
AFX

Client:

LumCAT: SYDP10LAJUDLB

Luminaire: LED lamp

Report No:

Ballast type:

Test No: LCZP25010160

Voltage(V): 120.010

LampCAT:

Current(A): 0.174

Lamp flux(lm): 1292.7

Power (W): 20.640

Number of Lamps: 1

PF: 0.991

Length(mm): -250

Width(mm): -250

Phm Type: C

Height(mm): 60

Photometric Results

Lumens(lm): 1292.70, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 62.63

Central intensity(cd): 184.887, Maximum intensity(cd): 184.887

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=335.4

[C90/270]Total=330.2

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

[C90/270]Total=N.A.

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

Maximum s/h(1/4): C0_180=1.48 C90_270=1.49

Up flux rate of lamp(%): 43.95%

Down flux rate of lamp(%): 56.05%

Up flux rate of LUM(%): 43.95%

Down flux rate of LUM(%): 56.05%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 36.258%

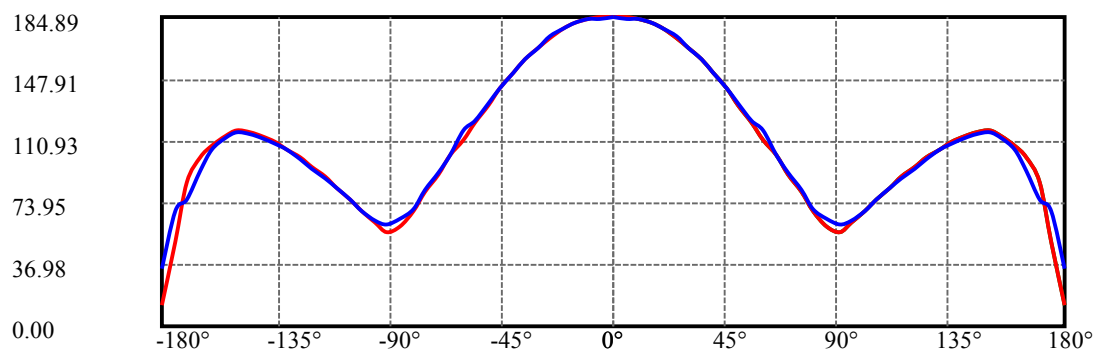
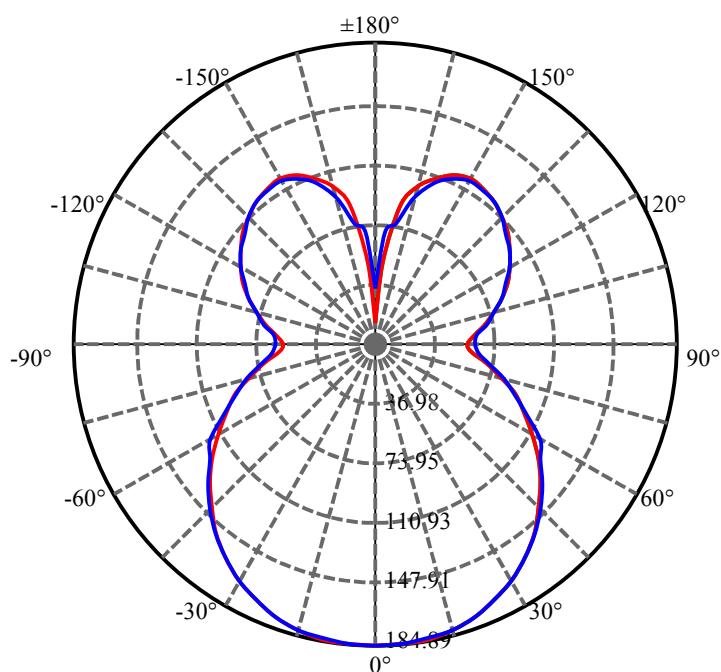
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	184.887	0.000	0	0.00%	0.00%
5.0	184.553	4.417	4.417	0.34%	0.34%
10.0	183.506	13.167	17.583	1.02%	1.36%
15.0	181.309	21.641	39.224	1.67%	3.03%
20.0	177.724	29.589	68.813	2.29%	5.32%
25.0	172.813	36.765	105.578	2.84%	8.17%
30.0	166.753	42.972	148.55	3.32%	11.49%
35.0	159.622	48.061	196.611	3.72%	15.21%
40.0	151.746	51.949	248.561	4.02%	19.23%
45.0	142.523	54.486	303.047	4.21%	23.44%
50.0	132.878	55.649	358.696	4.30%	27.75%
55.0	122.711	55.573	414.269	4.30%	32.05%
60.0	112.806	54.439	468.708	4.21%	36.26%
65.0	102.078	52.239	520.947	4.04%	40.30%
