



Bell-Southcn Testing Laboratory(Shenzhen)

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SOLERGIE(QINGDAO) RENEWABLE ENERGY CO.,LTD

LumCAT: SLD38-860

Luminaire: LED Panel Light

Report No: BSR1409150301-10

Voltage(V): 229.970

Test No: BSR1409150301-10

Current(A): 0.160

LampCAT:

Power (W): 35.680

Lamp flux(lm)

PF: 0.970

Number of Lamps: 1

Ballast type:

Length(mm): 600

Width(mm): 600

Phm Type: C

Height(mm): 10

Photometric Results

Lumens(lm): 3223.03

Lumens(lm)/Power(W): 90.33

Central intensity(cd): 1127.489

Maximum intensity(cd): 1127.489

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Left=55.8 Right=55.8

[C90/270]Left=55.6 Right=55.6

Field angle(10%Imax): [C0/180]Left=82.2 Right=82.2

[C90/270]Left=82.1 Right=82.1

Maximum s/h: C0_180=1.26 C90_270=1.26

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 77.793%

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Zonal flux distribution table

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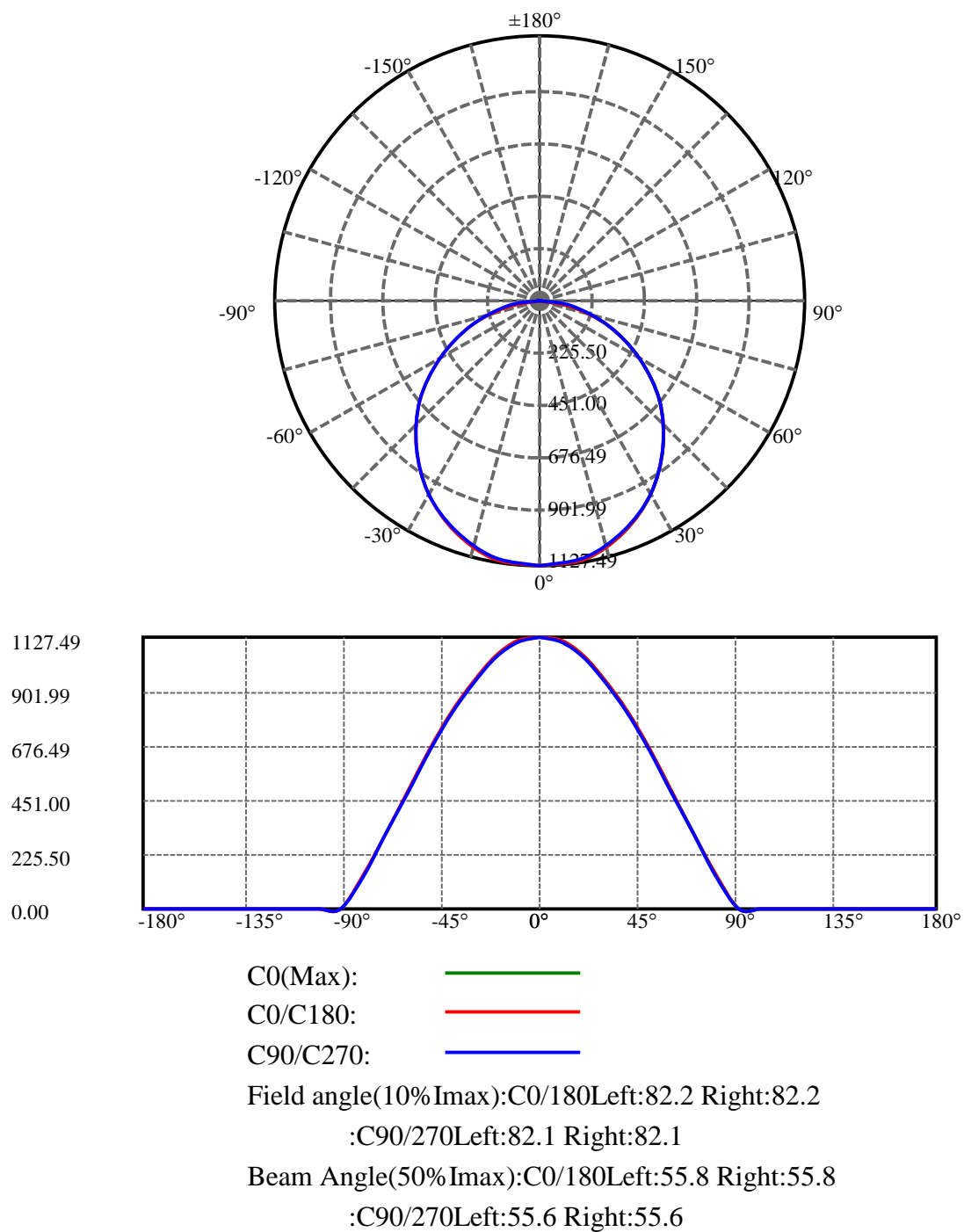
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1127.489	.000	.000	.000%	.000%
10.0	1106.951	106.645	106.645	3.309%	3.309%
20.0	1043.057	304.728	411.373	9.455%	12.764%
30.0	942.247	459.464	870.836	14.256%	27.019%
40.0	812.932	551.301	1422.137	17.105%	44.124%
50.0	660.217	570.437	1992.573	17.699%	61.823%
60.0	487.217	514.716	2507.290	15.970%	77.793%
70.0	311.613	396.466	2903.756	12.301%	90.094%
80.0	143.737	240.860	3144.616	7.473%	97.567%
90.0	.000	78.413	3223.029	2.433%	100.000%
100.0	.000	.000	3223.029	.000%	100.000%
110.0	.000	.000	3223.029	.000%	100.000%
120.0	.000	.000	3223.029	.000%	100.000%
130.0	.000	.000	3223.029	.000%	100.000%
140.0	.000	.000	3223.029	.000%	100.000%
150.0	.000	.000	3223.029	.000%	100.000%
160.0	.000	.000	3223.029	.000%	100.000%
170.0	.000	.000	3223.029	.000%	100.000%
180.0	.000	.000	3223.029	.000%	100.000%

