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Nata

LumCAT: 1496-S	
Luminaire: 92.70.188.00	
Report No: 220526-B007	Voltage(V): 35.5600
Test No: 220526-C007	Current(A): 0.3810
LampCAT: PHILIPS CentaFlux SLM 1204	Power (W): 13.5480
Lamp flux(lm): 1408.6	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): 1138.52
Efficiency(%): 80.83%
Lumens(lm)/Power(W): 84.04
Central intensity(cd): 4881.364
Maximum intensity(cd): 4881.364
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=21.8
 [C90/270]Total=21.8
Field angle(10%Imax): [C0/180]Total=52.5
 [C90/270]Total=52.5
Maximum s/h(1/2): C0_180=0.37 C90_270=0.37
Maximum s/h(1/4): C0_180=0.42 C90_270=0.42
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 80.83%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.019%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4881.364	0.000	0	.000%	.000%
1.0	4848.500	4.656	4.656	.331%	.409%
2.0	4728.247	13.745	18.401	.976%	1.616%
3.0	4549.511	22.189	40.59	1.575%	3.565%
4.0	4334.027	29.736	70.326	2.111%	6.177%
5.0	4044.898	36.046	106.372	2.559%	9.343%
6.0	3770.632	41.073	147.445	2.916%	12.951%
7.0	3482.100	45.018	192.462	3.196%	16.905%
8.0	3186.323	47.725	240.187	3.388%	21.096%
9.0	2910.937	49.415	289.602	3.508%	25.437%
10.0	2658.780	50.404	340.006	3.578%	29.864%
11.0	2416.109	50.709	390.714	3.600%	34.318%
12.0	2205.778	50.524	441.238	3.587%	38.755%
13.0	2001.423	49.929	491.167	3.545%	43.141%
14.0	1796.396	48.612	539.779	3.451%	47.410%
15.0	1634.615	47.102	586.881	3.344%	51.548%
16.0	1469.638	45.486	632.367	3.229%	55.543%
17.0	1322.952	43.488	675.856	3.087%	59.362%
18.0	1183.040	41.318	717.174	2.933%	62.992%
19.0	1091.626	39.575	756.748	2.809%	66.467%
20.0	982.547	37.963	794.712	2.695%	69.802%
21.0	883.252	35.827	830.539	2.543%	72.949%
22.0	799.875	33.823	864.362	2.401%	75.919%
23.0	718.656	31.863	896.225	2.262%	78.718%
24.0	645.712	29.830	926.055	2.118%	81.338%
25.0	574.950	27.755	953.81	1.970%	83.776%
26.0	506.100	25.518	979.328	1.812%	86.017%
27.0	434.135	23.003	1002.331	1.633%	88.038%
28.0	367.189	20.288	1022.619	1.440%	89.820%
29.0	307.966	17.664	1040.283	1.254%	91.371%
30.0	248.326	15.020	1055.303	1.066%	92.690%
31.0	188.625	12.160	1067.462	.863%	93.758%
32.0	139.665	9.405	1076.868	.668%	94.584%
33.0	97.808	6.996	1083.864	.497%	95.199%
34.0	64.936	4.925	1088.789	.350%	95.632%
35.0	43.515	3.368	1092.157	.239%	95.927%
36.0	31.273	2.381	1094.538	.169%	96.137%
37.0	25.716	1.859	1096.397	.132%	96.300%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	21.182	1.565	1097.962	.111%	96.437%
39.0	17.381	1.316	1099.278	.093%	96.553%
40.0	14.154	1.100	1100.378	.078%	96.649%
41.0	13.093	0.970	1101.349	.069%	96.735%
42.0	12.122	0.916	1102.265	.065%	96.815%
43.0	11.398	0.871	1103.136	.062%	96.892%
44.0	10.770	0.837	1103.973	.059%	96.965%
45.0	10.218	0.807	1104.779	.057%	97.036%
46.0	9.814	0.783	1105.563	.056%	97.105%
47.0	9.448	0.766	1106.329	.054%	97.172%
48.0	9.142	0.752	1107.08	.053%	97.238%
49.0	8.918	0.742	1107.822	.053%	97.303%
50.0	8.739	0.736	1108.558	.052%	97.368%
51.0	8.582	0.733	1109.291	.052%	97.432%
52.0	8.470	0.732	1110.023	.052%	97.497%
53.0	8.380	0.733	1110.756	.052%	97.561%
54.0	8.298	0.735	1111.491	.052%	97.626%
55.0	8.238	0.738	1112.229	.052%	97.690%
56.0	8.164	0.741	1112.97	.053%	97.755%
57.0	8.119	0.744	1113.715	.053%	97.821%
58.0	8.067	0.748	1114.463	.053%	97.887%
59.0	8.037	0.753	1115.216	.053%	97.953%
60.0	8.014	0.758	1115.974	.054%	98.019%
61.0	7.999	0.764	1116.738	.054%	98.086%
62.0	7.970	0.769	1117.508	.055%	98.154%
63.0	7.955	0.774	1118.282	.055%	98.222%
64.0	7.932	0.780	1119.062	.055%	98.291%
65.0	7.947	0.786	1119.848	.056%	98.360%
66.0	7.932	0.792	1120.64	.056%	98.429%
67.0	7.910	0.797	1121.437	.057%	98.499%
68.0	7.872	0.799	1122.236	.057%	98.569%
69.0	7.835	0.801	1123.037	.057%	98.640%
70.0	7.805	0.803	1123.841	.057%	98.710%
71.0	7.745	0.804	1124.644	.057%	98.781%
72.0	7.701	0.803	1125.448	.057%	98.851%
73.0	7.641	0.802	1126.25	.057%	98.922%
74.0	7.574	0.800	1127.05	.057%	98.992%
75.0	7.492	0.796	1127.846	.057%	99.062%