70.0	91.604	49.042	569.989	3.79%	44.09%
75.0	80.808	45.066	615.055	3.49%	47.58%
80.0	70.200	40.406	655.46	3.13%	50.70%
85.0	62.040	35.933	691.393	2.78%	53.48%
90.0	59.149	33.182	724.575	2.57%	56.05%
95.0	62.040	33.183	757.758	2.57%	58.62%
100.0	68.363	35.434	793.192	2.74%	61.36%
105.0	75.667	38.538	831.73	2.98%	64.34%
110.0	82.403	41.317	873.047	3.20%	67.54%
115.0	88.747	43.336	916.383	3.35%	70.89%
120.0	94.527	44.554	960.937	3.45%	74.34%
125.0	100.275	45.028	1005.965	3.48%	77.82%
130.0	105.172	44.671	1050.636	3.46%	81.27%
135.0	109.493	43.376	1094.013	3.36%	84.63%
140.0	113.016	41.199	1135.212	3.19%	87.82%
145.0	115.383	38.107	1173.318	2.95%	90.76%
150.0	115.679	34.025	1207.344	2.63%	93.40%
155.0	112.833	28.918	1236.262	2.24%	95.63%
160.0	106.648	23.020	1259.282	1.78%	97.41%
165.0	96.644	16.754	1276.036	1.30%	98.71%
170.0	79.769	10.465	1286.501	0.81%	99.52%
175.0	62.780	5.099	1291.6	0.39%	99.91%
180.0	29.248	1.100	1292.7	0.09%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	148.55	11.49%	11.49%
0-40	248.56	19.23%	19.23%
0-60	468.71	36.26%	36.26%
0-90	724.58	56.05%	56.05%
0-120	960.94	74.34%	74.34%
0-180	1292.70	100.00%	100.00%
60-90	255.87	19.79%	19.79%
90-120	236.36	18.28%	18.28%
90-130	326.06	25.22%	25.22%
90-150	482.77	37.35%	37.35%
90-180	567.02	43.86%	43.86%
0-128.16	1034.16	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	17.58
10-20	51.23
20-30	79.74
30-40	100.01
40-50	110.13
50-60	110.01
60-70	101.28
70-80	85.47
80-90	69.12
90-100	68.62
100-110	79.86
110-120	87.89
120-130	89.70
130-140	84.58
140-150	72.13
150-160	51.94
160-170	27.22
170-180	5.10



