



SGSO

Address: LIT by CARDI

Client:

LumCAT: 0017440219 RIO 6W 6500K 600lm

Luminaire:

Report No:

Voltage(V): 230.03

Test No: KYZ-A251011059-04-001

Current(A): 0.0299

LampCAT: LED

Power (W): 6.0000

Lamp flux(lm): -1.0

PF: 0.8738

Number of Lamps: 1

Ballast type:

Length(mm): -126

Width(mm): -126

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 600.00

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 100.00

Central intensity(cd): 296.708

Maximum intensity(cd): 315.991

Angle of maximum intensity: C=112.5 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=82.8

[C90/270]Total=86.0

Field angle(10%Imax): [C0/180]Total=134.8

[C90/270]Total=144.5

Maximum s/h(1/2): C0_180=1.14 C90_270=1.15

Maximum s/h(1/4): C0_180=1.17 C90_270=1.21

Up flux rate of lamp(%): 1.94%

Down flux rate of lamp(%): 98.06%

Up flux rate of LUM(%): 1.94%

Down flux rate of LUM(%): 98.06%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 86.635%

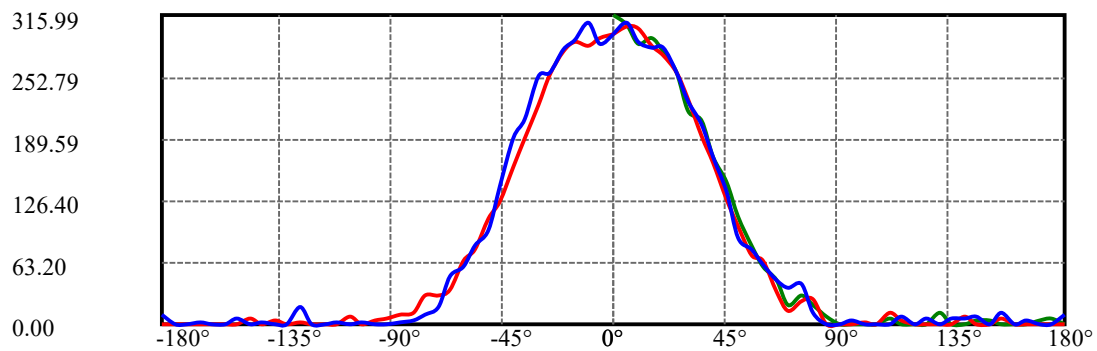
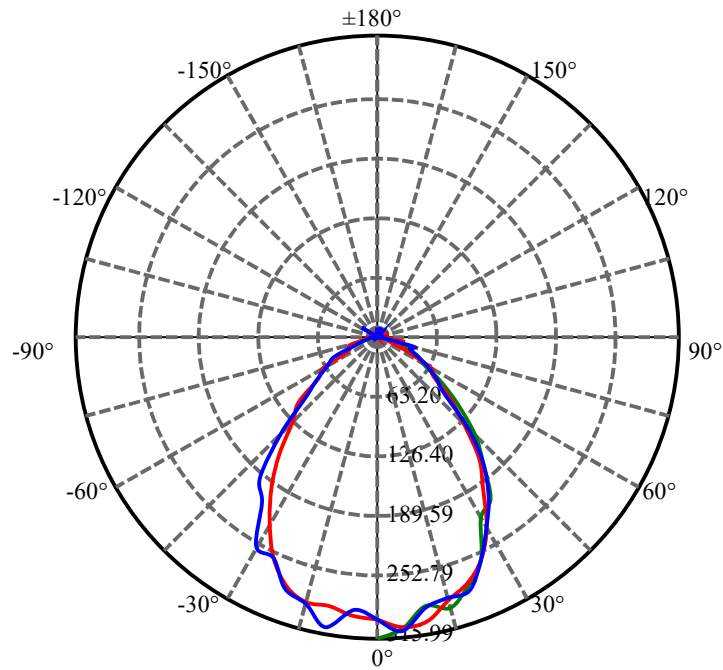
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	330.178	0.000	0	.000%	.000%
5.0	332.540	7.176	7.176	.000%	1.196%
10.0	326.458	21.353	28.529	.000%	4.755%
15.0	316.954	34.571	63.1	.000%	10.517%
20.0	301.694	46.182	109.282	.000%	18.214%
25.0	280.977	55.354	164.636	.000%	27.439%
30.0	248.122	60.649	225.285	.000%	37.547%
35.0	220.562	62.514	287.799	.000%	47.966%
40.0	189.961	62.039	349.839	.000%	58.306%
45.0	148.824	56.819	406.658	.000%	67.776%
50.0	107.851	46.978	453.636	.000%	75.606%
55.0	79.910	36.979	490.615	.000%	81.769%
60.0	59.546	29.198	519.813	.000%	86.635%
65.0	42.983	22.577	542.39	.000%	90.398%
70.0	29.977	16.733	559.123	.000%	93.187%
75.0	24.709	12.947	572.07	.000%	95.345%
80.0	14.282	9.450	581.52	.000%	96.920%
85.0	5.675	4.912	586.432	.000%	97.738%
90.0	2.199	1.953	588.385	.000%	98.064%
95.0	2.797	1.239	589.624	.000%	98.270%
100.0	1.222	0.989	590.613	.000%	98.435%
105.0	1.765	0.724	591.337	.000%	98.556%
110.0	1.521	0.778	592.115	.000%	98.685%
115.0	1.276	0.641	592.756	.000%	98.792%
120.0	1.711	0.658	593.414	.000%	98.902%
125.0	2.797	0.944	594.358	.000%	99.059%
130.0	1.249	0.797	595.155	.000%	99.192%
135.0	1.683	0.537	595.691	.000%	99.281%
140.0	2.987	0.783	596.475	.000%	99.412%
145.0	4.317	1.104	597.579	.000%	99.596%
150.0	2.009	0.844	598.422	.000%	99.737%
155.0	1.711	0.426	598.849	.000%	99.808%
160.0	1.874	0.340	599.189	.000%	99.864%
165.0	2.905	0.357	599.546	.000%	99.924%
170.0	1.982	0.263	599.809	.000%	99.968%
175.0	2.199	0.135	599.944	.000%	99.990%
180.0	3.204	0.059	600.003	.000%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	225.29	N.A.	37.55%
0-40	349.84	N.A.	58.31%
0-60	519.81	N.A.	86.64%
0-90	588.39	N.A.	98.06%
0-120	593.41	N.A.	98.90%
0-180	600.00	N.A.	100.00%
60-90	97.77	N.A.	16.29%
90-120	6.98	N.A.	1.16%
90-130	8.72	N.A.	1.45%
90-150	11.99	N.A.	2.00%
90-180	13.51	N.A.	2.25%
0-53.57	480.00	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	28.53
10-20	80.75
20-30	116.00
30-40	124.55
40-50	103.80
50-60	66.18
60-70	39.31
70-80	22.40
80-90	6.86
90-100	2.23
100-110	1.50
110-120	1.30
120-130	1.74
130-140	1.32
140-150	1.95
150-160	0.77
160-170	0.62
170-180	0.14



