



ZhongShan HaoXiang Lighting CO.,LTD
Http://www.diluce.cc
Email:haoxiang88@vip.sina.com
Tel:+86-760-22253325 Fax:+86-760-22287069
Address:12 Wanfu Road Xinglong industrial area,Jiu Zhou ji,Xiaolan town,Zhongshan City,China.

HX-DA114S

LumCAT: HX-DA114S	Luminaire: HK-70@19-15-D6-20-1g-1恒坤透镜
Report No:	Voltage(V): 220.500
Test No:	Current(A): 0.067
LampCAT: T120340H5	Power (W): 14.100
Lamp flux(lm): 1409.0	PF: 0.956
Number of Lamps: 1	Ballast type: LS-16-350LI1
Length(mm): -450	Width(mm): -450
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1203.96
Efficiency(%): 85.45%
Lumens(lm)/Power(W): 85.39
Central intensity(cd): 11595.930
Maximum intensity(cd): 12378.150
Angle of maximum intensity: C=90.0 γ =3.0
Beam Angle(50%Imax): [H]Left=7.1 Right=7.3
[V]Left=7.9 Right=7.4
Field angle(10%Imax): [H]Left=14.7 Right=14.6
[V]Left=14.4 Right=15.8
Maximum s/h: C0_180=0.30 C90_270=0.34
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 85.45%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.528%

Equipment: GMS-1980
Temperature(°C): 25.0

Date: 2022-11-7
Humidity(%): 65.3%

Operator: Lxl
Distance(m): 7.27

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	11362.490	.000	.000	.000%	.000%
1.0	11302.900	10.845	10.845	.770%	.770%
2.0	10920.200	31.897	42.742	2.264%	3.033%
3.0	10258.660	50.653	93.395	3.595%	6.628%
4.0	9374.520	65.719	159.113	4.664%	11.293%
5.0	8404.140	76.483	235.596	5.428%	16.721%
6.0	7409.757	83.106	318.702	5.898%	22.619%
7.0	6333.496	85.304	404.006	6.054%	28.673%
8.0	5343.120	83.567	487.574	5.931%	34.604%
9.0	4407.139	79.021	566.594	5.608%	40.213%
10.0	3657.156	72.979	639.573	5.179%	45.392%
11.0	2903.386	65.553	705.126	4.652%	50.044%
12.0	2294.741	56.823	761.949	4.033%	54.077%
13.0	1884.404	49.596	811.545	3.520%	57.597%
14.0	1496.896	43.280	854.826	3.072%	60.669%
15.0	1198.801	37.008	891.833	2.627%	63.295%
16.0	963.033	31.677	923.510	2.248%	65.544%
17.0	774.070	27.051	950.562	1.920%	67.464%
18.0	646.105	23.416	973.977	1.662%	69.125%
19.0	531.150	20.482	994.459	1.454%	70.579%
20.0	442.137	17.814	1012.273	1.264%	71.843%
21.0	370.503	15.604	1027.877	1.107%	72.951%
22.0	309.573	13.666	1041.543	.970%	73.921%
23.0	265.374	12.064	1053.607	.856%	74.777%
24.0	223.458	10.688	1064.295	.759%	75.535%
25.0	193.521	9.481	1073.776	.673%	76.208%
26.0	166.588	8.500	1082.277	.603%	76.812%
27.0	145.200	7.628	1089.905	.541%	77.353%
28.0	125.675	6.858	1096.763	.487%	77.840%
29.0	110.181	6.171	1102.933	.438%	78.278%
30.0	97.725	5.613	1108.547	.398%	78.676%
31.0	86.873	5.137	1113.684	.365%	79.041%
32.0	77.399	4.706	1118.390	.334%	79.375%
33.0	69.559	4.329	1122.719	.307%	79.682%
34.0	62.256	3.989	1126.708	.283%	79.965%
35.0	56.266	3.681	1130.389	.261%	80.226%
36.0	51.038	3.417	1133.806	.242%	80.469%
37.0	46.489	3.181	1136.987	.226%	80.695%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	42.754	2.979	1139.966	.211%	80.906%
39.0	39.516	2.808	1142.774	.199%	81.105%
40.0	36.993	2.668	1145.442	.189%	81.295%
41.0	35.024	2.564	1148.006	.182%	81.477%
42.0	33.328	2.483	1150.490	.176%	81.653%
43.0	32.024	2.421	1152.911	.172%	81.825%
44.0	30.945	2.377	1155.287	.169%	81.993%
45.0	29.990	2.342	1157.629	.166%	82.160%
46.0	29.056	2.309	1159.938	.164%	82.324%
47.0	28.087	2.273	1162.211	.161%	82.485%
48.0	27.109	2.231	1164.442	.158%	82.643%
49.0	26.026	2.182	1166.624	.155%	82.798%
50.0	24.951	2.125	1168.750	.151%	82.949%
51.0	23.841	2.064	1170.814	.147%	83.095%
52.0	22.595	1.993	1172.807	.141%	83.237%
53.0	21.524	1.919	1174.726	.136%	83.373%
54.0	20.569	1.855	1176.581	.132%	83.505%
55.0	19.472	1.787	1178.368	.127%	83.632%
56.0	18.380	1.710	1180.079	.121%	83.753%
57.0	17.446	1.638	1181.717	.116%	83.869%
58.0	16.587	1.574	1183.291	.112%	83.981%
59.0	15.640	1.507	1184.797	.107%	84.088%
60.0	14.772	1.437	1186.234	.102%	84.190%
61.0	13.900	1.368	1187.602	.097%	84.287%
62.0	13.077	1.300	1188.902	.092%	84.379%
63.0	12.293	1.234	1190.136	.088%	84.467%
64.0	11.553	1.170	1191.306	.083%	84.550%
65.0	10.782	1.105	1192.412	.078%	84.628%
66.0	10.139	1.044	1193.455	.074%	84.702%
67.0	9.390	.982	1194.437	.070%	84.772%
68.0	8.470	.905	1195.342	.064%	84.836%
69.0	7.598	.820	1196.162	.058%	84.894%
70.0	6.796	.739	1196.901	.052%	84.947%
71.0	6.082	.666	1197.567	.047%	84.994%
72.0	5.343	.594	1198.161	.042%	85.036%
73.0	4.581	.519	1198.680	.037%	85.073%
74.0	3.973	.450	1199.129	.032%	85.105%
75.0	3.629	.402	1199.531	.029%	85.134%

