
乐达凯

Client:

LumCAT: LEMW0524LAJUD**

Luminaire: LED lamp

Report No:

Ballast type:

Test No:

Voltage(V): 119.960

LampCAT:

Current(A): 0.195

Lamp flux(lm): 1512.1

Power (W): 23.200

Number of Lamps: 1

PF: 0.992

Length(mm): 50

Width(mm): 20

Phm Type: C

Height(mm): 560

Photometric Results

Lumens(lm): 1512.13, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 65.18

Central intensity(cd): 2.760, Maximum intensity(cd): 452.625

Angle of maximum intensity: C=60.0 γ =90.0

Beam Angle(50%Imax): [C0/180]Total=302.4

[C90/270]Total=145.0

Field angle(10%Imax): [C0/180]Total=346.2

[C90/270]Total=331.0

Maximum s/h(1/2): C0_180=120.00 C90_270=120.00

Maximum s/h(1/4): C0_180=3.30 C90_270=3.30

Up flux rate of lamp(%): 48.46%

Down flux rate of lamp(%): 51.54%

Up flux rate of LUM(%): 48.46%

Down flux rate of LUM(%): 51.54%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 18.736%

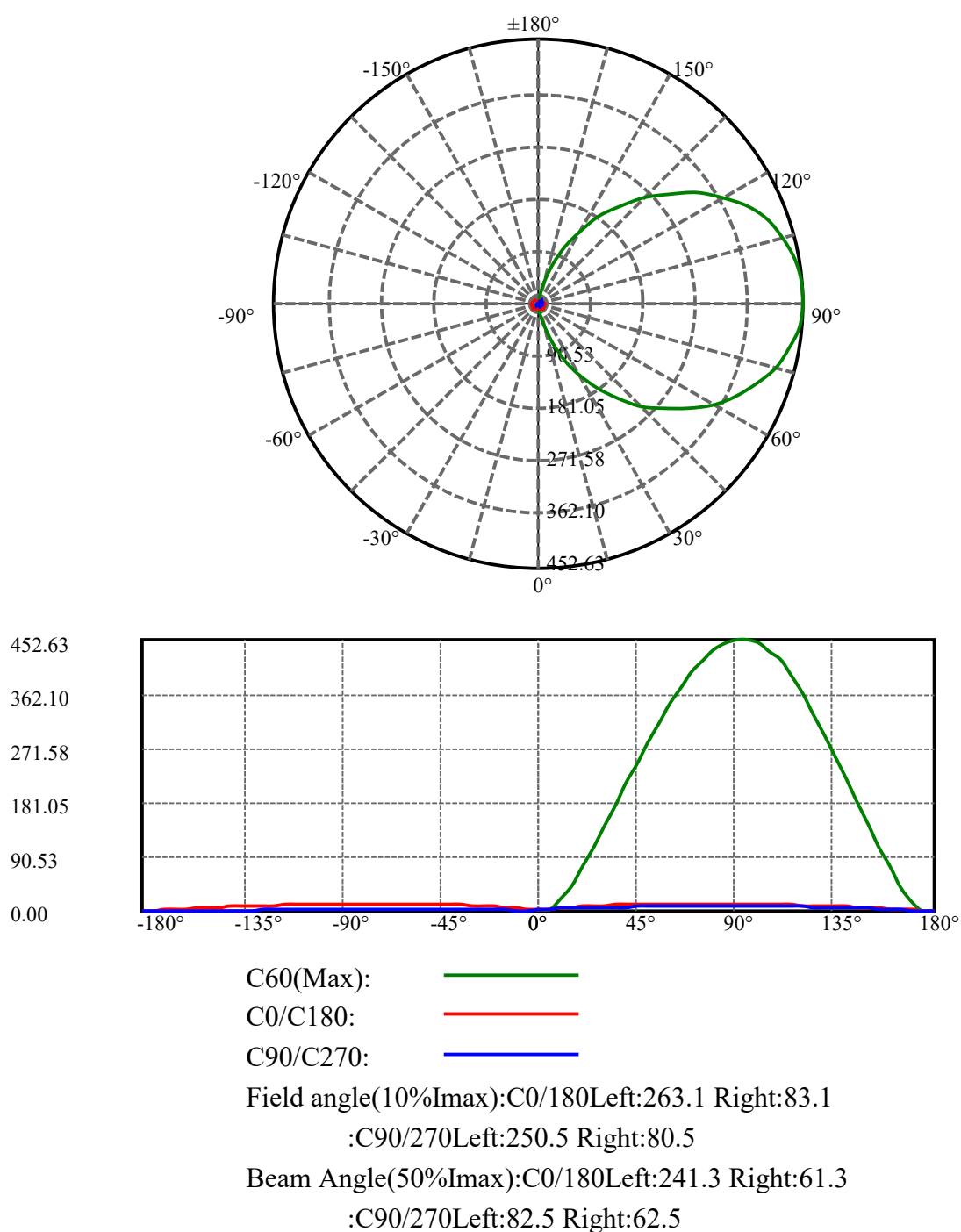
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2.530	0.000	0	0.00%	0.00%
5.0	6.095	0.103	0.103	0.01%	0.01%
10.0	15.409	0.769	0.872	0.05%	0.06%
15.0	27.101	2.522	3.394	0.17%	0.22%
20.0	40.440	5.566	8.96	0.37%	0.59%
25.0	54.317	9.938	18.899	0.66%	1.25%
30.0	68.001	15.479	34.378	1.02%	2.27%
