



SGSO

Address: LIT by CARDI

Client:

LumCAT: 0017440218 RIO 8W 6500K 800lm

Luminaire:

Report No:

Voltage(V): 230.3000

Test No: KYZ-A251014055-01-008

Current(A): 0.0435

LampCAT: LED

Power (W): 8.0000

Lamp flux(lm): -1.0

PF: 0.7980

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): 100.00

Central intensity(cd): 386.844

Maximum intensity(cd): 397.751

Angle of maximum intensity: $C=337.5$ $\gamma=5.0$

Beam Angle(50%Imax): [C0/180]Total=89.0

[C90/270]Total=88.5

Field angle(10%Imax): [C0/180]Total=140.2

[C90/270]Total=141.8

Maximum s/h(1/2): C0_180=1.20 C90_270=1.19

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

Up flux rate of lamp(%): 1.06%

Down flux rate of lamp(%): 98.94%

Up flux rate of LUM(%): 1.06%

Down flux rate of LUM(%): 98.94%

CIE Type : Direct lighting

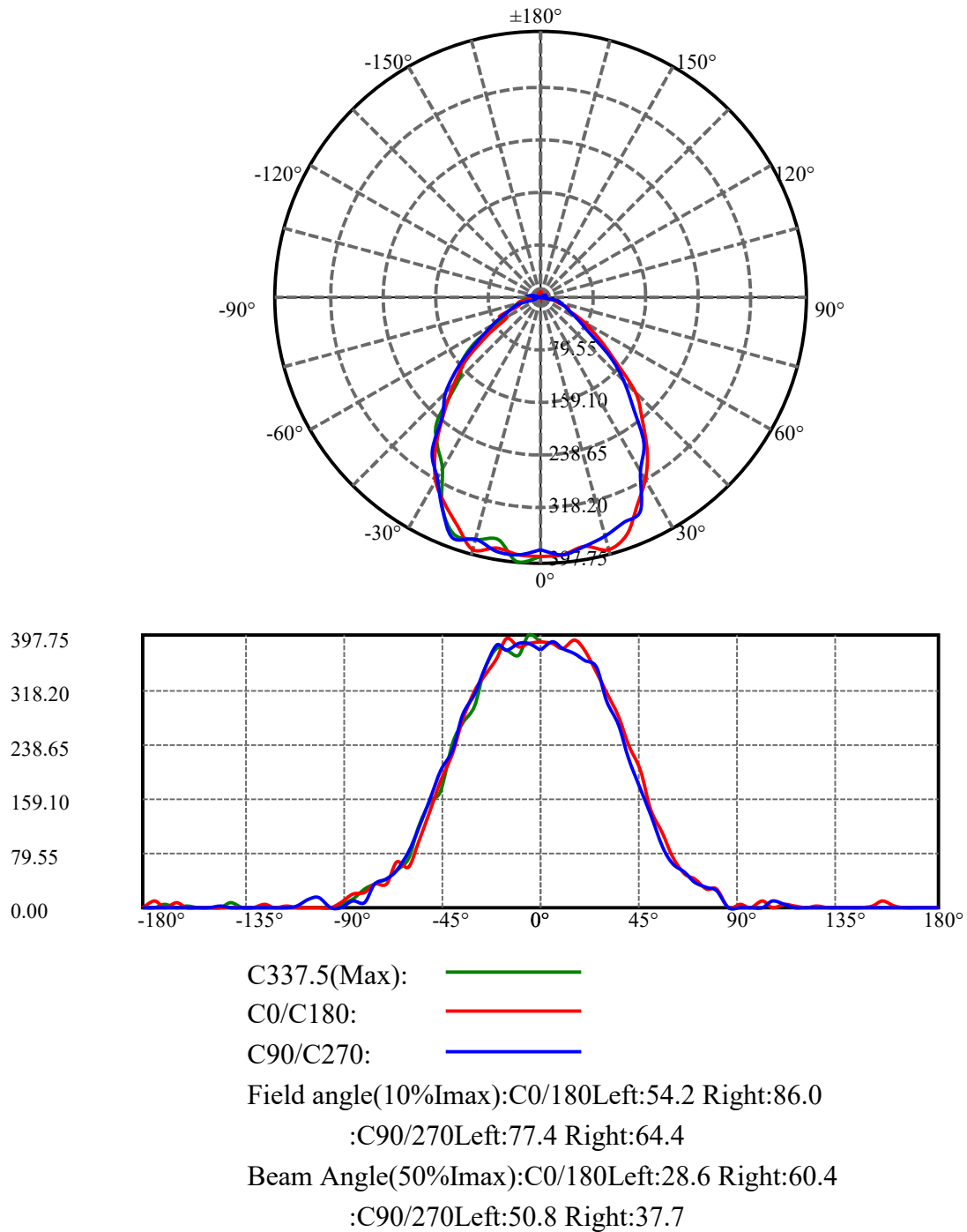
Output flux ratio in π solid angle : 87.267%