C112.5(Max):

C0/C180:

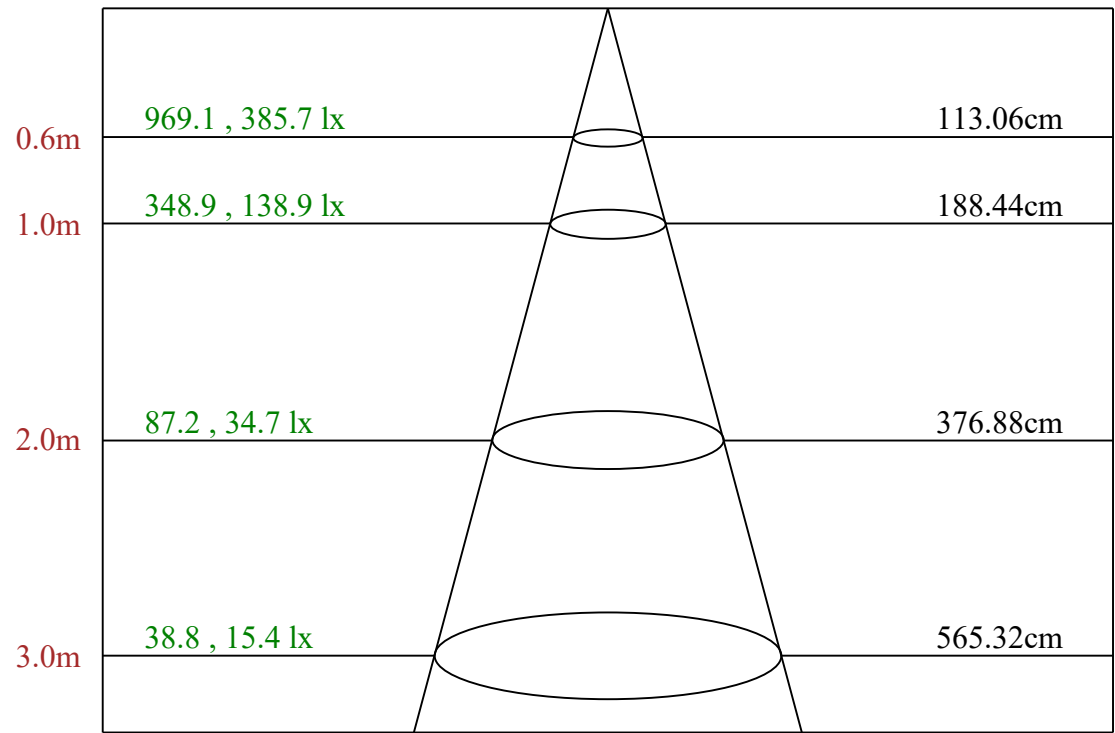
C90/C270:

Field angle(10%Imax):C0/180Left:74.0 Right:60.8

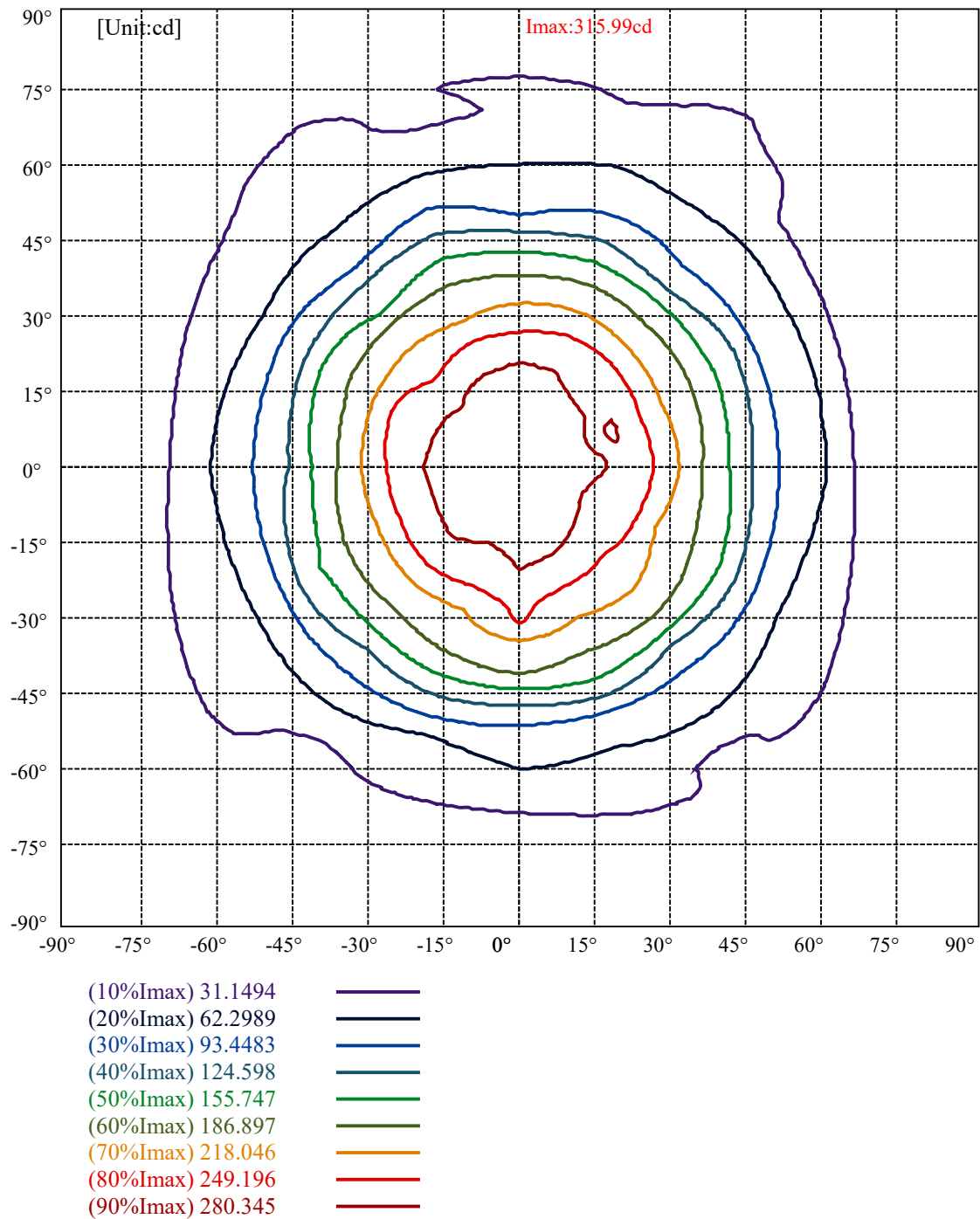
:C90/270Left:72.9 Right:71.6

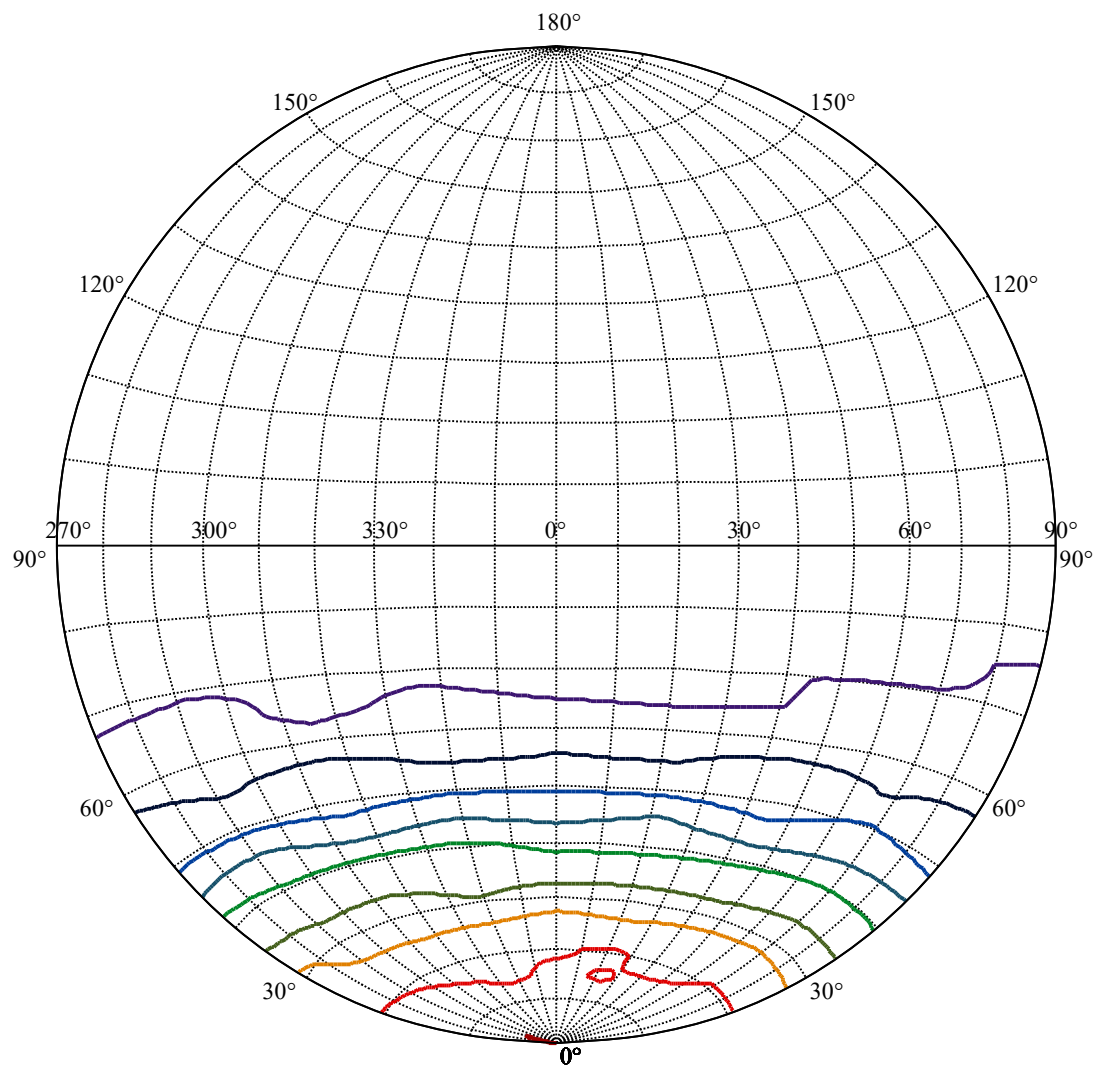
