



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: 1655-S
Luminaire: 92.70.051.00
Report No: NATA0100
Test No: GC2018080108
LampCAT: BRIDGELUX V4 HD
Lamp flux(lm): 732.0
Number of Lamps: 1
Length(mm): 32
Phm Type: C

Voltage(V): 37.4000
Current(A): 0.2000
Power (W): 7.4800
PF: 0.0000
Ballast type: DC
Width(mm): 32
Height(mm): 0

Photometric Results

Lumens(lm): 626.94
Efficiency(%): 85.65%
Lumens(lm)/Power(W): 85.28
Central intensity(cd): 1930.140
Maximum intensity(cd): 1930.140
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=27.7
[C90/270]Total=27.7
Field angle(10%Imax): [C0/180]Total=62.9
[C90/270]Total=62.9
Maximum s/h(1/2): C0_180=0.46 C90_270=0.46
Maximum s/h(1/4): C0_180=0.49 C90_270=0.49
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 87.14%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 96.700%

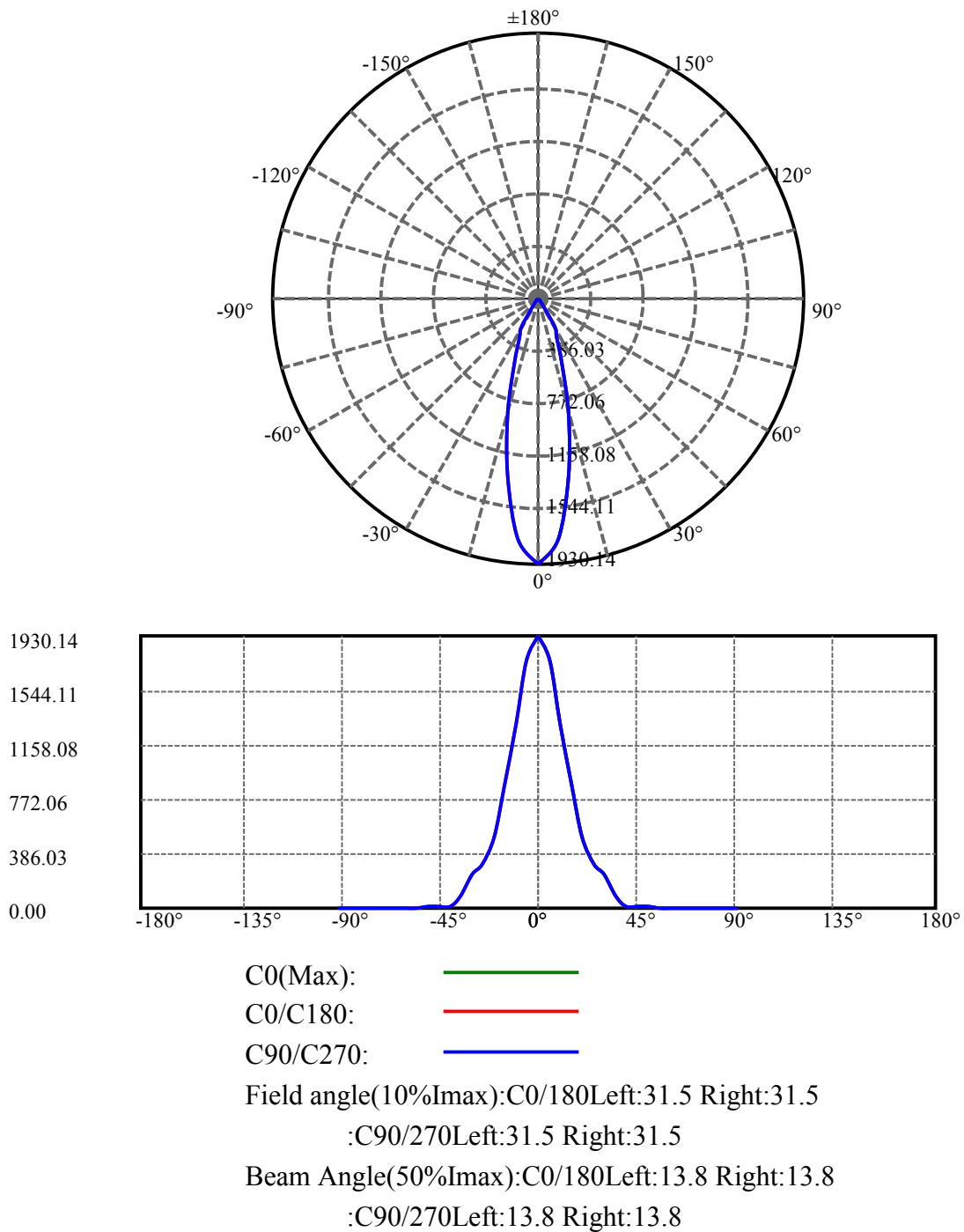
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1930.140	11.543	11.543	1.577%	1.841%
5.0	1750.725	83.638	95.181	11.426%	15.182%
10.0	1309.723	124.663	219.844	17.031%	35.066%
15.0	861.846	122.269	342.113	16.703%	54.568%
20.0	500.153	93.766	435.878	12.810%	69.525%
25.0	312.968	72.500	508.378	9.904%	81.089%
30.0	236.687	64.869	573.247	8.862%	91.435%
35.0	87.319	27.453	600.7	3.750%	95.814%
40.0	14.383	5.068	605.768	.692%	96.623%
45.0	8.781	3.404	609.172	.465%	97.166%
50.0	6.965	2.924	612.096	.400%	97.632%
55.0	5.595	2.512	614.608	.343%	98.033%
60.0	4.700	2.231	616.84	.305%	98.389%
65.0	4.164	2.068	618.908	.283%	98.719%
70.0	3.806	1.960	620.868	.268%	99.031%
75.0	3.530	1.869	622.737	.255%	99.329%
80.0	3.262	1.761	624.498	.241%	99.610%
85.0	3.056	1.669	626.167	.228%	99.876%
90.0	2.829	0.775	626.942	.106%	100.000%