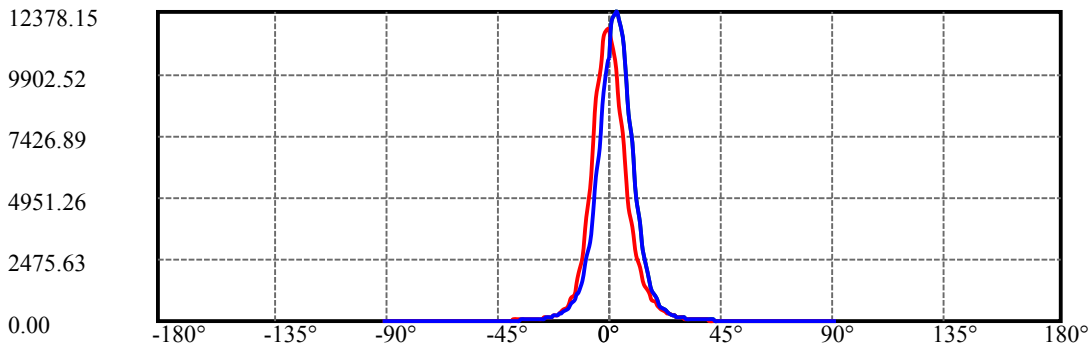
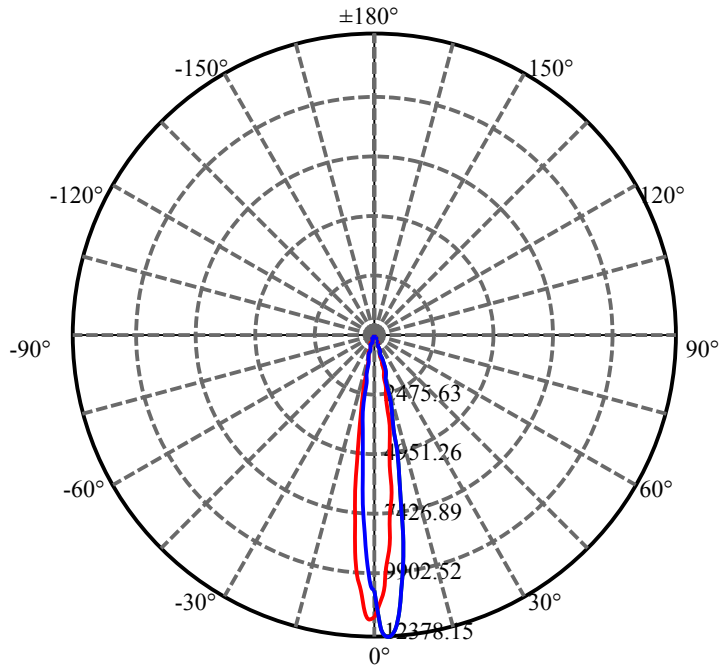
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	3.361	.371	1199.902	.026%	85.160%
77.0	3.035	.341	1200.243	.024%	85.184%
78.0	2.770	.311	1200.554	.022%	85.206%
79.0	2.713	.295	1200.849	.021%	85.227%
80.0	2.634	.288	1201.137	.020%	85.247%
81.0	2.607	.283	1201.420	.020%	85.268%
82.0	2.612	.283	1201.703	.020%	85.288%
83.0	2.607	.284	1201.987	.020%	85.308%
84.0	2.590	.283	1202.270	.020%	85.328%
85.0	2.590	.283	1202.553	.020%	85.348%
86.0	2.581	.283	1202.835	.020%	85.368%
87.0	2.581	.283	1203.118	.020%	85.388%
88.0	2.559	.282	1203.399	.020%	85.408%
89.0	2.572	.281	1203.681	.020%	85.428%
90.0	2.568	.282	1203.963	.020%	85.448%

ZONAL LUMEN SUMMARY

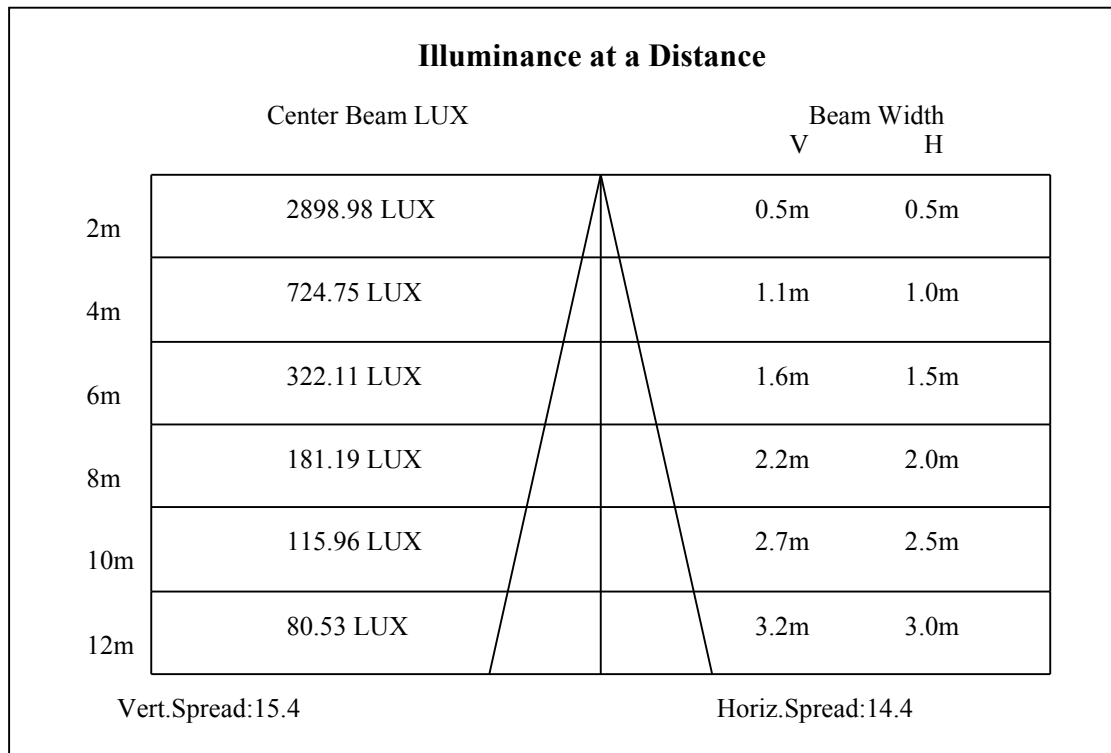
Zone	Lumens	%Lamp	%Fixt
0-30	1108.55	78.68%	92.07%
0-40	1145.44	81.29%	95.14%
0-60	1186.23	84.19%	98.53%
0-90	1203.68	85.43%	99.98%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-180	1203.96	85.45%	100.00%

