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Nata

Client:

LumCAT: 1681-S

Luminaire: 92.70.123.00

Report No: nata0100

Test No: GC2018042702

LampCAT: TRIDONIC SLE6

Lamp flux(lm): 1164.8

Number of Lamps: 1

Length(mm): 47

Phm Type: C

Voltage(V): 38.0000

Current(A): 0.3200

Power (W): 12.1600

PF: 0.0000

Ballast type: DC

Width(mm): 47

Height(mm): 0

Photometric Results

Lumens(lm): 1043.60, Efficiency(%): 89.59% , Luminous Efficacy(lm/W): 85.82

Central intensity(cd): 1261.893, Maximum intensity(cd): 1261.893

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=62.4

[C90/270]Total=62.4

Field angle(10%Imax): [C0/180]Total=75.0

[C90/270]Total=75.0

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

Maximum s/h(1/4): C0_180=0.90 C90_270=0.90

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 89.68%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.658%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1261.893	1.208	1.208	.104%	.116%
2.0	1261.411	9.655	10.862	.829%	1.041%
4.0	1252.051	19.155	30.017	1.644%	2.876%
6.0	1233.745	28.283	58.3	2.428%	5.586%
8.0	1209.107	36.905	95.205	3.168%	9.123%
10.0	1172.495	44.653	139.857	3.833%	13.401%
12.0	1133.185	51.671	191.528	4.436%	18.353%
14.0	1092.133	57.945	249.473	4.975%	23.905%
16.0	1053.773	63.702	313.175	5.469%	30.009%
18.0	1014.125	68.729	381.904	5.900%	36.595%
20.0	976.088	73.216	455.12	6.286%	43.611%
22.0	939.021	77.146	532.266	6.623%	51.003%
24.0	899.622	80.249	612.515	6.889%	58.693%
26.0	856.870	82.380	694.895	7.072%	66.586%
28.0	795.331	81.888	776.783	7.030%	74.433%
30.0	710.076	77.865	854.648	6.685%	81.894%
32.0	573.990	66.708	921.356	5.727%	88.286%
34.0	408.684	50.120	971.477	4.303%	93.089%
36.0	239.117	30.824	1002.301	2.646%	96.043%
38.0	84.408	11.397	1013.698	.978%	97.135%
40.0	37.431	5.277	1018.975	.453%	97.641%
42.0	19.394	2.846	1021.821	.244%	97.913%
44.0	11.342	1.728	1023.549	.148%	98.079%
46.0	7.639	1.205	1024.754	.103%	98.194%
48.0	5.815	0.948	1025.702	.081%	98.285%
50.0	5.024	0.844	1026.546	.072%	98.366%
52.0	4.728	0.817	1027.363	.070%	98.444%
54.0	4.570	0.811	1028.173	.070%	98.522%
56.0	4.460	0.811	1028.984	.070%	98.600%
58.0	4.405	0.819	1029.803	.070%	98.678%
60.0	4.356	0.827	1030.631	.071%	98.757%
62.0	4.301	0.833	1031.464	.072%	98.837%
64.0	4.288	0.845	1032.309	.073%	98.918%
66.0	4.267	0.855	1033.164	.073%	99.000%
68.0	4.267	0.868	1034.031	.074%	99.083%
70.0	4.267	0.879	1034.911	.075%	99.168%
72.0	4.260	0.889	1035.799	.076%	99.253%
74.0	4.253	0.897	1036.696	.077%	99.339%

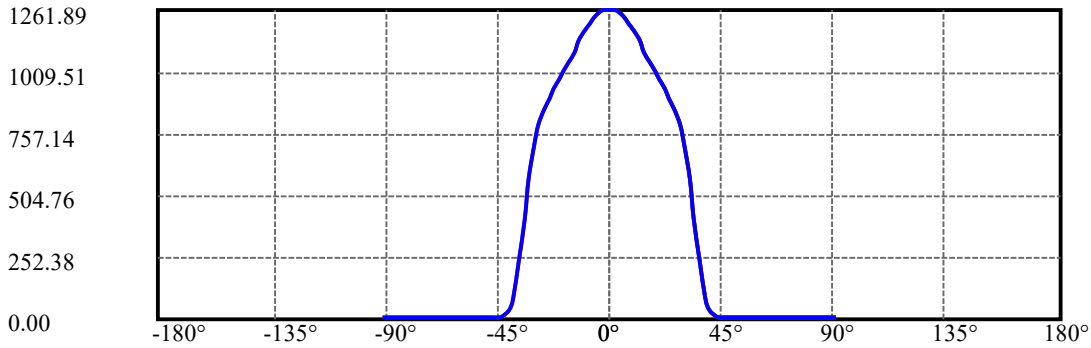
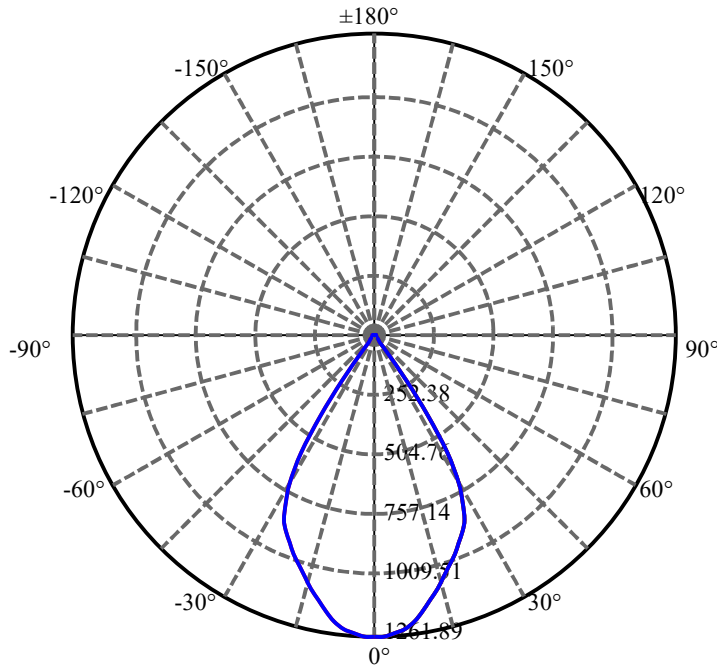
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	4.253	0.905	1037.601	.078%	99.425%
78.0	4.246	0.911	1038.512	.078%	99.513%
80.0	4.239	0.916	1039.428	.079%	99.600%
82.0	4.246	0.922	1040.35	.079%	99.689%
84.0	4.239	0.925	1041.274	.079%	99.777%
86.0	4.260	0.932	1042.206	.080%	99.867%
88.0	4.232	0.928	1043.134	.080%	99.956%
90.0	4.232	0.464	1043.598	.040%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	854.65	73.37%	81.89%
0-40	1018.97	87.48%	97.64%
0-60	1030.63	88.48%	98.76%
0-90	1043.13	89.55%	99.96%
0-120	1043.13	89.55%	99.96%
0-180	1043.60	89.59%	100.00%
60-90	13.33	1.14%	1.28%
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%
0-29.49	834.88	71.67%	80.00%