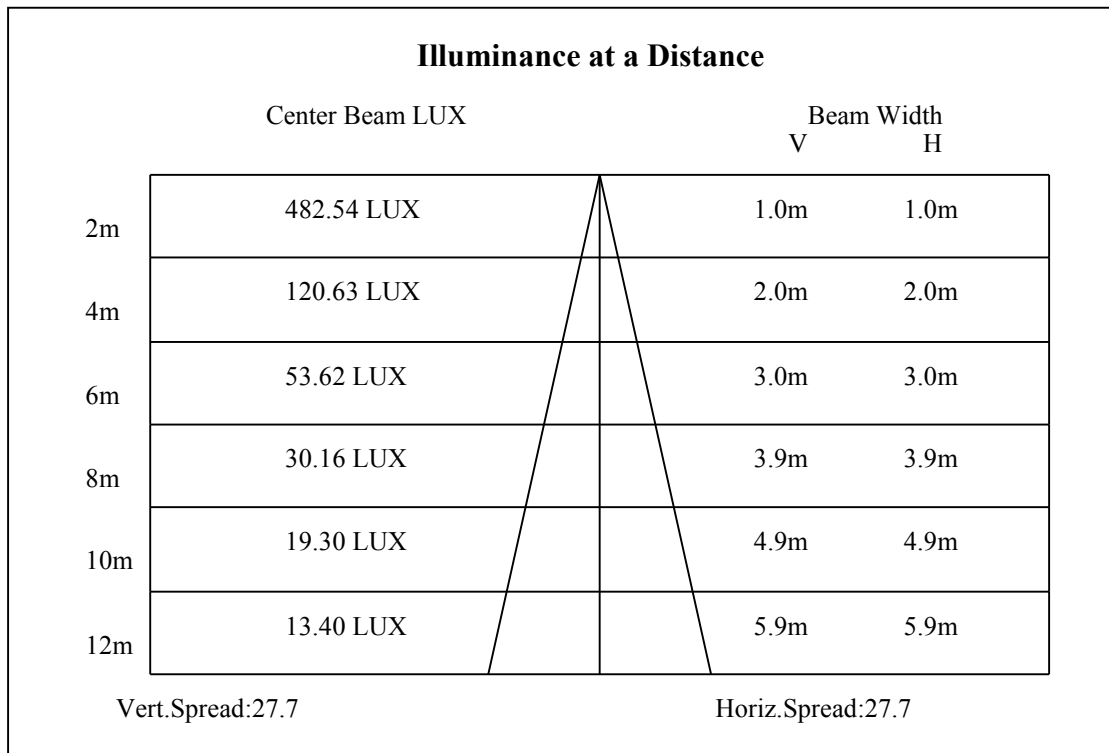
ZONAL LUMEN SUMMARY

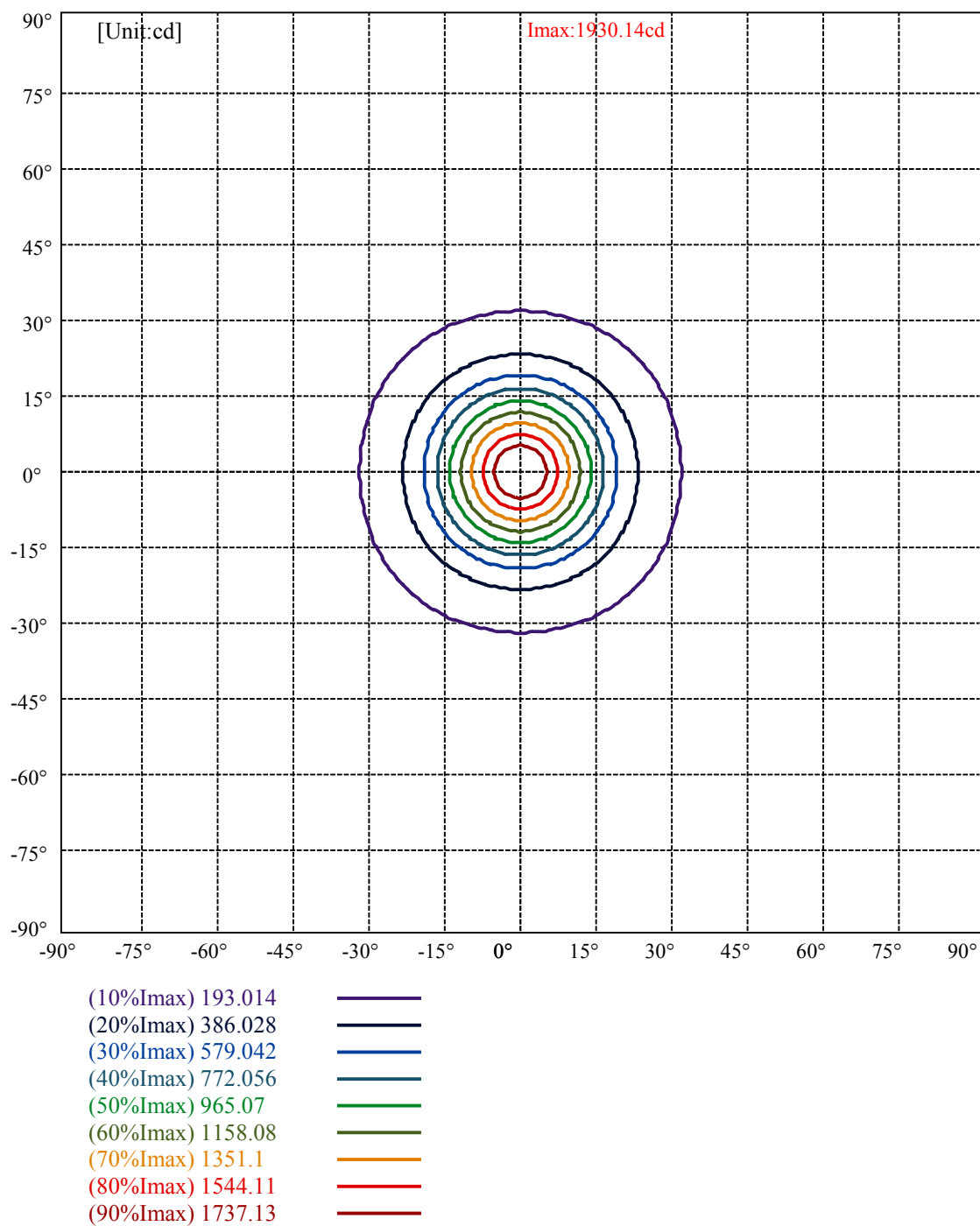
Zone	Lumens	%Lamp	%Fixt
0-30	573.25	78.31%	91.44%
0-40	605.77	82.76%	96.62%
0-60	616.84	84.27%	98.39%
0-90	626.17	85.54%	99.88%
0-120	626.17	85.54%	99.88%
0-180	626.94	85.65%	100.00%
60-90	11.56	1.58%	1.84%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-24.53	501.55	68.52%	80.00%

