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Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,Ching

Nata

LumCAT: 1-0935-N
Luminaire: 92.70.361.000

Report No: 220519-B026	Voltage(V): 37.1800
Test No: 220519-C026	Current(A): 0.3700
LampCAT: Bridgelux C10-(30C2000C)	Power (W): 13.7560
Lamp flux(lm): 1425.8	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 43	Width(mm): 43
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1172.51
Efficiency(%): 82.23%
Lumens(lm)/Power(W): 85.24
Central intensity(cd): 7101.184
Maximum intensity(cd): 7101.184
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=16.8
[C90/270]Total=16.8
Field angle(10%Imax): [C0/180]Total=44.1
[C90/270]Total=44.1
Maximum s/h(1/2): C0_180=0.29 C90_270=0.29
Maximum s/h(1/4): C0_180=0.33 C90_270=0.33
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 82.23%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.074%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7101.184	0.000	0	.000%	.000%
1.0	7046.659	6.769	6.769	.475%	.577%
2.0	6872.554	19.978	26.748	1.401%	2.281%
3.0	6558.852	32.124	58.871	2.253%	5.021%
4.0	6135.502	42.492	101.363	2.980%	8.645%
5.0	5597.428	50.474	151.838	3.540%	12.950%
6.0	5006.023	55.724	207.562	3.908%	17.702%
7.0	4351.131	58.080	265.641	4.073%	22.656%
8.0	3771.827	58.134	323.776	4.077%	27.614%
9.0	3241.819	56.842	380.618	3.987%	32.462%
10.0	2805.025	54.722	435.339	3.838%	37.129%
11.0	2450.840	52.517	487.856	3.683%	41.608%
12.0	2160.590	50.410	538.266	3.536%	45.907%
13.0	1908.881	48.294	586.56	3.387%	50.026%
14.0	1690.410	46.071	632.631	3.231%	53.955%
15.0	1514.138	43.993	676.624	3.086%	57.707%
16.0	1336.882	41.775	718.4	2.930%	61.270%
17.0	1202.781	39.549	757.949	2.774%	64.643%
18.0	1096.294	37.907	795.856	2.659%	67.876%
19.0	990.524	36.306	832.162	2.546%	70.972%
20.0	886.128	34.348	866.51	2.409%	73.902%
21.0	793.287	32.248	898.758	2.262%	76.652%
22.0	714.981	30.309	929.067	2.126%	79.237%
23.0	632.484	28.273	957.341	1.983%	81.649%
24.0	554.716	25.956	983.297	1.820%	83.862%
25.0	474.229	23.396	1006.693	1.641%	85.858%
26.0	397.790	20.584	1027.277	1.444%	87.613%
27.0	323.532	17.647	1044.925	1.238%	89.118%
28.0	260.172	14.778	1059.703	1.036%	90.379%
29.0	201.479	12.078	1071.781	.847%	91.409%
30.0	146.649	9.399	1081.18	.659%	92.210%
31.0	109.445	7.127	1088.307	.500%	92.818%
32.0	82.003	5.485	1093.792	.385%	93.286%
33.0	66.318	4.370	1098.161	.306%	93.659%
34.0	58.872	3.789	1101.95	.266%	93.982%
35.0	54.950	3.535	1105.485	.248%	94.283%
36.0	51.402	3.386	1108.871	.237%	94.572%
37.0	48.071	3.244	1112.116	.228%	94.849%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	44.591	3.093	1115.208	.217%	95.113%
39.0	40.893	2.918	1118.126	.205%	95.361%
40.0	37.301	2.727	1120.853	.191%	95.594%
41.0	33.843	2.533	1123.387	.178%	95.810%
42.0	30.183	2.326	1125.713	.163%	96.008%
43.0	27.038	2.120	1127.833	.149%	96.189%
44.0	24.267	1.936	1129.769	.136%	96.354%
45.0	21.877	1.773	1131.542	.124%	96.506%
46.0	20.159	1.644	1133.186	.115%	96.646%
47.0	18.620	1.542	1134.729	.108%	96.777%
48.0	17.351	1.454	1136.183	.102%	96.901%
49.0	16.320	1.383	1137.566	.097%	97.019%
50.0	15.386	1.322	1138.887	.093%	97.132%
51.0	14.595	1.268	1140.156	.089%	97.240%
52.0	13.893	1.222	1141.378	.086%	97.345%
53.0	13.243	1.180	1142.559	.083%	97.445%
54.0	12.638	1.141	1143.699	.080%	97.542%
55.0	12.115	1.105	1144.804	.077%	97.637%
56.0	11.644	1.074	1145.878	.075%	97.728%
57.0	11.226	1.046	1146.924	.073%	97.817%
58.0	10.868	1.022	1147.945	.072%	97.905%
59.0	10.524	1.000	1148.945	.070%	97.990%
60.0	10.233	0.981	1149.926	.069%	98.074%
61.0	9.964	0.964	1150.89	.068%	98.156%
62.0	9.710	0.948	1151.838	.066%	98.237%
63.0	9.478	0.933	1152.771	.065%	98.316%
64.0	9.277	0.920	1153.691	.065%	98.395%
65.0	9.068	0.908	1154.599	.064%	98.472%
66.0	8.866	0.895	1155.494	.063%	98.548%
67.0	8.664	0.881	1156.375	.062%	98.624%
68.0	8.477	0.868	1157.244	.061%	98.698%
69.0	8.246	0.853	1158.097	.060%	98.770%
70.0	8.074	0.838	1158.935	.059%	98.842%
71.0	7.850	0.823	1159.758	.058%	98.912%
72.0	7.626	0.805	1160.563	.056%	98.981%
73.0	7.417	0.787	1161.349	.055%	99.048%
74.0	7.223	0.770	1162.119	.054%	99.113%
75.0	7.021	0.753	1162.872	.053%	99.178%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	6.849	0.736	1163.608	.052%	99.240%
77.0	6.685	0.722	1164.329	.051%	99.302%
78.0	6.543	0.708	1165.038	.050%	99.362%
79.0	6.379	0.694	1165.732	.049%	99.422%
80.0	6.244	0.681	1166.412	.048%	99.480%
81.0	6.095	0.667	1167.08	.047%	99.537%
82.0	5.968	0.654	1167.734	.046%	99.592%
83.0	5.841	0.642	1168.376	.045%	99.647%
84.0	5.744	0.631	1169.007	.044%	99.701%
85.0	5.684	0.624	1169.631	.044%	99.754%
86.0	5.527	0.613	1170.243	.043%	99.806%
87.0	5.266	0.591	1170.834	.041%	99.857%
88.0	5.161	0.571	1171.405	.040%	99.905%
89.0	5.034	0.559	1171.964	.039%	99.953%
90.0	4.997	0.550	1172.514	.039%	100.000%

