
Nata

LumCAT: 3-1549-A3
Luminaire: TE 2213407-1+92.76.365.00
Report No: GC2016092006
Test No: NT-0010
LampCAT: CREE CXA2530
Lamp flux(lm): 1684.0
Number of Lamps: 1
Length(mm): 79
Phm Type: C

Voltage(V): 34.8000
Current(A): 0.5000
Power (W): 17.4000
PF: 0.0000
Ballast type: DC
Width(mm): 79
Height(mm): 0

Photometric Results

Lumens(lm): 1587.77
Efficiency(%): 94.29%
Lumens(lm)/Power(W): 91.25
Central intensity(cd): 5390.572
Maximum intensity(cd): 5390.572
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=25.1
[C90/270]Total=25.1
Field angle(10%Imax): [C0/180]Total=60.8
[C90/270]Total=60.8
Maximum s/h(1/2): C0_180=0.42 C90_270=0.42
Maximum s/h(1/4): C0_180=0.45 C90_270=0.45
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 94.29%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.696%

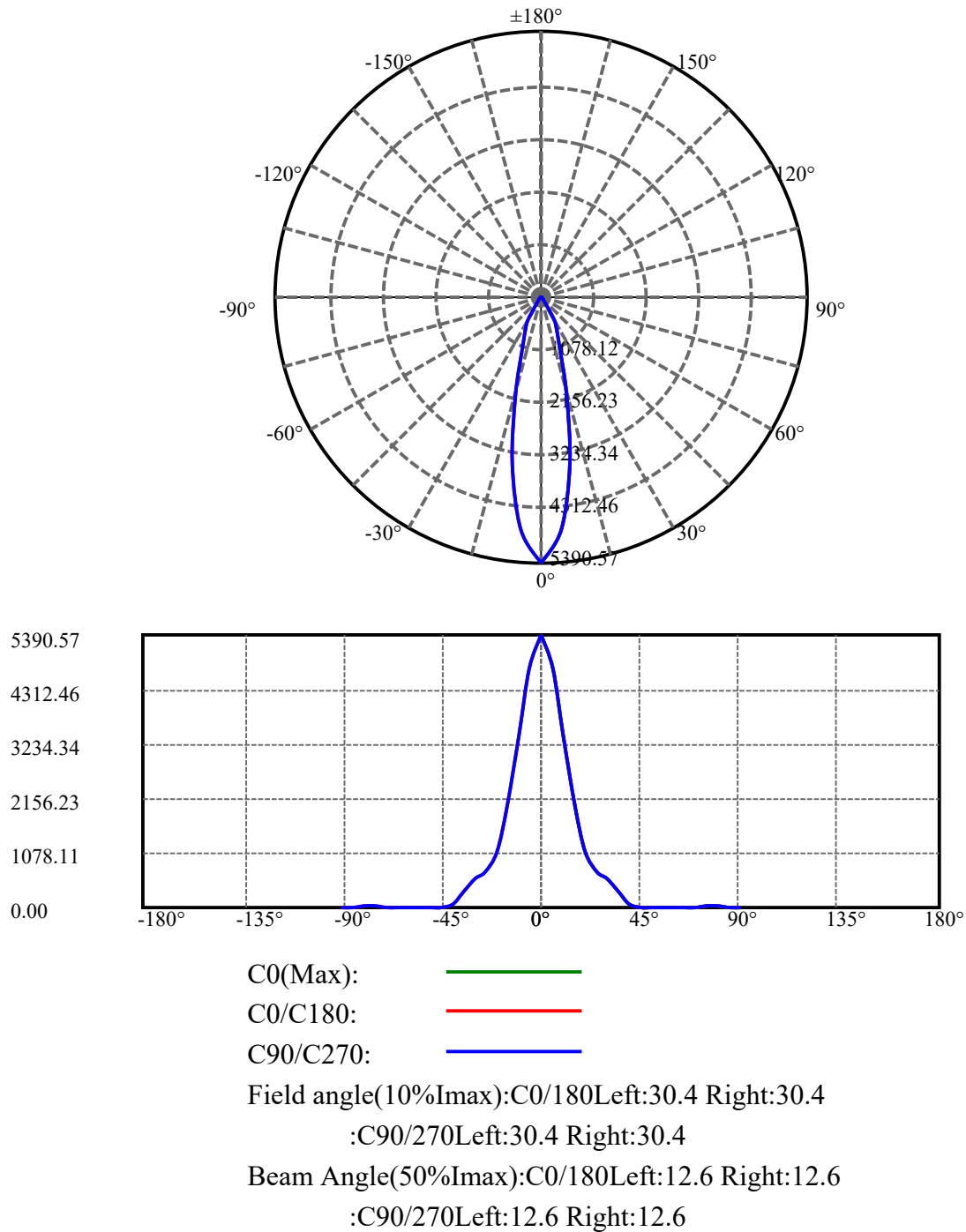
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5390.572	0.000	0	.000%	.000%
5.0	4706.875	120.712	120.712	7.168%	7.603%
10.0	3408.714	290.320	411.032	17.240%	25.887%
15.0	2019.469	321.996	733.028	19.121%	46.167%
20.0	1101.100	257.179	990.207	15.272%	62.365%
25.0	696.064	188.489	1178.697	11.193%	74.236%
30.0	559.008	158.830	1337.527	9.432%	84.239%
35.0	317.799	129.116	1466.643	7.667%	92.371%
40.0	58.301	62.750	1529.393	3.726%	96.323%
45.0	8.183	12.310	1541.703	.731%	97.099%
50.0	7.271	3.123	1544.825	.185%	97.295%
55.0	7.051	3.114	1547.939	.185%	97.491%
60.0	7.006	3.249	1551.188	.193%	97.696%
65.0	8.217	3.701	1554.889	.220%	97.929%
70.0	12.911	5.350	1560.239	.318%	98.266%
75.0	17.078	7.839	1568.077	.465%	98.760%
80.0	17.439	9.236	1577.313	.548%	99.341%
85.0	7.323	6.728	1584.042	.400%	99.765%
90.0	6.301	3.730	1587.772	.222%	100.000%

