



SGSO

Address: LIT by CARDI

Client:

LumCAT: 0017440224 KAI 6.6W 3000K 800lm

Luminaire:

Report No:

Voltage(V): 230.4600

Test No: KYZ-A251030009-05-002

Current(A): 0.0359

LampCAT: LED

Power (W): 6.6000

Lamp flux(lm): -1.0

PF: 0.5271

Number of Lamps: 1

Ballast type:

Length(mm): -80

Width(mm): -80

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 800.00

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 121.21

Central intensity(cd): 360.240

Maximum intensity(cd): 390.359

Angle of maximum intensity: C=225.0 γ =10.0

Beam Angle(50%Imax): [C0/180]Total=84.9

[C90/270]Total=85.8

Field angle(10%Imax): [C0/180]Total=146.7

[C90/270]Total=144.6

Maximum s/h(1/2): C0_180=1.23 C90_270=1.22

Maximum s/h(1/4): C0_180=1.22 C90_270=1.22

Up flux rate of lamp(%): 1.22%

Down flux rate of lamp(%): 98.78%

Up flux rate of LUM(%): 1.22%

Down flux rate of LUM(%): 98.78%

CIE Type : Direct lighting

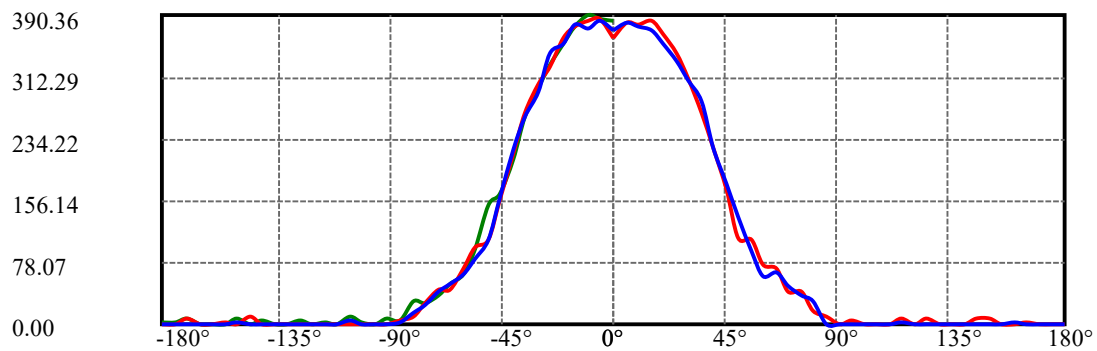
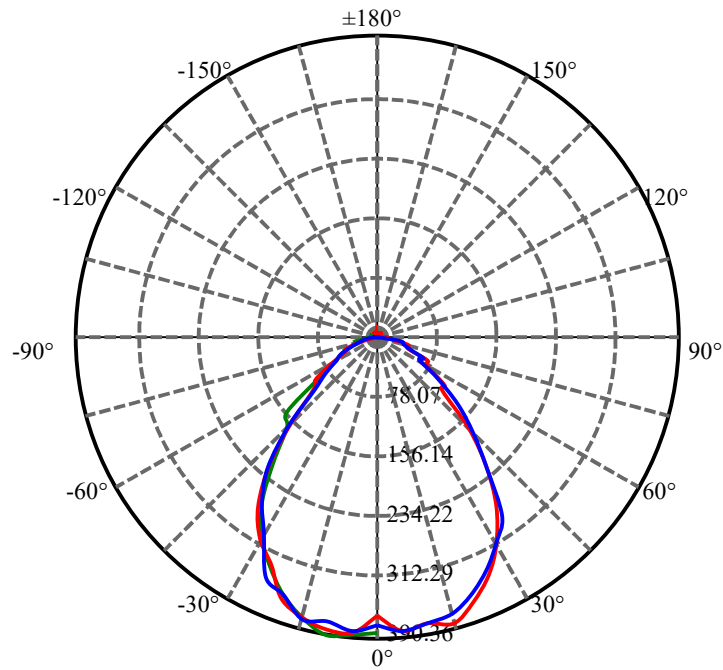
Output flux ratio in π solid angle : 85.987%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	401.597	0.000	0	.000%	.000%
5.0	411.349	9.034	9.034	.000%	1.129%
10.0	406.446	27.195	36.229	.000%	4.529%
15.0	405.647	44.781	81.01	.000%	10.126%
20.0	387.049	60.729	141.739	.000%	17.717%
25.0	362.588	73.087	214.826	.000%	26.853%
30.0	329.175	81.379	296.205	.000%	37.026%
35.0	290.007	84.758	380.963	.000%	47.621%
40.0	239.541	82.130	463.093	.000%	57.887%
45.0	185.611	73.177	536.27	.000%	67.034%
50.0	140.953	61.340	597.61	.000%	74.702%
55.0	108.286	50.377	647.987	.000%	80.999%
60.0	77.431	39.905	687.892	.000%	85.987%
65.0	61.924	31.492	719.384	.000%	89.923%
70.0	47.695	25.802	745.186	.000%	93.149%
75.0	36.717	20.510	765.696	.000%	95.712%
80.0	23.235	14.912	780.608	.000%	97.576%
85.0	6.555	7.525	788.132	.000%	98.517%
90.0	1.705	2.102	790.235	.000%	98.780%
95.0	1.386	0.787	791.022	.000%	98.878%
100.0	0.267	0.417	791.439	.000%	98.930%
105.0	2.505	0.689	792.128	.000%	99.016%
110.0	0.426	0.712	792.84	.000%	99.105%
115.0	1.865	0.539	793.38	.000%	99.173%
120.0	1.119	0.674	794.054	.000%	99.257%
125.0	2.398	0.756	794.81	.000%	99.352%
130.0	0.107	0.506	795.316	.000%	99.415%
135.0	2.718	0.531	795.847	.000%	99.481%
140.0	2.292	0.862	796.709	.000%	99.589%
145.0	3.464	0.893	797.602	.000%	99.701%
150.0	3.038	0.890	798.491	.000%	99.812%
155.0	3.091	0.721	799.212	.000%	99.902%
160.0	0.693	0.369	799.581	.000%	99.948%
165.0	0.746	0.110	799.692	.000%	99.962%
170.0	2.505	0.179	799.871	.000%	99.984%
175.0	0.320	0.094	799.965	.000%	99.996%
180.0	2.558	0.032	799.997	.000%	100.000%

ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	296.20	N.A.	37.03%
0-40	463.09	N.A.	57.89%
0-60	687.89	N.A.	85.99%
0-90	790.23	N.A.	98.78%
0-120	794.05	N.A.	99.26%
0-180	800.00	N.A.	100.00%
60-90	142.25	N.A.	17.78%
90-120	5.92	N.A.	0.74%
90-130	7.18	N.A.	0.90%
90-150	10.36	N.A.	1.29%
90-180	11.83	N.A.	1.48%
0-54.21	640.00	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	36.23
10-20	105.51
20-30	154.47
30-40	166.89
40-50	134.52
50-60	90.28
60-70	57.29
70-80	35.42
80-90	9.63
90-100	1.20
100-110	1.40
110-120	1.21
120-130	1.26
130-140	1.39
140-150	1.78
150-160	1.09
160-170	0.29
170-180	0.09



C225(Max): ————

C0/C180: ————

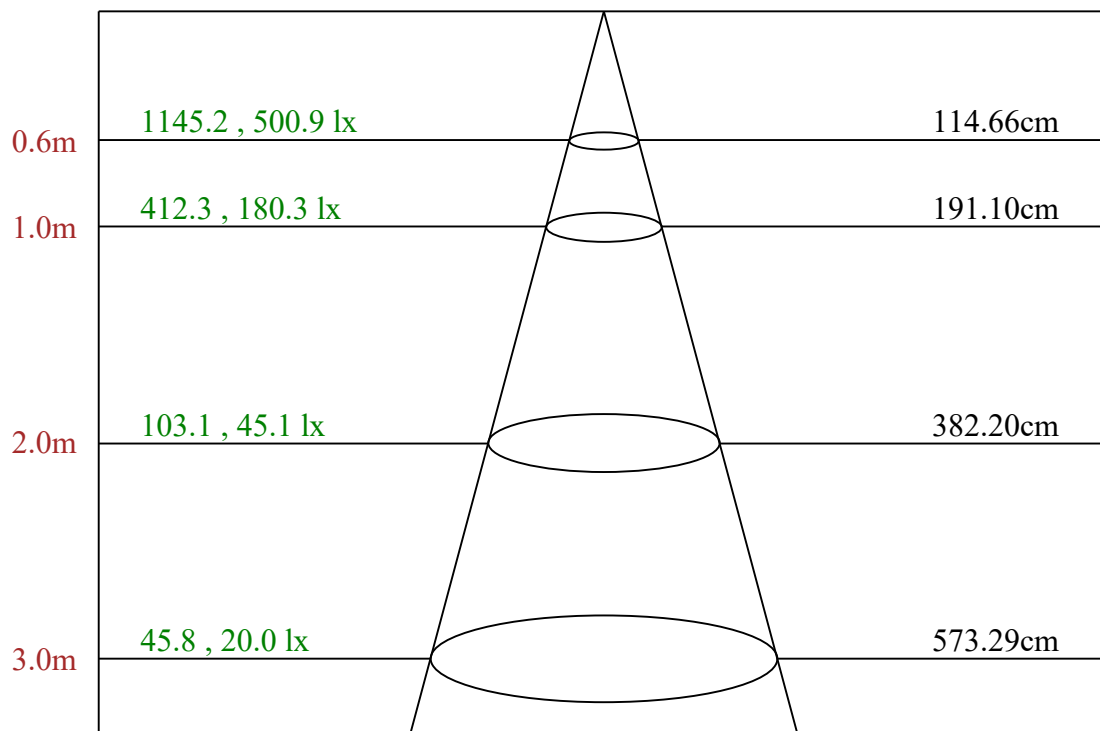
C90/C270: ————

Field angle(10%Imax):C0/180Left:66.4 Right:80.3

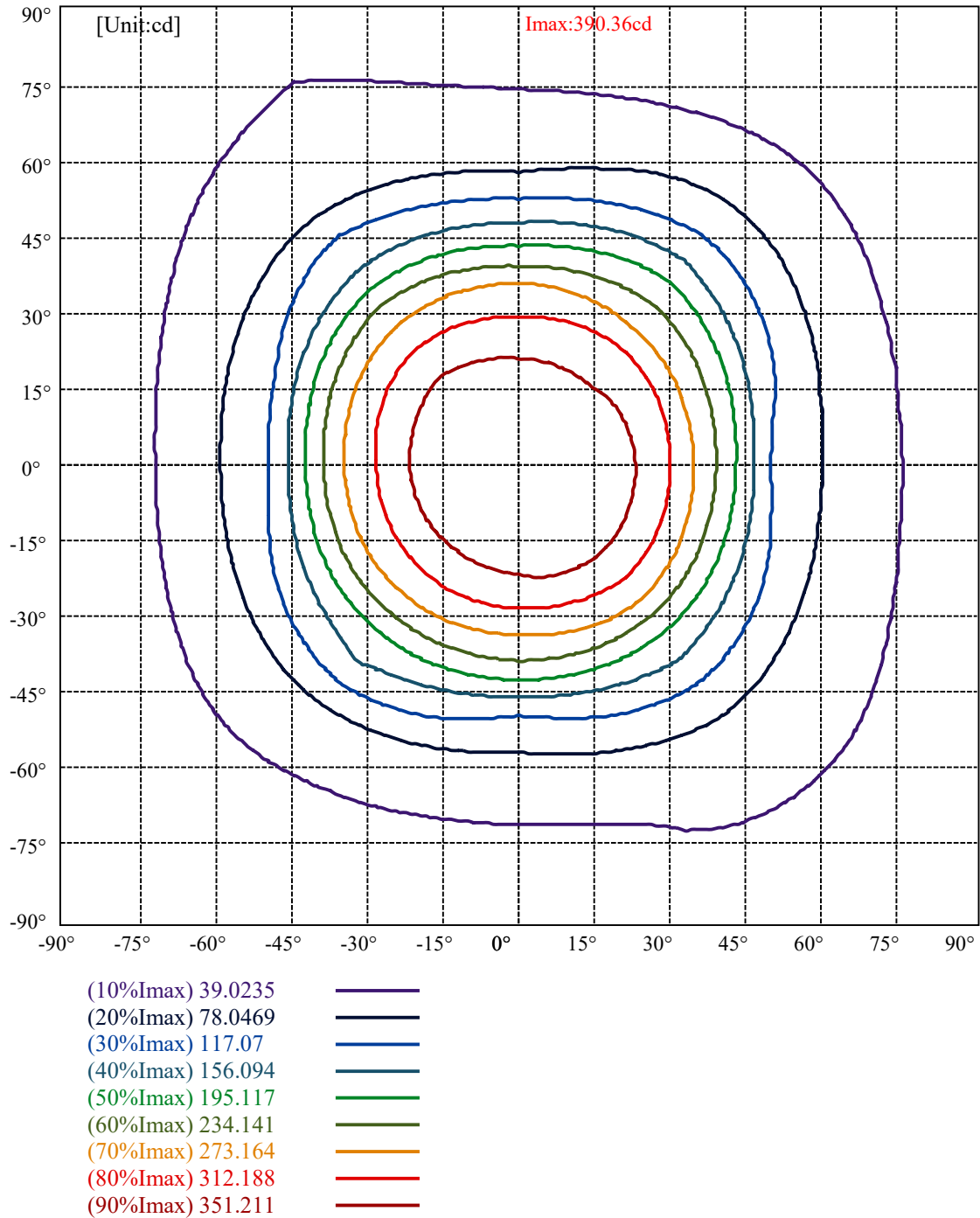
:C90/270Left:65.7 Right:78.9

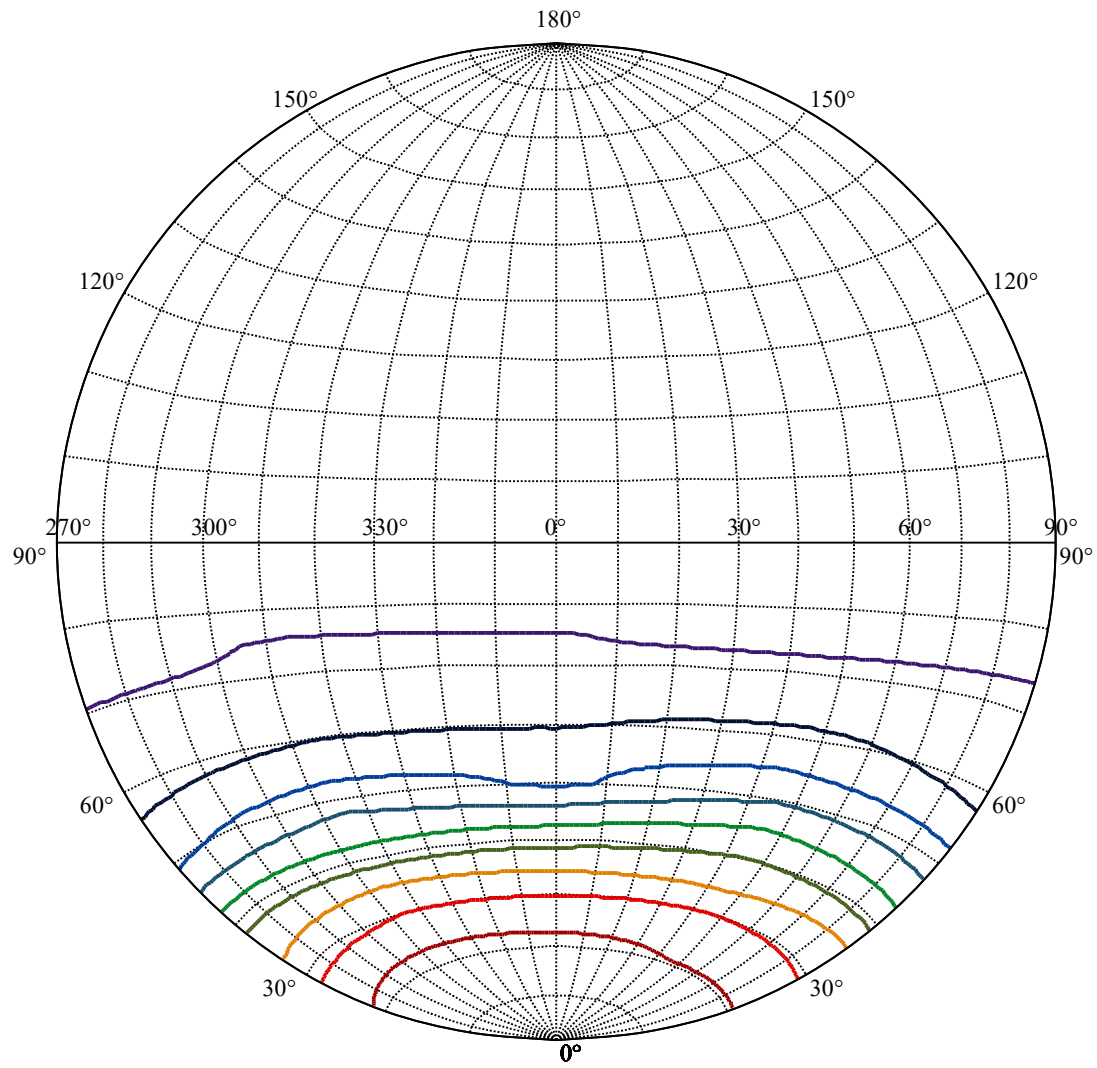
Beam Angle(50%Imax):C0/180Left:37.0 Right:47.9