35.0	81.341	21.992	56.37	1.45%	3.73%
40.0	93.837	29.227	85.597	1.93%	5.66%
45.0	106.065	37.013	122.61	2.45%	8.11%
50.0	117.833	45.242	167.852	2.99%	11.10%
55.0	128.834	53.634	221.485	3.55%	14.65%
60.0	138.647	61.828	283.313	4.09%	18.74%
65.0	146.888	69.414	352.727	4.59%	23.33%
70.0	154.287	76.259	428.987	5.04%	28.37%
75.0	159.998	82.149	511.136	5.43%	33.80%
80.0	164.253	86.761	597.896	5.74%	39.54%
85.0	166.859	89.971	687.867	5.95%	45.49%
90.0	167.434	91.532	779.4	6.05%	51.54%
95.0	165.901	91.270	870.67	6.04%	57.58%
100.0	162.758	89.305	959.974	5.91%	63.48%
105.0	157.391	85.663	1045.637	5.67%	69.15%
110.0	150.683	80.526	1126.163	5.33%	74.48%
115.0	141.637	74.017	1200.18	4.89%	79.37%
120.0	131.441	66.386	1266.566	4.39%	83.76%
125.0	118.523	57.778	1324.344	3.82%	87.58%
130.0	106.410	48.908	1373.252	3.23%	90.82%
135.0	93.875	40.471	1413.723	2.68%	93.49%
140.0	81.072	32.393	1446.116	2.14%	95.63%
145.0	67.273	24.750	1470.866	1.64%	97.27%
150.0	53.435	17.775	1488.641	1.18%	98.45%
155.0	39.750	11.793	1500.434	0.78%	99.23%
160.0	26.909	6.991	1507.425	0.46%	99.69%
165.0	14.451	3.409	1510.834	0.23%	99.91%
170.0	4.447	1.121	1511.955	0.07%	99.99%
175.0	0.422	0.174	1512.129	0.01%	100.00%
180.0	0.000	0.005	1512.134	0.00%	100.00%

