
Nata

LumCAT: 3-1943-M	
Luminaire: BJB 47.319.2344	
Report No: GC2017070304	Voltage(V): 34.3300
Test No: NT-0010	Current(A): 0.5000
LampCAT: Certaflux SLM 1208 L14 G1	Power (W): 17.1650
Lamp flux(lm): 2321.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 86	Width(mm): 86
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2134.15
Efficiency(%): 91.95%
Lumens(lm)/Power(W): 124.33
Central intensity(cd): 7639.479
Maximum intensity(cd): 7639.479
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=26.1
[C90/270]Total=26.1
Field angle(10%Imax): [C0/180]Total=56.6
[C90/270]Total=56.6
Maximum s/h(1/2): C0_180=0.45 C90_270=0.45
Maximum s/h(1/4): C0_180=0.43 C90_270=0.43
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 91.95%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.706%

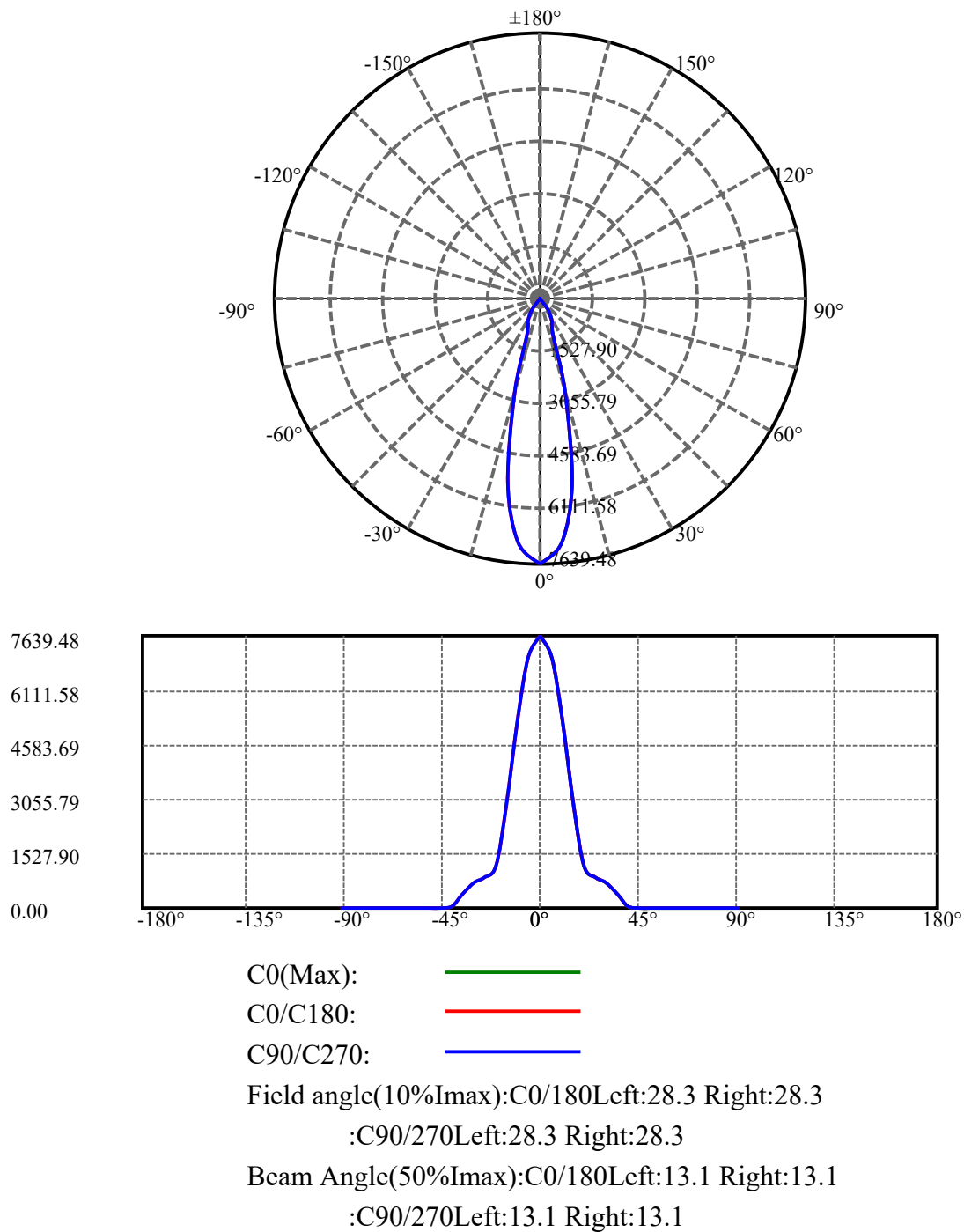
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7639.481	0.000	0	.000%	.000%
5.0	7038.211	175.468	175.468	7.560%	8.222%
10.0	5375.017	444.060	619.528	19.132%	29.029%
15.0	2834.846	487.004	1106.531	20.982%	51.849%
20.0	1204.862	332.929	1439.46	14.344%	67.449%
25.0	840.228	214.492	1653.952	9.241%	77.500%
30.0	724.139	197.972	1851.924	8.530%	86.776%
35.0	388.518	163.846	2015.771	7.059%	94.453%
40.0	27.177	69.355	2085.126	2.988%	97.703%
45.0	13.259	7.487	2092.613	.323%	98.054%
50.0	10.922	4.886	2097.499	.211%	98.283%
55.0	9.966	4.542	2102.041	.196%	98.496%
60.0	9.433	4.484	2106.525	.193%	98.706%
65.0	9.094	4.504	2111.029	.194%	98.917%
70.0	8.904	4.557	2115.586	.196%	99.130%
75.0	8.723	4.608	2120.194	.199%	99.346%
80.0	8.603	4.636	2124.83	.200%	99.564%
85.0	8.561	4.664	2129.494	.201%	99.782%
90.0	8.427	4.651	2134.145	.200%	100.000%

