



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86 571 85021543 Fax:+86 571 87977635
Address:Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

Client: NT

LumCAT: 11-0161-S6

Luminaire: 69-0030

Report No: 20260801-B011

Ballast type: DC

Test No: 20260801-C011

LampCAT: LUXEON 2835*2

Lamp flux(lm): 1120.0

Number of Lamps: 1

Length(mm): 280

Phm Type: C

Voltage(V): 22.140

Current(A): 0.454

Power (W): 10.051

PF: 0.000

Width(mm): 40

Height(mm): 20

Photometric Results

Lumens(lm): 1057.75, Efficiency(%): 94.44% , Luminous Efficacy(lm/W): 105.24

Central intensity(cd): 1193.847, Maximum intensity(cd): 1200.703

Angle of maximum intensity: C=22.5 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=60.2

[C90/270]Total=60.8

Field angle(10%Imax): [C0/180]Total=79.4

[C90/270]Total=79.9

Maximum s/h(1/2): C0_180=0.94 C90_270=0.96

Maximum s/h(1/4): C0_180=0.86 C90_270=0.89

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 94.35%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.777%

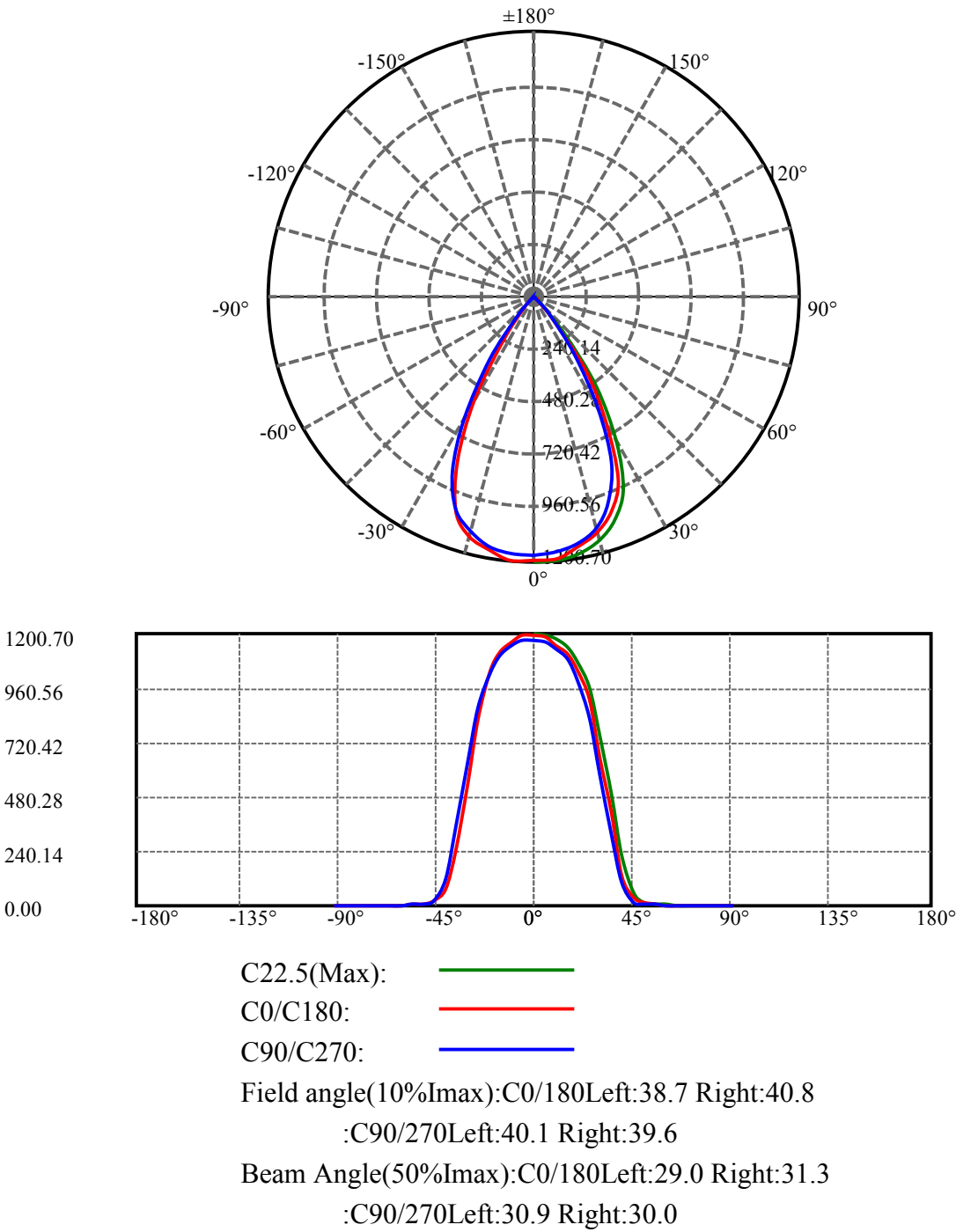
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1188.409	0.000	0	0.00%	0.00%
5.0	1183.749	28.358	28.358	2.53%	2.68%
10.0	1159.970	83.842	112.201	7.49%	10.61%
15.0	1115.777	134.996	247.196	12.05%	23.37%
20.0	1025.593	176.479	423.675	15.76%	40.05%
25.0	859.805	197.743	621.419	17.66%	58.75%
30.0	596.590	184.308	805.727	16.46%	76.17%
35.0	324.002	135.564	941.291	12.10%	88.99%
40.0	115.549	73.336	1014.626	6.55%	95.92%
45.0	28.434	26.660	1041.286	2.38%	98.44%
50.0	10.628	7.893	1049.179	0.70%	99.19%
55.0	5.131	3.427	1052.606	0.31%	99.51%
60.0	2.280	1.713	1054.319	0.15%	99.68%
65.0	1.100	0.822	1055.14	0.07%	99.75%
70.0	0.979	0.526	1055.667	0.05%	99.80%
75.0	0.968	0.509	1056.176	0.05%	99.85%
80.0	0.963	0.517	1056.692	0.05%	99.90%
85.0	0.968	0.525	1057.217	0.05%	99.95%
90.0	0.979	0.533	1057.75	0.05%	100.00%

