): 60

Photometric Results

Lumens(lm): 1227.14, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 59.92

Central intensity(cd): 187.743, Maximum intensity(cd): 187.743

Angle of maximum intensity: C=30.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=322.4

[C90/270]Total=308.2

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

[C90/270]Total=N.A.

Maximum s/h(1/2): C0_180=1.33 C90_270=1.34

Maximum s/h(1/4): C0_180=1.47 C90_270=1.48

Up flux rate of lamp(%): 41.17%

Down flux rate of lamp(%): 58.83%

Up flux rate of LUM(%): 41.17%

Down flux rate of LUM(%): 58.83%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 38.419%

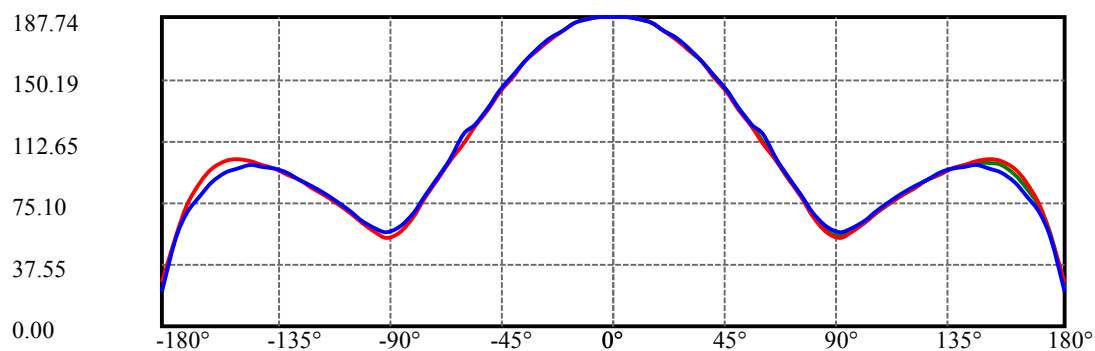
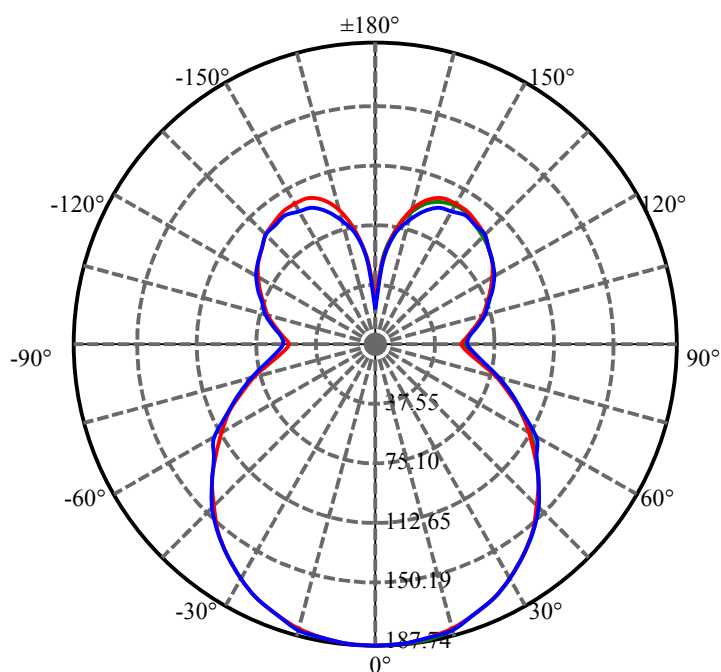
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	187.743	0.000	0	0.00%	0.00%
5.0	187.445	4.485	4.485	0.37%	0.37%
10.0	186.466	13.376	17.861	1.09%	1.46%
15.0	183.924	21.971	39.833	1.79%	3.25%
20.0	179.965	29.990	69.822	2.44%	5.69%
25.0	174.669	37.195	107.017	3.03%	8.72%
30.0	168.311	43.404	150.421	3.54%	12.26%
35.0	160.767	48.459	198.88	3.95%	16.21%
40.0	152.559	52.276	251.156	4.26%	20.47%
45.0	142.963	54.718	305.874	4.46%	24.93%
50.0	133.024	55.767	361.642	4.54%	29.47%
55.0	122.517	55.563	417.205	4.53%	34.00%
60.0	112.159	54.245	471.449	4.42%	38.42%
65.0	101.139	51.853	523.303	4.23%	42.64%
70.0	90.403	48.500	571.802	3.95%	46.60%
75.0	79.323	44.364	616.166	3.62%	50.21%
80.0	68.235	39.482	655.648	3.22%	53.43%
85.0	59.276	34.648	690.296	2.82%	56.25%
90.0	56.045	31.576	721.872	2.57%	58.83%
95.0	58.599	31.390	753.262	2.56%	61.38%
100.0	63.688	33.228	786.49	2.71%	64.09%
105.0	69.499	35.637	822.127	2.90%	67.00%
110.0	74.886	37.740	859.867	3.08%	70.07%
115.0	79.876	39.187	899.054	3.19%	73.26%
120.0	84.384	39.932	938.986	3.25%	76.52%
125.0	88.855	40.044	979.03	3.26%	79.78%
130.0	92.585	39.451	1018.481	3.21%	83.00%
135.0	95.588	38.023	1056.504	3.10%	86.10%
140.0	97.802	35.808	1092.311	2.92%	89.01%
145.0	98.934	32.824	1125.135	2.67%	91.69%
150.0	98.153	29.022	1154.158	2.37%	94.05%
155.0	95.883	24.555	1178.713	2.00%	96.05%
160.0	90.950	19.595	1198.308	1.60%	97.65%
165.0	82.887	14.327	1212.635	1.17%	98.82%
170.0	71.065	9.132	1221.767	0.74%	99.56%
175.0	53.513	4.457	1226.224	0.36%	99.93%
180.0	22.785	0.912	1227.136	0.07%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	150.42	12.26%	12.26%
0-40	251.16	20.47%	20.47%
0-60	471.45	38.42%	38.42%
0-90	721.87	58.83%	58.83%
0-120	938.99	76.52%	76.52%
0-180	1227.14	100.00%	100.00%
60-90	250.42	20.41%	20.41%
90-120	217.11	17.69%	17.69%
90-130	296.61	24.17%	24.17%
90-150	432.29	35.23%	35.23%
90-180	504.35	41.10%	41.10%
0-125.34	981.71	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	17.86
10-20	51.96
20-30	80.60
30-40	100.73
40-50	110.49
50-60	109.81
60-70	100.35
70-80	83.85
80-90	66.22
90-100	64.62
100-110	73.38
110-120	79.12
120-130	79.49
130-140	73.83
140-150	61.85
150-160	44.15
160-170	23.46
170-180	4.46



