



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

Client:

LumCAT: 1407-N

Luminaire: 92.70.064.00

Report No: GC2019091909

Test No: NATA07

LampCAT: TRIDONIC SLE G7 9MM

Lamp flux(lm): 1011.0

Number of Lamps: 1

Length(mm): 39

Phm Type: C

Voltage(V): 220.5000

Current(A): 0.0410

Power (W): 8.2800

PF: 0.8970

Ballast type: AC

Width(mm): 39

Height(mm): 0

Photometric Results

Lumens(lm): 834.71, Efficiency(%): 82.56% , Luminous Efficacy(lm/W): 100.81

Central intensity(cd): 922.058, Maximum intensity(cd): 922.058

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=48.0

[C90/270]Total=48.0

Field angle(10%Imax): [C0/180]Total=96.8

[C90/270]Total=96.8

Maximum s/h(1/2): C0_180=0.73 C90_270=0.73

Maximum s/h(1/4): C0_180=0.81 C90_270=0.81

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 82.56%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 94.992%

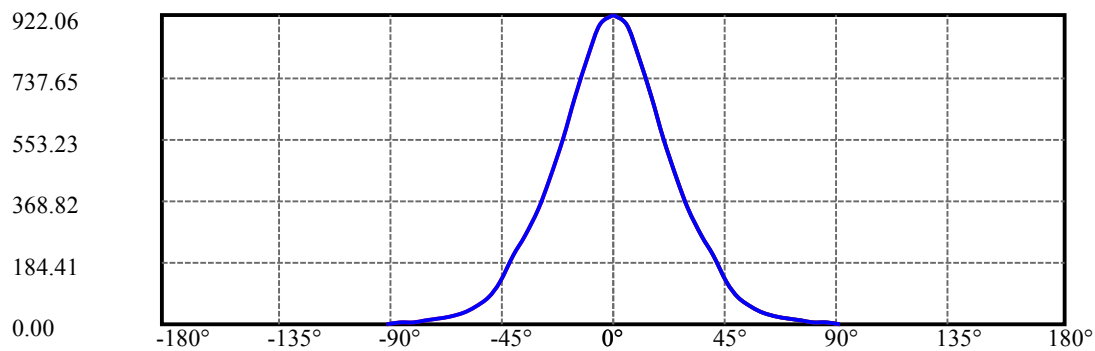
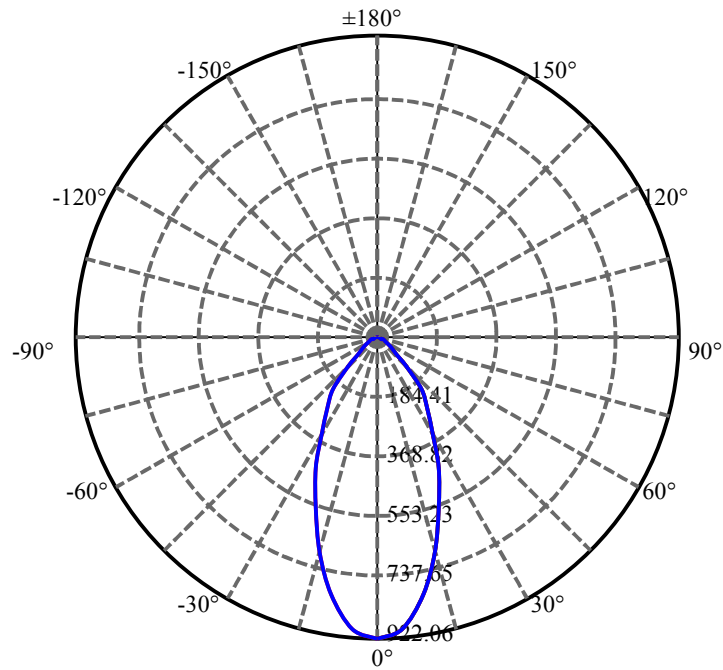
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	922.058	0.000	0	.000%	.000%
5.0	893.636	21.706	21.706	2.147%	2.600%
10.0	800.417	60.602	82.308	5.994%	9.861%
15.0	678.057	87.702	170.01	8.675%	20.368%
20.0	553.313	101.482	271.492	10.038%	32.525%
25.0	438.082	103.979	375.471	10.285%	44.982%
30.0	346.476	99.287	474.758	9.821%	56.877%
35.0	265.503	90.118	564.876	8.914%	67.673%
40.0	206.298	78.716	643.592	7.786%	77.104%
45.0	123.143	60.999	704.591	6.033%	84.412%
50.0	78.288	40.702	745.293	4.026%	89.288%
55.0	50.377	27.976	773.269	2.767%	92.639%
60.0	34.576	19.637	792.905	1.942%	94.992%
65.0	24.449	14.349	807.255	1.419%	96.711%
70.0	17.111	10.523	817.778	1.041%	97.972%
75.0	11.607	7.506	825.284	.742%	98.871%
80.0	7.042	4.990	830.274	.494%	99.469%
85.0	3.689	2.916	833.19	.288%	99.818%
90.0	1.856	1.518	834.708	.150%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	474.76	46.96%	56.88%
0-40	643.59	63.66%	77.10%
0-60	792.91	78.43%	94.99%
0-90	833.19	82.41%	99.82%
0-120	833.19	82.41%	99.82%
0-180	834.71	82.56%	100.00%
60-90	59.92	5.93%	7.18%
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%
0-41.98	667.77	66.05%	80.00%