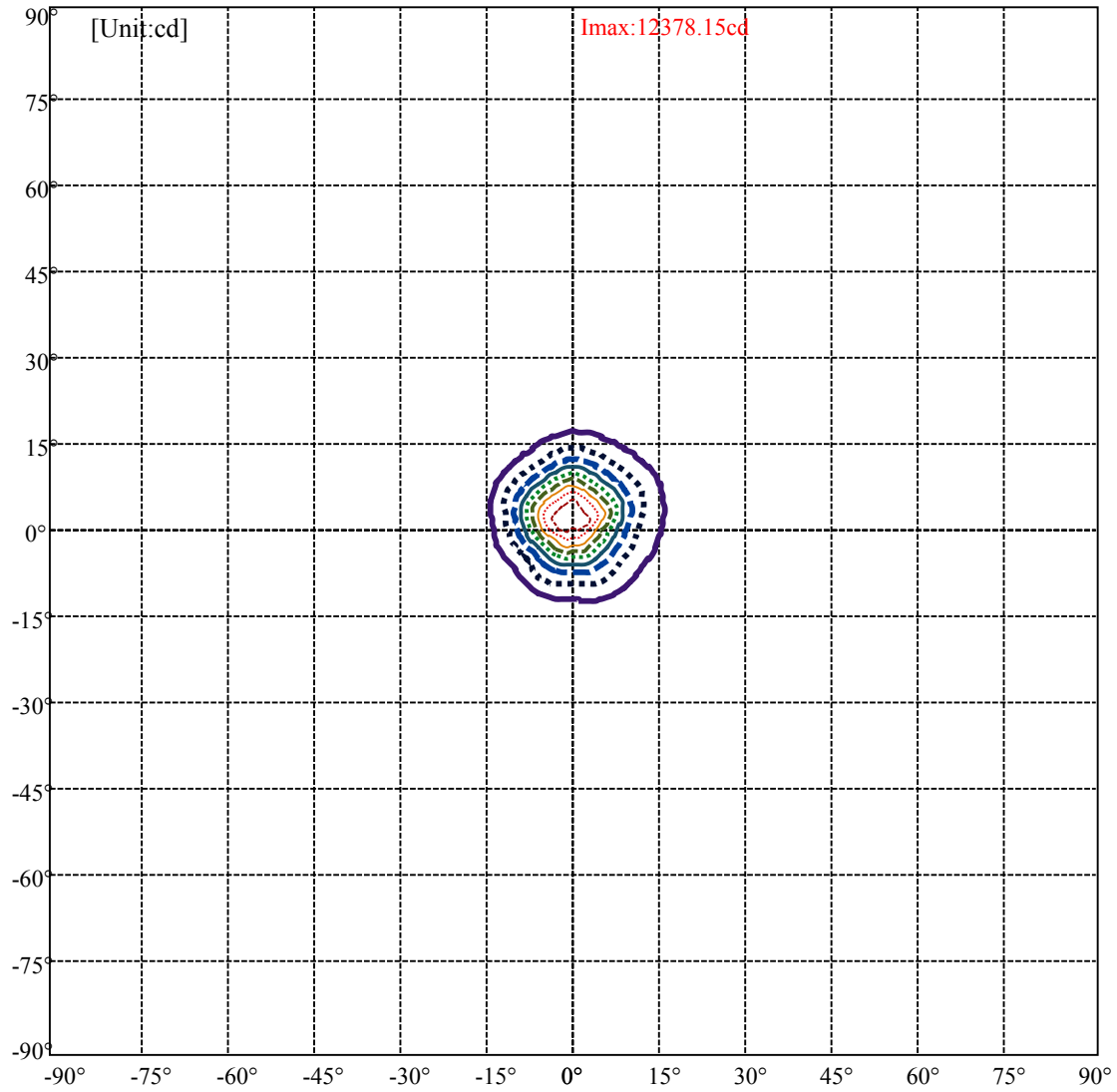
ZONAL LUMEN SUMMARY

0-10	639.57
10-20	372.70
20-30	96.27
30-40	36.90
40-50	23.31
50-60	17.48
60-70	10.67
70-80	4.24
80-90	2.54
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

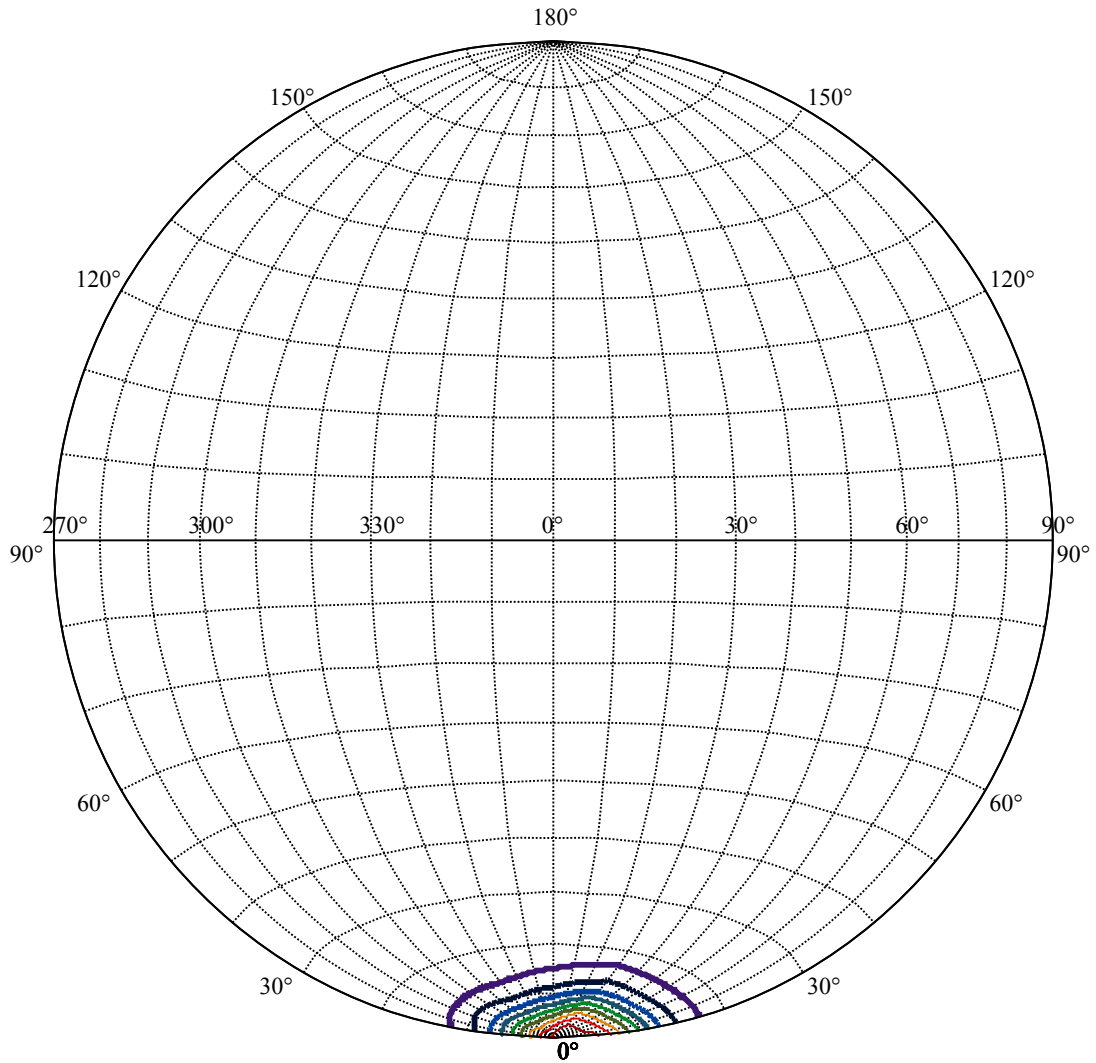


C90(Max): —
C0/C180: —
C90/C270: —





(10%Imax) 1237.81	———
(20%Imax) 2475.63
(30%Imax) 3713.44	- - - - -
(40%Imax) 4951.26	———
(50%Imax) 6189.07
(60%Imax) 7426.89	- - - - -
(70%Imax) 8664.71	———
(80%Imax) 9902.52
(90%Imax) 11140.3	- - - - -