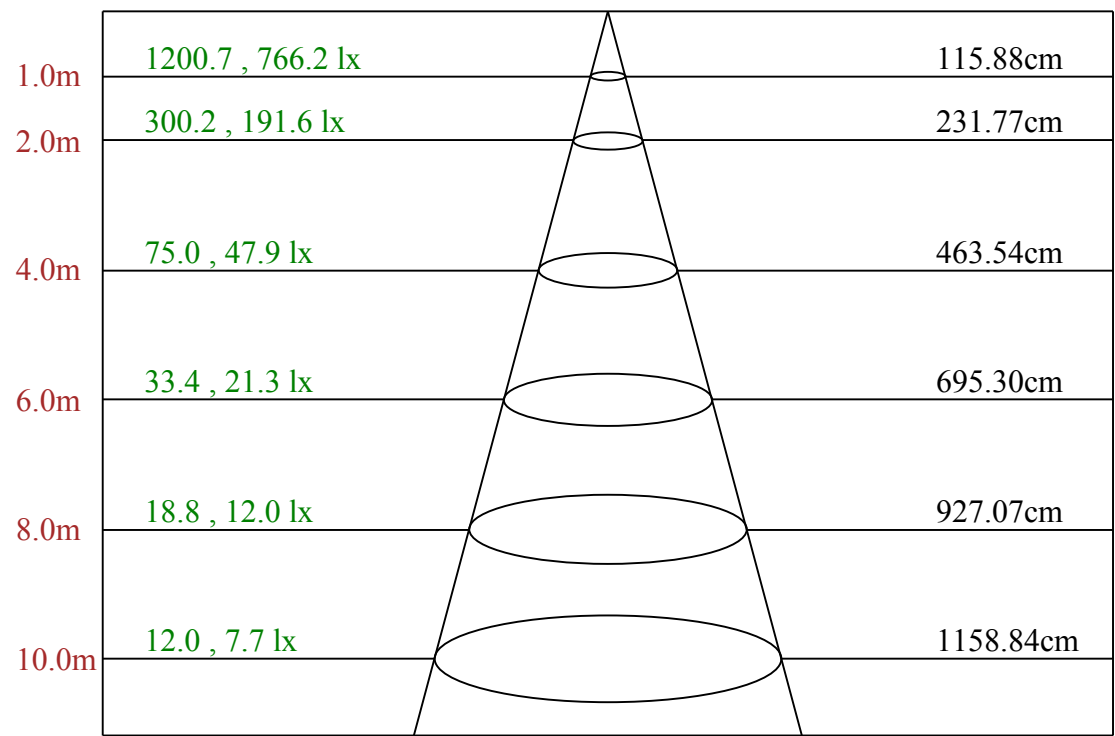
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	805.73	71.94%	76.17%
0-40	1014.63	90.59%	95.92%
0-60	1054.32	94.14%	99.68%
0-90	1057.22	94.39%	99.95%
0-120	1057.22	94.39%	99.95%
0-180	1057.75	94.44%	100.00%
60-90	2.90	0.26%	0.27%
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%
0-31.49	846.20	75.55%	80.00%