ZONAL LUMEN SUMMARY

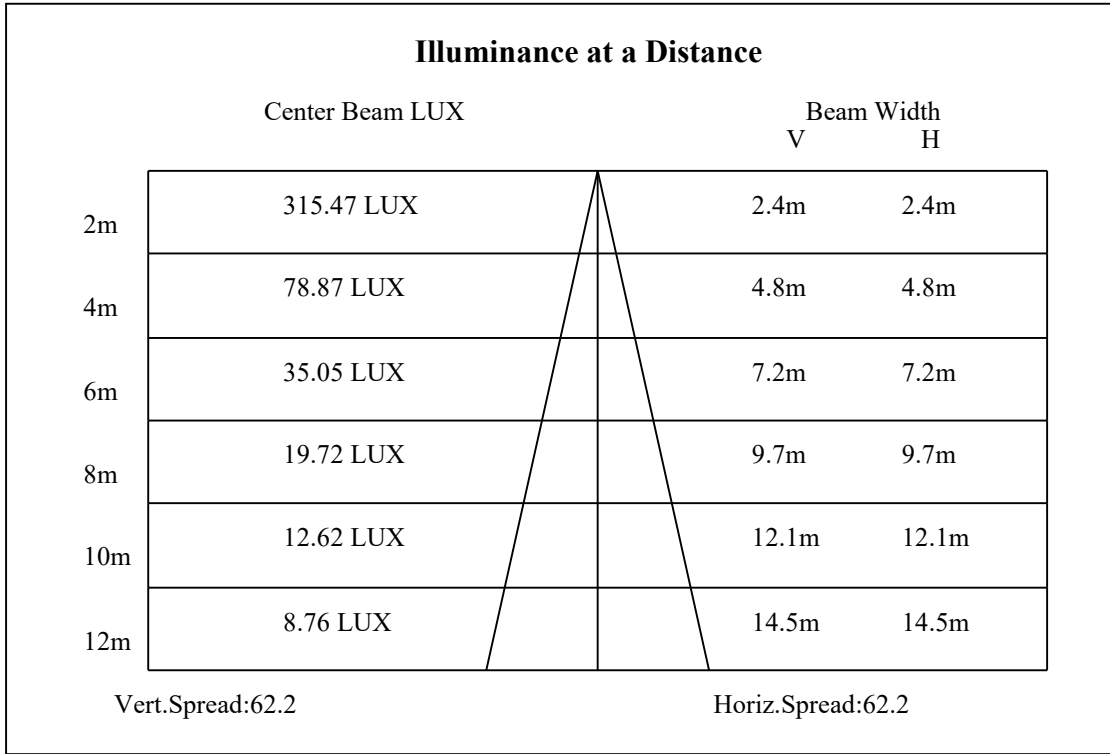
0-10	139.86
10-20	315.26
20-30	399.53
30-40	164.33
40-50	7.57
50-60	4.09
60-70	4.28
70-80	4.52
80-90	3.71
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