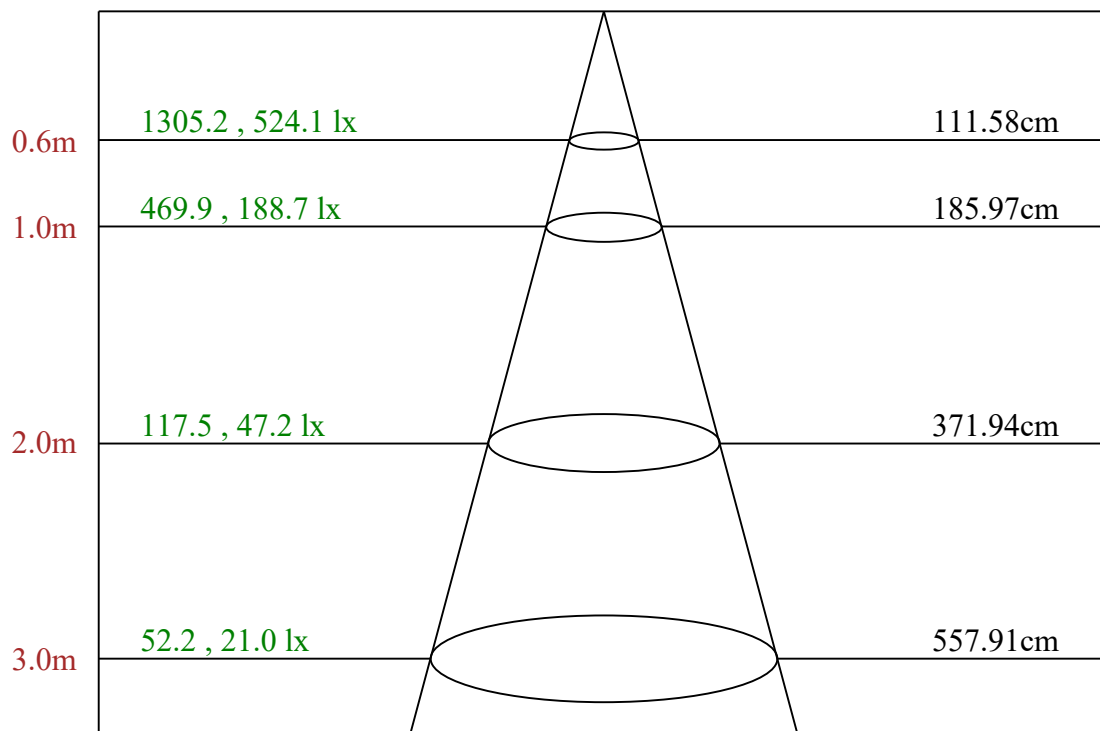
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	459.153	0.000	0	.000%	.000%
5.0	462.194	9.218	9.218	.000%	1.152%
10.0	457.768	27.541	36.759	.000%	4.595%
15.0	453.261	45.226	81.985	.000%	10.248%
20.0	438.300	61.491	143.476	.000%	17.935%
25.0	408.486	74.325	217.801	.000%	27.225%
30.0	368.626	82.302	300.102	.000%	37.513%
35.0	321.380	85.033	385.135	.000%	48.142%
40.0	274.895	83.255	468.391	.000%	58.549%
45.0	213.203	75.633	544.023	.000%	68.003%
50.0	162.346	63.506	607.53	.000%	75.941%
55.0	118.386	51.083	658.613	.000%	82.327%
60.0	85.938	39.525	698.138	.000%	87.267%
65.0	62.913	30.283	728.421	.000%	91.053%
70.0	48.549	23.619	752.04	.000%	94.005%
75.0	33.371	17.920	769.959	.000%	96.245%
80.0	22.944	12.610	782.57	.000%	97.821%
85.0	7.114	6.835	789.405	.000%	98.676%
90.0	2.199	2.134	791.539	.000%	98.942%
95.0	0.706	0.666	792.205	.000%	99.026%
100.0	2.281	0.679	792.884	.000%	99.111%
105.0	2.199	1.003	793.887	.000%	99.236%
110.0	2.254	0.974	794.861	.000%	99.358%
115.0	0.787	0.644	795.506	.000%	99.438%
120.0	1.059	0.376	795.881	.000%	99.485%
125.0	1.629	0.520	796.401	.000%	99.550%
130.0	2.742	0.795	797.197	.000%	99.650%
135.0	1.711	0.753	797.95	.000%	99.744%
140.0	1.439	0.488	798.438	.000%	99.805%
145.0	0.950	0.334	798.771	.000%	99.847%
150.0	0.543	0.184	798.955	.000%	99.870%
155.0	1.684	0.236	799.191	.000%	99.899%
160.0	1.005	0.236	799.427	.000%	99.928%
165.0	2.145	0.217	799.644	.000%	99.956%
170.0	1.683	0.190	799.834	.000%	99.979%
175.0	2.688	0.131	799.965	.000%	99.996%
180.0	0.706	0.034	799.999	.000%	100.000%

ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	300.10	N.A.	37.51%
0-40	468.39	N.A.	58.55%
0-60	698.14	N.A.	87.27%
0-90	791.54	N.A.	98.94%
0-120	795.88	N.A.	99.49%
0-180	800.00	N.A.	100.00%
60-90	132.93	N.A.	16.62%
90-120	6.48	N.A.	0.81%
90-130	7.79	N.A.	0.97%
90-150	9.55	N.A.	1.19%
90-180	10.56	N.A.	1.32%
0-53.18	640.00	N.A.	80.00%

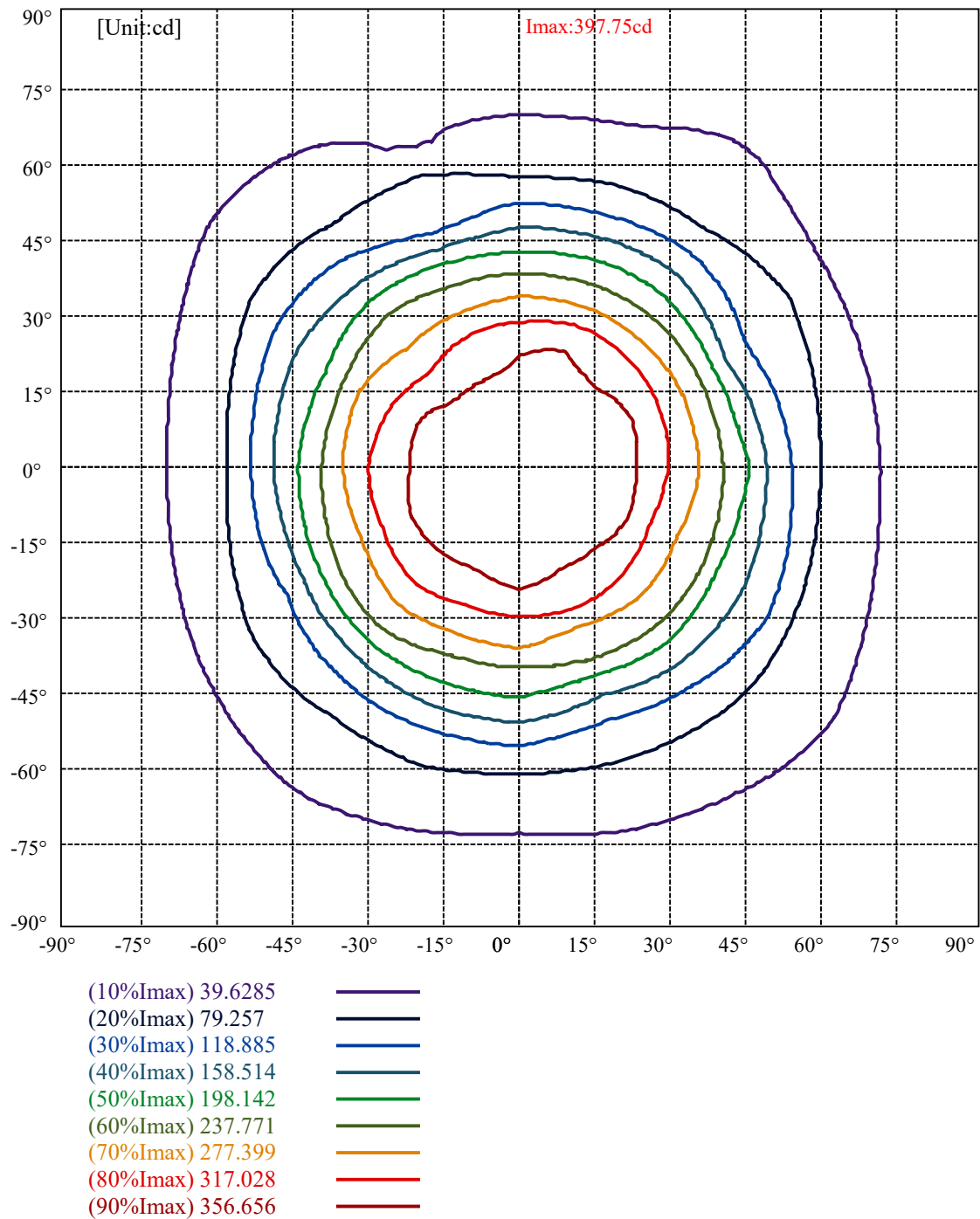