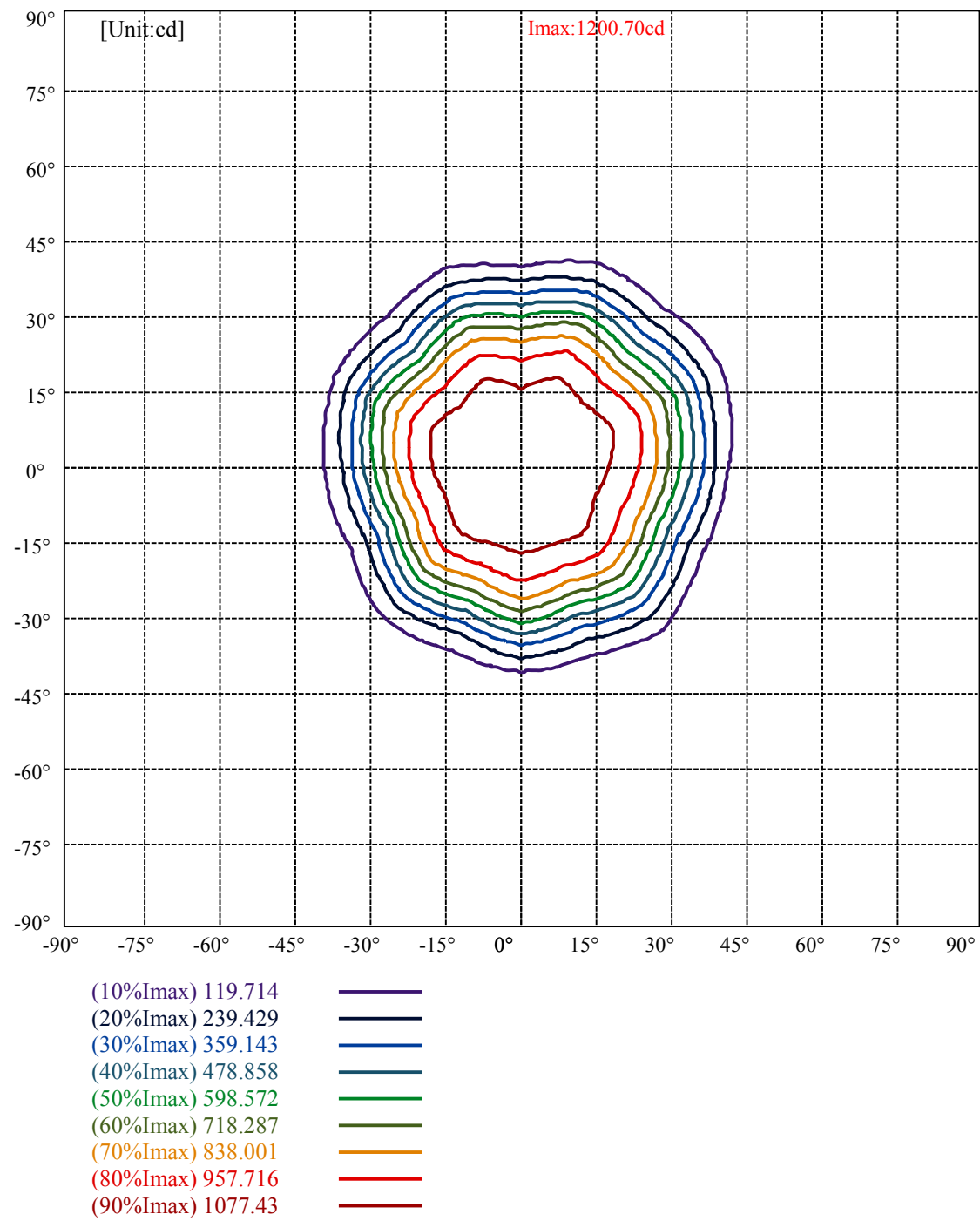
ZONAL LUMEN SUMMARY

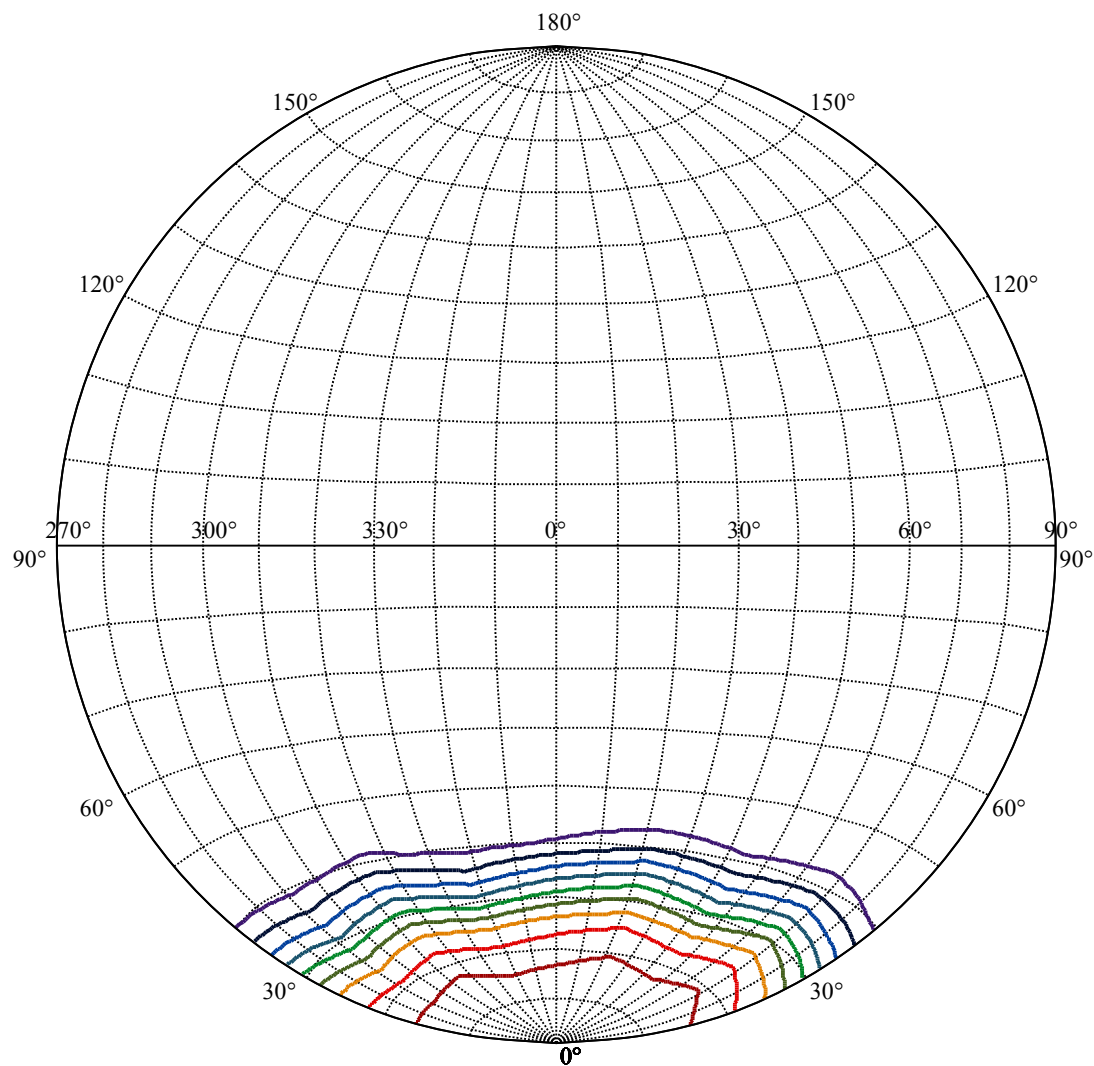
0-10	112.20
10-20	311.47
20-30	382.05
30-40	208.90
40-50	34.55
50-60	5.14
60-70	1.35
70-80	1.03
80-90	0.52
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00





