
Nata

LumCAT: 3-1942-M	
Luminaire: BJB 47.319.2141	
Report No: GC2017041506	Voltage(V): 35.0000
Test No: NT-0010	Current(A): 0.8000
LampCAT: BRIDGELUX V18B	Power (W): 28.0000
Lamp flux(lm): 3874.0	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): 3500.61
Efficiency(%): 90.36%
Lumens(lm)/Power(W): 125.02
Central intensity(cd): 11959.630
Maximum intensity(cd): 11959.630
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=19.4
[C90/270]Total=19.4
Field angle(10%Imax): [C0/180]Total=63.4
[C90/270]Total=63.4
Maximum s/h(1/2): C0_180=0.33 C90_270=0.33
Maximum s/h(1/4): C0_180=0.44 C90_270=0.44
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.36%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.751%

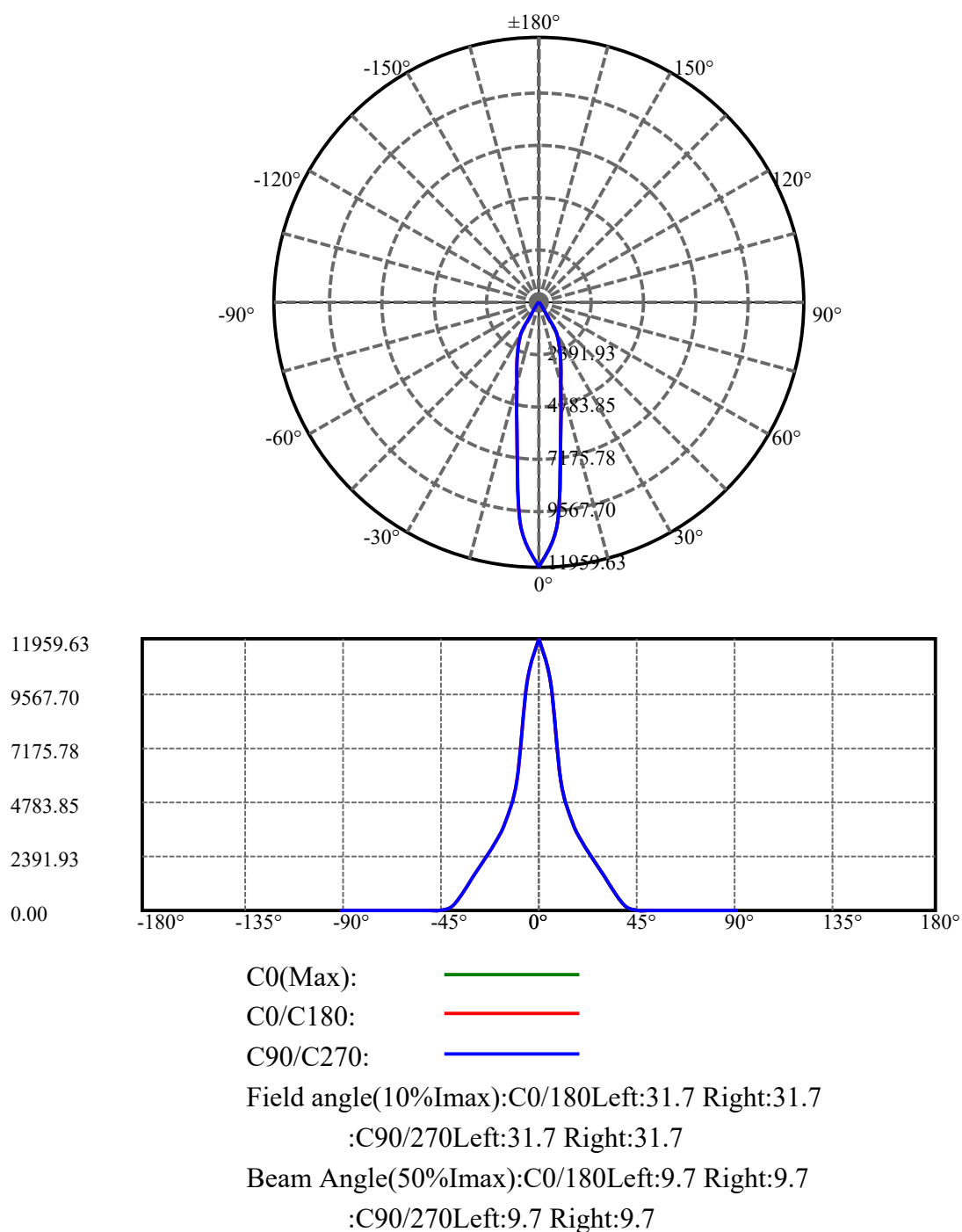
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	11959.626	0.000	0	.000%	.000%
5.0	10051.028	263.131	263.131	6.792%	7.517%
10.0	5725.934	564.392	827.523	14.569%	23.639%
15.0	3864.684	568.909	1396.432	14.685%	39.891%
20.0	2948.752	561.523	1957.955	14.495%	55.932%
25.0	2129.169	532.580	2490.535	13.748%	71.146%
30.0	1451.390	453.123	2943.657	11.697%	84.090%
35.0	697.840	316.489	3260.147	8.170%	93.131%
40.0	148.067	141.133	3401.28	3.643%	97.163%
45.0	28.237	32.644	3433.924	.843%	98.095%
50.0	17.081	9.157	3443.081	.236%	98.357%
55.0	15.030	6.982	3450.063	.180%	98.556%
60.0	14.445	6.813	3456.877	.176%	98.751%
65.0	14.115	6.943	3463.82	.179%	98.949%
70.0	13.957	7.108	3470.928	.183%	99.152%
75.0	13.826	7.262	3478.19	.187%	99.360%
80.0	13.764	7.382	3485.572	.191%	99.571%
85.0	13.854	7.504	3493.076	.194%	99.785%
90.0	13.647	7.530	3500.606	.194%	100.000%