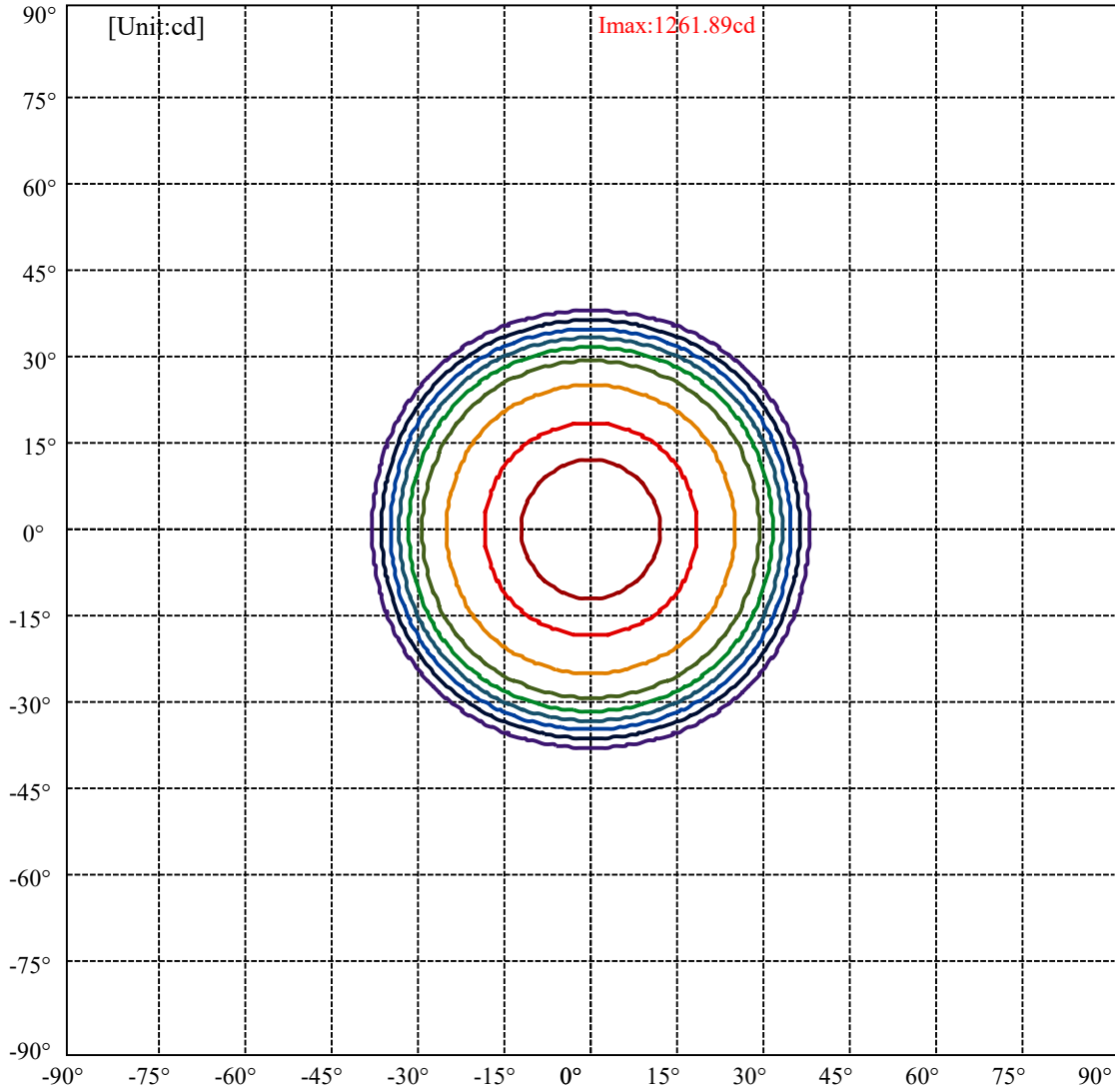


C0(Max): ———
C0/C180: ———
C90/C270: ———

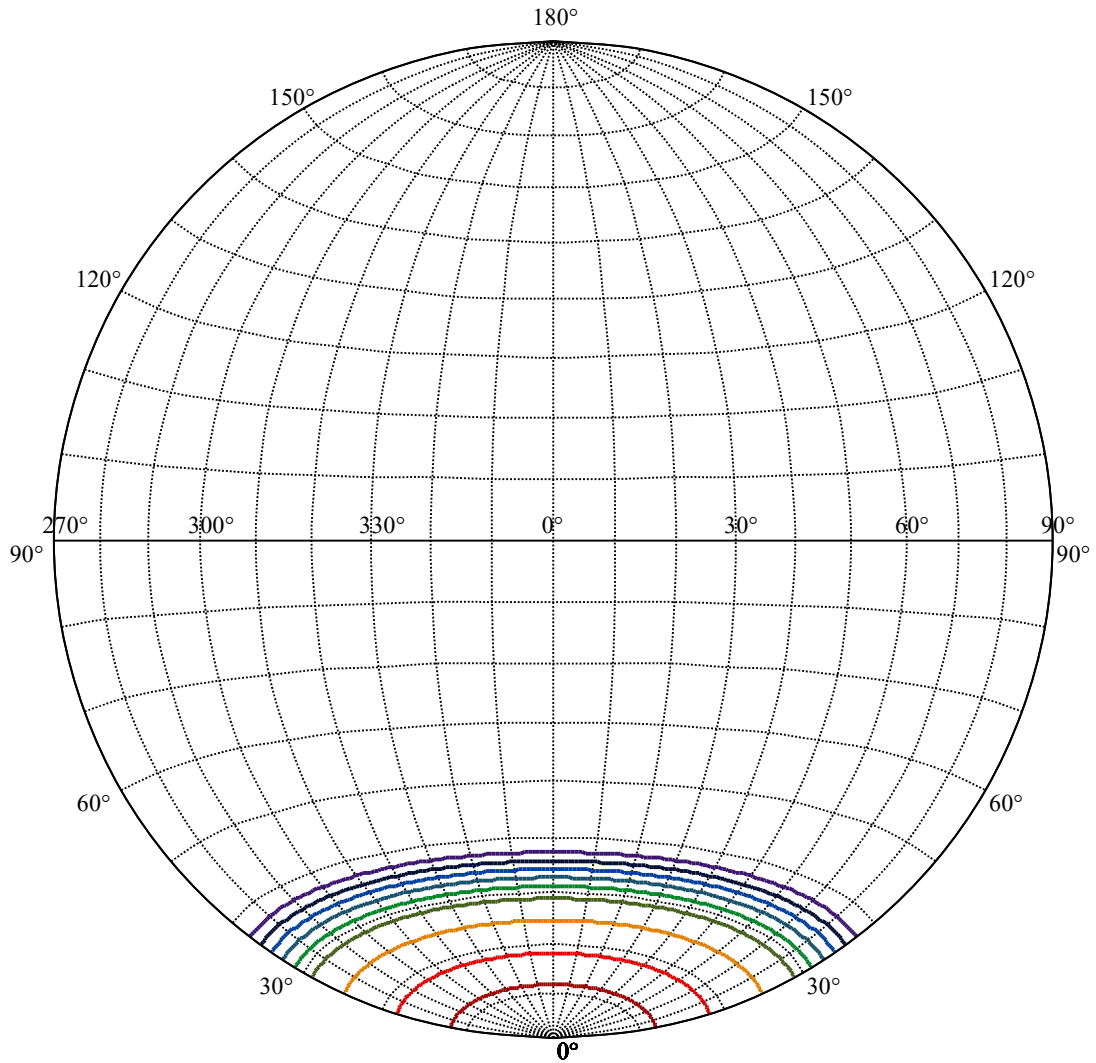
Field angle(10%Imax):C0/180Left:37.5 Right:37.5
:C90/270Left:37.5 Right:37.5