Max , Ave Beam angle of C22.5 plane 60.18



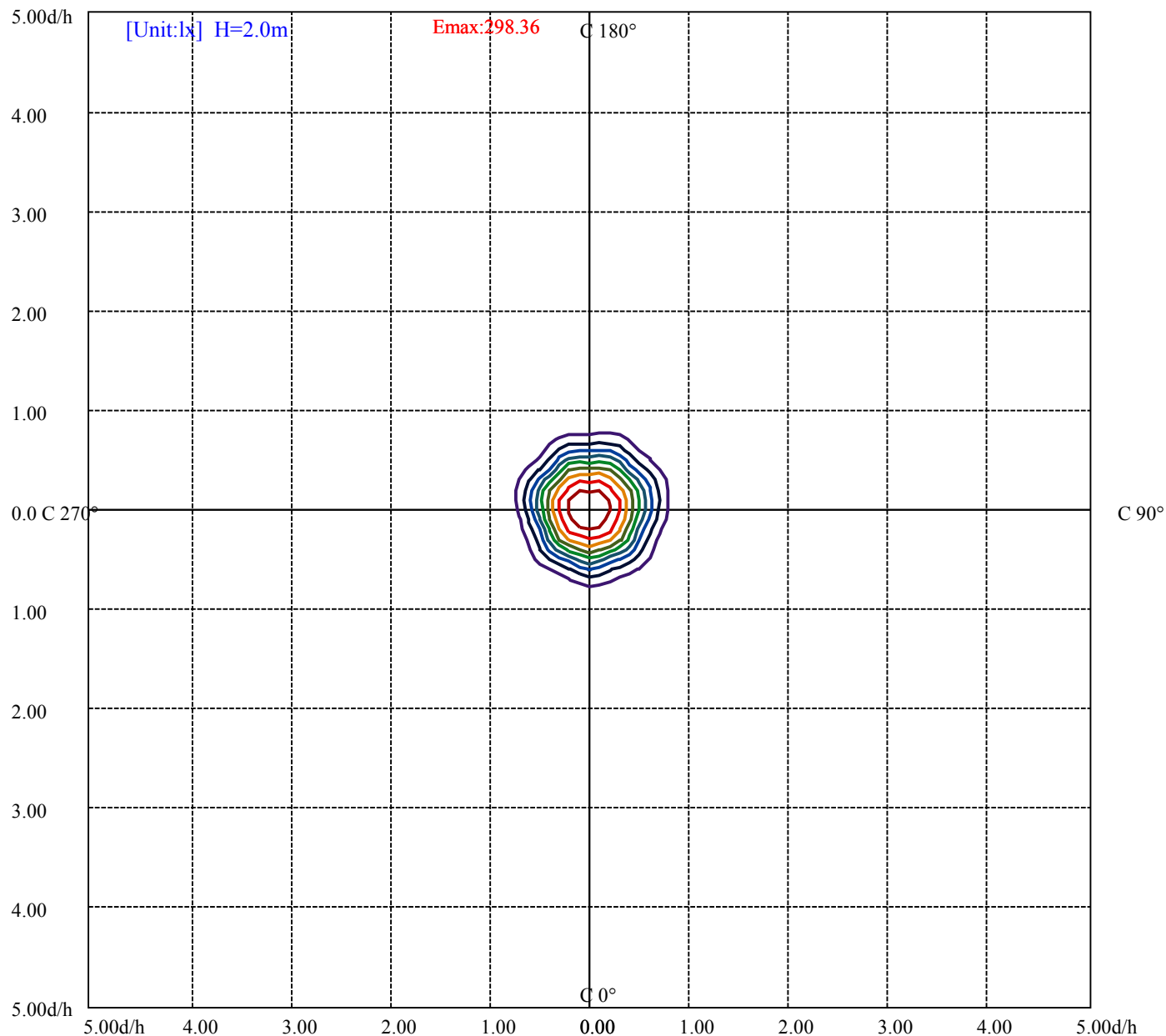


House

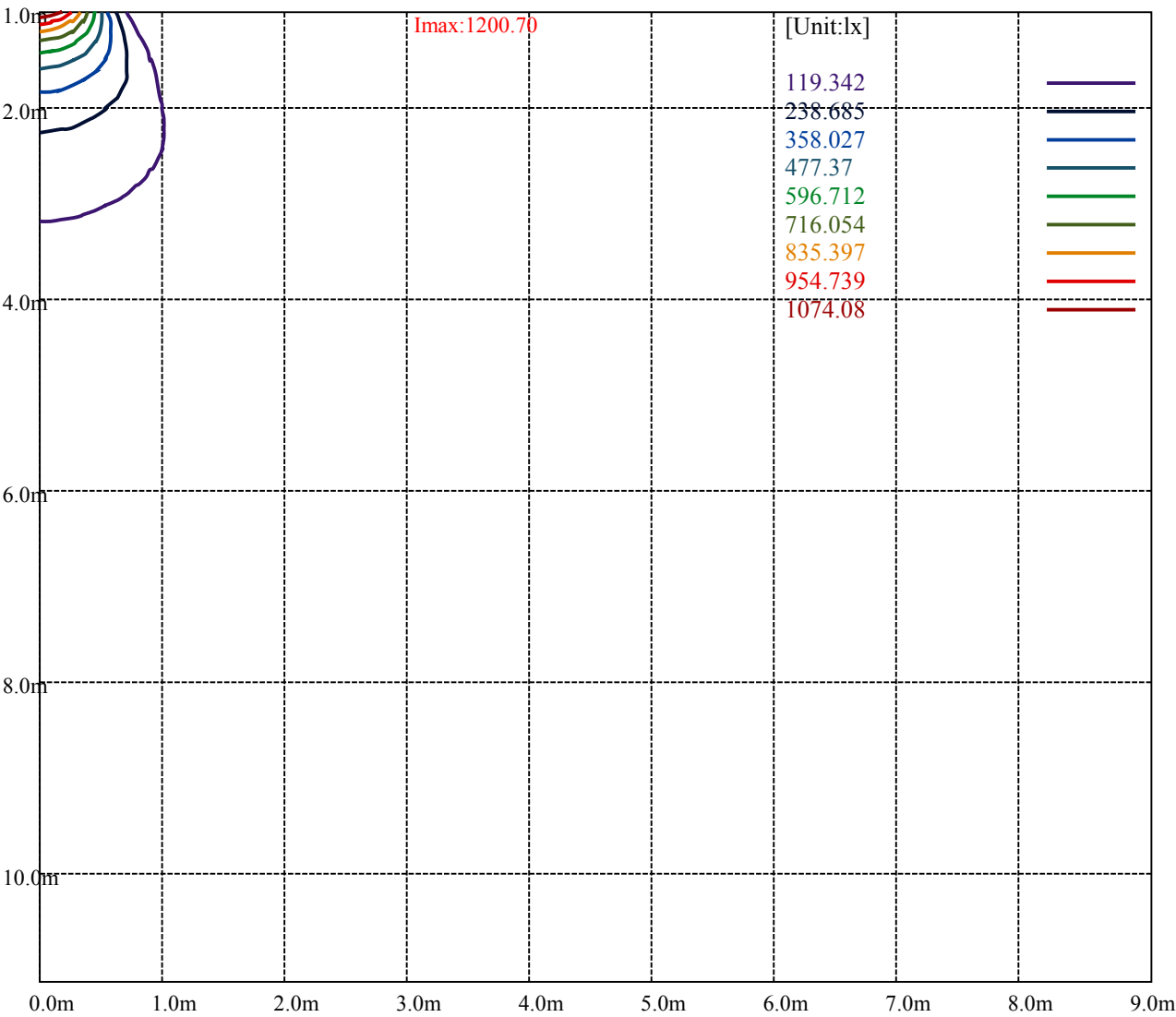
[Unit:cd]

Road

Imax:1200.70	
(10%Imax)	120.054
(20%Imax)	240.108
(30%Imax)	360.162
(40%Imax)	480.216
(50%Imax)	600.271
(60%Imax)	720.325
(70%Imax)	840.379
(80%Imax)	960.433
(90%Imax)	1080.49



(10%Emax)	29.8355	—
(20%Emax)	59.67125	—
(30%Emax)	89.50675	—
(40%Emax)	119.3422	—
(50%Emax)	149.1777	—
(60%Emax)	179.0135	—
(70%Emax)	208.849	—
(80%Emax)	238.6845	—
(90%Emax)	268.52	—



