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Nata

LumCAT: LN01D03536DA-N

Luminaire: 97.70.272.000

Report No: 200623-B020

Test No: 200623-C020

LampCAT: BRIDGELUX V4HD LES5.2

Lamp flux(lm): 365.8

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 34.6200

Current(A): 0.1000

Power (W): 3.4620

PF: 1.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 330.19

Efficiency(%): 90.27%

Lumens(lm)/Power(W): 95.38

Central intensity(cd): 716.695

Maximum intensity(cd): 716.695

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=38.0

[C90/270]Total=38.0

Field angle(10%Imax): [C0/180]Total=60.6

[C90/270]Total=60.6

Maximum s/h(1/2): C0_180=0.63 C90_270=0.63

Maximum s/h(1/4): C0_180=0.60 C90_270=0.60

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 90.27%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 96.556%

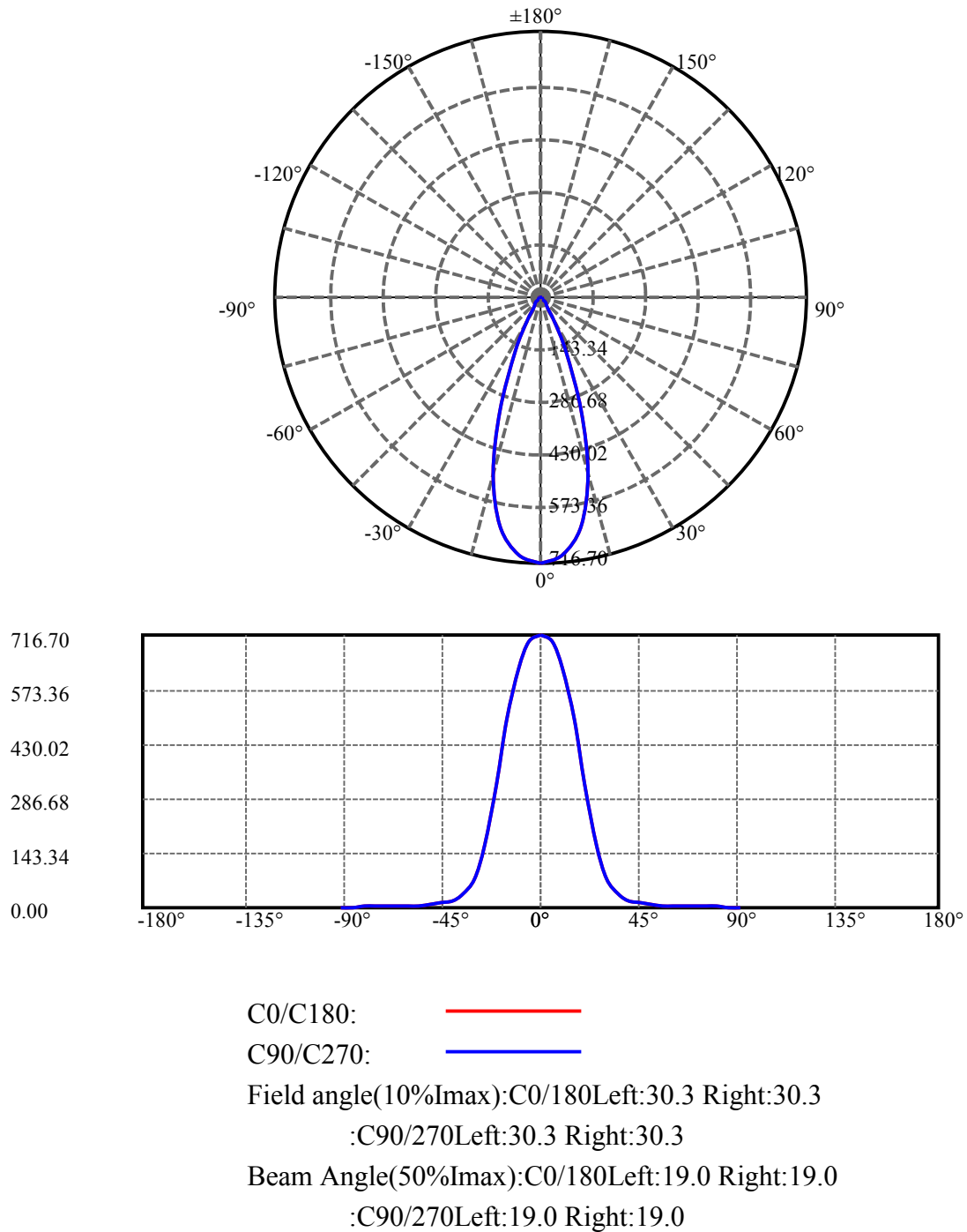
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	716.695	0.000	0	.000%	.000%
5.0	698.027	16.913	16.913	4.624%	5.122%
10.0	627.420	47.415	64.328	12.963%	19.482%
15.0	492.940	66.459	130.787	18.169%	39.609%
20.0	325.533	67.454	198.241	18.441%	60.038%
25.0	163.252	51.264	249.505	14.015%	75.564%
30.0	74.138	30.042	279.547	8.213%	84.662%
35.0	33.827	15.899	295.445	4.346%	89.477%
40.0	19.005	8.815	304.26	2.410%	92.146%
45.0	11.503	5.649	309.909	1.544%	93.857%
50.0	7.671	3.874	313.784	1.059%	95.031%
55.0	5.379	2.838	316.621	.776%	95.890%
60.0	4.141	2.201	318.822	.602%	96.556%
65.0	3.410	1.836	320.657	.502%	97.112%
70.0	3.973	1.869	322.527	.511%	97.678%
75.0	5.625	2.509	325.035	.686%	98.438%
80.0	4.205	2.630	327.666	.719%	99.235%
85.0	1.828	1.639	329.305	.448%	99.731%
90.0	1.413	0.888	330.192	.243%	100.000%