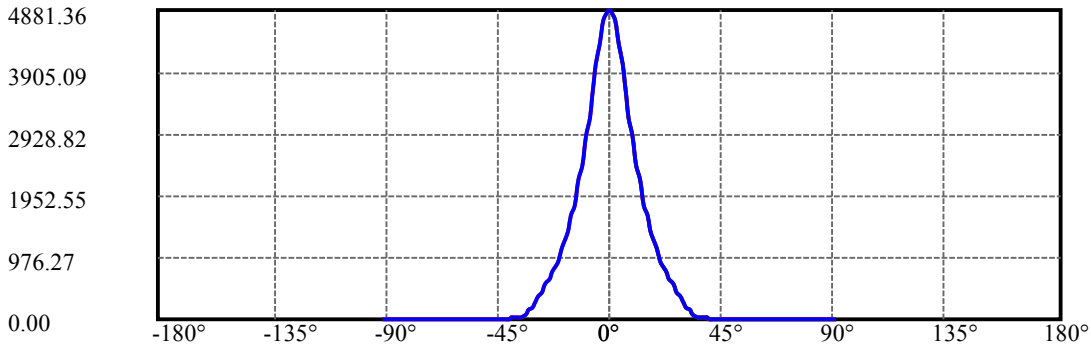
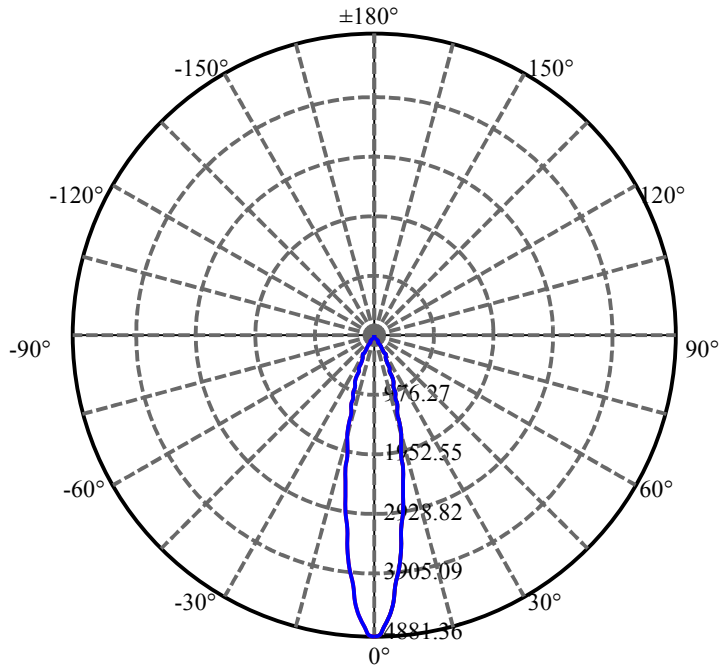
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.462	0.794	1128.639	.056%	99.132%
77.0	7.417	0.793	1129.433	.056%	99.201%
78.0	7.357	0.791	1130.224	.056%	99.271%
79.0	7.275	0.786	1131.01	.056%	99.340%
80.0	7.215	0.781	1131.791	.055%	99.409%
81.0	7.126	0.776	1132.566	.055%	99.477%
82.0	7.058	0.769	1133.336	.055%	99.544%
83.0	6.946	0.761	1134.097	.054%	99.611%
84.0	6.774	0.747	1134.844	.053%	99.677%
85.0	6.237	0.710	1135.555	.050%	99.739%
86.0	5.953	0.666	1136.221	.047%	99.798%
87.0	5.423	0.623	1136.843	.044%	99.852%
88.0	5.094	0.576	1137.42	.041%	99.903%
89.0	5.034	0.555	1137.975	.039%	99.952%
90.0	4.997	0.550	1138.525	.039%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1055.30	74.92%	92.69%
0-40	1100.38	78.12%	96.65%
0-60	1115.97	79.22%	98.02%
0-90	1137.97	80.79%	99.95%
0-120	1137.97	80.79%	99.95%
0-180	1138.52	80.83%	100.00%
60-90	22.76	1.62%	2.00%
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%
0-23.49	910.82	64.66%	80.00%

ZONAL LUMEN SUMMARY

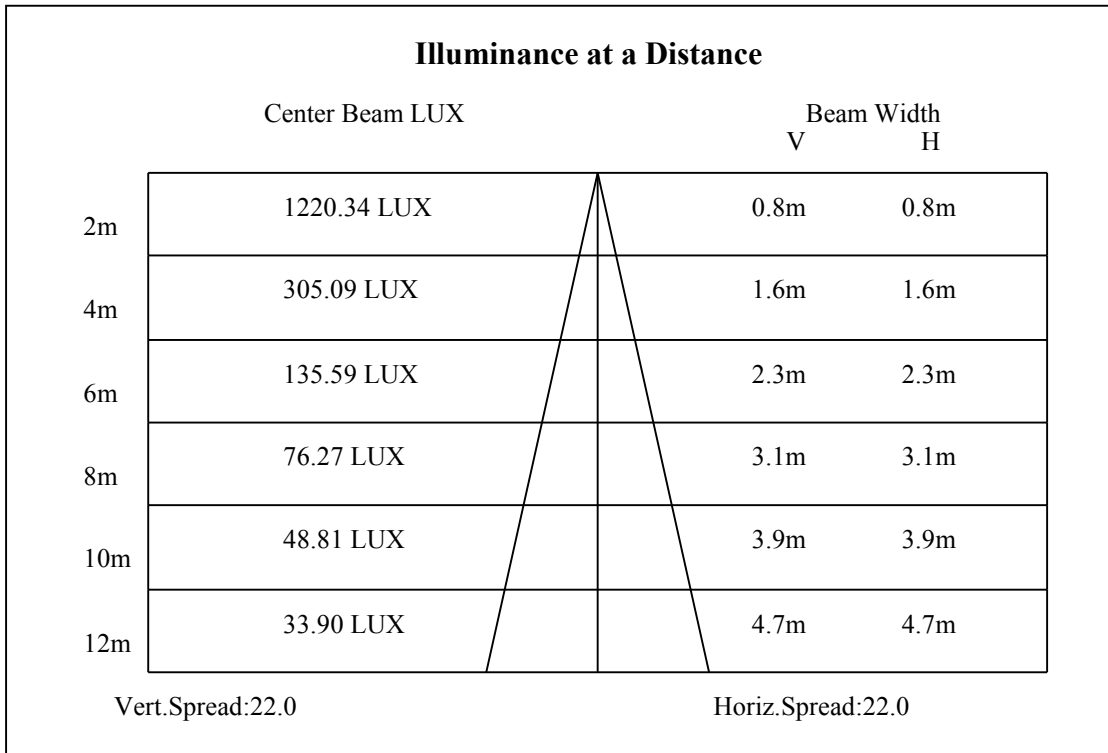
0-10	340.01
10-20	454.71
20-30	260.59
30-40	45.08
40-50	8.18
50-60	7.42
60-70	7.87
70-80	7.95
80-90	6.18
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