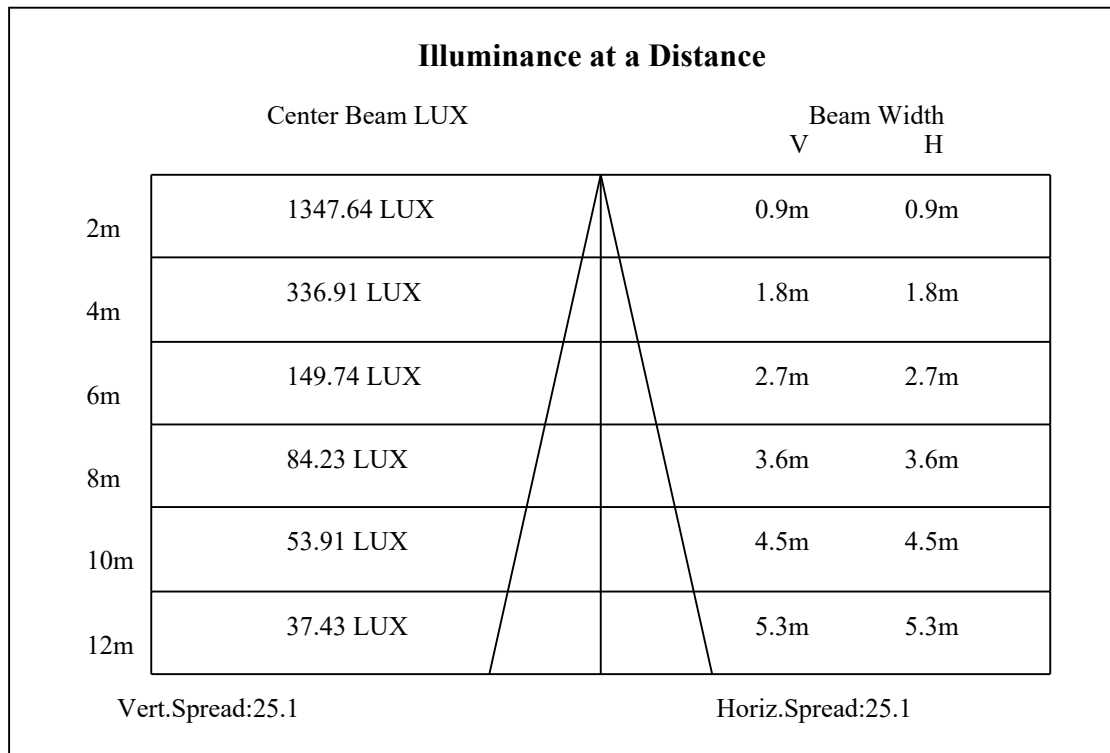
ZONAL LUMEN SUMMARY

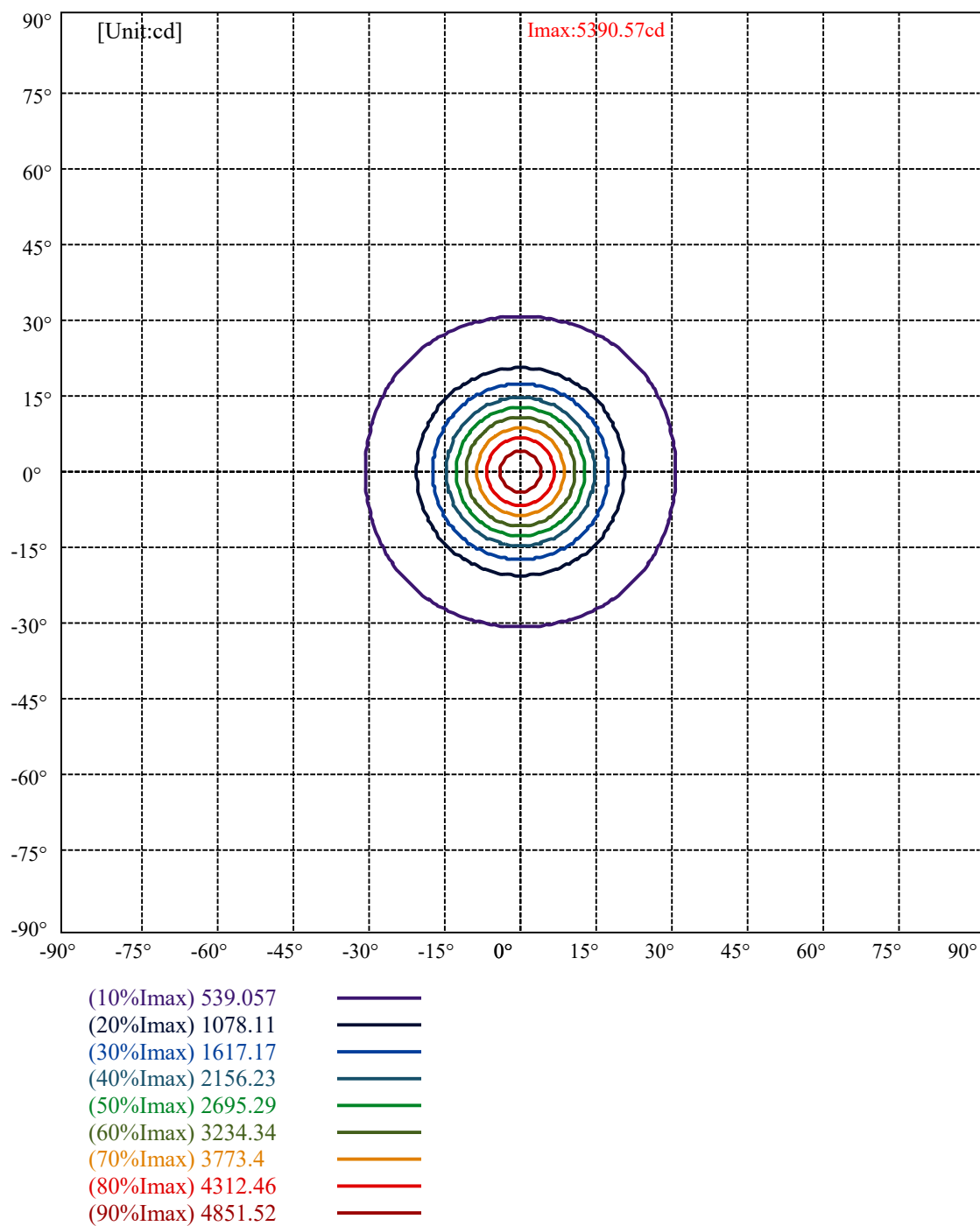
Zone	Lumens	%Lamp	%Fixt
0-30	1337.53	79.43%	84.24%
0-40	1529.39	90.82%	96.32%
0-60	1551.19	92.11%	97.70%
0-90	1584.04	94.06%	99.77%
0-120	1584.04	94.06%	99.77%
0-180	1587.77	94.29%	100.00%
60-90	36.10	2.14%	2.27%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-27.88	1270.22	75.43%	80.00%

