



NATA LIGHTING CO.,LTD.  
www.nata.cn  
Email:info@nata.com  
Tel:+86-750-3770000 Fax:+86-750-3771111  
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

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## NATA

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LumCAT: 3-1858-E	
Luminaire: 99.02.73.181	
Report No: NATA0100	Voltage(V): 35.1000
Test No: GC2019022011	Current(A): 0.7000
LampCAT: LUMILEDS LUXEON 1208	Power (W): 35.1000
Lamp flux(lm): 2998.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 82	Width(mm): 82
Phm Type: C	Height(mm): 0

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## Photometric Results

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Lumens(lm): 2576.68  
Efficiency(%): 85.95%  
Lumens(lm)/Power(W): 73.51  
Central intensity(cd): 15638.910  
Maximum intensity(cd): 15638.910  
Angle of maximum intensity: C=0.0  $\gamma$ =0.0  
Beam Angle(50%Imax): [C0/180]Total=16.5  
                                  [C90/270]Total=16.5  
Field angle(10%Imax): [C0/180]Total=47.2  
                                  [C90/270]Total=47.2  
Maximum s/h(1/2): C0\_180=0.28 C90\_270=0.28  
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(%): 86.07%  
Up flux rate of LUM(%): - -  
Down flux rate of LUM(%): 100.00%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 98.547%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	15638.906	3.742	3.742	.125%	.145%
1.0	15513.047	29.690	33.431	.990%	1.297%
2.0	15074.297	57.691	91.122	1.924%	3.536%
3.0	14338.828	82.294	173.416	2.745%	6.730%
4.0	13374.844	102.312	275.727	3.413%	10.701%
5.0	12068.367	115.344	391.072	3.847%	15.177%
6.0	10818.492	124.009	515.08	4.136%	19.990%
7.0	9453.586	126.341	641.421	4.214%	24.893%
8.0	8152.734	124.426	765.847	4.150%	29.722%
9.0	6919.875	118.709	884.555	3.960%	34.329%
10.0	5963.906	113.567	998.123	3.788%	38.737%
11.0	5247.141	109.793	1107.915	3.662%	42.998%
12.0	4696.242	107.073	1214.989	3.571%	47.153%
13.0	4240.758	104.612	1319.601	3.489%	51.213%
14.0	3866.836	102.585	1422.186	3.422%	55.195%
15.0	3563.719	101.147	1523.332	3.374%	59.120%
16.0	3300.750	99.771	1623.103	3.328%	62.992%
17.0	3070.336	98.440	1721.543	3.284%	66.813%
18.0	2851.031	96.613	1818.156	3.223%	70.562%
19.0	2692.195	96.117	1914.273	3.206%	74.292%
20.0	2428.172	91.072	2005.345	3.038%	77.827%
21.0	2200.148	86.464	2091.808	2.884%	81.182%
22.0	1998.703	82.106	2173.914	2.739%	84.369%
23.0	1743.469	74.704	2248.618	2.492%	87.268%
24.0	1432.589	63.898	2312.516	2.131%	89.748%
25.0	1137.713	52.727	2365.243	1.759%	91.794%
26.0	902.707	43.395	2408.638	1.447%	93.479%
27.0	655.362	32.627	2441.266	1.088%	94.745%
28.0	459.949	23.679	2464.945	.790%	95.664%
29.0	295.242	15.696	2480.641	.524%	96.273%
30.0	182.250	9.993	2490.634	.333%	96.661%
31.0	123.560	6.979	2497.613	.233%	96.932%
32.0	92.953	5.402	2503.015	.180%	97.141%
33.0	69.877	4.173	2507.188	.139%	97.303%
34.0	54.014	3.312	2510.5	.110%	97.432%
35.0	40.894	2.572	2513.072	.086%	97.532%
36.0	31.338	2.020	2515.092	.067%	97.610%
37.0	25.179	1.662	2516.754	.055%	97.674%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	21.164	1.429	2518.183	.048%	97.730%
39.0	19.146	1.321	2519.504	.044%	97.781%
40.0	17.965	1.266	2520.771	.042%	97.830%
41.0	16.938	1.219	2521.989	.041%	97.878%
42.0	16.024	1.176	2523.165	.039%	97.923%
43.0	15.328	1.146	2524.311	.038%	97.968%
44.0	14.766	1.125	2525.436	.038%	98.011%
45.0	14.302	1.109	2526.545	.037%	98.054%
46.0	13.964	1.102	2527.647	.037%	98.097%
47.0	13.683	1.097	2528.744	.037%	98.140%
48.0	13.444	1.096	2529.84	.037%	98.182%
49.0	13.233	1.095	2530.935	.037%	98.225%
50.0	12.994	1.092	2532.026	.036%	98.267%
51.0	12.755	1.087	2533.113	.036%	98.309%
52.0	12.551	1.085	2534.198	.036%	98.351%
53.0	12.319	1.079	2535.277	.036%	98.393%
54.0	12.101	1.074	2536.35	.036%	98.435%
55.0	11.925	1.071	2537.421	.036%	98.477%
56.0	11.784	1.071	2538.493	.036%	98.518%
57.0	11.672	1.073	2539.566	.036%	98.560%
58.0	11.609	1.080	2540.646	.036%	98.602%
59.0	11.573	1.088	2541.734	.036%	98.644%
60.0	11.566	1.098	2542.832	.037%	98.687%
61.0	11.545	1.107	2543.94	.037%	98.729%
62.0	11.545	1.118	2545.057	.037%	98.773%
63.0	11.531	1.127	2546.184	.038%	98.817%
64.0	11.496	1.133	2547.317	.038%	98.861%
65.0	11.489	1.142	2548.459	.038%	98.905%
66.0	11.440	1.146	2549.605	.038%	98.949%
67.0	11.433	1.154	2550.759	.038%	98.994%
68.0	11.426	1.162	2551.921	.039%	99.039%
69.0	11.405	1.168	2553.088	.039%	99.085%
70.0	11.370	1.172	2554.26	.039%	99.130%
71.0	11.348	1.177	2555.437	.039%	99.176%
72.0	11.306	1.179	2556.616	.039%	99.221%
73.0	11.264	1.181	2557.797	.039%	99.267%
74.0	11.173	1.178	2558.975	.039%	99.313%
75.0	11.102	1.176	2560.151	.039%	99.359%

