



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 2-1795-N	
Luminaire: 99.02.73.172	
Report No: NATA0100	Voltage(V): 34.0000
Test No: GC2018072705	Current(A): 0.3100
LampCAT: BRIDGELUX V9 HD	Power (W): 10.5400
Lamp flux(lm): 1151.0	PF: 1.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 69	Width(mm): 69
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 975.47
Efficiency(%): 84.75%
Lumens(lm)/Power(W): 93.99
Central intensity(cd): 2694.598
Maximum intensity(cd): 2694.598
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=29.8
[C90/270]Total=29.8
Field angle(10%Imax): [C0/180]Total=59.9
[C90/270]Total=59.9
Maximum s/h(1/2): C0_180=0.50 C90_270=0.50
Maximum s/h(1/4): C0_180=0.55 C90_270=0.55
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 86.07%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 96.256%

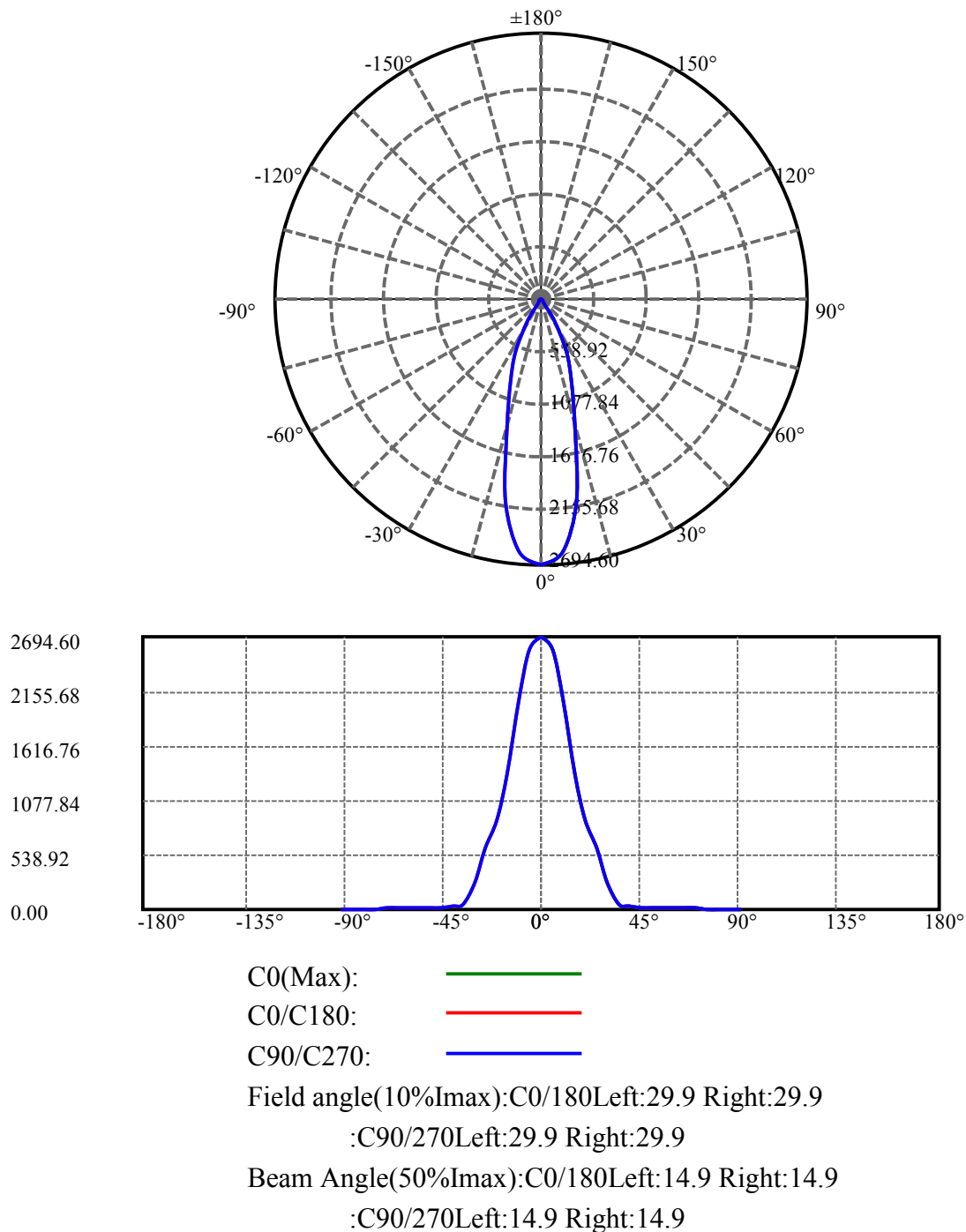
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2694.598	16.114	16.114	1.400%	1.652%
5.0	2563.701	122.477	138.591	10.641%	14.208%
10.0	2075.076	197.512	336.103	17.160%	34.456%
15.0	1331.979	188.966	525.069	16.418%	53.827%
20.0	893.889	167.581	692.65	14.560%	71.007%
25.0	595.786	138.016	830.665	11.991%	85.156%
30.0	265.916	72.879	903.544	6.332%	92.627%
35.0	54.533	17.145	920.689	1.490%	94.384%
40.0	25.691	9.052	929.741	.786%	95.312%
45.0	17.549	6.802	936.543	.591%	96.010%
50.0	14.294	6.002	942.545	.521%	96.625%
55.0	12.512	5.618	948.163	.488%	97.201%
60.0	11.376	5.400	953.563	.469%	97.754%
65.0	10.123	5.029	958.592	.437%	98.270%
70.0	8.974	4.622	963.215	.402%	98.744%
75.0	7.818	4.139	967.354	.360%	99.168%
80.0	6.806	3.674	971.028	.319%	99.545%
85.0	5.657	3.089	974.117	.268%	99.862%
90.0	4.928	1.350	975.468	.117%	100.000%