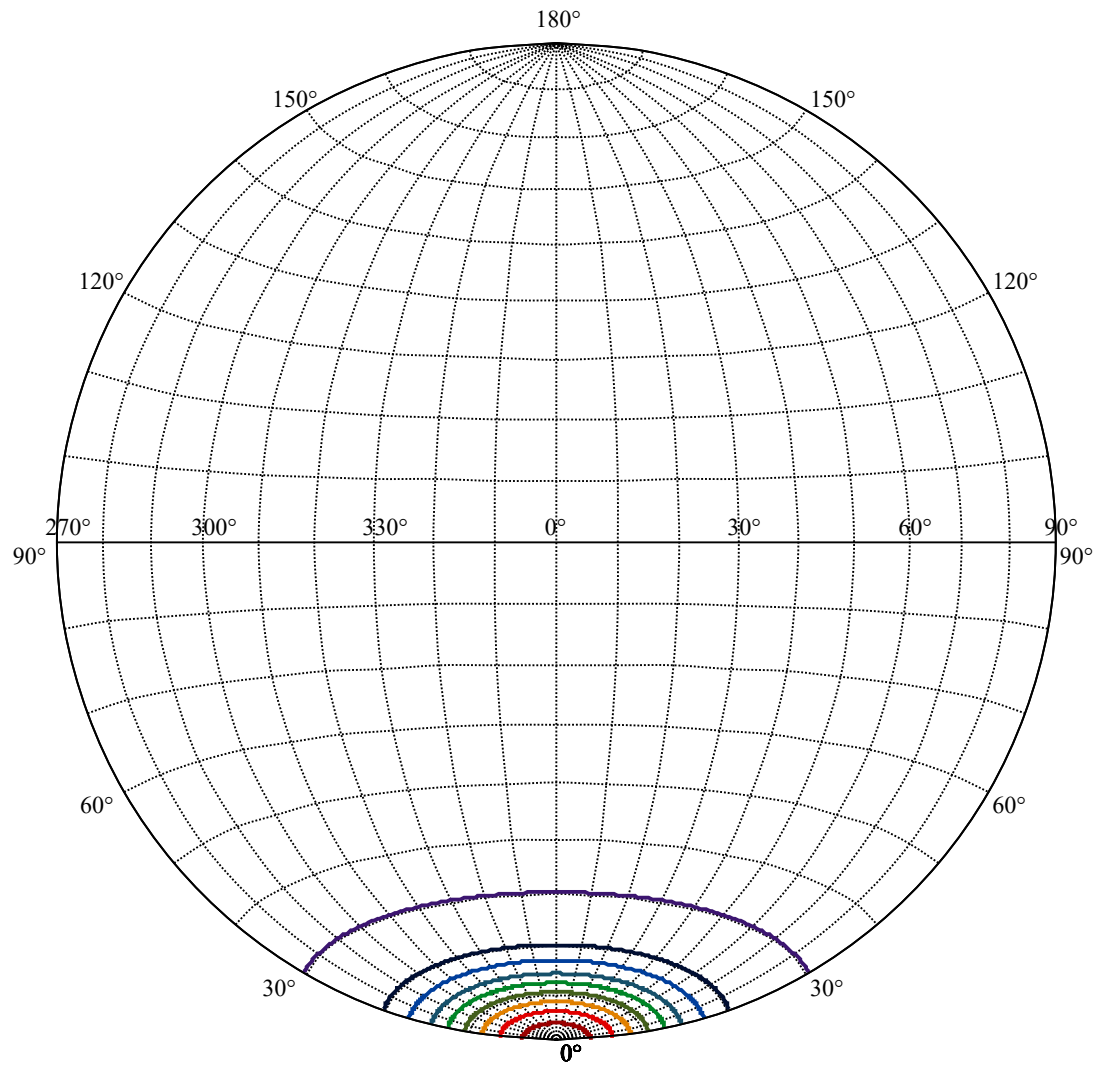
ZONAL LUMEN SUMMARY

0-10	411.03
10-20	579.17
20-30	347.32
30-40	191.87
40-50	15.43
50-60	6.36
60-70	9.05
70-80	17.07
80-90	6.73
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