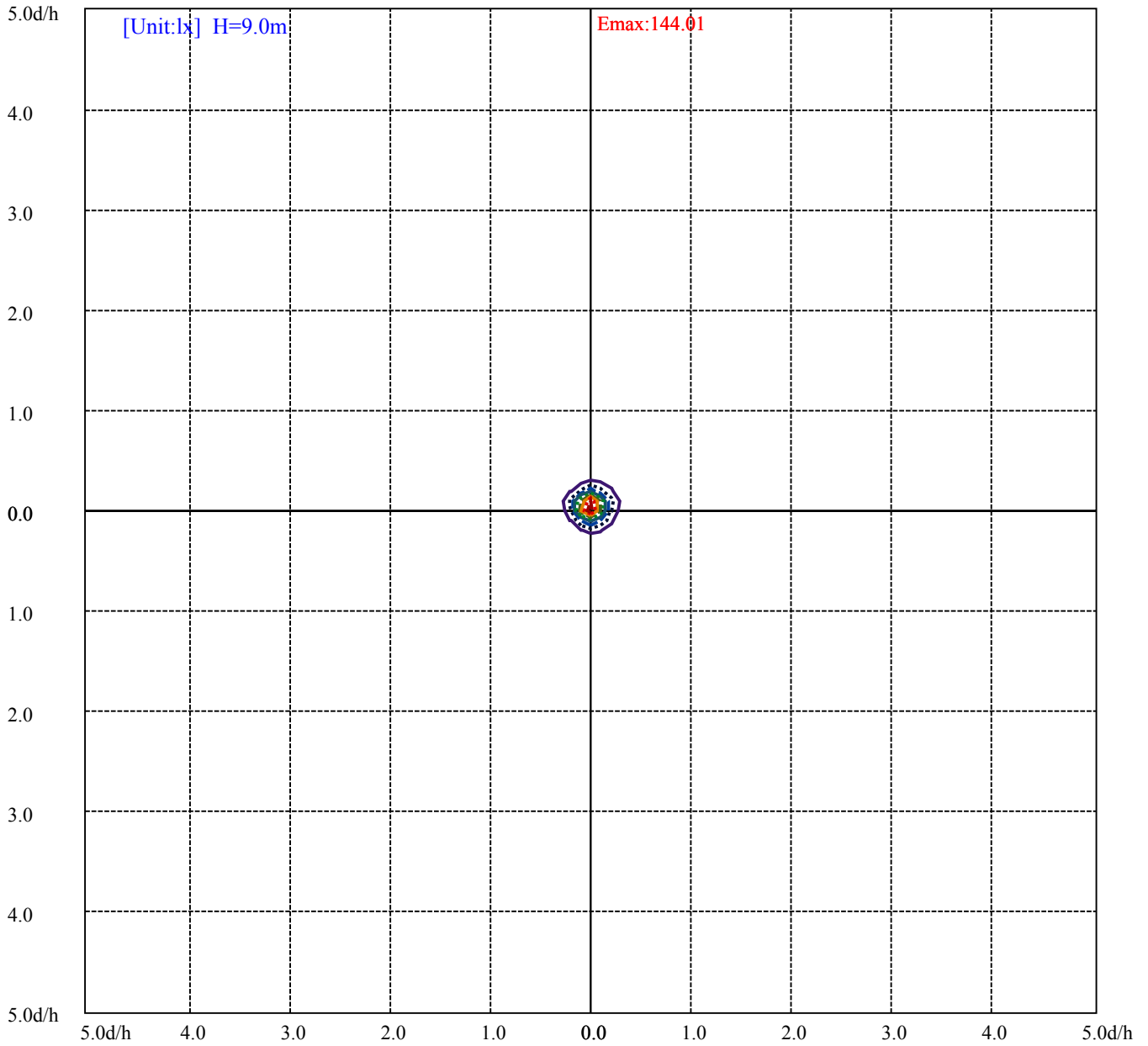


House

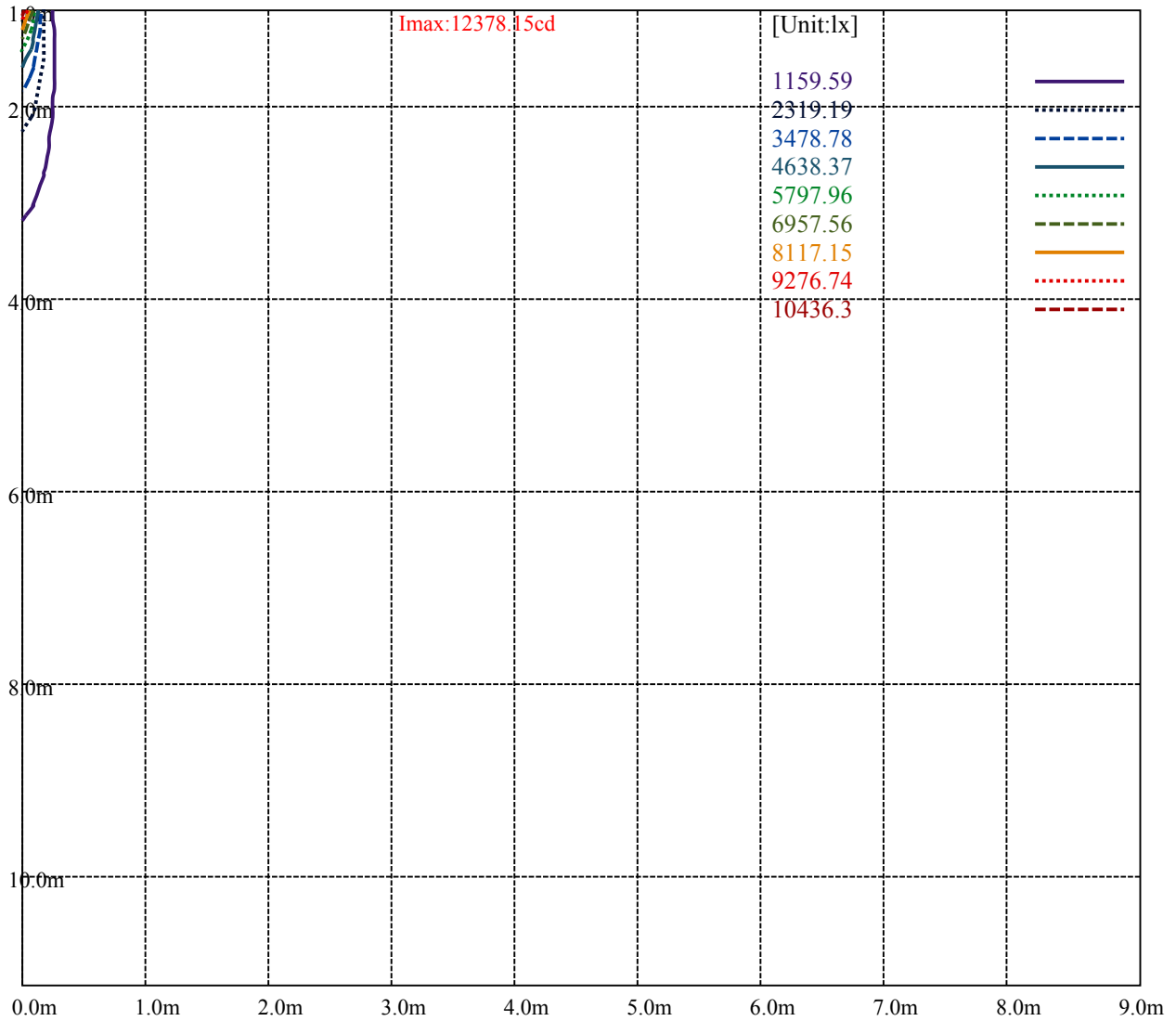
Road

Imax:12378.15cd

(10%Imax) 1237.81	—
(20%Imax) 2475.63	·····
(30%Imax) 3713.44	- - - - -
(40%Imax) 4951.26	—
(50%Imax) 6189.07	·····
(60%Imax) 7426.89	- - - - -
(70%Imax) 8664.71	—
(80%Imax) 9902.52	·····
(90%Imax) 11140.3	- - - - -