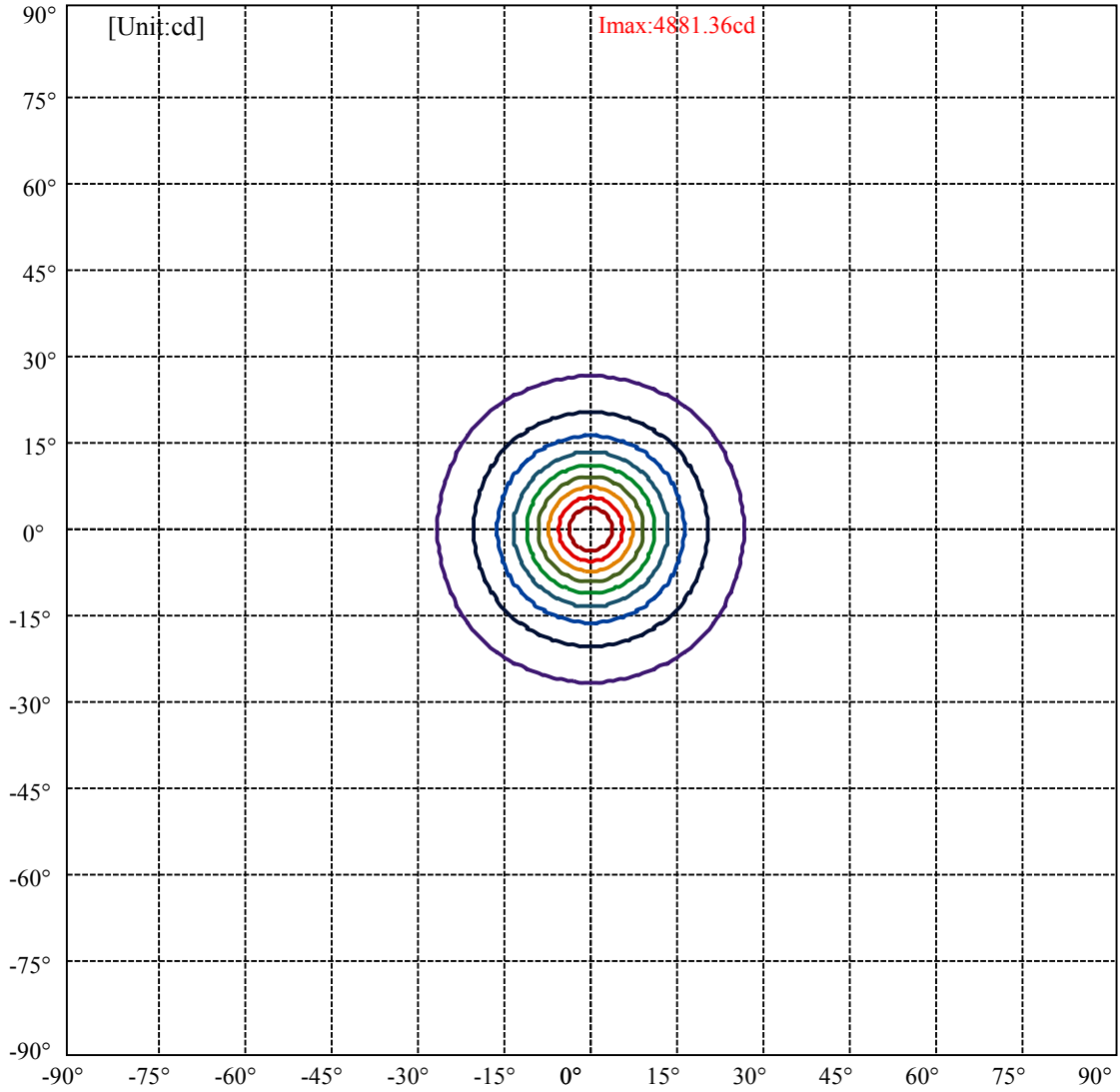


C0(Max): ———
C0/C180: ———
C90/C270: ———

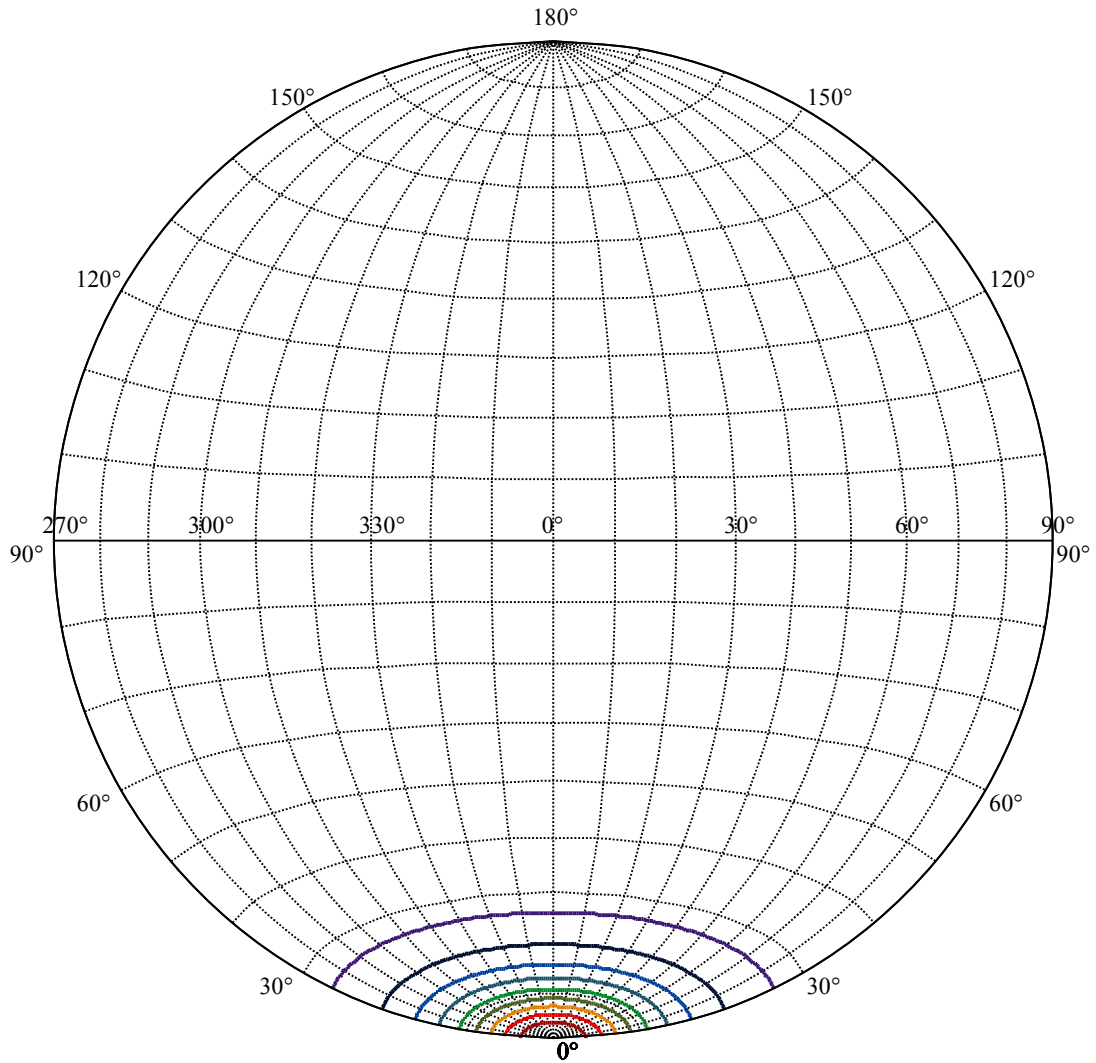
Field angle(10%Imax):C0/180Left:26.2 Right:26.2
:C90/270Left:26.2 Right:26.2

