
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): 1470.0

Power (W): 23.190

Number of Lamps: 1

PF: 0.992

Length(mm): 50

Width(mm): 20

Phm Type: C

Height(mm): 560

Photometric Results

Lumens(lm): 1469.99, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 63.39

Central intensity(cd): 1.840, Maximum intensity(cd): 440.205

Angle of maximum intensity: C=60.0 γ =90.0

Beam Angle(50%Imax): [C0/180]Total=300.0

[C90/270]Total=150.0

Field angle(10%Imax): [C0/180]Total=346.4

[C90/270]Total=332.0

Maximum s/h(1/2): C0_180=4.14 C90_270=120.00

Maximum s/h(1/4): C0_180=3.84 C90_270=3.30

Up flux rate of lamp(%): 48.45%

Down flux rate of lamp(%): 51.55%

Up flux rate of LUM(%): 48.45%

Down flux rate of LUM(%): 51.55%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 18.738%

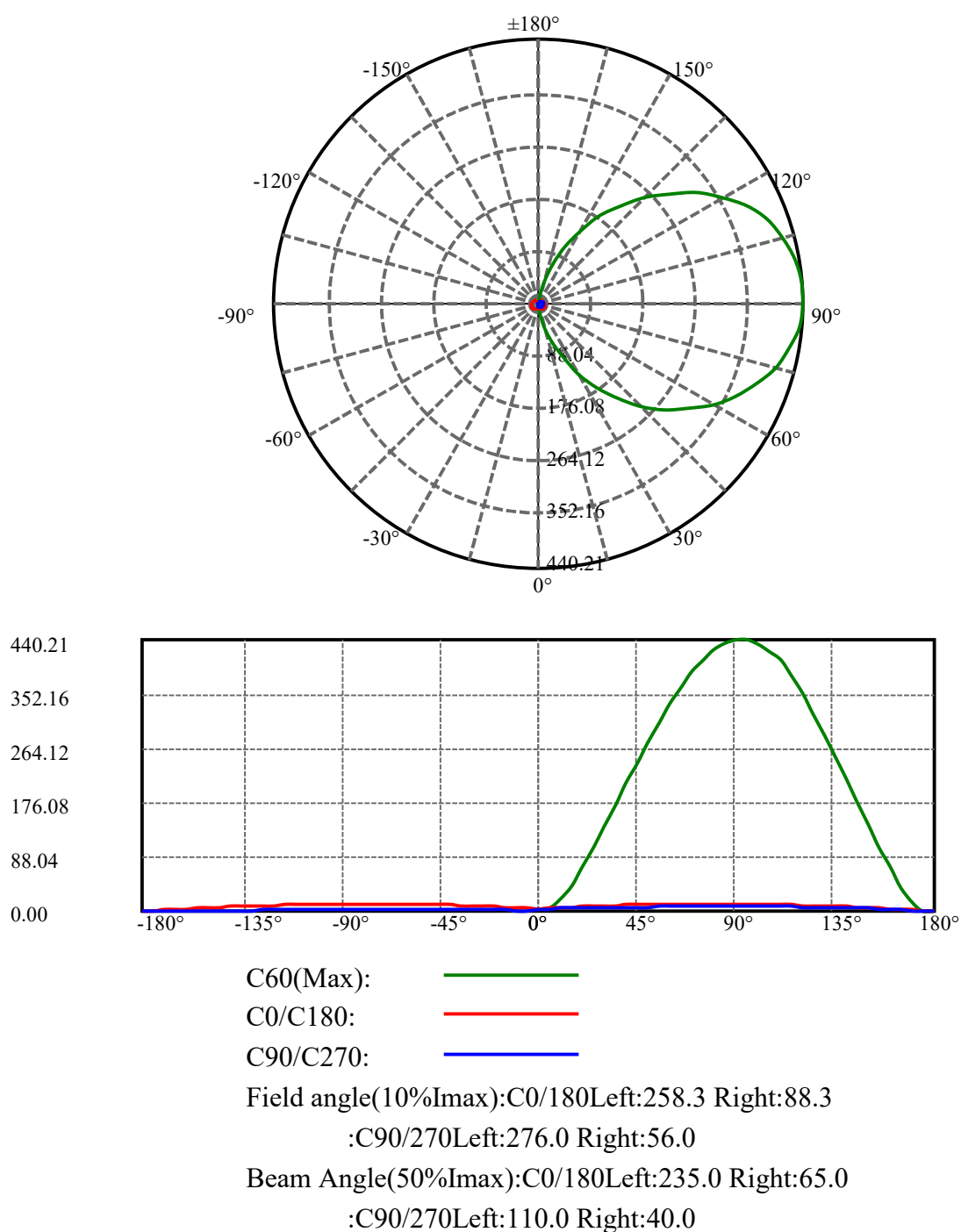
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2.300	0.000	0	0.00%	0.00%
5.0	5.903	0.098	0.098	0.01%	0.01%
10.0	14.911	0.745	0.843	0.05%	0.06%
15.0	26.411	2.451	3.294	0.17%	0.22%
20.0	39.367	5.421	8.715	0.37%	0.59%
25.0	52.860	9.673	18.388	0.66%	1.25%
30.0	66.008	15.043	33.431	1.02%	2.27%
35.0	79.002	21.354	54.784	1.45%	3.73%