Beam Angle(50%Imax):C0/180Left:46.1 Right:36.7

:C90/270Left:48.7 Right:37.3



Max , Ave Beam angle of C112.5 plane 86.59





House

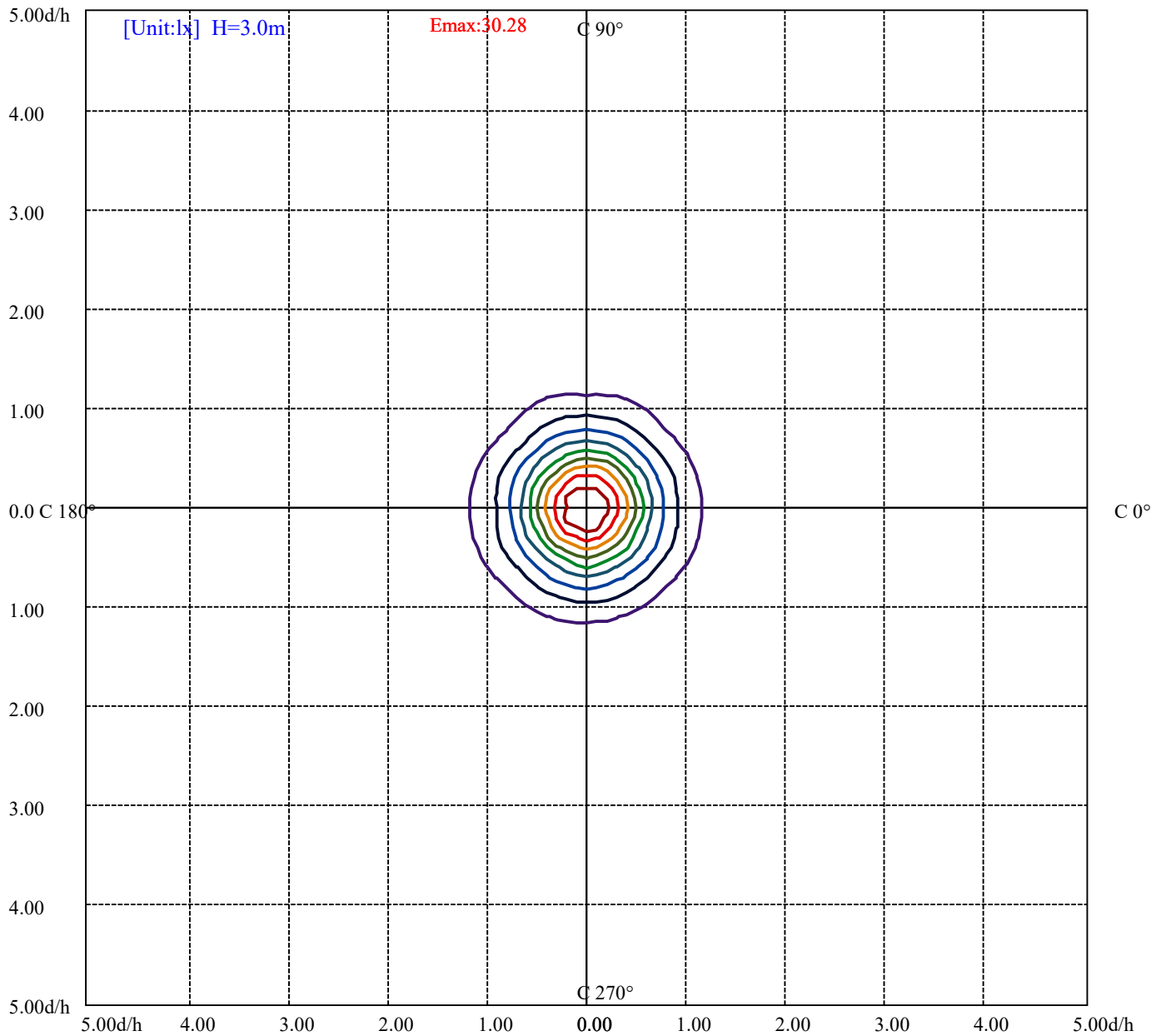
[Unit:cd]