Beam Angle(50%Imax):C0/180Left:10.9 Right:10.9
:C90/270Left:10.9 Right:10.9





(10%Imax) 488.136	—
(20%Imax) 976.273	—
(30%Imax) 1464.41	—
(40%Imax) 1952.55	—
(50%Imax) 2440.68	—
(60%Imax) 2928.82	—
(70%Imax) 3416.95	—
(80%Imax) 3905.09	—
(90%Imax) 4393.23	—



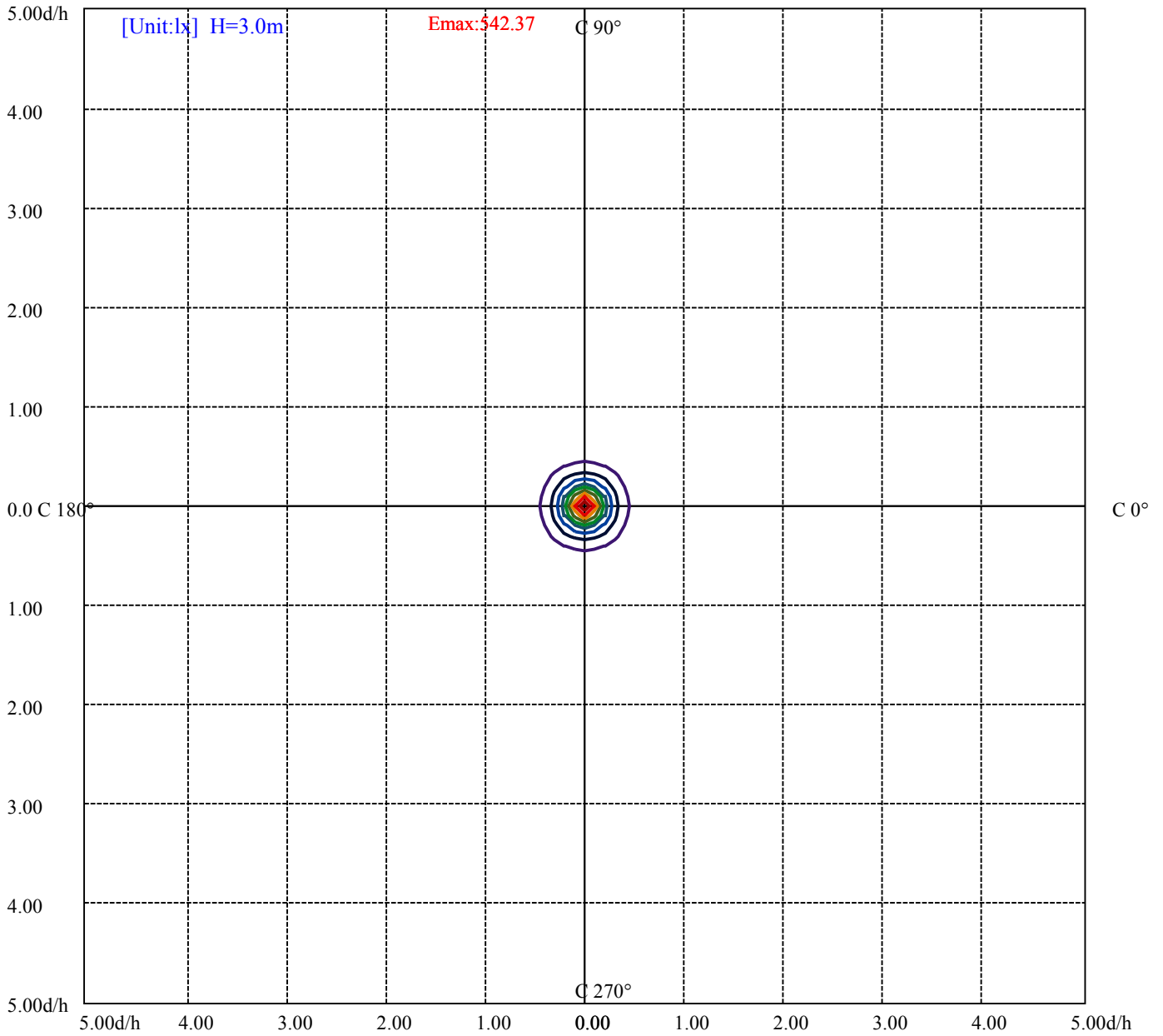
House

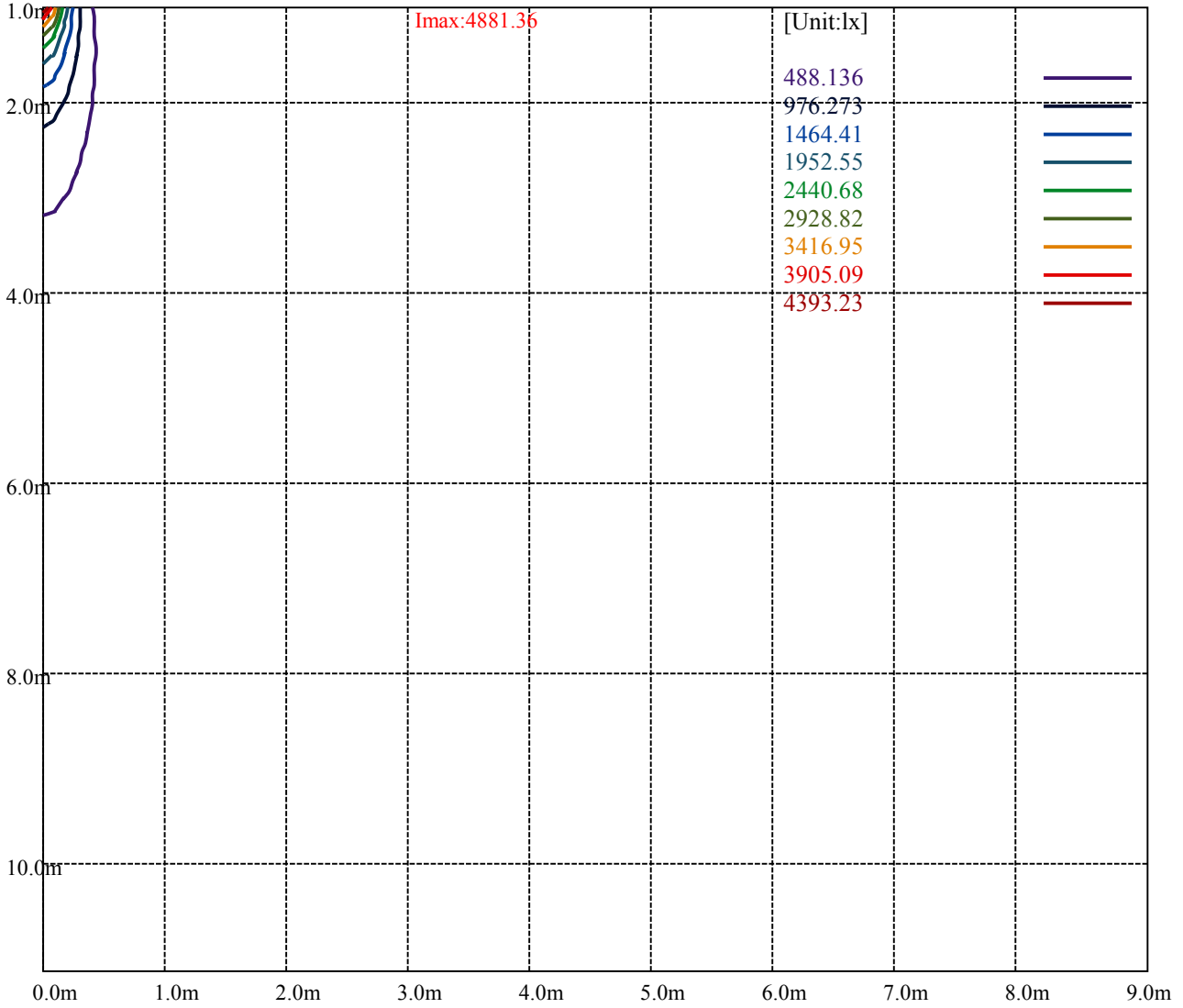
[Unit:cd]

Road

Imax:4881.36

(10%Imax) 488.136	—