Luminance Table

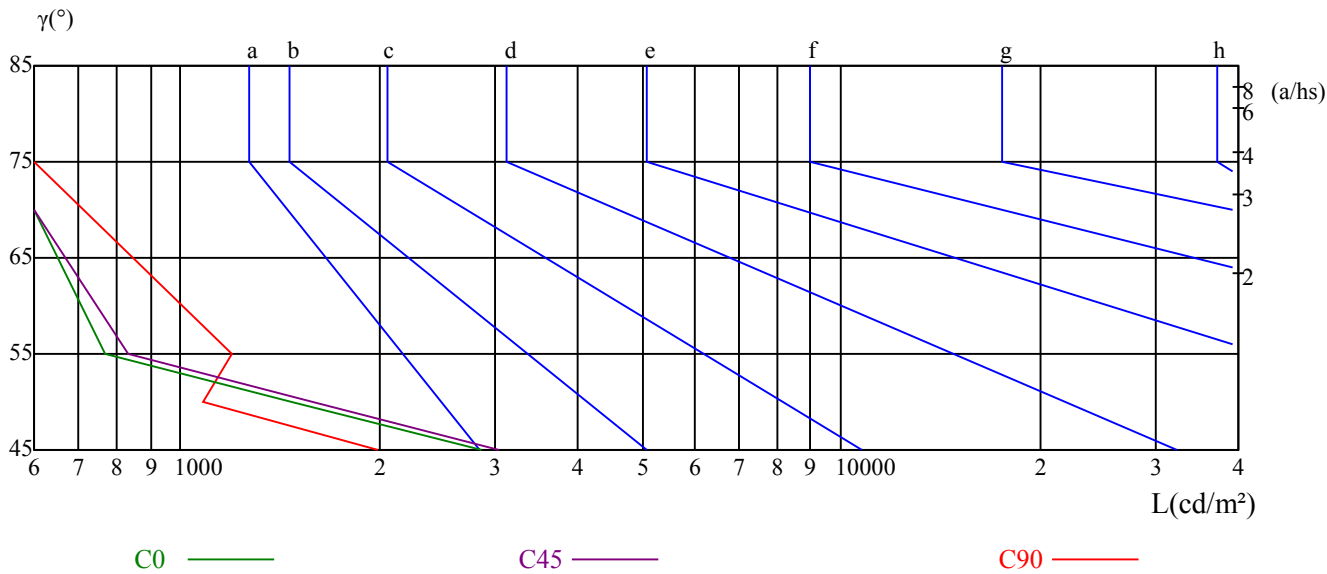
γ	45	50	55	60	65	70	75	80	85
C0	2850	1473	769	0	0	112	122	136	155
C45	3045	1587	835	0	0	126	0	0	0
C90	1995	1083	1196	0	0	0	254	341	525

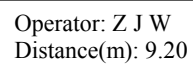
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	98	107	350	321	0	520	954	0

Glare Table

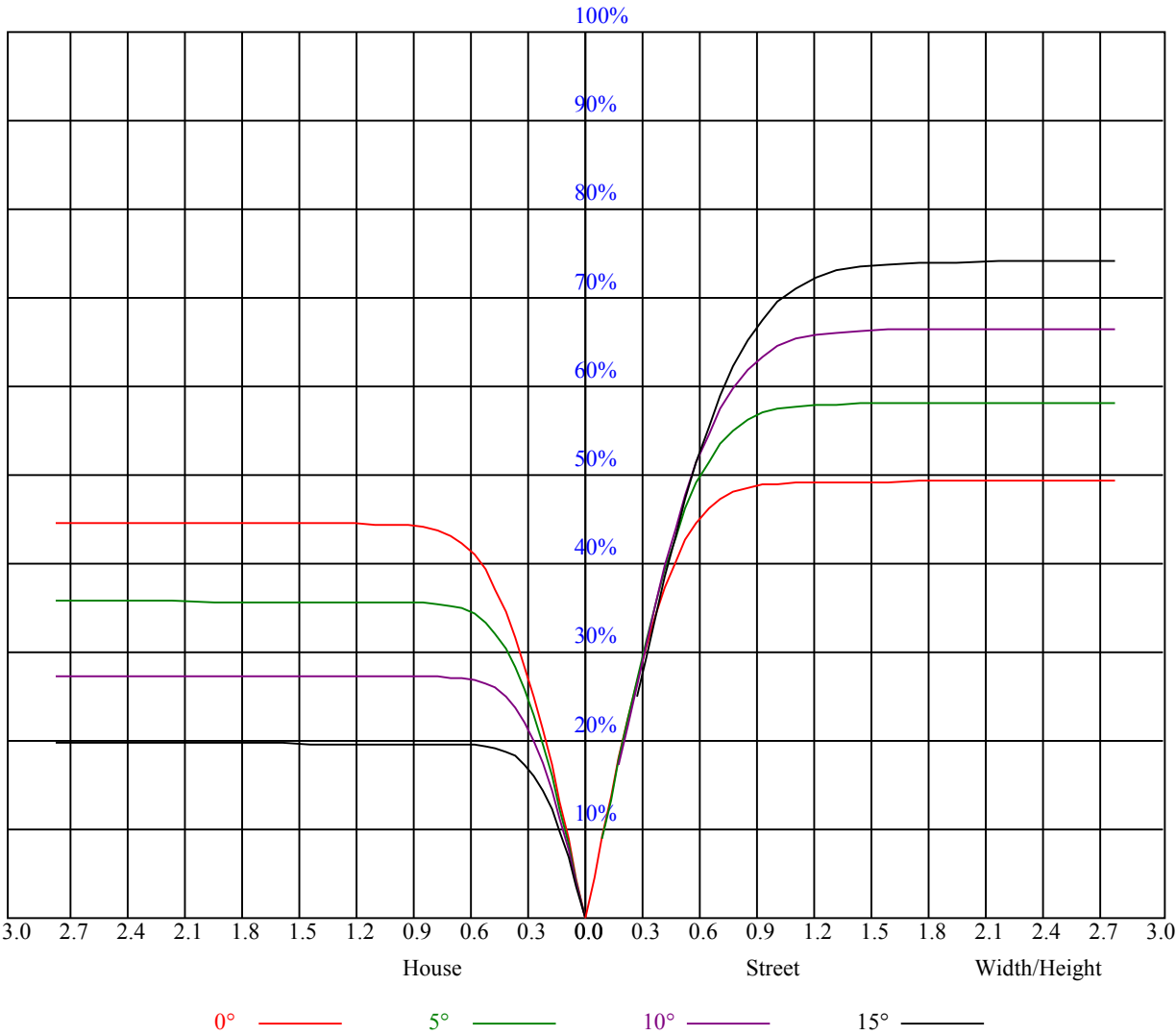
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