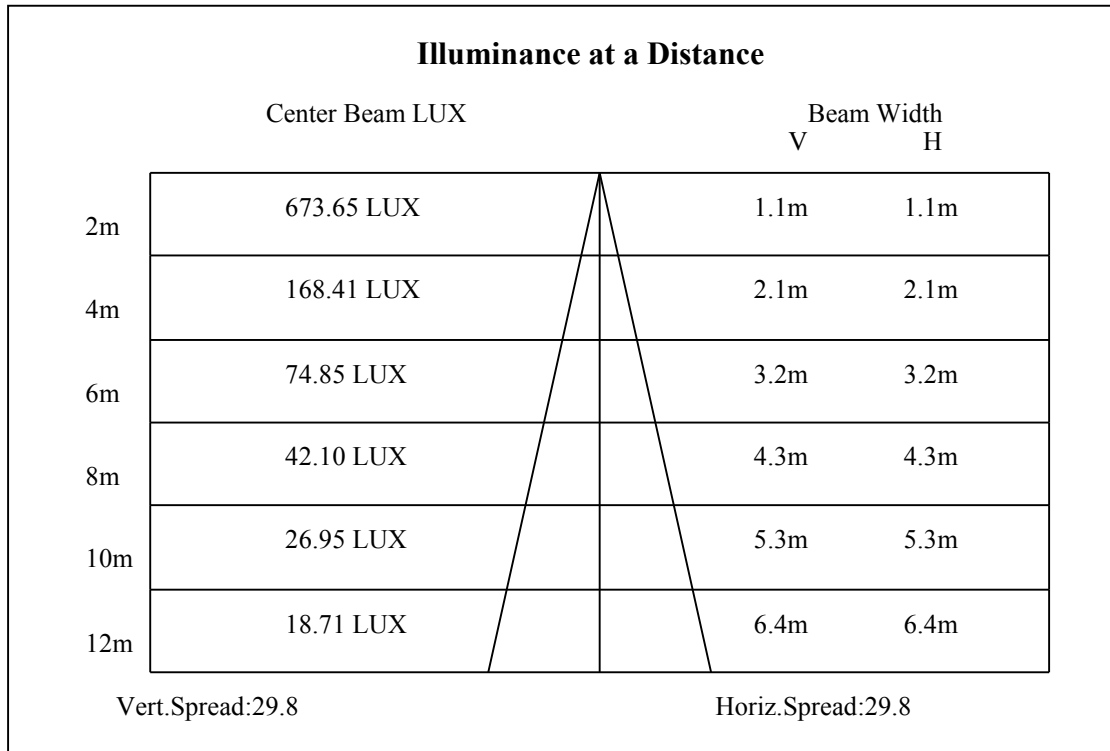
ZONAL LUMEN SUMMARY

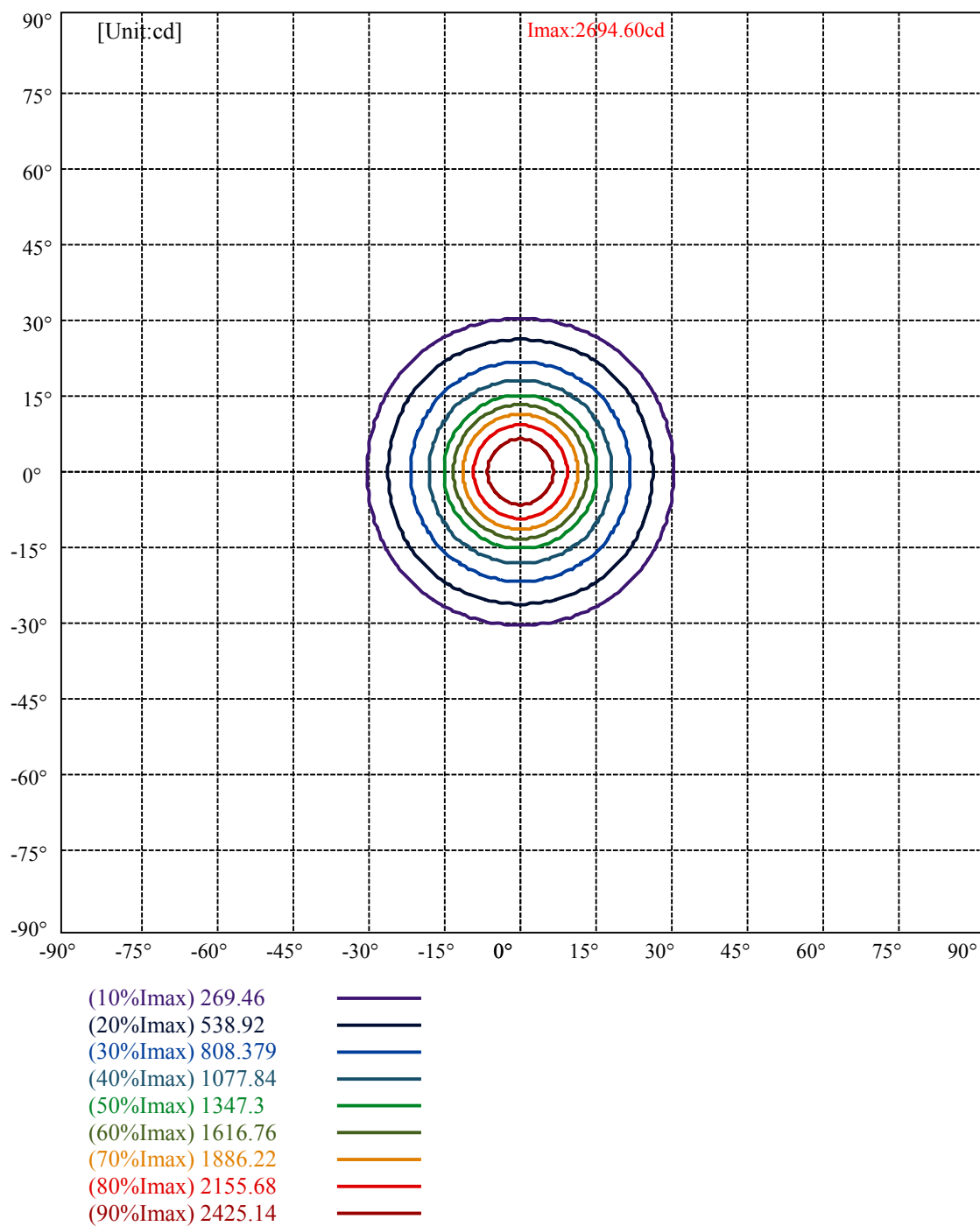
Zone	Lumens	%Lamp	%Fixt
0-30	903.54	78.50%	92.63%
0-40	929.74	80.78%	95.31%
0-60	953.56	82.85%	97.75%
0-90	974.12	84.63%	99.86%
0-120	974.12	84.63%	99.86%
0-180	975.47	84.75%	100.00%
60-90	25.95	2.25%	2.66%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-23.18	780.37	67.80%	80.00%