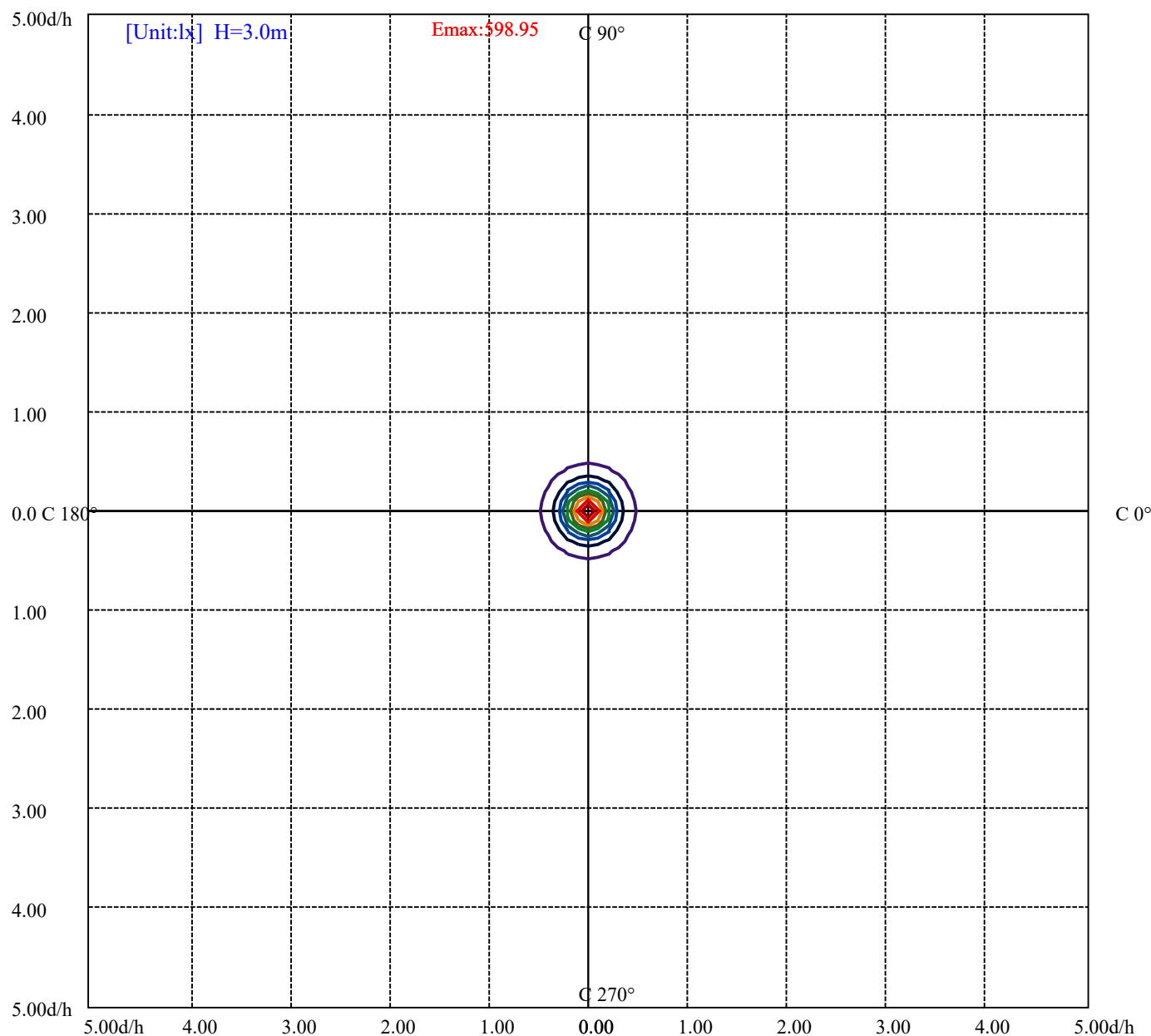


House

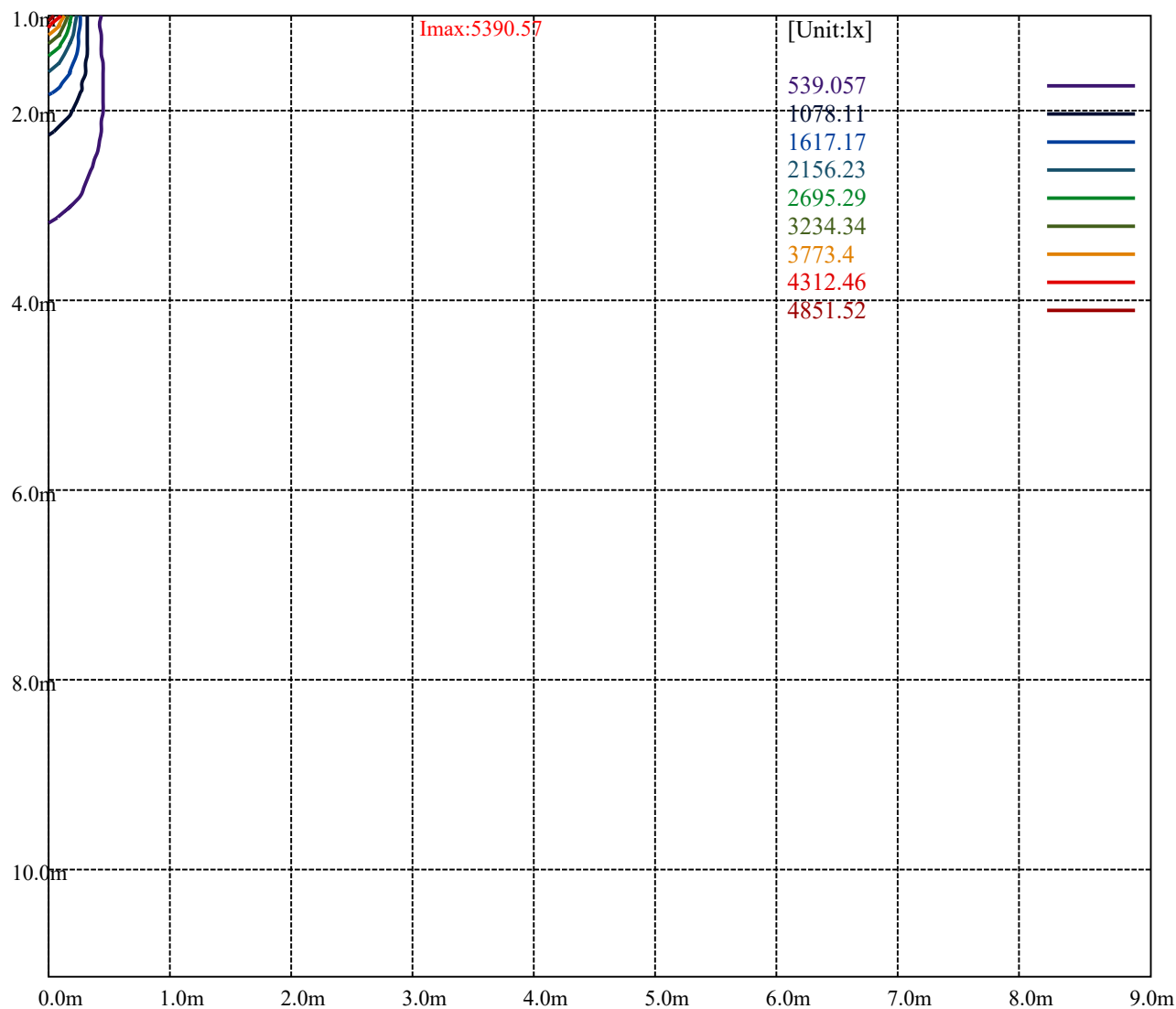
[Unit:cd]

Road

Imax:5390.57	
(10%Imax) 539.057	
(20%Imax) 1078.11	
(30%Imax) 1617.17	
(40%Imax) 2156.23	
(50%Imax) 2695.29	
(60%Imax) 3234.34	
(70%Imax) 3773.4	
(80%Imax) 4312.46	
(90%Imax) 4851.52	



(10%Emax) 59.895	—
(20%Emax) 119.79	—
(30%Emax) 179.6856	—
(40%Emax) 239.58	—
(50%Emax) 299.4756	—
(60%Emax) 359.37	—
(70%Emax) 419.2655	—
(80%Emax) 479.16	—
(90%Emax) 539.0555	—