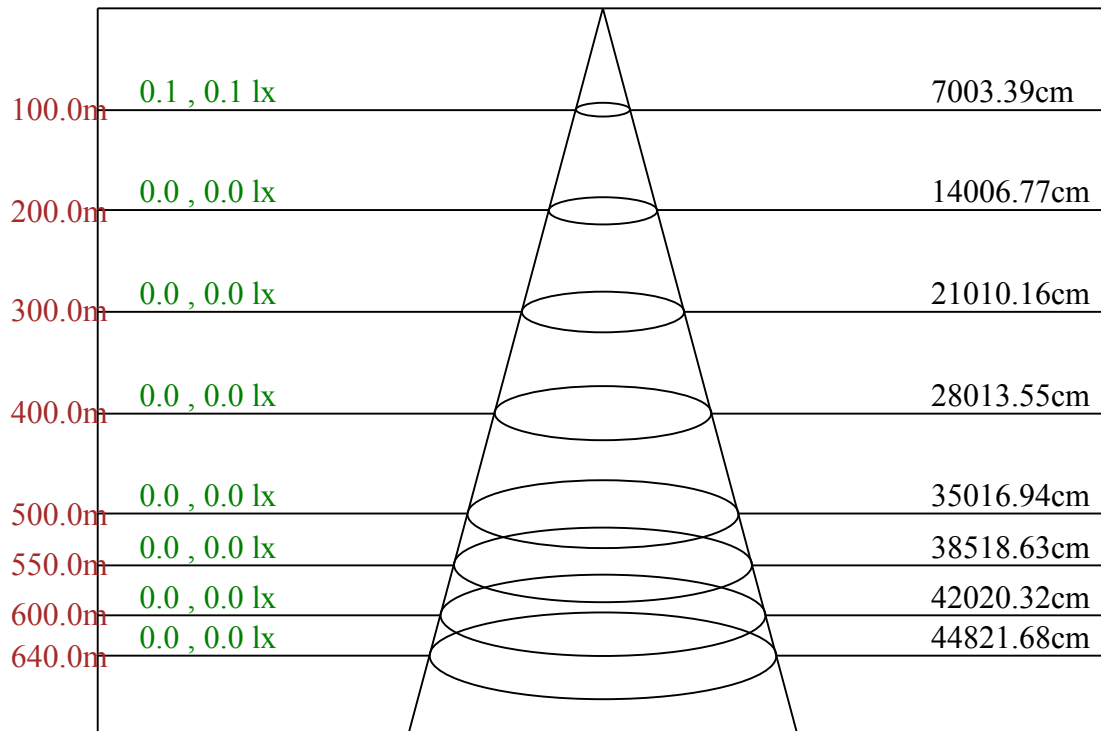
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	279.55	76.42%	84.66%
0-40	304.26	83.18%	92.15%
0-60	318.82	87.16%	96.56%
0-90	329.30	90.03%	99.73%
0-120	329.30	90.03%	99.73%
0-180	330.19	90.27%	100.00%
60-90	12.68	3.47%	3.84%
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%
0-27.44	264.15	72.22%	80.00%