C30(Max): —————

C0/C180: —————

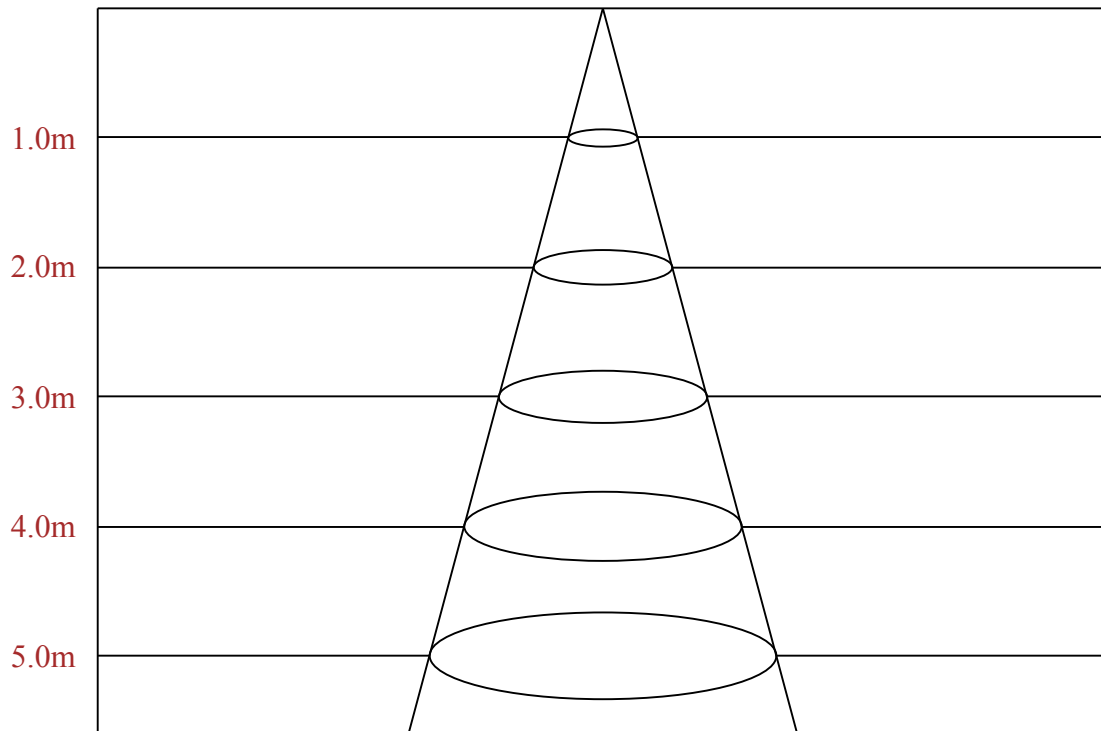
C90/C270: —————

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