Zonal flux distribution table

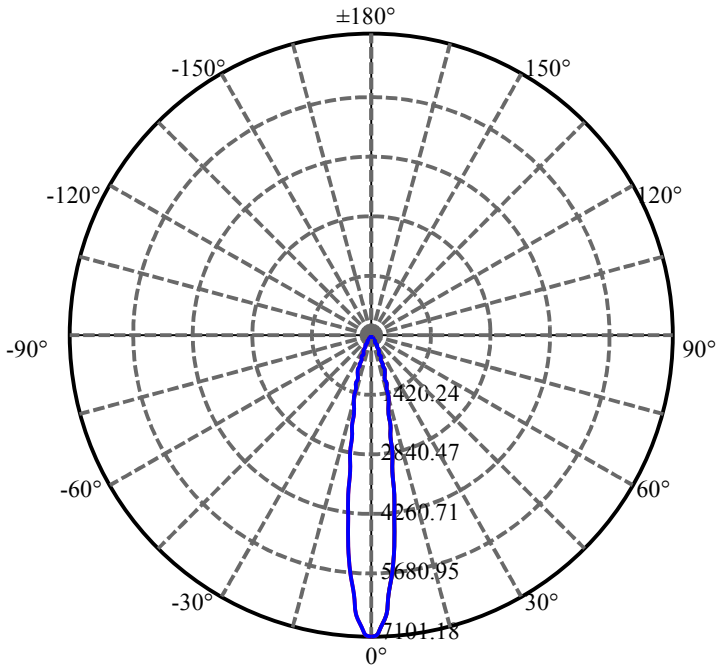
ZONAL LUMEN SUMMARY

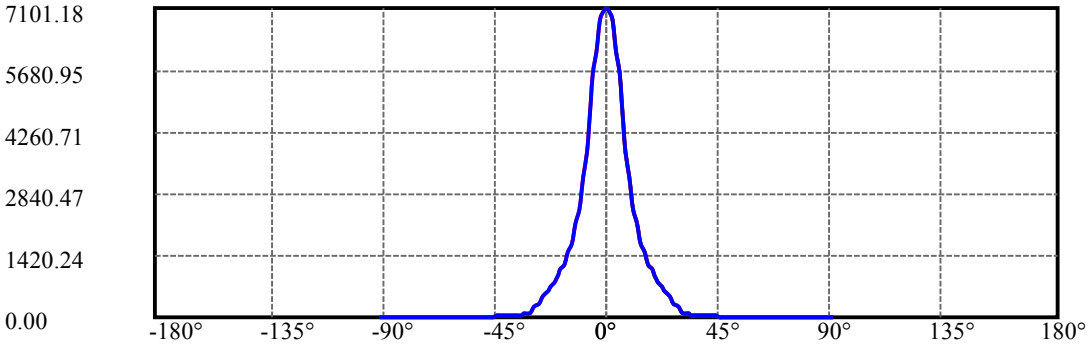
Zone	Lumens	%Lamp	%Fixt
0-30	1081.18	75.83%	92.21%
0-40	1120.85	78.61%	95.59%
0-60	1149.93	80.65%	98.07%
0-90	1171.96	82.20%	99.95%
0-120	1171.96	82.20%	99.95%
0-180	1172.51	82.23%	100.00%
60-90	23.02	1.61%	1.96%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-22.32	938.01	65.79%	80.00%

ZONAL LUMEN SUMMARY

0-10	435.34
10-20	431.17
20-30	214.67
30-40	39.67
40-50	18.03
50-60	11.04
60-70	9.01
70-80	7.48
80-90	5.55
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

Light Distribution Curve [Unit:cd]





C0(Max):

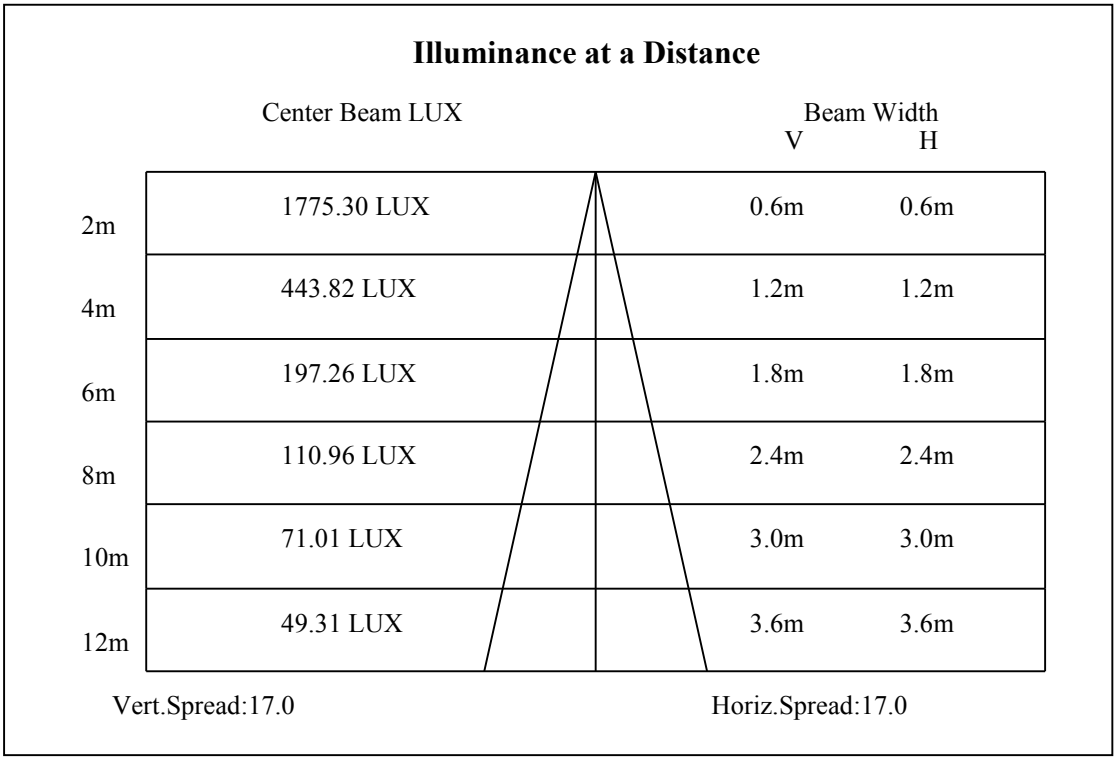
C0/C180:

C90/C270:

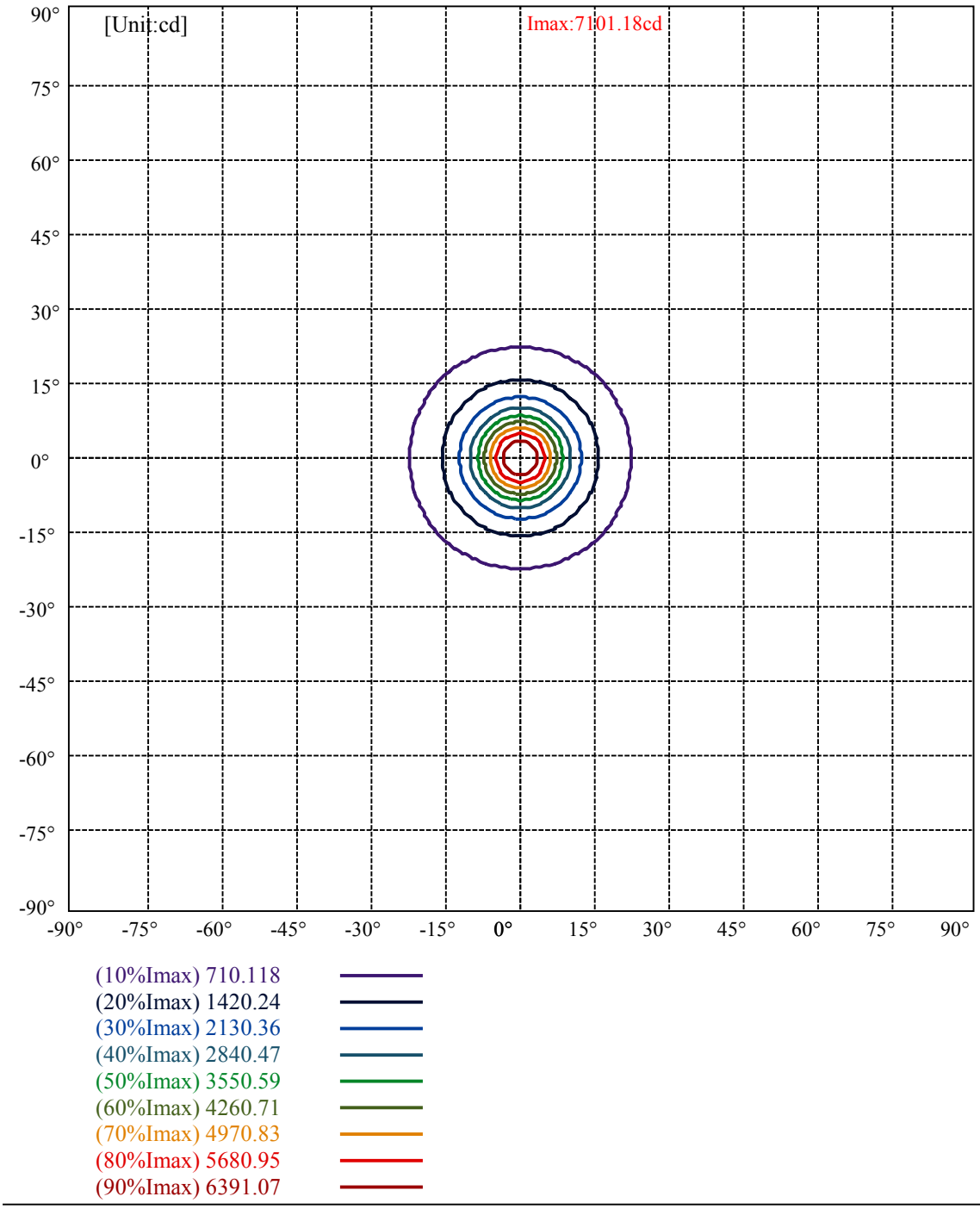
Field angle(10%Imax):C0/180Left:22.1 Right:22.1
:C90/270Left:22.1 Right:22.1

Beam Angle(50%Imax):C0/180Left:8.4 Right:8.4
:C90/270Left:8.4 Right:8.4

Lux distance Curve



ISO-Intensity(V-H)