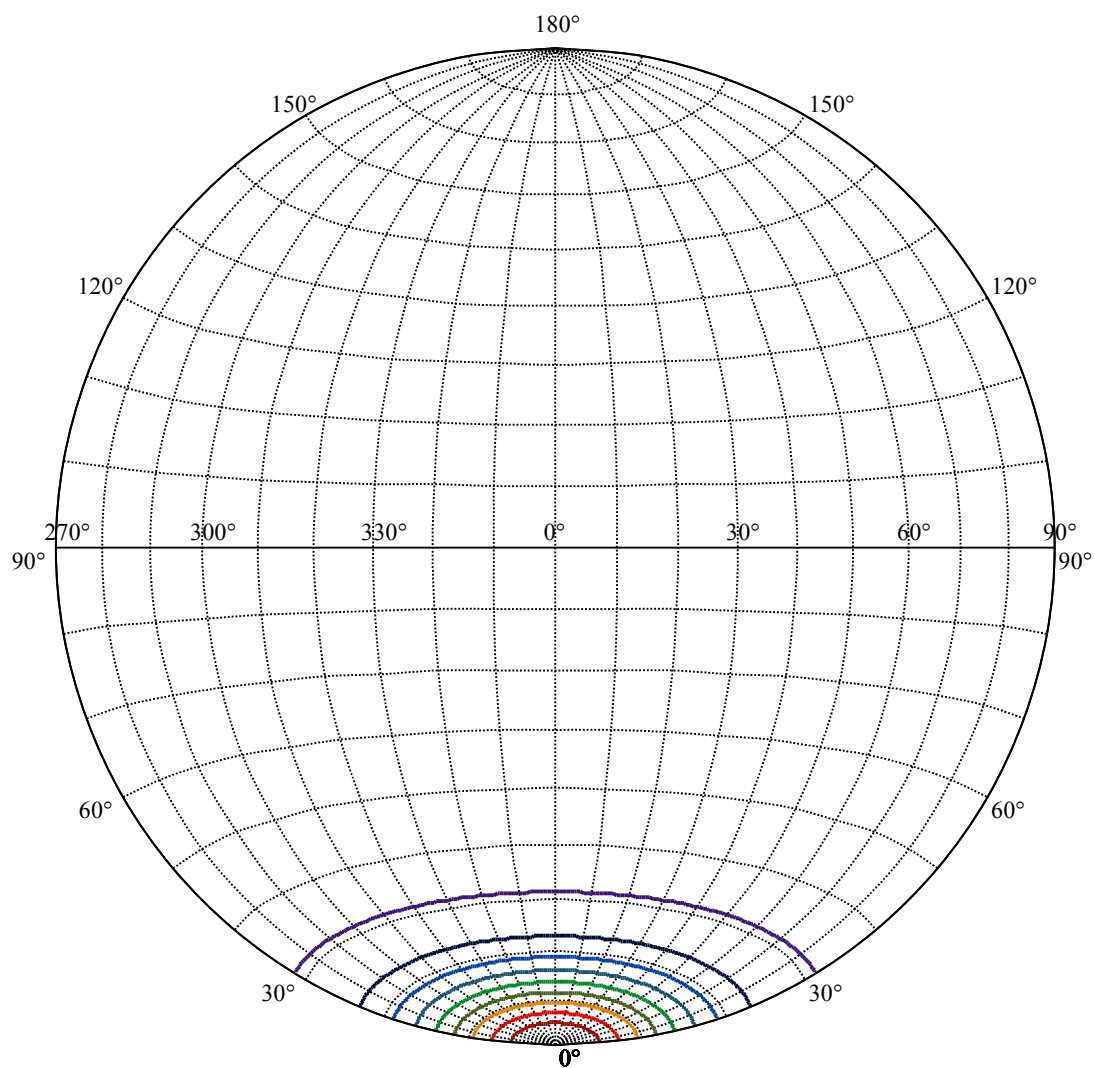
ZONAL LUMEN SUMMARY

0-10	219.84
10-20	216.03
20-30	137.37
30-40	32.52
40-50	6.33
50-60	4.74
60-70	4.03
70-80	3.63
80-90	1.67
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