:C90/270Left:0.0 Right:0.0

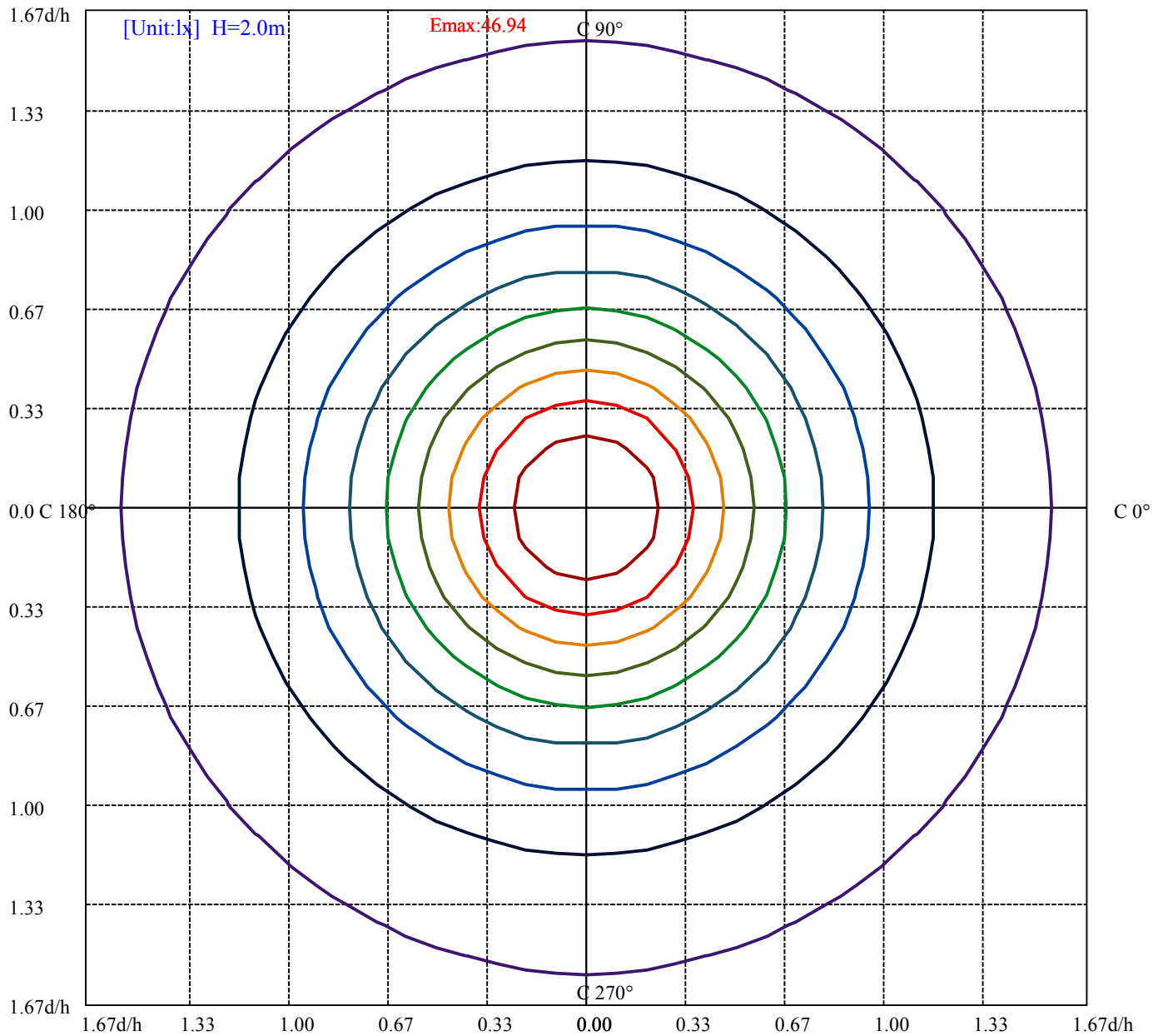
Beam Angle(50%Imax):C0/180Left:161.2 Right:161.2