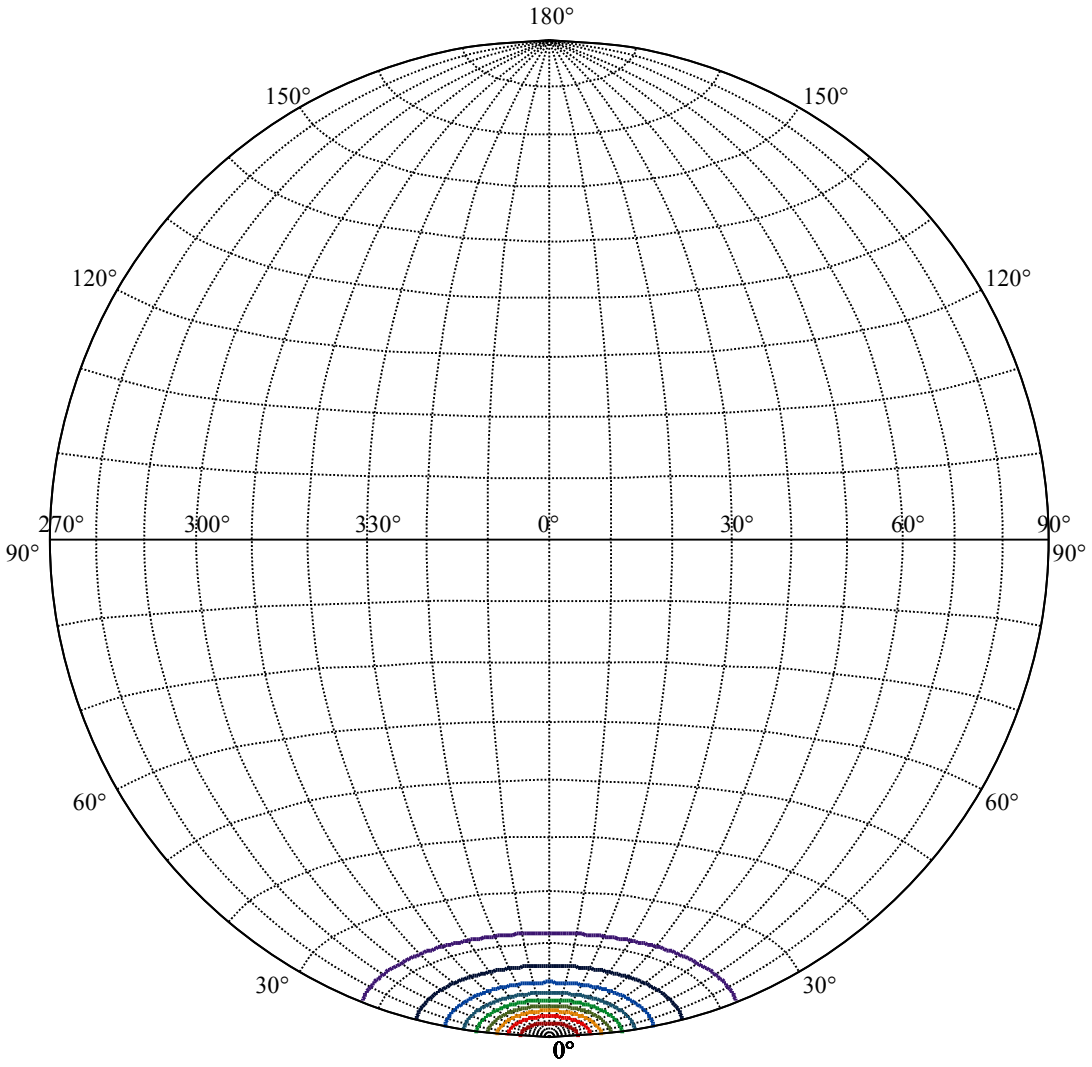


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2022/5/19
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:7101.18

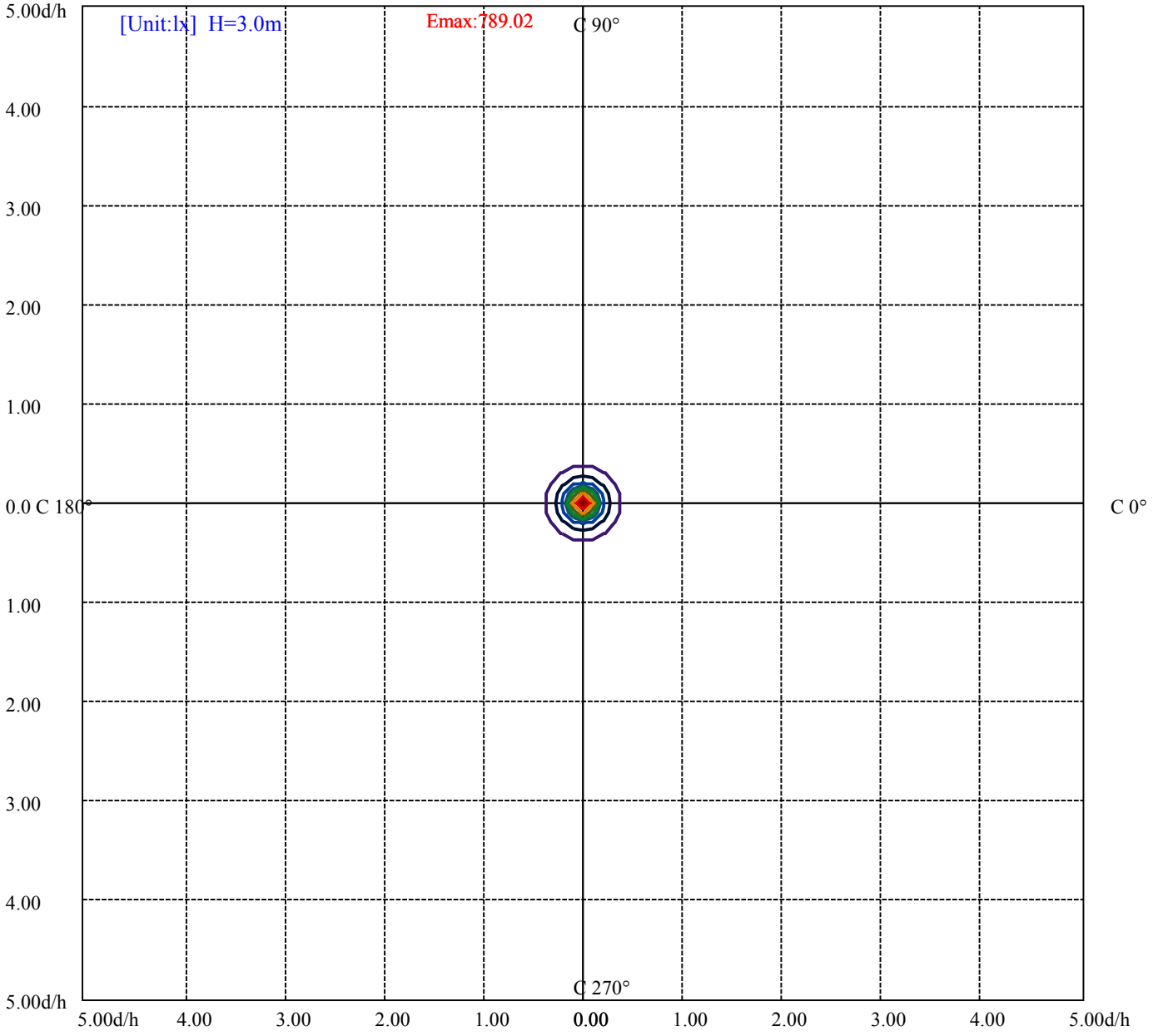
(10%Imax) 710.118
(20%Imax) 1420.24
(30%Imax) 2130.36
(40%Imax) 2840.47
(50%Imax) 3550.59
(60%Imax) 4260.71
(70%Imax) 4970.83
(80%Imax) 5680.95
(90%Imax) 6391.07

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2022/5/19
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