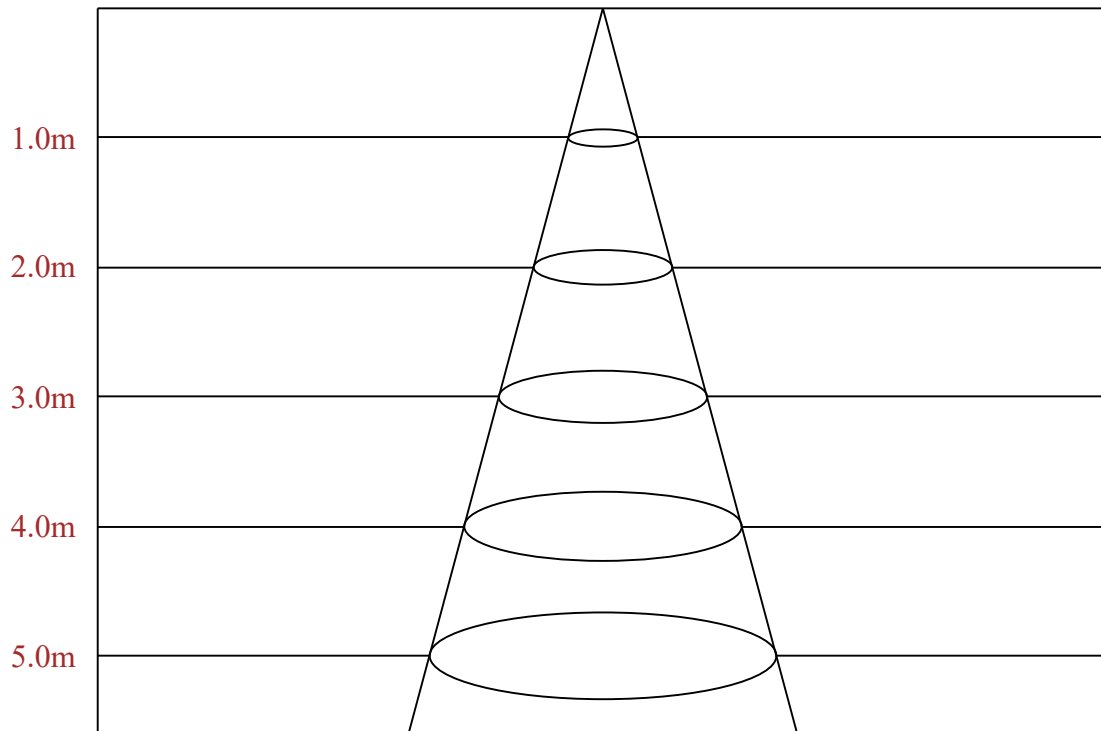
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	34.38	2.27%	2.27%
0-40	85.60	5.66%	5.66%
0-60	283.31	18.74%	18.74%
0-90	779.40	51.54%	51.54%
0-120	1266.57	83.76%	83.76%
0-180	1512.13	100.00%	100.00%
60-90	496.09	32.81%	32.81%
90-120	487.17	32.22%	32.22%
90-130	593.85	39.27%	39.27%
90-150	709.24	46.90%	46.90%
90-180	732.73	48.46%	48.46%
0-115.72	1209.71	80.00%	80.00%