Road

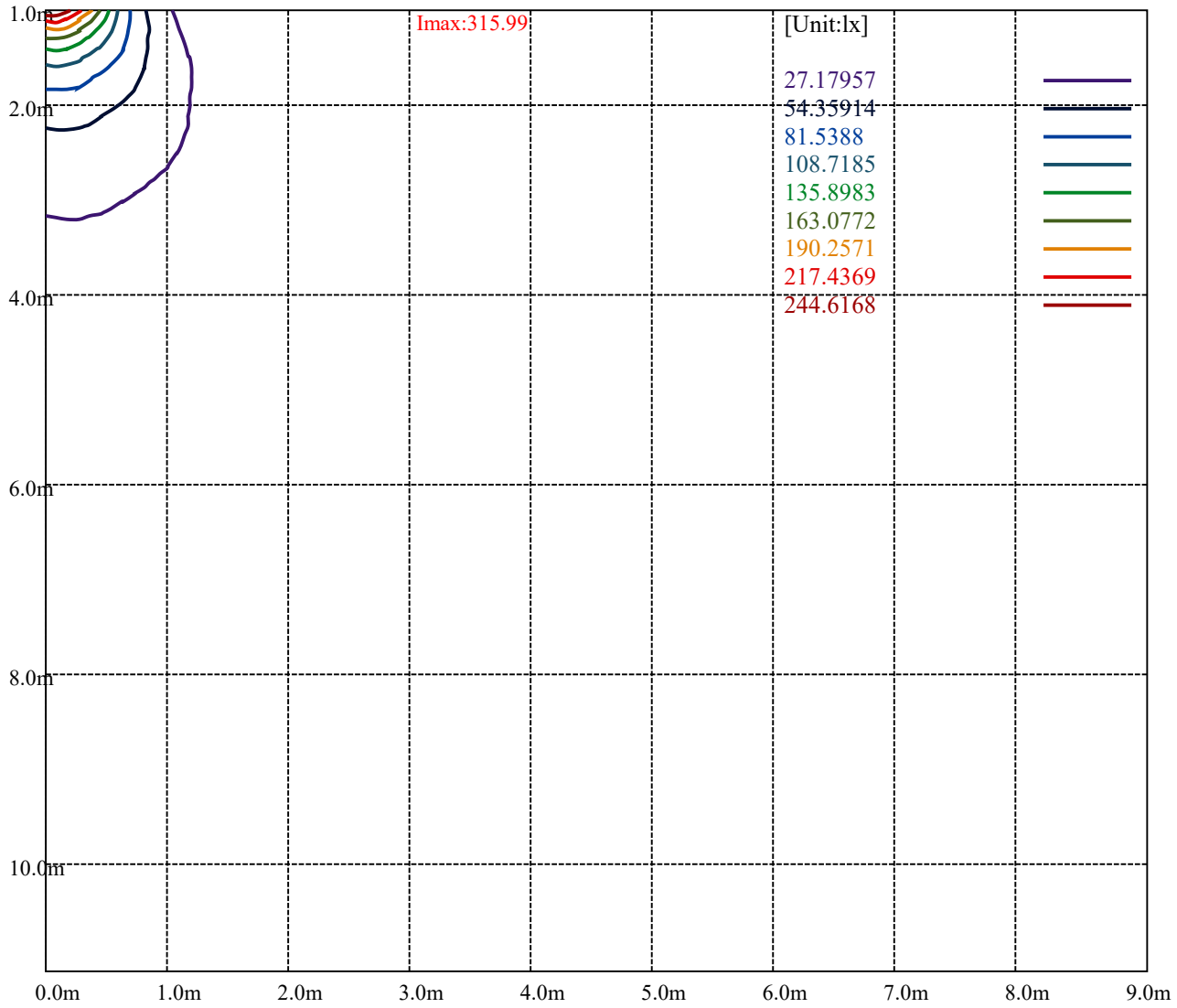
Imax:315.99

(10%Imax) 31.4815
(20%Imax) 62.96309
(30%Imax) 94.44422
(40%Imax) 125.9265
(50%Imax) 157.408
(60%Imax) 188.8894
(70%Imax) 220.3708
(80%Imax) 251.8522
(90%Imax) 283.3336





(10%Emax)	3.027863	—
(20%Emax)	6.055716	—
(30%Emax)	9.083579	—
(40%Emax)	12.11143	—
(50%Emax)	15.13926	—