Beam Angle(50%Imax):C0/180Left:31.2 Right:31.2
:C90/270Left:31.2 Right:31.2





(10%Imax) 126.189	—
(20%Imax) 252.379	—
(30%Imax) 378.568	—
(40%Imax) 504.757	—
(50%Imax) 630.946	—
(60%Imax) 757.136	—
(70%Imax) 883.325	—
(80%Imax) 1009.51	—
(90%Imax) 1135.7	—



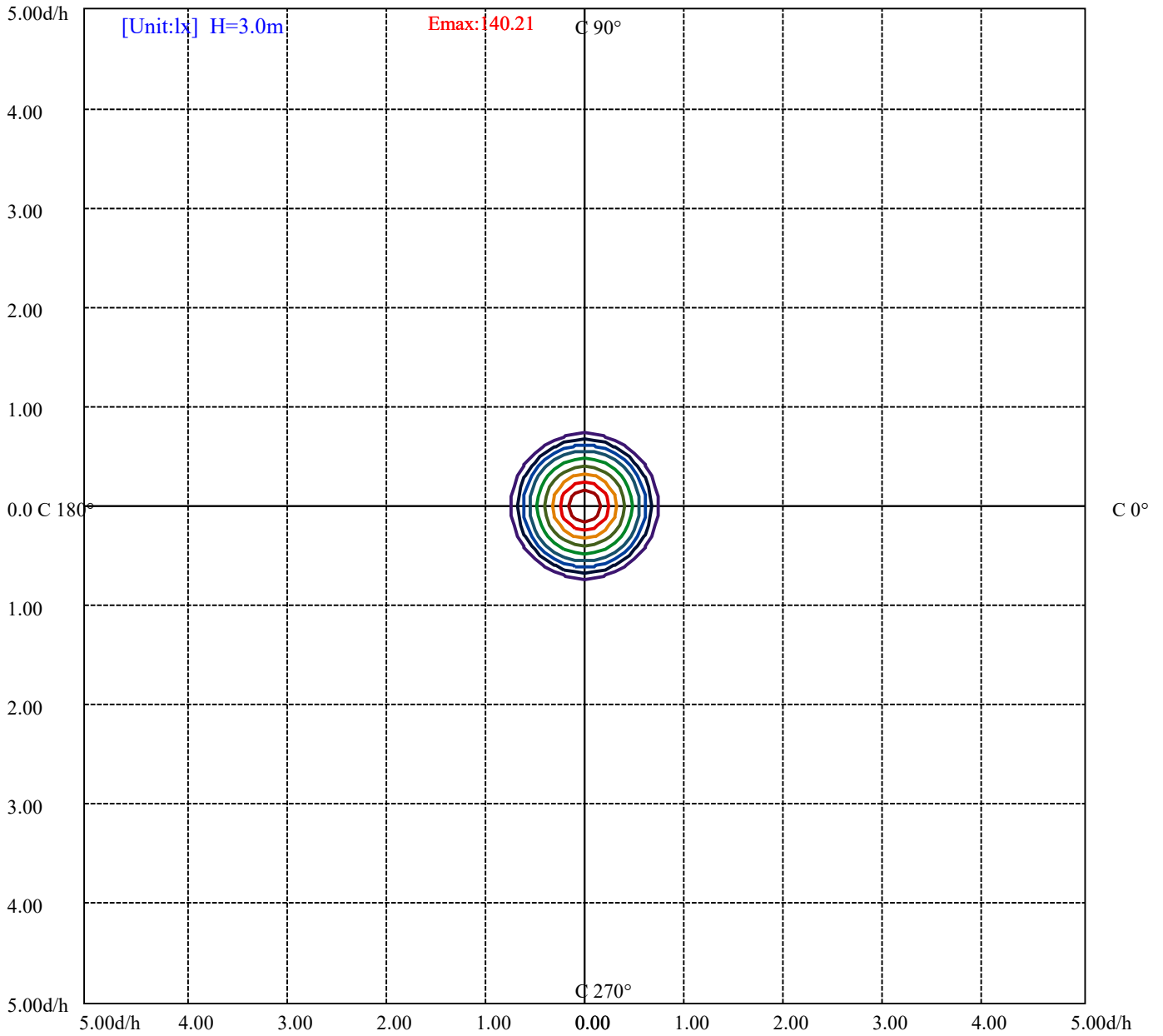
House

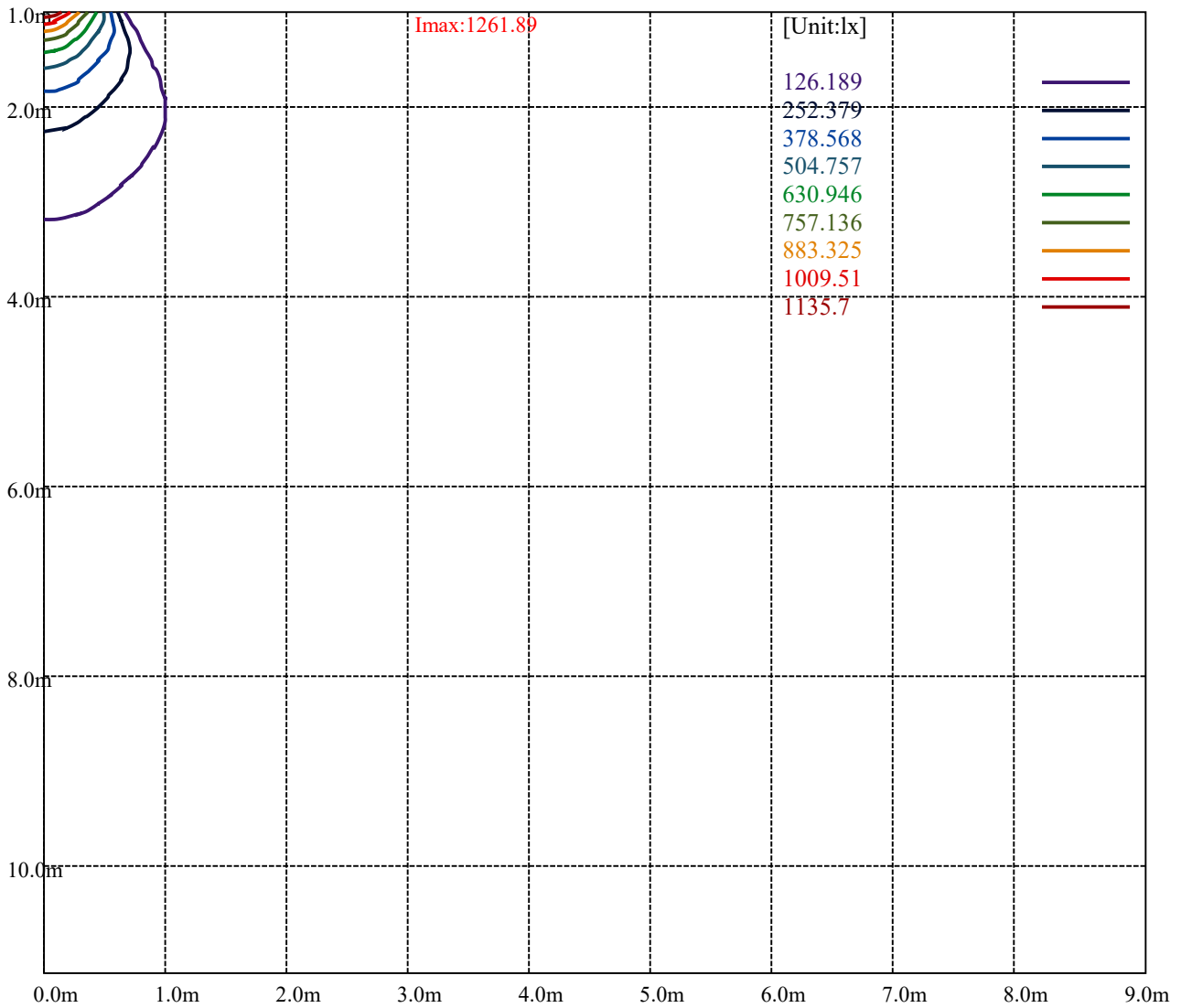
[Unit:cd]

Road

Imax:1261.89