ZONAL LUMEN SUMMARY

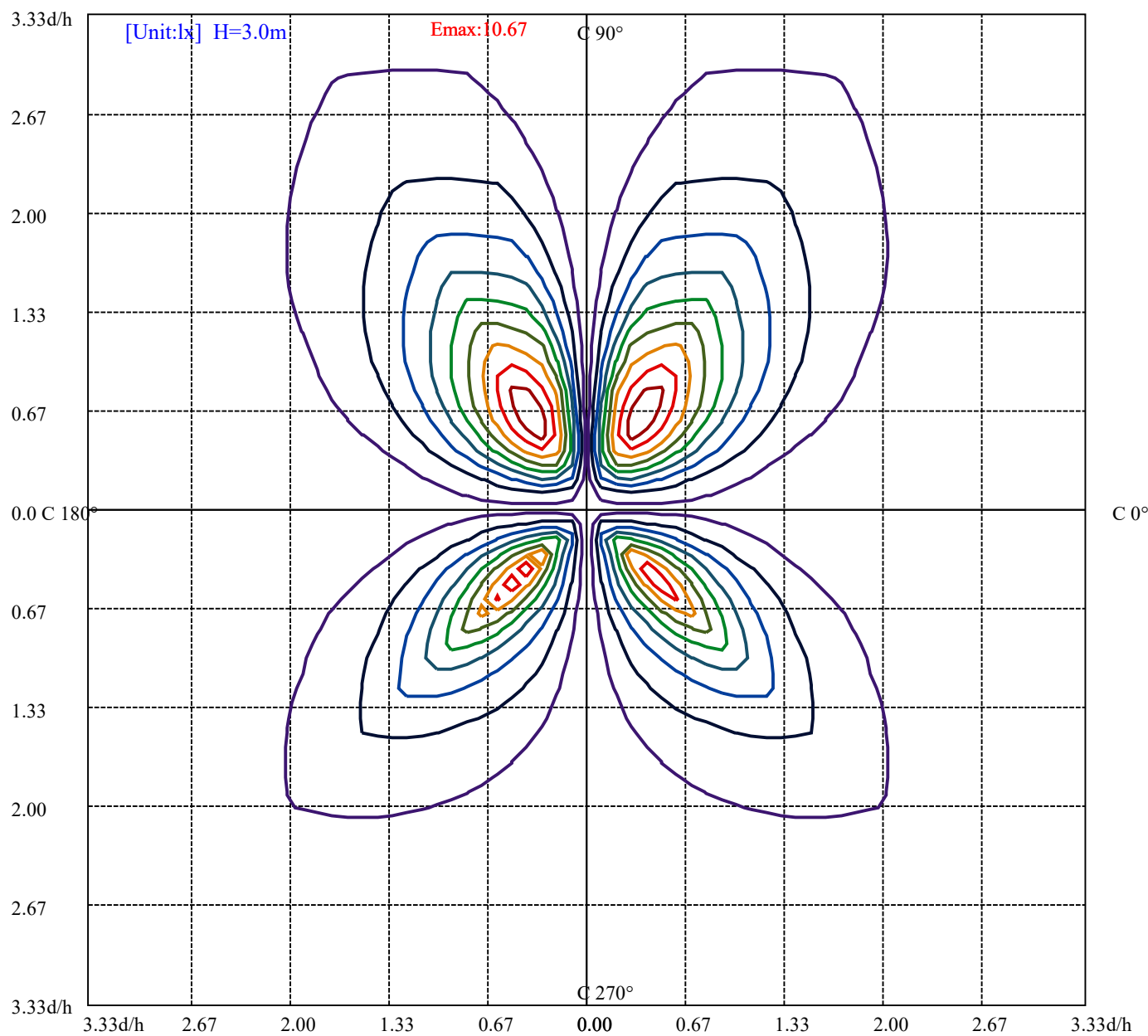
0-10	0.87
10-20	8.09
20-30	25.42
30-40	51.22
40-50	82.26
50-60	115.46
60-70	145.67
70-80	168.91
80-90	181.50
90-100	180.57
100-110	166.19
110-120	140.40
120-130	106.69
130-140	72.86
140-150	42.53
150-160	18.78
160-170	4.53
170-180	0.17