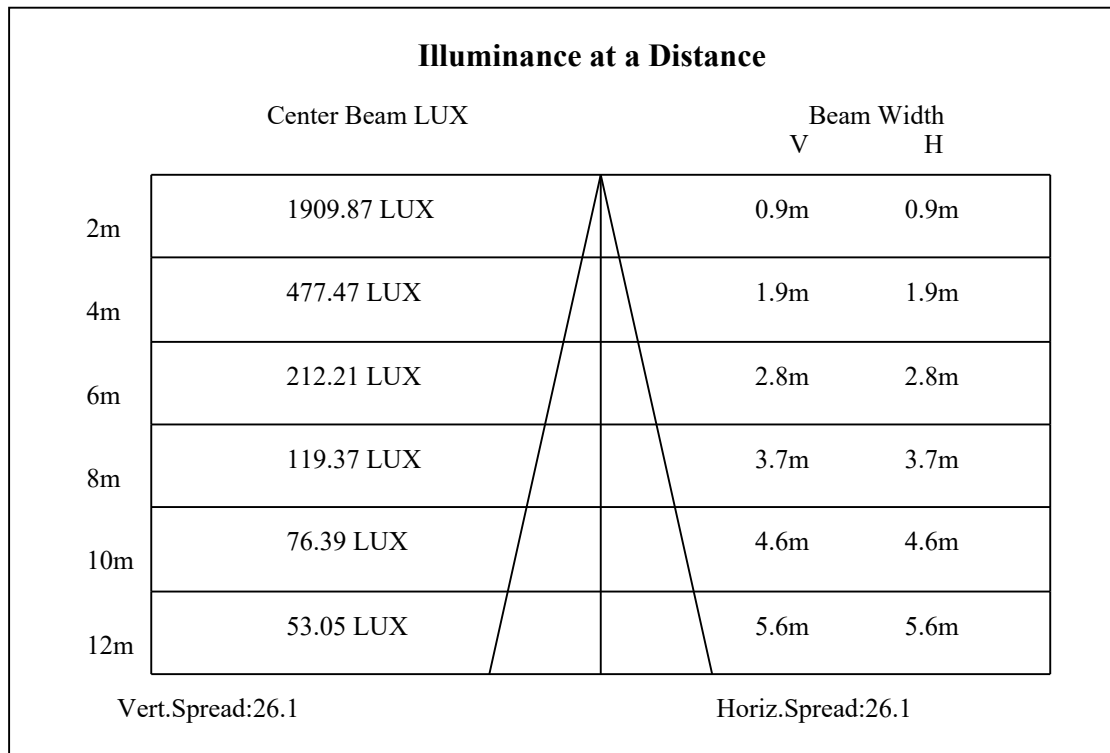
ZONAL LUMEN SUMMARY

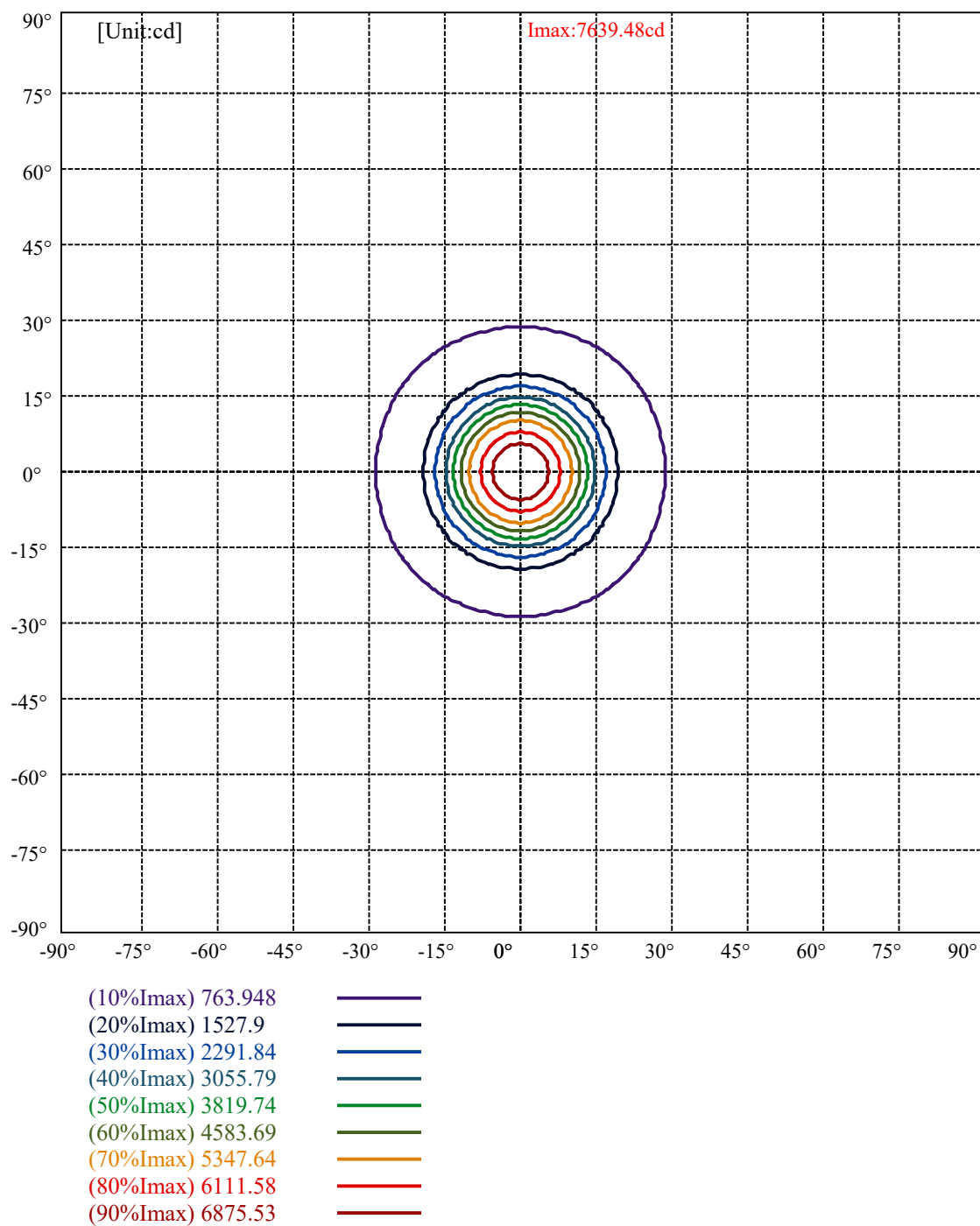
Zone	Lumens	%Lamp	%Fixt
0-30	1851.92	79.79%	86.78%
0-40	2085.13	89.84%	97.70%
0-60	2106.52	90.76%	98.71%
0-90	2129.49	91.75%	99.78%
0-120	2129.49	91.75%	99.78%
0-180	2134.15	91.95%	100.00%
60-90	27.45	1.18%	1.29%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-26.35	1707.32	73.56%	80.00%