40.0	91.345	28.421	83.206	1.93%	5.66%
45.0	103.113	36.006	119.211	2.45%	8.11%
50.0	114.613	43.995	163.206	2.99%	11.10%
55.0	125.231	52.150	215.356	3.55%	14.65%
60.0	134.737	60.091	275.447	4.09%	18.74%
65.0	142.940	67.504	342.951	4.59%	23.33%
70.0	150.032	74.182	417.133	5.05%	28.38%
75.0	155.552	79.875	497.008	5.43%	33.81%
80.0	159.615	84.330	581.337	5.74%	39.55%
85.0	162.183	87.440	668.777	5.95%	45.50%
90.0	162.681	88.950	757.728	6.05%	51.55%
95.0	161.263	88.698	846.426	6.03%	57.58%
100.0	158.273	86.826	933.252	5.91%	63.49%
105.0	153.022	83.294	1016.546	5.67%	69.15%
110.0	146.582	78.312	1094.857	5.33%	74.48%
115.0	137.727	71.989	1166.846	4.90%	79.38%
120.0	127.646	64.513	1231.359	4.39%	83.77%
125.0	115.150	56.121	1287.48	3.82%	87.58%
130.0	103.382	47.516	1334.996	3.23%	90.82%
135.0	91.230	39.324	1374.32	2.68%	93.49%
140.0	78.849	31.492	1405.812	2.14%	95.63%
145.0	65.509	24.085	1429.897	1.64%	97.27%
150.0	51.978	17.301	1447.198	1.18%	98.45%
155.0	38.447	11.443	1458.641	0.78%	99.23%
160.0	26.066	6.766	1465.408	0.46%	99.69%
165.0	14.068	3.308	1468.715	0.23%	99.91%
170.0	4.408	1.096	1469.811	0.07%	99.99%
175.0	0.422	0.173	1469.984	0.01%	100.00%
180.0	0.000	0.005	1469.989	0.00%	100.00%