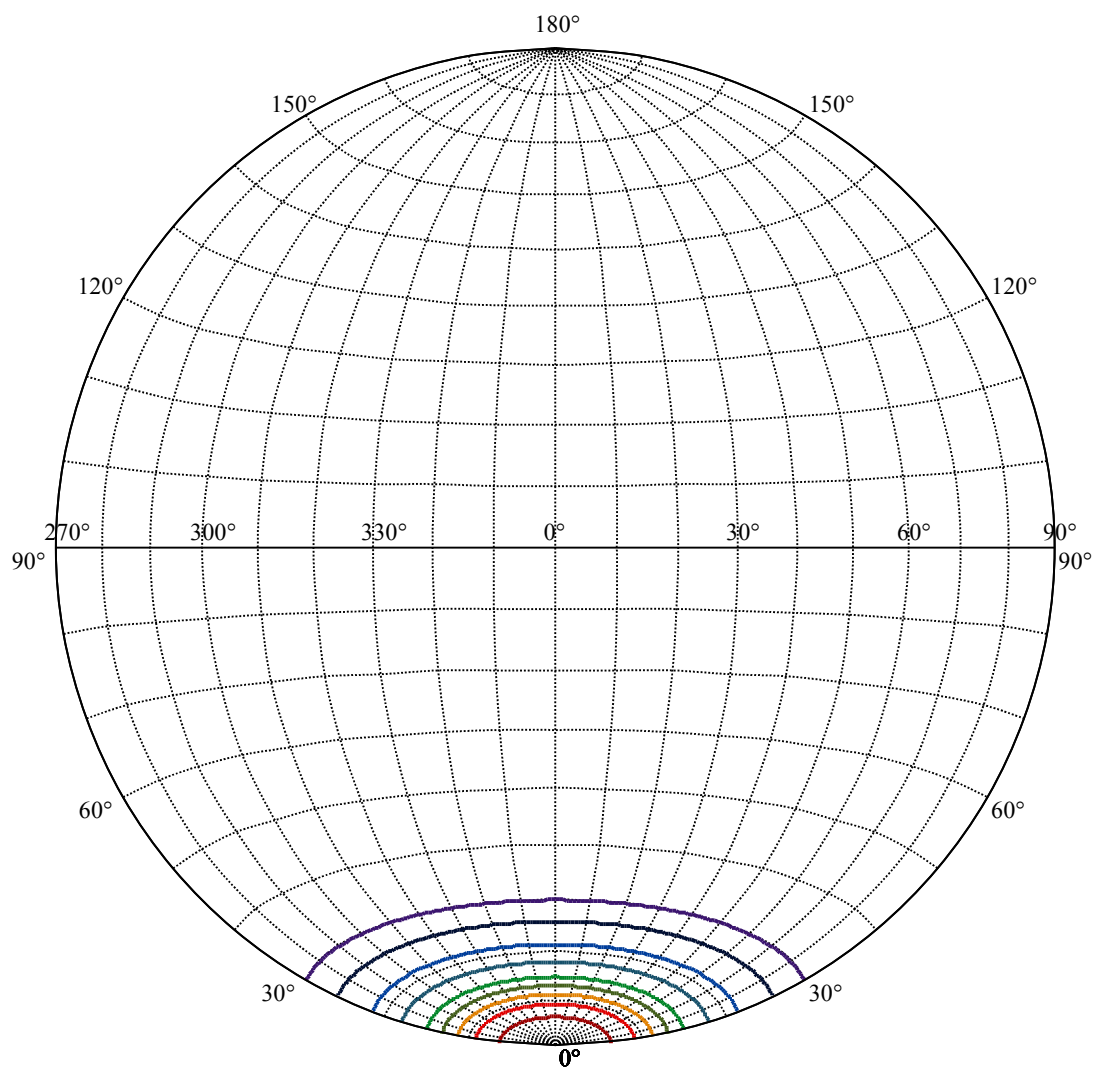
ZONAL LUMEN SUMMARY

0-10	336.10
10-20	356.55
20-30	210.89
30-40	26.20
40-50	12.80
50-60	11.02
60-70	9.65
70-80	7.81
80-90	3.09
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00









House

[Unit:cd]