:C90/270Left:37.5 Right:48.3



Max , Ave Beam angle of C225 plane 87.39



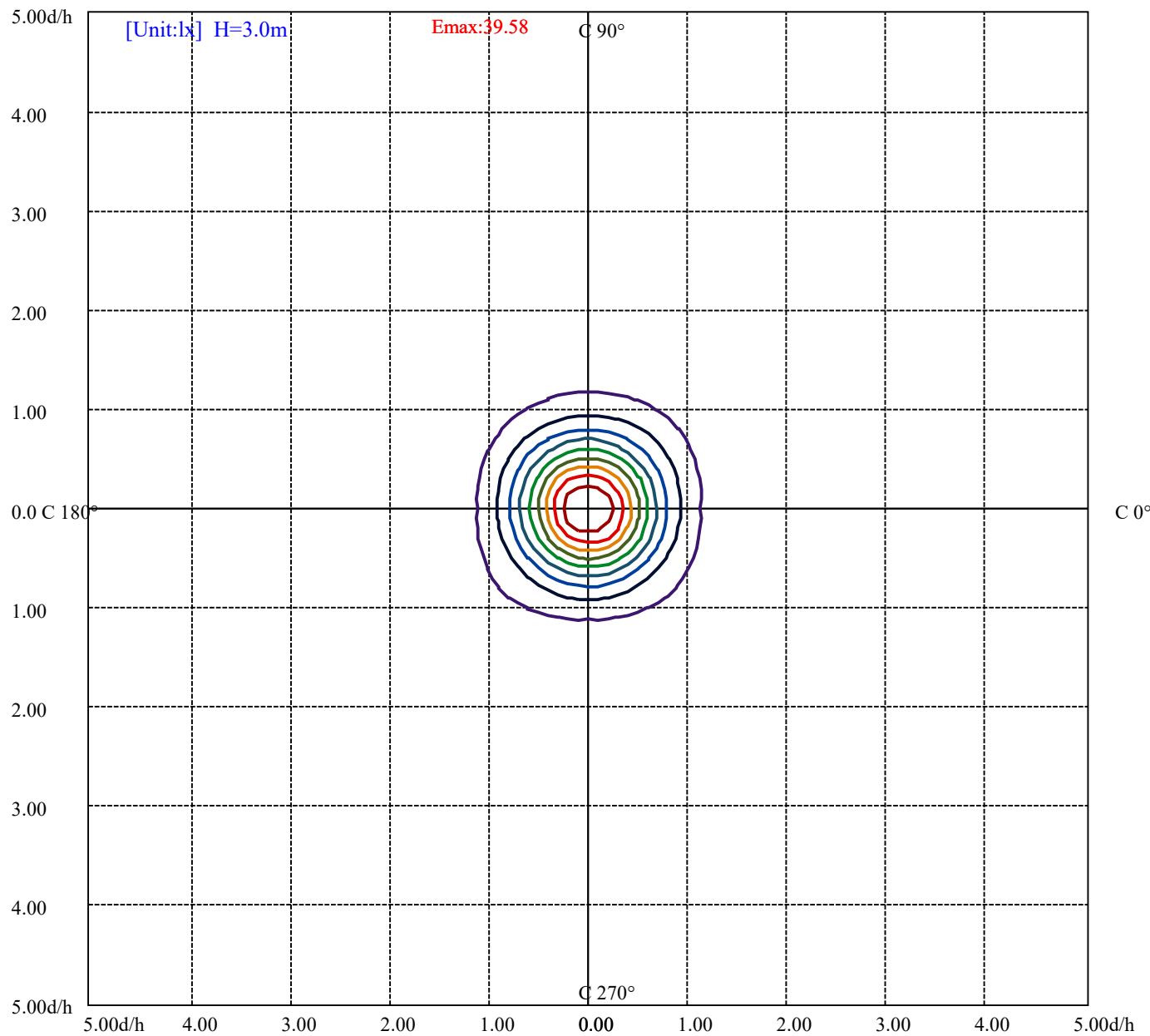


House

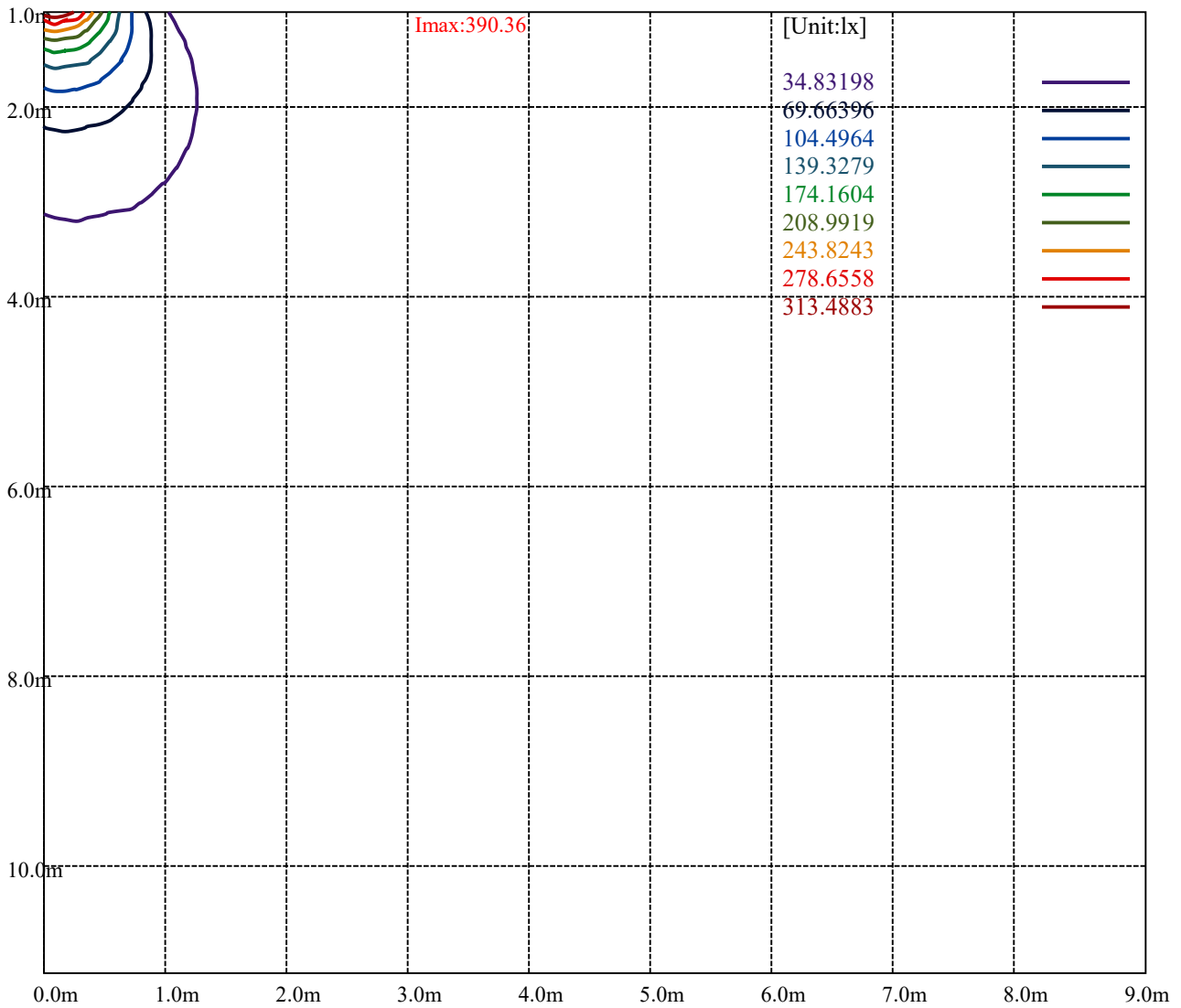
[Unit:cd]

