



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 1657-S
Luminaire: 92.70.124.00
Report No: NATA0100
Test No: GC2018072821
LampCAT: BRIDGELUX V6HD
Lamp flux(lm): 1105.0
Number of Lamps: 1
Length(mm): 47
Phm Type: C

Voltage(V): 36.0000
Current(A): 0.3000
Power (W): 10.8000
PF: 0.0000
Ballast type: DC
Width(mm): 47
Height(mm): 0

Photometric Results

Lumens(lm): 996.89
Efficiency(%): 90.22%
Lumens(lm)/Power(W): 95.07
Central intensity(cd): 5155.756
Maximum intensity(cd): 5155.756
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=19.8
[C90/270]Total=19.8
Field angle(10%Imax): [C0/180]Total=39.1
[C90/270]Total=39.1
Maximum s/h(1/2): C0_180=0.34 C90_270=0.34
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(%): 92.92%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 95.710%

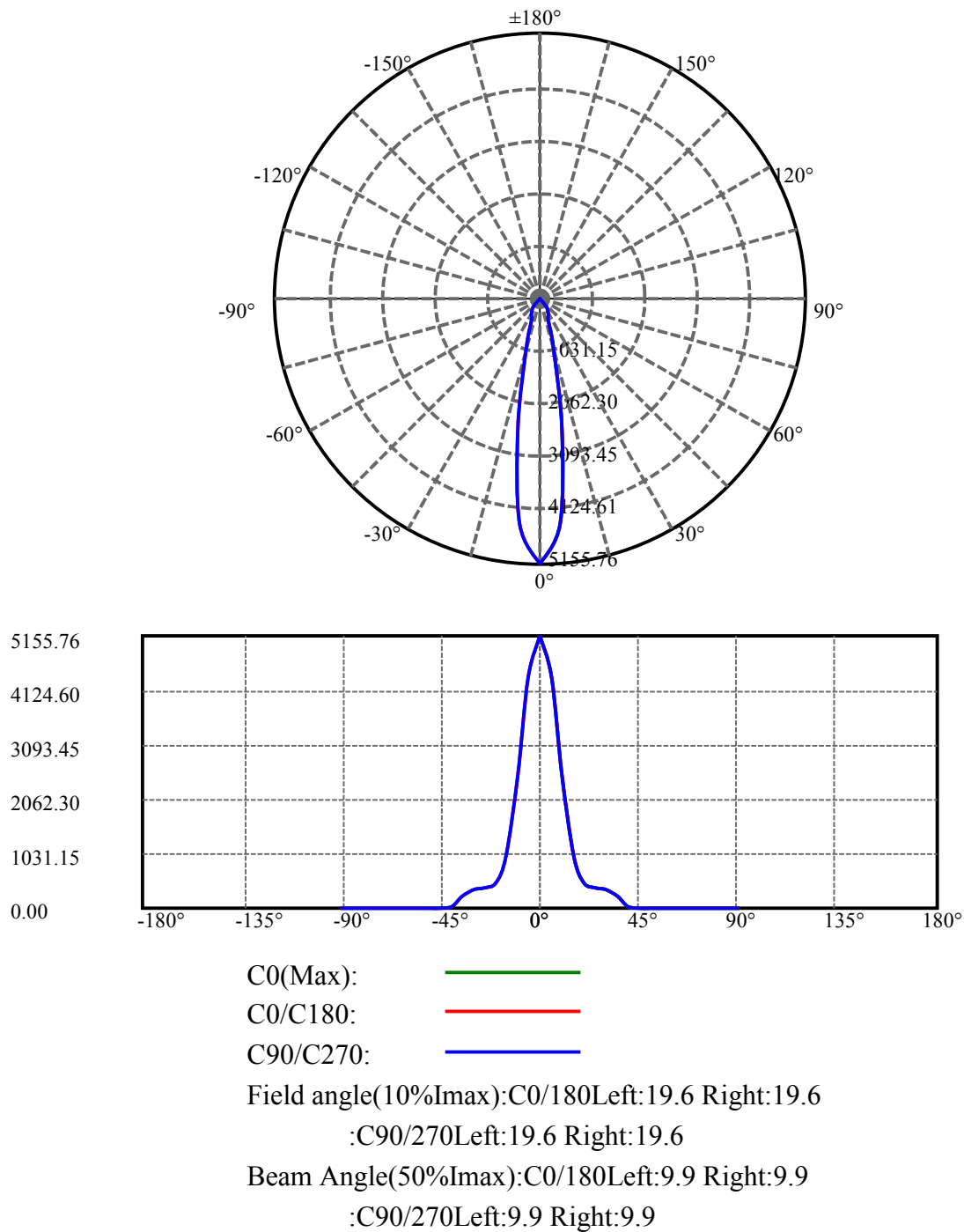
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5155.757	30.832	30.832	2.790%	3.093%
5.0	4369.758	208.758	239.59	18.892%	24.034%
10.0	2540.165	241.781	481.371	21.881%	48.287%
15.0	997.828	141.560	622.931	12.811%	62.487%
20.0	470.099	88.131	711.063	7.976%	71.328%
25.0	380.268	88.090	799.153	7.972%	80.164%
30.0	349.636	95.824	894.977	8.672%	89.777%
35.0	212.497	66.809	961.786	6.046%	96.478%
40.0	21.279	7.497	969.283	.679%	97.230%
45.0	9.814	3.804	973.087	.344%	97.612%
50.0	8.341	3.502	976.589	.317%	97.963%
55.0	7.116	3.195	979.784	.289%	98.284%
60.0	6.201	2.943	982.728	.266%	98.579%
65.0	5.492	2.728	985.456	.247%	98.853%
70.0	5.134	2.644	988.101	.239%	99.118%
75.0	4.859	2.573	990.673	.233%	99.376%
80.0	4.694	2.534	993.207	.229%	99.630%
85.0	4.542	2.480	995.687	.224%	99.879%
90.0	4.398	1.205	996.892	.109%	100.000%