ISO illuminance diagram

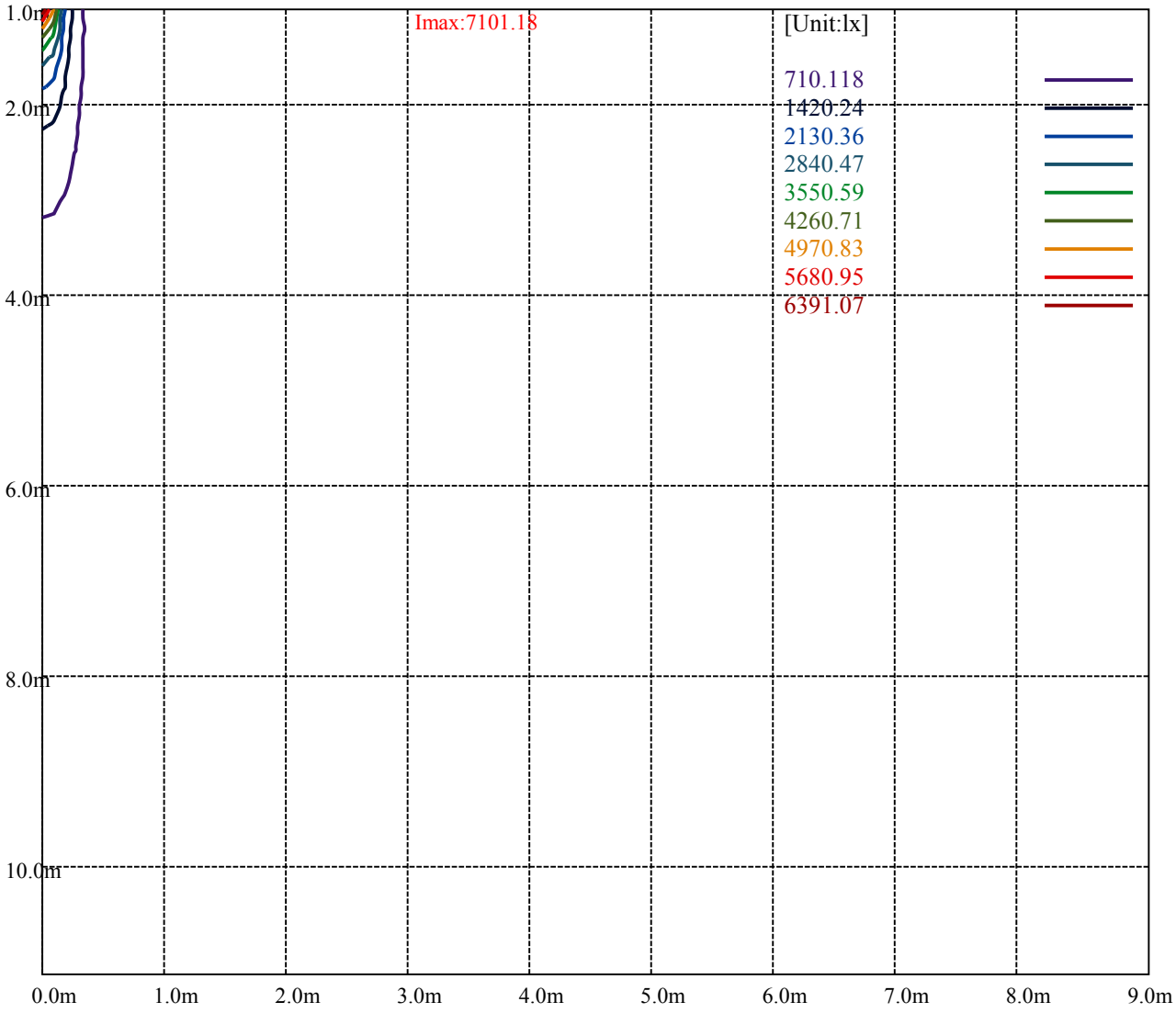


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2022/5/19
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2022/5/19
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

Luminance Limitting Curve(no luminous side)

Luminance Table

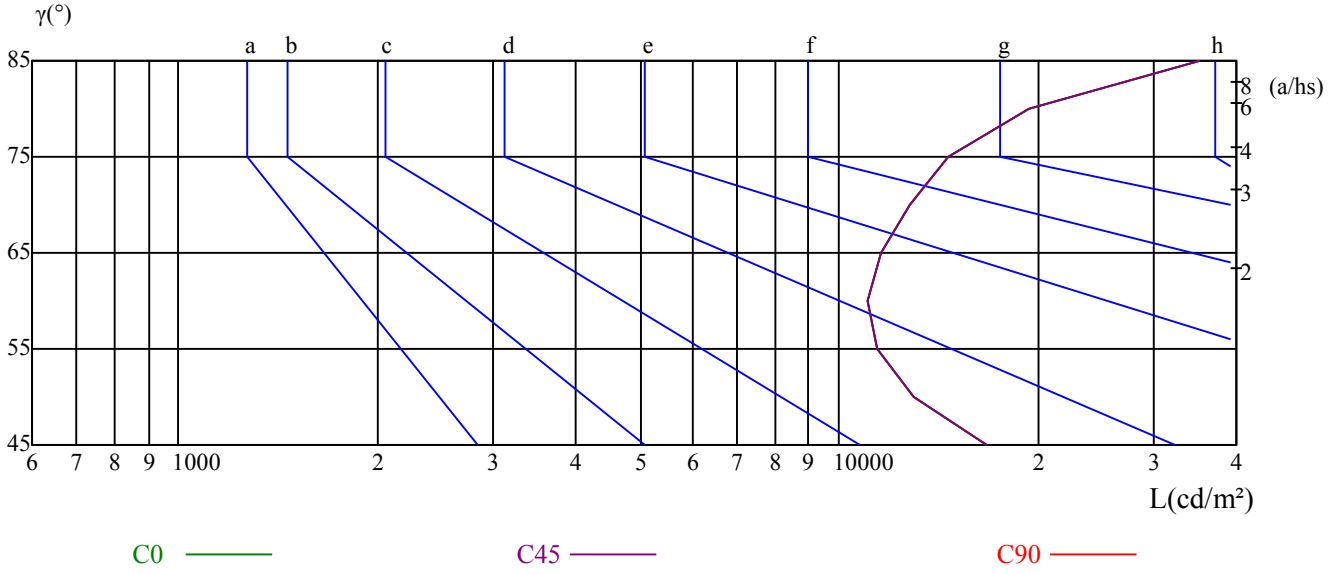
γ	45	50	55	60	65	70	75	80	85
C0	16733	12946	11423	11068	11604	12768	14671	19448	35271
C45	16733	12946	11423	11068	11604	12768	14671	19448	35271
C90	16733	12946	11423	11068	11604	12768	14671	19448	35271