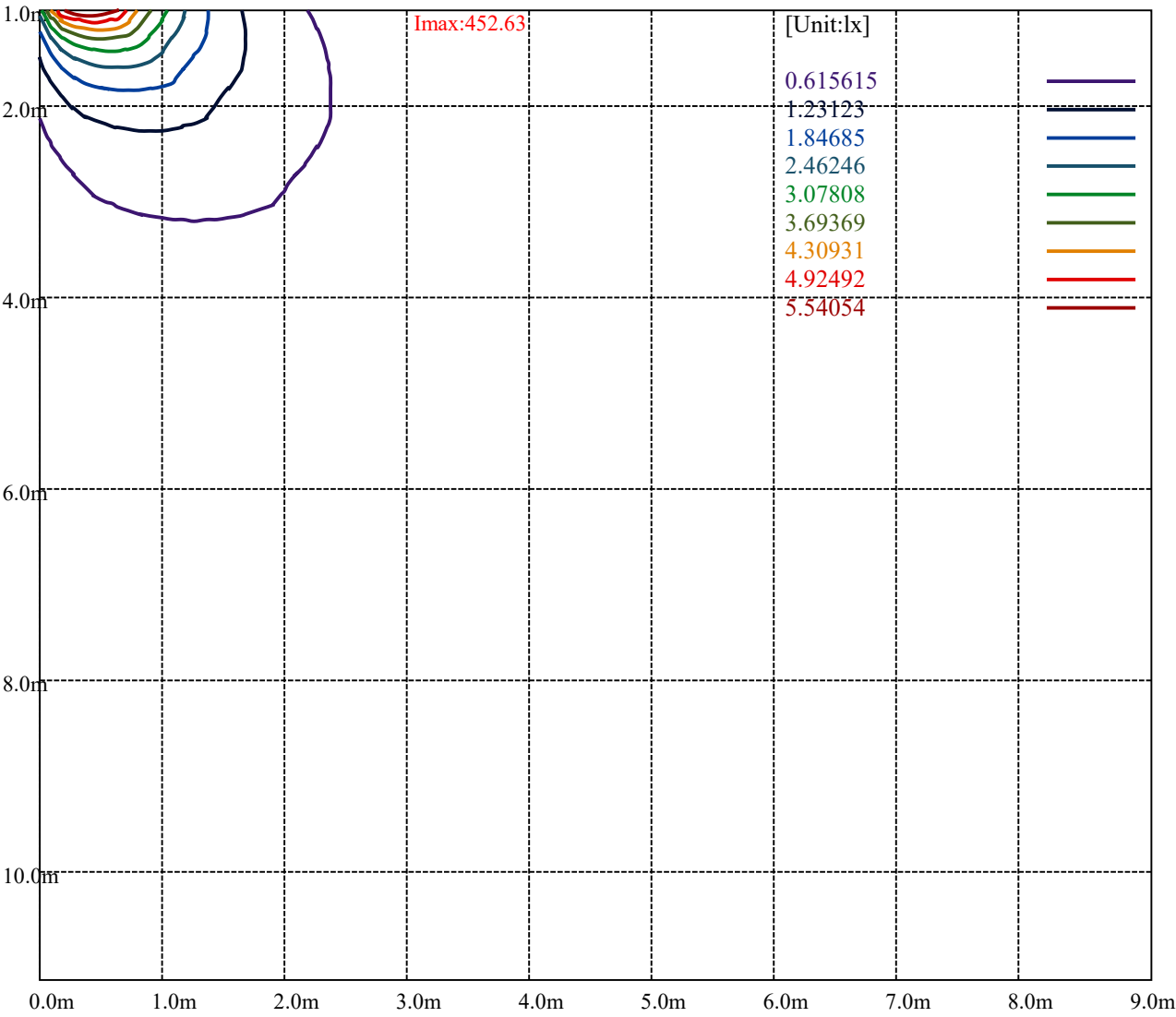


Max , Ave

Beam angle of C60 plane 340.36



(10%Emax)	1.066821	—
(20%Emax)	2.133645	—
(30%Emax)	3.200467	—
(40%Emax)	4.267278	—
(50%Emax)	5.3341	—
(60%Emax)	6.400922	—
(70%Emax)	7.467745	—
(80%Emax)	8.534566	—
(90%Emax)	9.601389	—



Luminance Table

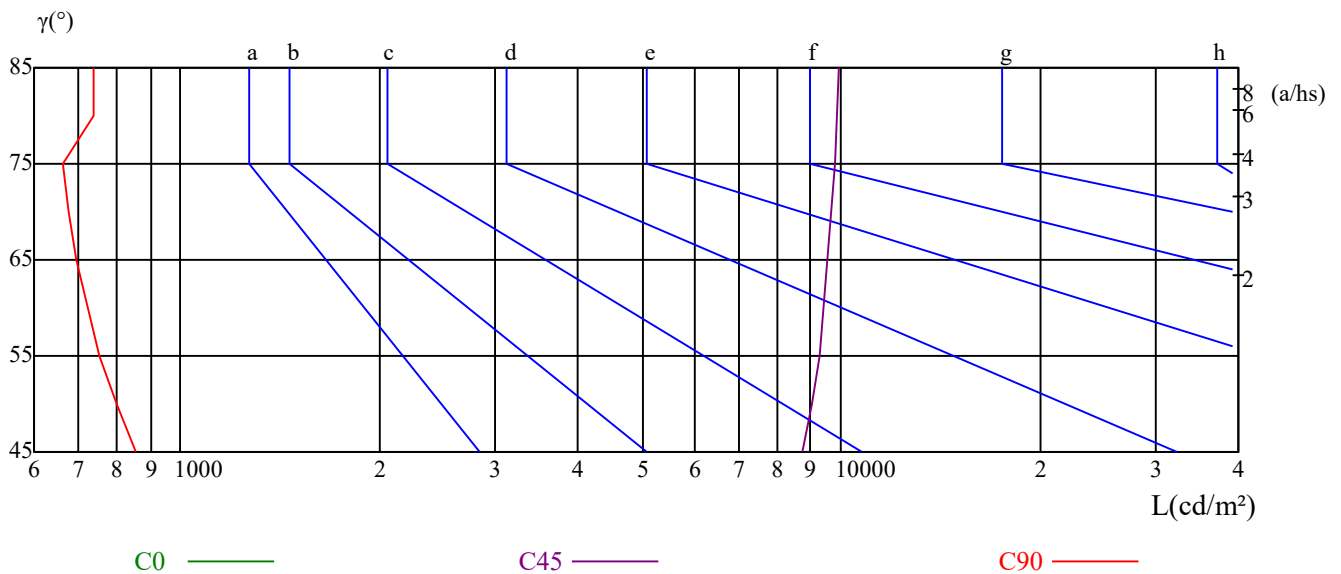
γ	45	50	55	60	65	70	75	80	85
C0	516	500	470	446	428	414	404	414	411
C45	8743	9062	9267	9442	9562	9674	9784	9846	9930
C90	853	798	755	722	696	677	664	739	736