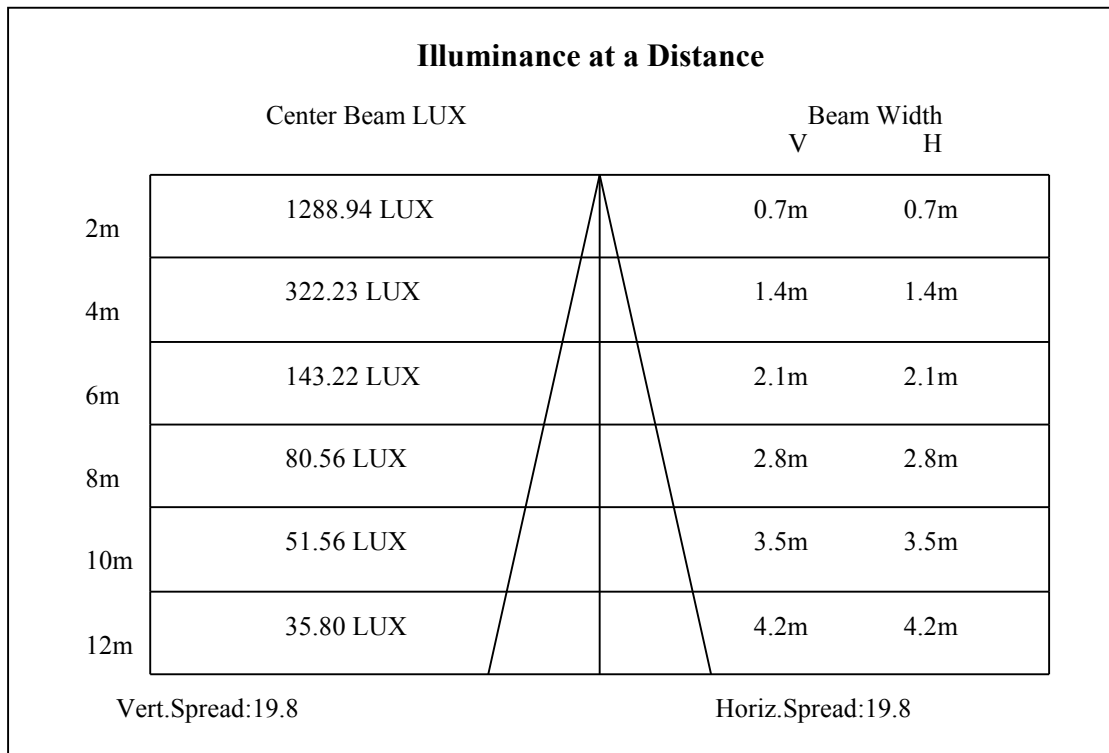
ZONAL LUMEN SUMMARY

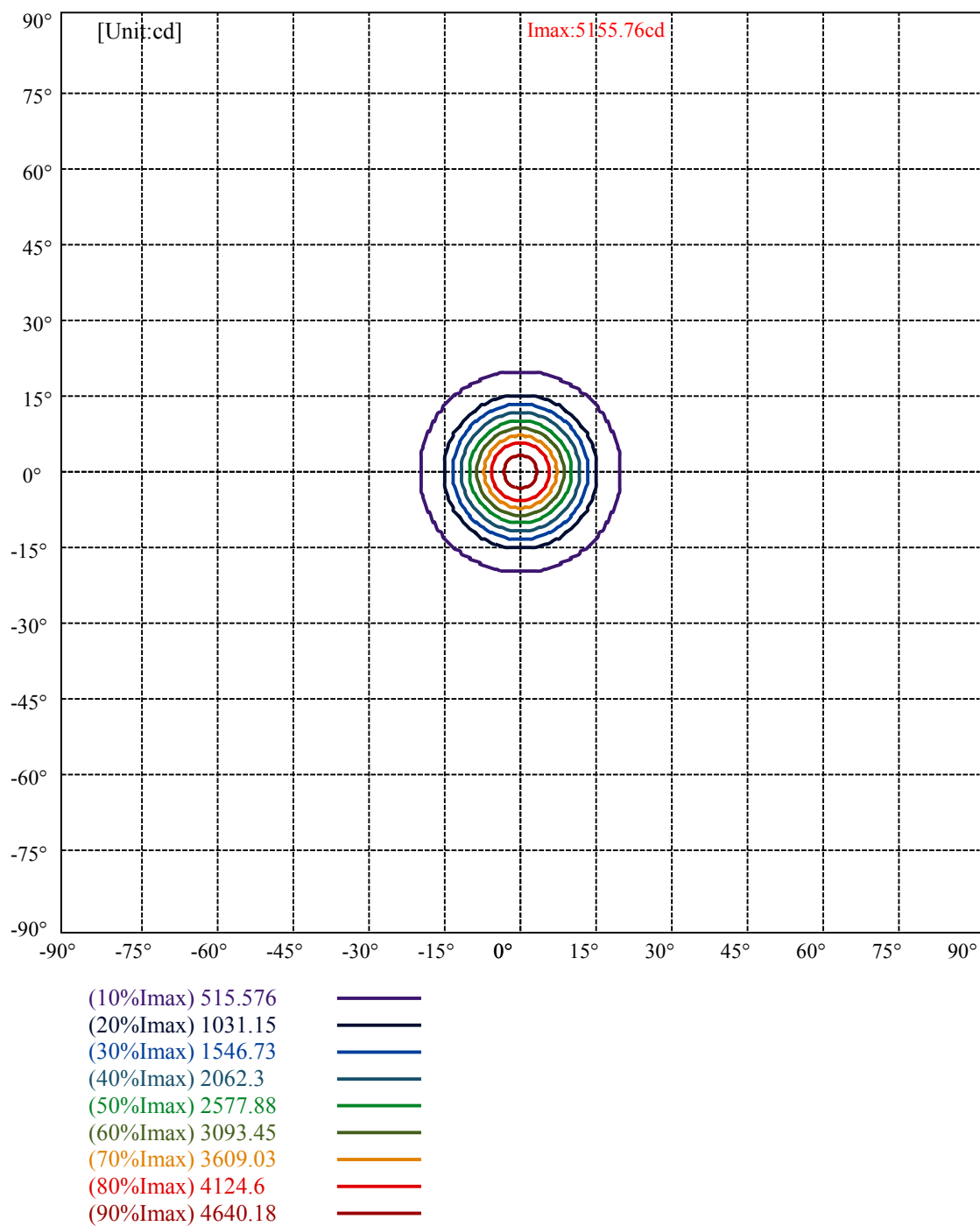
Zone	Lumens	%Lamp	%Fixt
0-30	894.98	80.99%	89.78%
0-40	969.28	87.72%	97.23%
0-60	982.73	88.93%	98.58%
0-90	995.69	90.11%	99.88%
0-120	995.69	90.11%	99.88%
0-180	996.89	90.22%	100.00%
60-90	15.90	1.44%	1.60%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-24.91	797.51	72.17%	80.00%