ZONAL LUMEN SUMMARY

0-10	82.31
10-20	189.18
20-30	203.27
30-40	168.83
40-50	101.70
50-60	47.61
60-70	24.87
70-80	12.50
80-90	2.92
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



C0(Max):

C0/C180:

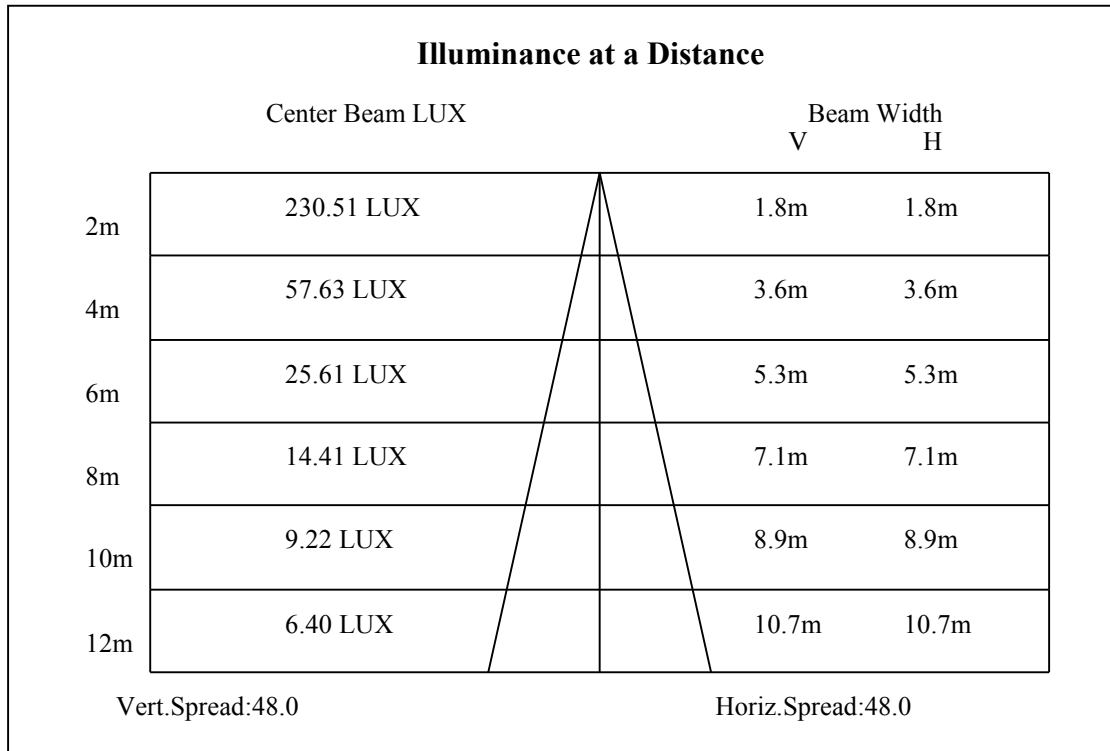
C90/C270:

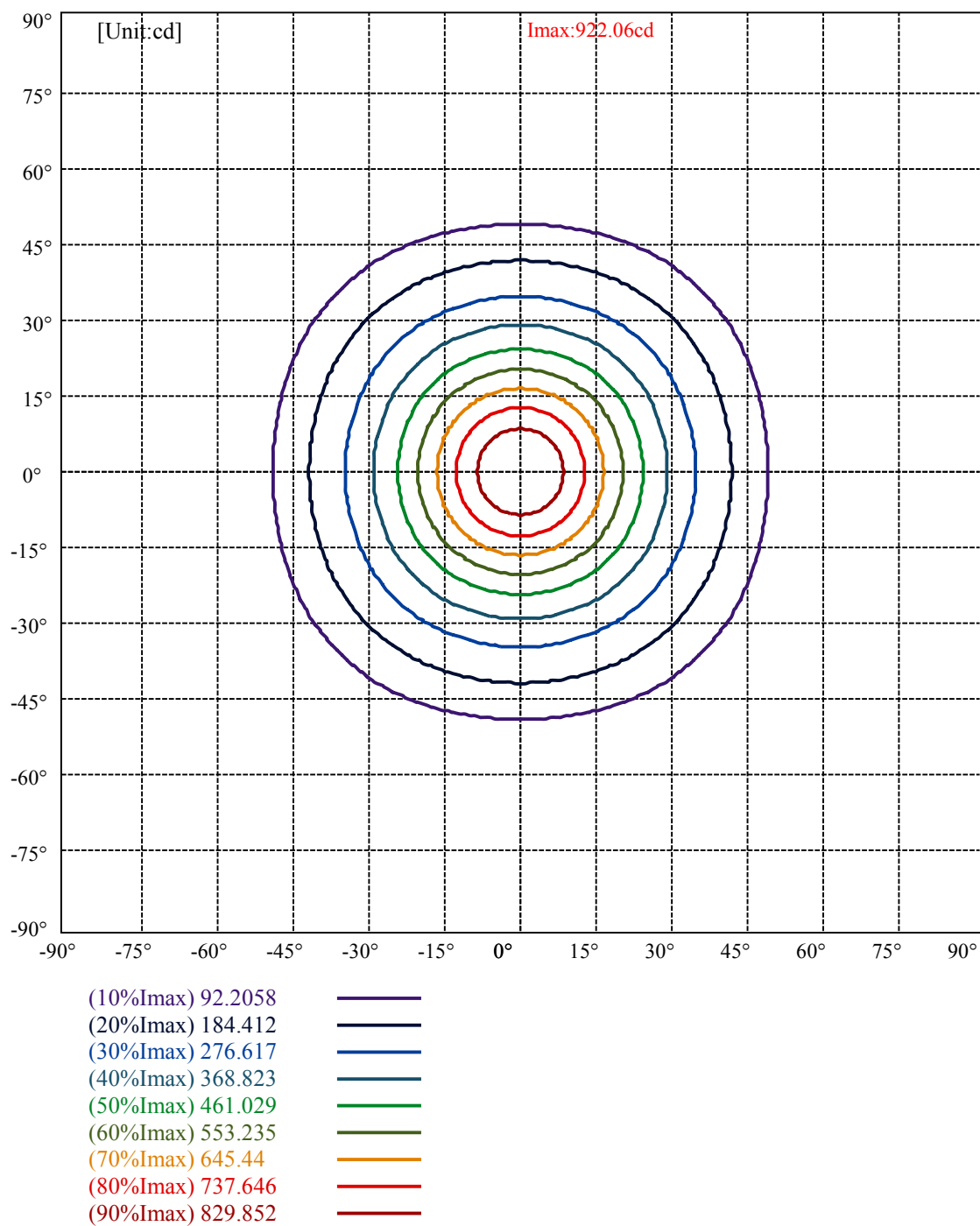
Field angle(10%Imax):C0/180Left:48.4 Right:48.4