ZONAL LUMEN SUMMARY

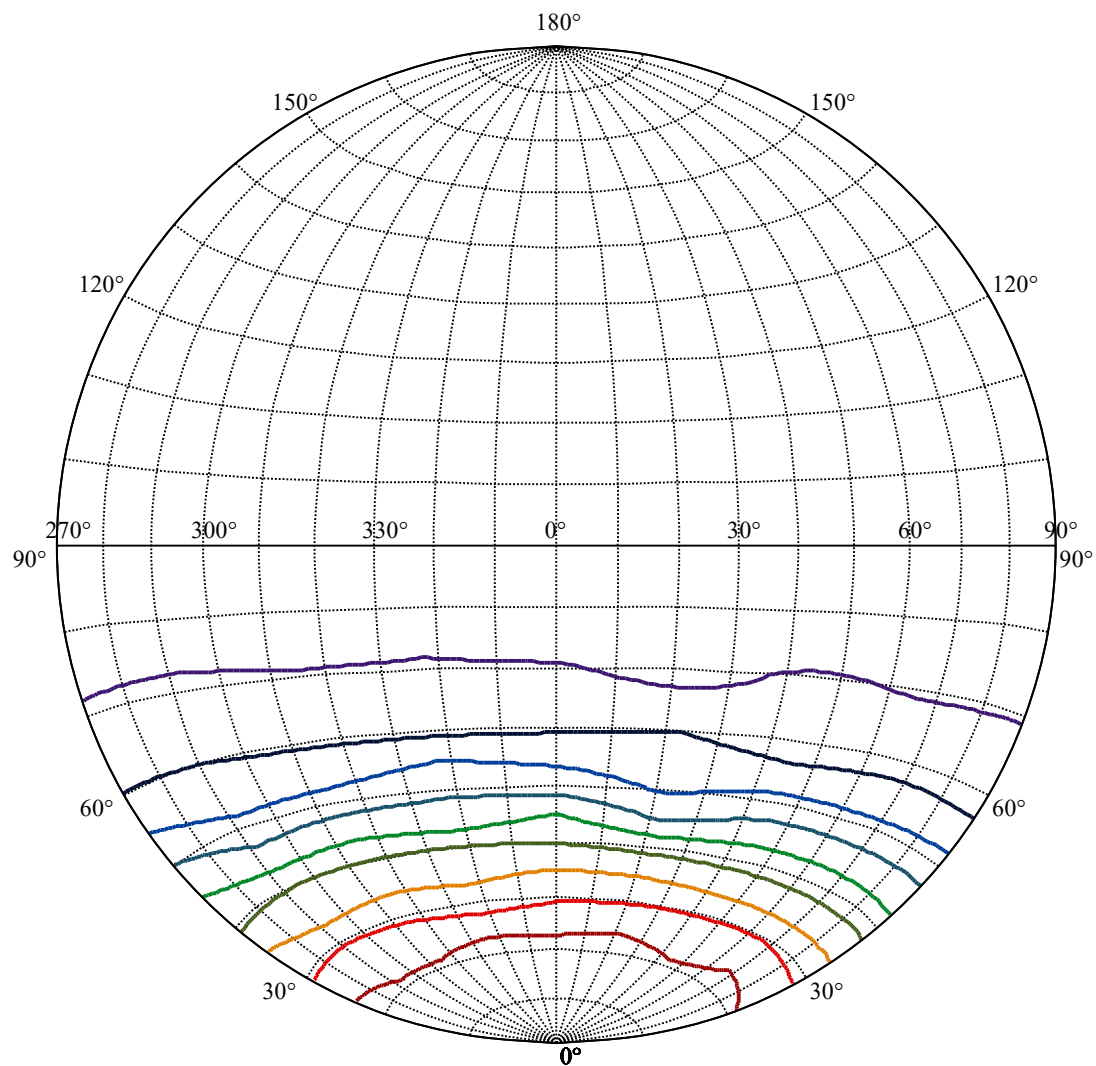
0-10	36.76
10-20	106.72
20-30	156.63
30-40	168.29
40-50	139.14
50-60	90.61
60-70	53.90
70-80	30.53
80-90	8.97
90-100	1.34
100-110	1.98
110-120	1.02
120-130	1.32
130-140	1.24
140-150	0.52
150-160	0.47
160-170	0.41
170-180	0.13





Max , Ave Beam angle of C337.5 plane 85.84





House

[Unit:cd]