(20%Imax) 976.273	—
(30%Imax) 1464.41	—
(40%Imax) 1952.55	—
(50%Imax) 2440.68	—
(60%Imax) 2928.82	—
(70%Imax) 3416.95	—
(80%Imax) 3905.09	—
(90%Imax) 4393.23	—





Luminance Table

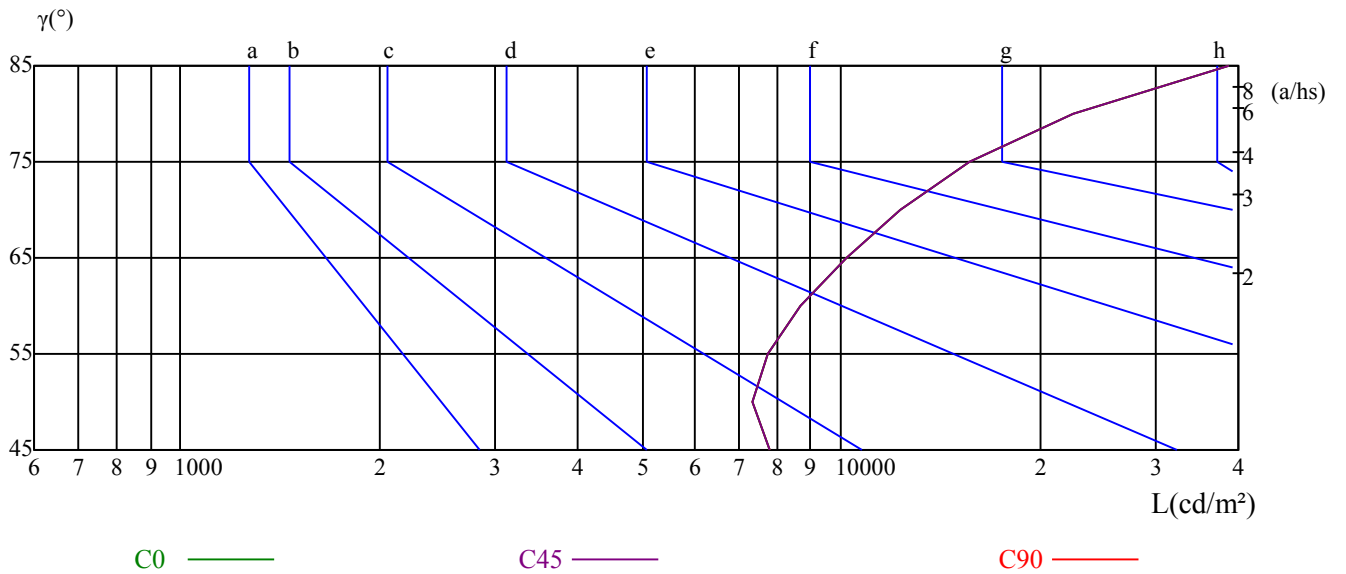
γ	45	50	55	60	65	70	75	80	85
C0	7815	7353	7768	8669	10170	12342	15654	22472	38701
C45	7815	7353	7768	8669	10170	12342	15654	22472	38701
C90	7815	7353	7768	8669	10170	12342	15654	22472	38701