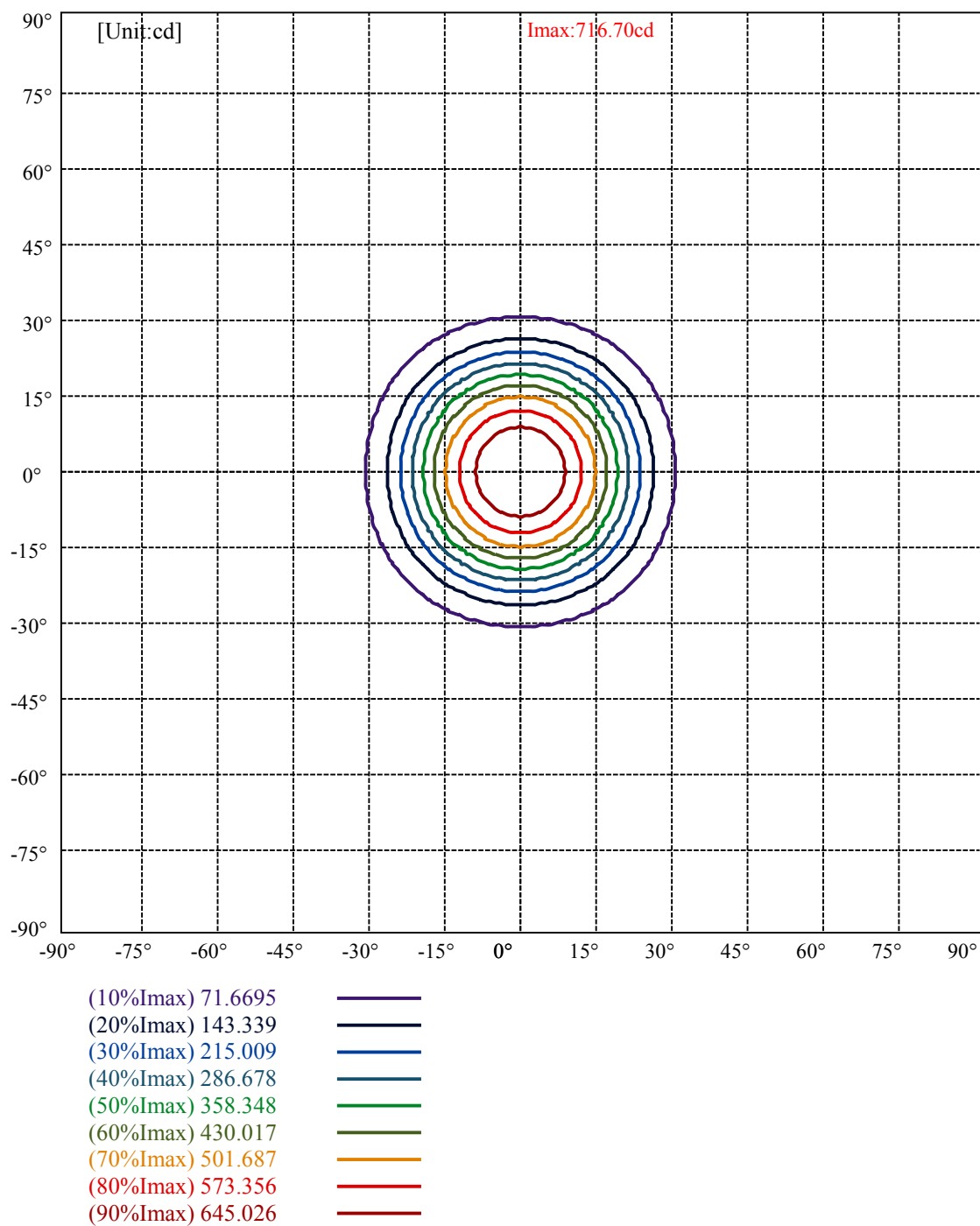
ZONAL LUMEN SUMMARY

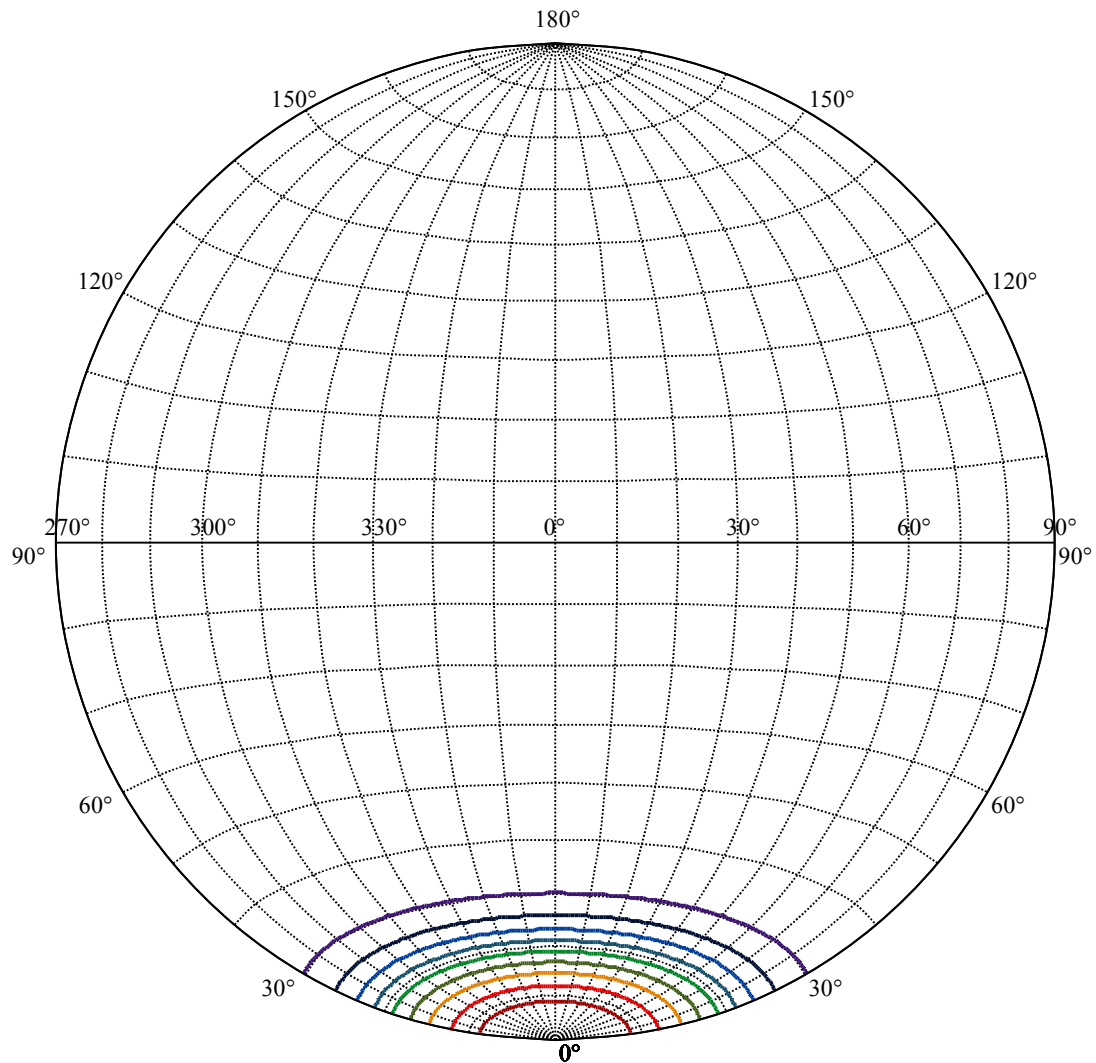
0-10	64.33
10-20	133.91
20-30	81.31
30-40	24.71
40-50	9.52
50-60	5.04
60-70	3.71
70-80	5.14
80-90	1.64
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00