Luminance Table

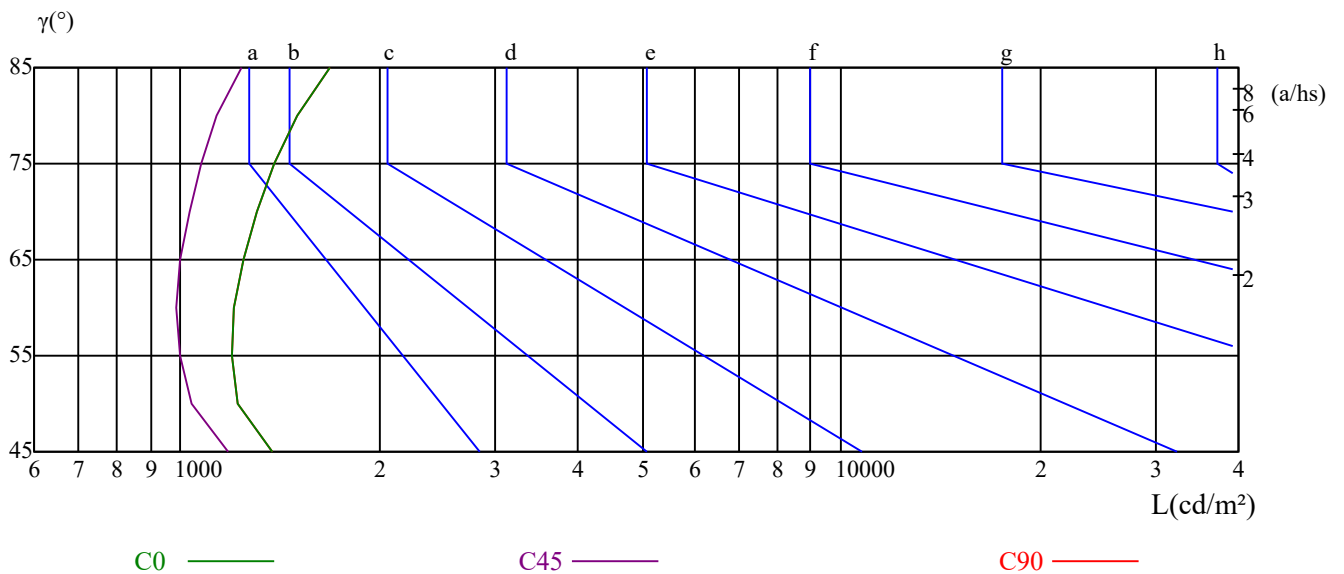
γ	45	50	55	60	65	70	75	80	85
C0	1373	1224	1195	1203	1241	1305	1387	1503	1684
C45	1180	1036	996	986	999	1031	1072	1134	1234
C90	1373	1224	1195	1203	1241	1305	1387	1503	1684

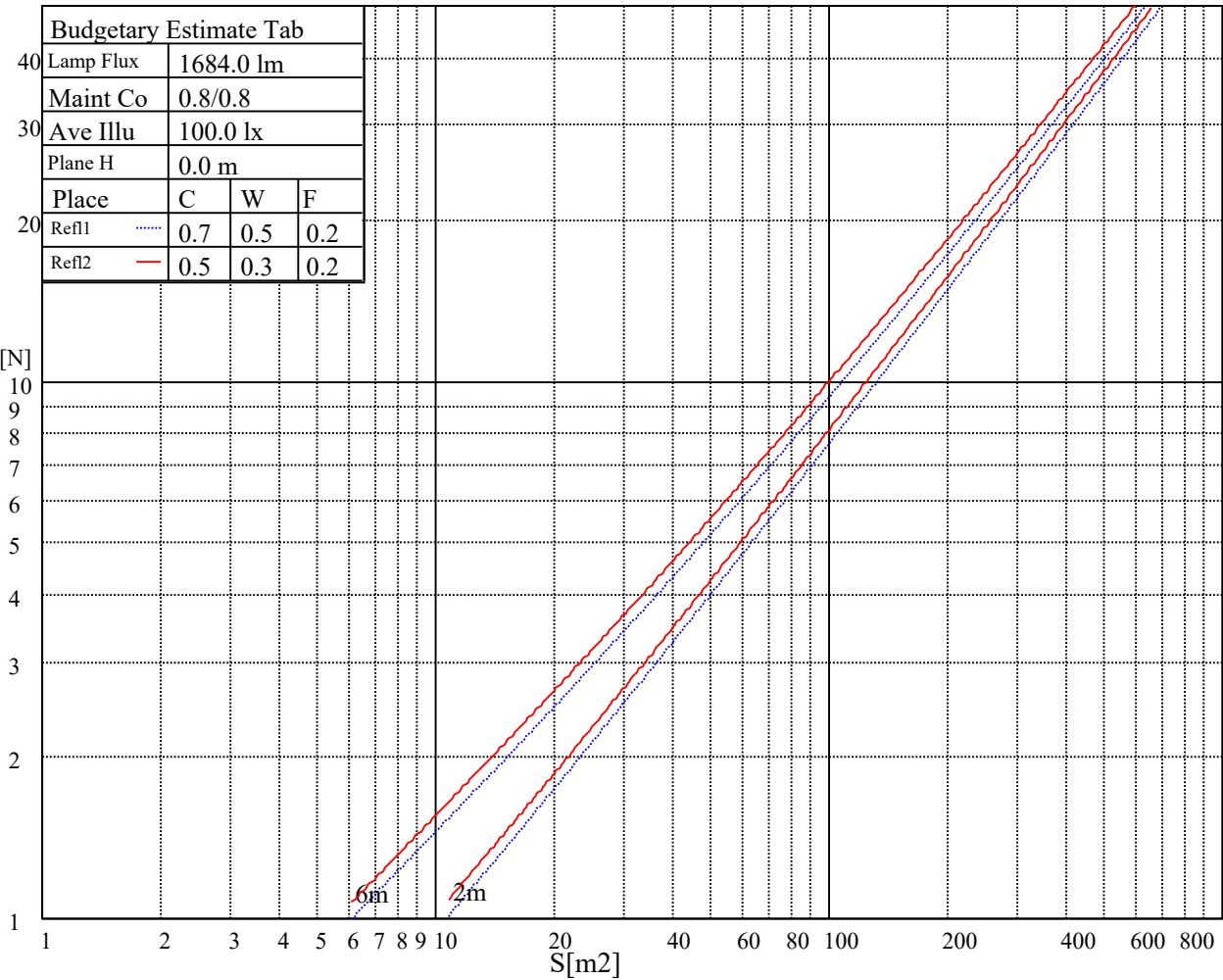
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2981	2981	2981	4771	4771	4771	14274	14274	14274