:C90/270Left:154.1 Right:154.1

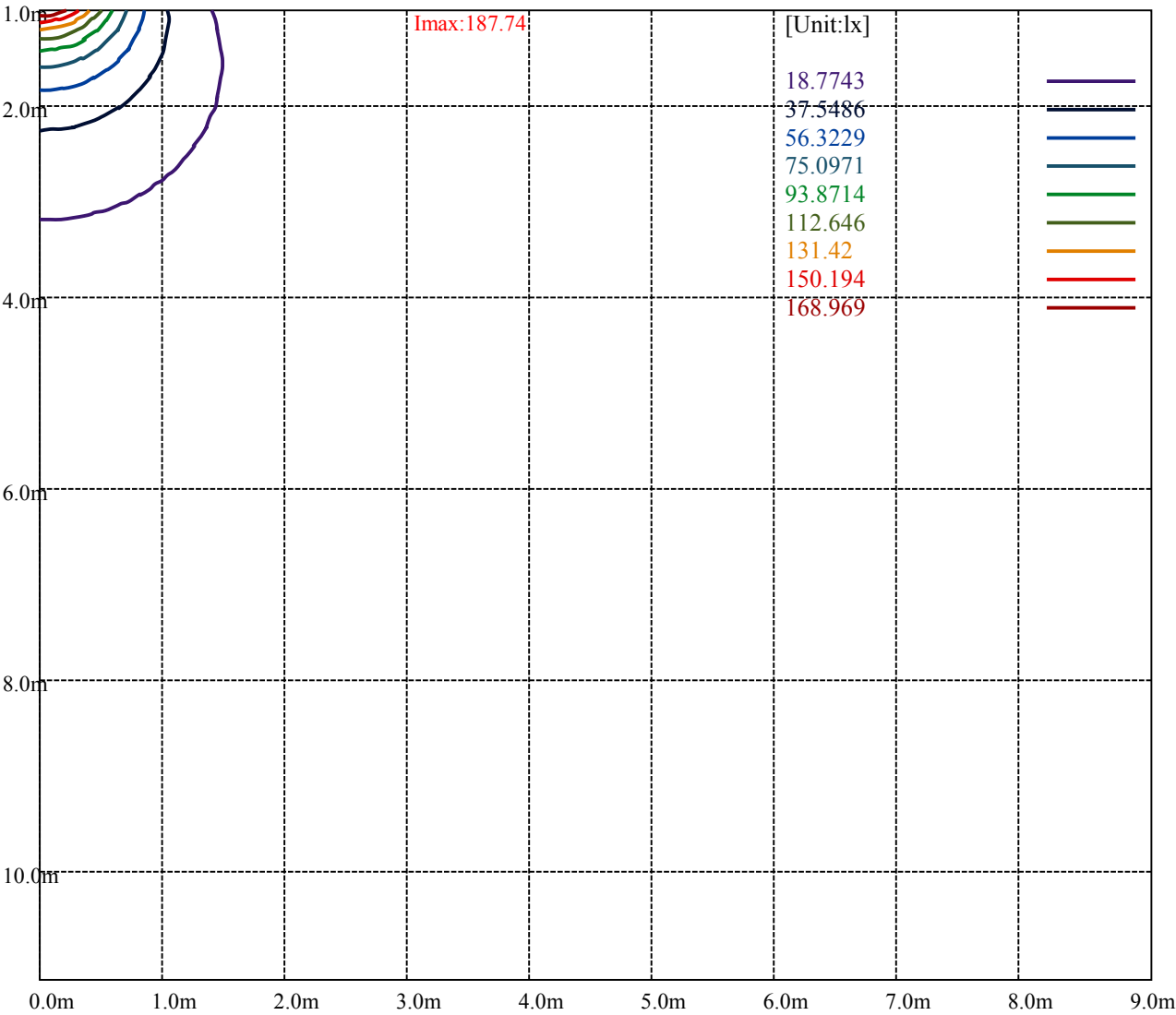


Max , Ave

Beam angle of C30 plane 226.98



(10%Emax) 4.693575	—
(20%Emax) 9.38715	—
(30%Emax) 14.08072	—
(40%Emax) 18.77427	—
(50%Emax) 23.46785	—
(60%Emax) 28.1615	—
(70%Emax) 32.855	—