C0(Max):

C0/C180:

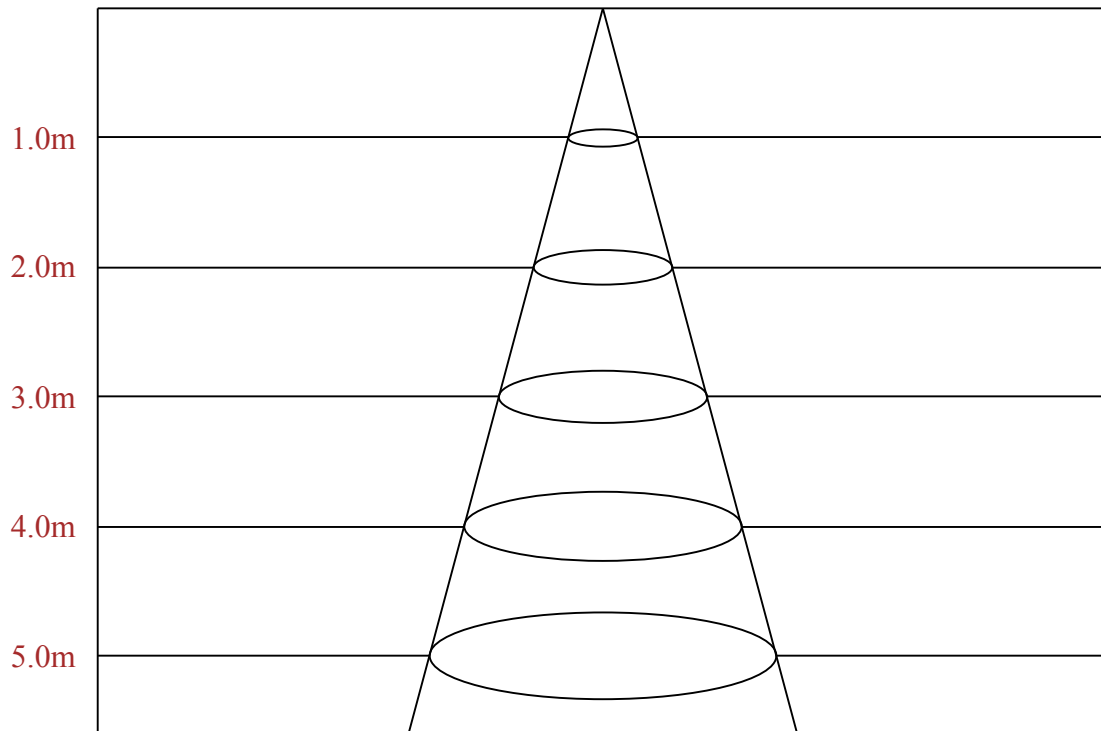
C90/C270:

Field angle(10%Imax):C0/180Left:184.2 Right:174.2

:C90/270Left:0.0 Right:0.0

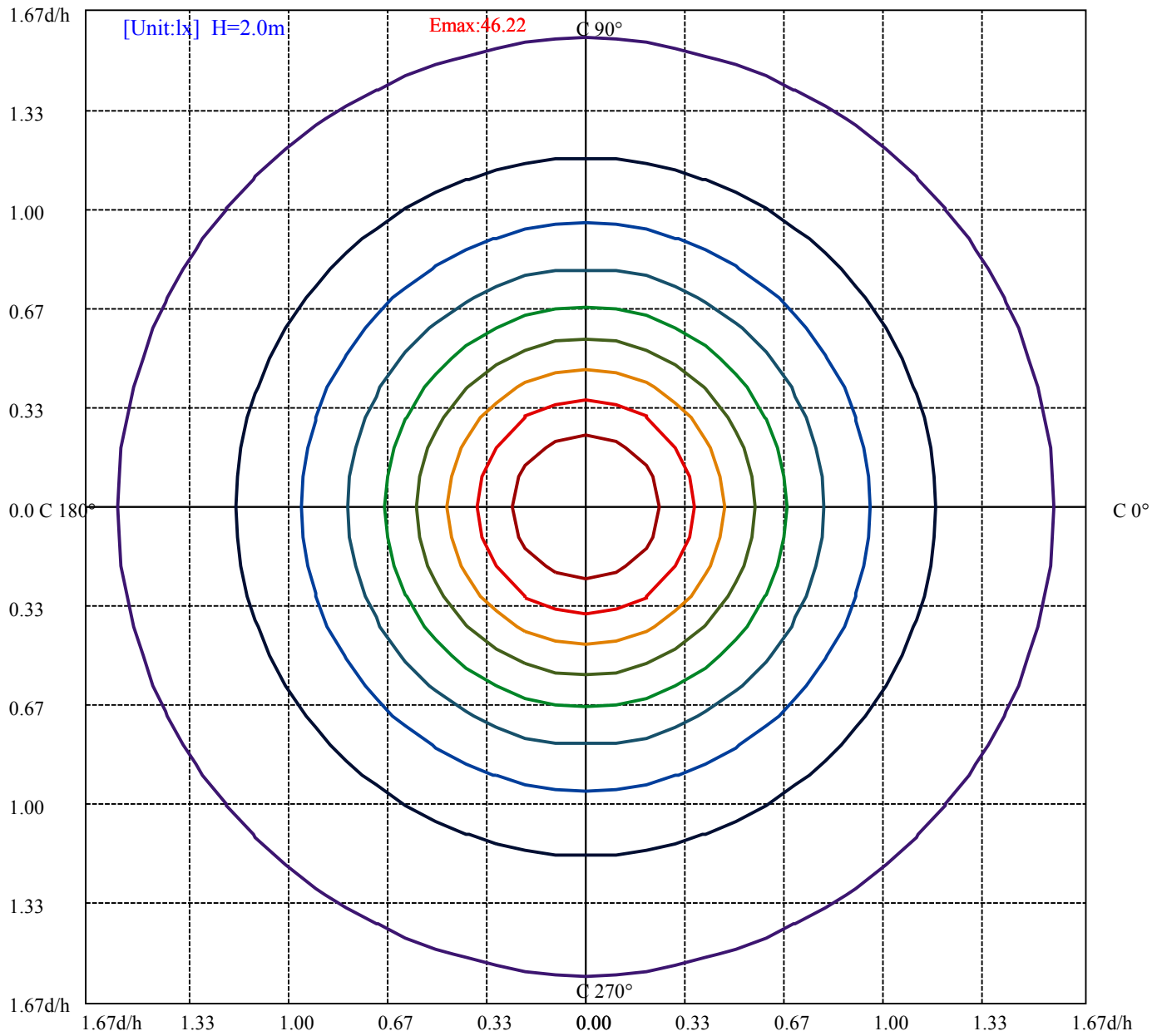
Beam Angle(50%Imax):C0/180Left:172.7 Right:162.7