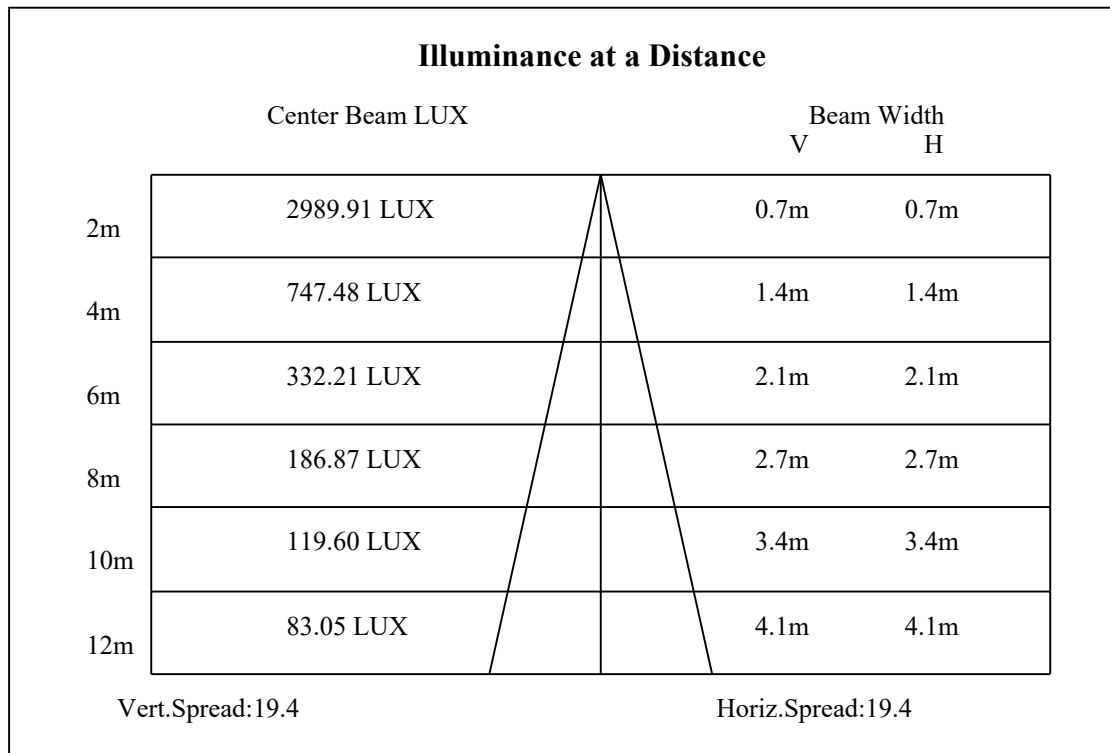
ZONAL LUMEN SUMMARY

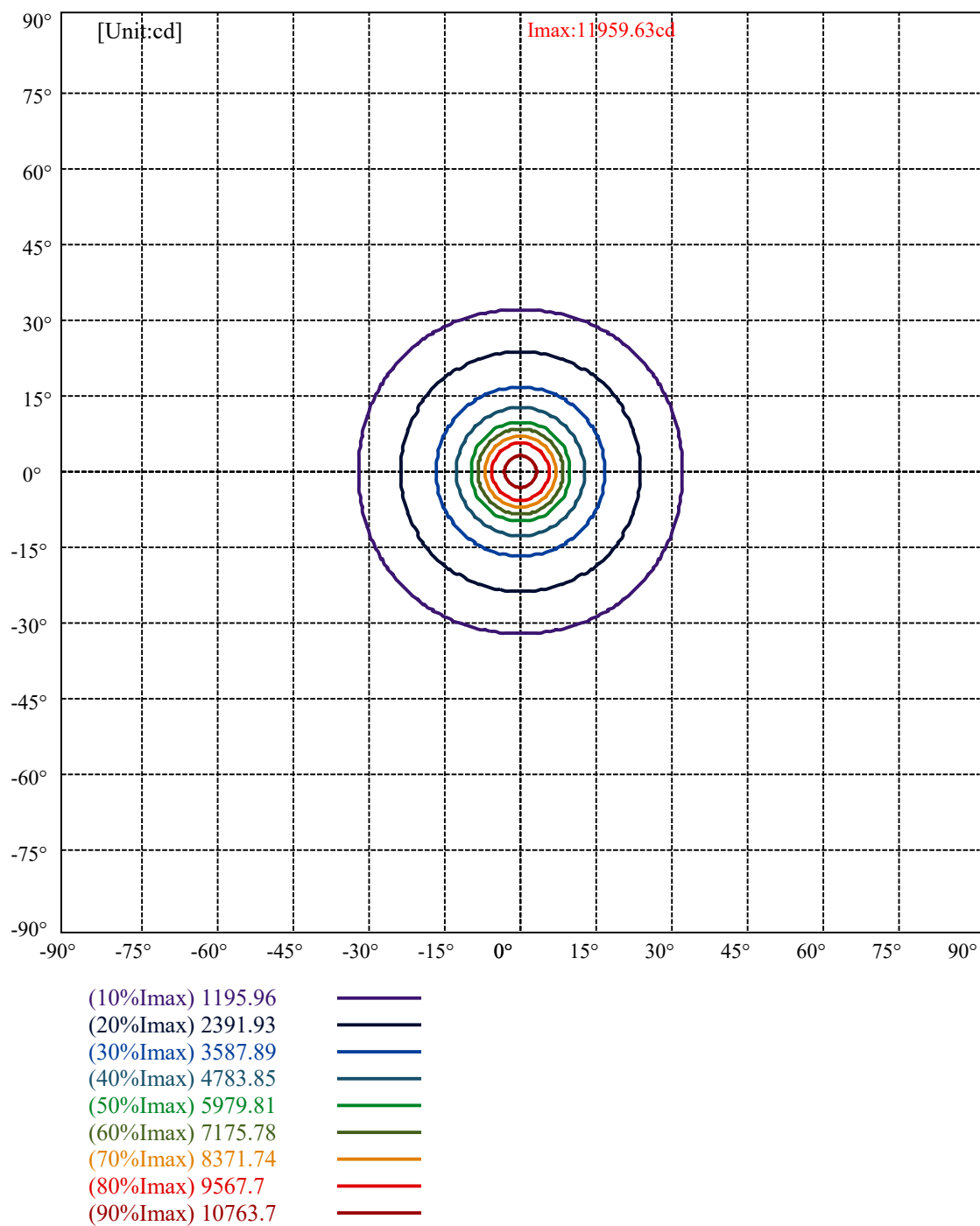
Zone	Lumens	%Lamp	%Fixt
0-30	2943.66	75.98%	84.09%
0-40	3401.28	87.80%	97.16%
0-60	3456.88	89.23%	98.75%
0-90	3493.08	90.17%	99.78%
0-120	3493.08	90.17%	99.78%
0-180	3500.61	90.36%	100.00%
60-90	43.01	1.11%	1.23%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.42	2800.49	72.29%	80.00%