(80%Emax) 37.5485	—
(90%Emax) 42.24225	—



Luminance Table

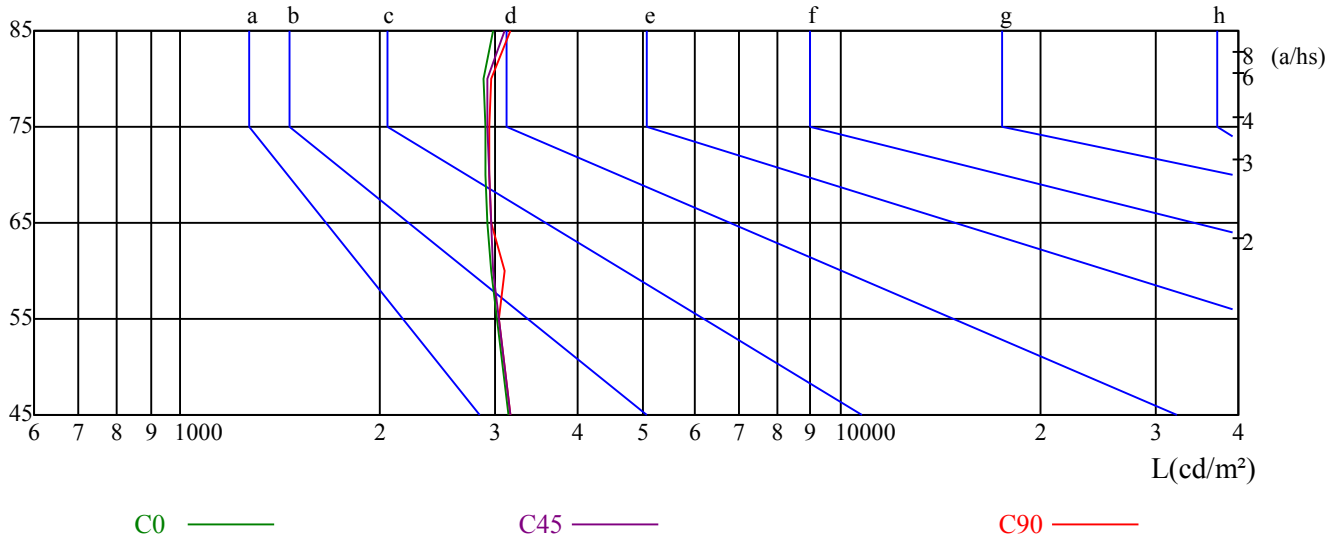
γ	45	50	55	60	65	70	75	80	85
C0	3142	3071	3009	2946	2916	2898	2886	2868	2974
C45	3161	3091	3035	2981	2948	2928	2922	2913	3092
C90	3164	3100	3038	3102	2954	2943	2933	2947	3165