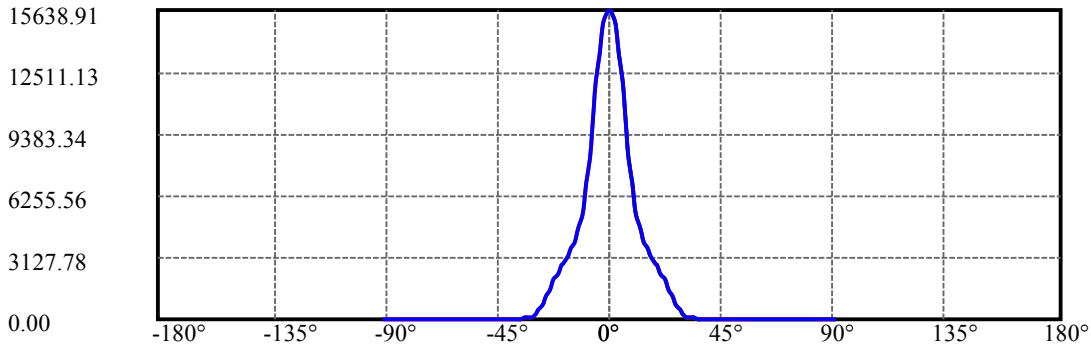
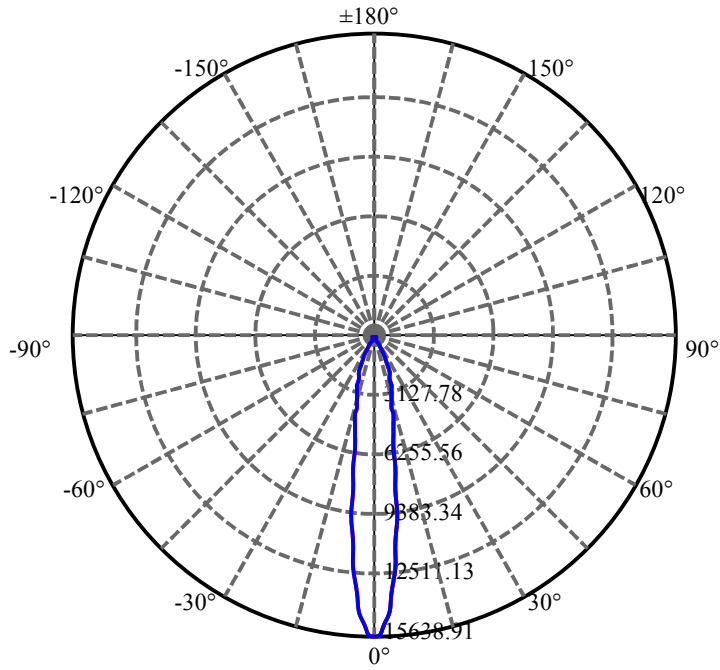
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	10.983	1.169	2561.32	.039%	99.404%
77.0	10.913	1.166	2562.486	.039%	99.449%
78.0	10.821	1.161	2563.646	.039%	99.494%
79.0	10.765	1.159	2564.805	.039%	99.539%
80.0	10.680	1.153	2565.958	.038%	99.584%
81.0	10.617	1.150	2567.108	.038%	99.629%
82.0	10.540	1.145	2568.253	.038%	99.673%
83.0	10.484	1.141	2569.394	.038%	99.717%
84.0	10.434	1.138	2570.532	.038%	99.762%
85.0	10.385	1.135	2571.667	.038%	99.806%
86.0	10.350	1.132	2572.799	.038%	99.850%
87.0	10.245	1.122	2573.921	.037%	99.893%
88.0	10.125	1.110	2575.03	.037%	99.936%
89.0	10.020	1.099	2576.129	.037%	99.979%
90.0	9.984	0.547	2576.676	.018%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2490.63	83.08%	96.66%
0-40	2520.77	84.08%	97.83%
0-60	2542.83	84.82%	98.69%
0-90	2576.13	85.93%	99.98%
0-120	2576.13	85.93%	99.98%
0-180	2576.68	85.95%	100.00%
60-90	34.40	1.15%	1.33%
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%
0-20.65	2061.34	68.76%	80.00%

ZONAL LUMEN SUMMARY

0-10	998.12
10-20	1007.22
20-30	485.29
30-40	30.14
40-50	11.26
50-60	10.81
60-70	11.43
70-80	11.70
80-90	10.17
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