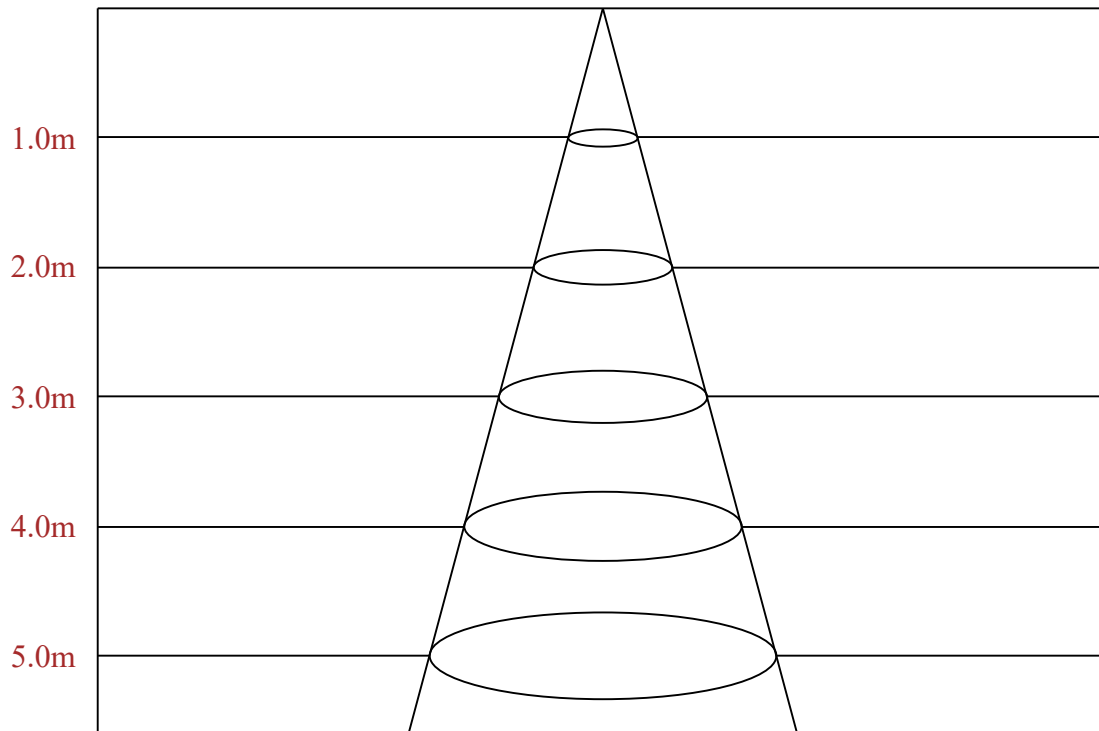
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	33.43	2.27%	2.27%
0-40	83.21	5.66%	5.66%
0-60	275.45	18.74%	18.74%
0-90	757.73	51.55%	51.55%
0-120	1231.36	83.77%	83.77%
0-180	1469.99	100.00%	100.00%
60-90	482.28	32.81%	32.81%
90-120	473.63	32.22%	32.22%
90-130	577.27	39.27%	39.27%
90-150	689.47	46.90%	46.90%
90-180	712.26	48.45%	48.45%
0-115.71	1175.99	80.00%	80.00%