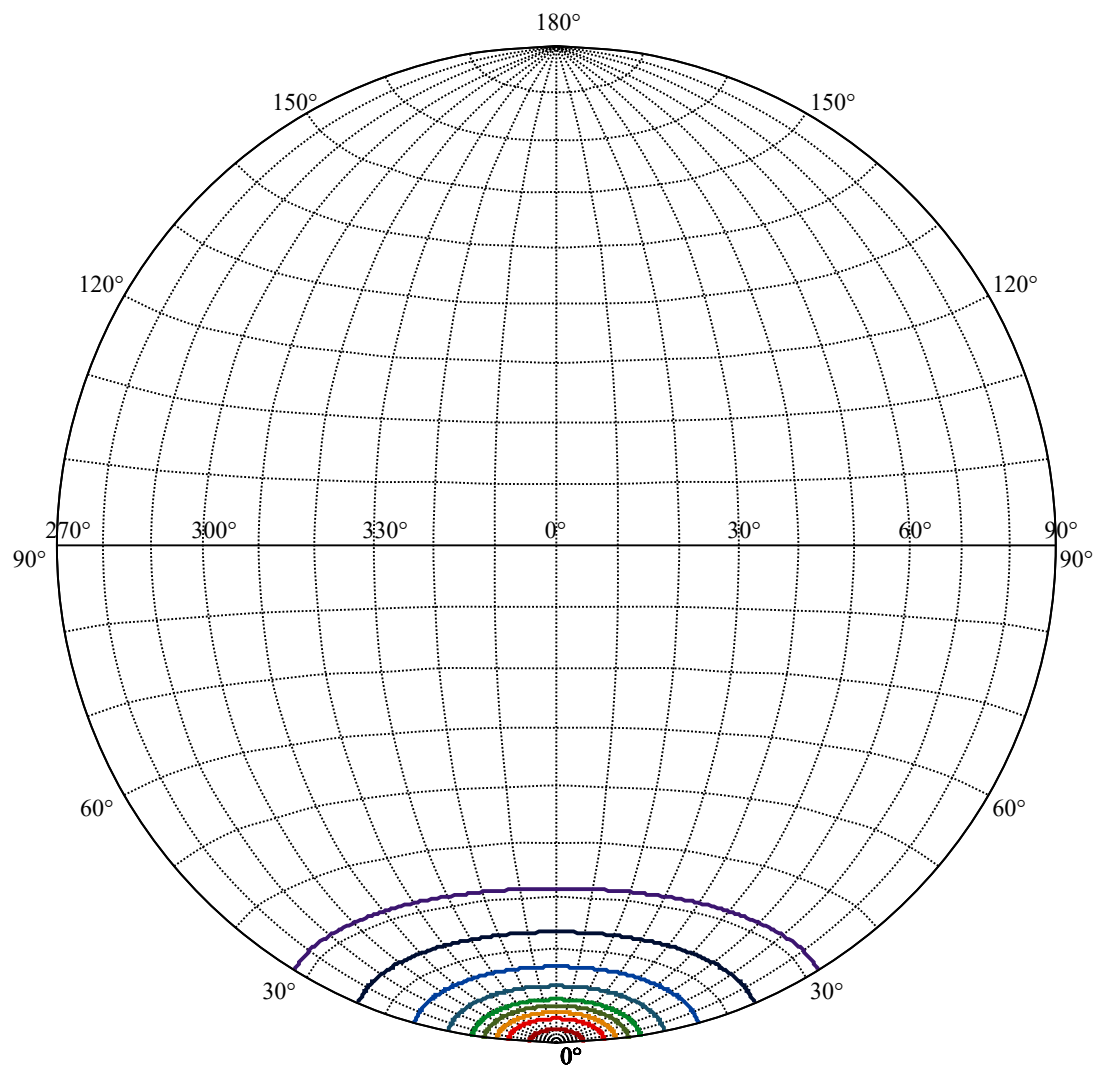
ZONAL LUMEN SUMMARY

0-10	827.52
10-20	1130.43
20-30	985.70
30-40	457.62
40-50	41.80
50-60	13.80
60-70	14.05
70-80	14.64
80-90	7.50
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