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
11604	11604	11604	14671	14671	14671	35271	35271	35271

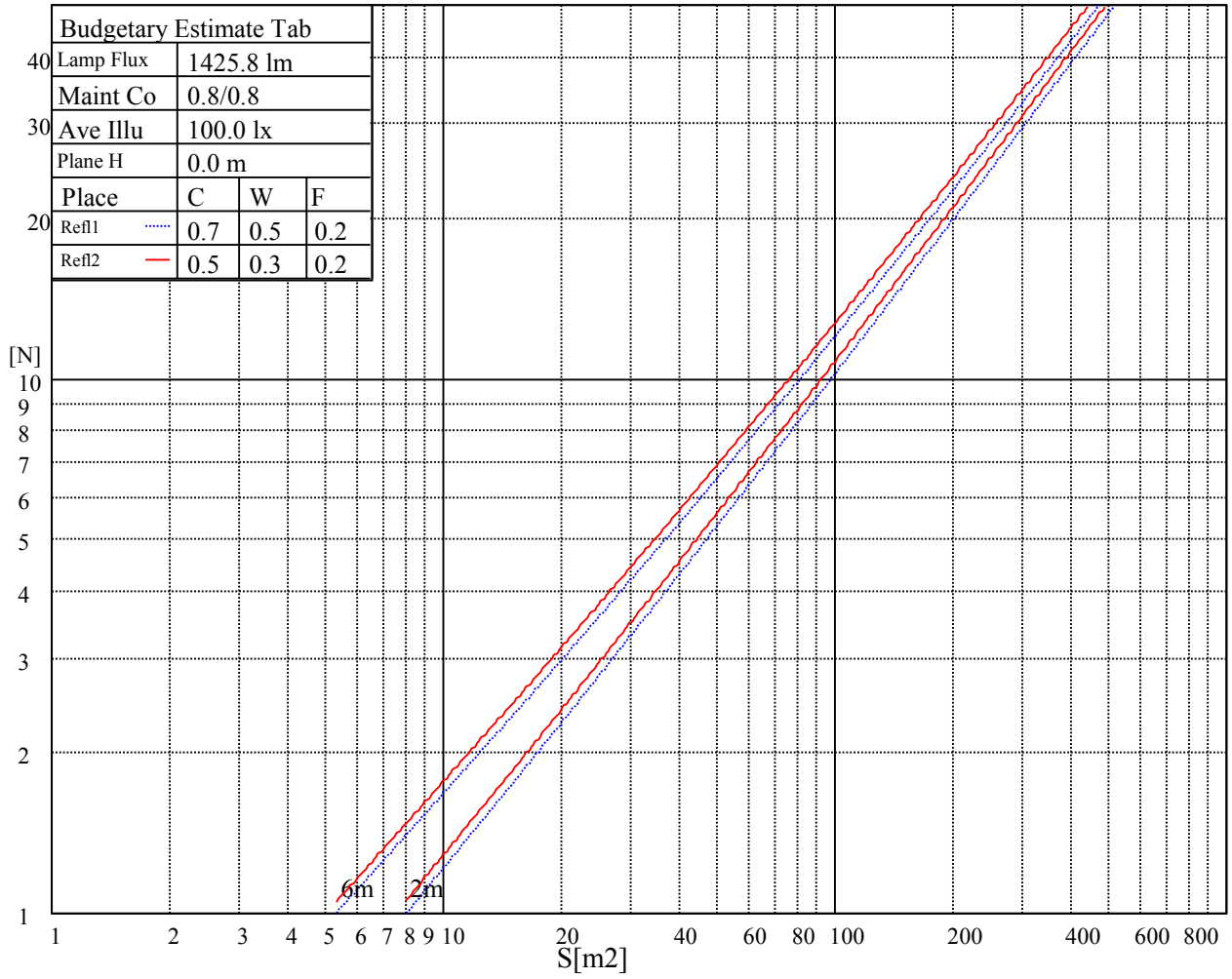
Glare Table

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 Limitting Curve



Budgetary Estimate Table

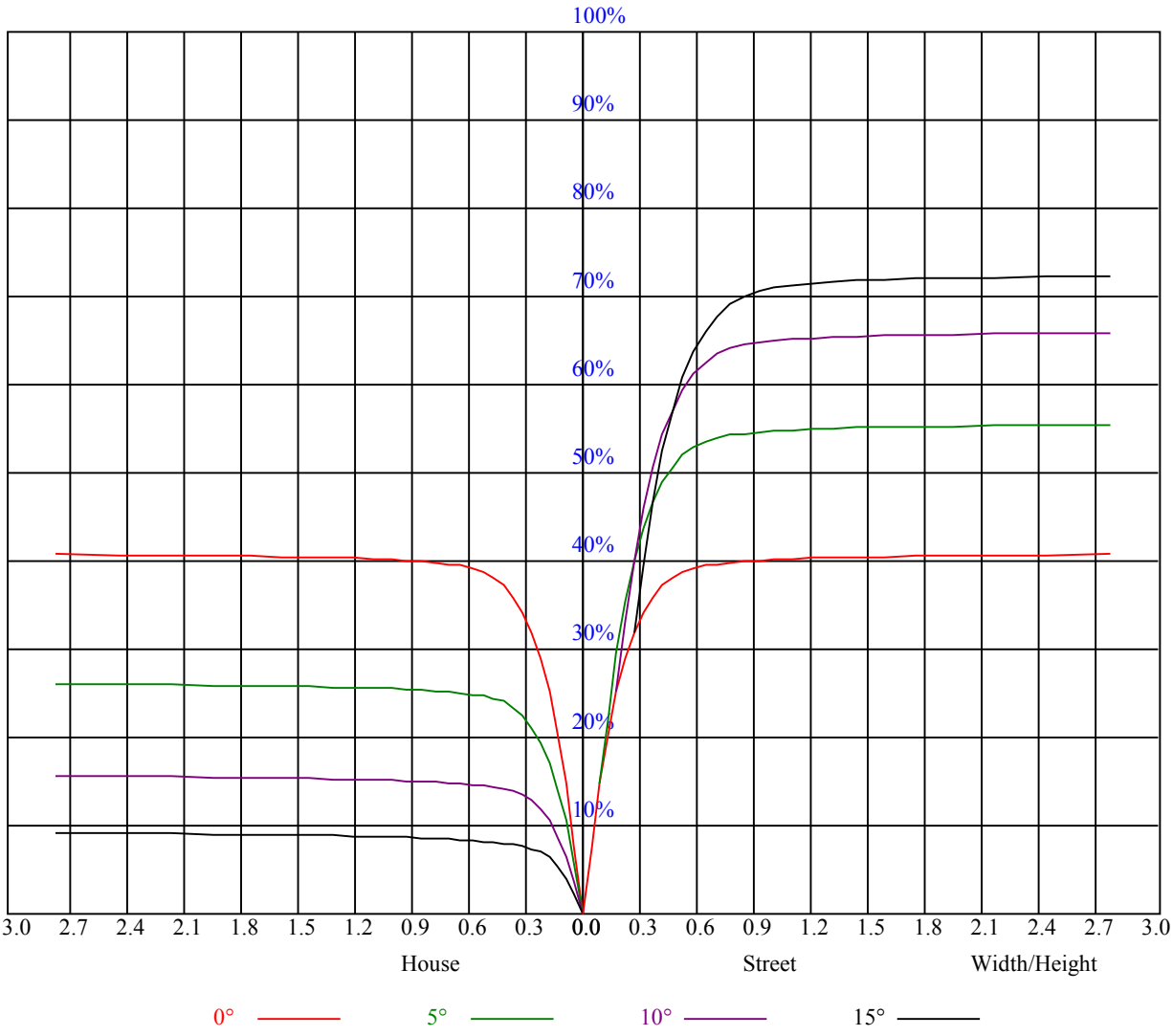


Equipment: GMS1980 Date: 2022/5/19 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 65.0% Distance(m): 7.73

Utilization factor table for indoor luminaire

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	0.98	0.98	0.98	0.96	0.96	0.96	0.91	0.91	0.91	0.87	0.87	0.87	0.84	0.84	0.84	0.82
1	0.92	0.91	0.89	0.91	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.81	0.80	0.79
2	0.88	0.85	0.83	0.86	0.84	0.82	0.84	0.82	0.80	0.81	0.80	0.78	0.79	0.78	0.77	0.76
3	0.84	0.80	0.78	0.83	0.80	0.77	0.81	0.78	0.76	0.79	0.77	0.75	0.77	0.75	0.74	0.73
4	0.80	0.77	0.74	0.79	0.76	0.74	0.78	0.75	0.73	0.76	0.74	0.72	0.75	0.73	0.71	0.70
5	0.77	0.74	0.71	0.76	0.73	0.71	0.75	0.72	0.70	0.74	0.71	0.69	0.73	0.71	0.69	0.68
6	0.74	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.68	0.72	0.69	0.67	0.71	0.68	0.67	0.66
7	0.72	0.68	0.66	0.71	0.68	0.66	0.71	0.68	0.65	0.70	0.67	0.65	0.69	0.67	0.65	0.64
8	0.70	0.66	0.64	0.69	0.66	0.64	0.68	0.65	0.63	0.68	0.65	0.63	0.67	0.65	0.63	0.62
9	0.68	0.64	0.62	0.67	0.64	0.62	0.67	0.64	0.62	0.66	0.63	0.61	0.65	0.63	0.61	0.60
10	0.66	0.62	0.60	0.65	0.62	0.60	0.65	0.62	0.60	0.64	0.62	0.60	0.64	0.61	0.60	0.59

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2022/5/19	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 65.0%	Distance(m): 7.73

Intensity data(cd)

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	7086.69	7111.79	7022.76	6812.43	6489.16	5944.82	5429.75	4845.96	4179.12
45.0	7091.47	6963.60	6721.60	6339.19	5900.00	5307.25	4642.20	4053.64	3470.45
90.0	7098.64	6957.63	6737.14	6350.54	5778.11	5297.09	4701.96	3889.32	3428.02