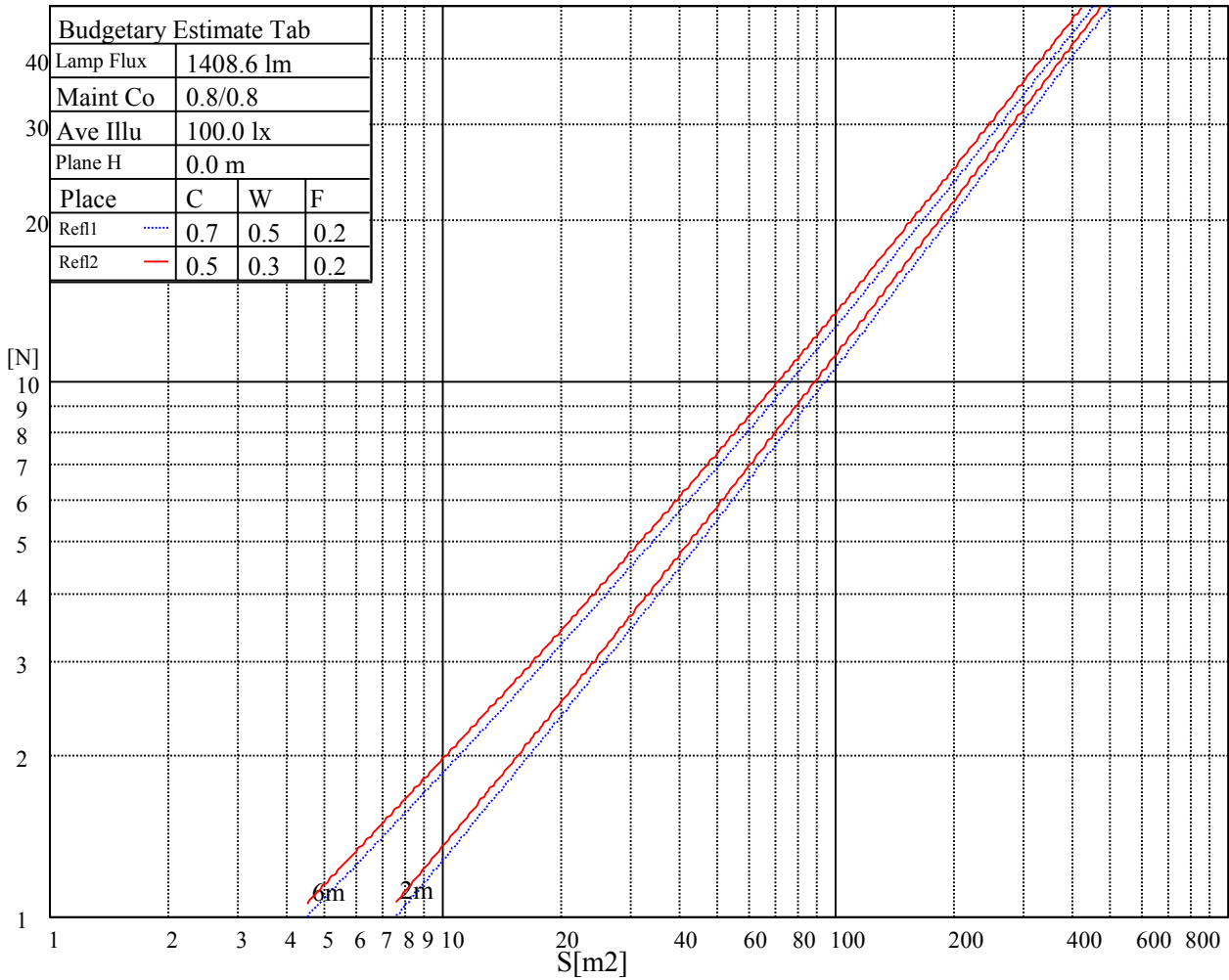
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
10170	10170	10170	15654	15654	15654	38701	38701	38701