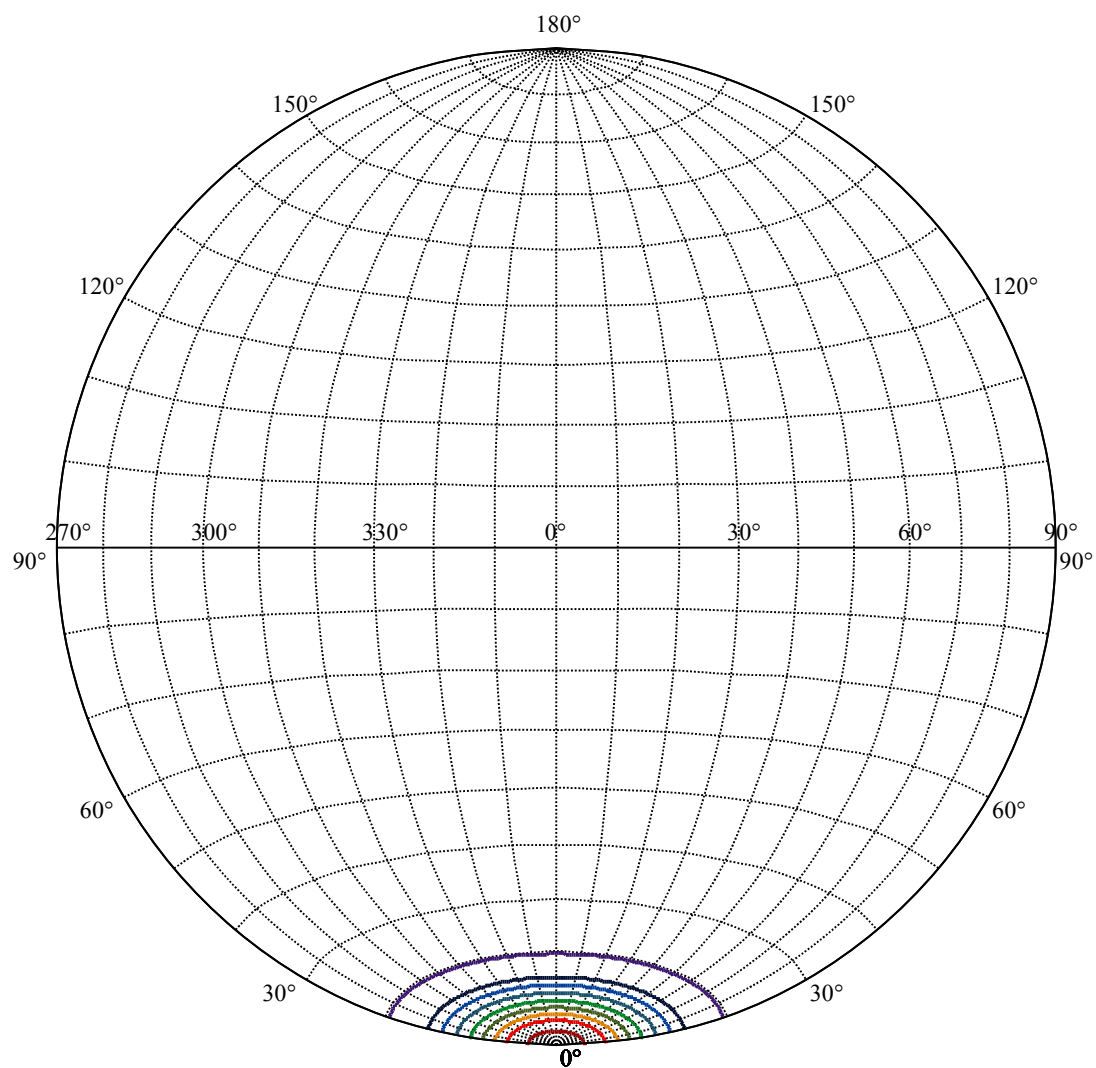
ZONAL LUMEN SUMMARY

0-10	481.37
10-20	229.69
20-30	183.91
30-40	74.31
40-50	7.31
50-60	6.14
60-70	5.37
70-80	5.11
80-90	2.48
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:5155.76

