
Nata

LumCAT: 3-1942-M	
Luminaire: BJB 47.319.2344	
Report No: GC2017070303	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): 2157.12
Efficiency(%): 92.94%
Lumens(lm)/Power(W): 125.67
Central intensity(cd): 9566.881
Maximum intensity(cd): 9566.881
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=15.6
[C90/270]Total=15.6
Field angle(10%Imax): [C0/180]Total=59.0
[C90/270]Total=59.0
Maximum s/h(1/2): C0_180=0.27 C90_270=0.27
Maximum s/h(1/4): C0_180=0.35 C90_270=0.35
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 92.94%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.734%

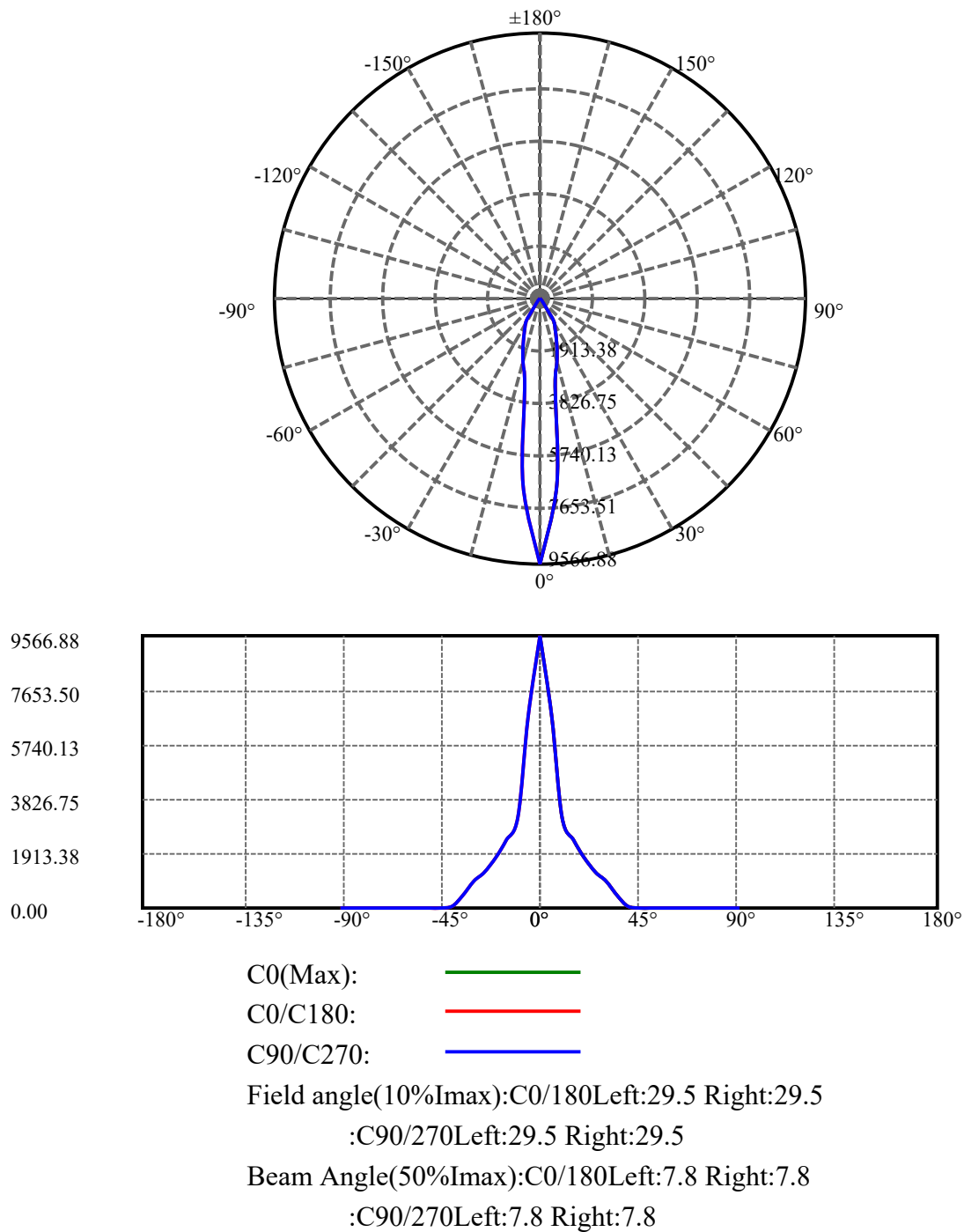
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9566.881	0.000	0	.000%	.000%
5.0	6724.847	194.763	194.763	8.391%	9.029%
10.0	3234.888	356.291	551.054	15.351%	25.546%
15.0	2385.552	333.401	884.455	14.365%	41.002%
20.0	1809.558	345.736	1230.191	14.896%	57.029%
25.0	1237.896	319.622	1549.812	13.771%	71.846%
30.0	925.505	273.780	1823.593	11.796%	84.538%
35.0	430.145	199.629	2023.222	8.601%	93.793%
40.0	48.324	79.829	2103.051	3.439%	97.493%
45.0	16.454	11.994	2115.045	.517%	98.049%
50.0	11.548	5.658	2120.703	.244%	98.312%
55.0	9.980	4.681	2125.384	.202%	98.529%
60.0	9.192	4.432	2129.815	.191%	98.734%
65.0	8.881	4.394	2134.209	.189%	98.938%
70.0	8.723	4.458	2138.667	.192%	99.144%
75.0	8.626	4.535	2143.201	.195%	99.355%
80.0	8.561	4.599	2147.8	.198%	99.568%
85.0	8.561	4.652	2152.453	.200%	99.783%
90.0	8.496	4.670	2157.123	.201%	100.000%