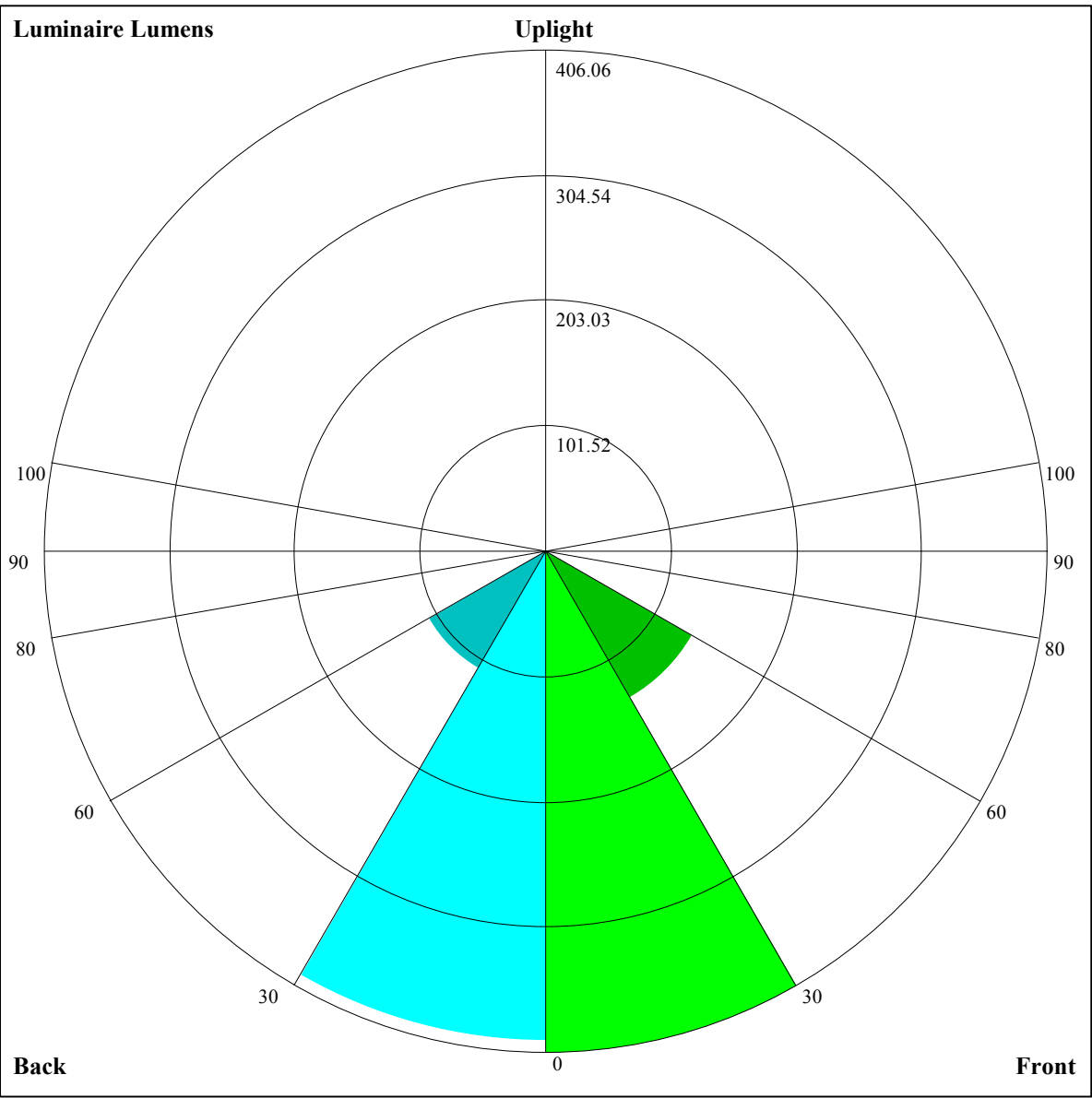
Luminance Limiting Curve





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	COEFFCIENTS OF UTILIZATION RHOFC=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	1.02	1.00	1.03	1.01	0.99	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89
2	0.98	0.94	0.91	0.96	0.93	0.90	0.93	0.90	0.88	0.90	0.88	0.86	0.88	0.86	0.84	0.83
3	0.91	0.87	0.83	0.90	0.86	0.83	0.88	0.84	0.81	0.85	0.83	0.80	0.83	0.81	0.79	0.77
4	0.86	0.81	0.77	0.85	0.80	0.76	0.83	0.79	0.75	0.81	0.77	0.75	0.79	0.76	0.74	0.72
5	0.80	0.75	0.71	0.80	0.75	0.71	0.78	0.74	0.70	0.76	0.73	0.70	0.75	0.72	0.69	0.68
6	0.76	0.70	0.66	0.75	0.70	0.66	0.74	0.69	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.63
7	0.71	0.66	0.62	0.71	0.66	0.62	0.70	0.65	0.62	0.68	0.64	0.61	0.67	0.64	0.61	0.60
8	0.67	0.62	0.58	0.67	0.62	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.56
9	0.64	0.58	0.55	0.63	0.58	0.55	0.62	0.58	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.53
10	0.60	0.55	0.51	0.60	0.55	0.51	0.59	0.55	0.51	0.58	0.54	0.51	0.58	0.54	0.51	0.50





Luminaire Lumens:

FL=406.06,FM=137.04,FH=1.24,FVH=0.53

BL=396.18,BM=109.19,BH=1.1,BVH=0.53

UL=0,UH=0

BUG Rating:B1-U0-G0

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	1193.85	1186.40	1149.33	1107.77	1034.72	913.01	659.18	409.74	133.99
22.5	1200.70	1195.12	1176.83	1138.92	1071.88	961.17	756.26	495.82	226.92
45.0	1195.54	1188.35	1165.58	1118.69	1035.06	893.21	619.82	361.75	140.59
67.5	1185.47	1180.73	1163.21	1133.24	1068.75	947.38	737.55	439.03	187.14
90.0	1170.06	1161.35	1135.19	1088.47	993.84	830.49	584.10	316.30	104.19
112.5	1185.81	1184.79	1168.37	1139.09	1060.37	918.94	684.31	401.62	157.18
135.0	1182.59	1180.73	1161.85	1112.85	1021.35	830.15	516.56	255.61	80.83
157.5	1193.25	1197.66	1181.91	1146.36	1063.67	907.59	675.43	350.66	124.42