ZONAL LUMEN SUMMARY

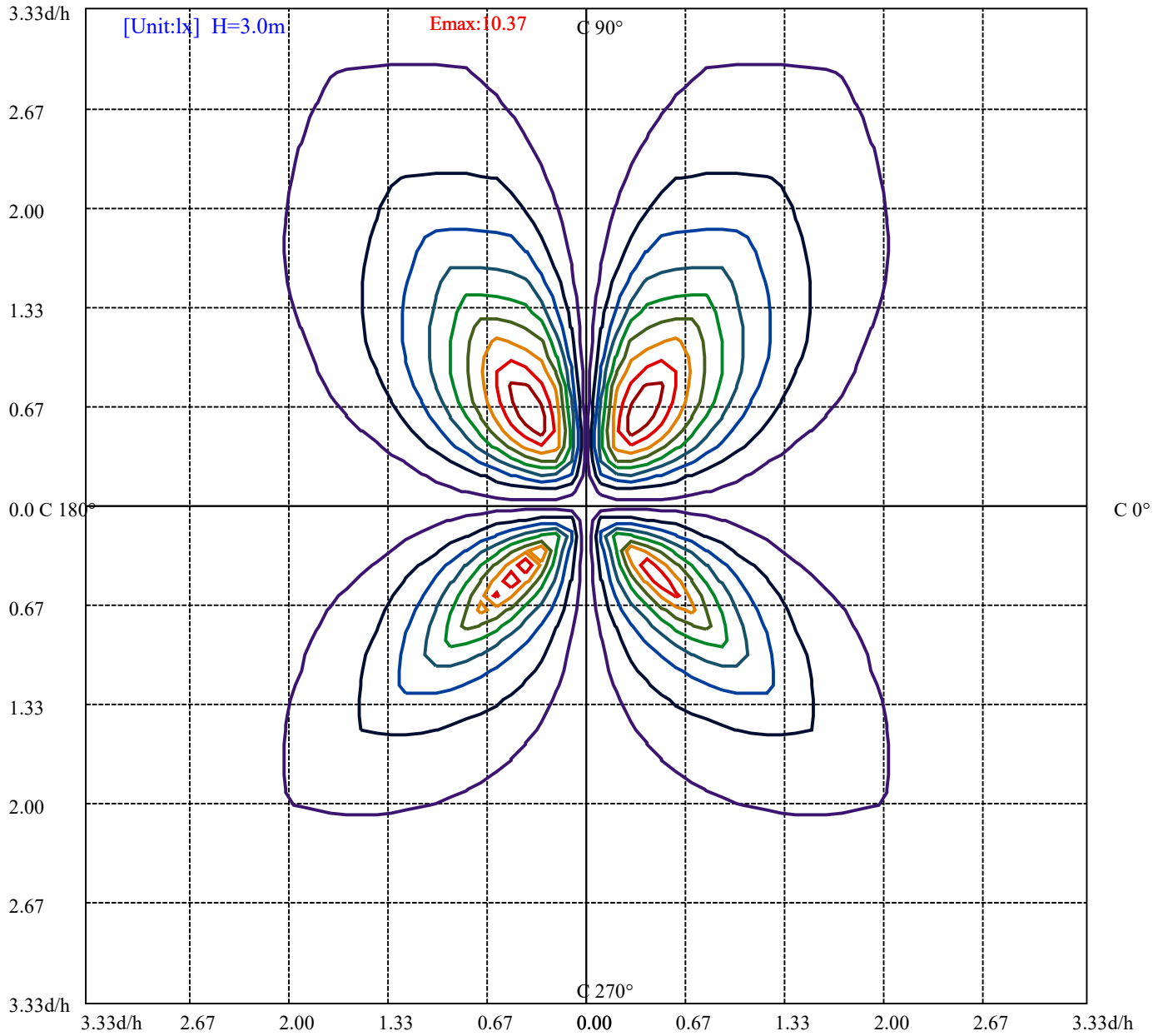
0-10	0.84
10-20	7.87
20-30	24.72
30-40	49.77
40-50	80.00
50-60	112.24
60-70	141.69
70-80	164.20
80-90	176.39
90-100	175.52
100-110	161.61
110-120	136.50
120-130	103.64
130-140	70.82
140-150	41.39
150-160	18.21
160-170	4.40
170-180	0.17