Road

Imax:397.75

(10%Imax) 33.2657

(20%Imax) 66.53139

(30%Imax) 99.79709

(40%Imax) 133.0628

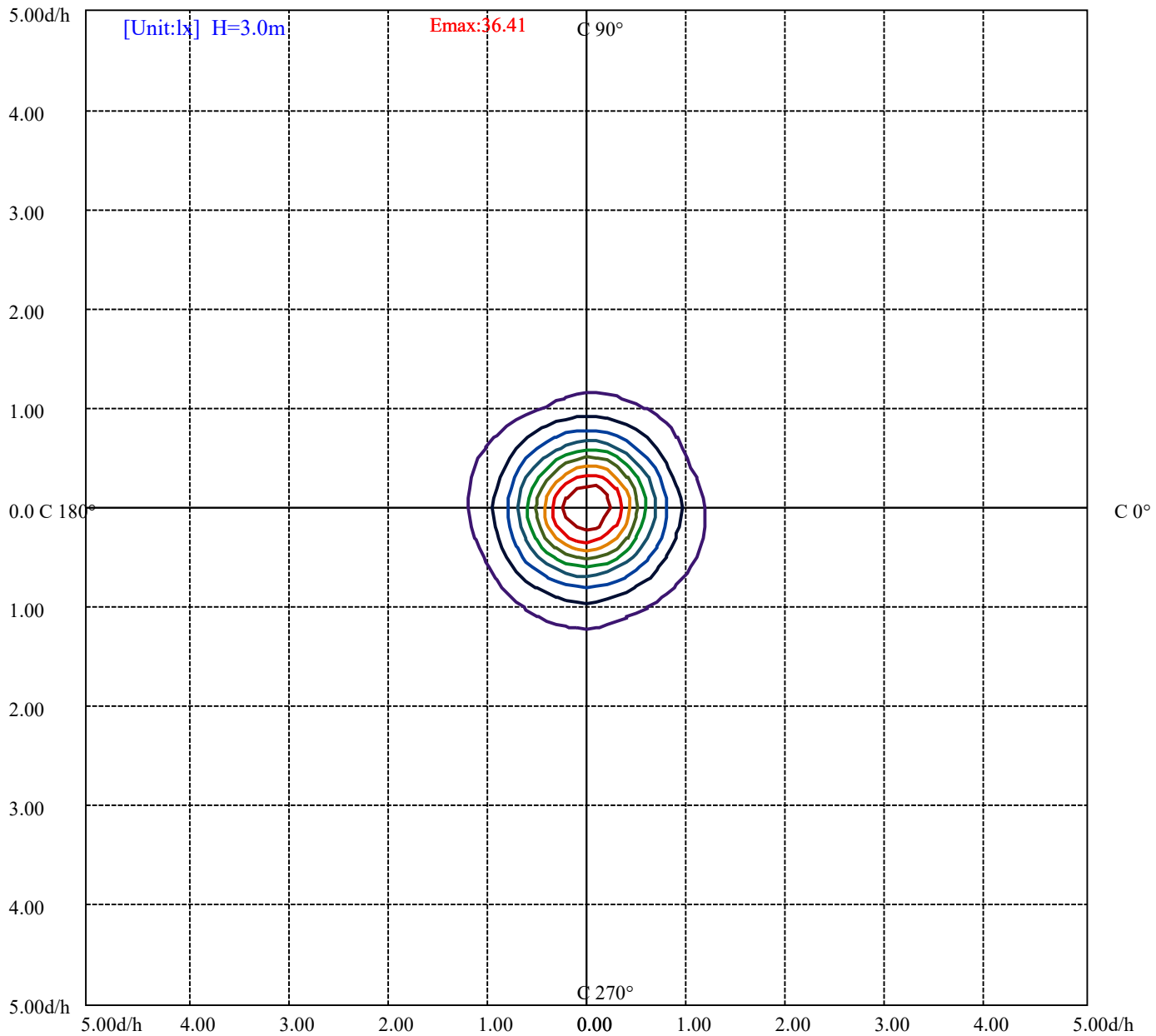
(50%Imax) 166.3285

(60%Imax) 199.5942

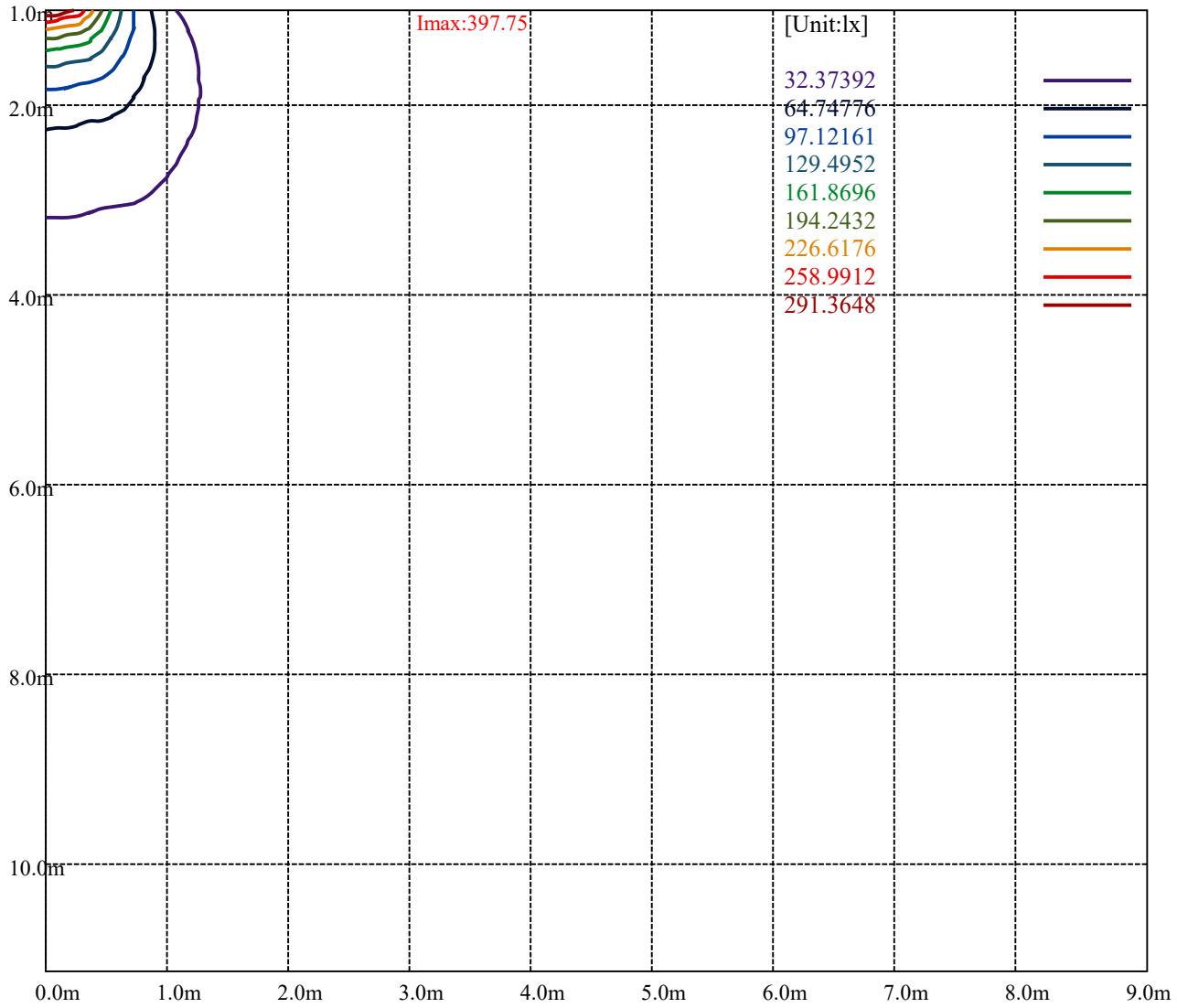
(70%Imax) 232.8599

(80%Imax) 266.1256

(90%Imax) 299.3913



(10%Emax) 3.641029	—
(20%Emax) 7.282068	—
(30%Emax) 10.92305	—
(40%Emax) 14.5641	—
(50%Emax) 18.20514	—