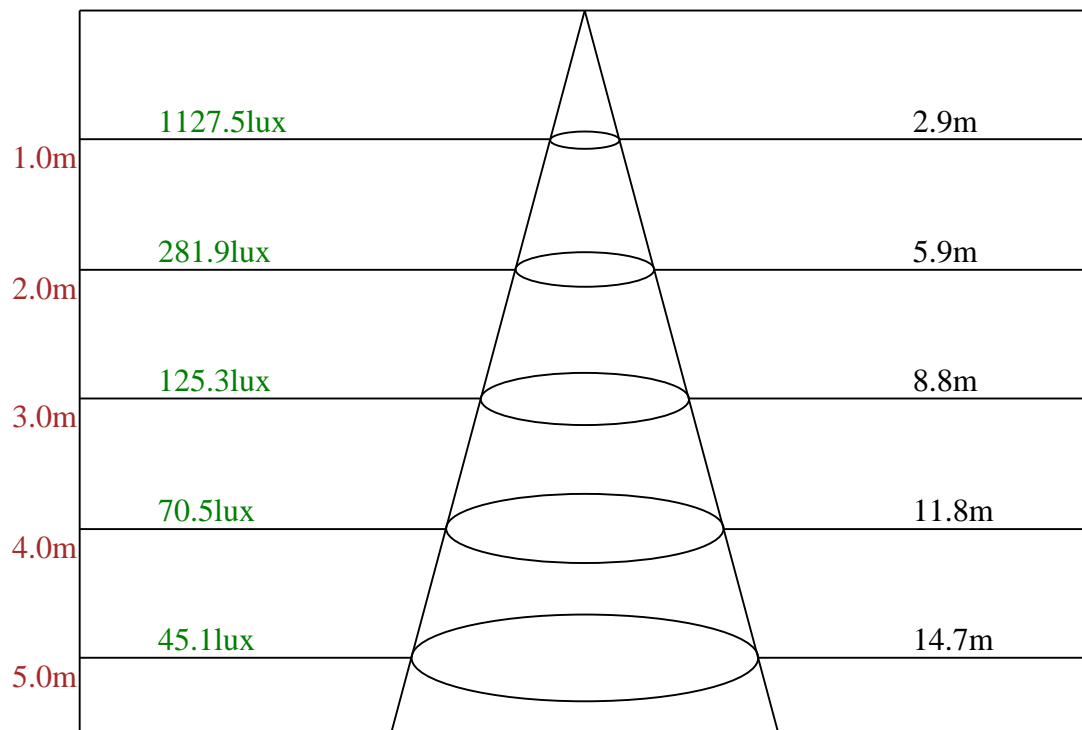
ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	870.84	27.02%
0-40	1422.14	44.12%
0-60	2507.29	77.79%
0-90	3223.03	100.00%
0-120	3223.03	100.00%
0-180	3223.03	100.00%
60-90	1230.46	38.18%
90-120	0.00	0.00%
90-130	0.00	0.00%
90-150	0.00	0.00%
90-180	0.00	0.00%
0-61.79	2578.42	80.00%