Road

Imax:390.36	
(10%Imax) 36.28715	
(20%Imax) 72.57439	
(30%Imax) 108.8617	
(40%Imax) 145.149	
(50%Imax) 181.4362	
(60%Imax) 217.7234	
(70%Imax) 254.0098	
(80%Imax) 290.297	
(90%Imax) 326.5843	



(10%Emax)	3.95822	—
(20%Emax)	7.91644	—
(30%Emax)	11.87461	—
(40%Emax)	15.83288	—
(50%Emax)	19.79105	—
(60%Emax)	23.74932	—
(70%Emax)	27.70749	—
(80%Emax)	31.66576	—
(90%Emax)	35.62393	—



Luminance Table

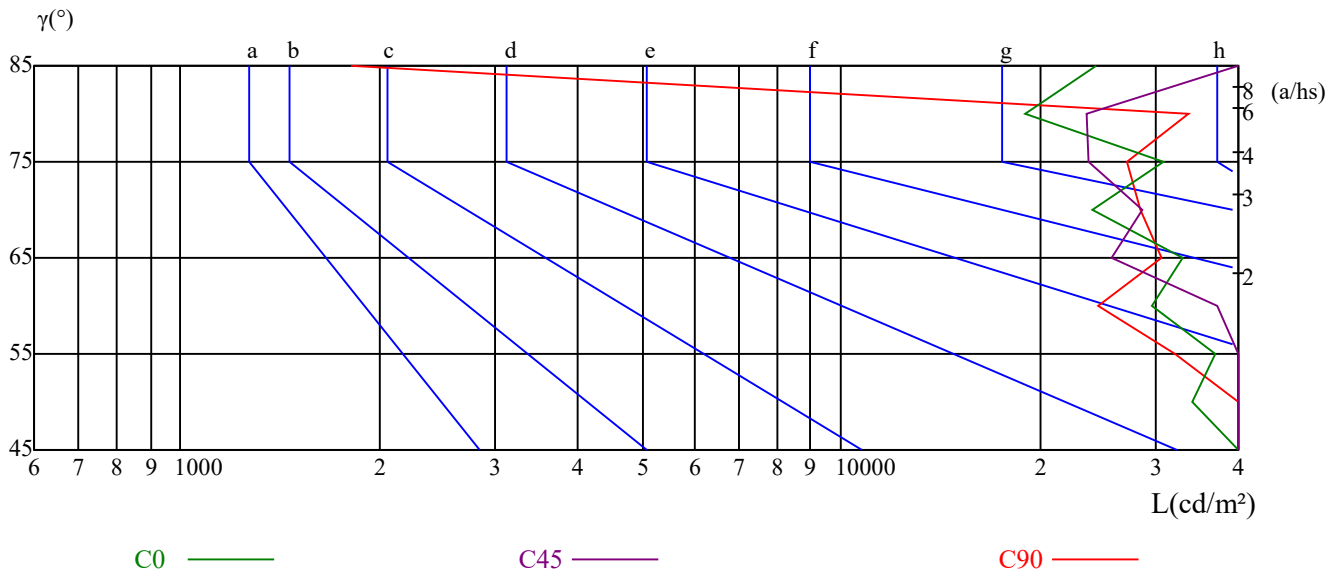
γ	45	50	55	60	65	70	75	80	85
C0	47722	33976	36839	29645	33020	23974	30767	19070	24425
C45	55638	47713	40825	37056	25745	28584	23760	23610	47944
C90	49506	41826	32165	24599	30595	28354	27112	33599	1810

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
26771	27424	27097	25741	22999	28101	18997	4976	15831