(60%Emax) 21.84619	—
(70%Emax) 25.48724	—
(80%Emax) 29.12829	—
(90%Emax) 32.76925	—



Luminance Limiting Curve(no luminous side)

Luminance Table

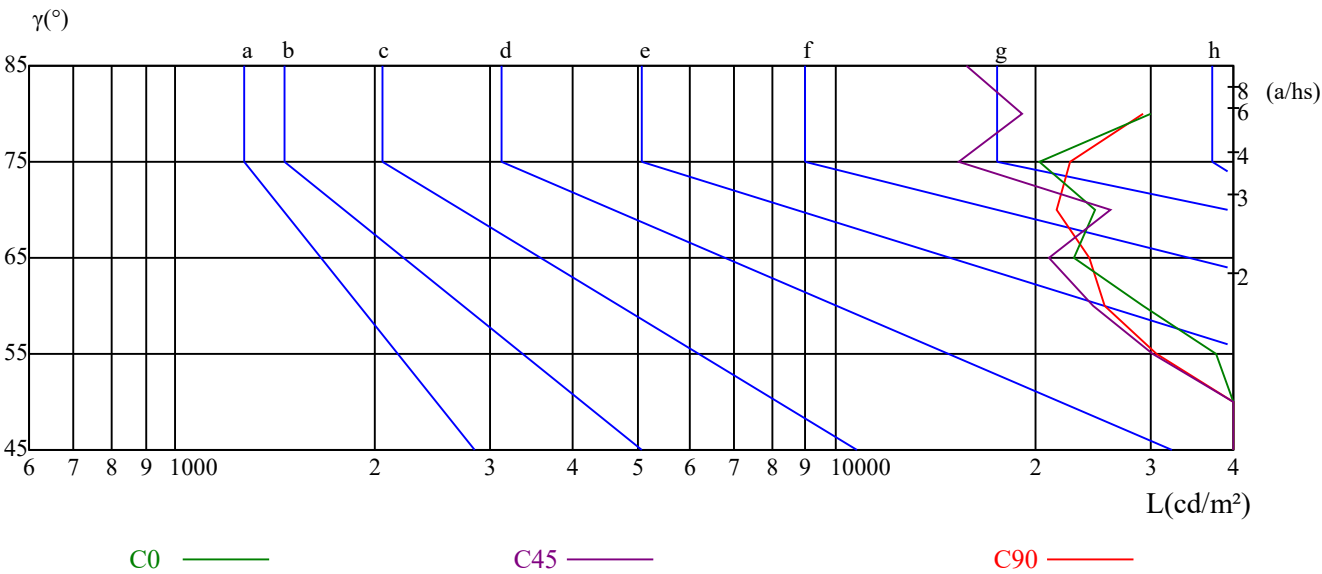
γ	45	50	55	60	65	70	75	80	85
C0	56465	44223	37705	29222	22934	24743	20401	29991	0
C45	50225	41973	30139	24592	21052	26012	15370	19160	15767
C90	48895	42085	30517	25460	24132	21571	22637	29157	0