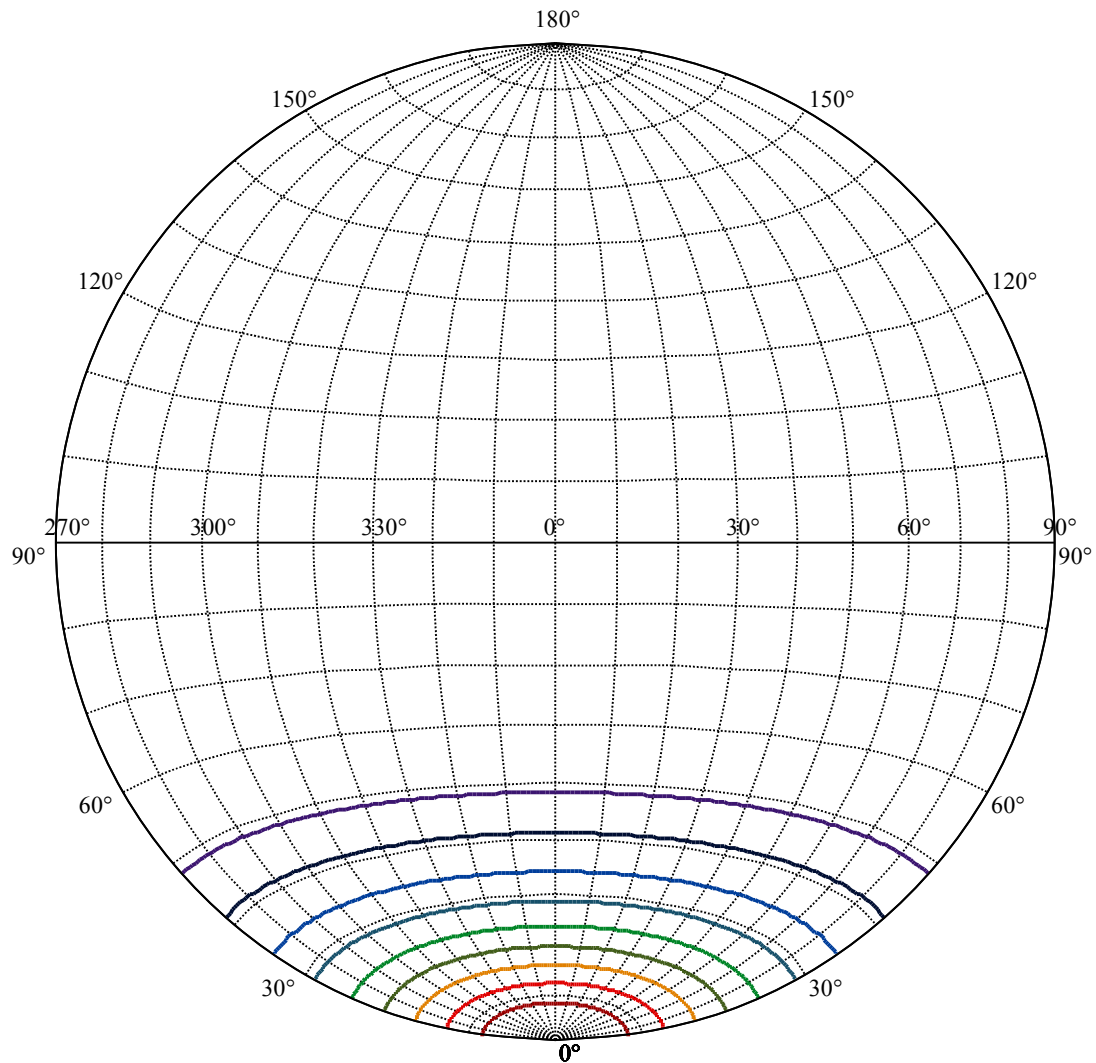
:C90/270Left:48.4 Right:48.4

Beam Angle(50%Imax):C0/180Left:24.0 Right:24.0