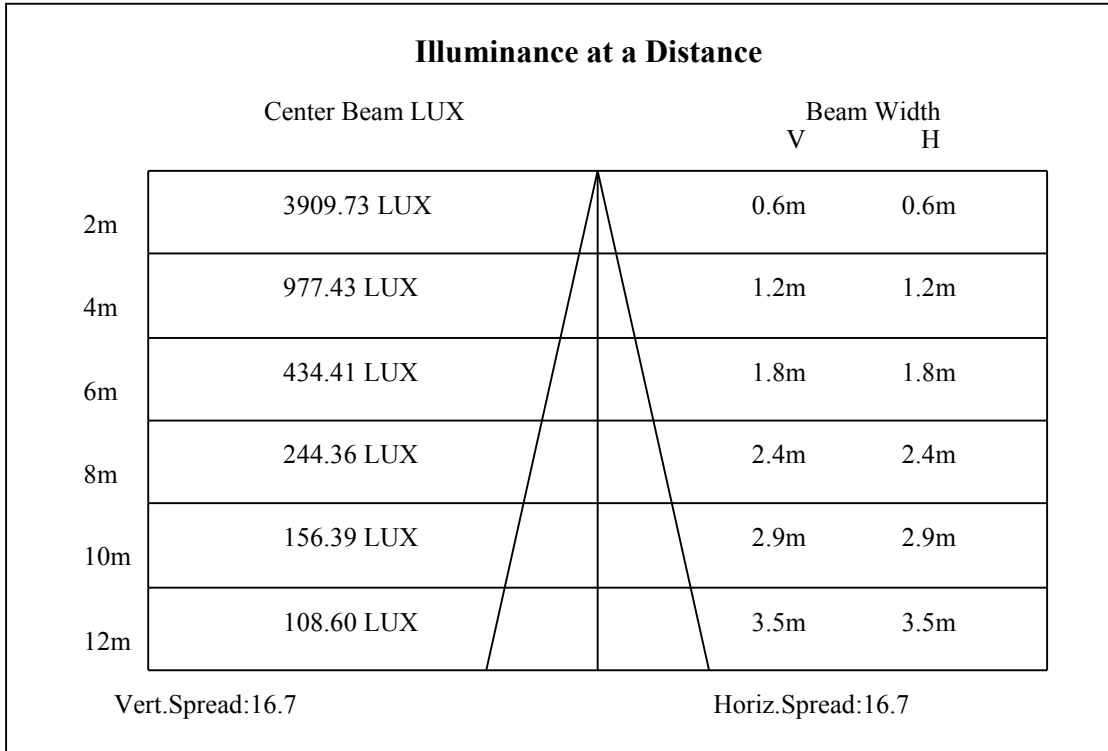
C0(Max): —————

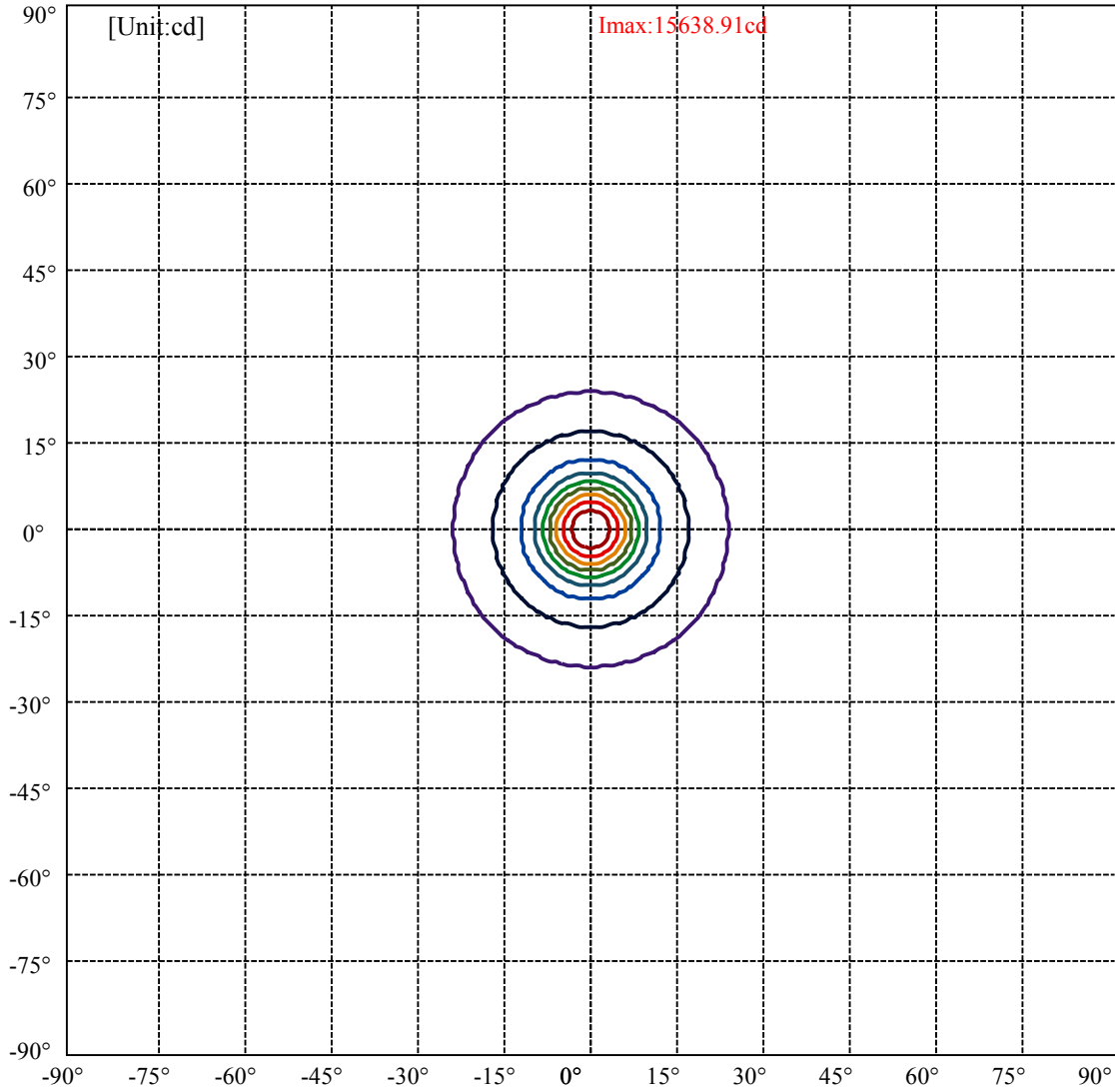
C0/C180: —————

C90/C270: —————

Field angle(10%Imax):C0/180Left:23.6 Right:23.6  
:C90/270Left:23.6 Right:23.6

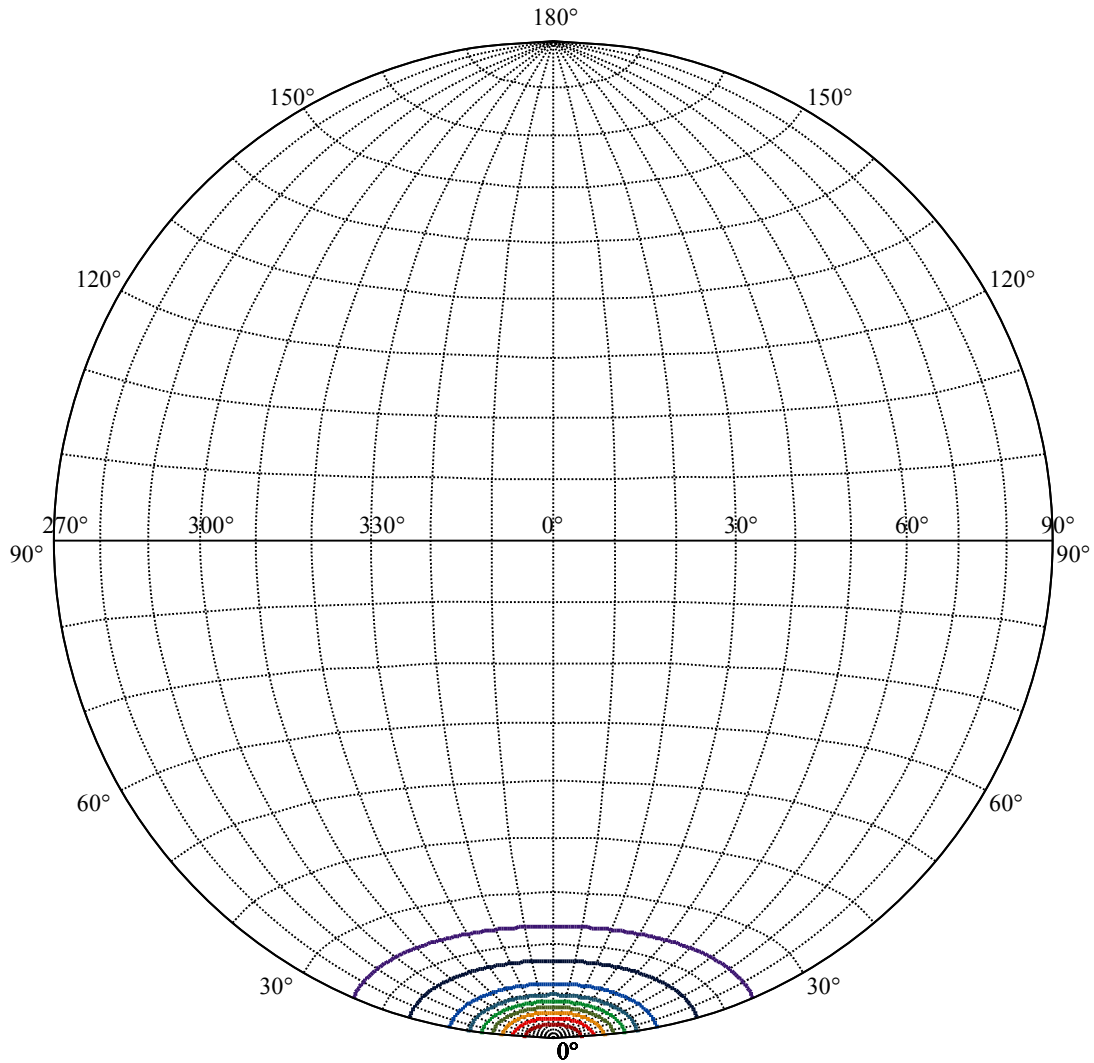
Beam Angle(50%Imax):C0/180Left:8.3 Right:8.3  
:C90/270Left:8.3 Right:8.3