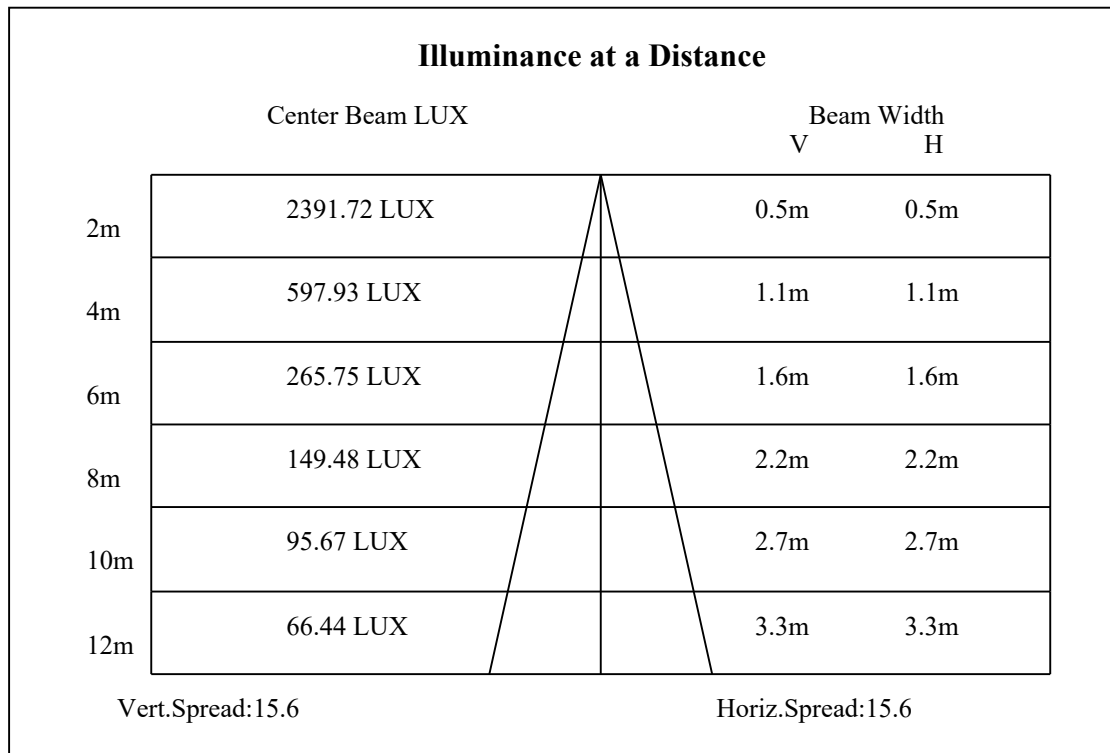
ZONAL LUMEN SUMMARY

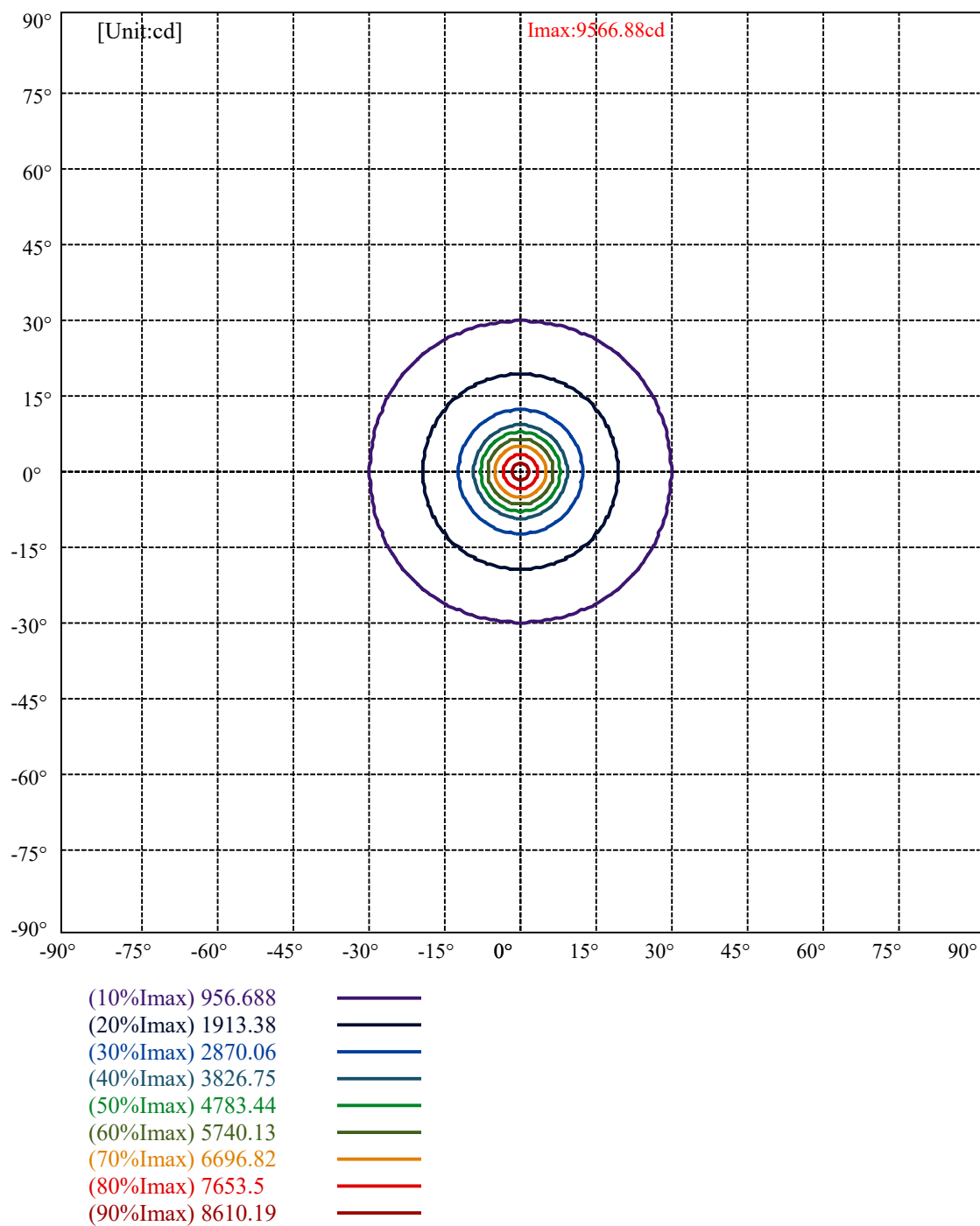
Zone	Lumens	%Lamp	%Fixt
0-30	1823.59	78.57%	84.54%
0-40	2103.05	90.61%	97.49%
0-60	2129.82	91.76%	98.73%
0-90	2152.45	92.74%	99.78%
0-120	2152.45	92.74%	99.78%
0-180	2157.12	92.94%	100.00%
60-90	27.07	1.17%	1.25%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.21	1725.70	74.35%	80.00%