Max , Ave Beam angle of C0 plane 38.60





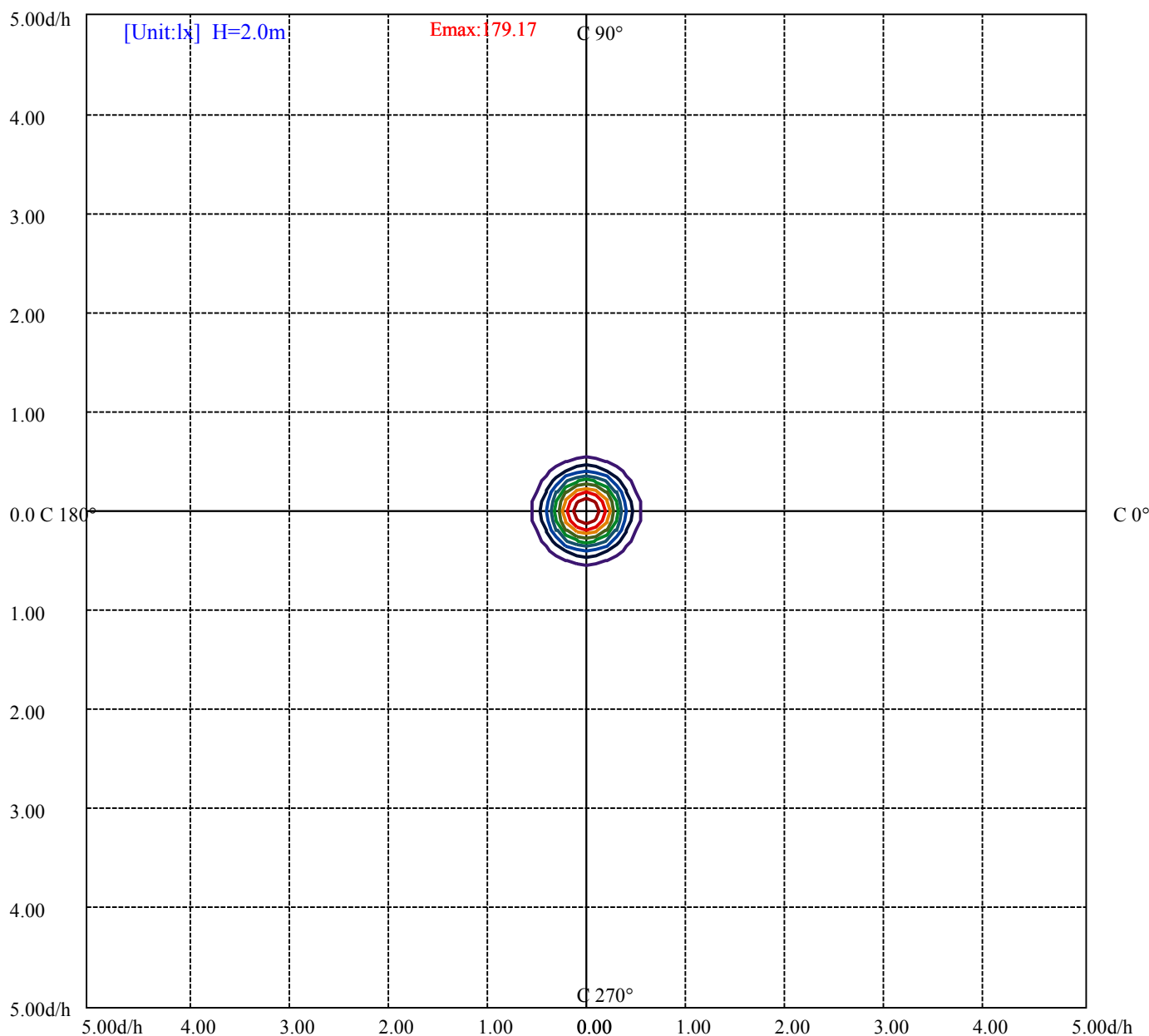
House

[Unit:cd]