(10%Imax) 1563.89	—
(20%Imax) 3127.78	—
(30%Imax) 4691.67	—
(40%Imax) 6255.56	—
(50%Imax) 7819.45	—
(60%Imax) 9383.34	—
(70%Imax) 10947.2	—
(80%Imax) 12511.1	—
(90%Imax) 14075	—





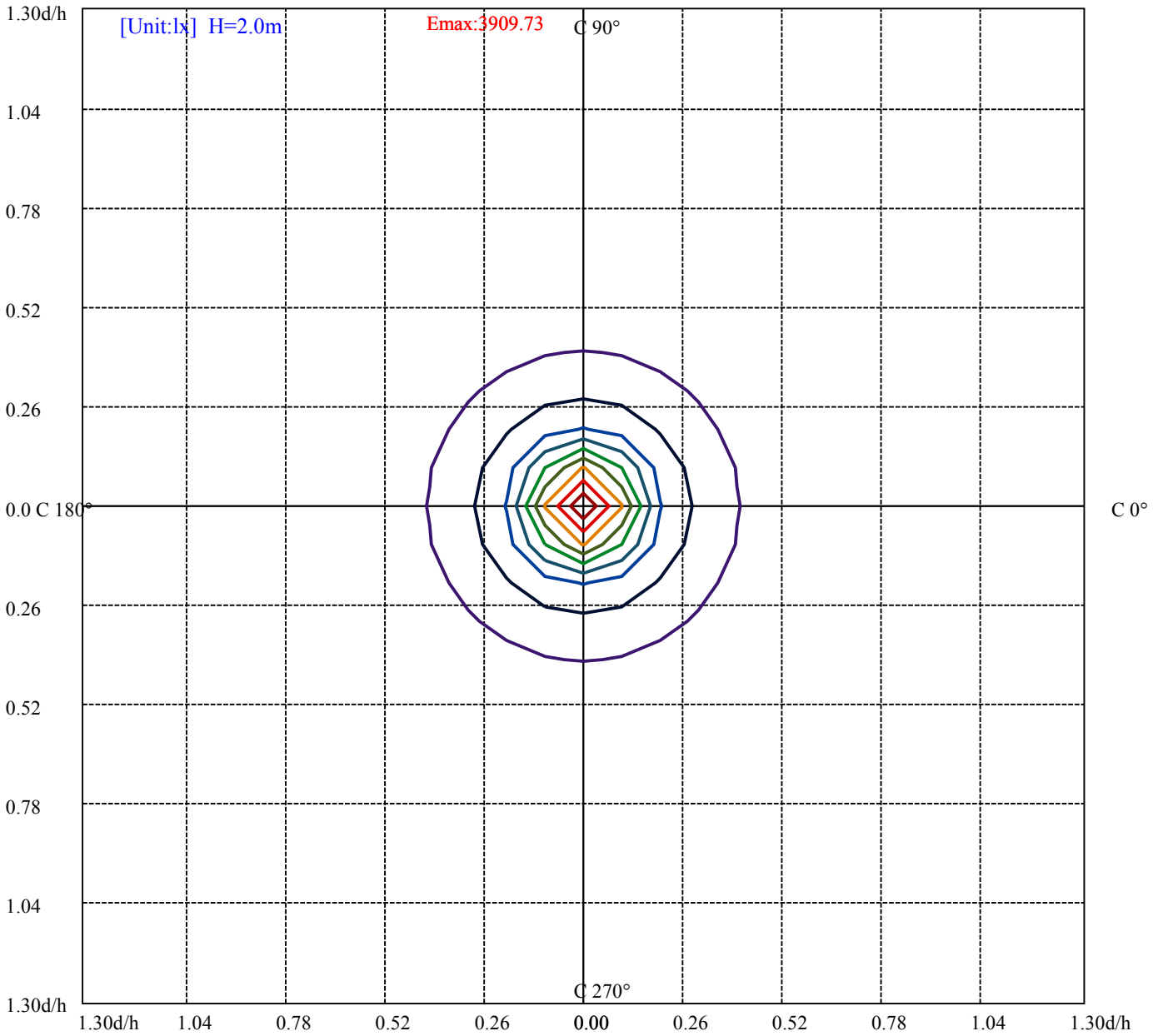
House

[Unit:cd]