135.0	7127.92	7091.47	6908.63	6621.82	6226.25	5620.36	5052.11	4451.59	3880.35
180.0	7086.69	6960.62	6659.46	6249.56	5772.73	5151.90	4552.57	3903.06	3336.00
225.0	7091.47	7093.27	7003.64	6789.72	6340.98	5891.04	5358.64	4623.68	4052.44
270.0	7098.64	7115.97	7040.09	6765.82	6441.36	5996.80	5313.23	4716.30	4128.33
315.0	7127.92	7078.93	6887.12	6541.75	6135.43	5570.17	4997.73	4325.51	3699.90
360.0	7086.69	7111.79	7022.76	6812.43	6489.16	5944.82	5429.75	4845.96	4179.12

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3576.81	3126.27	2699.64	2387.13	2094.34	1848.75	1662.33	1475.90	1316.95
45.0	2970.91	2599.25	2292.72	1980.21	1772.87	1597.20	1425.70	1280.50	1163.99
90.0	2975.10	2477.95	2225.80	1980.21	1750.16	1554.77	1405.99	1181.67	1139.55
135.0	3254.74	2833.48	2443.30	2155.88	1887.59	1689.81	1501.59	1342.05	1217.76
180.0	2912.95	2519.18	2201.89	1958.70	1748.97	1526.09	1374.91	1180.84	1111.16
225.0	3535.58	3043.81	2631.52	2324.39	2034.59	1791.99	1608.55	1431.08	1184.60
270.0	3481.20	3057.56	2691.27	2347.09	2060.88	1839.19	1627.67	1443.03	1302.61
315.0	3227.25	2782.69	2420.59	2151.10	1921.65	1675.47	1506.37	1359.98	1185.62
360.0	3576.81	3126.27	2699.64	2387.13	2094.34	1848.75	1662.33	1475.90	1316.95

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1196.25	1089.30	967.40	876.58	791.73	700.90	627.41	551.52	466.07
45.0	1041.49	920.79	838.33	747.51	676.40	595.14	507.90	431.42	365.09
90.0	1019.44	921.57	818.73	730.66	663.79	582.47	508.38	424.25	345.73
135.0	1094.08	987.72	875.38	786.35	710.46	624.42	544.95	471.45	396.16
180.0	997.04	903.76	800.51	712.43	646.47	564.49	492.72	411.64	334.92
225.0	1157.06	1038.51	940.39	846.40	741.35	669.35	594.96	502.52	429.50
270.0	1169.96	1064.80	954.25	850.28	768.42	685.96	601.11	524.63	449.34
315.0	1095.03	997.75	894.02	796.09	721.22	637.15	560.30	476.41	395.50
360.0	1196.25	1089.30	967.40	876.58	791.73	700.90	627.41	551.52	466.07