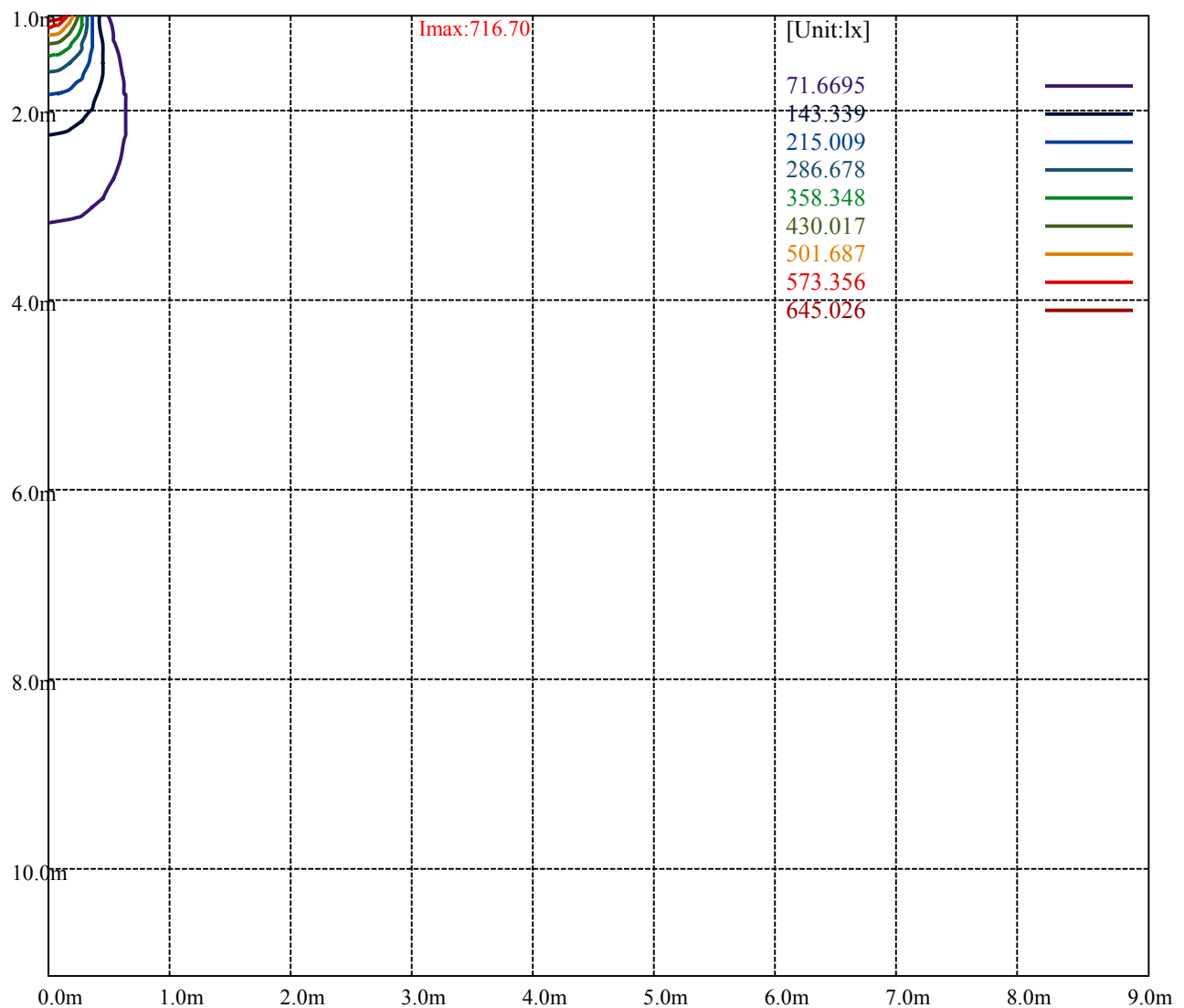
Road

Imax:716.70
 (10%Imax) 71.6695
 (20%Imax) 143.339
 (30%Imax) 215.009
 (40%Imax) 286.678
 (50%Imax) 358.348
 (60%Imax) 430.017
 (70%Imax) 501.687
 (80%Imax) 573.356
 (90%Imax) 645.026





(10%Emax) 17.91738	—
(20%Emax) 35.83475	—
(30%Emax) 53.752	—
(40%Emax) 71.6695	—
(50%Emax) 89.58675	—
(60%Emax) 107.5042	—
(70%Emax) 125.4215	—
(80%Emax) 143.339	—
(90%Emax) 161.2563	—



Luminance Table

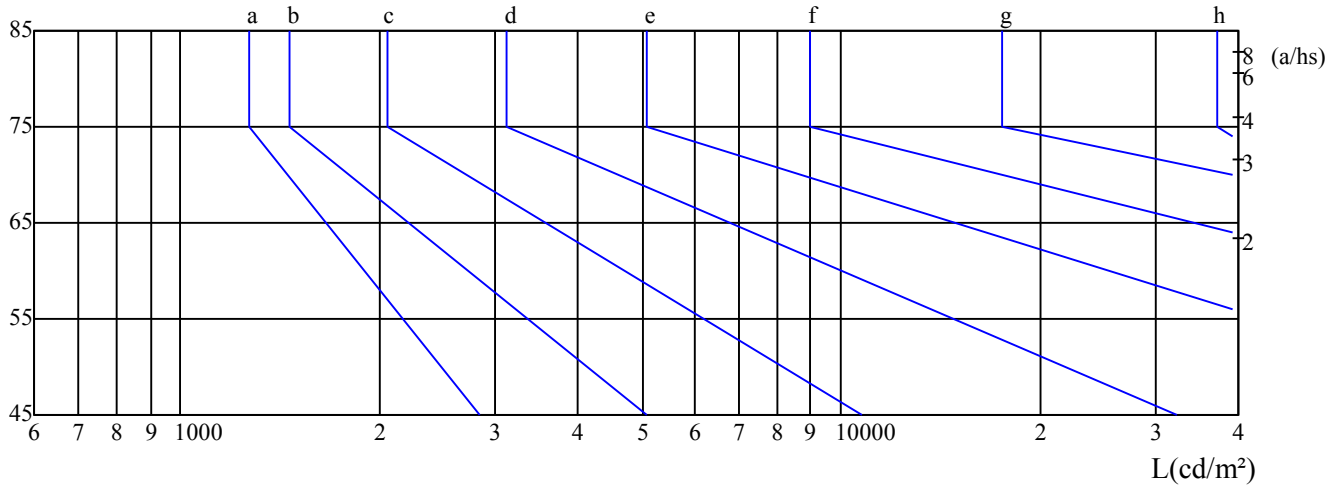
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