(10%Imax) 126.189	—
(20%Imax) 252.379	—
(30%Imax) 378.568	—
(40%Imax) 504.757	—
(50%Imax) 630.946	—
(60%Imax) 757.136	—
(70%Imax) 883.325	—
(80%Imax) 1009.51	—
(90%Imax) 1135.7	—





Luminance Table

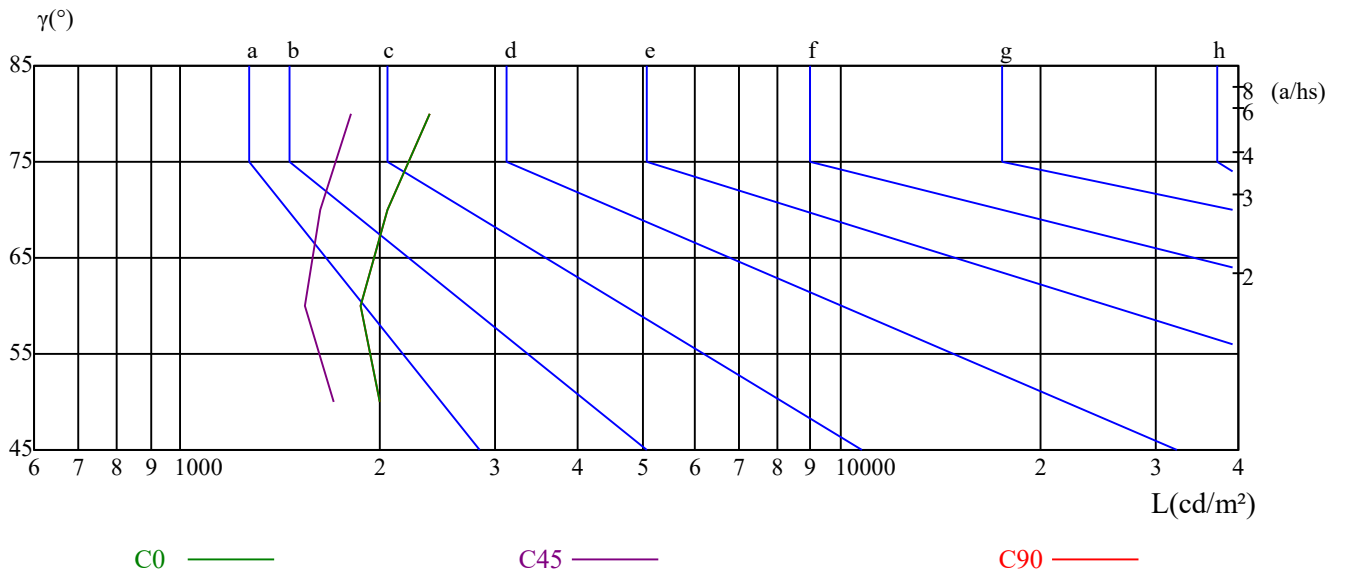
γ	45	50	55	60	65	70	75	80	85
C0	0	2010	0	1873	0	2051	0	2392	0
C45	0	1704	0	1539	0	1623	0	1806	0
C90	0	2010	0	1873	0	2051	0	2392	0