:C90/270Left:24.0 Right:24.0







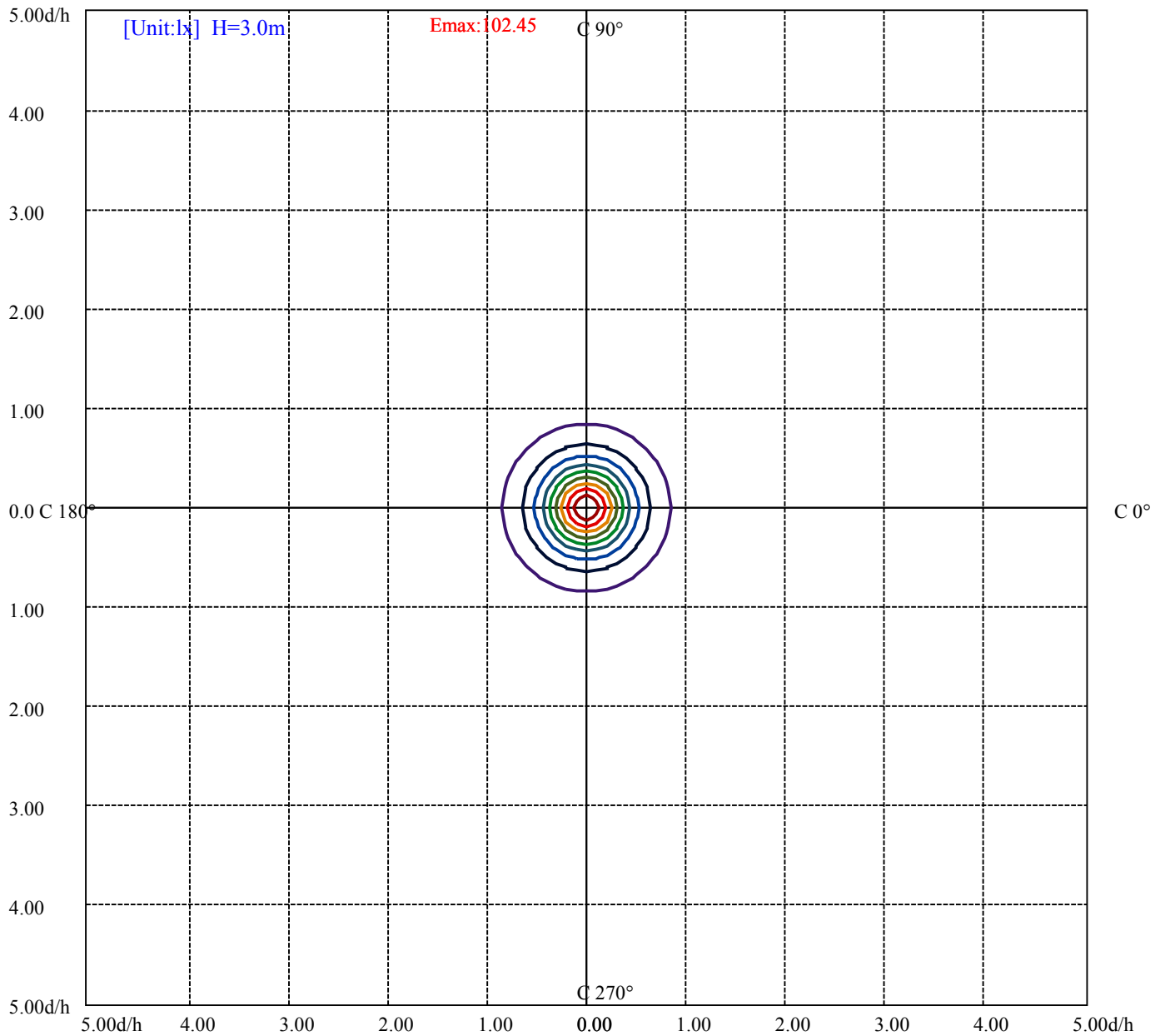
House

[Unit:cd]