Road

Imax:2694.60

(10%Imax) 269.46

(20%Imax) 538.92

(30%Imax) 808.379

(40%Imax) 1077.84

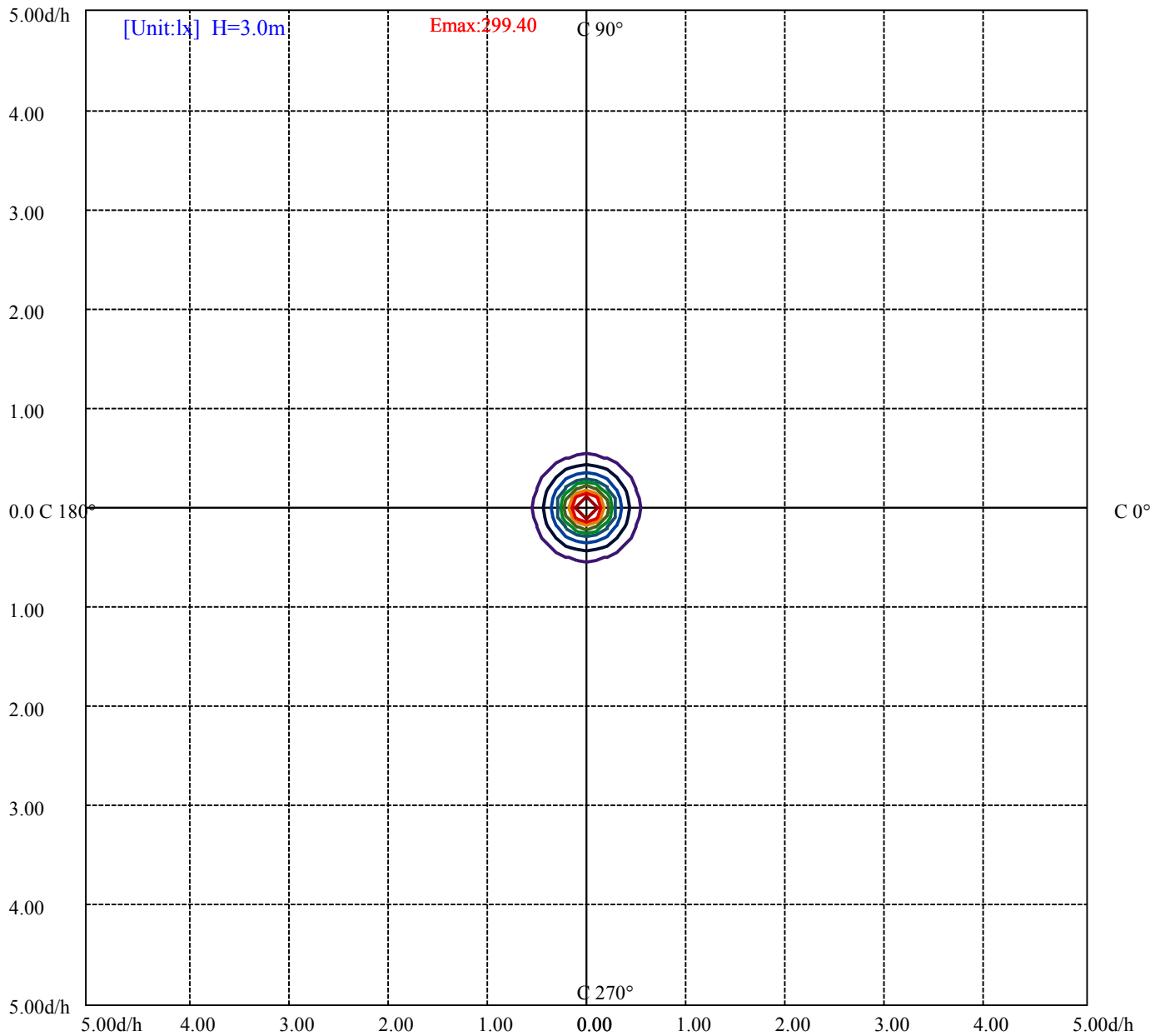
(50%Imax) 1347.3

(60%Imax) 1616.76

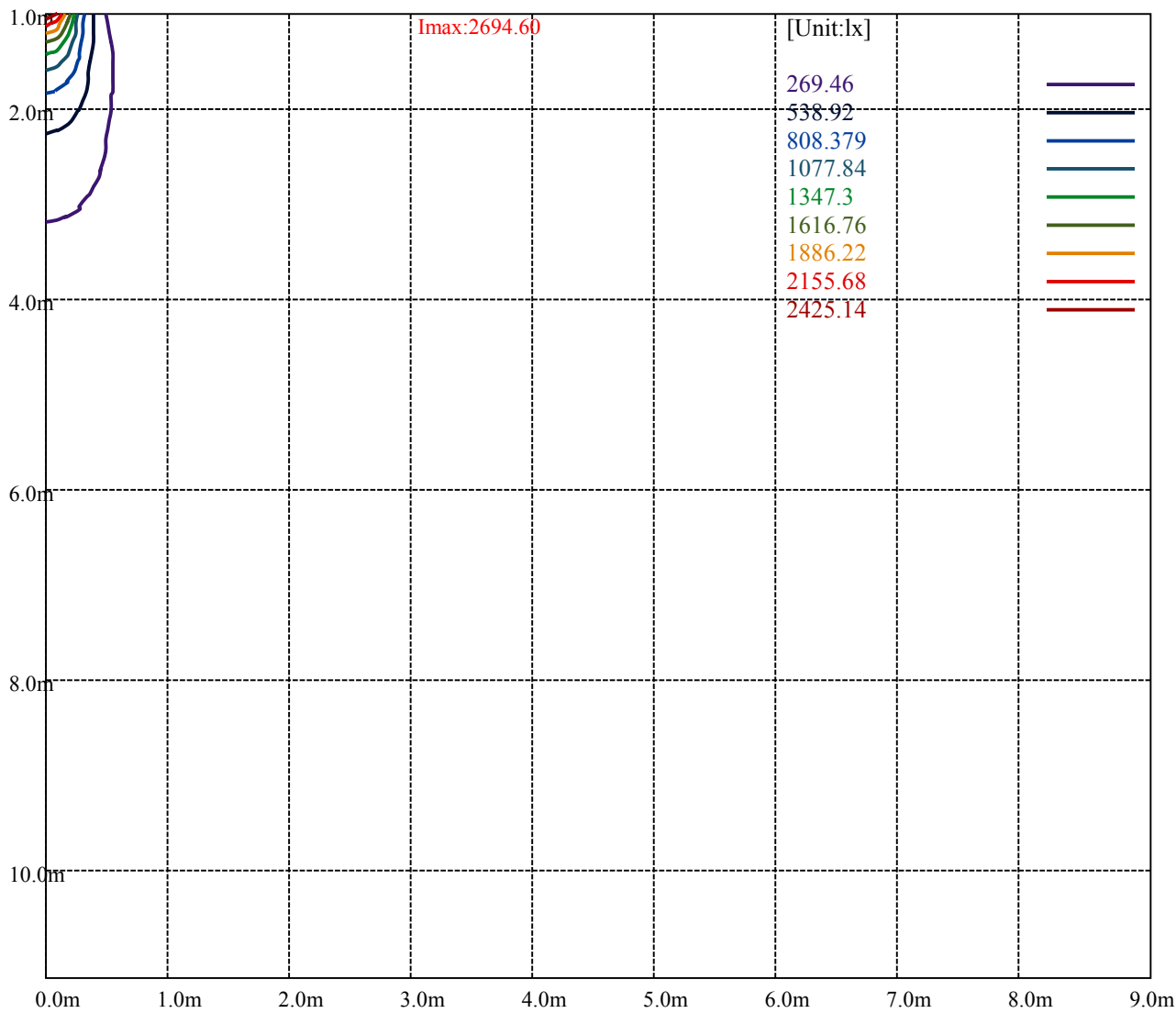
(70%Imax) 1886.22

(80%Imax) 2155.68

(90%Imax) 2425.14



(10%Emax)	29.93989	—
(20%Emax)	59.87989	—
(30%Emax)	89.81978	—
(40%Emax)	119.76	—
(50%Emax)	149.7	—
(60%Emax)	179.64	—
(70%Emax)	209.58	—
(80%Emax)	239.52	—
(90%Emax)	269.4589	—