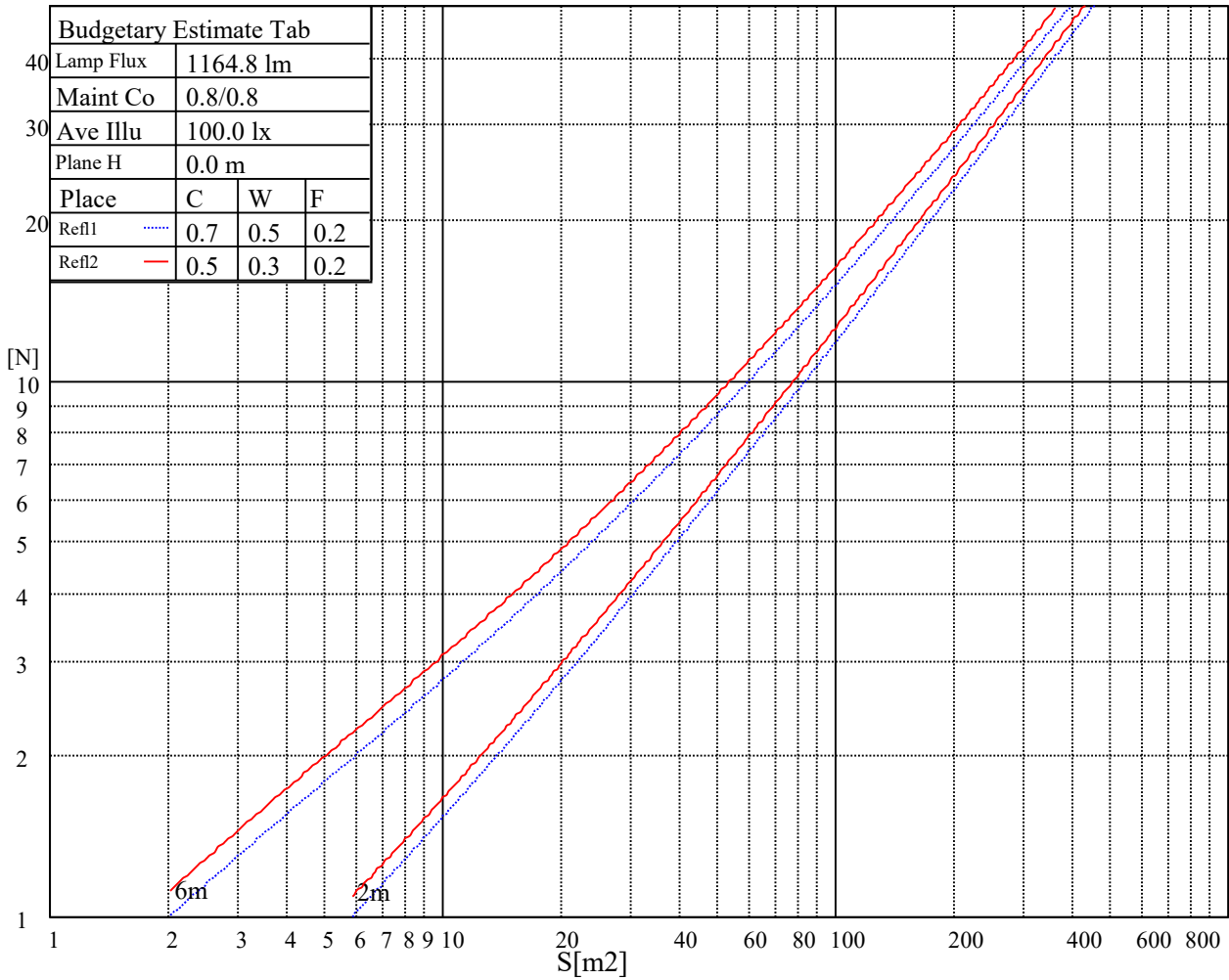
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6406	6406	6406	10376	10376	10376	30884	30884	30884

Glare Table

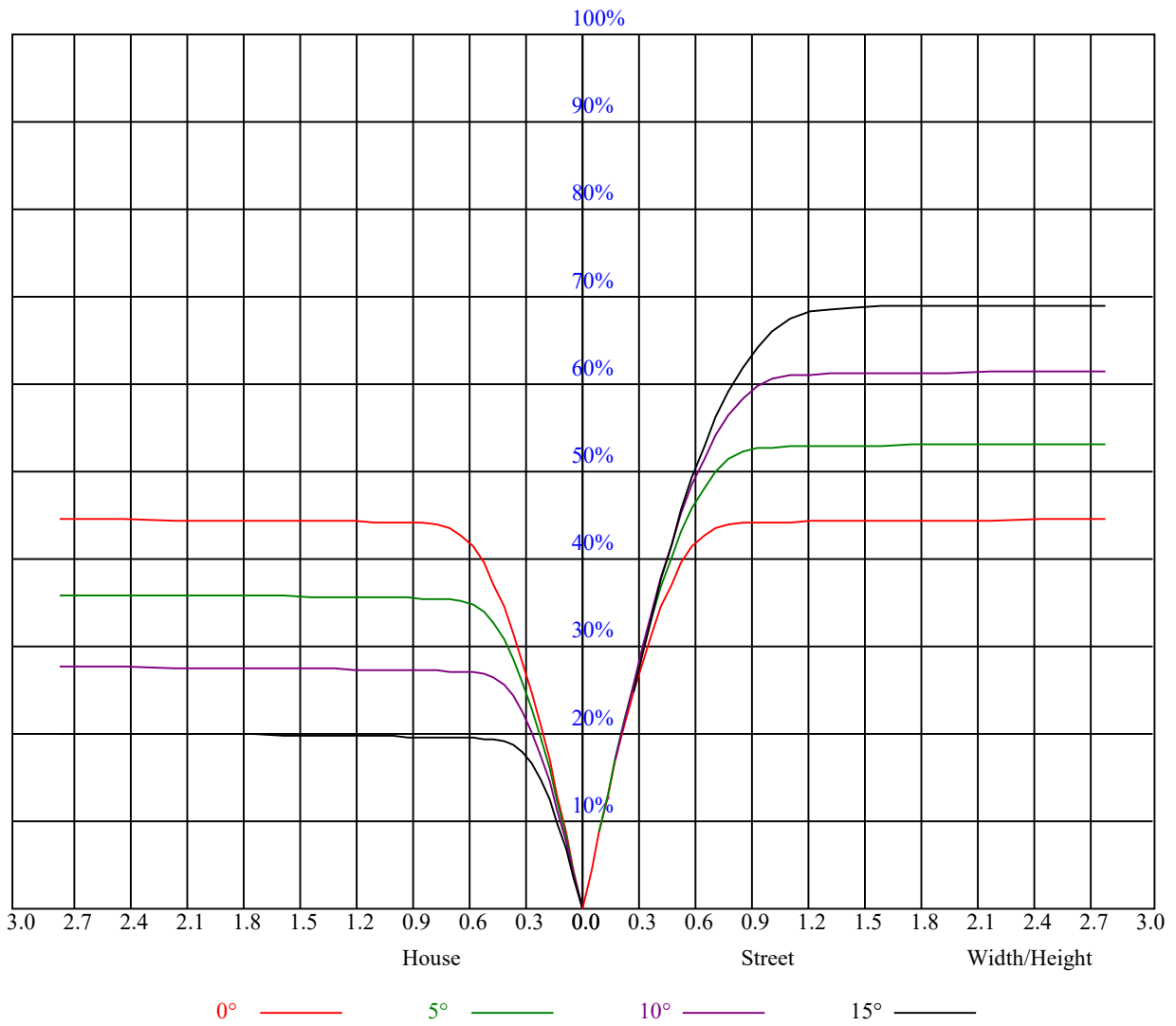
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