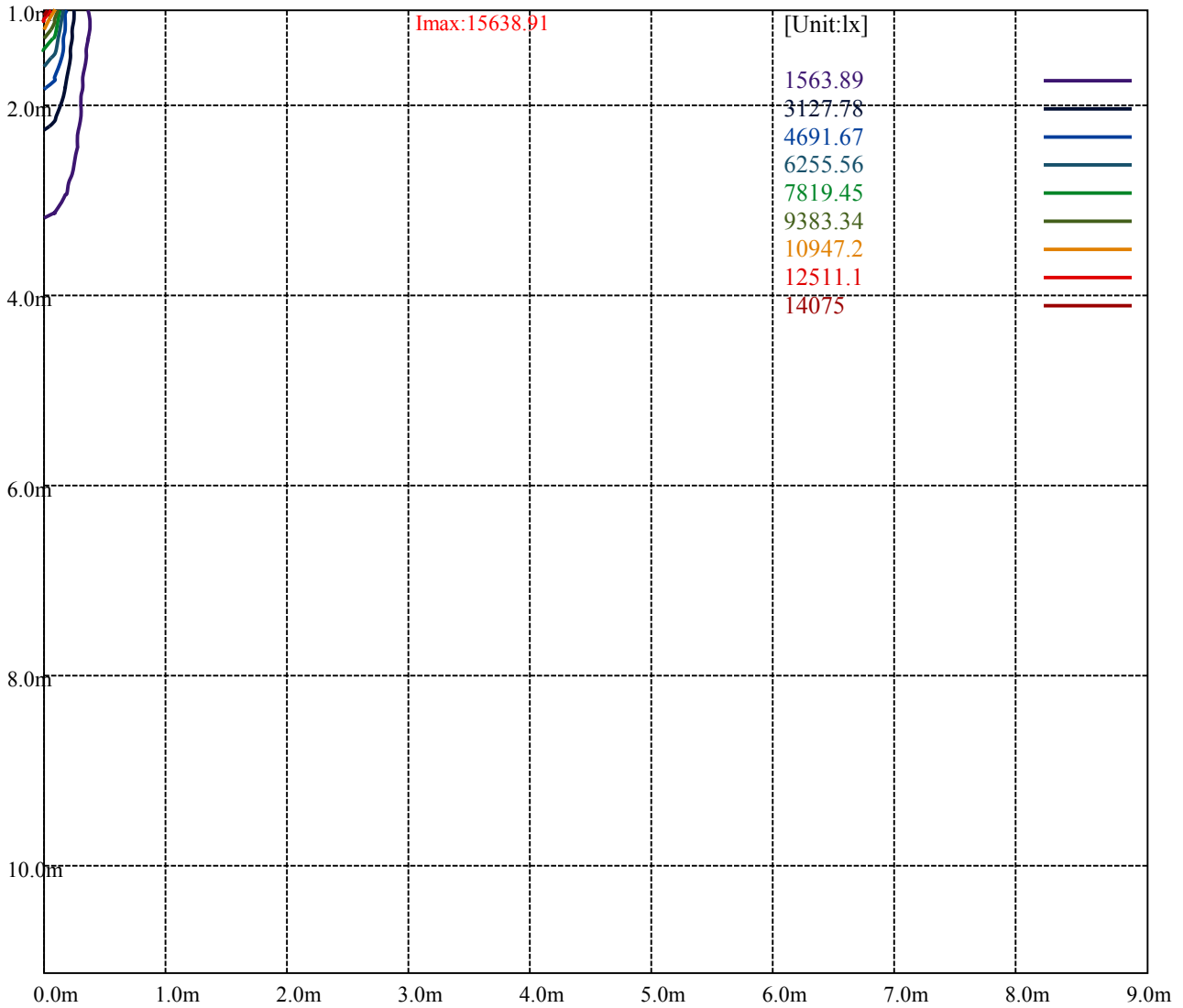
Road

**Imax:15638.91**

(10%Imax)	1563.89	—
(20%Imax)	3127.78	—
(30%Imax)	4691.67	—
(40%Imax)	6255.56	—
(50%Imax)	7819.45	—
(60%Imax)	9383.34	—
(70%Imax)	10947.2	—
(80%Imax)	12511.1	—
(90%Imax)	14075	—



- (10%Emax) 390.9725
- (20%Emax) 781.945
- (30%Emax) 1172.917
- (40%Emax) 1563.89
- (50%Emax) 1954.86
- (60%Emax) 2345.833
- (70%Emax) 2736.8
- (80%Emax) 3127.775
- (90%Emax) 3518.75



Luminance Table

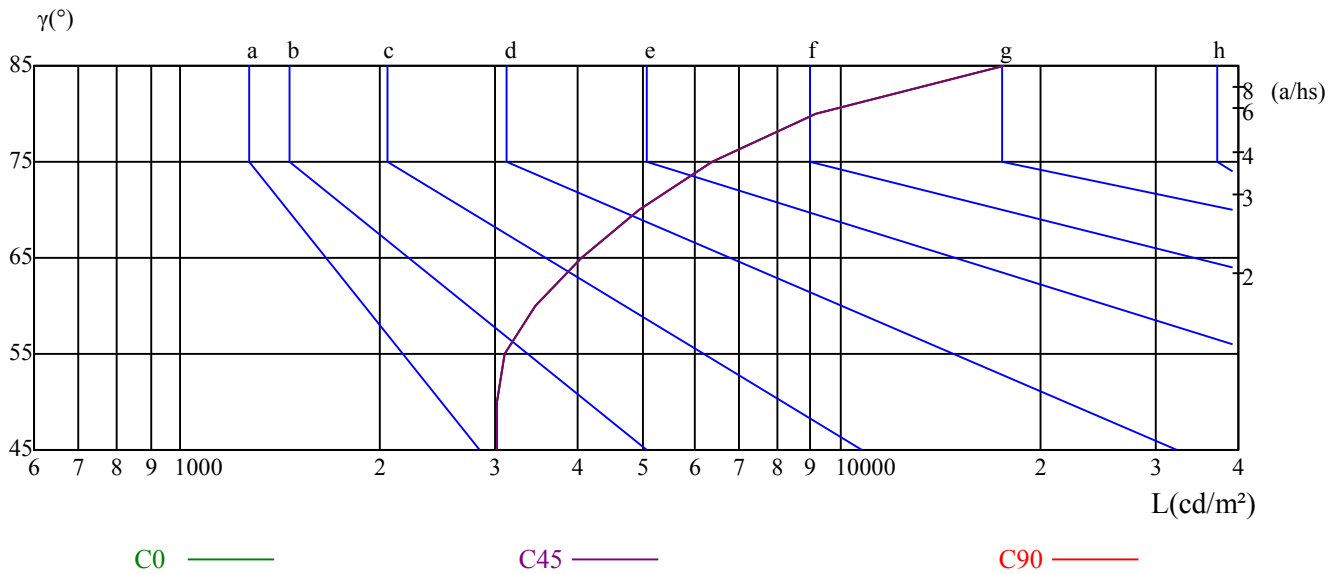
$\gamma$	45	50	55	60	65	70	75	80	85
C0	3008	3006	3092	3440	4043	4944	6380	9147	17721
C45	3008	3006	3092	3440	4043	4944	6380	9147	17721
C90	3008	3006	3092	3440	4043	4944	6380	9147	17721

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4043	4043	4043	6380	6380	6380	17721	17721	17721