- (10%Emax) 14.40086
- (20%Emax) 28.80173
- (30%Emax) 43.20259
- (40%Emax) 57.60345
- (50%Emax) 72.00433
- (60%Emax) 86.40518
- (70%Emax) 100.8061
- (80%Emax) 115.2069
- (90%Emax) 129.6074

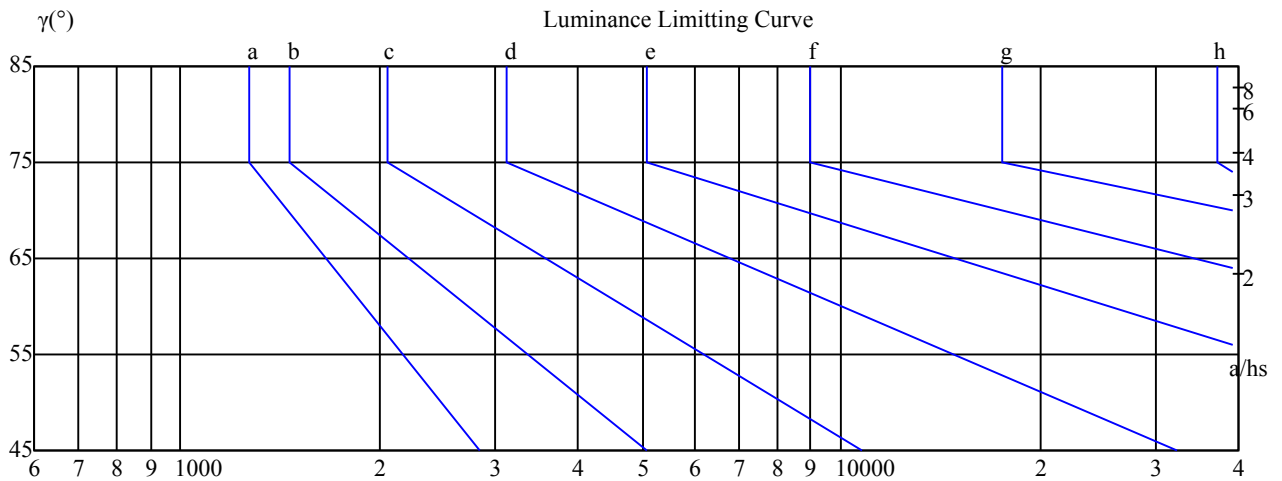


Luminance Table

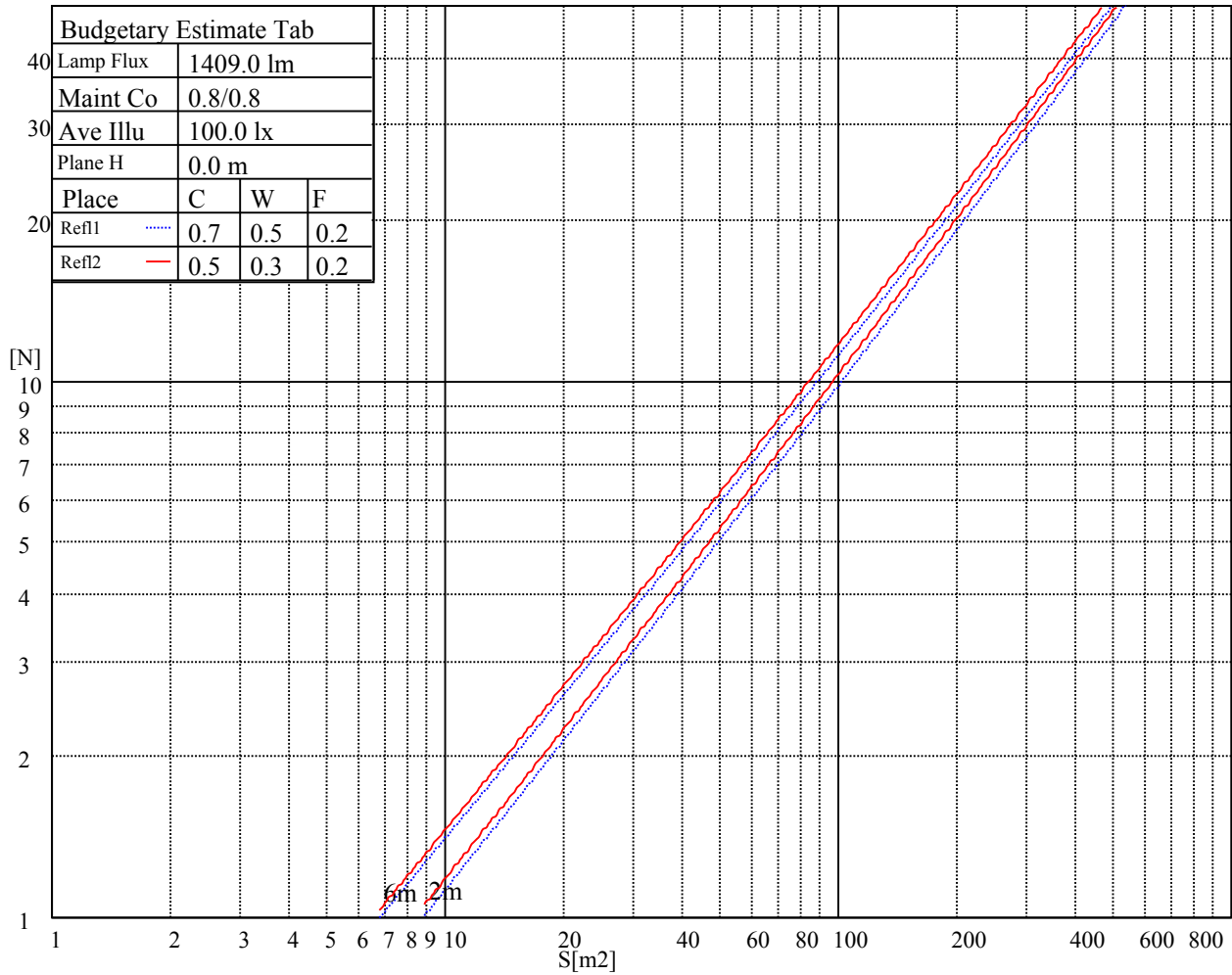
γ	45	50	55	60	65	70	75	80	85
C0	271	257	231	211	175	146	91	101	198
C45	0	0	0	0	0	0	0	0	0
C90	278	258	252	247	214	182	155	100	187