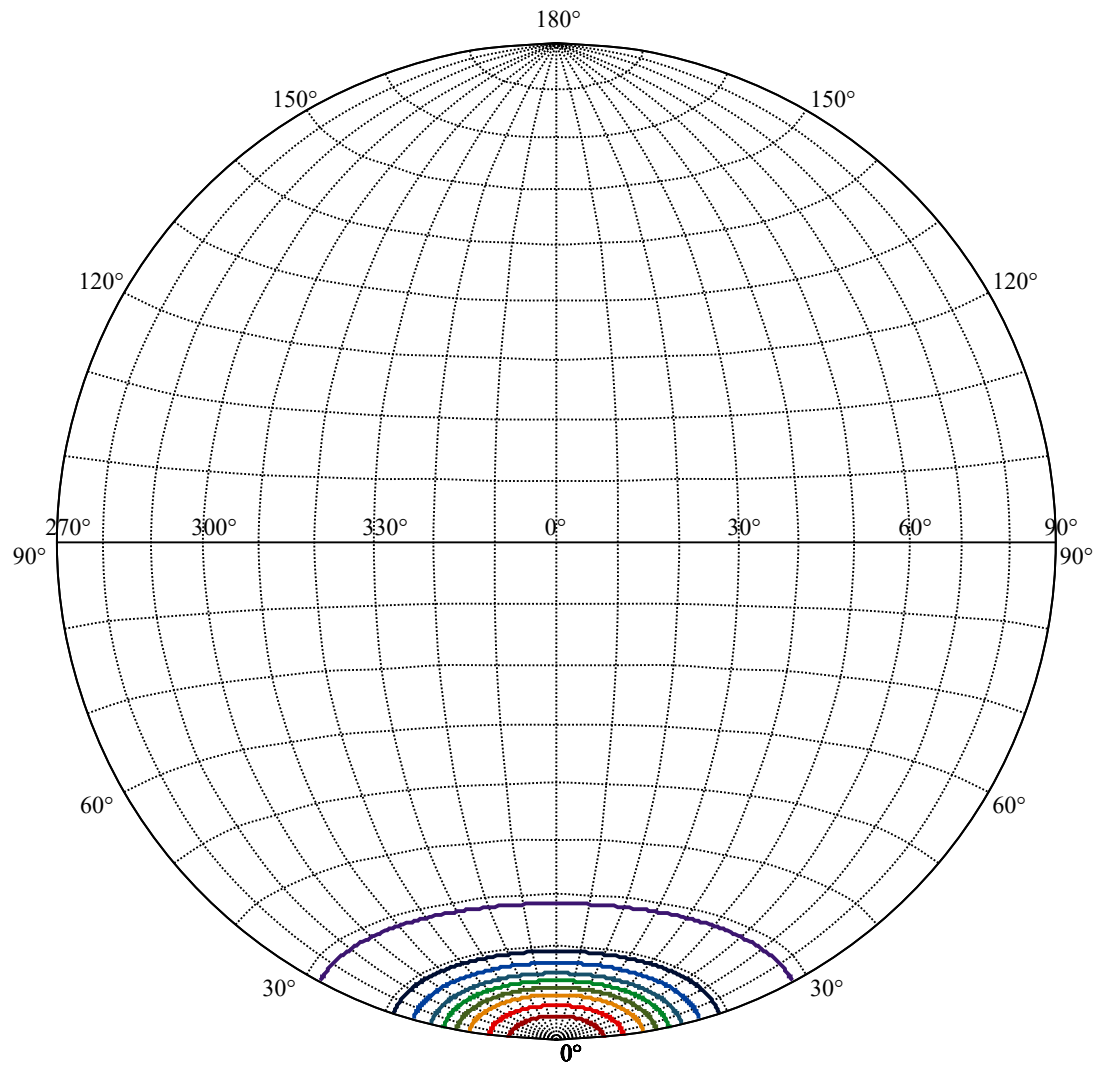
ZONAL LUMEN SUMMARY

0-10	619.53
10-20	819.93
20-30	412.46
30-40	233.20
40-50	12.37
50-60	9.03
60-70	9.06
70-80	9.24
80-90	4.66
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