Luminance Table

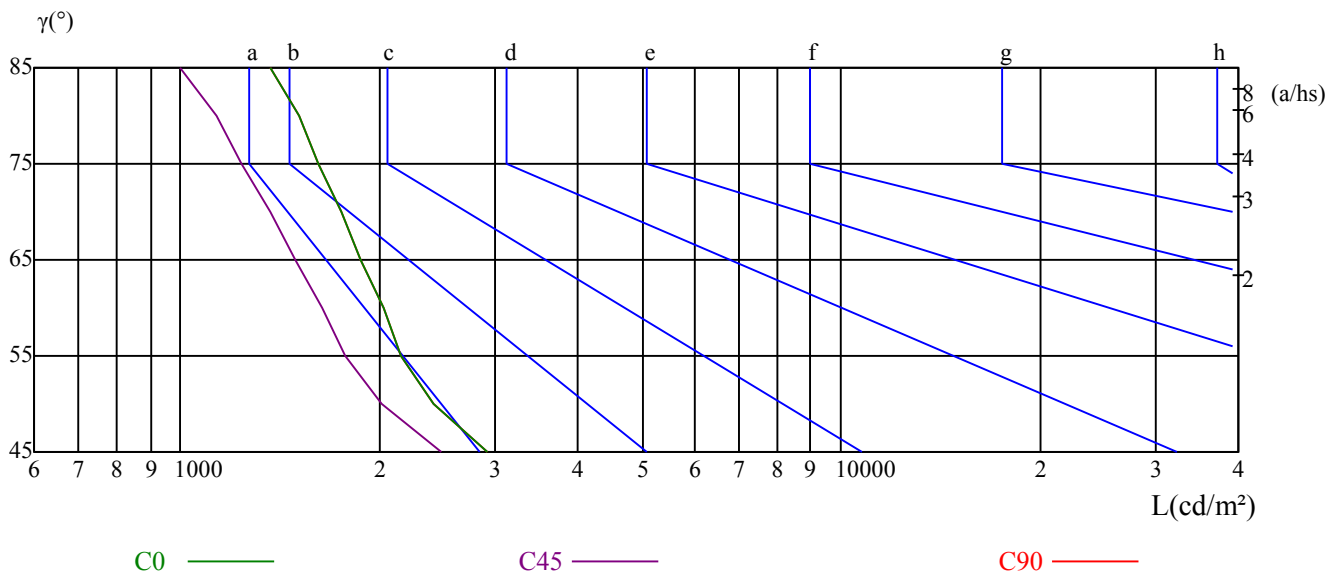
γ	45	50	55	60	65	70	75	80	85
C0	2924	2417	2164	2029	1879	1749	1618	1514	1371
C45	2474	2014	1775	1638	1491	1364	1237	1131	999
C90	2924	2417	2164	2029	1879	1749	1618	1514	1371