Glare Table

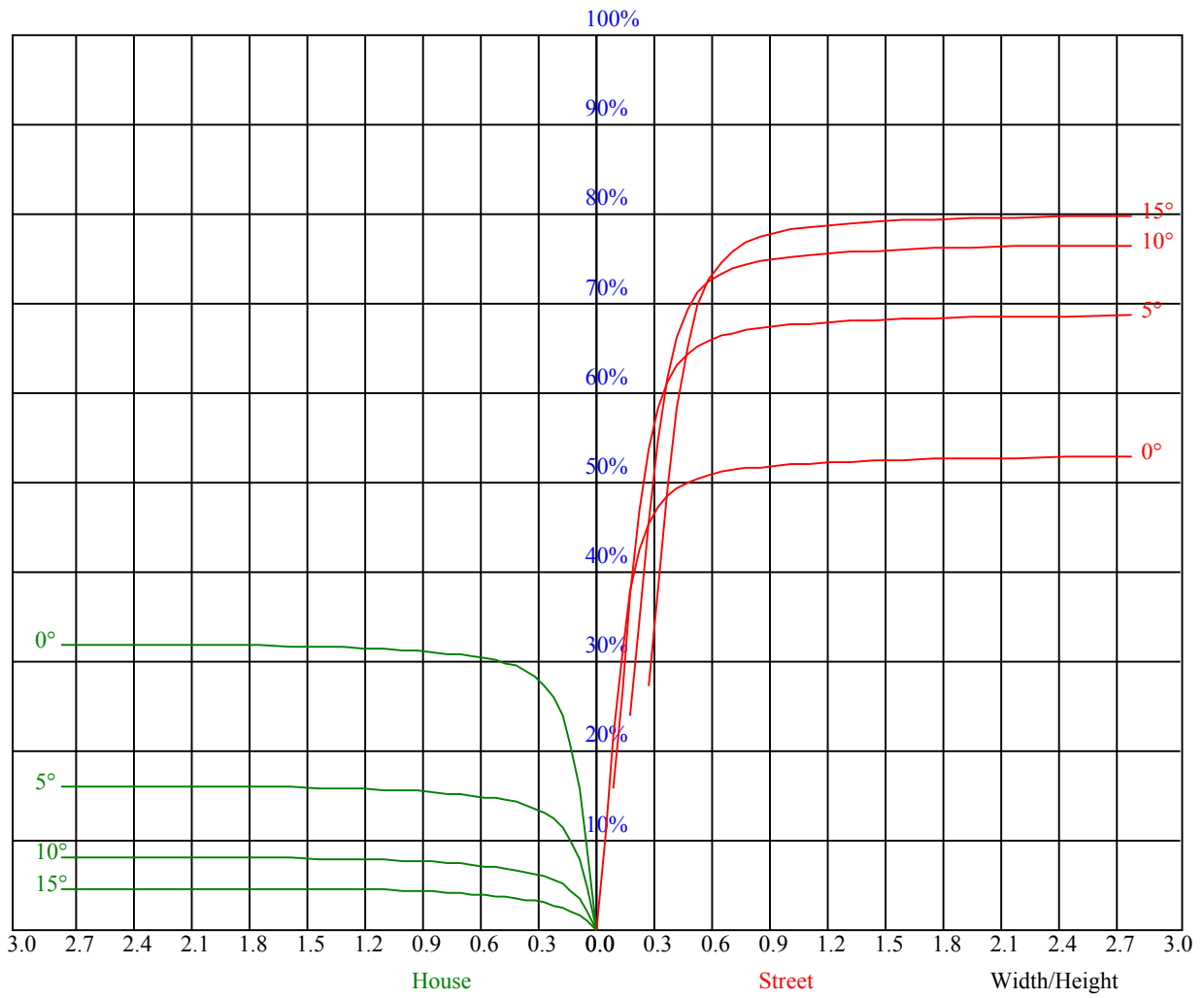
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



Illuminatin assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	-0.9	-0.4	-0.7	-0.2	0.0	-0.6	0.0	-0.4	0.1	0.3
	3H	-0.1	0.4	0.2	0.7	0.9	0.4	0.9	0.7	1.2	1.4
	4H	-0.1	0.4	0.3	0.7	1.0	0.6	1.1	1.0	1.4	1.7
	6H	0.1	0.6	0.5	0.9	1.2	0.8	1.3	1.2	1.6	1.9
	8H	0.3	0.7	0.6	1.0	1.3	0.9	1.4	1.3	1.7	2.0
	12H	0.3	0.6	0.7	1.0	1.4	0.9	1.2	1.3	1.6	2.0
4H	2H	-0.6	-0.2	-0.3	0.1	0.4	-0.4	0.1	0.0	0.3	0.7
	3H	0.3	0.6	0.7	1.0	1.3	0.7	1.1	1.1	1.4	1.8
	4H	0.5	0.8	0.9	1.2	1.6	1.1	1.5	1.5	1.8	2.2
	6H	0.7	1.1	1.1	1.4	1.8	1.4	1.7	1.8	2.1	2.5
	8H	0.7	0.9	1.2	1.4	1.9	1.3	1.5	1.8	2.0	2.5
	12H	1.0	1.2	1.5	1.7	2.2	1.6	1.8	2.1	2.2	2.7
8H	4H	0.4	0.6	0.9	1.1	1.6	1.0	1.2	1.5	1.7	2.2
	6H	0.7	0.9	1.2	1.4	1.9	1.4	1.6	1.9	2.0	2.5
	8H	1.0	1.2	1.5	1.7	2.2	1.6	1.8	2.1	2.3	2.8
	12H	1.5	1.7	2.0	2.2	2.7	2.0	2.2	2.5	2.7	3.2
12H	4H	0.4	0.6	0.9	1.1	1.6	1.0	1.2	1.5	1.7	2.2
	6H	0.8	1.0	1.3	1.4	1.9	1.4	1.6	1.9	2.1	2.6
	8H	1.1	1.3	1.6	1.8	2.3	1.7	1.9	2.2	2.4	2.9
Variation with the observer position at spacings:											
S = 1.0H		1.0/-0.8					0.9/-0.7				
S = 1.5H		1.9/-1.5					1.7/-0.9				
S = 2.0H		3.7/-1.9					3.4/-1.5				
Standard tables:		BK3					BK3				
Uncorrected UGR		-17.2					-16.8				
According 1000lm											



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 RHOF=20 CU															
0	1.02	1.02	1.02	0.99	0.99	0.99	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	0.87	0.85
1	0.97	0.95	0.94	0.95	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.85	0.85	0.84	0.83
2	0.92	0.90	0.88	0.91	0.89	0.87	0.88	0.86	0.85	0.86	0.84	0.83	0.84	0.82	0.81	0.80
3	0.89	0.86	0.83	0.88	0.85	0.83	0.86	0.83	0.82	0.84	0.82	0.80	0.82	0.80	0.79	0.78
4	0.86	0.82	0.80	0.85	0.82	0.80	0.83	0.81	0.79	0.82	0.80	0.78	0.80	0.78	0.77	0.76
5	0.83	0.80	0.77	0.82	0.79	0.77	0.81	0.78	0.76	0.80	0.78	0.76	0.79	0.77	0.75	0.74
6	0.81	0.77	0.75	0.80	0.77	0.75	0.79	0.76	0.74	0.78	0.76	0.74	0.77	0.75	0.73	0.73
7	0.79	0.75	0.73	0.78	0.75	0.73	0.77	0.75	0.73	0.76	0.74	0.72	0.76	0.74	0.72	0.71
8	0.77	0.74	0.71	0.76	0.73	0.71	0.76	0.73	0.71	0.75	0.73	0.71	0.74	0.72	0.71	0.70
9	0.75	0.72	0.70	0.75	0.72	0.70	0.74	0.72	0.70	0.74	0.71	0.69	0.73	0.71	0.69	0.69
10	0.74	0.71	0.69	0.73	0.70	0.69	0.73	0.70	0.68	0.72	0.70	0.68	0.72	0.70	0.68	0.67