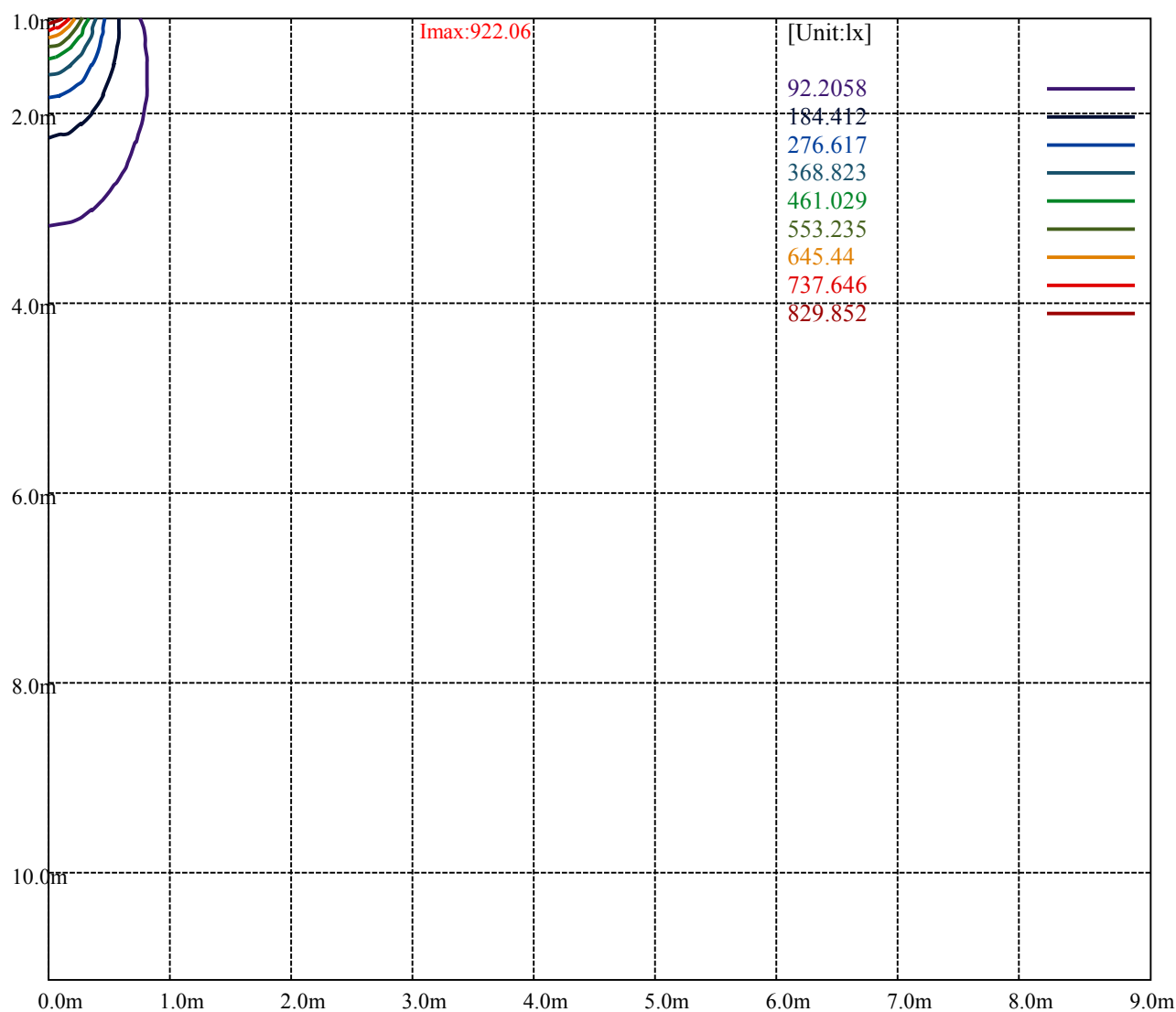
Road

Imax:922.06
 (10%Imax) 92.2058
 (20%Imax) 184.412
 (30%Imax) 276.617
 (40%Imax) 368.823
 (50%Imax) 461.029
 (60%Imax) 553.235
 (70%Imax) 645.44
 (80%Imax) 737.646
 (90%Imax) 829.852





(10%Emax) 10.24508	—
(20%Emax) 20.49011	—
(30%Emax) 30.73522	—
(40%Emax) 40.98033	—
(50%Emax) 51.22533	—
(60%Emax) 61.47044	—
(70%Emax) 71.71555	—
(80%Emax) 81.96056	—
(90%Emax) 92.20567	—



Luminance Table

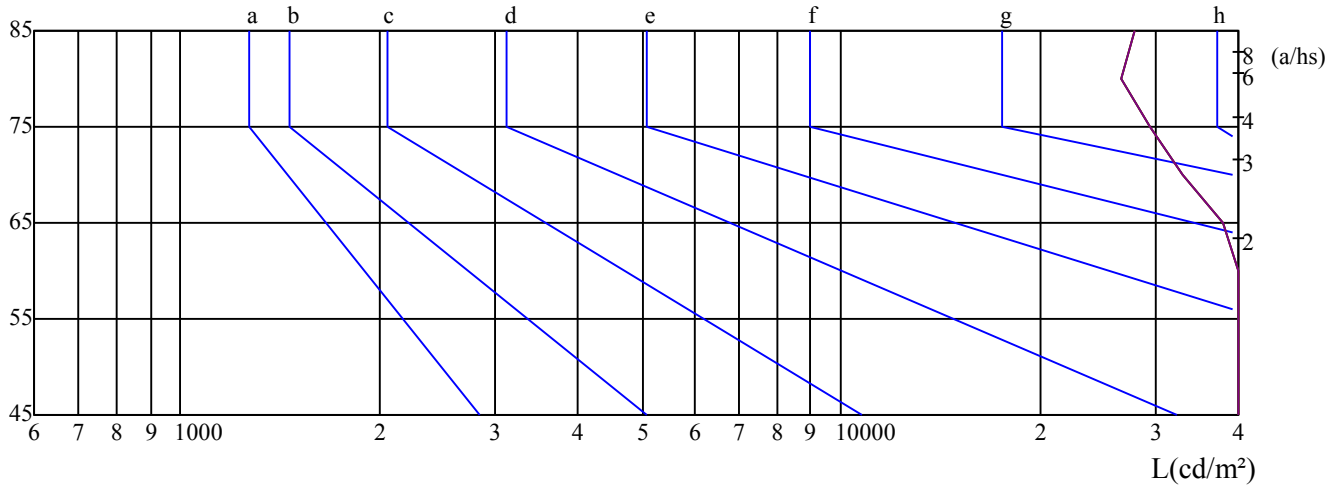
γ	45	50	55	60	65	70	75	80	85
C0	114497	80076	57744	45465	38035	32893	29484	26661	27829
C45	114497	80076	57744	45465	38035	32893	29484	26661	27829
C90	114497	80076	57744	45465	38035	32893	29484	26661	27829