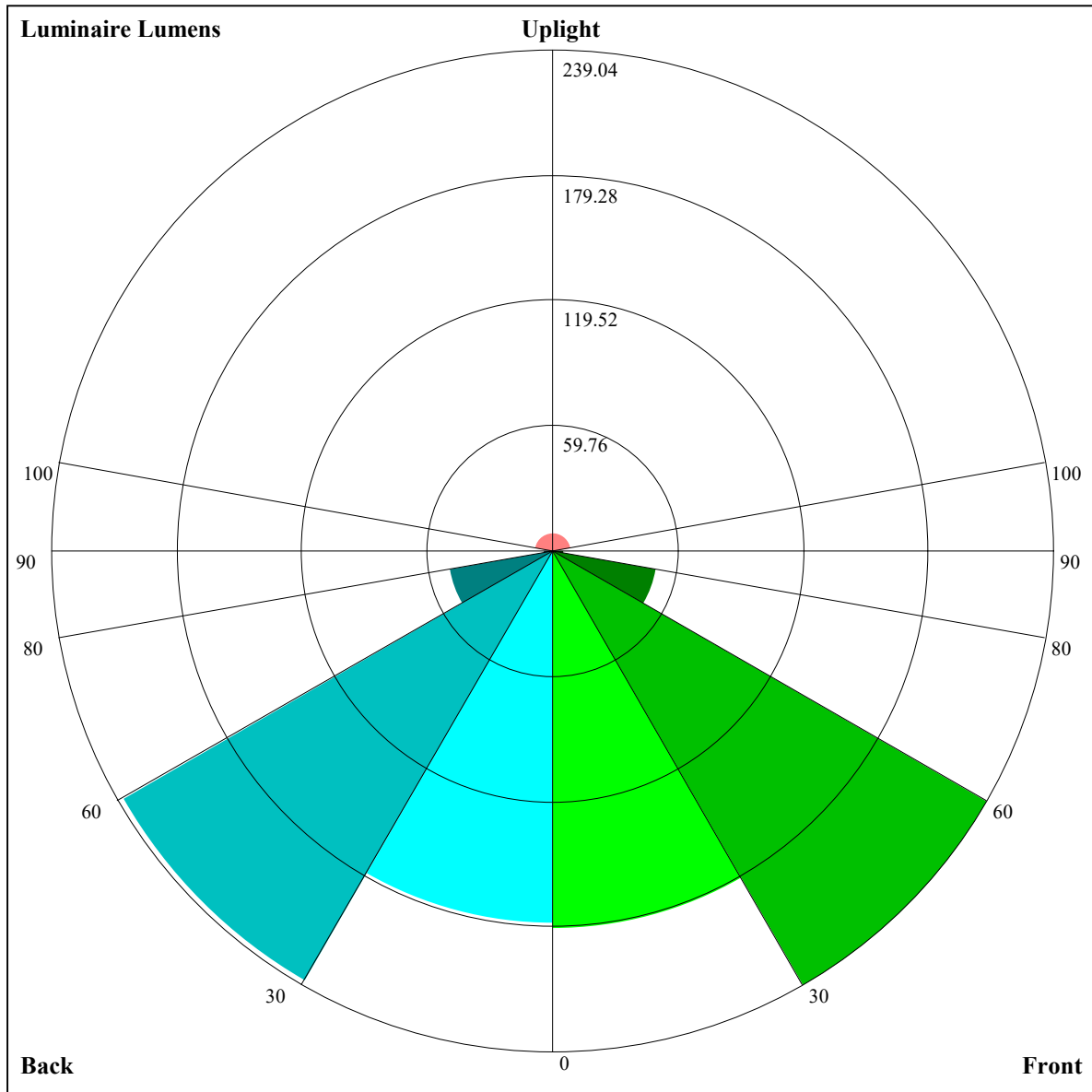
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
27042	24988	24218	23056	24593	16978	23237	11204	11826

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=180.38,FM=239.04,FH=50.54,FVH=5.6