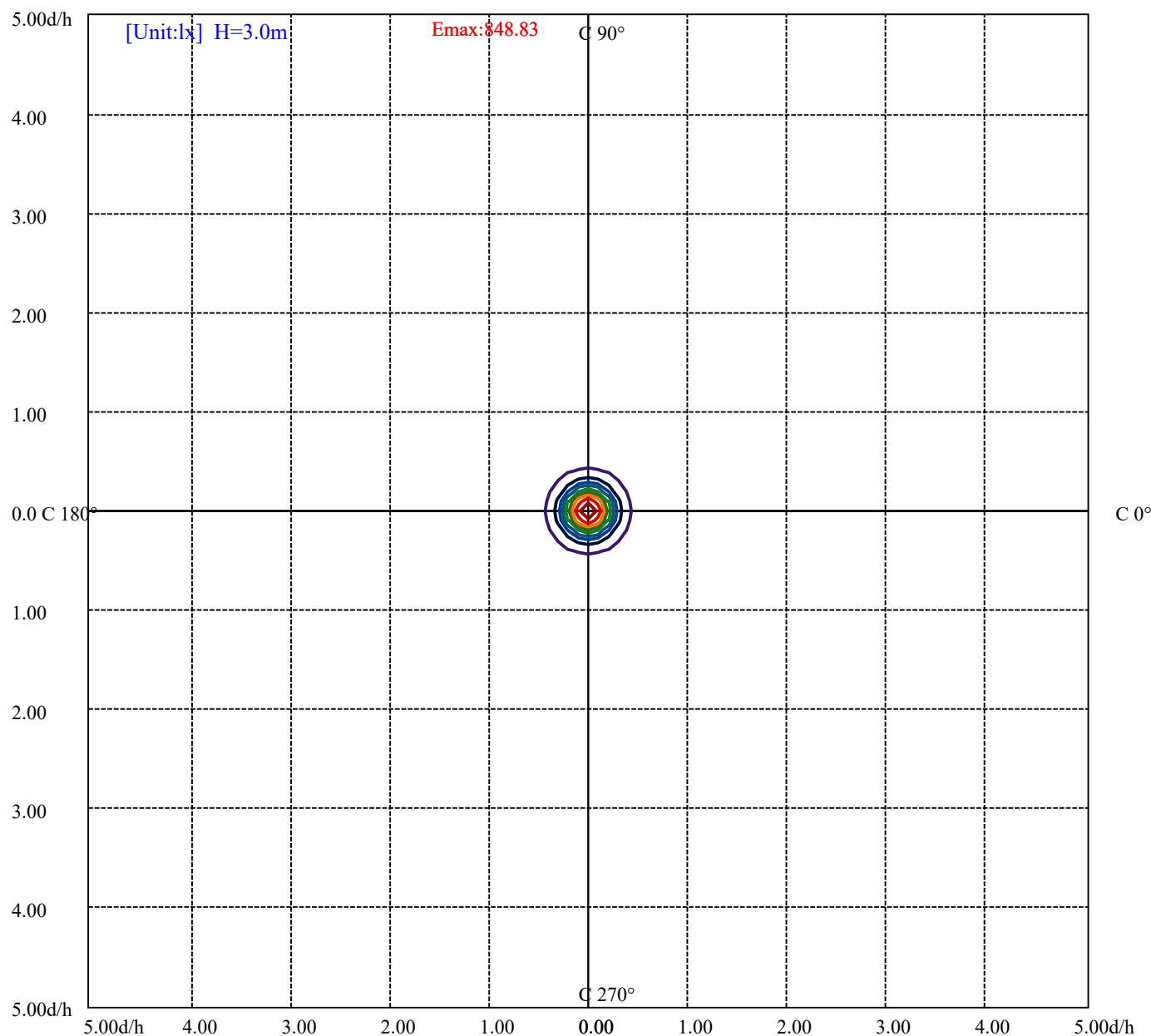


House

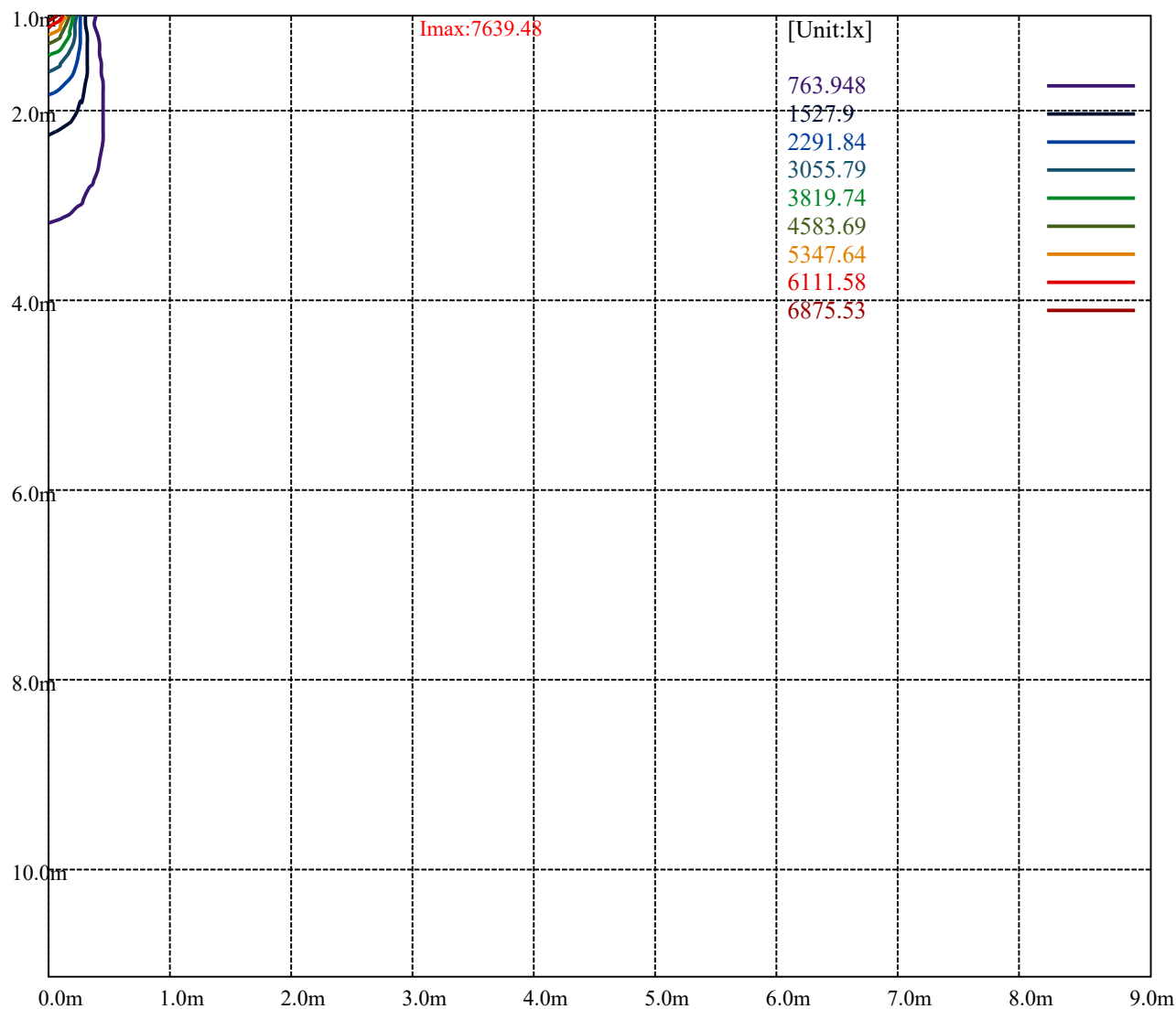
[Unit:cd]

Road

Imax:7639.48	
(10%Imax) 763.948	
(20%Imax) 1527.9	
(30%Imax) 2291.84	
(40%Imax) 3055.79	
(50%Imax) 3819.74	
(60%Imax) 4583.69	
(70%Imax) 5347.64	
(80%Imax) 6111.58	
(90%Imax) 6875.53	