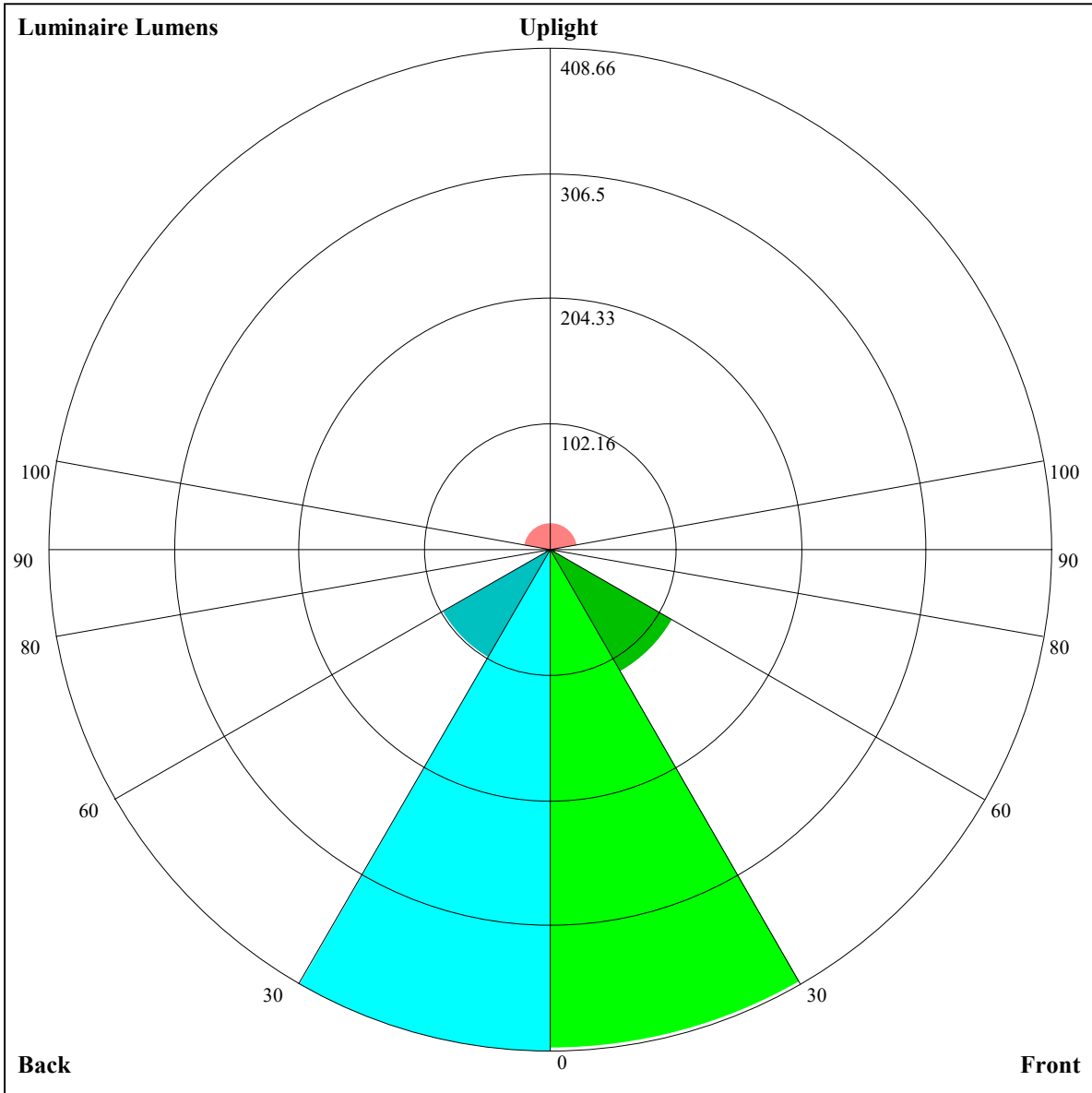
Luminance Limiting Curve





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	1.07	1.07	1.07	1.04	1.04	1.04	1.00	1.00	1.00	0.95	0.95	0.95	0.92	0.92	0.92	0.90
1	0.99	0.97	0.95	0.97	0.96	0.94	0.94	0.92	0.91	0.91	0.89	0.88	0.87	0.86	0.86	0.84
2	0.93	0.90	0.87	0.91	0.88	0.86	0.89	0.86	0.84	0.86	0.84	0.82	0.84	0.82	0.80	0.79
3	0.87	0.83	0.80	0.86	0.82	0.79	0.84	0.81	0.78	0.82	0.79	0.77	0.80	0.77	0.75	0.74
4	0.82	0.78	0.74	0.81	0.77	0.74	0.79	0.76	0.73	0.78	0.74	0.72	0.76	0.73	0.71	0.70
5	0.78	0.73	0.69	0.77	0.72	0.69	0.75	0.71	0.68	0.74	0.70	0.67	0.72	0.69	0.67	0.66
6	0.73	0.68	0.65	0.73	0.68	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.63	0.62
7	0.69	0.64	0.61	0.69	0.64	0.61	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.58
8	0.66	0.61	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.60	0.57	0.63	0.59	0.56	0.55
9	0.62	0.57	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.60	0.57	0.54	0.60	0.56	0.54	0.52
10	0.59	0.55	0.51	0.59	0.54	0.51	0.58	0.54	0.51	0.58	0.54	0.51	0.57	0.53	0.51	0.50