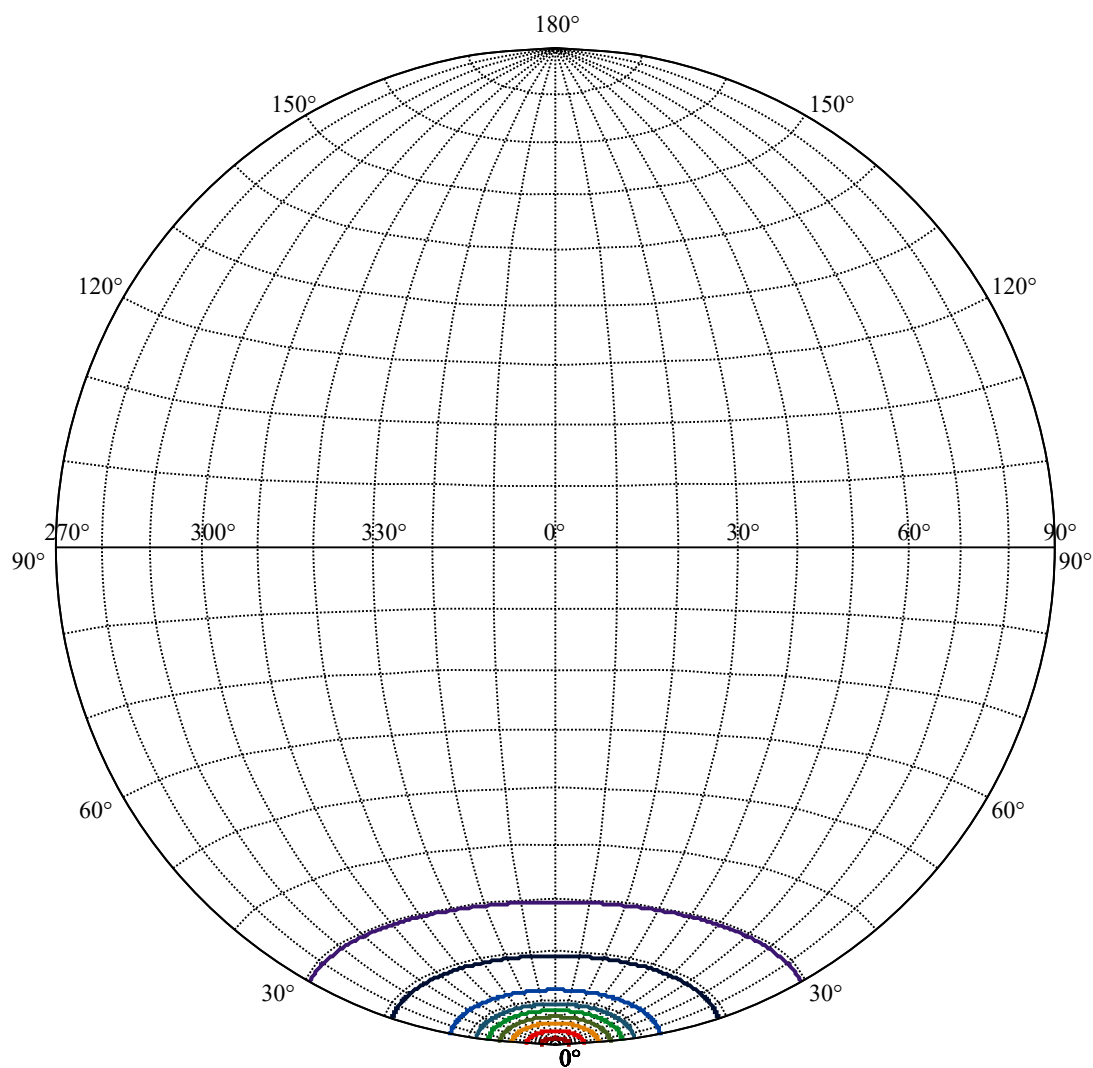
ZONAL LUMEN SUMMARY

0-10	551.05
10-20	679.14
20-30	593.40
30-40	279.46
40-50	17.65
50-60	9.11
60-70	8.85
70-80	9.13
80-90	4.65
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:9566.88