(10%Emax)	84.88289	
(20%Emax)	169.7656	
(30%Emax)	254.6489	
(40%Emax)	339.5311	
(50%Emax)	424.4144	
(60%Emax)	509.2978	
(70%Emax)	594.18	
(80%Emax)	679.0633	
(90%Emax)	763.9467	



Luminance Table

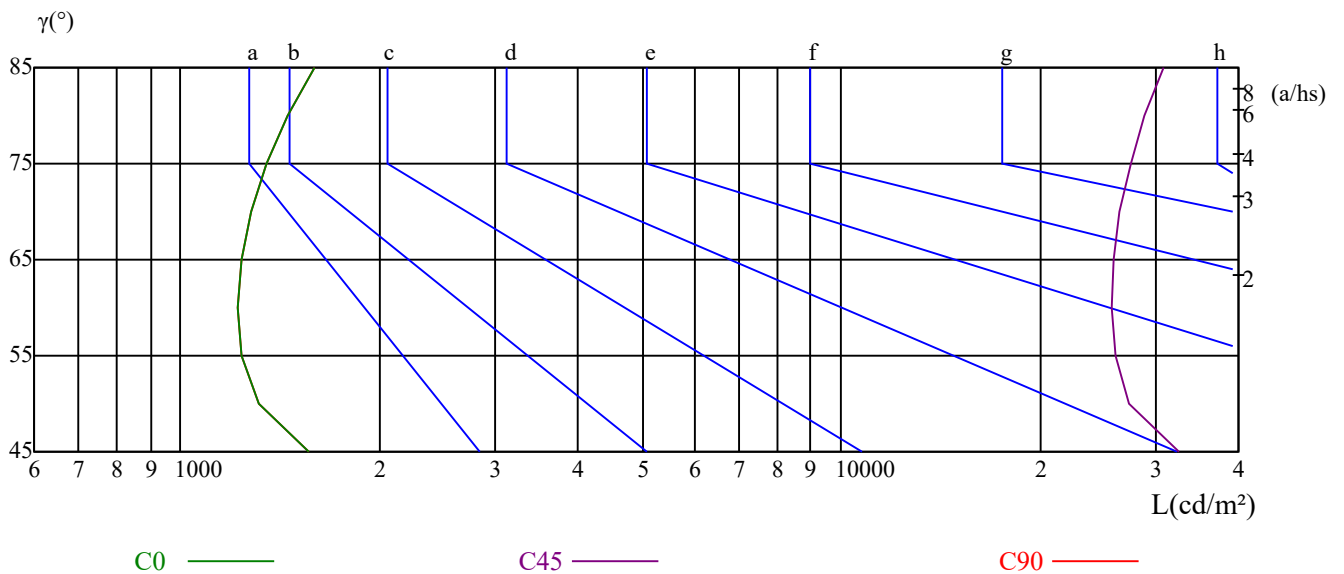
γ	45	50	55	60	65	70	75	80	85
C0	1565	1317	1239	1220	1234	1282	1349	1448	1594
C45	32557	27273	25990	25647	25795	26390	27424	28763	30703
C90	1565	1317	1239	1220	1234	1282	1349	1448	1594

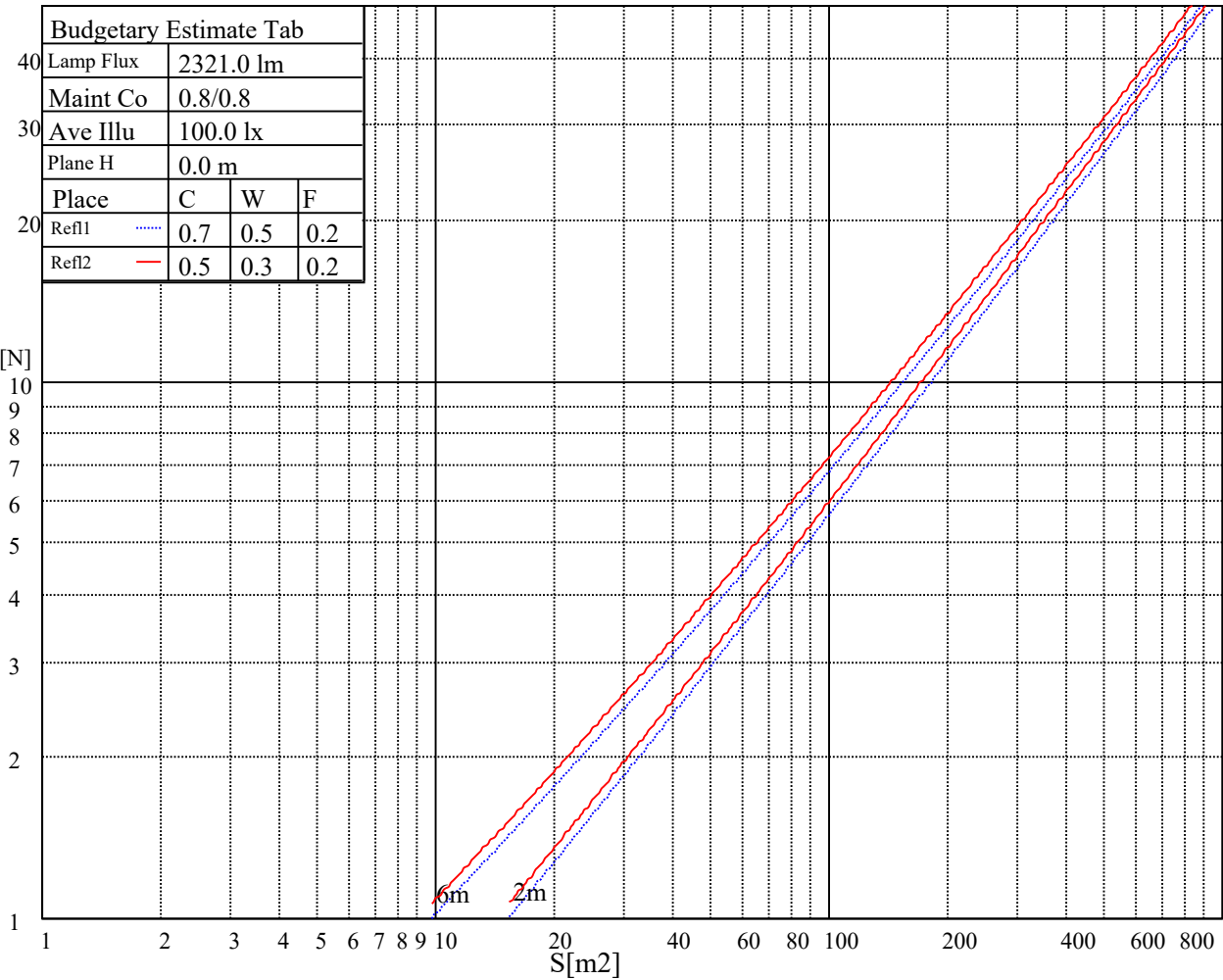
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2978	2978	77335	4665	4665	122782	13595	13595	357676