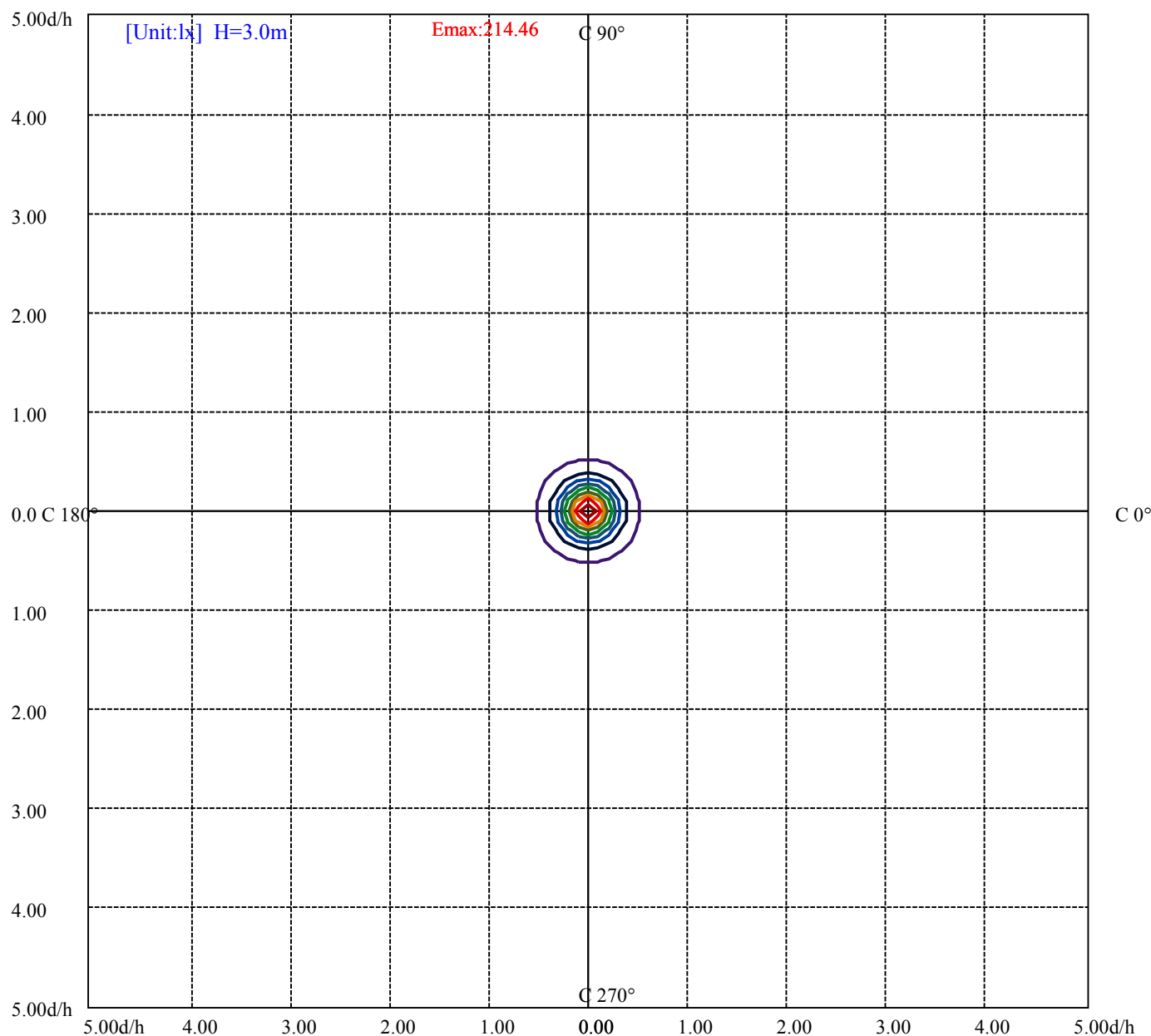
House

[Unit:cd]

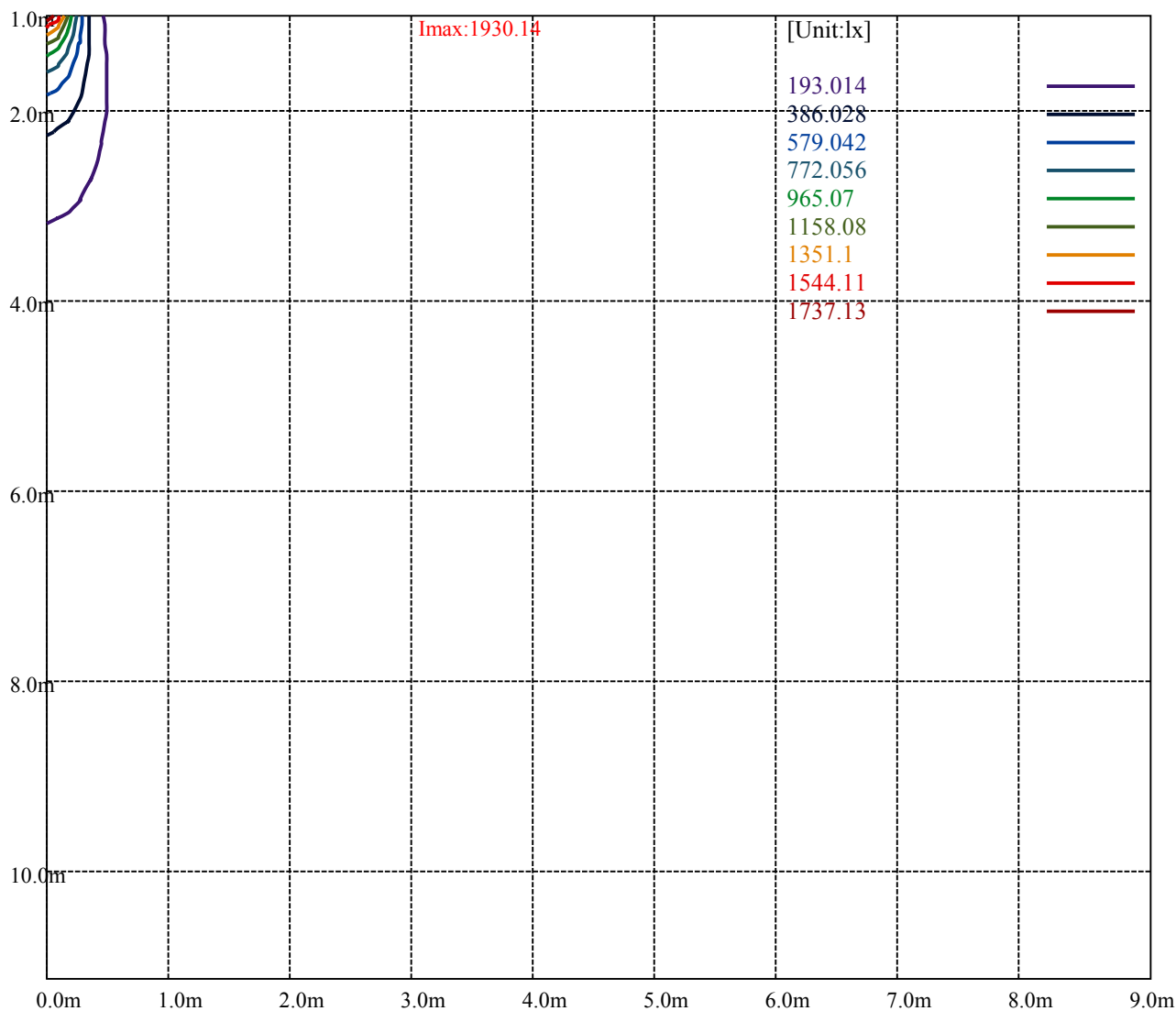
Road

Imax:1930.14

(10%Imax)	193.014	—
(20%Imax)	386.028	—
(30%Imax)	579.042	—
(40%Imax)	772.056	—
(50%Imax)	965.07	—
(60%Imax)	1158.08	—
(70%Imax)	1351.1	—
(80%Imax)	1544.11	—
(90%Imax)	1737.13	—