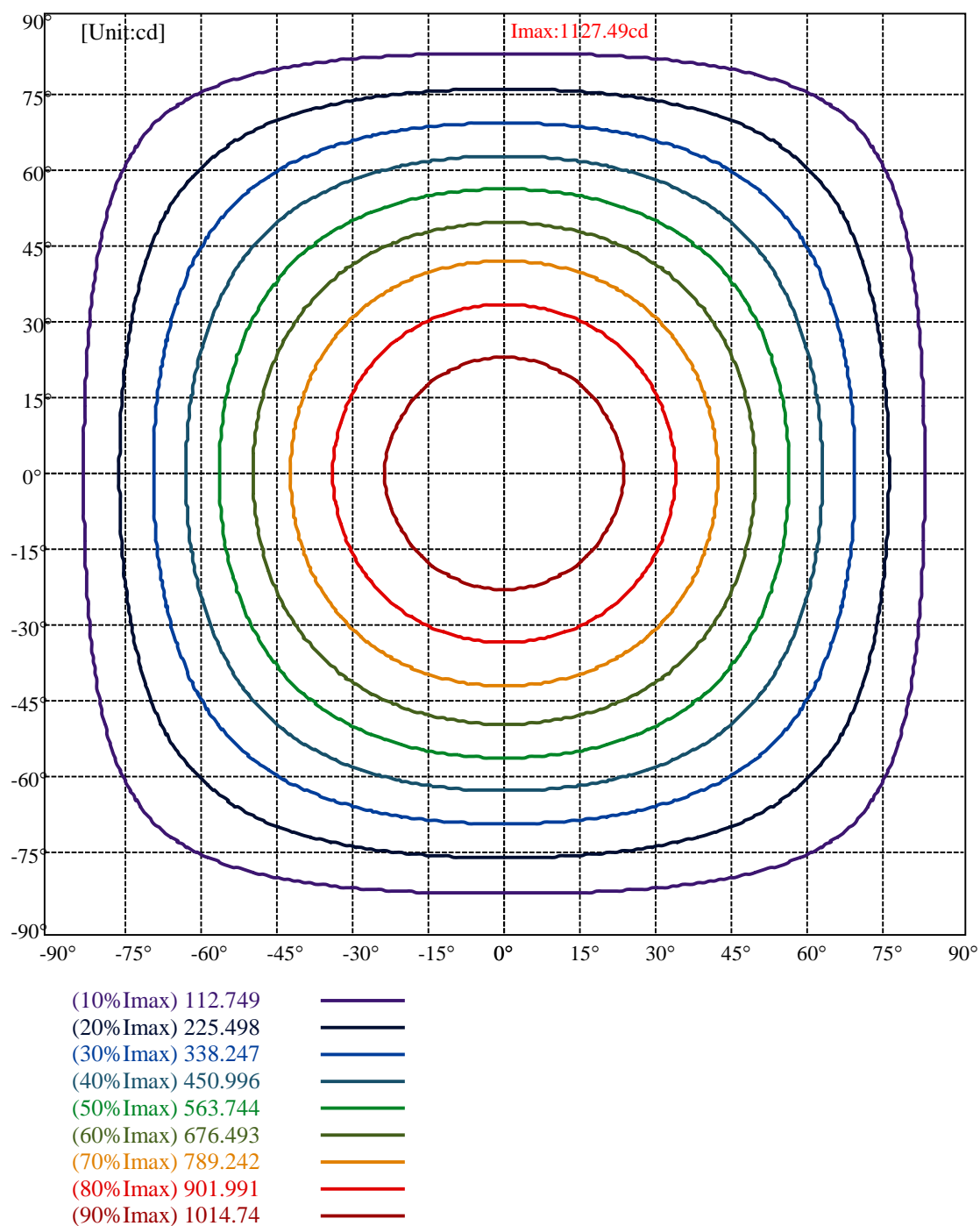
ZONAL LUMEN SUMMARY

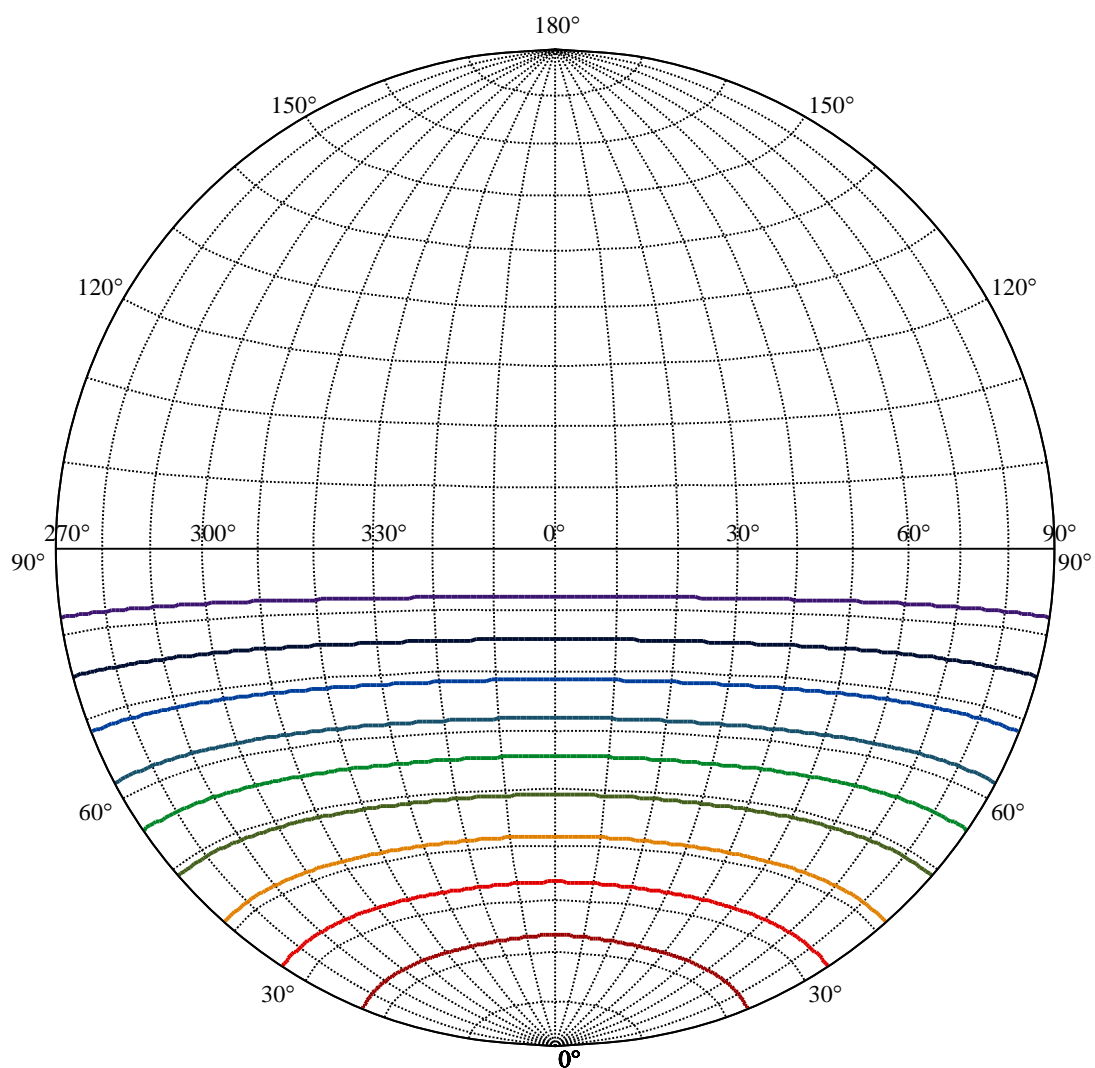
0-10	106.65
10-20	304.73
20-30	459.46
30-40	551.30
40-50	570.44
50-60	514.72
60-70	396.47
70-80	240.86
80-90	78.41
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00