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
38035	38035	38035	29484	29484	29484	27829	27829	27829

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

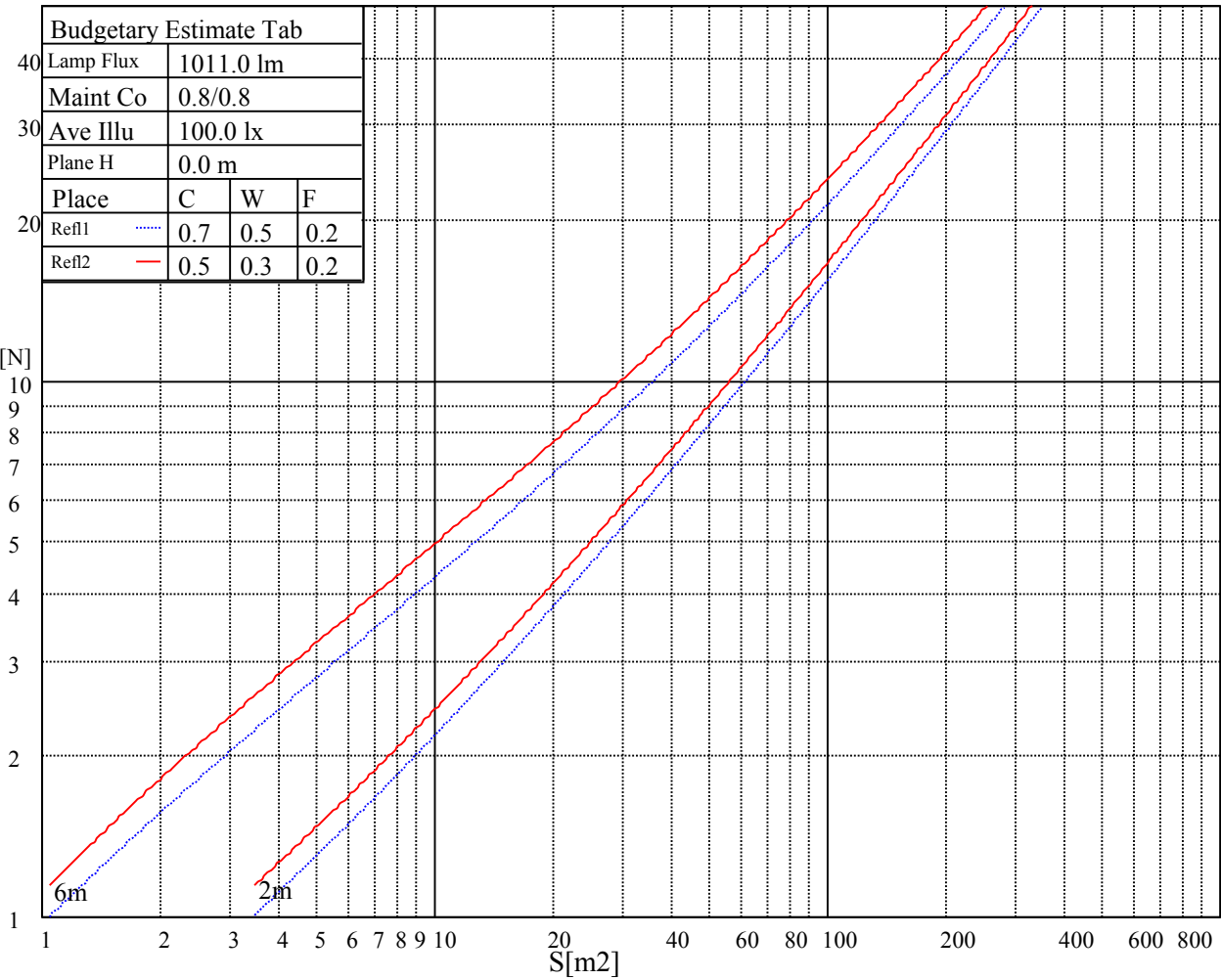
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