(10%Emax)	21.44589	—
(20%Emax)	42.89189	—
(30%Emax)	64.33778	—
(40%Emax)	85.78378	—
(50%Emax)	107.2297	—
(60%Emax)	128.6756	—
(70%Emax)	150.1211	—
(80%Emax)	171.5678	—
(90%Emax)	193.0133	—



Luminance Table

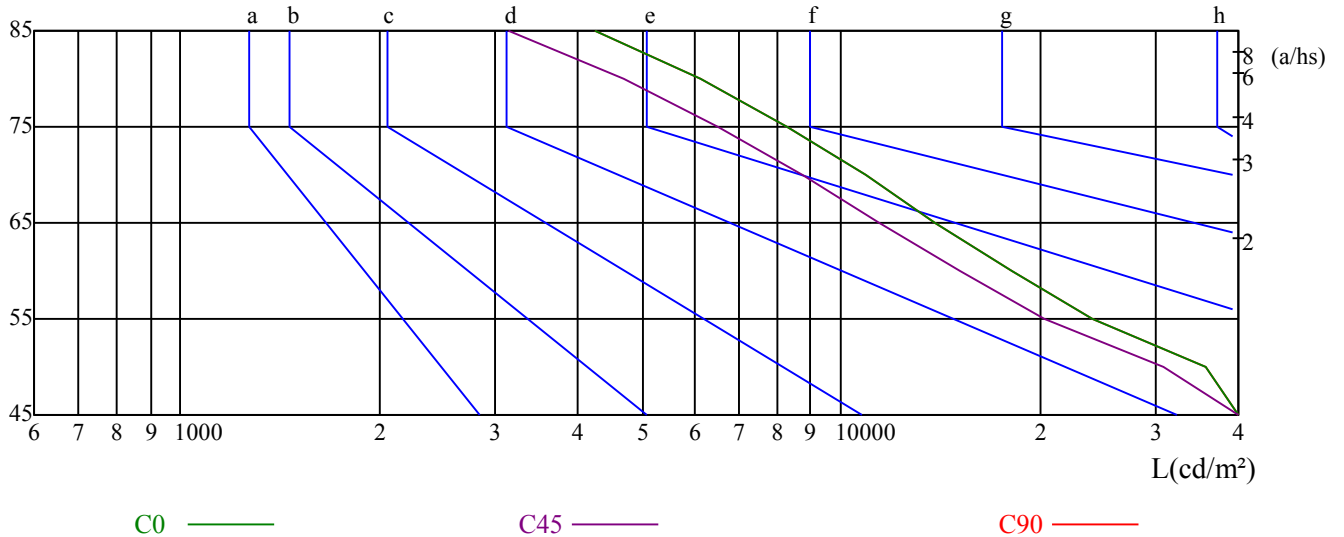
γ	45	50	55	60	65	70	75	80	85
C0	54391	35651	23966	18140	13910	10896	8303	6134	4237
C45	47694	30810	20394	15182	11430	8771	6528	4688	3130
C90	54391	35651	23966	18140	13910	10896	8303	6134	4237