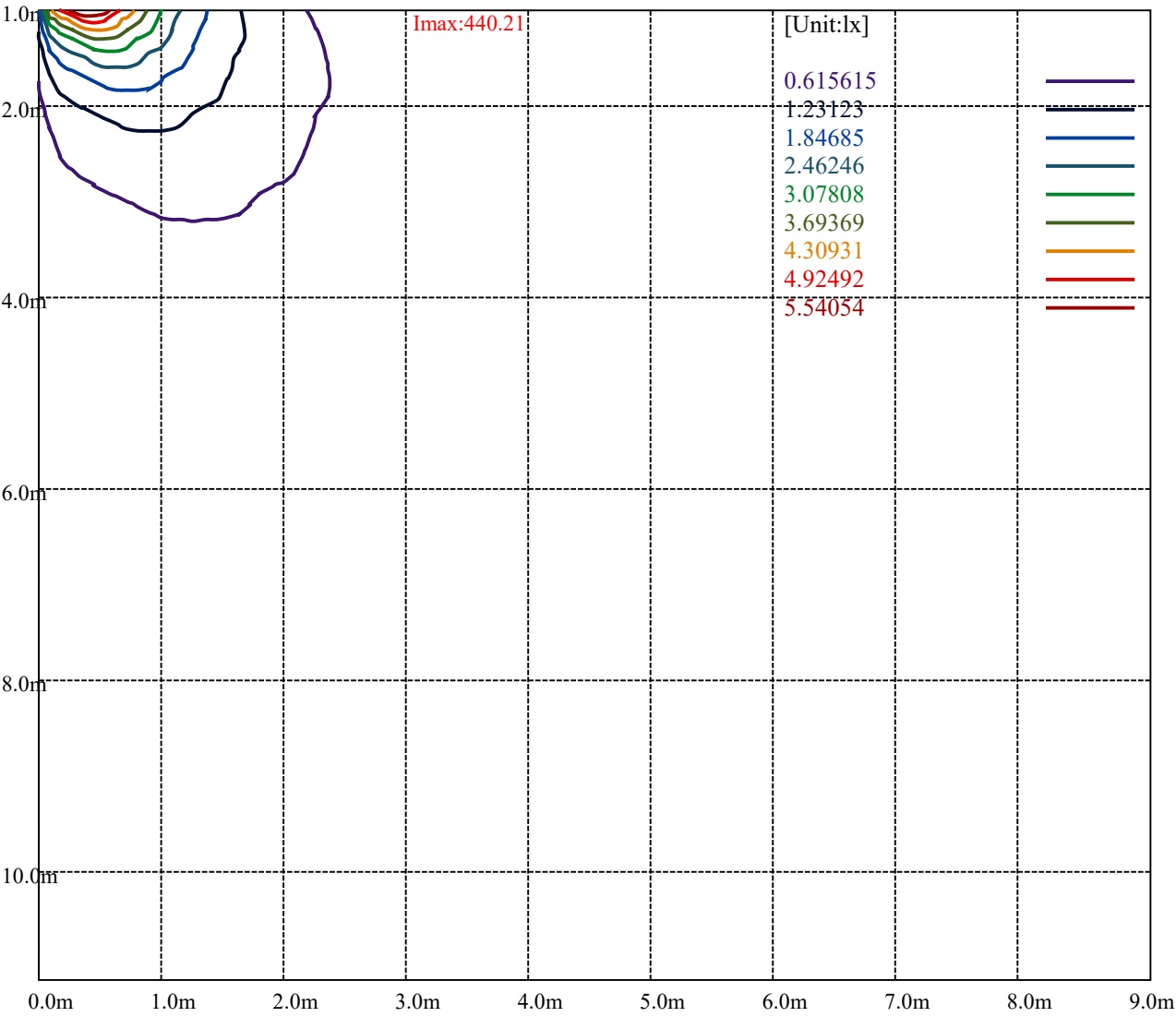


Max , Ave

Beam angle of C60 plane 340.50



(10%Emax)	1.036679	—
(20%Emax)	2.073356	—
(30%Emax)	3.110033	—
(40%Emax)	4.146711	—
(50%Emax)	5.183389	—
(60%Emax)	6.220067	—
(70%Emax)	7.256755	—
(80%Emax)	8.293433	—
(90%Emax)	9.330112	—