Glare Table

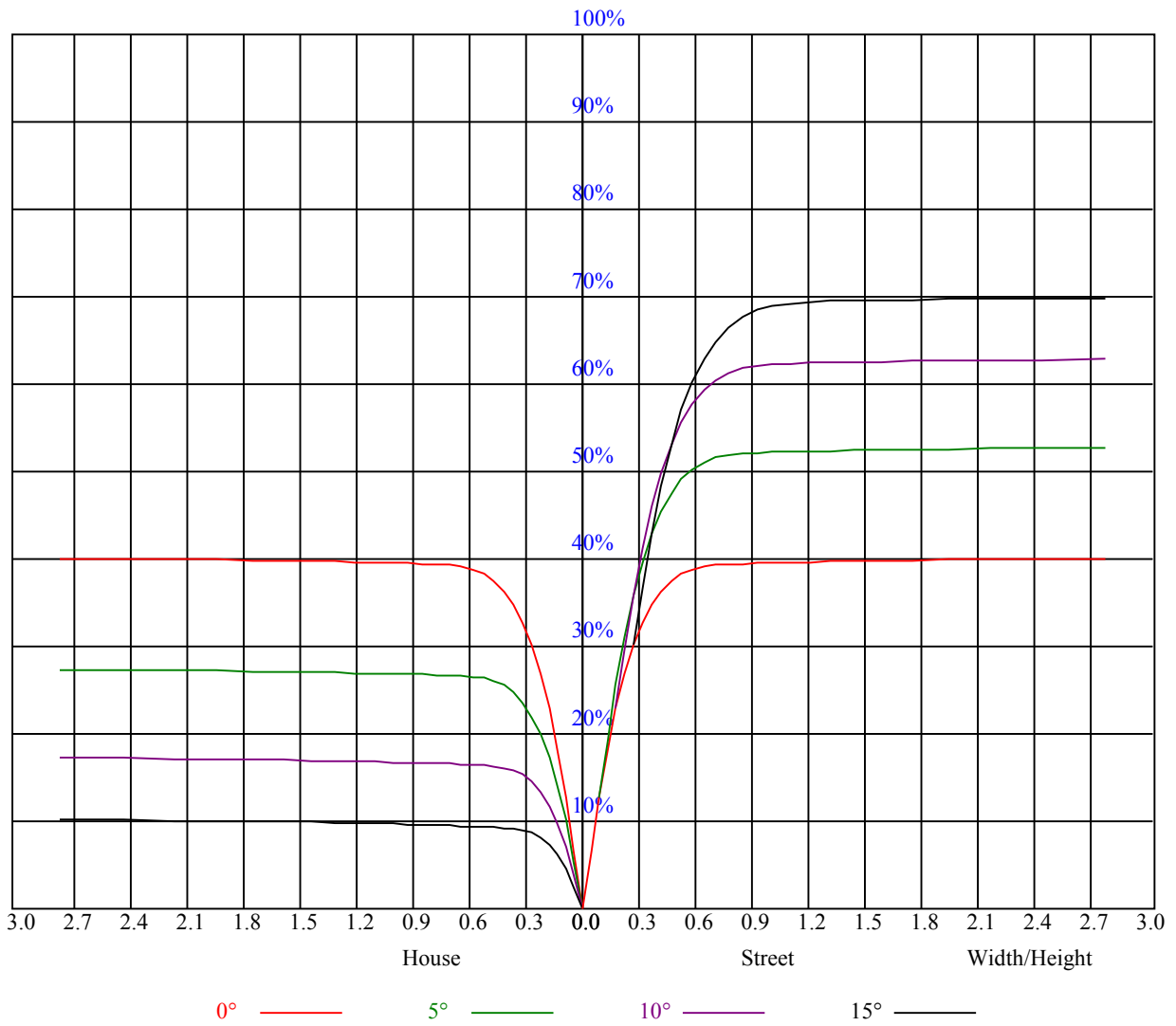
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.96	0.96	0.96	0.94	0.94	0.94	0.90	0.90	0.90	0.86	0.86	0.86	0.82	0.82	0.82	0.81
1	0.90	0.89	0.87	0.89	0.87	0.86	0.86	0.84	0.83	0.83	0.82	0.81	0.80	0.79	0.78	0.77
2	0.86	0.83	0.81	0.84	0.82	0.80	0.82	0.80	0.78	0.79	0.78	0.76	0.77	0.76	0.75	0.74
3	0.82	0.78	0.76	0.81	0.78	0.75	0.78	0.76	0.74	0.77	0.75	0.73	0.75	0.73	0.72	0.71
4	0.78	0.74	0.72	0.77	0.74	0.71	0.75	0.73	0.71	0.74	0.72	0.70	0.73	0.71	0.69	0.68
5	0.75	0.71	0.68	0.74	0.71	0.68	0.73	0.70	0.68	0.71	0.69	0.67	0.70	0.68	0.66	0.65
6	0.72	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.65	0.69	0.66	0.64	0.68	0.66	0.64	0.63
7	0.69	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.67	0.64	0.62	0.66	0.64	0.62	0.61
8	0.67	0.63	0.61	0.66	0.63	0.61	0.66	0.63	0.60	0.65	0.62	0.60	0.64	0.62	0.60	0.59
9	0.65	0.61	0.59	0.64	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.62	0.60	0.58	0.57
10	0.63	0.59	0.57	0.62	0.59	0.57	0.62	0.59	0.56	0.61	0.58	0.56	0.61	0.58	0.56	0.55



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	4878.82	4927.22	4868.67	4737.21	4541.22	4282.49	4024.96	3722.01	3447.14
45.0	4885.40	4774.26	4557.35	4349.41	4098.45	3764.43	3485.98	3217.10	2931.48
90.0	4847.16	4723.47	4503.58	4276.52	4014.80	3674.21	3431.61	3129.26	2803.01
135.0	4914.08	4845.36	4680.44	4495.21	4298.62	3931.14	3646.72	3405.92	3075.48
180.0	4878.82	4785.01	4633.24	4364.95	4116.38	3849.28	3536.18	3235.02	2970.91
225.0	4885.40	4914.68	4868.67	4739.60	4563.93	4312.37	4045.87	3742.92	3433.40
270.0	4847.16	4909.30	4883.01	4790.99	4611.73	4354.19	4097.26	3818.21	3511.08
315.0	4914.08	4908.70	4831.02	4642.20	4427.09	4191.07	3896.49	3586.37	3318.08
360.0	4878.82	4927.22	4868.67	4737.21	4541.22	4282.49	4024.96	3722.01	3447.14
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3156.75	2889.65	2672.15	2465.40	2215.64	2030.40	1858.32	1658.74	1515.33
45.0	2661.99	2442.10	2204.88	2013.67	1814.70	1633.64	1484.86	1337.87	1205.81
90.0	2588.50	2341.12	2081.79	1909.70	1732.24	1511.75	1386.86	1186.21	1140.50
135.0	2785.68	2580.13	2314.83	2110.47	1919.26	1708.34	1554.77	1413.75	1263.18
180.0	2700.23	2457.04	2261.05	2043.55	1873.25	1692.20	1528.48	1394.04	1180.48
225.0	3168.70	2866.94	2604.03	2379.36	2170.23	1928.23	1754.94	1596.00	1431.08
270.0	3205.15	2950.00	2672.15	2445.69	2204.28	1986.19	1804.54	1620.50	1448.41
315.0	3020.51	2743.26	2517.99	2278.38	2081.79	1880.42	1704.15	1549.99	1398.82
360.0	3156.75	2889.65	2672.15	2465.40	2215.64	2030.40	1858.32	1658.74	1515.33
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1381.49	1242.86	1115.59	1016.99	913.02	825.79	735.56	660.27	595.14
45.0	1101.84	1005.04	898.68	814.43	740.34	665.65	598.13	532.40	456.51
90.0	1010.42	911.29	826.80	726.12	653.64	594.06	530.31	462.25	398.91
135.0	1148.45	1049.26	943.50	853.27	776.19	695.52	629.20	565.26	492.96
180.0	1138.47	1021.06	927.19	819.21	738.13	671.86	607.33	522.00	455.62
225.0	1187.29	1172.77	1060.37	959.39	876.16	784.38	710.70	644.20	571.72
270.0	1307.99	1184.30	1040.90	942.90	850.28	740.94	662.66	594.54	524.03
315.0	1188.37	1146.42	1047.35	933.70	851.24	771.05	691.82	618.68	553.91
360.0	1381.49	1242.86	1115.59	1016.99	913.02	825.79	735.56	660.27	595.14
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	516.86	439.18	372.26	311.31	237.22	186.79	139.28	94.83	57.96
45.0	388.39	324.46	302.95	203.64	152.07	107.56	62.98	36.63	26.95
90.0	334.32	278.93	218.34	170.83	127.45	87.96	56.23	36.09	29.40
135.0	418.27	353.14	307.73	227.36	173.70	119.57	80.79	47.74	30.65
180.0	387.80	318.78	252.16	199.34	144.78	97.88	65.07	39.74	29.58
225.0	506.59	438.83	358.34	298.41	243.49	185.83	133.85	93.04	58.32
270.0	443.96	380.63	313.70	301.75	211.59	168.08	130.26	95.13	67.64
315.0	476.89	403.57	338.26	273.97	218.70	163.66	114.01	76.30	47.62
360.0	516.86	439.18	372.26	311.31	237.22	186.79	139.28	94.83	57.96
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	36.63	27.61	23.84	19.48	13.38	12.37	11.41	10.76	10.10
45.0	24.02	20.50	14.70	13.32	12.37	11.65	10.76	10.22	9.80
90.0	24.92	22.41	17.81	16.01	15.00	14.10	13.38	12.73	12.19
135.0	25.69	23.06	17.69	14.58	13.50	12.49	11.59	10.93	10.28
180.0	26.35	22.35	15.12	13.68	12.37	11.47	10.82	10.16	9.68
225.0	36.51	29.82	26.95	19.78	14.82	13.68	12.55	11.65	10.88
270.0	45.11	32.57	29.70	26.05	18.22	16.43	14.88	13.86	13.03
315.0	30.95	27.43	23.66	16.13	13.56	12.55	11.59	10.88	10.22
360.0	36.63	27.61	23.84	19.48	13.38	12.37	11.41	10.76	10.10