Luminaire Lumens:

FL=406.89,FM=115.51,FH=4.38,FVH=2.31

BL=408.66,BM=101.7,BH=4.38,BVH=2.32

UL=4.62,UH=21.98

BUG Rating:B1-U2-G0

Intensity data(cd)

C/γ(°)	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0
0.0	1256.94	1249.23	1235.47	1212.89	1188.67	1153.43	1112.14	1070.85	1032.31
45.0	1268.50	1265.75	1257.49	1230.51	1205.18	1176.00	1144.07	1109.39	1076.90
90.0	1264.65	1269.05	1260.24	1243.17	1221.15	1190.32	1155.08	1122.60	1084.39
135.0	1257.49	1267.95	1268.50	1260.24	1239.32	1203.53	1163.34	1119.85	1078.00
180.0	1256.94	1261.89	1258.04	1245.38	1220.05	1178.76	1140.77	1094.30	1054.50
225.0	1268.50	1271.80	1265.20	1251.98	1225.00	1186.47	1145.17	1096.89	1060.44
270.0	1264.65	1259.69	1246.48	1229.96	1207.39	1165.54	1124.25	1081.86	1040.02
315.0	1257.49	1245.93	1225.00	1195.83	1166.09	1125.90	1080.65	1041.34	1003.62
360.0	1256.94	1249.23	1235.47	1212.89	1188.67	1153.43	1112.14	1070.85	1032.31

C/γ(°)	18.0	20.0	22.0	24.0	26.0	28.0	30.0	32.0	34.0
0.0	992.12	955.23	921.09	885.31	856.13	810.98	751.52	639.20	492.20
45.0	1042.77	1005.88	971.19	935.96	898.52	853.37	777.40	657.37	506.52
90.0	1048.38	1015.90	980.83	940.47	896.70	832.01	731.31	604.13	433.84
135.0	1038.36	1000.37	965.14	927.15	880.90	812.08	727.85	583.05	412.92
180.0	1012.76	970.97	930.73	889.00	836.42	756.53	662.22	503.71	327.53
225.0	1014.58	972.57	928.25	883.55	831.46	763.19	653.90	505.69	333.42
270.0	1002.03	960.73	923.30	880.35	833.55	768.59	686.00	547.81	374.38
315.0	962.00	927.04	891.64	855.19	821.28	765.89	690.41	550.95	388.64
360.0	992.12	955.23	921.09	885.31	856.13	810.98	751.52	639.20	492.20

C/γ(°)	36.0	38.0	40.0	42.0	44.0	46.0	48.0	50.0	52.0
0.0	305.56	133.40	48.17	27.80	14.20	9.14	6.55	5.23	4.79
45.0	312.17	123.44	51.97	26.37	13.87	9.30	6.61	5.34	4.90
90.0	227.99	93.87	38.76	19.60	11.51	7.87	5.89	5.12	4.73
135.0	287.39	81.54	36.94	17.95	10.68	7.32	5.78	5.01	4.73
180.0	148.76	51.48	27.14	14.20	9.03	6.44	5.34	4.84	4.62
225.0	141.11	53.35	27.03	14.37	9.69	6.66	5.23	4.84	4.62
270.0	282.44	66.67	35.62	16.79	10.85	7.27	5.56	4.90	4.73
315.0	207.51	71.52	33.80	18.06	10.90	7.10	5.56	4.90	4.68
360.0	305.56	133.40	48.17	27.80	14.20	9.14	6.55	5.23	4.79

C/γ(°)	54.0	56.0	58.0	60.0	62.0	64.0	66.0	68.0	70.0
0.0	4.62	4.46	4.40	4.35	4.29	4.24	4.24	4.24	4.24
45.0	4.68	4.51	4.46	4.40	4.35	4.35	4.29	4.29	4.29
90.0	4.57	4.46	4.40	4.35	4.29	4.29	4.29	4.29	4.24
135.0	4.57	4.46	4.40	4.35	4.29	4.29	4.29	4.29	4.29
180.0	4.51	4.40	4.35	4.29	4.29	4.24	4.24	4.24	4.24
225.0	4.51	4.46	4.40	4.35	4.29	4.29	4.24	4.24	4.29
270.0	4.57	4.46	4.40	4.40	4.29	4.29	4.29	4.29	4.29
315.0	4.51	4.46	4.40	4.35	4.29	4.29	4.24	4.24	4.24
360.0	4.62	4.46	4.40	4.35	4.29	4.24	4.24	4.24	4.24

C/γ(°)	72.0	74.0	76.0	78.0	80.0	82.0	84.0	86.0	88.0
0.0	4.24	4.24	4.18	4.24	4.24	4.24	4.24	4.24	4.18
45.0	4.24	4.24	4.24	4.29	4.24	4.24	4.24	4.24	4.24
90.0	4.29	4.24	4.29	4.24	4.24	4.24	4.24	4.24	4.24
135.0	4.24	4.29	4.29	4.24	4.24	4.24	4.24	4.35	4.24
180.0	4.24	4.24	4.24	4.24	4.24	4.24	4.18	4.29	4.24
225.0	4.29	4.29	4.29	4.24	4.24	4.29	4.29	4.24	4.24
270.0	4.29	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24
315.0	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.24
360.0	4.24	4.24	4.18	4.24	4.24	4.24	4.24	4.24	4.18

Intensity data(cd)

C/γ(°)	90.0
0.0	4.24
45.0	4.24
90.0	4.24
135.0	4.18
180.0	4.24
225.0	4.24
270.0	4.24
315.0	4.24
360.0	4.24