180.0	1193.85	1196.05	1162.45	1120.97	1030.24	821.85	539.16	246.13	73.89
202.5	1200.70	1190.80	1154.83	1098.12	969.30	734.76	401.28	157.43	35.80
225.0	1195.54	1196.56	1178.19	1134.68	1021.69	849.19	571.66	275.67	89.63
247.5	1185.47	1181.57	1160.08	1098.88	975.39	764.47	476.27	211.77	57.98
270.0	1170.06	1167.69	1145.60	1103.28	1024.74	871.28	631.41	346.94	121.12
292.5	1185.81	1175.23	1155.00	1102.27	996.38	799.17	511.14	270.85	85.15
315.0	1182.59	1177.09	1157.45	1123.26	1040.31	889.74	645.55	376.99	151.93
337.5	1193.25	1179.88	1143.66	1085.59	1001.80	824.48	535.77	267.72	78.04
360.0	1193.85	1186.40	1149.33	1107.77	1034.72	913.01	659.18	409.74	133.99

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	36.06	16.93	8.13	3.13	1.10	1.02	1.02	1.02	1.02
22.5	59.33	15.66	8.38	4.99	1.86	1.02	1.02	1.02	1.02
45.0	36.82	13.54	5.25	2.03	1.10	1.02	0.93	0.93	0.93
67.5	49.26	12.53	6.60	3.55	1.27	1.02	0.93	0.93	0.93
90.0	16.17	8.89	4.57	1.61	1.02	0.93	0.93	0.93	0.93
112.5	38.09	10.16	5.67	3.39	1.02	0.93	1.02	0.93	0.93
135.0	24.63	9.31	3.55	1.69	1.02	1.02	0.93	0.93	1.02
157.5	28.44	10.50	5.92	3.05	1.02	1.02	1.02	1.02	0.93
180.0	22.60	10.24	3.89	1.18	1.10	1.02	1.02	1.02	1.02
202.5	11.85	6.52	3.39	1.02	1.02	0.93	0.93	1.02	1.02
225.0	25.90	9.56	3.64	1.69	1.02	0.93	1.02	0.93	0.93
247.5	13.80	6.69	3.64	1.18	0.93	0.93	0.93	0.93	0.93
270.0	20.65	9.14	4.66	1.52	0.93	1.02	0.93	0.93	0.93
292.5	15.15	7.45	3.89	1.61	1.02	0.93	0.93	0.85	0.93
315.0	37.75	13.80	5.42	2.29	1.18	0.93	1.02	1.02	1.02
337.5	18.45	9.14	5.50	2.54	1.02	1.02	0.93	1.02	1.02
360.0	36.06	16.93	8.13	3.13	1.10	1.02	1.02	1.02	1.02

C/γ(°)	90.0
0.0	1.02
22.5	1.02
45.0	0.93
67.5	0.93
90.0	0.93
112.5	1.02
135.0	1.02
157.5	1.02
180.0	1.02
202.5	1.02
225.0	0.93
247.5	0.93
270.0	0.93
292.5	0.93
315.0	1.02
337.5	1.02
360.0	1.02