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
26122	11973	582847	42654	19550	1013029	131943	68611	3082195

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	0.85	0.79	0.73	0.78	0.72	0.67	0.65	0.60	0.56	0.52	0.49	0.46	0.41	0.39	0.36	0.31
2	0.71	0.62	0.55	0.65	0.57	0.50	0.53	0.47	0.42	0.42	0.38	0.34	0.33	0.29	0.26	0.21
3	0.60	0.51	0.43	0.55	0.46	0.39	0.45	0.38	0.32	0.36	0.30	0.26	0.27	0.23	0.19	0.15
4	0.52	0.42	0.34	0.47	0.38	0.32	0.39	0.32	0.26	0.31	0.25	0.20	0.23	0.19	0.15	0.11
5	0.46	0.36	0.28	0.41	0.33	0.26	0.34	0.27	0.21	0.27	0.21	0.17	0.20	0.16	0.12	0.09
6	0.40	0.31	0.24	0.37	0.28	0.22	0.30	0.23	0.18	0.24	0.18	0.14	0.18	0.13	0.10	0.07
7	0.36	0.27	0.20	0.33	0.24	0.18	0.27	0.20	0.15	0.21	0.16	0.12	0.16	0.12	0.08	0.05
8	0.32	0.23	0.17	0.29	0.21	0.16	0.24	0.18	0.13	0.19	0.14	0.10	0.14	0.10	0.07	0.04
9	0.29	0.21	0.15	0.27	0.19	0.14	0.22	0.16	0.11	0.17	0.12	0.09	0.13	0.09	0.06	0.04
10	0.27	0.18	0.13	0.24	0.17	0.12	0.20	0.14	0.10	0.16	0.11	0.08	0.12	0.08	0.05	0.03