(60%Emax)	18.1672	—
(70%Emax)	21.19503	—
(80%Emax)	24.22286	—
(90%Emax)	27.2507	—



Luminance Table

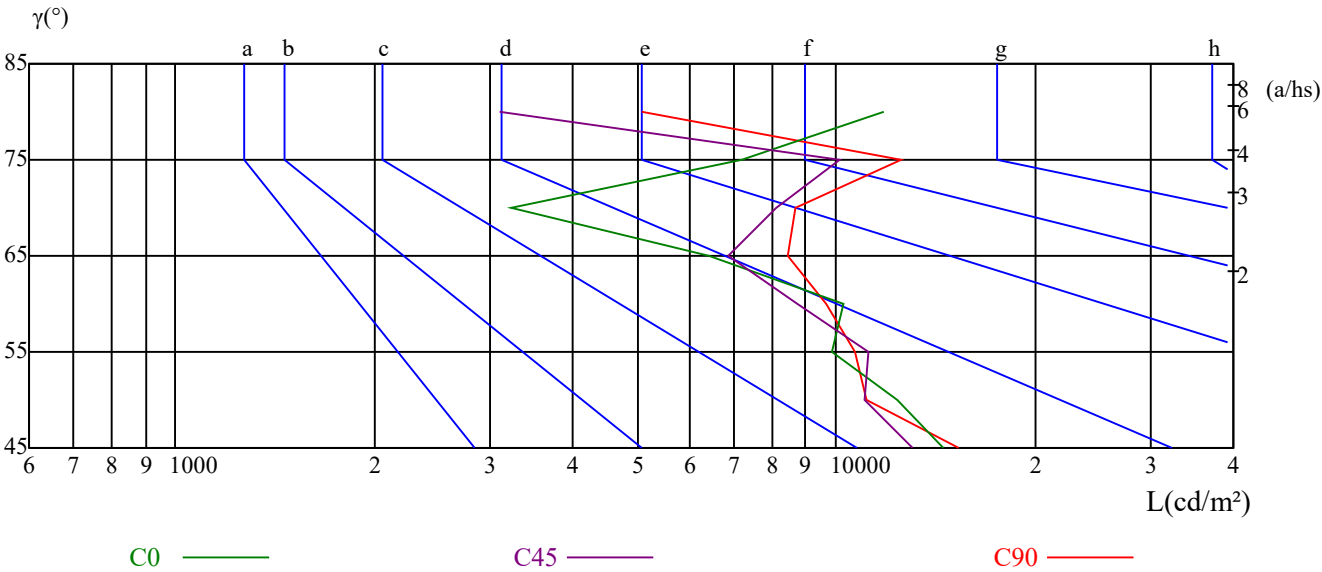
γ	45	50	55	60	65	70	75	80	85
C0	14505	12422	9849	10288	6422	3230	7194	11813	0
C45	13077	11047	11225	8774	6870	8120	10121	3090	0
C90	15309	11096	10674	9657	8438	8674	12559	5089	0