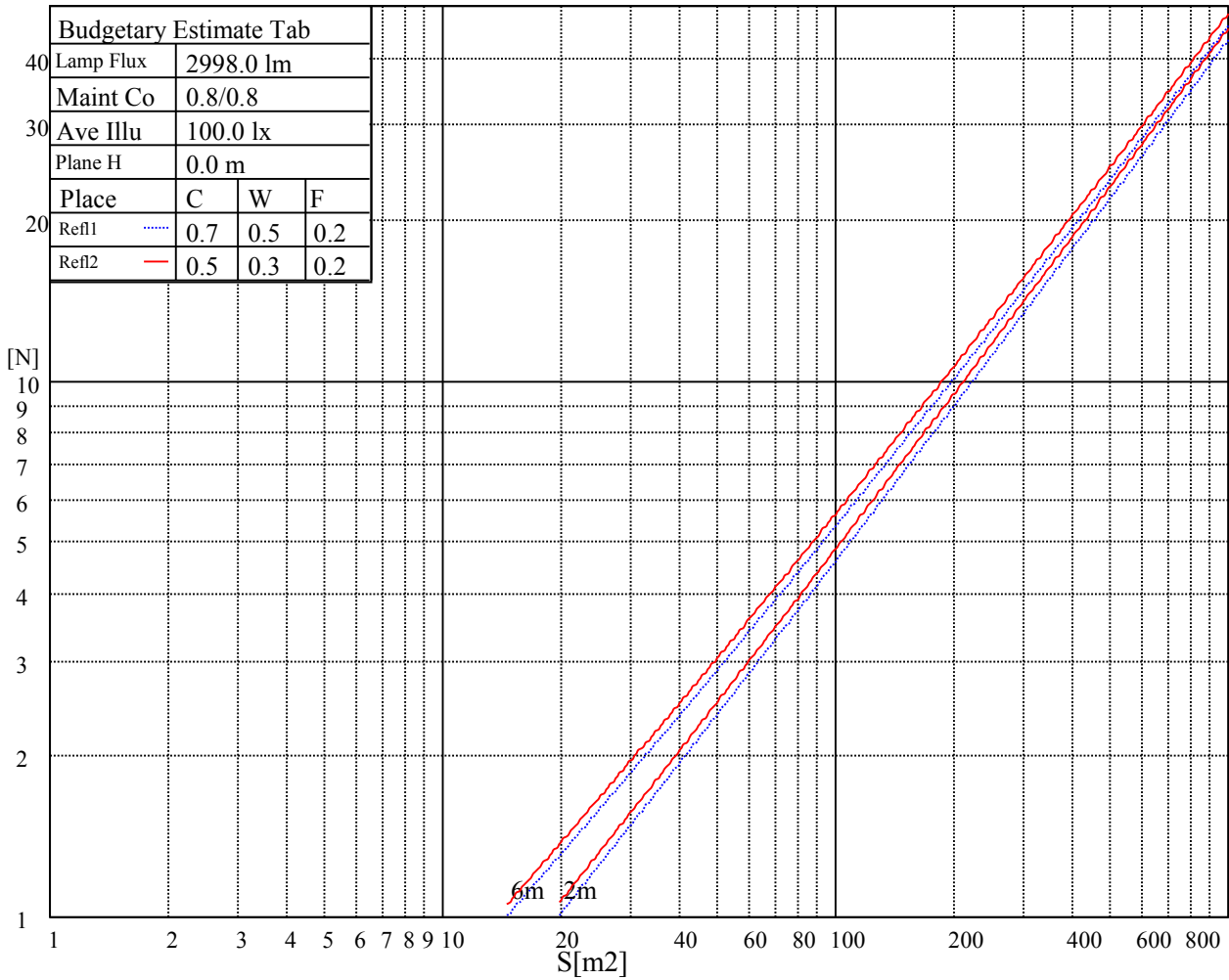
Glare Table

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

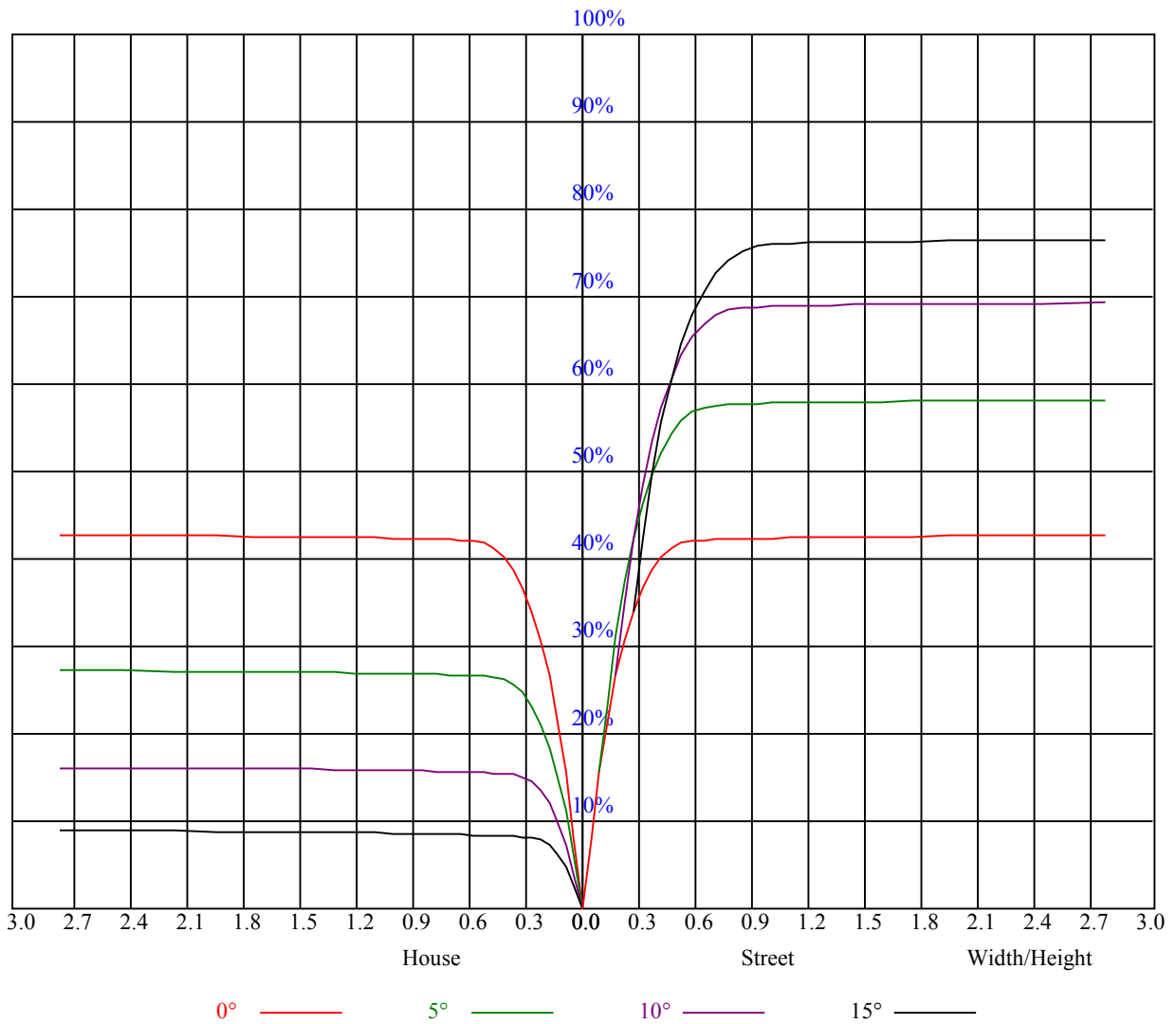
Luminance Limiting Curve



Illumination 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	1.48	2.39	1.85	2.70	3.02	1.41	2.32	1.78	2.63	2.95
	3H	4.83	5.63	5.22	5.97	6.34	4.78	5.59	5.17	5.92	6.29
	4H	6.60	7.35	7.01	7.70	8.09	6.55	7.30	6.96	7.65	8.04
	6H	8.53	9.21	8.95	9.58	9.98	8.45	9.13	8.87	9.51	9.90
	8H	9.58	10.21	10.02	10.61	11.02	9.49	10.12	9.92	10.52	10.93
	12H	11.29	11.90	11.73	12.28	12.71	11.17	11.78	11.61	12.16	12.60
4H	2H	2.47	3.21	2.88	3.56	3.95	2.42	3.16	2.83	3.51	3.90
	3H	6.03	6.64	6.45	7.05	7.46	5.99	6.60	6.41	7.01	7.42
	4H	7.95	8.49	8.39	8.92	9.37	7.91	8.45	8.35	8.88	9.33
	6H	9.98	10.45	10.46	10.90	11.38	9.91	10.38	10.38	10.83	11.30
	8H	11.14	11.57	11.61	12.02	12.50	11.05	11.48	11.53	11.93	12.41
	12H	12.75	13.12	13.24	13.61	14.09	12.64	13.01	13.13	13.50	13.98
8H	4H	8.68	9.11	9.15	9.56	10.04	8.65	9.08	9.12	9.53	10.01
	6H	10.99	11.33	11.50	11.83	12.32	10.93	11.27	11.44	11.77	12.26
	8H	12.32	12.62	12.86	13.15	13.64	12.25	12.55	12.78	13.07	13.57
	12H	14.07	14.33	14.60	14.83	15.41	13.98	14.24	14.50	14.74	15.32
12H	4H	8.87	9.24	9.36	9.73	10.21	8.85	9.22	9.34	9.71	10.19
	6H	11.49	11.60	11.83	12.07	12.62	11.44	11.55	11.78	12.02	12.57
	8H	12.76	13.02	13.29	13.52	14.10	12.70	12.95	13.22	13.45	14.04
Variation with the observer position at spacings:											
S = 1.0H	0.9/-1.4					0.9/-1.4					
S = 1.5H	0.6/-1.3					0.6/-1.3					
S = 2.0H	0.7/-1.1					0.7/-1.1					
Standard tables:	BKBF					BKBF					
Uncorrected UGR	-2.5					-2.5					



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	1.02	1.02	1.02	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.86
1	0.97	0.95	0.93	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	0.87	0.91	0.88	0.86	0.88	0.86	0.84	0.86	0.84	0.83	0.83	0.82	0.81	0.80
3	0.88	0.85	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.83	0.81	0.79	0.81	0.80	0.78	0.77
4	0.85	0.82	0.79	0.84	0.81	0.78	0.82	0.80	0.78	0.81	0.79	0.77	0.79	0.77	0.76	0.75
5	0.82	0.78	0.76	0.81	0.78	0.75	0.80	0.77	0.75	0.79	0.76	0.74	0.77	0.75	0.74	0.73
6	0.79	0.76	0.73	0.79	0.75	0.73	0.77	0.75	0.72	0.76	0.74	0.72	0.75	0.73	0.71	0.71
7	0.77	0.73	0.71	0.76	0.73	0.71	0.75	0.72	0.70	0.74	0.72	0.70	0.74	0.71	0.70	0.69
8	0.75	0.71	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.73	0.70	0.68	0.72	0.69	0.68	0.67
9	0.72	0.69	0.67	0.72	0.69	0.67	0.71	0.68	0.66	0.71	0.68	0.66	0.70	0.68	0.66	0.65
10	0.71	0.67	0.65	0.70	0.67	0.65	0.70	0.67	0.65	0.69	0.66	0.65	0.69	0.66	0.64	0.64





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	15648.75	15502.50	14906.25	14169.38	13331.25	11733.75	10462.50	9326.25	7824.38
45.0	15671.25	15547.50	15108.75	14473.13	13488.75	12268.13	11047.50	9579.38	8330.63
90.0	15660.00	15553.13	15142.50	14433.75	13567.50	12510.00	10965.94	9651.94	8371.69
135.0	15575.63	15671.25	15468.75	15024.38	14343.75	13185.00	12037.50	10749.38	9258.75
180.0	15648.75	15581.25	15221.25	14546.25	13685.63	12487.50	11067.19	9718.88	8421.19