Luminance Table

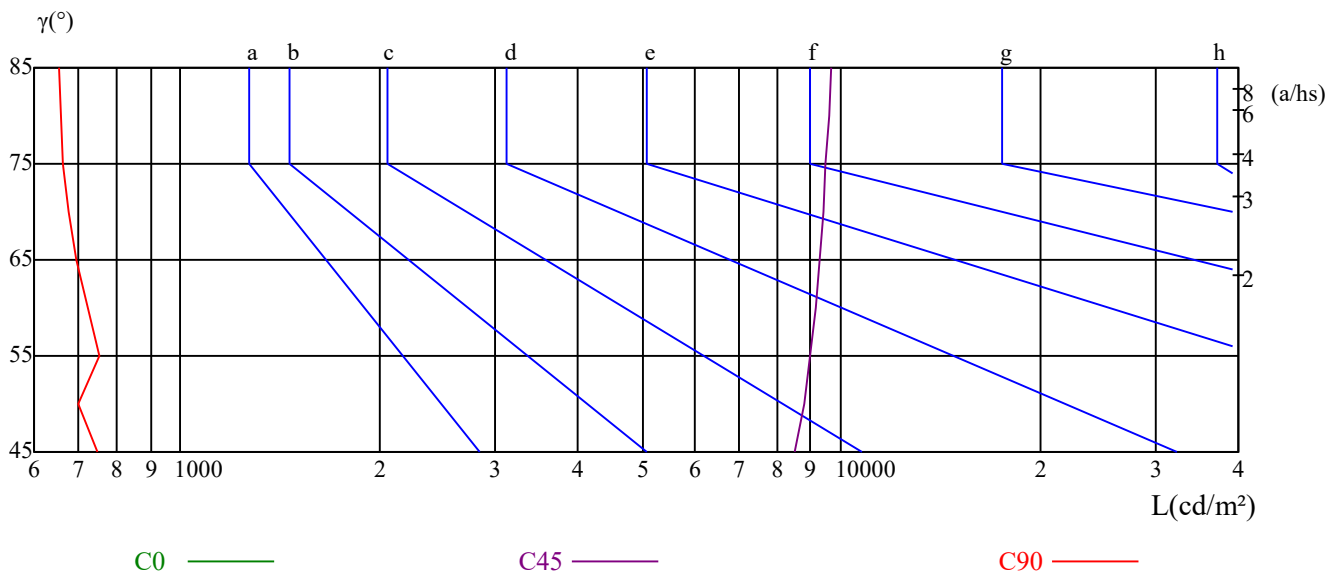
γ	45	50	55	60	65	70	75	80	85
C0	493	458	470	446	428	414	404	398	395
C45	8517	8789	8991	9179	9292	9413	9495	9578	9648
C90	746	698	755	722	696	677	664	657	655

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	566521	42654	19550	983705	126666	58055	2997751