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	381.22	310.12	301.75	181.77	132.71	99.55	73.79	61.72	57.24
45.0	303.54	216.84	169.40	119.21	89.09	70.33	61.43	56.29	53.06
90.0	280.42	214.51	162.71	123.45	93.10	70.03	61.43	57.24	53.48
135.0	308.92	267.39	187.50	140.12	103.55	79.59	64.53	57.90	54.20
180.0	271.64	214.69	155.48	119.86	89.27	66.27	59.27	55.27	51.99
225.0	359.00	293.27	220.55	173.82	133.97	97.70	72.48	60.77	56.65
270.0	357.92	305.93	226.10	171.19	125.96	94.71	72.30	61.96	57.60
315.0	325.59	258.61	188.34	143.77	107.91	77.86	65.31	59.81	55.39
360.0	381.22	310.12	301.75	181.77	132.71	99.55	73.79	61.72	57.24

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	53.42	50.31	46.91	42.90	39.56	36.63	32.03	28.92	26.29
45.0	49.95	46.25	42.84	39.26	35.37	31.55	28.38	25.45	23.12
90.0	50.13	46.85	43.20	39.44	35.79	32.21	28.92	25.63	23.00
135.0	50.91	47.98	44.75	40.93	37.70	34.24	30.12	27.19	24.44
180.0	48.10	45.05	41.89	37.82	34.36	30.95	27.61	24.50	22.23
225.0	52.88	49.30	46.01	42.90	38.72	35.49	32.21	28.98	25.39
270.0	54.02	50.37	46.73	42.90	39.44	36.03	31.91	28.74	25.93
315.0	51.81	48.46	44.40	40.99	37.47	33.64	30.29	26.89	23.72
360.0	53.42	50.31	46.91	42.90	39.56	36.63	32.03	28.92	26.29

Intensity data(cd)

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	23.00	21.21	19.84	18.16	16.91	16.07	15.06	14.40	13.74
45.0	21.09	19.42	18.16	16.91	15.95	15.12	14.52	13.62	13.09
90.0	21.09	19.54	17.93	16.85	15.95	15.00	14.28	13.62	12.97
135.0	21.75	20.08	18.64	17.39	16.31	15.48	14.58	13.92	13.27
180.0	20.20	18.70	17.39	16.31	15.48	14.58	13.80	13.21	12.61
225.0	23.06	21.15	19.24	17.99	16.91	15.83	15.00	14.28	13.56
270.0	22.95	21.09	19.54	18.05	16.85	15.95	15.06	14.34	13.62
315.0	21.87	20.08	18.22	17.15	16.19	15.06	14.46	13.74	13.09
360.0	23.00	21.21	19.84	18.16	16.91	16.07	15.06	14.40	13.74

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	13.03	12.49	12.07	11.53	11.11	10.82	10.46	10.22	9.92
45.0	12.61	12.01	11.53	11.23	10.82	10.46	10.28	9.92	9.68
90.0	12.37	11.95	11.47	11.11	10.76	10.40	10.10	9.86	9.62
135.0	12.67	12.13	11.65	11.17	10.82	10.52	10.16	9.98	9.74
180.0	11.95	11.47	11.11	10.70	10.40	10.10	9.80	9.50	9.32
225.0	12.97	12.37	11.83	11.41	11.05	10.64	10.34	10.04	9.74
270.0	13.03	12.49	11.95	11.53	11.17	10.88	10.58	10.28	9.98
315.0	12.49	12.01	11.53	11.11	10.82	10.40	10.16	9.92	9.68
360.0	13.03	12.49	12.07	11.53	11.11	10.82	10.46	10.22	9.92

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	9.62	9.38	9.26	9.02	8.84	8.60	8.37	8.19	8.01
45.0	9.44	9.20	9.02	8.84	8.54	8.37	8.13	7.95	7.71
90.0	9.44	9.26	8.96	8.78	8.60	8.43	8.19	8.01	7.77
135.0	9.50	9.26	9.08	8.84	8.60	8.48	8.19	8.01	7.83
180.0	9.08	8.90	8.72	8.48	8.37	8.13	7.89	7.77	7.47
225.0	9.56	9.32	9.08	8.90	8.72	8.54	8.31	8.13	7.95
270.0	9.74	9.56	9.32	9.14	8.96	8.84	8.66	8.48	8.25
315.0	9.44	9.32	9.08	8.90	8.66	8.43	8.25	8.07	7.83
360.0	9.62	9.38	9.26	9.02	8.84	8.60	8.37	8.19	8.01

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	7.77	7.59	7.35	7.11	6.99	6.81	6.69	6.51	6.39
45.0	7.53	7.29	7.11	6.93	6.75	6.57	6.45	6.33	6.21
90.0	7.53	7.35	7.17	6.99	6.81	6.69	6.57	6.39	6.21
135.0	7.59	7.35	7.17	6.93	6.75	6.57	6.39	6.21	6.09
180.0	7.29	7.05	6.93	6.69	6.51	6.33	6.15	6.04	5.92
225.0	7.71	7.53	7.29	7.11	6.93	6.75	6.57	6.39	6.21
270.0	8.01	7.77	7.53	7.35	7.17	7.05	6.93	6.75	6.69
315.0	7.59	7.41	7.23	7.05	6.87	6.69	6.57	6.39	6.21
360.0	7.77	7.59	7.35	7.11	6.99	6.81	6.69	6.51	6.39

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	6.21	6.04	5.92	5.86	5.68	5.56	5.38	5.20	5.08
45.0	6.04	5.92	5.86	5.68	5.56	5.38	5.20	5.14	5.02
90.0	6.09	5.98	5.86	5.62	5.50	5.38	5.20	5.14	4.96
135.0	5.92	5.86	5.68	5.56	5.44	5.32	5.26	5.14	5.02
180.0	5.80	5.68	5.56	5.44	5.32	5.20	5.08	5.02	4.90
225.0	6.09	5.92	5.80	5.68	5.56	5.50	5.38	5.26	5.14
270.0	6.51	6.39	6.27	6.39	6.81	6.45	5.38	5.26	5.14
315.0	6.09	5.98	5.80	5.74	5.62	5.44	5.26	5.14	5.02
360.0	6.21	6.04	5.92	5.86	5.68	5.56	5.38	5.20	5.08

Intensity data(cd)

C/γ(°)	90.0
0.0	4.96
45.0	5.02
90.0	5.02
135.0	4.96
180.0	4.96
225.0	5.08
270.0	5.02
315.0	4.96
360.0	4.96