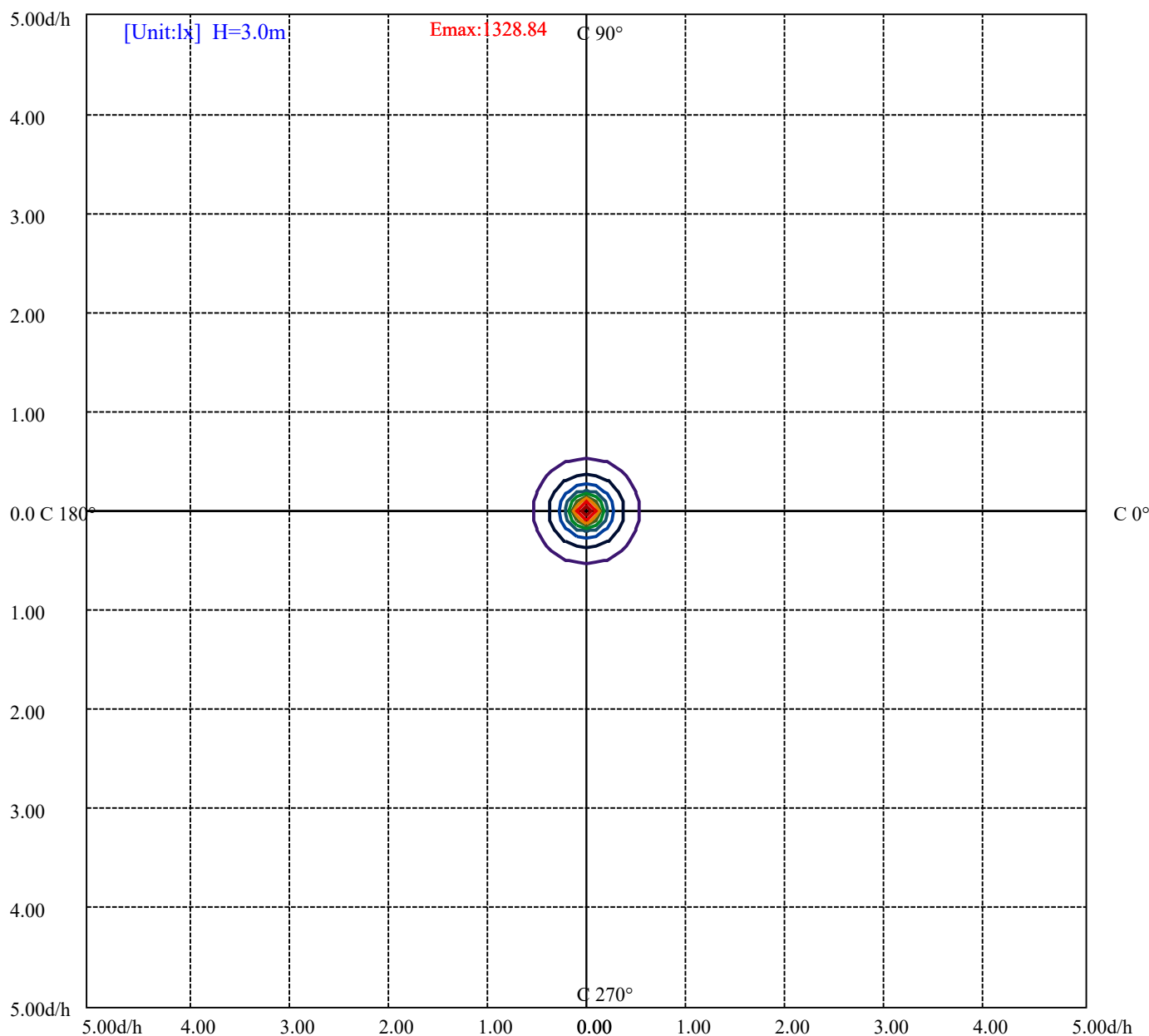
House

[Unit:cd]

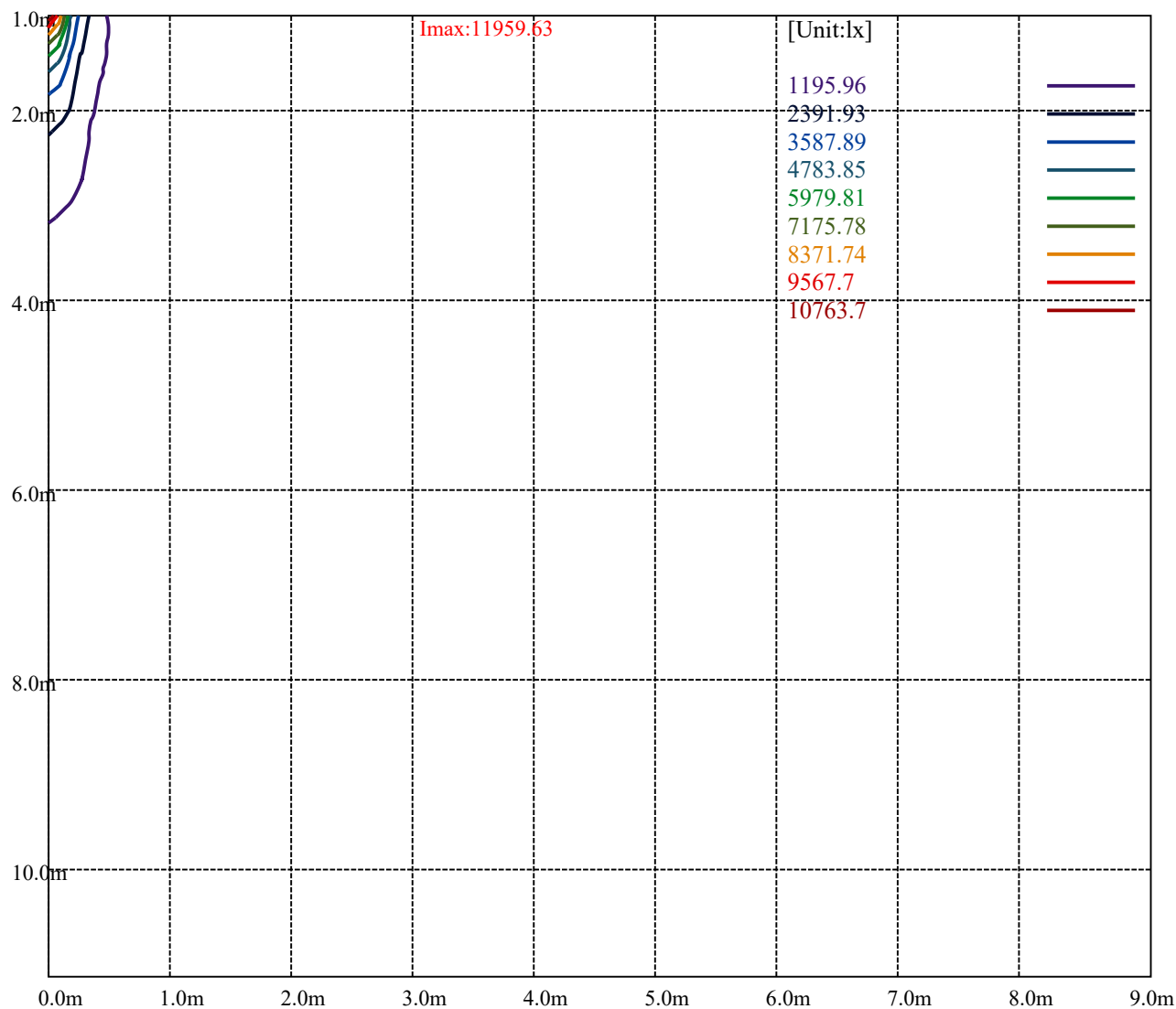
Road

Imax:11959.63

(10%Imax)	1195.96	—
(20%Imax)	2391.93	—
(30%Imax)	3587.89	—
(40%Imax)	4783.85	—
(50%Imax)	5979.81	—
(60%Imax)	7175.78	—
(70%Imax)	8371.74	—
(80%Imax)	9567.7	—
(90%Imax)	10763.7	—