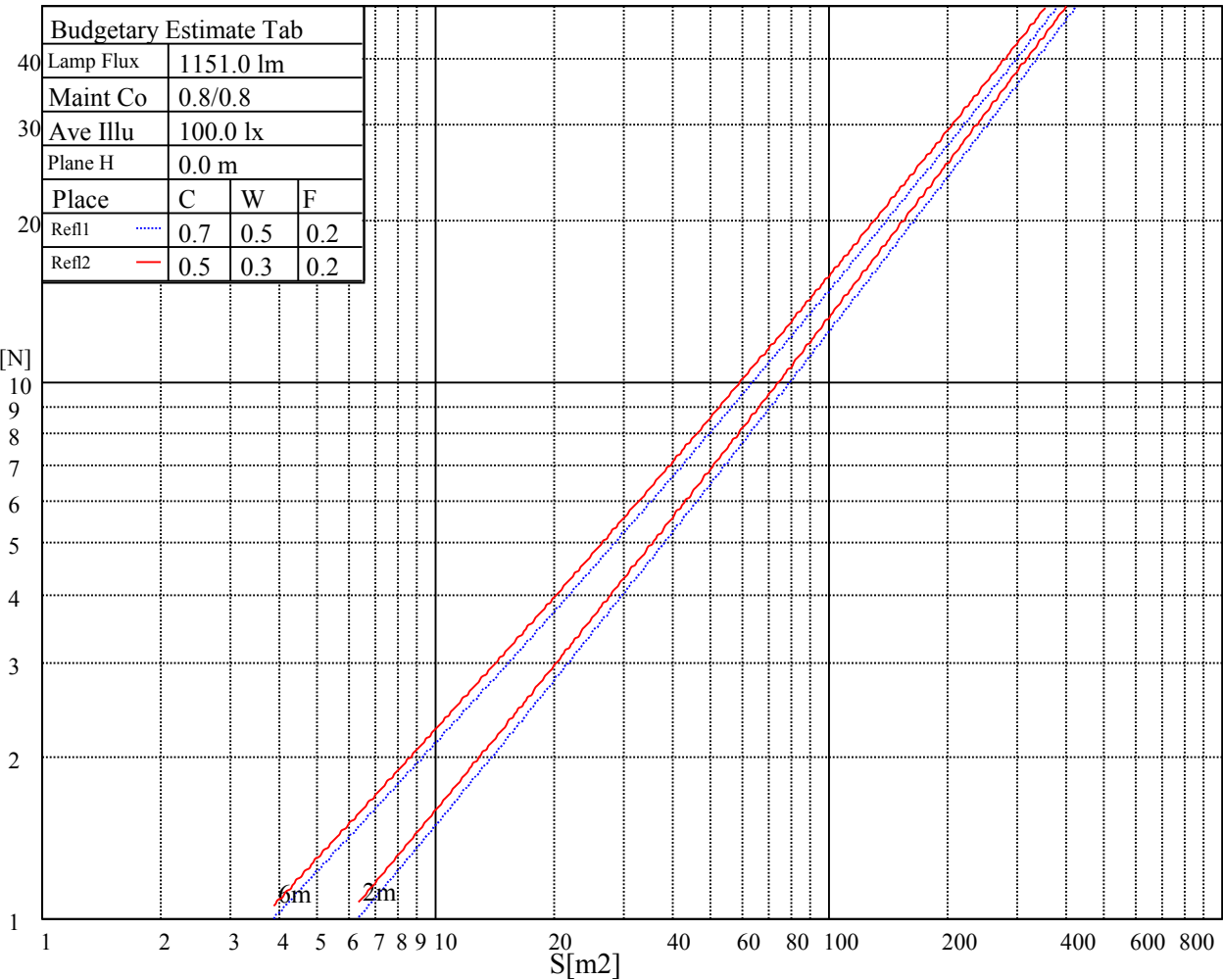
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5031	5031	5031	6345	6345	6345	13633	13633	13633

Glare Table

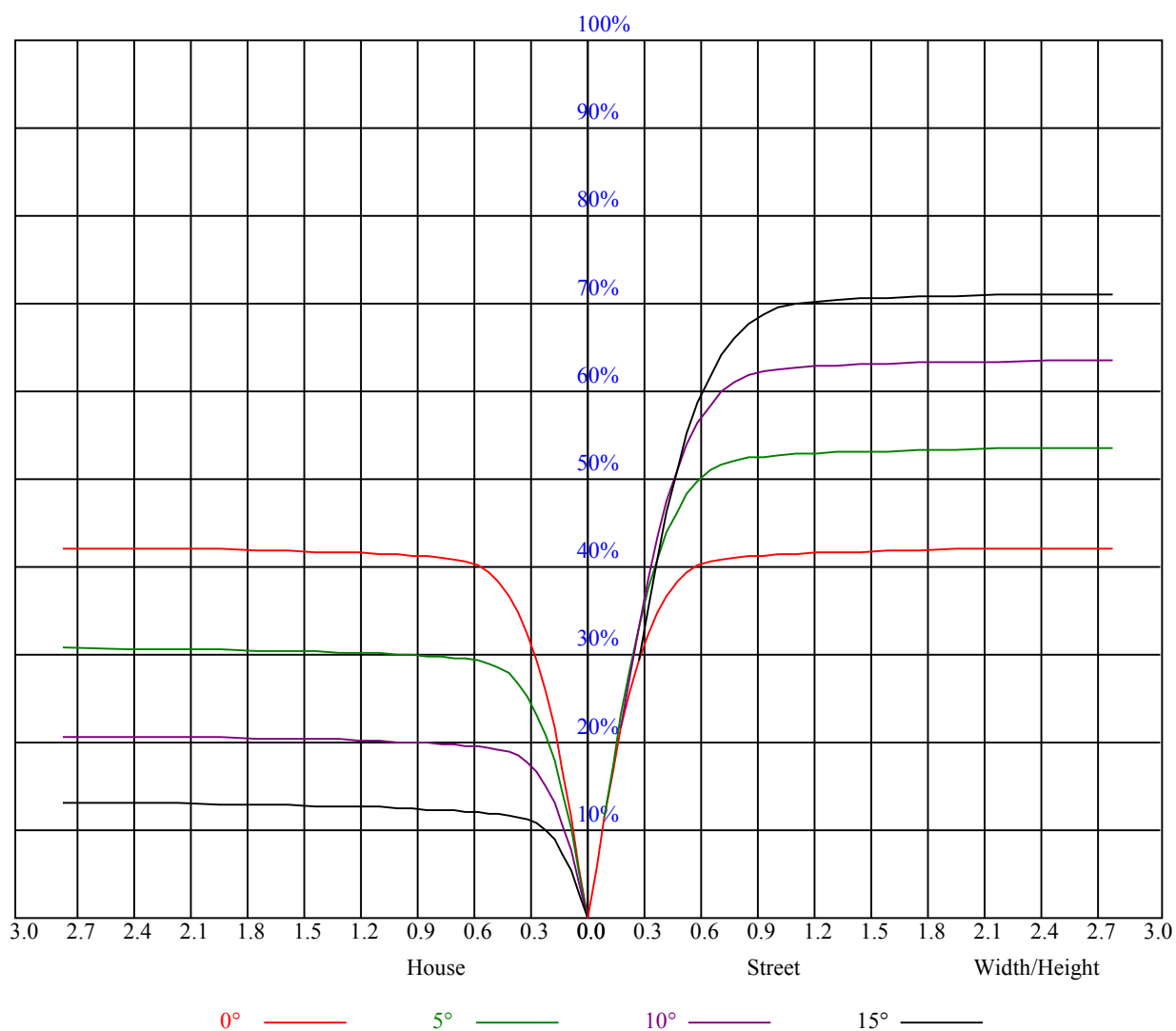
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