(10%Imax) 515.576

(20%Imax) 1031.15

(30%Imax) 1546.73

(40%Imax) 2062.3

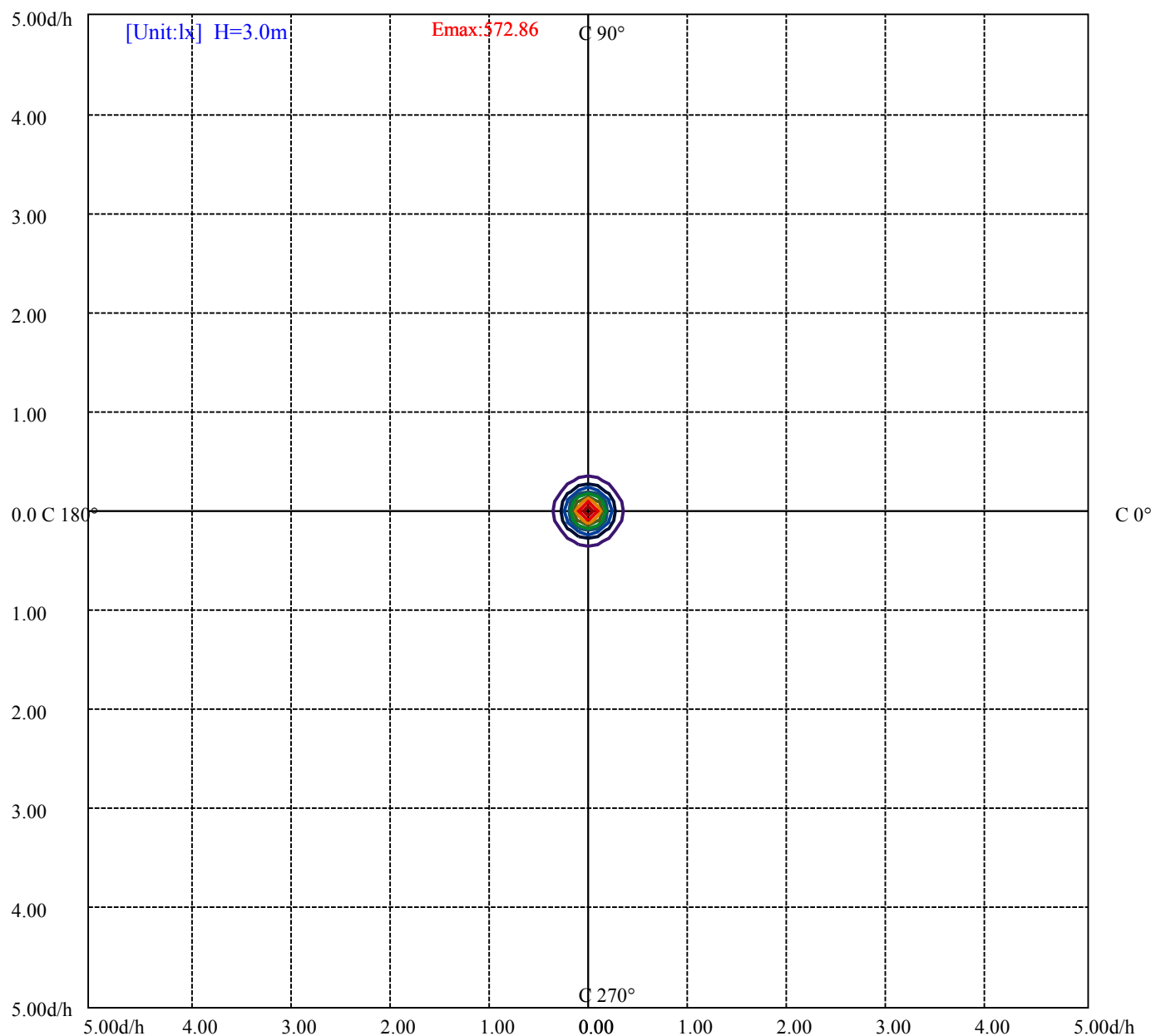
(50%Imax) 2577.88

(60%Imax) 3093.45

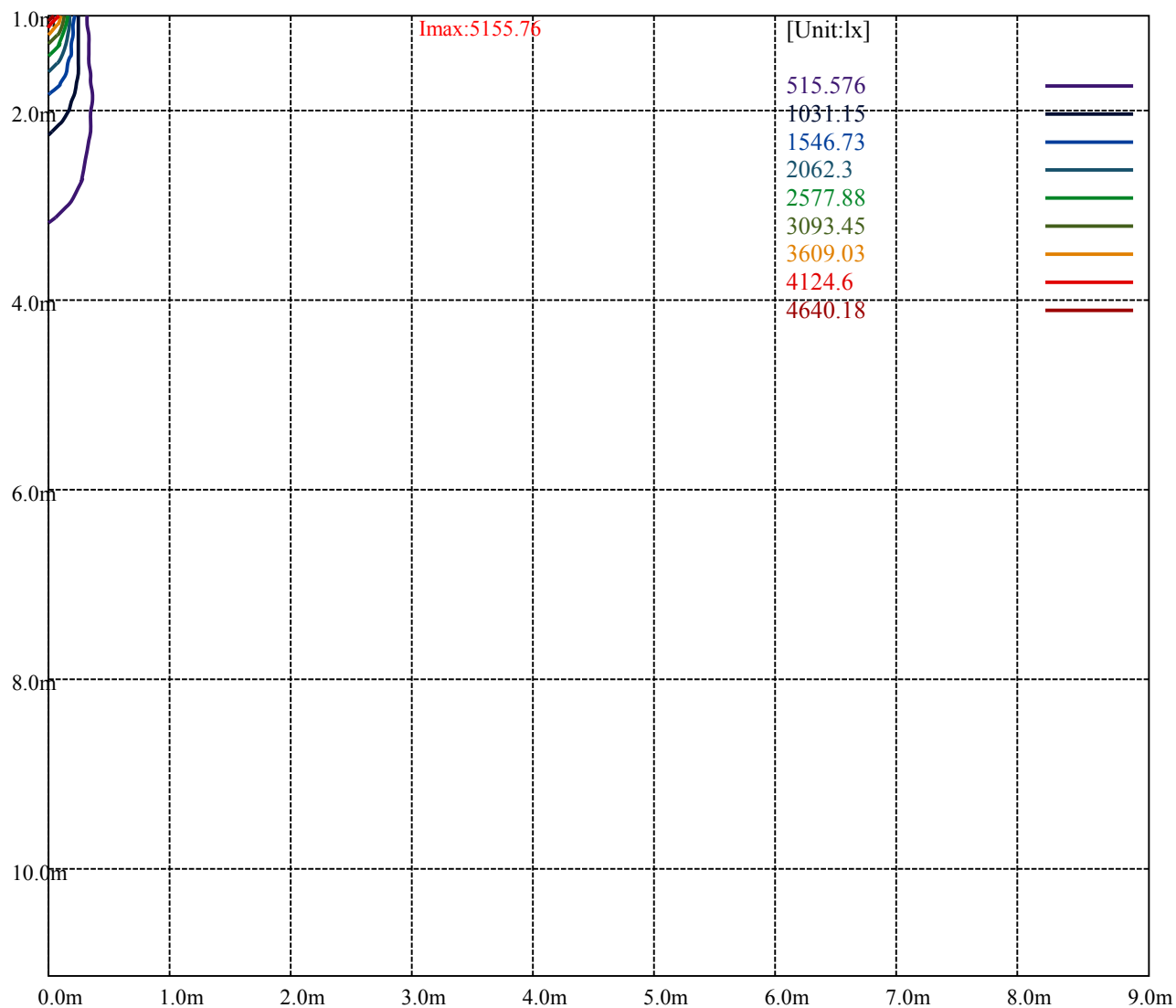
(70%Imax) 3609.03

(80%Imax) 4124.6

(90%Imax) 4640.18



(10%Emax)	57.28589	
(20%Emax)	114.5722	
(30%Emax)	171.8578	
(40%Emax)	229.1433	
(50%Emax)	286.43	
(60%Emax)	343.7155	
(70%Emax)	401.0011	
(80%Emax)	458.2878	
(90%Emax)	515.5734	