Glare Table

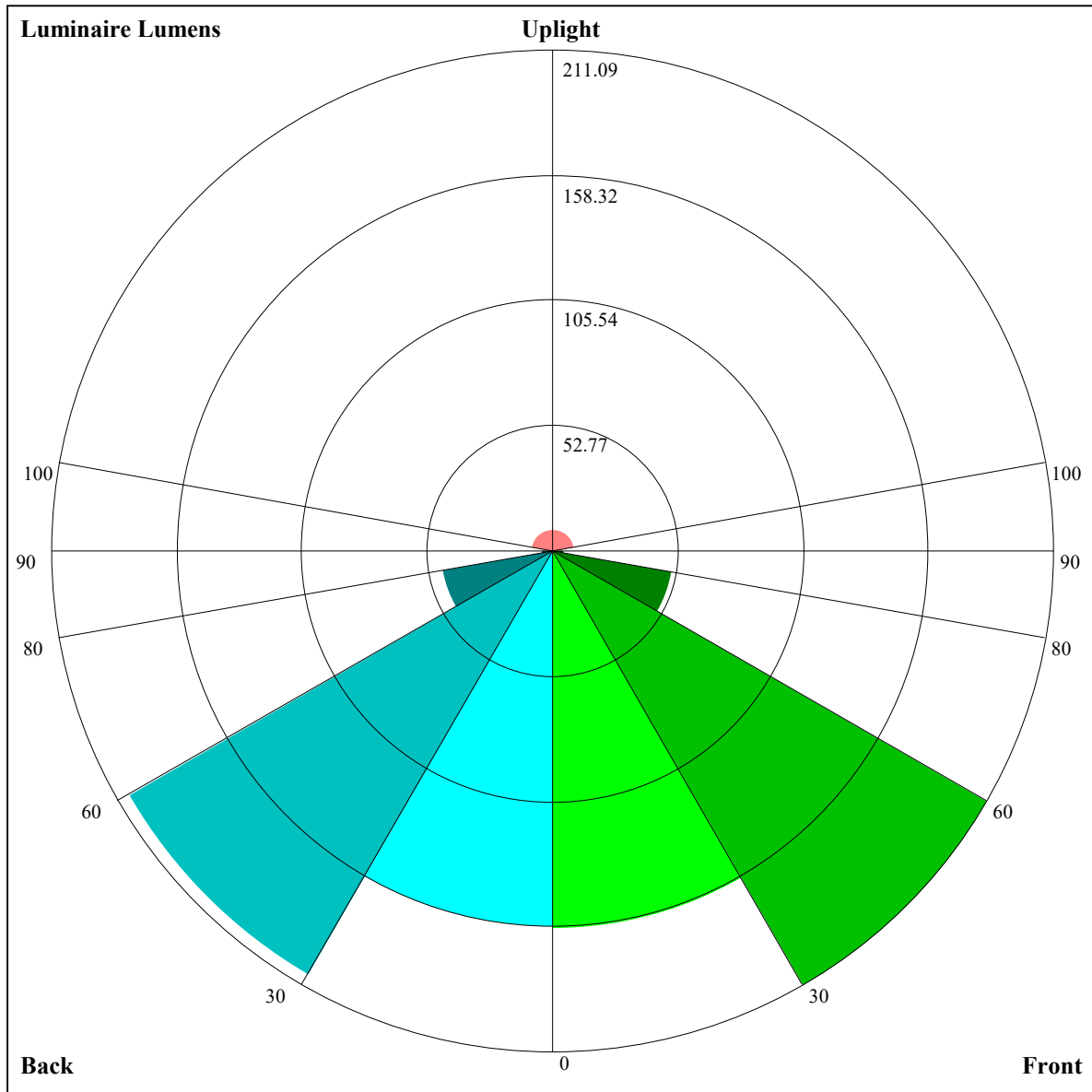
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve



Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	20.29	21.73	20.67	22.07	22.41	20.15	21.58	20.53	21.92	22.27
	3H	21.38	22.67	21.78	23.03	23.40	21.32	22.61	21.73	22.98	23.35
	4H	21.91	23.12	22.33	23.50	23.89	21.83	23.04	22.24	23.41	23.81
	6H	22.27	23.38	22.69	23.78	24.20	22.41	23.53	22.84	23.92	24.35
	8H	22.34	23.42	22.78	23.82	24.25	22.57	23.65	23.00	24.05	24.48
	12H	22.43	23.46	22.87	23.87	24.31	22.56	23.59	23.00	24.00	24.44
4H	2H	20.73	21.94	21.15	22.32	22.71	20.62	21.82	21.03	22.20	22.59
	3H	22.00	23.01	22.43	23.43	23.87	21.98	22.99	22.41	23.41	23.85
	4H	22.71	23.60	23.16	24.04	24.51	22.65	23.54	23.10	23.98	24.45
	6H	23.13	23.92	23.61	24.39	24.86	23.34	24.13	23.82	24.60	25.07
	8H	23.28	24.03	23.78	24.50	24.99	23.58	24.32	24.07	24.80	25.29
	12H	23.47	24.16	23.97	24.62	25.16	23.63	24.32	24.13	24.78	25.32
8H	4H	22.88	23.63	23.38	24.10	24.59	22.83	23.57	23.32	24.04	24.54
	6H	23.42	24.04	23.94	24.54	25.06	23.66	24.29	24.18	24.78	25.31
	8H	23.74	24.28	24.28	24.81	25.33	24.06	24.60	24.59	25.13	25.65
	12H	24.06	24.52	24.61	25.05	25.59	24.17	24.62	24.71	25.16	25.69
12H	4H	22.91	23.60	23.41	24.06	24.60	22.84	23.53	23.34	24.00	24.53
	6H	23.55	24.09	24.09	24.62	25.14	23.77	24.32	24.31	24.85	25.37
	8H	23.91	24.36	24.45	24.89	25.43	24.19	24.64	24.73	25.18	25.71
Variation with the observer position at spacings:											
S = 1.0H		0.3/-0.6					0.2/-0.6				
S = 1.5H		0.7/-1.3					0.9/-1.1				
S = 2.0H		1.2/-1.0					1.4/-1.1				
Standard tables:		BK3					BK3				
Uncorrected UGR		9.4					9.4				