Glare Table

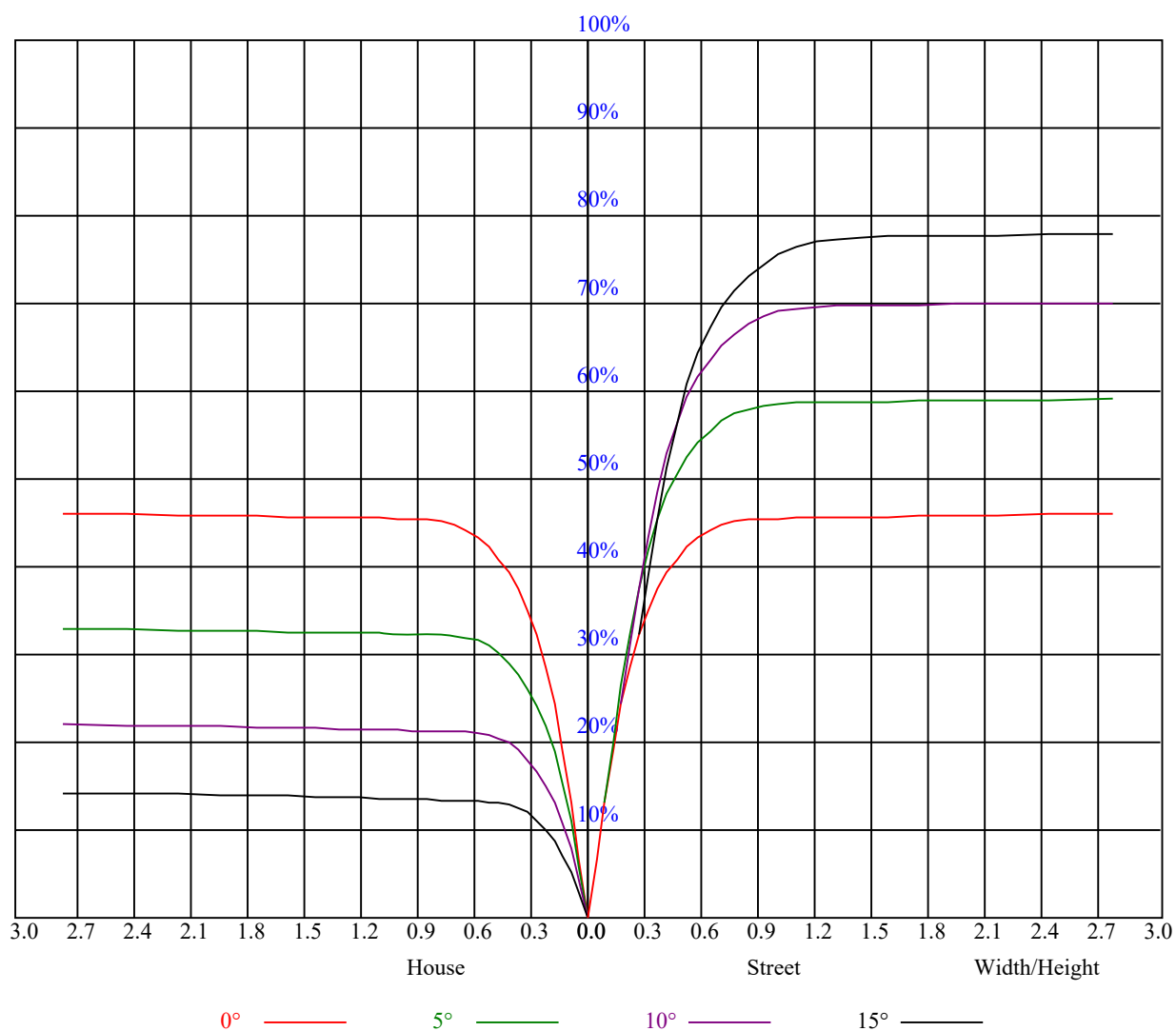
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