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4827	4889	4880	6178	6278	6253	13361	14218	13893

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	1.09	1.09	1.09	1.02	1.02	1.02	0.88	0.88	0.88	0.76	0.76	0.76	0.64	0.64	0.64	0.59
1	0.92	0.87	0.83	0.86	0.81	0.77	0.74	0.71	0.68	0.63	0.60	0.58	0.53	0.51	0.49	0.45
2	0.79	0.72	0.66	0.74	0.67	0.62	0.63	0.58	0.54	0.54	0.50	0.47	0.45	0.42	0.40	0.35
3	0.69	0.60	0.54	0.64	0.57	0.51	0.55	0.49	0.44	0.47	0.42	0.39	0.39	0.36	0.33	0.29
4	0.60	0.51	0.45	0.56	0.48	0.42	0.49	0.42	0.37	0.41	0.36	0.32	0.35	0.31	0.28	0.24
5	0.53	0.45	0.38	0.50	0.42	0.36	0.43	0.37	0.32	0.37	0.32	0.28	0.31	0.27	0.24	0.21
6	0.48	0.39	0.33	0.45	0.37	0.31	0.39	0.32	0.27	0.33	0.28	0.24	0.28	0.24	0.21	0.18
7	0.43	0.34	0.28	0.40	0.32	0.27	0.35	0.29	0.24	0.30	0.25	0.21	0.25	0.21	0.18	0.16
8	0.39	0.31	0.25	0.37	0.29	0.24	0.32	0.26	0.21	0.27	0.22	0.19	0.23	0.19	0.16	0.14
9	0.36	0.28	0.22	0.33	0.26	0.21	0.29	0.23	0.19	0.25	0.20	0.17	0.22	0.17	0.15	0.12
10	0.33	0.25	0.20	0.31	0.24	0.19	0.27	0.21	0.17	0.23	0.18	0.15	0.20	0.16	0.13	0.11