(10%Imax) 956.688

(20%Imax) 1913.38

(30%Imax) 2870.06

(40%Imax) 3826.75

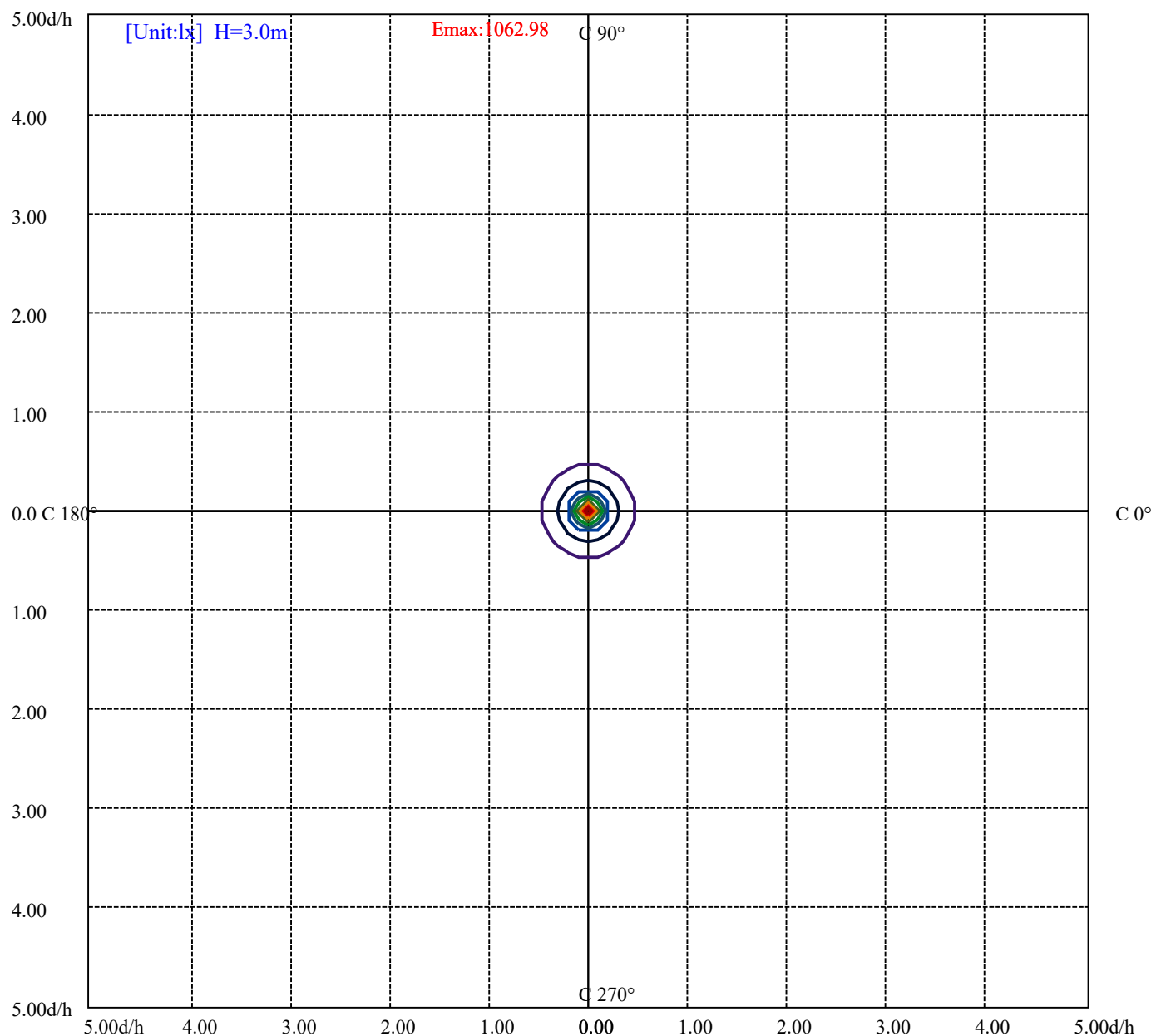
(50%Imax) 4783.44

(60%Imax) 5740.13

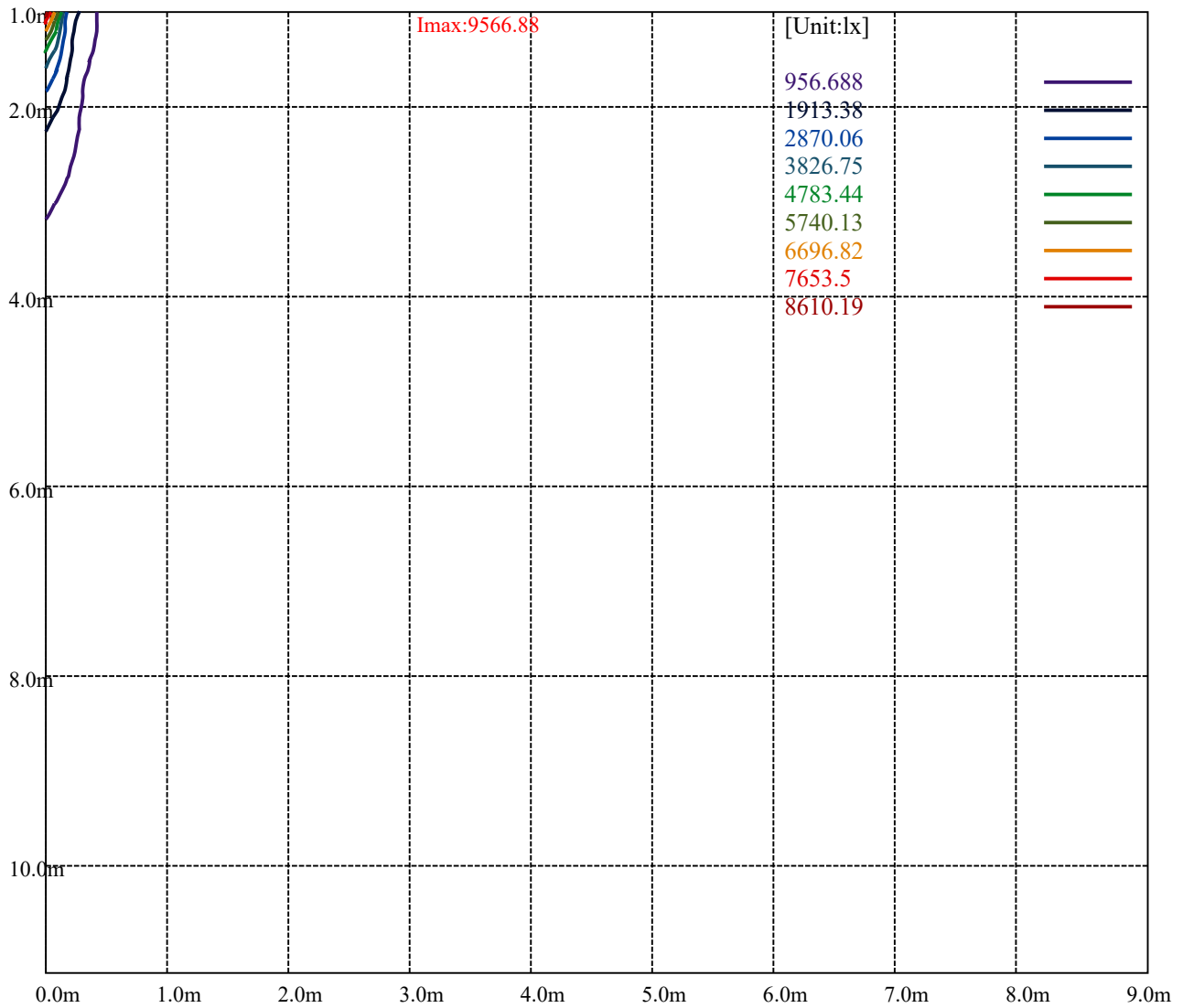
(70%Imax) 6696.82

(80%Imax) 7653.5

(90%Imax) 8610.19



(10%Emax) 106.2978	—
(20%Emax) 212.5956	—
(30%Emax) 318.8933	—
(40%Emax) 425.1911	—
(50%Emax) 531.4889	—
(60%Emax) 637.7867	—
(70%Emax) 744.0844	—
(80%Emax) 850.3822	—
(90%Emax) 956.68	—