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	2.76	3.68	4.60	5.52	6.44	7.36	8.28	9.20	9.20
15.0	2.76	3.68	8.28	12.88	19.32	25.76	31.28	37.72	43.24
30.0	2.76	4.60	12.88	25.76	40.48	56.12	71.76	86.48	99.36
45.0	2.76	5.52	18.40	38.64	62.56	87.40	114.08	139.84	163.75
60.0	2.76	4.60	18.40	44.16	74.52	108.56	143.52	179.39	216.19
75.0	1.84	3.68	9.20	21.16	34.04	46.92	59.80	73.60	88.32
90.0	1.84	3.68	4.60	5.52	6.44	6.44	6.44	6.44	6.44
105.0	1.84	3.68	11.96	35.88	67.16	102.12	138.92	178.47	220.79
120.0	1.84	3.68	19.32	42.32	71.76	104.88	138.92	173.87	208.83
135.0	3.68	4.60	15.64	33.12	55.20	79.12	103.04	126.04	149.04
150.0	2.76	3.68	10.12	19.32	41.40	45.08	57.96	69.92	80.96
165.0	2.76	3.68	5.52	8.28	11.96	15.64	19.32	23.00	25.76
180.0	2.76	4.60	6.44	7.36	8.28	9.20	10.12	11.04	11.04
195.0	2.76	7.36	13.80	22.08	30.36	37.72	46.00	51.52	57.04
210.0	2.76	11.04	24.84	42.32	60.72	79.12	96.60	111.32	124.20
225.0	2.76	11.96	34.04	59.80	87.40	116.84	146.28	172.95	199.63
240.0	2.76	8.28	30.36	42.32	53.36	64.40	73.60	82.80	90.16
255.0	1.84	1.84	2.76	5.52	8.28	11.04	13.80	15.64	17.48
270.0	1.84	0.92	0.92	1.84	1.84	1.84	1.84	1.84	1.84
285.0	1.84	8.28	23.92	34.04	44.16	53.36	62.56	71.76	73.60
300.0	1.84	13.80	34.96	46.92	48.76	69.00	79.12	89.24	98.44
315.0	3.68	12.88	30.36	51.52	74.52	97.52	115.92	134.32	151.79
330.0	2.76	10.12	19.32	31.28	44.16	57.04	68.08	78.20	85.56
345.0	2.76	6.44	9.20	12.88	17.48	21.16	24.84	27.60	29.44
360.0	2.76	3.68	4.60	5.52	6.44	7.36	8.28	9.20	9.20
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	9.20	10.12	10.12	10.12	10.12	10.12	10.12	11.04	11.04
15.0	46.92	51.52	54.28	57.96	59.80	62.56	63.48	65.32	66.24
30.0	109.48	118.68	126.04	132.48	137.08	141.68	145.36	148.12	149.96
45.0	185.83	207.91	225.39	242.87	257.59	269.55	279.67	286.11	291.63
60.0	250.23	285.19	320.15	353.27	381.79	409.39	430.55	448.03	459.06
75.0	102.12	115.92	129.72	141.68	150.88	159.15	164.67	167.43	168.35
90.0	7.36	7.36	7.36	7.36	7.36	7.36	7.36	8.28	8.28
105.0	264.03	309.11	351.43	390.07	425.03	458.14	482.06	503.22	517.02
120.0	243.79	275.07	307.27	337.63	364.31	388.23	409.39	425.03	436.07
135.0	169.27	188.59	206.07	219.87	230.91	241.03	249.31	254.83	258.51
150.0	90.16	97.52	103.96	108.56	113.16	116.84	119.60	122.36	123.28
165.0	28.52	30.36	33.12	34.96	36.80	37.72	39.56	40.48	41.40
180.0	11.96	11.96	11.96	11.96	11.96	11.96	11.96	11.96	11.96
195.0	60.72	64.40	67.16	69.00	71.76	72.68	73.60	74.52	73.60
210.0	135.24	144.44	151.79	158.23	161.91	164.67	167.43	168.35	168.35
225.0	223.55	245.63	264.95	282.43	296.23	307.27	315.55	319.23	321.07
240.0	96.60	105.80	119.60	134.32	146.28	157.31	164.67	171.11	174.79
255.0	20.24	23.00	27.60	31.28	34.04	36.80	39.56	40.48	42.32
270.0	1.84	1.84	2.76	2.76	2.76	2.76	2.76	2.76	3.68
285.0	89.24	100.28	110.40	115.92	121.44	128.80	135.24	139.84	143.52
300.0	109.48	124.20	138.00	151.79	162.83	172.03	179.39	183.99	185.83
315.0	167.43	180.31	189.51	195.95	200.55	203.31	204.23	204.23	203.31
330.0	91.08	95.68	99.36	102.12	104.88	106.72	107.64	108.56	108.56
345.0	31.28	33.12	34.04	34.96	35.88	36.80	36.80	36.80	36.80
360.0	9.20	10.12	10.12	10.12	10.12	10.12	10.12	11.04	11.04