Intensity data(cd)

Page: 17 Total:19

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	11595.93	11188.96	10470.16	9656.23	8615.02	7499.83	6500.91	5433.28	4503.07
30.0	11611.78	11950.04	11897.19	11537.79	10850.70	9946.92	9048.42	7927.94	6892.02
60.0	11717.49	12103.31	12150.88	11807.34	10489.19	10384.01	9352.85	8185.86	7116.12
90.0	10496.59	11891.90	12320.01	12378.15	12055.75	11368.66	10554.72	9460.67	8266.19
120.0	11458.51	12092.74	12314.73	12135.03	11558.93	10491.83	9780.43	8601.81	7301.63
150.0	11294.67	11775.63	11987.04	11839.05	11326.38	10533.58	9661.51	8546.31	7420.55
180.0	11595.93	11696.35	11358.09	10464.87	9847.55	8908.89	7701.73	6413.17	5284.23
210.0	11611.78	10540.98	10107.59	9008.78	7921.06	6775.74	5510.44	4343.98	3461.34
240.0	11717.49	10929.98	9946.92	8905.71	7864.51	6490.34	5364.57	4392.08	3535.86
270.0	10496.59	10268.26	9166.28	8125.61	6924.79	5745.64	4792.17	3860.38	3157.96
300.0	11458.51	10692.14	9677.37	8689.02	7510.40	6326.49	5343.43	4376.22	3546.43
330.0	11294.67	10504.51	9646.18	8556.36	7529.95	6377.76	5305.90	4460.26	3632.05
360.0	11595.93	11188.96	10470.16	9656.23	8615.02	7499.83	6500.91	5433.28	4503.07
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3789.55	3171.17	2600.36	2137.37	1799.11	1487.28	1261.07	1052.83	881.59
30.0	5760.97	4862.47	3979.82	3245.17	2706.07	2381.02	1848.27	1515.29	1246.80
60.0	5931.15	4956.55	4011.01	3307.01	2656.92	2193.40	1774.27	1434.43	1038.35
90.0	7166.85	5945.95	4936.46	3932.26	3102.47	2637.36	1956.61	1575.55	1242.57
120.0	6160.01	4926.42	3945.47	3035.34	2393.18	1834.52	1411.17	1032.27	871.33
150.0	6115.08	4894.18	3905.83	2980.90	2637.36	1767.40	1344.58	1058.64	816.05
180.0	4134.68	3271.60	2508.40	1919.62	1513.18	1040.20	927.83	718.69	561.98
210.0	2679.64	2137.90	1662.22	1188.66	1042.21	815.20	658.97	522.29	429.01
240.0	2769.49	2632.07	1742.03	1367.31	1076.09	873.66	695.02	570.28	460.88
270.0	2507.87	2038.01	1613.60	1185.49	1048.92	839.89	693.38	562.20	469.86
300.0	2922.77	2653.22	1933.36	1596.69	1257.90	1044.37	849.87	711.93	586.67
330.0	2947.61	2396.35	2002.07	1641.08	1379.46	1048.44	964.57	801.99	683.76
360.0	3789.55	3171.17	2600.36	2137.37	1799.11	1487.28	1261.07	1052.83	881.59
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	753.68	632.65	542.80	457.71	385.83	332.44	281.71	262.15	205.97
30.0	1052.30	871.54	726.73	621.55	524.30	450.84	380.01	320.29	275.36
60.0	968.64	807.80	662.30	544.86	449.62	380.17	323.51	272.30	231.23
90.0	987.82	809.18	652.20	542.80	445.55	375.26	311.30	260.56	236.73
120.0	699.51	553.32	455.54	370.08	304.86	258.98	217.44	188.00	161.04
150.0	654.32	516.90	424.41	345.66	284.88	262.68	201.95	174.78	150.47
180.0	455.70	365.58	305.07	251.16	209.30	179.91	154.22	136.20	119.82
210.0	347.83	285.14	241.22	202.06	171.61	150.42	131.02	117.02	104.12
240.0	375.78	315.00	261.62	235.46	185.83	158.66	139.43	121.93	109.04
270.0	386.57	320.34	273.09	229.49	194.02	168.13	144.66	125.42	111.52
300.0	497.35	413.84	346.19	295.98	264.26	213.05	180.97	157.40	135.09
330.0	573.77	482.49	414.47	349.25	294.81	253.96	215.27	186.20	158.66
360.0	753.68	632.65	542.80	457.71	385.83	332.44	281.71	262.15	205.97
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	176.11	153.64	132.45	115.01	102.06	89.69	80.13	70.51	63.16
30.0	260.56	200.47	171.77	147.72	129.75	113.05	101.00	89.27	80.02
60.0	197.35	172.19	148.20	130.18	113.42	99.79	89.43	79.33	71.40
90.0	188.10	160.88	141.22	124.84	109.62	97.41	88.05	78.86	70.61
120.0	139.37	123.89	109.62	99.20	89.11	80.23	73.10	65.85	60.20
150.0	130.86	116.80	103.75	92.65	84.09	75.74	69.18	62.68	56.76
180.0	106.34	96.14	86.10	77.48	70.88	64.85	58.83	53.43	49.42
210.0	93.13	84.62	76.16	69.50	62.89	56.71	51.90	47.09	43.08
240.0	96.67	87.21	77.85	69.66	62.37	56.50	50.79	46.40	42.34
270.0	98.46	88.53	78.65	70.72	62.84	56.50	50.37	45.19	41.07
300.0	117.28	104.33	92.23	82.93	73.62	65.17	57.56	51.80	46.93
330.0	138.16	119.39	104.17	92.81	81.82	73.15	64.37	56.66	50.21
360.0	176.11	153.64	132.45	115.01	102.06	89.69	80.13	70.51	63.16

Intensity data(cd)