Glare Table

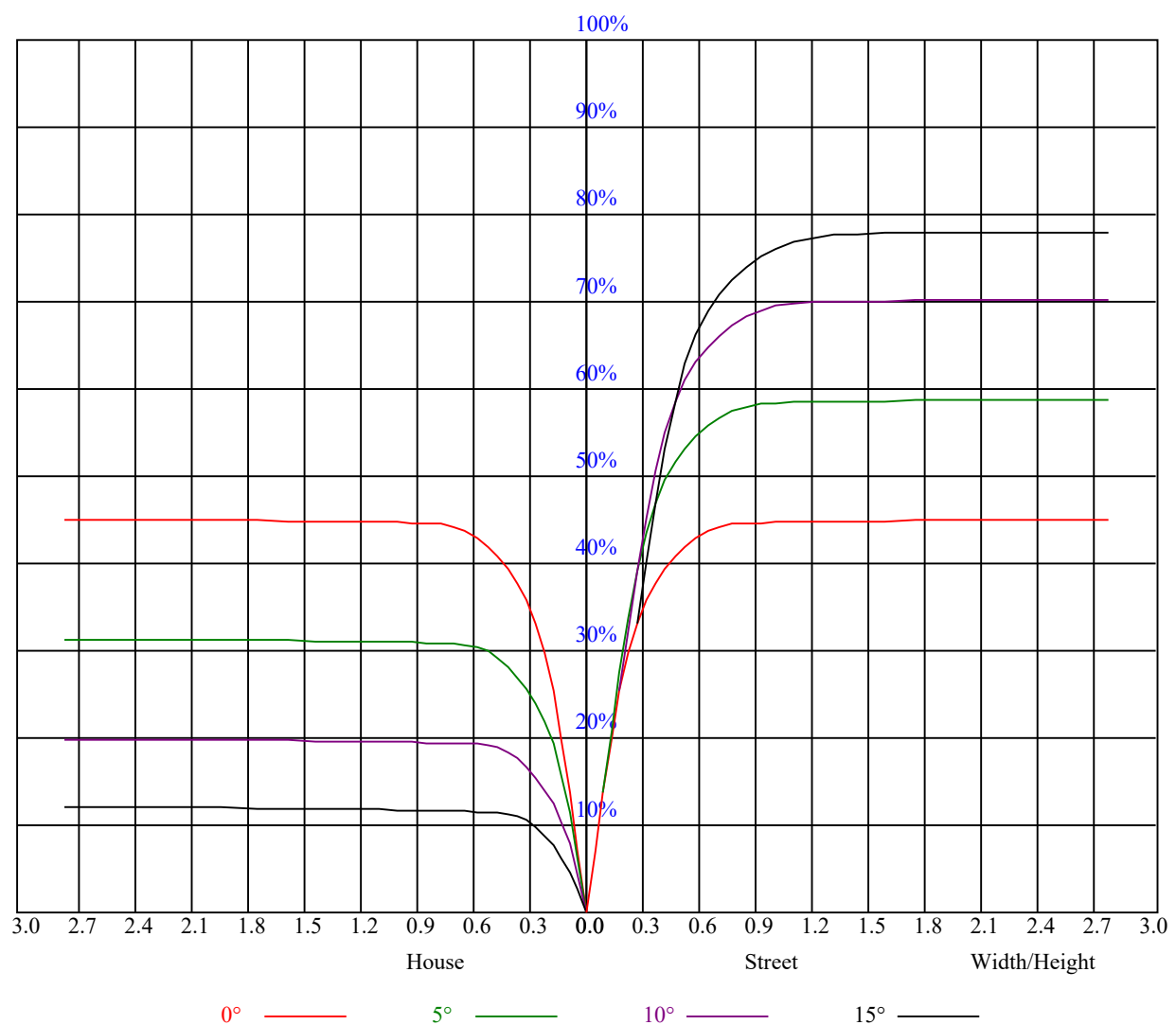
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