Luminance Table

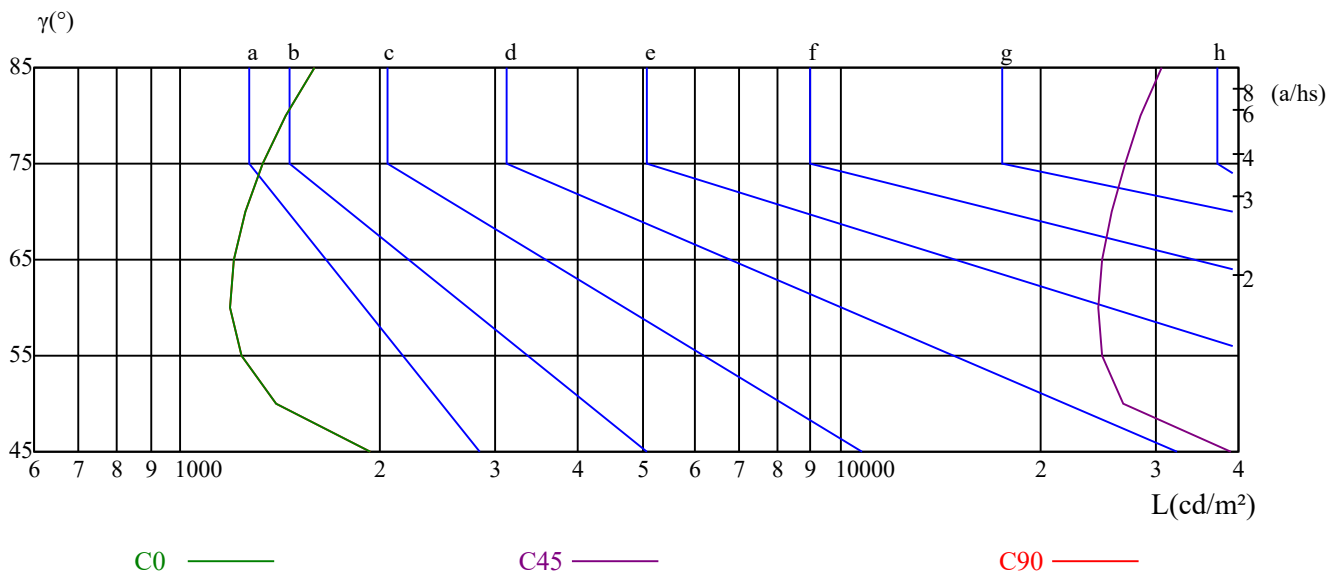
γ	45	50	55	60	65	70	75	80	85
C0	1942	1393	1241	1188	1205	1256	1334	1441	1594
C45	38835	26710	24865	24611	24942	25740	26877	28443	30517
C90	1942	1393	1241	1188	1205	1256	1334	1441	1594

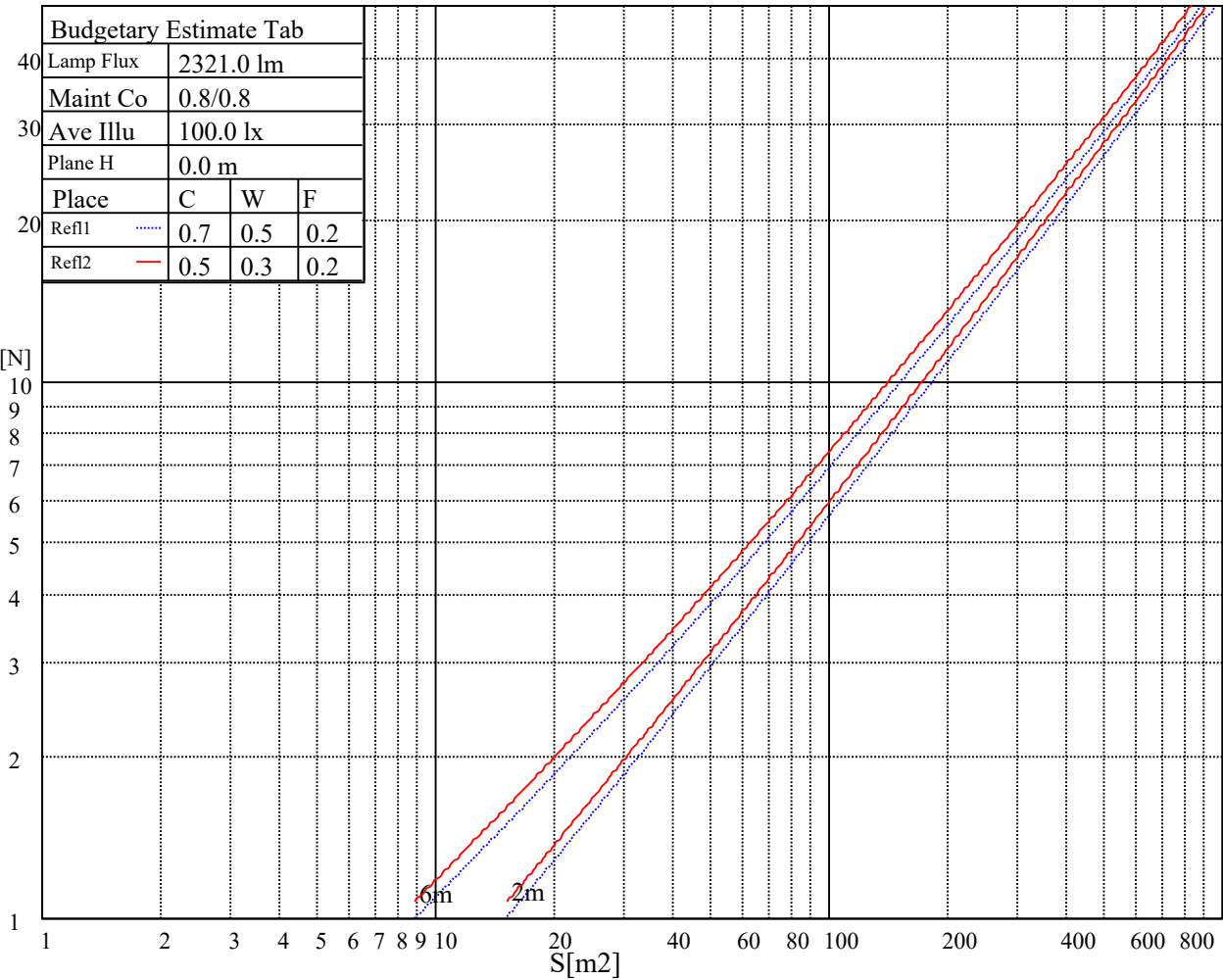
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2909	2909	74777	4613	4613	120334	13595	13595	355511