225.0	15671.25	15525.00	15114.38	14242.50	13297.50	11199.38	10713.38	9231.19	7981.88
270.0	15660.00	15496.88	15007.50	14287.50	13201.88	12020.63	10580.63	9123.75	7908.75
315.0	15575.63	15226.88	14625.00	13533.75	12082.50	11142.56	9673.31	8247.94	7124.63
360.0	15648.75	15502.50	14906.25	14169.38	13331.25	11733.75	10462.50	9326.25	7824.38
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	6654.38	5928.75	5124.38	4640.63	4258.13	3841.88	3566.25	3313.13	3037.50
45.0	7070.63	6041.25	5315.63	4770.00	4224.38	3870.00	3577.50	3273.75	3071.25
90.0	7079.06	6061.50	5371.88	4789.69	4315.50	3967.88	3629.25	3376.13	3120.75
135.0	7863.75	6772.50	5810.63	5163.75	4595.63	4140.00	3802.50	3476.25	3217.50
180.0	7116.19	6060.38	5351.06	4741.31	4317.19	3910.50	3581.44	3334.50	3115.13
225.0	6740.44	5751.56	5079.38	4518.56	4121.44	3757.50	3466.69	3246.75	3062.25
270.0	6750.00	5799.38	5169.38	4663.13	4162.50	3836.25	3549.38	3279.38	3043.13
315.0	6084.56	5295.94	4754.81	4282.88	3931.31	3610.69	3336.75	3106.13	2895.19
360.0	6654.38	5928.75	5124.38	4640.63	4258.13	3841.88	3566.25	3313.13	3037.50
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2846.25	2620.69	2363.06	2164.50	1968.19	1658.81	1389.38	1124.44	846.56
45.0	2874.38	2851.88	2450.81	2264.06	2066.06	1802.81	1487.81	1207.69	930.94
90.0	2884.50	2675.25	2469.94	2218.50	2016.00	1792.13	1460.25	1092.66	940.16
135.0	2998.13	2863.13	2545.31	2332.69	2125.13	1896.75	1620.56	1352.25	1066.50
180.0	2865.94	2671.88	2480.63	2220.19	2032.31	1818.56	1529.44	1098.28	975.26
225.0	2846.81	2669.63	2479.50	2221.88	2014.31	1766.25	1421.44	1117.86	901.35
270.0	2851.88	2748.94	2408.06	2207.81	2032.88	1743.19	1445.63	1209.94	885.38
315.0	2640.38	2436.19	2228.06	1971.56	1734.75	1469.25	1106.21	898.59	675.51
360.0	2846.25	2620.69	2363.06	2164.50	1968.19	1658.81	1389.38	1124.44	846.56
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	594.00	405.00	288.00	147.32	113.74	85.22	65.03	49.16	36.39
45.0	677.25	481.50	292.50	208.41	120.66	91.13	68.85	52.76	40.33
90.0	690.75	473.23	307.97	174.21	128.03	97.54	70.20	55.07	41.79
135.0	804.94	603.00	403.88	293.06	161.21	120.32	92.64	70.76	52.82
180.0	718.99	518.34	327.15	188.21	132.24	100.07	73.07	57.26	45.06
225.0	673.37	448.65	273.04	164.76	118.07	89.33	68.40	51.81	40.11
270.0	650.25	451.69	290.81	155.53	115.14	85.89	66.09	51.53	37.13
315.0	433.35	298.18	178.59	126.51	99.39	74.14	54.73	43.76	33.53
360.0	594.00	405.00	288.00	147.32	113.74	85.22	65.03	49.16	36.39
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	28.24	22.50	19.07	17.83	16.82	15.98	15.08	14.46	14.01
45.0	30.94	24.58	20.19	18.56	17.38	16.09	15.30	14.79	14.34
90.0	31.78	25.37	21.32	18.90	17.78	16.82	15.98	15.13	14.68
135.0	42.02	33.08	25.71	22.39	20.42	19.07	18.06	17.27	16.43
180.0	33.30	26.78	22.39	19.58	18.39	17.49	16.48	15.69	15.02
225.0	30.21	23.74	20.25	18.45	17.33	16.26	15.36	14.68	14.23
270.0	29.08	23.68	20.25	18.79	17.89	16.88	15.98	15.30	14.63
315.0	25.14	21.71	20.14	18.68	17.72	16.93	15.98	15.30	14.79
360.0	28.24	22.50	19.07	17.83	16.82	15.98	15.08	14.46	14.01