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	1.84	3.68	4.60	5.52	6.44	7.36	8.28	8.28	9.20
15.0	2.76	3.68	7.36	12.88	18.40	24.84	30.36	36.80	41.40
30.0	1.84	4.60	12.88	24.84	39.56	55.20	69.92	83.72	96.60
45.0	2.76	4.60	17.48	37.72	61.64	84.64	110.40	135.24	159.15
60.0	2.76	4.60	18.40	43.24	72.68	104.88	138.92	173.87	209.75
75.0	1.84	3.68	8.28	21.16	33.12	46.00	57.96	71.76	85.56
90.0	1.84	3.68	4.60	5.52	6.44	6.44	6.44	6.44	6.44
105.0	1.84	2.76	11.04	34.96	65.32	99.36	134.32	172.95	214.35
120.0	1.84	3.68	18.40	41.40	69.92	102.12	135.24	169.27	203.31
135.0	2.76	4.60	15.64	32.20	54.28	77.28	100.28	123.28	144.44
150.0	2.76	3.68	10.12	19.32	40.48	43.24	56.12	68.08	79.12
165.0	2.76	3.68	5.52	8.28	11.04	14.72	18.40	22.08	25.76
180.0	1.84	4.60	5.52	6.44	8.28	9.20	10.12	10.12	11.04
195.0	2.76	7.36	13.80	21.16	29.44	36.80	44.16	50.60	55.20
210.0	1.84	11.04	23.92	41.40	58.88	77.28	93.84	108.56	121.44
225.0	2.76	11.96	33.12	57.96	84.64	114.08	141.68	168.35	194.11
240.0	2.76	8.28	29.44	41.40	51.52	62.56	71.76	80.04	88.32
255.0	1.84	1.84	2.76	5.52	8.28	11.04	12.88	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	23.00	33.12	42.32	52.44	60.72	69.92	71.76
300.0	1.84	12.88	34.04	45.08	47.84	67.16	77.28	86.48	95.68
315.0	2.76	11.96	29.44	49.68	72.68	94.76	113.16	130.64	148.12
330.0	2.76	9.20	18.40	30.36	43.24	55.20	66.24	75.44	83.72
345.0	2.76	6.44	9.20	12.88	16.56	20.24	23.92	26.68	28.52
360.0	1.84	3.68	4.60	5.52	6.44	7.36	8.28	8.28	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	9.20	10.12	10.12	10.12	10.12	10.12	10.12	10.12
15.0	46.00	49.68	53.36	56.12	58.88	60.72	61.64	63.48	64.40
30.0	106.72	115.92	122.36	128.80	133.40	138.00	141.68	143.52	146.28
45.0	181.23	201.47	218.95	236.43	250.23	262.19	271.39	278.75	283.35
60.0	243.79	277.83	311.87	343.15	371.67	397.43	418.59	435.15	446.19
75.0	99.36	113.16	126.04	138.00	147.20	154.55	160.07	162.83	163.75
90.0	6.44	6.44	7.36	7.36	7.36	7.36	7.36	7.36	7.36
105.0	256.67	300.83	342.23	379.03	413.07	445.27	468.26	488.50	502.30
120.0	236.43	267.71	298.99	327.51	354.19	378.11	398.35	413.07	424.11
135.0	164.67	183.07	199.63	213.43	224.47	234.59	241.95	247.47	251.15
150.0	87.40	94.76	100.28	105.80	109.48	113.16	116.84	118.68	120.52
165.0	27.60	30.36	32.20	34.04	35.88	36.80	37.72	39.56	39.56
180.0	11.04	11.04	11.96	11.96	11.96	11.96	11.96	11.96	11.96
195.0	59.80	62.56	65.32	67.16	69.92	70.84	71.76	71.76	71.76
210.0	131.56	140.76	148.12	153.63	157.31	160.07	162.83	163.75	163.75
225.0	217.11	239.19	257.59	274.15	287.95	298.07	306.35	310.95	312.79
240.0	93.84	102.12	115.92	130.64	142.60	152.71	160.07	166.51	169.27
255.0	19.32	23.00	26.68	30.36	33.12	35.88	37.72	39.56	41.40
270.0	1.84	1.84	1.84	2.76	2.76	2.76	2.76	2.76	2.76
285.0	86.48	97.52	106.72	112.24	117.76	125.12	131.56	135.24	139.84
300.0	105.80	121.44	134.32	147.20	159.15	167.43	174.79	179.39	180.31
315.0	162.83	175.71	183.99	190.43	195.03	197.79	198.71	198.71	197.79
330.0	89.24	92.92	96.60	99.36	102.12	103.96	104.88	105.80	105.80
345.0	30.36	32.20	33.12	34.04	34.96	35.88	35.88	35.88	35.88
360.0	9.20	9.20	10.12	10.12	10.12	10.12	10.12	10.12	10.12