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	56.24	50.26	44.77	41.17	38.00	35.73	33.77	32.45	31.29
30.0	70.77	62.52	55.97	49.84	44.77	41.07	37.68	35.04	33.14
60.0	63.58	57.45	51.48	46.30	42.44	38.95	36.10	34.09	32.29
90.0	64.06	57.50	52.43	47.30	43.02	39.85	36.94	34.83	32.87
120.0	54.49	49.58	45.72	41.97	38.85	36.57	34.41	32.56	31.13
150.0	52.32	47.88	44.40	41.07	38.53	36.20	34.25	32.56	31.24
180.0	45.35	41.97	39.48	37.16	35.52	33.88	32.72	31.39	30.39
210.0	40.22	37.68	35.83	34.30	32.93	32.03	31.08	30.23	29.54
240.0	39.32	37.26	35.25	33.67	32.50	31.76	31.08	30.60	30.18
270.0	38.16	35.62	33.93	32.50	31.50	30.92	30.50	30.23	29.91
300.0	42.65	38.79	35.94	33.72	32.35	31.24	30.39	29.97	29.65
330.0	45.29	41.33	37.84	35.20	33.51	32.08	31.02	30.34	29.70
360.0	56.24	50.26	44.77	41.17	38.00	35.73	33.77	32.45	31.29
C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	30.44	29.65	28.96	28.22	27.32	26.32	25.32	24.15	23.10
30.0	31.66	30.23	29.17	28.22	27.27	26.48	25.69	24.84	24.05
60.0	30.92	29.60	28.43	27.54	26.69	25.95	25.11	24.42	23.73
90.0	31.29	30.07	28.86	28.01	27.11	26.37	25.69	25.00	24.37
120.0	29.86	28.75	27.80	27.01	26.22	25.48	24.84	24.10	23.41
150.0	29.97	28.96	28.01	27.11	26.27	25.42	24.58	23.89	23.20
180.0	29.44	28.43	27.43	26.43	25.53	24.52	23.63	22.67	21.93
210.0	28.65	27.75	26.64	25.48	24.31	23.20	21.99	19.13	16.38
240.0	29.65	29.02	28.17	27.01	25.74	24.21	22.78	21.67	20.56
270.0	29.44	28.70	27.48	26.22	24.63	23.10	21.93	20.77	19.82
300.0	29.33	28.96	28.28	27.38	26.00	24.42	21.99	19.03	17.65
330.0	29.23	28.54	27.80	26.69	25.21	23.94	22.57	21.46	20.08
360.0	30.44	29.65	28.96	28.22	27.32	26.32	25.32	24.15	23.10
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	22.15	21.09	20.24	19.34	18.45	17.65	16.75	15.64	14.48
30.0	23.26	21.51	19.40	18.13	17.23	16.44	15.64	14.75	13.85
60.0	22.99	22.25	21.56	20.61	18.92	17.28	16.23	15.33	14.59
90.0	23.68	22.99	22.41	21.72	21.14	20.45	19.66	18.97	18.02
120.0	22.78	20.98	18.29	16.70	15.91	15.27	14.64	13.90	13.11
150.0	22.41	21.67	20.98	20.24	19.29	17.44	15.96	14.64	13.85
180.0	21.09	20.35	19.71	18.92	18.23	17.49	16.54	15.27	14.01
210.0	15.22	14.43	13.69	13.05	12.26	11.47	10.83	10.36	9.78
240.0	19.34	17.49	15.80	14.69	13.85	13.11	12.21	11.42	10.83
270.0	18.92	18.02	17.23	16.33	15.49	14.43	13.48	12.53	11.68
300.0	16.75	16.01	15.33	14.48	13.79	13.05	12.42	11.73	11.05
330.0	18.23	16.86	15.91	15.12	14.48	13.58	12.90	12.26	11.68
360.0	22.15	21.09	20.24	19.34	18.45	17.65	16.75	15.64	14.48
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	13.42	12.58	11.79	11.05	10.31	9.51	8.77	7.93	7.29
30.0	13.11	12.47	11.79	11.15	10.31	9.67	9.04	8.25	6.34
60.0	13.74	12.95	12.16	11.47	10.68	9.83	9.09	8.51	7.82
90.0	16.86	15.70	14.38	13.32	12.31	11.42	10.68	9.88	9.25
120.0	12.47	11.94	11.31	10.78	10.09	9.51	8.83	8.25	6.87
150.0	13.11	12.42	11.63	11.05	10.36	9.62	9.04	8.40	8.03
180.0	13.05	12.05	11.15	10.41	9.67	8.93	8.35	7.66	7.19
210.0	9.25	8.72	8.19	7.77	7.19	5.71	4.23	3.86	3.65
240.0	10.20	9.57	8.93	8.35	7.77	7.29	6.34	4.49	4.02
270.0	10.99	10.20	9.41	8.67	7.88	7.24	6.71	5.34	4.23
300.0	10.36	9.83	9.14	8.67	7.61	5.34	4.76	4.23	4.02
330.0	10.94	10.20	9.51	8.98	8.51	7.56	5.34	4.76	4.28
360.0	13.42	12.58	11.79	11.05	10.31	9.51	8.77	7.93	7.29

Intensity data(cd)

C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	6.40	4.60	4.02	3.75	3.49	2.96	2.80	2.80	2.80
30.0	4.70	4.07	3.70	3.49	3.38	2.48	2.33	2.33	2.27
60.0	6.24	4.81	4.23	3.91	3.70	3.28	2.48	2.48	2.48
90.0	8.40	7.66	7.14	6.40	4.81	4.18	3.75	3.44	2.75
120.0	5.07	4.65	4.28	4.07	3.86	3.12	2.80	2.80	2.75
150.0	7.61	6.03	5.07	4.65	4.33	3.96	3.22	2.91	2.85
180.0	6.71	5.66	4.33	3.96	3.70	3.38	2.85	2.80	2.80
210.0	3.54	3.38	2.54	2.33	2.33	2.33	2.27	2.27	2.27
240.0	3.75	3.49	3.22	2.59	2.48	2.43	2.43	2.43	2.43
270.0	3.86	3.59	3.22	2.75	2.64	2.64	2.64	2.64	2.64
300.0	3.86	3.38	2.85	2.80	2.75	2.80	2.80	2.80	2.75
330.0	3.96	3.65	3.07	2.85	2.85	2.85	2.85	2.85	2.80
360.0	6.40	4.60	4.02	3.75	3.49	2.96	2.80	2.80	2.80
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	2.80	2.80	2.80	2.80	2.75	2.80	2.75	2.75	2.75
30.0	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.22	2.27
60.0	2.43	2.43	2.48	2.38	2.43	2.43	2.43	2.38	2.43
90.0	2.64	2.64	2.64	2.59	2.59	2.59	2.59	2.54	2.59
120.0	2.70	2.75	2.70	2.70	2.75	2.75	2.70	2.70	2.75
150.0	2.85	2.80	2.80	2.80	2.80	2.75	2.75	2.80	2.75
180.0	2.80	2.75	2.80	2.75	2.80	2.75	2.75	2.70	2.75
210.0	2.27	2.33	2.27	2.27	2.22	2.22	2.22	2.22	2.27
240.0	2.43	2.43	2.43	2.38	2.38	2.38	2.38	2.38	2.33
270.0	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.54	2.54
300.0	2.70	2.75	2.70	2.75	2.70	2.70	2.75	2.75	2.70
330.0	2.80	2.80	2.80	2.80	2.80	2.75	2.80	2.75	2.75
360.0	2.80	2.80	2.80	2.80	2.75	2.80	2.75	2.75	2.75
C/ γ (°)	90.0								
0.0	2.75								
30.0	2.22								
60.0	2.38								
90.0	2.54								
120.0	2.70								
150.0	2.80								
180.0	2.75								
210.0	2.27								
240.0	2.43								
270.0	2.54								
300.0	2.70								
330.0	2.75								
360.0	2.75								