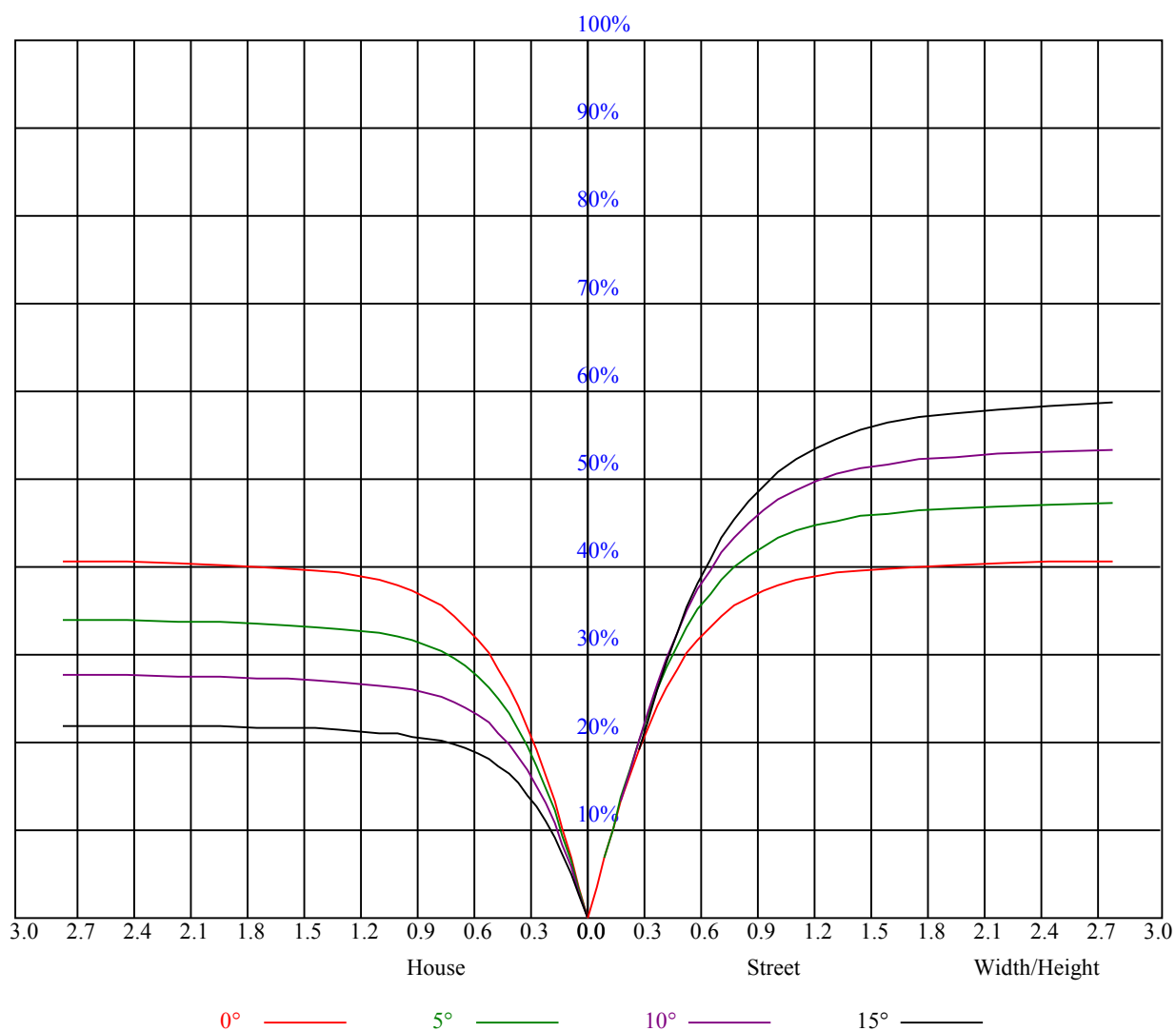
C0 ———

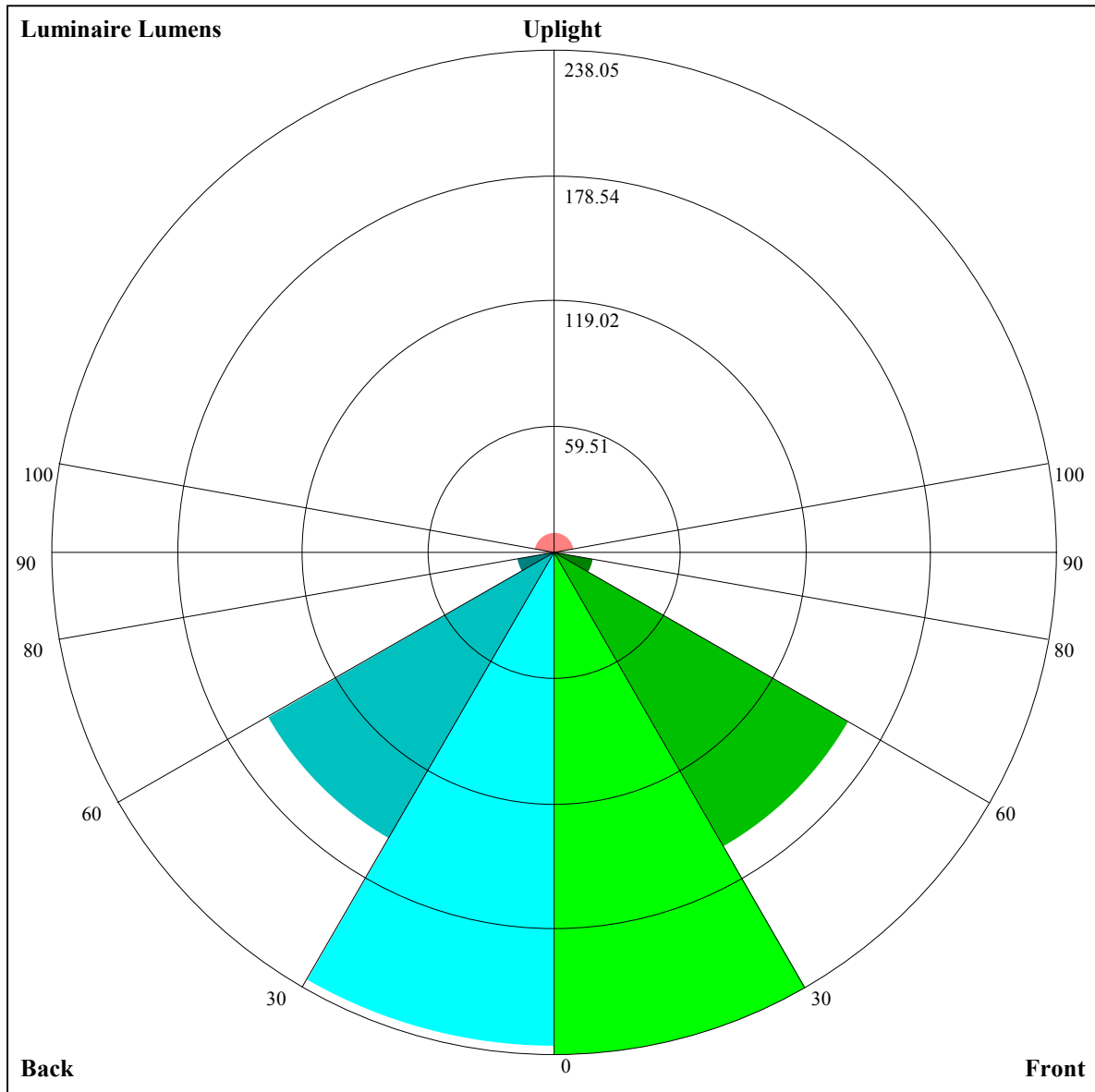
C45 ———

C90 ———



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	0.98	0.98	0.98	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.84	0.84	0.84	0.83
1	0.90	0.88	0.85	0.88	0.86	0.84	0.85	0.83	0.81	0.82	0.80	0.79	0.79	0.78	0.77	0.75
2	0.82	0.78	0.75	0.81	0.77	0.74	0.78	0.75	0.73	0.76	0.73	0.71	0.73	0.71	0.70	0.68
3	0.76	0.71	0.67	0.75	0.70	0.66	0.72	0.69	0.65	0.70	0.67	0.64	0.68	0.66	0.63	0.62
4	0.70	0.65	0.60	0.69	0.64	0.60	0.67	0.63	0.59	0.65	0.62	0.59	0.64	0.61	0.58	0.57
5	0.65	0.59	0.55	0.64	0.59	0.55	0.62	0.58	0.54	0.61	0.57	0.54	0.59	0.56	0.53	0.52
6	0.60	0.54	0.50	0.59	0.54	0.50	0.58	0.53	0.50	0.57	0.53	0.50	0.56	0.52	0.49	0.48
7	0.56	0.50	0.47	0.55	0.50	0.46	0.54	0.50	0.46	0.53	0.49	0.46	0.52	0.49	0.46	0.44
8	0.52	0.47	0.43	0.52	0.47	0.43	0.51	0.46	0.43	0.50	0.46	0.43	0.49	0.45	0.42	0.41
9	0.49	0.44	0.40	0.49	0.44	0.40	0.48	0.43	0.40	0.47	0.43	0.40	0.46	0.43	0.40	0.38
10	0.46	0.41	0.38	0.46	0.41	0.38	0.45	0.41	0.37	0.45	0.40	0.37	0.44	0.40	0.37	0.36





Luminaire Lumens:

FL=238.05,FM=160.77,FH=19.27,FVH=2.35

BL=234.28,BM=156.88,BH=18.09,BVH=2.09

UL=2.03,UH=9.64

BUG Rating:B1-U1-G0

Nata 1407-N

Intensity data(cd)										Appendix Page: 15 Total:15	
C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0		
0.0	920.36	896.98	802.31	669.23	546.03	438.70	355.87	264.17	195.73		