Luminance Table

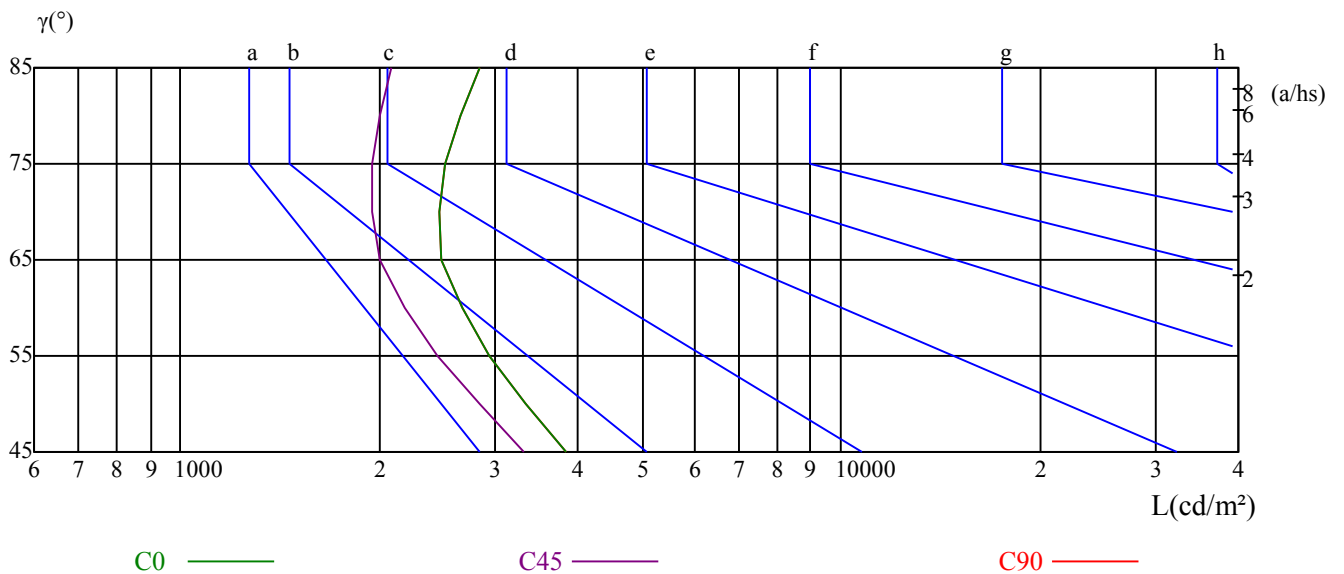
γ	45	50	55	60	65	70	75	80	85
C0	3835	3336	2938	2666	2483	2468	2513	2648	2844
C45	3302	2830	2453	2190	2004	1953	1945	2000	2085
C90	3835	3336	2938	2666	2483	2468	2513	2648	2844