Glare Table

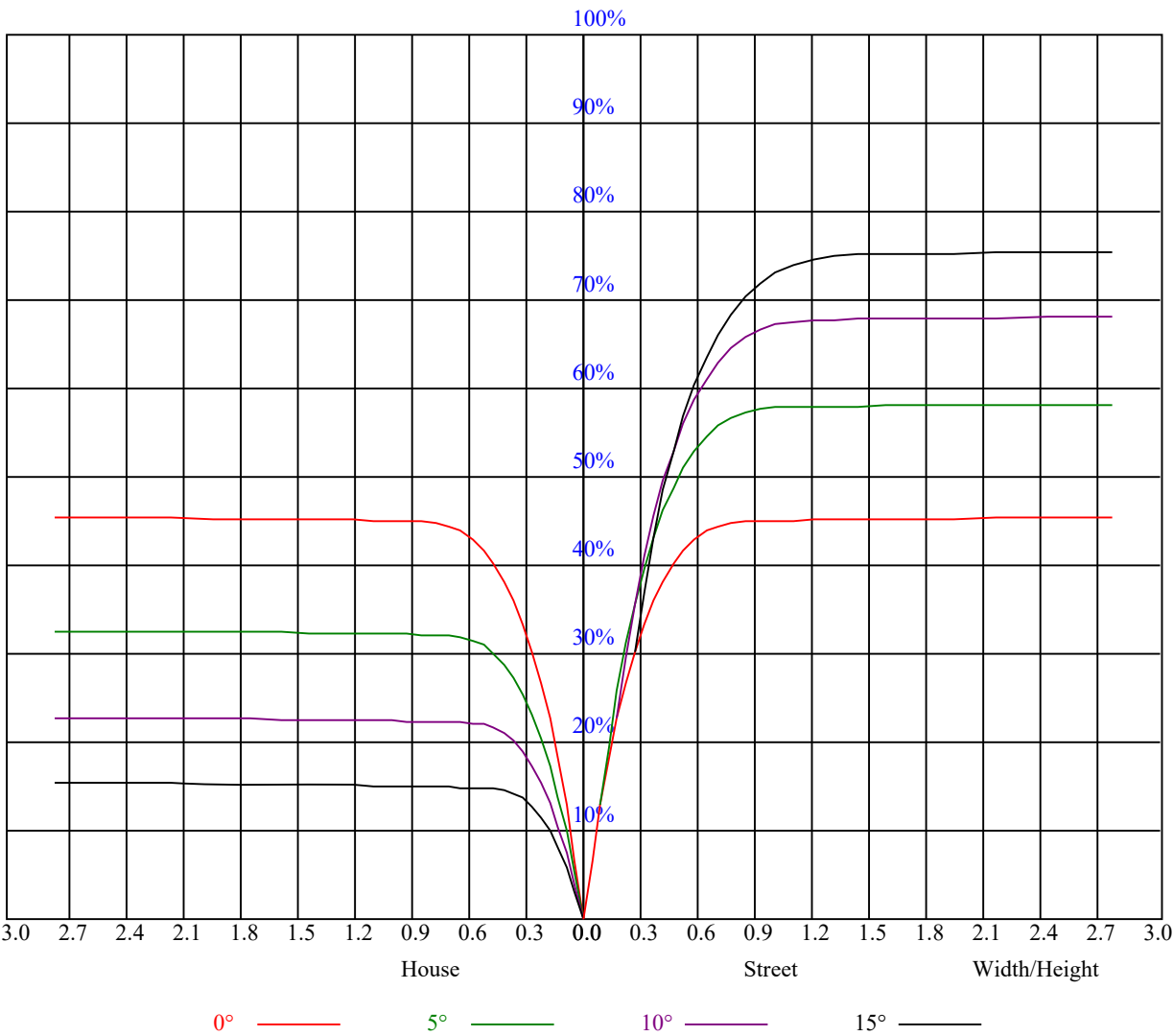
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