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	1.12	1.12	1.12	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.94
1	1.05	1.03	1.01	1.03	1.01	0.99	0.99	0.98	0.96	0.96	0.95	0.93	0.93	0.92	0.91	0.89
2	0.99	0.96	0.93	0.97	0.94	0.92	0.94	0.92	0.90	0.92	0.90	0.88	0.89	0.87	0.86	0.85
3	0.94	0.90	0.86	0.92	0.89	0.86	0.90	0.87	0.84	0.88	0.85	0.83	0.86	0.84	0.82	0.80
4	0.89	0.85	0.81	0.88	0.84	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.83	0.80	0.78	0.77
5	0.85	0.80	0.77	0.84	0.80	0.77	0.83	0.79	0.76	0.81	0.78	0.75	0.80	0.77	0.75	0.73
6	0.81	0.77	0.73	0.81	0.76	0.73	0.79	0.75	0.72	0.78	0.75	0.72	0.77	0.74	0.72	0.70
7	0.78	0.73	0.70	0.77	0.73	0.70	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.69	0.68
8	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.72	0.68	0.66	0.65
9	0.72	0.67	0.64	0.71	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.62
10	0.69	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.68	0.64	0.61	0.67	0.64	0.61	0.60



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	5364.15	4865.33	3643.08	2205.01	1258.59	736.10	580.85	377.14	94.81
22.5	5431.31	4781.10	3432.77	2128.48	1102.23	695.36	572.59	323.18	55.61
45.0	5392.77	4470.03	3204.28	1811.91	989.25	667.94	539.99	260.20	35.07
67.5	5409.84	4772.84	3432.22	2066.82	1114.34	703.07	564.88	320.98	57.70
90.0	5367.45	4549.31	3154.73	1779.97	1005.11	661.94	528.87	267.74	32.32
112.5	5397.73	4704.57	3431.11	2073.97	1116.54	695.91	563.23	325.93	60.73
135.0	5378.46	4488.20	3160.24	1724.37	1000.93	657.43	519.90	275.50	33.42
157.5	5382.86	4756.87	3431.11	1999.65	1108.29	690.96	561.02	313.82	62.27
180.0	5364.15	4523.43	3130.51	1817.41	983.64	652.31	538.18	269.28	30.50
202.5	5431.31	4643.46	3419.55	1985.88	1069.97	695.25	565.10	305.95	58.47
225.0	5392.77	4924.24	3689.88	2320.08	1206.29	731.15	584.70	362.82	81.48
247.5	5409.84	4680.34	3394.23	1969.37	1065.12	692.55	557.34	307.43	52.41
270.0	5367.45	4879.10	3646.94	2278.78	1223.35	738.86	578.64	362.82	84.35
292.5	5397.73	4719.99	3380.46	1952.30	1088.35	686.55	555.24	305.18	51.81
315.0	5378.46	4915.44	3628.22	2261.17	1208.49	748.22	577.54	396.41	86.93
337.5	5382.86	4635.75	3360.09	1936.33	1077.12	683.42	556.07	310.41	54.95
360.0	5364.15	4865.33	3643.08	2205.01	1258.59	736.10	580.85	377.14	94.81
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	8.59	7.32	7.16	7.05	7.65	12.72	18.50	19.82	7.38
22.5	8.15	7.38	7.27	7.21	9.19	15.91	22.19	22.02	7.60
45.0	8.04	7.38	7.21	7.27	11.18	20.81	27.03	26.26	7.87
67.5	8.31	7.43	7.32	7.27	10.08	18.33	26.04	26.76	8.86
90.0	8.04	7.27	7.16	7.21	10.35	16.08	21.80	21.25	7.98
112.5	7.93	7.27	7.10	7.10	8.42	12.77	16.08	16.46	7.65
135.0	7.38	7.05	6.99	6.99	8.37	12.83	16.74	16.74	7.05
157.5	8.09	7.16	6.94	6.94	7.60	10.30	13.54	14.59	6.88
180.0	7.98	7.05	6.83	6.83	7.16	8.97	12.06	12.44	6.72
202.5	8.42	7.16	6.94	6.83	7.10	8.37	11.18	12.17	6.77
225.0	8.64	7.27	6.94	6.88	6.99	8.70	10.74	11.95	6.88
247.5	7.71	7.16	6.94	6.83	7.21	10.41	12.39	12.72	6.94
270.0	8.53	7.32	6.99	6.94	6.99	10.13	12.39	12.88	7.10
292.5	8.26	7.21	6.99	6.88	7.76	12.22	15.25	14.98	7.16
315.0	8.75	7.71	7.05	6.94	7.32	13.49	18.39	19.21	7.16
337.5	8.09	7.21	6.99	6.94	8.09	14.53	18.94	18.77	7.16
360.0	8.59	7.32	7.16	7.05	7.65	12.72	18.50	19.82	7.38
C/γ(°)	90.0								
0.0	6.28								
22.5	6.33								
45.0	6.33								
67.5	6.33								
90.0	6.28								
112.5	6.33								
135.0	6.28								
157.5	6.28								
180.0	6.28								
202.5	6.33								
225.0	6.33								
247.5	6.33								
270.0	6.28								
292.5	6.28								
315.0	6.28								
337.5	6.28								
360.0	6.28								