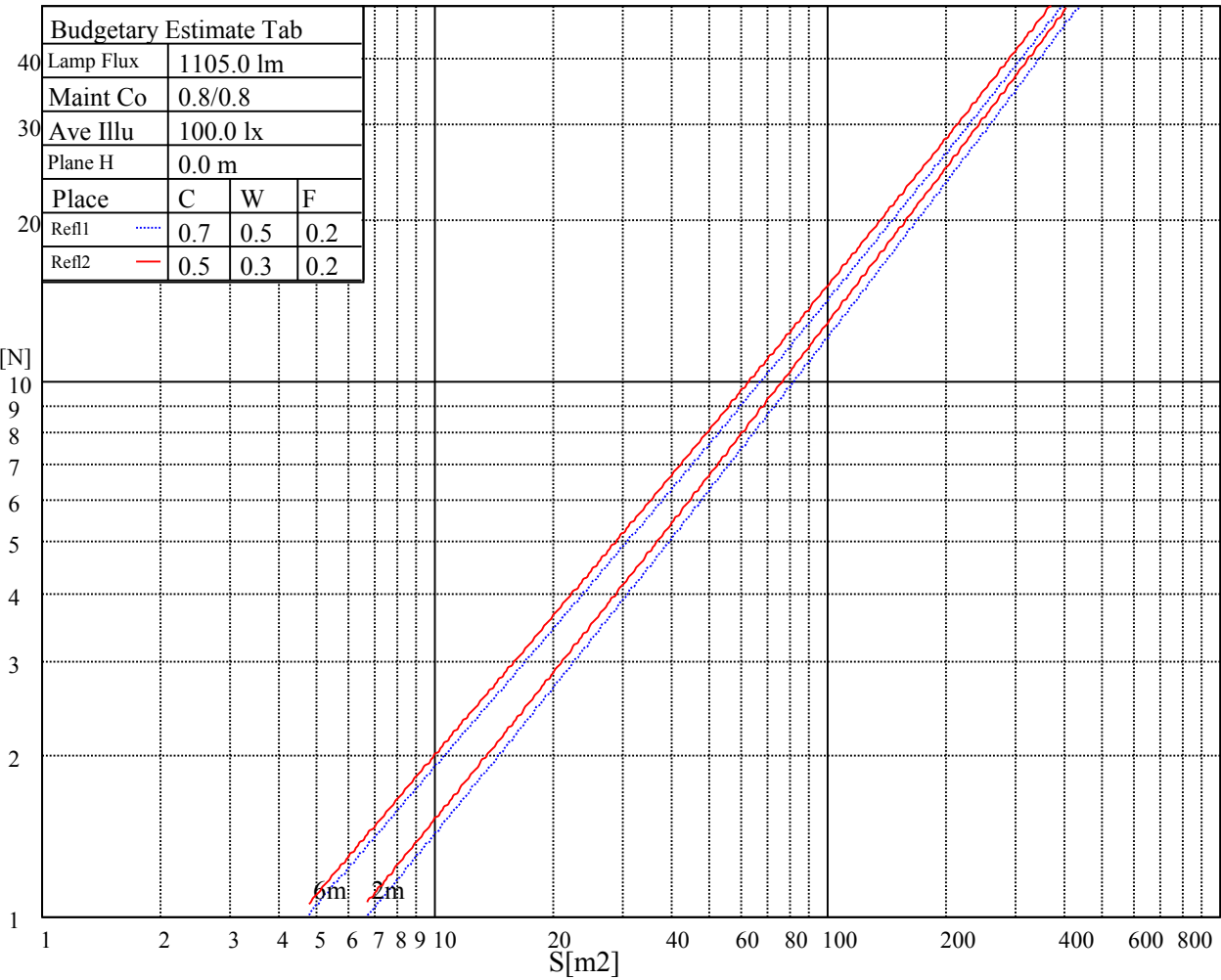
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5883	5883	5883	8498	8498	8498	23592	23592	23592

Glare Table

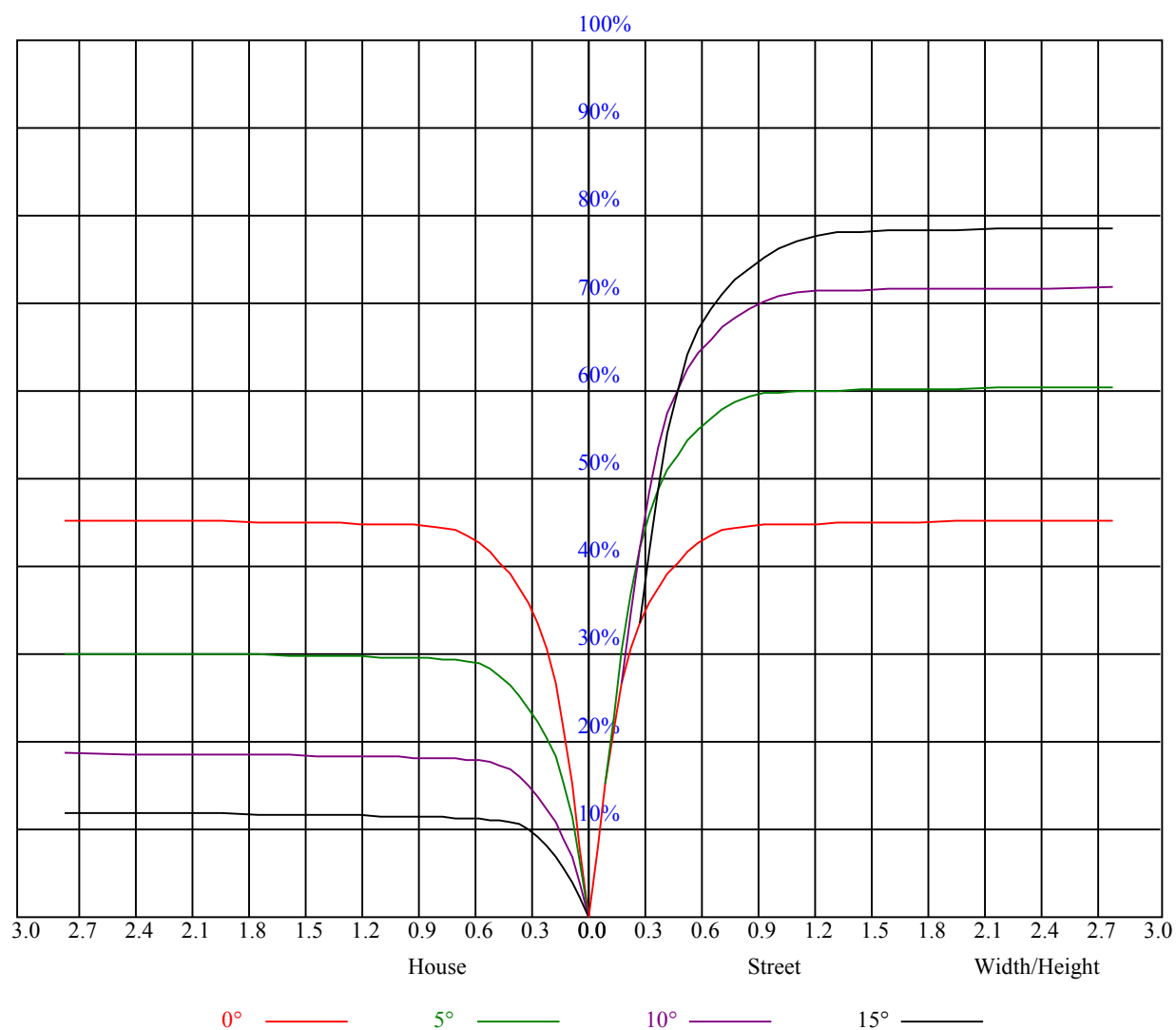
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