(10%E _{max}) 132.8844	—
(20%E _{max}) 265.7678	—
(30%E _{max}) 398.6522	—
(40%E _{max}) 531.5367	—
(50%E _{max}) 664.42	—
(60%E _{max}) 797.3044	—
(70%E _{max}) 930.1889	—
(80%E _{max}) 1063.073	—
(90%E _{max}) 1195.956	—



Luminance Table

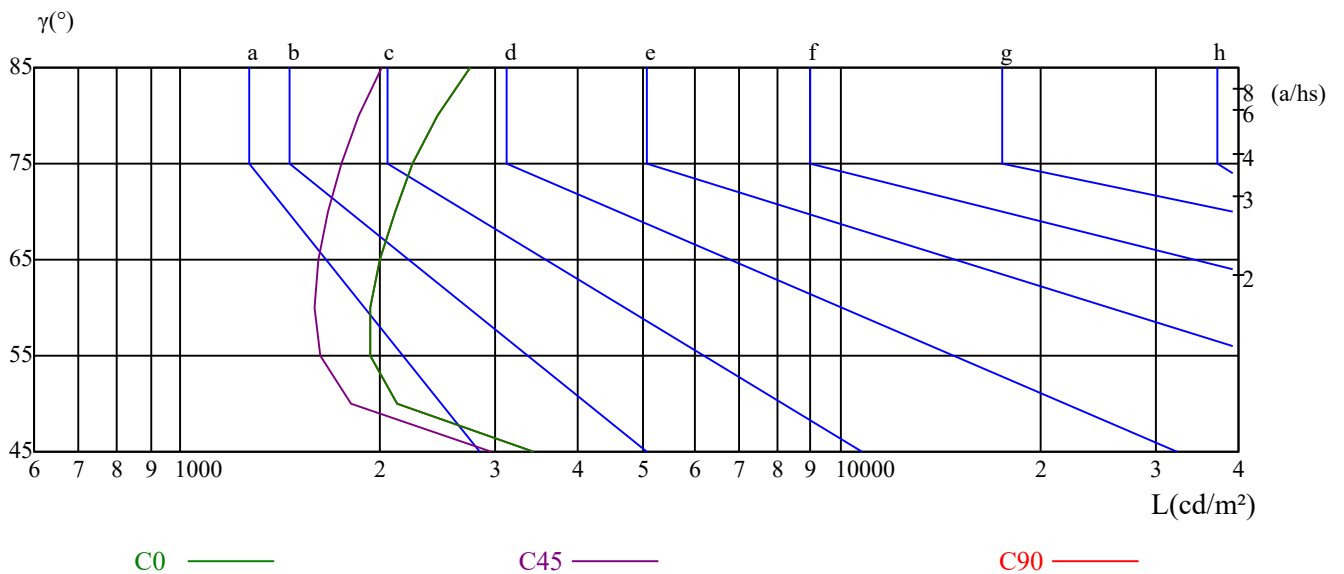
γ	45	50	55	60	65	70	75	80	85
C0	3429	2127	1936	1942	2000	2107	2252	2455	2753
C45	2963	1811	1622	1600	1619	1672	1748	1857	2020
C90	3429	2127	1936	1942	2000	2107	2252	2455	2753