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	1.11	1.11	1.11	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.04	1.02	1.00	1.02	1.00	0.98	0.98	0.97	0.95	0.95	0.93	0.92	0.91	0.91	0.90	0.88
2	0.98	0.94	0.92	0.96	0.93	0.91	0.93	0.91	0.89	0.91	0.89	0.87	0.88	0.86	0.85	0.84
3	0.93	0.89	0.85	0.91	0.88	0.85	0.89	0.86	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.80
4	0.88	0.83	0.80	0.87	0.83	0.80	0.85	0.81	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.76
5	0.84	0.79	0.76	0.83	0.79	0.75	0.81	0.78	0.75	0.80	0.77	0.74	0.78	0.76	0.73	0.72
6	0.80	0.75	0.72	0.79	0.75	0.72	0.78	0.74	0.71	0.77	0.73	0.71	0.75	0.72	0.70	0.69
7	0.76	0.72	0.68	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.66
8	0.73	0.69	0.65	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.63
9	0.70	0.66	0.63	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.65	0.62	0.68	0.64	0.62	0.61
10	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.59



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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	9606.58	7413.35	3360.80	2426.97	1897.16	1327.29	958.32	498.08	45.24		
30.0	9508.08	8157.41	3686.92	2595.03	1918.87	1369.03	1009.52	595.47	72.29		
60.0	9669.47	7344.90	3421.46	2467.04	1855.42	1301.69	960.38	503.65	45.30		
90.0	9451.87	8458.49	3867.79	2600.60	1974.52	1389.62	1016.75	598.25	153.26		
120.0	9651.66	6957.01	3347.44	2448.11	1833.16	1216.54	943.63	459.24	37.73		
150.0	9513.64	7435.61	3476.56	2502.10	1907.18	1340.09	983.92	527.02	48.36		
180.0	9606.58	5994.23	3035.24	2321.78	1767.49	1093.67	873.51	367.24	28.38		
210.0	9508.08	5210.66	2879.97	2206.03	1653.97	1110.42	863.88	269.35	28.72		
240.0	9669.47	6394.93	3007.41	2304.53	1766.94	1257.17	895.99	383.44	33.06		
270.0	9451.87	4915.15	2794.27	2169.86	1655.08	1105.02	845.63	266.91	28.22		
300.0	9651.66	6496.77	3012.98	2311.77	1790.31	1253.27	892.65	377.32	31.11		
330.0	9513.64	5919.66	2927.83	2272.81	1694.59	1090.94	861.88	315.77	28.22		
360.0	9606.58	7413.35	3360.80	2426.97	1897.16	1327.29	958.32	498.08	45.24		
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	16.92	11.63	10.02	9.24	8.85	8.74	8.57	8.57	8.57		
30.0	19.65	12.24	10.35	9.41	9.07	8.85	8.79	8.63	8.63		
60.0	17.98	12.41	10.41	9.41	8.96	8.79	8.68	8.57	8.57		
90.0	20.09	12.63	10.52	9.41	8.96	8.74	8.68	8.57	8.51		
120.0	15.86	11.58	9.96	9.13	8.85	8.63	8.57	8.51	8.51		
150.0	17.53	11.58	10.02	9.18	8.90	8.68	8.57	8.51	8.51		
180.0	14.36	10.96	9.68	9.07	8.79	8.68	8.57	8.51	8.51		
210.0	14.47	10.91	9.63	9.07	8.79	8.74	8.63	8.63	8.57		
240.0	15.42	11.30	9.79	9.07	8.85	8.74	8.68	8.57	8.57		
270.0	14.58	11.02	9.68	9.07	8.85	8.63	8.57	8.51	8.51		
300.0	15.81	11.30	9.91	9.18	8.90	8.74	8.63	8.57	8.63		
330.0	14.80	11.02	9.79	9.07	8.79	8.74	8.57	8.57	8.63		
360.0	16.92	11.63	10.02	9.24	8.85	8.74	8.57	8.57	8.57		
C/γ(°)	90.0										
0.0	8.46										
30.0	8.51										
60.0	8.57										
90.0	8.46										
120.0	8.46										
150.0	8.46										
180.0	8.46										
210.0	8.57										
240.0	8.51										
270.0	8.51										
300.0	8.51										
330.0	8.46										
360.0	8.46										