:C90/270Left:165.1 Right:165.1

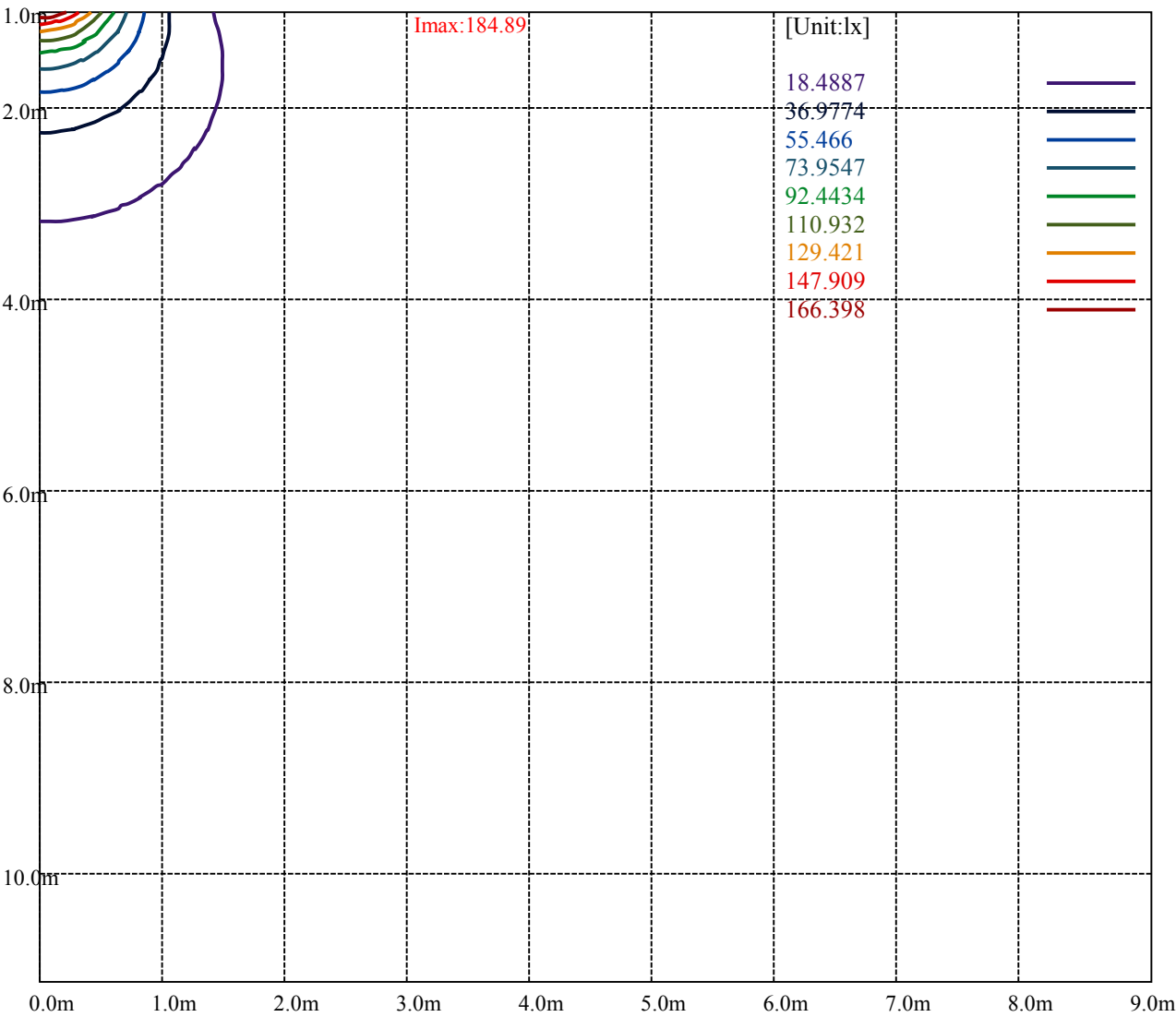


Max , Ave

Beam angle of C0 plane 237.09



(10%Emax)	4.622175	
(20%Emax)	9.24435	
(30%Emax)	13.8665	
(40%Emax)	18.48867	
(50%Emax)	23.11085	
(60%Emax)	27.733	
(70%Emax)	32.35525	
(80%Emax)	36.97725	