45.0	922.78	920.69	858.04	745.75	606.07	484.50	381.02	288.68	238.10		
90.0	922.31	900.55	792.66	681.71	560.37	442.60	347.89	264.92	182.60		
135.0	922.78	911.41	835.77	714.19	591.23	466.86	368.02	289.14	229.74		
180.0	920.36	894.70	803.75	694.24	571.74	450.62	354.57	270.58	237.63		
225.0	922.78	847.14	738.18	607.14	475.12	373.87	290.90	224.27	147.93		
270.0	922.31	899.34	807.00	671.97	544.82	437.17	341.58	268.26	238.56		
315.0	922.78	878.28	765.61	640.23	531.13	410.34	331.97	254.01	180.09		
360.0	920.36	896.98	802.31	669.23	546.03	438.70	355.87	264.17	195.73		
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	119.91	78.47	51.09	35.36	24.45	17.26	12.02	6.87	3.90		
45.0	146.08	97.77	58.42	41.11	29.28	20.46	14.29	9.33	4.92		
90.0	119.77	79.12	47.84	33.97	24.22	17.12	11.04	6.50	3.67		
135.0	131.09	85.99	54.90	35.73	25.01	17.73	12.53	7.15	3.62		
180.0	122.37	77.45	52.06	33.41	24.36	16.38	11.37	6.96	3.29		
225.0	99.72	60.00	41.90	29.51	20.23	13.97	9.00	5.94	2.74		
270.0	133.87	77.03	51.74	35.92	24.87	17.63	12.06	7.24	3.90		
315.0	112.34	70.49	45.06	31.60	23.16	16.33	10.53	6.36	3.48		
360.0	119.91	78.47	51.09	35.36	24.45	17.26	12.02	6.87	3.90		
C/γ(°)	90.0										
0.0	2.04										
45.0	2.51										
90.0	2.09										
135.0	1.67										
180.0	1.62										
225.0	1.44										
270.0	1.67										
315.0	1.81										
360.0	2.04										