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	10.12	10.12	10.12	10.12	10.12	10.12	9.20	9.20	9.20
15.0	64.40	64.40	64.40	63.48	61.64	59.80	57.04	54.28	50.60
30.0	147.20	147.20	146.28	144.44	141.68	138.00	132.48	126.04	118.68
45.0	286.11	286.11	283.35	277.83	271.39	260.35	245.63	226.31	206.99
60.0	451.71	450.79	444.35	432.39	416.75	390.99	360.63	326.59	289.79
75.0	162.83	158.23	153.63	145.36	135.24	124.20	112.24	99.36	85.56
90.0	7.36	7.36	7.36	7.36	7.36	7.36	6.44	6.44	6.44
105.0	509.66	507.82	498.62	481.14	459.06	431.47	396.51	356.95	314.63
120.0	428.71	428.71	422.27	411.23	396.51	375.35	345.91	314.63	281.51
135.0	253.91	254.83	253.91	250.23	244.71	236.43	224.47	208.83	192.27
150.0	121.44	121.44	121.44	119.60	118.68	115.92	112.24	106.72	100.28
165.0	40.48	40.48	40.48	40.48	39.56	38.64	37.72	35.88	34.04
180.0	11.04	11.04	11.04	11.04	10.12	9.20	9.20	8.28	7.36
195.0	71.76	70.84	69.00	67.16	65.32	62.56	58.88	54.28	49.68
210.0	162.83	160.99	157.31	154.55	149.96	142.60	133.40	123.28	112.24
225.0	310.95	306.35	299.91	288.87	275.99	256.67	251.15	210.67	186.75
240.0	167.43	163.75	160.99	146.28	133.40	116.84	98.44	80.96	70.84
255.0	41.40	40.48	39.56	36.80	34.04	30.36	25.76	21.16	18.40
270.0	2.76	2.76	2.76	2.76	2.76	2.76	1.84	1.84	0.92
285.0	138.00	134.32	126.04	116.84	104.88	89.24	74.52	61.64	54.28
300.0	179.39	173.87	164.67	154.55	141.68	126.04	109.48	92.92	77.28
315.0	195.03	190.43	185.83	179.39	172.03	161.91	149.04	135.24	120.52
330.0	104.88	103.96	102.12	98.44	94.76	90.16	84.64	78.20	71.76
345.0	34.96	34.04	33.12	32.20	30.36	28.52	26.68	23.92	21.16
360.0	10.12	10.12	10.12	10.12	10.12	10.12	9.20	9.20	9.20
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	8.28	8.28	7.36	6.44	5.52	4.60	3.68	2.76	0.92
15.0	46.92	42.32	36.80	31.28	24.84	17.48	11.04	4.60	0.92
30.0	108.56	98.44	85.56	69.92	54.28	37.72	23.00	9.20	0.92
45.0	184.91	160.99	135.24	109.48	83.72	57.04	32.20	10.12	0.92
60.0	255.75	214.35	178.47	141.68	104.88	69.92	39.56	11.96	0.92
75.0	73.60	60.72	48.76	37.72	26.68	17.48	8.28	1.84	0.92
90.0	5.52	5.52	5.52	4.60	3.68	2.76	1.84	0.92	0.00
105.0	269.55	227.23	186.75	146.28	105.80	71.76	38.64	11.96	0.92
120.0	245.63	210.67	176.63	138.92	103.96	72.68	39.56	14.72	0.92
135.0	172.95	151.79	128.80	103.96	80.04	56.12	33.12	12.88	0.92
150.0	93.84	84.64	74.52	61.64	47.84	34.04	21.16	9.20	0.92
165.0	32.20	29.44	26.68	23.00	18.40	13.80	9.20	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	44.16	38.64	32.20	25.76	18.40	16.56	6.44	1.84	0.00
210.0	99.36	95.68	70.84	55.20	39.56	24.84	11.96	1.84	0.00
225.0	160.99	135.24	109.48	84.64	58.88	35.88	14.72	1.84	0.00
240.0	61.64	52.44	44.16	34.96	26.68	19.32	11.96	0.00	0.00
255.0	16.56	14.72	11.96	10.12	7.36	5.52	2.76	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	47.84	41.40	34.96	27.60	20.24	12.88	5.52	0.00	0.00
300.0	65.32	53.36	43.24	33.12	23.00	15.64	7.36	0.00	0.00
315.0	103.96	87.40	69.00	50.60	33.12	17.48	5.52	0.92	0.00
330.0	64.40	55.20	45.08	34.96	23.92	13.80	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	8.28	8.28	7.36	6.44	5.52	4.60	3.68	2.76	0.92

Intensity data(cd)

Appendix Page: 12 Total:12

C/γ(°)	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