(90%Emax)	41.5995	



Luminance Table

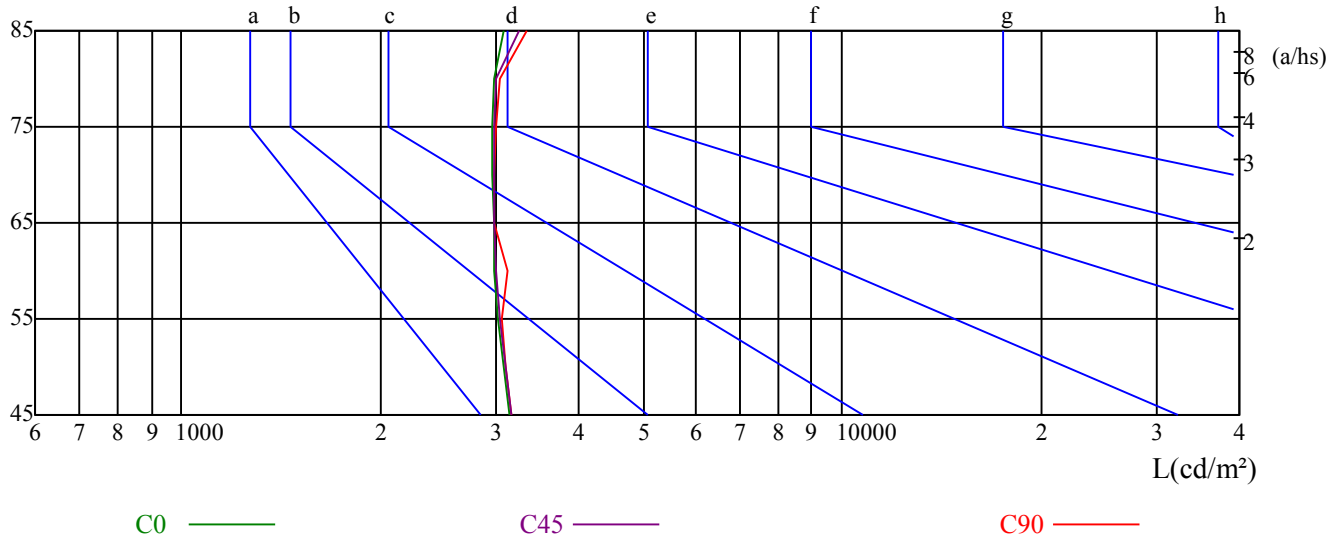
γ	45	50	55	60	65	70	75	80	85
C0	3139	3081	3021	2983	2966	2949	2960	2976	3081
C45	3150	3091	3042	3001	2978	2970	2977	3003	3248
C90	3153	3098	3046	3113	2983	2970	2987	3027	3334