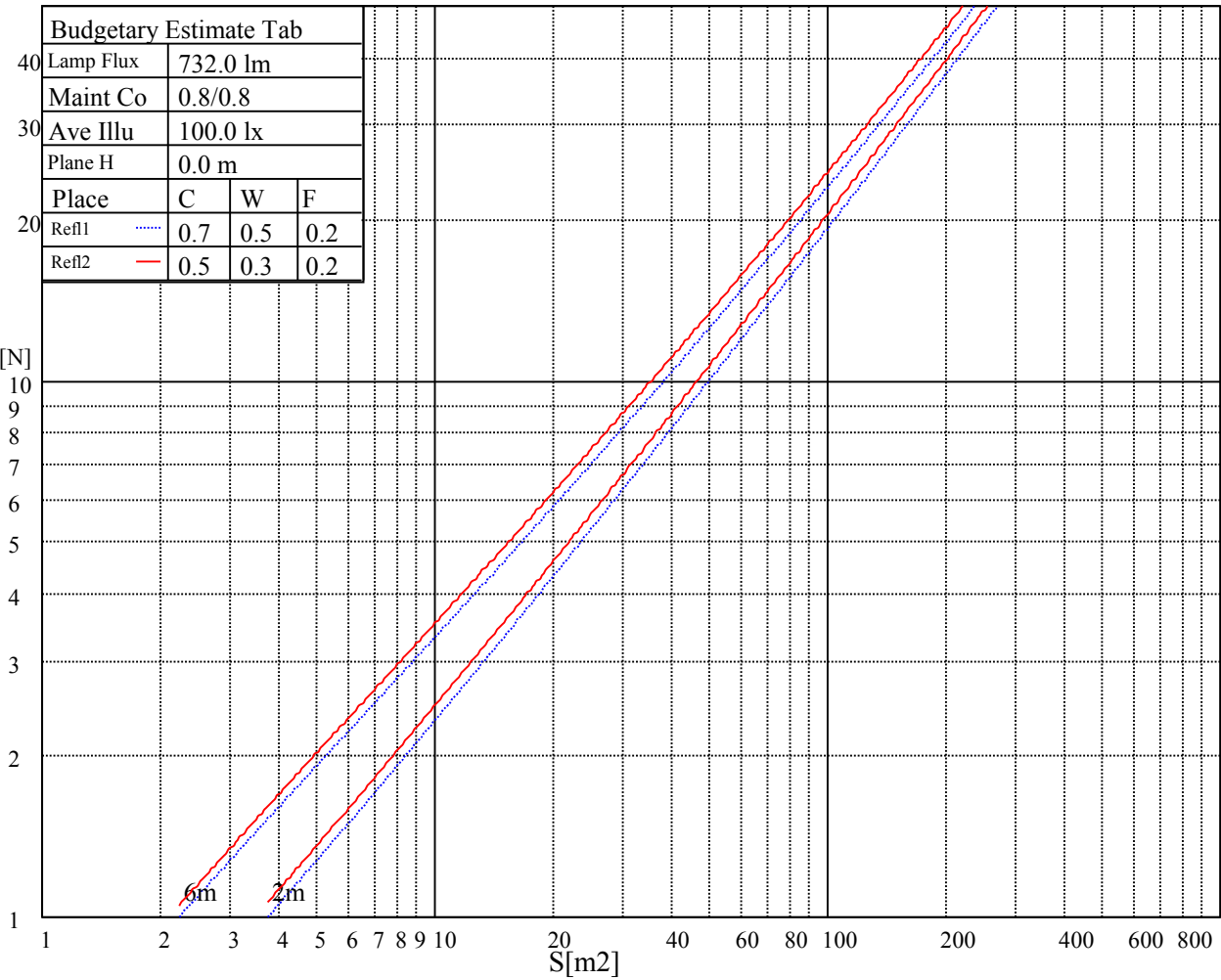
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
29207	29207	29207	24195	24195	24195	29072	29072	29072

Glare Table

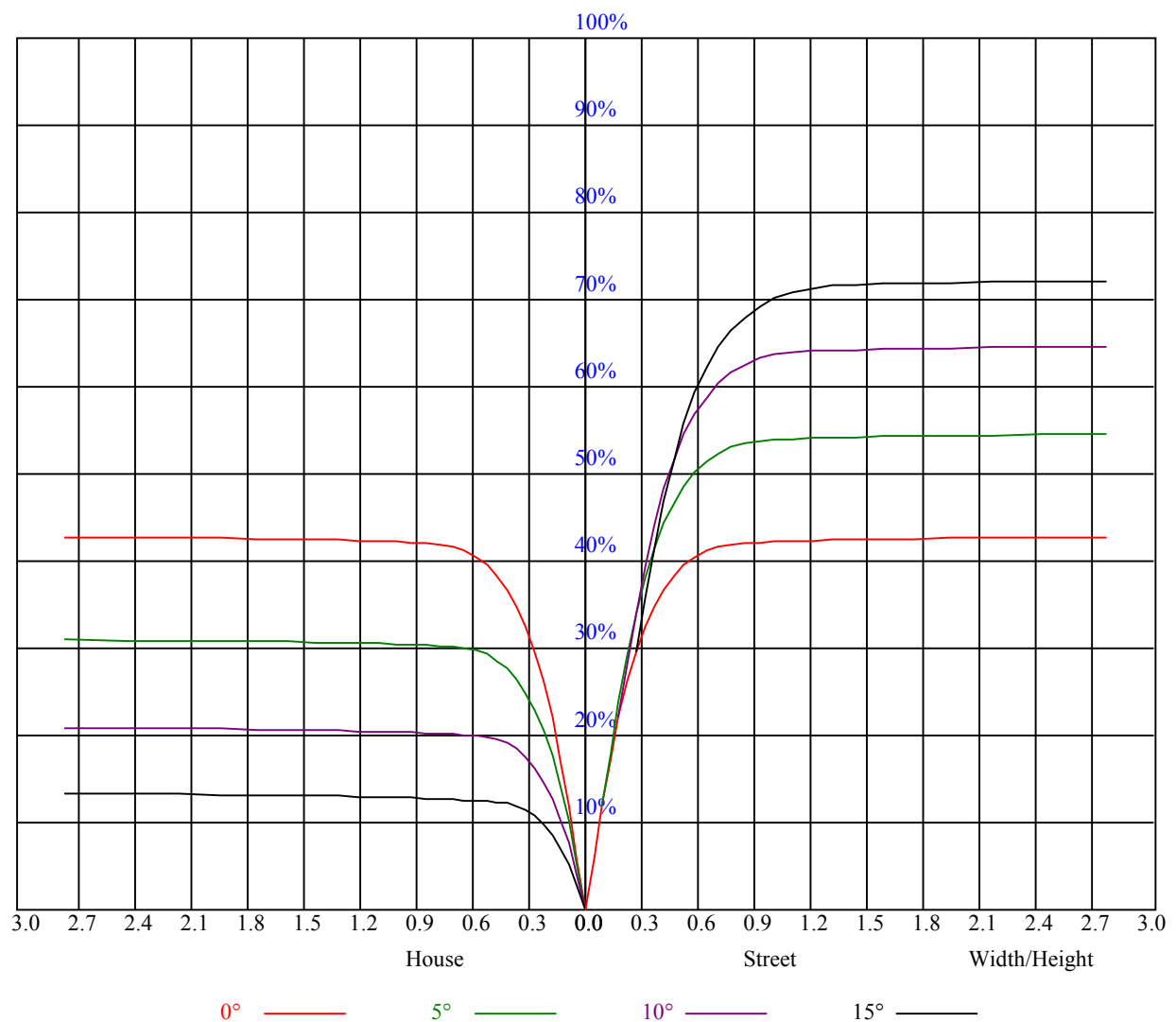
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