Beam angle of C0plane111.50





Imax:1127.49

(10%Imax) 112.749

(20%Imax) 225.498

(30%Imax) 338.247

(40%Imax) 450.996

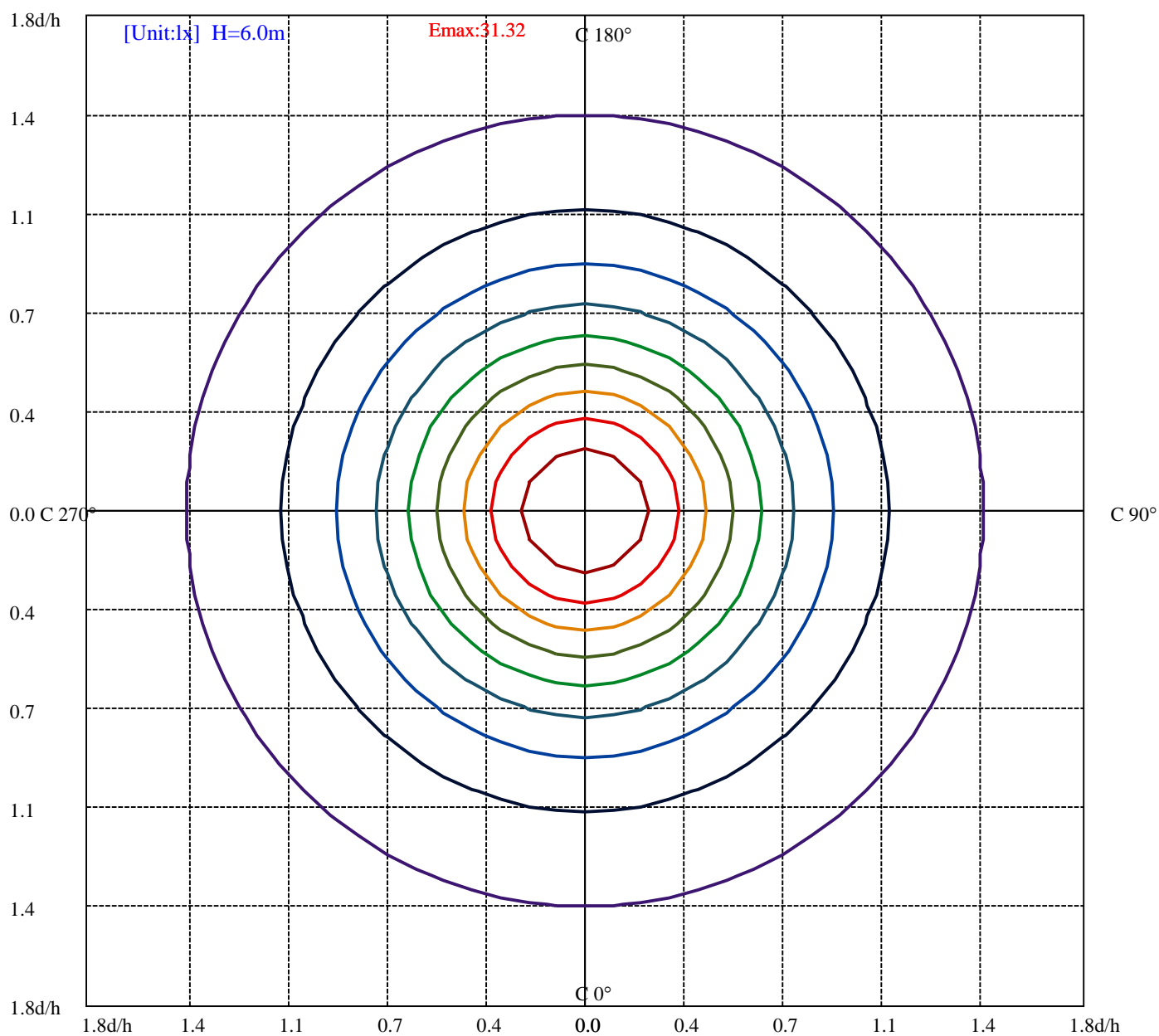
(50%Imax) 563.744

(60%Imax) 676.493

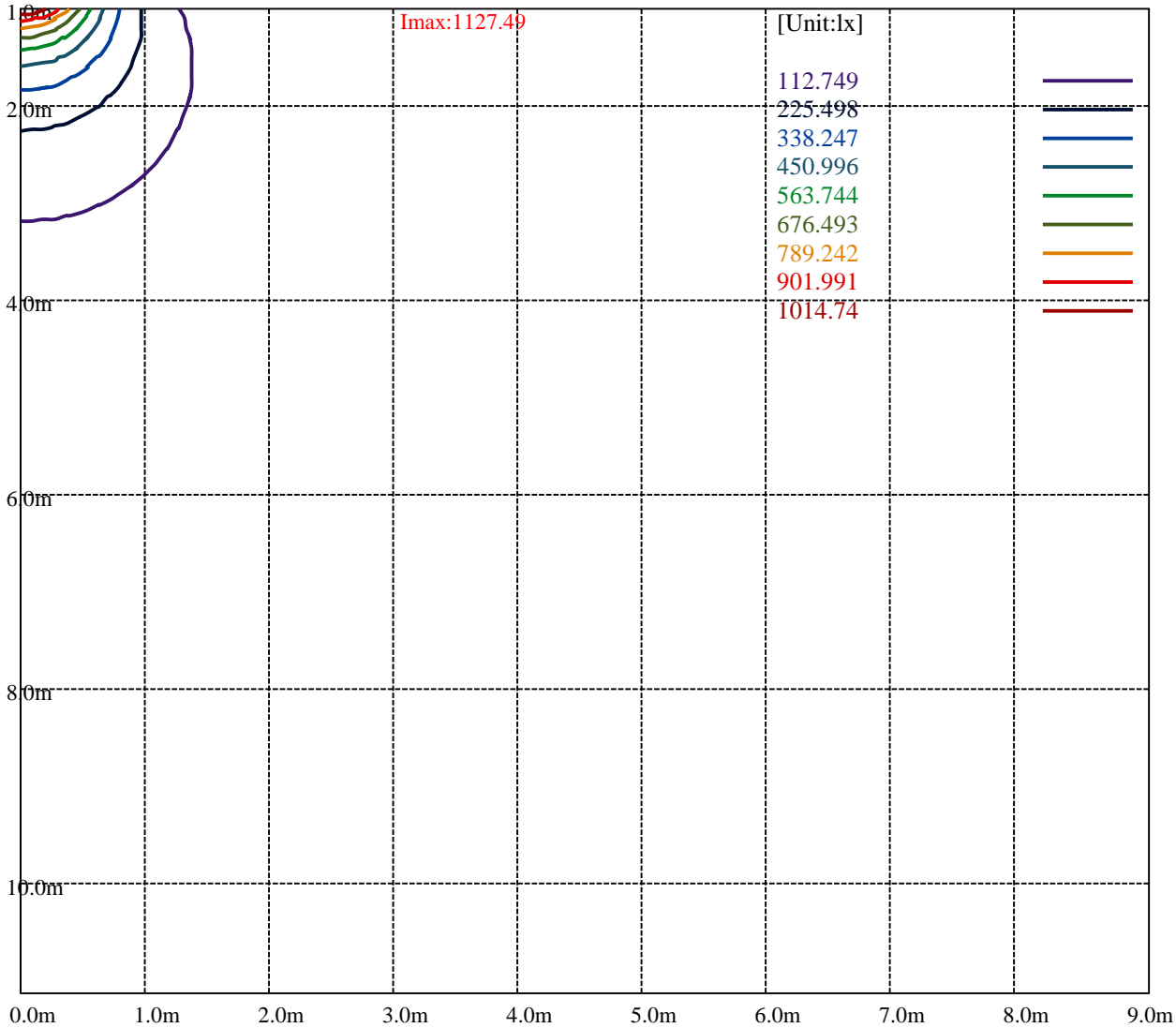
(70%Imax) 789.242

(80%Imax) 901.991

(90%Imax) 1014.74



(10%Emax) 3.131917