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	11.04	11.04	11.04	10.12	10.12	10.12	10.12	10.12	9.20
15.0	66.24	66.24	66.24	65.32	63.48	61.64	58.88	56.12	52.44
30.0	150.88	150.88	149.96	148.12	146.28	141.68	136.16	129.72	121.44
45.0	294.39	294.39	291.63	286.11	279.67	267.71	252.99	233.67	213.43
60.0	464.58	463.66	457.22	445.27	428.71	402.03	371.67	336.71	298.07
75.0	167.43	162.83	158.23	149.04	138.92	127.88	115.92	102.12	88.32
90.0	8.28	7.36	7.36	7.36	7.36	7.36	7.36	6.44	6.44
105.0	524.38	522.54	512.42	494.94	471.94	443.43	407.55	367.07	322.91
120.0	440.67	440.67	434.23	423.19	407.55	385.47	356.03	323.83	288.87
135.0	261.27	262.19	261.27	257.59	252.07	242.87	230.91	214.35	197.79
150.0	125.12	125.12	124.20	123.28	121.44	118.68	115.00	109.48	103.96
165.0	41.40	41.40	41.40	41.40	40.48	39.56	38.64	36.80	34.96
180.0	11.96	11.04	11.04	11.04	10.12	10.12	9.20	9.20	8.28
195.0	73.60	72.68	70.84	69.00	67.16	64.40	60.72	55.20	50.60
210.0	167.43	165.59	161.91	158.23	153.63	147.20	138.00	126.96	115.92
225.0	320.15	315.55	308.19	297.15	283.35	264.03	258.51	217.11	192.27
240.0	172.03	168.35	165.59	150.88	137.08	120.52	101.20	82.80	72.68
255.0	42.32	41.40	40.48	37.72	34.96	31.28	26.68	22.08	19.32
270.0	3.68	3.68	2.76	2.76	2.76	2.76	1.84	1.84	0.92
285.0	142.60	138.00	129.72	120.52	107.64	92.00	76.36	63.48	56.12
300.0	183.99	179.39	170.19	159.15	145.36	129.72	112.24	95.68	80.04
315.0	200.55	195.95	191.35	184.91	177.55	166.51	153.63	138.92	124.20
330.0	108.56	106.72	104.88	101.20	97.52	92.92	87.40	80.04	73.60
345.0	35.88	34.96	34.04	33.12	31.28	29.44	27.60	24.84	22.08
360.0	11.04	11.04	11.04	10.12	10.12	10.12	10.12	10.12	9.20
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	9.20	8.28	7.36	7.36	6.44	5.52	3.68	2.76	0.92
15.0	47.84	43.24	38.64	32.20	25.76	18.40	11.04	4.60	0.92
30.0	112.24	101.20	87.40	71.76	56.12	38.64	23.00	9.20	0.92
45.0	190.43	165.59	138.92	113.16	85.56	58.88	33.12	10.12	0.92
60.0	263.11	220.79	183.99	145.36	108.56	72.68	40.48	12.88	0.92
75.0	75.44	62.56	50.60	38.64	27.60	17.48	8.28	1.84	0.92
90.0	6.44	5.52	5.52	4.60	3.68	2.76	1.84	0.92	0.00
105.0	276.91	233.67	192.27	150.88	108.56	73.60	39.56	11.96	0.92
120.0	252.99	217.11	182.15	142.60	107.64	74.52	40.48	14.72	0.92
135.0	178.47	156.39	132.48	106.72	82.80	57.04	34.04	12.88	0.92
150.0	95.68	86.48	76.36	63.48	49.68	34.96	22.08	9.20	0.92
165.0	33.12	30.36	26.68	23.00	19.32	14.72	10.12	5.52	0.92
180.0	7.36	6.44	5.52	4.60	3.68	2.76	1.84	1.84	0.00
195.0	46.00	39.56	33.12	26.68	19.32	17.48	6.44	1.84	0.00
210.0	102.12	98.44	72.68	57.04	40.48	25.76	11.96	1.84	0.00
225.0	165.59	138.92	112.24	86.48	60.72	36.80	15.64	1.84	0.00
240.0	63.48	54.28	45.08	35.88	27.60	20.24	11.96	0.00	0.00
255.0	16.56	14.72	11.96	10.12	8.28	5.52	3.68	0.00	0.00
270.0	0.92	0.92	0.92	0.92	0.92	0.92	0.00	0.00	0.00
285.0	49.68	43.24	35.88	28.52	21.16	13.80	6.44	0.00	0.00
300.0	67.16	55.20	44.16	34.04	23.92	15.64	7.36	0.00	0.00
315.0	106.72	89.24	70.84	52.44	34.04	18.40	5.52	0.92	0.00
330.0	66.24	57.04	46.00	35.88	24.84	14.72	5.52	0.92	0.00
345.0	19.32	16.56	13.80	10.12	7.36	4.60	2.76	0.92	0.00
360.0	9.20	8.28	7.36	7.36	6.44	5.52	3.68	2.76	0.92

Intensity data(cd)

Appendix Page: 12 Total:12

C/ $\gamma(^{\circ})$	180.0
0.0	0.00
15.0	0.00
30.0	0.00
45.0	0.00
60.0	0.00
75.0	0.00
90.0	0.00
105.0	0.00
120.0	0.00
135.0	0.00
150.0	0.00
165.0	0.00
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	0.00