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	187.74	186.77	185.63	183.42	179.72	174.26	168.26	160.95	152.57
15.0	187.74	186.42	185.80	183.41	179.69	174.55	168.18	161.37	152.51
30.0	187.74	186.59	185.96	183.65	180.09	175.38	169.07	161.77	153.77
45.0	187.74	186.58	186.05	184.08	180.69	175.78	169.80	162.39	154.89
60.0	187.74	186.76	186.13	184.34	180.86	176.38	170.39	163.41	155.63
75.0	187.74	186.67	186.40	184.78	181.55	177.34	171.24	164.24	156.44
90.0	187.74	187.02	186.84	185.23	182.17	177.67	172.10	165.26	157.44
105.0	187.74	187.20	187.20	185.67	182.61	178.28	172.69	165.75	158.45
120.0	187.74	187.56	187.65	186.12	183.50	178.71	173.56	166.60	158.83
135.0	187.74	188.20	188.29	187.02	184.03	179.50	173.71	166.91	159.03
150.0	187.74	188.29	188.38	187.11	181.02	179.48	174.40	167.50	159.42
165.0	187.74	188.47	188.93	187.20	184.20	179.65	174.10	166.91	158.27
180.0	187.74	188.18	187.13	184.22	180.07	174.26	167.73	159.89	151.16
195.0	187.74	187.92	186.86	183.85	179.42	174.02	167.12	159.15	150.57
210.0	187.74	188.01	186.76	183.65	179.29	173.60	166.67	158.93	149.95
225.0	187.74	188.19	186.76	183.64	178.99	173.19	166.32	158.46	149.18
240.0	187.74	187.92	186.31	183.00	178.62	172.00	165.83	157.87	148.75
255.0	187.74	187.92	186.22	182.90	178.06	172.31	165.14	157.07	148.45
270.0	187.74	187.74	185.76	182.53	177.22	171.92	165.08	156.90	147.19
285.0	187.74	187.56	185.58	181.79	177.20	171.34	164.13	156.74	153.76
300.0	187.74	187.29	185.48	181.87	180.42	170.67	164.16	155.40	146.82
315.0	187.74	187.20	184.94	181.49	176.69	170.63	163.38	155.23	146.17
330.0	187.74	187.11	185.11	181.66	176.49	170.58	163.23	154.79	146.16
345.0	187.74	187.11	185.01	181.56	176.55	170.55	163.18	154.91	145.99
360.0	187.74	186.77	185.63	183.42	179.72	174.26	168.26	160.95	152.57
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	143.50	133.54	123.66	112.21	102.42	92.02	81.80	70.25	58.79
15.0	144.10	134.19	123.75	112.95	102.32	92.59	81.52	71.26	59.75
30.0	144.70	135.00	124.60	114.10	103.52	93.38	82.89	72.04	60.65
45.0	145.96	136.32	126.05	115.16	104.54	94.36	84.36	72.94	62.22
60.0	146.78	137.30	127.10	116.19	105.72	95.71	85.15	74.42	63.24
75.0	147.65	138.50	128.18	117.51	106.74	96.61	86.11	75.80	64.58
90.0	148.81	139.28	129.03	118.78	107.54	97.92	87.31	76.34	65.10
105.0	149.26	140.15	130.06	119.24	108.43	98.78	87.52	76.43	65.71
120.0	149.98	140.40	130.10	119.26	109.23	98.12	88.00	76.80	65.23
135.0	150.79	140.38	130.87	119.91	109.04	98.54	87.94	76.62	64.48
150.0	150.52	140.72	130.46	119.29	108.94	98.14	87.06	75.35	64.09
165.0	150.09	140.44	129.98	118.79	107.97	96.87	85.59	74.41	61.94
180.0	141.29	130.80	119.70	108.94	97.84	87.00	75.19	63.37	55.53
195.0	140.03	129.94	118.97	108.17	97.01	85.42	73.65	61.61	55.32
210.0	139.81	129.13	118.02	107.43	95.96	84.93	72.93	61.01	55.50
225.0	139.45	128.82	117.66	106.95	95.70	84.10	72.13	60.35	56.15
240.0	138.01	127.99	117.44	106.26	95.35	83.72	72.00	60.37	56.35
255.0	137.87	127.91	116.97	106.29	94.99	83.51	72.12	68.71	56.42
270.0	137.93	127.59	116.71	114.10	95.31	83.89	72.20	60.96	56.56
285.0	137.36	127.36	116.90	107.44	96.89	85.80	73.91	61.92	56.87
300.0	137.33	127.39	116.91	106.97	96.76	85.74	74.90	62.88	56.56
315.0	136.84	126.61	116.38	105.60	95.64	84.68	73.36	61.58	54.88
330.0	136.63	126.37	115.75	105.22	94.78	83.79	73.08	61.19	53.65
345.0	136.44	126.44	115.16	105.06	94.69	84.05	73.04	61.03	53.03
360.0	143.50	133.54	123.66	112.21	102.42	92.02	81.80	70.25	58.79