(20%Emax) 6.263834
(30%Emax) 9.39575
(40%Emax) 12.52764
(50%Emax) 15.65956
(60%Emax) 18.79147
(70%Emax) 21.92339
(80%Emax) 25.05531
(90%Emax) 28.18722



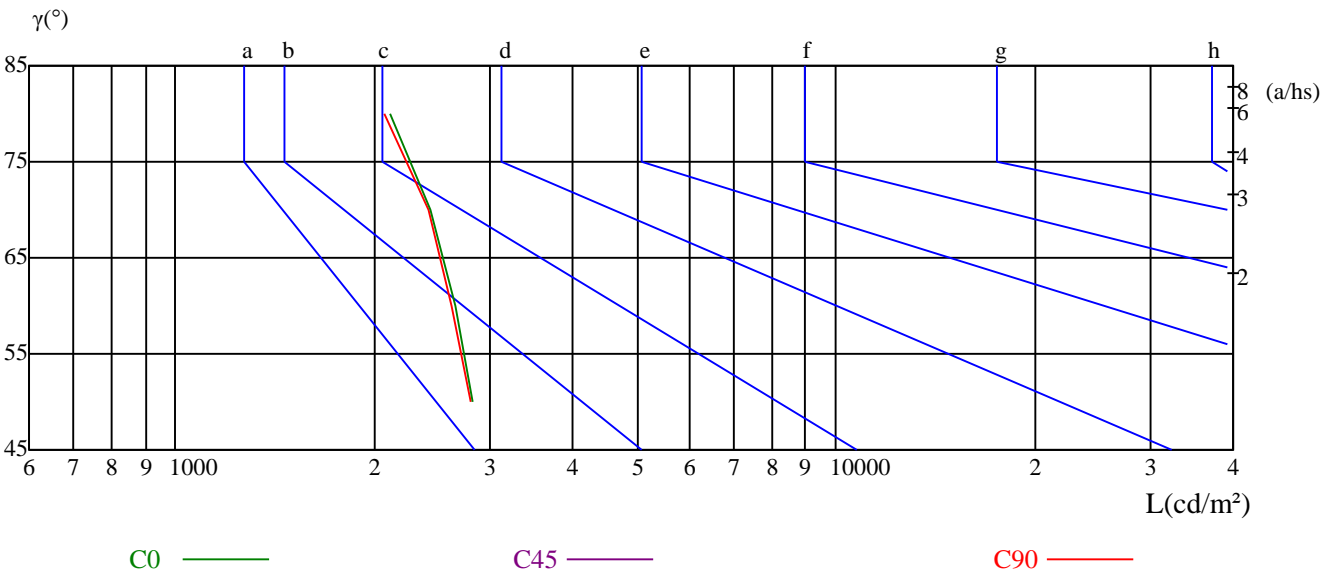
Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	0	2811	0	2647	0	2434	0	2118	0
C45	0	0	0	0	0	0	0	0	0
C90	0	2804	0	2623	0	2420	0	2077	0