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4909	4938	4929	6336	6394	6371	13844	14977	14592

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	1.01	1.01	1.01	0.87	0.87	0.87	0.74	0.74	0.74	0.62	0.62	0.62	0.56
1	0.91	0.86	0.82	0.85	0.81	0.77	0.72	0.69	0.66	0.61	0.59	0.56	0.51	0.49	0.47	0.42
2	0.78	0.71	0.65	0.73	0.66	0.61	0.62	0.57	0.53	0.52	0.49	0.45	0.43	0.41	0.38	0.34
3	0.68	0.60	0.53	0.63	0.56	0.50	0.54	0.48	0.44	0.46	0.41	0.37	0.38	0.34	0.31	0.27
4	0.60	0.51	0.44	0.56	0.48	0.42	0.48	0.41	0.37	0.40	0.35	0.31	0.33	0.30	0.26	0.23
5	0.53	0.44	0.38	0.49	0.41	0.35	0.42	0.36	0.31	0.36	0.31	0.27	0.30	0.26	0.23	0.19
6	0.47	0.39	0.32	0.44	0.36	0.31	0.38	0.32	0.27	0.32	0.27	0.23	0.27	0.23	0.20	0.17
7	0.43	0.34	0.28	0.40	0.32	0.27	0.34	0.28	0.23	0.29	0.24	0.20	0.24	0.20	0.17	0.15
8	0.39	0.30	0.25	0.36	0.29	0.23	0.31	0.25	0.21	0.27	0.22	0.18	0.22	0.18	0.15	0.13
9	0.35	0.27	0.22	0.33	0.26	0.21	0.29	0.23	0.18	0.24	0.20	0.16	0.21	0.17	0.14	0.12
10	0.32	0.25	0.20	0.30	0.23	0.19	0.26	0.20	0.17	0.23	0.18	0.14	0.19	0.15	0.12	0.10