BL=178.03,BM=236.89,BH=50.43,BVH=4.88

UL=1.61,UH=8.51

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	386.84	386.48	378.12	390.48	376.66	343.58	313.40	279.95	238.14
22.5	379.21	389.02	389.02	377.39	382.48	350.12	315.22	274.86	226.87
45.0	391.57	380.30	385.39	385.75	363.94	336.67	315.95	265.05	225.42
67.5	386.12	389.02	397.39	389.39	365.76	355.21	315.58	262.50	223.24
90.0	376.66	386.84	378.12	370.48	359.57	351.58	300.31	267.23	216.69
112.5	382.12	385.75	381.03	377.03	345.76	335.22	297.77	249.78	225.05
135.0	383.21	394.11	391.57	373.03	346.12	317.76	284.68	257.77	230.51
157.5	388.30	384.30	389.75	366.48	367.94	333.03	304.31	273.04	209.78
180.0	386.84	386.12	380.66	391.93	362.85	338.85	315.22	273.77	225.42
202.5	379.21	393.75	375.57	383.21	374.12	346.12	311.22	264.32	235.96
225.0	391.57	384.30	379.57	377.03	368.66	345.03	318.49	279.59	246.50
247.5	386.12	387.93	375.57	382.84	368.66	334.12	311.58	274.50	227.60
270.0	376.66	385.75	384.66	376.30	383.93	348.67	311.58	282.13	230.51
292.5	382.12	385.75	395.21	378.12	363.57	340.31	315.58	257.41	238.14
315.0	383.21	371.57	379.94	375.21	361.76	345.76	310.13	271.59	240.32
337.5	388.30	397.75	367.94	374.48	377.03	347.58	294.86	269.77	240.69
360.0	386.84	386.48	378.12	390.48	376.66	343.58	313.40	279.95	238.14
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	200.69	142.89	108.71	73.44	48.72	42.54	26.54	26.18	0.00
22.5	154.88	113.80	95.62	78.90	45.81	30.18	26.90	21.45	10.54
45.0	178.52	135.61	86.89	61.81	44.72	44.72	20.00	16.72	6.91
67.5	178.15	130.89	90.53	67.26	52.72	35.27	34.90	16.36	0.00
90.0	173.79	135.98	87.98	63.99	51.26	37.08	29.45	25.45	0.00
112.5	157.06	96.71	96.71	75.99	37.45	36.36	32.72	14.18	1.45
135.0	170.52	126.52	91.26	64.35	45.45	39.27	21.09	17.45	5.09
157.5	172.70	149.79	102.16	76.35	49.45	42.18	26.18	17.09	5.09
180.0	184.33	143.98	95.98	59.26	66.17	33.81	33.45	22.54	20.36
202.5	177.42	120.71	103.26	75.26	64.35	31.27	20.72	14.91	3.27
225.0	185.06	131.61	100.35	67.26	58.17	45.45	24.72	27.27	0.00
247.5	192.69	151.25	105.44	81.08	62.90	51.99	26.90	14.54	5.09
270.0	199.97	159.61	117.07	80.71	54.90	42.54	34.54	8.36	9.82
292.5	172.33	137.43	86.53	79.26	48.36	50.17	30.54	20.00	5.82
315.0	186.15	142.16	97.44	75.26	57.44	44.72	22.54	16.72	8.73
337.5	170.52	154.88	119.25	70.53	54.54	42.54	35.63	28.00	13.09
360.0	200.69	142.89	108.71	73.44	48.72	42.54	26.54	26.18	0.00
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	5.45	0.00	9.82	0.00	4.73	2.18	0.00	3.27	0.00
22.5	0.00	0.00	2.18	0.00	0.00	5.09	0.00	1.09	0.00
45.0	1.82	3.64	0.00	0.00	0.00	0.73	6.91	0.00	10.54
67.5	5.45	2.18	0.00	0.00	0.00	0.00	0.00	1.09	9.82
90.0	0.00	0.00	0.00	8.73	4.00	0.00	0.00	0.00	0.36
112.5	0.00	0.00	0.00	0.00	9.82	0.00	1.45	1.82	0.00
135.0	0.73	0.00	0.00	4.73	8.73	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	6.54	0.00	0.00	0.00	0.00	2.54	0.00	4.00	0.00
202.5	1.09	3.27	0.00	0.00	0.00	0.00	5.82	0.00	10.91
225.0	0.00	0.36	0.00	4.73	0.00	0.00	0.00	0.73	4.73
247.5	0.00	0.00	0.00	0.00	0.73	0.00	0.00	9.09	0.00
270.0	0.00	0.00	16.00	11.27	2.18	0.00	0.00	0.00	0.00
292.5	0.00	0.00	2.54	0.00	0.00	0.00	0.00	0.00	0.36
315.0	2.91	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.00
337.5	5.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
360.0	5.45	0.00	9.82	0.00	4.73	2.18	0.00	3.27	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	0.00	0.00	1.82	8.73	1.82	0.00	0.00	0.00
22.5	3.27	0.00	0.00	0.00	4.73	0.00	0.00	0.00	7.27
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67.5	7.63	0.00	0.00	0.00	7.27	0.00	0.00	0.00	2.18
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	2.54	0.00	1.82	0.00	0.00	11.63	0.00
135.0	12.00	5.82	0.00	1.45	0.00	0.00	9.45	0.36	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	7.63	0.00	9.09
202.5	0.00	0.00	3.27	4.00	0.00	0.00	8.73	0.00	7.63
225.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.18
247.5	0.00	0.00	4.36	0.00	0.00	0.00	0.00	0.73	3.64
270.0	0.00	0.00	2.54	0.00	0.00	0.00	0.00	0.00	0.00
292.5	0.00	0.00	0.00	0.00	0.00	8.00	2.91	3.27	0.00
315.0	0.00	6.18	0.00	0.00	0.00	0.00	0.00	1.09	0.00
337.5	0.00	7.27	0.00	0.00	0.00	3.64	0.00	5.45	0.00
360.0	0.00	0.00	0.00	1.82	8.73	1.82	0.00	0.00	0.00

C/γ(°)	180.0
0.0	0.00
22.5	0.00
45.0	0.00
67.5	4.73
90.0	0.00
112.5	0.00
135.0	0.00
157.5	0.00
180.0	0.00
202.5	0.00
225.0	0.00
247.5	4.73
270.0	0.00
292.5	0.00
315.0	0.00
337.5	0.00
360.0	0.00