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	1.01	0.98	0.96	0.99	0.96	0.94	0.95	0.93	0.91	0.92	0.90	0.88	0.88	0.87	0.86	0.84
2	0.96	0.92	0.89	0.94	0.91	0.88	0.91	0.88	0.86	0.88	0.86	0.84	0.86	0.84	0.82	0.81
3	0.92	0.87	0.84	0.90	0.86	0.83	0.88	0.85	0.82	0.86	0.83	0.81	0.84	0.81	0.80	0.78
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	0.80	0.77	0.84	0.80	0.76	0.82	0.79	0.76	0.81	0.78	0.75	0.79	0.77	0.75	0.73
6	0.82	0.77	0.74	0.81	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.73	0.77	0.74	0.72	0.71
7	0.79	0.75	0.72	0.78	0.74	0.71	0.77	0.74	0.71	0.76	0.73	0.71	0.75	0.73	0.70	0.69
8	0.77	0.72	0.69	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.69	0.74	0.71	0.68	0.67
9	0.74	0.70	0.67	0.74	0.70	0.67	0.73	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.66
10	0.72	0.68	0.66	0.72	0.68	0.66	0.71	0.68	0.66	0.71	0.68	0.65	0.70	0.67	0.65	0.64



Nata 1657-S

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	5170.90	4434.79	2622.89	1014.14	484.50	397.51	365.02	291.25	15.58		
45.0	5179.16	3966.26	2161.51	788.96	440.45	386.50	356.77	118.70	15.31		
90.0	5098.77	3783.48	1802.55	687.54	389.96	343.28	310.68	82.14	16.90		
135.0	5174.20	4361.02	2517.73	1003.68	465.23	384.29	352.36	287.39	18.33		
180.0	5170.90	4392.40	2437.90	994.43	472.05	384.84	353.79	183.01	17.84		
225.0	5179.16	4715.03	2984.06	1057.91	494.30	363.81	338.65	243.46	29.35		
270.0	5098.77	4831.75	3237.87	1395.13	539.00	392.00	363.92	294.55	40.85		
315.0	5174.20	4473.33	2556.82	1040.84	475.30	389.91	355.88	199.47	16.08		
360.0	5170.90	4434.79	2622.89	1014.14	484.50	397.51	365.02	291.25	15.58		
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	6.50	5.84	5.62	5.56	5.29	5.07	4.90	4.68	4.51		
45.0	9.25	8.59	7.21	6.17	5.51	5.18	4.90	4.79	4.51		
90.0	11.40	9.36	7.27	6.00	5.29	5.01	4.79	4.62	4.46		
135.0	9.97	8.42	6.88	5.95	5.34	5.07	4.79	4.62	4.57		
180.0	8.92	7.65	6.55	5.84	5.29	5.01	4.79	4.62	4.51		
225.0	13.10	10.41	8.26	6.83	5.73	5.18	4.84	4.68	4.57		
270.0	12.66	10.30	9.08	7.38	6.06	5.45	5.01	4.84	4.62		
315.0	6.72	6.17	6.06	5.89	5.45	5.12	4.84	4.68	4.57		
360.0	6.50	5.84	5.62	5.56	5.29	5.07	4.90	4.68	4.51		
C/γ(°)	90.0										
0.0	4.35										
45.0	4.29										
90.0	4.35										
135.0	4.46										
180.0	4.46										
225.0	4.40										
270.0	4.46										
315.0	4.40										
360.0	4.35										