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	184.89	185.15	184.89	183.13	179.97	175.48	169.77	163.01	155.10
15.0	184.89	184.80	184.89	183.21	180.56	176.41	171.02	164.30	156.97
30.0	184.89	185.06	185.06	184.18	181.51	177.59	172.53	166.30	158.92
45.0	184.89	185.07	185.42	184.44	182.21	178.46	173.72	167.92	160.32
60.0	184.89	184.71	185.16	184.71	182.56	179.60	174.85	169.02	161.94
75.0	184.89	184.71	185.34	184.98	183.27	180.03	175.44	169.60	162.95
90.0	184.89	184.71	184.89	184.80	183.18	180.11	175.52	169.85	163.00
105.0	184.89	185.07	184.89	184.71	182.99	179.83	175.31	169.80	162.48
120.0	184.89	184.34	184.71	184.34	182.27	179.37	174.59	168.71	161.66
135.0	184.89	185.07	185.43	184.89	182.53	178.99	173.91	167.92	160.66
150.0	184.89	184.71	184.80	183.71	178.45	177.55	172.47	165.95	158.69
165.0	184.89	184.62	184.62	183.17	180.36	176.01	170.76	164.14	155.63
180.0	184.89	184.62	183.04	179.88	175.66	170.04	163.62	155.36	147.45
195.0	184.89	184.62	182.50	179.23	174.73	168.72	161.74	153.79	145.05
210.0	184.89	184.18	182.13	178.66	174.13	168.08	161.05	153.05	143.98
225.0	184.89	184.44	181.85	177.92	173.10	166.93	159.52	151.21	142.73
240.0	184.89	184.08	181.39	177.90	172.43	166.43	158.90	150.56	141.24
255.0	184.89	184.17	181.47	177.51	172.03	165.64	158.18	150.27	140.64
270.0	184.89	183.90	181.46	177.50	172.28	165.97	158.23	149.76	140.76
285.0	184.89	184.16	181.90	177.84	172.60	166.27	158.86	150.73	147.93
300.0	184.89	183.71	181.27	178.02	176.30	166.09	158.77	150.82	141.33
315.0	184.89	184.43	182.17	178.45	173.82	167.02	160.48	152.23	142.88
330.0	184.89	184.43	182.44	178.81	174.10	167.85	160.69	152.62	144.19
345.0	184.89	184.52	182.44	179.45	174.38	169.03	162.15	154.00	145.39
360.0	184.89	185.15	184.89	183.13	179.97	175.48	169.77	163.01	155.10
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	146.40	137.00	126.80	116.43	105.98	95.34	84.27	73.11	61.60
15.0	148.14	139.22	129.15	118.55	108.12	97.43	87.10	75.97	64.57
30.0	150.56	141.22	132.06	120.95	111.16	100.67	89.73	78.61	67.14
45.0	152.64	143.53	133.71	123.35	112.81	102.63	91.82	81.46	70.11
60.0	153.88	144.92	134.97	125.38	114.18	104.77	94.10	83.08	71.88
75.0	155.12	146.22	136.51	126.26	115.73	105.57	95.50	84.17	73.56
90.0	154.99	146.25	136.53	126.26	116.08	105.64	95.73	84.92	73.94
105.0	154.80	145.67	136.36	126.15	115.58	105.64	95.43	85.21	74.10
120.0	153.62	144.58	134.82	125.34	114.22	105.00	94.52	83.77	72.92
135.0	152.32	143.43	133.99	123.74	113.40	103.33	93.35	82.19	71.67
150.0	150.45	141.38	131.69	121.54	111.39	101.23	90.72	80.03	68.88
165.0	148.11	139.14	129.27	118.94	108.70	98.47	88.50	77.54	66.49
180.0	138.14	128.21	117.58	107.47	97.72	86.82	76.71	65.55	56.85
195.0	135.51	125.97	114.57	105.12	94.96	84.36	73.41	62.37	55.12
210.0	134.02	123.70	112.94	102.80	92.49	82.53	70.88	60.29	54.16
225.0	132.81	122.45	111.74	101.64	91.28	80.39	69.31	58.15	53.77
240.0	131.47	120.99	110.50	100.29	90.34	79.40	68.20	57.09	53.86
255.0	131.11	120.59	110.16	100.00	89.30	78.24	67.08	64.39	53.96
270.0	130.76	120.41	109.87	107.44	88.80	77.81	66.73	56.11	54.21
285.0	131.03	120.55	110.15	99.76	89.73	78.71	67.32	56.21	54.31
300.0	131.84	121.36	110.88	100.58	89.73	78.89	67.68	56.57	54.04
315.0	133.27	122.74	112.67	101.79	91.54	80.56	69.31	58.06	54.16
330.0	133.77	124.07	113.47	103.23	92.72	81.57	70.33	59.00	53.74
345.0	135.79	125.46	114.68	104.36	93.94	83.52	71.65	60.96	53.90
360.0	146.40	137.00	126.80	116.43	105.98	95.34	84.27	73.11	61.60