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

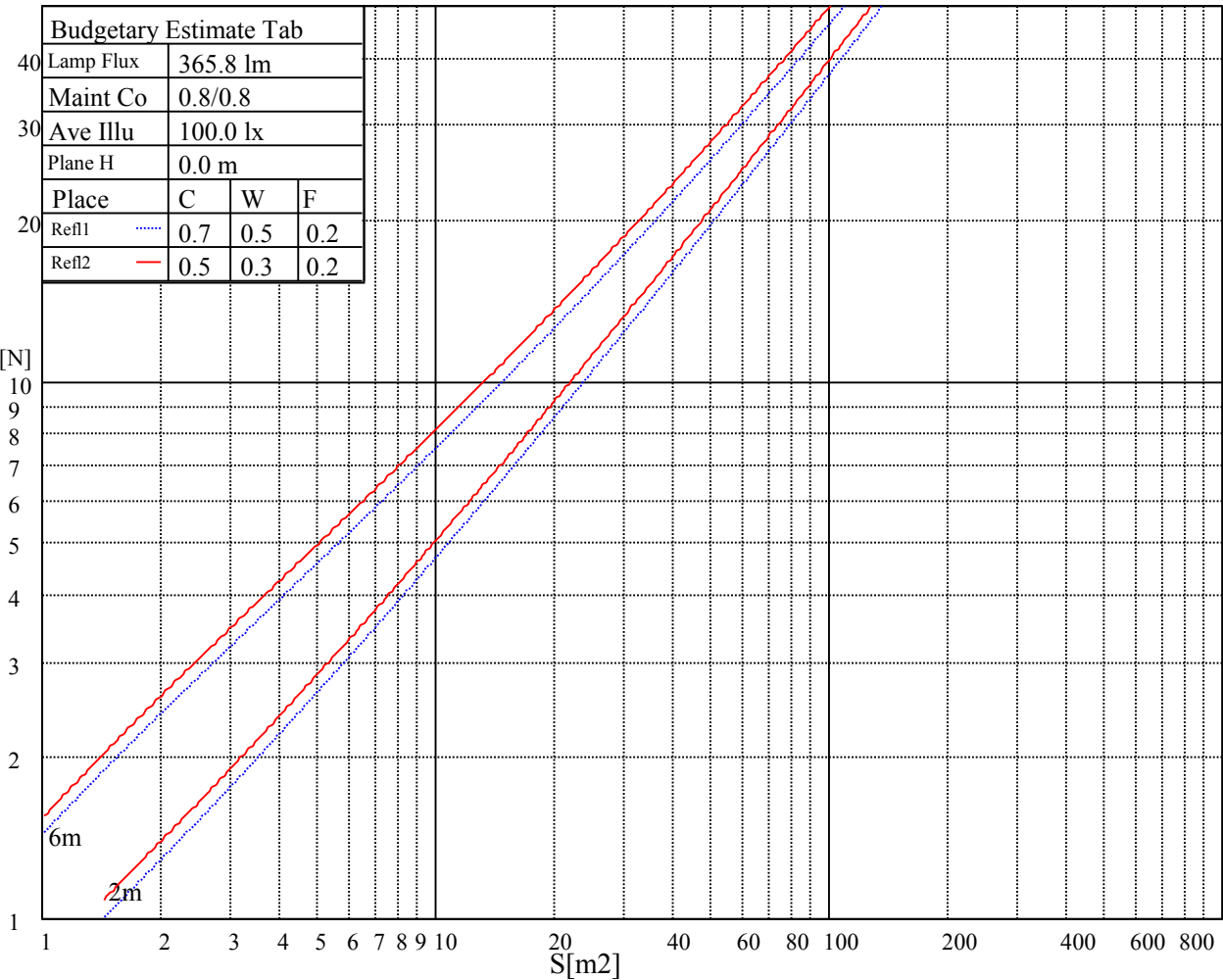
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