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	9.56	9.20	8.90	8.66	8.48	8.37	8.25	8.19	8.19
45.0	9.26	8.90	8.66	8.43	8.31	8.25	8.25	8.25	8.25
90.0	11.71	11.35	10.88	10.52	10.16	9.80	9.38	9.08	8.84
135.0	9.74	9.32	8.96	8.66	8.37	8.25	8.13	8.07	8.01
180.0	9.32	9.02	8.78	8.60	8.48	8.43	8.37	8.31	8.25
225.0	10.22	9.68	9.26	8.90	8.72	8.48	8.48	8.43	8.43
270.0	12.31	11.83	11.41	10.99	10.64	10.34	9.92	9.62	9.32
315.0	9.62	9.20	8.72	8.37	8.19	8.01	7.89	7.83	7.77
360.0	9.56	9.20	8.90	8.66	8.48	8.37	8.25	8.19	8.19
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	8.19	8.13	8.01	8.01	7.95	7.95	8.01	8.01	8.07
45.0	8.25	8.31	8.25	8.25	8.19	8.19	8.19	8.19	8.13
90.0	8.54	8.37	8.13	8.07	8.01	7.95	7.77	7.77	7.71
135.0	7.95	7.89	7.89	7.77	7.77	7.65	7.65	7.59	7.53
180.0	8.13	8.07	8.01	8.01	8.01	8.07	8.07	8.13	8.13
225.0	8.48	8.54	8.60	8.60	8.60	8.60	8.54	8.54	8.54
270.0	9.08	8.84	8.66	8.48	8.31	8.19	8.19	8.13	8.01
315.0	7.77	7.77	7.77	7.77	7.71	7.71	7.71	7.65	7.65
360.0	8.19	8.13	8.01	8.01	7.95	7.95	8.01	8.01	8.07
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	8.07	8.07	8.13	8.13	8.13	8.13	8.07	8.07	8.01
45.0	8.13	8.13	8.13	8.07	8.01	8.01	7.95	7.89	7.83
90.0	7.53	7.41	7.47	7.47	7.47	7.35	7.29	7.35	7.35
135.0	7.53	7.53	7.47	7.53	7.47	7.47	7.47	7.47	7.35
180.0	8.19	8.19	8.19	8.13	8.13	8.07	8.01	7.89	7.83
225.0	8.60	8.60	8.60	8.60	8.60	8.54	8.48	8.43	8.37
270.0	8.01	7.95	7.95	7.89	7.83	7.77	7.83	7.77	7.71
315.0	7.59	7.59	7.65	7.65	7.65	7.65	7.59	7.59	7.53
360.0	8.07	8.07	8.13	8.13	8.13	8.13	8.07	8.07	8.01
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	7.95	7.89	7.71	7.65	7.59	7.47	7.41	7.29	7.23
45.0	7.77	7.71	7.59	7.47	7.41	7.35	7.29	7.23	7.17
90.0	7.41	7.35	7.35	7.35	7.41	7.41	7.35	7.23	7.23
135.0	7.29	7.23	7.17	7.05	6.99	6.93	6.87	6.81	6.69
180.0	7.71	7.65	7.53	7.47	7.41	7.35	7.29	7.17	7.11
225.0	8.31	8.25	8.19	8.07	7.95	7.89	7.83	7.71	7.65
270.0	7.71	7.65	7.71	7.59	7.71	7.77	7.71	7.71	7.65
315.0	7.47	7.41	7.35	7.29	7.23	7.17	7.11	7.05	6.99
360.0	7.95	7.89	7.71	7.65	7.59	7.47	7.41	7.29	7.23
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.17	7.05	6.99	6.87	6.75	6.63	6.51	5.26	5.20
45.0	7.05	7.05	6.99	6.93	6.45	5.20	5.14	5.08	4.96
90.0	7.11	6.99	6.81	6.51	5.26	5.08	5.02	4.96	4.96
135.0	6.63	6.63	6.57	6.45	5.32	5.14	5.08	5.02	5.02
180.0	7.05	6.99	6.87	6.21	5.26	5.14	5.14	5.08	4.96
225.0	7.65	7.53	7.47	7.35	7.29	7.05	5.26	5.14	5.14
270.0	7.47	7.41	7.11	7.17	6.99	6.87	5.74	5.08	5.02
315.0	6.87	6.81	6.75	6.69	6.57	6.51	5.50	5.14	5.02
360.0	7.17	7.05	6.99	6.87	6.75	6.63	6.51	5.26	5.20

Intensity data(cd)

C/ γ (°)	90.0
0.0	5.14
45.0	4.96
90.0	4.96
135.0	4.90
180.0	4.96
225.0	5.08
270.0	4.96
315.0	5.02
360.0	5.14