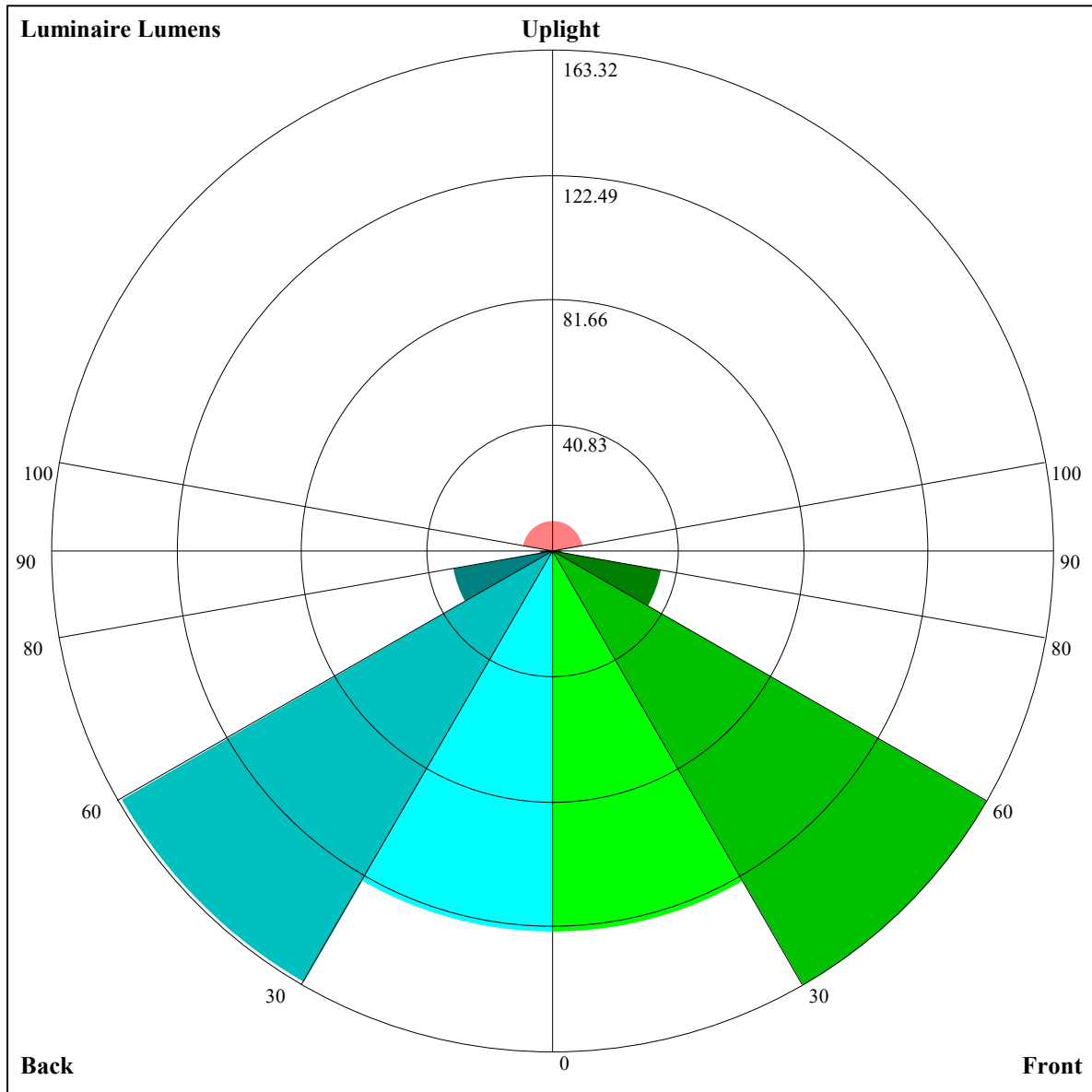
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6646	8812	5526	8048	7804	6707	4888	1267	4617

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





Luminaire Lumens:

FL=124.65,FM=163.32,FH=35.79,FVH=2.94

BL=124.23,BM=162.57,BH=32.93,BVH=4.13

UL=2.46,UH=10.36

BUG Rating:B1-U2-G0

Intensity data(cd)