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	13.56	13.33	13.16	12.94	12.71	12.54	12.32	12.09	11.93
45.0	14.01	13.73	13.44	13.28	13.16	12.99	12.88	12.77	12.60
90.0	14.34	13.95	13.84	13.73	13.56	13.39	13.16	12.88	12.60
135.0	15.64	15.19	14.74	14.40	14.01	13.67	13.39	13.11	12.71
180.0	14.40	14.01	13.61	13.28	13.05	12.77	12.43	12.21	12.04
225.0	13.89	13.61	13.33	13.16	12.99	12.83	12.60	12.49	12.26
270.0	14.18	13.84	13.56	13.33	13.11	12.83	12.60	12.38	12.21
315.0	14.40	14.06	13.78	13.44	13.28	12.94	12.66	12.49	12.21
360.0	13.56	13.33	13.16	12.94	12.71	12.54	12.32	12.09	11.93
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	11.76	11.59	11.42	11.42	11.31	11.25	11.31	11.25	11.25
45.0	12.43	12.26	12.09	11.93	11.81	11.76	11.64	11.59	11.53
90.0	12.32	12.04	11.87	11.64	11.53	11.48	11.42	11.36	11.31
135.0	12.49	12.26	12.04	11.93	11.81	11.76	11.70	11.70	11.70
180.0	11.76	11.64	11.59	11.48	11.42	11.42	11.48	11.48	11.48
225.0	12.09	11.93	11.87	11.76	11.81	11.81	11.81	11.81	11.87
270.0	11.98	11.81	11.64	11.53	11.53	11.53	11.53	11.53	11.59
315.0	11.98	11.87	11.76	11.70	11.64	11.59	11.64	11.64	11.64
360.0	11.76	11.59	11.42	11.42	11.31	11.25	11.31	11.25	11.25
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	11.25	11.19	11.19	11.08	11.08	11.08	11.08	11.03	11.03
45.0	11.48	11.48	11.36	11.36	11.36	11.36	11.31	11.31	11.19
90.0	11.31	11.25	11.25	11.19	11.19	11.14	11.08	11.03	11.03
135.0	11.70	11.64	11.64	11.59	11.53	11.53	11.48	11.48	11.42
180.0	11.48	11.42	11.48	11.42	11.42	11.42	11.42	11.36	11.36
225.0	11.87	11.87	11.87	11.81	11.87	11.87	11.87	11.87	11.87
270.0	11.59	11.53	11.59	11.53	11.53	11.59	11.59	11.53	11.53
315.0	11.59	11.59	11.53	11.53	11.48	11.42	11.42	11.36	11.36
360.0	11.25	11.19	11.19	11.08	11.08	11.08	11.08	11.03	11.03
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	10.97	10.91	10.86	10.80	10.74	10.63	10.58	10.52	10.41
45.0	11.19	11.14	11.03	11.03	10.97	10.97	10.86	10.86	10.74
90.0	10.97	10.97	10.86	10.80	10.74	10.69	10.63	10.58	10.52
135.0	11.36	11.36	11.25	11.19	11.08	11.03	10.97	10.91	10.86
180.0	11.31	11.31	11.19	11.08	10.91	10.80	10.69	10.58	10.52
225.0	11.81	11.76	11.70	11.53	11.31	11.19	11.08	11.03	10.91
270.0	11.53	11.48	11.36	11.31	11.19	11.14	11.03	10.97	10.86
315.0	11.31	11.19	11.14	11.08	10.91	10.86	10.74	10.69	10.63
360.0	10.97	10.91	10.86	10.80	10.74	10.63	10.58	10.52	10.41
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.35	10.35	10.29	10.24	10.18	10.18	10.07	9.96	9.84
45.0	10.69	10.63	10.58	10.58	10.52	10.52	10.41	10.29	10.13
90.0	10.46	10.41	10.41	10.35	10.35	10.29	10.24	10.18	10.07
135.0	10.80	10.69	10.63	10.52	10.46	10.29	10.24	10.07	9.96
180.0	10.46	10.35	10.29	10.24	10.24	10.24	10.18	10.07	9.96
225.0	10.80	10.80	10.69	10.63	10.58	10.58	10.52	10.35	10.24
270.0	10.80	10.69	10.63	10.63	10.58	10.58	10.29	10.18	10.07
315.0	10.58	10.41	10.35	10.29	10.18	10.13	10.01	9.90	9.90
360.0	10.35	10.35	10.29	10.24	10.18	10.18	10.07	9.96	9.84

Intensity data(cd)

C/γ(°)	90.0
0.0	9.84
45.0	10.07
90.0	10.07
135.0	9.96
180.0	9.84
225.0	10.07
270.0	10.07
315.0	9.96
360.0	9.84