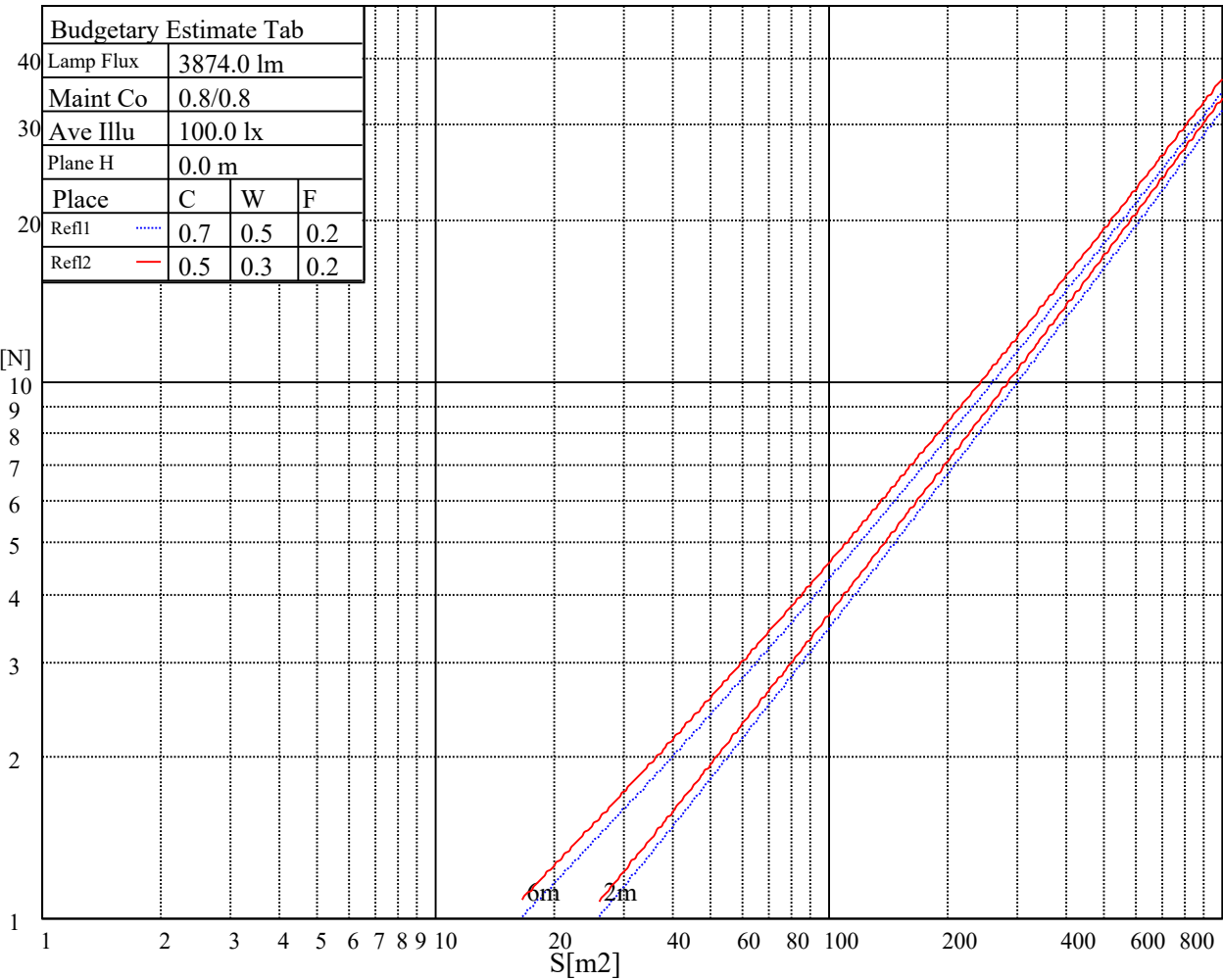
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4623	4623	4623	7394	7394	7394	22000	22000	22000

Glare Table

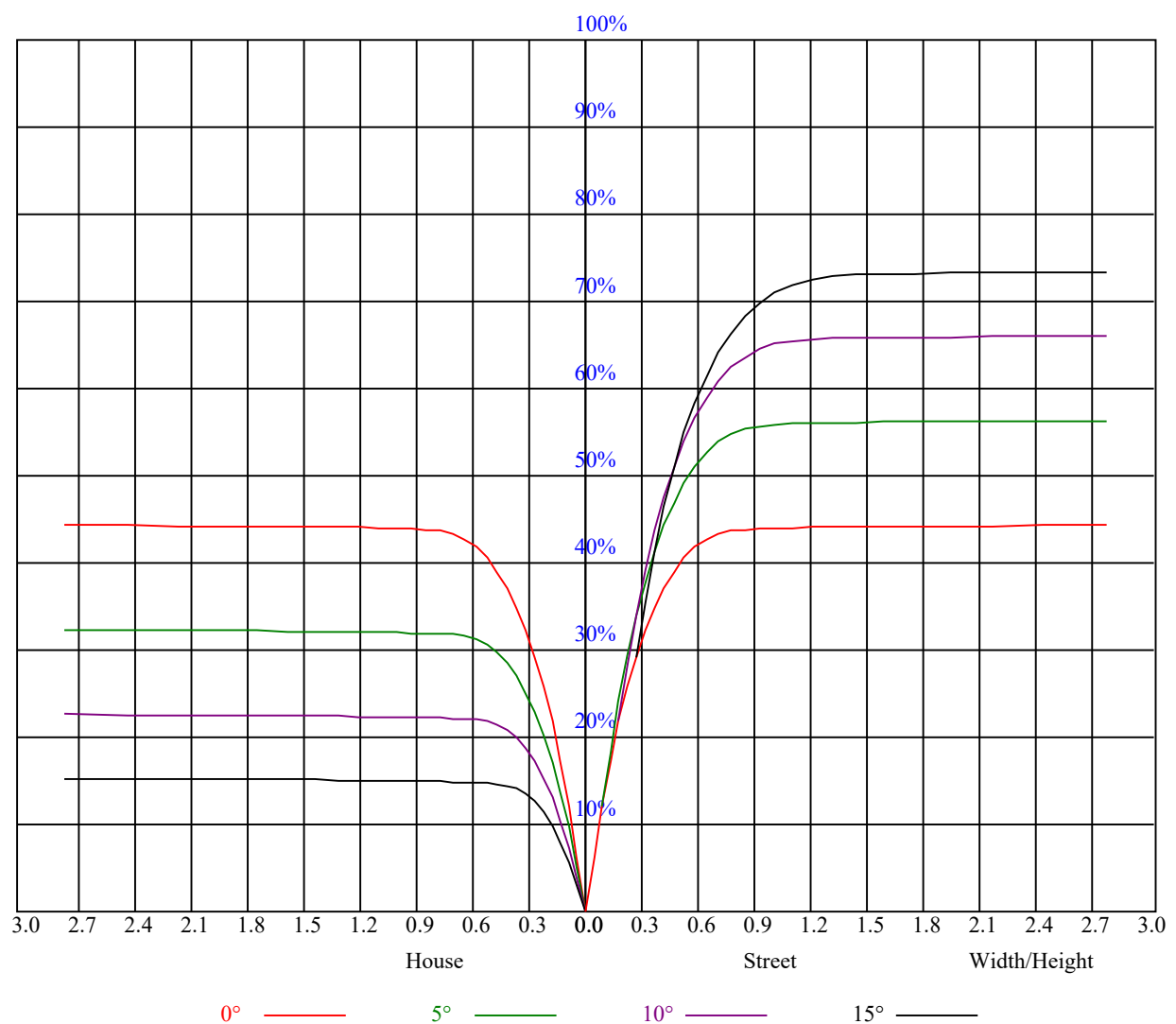
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