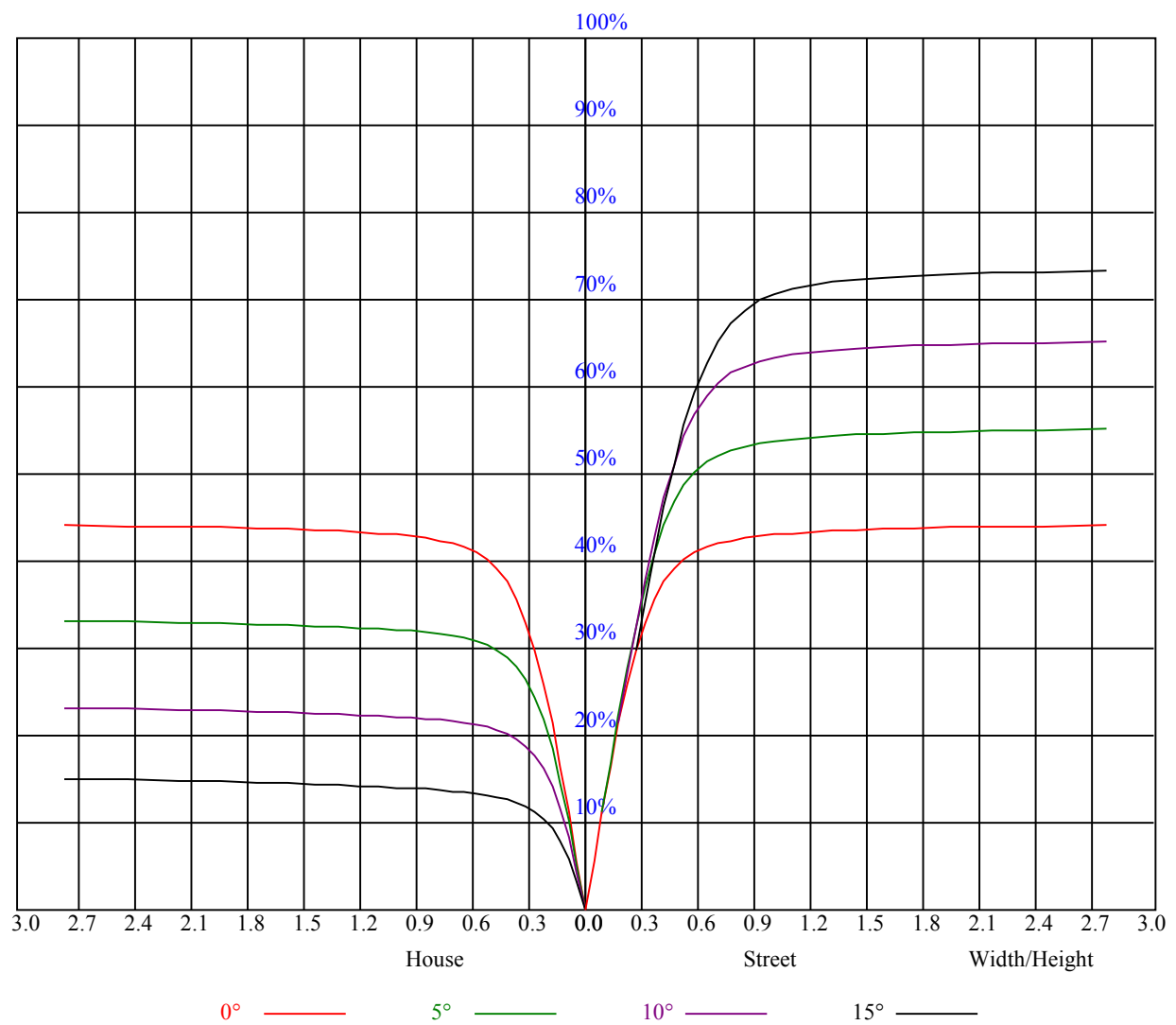
C0 ———

C45 ———

C90 ———



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	1.07	1.07	1.07	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.00	0.98	0.96	0.98	0.96	0.94	0.94	0.93	0.91	0.91	0.90	0.89	0.88	0.87	0.86	0.85
2	0.94	0.90	0.87	0.92	0.89	0.86	0.89	0.87	0.85	0.87	0.85	0.83	0.84	0.83	0.81	0.80
3	0.88	0.84	0.81	0.87	0.83	0.80	0.85	0.82	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.75
4	0.84	0.79	0.76	0.83	0.79	0.75	0.81	0.77	0.74	0.79	0.76	0.74	0.77	0.75	0.73	0.71
5	0.80	0.75	0.71	0.79	0.74	0.71	0.77	0.73	0.70	0.76	0.72	0.70	0.74	0.72	0.69	0.68
6	0.76	0.71	0.68	0.75	0.71	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.71	0.68	0.66	0.65
7	0.72	0.68	0.64	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.69	0.66	0.63	0.62
8	0.69	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.60	0.59
9	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.58	0.64	0.61	0.58	0.64	0.60	0.58	0.57
10	0.64	0.59	0.56	0.63	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.55



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	714.15	705.54	647.89	539.78	358.65	184.44	86.57	38.25	20.98
45.0	715.84	720.68	661.84	515.81	328.44	155.42	67.05	31.56	18.28
90.0	719.83	711.39	634.16	465.86	281.03	130.05	56.70	27.00	16.14
135.0	716.96	703.52	630.96	488.53	321.92	157.78	71.27	32.79	18.45
180.0	714.15	680.79	597.21	464.34	305.33	153.00	67.84	30.43	17.89
225.0	715.84	677.76	600.92	471.94	321.36	164.31	74.36	33.86	18.90
270.0	719.83	691.48	627.58	512.66	360.56	195.30	92.25	41.79	21.43
315.0	716.96	693.06	618.81	484.59	326.98	165.71	77.06	34.93	19.97
360.0	714.15	705.54	647.89	539.78	358.65	184.44	86.57	38.25	20.98
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	12.66	8.49	5.79	4.39	3.54	3.04	3.09	2.48	1.86
45.0	10.91	7.48	5.23	4.11	3.32	2.87	2.53	2.19	1.69
90.0	9.79	6.64	4.84	3.83	3.38	8.72	13.89	8.21	1.80
135.0	11.25	7.65	5.29	4.05	3.32	2.81	2.48	2.08	1.63
180.0	11.03	7.37	5.23	4.05	3.38	3.04	2.81	2.19	1.80
225.0	11.70	7.71	5.46	4.22	3.43	2.93	2.59	2.25	1.86
270.0	12.60	8.27	5.57	4.22	3.49	5.46	15.02	12.04	2.25
315.0	12.09	7.76	5.63	4.28	3.43	2.93	2.59	2.19	1.74
360.0	12.66	8.49	5.79	4.39	3.54	3.04	3.09	2.48	1.86
C/ γ (°)	90.0								
0.0	1.52								
45.0	1.35								
90.0	1.35								
135.0	1.41								
180.0	1.46								
225.0	1.41								
270.0	1.41								
315.0	1.41								
360.0	1.52								