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 RHOF=20 CU															
0	1.02	1.02	1.02	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.86
1	0.95	0.92	0.90	0.93	0.91	0.89	0.89	0.88	0.86	0.86	0.85	0.83	0.83	0.82	0.81	0.79
2	0.90	0.86	0.84	0.88	0.85	0.83	0.85	0.83	0.81	0.83	0.81	0.79	0.80	0.79	0.77	0.76
3	0.85	0.81	0.78	0.84	0.81	0.78	0.82	0.79	0.77	0.80	0.77	0.75	0.78	0.76	0.74	0.73
4	0.81	0.77	0.74	0.81	0.77	0.74	0.79	0.76	0.73	0.77	0.74	0.72	0.76	0.73	0.71	0.70
5	0.78	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.70	0.75	0.72	0.69	0.73	0.71	0.69	0.68
6	0.75	0.71	0.68	0.75	0.71	0.68	0.73	0.70	0.67	0.72	0.69	0.67	0.71	0.69	0.66	0.65
7	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.69	0.66	0.64	0.63
8	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.63	0.67	0.64	0.62	0.61
9	0.68	0.64	0.61	0.67	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.65	0.63	0.60	0.60
10	0.66	0.62	0.59	0.65	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.59	0.64	0.61	0.59	0.58



Intensity data(cd)

Appendix Page: 14 Total:14

C/ γ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	2703.27	2538.65	2054.70	1356.04	890.81	603.97	278.59	55.11	24.89
45.0	2696.66	2510.57	1964.41	1293.27	838.51	556.62	284.64	44.87	22.79
90.0	2683.45	2499.01	1907.70	1082.02	800.08	528.05	175.30	43.88	22.96
135.0	2695.01	2612.98	2175.28	1448.53	986.61	643.06	285.19	61.66	27.64
180.0	2703.27	2619.58	2122.42	1398.98	908.54	594.61	236.69	55.77	26.43
225.0	2696.66	2626.19	2199.50	1475.51	929.68	626.82	299.45	58.69	27.25
270.0	2683.45	2585.45	2208.86	1506.89	940.36	640.86	340.25	65.24	29.73
315.0	2695.01	2517.18	1967.72	1094.58	856.51	572.31	227.22	51.04	23.84
360.0	2703.27	2538.65	2054.70	1356.04	890.81	603.97	278.59	55.11	24.89
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	17.40	14.04	12.33	11.18	9.97	8.86	7.76	6.83	5.73
45.0	16.41	13.65	12.06	11.29	9.86	8.70	7.65	6.55	5.40
90.0	16.96	14.04	12.50	11.18	9.97	8.70	7.60	6.39	5.40
135.0	18.44	14.98	13.10	11.67	10.35	9.25	7.98	6.88	5.67
180.0	18.06	14.65	12.94	11.73	10.41	9.30	8.04	6.94	5.84
225.0	17.84	14.26	12.28	11.23	9.97	8.75	7.71	6.88	5.73
270.0	18.44	14.76	12.66	11.51	10.46	9.36	8.15	7.27	5.78
315.0	16.85	13.98	12.22	11.23	10.02	8.86	7.65	6.72	5.73
360.0	17.40	14.04	12.33	11.18	9.97	8.86	7.76	6.83	5.73
C/ γ (°)	90.0								
0.0	4.90								
45.0	4.79								
90.0	4.96								
135.0	4.90								
180.0	4.96								
225.0	4.96								
270.0	4.96								
315.0	5.01								
360.0	4.90								