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	1.08	1.08	1.08	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.01	0.99	0.97	0.99	0.97	0.95	0.95	0.94	0.92	0.92	0.91	0.90	0.89	0.88	0.87	0.86
2	0.95	0.92	0.89	0.93	0.90	0.88	0.91	0.88	0.86	0.88	0.86	0.84	0.85	0.84	0.82	0.81
3	0.90	0.86	0.83	0.88	0.85	0.82	0.86	0.83	0.81	0.84	0.82	0.79	0.82	0.80	0.78	0.77
4	0.85	0.81	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.80	0.78	0.75	0.79	0.76	0.74	0.73
5	0.81	0.76	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.70
6	0.77	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.67
7	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.65	0.64
8	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.67	0.64	0.62	0.61
9	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.58
10	0.65	0.60	0.58	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.60	0.57	0.63	0.59	0.57	0.56



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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	11991.28	9045.77	5153.28	3666.76	2791.36	1950.10	1384.12	525.79	50.10		
45.0	11980.27	10890.16	6100.25	4035.63	3061.14	2227.58	1606.55	797.22	282.44		
90.0	11985.78	10504.76	5794.14	3878.72	2988.46	2220.98	1582.32	739.24	135.77		
135.0	11881.17	11457.24	7025.20	4239.34	3325.41	2433.49	1757.40	1025.70	281.89		
180.0	11991.28	10972.19	6285.24	4101.15	3153.63	2299.16	1643.43	853.32	185.76		
225.0	11980.27	9384.36	5076.20	3652.99	2791.36	1997.45	1074.81	584.42	59.74		
270.0	11985.78	9744.98	5555.19	3804.40	2846.42	2043.14	1490.38	645.26	143.09		
315.0	11881.17	8408.76	4817.99	3538.47	2632.25	1861.46	1072.11	411.77	45.75		
360.0	11991.28	9045.77	5153.28	3666.76	2791.36	1950.10	1384.12	525.79	50.10		
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	23.78	15.97	14.81	14.31	14.04	13.87	13.76	13.71	13.93		
45.0	30.17	17.12	15.09	14.48	14.15	14.04	13.87	13.82	13.82		
90.0	29.95	17.07	14.98	14.37	14.04	13.93	13.82	13.87	14.15		
135.0	36.61	19.55	15.36	14.65	14.20	13.98	13.87	13.76	13.82		
180.0	31.77	17.89	15.25	14.53	14.15	13.93	13.76	13.65	13.71		
225.0	24.11	16.52	15.03	14.48	14.15	13.98	13.82	13.76	13.82		
270.0	26.87	16.79	15.03	14.53	14.20	14.04	13.93	13.82	13.82		
315.0	22.63	15.75	14.70	14.20	13.98	13.87	13.76	13.71	13.76		
360.0	23.78	15.97	14.81	14.31	14.04	13.87	13.76	13.71	13.93		
C/ γ (°)	90.0										
0.0	13.60										
45.0	13.71										
90.0	13.65										
135.0	13.65										
180.0	13.60										
225.0	13.65										
270.0	13.65										
315.0	13.65										
360.0	13.60										