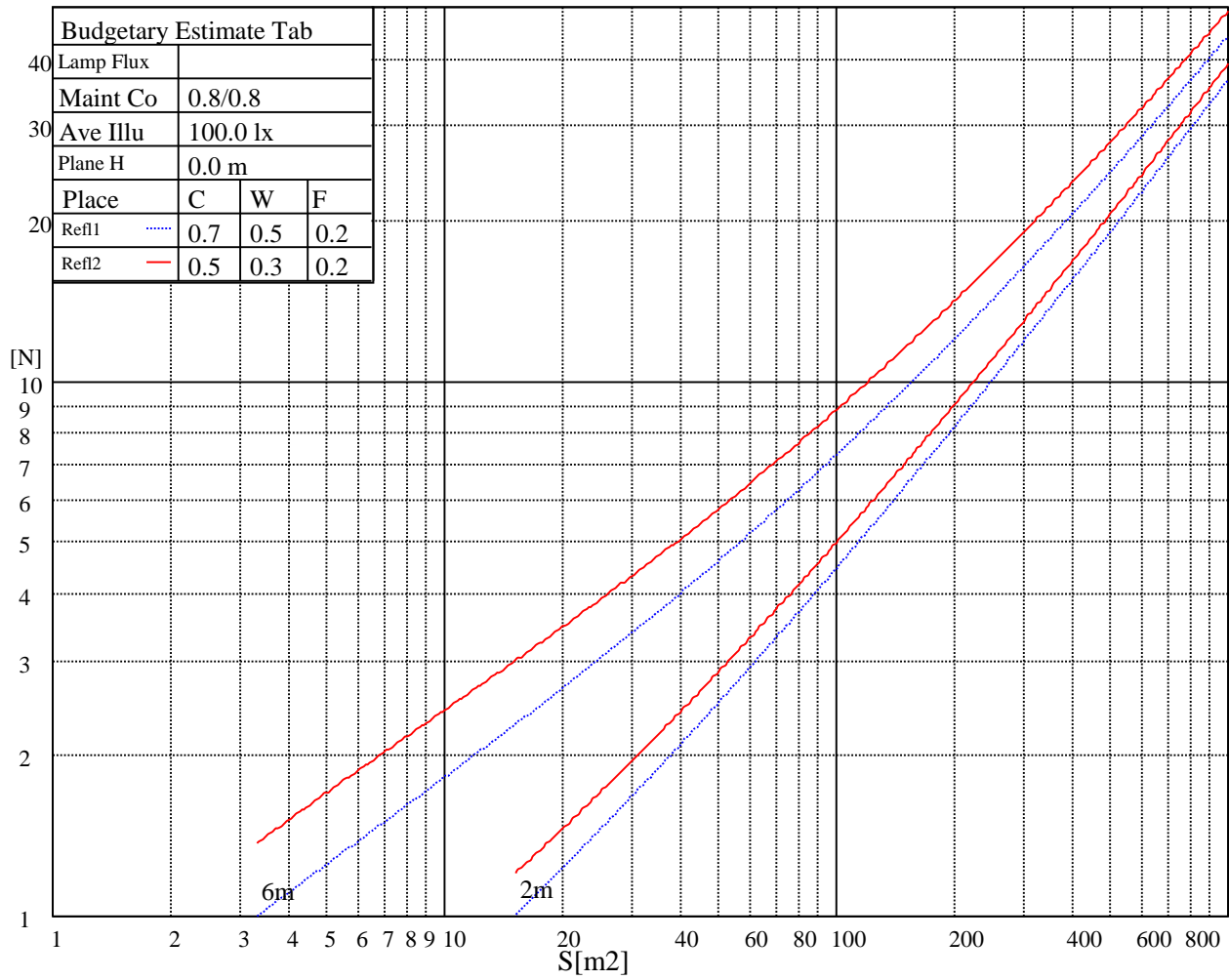
Glare Table

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 Limitting Curve



Illuminatin assessment acconding UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions	Viewed crosswise					Viewed endwise					
X	Y										
2H	2H	12.0	13.4	12.3	13.6	13.9	12.0	13.4	12.3	13.6	13.8
	3H	13.6	14.9	14.0	15.2	15.5	13.6	14.9	14.0	15.2	15.4
	4H	14.2	15.3	14.6	15.6	15.9	14.2	15.2	14.5	15.6	15.9
	6H	14.8	15.9	15.2	16.2	16.5	14.8	15.8	15.1	16.2	16.5
	8H	15.0	16.1	15.4	16.4	16.8	15.0	16.1	15.4	16.4	16.7
	12H	15.0	15.8	15.5	16.2	16.6	15.0	15.8	15.4	16.2	16.6
4H	2H	12.5	13.6	12.9	13.9	14.2	12.5	13.6	12.9	13.9	14.2
	3H	14.3	15.2	14.8	15.5	16.0	14.3	15.1	14.8	15.5	15.9
	4H	15.2	16.0	15.7	16.4	16.8	15.2	16.0	15.7	16.4	16.8
	6H	16.0	16.8	16.4	17.2	17.6	15.9	16.8	16.4	17.1	17.6
	8H	16.1	16.6	16.6	17.1	17.6	16.1	16.6	16.6	17.0	17.5
	12H	16.3	16.8	16.8	17.3	17.8	16.3	16.8	16.8	17.3	17.8
8H	4H	15.5	16.0	16.0	16.5	17.0	15.5	16.0	16.0	16.4	17.0
	6H	16.4	16.9	16.9	17.3	17.8	16.4	16.8	16.9	17.3	17.8
	8H	16.8	17.2	17.3	17.7	18.2	16.8	17.2	17.3	17.7	18.2
	12H	17.1	17.6	17.6	18.0	18.5	17.1	17.5	17.6	18.0	18.5
12H	4H	15.6	16.0	16.1	16.5	17.0	15.6	16.0	16.1	16.5	17.0
	6H	16.5	17.0	17.0	17.4	18.0	16.5	17.0	17.0	17.4	17.9
	8H	16.9	17.4	17.4	17.9	18.4	16.9	17.4	17.4	17.9	18.4
Variation with the observer position at spacings:											
S = 1.0H		0.2/-0.7					0.2/-0.7				
S = 1.5H		0.6/-0.6					0.6/-0.6				
S = 2.0H		0.7/-0.7					0.7/-0.7				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		1.2					1.1				
According 1000lm											