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	1.09	1.09	1.09	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.94	0.94	0.94	0.92
1	1.03	1.01	0.99	1.01	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88
2	0.97	0.94	0.92	0.96	0.93	0.91	0.93	0.91	0.89	0.90	0.88	0.87	0.88	0.86	0.85	0.84
3	0.93	0.89	0.86	0.91	0.88	0.85	0.89	0.86	0.84	0.87	0.85	0.83	0.85	0.83	0.81	0.80
4	0.88	0.84	0.81	0.87	0.84	0.81	0.85	0.82	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.77
5	0.84	0.80	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.81	0.78	0.75	0.79	0.77	0.75	0.74
6	0.81	0.77	0.74	0.80	0.76	0.73	0.79	0.75	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.71
7	0.78	0.73	0.70	0.77	0.73	0.70	0.76	0.73	0.70	0.75	0.72	0.70	0.74	0.71	0.69	0.68
8	0.75	0.71	0.68	0.74	0.70	0.68	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.66
9	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.70	0.67	0.65	0.64
10	0.70	0.66	0.63	0.69	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.63	0.68	0.65	0.62	0.61



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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	7636.51	7077.77	5451.63	2967.34	1210.42	821.42	731.82	397.35	23.37		
30.0	7644.30	7164.03	5372.61	2988.49	1244.93	844.79	719.02	377.32	23.10		
60.0	7648.20	6818.99	4861.72	2203.25	1105.19	824.03	700.26	249.21	21.54		
90.0	7639.30	7187.96	5287.46	2581.68	1207.08	838.67	718.46	356.17	23.15		
120.0	7648.20	6924.73	4929.62	2281.16	1102.46	804.83	712.34	285.88	21.48		
150.0	7620.37	7229.14	5516.19	3066.96	1306.14	854.81	732.38	472.48	28.72		
180.0	7636.51	6971.48	5362.59	2833.22	1082.59	826.31	725.47	376.43	21.82		
210.0	7644.30	6982.61	5417.13	2868.84	1093.44	842.23	724.75	395.85	23.87		
240.0	7648.20	7195.20	5988.67	3614.57	1513.72	911.02	744.62	493.63	46.14		
270.0	7639.30	6961.46	5427.70	2839.90	1098.34	835.89	726.81	412.16	27.38		
300.0	7648.20	7072.76	5800.01	3327.41	1391.85	864.27	740.72	488.06	42.96		
330.0	7620.37	6872.42	5084.89	2445.33	1102.18	814.46	713.01	357.67	22.59		
360.0	7636.51	7077.77	5451.63	2967.34	1210.42	821.42	731.82	397.35	23.37		
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	13.97	10.85	9.96	9.41	9.07	8.90	8.74	8.63	8.51		
30.0	13.13	10.80	9.85	9.35	9.02	8.85	8.63	8.57	8.46		
60.0	12.02	10.74	9.74	9.35	9.02	8.85	8.68	8.57	8.51		
90.0	12.52	10.96	9.96	9.46	9.13	8.96	8.79	8.63	8.57		
120.0	12.80	10.74	9.91	9.41	9.13	8.96	8.74	8.79	8.79		
150.0	13.36	11.02	10.07	9.57	9.18	9.02	8.85	8.68	8.74		
180.0	12.91	10.85	9.96	9.46	9.13	8.85	8.74	8.57	8.51		
210.0	13.08	10.85	9.85	9.29	8.96	8.79	8.63	8.46	8.35		
240.0	15.08	11.13	10.07	9.41	9.07	8.90	8.68	8.57	8.51		
270.0	13.52	10.96	10.02	9.41	9.07	8.90	8.68	8.51	8.51		
300.0	14.19	11.24	10.24	9.63	9.24	8.96	8.79	8.63	8.63		
330.0	12.52	10.91	9.96	9.46	9.13	8.90	8.74	8.63	8.63		
360.0	13.97	10.85	9.96	9.41	9.07	8.90	8.74	8.63	8.51		
C/ γ (°)	90.0										
0.0	8.46										
30.0	8.35										
60.0	8.40										
90.0	8.46										
120.0	8.46										
150.0	8.40										
180.0	8.46										
210.0	8.35										
240.0	8.40										
270.0	8.46										
300.0	8.46										
330.0	8.46										
360.0	8.46										