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	53.95	56.33	63.01	70.30	77.15	83.57	89.90	95.96	101.32
15.0	55.30	56.45	62.90	69.96	77.12	83.57	89.93	95.76	101.23
30.0	57.45	57.00	63.14	70.34	77.28	83.95	90.00	96.05	101.56
45.0	59.22	57.61	63.68	70.74	77.44	84.14	90.57	96.55	101.64
60.0	60.67	58.16	63.81	70.98	78.06	84.42	91.41	97.06	102.53
75.0	62.41	58.72	64.30	71.40	78.15	84.98	91.45	97.57	102.78
90.0	62.86	59.08	64.21	71.42	78.44	85.19	91.50	97.62	103.12
105.0	62.98	59.01	64.70	71.84	78.71	85.39	91.90	98.14	103.47
120.0	61.90	58.92	64.52	71.75	78.80	85.21	92.26	97.77	103.29
135.0	60.87	58.79	64.77	72.03	78.93	85.82	92.26	98.25	103.69
150.0	59.00	58.55	64.62	72.05	79.12	85.92	92.35	98.33	103.77
165.0	57.07	58.52	65.31	72.74	80.17	86.69	92.85	98.74	103.99
180.0	59.31	66.61	73.99	81.99	88.23	94.64	99.91	105.10	109.58
195.0	58.74	65.55	73.32	80.65	87.36	93.46	98.76	104.41	108.92
210.0	58.43	65.63	73.01	79.95	86.80	92.93	98.80	104.14	108.85
225.0	58.68	66.09	73.24	80.21	86.82	92.98	93.96	103.61	108.07
240.0	59.15	66.32	67.84	79.94	86.48	92.67	98.40	103.42	107.90
255.0	59.35	66.54	73.65	80.03	86.60	92.62	98.11	103.14	107.64
270.0	59.35	66.91	73.58	80.33	86.72	92.76	97.89	102.94	107.26
285.0	59.55	66.96	73.56	80.61	86.75	92.71	98.23	103.29	107.35
300.0	59.10	66.24	73.38	79.97	86.39	92.17	97.87	102.47	106.72
315.0	58.88	66.13	72.76	80.01	86.00	91.99	97.34	102.51	106.96
330.0	58.09	64.80	72.05	78.85	85.37	91.45	96.61	102.14	106.31
345.0	57.25	64.04	71.38	77.90	84.79	90.68	96.38	101.64	106.17
360.0	53.95	56.33	63.01	70.30	77.15	83.57	89.90	95.96	101.32
C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	106.15	110.37	113.80	116.87	118.01	114.76	109.67	100.88	69.51
15.0	105.91	110.33	114.04	117.57	119.52	118.90	115.01	105.03	79.15
30.0	106.45	110.45	114.63	117.57	120.50	121.66	118.19	108.67	88.66
45.0	106.56	110.93	114.86	118.35	120.67	122.10	120.85	110.04	92.00
60.0	107.37	111.85	115.25	118.84	121.79	123.05	122.51	110.86	92.31
75.0	108.00	112.14	115.91	119.33	122.66	124.01	122.21	110.97	91.18
90.0	107.89	112.30	116.17	119.42	122.84	124.73	119.24	109.15	90.33
105.0	108.26	112.69	116.48	119.64	122.44	123.17	116.57	106.09	88.02
120.0	108.26	112.59	116.12	119.37	121.54	119.64	114.22	102.02	86.03
135.0	108.68	113.22	116.76	119.12	120.39	117.48	111.13	100.34	82.83
150.0	108.67	112.93	116.46	118.91	118.55	115.01	109.57	97.97	79.94
165.0	108.70	112.87	116.04	118.03	117.67	112.69	105.80	94.66	77.09
180.0	113.53	116.08	117.93	117.22	109.40	101.49	91.39	70.47	32.60
195.0	112.89	116.25	118.02	115.54	107.86	105.56	84.63	60.86	22.08
210.0	112.68	113.48	117.03	113.83	104.94	92.58	78.61	49.53	18.59
225.0	112.18	115.04	116.11	111.29	101.82	87.71	72.53	41.44	22.51
240.0	111.58	114.18	114.71	108.26	98.94	83.88	64.97	38.90	31.64
255.0	111.42	113.58	113.31	109.08	99.19	82.46	64.30	38.76	40.74
270.0	111.22	113.83	113.56	111.58	101.49	85.91	66.64	42.06	47.46
285.0	111.15	114.04	114.49	112.50	104.19	90.91	71.66	47.89	48.89
300.0	110.25	113.32	113.77	113.14	106.09	93.53	76.36	55.39	50.33
315.0	110.22	113.76	113.94	113.31	107.50	95.71	80.56	62.32	53.34
330.0	110.03	113.20	114.29	113.02	108.94	98.79	87.82	71.15	58.73
345.0	109.79	112.96	115.50	114.50	111.06	103.81	95.03	78.99	62.78
360.0	106.15	110.37	113.80	116.87	118.01	114.76	109.67	100.88	69.51

Intensity data(cd)

C/ γ (°)	180.0
0.0	25.31
15.0	39.22
30.0	49.98
45.0	62.25
60.0	68.38
75.0	69.51
90.0	68.62
105.0	67.05
120.0	65.79
135.0	64.14
150.0	61.54
165.0	60.15
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	25.31