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	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.03	0.99	0.95	1.01	0.97	0.94	0.97	0.94	0.91	0.93	0.90	0.88	0.89	0.87	0.85	0.83
2	0.90	0.83	0.77	0.88	0.82	0.76	0.84	0.79	0.74	0.81	0.77	0.73	0.78	0.74	0.71	0.69
3	0.79	0.71	0.64	0.77	0.70	0.63	0.74	0.68	0.62	0.72	0.66	0.61	0.69	0.64	0.60	0.58
4	0.70	0.61	0.54	0.68	0.60	0.54	0.66	0.59	0.53	0.64	0.57	0.52	0.61	0.56	0.51	0.49
5	0.62	0.53	0.47	0.61	0.53	0.46	0.59	0.52	0.46	0.57	0.50	0.45	0.55	0.49	0.45	0.43
6	0.56	0.47	0.41	0.55	0.47	0.40	0.53	0.46	0.40	0.52	0.45	0.40	0.50	0.44	0.39	0.37
7	0.51	0.42	0.36	0.50	0.42	0.36	0.48	0.41	0.35	0.47	0.40	0.35	0.46	0.40	0.35	0.33
8	0.46	0.38	0.32	0.46	0.38	0.32	0.44	0.37	0.32	0.43	0.36	0.31	0.42	0.36	0.31	0.29
9	0.43	0.34	0.29	0.42	0.34	0.29	0.41	0.34	0.28	0.40	0.33	0.28	0.39	0.33	0.28	0.26
10	0.39	0.31	0.26	0.39	0.31	0.26	0.38	0.31	0.26	0.37	0.30	0.26	0.36	0.30	0.26	0.24

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Intensity data(cd)									
C/γ(°)	0.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0	80.0
0.0	1127.49	1114.18	1050.41	948.51	817.34	663.33	490.18	313.41	144.91
30.0	1127.49	1106.20	1041.82	941.48	812.31	658.38	486.70	310.70	143.00
60.0	1127.49	1104.53	1041.37	940.38	811.63	659.74	487.00	311.62	144.71
90.0	1127.49	1106.08	1041.56	941.25	812.35	661.74	485.72	311.64	142.10
120.0	1127.49	1104.53	1041.37	940.38	811.63	659.74	487.00	311.62	144.71
150.0	1127.49	1106.20	1041.82	941.48	812.31	658.38	486.70	310.70	143.00
180.0	1127.49	1114.18	1050.41	948.51	817.34	663.33	490.18	313.41	144.91
210.0	1127.49	1106.20	1041.82	941.48	812.31	658.38	486.70	310.70	143.00
240.0	1127.49	1104.53	1041.37	940.38	811.63	659.74	487.00	311.62	144.71
270.0	1127.49	1106.08	1041.56	941.25	812.35	661.74	485.72	311.64	142.10
300.0	1127.49	1104.53	1041.37	940.38	811.63	659.74	487.00	311.62	144.71
330.0	1127.49	1106.20	1041.82	941.48	812.31	658.38	486.70	310.70	143.00
360.0	1127.49	1114.18	1050.41	948.51	817.34	663.33	490.18	313.41	144.91
C/γ(°)	90.0	100.0	110.0	120.0	130.0	140.0	150.0	160.0	170.0
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.0	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	0.00	0.00	0.00
210.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
240.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
270.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
330.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C/γ(°)	180.0								
0.0	0.00								
30.0	0.00								
60.0	0.00								
90.0	0.00								
120.0	0.00								
150.0	0.00								
180.0	0.00								
210.0	0.00								
240.0	0.00								
270.0	0.00								
300.0	0.00								
330.0	0.00								
360.0	0.00								