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C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	296.71	304.97	302.22	284.90	274.28	257.36	229.02	192.03	165.28
22.5	300.64	299.46	298.28	274.67	284.12	253.03	219.19	200.69	164.09
45.0	291.20	308.51	304.18	287.66	262.47	262.87	224.70	195.97	169.21
67.5	295.13	301.43	290.81	288.84	280.18	265.23	231.39	204.63	174.72
90.0	296.31	308.12	288.84	282.94	281.75	257.75	227.84	204.23	170.78
112.5	315.99	306.55	286.08	292.77	278.21	256.96	218.79	207.38	171.57
135.0	299.86	302.61	288.84	283.33	270.74	240.04	221.15	207.38	151.11
157.5	296.71	291.59	299.86	289.23	272.31	266.80	226.27	188.89	183.77
180.0	296.71	292.77	285.30	287.66	277.82	255.78	223.51	191.25	160.16
202.5	300.64	299.07	297.10	297.89	265.23	251.85	216.83	203.45	160.55
225.0	291.20	311.27	291.59	301.82	273.88	255.78	219.97	192.43	170.00
247.5	295.13	293.95	290.41	284.90	258.54	249.49	216.43	202.27	181.02
270.0	296.31	286.48	307.73	290.41	280.57	256.18	253.03	210.53	191.25
292.5	315.99	312.45	309.30	291.59	273.88	249.09	223.91	202.66	177.08
315.0	299.86	289.63	293.17	282.15	262.87	244.37	232.17	201.87	181.02
337.5	296.71	310.48	297.50	272.70	275.46	249.49	211.71	190.85	181.41
360.0	296.71	304.97	302.22	284.90	274.28	257.36	229.02	192.03	165.28
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	127.89	99.56	70.44	64.14	33.84	13.77	23.22	25.58	0.00
22.5	142.45	94.84	68.47	59.42	27.94	27.94	20.07	11.41	3.54
45.0	115.30	88.54	80.28	54.70	36.20	34.63	32.66	6.69	0.00
67.5	133.40	108.22	68.47	65.32	48.01	35.42	27.55	14.17	2.75
90.0	134.97	88.93	76.34	60.21	44.47	36.99	40.53	11.02	0.00
112.5	145.21	109.79	81.06	59.03	44.86	19.28	28.73	19.68	7.87
135.0	130.65	83.03	67.68	46.83	33.45	46.43	22.82	0.00	1.18
157.5	130.65	103.10	65.72	51.55	40.14	23.61	7.08	9.44	12.20
180.0	125.14	107.43	76.34	64.93	36.20	29.12	28.73	12.20	10.62
202.5	153.08	99.95	71.62	48.40	43.29	35.02	17.71	20.86	12.20
225.0	125.92	96.02	74.77	39.74	22.82	19.28	10.23	5.90	18.89
247.5	140.48	102.71	59.03	35.42	44.07	7.48	18.50	22.04	1.57
270.0	141.27	96.02	79.49	59.81	48.40	18.50	9.84	3.54	2.75
292.5	148.75	95.23	67.68	54.30	51.55	29.91	19.68	17.71	5.90
315.0	121.99	90.90	84.21	48.80	24.00	31.09	20.86	11.02	0.00
337.5	139.70	98.77	66.50	50.37	43.68	25.97	29.91	15.74	2.75
360.0	127.89	99.56	70.44	64.14	33.84	13.77	23.22	25.58	0.00
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.00	0.00	2.75	0.00	12.20	3.54	0.00	0.00	0.00
22.5	3.15	0.00	0.00	0.00	0.00	0.00	4.33	0.00	0.00
45.0	1.57	0.00	2.36	5.90	0.00	0.79	0.00	0.00	0.00
67.5	9.05	0.39	1.97	0.00	0.00	0.00	0.00	0.00	2.75
90.0	0.00	4.72	0.00	0.00	0.00	7.08	0.00	5.90	0.00
112.5	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	12.20
135.0	0.00	8.26	0.79	0.00	0.00	0.00	6.30	0.00	0.00
157.5	0.00	6.69	0.00	6.69	0.39	0.00	0.00	0.00	0.00
180.0	6.69	4.72	0.00	7.08	0.00	0.00	0.00	2.36	0.00
202.5	0.00	7.08	0.00	0.00	0.00	0.00	3.54	0.00	0.00
225.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
247.5	1.18	0.00	0.00	5.90	0.00	0.00	0.00	5.12	0.00
270.0	0.00	0.00	1.18	0.00	2.75	0.00	0.39	18.50	0.00
292.5	10.23	0.00	7.08	0.00	0.00	6.69	0.00	0.00	0.00
315.0	0.00	8.66	1.57	0.00	0.00	0.39	0.00	1.57	3.15
337.5	0.00	0.00	0.00	0.00	0.00	0.00	10.23	7.08	0.00
360.0	0.00	0.00	2.75	0.00	12.20	3.54	0.00	0.00	0.00

Intensity data(cd)

Appendix Page: 13 Total:13

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.00	7.48	0.00	0.79	6.30	0.00	0.00	0.00	0.00
22.5	3.54	3.54	1.18	6.69	0.00	2.36	15.74	0.00	0.00
45.0	0.79	8.66	5.90	0.00	0.00	0.00	0.00	0.00	0.00
67.5	0.00	3.15	9.44	0.00	1.97	7.87	0.00	1.57	0.00
90.0	6.30	6.30	7.08	0.00	11.41	0.00	4.72	0.00	0.00
112.5	0.00	0.00	3.15	4.33	0.00	0.00	0.00	3.54	6.69
135.0	0.00	0.00	11.41	6.30	0.00	0.00	11.02	0.00	0.00
157.5	0.39	5.90	6.69	0.00	0.00	0.79	0.00	0.00	7.48
180.0	4.72	0.00	6.30	0.00	0.00	0.00	0.00	0.00	0.00
202.5	0.00	0.00	0.00	0.00	0.00	0.00	1.57	0.00	0.00
225.0	2.36	0.79	0.00	0.00	0.79	0.00	2.36	8.66	0.00
247.5	5.12	0.00	6.30	0.00	0.00	0.00	1.97	9.05	4.72
270.0	0.00	1.18	0.00	5.12	0.00	0.00	1.57	0.00	0.00
292.5	0.00	1.97	0.00	0.00	0.00	10.62	0.00	0.00	12.99
315.0	1.18	0.00	5.12	0.00	1.57	5.51	0.00	0.00	0.00
337.5	0.00	4.33	0.00	5.90	2.75	0.00	3.15	5.90	0.00
360.0	0.00	7.48	0.00	0.79	6.30	0.00	0.00	0.00	0.00

C/γ(°)	180.0
0.0	0.79
22.5	7.48
45.0	5.51
67.5	0.00
90.0	9.44
112.5	0.00
135.0	0.00
157.5	0.00
180.0	0.79
202.5	7.48
225.0	5.51
247.5	0.00
270.0	9.44
292.5	0.00
315.0	0.00
337.5	0.00
360.0	0.79