 $\gamma(^{\circ})$ 



RHOCC	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	1.04	1.04	1.04	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.87
1	0.96	0.93	0.91	0.94	0.92	0.90	0.90	0.89	0.87	0.87	0.86	0.84	0.84	0.83	0.82	0.80
2	0.91	0.87	0.84	0.89	0.86	0.84	0.86	0.84	0.82	0.84	0.82	0.80	0.81	0.80	0.78	0.77
3	0.86	0.82	0.79	0.85	0.82	0.79	0.83	0.80	0.77	0.81	0.78	0.76	0.79	0.77	0.75	0.74
4	0.82	0.78	0.75	0.81	0.78	0.75	0.80	0.76	0.74	0.78	0.75	0.73	0.76	0.74	0.72	0.71
5	0.79	0.75	0.72	0.78	0.74	0.71	0.77	0.73	0.71	0.75	0.72	0.70	0.74	0.72	0.70	0.68
6	0.76	0.72	0.69	0.75	0.71	0.68	0.74	0.71	0.68	0.73	0.70	0.68	0.72	0.69	0.67	0.66
7	0.73	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.65	0.70	0.67	0.65	0.64
8	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.63	0.62
9	0.68	0.64	0.62	0.68	0.64	0.62	0.67	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.60
10	0.66	0.62	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.65	0.62	0.59	0.64	0.61	0.59	0.58



Nata 1655-S

Appendix Page: 14 Total:14

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	1926.42	1776.12	1367.60	896.87	550.56	338.60	259.43	108.74	13.82
45.0	1934.13	1717.21	1241.52	784.55	469.63	308.32	239.11	60.89	13.32
90.0	1929.18	1657.75	1093.42	711.11	409.62	264.71	199.41	42.89	14.04
135.0	1930.83	1764.56	1347.78	858.88	478.99	314.37	242.41	86.16	15.25
180.0	1926.42	1741.98	1222.25	845.23	481.74	304.41	235.26	79.50	13.98
225.0	1934.13	1784.93	1397.33	925.06	545.83	327.53	243.13	106.09	14.92
270.0	1929.18	1821.27	1493.13	1002.58	564.88	331.44	230.36	125.20	16.46
315.0	1930.83	1741.98	1314.75	870.50	499.97	314.37	244.40	89.08	13.27
360.0	1926.42	1776.12	1367.60	896.87	550.56	338.60	259.43	108.74	13.82
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	8.20	6.83	5.56	4.68	4.18	3.80	3.52	3.30	3.08
45.0	8.20	6.61	5.23	4.46	4.02	3.69	3.41	3.25	3.03
90.0	8.81	6.77	5.45	4.68	4.07	3.74	3.47	3.19	2.92
135.0	9.47	7.32	5.89	4.79	4.18	3.80	3.52	3.19	2.97
180.0	8.97	7.27	5.84	4.84	4.24	3.80	3.47	3.19	3.08
225.0	9.03	7.21	5.78	4.79	4.18	3.85	3.58	3.30	3.14
270.0	9.58	7.21	5.78	4.84	4.35	3.96	3.74	3.41	3.14
315.0	7.98	6.50	5.23	4.51	4.07	3.80	3.52	3.25	3.08
360.0	8.20	6.83	5.56	4.68	4.18	3.80	3.52	3.30	3.08
C/γ(°)	90.0								
0.0	2.81								
45.0	2.81								
90.0	2.81								
135.0	2.81								
180.0	2.81								
225.0	2.86								
270.0	2.86								
315.0	2.86								
360.0	2.81								