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



Luminaire Lumens:

FL=159.54,FM=211.09,FH=51.07,FVH=5.22

BL=158.34,BM=206.37,BH=47.73,BVH=4.61

UL=1.3,UH=9.2

BUG Rating:B1-U1-G0

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	360.24	380.85	377.28	384.02	365.00	341.22	310.70	267.50	222.33
45.0	383.23	386.40	370.94	375.30	352.31	344.39	312.68	266.71	235.80
90.0	372.13	381.64	376.88	370.94	354.69	333.29	306.74	280.98	221.93
135.0	377.68	375.70	369.75	381.64	362.62	343.20	311.89	277.41	238.57
180.0	360.24	384.41	382.83	376.49	360.24	325.76	302.38	267.50	215.59
225.0	383.23	386.40	390.36	376.49	354.30	326.95	297.62	260.77	209.64
270.0	372.13	382.43	374.51	378.47	355.09	341.61	293.27	261.96	220.34
315.0	377.68	381.24	380.05	373.32	374.11	340.03	312.68	273.85	217.17
360.0	360.24	380.85	377.28	384.02	365.00	341.22	310.70	267.50	222.33
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	169.62	109.78	106.21	74.51	70.15	41.22	40.03	16.65	10.70
45.0	197.76	154.16	117.70	93.13	54.69	49.14	30.91	20.61	21.00
90.0	175.96	135.14	92.74	61.82	64.99	48.75	35.27	29.33	0.79
135.0	182.30	137.52	115.72	72.92	57.07	51.52	45.18	38.05	0.79
180.0	157.73	106.21	96.30	69.75	43.59	42.80	26.95	10.30	5.94
225.0	165.65	151.39	93.92	63.80	51.92	37.25	26.95	28.53	3.96
270.0	160.90	107.79	83.22	62.62	51.52	40.42	24.57	14.66	3.57
315.0	170.41	146.24	99.47	77.28	66.58	43.59	43.20	14.66	1.98
360.0	169.62	109.78	106.21	74.51	70.15	41.22	40.03	16.65	10.70
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.00	4.36	0.00	0.00	0.00	7.53	0.00	6.74	0.00
45.0	0.79	4.76	0.00	1.98	0.00	0.40	5.94	0.00	0.00
90.0	0.40	0.00	0.00	0.00	0.00	1.98	1.19	0.00	0.79
135.0	0.00	0.00	0.00	0.00	3.17	0.00	1.19	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	6.34	0.00	1.98	10.30	0.00	1.98	0.00	5.55	0.00
270.0	0.00	0.00	0.00	4.76	0.00	0.00	0.00	0.00	0.00
315.0	5.15	1.19	0.00	1.58	0.00	1.98	0.00	5.55	0.00
360.0	0.00	4.36	0.00	0.00	0.00	7.53	0.00	6.74	0.00
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.00	0.00	7.13	6.74	0.00	0.00	1.58	0.00	0.00
45.0	1.58	11.49	0.00	0.00	7.93	3.57	3.96	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	1.58	0.00	0.00	0.00
135.0	11.10	0.00	9.11	4.76	4.36	0.00	0.00	0.00	0.00
180.0	0.00	0.00	9.51	0.00	2.38	0.00	0.00	7.93	0.00
225.0	0.00	5.55	0.00	7.13	0.00	0.00	0.00	6.34	2.38
270.0	0.00	0.00	0.00	1.58	0.00	0.00	0.00	0.00	0.00
315.0	7.53	0.00	0.00	2.38	8.32	0.00	0.00	4.36	0.00
360.0	0.00	0.00	7.13	6.74	0.00	0.00	1.58	0.00	0.00
C/γ(°)	180.0								
0.0	0.00								
45.0	3.17								
90.0	0.00								
135.0	6.34								
180.0	0.00								
225.0	3.17								
270.0	0.00								
315.0	6.34								
360.0	0.00								