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	50.77	51.65	57.38	63.37	69.02	74.48	79.24	83.91	88.32
15.0	50.63	50.72	56.03	62.05	67.54	72.94	78.07	83.12	87.37
30.0	50.78	50.25	55.05	61.19	67.06	72.04	77.73	82.35	86.89
45.0	51.78	50.44	55.17	60.88	66.87	72.22	77.49	82.49	86.95
60.0	53.31	50.98	55.46	61.36	67.17	72.72	77.82	82.83	87.30
75.0	53.82	51.76	56.33	62.07	67.99	73.46	78.67	83.60	88.09
90.0	54.40	52.69	57.28	63.21	68.96	74.45	79.66	84.34	88.84
105.0	55.16	53.90	58.59	64.26	70.30	75.53	80.58	85.53	89.95
120.0	55.29	55.02	59.81	65.77	71.47	76.89	81.49	86.64	90.71
135.0	55.52	55.97	61.31	67.20	72.63	77.89	82.87	87.67	91.92
150.0	55.29	57.10	62.10	68.09	73.72	78.89	83.61	88.52	92.42
165.0	55.21	57.58	63.22	69.13	74.68	79.59	84.50	88.96	92.96
180.0	57.64	63.37	68.75	74.22	79.68	84.44	88.76	92.81	96.16
195.0	58.24	64.09	69.49	75.06	80.28	85.06	89.40	93.21	96.66
210.0	59.23	64.83	70.53	76.13	81.02	85.82	90.18	93.92	97.12
225.0	59.81	65.53	71.24	76.69	82.04	86.51	87.40	94.36	97.67
240.0	60.46	66.19	67.35	77.01	82.11	86.85	90.79	94.81	97.67
255.0	60.64	66.29	71.94	77.23	82.08	86.83	90.96	94.72	97.50
270.0	60.51	66.00	71.66	76.70	81.73	85.96	90.36	93.78	96.84
285.0	60.39	65.44	70.84	75.89	80.67	85.17	89.23	92.74	95.45
300.0	59.45	64.60	69.66	74.81	79.60	83.93	88.09	91.70	94.59
315.0	57.42	62.76	68.01	73.54	78.34	82.96	87.12	90.84	94.19
330.0	55.47	60.64	66.45	71.99	76.80	81.89	86.06	90.15	93.51
345.0	53.85	58.58	64.85	70.13	75.50	80.50	85.14	89.51	92.96
360.0	50.77	51.65	57.38	63.37	69.02	74.48	79.24	83.91	88.32
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	92.11	95.02	97.13	96.69	94.31	88.58	78.98	65.49	46.36
15.0	91.17	94.89	97.10	98.78	98.25	94.36	86.13	73.11	52.05
30.0	90.98	94.72	97.65	99.16	100.05	98.45	91.69	80.58	57.63
45.0	90.79	94.63	97.67	99.99	101.06	100.17	94.36	85.26	62.94
60.0	91.41	94.81	97.85	100.45	101.70	101.07	96.78	88.73	68.34
75.0	91.76	95.35	98.40	100.91	102.53	101.90	97.86	90.96	72.39
90.0	92.43	96.21	98.91	101.42	103.58	103.13	99.81	91.80	74.27
105.0	93.56	96.80	99.68	102.30	104.28	104.19	101.13	93.47	76.25
120.0	94.41	97.49	100.47	102.73	105.07	105.35	102.36	95.14	79.51
135.0	95.09	98.35	100.98	103.43	105.78	106.05	103.70	96.18	81.33
150.0	95.78	99.05	101.41	103.86	105.95	106.22	103.95	96.87	82.43
165.0	96.42	99.51	101.97	104.33	105.88	105.79	103.88	95.42	82.14
180.0	99.07	101.54	103.83	105.33	105.59	103.39	95.02	80.91	60.20
195.0	99.32	101.71	103.83	105.25	105.51	99.49	89.49	76.74	55.59
210.0	100.05	100.05	103.61	104.85	102.72	95.16	84.76	72.04	49.80
225.0	99.90	102.22	104.00	102.84	98.11	89.01	78.29	65.53	44.46
240.0	100.18	102.32	102.95	98.84	92.31	82.47	70.84	58.41	39.44
255.0	100.29	101.72	100.11	94.99	87.01	77.50	65.48	52.12	34.36
270.0	99.18	98.28	95.94	90.36	83.26	72.38	59.88	45.86	29.94
285.0	96.26	95.90	91.75	83.91	77.87	68.77	56.96	40.38	25.24
300.0	96.76	96.76	92.97	84.02	76.07	66.77	55.83	37.58	22.77
315.0	96.45	97.72	95.37	88.94	78.34	67.92	54.07	37.86	23.37
330.0	95.23	96.23	95.05	90.15	81.43	69.81	56.29	39.76	28.05
345.0	95.51	95.96	95.78	92.14	84.50	74.86	61.76	45.39	35.47
360.0	92.11	95.02	97.13	96.69	94.31	88.58	78.98	65.49	46.36

Intensity data(cd)

C/ γ (°)	180.0
0.0	52.89
15.0	33.37
30.0	35.13
45.0	36.69
60.0	38.46
75.0	39.92
90.0	42.89
105.0	44.98
120.0	50.14
135.0	53.80
150.0	58.10
165.0	60.49
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	52.89